APPENDIX C

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

PART 19
ANALYTICAL REPORTS
240-50067-1
240-50650-1
CHAIN OF CUSTODY FORMS

(Note—To be provided on disc only)

ANALYTICAL REPORT

Job Number: 240-50067-1

Job Description: RVAAP - ECC

For:
Environmental Chemical Corp.
33 Boston Post Road West
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Marlborough, MA 01752

Attention: Mr. Jackson Kiker



Approved for release.
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Project Manager II
5/21/2015 8:12 PM

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05/21/2015

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Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
M	Manual integrated compound.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
B	Blank contamination: The analyte was detected above one-half the reporting limit in an associated blank.
Q	One or more quality control criteria failed.
H	Sample was prepped or analyzed beyond the specified holding time
J	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
^	Instrument related QC is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

CASE NARRATIVE

Client: Environmental Chemical Corp.

Project: RVAAP - ECC

Report Number: 240-50067-1

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

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

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

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

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

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

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

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

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

RECEIPT

The samples were received on 4/30/2015 12:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.1º C and 5.3º C.

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS) WITH INCREMENTAL SAMPLE PREPARATION

Samples 079SS-0389M-0001-SO (240-50067-1), 079SB-0390M-0001-SO (240-50067-2), 079SB-0391M-0001-SO (240-50067-3), 079SB-0392M-0001-SO (240-50067-4), 079SB-0393M-0001-SO (240-50067-5), 079SB-0394M-0001-SO (240-50067-6), 079SB-0395M-0001-0002-SO (240-50067-7), 079SB-0396M-0001-SO (240-50067-8) and 079SB-0397M-0001-SO (240-50067-9) were analyzed for semivolatile organic compounds (GCMS) with incremental sample preparation in accordance with ITRC Technical and Regulatory Guidance: ISM, February 2012 and EPA SW-846 Method 8270 DoD. The samples began the drying process on 05/04/2015, were prepared on 05/12/2015 and analyzed on 05/20/2015 and 05/21/2015.

2-Fluorophenol (Surr) failed the surrogate recovery criteria low for 079SB-0394M-0001-SO (240-50067-6).

2,4,6-Tribromophenol (Surr) failed the surrogate recovery criteria low for MB 240-180350/8-A.

Benzoic acid and Pentachlorophenol exceeded the RPD limit for the MSD of sample 079SB-0395M-0001-0002-SOMSD (240-50067-7) in batch 240-181588.

The method blank for prep batch 180350, associated with samples 079SS-0389M-0001-SO (240-50067-1), 079SB-0390M-0001-SO (240-50067-2), 079SB-0391M-0001-SO (240-50067-3), 079SB-0392M-0001-SO (240-50067-4), 079SB-0393M-0001-SO (240-50067-5), 079SB-0394M-0001-SO (240-50067-6), 079SB-0395M-0001-0002-SO (240-50067-7), 079SB-0395M-0001-0002-SO (240-50067-7[MS]), 079SB-0395M-0001-0002-SO (240-50067-7[MSD]), 079SB-0396M-0001-SO (240-50067-8) and 079SB-0397M-0001-SO (240-50067-9), had an acid surrogate recovery below acceptance criteria. The data has been flagged accordingly and reported.

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

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)
Sample 079SB-0398-0001-SO (240-50067-10) was analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270C. The samples were prepared on 05/04/2015 and analyzed on 05/20/2015.

Naphthalene was detected in method blank MB 240-179108/22-A at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

The method blank for prep batch 179108, associated with sample 079SB-0398-0001-SO (240-50067-10), had one acid surrogate recovery below acceptance criteria. 2,4,6-Tribromophenol (Surr) failed the surrogate recovery criteria low. The results have been flagged accordingly and reported.

Naphthalene was detected above the reporting limit (RL) in the method blank associated with prep batch 179108 as well as in the following sample: 079SB-0398-0001-SO (240-50067-10). Because the naphthalene concentration in these samples was below the project action limit, no corrective action was required. The data has been flagged accordingly and reported.

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

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)
Sample 079SB-0399-0001-RB (240-50067-11) was analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270C. The samples were prepared on 05/04/2015 and 05/12/2015 and analyzed on 05/12/2015 and 05/14/2015.

Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

Hexachlorocyclopentadiene failed the recovery criteria low for LCS 240-179064/3-A. The associated sample was re-prepared and re-analyzed outside holding time with all QC meeting acceptance criteria. The initial results have been reported as has hexachlorocyclopentadiene from the reextracted results.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with 179064.

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

TOTAL SOLIDS/PERCENT MOISTURE
Samples 079SS-0389M-0001-SO (240-50067-1), 079SB-0390M-0001-SO (240-50067-2), 079SB-0391M-0001-SO (240-50067-3), 079SB-0392M-0001-SO (240-50067-4), 079SB-0393M-0001-SO (240-50067-5), 079SB-0394M-0001-SO (240-50067-6), 079SB-0395M-0001-0002-SO (240-50067-7), 079SB-0396M-0001-SO (240-50067-8) and 079SB-0397M-0001-SO (240-50067-9) were analyzed for Total Solids/Percent Moisture in accordance with Percent Moisture method. The samples were leached on 05/04/2015 and analyzed on 05/12/2015.

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

PERCENT SOLIDS
Sample 079SB-0398-0001-SO (240-50067-10) was analyzed for percent solids in accordance with EPA Method 160.3 MOD. The samples were analyzed on 05/05/2015.

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

Detection Summary

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

TestAmerica Job ID: 240-50067-1

Client Sample ID: 079SS-0389M-0001-SO — Lab Sample ID: 240-50067-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	10		6.9	0.78	ug/Kg	1	☼	8270C	Total/NA
Anthracene	7.9		6.9	0.80	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]anthracene	20		6.9	0.65	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]pyrene	18		6.9	0.66	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	32		6.9	0.61	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	13	M	6.9	0.36	ug/Kg	1	☼	8270C	Total/NA
Benzoic acid	39	J	680	37	ug/Kg	1	☼	8270C	Total/NA
Benzo[k]fluoranthene	8.3		6.9	0.70	ug/Kg	1	☼	8270C	Total/NA
Benzyl alcohol	25	J M	340	22	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	31	J	72	20	ug/Kg	1	☼	8270C	Total/NA
Chrysene	32		6.9	1.1	ug/Kg	1	☼	8270C	Total/NA
Dibenzofuran	80		52	0.68	ug/Kg	1	☼	8270C	Total/NA
Diethyl phthalate	180		72	16	ug/Kg	1	☼	8270C	Total/NA
Di-n-butyl phthalate	21	J	72	15	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	28		6.9	0.57	ug/Kg	1	☼	8270C	Total/NA
Fluorene	11		6.9	0.55	ug/Kg	1	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	10	M	6.9	0.36	ug/Kg	1	☼	8270C	Total/NA
Isophorone	120		52	13	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	270		6.9	0.52	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	230		6.9	0.84	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	120		6.9	0.75	ug/Kg	1	☼	8270C	Total/NA
Phenol	31	J M	52	7.5	ug/Kg	1	☼	8270C	Total/NA
Pyrene	29		6.9	0.45	ug/Kg	1	☼	8270C	Total/NA

Client Sample ID: 079SB-0390M-0001-SO — Lab Sample ID: 240-50067-2

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Diethyl phthalate	17	J	72	16	ug/Kg	1	☼	8270C	Total/NA
Isophorone	56		51	13	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	13		6.8	0.51	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	11		6.8	0.84	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	8.9		6.8	0.75	ug/Kg	1	☼	8270C	Total/NA
Phenol	11	J	51	7.5	ug/Kg	1	☼	8270C	Total/NA

Client Sample ID: 079SB-0391M-0001-SO — Lab Sample ID: 240-50067-3

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Isophorone	46	J	51	13	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	10		6.8	0.51	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	9.5		6.8	0.84	ug/Kg	1	☼	8270C	Total/NA
2-Nitrophenol	13	J	51	8.5	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	5.7	J	6.8	0.74	ug/Kg	1	☼	8270C	Total/NA

Client Sample ID: 079SB-0392M-0001-SO — Lab Sample ID: 240-50067-4

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Isophorone	62		52	14	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	7.1		6.9	0.52	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	5.1	J	6.9	0.85	ug/Kg	1	☼	8270C	Total/NA
2-Nitrophenol	16	J	52	8.6	ug/Kg	1	☼	8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 079SB-0392M-0001-SO (Continued) — Lab Sample ID: 240-50067-4

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	5.8	J	6.9	0.76	ug/Kg	1	☼	8270C	Total/NA

Client Sample ID: 079SB-0393M-0001-SO — Lab Sample ID: 240-50067-5

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Diethyl phthalate	22	J	71	16	ug/Kg	1	☼	8270C	Total/NA
Fluorene	3.4	J	6.8	0.54	ug/Kg	1	☼	8270C	Total/NA
Isophorone	89		51	13	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	8.4		6.8	0.51	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	6.2	J	6.8	0.83	ug/Kg	1	☼	8270C	Total/NA
2-Nitrophenol	28	J	51	8.4	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	7.8		6.8	0.74	ug/Kg	1	☼	8270C	Total/NA

Client Sample ID: 079SB-0394M-0001-SO — Lab Sample ID: 240-50067-6

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Isophorone	53		51	13	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	7.4		6.8	0.51	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	5.2	J	6.8	0.83	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	6.3	J	6.8	0.74	ug/Kg	1	☼	8270C	Total/NA
Phenol	12	J	51	7.4	ug/Kg	1	☼	8270C	Total/NA

Client Sample ID: 079SB-0395M-0001-0002-SO — Lab Sample ID: 240-50067-7

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Dibenzofuran	7.7	J	52	0.68	ug/Kg	1	☼	8270C	Total/NA
Isophorone	44	J	52	13	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	33		6.9	0.52	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	30		6.9	0.85	ug/Kg	1	☼	8270C	Total/NA
2-Nitrophenol	16	J	52	8.6	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	14		6.9	0.75	ug/Kg	1	☼	8270C	Total/NA

Client Sample ID: 079SB-0396M-0001-SO — Lab Sample ID: 240-50067-8

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Isophorone	55		51	13	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	12		6.8	0.51	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	11		6.8	0.83	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	9.8		6.8	0.74	ug/Kg	1	☼	8270C	Total/NA
Phenol	26	J M	51	7.4	ug/Kg	1	☼	8270C	Total/NA

Client Sample ID: 079SB-0397M-0001-SO — Lab Sample ID: 240-50067-9

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	6.2	J	6.8	0.77	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	4.1	J	6.8	0.60	ug/Kg	1	☼	8270C	Total/NA
Benzyl alcohol	23	J	340	21	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	22	J	71	19	ug/Kg	1	☼	8270C	Total/NA
Chrysene	3.6	J	6.8	1.1	ug/Kg	1	☼	8270C	Total/NA
Diethyl phthalate	19	J	71	16	ug/Kg	1	☼	8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 079SB-0397M-0001-SO (Continued) — Lab Sample ID: 240-50067-9

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Di-n-butyl phthalate	20	J	71	15	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	4.7	J	6.8	0.56	ug/Kg	1	☼	8270C	Total/NA
Fluorene	4.7	J	6.8	0.54	ug/Kg	1	☼	8270C	Total/NA
Isophorone	120		51	13	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	25		6.8	0.51	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	24		6.8	0.83	ug/Kg	1	☼	8270C	Total/NA
2-Nitrophenol	15	J	51	8.4	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	12		6.8	0.74	ug/Kg	1	☼	8270C	Total/NA
Phenol	24	J M	51	7.4	ug/Kg	1	☼	8270C	Total/NA
Pyrene	3.4	J	6.8	0.45	ug/Kg	1	☼	8270C	Total/NA

Client Sample ID: 079SB-0398-0001-SO — Lab Sample ID: 240-50067-10

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	24	J	83	22	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	22	B	7.9	0.97	ug/Kg	1	☼	8270C	Total/NA

Client Sample ID: 079SB-0399-0001-RB — Lab Sample ID: 240-50067-11

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: 079SS-0389M-0001-SO

Date Collected: 04/28/15 16:00
Date Received: 04/30/15 12:40

Lab Sample ID: 240-50067-1

Matrix: Solid
Percent Solids: 97.3

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**10**		6.9	0.78	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
Acenaphthylene	1.7	U	6.9	0.36	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
Anthracene	**7.9**		6.9	0.80	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
Benzo[a]anthracene	**20**		6.9	0.65	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
Benzo[a]pyrene	**18**		6.9	0.66	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
Benzo[b]fluoranthene	**32**		6.9	0.61	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
Benzo[g,h,i]perylene	**13**	**M**	6.9	0.36	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
Benzoic acid	**39**	**J**	680	37	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
Benzo[k]fluoranthene	**8.3**		6.9	0.70	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
Benzyl alcohol	**25**	**J M**	340	22	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
Bis(2-chloroethoxy)methane	69	U	100	23	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
Bis(2-chloroethyl)ether	3.4	U	100	2.1	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
bis (2-chloroisopropyl) ether	34	U	100	9.8	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
Bis(2-ethylhexyl) phthalate	**31**	**J**	72	20	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
4-Bromophenyl phenyl ether	34	U	52	13	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
Butyl benzyl phthalate	34	U	72	10	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
Carbazole	34	U	52	28	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
4-Chloroaniline	69	U	150	18	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
4-Chloro-3-methylphenol	69	U	150	22	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
2-Chloronaphthalene	1.7	U	52	0.46	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
2-Chlorophenol	34	U	52	8.4	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
4-Chlorophenyl phenyl ether	34	U	52	13	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
Chrysene	**32**		6.9	1.1	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
Dibenz(a,h)anthracene	3.4	U	6.9	0.68	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
Dibenzofuran	**80**		52	0.68	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
1,2-Dichlorobenzene	34	U	52	10	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
1,3-Dichlorobenzene	34	U	52	11	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
1,4-Dichlorobenzene	34	U	52	21	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
3,3'-Dichlorobenzidine	69	U	100	19	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
2,4-Dichlorophenol	69	U	150	21	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
Diethyl phthalate	**180**		72	16	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
2,4-Dimethylphenol	69	U	150	21	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
Dimethyl phthalate	34	U	72	18	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
Di-n-butyl phthalate	**21**	**J**	72	15	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
4,6-Dinitro-2-methylphenol	34	U	150	9.5	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
2,4-Dinitrophenol	69	U	340	22	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
2,4-Dinitrotoluene	69	U	210	18	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
2,6-Dinitrotoluene	69	U	210	22	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
Di-n-octyl phthalate	34	U	72	8.1	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
Fluoranthene	**28**		6.9	0.57	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
Fluorene	**11**		6.9	0.55	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
Hexachlorobenzene	3.4	U	6.9	2.2	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
Hexachlorobutadiene	34	U	52	5.8	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
Hexachlorocyclopentadiene	34	U	340	8.3	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
Hexachloroethane	34	U	52	9.3	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
Indeno[1,2,3-cd]pyrene	**10**	**M**	6.9	0.36	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
Isophorone	**120**		52	13	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
2-Methylnaphthalene	**270**		6.9	0.52	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
2-Methylphenol	69	U	210	11	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1

Client Sample ID: 079SS-0389M-0001-SO

Lab Sample ID: 240-50067-1

Date Collected: 04/28/15 16:00
Matrix: Solid
Date Received: 04/30/15 12:40
Percent Solids: 97.3

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
3 & 4 Methylphenol	69	U	410	21	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
Naphthalene	**230**		6.9	0.84	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
2-Nitroaniline	34	U	210	9.4	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
3-Nitroaniline	69	U	210	16	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
4-Nitroaniline	69	U	210	27	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
Nitrobenzene	3.4	U	100	2.3	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
2-Nitrophenol	34	U	52	8.6	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
4-Nitrophenol	69	U	340	18	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
N-Nitrosodi-n-propylamine	34	U	52	6.5	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
N-Nitrosodiphenylamine	34	U	52	22	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
Pentachlorophenol	34	U	150	9.4	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
Phenanthrene	**120**		6.9	0.75	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
Phenol	**31**	**J M**	52	7.5	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
Pyrene	**29**		6.9	0.45	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
1,2,4-Trichlorobenzene	17	U	52	3.6	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
2,4,5-Trichlorophenol	69	U	150	26	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1
2,4,6-Trichlorophenol	34	U	150	9.2	ug/Kg	☼	05/12/15 12:12	05/20/15 17:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*70*		*45 - 105*	*05/12/15 12:12*	*05/20/15 17:01*	*1*
2-Fluorophenol (Surr)	*70*		*35 - 105*	*05/12/15 12:12*	*05/20/15 17:01*	*1*
Nitrobenzene-d5 (Surr)	*67*		*35 - 100*	*05/12/15 12:12*	*05/20/15 17:01*	*1*
Phenol-d5 (Surr)	*70*	*M*	*40 - 100*	*05/12/15 12:12*	*05/20/15 17:01*	*1*
Terphenyl-d14 (Surr)	*78*		*30 - 125*	*05/12/15 12:12*	*05/20/15 17:01*	*1*
2,4,6-Tribromophenol (Surr)	*119*		*35 - 125*	*05/12/15 12:12*	*05/20/15 17:01*	*1*

Client Sample ID: 079SB-0390M-0001-SO

Lab Sample ID: 240-50067-2

Date Collected: 04/29/15 16:55
Matrix: Solid
Date Received: 04/30/15 12:40
Percent Solids: 97.4

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	3.4	U	6.8	0.78	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
Acenaphthylene	1.7	U	6.8	0.36	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
Anthracene	3.4	U	6.8	0.80	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
Benzo[a]anthracene	3.4	U	6.8	0.64	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
Benzo[a]pyrene	3.4	U	6.8	0.65	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
Benzo[b]fluoranthene	3.4	U	6.8	0.60	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
Benzo[g,h,i]perylene	1.7	U	6.8	0.36	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
Benzoic acid	140	U	680	37	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
Benzo[k]fluoranthene	3.4	U	6.8	0.70	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
Benzyl alcohol	68	U	340	21	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
Bis(2-chloroethoxy)methane	68	U	100	23	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
Bis(2-chloroethyl)ether	3.4	U	100	2.0	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
bis (2-chloroisopropyl) ether	34	U	100	9.7	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
Bis(2-ethylhexyl) phthalate	34	U	72	19	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
4-Bromophenyl phenyl ether	34	U	51	13	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
Butyl benzyl phthalate	34	U	72	10	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
Carbazole	34	U	51	28	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
4-Chloroaniline	68	U	150	17	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1

Client Sample ID: 079SB-0390M-0001-SO

Date Collected: 04/29/15 16:55
Date Received: 04/30/15 12:40

Lab Sample ID: 240-50067-2

Matrix: Solid
Percent Solids: 97.4

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloro-3-methylphenol	68	U	150	21	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
2-Chloronaphthalene	1.7	U	51	0.46	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
2-Chlorophenol	34	U	51	8.4	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
4-Chlorophenyl phenyl ether	34	U	51	13	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
Chrysene	3.4	U	6.8	1.1	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
Dibenz(a,h)anthracene	3.4	U	6.8	0.68	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
Dibenzofuran	3.4	U	51	0.68	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
1,2-Dichlorobenzene	34	U	51	9.9	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
1,3-Dichlorobenzene	34	U	51	11	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
1,4-Dichlorobenzene	34	U	51	20	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
3,3'-Dichlorobenzidine	68	U	100	18	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
2,4-Dichlorophenol	68	U	150	20	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
Diethyl phthalate	**17**	**J**	72	16	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
2,4-Dimethylphenol	68	U	150	20	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
Dimethyl phthalate	34	U	72	17	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
Di-n-butyl phthalate	34	U	72	15	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
4,6-Dinitro-2-methylphenol	34	U	150	9.4	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
2,4-Dinitrophenol	68	U	340	21	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
2,4-Dinitrotoluene	68	U	200	17	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
2,6-Dinitrotoluene	68	U	200	21	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
Di-n-octyl phthalate	34	U	72	8.1	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
Fluoranthene	3.4	U	6.8	0.56	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
Fluorene	3.4	U	6.8	0.54	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
Hexachlorobenzene	3.4	U	6.8	2.1	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
Hexachlorobutadiene	34	U	51	5.7	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
Hexachlorocyclopentadiene	34	U	340	8.3	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
Hexachloroethane	34	U	51	9.2	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
Indeno[1,2,3-cd]pyrene	1.7	U	6.8	0.36	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
Isophorone	**56**		51	13	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
2-Methylnaphthalene	**13**		6.8	0.51	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
2-Methylphenol	68	U	200	11	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
3 & 4 Methylphenol	68	U	410	20	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
Naphthalene	**11**		6.8	0.84	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
2-Nitroaniline	34	U	200	9.3	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
3-Nitroaniline	68	U	200	16	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
4-Nitroaniline	68	U	200	27	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
Nitrobenzene	3.4	U	100	2.3	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
2-Nitrophenol	34	U	51	8.5	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
4-Nitrophenol	68	U	340	17	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
N-Nitrosodi-n-propylamine	34	U	51	6.4	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
N-Nitrosodiphenylamine	34	U	51	21	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
Pentachlorophenol	34	U	150	9.3	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
Phenanthrene	**8.9**		6.8	0.75	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
Phenol	**11**	**J**	51	7.5	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
Pyrene	1.7	U	6.8	0.45	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
1,2,4-Trichlorobenzene	17	U	51	3.6	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
2,4,5-Trichlorophenol	68	U	150	26	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1
2,4,6-Trichlorophenol	34	U	150	9.1	ug/Kg	☼	05/12/15 12:12	05/20/15 14:55	1

Client Sample ID: 079SB-0390M-0001-SO

Date Collected: 04/29/15 16:55
Date Received: 04/30/15 12:40

Lab Sample ID: 240-50067-2

Matrix: Solid
Percent Solids: 97.4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*75*		*45 - 105*	*05/12/15 12:12*	*05/20/15 14:55*	*1*
2-Fluorophenol (Surr)	*56*		*35 - 105*	*05/12/15 12:12*	*05/20/15 14:55*	*1*
Nitrobenzene-d5 (Surr)	*68*		*35 - 100*	*05/12/15 12:12*	*05/20/15 14:55*	*1*
Phenol-d5 (Surr)	*44*		*40 - 100*	*05/12/15 12:12*	*05/20/15 14:55*	*1*
Terphenyl-d14 (Surr)	*74*		*30 - 125*	*05/12/15 12:12*	*05/20/15 14:55*	*1*
2,4,6-Tribromophenol (Surr)	*121*		*35 - 125*	*05/12/15 12:12*	*05/20/15 14:55*	*1*

Client Sample ID: 079SB-0391M-0001-SO

Date Collected: 04/29/15 16:58
Date Received: 04/30/15 12:40

Lab Sample ID: 240-50067-3

Matrix: Solid
Percent Solids: 97.8

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	3.4	U	6.8	0.77	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
Acenaphthylene	1.7	U	6.8	0.36	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
Anthracene	3.4	U	6.8	0.79	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
Benzo[a]anthracene	3.4	U	6.8	0.64	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
Benzo[a]pyrene	3.4	U	6.8	0.65	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
Benzo[b]fluoranthene	3.4	U	6.8	0.60	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
Benzo[g,h,i]perylene	1.7	U	6.8	0.36	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
Benzoic acid	140	U	670	37	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
Benzo[k]fluoranthene	3.4	U	6.8	0.69	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
Benzyl alcohol	68	U	340	21	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
Bis(2-chloroethoxy)methane	68	U	100	22	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
Bis(2-chloroethyl)ether	3.4	U	100	2.0	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
bis (2-chloroisopropyl) ether	34	U	100	9.7	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
Bis(2-ethylhexyl) phthalate	34	U	71	19	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
4-Bromophenyl phenyl ether	34	U	51	13	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
Butyl benzyl phthalate	34	U	71	10	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
Carbazole	34	U	51	28	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
4-Chloroaniline	68	U	150	17	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
4-Chloro-3-methylphenol	68	U	150	21	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
2-Chloronaphthalene	1.7	U	51	0.46	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
2-Chlorophenol	34	U	51	8.4	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
4-Chlorophenyl phenyl ether	34	U	51	13	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
Chrysene	3.4	U	6.8	1.1	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
Dibenz(a,h)anthracene	3.4	U	6.8	0.67	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
Dibenzofuran	3.4	U	51	0.67	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
1,2-Dichlorobenzene	34	U	51	9.9	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
1,3-Dichlorobenzene	34	U	51	11	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
1,4-Dichlorobenzene	34	U	51	20	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
3,3'-Dichlorobenzidine	68	U	100	18	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
2,4-Dichlorophenol	68	U	150	20	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
Diethyl phthalate	34	U	71	16	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
2,4-Dimethylphenol	68	U	150	20	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
Dimethyl phthalate	34	U	71	17	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
Di-n-butyl phthalate	34	U	71	15	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
4,6-Dinitro-2-methylphenol	34	U	150	9.4	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
2,4-Dinitrophenol	68	U	340	21	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
2,4-Dinitrotoluene	68	U	200	17	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1

Client Sample ID: 079SB-0391M-0001-SO

Date Collected: 04/29/15 16:58
Date Received: 04/30/15 12:40

Lab Sample ID: 240-50067-3

Matrix: Solid
Percent Solids: 97.8

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	68	U	200	21	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
Di-n-octyl phthalate	34	U	71	8.0	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
Fluoranthene	3.4	U	6.8	0.56	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
Fluorene	3.4	U	6.8	0.54	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
Hexachlorobenzene	3.4	U	6.8	2.1	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
Hexachlorobutadiene	34	U	51	5.7	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
Hexachlorocyclopentadiene	34	U	340	8.3	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
Hexachloroethane	34	U	51	9.2	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
Indeno[1,2,3-cd]pyrene	1.7	U	6.8	0.36	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
Isophorone	**46**	**J**	51	13	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
2-Methylnaphthalene	**10**		6.8	0.51	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
2-Methylphenol	68	U	200	11	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
3 & 4 Methylphenol	68	U	410	20	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
Naphthalene	**9.5**		6.8	0.84	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
2-Nitroaniline	34	U	200	9.3	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
3-Nitroaniline	68	U	200	16	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
4-Nitroaniline	68	U	200	26	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
Nitrobenzene	3.4	U	100	2.2	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
2-Nitrophenol	**13**	**J**	51	8.5	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
4-Nitrophenol	68	U	340	17	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
N-Nitrosodi-n-propylamine	34	U	51	6.4	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
N-Nitrosodiphenylamine	34	U	51	21	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
Pentachlorophenol	34	U	150	9.3	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
Phenanthrene	**5.7**	**J**	6.8	0.74	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
Phenol	34	U	51	7.4	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
Pyrene	1.7	U	6.8	0.45	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
1,2,4-Trichlorobenzene	17	U	51	3.6	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
2,4,5-Trichlorophenol	68	U	150	25	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1
2,4,6-Trichlorophenol	34	U	150	9.1	ug/Kg	☼	05/12/15 12:12	05/20/15 15:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*69*		*45 - 105*	*05/12/15 12:12*	*05/20/15 15:20*	*1*
2-Fluorophenol (Surr)	*40*		*35 - 105*	*05/12/15 12:12*	*05/20/15 15:20*	*1*
Nitrobenzene-d5 (Surr)	*63*		*35 - 100*	*05/12/15 12:12*	*05/20/15 15:20*	*1*
Phenol-d5 (Surr)	*46*		*40 - 100*	*05/12/15 12:12*	*05/20/15 15:20*	*1*
Terphenyl-d14 (Surr)	*70*		*30 - 125*	*05/12/15 12:12*	*05/20/15 15:20*	*1*
2,4,6-Tribromophenol (Surr)	*69*		*35 - 125*	*05/12/15 12:12*	*05/20/15 15:20*	*1*

Client Sample ID: 079SB-0392M-0001-SO

Date Collected: 04/29/15 15:23
Date Received: 04/30/15 12:40

Lab Sample ID: 240-50067-4

Matrix: Solid
Percent Solids: 97.4

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	3.4	U	6.9	0.79	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
Acenaphthylene	1.7	U	6.9	0.36	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
Anthracene	3.4	U	6.9	0.81	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
Benzo[a]anthracene	3.4	U	6.9	0.66	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
Benzo[a]pyrene	3.4	U	6.9	0.67	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
Benzo[b]fluoranthene	3.4	U	6.9	0.61	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1

Client Sample ID: 079SB-0392M-0001-SO

Date Collected: 04/29/15 15:23
Date Received: 04/30/15 12:40

Lab Sample ID: 240-50067-4

Matrix: Solid
Percent Solids: 97.4

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	1.7	U	6.9	0.36	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
Benzoic acid	140	U	690	37	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
Benzo[k]fluoranthene	3.4	U	6.9	0.71	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
Benzyl alcohol	69	U	340	22	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
Bis(2-chloroethoxy)methane	69	U	100	23	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
Bis(2-chloroethyl)ether	3.4	U	100	2.1	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
bis (2-chloroisopropyl) ether	35	U	100	9.9	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
Bis(2-ethylhexyl) phthalate	35	U	73	20	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
4-Bromophenyl phenyl ether	35	U	52	14	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
Butyl benzyl phthalate	35	U	73	10	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
Carbazole	35	U	52	28	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
4-Chloroaniline	69	U	160	18	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
4-Chloro-3-methylphenol	69	U	160	22	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
2-Chloronaphthalene	1.7	U	52	0.47	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
2-Chlorophenol	35	U	52	8.5	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
4-Chlorophenyl phenyl ether	35	U	52	14	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
Chrysene	3.4	U	6.9	1.1	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
Dibenz(a,h)anthracene	3.4	U	6.9	0.69	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
Dibenzofuran	3.4	U	52	0.69	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
1,2-Dichlorobenzene	35	U	52	10	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
1,3-Dichlorobenzene	35	U	52	11	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
1,4-Dichlorobenzene	35	U	52	21	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
3,3'-Dichlorobenzidine	69	U	100	19	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
2,4-Dichlorophenol	69	U	160	21	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
Diethyl phthalate	35	U	73	17	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
2,4-Dimethylphenol	69	U	160	21	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
Dimethyl phthalate	35	U	73	18	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
Di-n-butyl phthalate	35	U	73	16	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
4,6-Dinitro-2-methylphenol	35	U	160	9.6	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
2,4-Dinitrophenol	69	U	340	22	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
2,4-Dinitrotoluene	69	U	210	18	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
2,6-Dinitrotoluene	69	U	210	22	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
Di-n-octyl phthalate	35	U	73	8.2	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
Fluoranthene	3.4	U	6.9	0.57	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
Fluorene	3.4	U	6.9	0.55	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
Hexachlorobenzene	3.4	U	6.9	2.2	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
Hexachlorobutadiene	35	U	52	5.8	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
Hexachlorocyclopentadiene	35	U	340	8.4	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
Hexachloroethane	35	U	52	9.4	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
Indeno[1,2,3-cd]pyrene	1.7	U	6.9	0.36	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
Isophorone	**62**		52	14	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
2-Methylnaphthalene	**7.1**		6.9	0.52	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
2-Methylphenol	69	U	210	11	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
3 & 4 Methylphenol	69	U	420	21	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
Naphthalene	**5.1**	**J**	6.9	0.85	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
2-Nitroaniline	35	U	210	9.5	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
3-Nitroaniline	69	U	210	17	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
4-Nitroaniline	69	U	210	27	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
Nitrobenzene	3.4	U	100	2.3	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1

Client Sample ID: 079SB-0392M-0001-SO

Date Collected: 04/29/15 15:23
Date Received: 04/30/15 12:40

Lab Sample ID: 240-50067-4

Matrix: Solid
Percent Solids: 97.4

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	**16**	**J**	52	8.6	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
4-Nitrophenol	69	U	340	18	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
N-Nitrosodi-n-propylamine	35	U	52	6.6	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
N-Nitrosodiphenylamine	35	U	52	22	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
Pentachlorophenol	35	U	160	9.5	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
Phenanthrene	**5.8**	**J**	6.9	0.76	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
Phenol	35	U	52	7.6	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
Pyrene	1.7	U	6.9	0.46	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
1,2,4-Trichlorobenzene	17	U	52	3.6	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
2,4,5-Trichlorophenol	69	U	160	26	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1
2,4,6-Trichlorophenol	35	U	160	9.3	ug/Kg	☼	05/12/15 12:12	05/20/15 15:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*70*		*45 - 105*	*05/12/15 12:12*	*05/20/15 15:45*	*1*
2-Fluorophenol (Surr)	*49*		*35 - 105*	*05/12/15 12:12*	*05/20/15 15:45*	*1*
Nitrobenzene-d5 (Surr)	*64*		*35 - 100*	*05/12/15 12:12*	*05/20/15 15:45*	*1*
Phenol-d5 (Surr)	*50*		*40 - 100*	*05/12/15 12:12*	*05/20/15 15:45*	*1*
Terphenyl-d14 (Surr)	*74*		*30 - 125*	*05/12/15 12:12*	*05/20/15 15:45*	*1*
2,4,6-Tribromophenol (Surr)	*59*		*35 - 125*	*05/12/15 12:12*	*05/20/15 15:45*	*1*

Client Sample ID: 079SB-0393M-0001-SO

Date Collected: 04/29/15 00:00
Date Received: 04/30/15 12:40

Lab Sample ID: 240-50067-5

Matrix: Solid
Percent Solids: 97.4

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	3.3	U	6.8	0.77	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
Acenaphthylene	1.7	U	6.8	0.35	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
Anthracene	3.3	U	6.8	0.79	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
Benzo[a]anthracene	3.3	U	6.8	0.64	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
Benzo[a]pyrene	3.3	U	6.8	0.65	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
Benzo[b]fluoranthene	3.3	U	6.8	0.60	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
Benzo[g,h,i]perylene	1.7	U	6.8	0.35	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
Benzoic acid	130	U	670	36	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
Benzo[k]fluoranthene	3.3	U	6.8	0.69	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
Benzyl alcohol	67	U	330	21	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
Bis(2-chloroethoxy)methane	67	U	100	22	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
Bis(2-chloroethyl)ether	3.3	U	100	2.0	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
bis (2-chloroisopropyl) ether	34	U	100	9.6	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
Bis(2-ethylhexyl) phthalate	34	U	71	19	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
4-Bromophenyl phenyl ether	34	U	51	13	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
Butyl benzyl phthalate	34	U	71	10	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
Carbazole	34	U	51	27	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
4-Chloroaniline	67	U	150	17	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
4-Chloro-3-methylphenol	67	U	150	21	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
2-Chloronaphthalene	1.7	U	51	0.46	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
2-Chlorophenol	34	U	51	8.3	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
4-Chlorophenyl phenyl ether	34	U	51	13	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
Chrysene	3.3	U	6.8	1.1	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
Dibenz(a,h)anthracene	3.3	U	6.8	0.67	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1

Client Sample ID: 079SB-0393M-0001-SO

Date Collected: 04/29/15 00:00
Date Received: 04/30/15 12:40

Lab Sample ID: 240-50067-5

Matrix: Solid
Percent Solids: 97.4

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	3.3	U	51	0.67	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
1,2-Dichlorobenzene	34	U	51	9.8	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
1,3-Dichlorobenzene	34	U	51	11	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
1,4-Dichlorobenzene	34	U	51	20	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
3,3'-Dichlorobenzidine	67	U	100	18	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
2,4-Dichlorophenol	67	U	150	20	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
Diethyl phthalate	**22**	**J**	71	16	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
2,4-Dimethylphenol	67	U	150	20	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
Dimethyl phthalate	34	U	71	17	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
Di-n-butyl phthalate	34	U	71	15	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
4,6-Dinitro-2-methylphenol	34	U	150	9.3	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
2,4-Dinitrophenol	67	U	330	21	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
2,4-Dinitrotoluene	67	U	200	17	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
2,6-Dinitrotoluene	67	U	200	21	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
Di-n-octyl phthalate	34	U	71	8.0	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
Fluoranthene	3.3	U	6.8	0.56	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
Fluorene	**3.4**	**J**	6.8	0.54	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
Hexachlorobenzene	3.3	U	6.8	2.1	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
Hexachlorobutadiene	34	U	51	5.7	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
Hexachlorocyclopentadiene	34	U	330	8.2	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
Hexachloroethane	34	U	51	9.1	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
Indeno[1,2,3-cd]pyrene	1.7	U	6.8	0.35	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
Isophorone	**89**		51	13	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
2-Methylnaphthalene	**8.4**		6.8	0.51	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
2-Methylphenol	67	U	200	11	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
3 & 4 Methylphenol	67	U	400	20	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
Naphthalene	**6.2**	**J**	6.8	0.83	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
2-Nitroaniline	34	U	200	9.2	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
3-Nitroaniline	67	U	200	16	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
4-Nitroaniline	67	U	200	26	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
Nitrobenzene	3.3	U	100	2.2	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
2-Nitrophenol	**28**	**J**	51	8.4	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
4-Nitrophenol	67	U	330	17	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
N-Nitrosodi-n-propylamine	34	U	51	6.4	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
N-Nitrosodiphenylamine	34	U	51	21	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
Pentachlorophenol	34	U	150	9.2	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
Phenanthrene	**7.8**		6.8	0.74	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
Phenol	34	U	51	7.4	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
Pyrene	1.7	U	6.8	0.45	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
1,2,4-Trichlorobenzene	17	U	51	3.5	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
2,4,5-Trichlorophenol	67	U	150	25	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1
2,4,6-Trichlorophenol	34	U	150	9.0	ug/Kg	☼	05/12/15 12:12	05/20/15 16:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*74*		*45 - 105*	*05/12/15 12:12*	*05/20/15 16:11*	*1*
2-Fluorophenol (Surr)	*39*		*35 - 105*	*05/12/15 12:12*	*05/20/15 16:11*	*1*
Nitrobenzene-d5 (Surr)	*72*		*35 - 100*	*05/12/15 12:12*	*05/20/15 16:11*	*1*
Phenol-d5 (Surr)	*43*		*40 - 100*	*05/12/15 12:12*	*05/20/15 16:11*	*1*
Terphenyl-d14 (Surr)	*79*		*30 - 125*	*05/12/15 12:12*	*05/20/15 16:11*	*1*
2,4,6-Tribromophenol (Surr)	*68*		*35 - 125*	*05/12/15 12:12*	*05/20/15 16:11*	*1*

Client Sample ID: 079SB-0394M-0001-SO

Date Collected: 04/29/15 15:30
Date Received: 04/30/15 12:40

Lab Sample ID: 240-50067-6

Matrix: Solid
Percent Solids: 97.7

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	3.3	U	6.8	0.77	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
Acenaphthylene	1.7	U	6.8	0.36	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
Anthracene	3.3	U	6.8	0.79	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
Benzo[a]anthracene	3.3	U	6.8	0.64	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
Benzo[a]pyrene	3.3	U	6.8	0.65	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
Benzo[b]fluoranthene	3.3	U	6.8	0.60	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
Benzo[g,h,i]perylene	1.7	U	6.8	0.36	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
Benzoic acid	130	U Q	670	37	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
Benzo[k]fluoranthene	3.3	U	6.8	0.69	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
Benzyl alcohol	68	U	330	21	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
Bis(2-chloroethoxy)methane	68	U	100	22	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
Bis(2-chloroethyl)ether	3.3	U	100	2.0	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
bis (2-chloroisopropyl) ether	34	U	100	9.6	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
Bis(2-ethylhexyl) phthalate	34	U	71	19	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
4-Bromophenyl phenyl ether	34	U	51	13	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
Butyl benzyl phthalate	34	U	71	10	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
Carbazole	34	U	51	27	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
4-Chloroaniline	68	U	150	17	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
4-Chloro-3-methylphenol	68	U	150	21	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
2-Chloronaphthalene	1.7	U	51	0.46	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
2-Chlorophenol	34	U Q	51	8.3	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
4-Chlorophenyl phenyl ether	34	U	51	13	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
Chrysene	3.3	U	6.8	1.1	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
Dibenz(a,h)anthracene	3.3	U	6.8	0.67	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
Dibenzofuran	3.3	U	51	0.67	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
1,2-Dichlorobenzene	34	U	51	9.8	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
1,3-Dichlorobenzene	34	U	51	11	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
1,4-Dichlorobenzene	34	U	51	20	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
3,3'-Dichlorobenzidine	68	U	100	18	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
2,4-Dichlorophenol	68	U Q	150	20	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
Diethyl phthalate	34	U	71	16	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
2,4-Dimethylphenol	68	U Q	150	20	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
Dimethyl phthalate	34	U	71	17	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
Di-n-butyl phthalate	34	U	71	15	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
4,6-Dinitro-2-methylphenol	34	U	150	9.3	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
2,4-Dinitrophenol	68	U	330	21	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
2,4-Dinitrotoluene	68	U	200	17	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
2,6-Dinitrotoluene	68	U	200	21	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
Di-n-octyl phthalate	34	U	71	8.0	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
Fluoranthene	3.3	U	6.8	0.56	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
Fluorene	3.3	U	6.8	0.54	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
Hexachlorobenzene	3.3	U	6.8	2.1	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
Hexachlorobutadiene	34	U	51	5.7	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
Hexachlorocyclopentadiene	34	U	330	8.2	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
Hexachloroethane	34	U	51	9.1	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
Indeno[1,2,3-cd]pyrene	1.7	U	6.8	0.36	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
Isophorone	**53**		51	13	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
2-Methylnaphthalene	**7.4**		6.8	0.51	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
2-Methylphenol	68	U Q	200	11	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1

Client Sample ID: 079SB-0394M-0001-SO

Date Collected: 04/29/15 15:30
Date Received: 04/30/15 12:40

Lab Sample ID: 240-50067-6

Matrix: Solid
Percent Solids: 97.7

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
3 & 4 Methylphenol	68	U Q	410	20	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
Naphthalene	**5.2**	**J**	6.8	0.83	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
2-Nitroaniline	34	U	200	9.2	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
3-Nitroaniline	68	U	200	16	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
4-Nitroaniline	68	U	200	26	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
Nitrobenzene	3.3	U	100	2.2	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
2-Nitrophenol	34	U Q	51	8.4	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
4-Nitrophenol	68	U	330	17	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
N-Nitrosodi-n-propylamine	34	U	51	6.4	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
N-Nitrosodiphenylamine	34	U	51	21	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
Pentachlorophenol	34	U	150	9.2	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
Phenanthrene	**6.3**	**J**	6.8	0.74	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
Phenol	**12**	**J**	51	7.4	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
Pyrene	1.7	U	6.8	0.45	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
1,2,4-Trichlorobenzene	17	U	51	3.6	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
2,4,5-Trichlorophenol	68	U	150	25	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1
2,4,6-Trichlorophenol	34	U	150	9.0	ug/Kg	☼	05/12/15 12:12	05/21/15 09:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*67*		*45 - 105*	*05/12/15 12:12*	*05/21/15 09:35*	*1*
2-Fluorophenol (Surr)	*33*	*Q*	*35 - 105*	*05/12/15 12:12*	*05/21/15 09:35*	*1*
Nitrobenzene-d5 (Surr)	*63*		*35 - 100*	*05/12/15 12:12*	*05/21/15 09:35*	*1*
Phenol-d5 (Surr)	*41*		*40 - 100*	*05/12/15 12:12*	*05/21/15 09:35*	*1*
Terphenyl-d14 (Surr)	*72*		*30 - 125*	*05/12/15 12:12*	*05/21/15 09:35*	*1*
2,4,6-Tribromophenol (Surr)	*55*		*35 - 125*	*05/12/15 12:12*	*05/21/15 09:35*	*1*

Client Sample ID: 079SB-0395M-0001-0002-SO

Date Collected: 04/29/15 15:50
Date Received: 04/30/15 12:40

Lab Sample ID: 240-50067-7

Matrix: Solid
Percent Solids: 97.3

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	3.4	U	6.9	0.79	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
Acenaphthylene	1.7	U	6.9	0.36	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
Anthracene	3.4	U	6.9	0.81	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
Benzo[a]anthracene	3.4	U	6.9	0.65	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
Benzo[a]pyrene	3.4	U	6.9	0.66	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
Benzo[b]fluoranthene	3.4	U	6.9	0.61	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
Benzo[g,h,i]perylene	1.7	U	6.9	0.36	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
Benzoic acid	140	U J	680	37	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
Benzo[k]fluoranthene	3.4	U	6.9	0.70	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
Benzyl alcohol	69	U	340	22	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
Bis(2-chloroethoxy)methane	69	U	100	23	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
Bis(2-chloroethyl)ether	3.4	U	100	2.1	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
bis (2-chloroisopropyl) ether	34	U	100	9.8	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
Bis(2-ethylhexyl) phthalate	34	U	72	20	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
4-Bromophenyl phenyl ether	34	U	52	13	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
Butyl benzyl phthalate	34	U	72	10	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
Carbazole	34	U	52	28	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
4-Chloroaniline	69	U	150	18	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1

Client Sample ID: 079SB-0395M-0001-0002-SO

Date Collected: 04/29/15 15:50
Date Received: 04/30/15 12:40

Lab Sample ID: 240-50067-7

Matrix: Solid
Percent Solids: 97.3

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloro-3-methylphenol	69	U	150	22	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
2-Chloronaphthalene	1.7	U	52	0.46	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
2-Chlorophenol	34	U	52	8.5	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
4-Chlorophenyl phenyl ether	34	U	52	13	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
Chrysene	3.4	U	6.9	1.1	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
Dibenz(a,h)anthracene	3.4	U	6.9	0.68	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
Dibenzofuran	**7.7**	**J**	52	0.68	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
1,2-Dichlorobenzene	34	U	52	10	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
1,3-Dichlorobenzene	34	U	52	11	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
1,4-Dichlorobenzene	34	U	52	21	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
3,3'-Dichlorobenzidine	69	U	100	19	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
2,4-Dichlorophenol	69	U	150	21	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
Diethyl phthalate	34	U	72	17	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
2,4-Dimethylphenol	69	U	150	21	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
Dimethyl phthalate	34	U	72	18	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
Di-n-butyl phthalate	34	U	72	15	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
4,6-Dinitro-2-methylphenol	34	U	150	9.5	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
2,4-Dinitrophenol	69	U	340	22	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
2,4-Dinitrotoluene	69	U	210	18	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
2,6-Dinitrotoluene	69	U	210	22	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
Di-n-octyl phthalate	34	U	72	8.2	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
Fluoranthene	3.4	U	6.9	0.57	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
Fluorene	3.4	U	6.9	0.55	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
Hexachlorobenzene	3.4	U	6.9	2.2	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
Hexachlorobutadiene	34	U	52	5.8	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
Hexachlorocyclopentadiene	34	U	340	8.4	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
Hexachloroethane	34	U	52	9.3	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
Indeno[1,2,3-cd]pyrene	1.7	U	6.9	0.36	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
Isophorone	**44**	**J**	52	13	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
2-Methylnaphthalene	**33**		6.9	0.52	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
2-Methylphenol	69	U	210	11	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
3 & 4 Methylphenol	69	U	410	21	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
Naphthalene	**30**		6.9	0.85	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
2-Nitroaniline	34	U	210	9.4	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
3-Nitroaniline	69	U	210	17	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
4-Nitroaniline	69	U	210	27	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
Nitrobenzene	3.4	U	100	2.3	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
2-Nitrophenol	**16**	**J**	52	8.6	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
4-Nitrophenol	69	U	340	18	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
N-Nitrosodi-n-propylamine	34	U	52	6.5	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
N-Nitrosodiphenylamine	34	U	52	22	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
Pentachlorophenol	34	U J	150	9.4	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
Phenanthrene	**14**		6.9	0.75	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
Phenol	34	U	52	7.5	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
Pyrene	1.7	U	6.9	0.45	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
1,2,4-Trichlorobenzene	17	U	52	3.6	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
2,4,5-Trichlorophenol	69	U	150	26	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1
2,4,6-Trichlorophenol	34	U	150	9.2	ug/Kg	☼	05/12/15 12:12	05/20/15 12:25	1

Client Sample ID: 079SB-0395M-0001-0002-SO

Lab Sample ID: 240-50067-7

Date Collected: 04/29/15 15:50
Matrix: Solid
Date Received: 04/30/15 12:40
Percent Solids: 97.3

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*76*		*45 - 105*	*05/12/15 12:12*	*05/20/15 12:25*	*1*
2-Fluorophenol (Surr)	*67*		*35 - 105*	*05/12/15 12:12*	*05/20/15 12:25*	*1*
Nitrobenzene-d5 (Surr)	*67*		*35 - 100*	*05/12/15 12:12*	*05/20/15 12:25*	*1*
Phenol-d5 (Surr)	*59*	*M*	*40 - 100*	*05/12/15 12:12*	*05/20/15 12:25*	*1*
Terphenyl-d14 (Surr)	*72*		*30 - 125*	*05/12/15 12:12*	*05/20/15 12:25*	*1*
2,4,6-Tribromophenol (Surr)	*109*		*35 - 125*	*05/12/15 12:12*	*05/20/15 12:25*	*1*

Client Sample ID: 079SB-0396M-0001-SO

Lab Sample ID: 240-50067-8

Date Collected: 04/29/15 15:20
Matrix: Solid
Date Received: 04/30/15 12:40
Percent Solids: 97.6

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	3.3	U	6.8	0.77	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
Acenaphthylene	1.7	U	6.8	0.35	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
Anthracene	3.3	U	6.8	0.79	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
Benzo[a]anthracene	3.3	U	6.8	0.64	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
Benzo[a]pyrene	3.3	U	6.8	0.65	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
Benzo[b]fluoranthene	3.3	U	6.8	0.60	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
Benzo[g,h,i]perylene	1.7	U	6.8	0.35	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
Benzoic acid	130	U	670	37	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
Benzo[k]fluoranthene	3.3	U	6.8	0.69	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
Benzyl alcohol	68	U	330	21	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
Bis(2-chloroethoxy)methane	68	U	100	22	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
Bis(2-chloroethyl)ether	3.3	U	100	2.0	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
bis (2-chloroisopropyl) ether	34	U	100	9.6	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
Bis(2-ethylhexyl) phthalate	34	U	71	19	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
4-Bromophenyl phenyl ether	34	U	51	13	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
Butyl benzyl phthalate	34	U	71	10	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
Carbazole	34	U	51	27	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
4-Chloroaniline	68	U	150	17	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
4-Chloro-3-methylphenol	68	U	150	21	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
2-Chloronaphthalene	1.7	U	51	0.46	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
2-Chlorophenol	34	U	51	8.3	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
4-Chlorophenyl phenyl ether	34	U	51	13	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
Chrysene	3.3	U	6.8	1.1	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
Dibenz(a,h)anthracene	3.3	U	6.8	0.67	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
Dibenzofuran	3.3	U	51	0.67	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
1,2-Dichlorobenzene	34	U	51	9.8	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
1,3-Dichlorobenzene	34	U	51	11	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
1,4-Dichlorobenzene	34	U	51	20	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
3,3'-Dichlorobenzidine	68	U	100	18	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
2,4-Dichlorophenol	68	U	150	20	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
Diethyl phthalate	34	U	71	16	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
2,4-Dimethylphenol	68	U	150	20	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
Dimethyl phthalate	34	U	71	17	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
Di-n-butyl phthalate	34	U	71	15	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
4,6-Dinitro-2-methylphenol	34	U	150	9.3	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
2,4-Dinitrophenol	68	U	330	21	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
2,4-Dinitrotoluene	68	U	200	17	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1

Client Sample ID: 079SB-0396M-0001-SO

Date Collected: 04/29/15 15:20
Date Received: 04/30/15 12:40

Lab Sample ID: 240-50067-8

Matrix: Solid
Percent Solids: 97.6

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	68	U	200	21	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
Di-n-octyl phthalate	34	U	71	8.0	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
Fluoranthene	3.3	U	6.8	0.56	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
Fluorene	3.3	U	6.8	0.54	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
Hexachlorobenzene	3.3	U	6.8	2.1	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
Hexachlorobutadiene	34	U	51	5.7	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
Hexachlorocyclopentadiene	34	U	330	8.2	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
Hexachloroethane	34	U	51	9.1	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
Indeno[1,2,3-cd]pyrene	1.7	U	6.8	0.35	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
Isophorone	**55**		51	13	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
2-Methylnaphthalene	**12**		6.8	0.51	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
2-Methylphenol	68	U	200	11	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
3 & 4 Methylphenol	68	U	410	20	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
Naphthalene	**11**		6.8	0.83	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
2-Nitroaniline	34	U	200	9.2	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
3-Nitroaniline	68	U	200	16	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
4-Nitroaniline	68	U	200	26	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
Nitrobenzene	3.3	U	100	2.2	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
2-Nitrophenol	34	U	51	8.4	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
4-Nitrophenol	68	U	330	17	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
N-Nitrosodi-n-propylamine	34	U	51	6.4	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
N-Nitrosodiphenylamine	34	U	51	21	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
Pentachlorophenol	34	U	150	9.2	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
Phenanthrene	**9.8**		6.8	0.74	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
Phenol	**26**	**J M**	51	7.4	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
Pyrene	1.7	U	6.8	0.45	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
1,2,4-Trichlorobenzene	17	U	51	3.5	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
2,4,5-Trichlorophenol	68	U	150	25	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1
2,4,6-Trichlorophenol	34	U	150	9.0	ug/Kg	☼	05/12/15 12:12	05/20/15 13:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*90*		*45 - 105*	*05/12/15 12:12*	*05/20/15 13:40*	*1*
2-Fluorophenol (Surr)	*72*		*35 - 105*	*05/12/15 12:12*	*05/20/15 13:40*	*1*
Nitrobenzene-d5 (Surr)	*70*		*35 - 100*	*05/12/15 12:12*	*05/20/15 13:40*	*1*
Phenol-d5 (Surr)	*74*	*M*	*40 - 100*	*05/12/15 12:12*	*05/20/15 13:40*	*1*
Terphenyl-d14 (Surr)	*77*		*30 - 125*	*05/12/15 12:12*	*05/20/15 13:40*	*1*
2,4,6-Tribromophenol (Surr)	*105*		*35 - 125*	*05/12/15 12:12*	*05/20/15 13:40*	*1*

Client Sample ID: 079SB-0397M-0001-SO

Date Collected: 04/29/15 17:05
Date Received: 04/30/15 12:40

Lab Sample ID: 240-50067-9

Matrix: Solid
Percent Solids: 97.9

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**6.2**	**J**	6.8	0.77	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
Acenaphthylene	1.7	U	6.8	0.36	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
Anthracene	3.4	U	6.8	0.79	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
Benzo[a]anthracene	3.4	U	6.8	0.64	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
Benzo[a]pyrene	3.4	U	6.8	0.65	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
Benzo[b]fluoranthene	**4.1**	**J**	6.8	0.60	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1

Client Sample ID: 079SB-0397M-0001-SO
Date Collected: 04/29/15 17:05
Date Received: 04/30/15 12:40

Lab Sample ID: 240-50067-9
Matrix: Solid
Percent Solids: 97.9

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	1.7	U	6.8	0.36	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
Benzoic acid	140	U	670	37	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
Benzo[k]fluoranthene	3.4	U	6.8	0.69	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
Benzyl alcohol	**23**	**J**	340	21	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
Bis(2-chloroethoxy)methane	68	U	100	22	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
Bis(2-chloroethyl)ether	3.4	U	100	2.0	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
bis (2-chloroisopropyl) ether	34	U	100	9.7	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
Bis(2-ethylhexyl) phthalate	**22**	**J**	71	19	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
4-Bromophenyl phenyl ether	34	U	51	13	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
Butyl benzyl phthalate	34	U	71	10	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
Carbazole	34	U	51	27	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
4-Chloroaniline	68	U	150	17	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
4-Chloro-3-methylphenol	68	U	150	21	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
2-Chloronaphthalene	1.7	U	51	0.46	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
2-Chlorophenol	34	U	51	8.3	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
4-Chlorophenyl phenyl ether	34	U	51	13	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
Chrysene	**3.6**	**J**	6.8	1.1	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
Dibenz(a,h)anthracene	3.4	U	6.8	0.67	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
Dibenzofuran	3.4	U	51	0.67	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
1,2-Dichlorobenzene	34	U	51	9.9	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
1,3-Dichlorobenzene	34	U	51	11	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
1,4-Dichlorobenzene	34	U	51	20	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
3,3'-Dichlorobenzidine	68	U	100	18	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
2,4-Dichlorophenol	68	U	150	20	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
Diethyl phthalate	**19**	**J**	71	16	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
2,4-Dimethylphenol	68	U	150	20	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
Dimethyl phthalate	34	U	71	17	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
Di-n-butyl phthalate	**20**	**J**	71	15	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
4,6-Dinitro-2-methylphenol	34	U	150	9.4	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
2,4-Dinitrophenol	68	U	340	21	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
2,4-Dinitrotoluene	68	U	200	17	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
2,6-Dinitrotoluene	68	U	200	21	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
Di-n-octyl phthalate	34	U	71	8.0	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
Fluoranthene	**4.7**	**J**	6.8	0.56	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
Fluorene	**4.7**	**J**	6.8	0.54	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
Hexachlorobenzene	3.4	U	6.8	2.1	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
Hexachlorobutadiene	34	U	51	5.7	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
Hexachlorocyclopentadiene	34	U	340	8.2	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
Hexachloroethane	34	U	51	9.2	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
Indeno[1,2,3-cd]pyrene	1.7	U	6.8	0.36	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
Isophorone	**120**		51	13	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
2-Methylnaphthalene	**25**		6.8	0.51	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
2-Methylphenol	68	U	200	11	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
3 & 4 Methylphenol	68	U	410	20	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
Naphthalene	**24**		6.8	0.83	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
2-Nitroaniline	34	U	200	9.3	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
3-Nitroaniline	68	U	200	16	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
4-Nitroaniline	68	U	200	26	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
Nitrobenzene	3.4	U	100	2.2	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1

Client Sample ID: 079SB-0397M-0001-SO

Lab Sample ID: 240-50067-9
Date Collected: 04/29/15 17:05
Matrix: Solid
Date Received: 04/30/15 12:40
Percent Solids: 97.9

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	**15**	**J**	51	8.4	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
4-Nitrophenol	68	U	340	17	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
N-Nitrosodi-n-propylamine	34	U	51	6.4	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
N-Nitrosodiphenylamine	34	U	51	21	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
Pentachlorophenol	34	U	150	9.3	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
Phenanthrene	**12**		6.8	0.74	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
Phenol	**24**	**J M**	51	7.4	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
Pyrene	**3.4**	**J**	6.8	0.45	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
1,2,4-Trichlorobenzene	17	U	51	3.6	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
2,4,5-Trichlorophenol	68	U	150	25	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1
2,4,6-Trichlorophenol	34	U	150	9.1	ug/Kg	☼	05/12/15 12:12	05/20/15 14:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*76*		*45 - 105*	*05/12/15 12:12*	*05/20/15 14:04*	*1*
2-Fluorophenol (Surr)	*62*		*35 - 105*	*05/12/15 12:12*	*05/20/15 14:04*	*1*
Nitrobenzene-d5 (Surr)	*62*		*35 - 100*	*05/12/15 12:12*	*05/20/15 14:04*	*1*
Phenol-d5 (Surr)	*69*	*M*	*40 - 100*	*05/12/15 12:12*	*05/20/15 14:04*	*1*
Terphenyl-d14 (Surr)	*76*		*30 - 125*	*05/12/15 12:12*	*05/20/15 14:04*	*1*
2,4,6-Tribromophenol (Surr)	*72*		*35 - 125*	*05/12/15 12:12*	*05/20/15 14:04*	*1*

Client Sample ID: 079SB-0398-0001-SO

Lab Sample ID: 240-50067-10
Date Collected: 04/29/15 16:40
Matrix: Solid
Date Received: 04/30/15 12:40
Percent Solids: 84.6

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	3.9	U	7.9	0.90	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
Acenaphthylene	2.0	U	7.9	0.41	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
Anthracene	3.9	U	7.9	0.92	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
Benzo[a]anthracene	3.9	U	7.9	0.74	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
Benzo[a]pyrene	3.9	U	7.9	0.76	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
Benzo[b]fluoranthene	3.9	U	7.9	0.70	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
Benzo[g,h,i]perylene	2.0	U	7.9	0.41	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
Benzoic acid	160	U	780	42	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
Benzo[k]fluoranthene	3.9	U	7.9	0.80	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
Benzyl alcohol	79	U	390	25	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
Bis(2-chloroethoxy)methane	79	U	120	26	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
Bis(2-chloroethyl)ether	3.9	U	120	2.4	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
bis (2-chloroisopropyl) ether	39	U	120	11	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
Bis(2-ethylhexyl) phthalate	**24**	**J**	83	22	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
4-Bromophenyl phenyl ether	39	U	59	15	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
Butyl benzyl phthalate	39	U	83	12	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
Carbazole	39	U	59	32	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
4-Chloroaniline	79	U	180	20	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
4-Chloro-3-methylphenol	79	U	180	25	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
2-Chloronaphthalene	2.0	U	59	0.53	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
2-Chlorophenol	39	U	59	9.7	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
4-Chlorophenyl phenyl ether	39	U	59	15	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
Chrysene	3.9	U	7.9	1.3	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
Dibenz(a,h)anthracene	3.9	U	7.9	0.78	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1

Client Sample ID: 079SB-0398-0001-SO

Date Collected: 04/29/15 16:40
Date Received: 04/30/15 12:40

Lab Sample ID: 240-50067-10

Matrix: Solid
Percent Solids: 84.6

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	3.9	U	59	0.78	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
1,2-Dichlorobenzene	39	U	59	11	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
1,3-Dichlorobenzene	39	U	59	13	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
1,4-Dichlorobenzene	39	U	59	24	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
3,3'-Dichlorobenzidine	79	U	120	21	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
2,4-Dichlorophenol	79	U	180	24	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
Diethyl phthalate	39	U	83	19	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
2,4-Dimethylphenol	79	U	180	24	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
Dimethyl phthalate	39	U	83	20	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
Di-n-butyl phthalate	39	U	83	18	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
4,6-Dinitro-2-methylphenol	39	U	180	11	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
2,4-Dinitrophenol	79	U	390	25	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
2,4-Dinitrotoluene	79	U	240	20	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
2,6-Dinitrotoluene	79	U	240	25	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
Di-n-octyl phthalate	39	U	83	9.3	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
Fluoranthene	3.9	U	7.9	0.65	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
Fluorene	3.9	U	7.9	0.63	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
Hexachlorobenzene	3.9	U	7.9	2.5	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
Hexachlorobutadiene	39	U	59	6.6	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
Hexachlorocyclopentadiene	39	U	390	9.6	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
Hexachloroethane	39	U	59	11	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
Indeno[1,2,3-cd]pyrene	2.0	U	7.9	0.41	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
Isophorone	39	U	59	15	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
2-Methylnaphthalene	3.9	U	7.9	0.59	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
2-Methylphenol	79	U	240	13	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
3 & 4 Methylphenol	79	U	470	24	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
Naphthalene	**22**	**B**	7.9	0.97	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
2-Nitroaniline	39	U	240	11	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
3-Nitroaniline	79	U	240	19	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
4-Nitroaniline	79	U	240	31	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
Nitrobenzene	3.9	U	120	2.6	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
2-Nitrophenol	39	U	59	9.8	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
4-Nitrophenol	79	U	390	20	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
N-Nitrosodi-n-propylamine	39	U	59	7.4	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
N-Nitrosodiphenylamine	39	U	59	25	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
Pentachlorophenol	39	U	180	11	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
Phenanthrene	3.9	U	7.9	0.86	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
Phenol	39	U	59	8.6	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
Pyrene	2.0	U	7.9	0.52	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
1,2,4-Trichlorobenzene	20	U	59	4.1	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
2,4,5-Trichlorophenol	79	U	180	29	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1
2,4,6-Trichlorophenol	39	U	180	10	ug/Kg	☼	05/04/15 09:17	05/20/15 12:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*75*		*45 - 105*	*05/04/15 09:17*	*05/20/15 12:00*	*1*
2-Fluorophenol (Surr)	*70*		*35 - 105*	*05/04/15 09:17*	*05/20/15 12:00*	*1*
Nitrobenzene-d5 (Surr)	*70*		*35 - 100*	*05/04/15 09:17*	*05/20/15 12:00*	*1*
Phenol-d5 (Surr)	*74*		*40 - 100*	*05/04/15 09:17*	*05/20/15 12:00*	*1*
Terphenyl-d14 (Surr)	*80*		*30 - 125*	*05/04/15 09:17*	*05/20/15 12:00*	*1*
2,4,6-Tribromophenol (Surr)	*40*		*35 - 125*	*05/04/15 09:17*	*05/20/15 12:00*	*1*

Client Sample ID: 079SB-0399-0001-RB

Date Collected: 04/30/15 08:05
Date Received: 04/30/15 12:40

Lab Sample ID: 240-50067-11

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.095	U	0.19	0.042	ug/L		05/04/15 05:57	05/12/15 14:46	1
Acenaphthylene	0.095	U	0.19	0.046	ug/L		05/04/15 05:57	05/12/15 14:46	1
Anthracene	0.095	U	0.19	0.084	ug/L		05/04/15 05:57	05/12/15 14:46	1
Benzo[a]anthracene	0.095	U	0.19	0.028	ug/L		05/04/15 05:57	05/12/15 14:46	1
Benzo[a]pyrene	0.095	U	0.19	0.049	ug/L		05/04/15 05:57	05/12/15 14:46	1
Benzo[b]fluoranthene	0.095	U	0.19	0.038	ug/L		05/04/15 05:57	05/12/15 14:46	1
Benzo[g,h,i]perylene	0.095	U	0.19	0.044	ug/L		05/04/15 05:57	05/12/15 14:46	1
Benzoic acid	19	U	24	9.5	ug/L		05/04/15 05:57	05/12/15 14:46	1
Benzo[k]fluoranthene	0.095	U	0.19	0.043	ug/L		05/04/15 05:57	05/12/15 14:46	1
Benzyl alcohol	0.48	U	4.8	0.36	ug/L		05/04/15 05:57	05/12/15 14:46	1
Bis(2-chloroethoxy)methane	0.48	U	0.95	0.30	ug/L		05/04/15 05:57	05/12/15 14:46	1
Bis(2-chloroethyl)ether	0.095	U	0.95	0.095	ug/L		05/04/15 05:57	05/12/15 14:46	1
bis (2-chloroisopropyl) ether	0.48	U	0.95	0.38	ug/L		05/04/15 05:57	05/12/15 14:46	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8	1.6	ug/L		05/04/15 05:57	05/12/15 14:46	1
4-Bromophenyl phenyl ether	0.48	U	1.9	0.21	ug/L		05/04/15 05:57	05/12/15 14:46	1
Butyl benzyl phthalate	0.48	U	4.8	0.25	ug/L		05/04/15 05:57	05/12/15 14:46	1
Carbazole	0.48	U	0.95	0.27	ug/L		05/04/15 05:57	05/12/15 14:46	1
4-Chloroaniline	0.48	U	1.9	0.20	ug/L		05/04/15 05:57	05/12/15 14:46	1
4-Chloro-3-methylphenol	0.48	U	1.9	0.20	ug/L		05/04/15 05:57	05/12/15 14:46	1
2-Chloronaphthalene	0.48	U	0.95	0.095	ug/L		05/04/15 05:57	05/12/15 14:46	1
2-Chlorophenol	0.48	U	0.95	0.28	ug/L		05/04/15 05:57	05/12/15 14:46	1
4-Chlorophenyl phenyl ether	0.48	U	1.9	0.29	ug/L		05/04/15 05:57	05/12/15 14:46	1
Chrysene	0.095	U	0.19	0.048	ug/L		05/04/15 05:57	05/12/15 14:46	1
Dibenz(a,h)anthracene	0.095	U	0.19	0.042	ug/L		05/04/15 05:57	05/12/15 14:46	1
Dibenzofuran	0.095	U	0.95	0.019	ug/L		05/04/15 05:57	05/12/15 14:46	1
1,2-Dichlorobenzene	0.48	U	0.95	0.28	ug/L		05/04/15 05:57	05/12/15 14:46	1
1,3-Dichlorobenzene	0.48	U	0.95	0.22	ug/L		05/04/15 05:57	05/12/15 14:46	1
1,4-Dichlorobenzene	0.48	U	0.95	0.32	ug/L		05/04/15 05:57	05/12/15 14:46	1
3,3'-Dichlorobenzidine	0.95	U	4.8	0.35	ug/L		05/04/15 05:57	05/12/15 14:46	1
2,4-Dichlorophenol	0.48	U	1.9	0.18	ug/L		05/04/15 05:57	05/12/15 14:46	1
Diethyl phthalate	0.95	U	1.9	0.57	ug/L		05/04/15 05:57	05/12/15 14:46	1
2,4-Dimethylphenol	0.48	U	1.9	0.24	ug/L		05/04/15 05:57	05/12/15 14:46	1
Dimethyl phthalate	0.48	U	1.9	0.28	ug/L		05/04/15 05:57	05/12/15 14:46	1
Di-n-butyl phthalate	4.8	U	4.8	1.6	ug/L		05/04/15 05:57	05/12/15 14:46	1
4,6-Dinitro-2-methylphenol	3.8	U	4.8	2.3	ug/L		05/04/15 05:57	05/12/15 14:46	1
2,4-Dinitrophenol	0.95	U	4.8	0.30	ug/L		05/04/15 05:57	05/12/15 14:46	1
2,4-Dinitrotoluene	0.48	U	4.8	0.24	ug/L		05/04/15 05:57	05/12/15 14:46	1
2,6-Dinitrotoluene	4.8	U	4.8	1.0	ug/L		05/04/15 05:57	05/12/15 14:46	1
Di-n-octyl phthalate	0.48	U	1.9	0.22	ug/L		05/04/15 05:57	05/12/15 14:46	1
Fluoranthene	0.095	U	0.19	0.042	ug/L		05/04/15 05:57	05/12/15 14:46	1
Fluorene	0.095	U	0.19	0.039	ug/L		05/04/15 05:57	05/12/15 14:46	1
Hexachlorobenzene	0.095	U	0.19	0.081	ug/L		05/04/15 05:57	05/12/15 14:46	1
Hexachlorobutadiene	0.48	U	0.95	0.26	ug/L		05/04/15 05:57	05/12/15 14:46	1
Hexachlorocyclopentadiene	0.48	U Q	9.5	0.23	ug/L		05/04/15 05:57	05/12/15 14:46	1
Hexachloroethane	0.48	U	0.95	0.18	ug/L		05/04/15 05:57	05/12/15 14:46	1
Indeno[1,2,3-cd]pyrene	0.095	U	0.19	0.041	ug/L		05/04/15 05:57	05/12/15 14:46	1
Isophorone	0.48	U	0.95	0.26	ug/L		05/04/15 05:57	05/12/15 14:46	1
2-Methylnaphthalene	0.095	U	0.19	0.086	ug/L		05/04/15 05:57	05/12/15 14:46	1
2-Methylphenol	0.48	U	0.95	0.16	ug/L		05/04/15 05:57	05/12/15 14:46	1

Client Sample ID: 079SB-0399-0001-RB

Date Collected: 04/30/15 08:05
Date Received: 04/30/15 12:40

Lab Sample ID: 240-50067-11

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
3 & 4 Methylphenol	0.95	U	1.9	0.76	ug/L		05/04/15 05:57	05/12/15 14:46	1
Naphthalene	0.095	U	0.19	0.060	ug/L		05/04/15 05:57	05/12/15 14:46	1
2-Nitroaniline	0.48	U	1.9	0.20	ug/L		05/04/15 05:57	05/12/15 14:46	1
3-Nitroaniline	0.48	U	1.9	0.27	ug/L		05/04/15 05:57	05/12/15 14:46	1
4-Nitroaniline	0.48	U	1.9	0.21	ug/L		05/04/15 05:57	05/12/15 14:46	1
Nitrobenzene	0.095	U	0.95	0.038	ug/L		05/04/15 05:57	05/12/15 14:46	1
2-Nitrophenol	0.48	U	1.9	0.27	ug/L		05/04/15 05:57	05/12/15 14:46	1
4-Nitrophenol	3.8	U	4.8	0.28	ug/L		05/04/15 05:57	05/12/15 14:46	1
N-Nitrosodi-n-propylamine	0.48	U	0.95	0.23	ug/L		05/04/15 05:57	05/12/15 14:46	1
N-Nitrosodiphenylamine	0.48	U	0.95	0.30	ug/L		05/04/15 05:57	05/12/15 14:46	1
Pentachlorophenol	0.95	U	4.8	0.26	ug/L		05/04/15 05:57	05/12/15 14:46	1
Phenanthrene	0.095	U	0.19	0.059	ug/L		05/04/15 05:57	05/12/15 14:46	1
Phenol	0.95	U	0.95	0.57	ug/L		05/04/15 05:57	05/12/15 14:46	1
Pyrene	0.095	U	0.19	0.040	ug/L		05/04/15 05:57	05/12/15 14:46	1
1,2,4-Trichlorobenzene	0.48	U	0.95	0.27	ug/L		05/04/15 05:57	05/12/15 14:46	1
2,4,5-Trichlorophenol	0.48	U	4.8	0.29	ug/L		05/04/15 05:57	05/12/15 14:46	1
2,4,6-Trichlorophenol	0.48	U	4.8	0.23	ug/L		05/04/15 05:57	05/12/15 14:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*51*		*50 - 110*	*05/04/15 05:57*	*05/12/15 14:46*	*1*
2-Fluorophenol (Surr)	*56*		*20 - 110*	*05/04/15 05:57*	*05/12/15 14:46*	*1*
Nitrobenzene-d5 (Surr)	*50*		*40 - 110*	*05/04/15 05:57*	*05/12/15 14:46*	*1*
Phenol-d5 (Surr)	*55*		*10 - 115*	*05/04/15 05:57*	*05/12/15 14:46*	*1*
Terphenyl-d14 (Surr)	*74*		*50 - 135*	*05/04/15 05:57*	*05/12/15 14:46*	*1*
2,4,6-Tribromophenol (Surr)	*53*		*40 - 125*	*05/04/15 05:57*	*05/12/15 14:46*	*1*

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclopentadiene	0.48	U H	9.5	0.23	ug/L		05/12/15 13:37	05/14/15 12:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*82*		*50 - 110*	*05/12/15 13:37*	*05/14/15 12:03*	*1*
2-Fluorophenol (Surr)	*77*		*20 - 110*	*05/12/15 13:37*	*05/14/15 12:03*	*1*
Nitrobenzene-d5 (Surr)	*76*		*40 - 110*	*05/12/15 13:37*	*05/14/15 12:03*	*1*
Phenol-d5 (Surr)	*83*		*10 - 115*	*05/12/15 13:37*	*05/14/15 12:03*	*1*
Terphenyl-d14 (Surr)	*82*		*50 - 135*	*05/12/15 13:37*	*05/14/15 12:03*	*1*
2,4,6-Tribromophenol (Surr)	*81*		*40 - 125*	*05/12/15 13:37*	*05/14/15 12:03*	*1*

Default Detection Limits

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

TestAmerica Job ID: 240-50067-1

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

Analyte	LOQ	DL	Units	Method
1,2,4-Trichlorobenzene	50	3.5	ug/Kg	8270C
1,2,4-Trichlorobenzene	1.0	0.28	ug/L	8270C
1,2-Dichlorobenzene	50	9.7	ug/Kg	8270C
1,2-Dichlorobenzene	1.0	0.29	ug/L	8270C
1,3-Dichlorobenzene	50	11	ug/Kg	8270C
1,3-Dichlorobenzene	1.0	0.23	ug/L	8270C
1,4-Dichlorobenzene	50	20	ug/Kg	8270C
1,4-Dichlorobenzene	1.0	0.34	ug/L	8270C
2,4,5-Trichlorophenol	150	25	ug/Kg	8270C
2,4,5-Trichlorophenol	5.0	0.30	ug/L	8270C
2,4,6-Trichlorophenol	150	8.9	ug/Kg	8270C
2,4,6-Trichlorophenol	5.0	0.24	ug/L	8270C
2,4-Dichlorophenol	150	20	ug/Kg	8270C
2,4-Dichlorophenol	2.0	0.19	ug/L	8270C
2,4-Dimethylphenol	150	20	ug/Kg	8270C
2,4-Dimethylphenol	2.0	0.25	ug/L	8270C
2,4-Dinitrophenol	330	21	ug/Kg	8270C
2,4-Dinitrophenol	5.0	0.32	ug/L	8270C
2,4-Dinitrotoluene	200	17	ug/Kg	8270C
2,4-Dinitrotoluene	5.0	0.25	ug/L	8270C
2,6-Dinitrotoluene	200	21	ug/Kg	8270C
2,6-Dinitrotoluene	5.0	1.1	ug/L	8270C
2-Chloronaphthalene	50	0.45	ug/Kg	8270C
2-Chloronaphthalene	1.0	0.10	ug/L	8270C
2-Chlorophenol	50	8.2	ug/Kg	8270C
2-Chlorophenol	1.0	0.29	ug/L	8270C
2-Methylnaphthalene	6.7	0.50	ug/Kg	8270C
2-Methylnaphthalene	0.20	0.090	ug/L	8270C
2-Methylphenol	200	11	ug/Kg	8270C
2-Methylphenol	1.0	0.17	ug/L	8270C
2-Nitroaniline	200	9.1	ug/Kg	8270C
2-Nitroaniline	2.0	0.21	ug/L	8270C
2-Nitrophenol	50	8.3	ug/Kg	8270C
2-Nitrophenol	2.0	0.28	ug/L	8270C
3 & 4 Methylphenol	400	20	ug/Kg	8270C
3 & 4 Methylphenol	2.0	0.80	ug/L	8270C
3,3'-Dichlorobenzidine	100	18	ug/Kg	8270C
3,3'-Dichlorobenzidine	5.0	0.37	ug/L	8270C
3-Nitroaniline	200	16	ug/Kg	8270C
3-Nitroaniline	2.0	0.28	ug/L	8270C
4,6-Dinitro-2-methylphenol	150	9.2	ug/Kg	8270C
4,6-Dinitro-2-methylphenol	5.0	2.4	ug/L	8270C
4-Bromophenyl phenyl ether	50	13	ug/Kg	8270C
4-Bromophenyl phenyl ether	2.0	0.22	ug/L	8270C
4-Chloro-3-methylphenol	150	21	ug/Kg	8270C
4-Chloro-3-methylphenol	2.0	0.21	ug/L	8270C
4-Chloroaniline	150	17	ug/Kg	8270C
4-Chloroaniline	2.0	0.21	ug/L	8270C
4-Chlorophenyl phenyl ether	50	13	ug/Kg	8270C
4-Chlorophenyl phenyl ether	2.0	0.30	ug/L	8270C
4-Nitroaniline	200	26	ug/Kg	8270C
4-Nitroaniline	2.0	0.22	ug/L	8270C

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

Analyte	LOQ	DL	Units	Method
4-Nitrophenol	330	17	ug/Kg	8270C
4-Nitrophenol	5.0	0.29	ug/L	8270C
Acenaphthene	6.7	0.76	ug/Kg	8270C
Acenaphthene	0.20	0.044	ug/L	8270C
Acenaphthylene	6.7	0.35	ug/Kg	8270C
Acenaphthylene	0.20	0.048	ug/L	8270C
Anthracene	6.7	0.78	ug/Kg	8270C
Anthracene	0.20	0.088	ug/L	8270C
Benzo[a]anthracene	6.7	0.63	ug/Kg	8270C
Benzo[a]anthracene	0.20	0.030	ug/L	8270C
Benzo[a]pyrene	6.7	0.64	ug/Kg	8270C
Benzo[a]pyrene	0.20	0.051	ug/L	8270C
Benzo[b]fluoranthene	6.7	0.59	ug/Kg	8270C
Benzo[b]fluoranthene	0.20	0.039	ug/L	8270C
Benzo[g,h,i]perylene	6.7	0.35	ug/Kg	8270C
Benzo[g,h,i]perylene	0.20	0.046	ug/L	8270C
Benzo[k]fluoranthene	6.7	0.68	ug/Kg	8270C
Benzo[k]fluoranthene	0.20	0.045	ug/L	8270C
Benzoic acid	660	36	ug/Kg	8270C
Benzoic acid	25	10	ug/L	8270C
Benzyl alcohol	330	21	ug/Kg	8270C
Benzyl alcohol	5.0	0.38	ug/L	8270C
bis (2-chloroisopropyl) ether	100	9.5	ug/Kg	8270C
bis (2-chloroisopropyl) ether	1.0	0.40	ug/L	8270C
Bis(2-chloroethoxy)methane	100	22	ug/Kg	8270C
Bis(2-chloroethoxy)methane	1.0	0.32	ug/L	8270C
Bis(2-chloroethyl)ether	100	2.0	ug/Kg	8270C
Bis(2-chloroethyl)ether	1.0	0.10	ug/L	8270C
Bis(2-ethylhexyl) phthalate	70	19	ug/Kg	8270C
Bis(2-ethylhexyl) phthalate	5.0	1.7	ug/L	8270C
Butyl benzyl phthalate	70	10	ug/Kg	8270C
Butyl benzyl phthalate	5.0	0.26	ug/L	8270C
Carbazole	50	27	ug/Kg	8270C
Carbazole	1.0	0.28	ug/L	8270C
Chrysene	6.7	1.1	ug/Kg	8270C
Chrysene	0.20	0.050	ug/L	8270C
Dibenz(a,h)anthracene	6.7	0.66	ug/Kg	8270C
Dibenz(a,h)anthracene	0.20	0.045	ug/L	8270C
Dibenzofuran	50	0.66	ug/Kg	8270C
Dibenzofuran	1.0	0.020	ug/L	8270C
Diethyl phthalate	70	16	ug/Kg	8270C
Diethyl phthalate	2.0	0.60	ug/L	8270C
Dimethyl phthalate	70	17	ug/Kg	8270C
Dimethyl phthalate	2.0	0.29	ug/L	8270C
Di-n-butyl phthalate	70	15	ug/Kg	8270C
Di-n-butyl phthalate	5.0	1.7	ug/L	8270C
Di-n-octyl phthalate	70	7.9	ug/Kg	8270C
Di-n-octyl phthalate	2.0	0.23	ug/L	8270C
Fluoranthene	6.7	0.55	ug/Kg	8270C
Fluoranthene	0.20	0.045	ug/L	8270C
Fluorene	6.7	0.53	ug/Kg	8270C
Fluorene	0.20	0.041	ug/L	8270C

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

Analyte	LOQ	DL	Units	Method
Hexachlorobenzene	6.7	2.1	ug/Kg	8270C
Hexachlorobenzene	0.20	0.085	ug/L	8270C
Hexachlorobutadiene	50	5.6	ug/Kg	8270C
Hexachlorobutadiene	1.0	0.27	ug/L	8270C
Hexachlorocyclopentadiene	330	8.1	ug/Kg	8270C
Hexachlorocyclopentadiene	10	0.24	ug/L	8270C
Hexachloroethane	50	9.0	ug/Kg	8270C
Hexachloroethane	1.0	0.19	ug/L	8270C
Indeno[1,2,3-cd]pyrene	6.7	0.35	ug/Kg	8270C
Indeno[1,2,3-cd]pyrene	0.20	0.043	ug/L	8270C
Isophorone	50	13	ug/Kg	8270C
Isophorone	1.0	0.27	ug/L	8270C
Naphthalene	6.7	0.82	ug/Kg	8270C
Naphthalene	0.20	0.063	ug/L	8270C
Nitrobenzene	100	2.2	ug/Kg	8270C
Nitrobenzene	1.0	0.040	ug/L	8270C
N-Nitrosodi-n-propylamine	50	6.3	ug/Kg	8270C
N-Nitrosodi-n-propylamine	1.0	0.24	ug/L	8270C
N-Nitrosodiphenylamine	50	21	ug/Kg	8270C
N-Nitrosodiphenylamine	1.0	0.31	ug/L	8270C
Pentachlorophenol	150	9.1	ug/Kg	8270C
Pentachlorophenol	5.0	0.27	ug/L	8270C
Phenanthrene	6.7	0.73	ug/Kg	8270C
Phenanthrene	0.20	0.062	ug/L	8270C
Phenol	50	7.3	ug/Kg	8270C
Phenol	1.0	0.60	ug/L	8270C
Pyrene	6.7	0.44	ug/Kg	8270C
Pyrene	0.20	0.042	ug/L	8270C

Surrogate Summary

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

TestAmerica Job ID: 240-50067-1

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPH	TBP
Lab Sample ID	Client Sample ID	(45-105)	(35-105)	(35-100)	(40-100)	(30-125)	(35-125)
240-50067-1	079SS-0389M-0001-SO	70	70	67	70 M	78	119
240-50067-2	079SB-0390M-0001-SO	75	56	68	44	74	121
240-50067-3	079SB-0391M-0001-SO	69	40	63	46	70	69
240-50067-4	079SB-0392M-0001-SO	70	49	64	50	74	59
240-50067-5	079SB-0393M-0001-SO	74	39	72	43	79	68
240-50067-6	079SB-0394M-0001-SO	67	33 Q	63	41	72	55
240-50067-7	079SB-0395M-0001-0002-SO	76	67	67	59 M	72	109
240-50067-7 MS	079SB-0395M-0001-0002-SO	73	73	71	72	75	91
240-50067-7 MSD	079SB-0395M-0001-0002-SO	71	73	70	72	71	90
240-50067-8	079SB-0396M-0001-SO	90	72	70	74 M	77	105
240-50067-9	079SB-0397M-0001-SO	76	62	62	69 M	76	72
240-50067-10	079SB-0398-0001-SO	75	70	70	74	80	40
LCS 240-179108/23-A	Lab Control Sample	83	82	83	83	83	44
LCS 240-180350/9-A	Lab Control Sample	74	75	75	75	74	59
MB 240-179108/22-A	Method Blank	88	57	84	76	88	29 Q
MB 240-180350/8-A	Method Blank	70	45	67	60	70	22 Q

Surrogate Legend

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

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPH	TBP
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)
MRL 240-181588/20	Lab Control Sample	103	94	99	96	99	104
MRL 240-181588/3	Lab Control Sample	102	100	101	99	96	99
MRL 240-181781/16	Lab Control Sample	99	98	102	99	100	98
MRL 240-181781/3	Lab Control Sample	102	100	100	100	100	102

Surrogate Legend

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

Surrogate Summary

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

TestAmerica Job ID: 240-50067-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPH	TBP
Lab Sample ID	Client Sample ID	(50-110)	(20-110)	(40-110)	(10-115)	(50-135)	(40-125)
240-50067-11	079SB-0399-0001-RB	51	56	50	55	74	53
240-50067-11 - RE	079SB-0399-0001-RB	82	77	76	83	82	81
LCS 240-179064/3-A	Lab Control Sample	72	68	72	68	75	83
LCS 240-180428/3-A	Lab Control Sample	89	78	90	86	84	107
MB 240-179064/2-A	Method Blank	81	79	81	80	83	84
MB 240-180428/2-A	Method Blank	88	94	81	94	87	88

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPH	TBP
Lab Sample ID	Client Sample ID	(70-130)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)
MRL 240-180308/12	Lab Control Sample	105	99	105	102	97	101
MRL 240-180308/21	Lab Control Sample	101	100	105	96	91	96
MRL 240-180709/3	Lab Control Sample	97	103	101	102	95	113
MRL 240-180709/7	Lab Control Sample	99	103	104	96	93	112

Surrogate Legend

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

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

Lab Sample ID: MB 240-179064/2-A
Matrix: Water
Analysis Batch: 180308

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 179064

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.10	U	0.20	0.044	ug/L		05/04/15 05:57	05/12/15 12:15	1
Acenaphthylene	0.10	U	0.20	0.048	ug/L		05/04/15 05:57	05/12/15 12:15	1
Anthracene	0.10	U	0.20	0.088	ug/L		05/04/15 05:57	05/12/15 12:15	1
Benzo[a]anthracene	0.10	U	0.20	0.030	ug/L		05/04/15 05:57	05/12/15 12:15	1
Benzo[a]pyrene	0.10	U	0.20	0.051	ug/L		05/04/15 05:57	05/12/15 12:15	1
Benzo[b]fluoranthene	0.10	U	0.20	0.039	ug/L		05/04/15 05:57	05/12/15 12:15	1
Benzo[g,h,i]perylene	0.10	U	0.20	0.046	ug/L		05/04/15 05:57	05/12/15 12:15	1
Benzoic acid	20	U	25	10	ug/L		05/04/15 05:57	05/12/15 12:15	1
Benzo[k]fluoranthene	0.10	U	0.20	0.045	ug/L		05/04/15 05:57	05/12/15 12:15	1
Benzyl alcohol	0.50	U	5.0	0.38	ug/L		05/04/15 05:57	05/12/15 12:15	1
Bis(2-chloroethoxy)methane	0.50	U	1.0	0.32	ug/L		05/04/15 05:57	05/12/15 12:15	1
Bis(2-chloroethyl)ether	0.10	U	1.0	0.10	ug/L		05/04/15 05:57	05/12/15 12:15	1
bis (2-chloroisopropyl) ether	0.50	U	1.0	0.40	ug/L		05/04/15 05:57	05/12/15 12:15	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0	1.7	ug/L		05/04/15 05:57	05/12/15 12:15	1
4-Bromophenyl phenyl ether	0.50	U	2.0	0.22	ug/L		05/04/15 05:57	05/12/15 12:15	1
Butyl benzyl phthalate	0.50	U	5.0	0.26	ug/L		05/04/15 05:57	05/12/15 12:15	1
Carbazole	0.50	U	1.0	0.28	ug/L		05/04/15 05:57	05/12/15 12:15	1
4-Chloroaniline	0.50	U	2.0	0.21	ug/L		05/04/15 05:57	05/12/15 12:15	1
4-Chloro-3-methylphenol	0.50	U	2.0	0.21	ug/L		05/04/15 05:57	05/12/15 12:15	1
2-Chloronaphthalene	0.50	U	1.0	0.10	ug/L		05/04/15 05:57	05/12/15 12:15	1
2-Chlorophenol	0.50	U	1.0	0.29	ug/L		05/04/15 05:57	05/12/15 12:15	1
4-Chlorophenyl phenyl ether	0.50	U	2.0	0.30	ug/L		05/04/15 05:57	05/12/15 12:15	1
Chrysene	0.10	U	0.20	0.050	ug/L		05/04/15 05:57	05/12/15 12:15	1
Dibenz(a,h)anthracene	0.10	U	0.20	0.045	ug/L		05/04/15 05:57	05/12/15 12:15	1
Dibenzofuran	0.10	U	1.0	0.020	ug/L		05/04/15 05:57	05/12/15 12:15	1
1,2-Dichlorobenzene	0.50	U	1.0	0.29	ug/L		05/04/15 05:57	05/12/15 12:15	1
1,3-Dichlorobenzene	0.50	U	1.0	0.23	ug/L		05/04/15 05:57	05/12/15 12:15	1
1,4-Dichlorobenzene	0.50	U	1.0	0.34	ug/L		05/04/15 05:57	05/12/15 12:15	1
3,3'-Dichlorobenzidine	1.0	U	5.0	0.37	ug/L		05/04/15 05:57	05/12/15 12:15	1
2,4-Dichlorophenol	0.50	U	2.0	0.19	ug/L		05/04/15 05:57	05/12/15 12:15	1
Diethyl phthalate	1.0	U	2.0	0.60	ug/L		05/04/15 05:57	05/12/15 12:15	1
2,4-Dimethylphenol	0.50	U	2.0	0.25	ug/L		05/04/15 05:57	05/12/15 12:15	1
Dimethyl phthalate	0.50	U	2.0	0.29	ug/L		05/04/15 05:57	05/12/15 12:15	1
Di-n-butyl phthalate	5.0	U	5.0	1.7	ug/L		05/04/15 05:57	05/12/15 12:15	1
4,6-Dinitro-2-methylphenol	4.0	U	5.0	2.4	ug/L		05/04/15 05:57	05/12/15 12:15	1
2,4-Dinitrophenol	1.0	U	5.0	0.32	ug/L		05/04/15 05:57	05/12/15 12:15	1
2,4-Dinitrotoluene	0.50	U	5.0	0.25	ug/L		05/04/15 05:57	05/12/15 12:15	1
2,6-Dinitrotoluene	5.0	U	5.0	1.1	ug/L		05/04/15 05:57	05/12/15 12:15	1
Di-n-octyl phthalate	0.50	U	2.0	0.23	ug/L		05/04/15 05:57	05/12/15 12:15	1
Fluoranthene	0.10	U	0.20	0.045	ug/L		05/04/15 05:57	05/12/15 12:15	1
Fluorene	0.10	U	0.20	0.041	ug/L		05/04/15 05:57	05/12/15 12:15	1
Hexachlorobenzene	0.10	U	0.20	0.085	ug/L		05/04/15 05:57	05/12/15 12:15	1
Hexachlorobutadiene	0.50	U	1.0	0.27	ug/L		05/04/15 05:57	05/12/15 12:15	1
Hexachlorocyclopentadiene	0.50	U	10	0.24	ug/L		05/04/15 05:57	05/12/15 12:15	1
Hexachloroethane	0.50	U	1.0	0.19	ug/L		05/04/15 05:57	05/12/15 12:15	1
Indeno[1,2,3-cd]pyrene	0.10	U	0.20	0.043	ug/L		05/04/15 05:57	05/12/15 12:15	1
Isophorone	0.50	U	1.0	0.27	ug/L		05/04/15 05:57	05/12/15 12:15	1
2-Methylnaphthalene	0.10	U	0.20	0.090	ug/L		05/04/15 05:57	05/12/15 12:15	1

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

Lab Sample ID: MB 240-179064/2-A
Matrix: Water
Analysis Batch: 180308

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 179064

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	0.50	U	1.0	0.17	ug/L		05/04/15 05:57	05/12/15 12:15	1
3 & 4 Methylphenol	1.0	U	2.0	0.80	ug/L		05/04/15 05:57	05/12/15 12:15	1
Naphthalene	0.10	U	0.20	0.063	ug/L		05/04/15 05:57	05/12/15 12:15	1
2-Nitroaniline	0.50	U	2.0	0.21	ug/L		05/04/15 05:57	05/12/15 12:15	1
3-Nitroaniline	0.50	U	2.0	0.28	ug/L		05/04/15 05:57	05/12/15 12:15	1
4-Nitroaniline	0.50	U	2.0	0.22	ug/L		05/04/15 05:57	05/12/15 12:15	1
Nitrobenzene	0.10	U	1.0	0.040	ug/L		05/04/15 05:57	05/12/15 12:15	1
2-Nitrophenol	0.50	U	2.0	0.28	ug/L		05/04/15 05:57	05/12/15 12:15	1
4-Nitrophenol	4.0	U	5.0	0.29	ug/L		05/04/15 05:57	05/12/15 12:15	1
N-Nitrosodi-n-propylamine	0.50	U	1.0	0.24	ug/L		05/04/15 05:57	05/12/15 12:15	1
N-Nitrosodiphenylamine	0.50	U	1.0	0.31	ug/L		05/04/15 05:57	05/12/15 12:15	1
Pentachlorophenol	1.0	U	5.0	0.27	ug/L		05/04/15 05:57	05/12/15 12:15	1
Phenanthrene	0.10	U	0.20	0.062	ug/L		05/04/15 05:57	05/12/15 12:15	1
Phenol	1.0	U	1.0	0.60	ug/L		05/04/15 05:57	05/12/15 12:15	1
Pyrene	0.10	U	0.20	0.042	ug/L		05/04/15 05:57	05/12/15 12:15	1
1,2,4-Trichlorobenzene	0.50	U	1.0	0.28	ug/L		05/04/15 05:57	05/12/15 12:15	1
2,4,5-Trichlorophenol	0.50	U	5.0	0.30	ug/L		05/04/15 05:57	05/12/15 12:15	1
2,4,6-Trichlorophenol	0.50	U	5.0	0.24	ug/L		05/04/15 05:57	05/12/15 12:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*81*		*50 - 110*	*05/04/15 05:57*	*05/12/15 12:15*	*1*
2-Fluorophenol (Surr)	*79*		*20 - 110*	*05/04/15 05:57*	*05/12/15 12:15*	*1*
Nitrobenzene-d5 (Surr)	*81*		*40 - 110*	*05/04/15 05:57*	*05/12/15 12:15*	*1*
Phenol-d5 (Surr)	*80*		*10 - 115*	*05/04/15 05:57*	*05/12/15 12:15*	*1*
Terphenyl-d14 (Surr)	*83*		*50 - 135*	*05/04/15 05:57*	*05/12/15 12:15*	*1*
2,4,6-Tribromophenol (Surr)	*84*		*40 - 125*	*05/04/15 05:57*	*05/12/15 12:15*	*1*

Lab Sample ID: LCS 240-179064/3-A
Matrix: Water
Analysis Batch: 180308

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 179064

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	20.0	14.8		ug/L		74	45 - 110
Acenaphthylene	20.0	14.0		ug/L		70	50 - 105
Anthracene	20.0	14.8		ug/L		74	55 - 110
Benzo[a]anthracene	20.0	15.2		ug/L		76	55 - 110
Benzo[a]pyrene	20.0	15.1		ug/L		76	55 - 110
Benzo[b]fluoranthene	20.0	16.5		ug/L		83	45 - 120
Benzo[g,h,i]perylene	20.0	16.9		ug/L		85	40 - 125
Benzoic acid	40.0	20	U	ug/L		7	0 - 125
Benzo[k]fluoranthene	20.0	18.0		ug/L		90	45 - 125
Benzyl alcohol	20.0	14.1		ug/L		70	30 - 110
Bis(2-chloroethoxy)methane	20.0	13.7		ug/L		69	45 - 105
Bis(2-chloroethyl)ether	20.0	13.1		ug/L		66	35 - 110
bis (2-chloroisopropyl) ether	20.0	12.6		ug/L		63	25 - 130
Bis(2-ethylhexyl) phthalate	20.0	16.1		ug/L		81	40 - 125
4-Bromophenyl phenyl ether	20.0	16.1		ug/L		81	50 - 115
Butyl benzyl phthalate	20.0	15.5		ug/L		77	45 - 115

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

Lab Sample ID: LCS 240-179064/3-A
Matrix: Water
Analysis Batch: 180308

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 179064

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbazole	20.0	14.9		ug/L		75	50 - 115
4-Chloroaniline	20.0	13.4		ug/L		67	15 - 110
4-Chloro-3-methylphenol	20.0	16.0		ug/L		80	45 - 110
2-Chloronaphthalene	20.0	13.0		ug/L		65	50 - 105
2-Chlorophenol	20.0	12.6		ug/L		63	35 - 105
4-Chlorophenyl phenyl ether	20.0	15.4		ug/L		77	50 - 110
Chrysene	20.0	16.5		ug/L		82	55 - 110
Dibenz(a,h)anthracene	20.0	16.5		ug/L		82	40 - 125
Dibenzofuran	20.0	14.2		ug/L		71	55 - 105
1,2-Dichlorobenzene	20.0	12.3		ug/L		61	35 - 100
1,3-Dichlorobenzene	20.0	11.2		ug/L		56	30 - 100
1,4-Dichlorobenzene	20.0	11.4		ug/L		57	30 - 100
3,3'-Dichlorobenzidine	40.0	26.6		ug/L		67	20 - 110
2,4-Dichlorophenol	20.0	14.0		ug/L		70	50 - 105
Diethyl phthalate	20.0	16.4		ug/L		82	40 - 120
2,4-Dimethylphenol	20.0	11.0		ug/L		55	30 - 110
Dimethyl phthalate	20.0	15.8		ug/L		79	25 - 125
Di-n-butyl phthalate	20.0	17.3		ug/L		86	55 - 115
4,6-Dinitro-2-methylphenol	40.0	25.5		ug/L		64	40 - 130
2,4-Dinitrophenol	40.0	19.7		ug/L		49	15 - 140
2,4-Dinitrotoluene	20.0	15.5		ug/L		78	50 - 120
2,6-Dinitrotoluene	20.0	16.2		ug/L		81	50 - 115
Di-n-octyl phthalate	20.0	16.3		ug/L		81	35 - 135
Fluoranthene	20.0	15.3		ug/L		76	55 - 115
Fluorene	20.0	14.4		ug/L		72	50 - 110
Hexachlorobenzene	20.0	15.4		ug/L		77	50 - 110
Hexachlorobutadiene	20.0	12.1		ug/L		61	25 - 105
Hexachlorocyclopentadiene	20.0	0.451	J Q	ug/L		2	4 - 110
Hexachloroethane	20.0	11.5		ug/L		57	30 - 95
Indeno[1,2,3-cd]pyrene	20.0	16.9		ug/L		85	45 - 125
Isophorone	20.0	15.5		ug/L		77	50 - 110
2-Methylnaphthalene	20.0	14.0		ug/L		70	45 - 105
2-Methylphenol	20.0	13.3		ug/L		67	40 - 110
3 & 4 Methylphenol	20.0	13.5		ug/L		68	30 - 110
Naphthalene	20.0	13.0		ug/L		65	40 - 100
2-Nitroaniline	20.0	14.4		ug/L		72	50 - 115
3-Nitroaniline	20.0	16.4		ug/L		82	20 - 125
4-Nitroaniline	20.0	12.6		ug/L		63	35 - 120
Nitrobenzene	20.0	13.5		ug/L		67	45 - 110
2-Nitrophenol	20.0	13.8		ug/L		69	40 - 115
4-Nitrophenol	40.0	30.5		ug/L		76	0 - 125
N-Nitrosodi-n-propylamine	20.0	14.5		ug/L		72	35 - 130
N-Nitrosodiphenylamine	40.0	30.7		ug/L		77	50 - 110
Pentachlorophenol	40.0	25.6		ug/L		64	40 - 115
Phenanthrene	20.0	15.1		ug/L		76	50 - 115
Phenol	20.0	13.8		ug/L		69	0 - 115
Pyrene	20.0	15.4		ug/L		77	50 - 130
1,2,4-Trichlorobenzene	20.0	12.4		ug/L		62	35 - 105

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

Lab Sample ID: LCS 240-179064/3-A
Matrix: Water
Analysis Batch: 180308

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 179064

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,5-Trichlorophenol	20.0	15.3		ug/L		77	50 - 110
2,4,6-Trichlorophenol	20.0	15.6		ug/L		78	50 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*72*		*50 - 110*
2-Fluorophenol (Surr)	*68*		*20 - 110*
Nitrobenzene-d5 (Surr)	*72*		*40 - 110*
Phenol-d5 (Surr)	*68*		*10 - 115*
Terphenyl-d14 (Surr)	*75*		*50 - 135*
2,4,6-Tribromophenol (Surr)	*83*		*40 - 125*

Lab Sample ID: MB 240-179108/22-A
Matrix: Solid
Analysis Batch: 181588

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 179108

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	3.3	U	6.7	0.76	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
Acenaphthylene	1.7	U	6.7	0.35	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
Anthracene	3.3	U	6.7	0.78	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
Benzo[a]anthracene	3.3	U	6.7	0.63	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
Benzo[a]pyrene	3.3	U	6.7	0.64	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
Benzo[b]fluoranthene	3.3	U	6.7	0.59	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
Benzo[g,h,i]perylene	1.7	U	6.7	0.35	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
Benzoic acid	130	U	660	36	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
Benzo[k]fluoranthene	3.3	U	6.7	0.68	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
Benzyl alcohol	67	U	330	21	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
Bis(2-chloroethoxy)methane	67	U	100	22	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
Bis(2-chloroethyl)ether	3.3	U	100	2.0	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
bis (2-chloroisopropyl) ether	33	U	100	9.5	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
Bis(2-ethylhexyl) phthalate	33	U	70	19	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
4-Bromophenyl phenyl ether	33	U	50	13	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
Butyl benzyl phthalate	33	U	70	10	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
Carbazole	33	U	50	27	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
4-Chloroaniline	67	U	150	17	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
4-Chloro-3-methylphenol	67	U Q	150	21	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
2-Chloronaphthalene	1.7	U	50	0.45	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
2-Chlorophenol	33	U	50	8.2	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
4-Chlorophenyl phenyl ether	33	U	50	13	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
Chrysene	3.3	U	6.7	1.1	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
Dibenz(a,h)anthracene	3.3	U	6.7	0.66	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
Dibenzofuran	3.3	U	50	0.66	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
1,2-Dichlorobenzene	33	U	50	9.7	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
1,3-Dichlorobenzene	33	U	50	11	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
1,4-Dichlorobenzene	33	U	50	20	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
3,3'-Dichlorobenzidine	67	U	100	18	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
2,4-Dichlorophenol	67	U	150	20	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
Diethyl phthalate	33	U	70	16	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
2,4-Dimethylphenol	67	U	150	20	ug/Kg		05/04/15 09:17	05/20/15 10:20	1

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

Lab Sample ID: MB 240-179108/22-A
Matrix: Solid
Analysis Batch: 181588

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 179108

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	33	U	70	17	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
Di-n-butyl phthalate	33	U	70	15	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
4,6-Dinitro-2-methylphenol	33	U Q	150	9.2	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
2,4-Dinitrophenol	67	U Q	330	21	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
2,4-Dinitrotoluene	67	U	200	17	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
2,6-Dinitrotoluene	67	U	200	21	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
Di-n-octyl phthalate	33	U	70	7.9	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
Fluoranthene	3.3	U	6.7	0.55	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
Fluorene	3.3	U	6.7	0.53	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
Hexachlorobenzene	3.3	U	6.7	2.1	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
Hexachlorobutadiene	33	U	50	5.6	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
Hexachlorocyclopentadiene	33	U Q	330	8.1	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
Hexachloroethane	33	U	50	9.0	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
Indeno[1,2,3-cd]pyrene	1.7	U	6.7	0.35	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
Isophorone	33	U	50	13	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
2-Methylnaphthalene	3.3	U	6.7	0.50	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
2-Methylphenol	67	U	200	11	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
3 & 4 Methylphenol	67	U	400	20	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
Naphthalene	14.7		6.7	0.82	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
2-Nitroaniline	33	U	200	9.1	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
3-Nitroaniline	67	U	200	16	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
4-Nitroaniline	67	U	200	26	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
Nitrobenzene	3.3	U	100	2.2	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
2-Nitrophenol	33	U	50	8.3	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
4-Nitrophenol	67	U Q	330	17	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
N-Nitrosodi-n-propylamine	33	U	50	6.3	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
N-Nitrosodiphenylamine	33	U	50	21	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
Pentachlorophenol	33	U Q	150	9.1	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
Phenanthrene	3.3	U	6.7	0.73	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
Phenol	33	U	50	7.3	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
Pyrene	1.7	U	6.7	0.44	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
1,2,4-Trichlorobenzene	17	U	50	3.5	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
2,4,5-Trichlorophenol	67	U Q	150	25	ug/Kg		05/04/15 09:17	05/20/15 10:20	1
2,4,6-Trichlorophenol	33	U Q	150	8.9	ug/Kg		05/04/15 09:17	05/20/15 10:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*88*		*45 - 105*	*05/04/15 09:17*	*05/20/15 10:20*	*1*
2-Fluorophenol (Surr)	*57*		*35 - 105*	*05/04/15 09:17*	*05/20/15 10:20*	*1*
Nitrobenzene-d5 (Surr)	*84*		*35 - 100*	*05/04/15 09:17*	*05/20/15 10:20*	*1*
Phenol-d5 (Surr)	*76*		*40 - 100*	*05/04/15 09:17*	*05/20/15 10:20*	*1*
Terphenyl-d14 (Surr)	*88*		*30 - 125*	*05/04/15 09:17*	*05/20/15 10:20*	*1*
2,4,6-Tribromophenol (Surr)	*29*	*Q*	*35 - 125*	*05/04/15 09:17*	*05/20/15 10:20*	*1*

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

Lab Sample ID: LCS 240-179108/23-A
Matrix: Solid
Analysis Batch: 181588

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 179108

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	667	526		ug/Kg		79	45 - 110
Acenaphthylene	667	522		ug/Kg		78	45 - 105
Anthracene	667	534		ug/Kg		80	55 - 105
Benzo[a]anthracene	667	534		ug/Kg		80	50 - 110
Benzo[a]pyrene	667	650		ug/Kg		97	50 - 110
Benzo[b]fluoranthene	667	654		ug/Kg		98	45 - 115
Benzo[g,h,i]perylene	667	728		ug/Kg		109	40 - 125
Benzoic acid	1330	89.6	J	ug/Kg		7	0 - 110
Benzo[k]fluoranthene	667	655		ug/Kg		98	45 - 125
Benzyl alcohol	667	538		ug/Kg		81	20 - 125
Bis(2-chloroethoxy)methane	667	534		ug/Kg		80	45 - 110
Bis(2-chloroethyl)ether	667	568		ug/Kg		85	40 - 105
bis (2-chloroisopropyl) ether	667	498		ug/Kg		75	20 - 115
Bis(2-ethylhexyl) phthalate	667	602		ug/Kg		90	45 - 125
4-Bromophenyl phenyl ether	667	549		ug/Kg		82	45 - 115
Butyl benzyl phthalate	667	591		ug/Kg		89	50 - 125
Carbazole	667	585		ug/Kg		88	45 - 115
4-Chloroaniline	667	479		ug/Kg		72	10 - 110
4-Chloro-3-methylphenol	667	534		ug/Kg		80	45 - 115
2-Chloronaphthalene	667	517		ug/Kg		77	45 - 105
2-Chlorophenol	667	539		ug/Kg		81	45 - 105
4-Chlorophenyl phenyl ether	667	527		ug/Kg		79	45 - 110
Chrysene	667	576		ug/Kg		86	55 - 110
Dibenz(a,h)anthracene	667	701		ug/Kg		105	40 - 125
Dibenzofuran	667	530		ug/Kg		79	50 - 105
1,2-Dichlorobenzene	667	530		ug/Kg		80	45 - 110
1,3-Dichlorobenzene	667	515		ug/Kg		77	40 - 100
1,4-Dichlorobenzene	667	524		ug/Kg		79	35 - 105
3,3'-Dichlorobenzidine	1330	1050		ug/Kg		78	10 - 130
2,4-Dichlorophenol	667	512		ug/Kg		77	45 - 110
Diethyl phthalate	667	528		ug/Kg		79	50 - 115
2,4-Dimethylphenol	667	443		ug/Kg		66	30 - 105
Dimethyl phthalate	667	543		ug/Kg		81	50 - 110
Di-n-butyl phthalate	667	642		ug/Kg		96	55 - 110
4,6-Dinitro-2-methylphenol	1330	929		ug/Kg		70	30 - 135
2,4-Dinitrophenol	1330	678		ug/Kg		51	15 - 130
2,4-Dinitrotoluene	667	566		ug/Kg		85	50 - 115
2,6-Dinitrotoluene	667	561		ug/Kg		84	50 - 110
Di-n-octyl phthalate	667	656		ug/Kg		98	40 - 130
Fluoranthene	667	615		ug/Kg		92	55 - 115
Fluorene	667	519		ug/Kg		78	50 - 110
Hexachlorobenzene	667	523		ug/Kg		78	45 - 120
Hexachlorobutadiene	667	529		ug/Kg		79	40 - 115
Hexachlorocyclopentadiene	667	374		ug/Kg		56	12 - 110
Hexachloroethane	667	496		ug/Kg		74	35 - 110
Indeno[1,2,3-cd]pyrene	667	728		ug/Kg		109	40 - 120
Isophorone	667	543		ug/Kg		81	45 - 110
2-Methylnaphthalene	667	544		ug/Kg		82	45 - 105

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

Lab Sample ID: LCS 240-179108/23-A
Matrix: Solid
Analysis Batch: 181588

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 179108

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylphenol	667	531		ug/Kg		80	40 - 105
3 & 4 Methylphenol	667	522		ug/Kg		78	40 - 105
Naphthalene	667	539		ug/Kg		81	40 - 105
2-Nitroaniline	667	510		ug/Kg		77	45 - 120
3-Nitroaniline	667	508		ug/Kg		76	25 - 110
4-Nitroaniline	667	572		ug/Kg		86	35 - 115
Nitrobenzene	667	537		ug/Kg		81	40 - 115
2-Nitrophenol	667	535		ug/Kg		80	40 - 110
4-Nitrophenol	1330	1060		ug/Kg		79	15 - 140
N-Nitrosodi-n-propylamine	667	509		ug/Kg		76	40 - 115
N-Nitrosodiphenylamine	1330	1030		ug/Kg		77	50 - 115
Pentachlorophenol	1330	692		ug/Kg		52	25 - 120
Phenanthrene	667	538		ug/Kg		81	50 - 110
Phenol	667	520		ug/Kg		78	40 - 100
Pyrene	667	569		ug/Kg		85	45 - 125
1,2,4-Trichlorobenzene	667	536		ug/Kg		80	45 - 110
2,4,5-Trichlorophenol	667	383		ug/Kg		57	50 - 110
2,4,6-Trichlorophenol	667	322		ug/Kg		48	45 - 110

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*83*		*45 - 105*
2-Fluorophenol (Surr)	*82*		*35 - 105*
Nitrobenzene-d5 (Surr)	*83*		*35 - 100*
Phenol-d5 (Surr)	*83*		*40 - 100*
Terphenyl-d14 (Surr)	*83*		*30 - 125*
2,4,6-Tribromophenol (Surr)	*44*		*35 - 125*

Lab Sample ID: MRL 240-180308/12
Matrix: Water
Analysis Batch: 180308

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	5.00	5.17		ng/uL		103	70 - 130
Acenaphthylene	5.00	5.24		ng/uL		105	70 - 130
Anthracene	5.00	5.01		ng/uL		100	70 - 130
Benzo[a]anthracene	5.00	5.00		ng/uL		100	70 - 130
Benzo[a]pyrene	5.00	5.13		ng/uL		103	70 - 130
Benzo[b]fluoranthene	5.00	5.36		ng/uL		107	70 - 130
Benzo[g,h,i]perylene	5.00	5.23		ng/uL		105	70 - 130
Benzoic acid	10.0	9.45		ng/uL		94	70 - 130
Benzo[k]fluoranthene	5.00	4.82		ng/uL		96	70 - 130
Benzyl alcohol	5.00	5.18		ng/uL		104	70 - 130
Bis(2-chloroethoxy)methane	5.00	5.03		ng/uL		101	70 - 130
Bis(2-chloroethyl)ether	5.00	5.07		ng/uL		101	70 - 130
bis (2-chloroisopropyl) ether	5.00	4.95		ng/uL		99	70 - 130
Bis(2-ethylhexyl) phthalate	5.00	5.00		ng/uL		100	70 - 130
4-Bromophenyl phenyl ether	5.00	5.37		ng/uL		107	70 - 130
Butyl benzyl phthalate	5.00	5.00		ng/uL		100	70 - 130

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

Lab Sample ID: MRL 240-180308/12
Matrix: Water
Analysis Batch: 180308

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Carbazole	5.00	4.77		ng/uL		95	70 - 130
4-Chloroaniline	5.00	5.06		ng/uL		101	70 - 130
4-Chloro-3-methylphenol	5.00	5.29		ng/uL		106	70 - 130
2-Chloronaphthalene	5.00	5.00		ng/uL		100	70 - 130
2-Chlorophenol	5.00	5.02		ng/uL		100	70 - 130
4-Chlorophenyl phenyl ether	5.00	5.16		ng/uL		103	70 - 130
Chrysene	5.00	5.20		ng/uL		104	70 - 130
Dibenz(a,h)anthracene	5.00	5.39		ng/uL		108	70 - 130
Dibenzofuran	5.00	5.14		ng/uL		103	70 - 130
1,2-Dichlorobenzene	5.00	5.02		ng/uL		100	70 - 130
1,3-Dichlorobenzene	5.00	4.98		ng/uL		100	70 - 130
1,4-Dichlorobenzene	5.00	4.93		ng/uL		99	70 - 130
3,3'-Dichlorobenzidine	10.0	9.46		ng/uL		95	70 - 130
2,4-Dichlorophenol	5.00	4.96		ng/uL		99	70 - 130
Diethyl phthalate	5.00	5.46		ng/uL		109	70 - 130
2,4-Dimethylphenol	5.00	4.96		ng/uL		99	70 - 130
Dimethyl phthalate	5.00	5.31		ng/uL		106	70 - 130
Di-n-butyl phthalate	5.00	5.17		ng/uL		103	70 - 130
4,6-Dinitro-2-methylphenol	10.0	9.25		ng/uL		92	70 - 130
2,4-Dinitrophenol	10.0	9.23		ng/uL		92	70 - 130
2,4-Dinitrotoluene	5.00	5.27		ng/uL		105	70 - 130
2,6-Dinitrotoluene	5.00	5.23		ng/uL		105	70 - 130
Di-n-octyl phthalate	5.00	5.03		ng/uL		101	70 - 130
Fluoranthene	5.00	4.82		ng/uL		96	70 - 130
Fluorene	5.00	4.94		ng/uL		99	70 - 130
Hexachlorobenzene	5.00	5.14		ng/uL		103	70 - 130
Hexachlorobutadiene	5.00	5.05		ng/uL		101	70 - 130
Hexachlorocyclopentadiene	5.00	5.16		ng/uL		103	70 - 130
Hexachloroethane	5.00	5.13		ng/uL		103	70 - 130
Indeno[1,2,3-cd]pyrene	5.00	5.30		ng/uL		106	70 - 130
Isophorone	5.00	5.18		ng/uL		104	70 - 130
2-Methylnaphthalene	5.00	5.07		ng/uL		101	70 - 130
2-Methylphenol	5.00	5.17		ng/uL		103	70 - 130
3 & 4 Methylphenol	5.00	5.08		ng/uL		102	70 - 130
Naphthalene	5.00	5.07		ng/uL		101	70 - 130
2-Nitroaniline	5.00	5.05		ng/uL		101	70 - 130
3-Nitroaniline	5.00	5.74		ng/uL		115	70 - 130
4-Nitroaniline	5.00	4.58		ng/uL		92	70 - 130
Nitrobenzene	5.00	5.09		ng/uL		102	70 - 130
2-Nitrophenol	5.00	5.27		ng/uL		105	70 - 130
4-Nitrophenol	10.0	10.5		ng/uL		105	70 - 130
N-Nitrosodi-n-propylamine	5.00	5.25		ng/uL		105	70 - 130
N-Nitrosodiphenylamine	10.0	10.3		ng/uL		103	70 - 130
Pentachlorophenol	10.0	9.23		ng/uL		92	70 - 130
Phenanthrene	5.00	5.14		ng/uL		103	70 - 130
Phenol	5.00	5.28		ng/uL		106	70 - 130
Pyrene	5.00	4.99		ng/uL		100	70 - 130
1,2,4-Trichlorobenzene	5.00	5.08		ng/uL		102	70 - 130

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

Lab Sample ID: MRL 240-180308/12
Matrix: Water
Analysis Batch: 180308

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,5-Trichlorophenol	5.00	5.48		ng/uL		110	70 - 130
2,4,6-Trichlorophenol	5.00	5.44		ng/uL		109	70 - 130

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*105*		*70 - 130*
2-Fluorophenol (Surr)	*99*		*50 - 150*
Nitrobenzene-d5 (Surr)	*105*		*50 - 150*
Phenol-d5 (Surr)	*102*		*50 - 150*
Terphenyl-d14 (Surr)	*97*		*50 - 150*
2,4,6-Tribromophenol (Surr)	*101*		*50 - 150*

Lab Sample ID: MRL 240-180308/21
Matrix: Water
Analysis Batch: 180308

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	5.00	5.01		ng/uL		100	70 - 130
Acenaphthylene	5.00	5.06		ng/uL		101	70 - 130
Anthracene	5.00	4.59		ng/uL		92	70 - 130
Benzo[a]anthracene	5.00	4.62		ng/uL		92	70 - 130
Benzo[a]pyrene	5.00	4.76		ng/uL		95	70 - 130
Benzo[b]fluoranthene	5.00	4.55		ng/uL		91	70 - 130
Benzo[g,h,i]perylene	5.00	4.82		ng/uL		96	70 - 130
Benzoic acid	10.0	6.97	M	ng/uL		70	70 - 130
Benzo[k]fluoranthene	5.00	5.11		ng/uL		102	70 - 130
Benzyl alcohol	5.00	4.67		ng/uL		93	70 - 130
Bis(2-chloroethoxy)methane	5.00	4.75		ng/uL		95	70 - 130
Bis(2-chloroethyl)ether	5.00	4.88		ng/uL		98	70 - 130
bis (2-chloroisopropyl) ether	5.00	4.64		ng/uL		93	70 - 130
Bis(2-ethylhexyl) phthalate	5.00	4.54		ng/uL		91	70 - 130
4-Bromophenyl phenyl ether	5.00	4.66		ng/uL		93	70 - 130
Butyl benzyl phthalate	5.00	4.64		ng/uL		93	70 - 130
Carbazole	5.00	4.44		ng/uL		89	70 - 130
4-Chloroaniline	5.00	5.05		ng/uL		101	70 - 130
4-Chloro-3-methylphenol	5.00	5.00		ng/uL		100	70 - 130
2-Chloronaphthalene	5.00	5.01		ng/uL		100	70 - 130
2-Chlorophenol	5.00	4.60		ng/uL		92	70 - 130
4-Chlorophenyl phenyl ether	5.00	4.97		ng/uL		99	70 - 130
Chrysene	5.00	4.84		ng/uL		97	70 - 130
Dibenz(a,h)anthracene	5.00	4.65		ng/uL		93	70 - 130
Dibenzofuran	5.00	4.74		ng/uL		95	70 - 130
1,2-Dichlorobenzene	5.00	4.66		ng/uL		93	70 - 130
1,3-Dichlorobenzene	5.00	4.67		ng/uL		93	70 - 130
1,4-Dichlorobenzene	5.00	4.94		ng/uL		99	70 - 130
3,3'-Dichlorobenzidine	10.0	8.29		ng/uL		83	70 - 130
2,4-Dichlorophenol	5.00	4.81		ng/uL		96	70 - 130
Diethyl phthalate	5.00	5.25		ng/uL		105	70 - 130
2,4-Dimethylphenol	5.00	5.07		ng/uL		101	70 - 130

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

Lab Sample ID: MRL 240-180308/21
Matrix: Water
Analysis Batch: 180308

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Dimethyl phthalate	5.00	5.05		ng/uL		101	70 - 130
Di-n-butyl phthalate	5.00	4.47		ng/uL		89	70 - 130
4,6-Dinitro-2-methylphenol	10.0	7.51		ng/uL		75	70 - 130
2,4-Dinitrophenol	10.0	7.26		ng/uL		73	70 - 130
2,4-Dinitrotoluene	5.00	4.91		ng/uL		98	70 - 130
2,6-Dinitrotoluene	5.00	5.08		ng/uL		102	70 - 130
Di-n-octyl phthalate	5.00	4.38		ng/uL		88	70 - 130
Fluoranthene	5.00	4.31		ng/uL		86	70 - 130
Fluorene	5.00	4.92		ng/uL		98	70 - 130
Hexachlorobenzene	5.00	4.80		ng/uL		96	70 - 130
Hexachlorobutadiene	5.00	5.07		ng/uL		101	70 - 130
Hexachlorocyclopentadiene	5.00	4.90		ng/uL		98	70 - 130
Hexachloroethane	5.00	4.70		ng/uL		94	70 - 130
Indeno[1,2,3-cd]pyrene	5.00	4.85		ng/uL		97	70 - 130
Isophorone	5.00	5.00		ng/uL		100	70 - 130
2-Methylnaphthalene	5.00	4.90		ng/uL		98	70 - 130
2-Methylphenol	5.00	4.57		ng/uL		91	70 - 130
3 & 4 Methylphenol	5.00	4.70		ng/uL		94	70 - 130
Naphthalene	5.00	4.88		ng/uL		98	70 - 130
2-Nitroaniline	5.00	4.76		ng/uL		95	70 - 130
3-Nitroaniline	5.00	5.15		ng/uL		103	70 - 130
4-Nitroaniline	5.00	4.25		ng/uL		85	70 - 130
Nitrobenzene	5.00	4.94		ng/uL		99	70 - 130
2-Nitrophenol	5.00	4.64		ng/uL		93	70 - 130
4-Nitrophenol	10.0	9.39		ng/uL		94	70 - 130
N-Nitrosodi-n-propylamine	5.00	5.08		ng/uL		102	70 - 130
N-Nitrosodiphenylamine	10.0	9.57		ng/uL		96	70 - 130
Pentachlorophenol	10.0	8.15		ng/uL		82	70 - 130
Phenanthrene	5.00	4.87		ng/uL		97	70 - 130
Phenol	5.00	4.94		ng/uL		99	70 - 130
Pyrene	5.00	4.46		ng/uL		89	70 - 130
1,2,4-Trichlorobenzene	5.00	4.68		ng/uL		94	70 - 130
2,4,5-Trichlorophenol	5.00	4.91		ng/uL		98	70 - 130
2,4,6-Trichlorophenol	5.00	4.96		ng/uL		99	70 - 130

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*101*		*70 - 130*
2-Fluorophenol (Surr)	*100*		*50 - 150*
Nitrobenzene-d5 (Surr)	*105*		*50 - 150*
Phenol-d5 (Surr)	*96*		*50 - 150*
Terphenyl-d14 (Surr)	*91*		*50 - 150*
2,4,6-Tribromophenol (Surr)	*96*		*50 - 150*

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

Lab Sample ID: MB 240-180350/8-A
Matrix: Solid
Analysis Batch: 181588

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 180350

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	3.3	U	6.7	0.76	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
Acenaphthylene	1.7	U	6.7	0.35	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
Anthracene	3.3	U	6.7	0.78	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
Benzo[a]anthracene	3.3	U	6.7	0.63	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
Benzo[a]pyrene	3.3	U	6.7	0.64	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
Benzo[b]fluoranthene	3.3	U	6.7	0.59	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
Benzo[g,h,i]perylene	1.7	U	6.7	0.35	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
Benzoic acid	130	U	660	36	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
Benzo[k]fluoranthene	3.3	U	6.7	0.68	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
Benzyl alcohol	67	U	330	21	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
Bis(2-chloroethoxy)methane	67	U	100	22	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
Bis(2-chloroethyl)ether	3.3	U	100	2.0	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
bis (2-chloroisopropyl) ether	33	U	100	9.5	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
Bis(2-ethylhexyl) phthalate	33	U	70	19	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
4-Bromophenyl phenyl ether	33	U	50	13	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
Butyl benzyl phthalate	33	U	70	10	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
Carbazole	33	U	50	27	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
4-Chloroaniline	67	U	150	17	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
4-Chloro-3-methylphenol	67	U Q	150	21	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
2-Chloronaphthalene	1.7	U	50	0.45	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
2-Chlorophenol	33	U	50	8.2	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
4-Chlorophenyl phenyl ether	33	U	50	13	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
Chrysene	3.3	U	6.7	1.1	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
Dibenz(a,h)anthracene	3.3	U	6.7	0.66	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
Dibenzofuran	3.3	U	50	0.66	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
1,2-Dichlorobenzene	33	U	50	9.7	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
1,3-Dichlorobenzene	33	U	50	11	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
1,4-Dichlorobenzene	33	U	50	20	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
3,3'-Dichlorobenzidine	67	U	100	18	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
2,4-Dichlorophenol	67	U	150	20	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
Diethyl phthalate	33	U	70	16	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
2,4-Dimethylphenol	67	U	150	20	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
Dimethyl phthalate	33	U	70	17	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
Di-n-butyl phthalate	33	U	70	15	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
4,6-Dinitro-2-methylphenol	33	U Q	150	9.2	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
2,4-Dinitrophenol	67	U Q	330	21	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
2,4-Dinitrotoluene	67	U	200	17	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
2,6-Dinitrotoluene	67	U	200	21	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
Di-n-octyl phthalate	33	U	70	7.9	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
Fluoranthene	3.3	U	6.7	0.55	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
Fluorene	3.3	U	6.7	0.53	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
Hexachlorobenzene	3.3	U	6.7	2.1	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
Hexachlorobutadiene	33	U	50	5.6	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
Hexachlorocyclopentadiene	33	U Q	330	8.1	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
Hexachloroethane	33	U	50	9.0	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
Indeno[1,2,3-cd]pyrene	1.7	U	6.7	0.35	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
Isophorone	33	U	50	13	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
2-Methylnaphthalene	3.3	U	6.7	0.50	ug/Kg		05/12/15 10:00	05/20/15 11:10	1

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

Lab Sample ID: MB 240-180350/8-A
Matrix: Solid
Analysis Batch: 181588

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 180350

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	67	U	200	11	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
3 & 4 Methylphenol	67	U	400	20	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
Naphthalene	3.3	U	6.7	0.82	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
2-Nitroaniline	33	U	200	9.1	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
3-Nitroaniline	67	U	200	16	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
4-Nitroaniline	67	U	200	26	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
Nitrobenzene	3.3	U	100	2.2	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
2-Nitrophenol	33	U	50	8.3	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
4-Nitrophenol	67	U Q	330	17	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
N-Nitrosodi-n-propylamine	33	U	50	6.3	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
N-Nitrosodiphenylamine	33	U	50	21	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
Pentachlorophenol	33	U Q	150	9.1	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
Phenanthrene	3.3	U	6.7	0.73	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
Phenol	33	U	50	7.3	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
Pyrene	1.7	U	6.7	0.44	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
1,2,4-Trichlorobenzene	17	U	50	3.5	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
2,4,5-Trichlorophenol	67	U Q	150	25	ug/Kg		05/12/15 10:00	05/20/15 11:10	1
2,4,6-Trichlorophenol	33	U Q	150	8.9	ug/Kg		05/12/15 10:00	05/20/15 11:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*70*		*45 - 105*	*05/12/15 10:00*	*05/20/15 11:10*	*1*
2-Fluorophenol (Surr)	*45*		*35 - 105*	*05/12/15 10:00*	*05/20/15 11:10*	*1*
Nitrobenzene-d5 (Surr)	*67*		*35 - 100*	*05/12/15 10:00*	*05/20/15 11:10*	*1*
Phenol-d5 (Surr)	*60*		*40 - 100*	*05/12/15 10:00*	*05/20/15 11:10*	*1*
Terphenyl-d14 (Surr)	*70*		*30 - 125*	*05/12/15 10:00*	*05/20/15 11:10*	*1*
2,4,6-Tribromophenol (Surr)	*22*	*Q*	*35 - 125*	*05/12/15 10:00*	*05/20/15 11:10*	*1*

Lab Sample ID: LCS 240-180350/9-A
Matrix: Solid
Analysis Batch: 181588

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 180350

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	667	486		ug/Kg		73	45 - 110
Acenaphthylene	667	485		ug/Kg		73	45 - 105
Anthracene	667	490		ug/Kg		73	55 - 105
Benzo[a]anthracene	667	488		ug/Kg		73	50 - 110
Benzo[a]pyrene	667	584		ug/Kg		88	50 - 110
Benzo[b]fluoranthene	667	592		ug/Kg		89	45 - 115
Benzo[g,h,i]perylene	667	655		ug/Kg		98	40 - 125
Benzoic acid	1330	315	J M	ug/Kg		24	0 - 110
Benzo[k]fluoranthene	667	571		ug/Kg		86	45 - 125
Benzyl alcohol	667	490		ug/Kg		73	20 - 125
Bis(2-chloroethoxy)methane	667	489		ug/Kg		73	45 - 110
Bis(2-chloroethyl)ether	667	499		ug/Kg		75	40 - 105
bis (2-chloroisopropyl) ether	667	454		ug/Kg		68	20 - 115
Bis(2-ethylhexyl) phthalate	667	551		ug/Kg		83	45 - 125
4-Bromophenyl phenyl ether	667	522		ug/Kg		78	45 - 115
Butyl benzyl phthalate	667	532		ug/Kg		80	50 - 125

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

Lab Sample ID: LCS 240-180350/9-A
Matrix: Solid
Analysis Batch: 181588

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 180350

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbazole	667	540		ug/Kg		81	45 - 115
4-Chloroaniline	667	389		ug/Kg		58	10 - 110
4-Chloro-3-methylphenol	667	492		ug/Kg		74	45 - 115
2-Chloronaphthalene	667	482		ug/Kg		72	45 - 105
2-Chlorophenol	667	492		ug/Kg		74	45 - 105
4-Chlorophenyl phenyl ether	667	474		ug/Kg		71	45 - 110
Chrysene	667	527		ug/Kg		79	55 - 110
Dibenz(a,h)anthracene	667	631		ug/Kg		95	40 - 125
Dibenzofuran	667	490		ug/Kg		74	50 - 105
1,2-Dichlorobenzene	667	474		ug/Kg		71	45 - 110
1,3-Dichlorobenzene	667	462		ug/Kg		69	40 - 100
1,4-Dichlorobenzene	667	472		ug/Kg		71	35 - 105
3,3'-Dichlorobenzidine	1330	914		ug/Kg		69	10 - 130
2,4-Dichlorophenol	667	485		ug/Kg		73	45 - 110
Diethyl phthalate	667	489		ug/Kg		73	50 - 115
2,4-Dimethylphenol	667	331		ug/Kg		50	30 - 105
Dimethyl phthalate	667	501		ug/Kg		75	50 - 110
Di-n-butyl phthalate	667	599		ug/Kg		90	55 - 110
4,6-Dinitro-2-methylphenol	1330	785		ug/Kg		59	30 - 135
2,4-Dinitrophenol	1330	473		ug/Kg		35	15 - 130
2,4-Dinitrotoluene	667	519		ug/Kg		78	50 - 115
2,6-Dinitrotoluene	667	526		ug/Kg		79	50 - 110
Di-n-octyl phthalate	667	593		ug/Kg		89	40 - 130
Fluoranthene	667	564		ug/Kg		85	55 - 115
Fluorene	667	486		ug/Kg		73	50 - 110
Hexachlorobenzene	667	483		ug/Kg		72	45 - 120
Hexachlorobutadiene	667	461		ug/Kg		69	40 - 115
Hexachlorocyclopentadiene	667	316	J	ug/Kg		47	12 - 110
Hexachloroethane	667	448		ug/Kg		67	35 - 110
Indeno[1,2,3-cd]pyrene	667	645		ug/Kg		97	40 - 120
Isophorone	667	493		ug/Kg		74	45 - 110
2-Methylnaphthalene	667	489		ug/Kg		73	45 - 105
2-Methylphenol	667	479		ug/Kg		72	40 - 105
3 & 4 Methylphenol	667	484		ug/Kg		73	40 - 105
Naphthalene	667	485		ug/Kg		73	40 - 105
2-Nitroaniline	667	478		ug/Kg		72	45 - 120
3-Nitroaniline	667	449		ug/Kg		67	25 - 110
4-Nitroaniline	667	492		ug/Kg		74	35 - 115
Nitrobenzene	667	479		ug/Kg		72	40 - 115
2-Nitrophenol	667	497		ug/Kg		75	40 - 110
4-Nitrophenol	1330	1040		ug/Kg		78	15 - 140
N-Nitrosodi-n-propylamine	667	470		ug/Kg		71	40 - 115
N-Nitrosodiphenylamine	1330	979		ug/Kg		73	50 - 115
Pentachlorophenol	1330	707		ug/Kg		53	25 - 120
Phenanthrene	667	500		ug/Kg		75	50 - 110
Phenol	667	477		ug/Kg		72	40 - 100
Pyrene	667	506		ug/Kg		76	45 - 125
1,2,4-Trichlorobenzene	667	483		ug/Kg		72	45 - 110

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

Lab Sample ID: LCS 240-180350/9-A
Matrix: Solid
Analysis Batch: 181588

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 180350

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,5-Trichlorophenol	667	433		ug/Kg		65	50 - 110
2,4,6-Trichlorophenol	667	453		ug/Kg		68	45 - 110

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*74*		*45 - 105*
2-Fluorophenol (Surr)	*75*		*35 - 105*
Nitrobenzene-d5 (Surr)	*75*		*35 - 100*
Phenol-d5 (Surr)	*75*		*40 - 100*
Terphenyl-d14 (Surr)	*74*		*30 - 125*
2,4,6-Tribromophenol (Surr)	*59*		*35 - 125*

Lab Sample ID: 240-50067-7 MS
Matrix: Solid
Analysis Batch: 181588

Client Sample ID: 079SB-0395M-0001-0002-SO
Prep Type: Total/NA
Prep Batch: 180350

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	3.4	U	681	465		ug/Kg	☼	68	45 - 110
Acenaphthylene	1.7	U	681	455		ug/Kg	☼	67	45 - 105
Anthracene	3.4	U	681	483		ug/Kg	☼	71	55 - 105
Benzo[a]anthracene	3.4	U	681	514		ug/Kg	☼	75	50 - 110
Benzo[a]pyrene	3.4	U	681	590		ug/Kg	☼	87	50 - 110
Benzo[b]fluoranthene	3.4	U	681	595		ug/Kg	☼	87	45 - 115
Benzo[g,h,i]perylene	1.7	U	681	658		ug/Kg	☼	97	40 - 125
Benzoic acid	140	U J	1360	535	J M	ug/Kg	☼	39	0 - 110
Benzo[k]fluoranthene	3.4	U	681	603		ug/Kg	☼	89	45 - 125
Benzyl alcohol	69	U	681	469		ug/Kg	☼	69	20 - 125
Bis(2-chloroethoxy)methane	69	U	681	462		ug/Kg	☼	68	45 - 110
Bis(2-chloroethyl)ether	3.4	U	681	473		ug/Kg	☼	69	40 - 105
bis (2-chloroisopropyl) ether	34	U	681	431		ug/Kg	☼	63	20 - 115
Bis(2-ethylhexyl) phthalate	34	U	681	589		ug/Kg	☼	87	45 - 125
4-Bromophenyl phenyl ether	34	U	681	499		ug/Kg	☼	73	45 - 115
Butyl benzyl phthalate	34	U	681	556		ug/Kg	☼	82	50 - 125
Carbazole	34	U	681	535		ug/Kg	☼	79	45 - 115
4-Chloroaniline	69	U	681	207	M	ug/Kg	☼	30	10 - 95
4-Chloro-3-methylphenol	69	U	681	433		ug/Kg	☼	64	45 - 115
2-Chloronaphthalene	1.7	U	681	463		ug/Kg	☼	68	45 - 105
2-Chlorophenol	34	U	681	469		ug/Kg	☼	69	45 - 105
4-Chlorophenyl phenyl ether	34	U	681	532		ug/Kg	☼	78	45 - 110
Chrysene	3.4	U	681	549		ug/Kg	☼	81	55 - 110
Dibenz(a,h)anthracene	3.4	U	681	654		ug/Kg	☼	96	40 - 125
Dibenzofuran	7.7	J	681	504		ug/Kg	☼	73	50 - 105
1,2-Dichlorobenzene	34	U	681	438		ug/Kg	☼	64	45 - 95
1,3-Dichlorobenzene	34	U	681	443		ug/Kg	☼	65	40 - 100
1,4-Dichlorobenzene	34	U	681	429		ug/Kg	☼	63	35 - 105
3,3'-Dichlorobenzidine	69	U	1360	530		ug/Kg	☼	39	10 - 130
2,4-Dichlorophenol	69	U	681	420		ug/Kg	☼	62	45 - 110
Diethyl phthalate	34	U	681	621		ug/Kg	☼	91	50 - 115
2,4-Dimethylphenol	69	U	681	312		ug/Kg	☼	46	30 - 105

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

Lab Sample ID: 240-50067-7 MS
Matrix: Solid
Analysis Batch: 181588

Client Sample ID: 079SB-0395M-0001-0002-SO
Prep Type: Total/NA
Prep Batch: 180350

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dimethyl phthalate	34	U	681	574		ug/Kg	☼	84	50 - 110
Di-n-butyl phthalate	34	U	681	628		ug/Kg	☼	92	55 - 110
4,6-Dinitro-2-methylphenol	34	U	1360	857		ug/Kg	☼	63	30 - 135
2,4-Dinitrophenol	69	U	1360	861		ug/Kg	☼	63	15 - 130
2,4-Dinitrotoluene	69	U	681	630		ug/Kg	☼	93	50 - 115
2,6-Dinitrotoluene	69	U	681	581		ug/Kg	☼	85	50 - 110
Di-n-octyl phthalate	34	U	681	627		ug/Kg	☼	92	40 - 130
Fluoranthene	3.4	U	681	554		ug/Kg	☼	81	55 - 115
Fluorene	3.4	U	681	540		ug/Kg	☼	79	50 - 110
Hexachlorobenzene	3.4	U	681	483		ug/Kg	☼	71	45 - 120
Hexachlorobutadiene	34	U	681	451		ug/Kg	☼	66	40 - 115
Hexachlorocyclopentadiene	34	U	681	250	J	ug/Kg	☼	37	10 - 110
Hexachloroethane	34	U	681	418		ug/Kg	☼	61	35 - 110
Indeno[1,2,3-cd]pyrene	1.7	U	681	677		ug/Kg	☼	99	40 - 120
Isophorone	44	J	681	490		ug/Kg	☼	65	45 - 110
2-Methylnaphthalene	33		681	486		ug/Kg	☼	66	45 - 105
2-Methylphenol	69	U	681	455		ug/Kg	☼	67	40 - 105
3 & 4 Methylphenol	69	U	681	435		ug/Kg	☼	64	40 - 105
Naphthalene	30		681	502		ug/Kg	☼	69	40 - 105
2-Nitroaniline	34	U	681	523		ug/Kg	☼	77	45 - 120
3-Nitroaniline	69	U	681	487		ug/Kg	☼	71	25 - 110
4-Nitroaniline	69	U	681	519		ug/Kg	☼	76	35 - 115
Nitrobenzene	3.4	U	681	464		ug/Kg	☼	68	40 - 115
2-Nitrophenol	16	J	681	478		ug/Kg	☼	68	40 - 110
4-Nitrophenol	69	U	1360	1310		ug/Kg	☼	96	15 - 140
N-Nitrosodi-n-propylamine	34	U	681	447		ug/Kg	☼	66	40 - 115
N-Nitrosodiphenylamine	34	U	1360	932		ug/Kg	☼	68	50 - 115
Pentachlorophenol	34	U J	1360	1050		ug/Kg	☼	77	25 - 120
Phenanthrene	14		681	514		ug/Kg	☼	73	50 - 110
Phenol	34	U	681	474		ug/Kg	☼	70	40 - 100
Pyrene	1.7	U	681	536		ug/Kg	☼	79	45 - 125
1,2,4-Trichlorobenzene	17	U	681	461		ug/Kg	☼	68	45 - 110
2,4,5-Trichlorophenol	69	U	681	515		ug/Kg	☼	76	50 - 110
2,4,6-Trichlorophenol	34	U	681	496		ug/Kg	☼	73	45 - 110

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*73*		*45 - 105*
2-Fluorophenol (Surr)	*73*		*35 - 105*
Nitrobenzene-d5 (Surr)	*71*		*35 - 100*
Phenol-d5 (Surr)	*72*		*40 - 100*
Terphenyl-d14 (Surr)	*75*		*30 - 125*
2,4,6-Tribromophenol (Surr)	*91*		*35 - 125*

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

Lab Sample ID: 240-50067-7 MSD
Matrix: Solid
Analysis Batch: 181588

Client Sample ID: 079SB-0395M-0001-0002-SO
Prep Type: Total/NA
Prep Batch: 180350

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	3.4	U	684	472		ug/Kg	☼	69	45 - 110	1	30
Acenaphthylene	1.7	U	684	469		ug/Kg	☼	68	45 - 105	3	30
Anthracene	3.4	U	684	485		ug/Kg	☼	71	55 - 105	0	30
Benzo[a]anthracene	3.4	U	684	500		ug/Kg	☼	73	50 - 110	3	30
Benzo[a]pyrene	3.4	U	684	591		ug/Kg	☼	86	50 - 110	0	30
Benzo[b]fluoranthene	3.4	U	684	588		ug/Kg	☼	86	45 - 115	1	30
Benzo[g,h,i]perylene	1.7	U	684	677		ug/Kg	☼	99	40 - 125	3	30
Benzoic acid	140	U J	1370	339	M J	ug/Kg	☼	25	0 - 110	45	30
Benzo[k]fluoranthene	3.4	U	684	603		ug/Kg	☼	88	45 - 125	0	30
Benzyl alcohol	69	U	684	479		ug/Kg	☼	70	20 - 125	2	30
Bis(2-chloroethoxy)methane	69	U	684	463		ug/Kg	☼	68	45 - 110	0	30
Bis(2-chloroethyl)ether	3.4	U	684	467		ug/Kg	☼	68	40 - 105	1	30
bis (2-chloroisopropyl) ether	34	U	684	442		ug/Kg	☼	65	20 - 115	2	30
Bis(2-ethylhexyl) phthalate	34	U	684	583		ug/Kg	☼	85	45 - 125	1	30
4-Bromophenyl phenyl ether	34	U	684	500		ug/Kg	☼	73	45 - 115	0	30
Butyl benzyl phthalate	34	U	684	541		ug/Kg	☼	79	50 - 125	3	30
Carbazole	34	U	684	534		ug/Kg	☼	78	45 - 115	0	30
4-Chloroaniline	69	U	684	251		ug/Kg	☼	37	10 - 95	19	30
4-Chloro-3-methylphenol	69	U	684	442		ug/Kg	☼	65	45 - 115	2	30
2-Chloronaphthalene	1.7	U	684	456		ug/Kg	☼	67	45 - 105	2	30
2-Chlorophenol	34	U	684	466		ug/Kg	☼	68	45 - 105	1	30
4-Chlorophenyl phenyl ether	34	U	684	545		ug/Kg	☼	80	45 - 110	2	30
Chrysene	3.4	U	684	533		ug/Kg	☼	78	55 - 110	3	30
Dibenz(a,h)anthracene	3.4	U	684	655		ug/Kg	☼	96	40 - 125	0	30
Dibenzofuran	7.7	J	684	512		ug/Kg	☼	74	50 - 105	2	30
1,2-Dichlorobenzene	34	U	684	453		ug/Kg	☼	66	45 - 95	3	30
1,3-Dichlorobenzene	34	U	684	443		ug/Kg	☼	65	40 - 100	0	30
1,4-Dichlorobenzene	34	U	684	448		ug/Kg	☼	65	35 - 105	4	30
3,3'-Dichlorobenzidine	69	U	1370	656		ug/Kg	☼	48	10 - 130	21	30
2,4-Dichlorophenol	69	U	684	417		ug/Kg	☼	61	45 - 110	1	30
Diethyl phthalate	34	U	684	626		ug/Kg	☼	91	50 - 115	1	30
2,4-Dimethylphenol	69	U	684	381		ug/Kg	☼	56	30 - 105	20	30
Dimethyl phthalate	34	U	684	586		ug/Kg	☼	86	50 - 110	2	30
Di-n-butyl phthalate	34	U	684	619		ug/Kg	☼	91	55 - 110	1	30
4,6-Dinitro-2-methylphenol	34	U	1370	791		ug/Kg	☼	58	30 - 135	8	30
2,4-Dinitrophenol	69	U	1370	873		ug/Kg	☼	64	15 - 130	1	30
2,4-Dinitrotoluene	69	U	684	635		ug/Kg	☼	93	50 - 115	1	30
2,6-Dinitrotoluene	69	U	684	594		ug/Kg	☼	87	50 - 110	2	30
Di-n-octyl phthalate	34	U	684	623		ug/Kg	☼	91	40 - 130	1	30
Fluoranthene	3.4	U	684	545		ug/Kg	☼	80	55 - 115	2	30
Fluorene	3.4	U	684	539		ug/Kg	☼	79	50 - 110	0	30
Hexachlorobenzene	3.4	U	684	489		ug/Kg	☼	71	45 - 120	1	30
Hexachlorobutadiene	34	U	684	455		ug/Kg	☼	67	40 - 115	1	30
Hexachlorocyclopentadiene	34	U	684	250	J	ug/Kg	☼	36	10 - 110	0	30
Hexachloroethane	34	U	684	420		ug/Kg	☼	61	35 - 110	1	30
Indeno[1,2,3-cd]pyrene	1.7	U	684	678		ug/Kg	☼	99	40 - 120	0	30
Isophorone	44	J	684	483		ug/Kg	☼	64	45 - 110	1	30
2-Methylnaphthalene	33		684	476		ug/Kg	☼	65	45 - 105	2	30

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

Lab Sample ID: 240-50067-7 MSD — **Client Sample ID: 079SB-0395M-0001-0002-SO**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 181588 — **Prep Batch: 180350**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylphenol	69	U	684	466		ug/Kg	☼	68	40 - 105	2	30
3 & 4 Methylphenol	69	U	684	441		ug/Kg	☼	65	40 - 105	2	30
Naphthalene	30		684	493		ug/Kg	☼	68	40 - 105	2	30
2-Nitroaniline	34	U	684	535		ug/Kg	☼	78	45 - 120	2	30
3-Nitroaniline	69	U	684	493		ug/Kg	☼	72	25 - 110	1	30
4-Nitroaniline	69	U	684	558		ug/Kg	☼	81	35 - 115	7	30
Nitrobenzene	3.4	U	684	470		ug/Kg	☼	69	40 - 115	1	30
2-Nitrophenol	16	J	684	479		ug/Kg	☼	68	40 - 110	0	30
4-Nitrophenol	69	U	1370	1270		ug/Kg	☼	93	15 - 140	3	30
N-Nitrosodi-n-propylamine	34	U	684	449		ug/Kg	☼	66	40 - 115	0	30
N-Nitrosodiphenylamine	34	U	1370	971		ug/Kg	☼	71	50 - 115	4	30
Pentachlorophenol	34	U J	1370	763	J	ug/Kg	☼	56	25 - 120	31	30
Phenanthrene	14		684	521		ug/Kg	☼	74	50 - 110	1	30
Phenol	34	U	684	488		ug/Kg	☼	71	40 - 100	3	30
Pyrene	1.7	U	684	517		ug/Kg	☼	76	45 - 125	4	30
1,2,4-Trichlorobenzene	17	U	684	475		ug/Kg	☼	69	45 - 110	3	30
2,4,5-Trichlorophenol	69	U	684	512		ug/Kg	☼	75	50 - 110	1	30
2,4,6-Trichlorophenol	34	U	684	510		ug/Kg	☼	74	45 - 110	3	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*71*		*45 - 105*
2-Fluorophenol (Surr)	*73*		*35 - 105*
Nitrobenzene-d5 (Surr)	*70*		*35 - 100*
Phenol-d5 (Surr)	*72*		*40 - 100*
Terphenyl-d14 (Surr)	*71*		*30 - 125*
2,4,6-Tribromophenol (Surr)	*90*		*35 - 125*

Lab Sample ID: MB 240-180428/2-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 180709 — **Prep Batch: 180428**

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclopentadiene	0.50	U	10	0.24	ug/L		05/12/15 13:37	05/14/15 11:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*88*		*50 - 110*	*05/12/15 13:37*	*05/14/15 11:14*	*1*
2-Fluorophenol (Surr)	*94*		*20 - 110*	*05/12/15 13:37*	*05/14/15 11:14*	*1*
Nitrobenzene-d5 (Surr)	*81*		*40 - 110*	*05/12/15 13:37*	*05/14/15 11:14*	*1*
Phenol-d5 (Surr)	*94*		*10 - 115*	*05/12/15 13:37*	*05/14/15 11:14*	*1*
Terphenyl-d14 (Surr)	*87*		*50 - 135*	*05/12/15 13:37*	*05/14/15 11:14*	*1*
2,4,6-Tribromophenol (Surr)	*88*		*40 - 125*	*05/12/15 13:37*	*05/14/15 11:14*	*1*

Lab Sample ID: LCS 240-180428/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 180709 — **Prep Batch: 180428**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorocyclopentadiene	20.0	2.99	J	ug/L		15	4 - 110

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl (Surr)	*89*		*50 - 110*
2-Fluorophenol (Surr)	*78*		*20 - 110*
Nitrobenzene-d5 (Surr)	*90*		*40 - 110*
Phenol-d5 (Surr)	*86*		*10 - 115*
Terphenyl-d14 (Surr)	*84*		*50 - 135*
2,4,6-Tribromophenol (Surr)	*107*		*40 - 125*

Lab Sample ID: MRL 240-180709/3
Matrix: Water
Analysis Batch: 180709

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	5.00	4.98		ng/uL		100	70 - 130
Acenaphthylene	5.00	4.74		ng/uL		95	70 - 130
Anthracene	5.00	4.63		ng/uL		93	70 - 130
Benzo[a]anthracene	5.00	4.64		ng/uL		93	70 - 130
Benzo[a]pyrene	5.00	4.72		ng/uL		94	70 - 130
Benzo[b]fluoranthene	5.00	4.71		ng/uL		94	70 - 130
Benzo[g,h,i]perylene	5.00	4.95	M	ng/uL		99	70 - 130
Benzoic acid	10.0	8.37		ng/uL		84	70 - 130
Benzo[k]fluoranthene	5.00	5.15		ng/uL		103	70 - 130
Benzyl alcohol	5.00	4.90		ng/uL		98	70 - 130
Bis(2-chloroethoxy)methane	5.00	4.69		ng/uL		94	70 - 130
Bis(2-chloroethyl)ether	5.00	5.02		ng/uL		100	70 - 130
bis (2-chloroisopropyl) ether	5.00	4.98		ng/uL		100	70 - 130
Bis(2-ethylhexyl) phthalate	5.00	4.58		ng/uL		92	70 - 130
4-Bromophenyl phenyl ether	5.00	4.77		ng/uL		95	70 - 130
Butyl benzyl phthalate	5.00	4.58		ng/uL		92	70 - 130
Carbazole	5.00	4.32		ng/uL		86	70 - 130
4-Chloroaniline	5.00	4.67		ng/uL		93	70 - 130
4-Chloro-3-methylphenol	5.00	4.90		ng/uL		98	70 - 130
2-Chloronaphthalene	5.00	4.57		ng/uL		91	70 - 130
2-Chlorophenol	5.00	5.02		ng/uL		100	70 - 130
4-Chlorophenyl phenyl ether	5.00	5.09		ng/uL		102	70 - 130
Chrysene	5.00	4.89		ng/uL		98	70 - 130
Dibenz(a,h)anthracene	5.00	4.81		ng/uL		96	70 - 130
Dibenzofuran	5.00	4.71		ng/uL		94	70 - 130
1,2-Dichlorobenzene	5.00	5.07		ng/uL		101	70 - 130
1,3-Dichlorobenzene	5.00	5.24		ng/uL		105	70 - 130
1,4-Dichlorobenzene	5.00	4.97		ng/uL		99	70 - 130
3,3'-Dichlorobenzidine	10.0	9.26		ng/uL		93	70 - 130
2,4-Dichlorophenol	5.00	4.90		ng/uL		98	70 - 130
Diethyl phthalate	5.00	4.91		ng/uL		98	70 - 130
2,4-Dimethylphenol	5.00	4.86		ng/uL		97	70 - 130
Dimethyl phthalate	5.00	4.86		ng/uL		97	70 - 130
Di-n-butyl phthalate	5.00	4.43		ng/uL		89	70 - 130
4,6-Dinitro-2-methylphenol	10.0	8.37		ng/uL		84	70 - 130
2,4-Dinitrophenol	10.0	7.73		ng/uL		77	70 - 130
2,4-Dinitrotoluene	5.00	5.14		ng/uL		103	70 - 130
2,6-Dinitrotoluene	5.00	5.04		ng/uL		101	70 - 130
Di-n-octyl phthalate	5.00	4.33		ng/uL		87	70 - 130
Fluoranthene	5.00	4.49		ng/uL		90	70 - 130
Fluorene	5.00	4.73		ng/uL		95	70 - 130
Hexachlorobenzene	5.00	4.99		ng/uL		100	70 - 130

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

Lab Sample ID: MRL 240-180709/3
Matrix: Water
Analysis Batch: 180709

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorobutadiene	5.00	4.83		ng/uL		97	70 - 130
Hexachlorocyclopentadiene	5.00	4.96		ng/uL		99	70 - 130
Hexachloroethane	5.00	5.14		ng/uL		103	70 - 130
Indeno[1,2,3-cd]pyrene	5.00	4.89		ng/uL		98	70 - 130
Isophorone	5.00	4.82		ng/uL		96	70 - 130
2-Methylnaphthalene	5.00	4.93		ng/uL		99	70 - 130
2-Methylphenol	5.00	5.11		ng/uL		102	70 - 130
3 & 4 Methylphenol	5.00	5.01		ng/uL		100	70 - 130
Naphthalene	5.00	4.85		ng/uL		97	70 - 130
2-Nitroaniline	5.00	4.74		ng/uL		95	70 - 130
3-Nitroaniline	5.00	5.31		ng/uL		106	70 - 130
4-Nitroaniline	5.00	4.40		ng/uL		88	70 - 130
Nitrobenzene	5.00	4.87		ng/uL		97	70 - 130
2-Nitrophenol	5.00	4.81		ng/uL		96	70 - 130
4-Nitrophenol	10.0	9.16		ng/uL		92	70 - 130
N-Nitrosodi-n-propylamine	5.00	5.24		ng/uL		105	70 - 130
N-Nitrosodiphenylamine	10.0	9.33		ng/uL		93	70 - 130
Pentachlorophenol	10.0	8.01		ng/uL		80	70 - 130
Phenanthrene	5.00	4.76		ng/uL		95	70 - 130
Phenol	5.00	5.13		ng/uL		103	70 - 130
Pyrene	5.00	4.72		ng/uL		94	70 - 130
1,2,4-Trichlorobenzene	5.00	5.00		ng/uL		100	70 - 130
2,4,5-Trichlorophenol	5.00	5.13		ng/uL		103	70 - 130
2,4,6-Trichlorophenol	5.00	5.07		ng/uL		101	70 - 130

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*97*		*70 - 130*
2-Fluorophenol (Surr)	*103*		*50 - 150*
Nitrobenzene-d5 (Surr)	*101*		*50 - 150*
Phenol-d5 (Surr)	*102*		*50 - 150*
Terphenyl-d14 (Surr)	*95*		*50 - 150*
2,4,6-Tribromophenol (Surr)	*113*		*50 - 150*

Lab Sample ID: MRL 240-180709/7
Matrix: Water
Analysis Batch: 180709

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	5.00	5.05		ng/uL		101	70 - 130
Acenaphthylene	5.00	4.95		ng/uL		99	70 - 130
Anthracene	5.00	4.97		ng/uL		99	70 - 130
Benzo[a]anthracene	5.00	4.80		ng/uL		96	70 - 130
Benzo[a]pyrene	5.00	4.65		ng/uL		93	70 - 130
Benzo[b]fluoranthene	5.00	4.66		ng/uL		93	70 - 130
Benzo[g,h,i]perylene	5.00	4.84		ng/uL		97	70 - 130
Benzoic acid	10.0	7.73	M	ng/uL		77	70 - 130
Benzo[k]fluoranthene	5.00	4.67		ng/uL		93	70 - 130
Benzyl alcohol	5.00	4.96		ng/uL		99	70 - 130

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

Lab Sample ID: MRL 240-180709/7
Matrix: Water
Analysis Batch: 180709

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-chloroethoxy)methane	5.00	4.84		ng/uL		97	70 - 130
Bis(2-chloroethyl)ether	5.00	4.90		ng/uL		98	70 - 130
bis (2-chloroisopropyl) ether	5.00	4.65		ng/uL		93	70 - 130
Bis(2-ethylhexyl) phthalate	5.00	4.54		ng/uL		91	70 - 130
4-Bromophenyl phenyl ether	5.00	5.44		ng/uL		109	70 - 130
Butyl benzyl phthalate	5.00	4.80		ng/uL		96	70 - 130
Carbazole	5.00	4.52		ng/uL		90	70 - 130
4-Chloroaniline	5.00	5.28		ng/uL		106	70 - 130
4-Chloro-3-methylphenol	5.00	5.16		ng/uL		103	70 - 130
2-Chloronaphthalene	5.00	4.84		ng/uL		97	70 - 130
2-Chlorophenol	5.00	4.90		ng/uL		98	70 - 130
4-Chlorophenyl phenyl ether	5.00	5.35		ng/uL		107	70 - 130
Chrysene	5.00	5.13		ng/uL		103	70 - 130
Dibenz(a,h)anthracene	5.00	4.63		ng/uL		93	70 - 130
Dibenzofuran	5.00	4.95		ng/uL		99	70 - 130
1,2-Dichlorobenzene	5.00	4.94		ng/uL		99	70 - 130
1,3-Dichlorobenzene	5.00	4.86		ng/uL		97	70 - 130
1,4-Dichlorobenzene	5.00	4.76		ng/uL		95	70 - 130
3,3'-Dichlorobenzidine	10.0	9.11		ng/uL		91	70 - 130
2,4-Dichlorophenol	5.00	5.17		ng/uL		103	70 - 130
Diethyl phthalate	5.00	5.31		ng/uL		106	70 - 130
2,4-Dimethylphenol	5.00	5.10		ng/uL		102	70 - 130
Dimethyl phthalate	5.00	5.07		ng/uL		101	70 - 130
Di-n-butyl phthalate	5.00	4.76		ng/uL		95	70 - 130
4,6-Dinitro-2-methylphenol	10.0	8.46		ng/uL		85	70 - 130
2,4-Dinitrophenol	10.0	7.84		ng/uL		78	70 - 130
2,4-Dinitrotoluene	5.00	5.34		ng/uL		107	70 - 130
2,6-Dinitrotoluene	5.00	5.18		ng/uL		104	70 - 130
Di-n-octyl phthalate	5.00	4.13		ng/uL		83	70 - 130
Fluoranthene	5.00	4.56		ng/uL		91	70 - 130
Fluorene	5.00	4.98		ng/uL		100	70 - 130
Hexachlorobenzene	5.00	4.96		ng/uL		99	70 - 130
Hexachlorobutadiene	5.00	5.16		ng/uL		103	70 - 130
Hexachlorocyclopentadiene	5.00	5.22		ng/uL		104	70 - 130
Hexachloroethane	5.00	4.94		ng/uL		99	70 - 130
Indeno[1,2,3-cd]pyrene	5.00	4.77		ng/uL		95	70 - 130
Isophorone	5.00	5.07		ng/uL		101	70 - 130
2-Methylnaphthalene	5.00	5.04		ng/uL		101	70 - 130
2-Methylphenol	5.00	4.76		ng/uL		95	70 - 130
3 & 4 Methylphenol	5.00	4.70		ng/uL		94	70 - 130
Naphthalene	5.00	4.90		ng/uL		98	70 - 130
2-Nitroaniline	5.00	4.92		ng/uL		98	70 - 130
3-Nitroaniline	5.00	5.40		ng/uL		108	70 - 130
4-Nitroaniline	5.00	4.40		ng/uL		88	70 - 130
Nitrobenzene	5.00	5.14		ng/uL		103	70 - 130
2-Nitrophenol	5.00	5.06		ng/uL		101	70 - 130
4-Nitrophenol	10.0	9.67		ng/uL		97	70 - 130
N-Nitrosodi-n-propylamine	5.00	5.00		ng/uL		100	70 - 130

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

Lab Sample ID: MRL 240-180709/7
Matrix: Water
Analysis Batch: 180709

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
N-Nitrosodiphenylamine	10.0	9.92		ng/uL		99	70 - 130
Pentachlorophenol	10.0	8.35		ng/uL		84	70 - 130
Phenanthrene	5.00	4.95		ng/uL		99	70 - 130
Phenol	5.00	5.00		ng/uL		100	70 - 130
Pyrene	5.00	4.80		ng/uL		96	70 - 130
1,2,4-Trichlorobenzene	5.00	5.00		ng/uL		100	70 - 130
2,4,5-Trichlorophenol	5.00	5.21		ng/uL		104	70 - 130
2,4,6-Trichlorophenol	5.00	5.15		ng/uL		103	70 - 130

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*99*		*70 - 130*
2-Fluorophenol (Surr)	*103*		*50 - 150*
Nitrobenzene-d5 (Surr)	*104*		*50 - 150*
Phenol-d5 (Surr)	*96*		*50 - 150*
Terphenyl-d14 (Surr)	*93*		*50 - 150*
2,4,6-Tribromophenol (Surr)	*112*		*50 - 150*

Lab Sample ID: MRL 240-181588/20
Matrix: Solid
Analysis Batch: 181588

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	5.00	5.15		ng/uL		103	70 - 130
Acenaphthylene	5.00	4.98		ng/uL		100	70 - 130
Anthracene	5.00	5.02		ng/uL		100	70 - 130
Benzo[a]anthracene	5.00	4.90		ng/uL		98	70 - 130
Benzo[a]pyrene	5.00	5.05		ng/uL		101	70 - 130
Benzo[b]fluoranthene	5.00	5.01		ng/uL		100	70 - 130
Benzo[g,h,i]perylene	5.00	5.46		ng/uL		109	70 - 130
Benzoic acid	10.0	7.83	M	ng/uL		78	70 - 130
Benzo[k]fluoranthene	5.00	5.13		ng/uL		103	70 - 130
Benzyl alcohol	5.00	4.73		ng/uL		95	70 - 130
Bis(2-chloroethoxy)methane	5.00	5.04		ng/uL		101	70 - 130
Bis(2-chloroethyl)ether	5.00	5.10		ng/uL		102	70 - 130
bis (2-chloroisopropyl) ether	5.00	4.88		ng/uL		98	70 - 130
Bis(2-ethylhexyl) phthalate	5.00	5.21		ng/uL		104	70 - 130
4-Bromophenyl phenyl ether	5.00	5.10		ng/uL		102	70 - 130
Butyl benzyl phthalate	5.00	5.01		ng/uL		100	70 - 130
Carbazole	5.00	4.75		ng/uL		95	70 - 130
4-Chloroaniline	5.00	5.03		ng/uL		101	70 - 130
4-Chloro-3-methylphenol	5.00	4.88		ng/uL		98	70 - 130
2-Chloronaphthalene	5.00	4.92		ng/uL		98	70 - 130
2-Chlorophenol	5.00	4.92		ng/uL		98	70 - 130
4-Chlorophenyl phenyl ether	5.00	5.06		ng/uL		101	70 - 130
Chrysene	5.00	5.08		ng/uL		102	70 - 130
Dibenz(a,h)anthracene	5.00	5.29		ng/uL		106	70 - 130
Dibenzofuran	5.00	5.12		ng/uL		102	70 - 130
1,2-Dichlorobenzene	5.00	5.00		ng/uL		100	70 - 130

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

Lab Sample ID: MRL 240-181588/20
Matrix: Solid
Analysis Batch: 181588

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichlorobenzene	5.00	4.95		ng/uL		99	70 - 130
1,4-Dichlorobenzene	5.00	5.08		ng/uL		102	70 - 130
3,3'-Dichlorobenzidine	10.0	10.6		ng/uL		106	70 - 130
2,4-Dichlorophenol	5.00	5.16		ng/uL		103	70 - 130
Diethyl phthalate	5.00	5.29		ng/uL		106	70 - 130
2,4-Dimethylphenol	5.00	5.07		ng/uL		101	70 - 130
Dimethyl phthalate	5.00	5.15		ng/uL		103	70 - 130
Di-n-butyl phthalate	5.00	5.29		ng/uL		106	70 - 130
4,6-Dinitro-2-methylphenol	10.0	5.07	^	ng/uL		51	70 - 130
2,4-Dinitrophenol	10.0	3.78	^	ng/uL		38	70 - 130
2,4-Dinitrotoluene	5.00	4.74		ng/uL		95	70 - 130
2,6-Dinitrotoluene	5.00	4.79		ng/uL		96	70 - 130
Di-n-octyl phthalate	5.00	5.05		ng/uL		101	70 - 130
Fluoranthene	5.00	5.14		ng/uL		103	70 - 130
Fluorene	5.00	5.06		ng/uL		101	70 - 130
Hexachlorobenzene	5.00	5.16		ng/uL		103	70 - 130
Hexachlorobutadiene	5.00	5.27		ng/uL		105	70 - 130
Hexachlorocyclopentadiene	5.00	3.25	^	ng/uL		65	70 - 130
Hexachloroethane	5.00	4.59		ng/uL		92	70 - 130
Indeno[1,2,3-cd]pyrene	5.00	5.52		ng/uL		110	70 - 130
Isophorone	5.00	5.09		ng/uL		102	70 - 130
2-Methylnaphthalene	5.00	5.12		ng/uL		102	70 - 130
2-Methylphenol	5.00	4.91		ng/uL		98	70 - 130
3 & 4 Methylphenol	5.00	4.85		ng/uL		97	70 - 130
Naphthalene	5.00	5.16		ng/uL		103	70 - 130
2-Nitroaniline	5.00	4.41		ng/uL		88	70 - 130
3-Nitroaniline	5.00	4.77		ng/uL		95	70 - 130
4-Nitroaniline	5.00	4.59		ng/uL		92	70 - 130
Nitrobenzene	5.00	4.89		ng/uL		98	70 - 130
2-Nitrophenol	5.00	4.47		ng/uL		89	70 - 130
4-Nitrophenol	10.0	8.39		ng/uL		84	70 - 130
N-Nitrosodi-n-propylamine	5.00	4.90		ng/uL		98	70 - 130
N-Nitrosodiphenylamine	10.0	10.1		ng/uL		101	70 - 130
Pentachlorophenol	10.0	9.37		ng/uL		94	70 - 130
Phenanthrene	5.00	4.99		ng/uL		100	70 - 130
Phenol	5.00	4.85		ng/uL		97	70 - 130
Pyrene	5.00	4.97		ng/uL		99	70 - 130
1,2,4-Trichlorobenzene	5.00	5.20		ng/uL		104	70 - 130
2,4,5-Trichlorophenol	5.00	4.85		ng/uL		97	70 - 130
2,4,6-Trichlorophenol	5.00	5.00		ng/uL		100	70 - 130

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*103*		*50 - 150*
2-Fluorophenol (Surr)	*94*		*50 - 150*
Nitrobenzene-d5 (Surr)	*99*		*50 - 150*
Phenol-d5 (Surr)	*96*		*50 - 150*
Terphenyl-d14 (Surr)	*99*		*50 - 150*
2,4,6-Tribromophenol (Surr)	*104*		*50 - 150*

Lab Sample ID: MRL 240-181588/3
Matrix: Solid
Analysis Batch: 181588

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	5.00	5.11		ng/uL		102	70 - 130
Acenaphthylene	5.00	4.99		ng/uL		100	70 - 130
Anthracene	5.00	5.07		ng/uL		101	70 - 130
Benzo[a]anthracene	5.00	4.87		ng/uL		97	70 - 130
Benzo[a]pyrene	5.00	5.05		ng/uL		101	70 - 130
Benzo[b]fluoranthene	5.00	4.95		ng/uL		99	70 - 130
Benzo[g,h,i]perylene	5.00	5.63		ng/uL		113	70 - 130
Benzoic acid	10.0	9.88	M	ng/uL		99	70 - 130
Benzo[k]fluoranthene	5.00	5.21		ng/uL		104	70 - 130
Benzyl alcohol	5.00	4.99		ng/uL		100	70 - 130
Bis(2-chloroethoxy)methane	5.00	5.10		ng/uL		102	70 - 130
Bis(2-chloroethyl)ether	5.00	5.23		ng/uL		105	70 - 130
bis (2-chloroisopropyl) ether	5.00	4.84		ng/uL		97	70 - 130
Bis(2-ethylhexyl) phthalate	5.00	5.43		ng/uL		109	70 - 130
4-Bromophenyl phenyl ether	5.00	5.22		ng/uL		104	70 - 130
Butyl benzyl phthalate	5.00	5.22		ng/uL		104	70 - 130
Carbazole	5.00	5.15		ng/uL		103	70 - 130
4-Chloroaniline	5.00	4.96		ng/uL		99	70 - 130
4-Chloro-3-methylphenol	5.00	5.01		ng/uL		100	70 - 130
2-Chloronaphthalene	5.00	4.94		ng/uL		99	70 - 130
2-Chlorophenol	5.00	5.06		ng/uL		101	70 - 130
4-Chlorophenyl phenyl ether	5.00	4.98		ng/uL		100	70 - 130
Chrysene	5.00	5.05		ng/uL		101	70 - 130
Dibenz(a,h)anthracene	5.00	5.47		ng/uL		109	70 - 130
Dibenzofuran	5.00	5.11		ng/uL		102	70 - 130
1,2-Dichlorobenzene	5.00	5.20		ng/uL		104	70 - 130
1,3-Dichlorobenzene	5.00	5.13		ng/uL		103	70 - 130
1,4-Dichlorobenzene	5.00	5.20		ng/uL		104	70 - 130
3,3'-Dichlorobenzidine	10.0	10.9		ng/uL		109	70 - 130
2,4-Dichlorophenol	5.00	5.09		ng/uL		102	70 - 130
Diethyl phthalate	5.00	5.27		ng/uL		105	70 - 130
2,4-Dimethylphenol	5.00	5.03		ng/uL		101	70 - 130
Dimethyl phthalate	5.00	5.21		ng/uL		104	70 - 130
Di-n-butyl phthalate	5.00	5.67		ng/uL		113	70 - 130
4,6-Dinitro-2-methylphenol	10.0	9.06		ng/uL		91	70 - 130
2,4-Dinitrophenol	10.0	8.72		ng/uL		87	70 - 130
2,4-Dinitrotoluene	5.00	5.40		ng/uL		108	70 - 130
2,6-Dinitrotoluene	5.00	5.49		ng/uL		110	70 - 130
Di-n-octyl phthalate	5.00	5.16		ng/uL		103	70 - 130
Fluoranthene	5.00	5.35		ng/uL		107	70 - 130
Fluorene	5.00	5.09		ng/uL		102	70 - 130
Hexachlorobenzene	5.00	5.21		ng/uL		104	70 - 130
Hexachlorobutadiene	5.00	5.09		ng/uL		102	70 - 130
Hexachlorocyclopentadiene	5.00	4.36		ng/uL		87	70 - 130
Hexachloroethane	5.00	4.91		ng/uL		98	70 - 130
Indeno[1,2,3-cd]pyrene	5.00	5.57		ng/uL		111	70 - 130
Isophorone	5.00	5.09		ng/uL		102	70 - 130
2-Methylnaphthalene	5.00	5.17		ng/uL		103	70 - 130
2-Methylphenol	5.00	5.04		ng/uL		101	70 - 130
3 & 4 Methylphenol	5.00	5.02		ng/uL		100	70 - 130

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

Lab Sample ID: MRL 240-181588/3
Matrix: Solid
Analysis Batch: 181588

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	5.00	5.15		ng/uL		103	70 - 130
2-Nitroaniline	5.00	4.70		ng/uL		94	70 - 130
3-Nitroaniline	5.00	5.06		ng/uL		101	70 - 130
4-Nitroaniline	5.00	5.20		ng/uL		104	70 - 130
Nitrobenzene	5.00	5.01		ng/uL		100	70 - 130
2-Nitrophenol	5.00	5.19		ng/uL		104	70 - 130
4-Nitrophenol	10.0	10.4		ng/uL		104	70 - 130
N-Nitrosodi-n-propylamine	5.00	4.92		ng/uL		98	70 - 130
N-Nitrosodiphenylamine	10.0	10.7		ng/uL		107	70 - 130
Pentachlorophenol	10.0	10.1		ng/uL		101	70 - 130
Phenanthrene	5.00	5.16		ng/uL		103	70 - 130
Phenol	5.00	4.88		ng/uL		98	70 - 130
Pyrene	5.00	5.05		ng/uL		101	70 - 130
1,2,4-Trichlorobenzene	5.00	5.15		ng/uL		103	70 - 130
2,4,5-Trichlorophenol	5.00	4.90		ng/uL		98	70 - 130
2,4,6-Trichlorophenol	5.00	4.94		ng/uL		99	70 - 130

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*102*		*50 - 150*
2-Fluorophenol (Surr)	*100*		*50 - 150*
Nitrobenzene-d5 (Surr)	*101*		*50 - 150*
Phenol-d5 (Surr)	*99*		*50 - 150*
Terphenyl-d14 (Surr)	*96*		*50 - 150*
2,4,6-Tribromophenol (Surr)	*99*		*50 - 150*

Lab Sample ID: MRL 240-181781/16
Matrix: Solid
Analysis Batch: 181781

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	5.00	5.02		ng/uL		100	70 - 130
Acenaphthylene	5.00	4.89		ng/uL		98	70 - 130
Anthracene	5.00	4.96		ng/uL		99	70 - 130
Benzo[a]anthracene	5.00	4.92		ng/uL		98	70 - 130
Benzo[a]pyrene	5.00	4.98		ng/uL		100	70 - 130
Benzo[b]fluoranthene	5.00	4.73		ng/uL		95	70 - 130
Benzo[g,h,i]perylene	5.00	5.49		ng/uL		110	70 - 130
Benzoic acid	10.0	9.70	M	ng/uL		97	70 - 130
Benzo[k]fluoranthene	5.00	5.18		ng/uL		104	70 - 130
Benzyl alcohol	5.00	4.86		ng/uL		97	70 - 130
Bis(2-chloroethoxy)methane	5.00	5.06		ng/uL		101	70 - 130
Bis(2-chloroethyl)ether	5.00	5.26		ng/uL		105	70 - 130
bis (2-chloroisopropyl) ether	5.00	4.79		ng/uL		96	70 - 130
Bis(2-ethylhexyl) phthalate	5.00	5.39		ng/uL		108	70 - 130
4-Bromophenyl phenyl ether	5.00	4.94		ng/uL		99	70 - 130
Butyl benzyl phthalate	5.00	5.29		ng/uL		106	70 - 130
Carbazole	5.00	4.80		ng/uL		96	70 - 130
4-Chloroaniline	5.00	4.95		ng/uL		99	70 - 130

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

Lab Sample ID: MRL 240-181781/16
Matrix: Solid
Analysis Batch: 181781

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloro-3-methylphenol	5.00	4.93		ng/uL		99	70 - 130
2-Chloronaphthalene	5.00	4.93		ng/uL		99	70 - 130
2-Chlorophenol	5.00	5.07		ng/uL		101	70 - 130
4-Chlorophenyl phenyl ether	5.00	5.00		ng/uL		100	70 - 130
Chrysene	5.00	5.16		ng/uL		103	70 - 130
Dibenz(a,h)anthracene	5.00	5.36		ng/uL		107	70 - 130
Dibenzofuran	5.00	5.03		ng/uL		101	70 - 130
1,2-Dichlorobenzene	5.00	5.23		ng/uL		105	70 - 130
1,3-Dichlorobenzene	5.00	5.10		ng/uL		102	70 - 130
1,4-Dichlorobenzene	5.00	5.19		ng/uL		104	70 - 130
3,3'-Dichlorobenzidine	10.0	10.3		ng/uL		103	70 - 130
2,4-Dichlorophenol	5.00	5.19		ng/uL		104	70 - 130
Diethyl phthalate	5.00	5.14		ng/uL		103	70 - 130
2,4-Dimethylphenol	5.00	5.05		ng/uL		101	70 - 130
Dimethyl phthalate	5.00	5.15		ng/uL		103	70 - 130
Di-n-butyl phthalate	5.00	5.31		ng/uL		106	70 - 130
4,6-Dinitro-2-methylphenol	10.0	6.59	^	ng/uL		66	70 - 130
2,4-Dinitrophenol	10.0	5.74	^	ng/uL		57	70 - 130
2,4-Dinitrotoluene	5.00	5.05		ng/uL		101	70 - 130
2,6-Dinitrotoluene	5.00	5.02		ng/uL		100	70 - 130
Di-n-octyl phthalate	5.00	5.01		ng/uL		100	70 - 130
Fluoranthene	5.00	4.98		ng/uL		100	70 - 130
Fluorene	5.00	4.95		ng/uL		99	70 - 130
Hexachlorobenzene	5.00	5.05		ng/uL		101	70 - 130
Hexachlorobutadiene	5.00	5.10		ng/uL		102	70 - 130
Hexachlorocyclopentadiene	5.00	4.09		ng/uL		82	70 - 130
Hexachloroethane	5.00	4.84		ng/uL		97	70 - 130
Indeno[1,2,3-cd]pyrene	5.00	5.44		ng/uL		109	70 - 130
Isophorone	5.00	5.11		ng/uL		102	70 - 130
2-Methylnaphthalene	5.00	5.17		ng/uL		103	70 - 130
2-Methylphenol	5.00	5.09		ng/uL		102	70 - 130
3 & 4 Methylphenol	5.00	5.05		ng/uL		101	70 - 130
Naphthalene	5.00	5.22		ng/uL		104	70 - 130
2-Nitroaniline	5.00	4.53		ng/uL		91	70 - 130
3-Nitroaniline	5.00	4.81		ng/uL		96	70 - 130
4-Nitroaniline	5.00	4.98		ng/uL		100	70 - 130
Nitrobenzene	5.00	5.10		ng/uL		102	70 - 130
2-Nitrophenol	5.00	4.77		ng/uL		95	70 - 130
4-Nitrophenol	10.0	8.68		ng/uL		87	70 - 130
N-Nitrosodi-n-propylamine	5.00	4.85		ng/uL		97	70 - 130
N-Nitrosodiphenylamine	10.0	10.2		ng/uL		102	70 - 130
Pentachlorophenol	10.0	9.18		ng/uL		92	70 - 130
Phenanthrene	5.00	5.06		ng/uL		101	70 - 130
Phenol	5.00	4.90		ng/uL		98	70 - 130
Pyrene	5.00	5.21		ng/uL		104	70 - 130
1,2,4-Trichlorobenzene	5.00	5.20		ng/uL		104	70 - 130
2,4,5-Trichlorophenol	5.00	4.73		ng/uL		95	70 - 130
2,4,6-Trichlorophenol	5.00	4.80		ng/uL		96	70 - 130

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

Lab Sample ID: MRL 240-181781/16
Matrix: Solid
Analysis Batch: 181781

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

Surrogate	MRL %Recovery	MRL Qualifier	Limits
2-Fluorobiphenyl (Surr)	*99*		*50 - 150*
2-Fluorophenol (Surr)	*98*		*50 - 150*
Nitrobenzene-d5 (Surr)	*102*		*50 - 150*
Phenol-d5 (Surr)	*99*		*50 - 150*
Terphenyl-d14 (Surr)	*100*		*50 - 150*
2,4,6-Tribromophenol (Surr)	*98*		*50 - 150*

Lab Sample ID: MRL 240-181781/3
Matrix: Solid
Analysis Batch: 181781

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	5.00	5.12		ng/uL		102	70 - 130
Acenaphthylene	5.00	4.99		ng/uL		100	70 - 130
Anthracene	5.00	5.02		ng/uL		100	70 - 130
Benzo[a]anthracene	5.00	4.93		ng/uL		99	70 - 130
Benzo[a]pyrene	5.00	5.15		ng/uL		103	70 - 130
Benzo[b]fluoranthene	5.00	5.15		ng/uL		103	70 - 130
Benzo[g,h,i]perylene	5.00	5.73		ng/uL		115	70 - 130
Benzoic acid	10.0	10.5	M	ng/uL		105	70 - 130
Benzo[k]fluoranthene	5.00	5.04		ng/uL		101	70 - 130
Benzyl alcohol	5.00	4.99		ng/uL		100	70 - 130
Bis(2-chloroethoxy)methane	5.00	5.06		ng/uL		101	70 - 130
Bis(2-chloroethyl)ether	5.00	5.32		ng/uL		106	70 - 130
bis (2-chloroisopropyl) ether	5.00	4.72		ng/uL		94	70 - 130
Bis(2-ethylhexyl) phthalate	5.00	5.35		ng/uL		107	70 - 130
4-Bromophenyl phenyl ether	5.00	5.10		ng/uL		102	70 - 130
Butyl benzyl phthalate	5.00	5.23		ng/uL		105	70 - 130
Carbazole	5.00	4.98		ng/uL		100	70 - 130
4-Chloroaniline	5.00	5.27		ng/uL		105	70 - 130
4-Chloro-3-methylphenol	5.00	5.03		ng/uL		101	70 - 130
2-Chloronaphthalene	5.00	5.01		ng/uL		100	70 - 130
2-Chlorophenol	5.00	5.11		ng/uL		102	70 - 130
4-Chlorophenyl phenyl ether	5.00	5.08		ng/uL		102	70 - 130
Chrysene	5.00	5.15		ng/uL		103	70 - 130
Dibenz(a,h)anthracene	5.00	5.47		ng/uL		109	70 - 130
Dibenzofuran	5.00	5.10		ng/uL		102	70 - 130
1,2-Dichlorobenzene	5.00	5.25		ng/uL		105	70 - 130
1,3-Dichlorobenzene	5.00	5.13		ng/uL		103	70 - 130
1,4-Dichlorobenzene	5.00	5.24		ng/uL		105	70 - 130
3,3'-Dichlorobenzidine	10.0	10.5		ng/uL		105	70 - 130
2,4-Dichlorophenol	5.00	5.27		ng/uL		105	70 - 130
Diethyl phthalate	5.00	5.20		ng/uL		104	70 - 130
2,4-Dimethylphenol	5.00	5.02		ng/uL		100	70 - 130
Dimethyl phthalate	5.00	5.26		ng/uL		105	70 - 130
Di-n-butyl phthalate	5.00	5.59		ng/uL		112	70 - 130
4,6-Dinitro-2-methylphenol	10.0	9.77		ng/uL		98	70 - 130
2,4-Dinitrophenol	10.0	9.28		ng/uL		93	70 - 130

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

Lab Sample ID: MRL 240-181781/3
Matrix: Solid
Analysis Batch: 181781

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	5.00	5.63		ng/uL		113	70 - 130
2,6-Dinitrotoluene	5.00	5.53		ng/uL		111	70 - 130
Di-n-octyl phthalate	5.00	5.13		ng/uL		103	70 - 130
Fluoranthene	5.00	5.29		ng/uL		106	70 - 130
Fluorene	5.00	5.14		ng/uL		103	70 - 130
Hexachlorobenzene	5.00	5.10		ng/uL		102	70 - 130
Hexachlorobutadiene	5.00	5.18		ng/uL		104	70 - 130
Hexachlorocyclopentadiene	5.00	4.63		ng/uL		93	70 - 130
Hexachloroethane	5.00	4.92		ng/uL		98	70 - 130
Indeno[1,2,3-cd]pyrene	5.00	5.67		ng/uL		113	70 - 130
Isophorone	5.00	5.00		ng/uL		100	70 - 130
2-Methylnaphthalene	5.00	5.22		ng/uL		104	70 - 130
2-Methylphenol	5.00	5.11		ng/uL		102	70 - 130
3 & 4 Methylphenol	5.00	5.00		ng/uL		100	70 - 130
Naphthalene	5.00	5.15		ng/uL		103	70 - 130
2-Nitroaniline	5.00	4.85		ng/uL		97	70 - 130
3-Nitroaniline	5.00	5.20		ng/uL		104	70 - 130
4-Nitroaniline	5.00	5.00		ng/uL		100	70 - 130
Nitrobenzene	5.00	4.96		ng/uL		99	70 - 130
2-Nitrophenol	5.00	5.15		ng/uL		103	70 - 130
4-Nitrophenol	10.0	9.85		ng/uL		99	70 - 130
N-Nitrosodi-n-propylamine	5.00	4.92		ng/uL		98	70 - 130
N-Nitrosodiphenylamine	10.0	10.5		ng/uL		105	70 - 130
Pentachlorophenol	10.0	9.50		ng/uL		95	70 - 130
Phenanthrene	5.00	5.10		ng/uL		102	70 - 130
Phenol	5.00	4.93		ng/uL		99	70 - 130
Pyrene	5.00	5.10		ng/uL		102	70 - 130
1,2,4-Trichlorobenzene	5.00	5.27		ng/uL		105	70 - 130
2,4,5-Trichlorophenol	5.00	5.08		ng/uL		102	70 - 130
2,4,6-Trichlorophenol	5.00	5.07		ng/uL		101	70 - 130

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*102*		*50 - 150*
2-Fluorophenol (Surr)	*100*		*50 - 150*
Nitrobenzene-d5 (Surr)	*100*		*50 - 150*
Phenol-d5 (Surr)	*100*		*50 - 150*
Terphenyl-d14 (Surr)	*100*		*50 - 150*
2,4,6-Tribromophenol (Surr)	*102*		*50 - 150*

GC/MS Semi VOA

Prep Batch: 179064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-50067-11	079SB-0399-0001-RB	Total/NA	Water	3520C	
LCS 240-179064/3-A	Lab Control Sample	Total/NA	Water	3520C	
MB 240-179064/2-A	Method Blank	Total/NA	Water	3520C	

Prep Batch: 179108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-50067-10	079SB-0398-0001-SO	Total/NA	Solid	3540C	
LCS 240-179108/23-A	Lab Control Sample	Total/NA	Solid	3540C	
MB 240-179108/22-A	Method Blank	Total/NA	Solid	3540C	

ISM Prep Batch: 179242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-50067-1	079SS-0389M-0001-SO	Total/NA	Solid	Increment, Prep	
240-50067-2	079SB-0390M-0001-SO	Total/NA	Solid	Increment, Prep	
240-50067-3	079SB-0391M-0001-SO	Total/NA	Solid	Increment, Prep	
240-50067-4	079SB-0392M-0001-SO	Total/NA	Solid	Increment, Prep	
240-50067-5	079SB-0393M-0001-SO	Total/NA	Solid	Increment, Prep	
240-50067-6	079SB-0394M-0001-SO	Total/NA	Solid	Increment, Prep	
240-50067-7	079SB-0395M-0001-0002-SO	Total/NA	Solid	Increment, Prep	
240-50067-7 MS	079SB-0395M-0001-0002-SO	Total/NA	Solid	Increment, Prep	
240-50067-7 MSD	079SB-0395M-0001-0002-SO	Total/NA	Solid	Increment, Prep	
240-50067-8	079SB-0396M-0001-SO	Total/NA	Solid	Increment, Prep	
240-50067-9	079SB-0397M-0001-SO	Total/NA	Solid	Increment, Prep	

Analysis Batch: 180308

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-50067-11	079SB-0399-0001-RB	Total/NA	Water	8270C	179064
LCS 240-179064/3-A	Lab Control Sample	Total/NA	Water	8270C	179064
MB 240-179064/2-A	Method Blank	Total/NA	Water	8270C	179064
MRL 240-180308/12	Lab Control Sample	Total/NA	Water	8270C	
MRL 240-180308/21	Lab Control Sample	Total/NA	Water	8270C	

Prep Batch: 180350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-50067-1	079SS-0389M-0001-SO	Total/NA	Solid	3540C	179242
240-50067-2	079SB-0390M-0001-SO	Total/NA	Solid	3540C	179242
240-50067-3	079SB-0391M-0001-SO	Total/NA	Solid	3540C	179242
240-50067-4	079SB-0392M-0001-SO	Total/NA	Solid	3540C	179242
240-50067-5	079SB-0393M-0001-SO	Total/NA	Solid	3540C	179242
240-50067-6	079SB-0394M-0001-SO	Total/NA	Solid	3540C	179242
240-50067-7	079SB-0395M-0001-0002-SO	Total/NA	Solid	3540C	179242
240-50067-7 MS	079SB-0395M-0001-0002-SO	Total/NA	Solid	3540C	179242
240-50067-7 MSD	079SB-0395M-0001-0002-SO	Total/NA	Solid	3540C	179242
240-50067-8	079SB-0396M-0001-SO	Total/NA	Solid	3540C	179242
240-50067-9	079SB-0397M-0001-SO	Total/NA	Solid	3540C	179242
LCS 240-180350/9-A	Lab Control Sample	Total/NA	Solid	3540C	
MB 240-180350/8-A	Method Blank	Total/NA	Solid	3540C	

Prep Batch: 180428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-50067-11 - RE	079SB-0399-0001-RB	Total/NA	Water	3520C	

GC/MS Semi VOA (Continued)

Prep Batch: 180428 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-180428/3-A	Lab Control Sample	Total/NA	Water	3520C	
MB 240-180428/2-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 180709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-50067-11 - RE	079SB-0399-0001-RB	Total/NA	Water	8270C	180428
LCS 240-180428/3-A	Lab Control Sample	Total/NA	Water	8270C	180428
MB 240-180428/2-A	Method Blank	Total/NA	Water	8270C	180428
MRL 240-180709/3	Lab Control Sample	Total/NA	Water	8270C	
MRL 240-180709/7	Lab Control Sample	Total/NA	Water	8270C	

Analysis Batch: 181588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-50067-1	079SS-0389M-0001-SO	Total/NA	Solid	8270C	180350
240-50067-2	079SB-0390M-0001-SO	Total/NA	Solid	8270C	180350
240-50067-3	079SB-0391M-0001-SO	Total/NA	Solid	8270C	180350
240-50067-4	079SB-0392M-0001-SO	Total/NA	Solid	8270C	180350
240-50067-5	079SB-0393M-0001-SO	Total/NA	Solid	8270C	180350
240-50067-7	079SB-0395M-0001-0002-SO	Total/NA	Solid	8270C	180350
240-50067-7 MS	079SB-0395M-0001-0002-SO	Total/NA	Solid	8270C	180350
240-50067-7 MSD	079SB-0395M-0001-0002-SO	Total/NA	Solid	8270C	180350
240-50067-8	079SB-0396M-0001-SO	Total/NA	Solid	8270C	180350
240-50067-9	079SB-0397M-0001-SO	Total/NA	Solid	8270C	180350
240-50067-10	079SB-0398-0001-SO	Total/NA	Solid	8270C	179108
LCS 240-179108/23-A	Lab Control Sample	Total/NA	Solid	8270C	179108
LCS 240-180350/9-A	Lab Control Sample	Total/NA	Solid	8270C	180350
MB 240-179108/22-A	Method Blank	Total/NA	Solid	8270C	179108
MB 240-180350/8-A	Method Blank	Total/NA	Solid	8270C	180350
MRL 240-181588/20	Lab Control Sample	Total/NA	Solid	8270C	
MRL 240-181588/3	Lab Control Sample	Total/NA	Solid	8270C	

Analysis Batch: 181781

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-50067-6	079SB-0394M-0001-SO	Total/NA	Solid	8270C	180350
MRL 240-181781/16	Lab Control Sample	Total/NA	Solid	8270C	
MRL 240-181781/3	Lab Control Sample	Total/NA	Solid	8270C	

General Chemistry

ISM Prep Batch: 179242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-50067-1	079SS-0389M-0001-SO	Total/NA	Solid	Increment, Prep	
240-50067-2	079SB-0390M-0001-SO	Total/NA	Solid	Increment, Prep	
240-50067-3	079SB-0391M-0001-SO	Total/NA	Solid	Increment, Prep	
240-50067-4	079SB-0392M-0001-SO	Total/NA	Solid	Increment, Prep	
240-50067-5	079SB-0393M-0001-SO	Total/NA	Solid	Increment, Prep	
240-50067-6	079SB-0394M-0001-SO	Total/NA	Solid	Increment, Prep	
240-50067-7	079SB-0395M-0001-0002-SO	Total/NA	Solid	Increment, Prep	
240-50067-7 DU	079SB-0395M-0001-0002-SO	Total/NA	Solid	Increment, Prep	
240-50067-8	079SB-0396M-0001-SO	Total/NA	Solid	Increment, Prep	

General Chemistry (Continued)

ISM Prep Batch: 179242 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-50067-9	079SB-0397M-0001-SO	Total/NA	Solid	Increment, Prep	

Analysis Batch: 179415

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-50067-10	079SB-0398-0001-SO	Total/NA	Solid	Moisture	
240-50067-10 DU	079SB-0398-0001-SO	Total/NA	Solid	Moisture	

Analysis Batch: 180459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-50067-1	079SS-0389M-0001-SO	Total/NA	Solid	Moisture	179242
240-50067-2	079SB-0390M-0001-SO	Total/NA	Solid	Moisture	179242
240-50067-3	079SB-0391M-0001-SO	Total/NA	Solid	Moisture	179242
240-50067-4	079SB-0392M-0001-SO	Total/NA	Solid	Moisture	179242
240-50067-5	079SB-0393M-0001-SO	Total/NA	Solid	Moisture	179242
240-50067-6	079SB-0394M-0001-SO	Total/NA	Solid	Moisture	179242
240-50067-7	079SB-0395M-0001-0002-SO	Total/NA	Solid	Moisture	179242
240-50067-7 DU	079SB-0395M-0001-0002-SO	Total/NA	Solid	Moisture	179242
240-50067-8	079SB-0396M-0001-SO	Total/NA	Solid	Moisture	179242
240-50067-9	079SB-0397M-0001-SO	Total/NA	Solid	Moisture	179242

Client Sample ID: 079SS-0389M-0001-SO

Lab Sample ID: 240-50067-1
Date Collected: 04/28/15 16:00
Matrix: Solid
Date Received: 04/30/15 12:40
Percent Solids: 97.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			179242	05/04/15 16:00	DRJ	TAL CAN
Total/NA	Prep	3540C			180350	05/12/15 12:12	SDE	TAL CAN
Total/NA	Analysis	8270C		1	181588	05/20/15 17:01	MRU	TAL CAN
Total/NA	ISM Prep	Increment, Prep			179242	05/04/15 16:00	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	180459	05/12/15 15:52	NJE	TAL CAN

Client Sample ID: 079SB-0390M-0001-SO

Lab Sample ID: 240-50067-2
Date Collected: 04/29/15 16:55
Matrix: Solid
Date Received: 04/30/15 12:40
Percent Solids: 97.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			179242	05/04/15 16:00	DRJ	TAL CAN
Total/NA	Prep	3540C			180350	05/12/15 12:12	SDE	TAL CAN
Total/NA	Analysis	8270C		1	181588	05/20/15 14:55	MRU	TAL CAN
Total/NA	ISM Prep	Increment, Prep			179242	05/04/15 16:00	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	180459	05/12/15 15:52	NJE	TAL CAN

Client Sample ID: 079SB-0391M-0001-SO

Lab Sample ID: 240-50067-3
Date Collected: 04/29/15 16:58
Matrix: Solid
Date Received: 04/30/15 12:40
Percent Solids: 97.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			179242	05/04/15 16:00	DRJ	TAL CAN
Total/NA	Prep	3540C			180350	05/12/15 12:12	SDE	TAL CAN
Total/NA	Analysis	8270C		1	181588	05/20/15 15:20	MRU	TAL CAN
Total/NA	ISM Prep	Increment, Prep			179242	05/04/15 16:00	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	180459	05/12/15 15:52	NJE	TAL CAN

Client Sample ID: 079SB-0392M-0001-SO

Lab Sample ID: 240-50067-4
Date Collected: 04/29/15 15:23
Matrix: Solid
Date Received: 04/30/15 12:40
Percent Solids: 97.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			179242	05/04/15 16:00	DRJ	TAL CAN
Total/NA	Prep	3540C			180350	05/12/15 12:12	SDE	TAL CAN
Total/NA	Analysis	8270C		1	181588	05/20/15 15:45	MRU	TAL CAN
Total/NA	ISM Prep	Increment, Prep			179242	05/04/15 16:00	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	180459	05/12/15 15:52	NJE	TAL CAN

Client Sample ID: 079SB-0393M-0001-SO

Lab Sample ID: 240-50067-5
Date Collected: 04/29/15 00:00
Matrix: Solid
Date Received: 04/30/15 12:40
Percent Solids: 97.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			179242	05/04/15 16:00	DRJ	TAL CAN
Total/NA	Prep	3540C			180350	05/12/15 12:12	SDE	TAL CAN
Total/NA	Analysis	8270C		1	181588	05/20/15 16:11	MRU	TAL CAN
Total/NA	ISM Prep	Increment, Prep			179242	05/04/15 16:00	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	180459	05/12/15 15:52	NJE	TAL CAN

Client Sample ID: 079SB-0394M-0001-SO

Lab Sample ID: 240-50067-6
Date Collected: 04/29/15 15:30
Matrix: Solid
Date Received: 04/30/15 12:40
Percent Solids: 97.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			179242	05/04/15 16:00	DRJ	TAL CAN
Total/NA	Prep	3540C			180350	05/12/15 12:12	SDE	TAL CAN
Total/NA	Analysis	8270C		1	181781	05/21/15 09:35	MRU	TAL CAN
Total/NA	ISM Prep	Increment, Prep			179242	05/04/15 16:00	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	180459	05/12/15 15:52	NJE	TAL CAN

Client Sample ID: 079SB-0395M-0001-0002-SO

Lab Sample ID: 240-50067-7
Date Collected: 04/29/15 15:50
Matrix: Solid
Date Received: 04/30/15 12:40
Percent Solids: 97.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			179242	05/04/15 16:00	DRJ	TAL CAN
Total/NA	Prep	3540C			180350	05/12/15 12:12	SDE	TAL CAN
Total/NA	Analysis	8270C		1	181588	05/20/15 12:25	MRU	TAL CAN
Total/NA	ISM Prep	Increment, Prep			179242	05/04/15 16:00	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	180459	05/12/15 15:52	NJE	TAL CAN

Client Sample ID: 079SB-0396M-0001-SO

Lab Sample ID: 240-50067-8
Date Collected: 04/29/15 15:20
Matrix: Solid
Date Received: 04/30/15 12:40
Percent Solids: 97.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			179242	05/04/15 16:00	DRJ	TAL CAN
Total/NA	Prep	3540C			180350	05/12/15 12:12	SDE	TAL CAN
Total/NA	Analysis	8270C		1	181588	05/20/15 13:40	MRU	TAL CAN
Total/NA	ISM Prep	Increment, Prep			179242	05/04/15 16:00	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	180459	05/12/15 15:52	NJE	TAL CAN

Lab Chronicle

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

TestAmerica Job ID: 240-50067-1

Client Sample ID: 079SB-0397M-0001-SO

Lab Sample ID: 240-50067-9
Date Collected: 04/29/15 17:05
Matrix: Solid
Date Received: 04/30/15 12:40
Percent Solids: 97.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			179242	05/04/15 16:00	DRJ	TAL CAN
Total/NA	Prep	3540C			180350	05/12/15 12:12	SDE	TAL CAN
Total/NA	Analysis	8270C		1	181588	05/20/15 14:04	MRU	TAL CAN
Total/NA	ISM Prep	Increment, Prep			179242	05/04/15 16:00	DRJ	TAL CAN
Total/NA	Analysis	Moisture		1	180459	05/12/15 15:52	NJE	TAL CAN

Client Sample ID: 079SB-0398-0001-SO

Lab Sample ID: 240-50067-10
Date Collected: 04/29/15 16:40
Matrix: Solid
Date Received: 04/30/15 12:40
Percent Solids: 84.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			179108	05/04/15 09:17	SDE	TAL CAN
Total/NA	Analysis	8270C		1	181588	05/20/15 12:00	MRU	TAL CAN
Total/NA	Analysis	Moisture		1	179415	05/05/15 16:41	NJE	TAL CAN

Client Sample ID: 079SB-0399-0001-RB

Lab Sample ID: 240-50067-11
Date Collected: 04/30/15 08:05
Matrix: Water
Date Received: 04/30/15 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			179064	05/04/15 05:57	CSC	TAL CAN
Total/NA	Analysis	8270C		1	180308	05/12/15 14:46	MRU	TAL CAN
Total/NA	Prep	3520C	RE		180428	05/12/15 13:37	CSC	TAL CAN
Total/NA	Analysis	8270C	RE	1	180709	05/14/15 12:03	MRU	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

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

TestAmerica Job ID: 240-50067-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-15
Florida	NELAP	4	E87225	06-30-15 *
Georgia	State Program	4	N/A	06-30-15 *
Illinois	NELAP	5	200004	07-31-15
Kansas	NELAP	7	E-10336	05-31-15 *
Kentucky (UST)	State Program	4	58	06-30-15 *
Kentucky (WW)	State Program	4	98016	12-31-15
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-15
Nevada	State Program	9	OH-000482008A	07-31-15
New Jersey	NELAP	2	OH001	06-30-15 *
New York	NELAP	2	10975	03-31-16 *
Ohio VAP	State Program	5	CL0024	10-31-15
Oregon	NELAP	10	4062	02-23-16
Pennsylvania	NELAP	3	68-00340	08-31-15
Texas	NELAP	6		08-31-15
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-15
Washington	State Program	10	C971	01-12-16
West Virginia DEP	State Program	3	210	12-31-15
Wisconsin	State Program	5	999518190	08-31-15

* Certification renewal pending - certification considered valid.

Method Summary

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

TestAmerica Job ID: 240-50067-1

Method	Method Description	Protocol	Laboratory
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

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

TestAmerica Job ID: 240-50067-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-50067-1	079SS-0389M-0001-SO	Solid	04/28/15 16:00	04/30/15 12:40
240-50067-2	079SB-0390M-0001-SO	Solid	04/29/15 16:55	04/30/15 12:40
240-50067-3	079SB-0391M-0001-SO	Solid	04/29/15 16:58	04/30/15 12:40
240-50067-4	079SB-0392M-0001-SO	Solid	04/29/15 15:23	04/30/15 12:40
240-50067-5	079SB-0393M-0001-SO	Solid	04/29/15 00:00	04/30/15 12:40
240-50067-6	079SB-0394M-0001-SO	Solid	04/29/15 15:30	04/30/15 12:40
240-50067-7	079SB-0395M-0001-0002-SO	Solid	04/29/15 15:50	04/30/15 12:40
240-50067-8	079SB-0396M-0001-SO	Solid	04/29/15 15:20	04/30/15 12:40
240-50067-9	079SB-0397M-0001-SO	Solid	04/29/15 17:05	04/30/15 12:40
240-50067-10	079SB-0398-0001-SO	Solid	04/29/15 16:40	04/30/15 12:40
240-50067-11	079SB-0399-0001-RB	Water	04/30/15 08:05	04/30/15 12:40

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Instrument ID: A4HP9 Analysis Batch Number: 180308

Lab Sample ID: STD5 240-180308/2 IC Client Sample ID:

Date Analyzed: 05/12/15 07:38 Lab File ID: 50512002.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	7.14	Poor Chromatography	ulmanm	05/12/15 08:13
4-Chloroaniline	7.48	Poor Chromatography	ulmanm	05/12/15 08:13
Benzo[g,h,i]perylene	16.75	Poor Chromatography	ulmanm	05/12/15 08:13

Lab Sample ID: STD4 240-180308/3 IC Client Sample ID:

Date Analyzed: 05/12/15 08:03 Lab File ID: 50512003.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	2.89	Poor Chromatography	ulmanm	05/12/15 08:33
Benzoic acid	7.13	Poor Chromatography	ulmanm	05/12/15 08:33
Benzo[k]fluoranthene	13.75	Poor Chromatography	ulmanm	05/12/15 08:33

Lab Sample ID: STD3 240-180308/4 IC Client Sample ID:

Date Analyzed: 05/12/15 08:28 Lab File ID: 50512004.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	7.13	Poor Chromatography	ulmanm	05/12/15 09:18

Lab Sample ID: STD2 240-180308/5 IC Client Sample ID:

Date Analyzed: 05/12/15 08:53 Lab File ID: 50512005.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	2.88	Poor Chromatography	ulmanm	05/12/15 09:21
Indeno[1,2,3-cd]pyrene	16.16	Poor Chromatography	ulmanm	05/12/15 09:21
Benzo[g,h,i]perylene	16.75	Poor Chromatography	ulmanm	05/12/15 09:21

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Instrument ID: A4HP9 Analysis Batch Number: 180308

Lab Sample ID: STD1 240-180308/6 IC Client Sample ID:

Date Analyzed: 05/12/15 09:19 Lab File ID: 50512006.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[b]fluoranthene	13.72	Poor Chromatography	ulmanm	05/12/15 09:47
Benzo[k]fluoranthene	13.75	Poor Chromatography	ulmanm	05/12/15 09:47
Benzo[a]pyrene	14.18	Poor Chromatography	ulmanm	05/12/15 09:47
Indeno[1,2,3-cd]pyrene	16.16	Poor Chromatography	ulmanm	05/12/15 09:47
Dibenz(a,h)anthracene	16.17	Poor Chromatography	ulmanm	05/12/15 09:47
Benzo[g,h,i]perylene	16.76	Poor Chromatography	ulmanm	05/12/15 09:47

Lab Sample ID: STD9 240-180308/7 IC Client Sample ID:

Date Analyzed: 05/12/15 09:44 Lab File ID: 50512007.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Caprolactam	7.79	Poor Chromatography	ulmanm	05/12/15 10:34

Lab Sample ID: STD8 240-180308/8 IC Client Sample ID:

Date Analyzed: 05/12/15 10:09 Lab File ID: 50512008.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Caprolactam	7.78	Poor Chromatography	ulmanm	05/12/15 10:37

Lab Sample ID: STD7 240-180308/9 IC Client Sample ID:

Date Analyzed: 05/12/15 10:34 Lab File ID: 50512009.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Caprolactam	7.77	Poor Chromatography	ulmanm	05/12/15 11:23

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Instrument ID: A4HP9 Analysis Batch Number: 180308

Lab Sample ID: MRL 240-180308/21 Client Sample ID:

Date Analyzed: 05/12/15 15:37 Lab File ID: 50512021.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	7.14	Poor Chromatography	ulmanm	05/13/15 09:00

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Instrument ID: A4HP9 Analysis Batch Number: 180709

Lab Sample ID: MRL 240-180709/3 Client Sample ID:

Date Analyzed: 05/14/15 10:49 Lab File ID: 50514003.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[g,h,i]perylene	16.57	Poor Chromatography	ulmanm	05/14/15 11:15

Lab Sample ID: MRL 240-180709/7 Client Sample ID:

Date Analyzed: 05/14/15 12:28 Lab File ID: 50514007.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	7.11	Poor Chromatography	ulmanm	05/14/15 12:54

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Instrument ID: A4HP9 Analysis Batch Number: 181539

Lab Sample ID: STD4 240-181539/3 IC Client Sample ID:

Date Analyzed: 05/19/15 16:38 Lab File ID: 50519003.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	7.21	Poor Chromatography	ulmanm	05/19/15 17:08
4-Chloroaniline	7.57	Poor Chromatography	ulmanm	05/19/15 17:08
2,4-Dinitrophenol	9.05	Poor Chromatography	ulmanm	05/19/15 17:08

Lab Sample ID: STD2 240-181539/5 IC Client Sample ID:

Date Analyzed: 05/19/15 17:28 Lab File ID: 50519005.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	7.20	Poor Chromatography	ulmanm	05/19/15 17:57
Indeno[1,2,3-cd]pyrene	16.43	Poor Chromatography	ulmanm	05/19/15 17:57

Lab Sample ID: STD1 240-181539/6 IC Client Sample ID:

Date Analyzed: 05/19/15 17:53 Lab File ID: 50519006.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	16.43	Poor Chromatography	ulmanm	05/19/15 18:21
Dibenz(a,h)anthracene	16.44	Poor Chromatography	ulmanm	05/19/15 18:21
Benzo[g,h,i]perylene	17.05	Poor Chromatography	ulmanm	05/19/15 18:21

Lab Sample ID: STD9 240-181539/7 IC Client Sample ID:

Date Analyzed: 05/19/15 18:18 Lab File ID: 50519007.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Chloroaniline	7.57	Poor Chromatography	ulmanm	05/19/15 19:02
Caprolactam	7.86	Poor Chromatography	ulmanm	05/19/15 19:02

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Instrument ID: A4HP9 Analysis Batch Number: 181539

Lab Sample ID: STD8 240-181539/8 IC Client Sample ID:

Date Analyzed: 05/19/15 18:43 Lab File ID: 50519008.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Caprolactam	7.85	Poor Chromatography	ulmanm	05/19/15 19:10

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Instrument ID: A4HP9 Analysis Batch Number: 181588

Lab Sample ID: CCV 240-181588/2 Client Sample ID:

Date Analyzed: 05/20/15 09:30 Lab File ID: 50520002.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	3.15	Poor Chromatography	ulmanm	05/20/15 10:19
Pyridine	3.68	Poor Chromatography	ulmanm	05/20/15 10:19
Benzoic acid	7.24	Poor Chromatography	ulmanm	05/20/15 10:19
4-Chloroaniline	7.57	Poor Chromatography	ulmanm	05/20/15 10:19

Lab Sample ID: MRL 240-181588/3 Client Sample ID:

Date Analyzed: 05/20/15 09:55 Lab File ID: 50520003.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	7.22	Poor Chromatography	ulmanm	05/20/15 10:22

Lab Sample ID: LCS 240-180350/9-A Client Sample ID:

Date Analyzed: 05/20/15 11:35 Lab File ID: 50520007.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	7.25	Split Peak	ulmanm	05/20/15 12:11

Lab Sample ID: 240-50067-7 Client Sample ID: 079SB-0395M-0001-0002-SO

Date Analyzed: 05/20/15 12:25 Lab File ID: 50520009.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Phenol-d5 (Surr)	6.06	Split Peak	ulmanm	05/20/15 13:16

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Instrument ID: A4HP9 Analysis Batch Number: 181588

Lab Sample ID: 240-50067-7 MS Client Sample ID: 079SB-0395M-0001-0002-SO MS

Date Analyzed: 05/20/15 12:50 Lab File ID: 50520010.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	7.21	Poor Chromatography	ulmanm	05/20/15 13:20
4-Chloroaniline	7.57	Poor Chromatography	ulmanm	05/20/15 13:20

Lab Sample ID: 240-50067-7 MSD Client Sample ID: 079SB-0395M-0001-0002-SO MSD

Date Analyzed: 05/20/15 13:15 Lab File ID: 50520011.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	7.21	Poor Chromatography	ulmanm	05/20/15 13:43

Lab Sample ID: 240-50067-8 Client Sample ID: 079SB-0396M-0001-SO

Date Analyzed: 05/20/15 13:40 Lab File ID: 50520012.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Phenol-d5 (Surr)	6.08	Poor Chromatography	ulmanm	05/20/15 14:09
Phenol	6.09	Poor Chromatography	ulmanm	05/20/15 14:09

Lab Sample ID: 240-50067-9 Client Sample ID: 079SB-0397M-0001-SO

Date Analyzed: 05/20/15 14:04 Lab File ID: 50520013.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Phenol-d5 (Surr)	6.06	Split Peak	ulmanm	05/20/15 14:55
Phenol	6.07	Split Peak	ulmanm	05/20/15 14:55

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Instrument ID: A4HP9 Analysis Batch Number: 181588

Lab Sample ID: 240-50067-1 Client Sample ID: 079SS-0389M-0001-SO

Date Analyzed: 05/20/15 17:01 Lab File ID: 50520019.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Phenol-d5 (Surr)	6.06	Poor Chromatography	ulmanm	05/20/15 17:29
Phenol	6.07	Poor Chromatography	ulmanm	05/20/15 17:29
Benzyl alcohol	6.51	Poor Chromatography	ulmanm	05/20/15 17:29
Indeno[1,2,3-cd]pyrene	16.41	Poor Chromatography	ulmanm	05/20/15 17:29
Benzo[g,h,i]perylene	17.03	Poor Chromatography	ulmanm	05/20/15 17:29

Lab Sample ID: MRL 240-181588/20 Client Sample ID:

Date Analyzed: 05/20/15 17:51 Lab File ID: 50520020.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	7.22	Poor Chromatography	ulmanm	05/20/15 18:41

Lab Sample ID: LODV 240-181588/21 Client Sample ID:

Date Analyzed: 05/20/15 18:16 Lab File ID: 50520021.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dibenz(a,h)anthracene	16.41	Poor Chromatography	ulmanm	05/21/15 07:49
Indeno[1,2,3-cd]pyrene	16.41	Poor Chromatography	ulmanm	05/21/15 07:49
Benzo[g,h,i]perylene	17.02	Poor Chromatography	ulmanm	05/21/15 07:49

Lab Sample ID: LODV 240-181588/22 Client Sample ID:

Date Analyzed: 05/20/15 18:41 Lab File ID: 50520022.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	3.15	Poor Chromatography	ulmanm	05/21/15 07:52

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Instrument ID: A4HP9 Analysis Batch Number: 181781

Lab Sample ID: CCV 240-181781/2 Client Sample ID:

Date Analyzed: 05/21/15 07:55 Lab File ID: 50521002.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	3.11	Poor Chromatography	ulmanm	05/21/15 08:46
4-Chloroaniline	7.55	Poor Chromatography	ulmanm	05/21/15 08:46

Lab Sample ID: MRL 240-181781/3 Client Sample ID:

Date Analyzed: 05/21/15 08:20 Lab File ID: 50521003.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	7.22	Poor Chromatography	ulmanm	05/21/15 09:10

Lab Sample ID: MRL 240-181781/16 Client Sample ID:

Date Analyzed: 05/21/15 11:15 Lab File ID: 50521016.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	7.21	Poor Chromatography	ulmanm	05/21/15 11:51

Lab Sample ID: LODV 240-181781/17 Client Sample ID:

Date Analyzed: 05/21/15 12:04 Lab File ID: 50521017.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	16.36	Poor Chromatography	ulmanm	05/21/15 12:54
Dibenz(a,h)anthracene	16.38	Poor Chromatography	ulmanm	05/21/15 12:54
Benzo[g,h,i]perylene	16.97	Poor Chromatography	ulmanm	05/21/15 12:54

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Instrument ID: A4HP9 Analysis Batch Number: 181781

Lab Sample ID: LODV 240-181781/18 Client Sample ID:

Date Analyzed: 05/21/15 12:29 Lab File ID: 50521018.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	3.12	Poor Chromatography	ulmanm	05/21/15 13:10
N-Nitrosodimethylamine	3.60	Poor Chromatography	ulmanm	05/21/15 13:10
Pyridine	3.65	Poor Chromatography	ulmanm	05/21/15 13:10
4-Nitroaniline	9.46	Poor Chromatography	ulmanm	05/21/15 13:10

Lab Sample ID: LODV 240-181781/19 Client Sample ID:

Date Analyzed: 05/21/15 12:54 Lab File ID: 50521019.D GC Column: RXI-5SILMS ID: 0.45(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	7.19	Poor Chromatography	ulmanm	05/21/15 13:25

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
EXBENZALDEHYD_00021	06/10/16	04/23/15	MEOH, Lot 0000085233	200 mL	EXLIST1_S11_00001	4 mL	Atrazine	40 ug/mL
							Benzaldehyde	40 ug/mL
							Caprolactam	40 ug/mL
.EXLIST1_S11_00001	08/31/16		Restek, Lot A0108989		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
EXBNASPIKE_00040	06/10/16	04/23/15	MEOH, Lot 0000085233	200 mL	EXLIST1_S1_00001	4 mL	1,1'-Biphenyl	20 ug/mL
							1,2,4,5-Tetrachlorobenzene	20 ug/mL
							1,2,4-Trichlorobenzene	20 ug/mL
							1,2-Dichlorobenzene	20 ug/mL
							1,3-Dichlorobenzene	20 ug/mL
							1,3-Dinitrobenzene	20 ug/mL
							1,4-Dichlorobenzene	20 ug/mL
							1,4-Dioxane	20 ug/mL
							1-Methylnaphthalene	20 ug/mL
							2,3,4,6-Tetrachlorophenol	20 ug/mL
							2,4,5-Trichlorophenol	20 ug/mL
							2,4,6-Trichlorophenol	20 ug/mL
							2,4-Dichlorophenol	20 ug/mL
							2,4-Dimethylphenol	20 ug/mL
							2,4-Dinitrophenol	40 ug/mL
							2,4-Dinitrotoluene	20 ug/mL
							2,6-Dichlorophenol	20 ug/mL
							2,6-Dinitrotoluene	20 ug/mL
							2-Chloronaphthalene	20 ug/mL
							2-Chlorophenol	20 ug/mL
							2-Methylnaphthalene	20 ug/mL
							2-Methylphenol	20 ug/mL
							2-Nitroaniline	20 ug/mL
							2-Nitrophenol	20 ug/mL
							3 & 4 Methylphenol	20 ug/mL
							3-Methylphenol	10 ug/mL
							3-Nitroaniline	20 ug/mL
							4,6-Dinitro-2-methylphenol	40 ug/mL
							4-Bromophenyl phenyl ether	20 ug/mL
							4-Chloro-3-methylphenol	20 ug/mL
							4-Chloroaniline	20 ug/mL
							4-Chlorophenyl phenyl ether	20 ug/mL
							4-Methylphenol	10 ug/mL
							4-Nitroaniline	20 ug/mL
							4-Nitrophenol	40 ug/mL
							Acenaphthene	20 ug/mL
							Acenaphthylene	20 ug/mL
							Acetophenone	20 ug/mL
							Aniline	20 ug/mL
							Anthracene	20 ug/mL
							Azobenzene	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[a]anthracene	20 ug/mL
							Benzo[a]pyrene	20 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	20 ug/mL
							Benzyl alcohol	20 ug/mL
							bis (2-chloroisopropyl) ether	20 ug/mL
							Bis(2-chloroethoxy)methane	20 ug/mL
							Bis(2-chloroethyl)ether	20 ug/mL
							Bis(2-ethylhexyl) phthalate	20 ug/mL
							Butyl benzyl phthalate	20 ug/mL
							Carbazole	20 ug/mL
							Chrysene	20 ug/mL
							Di-n-butyl phthalate	20 ug/mL
							Di-n-octyl phthalate	20 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Dibenzofuran	20 ug/mL
							Diethyl phthalate	20 ug/mL
							Dimethyl phthalate	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Hexachlorobenzene	20 ug/mL
							Hexachlorobutadiene	20 ug/mL
							Hexachlorocyclopentadiene	20 ug/mL
							Hexachloroethane	20 ug/mL
							Hexadecane	20 ug/mL
							Indeno[1,2,3-cd]pyrene	20 ug/mL
							Isophorone	20 ug/mL
							n-Decane	20 ug/mL
							N-Nitrosodi-n-propylamine	20 ug/mL
							N-Nitrosodimethylamine	20 ug/mL
							N-Nitrosodiphenylamine	40 ug/mL
							n-Octadecane	20 ug/mL
							Naphthalene	20 ug/mL
							Nitrobenzene	20 ug/mL
							Pentachlorophenol	40 ug/mL
							Phenanthrene	20 ug/mL
							Phenol	20 ug/mL
							Pyrene	20 ug/mL
							Pyridine	20 ug/mL
					EXLIST1_S10_00001	4 mL	Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					EXLIST1_S9_00001	4 mL	3,3'-Dichlorobenzidine	40 ug/mL
							Benzidine	40 ug/mL
.EXLIST1_S1_00001	09/30/16		Restek, Lot A0109703		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Methylphenol	500 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Methylphenol	500 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added	Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	2000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
.EXLIST1_S10_00001	08/31/16		Restek, Lot A0108988		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
.EXLIST1_S9_00001	07/31/16		Restek, Lot A0108709		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
EXBNASURR W_00022	06/10/16	04/18/15	MEOH, Lot 85233	2000 mL	SMLIST1 SURR_00003	8 mL	2,4,6-Tribromophenol (Surr)	20 ug/mL
							2-Fluorobiphenyl (Surr)	20 ug/mL
							2-Fluorophenol (Surr)	20 ug/mL
							Nitrobenzene-d5 (Surr)	20 ug/mL
							Phenol-d5 (Surr)	20 ug/mL
							Terphenyl-d14 (Surr)	20 ug/mL
.SMLIST1 SURR_00003	02/22/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SMLIST1 L1 W_00005	08/31/15	01/26/15	MECL2, Lot 0000093871	2 mL	SMIS80PPMW_00011	100 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SMLIST1PAH ST_00004	2 uL	1,1'-Biphenyl	0.1 ug/mL
							1-Methylnaphthalene	0.1 ug/mL
							2-Chloronaphthalene	0.1 ug/mL
							2-Methylnaphthalene	0.1 ug/mL
							Acenaphthene	0.1 ug/mL
							Acenaphthylene	0.1 ug/mL
							Anthracene	0.1 ug/mL
							Benzo[a]anthracene	0.1 ug/mL
							Benzo[a]pyrene	0.1 ug/mL
							Benzo[b]fluoranthene	0.1 ug/mL
							Benzo[g,h,i]perylene	0.1 ug/mL
							Benzo[k]fluoranthene	0.1 ug/mL
							Chrysene	0.1 ug/mL
							Dibenz(a,h)anthracene	0.1 ug/mL
							Dibenzofuran	0.1 ug/mL
							Fluoranthene	0.1 ug/mL
							Fluorene	0.1 ug/mL
							Hexachlorobenzene	0.1 ug/mL
							Indeno[1,2,3-cd]pyrene	0.1 ug/mL
							Naphthalene	0.1 ug/mL
							Phenanthrene	0.1 ug/mL
							Pyrene	0.1 ug/mL
							2-Fluorobiphenyl (Surr)	0.1 ug/mL
							Nitrobenzene-d5 (Surr)	0.1 ug/mL
							Terphenyl-d14 (Surr)	0.1 ug/mL
.SMIS80PPMW_00011	08/31/15	08/14/14	MECL2, Lot 0000073814	25 mL	SMIS R_00005	1 mL	1,4-Dichlorobenzene-d4	80 ug/mL
							Acenaphthene-d10	80 ug/mL
							Chrysene-d12	80 ug/mL
							Naphthalene-d8	80 ug/mL
							Perylene-d12	80 ug/mL
							Phenanthrene-d10	80 ug/mL
..SMIS R_00005	01/31/19	Restek, Lot A0101020			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SMLIST1PAH ST_00004	05/31/16	01/26/15	MECL2, Lot 0000093871	3 mL	SMLIST1 PAH_00004	300 uL	1,1'-Biphenyl	100 ug/mL
							1-Methylnaphthalene	100 ug/mL
							2-Chloronaphthalene	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							Acenaphthene	100 ug/mL
							Acenaphthylene	100 ug/mL
							Anthracene	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	100 ug/mL
							Benzo[g,h,i]perylene	100 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Chrysene	100 ug/mL
							Dibenz(a,h)anthracene	100 ug/mL
							Dibenzofuran	100 ug/mL
							Fluoranthene	100 ug/mL
							Fluorene	100 ug/mL
							Hexachlorobenzene	100 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Naphthalene	100 ug/mL
							Phenanthrene	100 ug/mL
							Pyrene	100 ug/mL
					SMLIST1 SURR_00003	60 uL	2-Fluorobiphenyl (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL
..SMLIST1 PAH_00004	05/31/16		Restek, Lot A0107399		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Chrysene	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Naphthalene	1000 ug/mL
							Phenanthrene	1000 ug/mL
							Pyrene	1000 ug/mL
..SMLIST1 SURR_00003	02/22/18		Restek, Lot A093638		(Purchased Reagent)		2-Fluorobiphenyl (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SMLIST1 L1 W_00006	04/20/16	04/21/15	MECL2, Lot 0000103549	2 mL	SMLIST1PAH ST_00004	2 uL	2-Chloronaphthalene	0.1 ug/mL
							2-Methylnaphthalene	0.1 ug/mL
							Acenaphthene	0.1 ug/mL
							Acenaphthylene	0.1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Anthracene	0.1 ug/mL
							Benzo[a]anthracene	0.1 ug/mL
							Benzo[a]pyrene	0.1 ug/mL
							Benzo[b]fluoranthene	0.1 ug/mL
							Benzo[g,h,i]perylene	0.1 ug/mL
							Benzo[k]fluoranthene	0.1 ug/mL
							Chrysene	0.1 ug/mL
							Dibenz(a,h)anthracene	0.1 ug/mL
							Dibenzofuran	0.1 ug/mL
							Fluoranthene	0.1 ug/mL
							Fluorene	0.1 ug/mL
							Hexachlorobenzene	0.1 ug/mL
							Indeno[1,2,3-cd]pyrene	0.1 ug/mL
							Naphthalene	0.1 ug/mL
							Phenanthrene	0.1 ug/mL
							Pyrene	0.1 ug/mL
							2,4,6-Tribromophenol (Surr)	0.1 ug/mL
							2-Fluorobiphenyl (Surr)	0.1 ug/mL
							2-Fluorophenol (Surr)	0.1 ug/mL
							Nitrobenzene-d5 (Surr)	0.1 ug/mL
							Phenol-d5 (Surr)	0.1 ug/mL
							Terphenyl-d14 (Surr)	0.1 ug/mL
.SMLIST1PAH ST_00004	05/31/16	01/26/15	MECL2, Lot 0000093871	3 mL	SMLIST1 PAH_00004	300 uL	2-Chloronaphthalene	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							Acenaphthene	100 ug/mL
							Acenaphthylene	100 ug/mL
							Anthracene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	100 ug/mL
							Benzo[g,h,i]perylene	100 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Chrysene	100 ug/mL
							Dibenz(a,h)anthracene	100 ug/mL
							Dibenzofuran	100 ug/mL
							Fluoranthene	100 ug/mL
							Fluorene	100 ug/mL
							Hexachlorobenzene	100 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Naphthalene	100 ug/mL
							Phenanthrene	100 ug/mL
							Pyrene	100 ug/mL
					SMLIST1 SURR_00003	60 uL	2,4,6-Tribromophenol (Surr)	100 ug/mL
							2-Fluorobiphenyl (Surr)	100 ug/mL
							2-Fluorophenol (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Phenol-d5 (Surr)	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SMLIST1 PAH_00004	05/31/16		Restek, Lot A0107399		(Purchased Reagent)		2-Chloronaphthalene	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Chrysene	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Naphthalene	1000 ug/mL
							Phenanthrene	1000 ug/mL
							Pyrene	1000 ug/mL
..SMLIST1 SURR_00003	02/22/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SMLIST1 L2 W_00005	08/31/15	01/26/15	MECL2, Lot 0000093871	2 mL	SMIS80PPMW_00011	100 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SMLIST1 STOCK_00005	10 uL	1,1'-Biphenyl	0.5 ug/mL
							1,2,4,5-Tetrachlorobenzene	0.5 ug/mL
							1,2,4-Trichlorobenzene	0.5 ug/mL
							1,2-Dichlorobenzene	0.5 ug/mL
							1,2-Diphenylhydrazine	0.5 ug/mL
							1,3-Dichlorobenzene	0.5 ug/mL
							1,3-Dinitrobenzene	0.5 ug/mL
							1,4-Dichlorobenzene	0.5 ug/mL
							1,4-Dioxane	0.5 ug/mL
							1-Methylnaphthalene	0.5 ug/mL
							2,3,4,6-Tetrachlorophenol	0.5 ug/mL
							2,4,5-Trichlorophenol	0.5 ug/mL
							2,4,6-Trichlorophenol	0.5 ug/mL
							2,4-Dichlorophenol	0.5 ug/mL
							2,4-Dimethylphenol	0.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dinitrophenol	1 ug/mL
							2,4-Dinitrotoluene	0.5 ug/mL
							2,6-Dichlorophenol	0.5 ug/mL
							2,6-Dinitrotoluene	0.5 ug/mL
							2-Chloronaphthalene	0.5 ug/mL
							2-Chlorophenol	0.5 ug/mL
							2-Methylnaphthalene	0.5 ug/mL
							2-Methylphenol	0.5 ug/mL
							2-Nitroaniline	0.5 ug/mL
							2-Nitrophenol	0.5 ug/mL
							3 & 4 Methylphenol	0.5 ug/mL
							3-Nitroaniline	0.5 ug/mL
							4,6-Dinitro-2-methylphenol	1 ug/mL
							4-Bromophenyl phenyl ether	0.5 ug/mL
							4-Chloro-3-methylphenol	0.5 ug/mL
							4-Chloroaniline	0.5 ug/mL
							4-Chlorophenyl phenyl ether	0.5 ug/mL
							4-Nitroaniline	0.5 ug/mL
							4-Nitrophenol	1 ug/mL
							Acenaphthene	0.5 ug/mL
							Acenaphthylene	0.5 ug/mL
							Acetophenone	0.5 ug/mL
							Aniline	0.5 ug/mL
							Anthracene	0.5 ug/mL
							Azobenzene	0.5 ug/mL
							Benzo[a]anthracene	0.5 ug/mL
							Benzo[a]pyrene	0.5 ug/mL
							Benzo[b]fluoranthene	0.5 ug/mL
							Benzo[g,h,i]perylene	0.5 ug/mL
							Benzo[k]fluoranthene	0.5 ug/mL
							Benzyl alcohol	0.5 ug/mL
							bis (2-chloroisopropyl) ether	0.5 ug/mL
							Bis(2-chloroethoxy)methane	0.5 ug/mL
							Bis(2-chloroethyl)ether	0.5 ug/mL
							Bis(2-ethylhexyl) phthalate	0.5 ug/mL
							Butyl benzyl phthalate	0.5 ug/mL
							Carbazole	0.5 ug/mL
							Chrysene	0.5 ug/mL
							Di-n-butyl phthalate	0.5 ug/mL
							Di-n-octyl phthalate	0.5 ug/mL
							Dibenz(a,h)anthracene	0.5 ug/mL
							Dibenzofuran	0.5 ug/mL
							Diethyl phthalate	0.5 ug/mL
							Dimethyl phthalate	0.5 ug/mL
							Fluoranthene	0.5 ug/mL
							Fluorene	0.5 ug/mL
							Hexachlorobenzene	0.5 ug/mL
							Hexachlorobutadiene	0.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorocyclopentadiene	0.5 ug/mL
							Hexachloroethane	0.5 ug/mL
							Indeno[1,2,3-cd]pyrene	0.5 ug/mL
							Isophorone	0.5 ug/mL
							N-Nitrosodi-n-propylamine	0.5 ug/mL
							N-Nitrosodimethylamine	0.5 ug/mL
							N-Nitrosodiphenylamine	1 ug/mL
							Naphthalene	0.5 ug/mL
							Nitrobenzene	0.5 ug/mL
							Pentachlorophenol	1 ug/mL
							Phenanthrene	0.5 ug/mL
							Phenol	0.5 ug/mL
							Pyrene	0.5 ug/mL
							Pyridine	0.5 ug/mL
							Benzoic acid	1 ug/mL
							Indene	1 ug/mL
							Atrazine	1 ug/mL
							Benzaldehyde	1 ug/mL
							Caprolactam	1 ug/mL
							3,3'-Dichlorobenzidine	1 ug/mL
							Benzidine	1 ug/mL
							2,4,6-Tribromophenol (Surr)	0.5 ug/mL
							2-Fluorobiphenyl (Surr)	0.5 ug/mL
							2-Fluorophenol (Surr)	0.5 ug/mL
							Nitrobenzene-d5 (Surr)	0.5 ug/mL
							Phenol-d5 (Surr)	0.5 ug/mL
							Terphenyl-d14 (Surr)	0.5 ug/mL
.SMIS80PPMW_00011	08/31/15	08/14/14	MECL2, Lot 0000073814	25 mL	SMIS R_00005	1 mL	1,4-Dichlorobenzene-d4	80 ug/mL
							Acenaphthene-d10	80 ug/mL
							Chrysene-d12	80 ug/mL
							Naphthalene-d8	80 ug/mL
							Perylene-d12	80 ug/mL
							Phenanthrene-d10	80 ug/mL
..SMIS R_00005	01/31/19		Restek, Lot A0101020		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SMLIST1 STOCK_00005	05/31/16	01/26/15	MECL2, Lot 0000093871	10 mL	SMLIST1 S1_00005	1 mL	1,1'-Biphenyl	100 ug/mL
							1,2,4,5-Tetrachlorobenzene	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,2-Diphenylhydrazine	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,3-Dinitrobenzene	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							1,4-Dioxane	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1-Methylnaphthalene	100 ug/mL
							2,3,4,6-Tetrachlorophenol	100 ug/mL
							2,4,5-Trichlorophenol	100 ug/mL
							2,4,6-Trichlorophenol	100 ug/mL
							2,4-Dichlorophenol	100 ug/mL
							2,4-Dimethylphenol	100 ug/mL
							2,4-Dinitrophenol	200 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dichlorophenol	100 ug/mL
							2,6-Dinitrotoluene	100 ug/mL
							2-Chloronaphthalene	100 ug/mL
							2-Chlorophenol	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							2-Methylphenol	100 ug/mL
							2-Nitroaniline	100 ug/mL
							2-Nitrophenol	100 ug/mL
							3 & 4 Methylphenol	100 ug/mL
							3-Nitroaniline	100 ug/mL
							4,6-Dinitro-2-methylphenol	200 ug/mL
							4-Bromophenyl phenyl ether	100 ug/mL
							4-Chloro-3-methylphenol	100 ug/mL
							4-Chloroaniline	100 ug/mL
							4-Chlorophenyl phenyl ether	100 ug/mL
							4-Nitroaniline	100 ug/mL
							4-Nitrophenol	200 ug/mL
							Acenaphthene	100 ug/mL
							Acenaphthylene	100 ug/mL
							Acetophenone	100 ug/mL
							Aniline	100 ug/mL
							Anthracene	100 ug/mL
							Azobenzene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	100 ug/mL
							Benzo[g,h,i]perylene	100 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Benzyl alcohol	100 ug/mL
							bis (2-chloroisopropyl) ether	100 ug/mL
							Bis(2-chloroethoxy)methane	100 ug/mL
							Bis(2-chloroethyl)ether	100 ug/mL
							Bis(2-ethylhexyl) phthalate	100 ug/mL
							Butyl benzyl phthalate	100 ug/mL
							Carbazole	100 ug/mL
							Chrysene	100 ug/mL
							Di-n-butyl phthalate	100 ug/mL
							Di-n-octyl phthalate	100 ug/mL
							Dibenz(a,h)anthracene	100 ug/mL
							Dibenzofuran	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Diethyl phthalate	100 ug/mL
							Dimethyl phthalate	100 ug/mL
							Fluoranthene	100 ug/mL
							Fluorene	100 ug/mL
							Hexachlorobenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexachlorocyclopentadiene	100 ug/mL
							Hexachloroethane	100 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Isophorone	100 ug/mL
							N-Nitrosodi-n-propylamine	100 ug/mL
							N-Nitrosodimethylamine	100 ug/mL
							N-Nitrosodiphenylamine	200 ug/mL
							Naphthalene	100 ug/mL
							Nitrobenzene	100 ug/mL
							Pentachlorophenol	200 ug/mL
							Phenanthrene	100 ug/mL
							Phenol	100 ug/mL
							Pyrene	100 ug/mL
							Pyridine	100 ug/mL
					SMLIST1 S10_00001	1 mL	Benzoic acid	200 ug/mL
							Indene	200 ug/mL
					SMLIST1 S11_00001	1 mL	Atrazine	200 ug/mL
							Benzaldehyde	200 ug/mL
							Caprolactam	200 ug/mL
					SMLIST1 S9_00001	1 mL	3,3'-Dichlorobenzidine	200 ug/mL
							Benzidine	200 ug/mL
					SMLIST1 SURR_00003	200 uL	2,4,6-Tribromophenol (Surr)	100 ug/mL
							2-Fluorobiphenyl (Surr)	100 ug/mL
							2-Fluorophenol (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Phenol-d5 (Surr)	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL
..SMLIST1 S1_00005	05/31/16		Restek, Lot A0107399		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	2000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SMLIST1 S10_00001	06/30/16		Restek, Lot A0107943		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SMLIST1 S11_00001	06/30/16		Restek, Lot A0108035		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SMLIST1 S9_00001	07/31/16		Restek, Lot A0108174		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SMLIST1 SURR_00003	02/22/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SMLIST1 L2 W_00006	04/20/16	04/21/15	MECL2, Lot 0000103549	2 mL	SMLIST1 STOCK_00006	10 uL	1,2,4-Trichlorobenzene	0.5 ug/mL
							1,2-Dichlorobenzene	0.5 ug/mL
							1,3-Dichlorobenzene	0.5 ug/mL
							1,4-Dichlorobenzene	0.5 ug/mL
							2,4,5-Trichlorophenol	0.5 ug/mL
							2,4,6-Trichlorophenol	0.5 ug/mL
							2,4-Dichlorophenol	0.5 ug/mL
							2,4-Dimethylphenol	0.5 ug/mL
							2,4-Dinitrophenol	1 ug/mL
							2,4-Dinitrotoluene	0.5 ug/mL
							2,6-Dinitrotoluene	0.5 ug/mL
							2-Chloronaphthalene	0.5 ug/mL
							2-Chlorophenol	0.5 ug/mL
							2-Methylnaphthalene	0.5 ug/mL
							2-Methylphenol	0.5 ug/mL
							2-Nitroaniline	0.5 ug/mL
							2-Nitrophenol	0.5 ug/mL
							3 & 4 Methylphenol	0.5 ug/mL
							3-Nitroaniline	0.5 ug/mL
							4,6-Dinitro-2-methylphenol	1 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Bromophenyl phenyl ether	0.5 ug/mL
							4-Chloro-3-methylphenol	0.5 ug/mL
							4-Chloroaniline	0.5 ug/mL
							4-Chlorophenyl phenyl ether	0.5 ug/mL
							4-Nitroaniline	0.5 ug/mL
							4-Nitrophenol	1 ug/mL
							Acenaphthene	0.5 ug/mL
							Acenaphthylene	0.5 ug/mL
							Anthracene	0.5 ug/mL
							Benzo[a]anthracene	0.5 ug/mL
							Benzo[a]pyrene	0.5 ug/mL
							Benzo[b]fluoranthene	0.5 ug/mL
							Benzo[g,h,i]perylene	0.5 ug/mL
							Benzo[k]fluoranthene	0.5 ug/mL
							Benzyl alcohol	0.5 ug/mL
							bis (2-chloroisopropyl) ether	0.5 ug/mL
							Bis(2-chloroethoxy)methane	0.5 ug/mL
							Bis(2-chloroethyl)ether	0.5 ug/mL
							Bis(2-ethylhexyl) phthalate	0.5 ug/mL
							Butyl benzyl phthalate	0.5 ug/mL
							Carbazole	0.5 ug/mL
							Chrysene	0.5 ug/mL
							Di-n-butyl phthalate	0.5 ug/mL
							Di-n-octyl phthalate	0.5 ug/mL
							Dibenz(a,h)anthracene	0.5 ug/mL
							Dibenzofuran	0.5 ug/mL
							Diethyl phthalate	0.5 ug/mL
							Dimethyl phthalate	0.5 ug/mL
							Fluoranthene	0.5 ug/mL
							Fluorene	0.5 ug/mL
							Hexachlorobenzene	0.5 ug/mL
							Hexachlorobutadiene	0.5 ug/mL
							Hexachlorocyclopentadiene	0.5 ug/mL
							Hexachloroethane	0.5 ug/mL
							Indeno[1,2,3-cd]pyrene	0.5 ug/mL
							Isophorone	0.5 ug/mL
							N-Nitrosodi-n-propylamine	0.5 ug/mL
							N-Nitrosodiphenylamine	1 ug/mL
							Naphthalene	0.5 ug/mL
							Nitrobenzene	0.5 ug/mL
							Pentachlorophenol	1 ug/mL
							Phenanthrene	0.5 ug/mL
							Phenol	0.5 ug/mL
							Pyrene	0.5 ug/mL
							Benzoic acid	1 ug/mL
							3,3'-Dichlorobenzidine	1 ug/mL
							2,4,6-Tribromophenol (Surr)	0.5 ug/mL
							2-Fluorobiphenyl (Surr)	0.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Fluorophenol (Surr)	0.5 ug/mL
							Nitrobenzene-d5 (Surr)	0.5 ug/mL
							Phenol-d5 (Surr)	0.5 ug/mL
							Terphenyl-d14 (Surr)	0.5 ug/mL
.SMLIST1 STOCK_00006	05/31/16	04/20/15	MECL2, Lot 0000103549	10 mL	SMLIST1 S1_00005	1 mL	1,2,4-Trichlorobenzene	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							2,4,5-Trichlorophenol	100 ug/mL
							2,4,6-Trichlorophenol	100 ug/mL
							2,4-Dichlorophenol	100 ug/mL
							2,4-Dimethylphenol	100 ug/mL
							2,4-Dinitrophenol	200 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dinitrotoluene	100 ug/mL
							2-Chloronaphthalene	100 ug/mL
							2-Chlorophenol	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							2-Methylphenol	100 ug/mL
							2-Nitroaniline	100 ug/mL
							2-Nitrophenol	100 ug/mL
							3 & 4 Methylphenol	100 ug/mL
							3-Nitroaniline	100 ug/mL
							4,6-Dinitro-2-methylphenol	200 ug/mL
							4-Bromophenyl phenyl ether	100 ug/mL
							4-Chloro-3-methylphenol	100 ug/mL
							4-Chloroaniline	100 ug/mL
							4-Chlorophenyl phenyl ether	100 ug/mL
							4-Nitroaniline	100 ug/mL
							4-Nitrophenol	200 ug/mL
							Acenaphthene	100 ug/mL
							Acenaphthylene	100 ug/mL
							Anthracene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	100 ug/mL
							Benzo[g,h,i]perylene	100 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Benzyl alcohol	100 ug/mL
							bis (2-chloroisopropyl) ether	100 ug/mL
							Bis(2-chloroethoxy)methane	100 ug/mL
							Bis(2-chloroethyl)ether	100 ug/mL
							Bis(2-ethylhexyl) phthalate	100 ug/mL
							Butyl benzyl phthalate	100 ug/mL
							Carbazole	100 ug/mL
							Chrysene	100 ug/mL
							Di-n-butyl phthalate	100 ug/mL
							Di-n-octyl phthalate	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibenz(a,h)anthracene	100 ug/mL
							Dibenzofuran	100 ug/mL
							Diethyl phthalate	100 ug/mL
							Dimethyl phthalate	100 ug/mL
							Fluoranthene	100 ug/mL
							Fluorene	100 ug/mL
							Hexachlorobenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexachlorocyclopentadiene	100 ug/mL
							Hexachloroethane	100 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Isophorone	100 ug/mL
							N-Nitrosodi-n-propylamine	100 ug/mL
							N-Nitrosodiphenylamine	200 ug/mL
							Naphthalene	100 ug/mL
							Nitrobenzene	100 ug/mL
							Pentachlorophenol	200 ug/mL
							Phenanthrene	100 ug/mL
							Phenol	100 ug/mL
							Pyrene	100 ug/mL
					SMLIST1 S10_00001	1 mL	Benzoic acid	200 ug/mL
					SMLIST1 S9_00001	1 mL	3,3'-Dichlorobenzidine	200 ug/mL
					SMLIST1 SURR_00003	200 uL	2,4,6-Tribromophenol (Surr)	100 ug/mL
							2-Fluorobiphenyl (Surr)	100 ug/mL
							2-Fluorophenol (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Phenol-d5 (Surr)	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL
..SMLIST1 S1_00005	05/31/16		Restek, Lot A0107399		(Purchased Reagent)		1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodiphenylamine	2000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
..SMLIST1 S10_00001	06/30/16		Restek, Lot A0107943		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..SMLIST1 S9_00001	07/31/16		Restek, Lot A0108174		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
..SMLIST1 SURR_00003	02/22/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SMLIST1 L3 W_00005	08/31/15	01/26/15	MECL2, Lot 0000093871	2 mL	SMIS80PPMW_00011	100 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SMLIST1 STOCK_00005	20 uL	1,1'-Biphenyl	1 ug/mL
							1,2,4,5-Tetrachlorobenzene	1 ug/mL
							1,2,4-Trichlorobenzene	1 ug/mL
							1,2-Dichlorobenzene	1 ug/mL
							1,2-Diphenylhydrazine	1 ug/mL
							1,3-Dichlorobenzene	1 ug/mL
							1,3-Dinitrobenzene	1 ug/mL
							1,4-Dichlorobenzene	1 ug/mL
							1,4-Dioxane	1 ug/mL
							1-Methylnaphthalene	1 ug/mL
							2,3,4,6-Tetrachlorophenol	1 ug/mL
							2,4,5-Trichlorophenol	1 ug/mL
							2,4,6-Trichlorophenol	1 ug/mL
							2,4-Dichlorophenol	1 ug/mL
							2,4-Dimethylphenol	1 ug/mL
							2,4-Dinitrophenol	2 ug/mL
							2,4-Dinitrotoluene	1 ug/mL
							2,6-Dichlorophenol	1 ug/mL
							2,6-Dinitrotoluene	1 ug/mL
							2-Chloronaphthalene	1 ug/mL
							2-Chlorophenol	1 ug/mL
							2-Methylnaphthalene	1 ug/mL
							2-Methylphenol	1 ug/mL
							2-Nitroaniline	1 ug/mL
							2-Nitrophenol	1 ug/mL
							3 & 4 Methylphenol	1 ug/mL
							3-Nitroaniline	1 ug/mL
							4,6-Dinitro-2-methylphenol	2 ug/mL
							4-Bromophenyl phenyl ether	1 ug/mL
							4-Chloro-3-methylphenol	1 ug/mL
							4-Chloroaniline	1 ug/mL
							4-Chlorophenyl phenyl ether	1 ug/mL
							4-Nitroaniline	1 ug/mL
							4-Nitrophenol	2 ug/mL
							Acenaphthene	1 ug/mL
							Acenaphthylene	1 ug/mL
							Acetophenone	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Aniline	1 ug/mL
							Anthracene	1 ug/mL
							Azobenzene	1 ug/mL
							Benzo[a]anthracene	1 ug/mL
							Benzo[a]pyrene	1 ug/mL
							Benzo[b]fluoranthene	1 ug/mL
							Benzo[g,h,i]perylene	1 ug/mL
							Benzo[k]fluoranthene	1 ug/mL
							Benzyl alcohol	1 ug/mL
							bis (2-chloroisopropyl) ether	1 ug/mL
							Bis(2-chloroethoxy)methane	1 ug/mL
							Bis(2-chloroethyl)ether	1 ug/mL
							Bis(2-ethylhexyl) phthalate	1 ug/mL
							Butyl benzyl phthalate	1 ug/mL
							Carbazole	1 ug/mL
							Chrysene	1 ug/mL
							Di-n-butyl phthalate	1 ug/mL
							Di-n-octyl phthalate	1 ug/mL
							Dibenz(a,h)anthracene	1 ug/mL
							Dibenzofuran	1 ug/mL
							Diethyl phthalate	1 ug/mL
							Dimethyl phthalate	1 ug/mL
							Fluoranthene	1 ug/mL
							Fluorene	1 ug/mL
							Hexachlorobenzene	1 ug/mL
							Hexachlorobutadiene	1 ug/mL
							Hexachlorocyclopentadiene	1 ug/mL
							Hexachloroethane	1 ug/mL
							Indeno[1,2,3-cd]pyrene	1 ug/mL
							Isophorone	1 ug/mL
							N-Nitrosodi-n-propylamine	1 ug/mL
							N-Nitrosodimethylamine	1 ug/mL
							N-Nitrosodiphenylamine	2 ug/mL
							Naphthalene	1 ug/mL
							Nitrobenzene	1 ug/mL
							Pentachlorophenol	2 ug/mL
							Phenanthrene	1 ug/mL
							Phenol	1 ug/mL
							Pyrene	1 ug/mL
							Pyridine	1 ug/mL
							Benzoic acid	2 ug/mL
							Indene	2 ug/mL
							Atrazine	2 ug/mL
							Benzaldehyde	2 ug/mL
							Caprolactam	2 ug/mL
							3,3'-Dichlorobenzidine	2 ug/mL
							Benzidine	2 ug/mL
							2,4,6-Tribromophenol (Surr)	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Fluorobiphenyl (Surr)	1 ug/mL
							2-Fluorophenol (Surr)	1 ug/mL
							Nitrobenzene-d5 (Surr)	1 ug/mL
							Phenol-d5 (Surr)	1 ug/mL
							Terphenyl-d14 (Surr)	1 ug/mL
.SMIS80PPMW_00011	08/31/15	08/14/14	MECL2, Lot 0000073814	25 mL	SMIS R_00005	1 mL	1,4-Dichlorobenzene-d4	80 ug/mL
							Acenaphthene-d10	80 ug/mL
							Chrysene-d12	80 ug/mL
							Naphthalene-d8	80 ug/mL
							Perylene-d12	80 ug/mL
							Phenanthrene-d10	80 ug/mL
..SMIS R_00005	01/31/19		Restek, Lot A0101020		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SMLIST1 STOCK_00005	05/31/16	01/26/15	MECL2, Lot 0000093871	10 mL	SMLIST1 S1_00005	1 mL	1,1'-Biphenyl	100 ug/mL
							1,2,4,5-Tetrachlorobenzene	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,2-Diphenylhydrazine	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,3-Dinitrobenzene	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							1,4-Dioxane	100 ug/mL
							1-Methylnaphthalene	100 ug/mL
							2,3,4,6-Tetrachlorophenol	100 ug/mL
							2,4,5-Trichlorophenol	100 ug/mL
							2,4,6-Trichlorophenol	100 ug/mL
							2,4-Dichlorophenol	100 ug/mL
							2,4-Dimethylphenol	100 ug/mL
							2,4-Dinitrophenol	200 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dichlorophenol	100 ug/mL
							2,6-Dinitrotoluene	100 ug/mL
							2-Chloronaphthalene	100 ug/mL
							2-Chlorophenol	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							2-Methylphenol	100 ug/mL
							2-Nitroaniline	100 ug/mL
							2-Nitrophenol	100 ug/mL
							3 & 4 Methylphenol	100 ug/mL
							3-Nitroaniline	100 ug/mL
							4,6-Dinitro-2-methylphenol	200 ug/mL
							4-Bromophenyl phenyl ether	100 ug/mL
							4-Chloro-3-methylphenol	100 ug/mL
							4-Chloroaniline	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Chlorophenyl phenyl ether	100 ug/mL
							4-Nitroaniline	100 ug/mL
							4-Nitrophenol	200 ug/mL
							Acenaphthene	100 ug/mL
							Acenaphthylene	100 ug/mL
							Acetophenone	100 ug/mL
							Aniline	100 ug/mL
							Anthracene	100 ug/mL
							Azobenzene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	100 ug/mL
							Benzo[g,h,i]perylene	100 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Benzyl alcohol	100 ug/mL
							bis (2-chloroisopropyl) ether	100 ug/mL
							Bis(2-chloroethoxy)methane	100 ug/mL
							Bis(2-chloroethyl)ether	100 ug/mL
							Bis(2-ethylhexyl) phthalate	100 ug/mL
							Butyl benzyl phthalate	100 ug/mL
							Carbazole	100 ug/mL
							Chrysene	100 ug/mL
							Di-n-butyl phthalate	100 ug/mL
							Di-n-octyl phthalate	100 ug/mL
							Dibenz(a,h)anthracene	100 ug/mL
							Dibenzofuran	100 ug/mL
							Diethyl phthalate	100 ug/mL
							Dimethyl phthalate	100 ug/mL
							Fluoranthene	100 ug/mL
							Fluorene	100 ug/mL
							Hexachlorobenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexachlorocyclopentadiene	100 ug/mL
							Hexachloroethane	100 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Isophorone	100 ug/mL
							N-Nitrosodi-n-propylamine	100 ug/mL
							N-Nitrosodimethylamine	100 ug/mL
							N-Nitrosodiphenylamine	200 ug/mL
							Naphthalene	100 ug/mL
							Nitrobenzene	100 ug/mL
							Pentachlorophenol	200 ug/mL
							Phenanthrene	100 ug/mL
							Phenol	100 ug/mL
							Pyrene	100 ug/mL
							Pyridine	100 ug/mL
					SMLIST1 S10_00001	1 mL	Benzoic acid	200 ug/mL
							Indene	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					SMLIST1 S11_00001	1 mL	Atrazine	200 ug/mL
							Benzaldehyde	200 ug/mL
							Caprolactam	200 ug/mL
					SMLIST1 S9_00001	1 mL	3,3'-Dichlorobenzidine	200 ug/mL
							Benzidine	200 ug/mL
					SMLIST1 SURR_00003	200 uL	2,4,6-Tribromophenol (Surr)	100 ug/mL
							2-Fluorobiphenyl (Surr)	100 ug/mL
							2-Fluorophenol (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Phenol-d5 (Surr)	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL
..SMLIST1 S1_00005	05/31/16		Restek, Lot A0107399		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	2000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SMLIST1 S10_00001	06/30/16		Restek, Lot A0107943		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SMLIST1 S11_00001	06/30/16		Restek, Lot A0108035		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SMLIST1 S9_00001	07/31/16		Restek, Lot A0108174		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SMLIST1 SURR_00003	02/22/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Fluorobiphenyl (Surr)	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SMLIST1 L3 W_00006	04/20/16	04/21/15	MECL2, Lot 0000103549	2 mL	SMLIST1 STOCK_00006	20 uL	1,2,4-Trichlorobenzene	1 ug/mL
							1,2-Dichlorobenzene	1 ug/mL
							1,3-Dichlorobenzene	1 ug/mL
							1,4-Dichlorobenzene	1 ug/mL
							2,4,5-Trichlorophenol	1 ug/mL
							2,4,6-Trichlorophenol	1 ug/mL
							2,4-Dichlorophenol	1 ug/mL
							2,4-Dimethylphenol	1 ug/mL
							2,4-Dinitrophenol	2 ug/mL
							2,4-Dinitrotoluene	1 ug/mL
							2,6-Dinitrotoluene	1 ug/mL
							2-Chloronaphthalene	1 ug/mL
							2-Chlorophenol	1 ug/mL
							2-Methylnaphthalene	1 ug/mL
							2-Methylphenol	1 ug/mL
							2-Nitroaniline	1 ug/mL
							2-Nitrophenol	1 ug/mL
							3 & 4 Methylphenol	1 ug/mL
							3-Nitroaniline	1 ug/mL
							4,6-Dinitro-2-methylphenol	2 ug/mL
							4-Bromophenyl phenyl ether	1 ug/mL
							4-Chloro-3-methylphenol	1 ug/mL
							4-Chloroaniline	1 ug/mL
							4-Chlorophenyl phenyl ether	1 ug/mL
							4-Nitroaniline	1 ug/mL
							4-Nitrophenol	2 ug/mL
							Acenaphthene	1 ug/mL
							Acenaphthylene	1 ug/mL
							Anthracene	1 ug/mL
							Benzo[a]anthracene	1 ug/mL
							Benzo[a]pyrene	1 ug/mL
							Benzo[b]fluoranthene	1 ug/mL
							Benzo[g,h,i]perylene	1 ug/mL
							Benzo[k]fluoranthene	1 ug/mL
							Benzyl alcohol	1 ug/mL
							bis (2-chloroisopropyl) ether	1 ug/mL
							Bis(2-chloroethoxy)methane	1 ug/mL
							Bis(2-chloroethyl)ether	1 ug/mL
							Bis(2-ethylhexyl) phthalate	1 ug/mL
							Butyl benzyl phthalate	1 ug/mL
							Carbazole	1 ug/mL
							Chrysene	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Di-n-butyl phthalate	1 ug/mL
							Di-n-octyl phthalate	1 ug/mL
							Dibenz(a,h)anthracene	1 ug/mL
							Dibenzofuran	1 ug/mL
							Diethyl phthalate	1 ug/mL
							Dimethyl phthalate	1 ug/mL
							Fluoranthene	1 ug/mL
							Fluorene	1 ug/mL
							Hexachlorobenzene	1 ug/mL
							Hexachlorobutadiene	1 ug/mL
							Hexachlorocyclopentadiene	1 ug/mL
							Hexachloroethane	1 ug/mL
							Indeno[1,2,3-cd]pyrene	1 ug/mL
							Isophorone	1 ug/mL
							N-Nitrosodi-n-propylamine	1 ug/mL
							N-Nitrosodiphenylamine	2 ug/mL
							Naphthalene	1 ug/mL
							Nitrobenzene	1 ug/mL
							Pentachlorophenol	2 ug/mL
							Phenanthrene	1 ug/mL
							Phenol	1 ug/mL
							Pyrene	1 ug/mL
							Benzoic acid	2 ug/mL
							3,3'-Dichlorobenzidine	2 ug/mL
							2,4,6-Tribromophenol (Surr)	1 ug/mL
							2-Fluorobiphenyl (Surr)	1 ug/mL
							2-Fluorophenol (Surr)	1 ug/mL
							Nitrobenzene-d5 (Surr)	1 ug/mL
							Phenol-d5 (Surr)	1 ug/mL
							Terphenyl-d14 (Surr)	1 ug/mL
.SMLIST1 STOCK_00006	05/31/16	04/20/15	MECL2, Lot 0000103549	10 mL	SMLIST1 S1_00005	1 mL	1,2,4-Trichlorobenzene	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							2,4,5-Trichlorophenol	100 ug/mL
							2,4,6-Trichlorophenol	100 ug/mL
							2,4-Dichlorophenol	100 ug/mL
							2,4-Dimethylphenol	100 ug/mL
							2,4-Dinitrophenol	200 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dinitrotoluene	100 ug/mL
							2-Chloronaphthalene	100 ug/mL
							2-Chlorophenol	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							2-Methylphenol	100 ug/mL
							2-Nitroaniline	100 ug/mL
							2-Nitrophenol	100 ug/mL
							3 & 4 Methylphenol	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							3-Nitroaniline	100 ug/mL
							4,6-Dinitro-2-methylphenol	200 ug/mL
							4-Bromophenyl phenyl ether	100 ug/mL
							4-Chloro-3-methylphenol	100 ug/mL
							4-Chloroaniline	100 ug/mL
							4-Chlorophenyl phenyl ether	100 ug/mL
							4-Nitroaniline	100 ug/mL
							4-Nitrophenol	200 ug/mL
							Acenaphthene	100 ug/mL
							Acenaphthylene	100 ug/mL
							Anthracene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	100 ug/mL
							Benzo[g,h,i]perylene	100 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Benzyl alcohol	100 ug/mL
							bis (2-chloroisopropyl) ether	100 ug/mL
							Bis(2-chloroethoxy)methane	100 ug/mL
							Bis(2-chloroethyl)ether	100 ug/mL
							Bis(2-ethylhexyl) phthalate	100 ug/mL
							Butyl benzyl phthalate	100 ug/mL
							Carbazole	100 ug/mL
							Chrysene	100 ug/mL
							Di-n-butyl phthalate	100 ug/mL
							Di-n-octyl phthalate	100 ug/mL
							Dibenz(a,h)anthracene	100 ug/mL
							Dibenzofuran	100 ug/mL
							Diethyl phthalate	100 ug/mL
							Dimethyl phthalate	100 ug/mL
							Fluoranthene	100 ug/mL
							Fluorene	100 ug/mL
							Hexachlorobenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexachlorocyclopentadiene	100 ug/mL
							Hexachloroethane	100 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Isophorone	100 ug/mL
							N-Nitrosodi-n-propylamine	100 ug/mL
							N-Nitrosodiphenylamine	200 ug/mL
							Naphthalene	100 ug/mL
							Nitrobenzene	100 ug/mL
							Pentachlorophenol	200 ug/mL
							Phenanthrene	100 ug/mL
							Phenol	100 ug/mL
							Pyrene	100 ug/mL
					SMLIST1 S10_00001	1 mL	Benzoic acid	200 ug/mL
					SMLIST1 S9_00001	1 mL	3,3'-Dichlorobenzidine	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					SMLIST1 SURR_00003	200 uL	2,4,6-Tribromophenol (Surr)	100 ug/mL
							2-Fluorobiphenyl (Surr)	100 ug/mL
							2-Fluorophenol (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Phenol-d5 (Surr)	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL
..SMLIST1 S1_00005	05/31/16		Restek, Lot A0107399		(Purchased Reagent)		1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodiphenylamine	2000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
..SMLIST1 S10_00001	06/30/16		Restek, Lot A0107943		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..SMLIST1 S9_00001	07/31/16		Restek, Lot A0108174		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
..SMLIST1 SURR_00003	02/22/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SMLIST1 L4 W_00005	08/31/15	01/26/15	MECL2, Lot 0000093871	2 mL	SMIS80PPMW_00011	100 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SMLIST1 STOCK_00005	40 uL	1,1'-Biphenyl	2 ug/mL
							1,2,4,5-Tetrachlorobenzene	2 ug/mL
							1,2,4-Trichlorobenzene	2 ug/mL
							1,2-Dichlorobenzene	2 ug/mL
							1,2-Diphenylhydrazine	2 ug/mL
							1,3-Dichlorobenzene	2 ug/mL
							1,3-Dinitrobenzene	2 ug/mL
							1,4-Dichlorobenzene	2 ug/mL
							1,4-Dioxane	2 ug/mL
							1-Methylnaphthalene	2 ug/mL
							2,3,4,6-Tetrachlorophenol	2 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4,5-Trichlorophenol	2 ug/mL
							2,4,6-Trichlorophenol	2 ug/mL
							2,4-Dichlorophenol	2 ug/mL
							2,4-Dimethylphenol	2 ug/mL
							2,4-Dinitrophenol	4 ug/mL
							2,4-Dinitrotoluene	2 ug/mL
							2,6-Dichlorophenol	2 ug/mL
							2,6-Dinitrotoluene	2 ug/mL
							2-Chloronaphthalene	2 ug/mL
							2-Chlorophenol	2 ug/mL
							2-Methylnaphthalene	2 ug/mL
							2-Methylphenol	2 ug/mL
							2-Nitroaniline	2 ug/mL
							2-Nitrophenol	2 ug/mL
							3 & 4 Methylphenol	2 ug/mL
							3-Nitroaniline	2 ug/mL
							4,6-Dinitro-2-methylphenol	4 ug/mL
							4-Bromophenyl phenyl ether	2 ug/mL
							4-Chloro-3-methylphenol	2 ug/mL
							4-Chloroaniline	2 ug/mL
							4-Chlorophenyl phenyl ether	2 ug/mL
							4-Nitroaniline	2 ug/mL
							4-Nitrophenol	4 ug/mL
							Acenaphthene	2 ug/mL
							Acenaphthylene	2 ug/mL
							Acetophenone	2 ug/mL
							Aniline	2 ug/mL
							Anthracene	2 ug/mL
							Azobenzene	2 ug/mL
							Benzo[a]anthracene	2 ug/mL
							Benzo[a]pyrene	2 ug/mL
							Benzo[b]fluoranthene	2 ug/mL
							Benzo[g,h,i]perylene	2 ug/mL
							Benzo[k]fluoranthene	2 ug/mL
							Benzyl alcohol	2 ug/mL
							bis (2-chloroisopropyl) ether	2 ug/mL
							Bis(2-chloroethoxy)methane	2 ug/mL
							Bis(2-chloroethyl)ether	2 ug/mL
							Bis(2-ethylhexyl) phthalate	2 ug/mL
							Butyl benzyl phthalate	2 ug/mL
							Carbazole	2 ug/mL
							Chrysene	2 ug/mL
							Di-n-butyl phthalate	2 ug/mL
							Di-n-octyl phthalate	2 ug/mL
							Dibenz(a,h)anthracene	2 ug/mL
							Dibenzofuran	2 ug/mL
							Diethyl phthalate	2 ug/mL
							Dimethyl phthalate	2 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Fluoranthene	2 ug/mL
							Fluorene	2 ug/mL
							Hexachlorobenzene	2 ug/mL
							Hexachlorobutadiene	2 ug/mL
							Hexachlorocyclopentadiene	2 ug/mL
							Hexachloroethane	2 ug/mL
							Indeno[1,2,3-cd]pyrene	2 ug/mL
							Isophorone	2 ug/mL
							N-Nitrosodi-n-propylamine	2 ug/mL
							N-Nitrosodimethylamine	2 ug/mL
							N-Nitrosodiphenylamine	4 ug/mL
							Naphthalene	2 ug/mL
							Nitrobenzene	2 ug/mL
							Pentachlorophenol	4 ug/mL
							Phenanthrene	2 ug/mL
							Phenol	2 ug/mL
							Pyrene	2 ug/mL
							Pyridine	2 ug/mL
							Benzoic acid	4 ug/mL
							Indene	4 ug/mL
							Atrazine	4 ug/mL
							Benzaldehyde	4 ug/mL
							Caprolactam	4 ug/mL
							3,3'-Dichlorobenzidine	4 ug/mL
							Benzidine	4 ug/mL
							2,4,6-Tribromophenol (Surr)	2 ug/mL
							2-Fluorobiphenyl (Surr)	2 ug/mL
							2-Fluorophenol (Surr)	2 ug/mL
							Nitrobenzene-d5 (Surr)	2 ug/mL
							Phenol-d5 (Surr)	2 ug/mL
							Terphenyl-d14 (Surr)	2 ug/mL
.SMIS80PPMW_00011	08/31/15	08/14/14	MECL2, Lot 0000073814	25 mL	SMIS R_00005	1 mL	1,4-Dichlorobenzene-d4	80 ug/mL
							Acenaphthene-d10	80 ug/mL
							Chrysene-d12	80 ug/mL
							Naphthalene-d8	80 ug/mL
							Perylene-d12	80 ug/mL
							Phenanthrene-d10	80 ug/mL
..SMIS R_00005	01/31/19	Restek, Lot A0101020			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SMLIST1 STOCK_00005	05/31/16	01/26/15	MECL2, Lot 0000093871	10 mL	SMLIST1 S1_00005	1 mL	1,1'-Biphenyl	100 ug/mL
							1,2,4,5-Tetrachlorobenzene	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,2-Diphenylhydrazine	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dichlorobenzene	100 ug/mL
							1,3-Dinitrobenzene	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							1,4-Dioxane	100 ug/mL
							1-Methylnaphthalene	100 ug/mL
							2,3,4,6-Tetrachlorophenol	100 ug/mL
							2,4,5-Trichlorophenol	100 ug/mL
							2,4,6-Trichlorophenol	100 ug/mL
							2,4-Dichlorophenol	100 ug/mL
							2,4-Dimethylphenol	100 ug/mL
							2,4-Dinitrophenol	200 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dichlorophenol	100 ug/mL
							2,6-Dinitrotoluene	100 ug/mL
							2-Chloronaphthalene	100 ug/mL
							2-Chlorophenol	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							2-Methylphenol	100 ug/mL
							2-Nitroaniline	100 ug/mL
							2-Nitrophenol	100 ug/mL
							3 & 4 Methylphenol	100 ug/mL
							3-Nitroaniline	100 ug/mL
							4,6-Dinitro-2-methylphenol	200 ug/mL
							4-Bromophenyl phenyl ether	100 ug/mL
							4-Chloro-3-methylphenol	100 ug/mL
							4-Chloroaniline	100 ug/mL
							4-Chlorophenyl phenyl ether	100 ug/mL
							4-Nitroaniline	100 ug/mL
							4-Nitrophenol	200 ug/mL
							Acenaphthene	100 ug/mL
							Acenaphthylene	100 ug/mL
							Acetophenone	100 ug/mL
							Aniline	100 ug/mL
							Anthracene	100 ug/mL
							Azobenzene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	100 ug/mL
							Benzo[g,h,i]perylene	100 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Benzyl alcohol	100 ug/mL
							bis (2-chloroisopropyl) ether	100 ug/mL
							Bis(2-chloroethoxy)methane	100 ug/mL
							Bis(2-chloroethyl)ether	100 ug/mL
							Bis(2-ethylhexyl) phthalate	100 ug/mL
							Butyl benzyl phthalate	100 ug/mL
							Carbazole	100 ug/mL
							Chrysene	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Di-n-butyl phthalate	100 ug/mL
							Di-n-octyl phthalate	100 ug/mL
							Dibenz(a,h)anthracene	100 ug/mL
							Dibenzofuran	100 ug/mL
							Diethyl phthalate	100 ug/mL
							Dimethyl phthalate	100 ug/mL
							Fluoranthene	100 ug/mL
							Fluorene	100 ug/mL
							Hexachlorobenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexachlorocyclopentadiene	100 ug/mL
							Hexachloroethane	100 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Isophorone	100 ug/mL
							N-Nitrosodi-n-propylamine	100 ug/mL
							N-Nitrosodimethylamine	100 ug/mL
							N-Nitrosodiphenylamine	200 ug/mL
							Naphthalene	100 ug/mL
							Nitrobenzene	100 ug/mL
							Pentachlorophenol	200 ug/mL
							Phenanthrene	100 ug/mL
							Phenol	100 ug/mL
							Pyrene	100 ug/mL
							Pyridine	100 ug/mL
					SMLIST1 S10_00001	1 mL	Benzoic acid	200 ug/mL
							Indene	200 ug/mL
					SMLIST1 S11_00001	1 mL	Atrazine	200 ug/mL
							Benzaldehyde	200 ug/mL
							Caprolactam	200 ug/mL
					SMLIST1 S9_00001	1 mL	3,3'-Dichlorobenzidine	200 ug/mL
							Benzidine	200 ug/mL
					SMLIST1 SURR_00003	200 uL	2,4,6-Tribromophenol (Surr)	100 ug/mL
							2-Fluorobiphenyl (Surr)	100 ug/mL
							2-Fluorophenol (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Phenol-d5 (Surr)	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL
..SMLIST1 S1_00005	05/31/16		Restek, Lot A0107399		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	2000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SMLIST1 S10_00001	06/30/16		Restek, Lot A0107943		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SMLIST1 S11_00001	06/30/16		Restek, Lot A0108035		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SMLIST1 S9_00001	07/31/16		Restek, Lot A0108174		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SMLIST1 SURR_00003	02/22/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SMLIST1 L4 W_00006	04/20/16	04/21/15	MECL2, Lot 0000103549	2 mL	SMLIST1 STOCK_00006	40 uL	1,2,4-Trichlorobenzene	2 ug/mL
							1,2-Dichlorobenzene	2 ug/mL
							1,3-Dichlorobenzene	2 ug/mL
							1,4-Dichlorobenzene	2 ug/mL
							2,4,5-Trichlorophenol	2 ug/mL
							2,4,6-Trichlorophenol	2 ug/mL
							2,4-Dichlorophenol	2 ug/mL
							2,4-Dimethylphenol	2 ug/mL
							2,4-Dinitrophenol	4 ug/mL
							2,4-Dinitrotoluene	2 ug/mL
							2,6-Dinitrotoluene	2 ug/mL
							2-Chloronaphthalene	2 ug/mL
							2-Chlorophenol	2 ug/mL
							2-Methylnaphthalene	2 ug/mL
							2-Methylphenol	2 ug/mL
							2-Nitroaniline	2 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Nitrophenol	2 ug/mL
							3 & 4 Methylphenol	2 ug/mL
							3-Nitroaniline	2 ug/mL
							4,6-Dinitro-2-methylphenol	4 ug/mL
							4-Bromophenyl phenyl ether	2 ug/mL
							4-Chloro-3-methylphenol	2 ug/mL
							4-Chloroaniline	2 ug/mL
							4-Chlorophenyl phenyl ether	2 ug/mL
							4-Nitroaniline	2 ug/mL
							4-Nitrophenol	4 ug/mL
							Acenaphthene	2 ug/mL
							Acenaphthylene	2 ug/mL
							Anthracene	2 ug/mL
							Benzo[a]anthracene	2 ug/mL
							Benzo[a]pyrene	2 ug/mL
							Benzo[b]fluoranthene	2 ug/mL
							Benzo[g,h,i]perylene	2 ug/mL
							Benzo[k]fluoranthene	2 ug/mL
							Benzyl alcohol	2 ug/mL
							bis (2-chloroisopropyl) ether	2 ug/mL
							Bis(2-chloroethoxy)methane	2 ug/mL
							Bis(2-chloroethyl)ether	2 ug/mL
							Bis(2-ethylhexyl) phthalate	2 ug/mL
							Butyl benzyl phthalate	2 ug/mL
							Carbazole	2 ug/mL
							Chrysene	2 ug/mL
							Di-n-butyl phthalate	2 ug/mL
							Di-n-octyl phthalate	2 ug/mL
							Dibenz(a,h)anthracene	2 ug/mL
							Dibenzofuran	2 ug/mL
							Diethyl phthalate	2 ug/mL
							Dimethyl phthalate	2 ug/mL
							Fluoranthene	2 ug/mL
							Fluorene	2 ug/mL
							Hexachlorobenzene	2 ug/mL
							Hexachlorobutadiene	2 ug/mL
							Hexachlorocyclopentadiene	2 ug/mL
							Hexachloroethane	2 ug/mL
							Indeno[1,2,3-cd]pyrene	2 ug/mL
							Isophorone	2 ug/mL
							N-Nitrosodi-n-propylamine	2 ug/mL
							N-Nitrosodiphenylamine	4 ug/mL
							Naphthalene	2 ug/mL
							Nitrobenzene	2 ug/mL
							Pentachlorophenol	4 ug/mL
							Phenanthrene	2 ug/mL
							Phenol	2 ug/mL
							Pyrene	2 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzoic acid	4 ug/mL
							3,3'-Dichlorobenzidine	4 ug/mL
							2,4,6-Tribromophenol (Surr)	2 ug/mL
							2-Fluorobiphenyl (Surr)	2 ug/mL
							2-Fluorophenol (Surr)	2 ug/mL
							Nitrobenzene-d5 (Surr)	2 ug/mL
							Phenol-d5 (Surr)	2 ug/mL
							Terphenyl-d14 (Surr)	2 ug/mL
.SMLIST1 STOCK_00006	05/31/16	04/20/15	MECL2, Lot 0000103549	10 mL	SMLIST1 S1_00005	1 mL	1,2,4-Trichlorobenzene	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							2,4,5-Trichlorophenol	100 ug/mL
							2,4,6-Trichlorophenol	100 ug/mL
							2,4-Dichlorophenol	100 ug/mL
							2,4-Dimethylphenol	100 ug/mL
							2,4-Dinitrophenol	200 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dinitrotoluene	100 ug/mL
							2-Chloronaphthalene	100 ug/mL
							2-Chlorophenol	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							2-Methylphenol	100 ug/mL
							2-Nitroaniline	100 ug/mL
							2-Nitrophenol	100 ug/mL
							3 & 4 Methylphenol	100 ug/mL
							3-Nitroaniline	100 ug/mL
							4,6-Dinitro-2-methylphenol	200 ug/mL
							4-Bromophenyl phenyl ether	100 ug/mL
							4-Chloro-3-methylphenol	100 ug/mL
							4-Chloroaniline	100 ug/mL
							4-Chlorophenyl phenyl ether	100 ug/mL
							4-Nitroaniline	100 ug/mL
							4-Nitrophenol	200 ug/mL
							Acenaphthene	100 ug/mL
							Acenaphthylene	100 ug/mL
							Anthracene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	100 ug/mL
							Benzo[g,h,i]perylene	100 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Benzyl alcohol	100 ug/mL
							bis (2-chloroisopropyl) ether	100 ug/mL
							Bis(2-chloroethoxy)methane	100 ug/mL
							Bis(2-chloroethyl)ether	100 ug/mL
							Bis(2-ethylhexyl) phthalate	100 ug/mL
							Butyl benzyl phthalate	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbazole	100 ug/mL
							Chrysene	100 ug/mL
							Di-n-butyl phthalate	100 ug/mL
							Di-n-octyl phthalate	100 ug/mL
							Dibenz(a,h)anthracene	100 ug/mL
							Dibenzofuran	100 ug/mL
							Diethyl phthalate	100 ug/mL
							Dimethyl phthalate	100 ug/mL
							Fluoranthene	100 ug/mL
							Fluorene	100 ug/mL
							Hexachlorobenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexachlorocyclopentadiene	100 ug/mL
							Hexachloroethane	100 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Isophorone	100 ug/mL
							N-Nitrosodi-n-propylamine	100 ug/mL
							N-Nitrosodiphenylamine	200 ug/mL
							Naphthalene	100 ug/mL
							Nitrobenzene	100 ug/mL
							Pentachlorophenol	200 ug/mL
							Phenanthrene	100 ug/mL
							Phenol	100 ug/mL
							Pyrene	100 ug/mL
					SMLIST1 S10_00001	1 mL	Benzoic acid	200 ug/mL
					SMLIST1 S9_00001	1 mL	3,3'-Dichlorobenzidine	200 ug/mL
					SMLIST1 SURR_00003	200 uL	2,4,6-Tribromophenol (Surr)	100 ug/mL
							2-Fluorobiphenyl (Surr)	100 ug/mL
							2-Fluorophenol (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Phenol-d5 (Surr)	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL
..SMLIST1 S1_00005	05/31/16		Restek, Lot A0107399		(Purchased Reagent)		1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodiphenylamine	2000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SMLIST1 S10_00001	06/30/16		Restek, Lot A0107943		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..SMLIST1 S9_00001	07/31/16		Restek, Lot A0108174		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
..SMLIST1 SURR_00003	02/22/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SMLIST1 L5 W_00005	08/31/15	01/26/15	MECL2, Lot 0000093871	2 mL	SMIS80PPMW_00011	100 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SMLIST1 STOCK_00005	100 uL	1,1'-Biphenyl	5 ug/mL
							1,2,4,5-Tetrachlorobenzene	5 ug/mL
							1,2,4-Trichlorobenzene	5 ug/mL
							1,2-Dichlorobenzene	5 ug/mL
							1,2-Diphenylhydrazine	5 ug/mL
							1,3-Dichlorobenzene	5 ug/mL
							1,3-Dinitrobenzene	5 ug/mL
							1,4-Dichlorobenzene	5 ug/mL
							1,4-Dioxane	5 ug/mL
							1-Methylnaphthalene	5 ug/mL
							2,3,4,6-Tetrachlorophenol	5 ug/mL
							2,4,5-Trichlorophenol	5 ug/mL
							2,4,6-Trichlorophenol	5 ug/mL
							2,4-Dichlorophenol	5 ug/mL
							2,4-Dimethylphenol	5 ug/mL
							2,4-Dinitrophenol	10 ug/mL
							2,4-Dinitrotoluene	5 ug/mL
							2,6-Dichlorophenol	5 ug/mL
							2,6-Dinitrotoluene	5 ug/mL
							2-Chloronaphthalene	5 ug/mL
							2-Chlorophenol	5 ug/mL
							2-Methylnaphthalene	5 ug/mL
							2-Methylphenol	5 ug/mL
							2-Nitroaniline	5 ug/mL
							2-Nitrophenol	5 ug/mL
							3 & 4 Methylphenol	5 ug/mL
							3-Nitroaniline	5 ug/mL
							4,6-Dinitro-2-methylphenol	10 ug/mL
							4-Bromophenyl phenyl ether	5 ug/mL
							4-Chloro-3-methylphenol	5 ug/mL
							4-Chloroaniline	5 ug/mL
							4-Chlorophenyl phenyl ether	5 ug/mL
							4-Nitroaniline	5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Nitrophenol	10 ug/mL
							Acenaphthene	5 ug/mL
							Acenaphthylene	5 ug/mL
							Acetophenone	5 ug/mL
							Aniline	5 ug/mL
							Anthracene	5 ug/mL
							Azobenzene	5 ug/mL
							Benzo[a]anthracene	5 ug/mL
							Benzo[a]pyrene	5 ug/mL
							Benzo[b]fluoranthene	5 ug/mL
							Benzo[g,h,i]perylene	5 ug/mL
							Benzo[k]fluoranthene	5 ug/mL
							Benzyl alcohol	5 ug/mL
							bis (2-chloroisopropyl) ether	5 ug/mL
							Bis(2-chloroethoxy)methane	5 ug/mL
							Bis(2-chloroethyl)ether	5 ug/mL
							Bis(2-ethylhexyl) phthalate	5 ug/mL
							Butyl benzyl phthalate	5 ug/mL
							Carbazole	5 ug/mL
							Chrysene	5 ug/mL
							Di-n-butyl phthalate	5 ug/mL
							Di-n-octyl phthalate	5 ug/mL
							Dibenz(a,h)anthracene	5 ug/mL
							Dibenzofuran	5 ug/mL
							Diethyl phthalate	5 ug/mL
							Dimethyl phthalate	5 ug/mL
							Fluoranthene	5 ug/mL
							Fluorene	5 ug/mL
							Hexachlorobenzene	5 ug/mL
							Hexachlorobutadiene	5 ug/mL
							Hexachlorocyclopentadiene	5 ug/mL
							Hexachloroethane	5 ug/mL
							Indeno[1,2,3-cd]pyrene	5 ug/mL
							Isophorone	5 ug/mL
							N-Nitrosodi-n-propylamine	5 ug/mL
							N-Nitrosodimethylamine	5 ug/mL
							N-Nitrosodiphenylamine	10 ug/mL
							Naphthalene	5 ug/mL
							Nitrobenzene	5 ug/mL
							Pentachlorophenol	10 ug/mL
							Phenanthrene	5 ug/mL
							Phenol	5 ug/mL
							Pyrene	5 ug/mL
							Pyridine	5 ug/mL
							Benzoic acid	10 ug/mL
							Indene	10 ug/mL
							Atrazine	10 ug/mL
							Benzaldehyde	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Caprolactam	10 ug/mL
							3,3'-Dichlorobenzidine	10 ug/mL
							Benzidine	10 ug/mL
							2,4,6-Tribromophenol (Surr)	5 ug/mL
							2-Fluorobiphenyl (Surr)	5 ug/mL
							2-Fluorophenol (Surr)	5 ug/mL
							Nitrobenzene-d5 (Surr)	5 ug/mL
							Phenol-d5 (Surr)	5 ug/mL
							Terphenyl-d14 (Surr)	5 ug/mL
.SMIS80PPMW_00011	08/31/15	08/14/14	MECL2, Lot 0000073814	25 mL	SMIS R_00005	1 mL	1,4-Dichlorobenzene-d4	80 ug/mL
							Acenaphthene-d10	80 ug/mL
							Chrysene-d12	80 ug/mL
							Naphthalene-d8	80 ug/mL
							Perylene-d12	80 ug/mL
							Phenanthrene-d10	80 ug/mL
..SMIS R_00005	01/31/19		Restek, Lot A0101020		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SMLIST1 STOCK_00005	05/31/16	01/26/15	MECL2, Lot 0000093871	10 mL	SMLIST1 S1_00005	1 mL	1,1'-Biphenyl	100 ug/mL
							1,2,4,5-Tetrachlorobenzene	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,2-Diphenylhydrazine	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,3-Dinitrobenzene	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							1,4-Dioxane	100 ug/mL
							1-Methylnaphthalene	100 ug/mL
							2,3,4,6-Tetrachlorophenol	100 ug/mL
							2,4,5-Trichlorophenol	100 ug/mL
							2,4,6-Trichlorophenol	100 ug/mL
							2,4-Dichlorophenol	100 ug/mL
							2,4-Dimethylphenol	100 ug/mL
							2,4-Dinitrophenol	200 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dichlorophenol	100 ug/mL
							2,6-Dinitrotoluene	100 ug/mL
							2-Chloronaphthalene	100 ug/mL
							2-Chlorophenol	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							2-Methylphenol	100 ug/mL
							2-Nitroaniline	100 ug/mL
							2-Nitrophenol	100 ug/mL
							3 & 4 Methylphenol	100 ug/mL
							3-Nitroaniline	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4,6-Dinitro-2-methylphenol	200 ug/mL
							4-Bromophenyl phenyl ether	100 ug/mL
							4-Chloro-3-methylphenol	100 ug/mL
							4-Chloroaniline	100 ug/mL
							4-Chlorophenyl phenyl ether	100 ug/mL
							4-Nitroaniline	100 ug/mL
							4-Nitrophenol	200 ug/mL
							Acenaphthene	100 ug/mL
							Acenaphthylene	100 ug/mL
							Acetophenone	100 ug/mL
							Aniline	100 ug/mL
							Anthracene	100 ug/mL
							Azobenzene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	100 ug/mL
							Benzo[g,h,i]perylene	100 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Benzyl alcohol	100 ug/mL
							bis (2-chloroisopropyl) ether	100 ug/mL
							Bis(2-chloroethoxy)methane	100 ug/mL
							Bis(2-chloroethyl)ether	100 ug/mL
							Bis(2-ethylhexyl) phthalate	100 ug/mL
							Butyl benzyl phthalate	100 ug/mL
							Carbazole	100 ug/mL
							Chrysene	100 ug/mL
							Di-n-butyl phthalate	100 ug/mL
							Di-n-octyl phthalate	100 ug/mL
							Dibenz(a,h)anthracene	100 ug/mL
							Dibenzofuran	100 ug/mL
							Diethyl phthalate	100 ug/mL
							Dimethyl phthalate	100 ug/mL
							Fluoranthene	100 ug/mL
							Fluorene	100 ug/mL
							Hexachlorobenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexachlorocyclopentadiene	100 ug/mL
							Hexachloroethane	100 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Isophorone	100 ug/mL
							N-Nitrosodi-n-propylamine	100 ug/mL
							N-Nitrosodimethylamine	100 ug/mL
							N-Nitrosodiphenylamine	200 ug/mL
							Naphthalene	100 ug/mL
							Nitrobenzene	100 ug/mL
							Pentachlorophenol	200 ug/mL
							Phenanthrene	100 ug/mL
							Phenol	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pyrene	100 ug/mL
							Pyridine	100 ug/mL
					SMLIST1 S10_00001	1 mL	Benzoic acid	200 ug/mL
							Indene	200 ug/mL
					SMLIST1 S11_00001	1 mL	Atrazine	200 ug/mL
							Benzaldehyde	200 ug/mL
							Caprolactam	200 ug/mL
					SMLIST1 S9_00001	1 mL	3,3'-Dichlorobenzidine	200 ug/mL
							Benzidine	200 ug/mL
					SMLIST1 SURR_00003	200 uL	2,4,6-Tribromophenol (Surr)	100 ug/mL
							2-Fluorobiphenyl (Surr)	100 ug/mL
							2-Fluorophenol (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Phenol-d5 (Surr)	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL
..SMLIST1 S1_00005	05/31/16		Restek, Lot A0107399		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	2000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SMLIST1 S10_00001	06/30/16		Restek, Lot A0107943		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SMLIST1 S11_00001	06/30/16		Restek, Lot A0108035		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Caprolactam	2000 ug/mL
..SMLIST1 S9_00001	07/31/16	Restek, Lot A0108174			(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SMLIST1 SURR_00003	02/22/18	Restek, Lot A093638			(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SMLIST1 L5 W_00006	04/20/16	04/21/15	MECL2, Lot 0000103549	2 mL	SMLIST1 STOCK_00006	100 uL	1,2,4-Trichlorobenzene	5 ug/mL
							1,2-Dichlorobenzene	5 ug/mL
							1,3-Dichlorobenzene	5 ug/mL
							1,4-Dichlorobenzene	5 ug/mL
							2,4,5-Trichlorophenol	5 ug/mL
							2,4,6-Trichlorophenol	5 ug/mL
							2,4-Dichlorophenol	5 ug/mL
							2,4-Dimethylphenol	5 ug/mL
							2,4-Dinitrophenol	10 ug/mL
							2,4-Dinitrotoluene	5 ug/mL
							2,6-Dinitrotoluene	5 ug/mL
							2-Chloronaphthalene	5 ug/mL
							2-Chlorophenol	5 ug/mL
							2-Methylnaphthalene	5 ug/mL
							2-Methylphenol	5 ug/mL
							2-Nitroaniline	5 ug/mL
							2-Nitrophenol	5 ug/mL
							3 & 4 Methylphenol	5 ug/mL
							3-Nitroaniline	5 ug/mL
							4,6-Dinitro-2-methylphenol	10 ug/mL
							4-Bromophenyl phenyl ether	5 ug/mL
							4-Chloro-3-methylphenol	5 ug/mL
							4-Chloroaniline	5 ug/mL
							4-Chlorophenyl phenyl ether	5 ug/mL
							4-Nitroaniline	5 ug/mL
							4-Nitrophenol	10 ug/mL
							Acenaphthene	5 ug/mL
							Acenaphthylene	5 ug/mL
							Anthracene	5 ug/mL
							Benzo[a]anthracene	5 ug/mL
							Benzo[a]pyrene	5 ug/mL
							Benzo[b]fluoranthene	5 ug/mL
							Benzo[g,h,i]perylene	5 ug/mL
							Benzo[k]fluoranthene	5 ug/mL
							Benzyl alcohol	5 ug/mL
							bis (2-chloroisopropyl) ether	5 ug/mL
							Bis(2-chloroethoxy)methane	5 ug/mL
							Bis(2-chloroethyl)ether	5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bis(2-ethylhexyl) phthalate	5 ug/mL
							Butyl benzyl phthalate	5 ug/mL
							Carbazole	5 ug/mL
							Chrysene	5 ug/mL
							Di-n-butyl phthalate	5 ug/mL
							Di-n-octyl phthalate	5 ug/mL
							Dibenz(a,h)anthracene	5 ug/mL
							Dibenzofuran	5 ug/mL
							Diethyl phthalate	5 ug/mL
							Dimethyl phthalate	5 ug/mL
							Fluoranthene	5 ug/mL
							Fluorene	5 ug/mL
							Hexachlorobenzene	5 ug/mL
							Hexachlorobutadiene	5 ug/mL
							Hexachlorocyclopentadiene	5 ug/mL
							Hexachloroethane	5 ug/mL
							Indeno[1,2,3-cd]pyrene	5 ug/mL
							Isophorone	5 ug/mL
							N-Nitrosodi-n-propylamine	5 ug/mL
							N-Nitrosodiphenylamine	10 ug/mL
							Naphthalene	5 ug/mL
							Nitrobenzene	5 ug/mL
							Pentachlorophenol	10 ug/mL
							Phenanthrene	5 ug/mL
							Phenol	5 ug/mL
							Pyrene	5 ug/mL
							Benzoic acid	10 ug/mL
							3,3'-Dichlorobenzidine	10 ug/mL
							2,4,6-Tribromophenol (Surr)	5 ug/mL
							2-Fluorobiphenyl (Surr)	5 ug/mL
							2-Fluorophenol (Surr)	5 ug/mL
							Nitrobenzene-d5 (Surr)	5 ug/mL
							Phenol-d5 (Surr)	5 ug/mL
							Terphenyl-d14 (Surr)	5 ug/mL
.SMLIST1 STOCK_00006	05/31/16	04/20/15	MECL2, Lot 0000103549	10 mL	SMLIST1 S1_00005	1 mL	1,2,4-Trichlorobenzene	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							2,4,5-Trichlorophenol	100 ug/mL
							2,4,6-Trichlorophenol	100 ug/mL
							2,4-Dichlorophenol	100 ug/mL
							2,4-Dimethylphenol	100 ug/mL
							2,4-Dinitrophenol	200 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dinitrotoluene	100 ug/mL
							2-Chloronaphthalene	100 ug/mL
							2-Chlorophenol	100 ug/mL
							2-Methylnaphthalene	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Methylphenol	100 ug/mL
							2-Nitroaniline	100 ug/mL
							2-Nitrophenol	100 ug/mL
							3 & 4 Methylphenol	100 ug/mL
							3-Nitroaniline	100 ug/mL
							4,6-Dinitro-2-methylphenol	200 ug/mL
							4-Bromophenyl phenyl ether	100 ug/mL
							4-Chloro-3-methylphenol	100 ug/mL
							4-Chloroaniline	100 ug/mL
							4-Chlorophenyl phenyl ether	100 ug/mL
							4-Nitroaniline	100 ug/mL
							4-Nitrophenol	200 ug/mL
							Acenaphthene	100 ug/mL
							Acenaphthylene	100 ug/mL
							Anthracene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	100 ug/mL
							Benzo[g,h,i]perylene	100 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Benzyl alcohol	100 ug/mL
							bis (2-chloroisopropyl) ether	100 ug/mL
							Bis(2-chloroethoxy)methane	100 ug/mL
							Bis(2-chloroethyl)ether	100 ug/mL
							Bis(2-ethylhexyl) phthalate	100 ug/mL
							Butyl benzyl phthalate	100 ug/mL
							Carbazole	100 ug/mL
							Chrysene	100 ug/mL
							Di-n-butyl phthalate	100 ug/mL
							Di-n-octyl phthalate	100 ug/mL
							Dibenz(a,h)anthracene	100 ug/mL
							Dibenzofuran	100 ug/mL
							Diethyl phthalate	100 ug/mL
							Dimethyl phthalate	100 ug/mL
							Fluoranthene	100 ug/mL
							Fluorene	100 ug/mL
							Hexachlorobenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexachlorocyclopentadiene	100 ug/mL
							Hexachloroethane	100 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Isophorone	100 ug/mL
							N-Nitrosodi-n-propylamine	100 ug/mL
							N-Nitrosodiphenylamine	200 ug/mL
							Naphthalene	100 ug/mL
							Nitrobenzene	100 ug/mL
							Pentachlorophenol	200 ug/mL
							Phenanthrene	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenol	100 ug/mL
							Pyrene	100 ug/mL
					SMLIST1 S10_00001	1 mL	Benzoic acid	200 ug/mL
					SMLIST1 S9_00001	1 mL	3,3'-Dichlorobenzidine	200 ug/mL
					SMLIST1 SURR_00003	200 uL	2,4,6-Tribromophenol (Surr)	100 ug/mL
							2-Fluorobiphenyl (Surr)	100 ug/mL
							2-Fluorophenol (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Phenol-d5 (Surr)	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL
..SMLIST1 S1_00005	05/31/16		Restek, Lot A0107399		(Purchased Reagent)		1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodiphenylamine	2000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
..SMLIST1 S10_00001	06/30/16		Restek, Lot A0107943		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..SMLIST1 S9_00001	07/31/16		Restek, Lot A0108174		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
..SMLIST1 SURR_00003	02/22/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SMLIST1 L6 W_00005	08/31/15	01/26/15	MECL2, Lot 0000093871	2 mL	SMIS80PPMW_00011	100 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SMLIST1 STOCK_00005	200 uL	1,1'-Biphenyl	10 ug/mL
							1,2,4,5-Tetrachlorobenzene	10 ug/mL
							1,2,4-Trichlorobenzene	10 ug/mL
							1,2-Dichlorobenzene	10 ug/mL
							1,2-Diphenylhydrazine	10 ug/mL
							1,3-Dichlorobenzene	10 ug/mL
							1,3-Dinitrobenzene	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dichlorobenzene	10 ug/mL
							1,4-Dioxane	10 ug/mL
							1-Methylnaphthalene	10 ug/mL
							2,3,4,6-Tetrachlorophenol	10 ug/mL
							2,4,5-Trichlorophenol	10 ug/mL
							2,4,6-Trichlorophenol	10 ug/mL
							2,4-Dichlorophenol	10 ug/mL
							2,4-Dimethylphenol	10 ug/mL
							2,4-Dinitrophenol	20 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							2,6-Dichlorophenol	10 ug/mL
							2,6-Dinitrotoluene	10 ug/mL
							2-Chloronaphthalene	10 ug/mL
							2-Chlorophenol	10 ug/mL
							2-Methylnaphthalene	10 ug/mL
							2-Methylphenol	10 ug/mL
							2-Nitroaniline	10 ug/mL
							2-Nitrophenol	10 ug/mL
							3 & 4 Methylphenol	10 ug/mL
							3-Nitroaniline	10 ug/mL
							4,6-Dinitro-2-methylphenol	20 ug/mL
							4-Bromophenyl phenyl ether	10 ug/mL
							4-Chloro-3-methylphenol	10 ug/mL
							4-Chloroaniline	10 ug/mL
							4-Chlorophenyl phenyl ether	10 ug/mL
							4-Nitroaniline	10 ug/mL
							4-Nitrophenol	20 ug/mL
							Acenaphthene	10 ug/mL
							Acenaphthylene	10 ug/mL
							Acetophenone	10 ug/mL
							Aniline	10 ug/mL
							Anthracene	10 ug/mL
							Azobenzene	10 ug/mL
							Benzo[a]anthracene	10 ug/mL
							Benzo[a]pyrene	10 ug/mL
							Benzo[b]fluoranthene	10 ug/mL
							Benzo[g,h,i]perylene	10 ug/mL
							Benzo[k]fluoranthene	10 ug/mL
							Benzyl alcohol	10 ug/mL
							bis (2-chloroisopropyl) ether	10 ug/mL
							Bis(2-chloroethoxy)methane	10 ug/mL
							Bis(2-chloroethyl)ether	10 ug/mL
							Bis(2-ethylhexyl) phthalate	10 ug/mL
							Butyl benzyl phthalate	10 ug/mL
							Carbazole	10 ug/mL
							Chrysene	10 ug/mL
							Di-n-butyl phthalate	10 ug/mL
							Di-n-octyl phthalate	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibenz(a,h)anthracene	10 ug/mL
							Dibenzofuran	10 ug/mL
							Diethyl phthalate	10 ug/mL
							Dimethyl phthalate	10 ug/mL
							Fluoranthene	10 ug/mL
							Fluorene	10 ug/mL
							Hexachlorobenzene	10 ug/mL
							Hexachlorobutadiene	10 ug/mL
							Hexachlorocyclopentadiene	10 ug/mL
							Hexachloroethane	10 ug/mL
							Indeno[1,2,3-cd]pyrene	10 ug/mL
							Isophorone	10 ug/mL
							N-Nitrosodi-n-propylamine	10 ug/mL
							N-Nitrosodimethylamine	10 ug/mL
							N-Nitrosodiphenylamine	20 ug/mL
							Naphthalene	10 ug/mL
							Nitrobenzene	10 ug/mL
							Pentachlorophenol	20 ug/mL
							Phenanthrene	10 ug/mL
							Phenol	10 ug/mL
							Pyrene	10 ug/mL
							Pyridine	10 ug/mL
							Benzoic acid	20 ug/mL
							Indene	20 ug/mL
							Atrazine	20 ug/mL
							Benzaldehyde	20 ug/mL
							Caprolactam	20 ug/mL
							3,3'-Dichlorobenzidine	20 ug/mL
							Benzidine	20 ug/mL
							2,4,6-Tribromophenol (Surr)	10 ug/mL
							2-Fluorobiphenyl (Surr)	10 ug/mL
							2-Fluorophenol (Surr)	10 ug/mL
							Nitrobenzene-d5 (Surr)	10 ug/mL
							Phenol-d5 (Surr)	10 ug/mL
							Terphenyl-d14 (Surr)	10 ug/mL
.SMIS80PPMW_00011	08/31/15	08/14/14	MECL2, Lot 0000073814	25 mL	SMIS R_00005	1 mL	1,4-Dichlorobenzene-d4	80 ug/mL
							Acenaphthene-d10	80 ug/mL
							Chrysene-d12	80 ug/mL
							Naphthalene-d8	80 ug/mL
							Perylene-d12	80 ug/mL
							Phenanthrene-d10	80 ug/mL
..SMIS R_00005	01/31/19	Restek, Lot A0101020			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SMLIST1 STOCK_00005	05/31/16	01/26/15	MECL2, Lot 0000093871	10 mL	SMLIST1 S1_00005	1 mL	1,1'-Biphenyl	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4,5-Tetrachlorobenzene	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,2-Diphenylhydrazine	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,3-Dinitrobenzene	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							1,4-Dioxane	100 ug/mL
							1-Methylnaphthalene	100 ug/mL
							2,3,4,6-Tetrachlorophenol	100 ug/mL
							2,4,5-Trichlorophenol	100 ug/mL
							2,4,6-Trichlorophenol	100 ug/mL
							2,4-Dichlorophenol	100 ug/mL
							2,4-Dimethylphenol	100 ug/mL
							2,4-Dinitrophenol	200 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dichlorophenol	100 ug/mL
							2,6-Dinitrotoluene	100 ug/mL
							2-Chloronaphthalene	100 ug/mL
							2-Chlorophenol	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							2-Methylphenol	100 ug/mL
							2-Nitroaniline	100 ug/mL
							2-Nitrophenol	100 ug/mL
							3 & 4 Methylphenol	100 ug/mL
							3-Nitroaniline	100 ug/mL
							4,6-Dinitro-2-methylphenol	200 ug/mL
							4-Bromophenyl phenyl ether	100 ug/mL
							4-Chloro-3-methylphenol	100 ug/mL
							4-Chloroaniline	100 ug/mL
							4-Chlorophenyl phenyl ether	100 ug/mL
							4-Nitroaniline	100 ug/mL
							4-Nitrophenol	200 ug/mL
							Acenaphthene	100 ug/mL
							Acenaphthylene	100 ug/mL
							Acetophenone	100 ug/mL
							Aniline	100 ug/mL
							Anthracene	100 ug/mL
							Azobenzene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	100 ug/mL
							Benzo[g,h,i]perylene	100 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Benzyl alcohol	100 ug/mL
							bis (2-chloroisopropyl) ether	100 ug/mL
							Bis(2-chloroethoxy)methane	100 ug/mL
							Bis(2-chloroethyl)ether	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bis(2-ethylhexyl) phthalate	100 ug/mL
							Butyl benzyl phthalate	100 ug/mL
							Carbazole	100 ug/mL
							Chrysene	100 ug/mL
							Di-n-butyl phthalate	100 ug/mL
							Di-n-octyl phthalate	100 ug/mL
							Dibenz(a,h)anthracene	100 ug/mL
							Dibenzofuran	100 ug/mL
							Diethyl phthalate	100 ug/mL
							Dimethyl phthalate	100 ug/mL
							Fluoranthene	100 ug/mL
							Fluorene	100 ug/mL
							Hexachlorobenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexachlorocyclopentadiene	100 ug/mL
							Hexachloroethane	100 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Isophorone	100 ug/mL
							N-Nitrosodi-n-propylamine	100 ug/mL
							N-Nitrosodimethylamine	100 ug/mL
							N-Nitrosodiphenylamine	200 ug/mL
							Naphthalene	100 ug/mL
							Nitrobenzene	100 ug/mL
							Pentachlorophenol	200 ug/mL
							Phenanthrene	100 ug/mL
							Phenol	100 ug/mL
							Pyrene	100 ug/mL
							Pyridine	100 ug/mL
					SMLIST1 S10_00001	1 mL	Benzoic acid	200 ug/mL
							Indene	200 ug/mL
					SMLIST1 S11_00001	1 mL	Atrazine	200 ug/mL
							Benzaldehyde	200 ug/mL
							Caprolactam	200 ug/mL
					SMLIST1 S9_00001	1 mL	3,3'-Dichlorobenzidine	200 ug/mL
							Benzidine	200 ug/mL
					SMLIST1 SURR_00003	200 uL	2,4,6-Tribromophenol (Surr)	100 ug/mL
							2-Fluorobiphenyl (Surr)	100 ug/mL
							2-Fluorophenol (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Phenol-d5 (Surr)	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL
..SMLIST1 S1_00005	05/31/16		Restek, Lot A0107399		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	2000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SMLIST1 S10_00001	06/30/16		Restek, Lot A0107943		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SMLIST1 S11_00001	06/30/16		Restek, Lot A0108035		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SMLIST1 S9_00001	07/31/16		Restek, Lot A0108174		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SMLIST1 SURR_00003	02/22/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SMLIST1 L7 W_00005	08/31/15	01/26/15	MECL2, Lot 0000093871	2 mL	SMIS80PPMW_00011	100 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SMLIST1 STOCK_00005	300 uL	1,1'-Biphenyl	15 ug/mL
							1,2,4,5-Tetrachlorobenzene	15 ug/mL
							1,2,4-Trichlorobenzene	15 ug/mL
							1,2-Dichlorobenzene	15 ug/mL
							1,2-Diphenylhydrazine	15 ug/mL
							1,3-Dichlorobenzene	15 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dinitrobenzene	15 ug/mL
							1,4-Dichlorobenzene	15 ug/mL
							1,4-Dioxane	15 ug/mL
							1-Methylnaphthalene	15 ug/mL
							2,3,4,6-Tetrachlorophenol	15 ug/mL
							2,4,5-Trichlorophenol	15 ug/mL
							2,4,6-Trichlorophenol	15 ug/mL
							2,4-Dichlorophenol	15 ug/mL
							2,4-Dimethylphenol	15 ug/mL
							2,4-Dinitrophenol	30 ug/mL
							2,4-Dinitrotoluene	15 ug/mL
							2,6-Dichlorophenol	15 ug/mL
							2,6-Dinitrotoluene	15 ug/mL
							2-Chloronaphthalene	15 ug/mL
							2-Chlorophenol	15 ug/mL
							2-Methylnaphthalene	15 ug/mL
							2-Methylphenol	15 ug/mL
							2-Nitroaniline	15 ug/mL
							2-Nitrophenol	15 ug/mL
							3 & 4 Methylphenol	15 ug/mL
							3-Nitroaniline	15 ug/mL
							4,6-Dinitro-2-methylphenol	30 ug/mL
							4-Bromophenyl phenyl ether	15 ug/mL
							4-Chloro-3-methylphenol	15 ug/mL
							4-Chloroaniline	15 ug/mL
							4-Chlorophenyl phenyl ether	15 ug/mL
							4-Nitroaniline	15 ug/mL
							4-Nitrophenol	30 ug/mL
							Acenaphthene	15 ug/mL
							Acenaphthylene	15 ug/mL
							Acetophenone	15 ug/mL
							Aniline	15 ug/mL
							Anthracene	15 ug/mL
							Azobenzene	15 ug/mL
							Benzo[a]anthracene	15 ug/mL
							Benzo[a]pyrene	15 ug/mL
							Benzo[b]fluoranthene	15 ug/mL
							Benzo[g,h,i]perylene	15 ug/mL
							Benzo[k]fluoranthene	15 ug/mL
							Benzyl alcohol	15 ug/mL
							bis (2-chloroisopropyl) ether	15 ug/mL
							Bis(2-chloroethoxy)methane	15 ug/mL
							Bis(2-chloroethyl)ether	15 ug/mL
							Bis(2-ethylhexyl) phthalate	15 ug/mL
							Butyl benzyl phthalate	15 ug/mL
							Carbazole	15 ug/mL
							Chrysene	15 ug/mL
							Di-n-butyl phthalate	15 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Di-n-octyl phthalate	15 ug/mL
							Dibenz(a,h)anthracene	15 ug/mL
							Dibenzofuran	15 ug/mL
							Diethyl phthalate	15 ug/mL
							Dimethyl phthalate	15 ug/mL
							Fluoranthene	15 ug/mL
							Fluorene	15 ug/mL
							Hexachlorobenzene	15 ug/mL
							Hexachlorobutadiene	15 ug/mL
							Hexachlorocyclopentadiene	15 ug/mL
							Hexachloroethane	15 ug/mL
							Indeno[1,2,3-cd]pyrene	15 ug/mL
							Isophorone	15 ug/mL
							N-Nitrosodi-n-propylamine	15 ug/mL
							N-Nitrosodimethylamine	15 ug/mL
							N-Nitrosodiphenylamine	30 ug/mL
							Naphthalene	15 ug/mL
							Nitrobenzene	15 ug/mL
							Pentachlorophenol	30 ug/mL
							Phenanthrene	15 ug/mL
							Phenol	15 ug/mL
							Pyrene	15 ug/mL
							Pyridine	15 ug/mL
							Benzoic acid	30 ug/mL
							Indene	30 ug/mL
							Atrazine	30 ug/mL
							Benzaldehyde	30 ug/mL
							Caprolactam	30 ug/mL
							3,3'-Dichlorobenzidine	30 ug/mL
							Benzidine	30 ug/mL
							2,4,6-Tribromophenol (Surr)	15 ug/mL
							2-Fluorobiphenyl (Surr)	15 ug/mL
							2-Fluorophenol (Surr)	15 ug/mL
							Nitrobenzene-d5 (Surr)	15 ug/mL
							Phenol-d5 (Surr)	15 ug/mL
							Terphenyl-d14 (Surr)	15 ug/mL
.SMIS80PPMW_00011	08/31/15	08/14/14	MECL2, Lot 0000073814	25 mL	SMIS R_00005	1 mL	1,4-Dichlorobenzene-d4	80 ug/mL
							Acenaphthene-d10	80 ug/mL
							Chrysene-d12	80 ug/mL
							Naphthalene-d8	80 ug/mL
							Perylene-d12	80 ug/mL
							Phenanthrene-d10	80 ug/mL
..SMIS R_00005	01/31/19	Restek, Lot A0101020			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.SMLIST1 STOCK_00005	05/31/16	01/26/15	MECL2, Lot 0000093871	10 mL	SMLIST1 S1_00005	1 mL	1,1'-Biphenyl	100 ug/mL
							1,2,4,5-Tetrachlorobenzene	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,2-Diphenylhydrazine	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,3-Dinitrobenzene	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							1,4-Dioxane	100 ug/mL
							1-Methylnaphthalene	100 ug/mL
							2,3,4,6-Tetrachlorophenol	100 ug/mL
							2,4,5-Trichlorophenol	100 ug/mL
							2,4,6-Trichlorophenol	100 ug/mL
							2,4-Dichlorophenol	100 ug/mL
							2,4-Dimethylphenol	100 ug/mL
							2,4-Dinitrophenol	200 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dichlorophenol	100 ug/mL
							2,6-Dinitrotoluene	100 ug/mL
							2-Chloronaphthalene	100 ug/mL
							2-Chlorophenol	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							2-Methylphenol	100 ug/mL
							2-Nitroaniline	100 ug/mL
							2-Nitrophenol	100 ug/mL
							3 & 4 Methylphenol	100 ug/mL
							3-Nitroaniline	100 ug/mL
							4,6-Dinitro-2-methylphenol	200 ug/mL
							4-Bromophenyl phenyl ether	100 ug/mL
							4-Chloro-3-methylphenol	100 ug/mL
							4-Chloroaniline	100 ug/mL
							4-Chlorophenyl phenyl ether	100 ug/mL
							4-Nitroaniline	100 ug/mL
							4-Nitrophenol	200 ug/mL
							Acenaphthene	100 ug/mL
							Acenaphthylene	100 ug/mL
							Acetophenone	100 ug/mL
							Aniline	100 ug/mL
							Anthracene	100 ug/mL
							Azobenzene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	100 ug/mL
							Benzo[g,h,i]perylene	100 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Benzyl alcohol	100 ug/mL
							bis (2-chloroisopropyl) ether	100 ug/mL
							Bis(2-chloroethoxy)methane	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bis(2-chloroethyl)ether	100 ug/mL
							Bis(2-ethylhexyl) phthalate	100 ug/mL
							Butyl benzyl phthalate	100 ug/mL
							Carbazole	100 ug/mL
							Chrysene	100 ug/mL
							Di-n-butyl phthalate	100 ug/mL
							Di-n-octyl phthalate	100 ug/mL
							Dibenz(a,h)anthracene	100 ug/mL
							Dibenzofuran	100 ug/mL
							Diethyl phthalate	100 ug/mL
							Dimethyl phthalate	100 ug/mL
							Fluoranthene	100 ug/mL
							Fluorene	100 ug/mL
							Hexachlorobenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexachlorocyclopentadiene	100 ug/mL
							Hexachloroethane	100 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Isophorone	100 ug/mL
							N-Nitrosodi-n-propylamine	100 ug/mL
							N-Nitrosodimethylamine	100 ug/mL
							N-Nitrosodiphenylamine	200 ug/mL
							Naphthalene	100 ug/mL
							Nitrobenzene	100 ug/mL
							Pentachlorophenol	200 ug/mL
							Phenanthrene	100 ug/mL
							Phenol	100 ug/mL
							Pyrene	100 ug/mL
							Pyridine	100 ug/mL
					SMLIST1 S10_00001	1 mL	Benzoic acid	200 ug/mL
							Indene	200 ug/mL
					SMLIST1 S11_00001	1 mL	Atrazine	200 ug/mL
							Benzaldehyde	200 ug/mL
							Caprolactam	200 ug/mL
					SMLIST1 S9_00001	1 mL	3,3'-Dichlorobenzidine	200 ug/mL
							Benzidine	200 ug/mL
					SMLIST1 SURR_00003	200 uL	2,4,6-Tribromophenol (Surr)	100 ug/mL
							2-Fluorobiphenyl (Surr)	100 ug/mL
							2-Fluorophenol (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Phenol-d5 (Surr)	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL
..SMLIST1 S1_00005	05/31/16		Restek, Lot A0107399		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	2000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SMLIST1 S10_00001	06/30/16		Restek, Lot A0107943		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SMLIST1 S11_00001	06/30/16		Restek, Lot A0108035		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SMLIST1 S9_00001	07/31/16		Restek, Lot A0108174		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SMLIST1 SURR_00003	02/22/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SMLIST1 L8 W_00005	08/31/15	01/26/15	MECL2, Lot 0000093871	2 mL	SMIS80PPMW_00011	100 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SMLIST1 STOCK_00005	400 uL	1,1'-Biphenyl	20 ug/mL
							1,2,4,5-Tetrachlorobenzene	20 ug/mL
							1,2,4-Trichlorobenzene	20 ug/mL
							1,2-Dichlorobenzene	20 ug/mL
							1,2-Diphenylhydrazine	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dichlorobenzene	20 ug/mL
							1,3-Dinitrobenzene	20 ug/mL
							1,4-Dichlorobenzene	20 ug/mL
							1,4-Dioxane	20 ug/mL
							1-Methylnaphthalene	20 ug/mL
							2,3,4,6-Tetrachlorophenol	20 ug/mL
							2,4,5-Trichlorophenol	20 ug/mL
							2,4,6-Trichlorophenol	20 ug/mL
							2,4-Dichlorophenol	20 ug/mL
							2,4-Dimethylphenol	20 ug/mL
							2,4-Dinitrophenol	40 ug/mL
							2,4-Dinitrotoluene	20 ug/mL
							2,6-Dichlorophenol	20 ug/mL
							2,6-Dinitrotoluene	20 ug/mL
							2-Chloronaphthalene	20 ug/mL
							2-Chlorophenol	20 ug/mL
							2-Methylnaphthalene	20 ug/mL
							2-Methylphenol	20 ug/mL
							2-Nitroaniline	20 ug/mL
							2-Nitrophenol	20 ug/mL
							3 & 4 Methylphenol	20 ug/mL
							3-Nitroaniline	20 ug/mL
							4,6-Dinitro-2-methylphenol	40 ug/mL
							4-Bromophenyl phenyl ether	20 ug/mL
							4-Chloro-3-methylphenol	20 ug/mL
							4-Chloroaniline	20 ug/mL
							4-Chlorophenyl phenyl ether	20 ug/mL
							4-Nitroaniline	20 ug/mL
							4-Nitrophenol	40 ug/mL
							Acenaphthene	20 ug/mL
							Acenaphthylene	20 ug/mL
							Acetophenone	20 ug/mL
							Aniline	20 ug/mL
							Anthracene	20 ug/mL
							Azobenzene	20 ug/mL
							Benzo[a]anthracene	20 ug/mL
							Benzo[a]pyrene	20 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	20 ug/mL
							Benzyl alcohol	20 ug/mL
							bis (2-chloroisopropyl) ether	20 ug/mL
							Bis(2-chloroethoxy)methane	20 ug/mL
							Bis(2-chloroethyl)ether	20 ug/mL
							Bis(2-ethylhexyl) phthalate	20 ug/mL
							Butyl benzyl phthalate	20 ug/mL
							Carbazole	20 ug/mL
							Chrysene	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Di-n-butyl phthalate	20 ug/mL
							Di-n-octyl phthalate	20 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Dibenzofuran	20 ug/mL
							Diethyl phthalate	20 ug/mL
							Dimethyl phthalate	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Hexachlorobenzene	20 ug/mL
							Hexachlorobutadiene	20 ug/mL
							Hexachlorocyclopentadiene	20 ug/mL
							Hexachloroethane	20 ug/mL
							Indeno[1,2,3-cd]pyrene	20 ug/mL
							Isophorone	20 ug/mL
							N-Nitrosodi-n-propylamine	20 ug/mL
							N-Nitrosodimethylamine	20 ug/mL
							N-Nitrosodiphenylamine	40 ug/mL
							Naphthalene	20 ug/mL
							Nitrobenzene	20 ug/mL
							Pentachlorophenol	40 ug/mL
							Phenanthrene	20 ug/mL
							Phenol	20 ug/mL
							Pyrene	20 ug/mL
							Pyridine	20 ug/mL
							Benzoic acid	40 ug/mL
							Indene	40 ug/mL
							Atrazine	40 ug/mL
							Benzaldehyde	40 ug/mL
							Caprolactam	40 ug/mL
							3,3'-Dichlorobenzidine	40 ug/mL
							Benzidine	40 ug/mL
							2,4,6-Tribromophenol (Surr)	20 ug/mL
							2-Fluorobiphenyl (Surr)	20 ug/mL
							2-Fluorophenol (Surr)	20 ug/mL
							Nitrobenzene-d5 (Surr)	20 ug/mL
							Phenol-d5 (Surr)	20 ug/mL
							Terphenyl-d14 (Surr)	20 ug/mL
.SMIS80PPMW_00011	08/31/15	08/14/14	MECL2, Lot 0000073814	25 mL	SMIS R_00005	1 mL	1,4-Dichlorobenzene-d4	80 ug/mL
							Acenaphthene-d10	80 ug/mL
							Chrysene-d12	80 ug/mL
							Naphthalene-d8	80 ug/mL
							Perylene-d12	80 ug/mL
							Phenanthrene-d10	80 ug/mL
..SMIS R_00005	01/31/19		Restek, Lot A0101020		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenanthrene-d10	2000 ug/mL
.SMLIST1 STOCK_00005	05/31/16	01/26/15	MECL2, Lot 0000093871	10 mL	SMLIST1 S1_00005	1 mL	1,1'-Biphenyl	100 ug/mL
							1,2,4,5-Tetrachlorobenzene	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,2-Diphenylhydrazine	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,3-Dinitrobenzene	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							1,4-Dioxane	100 ug/mL
							1-Methylnaphthalene	100 ug/mL
							2,3,4,6-Tetrachlorophenol	100 ug/mL
							2,4,5-Trichlorophenol	100 ug/mL
							2,4,6-Trichlorophenol	100 ug/mL
							2,4-Dichlorophenol	100 ug/mL
							2,4-Dimethylphenol	100 ug/mL
							2,4-Dinitrophenol	200 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dichlorophenol	100 ug/mL
							2,6-Dinitrotoluene	100 ug/mL
							2-Chloronaphthalene	100 ug/mL
							2-Chlorophenol	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							2-Methylphenol	100 ug/mL
							2-Nitroaniline	100 ug/mL
							2-Nitrophenol	100 ug/mL
							3 & 4 Methylphenol	100 ug/mL
							3-Nitroaniline	100 ug/mL
							4,6-Dinitro-2-methylphenol	200 ug/mL
							4-Bromophenyl phenyl ether	100 ug/mL
							4-Chloro-3-methylphenol	100 ug/mL
							4-Chloroaniline	100 ug/mL
							4-Chlorophenyl phenyl ether	100 ug/mL
							4-Nitroaniline	100 ug/mL
							4-Nitrophenol	200 ug/mL
							Acenaphthene	100 ug/mL
							Acenaphthylene	100 ug/mL
							Acetophenone	100 ug/mL
							Aniline	100 ug/mL
							Anthracene	100 ug/mL
							Azobenzene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	100 ug/mL
							Benzo[g,h,i]perylene	100 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Benzyl alcohol	100 ug/mL
							bis (2-chloroisopropyl) ether	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bis(2-chloroethoxy)methane	100 ug/mL
							Bis(2-chloroethyl)ether	100 ug/mL
							Bis(2-ethylhexyl) phthalate	100 ug/mL
							Butyl benzyl phthalate	100 ug/mL
							Carbazole	100 ug/mL
							Chrysene	100 ug/mL
							Di-n-butyl phthalate	100 ug/mL
							Di-n-octyl phthalate	100 ug/mL
							Dibenz(a,h)anthracene	100 ug/mL
							Dibenzofuran	100 ug/mL
							Diethyl phthalate	100 ug/mL
							Dimethyl phthalate	100 ug/mL
							Fluoranthene	100 ug/mL
							Fluorene	100 ug/mL
							Hexachlorobenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexachlorocyclopentadiene	100 ug/mL
							Hexachloroethane	100 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Isophorone	100 ug/mL
							N-Nitrosodi-n-propylamine	100 ug/mL
							N-Nitrosodimethylamine	100 ug/mL
							N-Nitrosodiphenylamine	200 ug/mL
							Naphthalene	100 ug/mL
							Nitrobenzene	100 ug/mL
							Pentachlorophenol	200 ug/mL
							Phenanthrene	100 ug/mL
							Phenol	100 ug/mL
							Pyrene	100 ug/mL
							Pyridine	100 ug/mL
					SMLIST1 S10_00001	1 mL	Benzoic acid	200 ug/mL
							Indene	200 ug/mL
					SMLIST1 S11_00001	1 mL	Atrazine	200 ug/mL
							Benzaldehyde	200 ug/mL
							Caprolactam	200 ug/mL
					SMLIST1 S9_00001	1 mL	3,3'-Dichlorobenzidine	200 ug/mL
							Benzidine	200 ug/mL
					SMLIST1 SURR_00003	200 uL	2,4,6-Tribromophenol (Surr)	100 ug/mL
							2-Fluorobiphenyl (Surr)	100 ug/mL
							2-Fluorophenol (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Phenol-d5 (Surr)	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL
..SMLIST1 S1_00005	05/31/16		Restek, Lot A0107399		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	2000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SMLIST1 S10_00001	06/30/16		Restek, Lot A0107943		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SMLIST1 S11_00001	06/30/16		Restek, Lot A0108035		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SMLIST1 S9_00001	07/31/16		Restek, Lot A0108174		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SMLIST1 SURR_00003	02/22/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SMLIST1 L9 W_00005	08/31/15	01/26/15	MECL2, Lot 0000093871	2 mL	SMIS80PPMW_00011	100 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SMLIST1 STOCK_00005	500 uL	1,1'-Biphenyl	25 ug/mL
							1,2,4,5-Tetrachlorobenzene	25 ug/mL
							1,2,4-Trichlorobenzene	25 ug/mL
							1,2-Dichlorobenzene	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Diphenylhydrazine	25 ug/mL
							1,3-Dichlorobenzene	25 ug/mL
							1,3-Dinitrobenzene	25 ug/mL
							1,4-Dichlorobenzene	25 ug/mL
							1,4-Dioxane	25 ug/mL
							1-Methylnaphthalene	25 ug/mL
							2,3,4,6-Tetrachlorophenol	25 ug/mL
							2,4,5-Trichlorophenol	25 ug/mL
							2,4,6-Trichlorophenol	25 ug/mL
							2,4-Dichlorophenol	25 ug/mL
							2,4-Dimethylphenol	25 ug/mL
							2,4-Dinitrophenol	50 ug/mL
							2,4-Dinitrotoluene	25 ug/mL
							2,6-Dichlorophenol	25 ug/mL
							2,6-Dinitrotoluene	25 ug/mL
							2-Chloronaphthalene	25 ug/mL
							2-Chlorophenol	25 ug/mL
							2-Methylnaphthalene	25 ug/mL
							2-Methylphenol	25 ug/mL
							2-Nitroaniline	25 ug/mL
							2-Nitrophenol	25 ug/mL
							3 & 4 Methylphenol	25 ug/mL
							3-Nitroaniline	25 ug/mL
							4,6-Dinitro-2-methylphenol	50 ug/mL
							4-Bromophenyl phenyl ether	25 ug/mL
							4-Chloro-3-methylphenol	25 ug/mL
							4-Chloroaniline	25 ug/mL
							4-Chlorophenyl phenyl ether	25 ug/mL
							4-Nitroaniline	25 ug/mL
							4-Nitrophenol	50 ug/mL
							Acenaphthene	25 ug/mL
							Acenaphthylene	25 ug/mL
							Acetophenone	25 ug/mL
							Aniline	25 ug/mL
							Anthracene	25 ug/mL
							Azobenzene	25 ug/mL
							Benzo[a]anthracene	25 ug/mL
							Benzo[a]pyrene	25 ug/mL
							Benzo[b]fluoranthene	25 ug/mL
							Benzo[g,h,i]perylene	25 ug/mL
							Benzo[k]fluoranthene	25 ug/mL
							Benzyl alcohol	25 ug/mL
							bis (2-chloroisopropyl) ether	25 ug/mL
							Bis(2-chloroethoxy)methane	25 ug/mL
							Bis(2-chloroethyl)ether	25 ug/mL
							Bis(2-ethylhexyl) phthalate	25 ug/mL
							Butyl benzyl phthalate	25 ug/mL
							Carbazole	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chrysene	25 ug/mL
							Di-n-butyl phthalate	25 ug/mL
							Di-n-octyl phthalate	25 ug/mL
							Dibenz(a,h)anthracene	25 ug/mL
							Dibenzofuran	25 ug/mL
							Diethyl phthalate	25 ug/mL
							Dimethyl phthalate	25 ug/mL
							Fluoranthene	25 ug/mL
							Fluorene	25 ug/mL
							Hexachlorobenzene	25 ug/mL
							Hexachlorobutadiene	25 ug/mL
							Hexachlorocyclopentadiene	25 ug/mL
							Hexachloroethane	25 ug/mL
							Indeno[1,2,3-cd]pyrene	25 ug/mL
							Isophorone	25 ug/mL
							N-Nitrosodi-n-propylamine	25 ug/mL
							N-Nitrosodimethylamine	25 ug/mL
							N-Nitrosodiphenylamine	50 ug/mL
							Naphthalene	25 ug/mL
							Nitrobenzene	25 ug/mL
							Pentachlorophenol	50 ug/mL
							Phenanthrene	25 ug/mL
							Phenol	25 ug/mL
							Pyrene	25 ug/mL
							Pyridine	25 ug/mL
							Benzoic acid	50 ug/mL
							Indene	50 ug/mL
							Atrazine	50 ug/mL
							Benzaldehyde	50 ug/mL
							Caprolactam	50 ug/mL
							3,3'-Dichlorobenzidine	50 ug/mL
							Benzidine	50 ug/mL
							2,4,6-Tribromophenol (Surr)	25 ug/mL
							2-Fluorobiphenyl (Surr)	25 ug/mL
							2-Fluorophenol (Surr)	25 ug/mL
							Nitrobenzene-d5 (Surr)	25 ug/mL
							Phenol-d5 (Surr)	25 ug/mL
							Terphenyl-d14 (Surr)	25 ug/mL
.SMIS80PPMW_00011	08/31/15	08/14/14	MECL2, Lot 0000073814	25 mL	SMIS R_00005	1 mL	1,4-Dichlorobenzene-d4	80 ug/mL
							Acenaphthene-d10	80 ug/mL
							Chrysene-d12	80 ug/mL
							Naphthalene-d8	80 ug/mL
							Perylene-d12	80 ug/mL
							Phenanthrene-d10	80 ug/mL
..SMIS R_00005	01/31/19	Restek, Lot A0101020			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SMLIST1 STOCK_00005	05/31/16	01/26/15	MECL2, Lot 0000093871	10 mL	SMLIST1 S1_00005	1 mL	1,1'-Biphenyl	100 ug/mL
							1,2,4,5-Tetrachlorobenzene	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,2-Diphenylhydrazine	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,3-Dinitrobenzene	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							1,4-Dioxane	100 ug/mL
							1-Methylnaphthalene	100 ug/mL
							2,3,4,6-Tetrachlorophenol	100 ug/mL
							2,4,5-Trichlorophenol	100 ug/mL
							2,4,6-Trichlorophenol	100 ug/mL
							2,4-Dichlorophenol	100 ug/mL
							2,4-Dimethylphenol	100 ug/mL
							2,4-Dinitrophenol	200 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dichlorophenol	100 ug/mL
							2,6-Dinitrotoluene	100 ug/mL
							2-Chloronaphthalene	100 ug/mL
							2-Chlorophenol	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							2-Methylphenol	100 ug/mL
							2-Nitroaniline	100 ug/mL
							2-Nitrophenol	100 ug/mL
							3 & 4 Methylphenol	100 ug/mL
							3-Nitroaniline	100 ug/mL
							4,6-Dinitro-2-methylphenol	200 ug/mL
							4-Bromophenyl phenyl ether	100 ug/mL
							4-Chloro-3-methylphenol	100 ug/mL
							4-Chloroaniline	100 ug/mL
							4-Chlorophenyl phenyl ether	100 ug/mL
							4-Nitroaniline	100 ug/mL
							4-Nitrophenol	200 ug/mL
							Acenaphthene	100 ug/mL
							Acenaphthylene	100 ug/mL
							Acetophenone	100 ug/mL
							Aniline	100 ug/mL
							Anthracene	100 ug/mL
							Azobenzene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	100 ug/mL
							Benzo[g,h,i]perylene	100 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Benzyl alcohol	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							bis (2-chloroisopropyl) ether	100 ug/mL
							Bis(2-chloroethoxy)methane	100 ug/mL
							Bis(2-chloroethyl)ether	100 ug/mL
							Bis(2-ethylhexyl) phthalate	100 ug/mL
							Butyl benzyl phthalate	100 ug/mL
							Carbazole	100 ug/mL
							Chrysene	100 ug/mL
							Di-n-butyl phthalate	100 ug/mL
							Di-n-octyl phthalate	100 ug/mL
							Dibenz(a,h)anthracene	100 ug/mL
							Dibenzofuran	100 ug/mL
							Diethyl phthalate	100 ug/mL
							Dimethyl phthalate	100 ug/mL
							Fluoranthene	100 ug/mL
							Fluorene	100 ug/mL
							Hexachlorobenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexachlorocyclopentadiene	100 ug/mL
							Hexachloroethane	100 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Isophorone	100 ug/mL
							N-Nitrosodi-n-propylamine	100 ug/mL
							N-Nitrosodimethylamine	100 ug/mL
							N-Nitrosodiphenylamine	200 ug/mL
							Naphthalene	100 ug/mL
							Nitrobenzene	100 ug/mL
							Pentachlorophenol	200 ug/mL
							Phenanthrene	100 ug/mL
							Phenol	100 ug/mL
							Pyrene	100 ug/mL
							Pyridine	100 ug/mL
					SMLIST1 S10_00001	1 mL	Benzoic acid	200 ug/mL
							Indene	200 ug/mL
					SMLIST1 S11_00001	1 mL	Atrazine	200 ug/mL
							Benzaldehyde	200 ug/mL
							Caprolactam	200 ug/mL
					SMLIST1 S9_00001	1 mL	3,3'-Dichlorobenzidine	200 ug/mL
							Benzidine	200 ug/mL
					SMLIST1 SURR_00003	200 uL	2,4,6-Tribromophenol (Surr)	100 ug/mL
							2-Fluorobiphenyl (Surr)	100 ug/mL
							2-Fluorophenol (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Phenol-d5 (Surr)	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL
..SMLIST1 S1_00005	05/31/16		Restek, Lot A0107399		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	2000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SMLIST1 S10_00001	06/30/16		Restek, Lot A0107943		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SMLIST1 S11_00001	06/30/16		Restek, Lot A0108035		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SMLIST1 S9_00001	07/31/16		Restek, Lot A0108174		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SMLIST1 SURR_00003	02/22/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SMLIST1 SS W_00004	08/31/15	01/26/15	MECL2, Lot 0000093871	2 mL	SMLIST1 SS ST_00004	200 uL	1,2,4-Trichlorobenzene	10 ug/mL
							1,2-Dichlorobenzene	10 ug/mL
							1,3-Dichlorobenzene	10 ug/mL
							1,4-Dichlorobenzene	10 ug/mL
							2,4,5-Trichlorophenol	10 ug/mL
							2,4,6-Trichlorophenol	10 ug/mL
							2,4-Dichlorophenol	10 ug/mL
							2,4-Dimethylphenol	10 ug/mL
							2,4-Dinitrophenol	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dinitrotoluene	10 ug/mL
							2,6-Dinitrotoluene	10 ug/mL
							2-Chloronaphthalene	10 ug/mL
							2-Chlorophenol	10 ug/mL
							2-Methylnaphthalene	10 ug/mL
							2-Methylphenol	10 ug/mL
							2-Nitroaniline	10 ug/mL
							2-Nitrophenol	10 ug/mL
							3 & 4 Methylphenol	10 ug/mL
							3-Nitroaniline	10 ug/mL
							4,6-Dinitro-2-methylphenol	20 ug/mL
							4-Bromophenyl phenyl ether	10 ug/mL
							4-Chloro-3-methylphenol	10 ug/mL
							4-Chloroaniline	10 ug/mL
							4-Chlorophenyl phenyl ether	10 ug/mL
							4-Nitroaniline	10 ug/mL
							4-Nitrophenol	20 ug/mL
							Acenaphthene	10 ug/mL
							Acenaphthylene	10 ug/mL
							Anthracene	10 ug/mL
							Benzo[a]anthracene	10 ug/mL
							Benzo[a]pyrene	10 ug/mL
							Benzo[b]fluoranthene	10 ug/mL
							Benzo[g,h,i]perylene	10 ug/mL
							Benzo[k]fluoranthene	10 ug/mL
							Benzyl alcohol	10 ug/mL
							bis (2-chloroisopropyl) ether	10 ug/mL
							Bis(2-chloroethoxy)methane	10 ug/mL
							Bis(2-chloroethyl)ether	10 ug/mL
							Bis(2-ethylhexyl) phthalate	10 ug/mL
							Butyl benzyl phthalate	10 ug/mL
							Carbazole	10 ug/mL
							Chrysene	10 ug/mL
							Di-n-butyl phthalate	10 ug/mL
							Di-n-octyl phthalate	10 ug/mL
							Dibenz(a,h)anthracene	10 ug/mL
							Dibenzofuran	10 ug/mL
							Diethyl phthalate	10 ug/mL
							Dimethyl phthalate	10 ug/mL
							Fluoranthene	10 ug/mL
							Fluorene	10 ug/mL
							Hexachlorobenzene	10 ug/mL
							Hexachlorobutadiene	10 ug/mL
							Hexachlorocyclopentadiene	10 ug/mL
							Hexachloroethane	10 ug/mL
							Indeno[1,2,3-cd]pyrene	10 ug/mL
							Isophorone	10 ug/mL
							N-Nitrosodi-n-propylamine	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosodiphenylamine	20 ug/mL
							Naphthalene	10 ug/mL
							Nitrobenzene	10 ug/mL
							Pentachlorophenol	20 ug/mL
							Phenanthrene	10 ug/mL
							Phenol	10 ug/mL
							Pyrene	10 ug/mL
							3,3'-Dichlorobenzidine	20 ug/mL
							Benzoic acid	20 ug/mL
							2,4,6-Tribromophenol (Surr)	10 ug/mL
							2-Fluorobiphenyl (Surr)	10 ug/mL
							2-Fluorophenol (Surr)	10 ug/mL
							Nitrobenzene-d5 (Surr)	10 ug/mL
							Phenol-d5 (Surr)	10 ug/mL
							Terphenyl-d14 (Surr)	10 ug/mL
.SMLIST1 SS ST_00004	06/30/16	01/26/15	MECL2, Lot 0000093871	10 mL	SMLIST1 SS S1_00004	1 mL	1,2,4-Trichlorobenzene	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							2,4,5-Trichlorophenol	100 ug/mL
							2,4,6-Trichlorophenol	100 ug/mL
							2,4-Dichlorophenol	100 ug/mL
							2,4-Dimethylphenol	100 ug/mL
							2,4-Dinitrophenol	200 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dinitrotoluene	100 ug/mL
							2-Chloronaphthalene	100 ug/mL
							2-Chlorophenol	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							2-Methylphenol	100 ug/mL
							2-Nitroaniline	100 ug/mL
							2-Nitrophenol	100 ug/mL
							3 & 4 Methylphenol	100 ug/mL
							3-Nitroaniline	100 ug/mL
							4,6-Dinitro-2-methylphenol	200 ug/mL
							4-Bromophenyl phenyl ether	100 ug/mL
							4-Chloro-3-methylphenol	100 ug/mL
							4-Chloroaniline	100 ug/mL
							4-Chlorophenyl phenyl ether	100 ug/mL
							4-Nitroaniline	100 ug/mL
							4-Nitrophenol	200 ug/mL
							Acenaphthene	100 ug/mL
							Acenaphthylene	100 ug/mL
							Anthracene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	100 ug/mL
							Benzo[g,h,i]perylene	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[k]fluoranthene	100 ug/mL
							Benzyl alcohol	100 ug/mL
							bis (2-chloroisopropyl) ether	100 ug/mL
							Bis(2-chloroethoxy)methane	100 ug/mL
							Bis(2-chloroethyl)ether	100 ug/mL
							Bis(2-ethylhexyl) phthalate	100 ug/mL
							Butyl benzyl phthalate	100 ug/mL
							Carbazole	100 ug/mL
							Chrysene	100 ug/mL
							Di-n-butyl phthalate	100 ug/mL
							Di-n-octyl phthalate	100 ug/mL
							Dibenz(a,h)anthracene	100 ug/mL
							Dibenzofuran	100 ug/mL
							Diethyl phthalate	100 ug/mL
							Dimethyl phthalate	100 ug/mL
							Fluoranthene	100 ug/mL
							Fluorene	100 ug/mL
							Hexachlorobenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexachlorocyclopentadiene	100 ug/mL
							Hexachloroethane	100 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Isophorone	100 ug/mL
							N-Nitrosodi-n-propylamine	100 ug/mL
							N-Nitrosodiphenylamine	200 ug/mL
							Naphthalene	100 ug/mL
							Nitrobenzene	100 ug/mL
							Pentachlorophenol	200 ug/mL
							Phenanthrene	100 ug/mL
							Phenol	100 ug/mL
							Pyrene	100 ug/mL
					SMLIST1 SS S9_00001	1 mL	3,3'-Dichlorobenzidine	200 ug/mL
					SMLIST1SS S10_00001	1 mL	Benzoic acid	200 ug/mL
					SMLIST1SS SUR_00002	200 uL	2,4,6-Tribromophenol (Surr)	100 ug/mL
							2-Fluorobiphenyl (Surr)	100 ug/mL
							2-Fluorophenol (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Phenol-d5 (Surr)	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL
..SMLIST1 SS S1_00004	06/30/16		Restek, Lot A0107697		(Purchased Reagent)		1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							bis (2-chloroisopropyl) ether	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosodiphenylamine	2000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
..SMLIST1 SS S9_00001	07/31/16		Restek, Lot A0108170		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
..SMLIST1SS S10_00001	06/30/16		Restek, Lot A0107944		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..SMLIST1SS SUR_00002	09/30/18		Restek, Lot A092712		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL

Reagent

EXLIST1_S1_00001

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569729 **Lot No.:** A0109703

Description : 8270 List 1 / Std #1 MegaMix (2015)

8270 List 1 / Std #1 MegaMix (2015) 500-2000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 10 mL **Pkg Amt:** > 5 mL

Expiration Date : September 30, 2016 **Storage:** 10°C or colder

Handling: Carcinogen/reproductive toxin. Photosensitive. Sonicate.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dioxane **CAS #** 123-91-1 **Purity** 99%	(Lot SHBF2002V)	1,001.8 µg/mL	+/- 5.8246 +/- 10.9684 +/- 18.6042	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Pyridine **CAS #** 110-86-1 **Purity** 99%	(Lot SHBC7174V)	1,004.7 µg/mL	+/- 5.8414 +/- 11.0002 +/- 18.6581	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	N-Nitrosodimethylamine **CAS #** 62-75-9 **Purity** 99%	(Lot 3498100)	1,000.0 µg/mL	+/- 5.8141 +/- 10.9487 +/- 18.5708	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	Aniline **CAS #** 62-53-3 **Purity** 99%	(Lot K22Z462)	1,000.9 µg/mL	+/- 5.8193 +/- 10.9586 +/- 18.5875	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Bis(2-chloroethyl)ether **CAS #** 111-44-4 **Purity** 99%	(Lot 45296HKV)	1,001.9 µg/mL	+/- 5.8251 +/- 10.9695 +/- 18.6061	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	2-Chlorophenol **CAS #** 95-57-8 **Purity** 99%	(Lot MKBD3900V)	1,001.4 µg/mL	+/- 5.8222 +/- 10.9640 +/- 18.5968	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Phenol **CAS #** 108-95-2 **Purity** 99%	(Lot SHBC6998V)	1,000.3 µg/mL	+/- 5.8158 +/- 10.9520 +/- 18.5764	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

8	n-Decane (C10)		1,002.1	µg/mL	+/-	5.8263	µg/mL	Gravimetric
	CAS # 124-18-5	(Lot SHBF1587V)			+/-	10.9717	µg/mL	Unstressed
	Purity 99%				+/-	18.6098	µg/mL	Stressed
9	1,4-Dichlorobenzene		1,001.1	µg/mL	+/-	5.8205	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBL3891V)			+/-	10.9607	µg/mL	Unstressed
	Purity 99%				+/-	18.5912	µg/mL	Stressed
10	1,3-Dichlorobenzene		1,001.6	µg/mL	+/-	5.8234	µg/mL	Gravimetric
	CAS # 541-73-1	(Lot BCBC1891V)			+/-	10.9662	µg/mL	Unstressed
	Purity 99%				+/-	18.6005	µg/mL	Stressed
11	1,2-Dichlorobenzene		1,001.4	µg/mL	+/-	5.8222	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot 68996CMV)			+/-	10.9640	µg/mL	Unstressed
	Purity 99%				+/-	18.5968	µg/mL	Stressed
12	Benzyl alcohol		1,001.3	µg/mL	+/-	5.8216	µg/mL	Gravimetric
	CAS # 100-51-6	(Lot SHBC1850V)			+/-	10.9629	µg/mL	Unstressed
	Purity 99%				+/-	18.5949	µg/mL	Stressed
13	2,2'-oxybis(1-chloropropane)		1,000.8	µg/mL	+/-	5.8187	µg/mL	Gravimetric
	CAS # 108-60-1	(Lot 2-KMW-57-8)			+/-	10.9575	µg/mL	Unstressed
	Purity 99%				+/-	18.5856	µg/mL	Stressed
14	2-Methylphenol (o-cresol)		1,002.9	µg/mL	+/-	5.8309	µg/mL	Gravimetric
	CAS # 95-48-7	(Lot SHBC1479V)			+/-	10.9804	µg/mL	Unstressed
	Purity 99%				+/-	18.6246	µg/mL	Stressed
15	Hexachloroethane		1,000.9	µg/mL	+/-	5.8193	µg/mL	Gravimetric
	CAS # 67-72-1	(Lot 4H3SF)			+/-	10.9586	µg/mL	Unstressed
	Purity 99%				+/-	18.5875	µg/mL	Stressed
16	Acetophenone		1,003.6	µg/mL	+/-	5.8350	µg/mL	Gravimetric
	CAS # 98-86-2	(Lot MKBR7156V)			+/-	10.9881	µg/mL	Unstressed
	Purity 99%				+/-	18.6376	µg/mL	Stressed
17	N-Nitroso-di-n-propylamine		1,001.8	µg/mL	+/-	5.8246	µg/mL	Gravimetric
	CAS # 621-64-7	(Lot OPAGF)			+/-	10.9684	µg/mL	Unstressed
	Purity 99%				+/-	18.6042	µg/mL	Stressed
18	4-Methylphenol (p-cresol)		501.2	µg/mL	+/-	2.9208	µg/mL	Gravimetric
	CAS # 106-44-5	(Lot 49396APV)			+/-	5.4911	µg/mL	Unstressed
	Purity 99%				+/-	9.3098	µg/mL	Stressed
19	3-Methylphenol (m-cresol)		500.2	µg/mL	+/-	2.9149	µg/mL	Gravimetric
	CAS # 108-39-4	(Lot SHBD0627V)			+/-	5.4801	µg/mL	Unstressed
	Purity 99%				+/-	9.2912	µg/mL	Stressed
20	Nitrobenzene		1,001.7	µg/mL	+/-	5.8240	µg/mL	Gravimetric
	CAS # 98-95-3	(Lot SHBB0246V)			+/-	10.9673	µg/mL	Unstressed
	Purity 99%				+/-	18.6024	µg/mL	Stressed
21	Isophorone		1,001.1	µg/mL	+/-	5.8205	µg/mL	Gravimetric
	CAS # 78-59-1	(Lot MKBG2442V)			+/-	10.9607	µg/mL	Unstressed
	Purity 99%				+/-	18.5912	µg/mL	Stressed
22	2-Nitrophenol		1,003.1	µg/mL	+/-	5.8321	µg/mL	Gravimetric
	CAS # 88-75-5	(Lot BCBH7602V)			+/-	10.9826	µg/mL	Unstressed
	Purity 99%				+/-	18.6284	µg/mL	Stressed
23	2,4-Dimethylphenol		1,003.0	µg/mL	+/-	5.8315	µg/mL	Gravimetric
	CAS # 105-67-9	(Lot 10165155)			+/-	10.9815	µg/mL	Unstressed
	Purity 99%				+/-	18.6265	µg/mL	Stressed

24	Bis(2-chloroethoxy)methane		1,002.1	µg/mL	+/-	5.8263	µg/mL	Gravimetric
	CAS # 111-91-1	(Lot 2238100)			+/-	10.9717	µg/mL	Unstressed
	Purity 99%				+/-	18.6098	µg/mL	Stressed
25	2,4-Dichlorophenol		1,002.8	µg/mL	+/-	5.8304	µg/mL	Gravimetric
	CAS # 120-83-2	(Lot BCBH1617V)			+/-	10.9794	µg/mL	Unstressed
	Purity 99%				+/-	18.6228	µg/mL	Stressed
26	1,2,4-Trichlorobenzene		1,000.4	µg/mL	+/-	5.8163	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot SHBC5541V)			+/-	10.9529	µg/mL	Unstressed
	Purity 98%				+/-	18.5779	µg/mL	Stressed
27	Naphthalene		1,002.5	µg/mL	+/-	5.8286	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBH4351V)			+/-	10.9761	µg/mL	Unstressed
	Purity 99%				+/-	18.6172	µg/mL	Stressed
28	2,6-Dichlorophenol		1,001.7	µg/mL	+/-	5.8240	µg/mL	Gravimetric
	CAS # 87-65-0	(Lot MKBN2776V)			+/-	10.9673	µg/mL	Unstressed
	Purity 99%				+/-	18.6024	µg/mL	Stressed
29	4-Chloroaniline		1,000.3	µg/mL	+/-	5.8157	µg/mL	Gravimetric
	CAS # 106-47-8	(Lot 12528PH)			+/-	10.9518	µg/mL	Unstressed
	Purity 98%				+/-	18.5761	µg/mL	Stressed
30	Hexachlorobutadiene		1,002.1	µg/mL	+/-	5.8260	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot J31X013)			+/-	10.9711	µg/mL	Unstressed
	Purity 98%				+/-	18.6089	µg/mL	Stressed
31	2-Methylnaphthalene		1,000.2	µg/mL	+/-	5.8154	µg/mL	Gravimetric
	CAS # 91-57-6	(Lot 19399MJV)			+/-	10.9512	µg/mL	Unstressed
	Purity 96%				+/-	18.5749	µg/mL	Stressed
32	4-Chloro-3-methylphenol		1,000.9	µg/mL	+/-	5.8193	µg/mL	Gravimetric
	CAS # 59-50-7	(Lot STBC0769V)			+/-	10.9586	µg/mL	Unstressed
	Purity 99%				+/-	18.5875	µg/mL	Stressed
33	1-Methylnaphthalene		990.0	µg/mL	+/-	5.7692	µg/mL	Gravimetric
	CAS # 90-12-0	(Lot 525000-10)			+/-	10.8463	µg/mL	Unstressed
	Purity 99%				+/-	18.3892	µg/mL	Stressed
34	1,2,4,5-Tetrachlorobenzene		1,000.2	µg/mL	+/-	5.8152	µg/mL	Gravimetric
	CAS # 95-94-3	(Lot 06024AIV)			+/-	10.9509	µg/mL	Unstressed
	Purity 99%				+/-	18.5745	µg/mL	Stressed
35	Hexachlorocyclopentadiene		1,000.2	µg/mL	+/-	5.8152	µg/mL	Gravimetric
	CAS # 77-47-4	(Lot 3691100)			+/-	10.9509	µg/mL	Unstressed
	Purity 99%				+/-	18.5745	µg/mL	Stressed
36	2,4,6-Trichlorophenol		999.9	µg/mL	+/-	5.8135	µg/mL	Gravimetric
	CAS # 88-06-2	(Lot MKBL4698V)			+/-	10.9475	µg/mL	Unstressed
	Purity 98%				+/-	18.5688	µg/mL	Stressed
37	2,4,5-Trichlorophenol		1,002.2	µg/mL	+/-	5.8269	µg/mL	Gravimetric
	CAS # 95-95-4	(Lot FHM01)			+/-	10.9728	µg/mL	Unstressed
	Purity 99%				+/-	18.6116	µg/mL	Stressed
38	2-Chloronaphthalene		1,000.3	µg/mL	+/-	5.8158	µg/mL	Gravimetric
	CAS # 91-58-7	(Lot FIJ01)			+/-	10.9520	µg/mL	Unstressed
	Purity 99%				+/-	18.5764	µg/mL	Stressed
39	Biphenyl		1,002.7	µg/mL	+/-	5.8298	µg/mL	Gravimetric
	CAS # 92-52-4	(Lot 1277976)			+/-	10.9783	µg/mL	Unstressed
	Purity 99%				+/-	18.6209	µg/mL	Stressed

40	2-Nitroaniline		1,003.4	µg/mL	+/-	5.8339	µg/mL	Gravimetric
	CAS # 88-74-4	(Lot MKBK7597V)			+/-	10.9859	µg/mL	Unstressed
	Purity 99%				+/-	18.6339	µg/mL	Stressed
41	Acenaphthylene		1,003.3	µg/mL	+/-	5.8333	µg/mL	Gravimetric
	CAS # 208-96-8	(Lot ER030707-01)			+/-	10.9848	µg/mL	Unstressed
	Purity 99%				+/-	18.6321	µg/mL	Stressed
42	1,3-Dinitrobenzene		1,001.2	µg/mL	+/-	5.8211	µg/mL	Gravimetric
	CAS # 99-65-0	(Lot BCBB1436V)			+/-	10.9618	µg/mL	Unstressed
	Purity 99%				+/-	18.5931	µg/mL	Stressed
43	Dimethylphthalate		1,000.5	µg/mL	+/-	5.8170	µg/mL	Gravimetric
	CAS # 131-11-3	(Lot 10117699)			+/-	10.9542	µg/mL	Unstressed
	Purity 99%				+/-	18.5801	µg/mL	Stressed
44	2,6-Dinitrotoluene		1,000.9	µg/mL	+/-	5.8193	µg/mL	Gravimetric
	CAS # 606-20-2	(Lot 1437483V)			+/-	10.9586	µg/mL	Unstressed
	Purity 99%				+/-	18.5875	µg/mL	Stressed
45	Acenaphthene		1,003.3	µg/mL	+/-	5.8333	µg/mL	Gravimetric
	CAS # 83-32-9	(Lot MKBH3748V)			+/-	10.9848	µg/mL	Unstressed
	Purity 99%				+/-	18.6321	µg/mL	Stressed
46	2,4-Dinitrophenol		2,000.1	µg/mL	+/-	11.6288	µg/mL	Gravimetric
	CAS # 51-28-5	(Lot STBD8351V)			+/-	21.8985	µg/mL	Unstressed
	Purity 99%				+/-	37.1434	µg/mL	Stressed
47	Dibenzofuran		1,003.0	µg/mL	+/-	5.8315	µg/mL	Gravimetric
	CAS # 132-64-9	(Lot MKBH8392V)			+/-	10.9815	µg/mL	Unstressed
	Purity 99%				+/-	18.6265	µg/mL	Stressed
48	3-Nitroaniline		1,000.8	µg/mL	+/-	5.8190	µg/mL	Gravimetric
	CAS # 99-09-2	(Lot MKBH5131V)			+/-	10.9580	µg/mL	Unstressed
	Purity 97%				+/-	18.5865	µg/mL	Stressed
49	2,4-Dinitrotoluene		1,001.8	µg/mL	+/-	5.8246	µg/mL	Gravimetric
	CAS # 121-14-2	(Lot MKAA0690V)			+/-	10.9684	µg/mL	Unstressed
	Purity 99%				+/-	18.6042	µg/mL	Stressed
50	4-Nitrophenol		2,003.4	µg/mL	+/-	11.6479	µg/mL	Gravimetric
	CAS # 100-02-7	(Lot MKBK1842V)			+/-	21.9346	µg/mL	Unstressed
	Purity 99%				+/-	37.2047	µg/mL	Stressed
51	2,3,4,6-Tetrachlorophenol		1,003.5	µg/mL	+/-	5.8344	µg/mL	Gravimetric
	CAS # 58-90-2	(Lot FN10221307)			+/-	10.9870	µg/mL	Unstressed
	Purity 99%				+/-	18.6358	µg/mL	Stressed
52	Fluorene		999.6	µg/mL	+/-	5.8118	µg/mL	Gravimetric
	CAS # 86-73-7	(Lot 10174662)			+/-	10.9443	µg/mL	Unstressed
	Purity 98%				+/-	18.5634	µg/mL	Stressed
53	4-Chlorophenyl phenyl ether		1,000.1	µg/mL	+/-	5.8147	µg/mL	Gravimetric
	CAS # 7005-72-3	(Lot MKBS2248V)			+/-	10.9498	µg/mL	Unstressed
	Purity 99%				+/-	18.5726	µg/mL	Stressed
54	n-Hexadecane (C16)		1,003.0	µg/mL	+/-	5.8315	µg/mL	Gravimetric
	CAS # 544-76-3	(Lot SHBD4570V)			+/-	10.9815	µg/mL	Unstressed
	Purity 99%				+/-	18.6265	µg/mL	Stressed
55	Diethylphthalate		1,001.1	µg/mL	+/-	5.8205	µg/mL	Gravimetric
	CAS # 84-66-2	(Lot MKBJ3578V)			+/-	10.9607	µg/mL	Unstressed
	Purity 99%				+/-	18.5912	µg/mL	Stressed

56	Azobenzene		1,000.9	µg/mL	+/-	5.8193	µg/mL	Gravimetric
	CAS # 103-33-3	(Lot MKBS2559V)			+/-	10.9586	µg/mL	Unstressed
	Purity 99%				+/-	18.5875	µg/mL	Stressed
57	Diphenylamine		1,701.0	µg/mL	+/-	9.8898	µg/mL	Gravimetric
	CAS # 122-39-4	(Lot MKBN8295V)			+/-	18.6237	µg/mL	Unstressed
	Purity 99%				+/-	31.5889	µg/mL	Stressed
58	4-Nitroaniline		1,002.6	µg/mL	+/-	5.8292	µg/mL	Gravimetric
	CAS # 100-01-6	(Lot BCBG4702V)			+/-	10.9772	µg/mL	Unstressed
	Purity 99%				+/-	18.6191	µg/mL	Stressed
59	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)		2,000.8	µg/mL	+/-	11.6328	µg/mL	Gravimetric
	CAS # 534-52-1	(Lot LC06195V)			+/-	21.9062	µg/mL	Unstressed
	Purity 99%				+/-	37.1564	µg/mL	Stressed
60	4-Bromophenyl phenyl ether		999.5	µg/mL	+/-	5.8112	µg/mL	Gravimetric
	CAS # 101-55-3	(Lot STBB9729V)			+/-	10.9432	µg/mL	Unstressed
	Purity 98%				+/-	18.5615	µg/mL	Stressed
61	Hexachlorobenzene		1,002.7	µg/mL	+/-	5.8300	µg/mL	Gravimetric
	CAS # 118-74-1	(Lot LC04221V)			+/-	10.9787	µg/mL	Unstressed
	Purity 98%				+/-	18.6216	µg/mL	Stressed
62	Pentachlorophenol		2,006.0	µg/mL	+/-	11.6631	µg/mL	Gravimetric
	CAS # 87-86-5	(Lot 150212JLM)			+/-	21.9631	µg/mL	Unstressed
	Purity 99%				+/-	37.2530	µg/mL	Stressed
63	Phenanthrene		1,001.9	µg/mL	+/-	5.8249	µg/mL	Gravimetric
	CAS # 85-01-8	(Lot MKBQ8219V)			+/-	10.9690	µg/mL	Unstressed
	Purity 98%				+/-	18.6052	µg/mL	Stressed
64	n-Octadecane (C18)		1,000.3	µg/mL	+/-	5.8158	µg/mL	Gravimetric
	CAS # 593-45-3	(Lot OGCDK)			+/-	10.9520	µg/mL	Unstressed
	Purity 99%				+/-	18.5764	µg/mL	Stressed
65	Anthracene		1,001.2	µg/mL	+/-	5.8211	µg/mL	Gravimetric
	CAS # 120-12-7	(Lot MKBR2268V)			+/-	10.9618	µg/mL	Unstressed
	Purity 99%				+/-	18.5931	µg/mL	Stressed
66	Carbazole		1,002.9	µg/mL	+/-	5.8311	µg/mL	Gravimetric
	CAS # 86-74-8	(Lot S42950-417)			+/-	10.9808	µg/mL	Unstressed
	Purity 98%				+/-	18.6252	µg/mL	Stressed
67	Di-n-butylphthalate		1,001.5	µg/mL	+/-	5.8228	µg/mL	Gravimetric
	CAS # 84-74-2	(Lot MKBL8501V)			+/-	10.9651	µg/mL	Unstressed
	Purity 99%				+/-	18.5986	µg/mL	Stressed
68	Fluoranthene		999.8	µg/mL	+/-	5.8129	µg/mL	Gravimetric
	CAS # 206-44-0	(Lot MKBQ6360V)			+/-	10.9465	µg/mL	Unstressed
	Purity 98%				+/-	18.5670	µg/mL	Stressed
69	Pyrene		1,001.3	µg/mL	+/-	5.8216	µg/mL	Gravimetric
	CAS # 129-00-0	(Lot BCBL6786V)			+/-	10.9629	µg/mL	Unstressed
	Purity 99%				+/-	18.5949	µg/mL	Stressed
70	Benzyl butyl phthalate		1,000.2	µg/mL	+/-	5.8152	µg/mL	Gravimetric
	CAS # 85-68-7	(Lot 03027HV)			+/-	10.9509	µg/mL	Unstressed
	Purity 99%				+/-	18.5745	µg/mL	Stressed
71	Benz(a)anthracene		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 56-55-3	(Lot ER031412-01)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed

72	Chrysene		1,004.7	µg/mL	+/-	5.8414	µg/mL	Gravimetric
	CAS # 218-01-9	(Lot PR121912-01)			+/-	11.0002	µg/mL	Unstressed
	Purity 99%				+/-	18.6581	µg/mL	Stressed
73	Bis(2-ethylhexyl)phthalate		1,002.2	µg/mL	+/-	5.8269	µg/mL	Gravimetric
	CAS # 117-81-7	(Lot MKBK2695V)			+/-	10.9728	µg/mL	Unstressed
	Purity 99%				+/-	18.6116	µg/mL	Stressed
74	Di-n-octyl phthalate		1,001.9	µg/mL	+/-	5.8251	µg/mL	Gravimetric
	CAS # 117-84-0	(Lot 3589500)			+/-	10.9695	µg/mL	Unstressed
	Purity 99%				+/-	18.6061	µg/mL	Stressed
75	Benzo(b)fluoranthene		1,001.3	µg/mL	+/-	5.8216	µg/mL	Gravimetric
	CAS # 205-99-2	(Lot ER03101401)			+/-	10.9629	µg/mL	Unstressed
	Purity 99%				+/-	18.5949	µg/mL	Stressed
76	Benzo(k)fluoranthene		1,000.5	µg/mL	+/-	5.8170	µg/mL	Gravimetric
	CAS # 207-08-9	(Lot 012012k)			+/-	10.9542	µg/mL	Unstressed
	Purity 99%				+/-	18.5801	µg/mL	Stressed
77	Benzo(a)pyrene		1,002.5	µg/mL	+/-	5.8286	µg/mL	Gravimetric
	CAS # 50-32-8	(Lot ER071309-02)			+/-	10.9761	µg/mL	Unstressed
	Purity 99%				+/-	18.6172	µg/mL	Stressed
78	Indeno(1,2,3-cd)pyrene		1,003.3	µg/mL	+/-	5.8333	µg/mL	Gravimetric
	CAS # 193-39-5	(Lot ER082107-02)			+/-	10.9848	µg/mL	Unstressed
	Purity 99%				+/-	18.6321	µg/mL	Stressed
79	Dibenz(a,h)anthracene		1,000.7	µg/mL	+/-	5.8182	µg/mL	Gravimetric
	CAS # 53-70-3	(Lot ER032211-01)			+/-	10.9564	µg/mL	Unstressed
	Purity 99%				+/-	18.5838	µg/mL	Stressed
80	Benzo(g,h,i)perylene		1,001.0	µg/mL	+/-	5.8199	µg/mL	Gravimetric
	CAS # 191-24-2	(Lot ER020708-08)			+/-	10.9596	µg/mL	Unstressed
	Purity 99%				+/-	18.5894	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Specific Reference Material Notes:

N-nitrosodiphenylamine 2000 ug/mL equivalent when used for GC analysis. Actual formulation is diphenylamine 1710 ug/mL.
N-Nitrosodiphenylamine is prone to breakdown in the injection port and will be converted to diphenylamine.
N-Nitrosodiphenylamine is also a reactive species that can initiate premature decomposition of other compounds in the mix. For these reasons diphenylamine is used in the preparation of this mixture. When comparing the response of this compound to mixtures manufactured using N-nitrosodiphenylamine, a difference in response will be observed.

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

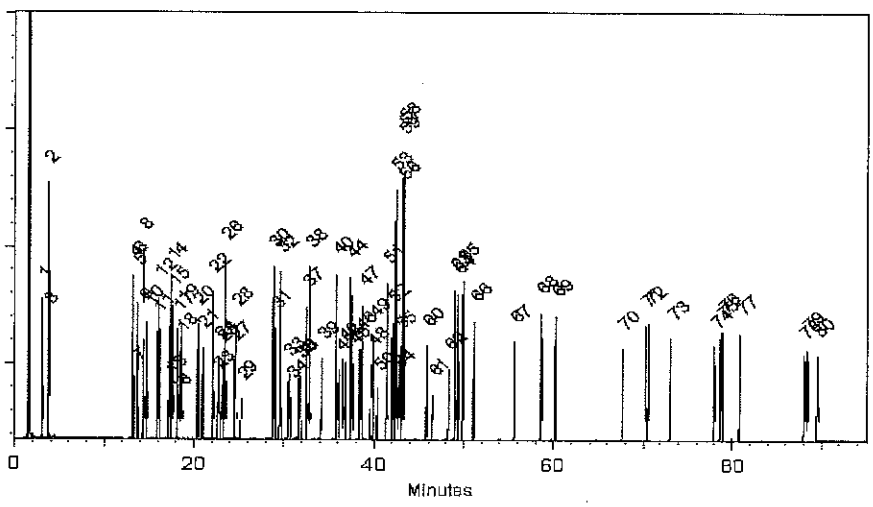
Carrier Gas:
hydrogen-constant pressure 10 psi

Temp. Program:
35°C (hold 3 min.) to 330°C
@ 3°C/min. (hold 3 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Kendra Swope - Mix Technician

Date Mixed: 16-Mar-2015 **Balance:** B442140311

Tyler Brown - QA Analyst

Date Passed: 23-Mar-2015

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

EXLIST1_S10_00001

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

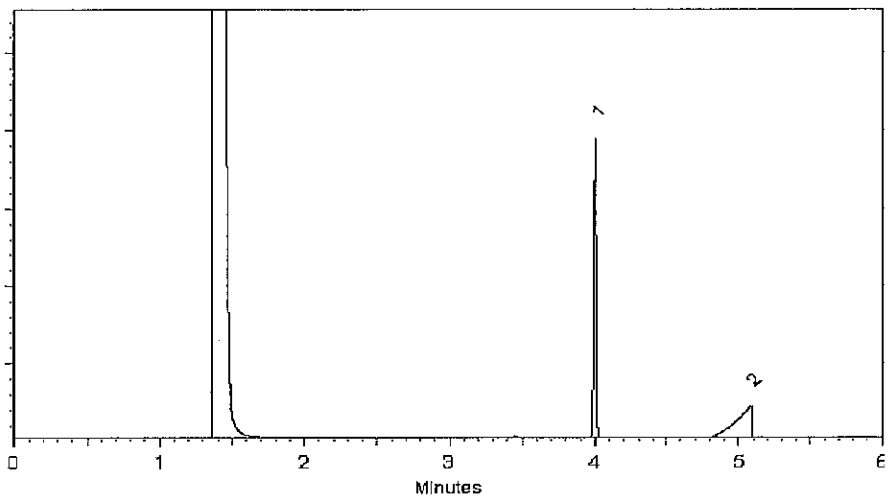
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cheryl Graham

Cheryl Graham - Mix Technician

Date Mixed: 10-Feb-2015 **Balance:** 1128360905

Jennifer L Pollino

Jennifer L. Pollino - QC Analyst

Date Passed: 12-Feb-2015

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569731 **Lot No.:** A0108988

Description : 8270 List 1 / Std #10

8270 List 1 / Std #10 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : August 31, 2016 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Indene **CAS #** 95-13-6 **Purity** 99% (Lot MKBP3098V)	2,001.4 µg/mL	+/- 11.6363 µg/mL +/- 22.5687 µg/mL +/- 25.9700 µg/mL	Gravimetric Unstressed Stressed
2	Benzoic acid **CAS #** 65-85-0 **Purity** 99% (Lot MKBL6689V)	2,000.1 µg/mL	+/- 11.6288 µg/mL +/- 22.5540 µg/mL +/- 25.9531 µg/mL	Gravimetric Unstressed Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Reagent

EXLIST1_S11_00001

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

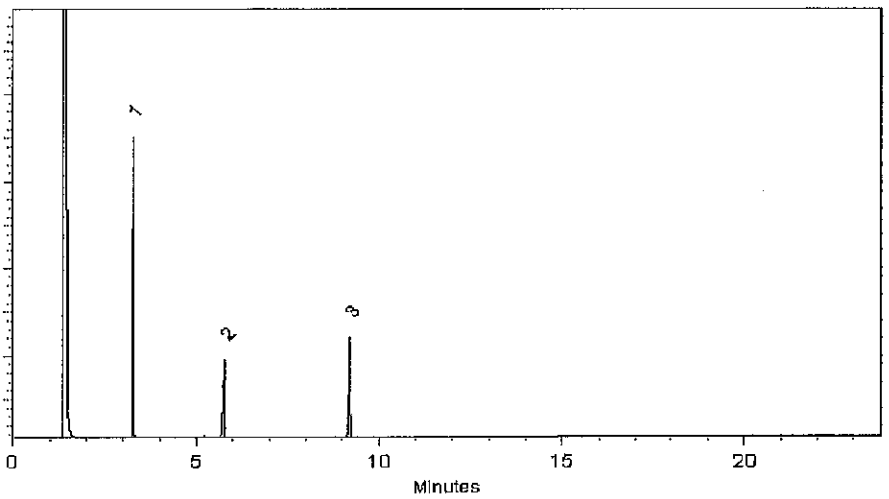
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cheryl Graham - Mix Technician

Date Mixed: 10-Feb-2015 **Balance:** 1128360905

Jennifer L. Pollino - QC Analyst

Date Passed: 12-Feb-2015

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

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Certificate of Analysis

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569732 **Lot No.:** A0108989

Description : 8270 List 1 / Std #11

8270 List 1 / Std #11 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : August 31, 2016 **Storage:** 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Benzaldehyde **CAS #** 100-52-7 **Purity** 99%	(Lot SHBD3510V)	2,011.6 µg/mL	+/- 11.6956 +/- 64.4832 +/- 74.9592	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	epsilon-Caprolactam **CAS #** 105-60-2 **Purity** 99%	(Lot I16X016)	2,009.2 µg/mL	+/- 11.6817 +/- 64.4062 +/- 74.8697	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Atrazine **CAS #** 1912-24-9 **Purity** 98%	(Lot TZ8ED)	2,001.6 µg/mL	+/- 11.6372 +/- 64.1611 +/- 74.5847	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Reagent

SMIS R_00005

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ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567684 **Lot No.:** A0101020

Description : 8270 Internal Standard

8270 Internal Standard 2,000µg/mL, Methylene Chloride, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : January 31, 2019 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dichlorobenzene-d4	2,005.4 µg/mL	+/- 11.6596	µg/mL	Gravimetric
	CAS # 3855-82-1 (Lot PR-18488)		+/- 89.1010	µg/mL	Unstressed
	Purity 99%		+/- 97.8939	µg/mL	Stressed
2	Naphthalene-d8	2,005.8 µg/mL	+/- 11.6619	µg/mL	Gravimetric
	CAS # 1146-65-2 (Lot PR-20449)		+/- 89.1187	µg/mL	Unstressed
	Purity 99%		+/- 97.9134	µg/mL	Stressed
3	Acenaphthene-d10	1,998.2 µg/mL	+/- 11.6177	µg/mL	Gravimetric
	CAS # 15067-26-2 (Lot PR-21070)		+/- 88.7811	µg/mL	Unstressed
	Purity 97%		+/- 97.5424	µg/mL	Stressed
4	Phenanthrene-d10	2,001.2 µg/mL	+/- 11.6351	µg/mL	Gravimetric
	CAS # 1517-22-2 (Lot PR-23065)		+/- 88.9144	µg/mL	Unstressed
	Purity 99%		+/- 97.6889	µg/mL	Stressed
5	Chrysene-d12	1,999.6 µg/mL	+/- 11.6258	µg/mL	Gravimetric
	CAS # 1719-03-5 (Lot PR-24875)		+/- 88.8429	µg/mL	Unstressed
	Purity 98%		+/- 97.6104	µg/mL	Stressed
6	Perylene-d12	2,002.6 µg/mL	+/- 11.6433	µg/mL	Gravimetric
	CAS # 1520-96-3 (Lot PR-24113)		+/- 88.9766	µg/mL	Unstressed
	Purity 99%		+/- 97.7572	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

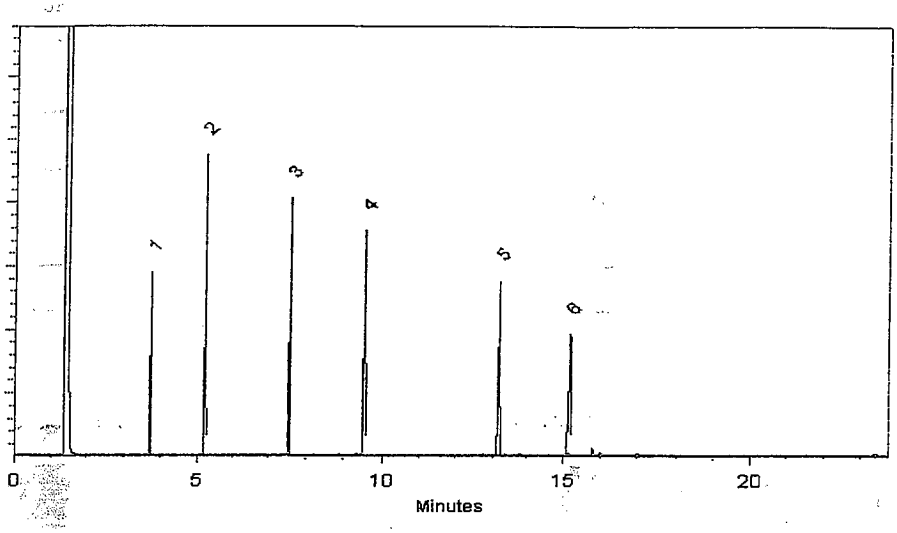
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen to guarantee product quality. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Kendra Swope - Mix Technician

Date Mixed: 30-Jan-2014 **Balance:** 1128342313

Jennifer L. Pollino - QC Analyst

Date Passed: 03-Feb-2014

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\,stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\,stability} + U^2_{shipping\,stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31840, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SMLIST1 PAH_00004

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569729 **Lot No.:** A0107399

Description : 8270 List 1 / Std #1 MegaMix (2015)

8270 List 1 / Std #1 MegaMix (2015) 500-2000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 10 mL **Pkg Amt:** > 5 mL

Expiration Date : May 31, 2016 **Storage:** 10°C or colder

Handling: Carcinogen/reproductive toxin. Photosensitive. Sonicate.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,4-Dioxane **CAS #** 123-91-1 **Purity** 99%	(Lot SHBD8744V)	1,004.4 µg/mL	+/- 5.8397 µg/mL +/- 10.9969 µg/mL +/- 18.6525 µg/mL	Gravimetric Unstressed Stressed
2	Pyridine **CAS #** 110-86-1 **Purity** 99%	(Lot SHBC7174V)	1,001.0 µg/mL	+/- 5.8199 µg/mL +/- 10.9596 µg/mL +/- 18.5894 µg/mL	Gravimetric Unstressed Stressed
3	N-Nitrosodimethylamine **CAS #** 62-75-9 **Purity** 99%	(Lot 3213100)	1,000.2 µg/mL	+/- 5.8152 µg/mL +/- 10.9509 µg/mL +/- 18.5745 µg/mL	Gravimetric Unstressed Stressed
4	Aniline **CAS #** 62-53-3 **Purity** 99%	(Lot K22Z462)	1,002.3 µg/mL	+/- 5.8275 µg/mL +/- 10.9739 µg/mL +/- 18.6135 µg/mL	Gravimetric Unstressed Stressed
5	Bis(2-chloroethyl)ether **CAS #** 111-44-4 **Purity** 99%	(Lot 45296HKV)	1,001.4 µg/mL	+/- 5.8222 µg/mL +/- 10.9640 µg/mL +/- 18.5968 µg/mL	Gravimetric Unstressed Stressed
6	2-Chlorophenol **CAS #** 95-57-8 **Purity** 99%	(Lot MKBD3900V)	1,000.8 µg/mL	+/- 5.8187 µg/mL +/- 10.9575 µg/mL +/- 18.5856 µg/mL	Gravimetric Unstressed Stressed
7	Phenol **CAS #** 108-95-2 **Purity** 99%	(Lot SHBC6998V)	1,006.9 µg/mL	+/- 5.8542 µg/mL +/- 11.0242 µg/mL +/- 18.6989 µg/mL	Gravimetric Unstressed Stressed

8	n-Decane (C10)		1,000.5	µg/mL	+/-	5.8170	µg/mL	Gravimetric
	CAS # 124-18-5	(Lot SHBF1587V)			+/-	10.9542	µg/mL	Unstressed
	Purity 99%				+/-	18.5801	µg/mL	Stressed
9	1,4-Dichlorobenzene		1,005.3	µg/mL	+/-	5.8449	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBL3891V)			+/-	11.0067	µg/mL	Unstressed
	Purity 99%				+/-	18.6692	µg/mL	Stressed
10	1,3-Dichlorobenzene		1,002.0	µg/mL	+/-	5.8257	µg/mL	Gravimetric
	CAS # 541-73-1	(Lot BCBC1891V)			+/-	10.9706	µg/mL	Unstressed
	Purity 99%				+/-	18.6079	µg/mL	Stressed
11	1,2-Dichlorobenzene		1,006.5	µg/mL	+/-	5.8519	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot 68996CMV)			+/-	11.0199	µg/mL	Unstressed
	Purity 99%				+/-	18.6915	µg/mL	Stressed
12	Benzyl alcohol		1,000.4	µg/mL	+/-	5.8164	µg/mL	Gravimetric
	CAS # 100-51-6	(Lot SHBC1850V)			+/-	10.9531	µg/mL	Unstressed
	Purity 99%				+/-	18.5782	µg/mL	Stressed
13	2,2'-oxybis(1-chloropropane)		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 108-60-1	(Lot 2-EAW-18-3)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed
14	2-Methylphenol (o-cresol)		1,003.6	µg/mL	+/-	5.8350	µg/mL	Gravimetric
	CAS # 95-48-7	(Lot SHBC1479V)			+/-	10.9881	µg/mL	Unstressed
	Purity 99%				+/-	18.6376	µg/mL	Stressed
15	Hexachloroethane		1,005.9	µg/mL	+/-	5.8484	µg/mL	Gravimetric
	CAS # 67-72-1	(Lot 4H3SF)			+/-	11.0133	µg/mL	Unstressed
	Purity 99%				+/-	18.6804	µg/mL	Stressed
16	Acetophenone		1,002.7	µg/mL	+/-	5.8298	µg/mL	Gravimetric
	CAS # 98-86-2	(Lot MKBR7156V)			+/-	10.9783	µg/mL	Unstressed
	Purity 99%				+/-	18.6209	µg/mL	Stressed
17	N-Nitroso-di-n-propylamine		1,003.9	µg/mL	+/-	5.8368	µg/mL	Gravimetric
	CAS # 621-64-7	(Lot OPAGF)			+/-	10.9914	µg/mL	Unstressed
	Purity 99%				+/-	18.6432	µg/mL	Stressed
18	4-Methylphenol (p-cresol)		500.4	µg/mL	+/-	2.9161	µg/mL	Gravimetric
	CAS # 106-44-5	(Lot 49396APV)			+/-	5.4823	µg/mL	Unstressed
	Purity 99%				+/-	9.2949	µg/mL	Stressed
19	3-Methylphenol (m-cresol)		500.2	µg/mL	+/-	2.9149	µg/mL	Gravimetric
	CAS # 108-39-4	(Lot SHBD0627V)			+/-	5.4801	µg/mL	Unstressed
	Purity 99%				+/-	9.2912	µg/mL	Stressed
20	Nitrobenzene		1,001.1	µg/mL	+/-	5.8205	µg/mL	Gravimetric
	CAS # 98-95-3	(Lot 65096APV)			+/-	10.9607	µg/mL	Unstressed
	Purity 99%				+/-	18.5912	µg/mL	Stressed
21	Isophorone		999.3	µg/mL	+/-	5.8100	µg/mL	Gravimetric
	CAS # 78-59-1	(Lot 06705DE)			+/-	10.9410	µg/mL	Unstressed
	Purity 97%				+/-	18.5577	µg/mL	Stressed
22	2-Nitrophenol		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 88-75-5	(Lot BCBH7602V)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed
23	2,4-Dimethylphenol		1,003.2	µg/mL	+/-	5.8327	µg/mL	Gravimetric
	CAS # 105-67-9	(Lot 10165155)			+/-	10.9837	µg/mL	Unstressed
	Purity 99%				+/-	18.6302	µg/mL	Stressed

24	Bis(2-chloroethoxy)methane		1,004.5	µg/mL	+/-	5.8402	µg/mL	Gravimetric
	CAS # 111-91-1	(Lot 317200)			+/-	10.9980	µg/mL	Unstressed
	Purity 99%				+/-	18.6544	µg/mL	Stressed
25	2,4-Dichlorophenol		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 120-83-2	(Lot BCBH1617V)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed
26	1,2,4-Trichlorobenzene		1,000.6	µg/mL	+/-	5.8176	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot 26896BM)			+/-	10.9553	µg/mL	Unstressed
	Purity 99%				+/-	18.5819	µg/mL	Stressed
27	Naphthalene		1,002.3	µg/mL	+/-	5.8275	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBH4351V)			+/-	10.9739	µg/mL	Unstressed
	Purity 99%				+/-	18.6135	µg/mL	Stressed
28	2,6-Dichlorophenol		1,000.1	µg/mL	+/-	5.8147	µg/mL	Gravimetric
	CAS # 87-65-0	(Lot MKBN2776V)			+/-	10.9498	µg/mL	Unstressed
	Purity 99%				+/-	18.5726	µg/mL	Stressed
29	4-Chloroaniline		1,000.3	µg/mL	+/-	5.8157	µg/mL	Gravimetric
	CAS # 106-47-8	(Lot 12528PH)			+/-	10.9518	µg/mL	Unstressed
	Purity 98%				+/-	18.5761	µg/mL	Stressed
30	Hexachlorobutadiene		999.9	µg/mL	+/-	5.8135	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot K22W009)			+/-	10.9475	µg/mL	Unstressed
	Purity 98%				+/-	18.5688	µg/mL	Stressed
31	2-Methylnaphthalene		998.6	µg/mL	+/-	5.8059	µg/mL	Gravimetric
	CAS # 91-57-6	(Lot 19399MJV)			+/-	10.9333	µg/mL	Unstressed
	Purity 96%				+/-	18.5446	µg/mL	Stressed
32	4-Chloro-3-methylphenol		1,001.3	µg/mL	+/-	5.8216	µg/mL	Gravimetric
	CAS # 59-50-7	(Lot STBC0769V)			+/-	10.9629	µg/mL	Unstressed
	Purity 99%				+/-	18.5949	µg/mL	Stressed
33	1-Methylnaphthalene		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 90-12-0	(Lot 525000-10)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed
34	1,2,4,5-Tetrachlorobenzene		1,000.2	µg/mL	+/-	5.8152	µg/mL	Gravimetric
	CAS # 95-94-3	(Lot 06024AIV)			+/-	10.9509	µg/mL	Unstressed
	Purity 99%				+/-	18.5745	µg/mL	Stressed
35	Hexachlorocyclopentadiene		1,002.4	µg/mL	+/-	5.8280	µg/mL	Gravimetric
	CAS # 77-47-4	(Lot 3140300)			+/-	10.9750	µg/mL	Unstressed
	Purity 99%				+/-	18.6154	µg/mL	Stressed
36	2,4,6-Trichlorophenol		1,001.4	µg/mL	+/-	5.8222	µg/mL	Gravimetric
	CAS # 88-06-2	(Lot MKBH7393V)			+/-	10.9640	µg/mL	Unstressed
	Purity 99%				+/-	18.5968	µg/mL	Stressed
37	2,4,5-Trichlorophenol		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 95-95-4	(Lot FHM01)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed
38	2-Chloronaphthalene		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 91-58-7	(Lot FIJ01)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed
39	Biphenyl		1,006.1	µg/mL	+/-	5.8496	µg/mL	Gravimetric
	CAS # 92-52-4	(Lot 1277976)			+/-	11.0155	µg/mL	Unstressed
	Purity 99%				+/-	18.6841	µg/mL	Stressed

40	2-Nitroaniline		1,004.6	µg/mL	+/-	5.8408	µg/mL	Gravimetric
	CAS # 88-74-4	(Lot MKBK7597V)			+/-	10.9991	µg/mL	Unstressed
	Purity 99%				+/-	18.6562	µg/mL	Stressed
41	Acenaphthylene		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 208-96-8	(Lot ER030707-01)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed
42	1,3-Dinitrobenzene		1,006.4	µg/mL	+/-	5.8513	µg/mL	Gravimetric
	CAS # 99-65-0	(Lot BCBB1436V)			+/-	11.0188	µg/mL	Unstressed
	Purity 99%				+/-	18.6896	µg/mL	Stressed
43	Dimethylphthalate		1,001.0	µg/mL	+/-	5.8199	µg/mL	Gravimetric
	CAS # 131-11-3	(Lot 10117699)			+/-	10.9596	µg/mL	Unstressed
	Purity 99%				+/-	18.5894	µg/mL	Stressed
44	2,6-Dimitrotoluene		1,001.6	µg/mL	+/-	5.8234	µg/mL	Gravimetric
	CAS # 606-20-2	(Lot 1437483V)			+/-	10.9662	µg/mL	Unstressed
	Purity 99%				+/-	18.6005	µg/mL	Stressed
45	Acenaphthene		1,001.8	µg/mL	+/-	5.8246	µg/mL	Gravimetric
	CAS # 83-32-9	(Lot MKBP0384V)			+/-	10.9684	µg/mL	Unstressed
	Purity 99%				+/-	18.6042	µg/mL	Stressed
46	2,4-Dinitrophenol		2,008.7	µg/mL	+/-	11.6788	µg/mL	Gravimetric
	CAS # 51-28-5	(Lot MKBP5833V)			+/-	21.9927	µg/mL	Unstressed
	Purity 99%				+/-	37.3031	µg/mL	Stressed
47	Dibenzofuran		1,001.8	µg/mL	+/-	5.8246	µg/mL	Gravimetric
	CAS # 132-64-9	(Lot MKBK2375V)			+/-	10.9684	µg/mL	Unstressed
	Purity 99%				+/-	18.6042	µg/mL	Stressed
48	3-Nitroaniline		1,001.3	µg/mL	+/-	5.8216	µg/mL	Gravimetric
	CAS # 99-09-2	(Lot MKBH5131V)			+/-	10.9629	µg/mL	Unstressed
	Purity 99%				+/-	18.5949	µg/mL	Stressed
49	2,4-Dinitrotoluene		1,001.7	µg/mL	+/-	5.8240	µg/mL	Gravimetric
	CAS # 121-14-2	(Lot MKAA0690V)			+/-	10.9673	µg/mL	Unstressed
	Purity 99%				+/-	18.6024	µg/mL	Stressed
50	4-Nitrophenol		2,001.0	µg/mL	+/-	11.6340	µg/mL	Gravimetric
	CAS # 100-02-7	(Lot MKBK1842V)			+/-	21.9083	µg/mL	Unstressed
	Purity 99%				+/-	37.1601	µg/mL	Stressed
51	2,3,4,6-Tetrachlorophenol		1,002.1	µg/mL	+/-	5.8263	µg/mL	Gravimetric
	CAS # 58-90-2	(Lot FN10221307)			+/-	10.9717	µg/mL	Unstressed
	Purity 99%				+/-	18.6098	µg/mL	Stressed
52	Fluorene		1,000.5	µg/mL	+/-	5.8169	µg/mL	Gravimetric
	CAS # 86-73-7	(Lot 10174662)			+/-	10.9540	µg/mL	Unstressed
	Purity 98%				+/-	18.5797	µg/mL	Stressed
53	4-Chlorophenyl phenyl ether		1,000.4	µg/mL	+/-	5.8164	µg/mL	Gravimetric
	CAS # 7005-72-3	(Lot MKBL1347V)			+/-	10.9531	µg/mL	Unstressed
	Purity 99%				+/-	18.5782	µg/mL	Stressed
54	n-Hexadecane (C16)		1,002.2	µg/mL	+/-	5.8269	µg/mL	Gravimetric
	CAS # 544-76-3	(Lot SHBD4570V)			+/-	10.9728	µg/mL	Unstressed
	Purity 99%				+/-	18.6116	µg/mL	Stressed
55	Diethylphthalate		1,001.1	µg/mL	+/-	5.8205	µg/mL	Gravimetric
	CAS # 84-66-2	(Lot MKBJ3578V)			+/-	10.9607	µg/mL	Unstressed
	Purity 99%				+/-	18.5912	µg/mL	Stressed

56	Azobenzene		1,002.3	µg/mL	+/-	5.8275	µg/mL	Gravimetric
	CAS # 103-33-3	(Lot MKBS2559V)			+/-	10.9739	µg/mL	Unstressed
	Purity 99%				+/-	18.6135	µg/mL	Stressed
57	Diphenylamine		1,713.4	µg/mL	+/-	9.9619	µg/mL	Gravimetric
	CAS # 122-39-4	(Lot 07525MF)			+/-	18.7595	µg/mL	Unstressed
	Purity 99%				+/-	31.8192	µg/mL	Stressed
58	4-Nitroaniline		1,002.8	µg/mL	+/-	5.8304	µg/mL	Gravimetric
	CAS # 100-01-6	(Lot BCBG4702V)			+/-	10.9794	µg/mL	Unstressed
	Purity 99%				+/-	18.6228	µg/mL	Stressed
59	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)		2,002.0	µg/mL	+/-	11.6398	µg/mL	Gravimetric
	CAS # 534-52-1	(Lot LC06195V)			+/-	21.9193	µg/mL	Unstressed
	Purity 99%				+/-	37.1787	µg/mL	Stressed
60	4-Bromophenyl phenyl ether		1,000.5	µg/mL	+/-	5.8170	µg/mL	Gravimetric
	CAS # 101-55-3	(Lot STBB9729V)			+/-	10.9542	µg/mL	Unstressed
	Purity 99%				+/-	18.5801	µg/mL	Stressed
61	Hexachlorobenzene		1,002.1	µg/mL	+/-	5.8260	µg/mL	Gravimetric
	CAS # 118-74-1	(Lot LC04221V)			+/-	10.9711	µg/mL	Unstressed
	Purity 98%				+/-	18.6089	µg/mL	Stressed
62	Pentachlorophenol		2,000.3	µg/mL	+/-	11.6299	µg/mL	Gravimetric
	CAS # 87-86-5	(Lot 140626JLM)			+/-	21.9007	µg/mL	Unstressed
	Purity 99%				+/-	37.1471	µg/mL	Stressed
63	Phenanthrene		999.0	µg/mL	+/-	5.8083	µg/mL	Gravimetric
	CAS # 85-01-8	(Lot MKBL6906V)			+/-	10.9379	µg/mL	Unstressed
	Purity 98%				+/-	18.5524	µg/mL	Stressed
64	n-Octadecane (C18)		1,006.5	µg/mL	+/-	5.8519	µg/mL	Gravimetric
	CAS # 593-45-3	(Lot OGCDK)			+/-	11.0199	µg/mL	Unstressed
	Purity 99%				+/-	18.6915	µg/mL	Stressed
65	Anthracene		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 120-12-7	(Lot MKBK5208V)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed
66	Carbazole		1,000.1	µg/mL	+/-	5.8146	µg/mL	Gravimetric
	CAS # 86-74-8	(Lot S42950-417)			+/-	10.9497	µg/mL	Unstressed
	Purity 98%				+/-	18.5725	µg/mL	Stressed
67	Di-n-butylphthalate		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 84-74-2	(Lot MKBL8501V)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed
68	Fluoranthene		999.7	µg/mL	+/-	5.8123	µg/mL	Gravimetric
	CAS # 206-44-0	(Lot MKBQ6360V)			+/-	10.9454	µg/mL	Unstressed
	Purity 98%				+/-	18.5652	µg/mL	Stressed
69	Pyrene		999.1	µg/mL	+/-	5.8089	µg/mL	Gravimetric
	CAS # 129-00-0	(Lot BCBJ0984V)			+/-	10.9390	µg/mL	Unstressed
	Purity 98%				+/-	18.5543	µg/mL	Stressed
70	Benzyl butyl phthalate		1,001.2	µg/mL	+/-	5.8211	µg/mL	Gravimetric
	CAS # 85-68-7	(Lot 03027HV)			+/-	10.9618	µg/mL	Unstressed
	Purity 99%				+/-	18.5931	µg/mL	Stressed
71	Benz(a)anthracene		1,001.4	µg/mL	+/-	5.8222	µg/mL	Gravimetric
	CAS # 56-55-3	(Lot ER031412-01)			+/-	10.9640	µg/mL	Unstressed
	Purity 99%				+/-	18.5968	µg/mL	Stressed

72	Chrysene		1,006.5	µg/mL	+/-	5.8519	µg/mL	Gravimetric
	CAS # 218-01-9	(Lot ER120810-02)			+/-	11.0199	µg/mL	Unstressed
	Purity 99%				+/-	18.6915	µg/mL	Stressed
73	Bis(2-ethylhexyl)phthalate		1,000.5	µg/mL	+/-	5.8170	µg/mL	Gravimetric
	CAS # 117-81-7	(Lot MKBK2695V)			+/-	10.9542	µg/mL	Unstressed
	Purity 99%				+/-	18.5801	µg/mL	Stressed
74	Di-n-octyl phthalate		1,002.1	µg/mL	+/-	5.8263	µg/mL	Gravimetric
	CAS # 117-84-0	(Lot 3128600)			+/-	10.9717	µg/mL	Unstressed
	Purity 99%				+/-	18.6098	µg/mL	Stressed
75	Benzo(b)fluoranthene		1,000.1	µg/mL	+/-	5.8147	µg/mL	Gravimetric
	CAS # 205-99-2	(Lot ER03101401)			+/-	10.9498	µg/mL	Unstressed
	Purity 99%				+/-	18.5726	µg/mL	Stressed
76	Benzo(k)fluoranthene		1,003.3	µg/mL	+/-	5.8333	µg/mL	Gravimetric
	CAS # 207-08-9	(Lot ER041513-01)			+/-	10.9848	µg/mL	Unstressed
	Purity 99%				+/-	18.6321	µg/mL	Stressed
77	Benzo(a)pyrene		1,001.3	µg/mL	+/-	5.8216	µg/mL	Gravimetric
	CAS # 50-32-8	(Lot ER071309-02)			+/-	10.9629	µg/mL	Unstressed
	Purity 99%				+/-	18.5949	µg/mL	Stressed
78	Indeno(1,2,3-cd)pyrene		1,000.6	µg/mL	+/-	5.8176	µg/mL	Gravimetric
	CAS # 193-39-5	(Lot ER082107-02)			+/-	10.9553	µg/mL	Unstressed
	Purity 99%				+/-	18.5819	µg/mL	Stressed
79	Dibenz(a,h)anthracene		1,004.4	µg/mL	+/-	5.8397	µg/mL	Gravimetric
	CAS # 53-70-3	(Lot ER032211-01)			+/-	10.9969	µg/mL	Unstressed
	Purity 99%				+/-	18.6525	µg/mL	Stressed
80	Benzo(g,h,i)perylene		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 191-24-2	(Lot ER020708-08)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Specific Reference Material Notes:

N-nitrosodiphenylamine 2000 ug/mL equivalent when used for GC analysis. Actual formulation is diphenylamine 1710 ug/mL.
N-Nitrosodiphenylamine is prone to breakdown in the injection port and will be converted to diphenylamine.
N-Nitrosodiphenylamine is also a reactive species that can initiate premature decomposition of other compounds in the mix. For these reasons diphenylamine is used in the preparation of this mixture. When comparing the response of this compound to mixtures manufactured using N-nitrosodiphenylamine, a difference in response will be observed.

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

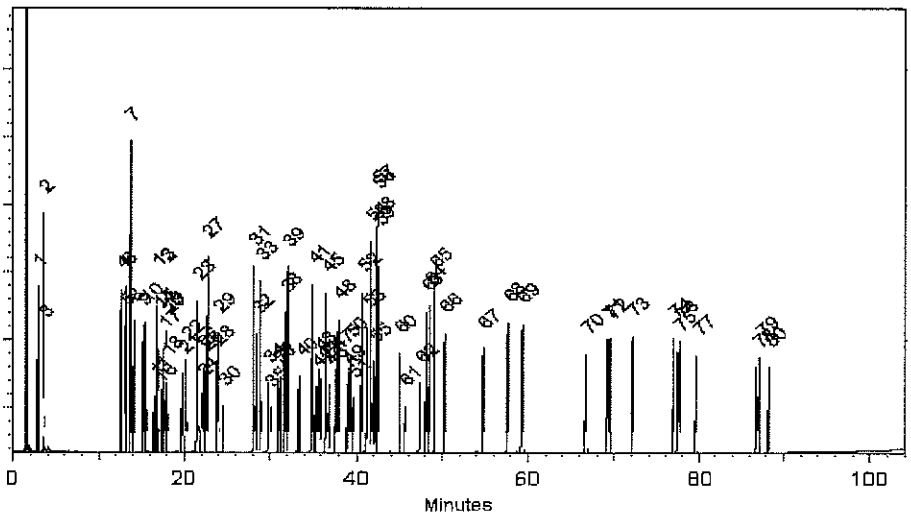
Carrier Gas:
hydrogen-constant pressure 10 psi

Temp. Program:
35°C (hold 3 min.) to 330°C
@ 3°C/min. (hold 3 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon - Mix Technician

Date Mixed: 24-Nov-2014 **Balance:** 1128360905

Jodi E. Breon - QA Analyst

Date Passed: 05-Dec-2014

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SMLIST1 S1_00005

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569729 **Lot No.:** A0107399

Description : 8270 List 1 / Std #1 MegaMix (2015)

8270 List 1 / Std #1 MegaMix (2015) 500-2000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 10 mL **Pkg Amt:** > 5 mL

Expiration Date : May 31, 2016 **Storage:** 10°C or colder

Handling: Carcinogen/reproductive toxin. Photosensitive. Sonicate.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,4-Dioxane **CAS #** 123-91-1 **Purity** 99%	(Lot SHBD8744V)	1,004.4 µg/mL	+/- 5.8397 µg/mL +/- 10.9969 µg/mL +/- 18.6525 µg/mL	Gravimetric Unstressed Stressed
2	Pyridine **CAS #** 110-86-1 **Purity** 99%	(Lot SHBC7174V)	1,001.0 µg/mL	+/- 5.8199 µg/mL +/- 10.9596 µg/mL +/- 18.5894 µg/mL	Gravimetric Unstressed Stressed
3	N-Nitrosodimethylamine **CAS #** 62-75-9 **Purity** 99%	(Lot 3213100)	1,000.2 µg/mL	+/- 5.8152 µg/mL +/- 10.9509 µg/mL +/- 18.5745 µg/mL	Gravimetric Unstressed Stressed
4	Aniline **CAS #** 62-53-3 **Purity** 99%	(Lot K22Z462)	1,002.3 µg/mL	+/- 5.8275 µg/mL +/- 10.9739 µg/mL +/- 18.6135 µg/mL	Gravimetric Unstressed Stressed
5	Bis(2-chloroethyl)ether **CAS #** 111-44-4 **Purity** 99%	(Lot 45296HKV)	1,001.4 µg/mL	+/- 5.8222 µg/mL +/- 10.9640 µg/mL +/- 18.5968 µg/mL	Gravimetric Unstressed Stressed
6	2-Chlorophenol **CAS #** 95-57-8 **Purity** 99%	(Lot MKBD3900V)	1,000.8 µg/mL	+/- 5.8187 µg/mL +/- 10.9575 µg/mL +/- 18.5856 µg/mL	Gravimetric Unstressed Stressed
7	Phenol **CAS #** 108-95-2 **Purity** 99%	(Lot SHBC6998V)	1,006.9 µg/mL	+/- 5.8542 µg/mL +/- 11.0242 µg/mL +/- 18.6989 µg/mL	Gravimetric Unstressed Stressed

8	n-Decane (C10)		1,000.5	µg/mL	+/-	5.8170	µg/mL	Gravimetric
	CAS # 124-18-5	(Lot SHBF1587V)			+/-	10.9542	µg/mL	Unstressed
	Purity 99%				+/-	18.5801	µg/mL	Stressed
9	1,4-Dichlorobenzene		1,005.3	µg/mL	+/-	5.8449	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBL3891V)			+/-	11.0067	µg/mL	Unstressed
	Purity 99%				+/-	18.6692	µg/mL	Stressed
10	1,3-Dichlorobenzene		1,002.0	µg/mL	+/-	5.8257	µg/mL	Gravimetric
	CAS # 541-73-1	(Lot BCBC1891V)			+/-	10.9706	µg/mL	Unstressed
	Purity 99%				+/-	18.6079	µg/mL	Stressed
11	1,2-Dichlorobenzene		1,006.5	µg/mL	+/-	5.8519	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot 68996CMV)			+/-	11.0199	µg/mL	Unstressed
	Purity 99%				+/-	18.6915	µg/mL	Stressed
12	Benzyl alcohol		1,000.4	µg/mL	+/-	5.8164	µg/mL	Gravimetric
	CAS # 100-51-6	(Lot SHBC1850V)			+/-	10.9531	µg/mL	Unstressed
	Purity 99%				+/-	18.5782	µg/mL	Stressed
13	2,2'-oxybis(1-chloropropane)		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 108-60-1	(Lot 2-EAW-18-3)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed
14	2-Methylphenol (o-cresol)		1,003.6	µg/mL	+/-	5.8350	µg/mL	Gravimetric
	CAS # 95-48-7	(Lot SHBC1479V)			+/-	10.9881	µg/mL	Unstressed
	Purity 99%				+/-	18.6376	µg/mL	Stressed
15	Hexachloroethane		1,005.9	µg/mL	+/-	5.8484	µg/mL	Gravimetric
	CAS # 67-72-1	(Lot 4H3SF)			+/-	11.0133	µg/mL	Unstressed
	Purity 99%				+/-	18.6804	µg/mL	Stressed
16	Acetophenone		1,002.7	µg/mL	+/-	5.8298	µg/mL	Gravimetric
	CAS # 98-86-2	(Lot MKBR7156V)			+/-	10.9783	µg/mL	Unstressed
	Purity 99%				+/-	18.6209	µg/mL	Stressed
17	N-Nitroso-di-n-propylamine		1,003.9	µg/mL	+/-	5.8368	µg/mL	Gravimetric
	CAS # 621-64-7	(Lot OPAGF)			+/-	10.9914	µg/mL	Unstressed
	Purity 99%				+/-	18.6432	µg/mL	Stressed
18	4-Methylphenol (p-cresol)		500.4	µg/mL	+/-	2.9161	µg/mL	Gravimetric
	CAS # 106-44-5	(Lot 49396APV)			+/-	5.4823	µg/mL	Unstressed
	Purity 99%				+/-	9.2949	µg/mL	Stressed
19	3-Methylphenol (m-cresol)		500.2	µg/mL	+/-	2.9149	µg/mL	Gravimetric
	CAS # 108-39-4	(Lot SHBD0627V)			+/-	5.4801	µg/mL	Unstressed
	Purity 99%				+/-	9.2912	µg/mL	Stressed
20	Nitrobenzene		1,001.1	µg/mL	+/-	5.8205	µg/mL	Gravimetric
	CAS # 98-95-3	(Lot 65096APV)			+/-	10.9607	µg/mL	Unstressed
	Purity 99%				+/-	18.5912	µg/mL	Stressed
21	Isophorone		999.3	µg/mL	+/-	5.8100	µg/mL	Gravimetric
	CAS # 78-59-1	(Lot 06705DE)			+/-	10.9410	µg/mL	Unstressed
	Purity 97%				+/-	18.5577	µg/mL	Stressed
22	2-Nitrophenol		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 88-75-5	(Lot BCBH7602V)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed
23	2,4-Dimethylphenol		1,003.2	µg/mL	+/-	5.8327	µg/mL	Gravimetric
	CAS # 105-67-9	(Lot 10165155)			+/-	10.9837	µg/mL	Unstressed
	Purity 99%				+/-	18.6302	µg/mL	Stressed

24	Bis(2-chloroethoxy)methane		1,004.5	µg/mL	+/-	5.8402	µg/mL	Gravimetric
	CAS # 111-91-1	(Lot 317200)			+/-	10.9980	µg/mL	Unstressed
	Purity 99%				+/-	18.6544	µg/mL	Stressed
25	2,4-Dichlorophenol		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 120-83-2	(Lot BCBH1617V)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed
26	1,2,4-Trichlorobenzene		1,000.6	µg/mL	+/-	5.8176	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot 26896BM)			+/-	10.9553	µg/mL	Unstressed
	Purity 99%				+/-	18.5819	µg/mL	Stressed
27	Naphthalene		1,002.3	µg/mL	+/-	5.8275	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBH4351V)			+/-	10.9739	µg/mL	Unstressed
	Purity 99%				+/-	18.6135	µg/mL	Stressed
28	2,6-Dichlorophenol		1,000.1	µg/mL	+/-	5.8147	µg/mL	Gravimetric
	CAS # 87-65-0	(Lot MKBN2776V)			+/-	10.9498	µg/mL	Unstressed
	Purity 99%				+/-	18.5726	µg/mL	Stressed
29	4-Chloroaniline		1,000.3	µg/mL	+/-	5.8157	µg/mL	Gravimetric
	CAS # 106-47-8	(Lot 12528PH)			+/-	10.9518	µg/mL	Unstressed
	Purity 98%				+/-	18.5761	µg/mL	Stressed
30	Hexachlorobutadiene		999.9	µg/mL	+/-	5.8135	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot K22W009)			+/-	10.9475	µg/mL	Unstressed
	Purity 98%				+/-	18.5688	µg/mL	Stressed
31	2-Methylnaphthalene		998.6	µg/mL	+/-	5.8059	µg/mL	Gravimetric
	CAS # 91-57-6	(Lot 19399MJV)			+/-	10.9333	µg/mL	Unstressed
	Purity 96%				+/-	18.5446	µg/mL	Stressed
32	4-Chloro-3-methylphenol		1,001.3	µg/mL	+/-	5.8216	µg/mL	Gravimetric
	CAS # 59-50-7	(Lot STBC0769V)			+/-	10.9629	µg/mL	Unstressed
	Purity 99%				+/-	18.5949	µg/mL	Stressed
33	1-Methylnaphthalene		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 90-12-0	(Lot 525000-10)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed
34	1,2,4,5-Tetrachlorobenzene		1,000.2	µg/mL	+/-	5.8152	µg/mL	Gravimetric
	CAS # 95-94-3	(Lot 06024AIV)			+/-	10.9509	µg/mL	Unstressed
	Purity 99%				+/-	18.5745	µg/mL	Stressed
35	Hexachlorocyclopentadiene		1,002.4	µg/mL	+/-	5.8280	µg/mL	Gravimetric
	CAS # 77-47-4	(Lot 3140300)			+/-	10.9750	µg/mL	Unstressed
	Purity 99%				+/-	18.6154	µg/mL	Stressed
36	2,4,6-Trichlorophenol		1,001.4	µg/mL	+/-	5.8222	µg/mL	Gravimetric
	CAS # 88-06-2	(Lot MKBH7393V)			+/-	10.9640	µg/mL	Unstressed
	Purity 99%				+/-	18.5968	µg/mL	Stressed
37	2,4,5-Trichlorophenol		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 95-95-4	(Lot FHM01)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed
38	2-Chloronaphthalene		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 91-58-7	(Lot FIJ01)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed
39	Biphenyl		1,006.1	µg/mL	+/-	5.8496	µg/mL	Gravimetric
	CAS # 92-52-4	(Lot 1277976)			+/-	11.0155	µg/mL	Unstressed
	Purity 99%				+/-	18.6841	µg/mL	Stressed

40	2-Nitroaniline		1,004.6	µg/mL	+/-	5.8408	µg/mL	Gravimetric
	CAS # 88-74-4	(Lot MKBK7597V)			+/-	10.9991	µg/mL	Unstressed
	Purity 99%				+/-	18.6562	µg/mL	Stressed
41	Acenaphthylene		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 208-96-8	(Lot ER030707-01)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed
42	1,3-Dinitrobenzene		1,006.4	µg/mL	+/-	5.8513	µg/mL	Gravimetric
	CAS # 99-65-0	(Lot BCBB1436V)			+/-	11.0188	µg/mL	Unstressed
	Purity 99%				+/-	18.6896	µg/mL	Stressed
43	Dimethylphthalate		1,001.0	µg/mL	+/-	5.8199	µg/mL	Gravimetric
	CAS # 131-11-3	(Lot 10117699)			+/-	10.9596	µg/mL	Unstressed
	Purity 99%				+/-	18.5894	µg/mL	Stressed
44	2,6-Dimitrotoluene		1,001.6	µg/mL	+/-	5.8234	µg/mL	Gravimetric
	CAS # 606-20-2	(Lot 1437483V)			+/-	10.9662	µg/mL	Unstressed
	Purity 99%				+/-	18.6005	µg/mL	Stressed
45	Acenaphthene		1,001.8	µg/mL	+/-	5.8246	µg/mL	Gravimetric
	CAS # 83-32-9	(Lot MKBP0384V)			+/-	10.9684	µg/mL	Unstressed
	Purity 99%				+/-	18.6042	µg/mL	Stressed
46	2,4-Dinitrophenol		2,008.7	µg/mL	+/-	11.6788	µg/mL	Gravimetric
	CAS # 51-28-5	(Lot MKBP5833V)			+/-	21.9927	µg/mL	Unstressed
	Purity 99%				+/-	37.3031	µg/mL	Stressed
47	Dibenzofuran		1,001.8	µg/mL	+/-	5.8246	µg/mL	Gravimetric
	CAS # 132-64-9	(Lot MKBK2375V)			+/-	10.9684	µg/mL	Unstressed
	Purity 99%				+/-	18.6042	µg/mL	Stressed
48	3-Nitroaniline		1,001.3	µg/mL	+/-	5.8216	µg/mL	Gravimetric
	CAS # 99-09-2	(Lot MKBH5131V)			+/-	10.9629	µg/mL	Unstressed
	Purity 99%				+/-	18.5949	µg/mL	Stressed
49	2,4-Dinitrotoluene		1,001.7	µg/mL	+/-	5.8240	µg/mL	Gravimetric
	CAS # 121-14-2	(Lot MKAA0690V)			+/-	10.9673	µg/mL	Unstressed
	Purity 99%				+/-	18.6024	µg/mL	Stressed
50	4-Nitrophenol		2,001.0	µg/mL	+/-	11.6340	µg/mL	Gravimetric
	CAS # 100-02-7	(Lot MKBK1842V)			+/-	21.9083	µg/mL	Unstressed
	Purity 99%				+/-	37.1601	µg/mL	Stressed
51	2,3,4,6-Tetrachlorophenol		1,002.1	µg/mL	+/-	5.8263	µg/mL	Gravimetric
	CAS # 58-90-2	(Lot FN10221307)			+/-	10.9717	µg/mL	Unstressed
	Purity 99%				+/-	18.6098	µg/mL	Stressed
52	Fluorene		1,000.5	µg/mL	+/-	5.8169	µg/mL	Gravimetric
	CAS # 86-73-7	(Lot 10174662)			+/-	10.9540	µg/mL	Unstressed
	Purity 98%				+/-	18.5797	µg/mL	Stressed
53	4-Chlorophenyl phenyl ether		1,000.4	µg/mL	+/-	5.8164	µg/mL	Gravimetric
	CAS # 7005-72-3	(Lot MKBL1347V)			+/-	10.9531	µg/mL	Unstressed
	Purity 99%				+/-	18.5782	µg/mL	Stressed
54	n-Hexadecane (C16)		1,002.2	µg/mL	+/-	5.8269	µg/mL	Gravimetric
	CAS # 544-76-3	(Lot SHBD4570V)			+/-	10.9728	µg/mL	Unstressed
	Purity 99%				+/-	18.6116	µg/mL	Stressed
55	Diethylphthalate		1,001.1	µg/mL	+/-	5.8205	µg/mL	Gravimetric
	CAS # 84-66-2	(Lot MKBJ3578V)			+/-	10.9607	µg/mL	Unstressed
	Purity 99%				+/-	18.5912	µg/mL	Stressed

56	Azobenzene		1,002.3	µg/mL	+/-	5.8275	µg/mL	Gravimetric
	CAS # 103-33-3	(Lot MKBS2559V)			+/-	10.9739	µg/mL	Unstressed
	Purity 99%				+/-	18.6135	µg/mL	Stressed
57	Diphenylamine		1,713.4	µg/mL	+/-	9.9619	µg/mL	Gravimetric
	CAS # 122-39-4	(Lot 07525MF)			+/-	18.7595	µg/mL	Unstressed
	Purity 99%				+/-	31.8192	µg/mL	Stressed
58	4-Nitroaniline		1,002.8	µg/mL	+/-	5.8304	µg/mL	Gravimetric
	CAS # 100-01-6	(Lot BCBG4702V)			+/-	10.9794	µg/mL	Unstressed
	Purity 99%				+/-	18.6228	µg/mL	Stressed
59	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)		2,002.0	µg/mL	+/-	11.6398	µg/mL	Gravimetric
	CAS # 534-52-1	(Lot LC06195V)			+/-	21.9193	µg/mL	Unstressed
	Purity 99%				+/-	37.1787	µg/mL	Stressed
60	4-Bromophenyl phenyl ether		1,000.5	µg/mL	+/-	5.8170	µg/mL	Gravimetric
	CAS # 101-55-3	(Lot STBB9729V)			+/-	10.9542	µg/mL	Unstressed
	Purity 99%				+/-	18.5801	µg/mL	Stressed
61	Hexachlorobenzene		1,002.1	µg/mL	+/-	5.8260	µg/mL	Gravimetric
	CAS # 118-74-1	(Lot LC04221V)			+/-	10.9711	µg/mL	Unstressed
	Purity 98%				+/-	18.6089	µg/mL	Stressed
62	Pentachlorophenol		2,000.3	µg/mL	+/-	11.6299	µg/mL	Gravimetric
	CAS # 87-86-5	(Lot 140626JLM)			+/-	21.9007	µg/mL	Unstressed
	Purity 99%				+/-	37.1471	µg/mL	Stressed
63	Phenanthrene		999.0	µg/mL	+/-	5.8083	µg/mL	Gravimetric
	CAS # 85-01-8	(Lot MKBL6906V)			+/-	10.9379	µg/mL	Unstressed
	Purity 98%				+/-	18.5524	µg/mL	Stressed
64	n-Octadecane (C18)		1,006.5	µg/mL	+/-	5.8519	µg/mL	Gravimetric
	CAS # 593-45-3	(Lot OGCDK)			+/-	11.0199	µg/mL	Unstressed
	Purity 99%				+/-	18.6915	µg/mL	Stressed
65	Anthracene		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 120-12-7	(Lot MKBK5208V)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed
66	Carbazole		1,000.1	µg/mL	+/-	5.8146	µg/mL	Gravimetric
	CAS # 86-74-8	(Lot S42950-417)			+/-	10.9497	µg/mL	Unstressed
	Purity 98%				+/-	18.5725	µg/mL	Stressed
67	Di-n-butylphthalate		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 84-74-2	(Lot MKBL8501V)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed
68	Fluoranthene		999.7	µg/mL	+/-	5.8123	µg/mL	Gravimetric
	CAS # 206-44-0	(Lot MKBQ6360V)			+/-	10.9454	µg/mL	Unstressed
	Purity 98%				+/-	18.5652	µg/mL	Stressed
69	Pyrene		999.1	µg/mL	+/-	5.8089	µg/mL	Gravimetric
	CAS # 129-00-0	(Lot BCBJ0984V)			+/-	10.9390	µg/mL	Unstressed
	Purity 98%				+/-	18.5543	µg/mL	Stressed
70	Benzyl butyl phthalate		1,001.2	µg/mL	+/-	5.8211	µg/mL	Gravimetric
	CAS # 85-68-7	(Lot 03027HV)			+/-	10.9618	µg/mL	Unstressed
	Purity 99%				+/-	18.5931	µg/mL	Stressed
71	Benz(a)anthracene		1,001.4	µg/mL	+/-	5.8222	µg/mL	Gravimetric
	CAS # 56-55-3	(Lot ER031412-01)			+/-	10.9640	µg/mL	Unstressed
	Purity 99%				+/-	18.5968	µg/mL	Stressed

72	Chrysene		1,006.5	µg/mL	+/-	5.8519	µg/mL	Gravimetric
	CAS # 218-01-9	(Lot ER120810-02)			+/-	11.0199	µg/mL	Unstressed
	Purity 99%				+/-	18.6915	µg/mL	Stressed
73	Bis(2-ethylhexyl)phthalate		1,000.5	µg/mL	+/-	5.8170	µg/mL	Gravimetric
	CAS # 117-81-7	(Lot MKBK2695V)			+/-	10.9542	µg/mL	Unstressed
	Purity 99%				+/-	18.5801	µg/mL	Stressed
74	Di-n-octyl phthalate		1,002.1	µg/mL	+/-	5.8263	µg/mL	Gravimetric
	CAS # 117-84-0	(Lot 3128600)			+/-	10.9717	µg/mL	Unstressed
	Purity 99%				+/-	18.6098	µg/mL	Stressed
75	Benzo(b)fluoranthene		1,000.1	µg/mL	+/-	5.8147	µg/mL	Gravimetric
	CAS # 205-99-2	(Lot ER03101401)			+/-	10.9498	µg/mL	Unstressed
	Purity 99%				+/-	18.5726	µg/mL	Stressed
76	Benzo(k)fluoranthene		1,003.3	µg/mL	+/-	5.8333	µg/mL	Gravimetric
	CAS # 207-08-9	(Lot ER041513-01)			+/-	10.9848	µg/mL	Unstressed
	Purity 99%				+/-	18.6321	µg/mL	Stressed
77	Benzo(a)pyrene		1,001.3	µg/mL	+/-	5.8216	µg/mL	Gravimetric
	CAS # 50-32-8	(Lot ER071309-02)			+/-	10.9629	µg/mL	Unstressed
	Purity 99%				+/-	18.5949	µg/mL	Stressed
78	Indeno(1,2,3-cd)pyrene		1,000.6	µg/mL	+/-	5.8176	µg/mL	Gravimetric
	CAS # 193-39-5	(Lot ER082107-02)			+/-	10.9553	µg/mL	Unstressed
	Purity 99%				+/-	18.5819	µg/mL	Stressed
79	Dibenz(a,h)anthracene		1,004.4	µg/mL	+/-	5.8397	µg/mL	Gravimetric
	CAS # 53-70-3	(Lot ER032211-01)			+/-	10.9969	µg/mL	Unstressed
	Purity 99%				+/-	18.6525	µg/mL	Stressed
80	Benzo(g,h,i)perylene		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 191-24-2	(Lot ER020708-08)			+/-	10.9487	µg/mL	Unstressed
	Purity 99%				+/-	18.5708	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Specific Reference Material Notes:

N-nitrosodiphenylamine 2000 ug/mL equivalent when used for GC analysis. Actual formulation is diphenylamine 1710 ug/mL.
N-Nitrosodiphenylamine is prone to breakdown in the injection port and will be converted to diphenylamine.
N-Nitrosodiphenylamine is also a reactive species that can initiate premature decomposition of other compounds in the mix. For these reasons diphenylamine is used in the preparation of this mixture. When comparing the response of this compound to mixtures manufactured using N-nitrosodiphenylamine, a difference in response will be observed.

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

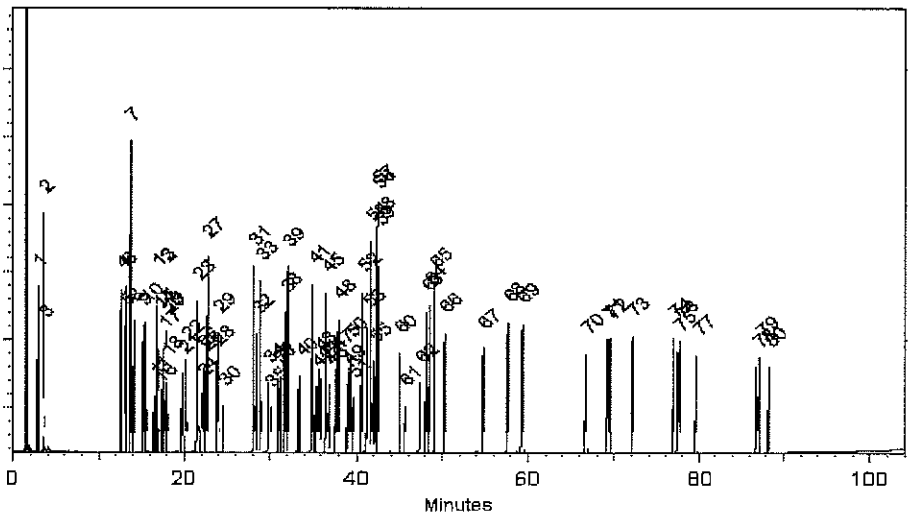
Carrier Gas:
hydrogen-constant pressure 10 psi

Temp. Program:
35°C (hold 3 min.) to 330°C
@ 3°C/min. (hold 3 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon - Mix Technician

Date Mixed: 24-Nov-2014 **Balance:** 1128360905

Jodi E. Breon - QA Analyst

Date Passed: 05-Dec-2014

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569731 **Lot No.:** A0107943

Description : 8270 List 1 / Std #10

8270 List 1 / Std #10 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : June 30, 2016 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	Indene		2,001.4 µg/mL		+/- 11.6363	µg/mL	Gravimetric
	CAS # 95-13-6	(Lot MKBP3098V)			+/- 22.5687	µg/mL	Unstressed
	Purity 99%				+/- 25.9700	µg/mL	Stressed
2	Benzoic acid		2,005.8 µg/mL		+/- 11.6619	µg/mL	Gravimetric
	CAS # 65-85-0	(Lot MKBL6689V)			+/- 22.6183	µg/mL	Unstressed
	Purity 99%				+/- 26.0271	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

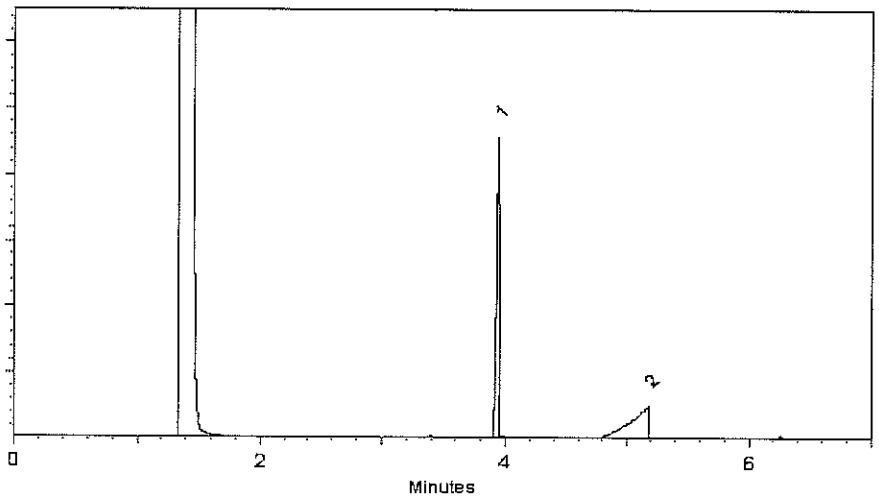
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon - Mix Technician

Date Mixed: 22-Dec-2014 **Balance:** 1128360905

Tyler Brown - QA Analyst

Date Passed: 29-Dec-2014

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569732 **Lot No.:** A0108035

Description : 8270 List 1 / Std #11

8270 List 1 / Std #11 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : June 30, 2016 **Storage:** 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Benzaldehyde **CAS #** 100-52-7 (Lot SHBD3510V) **Purity** 99%	2,000.6 µg/mL	+/- 11.6317 µg/mL +/- 64.1305 µg/mL +/- 74.5493 µg/mL	Gravimetric Unstressed Stressed
2	epsilon-Caprolactam **CAS #** 105-60-2 (Lot I16X016) **Purity** 99%	2,001.2 µg/mL	+/- 11.6351 µg/mL +/- 64.1498 µg/mL +/- 74.5716 µg/mL	Gravimetric Unstressed Stressed
3	Atrazine **CAS #** 1912-24-9 (Lot TZ8ED) **Purity** 98%	2,004.3 µg/mL	+/- 11.6532 µg/mL +/- 64.2490 µg/mL +/- 74.6870 µg/mL	Gravimetric Unstressed Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

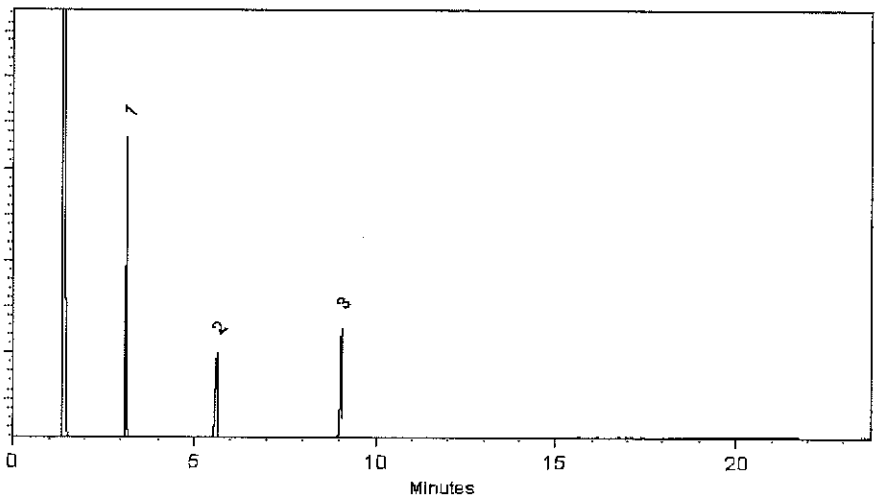
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon - Mix Technician

Date Mixed: 30-Dec-2014 **Balance:** 1128360905

Jennifer L. Pollino - QC Analyst

Date Passed: 02-Jan-2015

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569730 **Lot No.:** A0108174

Description : 8270 List 1 / Std #9

8270 List 1 / Std #9 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 10 mL **Pkg Amt:** > 5 mL

Expiration Date : July 31, 2016 **Storage:** 10°C or colder

Handling: Contains carcinogen/reproductive toxin.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Benzidine	2,008.4 µg/mL	+/- 11.6770	µg/mL	Gravimetric
	CAS # 92-87-5 (Lot 141208JLM)		+/- 21.9894	µg/mL	Unstressed
	Purity 99%		+/- 37.2976	µg/mL	Stressed
2	3,3'-Dichlorobenzidine	2,003.0 µg/mL	+/- 11.6456	µg/mL	Gravimetric
	CAS # 91-94-1 (Lot 141205JLM)		+/- 21.9302	µg/mL	Unstressed
	Purity 99%		+/- 37.1973	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

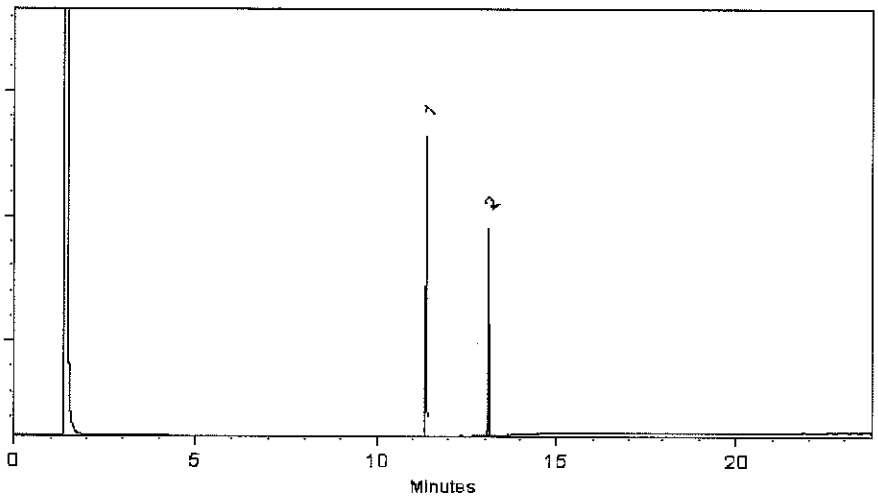
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Rebecca Sauver

Jennifer L. Pollino - QC Analyst

Date Mixed: 07-Jan-2015 **Balance:** 1122030677

Date Passed: 13-Jan-2015

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SMLIST1 SS S1_00004

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569729.SEC **Lot No.:** A0107697

Description : 8270 List 1 / Std #1 MegaMix (2015)

8270 List 1 / Std #1 MegaMix (2015) 500-2000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 10 mL **Pkg Amt:** > 5 mL

Expiration Date : June 30, 2016 **Storage:** 10°C or colder

Handling: Carcinogen/reproductive toxin. Photosensitive. Sonicate.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dioxane	1,005.6 µg/mL	+/- 5.8602	µg/mL	Gravimetric
	CAS # 123-91-1.SEC (Lot CHA4A)		+/- 11.0172	µg/mL	Unstressed
	Purity 99%		+/- 18.6790	µg/mL	Stressed
2	Pyridine	1,000.2 µg/mL	+/- 5.8287	µg/mL	Gravimetric
	CAS # 110-86-1.SEC (Lot QN8DK)		+/- 10.9580	µg/mL	Unstressed
	Purity 99%		+/- 18.5787	µg/mL	Stressed
3	N-Nitrosodimethylamine	1,004.1 µg/mL	+/- 5.8515	µg/mL	Gravimetric
	CAS # 62-75-9.SEC (Lot 41B67)		+/- 11.0008	µg/mL	Unstressed
	Purity 98%		+/- 18.6513	µg/mL	Stressed
4	Aniline	1,002.8 µg/mL	+/- 5.8438	µg/mL	Gravimetric
	CAS # 62-53-3.SEC (Lot ZCD3N)		+/- 10.9865	µg/mL	Unstressed
	Purity 99%		+/- 18.6270	µg/mL	Stressed
5	Bis(2-chloroethyl)ether	1,002.4 µg/mL	+/- 5.8415	µg/mL	Gravimetric
	CAS # 111-44-4.SEC (Lot FA010143)		+/- 10.9821	µg/mL	Unstressed
	Purity 99%		+/- 18.6196	µg/mL	Stressed
6	2-Chlorophenol	1,006.0 µg/mL	+/- 5.8625	µg/mL	Gravimetric
	CAS # 95-57-8.SEC (Lot GJ01)		+/- 11.0216	µg/mL	Unstressed
	Purity 99%		+/- 18.6864	µg/mL	Stressed
7	Phenol	1,004.2 µg/mL	+/- 5.8520	µg/mL	Gravimetric
	CAS # 108-95-2.SEC (Lot EDPYN)		+/- 11.0019	µg/mL	Unstressed
	Purity 99%		+/- 18.6530	µg/mL	Stressed

8	n-Decane (C10)		1,000.2	µg/mL	+/-	5.8287	µg/mL	Gravimetric
	CAS # 124-18-5.SEC	(Lot UCVNN)			+/-	10.9580	µg/mL	Unstressed
	Purity 99%				+/-	18.5787	µg/mL	Stressed
9	1,4-Dichlorobenzene		1,005.2	µg/mL	+/-	5.8578	µg/mL	Gravimetric
	CAS # 106-46-7.SEC	(Lot YWKDC-MK)			+/-	11.0128	µg/mL	Unstressed
	Purity 99%				+/-	18.6716	µg/mL	Stressed
10	1,3-Dichlorobenzene		1,004.2	µg/mL	+/-	5.8520	µg/mL	Gravimetric
	CAS # 541-73-1.SEC	(Lot FMDFD-KA)			+/-	11.0019	µg/mL	Unstressed
	Purity 99%				+/-	18.6530	µg/mL	Stressed
11	1,2-Dichlorobenzene		1,003.8	µg/mL	+/-	5.8497	µg/mL	Gravimetric
	CAS # 95-50-1.SEC	(Lot 4NRGF-OT)			+/-	10.9975	µg/mL	Unstressed
	Purity 99%				+/-	18.6456	µg/mL	Stressed
12	Benzyl alcohol		1,004.8	µg/mL	+/-	5.8555	µg/mL	Gravimetric
	CAS # 100-51-6.SEC	(Lot QZBUO)			+/-	11.0084	µg/mL	Unstressed
	Purity 99%				+/-	18.6642	µg/mL	Stressed
13	2,2'-oxybis(1-chloropropane)		1,002.2	µg/mL	+/-	5.8403	µg/mL	Gravimetric
	CAS # 108-60-1 *	(Lot 2-EAW-18-3)			+/-	10.9799	µg/mL	Unstressed
	Purity 99%				+/-	18.6159	µg/mL	Stressed
14	2-Methylphenol (o-cresol)		1,002.9	µg/mL	+/-	5.8446	µg/mL	Gravimetric
	CAS # 95-48-7.SEC	(Lot NC7HL)			+/-	10.9880	µg/mL	Unstressed
	Purity 98%				+/-	18.6295	µg/mL	Stressed
15	Hexachloroethane		1,005.1	µg/mL	+/-	5.8572	µg/mL	Gravimetric
	CAS # 67-72-1.SEC	(Lot 10173016)			+/-	11.0116	µg/mL	Unstressed
	Purity 98%				+/-	18.6695	µg/mL	Stressed
16	Acetophenone		1,004.4	µg/mL	+/-	5.8532	µg/mL	Gravimetric
	CAS # 98-86-2.SEC	(Lot NSGTI)			+/-	11.0040	µg/mL	Unstressed
	Purity 99%				+/-	18.6567	µg/mL	Stressed
17	N-Nitroso-di-n-propylamine		1,001.2	µg/mL	+/-	5.8345	µg/mL	Gravimetric
	CAS # 621-64-7.SEC	(Lot 1528900)			+/-	10.9690	µg/mL	Unstressed
	Purity 99%				+/-	18.5973	µg/mL	Stressed
18	4-Methylphenol (p-cresol)		500.8	µg/mL	+/-	2.9184	µg/mL	Gravimetric
	CAS # 106-44-5.SEC	(Lot 65S2E)			+/-	5.4867	µg/mL	Unstressed
	Purity 99%				+/-	9.3024	µg/mL	Stressed
19	3-Methylphenol (m-cresol)		502.8	µg/mL	+/-	2.9301	µg/mL	Gravimetric
	CAS # 108-39-4.SEC	(Lot 6LHTM)			+/-	5.5086	µg/mL	Unstressed
	Purity 99%				+/-	9.3395	µg/mL	Stressed
20	Nitrobenzene		1,001.0	µg/mL	+/-	5.8333	µg/mL	Gravimetric
	CAS # 98-95-3.SEC	(Lot FLYIG)			+/-	10.9668	µg/mL	Unstressed
	Purity 99%				+/-	18.5936	µg/mL	Stressed
21	Isophorone		1,003.2	µg/mL	+/-	5.8462	µg/mL	Gravimetric
	CAS # 78-59-1.SEC	(Lot XHGJI)			+/-	10.9909	µg/mL	Unstressed
	Purity 99%				+/-	18.6344	µg/mL	Stressed
22	2-Nitrophenol		1,003.8	µg/mL	+/-	5.8497	µg/mL	Gravimetric
	CAS # 88-75-5.SEC	(Lot GXJ7J)			+/-	10.9975	µg/mL	Unstressed
	Purity 99%				+/-	18.6456	µg/mL	Stressed
23	2,4-Dimethylphenol		1,001.8	µg/mL	+/-	5.8380	µg/mL	Gravimetric
	CAS # 105-67-9.SEC	(Lot MKBL3650V)			+/-	10.9756	µg/mL	Unstressed
	Purity 99%				+/-	18.6084	µg/mL	Stressed

24	Bis(2-chloroethoxy)methane		1,005.0	µg/mL	+/-	5.8567	µg/mL	Gravimetric
	CAS # 111-91-1 *	(Lot 317200)			+/-	11.0106	µg/mL	Unstressed
	Purity 99%				+/-	18.6679	µg/mL	Stressed
25	2,4-Dichlorophenol		1,001.6	µg/mL	+/-	5.8368	µg/mL	Gravimetric
	CAS # 120-83-2.SEC	(Lot FHM01)			+/-	10.9734	µg/mL	Unstressed
	Purity 99%				+/-	18.6047	µg/mL	Stressed
26	1,2,4-Trichlorobenzene		1,002.0	µg/mL	+/-	5.8392	µg/mL	Gravimetric
	CAS # 120-82-1.SEC	(Lot OGO01)			+/-	10.9778	µg/mL	Unstressed
	Purity 99%				+/-	18.6121	µg/mL	Stressed
27	Naphthalene		1,006.4	µg/mL	+/-	5.8648	µg/mL	Gravimetric
	CAS # 91-20-3.SEC	(Lot 4KW3H-OO)			+/-	11.0260	µg/mL	Unstressed
	Purity 99%				+/-	18.6939	µg/mL	Stressed
28	2,6-Dichlorophenol		1,005.6	µg/mL	+/-	5.8602	µg/mL	Gravimetric
	CAS # 87-65-0.SEC	(Lot SIDBB)			+/-	11.0172	µg/mL	Unstressed
	Purity 99%				+/-	18.6790	µg/mL	Stressed
29	4-Chloroaniline		1,000.2	µg/mL	+/-	5.8287	µg/mL	Gravimetric
	CAS # 106-47-8.SEC	(Lot 10171860)			+/-	10.9580	µg/mL	Unstressed
	Purity 99%				+/-	18.5787	µg/mL	Stressed
30	Hexachlorobutadiene		1,002.4	µg/mL	+/-	5.8415	µg/mL	Gravimetric
	CAS # 87-68-3.SEC	(Lot 2009400)			+/-	10.9821	µg/mL	Unstressed
	Purity 97%				+/-	18.6195	µg/mL	Stressed
31	2-Methylnaphthalene		1,001.0	µg/mL	+/-	5.8333	µg/mL	Gravimetric
	CAS # 91-57-6.SEC	(Lot 76023-1)			+/-	10.9668	µg/mL	Unstressed
	Purity 99%				+/-	18.5936	µg/mL	Stressed
32	4-Chloro-3-methylphenol		1,006.8	µg/mL	+/-	5.8671	µg/mL	Gravimetric
	CAS # 59-50-7.SEC	(Lot FDO02)			+/-	11.0303	µg/mL	Unstressed
	Purity 99%				+/-	18.7013	µg/mL	Stressed
33	1-Methylnaphthalene		1,003.8	µg/mL	+/-	5.8497	µg/mL	Gravimetric
	CAS # 90-12-0.SEC	(Lot UATSA)			+/-	10.9975	µg/mL	Unstressed
	Purity 99%				+/-	18.6456	µg/mL	Stressed
34	1,2,4,5-Tetrachlorobenzene		1,002.6	µg/mL	+/-	5.8427	µg/mL	Gravimetric
	CAS # 95-94-3.SEC	(Lot AF02)			+/-	10.9843	µg/mL	Unstressed
	Purity 99%				+/-	18.6233	µg/mL	Stressed
35	Hexachlorocyclopentadiene		1,004.0	µg/mL	+/-	5.8508	µg/mL	Gravimetric
	CAS # 77-47-4.SEC	(Lot 0012013)			+/-	10.9997	µg/mL	Unstressed
	Purity 99%				+/-	18.6493	µg/mL	Stressed
36	2,4,6-Trichlorophenol		1,006.7	µg/mL	+/-	5.8663	µg/mL	Gravimetric
	CAS # 88-06-2.SEC	(Lot UUMYM)			+/-	11.0288	µg/mL	Unstressed
	Purity 98%				+/-	18.6986	µg/mL	Stressed
37	2,4,5-Trichlorophenol		1,002.8	µg/mL	+/-	5.8438	µg/mL	Gravimetric
	CAS # 95-95-4.SEC	(Lot MKBQ9937V)			+/-	10.9864	µg/mL	Unstressed
	Purity 97%				+/-	18.6267	µg/mL	Stressed
38	2-Chloronaphthalene		1,006.4	µg/mL	+/-	5.8648	µg/mL	Gravimetric
	CAS # 91-58-7.SEC	(Lot LC03928V)			+/-	11.0260	µg/mL	Unstressed
	Purity 99%				+/-	18.6939	µg/mL	Stressed
39	Biphenyl		1,005.8	µg/mL	+/-	5.8613	µg/mL	Gravimetric
	CAS # 92-52-4.SEC	(Lot 330QE)			+/-	11.0194	µg/mL	Unstressed
	Purity 99%				+/-	18.6827	µg/mL	Stressed

40	4-Nitroaniline		1,005.4	µg/mL	+/-	5.8590	µg/mL	Gravimetric
	CAS # 100-01-6.SEC	(Lot 5ITRC)			+/-	11.0150	µg/mL	Unstressed
	Purity 99%				+/-	18.6753	µg/mL	Stressed
41	Acenaphthylene		1,000.0	µg/mL	+/-	5.8275	µg/mL	Gravimetric
	CAS # 208-96-8.SEC	(Lot 062013)			+/-	10.9558	µg/mL	Unstressed
	Purity 98%				+/-	18.5748	µg/mL	Stressed
42	1,3-Dinitrobenzene		1,004.8	µg/mL	+/-	5.8555	µg/mL	Gravimetric
	CAS # 99-65-0.SEC	(Lot 3XXLB)			+/-	11.0084	µg/mL	Unstressed
	Purity 99%				+/-	18.6642	µg/mL	Stressed
43	Dimethylphthalate		1,000.6	µg/mL	+/-	5.8310	µg/mL	Gravimetric
	CAS # 131-11-3.SEC	(Lot 483WC)			+/-	10.9624	µg/mL	Unstressed
	Purity 99%				+/-	18.5861	µg/mL	Stressed
44	2,6-Dinitrotoluene		1,006.8	µg/mL	+/-	5.8671	µg/mL	Gravimetric
	CAS # 606-20-2.SEC	(Lot GE01)			+/-	11.0303	µg/mL	Unstressed
	Purity 99%				+/-	18.7013	µg/mL	Stressed
45	Acenaphthene		1,001.8	µg/mL	+/-	5.8380	µg/mL	Gravimetric
	CAS # 83-32-9.SEC	(Lot BWZJE)			+/-	10.9756	µg/mL	Unstressed
	Purity 99%				+/-	18.6084	µg/mL	Stressed
46	2,4-Dinitrophenol		2,006.2	µg/mL	+/-	11.6642	µg/mL	Gravimetric
	CAS # 51-28-5.SEC	(Lot 2TXXH)			+/-	21.9653	µg/mL	Unstressed
	Purity 99%				+/-	37.2567	µg/mL	Stressed
47	Dibenzofuran		1,000.8	µg/mL	+/-	5.8322	µg/mL	Gravimetric
	CAS # 132-64-9.SEC	(Lot 27ZGC)			+/-	10.9646	µg/mL	Unstressed
	Purity 99%				+/-	18.5899	µg/mL	Stressed
48	3-Nitroaniline		1,002.6	µg/mL	+/-	5.8427	µg/mL	Gravimetric
	CAS # 99-09-2.SEC	(Lot FGN03)			+/-	10.9843	µg/mL	Unstressed
	Purity 99%				+/-	18.6233	µg/mL	Stressed
49	2,4-Dinitrotoluene		1,003.6	µg/mL	+/-	5.8485	µg/mL	Gravimetric
	CAS # 121-14-2.SEC	(Lot SHRSA)			+/-	10.9953	µg/mL	Unstressed
	Purity 99%				+/-	18.6419	µg/mL	Stressed
50	4-Nitrophenol		2,004.2	µg/mL	+/-	11.6526	µg/mL	Gravimetric
	CAS # 100-02-7.SEC	(Lot 2J5LB)			+/-	21.9434	µg/mL	Unstressed
	Purity 99%				+/-	37.2196	µg/mL	Stressed
51	2,3,4,6-Tetrachlorophenol		1,005.4	µg/mL	+/-	5.8590	µg/mL	Gravimetric
	CAS # 58-90-2.SEC	(Lot LB98980V)			+/-	11.0150	µg/mL	Unstressed
	Purity 99%				+/-	18.6753	µg/mL	Stressed
52	Fluorene		995.1	µg/mL	+/-	5.7989	µg/mL	Gravimetric
	CAS # 86-73-7.SEC	(Lot 1240200)			+/-	10.9021	µg/mL	Unstressed
	Purity 98%				+/-	18.4838	µg/mL	Stressed
53	4-Chlorophenyl phenyl ether		1,005.4	µg/mL	+/-	5.8590	µg/mL	Gravimetric
	CAS # 7005-72-3.SEC	(Lot P31G)			+/-	11.0150	µg/mL	Unstressed
	Purity 99%				+/-	18.6753	µg/mL	Stressed
54	n-Hexadecane (C16)		1,005.4	µg/mL	+/-	5.8590	µg/mL	Gravimetric
	CAS # 544-76-3.SEC	(Lot A0328141)			+/-	11.0150	µg/mL	Unstressed
	Purity 99%				+/-	18.6753	µg/mL	Stressed
55	Diethylphthalate		1,000.2	µg/mL	+/-	5.8287	µg/mL	Gravimetric
	CAS # 84-66-2.SEC	(Lot UMBJC)			+/-	10.9580	µg/mL	Unstressed
	Purity 99%				+/-	18.5787	µg/mL	Stressed

56	Azobenzene		1,003.2	µg/mL	+/-	5.8462	µg/mL	Gravimetric
	CAS # 103-33-3.SEC	(Lot JUWAG)			+/-	10.9909	µg/mL	Unstressed
	Purity 99%				+/-	18.6344	µg/mL	Stressed
57	Diphenylamine		1,711.8	µg/mL	+/-	9.9756	µg/mL	Gravimetric
	CAS # 122-39-4.SEC	(Lot 10164691)			+/-	18.7542	µg/mL	Unstressed
	Purity 99%				+/-	31.7967	µg/mL	Stressed
58	2-Nitroaniline		1,000.2	µg/mL	+/-	5.8287	µg/mL	Gravimetric
	CAS # 88-74-4.SEC	(Lot T6E7B)			+/-	10.9580	µg/mL	Unstressed
	Purity 99%				+/-	18.5787	µg/mL	Stressed
59	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)		2,009.8	µg/mL	+/-	11.6852	µg/mL	Gravimetric
	CAS # 534-52-1.SEC	(Lot 1791900)			+/-	22.0047	µg/mL	Unstressed
	Purity 99%				+/-	37.3236	µg/mL	Stressed
60	4-Bromophenyl phenyl ether		1,003.8	µg/mL	+/-	5.8497	µg/mL	Gravimetric
	CAS # 101-55-3.SEC	(Lot 84C6D)			+/-	10.9975	µg/mL	Unstressed
	Purity 99%				+/-	18.6456	µg/mL	Stressed
61	Hexachlorobenzene		1,000.0	µg/mL	+/-	5.8275	µg/mL	Gravimetric
	CAS # 118-74-1.SEC	(Lot 20625)			+/-	10.9558	µg/mL	Unstressed
	Purity 98%				+/-	18.5748	µg/mL	Stressed
62	Pentachlorophenol		2,002.2	µg/mL	+/-	11.6410	µg/mL	Gravimetric
	CAS # 87-86-5.SEC	(Lot 1239600)			+/-	21.9215	µg/mL	Unstressed
	Purity 99%				+/-	37.1824	µg/mL	Stressed
63	Phenanthrene		1,004.4	µg/mL	+/-	5.8532	µg/mL	Gravimetric
	CAS # 85-01-8.SEC	(Lot 1238300)			+/-	11.0040	µg/mL	Unstressed
	Purity 99%				+/-	18.6567	µg/mL	Stressed
64	n-Octadecane (C18)		1,001.2	µg/mL	+/-	5.8345	µg/mL	Gravimetric
	CAS # 593-45-3.SEC	(Lot G14U045)			+/-	10.9690	µg/mL	Unstressed
	Purity 99%				+/-	18.5973	µg/mL	Stressed
65	Anthracene		1,000.6	µg/mL	+/-	5.8310	µg/mL	Gravimetric
	CAS # 120-12-7.SEC	(Lot WDFNJ)			+/-	10.9624	µg/mL	Unstressed
	Purity 99%				+/-	18.5861	µg/mL	Stressed
66	Carbazole		1,001.8	µg/mL	+/-	5.8380	µg/mL	Gravimetric
	CAS # 86-74-8.SEC	(Lot LMIZB)			+/-	10.9756	µg/mL	Unstressed
	Purity 99%				+/-	18.6084	µg/mL	Stressed
67	Di-n-butylphthalate		1,000.8	µg/mL	+/-	5.8322	µg/mL	Gravimetric
	CAS # 84-74-2.SEC	(Lot 42FSG)			+/-	10.9646	µg/mL	Unstressed
	Purity 99%				+/-	18.5899	µg/mL	Stressed
68	Fluoranthene		1,002.6	µg/mL	+/-	5.8427	µg/mL	Gravimetric
	CAS # 206-44-0.SEC	(Lot FREGF)			+/-	10.9843	µg/mL	Unstressed
	Purity 99%				+/-	18.6233	µg/mL	Stressed
69	Pyrene		1,000.0	µg/mL	+/-	5.8275	µg/mL	Gravimetric
	CAS # 129-00-0.SEC	(Lot ROVJC)			+/-	10.9558	µg/mL	Unstressed
	Purity 99%				+/-	18.5750	µg/mL	Stressed
70	Benzyl butyl phthalate		1,004.5	µg/mL	+/-	5.8537	µg/mL	Gravimetric
	CAS # 85-68-7.SEC	(Lot GX3GL)			+/-	11.0051	µg/mL	Unstressed
	Purity 98%				+/-	18.6586	µg/mL	Stressed
71	Benz(a)anthracene		999.7	µg/mL	+/-	5.8257	µg/mL	Gravimetric
	CAS # 56-55-3.SEC	(Lot MTENF)			+/-	10.9524	µg/mL	Unstressed
	Purity 97%				+/-	18.5691	µg/mL	Stressed

72	chrysene		1,003.0	µg/mL	+/-	5.8450	µg/mL	Gravimetric
	CAS # 218-01-9.SEC	(Lot KQ4SE)			+/-	10.9887	µg/mL	Unstressed
	Purity 99%				+/-	18.6307	µg/mL	Stressed
73	Bis(2-ethylhexyl)phthalate		1,003.6	µg/mL	+/-	5.8485	µg/mL	Gravimetric
	CAS # 117-81-7.SEC	(Lot MT8AG)			+/-	10.9953	µg/mL	Unstressed
	Purity 99%				+/-	18.6419	µg/mL	Stressed
74	Di-n-octyl phthalate		1,002.0	µg/mL	+/-	5.8389	µg/mL	Gravimetric
	CAS # 117-84-0.SEC	(Lot O8DLD)			+/-	10.9772	µg/mL	Unstressed
	Purity 98%				+/-	18.6113	µg/mL	Stressed
75	Benzo(b)fluoranthene		1,002.2	µg/mL	+/-	5.8403	µg/mL	Gravimetric
	CAS # 205-99-2.SEC	(Lot 022011)			+/-	10.9799	µg/mL	Unstressed
	Purity 99%				+/-	18.6159	µg/mL	Stressed
76	Benzo(k)fluoranthene		1,006.6	µg/mL	+/-	5.8660	µg/mL	Gravimetric
	CAS # 207-08-9.SEC	(Lot 022011)			+/-	11.0281	µg/mL	Unstressed
	Purity 99%				+/-	18.6976	µg/mL	Stressed
77	Benzo(a)pyrene		1,000.2	µg/mL	+/-	5.8287	µg/mL	Gravimetric
	CAS # 50-32-8.SEC	(Lot 2IGMD)			+/-	10.9580	µg/mL	Unstressed
	Purity 99%				+/-	18.5787	µg/mL	Stressed
78	Indeno(1,2,3-cd)pyrene		1,000.0	µg/mL	+/-	5.8275	µg/mL	Gravimetric
	CAS # 193-39-5.SEC	(Lot 012011)			+/-	10.9558	µg/mL	Unstressed
	Purity 99%				+/-	18.5750	µg/mL	Stressed
79	Dibenz(a,h)anthracene		1,002.4	µg/mL	+/-	5.8415	µg/mL	Gravimetric
	CAS # 53-70-3.SEC	(Lot 0012012)			+/-	10.9821	µg/mL	Unstressed
	Purity 99%				+/-	18.6196	µg/mL	Stressed
80	Benzo(g,h,i)perylene		1,007.6	µg/mL	+/-	5.8718	µg/mL	Gravimetric
	CAS # 191-24-2.SEC	(Lot 0022012)			+/-	11.0391	µg/mL	Unstressed
	Purity 99%				+/-	18.7162	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

*** Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.**

Specific Reference Material Notes:

N-nitrosodiphenylamine 2000 ug/mL equivalent when used for GC analysis. Actual formulation is diphenylamine 1710 ug/mL.
N-Nitrosodiphenylamine is prone to breakdown in the injection port and will be converted to diphenylamine.
N-Nitrosodiphenylamine is also a reactive species that can initiate premature decomposition of other compounds in the mix. For these reasons diphenylamine is used in the preparation of this mixture. When comparing the response of this compound to mixtures manufactured using N-nitrosodiphenylamine, a difference in response will be observed.

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

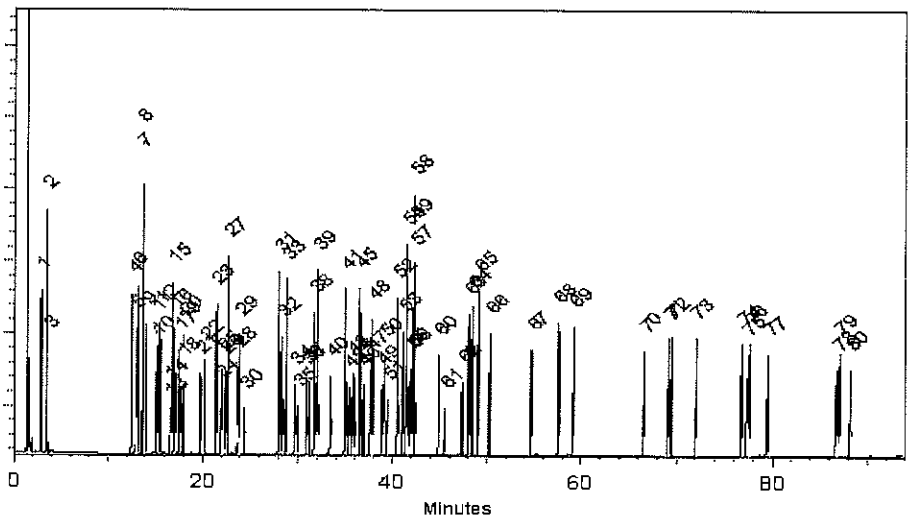
Carrier Gas:
hydrogen-constant pressure 10 psi

Temp. Program:
35°C (hold 3 min.) to 330°C
@ 3°C/min. (hold 5 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician

Date Mixed: 10-Dec-2014 **Balance:** 1128353505

Tyler Brown - QA Analyst

Date Passed: 23-Dec-2014

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569730.SEC **Lot No.:** A0108170

Description : 8270 List 1 / Std #9

8270 List 1 / Std #9 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 10 mL **Pkg Amt:** > 5 mL

Expiration Date : July 31, 2016 **Storage:** 10°C or colder

Handling: Contains carcinogen/reproductive toxin.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Benzidine		2,000.0 µg/mL	+/- 11.6282	µg/mL	Gravimetric
	CAS # 92-87-5.SEC	(Lot 3241700)		+/- 21.8974	µg/mL	Unstressed
	Purity 99%			+/- 37.1416	µg/mL	Stressed
2	3,3'-Dichlorobenzidine		2,007.4 µg/mL	+/- 11.6712	µg/mL	Gravimetric
	CAS # 91-94-1.SEC	(Lot 2982200)		+/- 21.9784	µg/mL	Unstressed
	Purity 99%			+/- 37.2790	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

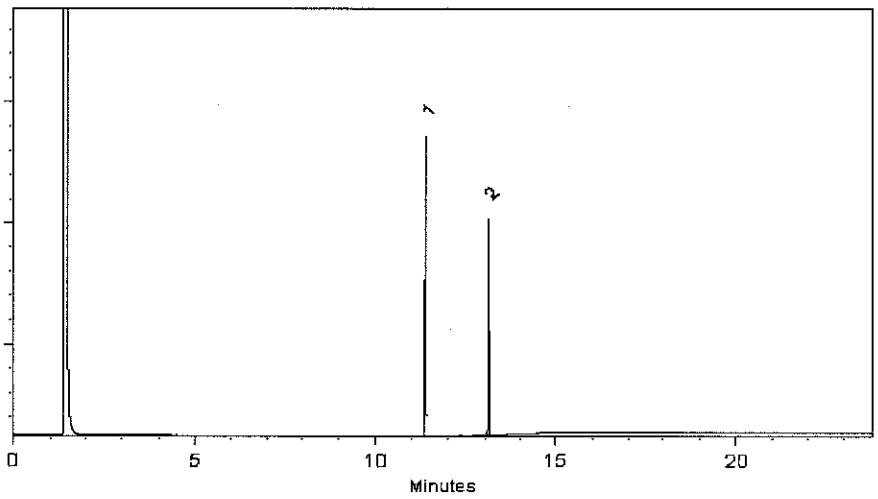
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician

Date Mixed: 07-Jan-2015 **Balance:** 1128353505

Jennifer L. Pollino - QC Analyst

Date Passed: 13-Jan-2015

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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5MLIST1 SURR-00002

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Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567685 **Lot No.:** A093638

Description : 8270 Surrogate Standard

8270 Surrogate Standard 5,000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : February 2018 **Storage:** 10°C or colder

Handling: Sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Fluorophenol	5,000.0 µg/mL	+/- 29.0689	µg/mL	Gravimetric
	CAS # 367-12-4		+/- 132.9492	µg/mL	Unstressed
	Purity 99%		+/- 163.4029	µg/mL	Stressed
2	Phenol-d5	5,000.0 µg/mL	+/- 29.0689	µg/mL	Gravimetric
	CAS # 4165-62-2		+/- 132.9492	µg/mL	Unstressed
	Purity 99%		+/- 163.4029	µg/mL	Stressed
3	Nitrobenzene-d5	5,000.0 µg/mL	+/- 29.0689	µg/mL	Gravimetric
	CAS # 4165-60-0		+/- 132.9492	µg/mL	Unstressed
	Purity 99%		+/- 163.4029	µg/mL	Stressed
4	2-Fluorobiphenyl	5,000.0 µg/mL	+/- 29.0689	µg/mL	Gravimetric
	CAS # 321-60-8		+/- 132.9492	µg/mL	Unstressed
	Purity 99%		+/- 163.4029	µg/mL	Stressed
5	2,4,6-Tribromophenol	5,000.0 µg/mL	+/- 29.0689	µg/mL	Gravimetric
	CAS # 118-79-6		+/- 132.9492	µg/mL	Unstressed
	Purity 99%		+/- 163.4029	µg/mL	Stressed
6	p-Terphenyl-d14	5,000.0 µg/mL	+/- 29.0689	µg/mL	Gravimetric
	CAS # 1718-51-0		+/- 132.9492	µg/mL	Unstressed
	Purity 99%		+/- 163.4029	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Tech Tips:
Due to the limited solubility of p-terphenyl-d14 in methanol, we do not recommend that this mixture be diluted in methanol.

Column:
30m x .25mm x .25um
Rtx-5 (cat.#10223)

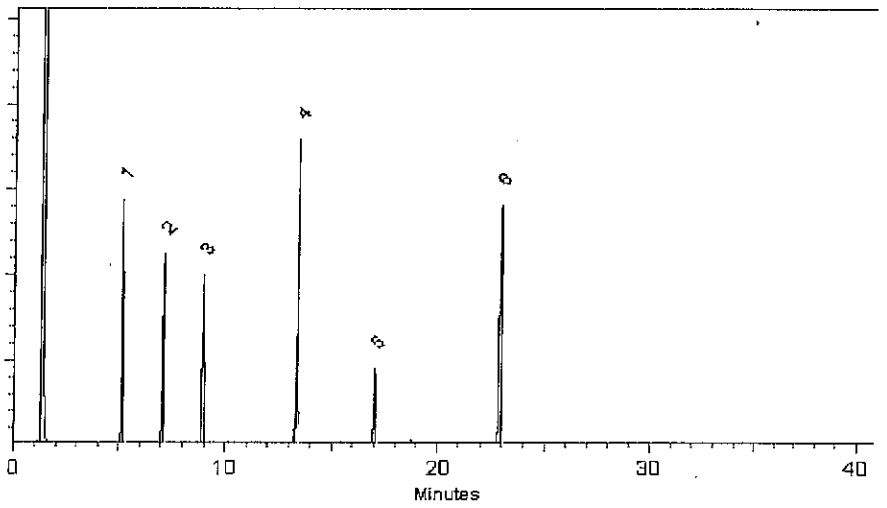
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



Diane Shaffer - QA Analyst

Date Passed: 22-Feb-2013 **Balance:** 1128342313

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date of the unopened ampul stored at the recommended storage condition is the last day of the month listed in the expiration date field.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31840, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569731.sec **Lot No.:** A0107944

Description : 8270 List 1 / Std #10

8270 List 1 / Std #10 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : June 30, 2016 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Indene	2,000.4 µg/mL	+/- 11.6305	µg/mL	Gravimetric
	CAS # 95-13-6.SEC (Lot IG5TI)		+/- 22.5574	µg/mL	Unstressed
	Purity 99%		+/- 25.9570	µg/mL	Stressed
2	Benzoic acid	2,000.7 µg/mL	+/- 11.6324	µg/mL	Gravimetric
	CAS # 65-85-0.SEC (Lot QD3UO)		+/- 22.5610	µg/mL	Unstressed
	Purity 97%		+/- 25.9612	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

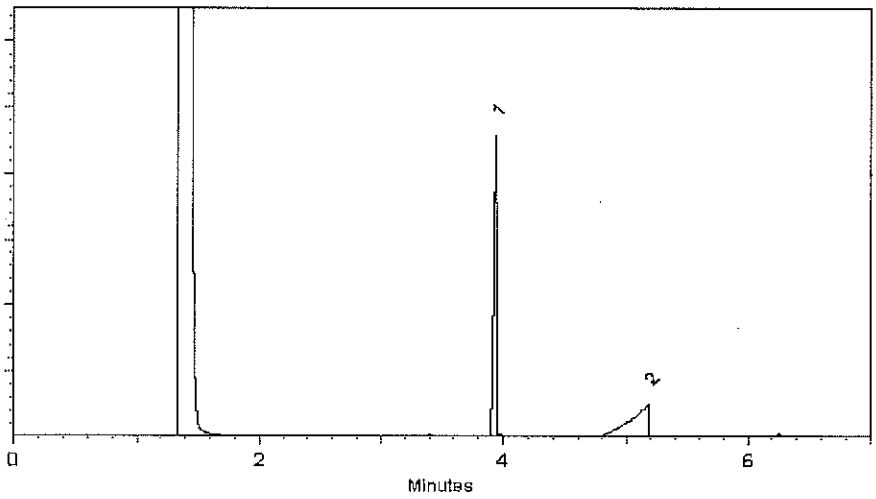
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael J Maye

Date Mixed: 22-Dec-2014 **Balance:** 1128353505

Tyler Brown - QA Analyst

Date Passed: 29-Dec-2014

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

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Certificate of Composition

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567685 **Lot No.:** A092712

Description : 8270 Surrogate Standard

8270 Surrogate Standard 5000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : January 2018 **Storage:** 10°C or colder

Handling: Sonicate prior to use.

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Fluorophenol	5,000.0 µg/mL	+/- 29.2761 µg/mL	Gravimetric
	CAS # 367-12-4		+/- 132.9947 µg/mL	Unstressed
	Purity 99%		+/- 163.4399 µg/mL	Stressed
2	Phenol-d5	5,000.0 µg/mL	+/- 29.2761 µg/mL	Gravimetric
	CAS # 4165-62-2		+/- 132.9947 µg/mL	Unstressed
	Purity 99%		+/- 163.4399 µg/mL	Stressed
3	Nitrobenzene-d5	5,000.0 µg/mL	+/- 29.2761 µg/mL	Gravimetric
	CAS # 4165-60-0		+/- 132.9947 µg/mL	Unstressed
	Purity 99%		+/- 163.4399 µg/mL	Stressed
4	2-Fluorobiphenyl	5,000.0 µg/mL	+/- 29.2761 µg/mL	Gravimetric
	CAS # 321-60-8		+/- 132.9947 µg/mL	Unstressed
	Purity 99%		+/- 163.4399 µg/mL	Stressed
5	2,4,6-Tribromophenol	5,000.0 µg/mL	+/- 29.2761 µg/mL	Gravimetric
	CAS # 118-79-6		+/- 132.9947 µg/mL	Unstressed
	Purity 99%		+/- 163.4399 µg/mL	Stressed
6	p-Terphenyl-d14	5,000.0 µg/mL	+/- 29.2761 µg/mL	Gravimetric
	CAS # 1718-51-0		+/- 132.9947 µg/mL	Unstressed
	Purity 99%		+/- 163.4399 µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Tech Tips:

Due to the limited solubility of p-terphenyl-d14 in methanol, we do not recommend that this mixture be diluted in methanol.

Column:
30m x .25mm x .25um
Rtx-5 (cat.#10223)

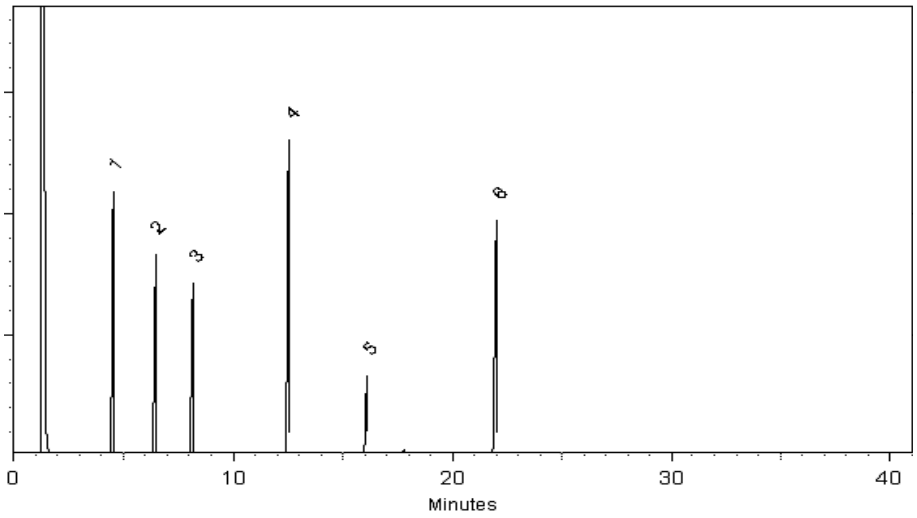
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



Jennifer L. Pollino - QC Analyst

Date Passed: 14-Jan-2013 **Balance:** 1128342314

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date of the unopened ampul stored at the recommended storage condition is the last day of the month listed in the expiration date field.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31840, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

REVIEWED
By jlidgett at 8:46 am, Jan 15, 2013

Method 8270C DOD

Semivolatile Compounds (GC/MS) by Method 8270/DOD

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): RXI-5SILMS ID: 0.45(mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
079SS-0389M-0001-SO	240-50067-1	70	70 M	67	70	119	78
079SB-0390M-0001-SO	240-50067-2	56	44	68	75	121	74
079SB-0391M-0001-SO	240-50067-3	40	46	63	69	69	70
079SB-0392M-0001-SO	240-50067-4	49	50	64	70	59	74
079SB-0393M-0001-SO	240-50067-5	39	43	72	74	68	79
079SB-0394M-0001-SO	240-50067-6	33 Q	41	63	67	55	72
079SB-0395M-0001-0002-SO	240-50067-7	67	59 M	67	76	109	72
079SB-0396M-0001-SO	240-50067-8	72	74 M	70	90	105	77
079SB-0397M-0001-SO	240-50067-9	62	69 M	62	76	72	76
079SB-0398-0001-SO	240-50067-10	70	74	70	75	40	80
	MB 240-179108/22-A	57	76	84	88	29 Q	88
	MB 240-180350/8-A	45	60	67	70	22 Q	70
	LCS 240-179108/23-A	82	83	83	83	44	83
	LCS 240-180350/9-A	75	75	75	74	59	74
079SB-0395M-0001-0002-SO MS	240-50067-7 MS	73	72	71	73	91	75
079SB-0395M-0001-0002-SO MSD	240-50067-7 MSD	73	72	70	71	90	71

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	35-105
PHL = Phenol-d5 (Surr)	40-100
NBZ = Nitrobenzene-d5 (Surr)	35-100
FBP = 2-Fluorobiphenyl (Surr)	45-105
TBP = 2,4,6-Tribromophenol (Surr)	35-125
TPH = Terphenyl-d14 (Surr)	30-125

Column to be used to flag recovery values

FORM II 8270C

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): RXI-5SILMS ID: 0.45(mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
	MRL 240-181588/3	100	99	101	102	99	96
	MRL 240-181588/20	94	96	99	103	104	99

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	50-150
PHL = Phenol-d5 (Surr)	50-150
NBZ = Nitrobenzene-d5 (Surr)	50-150
FBP = 2-Fluorobiphenyl (Surr)	50-150
TBP = 2,4,6-Tribromophenol (Surr)	50-150
TPH = Terphenyl-d14 (Surr)	50-150

Column to be used to flag recovery values

FORM II 8270C

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RXI-5SILMS ID: 0.45(mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
079SB-0399-0001-RB	240-50067-11	56	55	50	51	53	74
079SB-0399-0001-RB RE	240-50067-11 RE	77	83	76	82	81	82
	MB 240-179064/2-A	79	80	81	81	84	83
	MB 240-180428/2-A	94	94	81	88	88	87
	LCS 240-179064/3-A	68	68	72	72	83	75
	LCS 240-180428/3-A	78	86	90	89	107	84

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	20-110
PHL = Phenol-d5 (Surr)	10-115
NBZ = Nitrobenzene-d5 (Surr)	40-110
FBP = 2-Fluorobiphenyl (Surr)	50-110
TBP = 2,4,6-Tribromophenol (Surr)	40-125
TPH = Terphenyl-d14 (Surr)	50-135

Column to be used to flag recovery values

FORM II 8270C

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RXI-5SILMS ID: 0.45(mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
	MRL 240-181781/3	100	100	100	102	102	100
	MRL 240-181781/16	98	99	102	99	98	100

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	50-150
PHL = Phenol-d5 (Surr)	50-150
NBZ = Nitrobenzene-d5 (Surr)	50-150
FBP = 2-Fluorobiphenyl (Surr)	50-150
TBP = 2,4,6-Tribromophenol (Surr)	50-150
TPH = Terphenyl-d14 (Surr)	50-150

Column to be used to flag recovery values

FORM II 8270C

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RXI-5SILMS ID: 0.45(mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
	MRL 240-180308/12	99	102	105	105	101	97
	MRL 240-180308/21	100	96	105	101	96	91
	MRL 240-180709/3	103	102	101	97	113	95
	MRL 240-180709/7	103	96	104	99	112	93

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	50-150
PHL = Phenol-d5 (Surr)	50-150
NBZ = Nitrobenzene-d5 (Surr)	50-150
FBP = 2-Fluorobiphenyl (Surr)	70-130
TBP = 2,4,6-Tribromophenol (Surr)	50-150
TPH = Terphenyl-d14 (Surr)	50-150

Column to be used to flag recovery values

FORM II 8270C

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 50512014.D

Lab ID: LCS 240-179064/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acenaphthene	20.0	14.8	74	45-110	
Acenaphthylene	20.0	14.0	70	50-105	
Anthracene	20.0	14.8	74	55-110	
Benzo[a]anthracene	20.0	15.2	76	55-110	
Benzo[a]pyrene	20.0	15.1	76	55-110	
Benzo[b]fluoranthene	20.0	16.5	83	45-120	
Benzo[g,h,i]perylene	20.0	16.9	85	40-125	
Benzoic acid	40.0	20 U	7	0-125	
Benzo[k]fluoranthene	20.0	18.0	90	45-125	
Benzyl alcohol	20.0	14.1	70	30-110	
Bis(2-chloroethoxy)methane	20.0	13.7	69	45-105	
Bis(2-chloroethyl)ether	20.0	13.1	66	35-110	
bis (2-chloroisopropyl) ether	20.0	12.6	63	25-130	
Bis(2-ethylhexyl) phthalate	20.0	16.1	81	40-125	
4-Bromophenyl phenyl ether	20.0	16.1	81	50-115	
Butyl benzyl phthalate	20.0	15.5	77	45-115	
Carbazole	20.0	14.9	75	50-115	
4-Chloroaniline	20.0	13.4	67	15-110	
4-Chloro-3-methylphenol	20.0	16.0	80	45-110	
2-Chloronaphthalene	20.0	13.0	65	50-105	
2-Chlorophenol	20.0	12.6	63	35-105	
4-Chlorophenyl phenyl ether	20.0	15.4	77	50-110	
Chrysene	20.0	16.5	82	55-110	
Dibenz(a,h)anthracene	20.0	16.5	82	40-125	
Dibenzofuran	20.0	14.2	71	55-105	
1,2-Dichlorobenzene	20.0	12.3	61	35-100	
1,3-Dichlorobenzene	20.0	11.2	56	30-100	
1,4-Dichlorobenzene	20.0	11.4	57	30-100	
3,3'-Dichlorobenzidine	40.0	26.6	67	20-110	
2,4-Dichlorophenol	20.0	14.0	70	50-105	
Diethyl phthalate	20.0	16.4	82	40-120	
2,4-Dimethylphenol	20.0	11.0	55	30-110	
Dimethyl phthalate	20.0	15.8	79	25-125	
Di-n-butyl phthalate	20.0	17.3	86	55-115	
4,6-Dinitro-2-methylphenol	40.0	25.5	64	40-130	
2,4-Dinitrophenol	40.0	19.7	49	15-140	
2,4-Dinitrotoluene	20.0	15.5	78	50-120	
2,6-Dinitrotoluene	20.0	16.2	81	50-115	
Di-n-octyl phthalate	20.0	16.3	81	35-135	
Fluoranthene	20.0	15.3	76	55-115	
Fluorene	20.0	14.4	72	50-110	
Hexachlorobenzene	20.0	15.4	77	50-110	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 50512014.D

Lab ID: LCS 240-179064/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Hexachlorobutadiene	20.0	12.1	61	25-105	
Hexachlorocyclopentadiene	20.0	0.451 J	2	4-110	Q
Hexachloroethane	20.0	11.5	57	30-95	
Indeno[1,2,3-cd]pyrene	20.0	16.9	85	45-125	
Isophorone	20.0	15.5	77	50-110	
2-Methylnaphthalene	20.0	14.0	70	45-105	
2-Methylphenol	20.0	13.3	67	40-110	
3 & 4 Methylphenol	20.0	13.5	68	30-110	
Naphthalene	20.0	13.0	65	40-100	
2-Nitroaniline	20.0	14.4	72	50-115	
3-Nitroaniline	20.0	16.4	82	20-125	
4-Nitroaniline	20.0	12.6	63	35-120	
Nitrobenzene	20.0	13.5	67	45-110	
2-Nitrophenol	20.0	13.8	69	40-115	
4-Nitrophenol	40.0	30.5	76	0-125	
N-Nitrosodi-n-propylamine	20.0	14.5	72	35-130	
N-Nitrosodiphenylamine	40.0	30.7	77	50-110	
Pentachlorophenol	40.0	25.6	64	40-115	
Phenanthrene	20.0	15.1	76	50-115	
Phenol	20.0	13.8	69	0-115	
Pyrene	20.0	15.4	77	50-130	
1,2,4-Trichlorobenzene	20.0	12.4	62	35-105	
2,4,5-Trichlorophenol	20.0	15.3	77	50-110	
2,4,6-Trichlorophenol	20.0	15.6	78	50-115	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 50520005.D

Lab ID: LCS 240-179108/23-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Acenaphthene	667	526	79	45-110	
Acenaphthylene	667	522	78	45-105	
Anthracene	667	534	80	55-105	
Benzo[a]anthracene	667	534	80	50-110	
Benzo[a]pyrene	667	650	97	50-110	
Benzo[b]fluoranthene	667	654	98	45-115	
Benzo[g,h,i]perylene	667	728	109	40-125	
Benzoic acid	1330	89.6 J	7	0-110	
Benzo[k]fluoranthene	667	655	98	45-125	
Benzyl alcohol	667	538	81	20-125	
Bis(2-chloroethoxy)methane	667	534	80	45-110	
Bis(2-chloroethyl)ether	667	568	85	40-105	
bis (2-chloroisopropyl) ether	667	498	75	20-115	
Bis(2-ethylhexyl) phthalate	667	602	90	45-125	
4-Bromophenyl phenyl ether	667	549	82	45-115	
Butyl benzyl phthalate	667	591	89	50-125	
Carbazole	667	585	88	45-115	
4-Chloroaniline	667	479	72	10-110	
4-Chloro-3-methylphenol	667	534	80	45-115	
2-Chloronaphthalene	667	517	77	45-105	
2-Chlorophenol	667	539	81	45-105	
4-Chlorophenyl phenyl ether	667	527	79	45-110	
Chrysene	667	576	86	55-110	
Dibenz(a,h)anthracene	667	701	105	40-125	
Dibenzofuran	667	530	79	50-105	
1,2-Dichlorobenzene	667	530	80	45-110	
1,3-Dichlorobenzene	667	515	77	40-100	
1,4-Dichlorobenzene	667	524	79	35-105	
3,3'-Dichlorobenzidine	1330	1050	78	10-130	
2,4-Dichlorophenol	667	512	77	45-110	
Diethyl phthalate	667	528	79	50-115	
2,4-Dimethylphenol	667	443	66	30-105	
Dimethyl phthalate	667	543	81	50-110	
Di-n-butyl phthalate	667	642	96	55-110	
4,6-Dinitro-2-methylphenol	1330	929	70	30-135	
2,4-Dinitrophenol	1330	678	51	15-130	
2,4-Dinitrotoluene	667	566	85	50-115	
2,6-Dinitrotoluene	667	561	84	50-110	
Di-n-octyl phthalate	667	656	98	40-130	
Fluoranthene	667	615	92	55-115	
Fluorene	667	519	78	50-110	
Hexachlorobenzene	667	523	78	45-120	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 50520005.D

Lab ID: LCS 240-179108/23-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Hexachlorobutadiene	667	529	79	40-115	
Hexachlorocyclopentadiene	667	374	56	12-110	
Hexachloroethane	667	496	74	35-110	
Indeno[1,2,3-cd]pyrene	667	728	109	40-120	
Isophorone	667	543	81	45-110	
2-Methylnaphthalene	667	544	82	45-105	
2-Methylphenol	667	531	80	40-105	
3 & 4 Methylphenol	667	522	78	40-105	
Naphthalene	667	539	81	40-105	
2-Nitroaniline	667	510	77	45-120	
3-Nitroaniline	667	508	76	25-110	
4-Nitroaniline	667	572	86	35-115	
Nitrobenzene	667	537	81	40-115	
2-Nitrophenol	667	535	80	40-110	
4-Nitrophenol	1330	1060	79	15-140	
N-Nitrosodi-n-propylamine	667	509	76	40-115	
N-Nitrosodiphenylamine	1330	1030	77	50-115	
Pentachlorophenol	1330	692	52	25-120	
Phenanthrene	667	538	81	50-110	
Phenol	667	520	78	40-100	
Pyrene	667	569	85	45-125	
1,2,4-Trichlorobenzene	667	536	80	45-110	
2,4,5-Trichlorophenol	667	383	57	50-110	
2,4,6-Trichlorophenol	667	322	48	45-110	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 50520007.D

Lab ID: LCS 240-180350/9-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Acenaphthene	667	486	73	45-110	
Acenaphthylene	667	485	73	45-105	
Anthracene	667	490	73	55-105	
Benzo[a]anthracene	667	488	73	50-110	
Benzo[a]pyrene	667	584	88	50-110	
Benzo[b]fluoranthene	667	592	89	45-115	
Benzo[g,h,i]perylene	667	655	98	40-125	
Benzoic acid	1330	315 J	24	0-110	M
Benzo[k]fluoranthene	667	571	86	45-125	
Benzyl alcohol	667	490	73	20-125	
Bis(2-chloroethoxy)methane	667	489	73	45-110	
Bis(2-chloroethyl)ether	667	499	75	40-105	
bis (2-chloroisopropyl) ether	667	454	68	20-115	
Bis(2-ethylhexyl) phthalate	667	551	83	45-125	
4-Bromophenyl phenyl ether	667	522	78	45-115	
Butyl benzyl phthalate	667	532	80	50-125	
Carbazole	667	540	81	45-115	
4-Chloroaniline	667	389	58	10-110	
4-Chloro-3-methylphenol	667	492	74	45-115	
2-Chloronaphthalene	667	482	72	45-105	
2-Chlorophenol	667	492	74	45-105	
4-Chlorophenyl phenyl ether	667	474	71	45-110	
Chrysene	667	527	79	55-110	
Dibenz(a,h)anthracene	667	631	95	40-125	
Dibenzofuran	667	490	74	50-105	
1,2-Dichlorobenzene	667	474	71	45-110	
1,3-Dichlorobenzene	667	462	69	40-100	
1,4-Dichlorobenzene	667	472	71	35-105	
3,3'-Dichlorobenzidine	1330	914	69	10-130	
2,4-Dichlorophenol	667	485	73	45-110	
Diethyl phthalate	667	489	73	50-115	
2,4-Dimethylphenol	667	331	50	30-105	
Dimethyl phthalate	667	501	75	50-110	
Di-n-butyl phthalate	667	599	90	55-110	
4,6-Dinitro-2-methylphenol	1330	785	59	30-135	
2,4-Dinitrophenol	1330	473	35	15-130	
2,4-Dinitrotoluene	667	519	78	50-115	
2,6-Dinitrotoluene	667	526	79	50-110	
Di-n-octyl phthalate	667	593	89	40-130	
Fluoranthene	667	564	85	55-115	
Fluorene	667	486	73	50-110	
Hexachlorobenzene	667	483	72	45-120	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 50520007.D

Lab ID: LCS 240-180350/9-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Hexachlorobutadiene	667	461	69	40-115	
Hexachlorocyclopentadiene	667	316 J	47	12-110	
Hexachloroethane	667	448	67	35-110	
Indeno[1,2,3-cd]pyrene	667	645	97	40-120	
Isophorone	667	493	74	45-110	
2-Methylnaphthalene	667	489	73	45-105	
2-Methylphenol	667	479	72	40-105	
3 & 4 Methylphenol	667	484	73	40-105	
Naphthalene	667	485	73	40-105	
2-Nitroaniline	667	478	72	45-120	
3-Nitroaniline	667	449	67	25-110	
4-Nitroaniline	667	492	74	35-115	
Nitrobenzene	667	479	72	40-115	
2-Nitrophenol	667	497	75	40-110	
4-Nitrophenol	1330	1040	78	15-140	
N-Nitrosodi-n-propylamine	667	470	71	40-115	
N-Nitrosodiphenylamine	1330	979	73	50-115	
Pentachlorophenol	1330	707	53	25-120	
Phenanthrene	667	500	75	50-110	
Phenol	667	477	72	40-100	
Pyrene	667	506	76	45-125	
1,2,4-Trichlorobenzene	667	483	72	45-110	
2,4,5-Trichlorophenol	667	433	65	50-110	
2,4,6-Trichlorophenol	667	453	68	45-110	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 50514005.D

Lab ID: LCS 240-180428/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Hexachlorocyclopentadiene	20.0	2.99 J	15	4-110	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 50512012.D

Lab ID: MRL 240-180308/12 Client ID:

COMPOUND	SPIKE ADDED (ng/uL)	MRL CONCENTRATION (ng/uL)	MRL % REC	QC LIMITS REC	#
Acenaphthene	5.00	5.17	103	70-130	
Acenaphthylene	5.00	5.24	105	70-130	
Anthracene	5.00	5.01	100	70-130	
Benzo[a]anthracene	5.00	5.00	100	70-130	
Benzo[a]pyrene	5.00	5.13	103	70-130	
Benzo[b]fluoranthene	5.00	5.36	107	70-130	
Benzo[g,h,i]perylene	5.00	5.23	105	70-130	
Benzoic acid	10.0	9.45	94	70-130	
Benzo[k]fluoranthene	5.00	4.82	96	70-130	
Benzyl alcohol	5.00	5.18	104	70-130	
Bis(2-chloroethoxy)methane	5.00	5.03	101	70-130	
Bis(2-chloroethyl)ether	5.00	5.07	101	70-130	
bis (2-chloroisopropyl) ether	5.00	4.95	99	70-130	
Bis(2-ethylhexyl) phthalate	5.00	5.00	100	70-130	
4-Bromophenyl phenyl ether	5.00	5.37	107	70-130	
Butyl benzyl phthalate	5.00	5.00	100	70-130	
Carbazole	5.00	4.77	95	70-130	
4-Chloroaniline	5.00	5.06	101	70-130	
4-Chloro-3-methylphenol	5.00	5.29	106	70-130	
2-Chloronaphthalene	5.00	5.00	100	70-130	
2-Chlorophenol	5.00	5.02	100	70-130	
4-Chlorophenyl phenyl ether	5.00	5.16	103	70-130	
Chrysene	5.00	5.20	104	70-130	
Dibenz(a,h)anthracene	5.00	5.39	108	70-130	
Dibenzofuran	5.00	5.14	103	70-130	
1,2-Dichlorobenzene	5.00	5.02	100	70-130	
1,3-Dichlorobenzene	5.00	4.98	100	70-130	
1,4-Dichlorobenzene	5.00	4.93	99	70-130	
3,3'-Dichlorobenzidine	10.0	9.46	95	70-130	
2,4-Dichlorophenol	5.00	4.96	99	70-130	
Diethyl phthalate	5.00	5.46	109	70-130	
2,4-Dimethylphenol	5.00	4.96	99	70-130	
Dimethyl phthalate	5.00	5.31	106	70-130	
Di-n-butyl phthalate	5.00	5.17	103	70-130	
4,6-Dinitro-2-methylphenol	10.0	9.25	92	70-130	
2,4-Dinitrophenol	10.0	9.23	92	70-130	
2,4-Dinitrotoluene	5.00	5.27	105	70-130	
2,6-Dinitrotoluene	5.00	5.23	105	70-130	
Di-n-octyl phthalate	5.00	5.03	101	70-130	
Fluoranthene	5.00	4.82	96	70-130	
Fluorene	5.00	4.94	99	70-130	
Hexachlorobenzene	5.00	5.14	103	70-130	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 50512012.D

Lab ID: MRL 240-180308/12 Client ID:

COMPOUND	SPIKE ADDED (ng/uL)	MRL CONCENTRATION (ng/uL)	MRL % REC	QC LIMITS REC	#
Hexachlorobutadiene	5.00	5.05	101	70-130	
Hexachlorocyclopentadiene	5.00	5.16	103	70-130	
Hexachloroethane	5.00	5.13	103	70-130	
Indeno[1,2,3-cd]pyrene	5.00	5.30	106	70-130	
Isophorone	5.00	5.18	104	70-130	
2-Methylnaphthalene	5.00	5.07	101	70-130	
2-Methylphenol	5.00	5.17	103	70-130	
3 & 4 Methylphenol	5.00	5.08	102	70-130	
Naphthalene	5.00	5.07	101	70-130	
2-Nitroaniline	5.00	5.05	101	70-130	
3-Nitroaniline	5.00	5.74	115	70-130	
4-Nitroaniline	5.00	4.58	92	70-130	
Nitrobenzene	5.00	5.09	102	70-130	
2-Nitrophenol	5.00	5.27	105	70-130	
4-Nitrophenol	10.0	10.5	105	70-130	
N-Nitrosodi-n-propylamine	5.00	5.25	105	70-130	
N-Nitrosodiphenylamine	10.0	10.3	103	70-130	
Pentachlorophenol	10.0	9.23	92	70-130	
Phenanthrene	5.00	5.14	103	70-130	
Phenol	5.00	5.28	106	70-130	
Pyrene	5.00	4.99	100	70-130	
1,2,4-Trichlorobenzene	5.00	5.08	102	70-130	
2,4,5-Trichlorophenol	5.00	5.48	110	70-130	
2,4,6-Trichlorophenol	5.00	5.44	109	70-130	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 50512021.D

Lab ID: MRL 240-180308/21 Client ID:

COMPOUND	SPIKE ADDED (ng/uL)	MRL CONCENTRATION (ng/uL)	MRL % REC	QC LIMITS REC	#
Acenaphthene	5.00	5.01	100	70-130	
Acenaphthylene	5.00	5.06	101	70-130	
Anthracene	5.00	4.59	92	70-130	
Benzo[a]anthracene	5.00	4.62	92	70-130	
Benzo[a]pyrene	5.00	4.76	95	70-130	
Benzo[b]fluoranthene	5.00	4.55	91	70-130	
Benzo[g,h,i]perylene	5.00	4.82	96	70-130	
Benzoic acid	10.0	6.97	70	70-130	M
Benzo[k]fluoranthene	5.00	5.11	102	70-130	
Benzyl alcohol	5.00	4.67	93	70-130	
Bis(2-chloroethoxy)methane	5.00	4.75	95	70-130	
Bis(2-chloroethyl)ether	5.00	4.88	98	70-130	
bis (2-chloroisopropyl) ether	5.00	4.64	93	70-130	
Bis(2-ethylhexyl) phthalate	5.00	4.54	91	70-130	
4-Bromophenyl phenyl ether	5.00	4.66	93	70-130	
Butyl benzyl phthalate	5.00	4.64	93	70-130	
Carbazole	5.00	4.44	89	70-130	
4-Chloroaniline	5.00	5.05	101	70-130	
4-Chloro-3-methylphenol	5.00	5.00	100	70-130	
2-Chloronaphthalene	5.00	5.01	100	70-130	
2-Chlorophenol	5.00	4.60	92	70-130	
4-Chlorophenyl phenyl ether	5.00	4.97	99	70-130	
Chrysene	5.00	4.84	97	70-130	
Dibenz(a,h)anthracene	5.00	4.65	93	70-130	
Dibenzofuran	5.00	4.74	95	70-130	
1,2-Dichlorobenzene	5.00	4.66	93	70-130	
1,3-Dichlorobenzene	5.00	4.67	93	70-130	
1,4-Dichlorobenzene	5.00	4.94	99	70-130	
3,3'-Dichlorobenzidine	10.0	8.29	83	70-130	
2,4-Dichlorophenol	5.00	4.81	96	70-130	
Diethyl phthalate	5.00	5.25	105	70-130	
2,4-Dimethylphenol	5.00	5.07	101	70-130	
Dimethyl phthalate	5.00	5.05	101	70-130	
Di-n-butyl phthalate	5.00	4.47	89	70-130	
4,6-Dinitro-2-methylphenol	10.0	7.51	75	70-130	
2,4-Dinitrophenol	10.0	7.26	73	70-130	
2,4-Dinitrotoluene	5.00	4.91	98	70-130	
2,6-Dinitrotoluene	5.00	5.08	102	70-130	
Di-n-octyl phthalate	5.00	4.38	88	70-130	
Fluoranthene	5.00	4.31	86	70-130	
Fluorene	5.00	4.92	98	70-130	
Hexachlorobenzene	5.00	4.80	96	70-130	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 50512021.D

Lab ID: MRL 240-180308/21 Client ID:

COMPOUND	SPIKE ADDED (ng/uL)	MRL CONCENTRATION (ng/uL)	MRL % REC	QC LIMITS REC	#
Hexachlorobutadiene	5.00	5.07	101	70-130	
Hexachlorocyclopentadiene	5.00	4.90	98	70-130	
Hexachloroethane	5.00	4.70	94	70-130	
Indeno[1,2,3-cd]pyrene	5.00	4.85	97	70-130	
Isophorone	5.00	5.00	100	70-130	
2-Methylnaphthalene	5.00	4.90	98	70-130	
2-Methylphenol	5.00	4.57	91	70-130	
3 & 4 Methylphenol	5.00	4.70	94	70-130	
Naphthalene	5.00	4.88	98	70-130	
2-Nitroaniline	5.00	4.76	95	70-130	
3-Nitroaniline	5.00	5.15	103	70-130	
4-Nitroaniline	5.00	4.25	85	70-130	
Nitrobenzene	5.00	4.94	99	70-130	
2-Nitrophenol	5.00	4.64	93	70-130	
4-Nitrophenol	10.0	9.39	94	70-130	
N-Nitrosodi-n-propylamine	5.00	5.08	102	70-130	
N-Nitrosodiphenylamine	10.0	9.57	96	70-130	
Pentachlorophenol	10.0	8.15	82	70-130	
Phenanthrene	5.00	4.87	97	70-130	
Phenol	5.00	4.94	99	70-130	
Pyrene	5.00	4.46	89	70-130	
1,2,4-Trichlorobenzene	5.00	4.68	94	70-130	
2,4,5-Trichlorophenol	5.00	4.91	98	70-130	
2,4,6-Trichlorophenol	5.00	4.96	99	70-130	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 50514003.D

Lab ID: MRL 240-180709/3 Client ID:

COMPOUND	SPIKE ADDED (ng/uL)	MRL CONCENTRATION (ng/uL)	MRL % REC	QC LIMITS REC	#
Acenaphthene	5.00	4.98	100	70-130	
Acenaphthylene	5.00	4.74	95	70-130	
Anthracene	5.00	4.63	93	70-130	
Benzo[a]anthracene	5.00	4.64	93	70-130	
Benzo[a]pyrene	5.00	4.72	94	70-130	
Benzo[b]fluoranthene	5.00	4.71	94	70-130	
Benzo[g,h,i]perylene	5.00	4.95	99	70-130	M
Benzoic acid	10.0	8.37	84	70-130	
Benzo[k]fluoranthene	5.00	5.15	103	70-130	
Benzyl alcohol	5.00	4.90	98	70-130	
Bis(2-chloroethoxy)methane	5.00	4.69	94	70-130	
Bis(2-chloroethyl)ether	5.00	5.02	100	70-130	
bis (2-chloroisopropyl) ether	5.00	4.98	100	70-130	
Bis(2-ethylhexyl) phthalate	5.00	4.58	92	70-130	
4-Bromophenyl phenyl ether	5.00	4.77	95	70-130	
Butyl benzyl phthalate	5.00	4.58	92	70-130	
Carbazole	5.00	4.32	86	70-130	
4-Chloroaniline	5.00	4.67	93	70-130	
4-Chloro-3-methylphenol	5.00	4.90	98	70-130	
2-Chloronaphthalene	5.00	4.57	91	70-130	
2-Chlorophenol	5.00	5.02	100	70-130	
4-Chlorophenyl phenyl ether	5.00	5.09	102	70-130	
Chrysene	5.00	4.89	98	70-130	
Dibenz(a,h)anthracene	5.00	4.81	96	70-130	
Dibenzofuran	5.00	4.71	94	70-130	
1,2-Dichlorobenzene	5.00	5.07	101	70-130	
1,3-Dichlorobenzene	5.00	5.24	105	70-130	
1,4-Dichlorobenzene	5.00	4.97	99	70-130	
3,3'-Dichlorobenzidine	10.0	9.26	93	70-130	
2,4-Dichlorophenol	5.00	4.90	98	70-130	
Diethyl phthalate	5.00	4.91	98	70-130	
2,4-Dimethylphenol	5.00	4.86	97	70-130	
Dimethyl phthalate	5.00	4.86	97	70-130	
Di-n-butyl phthalate	5.00	4.43	89	70-130	
4,6-Dinitro-2-methylphenol	10.0	8.37	84	70-130	
2,4-Dinitrophenol	10.0	7.73	77	70-130	
2,4-Dinitrotoluene	5.00	5.14	103	70-130	
2,6-Dinitrotoluene	5.00	5.04	101	70-130	
Di-n-octyl phthalate	5.00	4.33	87	70-130	
Fluoranthene	5.00	4.49	90	70-130	
Fluorene	5.00	4.73	95	70-130	
Hexachlorobenzene	5.00	4.99	100	70-130	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 50514003.D

Lab ID: MRL 240-180709/3 Client ID:

COMPOUND	SPIKE ADDED (ng/uL)	MRL CONCENTRATION (ng/uL)	MRL % REC	QC LIMITS REC	#
Hexachlorobutadiene	5.00	4.83	97	70-130	
Hexachlorocyclopentadiene	5.00	4.96	99	70-130	
Hexachloroethane	5.00	5.14	103	70-130	
Indeno[1,2,3-cd]pyrene	5.00	4.89	98	70-130	
Isophorone	5.00	4.82	96	70-130	
2-Methylnaphthalene	5.00	4.93	99	70-130	
2-Methylphenol	5.00	5.11	102	70-130	
3 & 4 Methylphenol	5.00	5.01	100	70-130	
Naphthalene	5.00	4.85	97	70-130	
2-Nitroaniline	5.00	4.74	95	70-130	
3-Nitroaniline	5.00	5.31	106	70-130	
4-Nitroaniline	5.00	4.40	88	70-130	
Nitrobenzene	5.00	4.87	97	70-130	
2-Nitrophenol	5.00	4.81	96	70-130	
4-Nitrophenol	10.0	9.16	92	70-130	
N-Nitrosodi-n-propylamine	5.00	5.24	105	70-130	
N-Nitrosodiphenylamine	10.0	9.33	93	70-130	
Pentachlorophenol	10.0	8.01	80	70-130	
Phenanthrene	5.00	4.76	95	70-130	
Phenol	5.00	5.13	103	70-130	
Pyrene	5.00	4.72	94	70-130	
1,2,4-Trichlorobenzene	5.00	5.00	100	70-130	
2,4,5-Trichlorophenol	5.00	5.13	103	70-130	
2,4,6-Trichlorophenol	5.00	5.07	101	70-130	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 50514007.D

Lab ID: MRL 240-180709/7 Client ID:

COMPOUND	SPIKE ADDED (ng/uL)	MRL CONCENTRATION (ng/uL)	MRL % REC	QC LIMITS REC	#
Acenaphthene	5.00	5.05	101	70-130	
Acenaphthylene	5.00	4.95	99	70-130	
Anthracene	5.00	4.97	99	70-130	
Benzo[a]anthracene	5.00	4.80	96	70-130	
Benzo[a]pyrene	5.00	4.65	93	70-130	
Benzo[b]fluoranthene	5.00	4.66	93	70-130	
Benzo[g,h,i]perylene	5.00	4.84	97	70-130	
Benzoic acid	10.0	7.73	77	70-130	M
Benzo[k]fluoranthene	5.00	4.67	93	70-130	
Benzyl alcohol	5.00	4.96	99	70-130	
Bis(2-chloroethoxy)methane	5.00	4.84	97	70-130	
Bis(2-chloroethyl)ether	5.00	4.90	98	70-130	
bis (2-chloroisopropyl) ether	5.00	4.65	93	70-130	
Bis(2-ethylhexyl) phthalate	5.00	4.54	91	70-130	
4-Bromophenyl phenyl ether	5.00	5.44	109	70-130	
Butyl benzyl phthalate	5.00	4.80	96	70-130	
Carbazole	5.00	4.52	90	70-130	
4-Chloroaniline	5.00	5.28	106	70-130	
4-Chloro-3-methylphenol	5.00	5.16	103	70-130	
2-Chloronaphthalene	5.00	4.84	97	70-130	
2-Chlorophenol	5.00	4.90	98	70-130	
4-Chlorophenyl phenyl ether	5.00	5.35	107	70-130	
Chrysene	5.00	5.13	103	70-130	
Dibenz(a,h)anthracene	5.00	4.63	93	70-130	
Dibenzofuran	5.00	4.95	99	70-130	
1,2-Dichlorobenzene	5.00	4.94	99	70-130	
1,3-Dichlorobenzene	5.00	4.86	97	70-130	
1,4-Dichlorobenzene	5.00	4.76	95	70-130	
3,3'-Dichlorobenzidine	10.0	9.11	91	70-130	
2,4-Dichlorophenol	5.00	5.17	103	70-130	
Diethyl phthalate	5.00	5.31	106	70-130	
2,4-Dimethylphenol	5.00	5.10	102	70-130	
Dimethyl phthalate	5.00	5.07	101	70-130	
Di-n-butyl phthalate	5.00	4.76	95	70-130	
4,6-Dinitro-2-methylphenol	10.0	8.46	85	70-130	
2,4-Dinitrophenol	10.0	7.84	78	70-130	
2,4-Dinitrotoluene	5.00	5.34	107	70-130	
2,6-Dinitrotoluene	5.00	5.18	104	70-130	
Di-n-octyl phthalate	5.00	4.13	83	70-130	
Fluoranthene	5.00	4.56	91	70-130	
Fluorene	5.00	4.98	100	70-130	
Hexachlorobenzene	5.00	4.96	99	70-130	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 50514007.D

Lab ID: MRL 240-180709/7 Client ID:

COMPOUND	SPIKE ADDED (ng/uL)	MRL CONCENTRATION (ng/uL)	MRL % REC	QC LIMITS REC	#
Hexachlorobutadiene	5.00	5.16	103	70-130	
Hexachlorocyclopentadiene	5.00	5.22	104	70-130	
Hexachloroethane	5.00	4.94	99	70-130	
Indeno[1,2,3-cd]pyrene	5.00	4.77	95	70-130	
Isophorone	5.00	5.07	101	70-130	
2-Methylnaphthalene	5.00	5.04	101	70-130	
2-Methylphenol	5.00	4.76	95	70-130	
3 & 4 Methylphenol	5.00	4.70	94	70-130	
Naphthalene	5.00	4.90	98	70-130	
2-Nitroaniline	5.00	4.92	98	70-130	
3-Nitroaniline	5.00	5.40	108	70-130	
4-Nitroaniline	5.00	4.40	88	70-130	
Nitrobenzene	5.00	5.14	103	70-130	
2-Nitrophenol	5.00	5.06	101	70-130	
4-Nitrophenol	10.0	9.67	97	70-130	
N-Nitrosodi-n-propylamine	5.00	5.00	100	70-130	
N-Nitrosodiphenylamine	10.0	9.92	99	70-130	
Pentachlorophenol	10.0	8.35	84	70-130	
Phenanthrene	5.00	4.95	99	70-130	
Phenol	5.00	5.00	100	70-130	
Pyrene	5.00	4.80	96	70-130	
1,2,4-Trichlorobenzene	5.00	5.00	100	70-130	
2,4,5-Trichlorophenol	5.00	5.21	104	70-130	
2,4,6-Trichlorophenol	5.00	5.15	103	70-130	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 50520003.D

Lab ID: MRL 240-181588/3 Client ID:

COMPOUND	SPIKE ADDED (ng/uL)	MRL CONCENTRATION (ng/uL)	MRL % REC	QC LIMITS REC	#
Acenaphthene	5.00	5.11	102	70-130	
Acenaphthylene	5.00	4.99	100	70-130	
Anthracene	5.00	5.07	101	70-130	
Benzo[a]anthracene	5.00	4.87	97	70-130	
Benzo[a]pyrene	5.00	5.05	101	70-130	
Benzo[b]fluoranthene	5.00	4.95	99	70-130	
Benzo[g,h,i]perylene	5.00	5.63	113	70-130	
Benzoic acid	10.0	9.88	99	70-130	M
Benzo[k]fluoranthene	5.00	5.21	104	70-130	
Benzyl alcohol	5.00	4.99	100	70-130	
Bis(2-chloroethoxy)methane	5.00	5.10	102	70-130	
Bis(2-chloroethyl)ether	5.00	5.23	105	70-130	
bis (2-chloroisopropyl) ether	5.00	4.84	97	70-130	
Bis(2-ethylhexyl) phthalate	5.00	5.43	109	70-130	
4-Bromophenyl phenyl ether	5.00	5.22	104	70-130	
Butyl benzyl phthalate	5.00	5.22	104	70-130	
Carbazole	5.00	5.15	103	70-130	
4-Chloroaniline	5.00	4.96	99	70-130	
4-Chloro-3-methylphenol	5.00	5.01	100	70-130	
2-Chloronaphthalene	5.00	4.94	99	70-130	
2-Chlorophenol	5.00	5.06	101	70-130	
4-Chlorophenyl phenyl ether	5.00	4.98	100	70-130	
Chrysene	5.00	5.05	101	70-130	
Dibenz(a,h)anthracene	5.00	5.47	109	70-130	
Dibenzofuran	5.00	5.11	102	70-130	
1,2-Dichlorobenzene	5.00	5.20	104	70-130	
1,3-Dichlorobenzene	5.00	5.13	103	70-130	
1,4-Dichlorobenzene	5.00	5.20	104	70-130	
3,3'-Dichlorobenzidine	10.0	10.9	109	70-130	
2,4-Dichlorophenol	5.00	5.09	102	70-130	
Diethyl phthalate	5.00	5.27	105	70-130	
2,4-Dimethylphenol	5.00	5.03	101	70-130	
Dimethyl phthalate	5.00	5.21	104	70-130	
Di-n-butyl phthalate	5.00	5.67	113	70-130	
4,6-Dinitro-2-methylphenol	10.0	9.06	91	70-130	
2,4-Dinitrophenol	10.0	8.72	87	70-130	
2,4-Dinitrotoluene	5.00	5.40	108	70-130	
2,6-Dinitrotoluene	5.00	5.49	110	70-130	
Di-n-octyl phthalate	5.00	5.16	103	70-130	
Fluoranthene	5.00	5.35	107	70-130	
Fluorene	5.00	5.09	102	70-130	
Hexachlorobenzene	5.00	5.21	104	70-130	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 50520003.D

Lab ID: MRL 240-181588/3 Client ID:

COMPOUND	SPIKE ADDED (ng/uL)	MRL CONCENTRATION (ng/uL)	MRL % REC	QC LIMITS REC	#
Hexachlorobutadiene	5.00	5.09	102	70-130	
Hexachlorocyclopentadiene	5.00	4.36	87	70-130	
Hexachloroethane	5.00	4.91	98	70-130	
Indeno[1,2,3-cd]pyrene	5.00	5.57	111	70-130	
Isophorone	5.00	5.09	102	70-130	
2-Methylnaphthalene	5.00	5.17	103	70-130	
2-Methylphenol	5.00	5.04	101	70-130	
3 & 4 Methylphenol	5.00	5.02	100	70-130	
Naphthalene	5.00	5.15	103	70-130	
2-Nitroaniline	5.00	4.70	94	70-130	
3-Nitroaniline	5.00	5.06	101	70-130	
4-Nitroaniline	5.00	5.20	104	70-130	
Nitrobenzene	5.00	5.01	100	70-130	
2-Nitrophenol	5.00	5.19	104	70-130	
4-Nitrophenol	10.0	10.4	104	70-130	
N-Nitrosodi-n-propylamine	5.00	4.92	98	70-130	
N-Nitrosodiphenylamine	10.0	10.7	107	70-130	
Pentachlorophenol	10.0	10.1	101	70-130	
Phenanthrene	5.00	5.16	103	70-130	
Phenol	5.00	4.88	98	70-130	
Pyrene	5.00	5.05	101	70-130	
1,2,4-Trichlorobenzene	5.00	5.15	103	70-130	
2,4,5-Trichlorophenol	5.00	4.90	98	70-130	
2,4,6-Trichlorophenol	5.00	4.94	99	70-130	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 50520020.D

Lab ID: MRL 240-181588/20 Client ID:

COMPOUND	SPIKE ADDED (ng/uL)	MRL CONCENTRATION (ng/uL)	MRL % REC	QC LIMITS REC	#
Acenaphthene	5.00	5.15	103	70-130	
Acenaphthylene	5.00	4.98	100	70-130	
Anthracene	5.00	5.02	100	70-130	
Benzo[a]anthracene	5.00	4.90	98	70-130	
Benzo[a]pyrene	5.00	5.05	101	70-130	
Benzo[b]fluoranthene	5.00	5.01	100	70-130	
Benzo[g,h,i]perylene	5.00	5.46	109	70-130	
Benzoic acid	10.0	7.83	78	70-130	M
Benzo[k]fluoranthene	5.00	5.13	103	70-130	
Benzyl alcohol	5.00	4.73	95	70-130	
Bis(2-chloroethoxy)methane	5.00	5.04	101	70-130	
Bis(2-chloroethyl)ether	5.00	5.10	102	70-130	
bis (2-chloroisopropyl) ether	5.00	4.88	98	70-130	
Bis(2-ethylhexyl) phthalate	5.00	5.21	104	70-130	
4-Bromophenyl phenyl ether	5.00	5.10	102	70-130	
Butyl benzyl phthalate	5.00	5.01	100	70-130	
Carbazole	5.00	4.75	95	70-130	
4-Chloroaniline	5.00	5.03	101	70-130	
4-Chloro-3-methylphenol	5.00	4.88	98	70-130	
2-Chloronaphthalene	5.00	4.92	98	70-130	
2-Chlorophenol	5.00	4.92	98	70-130	
4-Chlorophenyl phenyl ether	5.00	5.06	101	70-130	
Chrysene	5.00	5.08	102	70-130	
Dibenz(a,h)anthracene	5.00	5.29	106	70-130	
Dibenzofuran	5.00	5.12	102	70-130	
1,2-Dichlorobenzene	5.00	5.00	100	70-130	
1,3-Dichlorobenzene	5.00	4.95	99	70-130	
1,4-Dichlorobenzene	5.00	5.08	102	70-130	
3,3'-Dichlorobenzidine	10.0	10.6	106	70-130	
2,4-Dichlorophenol	5.00	5.16	103	70-130	
Diethyl phthalate	5.00	5.29	106	70-130	
2,4-Dimethylphenol	5.00	5.07	101	70-130	
Dimethyl phthalate	5.00	5.15	103	70-130	
Di-n-butyl phthalate	5.00	5.29	106	70-130	
4,6-Dinitro-2-methylphenol	10.0	5.07	51	70-130	^
2,4-Dinitrophenol	10.0	3.78	38	70-130	^
2,4-Dinitrotoluene	5.00	4.74	95	70-130	
2,6-Dinitrotoluene	5.00	4.79	96	70-130	
Di-n-octyl phthalate	5.00	5.05	101	70-130	
Fluoranthene	5.00	5.14	103	70-130	
Fluorene	5.00	5.06	101	70-130	
Hexachlorobenzene	5.00	5.16	103	70-130	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 50520020.D

Lab ID: MRL 240-181588/20 Client ID:

COMPOUND	SPIKE ADDED (ng/uL)	MRL CONCENTRATION (ng/uL)	MRL % REC	QC LIMITS REC	#
Hexachlorobutadiene	5.00	5.27	105	70-130	
Hexachlorocyclopentadiene	5.00	3.25	65	70-130	^
Hexachloroethane	5.00	4.59	92	70-130	
Indeno[1,2,3-cd]pyrene	5.00	5.52	110	70-130	
Isophorone	5.00	5.09	102	70-130	
2-Methylnaphthalene	5.00	5.12	102	70-130	
2-Methylphenol	5.00	4.91	98	70-130	
3 & 4 Methylphenol	5.00	4.85	97	70-130	
Naphthalene	5.00	5.16	103	70-130	
2-Nitroaniline	5.00	4.41	88	70-130	
3-Nitroaniline	5.00	4.77	95	70-130	
4-Nitroaniline	5.00	4.59	92	70-130	
Nitrobenzene	5.00	4.89	98	70-130	
2-Nitrophenol	5.00	4.47	89	70-130	
4-Nitrophenol	10.0	8.39	84	70-130	
N-Nitrosodi-n-propylamine	5.00	4.90	98	70-130	
N-Nitrosodiphenylamine	10.0	10.1	101	70-130	
Pentachlorophenol	10.0	9.37	94	70-130	
Phenanthrene	5.00	4.99	100	70-130	
Phenol	5.00	4.85	97	70-130	
Pyrene	5.00	4.97	99	70-130	
1,2,4-Trichlorobenzene	5.00	5.20	104	70-130	
2,4,5-Trichlorophenol	5.00	4.85	97	70-130	
2,4,6-Trichlorophenol	5.00	5.00	100	70-130	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 50521003.D

Lab ID: MRL 240-181781/3 Client ID:

COMPOUND	SPIKE ADDED (ng/uL)	MRL CONCENTRATION (ng/uL)	MRL % REC	QC LIMITS REC	#
Acenaphthene	5.00	5.12	102	70-130	
Acenaphthylene	5.00	4.99	100	70-130	
Anthracene	5.00	5.02	100	70-130	
Benzo[a]anthracene	5.00	4.93	99	70-130	
Benzo[a]pyrene	5.00	5.15	103	70-130	
Benzo[b]fluoranthene	5.00	5.15	103	70-130	
Benzo[g,h,i]perylene	5.00	5.73	115	70-130	
Benzoic acid	10.0	10.5	105	70-130	M
Benzo[k]fluoranthene	5.00	5.04	101	70-130	
Benzyl alcohol	5.00	4.99	100	70-130	
Bis(2-chloroethoxy)methane	5.00	5.06	101	70-130	
Bis(2-chloroethyl)ether	5.00	5.32	106	70-130	
bis (2-chloroisopropyl) ether	5.00	4.72	94	70-130	
Bis(2-ethylhexyl) phthalate	5.00	5.35	107	70-130	
4-Bromophenyl phenyl ether	5.00	5.10	102	70-130	
Butyl benzyl phthalate	5.00	5.23	105	70-130	
Carbazole	5.00	4.98	100	70-130	
4-Chloroaniline	5.00	5.27	105	70-130	
4-Chloro-3-methylphenol	5.00	5.03	101	70-130	
2-Chloronaphthalene	5.00	5.01	100	70-130	
2-Chlorophenol	5.00	5.11	102	70-130	
4-Chlorophenyl phenyl ether	5.00	5.08	102	70-130	
Chrysene	5.00	5.15	103	70-130	
Dibenz(a,h)anthracene	5.00	5.47	109	70-130	
Dibenzofuran	5.00	5.10	102	70-130	
1,2-Dichlorobenzene	5.00	5.25	105	70-130	
1,3-Dichlorobenzene	5.00	5.13	103	70-130	
1,4-Dichlorobenzene	5.00	5.24	105	70-130	
3,3'-Dichlorobenzidine	10.0	10.5	105	70-130	
2,4-Dichlorophenol	5.00	5.27	105	70-130	
Diethyl phthalate	5.00	5.20	104	70-130	
2,4-Dimethylphenol	5.00	5.02	100	70-130	
Dimethyl phthalate	5.00	5.26	105	70-130	
Di-n-butyl phthalate	5.00	5.59	112	70-130	
4,6-Dinitro-2-methylphenol	10.0	9.77	98	70-130	
2,4-Dinitrophenol	10.0	9.28	93	70-130	
2,4-Dinitrotoluene	5.00	5.63	113	70-130	
2,6-Dinitrotoluene	5.00	5.53	111	70-130	
Di-n-octyl phthalate	5.00	5.13	103	70-130	
Fluoranthene	5.00	5.29	106	70-130	
Fluorene	5.00	5.14	103	70-130	
Hexachlorobenzene	5.00	5.10	102	70-130	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 50521003.D

Lab ID: MRL 240-181781/3 Client ID:

COMPOUND	SPIKE ADDED (ng/uL)	MRL CONCENTRATION (ng/uL)	MRL % REC	QC LIMITS REC	#
Hexachlorobutadiene	5.00	5.18	104	70-130	
Hexachlorocyclopentadiene	5.00	4.63	93	70-130	
Hexachloroethane	5.00	4.92	98	70-130	
Indeno[1,2,3-cd]pyrene	5.00	5.67	113	70-130	
Isophorone	5.00	5.00	100	70-130	
2-Methylnaphthalene	5.00	5.22	104	70-130	
2-Methylphenol	5.00	5.11	102	70-130	
3 & 4 Methylphenol	5.00	5.00	100	70-130	
Naphthalene	5.00	5.15	103	70-130	
2-Nitroaniline	5.00	4.85	97	70-130	
3-Nitroaniline	5.00	5.20	104	70-130	
4-Nitroaniline	5.00	5.00	100	70-130	
Nitrobenzene	5.00	4.96	99	70-130	
2-Nitrophenol	5.00	5.15	103	70-130	
4-Nitrophenol	10.0	9.85	99	70-130	
N-Nitrosodi-n-propylamine	5.00	4.92	98	70-130	
N-Nitrosodiphenylamine	10.0	10.5	105	70-130	
Pentachlorophenol	10.0	9.50	95	70-130	
Phenanthrene	5.00	5.10	102	70-130	
Phenol	5.00	4.93	99	70-130	
Pyrene	5.00	5.10	102	70-130	
1,2,4-Trichlorobenzene	5.00	5.27	105	70-130	
2,4,5-Trichlorophenol	5.00	5.08	102	70-130	
2,4,6-Trichlorophenol	5.00	5.07	101	70-130	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 50521016.D

Lab ID: MRL 240-181781/16 Client ID:

COMPOUND	SPIKE ADDED (ng/uL)	MRL CONCENTRATION (ng/uL)	MRL % REC	QC LIMITS REC	#
Acenaphthene	5.00	5.02	100	70-130	
Acenaphthylene	5.00	4.89	98	70-130	
Anthracene	5.00	4.96	99	70-130	
Benzo[a]anthracene	5.00	4.92	98	70-130	
Benzo[a]pyrene	5.00	4.98	100	70-130	
Benzo[b]fluoranthene	5.00	4.73	95	70-130	
Benzo[g,h,i]perylene	5.00	5.49	110	70-130	
Benzoic acid	10.0	9.70	97	70-130	M
Benzo[k]fluoranthene	5.00	5.18	104	70-130	
Benzyl alcohol	5.00	4.86	97	70-130	
Bis(2-chloroethoxy)methane	5.00	5.06	101	70-130	
Bis(2-chloroethyl)ether	5.00	5.26	105	70-130	
bis (2-chloroisopropyl) ether	5.00	4.79	96	70-130	
Bis(2-ethylhexyl) phthalate	5.00	5.39	108	70-130	
4-Bromophenyl phenyl ether	5.00	4.94	99	70-130	
Butyl benzyl phthalate	5.00	5.29	106	70-130	
Carbazole	5.00	4.80	96	70-130	
4-Chloroaniline	5.00	4.95	99	70-130	
4-Chloro-3-methylphenol	5.00	4.93	99	70-130	
2-Chloronaphthalene	5.00	4.93	99	70-130	
2-Chlorophenol	5.00	5.07	101	70-130	
4-Chlorophenyl phenyl ether	5.00	5.00	100	70-130	
Chrysene	5.00	5.16	103	70-130	
Dibenz(a,h)anthracene	5.00	5.36	107	70-130	
Dibenzofuran	5.00	5.03	101	70-130	
1,2-Dichlorobenzene	5.00	5.23	105	70-130	
1,3-Dichlorobenzene	5.00	5.10	102	70-130	
1,4-Dichlorobenzene	5.00	5.19	104	70-130	
3,3'-Dichlorobenzidine	10.0	10.3	103	70-130	
2,4-Dichlorophenol	5.00	5.19	104	70-130	
Diethyl phthalate	5.00	5.14	103	70-130	
2,4-Dimethylphenol	5.00	5.05	101	70-130	
Dimethyl phthalate	5.00	5.15	103	70-130	
Di-n-butyl phthalate	5.00	5.31	106	70-130	
4,6-Dinitro-2-methylphenol	10.0	6.59	66	70-130	^
2,4-Dinitrophenol	10.0	5.74	57	70-130	^
2,4-Dinitrotoluene	5.00	5.05	101	70-130	
2,6-Dinitrotoluene	5.00	5.02	100	70-130	
Di-n-octyl phthalate	5.00	5.01	100	70-130	
Fluoranthene	5.00	4.98	100	70-130	
Fluorene	5.00	4.95	99	70-130	
Hexachlorobenzene	5.00	5.05	101	70-130	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA METHOD REPORTING LIMIT CHECK RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 50521016.D

Lab ID: MRL 240-181781/16 Client ID:

COMPOUND	SPIKE ADDED (ng/uL)	MRL CONCENTRATION (ng/uL)	MRL % REC	QC LIMITS REC	#
Hexachlorobutadiene	5.00	5.10	102	70-130	
Hexachlorocyclopentadiene	5.00	4.09	82	70-130	
Hexachloroethane	5.00	4.84	97	70-130	
Indeno[1,2,3-cd]pyrene	5.00	5.44	109	70-130	
Isophorone	5.00	5.11	102	70-130	
2-Methylnaphthalene	5.00	5.17	103	70-130	
2-Methylphenol	5.00	5.09	102	70-130	
3 & 4 Methylphenol	5.00	5.05	101	70-130	
Naphthalene	5.00	5.22	104	70-130	
2-Nitroaniline	5.00	4.53	91	70-130	
3-Nitroaniline	5.00	4.81	96	70-130	
4-Nitroaniline	5.00	4.98	100	70-130	
Nitrobenzene	5.00	5.10	102	70-130	
2-Nitrophenol	5.00	4.77	95	70-130	
4-Nitrophenol	10.0	8.68	87	70-130	
N-Nitrosodi-n-propylamine	5.00	4.85	97	70-130	
N-Nitrosodiphenylamine	10.0	10.2	102	70-130	
Pentachlorophenol	10.0	9.18	92	70-130	
Phenanthrene	5.00	5.06	101	70-130	
Phenol	5.00	4.90	98	70-130	
Pyrene	5.00	5.21	104	70-130	
1,2,4-Trichlorobenzene	5.00	5.20	104	70-130	
2,4,5-Trichlorophenol	5.00	4.73	95	70-130	
2,4,6-Trichlorophenol	5.00	4.80	96	70-130	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 50520010.D

Lab ID: 240-50067-7 MS Client ID: 079SB-0395M-0001-0002-SO MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Acenaphthene	681	3.4 U	465	68	45-110	
Acenaphthylene	681	1.7 U	455	67	45-105	
Anthracene	681	3.4 U	483	71	55-105	
Benzo[a]anthracene	681	3.4 U	514	75	50-110	
Benzo[a]pyrene	681	3.4 U	590	87	50-110	
Benzo[b]fluoranthene	681	3.4 U	595	87	45-115	
Benzo[g,h,i]perylene	681	1.7 U	658	97	40-125	
Benzoic acid	1360	140 U	535 J	39	0-110	M
Benzo[k]fluoranthene	681	3.4 U	603	89	45-125	
Benzyl alcohol	681	69 U	469	69	20-125	
Bis(2-chloroethoxy)methane	681	69 U	462	68	45-110	
Bis(2-chloroethyl)ether	681	3.4 U	473	69	40-105	
bis (2-chloroisopropyl) ether	681	34 U	431	63	20-115	
Bis(2-ethylhexyl) phthalate	681	34 U	589	87	45-125	
4-Bromophenyl phenyl ether	681	34 U	499	73	45-115	
Butyl benzyl phthalate	681	34 U	556	82	50-125	
Carbazole	681	34 U	535	79	45-115	
4-Chloroaniline	681	69 U	207	30	10-95	M
4-Chloro-3-methylphenol	681	69 U	433	64	45-115	
2-Chloronaphthalene	681	1.7 U	463	68	45-105	
2-Chlorophenol	681	34 U	469	69	45-105	
4-Chlorophenyl phenyl ether	681	34 U	532	78	45-110	
Chrysene	681	3.4 U	549	81	55-110	
Dibenz(a,h)anthracene	681	3.4 U	654	96	40-125	
Dibenzofuran	681	7.7 J	504	73	50-105	
1,2-Dichlorobenzene	681	34 U	438	64	45-95	
1,3-Dichlorobenzene	681	34 U	443	65	40-100	
1,4-Dichlorobenzene	681	34 U	429	63	35-105	
3,3'-Dichlorobenzidine	1360	69 U	530	39	10-130	
2,4-Dichlorophenol	681	69 U	420	62	45-110	
Diethyl phthalate	681	34 U	621	91	50-115	
2,4-Dimethylphenol	681	69 U	312	46	30-105	
Dimethyl phthalate	681	34 U	574	84	50-110	
Di-n-butyl phthalate	681	34 U	628	92	55-110	
4,6-Dinitro-2-methylphenol	1360	34 U	857	63	30-135	
2,4-Dinitrophenol	1360	69 U	861	63	15-130	
2,4-Dinitrotoluene	681	69 U	630	93	50-115	
2,6-Dinitrotoluene	681	69 U	581	85	50-110	
Di-n-octyl phthalate	681	34 U	627	92	40-130	
Fluoranthene	681	3.4 U	554	81	55-115	
Fluorene	681	3.4 U	540	79	50-110	
Hexachlorobenzene	681	3.4 U	483	71	45-120	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 50520010.D

Lab ID: 240-50067-7 MS Client ID: 079SB-0395M-0001-0002-SO MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Hexachlorobutadiene	681	34 U	451	66	40-115	
Hexachlorocyclopentadiene	681	34 U	250 J	37	10-110	
Hexachloroethane	681	34 U	418	61	35-110	
Indeno[1,2,3-cd]pyrene	681	1.7 U	677	99	40-120	
Isophorone	681	44 J	490	65	45-110	
2-Methylnaphthalene	681	33	486	66	45-105	
2-Methylphenol	681	69 U	455	67	40-105	
3 & 4 Methylphenol	681	69 U	435	64	40-105	
Naphthalene	681	30	502	69	40-105	
2-Nitroaniline	681	34 U	523	77	45-120	
3-Nitroaniline	681	69 U	487	71	25-110	
4-Nitroaniline	681	69 U	519	76	35-115	
Nitrobenzene	681	3.4 U	464	68	40-115	
2-Nitrophenol	681	16 J	478	68	40-110	
4-Nitrophenol	1360	69 U	1310	96	15-140	
N-Nitrosodi-n-propylamine	681	34 U	447	66	40-115	
N-Nitrosodiphenylamine	1360	34 U	932	68	50-115	
Pentachlorophenol	1360	34 U	1050	77	25-120	
Phenanthrene	681	14	514	73	50-110	
Phenol	681	34 U	474	70	40-100	
Pyrene	681	1.7 U	536	79	45-125	
1,2,4-Trichlorobenzene	681	17 U	461	68	45-110	
2,4,5-Trichlorophenol	681	69 U	515	76	50-110	
2,4,6-Trichlorophenol	681	34 U	496	73	45-110	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 50520011.D

Lab ID: 240-50067-7 MSD Client ID: 079SB-0395M-0001-0002-SO MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Acenaphthene	684	472	69	1	30	45-110	
Acenaphthylene	684	469	68	3	30	45-105	
Anthracene	684	485	71	0	30	55-105	
Benzo[a]anthracene	684	500	73	3	30	50-110	
Benzo[a]pyrene	684	591	86	0	30	50-110	
Benzo[b]fluoranthene	684	588	86	1	30	45-115	
Benzo[g,h,i]perylene	684	677	99	3	30	40-125	
Benzoic acid	1370	339 J	25	45	30	0-110	M J
Benzo[k]fluoranthene	684	603	88	0	30	45-125	
Benzyl alcohol	684	479	70	2	30	20-125	
Bis(2-chloroethoxy)methane	684	463	68	0	30	45-110	
Bis(2-chloroethyl)ether	684	467	68	1	30	40-105	
bis (2-chloroisopropyl) ether	684	442	65	2	30	20-115	
Bis(2-ethylhexyl) phthalate	684	583	85	1	30	45-125	
4-Bromophenyl phenyl ether	684	500	73	0	30	45-115	
Butyl benzyl phthalate	684	541	79	3	30	50-125	
Carbazole	684	534	78	0	30	45-115	
4-Chloroaniline	684	251	37	19	30	10-95	
4-Chloro-3-methylphenol	684	442	65	2	30	45-115	
2-Chloronaphthalene	684	456	67	2	30	45-105	
2-Chlorophenol	684	466	68	1	30	45-105	
4-Chlorophenyl phenyl ether	684	545	80	2	30	45-110	
Chrysene	684	533	78	3	30	55-110	
Dibenz(a,h)anthracene	684	655	96	0	30	40-125	
Dibenzofuran	684	512	74	2	30	50-105	
1,2-Dichlorobenzene	684	453	66	3	30	45-95	
1,3-Dichlorobenzene	684	443	65	0	30	40-100	
1,4-Dichlorobenzene	684	448	65	4	30	35-105	
3,3'-Dichlorobenzidine	1370	656	48	21	30	10-130	
2,4-Dichlorophenol	684	417	61	1	30	45-110	
Diethyl phthalate	684	626	91	1	30	50-115	
2,4-Dimethylphenol	684	381	56	20	30	30-105	
Dimethyl phthalate	684	586	86	2	30	50-110	
Di-n-butyl phthalate	684	619	91	1	30	55-110	
4,6-Dinitro-2-methylphenol	1370	791	58	8	30	30-135	
2,4-Dinitrophenol	1370	873	64	1	30	15-130	
2,4-Dinitrotoluene	684	635	93	1	30	50-115	
2,6-Dinitrotoluene	684	594	87	2	30	50-110	
Di-n-octyl phthalate	684	623	91	1	30	40-130	
Fluoranthene	684	545	80	2	30	55-115	
Fluorene	684	539	79	0	30	50-110	
Hexachlorobenzene	684	489	71	1	30	45-120	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 50520011.D

Lab ID: 240-50067-7 MSD Client ID: 079SB-0395M-0001-0002-SO MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Hexachlorobutadiene	684	455	67	1	30	40-115	
Hexachlorocyclopentadiene	684	250 J	36	0	30	10-110	
Hexachloroethane	684	420	61	1	30	35-110	
Indeno[1,2,3-cd]pyrene	684	678	99	0	30	40-120	
Isophorone	684	483	64	1	30	45-110	
2-Methylnaphthalene	684	476	65	2	30	45-105	
2-Methylphenol	684	466	68	2	30	40-105	
3 & 4 Methylphenol	684	441	65	2	30	40-105	
Naphthalene	684	493	68	2	30	40-105	
2-Nitroaniline	684	535	78	2	30	45-120	
3-Nitroaniline	684	493	72	1	30	25-110	
4-Nitroaniline	684	558	81	7	30	35-115	
Nitrobenzene	684	470	69	1	30	40-115	
2-Nitrophenol	684	479	68	0	30	40-110	
4-Nitrophenol	1370	1270	93	3	30	15-140	
N-Nitrosodi-n-propylamine	684	449	66	0	30	40-115	
N-Nitrosodiphenylamine	1370	971	71	4	30	50-115	
Pentachlorophenol	1370	763	56	31	30	25-120	J
Phenanthrene	684	521	74	1	30	50-110	
Phenol	684	488	71	3	30	40-100	
Pyrene	684	517	76	4	30	45-125	
1,2,4-Trichlorobenzene	684	475	69	3	30	45-110	
2,4,5-Trichlorophenol	684	512	75	1	30	50-110	
2,4,6-Trichlorophenol	684	510	74	3	30	45-110	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab File ID: 50512013.D Lab Sample ID: MB 240-179064/2-A

Matrix: Water Date Extracted: 05/04/2015 05:57

Instrument ID: A4HP9 Date Analyzed: 05/12/2015 12:15

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-179064/3-A	50512014.D	05/12/2015 12:40
079SB-0399-0001-RB	240-50067-11	50512019.D	05/12/2015 14:46

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab File ID: 50520004.D Lab Sample ID: MB 240-179108/22-A

Matrix: Solid Date Extracted: 05/04/2015 09:17

Instrument ID: A4HP9 Date Analyzed: 05/20/2015 10:20

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-179108/23-A	50520005.D	05/20/2015 10:45
079SB-0398-0001-SO	240-50067-10	50520008.D	05/20/2015 12:00

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab File ID: 50520006.D Lab Sample ID: MB 240-180350/8-A

Matrix: Solid Date Extracted: 05/12/2015 10:00

Instrument ID: A4HP9 Date Analyzed: 05/20/2015 11:10

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-180350/9-A	50520007.D	05/20/2015 11:35
079SB-0395M-0001-0002-SO	240-50067-7	50520009.D	05/20/2015 12:25
079SB-0395M-0001-0002-SO MS	240-50067-7 MS	50520010.D	05/20/2015 12:50
079SB-0395M-0001-0002-SO MSD	240-50067-7 MSD	50520011.D	05/20/2015 13:15
079SB-0396M-0001-SO	240-50067-8	50520012.D	05/20/2015 13:40
079SB-0397M-0001-SO	240-50067-9	50520013.D	05/20/2015 14:04
079SB-0390M-0001-SO	240-50067-2	50520014.D	05/20/2015 14:55
079SB-0391M-0001-SO	240-50067-3	50520015.D	05/20/2015 15:20
079SB-0392M-0001-SO	240-50067-4	50520016.D	05/20/2015 15:45
079SB-0393M-0001-SO	240-50067-5	50520017.D	05/20/2015 16:11
079SS-0389M-0001-SO	240-50067-1	50520019.D	05/20/2015 17:01
079SB-0394M-0001-SO	240-50067-6	50521006.D	05/21/2015 09:35

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab File ID: 50514004.D Lab Sample ID: MB 240-180428/2-A

Matrix: Water Date Extracted: 05/12/2015 13:37

Instrument ID: A4HP9 Date Analyzed: 05/14/2015 11:14

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-180428/3-A	50514005.D	05/14/2015 11:39
079SB-0399-0001-RB RE	240-50067-11 RE	50514006.D	05/14/2015 12:03

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab File ID: BFB Injection Date:

Instrument ID: BFB Injection Time:

Lab File ID: DFTPP Injection Date:

Instrument ID: DFTPP Injection Time:

Analysis Batch No.:

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD5 240-180308/2	50512002.D	05/12/2015	07:38
	STD4 240-180308/3	50512003.D	05/12/2015	08:03
	STD3 240-180308/4	50512004.D	05/12/2015	08:28
	STD2 240-180308/5	50512005.D	05/12/2015	08:53
	STD1 240-180308/6	50512006.D	05/12/2015	09:19
	STD9 240-180308/7	50512007.D	05/12/2015	09:44
	STD8 240-180308/8	50512008.D	05/12/2015	10:09
	STD7 240-180308/9	50512009.D	05/12/2015	10:34
	STD6 240-180308/10	50512010.D	05/12/2015	10:59
	ICV 240-180308/11	50512011.D	05/12/2015	11:25
	MRL 240-180308/12	50512012.D	05/12/2015	11:50
	MB 240-179064/2-A	50512013.D	05/12/2015	12:15
	LCS 240-179064/3-A	50512014.D	05/12/2015	12:40
079SB-0399-0001-RB	240-50067-11	50512019.D	05/12/2015	14:46
	MRL 240-180308/21	50512021.D	05/12/2015	15:37

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab File ID: BFB Injection Date:

Instrument ID: BFB Injection Time:

Lab File ID: DFTPP Injection Date:

Instrument ID: DFTPP Injection Time:

Analysis Batch No.:

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-180709/2	50514002.D	05/14/2015	10:24
	MRL 240-180709/3	50514003.D	05/14/2015	10:49
	MB 240-180428/2-A	50514004.D	05/14/2015	11:14
	LCS 240-180428/3-A	50514005.D	05/14/2015	11:39
079SB-0399-0001-RB RE	240-50067-11 RE	50514006.D	05/14/2015	12:03
	MRL 240-180709/7	50514007.D	05/14/2015	12:28

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab File ID: BFB Injection Date:

Instrument ID: BFB Injection Time:

Lab File ID: DFTPP Injection Date:

Instrument ID: DFTPP Injection Time:

Analysis Batch No.:

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD5 240-181539/2	50519002.D	05/19/2015	16:13
	STD4 240-181539/3	50519003.D	05/19/2015	16:38
	STD3 240-181539/4	50519004.D	05/19/2015	17:03
	STD2 240-181539/5	50519005.D	05/19/2015	17:28
	STD1 240-181539/6	50519006.D	05/19/2015	17:53
	STD9 240-181539/7	50519007.D	05/19/2015	18:18
	STD8 240-181539/8	50519008.D	05/19/2015	18:43
	STD7 240-181539/9	50519009.D	05/19/2015	19:08
	STD6 240-181539/10	50519010.D	05/19/2015	19:33
	ICV 240-181539/11	50519011.D	05/19/2015	19:58

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab File ID: BFB Injection Date:

Instrument ID: BFB Injection Time:

Lab File ID: DFTPP Injection Date:

Instrument ID: DFTPP Injection Time:

Analysis Batch No.:

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-181588/2	50520002.D	05/20/2015	09:30
	MRL 240-181588/3	50520003.D	05/20/2015	09:55
	MB 240-179108/22-A	50520004.D	05/20/2015	10:20
	LCS 240-179108/23-A	50520005.D	05/20/2015	10:45
	MB 240-180350/8-A	50520006.D	05/20/2015	11:10
	LCS 240-180350/9-A	50520007.D	05/20/2015	11:35
079SB-0398-0001-SO	240-50067-10	50520008.D	05/20/2015	12:00
079SB-0395M-0001-0002-SO	240-50067-7	50520009.D	05/20/2015	12:25
079SB-0395M-0001-0002-SO MS	240-50067-7 MS	50520010.D	05/20/2015	12:50
079SB-0395M-0001-0002-SO MSD	240-50067-7 MSD	50520011.D	05/20/2015	13:15
079SB-0396M-0001-SO	240-50067-8	50520012.D	05/20/2015	13:40
079SB-0397M-0001-SO	240-50067-9	50520013.D	05/20/2015	14:04
079SB-0390M-0001-SO	240-50067-2	50520014.D	05/20/2015	14:55
079SB-0391M-0001-SO	240-50067-3	50520015.D	05/20/2015	15:20
079SB-0392M-0001-SO	240-50067-4	50520016.D	05/20/2015	15:45
079SB-0393M-0001-SO	240-50067-5	50520017.D	05/20/2015	16:11
079SS-0389M-0001-SO	240-50067-1	50520019.D	05/20/2015	17:01
	MRL 240-181588/20	50520020.D	05/20/2015	17:51
	LODV 240-181588/21	50520021.D	05/20/2015	18:16
	LODV 240-181588/22	50520022.D	05/20/2015	18:41
	LODV 240-181588/23	50520023.D	05/20/2015	19:06
	LODV 240-181588/24	50520024.D	05/20/2015	19:31

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab File ID: BFB Injection Date:

Instrument ID: BFB Injection Time:

Lab File ID: DFTPP Injection Date:

Instrument ID: DFTPP Injection Time:

Analysis Batch No.:

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-181781/2	50521002.D	05/21/2015	07:55
	MRL 240-181781/3	50521003.D	05/21/2015	08:20
079SB-0394M-0001-SO	240-50067-6	50521006.D	05/21/2015	09:35
	MRL 240-181781/16	50521016.D	05/21/2015	11:15
	LODV 240-181781/17	50521017.D	05/21/2015	12:04
	LODV 240-181781/18	50521018.D	05/21/2015	12:29
	LODV 240-181781/19	50521019.D	05/21/2015	12:54

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Sample No.: STD6 240-180308/10 Date Analyzed: 05/12/2015 10:59

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 50512010.D Heated Purge: (Y/N) N

Calibration ID: 28497

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		170342	6.33	626557	7.44	387027	8.95
UPPER LIMIT		340684	6.83	1253114	7.94	774054	9.45
LOWER LIMIT		85171	5.83	313279	6.94	193514	8.45
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-180308/11		158735	6.33	629023	7.45	377890	8.95
MRL 240-180308/12		173191	6.32	635723	7.44	370146	8.95
MB 240-179064/2-A		120097	6.32	446485	7.44	269380	8.95
LCS 240-179064/3-A		120585	6.33	450260	7.45	277989	8.95
240-50067-11	079SB-0399-0001-RB	110480	6.33	436583	7.44	273288	8.95
MRL 240-180308/21		136164	6.33	493203	7.45	289741	8.95
CCV 240-180709/2		141470	6.28	546890	7.40	319471	8.90
MRL 240-180709/3		144445	6.28	565174	7.40	331166	8.91
MB 240-180428/2-A		115108	6.28	451583	7.40	269333	8.90
LCS 240-180428/3-A		128413	6.28	462830	7.40	276891	8.91
240-50067-11 RE	079SB-0399-0001-RB RE	120268	6.28	455446	7.40	270865	8.91
MRL 240-180709/7		166025	6.28	605290	7.40	359532	8.91

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Sample No.: STD6 240-180308/10 Date Analyzed: 05/12/2015 10:59

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 50512010.D Heated Purge: (Y/N) N

Calibration ID: 28497

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		613513	10.22	726856	12.52	563544	14.27
UPPER LIMIT		1227026	10.72	1453712	13.02	1127088	14.77
LOWER LIMIT		306757	9.72	363428	12.02	281772	13.77
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-180308/11		580202	10.22	684958	12.51	516825	14.27
MRL 240-180308/12		619122	10.22	713764	12.52	511552	14.26
MB 240-179064/2-A		491465	10.22	501223	12.51	343812	14.26
LCS 240-179064/3-A		463467	10.23	529836	12.51	361168	14.27
240-50067-11	079SB-0399-0001-RB	467842	10.22	503162	12.52	329398	14.27
MRL 240-180308/21		511237	10.22	578265	12.51	423862	14.26
CCV 240-180709/2		495974	10.17	586435	12.45	463907	14.16
MRL 240-180709/3		583737	10.17	635061	12.45	484652	14.16
MB 240-180428/2-A		497807	10.17	510616	12.45	362546	14.16
LCS 240-180428/3-A		481156	10.17	563984	12.45	355259	14.16
240-50067-11 RE	079SB-0399-0001-RB RE	505575	10.17	513829	12.45	329660	14.16
MRL 240-180709/7		623553	10.17	714409	12.45	565226	14.16

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Sample No.: STD6 240-181539/10 Date Analyzed: 05/19/2015 19:33

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 50519010.D Heated Purge: (Y/N) N

Calibration ID: 28567

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		193601	6.41	821091	7.53	384100	9.04
UPPER LIMIT		387202	6.91	1642182	8.03	768200	9.54
LOWER LIMIT		96801	5.91	410546	7.03	192050	8.54
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-181539/11		185978	6.42	801807	7.53	376179	9.04
CCV 240-181588/2		271983	6.41	1130800	7.53	543389	9.04
MRL 240-181588/3		289685	6.41	1221978	7.53	578437	9.04
MB 240-179108/22-A		225364	6.42	934184	7.53	448317	9.04
LCS 240-179108/23-A		231331	6.42	974675	7.53	465988	9.04
MB 240-180350/8-A		237805	6.41	967372	7.53	472894	9.04
LCS 240-180350/9-A		228889	6.41	974971	7.53	462319	9.04
240-50067-10	079SB-0398-0001-SO	225084	6.41	934769	7.53	450822	9.04
240-50067-7	079SB-0395M-0001-0002-SO	253200	6.42	993307	7.53	286527	9.03
240-50067-7 MS	079SB-0395M-0001-0002-SO MS	257873	6.42	1059555	7.53	422423	9.04
240-50067-7 MSD	079SB-0395M-0001-0002-SO MSD	259936	6.42	1072951	7.53	423444	9.04
240-50067-8	079SB-0396M-0001-SO	262188	6.42	1094042	7.53	308431	9.03
240-50067-9	079SB-0397M-0001-SO	261365	6.42	1106663	7.53	410872	9.03
240-50067-2	079SB-0390M-0001-SO	263167	6.42	946209	7.53	291543	9.04
240-50067-3	079SB-0391M-0001-SO	276178	6.42	903735	7.53	387181	9.04
240-50067-4	079SB-0392M-0001-SO	272826	6.42	1007690	7.53	390033	9.04
240-50067-5	079SB-0393M-0001-SO	261750	6.42	786022	7.53	342464	9.04
240-50067-1	079SS-0389M-0001-SO	273647	6.42	1147417	7.53	380578	9.04
MRL 240-181588/20		330847	6.41	1351917	7.53	641674	9.03
LODV 240-181588/21		262892	6.41	1068610	7.53	524034	9.03
LODV 240-181588/22		269971	6.41	1119801	7.53	535808	9.03
LODV 240-181588/23		281362	6.41	1119060	7.53	548089	9.04
LODV 240-181588/24		267443	6.41	1085375	7.53	537343	9.03
CCV 240-181781/2		317436	6.40	1283281	7.51	600482	9.02
MRL 240-181781/3		281817	6.40	1189273	7.51	565062	9.02
240-50067-6	079SB-0394M-0001-SO	235426	6.42	712981	7.52	335030	9.02
MRL 240-181781/16		252766	6.40	1054051	7.51	509996	9.02

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Sample No.: STD6 240-181539/10 Date Analyzed: 05/19/2015 19:33

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 50519010.D Heated Purge: (Y/N) N

Calibration ID: 28567

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		193601	6.41	821091	7.53	384100	9.04
UPPER LIMIT		387202	6.91	1642182	8.03	768200	9.54
LOWER LIMIT		96801	5.91	410546	7.03	192050	8.54
LAB SAMPLE ID	CLIENT SAMPLE ID						
LODV 240-181781/17		226652	6.40	929868	7.51	447364	9.02
LODV 240-181781/18		254402	6.40	1041817	7.52	483663	9.02
LODV 240-181781/19		261559	6.40	1063616	7.51	514685	9.02

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Sample No.: STD6 240-181539/10 Date Analyzed: 05/19/2015 19:33

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 50519010.D Heated Purge: (Y/N) N

Calibration ID: 28567

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		530433	10.31	495913	12.63	357574	14.45
UPPER LIMIT		1060866	10.81	991826	13.13	715148	14.95
LOWER LIMIT		265217	9.81	247957	12.13	178787	13.95
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-181539/11		519420	10.32	490052	12.63	347707	14.44
CCV 240-181588/2		736509	10.31	700237	12.62	562092	14.44
MRL 240-181588/3		830415	10.31	772482	12.62	600989	14.44
MB 240-179108/22-A		690635	10.31	576128	12.62	384611	14.43
LCS 240-179108/23-A		667558	10.31	613024	12.62	418479	14.43
MB 240-180350/8-A		718521	10.31	614939	12.62	398820	14.43
LCS 240-180350/9-A		652855	10.31	615468	12.62	418161	14.43
240-50067-10	079SB-0398-0001-SO	690885	10.31	560614	12.62	397026	14.43
240-50067-7	079SB-0395M-0001-0002-SO	711945	10.31	640060	12.62	455697	14.43
240-50067-7 MS	079SB-0395M-0001-0002-SO MS	740905	10.31	677509	12.62	476487	14.43
240-50067-7 MSD	079SB-0395M-0001-0002-SO MSD	738690	10.31	674617	12.62	466369	14.44
240-50067-8	079SB-0396M-0001-SO	759169	10.31	691216	12.62	483100	14.44
240-50067-9	079SB-0397M-0001-SO	746762	10.31	671184	12.62	472877	14.43
240-50067-2	079SB-0390M-0001-SO	752249	10.31	663398	12.62	471414	14.44
240-50067-3	079SB-0391M-0001-SO	809605	10.31	693840	12.62	494391	14.43
240-50067-4	079SB-0392M-0001-SO	784474	10.31	705375	12.62	493331	14.43
240-50067-5	079SB-0393M-0001-SO	763861	10.31	653103	12.62	471770	14.43
240-50067-1	079SS-0389M-0001-SO	849046	10.31	719264	12.62	498417	14.43
MRL 240-181588/20		982483	10.31	871974	12.62	682208	14.43
LODV 240-181588/21		825265	10.31	714536	12.62	556950	14.43
LODV 240-181588/22		857188	10.31	736164	12.62	566955	14.43
LODV 240-181588/23		870602	10.31	760646	12.61	576490	14.43
LODV 240-181588/24		847474	10.31	736125	12.61	560333	14.43
CCV 240-181781/2		822233	10.30	766637	12.60	607229	14.40
MRL 240-181781/3		833907	10.29	745063	12.60	576359	14.40
240-50067-6	079SB-0394M-0001-SO	579327	10.30	626838	12.60	441934	14.40
MRL 240-181781/16		763023	10.29	642879	12.60	512541	14.40

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Sample No.: STD6 240-181539/10 Date Analyzed: 05/19/2015 19:33

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 50519010.D Heated Purge: (Y/N) N

Calibration ID: 28567

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		530433	10.31	495913	12.63	357574	14.45
UPPER LIMIT		1060866	10.81	991826	13.13	715148	14.95
LOWER LIMIT		265217	9.81	247957	12.13	178787	13.95
LAB SAMPLE ID	CLIENT SAMPLE ID						
LODV 240-181781/17		686795	10.29	567419	12.60	444312	14.40
LODV 240-181781/18		754051	10.29	646831	12.60	500824	14.40
LODV 240-181781/19		797573	10.29	678365	12.60	532717	14.40

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SS-0389M-0001-SO | Lab Sample ID: 240-50067-1

Matrix: Solid | Lab File ID: 50520019.D

Analysis Method: 8270C | Date Collected: 04/28/2015 16:00

Extract. Method: 3540C | Date Extracted: 05/12/2015 12:12

Sample wt/vol: 29.94(g) | Date Analyzed: 05/20/2015 17:01

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
83-32-9	Acenaphthene	10		6.9	3.4	0.78
208-96-8	Acenaphthylene	1.7	U	6.9	1.7	0.36
120-12-7	Anthracene	7.9		6.9	3.4	0.80
56-55-3	Benzo[a]anthracene	20		6.9	3.4	0.65
50-32-8	Benzo[a]pyrene	18		6.9	3.4	0.66
205-99-2	Benzo[b]fluoranthene	32		6.9	3.4	0.61
191-24-2	Benzo[g,h,i]perylene	13	M	6.9	1.7	0.36
65-85-0	Benzoic acid	39	J	680	140	37
207-08-9	Benzo[k]fluoranthene	8.3		6.9	3.4	0.70
100-51-6	Benzyl alcohol	25	J M	340	69	22
111-91-1	Bis(2-chloroethoxy)methane	69	U	100	69	23
111-44-4	Bis(2-chloroethyl)ether	3.4	U	100	3.4	2.1
108-60-1	bis (2-chloroisopropyl) ether	34	U	100	34	9.8
117-81-7	Bis(2-ethylhexyl) phthalate	31	J	72	34	20
101-55-3	4-Bromophenyl phenyl ether	34	U	52	34	13
85-68-7	Butyl benzyl phthalate	34	U	72	34	10
86-74-8	Carbazole	34	U	52	34	28
106-47-8	4-Chloroaniline	69	U	150	69	18
59-50-7	4-Chloro-3-methylphenol	69	U	150	69	22
91-58-7	2-Chloronaphthalene	1.7	U	52	1.7	0.46
95-57-8	2-Chlorophenol	34	U	52	34	8.4
7005-72-3	4-Chlorophenyl phenyl ether	34	U	52	34	13
218-01-9	Chrysene	32		6.9	3.4	1.1
53-70-3	Dibenz(a,h)anthracene	3.4	U	6.9	3.4	0.68
132-64-9	Dibenzofuran	80		52	3.4	0.68
95-50-1	1,2-Dichlorobenzene	34	U	52	34	10
541-73-1	1,3-Dichlorobenzene	34	U	52	34	11
106-46-7	1,4-Dichlorobenzene	34	U	52	34	21
91-94-1	3,3'-Dichlorobenzidine	69	U	100	69	19
120-83-2	2,4-Dichlorophenol	69	U	150	69	21
84-66-2	Diethyl phthalate	180		72	34	16
105-67-9	2,4-Dimethylphenol	69	U	150	69	21
131-11-3	Dimethyl phthalate	34	U	72	34	18
84-74-2	Di-n-butyl phthalate	21	J	72	34	15

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SS-0389M-0001-SO | Lab Sample ID: 240-50067-1

Matrix: Solid | Lab File ID: 50520019.D

Analysis Method: 8270C | Date Collected: 04/28/2015 16:00

Extract. Method: 3540C | Date Extracted: 05/12/2015 12:12

Sample wt/vol: 29.94(g) | Date Analyzed: 05/20/2015 17:01

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
534-52-1	4,6-Dinitro-2-methylphenol	34	U	150	34	9.5
51-28-5	2,4-Dinitrophenol	69	U	340	69	22
121-14-2	2,4-Dinitrotoluene	69	U	210	69	18
606-20-2	2,6-Dinitrotoluene	69	U	210	69	22
117-84-0	Di-n-octyl phthalate	34	U	72	34	8.1
206-44-0	Fluoranthene	28		6.9	3.4	0.57
86-73-7	Fluorene	11		6.9	3.4	0.55
118-74-1	Hexachlorobenzene	3.4	U	6.9	3.4	2.2
87-68-3	Hexachlorobutadiene	34	U	52	34	5.8
77-47-4	Hexachlorocyclopentadiene	34	U	340	34	8.3
67-72-1	Hexachloroethane	34	U	52	34	9.3
193-39-5	Indeno[1,2,3-cd]pyrene	10	M	6.9	1.7	0.36
78-59-1	Isophorone	120		52	34	13
91-57-6	2-Methylnaphthalene	270		6.9	3.4	0.52
95-48-7	2-Methylphenol	69	U	210	69	11
15831-10-4	3 & 4 Methylphenol	69	U	410	69	21
91-20-3	Naphthalene	230		6.9	3.4	0.84
88-74-4	2-Nitroaniline	34	U	210	34	9.4
99-09-2	3-Nitroaniline	69	U	210	69	16
100-01-6	4-Nitroaniline	69	U	210	69	27
98-95-3	Nitrobenzene	3.4	U	100	3.4	2.3
88-75-5	2-Nitrophenol	34	U	52	34	8.6
100-02-7	4-Nitrophenol	69	U	340	69	18
621-64-7	N-Nitrosodi-n-propylamine	34	U	52	34	6.5
86-30-6	N-Nitrosodiphenylamine	34	U	52	34	22
87-86-5	Pentachlorophenol	34	U	150	34	9.4
85-01-8	Phenanthrene	120		6.9	3.4	0.75
108-95-2	Phenol	31	J M	52	34	7.5
129-00-0	Pyrene	29		6.9	1.7	0.45
120-82-1	1,2,4-Trichlorobenzene	17	U	52	17	3.6
95-95-4	2,4,5-Trichlorophenol	69	U	150	69	26
88-06-2	2,4,6-Trichlorophenol	34	U	150	34	9.2

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SS-0389M-0001-SO | Lab Sample ID: 240-50067-1

Matrix: Solid | Lab File ID: 50520019.D

Analysis Method: 8270C | Date Collected: 04/28/2015 16:00

Extract. Method: 3540C | Date Extracted: 05/12/2015 12:12

Sample wt/vol: 29.94(g) | Date Analyzed: 05/20/2015 17:01

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	70		45-105
367-12-4	2-Fluorophenol (Surr)	70		35-105
4165-60-0	Nitrobenzene-d5 (Surr)	67		35-100
4165-62-2	Phenol-d5 (Surr)	70	M	40-100
1718-51-0	Terphenyl-d14 (Surr)	78		30-125
118-79-6	2,4,6-Tribromophenol (Surr)	119		35-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520019.D
Lims ID: 240-50067-A-1-B Lab Sample ID: 240-50067-1
Client ID: 079SS-0389M-0001-SO
Sample Type: Client
Inject. Date: 20-May-2015 17:01:30 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043844-019
Misc. Info.: 240-50067-A-1-B240-50067-A-1-B
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-May-2015 08:02:18 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 20-May-2015 17:29:42

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.416	6.411	0.005	97	273647	4.00	
* 2 Naphthalene-d8	136	7.531	7.527	0.004	99	1147417	4.00	
* 3 Acenaphthene-d10	164	9.036	9.037	-0.001	90	380578	4.00	
* 4 Phenanthrene-d10	188	10.306	10.311	-0.005	95	849046	4.00	
* 5 Chrysene-d12	240	12.619	12.619	0.000	93	719264	4.00	
* 6 Perylene-d12	264	14.432	14.437	-0.005	91	498417	4.00	
$ 7 2-Fluorophenol	112	5.261	5.199	0.062	94	831933	7.03	
$ 8 Phenol-d5	99	6.060	6.046	0.014	92	1125630	7.05	M
$ 9 Nitrobenzene-d5	82	6.887	6.887	0.000	86	788574	6.71	
$ 10 2-Fluorobiphenyl (Surr)	172	8.430	8.431	-0.001	99	760800	7.01	
$ 11 2,4,6-Tribromophenol	330	9.705	9.710	-0.005	85	119242	11.9	
$ 12 Terphenyl-d14	244	11.633	11.638	-0.005	97	1074316	7.78	
43 Phenol	94	6.074	6.055	0.019	0	79591	0.4561	M
69 Bis(2-chloroethyl)ether	93		6.147				ND	
46 2-Chlorophenol	128		6.228				ND	
47 1,3-Dichlorobenzene	146		6.368				ND	
48 1,4-Dichlorobenzene	146		6.426				ND	
49 Benzyl alcohol	108	6.512	6.507	0.005	60	32398	0.3697	M
50 1,2-Dichlorobenzene	146		6.570				ND	
51 2-Methylphenol	108		6.594				ND	
53 2,2'-oxybis[1-chloropropan	45		6.628				ND	
21 3 & 4 Methylphenol	108		6.724				ND	
57 N-Nitrosodi-n-propylamine	70		6.738				ND	
61 Hexachloroethane	117		6.878				ND	
62 Nitrobenzene	77		6.902				ND	
64 Isophorone	82	7.108	7.104	0.004	98	398874	1.74	
66 2-Nitrophenol	139		7.185				ND	
65 2,4-Dimethylphenol	107		7.190				ND	
71 Benzoic acid	122	7.209	7.238	-0.029	80	32965	0.5726	
70 Bis(2-chloroethoxy)methane	93		7.267				ND	
73 2,4-Dichlorophenol	162		7.387				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
74 1,2,4-Trichlorobenzene	180		7.474				ND	
75 Naphthalene	128	7.546	7.546	0.000	97	1021696	3.37	
76 4-Chloroaniline	127		7.565				ND	
79 Hexachlorobutadiene	225		7.652				ND	
86 4-Chloro-3-methylphenol	107		7.955				ND	
87 2-Methylnaphthalene	142	8.137	8.138	-0.001	94	722987	3.92	
89 Hexachlorocyclopentadiene	237		8.282				ND	
92 2,4,6-Trichlorophenol	196		8.364				ND	
93 2,4,5-Trichlorophenol	196		8.402				ND	
100 2-Chloronaphthalene	162		8.556				ND	
102 2-Nitroaniline	65		8.618				ND	
105 Dimethyl phthalate	163		8.748				ND	
107 2,6-Dinitrotoluene	165		8.806				ND	
109 Acenaphthylene	152		8.921				ND	
110 3-Nitroaniline	138		8.960				ND	
111 2,4-Dinitrophenol	184		9.046				ND	
112 Acenaphthene	153	9.060	9.066	-0.006	65	15536	0.1454	
113 4-Nitrophenol	109		9.070				ND	
114 2,4-Dinitrotoluene	165		9.157				ND	
116 Dibenzofuran	168	9.205	9.210	-0.005	97	169008	1.17	
121 Diethyl phthalate	149	9.339	9.345	-0.006	98	280886	2.67	
123 4-Chlorophenyl phenyl ethe	204		9.474				ND	
125 4-Nitroaniline	138		9.484				ND	
126 Fluorene	166	9.498	9.503	-0.005	91	18089	0.1537	
128 4,6-Dinitro-2-methylphenol	198		9.513				ND	
131 N-Nitrosodiphenylamine	169		9.571				ND	
139 4-Bromophenyl phenyl ether	248		9.898				ND	
141 Hexachlorobenzene	284		9.989				ND	
143 Pentachlorophenol	266		10.143				ND	
148 Phenanthrene	178	10.330	10.330	0.000	97	441342	1.82	
149 Anthracene	178	10.373	10.374	-0.001	94	28395	0.1154	
151 Carbazole	167	10.489	10.489	0.000	54	29248	0.1318	
154 Di-n-butyl phthalate	149	10.724	10.725	-0.001	99	80230	0.3076	
159 Fluoranthene	202	11.349	11.355	-0.006	96	85509	0.4055	
161 Pyrene	202	11.551	11.557	-0.006	90	92216	0.4230	
168 Butyl benzyl phthalate	149		12.013				ND	
173 Bis(2-ethylhexyl) phthalat	149	12.499	12.504	-0.005	94	76162	0.4583	
175 3,3'-Dichlorobenzidine	252		12.538				ND	
177 Benzo[a]anthracene	228	12.604	12.610	-0.006	94	57999	0.2854	
178 Chrysene	228	12.643	12.648	-0.005	94	86362	0.4672	
180 Di-n-octyl phthalate	149		13.177				ND	
182 Benzo[b]fluoranthene	252	13.864	13.870	-0.006	65	72312	0.4703	
183 Benzo[k]fluoranthene	252	13.898	13.903	-0.005	1	18936	0.1207	
184 Benzo[a]pyrene	252	14.345	14.355	-0.010	86	38265	0.2599	
188 Indeno[1,2,3-cd]pyrene	276	16.413	16.423	-0.010	59	20792	0.1514	M
189 Dibenz(a,h)anthracene	278		16.428				ND	
190 Benzo[g,h,i]perylene	276	17.029	17.039	-0.010	71	22421	0.1957	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SMIS80PPMW_00011 Amount Added: 5.00 Units: uL Run Reagent

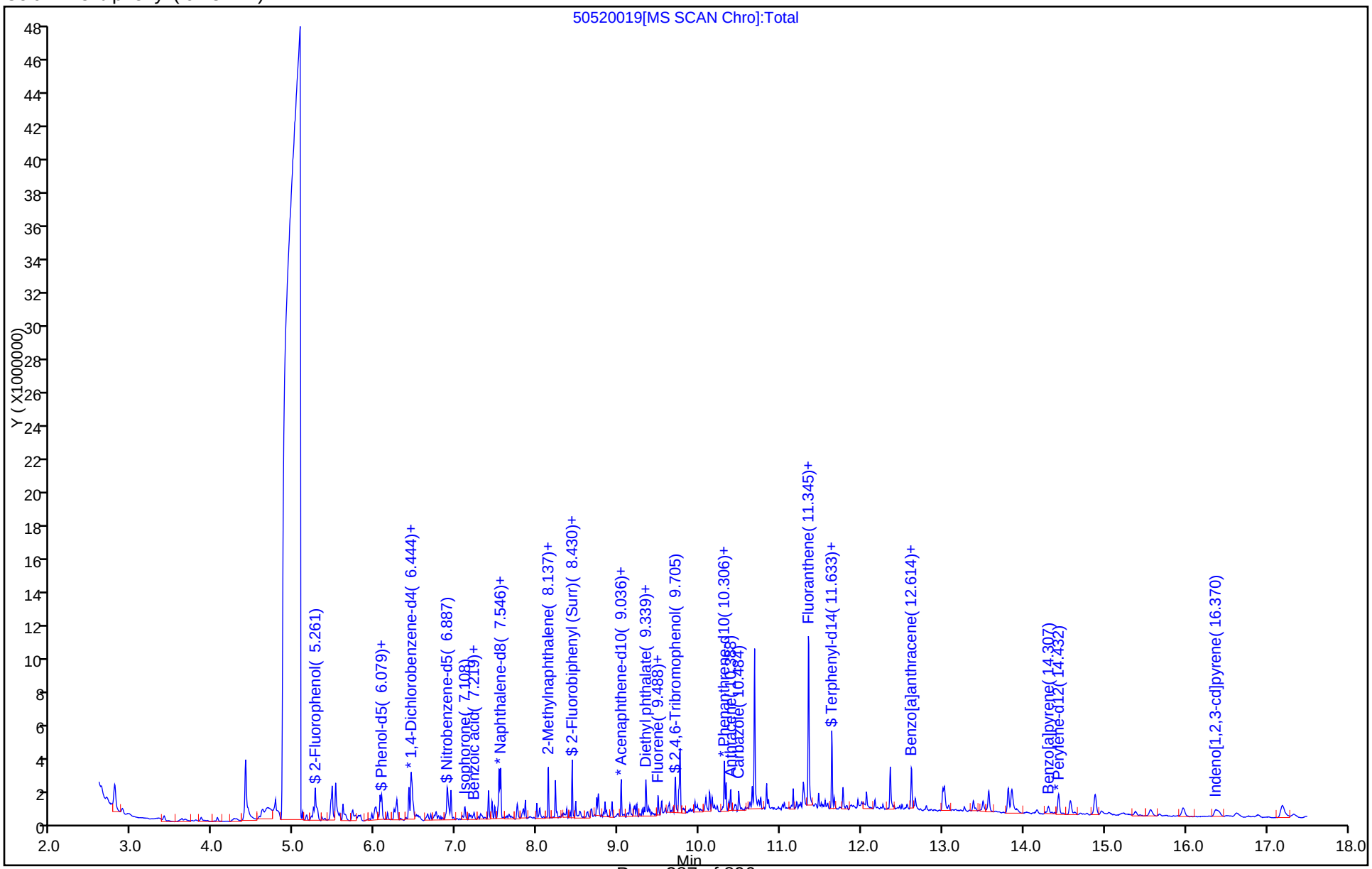
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TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520019.D

Injection Date:	20-May-2015 17:01:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	240-50067-A-1-B	Lab Sample ID:	240-50067-1	Worklist Smp#:	19
Client ID:	079SS-0389M-0001-SO				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



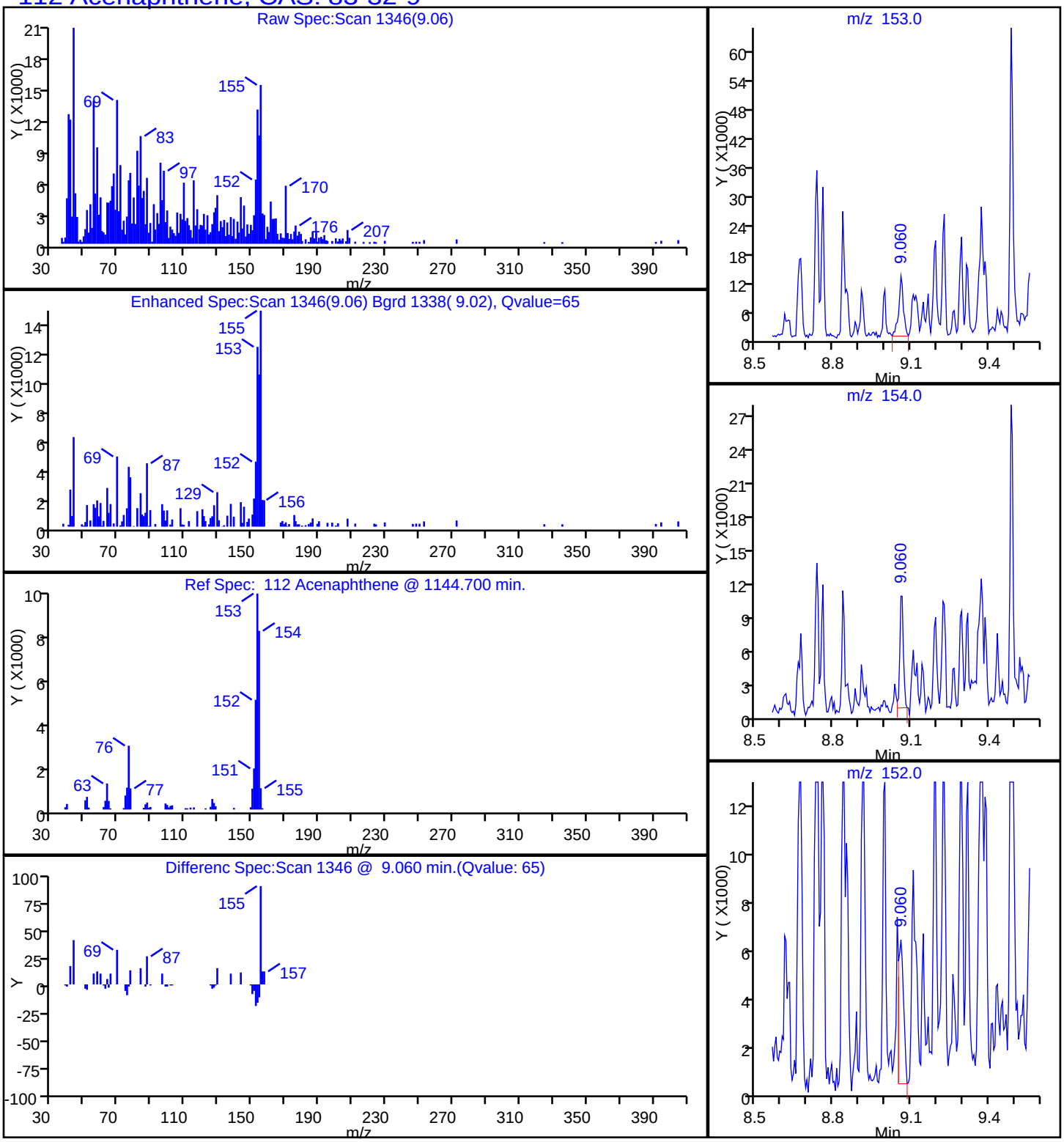
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Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520019.D

Injection Date:	20-May-2015 17:01:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-1-B	Lab Sample ID:	240-50067-1		
Client ID:	079SS-0389M-0001-SO				
Operator ID:	001574	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

112 Acenaphthene, CAS: 83-32-9



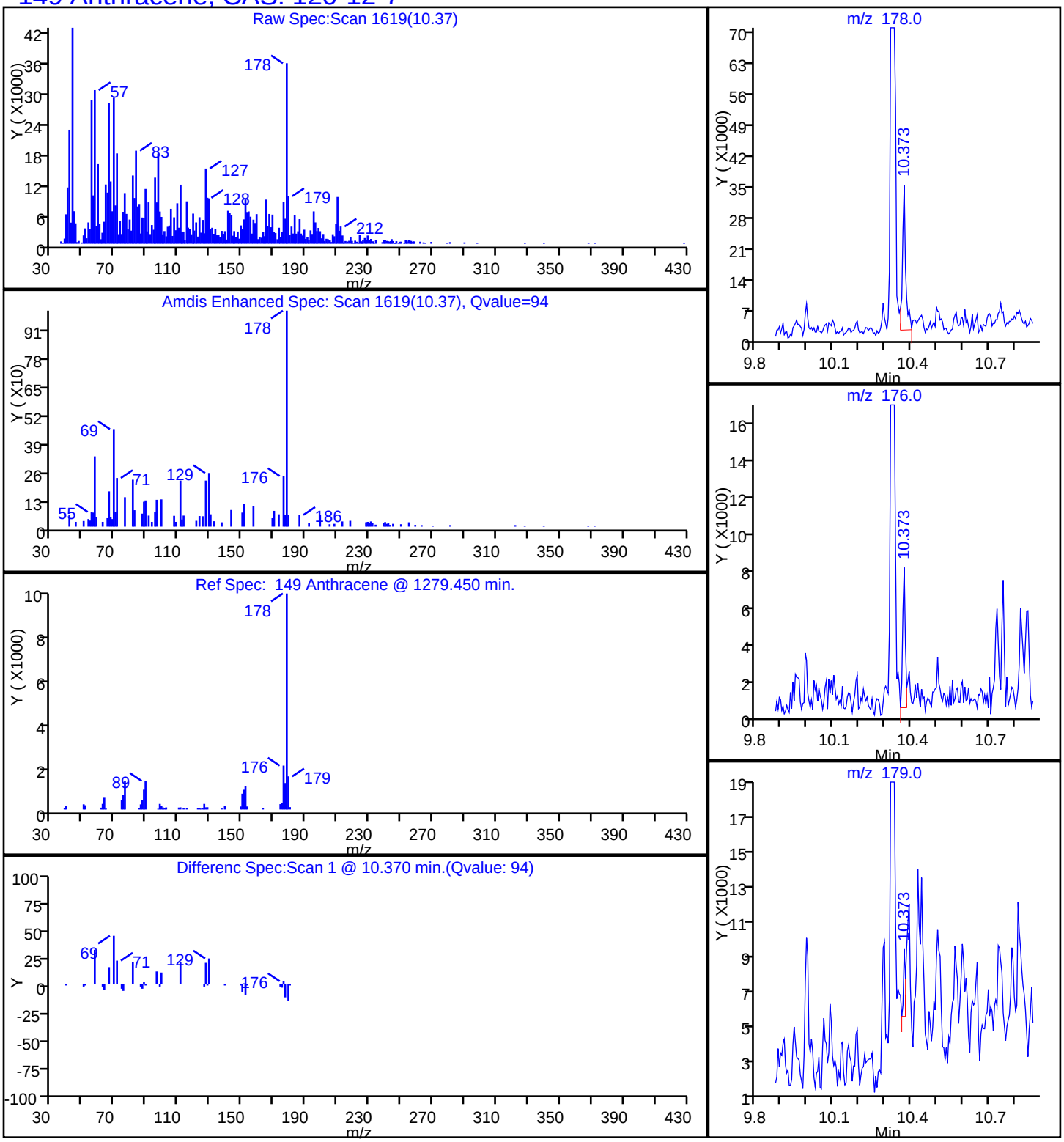
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TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520019.D

Injection Date:	20-May-2015 17:01:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-1-B	Lab Sample ID:	240-50067-1		
Client ID:	079SS-0389M-0001-SO				
Operator ID:	001574	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

149 Anthracene, CAS: 120-12-7



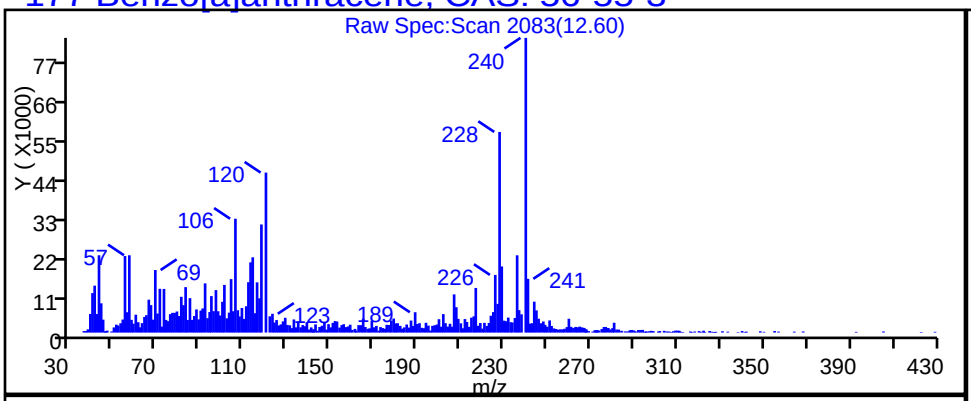
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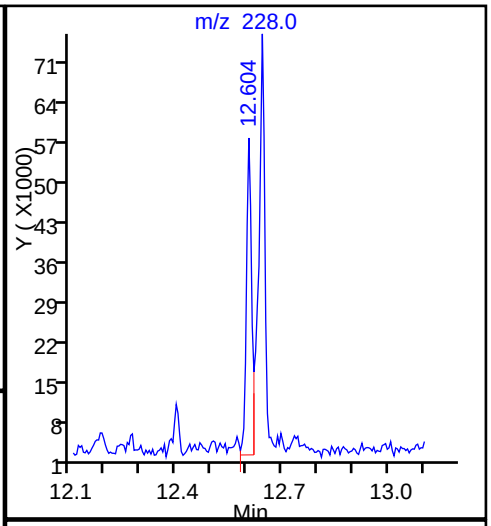
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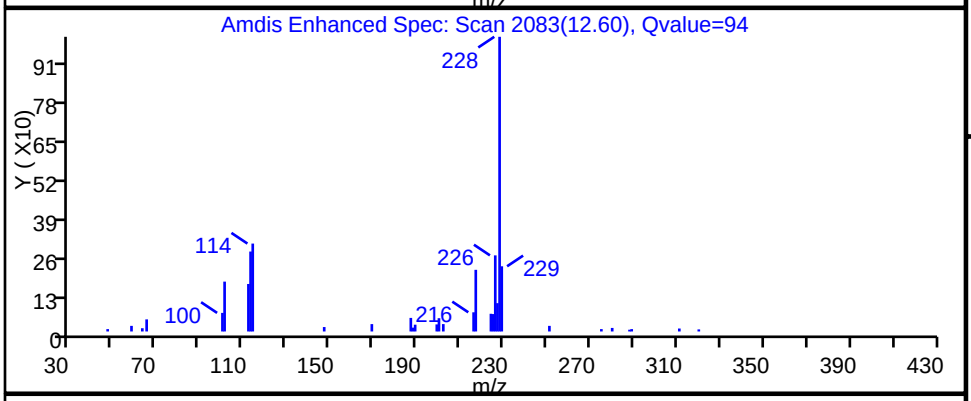
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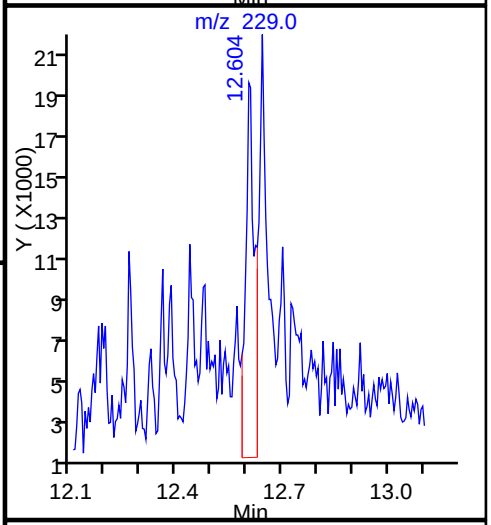
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Client ID:	079SS-0389M-0001-SO				
Operator ID:	001574	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

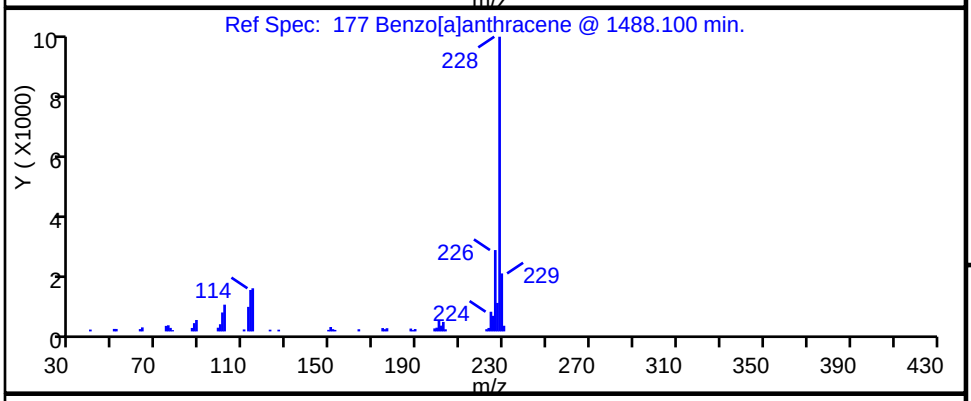
177 Benzo[a]anthracene, CAS: 56-55-3

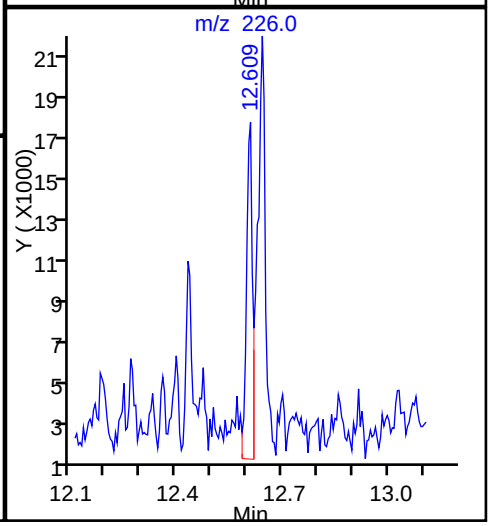


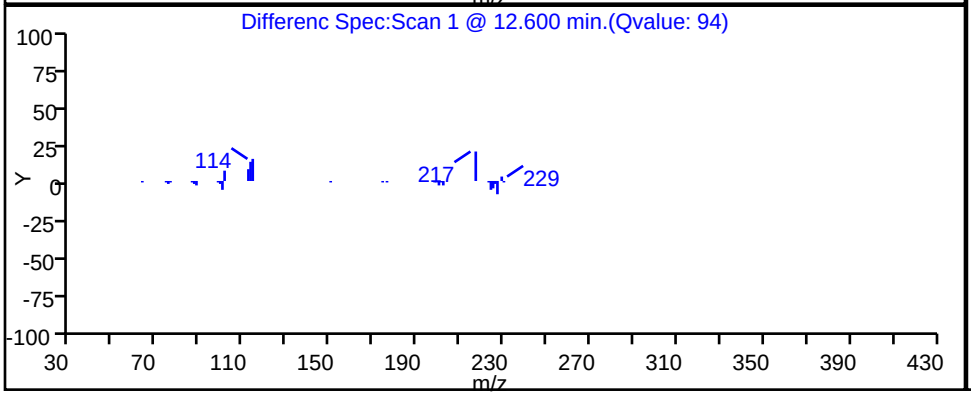












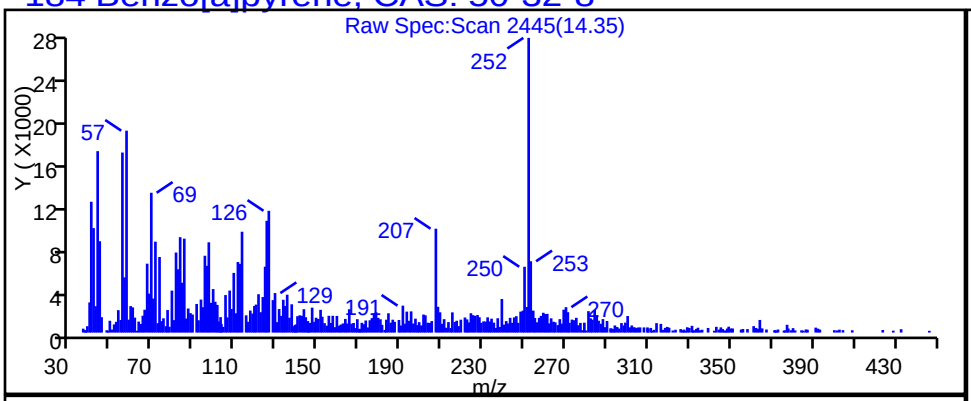
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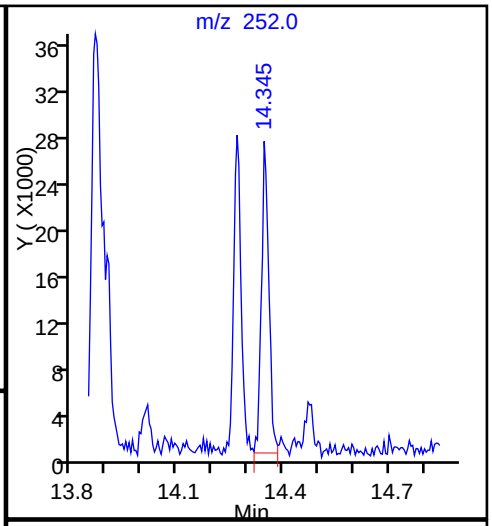
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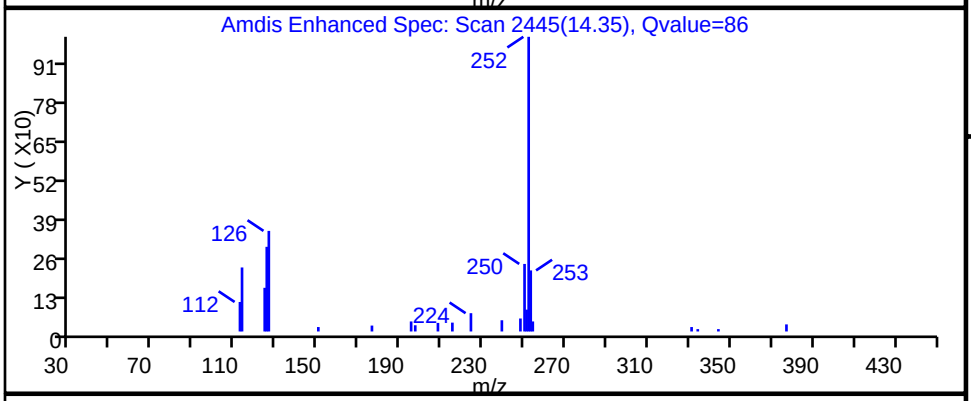
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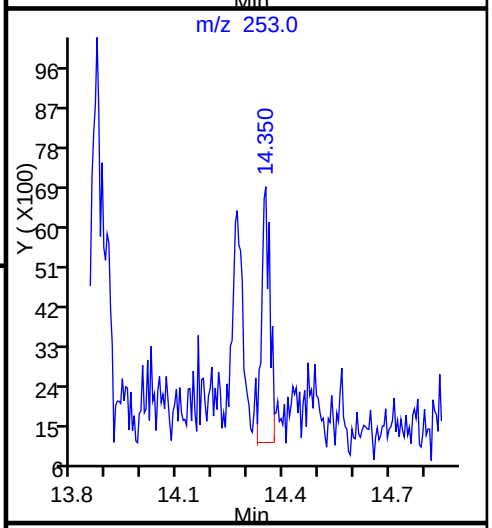
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Lims ID:	240-50067-A-1-B	Lab Sample ID:	240-50067-1		
Client ID:	079SS-0389M-0001-SO				
Operator ID:	001574	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

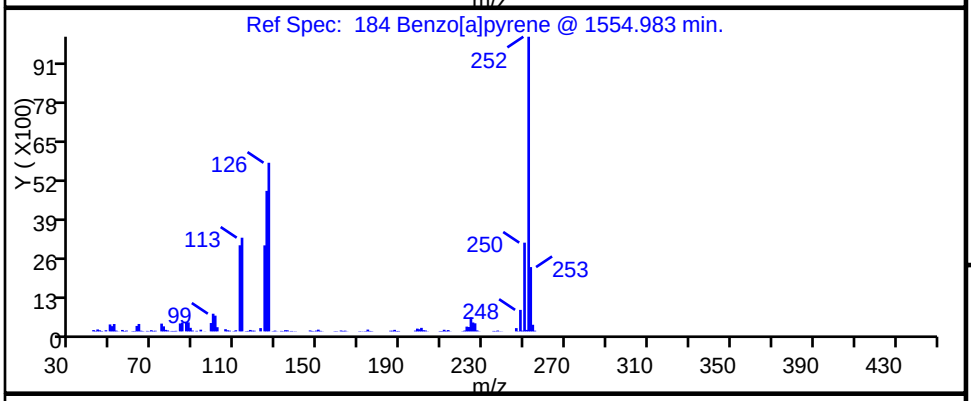
184 Benzo[a]pyrene, CAS: 50-32-8

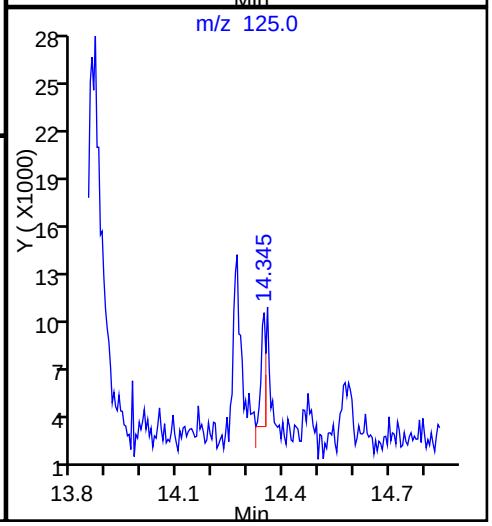


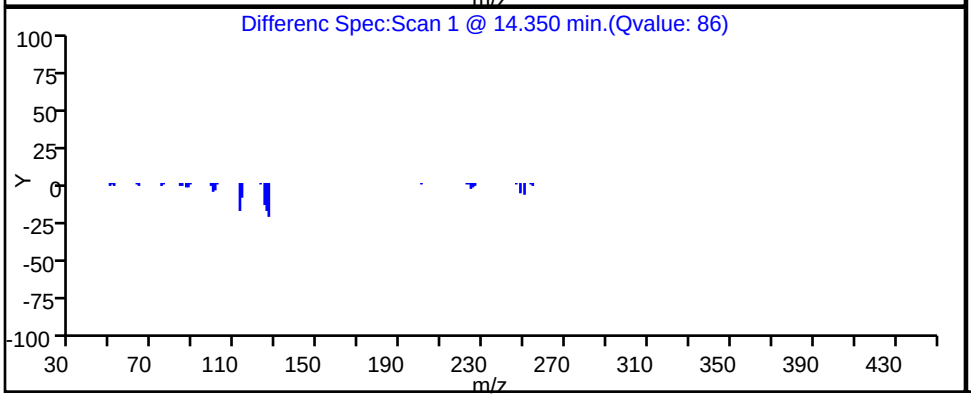












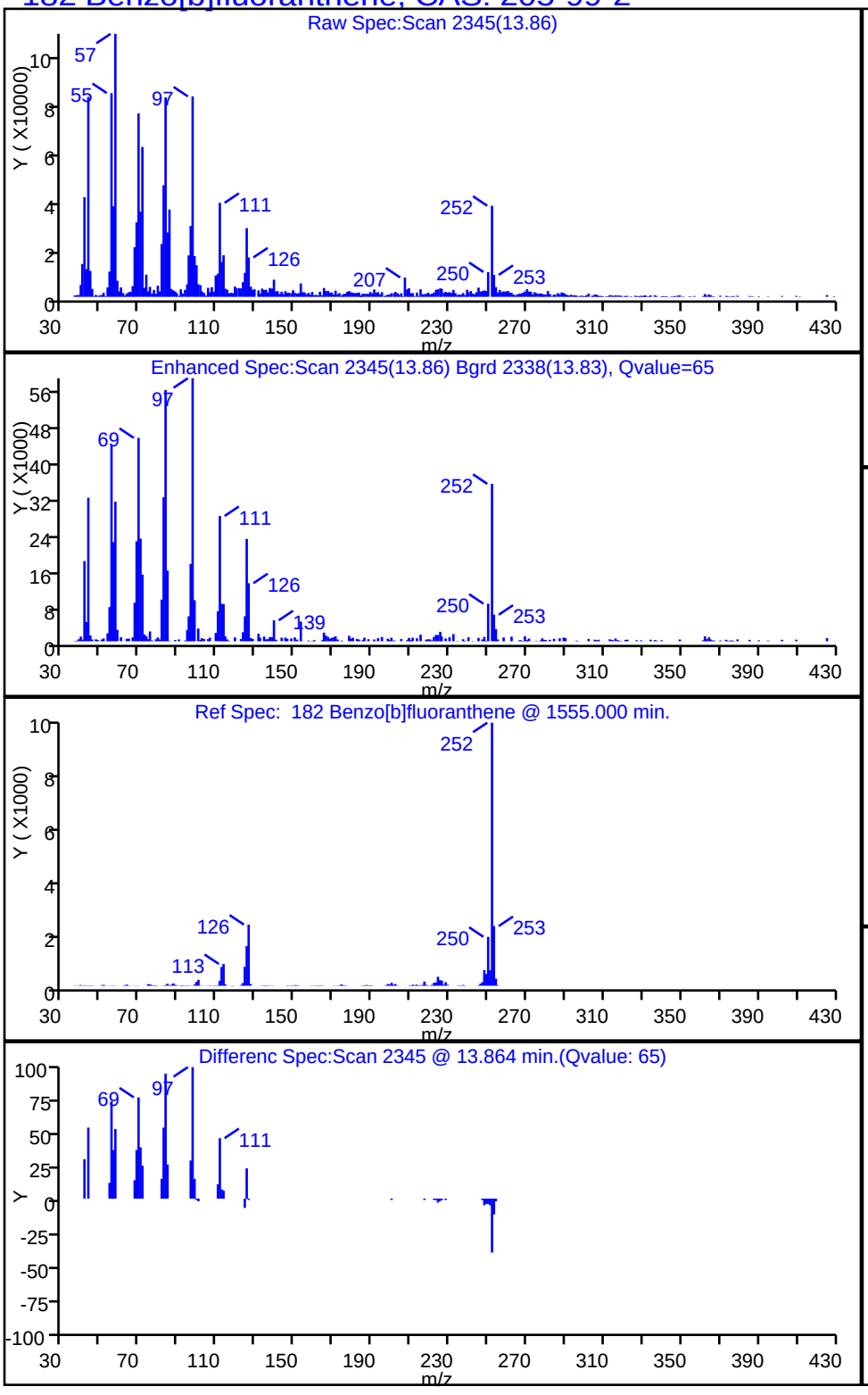
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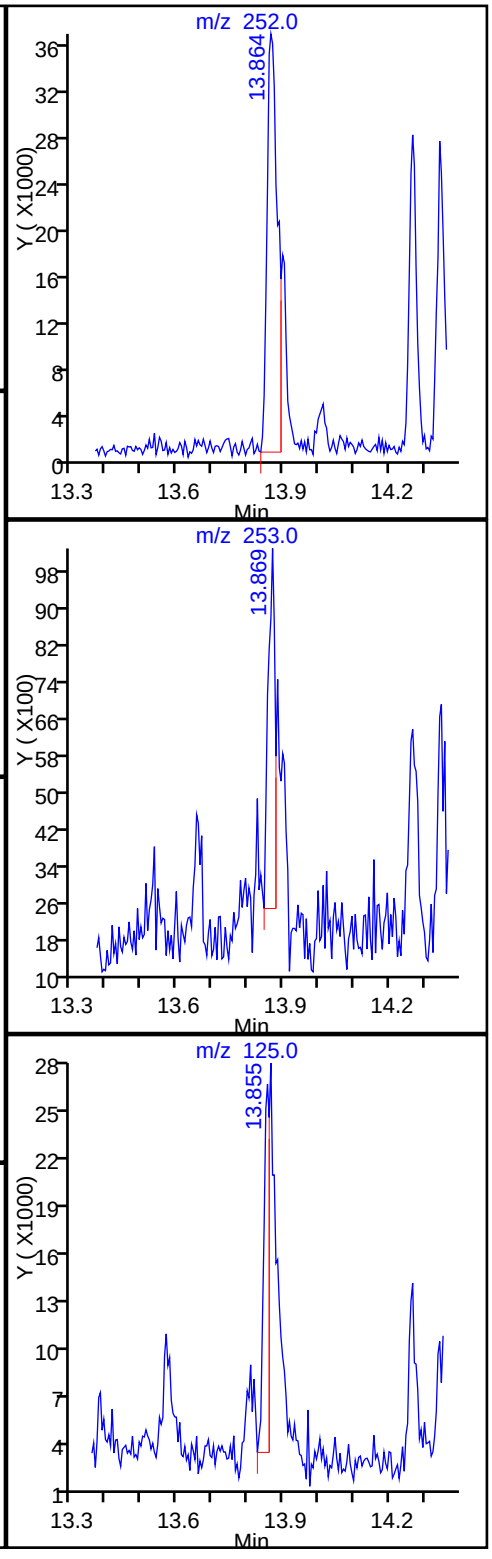
TestAmerica Canton

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Injection Date:	20-May-2015 17:01:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-1-B	Lab Sample ID:	240-50067-1		
Client ID:	079SS-0389M-0001-SO				
Operator ID:	001574	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

182 Benzo[b]fluoranthene, CAS: 205-99-2





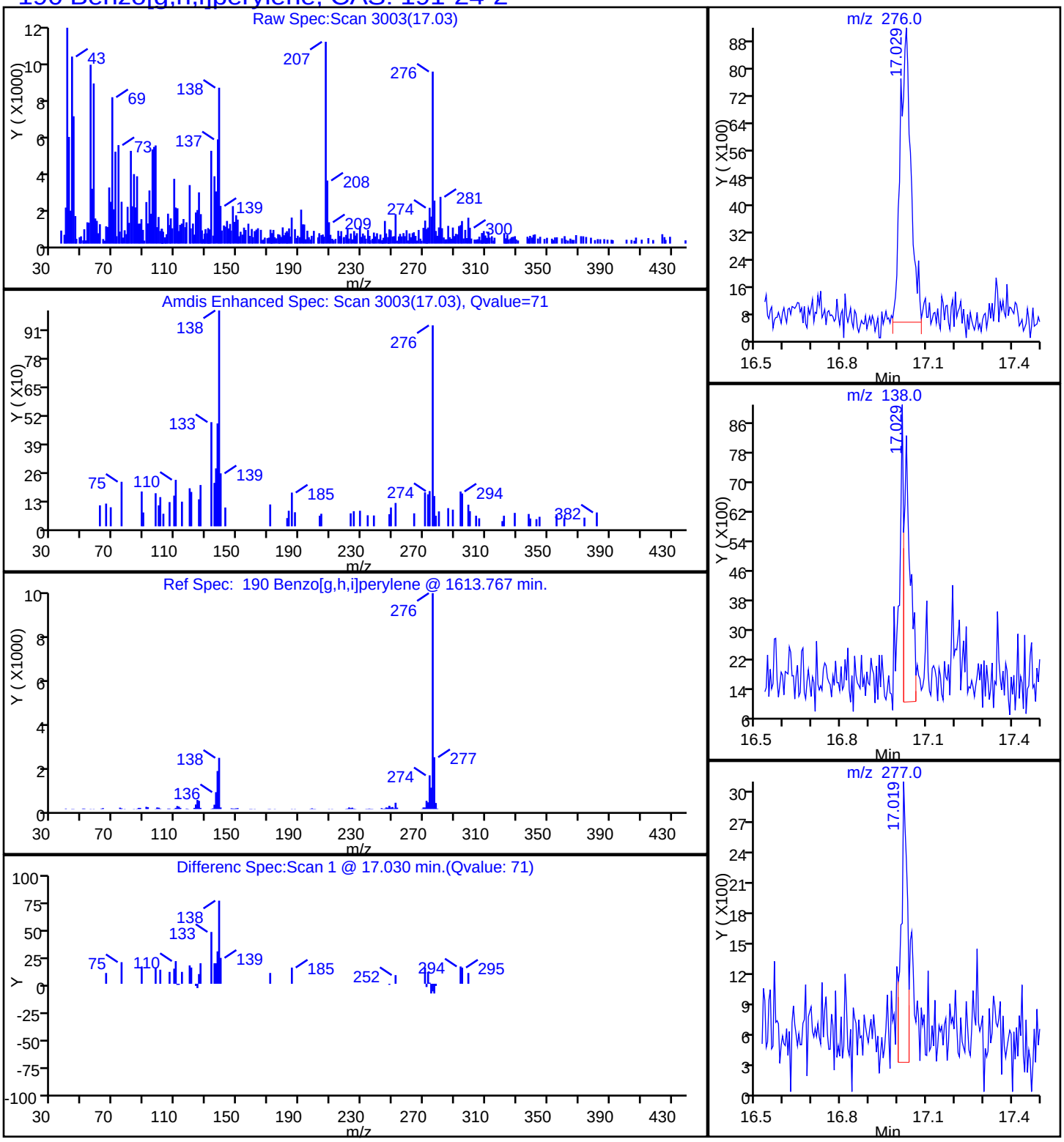
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TestAmerica Canton

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Injection Date:	20-May-2015 17:01:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-1-B	Lab Sample ID:	240-50067-1		
Client ID:	079SS-0389M-0001-SO				
Operator ID:	001574	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

190 Benzo[g,h,i]perylene, CAS: 191-24-2



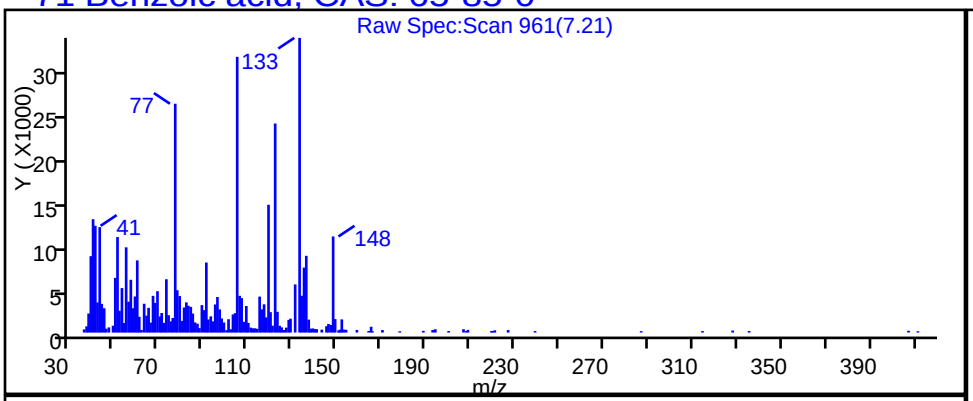
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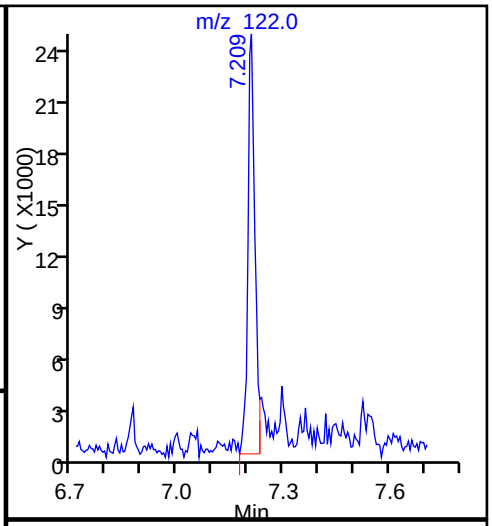
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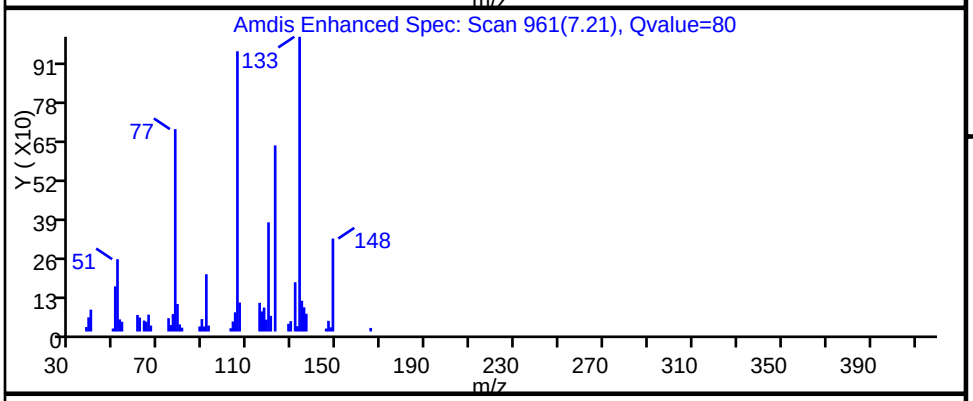
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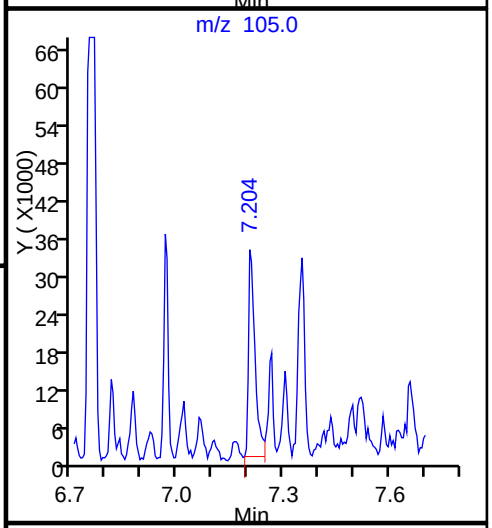
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Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

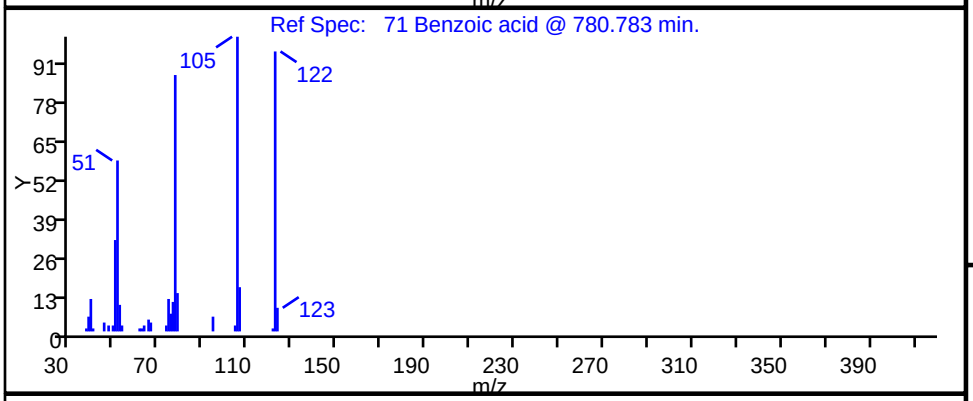
71 Benzoic acid, CAS: 65-85-0

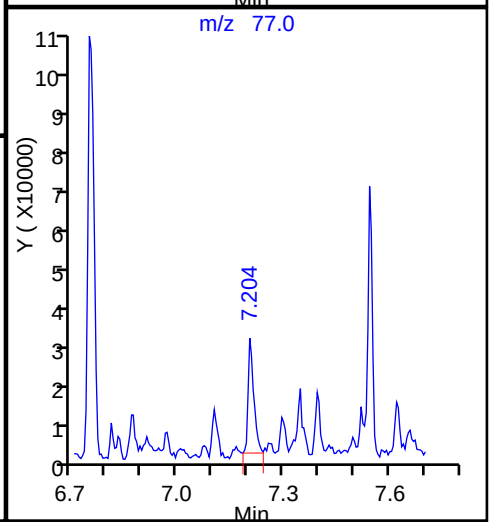


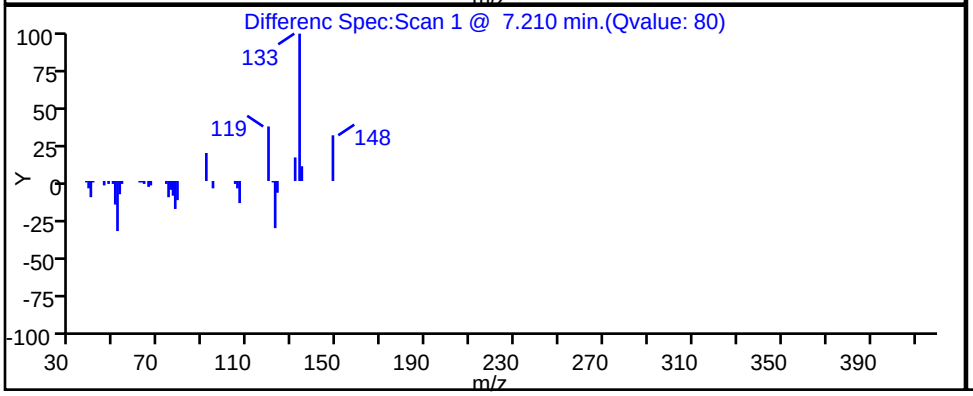












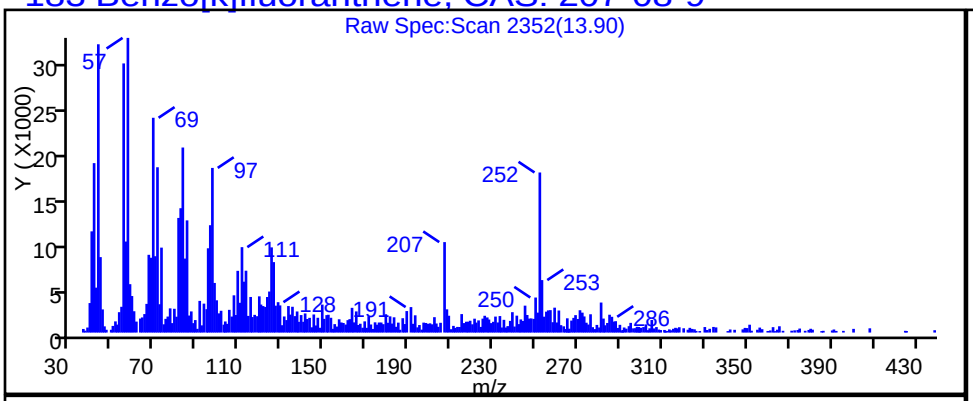
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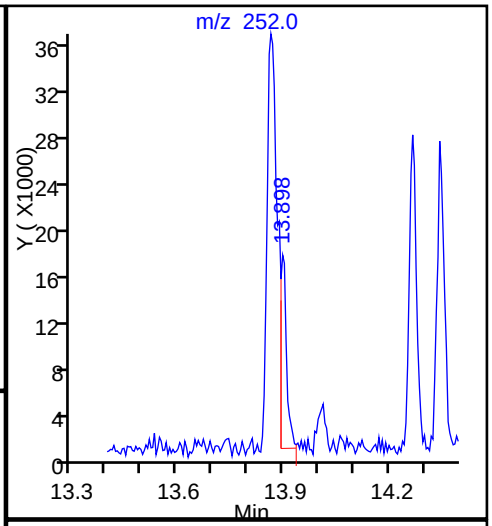
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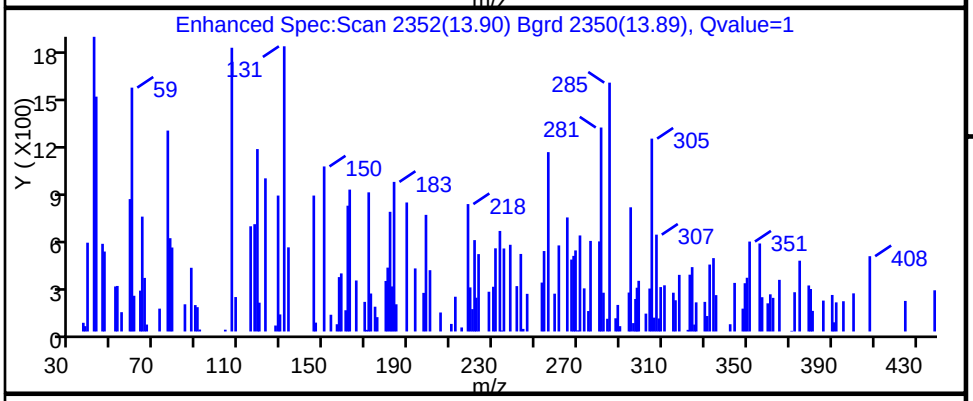
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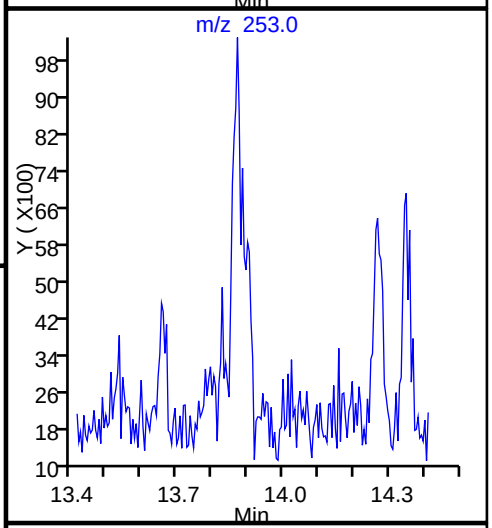
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Lims ID:	240-50067-A-1-B	Lab Sample ID:	240-50067-1		
Client ID:	079SS-0389M-0001-SO				
Operator ID:	001574	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

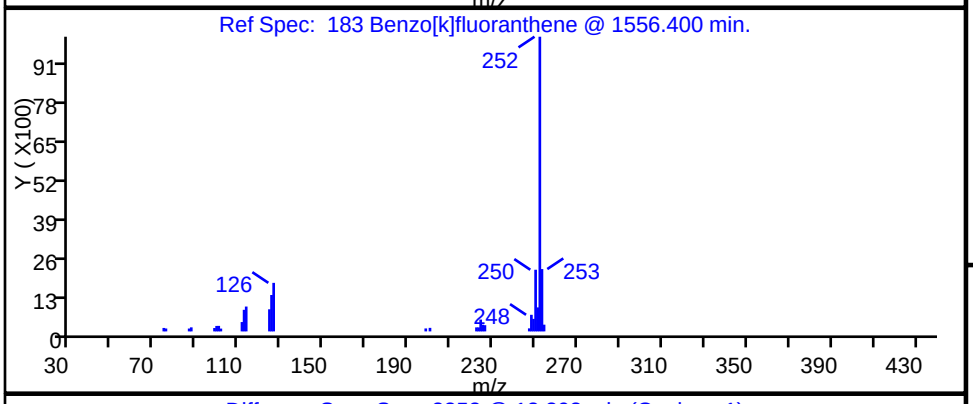
183 Benzo[k]fluoranthene, CAS: 207-08-9

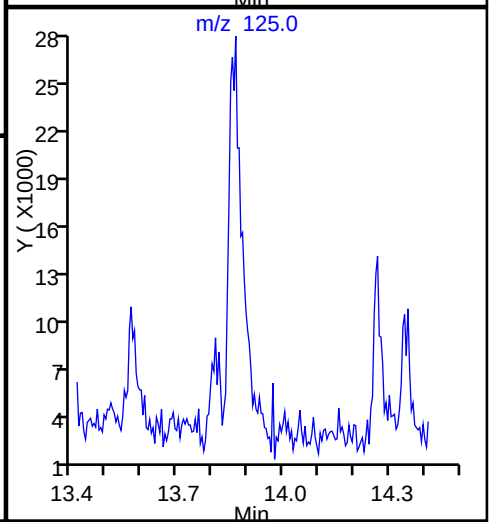


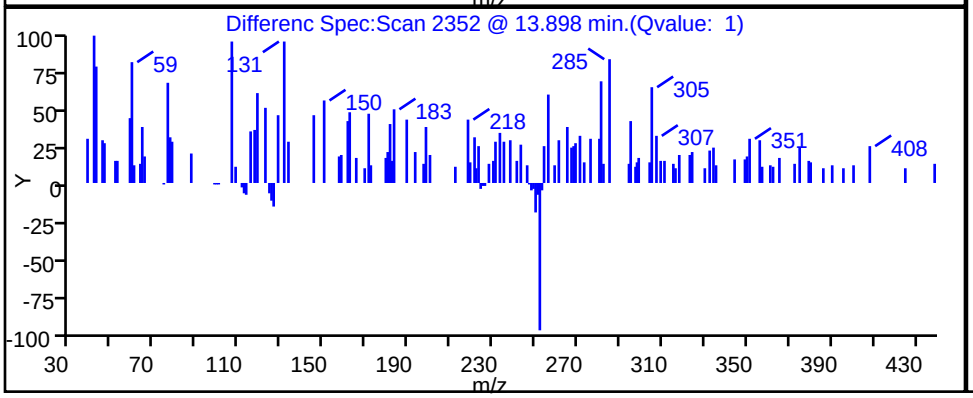












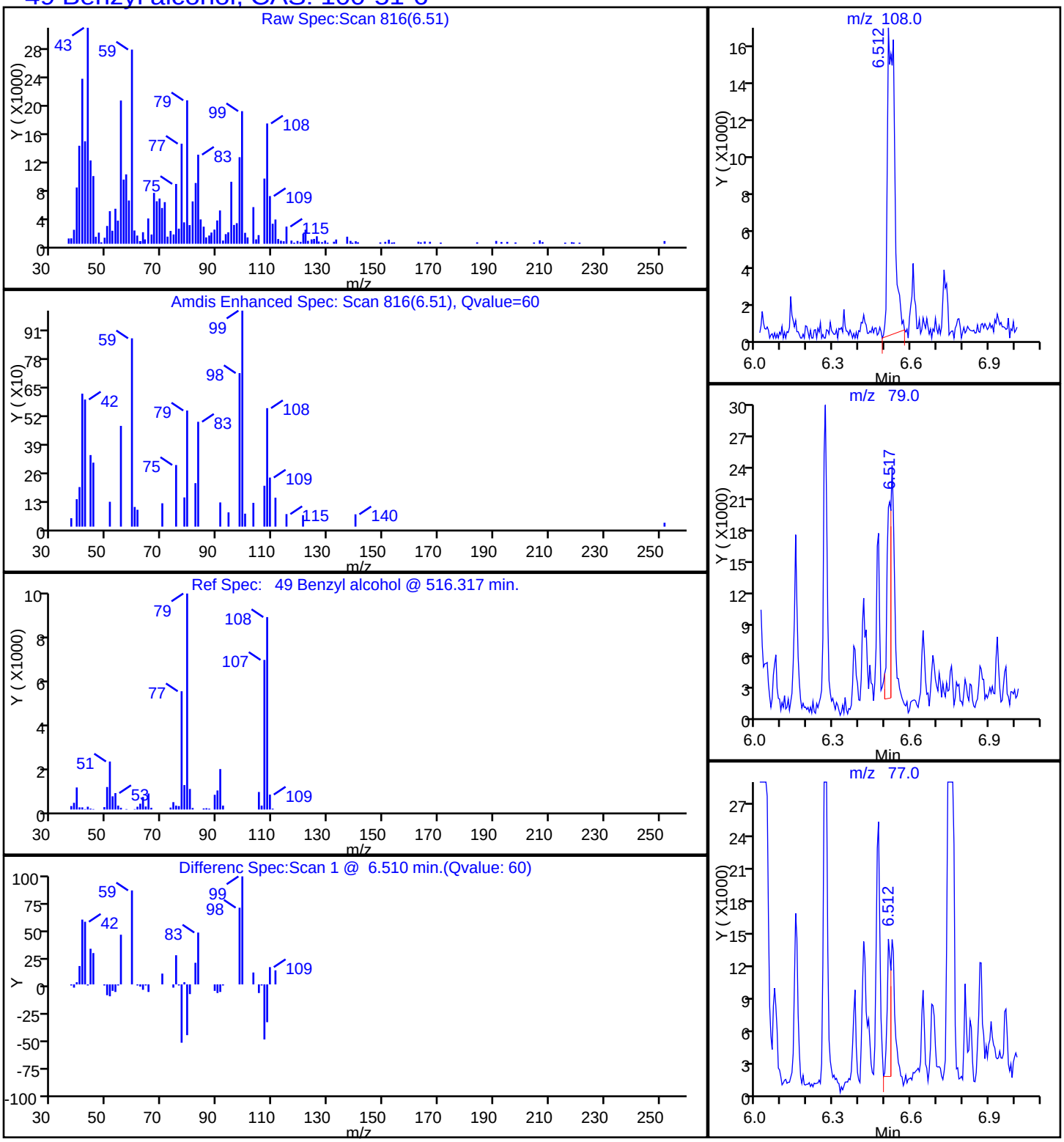
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TestAmerica Canton

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Injection Date:	20-May-2015 17:01:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-1-B	Lab Sample ID:	240-50067-1		
Client ID:	079SS-0389M-0001-SO				
Operator ID:	001574	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

49 Benzyl alcohol, CAS: 100-51-6



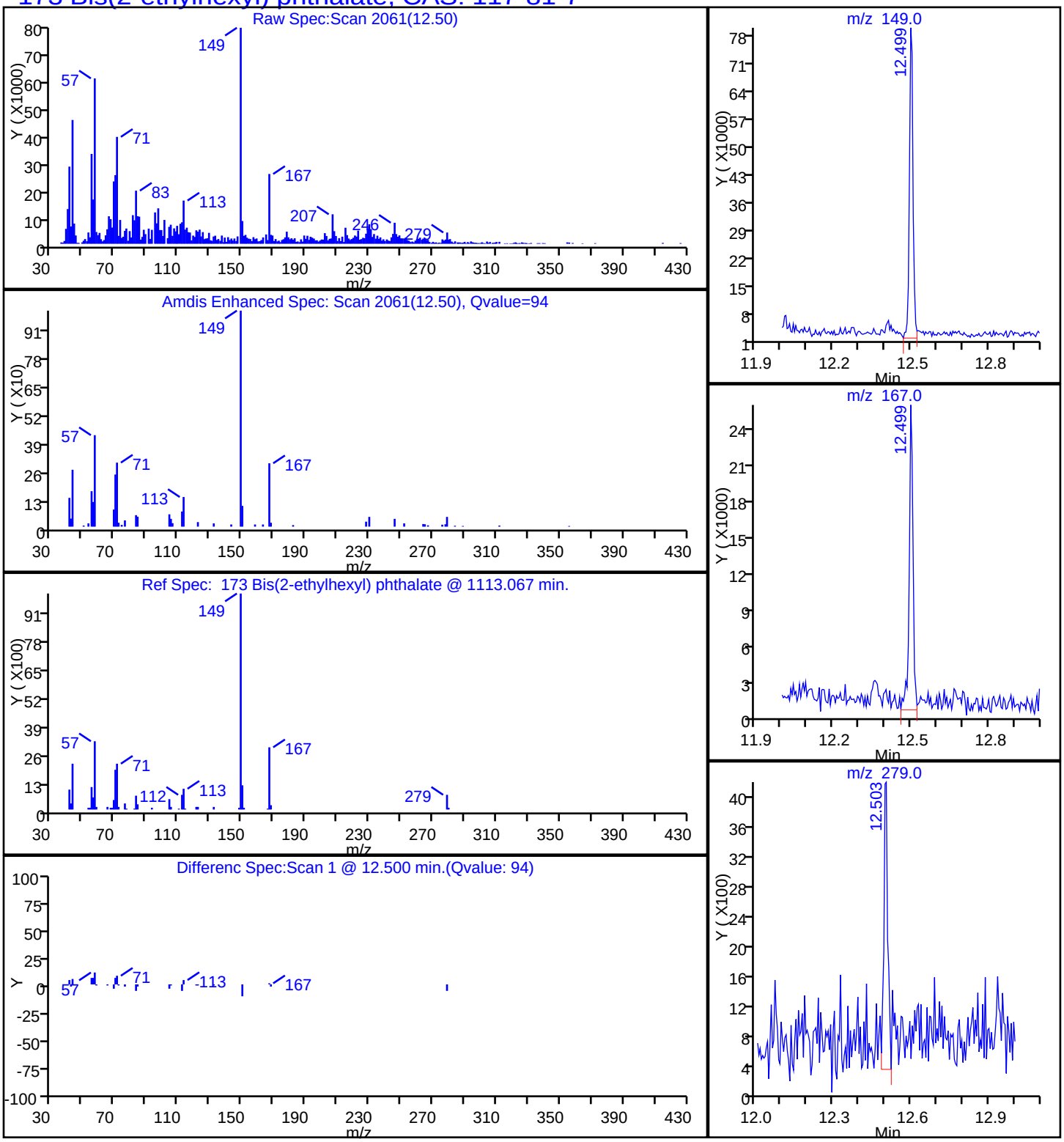
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Injection Date:	20-May-2015 17:01:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-1-B	Lab Sample ID:	240-50067-1		
Client ID:	079SS-0389M-0001-SO				
Operator ID:	001574	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

173 Bis(2-ethylhexyl) phthalate, CAS: 117-81-7



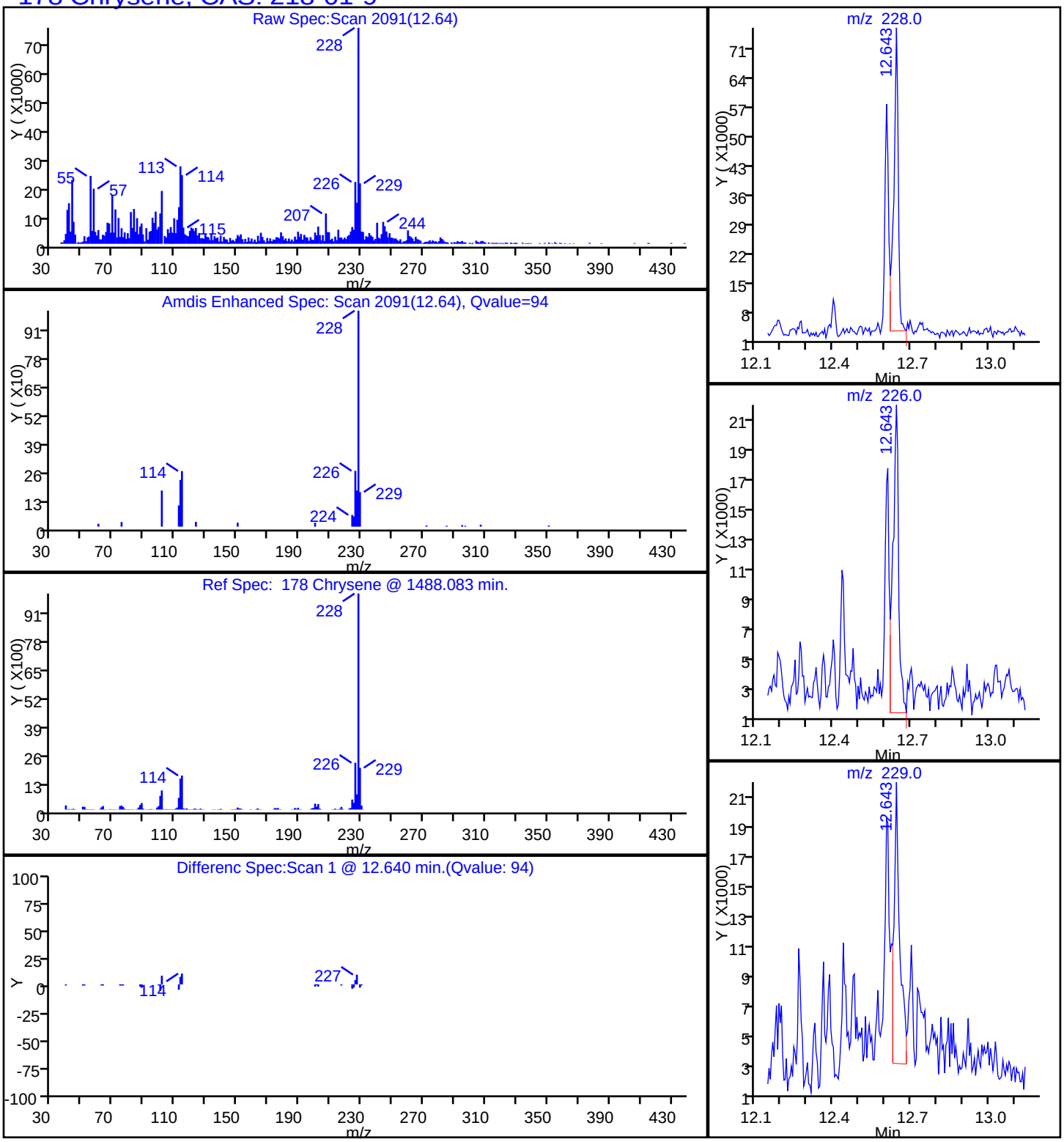
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Injection Date:	20-May-2015 17:01:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-1-B	Lab Sample ID:	240-50067-1		
Client ID:	079SS-0389M-0001-SO				
Operator ID:	001574	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

178 Chrysene, CAS: 218-01-9



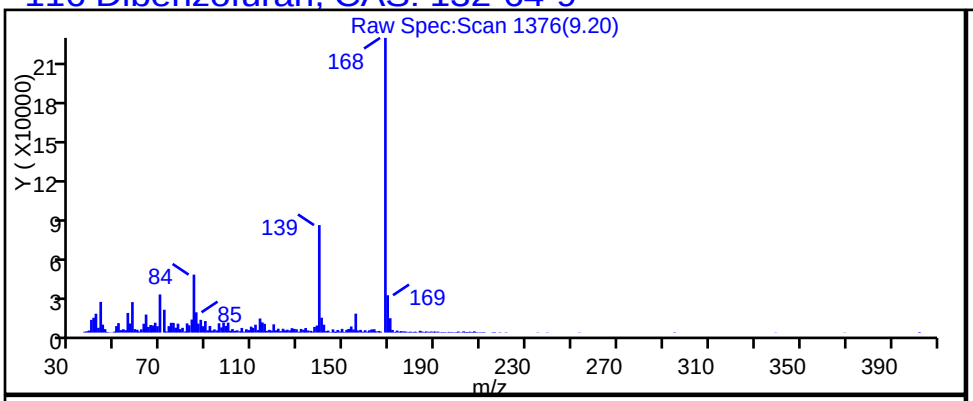
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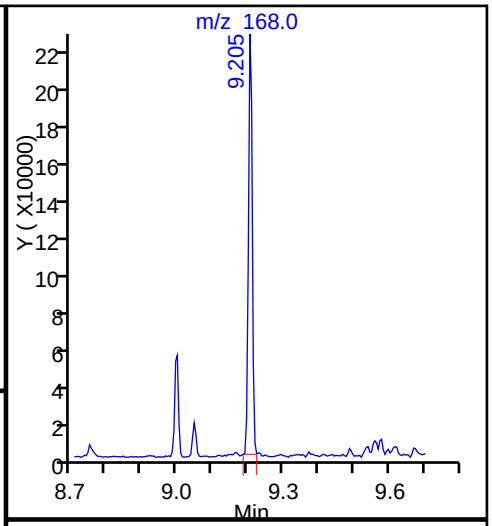
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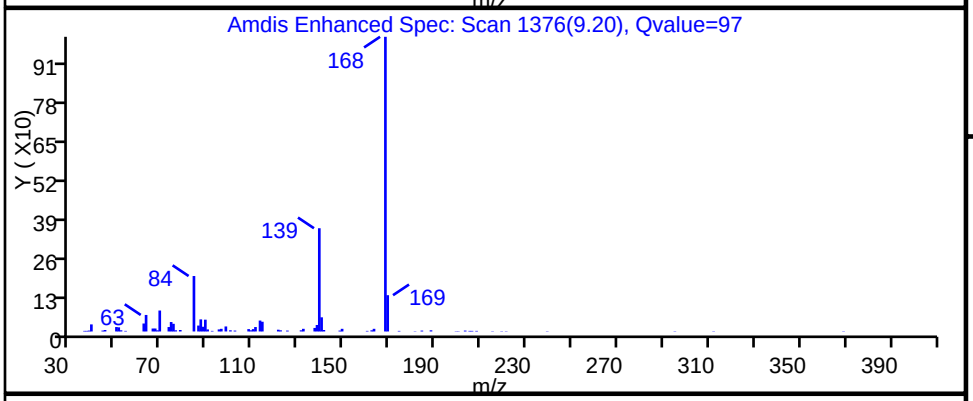
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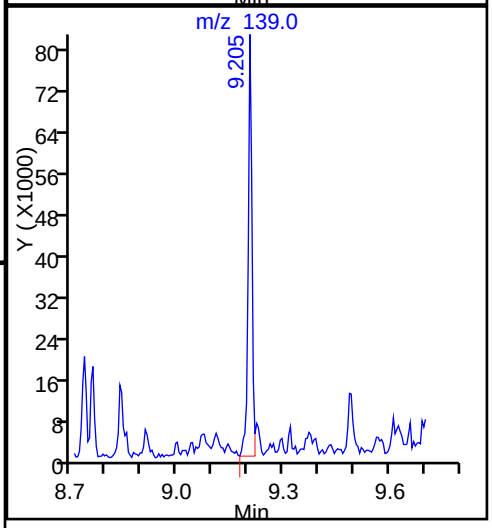
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Lims ID:	240-50067-A-1-B	Lab Sample ID:	240-50067-1		
Client ID:	079SS-0389M-0001-SO				
Operator ID:	001574	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

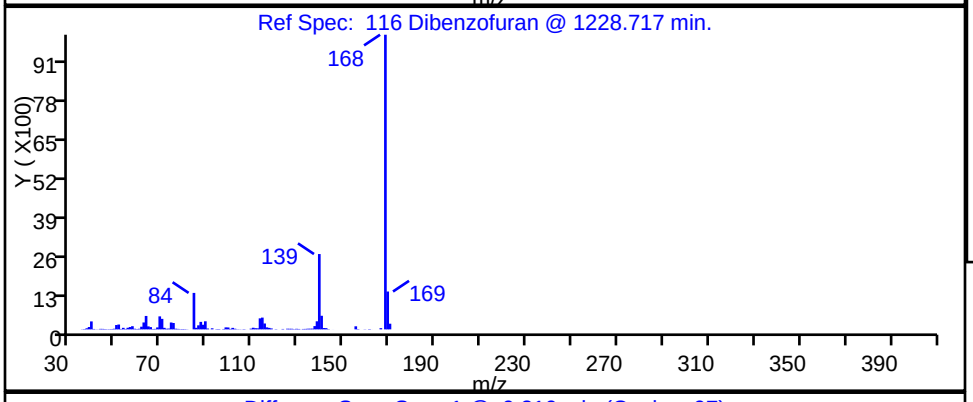
116 Dibenzofuran, CAS: 132-64-9

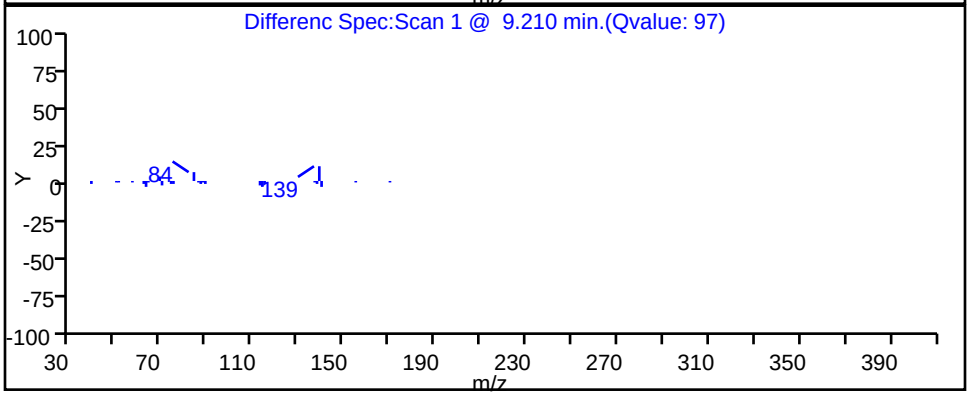












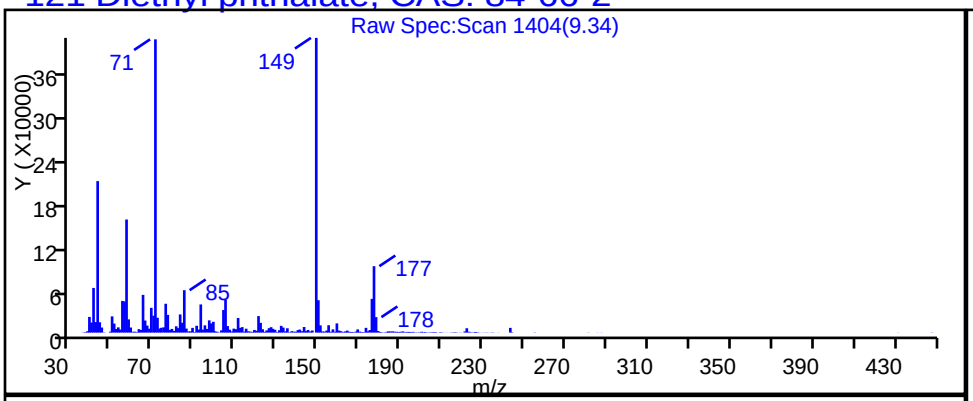
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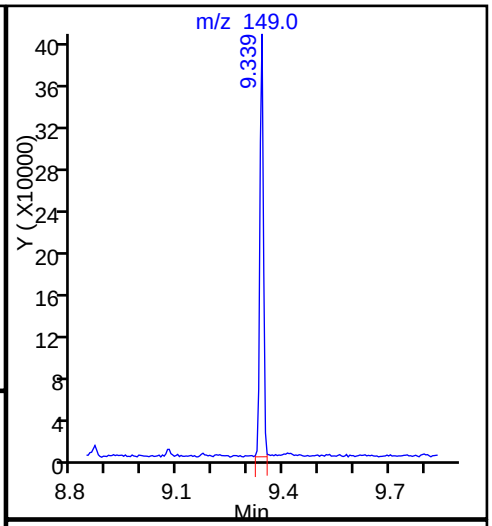
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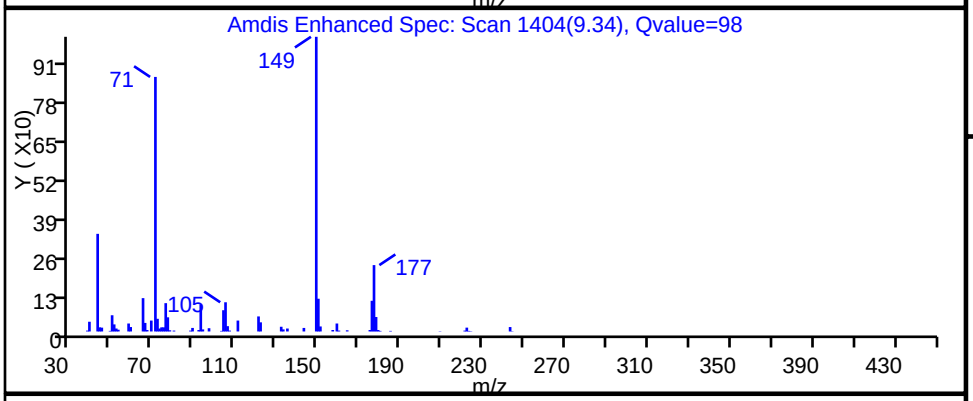
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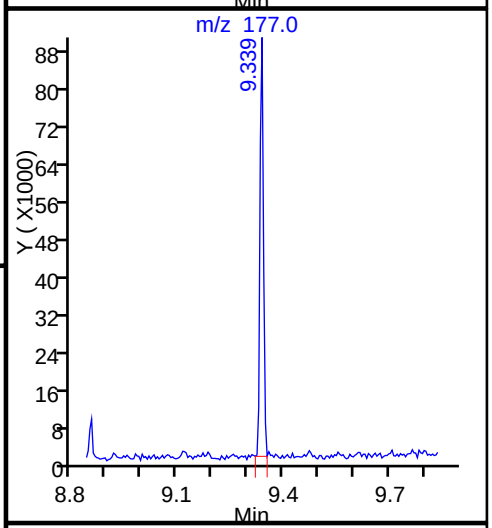
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Lims ID:	240-50067-A-1-B	Lab Sample ID:	240-50067-1
Client ID:	079SS-0389M-0001-SO		
Operator ID:	001574	ALS Bottle#:	19 Worklist Smp#: 19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN

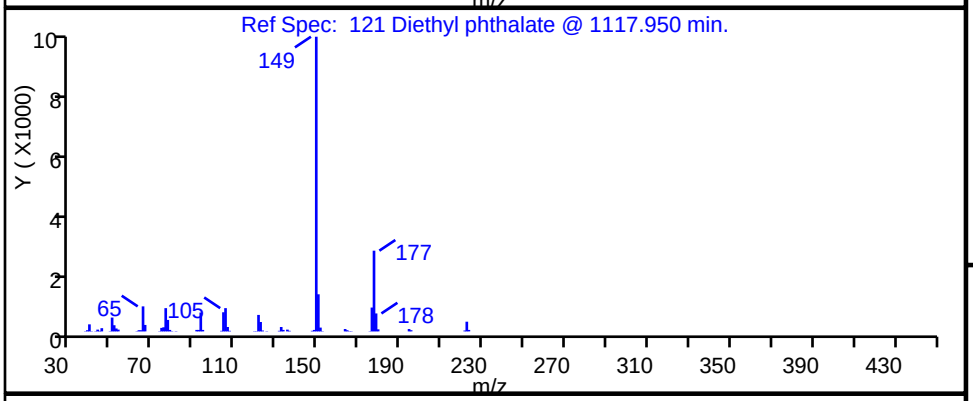
121 Diethyl phthalate, CAS: 84-66-2

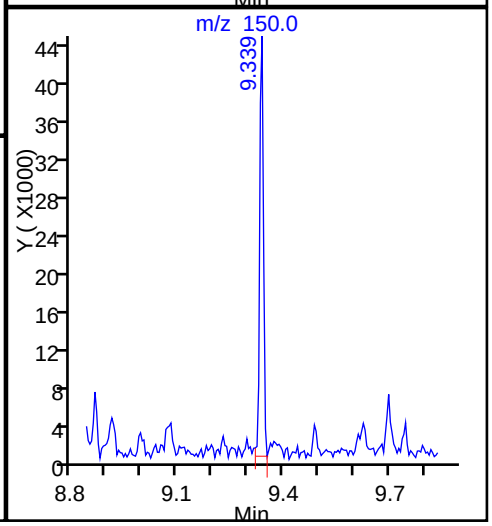


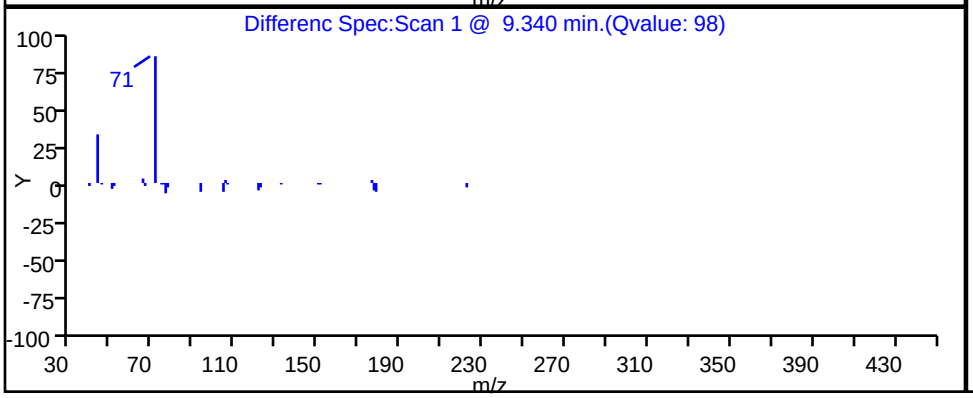












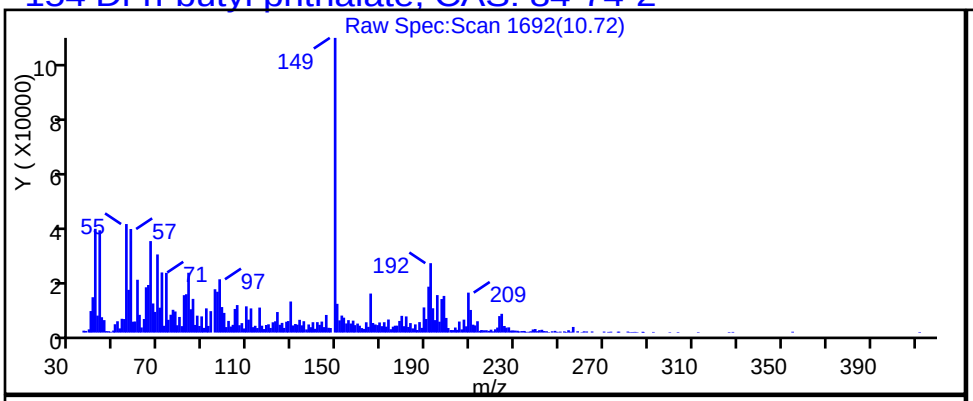
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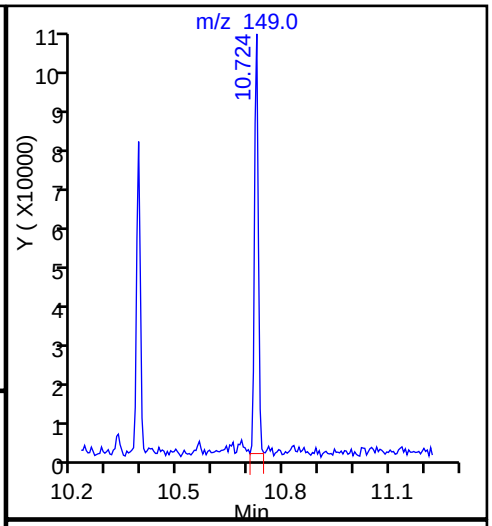
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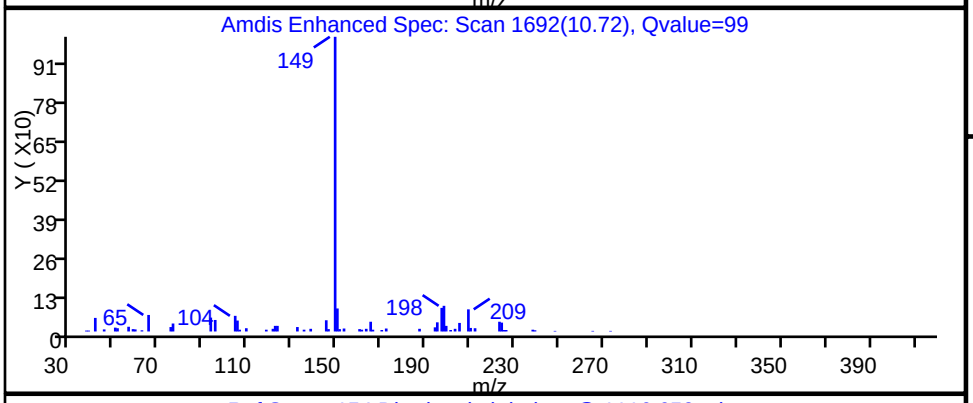
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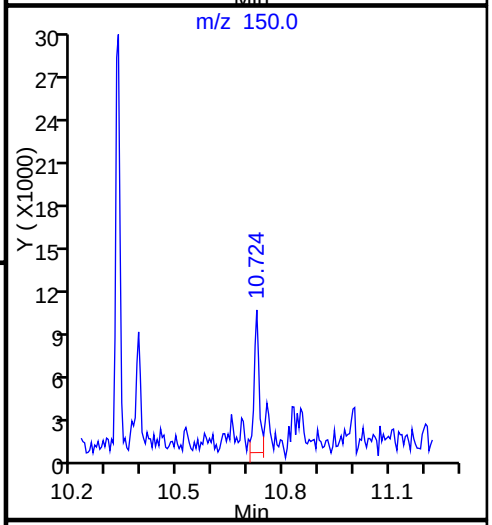
Injection Date:	20-May-2015 17:01:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-1-B	Lab Sample ID:	240-50067-1		
Client ID:	079SS-0389M-0001-SO				
Operator ID:	001574	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

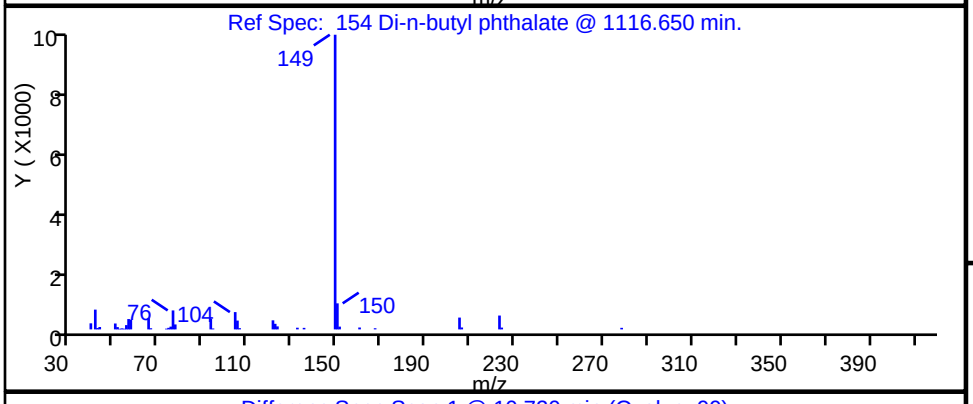
154 Di-n-butyl phthalate, CAS: 84-74-2

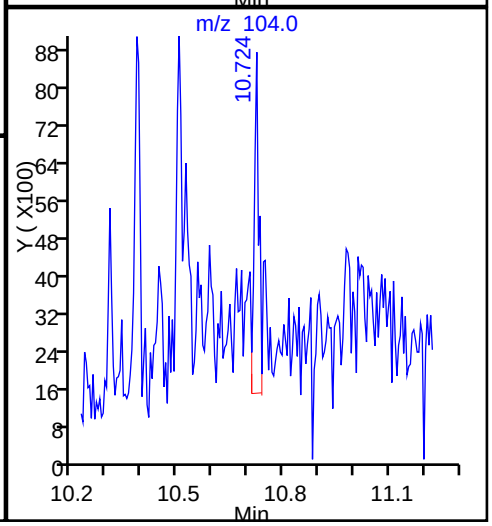


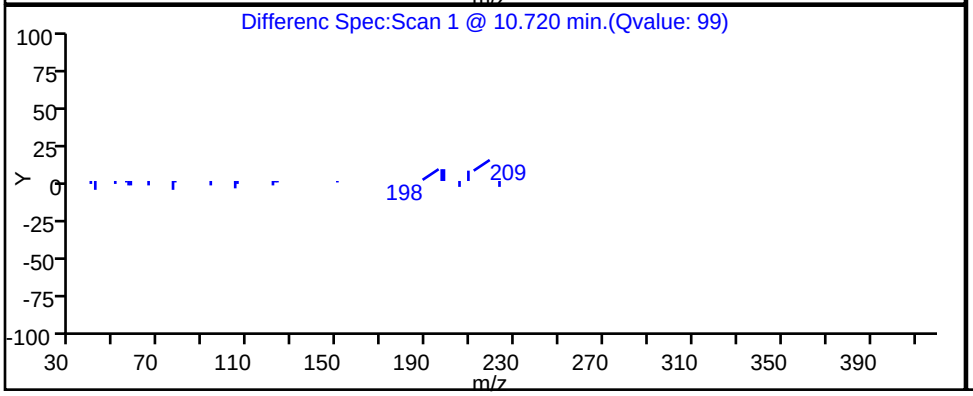












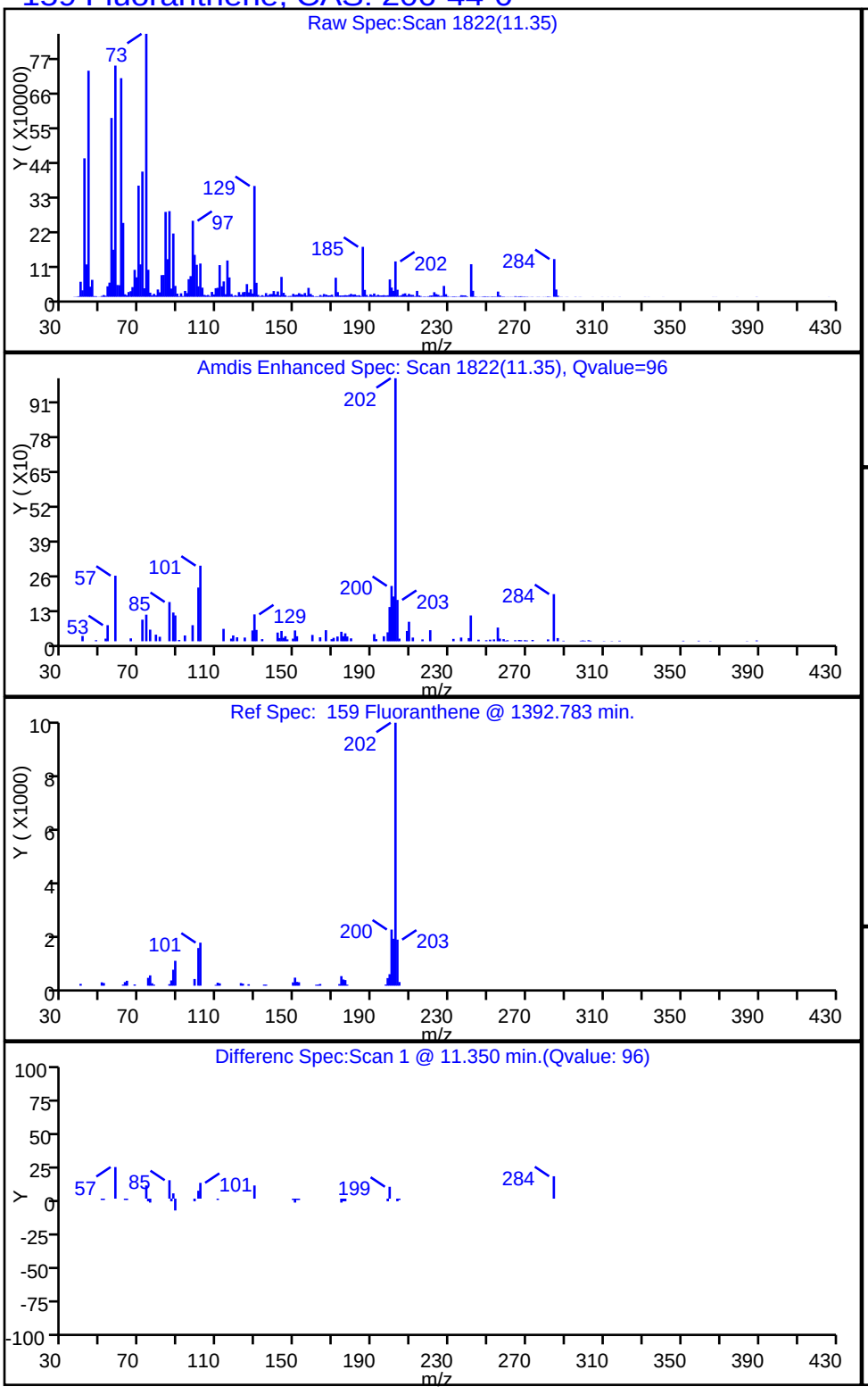
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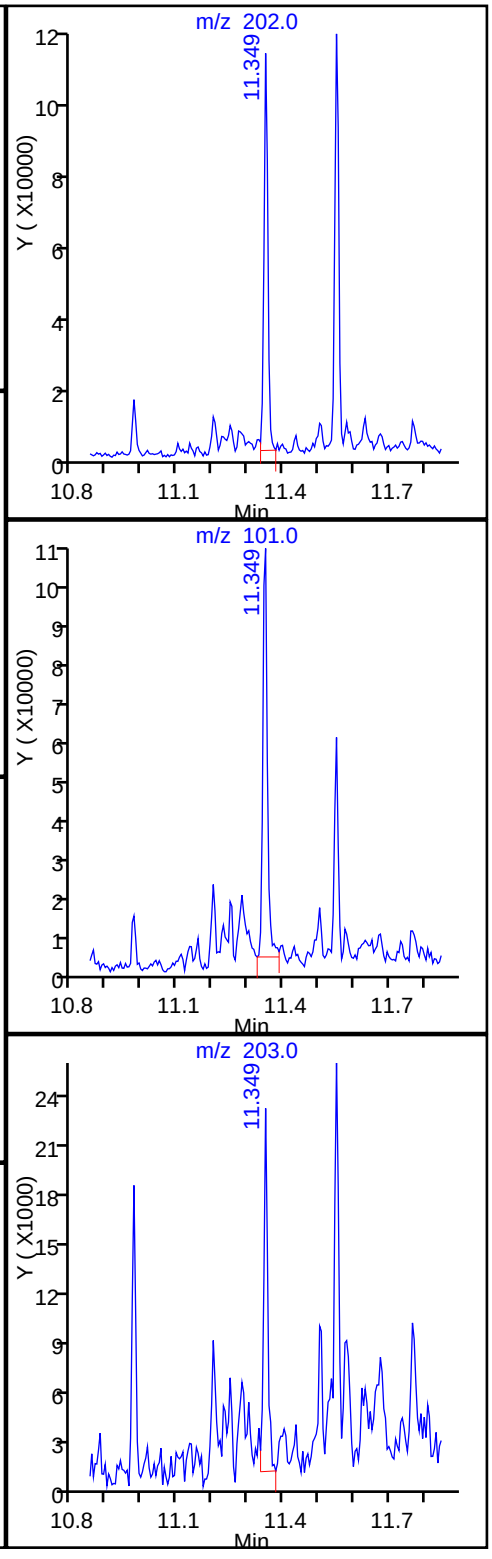
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Injection Date:	20-May-2015 17:01:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-1-B	Lab Sample ID:	240-50067-1		
Client ID:	079SS-0389M-0001-SO				
Operator ID:	001574	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

159 Fluoranthene, CAS: 206-44-0





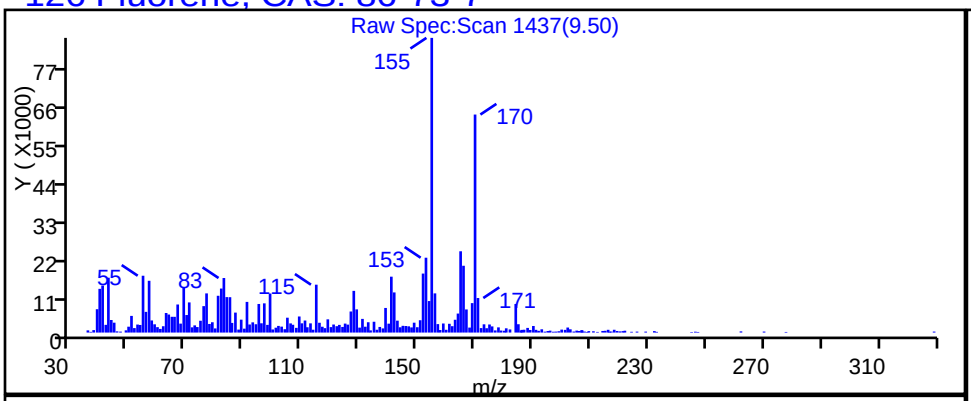
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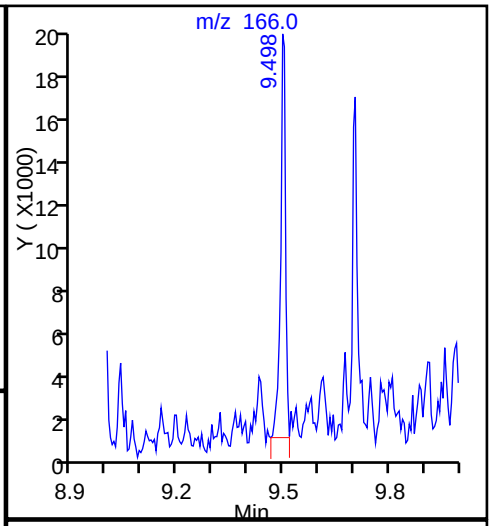
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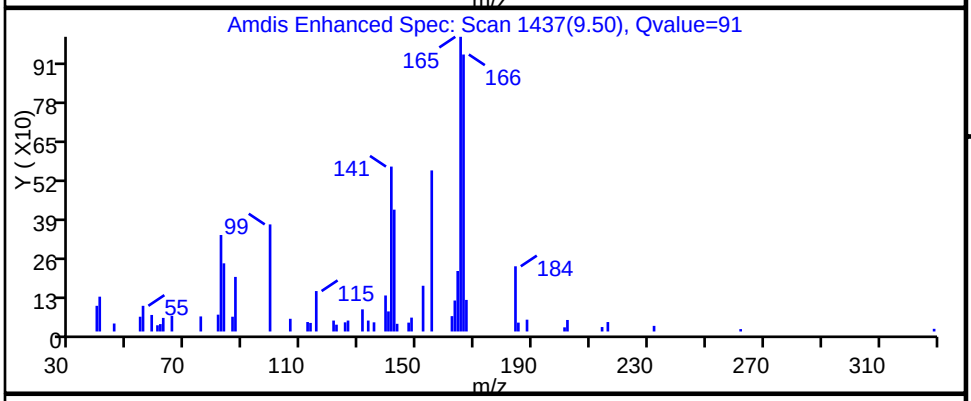
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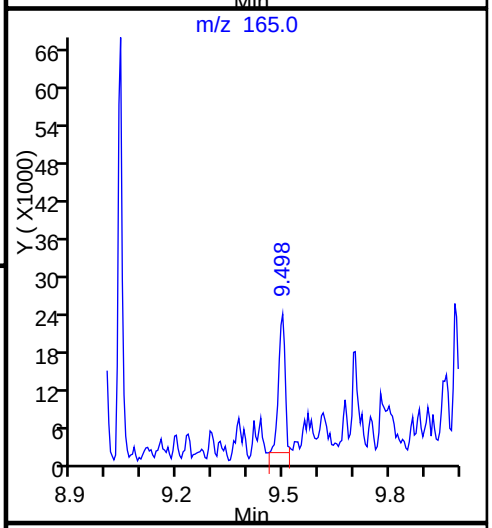
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Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

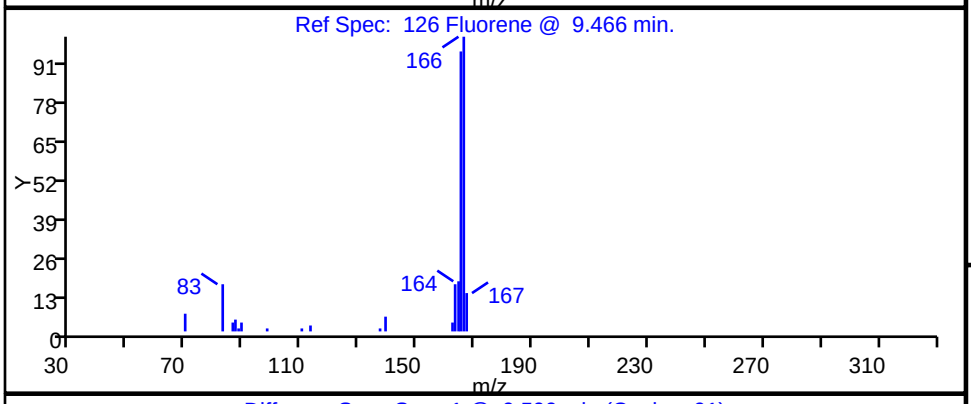
126 Fluorene, CAS: 86-73-7

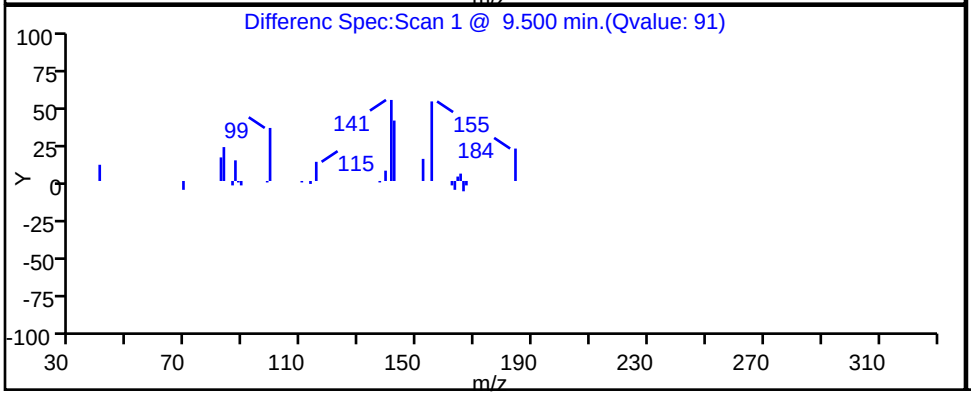


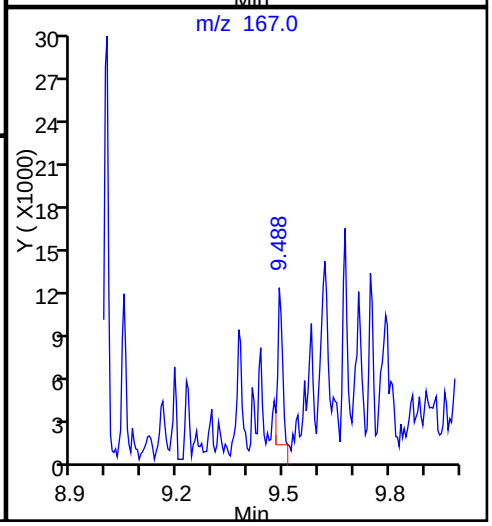












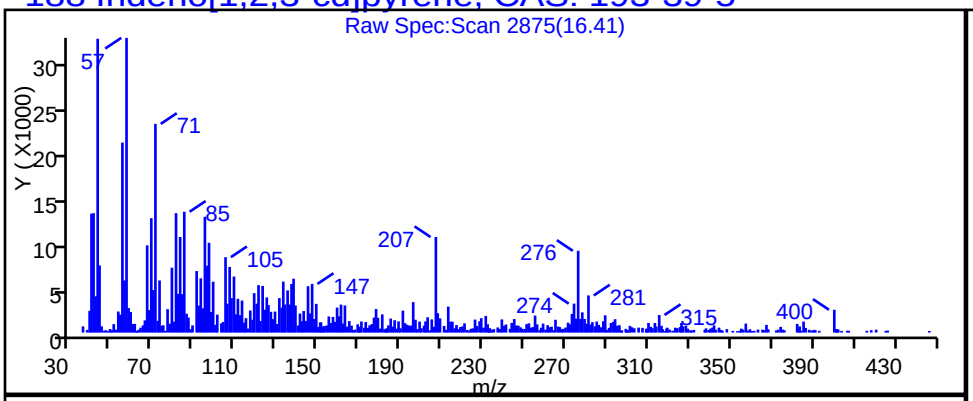
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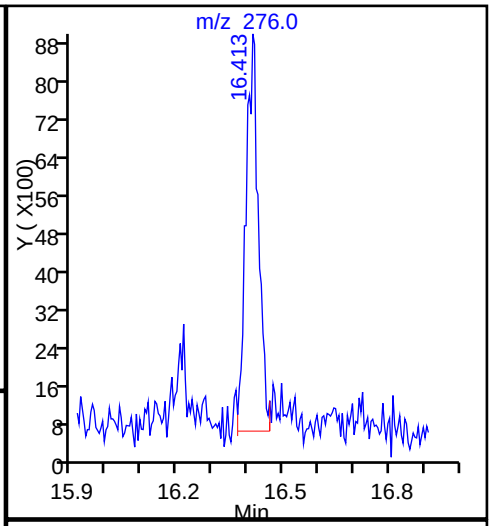
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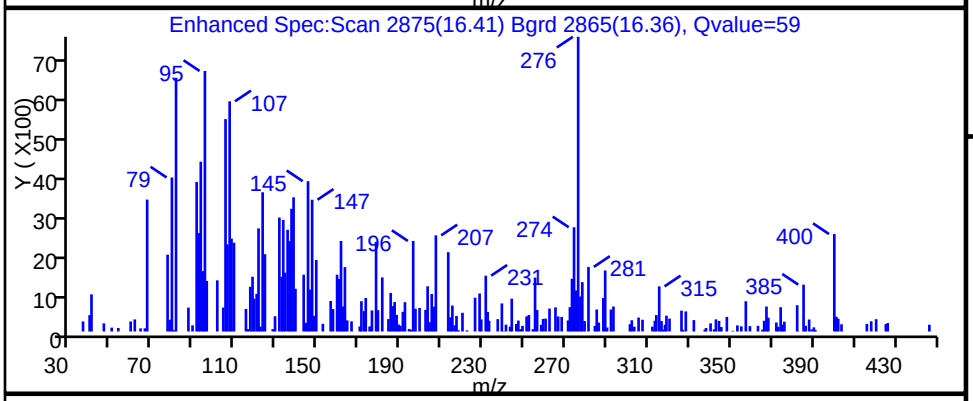
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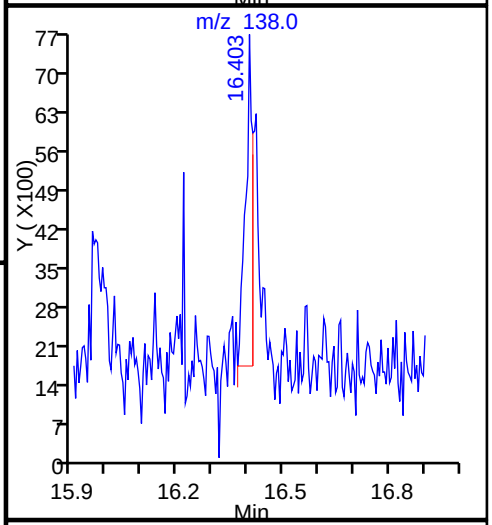
Injection Date:	20-May-2015 17:01:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-1-B	Lab Sample ID:	240-50067-1		
Client ID:	079SS-0389M-0001-SO				
Operator ID:	001574	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

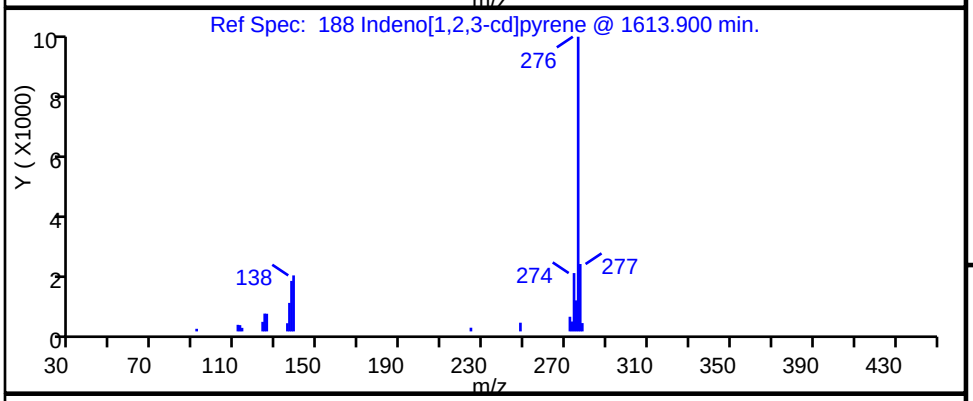
188 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

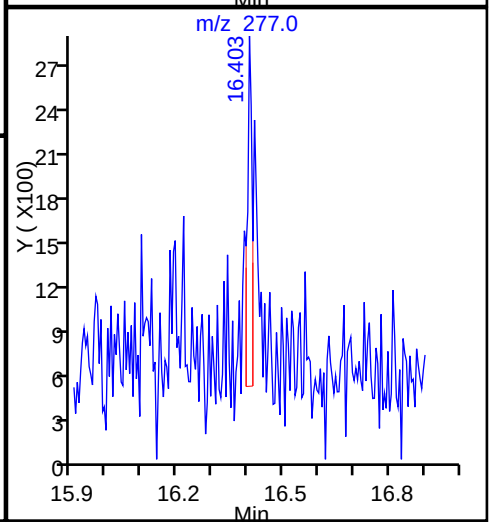


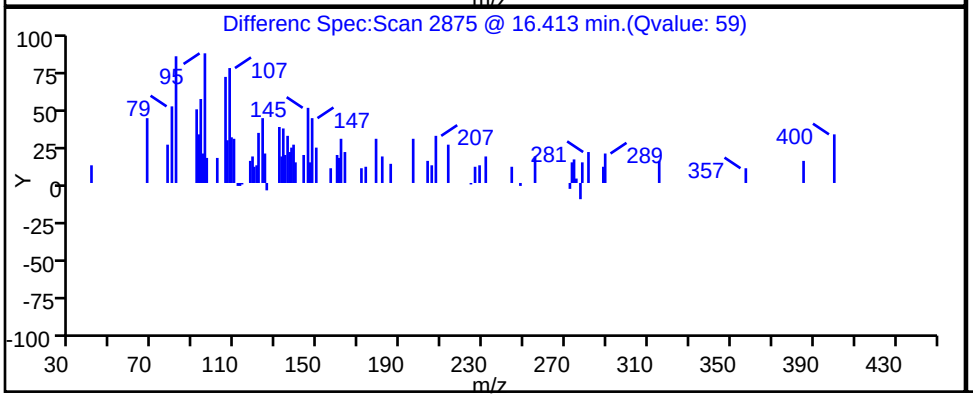












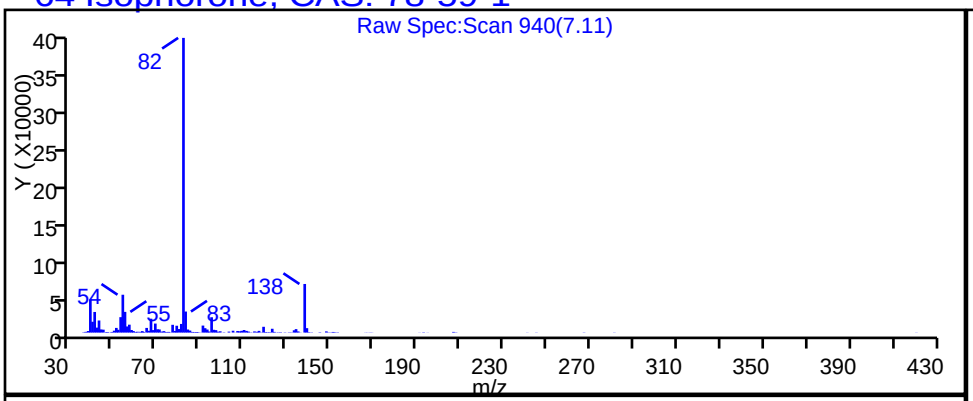
Report Date: 21-May-2015 08:02:48 Chrom Revision: 2.2 05-May-2015 11:39:10

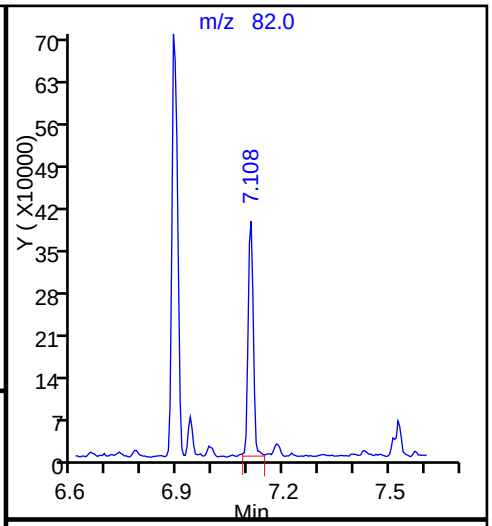
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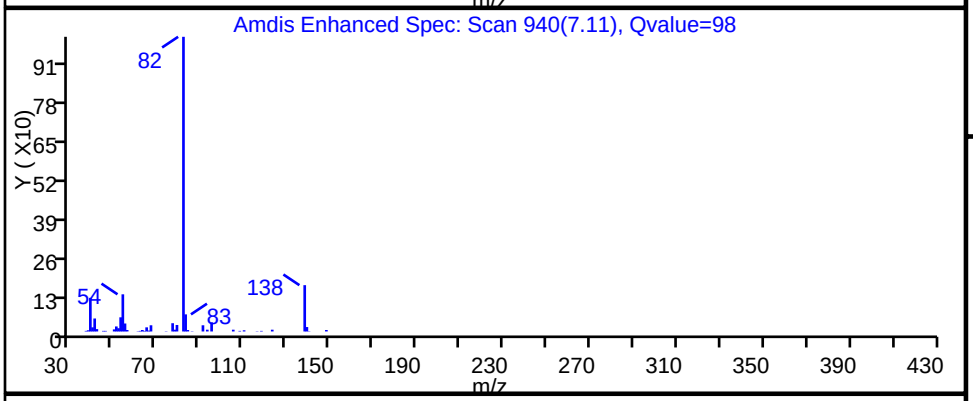
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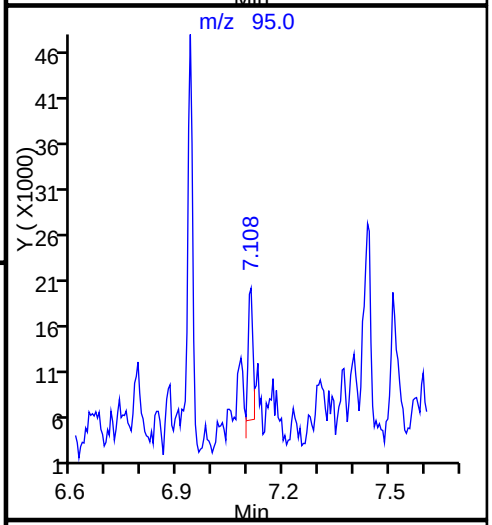
Injection Date:	20-May-2015 17:01:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-1-B	Lab Sample ID:	240-50067-1		
Client ID:	079SS-0389M-0001-SO				
Operator ID:	001574	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

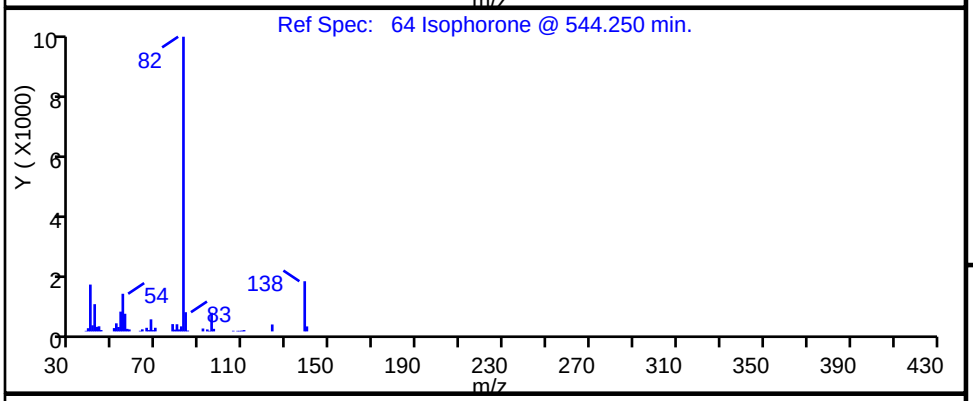
64 Isophorone, CAS: 78-59-1

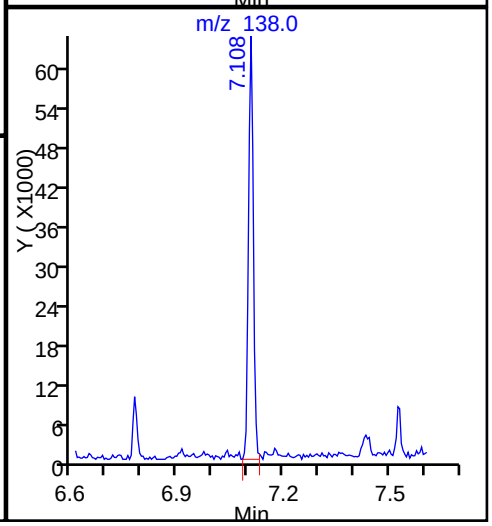


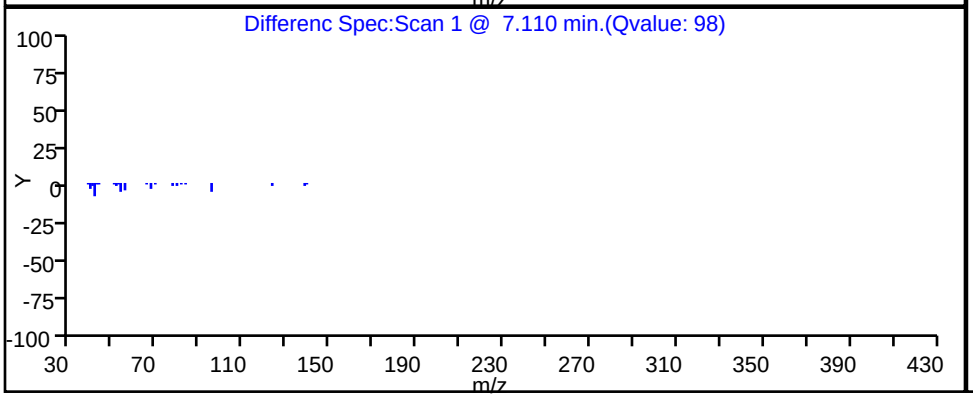












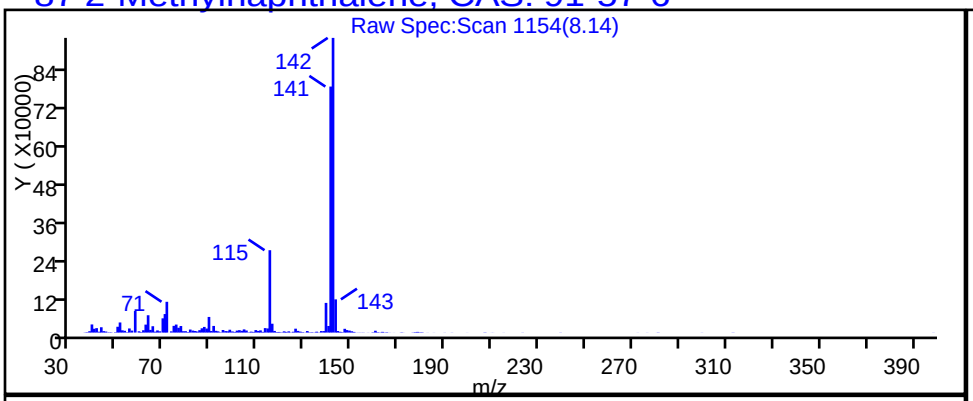
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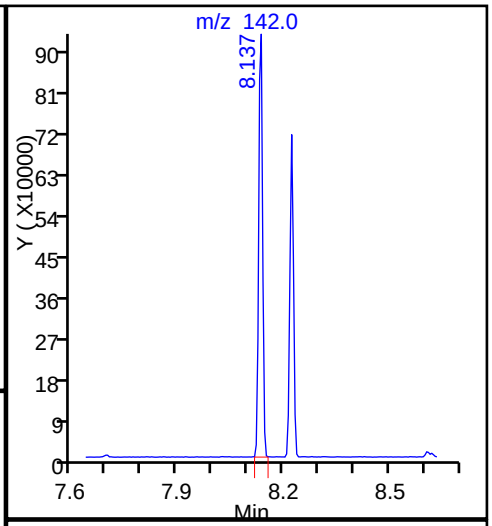
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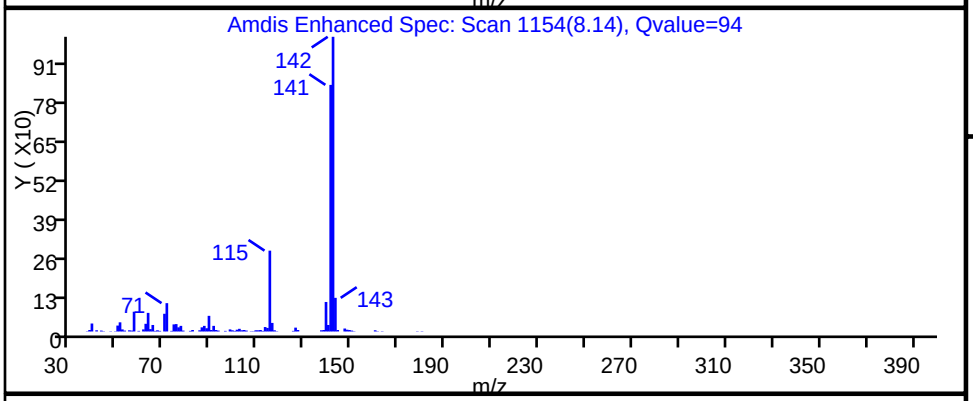
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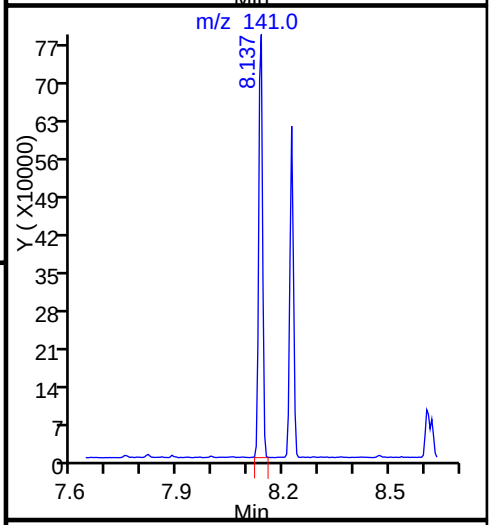
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Lims ID:	240-50067-A-1-B	Lab Sample ID:	240-50067-1		
Client ID:	079SS-0389M-0001-SO				
Operator ID:	001574	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

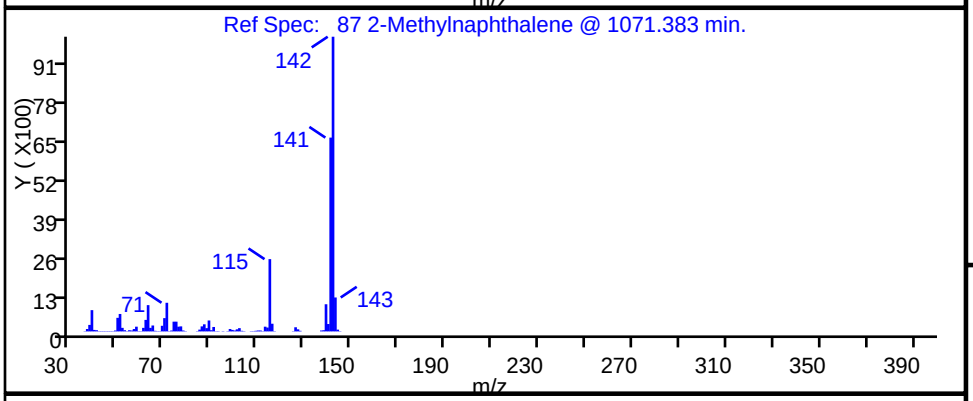
87 2-Methylnaphthalene, CAS: 91-57-6

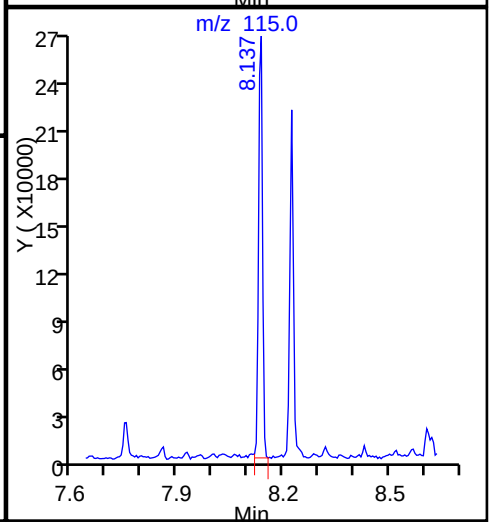


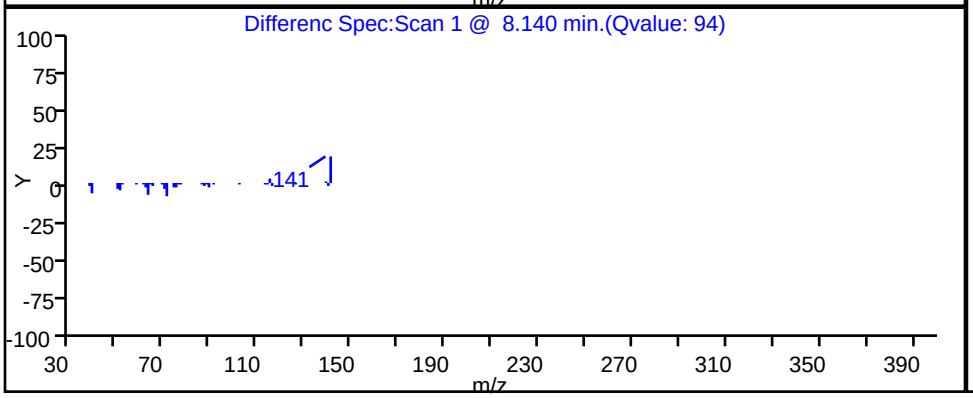












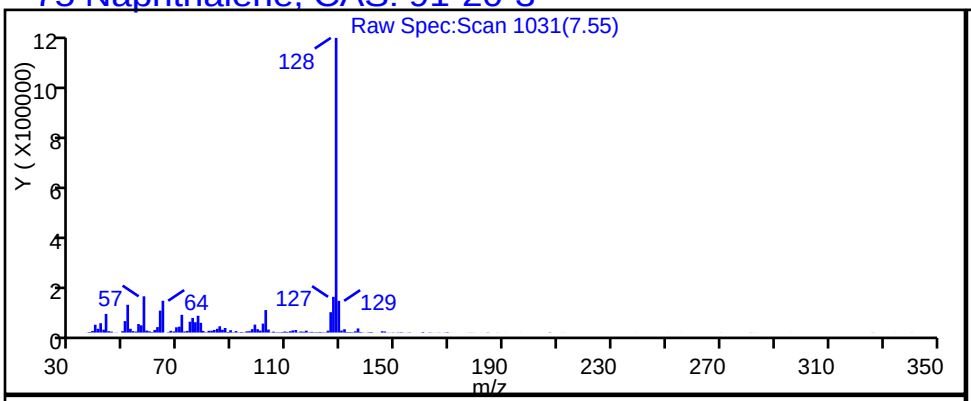
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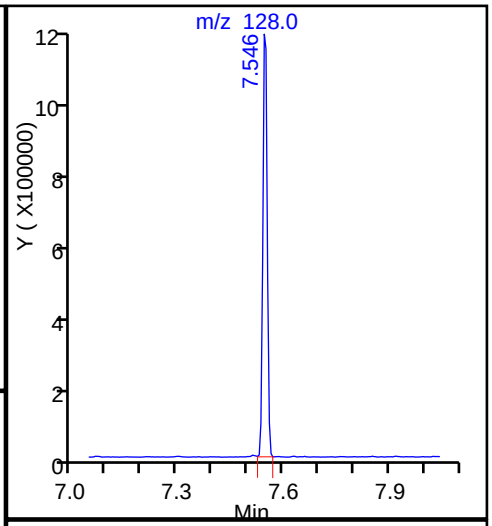
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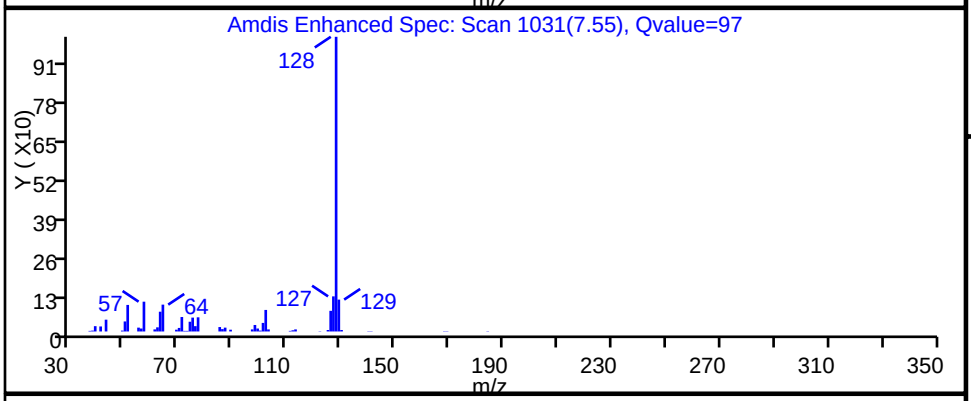
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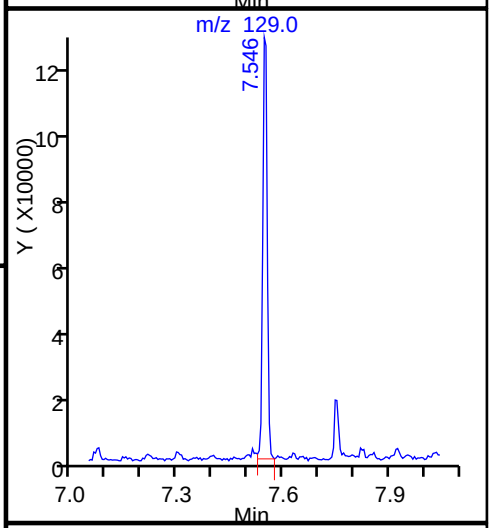
Injection Date:	20-May-2015 17:01:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-1-B	Lab Sample ID:	240-50067-1		
Client ID:	079SS-0389M-0001-SO				
Operator ID:	001574	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

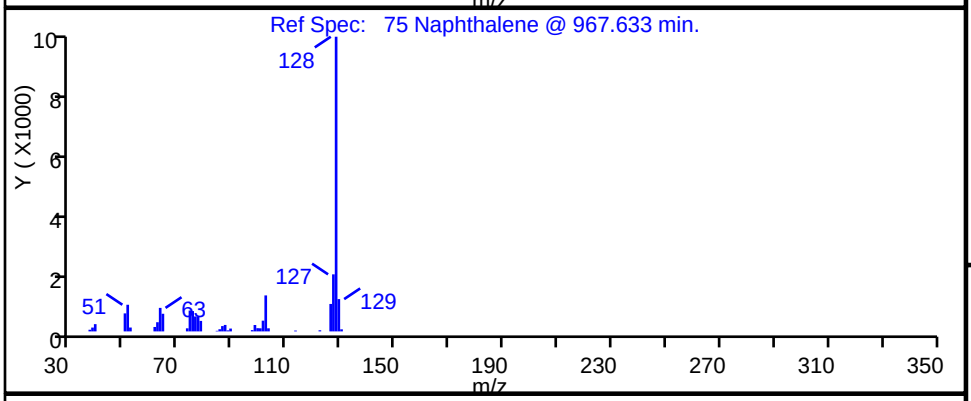
75 Naphthalene, CAS: 91-20-3

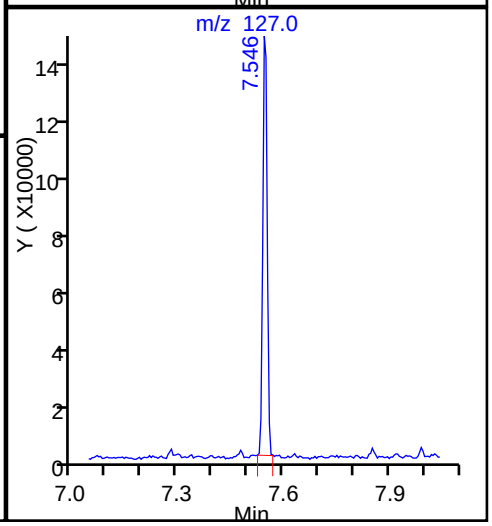


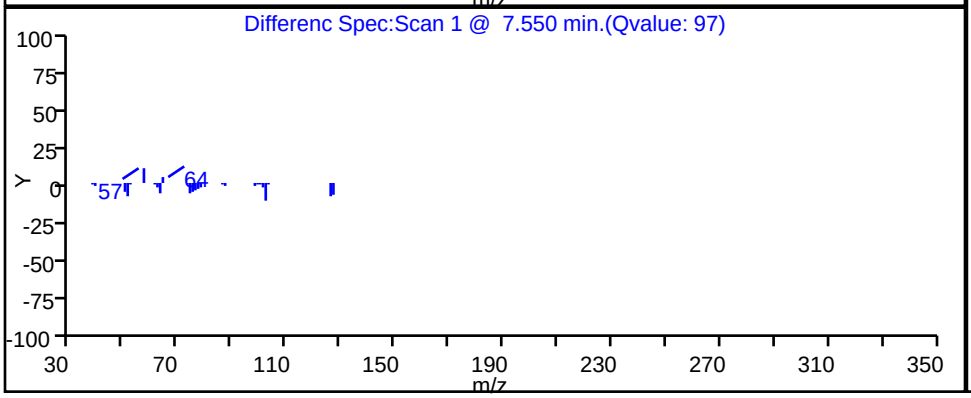












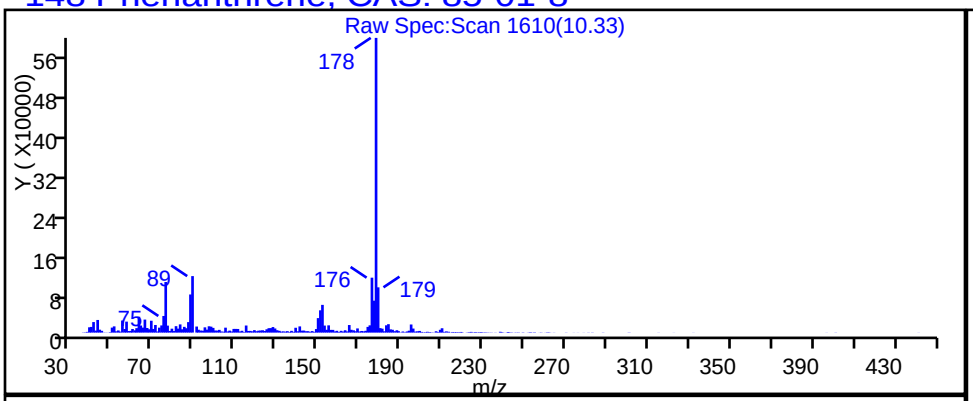
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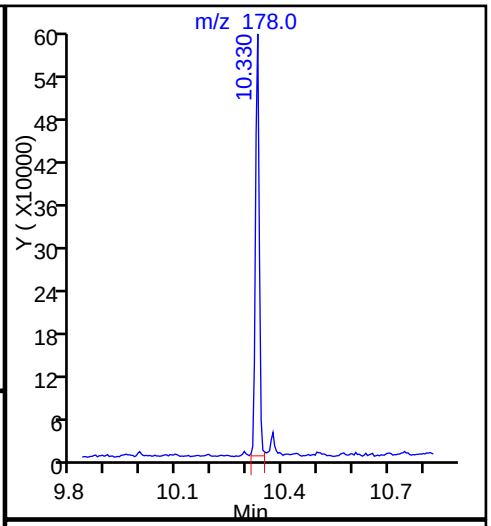
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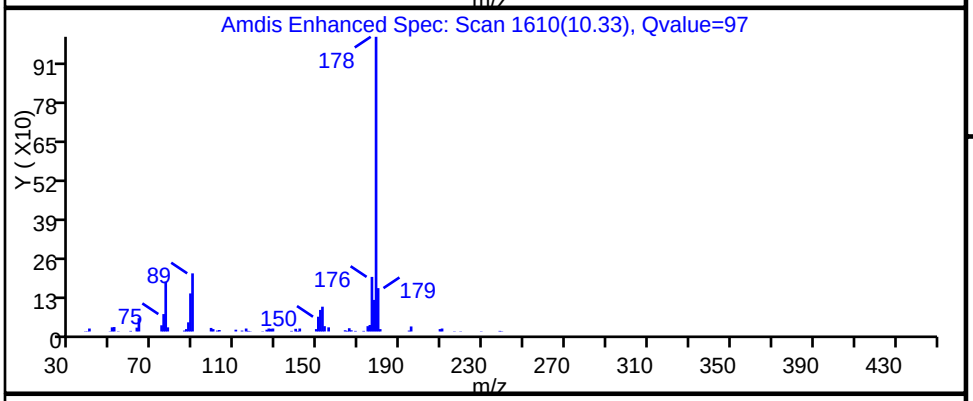
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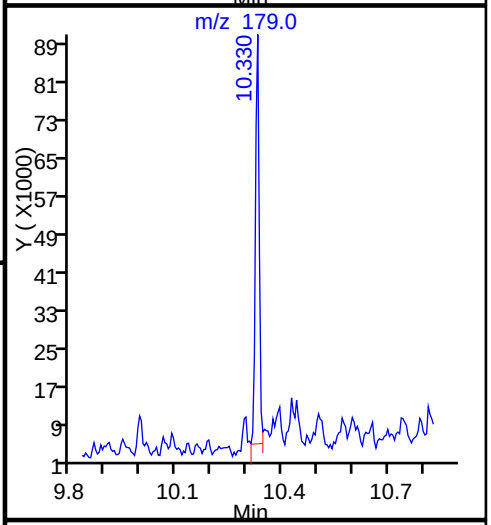
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Lims ID:	240-50067-A-1-B	Lab Sample ID:	240-50067-1		
Client ID:	079SS-0389M-0001-SO				
Operator ID:	001574	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

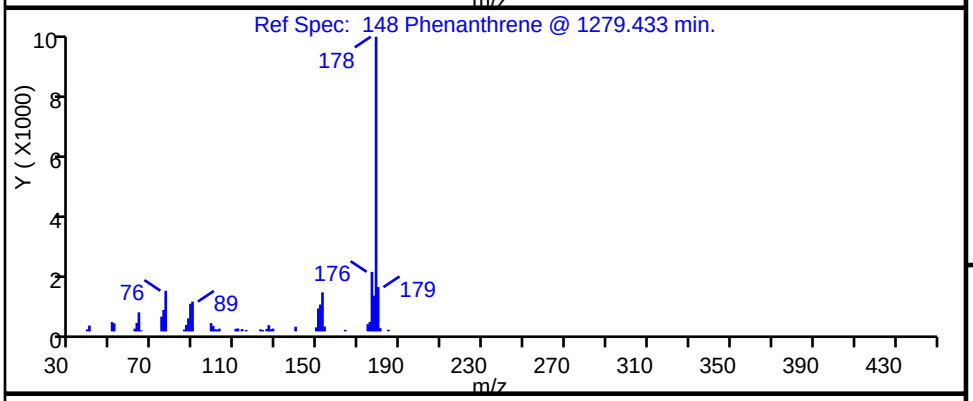
148 Phenanthrene, CAS: 85-01-8

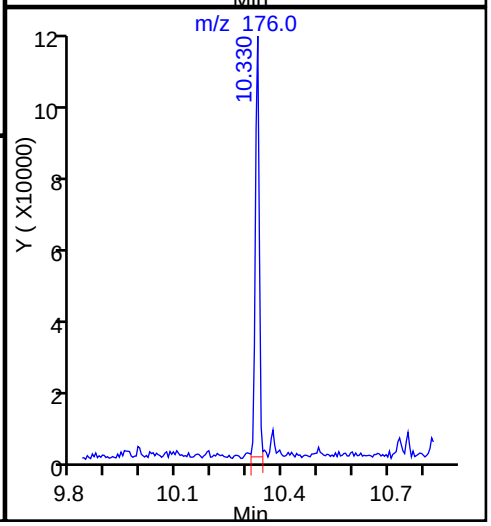


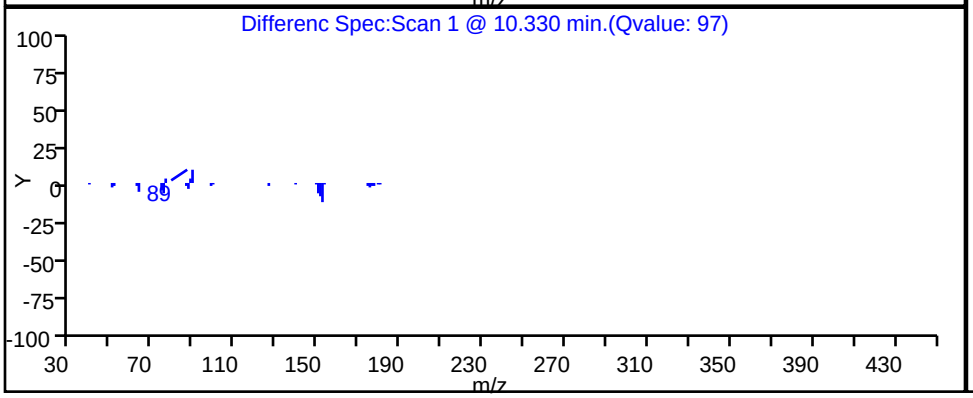












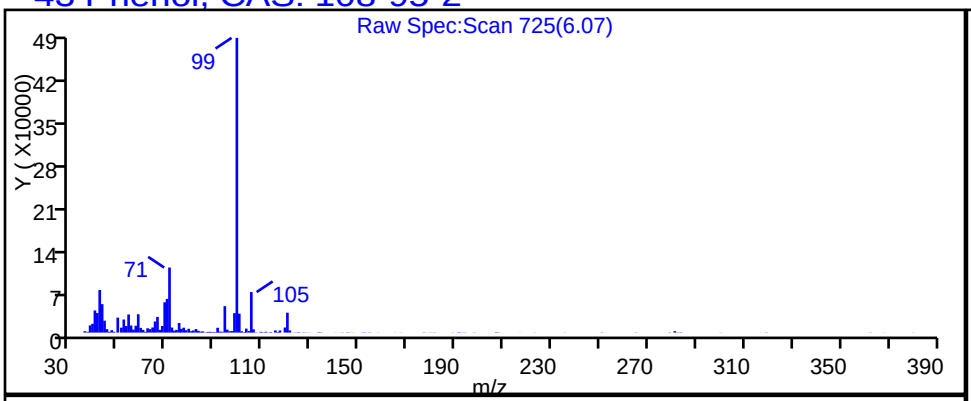
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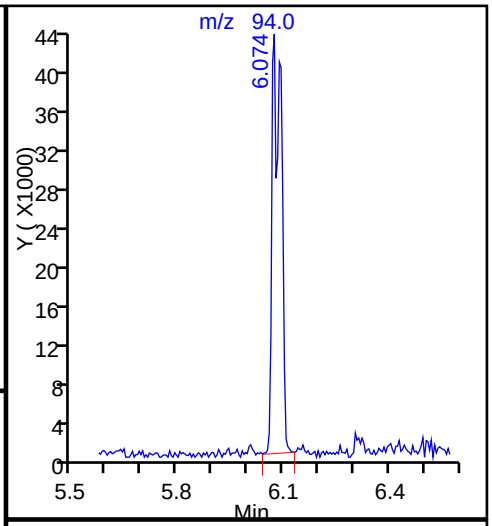
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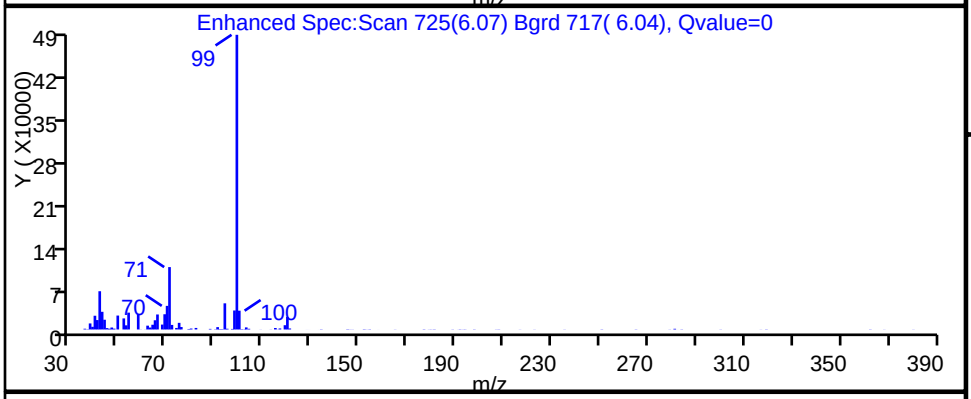
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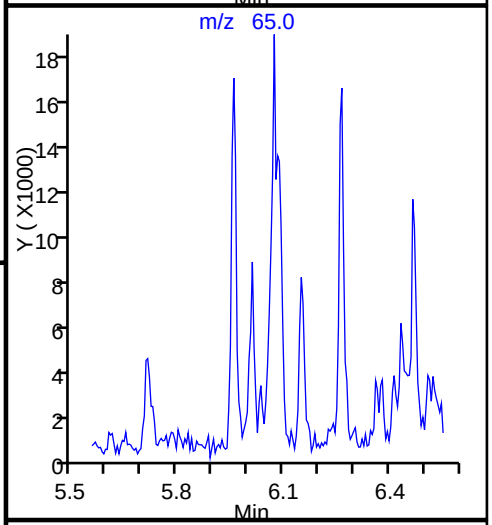
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Lims ID:	240-50067-A-1-B	Lab Sample ID:	240-50067-1		
Client ID:	079SS-0389M-0001-SO				
Operator ID:	001574	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

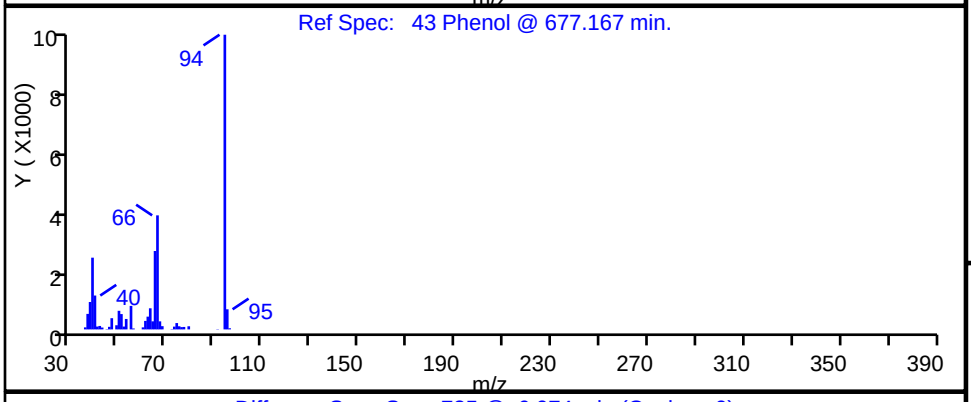
43 Phenol, CAS: 108-95-2

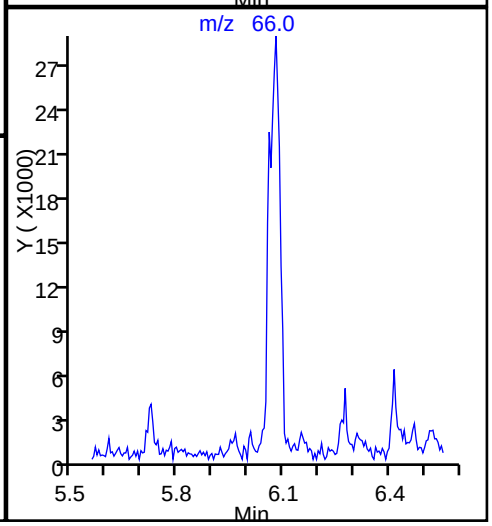


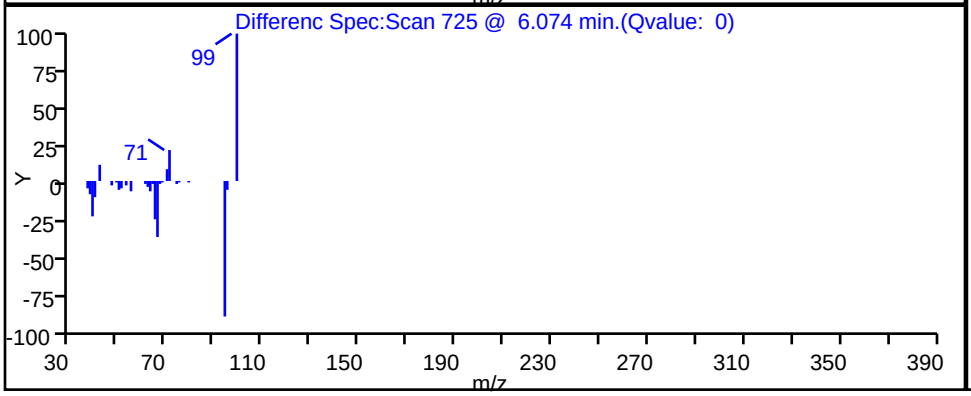












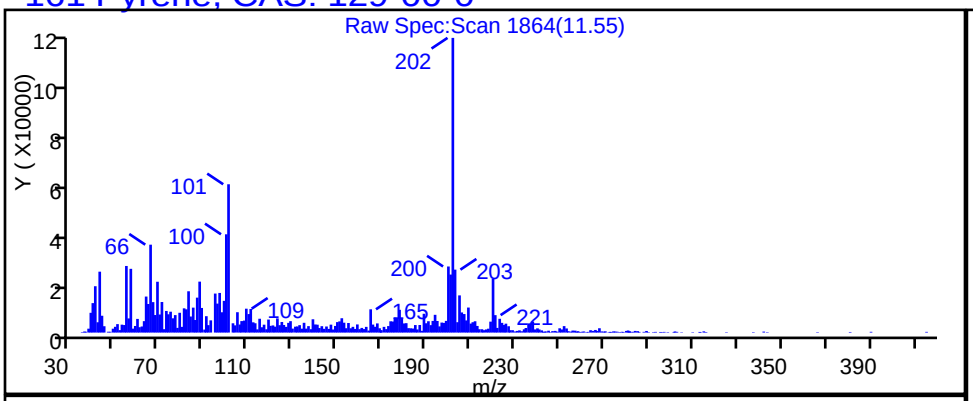
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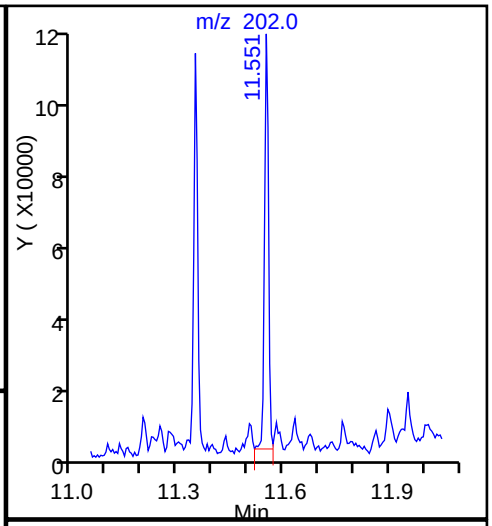
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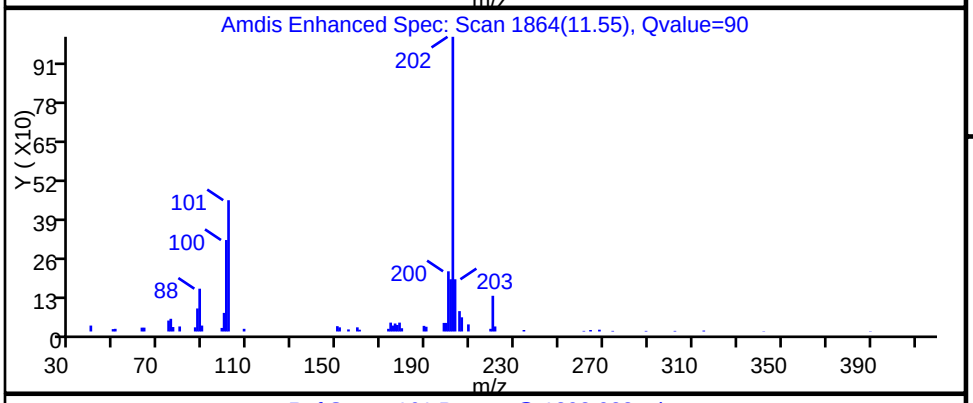
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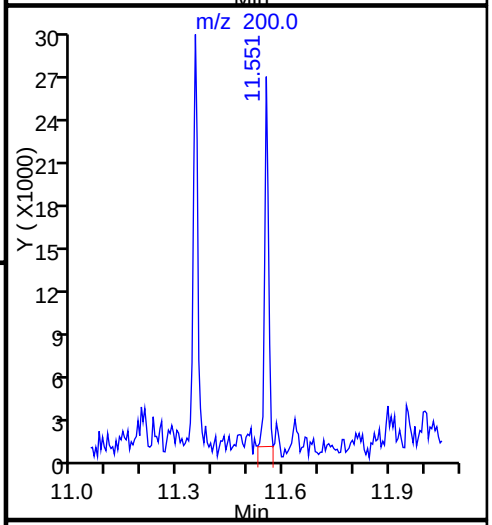
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Lims ID:	240-50067-A-1-B	Lab Sample ID:	240-50067-1		
Client ID:	079SS-0389M-0001-SO				
Operator ID:	001574	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

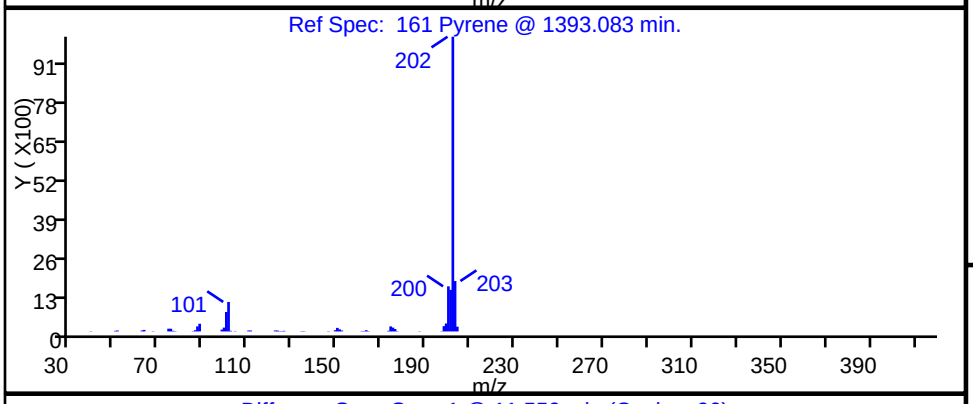
161 Pyrene, CAS: 129-00-0

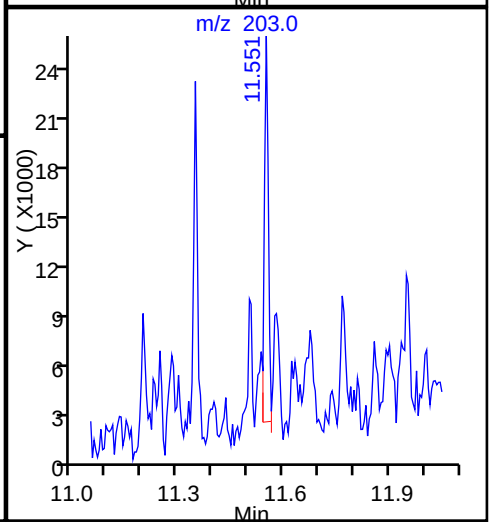


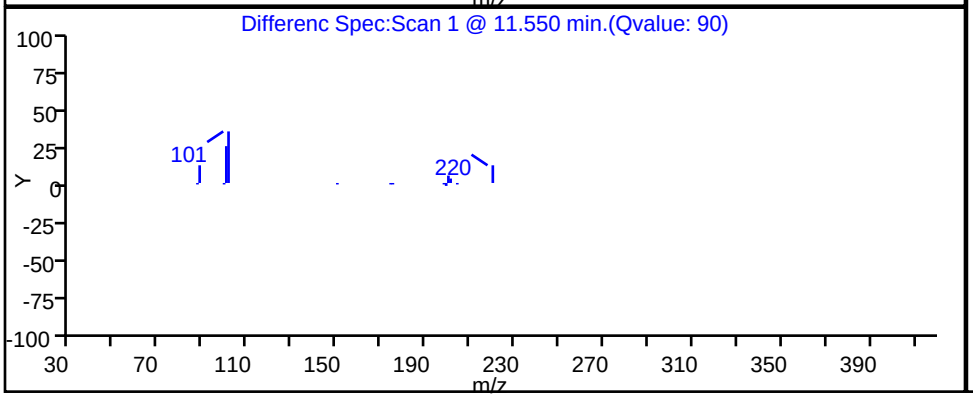












Manual Integration/User Assign Peak Report

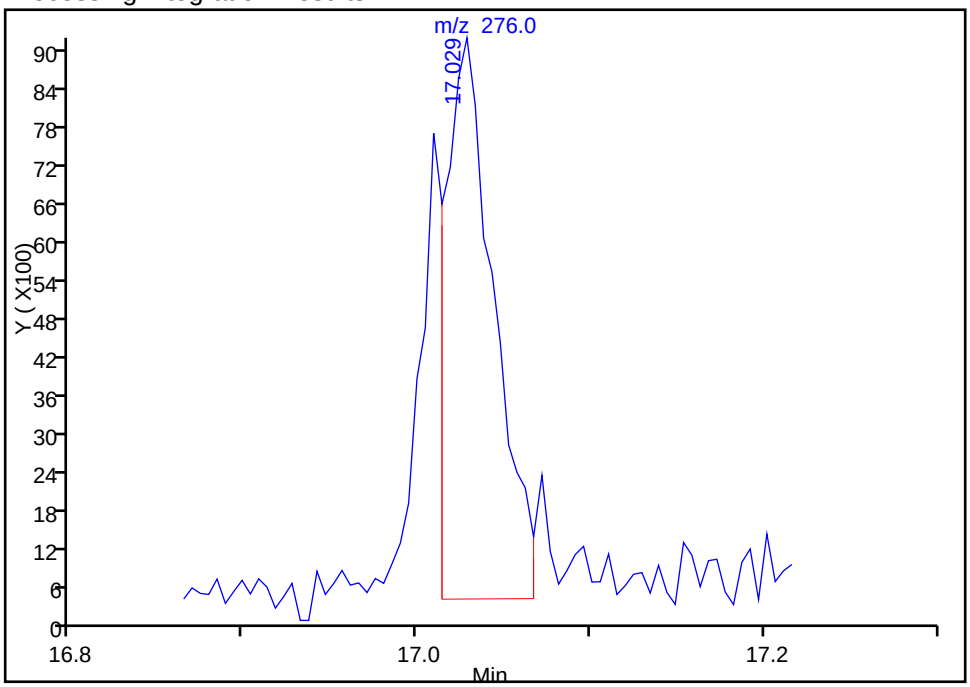
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Data File:	\\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520019.D				
Injection Date:	20-May-2015 17:01:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-1-B	Lab Sample ID:	240-50067-1		
Client ID:	079SS-0389M-0001-SO				
Operator ID:	001574	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

190 Benzo[g,h,i]perylene, CAS: 191-24-2

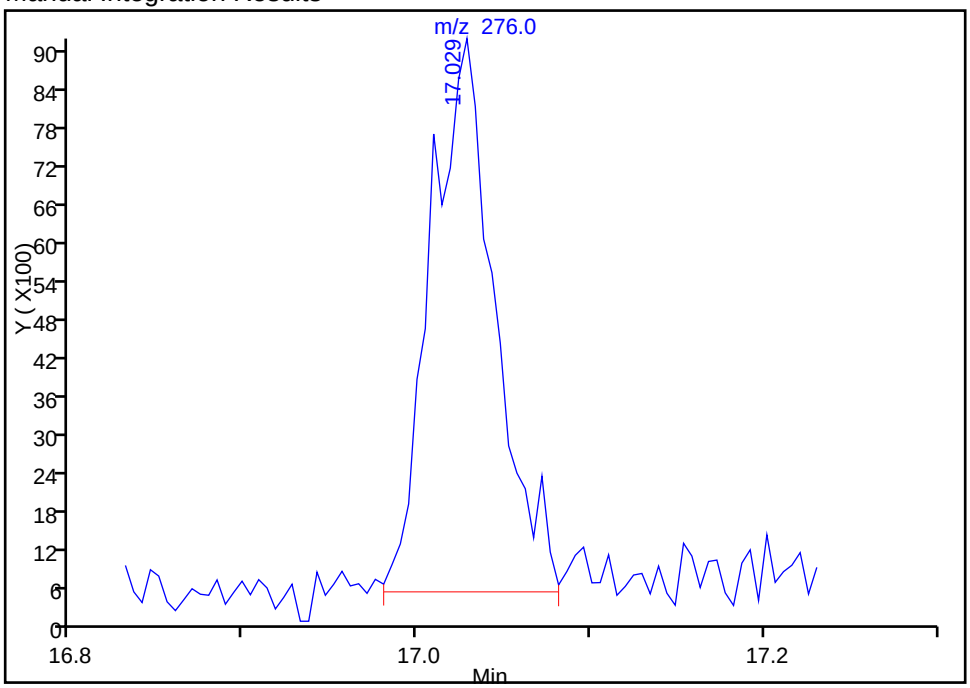
Processing Integration Results

RT: 17.03
Area: 17134
Amount: 0.149552
Amount Units: ng/ul



Manual Integration Results

RT: 17.03
Area: 22421
Amount: 0.195699
Amount Units: ng/ul



Reviewer: ulmanm, 20-May-2015 17:29:42
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Manual Integration/User Assign Peak Report

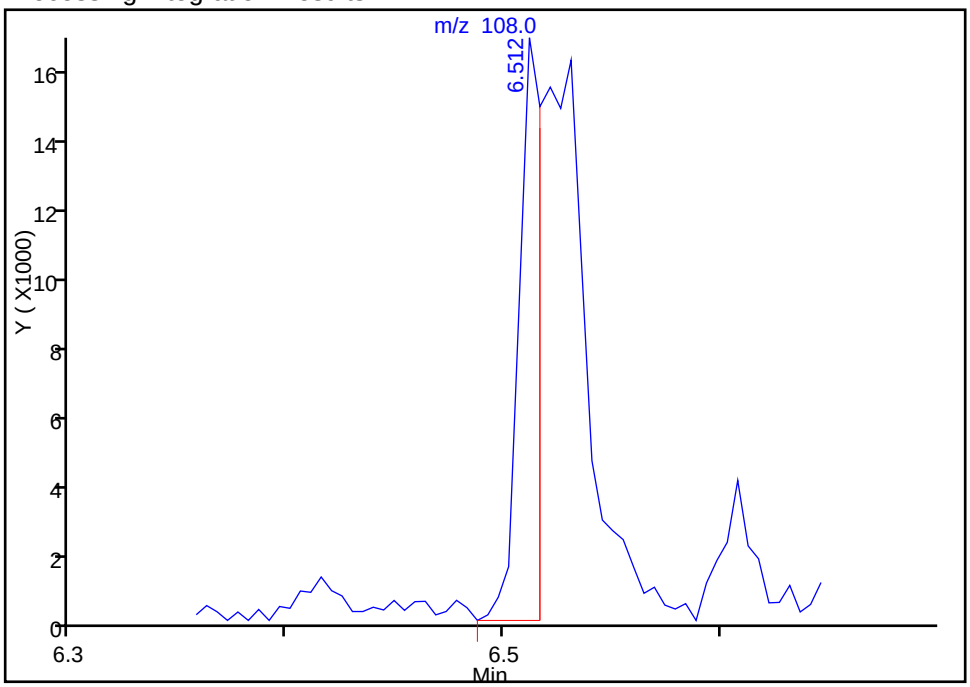
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520019.D				
Injection Date:	20-May-2015 17:01:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-1-B	Lab Sample ID:	240-50067-1		
Client ID:	079SS-0389M-0001-SO				
Operator ID:	001574	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

49 Benzyl alcohol, CAS: 100-51-6

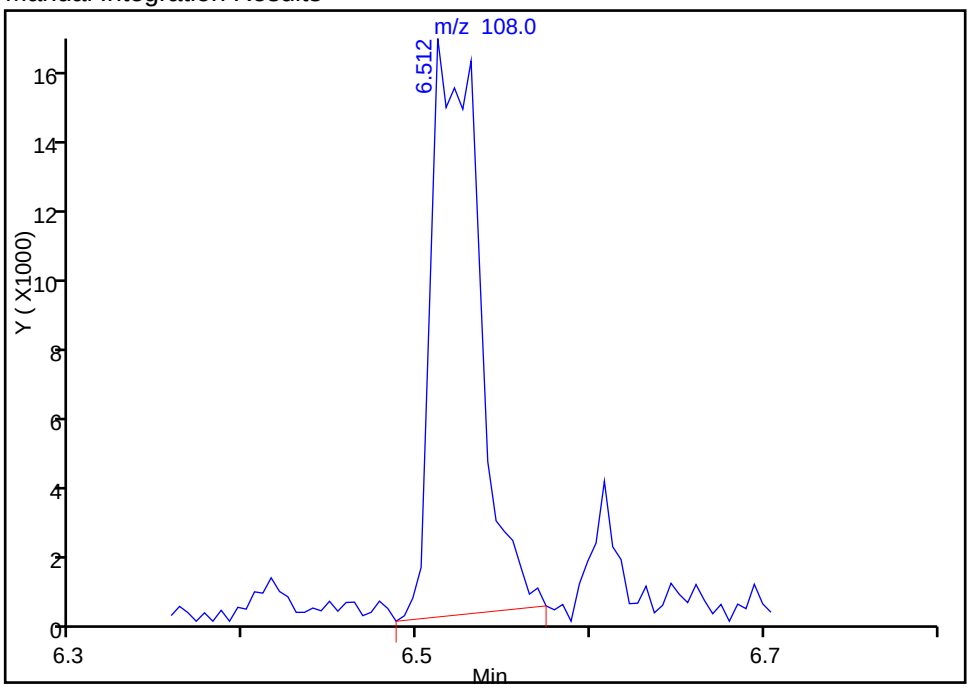
Processing Integration Results

RT: 6.51
Area: 12504
Amount: 0.142705
Amount Units: ng/ul



Manual Integration Results

RT: 6.51
Area: 32398
Amount: 0.369750
Amount Units: ng/ul



Reviewer: ulmanm, 20-May-2015 17:29:42
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Manual Integration/User Assign Peak Report

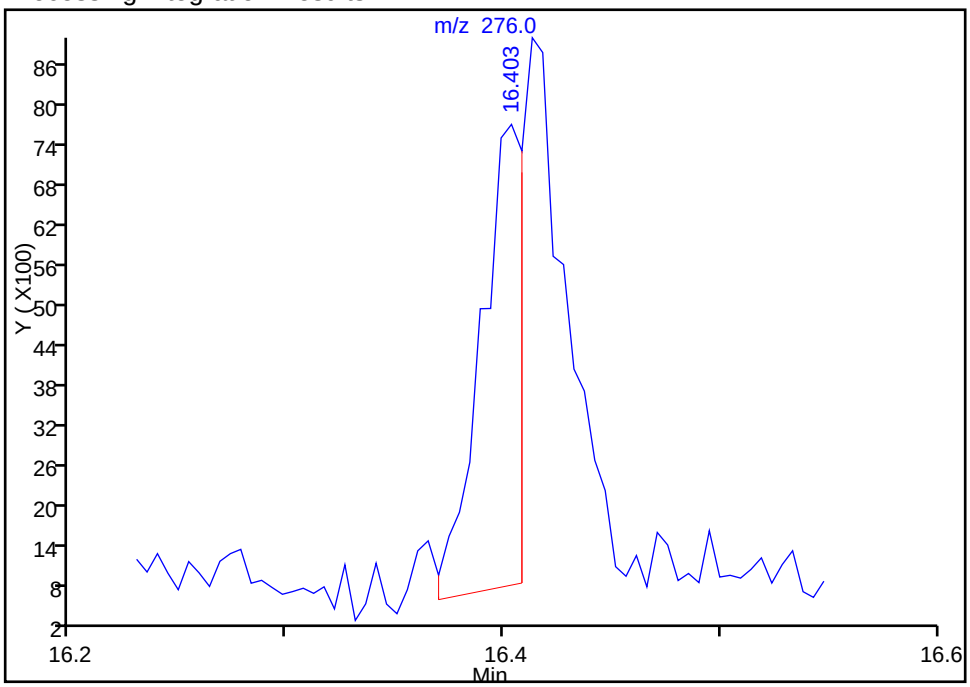
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520019.D				
Injection Date:	20-May-2015 17:01:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-1-B	Lab Sample ID:	240-50067-1		
Client ID:	079SS-0389M-0001-SO				
Operator ID:	001574	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

188 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

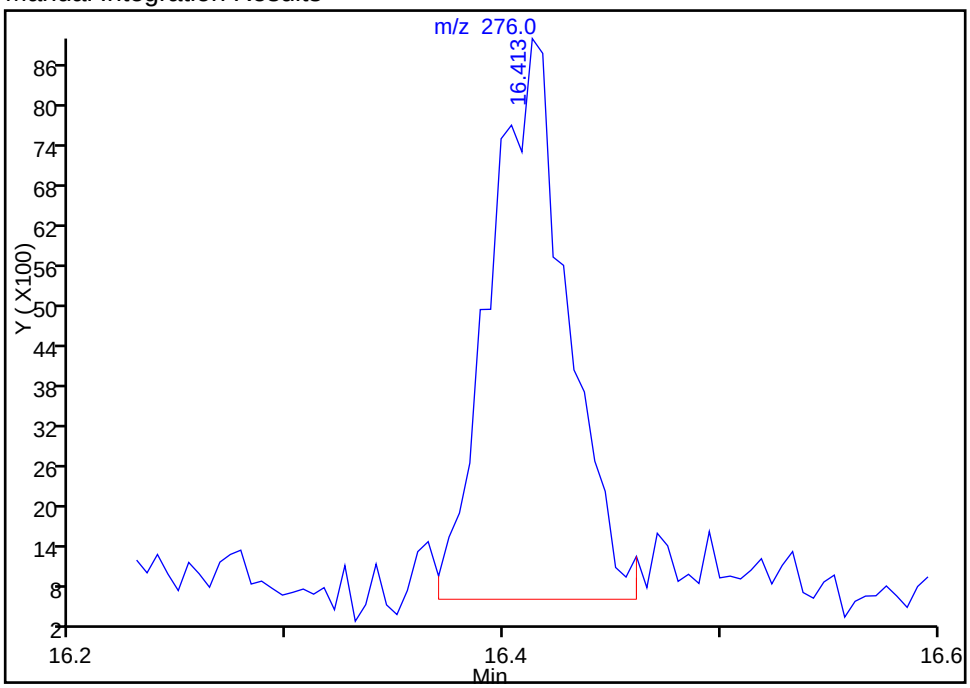
Processing Integration Results

RT: 16.40
Area: 9494
Amount: 0.069132
Amount Units: ng/ul



Manual Integration Results

RT: 16.41
Area: 20792
Amount: 0.151401
Amount Units: ng/ul



Reviewer: ulmanm, 20-May-2015 17:29:42
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Manual Integration/User Assign Peak Report

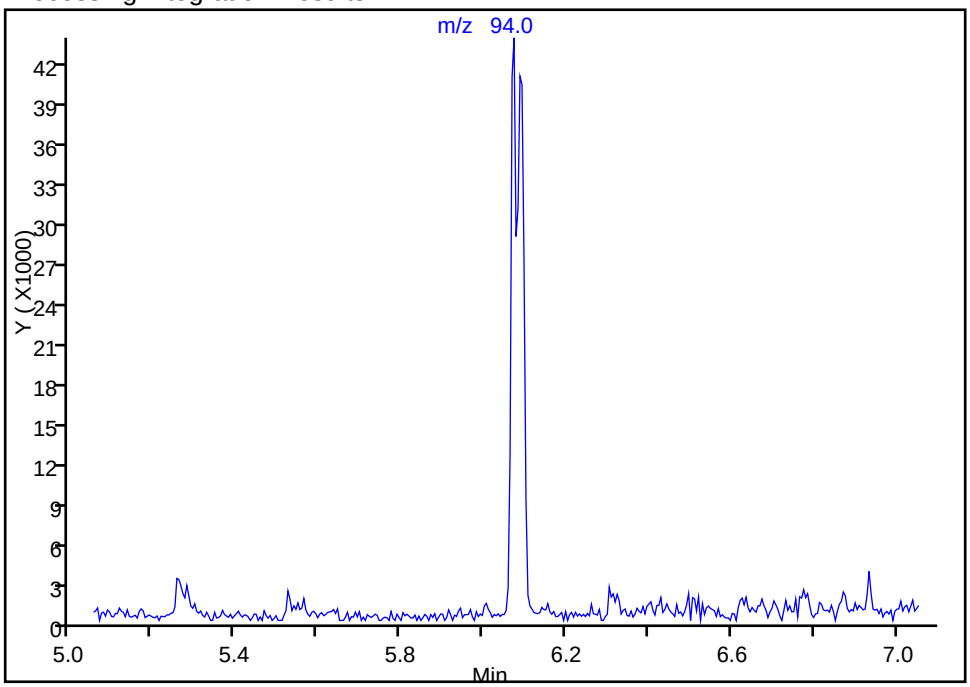
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520019.D				
Injection Date:	20-May-2015 17:01:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-1-B	Lab Sample ID:	240-50067-1		
Client ID:	079SS-0389M-0001-SO				
Operator ID:	001574	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

43 Phenol, CAS: 108-95-2

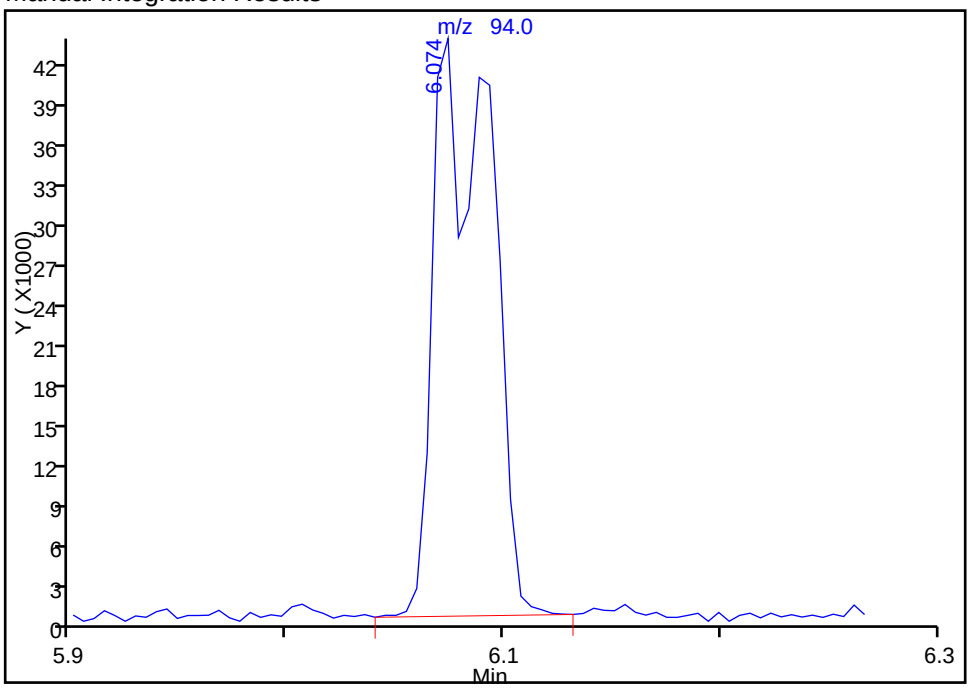
Not Detected
Expected RT: 6.06

Processing Integration Results



Manual Integration Results

RT: 6.07
Area: 79591
Amount: 0.456090
Amount Units: ng/ul



Reviewer: ulmanm, 20-May-2015 17:29:42
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Manual Integration/User Assign Peak Report

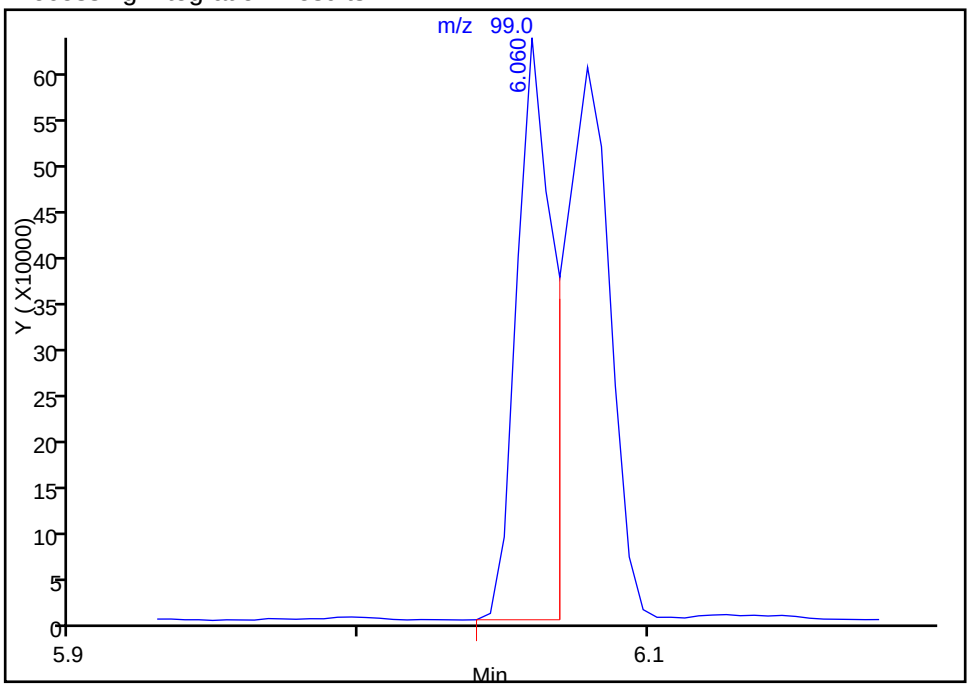
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520019.D				
Injection Date:	20-May-2015 17:01:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-1-B	Lab Sample ID:	240-50067-1		
Client ID:	079SS-0389M-0001-SO				
Operator ID:	001574	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

$ 8 Phenol-d5, CAS: 4165-62-2

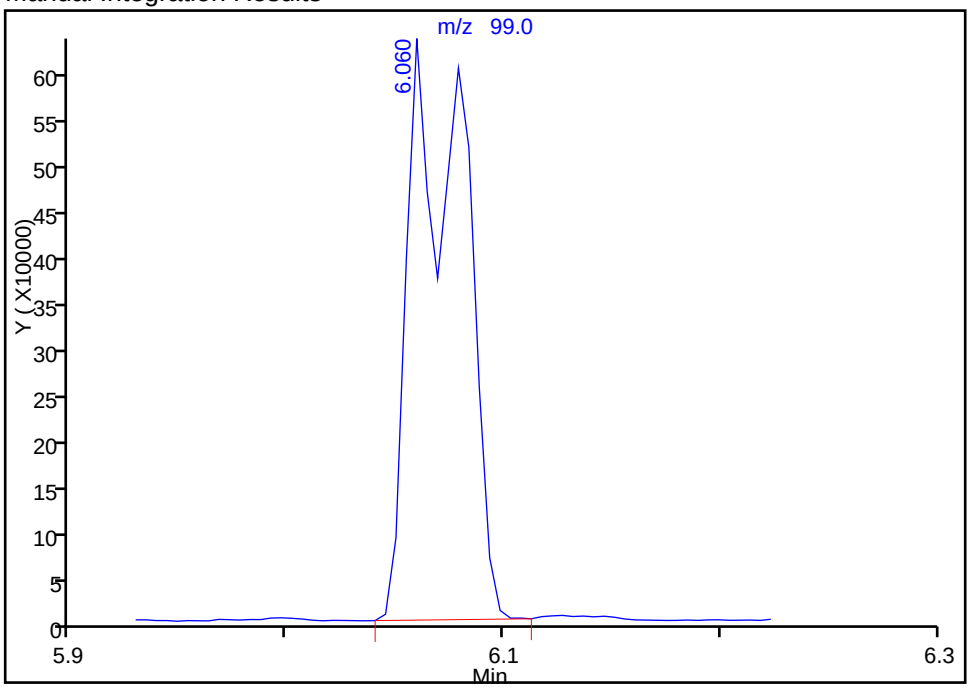
Processing Integration Results

RT: 6.06
Area: 568098
Amount: 3.556414
Amount Units: ng/ul



Manual Integration Results

RT: 6.06
Area: 1125630
Amount: 7.046682
Amount Units: ng/ul



Reviewer: ulmanm, 20-May-2015 17:29:42
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0390M-0001-SO | Lab Sample ID: 240-50067-2

Matrix: Solid | Lab File ID: 50520014.D

Analysis Method: 8270C | Date Collected: 04/29/2015 16:55

Extract. Method: 3540C | Date Extracted: 05/12/2015 12:12

Sample wt/vol: 30.10(g) | Date Analyzed: 05/20/2015 14:55

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
83-32-9	Acenaphthene	3.4	U	6.8	3.4	0.78
208-96-8	Acenaphthylene	1.7	U	6.8	1.7	0.36
120-12-7	Anthracene	3.4	U	6.8	3.4	0.80
56-55-3	Benzo[a]anthracene	3.4	U	6.8	3.4	0.64
50-32-8	Benzo[a]pyrene	3.4	U	6.8	3.4	0.65
205-99-2	Benzo[b]fluoranthene	3.4	U	6.8	3.4	0.60
191-24-2	Benzo[g,h,i]perylene	1.7	U	6.8	1.7	0.36
65-85-0	Benzoic acid	140	U	680	140	37
207-08-9	Benzo[k]fluoranthene	3.4	U	6.8	3.4	0.70
100-51-6	Benzyl alcohol	68	U	340	68	21
111-91-1	Bis(2-chloroethoxy)methane	68	U	100	68	23
111-44-4	Bis(2-chloroethyl)ether	3.4	U	100	3.4	2.0
108-60-1	bis (2-chloroisopropyl) ether	34	U	100	34	9.7
117-81-7	Bis(2-ethylhexyl) phthalate	34	U	72	34	19
101-55-3	4-Bromophenyl phenyl ether	34	U	51	34	13
85-68-7	Butyl benzyl phthalate	34	U	72	34	10
86-74-8	Carbazole	34	U	51	34	28
106-47-8	4-Chloroaniline	68	U	150	68	17
59-50-7	4-Chloro-3-methylphenol	68	U	150	68	21
91-58-7	2-Chloronaphthalene	1.7	U	51	1.7	0.46
95-57-8	2-Chlorophenol	34	U	51	34	8.4
7005-72-3	4-Chlorophenyl phenyl ether	34	U	51	34	13
218-01-9	Chrysene	3.4	U	6.8	3.4	1.1
53-70-3	Dibenz(a,h)anthracene	3.4	U	6.8	3.4	0.68
132-64-9	Dibenzofuran	3.4	U	51	3.4	0.68
95-50-1	1,2-Dichlorobenzene	34	U	51	34	9.9
541-73-1	1,3-Dichlorobenzene	34	U	51	34	11
106-46-7	1,4-Dichlorobenzene	34	U	51	34	20
91-94-1	3,3'-Dichlorobenzidine	68	U	100	68	18
120-83-2	2,4-Dichlorophenol	68	U	150	68	20
84-66-2	Diethyl phthalate	17	J	72	34	16
105-67-9	2,4-Dimethylphenol	68	U	150	68	20
131-11-3	Dimethyl phthalate	34	U	72	34	17
84-74-2	Di-n-butyl phthalate	34	U	72	34	15

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0390M-0001-SO | Lab Sample ID: 240-50067-2

Matrix: Solid | Lab File ID: 50520014.D

Analysis Method: 8270C | Date Collected: 04/29/2015 16:55

Extract. Method: 3540C | Date Extracted: 05/12/2015 12:12

Sample wt/vol: 30.10(g) | Date Analyzed: 05/20/2015 14:55

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
534-52-1	4,6-Dinitro-2-methylphenol	34	U	150	34	9.4
51-28-5	2,4-Dinitrophenol	68	U	340	68	21
121-14-2	2,4-Dinitrotoluene	68	U	200	68	17
606-20-2	2,6-Dinitrotoluene	68	U	200	68	21
117-84-0	Di-n-octyl phthalate	34	U	72	34	8.1
206-44-0	Fluoranthene	3.4	U	6.8	3.4	0.56
86-73-7	Fluorene	3.4	U	6.8	3.4	0.54
118-74-1	Hexachlorobenzene	3.4	U	6.8	3.4	2.1
87-68-3	Hexachlorobutadiene	34	U	51	34	5.7
77-47-4	Hexachlorocyclopentadiene	34	U	340	34	8.3
67-72-1	Hexachloroethane	34	U	51	34	9.2
193-39-5	Indeno[1,2,3-cd]pyrene	1.7	U	6.8	1.7	0.36
78-59-1	Isophorone	56		51	34	13
91-57-6	2-Methylnaphthalene	13		6.8	3.4	0.51
95-48-7	2-Methylphenol	68	U	200	68	11
15831-10-4	3 & 4 Methylphenol	68	U	410	68	20
91-20-3	Naphthalene	11		6.8	3.4	0.84
88-74-4	2-Nitroaniline	34	U	200	34	9.3
99-09-2	3-Nitroaniline	68	U	200	68	16
100-01-6	4-Nitroaniline	68	U	200	68	27
98-95-3	Nitrobenzene	3.4	U	100	3.4	2.3
88-75-5	2-Nitrophenol	34	U	51	34	8.5
100-02-7	4-Nitrophenol	68	U	340	68	17
621-64-7	N-Nitrosodi-n-propylamine	34	U	51	34	6.4
86-30-6	N-Nitrosodiphenylamine	34	U	51	34	21
87-86-5	Pentachlorophenol	34	U	150	34	9.3
85-01-8	Phenanthrene	8.9		6.8	3.4	0.75
108-95-2	Phenol	11	J	51	34	7.5
129-00-0	Pyrene	1.7	U	6.8	1.7	0.45
120-82-1	1,2,4-Trichlorobenzene	17	U	51	17	3.6
95-95-4	2,4,5-Trichlorophenol	68	U	150	68	26
88-06-2	2,4,6-Trichlorophenol	34	U	150	34	9.1

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0390M-0001-SO | Lab Sample ID: 240-50067-2

Matrix: Solid | Lab File ID: 50520014.D

Analysis Method: 8270C | Date Collected: 04/29/2015 16:55

Extract. Method: 3540C | Date Extracted: 05/12/2015 12:12

Sample wt/vol: 30.10(g) | Date Analyzed: 05/20/2015 14:55

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	75		45-105
367-12-4	2-Fluorophenol (Surr)	56		35-105
4165-60-0	Nitrobenzene-d5 (Surr)	68		35-100
4165-62-2	Phenol-d5 (Surr)	44		40-100
1718-51-0	Terphenyl-d14 (Surr)	74		30-125
118-79-6	2,4,6-Tribromophenol (Surr)	121		35-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520014.D
Lims ID: 240-50067-A-2-B Lab Sample ID: 240-50067-2
Client ID: 079SB-0390M-0001-SO
Sample Type: Client
Inject. Date: 20-May-2015 14:55:30 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043844-014
Misc. Info.: 240-50067-A-2-B
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-May-2015 08:02:18 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 20-May-2015 15:21:14

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.419	6.411	0.008	97	263167	4.00	
* 2 Naphthalene-d8	136	7.530	7.527	0.003	99	946209	4.00	
* 3 Acenaphthene-d10	164	9.035	9.037	-0.002	90	291543	4.00	
* 4 Phenanthrene-d10	188	10.309	10.311	-0.002	95	752249	4.00	
* 5 Chrysene-d12	240	12.618	12.619	-0.001	92	663398	4.00	
* 6 Perylene-d12	264	14.435	14.437	-0.002	90	471414	4.00	
$ 7 2-Fluorophenol	112	5.284	5.199	0.085	93	634340	5.58	
$ 8 Phenol-d5	99	6.068	6.046	0.022	92	676363	4.40	
$ 9 Nitrobenzene-d5	82	6.890	6.887	0.003	86	658160	6.79	
$ 10 2-Fluorobiphenyl (Surr)	172	8.429	8.431	-0.002	99	621151	7.47	
$ 11 2,4,6-Tribromophenol	330	9.703	9.710	-0.007	85	92443	12.1	
$ 12 Terphenyl-d14	244	11.637	11.638	-0.001	97	941040	7.39	
43 Phenol	94	6.078	6.055	0.023	89	26197	0.1561	
69 Bis(2-chloroethyl)ether	93		6.147				ND	
46 2-Chlorophenol	128		6.228				ND	
47 1,3-Dichlorobenzene	146		6.368				ND	
48 1,4-Dichlorobenzene	146		6.426				ND	
49 Benzyl alcohol	108	6.515	6.507	0.008	94	12004	0.1425	
50 1,2-Dichlorobenzene	146		6.570				ND	
51 2-Methylphenol	108		6.594				ND	
53 2,2'-oxybis[1-chloropropan	45		6.628				ND	
21 3 & 4 Methylphenol	108		6.724				ND	
57 N-Nitrosodi-n-propylamine	70		6.738				ND	
61 Hexachloroethane	117		6.878				ND	
62 Nitrobenzene	77		6.902				ND	
64 Isophorone	82	7.107	7.104	0.003	98	155143	0.8203	
66 2-Nitrophenol	139		7.185				ND	
65 2,4-Dimethylphenol	107		7.190				ND	
71 Benzoic acid	122	7.208	7.238	-0.030	84	8518	0.1794	
70 Bis(2-chloroethoxy)methane	93		7.267				ND	
73 2,4-Dichlorophenol	162		7.387				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
74 1,2,4-Trichlorobenzene	180		7.474				ND	
75 Naphthalene	128	7.549	7.546	0.003	97	40868	0.1636	
76 4-Chloroaniline	127		7.565				ND	
79 Hexachlorobutadiene	225		7.652				ND	
86 4-Chloro-3-methylphenol	107		7.955				ND	
87 2-Methylnaphthalene	142	8.136	8.138	-0.002	95	28991	0.1905	
89 Hexachlorocyclopentadiene	237		8.282				ND	
92 2,4,6-Trichlorophenol	196		8.364				ND	
93 2,4,5-Trichlorophenol	196		8.402				ND	
100 2-Chloronaphthalene	162		8.556				ND	
102 2-Nitroaniline	65		8.618				ND	
105 Dimethyl phthalate	163		8.748				ND	
107 2,6-Dinitrotoluene	165		8.806				ND	
109 Acenaphthylene	152		8.921				ND	
110 3-Nitroaniline	138		8.960				ND	
111 2,4-Dinitrophenol	184		9.046				ND	
112 Acenaphthene	153		9.066				ND	
113 4-Nitrophenol	109		9.070				ND	
114 2,4-Dinitrotoluene	165		9.157				ND	
116 Dibenzofuran	168		9.210				ND	
121 Diethyl phthalate	149	9.338	9.345	-0.007	56	19524	0.2419	
123 4-Chlorophenyl phenyl ethe	204		9.474				ND	
125 4-Nitroaniline	138		9.484				ND	
126 Fluorene	166		9.503				ND	
128 4,6-Dinitro-2-methylphenol	198		9.513				ND	
131 N-Nitrosodiphenylamine	169		9.571				ND	
139 4-Bromophenyl phenyl ether	248		9.898				ND	
141 Hexachlorobenzene	284		9.989				ND	
143 Pentachlorophenol	266		10.143				ND	
148 Phenanthrene	178	10.329	10.330	-0.001	95	28137	0.1307	
149 Anthracene	178		10.374				ND	
151 Carbazole	167		10.489				ND	
154 Di-n-butyl phthalate	149	10.723	10.725	-0.002	99	35437	0.1533	
159 Fluoranthene	202		11.355				ND	
161 Pyrene	202		11.557				ND	
168 Butyl benzyl phthalate	149		12.013				ND	
173 Bis(2-ethylhexyl) phthalat	149	12.497	12.504	-0.007	91	26735	0.1744	
175 3,3'-Dichlorobenzidine	252		12.538				ND	
177 Benzo[a]anthracene	228		12.610				ND	
178 Chrysene	228		12.648				ND	
180 Di-n-octyl phthalate	149		13.177				ND	
182 Benzo[b]fluoranthene	252		13.870				ND	
183 Benzo[k]fluoranthene	252		13.903				ND	
184 Benzo[a]pyrene	252		14.355				ND	
188 Indeno[1,2,3-cd]pyrene	276		16.423				ND	
189 Dibenz(a,h)anthracene	278		16.428				ND	
190 Benzo[g,h,i]perylene	276		17.039				ND	

Reagents:

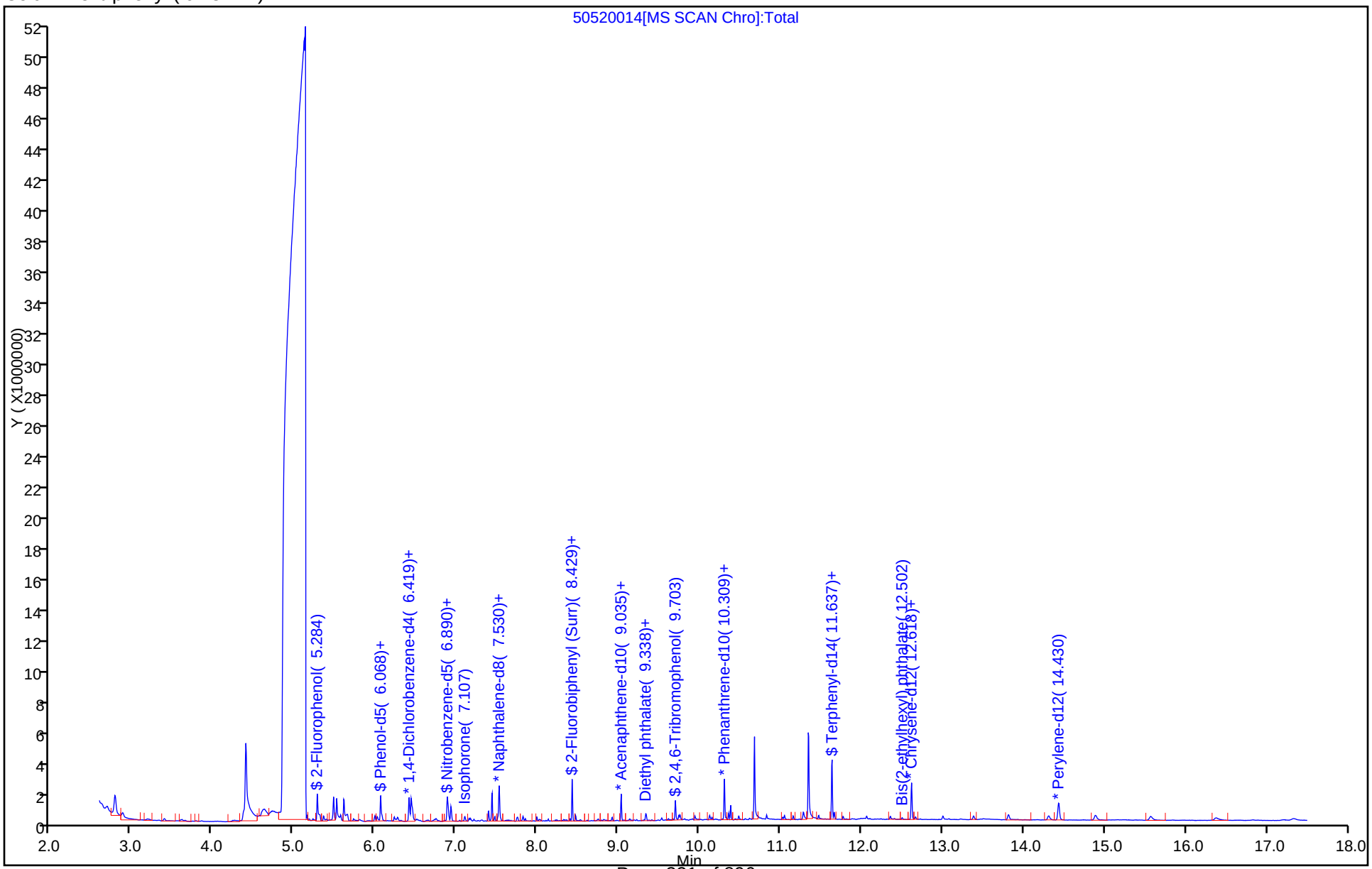
SMIS80PPMW_00011 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 21-May-2015 08:02:39 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520014.D				
Injection Date:	20-May-2015 14:55:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	240-50067-A-2-B	Lab Sample ID:	240-50067-2	Worklist Smp#:	14
Client ID:	079SB-0390M-0001-SO				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



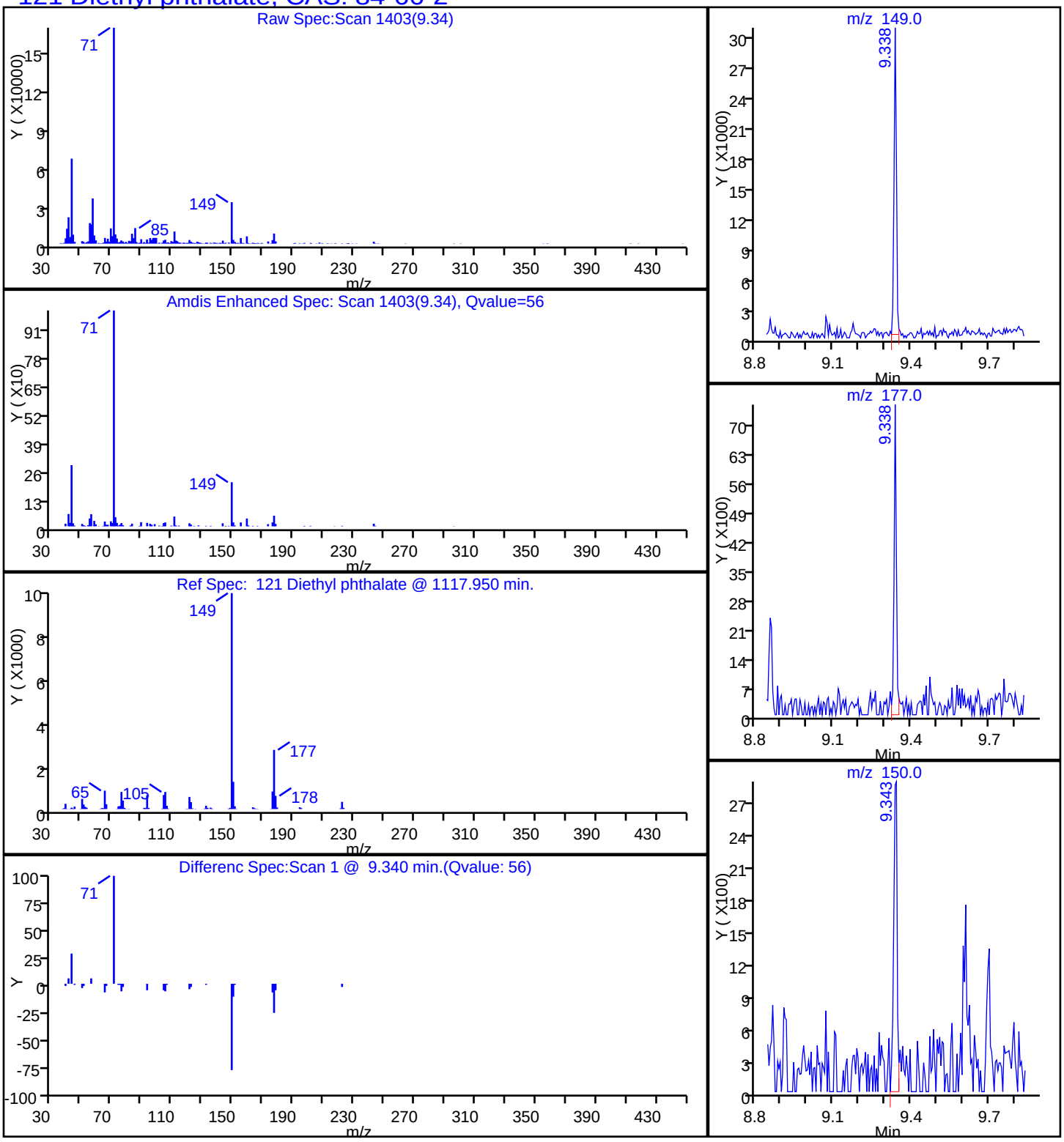
Report Date: 21-May-2015 08:02:39 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520014.D

Injection Date:	20-May-2015 14:55:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-2-B	Lab Sample ID:	240-50067-2		
Client ID:	079SB-0390M-0001-SO				
Operator ID:	001574	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

121 Diethyl phthalate, CAS: 84-66-2



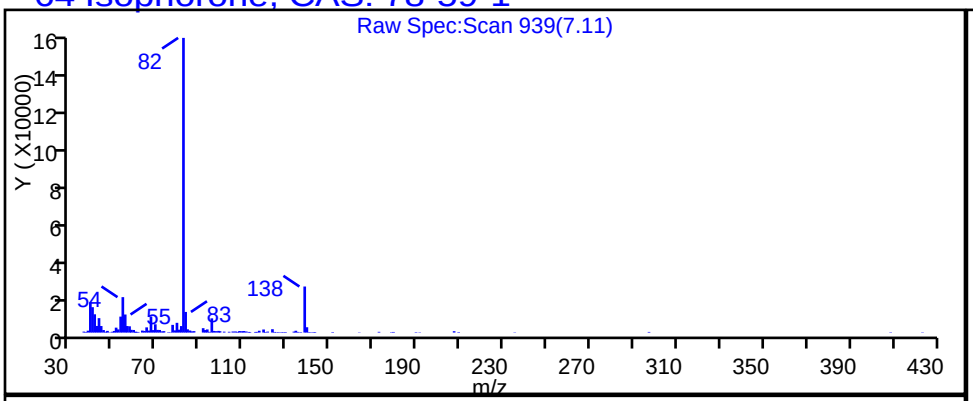
Report Date: 21-May-2015 08:02:39 Chrom Revision: 2.2 05-May-2015 11:39:10

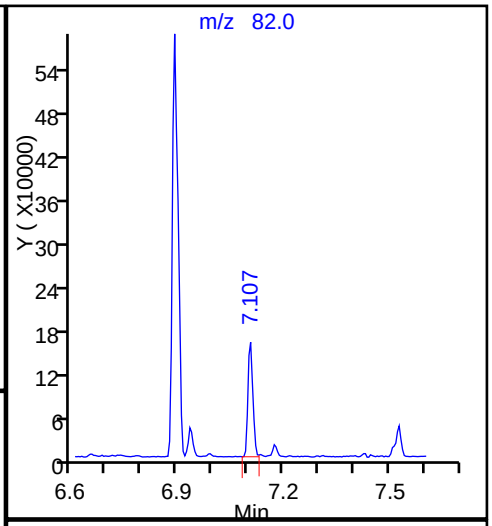
TestAmerica Canton

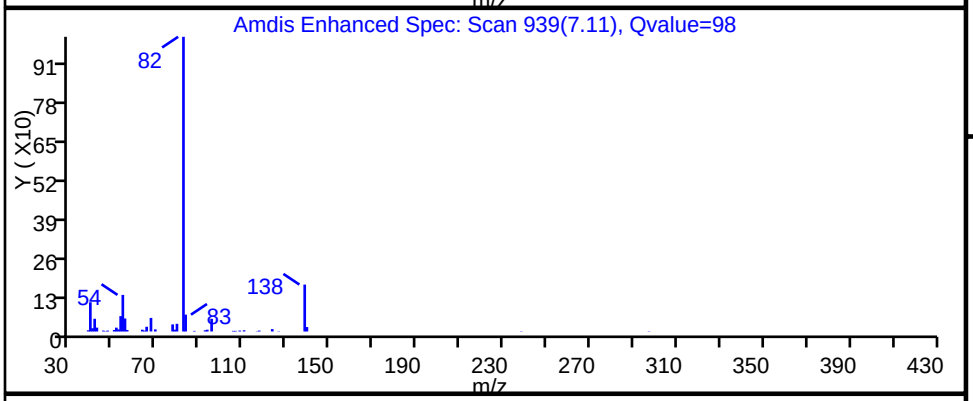
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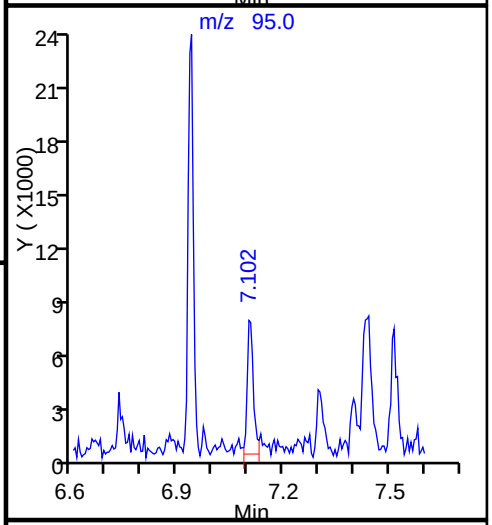
Injection Date:	20-May-2015 14:55:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-2-B	Lab Sample ID:	240-50067-2		
Client ID:	079SB-0390M-0001-SO				
Operator ID:	001574	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

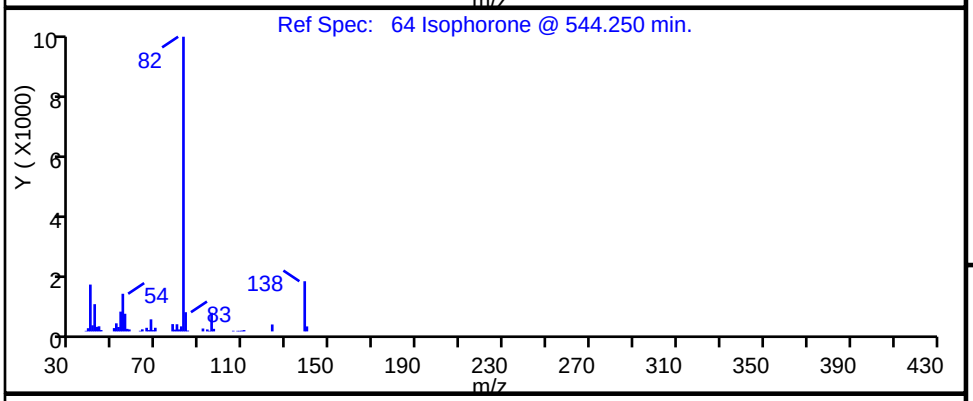
64 Isophorone, CAS: 78-59-1

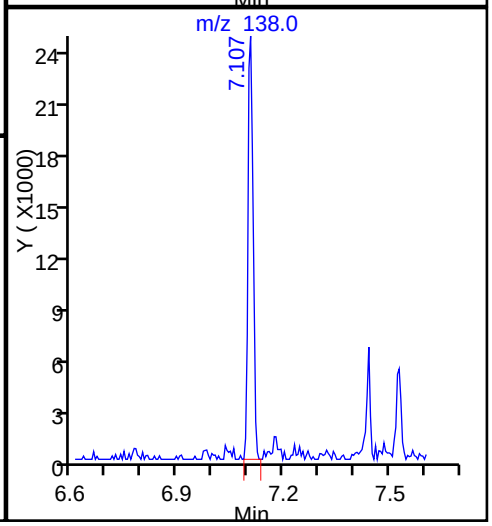


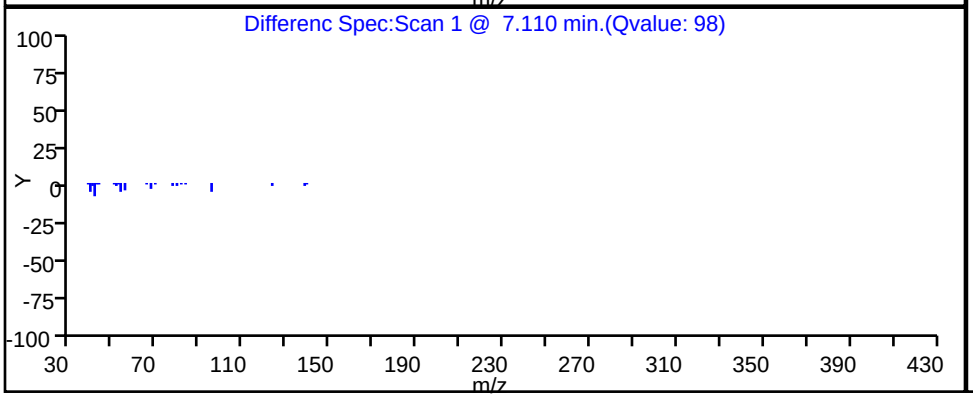












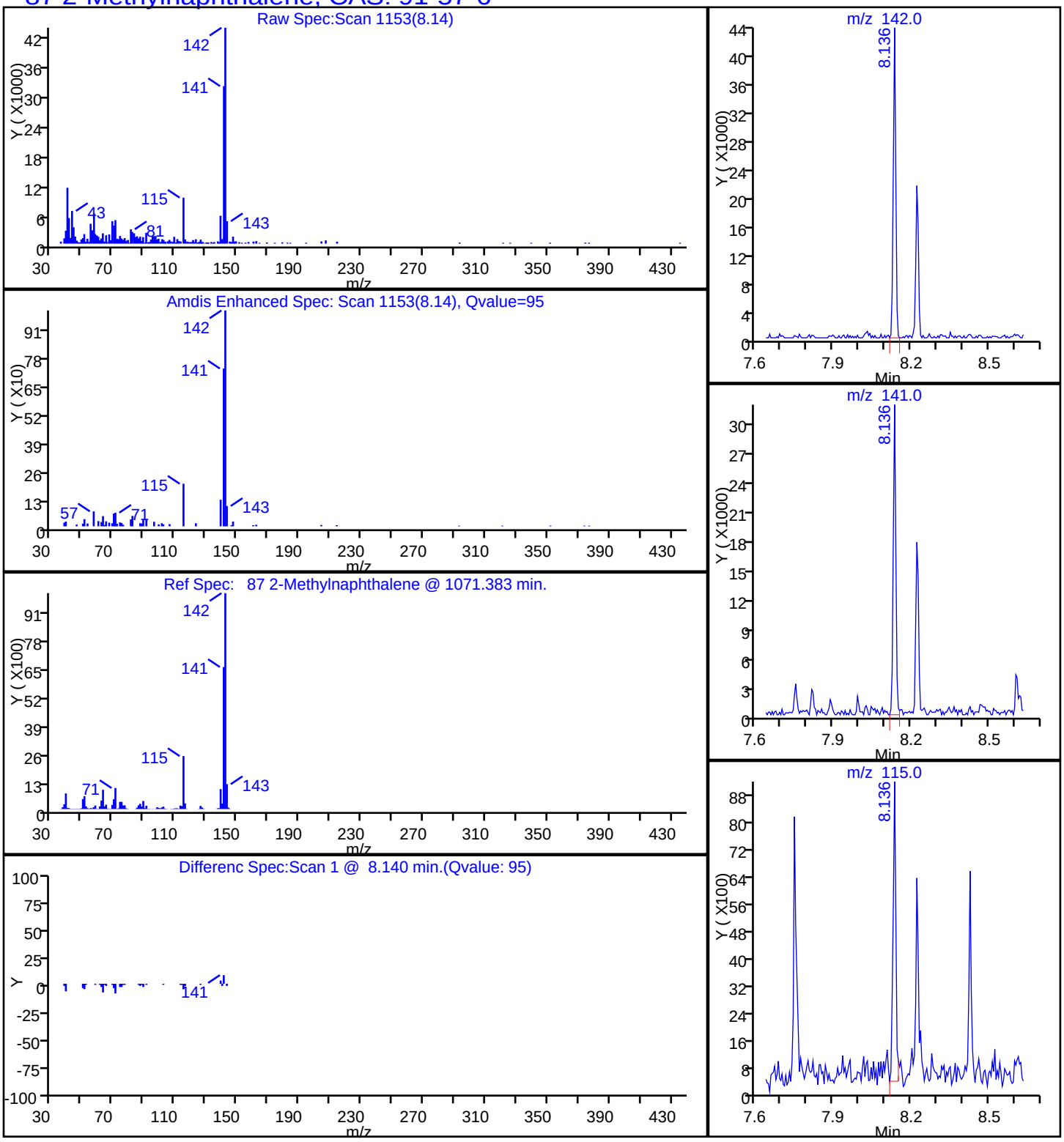
Report Date: 21-May-2015 08:02:39 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520014.D

Injection Date:	20-May-2015 14:55:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-2-B	Lab Sample ID:	240-50067-2		
Client ID:	079SB-0390M-0001-SO				
Operator ID:	001574	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

87 2-Methylnaphthalene, CAS: 91-57-6



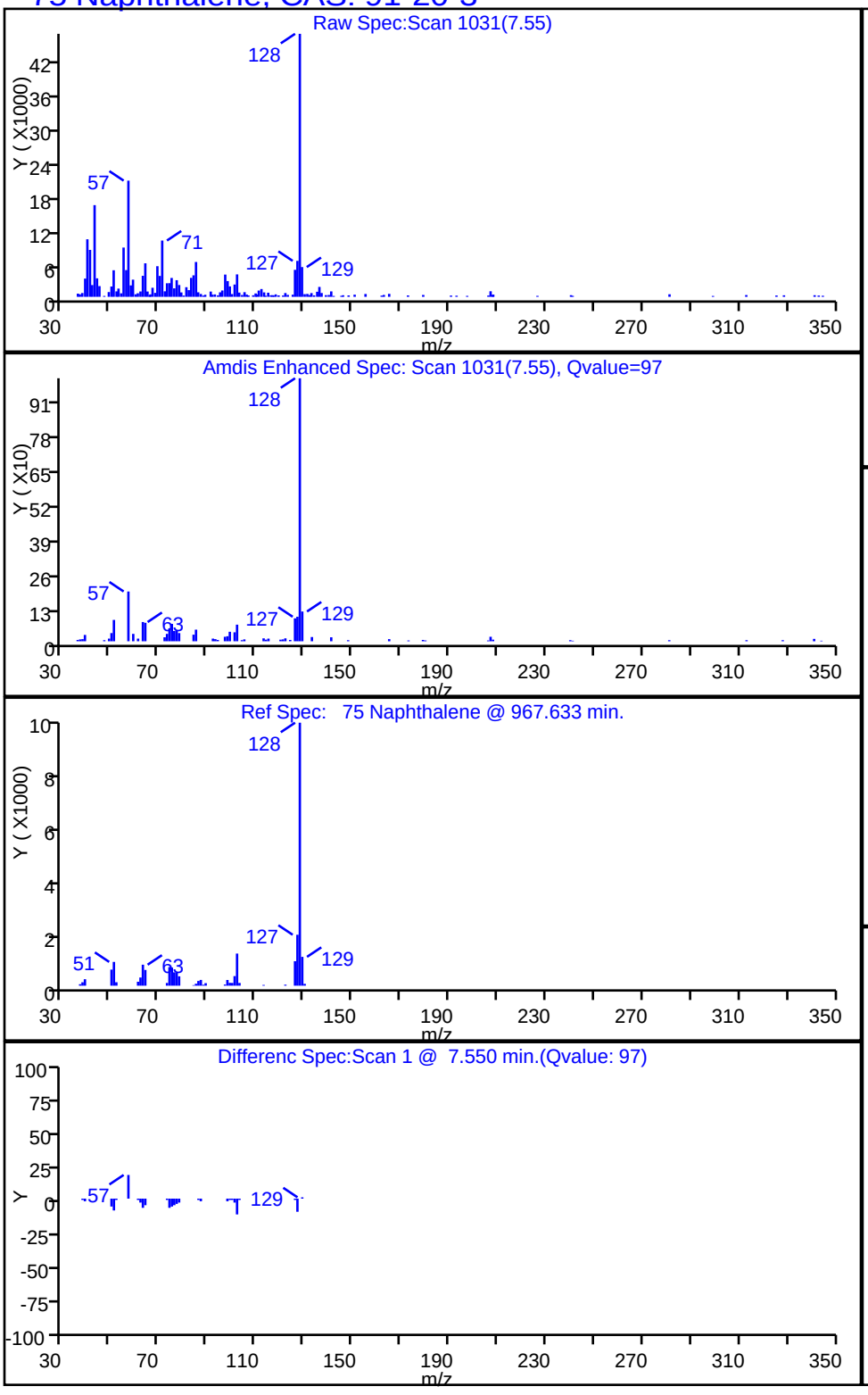
Report Date: 21-May-2015 08:02:39 Chrom Revision: 2.2 05-May-2015 11:39:10

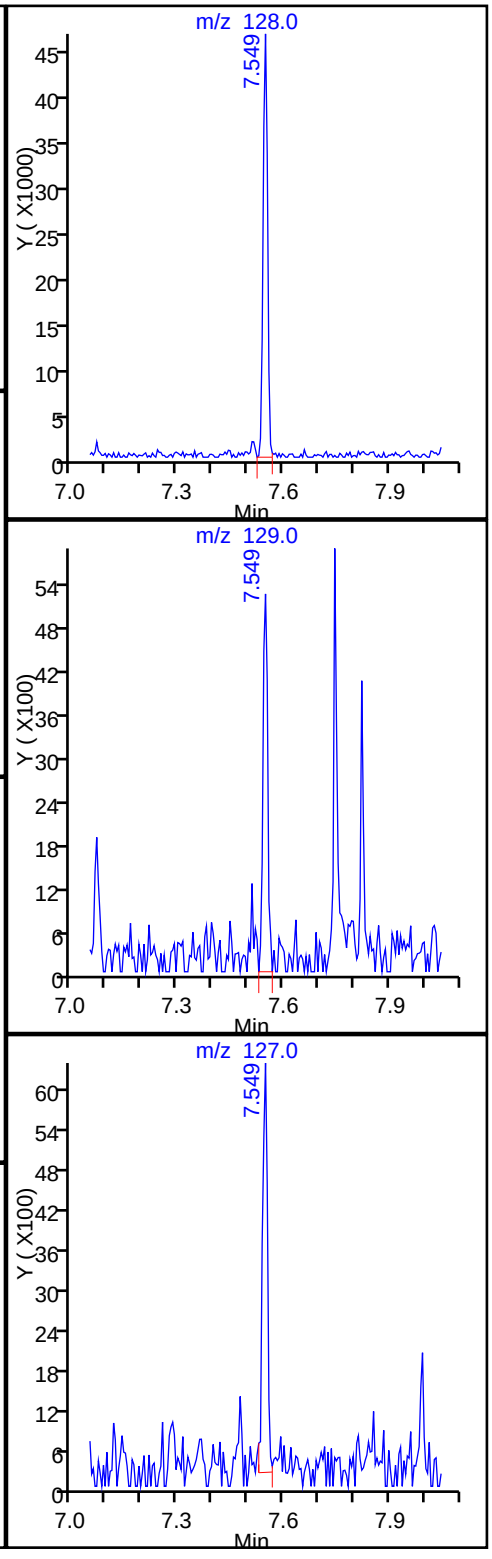
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520014.D

Injection Date:	20-May-2015 14:55:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-2-B	Lab Sample ID:	240-50067-2		
Client ID:	079SB-0390M-0001-SO				
Operator ID:	001574	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

75 Naphthalene, CAS: 91-20-3





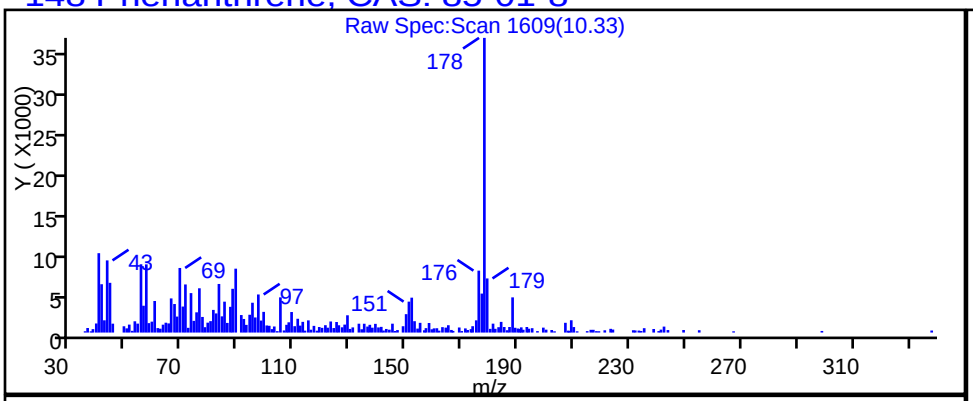
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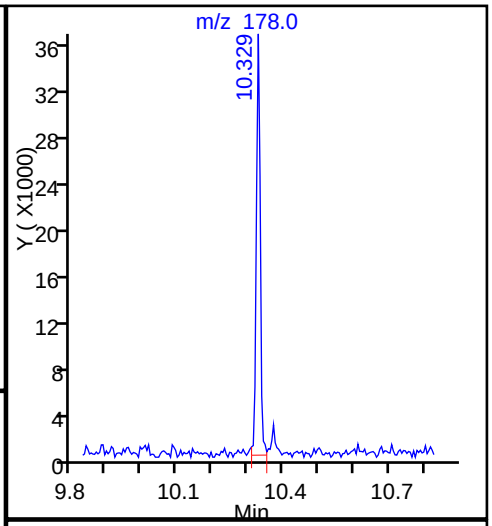
TestAmerica Canton

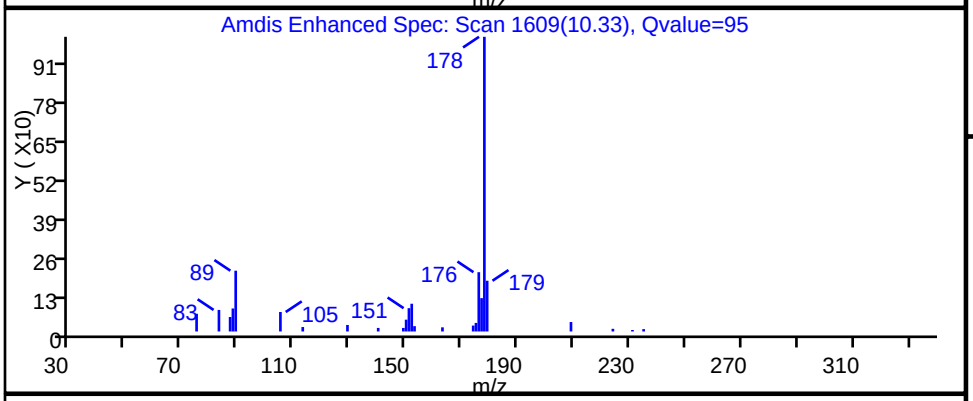
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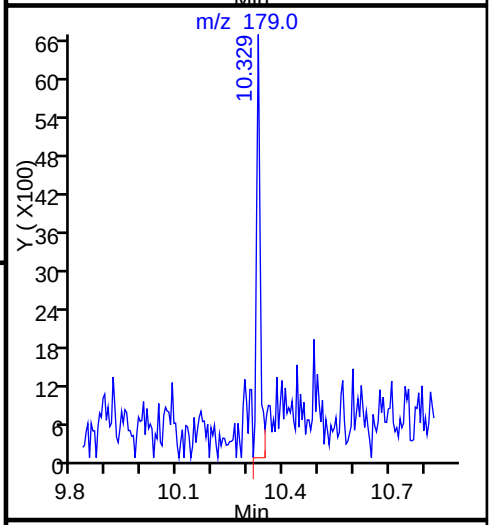
Injection Date:	20-May-2015 14:55:30	Instrument ID:	A4HP9
Lims ID:	240-50067-A-2-B	Lab Sample ID:	240-50067-2
Client ID:	079SB-0390M-0001-SO		
Operator ID:	001574	ALS Bottle#:	14 Worklist Smp#: 14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN

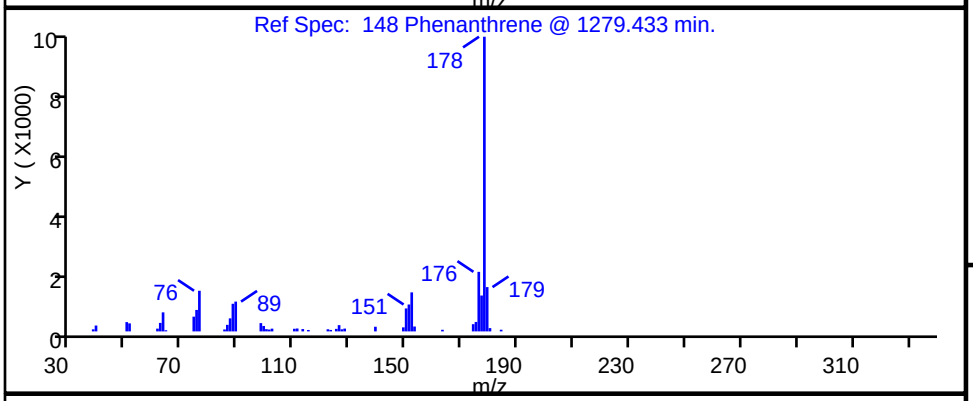
148 Phenanthrene, CAS: 85-01-8

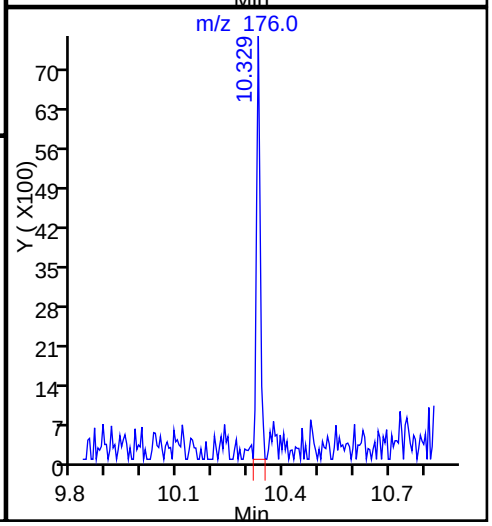


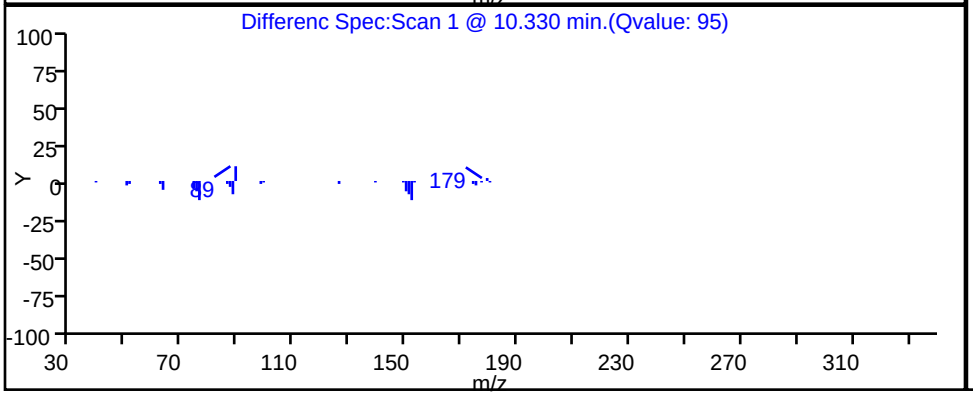












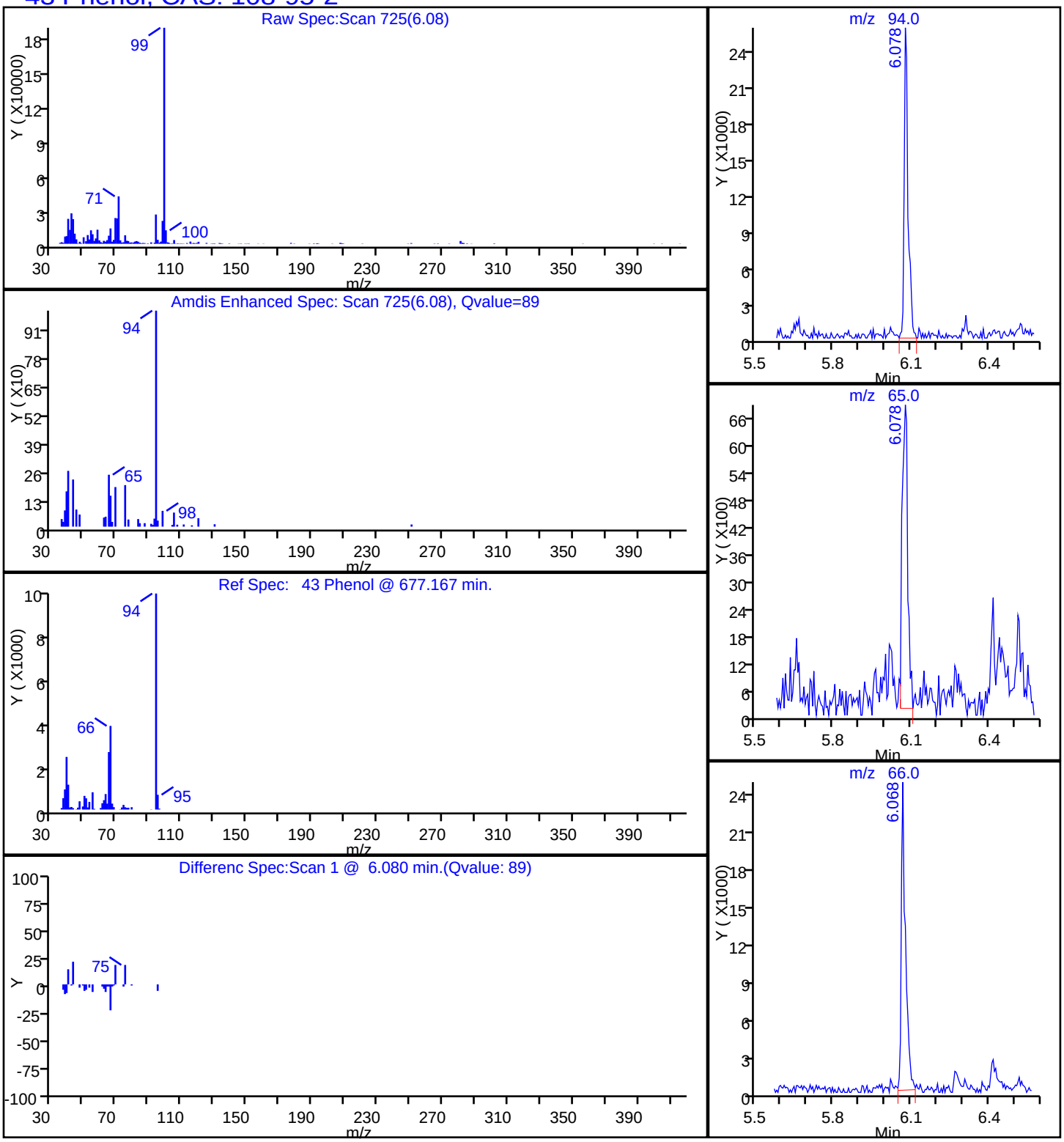
Report Date: 21-May-2015 08:02:39 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520014.D

Injection Date:	20-May-2015 14:55:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-2-B	Lab Sample ID:	240-50067-2		
Client ID:	079SB-0390M-0001-SO				
Operator ID:	001574	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

43 Phenol, CAS: 108-95-2



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0391M-0001-SO | Lab Sample ID: 240-50067-3

Matrix: Solid | Lab File ID: 50520015.D

Analysis Method: 8270C | Date Collected: 04/29/2015 16:58

Extract. Method: 3540C | Date Extracted: 05/12/2015 12:12

Sample wt/vol: 30.13(g) | Date Analyzed: 05/20/2015 15:20

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
83-32-9	Acenaphthene	3.4	U	6.8	3.4	0.77
208-96-8	Acenaphthylene	1.7	U	6.8	1.7	0.36
120-12-7	Anthracene	3.4	U	6.8	3.4	0.79
56-55-3	Benzo[a]anthracene	3.4	U	6.8	3.4	0.64
50-32-8	Benzo[a]pyrene	3.4	U	6.8	3.4	0.65
205-99-2	Benzo[b]fluoranthene	3.4	U	6.8	3.4	0.60
191-24-2	Benzo[g,h,i]perylene	1.7	U	6.8	1.7	0.36
65-85-0	Benzoic acid	140	U	670	140	37
207-08-9	Benzo[k]fluoranthene	3.4	U	6.8	3.4	0.69
100-51-6	Benzyl alcohol	68	U	340	68	21
111-91-1	Bis(2-chloroethoxy)methane	68	U	100	68	22
111-44-4	Bis(2-chloroethyl)ether	3.4	U	100	3.4	2.0
108-60-1	bis (2-chloroisopropyl) ether	34	U	100	34	9.7
117-81-7	Bis(2-ethylhexyl) phthalate	34	U	71	34	19
101-55-3	4-Bromophenyl phenyl ether	34	U	51	34	13
85-68-7	Butyl benzyl phthalate	34	U	71	34	10
86-74-8	Carbazole	34	U	51	34	28
106-47-8	4-Chloroaniline	68	U	150	68	17
59-50-7	4-Chloro-3-methylphenol	68	U	150	68	21
91-58-7	2-Chloronaphthalene	1.7	U	51	1.7	0.46
95-57-8	2-Chlorophenol	34	U	51	34	8.4
7005-72-3	4-Chlorophenyl phenyl ether	34	U	51	34	13
218-01-9	Chrysene	3.4	U	6.8	3.4	1.1
53-70-3	Dibenz(a,h)anthracene	3.4	U	6.8	3.4	0.67
132-64-9	Dibenzofuran	3.4	U	51	3.4	0.67
95-50-1	1,2-Dichlorobenzene	34	U	51	34	9.9
541-73-1	1,3-Dichlorobenzene	34	U	51	34	11
106-46-7	1,4-Dichlorobenzene	34	U	51	34	20
91-94-1	3,3'-Dichlorobenzidine	68	U	100	68	18
120-83-2	2,4-Dichlorophenol	68	U	150	68	20
84-66-2	Diethyl phthalate	34	U	71	34	16
105-67-9	2,4-Dimethylphenol	68	U	150	68	20
131-11-3	Dimethyl phthalate	34	U	71	34	17
84-74-2	Di-n-butyl phthalate	34	U	71	34	15

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0391M-0001-SO | Lab Sample ID: 240-50067-3

Matrix: Solid | Lab File ID: 50520015.D

Analysis Method: 8270C | Date Collected: 04/29/2015 16:58

Extract. Method: 3540C | Date Extracted: 05/12/2015 12:12

Sample wt/vol: 30.13(g) | Date Analyzed: 05/20/2015 15:20

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
534-52-1	4,6-Dinitro-2-methylphenol	34	U	150	34	9.4
51-28-5	2,4-Dinitrophenol	68	U	340	68	21
121-14-2	2,4-Dinitrotoluene	68	U	200	68	17
606-20-2	2,6-Dinitrotoluene	68	U	200	68	21
117-84-0	Di-n-octyl phthalate	34	U	71	34	8.0
206-44-0	Fluoranthene	3.4	U	6.8	3.4	0.56
86-73-7	Fluorene	3.4	U	6.8	3.4	0.54
118-74-1	Hexachlorobenzene	3.4	U	6.8	3.4	2.1
87-68-3	Hexachlorobutadiene	34	U	51	34	5.7
77-47-4	Hexachlorocyclopentadiene	34	U	340	34	8.3
67-72-1	Hexachloroethane	34	U	51	34	9.2
193-39-5	Indeno[1,2,3-cd]pyrene	1.7	U	6.8	1.7	0.36
78-59-1	Isophorone	46	J	51	34	13
91-57-6	2-Methylnaphthalene	10		6.8	3.4	0.51
95-48-7	2-Methylphenol	68	U	200	68	11
15831-10-4	3 & 4 Methylphenol	68	U	410	68	20
91-20-3	Naphthalene	9.5		6.8	3.4	0.84
88-74-4	2-Nitroaniline	34	U	200	34	9.3
99-09-2	3-Nitroaniline	68	U	200	68	16
100-01-6	4-Nitroaniline	68	U	200	68	26
98-95-3	Nitrobenzene	3.4	U	100	3.4	2.2
88-75-5	2-Nitrophenol	13	J	51	34	8.5
100-02-7	4-Nitrophenol	68	U	340	68	17
621-64-7	N-Nitrosodi-n-propylamine	34	U	51	34	6.4
86-30-6	N-Nitrosodiphenylamine	34	U	51	34	21
87-86-5	Pentachlorophenol	34	U	150	34	9.3
85-01-8	Phenanthrene	5.7	J	6.8	3.4	0.74
108-95-2	Phenol	34	U	51	34	7.4
129-00-0	Pyrene	1.7	U	6.8	1.7	0.45
120-82-1	1,2,4-Trichlorobenzene	17	U	51	17	3.6
95-95-4	2,4,5-Trichlorophenol	68	U	150	68	25
88-06-2	2,4,6-Trichlorophenol	34	U	150	34	9.1

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0391M-0001-SO | Lab Sample ID: 240-50067-3

Matrix: Solid | Lab File ID: 50520015.D

Analysis Method: 8270C | Date Collected: 04/29/2015 16:58

Extract. Method: 3540C | Date Extracted: 05/12/2015 12:12

Sample wt/vol: 30.13(g) | Date Analyzed: 05/20/2015 15:20

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	69		45-105
367-12-4	2-Fluorophenol (Surr)	40		35-105
4165-60-0	Nitrobenzene-d5 (Surr)	63		35-100
4165-62-2	Phenol-d5 (Surr)	46		40-100
1718-51-0	Terphenyl-d14 (Surr)	70		30-125
118-79-6	2,4,6-Tribromophenol (Surr)	69		35-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520015.D
Lims ID: 240-50067-A-3-B Lab Sample ID: 240-50067-3
Client ID: 079SB-0391M-0001-SO
Sample Type: Client
Inject. Date: 20-May-2015 15:20:30 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043844-015
Misc. Info.: 240-50067-A-3-B240-50067-A-3-B
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-May-2015 08:02:18 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 20-May-2015 15:46:53

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.420	6.411	0.009	97	276178	4.00	
* 2 Naphthalene-d8	136	7.531	7.527	0.004	99	903735	4.00	
* 3 Acenaphthene-d10	164	9.036	9.037	-0.001	90	387181	4.00	
* 4 Phenanthrene-d10	188	10.311	10.311	0.000	95	809605	4.00	
* 5 Chrysene-d12	240	12.619	12.619	0.000	93	693840	4.00	
* 6 Perylene-d12	264	14.432	14.437	-0.005	91	494391	4.00	
$ 7 2-Fluorophenol	112	5.309	5.199	0.110	93	475427	3.98	
$ 8 Phenol-d5	99	6.074	6.046	0.028	93	737606	4.58	
$ 9 Nitrobenzene-d5	82	6.892	6.887	0.005	86	578848	6.25	
$ 10 2-Fluorobiphenyl (Surr)	172	8.430	8.431	-0.001	99	762711	6.91	
$ 11 2,4,6-Tribromophenol	330	9.705	9.710	-0.005	87	70121	6.90	
$ 12 Terphenyl-d14	244	11.633	11.638	-0.005	97	933334	7.01	
43 Phenol	94		6.055				ND	
69 Bis(2-chloroethyl)ether	93		6.147				ND	
46 2-Chlorophenol	128		6.228				ND	
47 1,3-Dichlorobenzene	146		6.368				ND	
48 1,4-Dichlorobenzene	146		6.426				ND	
49 Benzyl alcohol	108	6.521	6.507	0.014	94	11232	0.1270	
50 1,2-Dichlorobenzene	146		6.570				ND	
51 2-Methylphenol	108		6.594				ND	
53 2,2'-oxybis[1-chloropropan	45		6.628				ND	
21 3 & 4 Methylphenol	108		6.724				ND	
57 N-Nitrosodi-n-propylamine	70		6.738				ND	
61 Hexachloroethane	117		6.878				ND	
62 Nitrobenzene	77		6.902				ND	
64 Isophorone	82	7.108	7.104	0.004	98	121981	0.6753	
66 2-Nitrophenol	139	7.190	7.185	0.005	88	7258	0.1873	
65 2,4-Dimethylphenol	107		7.190				ND	
71 Benzoic acid	122		7.238				ND	
70 Bis(2-chloroethoxy)methane	93		7.267				ND	
73 2,4-Dichlorophenol	162		7.387				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
74 1,2,4-Trichlorobenzene	180		7.474				ND	
75 Naphthalene	128	7.550	7.546	0.004	94	33270	0.1395	
76 4-Chloroaniline	127		7.565				ND	
79 Hexachlorobutadiene	225		7.652				ND	
86 4-Chloro-3-methylphenol	107		7.955				ND	
87 2-Methylnaphthalene	142	8.137	8.138	-0.001	91	22049	0.1517	
89 Hexachlorocyclopentadiene	237		8.282				ND	
92 2,4,6-Trichlorophenol	196		8.364				ND	
93 2,4,5-Trichlorophenol	196		8.402				ND	
100 2-Chloronaphthalene	162		8.556				ND	
102 2-Nitroaniline	65		8.618				ND	
105 Dimethyl phthalate	163		8.748				ND	
107 2,6-Dinitrotoluene	165		8.806				ND	
109 Acenaphthylene	152		8.921				ND	
110 3-Nitroaniline	138		8.960				ND	
111 2,4-Dinitrophenol	184		9.046				ND	
112 Acenaphthene	153		9.066				ND	
113 4-Nitrophenol	109		9.070				ND	
114 2,4-Dinitrotoluene	165		9.157				ND	
116 Dibenzofuran	168		9.210				ND	
121 Diethyl phthalate	149	9.339	9.345	-0.006	57	16730	0.1561	
123 4-Chlorophenyl phenyl ethe	204		9.474				ND	
125 4-Nitroaniline	138		9.484				ND	
126 Fluorene	166		9.503				ND	
128 4,6-Dinitro-2-methylphenol	198		9.513				ND	
131 N-Nitrosodiphenylamine	169		9.571				ND	
139 4-Bromophenyl phenyl ether	248		9.898				ND	
141 Hexachlorobenzene	284		9.989				ND	
143 Pentachlorophenol	266		10.143				ND	
148 Phenanthrene	178	10.330	10.330	0.000	95	19380	0.0836	
149 Anthracene	178		10.374				ND	
151 Carbazole	167		10.489				ND	
154 Di-n-butyl phthalate	149	10.724	10.725	-0.001	99	31841	0.1280	
159 Fluoranthene	202		11.355				ND	
161 Pyrene	202		11.557				ND	
168 Butyl benzyl phthalate	149		12.013				ND	
173 Bis(2-ethylhexyl) phthalat	149	12.499	12.504	-0.005	95	36471	0.2275	
175 3,3'-Dichlorobenzidine	252		12.538				ND	
177 Benzo[a]anthracene	228		12.610				ND	
178 Chrysene	228		12.648				ND	
180 Di-n-octyl phthalate	149		13.177				ND	
182 Benzo[b]fluoranthene	252		13.870				ND	
183 Benzo[k]fluoranthene	252		13.903				ND	
184 Benzo[a]pyrene	252		14.355				ND	
188 Indeno[1,2,3-cd]pyrene	276		16.423				ND	
189 Dibenz(a,h)anthracene	278		16.428				ND	
190 Benzo[g,h,i]perylene	276		17.039				ND	

Reagents:

SMIS80PPMW_00011 Amount Added: 5.00 Units: uL Run Reagent

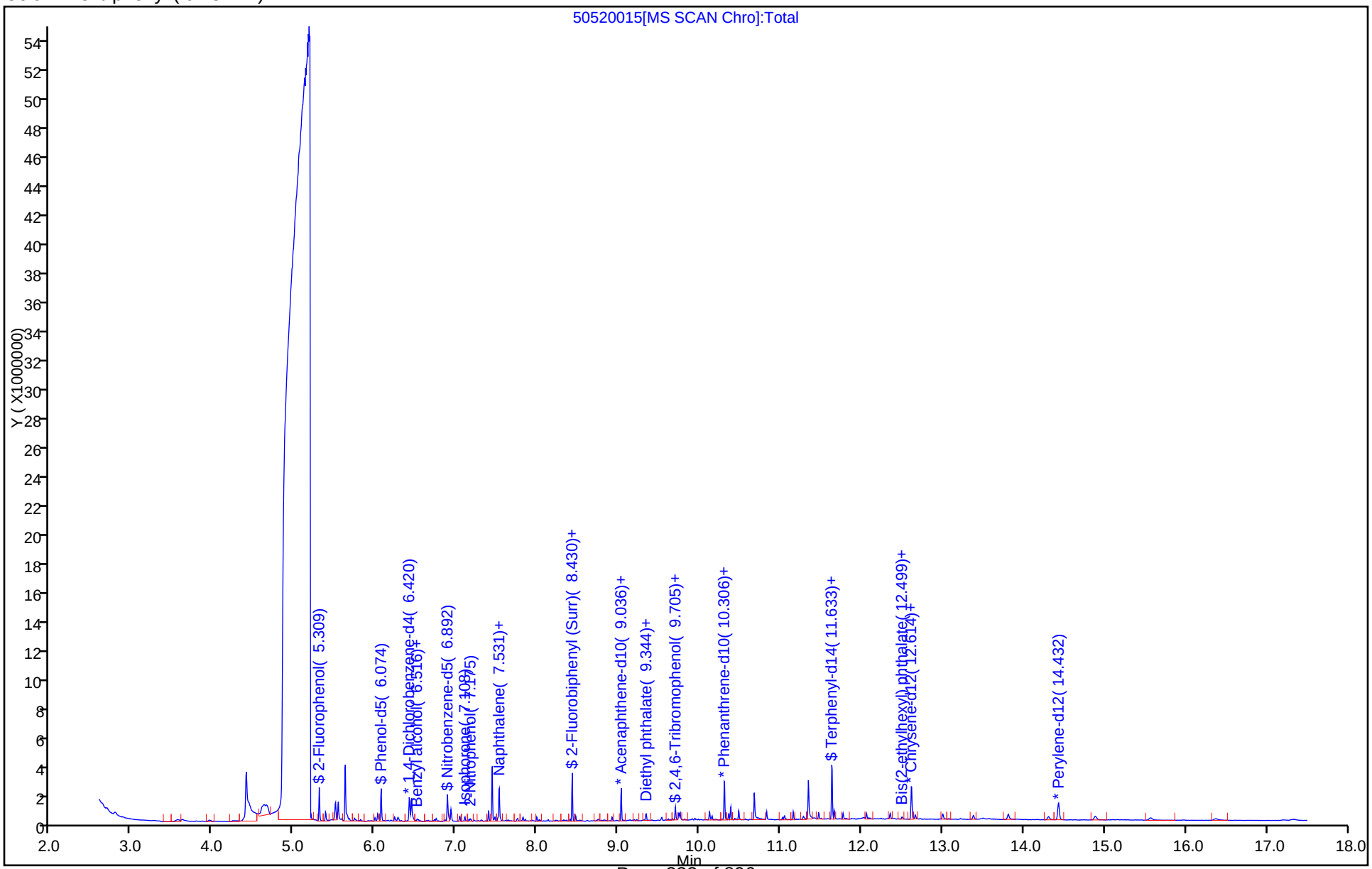
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TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520015.D

Injection Date:	20-May-2015 15:20:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	240-50067-A-3-B	Lab Sample ID:	240-50067-3	Worklist Smp#:	15
Client ID:	079SB-0391M-0001-SO				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



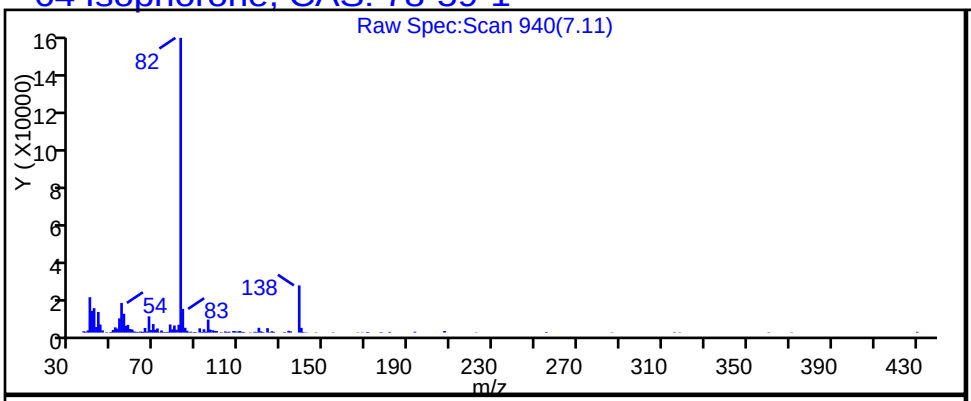
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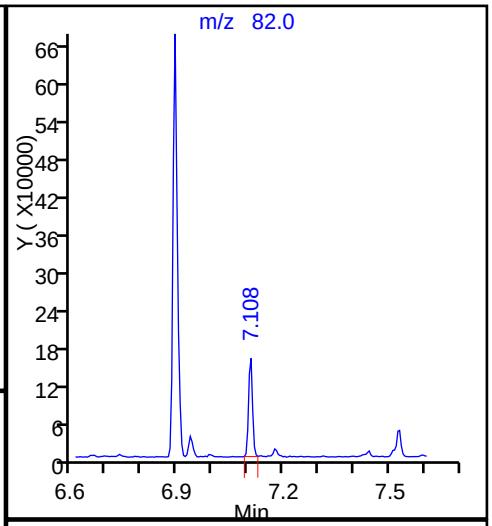
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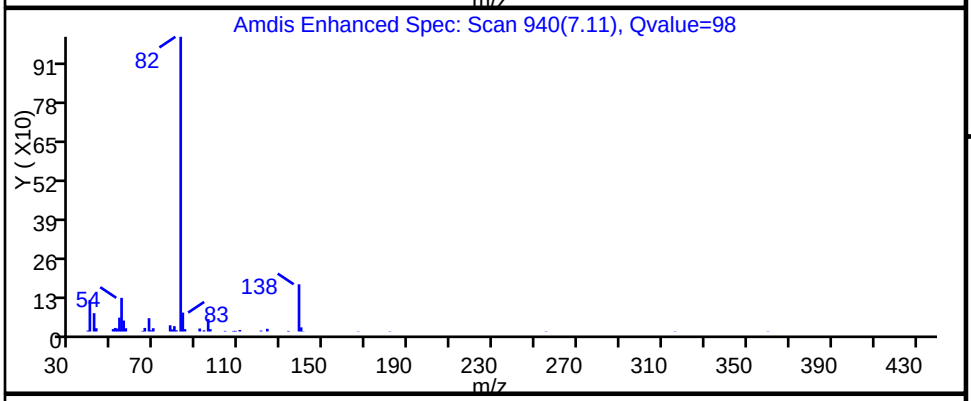
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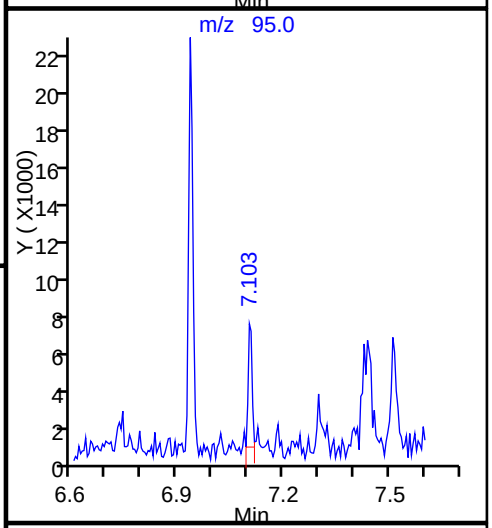
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Lims ID:	240-50067-A-3-B	Lab Sample ID:	240-50067-3
Client ID:	079SB-0391M-0001-SO		
Operator ID:	001574	ALS Bottle#:	15 Worklist Smp#: 15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN

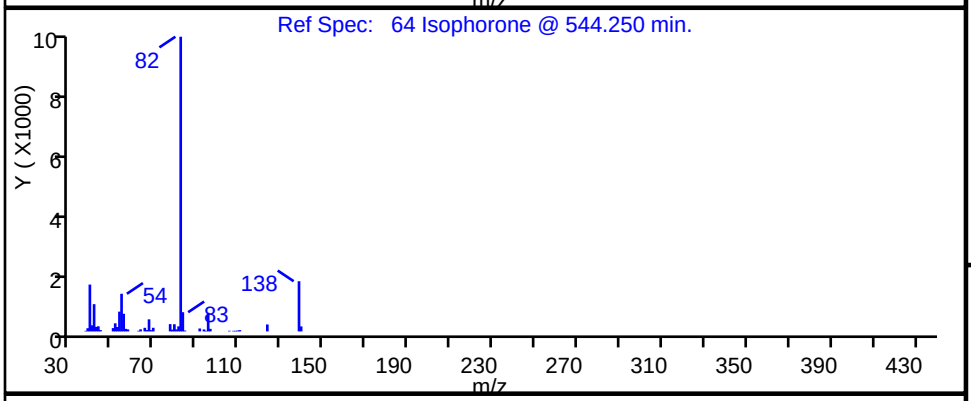
64 Isophorone, CAS: 78-59-1

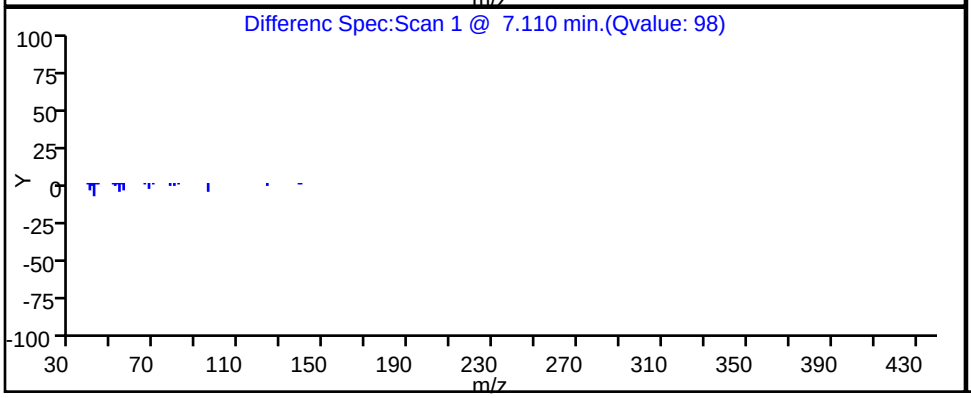


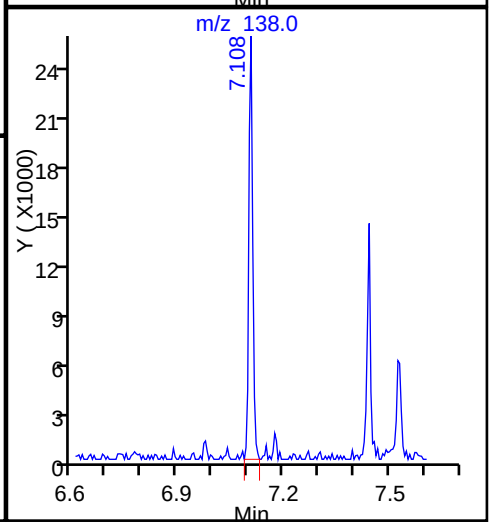












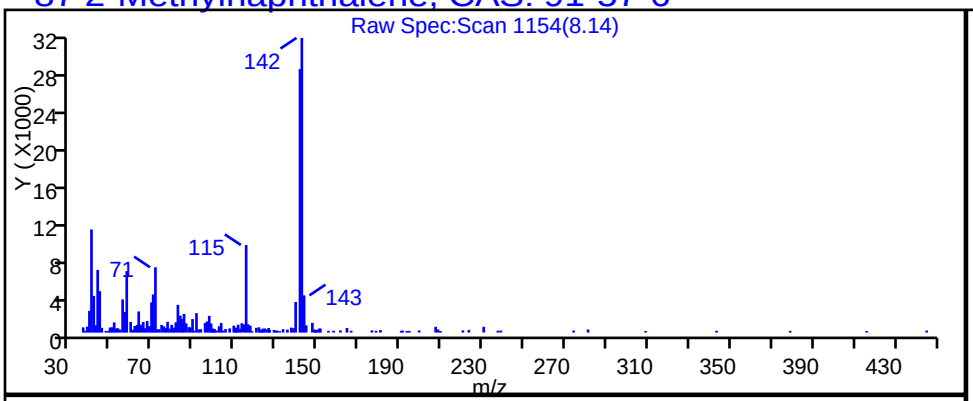
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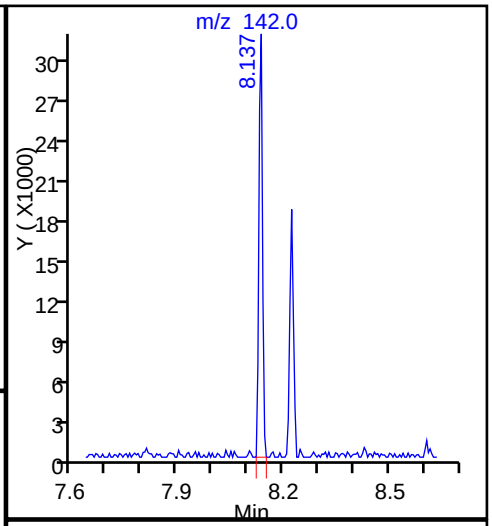
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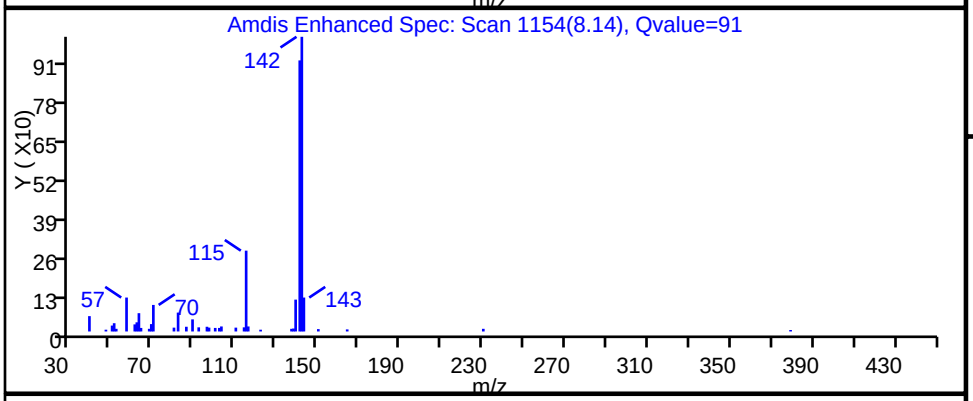
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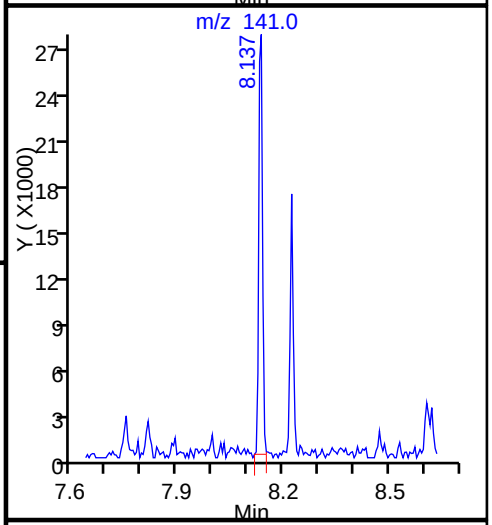
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Lims ID:	240-50067-A-3-B	Lab Sample ID:	240-50067-3
Client ID:	079SB-0391M-0001-SO		
Operator ID:	001574	ALS Bottle#:	15 Worklist Smp#: 15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN

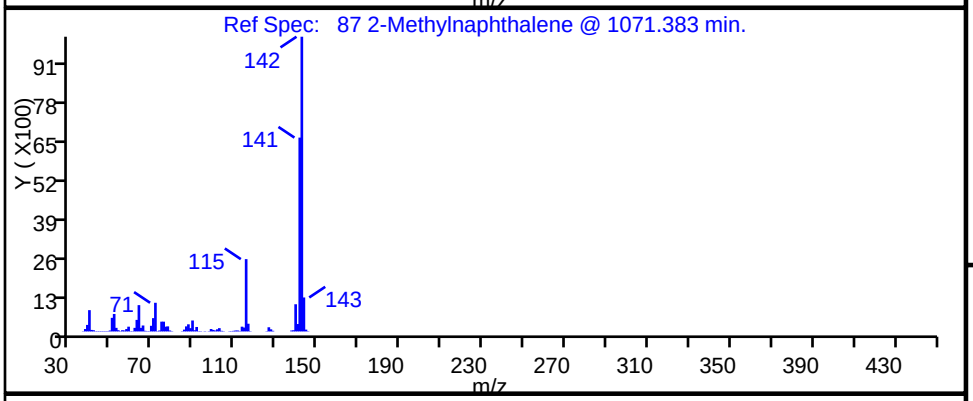
87 2-Methylnaphthalene, CAS: 91-57-6

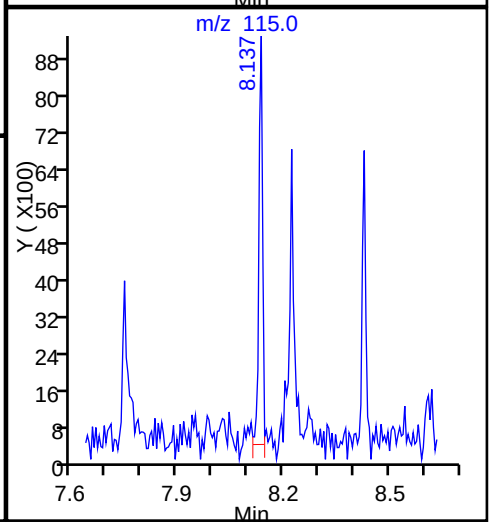


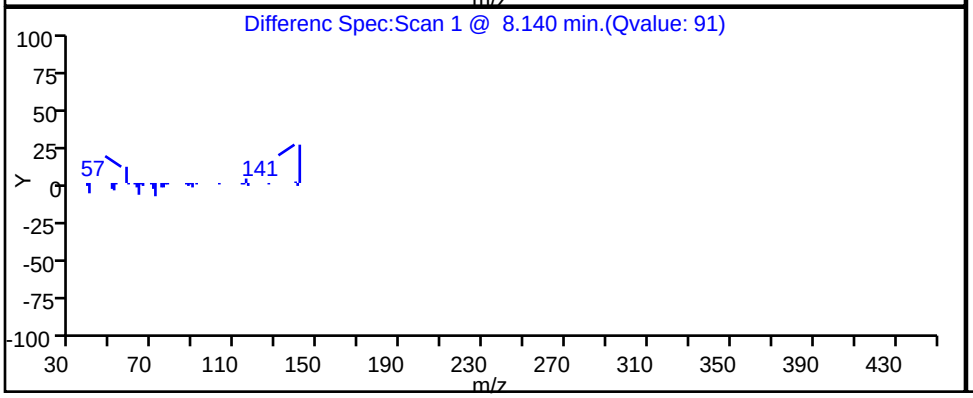












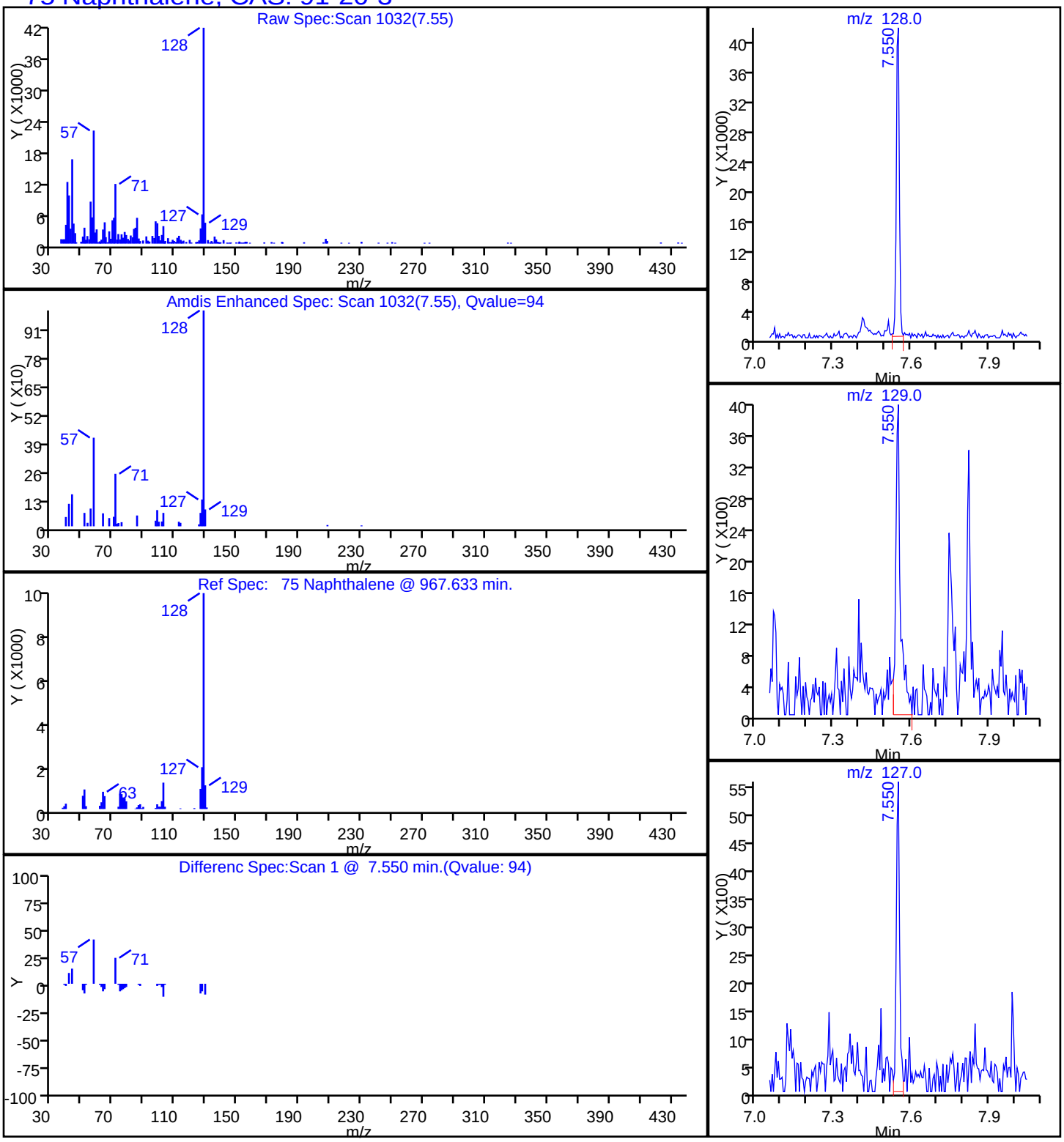
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Lims ID:	240-50067-A-3-B	Lab Sample ID:	240-50067-3		
Client ID:	079SB-0391M-0001-SO				
Operator ID:	001574	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

75 Naphthalene, CAS: 91-20-3



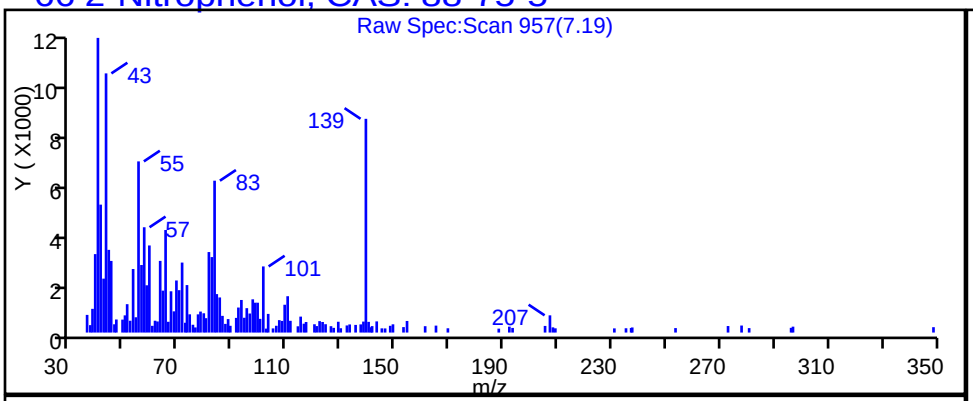
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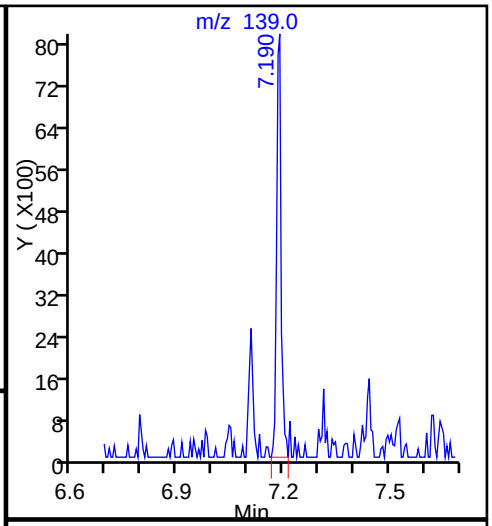
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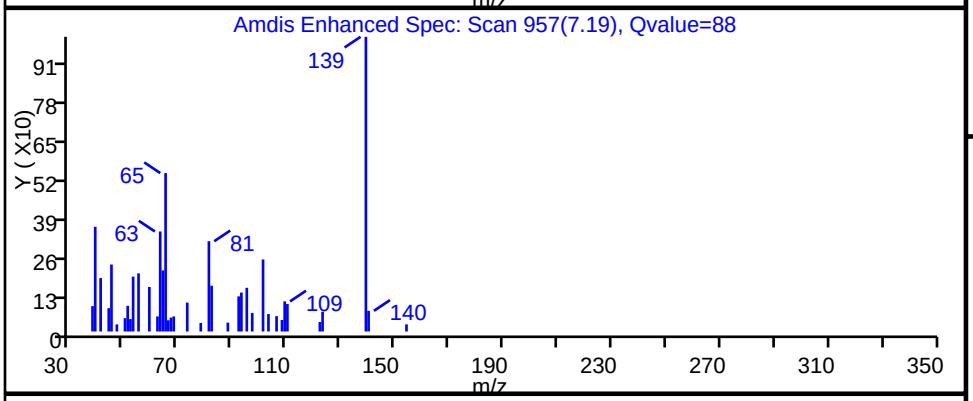
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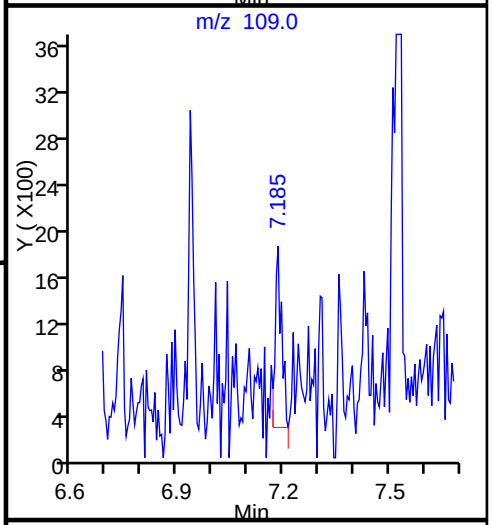
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Client ID:	079SB-0391M-0001-SO				
Operator ID:	001574	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

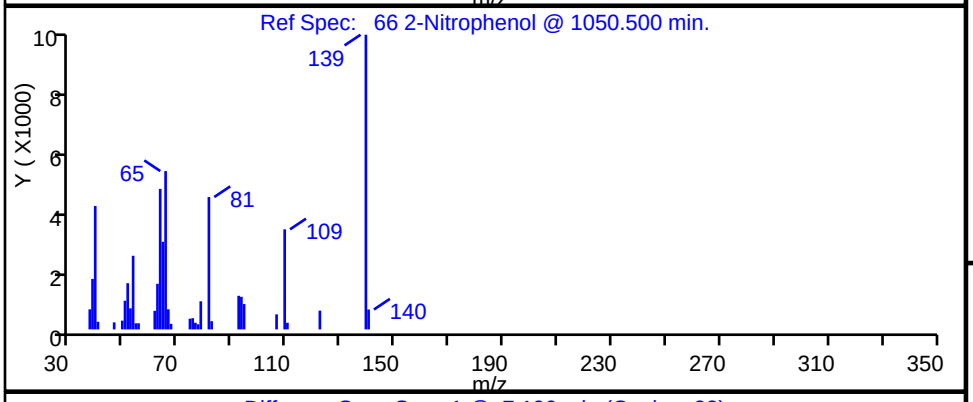
66 2-Nitrophenol, CAS: 88-75-5

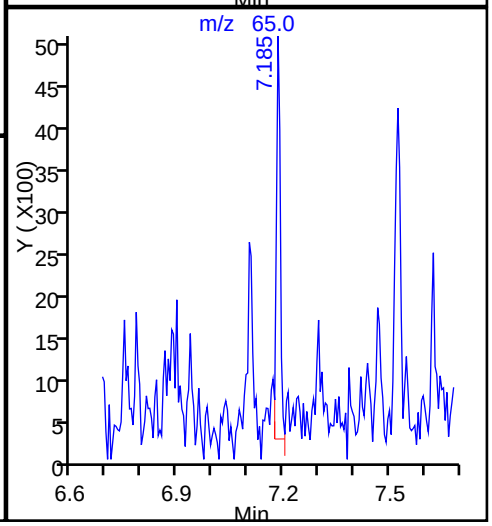


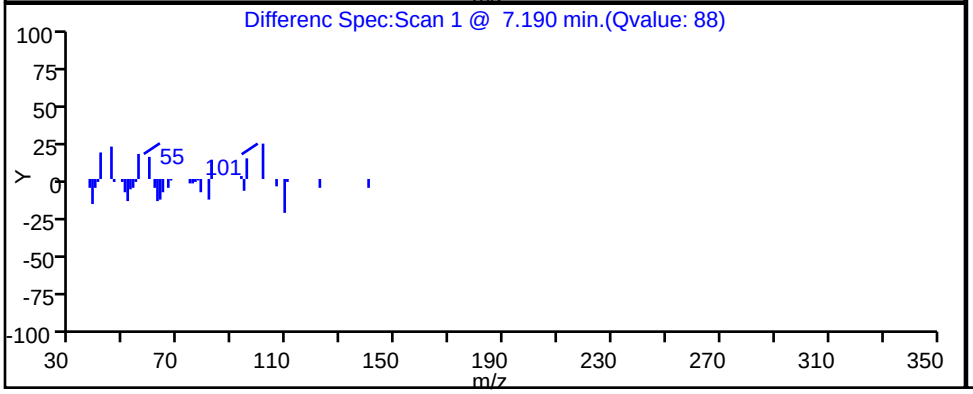












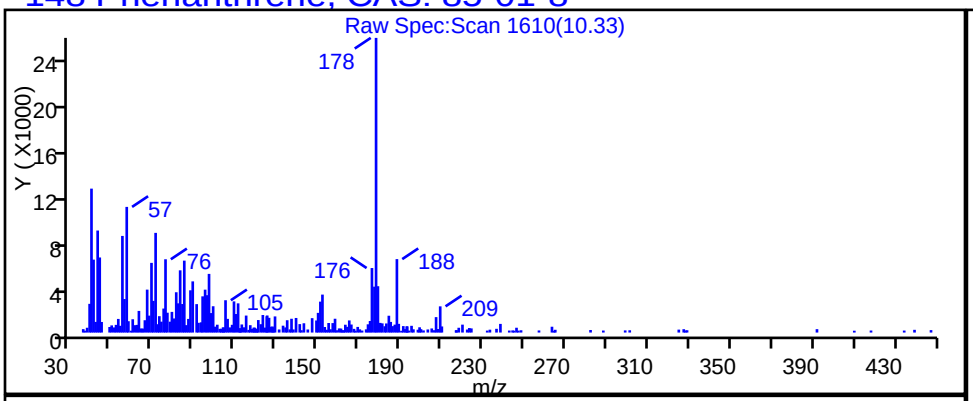
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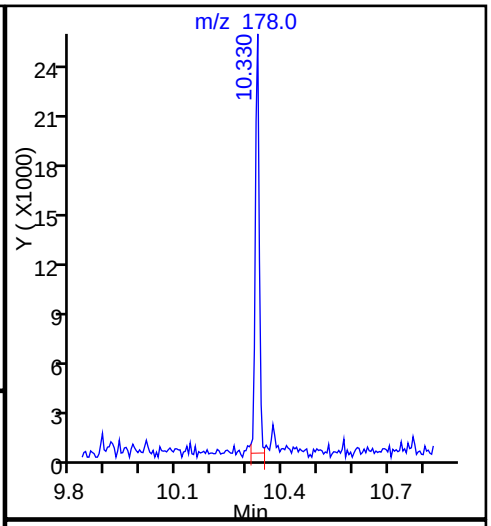
TestAmerica Canton

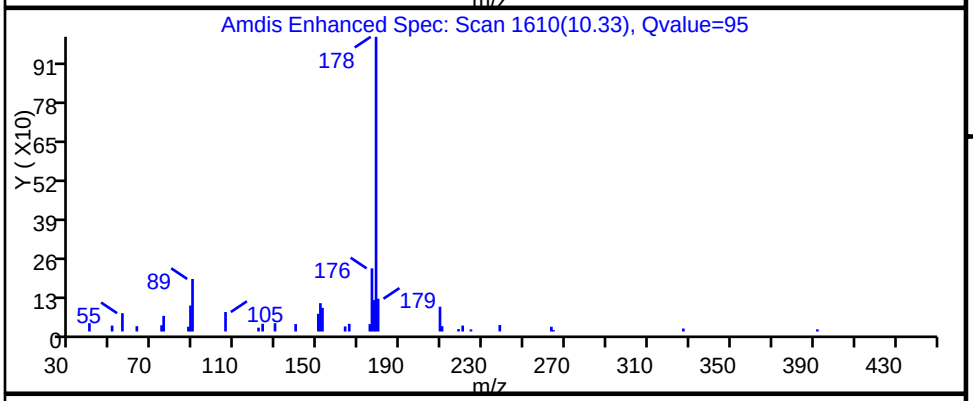
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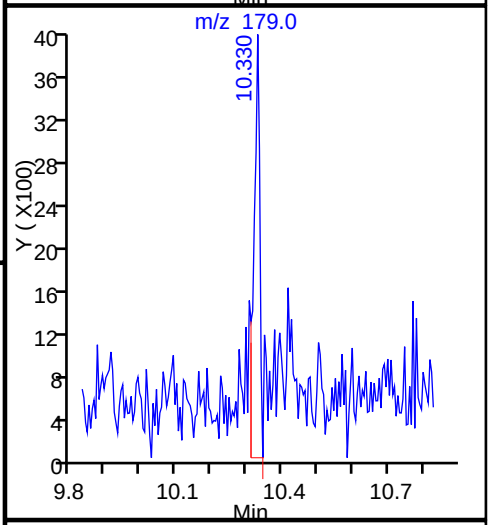
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Lims ID:	240-50067-A-3-B	Lab Sample ID:	240-50067-3
Client ID:	079SB-0391M-0001-SO		
Operator ID:	001574	ALS Bottle#:	15 Worklist Smp#: 15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000
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Column:	5% phenyl (0.18 mm)	Detector	MS SCAN

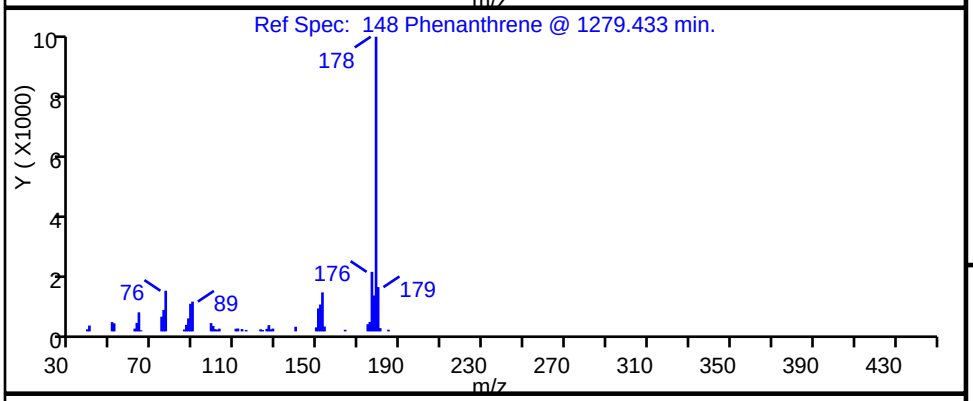
148 Phenanthrene, CAS: 85-01-8

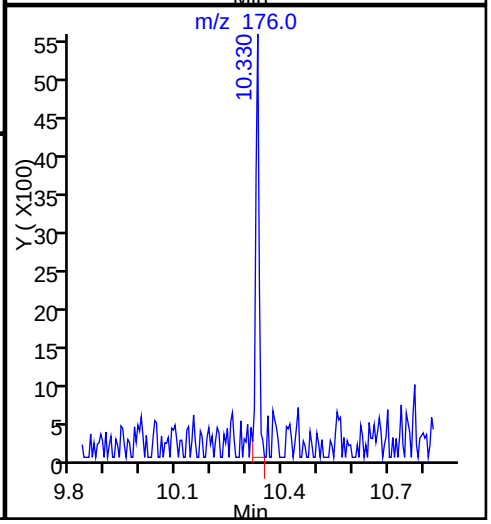


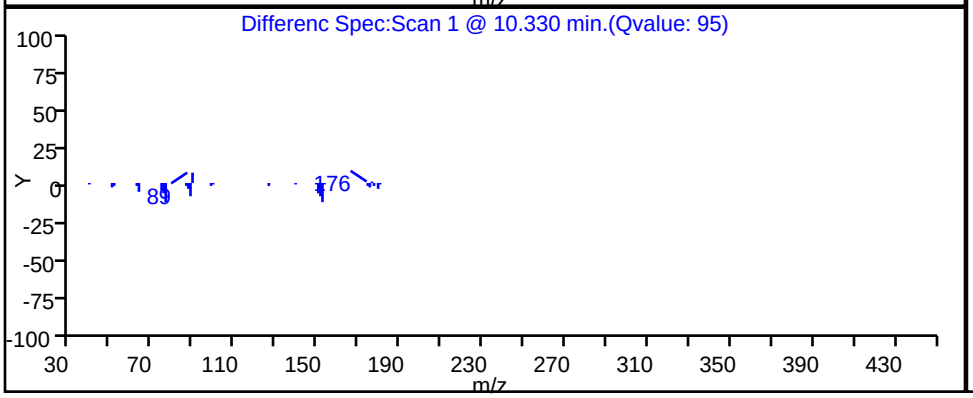












FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0392M-0001-SO | Lab Sample ID: 240-50067-4

Matrix: Solid | Lab File ID: 50520016.D

Analysis Method: 8270C | Date Collected: 04/29/2015 15:23

Extract. Method: 3540C | Date Extracted: 05/12/2015 12:12

Sample wt/vol: 29.62(g) | Date Analyzed: 05/20/2015 15:45

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
83-32-9	Acenaphthene	3.4	U	6.9	3.4	0.79
208-96-8	Acenaphthylene	1.7	U	6.9	1.7	0.36
120-12-7	Anthracene	3.4	U	6.9	3.4	0.81
56-55-3	Benzo[a]anthracene	3.4	U	6.9	3.4	0.66
50-32-8	Benzo[a]pyrene	3.4	U	6.9	3.4	0.67
205-99-2	Benzo[b]fluoranthene	3.4	U	6.9	3.4	0.61
191-24-2	Benzo[g,h,i]perylene	1.7	U	6.9	1.7	0.36
65-85-0	Benzoic acid	140	U	690	140	37
207-08-9	Benzo[k]fluoranthene	3.4	U	6.9	3.4	0.71
100-51-6	Benzyl alcohol	69	U	340	69	22
111-91-1	Bis(2-chloroethoxy)methane	69	U	100	69	23
111-44-4	Bis(2-chloroethyl)ether	3.4	U	100	3.4	2.1
108-60-1	bis (2-chloroisopropyl) ether	35	U	100	35	9.9
117-81-7	Bis(2-ethylhexyl) phthalate	35	U	73	35	20
101-55-3	4-Bromophenyl phenyl ether	35	U	52	35	14
85-68-7	Butyl benzyl phthalate	35	U	73	35	10
86-74-8	Carbazole	35	U	52	35	28
106-47-8	4-Chloroaniline	69	U	160	69	18
59-50-7	4-Chloro-3-methylphenol	69	U	160	69	22
91-58-7	2-Chloronaphthalene	1.7	U	52	1.7	0.47
95-57-8	2-Chlorophenol	35	U	52	35	8.5
7005-72-3	4-Chlorophenyl phenyl ether	35	U	52	35	14
218-01-9	Chrysene	3.4	U	6.9	3.4	1.1
53-70-3	Dibenz(a,h)anthracene	3.4	U	6.9	3.4	0.69
132-64-9	Dibenzofuran	3.4	U	52	3.4	0.69
95-50-1	1,2-Dichlorobenzene	35	U	52	35	10
541-73-1	1,3-Dichlorobenzene	35	U	52	35	11
106-46-7	1,4-Dichlorobenzene	35	U	52	35	21
91-94-1	3,3'-Dichlorobenzidine	69	U	100	69	19
120-83-2	2,4-Dichlorophenol	69	U	160	69	21
84-66-2	Diethyl phthalate	35	U	73	35	17
105-67-9	2,4-Dimethylphenol	69	U	160	69	21
131-11-3	Dimethyl phthalate	35	U	73	35	18
84-74-2	Di-n-butyl phthalate	35	U	73	35	16

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0392M-0001-SO | Lab Sample ID: 240-50067-4

Matrix: Solid | Lab File ID: 50520016.D

Analysis Method: 8270C | Date Collected: 04/29/2015 15:23

Extract. Method: 3540C | Date Extracted: 05/12/2015 12:12

Sample wt/vol: 29.62(g) | Date Analyzed: 05/20/2015 15:45

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
534-52-1	4,6-Dinitro-2-methylphenol	35	U	160	35	9.6
51-28-5	2,4-Dinitrophenol	69	U	340	69	22
121-14-2	2,4-Dinitrotoluene	69	U	210	69	18
606-20-2	2,6-Dinitrotoluene	69	U	210	69	22
117-84-0	Di-n-octyl phthalate	35	U	73	35	8.2
206-44-0	Fluoranthene	3.4	U	6.9	3.4	0.57
86-73-7	Fluorene	3.4	U	6.9	3.4	0.55
118-74-1	Hexachlorobenzene	3.4	U	6.9	3.4	2.2
87-68-3	Hexachlorobutadiene	35	U	52	35	5.8
77-47-4	Hexachlorocyclopentadiene	35	U	340	35	8.4
67-72-1	Hexachloroethane	35	U	52	35	9.4
193-39-5	Indeno[1,2,3-cd]pyrene	1.7	U	6.9	1.7	0.36
78-59-1	Isophorone	62		52	35	14
91-57-6	2-Methylnaphthalene	7.1		6.9	3.4	0.52
95-48-7	2-Methylphenol	69	U	210	69	11
15831-10-4	3 & 4 Methylphenol	69	U	420	69	21
91-20-3	Naphthalene	5.1	J	6.9	3.4	0.85
88-74-4	2-Nitroaniline	35	U	210	35	9.5
99-09-2	3-Nitroaniline	69	U	210	69	17
100-01-6	4-Nitroaniline	69	U	210	69	27
98-95-3	Nitrobenzene	3.4	U	100	3.4	2.3
88-75-5	2-Nitrophenol	16	J	52	35	8.6
100-02-7	4-Nitrophenol	69	U	340	69	18
621-64-7	N-Nitrosodi-n-propylamine	35	U	52	35	6.6
86-30-6	N-Nitrosodiphenylamine	35	U	52	35	22
87-86-5	Pentachlorophenol	35	U	160	35	9.5
85-01-8	Phenanthrene	5.8	J	6.9	3.4	0.76
108-95-2	Phenol	35	U	52	35	7.6
129-00-0	Pyrene	1.7	U	6.9	1.7	0.46
120-82-1	1,2,4-Trichlorobenzene	17	U	52	17	3.6
95-95-4	2,4,5-Trichlorophenol	69	U	160	69	26
88-06-2	2,4,6-Trichlorophenol	35	U	160	35	9.3

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0392M-0001-SO | Lab Sample ID: 240-50067-4

Matrix: Solid | Lab File ID: 50520016.D

Analysis Method: 8270C | Date Collected: 04/29/2015 15:23

Extract. Method: 3540C | Date Extracted: 05/12/2015 12:12

Sample wt/vol: 29.62(g) | Date Analyzed: 05/20/2015 15:45

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	70		45-105
367-12-4	2-Fluorophenol (Surr)	49		35-105
4165-60-0	Nitrobenzene-d5 (Surr)	64		35-100
4165-62-2	Phenol-d5 (Surr)	50		40-100
1718-51-0	Terphenyl-d14 (Surr)	74		30-125
118-79-6	2,4,6-Tribromophenol (Surr)	59		35-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520016.D
Lims ID: 240-50067-A-4-B Lab Sample ID: 240-50067-4
Client ID: 079SB-0392M-0001-SO
Sample Type: Client
Inject. Date: 20-May-2015 15:45:30 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043844-016
Misc. Info.: 240-50067-A-4-B240-50067-A-4-B
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-May-2015 08:02:18 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 20-May-2015 16:13:36

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.421	6.411	0.010	97	272826	4.00	
* 2 Naphthalene-d8	136	7.527	7.527	0.000	99	1007690	4.00	
* 3 Acenaphthene-d10	164	9.037	9.037	0.000	89	390033	4.00	
* 4 Phenanthrene-d10	188	10.306	10.311	-0.005	95	784474	4.00	
* 5 Chrysene-d12	240	12.619	12.619	0.000	92	705375	4.00	
* 6 Perylene-d12	264	14.432	14.437	-0.005	90	493331	4.00	
$ 7 2-Fluorophenol	112	5.296	5.199	0.097	93	580219	4.92	
$ 8 Phenol-d5	99	6.070	6.046	0.024	93	802577	5.04	
$ 9 Nitrobenzene-d5	82	6.892	6.887	0.005	86	659656	6.39	
$ 10 2-Fluorobiphenyl (Surr)	172	8.431	8.431	0.000	99	778512	7.00	
$ 11 2,4,6-Tribromophenol	330	9.705	9.710	-0.005	87	60550	5.92	
$ 12 Terphenyl-d14	244	11.634	11.638	-0.004	97	1002780	7.41	
43 Phenol	94		6.055				ND	
69 Bis(2-chloroethyl)ether	93		6.147				ND	
46 2-Chlorophenol	128		6.228				ND	
47 1,3-Dichlorobenzene	146		6.368				ND	
48 1,4-Dichlorobenzene	146		6.426				ND	
49 Benzyl alcohol	108	6.517	6.507	0.010	94	15031	0.1721	
50 1,2-Dichlorobenzene	146		6.570				ND	
51 2-Methylphenol	108		6.594				ND	
53 2,2'-oxybis[1-chloropropan	45		6.628				ND	
21 3 & 4 Methylphenol	108		6.724				ND	
57 N-Nitrosodi-n-propylamine	70		6.738				ND	
61 Hexachloroethane	117		6.878				ND	
62 Nitrobenzene	77		6.902				ND	
64 Isophorone	82	7.104	7.104	0.000	98	180746	0.8974	
66 2-Nitrophenol	139	7.185	7.185	0.000	88	9695	0.2244	
65 2,4-Dimethylphenol	107		7.190				ND	
71 Benzoic acid	122		7.238				ND	
70 Bis(2-chloroethoxy)methane	93		7.267				ND	
73 2,4-Dichlorophenol	162		7.387				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
74 1,2,4-Trichlorobenzene	180		7.474				ND	
75 Naphthalene	128	7.546	7.546	0.000	95	19672	0.0740	
76 4-Chloroaniline	127		7.565				ND	
79 Hexachlorobutadiene	225		7.652				ND	
86 4-Chloro-3-methylphenol	107		7.955				ND	
87 2-Methylnaphthalene	142	8.133	8.138	-0.005	94	16705	0.1030	
89 Hexachlorocyclopentadiene	237		8.282				ND	
92 2,4,6-Trichlorophenol	196		8.364				ND	
93 2,4,5-Trichlorophenol	196		8.402				ND	
100 2-Chloronaphthalene	162		8.556				ND	
102 2-Nitroaniline	65		8.618				ND	
105 Dimethyl phthalate	163		8.748				ND	
107 2,6-Dinitrotoluene	165		8.806				ND	
109 Acenaphthylene	152		8.921				ND	
110 3-Nitroaniline	138		8.960				ND	
111 2,4-Dinitrophenol	184		9.046				ND	
112 Acenaphthene	153		9.066				ND	
113 4-Nitrophenol	109		9.070				ND	
114 2,4-Dinitrotoluene	165		9.157				ND	
116 Dibenzofuran	168		9.210				ND	
121 Diethyl phthalate	149	9.340	9.345	-0.005	55	21647	0.2005	
123 4-Chlorophenyl phenyl ethe	204		9.474				ND	
125 4-Nitroaniline	138		9.484				ND	
126 Fluorene	166		9.503				ND	
128 4,6-Dinitro-2-methylphenol	198		9.513				ND	
131 N-Nitrosodiphenylamine	169		9.571				ND	
139 4-Bromophenyl phenyl ether	248		9.898				ND	
141 Hexachlorobenzene	284		9.989				ND	
143 Pentachlorophenol	266		10.143				ND	
148 Phenanthrene	178	10.330	10.330	0.000	95	18709	0.0833	
149 Anthracene	178		10.374				ND	
151 Carbazole	167		10.489				ND	
154 Di-n-butyl phthalate	149	10.725	10.725	0.000	99	39543	0.1641	
159 Fluoranthene	202		11.355				ND	
161 Pyrene	202		11.557				ND	
168 Butyl benzyl phthalate	149		12.013				ND	
173 Bis(2-ethylhexyl) phthalat	149	12.499	12.504	-0.005	91	34690	0.2129	
175 3,3'-Dichlorobenzidine	252		12.538				ND	
177 Benzo[a]anthracene	228		12.610				ND	
178 Chrysene	228		12.648				ND	
180 Di-n-octyl phthalate	149		13.177				ND	
182 Benzo[b]fluoranthene	252		13.870				ND	
183 Benzo[k]fluoranthene	252		13.903				ND	
184 Benzo[a]pyrene	252		14.355				ND	
188 Indeno[1,2,3-cd]pyrene	276		16.423				ND	
189 Dibenz(a,h)anthracene	278		16.428				ND	
190 Benzo[g,h,i]perylene	276		17.039				ND	

Reagents:

SMIS80PPMW_00011 Amount Added: 5.00 Units: uL Run Reagent

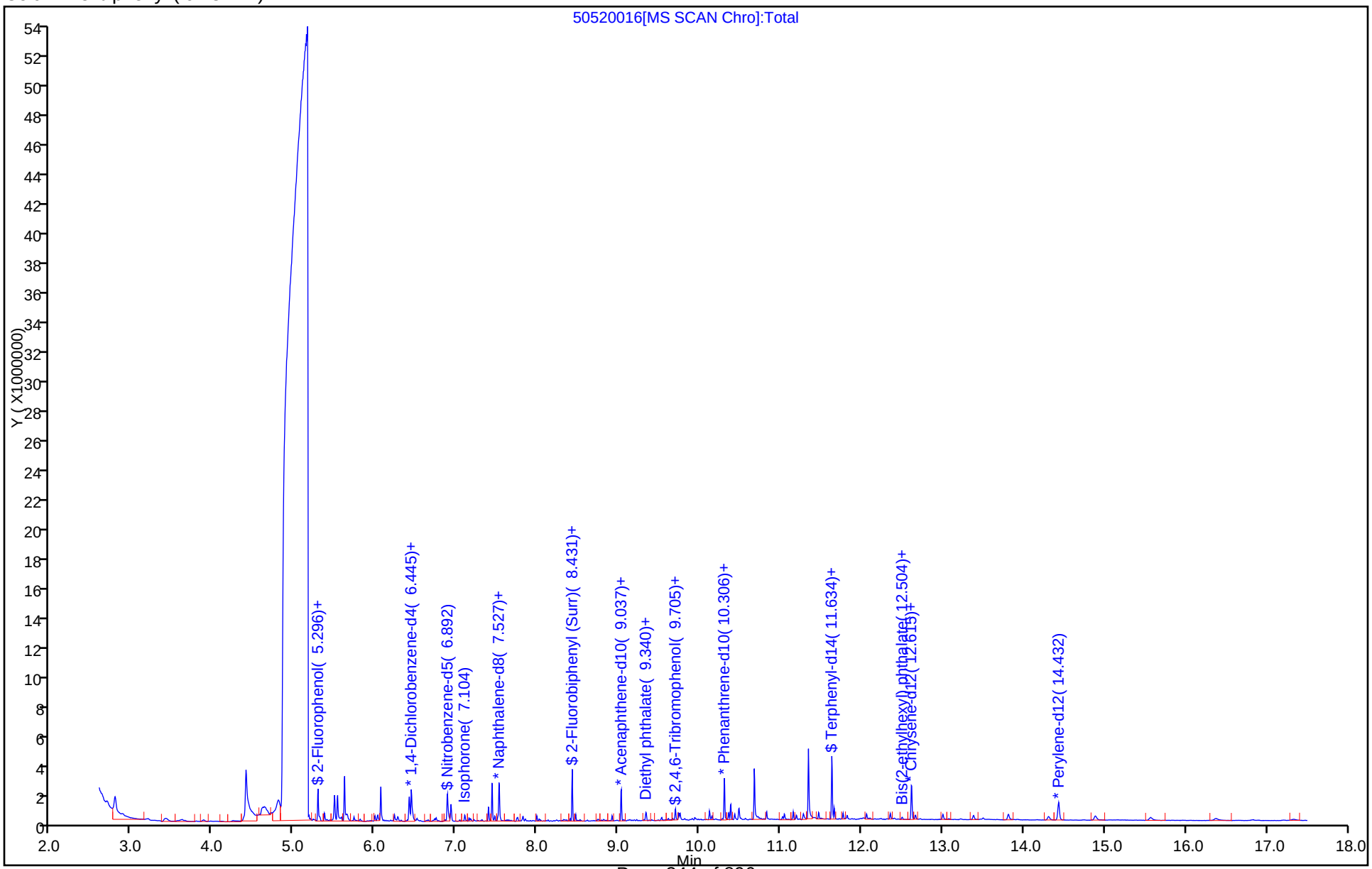
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TestAmerica Canton

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Injection Date:	20-May-2015 15:45:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	240-50067-A-4-B	Lab Sample ID:	240-50067-4	Worklist Smp#:	16
Client ID:	079SB-0392M-0001-SO				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



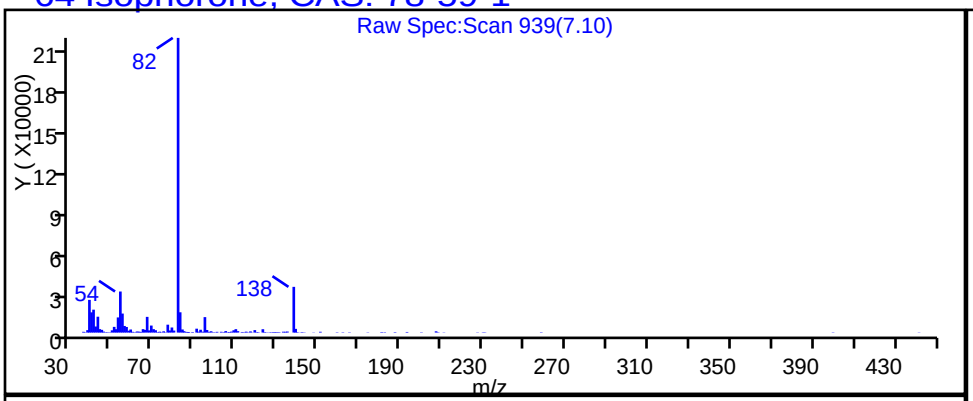
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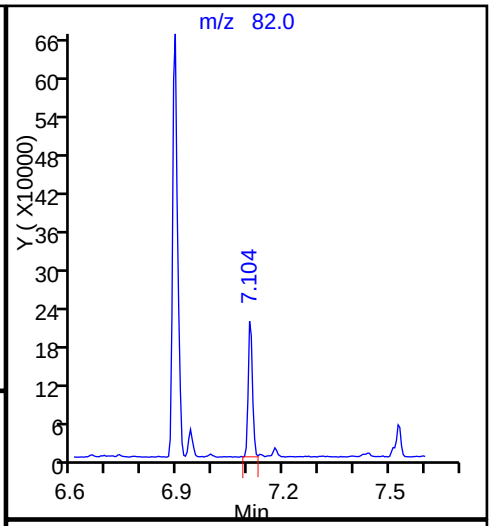
TestAmerica Canton

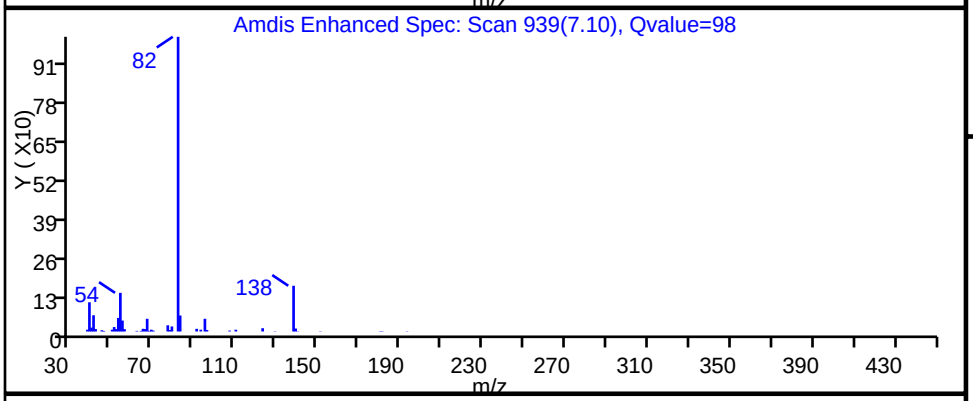
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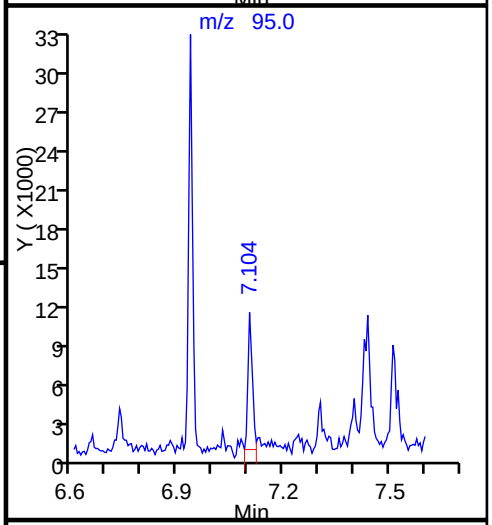
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Lims ID:	240-50067-A-4-B	Lab Sample ID:	240-50067-4		
Client ID:	079SB-0392M-0001-SO				
Operator ID:	001574	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

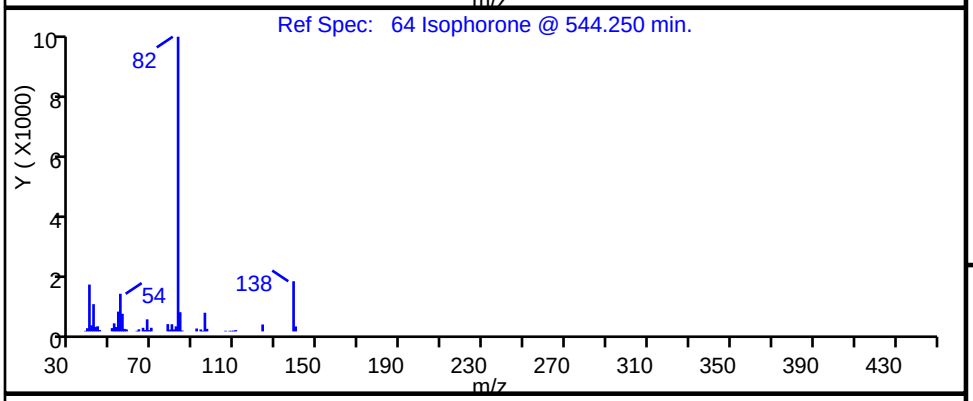
64 Isophorone, CAS: 78-59-1

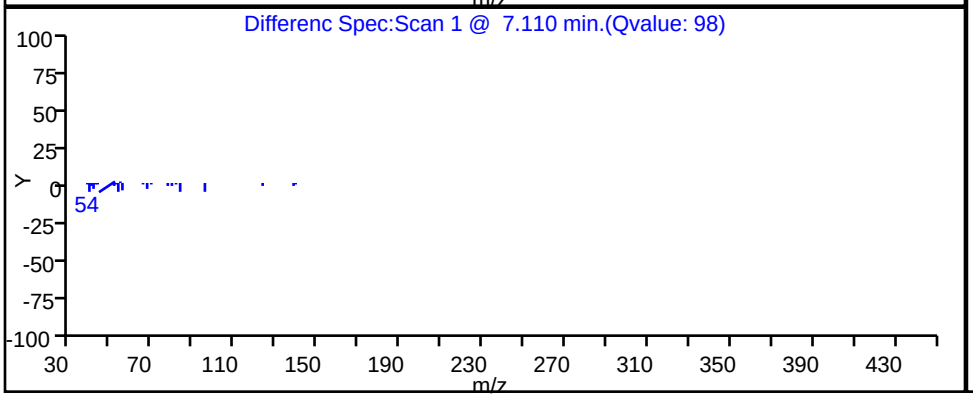


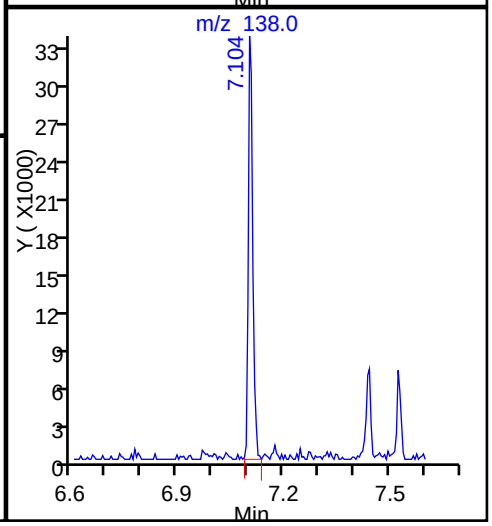












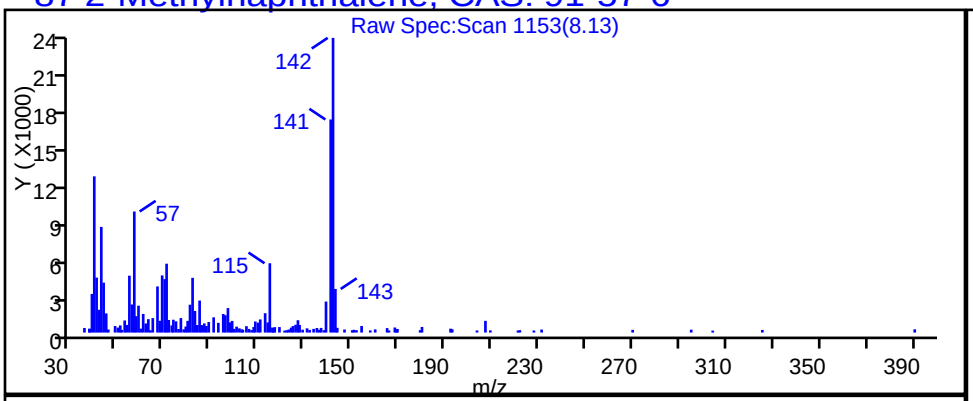
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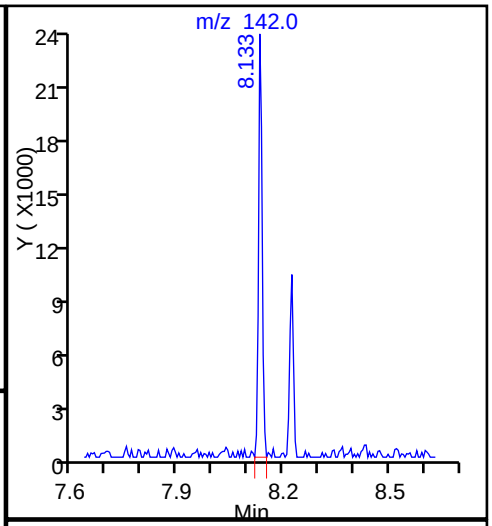
TestAmerica Canton

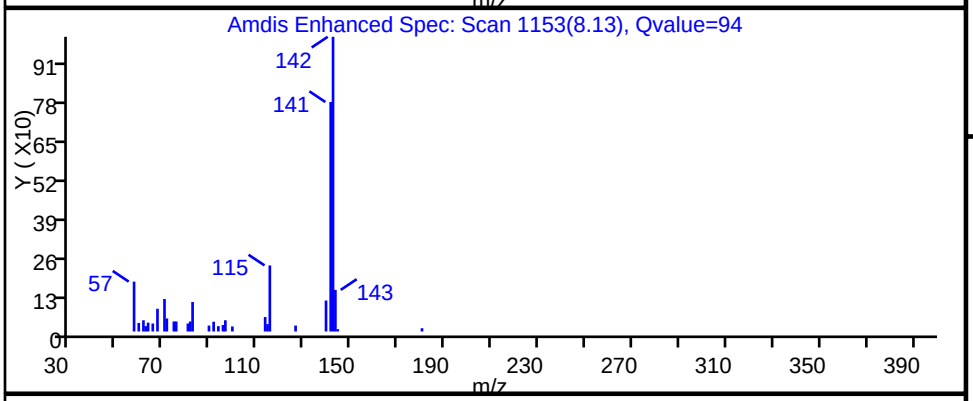
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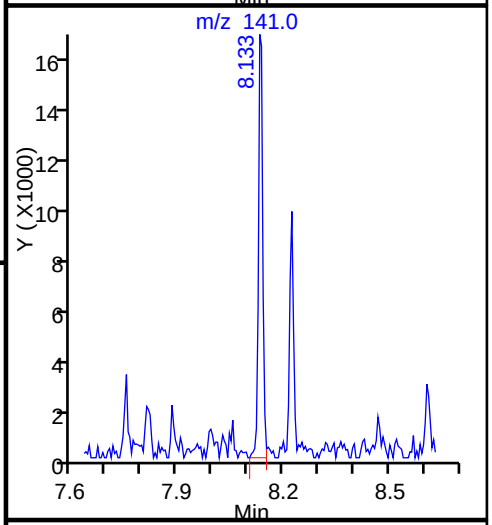
Injection Date:	20-May-2015 15:45:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-4-B	Lab Sample ID:	240-50067-4		
Client ID:	079SB-0392M-0001-SO				
Operator ID:	001574	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

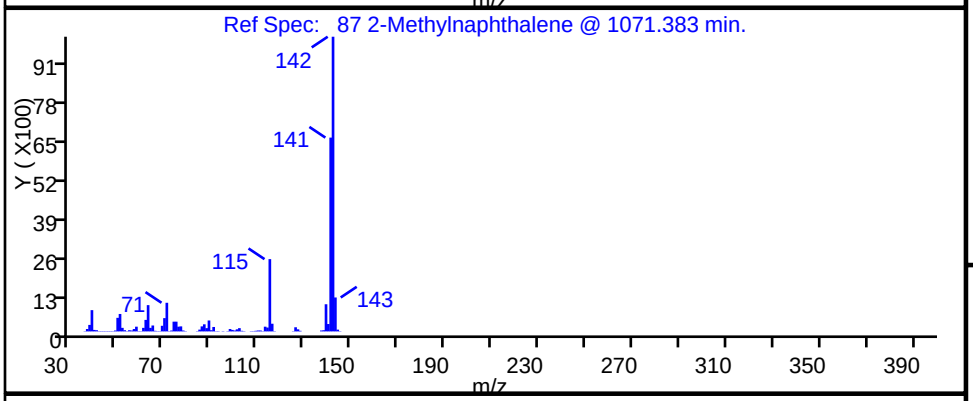
87 2-Methylnaphthalene, CAS: 91-57-6

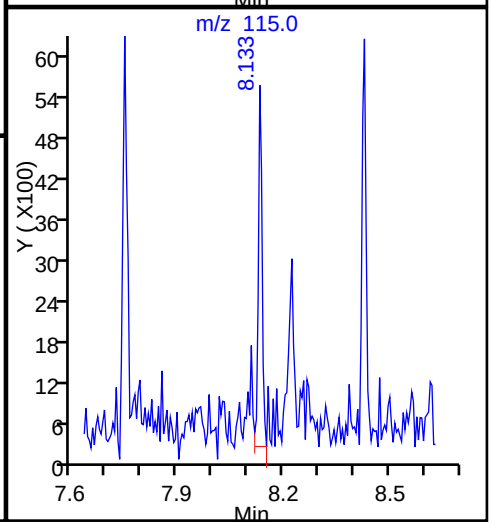


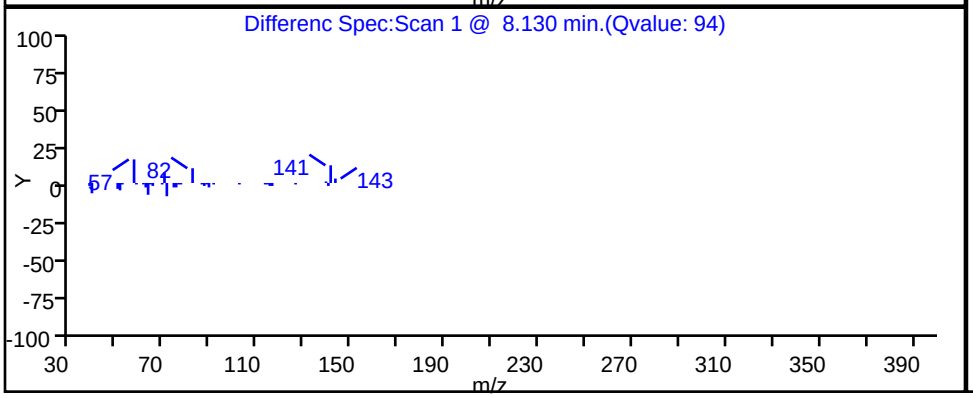












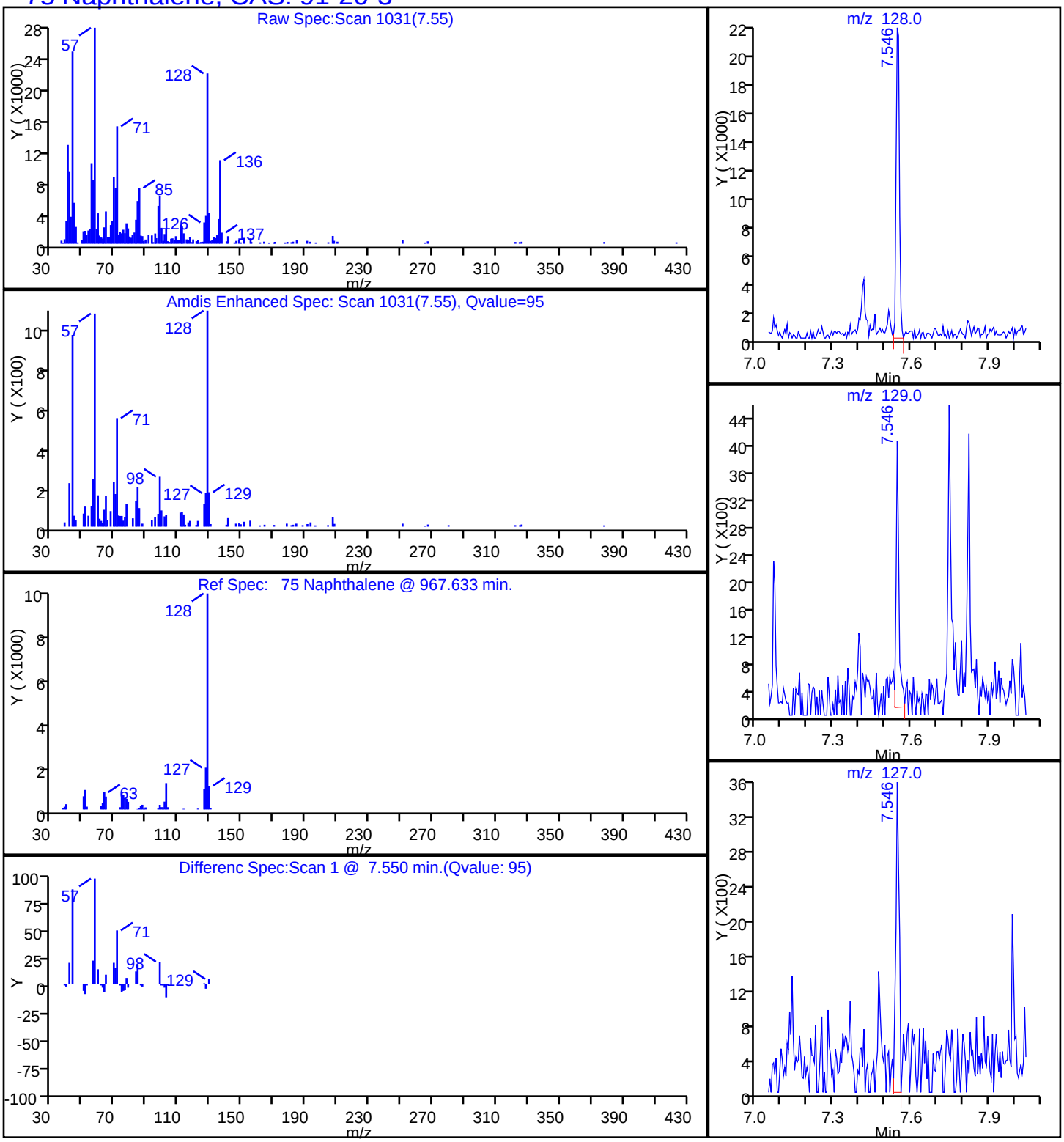
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TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520016.D

Injection Date:	20-May-2015 15:45:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-4-B	Lab Sample ID:	240-50067-4		
Client ID:	079SB-0392M-0001-SO				
Operator ID:	001574	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

75 Naphthalene, CAS: 91-20-3



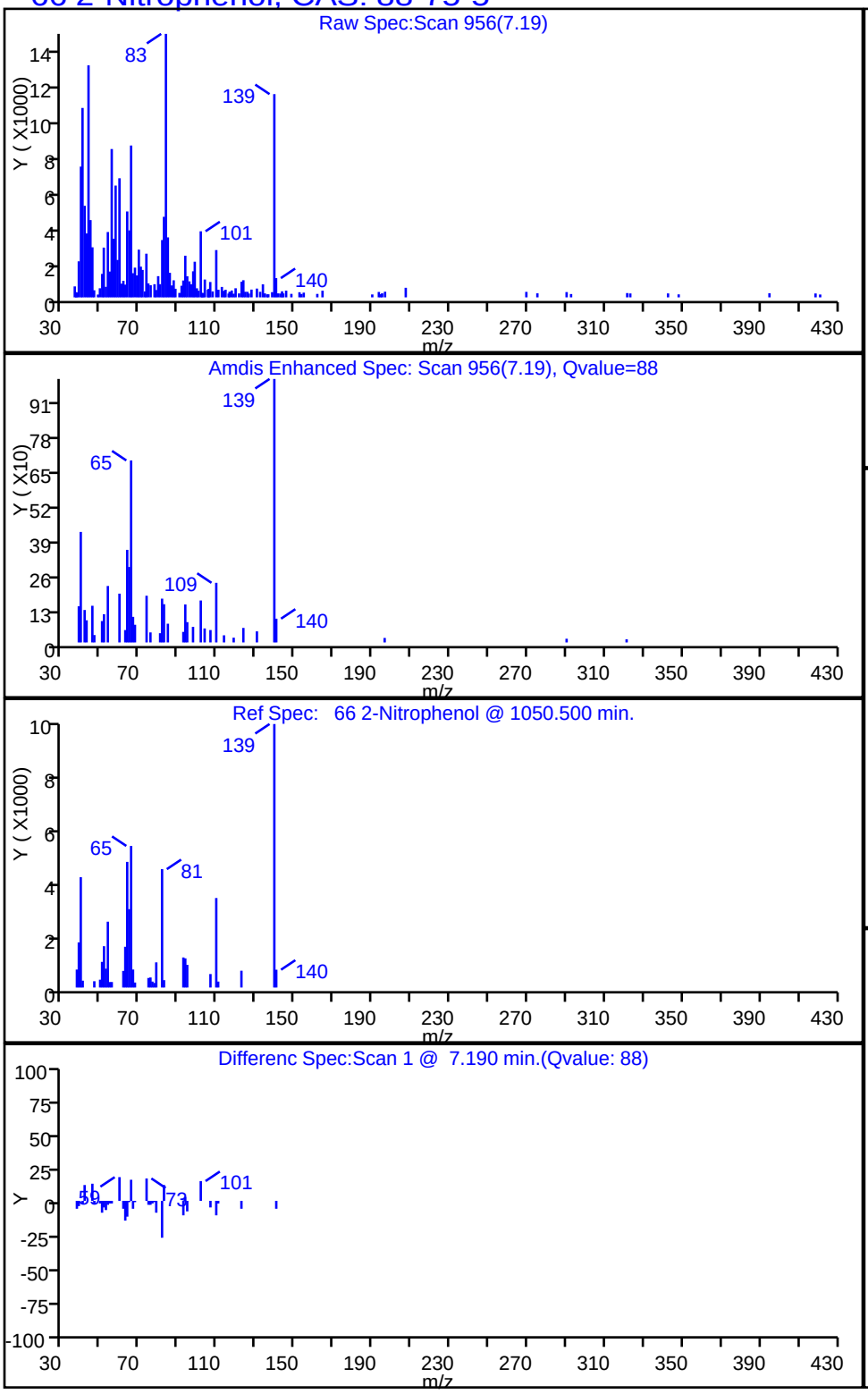
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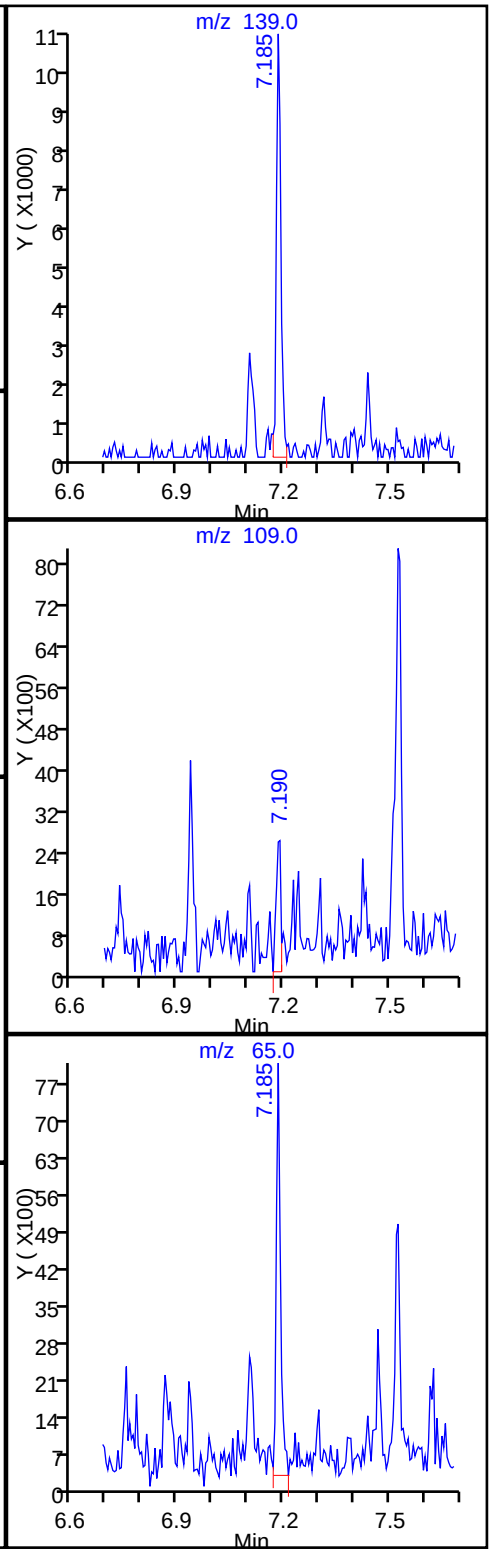
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520016.D

Injection Date:	20-May-2015 15:45:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-4-B	Lab Sample ID:	240-50067-4		
Client ID:	079SB-0392M-0001-SO				
Operator ID:	001574	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

66 2-Nitrophenol, CAS: 88-75-5





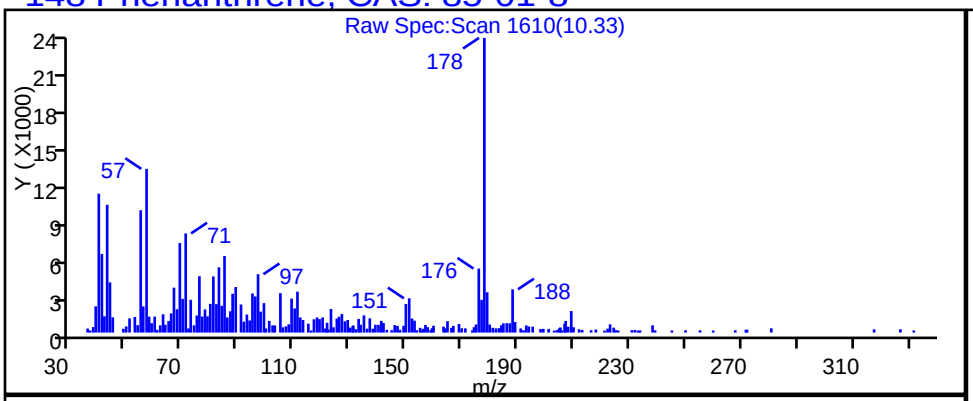
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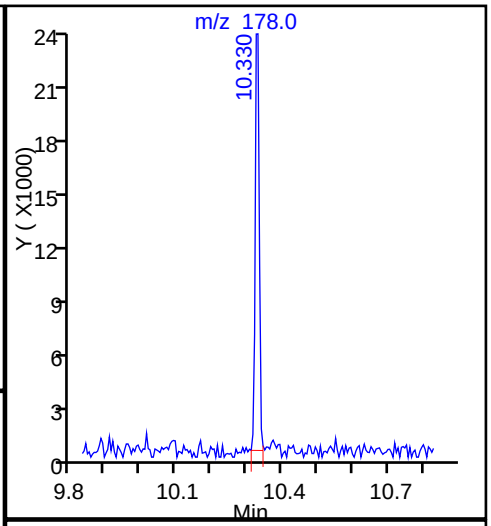
TestAmerica Canton

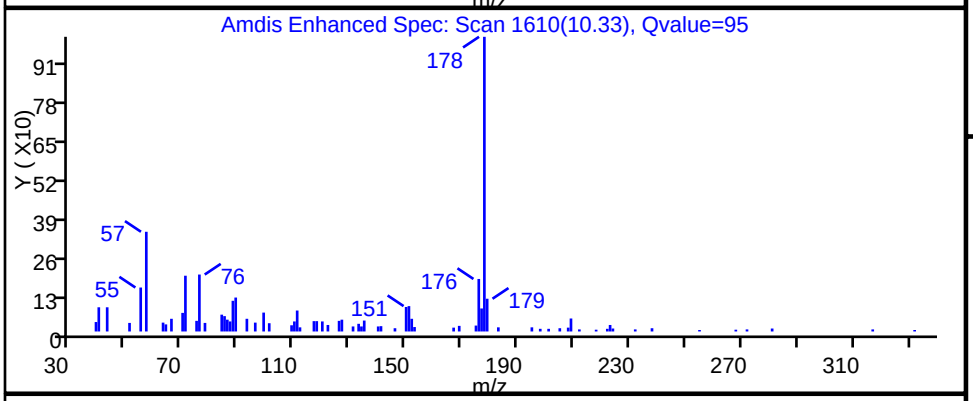
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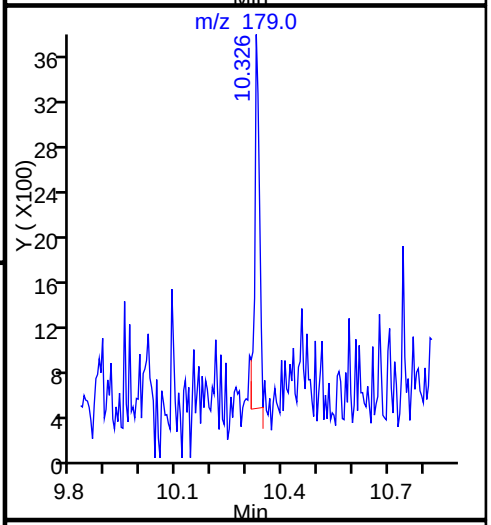
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Lims ID:	240-50067-A-4-B	Lab Sample ID:	240-50067-4		
Client ID:	079SB-0392M-0001-SO				
Operator ID:	001574	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

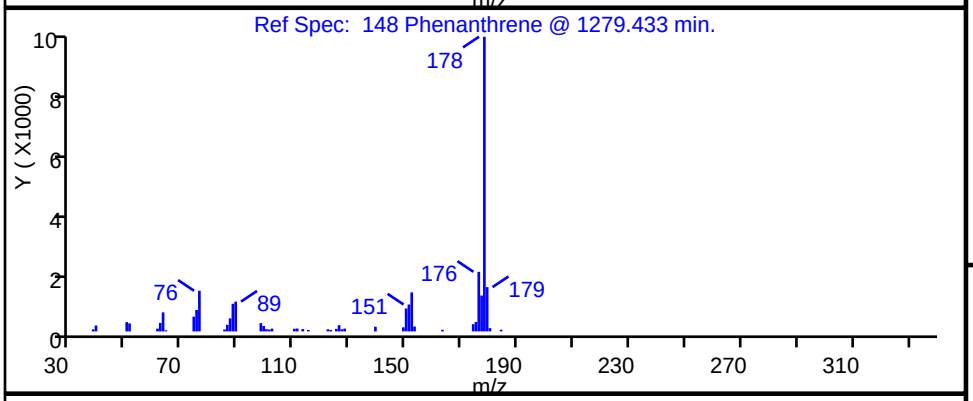
148 Phenanthrene, CAS: 85-01-8

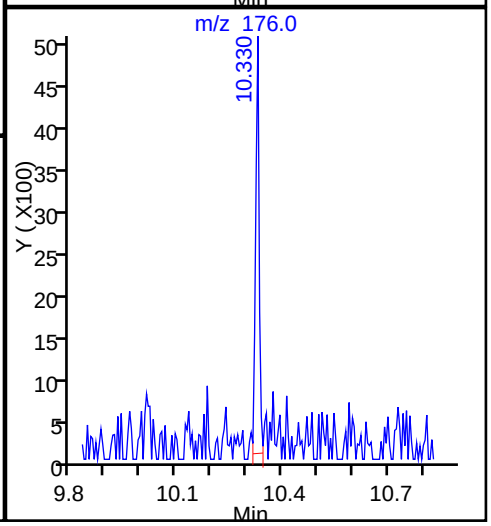


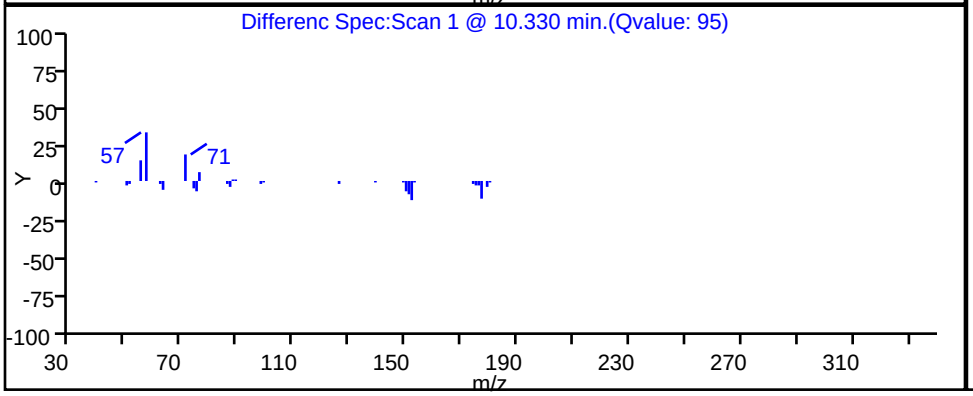












FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0393M-0001-SO | Lab Sample ID: 240-50067-5

Matrix: Solid | Lab File ID: 50520017.D

Analysis Method: 8270C | Date Collected: 04/29/2015 00:00

Extract. Method: 3540C | Date Extracted: 05/12/2015 12:12

Sample wt/vol: 30.42(g) | Date Analyzed: 05/20/2015 16:11

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
83-32-9	Acenaphthene	3.3	U	6.8	3.3	0.77
208-96-8	Acenaphthylene	1.7	U	6.8	1.7	0.35
120-12-7	Anthracene	3.3	U	6.8	3.3	0.79
56-55-3	Benzo[a]anthracene	3.3	U	6.8	3.3	0.64
50-32-8	Benzo[a]pyrene	3.3	U	6.8	3.3	0.65
205-99-2	Benzo[b]fluoranthene	3.3	U	6.8	3.3	0.60
191-24-2	Benzo[g,h,i]perylene	1.7	U	6.8	1.7	0.35
65-85-0	Benzoic acid	130	U	670	130	36
207-08-9	Benzo[k]fluoranthene	3.3	U	6.8	3.3	0.69
100-51-6	Benzyl alcohol	67	U	330	67	21
111-91-1	Bis(2-chloroethoxy)methane	67	U	100	67	22
111-44-4	Bis(2-chloroethyl)ether	3.3	U	100	3.3	2.0
108-60-1	bis (2-chloroisopropyl) ether	34	U	100	34	9.6
117-81-7	Bis(2-ethylhexyl) phthalate	34	U	71	34	19
101-55-3	4-Bromophenyl phenyl ether	34	U	51	34	13
85-68-7	Butyl benzyl phthalate	34	U	71	34	10
86-74-8	Carbazole	34	U	51	34	27
106-47-8	4-Chloroaniline	67	U	150	67	17
59-50-7	4-Chloro-3-methylphenol	67	U	150	67	21
91-58-7	2-Chloronaphthalene	1.7	U	51	1.7	0.46
95-57-8	2-Chlorophenol	34	U	51	34	8.3
7005-72-3	4-Chlorophenyl phenyl ether	34	U	51	34	13
218-01-9	Chrysene	3.3	U	6.8	3.3	1.1
53-70-3	Dibenz(a,h)anthracene	3.3	U	6.8	3.3	0.67
132-64-9	Dibenzofuran	3.3	U	51	3.3	0.67
95-50-1	1,2-Dichlorobenzene	34	U	51	34	9.8
541-73-1	1,3-Dichlorobenzene	34	U	51	34	11
106-46-7	1,4-Dichlorobenzene	34	U	51	34	20
91-94-1	3,3'-Dichlorobenzidine	67	U	100	67	18
120-83-2	2,4-Dichlorophenol	67	U	150	67	20
84-66-2	Diethyl phthalate	22	J	71	34	16
105-67-9	2,4-Dimethylphenol	67	U	150	67	20
131-11-3	Dimethyl phthalate	34	U	71	34	17
84-74-2	Di-n-butyl phthalate	34	U	71	34	15

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0393M-0001-SO | Lab Sample ID: 240-50067-5

Matrix: Solid | Lab File ID: 50520017.D

Analysis Method: 8270C | Date Collected: 04/29/2015 00:00

Extract. Method: 3540C | Date Extracted: 05/12/2015 12:12

Sample wt/vol: 30.42(g) | Date Analyzed: 05/20/2015 16:11

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
534-52-1	4,6-Dinitro-2-methylphenol	34	U	150	34	9.3
51-28-5	2,4-Dinitrophenol	67	U	330	67	21
121-14-2	2,4-Dinitrotoluene	67	U	200	67	17
606-20-2	2,6-Dinitrotoluene	67	U	200	67	21
117-84-0	Di-n-octyl phthalate	34	U	71	34	8.0
206-44-0	Fluoranthene	3.3	U	6.8	3.3	0.56
86-73-7	Fluorene	3.4	J	6.8	3.3	0.54
118-74-1	Hexachlorobenzene	3.3	U	6.8	3.3	2.1
87-68-3	Hexachlorobutadiene	34	U	51	34	5.7
77-47-4	Hexachlorocyclopentadiene	34	U	330	34	8.2
67-72-1	Hexachloroethane	34	U	51	34	9.1
193-39-5	Indeno[1,2,3-cd]pyrene	1.7	U	6.8	1.7	0.35
78-59-1	Isophorone	89		51	34	13
91-57-6	2-Methylnaphthalene	8.4		6.8	3.3	0.51
95-48-7	2-Methylphenol	67	U	200	67	11
15831-10-4	3 & 4 Methylphenol	67	U	400	67	20
91-20-3	Naphthalene	6.2	J	6.8	3.3	0.83
88-74-4	2-Nitroaniline	34	U	200	34	9.2
99-09-2	3-Nitroaniline	67	U	200	67	16
100-01-6	4-Nitroaniline	67	U	200	67	26
98-95-3	Nitrobenzene	3.3	U	100	3.3	2.2
88-75-5	2-Nitrophenol	28	J	51	34	8.4
100-02-7	4-Nitrophenol	67	U	330	67	17
621-64-7	N-Nitrosodi-n-propylamine	34	U	51	34	6.4
86-30-6	N-Nitrosodiphenylamine	34	U	51	34	21
87-86-5	Pentachlorophenol	34	U	150	34	9.2
85-01-8	Phenanthrene	7.8		6.8	3.3	0.74
108-95-2	Phenol	34	U	51	34	7.4
129-00-0	Pyrene	1.7	U	6.8	1.7	0.45
120-82-1	1,2,4-Trichlorobenzene	17	U	51	17	3.5
95-95-4	2,4,5-Trichlorophenol	67	U	150	67	25
88-06-2	2,4,6-Trichlorophenol	34	U	150	34	9.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0393M-0001-SO | Lab Sample ID: 240-50067-5

Matrix: Solid | Lab File ID: 50520017.D

Analysis Method: 8270C | Date Collected: 04/29/2015 00:00

Extract. Method: 3540C | Date Extracted: 05/12/2015 12:12

Sample wt/vol: 30.42(g) | Date Analyzed: 05/20/2015 16:11

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	74		45-105
367-12-4	2-Fluorophenol (Surr)	39		35-105
4165-60-0	Nitrobenzene-d5 (Surr)	72		35-100
4165-62-2	Phenol-d5 (Surr)	43		40-100
1718-51-0	Terphenyl-d14 (Surr)	79		30-125
118-79-6	2,4,6-Tribromophenol (Surr)	68		35-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520017.D
Lims ID: 240-50067-A-5-B Lab Sample ID: 240-50067-5
Client ID: 079SB-0393M-0001-SO
Sample Type: Client
Inject. Date: 20-May-2015 16:11:30 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043844-017
Misc. Info.: 240-50067-A-5-B240-50067-A-5-B
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-May-2015 08:02:18 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 20-May-2015 16:38:13

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.424	6.411	0.013	97	261750	4.00	
* 2 Naphthalene-d8	136	7.530	7.527	0.003	99	786022	4.00	
* 3 Acenaphthene-d10	164	9.035	9.037	-0.002	90	342464	4.00	
* 4 Phenanthrene-d10	188	10.309	10.311	-0.002	95	763861	4.00	
* 5 Chrysene-d12	240	12.618	12.619	-0.001	92	653103	4.00	
* 6 Perylene-d12	264	14.431	14.437	-0.007	90	471770	4.00	
$ 7 2-Fluorophenol	112	5.327	5.199	0.128	93	445193	3.94	
$ 8 Phenol-d5	99	6.078	6.046	0.032	93	649811	4.25	
$ 9 Nitrobenzene-d5	82	6.890	6.887	0.003	87	579520	7.20	
$ 10 2-Fluorobiphenyl (Surr)	172	8.429	8.431	-0.002	99	726446	7.44	
$ 11 2,4,6-Tribromophenol	330	9.703	9.710	-0.007	86	61378	6.83	
$ 12 Terphenyl-d14	244	11.632	11.638	-0.006	97	989083	7.89	
43 Phenol	94		6.055				ND	
69 Bis(2-chloroethyl)ether	93		6.147				ND	
46 2-Chlorophenol	128		6.228				ND	
47 1,3-Dichlorobenzene	146		6.368				ND	
48 1,4-Dichlorobenzene	146		6.426				ND	
49 Benzyl alcohol	108	6.520	6.507	0.013	96	16119	0.1923	
50 1,2-Dichlorobenzene	146		6.570				ND	
51 2-Methylphenol	108		6.594				ND	
53 2,2'-oxybis[1-chloropropan	45		6.628				ND	
21 3 & 4 Methylphenol	108		6.724				ND	
57 N-Nitrosodi-n-propylamine	70		6.738				ND	
61 Hexachloroethane	117		6.878				ND	
62 Nitrobenzene	77		6.902				ND	
64 Isophorone	82	7.107	7.104	0.003	98	208308	1.33	
66 2-Nitrophenol	139	7.188	7.185	0.003	86	13763	0.4084	
65 2,4-Dimethylphenol	107		7.190				ND	
71 Benzoic acid	122		7.238				ND	
70 Bis(2-chloroethoxy)methane	93		7.267				ND	
73 2,4-Dichlorophenol	162		7.387				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
74 1,2,4-Trichlorobenzene	180		7.474				ND	
75 Naphthalene	128	7.549	7.546	0.003	91	19113	0.0921	
76 4-Chloroaniline	127		7.565				ND	
79 Hexachlorobutadiene	225		7.652				ND	
86 4-Chloro-3-methylphenol	107		7.955				ND	
87 2-Methylnaphthalene	142	8.136	8.138	-0.002	92	15686	0.1240	
89 Hexachlorocyclopentadiene	237		8.282				ND	
92 2,4,6-Trichlorophenol	196		8.364				ND	
93 2,4,5-Trichlorophenol	196		8.402				ND	
100 2-Chloronaphthalene	162		8.556				ND	
102 2-Nitroaniline	65		8.618				ND	
105 Dimethyl phthalate	163		8.748				ND	
107 2,6-Dinitrotoluene	165		8.806				ND	
109 Acenaphthylene	152		8.921				ND	
110 3-Nitroaniline	138		8.960				ND	
111 2,4-Dinitrophenol	184		9.046				ND	
112 Acenaphthene	153		9.066				ND	
113 4-Nitrophenol	109		9.070				ND	
114 2,4-Dinitrotoluene	165		9.157				ND	
116 Dibenzofuran	168		9.210				ND	
121 Diethyl phthalate	149	9.338	9.345	-0.007	89	31355	0.3307	
123 4-Chlorophenyl phenyl ethe	204		9.474				ND	
125 4-Nitroaniline	138		9.484				ND	
126 Fluorene	166	9.501	9.503	-0.002	89	5400	0.0510	
128 4,6-Dinitro-2-methylphenol	198		9.513				ND	
131 N-Nitrosodiphenylamine	169		9.571				ND	
139 4-Bromophenyl phenyl ether	248		9.898				ND	
141 Hexachlorobenzene	284		9.989				ND	
143 Pentachlorophenol	266		10.143				ND	
148 Phenanthrene	178	10.329	10.330	-0.001	95	25203	0.1153	
149 Anthracene	178		10.374				ND	
151 Carbazole	167		10.489				ND	
154 Di-n-butyl phthalate	149	10.723	10.725	-0.002	99	46535	0.1983	
159 Fluoranthene	202		11.355				ND	
161 Pyrene	202		11.557				ND	
168 Butyl benzyl phthalate	149		12.013				ND	
173 Bis(2-ethylhexyl) phthalat	149	12.502	12.504	-0.002	91	36979	0.2451	
175 3,3'-Dichlorobenzidine	252		12.538				ND	
177 Benzo[a]anthracene	228		12.610				ND	
178 Chrysene	228		12.648				ND	
180 Di-n-octyl phthalate	149		13.177				ND	
182 Benzo[b]fluoranthene	252		13.870				ND	
183 Benzo[k]fluoranthene	252		13.903				ND	
184 Benzo[a]pyrene	252		14.355				ND	
188 Indeno[1,2,3-cd]pyrene	276		16.423				ND	
189 Dibenz(a,h)anthracene	278		16.428				ND	
190 Benzo[g,h,i]perylene	276		17.039				ND	

Reagents:

SMIS80PPMW_00011 Amount Added: 5.00 Units: uL Run Reagent

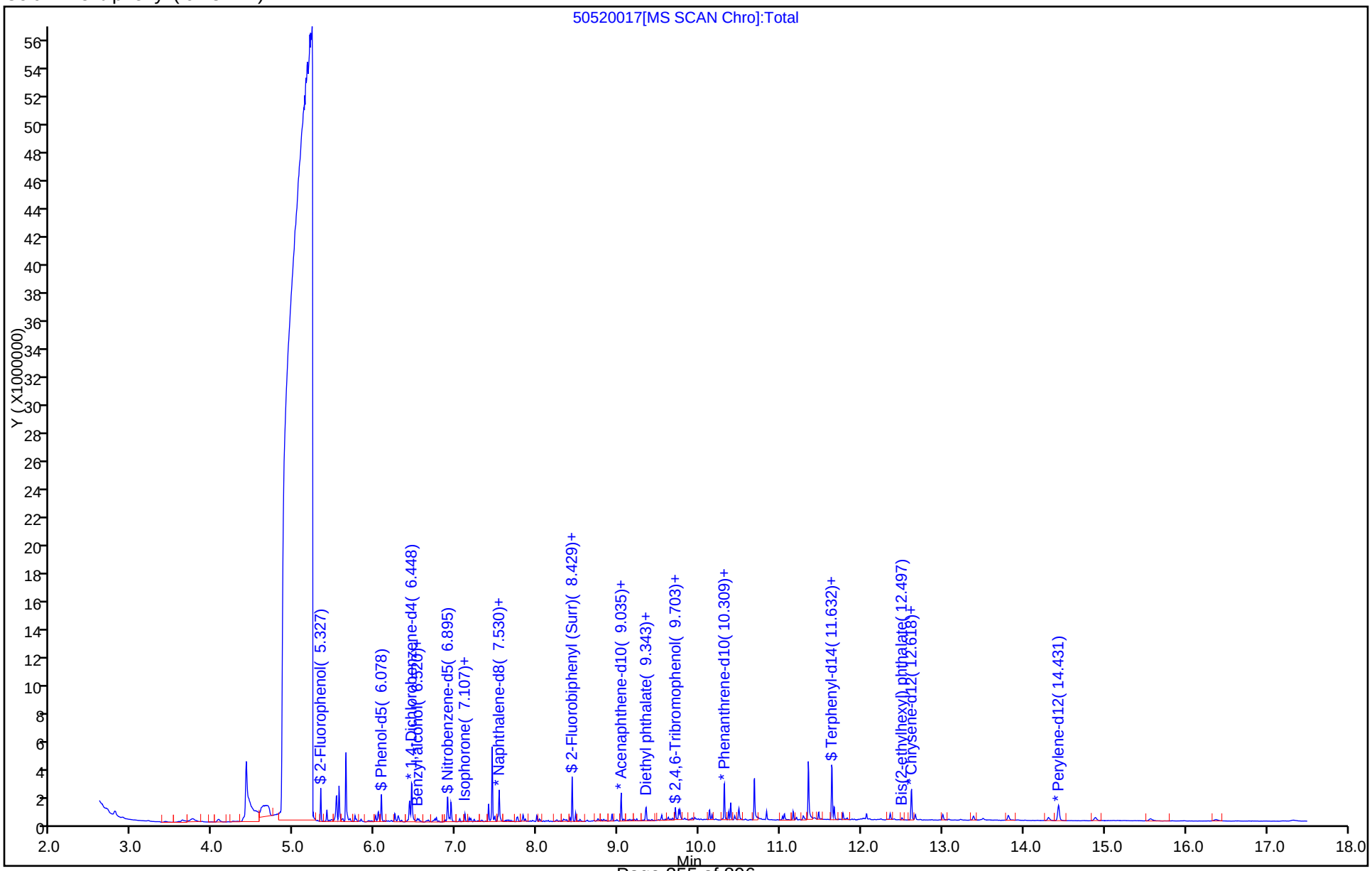
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TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520017.D

Injection Date:	20-May-2015 16:11:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	240-50067-A-5-B	Lab Sample ID:	240-50067-5	Worklist Smp#:	17
Client ID:	079SB-0393M-0001-SO				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



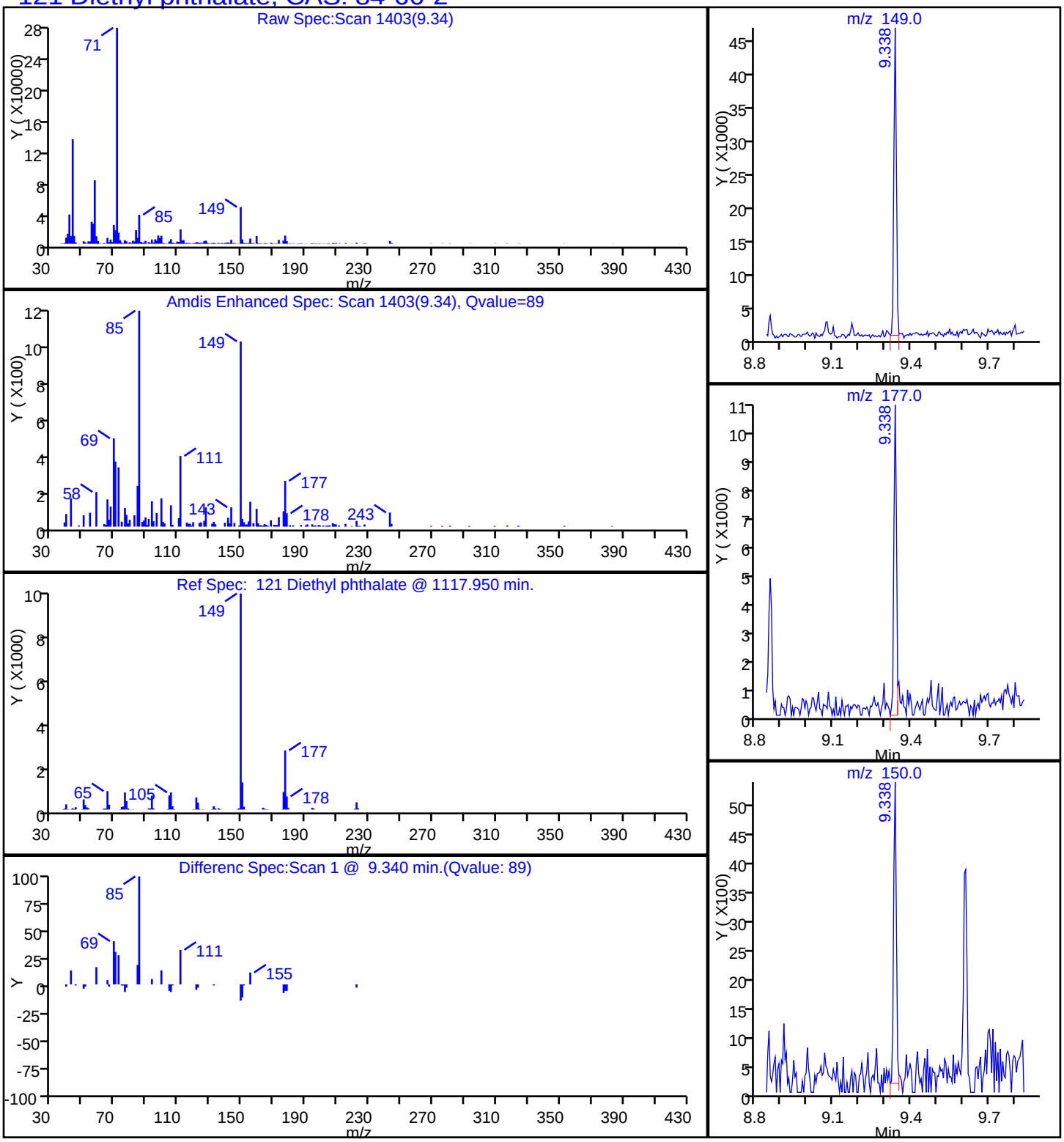
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TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520017.D

Injection Date:	20-May-2015 16:11:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-5-B	Lab Sample ID:	240-50067-5		
Client ID:	079SB-0393M-0001-SO				
Operator ID:	001574	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

121 Diethyl phthalate, CAS: 84-66-2



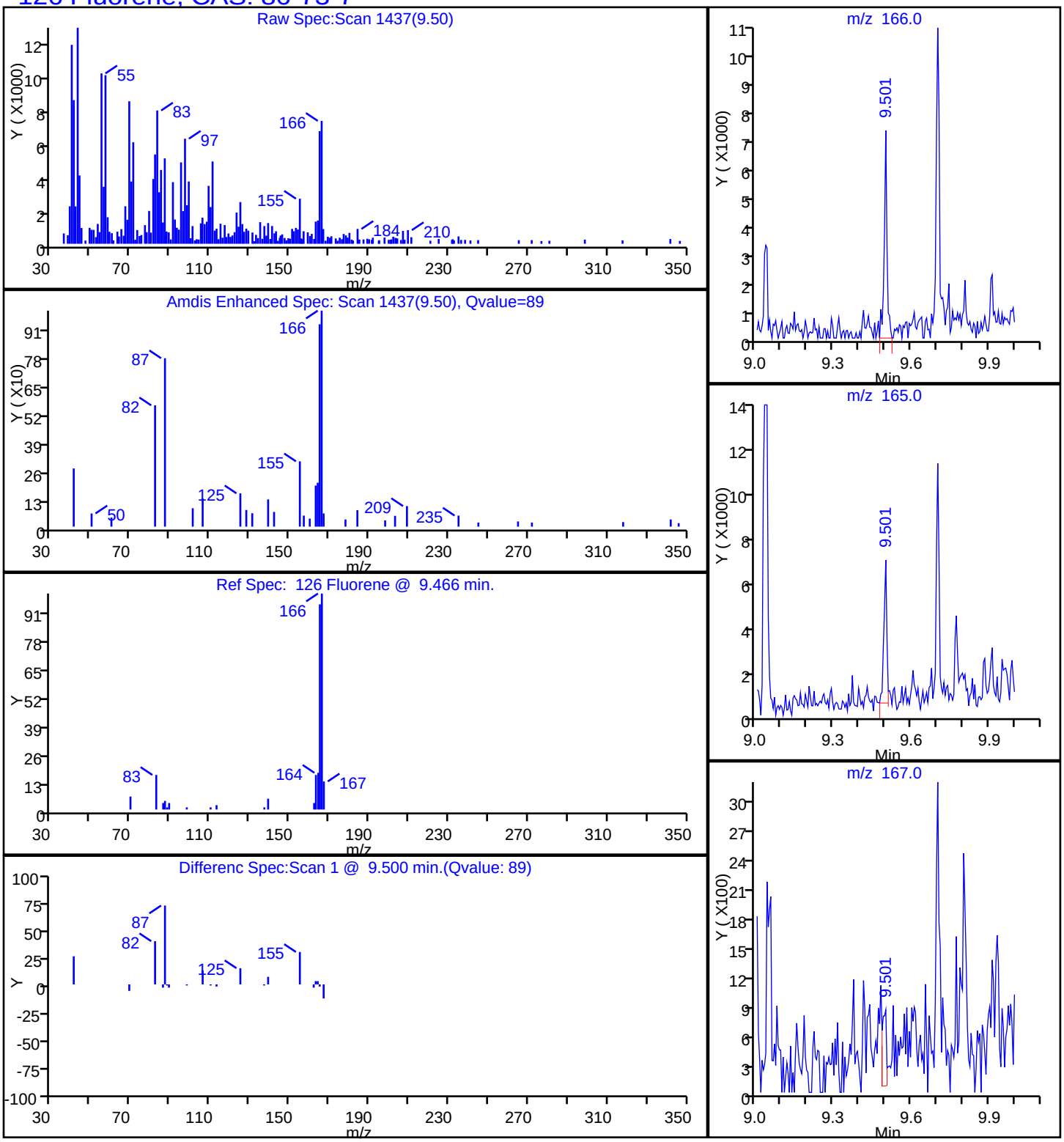
Report Date: 21-May-2015 08:02:44 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520017.D

Injection Date:	20-May-2015 16:11:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-5-B	Lab Sample ID:	240-50067-5		
Client ID:	079SB-0393M-0001-SO				
Operator ID:	001574	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

126 Fluorene, CAS: 86-73-7



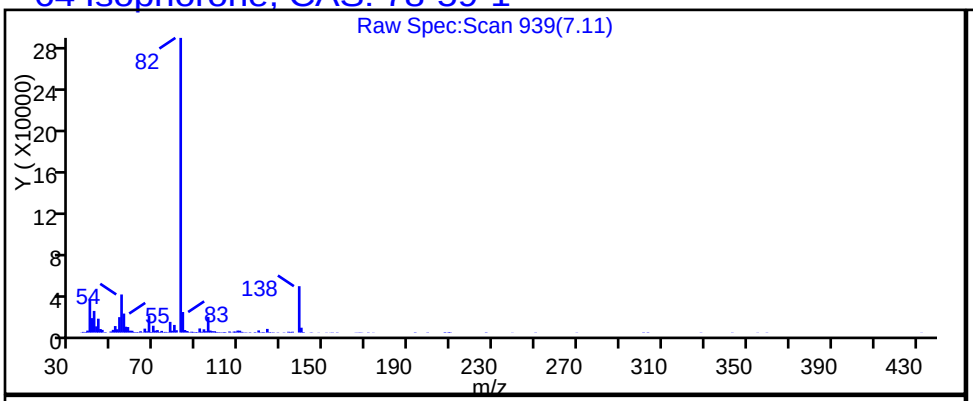
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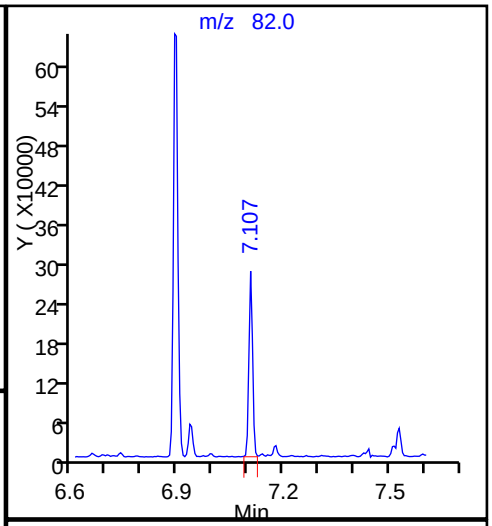
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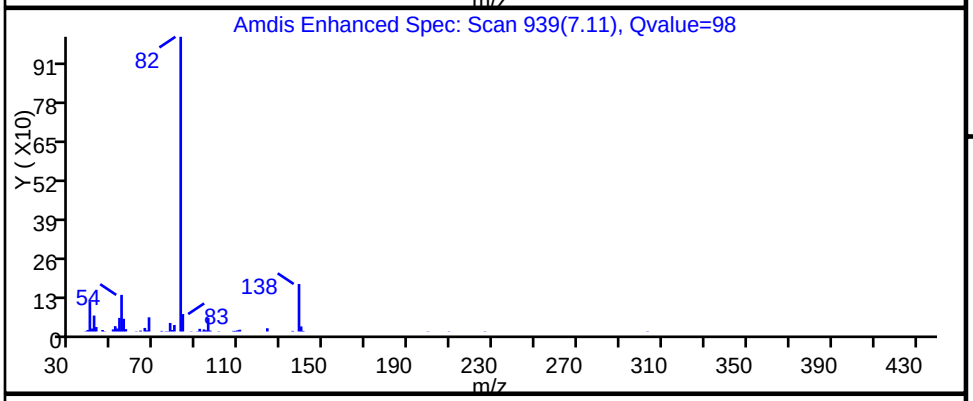
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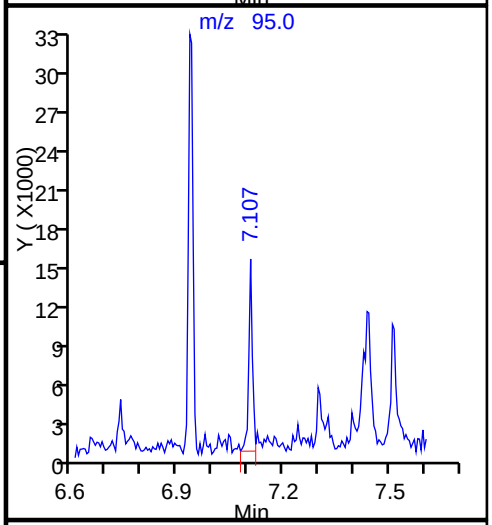
Injection Date:	20-May-2015 16:11:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-5-B	Lab Sample ID:	240-50067-5		
Client ID:	079SB-0393M-0001-SO				
Operator ID:	001574	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

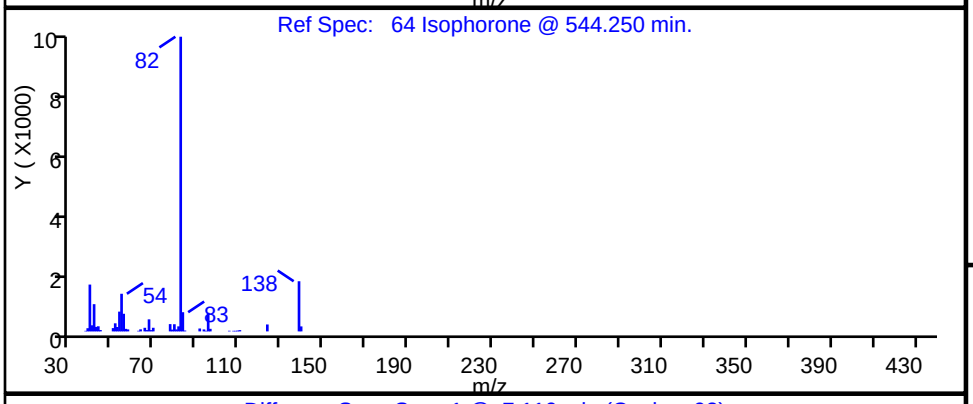
64 Isophorone, CAS: 78-59-1

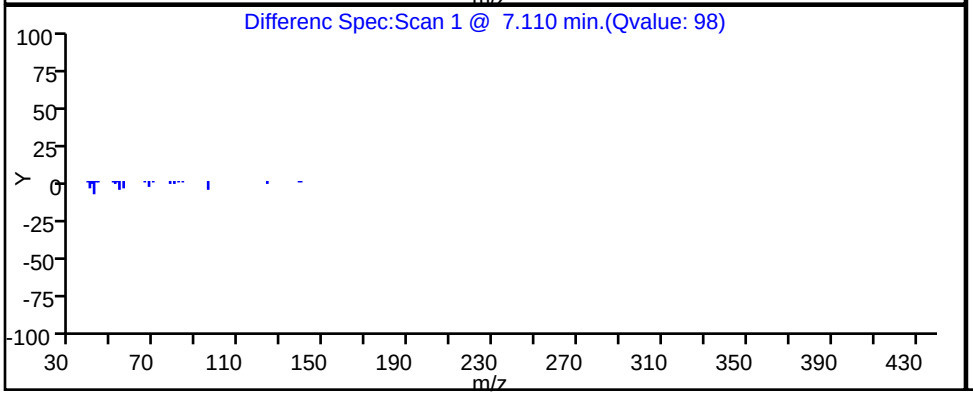


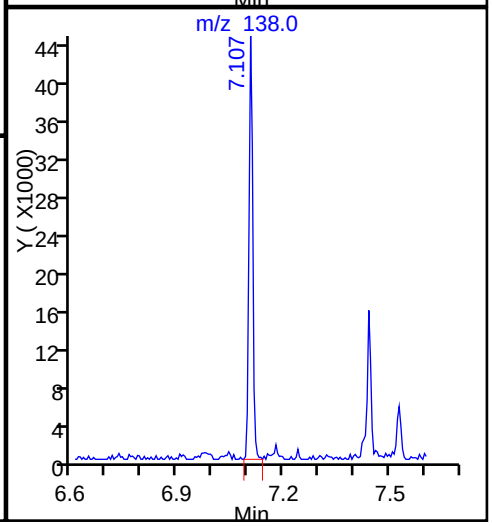












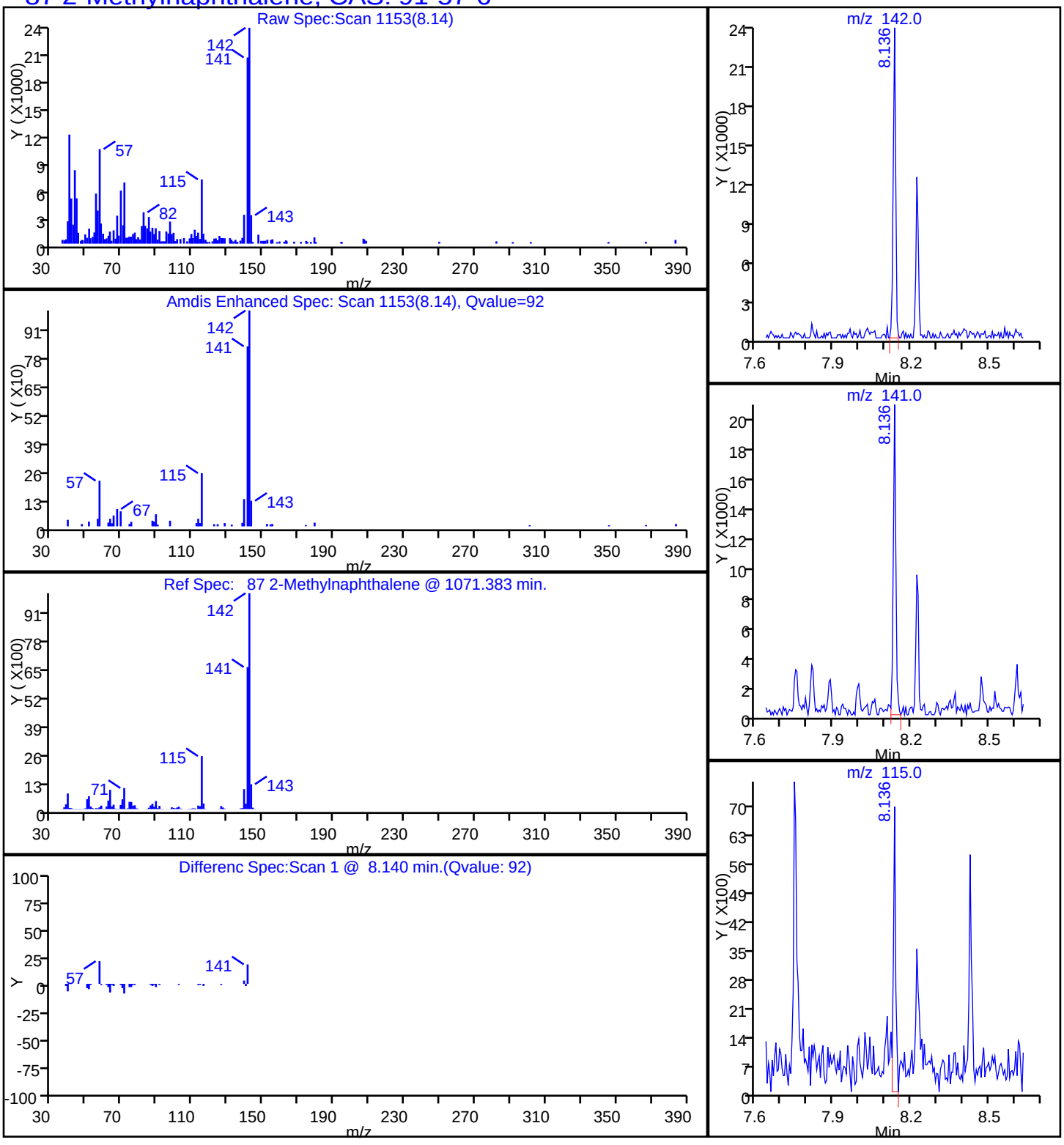
Report Date: 21-May-2015 08:02:44 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520017.D

Injection Date:	20-May-2015 16:11:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-5-B	Lab Sample ID:	240-50067-5		
Client ID:	079SB-0393M-0001-SO				
Operator ID:	001574	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

87 2-Methylnaphthalene, CAS: 91-57-6



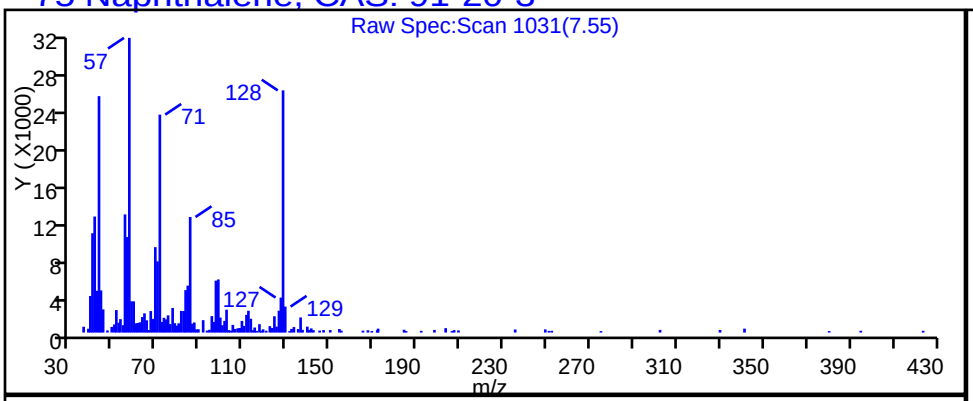
Report Date: 21-May-2015 08:02:44 Chrom Revision: 2.2 05-May-2015 11:39:10

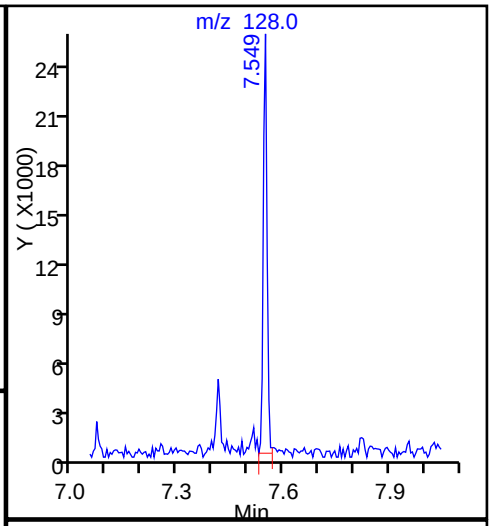
TestAmerica Canton

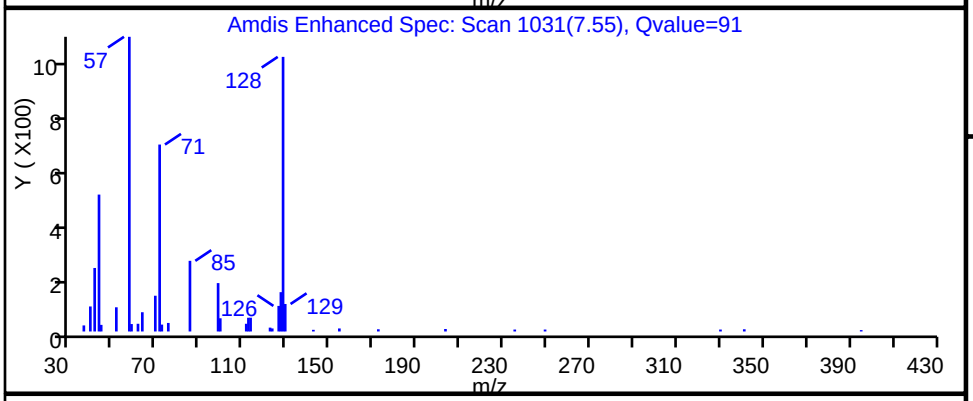
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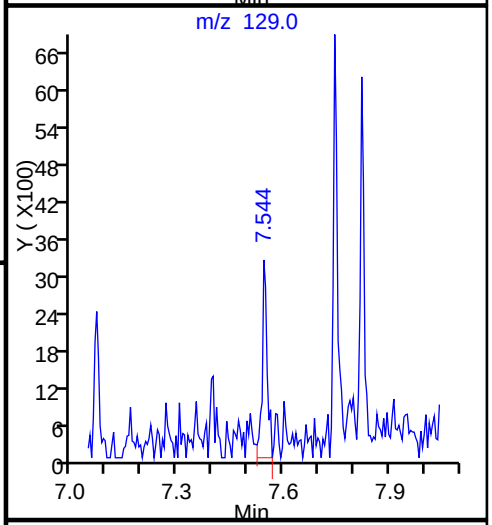
Injection Date:	20-May-2015 16:11:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-5-B	Lab Sample ID:	240-50067-5		
Client ID:	079SB-0393M-0001-SO				
Operator ID:	001574	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

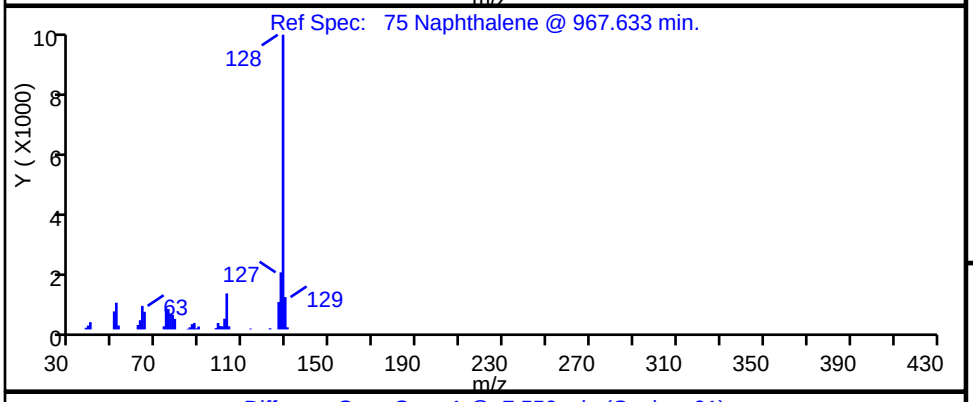
75 Naphthalene, CAS: 91-20-3

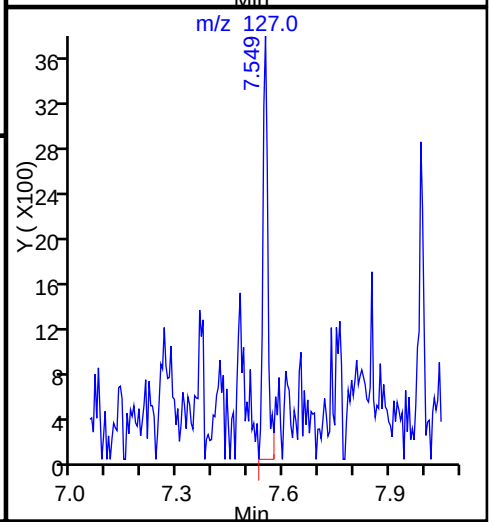


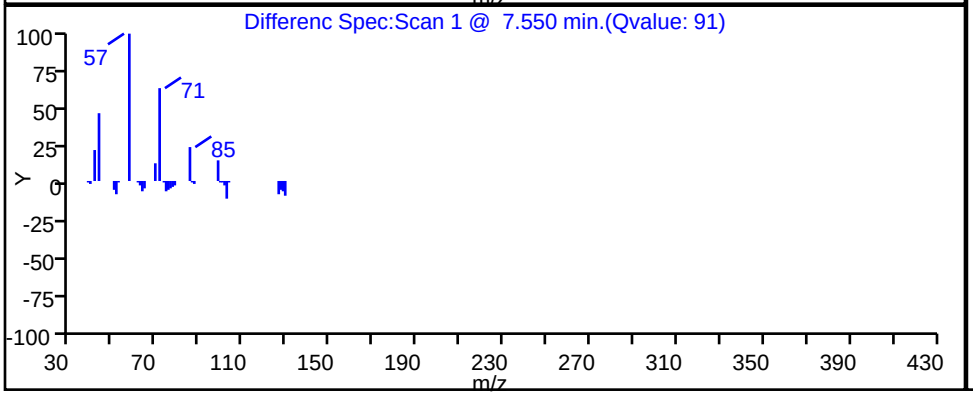












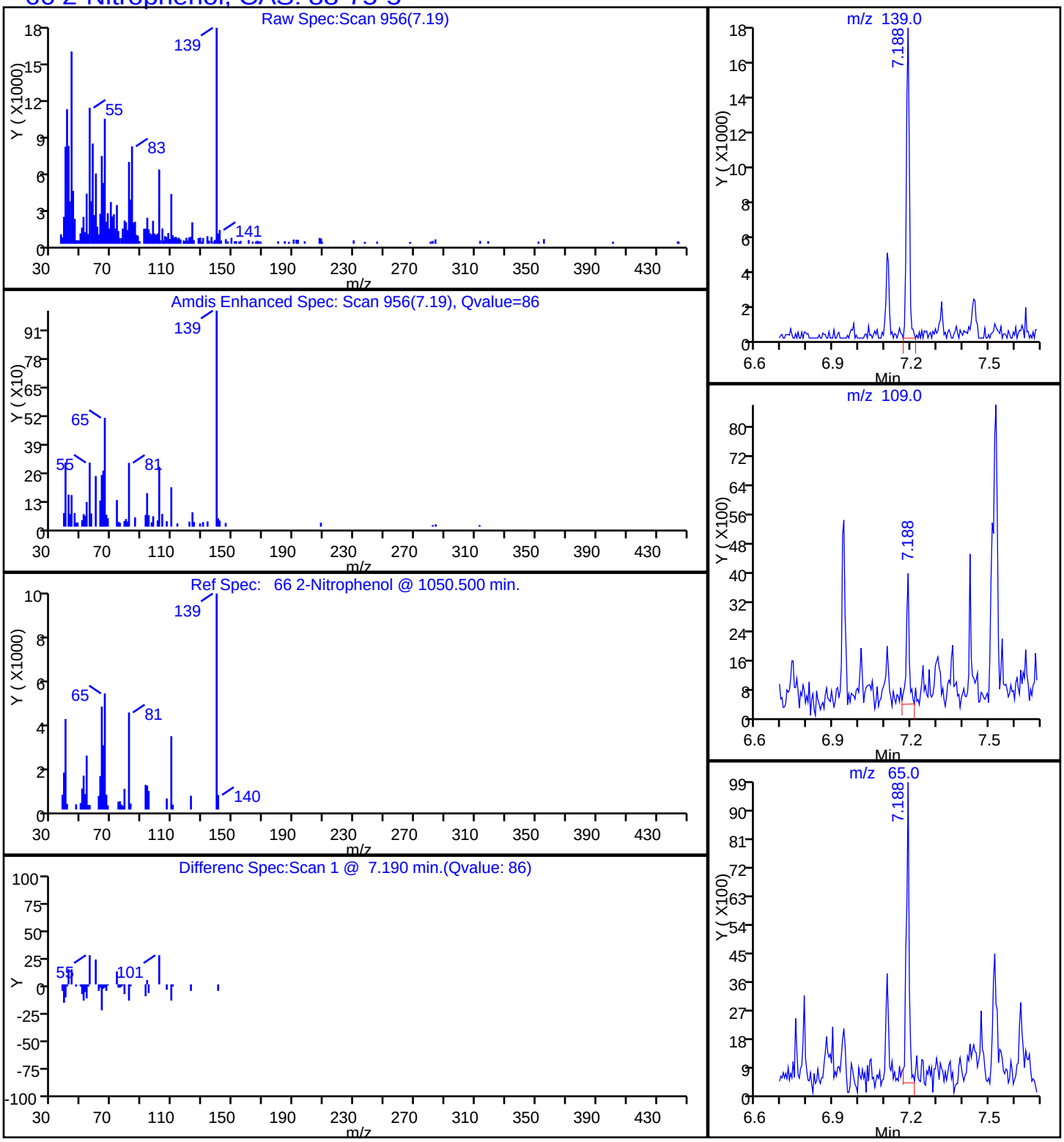
Report Date: 21-May-2015 08:02:44 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520017.D

Injection Date:	20-May-2015 16:11:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-5-B	Lab Sample ID:	240-50067-5		
Client ID:	079SB-0393M-0001-SO				
Operator ID:	001574	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

66 2-Nitrophenol, CAS: 88-75-5



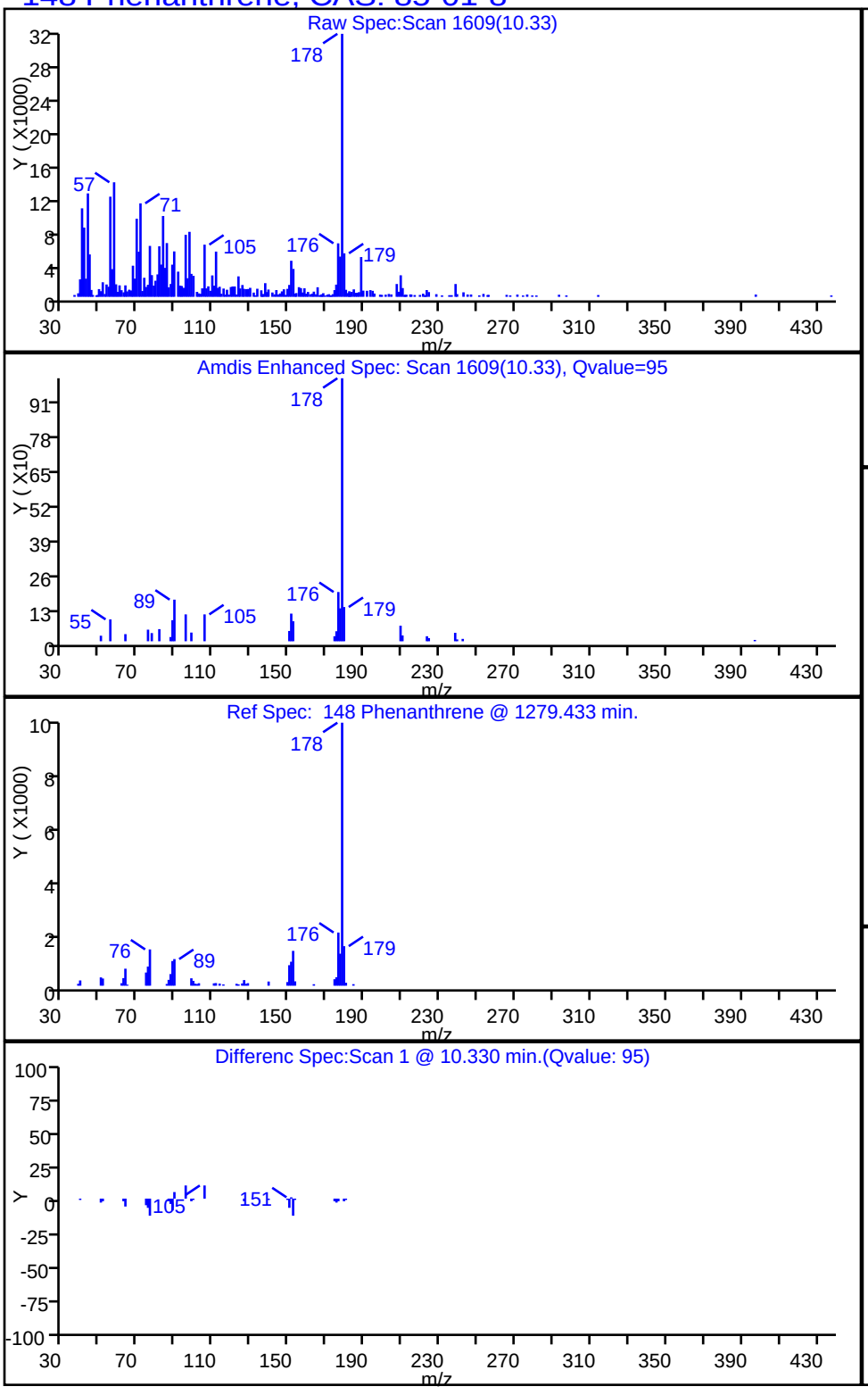
Report Date: 21-May-2015 08:02:44 Chrom Revision: 2.2 05-May-2015 11:39:10

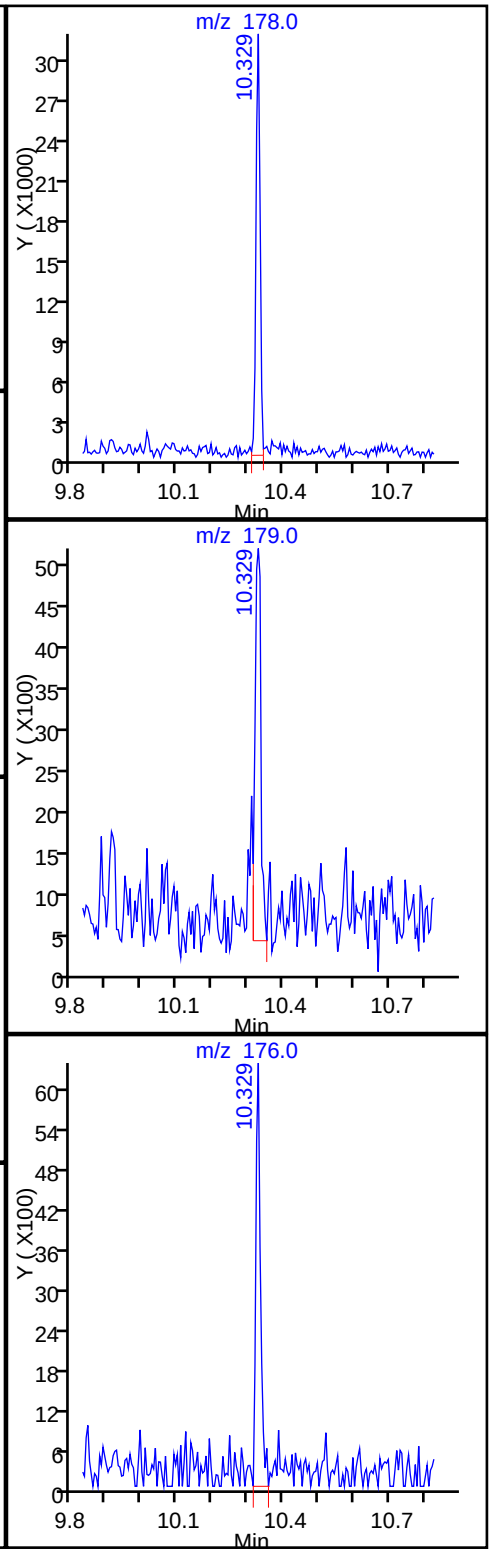
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520017.D

Injection Date:	20-May-2015 16:11:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-5-B	Lab Sample ID:	240-50067-5		
Client ID:	079SB-0393M-0001-SO				
Operator ID:	001574	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

148 Phenanthrene, CAS: 85-01-8





FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0394M-0001-SO | Lab Sample ID: 240-50067-6

Matrix: Solid | Lab File ID: 50521006.D

Analysis Method: 8270C | Date Collected: 04/29/2015 15:30

Extract. Method: 3540C | Date Extracted: 05/12/2015 12:12

Sample wt/vol: 30.24(g) | Date Analyzed: 05/21/2015 09:35

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181781 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
83-32-9	Acenaphthene	3.3	U	6.8	3.3	0.77
208-96-8	Acenaphthylene	1.7	U	6.8	1.7	0.36
120-12-7	Anthracene	3.3	U	6.8	3.3	0.79
56-55-3	Benzo[a]anthracene	3.3	U	6.8	3.3	0.64
50-32-8	Benzo[a]pyrene	3.3	U	6.8	3.3	0.65
205-99-2	Benzo[b]fluoranthene	3.3	U	6.8	3.3	0.60
191-24-2	Benzo[g,h,i]perylene	1.7	U	6.8	1.7	0.36
65-85-0	Benzoic acid	130	U Q	670	130	37
207-08-9	Benzo[k]fluoranthene	3.3	U	6.8	3.3	0.69
100-51-6	Benzyl alcohol	68	U	330	68	21
111-91-1	Bis(2-chloroethoxy)methane	68	U	100	68	22
111-44-4	Bis(2-chloroethyl)ether	3.3	U	100	3.3	2.0
108-60-1	bis (2-chloroisopropyl) ether	34	U	100	34	9.6
117-81-7	Bis(2-ethylhexyl) phthalate	34	U	71	34	19
101-55-3	4-Bromophenyl phenyl ether	34	U	51	34	13
85-68-7	Butyl benzyl phthalate	34	U	71	34	10
86-74-8	Carbazole	34	U	51	34	27
106-47-8	4-Chloroaniline	68	U	150	68	17
59-50-7	4-Chloro-3-methylphenol	68	U	150	68	21
91-58-7	2-Chloronaphthalene	1.7	U	51	1.7	0.46
95-57-8	2-Chlorophenol	34	U Q	51	34	8.3
7005-72-3	4-Chlorophenyl phenyl ether	34	U	51	34	13
218-01-9	Chrysene	3.3	U	6.8	3.3	1.1
53-70-3	Dibenz(a,h)anthracene	3.3	U	6.8	3.3	0.67
132-64-9	Dibenzofuran	3.3	U	51	3.3	0.67
95-50-1	1,2-Dichlorobenzene	34	U	51	34	9.8
541-73-1	1,3-Dichlorobenzene	34	U	51	34	11
106-46-7	1,4-Dichlorobenzene	34	U	51	34	20
91-94-1	3,3'-Dichlorobenzidine	68	U	100	68	18
120-83-2	2,4-Dichlorophenol	68	U Q	150	68	20
84-66-2	Diethyl phthalate	34	U	71	34	16
105-67-9	2,4-Dimethylphenol	68	U Q	150	68	20
131-11-3	Dimethyl phthalate	34	U	71	34	17
84-74-2	Di-n-butyl phthalate	34	U	71	34	15

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0394M-0001-SO | Lab Sample ID: 240-50067-6

Matrix: Solid | Lab File ID: 50521006.D

Analysis Method: 8270C | Date Collected: 04/29/2015 15:30

Extract. Method: 3540C | Date Extracted: 05/12/2015 12:12

Sample wt/vol: 30.24(g) | Date Analyzed: 05/21/2015 09:35

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181781 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
534-52-1	4,6-Dinitro-2-methylphenol	34	U	150	34	9.3
51-28-5	2,4-Dinitrophenol	68	U	330	68	21
121-14-2	2,4-Dinitrotoluene	68	U	200	68	17
606-20-2	2,6-Dinitrotoluene	68	U	200	68	21
117-84-0	Di-n-octyl phthalate	34	U	71	34	8.0
206-44-0	Fluoranthene	3.3	U	6.8	3.3	0.56
86-73-7	Fluorene	3.3	U	6.8	3.3	0.54
118-74-1	Hexachlorobenzene	3.3	U	6.8	3.3	2.1
87-68-3	Hexachlorobutadiene	34	U	51	34	5.7
77-47-4	Hexachlorocyclopentadiene	34	U	330	34	8.2
67-72-1	Hexachloroethane	34	U	51	34	9.1
193-39-5	Indeno[1,2,3-cd]pyrene	1.7	U	6.8	1.7	0.36
78-59-1	Isophorone	53		51	34	13
91-57-6	2-Methylnaphthalene	7.4		6.8	3.3	0.51
95-48-7	2-Methylphenol	68	U Q	200	68	11
15831-10-4	3 & 4 Methylphenol	68	U Q	410	68	20
91-20-3	Naphthalene	5.2	J	6.8	3.3	0.83
88-74-4	2-Nitroaniline	34	U	200	34	9.2
99-09-2	3-Nitroaniline	68	U	200	68	16
100-01-6	4-Nitroaniline	68	U	200	68	26
98-95-3	Nitrobenzene	3.3	U	100	3.3	2.2
88-75-5	2-Nitrophenol	34	U Q	51	34	8.4
100-02-7	4-Nitrophenol	68	U	330	68	17
621-64-7	N-Nitrosodi-n-propylamine	34	U	51	34	6.4
86-30-6	N-Nitrosodiphenylamine	34	U	51	34	21
87-86-5	Pentachlorophenol	34	U	150	34	9.2
85-01-8	Phenanthrene	6.3	J	6.8	3.3	0.74
108-95-2	Phenol	12	J	51	34	7.4
129-00-0	Pyrene	1.7	U	6.8	1.7	0.45
120-82-1	1,2,4-Trichlorobenzene	17	U	51	17	3.6
95-95-4	2,4,5-Trichlorophenol	68	U	150	68	25
88-06-2	2,4,6-Trichlorophenol	34	U	150	34	9.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0394M-0001-SO | Lab Sample ID: 240-50067-6

Matrix: Solid | Lab File ID: 50521006.D

Analysis Method: 8270C | Date Collected: 04/29/2015 15:30

Extract. Method: 3540C | Date Extracted: 05/12/2015 12:12

Sample wt/vol: 30.24(g) | Date Analyzed: 05/21/2015 09:35

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181781 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	67		45-105
367-12-4	2-Fluorophenol (Surr)	33	Q	35-105
4165-60-0	Nitrobenzene-d5 (Surr)	63		35-100
4165-62-2	Phenol-d5 (Surr)	41		40-100
1718-51-0	Terphenyl-d14 (Surr)	72		30-125
118-79-6	2,4,6-Tribromophenol (Surr)	55		35-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150521-43883.b\50521006.D
Lims ID: 240-50067-A-6-B Lab Sample ID: 240-50067-6
Client ID: 079SB-0394M-0001-SO
Sample Type: Client
Inject. Date: 21-May-2015 09:35:30 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043883-006
Misc. Info.: 240-50067-A-6-B240-50067-A-6-B
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150521-43883.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-May-2015 15:43:54 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 21-May-2015 10:26:54

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.415	6.397	0.018	97	235426	4.00	
* 2 Naphthalene-d8	136	7.521	7.513	0.008	99	712981	4.00	
* 3 Acenaphthene-d10	164	9.022	9.023	-0.001	90	335030	4.00	
* 4 Phenanthrene-d10	188	10.296	10.297	-0.001	95	579327	4.00	
* 5 Chrysene-d12	240	12.600	12.601	-0.001	93	626838	4.00	
* 6 Perylene-d12	264	14.398	14.404	-0.006	90	441934	4.00	
$ 7 2-Fluorophenol	112	5.357	5.181	0.176	93	332468	3.27	
$ 8 Phenol-d5	99	6.069	6.032	0.037	93	566676	4.12	
$ 9 Nitrobenzene-d5	82	6.887	6.874	0.013	86	461453	6.32	
$ 10 2-Fluorobiphenyl (Surr)	172	8.421	8.417	0.004	99	639579	6.70	
$ 11 2,4,6-Tribromophenol	330	9.690	9.692	-0.002	81	48366	5.50	
$ 12 Terphenyl-d14	244	11.619	11.620	-0.002	97	861214	7.16	
43 Phenol	94	6.084	6.084	0.038	87	25554	0.1702	
69 Bis(2-chloroethyl)ether	93		6.133				ND	
46 2-Chlorophenol	128		6.215				ND	
47 1,3-Dichlorobenzene	146		6.354				ND	
48 1,4-Dichlorobenzene	146		6.417				ND	
49 Benzyl alcohol	108	6.516	6.494	0.022	84	10728	0.1423	
50 1,2-Dichlorobenzene	146		6.556				ND	
51 2-Methylphenol	108		6.580				ND	
53 2,2'-oxybis[1-chloropropan	45		6.614				ND	
21 3 & 4 Methylphenol	108		6.710				ND	
57 N-Nitrosodi-n-propylamine	70		6.724				ND	
61 Hexachloroethane	117		6.864				ND	
62 Nitrobenzene	77		6.893				ND	
64 Isophorone	82	7.098	7.090	0.008	97	111163	0.7801	
66 2-Nitrophenol	139		7.172				ND	
65 2,4-Dimethylphenol	107		7.177				ND	
71 Benzoic acid	122	7.199	7.234	-0.035	68	10052	0.2810	
70 Bis(2-chloroethoxy)methane	93		7.253				ND	
73 2,4-Dichlorophenol	162		7.374				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
74 1,2,4-Trichlorobenzene	180		7.460				ND	
75 Naphthalene	128	7.541	7.541	0.009	28	14349	0.0762	
76 4-Chloroaniline	127		7.552				ND	
79 Hexachlorobutadiene	225		7.638				ND	
86 4-Chloro-3-methylphenol	107		7.946				ND	
87 2-Methylnaphthalene	142	8.123	8.124	-0.001	75	12589	0.1098	
89 Hexachlorocyclopentadiene	237		8.268				ND	
92 2,4,6-Trichlorophenol	196		8.350				ND	
93 2,4,5-Trichlorophenol	196		8.388				ND	
100 2-Chloronaphthalene	162		8.542				ND	
102 2-Nitroaniline	65		8.605				ND	
105 Dimethyl phthalate	163		8.735				ND	
107 2,6-Dinitrotoluene	165		8.792				ND	
109 Acenaphthylene	152		8.903				ND	
110 3-Nitroaniline	138		8.946				ND	
111 2,4-Dinitrophenol	184		9.033				ND	
112 Acenaphthene	153		9.052				ND	
113 4-Nitrophenol	109		9.057				ND	
114 2,4-Dinitrotoluene	165		9.143				ND	
116 Dibenzofuran	168		9.196				ND	
121 Diethyl phthalate	149	9.325	9.325	-0.006	43	12882	0.1389	
123 4-Chlorophenyl phenyl ethe	204		9.461				ND	
125 4-Nitroaniline	138		9.470				ND	
126 Fluorene	166		9.490				ND	
128 4,6-Dinitro-2-methylphenol	198		9.499				ND	
131 N-Nitrosodiphenylamine	169		9.557				ND	
139 4-Bromophenyl phenyl ether	248		9.884				ND	
141 Hexachlorobenzene	284		9.975				ND	
143 Pentachlorophenol	266		10.124				ND	
148 Phenanthrene	178	10.315	10.315	-0.002	45	15329	0.0924	
149 Anthracene	178		10.360				ND	
151 Carbazole	167		10.475				ND	
154 Di-n-butyl phthalate	149	10.710	10.711	-0.001	65	27879	0.1566	
159 Fluoranthene	202		11.336				ND	
161 Pyrene	202		11.538				ND	
168 Butyl benzyl phthalate	149		11.995				ND	
173 Bis(2-ethylhexyl) phthalat	149	12.484	12.485	-0.001	92	21776	0.1504	
175 3,3'-Dichlorobenzidine	252		12.519				ND	
177 Benzo[a]anthracene	228		12.591				ND	
178 Chrysene	228		12.630				ND	
180 Di-n-octyl phthalate	149		13.154				ND	
182 Benzo[b]fluoranthene	252		13.842				ND	
183 Benzo[k]fluoranthene	252		13.875				ND	
184 Benzo[a]pyrene	252		14.322				ND	
188 Indeno[1,2,3-cd]pyrene	276		16.376				ND	
189 Dibenz(a,h)anthracene	278		16.381				ND	
190 Benzo[g,h,i]perylene	276		16.986				ND	

Reagents:

SMIS80PPMW_00011 Amount Added: 5.00 Units: uL Run Reagent

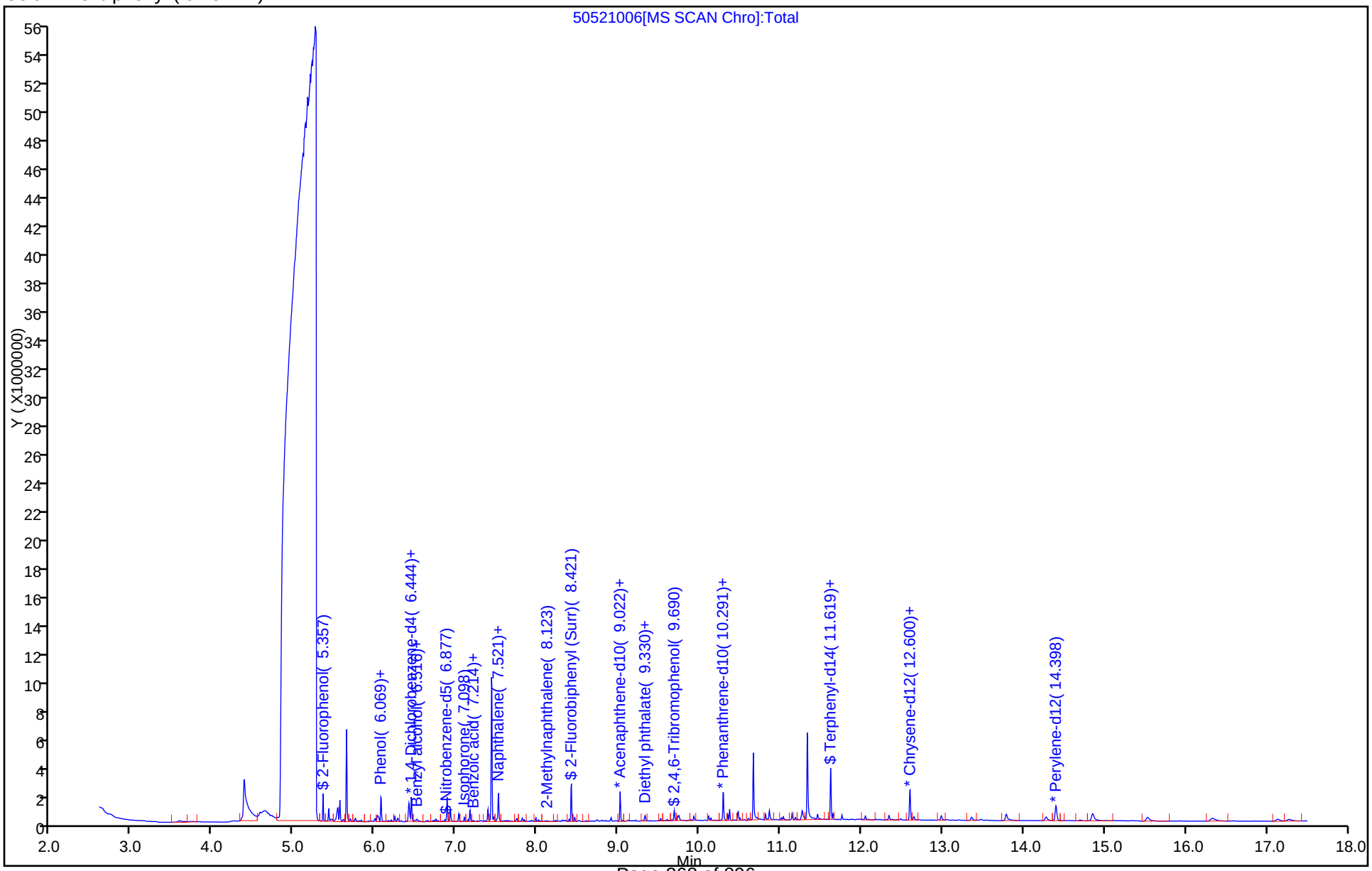
Report Date: 21-May-2015 15:43:55 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150521-43883.b\50521006.D

Injection Date:	21-May-2015 09:35:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	240-50067-A-6-B	Lab Sample ID:	240-50067-6	Worklist Smp#:	6
Client ID:	079SB-0394M-0001-SO				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



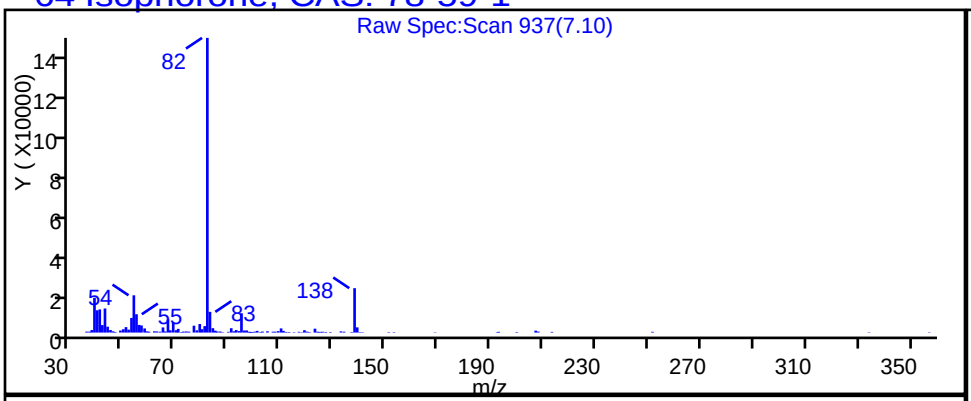
Report Date: 21-May-2015 15:43:55 Chrom Revision: 2.2 05-May-2015 11:39:10

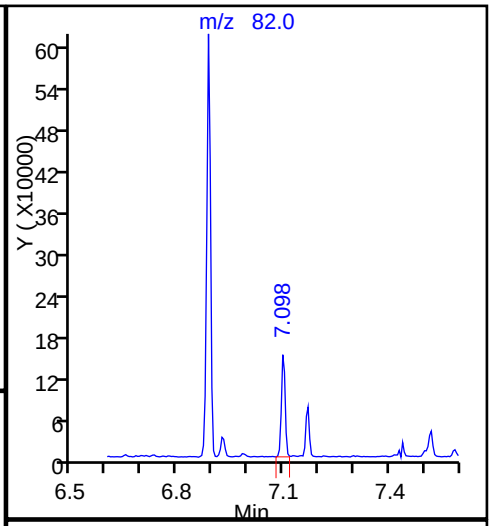
TestAmerica Canton

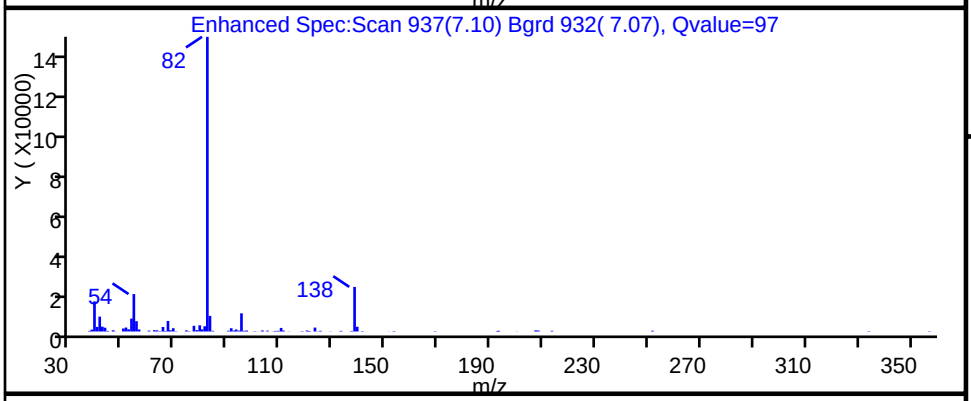
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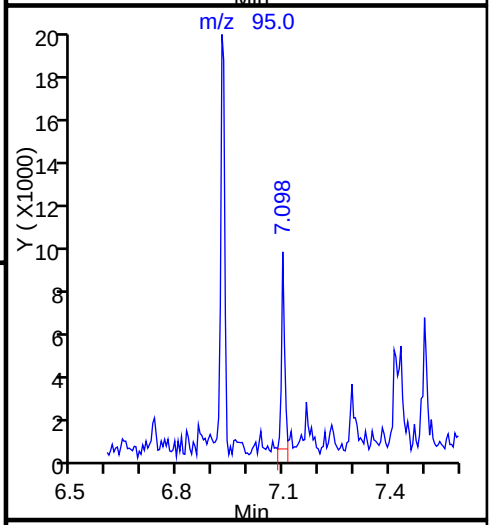
Injection Date:	21-May-2015 09:35:30	Instrument ID:	A4HP9
Lims ID:	240-50067-A-6-B	Lab Sample ID:	240-50067-6
Client ID:	079SB-0394M-0001-SO		
Operator ID:	001574	ALS Bottle#:	6 Worklist Smp#: 6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN

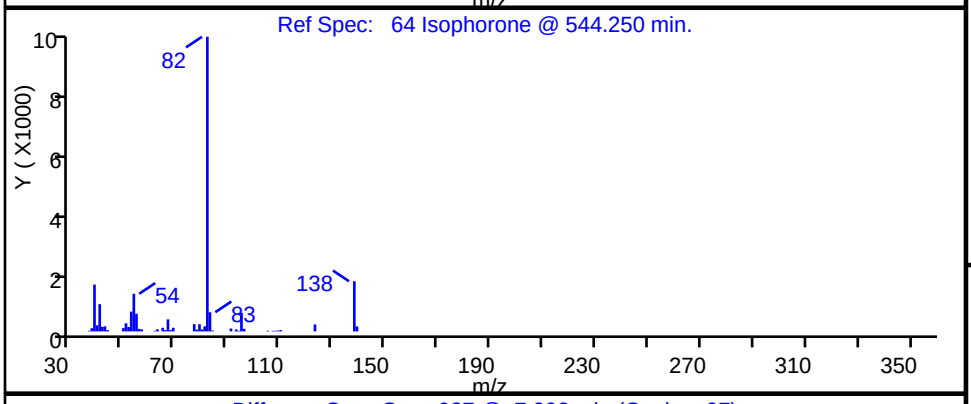
64 Isophorone, CAS: 78-59-1

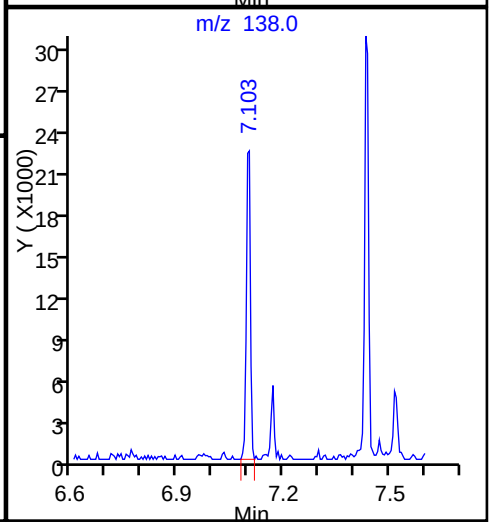


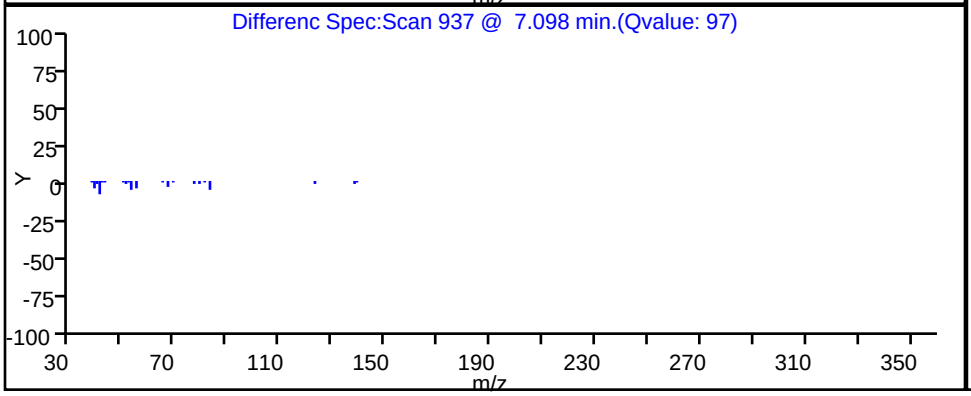












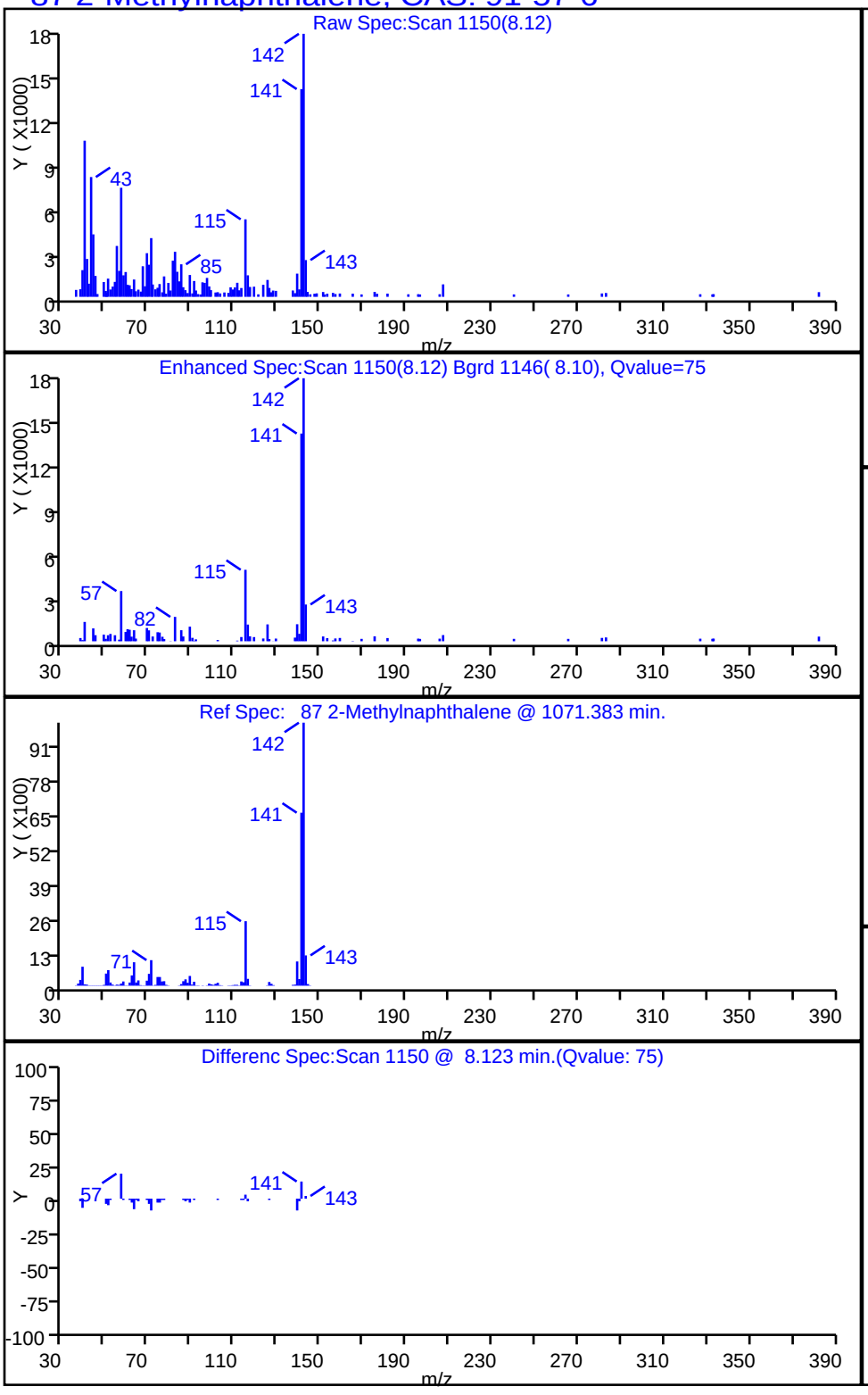
Report Date: 21-May-2015 15:43:55 Chrom Revision: 2.2 05-May-2015 11:39:10

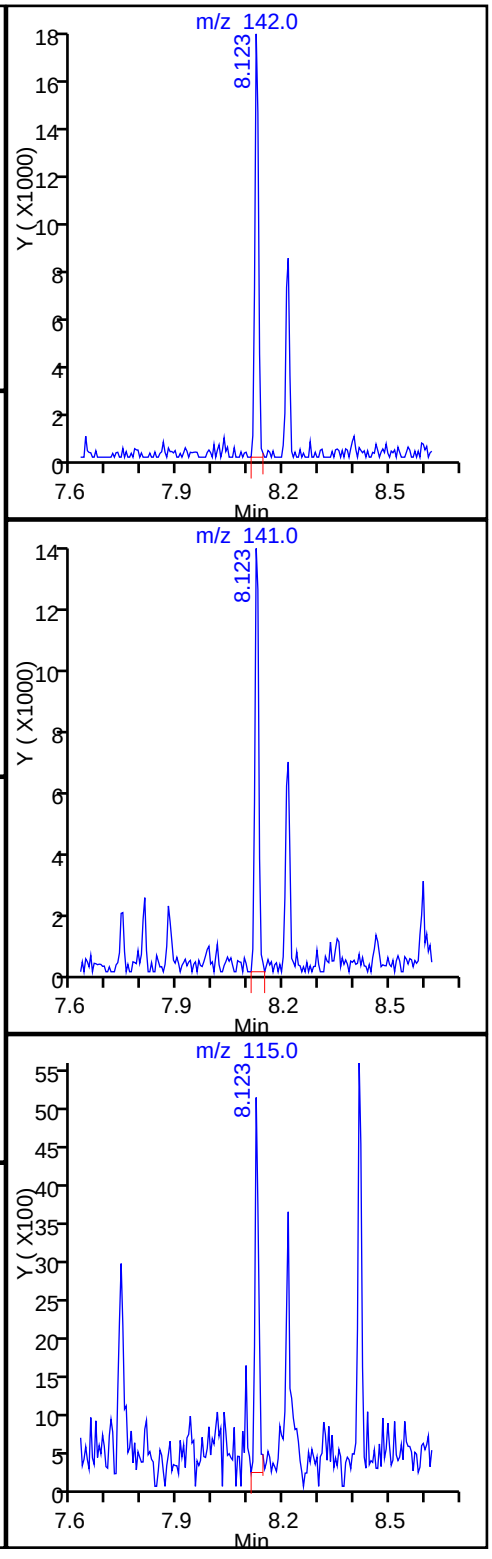
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150521-43883.b\50521006.D

Injection Date:	21-May-2015 09:35:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-6-B	Lab Sample ID:	240-50067-6		
Client ID:	079SB-0394M-0001-SO				
Operator ID:	001574	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

87 2-Methylnaphthalene, CAS: 91-57-6



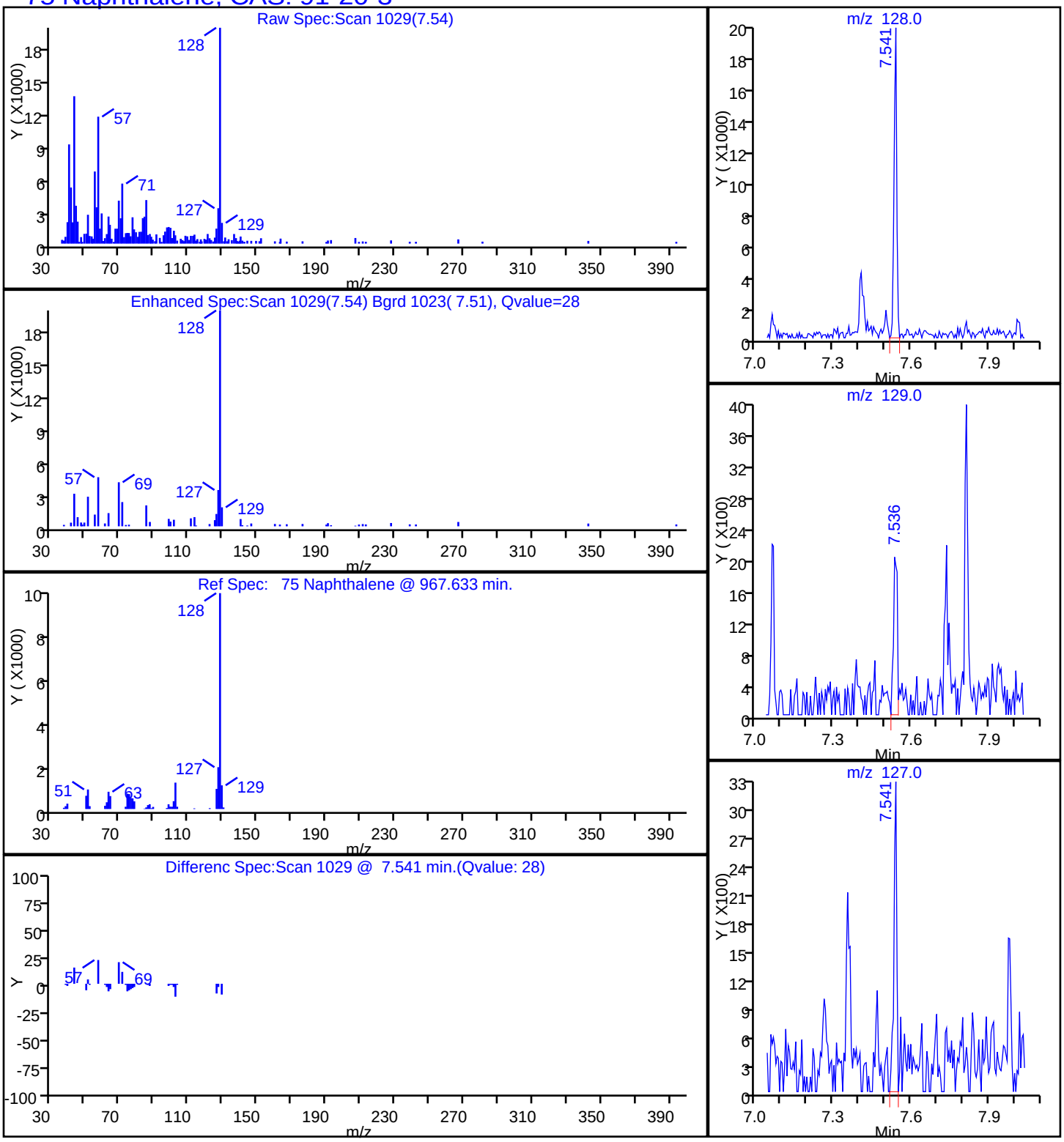


Report Date: 21-May-2015 15:43:55 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150521-43883.b\50521006.D		
Injection Date:	21-May-2015 09:35:30	Instrument ID:	A4HP9
Lims ID:	240-50067-A-6-B	Lab Sample ID:	240-50067-6
Client ID:	079SB-0394M-0001-SO		
Operator ID:	001574	ALS Bottle#:	6 Worklist Smp#: 6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN

75 Naphthalene, CAS: 91-20-3



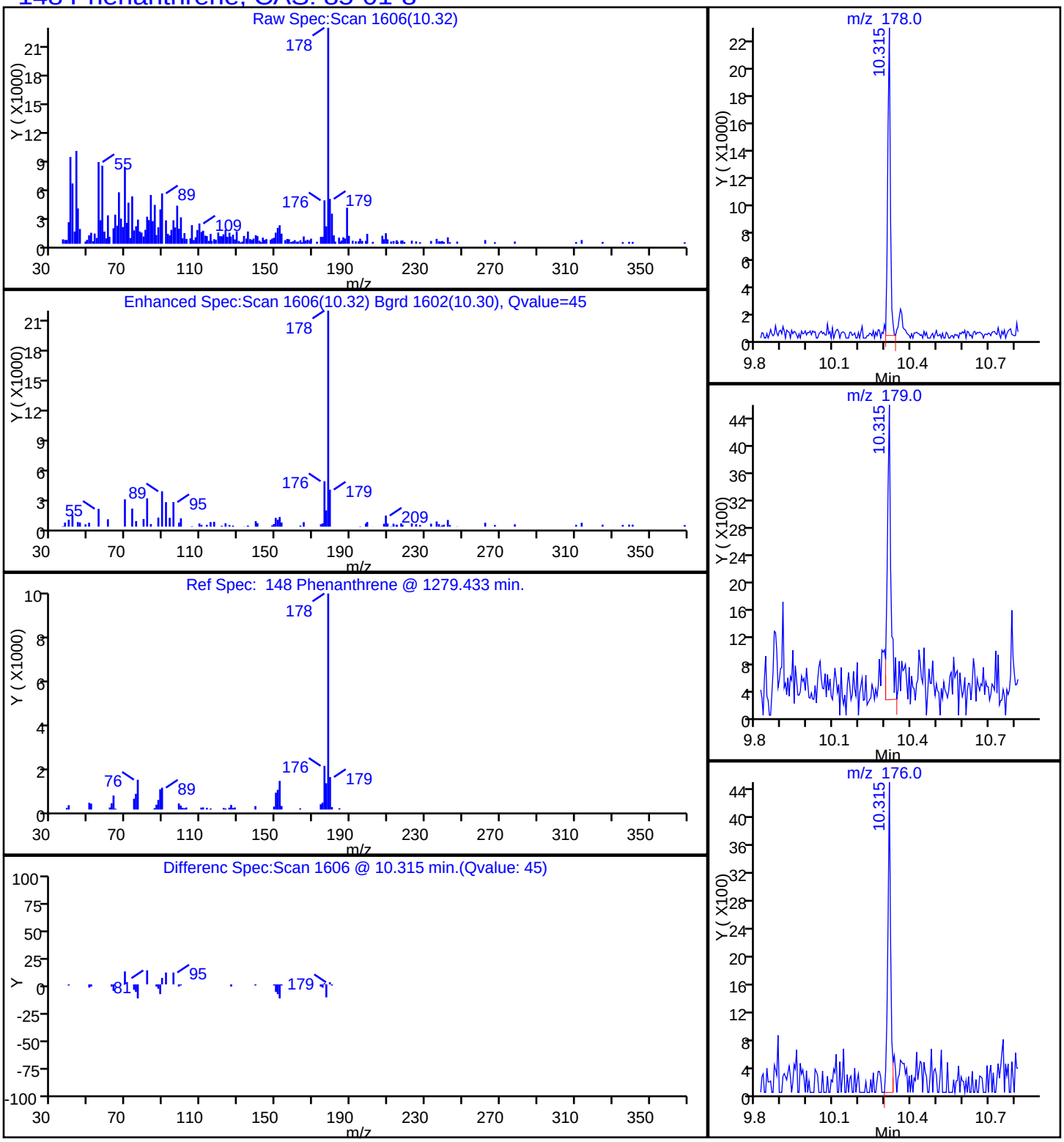
Report Date: 21-May-2015 15:43:55 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150521-43883.b\50521006.D

Injection Date:	21-May-2015 09:35:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-6-B	Lab Sample ID:	240-50067-6		
Client ID:	079SB-0394M-0001-SO				
Operator ID:	001574	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

148 Phenanthrene, CAS: 85-01-8



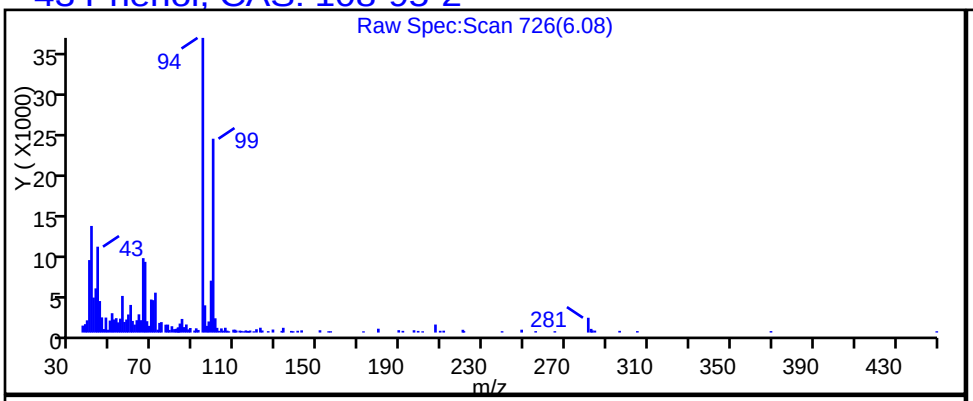
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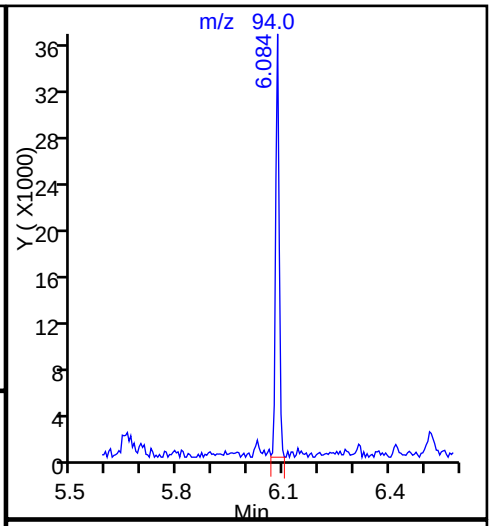
TestAmerica Canton

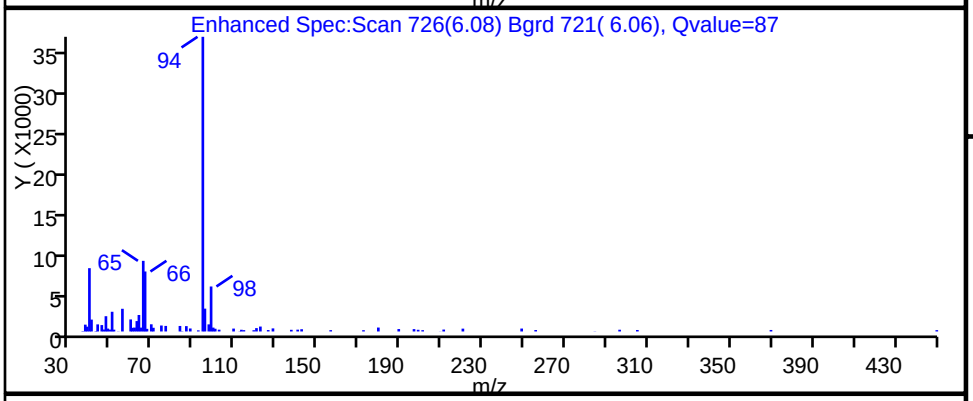
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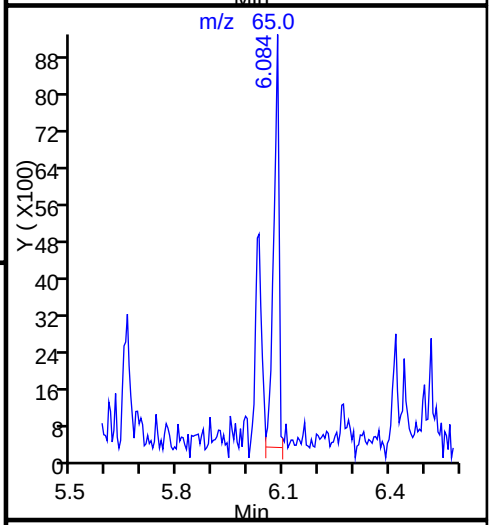
Injection Date:	21-May-2015 09:35:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-6-B	Lab Sample ID:	240-50067-6		
Client ID:	079SB-0394M-0001-SO				
Operator ID:	001574	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

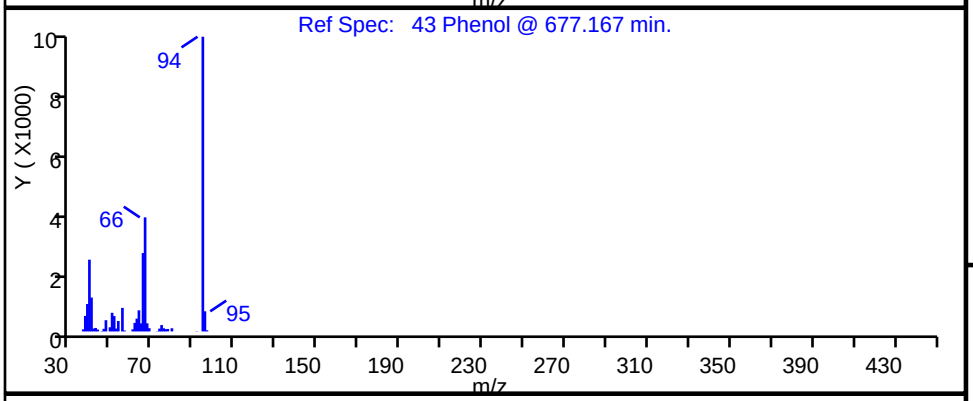
43 Phenol, CAS: 108-95-2

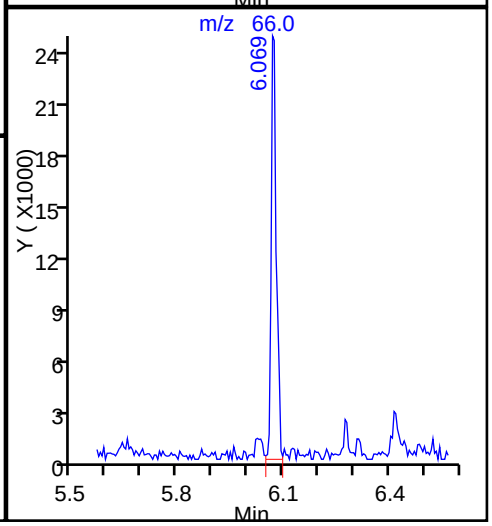


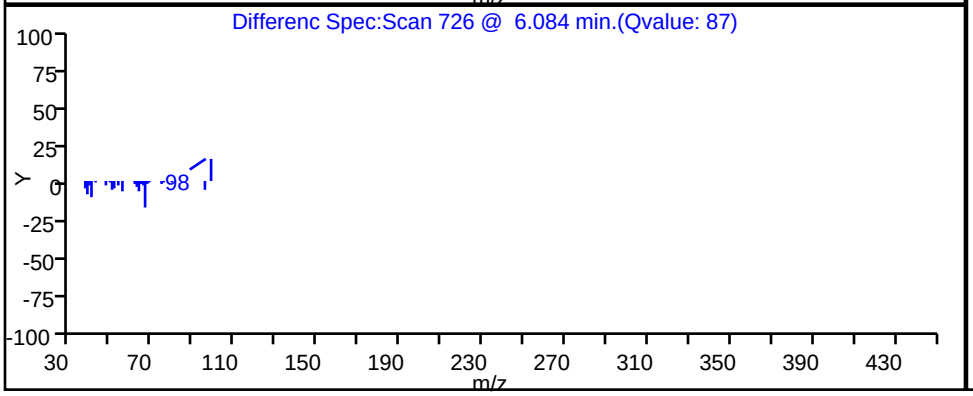












FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0395M-0001-0002-SO | Lab Sample ID: 240-50067-7

Matrix: Solid | Lab File ID: 50520009.D

Analysis Method: 8270C | Date Collected: 04/29/2015 15:50

Extract. Method: 3540C | Date Extracted: 05/12/2015 12:12

Sample wt/vol: 29.86(g) | Date Analyzed: 05/20/2015 12:25

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
83-32-9	Acenaphthene	3.4	U	6.9	3.4	0.79
208-96-8	Acenaphthylene	1.7	U	6.9	1.7	0.36
120-12-7	Anthracene	3.4	U	6.9	3.4	0.81
56-55-3	Benzo[a]anthracene	3.4	U	6.9	3.4	0.65
50-32-8	Benzo[a]pyrene	3.4	U	6.9	3.4	0.66
205-99-2	Benzo[b]fluoranthene	3.4	U	6.9	3.4	0.61
191-24-2	Benzo[g,h,i]perylene	1.7	U	6.9	1.7	0.36
65-85-0	Benzoic acid	140	U J	680	140	37
207-08-9	Benzo[k]fluoranthene	3.4	U	6.9	3.4	0.70
100-51-6	Benzyl alcohol	69	U	340	69	22
111-91-1	Bis(2-chloroethoxy)methane	69	U	100	69	23
111-44-4	Bis(2-chloroethyl)ether	3.4	U	100	3.4	2.1
108-60-1	bis (2-chloroisopropyl) ether	34	U	100	34	9.8
117-81-7	Bis(2-ethylhexyl) phthalate	34	U	72	34	20
101-55-3	4-Bromophenyl phenyl ether	34	U	52	34	13
85-68-7	Butyl benzyl phthalate	34	U	72	34	10
86-74-8	Carbazole	34	U	52	34	28
106-47-8	4-Chloroaniline	69	U	150	69	18
59-50-7	4-Chloro-3-methylphenol	69	U	150	69	22
91-58-7	2-Chloronaphthalene	1.7	U	52	1.7	0.46
95-57-8	2-Chlorophenol	34	U	52	34	8.5
7005-72-3	4-Chlorophenyl phenyl ether	34	U	52	34	13
218-01-9	Chrysene	3.4	U	6.9	3.4	1.1
53-70-3	Dibenz(a,h)anthracene	3.4	U	6.9	3.4	0.68
132-64-9	Dibenzofuran	7.7	J	52	3.4	0.68
95-50-1	1,2-Dichlorobenzene	34	U	52	34	10
541-73-1	1,3-Dichlorobenzene	34	U	52	34	11
106-46-7	1,4-Dichlorobenzene	34	U	52	34	21
91-94-1	3,3'-Dichlorobenzidine	69	U	100	69	19
120-83-2	2,4-Dichlorophenol	69	U	150	69	21
84-66-2	Diethyl phthalate	34	U	72	34	17
105-67-9	2,4-Dimethylphenol	69	U	150	69	21
131-11-3	Dimethyl phthalate	34	U	72	34	18
84-74-2	Di-n-butyl phthalate	34	U	72	34	15

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0395M-0001-0002-SO | Lab Sample ID: 240-50067-7

Matrix: Solid | Lab File ID: 50520009.D

Analysis Method: 8270C | Date Collected: 04/29/2015 15:50

Extract. Method: 3540C | Date Extracted: 05/12/2015 12:12

Sample wt/vol: 29.86(g) | Date Analyzed: 05/20/2015 12:25

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
534-52-1	4,6-Dinitro-2-methylphenol	34	U	150	34	9.5
51-28-5	2,4-Dinitrophenol	69	U	340	69	22
121-14-2	2,4-Dinitrotoluene	69	U	210	69	18
606-20-2	2,6-Dinitrotoluene	69	U	210	69	22
117-84-0	Di-n-octyl phthalate	34	U	72	34	8.2
206-44-0	Fluoranthene	3.4	U	6.9	3.4	0.57
86-73-7	Fluorene	3.4	U	6.9	3.4	0.55
118-74-1	Hexachlorobenzene	3.4	U	6.9	3.4	2.2
87-68-3	Hexachlorobutadiene	34	U	52	34	5.8
77-47-4	Hexachlorocyclopentadiene	34	U	340	34	8.4
67-72-1	Hexachloroethane	34	U	52	34	9.3
193-39-5	Indeno[1,2,3-cd]pyrene	1.7	U	6.9	1.7	0.36
78-59-1	Isophorone	44	J	52	34	13
91-57-6	2-Methylnaphthalene	33		6.9	3.4	0.52
95-48-7	2-Methylphenol	69	U	210	69	11
15831-10-4	3 & 4 Methylphenol	69	U	410	69	21
91-20-3	Naphthalene	30		6.9	3.4	0.85
88-74-4	2-Nitroaniline	34	U	210	34	9.4
99-09-2	3-Nitroaniline	69	U	210	69	17
100-01-6	4-Nitroaniline	69	U	210	69	27
98-95-3	Nitrobenzene	3.4	U	100	3.4	2.3
88-75-5	2-Nitrophenol	16	J	52	34	8.6
100-02-7	4-Nitrophenol	69	U	340	69	18
621-64-7	N-Nitrosodi-n-propylamine	34	U	52	34	6.5
86-30-6	N-Nitrosodiphenylamine	34	U	52	34	22
87-86-5	Pentachlorophenol	34	U J	150	34	9.4
85-01-8	Phenanthrene	14		6.9	3.4	0.75
108-95-2	Phenol	34	U	52	34	7.5
129-00-0	Pyrene	1.7	U	6.9	1.7	0.45
120-82-1	1,2,4-Trichlorobenzene	17	U	52	17	3.6
95-95-4	2,4,5-Trichlorophenol	69	U	150	69	26
88-06-2	2,4,6-Trichlorophenol	34	U	150	34	9.2

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0395M-0001-0002-SO | Lab Sample ID: 240-50067-7

Matrix: Solid | Lab File ID: 50520009.D

Analysis Method: 8270C | Date Collected: 04/29/2015 15:50

Extract. Method: 3540C | Date Extracted: 05/12/2015 12:12

Sample wt/vol: 29.86(g) | Date Analyzed: 05/20/2015 12:25

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	76		45-105
367-12-4	2-Fluorophenol (Surr)	67		35-105
4165-60-0	Nitrobenzene-d5 (Surr)	67		35-100
4165-62-2	Phenol-d5 (Surr)	59	M	40-100
1718-51-0	Terphenyl-d14 (Surr)	72		30-125
118-79-6	2,4,6-Tribromophenol (Surr)	109		35-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520009.D
Lims ID: 240-50067-A-7-G Lab Sample ID: 240-50067-7
Client ID: 079SB-0395M-0001-0002-SO
Sample Type: Client
Inject. Date: 20-May-2015 12:25:30 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043844-009
Misc. Info.: 240-50067-A-7-G240-50067-A-7-G
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-May-2015 08:02:18 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 20-May-2015 13:16:15

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.417	6.411	0.006	97	253200	4.00	
* 2 Naphthalene-d8	136	7.528	7.527	0.001	99	993307	4.00	
* 3 Acenaphthene-d10	164	9.033	9.037	-0.004	90	286527	4.00	
* 4 Phenanthrene-d10	188	10.307	10.311	-0.004	96	711945	4.00	
* 5 Chrysene-d12	240	12.615	12.619	-0.004	92	640060	4.00	
* 6 Perylene-d12	264	14.433	14.437	-0.004	91	455697	4.00	
$ 7 2-Fluorophenol	112	5.272	5.199	0.073	92	736293	6.73	
$ 8 Phenol-d5	99	6.061	6.046	0.015	93	867115	5.87	M
$ 9 Nitrobenzene-d5	82	6.888	6.887	0.001	87	681055	6.69	
$ 10 2-Fluorobiphenyl (Surr)	172	8.432	8.431	0.001	99	618953	7.58	
$ 11 2,4,6-Tribromophenol	330	9.706	9.710	-0.004	87	82232	10.9	
$ 12 Terphenyl-d14	244	11.634	11.638	-0.004	97	887990	7.23	
43 Phenol	94		6.055				ND	M
69 Bis(2-chloroethyl)ether	93		6.147				ND	
46 2-Chlorophenol	128		6.228				ND	
47 1,3-Dichlorobenzene	146		6.368				ND	
48 1,4-Dichlorobenzene	146		6.426				ND	
49 Benzyl alcohol	108		6.507				ND	
50 1,2-Dichlorobenzene	146		6.570				ND	
51 2-Methylphenol	108		6.594				ND	
53 2,2'-oxybis[1-chloropropan	45		6.628				ND	
21 3 & 4 Methylphenol	108		6.724				ND	
57 N-Nitrosodi-n-propylamine	70		6.738				ND	
61 Hexachloroethane	117		6.878				ND	
62 Nitrobenzene	77		6.902				ND	
64 Isophorone	82	7.105	7.104	0.001	97	128221	0.6458	
66 2-Nitrophenol	139	7.186	7.185	0.001	89	9888	0.2322	
65 2,4-Dimethylphenol	107		7.190				ND	
71 Benzoic acid	122	7.206	7.238	-0.032	79	9993	0.2005	
70 Bis(2-chloroethoxy)methane	93		7.267				ND	
73 2,4-Dichlorophenol	162		7.387				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
74 1,2,4-Trichlorobenzene	180		7.474				ND	
75 Naphthalene	128	7.547	7.546	0.001	96	114609	0.4371	
76 4-Chloroaniline	127		7.565				ND	
79 Hexachlorobutadiene	225		7.652				ND	
86 4-Chloro-3-methylphenol	107		7.955				ND	
87 2-Methylnaphthalene	142	8.134	8.138	-0.004	95	77691	0.4862	
89 Hexachlorocyclopentadiene	237		8.282				ND	
92 2,4,6-Trichlorophenol	196		8.364				ND	
93 2,4,5-Trichlorophenol	196		8.402				ND	
100 2-Chloronaphthalene	162		8.556				ND	
102 2-Nitroaniline	65		8.618				ND	
105 Dimethyl phthalate	163		8.748				ND	
107 2,6-Dinitrotoluene	165		8.806				ND	
109 Acenaphthylene	152		8.921				ND	
110 3-Nitroaniline	138		8.960				ND	
111 2,4-Dinitrophenol	184		9.046				ND	
112 Acenaphthene	153		9.066				ND	
113 4-Nitrophenol	109		9.070				ND	
114 2,4-Dinitrotoluene	165		9.157				ND	
116 Dibenzofuran	168	9.206	9.210	-0.004	95	12194	0.1118	
121 Diethyl phthalate	149	9.341	9.345	-0.004	56	15318	0.1931	
123 4-Chlorophenyl phenyl ethe	204		9.474				ND	
125 4-Nitroaniline	138		9.484				ND	
126 Fluorene	166		9.503				ND	
128 4,6-Dinitro-2-methylphenol	198		9.513				ND	
131 N-Nitrosodiphenylamine	169		9.571				ND	
139 4-Bromophenyl phenyl ether	248		9.898				ND	
141 Hexachlorobenzene	284		9.989				ND	
143 Pentachlorophenol	266		10.143				ND	
148 Phenanthrene	178	10.331	10.330	0.001	96	40562	0.1990	
149 Anthracene	178		10.374				ND	
151 Carbazole	167		10.489				ND	
154 Di-n-butyl phthalate	149	10.726	10.725	0.001	99	37281	0.1705	
159 Fluoranthene	202		11.355				ND	
161 Pyrene	202		11.557				ND	
168 Butyl benzyl phthalate	149		12.013				ND	
173 Bis(2-ethylhexyl) phthalat	149	12.500	12.504	-0.004	95	29534	0.1997	
175 3,3'-Dichlorobenzidine	252		12.538				ND	
177 Benzo[a]anthracene	228		12.610				ND	
178 Chrysene	228		12.648				ND	
180 Di-n-octyl phthalate	149		13.177				ND	
182 Benzo[b]fluoranthene	252		13.870				ND	
183 Benzo[k]fluoranthene	252		13.903				ND	
184 Benzo[a]pyrene	252		14.355				ND	
188 Indeno[1,2,3-cd]pyrene	276		16.423				ND	
189 Dibenz(a,h)anthracene	278		16.428				ND	
190 Benzo[g,h,i]perylene	276		17.039				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

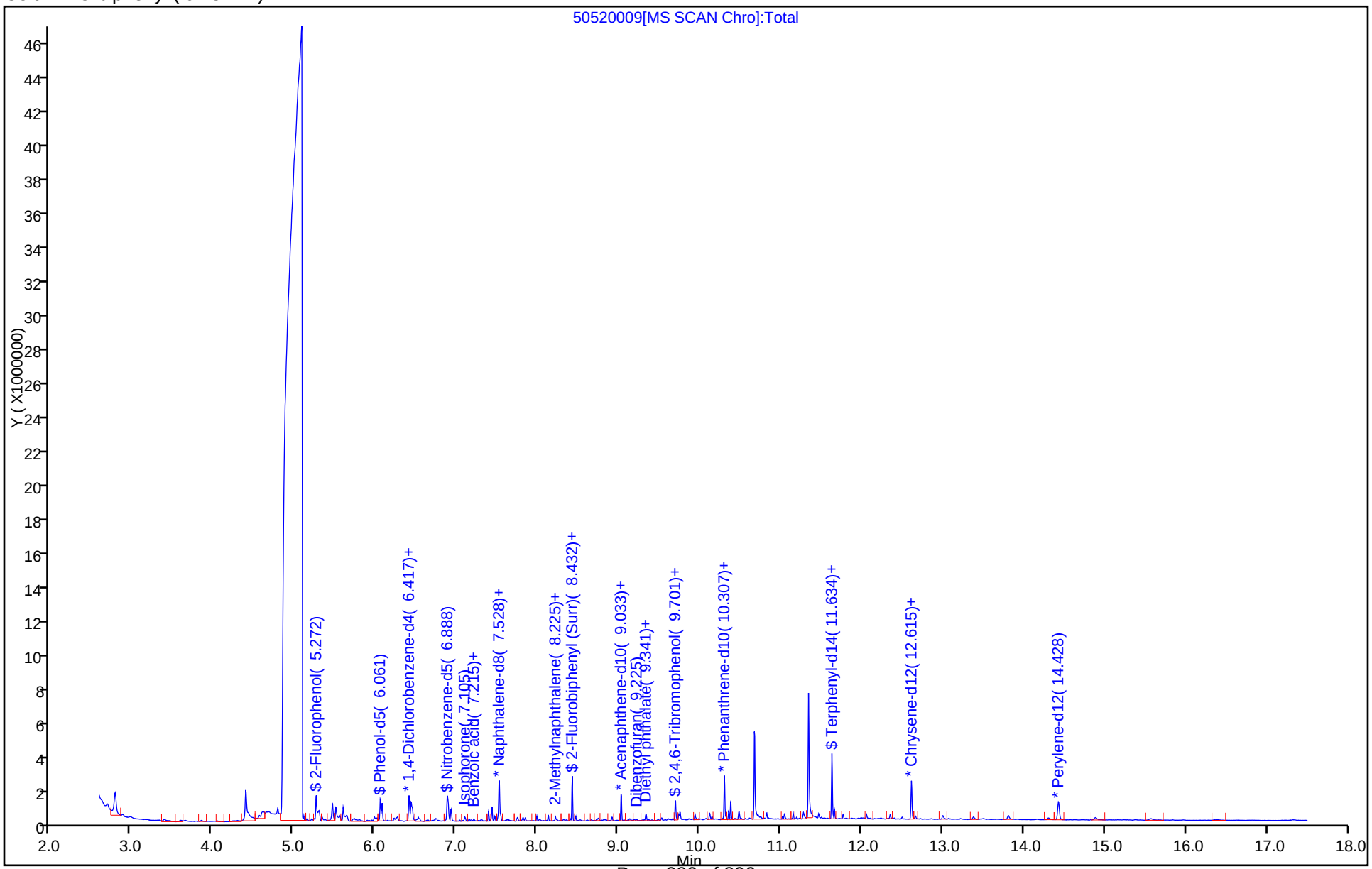
SMIS80PPMW_00011 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 21-May-2015 08:02:31 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520009.D				
Injection Date:	20-May-2015 12:25:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	240-50067-A-7-G	Lab Sample ID:	240-50067-7	Worklist Smp#:	9
Client ID:	079SB-0395M-0001-0002-SO				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



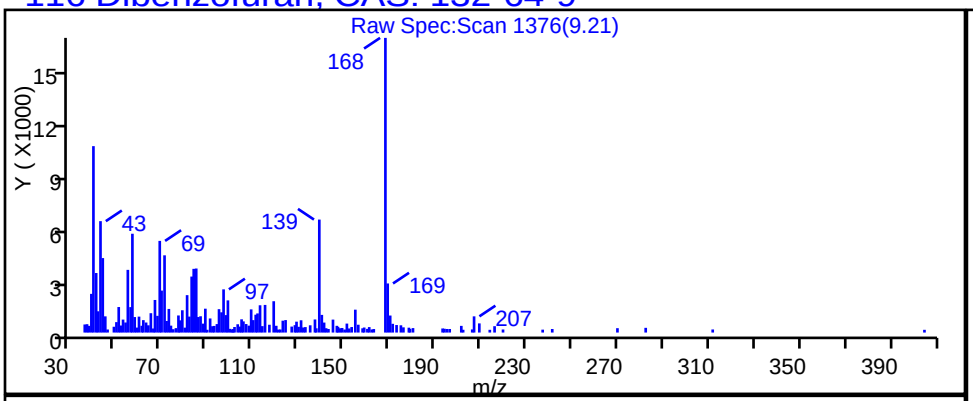
Report Date: 21-May-2015 08:02:31 Chrom Revision: 2.2 05-May-2015 11:39:10

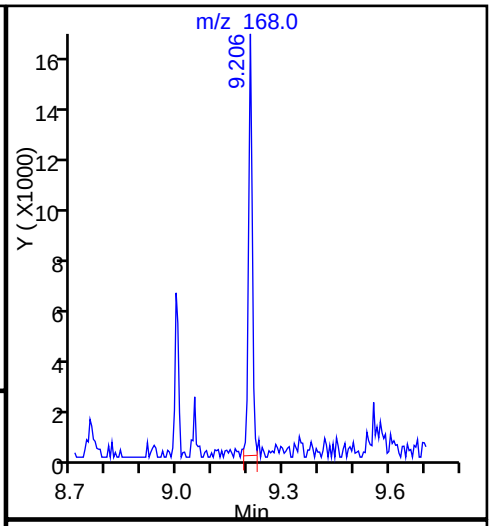
TestAmerica Canton

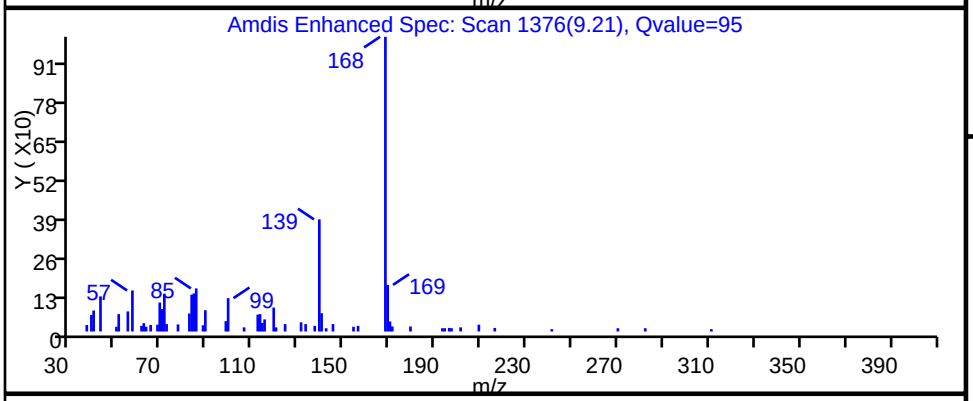
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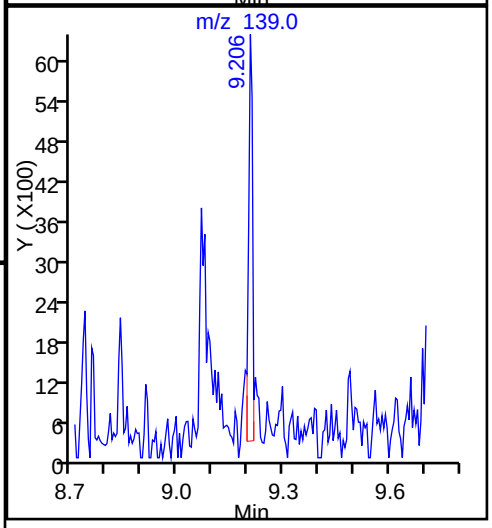
Injection Date:	20-May-2015 12:25:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-7-G	Lab Sample ID:	240-50067-7		
Client ID:	079SB-0395M-0001-0002-SO				
Operator ID:	001574	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

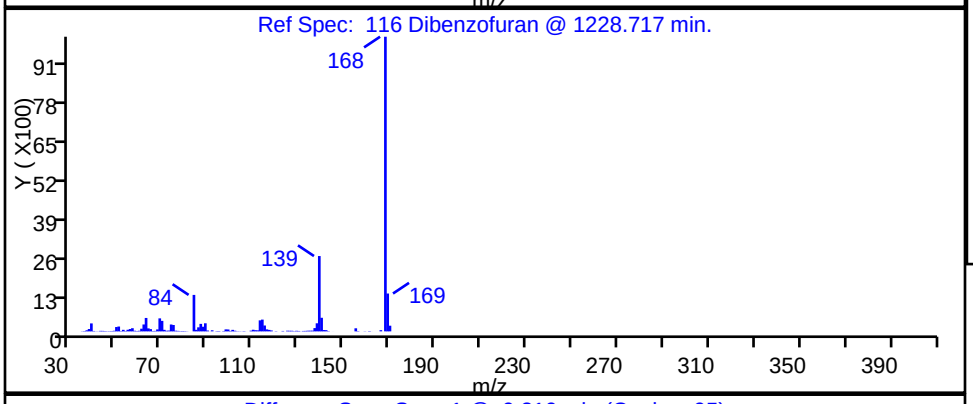
116 Dibenzofuran, CAS: 132-64-9

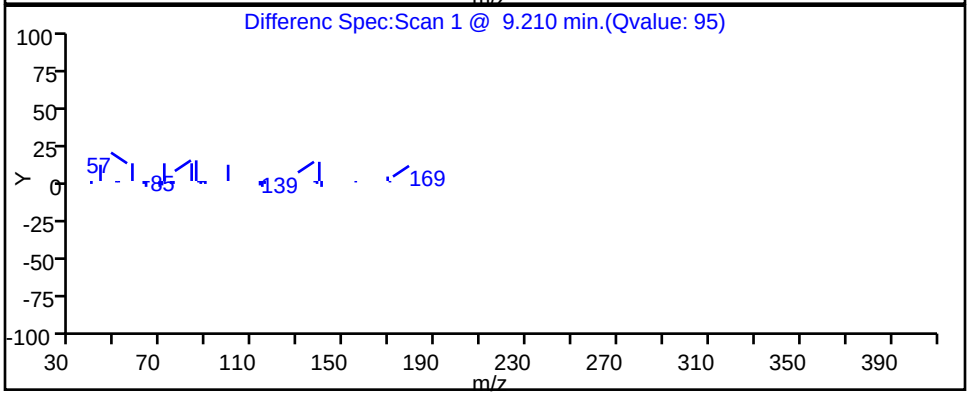












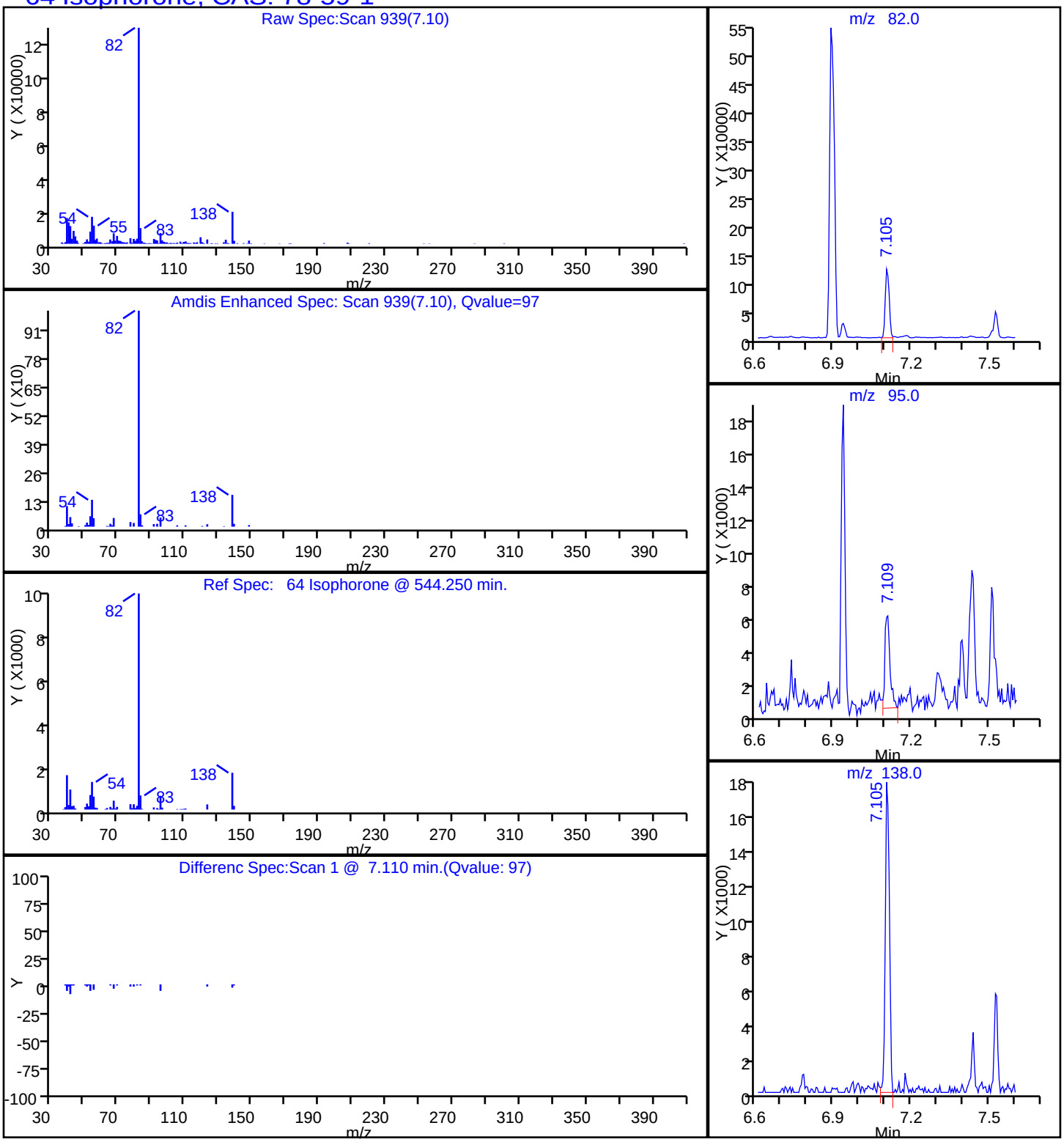
Report Date: 21-May-2015 08:02:31 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520009.D

Injection Date:	20-May-2015 12:25:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-7-G	Lab Sample ID:	240-50067-7		
Client ID:	079SB-0395M-0001-0002-SO				
Operator ID:	001574	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

64 Isophorone, CAS: 78-59-1



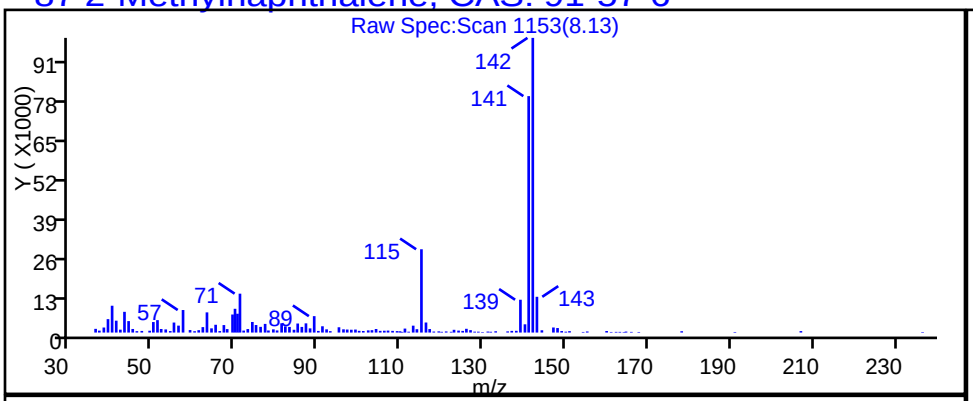
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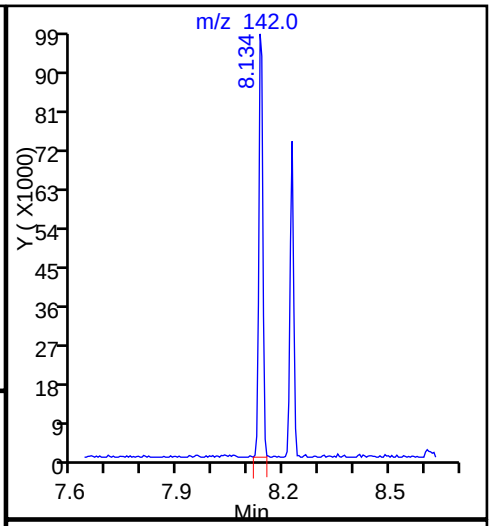
TestAmerica Canton

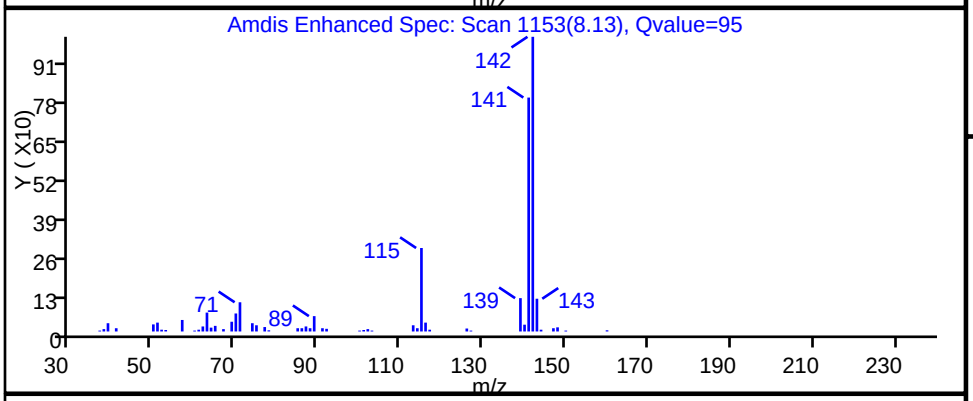
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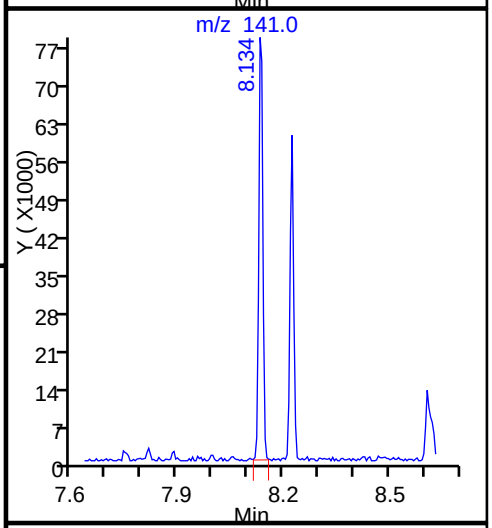
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Lims ID:	240-50067-A-7-G	Lab Sample ID:	240-50067-7		
Client ID:	079SB-0395M-0001-0002-SO				
Operator ID:	001574	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

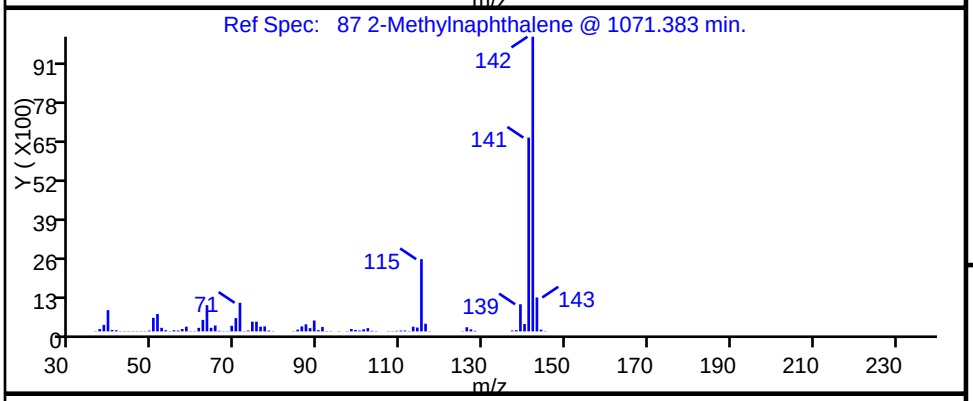
87 2-Methylnaphthalene, CAS: 91-57-6

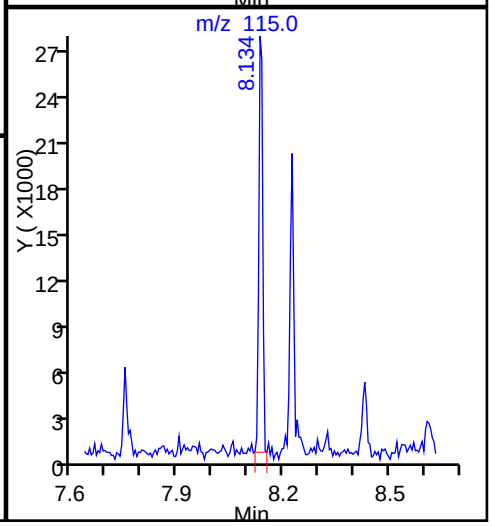


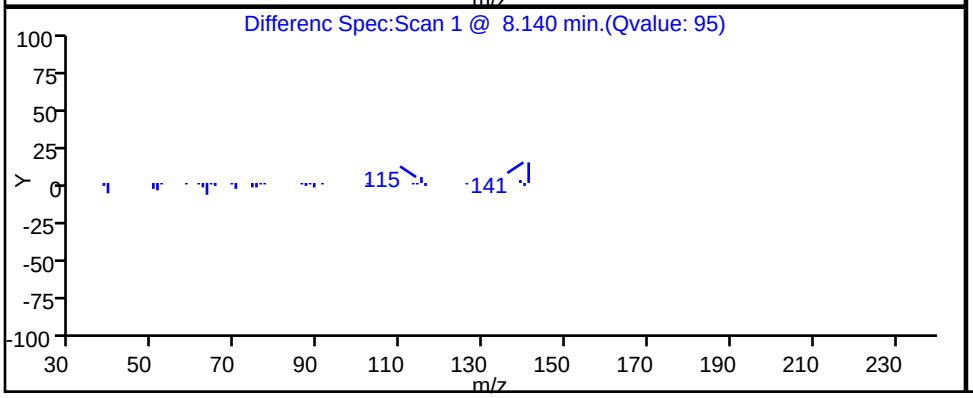












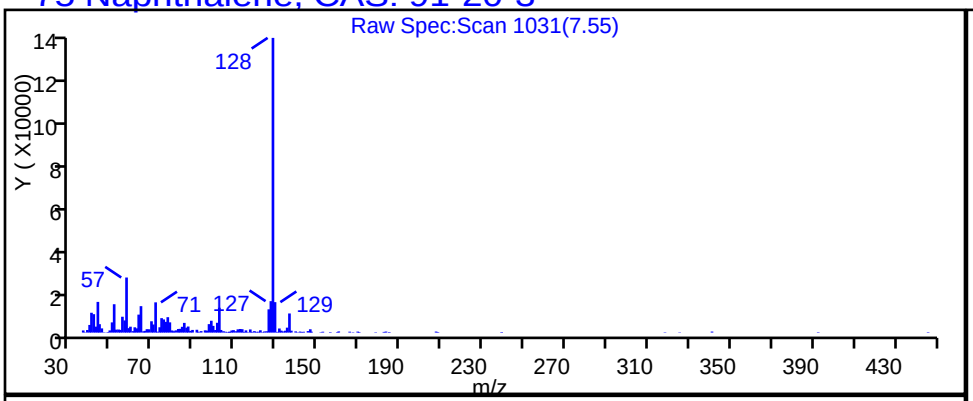
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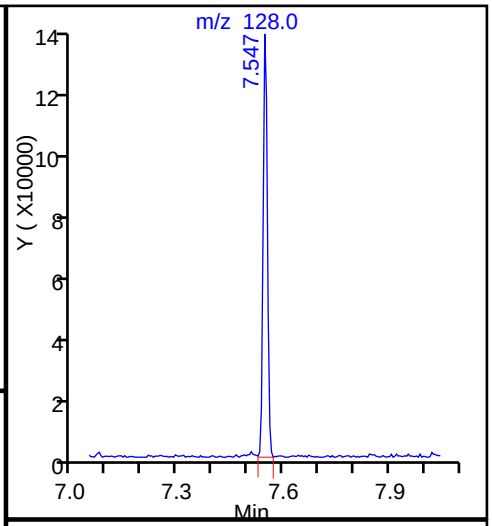
TestAmerica Canton

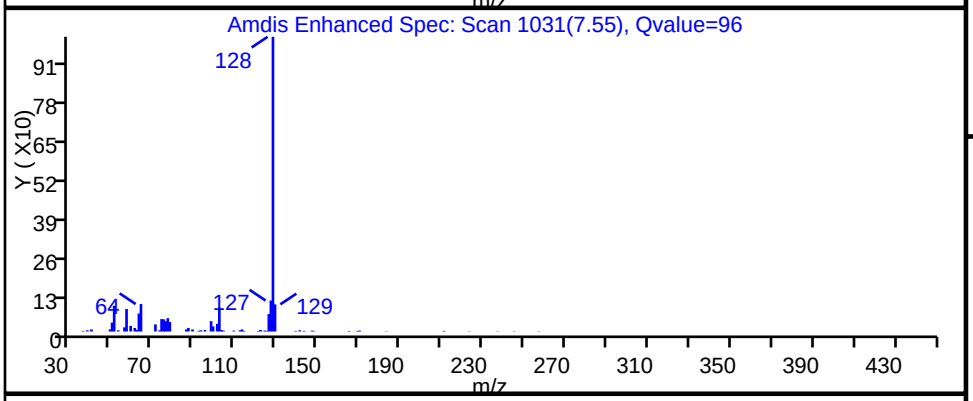
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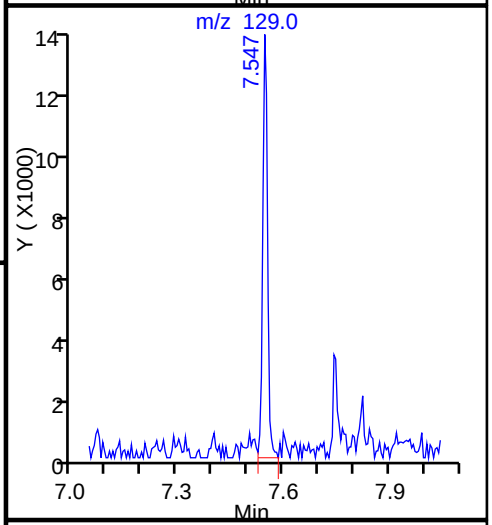
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Lims ID:	240-50067-A-7-G	Lab Sample ID:	240-50067-7		
Client ID:	079SB-0395M-0001-0002-SO				
Operator ID:	001574	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

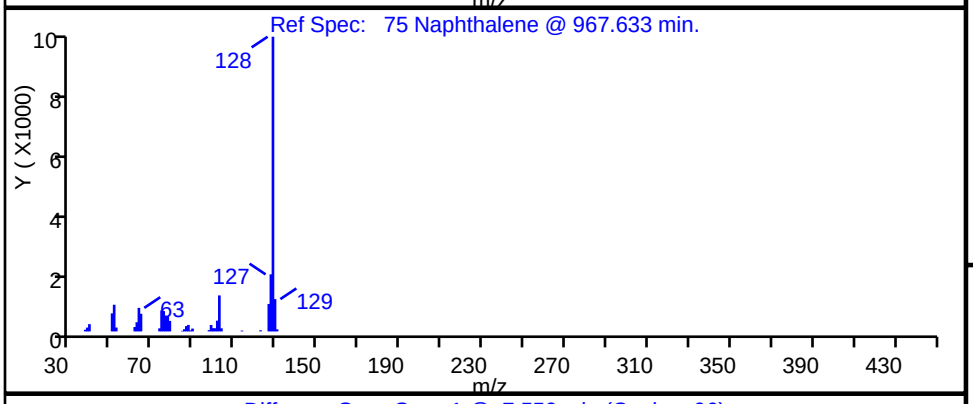
75 Naphthalene, CAS: 91-20-3

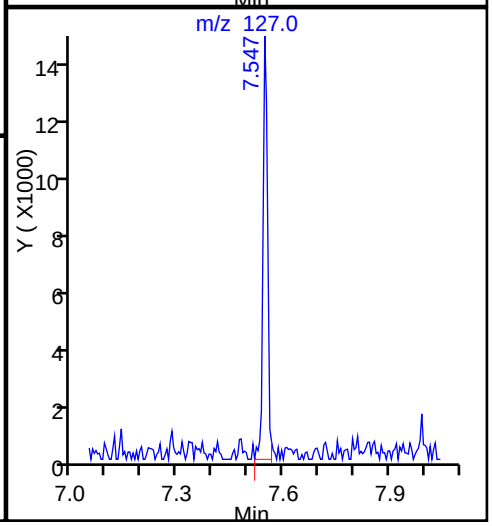


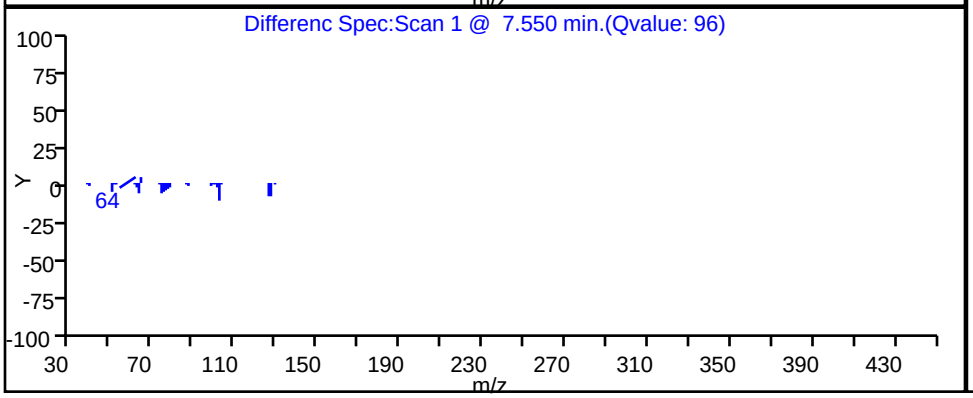












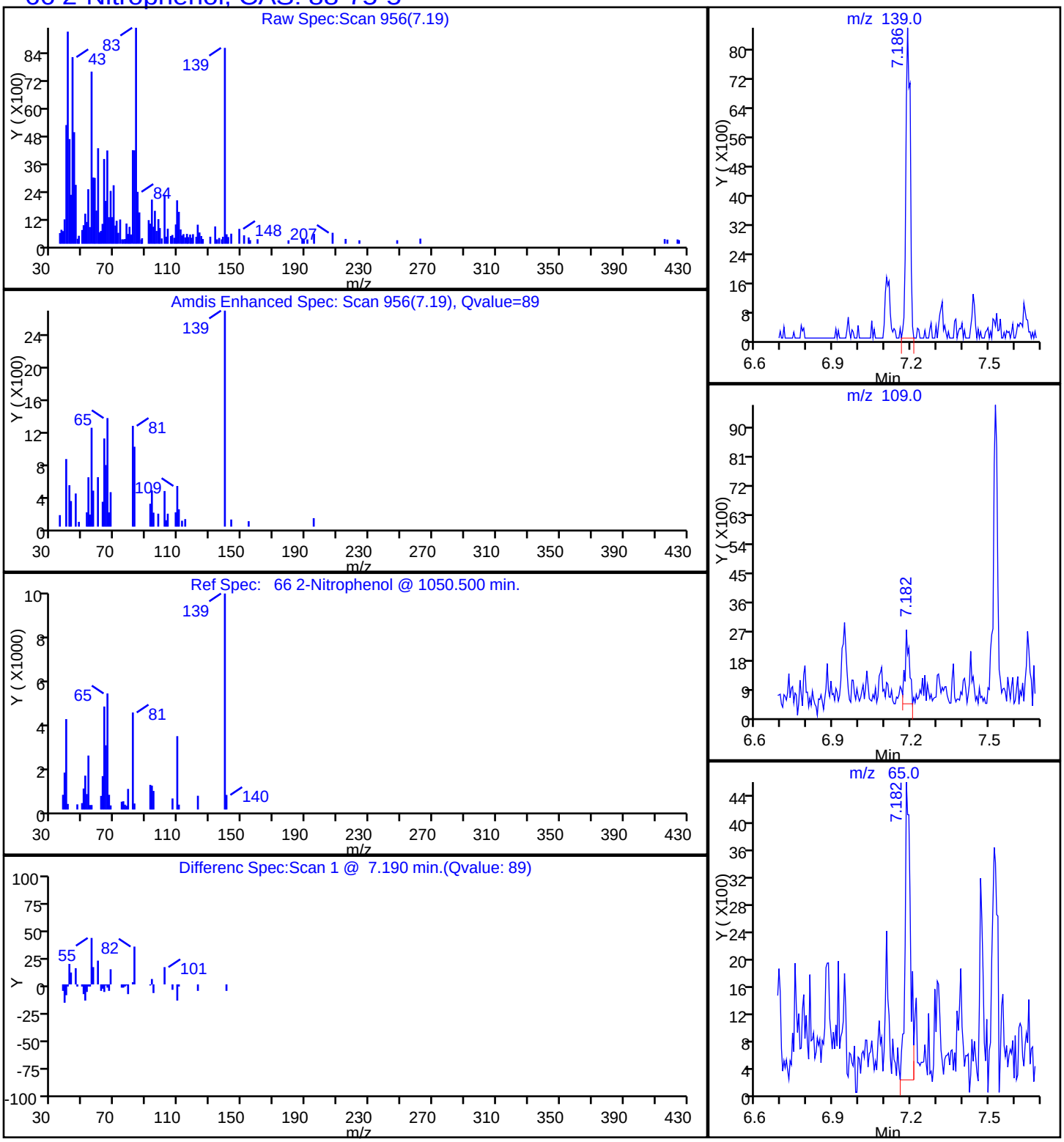
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TestAmerica Canton

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Injection Date:	20-May-2015 12:25:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-7-G	Lab Sample ID:	240-50067-7		
Client ID:	079SB-0395M-0001-0002-SO				
Operator ID:	001574	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

66 2-Nitrophenol, CAS: 88-75-5



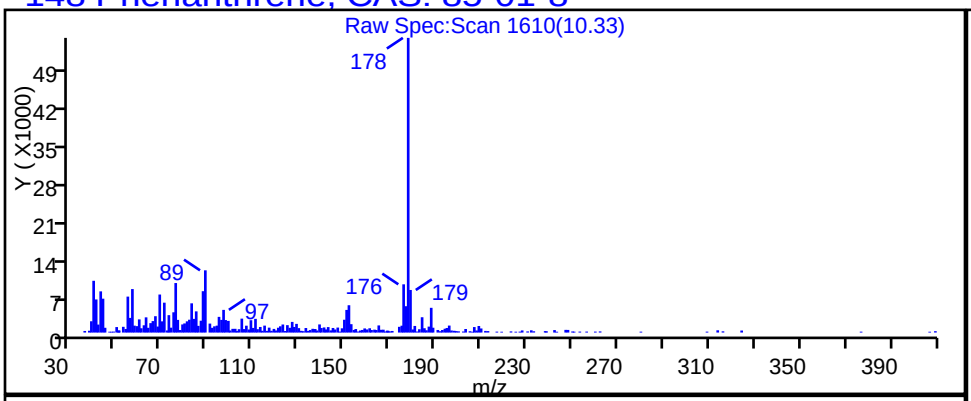
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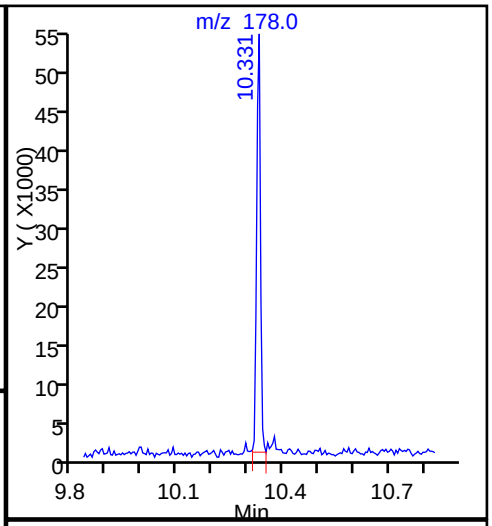
TestAmerica Canton

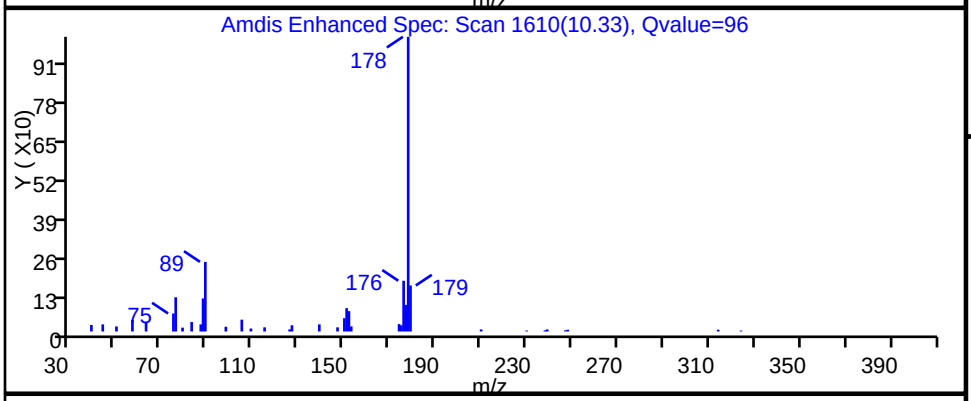
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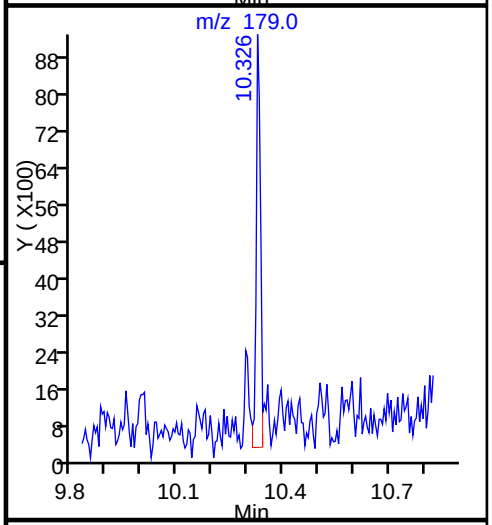
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Operator ID:	001574	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

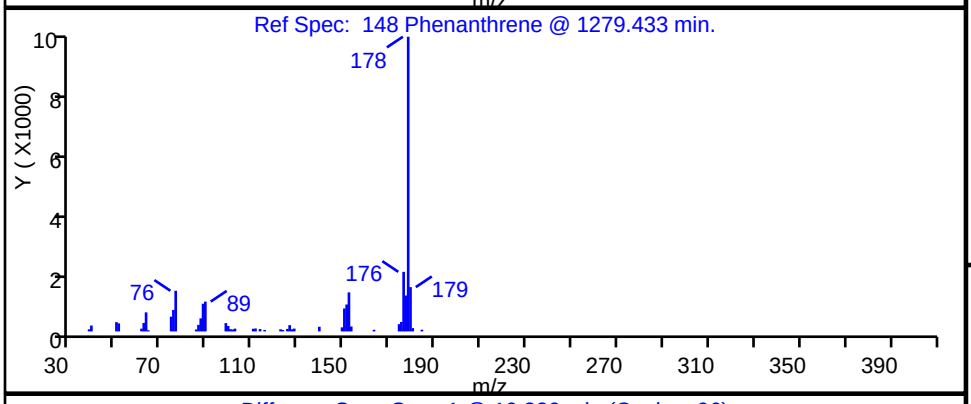
148 Phenanthrene, CAS: 85-01-8

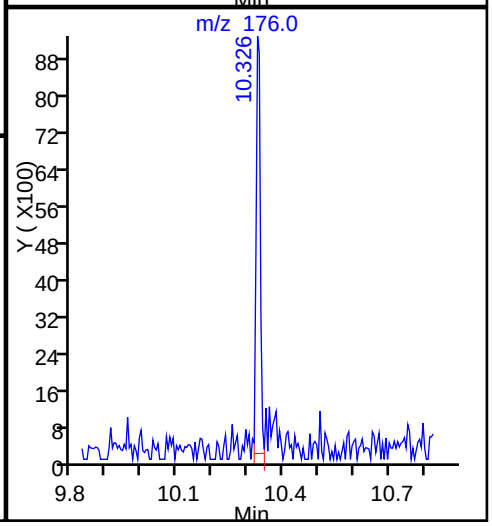


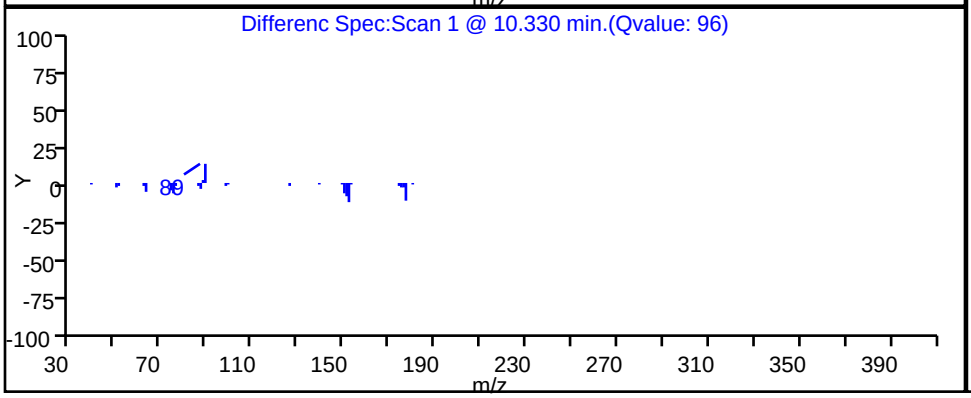












Manual Integration/User Assign Peak Report

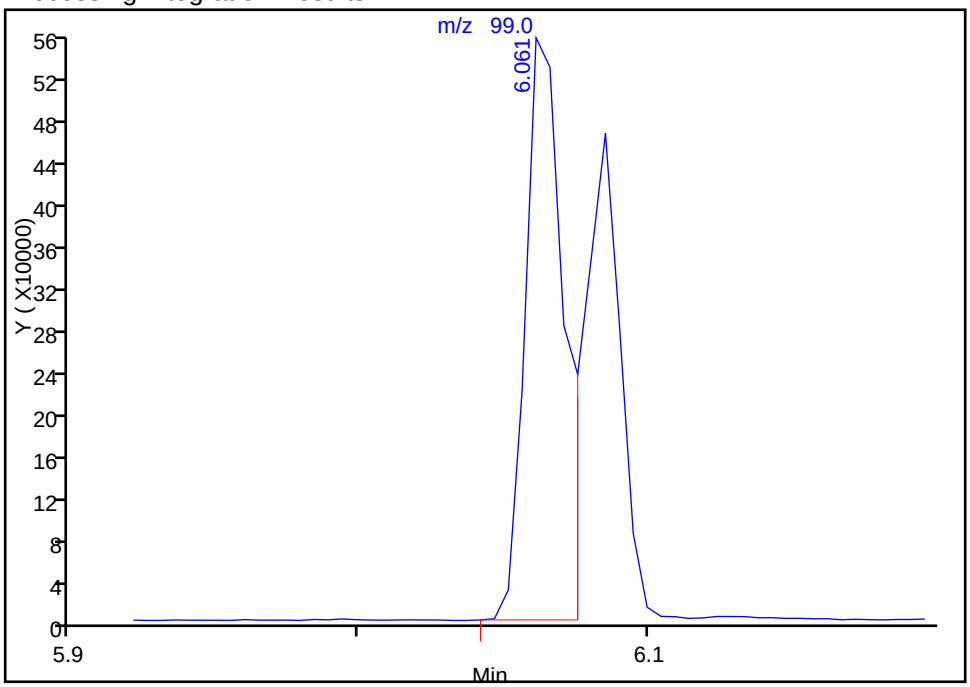
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520009.D				
Injection Date:	20-May-2015 12:25:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-7-G	Lab Sample ID:	240-50067-7		
Client ID:	079SB-0395M-0001-0002-SO				
Operator ID:	001574	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

$ 8 Phenol-d5, CAS: 4165-62-2

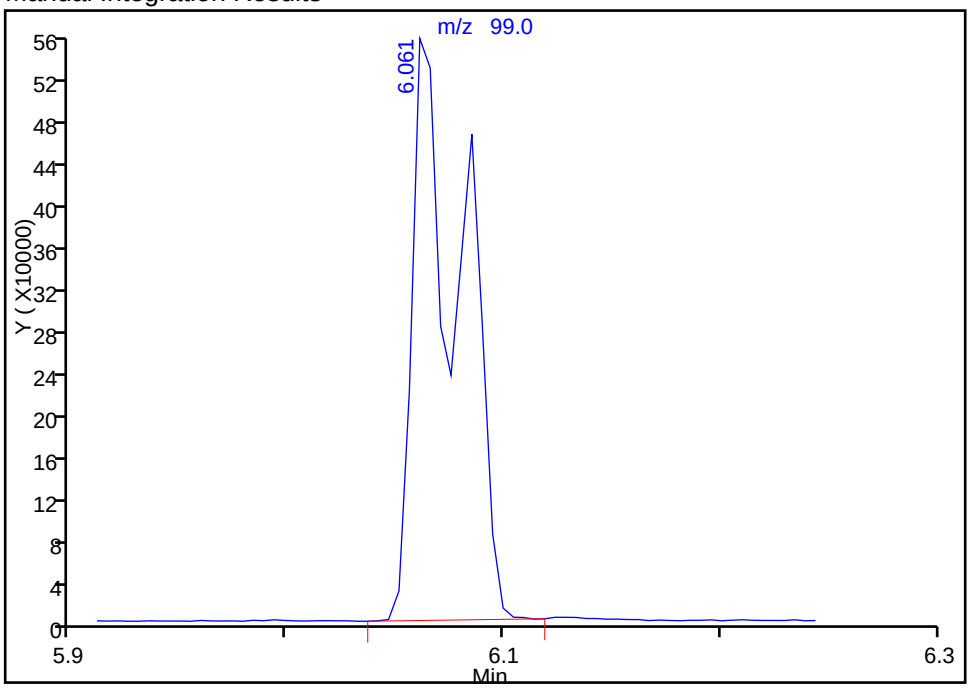
Processing Integration Results

RT: 6.06
Area: 527841
Amount: 3.571241
Amount Units: ng/ul



Manual Integration Results

RT: 6.06
Area: 867115
Amount: 5.866684
Amount Units: ng/ul



Reviewer: ulmanm, 20-May-2015 13:16:15
Audit Action: Manually Integrated
Audit Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0396M-0001-SO | Lab Sample ID: 240-50067-8

Matrix: Solid | Lab File ID: 50520012.D

Analysis Method: 8270C | Date Collected: 04/29/2015 15:20

Extract. Method: 3540C | Date Extracted: 05/12/2015 12:12

Sample wt/vol: 30.31(g) | Date Analyzed: 05/20/2015 13:40

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
83-32-9	Acenaphthene	3.3	U	6.8	3.3	0.77
208-96-8	Acenaphthylene	1.7	U	6.8	1.7	0.35
120-12-7	Anthracene	3.3	U	6.8	3.3	0.79
56-55-3	Benzo[a]anthracene	3.3	U	6.8	3.3	0.64
50-32-8	Benzo[a]pyrene	3.3	U	6.8	3.3	0.65
205-99-2	Benzo[b]fluoranthene	3.3	U	6.8	3.3	0.60
191-24-2	Benzo[g,h,i]perylene	1.7	U	6.8	1.7	0.35
65-85-0	Benzoic acid	130	U	670	130	37
207-08-9	Benzo[k]fluoranthene	3.3	U	6.8	3.3	0.69
100-51-6	Benzyl alcohol	68	U	330	68	21
111-91-1	Bis(2-chloroethoxy)methane	68	U	100	68	22
111-44-4	Bis(2-chloroethyl)ether	3.3	U	100	3.3	2.0
108-60-1	bis (2-chloroisopropyl) ether	34	U	100	34	9.6
117-81-7	Bis(2-ethylhexyl) phthalate	34	U	71	34	19
101-55-3	4-Bromophenyl phenyl ether	34	U	51	34	13
85-68-7	Butyl benzyl phthalate	34	U	71	34	10
86-74-8	Carbazole	34	U	51	34	27
106-47-8	4-Chloroaniline	68	U	150	68	17
59-50-7	4-Chloro-3-methylphenol	68	U	150	68	21
91-58-7	2-Chloronaphthalene	1.7	U	51	1.7	0.46
95-57-8	2-Chlorophenol	34	U	51	34	8.3
7005-72-3	4-Chlorophenyl phenyl ether	34	U	51	34	13
218-01-9	Chrysene	3.3	U	6.8	3.3	1.1
53-70-3	Dibenz(a,h)anthracene	3.3	U	6.8	3.3	0.67
132-64-9	Dibenzofuran	3.3	U	51	3.3	0.67
95-50-1	1,2-Dichlorobenzene	34	U	51	34	9.8
541-73-1	1,3-Dichlorobenzene	34	U	51	34	11
106-46-7	1,4-Dichlorobenzene	34	U	51	34	20
91-94-1	3,3'-Dichlorobenzidine	68	U	100	68	18
120-83-2	2,4-Dichlorophenol	68	U	150	68	20
84-66-2	Diethyl phthalate	34	U	71	34	16
105-67-9	2,4-Dimethylphenol	68	U	150	68	20
131-11-3	Dimethyl phthalate	34	U	71	34	17
84-74-2	Di-n-butyl phthalate	34	U	71	34	15

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0396M-0001-SO | Lab Sample ID: 240-50067-8

Matrix: Solid | Lab File ID: 50520012.D

Analysis Method: 8270C | Date Collected: 04/29/2015 15:20

Extract. Method: 3540C | Date Extracted: 05/12/2015 12:12

Sample wt/vol: 30.31(g) | Date Analyzed: 05/20/2015 13:40

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
534-52-1	4,6-Dinitro-2-methylphenol	34	U	150	34	9.3
51-28-5	2,4-Dinitrophenol	68	U	330	68	21
121-14-2	2,4-Dinitrotoluene	68	U	200	68	17
606-20-2	2,6-Dinitrotoluene	68	U	200	68	21
117-84-0	Di-n-octyl phthalate	34	U	71	34	8.0
206-44-0	Fluoranthene	3.3	U	6.8	3.3	0.56
86-73-7	Fluorene	3.3	U	6.8	3.3	0.54
118-74-1	Hexachlorobenzene	3.3	U	6.8	3.3	2.1
87-68-3	Hexachlorobutadiene	34	U	51	34	5.7
77-47-4	Hexachlorocyclopentadiene	34	U	330	34	8.2
67-72-1	Hexachloroethane	34	U	51	34	9.1
193-39-5	Indeno[1,2,3-cd]pyrene	1.7	U	6.8	1.7	0.35
78-59-1	Isophorone	55		51	34	13
91-57-6	2-Methylnaphthalene	12		6.8	3.3	0.51
95-48-7	2-Methylphenol	68	U	200	68	11
15831-10-4	3 & 4 Methylphenol	68	U	410	68	20
91-20-3	Naphthalene	11		6.8	3.3	0.83
88-74-4	2-Nitroaniline	34	U	200	34	9.2
99-09-2	3-Nitroaniline	68	U	200	68	16
100-01-6	4-Nitroaniline	68	U	200	68	26
98-95-3	Nitrobenzene	3.3	U	100	3.3	2.2
88-75-5	2-Nitrophenol	34	U	51	34	8.4
100-02-7	4-Nitrophenol	68	U	330	68	17
621-64-7	N-Nitrosodi-n-propylamine	34	U	51	34	6.4
86-30-6	N-Nitrosodiphenylamine	34	U	51	34	21
87-86-5	Pentachlorophenol	34	U	150	34	9.2
85-01-8	Phenanthrene	9.8		6.8	3.3	0.74
108-95-2	Phenol	26	J M	51	34	7.4
129-00-0	Pyrene	1.7	U	6.8	1.7	0.45
120-82-1	1,2,4-Trichlorobenzene	17	U	51	17	3.5
95-95-4	2,4,5-Trichlorophenol	68	U	150	68	25
88-06-2	2,4,6-Trichlorophenol	34	U	150	34	9.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0396M-0001-SO | Lab Sample ID: 240-50067-8

Matrix: Solid | Lab File ID: 50520012.D

Analysis Method: 8270C | Date Collected: 04/29/2015 15:20

Extract. Method: 3540C | Date Extracted: 05/12/2015 12:12

Sample wt/vol: 30.31(g) | Date Analyzed: 05/20/2015 13:40

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	90		45-105
367-12-4	2-Fluorophenol (Surr)	72		35-105
4165-60-0	Nitrobenzene-d5 (Surr)	70		35-100
4165-62-2	Phenol-d5 (Surr)	74	M	40-100
1718-51-0	Terphenyl-d14 (Surr)	77		30-125
118-79-6	2,4,6-Tribromophenol (Surr)	105		35-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520012.D
Lims ID: 240-50067-A-8-B Lab Sample ID: 240-50067-8
Client ID: 079SB-0396M-0001-SO
Sample Type: Client
Inject. Date: 20-May-2015 13:40:30 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043844-012
Misc. Info.: 240-50067-A-8-B240-50067-A-8-B
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-May-2015 08:02:18 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 20-May-2015 14:09:34

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.418	6.411	0.007	97	262188	4.00	
* 2 Naphthalene-d8	136	7.529	7.527	0.002	99	1094042	4.00	
* 3 Acenaphthene-d10	164	9.034	9.037	-0.003	90	308431	4.00	
* 4 Phenanthrene-d10	188	10.309	10.311	-0.002	95	759169	4.00	
* 5 Chrysene-d12	240	12.617	12.619	-0.002	92	691216	4.00	
* 6 Perylene-d12	264	14.435	14.437	-0.002	93	483100	4.00	
$ 7 2-Fluorophenol	112	5.264	5.199	0.065	95	820889	7.24	
$ 8 Phenol-d5	99	6.082	6.046	0.036	92	1127097	7.36	M
$ 9 Nitrobenzene-d5	82	6.890	6.887	0.003	86	782235	6.98	
$ 10 2-Fluorobiphenyl (Surr)	172	8.433	8.431	0.002	99	790581	8.99	
$ 11 2,4,6-Tribromophenol	330	9.708	9.710	-0.002	92	85276	10.5	
$ 12 Terphenyl-d14	244	11.636	11.638	-0.002	97	1021193	7.70	
43 Phenol	94	6.091	6.055	0.036	0	63078	0.3773	M
69 Bis(2-chloroethyl)ether	93		6.147				ND	
46 2-Chlorophenol	128		6.228				ND	
47 1,3-Dichlorobenzene	146		6.368				ND	
48 1,4-Dichlorobenzene	146		6.426				ND	
49 Benzyl alcohol	108		6.507				ND	
50 1,2-Dichlorobenzene	146		6.570				ND	
51 2-Methylphenol	108		6.594				ND	
53 2,2'-oxybis[1-chloropropan	45		6.628				ND	
21 3 & 4 Methylphenol	108		6.724				ND	
57 N-Nitrosodi-n-propylamine	70		6.738				ND	
61 Hexachloroethane	117		6.878				ND	
62 Nitrobenzene	77		6.902				ND	
64 Isophorone	82	7.106	7.104	0.002	98	177492	0.8117	
66 2-Nitrophenol	139		7.185				ND	
65 2,4-Dimethylphenol	107		7.190				ND	
71 Benzoic acid	122	7.202	7.238	-0.036	89	7162	0.1305	
70 Bis(2-chloroethoxy)methane	93		7.267				ND	
73 2,4-Dichlorophenol	162		7.387				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
74 1,2,4-Trichlorobenzene	180		7.474				ND	
75 Naphthalene	128	7.549	7.546	0.003	96	44875	0.1554	
76 4-Chloroaniline	127		7.565				ND	
79 Hexachlorobutadiene	225		7.652				ND	
86 4-Chloro-3-methylphenol	107		7.955				ND	
87 2-Methylnaphthalene	142	8.135	8.138	-0.003	93	32051	0.1821	
89 Hexachlorocyclopentadiene	237		8.282				ND	
92 2,4,6-Trichlorophenol	196		8.364				ND	
93 2,4,5-Trichlorophenol	196		8.402				ND	
100 2-Chloronaphthalene	162		8.556				ND	
102 2-Nitroaniline	65		8.618				ND	
105 Dimethyl phthalate	163		8.748				ND	
107 2,6-Dinitrotoluene	165		8.806				ND	
109 Acenaphthylene	152		8.921				ND	
110 3-Nitroaniline	138		8.960				ND	
111 2,4-Dinitrophenol	184		9.046				ND	
112 Acenaphthene	153		9.066				ND	
113 4-Nitrophenol	109		9.070				ND	
114 2,4-Dinitrotoluene	165		9.157				ND	
116 Dibenzofuran	168		9.210				ND	
121 Diethyl phthalate	149	9.337	9.345	-0.008	56	17275	0.2023	
123 4-Chlorophenyl phenyl ethe	204		9.474				ND	
125 4-Nitroaniline	138		9.484				ND	
126 Fluorene	166		9.503				ND	
128 4,6-Dinitro-2-methylphenol	198		9.513				ND	
131 N-Nitrosodiphenylamine	169		9.571				ND	
139 4-Bromophenyl phenyl ether	248		9.898				ND	
141 Hexachlorobenzene	284		9.989				ND	
143 Pentachlorophenol	266		10.143				ND	
148 Phenanthrene	178	10.328	10.330	-0.002	97	31641	0.1456	
149 Anthracene	178		10.374				ND	
151 Carbazole	167		10.489				ND	
154 Di-n-butyl phthalate	149	10.722	10.725	-0.003	98	33452	0.1434	
159 Fluoranthene	202		11.355				ND	
161 Pyrene	202		11.557				ND	
168 Butyl benzyl phthalate	149		12.013				ND	
173 Bis(2-ethylhexyl) phthalat	149	12.502	12.504	-0.002	94	34545	0.2163	
175 3,3'-Dichlorobenzidine	252		12.538				ND	
177 Benzo[a]anthracene	228		12.610				ND	
178 Chrysene	228		12.648				ND	
180 Di-n-octyl phthalate	149		13.177				ND	
182 Benzo[b]fluoranthene	252		13.870				ND	
183 Benzo[k]fluoranthene	252		13.903				ND	
184 Benzo[a]pyrene	252		14.355				ND	
188 Indeno[1,2,3-cd]pyrene	276		16.423				ND	
189 Dibenz(a,h)anthracene	278		16.428				ND	
190 Benzo[g,h,i]perylene	276		17.039				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SMIS80PPMW_00011	Amount Added:	5.00	Units: uL	Run Reagent

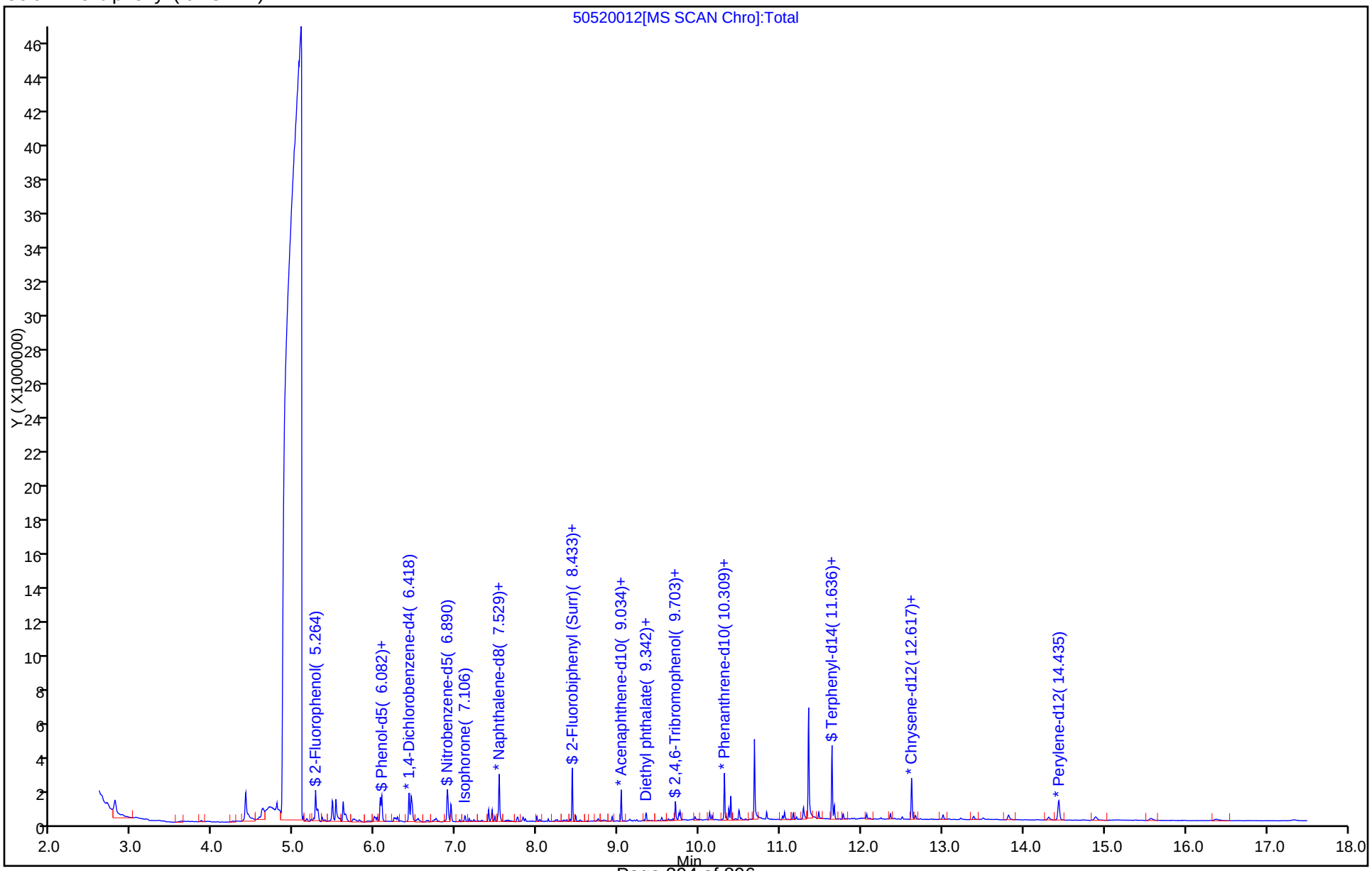
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TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520012.D

Injection Date:	20-May-2015 13:40:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	240-50067-A-8-B	Lab Sample ID:	240-50067-8	Worklist Smp#:	12
Client ID:	079SB-0396M-0001-SO				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



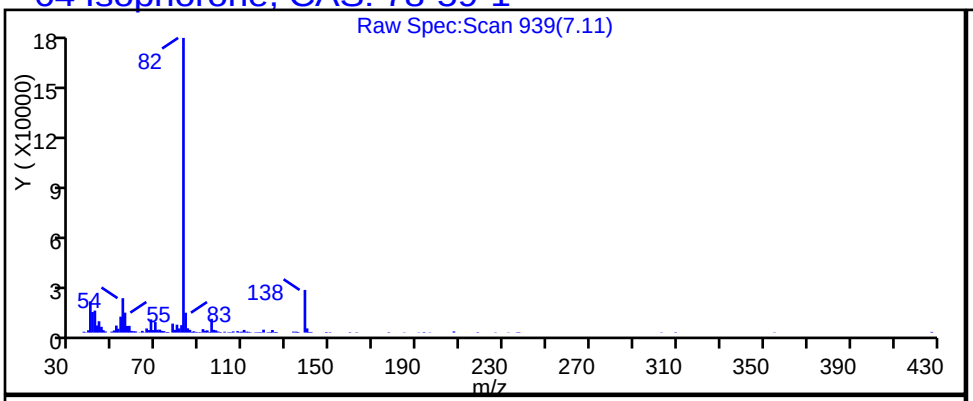
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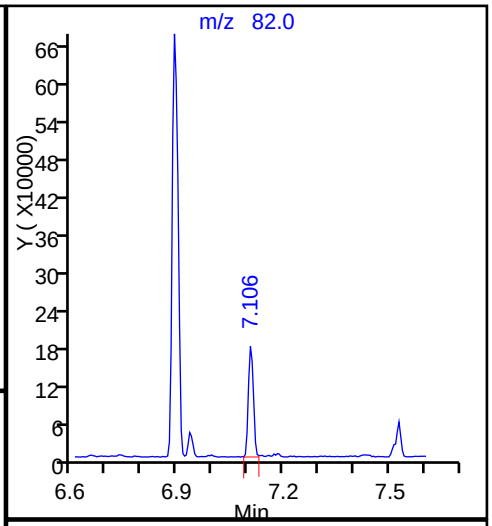
TestAmerica Canton

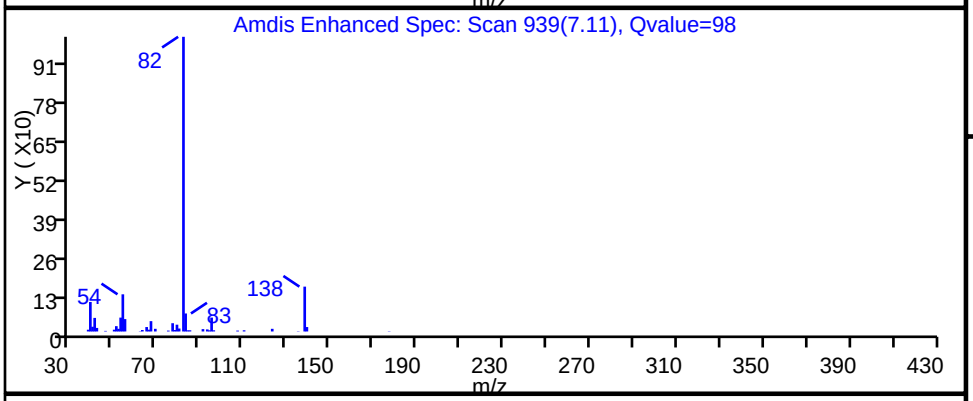
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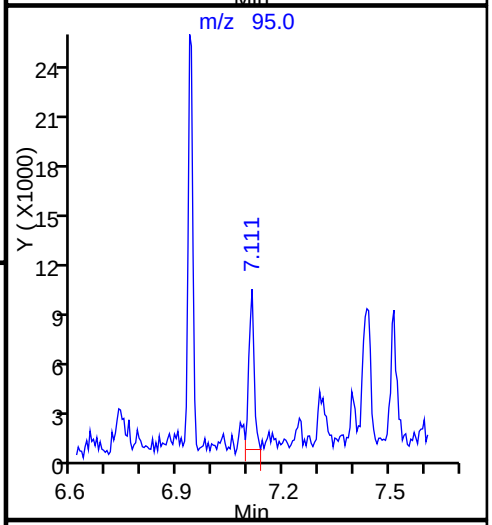
Injection Date:	20-May-2015 13:40:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-8-B	Lab Sample ID:	240-50067-8		
Client ID:	079SB-0396M-0001-SO				
Operator ID:	001574	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

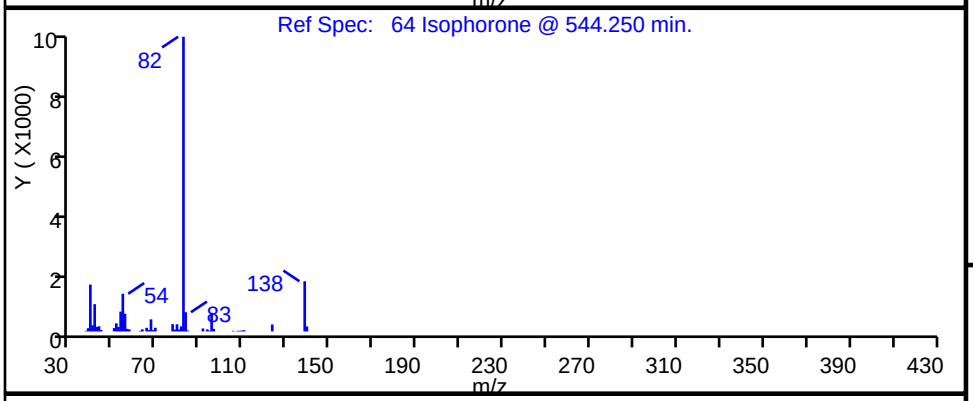
64 Isophorone, CAS: 78-59-1

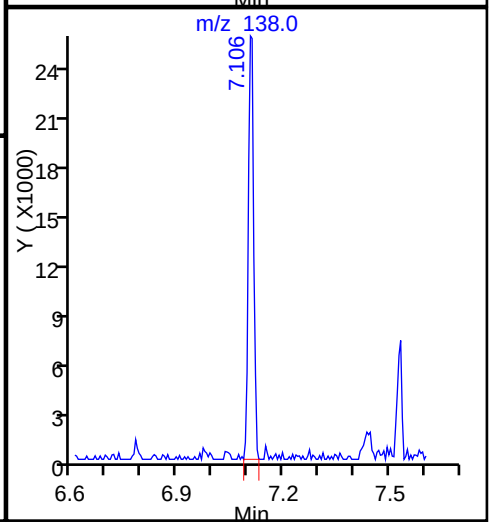


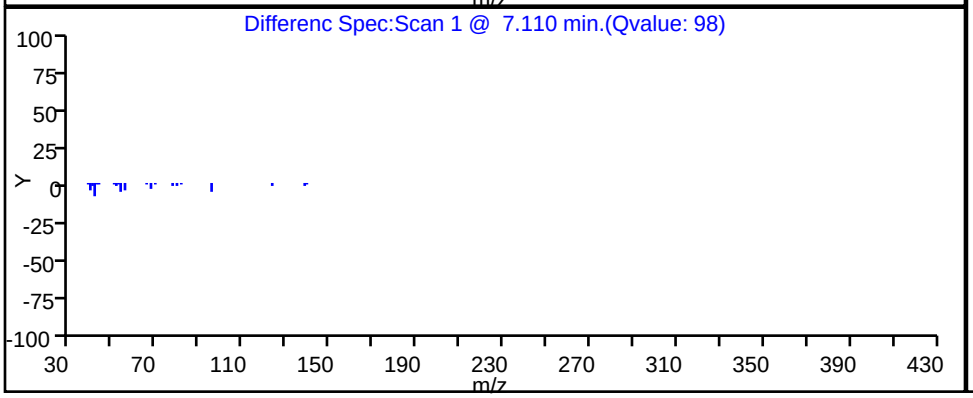












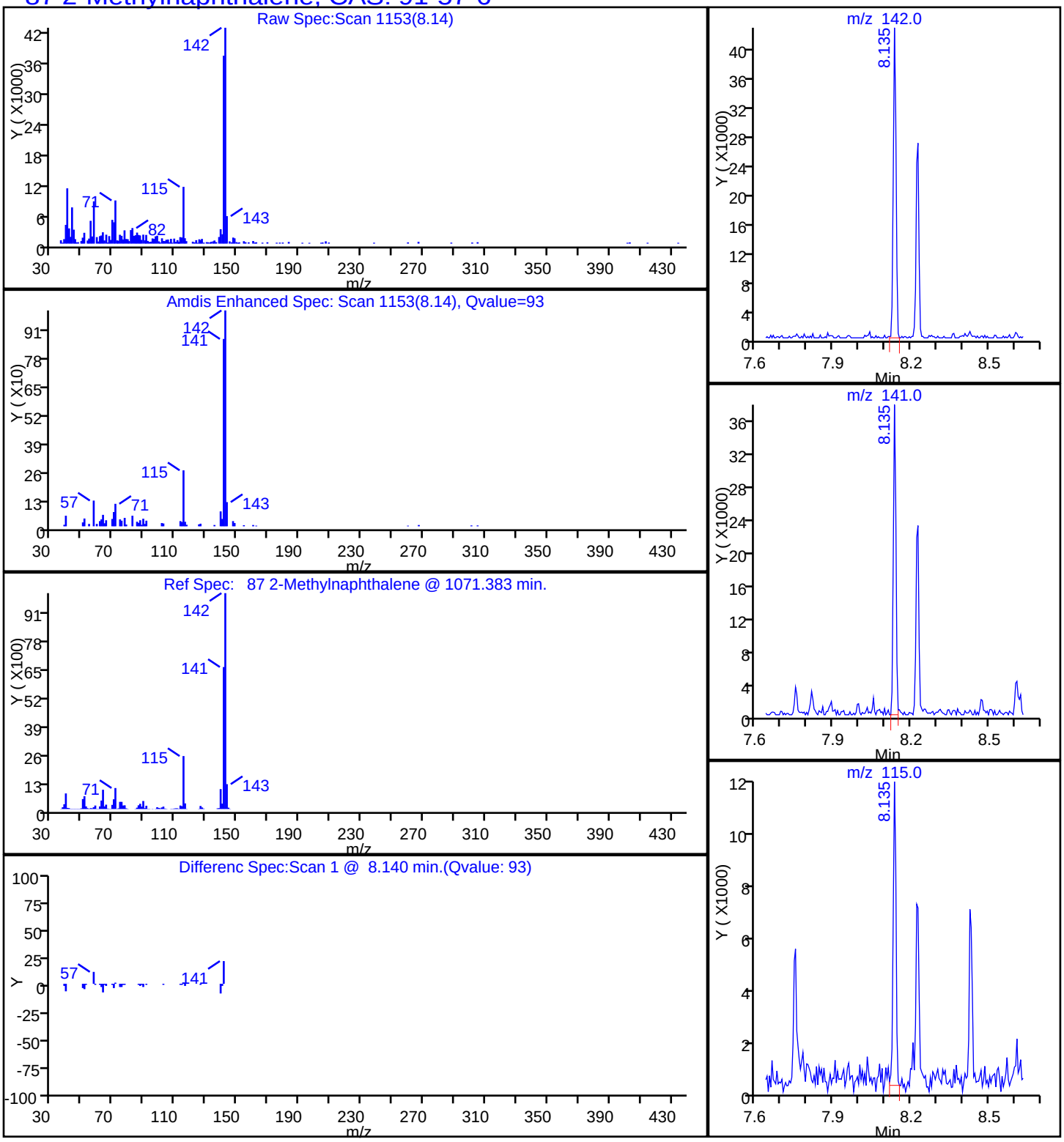
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TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520012.D

Injection Date:	20-May-2015 13:40:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-8-B	Lab Sample ID:	240-50067-8		
Client ID:	079SB-0396M-0001-SO				
Operator ID:	001574	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

87 2-Methylnaphthalene, CAS: 91-57-6



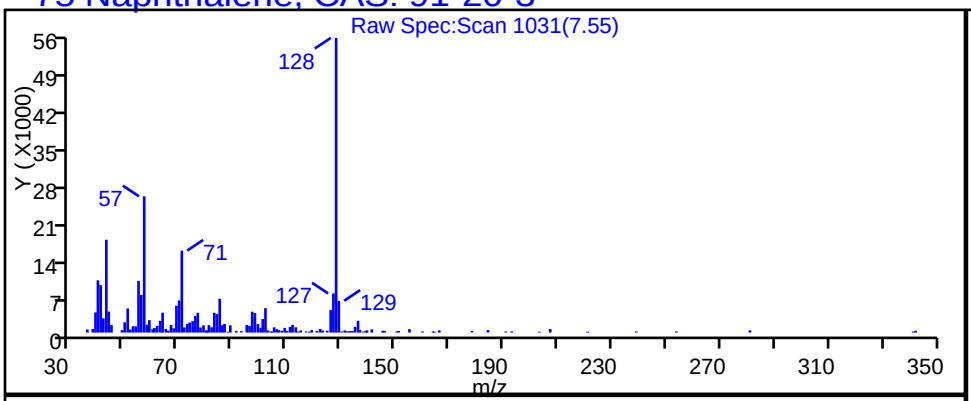
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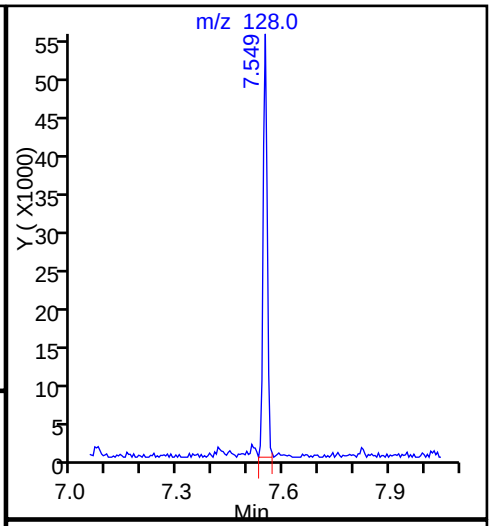
TestAmerica Canton

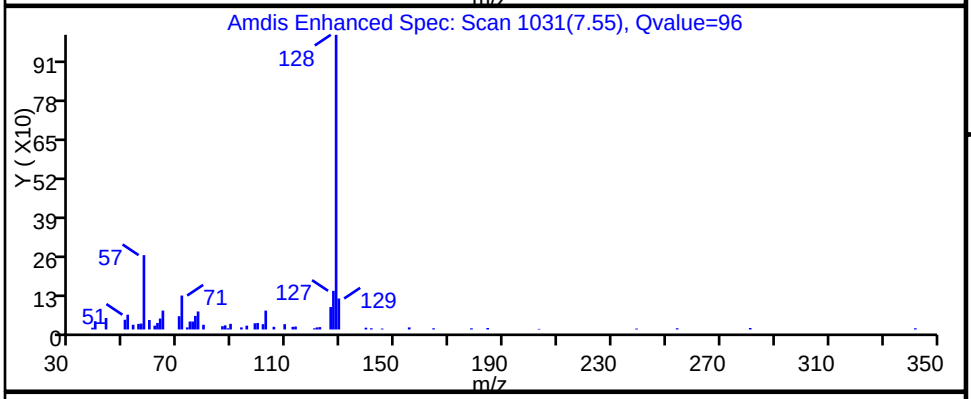
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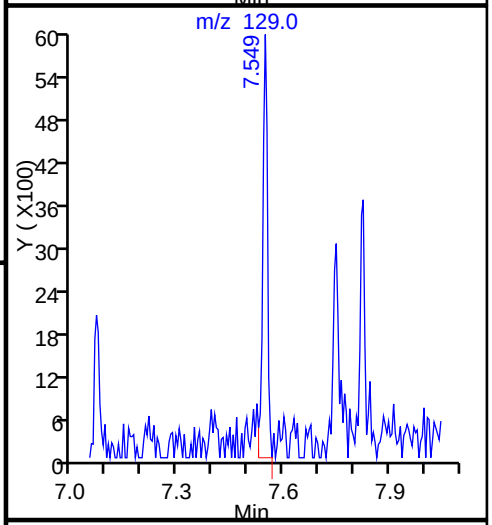
Injection Date:	20-May-2015 13:40:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-8-B	Lab Sample ID:	240-50067-8		
Client ID:	079SB-0396M-0001-SO				
Operator ID:	001574	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

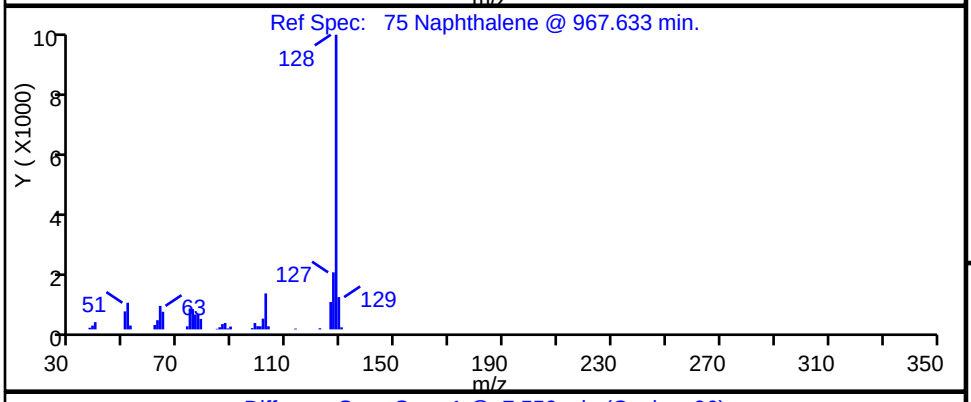
75 Naphthalene, CAS: 91-20-3

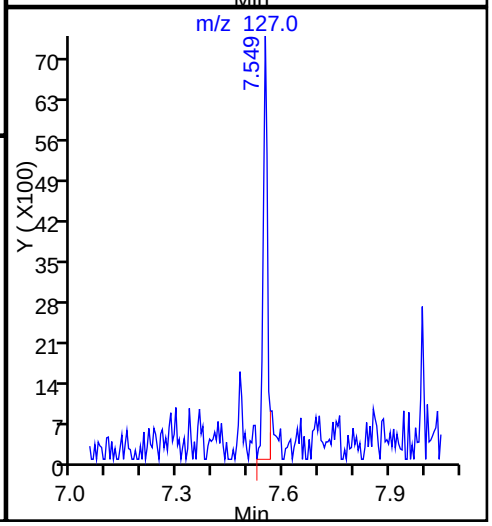


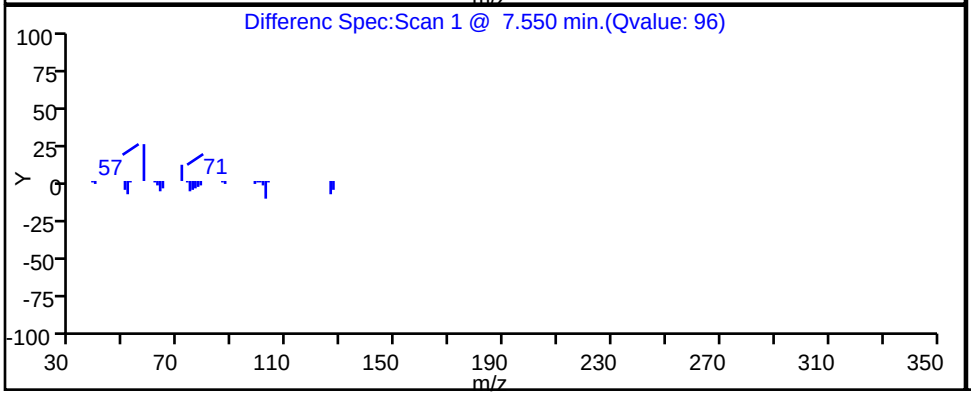












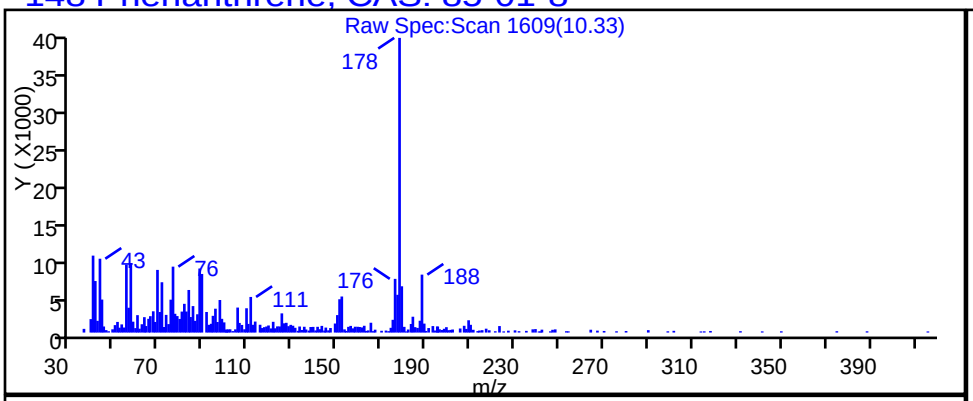
Report Date: 21-May-2015 08:02:36 Chrom Revision: 2.2 05-May-2015 11:39:10

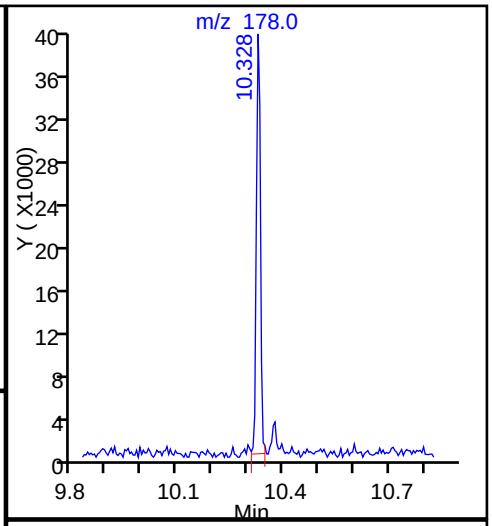
TestAmerica Canton

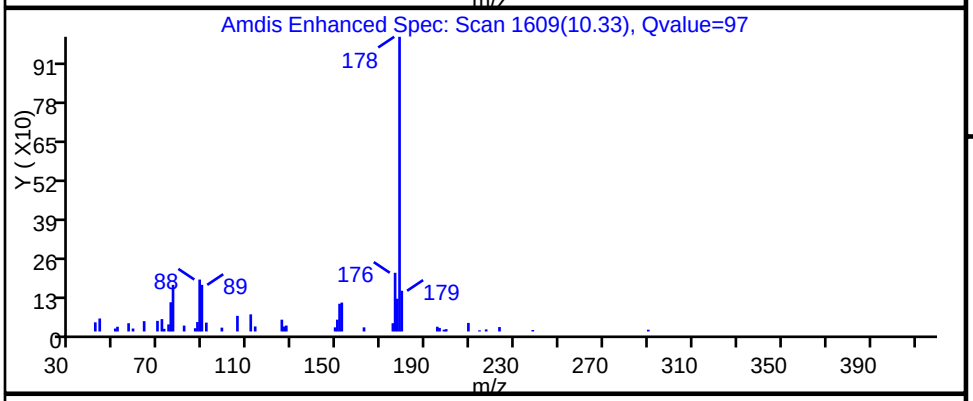
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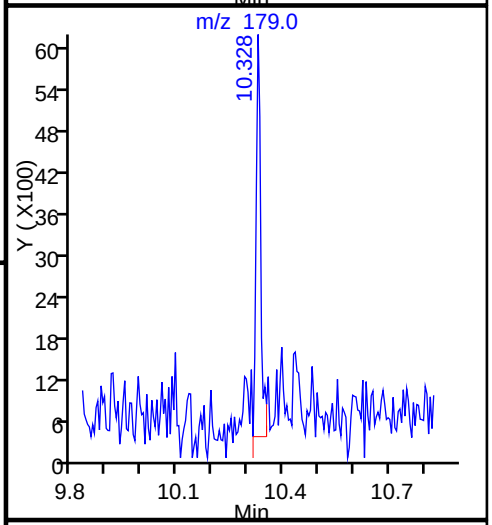
Injection Date:	20-May-2015 13:40:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-8-B	Lab Sample ID:	240-50067-8		
Client ID:	079SB-0396M-0001-SO				
Operator ID:	001574	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

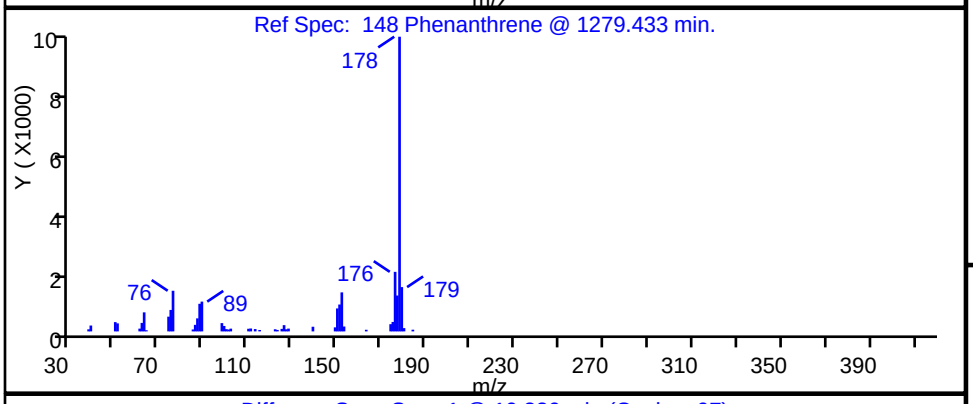
148 Phenanthrene, CAS: 85-01-8

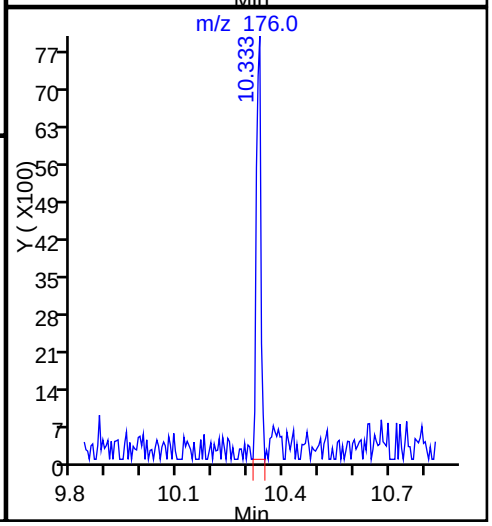


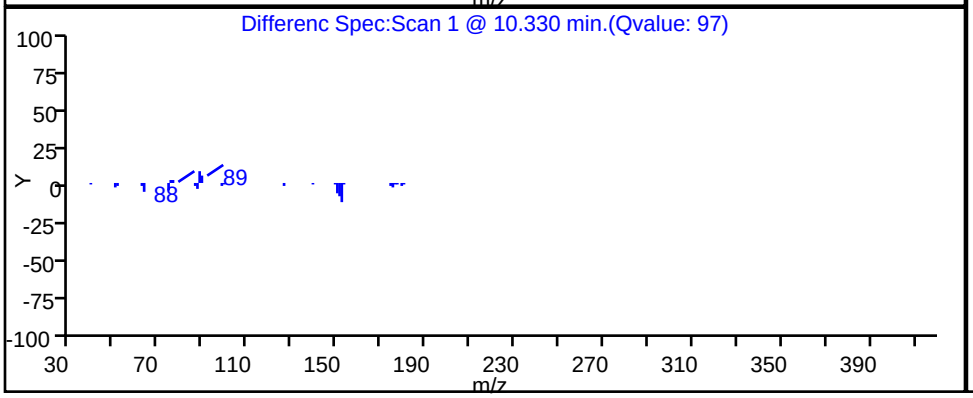












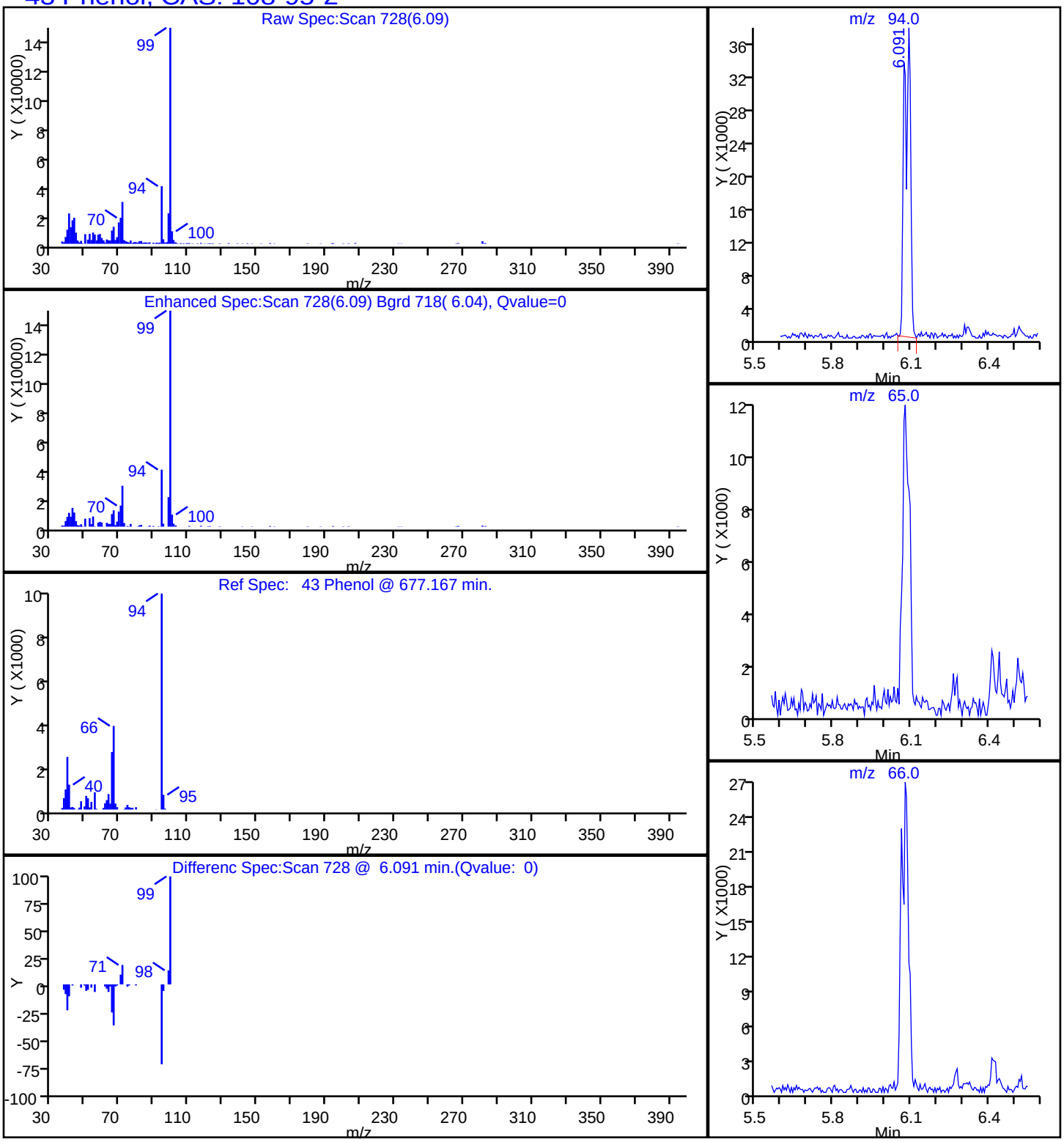
Report Date: 21-May-2015 08:02:35 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520012.D

Injection Date:	20-May-2015 13:40:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-8-B	Lab Sample ID:	240-50067-8		
Client ID:	079SB-0396M-0001-SO				
Operator ID:	001574	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

43 Phenol, CAS: 108-95-2



Manual Integration/User Assign Peak Report

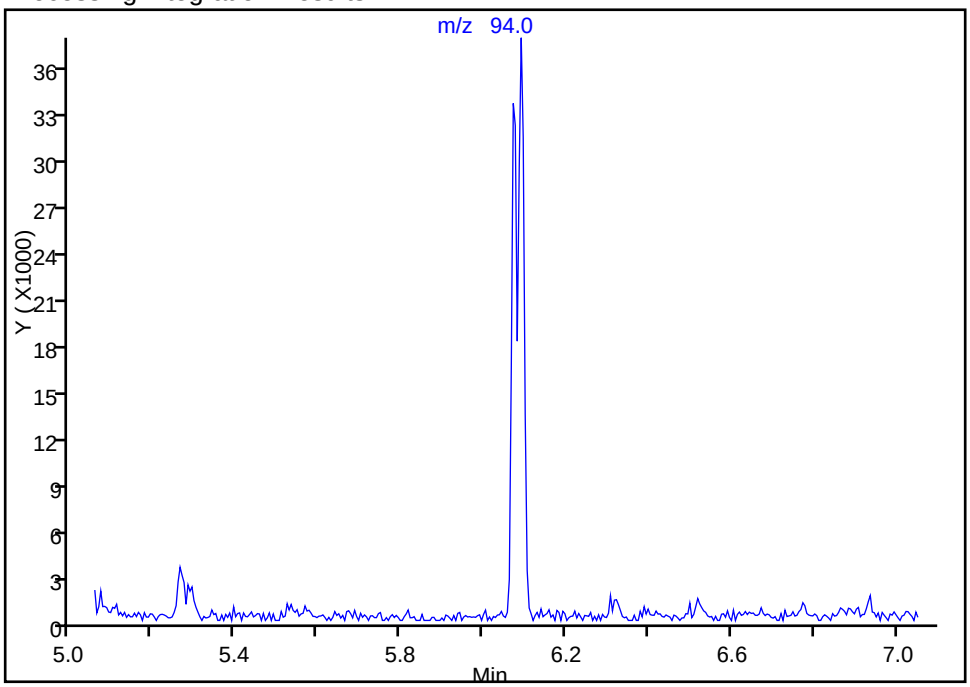
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520012.D				
Injection Date:	20-May-2015 13:40:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-8-B	Lab Sample ID:	240-50067-8		
Client ID:	079SB-0396M-0001-SO				
Operator ID:	001574	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

43 Phenol, CAS: 108-95-2

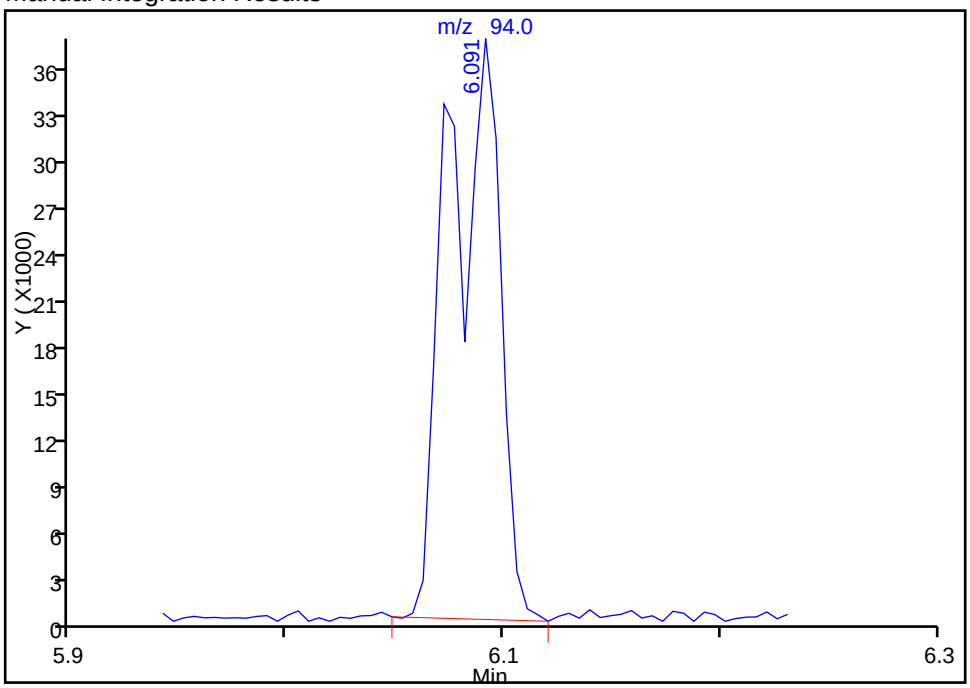
Not Detected
Expected RT: 6.06

Processing Integration Results



Manual Integration Results

RT: 6.09
Area: 63078
Amount: 0.377262
Amount Units: ng/ul



Reviewer: ulmanm, 20-May-2015 14:09:34
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Manual Integration/User Assign Peak Report

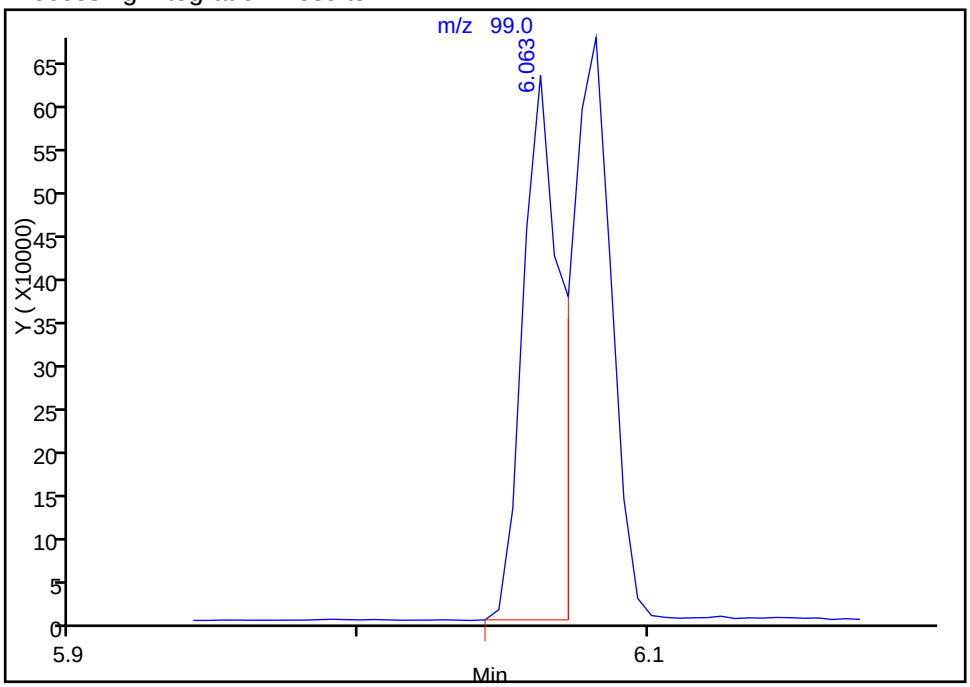
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520012.D				
Injection Date:	20-May-2015 13:40:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-8-B	Lab Sample ID:	240-50067-8		
Client ID:	079SB-0396M-0001-SO				
Operator ID:	001574	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

$ 8 Phenol-d5, CAS: 4165-62-2

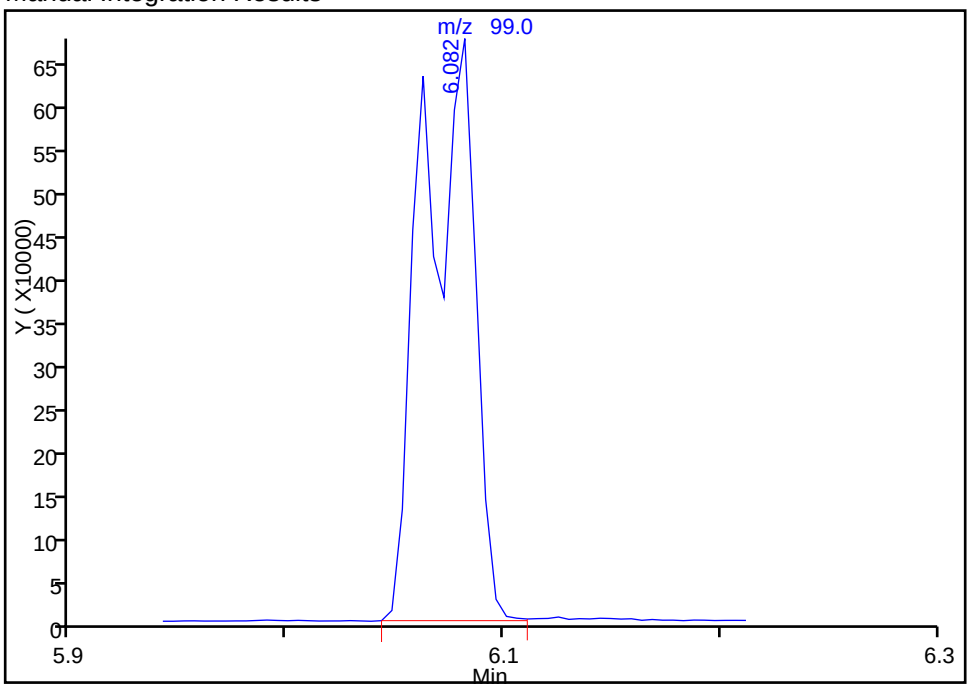
Processing Integration Results

RT: 6.06
Area: 586903
Amount: 3.834716
Amount Units: ng/ul



Manual Integration Results

RT: 6.08
Area: 1127097
Amount: 7.364244
Amount Units: ng/ul



Reviewer: ulmanm, 20-May-2015 14:09:34
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0397M-0001-SO | Lab Sample ID: 240-50067-9

Matrix: Solid | Lab File ID: 50520013.D

Analysis Method: 8270C | Date Collected: 04/29/2015 17:05

Extract. Method: 3540C | Date Extracted: 05/12/2015 12:12

Sample wt/vol: 30.12(g) | Date Analyzed: 05/20/2015 14:04

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
83-32-9	Acenaphthene	6.2	J	6.8	3.4	0.77
208-96-8	Acenaphthylene	1.7	U	6.8	1.7	0.36
120-12-7	Anthracene	3.4	U	6.8	3.4	0.79
56-55-3	Benzo[a]anthracene	3.4	U	6.8	3.4	0.64
50-32-8	Benzo[a]pyrene	3.4	U	6.8	3.4	0.65
205-99-2	Benzo[b]fluoranthene	4.1	J	6.8	3.4	0.60
191-24-2	Benzo[g,h,i]perylene	1.7	U	6.8	1.7	0.36
65-85-0	Benzoic acid	140	U	670	140	37
207-08-9	Benzo[k]fluoranthene	3.4	U	6.8	3.4	0.69
100-51-6	Benzyl alcohol	23	J	340	68	21
111-91-1	Bis(2-chloroethoxy)methane	68	U	100	68	22
111-44-4	Bis(2-chloroethyl)ether	3.4	U	100	3.4	2.0
108-60-1	bis (2-chloroisopropyl) ether	34	U	100	34	9.7
117-81-7	Bis(2-ethylhexyl) phthalate	22	J	71	34	19
101-55-3	4-Bromophenyl phenyl ether	34	U	51	34	13
85-68-7	Butyl benzyl phthalate	34	U	71	34	10
86-74-8	Carbazole	34	U	51	34	27
106-47-8	4-Chloroaniline	68	U	150	68	17
59-50-7	4-Chloro-3-methylphenol	68	U	150	68	21
91-58-7	2-Chloronaphthalene	1.7	U	51	1.7	0.46
95-57-8	2-Chlorophenol	34	U	51	34	8.3
7005-72-3	4-Chlorophenyl phenyl ether	34	U	51	34	13
218-01-9	Chrysene	3.6	J	6.8	3.4	1.1
53-70-3	Dibenz(a,h)anthracene	3.4	U	6.8	3.4	0.67
132-64-9	Dibenzofuran	3.4	U	51	3.4	0.67
95-50-1	1,2-Dichlorobenzene	34	U	51	34	9.9
541-73-1	1,3-Dichlorobenzene	34	U	51	34	11
106-46-7	1,4-Dichlorobenzene	34	U	51	34	20
91-94-1	3,3'-Dichlorobenzidine	68	U	100	68	18
120-83-2	2,4-Dichlorophenol	68	U	150	68	20
84-66-2	Diethyl phthalate	19	J	71	34	16
105-67-9	2,4-Dimethylphenol	68	U	150	68	20
131-11-3	Dimethyl phthalate	34	U	71	34	17
84-74-2	Di-n-butyl phthalate	20	J	71	34	15

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0397M-0001-SO | Lab Sample ID: 240-50067-9

Matrix: Solid | Lab File ID: 50520013.D

Analysis Method: 8270C | Date Collected: 04/29/2015 17:05

Extract. Method: 3540C | Date Extracted: 05/12/2015 12:12

Sample wt/vol: 30.12(g) | Date Analyzed: 05/20/2015 14:04

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
534-52-1	4,6-Dinitro-2-methylphenol	34	U	150	34	9.4
51-28-5	2,4-Dinitrophenol	68	U	340	68	21
121-14-2	2,4-Dinitrotoluene	68	U	200	68	17
606-20-2	2,6-Dinitrotoluene	68	U	200	68	21
117-84-0	Di-n-octyl phthalate	34	U	71	34	8.0
206-44-0	Fluoranthene	4.7	J	6.8	3.4	0.56
86-73-7	Fluorene	4.7	J	6.8	3.4	0.54
118-74-1	Hexachlorobenzene	3.4	U	6.8	3.4	2.1
87-68-3	Hexachlorobutadiene	34	U	51	34	5.7
77-47-4	Hexachlorocyclopentadiene	34	U	340	34	8.2
67-72-1	Hexachloroethane	34	U	51	34	9.2
193-39-5	Indeno[1,2,3-cd]pyrene	1.7	U	6.8	1.7	0.36
78-59-1	Isophorone	120		51	34	13
91-57-6	2-Methylnaphthalene	25		6.8	3.4	0.51
95-48-7	2-Methylphenol	68	U	200	68	11
15831-10-4	3 & 4 Methylphenol	68	U	410	68	20
91-20-3	Naphthalene	24		6.8	3.4	0.83
88-74-4	2-Nitroaniline	34	U	200	34	9.3
99-09-2	3-Nitroaniline	68	U	200	68	16
100-01-6	4-Nitroaniline	68	U	200	68	26
98-95-3	Nitrobenzene	3.4	U	100	3.4	2.2
88-75-5	2-Nitrophenol	15	J	51	34	8.4
100-02-7	4-Nitrophenol	68	U	340	68	17
621-64-7	N-Nitrosodi-n-propylamine	34	U	51	34	6.4
86-30-6	N-Nitrosodiphenylamine	34	U	51	34	21
87-86-5	Pentachlorophenol	34	U	150	34	9.3
85-01-8	Phenanthrene	12		6.8	3.4	0.74
108-95-2	Phenol	24	J M	51	34	7.4
129-00-0	Pyrene	3.4	J	6.8	1.7	0.45
120-82-1	1,2,4-Trichlorobenzene	17	U	51	17	3.6
95-95-4	2,4,5-Trichlorophenol	68	U	150	68	25
88-06-2	2,4,6-Trichlorophenol	34	U	150	34	9.1

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0397M-0001-SO | Lab Sample ID: 240-50067-9

Matrix: Solid | Lab File ID: 50520013.D

Analysis Method: 8270C | Date Collected: 04/29/2015 17:05

Extract. Method: 3540C | Date Extracted: 05/12/2015 12:12

Sample wt/vol: 30.12(g) | Date Analyzed: 05/20/2015 14:04

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	76		45-105
367-12-4	2-Fluorophenol (Surr)	62		35-105
4165-60-0	Nitrobenzene-d5 (Surr)	62		35-100
4165-62-2	Phenol-d5 (Surr)	69	M	40-100
1718-51-0	Terphenyl-d14 (Surr)	76		30-125
118-79-6	2,4,6-Tribromophenol (Surr)	72		35-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520013.D
Lims ID: 240-50067-A-9-B Lab Sample ID: 240-50067-9
Client ID: 079SB-0397M-0001-SO
Sample Type: Client
Inject. Date: 20-May-2015 14:04:30 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043844-013
Misc. Info.: 240-50067-A-9-B240-50067-A-9-B
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-May-2015 08:02:18 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 20-May-2015 14:55:10

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.418	6.411	0.007	97	261365	4.00	
* 2 Naphthalene-d8	136	7.529	7.527	0.002	99	1106663	4.00	
* 3 Acenaphthene-d10	164	9.034	9.037	-0.003	90	410872	4.00	
* 4 Phenanthrene-d10	188	10.309	10.311	-0.002	95	746762	4.00	
* 5 Chrysene-d12	240	12.617	12.619	-0.002	92	671184	4.00	
* 6 Perylene-d12	264	14.430	14.437	-0.007	90	472877	4.00	
$ 7 2-Fluorophenol	112	5.264	5.199	0.065	91	697761	6.18	
$ 8 Phenol-d5	99	6.062	6.046	0.016	92	1049137	6.88	M
$ 9 Nitrobenzene-d5	82	6.890	6.887	0.003	86	700133	6.18	
$ 10 2-Fluorobiphenyl (Surr)	172	8.433	8.431	0.002	99	889839	7.60	
$ 11 2,4,6-Tribromophenol	330	9.703	9.710	-0.007	85	77454	7.19	
$ 12 Terphenyl-d14	244	11.636	11.638	-0.002	97	984797	7.65	
43 Phenol	94	6.072	6.055	0.017	91	59318	0.3559	M
69 Bis(2-chloroethyl)ether	93		6.147				ND	
46 2-Chlorophenol	128		6.228				ND	
47 1,3-Dichlorobenzene	146		6.368				ND	
48 1,4-Dichlorobenzene	146		6.426				ND	
49 Benzyl alcohol	108	6.515	6.507	0.007	97	28286	0.3380	
50 1,2-Dichlorobenzene	146		6.570				ND	
51 2-Methylphenol	108		6.594				ND	
53 2,2'-oxybis[1-chloropropan	45		6.628				ND	
21 3 & 4 Methylphenol	108		6.724				ND	
57 N-Nitrosodi-n-propylamine	70		6.738				ND	
61 Hexachloroethane	117		6.878				ND	
62 Nitrobenzene	77		6.902				ND	
64 Isophorone	82	7.106	7.104	0.002	98	387402	1.75	
66 2-Nitrophenol	139	7.183	7.185	-0.002	53	10215	0.2153	
65 2,4-Dimethylphenol	107		7.190				ND	
71 Benzoic acid	122		7.238				ND	
70 Bis(2-chloroethoxy)methane	93		7.267				ND	
73 2,4-Dichlorophenol	162		7.387				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
74 1,2,4-Trichlorobenzene	180		7.474				ND	
75 Naphthalene	128	7.548	7.546	0.002	95	103773	0.3553	
76 4-Chloroaniline	127		7.565				ND	
79 Hexachlorobutadiene	225		7.652				ND	
86 4-Chloro-3-methylphenol	107		7.955				ND	
87 2-Methylnaphthalene	142	8.135	8.138	-0.003	96	64829	0.3641	
89 Hexachlorocyclopentadiene	237		8.282				ND	
92 2,4,6-Trichlorophenol	196		8.364				ND	
93 2,4,5-Trichlorophenol	196		8.402				ND	
100 2-Chloronaphthalene	162		8.556				ND	
102 2-Nitroaniline	65		8.618				ND	
105 Dimethyl phthalate	163		8.748				ND	
107 2,6-Dinitrotoluene	165		8.806				ND	
109 Acenaphthylene	152		8.921				ND	
110 3-Nitroaniline	138		8.960				ND	
111 2,4-Dinitrophenol	184		9.046				ND	
112 Acenaphthene	153	9.063	9.066	-0.003	89	10499	0.0910	
113 4-Nitrophenol	109		9.070				ND	
114 2,4-Dinitrotoluene	165		9.157				ND	
116 Dibenzofuran	168		9.210				ND	
121 Diethyl phthalate	149	9.337	9.345	-0.008	55	31061	0.2731	
123 4-Chlorophenyl phenyl ethe	204		9.474				ND	
125 4-Nitroaniline	138		9.484				ND	
126 Fluorene	166	9.501	9.503	-0.002	93	8832	0.0695	
128 4,6-Dinitro-2-methylphenol	198		9.513				ND	
131 N-Nitrosodiphenylamine	169		9.571				ND	
139 4-Bromophenyl phenyl ether	248		9.898				ND	
141 Hexachlorobenzene	284		9.989				ND	
143 Pentachlorophenol	266		10.143				ND	
148 Phenanthrene	178	10.328	10.330	-0.002	95	38614	0.1806	
149 Anthracene	178		10.374				ND	
151 Carbazole	167		10.489				ND	
154 Di-n-butyl phthalate	149	10.722	10.725	-0.003	99	68083	0.2968	
159 Fluoranthene	202	11.352	11.355	-0.003	46	12723	0.0686	
161 Pyrene	202	11.554	11.557	-0.003	90	10260	0.0504	
168 Butyl benzyl phthalate	149		12.013				ND	
173 Bis(2-ethylhexyl) phthalat	149	12.501	12.504	-0.003	94	51211	0.3302	
175 3,3'-Dichlorobenzidine	252		12.538				ND	
177 Benzo[a]anthracene	228		12.610				ND	
178 Chrysene	228	12.641	12.648	-0.007	7	9105	0.0528	
180 Di-n-octyl phthalate	149		13.177				ND	
182 Benzo[b]fluoranthene	252	13.867	13.870	-0.003	92	8787	0.0602	
183 Benzo[k]fluoranthene	252		13.903				ND	
184 Benzo[a]pyrene	252		14.355				ND	
188 Indeno[1,2,3-cd]pyrene	276		16.423				ND	
189 Dibenz(a,h)anthracene	278		16.428				ND	
190 Benzo[g,h,i]perylene	276		17.039				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SMIS80PPMW_00011 Amount Added: 5.00 Units: uL Run Reagent

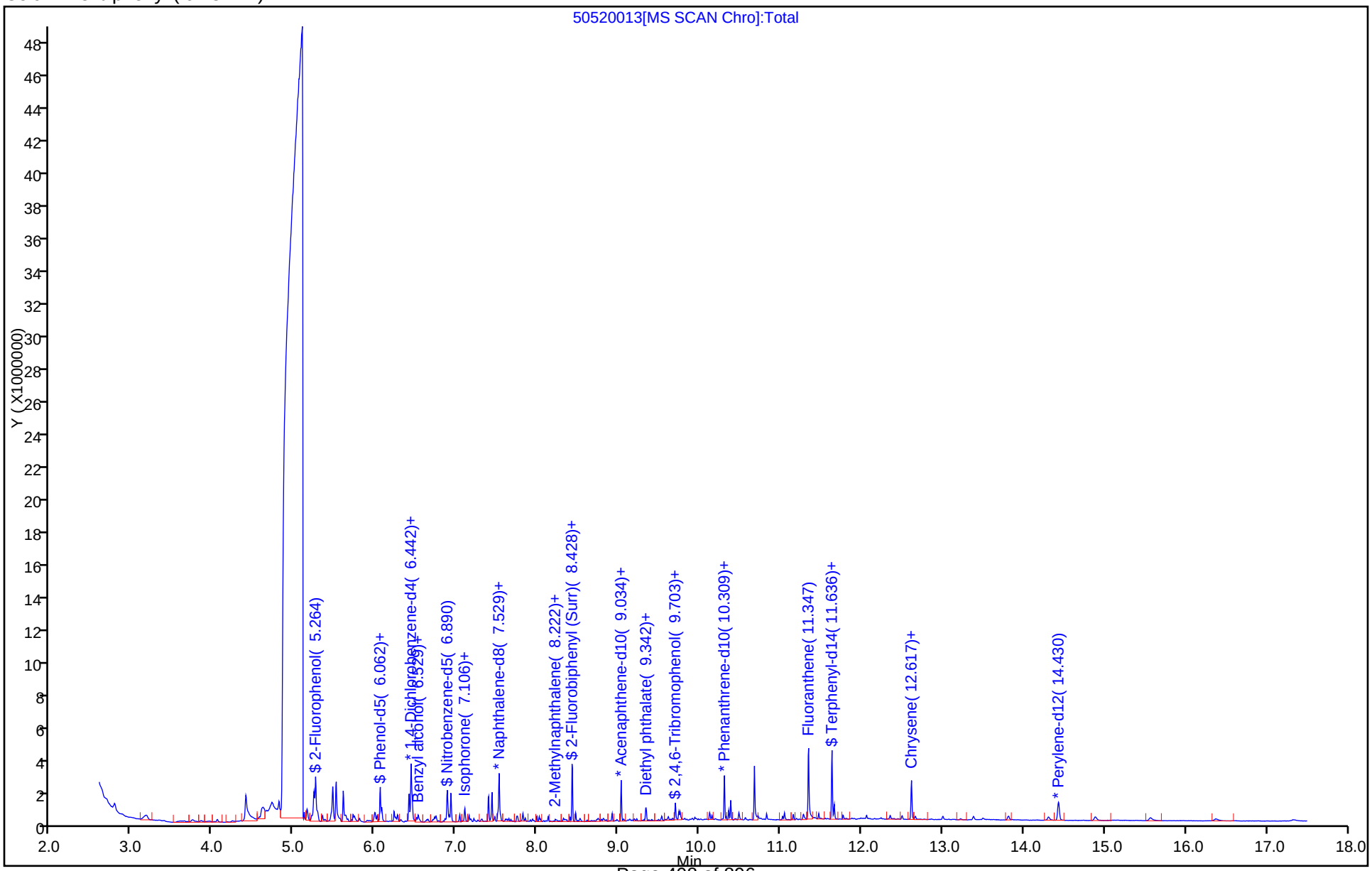
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TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520013.D

Injection Date:	20-May-2015 14:04:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	240-50067-A-9-B	Lab Sample ID:	240-50067-9	Worklist Smp#:	13
Client ID:	079SB-0397M-0001-SO				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



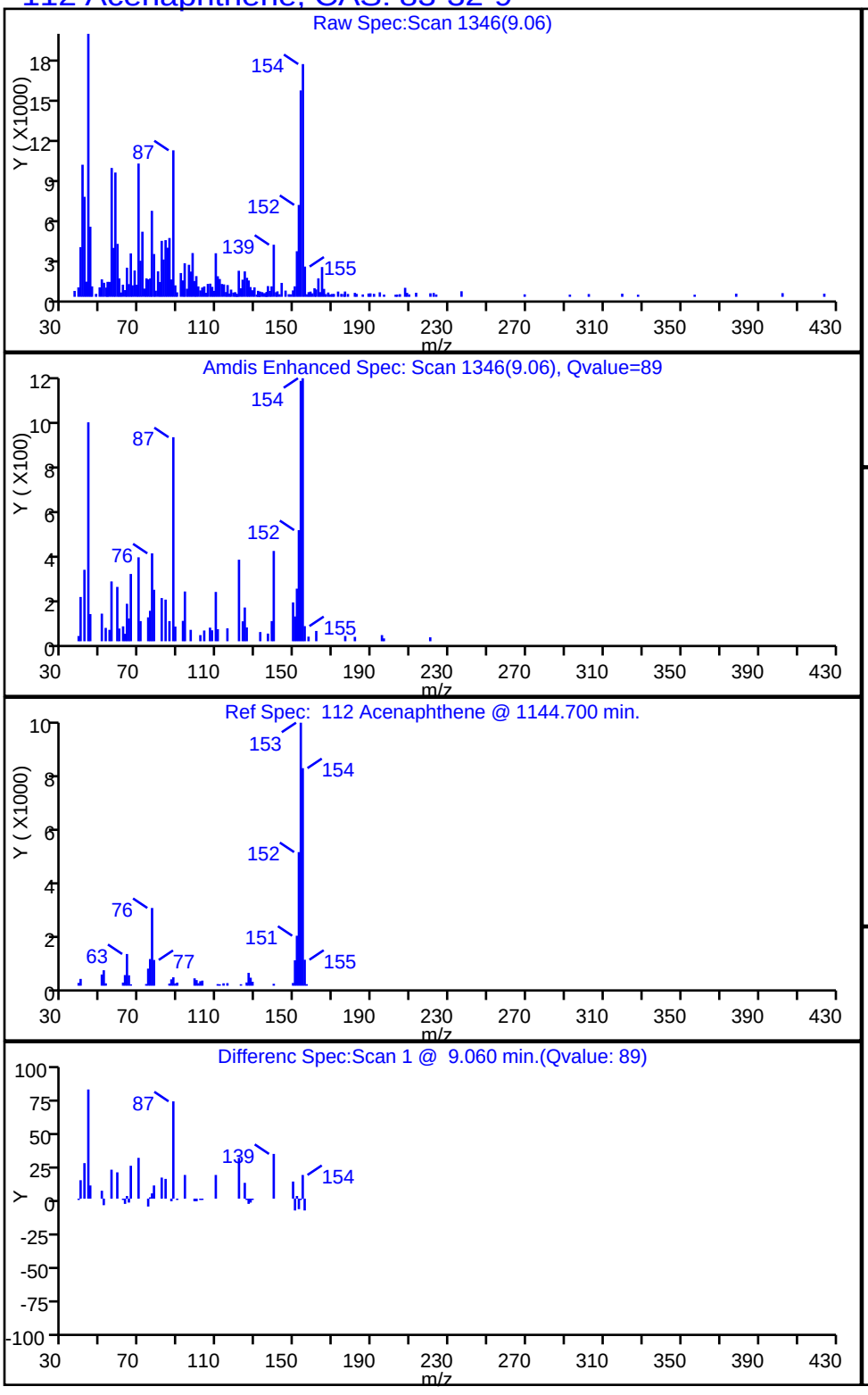
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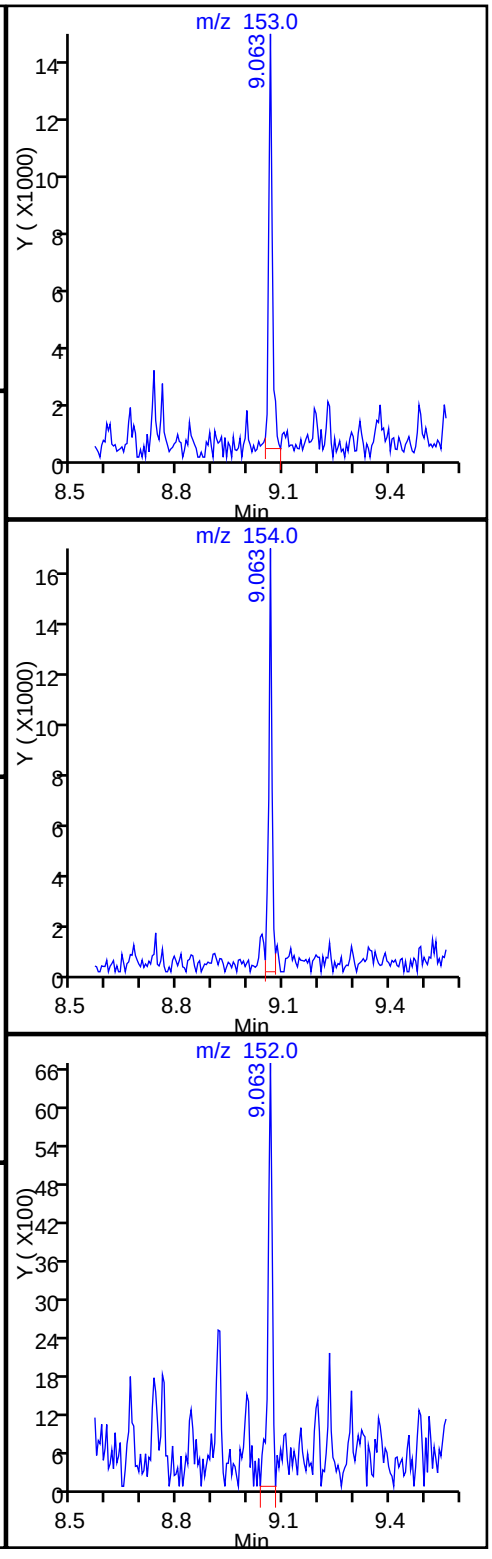
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Injection Date:	20-May-2015 14:04:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-9-B	Lab Sample ID:	240-50067-9		
Client ID:	079SB-0397M-0001-SO				
Operator ID:	001574	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

112 Acenaphthene, CAS: 83-32-9





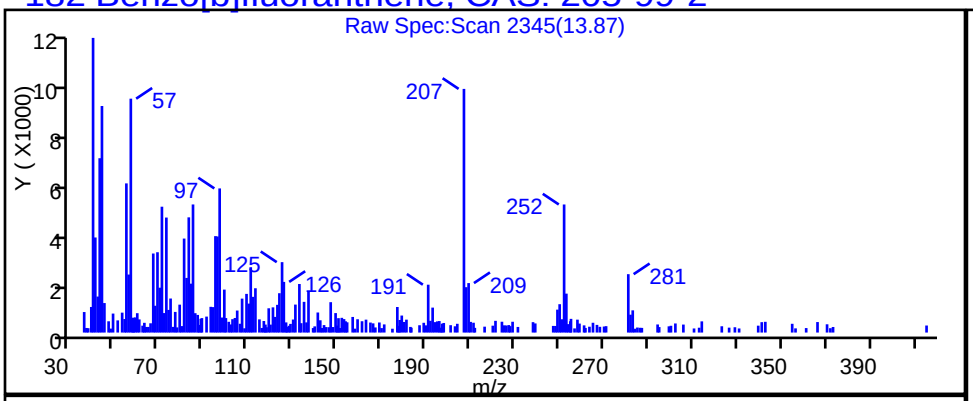
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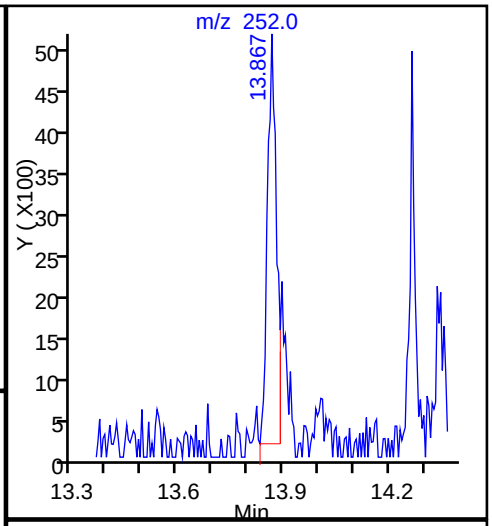
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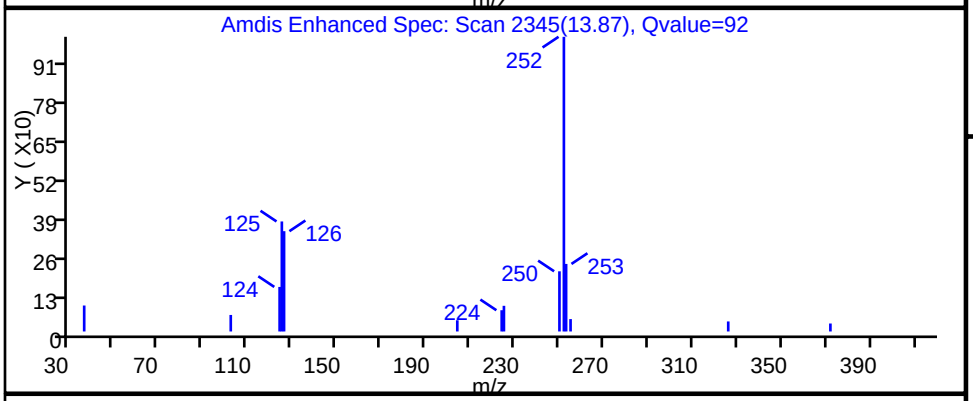
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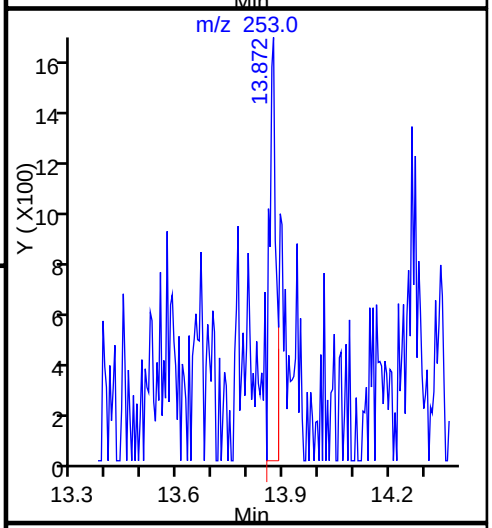
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Operator ID:	001574	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

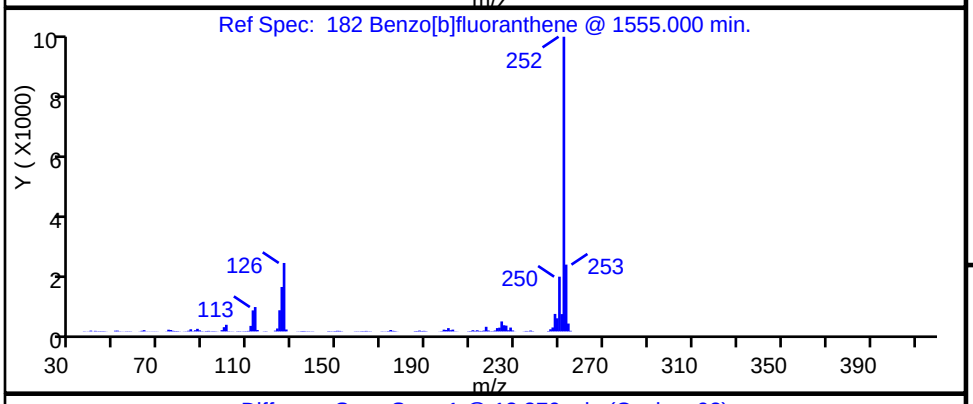
182 Benzo[b]fluoranthene, CAS: 205-99-2

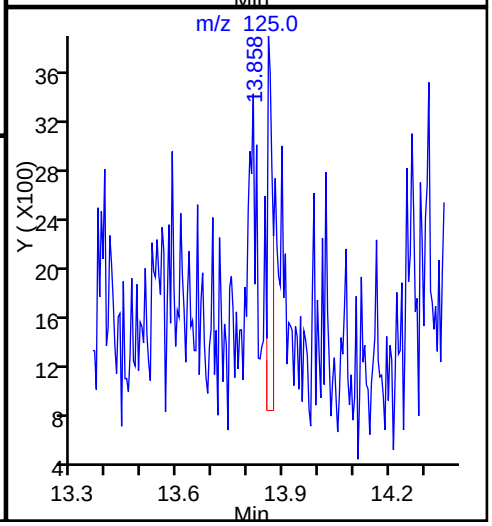


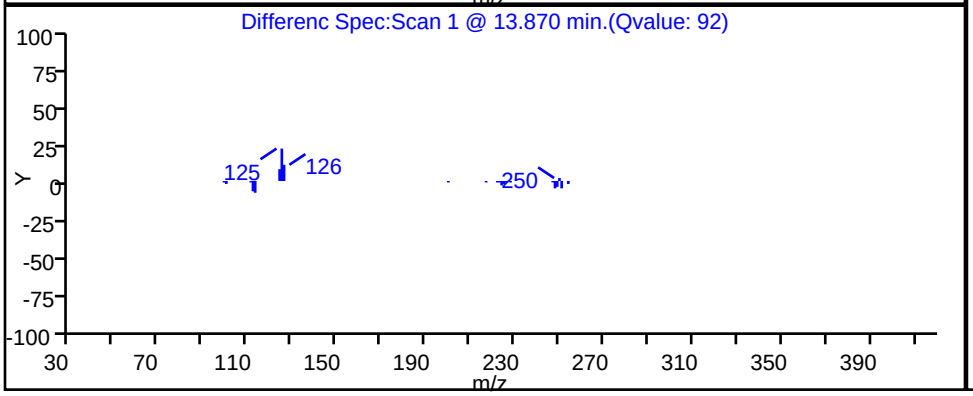












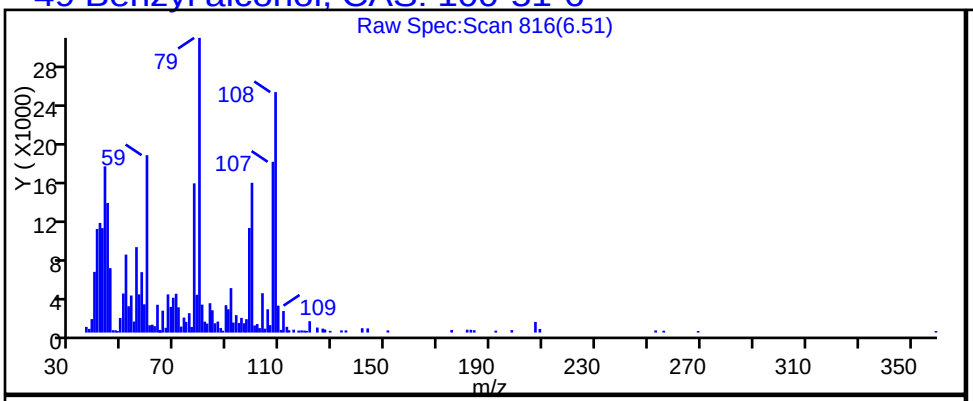
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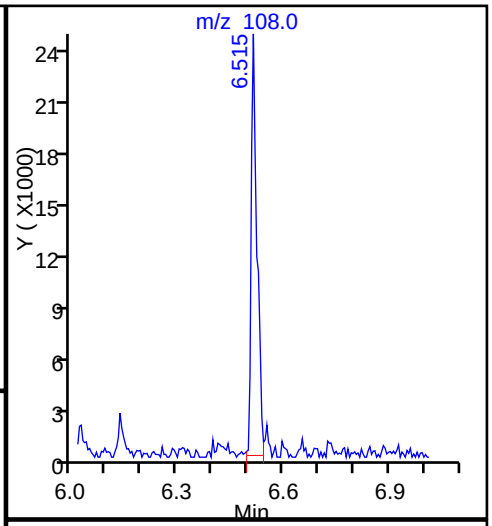
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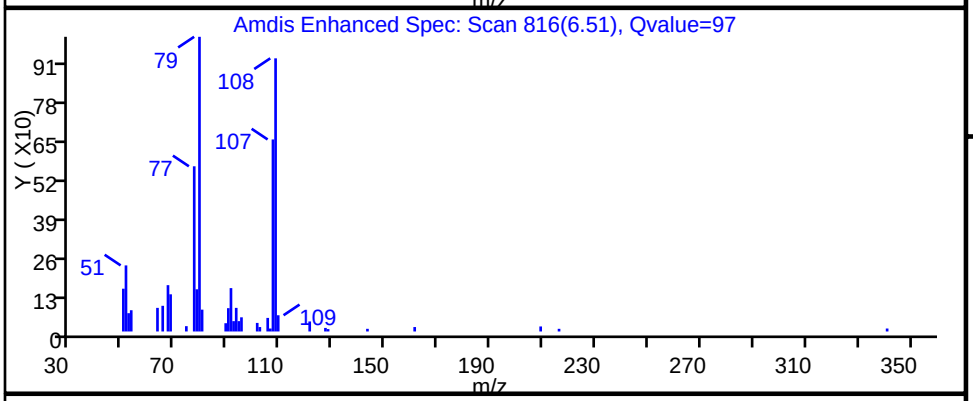
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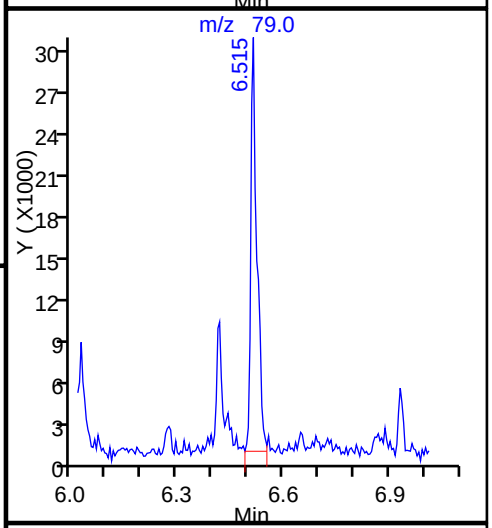
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Lims ID:	240-50067-A-9-B	Lab Sample ID:	240-50067-9		
Client ID:	079SB-0397M-0001-SO				
Operator ID:	001574	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

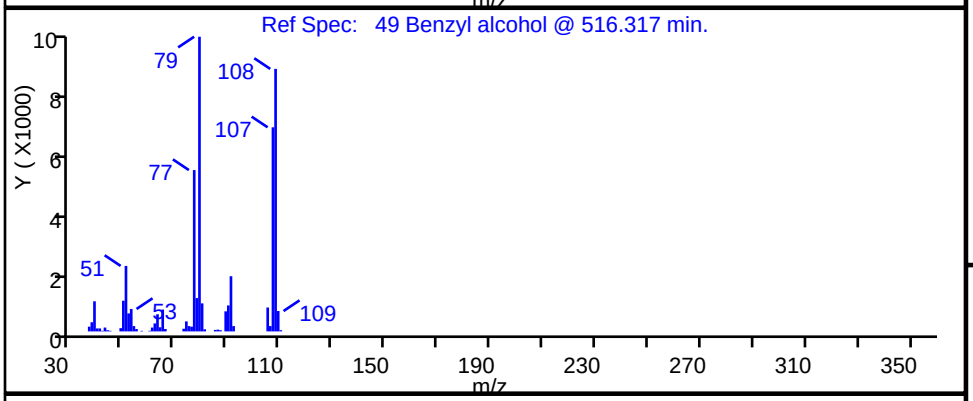
49 Benzyl alcohol, CAS: 100-51-6

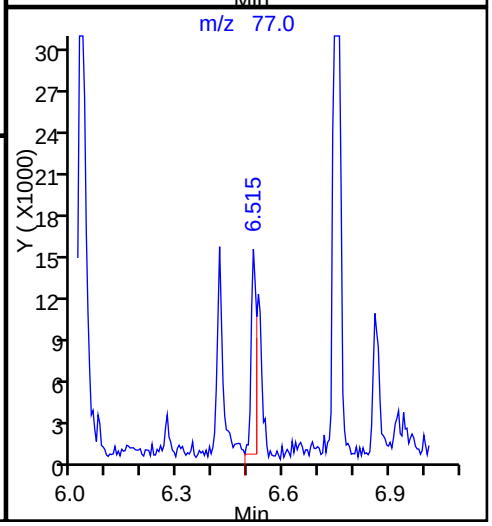


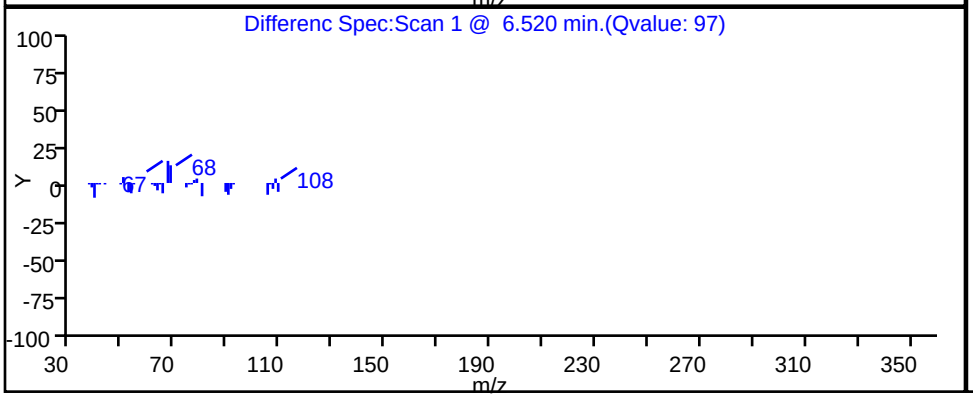












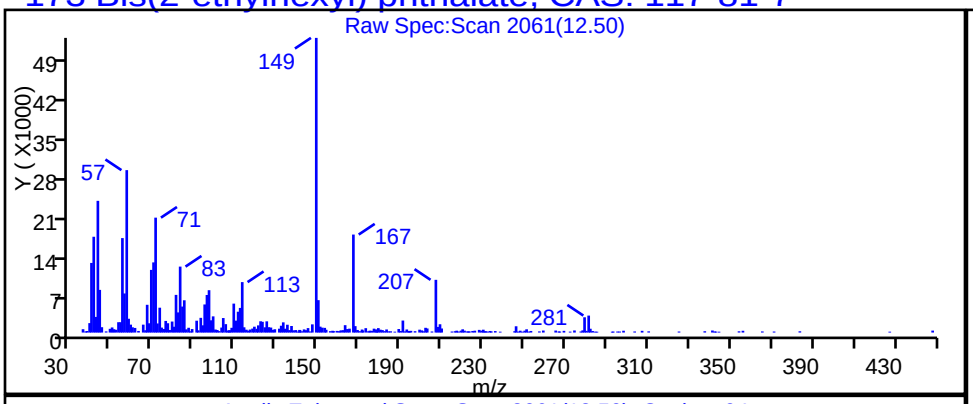
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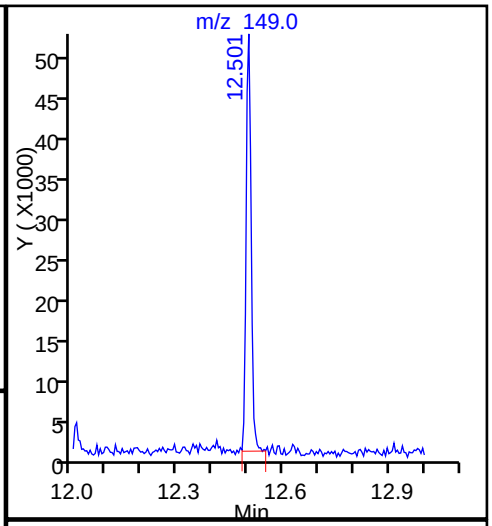
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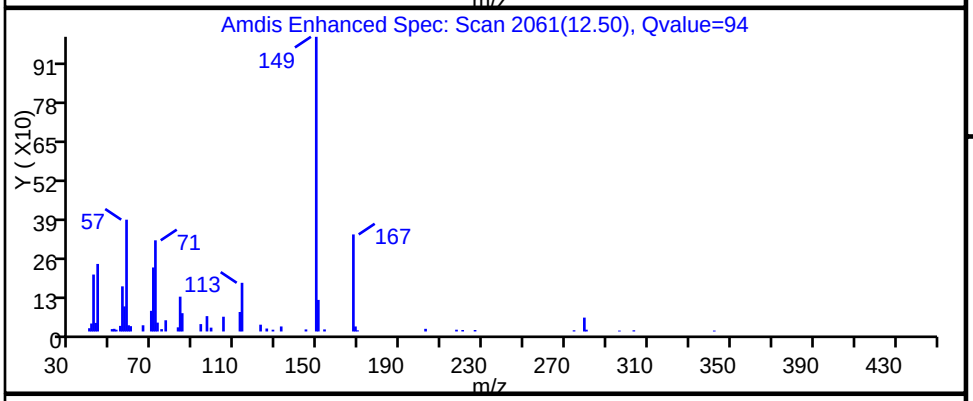
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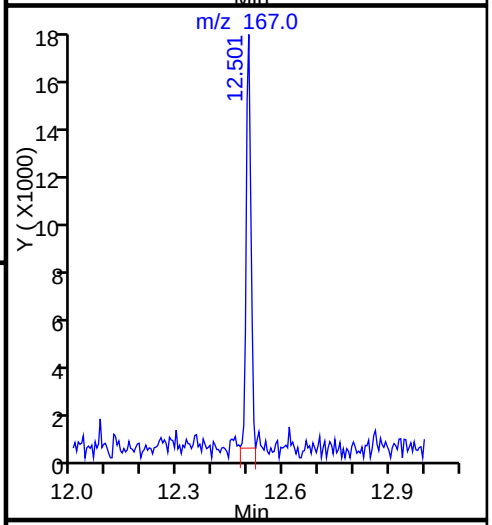
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Client ID:	079SB-0397M-0001-SO				
Operator ID:	001574	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

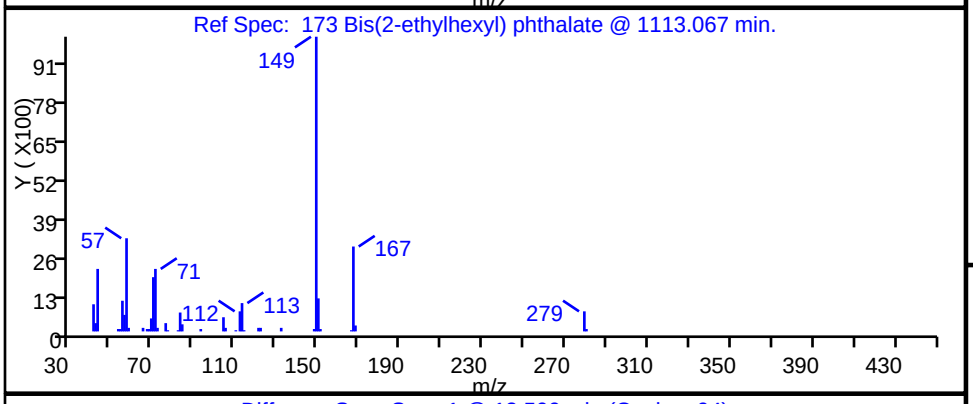
173 Bis(2-ethylhexyl) phthalate, CAS: 117-81-7

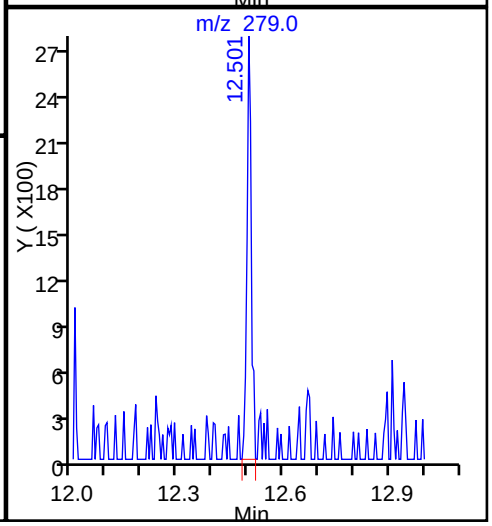


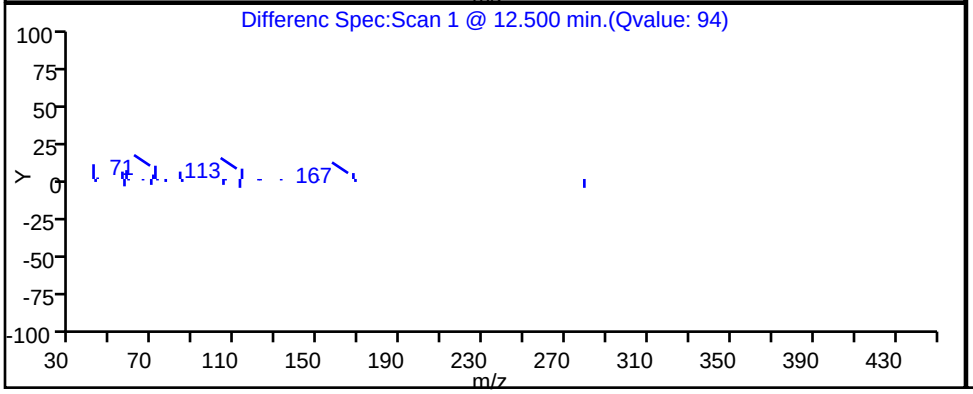












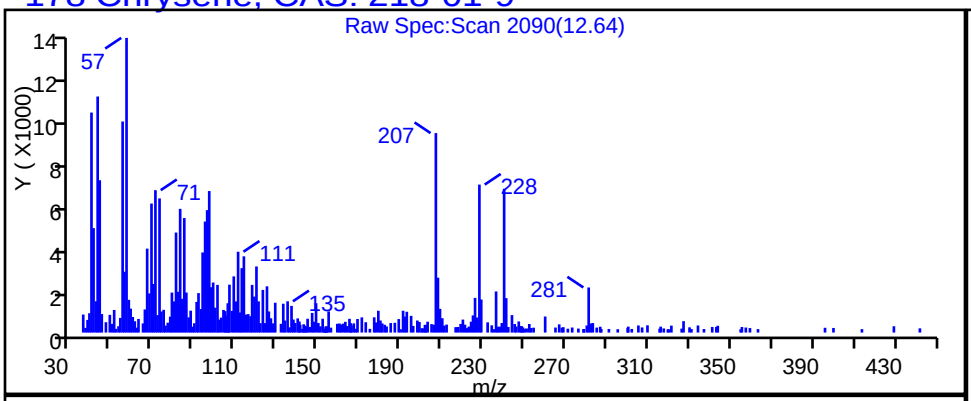
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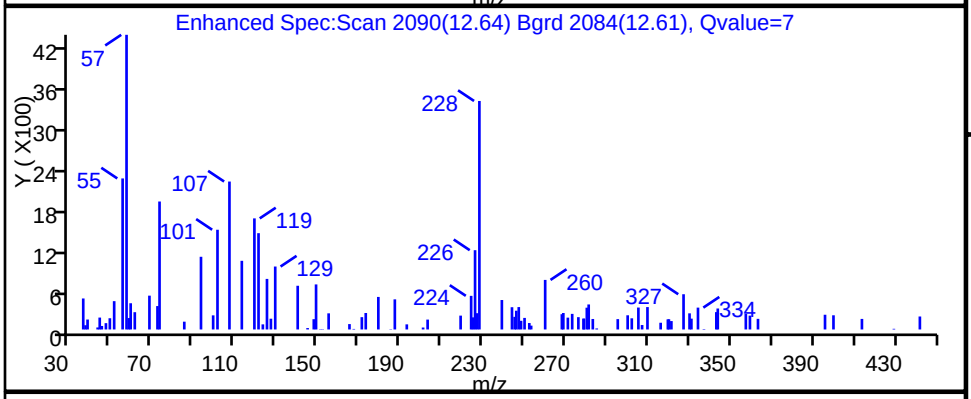
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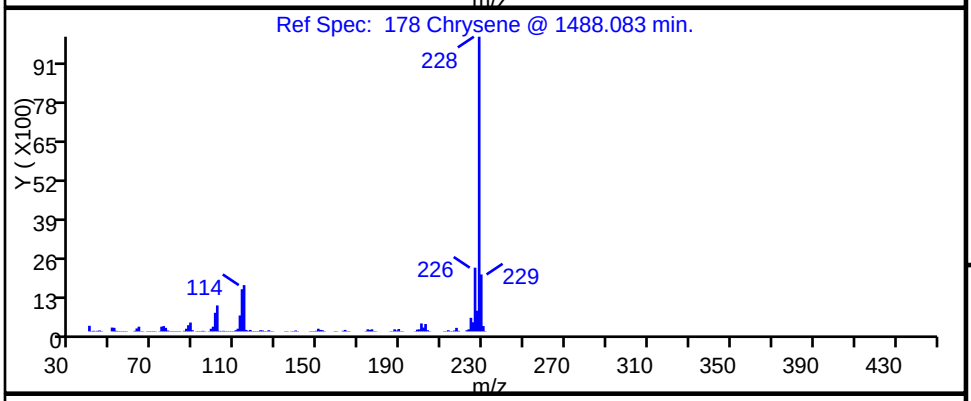
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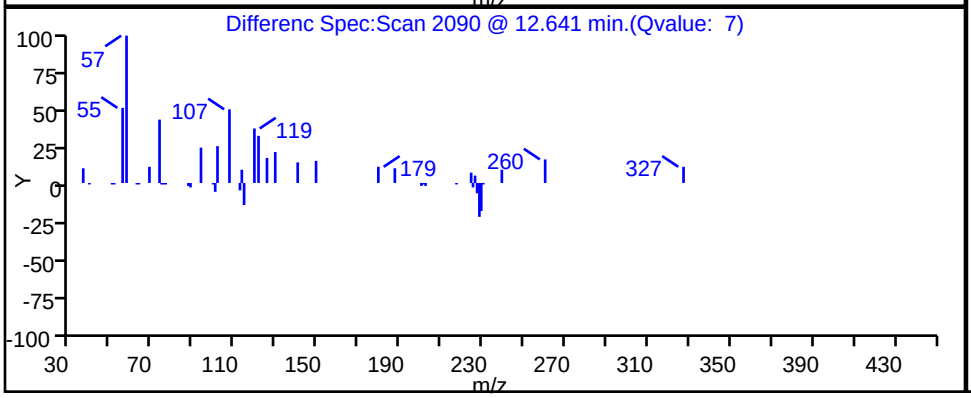
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Operator ID:	001574	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

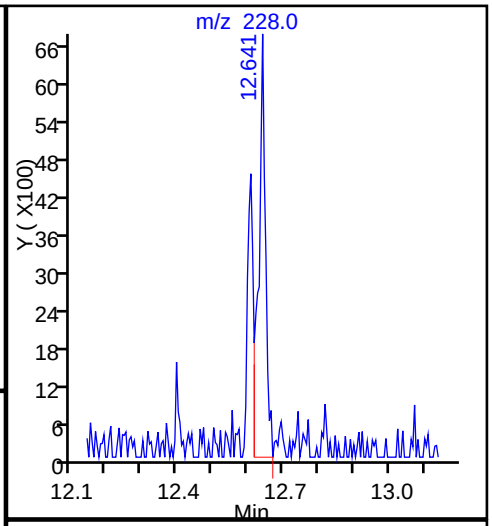
178 Chrysene, CAS: 218-01-9

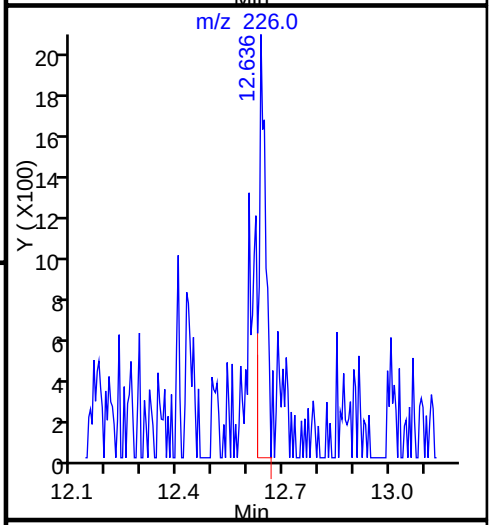


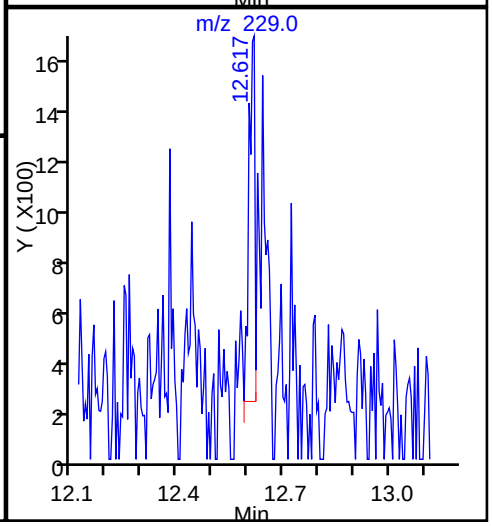












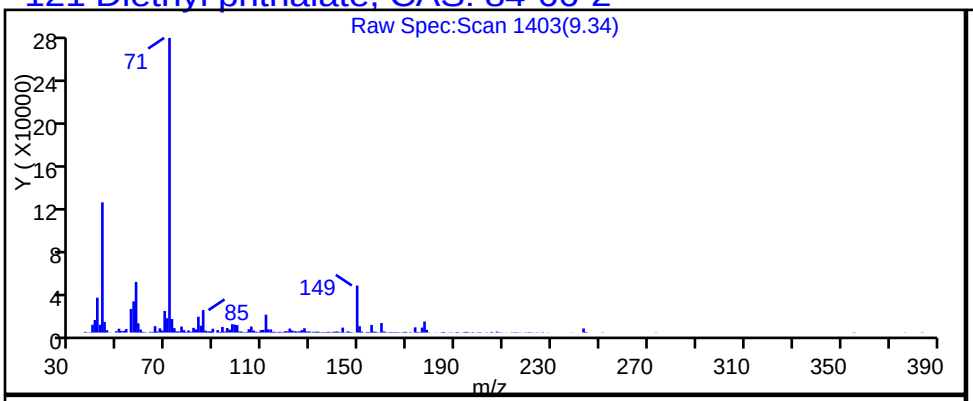
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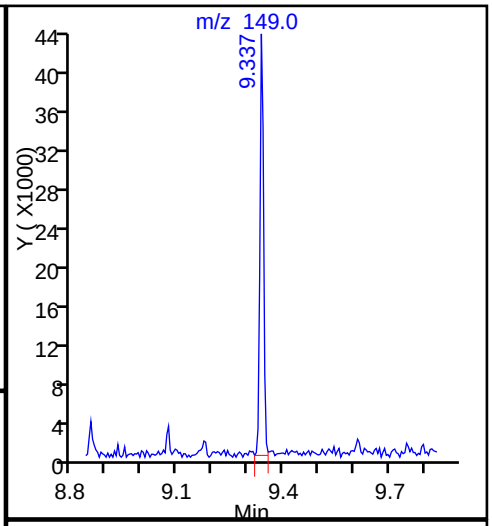
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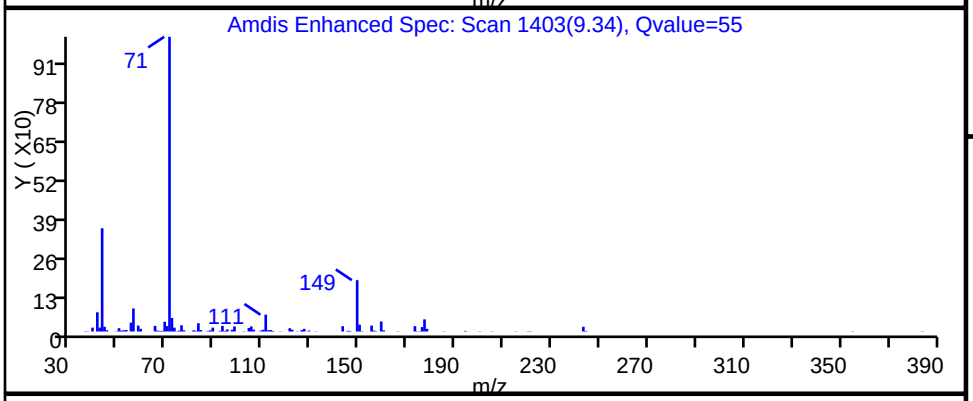
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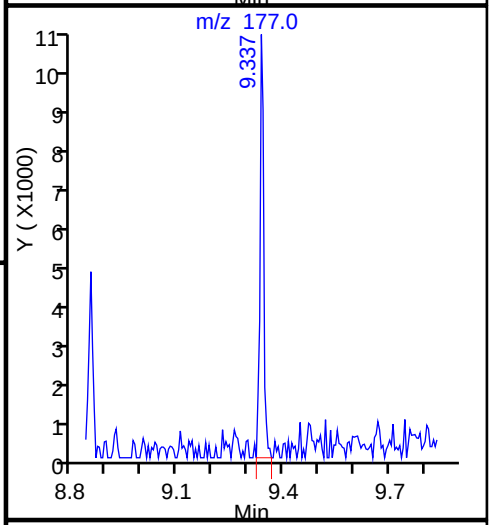
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Client ID:	079SB-0397M-0001-SO				
Operator ID:	001574	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

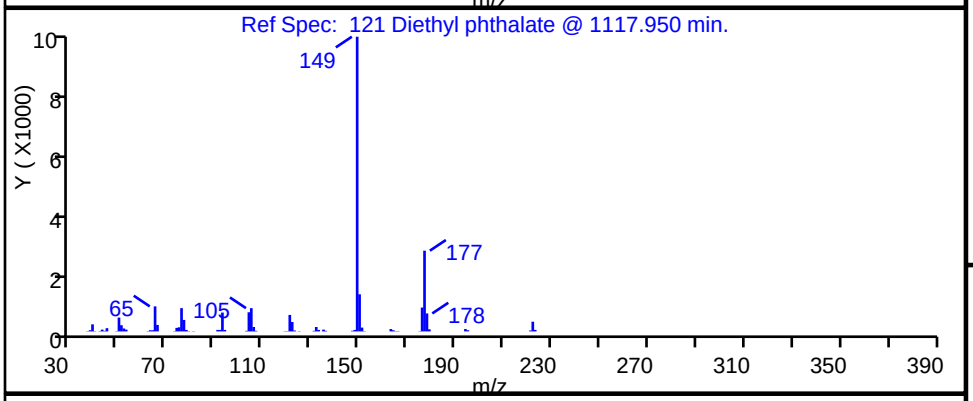
121 Diethyl phthalate, CAS: 84-66-2

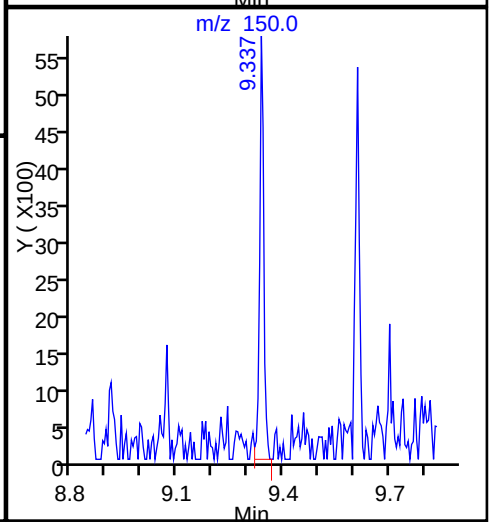


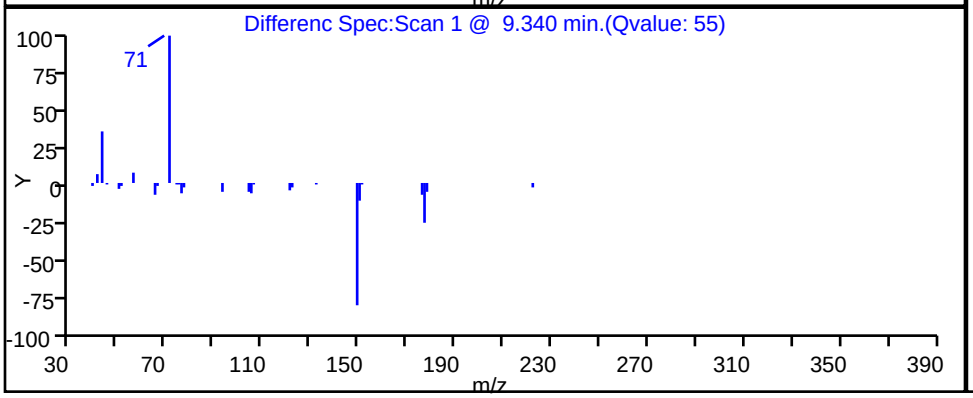












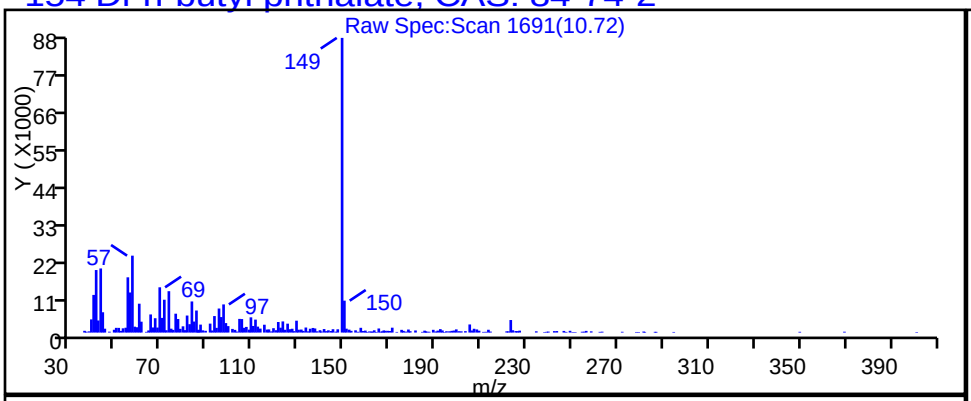
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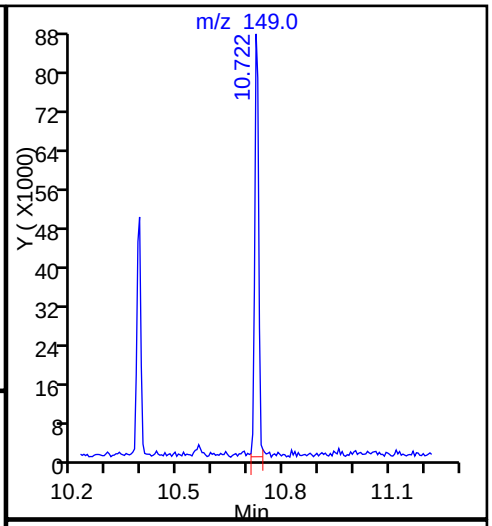
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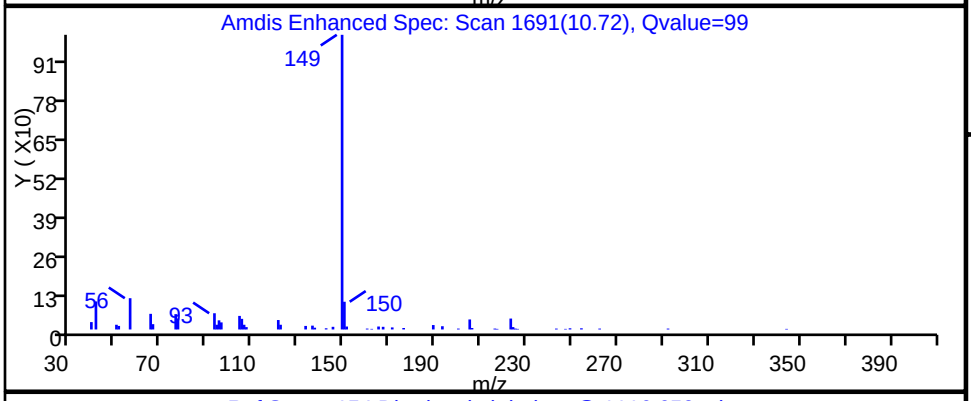
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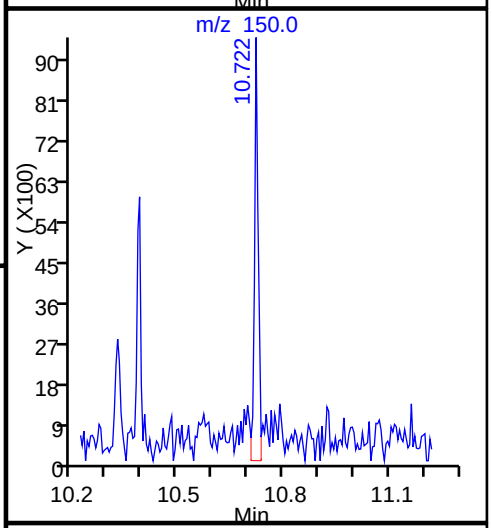
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Lims ID:	240-50067-A-9-B	Lab Sample ID:	240-50067-9		
Client ID:	079SB-0397M-0001-SO				
Operator ID:	001574	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

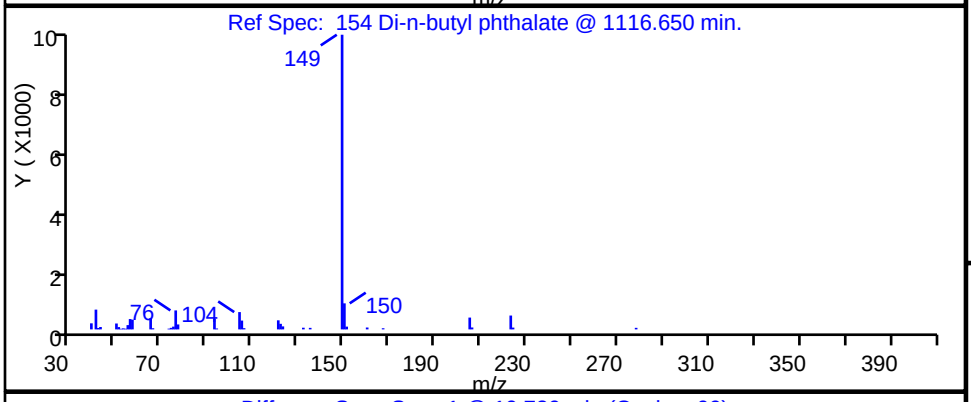
154 Di-n-butyl phthalate, CAS: 84-74-2

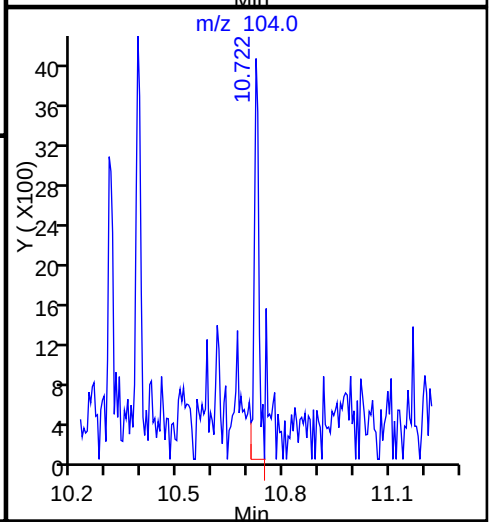


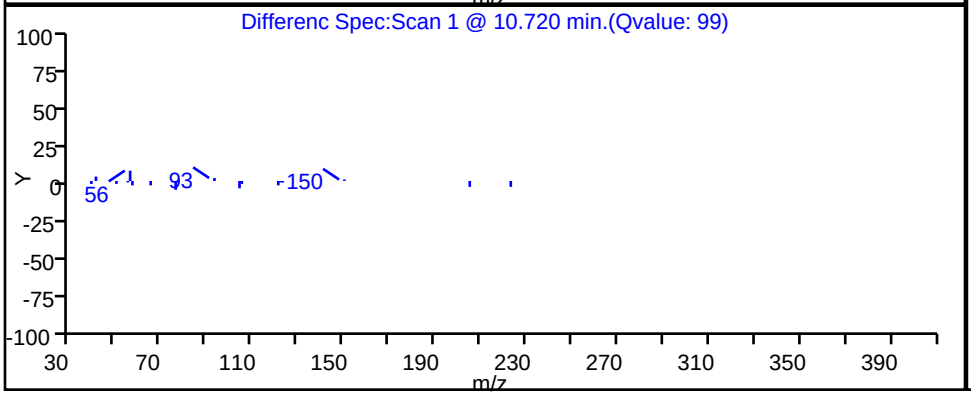












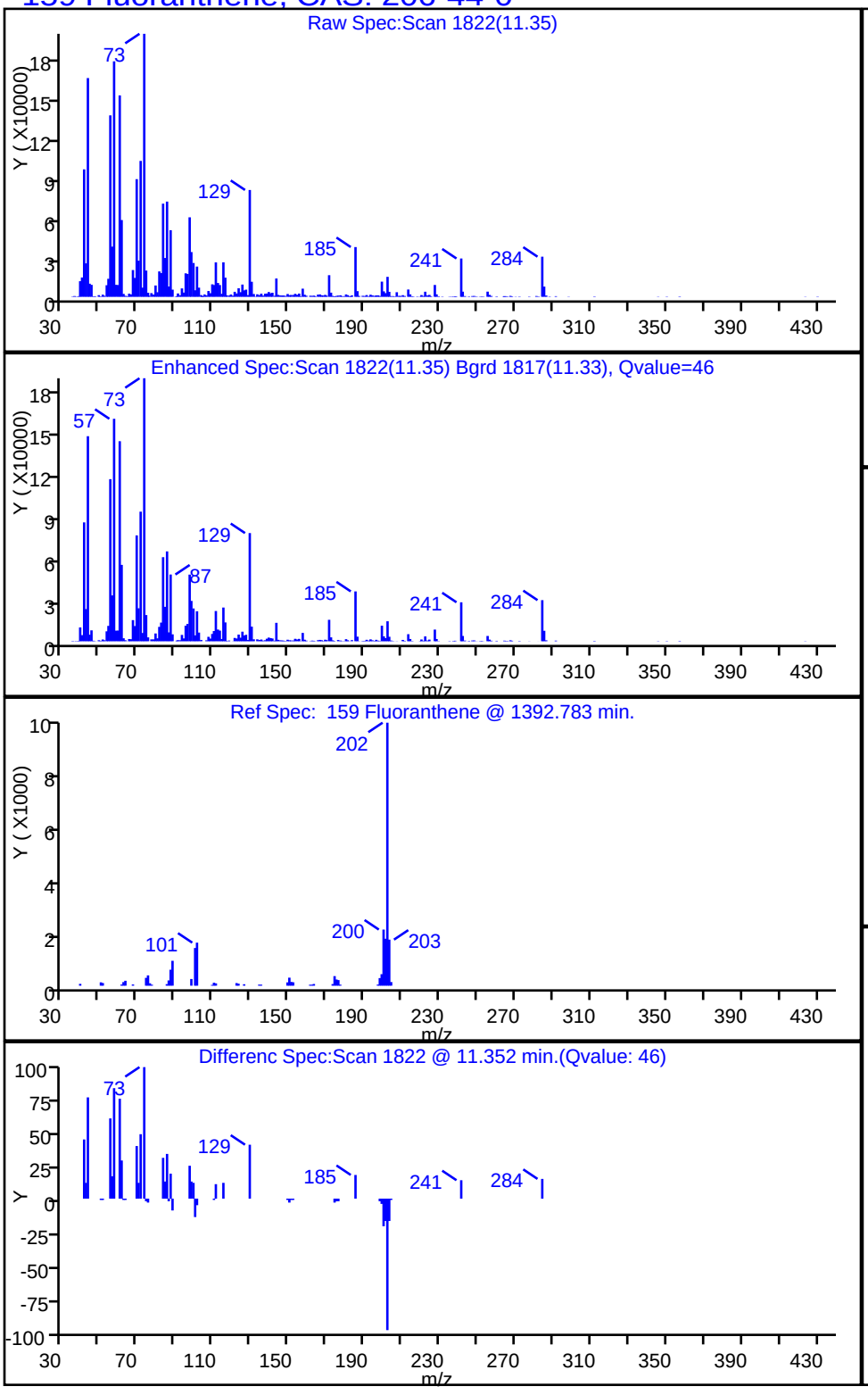
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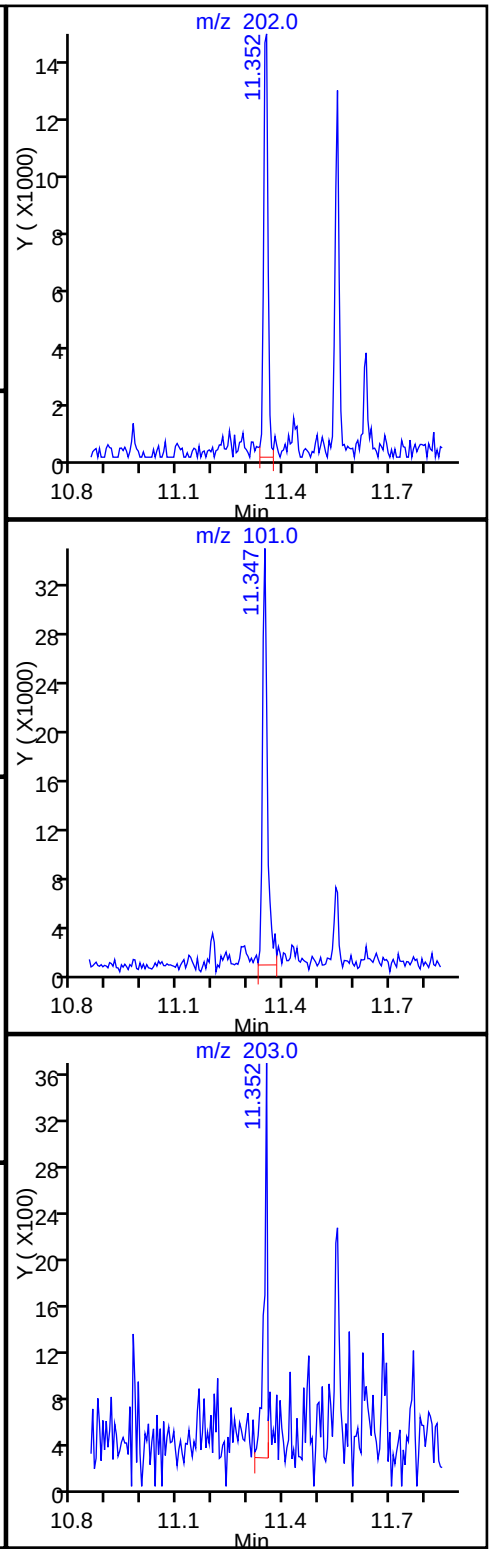
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520013.D

Injection Date:	20-May-2015 14:04:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-9-B	Lab Sample ID:	240-50067-9		
Client ID:	079SB-0397M-0001-SO				
Operator ID:	001574	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

159 Fluoranthene, CAS: 206-44-0





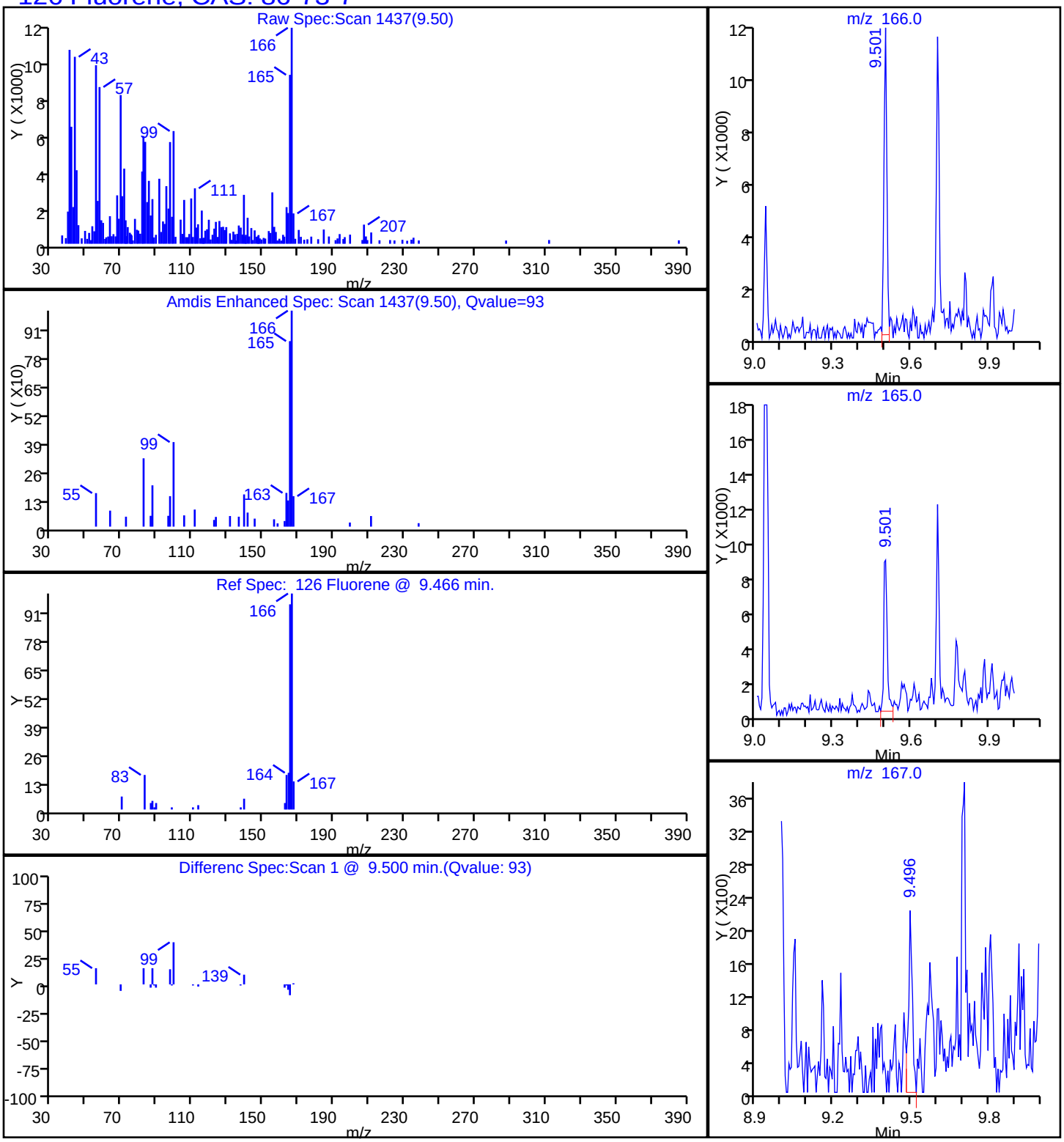
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TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520013.D

Injection Date:	20-May-2015 14:04:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-9-B	Lab Sample ID:	240-50067-9		
Client ID:	079SB-0397M-0001-SO				
Operator ID:	001574	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

126 Fluorene, CAS: 86-73-7



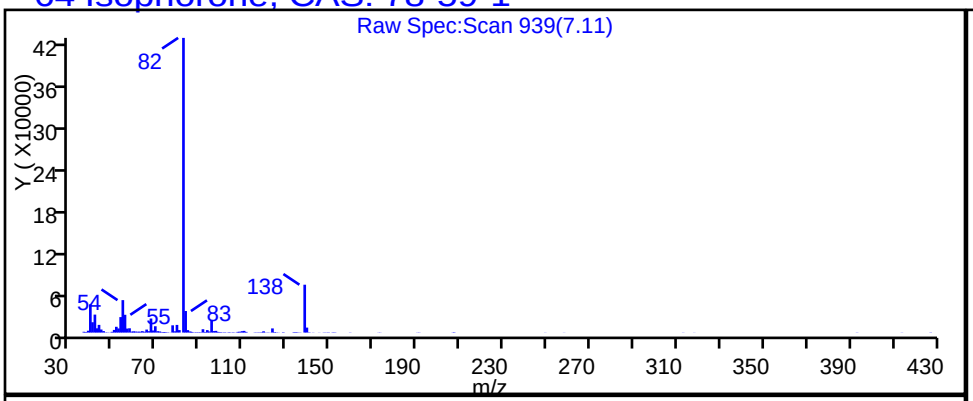
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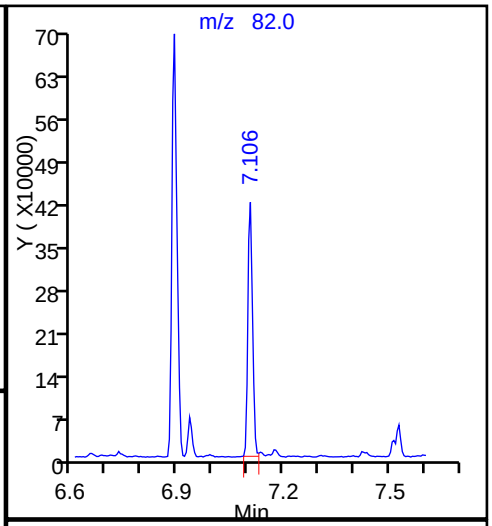
TestAmerica Canton

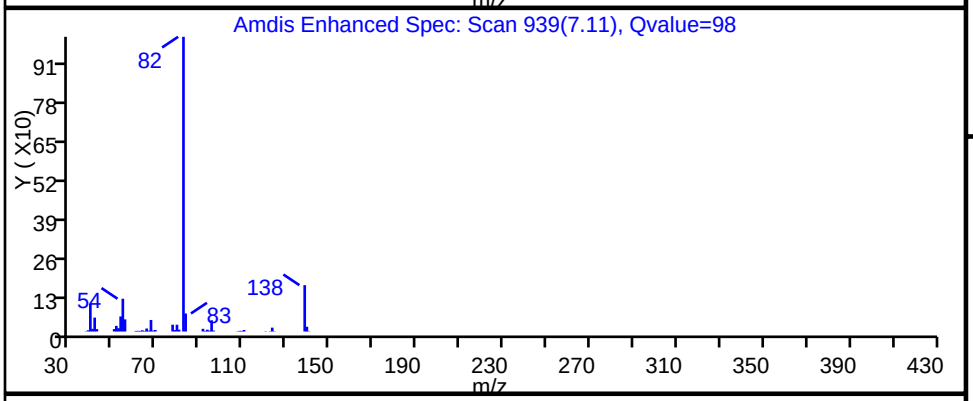
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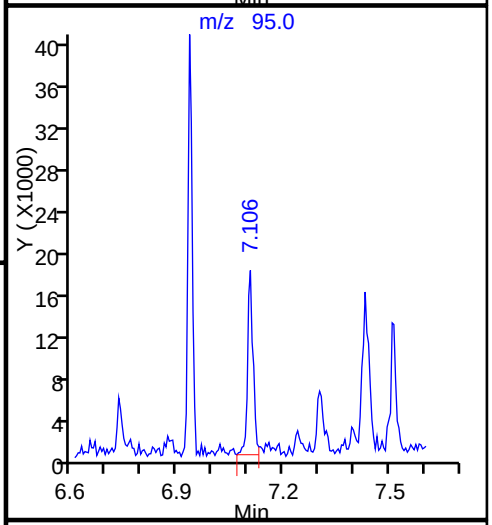
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Lims ID:	240-50067-A-9-B	Lab Sample ID:	240-50067-9		
Client ID:	079SB-0397M-0001-SO				
Operator ID:	001574	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

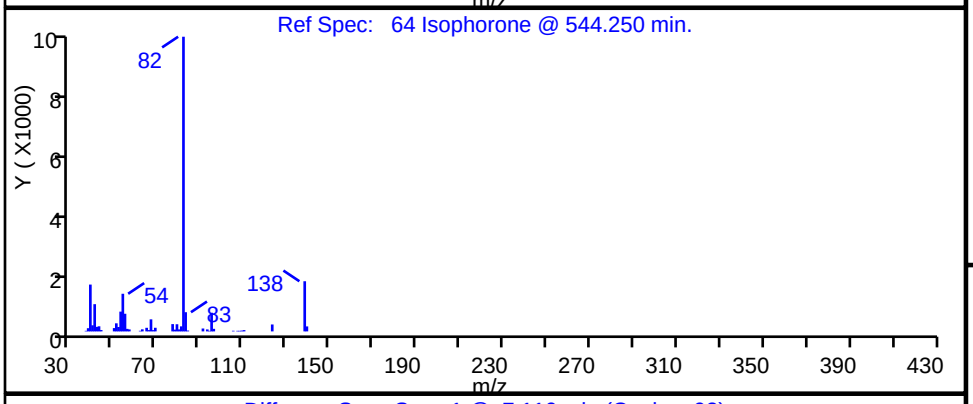
64 Isophorone, CAS: 78-59-1

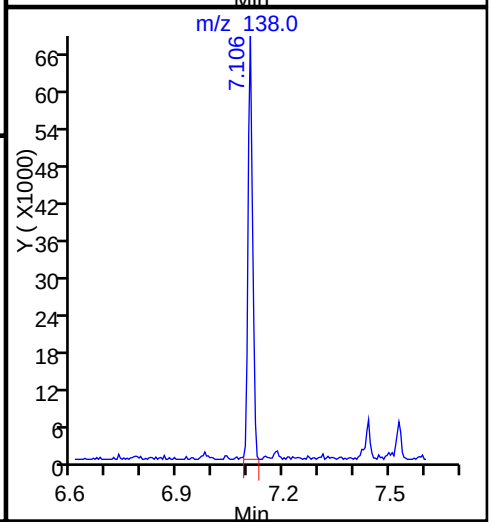


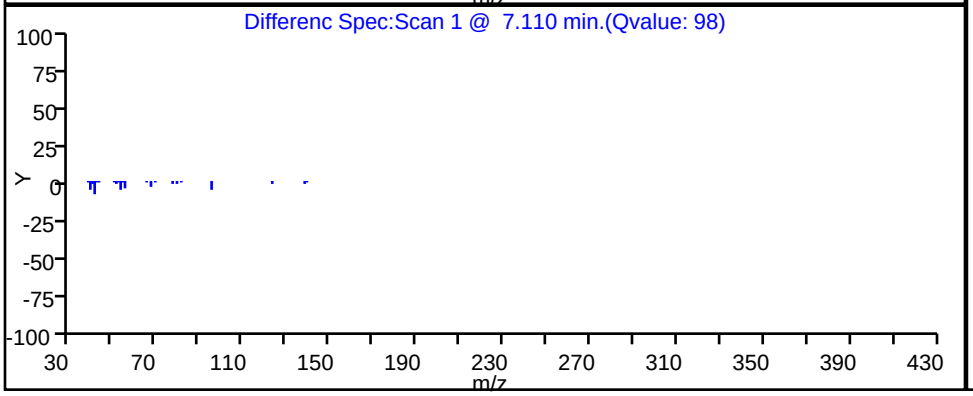












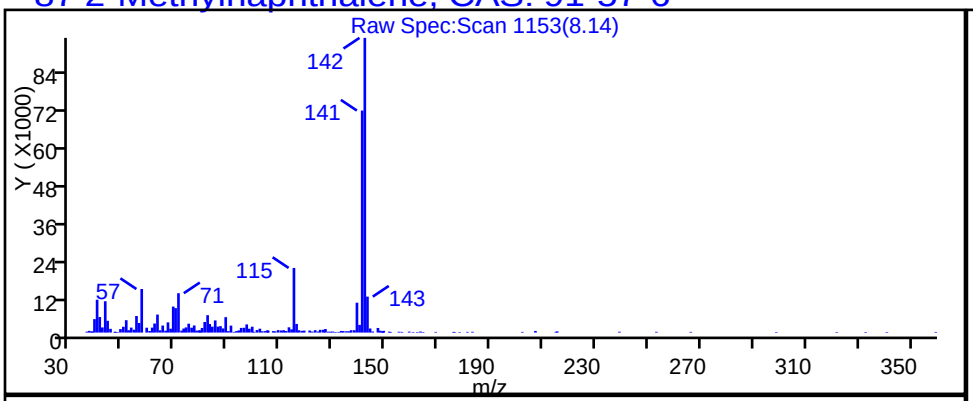
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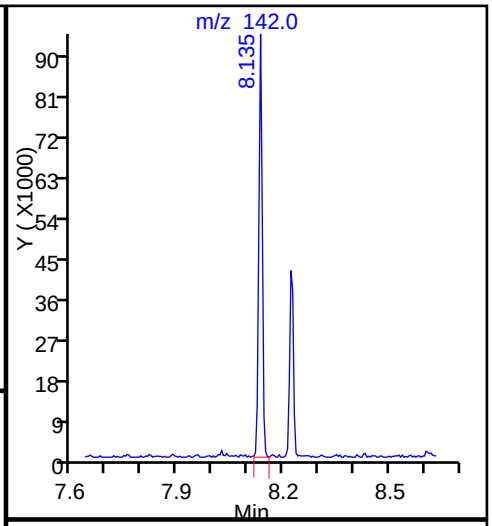
TestAmerica Canton

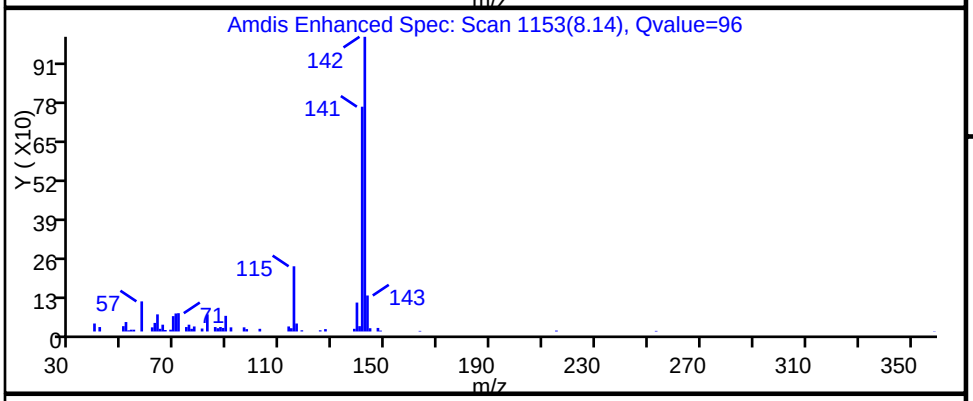
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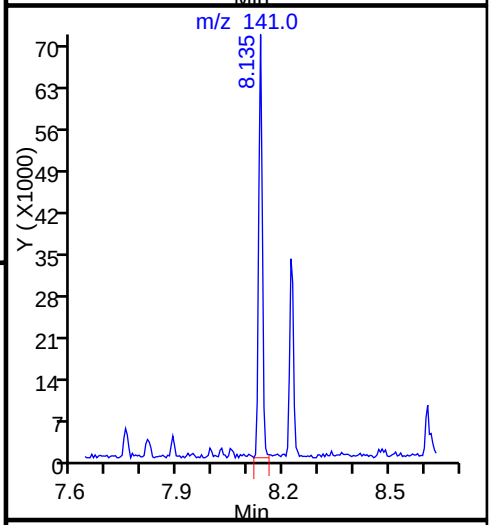
Injection Date:	20-May-2015 14:04:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-9-B	Lab Sample ID:	240-50067-9		
Client ID:	079SB-0397M-0001-SO				
Operator ID:	001574	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

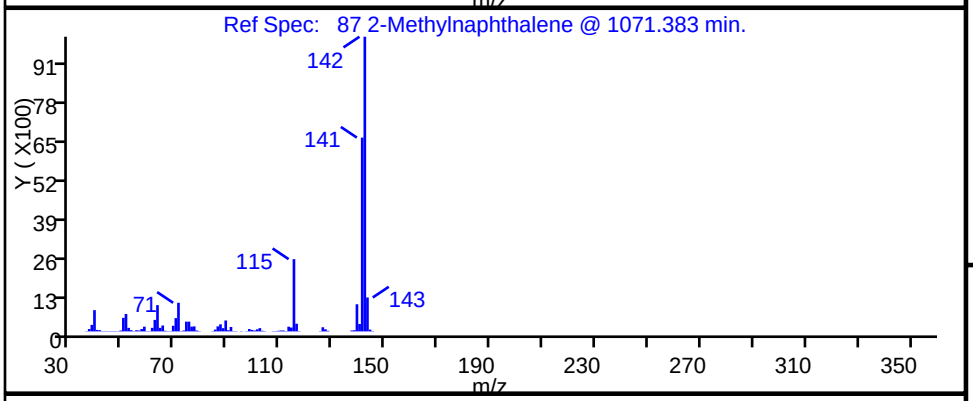
87 2-Methylnaphthalene, CAS: 91-57-6

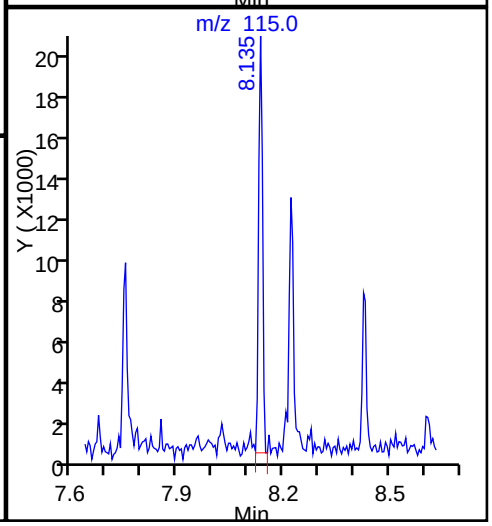


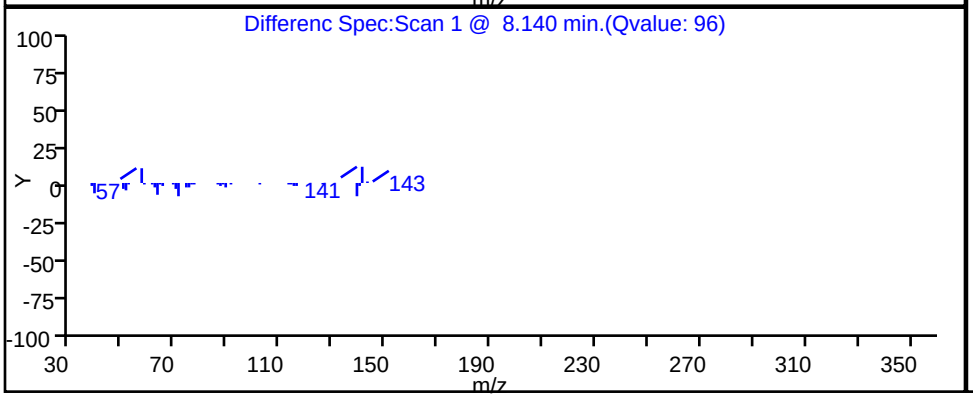












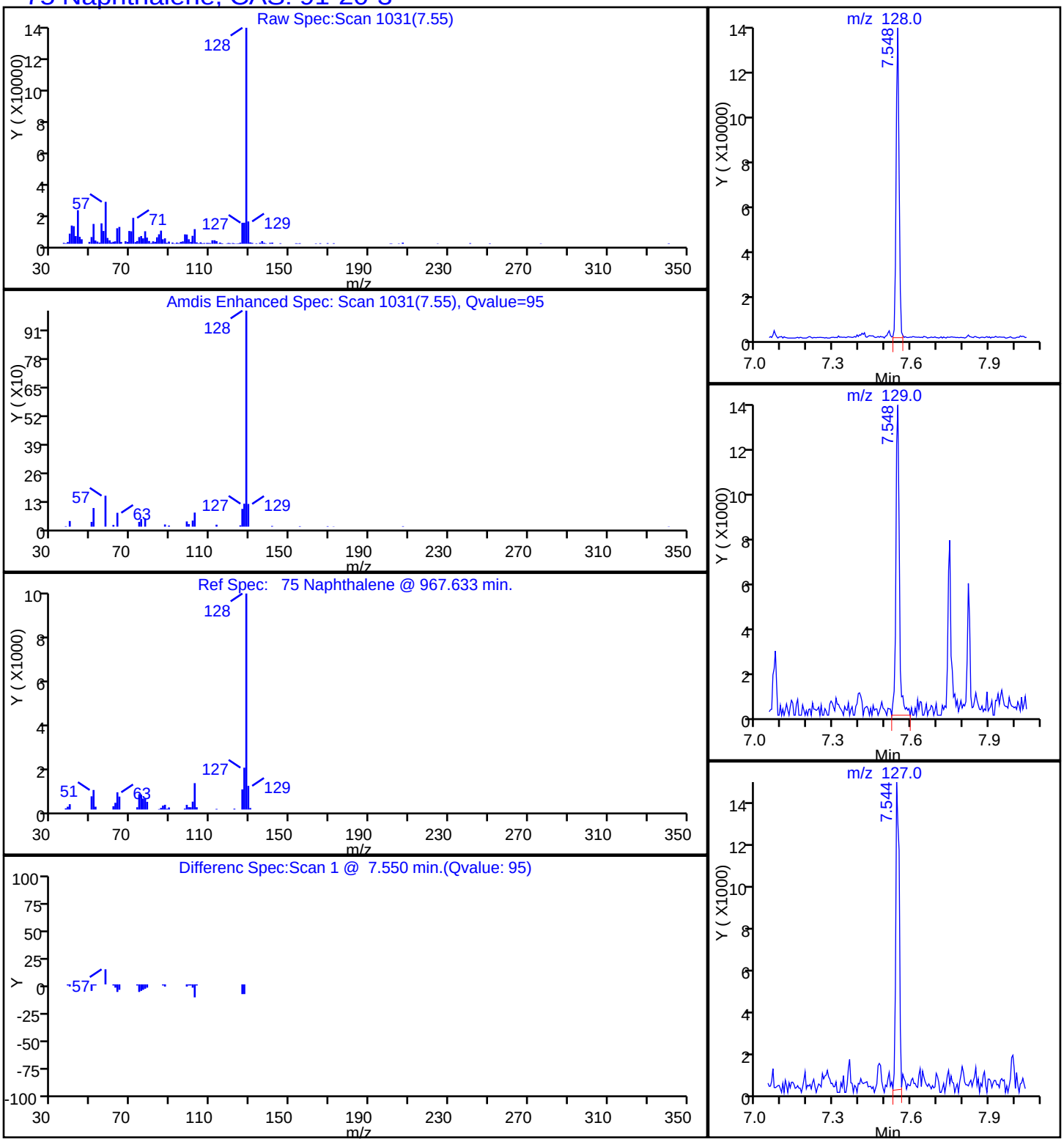
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TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520013.D

Injection Date:	20-May-2015 14:04:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-9-B	Lab Sample ID:	240-50067-9		
Client ID:	079SB-0397M-0001-SO				
Operator ID:	001574	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

75 Naphthalene, CAS: 91-20-3



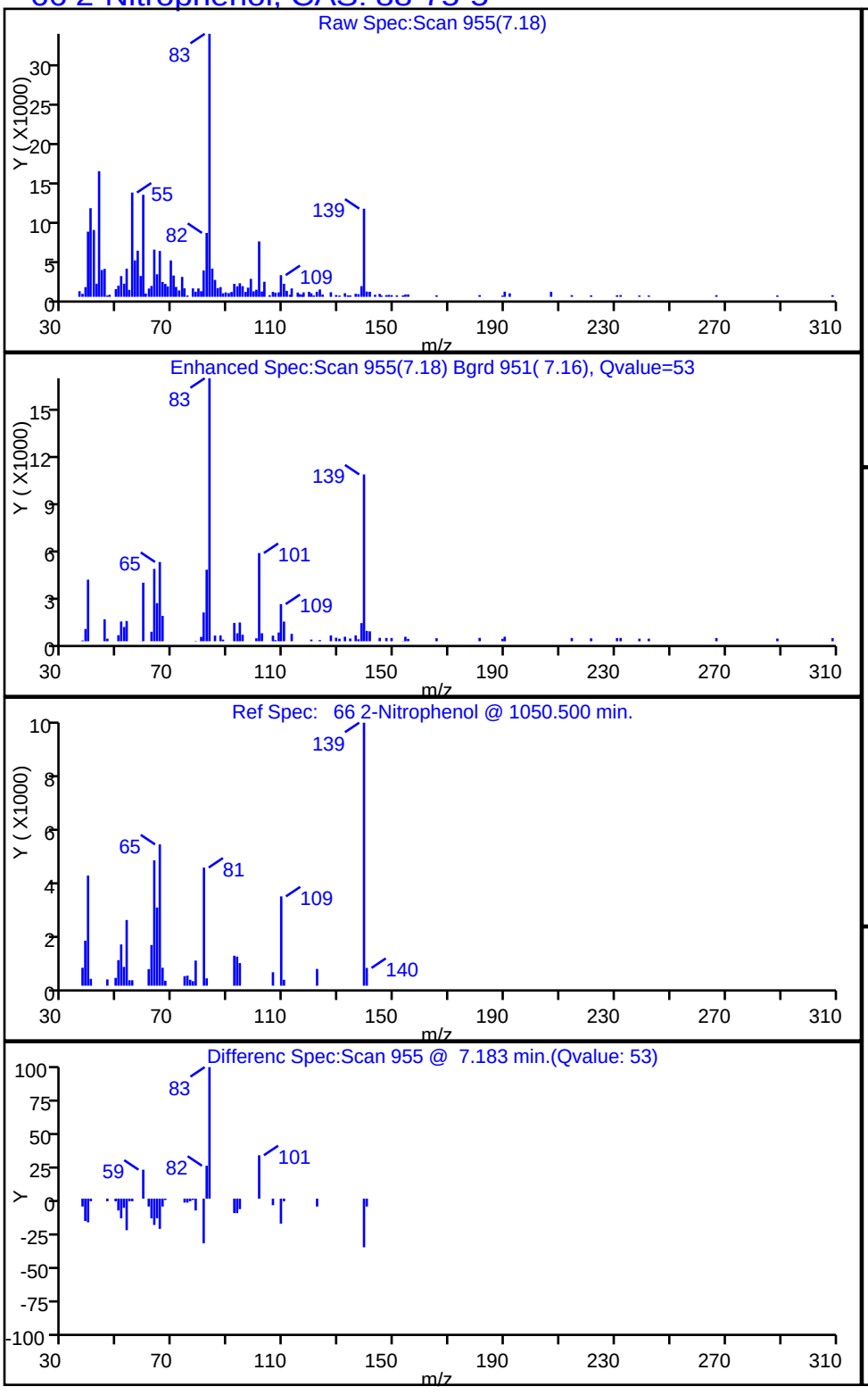
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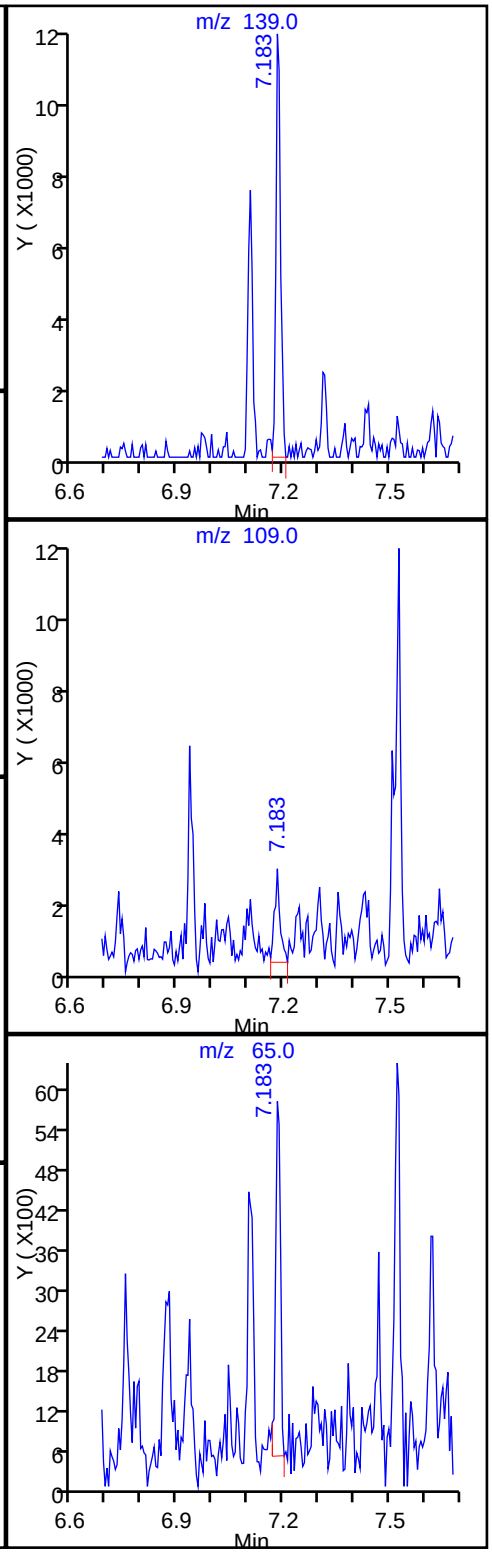
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Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520013.D

Injection Date:	20-May-2015 14:04:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-9-B	Lab Sample ID:	240-50067-9		
Client ID:	079SB-0397M-0001-SO				
Operator ID:	001574	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

66 2-Nitrophenol, CAS: 88-75-5





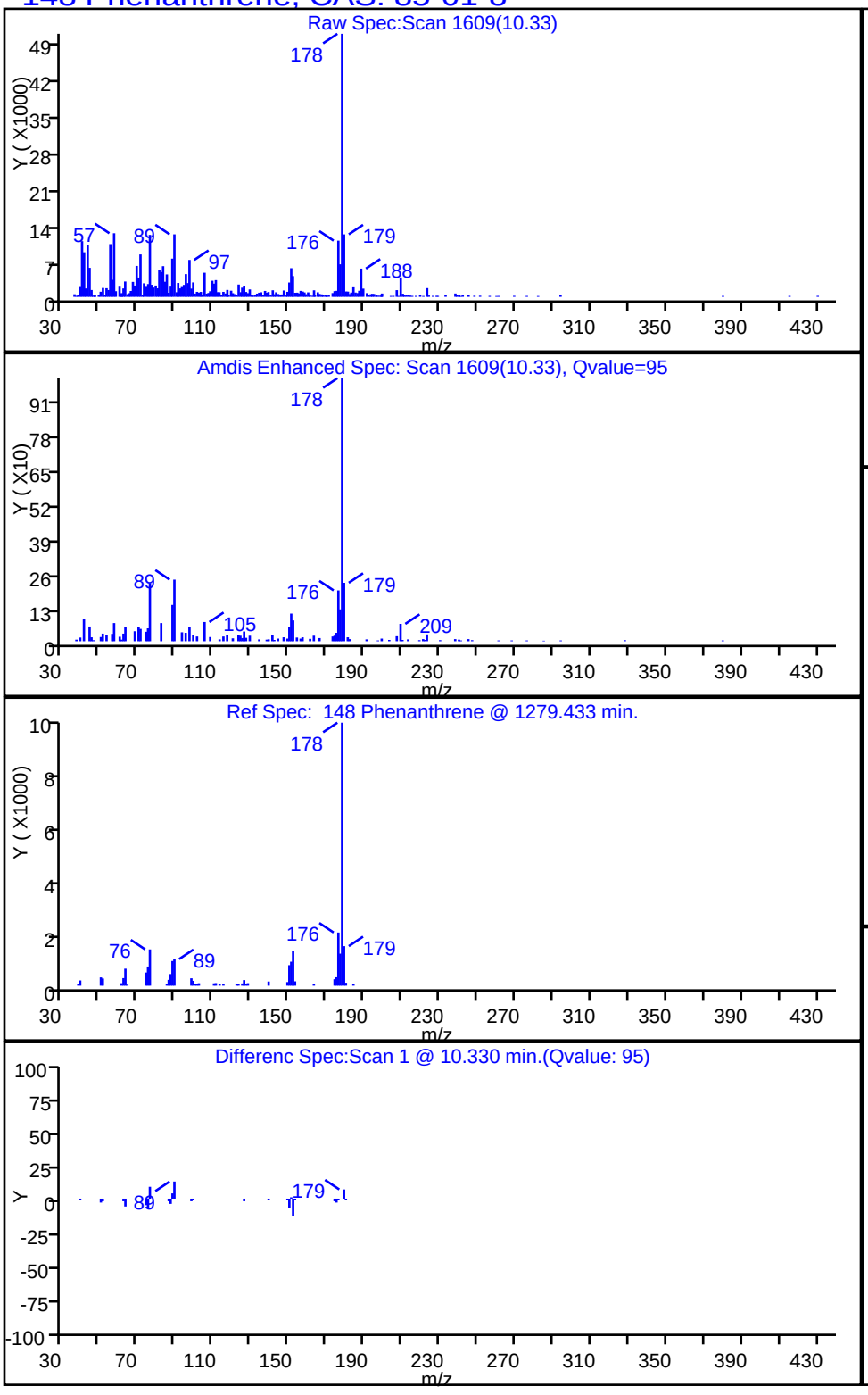
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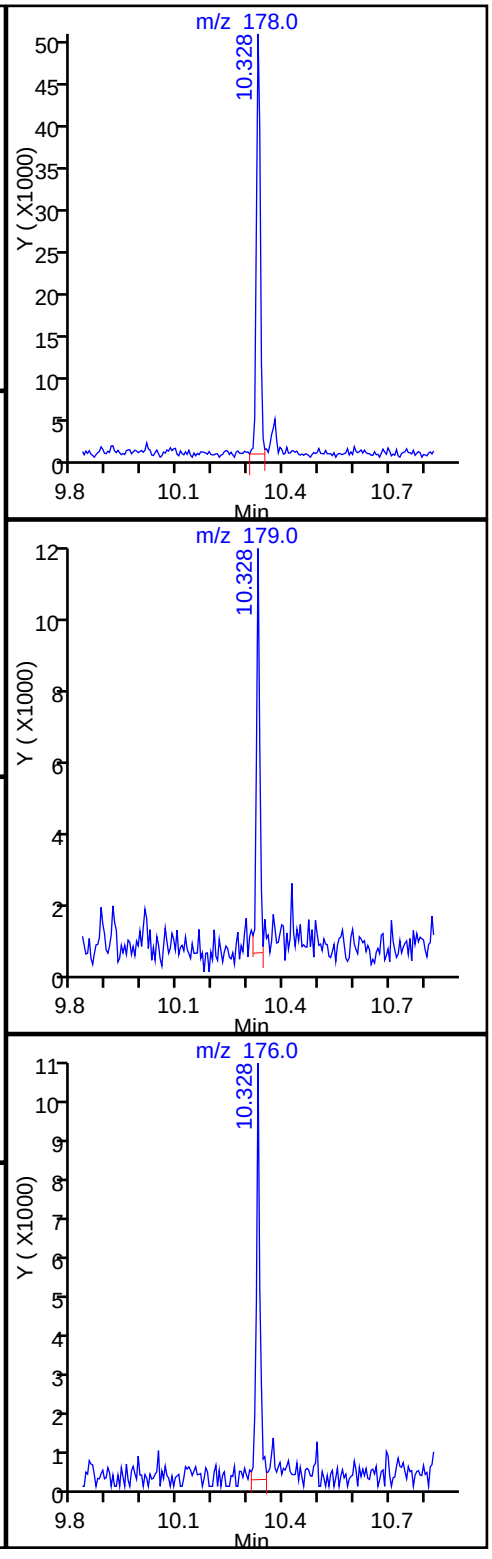
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Injection Date:	20-May-2015 14:04:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-9-B	Lab Sample ID:	240-50067-9		
Client ID:	079SB-0397M-0001-SO				
Operator ID:	001574	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

148 Phenanthrene, CAS: 85-01-8





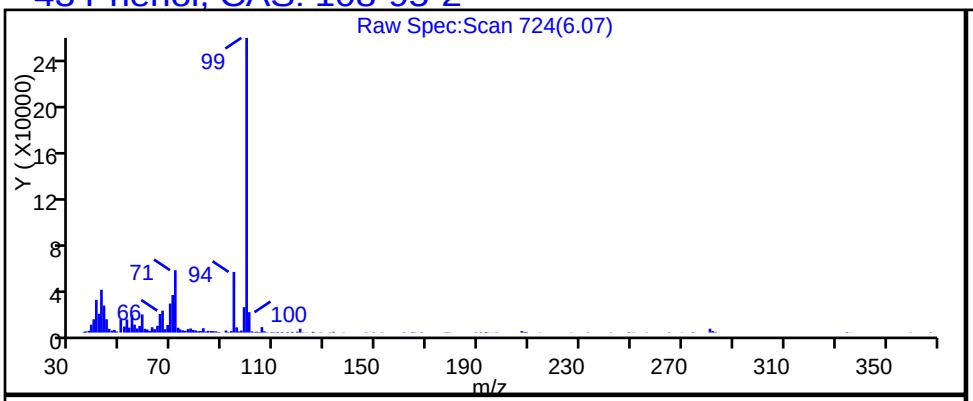
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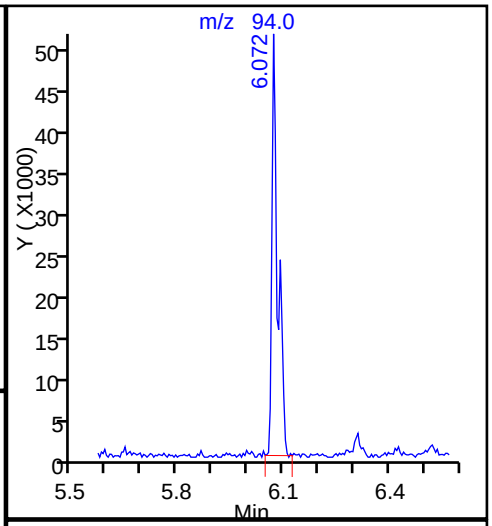
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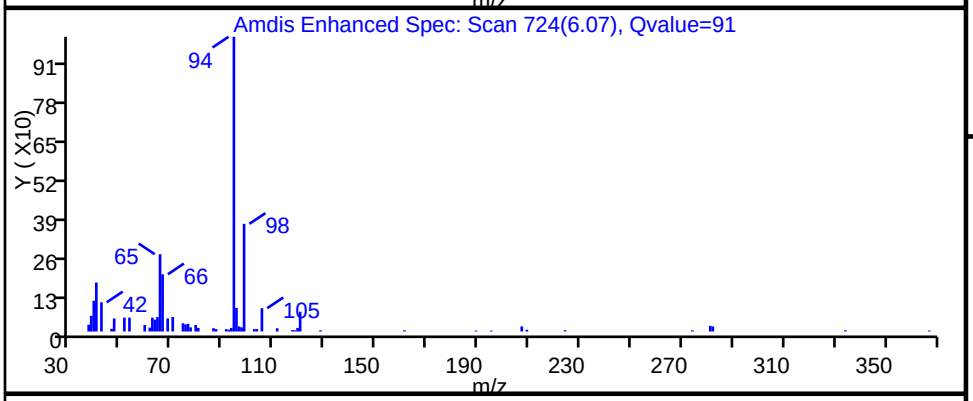
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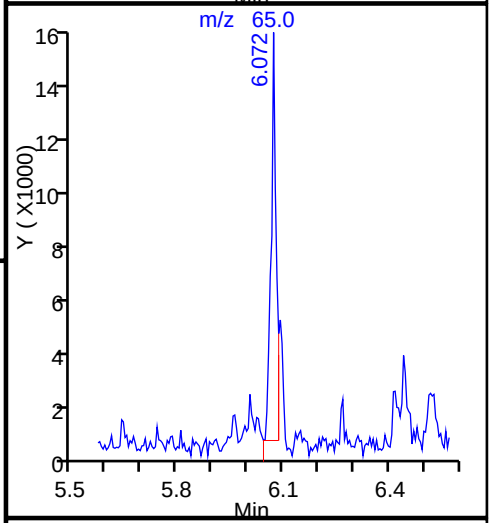
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Client ID:	079SB-0397M-0001-SO				
Operator ID:	001574	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

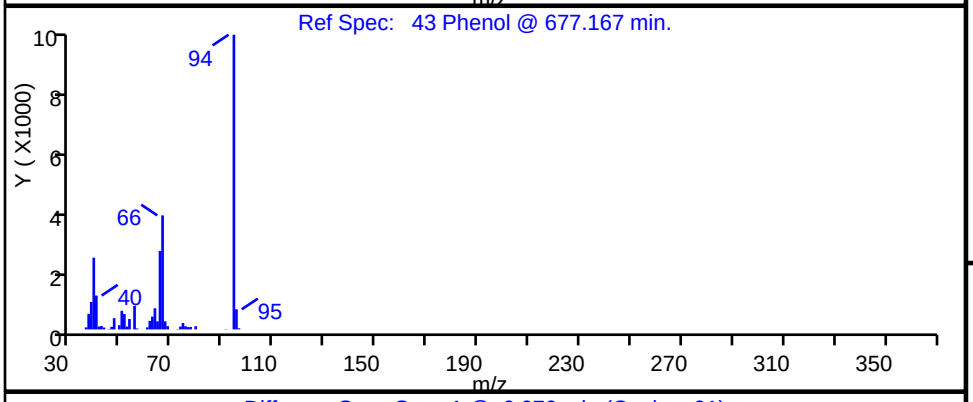
43 Phenol, CAS: 108-95-2

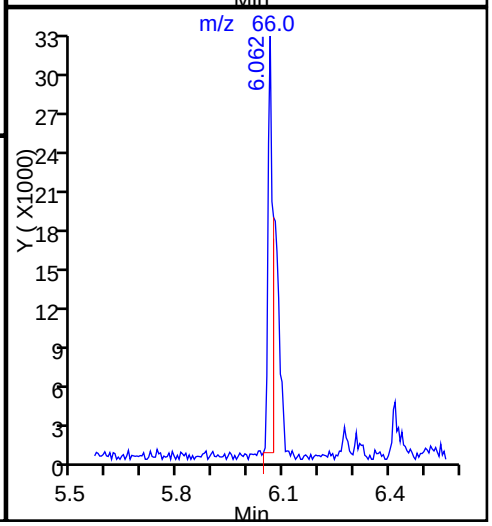


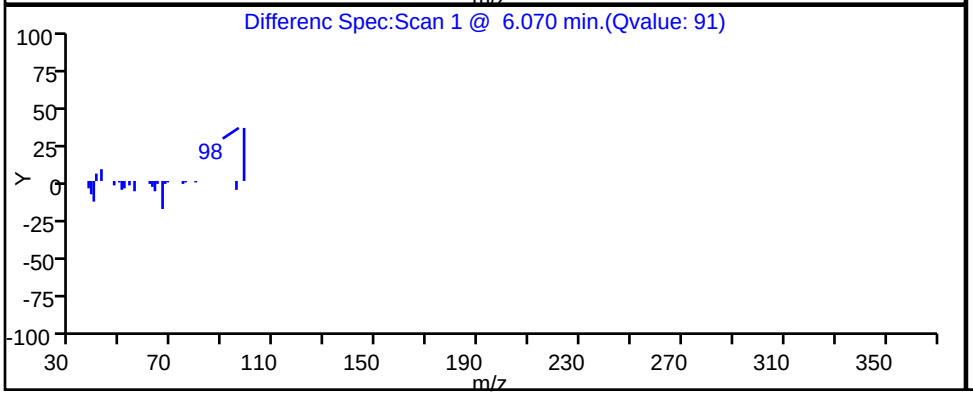












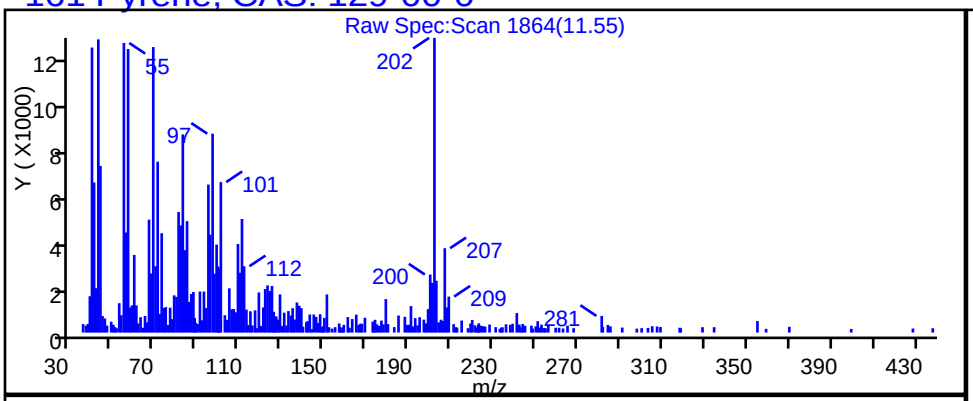
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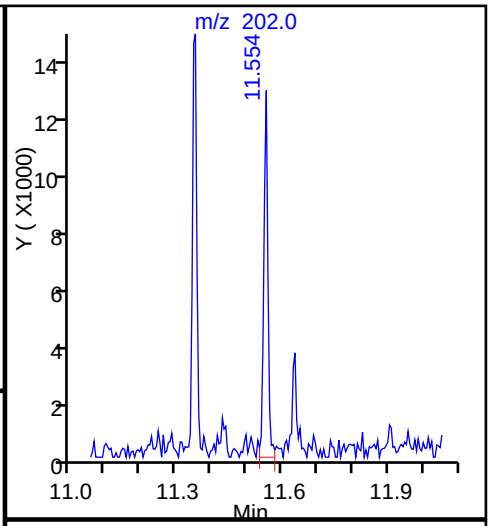
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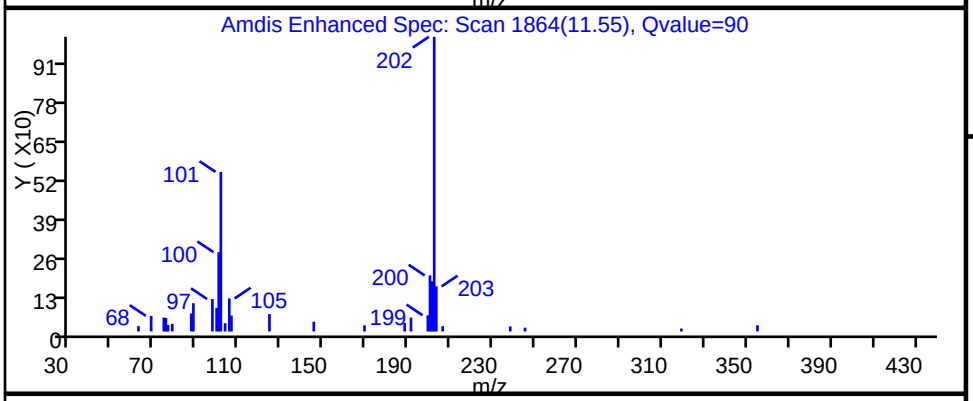
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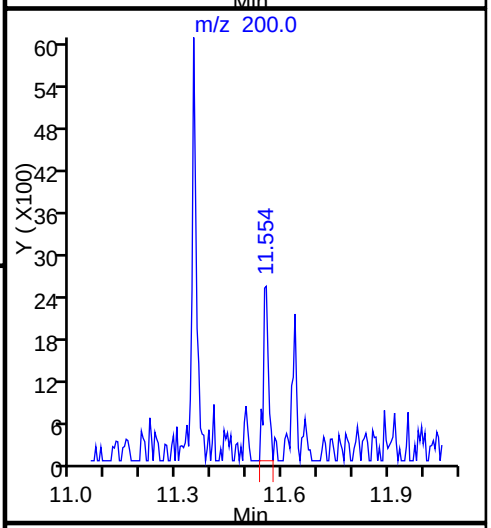
Injection Date:	20-May-2015 14:04:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-9-B	Lab Sample ID:	240-50067-9		
Client ID:	079SB-0397M-0001-SO				
Operator ID:	001574	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

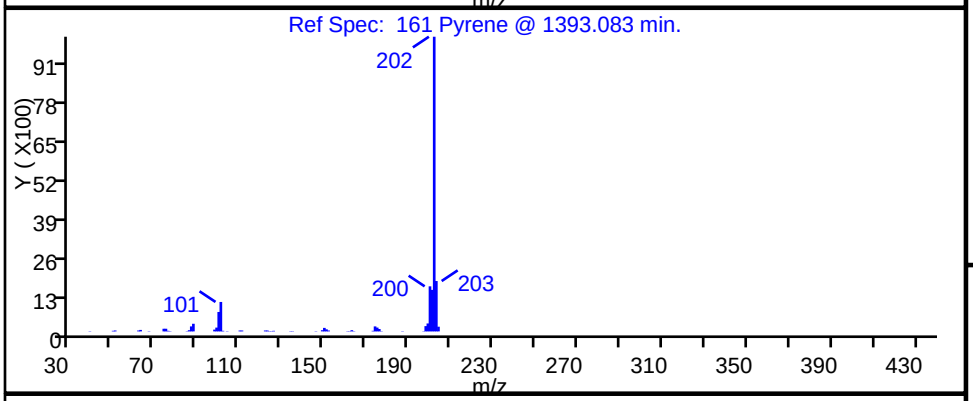
161 Pyrene, CAS: 129-00-0

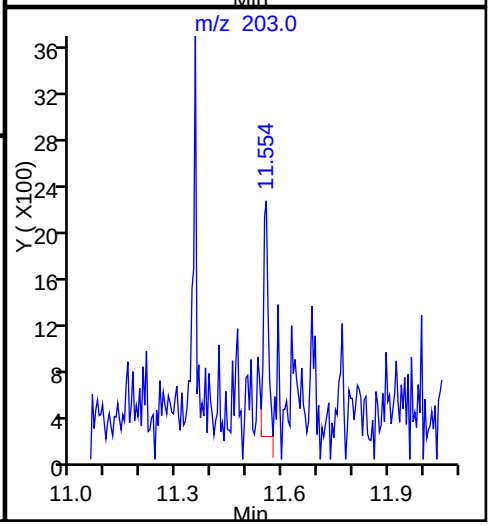


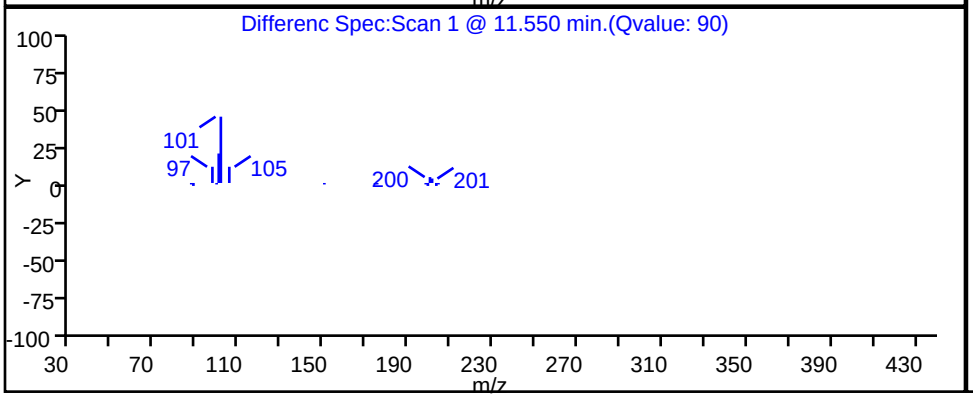












Manual Integration/User Assign Peak Report

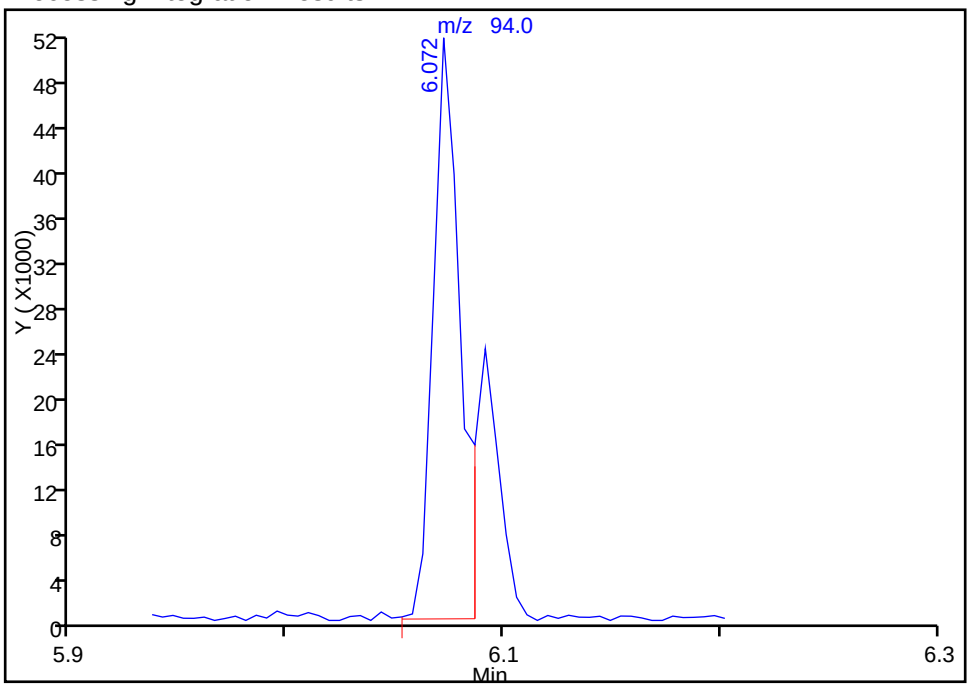
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520013.D				
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Lims ID:	240-50067-A-9-B	Lab Sample ID:	240-50067-9		
Client ID:	079SB-0397M-0001-SO				
Operator ID:	001574	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

43 Phenol, CAS: 108-95-2

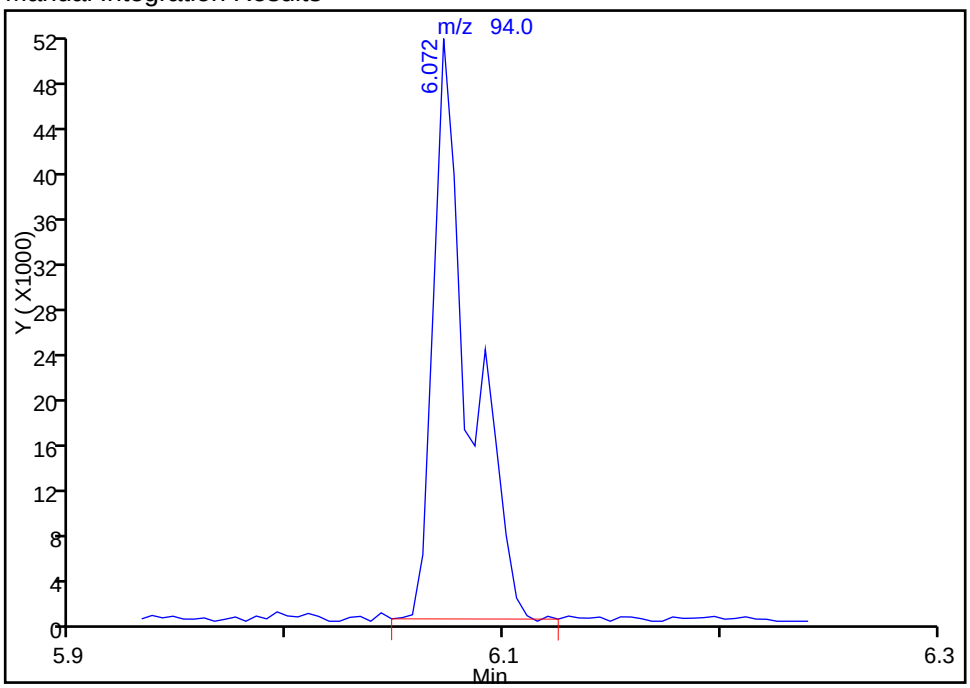
Processing Integration Results

RT: 6.07
Area: 45284
Amount: 0.271691
Amount Units: ng/ul



Manual Integration Results

RT: 6.07
Area: 59318
Amount: 0.355891
Amount Units: ng/ul



Reviewer: ulmanm, 20-May-2015 14:55:10
Audit Action: Manually Integrated
Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

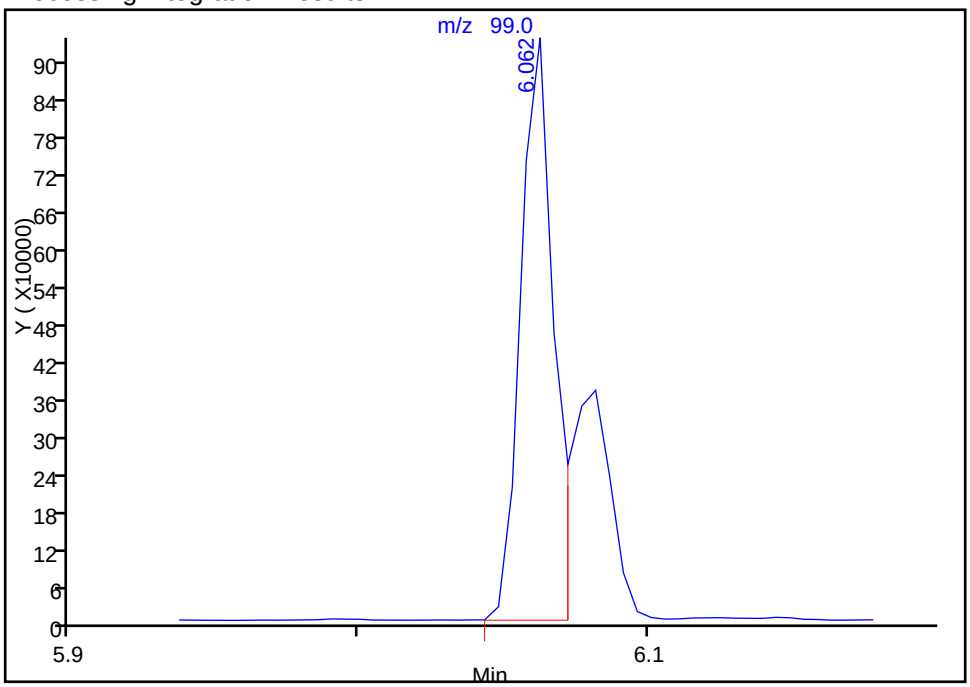
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520013.D				
Injection Date:	20-May-2015 14:04:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-9-B	Lab Sample ID:	240-50067-9		
Client ID:	079SB-0397M-0001-SO				
Operator ID:	001574	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

$ 8 Phenol-d5, CAS: 4165-62-2

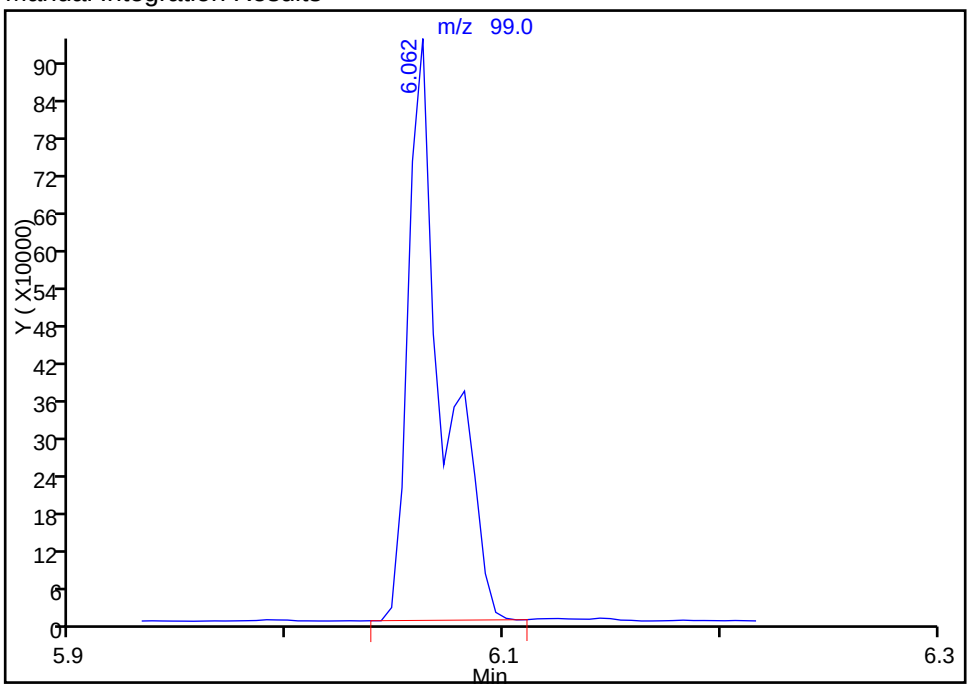
Processing Integration Results

RT: 6.06
Area: 754776
Amount: 4.947096
Amount Units: ng/ul



Manual Integration Results

RT: 6.06
Area: 1049137
Amount: 6.876453
Amount Units: ng/ul



Reviewer: ulmanm, 20-May-2015 14:55:10
Audit Action: Manually Integrated
Audit Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0398-0001-SO | Lab Sample ID: 240-50067-10

Matrix: Solid | Lab File ID: 50520008.D

Analysis Method: 8270C | Date Collected: 04/29/2015 16:40

Extract. Method: 3540C | Date Extracted: 05/04/2015 09:17

Sample wt/vol: 30.06(g) | Date Analyzed: 05/20/2015 12:00

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 15.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
83-32-9	Acenaphthene	3.9	U	7.9	3.9	0.90
208-96-8	Acenaphthylene	2.0	U	7.9	2.0	0.41
120-12-7	Anthracene	3.9	U	7.9	3.9	0.92
56-55-3	Benzo[a]anthracene	3.9	U	7.9	3.9	0.74
50-32-8	Benzo[a]pyrene	3.9	U	7.9	3.9	0.76
205-99-2	Benzo[b]fluoranthene	3.9	U	7.9	3.9	0.70
191-24-2	Benzo[g,h,i]perylene	2.0	U	7.9	2.0	0.41
65-85-0	Benzoic acid	160	U	780	160	42
207-08-9	Benzo[k]fluoranthene	3.9	U	7.9	3.9	0.80
100-51-6	Benzyl alcohol	79	U	390	79	25
111-91-1	Bis(2-chloroethoxy)methane	79	U	120	79	26
111-44-4	Bis(2-chloroethyl)ether	3.9	U	120	3.9	2.4
108-60-1	bis (2-chloroisopropyl) ether	39	U	120	39	11
117-81-7	Bis(2-ethylhexyl) phthalate	24	J	83	39	22
101-55-3	4-Bromophenyl phenyl ether	39	U	59	39	15
85-68-7	Butyl benzyl phthalate	39	U	83	39	12
86-74-8	Carbazole	39	U	59	39	32
106-47-8	4-Chloroaniline	79	U	180	79	20
59-50-7	4-Chloro-3-methylphenol	79	U	180	79	25
91-58-7	2-Chloronaphthalene	2.0	U	59	2.0	0.53
95-57-8	2-Chlorophenol	39	U	59	39	9.7
7005-72-3	4-Chlorophenyl phenyl ether	39	U	59	39	15
218-01-9	Chrysene	3.9	U	7.9	3.9	1.3
53-70-3	Dibenz(a,h)anthracene	3.9	U	7.9	3.9	0.78
132-64-9	Dibenzofuran	3.9	U	59	3.9	0.78
95-50-1	1,2-Dichlorobenzene	39	U	59	39	11
541-73-1	1,3-Dichlorobenzene	39	U	59	39	13
106-46-7	1,4-Dichlorobenzene	39	U	59	39	24
91-94-1	3,3'-Dichlorobenzidine	79	U	120	79	21
120-83-2	2,4-Dichlorophenol	79	U	180	79	24
84-66-2	Diethyl phthalate	39	U	83	39	19
105-67-9	2,4-Dimethylphenol	79	U	180	79	24
131-11-3	Dimethyl phthalate	39	U	83	39	20
84-74-2	Di-n-butyl phthalate	39	U	83	39	18

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0398-0001-SO | Lab Sample ID: 240-50067-10

Matrix: Solid | Lab File ID: 50520008.D

Analysis Method: 8270C | Date Collected: 04/29/2015 16:40

Extract. Method: 3540C | Date Extracted: 05/04/2015 09:17

Sample wt/vol: 30.06(g) | Date Analyzed: 05/20/2015 12:00

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 15.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
534-52-1	4,6-Dinitro-2-methylphenol	39	U	180	39	11
51-28-5	2,4-Dinitrophenol	79	U	390	79	25
121-14-2	2,4-Dinitrotoluene	79	U	240	79	20
606-20-2	2,6-Dinitrotoluene	79	U	240	79	25
117-84-0	Di-n-octyl phthalate	39	U	83	39	9.3
206-44-0	Fluoranthene	3.9	U	7.9	3.9	0.65
86-73-7	Fluorene	3.9	U	7.9	3.9	0.63
118-74-1	Hexachlorobenzene	3.9	U	7.9	3.9	2.5
87-68-3	Hexachlorobutadiene	39	U	59	39	6.6
77-47-4	Hexachlorocyclopentadiene	39	U	390	39	9.6
67-72-1	Hexachloroethane	39	U	59	39	11
193-39-5	Indeno[1,2,3-cd]pyrene	2.0	U	7.9	2.0	0.41
78-59-1	Isophorone	39	U	59	39	15
91-57-6	2-Methylnaphthalene	3.9	U	7.9	3.9	0.59
95-48-7	2-Methylphenol	79	U	240	79	13
15831-10-4	3 & 4 Methylphenol	79	U	470	79	24
91-20-3	Naphthalene	22	B	7.9	3.9	0.97
88-74-4	2-Nitroaniline	39	U	240	39	11
99-09-2	3-Nitroaniline	79	U	240	79	19
100-01-6	4-Nitroaniline	79	U	240	79	31
98-95-3	Nitrobenzene	3.9	U	120	3.9	2.6
88-75-5	2-Nitrophenol	39	U	59	39	9.8
100-02-7	4-Nitrophenol	79	U	390	79	20
621-64-7	N-Nitrosodi-n-propylamine	39	U	59	39	7.4
86-30-6	N-Nitrosodiphenylamine	39	U	59	39	25
87-86-5	Pentachlorophenol	39	U	180	39	11
85-01-8	Phenanthrene	3.9	U	7.9	3.9	0.86
108-95-2	Phenol	39	U	59	39	8.6
129-00-0	Pyrene	2.0	U	7.9	2.0	0.52
120-82-1	1,2,4-Trichlorobenzene	20	U	59	20	4.1
95-95-4	2,4,5-Trichlorophenol	79	U	180	79	29
88-06-2	2,4,6-Trichlorophenol	39	U	180	39	10

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0398-0001-SO | Lab Sample ID: 240-50067-10

Matrix: Solid | Lab File ID: 50520008.D

Analysis Method: 8270C | Date Collected: 04/29/2015 16:40

Extract. Method: 3540C | Date Extracted: 05/04/2015 09:17

Sample wt/vol: 30.06(g) | Date Analyzed: 05/20/2015 12:00

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 15.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	75		45-105
367-12-4	2-Fluorophenol (Surr)	70		35-105
4165-60-0	Nitrobenzene-d5 (Surr)	70		35-100
4165-62-2	Phenol-d5 (Surr)	74		40-100
1718-51-0	Terphenyl-d14 (Surr)	80		30-125
118-79-6	2,4,6-Tribromophenol (Surr)	40		35-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520008.D
Lims ID: 240-50067-A-10-A Lab Sample ID: 240-50067-10
Client ID: 079SB-0398-0001-SO
Sample Type: Client
Inject. Date: 20-May-2015 12:00:30 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043844-008
Misc. Info.: 240-50067-A-10-A240-50067-A-10-A
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-May-2015 08:02:18 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 20-May-2015 12:51:03

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.411	6.411	0.000	97	225084	4.00	
* 2 Naphthalene-d8	136	7.527	7.527	0.000	99	934769	4.00	
* 3 Acenaphthene-d10	164	9.037	9.037	0.000	91	450822	4.00	
* 4 Phenanthrene-d10	188	10.307	10.311	-0.004	96	690885	4.00	
* 5 Chrysene-d12	240	12.615	12.619	-0.004	92	560614	4.00	
* 6 Perylene-d12	264	14.433	14.437	-0.004	90	397026	4.00	
$ 7 2-Fluorophenol	112	5.219	5.199	0.020	91	682561	7.02	
$ 8 Phenol-d5	99	6.051	6.046	0.005	93	969413	7.38	
$ 9 Nitrobenzene-d5	82	6.888	6.887	0.001	86	666254	6.96	
$ 10 2-Fluorobiphenyl (Surr)	172	8.431	8.431	0.000	99	958731	7.46	
$ 11 2,4,6-Tribromophenol	330	9.705	9.710	-0.005	85	46728	3.95	
$ 12 Terphenyl-d14	244	11.634	11.638	-0.004	97	857313	7.97	
43 Phenol	94		6.055				ND	
69 Bis(2-chloroethyl)ether	93		6.147				ND	
46 2-Chlorophenol	128		6.228				ND	
47 1,3-Dichlorobenzene	146		6.368				ND	
48 1,4-Dichlorobenzene	146		6.426				ND	
49 Benzyl alcohol	108		6.507				ND	
50 1,2-Dichlorobenzene	146		6.570				ND	
51 2-Methylphenol	108		6.594				ND	
53 2,2'-oxybis[1-chloropropan	45		6.628				ND	
21 3 & 4 Methylphenol	108		6.724				ND	
57 N-Nitrosodi-n-propylamine	70		6.738				ND	
61 Hexachloroethane	117		6.878				ND	
62 Nitrobenzene	77		6.902				ND	
64 Isophorone	82		7.104				ND	
66 2-Nitrophenol	139		7.185				ND	
65 2,4-Dimethylphenol	107		7.190				ND	
71 Benzoic acid	122	7.200	7.238	-0.038	86	15076	0.3214	
70 Bis(2-chloroethoxy)methane	93		7.267				ND	
73 2,4-Dichlorophenol	162		7.387				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
74 1,2,4-Trichlorobenzene	180		7.474				ND	
75 Naphthalene	128	7.546	7.546	0.000	96	67455	0.2734	
76 4-Chloroaniline	127		7.565				ND	
79 Hexachlorobutadiene	225		7.652				ND	
86 4-Chloro-3-methylphenol	107		7.955				ND	
87 2-Methylnaphthalene	142		8.138				ND	
89 Hexachlorocyclopentadiene	237		8.282				ND	
92 2,4,6-Trichlorophenol	196		8.364				ND	
93 2,4,5-Trichlorophenol	196		8.402				ND	
100 2-Chloronaphthalene	162		8.556				ND	
102 2-Nitroaniline	65		8.618				ND	
105 Dimethyl phthalate	163		8.748				ND	
107 2,6-Dinitrotoluene	165		8.806				ND	
109 Acenaphthylene	152		8.921				ND	
110 3-Nitroaniline	138		8.960				ND	
111 2,4-Dinitrophenol	184		9.046				ND	
112 Acenaphthene	153		9.066				ND	
113 4-Nitrophenol	109		9.070				ND	
114 2,4-Dinitrotoluene	165		9.157				ND	
116 Dibenzofuran	168		9.210				ND	
121 Diethyl phthalate	149		9.345				ND	
123 4-Chlorophenyl phenyl ethe	204		9.474				ND	
125 4-Nitroaniline	138		9.484				ND	
126 Fluorene	166		9.503				ND	
128 4,6-Dinitro-2-methylphenol	198		9.513				ND	
131 N-Nitrosodiphenylamine	169		9.571				ND	
139 4-Bromophenyl phenyl ether	248		9.898				ND	
141 Hexachlorobenzene	284		9.989				ND	
143 Pentachlorophenol	266		10.143				ND	
148 Phenanthrene	178		10.330				ND	
149 Anthracene	178		10.374				ND	
151 Carbazole	167		10.489				ND	
154 Di-n-butyl phthalate	149	10.725	10.725	0.000	98	27638	0.1302	
159 Fluoranthene	202		11.355				ND	
161 Pyrene	202		11.557				ND	
168 Butyl benzyl phthalate	149		12.013				ND	
173 Bis(2-ethylhexyl) phthalat	149	12.504	12.504	0.000	92	39259	0.3031	
175 3,3'-Dichlorobenzidine	252		12.538				ND	
177 Benzo[a]anthracene	228		12.610				ND	
178 Chrysene	228		12.648				ND	
180 Di-n-octyl phthalate	149		13.177				ND	
182 Benzo[b]fluoranthene	252		13.870				ND	
183 Benzo[k]fluoranthene	252		13.903				ND	
184 Benzo[a]pyrene	252		14.355				ND	
188 Indeno[1,2,3-cd]pyrene	276		16.423				ND	
189 Dibenz(a,h)anthracene	278		16.428				ND	
190 Benzo[g,h,i]perylene	276		17.039				ND	

Reagents:

SMIS80PPMW_00011 Amount Added: 5.00 Units: uL Run Reagent

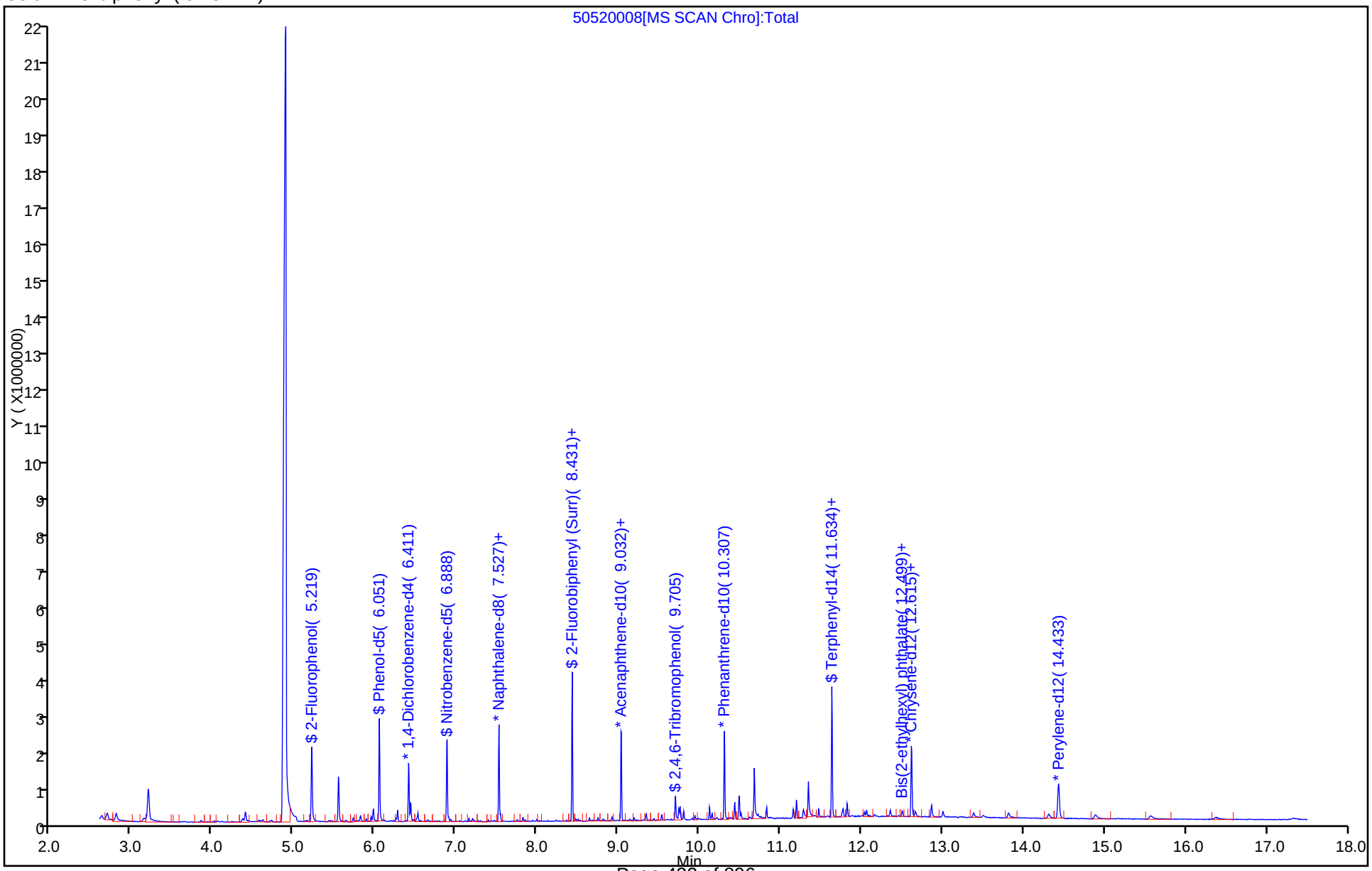
Report Date: 21-May-2015 08:02:30 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520008.D

Injection Date:	20-May-2015 12:00:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	240-50067-A-10-A	Lab Sample ID:	240-50067-10	Worklist Smp#:	8
Client ID:	079SB-0398-0001-SO				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



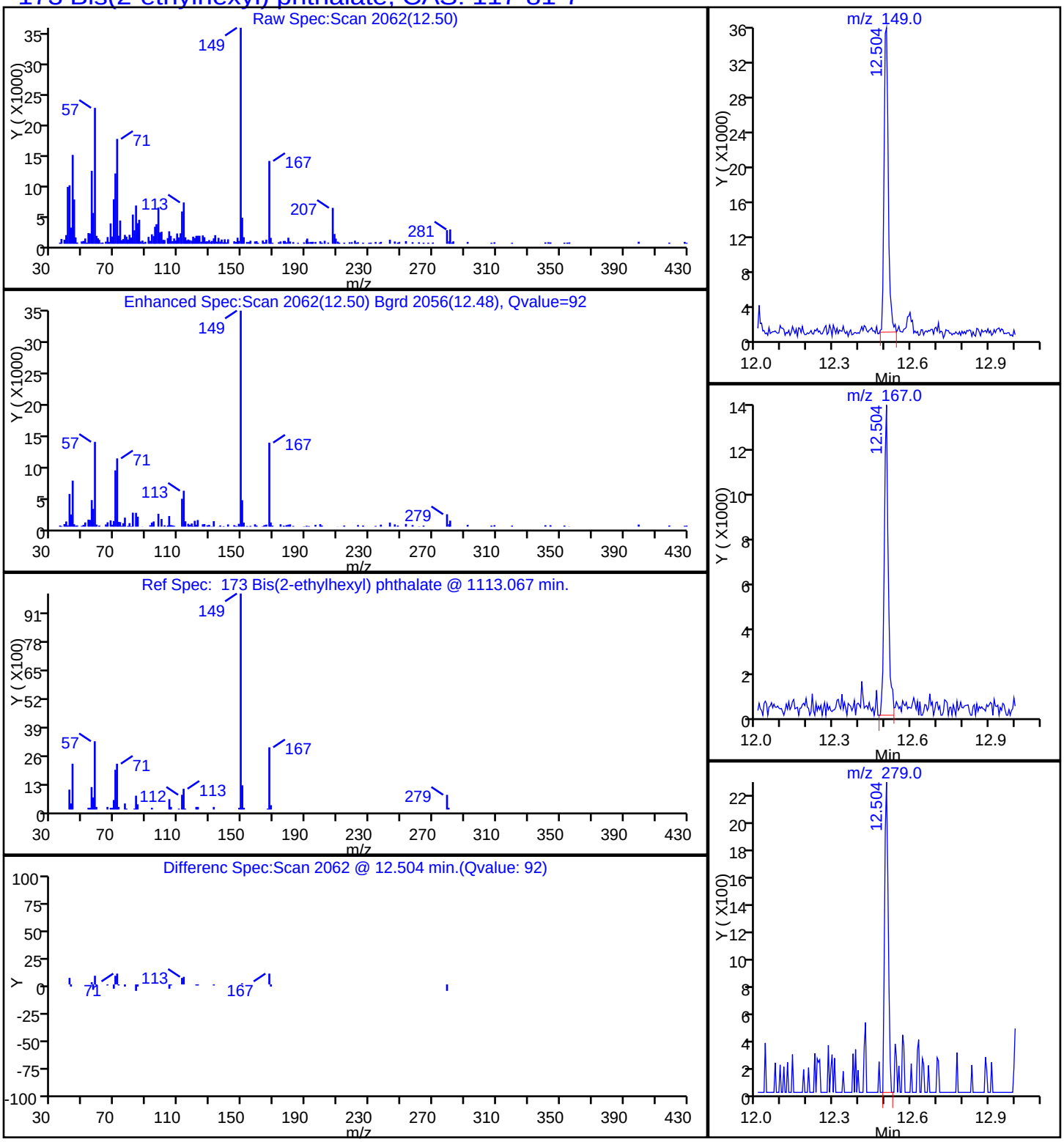
Report Date: 21-May-2015 08:02:30 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520008.D

Injection Date:	20-May-2015 12:00:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-10-A	Lab Sample ID:	240-50067-10		
Client ID:	079SB-0398-0001-SO				
Operator ID:	001574	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

173 Bis(2-ethylhexyl) phthalate, CAS: 117-81-7



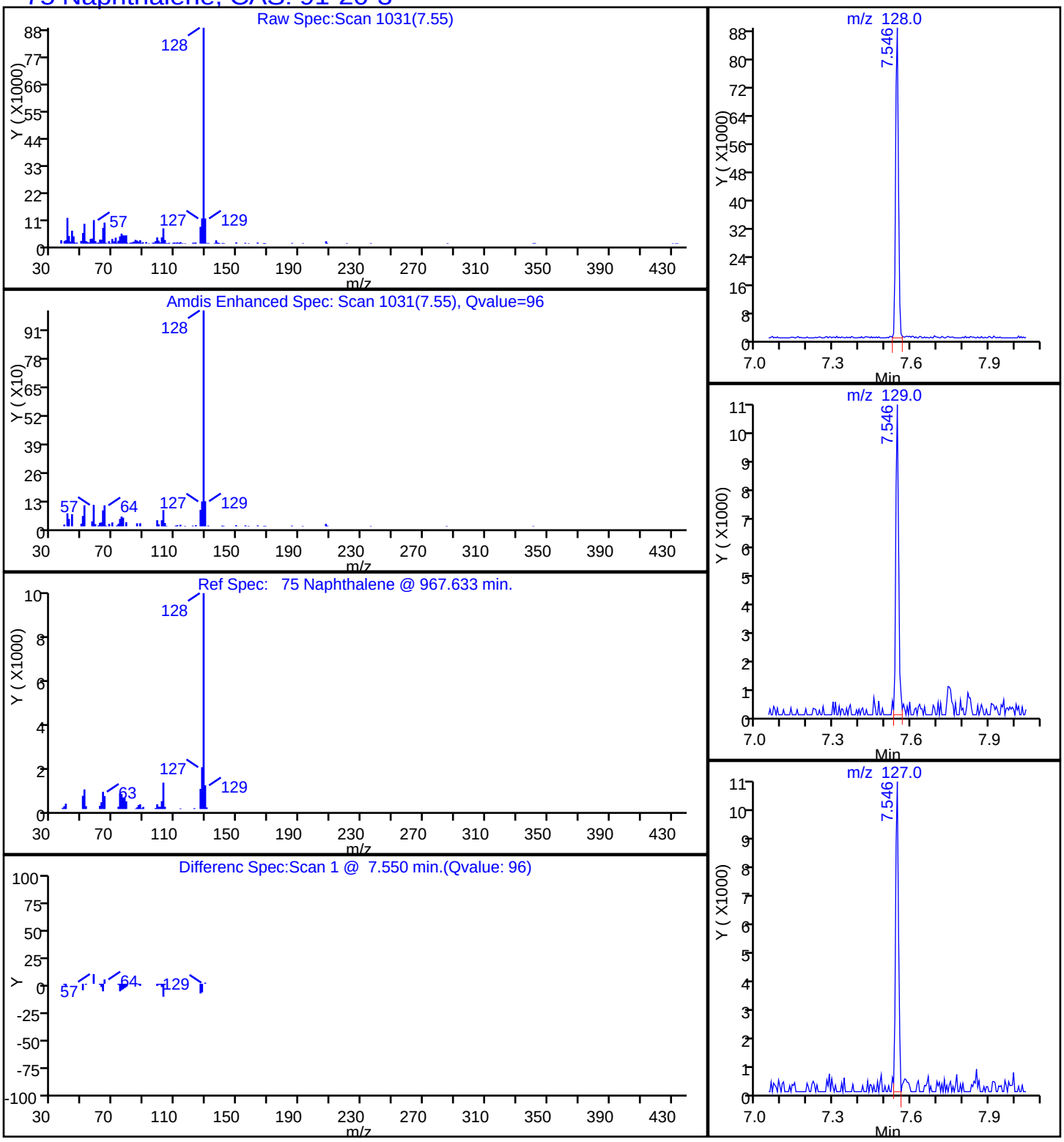
Report Date: 21-May-2015 08:02:30 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520008.D

Injection Date:	20-May-2015 12:00:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-10-A	Lab Sample ID:	240-50067-10		
Client ID:	079SB-0398-0001-SO				
Operator ID:	001574	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

75 Naphthalene, CAS: 91-20-3



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0399-0001-RB | Lab Sample ID: 240-50067-11

Matrix: Water | Lab File ID: 50512019.D

Analysis Method: 8270C | Date Collected: 04/30/2015 08:05

Extract. Method: 3520C | Date Extracted: 05/04/2015 05:57

Sample wt/vol: 1050(mL) | Date Analyzed: 05/12/2015 14:46

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 180308 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
83-32-9	Acenaphthene	0.095	U	0.19	0.095	0.042
208-96-8	Acenaphthylene	0.095	U	0.19	0.095	0.046
120-12-7	Anthracene	0.095	U	0.19	0.095	0.084
56-55-3	Benzo[a]anthracene	0.095	U	0.19	0.095	0.028
50-32-8	Benzo[a]pyrene	0.095	U	0.19	0.095	0.049
205-99-2	Benzo[b]fluoranthene	0.095	U	0.19	0.095	0.038
191-24-2	Benzo[g,h,i]perylene	0.095	U	0.19	0.095	0.044
65-85-0	Benzoic acid	19	U	24	19	9.5
207-08-9	Benzo[k]fluoranthene	0.095	U	0.19	0.095	0.043
100-51-6	Benzyl alcohol	0.48	U	4.8	0.48	0.36
111-91-1	Bis(2-chloroethoxy)methane	0.48	U	0.95	0.48	0.30
111-44-4	Bis(2-chloroethyl)ether	0.095	U	0.95	0.095	0.095
108-60-1	bis (2-chloroisopropyl) ether	0.48	U	0.95	0.48	0.38
117-81-7	Bis(2-ethylhexyl) phthalate	4.8	U	4.8	4.8	1.6
101-55-3	4-Bromophenyl phenyl ether	0.48	U	1.9	0.48	0.21
85-68-7	Butyl benzyl phthalate	0.48	U	4.8	0.48	0.25
86-74-8	Carbazole	0.48	U	0.95	0.48	0.27
106-47-8	4-Chloroaniline	0.48	U	1.9	0.48	0.20
59-50-7	4-Chloro-3-methylphenol	0.48	U	1.9	0.48	0.20
91-58-7	2-Chloronaphthalene	0.48	U	0.95	0.48	0.095
95-57-8	2-Chlorophenol	0.48	U	0.95	0.48	0.28
7005-72-3	4-Chlorophenyl phenyl ether	0.48	U	1.9	0.48	0.29
218-01-9	Chrysene	0.095	U	0.19	0.095	0.048
53-70-3	Dibenz(a,h)anthracene	0.095	U	0.19	0.095	0.042
132-64-9	Dibenzofuran	0.095	U	0.95	0.095	0.019
95-50-1	1,2-Dichlorobenzene	0.48	U	0.95	0.48	0.28
541-73-1	1,3-Dichlorobenzene	0.48	U	0.95	0.48	0.22
106-46-7	1,4-Dichlorobenzene	0.48	U	0.95	0.48	0.32
91-94-1	3,3'-Dichlorobenzidine	0.95	U	4.8	0.95	0.35
120-83-2	2,4-Dichlorophenol	0.48	U	1.9	0.48	0.18
84-66-2	Diethyl phthalate	0.95	U	1.9	0.95	0.57
105-67-9	2,4-Dimethylphenol	0.48	U	1.9	0.48	0.24
131-11-3	Dimethyl phthalate	0.48	U	1.9	0.48	0.28
84-74-2	Di-n-butyl phthalate	4.8	U	4.8	4.8	1.6

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0399-0001-RB | Lab Sample ID: 240-50067-11

Matrix: Water | Lab File ID: 50512019.D

Analysis Method: 8270C | Date Collected: 04/30/2015 08:05

Extract. Method: 3520C | Date Extracted: 05/04/2015 05:57

Sample wt/vol: 1050(mL) | Date Analyzed: 05/12/2015 14:46

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 180308 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
534-52-1	4,6-Dinitro-2-methylphenol	3.8	U	4.8	3.8	2.3
51-28-5	2,4-Dinitrophenol	0.95	U	4.8	0.95	0.30
121-14-2	2,4-Dinitrotoluene	0.48	U	4.8	0.48	0.24
606-20-2	2,6-Dinitrotoluene	4.8	U	4.8	4.8	1.0
117-84-0	Di-n-octyl phthalate	0.48	U	1.9	0.48	0.22
206-44-0	Fluoranthene	0.095	U	0.19	0.095	0.042
86-73-7	Fluorene	0.095	U	0.19	0.095	0.039
118-74-1	Hexachlorobenzene	0.095	U	0.19	0.095	0.081
87-68-3	Hexachlorobutadiene	0.48	U	0.95	0.48	0.26
77-47-4	Hexachlorocyclopentadiene	0.48	U Q	9.5	0.48	0.23
67-72-1	Hexachloroethane	0.48	U	0.95	0.48	0.18
193-39-5	Indeno[1,2,3-cd]pyrene	0.095	U	0.19	0.095	0.041
78-59-1	Isophorone	0.48	U	0.95	0.48	0.26
91-57-6	2-Methylnaphthalene	0.095	U	0.19	0.095	0.086
95-48-7	2-Methylphenol	0.48	U	0.95	0.48	0.16
15831-10-4	3 & 4 Methylphenol	0.95	U	1.9	0.95	0.76
91-20-3	Naphthalene	0.095	U	0.19	0.095	0.060
88-74-4	2-Nitroaniline	0.48	U	1.9	0.48	0.20
99-09-2	3-Nitroaniline	0.48	U	1.9	0.48	0.27
100-01-6	4-Nitroaniline	0.48	U	1.9	0.48	0.21
98-95-3	Nitrobenzene	0.095	U	0.95	0.095	0.038
88-75-5	2-Nitrophenol	0.48	U	1.9	0.48	0.27
100-02-7	4-Nitrophenol	3.8	U	4.8	3.8	0.28
621-64-7	N-Nitrosodi-n-propylamine	0.48	U	0.95	0.48	0.23
86-30-6	N-Nitrosodiphenylamine	0.48	U	0.95	0.48	0.30
87-86-5	Pentachlorophenol	0.95	U	4.8	0.95	0.26
85-01-8	Phenanthrene	0.095	U	0.19	0.095	0.059
108-95-2	Phenol	0.95	U	0.95	0.95	0.57
129-00-0	Pyrene	0.095	U	0.19	0.095	0.040
120-82-1	1,2,4-Trichlorobenzene	0.48	U	0.95	0.48	0.27
95-95-4	2,4,5-Trichlorophenol	0.48	U	4.8	0.48	0.29
88-06-2	2,4,6-Trichlorophenol	0.48	U	4.8	0.48	0.23

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0399-0001-RB | Lab Sample ID: 240-50067-11

Matrix: Water | Lab File ID: 50512019.D

Analysis Method: 8270C | Date Collected: 04/30/2015 08:05

Extract. Method: 3520C | Date Extracted: 05/04/2015 05:57

Sample wt/vol: 1050(mL) | Date Analyzed: 05/12/2015 14:46

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 180308 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	51		50-110
367-12-4	2-Fluorophenol (Surr)	56		20-110
4165-60-0	Nitrobenzene-d5 (Surr)	50		40-110
4165-62-2	Phenol-d5 (Surr)	55		10-115
1718-51-0	Terphenyl-d14 (Surr)	74		50-135
118-79-6	2,4,6-Tribromophenol (Surr)	53		40-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512019.D
Lims ID: 240-50067-B-11-A Lab Sample ID: 240-50067-11
Client ID: 079SB-0399-0001-RB
Sample Type: Client
Inject. Date: 12-May-2015 14:46:30 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043530-019
Misc. Info.: 240-50067-B-11-A240-50067-B-11-A
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 13-May-2015 09:12:46 Calib Date: 12-May-2015 10:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK049

First Level Reviewer: ulmanm Date: 12-May-2015 15:23:44

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
*	1 1,4-Dichlorobenzene-d4	152	6.327	6.326	0.001	90	110480	4.00	
*	2 Naphthalene-d8	136	7.443	7.446	-0.003	97	436583	4.00	
*	3 Acenaphthene-d10	164	8.953	8.951	0.002	94	273288	4.00	
*	4 Phenanthrene-d10	188	10.223	10.221	0.002	99	467842	4.00	
*	5 Chrysene-d12	240	12.516	12.514	0.002	97	503162	4.00	
*	6 Perylene-d12	264	14.267	14.270	-0.003	98	329398	4.00	
$	7 2-Fluorophenol	112	5.092	5.090	0.002	92	216617	5.61	
$	8 Phenol-d5	99	5.957	5.960	-0.003	88	301461	5.47	
$	9 Nitrobenzene-d5	82	6.804	6.802	0.002	86	392260	5.00	
$	10 2-Fluorobiphenyl (Surr)	172	8.352	8.350	0.002	98	471369	5.11	
$	11 2,4,6-Tribromophenol	330	9.622	9.620	0.002	78	52287	5.27	
$	12 Terphenyl-d14	244	11.550	11.548	0.002	99	748788	7.38	
	43 Phenol	94		5.970				ND	
	69 Bis(2-chloroethyl)ether	93		6.061				ND	
	46 2-Chlorophenol	128		6.138				ND	
	47 1,3-Dichlorobenzene	146		6.282				ND	
	48 1,4-Dichlorobenzene	146		6.340				ND	
	49 Benzyl alcohol	108	6.424	6.422	0.002	75	3403	0.1151	
	50 1,2-Dichlorobenzene	146		6.484				ND	
	51 2-Methylphenol	108		6.513				ND	
	53 2,2'-oxybis[1-chloropropan	45		6.547				ND	
	21 3 & 4 Methylphenol	108		6.643				ND	
	57 N-Nitrosodi-n-propylamine	70		6.653				ND	
	61 Hexachloroethane	117		6.792				ND	
	62 Nitrobenzene	77		6.821				ND	
	64 Isophorone	82		7.023				ND	
	66 2-Nitrophenol	139		7.100				ND	
	65 2,4-Dimethylphenol	107		7.109				ND	
	71 Benzoic acid	122		7.167				ND	
	70 Bis(2-chloroethoxy)methane	93		7.186				ND	
	73 2,4-Dichlorophenol	162		7.307				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
74 1,2,4-Trichlorobenzene	180		7.388				ND	
75 Naphthalene	128		7.460				ND	
76 4-Chloroaniline	127		7.484				ND	
79 Hexachlorobutadiene	225		7.566				ND	
86 4-Chloro-3-methylphenol	107		7.879				ND	
87 2-Methylnaphthalene	142		8.052				ND	
89 Hexachlorocyclopentadiene	237		8.196				ND	
92 2,4,6-Trichlorophenol	196		8.283				ND	
93 2,4,5-Trichlorophenol	196		8.316				ND	
100 2-Chloronaphthalene	162		8.475				ND	
102 2-Nitroaniline	65		8.533				ND	
105 Dimethyl phthalate	163		8.667				ND	
107 2,6-Dinitrotoluene	165		8.725				ND	
109 Acenaphthylene	152		8.836				ND	
110 3-Nitroaniline	138		8.879				ND	
111 2,4-Dinitrophenol	184		8.966				ND	
112 Acenaphthene	153		8.980				ND	
113 4-Nitrophenol	109		8.990				ND	
114 2,4-Dinitrotoluene	165		9.076				ND	
116 Dibenzofuran	168		9.124				ND	
121 Diethyl phthalate	149	9.261	9.264	-0.003	96	22236	0.2297	
123 4-Chlorophenyl phenyl ethe	204		9.394				ND	
125 4-Nitroaniline	138		9.398				ND	
126 Fluorene	166		9.418				ND	
128 4,6-Dinitro-2-methylphenol	198		9.432				ND	
131 N-Nitrosodiphenylamine	169		9.485				ND	
139 4-Bromophenyl phenyl ether	248		9.812				ND	
141 Hexachlorobenzene	284		9.903				ND	
143 Pentachlorophenol	266		10.052				ND	
148 Phenanthrene	178		10.245				ND	
149 Anthracene	178		10.288				ND	
151 Carbazole	167		10.403				ND	
154 Di-n-butyl phthalate	149	10.646	10.644	0.002	97	28840	0.1996	
159 Fluoranthene	202		11.264				ND	
161 Pyrene	202		11.466				ND	
168 Butyl benzyl phthalate	149		11.928				ND	
173 Bis(2-ethylhexyl) phthalat	149	12.411	12.413	-0.002	96	22155	0.2471	
175 3,3'-Dichlorobenzidine	252		12.438				ND	
177 Benzo[a]anthracene	228		12.505				ND	
178 Chrysene	228		12.543				ND	
180 Di-n-octyl phthalate	149		13.063				ND	
182 Benzo[b]fluoranthene	252		13.721				ND	
183 Benzo[k]fluoranthene	252		13.755				ND	
184 Benzo[a]pyrene	252		14.188				ND	
188 Indeno[1,2,3-cd]pyrene	276		16.169				ND	
189 Dibenz(a,h)anthracene	278		16.179				ND	
190 Benzo[g,h,i]perylene	276		16.756				ND	

Reagents:

SMIS80PPMW_00011 Amount Added: 5.00 Units: uL Run Reagent

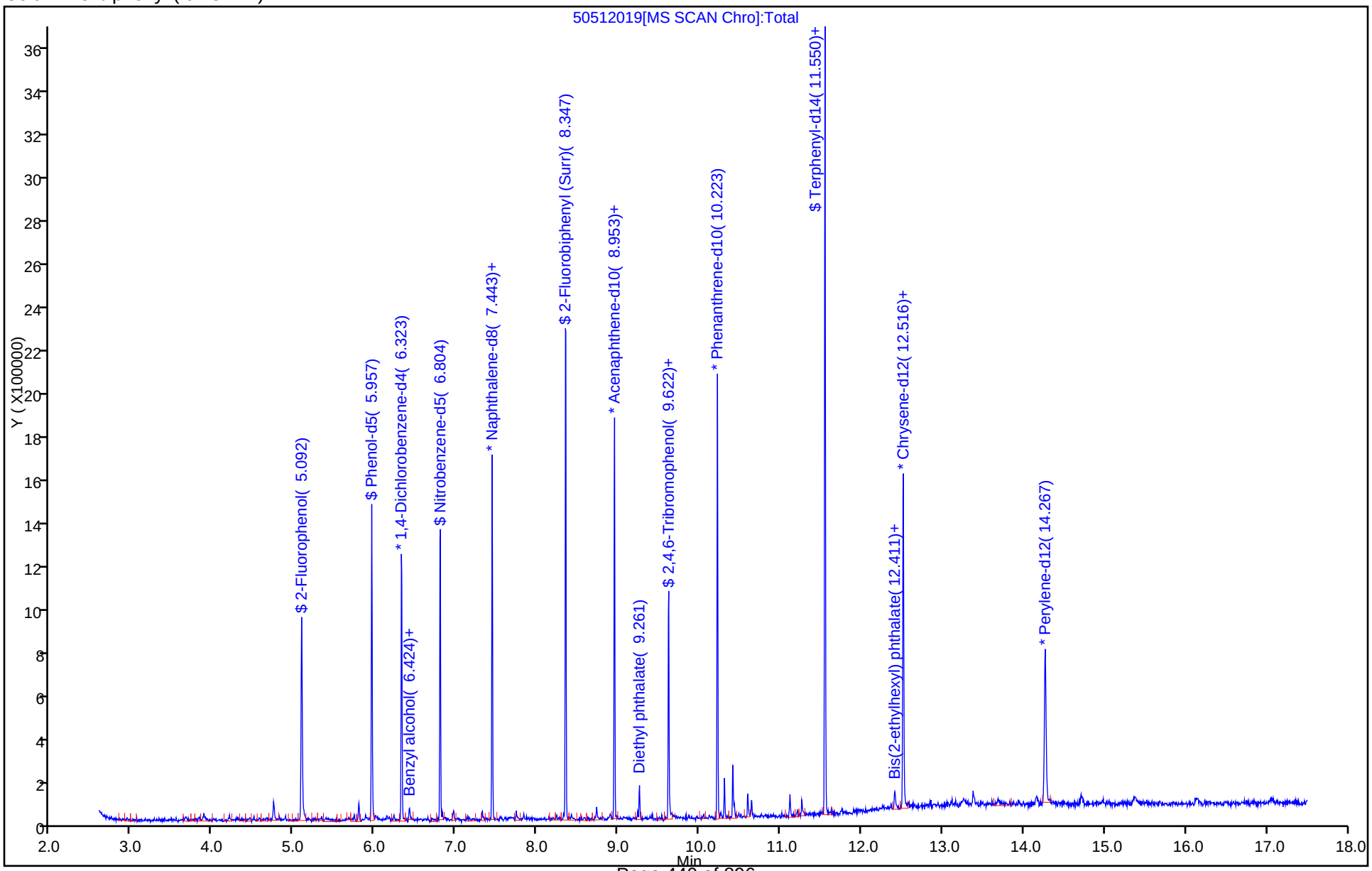
Report Date: 13-May-2015 09:13:13 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512019.D

Injection Date:	12-May-2015 14:46:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	240-50067-B-11-A	Lab Sample ID:	240-50067-11	Worklist Smp#:	19
Client ID:	079SB-0399-0001-RB				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0399-0001-RB RE | Lab Sample ID: 240-50067-11 RE

Matrix: Water | Lab File ID: 50514006.D

Analysis Method: 8270C | Date Collected: 04/30/2015 08:05

Extract. Method: 3520C | Date Extracted: 05/12/2015 13:37

Sample wt/vol: 1050(mL) | Date Analyzed: 05/14/2015 12:03

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 180709 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
77-47-4	*Hexachlorocyclopentadiene*	*0.48*	*U H*	*9.5*	0.48	*0.23*

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	82		50-110
367-12-4	2-Fluorophenol (Surr)	77		20-110
4165-60-0	Nitrobenzene-d5 (Surr)	76		40-110
4165-62-2	Phenol-d5 (Surr)	83		10-115
1718-51-0	Terphenyl-d14 (Surr)	82		50-135
118-79-6	2,4,6-Tribromophenol (Surr)	81		40-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150514-43624.b\50514006.D
Lims ID: 240-50067-A-11-A Lab Sample ID: 240-50067-11
Client ID: 079SB-0399-0001-RB
Sample Type: Client
Inject. Date: 14-May-2015 12:03:30 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043624-006
Misc. Info.: 240-50067-A-11-A240-50067-A-11-A
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150514-43624.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 14-May-2015 12:57:18 Calib Date: 12-May-2015 10:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK048

First Level Reviewer: ulmanm Date: 14-May-2015 12:30:10

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
*	1 1,4-Dichlorobenzene-d4	152	6.276	6.278	-0.002	91	120268	4.00	
*	2 Naphthalene-d8	136	7.397	7.398	-0.001	98	455446	4.00	
*	3 Acenaphthene-d10	164	8.907	8.903	0.004	93	270865	4.00	
*	4 Phenanthrene-d10	188	10.171	10.173	-0.002	98	505575	4.00	
*	5 Chrysene-d12	240	12.451	12.452	-0.001	97	513829	4.00	
*	6 Perylene-d12	264	14.158	14.159	-0.001	98	329660	4.00	
$	7 2-Fluorophenol	112	5.031	5.032	-0.001	93	323561	7.70	
$	8 Phenol-d5	99	5.911	5.912	-0.001	91	495143	8.25	
$	9 Nitrobenzene-d5	82	6.757	6.754	0.003	85	624459	7.63	
$	10 2-Fluorobiphenyl (Surr)	172	8.305	8.307	-0.002	99	746087	8.16	
$	11 2,4,6-Tribromophenol	330	9.570	9.572	-0.002	78	79791	8.11	
$	12 Terphenyl-d14	244	11.499	11.495	0.003	99	852152	8.23	
	43 Phenol	94		5.927				ND	
	69 Bis(2-chloroethyl)ether	93		6.013				ND	
	46 2-Chlorophenol	128		6.085				ND	
	47 1,3-Dichlorobenzene	146		6.230				ND	
	48 1,4-Dichlorobenzene	146		6.292				ND	
	49 Benzyl alcohol	108		6.379				ND	
	50 1,2-Dichlorobenzene	146		6.436				ND	
	51 2-Methylphenol	108		6.470				ND	
	53 2,2'-oxybis[1-chloropropan	45		6.499				ND	
	21 3 & 4 Methylphenol	108		6.600				ND	
	57 N-Nitrosodi-n-propylamine	70		6.610				ND	
	61 Hexachloroethane	117		6.744				ND	
	62 Nitrobenzene	77		6.773				ND	
	64 Isophorone	82		6.975				ND	
	66 2-Nitrophenol	139		7.057				ND	
	65 2,4-Dimethylphenol	107		7.066				ND	
	71 Benzoic acid	122		7.119				ND	
	70 Bis(2-chloroethoxy)methane	93		7.143				ND	
	73 2,4-Dichlorophenol	162		7.264				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
74 1,2,4-Trichlorobenzene	180		7.345				ND	
75 Naphthalene	128		7.417				ND	
76 4-Chloroaniline	127		7.437				ND	
79 Hexachlorobutadiene	225		7.523				ND	
86 4-Chloro-3-methylphenol	107		7.836				ND	
87 2-Methylnaphthalene	142		8.009				ND	
89 Hexachlorocyclopentadiene	237		8.153				ND	
92 2,4,6-Trichlorophenol	196		8.240				ND	
93 2,4,5-Trichlorophenol	196		8.273				ND	
100 2-Chloronaphthalene	162		8.427				ND	
102 2-Nitroaniline	65		8.490				ND	
105 Dimethyl phthalate	163		8.624				ND	
107 2,6-Dinitrotoluene	165		8.682				ND	
109 Acenaphthylene	152		8.788				ND	
110 3-Nitroaniline	138		8.831				ND	
111 2,4-Dinitrophenol	184		8.918				ND	
112 Acenaphthene	153		8.932				ND	
113 4-Nitrophenol	109		8.947				ND	
114 2,4-Dinitrotoluene	165		9.028				ND	
116 Dibenzofuran	168		9.076				ND	
121 Diethyl phthalate	149		9.216				ND	
123 4-Chlorophenyl phenyl ethe	204		9.346				ND	
125 4-Nitroaniline	138		9.351				ND	
126 Fluorene	166		9.370				ND	
128 4,6-Dinitro-2-methylphenol	198		9.384				ND	
131 N-Nitrosodiphenylamine	169		9.437				ND	
139 4-Bromophenyl phenyl ether	248		9.764				ND	
141 Hexachlorobenzene	284		9.855				ND	
143 Pentachlorophenol	266		10.005				ND	
148 Phenanthrene	178		10.192				ND	
149 Anthracene	178		10.235				ND	
151 Carbazole	167		10.351				ND	
154 Di-n-butyl phthalate	149	10.594	10.596	-0.002	98	28938	0.1853	
159 Fluoranthene	202		11.212				ND	
161 Pyrene	202		11.409				ND	
168 Butyl benzyl phthalate	149		11.875				ND	
173 Bis(2-ethylhexyl) phthalat	149	12.350	12.351	-0.001	95	52526	0.5737	
175 3,3'-Dichlorobenzidine	252		12.375				ND	
177 Benzo[a]anthracene	228		12.443				ND	
178 Chrysene	228		12.476				ND	
180 Di-n-octyl phthalate	149		12.991				ND	
182 Benzo[b]fluoranthene	252		13.630				ND	
183 Benzo[k]fluoranthene	252		13.664				ND	
184 Benzo[a]pyrene	252		14.082				ND	
188 Indeno[1,2,3-cd]pyrene	276		16.011				ND	
189 Dibenz(a,h)anthracene	278		16.020				ND	
190 Benzo[g,h,i]perylene	276		16.578				ND	

Reagents:

SMIS80PPMW_00011 Amount Added: 5.00 Units: uL Run Reagent

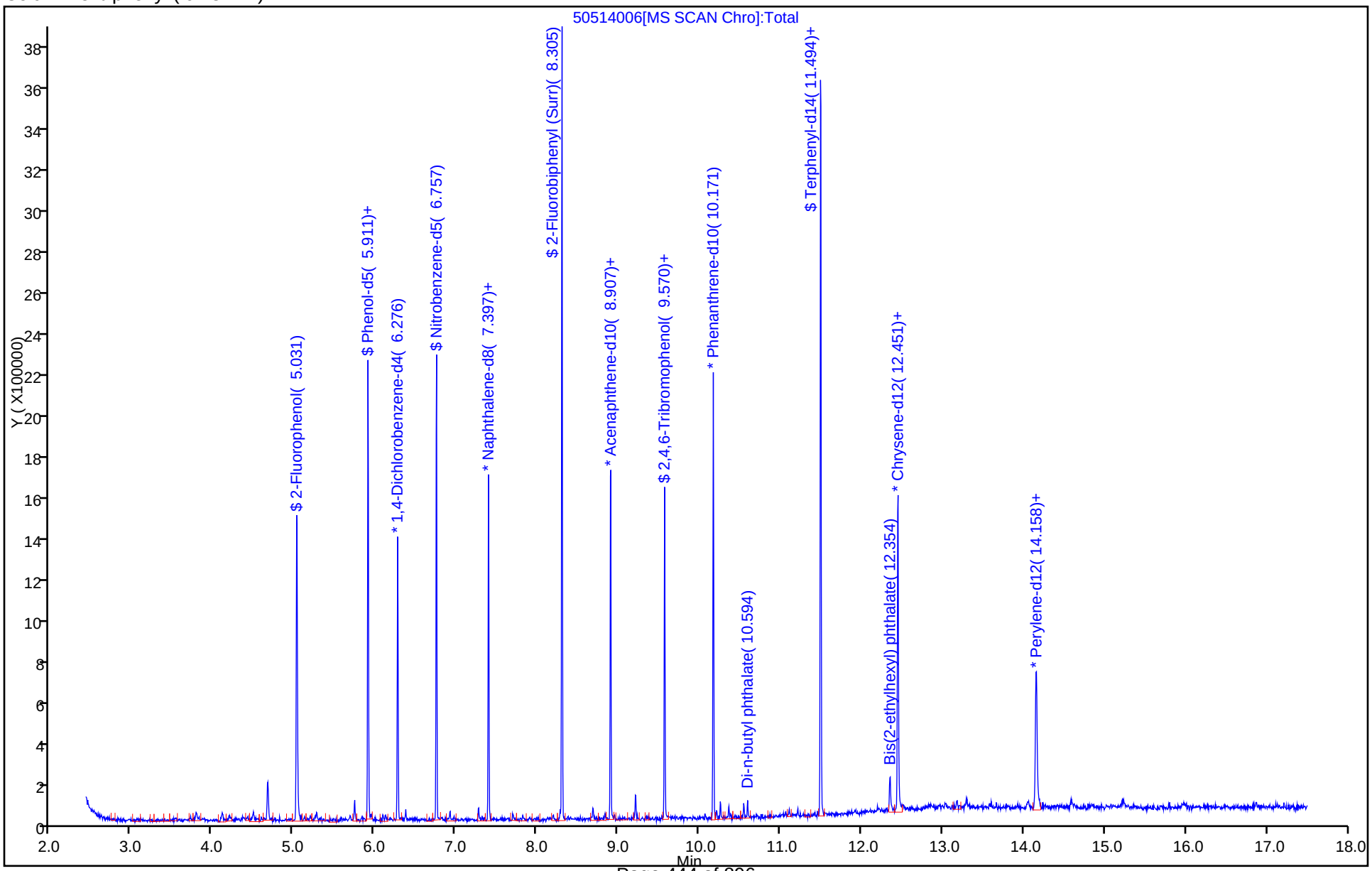
Report Date: 14-May-2015 12:57:24 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150514-43624.b\50514006.D

Injection Date:	14-May-2015 12:03:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	240-50067-A-11-A	Lab Sample ID:	240-50067-11	Worklist Smp#:	6
Client ID:	079SB-0399-0001-RB				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-50067-1 Analy Batch No.: 180308

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2015 07:38 Calibration End Date: 05/12/2015 10:59 Calibration ID: 28497

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-180308/6	50512006.D
Level 2	STD2 240-180308/5	50512005.D
Level 3	STD3 240-180308/4	50512004.D
Level 4	STD4 240-180308/3	50512003.D
Level 5	STD5 240-180308/2	50512002.D
Level 6	STD6 240-180308/10	50512010.D
Level 7	STD7 240-180308/9	50512009.D
Level 8	STD8 240-180308/8	50512008.D
Level 9	STD9 240-180308/7	50512007.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.8199	0.7986 0.8024	0.8596 0.7480	0.8149 0.8096	0.8053	Ave		0.8073			0.0500	3.8		15.0			
N-Nitrosodimethylamine	1.2468	1.2333 1.2882	1.1742 1.2519	1.3536 1.2902	1.1685	Ave		1.2508			0.0500	4.9		15.0			
Pyridine	2.0731	1.7051 2.0987	1.9854 2.0005	1.9427 2.0768	1.8628	Ave		1.9681			0.0500	6.7		15.0			
Benzaldehyde	1.7767	1.9173 1.8063	1.8043 1.6875	1.8953 1.7356	1.6562	Ave		1.7849			0.0500	5.1		15.0			
Phenol	2.2889	2.1789 2.3218	2.0652 2.2406	2.3761 2.3157	2.1325	Ave		2.2400			0.0500	4.7		15.0			
Aniline	2.8608	2.7087 2.9237	2.8340 2.8155	2.9424 2.9015	2.7368	Ave		2.8404			0.0500	3.0		15.0			
Bis(2-chloroethyl)ether	1.8588	1.7444 1.8469	1.8832 1.7317	1.8281 1.8240	1.7263	Ave		1.8054			0.0500	3.4		15.0			
2-Chlorophenol	1.3627	1.2202 1.4265	1.3739 1.3441	1.4368 1.4426	1.2966	Ave		1.3629			0.0500	5.6		15.0			
1,3-Dichlorobenzene	1.5574	1.6423 1.5819	1.5537 1.4896	1.6264 1.5885	1.4854	Ave		1.5657			0.0500	3.6		15.0			
1,4-Dichlorobenzene	1.5670	1.5554 1.6100	1.6864 1.5394	1.5725 1.6382	1.4836	Ave		1.5816			0.0500	4.0		15.0			
Benzyl alcohol	1.0627	0.9360 1.1203	1.0200 1.0711	1.1641 1.1224	1.0639	Ave		1.0701			0.0500	6.6		15.0			
1,2-Dichlorobenzene	1.5145	1.4782 1.5106	1.5465 1.4290	1.6281 1.5142	1.3954	Ave		1.5021			0.0500	4.7		15.0			
2-Methylphenol	1.5004	1.3001 1.5556	1.4098 1.5152	1.6019 1.5876	1.4590	Ave		1.4912			0.0500	6.7		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-50067-1 Analy Batch No.: 180308

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2015 07:38 Calibration End Date: 05/12/2015 10:59 Calibration ID: 28497

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
bis (2-chloroisopropyl) ether	1.4032	1.4941 1.4667	1.5144 1.4256	1.5176 1.4685	1.3238	Ave		1.4517			0.0500	4.5		15.0			
Indene	2.8562	2.7358 3.0117	2.7493 2.9324	2.9524 3.0647	2.6472	Ave		2.8687			0.0500	5.1		15.0			
3 & 4 Methylphenol	1.5670	1.6444 1.6763	1.5274 1.6174	1.6244 1.6668	1.4909	Ave		1.6018			0.0500	4.2		15.0			
N-Nitrosodi-n-propylamine	1.7238	1.4710 1.7636	1.5807 1.7083	1.6869 1.7470	1.6195	Ave		1.6626			0.0500	6.0		15.0			
Acetophenone	2.5068	2.6303 2.5738	2.5270 2.5059	2.5721 2.5785	2.3063	Ave		2.5251			0.0500	3.9		15.0			
Hexachloroethane	0.8083	0.8110 0.8738	0.8583 0.8110	0.8347 0.8394	0.7922	Ave		0.8286			0.0500	3.4		15.0			
Nitrobenzene	0.7273	0.6851 0.7224	0.7184 0.7149	0.6905 0.6948	0.6683	Ave		0.7027			0.0500	3.0		15.0			
Isophorone	1.2199	1.1449 1.1845	1.1320 1.1818	1.1369 1.1381	1.1452	Ave		1.1604			0.0500	2.7		15.0			
2-Nitrophenol	0.1983	0.1582 0.2060	0.1861 0.1955	0.1793 0.1969	0.1833	Ave		0.1879			0.0500	7.9		15.0			
2,4-Dimethylphenol	0.5314	0.4875 0.5492	0.5594 0.5386	0.5086 0.5435	0.5205	Ave		0.5298			0.0500	4.4		15.0			
Benzoic acid	0.2151	0.1033 0.2339	0.1396 0.2316	0.1463 0.2311	0.1859	Lin1	-0.188	0.2323			0.0500				0.9970		0.9950
Bis(2-chloroethoxy)methane	0.5901	0.5489 0.5850	0.5927 0.5912	0.5547 0.5706	0.5619	Ave		0.5744			0.0500	3.1		15.0			
2,4-Dichlorophenol	0.3094	0.2539 0.3302	0.3135 0.3169	0.3030 0.3245	0.3039	Ave		0.3069			0.0500	7.6		15.0			
1,2,4-Trichlorobenzene	0.3516	0.3662 0.3524	0.3442 0.3473	0.3388 0.3476	0.3448	Ave		0.3491			0.0500	2.3		15.0			
Naphthalene	0.9506 1.0759	0.9733 1.1083	1.0710 1.0744	1.0822 1.0891	1.0501	Ave		1.0528			0.0500	5.1		15.0			
4-Chloroaniline	0.4549	0.4268 0.4667	0.4691 0.4753	0.3970 0.4666	0.4695	Ave		0.4532			0.0500	6.0		15.0			
2,6-Dichlorophenol	0.3131	0.3577 0.3209	0.3178 0.3098	0.3060 0.3096	0.3051	Ave		0.3175			0.0500	5.4		15.0			
Hexachlorobutadiene	0.2597	0.2606 0.2557	0.2478 0.2574	0.2387 0.2513	0.2456	Ave		0.2521			0.0500	3.0		15.0			
Caprolactam	0.1226	0.1179 0.1198	0.1133 0.1172	0.1066 0.1140	0.1124	Ave		0.1155			0.0500	4.3		15.0			
4-Chloro-3-methylphenol	0.4503	0.3648 0.4457	0.4249 0.4559	0.4063 0.4498	0.4377	Ave		0.4294			0.0500	7.2		15.0			

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SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2015 07:38 Calibration End Date: 05/12/2015 10:59 Calibration ID: 28497

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2-Methylnaphthalene	0.5943 0.7191	0.6738 0.7229	0.7369 0.7409	0.6765 0.7198	0.6912	Ave		0.6973			0.0500	6.6		15.0			
1-Methylnaphthalene	0.5048 0.6266	0.5243 0.6240	0.6088 0.6341	0.5888 0.6180	0.5857	Ave		0.5906			0.0500	7.8		15.0			
Hexachlorocyclopentadiene	 0.4361	0.3608 0.4918	0.3787 0.4905	0.4120 0.4865	0.4253	Ave		0.4352			0.0500	11.7		15.0			
1,2,4,5-Tetrachlorobenzene	 0.6197	0.5687 0.6843	0.6163 0.6559	0.6256 0.6751	0.6229	Ave		0.6336			0.0500	5.9		15.0			
2,4,6-Trichlorophenol	 0.4073	0.3568 0.4473	0.3720 0.4282	0.4315 0.4293	0.3815	Ave		0.4067			0.0500	8.1		15.0			
2,4,5-Trichlorophenol	 0.4278	0.3698 0.4620	0.3876 0.4463	0.4204 0.4426	0.4152	Ave		0.4215			0.0500	7.3		15.0			
1,1'-Biphenyl	1.3923 1.4275	1.3672 1.5518	1.4572 1.5009	1.4069 1.5183	1.3555	Ave		1.4419			0.0500	4.8		15.0			
2-Chloronaphthalene	1.3096 1.1296	1.1173 1.2359	1.2139 1.1804	1.1591 1.1834	1.1041	Ave		1.1815			0.0500	5.5		15.0			
2-Nitroaniline	 0.6188	0.4363 0.6734	0.4334 0.6221	0.5199 0.6256	0.5527	Lin1	-0.157	0.6380			0.0500				0.9980		0.9950
Dimethyl phthalate	 1.3852	1.2950 1.4732	1.3068 1.3831	1.4211 1.3743	1.3217	Ave		1.3701			0.0500	4.4		15.0			
1,3-Dinitrobenzene	 0.2084	0.1296 0.2250	0.1393 0.2189	0.1904 0.2106	0.1808	Lin1	-0.060	0.2174			0.0500				0.9980		0.9950
2,6-Dinitrotoluene	 0.3050	0.2740 0.3250	0.2657 0.3085	0.2422 0.3033	0.2829	Ave		0.2883			0.0500	9.4		15.0			
Acenaphthylene	1.7978 1.7586	1.6400 1.9401	1.7018 1.8659	1.6673 1.8616	1.7136	Ave		1.7719			0.0500	5.7		15.0			
3-Nitroaniline	 0.2757	0.2198 0.3066	0.2358 0.2887	0.2732 0.2900	0.2861	Ave		0.2720			0.0500	10.8		15.0			
2,4-Dinitrophenol	 0.1884	0.0813 0.2280	0.1323 0.2238	0.1491 0.2233	0.1965	Lin1	-0.185	0.2237			0.0500				0.9960		0.9950
Acenaphthene	1.1382 1.1422	1.1124 1.2551	1.0887 1.2138	1.1099 1.2041	1.1087	Ave		1.1526			0.0500	5.0		15.0			
4-Nitrophenol	 0.3700	0.2641 0.4269	0.3114 0.4044	0.3357 0.4047	0.3348	Lin1	-0.202	0.4064			0.0500				0.9970		0.9950
2,4-Dinitrotoluene	 0.3917	0.3481 0.4300	0.3456 0.4126	0.3880 0.4073	0.3786	Ave		0.3877			0.0500	7.7		15.0			
Dibenzofuran	1.8164 1.5788	1.5251 1.7126	1.5855 1.6460	1.6154 1.6463	1.4969	Ave		1.6248			0.0500	6.0		15.0			
2,3,4,6-Tetrachlorophenol	 0.3564	0.2883 0.3628	0.3171 0.3484	0.3327 0.3441	0.3324	Ave		0.3353			0.0500	7.1		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-50067-1 Analy Batch No.: 180308

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2015 07:38 Calibration End Date: 05/12/2015 10:59 Calibration ID: 28497

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Diethyl phthalate	1.3811	1.3370 1.4728	1.4086 1.4173	1.4977 1.4255	1.3949	Ave		1.4169			0.0500	3.6		15.0			
4-Chlorophenyl phenyl ether	0.6682	0.6399 0.7094	0.6656 0.6856	0.6240 0.6783	0.6119	Ave		0.6604			0.0500	5.0		15.0			
4-Nitroaniline	0.2720	0.1945 0.3455	0.2277 0.3320	0.2583 0.3281	0.2632	Lin	-0.206	0.3383			0.0500				0.9950		0.9950
Fluorene	1.6678 1.3276	1.2228 1.4362	1.2809 1.4418	1.2922 1.4019	1.2612	Ave		1.3703			0.0500	9.9		15.0			
4,6-Dinitro-2-methylphenol	0.1529	0.0784 0.1670	0.1048 0.1698	0.1261 0.1713	0.1390	Lin1	-0.124	0.1694			0.0500				0.9980		0.9950
N-Nitrosodiphenylamine	0.6651	0.5490 0.6471	0.5919 0.6205	0.5876 0.6380	0.5669	Ave		0.6083			0.0500	6.7		15.0			
1,2-Diphenylhydrazine(as Azobenzene)	1.4317	1.1371 1.4563	1.2705 1.3473	1.2563 1.3870	1.2180	Ave		1.3124			0.0500	8.5		15.0			
Azobenzene	1.4313	1.1371 1.4564	1.2705 1.3470	1.2505 1.3873	1.2192	Ave		1.3124			0.0500	8.5		15.0			
4-Bromophenyl phenyl ether	0.2472	0.1931 0.2333	0.2207 0.2264	0.2087 0.2204	0.2044	Ave		0.2193			0.0500	7.8		15.0			
Hexachlorobenzene	0.2038 0.2228	0.1882 0.2218	0.2235 0.2154	0.1991 0.2159	0.2007	Ave		0.2101			0.0500	6.0		15.0			
Atrazine	0.2512	0.2059 0.2548	0.2260 0.2291	0.1888 0.2337	0.2104	Ave		0.2250			0.0500	10.0		15.0			
Pentachlorophenol	0.1630	0.0891 0.1724	0.1113 0.1747	0.1236 0.1792	0.1357	Lin1	-0.130	0.1756			0.0500				0.9960		0.9950
Phenanthrene	1.0688 1.1028	1.0259 1.1022	1.1052 1.1143	1.0500 1.1404	1.0538	Ave		1.0848			0.0500	3.4		15.0			
Anthracene	1.0937 1.1162	1.0204 1.1385	1.1580 1.1383	1.0699 1.1695	1.0724	Ave		1.1085			0.0500	4.4		15.0			
Carbazole	1.0233	0.8641 1.1020	0.9348 1.0848	0.9393 1.1022	0.8831	Ave		0.9917			0.0500	9.9		15.0			
Di-n-butyl phthalate	1.4234	1.0939 1.4167	1.1713 1.3252	0.9917 1.3372	1.1236	Ave		1.2354			0.0500	13.1		15.0			
Fluoranthene	1.2376 1.3298	1.1362 1.3968	1.2100 1.3130	1.1247 1.3593	1.0772	Ave		1.2427			0.0500	9.2		15.0			
Benzidine	0.6144	0.3226 0.6868	0.4265 0.6571	0.4513 0.6241	0.5134	Lin1	-0.460	0.6508			0.0500				0.9950		0.9950
Pyrene	1.0112 1.1823	1.0419 1.2001	1.1859 1.1684	1.0525 1.2216	1.0130	Ave		1.1196			0.0500	7.8		15.0			
Butyl benzyl phthalate	0.5490	0.4524 0.5732	0.5132 0.5548	0.5214 0.5647	0.5227	Ave		0.5314			0.0500	7.3		15.0			

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ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Bis(2-ethylhexyl) phthalate	0.7537	0.6105 0.7668	0.6648 0.7430	0.6822 0.7637	0.7176	Ave		0.7128			0.0500	7.8		15.0			
3,3'-Dichlorobenzidine	0.3664	0.2299 0.3911	0.2862 0.3999	0.3126 0.4015	0.3335	Lin1	-0.231	0.3972			0.0500				0.9980		0.9950
Benzo[a]anthracene	1.3308 1.1481	1.0946 1.1932	1.1611 1.1703	1.0969 1.2077	1.0711	Ave		1.1637			0.0500	6.7		15.0			
Chrysene	0.9764 1.0637	1.0084 1.1223	1.0635 1.0923	1.0311 1.0984	1.0198	Ave		1.0529			0.0500	4.5		15.0			
Di-n-octyl phthalate	1.6044	1.2160 1.6931	1.4411 1.6310	1.5584 1.6548	1.5420	Ave		1.5426			0.0500	9.9		15.0			
Benzo[b]fluoranthene	1.1914 1.2566	1.2133 1.3555	1.1825 1.3345	1.2120 1.3435	1.2692	Ave		1.2621			0.0500	5.4		15.0			
Benzo[k]fluoranthene	1.3666 1.3862	1.2381 1.4063	1.3408 1.3397	1.2850 1.3555	1.2296	Ave		1.3276			0.0500	4.7		15.0			
Benzo[a]pyrene	1.3366 1.2440	1.1046 1.3234	1.2625 1.2787	1.1245 1.2651	1.1693	Ave		1.2343			0.0500	6.7		15.0			
Indeno[1,2,3-cd]pyrene	0.9318 1.2725	1.0966 1.3566	1.2191 1.2674	1.2567 1.3133	1.1855	Ave		1.2111			0.0500	10.6		15.0			
Dibenz(a,h)anthracene	0.7760 1.0256	0.8728 1.0889	0.9658 1.0382	0.9843 1.0716	0.9394	Ave		0.9736			0.0500	10.3		15.0			
Benzo[g,h,i]perylene	0.9975 0.9781	0.9483 1.0483	1.0229 0.9728	1.0382 1.0085	0.9425	Ave		0.9952			0.0500	3.8		15.0			
2-Fluorophenol (Surr)	1.4530	1.2496 1.4730	1.2682 1.3779	1.5379 1.4529	1.3705	Ave		1.3979			0.0500	7.2		15.0			
Phenol-d5 (Surr)	2.0097	1.9151 2.0737	1.9866 1.9922	2.0252 2.0722	1.8926	Ave		1.9959			0.0500	3.3		15.0			
Nitrobenzene-d5 (Surr)	0.6097 0.7727	0.6505 0.7722	0.7361 0.7658	0.7052 0.7540	0.7068	Ave		0.7192			0.0500	8.0		15.0			
2-Fluorobiphenyl (Surr)	1.4413 1.3515	1.2643 1.4525	1.2715 1.3805	1.3462 1.3904	1.2528	Ave		1.3501			0.0500	5.5		15.0			
2,4,6-Tribromophenol (Surr)	0.1450	0.1416 0.1543	0.1465 0.1395	0.1415 0.1415	0.1519	Ave		0.1452			0.0500	3.7		15.0			
Terphenyl-d14 (Surr)	0.9182 0.7902	0.7861 0.8151	0.8016 0.8078	0.7419 0.8270	0.7682	Ave		0.8062			0.0500	6.1		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-50067-1 Analy Batch No.: 180308

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2015 07:38 Calibration End Date: 05/12/2015 10:59 Calibration ID: 28497

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-180308/6	50512006.D
Level 2	STD2 240-180308/5	50512005.D
Level 3	STD3 240-180308/4	50512004.D
Level 4	STD4 240-180308/3	50512003.D
Level 5	STD5 240-180308/2	50512002.D
Level 6	STD6 240-180308/10	50512010.D
Level 7	STD7 240-180308/9	50512009.D
Level 8	STD8 240-180308/8	50512008.D
Level 9	STD9 240-180308/7	50512007.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
1,4-Dioxane	DCB	Ave	349167	16292 525770	35160 676525	60806 793109	166306	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
N-Nitrosodimethylamine	DCB	Ave	530947	25160 844083	48024 1132225	101006 1263890	241322	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Pyridine	DCB	Ave	882828	34785 1375114	81203 1809192	144964 2034424	384702	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzaldehyde	DCB	Ave	1513262	78229 2367087	147592 3052375	282851 3400504	684086	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Phenol	DCB	Ave	974751	44451 1521303	84470 2026398	177299 2268488	440404	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Aniline	DCB	Ave	1218280	55259 1915691	115911 2546327	219556 2842321	565211	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Bis(2-chloroethyl)ether	DCB	Ave	791583	35587 1210137	77024 1566167	136411 1786860	356530	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Chlorophenol	DCB	Ave	580300	24892 934649	56192 1215540	107211 1413157	267777	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,3-Dichlorobenzene	DCB	Ave	663239	33504 1036527	63546 1347188	121360 1556158	306762	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,4-Dichlorobenzene	DCB	Ave	667315	31731 1054915	68974 1392216	117339 1604775	306392	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzyl alcohol	DCB	Ave	452539	19095 734056	41718 968707	86864 1099508	219717	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2-Dichlorobenzene	DCB	Ave	644977	30155 989783	63254 1292402	121486 1483319	288185	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Methylphenol	DCB	Ave	638940	26522 1019264	57660 1370350	119531 1555246	301321	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
bis (2-chloroisopropyl) ether	DCB	Ave	597543	30481 960998	61940 1289325	113240 1438550	273392	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-50067-1 Analy Batch No.: 180308

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2015 07:38 Calibration End Date: 05/12/2015 10:59 Calibration ID: 28497

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Indene	DCB	Ave	2432640	111625 3946724	224897 5303975	440612 6004477	1093410	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
3 & 4 Methylphenol	DCB	Ave	667318	33546 1098364	62471 1462768	121207 1632824	307912	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
N-Nitrosodi-n-propylamine	DCB	Ave	734070	30009 1155521	64652 1544925	125871 1711416	334460	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Acetophenone	DCB	Ave	1067537	53660 1686387	103357 2266261	191927 2525919	476302	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexachloroethane	DCB	Ave	344232	16545 572540	35107 733497	62281 822300	163598	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Nitrobenzene	NPT	Ave	1139221	52295 1762056	106227 2349318	196776 2569356	489602	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Isophorone	NPT	Ave	1910879	87401 2888979	167399 3883265	323970 4208640	838982	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Nitrophenol	NPT	Ave	310573	12077 502516	27522 642327	51082 728284	134264	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4-Dimethylphenol	NPT	Ave	832406	37215 1339418	82714 1769767	144916 2009902	381331	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzoic acid	NPT	Lin1	673817	15770 1140744	41282 1522215	83382 1708971	272442	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Bis(2-chloroethoxy)methane	NPT	Ave	924378	41899 1426723	87646 1942715	158076 2110006	411656	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4-Dichlorophenol	NPT	Ave	484598	19379 805352	46358 1041426	86334 1199823	222650	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2,4-Trichlorobenzene	NPT	Ave	550754	27952 859595	50899 1141148	96548 1285208	252601	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Naphthalene	NPT	Ave	15079 1685316	74296 2703103	158368 3530522	308379 4027201	769336	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Chloroaniline	NPT	Ave	712576	32578 1138327	69363 1561824	113117 1725597	343940	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,6-Dichlorophenol	NPT	Ave	490362	27304 782684	46990 1018080	87203 1144765	223548	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexachlorobutadiene	NPT	Ave	406818	19892 623689	36644 845769	68031 929312	179909	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Caprolactam	NPT	Ave	384184	18004 584201	33494 769917	60727 843365	164712	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
4-Chloro-3-methylphenol	NPT	Ave	705318	27844 1087151	62828 1498258	115780 1663200	320696	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Methylnaphthalene	NPT	Ave	9428 1126404	51438 1763186	108969 2434539	192778 2661586	506398	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1-Methylnaphthalene	NPT	Ave	8008 981542	40024 1522027	90033 2083675	167771 2285432	429122	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-50067-1 Analy Batch No.: 180308

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2015 07:38 Calibration End Date: 05/12/2015 10:59 Calibration ID: 28497

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Hexachlorocyclopentadiene	ANT	Ave	421925	16344 680589	34337 973158	68339 1057438	189658	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2,4,5-Tetrachlorobenzene	ANT	Ave	599576	25759 946862	55881 1301281	103775 1467413	277793	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4,6-Trichlorophenol	ANT	Ave	394071	16159 618900	33729 849483	71567 933173	170112	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4,5-Trichlorophenol	ANT	Ave	413932	16751 639236	35146 885342	69733 962074	185167	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,1'-Biphenyl	ANT	Ave	12468 1381185	61925 2147346	132124 2977481	233354 3300245	604453	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Chloronaphthalene	ANT	Ave	11728 1092929	50609 1710178	110063 2341646	192253 2572360	492360	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Nitroaniline	ANT	Lin1	598697	19763 931761	39295 1234216	86238 1359749	246467	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Dimethyl phthalate	ANT	Ave	1340232	58657 2038605	118486 2743804	235721 2987151	589399	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,3-Dinitrobenzene	ANT	Lin1	201597	5868 311403	12631 434229	31585 457667	80618	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,6-Dinitrotoluene	ANT	Ave	295134	12409 449688	24087 612011	40169 659272	126145	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Acenaphthylene	ANT	Ave	16100 1701572	74281 2684645	154295 3701686	276560 4046555	764171	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
3-Nitroaniline	ANT	Ave	266789	9955 424314	21380 572643	45318 630402	127568	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4-Dinitrophenol	ANT	Lin1	364569	7369 631044	23994 887921	49478 970911	175219	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Acenaphthene	ANT	Ave	10193 1105161	50384 1736831	98708 2408048	184105 2617265	494396	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Nitrophenol	ANT	Lin1	716070	23927 1181571	56463 1604575	111374 1759188	298603	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
2,4-Dinitrotoluene	ANT	Ave	378963	15767 595064	31338 818433	64350 885247	168809	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Dibenzofuran	ANT	Ave	16266 1527598	69079 2369817	143754 3265305	267943 3578506	667514	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,3,4,6-Tetrachlorophenol	ANT	Ave	344800	13059 501973	28747 691192	55180 747941	148236	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Diethyl phthalate	ANT	Ave	1336299	60558 2038038	127717 2811635	248429 3098598	622043	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Chlorophenyl phenyl ether	ANT	Ave	646574	28982 981602	60345 1360198	103503 1474281	272856	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Nitroaniline	ANT	Lin	263176	8810 478084	20643 658655	42836 713184	117372	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-50067-1 Analy Batch No.: 180308

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2015 07:38 Calibration End Date: 05/12/2015 10:59 Calibration ID: 28497

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Fluorene	ANT	Ave	14936 1284529	55386 1987381	116136 2860206	214334 3047227	562418	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4,6-Dinitro-2-methylphenol	PHN	Lin1	 468940	12765 772075	32151 1116358	72583 1197353	206727	 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
N-Nitrosodiphenylamine	PHN	Ave	 2040176	89354 2991646	181625 4079292	338317 4460525	843161	 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
1,2-Diphenylhydrazine(as Azobenzene)	PHN	Ave	 2195952	92540 3366691	194921 4428609	361644 4848424	905729	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Azobenzene	PHN	Ave	 2195258	92540 3366702	194921 4427685	359990 4849465	906632	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Bromophenyl phenyl ether	PHN	Ave	 379203	15715 539436	33857 744059	60079 770417	152010	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexachlorobenzene	PHN	Ave	3176 341728	15317 512714	34284 707936	57323 754725	149272	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Atrazine	PHN	Ave	 770672	33516 1177893	69336 1505971	108724 1634016	312959	 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Pentachlorophenol	PHN	Lin1	 499974	14508 796948	34143 1148272	71156 1252558	201796	 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Phenanthrene	PHN	Ave	16659 1691428	83493 2548060	169571 3662674	302276 3986378	783586	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Anthracene	PHN	Ave	17048 1712076	83045 2631923	177665 3741647	307986 4088050	797407	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Carbazole	PHN	Ave	 1569469	70319 2547419	143417 3565793	270412 3853051	656648	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Di-n-butyl phthalate	PHN	Ave	 2183176	89023 3274971	179711 4355797	285487 4674588	835540	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Fluoranthene	PHN	Ave	19291 2039604	92465 3229084	185640 4315873	323764 4751752	800991	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzidine	CRY	Lin1	 2232931	52744 3782182	138063 5102204	275423 5109796	828248	 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Pyrene	CRY	Ave	16178 2148388	85180 3304324	191927 4536674	321177 5000824	817088	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Butyl benzyl phthalate	CRY	Ave	 997651	36991 1578284	83062 2154243	159109 2311780	421612	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Bis(2-ethylhexyl) phthalate	CRY	Ave	 1369591	49910 2111433	107595 2884995	208173 3126326	578810	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
3,3'-Dichlorobenzidine	CRY	Lin1	 1331740	37593 2153822	92638 3105098	190806 3287416	537980	 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Benzo[a]anthracene	CRY	Ave	21290 2086186	89488 3285417	187916 4543854	334721 4943855	863934	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Chrysene	CRY	Ave	15620 1932804	82442 3090312	172113 4241103	314649 4496740	822605	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-50067-1 Analy Batch No.: 180308

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/12/2015 07:38 Calibration End Date: 05/12/2015 10:59 Calibration ID: 28497

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Di-n-octyl phthalate	PRY	Ave	2260401	74191 3511239	176130 4851190	368125 5201991	930403	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[b]fluoranthene	PRY	Ave	14783 1770440	74026 2811034	144519 3969407	286307 4223306	765768	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[k]fluoranthene	PRY	Ave	16957 1953029	75542 2916456	163877 3984806	303544 4261084	741868	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[a]pyrene	PRY	Ave	16585 1752633	67395 2744494	154303 3803375	265634 3976980	705520	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Indeno[1,2,3-cd]pyrene	PRY	Ave	11562 1792749	66905 2813396	149003 3769778	296852 4128307	715273	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Dibenz(a,h)anthracene	PRY	Ave	9628 1444982	53251 2258251	118036 3088019	232509 3368495	566825	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[g,h,i]perylene	PRY	Ave	12377 1378012	57855 2173864	125021 2893437	245245 3170388	568660	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Fluorophenol (Surr)	DCB	Ave	618777	25493 965145	51869 1246169	114753 1423271	283041	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Phenol-d5 (Surr)	DCB	Ave	855829	39068 1358736	81253 1801735	151121 2029953	390870	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Nitrobenzene-d5 (Surr)	NPT	Ave	9671 1210428	49658 1883356	108850 2516327	200954 2788121	517823	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Fluorobiphenyl (Surr)	ANT	Ave	12907 1307652	57266 2009955	115283 2738653	223289 3022319	558660	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4,6-Tribromophenol (Surr)	ANT	Ave	140317	6413 213532	13279 276711	23474 307617	67753	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Terphenyl-d14 (Surr)	CRY	Ave	14690 1435915	64270 2244418	129733 3136537	226412 3385408	619588	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

Curve Type Legend:

Ave = Average ISTD
Lin = Linear ISTD
Lin1 = Linear 1/conc ISTD

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512002.D
Lims ID: std5 lst1
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 12-May-2015 07:38:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043530-002
Misc. Info.: STD5 LST1STD5 LST1
Operator ID: 001574 Instrument ID: A4HP9
Sublist: chrom-8270 _9*sub34

Method: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 12-May-2015 15:31:59 Calib Date: 12-May-2015 10:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: ulmanm Date: 12-May-2015 08:13:28

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.325	6.325	0.000	91	165218	4.00	4.00	
* 2 Naphthalene-d8	136	7.446	7.446	0.000	98	586083	4.00	4.00	
* 3 Acenaphthene-d10	164	8.951	8.951	0.000	94	356746	4.00	4.00	
* 4 Phenanthrene-d10	188	10.225	10.225	0.000	98	594884	4.00	4.00	
* 5 Chrysene-d12	240	12.514	12.514	0.000	97	645276	4.00	4.00	
* 6 Perylene-d12	264	14.265	14.265	0.000	98	482688	4.00	4.00	
$ 7 2-Fluorophenol	112	5.089	5.089	0.000	93	283041	5.00	4.90	
$ 8 Phenol-d5	99	5.960	5.960	0.000	92	390870	5.00	4.74	
$ 9 Nitrobenzene-d5	82	6.801	6.801	0.000	88	517823	5.00	4.91	
$ 10 2-Fluorobiphenyl (Surr)	172	8.350	8.350	0.000	97	558660	5.00	4.64	
$ 11 2,4,6-Tribromophenol	330	9.624	9.624	0.000	85	67753	5.00	5.23	
$ 12 Terphenyl-d14	244	11.548	11.548	0.000	99	619588	5.00	4.76	
25 1,4-Dioxane	88	2.872	2.872	0.000	88	166306	5.00	4.99	
26 N-Nitrosodimethylamine	74	3.387	3.387	0.000	90	241322	5.00	4.67	
27 Pyridine	79	3.459	3.459	0.000	95	384702	5.00	4.73	
41 Benzaldehyde	77	5.921	5.921	0.000	88	684086	10.0	9.28	
43 Phenol	94	5.969	5.969	0.000	92	440404	5.00	4.76	
44 Aniline	93	6.017	6.017	0.000	94	565211	5.00	4.82	
69 Bis(2-chloroethyl)ether	93	6.061	6.061	0.000	98	356530	5.00	4.78	
46 2-Chlorophenol	128	6.138	6.138	0.000	87	267777	5.00	4.76	
243 n-Decane	57	6.171	6.171	0.000	95	305109	NC	NC	
47 1,3-Dichlorobenzene	146	6.282	6.282	0.000	87	306762	5.00	4.74	
48 1,4-Dichlorobenzene	146	6.340	6.340	0.000	83	306392	5.00	4.69	
49 Benzyl alcohol	108	6.421	6.421	0.000	85	219717	5.00	4.97	
50 1,2-Dichlorobenzene	146	6.484	6.484	0.000	86	288185	5.00	4.64	
51 2-Methylphenol	108	6.513	6.513	0.000	92	301321	5.00	4.89	
53 2,2'-oxybis[1-chloropropan	45	6.546	6.546	0.000	89	273392	5.00	4.56	
52 Indene	115	6.561	6.561	0.000	88	1093410	10.0	9.23	
21 3 & 4 Methylphenol	108	6.643	6.643	0.000	95	307912	5.00	4.65	
57 N-Nitrosodi-n-propylamine	70	6.652	6.652	0.000	96	334460	5.00	4.87	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
58 Acetophenone	105	6.662	6.662	0.000	87	476302	5.00	4.57	
61 Hexachloroethane	117	6.792	6.792	0.000	92	163598	5.00	4.78	
62 Nitrobenzene	77	6.820	6.820	0.000	83	489602	5.00	4.76	
64 Isophorone	82	7.022	7.022	0.000	97	838982	5.00	4.93	
66 2-Nitrophenol	139	7.099	7.099	0.000	71	134264	5.00	4.88	
65 2,4-Dimethylphenol	107	7.109	7.109	0.000	93	381331	5.00	4.91	
71 Benzoic acid	122	7.143	7.143	0.000	85	272442	10.0	8.81	M
70 Bis(2-chloroethoxy)methane	93	7.186	7.186	0.000	98	411656	5.00	4.89	
73 2,4-Dichlorophenol	162	7.306	7.306	0.000	91	222650	5.00	4.95	
74 1,2,4-Trichlorobenzene	180	7.388	7.388	0.000	88	252601	5.00	4.94	
75 Naphthalene	128	7.465	7.465	0.000	97	769336	5.00	4.99	
76 4-Chloroaniline	127	7.484	7.484	0.000	87	343940	5.00	5.18	M
77 2,6-Dichlorophenol	162	7.503	7.503	0.000	84	223548	5.00	4.81	
79 Hexachlorobutadiene	225	7.566	7.566	0.000	95	179909	5.00	4.87	
84 Caprolactam	113	7.753	7.753	0.000	83	164712	10.0	9.74	
86 4-Chloro-3-methylphenol	107	7.874	7.874	0.000	86	320696	5.00	5.10	
87 2-Methylnaphthalene	142	8.052	8.052	0.000	88	506398	5.00	4.96	
88 1-Methylnaphthalene	142	8.143	8.143	0.000	86	429122	5.00	4.96	
89 Hexachlorocyclopentadiene	237	8.196	8.196	0.000	93	189658	5.00	4.89	
91 1,2,4,5-Tetrachlorobenzene	216	8.201	8.201	0.000	95	277793	5.00	4.92	
92 2,4,6-Trichlorophenol	196	8.282	8.282	0.000	88	170112	5.00	4.69	
93 2,4,5-Trichlorophenol	196	8.316	8.316	0.000	88	185167	5.00	4.93	
98 1,1'-Biphenyl	154	8.441	8.441	0.000	98	604453	5.00	4.70	
100 2-Chloronaphthalene	162	8.475	8.475	0.000	98	492360	5.00	4.67	
102 2-Nitroaniline	65	8.532	8.532	0.000	69	246467	5.00	4.58	
105 Dimethyl phthalate	163	8.667	8.667	0.000	93	589399	5.00	4.82	
106 1,3-Dinitrobenzene	168	8.701	8.701	0.000	80	80618	5.00	4.43	
107 2,6-Dinitrotoluene	165	8.725	8.725	0.000	75	126145	5.00	4.91	
109 Acenaphthylene	152	8.835	8.835	0.000	98	764171	5.00	4.84	
110 3-Nitroaniline	138	8.879	8.879	0.000	83	127568	5.00	5.26	
111 2,4-Dinitrophenol	184	8.965	8.965	0.000	94	175219	10.0	9.61	
112 Acenaphthene	153	8.980	8.980	0.000	96	494396	5.00	4.81	
113 4-Nitrophenol	109	8.989	8.989	0.000	86	298603	10.0	8.73	
114 2,4-Dinitrotoluene	165	9.076	9.076	0.000	79	168809	5.00	4.88	
116 Dibenzofuran	168	9.124	9.124	0.000	93	667514	5.00	4.61	
119 2,3,4,6-Tetrachlorophenol	232	9.220	9.220	0.000	81	148236	5.00	4.96	
121 Diethyl phthalate	149	9.263	9.263	0.000	95	622043	5.00	4.92	
247 Hexadecane	57	9.268	9.268	0.000	96	379506	NC	NC	
123 4-Chlorophenyl phenyl ethe	204	9.393	9.393	0.000	94	272856	5.00	4.63	
125 4-Nitroaniline	138	9.398	9.398	0.000	74	117372	5.00	4.50	
126 Fluorene	166	9.417	9.417	0.000	99	562418	5.00	4.60	
128 4,6-Dinitro-2-methylphenol	198	9.427	9.427	0.000	92	206727	10.0	8.94	
131 N-Nitrosodiphenylamine	169	9.485	9.485	0.000	98	843161	10.0	9.32	
133 Azobenzene	77	9.528	9.528	0.000	96	906632	5.00	4.65	
132 1,2-Diphenylhydrazine	77	9.528	9.528	0.000	98	905729	5.00	4.64	
139 4-Bromophenyl phenyl ether	248	9.812	9.812	0.000	77	152010	5.00	4.66	
141 Hexachlorobenzene	284	9.903	9.903	0.000	84	149272	5.00	4.78	
142 Atrazine	200	9.908	9.908	0.000	90	312959	10.0	9.35	
244 n-Octadecane	57	10.047	10.047	0.000	94	382189	NC	NC	
143 Pentachlorophenol	266	10.052	10.052	0.000	86	201796	10.0	8.46	
148 Phenanthrene	178	10.244	10.244	0.000	99	783586	5.00	4.86	
149 Anthracene	178	10.288	10.288	0.000	100	797407	5.00	4.84	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
151 Carbazole	167	10.403	10.403	0.000	98	656648	5.00	4.45	
154 Di-n-butyl phthalate	149	10.643	10.643	0.000	99	835540	5.00	4.55	
159 Fluoranthene	202	11.264	11.264	0.000	98	800991	5.00	4.33	
160 Benzidine	184	11.336	11.336	0.000	98	828248	10.0	8.60	
161 Pyrene	202	11.466	11.466	0.000	96	817088	5.00	4.52	
168 Butyl benzyl phthalate	149	11.927	11.927	0.000	92	421612	5.00	4.92	
173 Bis(2-ethylhexyl) phthalat	149	12.408	12.408	0.000	97	578810	5.00	5.03	
175 3,3'-Dichlorobenzidine	252	12.437	12.437	0.000	77	537980	10.0	8.98	
177 Benzo[a]anthracene	228	12.504	12.504	0.000	98	863934	5.00	4.60	
178 Chrysene	228	12.538	12.538	0.000	96	822605	5.00	4.84	
180 Di-n-octyl phthalate	149	13.062	13.062	0.000	100	930403	5.00	5.00	
182 Benzo[b]fluoranthene	252	13.716	13.716	0.000	95	765768	5.00	5.03	
183 Benzo[k]fluoranthene	252	13.750	13.750	0.000	99	741868	5.00	4.63	
184 Benzo[a]pyrene	252	14.183	14.183	0.000	77	705520	5.00	4.74	
188 Indeno[1,2,3-cd]pyrene	276	16.159	16.159	0.000	97	715273	5.00	4.89	
189 Dibenz(a,h)anthracene	278	16.169	16.169	0.000	89	566825	5.00	4.82	
190 Benzo[g,h,i]perylene	276	16.751	16.751	0.000	92	568660	5.00	4.74	M

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L5 W_00005 Amount Added: 1.00 Units: mL

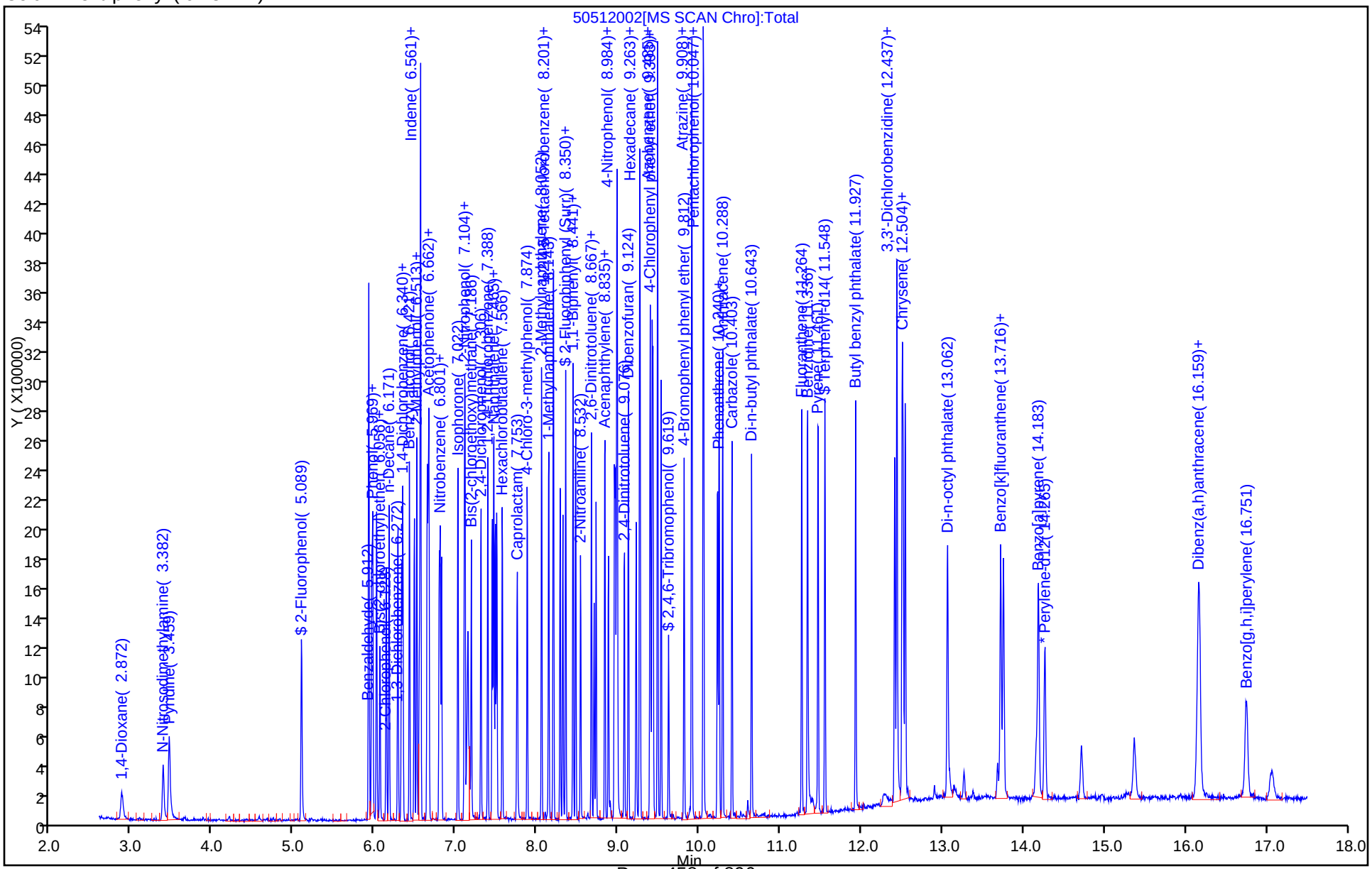
Report Date: 12-May-2015 15:32:00 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512002.D

Injection Date:	12-May-2015 07:38:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	std5 lst1			Worklist Smp#:	2
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

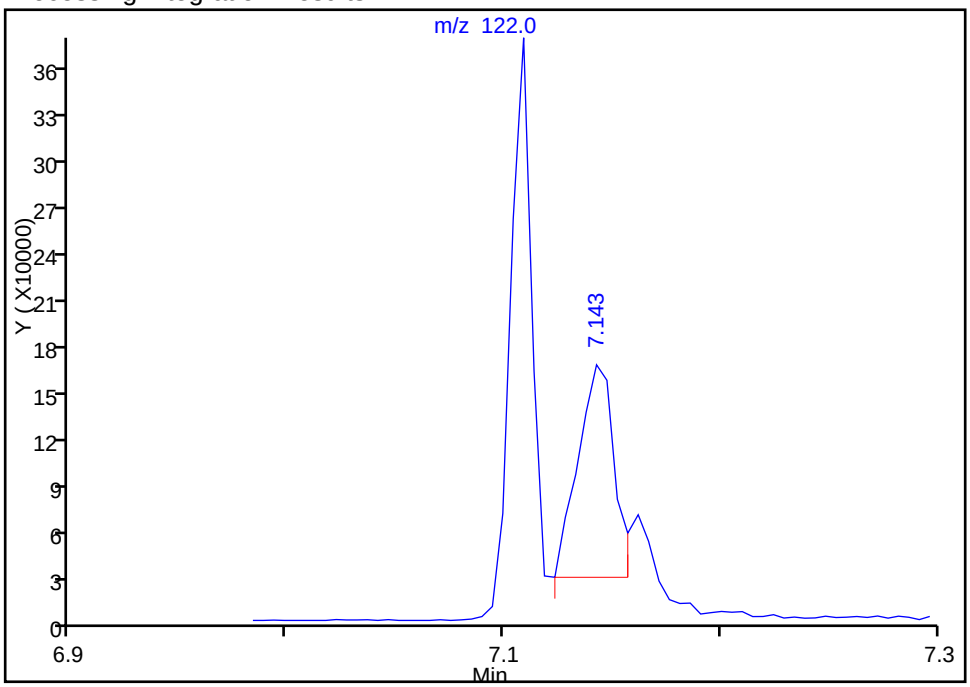
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512002.D
Injection Date: 12-May-2015 07:38:30 Instrument ID: A4HP9
Lims ID: std5 lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

71 Benzoic acid, CAS: 65-85-0

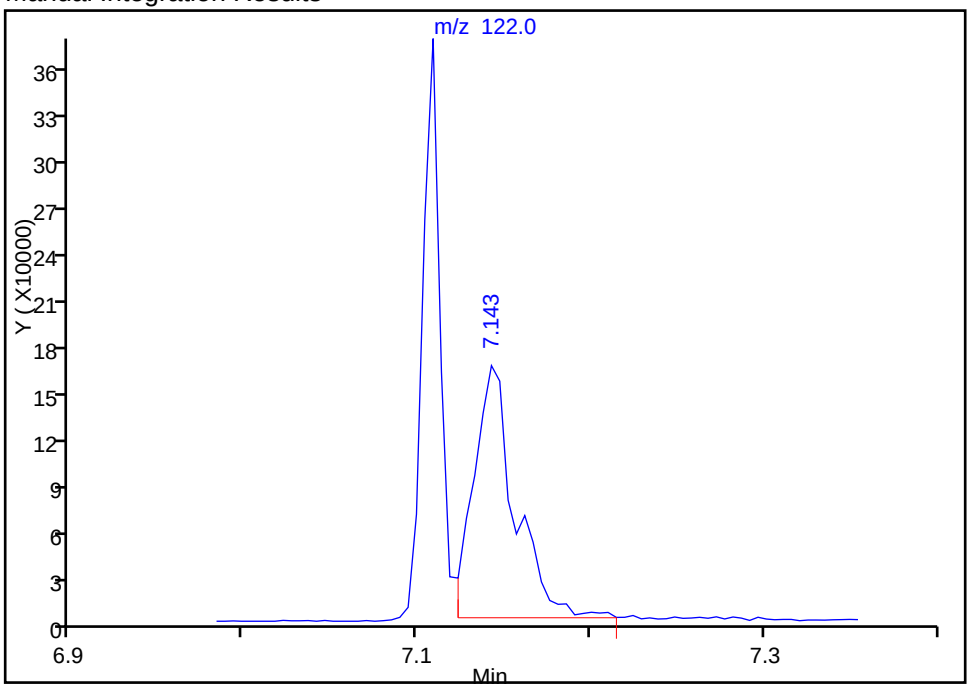
Processing Integration Results

RT: 7.14
Area: 160561
Amount: 10.000000
Amount Units: ng/ul



Manual Integration Results

RT: 7.14
Area: 272442
Amount: 8.813896
Amount Units: ng/ul



Reviewer: ulmanm, 12-May-2015 08:13:28
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Manual Integration/User Assign Peak Report

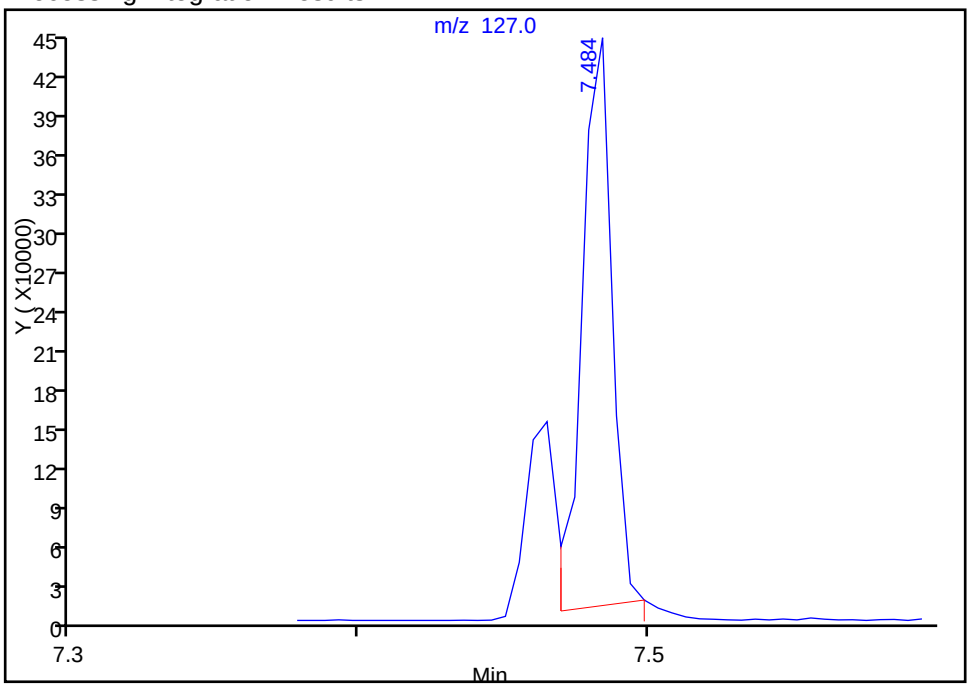
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512002.D
Injection Date: 12-May-2015 07:38:30 Instrument ID: A4HP9
Lims ID: std5 lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

76 4-Chloroaniline, CAS: 106-47-8

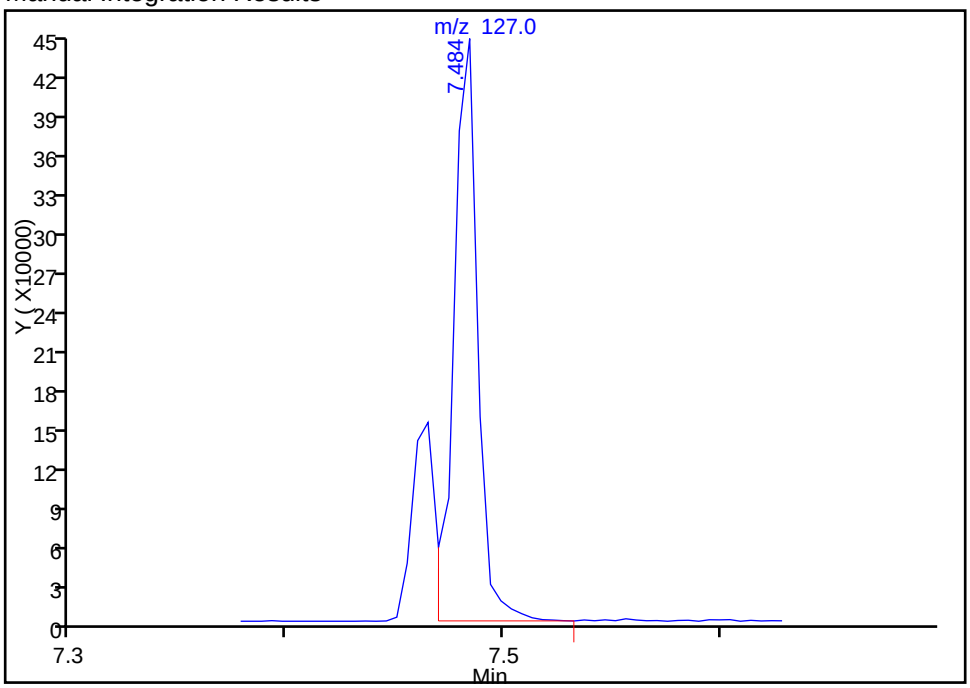
Processing Integration Results

RT: 7.48
Area: 315930
Amount: 5.000000
Amount Units: ng/ul



Manual Integration Results

RT: 7.48
Area: 343940
Amount: 5.179222
Amount Units: ng/ul



Reviewer: ulmanm, 12-May-2015 08:13:28
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Manual Integration/User Assign Peak Report

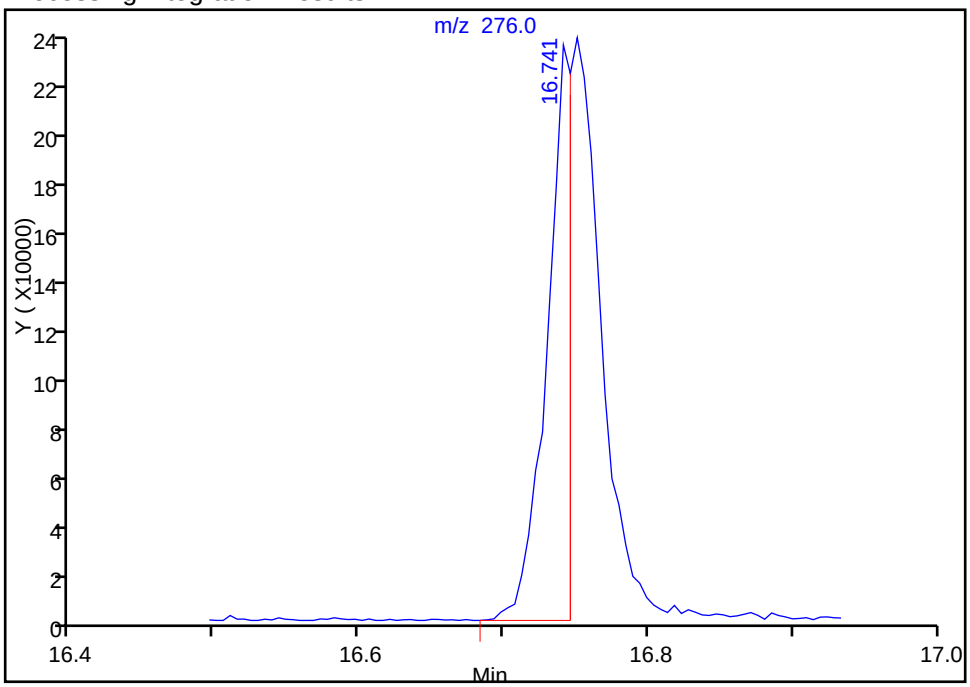
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512002.D				
Injection Date:	12-May-2015 07:38:30	Instrument ID:	A4HP9		
Lims ID:	std5 lst1				
Client ID:					
Operator ID:	001574	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

190 Benzo[g,h,i]perylene, CAS: 191-24-2

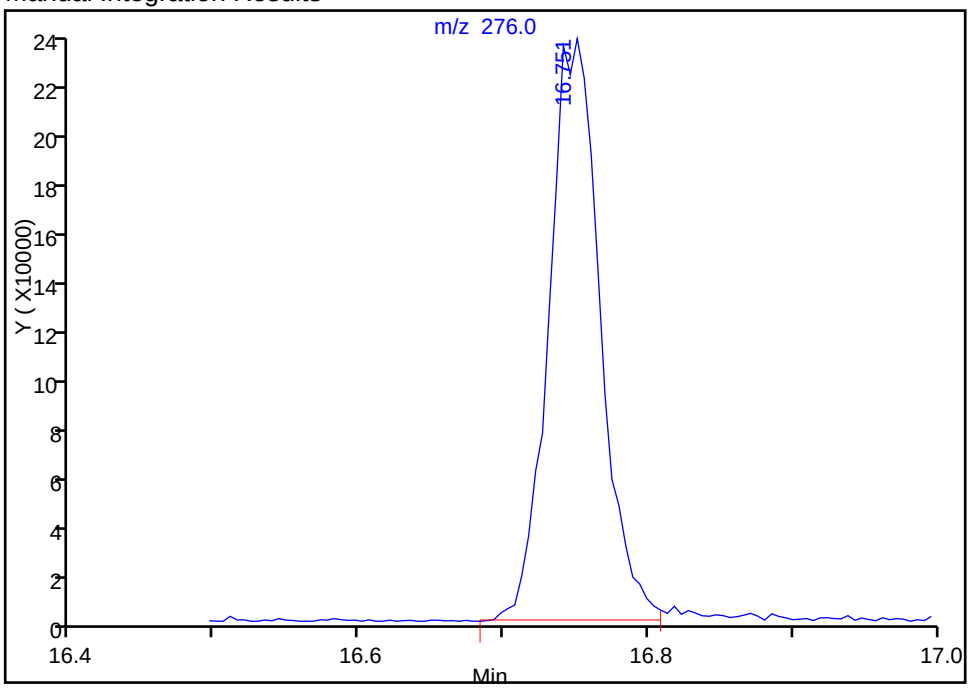
Processing Integration Results

RT: 16.74
Area: 272166
Amount: 5.000000
Amount Units: ng/ul



Manual Integration Results

RT: 16.75
Area: 568660
Amount: 4.735034
Amount Units: ng/ul



Reviewer: ulmanm, 12-May-2015 08:13:28
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Report Date: 12-May-2015 15:32:04 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512003.D
Lims ID: std4 lst1
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 12-May-2015 08:03:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043530-003
Misc. Info.: STD4 LST1STD4 LST1
Operator ID: 001574 Instrument ID: A4HP9
Sublist: chrom-8270 _9*sub34

Method: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 12-May-2015 15:32:03 Calib Date: 12-May-2015 10:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: ulmanm Date: 12-May-2015 08:33:41

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.327	6.325	0.002	93	149237	4.00	4.00	
* 2 Naphthalene-d8	136	7.443	7.446	-0.003	98	569916	4.00	4.00	
* 3 Acenaphthene-d10	164	8.953	8.951	0.002	95	331737	4.00	4.00	
* 4 Phenanthrene-d10	188	10.223	10.225	-0.002	98	575749	4.00	4.00	
* 5 Chrysene-d12	240	12.512	12.514	-0.002	97	610320	4.00	4.00	
* 6 Perylene-d12	264	14.262	14.265	-0.002	98	472438	4.00	4.00	
$ 7 2-Fluorophenol	112	5.092	5.089	0.003	94	114753	2.00	2.20	
$ 8 Phenol-d5	99	5.957	5.960	-0.003	90	151121	2.00	2.03	
$ 9 Nitrobenzene-d5	82	6.804	6.801	0.003	85	200954	2.00	1.96	
$ 10 2-Fluorobiphenyl (Surr)	172	8.352	8.350	0.002	97	223289	2.00	1.99	
$ 11 2,4,6-Tribromophenol	330	9.621	9.624	-0.003	74	23474	2.00	1.95	
$ 12 Terphenyl-d14	244	11.550	11.548	0.002	99	226412	2.00	1.84	
25 1,4-Dioxane	88	2.889	2.872	0.017	85	60806	2.00	2.02	M
26 N-Nitrosodimethylamine	74	3.394	3.387	0.007	81	101006	2.00	2.16	
27 Pyridine	79	3.471	3.459	0.012	92	144964	2.00	1.97	
41 Benzaldehyde	77	5.924	5.921	0.003	87	282851	4.00	4.25	
43 Phenol	94	5.972	5.969	0.003	92	177299	2.00	2.12	
44 Aniline	93	6.015	6.017	-0.002	94	219556	2.00	2.07	
69 Bis(2-chloroethyl)ether	93	6.058	6.061	-0.003	97	136411	2.00	2.03	
46 2-Chlorophenol	128	6.135	6.138	-0.003	86	107211	2.00	2.11	
243 n-Decane	57	6.169	6.171	-0.002	95	126528	NC	NC	
47 1,3-Dichlorobenzene	146	6.279	6.282	-0.003	86	121360	2.00	2.08	
48 1,4-Dichlorobenzene	146	6.342	6.340	0.002	84	117339	2.00	1.99	
49 Benzyl alcohol	108	6.424	6.421	0.003	86	86864	2.00	2.18	
50 1,2-Dichlorobenzene	146	6.481	6.484	-0.003	86	121486	2.00	2.17	
51 2-Methylphenol	108	6.515	6.513	0.002	89	119531	2.00	2.15	
53 2,2'-oxybis[1-chloropropan	45	6.544	6.546	-0.002	93	113240	2.00	2.09	
52 Indene	115	6.558	6.561	-0.003	88	440612	4.00	4.12	
21 3 & 4 Methylphenol	108	6.640	6.643	-0.003	95	121207	2.00	2.03	
57 N-Nitrosodi-n-propylamine	70	6.654	6.652	0.002	95	125871	2.00	2.03	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
58 Acetophenone	105	6.664	6.662	0.002	87	191927	2.00	2.04	
61 Hexachloroethane	117	6.789	6.792	-0.003	91	62281	2.00	2.01	
62 Nitrobenzene	77	6.818	6.820	-0.002	83	196776	2.00	1.97	
64 Isophorone	82	7.020	7.022	-0.002	98	323970	2.00	1.96	
66 2-Nitrophenol	139	7.102	7.099	0.003	73	51082	2.00	1.91	
65 2,4-Dimethylphenol	107	7.106	7.109	-0.003	92	144916	2.00	1.92	
71 Benzoic acid	122	7.131	7.143	-0.012	83	83382	4.00	3.33	M
70 Bis(2-chloroethoxy)methane	93	7.183	7.186	-0.003	95	158076	2.00	1.93	
73 2,4-Dichlorophenol	162	7.304	7.306	-0.002	87	86334	2.00	1.97	
74 1,2,4-Trichlorobenzene	180	7.390	7.388	0.002	89	96548	2.00	1.94	
75 Naphthalene	128	7.462	7.465	-0.003	97	308379	2.00	2.06	
76 4-Chloroaniline	127	7.482	7.484	-0.002	84	113117	2.00	1.75	
77 2,6-Dichlorophenol	162	7.501	7.503	-0.002	86	87203	2.00	1.93	
79 Hexachlorobutadiene	225	7.568	7.566	0.002	93	68031	2.00	1.89	
84 Caprolactam	113	7.746	7.753	-0.007	83	60727	4.00	3.69	
86 4-Chloro-3-methylphenol	107	7.876	7.874	0.002	87	115780	2.00	1.89	
87 2-Methylnaphthalene	142	8.054	8.052	0.002	88	192778	2.00	1.94	
88 1-Methylnaphthalene	142	8.140	8.143	-0.003	85	167771	2.00	1.99	
89 Hexachlorocyclopentadiene	237	8.198	8.196	0.002	93	68339	2.00	1.89	
91 1,2,4,5-Tetrachlorobenzene	216	8.203	8.201	0.002	95	103775	2.00	1.97	
92 2,4,6-Trichlorophenol	196	8.280	8.282	-0.002	93	71567	2.00	2.12	
93 2,4,5-Trichlorophenol	196	8.313	8.316	-0.003	85	69733	2.00	1.99	
98 1,1'-Biphenyl	154	8.443	8.441	0.002	98	233354	2.00	1.95	
100 2-Chloronaphthalene	162	8.472	8.475	-0.003	98	192253	2.00	1.96	
102 2-Nitroaniline	65	8.535	8.532	0.003	67	86238	2.00	1.88	
105 Dimethyl phthalate	163	8.669	8.667	0.002	95	235721	2.00	2.07	
106 1,3-Dinitrobenzene	168	8.698	8.701	-0.003	80	31585	2.00	2.03	
107 2,6-Dinitrotoluene	165	8.727	8.725	0.002	73	40169	2.00	1.68	
109 Acenaphthylene	152	8.833	8.835	-0.002	97	276560	2.00	1.88	
110 3-Nitroaniline	138	8.876	8.879	-0.003	81	45318	2.00	2.01	
111 2,4-Dinitrophenol	184	8.963	8.965	-0.002	93	49478	4.00	3.50	
112 Acenaphthene	153	8.982	8.980	0.002	96	184105	2.00	1.93	
113 4-Nitrophenol	109	8.987	8.989	-0.002	86	111374	4.00	3.80	
114 2,4-Dinitrotoluene	165	9.073	9.076	-0.003	80	64350	2.00	2.00	
116 Dibenzofuran	168	9.121	9.124	-0.003	93	267943	2.00	1.99	
119 2,3,4,6-Tetrachlorophenol	232	9.218	9.220	-0.002	81	55180	2.00	1.98	
121 Diethyl phthalate	149	9.261	9.263	-0.002	95	248429	2.00	2.11	
247 Hexadecane	57	9.266	9.268	-0.002	89	143989	NC	NC	
123 4-Chlorophenyl phenyl ethe	204	9.391	9.393	-0.002	91	103503	2.00	1.89	
125 4-Nitroaniline	138	9.395	9.398	-0.003	75	42836	2.00	2.14	
126 Fluorene	166	9.415	9.417	-0.002	98	214334	2.00	1.89	
128 4,6-Dinitro-2-methylphenol	198	9.429	9.427	0.002	95	72583	4.00	3.71	
131 N-Nitrosodiphenylamine	169	9.482	9.485	-0.003	98	338317	4.00	3.86	
133 Azobenzene	77	9.525	9.528	-0.003	96	359990	2.00	1.91	
132 1,2-Diphenylhydrazine	77	9.525	9.528	-0.003	97	361644	2.00	1.91	
139 4-Bromophenyl phenyl ether	248	9.814	9.812	0.002	76	60079	2.00	1.90	
141 Hexachlorobenzene	284	9.905	9.903	0.002	79	57323	2.00	1.90	
142 Atrazine	200	9.910	9.908	0.002	92	108724	4.00	3.36	
244 n-Octadecane	57	10.045	10.047	-0.002	94	153774	NC	NC	
143 Pentachlorophenol	266	10.054	10.052	0.002	80	71156	4.00	3.55	
148 Phenanthrene	178	10.242	10.244	-0.002	99	302276	2.00	1.94	
149 Anthracene	178	10.285	10.288	-0.003	98	307986	2.00	1.93	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
151 Carbazole	167	10.401	10.403	-0.003	98	270412	2.00	1.89	
154 Di-n-butyl phthalate	149	10.646	10.643	0.003	99	285487	2.00	1.61	
159 Fluoranthene	202	11.261	11.264	-0.003	98	323764	2.00	1.81	
160 Benzidine	184	11.333	11.336	-0.003	98	275423	4.00	3.48	
161 Pyrene	202	11.463	11.466	-0.003	96	321177	2.00	1.88	
168 Butyl benzyl phthalate	149	11.930	11.927	0.003	90	159109	2.00	1.96	
173 Bis(2-ethylhexyl) phthalat	149	12.411	12.408	0.003	96	208173	2.00	1.91	
175 3,3'-Dichlorobenzidine	252	12.439	12.437	0.002	78	190806	4.00	3.73	
177 Benzo[a]anthracene	228	12.502	12.504	-0.002	98	334721	2.00	1.89	
178 Chrysene	228	12.540	12.538	0.002	95	314649	2.00	1.96	
180 Di-n-octyl phthalate	149	13.060	13.062	-0.002	99	368125	2.00	2.02	
182 Benzo[b]fluoranthene	252	13.719	13.716	0.003	95	286307	2.00	1.92	
183 Benzo[k]fluoranthene	252	13.752	13.750	0.002	97	303544	2.00	1.94	M
184 Benzo[a]pyrene	252	14.180	14.183	-0.003	78	265634	2.00	1.82	
188 Indeno[1,2,3-cd]pyrene	276	16.161	16.159	0.002	94	296852	2.00	2.08	
189 Dibenz(a,h)anthracene	278	16.166	16.169	-0.003	74	232509	2.00	2.02	
190 Benzo[g,h,i]perylene	276	16.743	16.751	-0.008	97	245245	2.00	2.09	
S 191 Methyl Phenols,Total	100				0			4.18	
S 245 Total Cresols	100				0			4.18	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L4 W_00005 Amount Added: 1.00 Units: mL

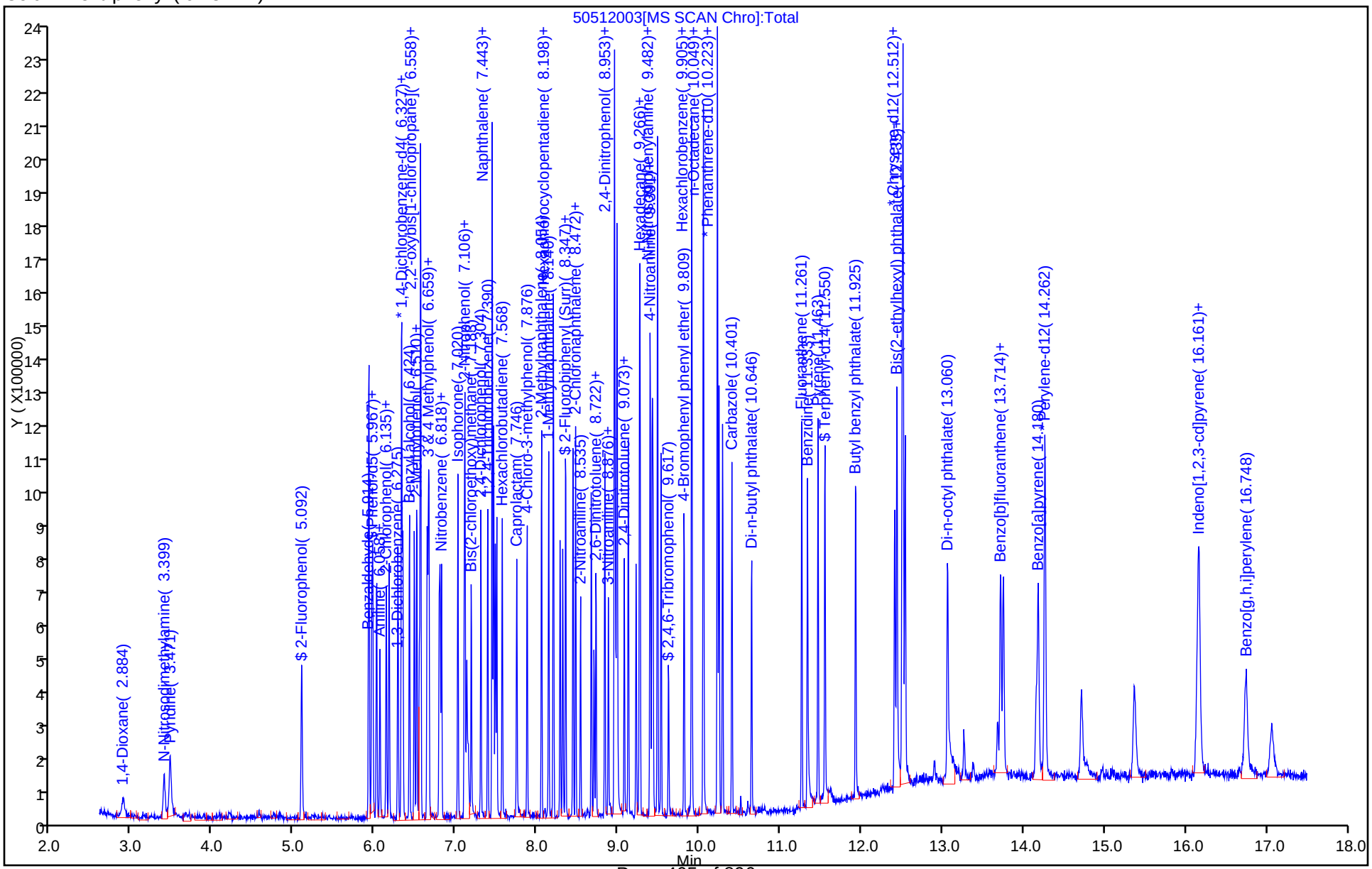
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TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512003.D

Injection Date:	12-May-2015 08:03:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	std4 lst1			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

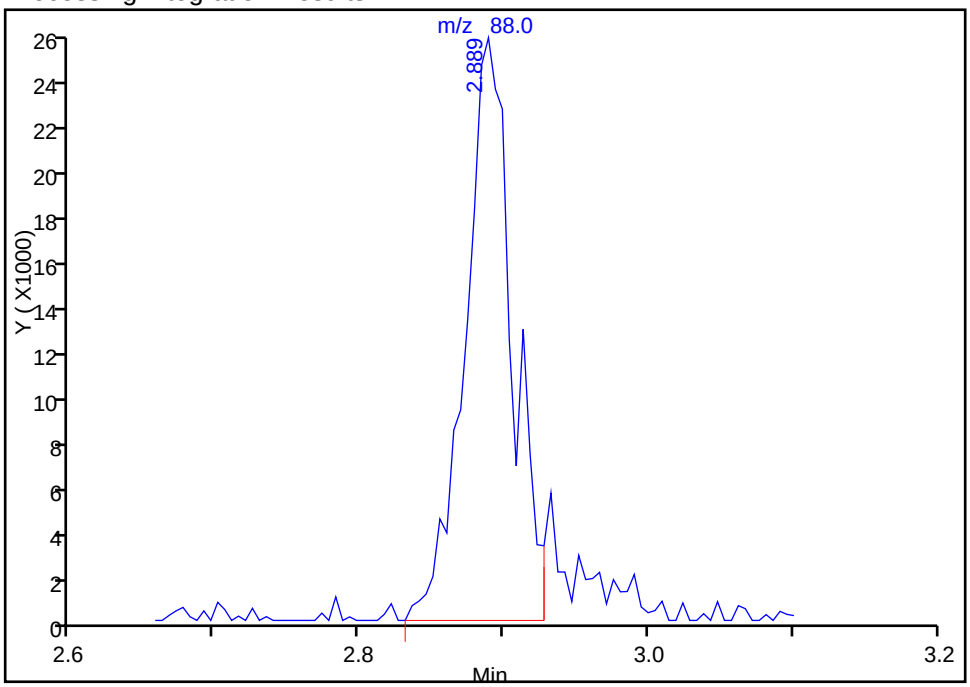
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512003.D
Injection Date: 12-May-2015 08:03:30 Instrument ID: A4HP9
Lims ID: std4 lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

25 1,4-Dioxane, CAS: 123-91-1

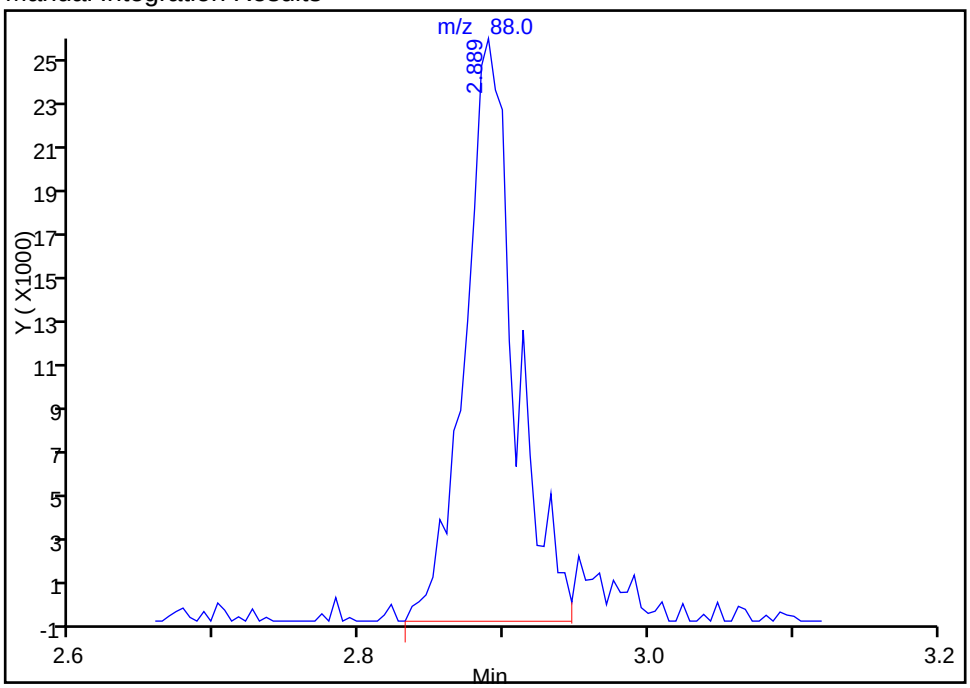
Processing Integration Results

RT: 2.89
Area: 57732
Amount: 1.960008
Amount Units: ng/ul



Manual Integration Results

RT: 2.89
Area: 60806
Amount: 2.018802
Amount Units: ng/ul



Reviewer: ulmanm, 12-May-2015 08:33:41
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Manual Integration/User Assign Peak Report

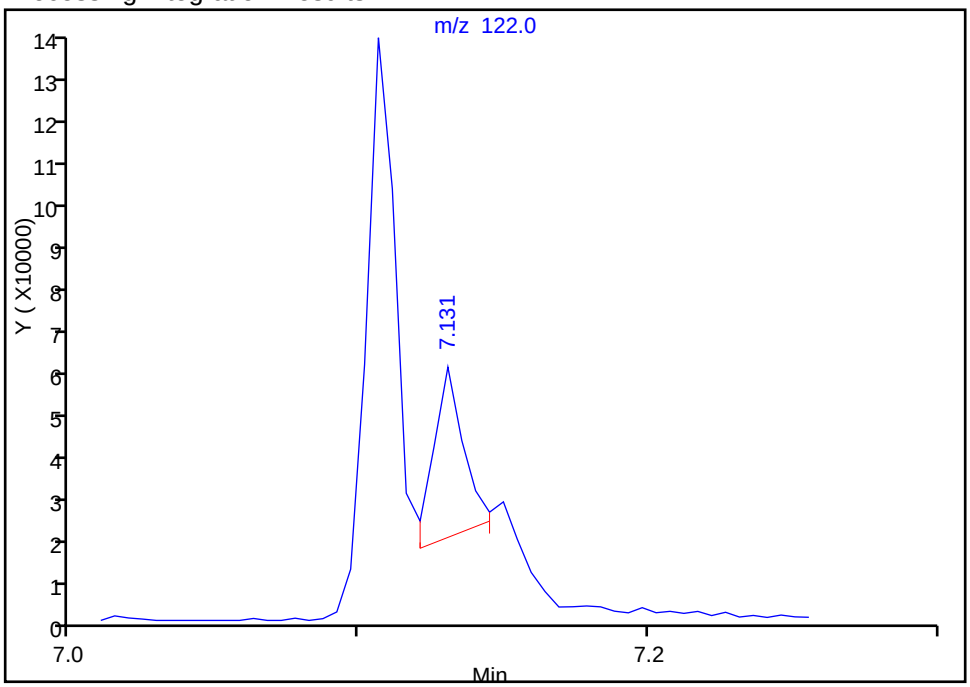
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512003.D
Injection Date: 12-May-2015 08:03:30 Instrument ID: A4HP9
Lims ID: std4 lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

71 Benzoic acid, CAS: 65-85-0

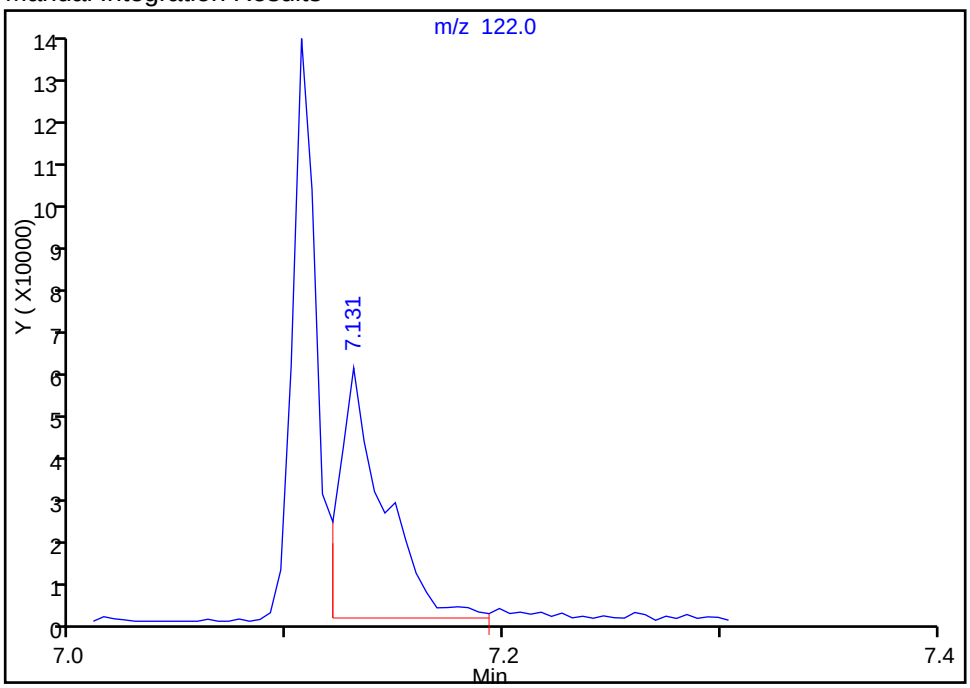
Processing Integration Results

RT: 7.13
Area: 28876
Amount: 1.713116
Amount Units: ng/ul



Manual Integration Results

RT: 7.13
Area: 83382
Amount: 3.327803
Amount Units: ng/ul



Reviewer: ulmanm, 12-May-2015 08:33:41
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Manual Integration/User Assign Peak Report

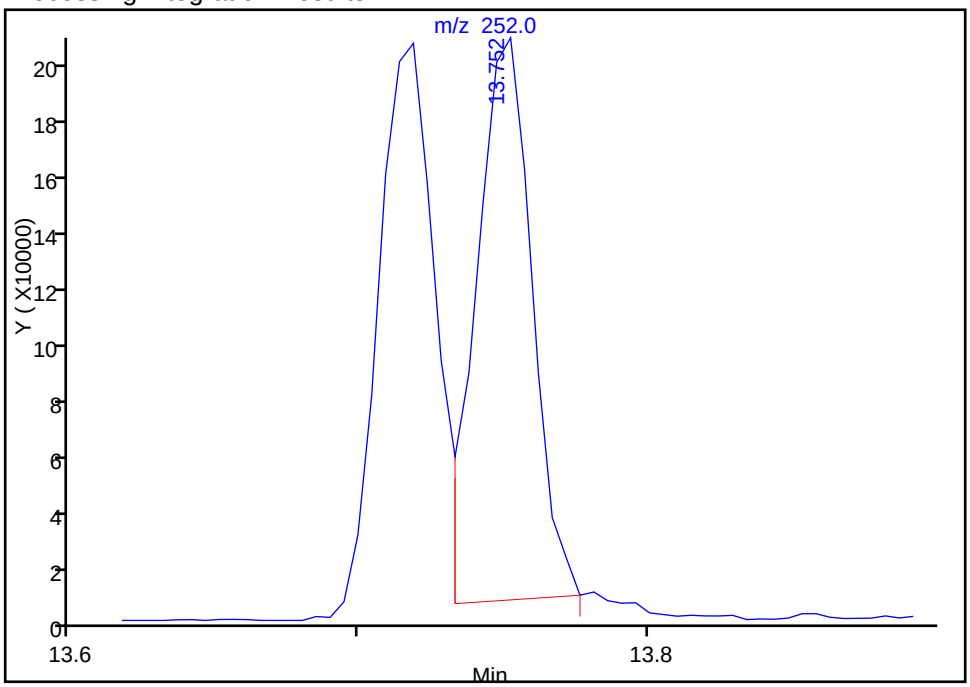
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512003.D
Injection Date: 12-May-2015 08:03:30 Instrument ID: A4HP9
Lims ID: std4 lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

183 Benzo[k]fluoranthene, CAS: 207-08-9

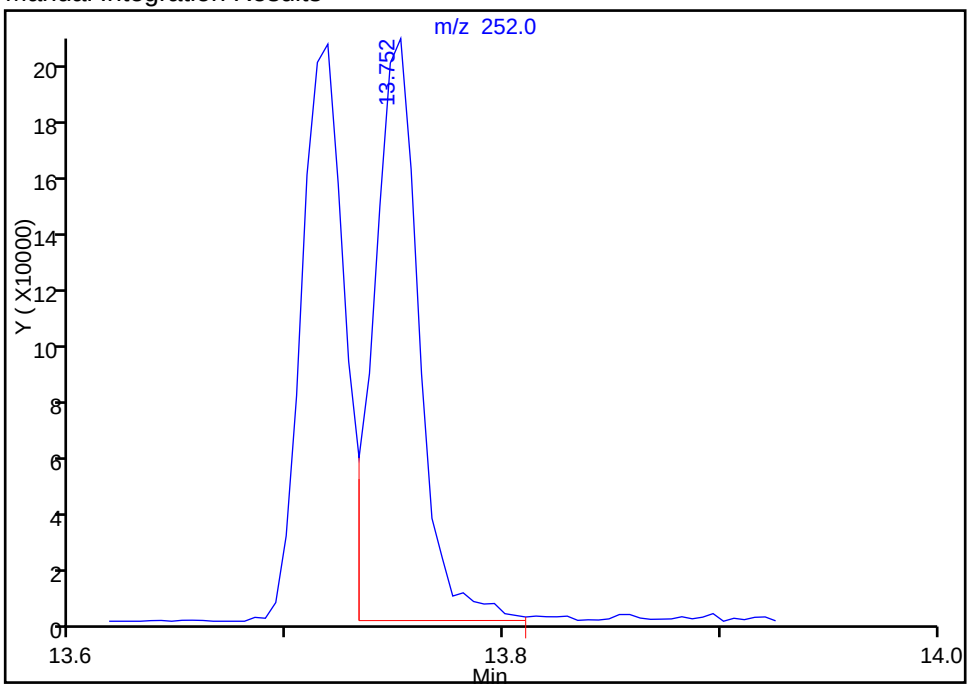
Processing Integration Results

RT: 13.75
Area: 272779
Amount: 1.937266
Amount Units: ng/ul



Manual Integration Results

RT: 13.75
Area: 303544
Amount: 1.935909
Amount Units: ng/ul



Reviewer: ulmanm, 12-May-2015 08:33:41
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512004.D
Lims ID: std3 lst1
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 12-May-2015 08:28:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043530-004
Misc. Info.: STD3 LST1STD3 LST1
Operator ID: 001574 Instrument ID: A4HP9
Sublist: chrom-8270 _9*sub34

Method: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 12-May-2015 15:32:06 Calib Date: 12-May-2015 10:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: ulmanm Date: 12-May-2015 09:18:02

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.324	6.325	-0.001	89	163603	4.00	4.00	
* 2 Naphthalene-d8	136	7.445	7.446	-0.001	98	591498	4.00	4.00	
* 3 Acenaphthene-d10	164	8.950	8.951	-0.001	92	362672	4.00	4.00	
* 4 Phenanthrene-d10	188	10.224	10.225	-0.001	99	613693	4.00	4.00	
* 5 Chrysene-d12	240	12.513	12.514	-0.001	97	647370	4.00	4.00	
* 6 Perylene-d12	264	14.259	14.265	-0.005	98	488879	4.00	4.00	
$ 7 2-Fluorophenol	112	5.089	5.089	0.000	90	51869	1.00	0.9072	
$ 8 Phenol-d5	99	5.954	5.960	-0.006	93	81253	1.00	1.00	
$ 9 Nitrobenzene-d5	82	6.801	6.801	0.000	86	108850	1.00	1.02	
$ 10 2-Fluorobiphenyl (Surr)	172	8.349	8.350	-0.001	98	115283	1.00	0.9418	
$ 11 2,4,6-Tribromophenol	330	9.618	9.624	-0.006	75	13279	1.00	1.01	
$ 12 Terphenyl-d14	244	11.547	11.548	-0.001	98	129733	1.00	0.99	
25 1,4-Dioxane	88	2.877	2.872	0.005	87	35160	1.00	1.06	
26 N-Nitrosodimethylamine	74	3.386	3.387	-0.001	87	48024	1.00	0.9387	
27 Pyridine	79	3.454	3.459	-0.005	93	81203	1.00	1.01	
41 Benzaldehyde	77	5.921	5.921	-0.001	87	147592	2.00	2.02	
43 Phenol	94	5.969	5.969	0.000	89	84470	1.00	0.9220	
44 Aniline	93	6.017	6.017	0.000	95	115911	1.00	1.00	
69 Bis(2-chloroethyl)ether	93	6.060	6.061	-0.001	95	77024	1.00	1.04	
46 2-Chlorophenol	128	6.137	6.138	-0.001	87	56192	1.00	1.01	
243 n-Decane	57	6.171	6.171	0.000	93	66292	NC	NC	
47 1,3-Dichlorobenzene	146	6.281	6.282	-0.001	84	63546	1.00	0.99	
48 1,4-Dichlorobenzene	146	6.344	6.340	0.004	87	68974	1.00	1.07	
49 Benzyl alcohol	108	6.421	6.421	0.000	83	41718	1.00	0.9532	
50 1,2-Dichlorobenzene	146	6.483	6.484	-0.001	83	63254	1.00	1.03	
51 2-Methylphenol	108	6.512	6.513	-0.001	89	57660	1.00	0.9454	
53 2,2'-oxybis[1-chloropropan	45	6.546	6.546	0.000	92	61940	1.00	1.04	
52 Indene	115	6.560	6.561	-0.001	89	224897	2.00	1.92	
21 3 & 4 Methylphenol	108	6.642	6.643	-0.001	94	62471	1.00	0.9535	
57 N-Nitrosodi-n-propylamine	70	6.651	6.652	-0.001	92	64652	1.00	0.9508	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
58 Acetophenone	105	6.661	6.662	-0.001	87	103357	1.00	1.00	
61 Hexachloroethane	117	6.791	6.792	-0.001	87	35107	1.00	1.04	
62 Nitrobenzene	77	6.820	6.820	0.000	82	106227	1.00	1.02	
64 Isophorone	82	7.022	7.022	0.000	98	167399	1.00	0.9755	
66 2-Nitrophenol	139	7.099	7.099	0.000	77	27522	1.00	0.99	
65 2,4-Dimethylphenol	107	7.108	7.109	-0.001	92	82714	1.00	1.06	
71 Benzoic acid	122	7.128	7.143	-0.015	85	41282	2.00	2.01	M
70 Bis(2-chloroethoxy)methane	93	7.185	7.186	-0.001	97	87646	1.00	1.03	
73 2,4-Dichlorophenol	162	7.305	7.306	-0.001	89	46358	1.00	1.02	
74 1,2,4-Trichlorobenzene	180	7.387	7.388	-0.001	87	50899	1.00	0.9860	
75 Naphthalene	128	7.464	7.465	-0.001	96	158368	1.00	1.02	
76 4-Chloroaniline	127	7.483	7.484	-0.001	88	69363	1.00	1.03	
77 2,6-Dichlorophenol	162	7.503	7.503	0.000	83	46990	1.00	1.00	
79 Hexachlorobutadiene	225	7.570	7.566	0.004	92	36644	1.00	0.9829	
84 Caprolactam	113	7.743	7.753	-0.010	84	33494	2.00	1.96	
86 4-Chloro-3-methylphenol	107	7.873	7.874	-0.001	85	62828	1.00	0.9894	
87 2-Methylnaphthalene	142	8.051	8.052	-0.001	88	108969	1.00	1.06	
88 1-Methylnaphthalene	142	8.142	8.143	-0.001	85	90033	1.00	1.03	
89 Hexachlorocyclopentadiene	237	8.195	8.196	-0.001	90	34337	1.00	0.8702	
91 1,2,4,5-Tetrachlorobenzene	216	8.200	8.201	-0.001	91	55881	1.00	0.9728	
92 2,4,6-Trichlorophenol	196	8.282	8.282	0.000	89	33729	1.00	0.9146	
93 2,4,5-Trichlorophenol	196	8.315	8.316	-0.001	84	35146	1.00	0.9197	
98 1,1'-Biphenyl	154	8.440	8.441	-0.001	98	132124	1.00	1.01	
100 2-Chloronaphthalene	162	8.474	8.475	-0.001	97	110063	1.00	1.03	
102 2-Nitroaniline	65	8.532	8.532	0.000	71	39295	1.00	0.9256	
105 Dimethyl phthalate	163	8.666	8.667	-0.001	91	118486	1.00	0.9538	
106 1,3-Dinitrobenzene	168	8.700	8.701	-0.001	77	12631	1.00	0.9156	
107 2,6-Dinitrotoluene	165	8.724	8.725	-0.001	76	24087	1.00	0.9214	
109 Acenaphthylene	152	8.835	8.835	0.000	97	154295	1.00	0.9604	
110 3-Nitroaniline	138	8.878	8.879	-0.001	79	21380	1.00	0.8670	
111 2,4-Dinitrophenol	184	8.964	8.965	-0.001	78	23994	2.00	2.01	
112 Acenaphthene	153	8.979	8.980	-0.001	95	98708	1.00	0.9446	
113 4-Nitrophenol	109	8.989	8.989	0.000	82	56463	2.00	2.03	
114 2,4-Dinitrotoluene	165	9.075	9.076	-0.001	79	31338	1.00	0.8915	
116 Dibenzofuran	168	9.123	9.124	-0.001	94	143754	1.00	0.9758	
119 2,3,4,6-Tetrachlorophenol	232	9.219	9.220	-0.001	79	28747	1.00	0.9457	
121 Diethyl phthalate	149	9.263	9.263	0.000	94	127717	1.00	0.99	
247 Hexadecane	57	9.267	9.268	-0.001	92	83767	NC	NC	
123 4-Chlorophenyl phenyl ethe	204	9.392	9.393	-0.001	95	60345	1.00	1.01	
125 4-Nitroaniline	138	9.397	9.398	-0.001	69	20643	1.00	1.28	
126 Fluorene	166	9.417	9.417	0.000	99	116136	1.00	0.9348	
128 4,6-Dinitro-2-methylphenol	198	9.426	9.427	-0.001	87	32151	2.00	1.97	
131 N-Nitrosodiphenylamine	169	9.484	9.485	-0.001	98	181625	2.00	1.95	
133 Azobenzene	77	9.527	9.528	-0.001	96	194921	1.00	0.9681	
132 1,2-Diphenylhydrazine	77	9.527	9.528	-0.001	97	194921	1.00	0.9681	
139 4-Bromophenyl phenyl ether	248	9.811	9.812	-0.001	75	33857	1.00	1.01	
141 Hexachlorobenzene	284	9.902	9.903	-0.001	84	34284	1.00	1.06	
142 Atrazine	200	9.907	9.908	-0.001	88	69336	2.00	2.01	
244 n-Octadecane	57	10.046	10.047	-0.001	93	81207	NC	NC	
143 Pentachlorophenol	266	10.051	10.052	-0.001	81	34143	2.00	2.00	
148 Phenanthrene	178	10.244	10.244	0.000	98	169571	1.00	1.02	
149 Anthracene	178	10.287	10.288	-0.001	99	177665	1.00	1.04	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
151 Carbazole	167	10.402	10.403	-0.001	97	143417	1.00	0.9426	
154 Di-n-butyl phthalate	149	10.643	10.643	0.000	99	179711	1.00	0.9482	
159 Fluoranthene	202	11.263	11.264	-0.001	97	185640	1.00	0.9737	
160 Benzidine	184	11.335	11.336	-0.001	98	138063	2.00	2.02	
161 Pyrene	202	11.465	11.466	-0.001	97	191927	1.00	1.06	
168 Butyl benzyl phthalate	149	11.927	11.927	0.000	90	83062	1.00	0.9657	
173 Bis(2-ethylhexyl) phthalat	149	12.408	12.408	0.000	96	107595	1.00	0.9327	
175 3,3'-Dichlorobenzidine	252	12.436	12.437	-0.001	77	92638	2.00	2.02	
177 Benzo[a]anthracene	228	12.499	12.504	-0.005	97	187916	1.00	1.00	
178 Chrysene	228	12.537	12.538	-0.001	95	172113	1.00	1.01	
180 Di-n-octyl phthalate	149	13.062	13.062	0.000	99	176130	1.00	0.9342	
182 Benzo[b]fluoranthene	252	13.716	13.716	0.000	97	144519	1.00	0.9369	
183 Benzo[k]fluoranthene	252	13.749	13.750	-0.001	98	163877	1.00	1.01	
184 Benzo[a]pyrene	252	14.182	14.183	-0.001	77	154303	1.00	1.02	
188 Indeno[1,2,3-cd]pyrene	276	16.163	16.159	0.004	95	149003	1.00	1.01	
189 Dibenz(a,h)anthracene	278	16.168	16.169	-0.001	83	118036	1.00	0.99	
190 Benzo[g,h,i]perylene	276	16.750	16.751	-0.001	97	125021	1.00	1.03	
S 191 Methyl Phenols,Total	100				0			1.90	
S 245 Total Cresols	100				0			1.90	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L3 W_00005 Amount Added: 1.00 Units: mL

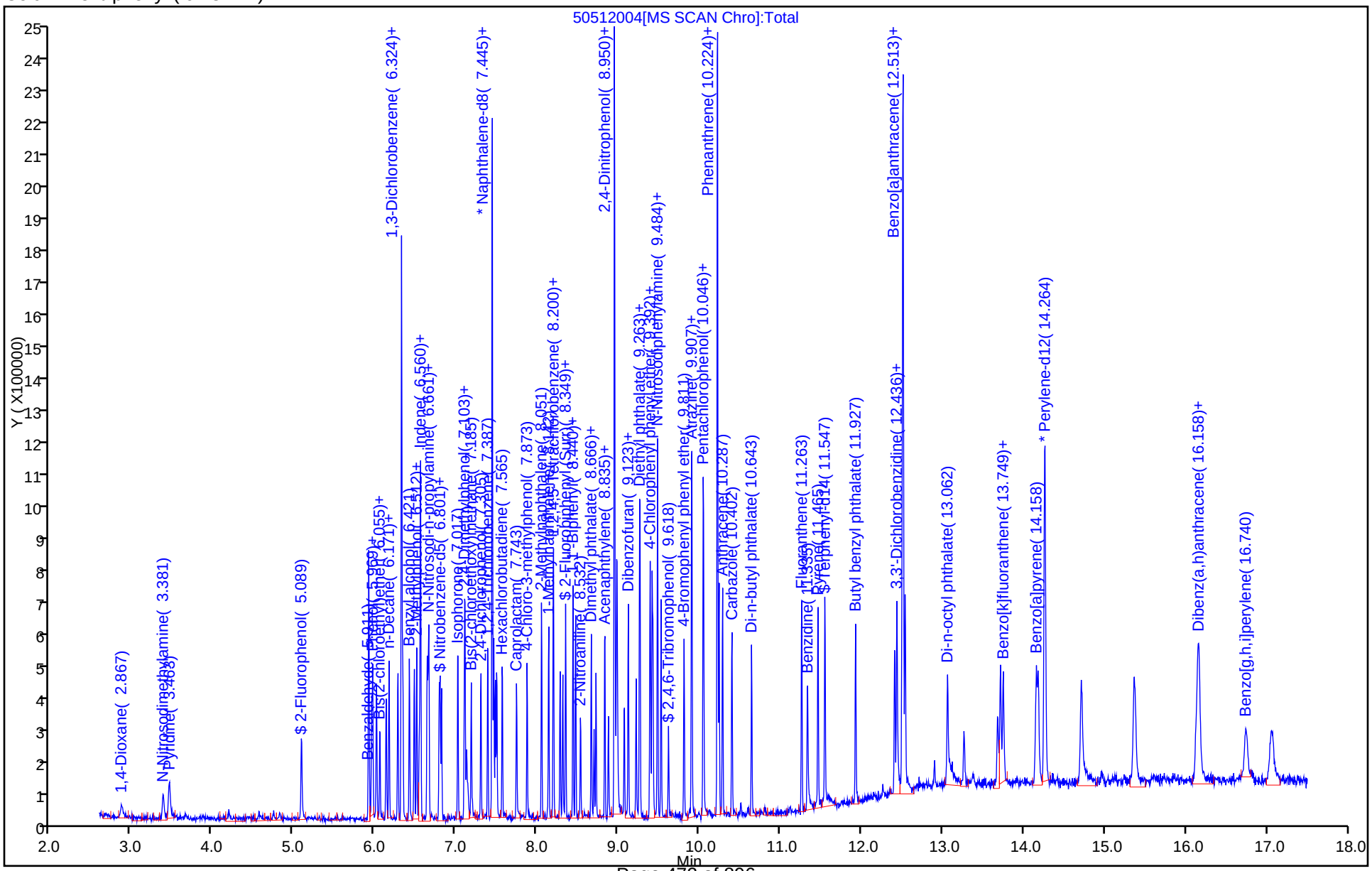
Report Date: 12-May-2015 15:32:06 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512004.D

Injection Date:	12-May-2015 08:28:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	std3 lst1			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

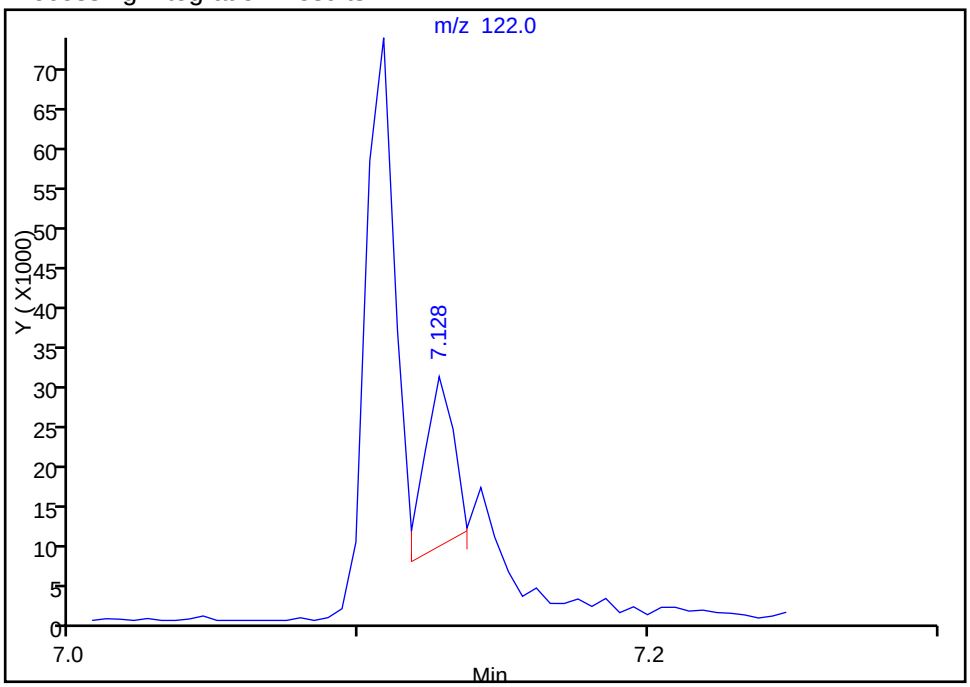
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512004.D				
Injection Date:	12-May-2015 08:28:30	Instrument ID:	A4HP9		
Lims ID:	std3 lst1				
Client ID:					
Operator ID:	001574	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

71 Benzoic acid, CAS: 65-85-0

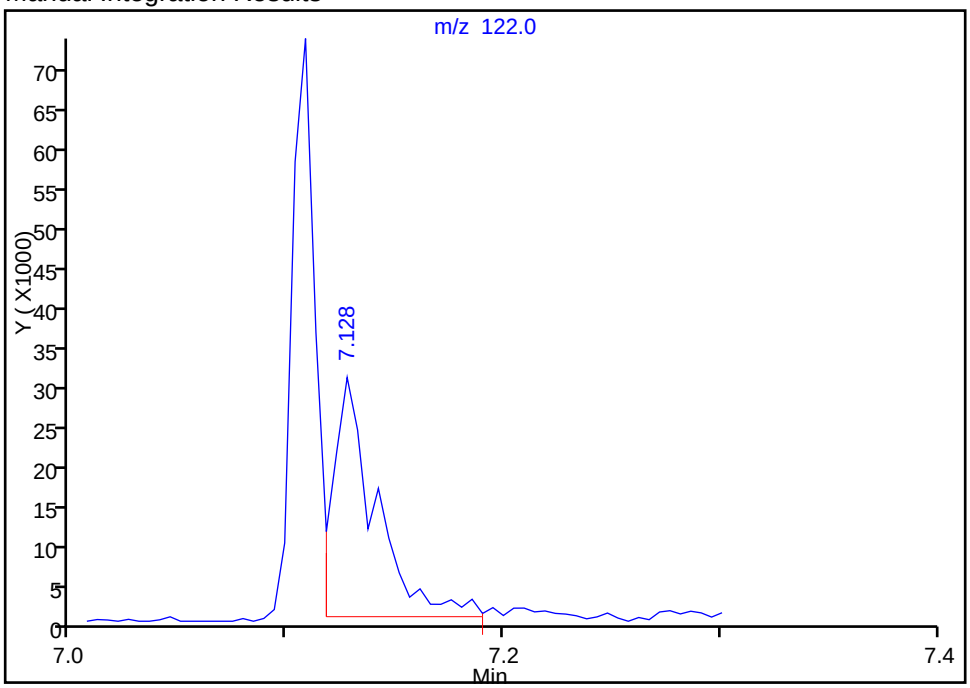
Processing Integration Results

RT: 7.13
Area: 15135
Amount: 1.948427
Amount Units: ng/ul



Manual Integration Results

RT: 7.13
Area: 41282
Amount: 2.010067
Amount Units: ng/ul



Reviewer: ulmanm, 12-May-2015 09:18:02
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512005.D
Lims ID: std2 lst1
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 12-May-2015 08:53:30 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043530-005
Misc. Info.: STD2 LST1STD2 LST1
Operator ID: 001574 Instrument ID: A4HP9
Sublist: chrom-8270 _9*sub34

Method: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 12-May-2015 15:32:08 Calib Date: 12-May-2015 10:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: ulmanm Date: 12-May-2015 09:21:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.324	6.325	-0.001	93	163204	4.00	4.00	
* 2 Naphthalene-d8	136	7.445	7.446	-0.001	98	610692	4.00	4.00	
* 3 Acenaphthene-d10	164	8.950	8.951	-0.001	93	362356	4.00	4.00	
* 4 Phenanthrene-d10	188	10.224	10.225	-0.001	98	651056	4.00	4.00	
* 5 Chrysene-d12	240	12.513	12.514	-0.001	97	654061	4.00	4.00	
* 6 Perylene-d12	264	14.264	14.265	0.000	98	488096	4.00	4.00	
$ 7 2-Fluorophenol	112	5.089	5.089	0.000	89	25493	0.5000	0.4470	
$ 8 Phenol-d5	99	5.959	5.960	-0.001	92	39068	0.5000	0.4797	
$ 9 Nitrobenzene-d5	82	6.801	6.801	-0.001	87	49658	0.5000	0.4522	
$ 10 2-Fluorobiphenyl (Surr)	172	8.349	8.350	-0.001	98	57266	0.5000	0.4682	
$ 11 2,4,6-Tribromophenol	330	9.623	9.624	-0.001	77	6413	0.5000	0.4875	
$ 12 Terphenyl-d14	244	11.547	11.548	-0.001	98	64270	0.5000	0.4875	
25 1,4-Dioxane	88	2.877	2.872	0.005	0	16292	0.5000	0.4946	M
26 N-Nitrosodimethylamine	74	3.381	3.387	-0.006	89	25160	0.5000	0.4930	
27 Pyridine	79	3.463	3.459	0.004	93	34785	0.5000	0.4332	
41 Benzaldehyde	77	5.920	5.921	-0.001	86	78229	1.00	1.07	
43 Phenol	94	5.969	5.969	0.000	95	44451	0.5000	0.4864	
44 Aniline	93	6.017	6.017	0.000	94	55259	0.5000	0.4768	
69 Bis(2-chloroethyl)ether	93	6.060	6.061	-0.001	92	35587	0.5000	0.4831	
46 2-Chlorophenol	128	6.137	6.138	-0.001	78	24892	0.5000	0.4476	
243 n-Decane	57	6.171	6.171	0.000	89	34388	NC	NC	
47 1,3-Dichlorobenzene	146	6.276	6.282	-0.006	84	33504	0.5000	0.5245	
48 1,4-Dichlorobenzene	146	6.339	6.340	-0.001	86	31731	0.5000	0.4917	
49 Benzyl alcohol	108	6.421	6.421	0.000	81	19095	0.5000	0.4374	
50 1,2-Dichlorobenzene	146	6.483	6.484	-0.001	82	30155	0.5000	0.4920	
51 2-Methylphenol	108	6.512	6.513	-0.001	87	26522	0.5000	0.4359	
53 2,2'-oxybis[1-chloropropan	45	6.546	6.546	0.000	92	30481	0.5000	0.5146	
52 Indene	115	6.560	6.561	-0.001	89	111625	1.00	0.9537	
21 3 & 4 Methylphenol	108	6.642	6.643	-0.001	88	33546	0.5000	0.5133	
57 N-Nitrosodi-n-propylamine	70	6.651	6.652	-0.001	93	30009	0.5000	0.4424	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
58 Acetophenone	105	6.661	6.662	-0.001	90	53660	0.5000	0.5208	
61 Hexachloroethane	117	6.791	6.792	-0.001	85	16545	0.5000	0.4894	
62 Nitrobenzene	77	6.820	6.820	0.000	83	52295	0.5000	0.4874	
64 Isophorone	82	7.022	7.022	0.000	97	87401	0.5000	0.4933	
66 2-Nitrophenol	139	7.099	7.099	0.000	62	12077	0.5000	0.4209	
65 2,4-Dimethylphenol	107	7.108	7.109	-0.001	93	37215	0.5000	0.4601	
71 Benzoic acid	122	7.128	7.143	-0.015	77	15770	1.00	1.25	
70 Bis(2-chloroethoxy)methane	93	7.185	7.186	-0.001	98	41899	0.5000	0.4778	
73 2,4-Dichlorophenol	162	7.305	7.306	-0.001	86	19379	0.5000	0.4136	
74 1,2,4-Trichlorobenzene	180	7.387	7.388	-0.001	89	27952	0.5000	0.5244	
75 Naphthalene	128	7.464	7.465	-0.001	96	74296	0.5000	0.4622	
76 4-Chloroaniline	127	7.483	7.484	-0.001	84	32578	0.5000	0.4708	
77 2,6-Dichlorophenol	162	7.498	7.503	-0.005	86	27304	0.5000	0.5633	
79 Hexachlorobutadiene	225	7.565	7.566	-0.001	92	19892	0.5000	0.5168	
84 Caprolactam	113	7.743	7.753	-0.010	84	18004	1.00	1.02	
86 4-Chloro-3-methylphenol	107	7.873	7.874	-0.001	88	27844	0.5000	0.4247	
87 2-Methylnaphthalene	142	8.056	8.052	0.004	86	51438	0.5000	0.4832	
88 1-Methylnaphthalene	142	8.142	8.143	-0.001	86	40024	0.5000	0.4439	
89 Hexachlorocyclopentadiene	237	8.195	8.196	-0.001	91	16344	0.5000	0.4145	
91 1,2,4,5-Tetrachlorobenzene	216	8.200	8.201	-0.001	88	25759	0.5000	0.4488	
92 2,4,6-Trichlorophenol	196	8.282	8.282	0.000	88	16159	0.5000	0.4386	
93 2,4,5-Trichlorophenol	196	8.315	8.316	-0.001	82	16751	0.5000	0.4387	
98 1,1'-Biphenyl	154	8.440	8.441	-0.001	98	61925	0.5000	0.4741	
100 2-Chloronaphthalene	162	8.474	8.475	-0.001	96	50609	0.5000	0.4729	
102 2-Nitroaniline	65	8.532	8.532	0.000	69	19763	0.5000	0.5882	
105 Dimethyl phthalate	163	8.666	8.667	-0.001	90	58657	0.5000	0.4726	
106 1,3-Dinitrobenzene	168	8.700	8.701	-0.001	76	5868	0.5000	0.5728	
107 2,6-Dinitrotoluene	165	8.724	8.725	-0.001	77	12409	0.5000	0.4751	
109 Acenaphthylene	152	8.835	8.835	0.000	97	74281	0.5000	0.4628	
110 3-Nitroaniline	138	8.878	8.879	-0.001	80	9955	0.5000	0.4040	
111 2,4-Dinitrophenol	184	8.964	8.965	-0.001	48	7369	1.00	1.19	
112 Acenaphthene	153	8.979	8.980	-0.001	95	50384	0.5000	0.4826	
113 4-Nitrophenol	109	8.989	8.989	-0.001	80	23927	1.00	1.15	
114 2,4-Dinitrotoluene	165	9.070	9.076	-0.006	79	15767	0.5000	0.4489	
116 Dibenzofuran	168	9.123	9.124	-0.001	92	69079	0.5000	0.4693	
119 2,3,4,6-Tetrachlorophenol	232	9.219	9.220	-0.001	77	13059	0.5000	0.4300	
121 Diethyl phthalate	149	9.263	9.263	0.000	93	60558	0.5000	0.4718	
247 Hexadecane	57	9.267	9.268	-0.001	94	38998	NC	NC	
123 4-Chlorophenyl phenyl ethe	204	9.392	9.393	-0.001	94	28982	0.5000	0.4845	
125 4-Nitroaniline	138	9.397	9.398	-0.001	68	8810	0.5000	0.8979	
126 Fluorene	166	9.416	9.417	-0.001	95	55386	0.5000	0.4462	
128 4,6-Dinitro-2-methylphenol	198	9.431	9.427	0.004	90	12765	1.00	1.20	
131 N-Nitrosodiphenylamine	169	9.484	9.485	-0.001	98	89354	1.00	0.9025	
133 Azobenzene	77	9.527	9.528	-0.001	97	92540	0.5000	0.4332	
132 1,2-Diphenylhydrazine	77	9.527	9.528	-0.001	96	92540	0.5000	0.4332	
139 4-Bromophenyl phenyl ether	248	9.811	9.812	-0.001	74	15715	0.5000	0.4403	
141 Hexachlorobenzene	284	9.902	9.903	-0.001	83	15317	0.5000	0.4478	
142 Atrazine	200	9.907	9.908	-0.001	87	33516	1.00	0.9152	
244 n-Octadecane	57	10.046	10.047	-0.001	89	35896	NC	NC	
143 Pentachlorophenol	266	10.056	10.052	0.004	77	14508	1.00	1.24	
148 Phenanthrene	178	10.244	10.244	0.000	96	83493	0.5000	0.4729	
149 Anthracene	178	10.287	10.288	-0.001	99	83045	0.5000	0.4603	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
151 Carbazole	167	10.402	10.403	-0.001	97	70319	0.5000	0.4357	
154 Di-n-butyl phthalate	149	10.643	10.643	0.000	99	89023	0.5000	0.4427	
159 Fluoranthene	202	11.263	11.264	-0.001	98	92465	0.5000	0.4571	
160 Benzidine	184	11.330	11.336	-0.006	98	52744	1.00	1.20	
161 Pyrene	202	11.465	11.466	-0.001	96	85180	0.5000	0.4653	
168 Butyl benzyl phthalate	149	11.927	11.927	0.000	89	36991	0.5000	0.4257	
173 Bis(2-ethylhexyl) phthalat	149	12.408	12.408	0.000	95	49910	0.5000	0.4282	
175 3,3'-Dichlorobenzidine	252	12.436	12.437	-0.001	76	37593	1.00	1.16	
177 Benzo[a]anthracene	228	12.499	12.504	-0.005	96	89488	0.5000	0.4703	
178 Chrysene	228	12.537	12.538	-0.001	95	82442	0.5000	0.4789	
180 Di-n-octyl phthalate	149	13.062	13.062	0.000	98	74191	0.5000	0.3941	
182 Benzo[b]fluoranthene	252	13.716	13.716	0.000	95	74026	0.5000	0.4807	
183 Benzo[k]fluoranthene	252	13.749	13.750	-0.001	96	75542	0.5000	0.4663	
184 Benzo[a]pyrene	252	14.182	14.183	-0.001	77	67395	0.5000	0.4475	
188 Indeno[1,2,3-cd]pyrene	276	16.158	16.159	-0.001	92	66905	0.5000	0.4527	M
189 Dibenz(a,h)anthracene	278	16.163	16.169	-0.006	55	53251	0.5000	0.4482	
190 Benzo[g,h,i]perylene	276	16.745	16.751	-0.006	93	57855	0.5000	0.4764	M
S 191 Methyl Phenols,Total	100				0			0.9492	
S 245 Total Cresols	100				0			0.9492	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L2 W_00005 Amount Added: 1.00 Units: mL

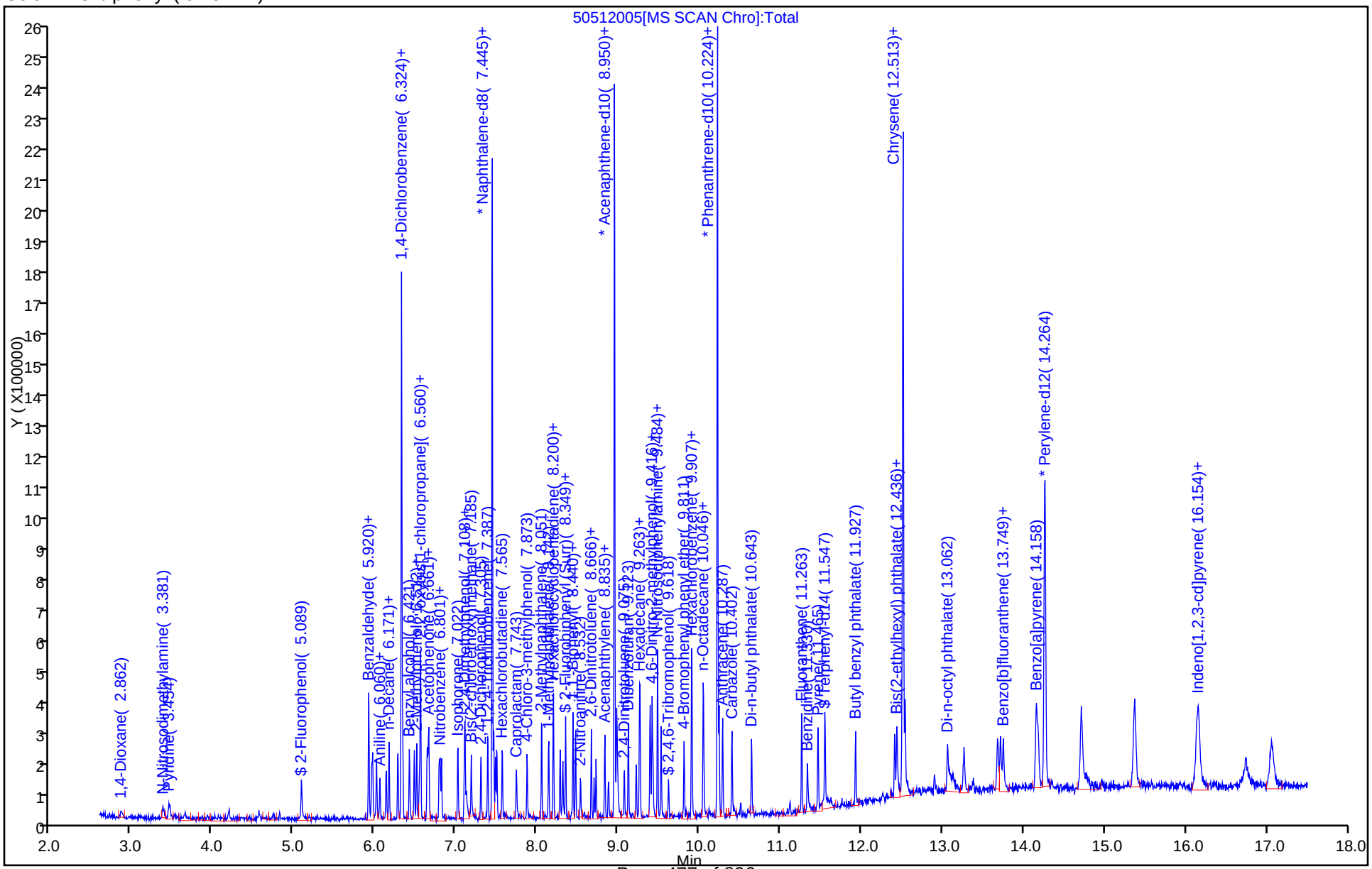
Report Date: 12-May-2015 15:32:08 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512005.D

Injection Date:	12-May-2015 08:53:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	std2 lst1			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

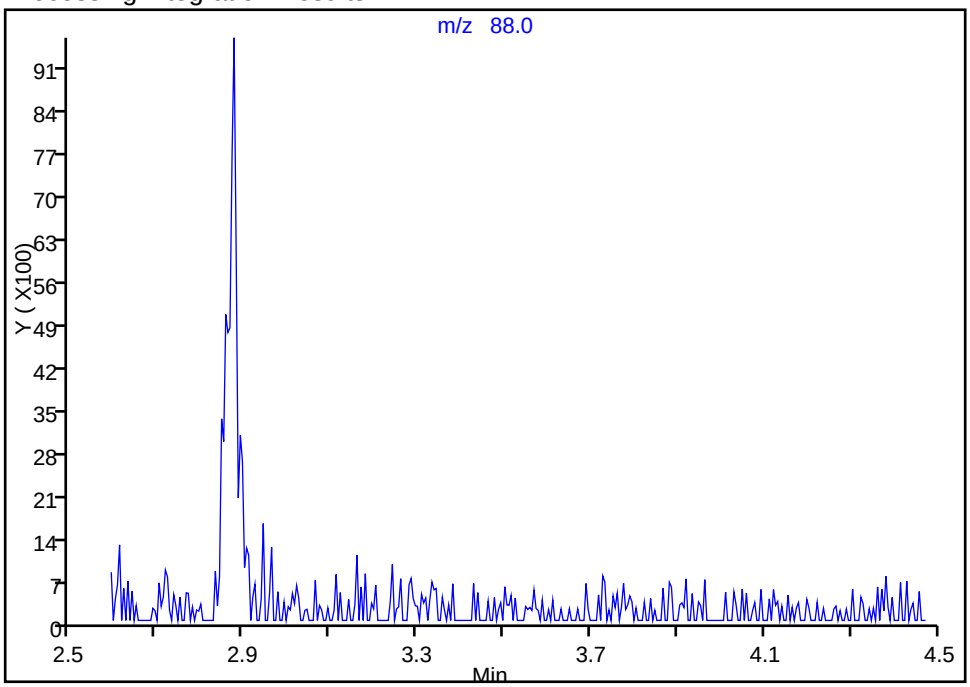
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512005.D
Injection Date: 12-May-2015 08:53:30 Instrument ID: A4HP9
Lims ID: std2 lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

25 1,4-Dioxane, CAS: 123-91-1

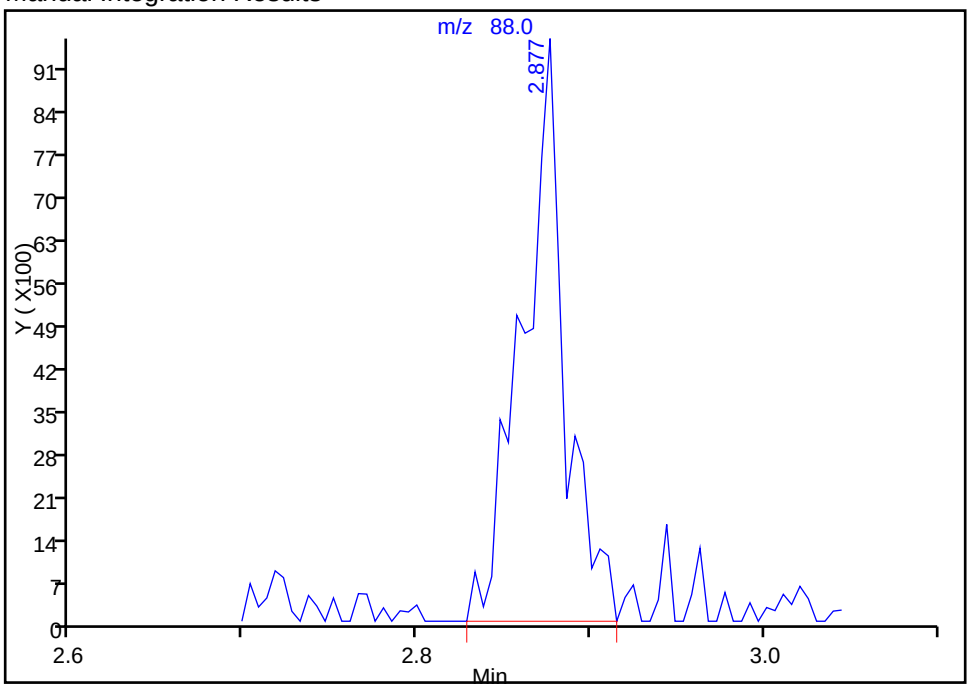
Not Detected
Expected RT: 2.87

Processing Integration Results



Manual Integration Results

RT: 2.88
Area: 16292
Amount: 0.494615
Amount Units: ng/ul



Reviewer: ulmanm, 12-May-2015 09:21:48
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Manual Integration/User Assign Peak Report

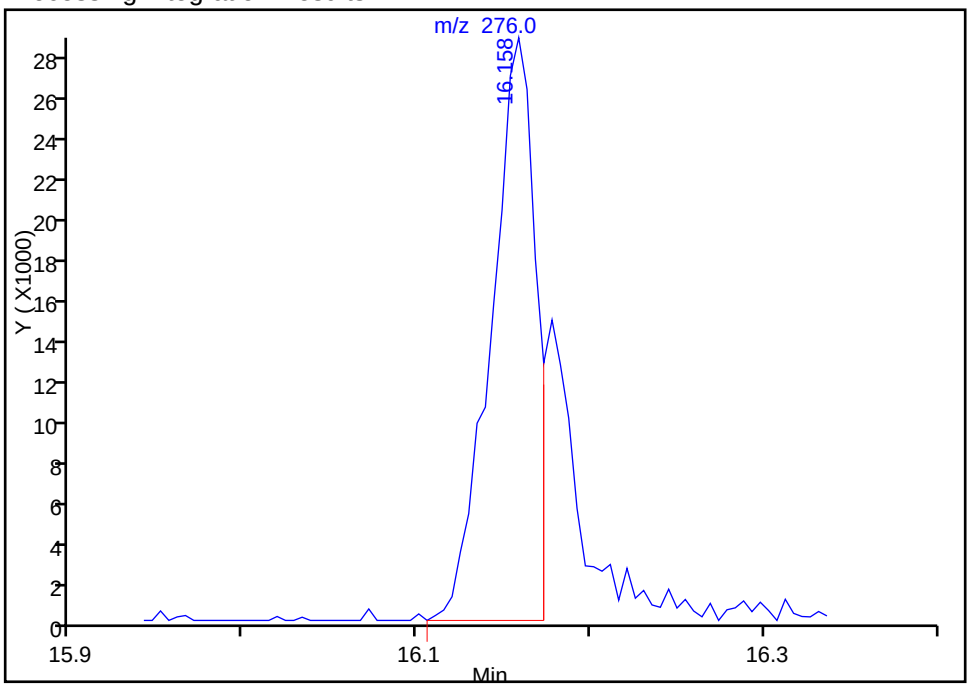
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512005.D
Injection Date: 12-May-2015 08:53:30 Instrument ID: A4HP9
Lims ID: std2 lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

188 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

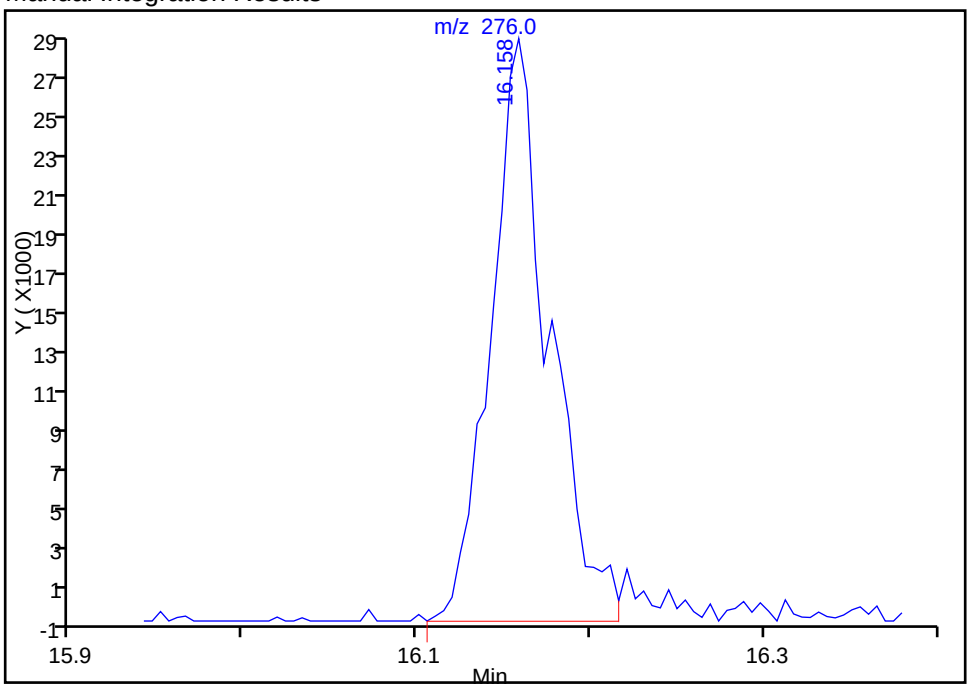
Processing Integration Results

RT: 16.16
Area: 51231
Amount: 0.373112
Amount Units: ng/ul



Manual Integration Results

RT: 16.16
Area: 66905
Amount: 0.452740
Amount Units: ng/ul



Reviewer: ulmanm, 12-May-2015 09:21:48
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

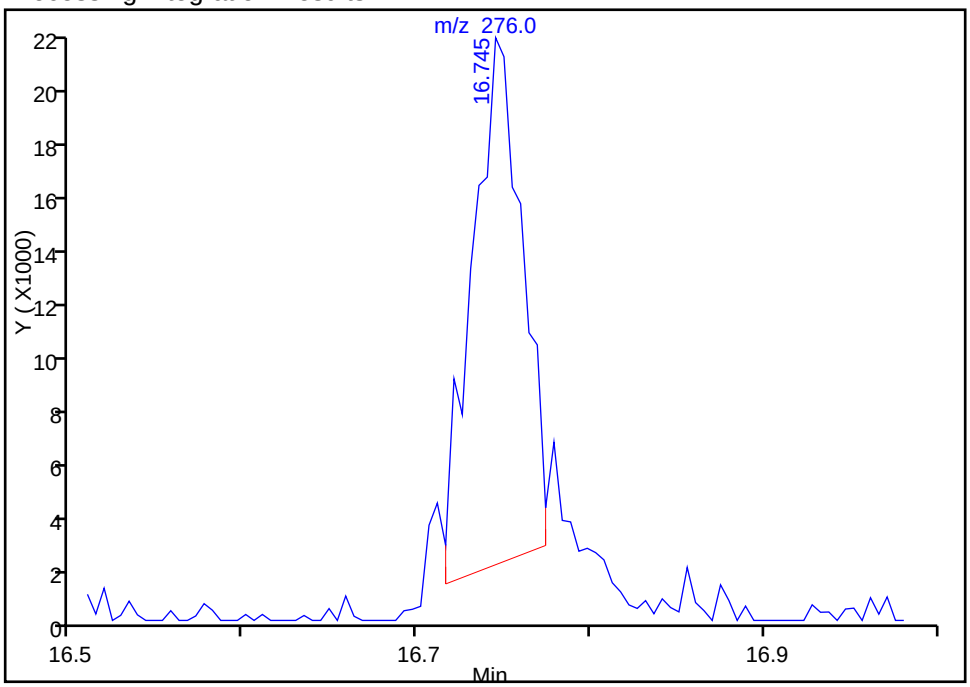
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512005.D
Injection Date: 12-May-2015 08:53:30 Instrument ID: A4HP9
Lims ID: std2 lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

190 Benzo[g,h,i]perylene, CAS: 191-24-2

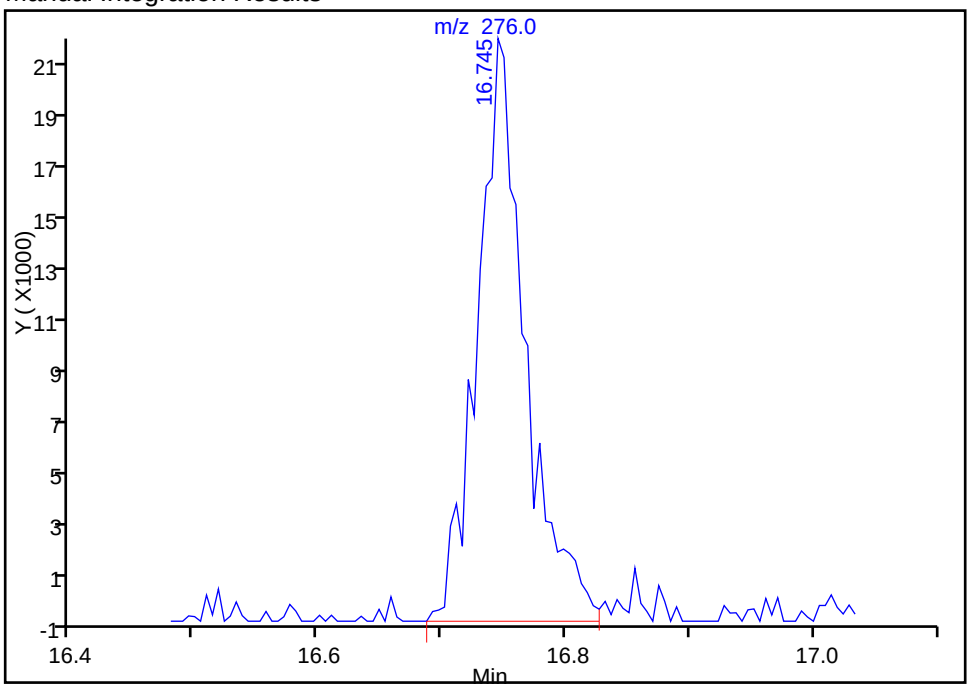
Processing Integration Results

RT: 16.75
Area: 39547
Amount: 0.354994
Amount Units: ng/ul



Manual Integration Results

RT: 16.75
Area: 57855
Amount: 0.476401
Amount Units: ng/ul



Reviewer: ulmanm, 12-May-2015 09:21:48
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512006.D
Lims ID: std1 lst1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 12-May-2015 09:19:30 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043530-006
Misc. Info.: STD1 LST1STD1 LST1
Operator ID: 001574 Instrument ID: A4HP9
Sublist: chrom-8270 _9*sub34

Method: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 12-May-2015 15:32:10 Calib Date: 12-May-2015 10:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: ulmanm Date: 12-May-2015 09:47:46

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.324	6.325	-0.001	92	164699	4.00	4.00	
* 2 Naphthalene-d8	136	7.445	7.446	-0.001	98	634516	4.00	4.00	
* 3 Acenaphthene-d10	164	8.950	8.951	-0.001	94	358211	4.00	4.00	
* 4 Phenanthrene-d10	188	10.224	10.225	-0.001	98	623491	4.00	4.00	
* 5 Chrysene-d12	240	12.513	12.514	-0.001	96	639925	4.00	4.00	
* 6 Perylene-d12	264	14.264	14.265	0.000	98	496318	4.00	4.00	
$ 9 Nitrobenzene-d5	82	6.800	6.801	-0.001	82	9671	0.1000	0.0848	
$ 10 2-Fluorobiphenyl (Surr)	172	8.349	8.350	-0.001	97	12907	0.1000	0.1068	
$ 12 Terphenyl-d14	244	11.547	11.548	-0.001	96	14690	0.1000	0.1139	
75 Naphthalene	128	7.464	7.465	-0.001	91	15079	0.1000	0.0903	
87 2-Methylnaphthalene	142	8.051	8.052	-0.001	76	9428	0.1000	0.0852	
88 1-Methylnaphthalene	142	8.142	8.143	-0.001	83	8008	0.1000	0.0855	
98 1,1'-Biphenyl	154	8.440	8.441	-0.001	92	12468	0.1000	0.0966	
100 2-Chloronaphthalene	162	8.474	8.475	-0.001	94	11728	0.1000	0.1108	
109 Acenaphthylene	152	8.830	8.835	-0.005	95	16100	0.1000	0.1015	
112 Acenaphthene	153	8.979	8.980	-0.001	89	10193	0.1000	0.0988	
116 Dibenzofuran	168	9.123	9.124	-0.001	92	16266	0.1000	0.1118	
126 Fluorene	166	9.416	9.417	-0.001	96	14936	0.1000	0.1217	
141 Hexachlorobenzene	284	9.902	9.903	-0.001	70	3176	0.1000	0.0970	
148 Phenanthrene	178	10.243	10.244	-0.001	93	16659	0.1000	0.0985	
149 Anthracene	178	10.287	10.288	-0.001	96	17048	0.1000	0.0987	
159 Fluoranthene	202	11.263	11.264	-0.001	96	19291	0.1000	0.0996	
161 Pyrene	202	11.465	11.466	-0.001	93	16178	0.1000	0.0903	
177 Benzo[a]anthracene	228	12.504	12.504	0.000	51	21290	0.1000	0.1144	
178 Chrysene	228	12.537	12.538	-0.001	93	15620	0.1000	0.0927	
182 Benzo[b]fluoranthene	252	13.715	13.716	-0.001	67	14783	0.1000	0.0944	M
183 Benzo[k]fluoranthene	252	13.749	13.750	-0.001	10	16957	0.1000	0.1029	M
184 Benzo[a]pyrene	252	14.177	14.183	-0.006	35	16585	0.1000	0.1083	M
188 Indeno[1,2,3-cd]pyrene	276	16.158	16.159	-0.001	0	11562	0.1000	0.0769	M
189 Dibenz(a,h)anthracene	278	16.168	16.169	-0.001	0	9628	0.1000	0.0797	M

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
190 Benzo[g,h,i]perylene	276	16.755	16.751	0.004	0	12377	0.1000	0.1002	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L1 W_00005 Amount Added: 1.00 Units: mL

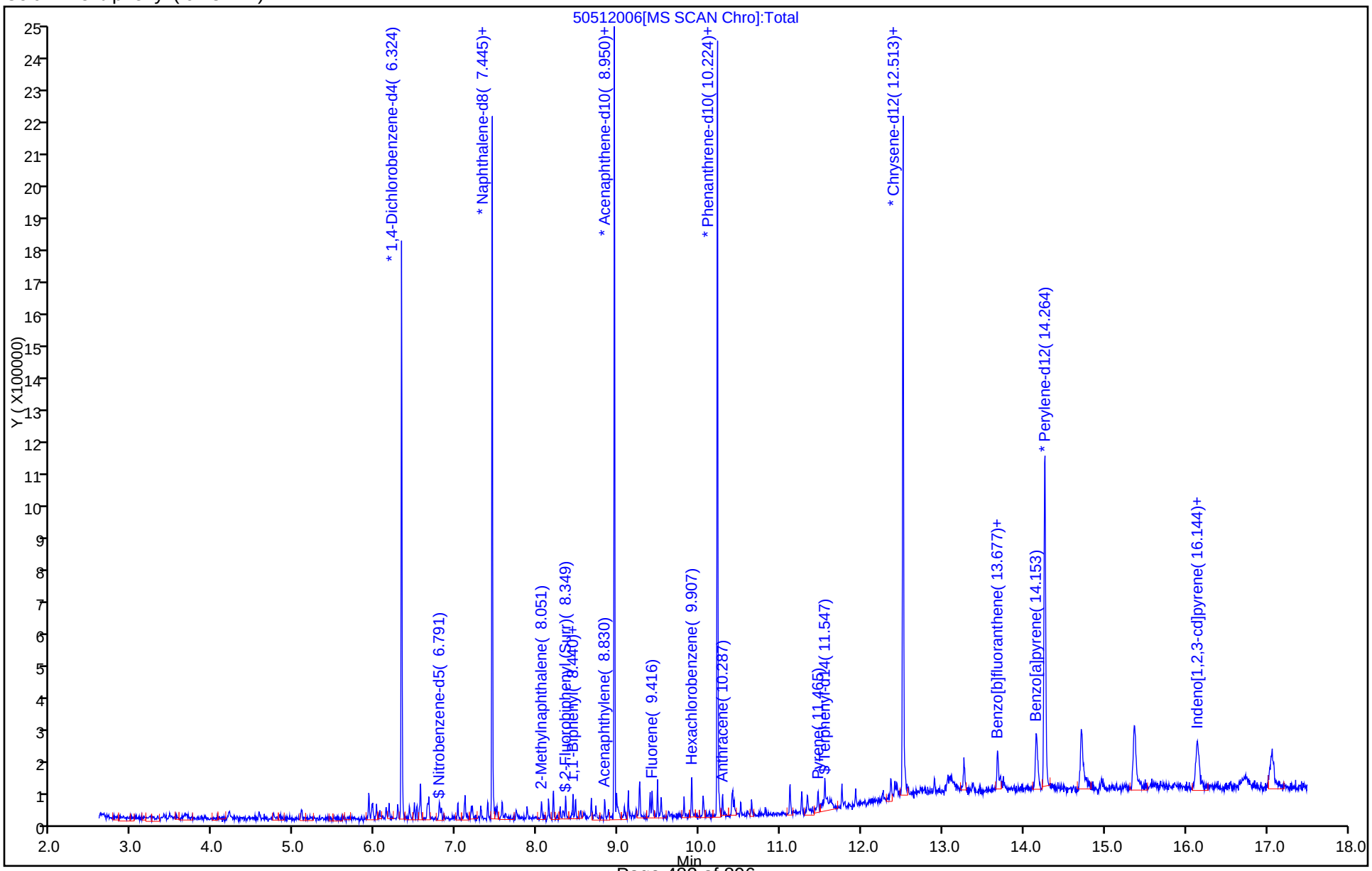
Report Date: 12-May-2015 15:32:10 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512006.D

Injection Date:	12-May-2015 09:19:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	std1 lst1			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



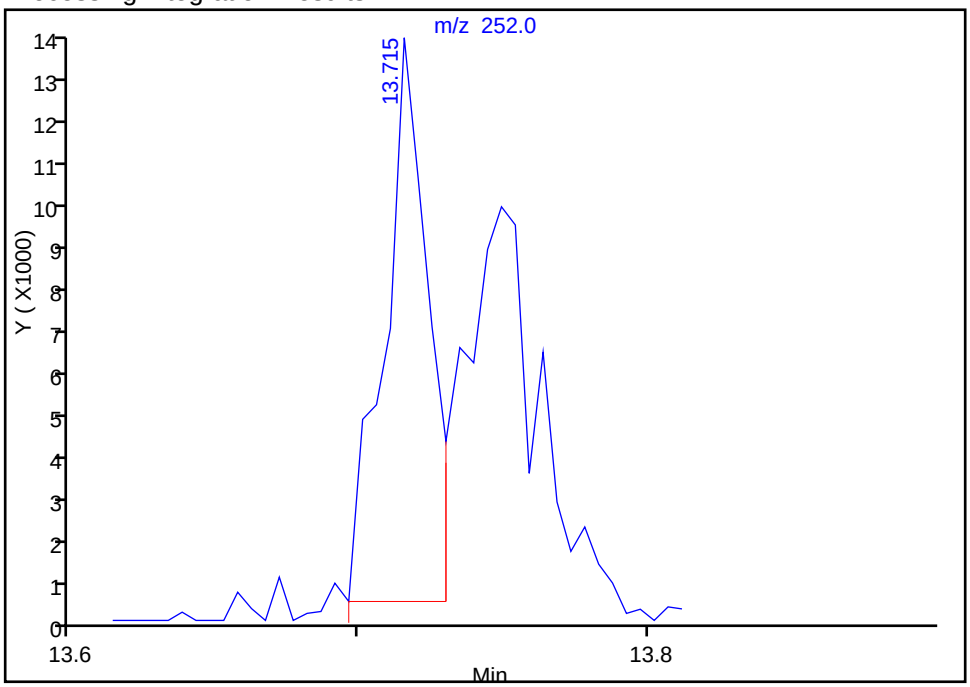
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512006.D
Injection Date: 12-May-2015 09:19:30 Instrument ID: A4HP9
Lims ID: std1 lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

182 Benzo[b]fluoranthene, CAS: 205-99-2

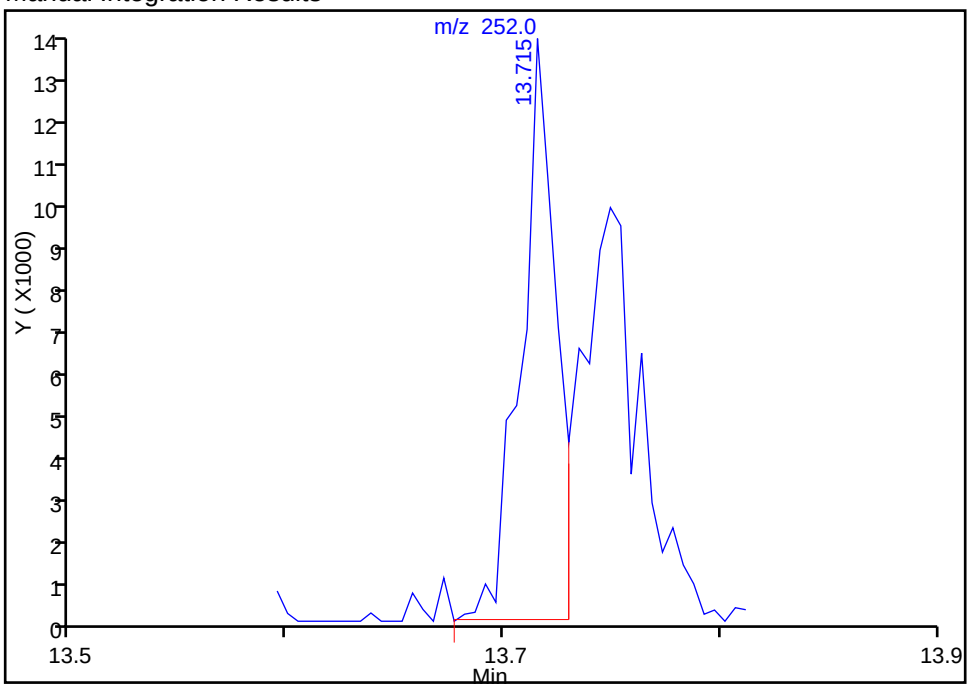
Processing Integration Results

RT: 13.72
Area: 13575
Amount: 0.091614
Amount Units: ng/ul



Manual Integration Results

RT: 13.72
Area: 14783
Amount: 0.094402
Amount Units: ng/ul



Reviewer: ulmanm, 12-May-2015 09:47:46
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Manual Integration/User Assign Peak Report

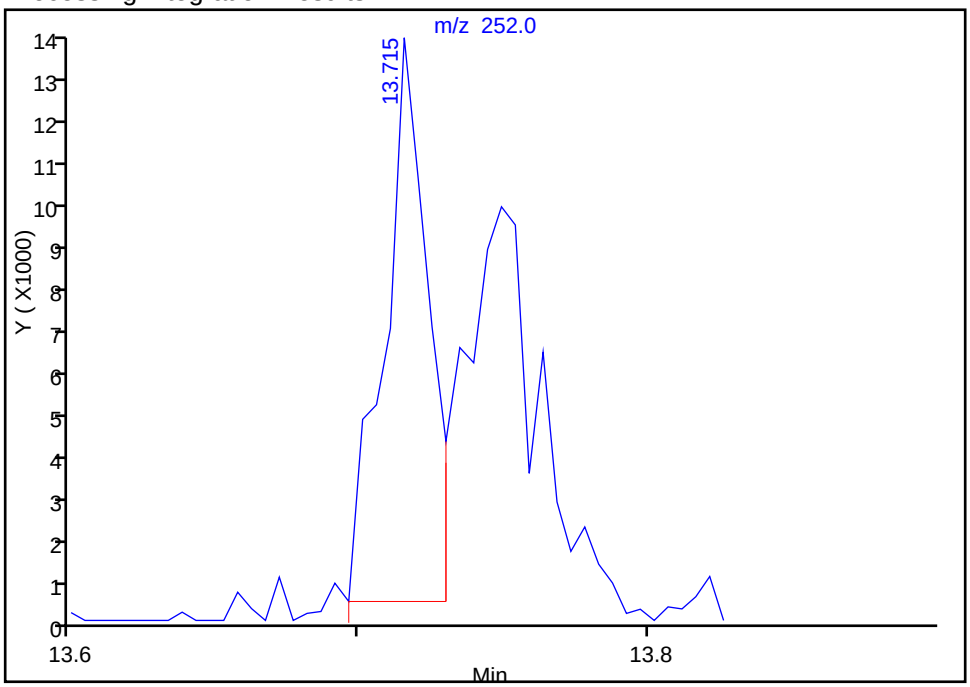
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512006.D				
Injection Date:	12-May-2015 09:19:30	Instrument ID:	A4HP9		
Lims ID:	std1 lst1				
Client ID:					
Operator ID:	001574	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

183 Benzo[k]fluoranthene, CAS: 207-08-9

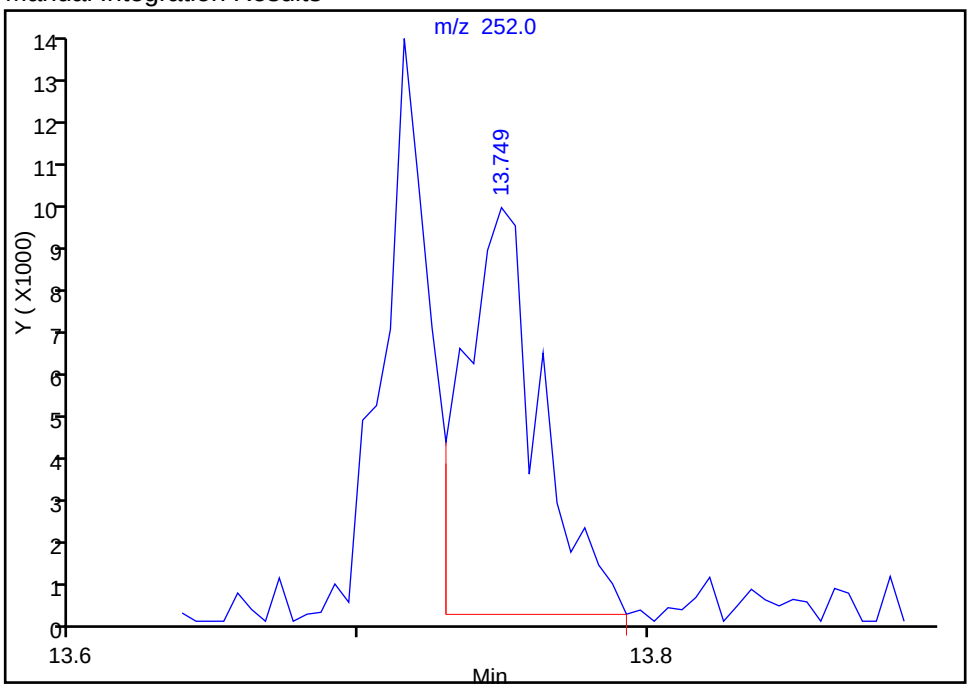
Processing Integration Results

RT: 13.72
Area: 13575
Amount: 0.088407
Amount Units: ng/ul



Manual Integration Results

RT: 13.75
Area: 16957
Amount: 0.102943
Amount Units: ng/ul



Reviewer: ulmanm, 12-May-2015 09:47:46
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Manual Integration/User Assign Peak Report

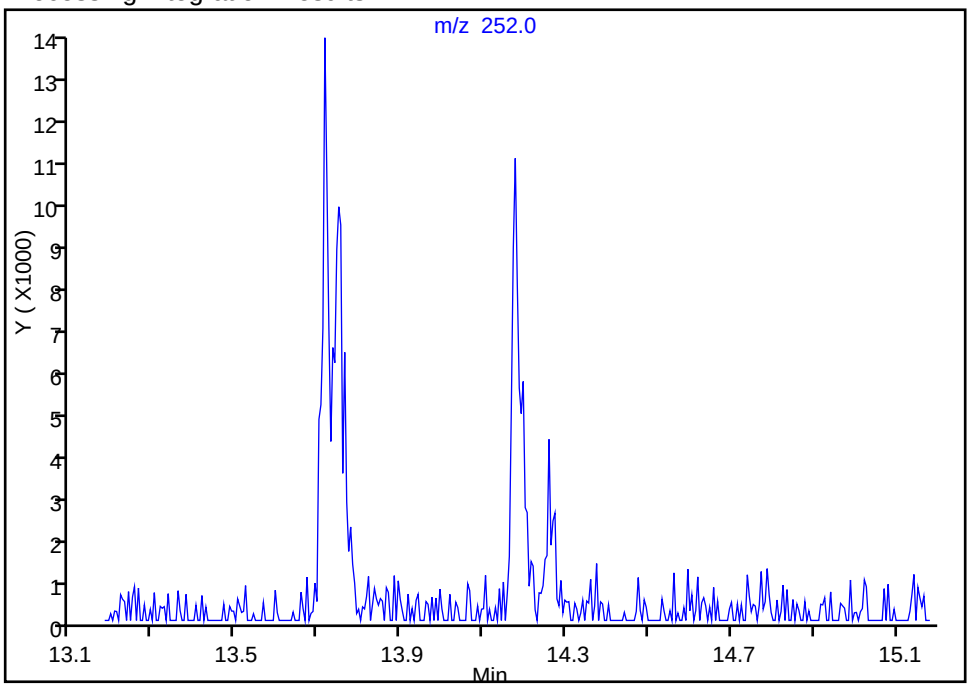
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512006.D				
Injection Date:	12-May-2015 09:19:30	Instrument ID:	A4HP9		
Lims ID:	std1 lst1				
Client ID:					
Operator ID:	001574	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

184 Benzo[a]pyrene, CAS: 50-32-8

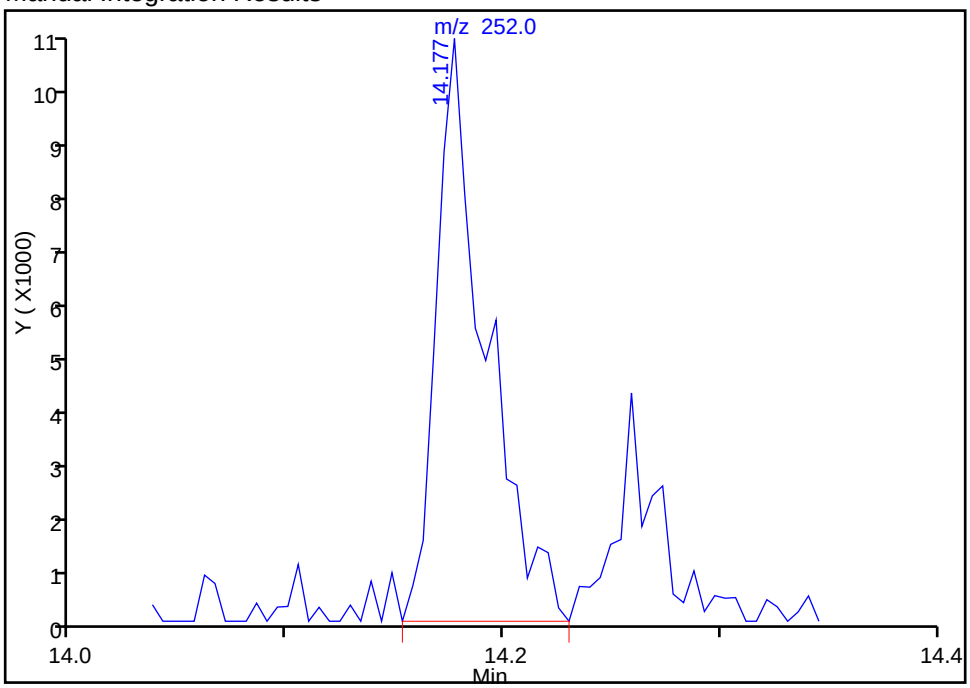
Not Detected
Expected RT: 14.18

Processing Integration Results



Manual Integration Results

RT: 14.18
Area: 16585
Amount: 0.108290
Amount Units: ng/ul



Reviewer: ulmanm, 12-May-2015 09:47:46
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

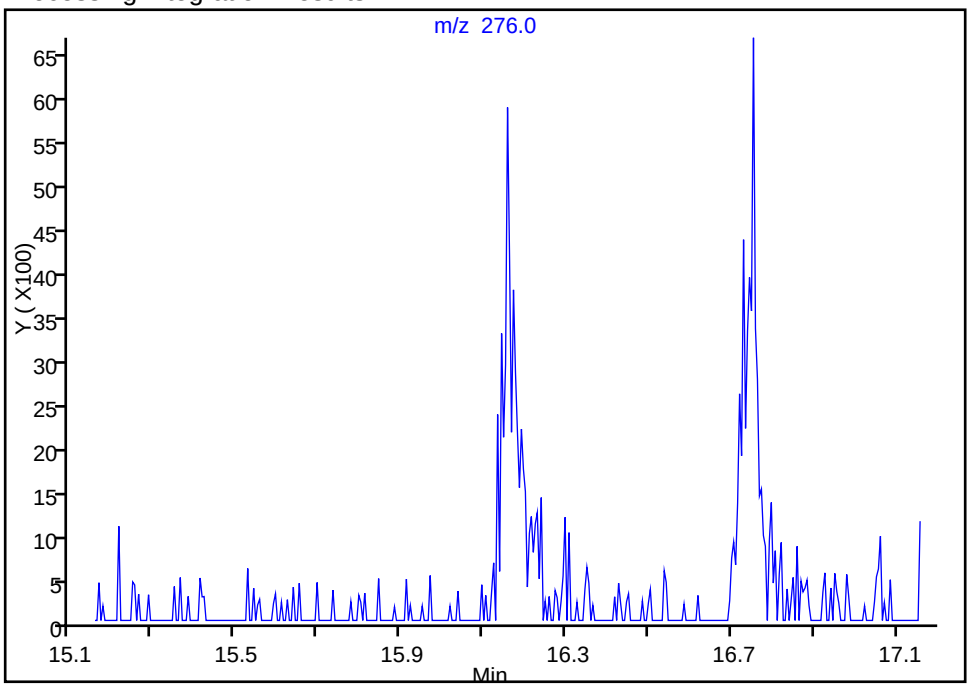
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512006.D
Injection Date: 12-May-2015 09:19:30 Instrument ID: A4HP9
Lims ID: std1 lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

188 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

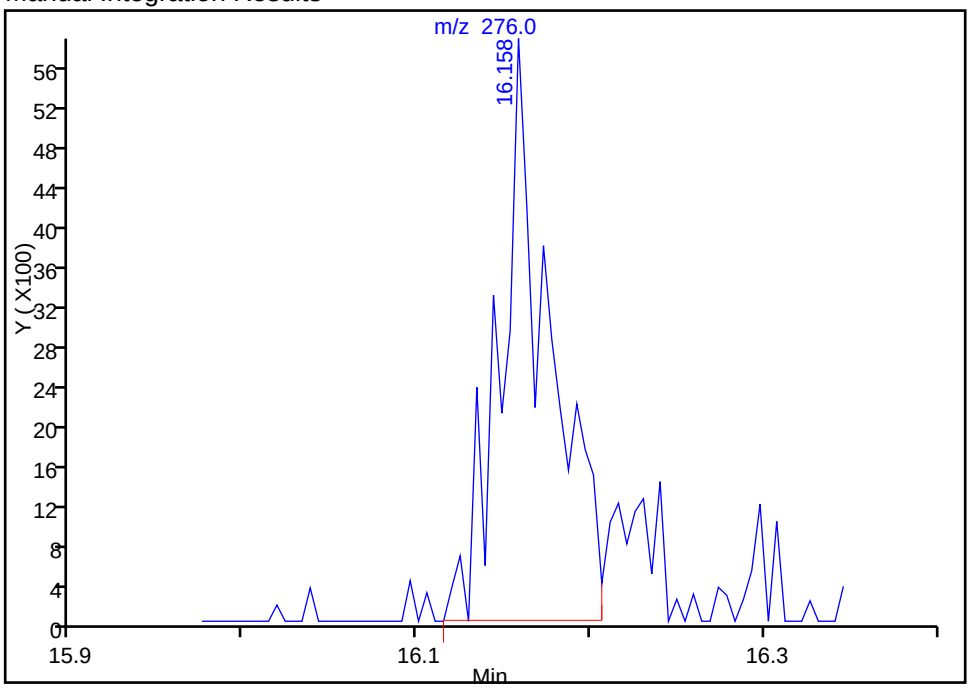
Not Detected
Expected RT: 16.16

Processing Integration Results



Manual Integration Results

RT: 16.16
Area: 11562
Amount: 0.076943
Amount Units: ng/ul



Reviewer: ulmanm, 12-May-2015 09:47:46
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

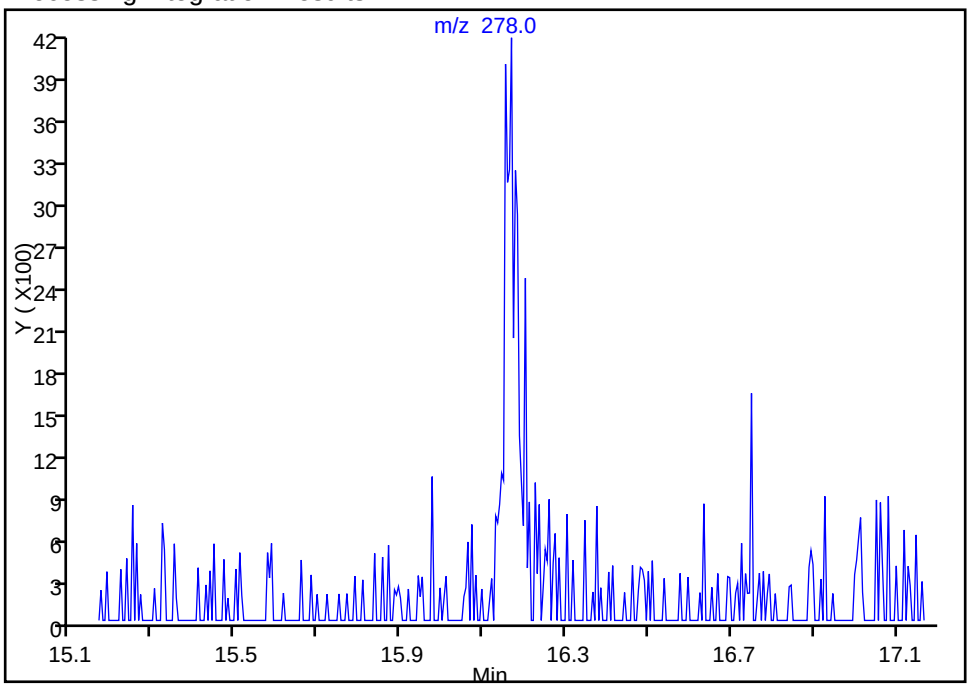
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512006.D
Injection Date: 12-May-2015 09:19:30 Instrument ID: A4HP9
Lims ID: std1 lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

189 Dibenz(a,h)anthracene, CAS: 53-70-3

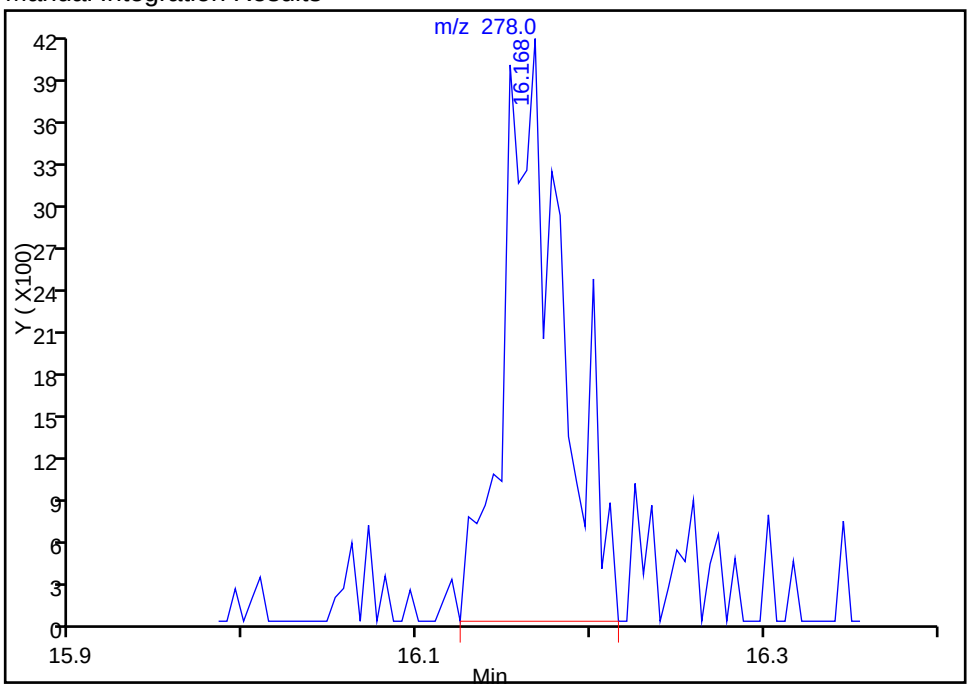
Not Detected
Expected RT: 16.17

Processing Integration Results



Manual Integration Results

RT: 16.17
Area: 9628
Amount: 0.079698
Amount Units: ng/ul



Reviewer: ulmanm, 12-May-2015 09:47:46
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Manual Integration/User Assign Peak Report

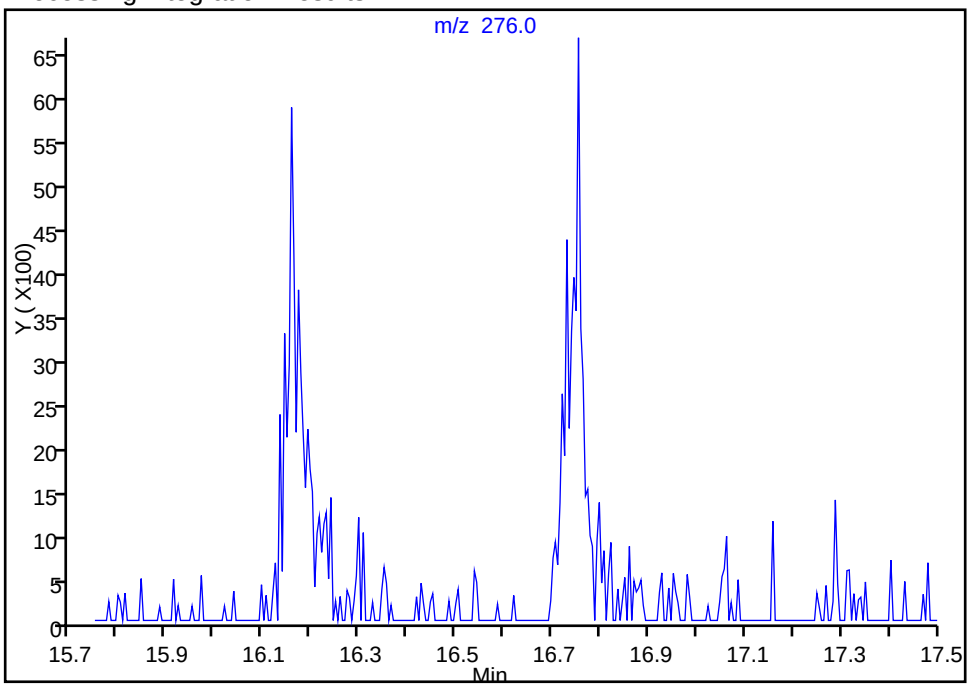
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512006.D				
Injection Date:	12-May-2015 09:19:30	Instrument ID:	A4HP9		
Lims ID:	std1 lst1				
Client ID:					
Operator ID:	001574	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

190 Benzo[g,h,i]perylene, CAS: 191-24-2

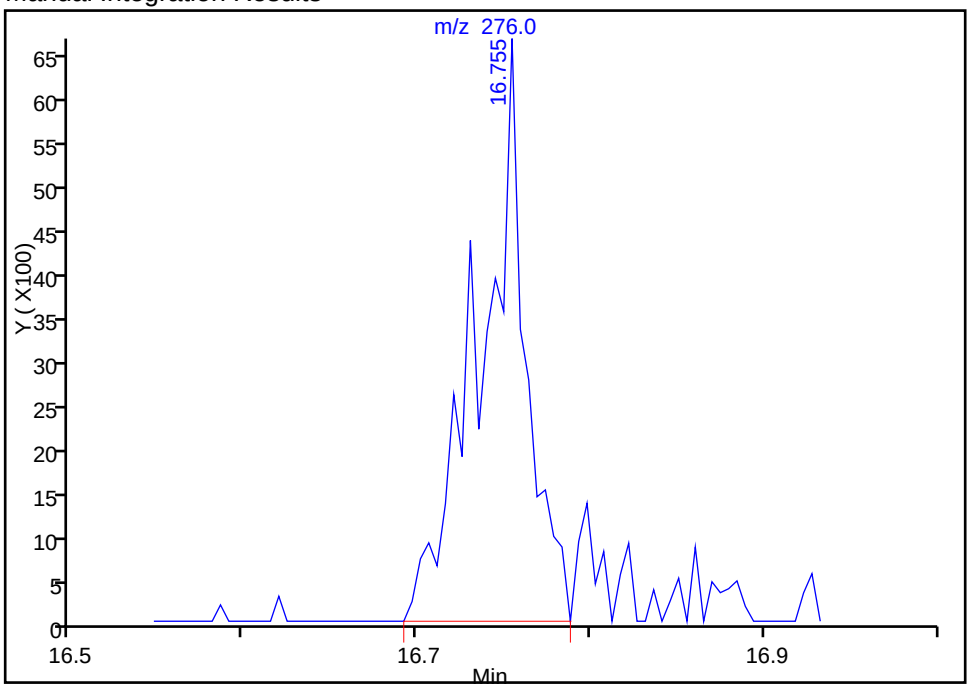
Not Detected
Expected RT: 16.75

Processing Integration Results



Manual Integration Results

RT: 16.75
Area: 12377
Amount: 0.100229
Amount Units: ng/ul



Reviewer: ulmanm, 12-May-2015 09:47:46
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512007.D
Lims ID: std9 lst1
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 12-May-2015 09:44:30 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043530-007
Misc. Info.: STD9 LST1STD9 LST1
Operator ID: 001574 Instrument ID: A4HP9
Sublist: chrom-8270 _9*sub34

Method: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 12-May-2015 15:32:14 Calib Date: 12-May-2015 10:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: ulmanm Date: 12-May-2015 10:34:51

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.327	6.325	0.002	92	156739	4.00	4.00	
* 2 Naphthalene-d8	136	7.443	7.446	-0.003	97	591662	4.00	4.00	
* 3 Acenaphthene-d10	164	8.953	8.951	0.002	95	347784	4.00	4.00	
* 4 Phenanthrene-d10	188	10.223	10.225	-0.002	98	559310	4.00	4.00	
* 5 Chrysene-d12	240	12.516	12.514	0.002	97	655005	4.00	4.00	
* 6 Perylene-d12	264	14.267	14.265	0.003	98	502965	4.00	4.00	
$ 7 2-Fluorophenol	112	5.092	5.089	0.003	93	1423271	25.0	26.0	
$ 8 Phenol-d5	99	5.962	5.960	0.002	91	2029953	25.0	26.0	
$ 9 Nitrobenzene-d5	82	6.804	6.801	0.003	86	2788121	25.0	26.2	
$ 10 2-Fluorobiphenyl (Surr)	172	8.352	8.350	0.002	98	3022319	25.0	25.7	
$ 11 2,4,6-Tribromophenol	330	9.621	9.624	-0.003	76	307617	25.0	24.4	
$ 12 Terphenyl-d14	244	11.550	11.548	0.002	99	3385408	25.0	25.6	
25 1,4-Dioxane	88	2.884	2.872	0.012	90	793109	25.0	25.1	
26 N-Nitrosodimethylamine	74	3.394	3.387	0.007	91	1263890	25.0	25.8	
27 Pyridine	79	3.466	3.459	0.007	94	2034424	25.0	26.4	
41 Benzaldehyde	77	5.924	5.921	0.003	87	3400504	50.0	48.6	
43 Phenol	94	5.976	5.969	0.007	92	2268488	25.0	25.8	
44 Aniline	93	6.020	6.017	0.003	94	2842321	25.0	25.5	
69 Bis(2-chloroethyl)ether	93	6.063	6.061	0.002	97	1786860	25.0	25.3	
46 2-Chlorophenol	128	6.140	6.138	0.002	88	1413157	25.0	26.5	
243 n-Decane	57	6.174	6.171	0.003	96	1647814	NC	NC	
47 1,3-Dichlorobenzene	146	6.279	6.282	-0.003	86	1556158	25.0	25.4	
48 1,4-Dichlorobenzene	146	6.342	6.340	0.002	82	1604775	25.0	25.9	
49 Benzyl alcohol	108	6.428	6.421	0.007	84	1099508	25.0	26.2	
50 1,2-Dichlorobenzene	146	6.481	6.484	-0.003	85	1483319	25.0	25.2	
51 2-Methylphenol	108	6.515	6.513	0.002	91	1555246	25.0	26.6	
53 2,2'-oxybis[1-chloropropan	45	6.549	6.546	0.003	91	1438550	25.0	25.3	
52 Indene	115	6.563	6.561	0.002	88	6004477	50.0	53.4	
21 3 & 4 Methylphenol	108	6.645	6.643	0.002	95	1632824	25.0	26.0	
57 N-Nitrosodi-n-propylamine	70	6.659	6.652	0.007	96	1711416	25.0	26.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
58 Acetophenone	105	6.664	6.662	0.002	88	2525919	25.0	25.5	
61 Hexachloroethane	117	6.789	6.792	-0.003	92	822300	25.0	25.3	
62 Nitrobenzene	77	6.823	6.820	0.003	84	2569356	25.0	24.7	
64 Isophorone	82	7.025	7.022	0.003	98	4208640	25.0	24.5	
66 2-Nitrophenol	139	7.102	7.099	0.003	79	728284	25.0	26.2	
65 2,4-Dimethylphenol	107	7.111	7.109	0.002	94	2009902	25.0	25.6	
71 Benzoic acid	122	7.188	7.143	0.045	84	1708971	50.0	50.6	
70 Bis(2-chloroethoxy)methane	93	7.188	7.186	0.002	98	2110006	25.0	24.8	
73 2,4-Dichlorophenol	162	7.308	7.306	0.002	91	1199823	25.0	26.4	
74 1,2,4-Trichlorobenzene	180	7.390	7.388	0.002	88	1285208	25.0	24.9	
75 Naphthalene	128	7.462	7.465	-0.003	98	4027201	25.0	25.9	
76 4-Chloroaniline	127	7.486	7.484	0.002	88	1725597	25.0	25.7	
77 2,6-Dichlorophenol	162	7.501	7.503	-0.002	87	1144765	25.0	24.4	
79 Hexachlorobutadiene	225	7.568	7.566	0.002	95	929312	25.0	24.9	
84 Caprolactam	113	7.785	7.753	0.031	82	843365	50.0	49.4	M
86 4-Chloro-3-methylphenol	107	7.881	7.874	0.007	86	1663200	25.0	26.2	
87 2-Methylnaphthalene	142	8.054	8.052	0.002	88	2661586	25.0	25.8	
88 1-Methylnaphthalene	142	8.140	8.143	-0.003	89	2285432	25.0	26.2	
89 Hexachlorocyclopentadiene	237	8.198	8.196	0.002	96	1057438	25.0	27.9	
91 1,2,4,5-Tetrachlorobenzene	216	8.203	8.201	0.002	95	1467413	25.0	26.6	
92 2,4,6-Trichlorophenol	196	8.285	8.282	0.003	91	933173	25.0	26.4	
93 2,4,5-Trichlorophenol	196	8.318	8.316	0.002	87	962074	25.0	26.3	
98 1,1'-Biphenyl	154	8.443	8.441	0.002	98	3300245	25.0	26.3	
100 2-Chloronaphthalene	162	8.477	8.475	0.002	98	2572360	25.0	25.0	
102 2-Nitroaniline	65	8.535	8.532	0.003	70	1359749	25.0	24.8	
105 Dimethyl phthalate	163	8.674	8.667	0.007	93	2987151	25.0	25.1	
106 1,3-Dinitrobenzene	168	8.708	8.701	0.007	79	457667	25.0	24.5	
107 2,6-Dinitrotoluene	165	8.732	8.725	0.007	76	659272	25.0	26.3	
109 Acenaphthylene	152	8.838	8.835	0.003	98	4046555	25.0	26.3	
110 3-Nitroaniline	138	8.881	8.879	0.002	82	630402	25.0	26.7	
111 2,4-Dinitrophenol	184	8.967	8.965	0.002	95	970911	50.0	50.8	
112 Acenaphthene	153	8.982	8.980	0.002	97	2617265	25.0	26.1	
113 4-Nitrophenol	109	8.996	8.989	0.007	86	1759188	50.0	50.3	
114 2,4-Dinitrotoluene	165	9.078	9.076	0.002	79	885247	25.0	26.3	
116 Dibenzofuran	168	9.126	9.124	0.002	93	3578506	25.0	25.3	
119 2,3,4,6-Tetrachlorophenol	232	9.222	9.220	0.002	80	747941	25.0	25.7	
121 Diethyl phthalate	149	9.266	9.263	0.003	95	3098598	25.0	25.2	
247 Hexadecane	57	9.270	9.268	0.002	91	2063509	NC	NC	
123 4-Chlorophenyl phenyl ethe	204	9.395	9.393	0.002	94	1474281	25.0	25.7	
125 4-Nitroaniline	138	9.405	9.398	0.007	71	713184	25.0	24.9	
126 Fluorene	166	9.420	9.417	0.003	99	3047227	25.0	25.6	
128 4,6-Dinitro-2-methylphenol	198	9.434	9.427	0.007	93	1197353	50.0	51.3	
131 N-Nitrosodiphenylamine	169	9.487	9.485	0.002	99	4460525	50.0	52.4	
133 Azobenzene	77	9.530	9.528	0.002	96	4849465	25.0	26.4	
132 1,2-Diphenylhydrazine	77	9.530	9.528	0.002	97	4848424	25.0	26.4	
139 4-Bromophenyl phenyl ether	248	9.814	9.812	0.002	75	770417	25.0	25.1	
141 Hexachlorobenzene	284	9.905	9.903	0.002	85	754725	25.0	25.7	
142 Atrazine	200	9.915	9.908	0.007	90	1634016	50.0	51.9	
244 n-Octadecane	57	10.049	10.047	0.002	93	1954105	NC	NC	
143 Pentachlorophenol	266	10.054	10.052	0.002	88	1252558	50.0	51.7	
148 Phenanthrene	178	10.247	10.244	0.003	99	3986378	25.0	26.3	
149 Anthracene	178	10.290	10.288	0.002	99	4088050	25.0	26.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
151 Carbazole	167	10.405	10.403	0.002	98	3853051	25.0	27.8	
154 Di-n-butyl phthalate	149	10.646	10.643	0.003	99	4674588	25.0	27.1	
159 Fluoranthene	202	11.266	11.264	0.002	98	4751752	25.0	27.3	
160 Benzidine	184	11.338	11.336	0.002	99	5109796	50.0	48.7	
161 Pyrene	202	11.468	11.466	0.002	96	5000824	25.0	27.3	
168 Butyl benzyl phthalate	149	11.930	11.927	0.003	91	2311780	25.0	26.6	
173 Bis(2-ethylhexyl) phthalat	149	12.411	12.408	0.003	97	3126326	25.0	26.8	
175 3,3'-Dichlorobenzidine	252	12.444	12.437	0.007	76	3287416	50.0	51.1	
177 Benzo[a]anthracene	228	12.507	12.504	0.003	98	4943855	25.0	25.9	
178 Chrysene	228	12.545	12.538	0.007	96	4496740	25.0	26.1	
180 Di-n-octyl phthalate	149	13.065	13.062	0.003	100	5201991	25.0	26.8	
182 Benzo[b]fluoranthene	252	13.723	13.716	0.007	95	4223306	25.0	26.6	
183 Benzo[k]fluoranthene	252	13.762	13.750	0.012	98	4261084	25.0	25.5	
184 Benzo[a]pyrene	252	14.190	14.183	0.007	77	3976980	25.0	25.6	
188 Indeno[1,2,3-cd]pyrene	276	16.185	16.159	0.026	98	4128307	25.0	27.1	
189 Dibenz(a,h)anthracene	278	16.190	16.169	0.021	87	3368495	25.0	27.5	
190 Benzo[g,h,i]perylene	276	16.772	16.751	0.021	97	3170388	25.0	25.3	
S 191 Methyl Phenols,Total	100				0			52.6	
S 245 Total Cresols	100				0			52.6	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L9 W_00005 Amount Added: 1.00 Units: mL

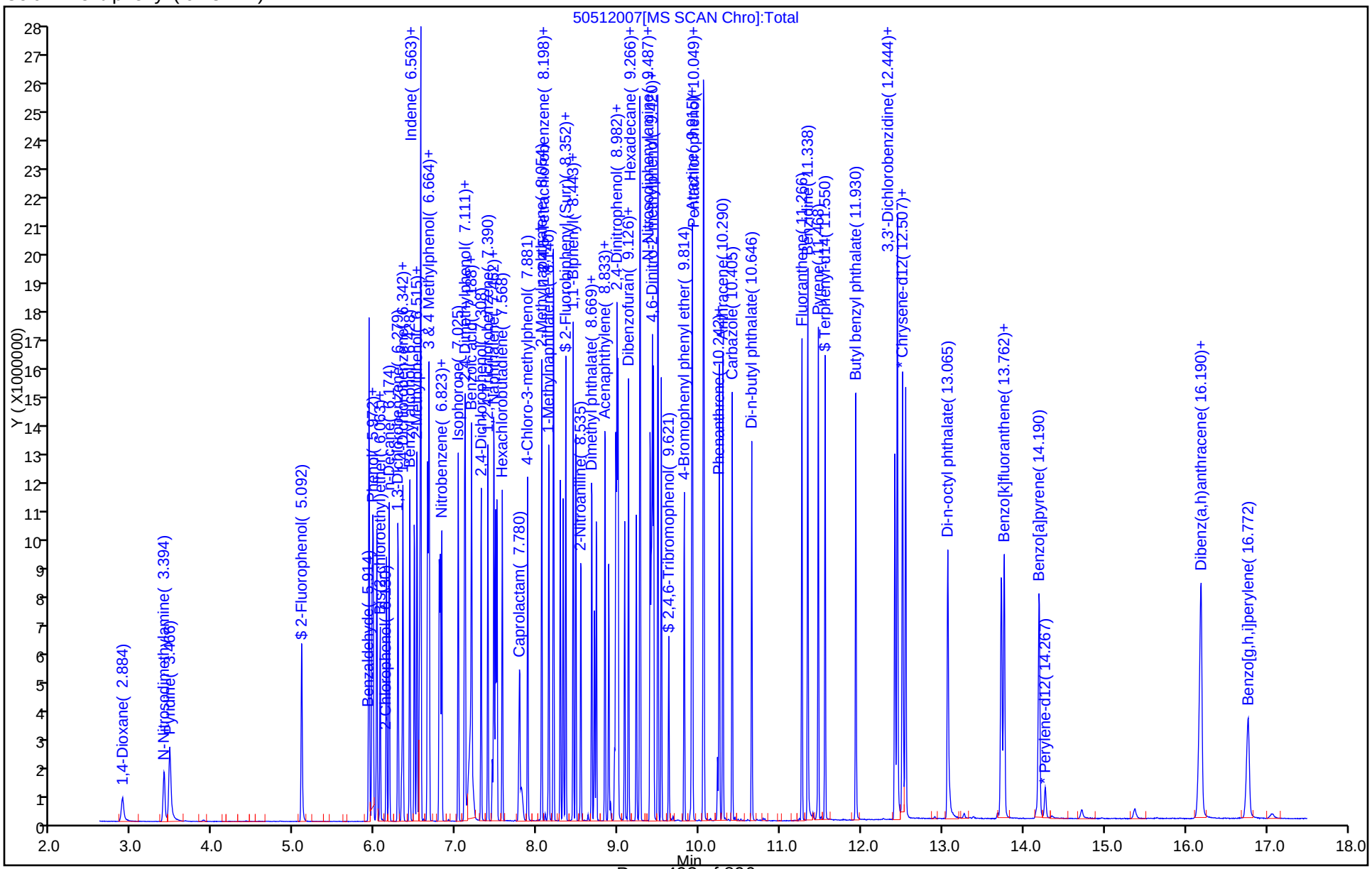
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TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512007.D

Injection Date:	12-May-2015 09:44:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	std9 lst1			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

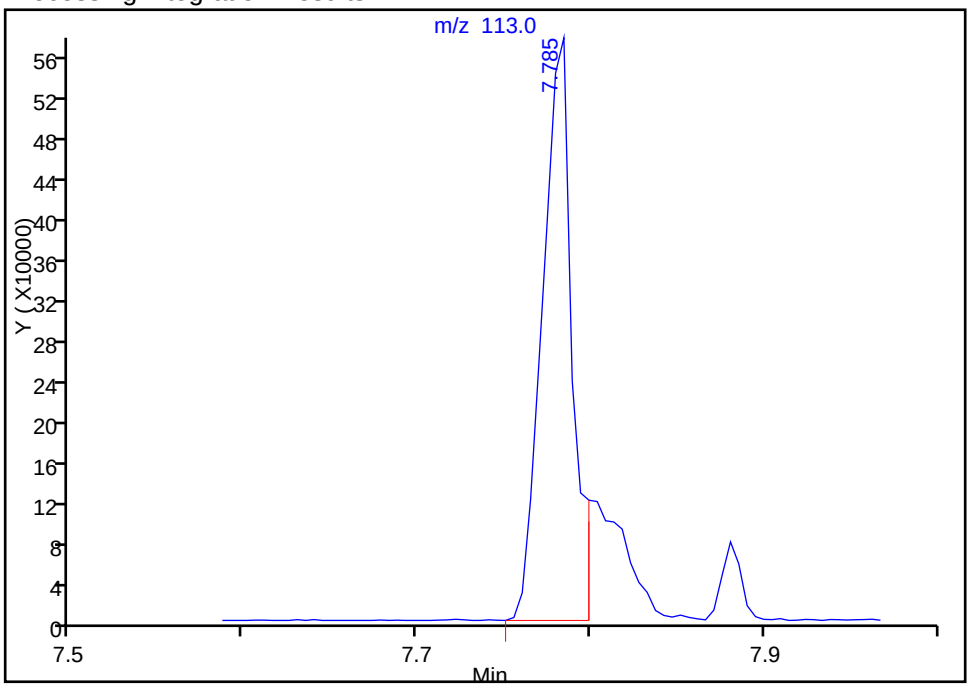
TestAmerica Canton

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Injection Date:	12-May-2015 09:44:30	Instrument ID:	A4HP9		
Lims ID:	std9 lst1				
Client ID:					
Operator ID:	001574	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

84 Caprolactam, CAS: 105-60-2

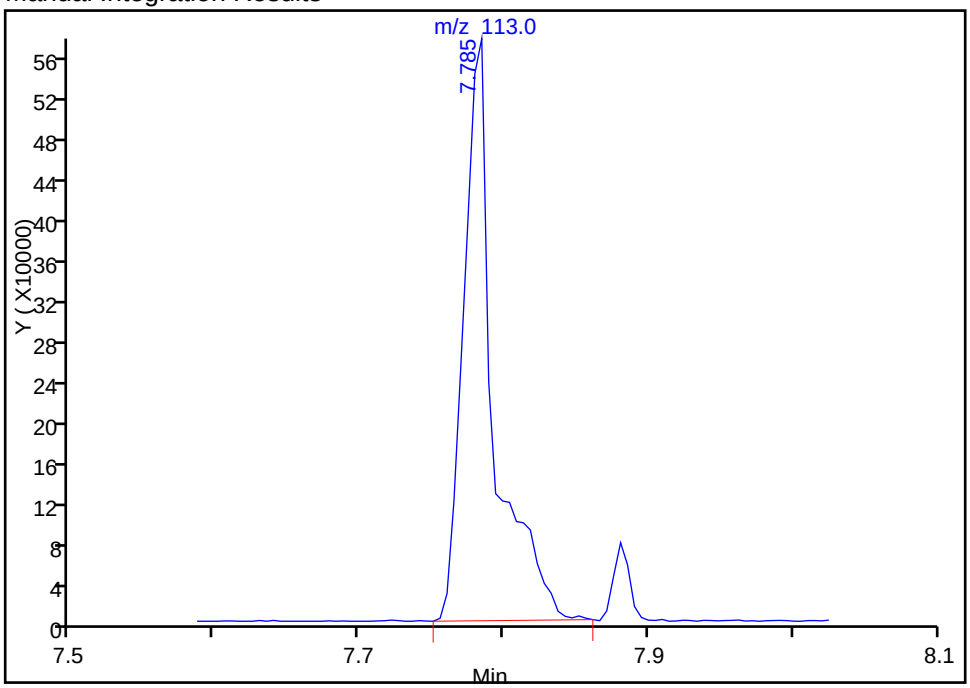
Processing Integration Results

RT: 7.78
Area: 689579
Amount: 42.897489
Amount Units: ng/ul



Manual Integration Results

RT: 7.78
Area: 843365
Amount: 49.379732
Amount Units: ng/ul



Reviewer: ulmanm, 12-May-2015 10:34:51
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512008.D
Lims ID: std8 lst1
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 12-May-2015 10:09:30 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043530-008
Misc. Info.: STD8 LST1STD8 LST1
Operator ID: 001574 Instrument ID: A4HP9
Sublist: chrom-8270 _9*sub34

Method: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 12-May-2015 15:32:16 Calib Date: 12-May-2015 10:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: ulmanm Date: 12-May-2015 10:37:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.324	6.325	-0.001	93	180877	4.00	4.00	
* 2 Naphthalene-d8	136	7.445	7.446	-0.001	97	657203	4.00	4.00	
* 3 Acenaphthene-d10	164	8.955	8.951	0.004	93	396763	4.00	4.00	
* 4 Phenanthrene-d10	188	10.224	10.225	-0.001	98	657400	4.00	4.00	
* 5 Chrysene-d12	240	12.518	12.514	0.004	97	776529	4.00	4.00	
* 6 Perylene-d12	264	14.269	14.265	0.004	98	594880	4.00	4.00	
$ 7 2-Fluorophenol	112	5.093	5.089	0.004	93	1246169	20.0	19.7	
$ 8 Phenol-d5	99	5.964	5.960	0.004	91	1801735	20.0	20.0	
$ 9 Nitrobenzene-d5	82	6.805	6.801	0.004	86	2516327	20.0	21.3	
$ 10 2-Fluorobiphenyl (Surr)	172	8.354	8.350	0.004	98	2738653	20.0	20.5	
$ 11 2,4,6-Tribromophenol	330	9.623	9.624	-0.001	79	276711	20.0	19.2	
$ 12 Terphenyl-d14	244	11.552	11.548	0.004	99	3136537	20.0	20.0	
25 1,4-Dioxane	88	2.891	2.872	0.019	90	676525	20.0	18.5	
26 N-Nitrosodimethylamine	74	3.396	3.387	0.009	90	1132225	20.0	20.0	
27 Pyridine	79	3.468	3.459	0.009	94	1809192	20.0	20.3	
41 Benzaldehyde	77	5.925	5.921	0.004	87	3052375	40.0	37.8	
43 Phenol	94	5.973	5.969	0.004	93	2026398	20.0	20.0	
44 Aniline	93	6.021	6.017	0.004	94	2546327	20.0	19.8	
69 Bis(2-chloroethyl)ether	93	6.060	6.061	-0.001	97	1566167	20.0	19.2	
46 2-Chlorophenol	128	6.137	6.138	-0.001	87	1215540	20.0	19.7	
243 n-Decane	57	6.170	6.171	-0.001	94	1415030	NC	NC	
47 1,3-Dichlorobenzene	146	6.281	6.282	-0.001	85	1347188	20.0	19.0	
48 1,4-Dichlorobenzene	146	6.344	6.340	0.004	82	1392216	20.0	19.5	
49 Benzyl alcohol	108	6.425	6.421	0.004	84	968707	20.0	20.0	
50 1,2-Dichlorobenzene	146	6.483	6.484	-0.001	84	1292402	20.0	19.0	
51 2-Methylphenol	108	6.517	6.513	0.004	92	1370350	20.0	20.3	
53 2,2'-oxybis[1-chloropropan	45	6.546	6.546	0.000	90	1289325	20.0	19.6	
52 Indene	115	6.560	6.561	-0.001	88	5303975	40.0	40.9	
21 3 & 4 Methylphenol	108	6.647	6.643	0.004	95	1462768	20.0	20.2	
57 N-Nitrosodi-n-propylamine	70	6.656	6.652	0.004	94	1544925	20.0	20.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
58 Acetophenone	105	6.666	6.662	0.004	88	2266261	20.0	19.8	
61 Hexachloroethane	117	6.791	6.792	-0.001	93	733497	20.0	19.6	
62 Nitrobenzene	77	6.820	6.820	0.000	83	2349318	20.0	20.3	
64 Isophorone	82	7.022	7.022	0.000	98	3883265	20.0	20.4	
66 2-Nitrophenol	139	7.103	7.099	0.004	74	642327	20.0	20.8	
65 2,4-Dimethylphenol	107	7.108	7.109	-0.001	94	1769767	20.0	20.3	
71 Benzoic acid	122	7.190	7.143	0.047	47	1522215	40.0	40.7	
70 Bis(2-chloroethoxy)methane	93	7.190	7.186	0.004	99	1942715	20.0	20.6	
73 2,4-Dichlorophenol	162	7.305	7.306	-0.001	88	1041426	20.0	20.7	
74 1,2,4-Trichlorobenzene	180	7.392	7.388	0.004	88	1141148	20.0	19.9	
75 Naphthalene	128	7.464	7.465	-0.001	98	3530522	20.0	20.4	
76 4-Chloroaniline	127	7.483	7.484	-0.001	88	1561824	20.0	21.0	
77 2,6-Dichlorophenol	162	7.503	7.503	0.000	85	1018080	20.0	19.5	
79 Hexachlorobutadiene	225	7.570	7.566	0.004	94	845769	20.0	20.4	
84 Caprolactam	113	7.781	7.753	0.028	83	769917	40.0	40.6	M
86 4-Chloro-3-methylphenol	107	7.882	7.874	0.008	87	1498258	20.0	21.2	
87 2-Methylnaphthalene	142	8.056	8.052	0.004	88	2434539	20.0	21.3	
88 1-Methylnaphthalene	142	8.142	8.143	-0.001	89	2083675	20.0	21.5	
89 Hexachlorocyclopentadiene	237	8.200	8.196	0.004	96	973158	20.0	22.5	
91 1,2,4,5-Tetrachlorobenzene	216	8.205	8.201	0.004	94	1301281	20.0	20.7	
92 2,4,6-Trichlorophenol	196	8.286	8.282	0.004	91	849483	20.0	21.1	
93 2,4,5-Trichlorophenol	196	8.320	8.316	0.004	88	885342	20.0	21.2	
98 1,1'-Biphenyl	154	8.445	8.441	0.004	98	2977481	20.0	20.8	
100 2-Chloronaphthalene	162	8.474	8.475	-0.001	98	2341646	20.0	20.0	
102 2-Nitroaniline	65	8.536	8.532	0.004	69	1234216	20.0	19.7	
105 Dimethyl phthalate	163	8.671	8.667	0.004	92	2743804	20.0	20.2	
106 1,3-Dinitrobenzene	168	8.705	8.701	0.004	79	434229	20.0	20.4	
107 2,6-Dinitrotoluene	165	8.729	8.725	0.004	76	612011	20.0	21.4	
109 Acenaphthylene	152	8.835	8.835	0.000	98	3701686	20.0	21.1	
110 3-Nitroaniline	138	8.883	8.879	0.004	82	572643	20.0	21.2	
111 2,4-Dinitrophenol	184	8.969	8.965	0.004	97	887921	40.0	40.8	
112 Acenaphthene	153	8.984	8.980	0.004	96	2408048	20.0	21.1	
113 4-Nitrophenol	109	8.998	8.989	0.009	84	1604575	40.0	40.3	
114 2,4-Dinitrotoluene	165	9.080	9.076	0.004	79	818433	20.0	21.3	
116 Dibenzofuran	168	9.128	9.124	0.004	93	3265305	20.0	20.3	
119 2,3,4,6-Tetrachlorophenol	232	9.224	9.220	0.004	80	691192	20.0	20.8	
121 Diethyl phthalate	149	9.263	9.263	0.000	95	2811635	20.0	20.0	
247 Hexadecane	57	9.267	9.268	-0.001	89	1941131	NC	NC	
123 4-Chlorophenyl phenyl ethe	204	9.392	9.393	-0.001	95	1360198	20.0	20.8	
125 4-Nitroaniline	138	9.407	9.398	0.009	71	658655	20.0	20.2	
126 Fluorene	166	9.421	9.417	0.004	99	2860206	20.0	21.0	
128 4,6-Dinitro-2-methylphenol	198	9.436	9.427	0.009	95	1116358	40.0	40.8	
131 N-Nitrosodiphenylamine	169	9.489	9.485	0.004	99	4079292	40.0	40.8	
133 Azobenzene	77	9.532	9.528	0.004	97	4427685	20.0	20.5	
132 1,2-Diphenylhydrazine	77	9.532	9.528	0.004	97	4428609	20.0	20.5	
139 4-Bromophenyl phenyl ether	248	9.816	9.812	0.004	75	744059	20.0	20.6	
141 Hexachlorobenzene	284	9.907	9.903	0.004	88	707936	20.0	20.5	
142 Atrazine	200	9.917	9.908	0.009	91	1505971	40.0	40.7	
244 n-Octadecane	57	10.046	10.047	-0.001	92	1791731	NC	NC	
143 Pentachlorophenol	266	10.056	10.052	0.004	87	1148272	40.0	40.5	
148 Phenanthrene	178	10.248	10.244	0.004	99	3662674	20.0	20.5	
149 Anthracene	178	10.292	10.288	0.004	99	3741647	20.0	20.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
151 Carbazole	167	10.407	10.403	0.004	98	3565793	20.0	21.9	
154 Di-n-butyl phthalate	149	10.647	10.643	0.004	99	4355797	20.0	21.5	
159 Fluoranthene	202	11.268	11.264	0.004	98	4315873	20.0	21.1	
160 Benzidine	184	11.340	11.336	0.004	98	5102204	40.0	41.1	
161 Pyrene	202	11.470	11.466	0.004	97	4536674	20.0	20.9	
168 Butyl benzyl phthalate	149	11.931	11.927	0.004	91	2154243	20.0	20.9	
173 Bis(2-ethylhexyl) phthalat	149	12.412	12.408	0.004	97	2884995	20.0	20.8	
175 3,3'-Dichlorobenzidine	252	12.441	12.437	0.004	76	3105098	40.0	40.8	
177 Benzo[a]anthracene	228	12.508	12.504	0.004	98	4543854	20.0	20.1	
178 Chrysene	228	12.547	12.538	0.009	96	4241103	20.0	20.7	
180 Di-n-octyl phthalate	149	13.066	13.062	0.004	100	4851190	20.0	21.1	
182 Benzo[b]fluoranthene	252	13.725	13.716	0.009	95	3969407	20.0	21.1	
183 Benzo[k]fluoranthene	252	13.759	13.750	0.009	98	3984806	20.0	20.2	
184 Benzo[a]pyrene	252	14.192	14.183	0.009	76	3803375	20.0	20.7	
188 Indeno[1,2,3-cd]pyrene	276	16.182	16.159	0.023	98	3769778	20.0	20.9	
189 Dibenz(a,h)anthracene	278	16.187	16.169	0.018	87	3088019	20.0	21.3	
190 Benzo[g,h,i]perylene	276	16.769	16.751	0.018	97	2893437	20.0	19.5	
S 191 Methyl Phenols,Total	100				0			40.5	
S 245 Total Cresols	100				0			40.5	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L8 W_00005 Amount Added: 1.00 Units: mL

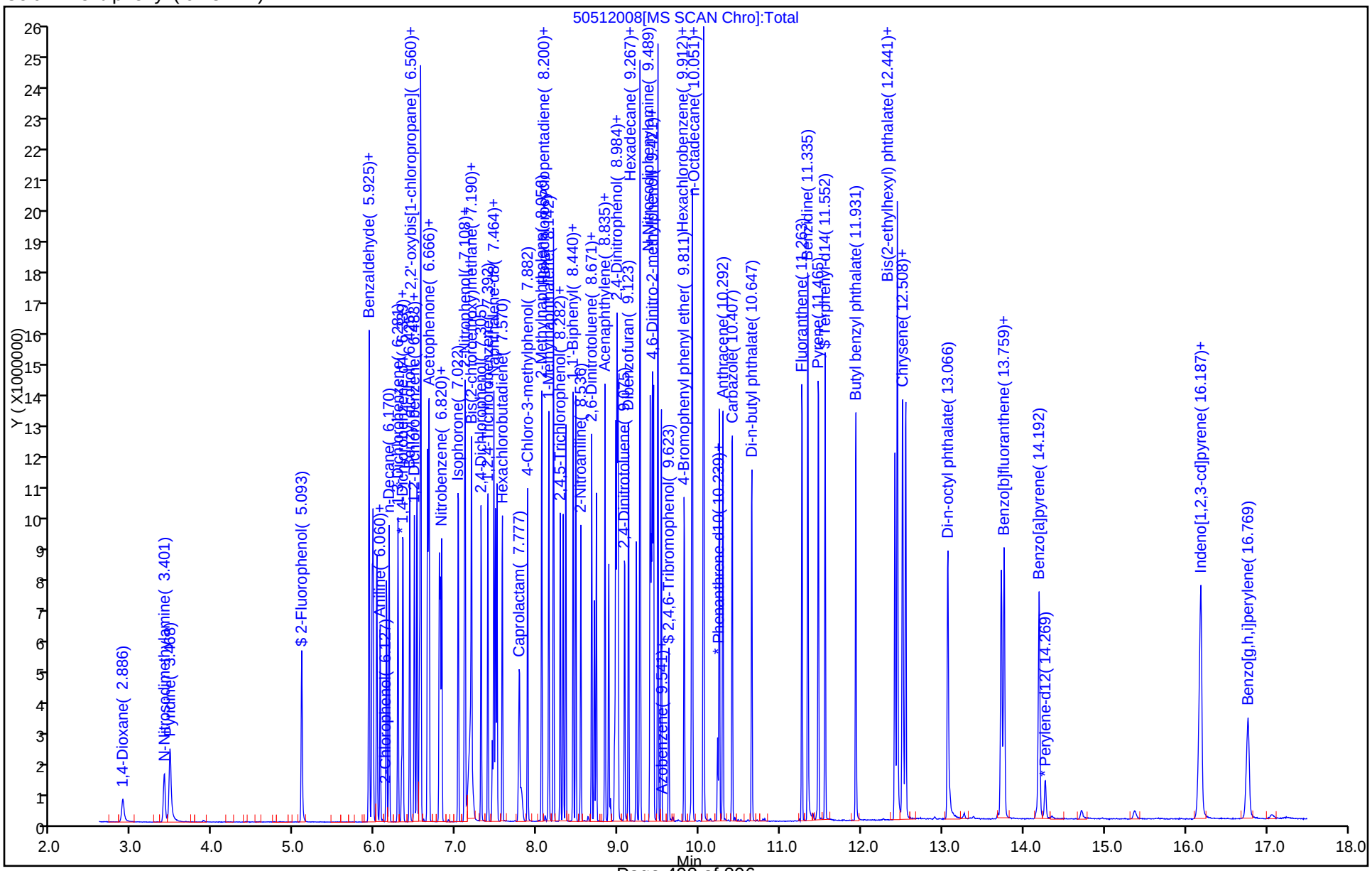
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TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512008.D

Injection Date:	12-May-2015 10:09:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	std8 lst1			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

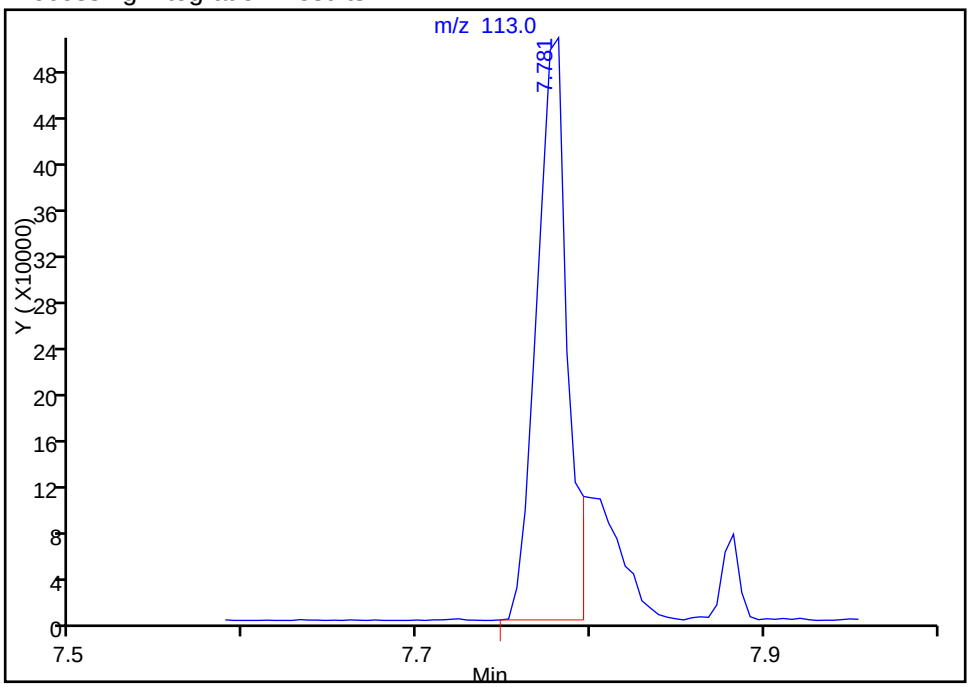
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512008.D				
Injection Date:	12-May-2015 10:09:30	Instrument ID:	A4HP9		
Lims ID:	std8 lst1				
Client ID:					
Operator ID:	001574	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

84 Caprolactam, CAS: 105-60-2

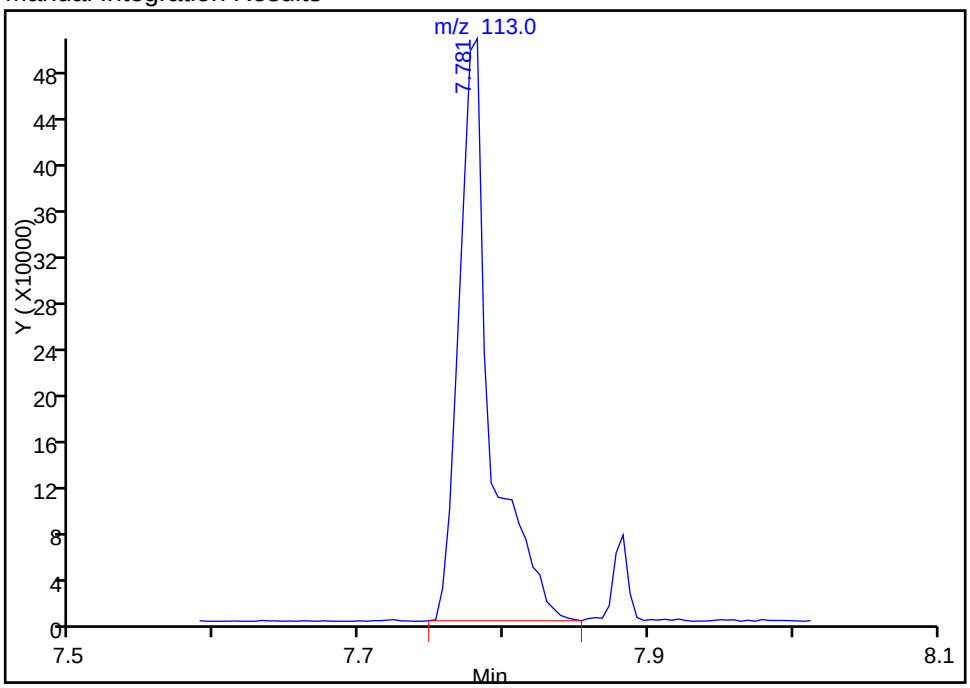
Processing Integration Results

RT: 7.78
Area: 628515
Amount: 34.786073
Amount Units: ng/ul



Manual Integration Results

RT: 7.78
Area: 769917
Amount: 40.583659
Amount Units: ng/ul



Reviewer: ulmanm, 12-May-2015 10:37:24
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512009.D
Lims ID: std7 lst1
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 12-May-2015 10:34:30 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043530-009
Misc. Info.: STD7 LST1STD7 LST1
Operator ID: 001574 Instrument ID: A4HP9
Sublist: chrom-8270 _9*sub34

Method: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 12-May-2015 15:32:18 Calib Date: 12-May-2015 10:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: ulmanm Date: 12-May-2015 11:23:14

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.326	6.325	0.001	89	174726	4.00	4.00	
* 2 Naphthalene-d8	136	7.446	7.446	0.000	98	650401	4.00	4.00	
* 3 Acenaphthene-d10	164	8.951	8.951	0.000	93	369004	4.00	4.00	
* 4 Phenanthrene-d10	188	10.226	10.225	0.001	98	616463	4.00	4.00	
* 5 Chrysene-d12	240	12.515	12.514	0.001	97	734261	4.00	4.00	
* 6 Perylene-d12	264	14.265	14.265	0.001	99	553012	4.00	4.00	
$ 7 2-Fluorophenol	112	5.095	5.089	0.006	93	965145	15.0	15.8	
$ 8 Phenol-d5	99	5.960	5.960	0.000	90	1358736	15.0	15.6	
$ 9 Nitrobenzene-d5	82	6.802	6.801	0.001	87	1883356	15.0	16.1	
$ 10 2-Fluorobiphenyl (Surr)	172	8.350	8.350	0.000	99	2009955	15.0	16.1	
$ 11 2,4,6-Tribromophenol	330	9.625	9.624	0.001	82	213532	15.0	15.9	
$ 12 Terphenyl-d14	244	11.548	11.548	0.000	99	2244418	15.0	15.2	
25 1,4-Dioxane	88	2.892	2.872	0.020	90	525770	15.0	14.9	
26 N-Nitrosodimethylamine	74	3.397	3.387	0.010	91	844083	15.0	15.4	
27 Pyridine	79	3.469	3.459	0.010	94	1375114	15.0	16.0	
41 Benzaldehyde	77	5.922	5.921	0.001	87	2367087	30.0	30.4	
43 Phenol	94	5.975	5.969	0.006	92	1521303	15.0	15.5	
44 Aniline	93	6.018	6.017	0.001	94	1915691	15.0	15.4	
69 Bis(2-chloroethyl)ether	93	6.061	6.061	0.000	97	1210137	15.0	15.3	
46 2-Chlorophenol	128	6.138	6.138	0.000	86	934649	15.0	15.7	
243 n-Decane	57	6.172	6.171	0.001	96	1109095	NC	NC	
47 1,3-Dichlorobenzene	146	6.282	6.282	0.000	85	1036527	15.0	15.2	
48 1,4-Dichlorobenzene	146	6.340	6.340	0.000	82	1054915	15.0	15.3	
49 Benzyl alcohol	108	6.427	6.421	0.006	83	734056	15.0	15.7	
50 1,2-Dichlorobenzene	146	6.484	6.484	0.000	84	989783	15.0	15.1	
51 2-Methylphenol	108	6.513	6.513	0.000	91	1019264	15.0	15.6	
53 2,2'-oxybis[1-chloropropan	45	6.547	6.546	0.001	89	960998	15.0	15.2	
52 Indene	115	6.561	6.561	0.000	88	3946724	30.0	31.5	
21 3 & 4 Methylphenol	108	6.643	6.643	0.000	94	1098364	15.0	15.7	
57 N-Nitrosodi-n-propylamine	70	6.658	6.652	0.006	95	1155521	15.0	15.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
58 Acetophenone	105	6.667	6.662	0.005	86	1686387	15.0	15.3	
61 Hexachloroethane	117	6.792	6.792	0.000	92	572540	15.0	15.8	
62 Nitrobenzene	77	6.821	6.820	0.001	83	1762056	15.0	15.4	
64 Isophorone	82	7.023	7.022	0.001	98	2888979	15.0	15.3	
66 2-Nitrophenol	139	7.100	7.099	0.001	78	502516	15.0	16.4	
65 2,4-Dimethylphenol	107	7.110	7.109	0.001	94	1339418	15.0	15.5	
71 Benzoic acid	122	7.182	7.143	0.039	83	1140744	30.0	31.0	
70 Bis(2-chloroethoxy)methane	93	7.187	7.186	0.000	99	1426723	15.0	15.3	
73 2,4-Dichlorophenol	162	7.307	7.306	0.001	90	805352	15.0	16.1	
74 1,2,4-Trichlorobenzene	180	7.388	7.388	0.000	88	859595	15.0	15.1	
75 Naphthalene	128	7.465	7.465	0.000	97	2703103	15.0	15.8	
76 4-Chloroaniline	127	7.485	7.484	0.001	86	1138327	15.0	15.4	
77 2,6-Dichlorophenol	162	7.504	7.503	0.001	85	782684	15.0	15.2	
79 Hexachlorobutadiene	225	7.566	7.566	0.000	95	623689	15.0	15.2	
84 Caprolactam	113	7.773	7.753	0.020	83	584201	30.0	31.1	M
86 4-Chloro-3-methylphenol	107	7.879	7.874	0.005	86	1087151	15.0	15.6	
87 2-Methylnaphthalene	142	8.052	8.052	0.000	88	1763186	15.0	15.6	
88 1-Methylnaphthalene	142	8.143	8.143	0.000	88	1522027	15.0	15.8	
89 Hexachlorocyclopentadiene	237	8.196	8.196	0.000	94	680589	15.0	17.0	
91 1,2,4,5-Tetrachlorobenzene	216	8.201	8.201	0.000	95	946862	15.0	16.2	
92 2,4,6-Trichlorophenol	196	8.283	8.282	0.001	91	618900	15.0	16.5	
93 2,4,5-Trichlorophenol	196	8.317	8.316	0.001	85	639236	15.0	16.4	
98 1,1'-Biphenyl	154	8.442	8.441	0.001	98	2147346	15.0	16.1	
100 2-Chloronaphthalene	162	8.475	8.475	0.000	98	1710178	15.0	15.7	
102 2-Nitroaniline	65	8.538	8.532	0.006	69	931761	15.0	16.1	
105 Dimethyl phthalate	163	8.668	8.667	0.001	92	2038605	15.0	16.1	
106 1,3-Dinitrobenzene	168	8.701	8.701	0.000	78	311403	15.0	15.8	
107 2,6-Dinitrotoluene	165	8.725	8.725	0.000	76	449688	15.0	16.9	
109 Acenaphthylene	152	8.836	8.835	0.001	98	2684645	15.0	16.4	
110 3-Nitroaniline	138	8.879	8.879	0.000	83	424314	15.0	16.9	
111 2,4-Dinitrophenol	184	8.966	8.965	0.001	95	631044	30.0	31.4	
112 Acenaphthene	153	8.980	8.980	0.000	97	1736831	15.0	16.3	
113 4-Nitrophenol	109	8.995	8.989	0.006	86	1181571	30.0	32.0	
114 2,4-Dinitrotoluene	165	9.076	9.076	0.000	79	595064	15.0	16.6	
116 Dibenzofuran	168	9.124	9.124	0.000	93	2369817	15.0	15.8	
119 2,3,4,6-Tetrachlorophenol	232	9.221	9.220	0.001	81	501973	15.0	16.2	
121 Diethyl phthalate	149	9.264	9.263	0.001	95	2038038	15.0	15.6	
247 Hexadecane	57	9.269	9.268	0.001	92	1383283	NC	NC	
123 4-Chlorophenyl phenyl ethe	204	9.394	9.393	0.001	95	981602	15.0	16.1	
125 4-Nitroaniline	138	9.403	9.398	0.005	72	478084	15.0	15.9	
126 Fluorene	166	9.418	9.417	0.001	98	1987381	15.0	15.7	
128 4,6-Dinitro-2-methylphenol	198	9.432	9.427	0.005	92	772075	30.0	30.3	
131 N-Nitrosodiphenylamine	169	9.485	9.485	0.000	98	2991646	30.0	31.9	
133 Azobenzene	77	9.528	9.528	0.000	96	3366702	15.0	16.6	
132 1,2-Diphenylhydrazine	77	9.528	9.528	0.000	98	3366691	15.0	16.6	
139 4-Bromophenyl phenyl ether	248	9.812	9.812	0.000	75	539436	15.0	16.0	
141 Hexachlorobenzene	284	9.903	9.903	0.000	84	512714	15.0	15.8	
142 Atrazine	200	9.913	9.908	0.005	90	1177893	30.0	34.0	
244 n-Octadecane	57	10.048	10.047	0.001	91	1314898	NC	NC	
143 Pentachlorophenol	266	10.053	10.052	0.001	85	796948	30.0	30.2	
148 Phenanthrene	178	10.245	10.244	0.001	99	2548060	15.0	15.2	
149 Anthracene	178	10.288	10.288	0.000	99	2631923	15.0	15.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
151 Carbazole	167	10.404	10.403	0.001	98	2547419	15.0	16.7	
154 Di-n-butyl phthalate	149	10.644	10.643	0.001	99	3274971	15.0	17.2	
159 Fluoranthene	202	11.264	11.264	0.000	98	3229084	15.0	16.9	
160 Benzidine	184	11.337	11.336	0.000	98	3782182	30.0	32.4	
161 Pyrene	202	11.466	11.466	0.000	97	3304324	15.0	16.1	
168 Butyl benzyl phthalate	149	11.928	11.927	0.001	92	1578284	15.0	16.2	
173 Bis(2-ethylhexyl) phthalat	149	12.414	12.408	0.006	96	2111433	15.0	16.1	
175 3,3'-Dichlorobenzidine	252	12.443	12.437	0.006	77	2153822	30.0	30.1	
177 Benzo[a]anthracene	228	12.505	12.504	0.001	98	3285417	15.0	15.4	
178 Chrysene	228	12.544	12.538	0.006	96	3090312	15.0	16.0	
180 Di-n-octyl phthalate	149	13.063	13.062	0.001	100	3511239	15.0	16.5	
182 Benzo[b]fluoranthene	252	13.722	13.716	0.006	95	2811034	15.0	16.1	
183 Benzo[k]fluoranthene	252	13.760	13.750	0.010	98	2916456	15.0	15.9	
184 Benzo[a]pyrene	252	14.188	14.183	0.005	76	2744494	15.0	16.1	
188 Indeno[1,2,3-cd]pyrene	276	16.174	16.159	0.015	97	2813396	15.0	16.8	
189 Dibenz(a,h)anthracene	278	16.184	16.169	0.015	89	2258251	15.0	16.8	
190 Benzo[g,h,i]perylene	276	16.761	16.751	0.010	97	2173864	15.0	15.8	
S 191 Methyl Phenols,Total	100				0			31.3	
S 245 Total Cresols	100				0			31.3	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L7 W_00005 Amount Added: 1.00 Units: mL

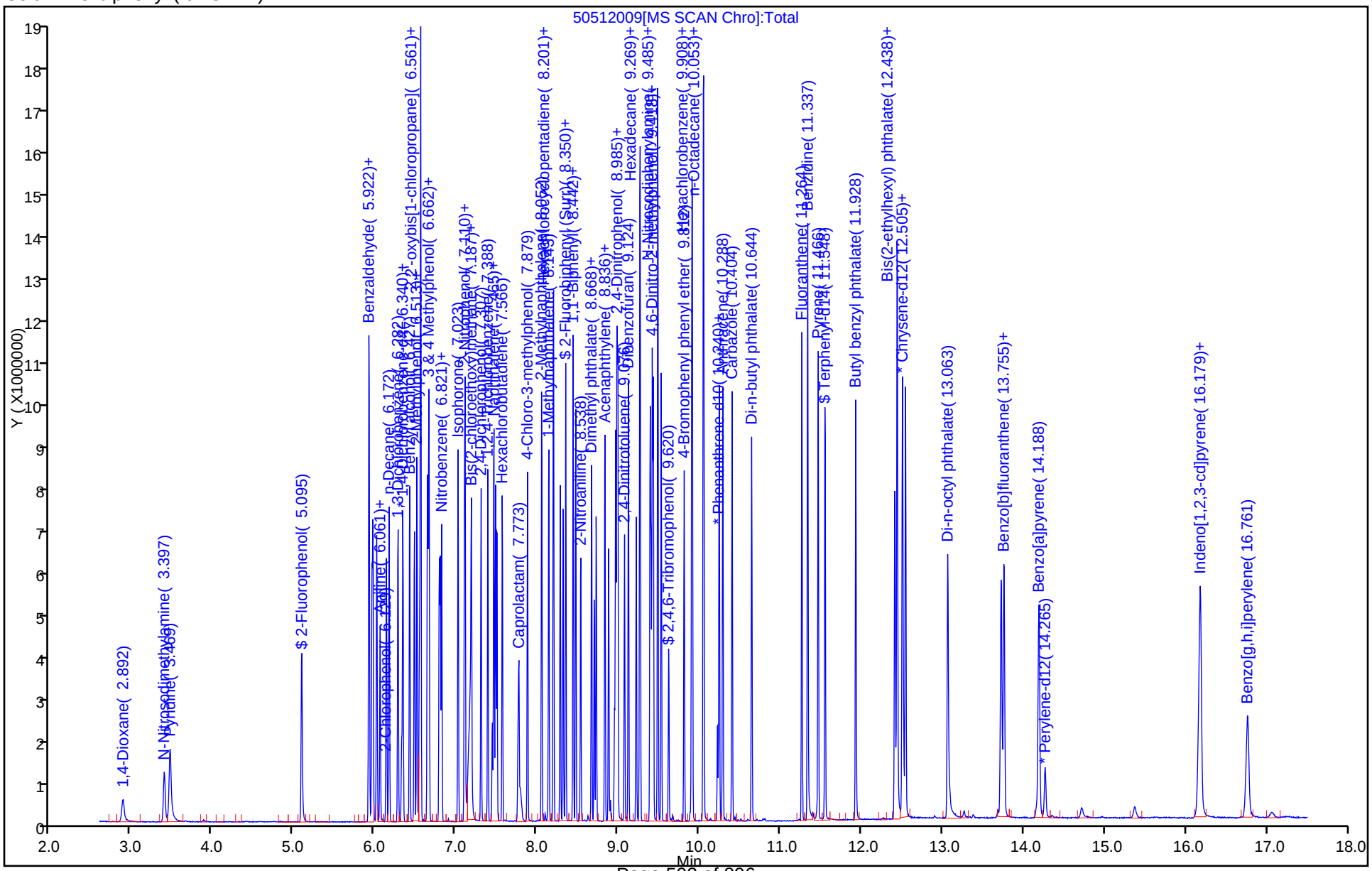
Report Date: 12-May-2015 15:32:19 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512009.D

Injection Date:	12-May-2015 10:34:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	std7 lst1			Worklist Smp#:	9
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

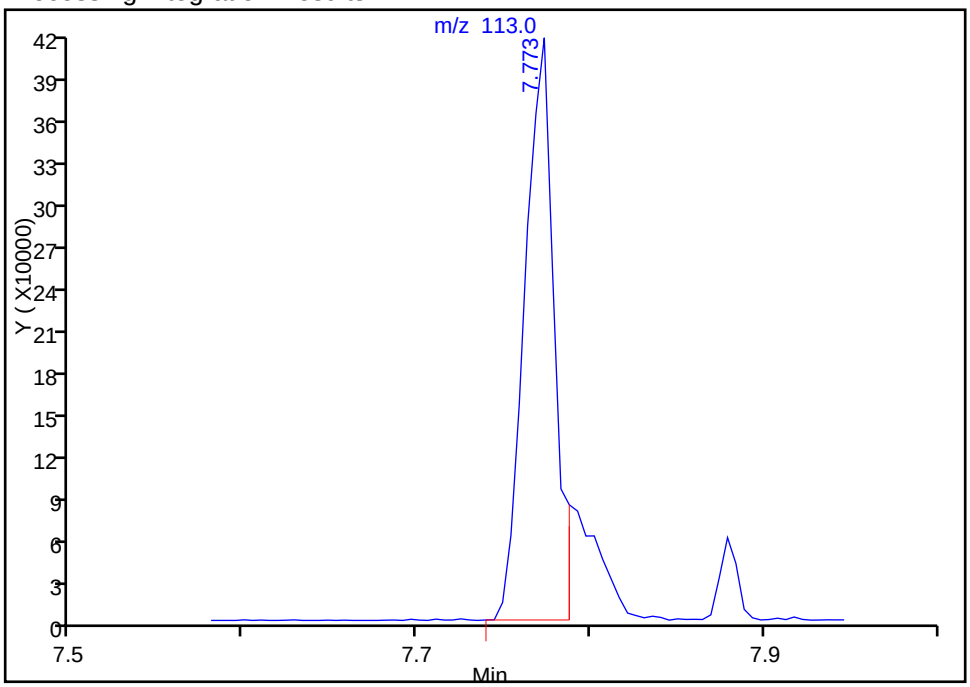
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512009.D				
Injection Date:	12-May-2015 10:34:30	Instrument ID:	A4HP9		
Lims ID:	std7 lst1				
Client ID:					
Operator ID:	001574	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

84 Caprolactam, CAS: 105-60-2

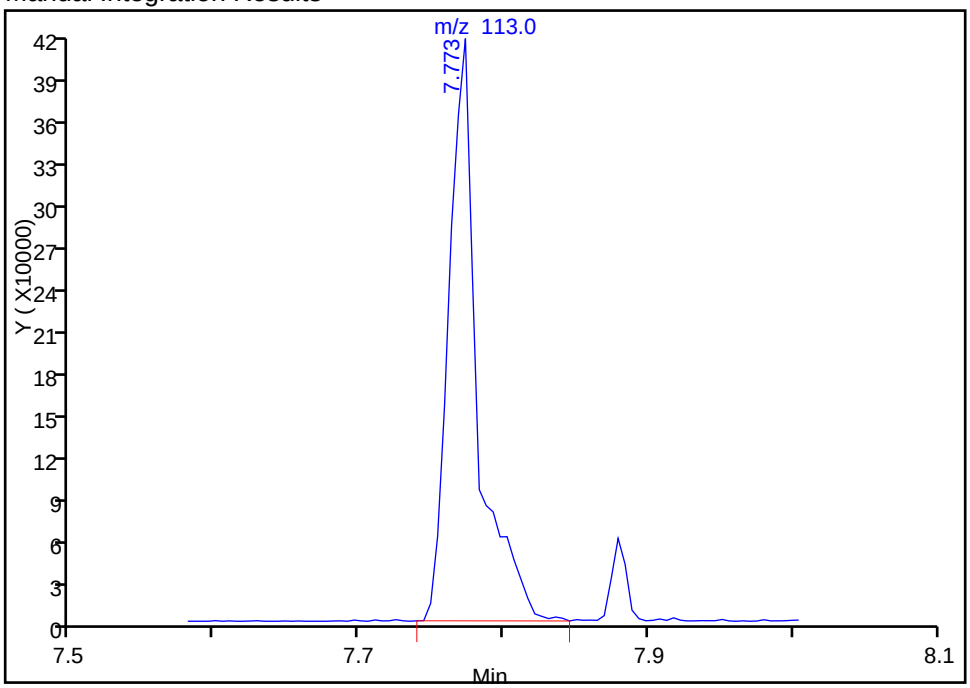
Processing Integration Results

RT: 7.77
Area: 496446
Amount: 27.291672
Amount Units: ng/ul



Manual Integration Results

RT: 7.77
Area: 584201
Amount: 31.116298
Amount Units: ng/ul



Reviewer: ulmanm, 12-May-2015 11:23:14
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512010.D
Lims ID: std6 lst1
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 12-May-2015 10:59:30 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043530-010
Misc. Info.: STD6 LST1STD6 LST1
Operator ID: 001574 Instrument ID: A4HP9
Sublist: chrom-8270 _9*sub34

Method: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 12-May-2015 15:32:21 Calib Date: 12-May-2015 10:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: ulmanm Date: 12-May-2015 11:26:47

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.328	6.328	0.000	90	170342	4.00	4.00	
* 2 Naphthalene-d8	136	7.443	7.443	0.000	98	626557	4.00	4.00	
* 3 Acenaphthene-d10	164	8.953	8.953	0.000	93	387027	4.00	4.00	
* 4 Phenanthrene-d10	188	10.223	10.223	0.000	98	613513	4.00	4.00	
* 5 Chrysene-d12	240	12.517	12.517	0.000	97	726856	4.00	4.00	
* 6 Perylene-d12	264	14.267	14.267	0.000	98	563544	4.00	4.00	
$ 7 2-Fluorophenol	112	5.092	5.092	0.000	93	618777	10.0	10.4	
$ 8 Phenol-d5	99	5.957	5.957	0.000	91	855829	10.0	10.1	
$ 9 Nitrobenzene-d5	82	6.804	6.804	0.000	86	1210428	10.0	10.7	
$ 10 2-Fluorobiphenyl (Surr)	172	8.352	8.352	0.000	98	1307652	10.0	10.0	
$ 11 2,4,6-Tribromophenol	330	9.622	9.622	0.000	75	140317	10.0	9.99	
$ 12 Terphenyl-d14	244	11.550	11.550	0.000	99	1435915	10.0	9.80	
25 1,4-Dioxane	88	2.889	2.889	0.000	90	349167	10.0	10.2	
26 N-Nitrosodimethylamine	74	3.394	3.394	0.000	90	530947	10.0	9.97	
27 Pyridine	79	3.471	3.471	0.000	93	882828	10.0	10.5	
41 Benzaldehyde	77	5.924	5.924	0.000	87	1513262	20.0	19.9	
43 Phenol	94	5.972	5.972	0.000	92	974751	10.0	10.2	
44 Aniline	93	6.020	6.020	0.000	94	1218280	10.0	10.1	
69 Bis(2-chloroethyl)ether	93	6.058	6.058	0.000	97	791583	10.0	10.3	
46 2-Chlorophenol	128	6.135	6.135	0.000	86	580300	10.0	10.0	
243 n-Decane	57	6.174	6.174	0.000	95	685401	NC	NC	
47 1,3-Dichlorobenzene	146	6.280	6.280	0.000	84	663239	10.0	9.95	
48 1,4-Dichlorobenzene	146	6.342	6.342	0.000	82	667315	10.0	9.91	
49 Benzyl alcohol	108	6.424	6.424	0.000	83	452539	10.0	9.93	
50 1,2-Dichlorobenzene	146	6.482	6.482	0.000	84	644977	10.0	10.1	
51 2-Methylphenol	108	6.515	6.515	0.000	91	638940	10.0	10.1	
53 2,2'-oxybis[1-chloropropan	45	6.544	6.544	0.000	89	597543	10.0	9.67	
52 Indene	115	6.558	6.558	0.000	88	2432640	20.0	19.9	
21 3 & 4 Methylphenol	108	6.645	6.645	0.000	94	667318	10.0	9.78	
57 N-Nitrosodi-n-propylamine	70	6.655	6.655	0.000	95	734070	10.0	10.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
58 Acetophenone	105	6.664	6.664	0.000	88	1067537	10.0	9.93	
61 Hexachloroethane	117	6.789	6.789	0.000	92	344232	10.0	9.76	
62 Nitrobenzene	77	6.818	6.818	0.000	83	1139221	10.0	10.3	
64 Isophorone	82	7.020	7.020	0.000	98	1910879	10.0	10.5	
66 2-Nitrophenol	139	7.102	7.102	0.000	75	310573	10.0	10.5	
65 2,4-Dimethylphenol	107	7.107	7.107	0.000	93	832406	10.0	10.0	
71 Benzoic acid	122	7.164	7.164	0.000	84	673817	20.0	19.3	
70 Bis(2-chloroethoxy)methane	93	7.188	7.188	0.000	98	924378	10.0	10.3	
73 2,4-Dichlorophenol	162	7.304	7.304	0.000	88	484598	10.0	10.1	
74 1,2,4-Trichlorobenzene	180	7.390	7.390	0.000	87	550754	10.0	10.1	
75 Naphthalene	128	7.463	7.463	0.000	98	1685316	10.0	10.2	
76 4-Chloroaniline	127	7.482	7.482	0.000	88	712576	10.0	10.0	
77 2,6-Dichlorophenol	162	7.501	7.501	0.000	84	490362	10.0	9.86	
79 Hexachlorobutadiene	225	7.568	7.568	0.000	95	406818	10.0	10.3	
84 Caprolactam	113	7.761	7.761	0.000	82	384184	20.0	21.2	
86 4-Chloro-3-methylphenol	107	7.876	7.876	0.000	86	705318	10.0	10.5	
87 2-Methylnaphthalene	142	8.054	8.054	0.000	87	1126404	10.0	10.3	
88 1-Methylnaphthalene	142	8.141	8.141	0.000	88	981542	10.0	10.6	
89 Hexachlorocyclopentadiene	237	8.198	8.198	0.000	92	421925	10.0	10.0	
91 1,2,4,5-Tetrachlorobenzene	216	8.203	8.203	0.000	94	599576	10.0	9.78	
92 2,4,6-Trichlorophenol	196	8.285	8.285	0.000	91	394071	10.0	10.0	
93 2,4,5-Trichlorophenol	196	8.319	8.319	0.000	89	413932	10.0	10.2	
98 1,1'-Biphenyl	154	8.444	8.444	0.000	97	1381185	10.0	9.90	
100 2-Chloronaphthalene	162	8.472	8.472	0.000	98	1092929	10.0	9.56	
102 2-Nitroaniline	65	8.535	8.535	0.000	69	598697	10.0	9.95	
105 Dimethyl phthalate	163	8.670	8.670	0.000	92	1340232	10.0	10.1	
106 1,3-Dinitrobenzene	168	8.703	8.703	0.000	79	201597	10.0	9.86	
107 2,6-Dinitrotoluene	165	8.727	8.727	0.000	75	295134	10.0	10.6	
109 Acenaphthylene	152	8.833	8.833	0.000	98	1701572	10.0	9.93	
110 3-Nitroaniline	138	8.881	8.881	0.000	82	266789	10.0	10.1	
111 2,4-Dinitrophenol	184	8.968	8.968	0.000	95	364569	20.0	17.7	
112 Acenaphthene	153	8.982	8.982	0.000	96	1105161	10.0	9.91	
113 4-Nitrophenol	109	8.992	8.992	0.000	86	716070	20.0	18.7	
114 2,4-Dinitrotoluene	165	9.073	9.073	0.000	78	378963	10.0	10.1	
116 Dibenzofuran	168	9.126	9.126	0.000	92	1527598	10.0	9.72	
119 2,3,4,6-Tetrachlorophenol	232	9.223	9.223	0.000	80	344800	10.0	10.6	
121 Diethyl phthalate	149	9.261	9.261	0.000	95	1336299	10.0	9.75	
247 Hexadecane	57	9.266	9.266	0.000	89	878522	NC	NC	
123 4-Chlorophenyl phenyl ethe	204	9.391	9.391	0.000	94	646574	10.0	10.1	
125 4-Nitroaniline	138	9.400	9.400	0.000	70	263176	10.0	8.65	
126 Fluorene	166	9.420	9.420	0.000	99	1284529	10.0	9.69	
128 4,6-Dinitro-2-methylphenol	198	9.429	9.429	0.000	92	468940	20.0	18.8	
131 N-Nitrosodiphenylamine	169	9.487	9.487	0.000	98	2040176	20.0	21.9	
133 Azobenzene	77	9.530	9.530	0.000	96	2195258	10.0	10.9	
132 1,2-Diphenylhydrazine	77	9.530	9.530	0.000	97	2195952	10.0	10.9	
139 4-Bromophenyl phenyl ether	248	9.814	9.814	0.000	76	379203	10.0	11.3	
141 Hexachlorobenzene	284	9.905	9.905	0.000	84	341728	10.0	10.6	
142 Atrazine	200	9.910	9.910	0.000	89	770672	20.0	22.3	
244 n-Octadecane	57	10.045	10.045	0.000	95	878414	NC	NC	
143 Pentachlorophenol	266	10.054	10.054	0.000	84	499974	20.0	19.3	
148 Phenanthrene	178	10.242	10.242	0.000	99	1691428	10.0	10.2	
149 Anthracene	178	10.290	10.290	0.000	99	1712076	10.0	10.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
151 Carbazole	167	10.401	10.401	0.000	98	1569469	10.0	10.3	
154 Di-n-butyl phthalate	149	10.646	10.646	0.000	100	2183176	10.0	11.5	
159 Fluoranthene	202	11.261	11.261	0.000	98	2039604	10.0	10.7	
160 Benzidine	184	11.334	11.334	0.000	98	2232931	20.0	19.6	
161 Pyrene	202	11.463	11.463	0.000	96	2148388	10.0	10.6	
168 Butyl benzyl phthalate	149	11.930	11.930	0.000	91	997651	10.0	10.3	
173 Bis(2-ethylhexyl) phthalat	149	12.411	12.411	0.000	96	1369591	10.0	10.6	
175 3,3'-Dichlorobenzidine	252	12.440	12.440	0.000	77	1331740	20.0	19.0	
177 Benzo[a]anthracene	228	12.502	12.502	0.000	97	2086186	10.0	9.87	
178 Chrysene	228	12.541	12.541	0.000	95	1932804	10.0	10.1	
180 Di-n-octyl phthalate	149	13.065	13.065	0.000	100	2260401	10.0	10.4	
182 Benzo[b]fluoranthene	252	13.724	13.724	0.000	95	1770440	10.0	9.96	
183 Benzo[k]fluoranthene	252	13.757	13.757	0.000	98	1953029	10.0	10.4	
184 Benzo[a]pyrene	252	14.185	14.185	0.000	78	1752633	10.0	10.1	
188 Indeno[1,2,3-cd]pyrene	276	16.171	16.171	0.000	97	1792749	10.0	10.5	
189 Dibenz(a,h)anthracene	278	16.176	16.176	0.000	89	1444982	10.0	10.5	
190 Benzo[g,h,i]perylene	276	16.763	16.763	0.000	97	1378012	10.0	9.83	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SMLIST1 L6 W_00005 Amount Added: 1.00 Units: mL

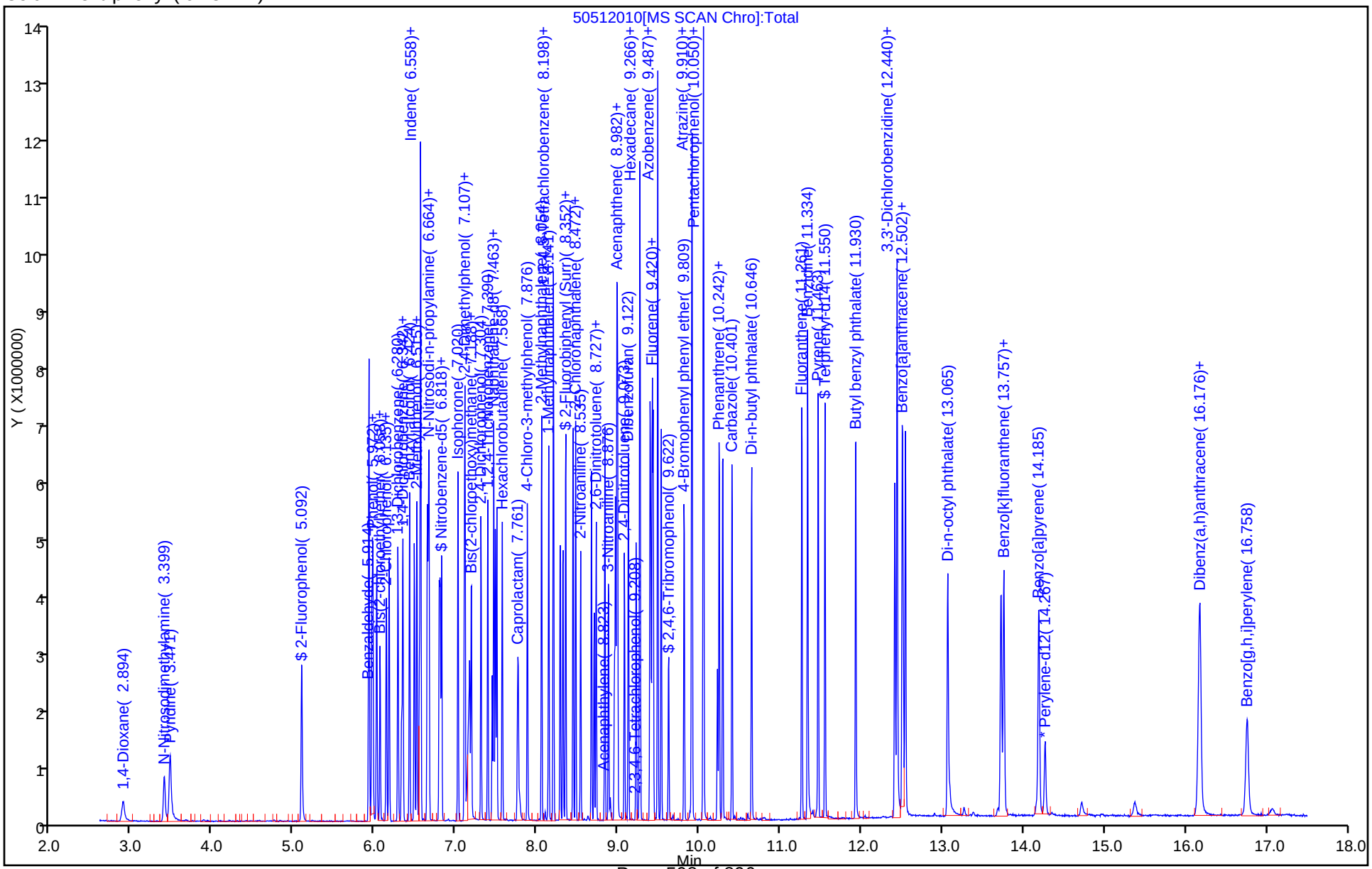
Report Date: 12-May-2015 15:32:21 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512010.D

Injection Date:	12-May-2015 10:59:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	std6 lst1			Worklist Smp#:	10
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-50067-1 Analy Batch No.: 181539

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/19/2015 16:13 Calibration End Date: 05/19/2015 19:33 Calibration ID: 28567

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-181539/6	50519006.D
Level 2	STD2 240-181539/5	50519005.D
Level 3	STD3 240-181539/4	50519004.D
Level 4	STD4 240-181539/3	50519003.D
Level 5	STD5 240-181539/2	50519002.D
Level 6	STD6 240-181539/10	50519010.D
Level 7	STD7 240-181539/9	50519009.D
Level 8	STD8 240-181539/8	50519008.D
Level 9	STD9 240-181539/7	50519007.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.9036	0.8928 0.9199	0.8324 0.8887	0.9650 0.9115	0.9191	Ave		0.9041			0.0500	4.1		15.0			
N-Nitrosodimethylamine	1.3840	1.4220 1.3760	1.4073 1.3564	1.4484 1.3802	1.3973	Ave		1.3964			0.0500	2.1		15.0			
Pyridine	2.4156	2.3195 2.4350	2.4287 2.3192	2.5699 2.4261	2.4265	Ave		2.4176			0.0500	3.2		15.0			
Benzaldehyde	1.3314	1.6346 1.3131	1.6235 1.2017	1.6280 1.1863	1.5252	Ave		1.4305			0.0500	13.5		15.0			
Phenol	2.5022	2.7530 2.4310	2.7433 2.2478	2.7828 2.2989	2.6477	Ave		2.5508			0.0500	8.3		15.0			
Aniline	3.0790	3.2327 3.0110	3.3080 2.8381	3.3576 2.8828	3.2156	Ave		3.1156			0.0500	6.2		15.0			
Bis(2-chloroethyl)ether	1.9859	2.0888 1.9600	2.1211 1.7796	2.1194 1.9018	2.1170	Ave		2.0092			0.0500	6.2		15.0			
2-Chlorophenol	1.6102	1.6039 1.5763	1.5825 1.5172	1.6330 1.5318	1.5937	Ave		1.5811			0.0500	2.5		15.0			
1,3-Dichlorobenzene	1.5793	1.6288 1.5334	1.5848 1.4552	1.6181 1.4677	1.4935	Ave		1.5451			0.0500	4.4		15.0			
1,4-Dichlorobenzene	1.6150	1.6152 1.5546	1.6713 1.4626	1.5829 1.4532	1.5449	Ave		1.5625			0.0500	4.8		15.0			
Benzyl alcohol	1.2761	1.3455 1.2479	1.3302 1.1704	1.3619 1.2002	1.3141	Ave		1.2808			0.0500	5.4		15.0			
1,2-Dichlorobenzene	1.5319	1.5668 1.4836	1.5407 1.3886	1.5085 1.4134	1.4592	Ave		1.4866			0.0500	4.2		15.0			
2-Methylphenol	1.7458	1.7985 1.6873	1.8540 1.5902	1.8102 1.6212	1.7989	Ave		1.7383			0.0500	5.5		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-50067-1 Analy Batch No.: 181539

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/19/2015 16:13 Calibration End Date: 05/19/2015 19:33 Calibration ID: 28567

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
bis (2-chloroisopropyl) ether	2.5928	2.7533 2.5252	2.7073 2.3984	2.7657 2.4662	2.6843	Ave		2.6116			0.0500	5.3		15.0			
Indene	2.6567	3.0391 2.4352	3.1252 2.1916	3.0650 2.1183	2.9077	Ave		2.6923			0.0500	15.0		15.0			
3 & 4 Methylphenol	1.8303	1.9404 1.7500	1.9416 1.6587	1.9620 1.6856	1.9169	Ave		1.8357			0.0500	6.7		15.0			
N-Nitrosodi-n-propylamine	1.2154	1.2671 1.1450	1.2644 1.0825	1.3130 1.0829	1.2542	Ave		1.2030			0.0500	7.4		15.0			
Acetophenone	2.2686	2.3538 2.1825	2.4932 2.0194	2.4745 2.0669	2.3478	Ave		2.2758			0.0500	7.7		15.0			
Hexachloroethane	0.6336	0.6684 0.6179	0.6870 0.5949	0.6524 0.5925	0.6486	Ave		0.6369			0.0500	5.3		15.0			
Nitrobenzene	0.4296	0.4264 0.4270	0.4305 0.4064	0.4449 0.4102	0.4370	Ave		0.4265			0.0500	3.0		15.0			
Isophorone	0.7863	0.8375 0.7683	0.8705 0.7334	0.8591 0.7293	0.8117	Ave		0.7995			0.0500	6.8		15.0			
2-Nitrophenol	0.1732	0.1664 0.1728	0.1718 0.1641	0.1859 0.1627	0.1752	Ave		0.1715			0.0500	4.3		15.0			
2,4-Dimethylphenol	0.3598	0.3852 0.3438	0.4059 0.3308	0.3870 0.3203	0.3711	Ave		0.3630			0.0500	8.2		15.0			
Benzoic acid	0.2103	0.1495 0.2207	0.1964 0.2204	0.1907 0.2163	0.2013	Ave		0.2007			0.0500	11.7		15.0			
Bis(2-chloroethoxy)methane	0.5112	0.5409 0.5001	0.5675 0.4695	0.5522 0.4600	0.5399	Ave		0.5177			0.0500	7.6		15.0			
2,4-Dichlorophenol	0.2542	0.2640 0.2496	0.2560 0.2413	0.2518 0.2383	0.2394	Ave		0.2493			0.0500	3.6		15.0			
1,2,4-Trichlorobenzene	0.2549	0.2671 0.2557	0.2655 0.2428	0.2636 0.2396	0.2490	Ave		0.2548			0.0500	4.1		15.0			
Naphthalene	1.1358 1.0409	1.1284 1.0070	1.1222 0.9560	1.1041 0.9365	1.0713	Ave		1.0558			0.0500	7.1		15.0			
4-Chloroaniline	0.4749	0.5185 0.4672	0.4881 0.4585	0.5067 0.4557	0.4992	Ave		0.4836			0.0500	4.8		15.0			
2,6-Dichlorophenol	0.2472	0.2422 0.2398	0.2496 0.2293	0.2501 0.2261	0.2377	Ave		0.2403			0.0500	3.7		15.0			
Hexachlorobutadiene	0.1070	0.1075 0.1076	0.1082 0.1036	0.1092 0.1013	0.0993	Ave		0.1055			0.0500	3.4		15.0			
Caprolactam	0.1184	0.1302 0.1163	0.1310 0.1125	0.1279 0.1124	0.1164	Ave		0.1206			0.0500	6.5		15.0			
4-Chloro-3-methylphenol	0.3214	0.3328 0.3118	0.3465 0.3033	0.3324 0.2950	0.3200	Ave		0.3204			0.0500	5.3		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-50067-1 Analy Batch No.: 181539

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/19/2015 16:13 Calibration End Date: 05/19/2015 19:33 Calibration ID: 28567

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2-Methylnaphthalene	0.7233 0.6402	0.6767 0.6190	0.6730 0.5793	0.6751 0.5649	0.6401	Ave		0.6435			0.0500	7.8		15.0			
1-Methylnaphthalene	0.6059 0.5584	0.5979 0.5464	0.5830 0.5099	0.5827 0.5075	0.5426	Ave		0.5594			0.0500	6.4		15.0			
Hexachlorocyclopentadiene	 0.2216	0.2241 0.2307	0.2508 0.2286	0.2359 0.2264	0.2502	Ave		0.2335			0.0500	4.8		15.0			
1,2,4,5-Tetrachlorobenzene	 0.3963	0.4546 0.3863	0.4169 0.3634	0.4243 0.3490	0.4192	Ave		0.4013			0.0500	8.6		15.0			
2,4,6-Trichlorophenol	 0.3265	0.3096 0.3311	0.3365 0.3208	0.3436 0.3207	0.3317	Ave		0.3276			0.0500	3.2		15.0			
2,4,5-Trichlorophenol	 0.3560	0.3399 0.3488	0.3513 0.3324	0.3468 0.3230	0.3420	Ave		0.3425			0.0500	3.1		15.0			
1,1'-Biphenyl	1.7463 1.4825	1.6365 1.4570	1.5991 1.3745	1.5708 1.3364	1.5473	Ave		1.5278			0.0500	8.5		15.0			
2-Chloronaphthalene	1.2365 1.1097	1.1402 1.1016	1.2332 1.0431	1.1387 1.0210	1.1211	Ave		1.1272			0.0500	6.5		15.0			
2-Nitroaniline	 0.4421	0.4124 0.4584	0.4345 0.4381	0.4516 0.4457	0.4681	Ave		0.4439			0.0500	3.8		15.0			
Dimethyl phthalate	 1.1745	1.1490 1.1432	1.2182 1.1175	1.1562 1.0826	1.1538	Ave		1.1494			0.0500	3.4		15.0			
1,3-Dinitrobenzene	 0.1968	0.1478 0.2062	0.1623 0.2044	0.1647 0.2042	0.1941	Ave		0.1850			0.0500	12.5		15.0			
2,6-Dinitrotoluene	 0.2742	0.2092 0.2852	0.2436 0.2710	0.2598 0.2746	0.2579	Ave		0.2594			0.0500	9.2		15.0			
Acenaphthylene	2.2036 1.9316	1.9932 1.8871	2.0495 1.7960	2.0489 1.7326	1.9536	Ave		1.9551			0.0500	7.3		15.0			
3-Nitroaniline	 0.4033	0.3358 0.3840	0.3728 0.3835	0.3908 0.3771	0.4056	Ave		0.3816			0.0500	5.7		15.0			
2,4-Dinitrophenol	 0.1219	+++++ 0.1349	0.0974 0.1327	0.1164 0.1396	0.1369	Ave		0.1257			0.0500	12.0		15.0			
Acenaphthene	1.2564 1.0877	1.2219 1.0411	1.2389 0.9640	1.2025 0.9262	1.1687	Ave		1.1230			0.0500	11.0		15.0			
4-Nitrophenol	 0.1155	0.1082 0.1234	0.1244 0.1205	0.1212 0.1212	0.1134	Ave		0.1185			0.0500	4.7		15.0			
2,4-Dinitrotoluene	 0.3374	0.2591 0.3380	0.2946 0.3362	0.3348 0.3348	0.3468	Ave		0.3227			0.0500	9.3		15.0			
Dibenzofuran	1.6225 1.5238	1.5869 1.4750	1.6226 1.4183	1.5489 1.3750	1.5322	Ave		1.5228			0.0500	5.7		15.0			
2,3,4,6-Tetrachlorophenol	 0.2548	0.2550 0.2396	0.2541 0.2265	0.2521 0.2240	0.2502	Ave		0.2445			0.0500	5.3		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-50067-1 Analy Batch No.: 181539

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/19/2015 16:13 Calibration End Date: 05/19/2015 19:33 Calibration ID: 28567

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Diethyl phthalate	1.0858	1.2661 0.9999	1.2427 0.9391	1.2336 0.8897	1.2021	Ave		1.1074			0.0500	13.5		15.0			
4-Chlorophenyl phenyl ether	0.4950	0.5189 0.4832	0.5273 0.4763	0.5167 0.4712	0.4965	Ave		0.4981			0.0500	4.2		15.0			
4-Nitroaniline	0.3223	0.2997 0.3357	0.3206 0.3399	0.3524 0.3501	0.3161	Ave		0.3296			0.0500	5.5		15.0			
Fluorene	1.3603 1.2307	1.3053 1.1820	1.3090 1.1120	1.2895 1.0811	1.2603	Ave		1.2367			0.0500	7.6		15.0			
4,6-Dinitro-2-methylphenol	0.0984	0.0678 0.1050	0.0739 0.1042	0.0911 0.1067	0.0927	Lin1	-0.052	0.1054			0.0500				0.9990		0.9950
N-Nitrosodiphenylamine	0.5929	0.5565 0.5505	0.5758 0.4914	0.5686 0.4590	0.5626	Ave		0.5447			0.0500	8.4		15.0			
1,2-Diphenylhydrazine(as Azobenzene)	1.2529	1.1553 1.2311	1.2129 1.1588	1.2156 1.1213	1.1833	Ave		1.1927			0.0500	3.6		15.0			
Azobenzene	1.2527	1.1659 1.2317	1.2129 1.1588	1.2147 1.1212	1.1833	Ave		1.1927			0.0500	3.6		15.0			
4-Bromophenyl phenyl ether	0.1772	0.1583 0.1782	0.1657 0.1699	0.1658 0.1630	0.1613	Ave		0.1674			0.0500	4.3		15.0			
Hexachlorobenzene	0.1529 0.1603	0.1501 0.1494	0.1603 0.1357	0.1608 0.1301	0.1557	Ave		0.1506			0.0500	7.3		15.0			
Atrazine	0.1588	0.1604 0.1472	0.1712 0.1342	0.1540 0.1164	0.1438	Ave		0.1482			0.0500	11.6		15.0			
Pentachlorophenol	0.1142	0.1095 0.1126	0.1056 0.1061	0.1097 0.1022	0.1136	Ave		0.1092			0.0500	3.9		15.0			
Phenanthrene	1.2206 1.1473	1.1676 1.1478	1.2082 1.0741	1.1826 1.0403	1.1163	Ave		1.1450			0.0500	5.2		15.0			
Anthracene	1.2450 1.1757	1.1627 1.1507	1.2312 1.0832	1.1891 1.0585	1.1380	Ave		1.1593			0.0500	5.3		15.0			
Carbazole	1.0866	1.0467 1.0982	1.1042 1.0483	1.0332 1.0327	0.9151	Ave		1.0456			0.0500	5.7		15.0			
Di-n-butyl phthalate	1.3842	1.2629 1.3583	1.2162 1.2956	1.0608 1.1522	1.1007	Ave		1.2289			0.0500	9.6		15.0			
Fluoranthene	1.0702 1.0739	1.0007 1.0617	1.0330 1.0156	0.8851 0.9374	0.8646	Ave		0.9936			0.0500	8.0		15.0			
Benzidine	0.7195	0.4659 0.8060	0.4950 0.7453	0.6094 0.7274	0.7127	Lin1	-0.393	0.7575			0.0500				0.9980		0.9950
Pyrene	1.4882 1.2107	1.2287 1.2563	1.3146 1.1256	1.1401 1.0285	1.1193	Ave		1.2124			0.0500	11.1		15.0			
Butyl benzyl phthalate	0.6661	0.6545 0.6868	0.6812 0.6470	0.6955 0.6373	0.6186	Ave		0.6609			0.0500	4.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-50067-1 Analy Batch No.: 181539

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/19/2015 16:13 Calibration End Date: 05/19/2015 19:33 Calibration ID: 28567

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Bis(2-ethylhexyl) phthalate	0.9305	0.9509 0.9522	0.9286 0.9041	0.9172 0.9073	0.9026	Ave		0.9242			0.0500	2.2		15.0			
3,3'-Dichlorobenzidine	0.3488	0.3083 0.3654	0.3422 0.3431	0.3653 0.3370	0.3698	Ave		0.3475			0.0500	5.8		15.0			
Benzo[a]anthracene	1.2551 1.1113	1.1370 1.1451	1.1777 1.0796	1.1398 1.0556	1.0686	Ave		1.1300			0.0500	5.5		15.0			
Chrysene	1.0753 1.0452	1.0299 1.0516	1.0378 0.9927	1.0326 0.9852	1.0017	Ave		1.0280			0.0500	2.9		15.0			
Di-n-octyl phthalate	2.2096	1.8812 2.1308	2.1822 2.1487	2.1616 2.0895	2.0486	Ave		2.1065			0.0500	5.0		15.0			
Benzo[b]fluoranthene	1.1716 1.3043	1.0938 1.3098	1.2233 1.2855	1.2408 1.2473	1.2292	Ave		1.2340			0.0500	5.5		15.0			
Benzo[k]fluoranthene	1.3447 1.3450	1.0891 1.2602	1.2965 1.2712	1.2618 1.2671	1.1933	Ave		1.2588			0.0500	6.3		15.0			
Benzo[a]pyrene	1.1341 1.2615	1.0802 1.2211	1.1676 1.2351	1.1626 1.2207	1.1516	Ave		1.1816			0.0500	4.9		15.0			
Indeno[1,2,3-cd]pyrene	1.1222 1.1388	0.9885 1.1466	1.0897 1.1432	1.0972 1.1276	1.0655	Ave		1.1021			0.0500	4.6		15.0			
Dibenz(a,h)anthracene	1.0227 0.9494	0.7889 0.9548	0.8965 0.9576	0.9116 0.9557	0.9059	Ave		0.9270			0.0500	6.9		15.0			
Benzo[g,h,i]perylene	1.1182 0.9082	0.8289 0.8934	0.9433 0.8861	0.9553 0.8782	0.8637	Ave		0.9195			0.0500	9.1		15.0			
2-Fluorophenol (Surr)	1.7624	1.7144 1.7032	1.7922 1.6394	1.7839 1.6830	1.7510	Ave		1.7287			0.0500	3.1		15.0			
Phenol-d5 (Surr)	2.3175	2.3936 2.2539	2.4917 2.1240	2.5025 2.1564	2.4400	Ave		2.3350			0.0500	6.3		15.0			
Nitrobenzene-d5 (Surr)	0.4194 0.4105	0.4011 0.4031	0.4413 0.3867	0.4218 0.3889	0.4149	Ave		0.4097			0.0500	4.2		15.0			
2-Fluorobiphenyl (Surr)	1.1333 1.1325	1.1972 1.1268	1.2161 1.0714	1.1833 1.0516	1.1526	Ave		1.1405			0.0500	4.8		15.0			
2,4,6-Tribromophenol (Surr)	0.1077	0.0909 0.1008	0.1214 0.0976	0.1106 0.0987	0.1117	Ave		0.1049			0.0500	9.3		15.0			
Terphenyl-d14 (Surr)	0.8804 0.7315	0.7776 0.7627	0.8097 0.7196	0.7828 0.7025	0.7419	Ave		0.7676			0.0500	7.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-50067-1 Analy Batch No.: 181539

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/19/2015 16:13 Calibration End Date: 05/19/2015 19:33 Calibration ID: 28567

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-181539/6	50519006.D
Level 2	STD2 240-181539/5	50519005.D
Level 3	STD3 240-181539/4	50519004.D
Level 4	STD4 240-181539/3	50519003.D
Level 5	STD5 240-181539/2	50519002.D
Level 6	STD6 240-181539/10	50519010.D
Level 7	STD7 240-181539/9	50519009.D
Level 8	STD8 240-181539/8	50519008.D
Level 9	STD9 240-181539/7	50519007.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
1,4-Dioxane	DCB	Ave	437349	25364 678748	44490 875415	94888 1071779	204428	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
N-Nitrosodimethylamine	DCB	Ave	669858	40397 1015299	75213 1336166	142419 1622853	310805	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Pyridine	DCB	Ave	1169135	65894 1796760	129804 2284580	252683 2852686	539720	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzaldehyde	DCB	Ave	1288765	92873 1937862	173546 2367472	320146 2789876	678500	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Phenol	DCB	Ave	1211072	78210 1793803	146621 2214218	273616 2703136	588905	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Aniline	DCB	Ave	1490234	91835 2221782	176801 2795756	330134 3389742	715240	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Bis(2-chloroethyl)ether	DCB	Ave	961174	59339 1446236	113368 1753057	208390 2236160	470877	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Chlorophenol	DCB	Ave	779327	45563 1163143	84578 1494525	160561 1801164	354483	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,3-Dichlorobenzene	DCB	Ave	764399	46273 1131497	84704 1433496	159098 1725766	332181	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,4-Dichlorobenzene	DCB	Ave	781643	45886 1147110	89326 1440764	155636 1708760	343627	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzyl alcohol	DCB	Ave	617657	38224 920785	71097 1152906	133907 1411267	292290	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2-Dichlorobenzene	DCB	Ave	741420	44510 1094726	82346 1367873	148325 1661946	324559	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Methylphenol	DCB	Ave	844971	51093 1245014	99088 1566475	177989 1906240	400110	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
bis (2-chloroisopropyl) ether	DCB	Ave	1254906	78218 1863294	144698 2362564	271936 2899809	597059	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-50067-1 Analy Batch No.: 181539

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/19/2015 16:13 Calibration End Date: 05/19/2015 19:33 Calibration ID: 28567

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Indene	DCB	Ave	2571685	172671 3593725	334061 4317768	602742 4981628	1293487	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
3 & 4 Methylphenol	DCB	Ave	885883	55124 1291298	103773 1633917	192913 1981943	426360	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
N-Nitrosodi-n-propylamine	DCB	Ave	588267	35995 844874	67577 1066310	129098 1273279	278969	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Acetophenone	DCB	Ave	1098028	66868 1610414	133252 1989235	243307 2430314	522214	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexachloroethane	DCB	Ave	306655	18988 455911	36720 586054	64152 696636	144274	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Nitrobenzene	NPT	Ave	881849	51212 1311835	95445 1641533	186218 2033115	414662	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Isophorone	NPT	Ave	1613983	100598 2360460	193006 2962105	359605 3614192	770147	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Nitrophenol	NPT	Ave	355489	19987 530972	38093 662613	77803 806348	166221	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4-Dimethylphenol	NPT	Ave	738605	46270 1056425	90003 1335910	161993 1587377	352124	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzoic acid	NPT	Ave	863566	35924 1356259	87082 1780038	159687 2143463	381956	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Bis(2-chloroethoxy)methane	NPT	Ave	1049423	64968 1536607	125830 1896177	231164 2279697	512274	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4-Dichlorophenol	NPT	Ave	521888	31714 767012	56758 974522	105402 1181230	227101	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2,4-Trichlorobenzene	NPT	Ave	523332	32082 785634	58869 980805	110342 1187259	236219	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Naphthalene	NPT	Ave	26175 2136740	135538 3093857	248799 3860979	462181 4641347	1016506	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Chloroaniline	NPT	Ave	974799	62283 1435601	108219 1851876	212116 2258200	473689	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,6-Dichlorophenol	NPT	Ave	507422	29093 736882	55344 926144	104704 1120596	225522	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexachlorobutadiene	NPT	Ave	219736	12907 330747	23984 418372	45722 502094	94180	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Caprolactam	NPT	Ave	485955	31284 714615	58108 908745	107044 1114386	220881	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
4-Chloro-3-methylphenol	NPT	Ave	659774	39974 957931	76821 1224897	139154 1461983	303610	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Methylnaphthalene	NPT	Ave	16668 1314168	81278 1901792	149220 2339575	282595 2799718	607347	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1-Methylnaphthalene	NPT	Ave	13963 1146338	71814 1678815	129268 2059588	243897 2515213	514799	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-50067-1 Analy Batch No.: 181539

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/19/2015 16:13 Calibration End Date: 05/19/2015 19:33 Calibration ID: 28567

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Hexachlorocyclopentadiene	ANT	Ave	212762	12378 325359	25499 423785	45693 513405	105131	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2,4,5-Tetrachlorobenzene	ANT	Ave	380570	25110 544673	42396 673702	82170 791502	176143	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4,6-Trichlorophenol	ANT	Ave	313555	17101 466876	34212 594742	66538 727392	139400	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4,5-Trichlorophenol	ANT	Ave	341863	18774 491813	35718 616169	67151 732446	143689	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,1'-Biphenyl	ANT	Ave	18690 1423587	90391 2054434	162604 2547893	304189 3030624	650189	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Chloronaphthalene	ANT	Ave	13234 1065581	62981 1553379	125393 1933553	220516 2315459	471083	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Nitroaniline	ANT	Ave	424554	22782 646434	44185 812162	87460 1010730	196699	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Dimethyl phthalate	ANT	Ave	1127807	63464 1612061	123874 2071500	223899 2455040	484839	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,3-Dinitrobenzene	ANT	Ave	188957	8162 290742	16504 378878	31887 463022	81563	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,6-Dinitrotoluene	ANT	Ave	263284	11553 402112	24768 502298	50315 622795	108364	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Acenaphthylene	ANT	Ave	23584 1854837	110097 2660914	208398 3329215	396781 3929079	820907	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
3-Nitroaniline	ANT	Ave	387312	18551 541482	37904 710843	75673 855276	170449	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4-Dinitrophenol	ANT	Ave	234052	+++++ 380406	19800 491793	45069 633352	115054	20.0	+++++ 30.0	2.00 40.0	4.00 50.0	10.0
Acenaphthene	ANT	Ave	13447 1044451	67492 1467981	125974 1786900	232880 2100351	491073	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Nitrophenol	ANT	Ave	221858	11950 347906	25305 446826	46954 549567	95320	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
2,4-Dinitrotoluene	ANT	Ave	323966	14309 476601	29955 623273	64835 759144	145743	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Dibenzofuran	ANT	Ave	17365 1463274	87656 2079939	164987 2629085	299961 3118196	643835	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,3,4,6-Tetrachlorophenol	ANT	Ave	244625	14086 337863	25839 419830	48826 507877	105136	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Diethyl phthalate	ANT	Ave	1042627	69934 1409993	126358 1740846	238903 2017617	505129	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Chlorophenyl phenyl ether	ANT	Ave	475305	28661 681360	53622 882962	100068 1068616	208618	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Nitroaniline	ANT	Ave	309515	16553 473334	32596 630108	68243 794049	132812	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-50067-1 Analy Batch No.: 181539

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/19/2015 16:13 Calibration End Date: 05/19/2015 19:33 Calibration ID: 28567

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Fluorene	ANT	Ave	14558 1181824	72097 1666768	133104 2061385	249715 2451718	529582	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4,6-Dinitro-2-methylphenol	PHN	Lin1	 260936	11899 405092	23262 534950	54056 679391	121257	 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
N-Nitrosodiphenylamine	PHN	Ave	 1572390	97621 2124595	181291 2522749	337256 2923625	736340	 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
1,2-Diphenylhydrazine(as Azobenzene)	PHN	Ave	 1661459	101336 2375637	190959 2974105	360513 3571295	774349	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Azobenzene	PHN	Ave	 1661218	102265 2376771	190959 2974105	360241 3570851	774337	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Bromophenyl phenyl ether	PHN	Ave	 234984	13887 343776	26083 436145	49164 519173	105534	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexachlorobenzene	PHN	Ave	2527 212572	13163 288366	25236 348354	47698 414202	101917	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Atrazine	PHN	Ave	 421103	28138 568041	53920 688971	91321 741214	188174	 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Pentachlorophenol	PHN	Ave	 302897	19206 434512	33264 544703	65051 650714	148629	 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Phenanthrene	PHN	Ave	20170 1521407	102409 2214926	190217 2756919	350742 3313239	730477	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Anthracene	PHN	Ave	20574 1559011	101984 2220409	193839 2780135	352653 3371126	744643	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Carbazole	PHN	Ave	 1440872	91808 2119100	173843 2690566	306434 3289131	598785	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Di-n-butyl phthalate	PHN	Ave	 1835603	110775 2621017	191477 3325383	314595 3669607	720235	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Fluoranthene	PHN	Ave	17685 1424022	87776 2048812	162631 2606595	262494 2985416	565744	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzidine	CRY	Lin1	 1784002	65114 2739703	123801 3487416	288393 4141330	738111	 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Pyrene	CRY	Ave	18857 1501041	85863 2135077	164389 2633606	269764 2927703	579633	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Butyl benzyl phthalate	CRY	Ave	 825808	45739 1167212	85180 1513714	164563 1814087	320324	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Bis(2-ethylhexyl) phthalate	CRY	Ave	 1153610	66449 1618266	116125 2115270	217021 2582603	467391	 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
3,3'-Dichlorobenzidine	CRY	Ave	 864928	43091 1241902	85573 1605282	172869 1918417	382988	 20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Benzo[a]anthracene	CRY	Ave	15904 1377712	79454 1946133	147267 2526054	269698 3004851	553364	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Chrysene	CRY	Ave	13625 1295782	71968 1787198	129774 2322624	244325 2804425	518744	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-50067-1 Analy Batch No.: 181539

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/19/2015 16:13 Calibration End Date: 05/19/2015 19:33 Calibration ID: 28567

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Di-n-octyl phthalate	PRY	Ave	1975272	105077 2825727	204936 3755074	376499 4542762	796268	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[b]fluoranthene	PRY	Ave	11750 1165964	61094 1737025	114882 2246526	216121 2711635	477789	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[k]fluoranthene	PRY	Ave	13486 1202344	60833 1671236	121761 2221648	219773 2754757	463824	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[a]pyrene	PRY	Ave	11374 1127677	60333 1619343	109650 2158506	202504 2653884	447611	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Indeno[1,2,3-cd]pyrene	PRY	Ave	11254 1018010	55215 1520587	102340 1997854	191100 2451465	414135	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Dibenz(a,h)anthracene	PRY	Ave	10257 848666	44066 1266277	84196 1673591	158778 2077789	352115	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[g,h,i]perylene	PRY	Ave	11214 811837	46299 1184787	88587 1548497	166390 1909196	335726	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Fluorophenol (Surr)	DCB	Ave	853026	48704 1256749	95785 1614882	175400 1978977	389474	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Phenol-d5 (Surr)	DCB	Ave	1121676	67998 1663125	133174 2092284	246062 2535617	542727	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Nitrobenzene-d5 (Surr)	NPT	Ave	9666 842627	48176 1238638	97850 1561937	176561 1927158	393620	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Fluorobiphenyl (Surr)	ANT	Ave	12129 1087462	66127 1588839	123659 1985989	229145 2384803	484320	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4,6-Tribromophenol (Surr)	ANT	Ave	103401	5021 142204	12341 180881	21411 223852	46949	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Terphenyl-d14 (Surr)	CRY	Ave	11156 906899	54340 1296265	101250 1683742	185228 1999755	384196	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519002.D
Lims ID: std5 lst1
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 19-May-2015 16:13:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043834-002
Misc. Info.: STD5 LST1STD5 LST1
Operator ID: 001574 Instrument ID: A4HP9
Sublist: chrom-8270 _9*sub34

Method: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 19-May-2015 20:27:23 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: ulmanm Date: 19-May-2015 16:38:54

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.415	6.415	0.000	97	177940	4.00	4.00	
* 2 Naphthalene-d8	136	7.531	7.531	0.000	98	759056	4.00	4.00	
* 3 Acenaphthene-d10	164	9.045	9.045	0.000	90	336160	4.00	4.00	
* 4 Phenanthrene-d10	188	10.315	10.315	0.000	94	523497	4.00	4.00	
* 5 Chrysene-d12	240	12.628	12.628	0.000	92	414284	4.00	4.00	
* 6 Perylene-d12	264	14.450	14.450	0.000	90	310950	4.00	4.00	
$ 7 2-Fluorophenol	112	5.194	5.194	0.000	91	389474	5.00	5.06	
$ 8 Phenol-d5	99	6.045	6.045	0.000	92	542727	5.00	5.23	
$ 9 Nitrobenzene-d5	82	6.886	6.886	0.000	86	393620	5.00	5.06	
$ 10 2-Fluorobiphenyl (Surr)	172	8.439	8.439	0.000	99	484320	5.00	5.05	
$ 11 2,4,6-Tribromophenol	330	9.714	9.714	0.000	89	46949	5.00	5.32	
$ 12 Terphenyl-d14	244	11.642	11.642	0.000	97	384196	5.00	4.83	
25 1,4-Dioxane	88	3.073	3.073	0.000	93	204428	5.00	5.08	
26 N-Nitrosodimethylamine	74	3.544	3.544	0.000	84	310805	5.00	5.00	
27 Pyridine	79	3.621	3.621	0.000	98	539720	5.00	5.02	
41 Benzaldehyde	77	6.011	6.011	0.000	97	678500	10.0	10.7	
43 Phenol	94	6.054	6.054	0.000	92	588905	5.00	5.19	
44 Aniline	93	6.107	6.107	0.000	99	715240	5.00	5.16	
69 Bis(2-chloroethyl)ether	93	6.146	6.146	0.000	98	470877	5.00	5.27	
46 2-Chlorophenol	128	6.227	6.227	0.000	97	354483	5.00	5.04	
243 n-Decane	57	6.256	6.256	0.000	91	543351	NC	NC	
47 1,3-Dichlorobenzene	146	6.372	6.372	0.000	97	332181	5.00	4.83	
48 1,4-Dichlorobenzene	146	6.429	6.429	0.000	93	343627	5.00	4.94	
49 Benzyl alcohol	108	6.511	6.511	0.000	97	292290	5.00	5.13	
50 1,2-Dichlorobenzene	146	6.574	6.574	0.000	95	324559	5.00	4.91	
51 2-Methylphenol	108	6.598	6.598	0.000	89	400110	5.00	5.17	
53 2,2'-oxybis[1-chloropropan	45	6.631	6.631	0.000	85	597059	5.00	5.14	
52 Indene	115	6.651	6.651	0.000	91	1293487	10.0	10.8	
21 3 & 4 Methylphenol	108	6.723	6.723	0.000	87	426360	5.00	5.22	
57 N-Nitrosodi-n-propylamine	70	6.737	6.737	0.000	92	278969	5.00	5.21	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
58 Acetophenone	105	6.752	6.752	0.000	97	522214	5.00	5.16	
61 Hexachloroethane	117	6.881	6.881	0.000	85	144274	5.00	5.09	
62 Nitrobenzene	77	6.905	6.905	0.000	84	414662	5.00	5.12	
64 Isophorone	82	7.107	7.107	0.000	98	770147	5.00	5.08	
66 2-Nitrophenol	139	7.184	7.184	0.000	91	166221	5.00	5.11	
65 2,4-Dimethylphenol	107	7.189	7.189	0.000	93	352124	5.00	5.11	
71 Benzoic acid	122	7.223	7.223	0.000	84	381956	10.0	10.0	
70 Bis(2-chloroethoxy)methane	93	7.271	7.271	0.000	98	512274	5.00	5.21	
73 2,4-Dichlorophenol	162	7.391	7.391	0.000	96	227101	5.00	4.80	
74 1,2,4-Trichlorobenzene	180	7.478	7.478	0.000	94	236219	5.00	4.89	
75 Naphthalene	128	7.550	7.550	0.000	95	1016506	5.00	5.07	
76 4-Chloroaniline	127	7.569	7.569	0.000	96	473689	5.00	5.16	
77 2,6-Dichlorophenol	162	7.588	7.588	0.000	95	225522	5.00	4.95	
79 Hexachlorobutadiene	225	7.656	7.656	0.000	98	94180	5.00	4.71	
84 Caprolactam	113	7.838	7.838	0.000	83	220881	10.0	9.65	
86 4-Chloro-3-methylphenol	107	7.959	7.959	0.000	96	303610	5.00	4.99	
87 2-Methylnaphthalene	142	8.141	8.141	0.000	95	607347	5.00	4.97	
88 1-Methylnaphthalene	142	8.228	8.228	0.000	93	514799	5.00	4.85	
89 Hexachlorocyclopentadiene	237	8.286	8.286	0.000	97	105131	5.00	5.36	
91 1,2,4,5-Tetrachlorobenzene	216	8.290	8.290	0.000	96	176143	5.00	5.22	
92 2,4,6-Trichlorophenol	196	8.367	8.367	0.000	94	139400	5.00	5.06	
93 2,4,5-Trichlorophenol	196	8.401	8.401	0.000	91	143689	5.00	4.99	
98 1,1'-Biphenyl	154	8.531	8.531	0.000	95	650189	5.00	5.06	
100 2-Chloronaphthalene	162	8.564	8.564	0.000	96	471083	5.00	4.97	
102 2-Nitroaniline	65	8.622	8.622	0.000	83	196699	5.00	5.27	
105 Dimethyl phthalate	163	8.752	8.752	0.000	97	484839	5.00	5.02	
106 1,3-Dinitrobenzene	168	8.786	8.786	0.000	84	81563	5.00	5.24	
107 2,6-Dinitrotoluene	165	8.810	8.810	0.000	92	108364	5.00	4.97	
109 Acenaphthylene	152	8.925	8.925	0.000	99	820907	5.00	5.00	
110 3-Nitroaniline	138	8.964	8.964	0.000	94	170449	5.00	5.31	
111 2,4-Dinitrophenol	184	9.050	9.050	0.000	84	115054	10.0	10.9	
112 Acenaphthene	153	9.069	9.069	0.000	94	491073	5.00	5.20	
113 4-Nitrophenol	109	9.069	9.069	0.000	62	95320	10.0	9.57	
114 2,4-Dinitrotoluene	165	9.161	9.161	0.000	90	145743	5.00	5.37	
116 Dibenzofuran	168	9.214	9.214	0.000	98	643835	5.00	5.03	
119 2,3,4,6-Tetrachlorophenol	232	9.310	9.310	0.000	77	105136	5.00	5.12	
121 Diethyl phthalate	149	9.348	9.348	0.000	98	505129	5.00	5.43	
247 Hexadecane	57	9.353	9.353	0.000	87	581090	NC	NC	
123 4-Chlorophenyl phenyl ethe	204	9.483	9.483	0.000	93	208618	5.00	4.98	
125 4-Nitroaniline	138	9.488	9.488	0.000	83	132812	5.00	4.79	
126 Fluorene	166	9.507	9.507	0.000	97	529582	5.00	5.10	
128 4,6-Dinitro-2-methylphenol	198	9.517	9.517	0.000	88	121257	10.0	9.29	
131 N-Nitrosodiphenylamine	169	9.574	9.574	0.000	98	736340	10.0	10.3	
133 Azobenzene	77	9.618	9.618	0.000	94	774337	5.00	4.96	
132 1,2-Diphenylhydrazine	77	9.618	9.618	0.000	98	774349	5.00	4.96	
139 4-Bromophenyl phenyl ether	248	9.901	9.901	0.000	75	105534	5.00	4.82	
142 Atrazine	200	9.997	9.997	0.000	85	188174	10.0	9.70	
141 Hexachlorobenzene	284	9.997	9.997	0.000	89	101917	5.00	5.17	
244 n-Octadecane	57	10.132	10.132	0.000	77	586714	NC	NC	
143 Pentachlorophenol	266	10.147	10.147	0.000	90	148629	10.0	10.4	
148 Phenanthrene	178	10.339	10.339	0.000	96	730477	5.00	4.87	
149 Anthracene	178	10.382	10.382	0.000	96	744643	5.00	4.91	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
151 Carbazole	167	10.493	10.493	0.000	95	598785	5.00	4.38	
154 Di-n-butyl phthalate	149	10.733	10.733	0.000	99	720235	5.00	4.48	
159 Fluoranthene	202	11.358	11.358	0.000	95	565744	5.00	4.35	
160 Benzidine	184	11.426	11.426	0.000	99	738111	10.0	9.93	
161 Pyrene	202	11.560	11.560	0.000	91	579633	5.00	4.62	
168 Butyl benzyl phthalate	149	12.022	12.022	0.000	94	320324	5.00	4.68	
173 Bis(2-ethylhexyl) phthalat	149	12.512	12.512	0.000	93	467391	5.00	4.88	
175 3,3'-Dichlorobenzidine	252	12.546	12.546	0.000	77	382988	10.0	10.6	
177 Benzo[a]anthracene	228	12.613	12.613	0.000	95	553364	5.00	4.73	
178 Chrysene	228	12.657	12.657	0.000	92	518744	5.00	4.87	
180 Di-n-octyl phthalate	149	13.186	13.186	0.000	99	796268	5.00	4.86	
182 Benzo[b]fluoranthene	252	13.878	13.878	0.000	93	477789	5.00	4.98	
183 Benzo[k]fluoranthene	252	13.912	13.912	0.000	92	463824	5.00	4.74	
184 Benzo[a]pyrene	252	14.364	14.364	0.000	88	447611	5.00	4.87	
188 Indeno[1,2,3-cd]pyrene	276	16.432	16.432	0.000	88	414135	5.00	4.83	
189 Dibenz(a,h)anthracene	278	16.441	16.441	0.000	88	352115	5.00	4.89	
190 Benzo[g,h,i]perylene	276	17.052	17.052	0.000	82	335726	5.00	4.70	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SMLIST1 L5 W_00005 Amount Added: 1.00 Units: mL

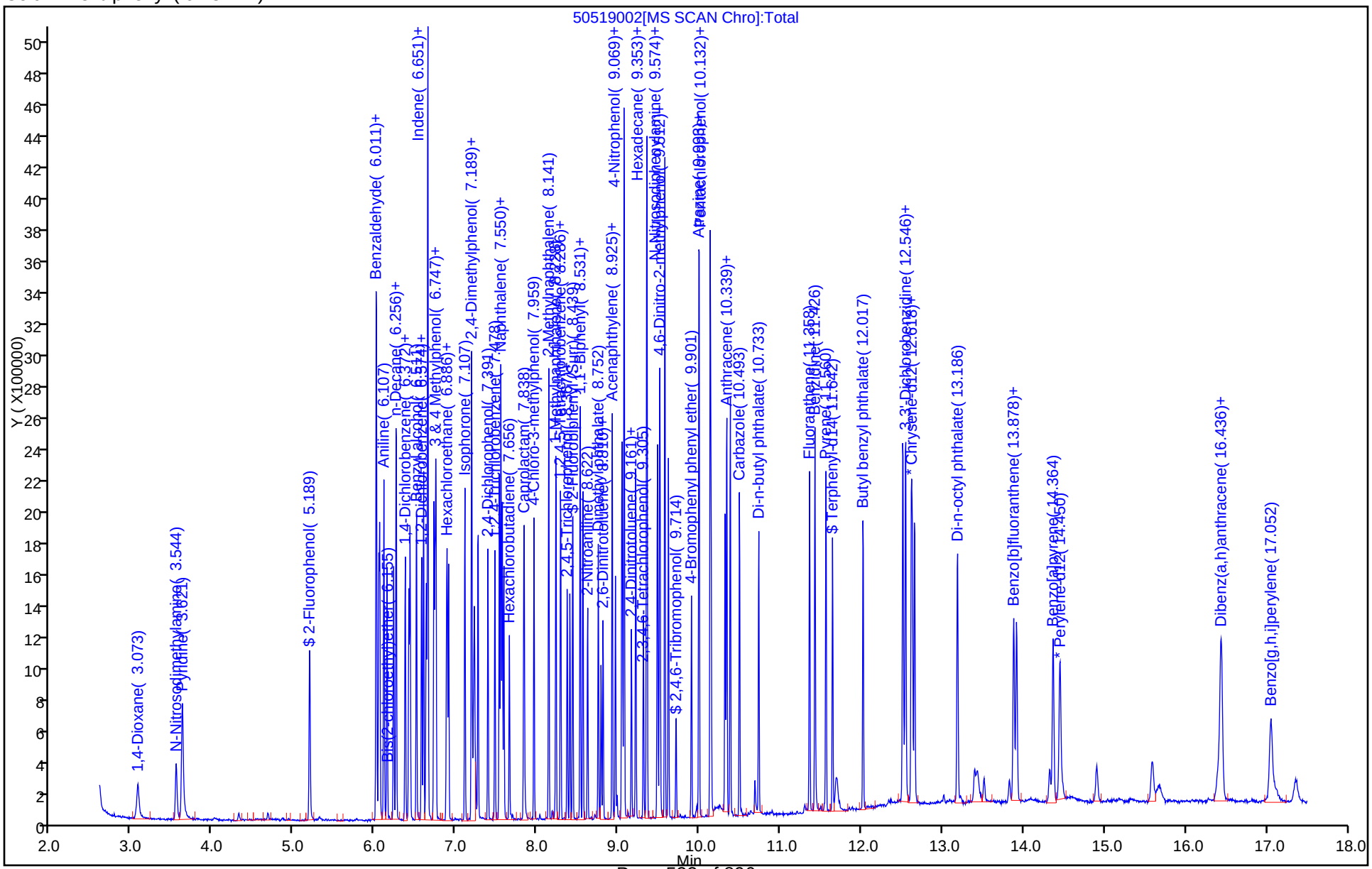
Report Date: 19-May-2015 20:27:23 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519002.D

Injection Date:	19-May-2015 16:13:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	std5 lst1			Worklist Smp#:	2
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519003.D
Lims ID: std4 lst1
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 19-May-2015 16:38:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043834-003
Misc. Info.: STD4 LST1STD4 LST1
Operator ID: 001574 Instrument ID: A4HP9
Sublist: chrom-8270 _9*sub34

Method: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 19-May-2015 20:27:25 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: ulmanm Date: 19-May-2015 17:08:57

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.417	6.415	0.002	96	196651	4.00	4.00	
* 2 Naphthalene-d8	136	7.533	7.531	0.002	99	837199	4.00	4.00	
* 3 Acenaphthene-d10	164	9.043	9.045	-0.002	90	387314	4.00	4.00	
* 4 Phenanthrene-d10	188	10.317	10.315	0.002	95	593154	4.00	4.00	
* 5 Chrysene-d12	240	12.625	12.628	-0.003	92	473238	4.00	4.00	
* 6 Perylene-d12	264	14.448	14.450	-0.002	90	348356	4.00	4.00	
$ 7 2-Fluorophenol	112	5.191	5.194	-0.003	91	175400	2.00	2.06	
$ 8 Phenol-d5	99	6.042	6.045	-0.003	92	246062	2.00	2.14	
$ 9 Nitrobenzene-d5	82	6.888	6.886	0.002	86	176561	2.00	2.06	
$ 10 2-Fluorobiphenyl (Surr)	172	8.437	8.439	-0.002	99	229145	2.00	2.07	
$ 11 2,4,6-Tribromophenol	330	9.711	9.714	-0.003	84	21411	2.00	2.11	
$ 12 Terphenyl-d14	244	11.639	11.642	-0.003	97	185228	2.00	2.04	
25 1,4-Dioxane	88	3.075	3.073	0.002	92	94888	2.00	2.13	
26 N-Nitrosodimethylamine	74	3.546	3.544	0.002	84	142419	2.00	2.07	
27 Pyridine	79	3.618	3.621	-0.003	97	252683	2.00	2.13	
41 Benzaldehyde	77	6.013	6.011	0.002	98	320146	4.00	4.55	
43 Phenol	94	6.056	6.054	0.002	93	273616	2.00	2.18	
44 Aniline	93	6.104	6.107	-0.003	99	330134	2.00	2.16	
69 Bis(2-chloroethyl)ether	93	6.143	6.146	-0.003	98	208390	2.00	2.11	
46 2-Chlorophenol	128	6.225	6.227	-0.002	97	160561	2.00	2.07	
243 n-Decane	57	6.258	6.256	0.002	91	245704	NC	NC	
47 1,3-Dichlorobenzene	146	6.369	6.372	-0.003	97	159098	2.00	2.09	
48 1,4-Dichlorobenzene	146	6.431	6.429	0.002	94	155636	2.00	2.03	
49 Benzyl alcohol	108	6.508	6.511	-0.003	97	133907	2.00	2.13	
50 1,2-Dichlorobenzene	146	6.571	6.574	-0.003	96	148325	2.00	2.03	
51 2-Methylphenol	108	6.595	6.598	-0.003	90	177989	2.00	2.08	
53 2,2'-oxybis[1-chloropropan	45	6.629	6.631	-0.002	86	271936	2.00	2.12	
52 Indene	115	6.648	6.651	-0.003	89	602742	4.00	4.55	
21 3 & 4 Methylphenol	108	6.725	6.723	0.002	86	192913	2.00	2.14	
57 N-Nitrosodi-n-propylamine	70	6.739	6.737	0.002	91	129098	2.00	2.18	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
58 Acetophenone	105	6.749	6.752	-0.003	97	243307	2.00	2.17	
61 Hexachloroethane	117	6.879	6.881	-0.002	87	64152	2.00	2.05	
62 Nitrobenzene	77	6.903	6.905	-0.002	84	186218	2.00	2.09	
64 Isophorone	82	7.105	7.107	-0.002	98	359605	2.00	2.15	
66 2-Nitrophenol	139	7.186	7.184	0.002	91	77803	2.00	2.17	
65 2,4-Dimethylphenol	107	7.191	7.189	0.002	92	161993	2.00	2.13	
71 Benzoic acid	122	7.210	7.223	-0.013	82	159687	4.00	3.80	M
70 Bis(2-chloroethoxy)methane	93	7.268	7.271	-0.003	99	231164	2.00	2.13	
73 2,4-Dichlorophenol	162	7.388	7.391	-0.003	96	105402	2.00	2.02	
74 1,2,4-Trichlorobenzene	180	7.475	7.478	-0.003	94	110342	2.00	2.07	
75 Naphthalene	128	7.552	7.550	0.002	95	462181	2.00	2.09	
76 4-Chloroaniline	127	7.566	7.569	-0.003	95	212116	2.00	2.10	M
77 2,6-Dichlorophenol	162	7.586	7.588	-0.002	95	104704	2.00	2.08	
79 Hexachlorobutadiene	225	7.653	7.656	-0.003	97	45722	2.00	2.07	
84 Caprolactam	113	7.831	7.838	-0.007	83	107044	4.00	4.24	
86 4-Chloro-3-methylphenol	107	7.956	7.959	-0.003	96	139154	2.00	2.08	
87 2-Methylnaphthalene	142	8.139	8.141	-0.002	95	282595	2.00	2.10	
88 1-Methylnaphthalene	142	8.230	8.228	0.002	93	243897	2.00	2.08	
89 Hexachlorocyclopentadiene	237	8.283	8.286	-0.003	95	45693	2.00	2.02	
91 1,2,4,5-Tetrachlorobenzene	216	8.288	8.290	-0.002	97	82170	2.00	2.11	
92 2,4,6-Trichlorophenol	196	8.369	8.367	0.002	95	66538	2.00	2.10	
93 2,4,5-Trichlorophenol	196	8.403	8.401	0.002	93	67151	2.00	2.02	
98 1,1'-Biphenyl	154	8.528	8.531	-0.003	95	304189	2.00	2.06	
100 2-Chloronaphthalene	162	8.562	8.564	-0.002	97	220516	2.00	2.02	
102 2-Nitroaniline	65	8.619	8.622	-0.003	83	87460	2.00	2.03	
105 Dimethyl phthalate	163	8.749	8.752	-0.003	97	223899	2.00	2.01	
106 1,3-Dinitrobenzene	168	8.788	8.786	0.002	85	31887	2.00	1.78	
107 2,6-Dinitrotoluene	165	8.812	8.810	0.002	93	50315	2.00	2.00	
109 Acenaphthylene	152	8.922	8.925	-0.003	99	396781	2.00	2.10	
110 3-Nitroaniline	138	8.966	8.964	0.002	95	75673	2.00	2.05	
111 2,4-Dinitrophenol	184	9.052	9.050	0.002	80	45069	4.00	3.70	M
112 Acenaphthene	153	9.071	9.069	0.002	93	232880	2.00	2.14	
113 4-Nitrophenol	109	9.071	9.069	0.002	62	46954	4.00	4.09	
114 2,4-Dinitrotoluene	165	9.163	9.161	0.002	90	64835	2.00	2.07	
116 Dibenzofuran	168	9.216	9.214	0.002	98	299961	2.00	2.03	
119 2,3,4,6-Tetrachlorophenol	232	9.307	9.310	-0.003	78	48826	2.00	2.06	
121 Diethyl phthalate	149	9.346	9.348	-0.002	97	238903	2.00	2.23	
247 Hexadecane	57	9.350	9.353	-0.003	88	264237	NC	NC	
123 4-Chlorophenyl phenyl ethe	204	9.480	9.483	-0.003	92	100068	2.00	2.07	
125 4-Nitroaniline	138	9.485	9.488	-0.003	82	68243	2.00	2.14	
126 Fluorene	166	9.509	9.507	0.002	96	249715	2.00	2.09	
128 4,6-Dinitro-2-methylphenol	198	9.519	9.517	0.002	88	54056	4.00	3.95	
131 N-Nitrosodiphenylamine	169	9.572	9.574	-0.002	98	337256	4.00	4.18	
133 Azobenzene	77	9.615	9.618	-0.003	94	360241	2.00	2.04	
132 1,2-Diphenylhydrazine	77	9.615	9.618	-0.003	99	360513	2.00	2.04	
139 4-Bromophenyl phenyl ether	248	9.903	9.901	0.002	75	49164	2.00	1.98	
142 Atrazine	200	9.995	9.997	-0.002	81	91321	4.00	4.15	
141 Hexachlorobenzene	284	9.995	9.997	-0.002	77	47698	2.00	2.14	
244 n-Octadecane	57	10.129	10.132	-0.003	77	273014	NC	NC	
143 Pentachlorophenol	266	10.144	10.147	-0.003	89	65051	4.00	4.02	
148 Phenanthrene	178	10.336	10.339	-0.003	96	350742	2.00	2.07	
149 Anthracene	178	10.379	10.382	-0.003	96	352653	2.00	2.05	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
151 Carbazole	167	10.495	10.493	0.002	95	306434	2.00	1.98	
154 Di-n-butyl phthalate	149	10.730	10.733	-0.003	99	314595	2.00	1.73	
159 Fluoranthene	202	11.356	11.358	-0.002	96	262494	2.00	1.78	
160 Benzidine	184	11.423	11.426	-0.003	98	288393	4.00	3.74	
161 Pyrene	202	11.558	11.560	-0.002	92	269764	2.00	1.88	
168 Butyl benzyl phthalate	149	12.019	12.022	-0.003	94	164563	2.00	2.10	
173 Bis(2-ethylhexyl) phthalat	149	12.510	12.512	-0.002	95	217021	2.00	1.98	
175 3,3'-Dichlorobenzidine	252	12.543	12.546	-0.003	78	172869	4.00	4.21	
177 Benzo[a]anthracene	228	12.616	12.613	0.003	96	269698	2.00	2.02	
178 Chrysene	228	12.654	12.657	-0.003	93	244325	2.00	2.01	
180 Di-n-octyl phthalate	149	13.183	13.186	-0.003	98	376499	2.00	2.05	
182 Benzo[b]fluoranthene	252	13.875	13.878	-0.003	94	216121	2.00	2.01	
183 Benzo[k]fluoranthene	252	13.914	13.912	0.002	93	219773	2.00	2.00	
184 Benzo[a]pyrene	252	14.366	14.364	0.002	89	202504	2.00	1.97	
188 Indeno[1,2,3-cd]pyrene	276	16.429	16.432	-0.003	90	191100	2.00	1.99	
189 Dibenz(a,h)anthracene	278	16.439	16.441	-0.002	89	158778	2.00	1.97	
190 Benzo[g,h,i]perylene	276	17.044	17.052	-0.008	84	166390	2.00	2.08	
S 191 Methyl Phenols,Total	100				0			4.22	
S 245 Total Cresols	100				0			4.22	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L4 W_00005 Amount Added: 1.00 Units: mL

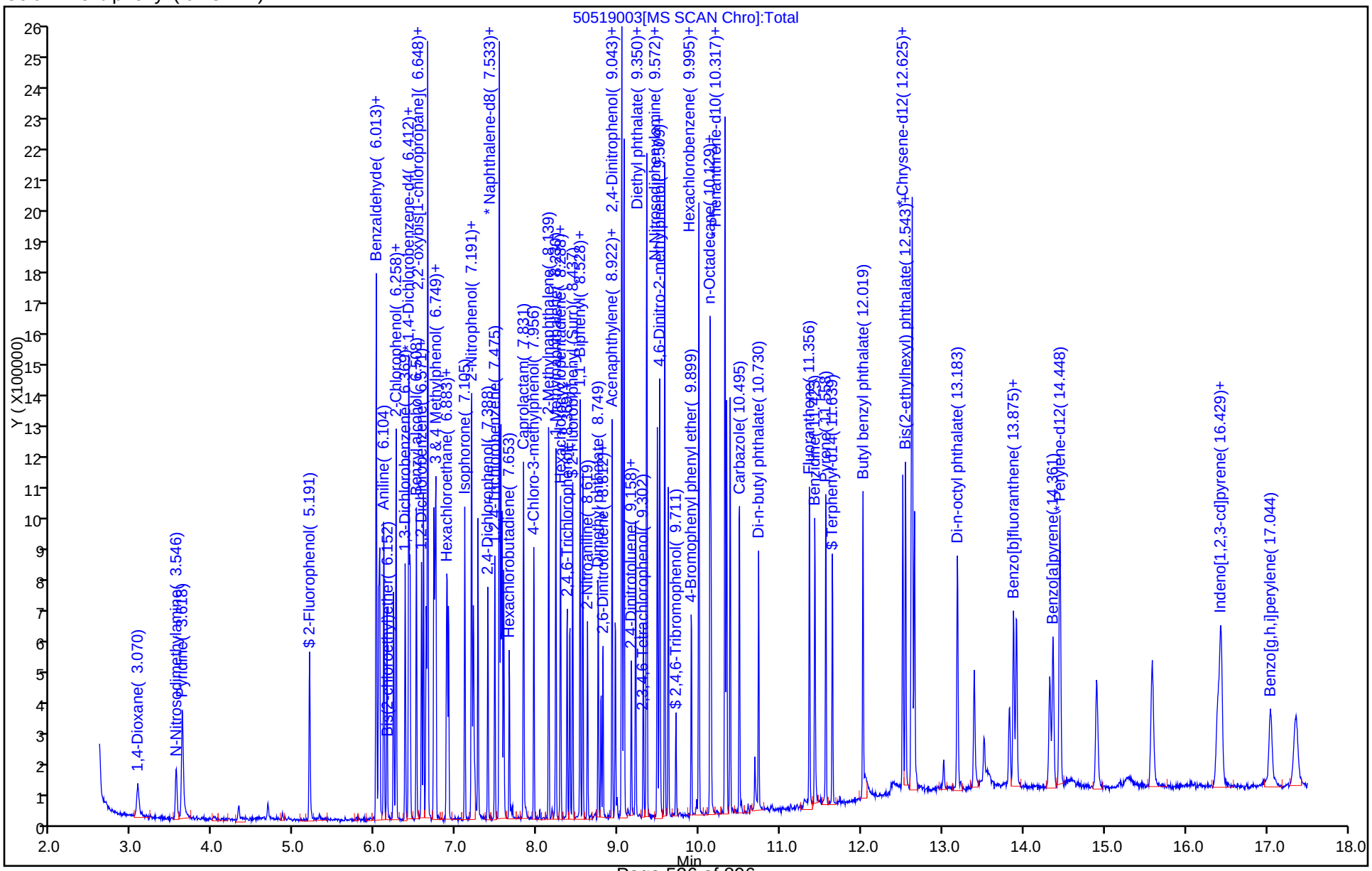
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TestAmerica Canton

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Injection Date:	19-May-2015 16:38:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	std4 lst1			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

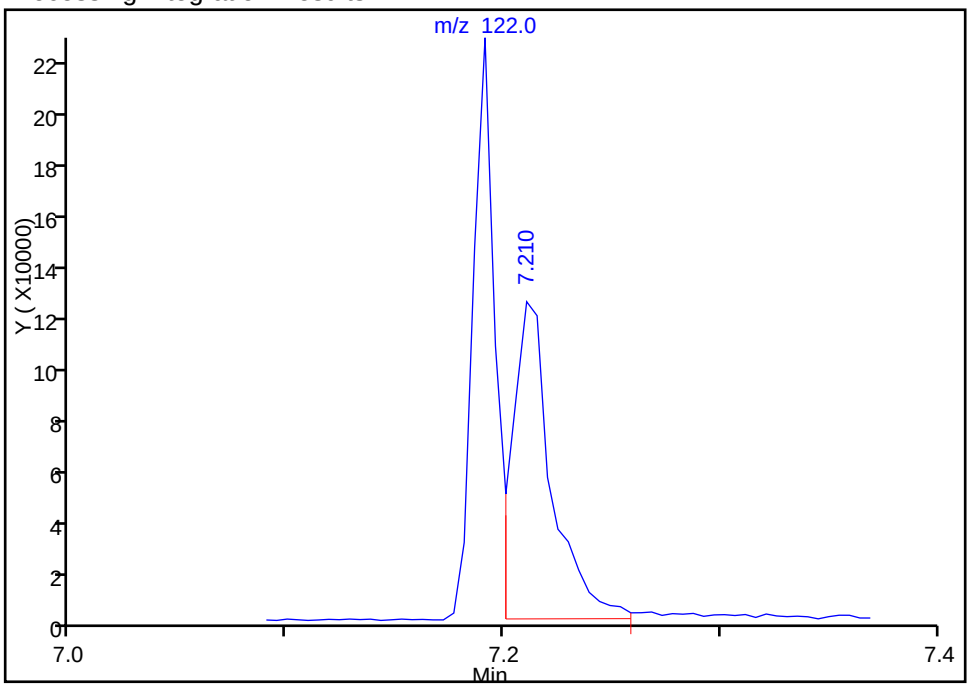
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519003.D
Injection Date: 19-May-2015 16:38:30 Instrument ID: A4HP9
Lims ID: std4 lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

71 Benzoic acid, CAS: 65-85-0

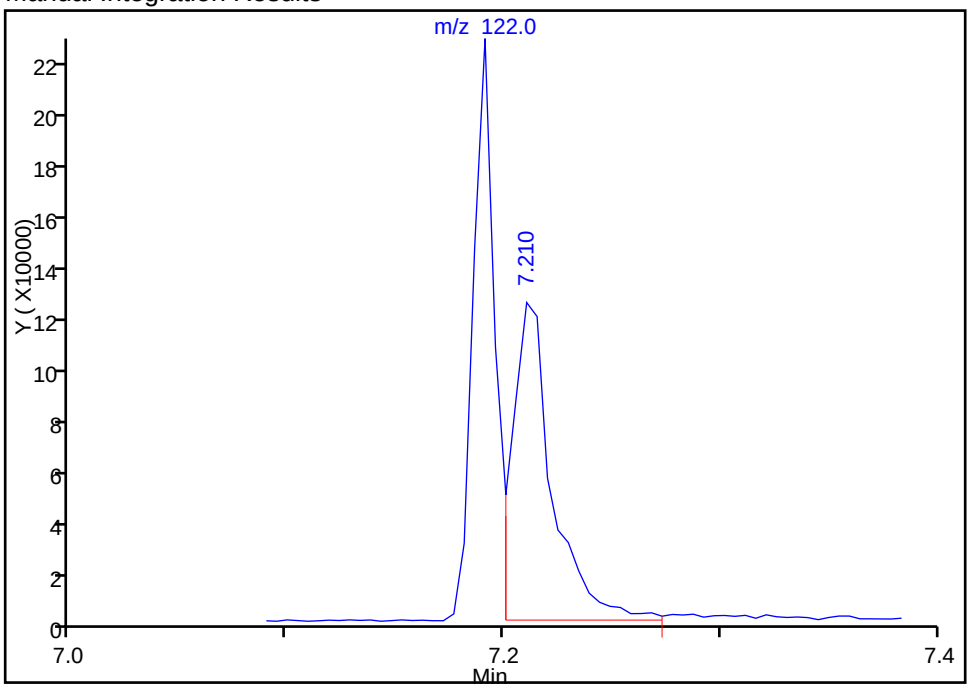
Processing Integration Results

RT: 7.21
Area: 157046
Amount: 3.859134
Amount Units: ng/ul



Manual Integration Results

RT: 7.21
Area: 159687
Amount: 3.801440
Amount Units: ng/ul



Reviewer: ulmanm, 19-May-2015 17:08:57
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

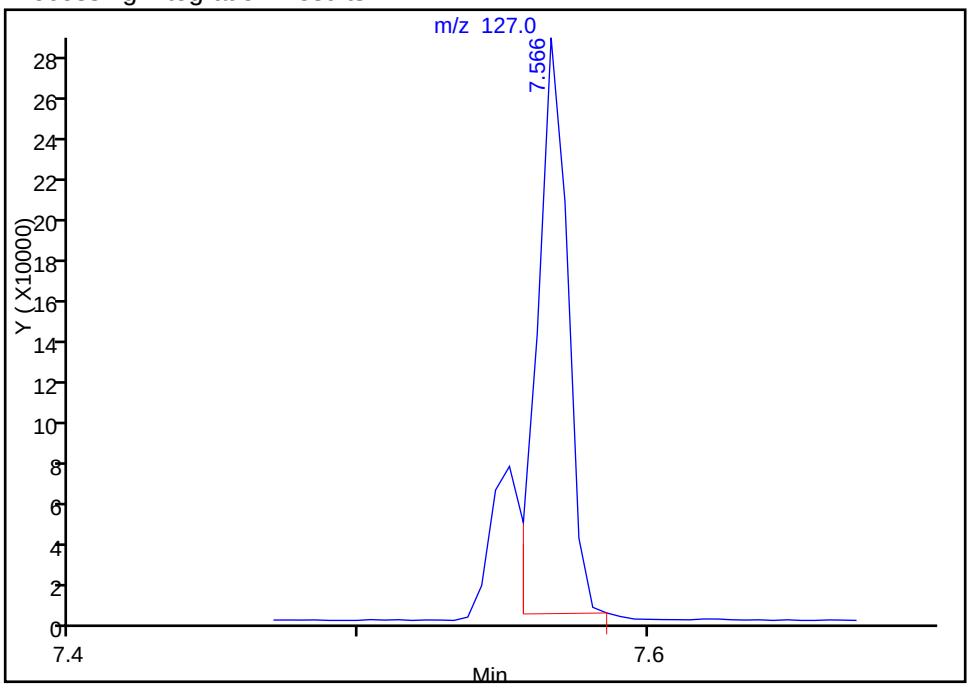
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519003.D
Injection Date: 19-May-2015 16:38:30 Instrument ID: A4HP9
Lims ID: std4 lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

76 4-Chloroaniline, CAS: 106-47-8

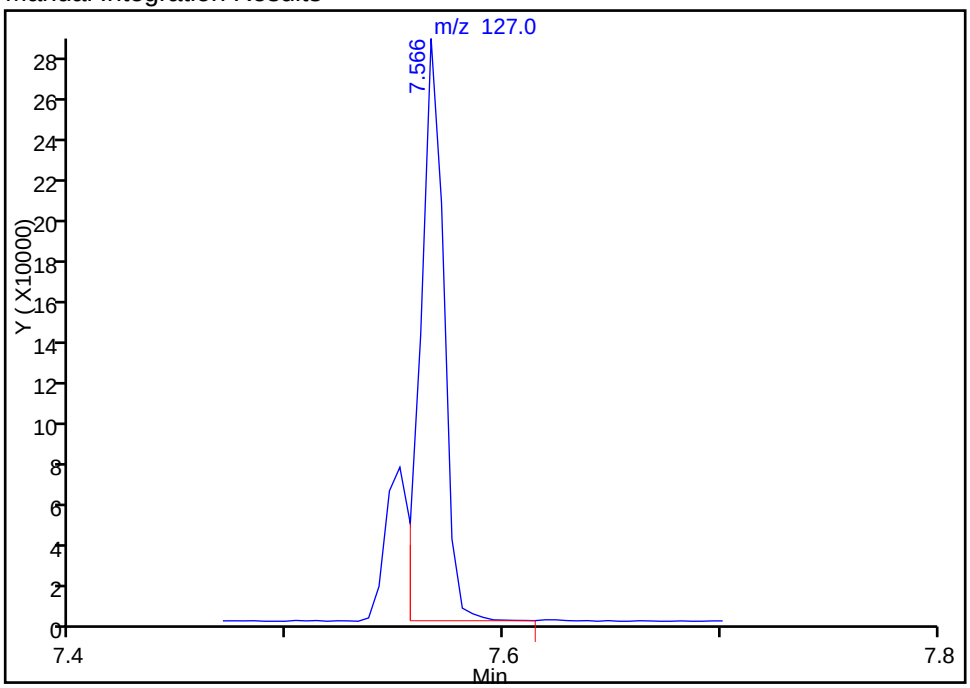
Processing Integration Results

RT: 7.57
Area: 204906
Amount: 1.980305
Amount Units: ng/ul



Manual Integration Results

RT: 7.57
Area: 212116
Amount: 2.095592
Amount Units: ng/ul



Reviewer: ulmanm, 19-May-2015 17:08:57
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

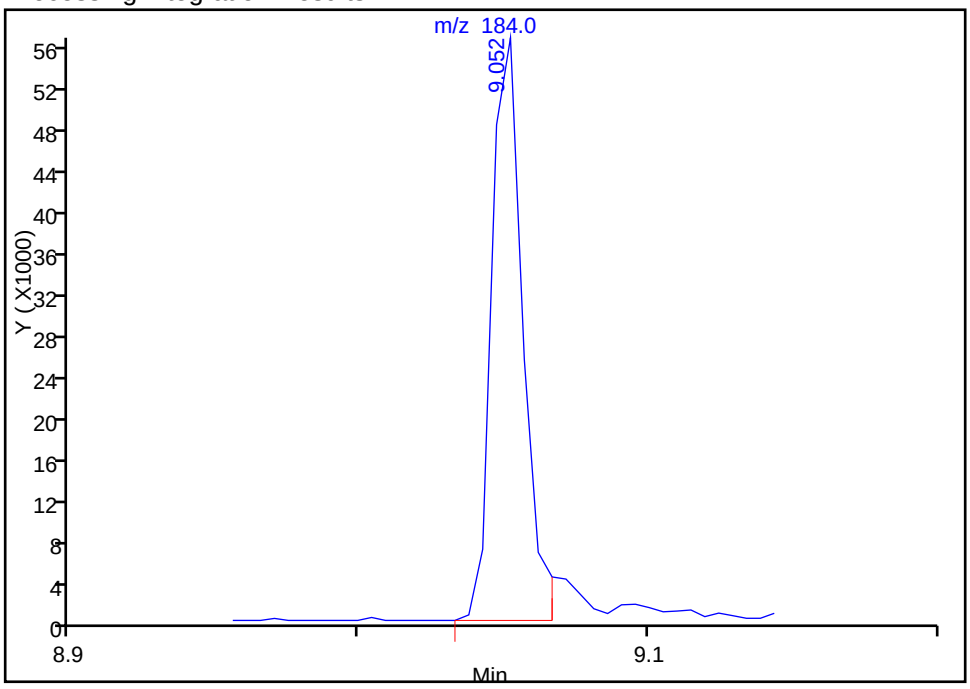
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519003.D
Injection Date: 19-May-2015 16:38:30 Instrument ID: A4HP9
Lims ID: std4 lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

111 2,4-Dinitrophenol, CAS: 51-28-5

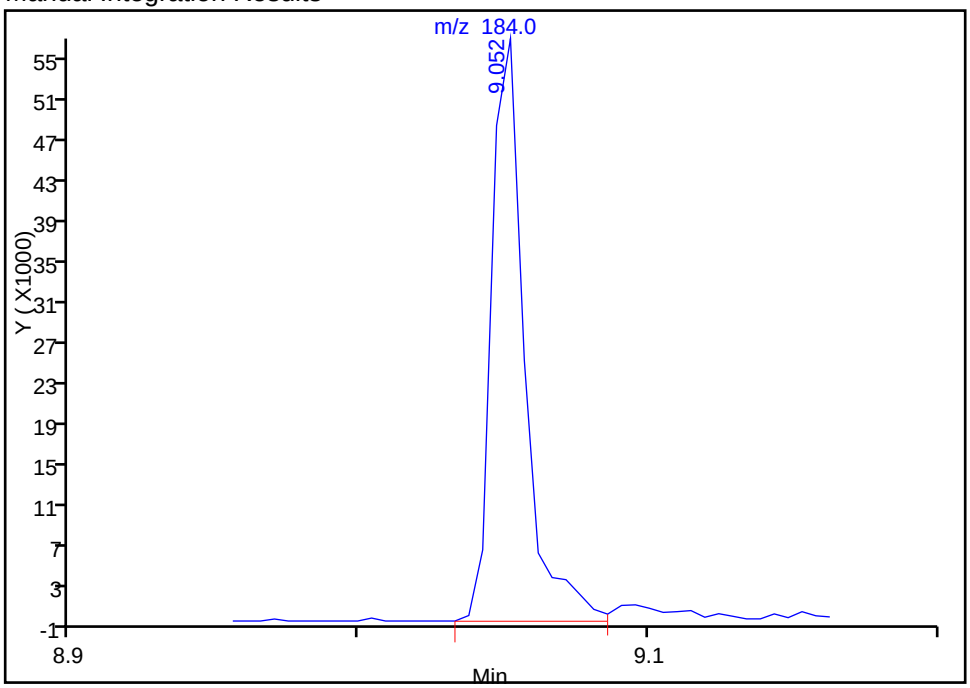
Processing Integration Results

RT: 9.05
Area: 42580
Amount: 3.563002
Amount Units: ng/ul



Manual Integration Results

RT: 9.05
Area: 45069
Amount: 3.703812
Amount Units: ng/ul



Reviewer: ulmanm, 19-May-2015 17:08:57
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519004.D
Lims ID: std3 lst1
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 19-May-2015 17:03:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043834-004
Misc. Info.: STD3 LST1STD3 LST1
Operator ID: 001574 Instrument ID: A4HP9
Sublist: chrom-8270 _9*sub34

Method: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 19-May-2015 20:27:27 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: ulmanm Date: 19-May-2015 17:29:50

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.414	6.415	-0.001	97	213786	4.00	4.00	
* 2 Naphthalene-d8	136	7.530	7.531	-0.001	99	886865	4.00	4.00	
* 3 Acenaphthene-d10	164	9.040	9.045	-0.005	91	406730	4.00	4.00	
* 4 Phenanthrene-d10	188	10.314	10.315	-0.001	95	629737	4.00	4.00	
* 5 Chrysene-d12	240	12.627	12.628	-0.001	92	500190	4.00	4.00	
* 6 Perylene-d12	264	14.445	14.450	-0.005	89	375655	4.00	4.00	
$ 7 2-Fluorophenol	112	5.193	5.194	-0.001	91	95785	1.00	1.04	
$ 8 Phenol-d5	99	6.044	6.045	-0.001	92	133174	1.00	1.07	
$ 9 Nitrobenzene-d5	82	6.890	6.886	0.004	86	97850	1.00	1.08	
$ 10 2-Fluorobiphenyl (Surr)	172	8.438	8.439	-0.001	98	123659	1.00	1.07	
$ 11 2,4,6-Tribromophenol	330	9.713	9.714	-0.001	86	12341	1.00	1.16	
$ 12 Terphenyl-d14	244	11.641	11.642	-0.001	97	101250	1.00	1.05	
25 1,4-Dioxane	88	3.072	3.073	-0.001	93	44490	1.00	0.9207	
26 N-Nitrosodimethylamine	74	3.543	3.544	-0.001	85	75213	1.00	1.01	
27 Pyridine	79	3.620	3.621	-0.001	98	129804	1.00	1.00	
41 Benzaldehyde	77	6.015	6.011	0.004	98	173546	2.00	2.27	
43 Phenol	94	6.053	6.054	-0.001	93	146621	1.00	1.08	
44 Aniline	93	6.106	6.107	-0.001	98	176801	1.00	1.06	
69 Bis(2-chloroethyl)ether	93	6.145	6.146	-0.001	99	113368	1.00	1.06	
46 2-Chlorophenol	128	6.226	6.227	-0.001	97	84578	1.00	1.00	
243 n-Decane	57	6.255	6.256	-0.001	91	134475	NC	NC	
47 1,3-Dichlorobenzene	146	6.371	6.372	-0.001	96	84704	1.00	1.03	
48 1,4-Dichlorobenzene	146	6.428	6.429	-0.001	95	89326	1.00	1.07	
49 Benzyl alcohol	108	6.510	6.511	-0.001	97	71097	1.00	1.04	
50 1,2-Dichlorobenzene	146	6.573	6.574	-0.001	96	82346	1.00	1.04	
51 2-Methylphenol	108	6.597	6.598	-0.001	89	99088	1.00	1.07	
53 2,2'-oxybis[1-chloropropan	45	6.630	6.631	-0.001	85	144698	1.00	1.04	
52 Indene	115	6.650	6.651	-0.001	89	334061	2.00	2.32	
21 3 & 4 Methylphenol	108	6.722	6.723	-0.001	86	103773	1.00	1.06	
57 N-Nitrosodi-n-propylamine	70	6.736	6.737	-0.001	92	67577	1.00	1.05	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
58 Acetophenone	105	6.751	6.752	-0.001	98	133252	1.00	1.10	
61 Hexachloroethane	117	6.880	6.881	-0.001	82	36720	1.00	1.08	
62 Nitrobenzene	77	6.904	6.905	-0.001	86	95445	1.00	1.01	
64 Isophorone	82	7.106	7.107	-0.001	98	193006	1.00	1.09	
66 2-Nitrophenol	139	7.188	7.184	0.004	91	38093	1.00	1.00	
65 2,4-Dimethylphenol	107	7.193	7.189	0.004	95	90003	1.00	1.12	
71 Benzoic acid	122	7.207	7.223	-0.016	78	87082	2.00	1.96	
70 Bis(2-chloroethoxy)methane	93	7.270	7.271	-0.001	97	125830	1.00	1.10	
73 2,4-Dichlorophenol	162	7.390	7.391	-0.001	95	56758	1.00	1.03	
74 1,2,4-Trichlorobenzene	180	7.477	7.478	-0.001	94	58869	1.00	1.04	
75 Naphthalene	128	7.549	7.550	-0.001	96	248799	1.00	1.06	
76 4-Chloroaniline	127	7.568	7.569	-0.001	94	108219	1.00	1.01	
77 2,6-Dichlorophenol	162	7.587	7.588	-0.001	95	55344	1.00	1.04	
79 Hexachlorobutadiene	225	7.655	7.656	-0.001	97	23984	1.00	1.03	
84 Caprolactam	113	7.828	7.838	-0.010	84	58108	2.00	2.17	
86 4-Chloro-3-methylphenol	107	7.958	7.959	-0.001	94	76821	1.00	1.08	
87 2-Methylnaphthalene	142	8.140	8.141	-0.001	95	149220	1.00	1.05	
88 1-Methylnaphthalene	142	8.227	8.228	-0.001	93	129268	1.00	1.04	
89 Hexachlorocyclopentadiene	237	8.285	8.286	-0.001	92	25499	1.00	1.07	
91 1,2,4,5-Tetrachlorobenzene	216	8.289	8.290	-0.001	96	42396	1.00	1.04	
92 2,4,6-Trichlorophenol	196	8.366	8.367	-0.001	94	34212	1.00	1.03	
93 2,4,5-Trichlorophenol	196	8.400	8.401	-0.001	94	35718	1.00	1.03	
98 1,1'-Biphenyl	154	8.530	8.531	-0.001	94	162604	1.00	1.05	
100 2-Chloronaphthalene	162	8.564	8.564	0.000	95	125393	1.00	1.09	
102 2-Nitroaniline	65	8.621	8.622	-0.001	81	44185	1.00	0.9789	
105 Dimethyl phthalate	163	8.751	8.752	-0.001	97	123874	1.00	1.06	
106 1,3-Dinitrobenzene	168	8.785	8.786	-0.001	82	16504	1.00	0.8771	
107 2,6-Dinitrotoluene	165	8.809	8.810	-0.001	92	24768	1.00	0.9389	
109 Acenaphthylene	152	8.924	8.925	-0.001	99	208398	1.00	1.05	
110 3-Nitroaniline	138	8.963	8.964	-0.001	92	37904	1.00	0.9768	
111 2,4-Dinitrophenol	184	9.049	9.050	-0.001	76	19800	2.00	1.55	
112 Acenaphthene	153	9.068	9.069	-0.001	92	125974	1.00	1.10	
113 4-Nitrophenol	109	9.068	9.069	-0.001	60	25305	2.00	2.10	
114 2,4-Dinitrotoluene	165	9.160	9.161	-0.001	86	29955	1.00	0.9129	
116 Dibenzofuran	168	9.213	9.214	-0.001	98	164987	1.00	1.07	
119 2,3,4,6-Tetrachlorophenol	232	9.309	9.310	-0.001	77	25839	1.00	1.04	
121 Diethyl phthalate	149	9.347	9.348	-0.001	98	126358	1.00	1.12	
247 Hexadecane	57	9.352	9.353	-0.001	88	143363	NC	NC	
123 4-Chlorophenyl phenyl ethe	204	9.482	9.483	-0.001	92	53622	1.00	1.06	
125 4-Nitroaniline	138	9.482	9.488	-0.006	81	32596	1.00	0.9726	
126 Fluorene	166	9.506	9.507	-0.001	97	133104	1.00	1.06	
128 4,6-Dinitro-2-methylphenol	198	9.516	9.517	-0.001	87	23262	2.00	1.90	
131 N-Nitrosodiphenylamine	169	9.573	9.574	-0.001	98	181291	2.00	2.11	
133 Azobenzene	77	9.617	9.618	-0.001	94	190959	1.00	1.02	
132 1,2-Diphenylhydrazine	77	9.617	9.618	-0.001	97	190959	1.00	1.02	
139 4-Bromophenyl phenyl ether	248	9.900	9.901	-0.001	76	26083	1.00	0.9896	
142 Atrazine	200	9.992	9.997	-0.005	81	53920	2.00	2.31	
141 Hexachlorobenzene	284	9.997	9.997	0.000	87	25236	1.00	1.06	
244 n-Octadecane	57	10.131	10.132	-0.001	77	141592	NC	NC	
143 Pentachlorophenol	266	10.146	10.147	-0.001	89	33264	2.00	1.94	
148 Phenanthrene	178	10.338	10.339	-0.001	96	190217	1.00	1.06	
149 Anthracene	178	10.381	10.382	-0.001	96	193839	1.00	1.06	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
151 Carbazole	167	10.492	10.493	-0.001	95	173843	1.00	1.06	
154 Di-n-butyl phthalate	149	10.732	10.733	-0.001	99	191477	1.00	0.9897	
159 Fluoranthene	202	11.357	11.358	-0.001	96	162631	1.00	1.04	
160 Benzidine	184	11.425	11.426	-0.001	99	123801	2.00	1.83	
161 Pyrene	202	11.559	11.560	-0.001	92	164389	1.00	1.08	
168 Butyl benzyl phthalate	149	12.016	12.022	-0.006	91	85180	1.00	1.03	
173 Bis(2-ethylhexyl) phthalat	149	12.507	12.512	-0.005	94	116125	1.00	1.00	
175 3,3'-Dichlorobenzidine	252	12.545	12.546	-0.001	78	85573	2.00	1.97	
177 Benzo[a]anthracene	228	12.613	12.613	0.000	96	147267	1.00	1.04	
178 Chrysene	228	12.651	12.657	-0.006	93	129774	1.00	1.01	
180 Di-n-octyl phthalate	149	13.180	13.186	-0.006	98	204936	1.00	1.04	
182 Benzo[b]fluoranthene	252	13.872	13.878	-0.006	92	114882	1.00	0.99	
183 Benzo[k]fluoranthene	252	13.911	13.912	-0.001	92	121761	1.00	1.03	
184 Benzo[a]pyrene	252	14.363	14.364	-0.001	87	109650	1.00	0.9881	
188 Indeno[1,2,3-cd]pyrene	276	16.431	16.432	-0.001	78	102340	1.00	0.9887	
189 Dibenz(a,h)anthracene	278	16.440	16.441	-0.001	66	84196	1.00	0.9671	
190 Benzo[g,h,i]perylene	276	17.041	17.052	-0.011	85	88587	1.00	1.03	
S 191 Methyl Phenols,Total	100				0			2.12	
S 245 Total Cresols	100				0			2.12	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SMLIST1 L3 W_00005 Amount Added: 1.00 Units: mL

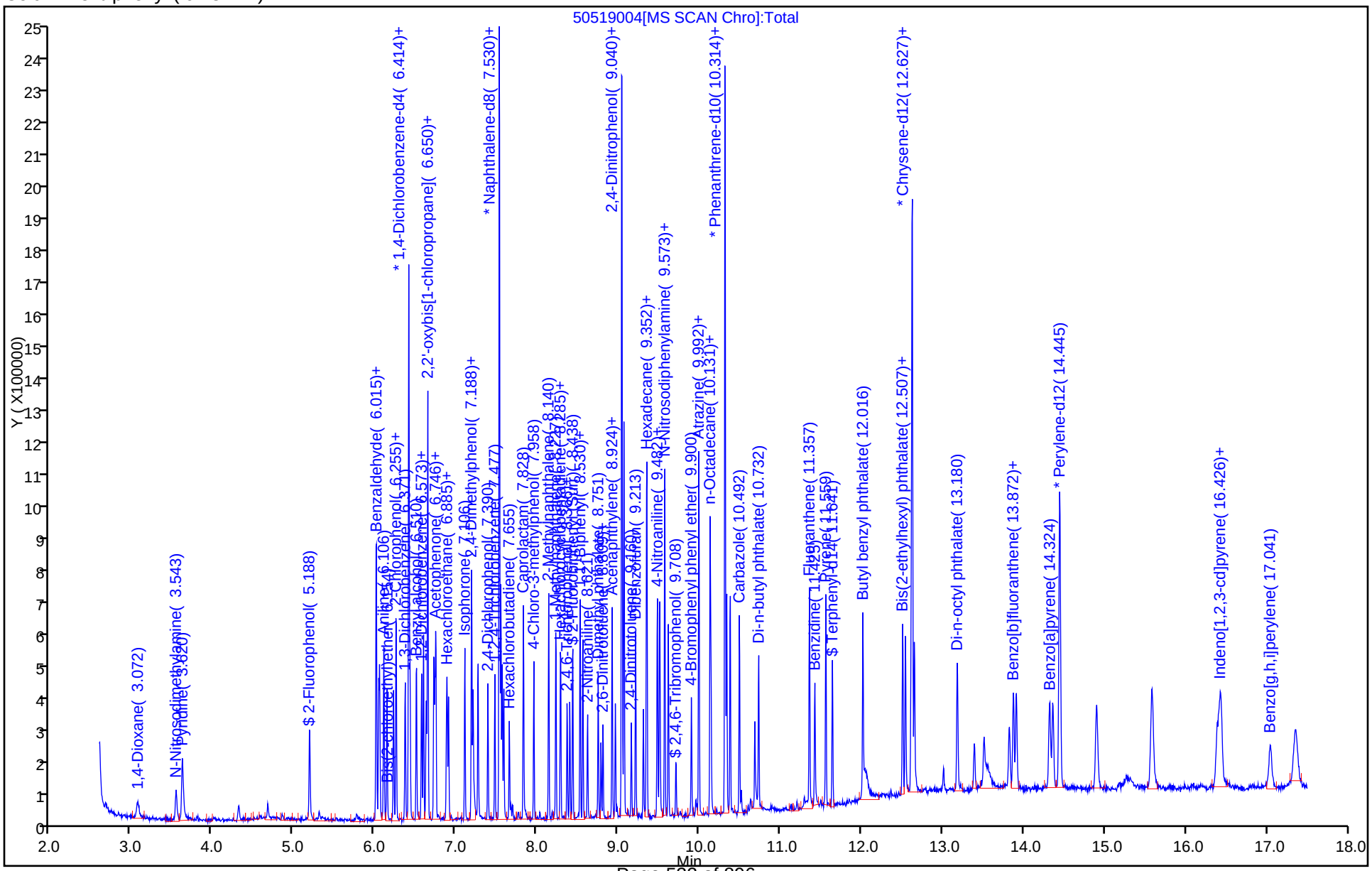
Report Date: 19-May-2015 20:27:27 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519004.D

Injection Date:	19-May-2015 17:03:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	std3 lst1			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519005.D
Lims ID: std2 lst1
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 19-May-2015 17:28:30 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043834-005
Misc. Info.: STD2 LST1STD2 LST1
Operator ID: 001574 Instrument ID: A4HP9
Sublist: chrom-8270 _9*sub34

Method: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 19-May-2015 20:27:29 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: ulmanm Date: 19-May-2015 17:57:33

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.415	6.415	0.000	97	227268	4.00	4.00	
* 2 Naphthalene-d8	136	7.530	7.531	-0.001	99	960903	4.00	4.00	
* 3 Acenaphthene-d10	164	9.040	9.045	-0.005	91	441888	4.00	4.00	
* 4 Phenanthrene-d10	188	10.315	10.315	0.000	95	701691	4.00	4.00	
* 5 Chrysene-d12	240	12.623	12.628	-0.005	92	559040	4.00	4.00	
* 6 Perylene-d12	264	14.445	14.450	-0.005	90	446844	4.00	4.00	
$ 7 2-Fluorophenol	112	5.188	5.194	-0.006	91	48704	0.5000	0.4959	
$ 8 Phenol-d5	99	6.044	6.045	-0.001	92	67998	0.5000	0.5126	
$ 9 Nitrobenzene-d5	82	6.886	6.886	0.000	86	48176	0.5000	0.4894	
$ 10 2-Fluorobiphenyl (Surr)	172	8.434	8.439	-0.005	98	66127	0.5000	0.5248	
$ 11 2,4,6-Tribromophenol	330	9.714	9.714	0.000	83	5021	0.5000	0.4332	
$ 12 Terphenyl-d14	244	11.642	11.642	0.000	97	54340	0.5000	0.5065	
25 1,4-Dioxane	88	3.073	3.073	0.000	93	25364	0.5000	0.4938	
26 N-Nitrosodimethylamine	74	3.549	3.544	0.005	83	40397	0.5000	0.5091	
27 Pyridine	79	3.626	3.621	0.005	99	65894	0.5000	0.4797	
41 Benzaldehyde	77	6.011	6.011	0.000	97	92873	1.00	1.14	
43 Phenol	94	6.054	6.054	0.000	92	78210	0.5000	0.5396	
44 Aniline	93	6.107	6.107	0.000	98	91835	0.5000	0.5188	
69 Bis(2-chloroethyl)ether	93	6.145	6.146	-0.001	97	59339	0.5000	0.5198	
46 2-Chlorophenol	128	6.227	6.227	0.000	96	45563	0.5000	0.5072	
243 n-Decane	57	6.256	6.256	0.000	91	66829	NC	NC	
47 1,3-Dichlorobenzene	146	6.371	6.372	-0.001	96	46273	0.5000	0.5271	
48 1,4-Dichlorobenzene	146	6.429	6.429	0.000	91	45886	0.5000	0.5169	
49 Benzyl alcohol	108	6.506	6.511	-0.005	93	38224	0.5000	0.5253	
50 1,2-Dichlorobenzene	146	6.573	6.574	-0.001	96	44510	0.5000	0.5270	
51 2-Methylphenol	108	6.597	6.598	-0.001	89	51093	0.5000	0.5173	
53 2,2'-oxybis[1-chloropropan	45	6.631	6.631	0.000	86	78218	0.5000	0.5271	
52 Indene	115	6.650	6.651	-0.001	90	172671	1.00	1.13	
21 3 & 4 Methylphenol	108	6.722	6.723	-0.001	85	55124	0.5000	0.5285	
57 N-Nitrosodi-n-propylamine	70	6.737	6.737	0.000	93	35995	0.5000	0.5266	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
58 Acetophenone	105	6.747	6.752	-0.005	97	66868	0.5000	0.5171	
61 Hexachloroethane	117	6.876	6.881	-0.005	85	18988	0.5000	0.5247	
62 Nitrobenzene	77	6.905	6.905	0.000	85	51212	0.5000	0.4998	
64 Isophorone	82	7.107	7.107	0.000	98	100598	0.5000	0.5238	
66 2-Nitrophenol	139	7.184	7.184	0.000	90	19987	0.5000	0.4851	
65 2,4-Dimethylphenol	107	7.189	7.189	0.000	90	46270	0.5000	0.5306	
71 Benzoic acid	122	7.203	7.223	-0.020	54	35924	1.00	0.7451	M
70 Bis(2-chloroethoxy)methane	93	7.266	7.271	-0.005	98	64968	0.5000	0.5224	
73 2,4-Dichlorophenol	162	7.391	7.391	0.000	95	31714	0.5000	0.5295	
74 1,2,4-Trichlorobenzene	180	7.477	7.478	-0.001	94	32082	0.5000	0.5242	
75 Naphthalene	128	7.550	7.550	0.000	95	135538	0.5000	0.5344	
76 4-Chloroaniline	127	7.569	7.569	0.000	94	62283	0.5000	0.5361	
77 2,6-Dichlorophenol	162	7.588	7.588	0.000	95	29093	0.5000	0.5041	
79 Hexachlorobutadiene	225	7.655	7.656	-0.001	95	12907	0.5000	0.5095	
84 Caprolactam	113	7.829	7.838	-0.010	84	31284	1.00	1.08	
86 4-Chloro-3-methylphenol	107	7.958	7.959	-0.001	94	39974	0.5000	0.5194	
87 2-Methylnaphthalene	142	8.141	8.141	0.000	94	81278	0.5000	0.5258	
88 1-Methylnaphthalene	142	8.228	8.228	0.000	93	71814	0.5000	0.5344	
89 Hexachlorocyclopentadiene	237	8.285	8.286	-0.001	94	12378	0.5000	0.4798	
91 1,2,4,5-Tetrachlorobenzene	216	8.285	8.290	-0.005	97	25110	0.5000	0.5665	
92 2,4,6-Trichlorophenol	196	8.367	8.367	0.000	92	17101	0.5000	0.4726	
93 2,4,5-Trichlorophenol	196	8.401	8.401	0.000	92	18774	0.5000	0.4962	
98 1,1'-Biphenyl	154	8.526	8.531	-0.005	94	90391	0.5000	0.5356	
100 2-Chloronaphthalene	162	8.559	8.564	-0.005	96	62981	0.5000	0.5058	
102 2-Nitroaniline	65	8.617	8.622	-0.005	80	22782	0.5000	0.4646	
105 Dimethyl phthalate	163	8.752	8.752	0.000	97	63464	0.5000	0.4998	
106 1,3-Dinitrobenzene	168	8.785	8.786	-0.001	81	8162	0.5000	0.3993	
107 2,6-Dinitrotoluene	165	8.810	8.810	0.000	89	11553	0.5000	0.4031	
109 Acenaphthylene	152	8.920	8.925	-0.005	99	110097	0.5000	0.5097	
110 3-Nitroaniline	138	8.963	8.964	-0.001	93	18551	0.5000	0.4400	
111 2,4-Dinitrophenol	184		9.050				ND	ND	
112 Acenaphthene	153	9.069	9.069	0.000	93	67492	0.5000	0.5440	
113 4-Nitrophenol	109	9.069	9.069	0.000	56	11950	1.00	0.9130	
114 2,4-Dinitrotoluene	165	9.161	9.161	0.000	88	14309	0.5000	0.4014	
116 Dibenzofuran	168	9.213	9.214	-0.001	98	87656	0.5000	0.5211	
119 2,3,4,6-Tetrachlorophenol	232	9.310	9.310	0.000	78	14086	0.5000	0.5214	
121 Diethyl phthalate	149	9.343	9.348	-0.005	98	69934	0.5000	0.5717	
247 Hexadecane	57	9.353	9.353	0.000	88	74545	NC	NC	
123 4-Chlorophenyl phenyl ethe	204	9.478	9.483	-0.005	91	28661	0.5000	0.5208	
125 4-Nitroaniline	138	9.483	9.488	-0.005	80	16553	0.5000	0.4546	
126 Fluorene	166	9.507	9.507	0.000	96	72097	0.5000	0.5277	
128 4,6-Dinitro-2-methylphenol	198	9.516	9.517	-0.001	88	11899	1.00	1.14	
131 N-Nitrosodiphenylamine	169	9.569	9.574	-0.005	98	97621	1.00	1.02	
133 Azobenzene	77	9.613	9.618	-0.005	95	102265	0.5000	0.4888	
132 1,2-Diphenylhydrazine	77	9.613	9.618	-0.005	97	101336	0.5000	0.4844	
139 4-Bromophenyl phenyl ether	248	9.901	9.901	0.000	75	13887	0.5000	0.4728	
142 Atrazine	200	9.992	9.997	-0.005	80	28138	1.00	1.08	
141 Hexachlorobenzene	284	9.992	9.997	-0.005	69	13163	0.5000	0.4983	
244 n-Octadecane	57	10.132	10.132	0.000	76	77632	NC	NC	
143 Pentachlorophenol	266	10.142	10.147	-0.005	90	19206	1.00	1.00	
148 Phenanthrene	178	10.334	10.339	-0.005	97	102409	0.5000	0.5099	
149 Anthracene	178	10.377	10.382	-0.005	96	101984	0.5000	0.5015	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
151 Carbazole	167	10.493	10.493	0.000	96	91808	0.5000	0.5005	
154 Di-n-butyl phthalate	149	10.728	10.733	-0.005	99	110775	0.5000	0.5139	
159 Fluoranthene	202	11.358	11.358	0.000	95	87776	0.5000	0.5036	
160 Benzidine	184	11.425	11.426	-0.001	98	65114	1.00	1.13	
161 Pyrene	202	11.560	11.560	0.000	91	85863	0.5000	0.5067	
168 Butyl benzyl phthalate	149	12.017	12.022	-0.005	95	45739	0.5000	0.4952	
173 Bis(2-ethylhexyl) phthalat	149	12.507	12.512	-0.005	95	66449	0.5000	0.5145	
175 3,3'-Dichlorobenzidine	252	12.541	12.546	-0.005	77	43091	1.00	0.8873	
177 Benzo[a]anthracene	228	12.613	12.613	0.000	95	79454	0.5000	0.5031	
178 Chrysene	228	12.652	12.657	-0.005	94	71968	0.5000	0.5009	
180 Di-n-octyl phthalate	149	13.181	13.186	-0.005	97	105077	0.5000	0.4465	
182 Benzo[b]fluoranthene	252	13.873	13.878	-0.005	93	61094	0.5000	0.4432	
183 Benzo[k]fluoranthene	252	13.907	13.912	-0.005	92	60833	0.5000	0.4326	
184 Benzo[a]pyrene	252	14.359	14.364	-0.005	90	60333	0.5000	0.4571	
188 Indeno[1,2,3-cd]pyrene	276	16.431	16.432	-0.001	85	55215	0.5000	0.4485	M
189 Dibenz(a,h)anthracene	278	16.431	16.441	-0.010	72	44066	0.5000	0.4255	
190 Benzo[g,h,i]perylene	276	17.042	17.052	-0.010	86	46299	0.5000	0.4508	
S 191 Methyl Phenols,Total	100				0			1.05	
S 245 Total Cresols	100				0			1.05	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L2 W_00005 Amount Added: 1.00 Units: mL

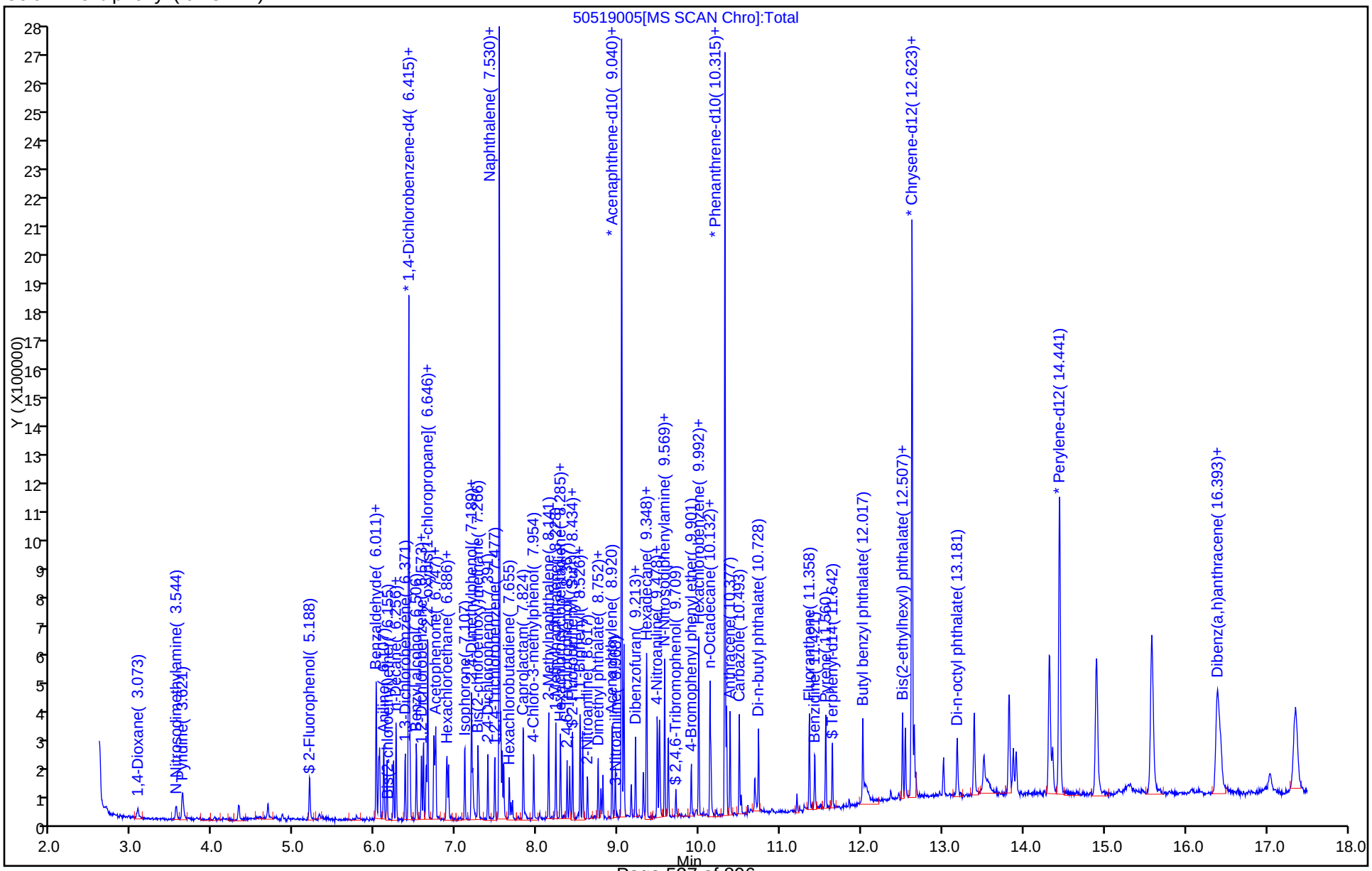
Report Date: 19-May-2015 20:27:29 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519005.D

Injection Date:	19-May-2015 17:28:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	std2 lst1			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

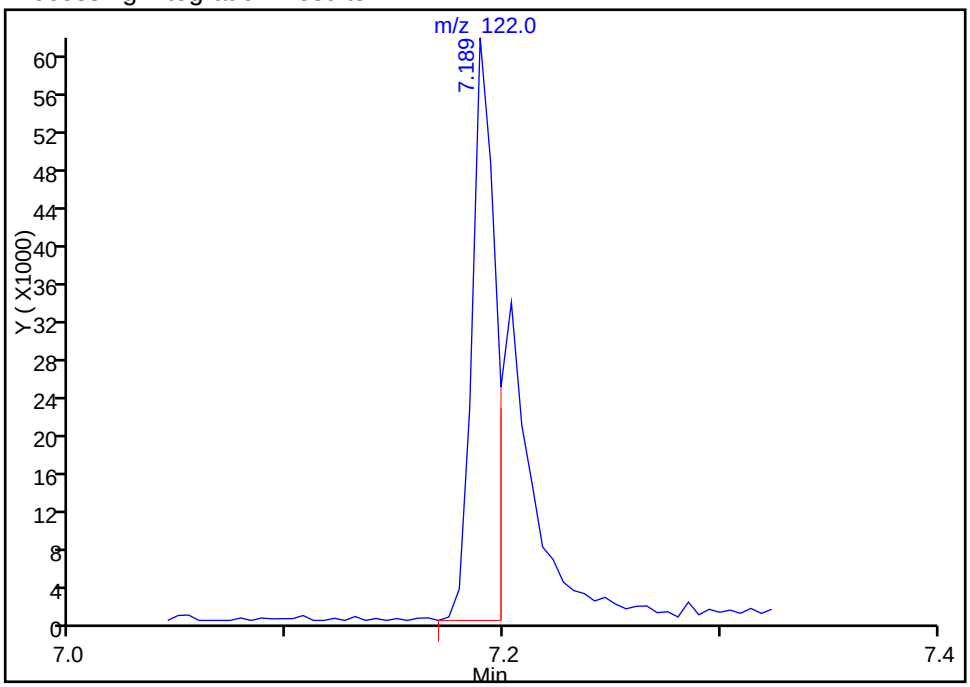
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519005.D
Injection Date: 19-May-2015 17:28:30 Instrument ID: A4HP9
Lims ID: std2 lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

71 Benzoic acid, CAS: 65-85-0

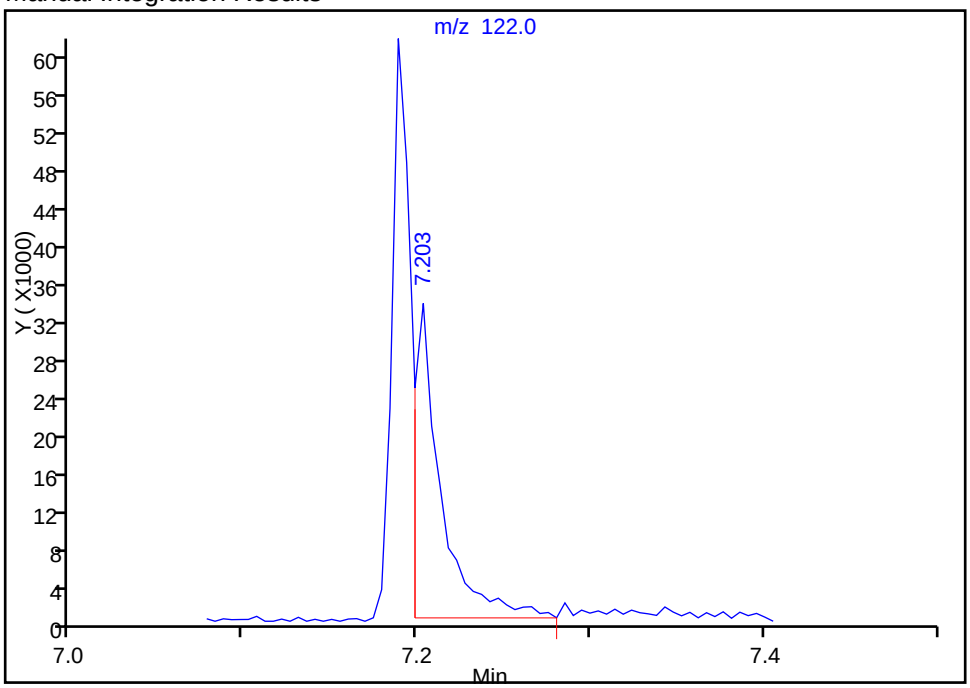
Processing Integration Results

RT: 7.19
Area: 46748
Amount: 0.994125
Amount Units: ng/ul



Manual Integration Results

RT: 7.20
Area: 35924
Amount: 0.745096
Amount Units: ng/ul



Reviewer: ulmanm, 19-May-2015 17:57:33
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Manual Integration/User Assign Peak Report

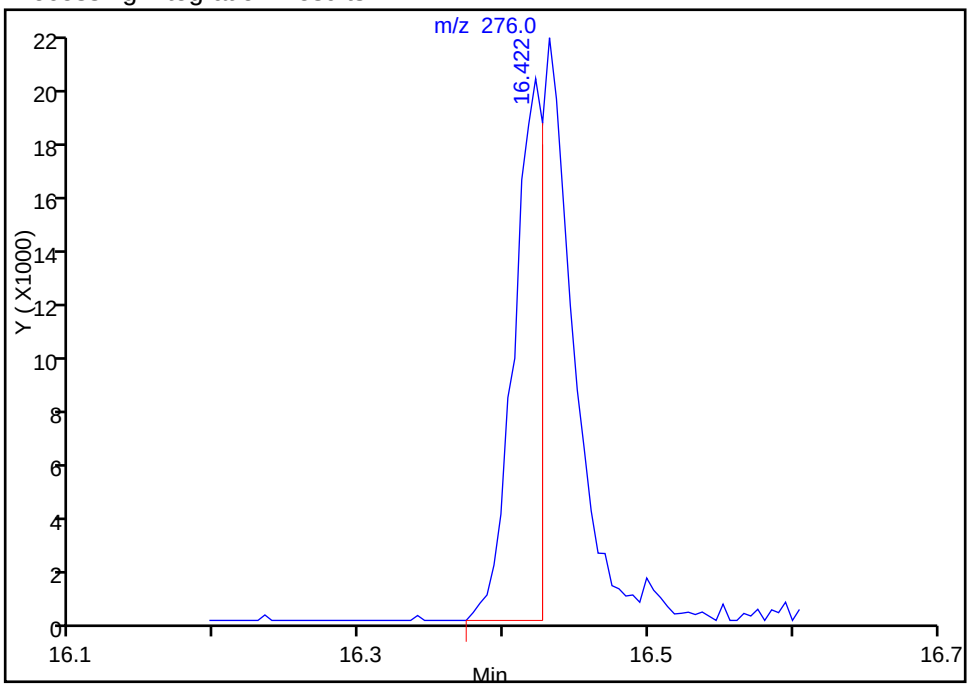
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519005.D
Injection Date: 19-May-2015 17:28:30 Instrument ID: A4HP9
Lims ID: std2 lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

188 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

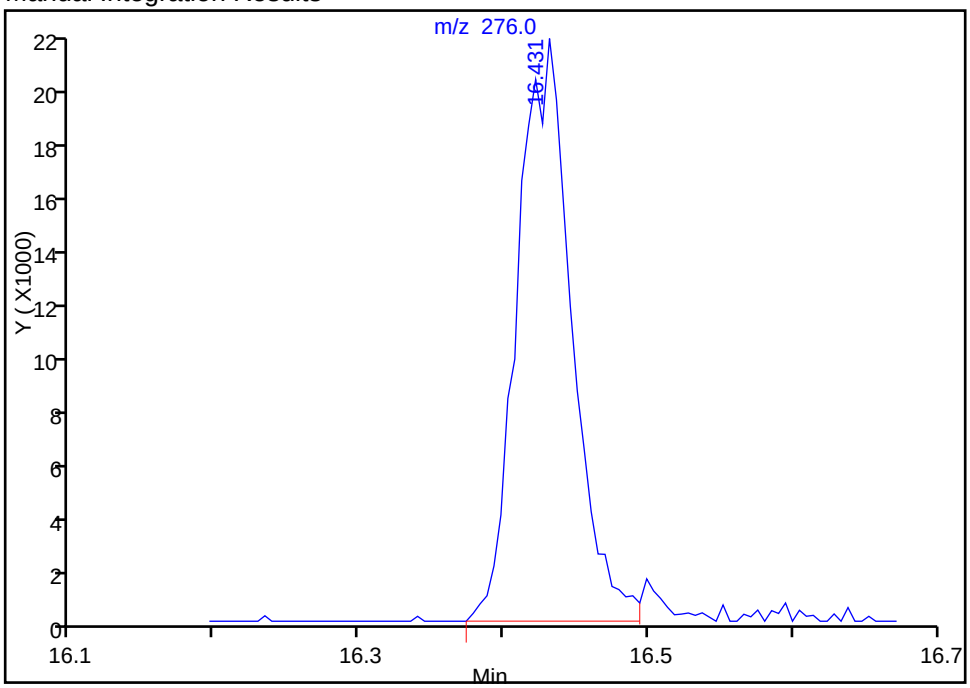
Processing Integration Results

RT: 16.42
Area: 27912
Amount: 0.266370
Amount Units: ng/ul



Manual Integration Results

RT: 16.43
Area: 55215
Amount: 0.448463
Amount Units: ng/ul



Reviewer: ulmanm, 19-May-2015 17:57:33
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519006.D
Lims ID: std1 lst1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 19-May-2015 17:53:30 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043834-006
Misc. Info.: STD1 LST1STD1 LST1
Operator ID: 001574 Instrument ID: A4HP9
Sublist: chrom-8270 _9*sub34

Method: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 19-May-2015 20:27:31 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: ulmanm Date: 19-May-2015 18:21:37

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.413	6.415	-0.002	97	215514	4.00	4.00	
* 2 Naphthalene-d8	136	7.529	7.531	-0.002	99	921821	4.00	4.00	
* 3 Acenaphthene-d10	164	9.039	9.045	-0.006	90	428096	4.00	4.00	
* 4 Phenanthrene-d10	188	10.313	10.315	-0.002	96	660987	4.00	4.00	
* 5 Chrysene-d12	240	12.626	12.628	-0.002	93	506857	4.00	4.00	
* 6 Perylene-d12	264	14.444	14.450	-0.006	90	401158	4.00	4.00	
$ 9 Nitrobenzene-d5	82	6.884	6.886	-0.002	82	9666	0.1000	0.1024	
$ 10 2-Fluorobiphenyl (Surr)	172	8.438	8.439	-0.001	96	12129	0.1000	0.0994	
$ 12 Terphenyl-d14	244	11.640	11.642	-0.002	95	11156	0.1000	0.1147	
75 Naphthalene	128	7.548	7.550	-0.002	93	26175	0.1000	0.1076	
87 2-Methylnaphthalene	142	8.140	8.141	-0.001	95	16668	0.1000	0.1124	
88 1-Methylnaphthalene	142	8.226	8.228	-0.002	95	13963	0.1000	0.1083	
98 1,1'-Biphenyl	154	8.529	8.531	-0.002	96	18690	0.1000	0.1143	
100 2-Chloronaphthalene	162	8.558	8.564	-0.006	96	13234	0.1000	0.1097	
109 Acenaphthylene	152	8.923	8.925	-0.002	98	23584	0.1000	0.1127	
112 Acenaphthene	153	9.068	9.069	-0.001	95	13447	0.1000	0.1119	
116 Dibenzofuran	168	9.212	9.214	-0.002	97	17365	0.1000	0.1065	
126 Fluorene	166	9.505	9.507	-0.002	94	14558	0.1000	0.1100	
141 Hexachlorobenzene	284	9.996	9.997	-0.001	65	2527	0.1000	0.1015	
148 Phenanthrene	178	10.337	10.339	-0.002	96	20170	0.1000	0.1066	
149 Anthracene	178	10.380	10.382	-0.002	97	20574	0.1000	0.1074	
159 Fluoranthene	202	11.357	11.358	-0.001	95	17685	0.1000	0.1077	
161 Pyrene	202	11.559	11.560	-0.001	92	18857	0.1000	0.1227	
177 Benzo[a]anthracene	228	12.612	12.613	-0.001	94	15904	0.1000	0.1111	
178 Chrysene	228	12.650	12.657	-0.007	93	13625	0.1000	0.1046	
182 Benzo[b]fluoranthene	252	13.872	13.878	-0.006	85	11750	0.1000	0.0949	
183 Benzo[k]fluoranthene	252	13.910	13.912	-0.002	92	13486	0.1000	0.1068	
184 Benzo[a]pyrene	252	14.362	14.364	-0.002	86	11374	0.1000	0.0960	
188 Indeno[1,2,3-cd]pyrene	276	16.425	16.432	-0.007	82	11254	0.1000	0.1018	M
189 Dibenz(a,h)anthracene	278	16.435	16.441	-0.006	54	10257	0.1000	0.1103	M

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
190 Benzo[g,h,i]perylene	276	17.045	17.052	-0.007	68	11214	0.1000	0.1216	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L1 W_00005 Amount Added: 1.00 Units: mL

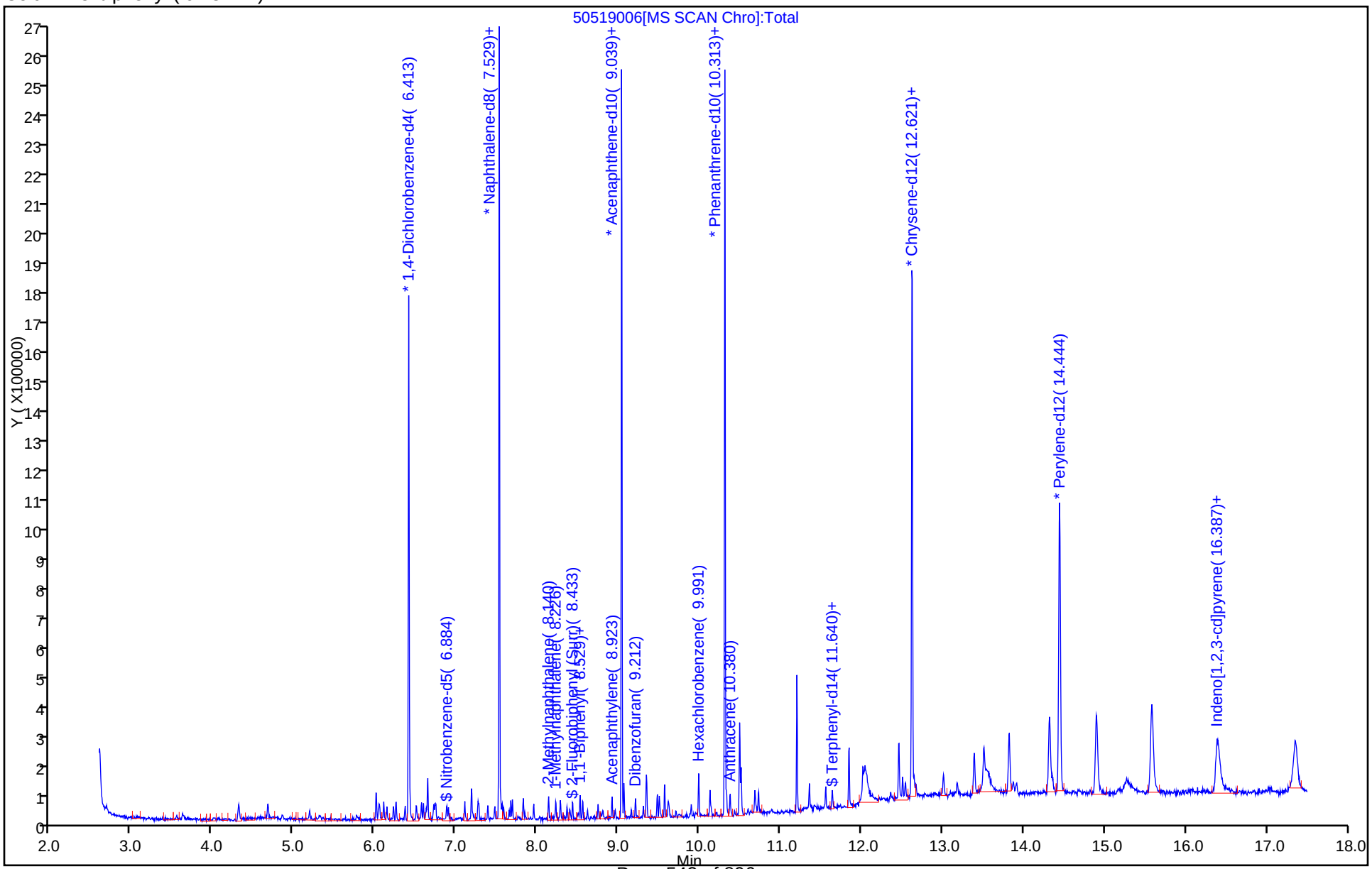
Report Date: 19-May-2015 20:27:32 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519006.D

Injection Date:	19-May-2015 17:53:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	std1 lst1			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

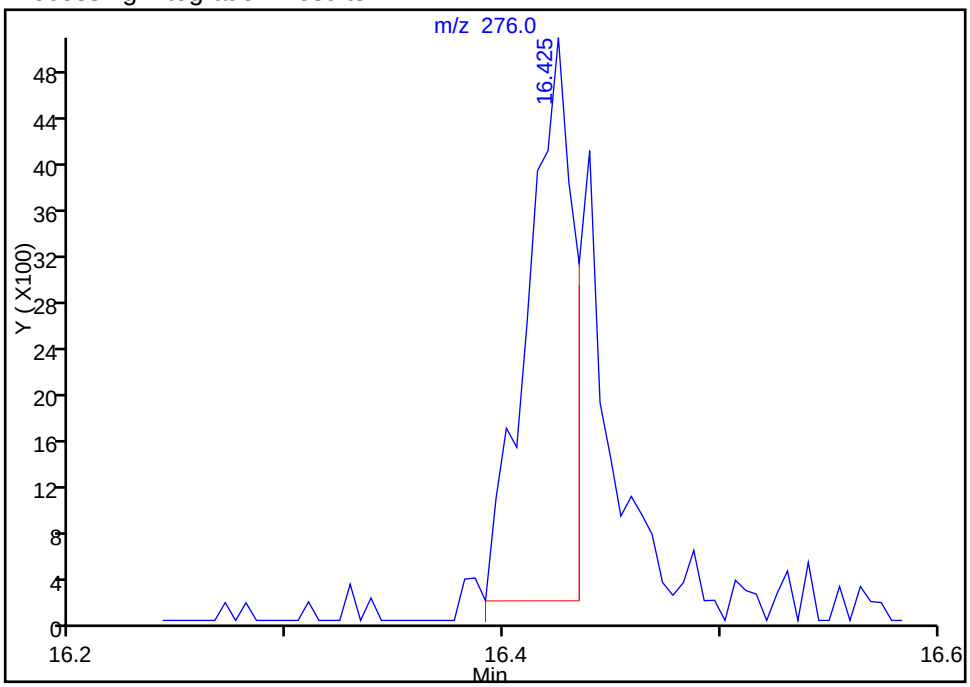
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519006.D
Injection Date: 19-May-2015 17:53:30 Instrument ID: A4HP9
Lims ID: std1 lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

188 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

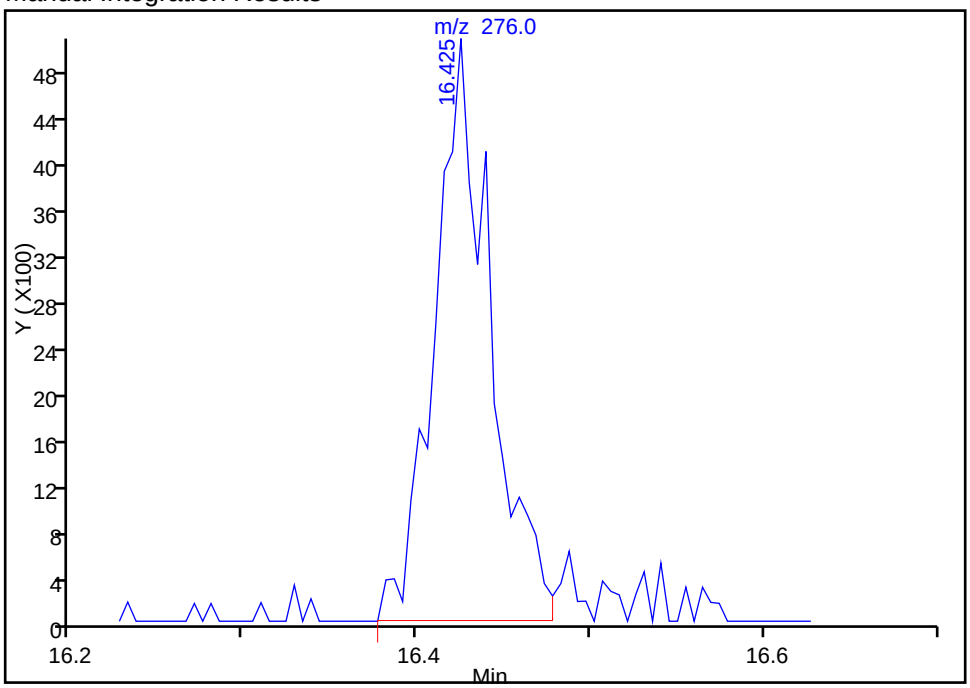
Processing Integration Results

RT: 16.43
Area: 7259
Amount: 0.098223
Amount Units: ng/ul



Manual Integration Results

RT: 16.43
Area: 11254
Amount: 0.101816
Amount Units: ng/ul



Reviewer: ulmanm, 19-May-2015 18:21:37
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

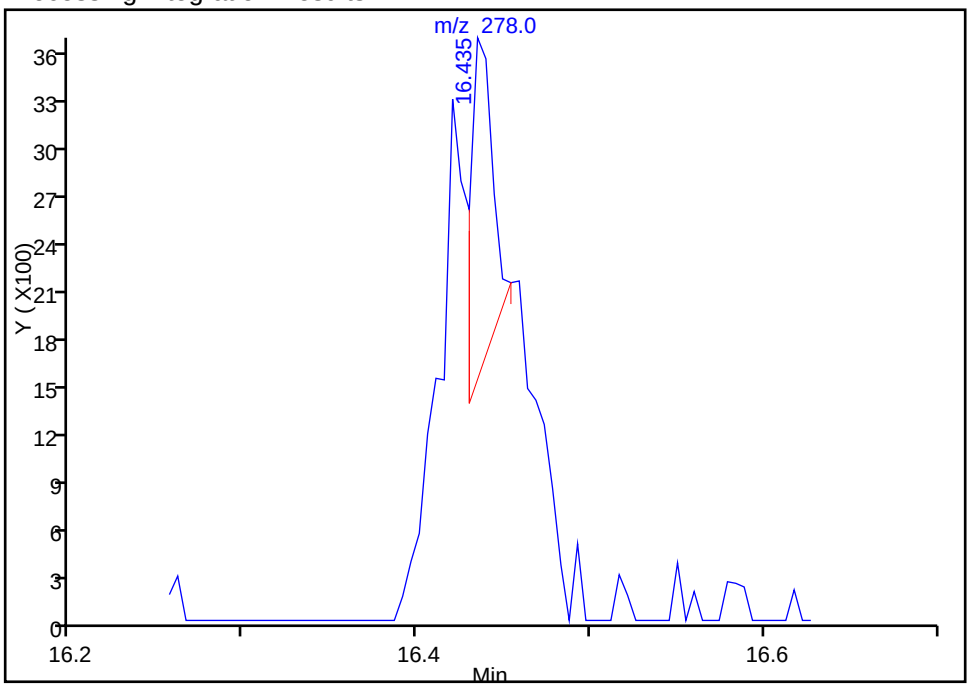
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519006.D
Injection Date: 19-May-2015 17:53:30 Instrument ID: A4HP9
Lims ID: std1 lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

189 Dibenz(a,h)anthracene, CAS: 53-70-3

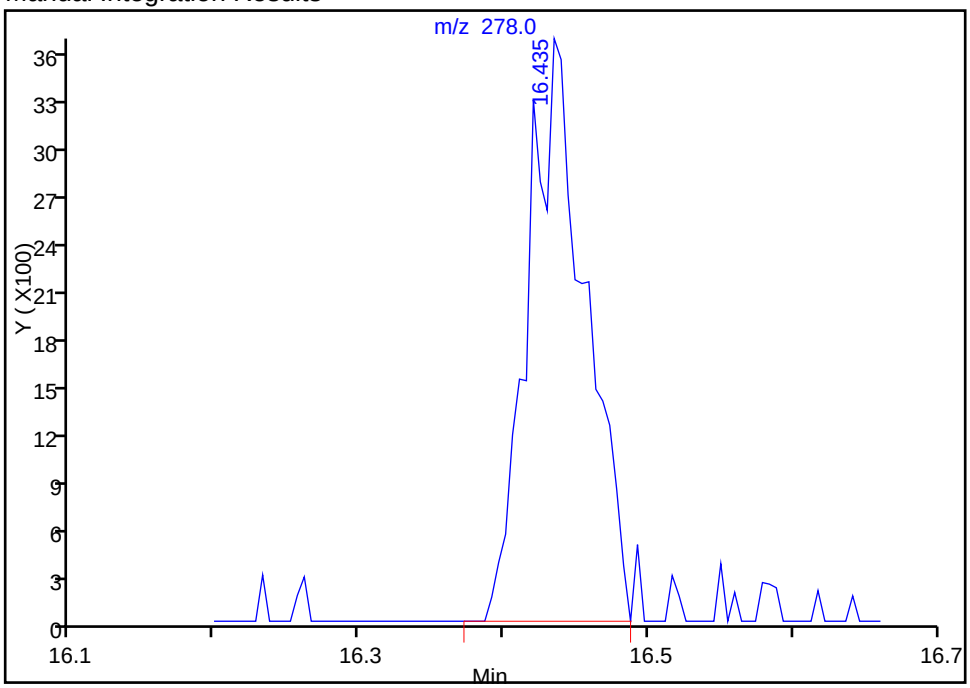
Processing Integration Results

RT: 16.43
Area: 1812
Amount: 0.095978
Amount Units: ng/ul



Manual Integration Results

RT: 16.43
Area: 10257
Amount: 0.110325
Amount Units: ng/ul



Reviewer: ulmanm, 19-May-2015 18:21:37
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

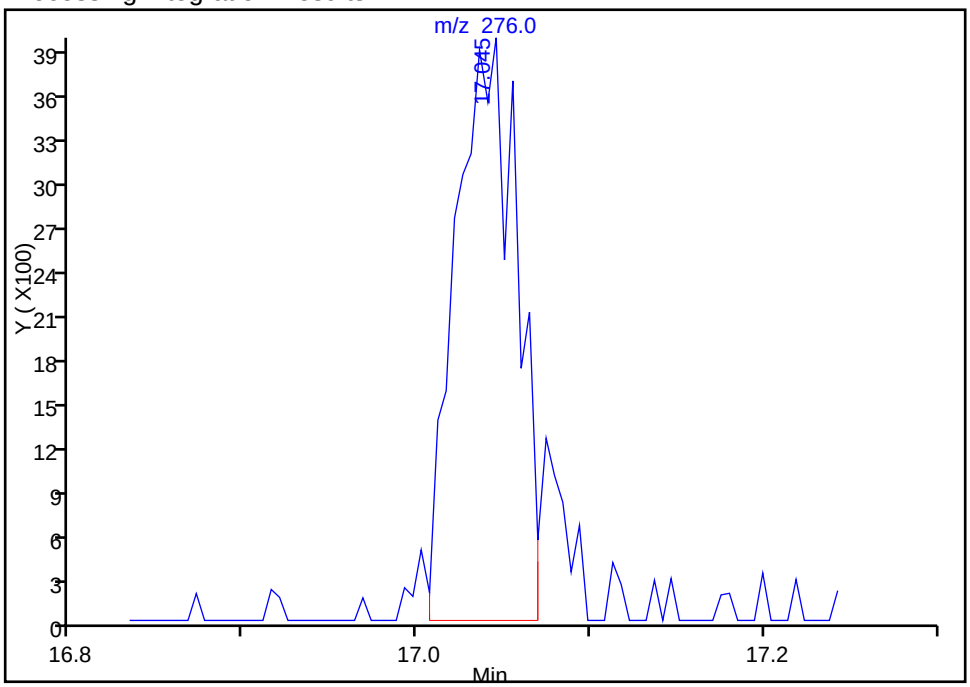
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519006.D
Injection Date: 19-May-2015 17:53:30 Instrument ID: A4HP9
Lims ID: std1 lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

190 Benzo[g,h,i]perylene, CAS: 191-24-2

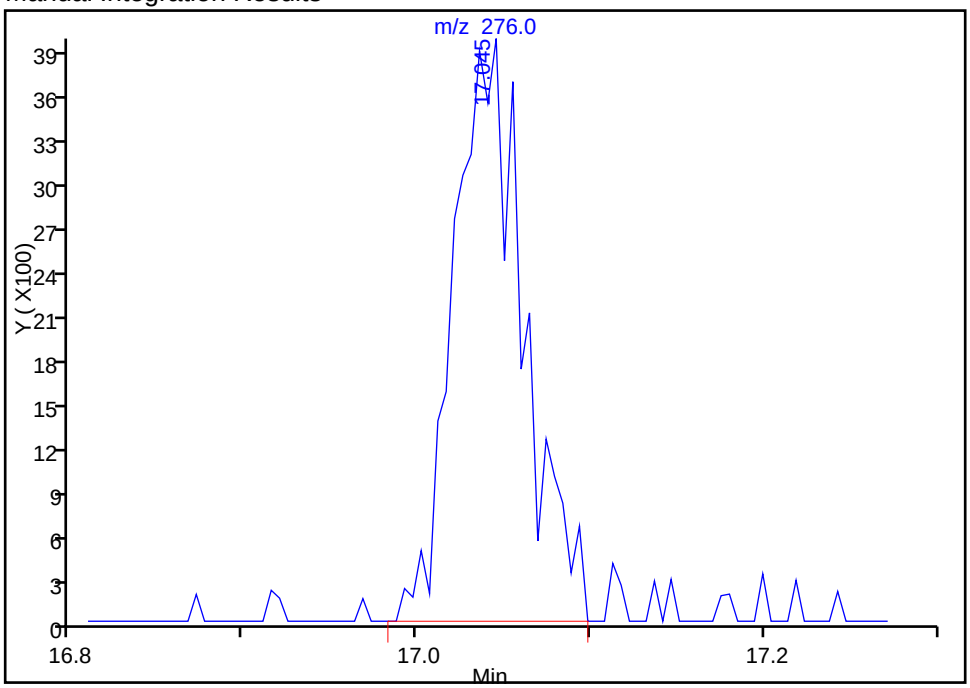
Processing Integration Results

RT: 17.05
Area: 9803
Amount: 0.106975
Amount Units: ng/ul



Manual Integration Results

RT: 17.05
Area: 11214
Amount: 0.121611
Amount Units: ng/ul



Reviewer: ulmanm, 19-May-2015 18:21:37
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519007.D
Lims ID: std9 lst1
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 19-May-2015 18:18:30 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043834-007
Misc. Info.: STD9 LST1STD9 LST1
Operator ID: 001574 Instrument ID: A4HP9
Sublist: chrom-8270 _9*sub34

Method: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 19-May-2015 20:27:33 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: ulmanm Date: 19-May-2015 19:02:37

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.416	6.415	0.001	96	188134	4.00	4.00	
* 2 Naphthalene-d8	136	7.532	7.531	0.001	99	792939	4.00	4.00	
* 3 Acenaphthene-d10	164	9.042	9.045	-0.003	91	362847	4.00	4.00	
* 4 Phenanthrene-d10	188	10.316	10.315	0.001	93	509585	4.00	4.00	
* 5 Chrysene-d12	240	12.629	12.628	0.001	92	455455	4.00	4.00	
* 6 Perylene-d12	264	14.447	14.450	-0.003	85	347853	4.00	4.00	
$ 7 2-Fluorophenol	112	5.190	5.194	-0.004	91	1978977	25.0	24.3	
$ 8 Phenol-d5	99	6.046	6.045	0.001	80	2535617	25.0	23.1	
$ 9 Nitrobenzene-d5	82	6.892	6.886	0.006	86	1927158	25.0	23.7	
$ 10 2-Fluorobiphenyl (Surr)	172	8.436	8.439	-0.003	99	2384803	25.0	23.1	
$ 11 2,4,6-Tribromophenol	330	9.715	9.714	0.001	91	223852	25.0	23.5	
$ 12 Terphenyl-d14	244	11.643	11.642	0.001	98	1999755	25.0	22.9	
25 1,4-Dioxane	88	3.074	3.073	0.001	93	1071779	25.0	25.2	
26 N-Nitrosodimethylamine	74	3.550	3.544	0.006	83	1622853	25.0	24.7	
27 Pyridine	79	3.622	3.621	0.001	99	2852686	25.0	25.1	
41 Benzaldehyde	77	6.012	6.011	0.001	93	2789876	50.0	41.5	
43 Phenol	94	6.060	6.054	0.006	93	2703136	25.0	22.5	
44 Aniline	93	6.108	6.107	0.001	98	3389742	25.0	23.1	
69 Bis(2-chloroethyl)ether	93	6.147	6.146	0.001	93	2236160	25.0	23.7	
46 2-Chlorophenol	128	6.229	6.227	0.001	97	1801164	25.0	24.2	
243 n-Decane	57	6.257	6.256	0.001	91	2463707	NC	NC	
47 1,3-Dichlorobenzene	146	6.368	6.372	-0.004	96	1725766	25.0	23.7	
48 1,4-Dichlorobenzene	146	6.430	6.429	0.001	93	1708760	25.0	23.3	
49 Benzyl alcohol	108	6.512	6.511	0.001	96	1411267	25.0	23.4	
50 1,2-Dichlorobenzene	146	6.570	6.574	-0.004	95	1661946	25.0	23.8	
51 2-Methylphenol	108	6.599	6.598	0.001	74	1906240	25.0	23.3	
53 2,2'-oxybis[1-chloropropan	45	6.632	6.631	0.001	86	2899809	25.0	23.6	
52 Indene	115	6.652	6.651	0.001	80	4981628	50.0	39.3	
21 3 & 4 Methylphenol	108	6.729	6.723	0.006	87	1981943	25.0	23.0	
57 N-Nitrosodi-n-propylamine	70	6.743	6.737	0.006	84	1273279	25.0	22.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
58 Acetophenone	105	6.753	6.752	0.001	73	2430314	25.0	22.7	
61 Hexachloroethane	117	6.878	6.881	-0.003	84	696636	25.0	23.3	
62 Nitrobenzene	77	6.907	6.905	0.002	79	2033115	25.0	24.0	
64 Isophorone	82	7.109	7.107	0.001	97	3614192	25.0	22.8	
66 2-Nitrophenol	139	7.185	7.184	0.001	91	806348	25.0	23.7	
65 2,4-Dimethylphenol	107	7.190	7.189	0.001	93	1587377	25.0	22.1	
71 Benzoic acid	122	7.262	7.223	0.039	82	2143463	50.0	53.9	
70 Bis(2-chloroethoxy)methane	93	7.272	7.271	0.001	93	2279697	25.0	22.2	
73 2,4-Dichlorophenol	162	7.392	7.391	0.001	96	1181230	25.0	23.9	
74 1,2,4-Trichlorobenzene	180	7.479	7.478	0.001	90	1187259	25.0	23.5	
75 Naphthalene	128	7.551	7.550	0.001	97	4641347	25.0	22.2	
76 4-Chloroaniline	127	7.570	7.569	0.001	45	2258200	25.0	23.6	M
77 2,6-Dichlorophenol	162	7.589	7.588	0.001	61	1120596	25.0	23.5	
79 Hexachlorobutadiene	225	7.657	7.656	0.001	95	502094	25.0	24.0	
84 Caprolactam	113	7.859	7.838	0.021	82	1114386	50.0	46.6	M
86 4-Chloro-3-methylphenol	107	7.964	7.959	0.005	94	1461983	25.0	23.0	
87 2-Methylnaphthalene	142	8.142	8.141	0.001	91	2799718	25.0	21.9	
88 1-Methylnaphthalene	142	8.229	8.228	0.001	92	2515213	25.0	22.7	
89 Hexachlorocyclopentadiene	237	8.287	8.286	0.001	84	513405	25.0	24.2	
91 1,2,4,5-Tetrachlorobenzene	216	8.291	8.290	0.001	96	791502	25.0	21.7	
92 2,4,6-Trichlorophenol	196	8.368	8.367	0.001	95	727392	25.0	24.5	
93 2,4,5-Trichlorophenol	196	8.407	8.401	0.006	94	732446	25.0	23.6	
98 1,1'-Biphenyl	154	8.527	8.531	-0.004	95	3030624	25.0	21.9	
100 2-Chloronaphthalene	162	8.561	8.564	-0.003	91	2315459	25.0	22.6	
102 2-Nitroaniline	65	8.623	8.622	0.001	84	1010730	25.0	25.1	
105 Dimethyl phthalate	163	8.753	8.752	0.001	97	2455040	25.0	23.5	
106 1,3-Dinitrobenzene	168	8.792	8.786	0.006	84	463022	25.0	27.6	
107 2,6-Dinitrotoluene	165	8.816	8.810	0.006	66	622795	25.0	26.5	
109 Acenaphthylene	152	8.926	8.925	0.001	97	3929079	25.0	22.2	
110 3-Nitroaniline	138	8.965	8.964	0.001	92	855276	25.0	24.7	
111 2,4-Dinitrophenol	184	9.051	9.050	0.001	86	633352	50.0	55.6	
112 Acenaphthene	153	9.071	9.069	0.001	94	2100351	25.0	20.6	
113 4-Nitrophenol	109	9.080	9.069	0.011	34	549567	50.0	51.1	
114 2,4-Dinitrotoluene	165	9.162	9.161	0.001	85	759144	25.0	25.9	
116 Dibenzofuran	168	9.215	9.214	0.001	91	3118196	25.0	22.6	
119 2,3,4,6-Tetrachlorophenol	232	9.311	9.310	0.001	73	507877	25.0	22.9	
121 Diethyl phthalate	149	9.349	9.348	0.001	97	2017617	25.0	20.1	
247 Hexadecane	57	9.354	9.353	0.001	89	2259625	NC	NC	
123 4-Chlorophenyl phenyl ethe	204	9.479	9.483	-0.004	94	1068616	25.0	23.6	
125 4-Nitroaniline	138	9.494	9.488	0.006	87	794049	25.0	26.6	
126 Fluorene	166	9.508	9.507	0.001	98	2451718	25.0	21.9	
128 4,6-Dinitro-2-methylphenol	198	9.523	9.517	0.006	88	679391	50.0	51.1	
131 N-Nitrosodiphenylamine	169	9.575	9.574	0.001	99	2923625	50.0	42.1	
133 Azobenzene	77	9.619	9.618	0.001	96	3570851	25.0	23.5	
132 1,2-Diphenylhydrazine	77	9.619	9.618	0.001	96	3571295	25.0	23.5	
139 4-Bromophenyl phenyl ether	248	9.902	9.901	0.001	69	519173	25.0	24.3	
142 Atrazine	200	9.999	9.997	0.002	80	741214	50.0	39.2	
141 Hexachlorobenzene	284	9.999	9.997	0.002	77	414202	25.0	21.6	
244 n-Octadecane	57	10.133	10.132	0.001	76	2270229	NC	NC	
143 Pentachlorophenol	266	10.148	10.147	0.001	82	650714	50.0	46.8	
148 Phenanthrene	178	10.335	10.339	-0.004	97	3313239	25.0	22.7	
149 Anthracene	178	10.383	10.382	0.001	97	3371126	25.0	22.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
151 Carbazole	167	10.494	10.493	0.001	82	3289131	25.0	24.7	
154 Di-n-butyl phthalate	149	10.730	10.733	-0.003	99	3669607	25.0	23.4	
159 Fluoranthene	202	11.359	11.358	0.001	99	2985416	25.0	23.6	
160 Benzidine	184	11.427	11.426	0.001	99	4141330	50.0	48.5	
161 Pyrene	202	11.561	11.560	0.001	95	2927703	25.0	21.2	
168 Butyl benzyl phthalate	149	12.018	12.022	-0.004	95	1814087	25.0	24.1	
173 Bis(2-ethylhexyl) phthalat	149	12.509	12.512	-0.003	96	2582603	25.0	24.5	
175 3,3'-Dichlorobenzidine	252	12.547	12.546	0.001	64	1918417	50.0	48.5	
177 Benzo[a]anthracene	228	12.615	12.613	0.002	98	3004851	25.0	23.4	
178 Chrysene	228	12.658	12.657	0.001	92	2804425	25.0	24.0	
180 Di-n-octyl phthalate	149	13.182	13.186	-0.004	99	4542762	25.0	24.8	
182 Benzo[b]fluoranthene	252	13.884	13.878	0.006	93	2711635	25.0	25.3	
183 Benzo[k]fluoranthene	252	13.918	13.912	0.006	91	2754757	25.0	25.2	
184 Benzo[a]pyrene	252	14.370	14.364	0.006	84	2653884	25.0	25.8	
188 Indeno[1,2,3-cd]pyrene	276	16.447	16.432	0.015	74	2451465	25.0	25.6	
189 Dibenz(a,h)anthracene	278	16.452	16.441	0.011	48	2077789	25.0	25.8	
190 Benzo[g,h,i]perylene	276	17.063	17.052	0.011	81	1909196	25.0	23.9	
S 191 Methyl Phenols,Total	100				0			46.3	
S 245 Total Cresols	100				0			46.3	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L9 W_00005 Amount Added: 1.00 Units: mL

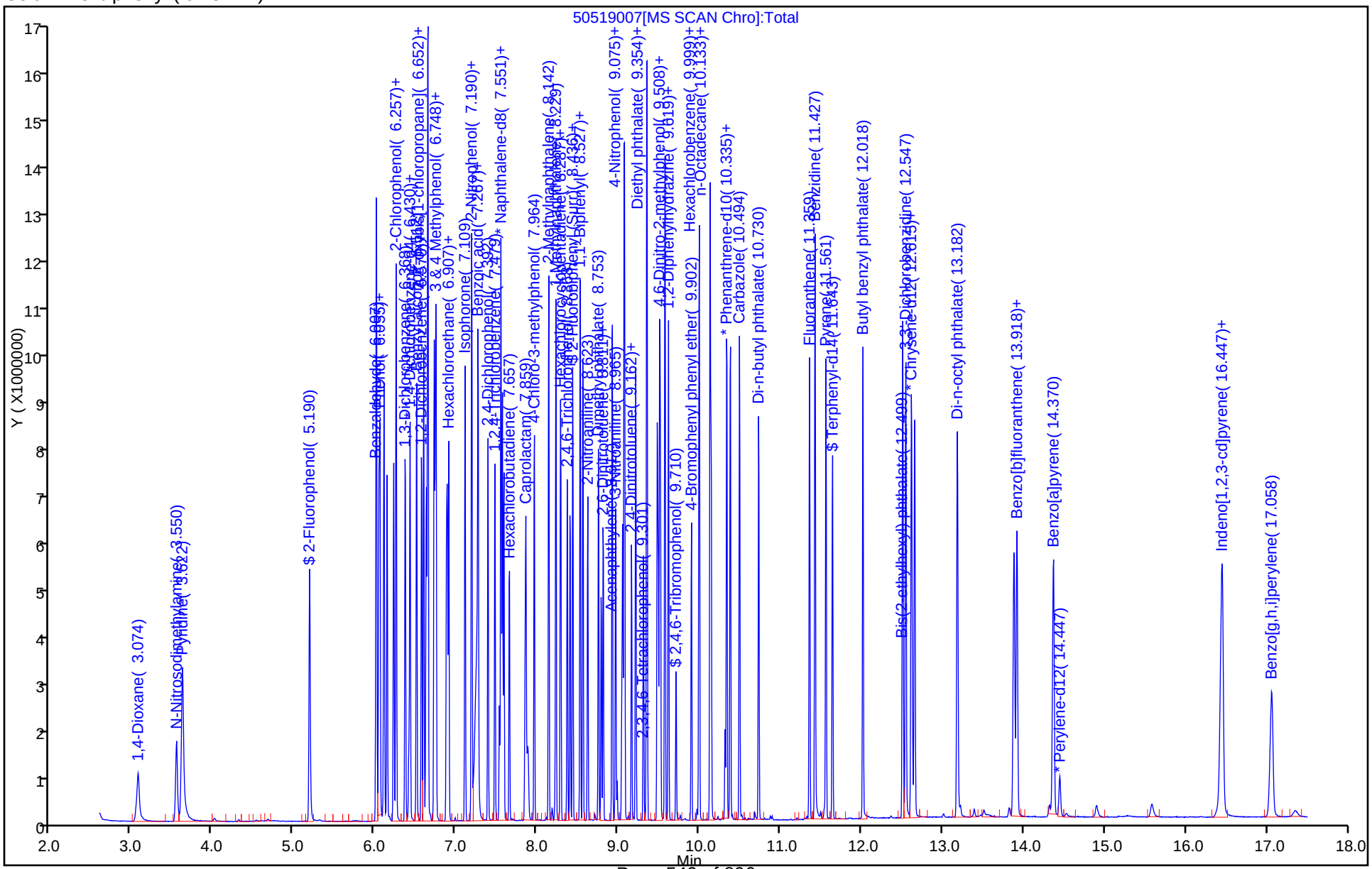
Report Date: 19-May-2015 20:27:33 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519007.D

Injection Date:	19-May-2015 18:18:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	std9 lst1			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



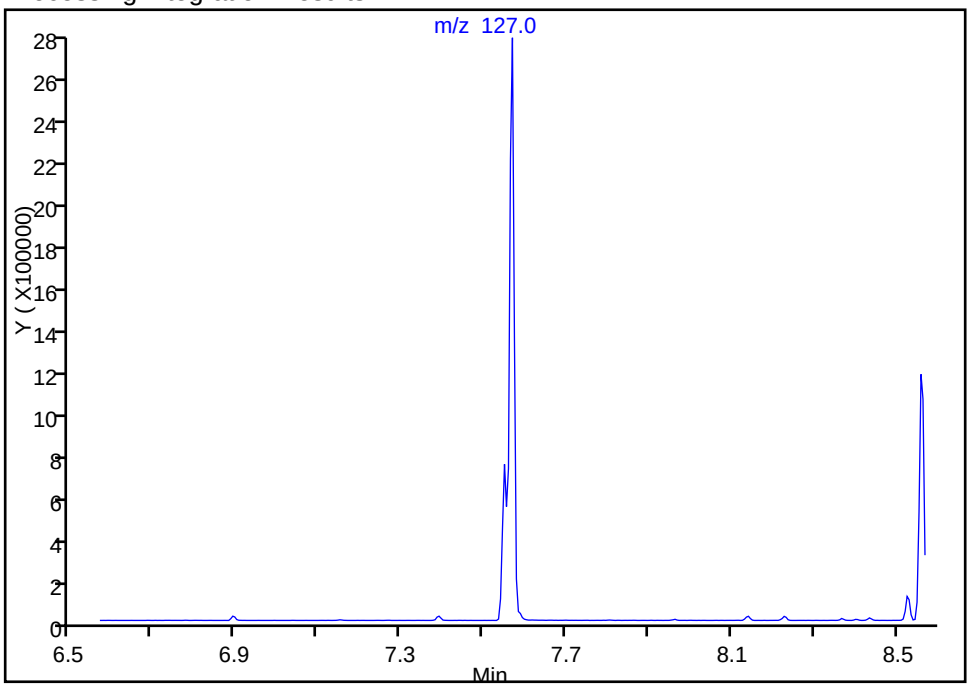
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519007.D
Injection Date: 19-May-2015 18:18:30 Instrument ID: A4HP9
Lims ID: std9 lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

76 4-Chloroaniline, CAS: 106-47-8

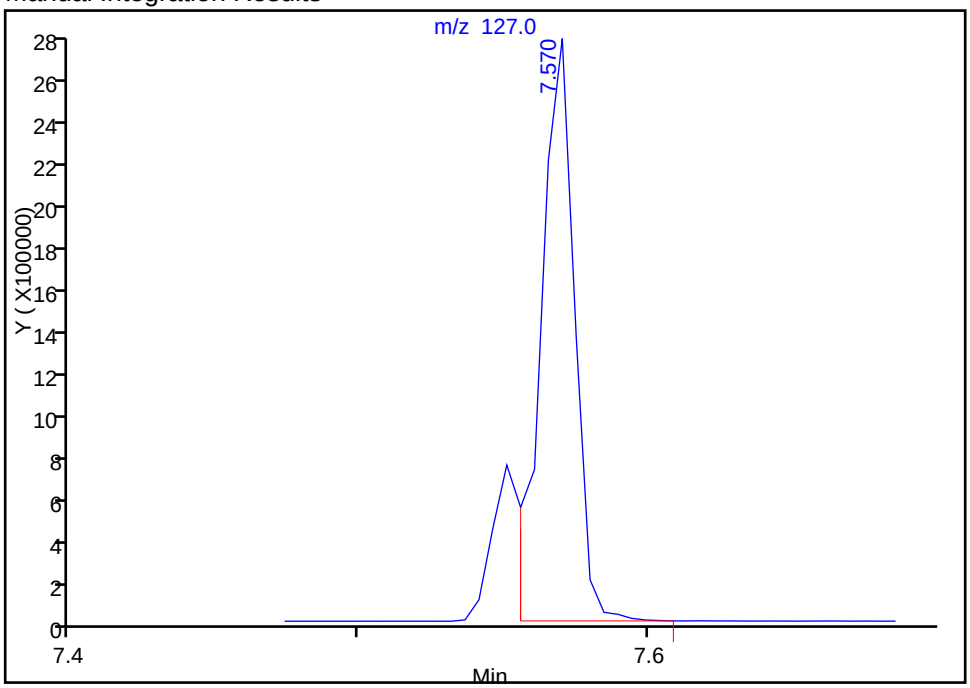
Not Detected
Expected RT: 7.57

Processing Integration Results



Manual Integration Results

RT: 7.57
Area: 2258200
Amount: 23.555081
Amount Units: ng/ul



Reviewer: ulmanm, 19-May-2015 19:02:37
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Manual Integration/User Assign Peak Report

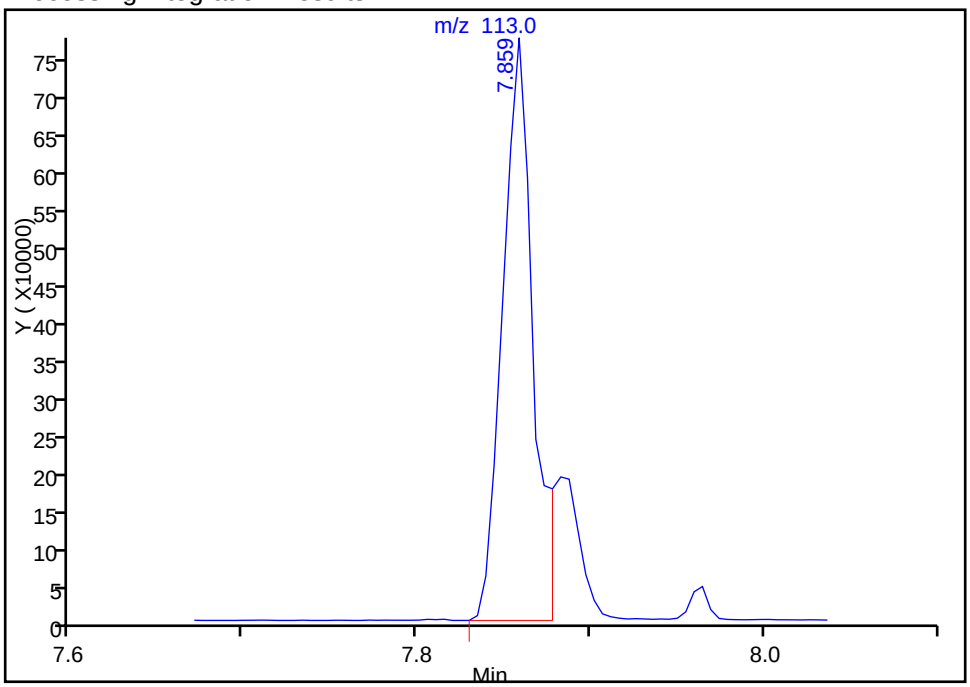
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519007.D
Injection Date: 19-May-2015 18:18:30 Instrument ID: A4HP9
Lims ID: std9 lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

84 Caprolactam, CAS: 105-60-2

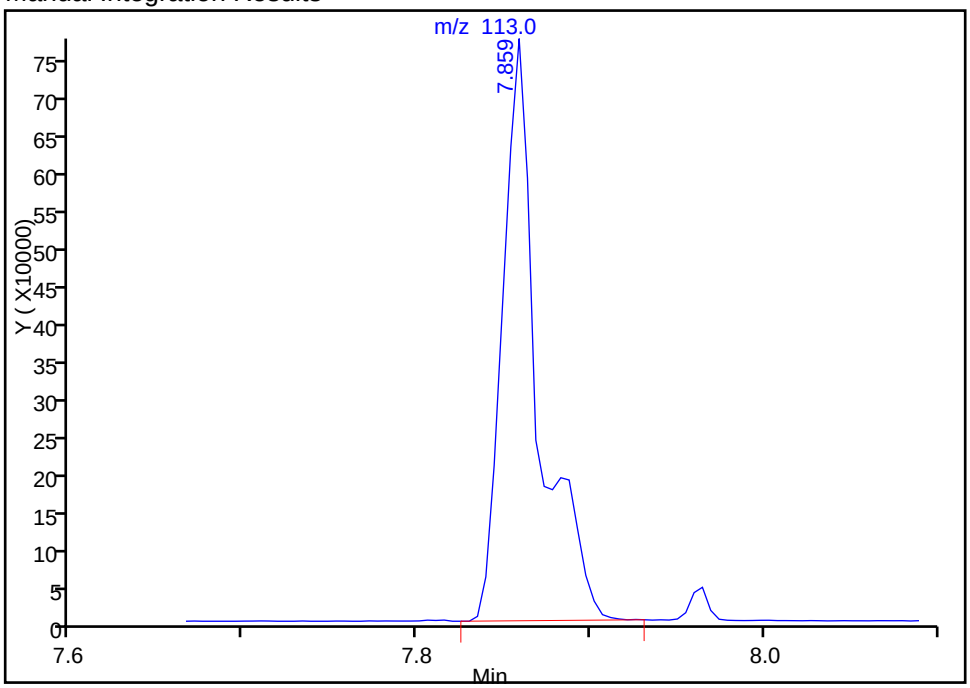
Processing Integration Results

RT: 7.86
Area: 944526
Amount: 39.651514
Amount Units: ng/ul



Manual Integration Results

RT: 7.86
Area: 1114386
Amount: 46.597770
Amount Units: ng/ul



Reviewer: ulmanm, 19-May-2015 19:02:37
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519008.D
Lims ID: std8 lst1
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 19-May-2015 18:43:30 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043834-008
Misc. Info.: STD8 LST1STD8 LST1
Operator ID: 001574 Instrument ID: A4HP9
Sublist: chrom-8270 _9*sub34

Method: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 19-May-2015 20:27:35 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: ulmanm Date: 19-May-2015 19:10:06

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.416	6.415	0.001	96	197014	4.00	4.00	
* 2 Naphthalene-d8	136	7.532	7.531	0.001	99	807765	4.00	4.00	
* 3 Acenaphthene-d10	164	9.042	9.045	-0.003	87	370743	4.00	4.00	
* 4 Phenanthrene-d10	188	10.316	10.315	0.001	94	513328	4.00	4.00	
* 5 Chrysene-d12	240	12.629	12.628	0.001	92	467941	4.00	4.00	
* 6 Perylene-d12	264	14.447	14.450	-0.003	89	349525	4.00	4.00	
$ 7 2-Fluorophenol	112	5.190	5.194	-0.004	91	1614882	20.0	19.0	
$ 8 Phenol-d5	99	6.046	6.045	0.001	80	2092284	20.0	18.2	
$ 9 Nitrobenzene-d5	82	6.887	6.886	0.001	87	1561937	20.0	18.9	
$ 10 2-Fluorobiphenyl (Surr)	172	8.436	8.439	-0.003	96	1985989	20.0	18.8	
$ 11 2,4,6-Tribromophenol	330	9.715	9.714	0.001	91	180881	20.0	18.6	
$ 12 Terphenyl-d14	244	11.643	11.642	0.001	97	1683742	20.0	18.7	
25 1,4-Dioxane	88	3.074	3.073	0.001	90	875415	20.0	19.7	
26 N-Nitrosodimethylamine	74	3.550	3.544	0.006	84	1336166	20.0	19.4	
27 Pyridine	79	3.622	3.621	0.001	98	2284580	20.0	19.2	
41 Benzaldehyde	77	6.012	6.011	0.001	94	2367472	40.0	33.6	
43 Phenol	94	6.060	6.054	0.006	92	2214218	20.0	17.6	
44 Aniline	93	6.108	6.107	0.001	98	2795756	20.0	18.2	
69 Bis(2-chloroethyl)ether	93	6.147	6.146	0.001	94	1753057	20.0	17.7	
46 2-Chlorophenol	128	6.228	6.227	0.001	97	1494525	20.0	19.2	
243 n-Decane	57	6.257	6.256	0.001	91	2026918	NC	NC	
47 1,3-Dichlorobenzene	146	6.368	6.372	-0.004	96	1433496	20.0	18.8	
48 1,4-Dichlorobenzene	146	6.430	6.429	0.001	93	1440764	20.0	18.7	
49 Benzyl alcohol	108	6.512	6.511	0.001	96	1152906	20.0	18.3	
50 1,2-Dichlorobenzene	146	6.570	6.574	-0.004	95	1367873	20.0	18.7	
51 2-Methylphenol	108	6.599	6.598	0.001	74	1566475	20.0	18.3	
53 2,2'-oxybis[1-chloropropan	45	6.632	6.631	0.001	86	2362564	20.0	18.4	
52 Indene	115	6.652	6.651	0.001	80	4317768	40.0	32.6	
21 3 & 4 Methylphenol	108	6.728	6.723	0.005	87	1633917	20.0	18.1	
57 N-Nitrosodi-n-propylamine	70	6.738	6.737	0.001	87	1066310	20.0	18.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
58 Acetophenone	105	6.753	6.752	0.000	71	1989235	20.0	17.7	
61 Hexachloroethane	117	6.878	6.881	-0.003	82	586054	20.0	18.7	
62 Nitrobenzene	77	6.906	6.905	0.001	79	1641533	20.0	19.1	
64 Isophorone	82	7.108	7.107	0.001	96	2962105	20.0	18.3	
66 2-Nitrophenol	139	7.185	7.184	0.001	90	662613	20.0	19.1	
65 2,4-Dimethylphenol	107	7.190	7.189	0.001	93	1335910	20.0	18.2	
71 Benzoic acid	122	7.257	7.223	0.034	71	1780038	40.0	43.9	
70 Bis(2-chloroethoxy)methane	93	7.267	7.271	-0.004	92	1896177	20.0	18.1	
73 2,4-Dichlorophenol	162	7.392	7.391	0.001	95	974522	20.0	19.4	
74 1,2,4-Trichlorobenzene	180	7.479	7.478	0.001	90	980805	20.0	19.1	
75 Naphthalene	128	7.551	7.550	0.001	97	3860979	20.0	18.1	
76 4-Chloroaniline	127	7.570	7.569	0.001	46	1851876	20.0	19.0	
77 2,6-Dichlorophenol	162	7.589	7.588	0.001	54	926144	20.0	19.1	
79 Hexachlorobutadiene	225	7.657	7.656	0.001	94	418372	20.0	19.6	
84 Caprolactam	113	7.854	7.838	0.016	82	908745	40.0	37.3	M
86 4-Chloro-3-methylphenol	107	7.960	7.959	0.001	93	1224897	20.0	18.9	
87 2-Methylnaphthalene	142	8.142	8.141	0.001	91	2339575	20.0	18.0	
88 1-Methylnaphthalene	142	8.229	8.228	0.001	91	2059588	20.0	18.2	
89 Hexachlorocyclopentadiene	237	8.287	8.286	0.001	72	423785	20.0	19.6	
91 1,2,4,5-Tetrachlorobenzene	216	8.291	8.290	0.001	97	673702	20.0	18.1	
92 2,4,6-Trichlorophenol	196	8.368	8.367	0.001	93	594742	20.0	19.6	
93 2,4,5-Trichlorophenol	196	8.407	8.401	0.006	94	616169	20.0	19.4	
98 1,1'-Biphenyl	154	8.527	8.531	-0.004	96	2547893	20.0	18.0	
100 2-Chloronaphthalene	162	8.561	8.564	-0.003	92	1933553	20.0	18.5	
102 2-Nitroaniline	65	8.623	8.622	0.001	84	812162	20.0	19.7	
105 Dimethyl phthalate	163	8.753	8.752	0.001	97	2071500	20.0	19.4	
106 1,3-Dinitrobenzene	168	8.787	8.786	0.001	80	378878	20.0	22.1	
107 2,6-Dinitrotoluene	165	8.811	8.810	0.001	67	502298	20.0	20.9	
109 Acenaphthylene	152	8.926	8.925	0.001	96	3329215	20.0	18.4	
110 3-Nitroaniline	138	8.965	8.964	0.001	93	710843	20.0	20.1	
111 2,4-Dinitrophenol	184	9.051	9.050	0.001	86	491793	40.0	42.2	
112 Acenaphthene	153	9.070	9.069	0.001	94	1786900	20.0	17.2	
113 4-Nitrophenol	109	9.075	9.069	0.006	43	446826	40.0	40.7	
114 2,4-Dinitrotoluene	165	9.162	9.161	0.001	83	623273	20.0	20.8	
116 Dibenzofuran	168	9.215	9.214	0.001	91	2629085	20.0	18.6	
119 2,3,4,6-Tetrachlorophenol	232	9.311	9.310	0.001	75	419830	20.0	18.5	
121 Diethyl phthalate	149	9.349	9.348	0.001	97	1740846	20.0	17.0	
247 Hexadecane	57	9.354	9.353	0.001	88	1960160	NC	NC	
123 4-Chlorophenyl phenyl ethe	204	9.479	9.483	-0.004	94	882962	20.0	19.1	
125 4-Nitroaniline	138	9.489	9.488	0.001	83	630108	20.0	20.6	
126 Fluorene	166	9.508	9.507	0.001	97	2061385	20.0	18.0	
128 4,6-Dinitro-2-methylphenol	198	9.518	9.517	0.001	87	534950	40.0	40.1	
131 N-Nitrosodiphenylamine	169	9.575	9.574	0.001	99	2522749	40.0	36.1	
133 Azobenzene	77	9.619	9.618	0.001	95	2974105	20.0	19.4	
132 1,2-Diphenylhydrazine	77	9.619	9.618	0.001	97	2974105	20.0	19.4	
139 4-Bromophenyl phenyl ether	248	9.902	9.901	0.001	69	436145	20.0	20.3	
142 Atrazine	200	9.998	9.997	0.001	82	688971	40.0	36.2	
141 Hexachlorobenzene	284	9.994	9.997	-0.003	76	348354	20.0	18.0	
244 n-Octadecane	57	10.133	10.132	0.001	76	1982679	NC	NC	
143 Pentachlorophenol	266	10.148	10.147	0.001	85	544703	40.0	38.9	
148 Phenanthrene	178	10.335	10.339	-0.004	97	2756919	20.0	18.8	
149 Anthracene	178	10.383	10.382	0.001	98	2780135	20.0	18.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
151 Carbazole	167	10.494	10.493	0.001	82	2690566	20.0	20.1	
154 Di-n-butyl phthalate	149	10.729	10.733	-0.004	99	3325383	20.0	21.1	
159 Fluoranthene	202	11.359	11.358	0.001	99	2606595	20.0	20.4	
160 Benzidine	184	11.427	11.426	0.001	99	3487416	40.0	39.9	
161 Pyrene	202	11.561	11.560	0.001	93	2633606	20.0	18.6	
168 Butyl benzyl phthalate	149	12.018	12.022	-0.004	95	1513714	20.0	19.6	
173 Bis(2-ethylhexyl) phthalat	149	12.509	12.512	-0.003	96	2115270	20.0	19.6	
175 3,3'-Dichlorobenzidine	252	12.547	12.546	0.001	61	1605282	40.0	39.5	
177 Benzo[a]anthracene	228	12.614	12.613	0.001	98	2526054	20.0	19.1	
178 Chrysene	228	12.653	12.657	-0.004	92	2322624	20.0	19.3	
180 Di-n-octyl phthalate	149	13.182	13.186	-0.004	99	3755074	20.0	20.4	
182 Benzo[b]fluoranthene	252	13.879	13.878	0.001	92	2246526	20.0	20.8	
183 Benzo[k]fluoranthene	252	13.918	13.912	0.006	90	2221648	20.0	20.2	
184 Benzo[a]pyrene	252	14.365	14.364	0.001	83	2158506	20.0	20.9	
188 Indeno[1,2,3-cd]pyrene	276	16.442	16.432	0.010	78	1997854	20.0	20.7	
189 Dibenz(a,h)anthracene	278	16.447	16.441	0.006	43	1673591	20.0	20.7	
190 Benzo[g,h,i]perylene	276	17.058	17.052	0.006	79	1548497	20.0	19.3	
S 191 Methyl Phenols,Total	100				0			36.4	
S 245 Total Cresols	100				0			36.4	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L8 W_00005 Amount Added: 1.00 Units: mL

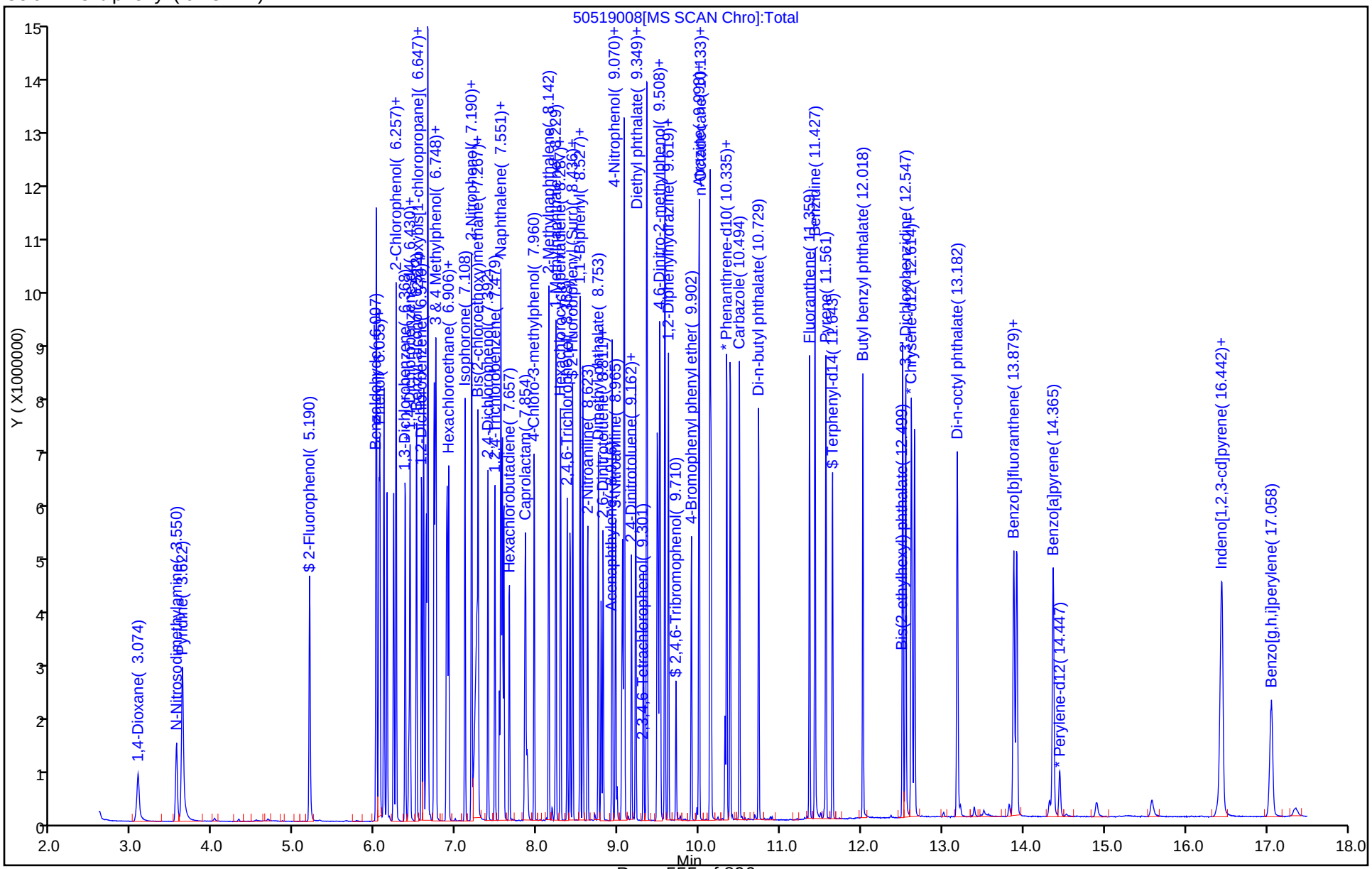
Report Date: 19-May-2015 20:27:35 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519008.D

Injection Date:	19-May-2015 18:43:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	std8 lst1			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



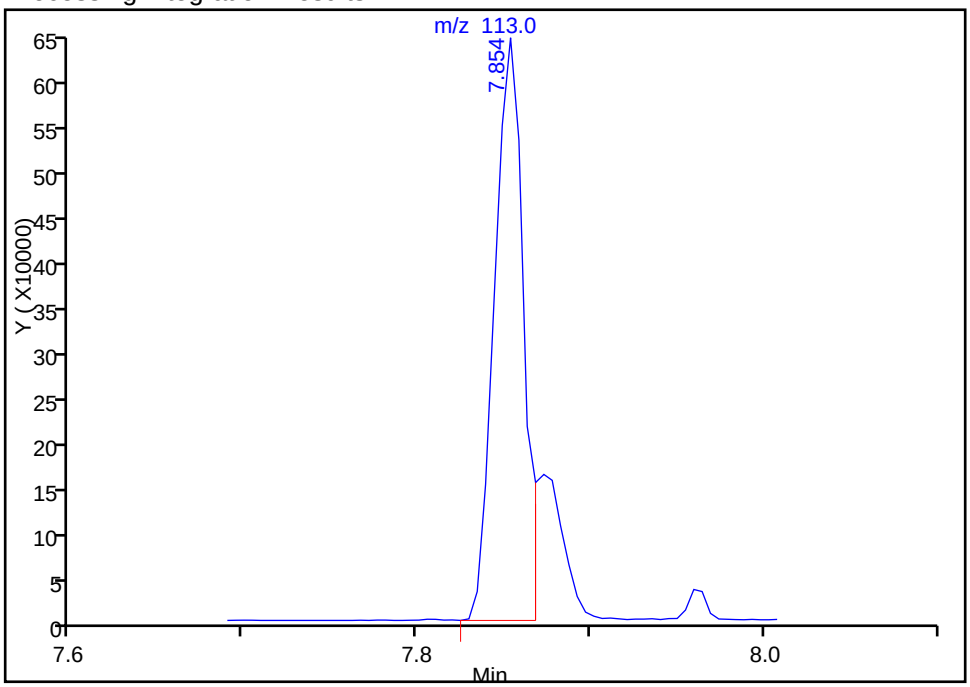
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519008.D				
Injection Date:	19-May-2015 18:43:30	Instrument ID:	A4HP9		
Lims ID:	std8 lst1				
Client ID:					
Operator ID:	001574	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

84 Caprolactam, CAS: 105-60-2

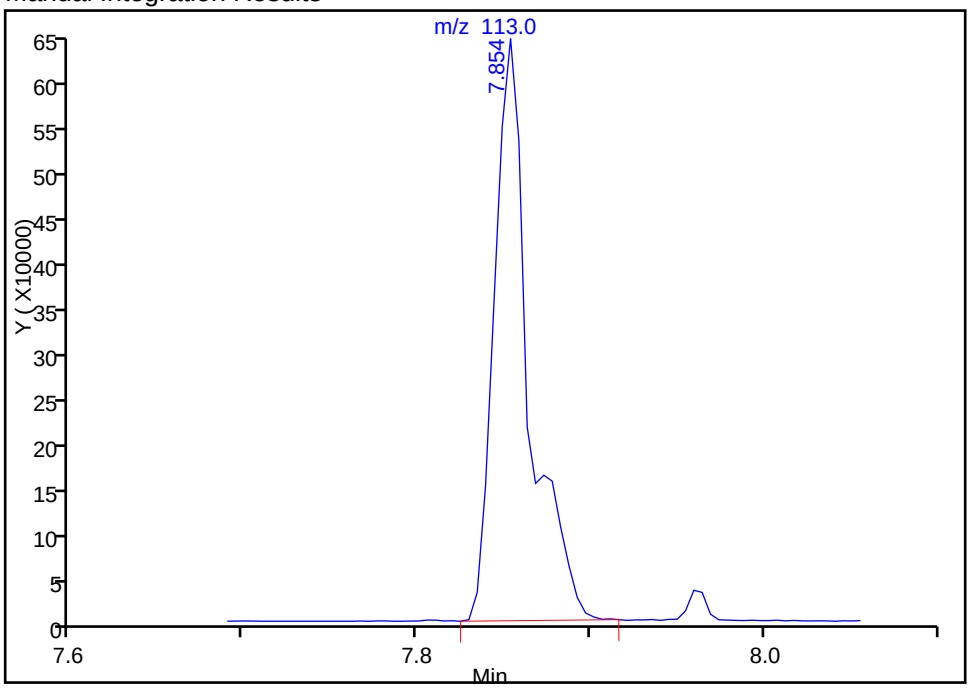
Processing Integration Results

RT: 7.85
Area: 760429
Amount: 31.728216
Amount Units: ng/ul



Manual Integration Results

RT: 7.85
Area: 908745
Amount: 37.301497
Amount Units: ng/ul



Reviewer: ulmanm, 19-May-2015 19:10:06
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519009.D
Lims ID: std7 lst1
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 19-May-2015 19:08:30 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043834-009
Misc. Info.: STD7 LST1STD7 LST1
Operator ID: 001574 Instrument ID: A4HP9
Sublist: chrom-8270 _9*sub34

Method: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 19-May-2015 20:27:37 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: ulmanm Date: 19-May-2015 19:36:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.417	6.415	0.002	95	196769	4.00	4.00	
* 2 Naphthalene-d8	136	7.532	7.531	0.001	99	819333	4.00	4.00	
* 3 Acenaphthene-d10	164	9.042	9.045	-0.003	90	376022	4.00	4.00	
* 4 Phenanthrene-d10	188	10.317	10.315	0.002	96	514582	4.00	4.00	
* 5 Chrysene-d12	240	12.630	12.628	0.002	93	453204	4.00	4.00	
* 6 Perylene-d12	264	14.447	14.450	-0.003	89	353642	4.00	4.00	
$ 7 2-Fluorophenol	112	5.190	5.194	-0.004	91	1256749	15.0	14.8	
$ 8 Phenol-d5	99	6.046	6.045	0.001	79	1663125	15.0	14.5	
$ 9 Nitrobenzene-d5	82	6.888	6.886	0.002	87	1238638	15.0	14.8	
$ 10 2-Fluorobiphenyl (Surr)	172	8.436	8.439	-0.003	99	1588839	15.0	14.8	
$ 11 2,4,6-Tribromophenol	330	9.711	9.714	-0.003	83	142204	15.0	14.4	
$ 12 Terphenyl-d14	244	11.644	11.642	0.002	97	1296265	15.0	14.9	
25 1,4-Dioxane	88	3.079	3.073	0.006	92	678748	15.0	15.3	
26 N-Nitrosodimethylamine	74	3.551	3.544	0.007	82	1015299	15.0	14.8	
27 Pyridine	79	3.623	3.621	0.002	99	1796760	15.0	15.1	
41 Benzaldehyde	77	6.013	6.011	0.002	93	1937862	30.0	27.5	
43 Phenol	94	6.056	6.054	0.002	93	1793803	15.0	14.3	
44 Aniline	93	6.109	6.107	0.002	98	2221782	15.0	14.5	
69 Bis(2-chloroethyl)ether	93	6.147	6.146	0.001	95	1446236	15.0	14.6	
46 2-Chlorophenol	128	6.229	6.227	0.002	97	1163143	15.0	15.0	
243 n-Decane	57	6.258	6.256	0.002	92	1611919	NC	NC	
47 1,3-Dichlorobenzene	146	6.369	6.372	-0.003	97	1131497	15.0	14.9	
48 1,4-Dichlorobenzene	146	6.431	6.429	0.002	94	1147110	15.0	14.9	
49 Benzyl alcohol	108	6.508	6.511	-0.003	95	920785	15.0	14.6	
50 1,2-Dichlorobenzene	146	6.570	6.574	-0.004	96	1094726	15.0	15.0	
51 2-Methylphenol	108	6.599	6.598	0.001	74	1245014	15.0	14.6	
53 2,2'-oxybis[1-chloropropan	45	6.628	6.631	-0.003	85	1863294	15.0	14.5	
52 Indene	115	6.647	6.651	-0.004	81	3593725	30.0	27.1	
21 3 & 4 Methylphenol	108	6.724	6.723	0.001	87	1291298	15.0	14.3	
57 N-Nitrosodi-n-propylamine	70	6.739	6.737	0.002	87	844874	15.0	14.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
58 Acetophenone	105	6.748	6.752	-0.004	77	1610414	15.0	14.4	
61 Hexachloroethane	117	6.878	6.881	-0.003	84	455911	15.0	14.6	
62 Nitrobenzene	77	6.907	6.905	0.002	80	1311835	15.0	15.0	
64 Isophorone	82	7.109	7.107	0.002	96	2360460	15.0	14.4	
66 2-Nitrophenol	139	7.186	7.184	0.002	88	530972	15.0	15.1	
65 2,4-Dimethylphenol	107	7.191	7.189	0.002	94	1056425	15.0	14.2	
71 Benzoic acid	122	7.249	7.223	0.026	77	1356259	30.0	33.0	
70 Bis(2-chloroethoxy)methane	93	7.268	7.271	-0.003	93	1536607	15.0	14.5	
73 2,4-Dichlorophenol	162	7.393	7.391	0.002	95	767012	15.0	15.0	
74 1,2,4-Trichlorobenzene	180	7.475	7.478	-0.003	92	785634	15.0	15.1	
75 Naphthalene	128	7.551	7.550	0.001	97	3093857	15.0	14.3	
76 4-Chloroaniline	127	7.566	7.569	-0.003	45	1435601	15.0	14.5	
77 2,6-Dichlorophenol	162	7.585	7.588	-0.003	61	736882	15.0	15.0	
79 Hexachlorobutadiene	225	7.657	7.656	0.001	94	330747	15.0	15.3	
84 Caprolactam	113	7.850	7.838	0.012	83	714615	30.0	28.9	
86 4-Chloro-3-methylphenol	107	7.960	7.959	0.001	95	957931	15.0	14.6	
87 2-Methylnaphthalene	142	8.138	8.141	-0.003	91	1901792	15.0	14.4	
88 1-Methylnaphthalene	142	8.230	8.228	0.002	91	1678815	15.0	14.7	
89 Hexachlorocyclopentadiene	237	8.282	8.286	-0.004	87	325359	15.0	14.8	
91 1,2,4,5-Tetrachlorobenzene	216	8.287	8.290	-0.003	93	544673	15.0	14.4	
92 2,4,6-Trichlorophenol	196	8.369	8.367	0.002	93	466876	15.0	15.2	
93 2,4,5-Trichlorophenol	196	8.403	8.401	0.002	93	491813	15.0	15.3	
98 1,1'-Biphenyl	154	8.528	8.531	-0.003	96	2054434	15.0	14.3	
100 2-Chloronaphthalene	162	8.561	8.564	-0.003	96	1553379	15.0	14.7	
102 2-Nitroaniline	65	8.619	8.622	-0.003	80	646434	15.0	15.5	
105 Dimethyl phthalate	163	8.754	8.752	0.002	98	1612061	15.0	14.9	
106 1,3-Dinitrobenzene	168	8.787	8.786	0.001	84	290742	15.0	16.7	
107 2,6-Dinitrotoluene	165	8.811	8.810	0.001	67	402112	15.0	16.5	
109 Acenaphthylene	152	8.922	8.925	-0.003	93	2660914	15.0	14.5	
110 3-Nitroaniline	138	8.965	8.964	0.001	95	541482	15.0	15.1	
111 2,4-Dinitrophenol	184	9.052	9.050	0.002	83	380406	30.0	32.2	
112 Acenaphthene	153	9.071	9.069	0.002	95	1467981	15.0	13.9	
113 4-Nitrophenol	109	9.076	9.069	0.007	53	347906	30.0	31.2	
114 2,4-Dinitrotoluene	165	9.162	9.161	0.001	88	476601	15.0	15.7	
116 Dibenzofuran	168	9.215	9.214	0.001	91	2079939	15.0	14.5	
119 2,3,4,6-Tetrachlorophenol	232	9.312	9.310	0.002	72	337863	15.0	14.7	
121 Diethyl phthalate	149	9.345	9.348	-0.003	96	1409993	15.0	13.5	
247 Hexadecane	57	9.355	9.353	0.002	87	1581821	NC	NC	
123 4-Chlorophenyl phenyl ethe	204	9.480	9.483	-0.003	94	681360	15.0	14.6	
125 4-Nitroaniline	138	9.489	9.488	0.001	85	473334	15.0	15.3	
126 Fluorene	166	9.509	9.507	0.002	97	1666768	15.0	14.3	
128 4,6-Dinitro-2-methylphenol	198	9.518	9.517	0.001	88	405092	30.0	30.4	
131 N-Nitrosodiphenylamine	169	9.576	9.574	0.002	99	2124595	30.0	30.3	
133 Azobenzene	77	9.614	9.618	-0.004	95	2376771	15.0	15.5	
132 1,2-Diphenylhydrazine	77	9.614	9.618	-0.004	98	2375637	15.0	15.5	
139 4-Bromophenyl phenyl ether	248	9.903	9.901	0.002	68	343776	15.0	16.0	
142 Atrazine	200	9.999	9.997	0.002	84	568041	30.0	29.8	
141 Hexachlorobenzene	284	9.994	9.997	-0.003	76	288366	15.0	14.9	
244 n-Octadecane	57	10.129	10.132	-0.003	72	1642987	NC	NC	
143 Pentachlorophenol	266	10.143	10.147	-0.004	85	434512	30.0	30.9	
148 Phenanthrene	178	10.336	10.339	-0.003	97	2214926	15.0	15.0	
149 Anthracene	178	10.379	10.382	-0.003	97	2220409	15.0	14.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
151 Carbazole	167	10.494	10.493	0.001	82	2119100	15.0	15.8	
154 Di-n-butyl phthalate	149	10.730	10.733	-0.003	99	2621017	15.0	16.6	
159 Fluoranthene	202	11.360	11.358	0.002	98	2048812	15.0	16.0	
160 Benzidine	184	11.427	11.426	0.001	99	2739703	30.0	32.4	
161 Pyrene	202	11.562	11.560	0.002	94	2135077	15.0	15.5	
168 Butyl benzyl phthalate	149	12.019	12.022	-0.003	95	1167212	15.0	15.6	
173 Bis(2-ethylhexyl) phthalat	149	12.509	12.512	-0.003	95	1618266	15.0	15.5	
175 3,3'-Dichlorobenzidine	252	12.548	12.546	0.002	60	1241902	30.0	31.5	
177 Benzo[a]anthracene	228	12.615	12.613	0.002	97	1946133	15.0	15.2	
178 Chrysene	228	12.654	12.657	-0.003	89	1787198	15.0	15.3	
180 Di-n-octyl phthalate	149	13.183	13.186	-0.003	99	2825727	15.0	15.2	
182 Benzo[b]fluoranthene	252	13.880	13.878	0.002	90	1737025	15.0	15.9	
183 Benzo[k]fluoranthene	252	13.914	13.912	0.002	93	1671236	15.0	15.0	
184 Benzo[a]pyrene	252	14.366	14.364	0.002	83	1619343	15.0	15.5	
188 Indeno[1,2,3-cd]pyrene	276	16.438	16.432	0.006	76	1520587	15.0	15.6	
189 Dibenz(a,h)anthracene	278	16.448	16.441	0.007	49	1266277	15.0	15.5	
190 Benzo[g,h,i]perylene	276	17.058	17.052	0.006	77	1184787	15.0	14.6	
S 191 Methyl Phenols,Total	100				0			28.9	
S 245 Total Cresols	100				0			28.9	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SMLIST1 L7 W_00005 Amount Added: 1.00 Units: mL

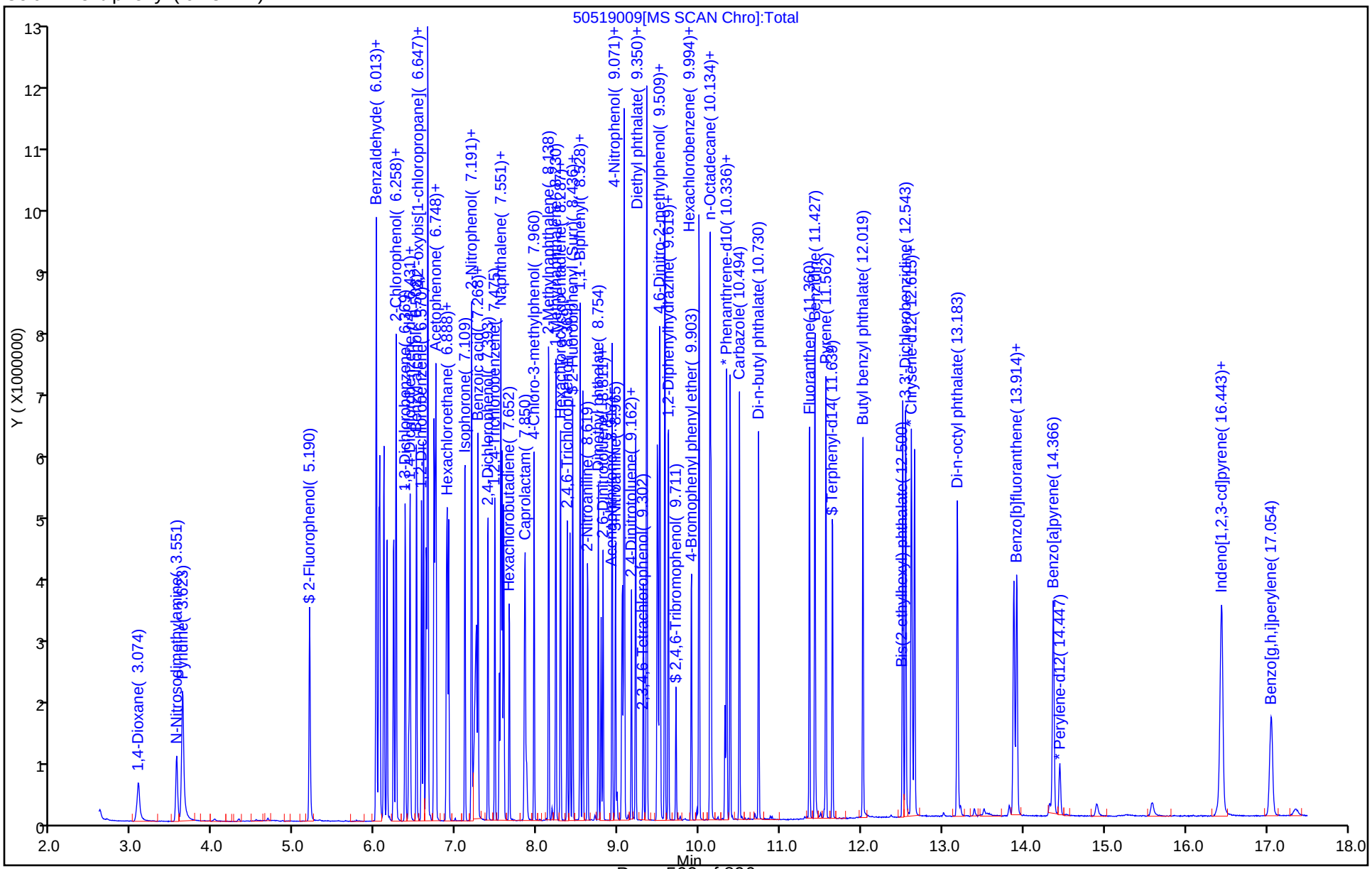
Report Date: 19-May-2015 20:27:37 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519009.D

Injection Date:	19-May-2015 19:08:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	std7 lst1			Worklist Smp#:	9
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Report Date: 19-May-2015 20:27:39 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D
Lims ID: std6 lst1
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 19-May-2015 19:33:30 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043834-010
Misc. Info.: STD6 LST1STD6 LST1
Operator ID: 001574 Instrument ID: A4HP9
Sublist: chrom-8270 _9*sub34

Method: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 19-May-2015 20:27:38 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: ulmanm Date: 19-May-2015 20:00:59

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.413	6.413	0.000	98	193601	4.00	4.00	
* 2 Naphthalene-d8	136	7.529	7.529	0.000	99	821091	4.00	4.00	
* 3 Acenaphthene-d10	164	9.044	9.044	0.000	90	384100	4.00	4.00	
* 4 Phenanthrene-d10	188	10.313	10.313	0.000	95	530433	4.00	4.00	
* 5 Chrysene-d12	240	12.626	12.626	0.000	93	495913	4.00	4.00	
* 6 Perylene-d12	264	14.449	14.449	0.000	90	357574	4.00	4.00	
$ 7 2-Fluorophenol	112	5.192	5.192	0.000	91	853026	10.0	10.2	
$ 8 Phenol-d5	99	6.043	6.043	0.000	93	1121676	10.0	9.93	
$ 9 Nitrobenzene-d5	82	6.890	6.890	0.000	86	842627	10.0	10.0	
$ 10 2-Fluorobiphenyl (Surr)	172	8.438	8.438	0.000	99	1087462	10.0	9.93	
$ 11 2,4,6-Tribromophenol	330	9.712	9.712	0.000	88	103401	10.0	10.3	
$ 12 Terphenyl-d14	244	11.641	11.641	0.000	97	906899	10.0	9.53	
25 1,4-Dioxane	88	3.071	3.071	0.000	92	437349	10.0	10.0	
26 N-Nitrosodimethylamine	74	3.547	3.547	0.000	86	669858	10.0	9.91	
27 Pyridine	79	3.620	3.620	0.000	99	1169135	10.0	10.0	
41 Benzaldehyde	77	6.014	6.014	0.000	97	1288765	20.0	18.6	
43 Phenol	94	6.058	6.058	0.000	93	1211072	10.0	9.81	
44 Aniline	93	6.106	6.106	0.000	98	1490234	10.0	9.88	
69 Bis(2-chloroethyl)ether	93	6.144	6.144	0.000	98	961174	10.0	9.88	
46 2-Chlorophenol	128	6.226	6.226	0.000	98	779327	10.0	10.2	
243 n-Decane	57	6.260	6.260	0.000	92	1089874	NC	NC	
47 1,3-Dichlorobenzene	146	6.370	6.370	0.000	98	764399	10.0	10.2	
48 1,4-Dichlorobenzene	146	6.428	6.428	0.000	93	781643	10.0	10.3	
49 Benzyl alcohol	108	6.510	6.510	0.000	97	617657	10.0	9.96	
50 1,2-Dichlorobenzene	146	6.572	6.572	0.000	97	741420	10.0	10.3	
51 2-Methylphenol	108	6.596	6.596	0.000	90	844971	10.0	10.0	
53 2,2'-oxybis[1-chloropropan	45	6.630	6.630	0.000	86	1254906	10.0	9.93	
52 Indene	115	6.649	6.649	0.000	90	2571685	20.0	19.7	
21 3 & 4 Methylphenol	108	6.726	6.726	0.000	87	885883	10.0	9.97	
57 N-Nitrosodi-n-propylamine	70	6.736	6.736	0.000	91	588267	10.0	10.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
58 Acetophenone	105	6.750	6.750	0.000	97	1098028	10.0	9.97	
61 Hexachloroethane	117	6.880	6.880	0.000	88	306655	10.0	9.95	
62 Nitrobenzene	77	6.904	6.904	0.000	85	881849	10.0	10.1	
64 Isophorone	82	7.106	7.106	0.000	98	1613983	10.0	9.83	
66 2-Nitrophenol	139	7.188	7.188	0.000	92	355489	10.0	10.1	
65 2,4-Dimethylphenol	107	7.193	7.193	0.000	94	738605	10.0	9.91	
71 Benzoic acid	122	7.236	7.236	0.000	85	863566	20.0	21.0	
70 Bis(2-chloroethoxy)methane	93	7.269	7.269	0.000	98	1049423	10.0	9.88	
73 2,4-Dichlorophenol	162	7.390	7.390	0.000	95	521888	10.0	10.2	
74 1,2,4-Trichlorobenzene	180	7.476	7.476	0.000	94	523332	10.0	10.0	
75 Naphthalene	128	7.548	7.548	0.000	97	2136740	10.0	9.86	
76 4-Chloroaniline	127	7.568	7.568	0.000	96	974799	10.0	9.82	
77 2,6-Dichlorophenol	162	7.587	7.587	0.000	96	507422	10.0	10.3	
79 Hexachlorobutadiene	225	7.654	7.654	0.000	98	219736	10.0	10.1	
84 Caprolactam	113	7.842	7.842	0.000	83	485955	20.0	19.6	
86 4-Chloro-3-methylphenol	107	7.957	7.957	0.000	96	659774	10.0	10.0	
87 2-Methylnaphthalene	142	8.140	8.140	0.000	94	1314168	10.0	9.95	
88 1-Methylnaphthalene	142	8.231	8.231	0.000	94	1146338	10.0	9.98	
89 Hexachlorocyclopentadiene	237	8.284	8.284	0.000	95	212762	10.0	9.49	
91 1,2,4,5-Tetrachlorobenzene	216	8.289	8.289	0.000	97	380570	10.0	9.88	
92 2,4,6-Trichlorophenol	196	8.371	8.371	0.000	94	313555	10.0	9.97	
93 2,4,5-Trichlorophenol	196	8.404	8.404	0.000	96	341863	10.0	10.4	
98 1,1'-Biphenyl	154	8.529	8.529	0.000	96	1423587	10.0	9.70	
100 2-Chloronaphthalene	162	8.563	8.563	0.000	96	1065581	10.0	9.84	
102 2-Nitroaniline	65	8.621	8.621	0.000	83	424554	10.0	9.96	
105 Dimethyl phthalate	163	8.751	8.751	0.000	98	1127807	10.0	10.2	
106 1,3-Dinitrobenzene	168	8.789	8.789	0.000	86	188957	10.0	10.6	
107 2,6-Dinitrotoluene	165	8.813	8.813	0.000	93	263284	10.0	10.6	
109 Acenaphthylene	152	8.924	8.924	0.000	99	1854837	10.0	9.88	
110 3-Nitroaniline	138	8.962	8.962	0.000	94	387312	10.0	10.6	
111 2,4-Dinitrophenol	184	9.049	9.049	0.000	87	234052	20.0	19.4	
112 Acenaphthene	153	9.068	9.068	0.000	95	1044451	10.0	9.69	
113 4-Nitrophenol	109	9.073	9.073	0.000	87	221858	20.0	19.5	
114 2,4-Dinitrotoluene	165	9.164	9.164	0.000	90	323966	10.0	10.5	
116 Dibenzofuran	168	9.212	9.212	0.000	98	1463274	10.0	10.0	
119 2,3,4,6-Tetrachlorophenol	232	9.308	9.308	0.000	77	244625	10.0	10.4	
121 Diethyl phthalate	149	9.347	9.347	0.000	98	1042627	10.0	9.81	
247 Hexadecane	57	9.352	9.352	0.000	89	1142639	NC	NC	
123 4-Chlorophenyl phenyl ethe	204	9.481	9.481	0.000	93	475305	10.0	9.94	
125 4-Nitroaniline	138	9.486	9.486	0.000	85	309515	10.0	9.78	
126 Fluorene	166	9.506	9.506	0.000	97	1181824	10.0	9.95	
128 4,6-Dinitro-2-methylphenol	198	9.515	9.515	0.000	88	260936	20.0	19.2	
131 N-Nitrosodiphenylamine	169	9.573	9.573	0.000	99	1572390	20.0	21.8	
133 Azobenzene	77	9.616	9.616	0.000	95	1661218	10.0	10.5	
132 1,2-Diphenylhydrazine	77	9.616	9.616	0.000	97	1661459	10.0	10.5	
139 4-Bromophenyl phenyl ether	248	9.900	9.900	0.000	74	234984	10.0	10.6	
142 Atrazine	200	9.996	9.996	0.000	83	421103	20.0	21.4	
141 Hexachlorobenzene	284	9.996	9.996	0.000	76	212572	10.0	10.6	
244 n-Octadecane	57	10.131	10.131	0.000	77	1177228	NC	NC	
143 Pentachlorophenol	266	10.145	10.145	0.000	90	302897	20.0	20.9	
148 Phenanthrene	178	10.337	10.337	0.000	97	1521407	10.0	10.0	
149 Anthracene	178	10.381	10.381	0.000	97	1559011	10.0	10.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
151 Carbazole	167	10.491	10.491	0.000	95	1440872	10.0	10.4	
154 Di-n-butyl phthalate	149	10.732	10.732	0.000	99	1835603	10.0	11.3	
159 Fluoranthene	202	11.357	11.357	0.000	97	1424022	10.0	10.8	
160 Benzidine	184	11.424	11.424	0.000	99	1784002	20.0	19.5	
161 Pyrene	202	11.559	11.559	0.000	94	1501041	10.0	9.99	
168 Butyl benzyl phthalate	149	12.016	12.016	0.000	95	825808	10.0	10.1	
173 Bis(2-ethylhexyl) phthalat	149	12.506	12.506	0.000	96	1153610	10.0	10.1	
175 3,3'-Dichlorobenzidine	252	12.545	12.545	0.000	77	864928	20.0	20.1	
177 Benzo[a]anthracene	228	12.612	12.612	0.000	96	1377712	10.0	9.83	
178 Chrysene	228	12.655	12.655	0.000	94	1295782	10.0	10.2	
180 Di-n-octyl phthalate	149	13.184	13.184	0.000	99	1975272	10.0	10.5	
182 Benzo[b]fluoranthene	252	13.877	13.877	0.000	94	1165964	10.0	10.6	
183 Benzo[k]fluoranthene	252	13.915	13.915	0.000	93	1202344	10.0	10.7	
184 Benzo[a]pyrene	252	14.362	14.362	0.000	87	1127677	10.0	10.7	
188 Indeno[1,2,3-cd]pyrene	276	16.435	16.435	0.000	96	1018010	10.0	10.3	
189 Dibenz(a,h)anthracene	278	16.440	16.440	0.000	89	848666	10.0	10.2	
190 Benzo[g,h,i]perylene	276	17.055	17.055	0.000	84	811837	10.0	9.88	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SMLIST1 L6 W_00005 Amount Added: 1.00 Units: mL

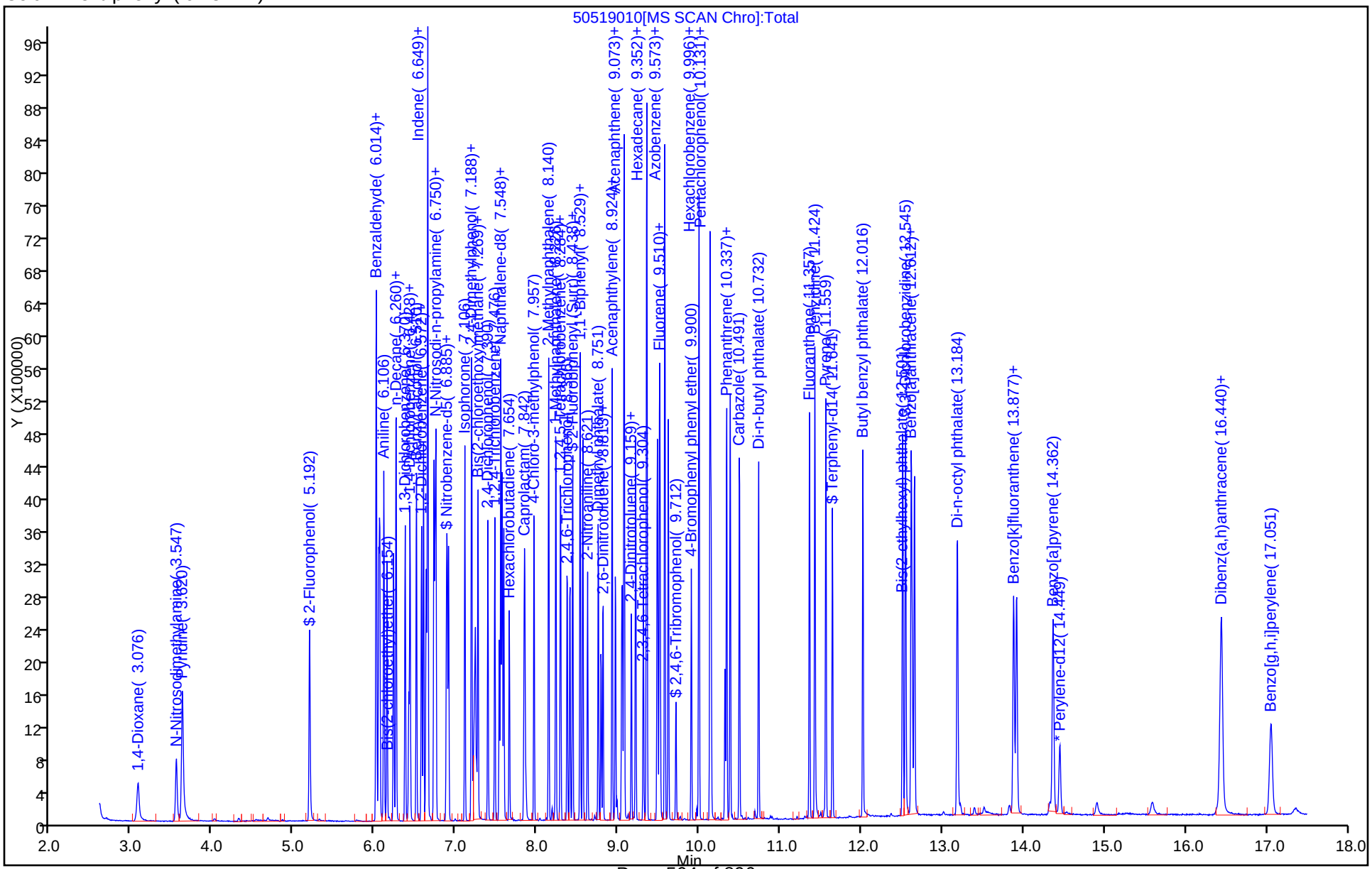
Report Date: 19-May-2015 20:27:39 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Injection Date:	19-May-2015 19:33:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	std6 lst1			Worklist Smp#:	10
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID (1): STD6 240-180308/10 ICIS Instrument ID (1): A4HP9

GC Column (1): RXI-5SILMS ID: 0.45(mm) Date Analyzed (1): 05/12/2015 10:59

ANALYTE	RT	RESOLUTION (%)
2-Fluorophenol (Surr)	5.09	100.0
Phenol-d5 (Surr)	5.96	100.0
Phenol	5.97	100.0
Bis(2-chloroethyl)ether	6.06	100.0
2-Chlorophenol	6.14	100.0
1,3-Dichlorobenzene	6.28	100.0
1,4-Dichlorobenzene	6.34	100.0
Benzyl alcohol	6.42	100.0
1,2-Dichlorobenzene	6.48	100.0
2-Methylphenol	6.52	100.0
bis (2-chloroisopropyl) ether	6.54	100.0
3 & 4 Methylphenol	6.65	100.0
N-Nitrosodi-n-propylamine	6.66	100.0
Hexachloroethane	6.79	100.0
Nitrobenzene-d5 (Surr)	6.80	100.0
Nitrobenzene	6.82	100.0
Isophorone	7.02	100.0
2-Nitrophenol	7.10	100.0
2,4-Dimethylphenol	7.11	100.0
Benzoic acid	7.16	100.0
Bis(2-chloroethoxy)methane	7.19	100.0
2,4-Dichlorophenol	7.30	100.0
1,2,4-Trichlorobenzene	7.39	100.0
Naphthalene	7.46	100.0
4-Chloroaniline	7.48	100.0
Hexachlorobutadiene	7.57	100.0
4-Chloro-3-methylphenol	7.88	100.0
2-Methylnaphthalene	8.05	100.0
Hexachlorocyclopentadiene	8.20	100.0
2,4,6-Trichlorophenol	8.29	100.0
2,4,5-Trichlorophenol	8.32	100.0
2-Fluorobiphenyl (Surr)	8.35	100.0
2-Chloronaphthalene	8.47	100.0
2-Nitroaniline	8.54	100.0
Dimethyl phthalate	8.67	100.0
2,6-Dinitrotoluene	8.73	100.0
Acenaphthylene	8.83	100.0
3-Nitroaniline	8.88	100.0
2,4-Dinitrophenol	8.97	100.0
Acenaphthene	8.98	100.0
4-Nitrophenol	8.99	100.0
2,4-Dinitrotoluene	9.07	100.0
Dibenzofuran	9.13	100.0
Diethyl phthalate	9.26	100.0
4-Chlorophenyl phenyl ether	9.39	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID (1): STD6 240-180308/10 ICIS Instrument ID (1): A4HP9

GC Column (1): RXI-5SILMS ID: 0.45(mm) Date Analyzed (1): 05/12/2015 10:59

ANALYTE	RT	RESOLUTION (%)
4-Nitroaniline	9.40	100.0
Fluorene	9.42	100.0
4,6-Dinitro-2-methylphenol	9.43	100.0
N-Nitrosodiphenylamine	9.49	100.0
2,4,6-Tribromophenol (Surr)	9.62	100.0
4-Bromophenyl phenyl ether	9.81	100.0
Hexachlorobenzene	9.91	100.0
Pentachlorophenol	10.05	100.0
Phenanthrene	10.24	100.0
Anthracene	10.29	100.0
Carbazole	10.40	100.0
Di-n-butyl phthalate	10.65	100.0
Fluoranthene	11.26	100.0
Pyrene	11.46	100.0
Terphenyl-d14 (Surr)	11.55	100.0
Butyl benzyl phthalate	11.93	100.0
Bis(2-ethylhexyl) phthalate	12.41	100.0
3,3'-Dichlorobenzidine	12.44	100.0
Benzo[a]anthracene	12.50	100.0
Chrysene	12.54	100.0
Di-n-octyl phthalate	13.07	100.0
Benzo[b]fluoranthene	13.72	24.50
Benzo[k]fluoranthene	13.76	100.0
Benzo[a]pyrene	14.19	100.0
Indeno[1,2,3-cd]pyrene	16.17	100.0
Dibenz(a,h)anthracene	16.18	100.0

Resolution Report

TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512010.D				
Injection Date:	12-May-2015 10:59:30	Instrument ID:	A4HP9		
Lims ID:	std6 lst1				
Client ID:					
Operator ID:	001574	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

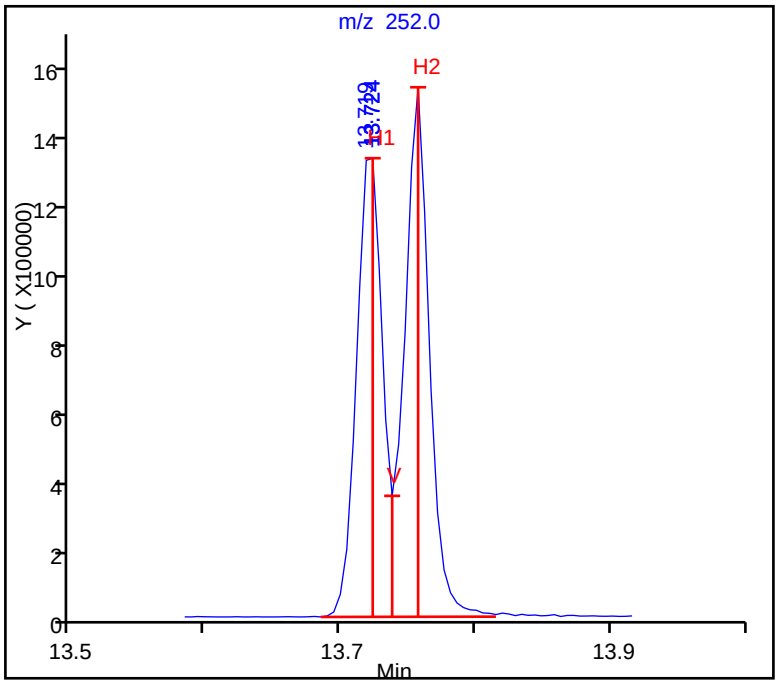
182 Benzo[b]fluoranthene - 183 Benzo[k]fluoranthene

SW-846 Method

Version C: %R = (V / (H1 + H2)) * 100
Version D: %R = (V / ((H1 + H2)/2)) * 100

V (Valley Height) = 339699
H1(182 Benzo[b]fluoranthen) = 1287950
H2(183 Benzo[k]fluoranthen) = 1486906

Version D: %R = 24.5 <= 50.0
Passed



FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID (1): CCV 240-180709/2 Instrument ID (1): A4HP9

GC Column (1): RXI-5SILMS ID: 0.45(mm) Date Analyzed (1): 05/14/2015 10:24

ANALYTE	RT	RESOLUTION (%)
2-Fluorophenol (Surr)	5.03	100.0
Phenol-d5 (Surr)	5.91	100.0
Phenol	5.93	100.0
Bis(2-chloroethyl)ether	6.01	100.0
2-Chlorophenol	6.09	100.0
1,3-Dichlorobenzene	6.23	100.0
1,4-Dichlorobenzene	6.29	100.0
Benzyl alcohol	6.38	100.0
1,2-Dichlorobenzene	6.44	100.0
2-Methylphenol	6.47	100.0
bis (2-chloroisopropyl) ether	6.50	100.0
3 & 4 Methylphenol	6.60	100.0
N-Nitrosodi-n-propylamine	6.61	100.0
Hexachloroethane	6.74	100.0
Nitrobenzene-d5 (Surr)	6.75	100.0
Nitrobenzene	6.77	100.0
Isophorone	6.98	100.0
2-Nitrophenol	7.06	100.0
2,4-Dimethylphenol	7.07	100.0
Benzoic acid	7.12	100.0
Bis(2-chloroethoxy)methane	7.14	100.0
2,4-Dichlorophenol	7.26	100.0
1,2,4-Trichlorobenzene	7.35	100.0
Naphthalene	7.42	100.0
4-Chloroaniline	7.44	100.0
Hexachlorobutadiene	7.52	100.0
4-Chloro-3-methylphenol	7.84	100.0
2-Methylnaphthalene	8.01	100.0
Hexachlorocyclopentadiene	8.15	100.0
2,4,6-Trichlorophenol	8.24	100.0
2,4,5-Trichlorophenol	8.27	100.0
2-Fluorobiphenyl (Surr)	8.31	100.0
2-Chloronaphthalene	8.43	100.0
2-Nitroaniline	8.49	100.0
Dimethyl phthalate	8.62	100.0
2,6-Dinitrotoluene	8.68	100.0
Acenaphthylene	8.79	100.0
3-Nitroaniline	8.83	100.0
2,4-Dinitrophenol	8.92	100.0
Acenaphthene	8.93	100.0
4-Nitrophenol	8.95	100.0
2,4-Dinitrotoluene	9.03	100.0
Dibenzofuran	9.08	100.0
Diethyl phthalate	9.22	100.0
4-Chlorophenyl phenyl ether	9.35	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID (1): CCV 240-180709/2 Instrument ID (1): A4HP9

GC Column (1): RXI-5SILMS ID: 0.45(mm) Date Analyzed (1): 05/14/2015 10:24

ANALYTE	RT	RESOLUTION (%)
4-Nitroaniline	9.35	100.0
Fluorene	9.37	100.0
4,6-Dinitro-2-methylphenol	9.38	100.0
N-Nitrosodiphenylamine	9.44	100.0
2,4,6-Tribromophenol (Surr)	9.57	100.0
4-Bromophenyl phenyl ether	9.76	100.0
Hexachlorobenzene	9.86	100.0
Pentachlorophenol	10.01	100.0
Phenanthrene	10.19	100.0
Anthracene	10.24	100.0
Carbazole	10.35	100.0
Di-n-butyl phthalate	10.60	100.0
Fluoranthene	11.21	100.0
Pyrene	11.41	100.0
Terphenyl-d14 (Surr)	11.50	100.0
Butyl benzyl phthalate	11.88	100.0
Bis(2-ethylhexyl) phthalate	12.35	100.0
3,3'-Dichlorobenzidine	12.38	100.0
Benzo[a]anthracene	12.44	100.0
Chrysene	12.48	100.0
Di-n-octyl phthalate	12.99	100.0
Benzo[b]fluoranthene	13.63	31.70
Benzo[k]fluoranthene	13.66	100.0
Benzo[a]pyrene	14.08	100.0
Indeno[1,2,3-cd]pyrene	16.01	100.0
Dibenz(a,h)anthracene	16.02	100.0

Resolution Report

TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150514-43624.b\50514002.D				
Injection Date:	14-May-2015 10:24:30	Instrument ID:	A4HP9		
Lims ID:	ccv lst1				
Client ID:					
Operator ID:	001574	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

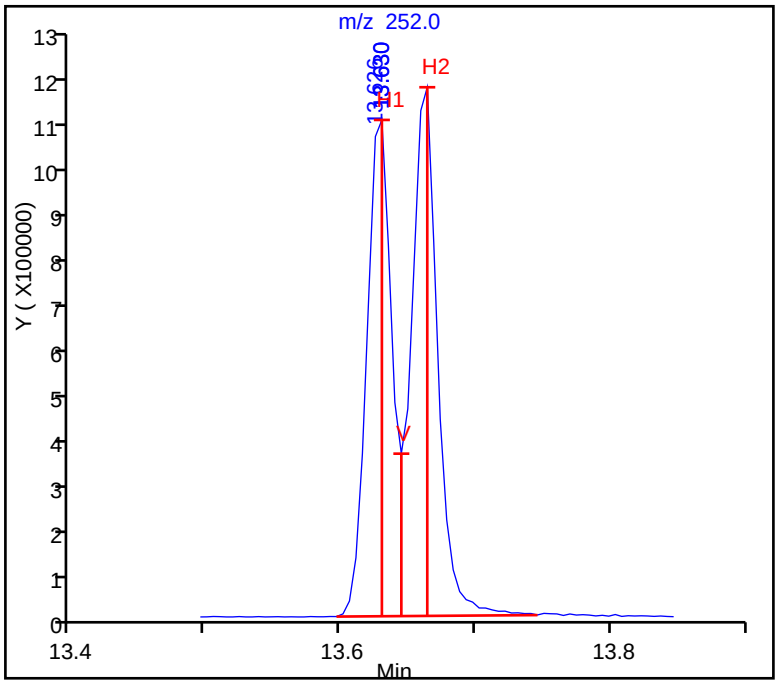
182 Benzo[b]fluoranthene - 183 Benzo[k]fluoranthene

SW-846 Method

Version C: %R = (V / (H1 + H2)) * 100
Version D: %R = (V / ((H1 + H2)/2)) * 100

V (Valley Height) = 351075
H1(182 Benzo[b]fluoranthen) = 1072663
H2(183 Benzo[k]fluoranthen) = 1142601

Version D: %R = 31.7 <= 50.0
Passed



FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID (1): STD6 240-181539/10 ICIS Instrument ID (1): A4HP9

GC Column (1): RXI-5SILMS ID: 0.45(mm) Date Analyzed (1): 05/19/2015 19:33

ANALYTE	RT	RESOLUTION (%)
2-Fluorophenol (Surr)	5.19	100.0
Phenol-d5 (Surr)	6.04	100.0
Phenol	6.06	100.0
Bis(2-chloroethyl)ether	6.14	100.0
2-Chlorophenol	6.23	100.0
1,3-Dichlorobenzene	6.37	100.0
1,4-Dichlorobenzene	6.43	100.0
Benzyl alcohol	6.51	100.0
1,2-Dichlorobenzene	6.57	100.0
2-Methylphenol	6.60	100.0
bis (2-chloroisopropyl) ether	6.63	100.0
3 & 4 Methylphenol	6.73	100.0
N-Nitrosodi-n-propylamine	6.74	100.0
Hexachloroethane	6.88	100.0
Nitrobenzene-d5 (Surr)	6.89	100.0
Nitrobenzene	6.90	100.0
Isophorone	7.11	100.0
2-Nitrophenol	7.19	100.0
2,4-Dimethylphenol	7.19	100.0
Benzoic acid	7.24	100.0
Bis(2-chloroethoxy)methane	7.27	100.0
2,4-Dichlorophenol	7.39	100.0
1,2,4-Trichlorobenzene	7.48	100.0
Naphthalene	7.55	100.0
4-Chloroaniline	7.57	100.0
Hexachlorobutadiene	7.65	100.0
4-Chloro-3-methylphenol	7.96	100.0
2-Methylnaphthalene	8.14	100.0
Hexachlorocyclopentadiene	8.28	100.0
2,4,6-Trichlorophenol	8.37	100.0
2,4,5-Trichlorophenol	8.40	100.0
2-Fluorobiphenyl (Surr)	8.44	100.0
2-Chloronaphthalene	8.56	100.0
2-Nitroaniline	8.62	100.0
Dimethyl phthalate	8.75	100.0
2,6-Dinitrotoluene	8.81	100.0
Acenaphthylene	8.92	100.0
3-Nitroaniline	8.96	100.0
2,4-Dinitrophenol	9.05	100.0
Acenaphthene	9.07	100.0
4-Nitrophenol	9.07	100.0
2,4-Dinitrotoluene	9.16	100.0
Dibenzofuran	9.21	100.0
Diethyl phthalate	9.35	100.0
4-Chlorophenyl phenyl ether	9.48	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID (1): STD6 240-181539/10 ICIS Instrument ID (1): A4HP9

GC Column (1): RXI-5SILMS ID: 0.45(mm) Date Analyzed (1): 05/19/2015 19:33

ANALYTE	RT	RESOLUTION (%)
4-Nitroaniline	9.49	100.0
Fluorene	9.51	100.0
4,6-Dinitro-2-methylphenol	9.52	100.0
N-Nitrosodiphenylamine	9.57	100.0
2,4,6-Tribromophenol (Surr)	9.71	100.0
4-Bromophenyl phenyl ether	9.90	100.0
Hexachlorobenzene	10.00	100.0
Pentachlorophenol	10.15	100.0
Phenanthrene	10.34	100.0
Anthracene	10.38	100.0
Carbazole	10.49	100.0
Di-n-butyl phthalate	10.73	100.0
Fluoranthene	11.36	100.0
Pyrene	11.56	100.0
Terphenyl-d14 (Surr)	11.64	100.0
Butyl benzyl phthalate	12.02	100.0
Bis(2-ethylhexyl) phthalate	12.51	100.0
3,3'-Dichlorobenzidine	12.55	100.0
Benzo[a]anthracene	12.61	100.0
Chrysene	12.66	100.0
Di-n-octyl phthalate	13.18	100.0
Benzo[b]fluoranthene	13.88	25.40
Benzo[k]fluoranthene	13.92	100.0
Benzo[a]pyrene	14.36	100.0
Indeno[1,2,3-cd]pyrene	16.44	100.0
Dibenz(a,h)anthracene	16.44	100.0

Resolution Report

TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D				
Injection Date:	19-May-2015 19:33:30	Instrument ID:	A4HP9		
Lims ID:	std6 lst1				
Client ID:					
Operator ID:	001574	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

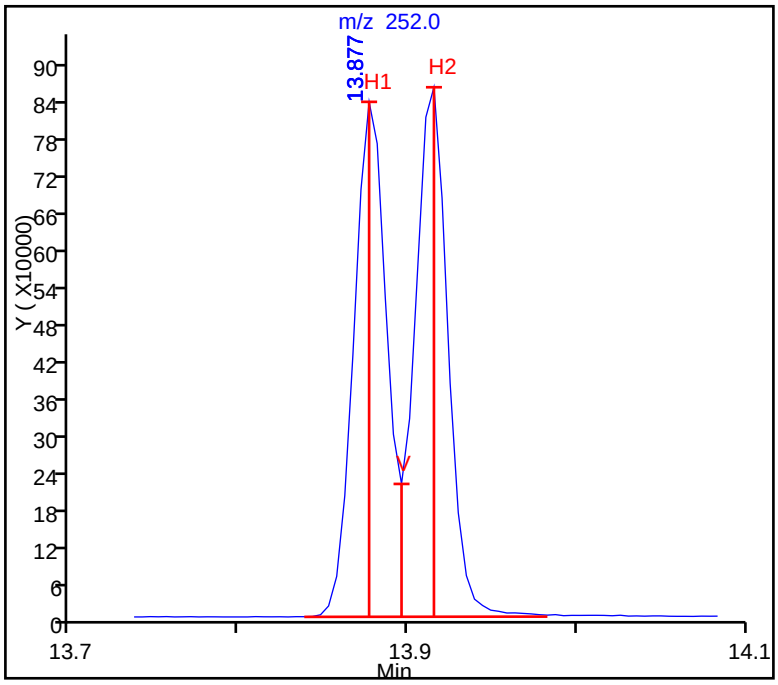
182 Benzo[b]fluoranthene - 183 Benzo[k]fluoranthene

SW-846 Method

Version C: %R = (V / (H1 + H2)) * 100
Version D: %R = (V / ((H1 + H2)/2)) * 100

V (Valley Height) = 215921
H1(182 Benzo[b]fluoranthen) = 837034
H2(183 Benzo[k]fluoranthen) = 860664

Version D: %R = 25.4 <= 50.0
Passed



FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID (1): CCV 240-181588/2 Instrument ID (1): A4HP9

GC Column (1): RXI-5SILMS ID: 0.45(mm) Date Analyzed (1): 05/20/2015 09:30

ANALYTE	RT	RESOLUTION (%)
2-Fluorophenol (Surr)	5.20	100.0
Phenol-d5 (Surr)	6.05	100.0
Phenol	6.06	100.0
Bis(2-chloroethyl)ether	6.15	100.0
2-Chlorophenol	6.23	100.0
1,3-Dichlorobenzene	6.37	100.0
1,4-Dichlorobenzene	6.43	100.0
Benzyl alcohol	6.51	100.0
1,2-Dichlorobenzene	6.57	100.0
2-Methylphenol	6.59	100.0
bis (2-chloroisopropyl) ether	6.63	100.0
3 & 4 Methylphenol	6.72	100.0
N-Nitrosodi-n-propylamine	6.74	100.0
Hexachloroethane	6.88	100.0
Nitrobenzene-d5 (Surr)	6.89	100.0
Nitrobenzene	6.90	100.0
Isophorone	7.10	100.0
2-Nitrophenol	7.19	100.0
2,4-Dimethylphenol	7.19	100.0
Benzoic acid	7.24	100.0
Bis(2-chloroethoxy)methane	7.27	100.0
2,4-Dichlorophenol	7.39	100.0
1,2,4-Trichlorobenzene	7.47	100.0
Naphthalene	7.55	100.0
4-Chloroaniline	7.57	100.0
Hexachlorobutadiene	7.65	100.0
4-Chloro-3-methylphenol	7.96	100.0
2-Methylnaphthalene	8.14	100.0
Hexachlorocyclopentadiene	8.28	100.0
2,4,6-Trichlorophenol	8.36	100.0
2,4,5-Trichlorophenol	8.40	100.0
2-Fluorobiphenyl (Surr)	8.43	100.0
2-Chloronaphthalene	8.56	100.0
2-Nitroaniline	8.62	100.0
Dimethyl phthalate	8.75	100.0
2,6-Dinitrotoluene	8.81	100.0
Acenaphthylene	8.92	100.0
3-Nitroaniline	8.96	100.0
2,4-Dinitrophenol	9.05	100.0
Acenaphthene	9.07	100.0
4-Nitrophenol	9.07	100.0
2,4-Dinitrotoluene	9.16	100.0
Dibenzofuran	9.21	100.0
Diethyl phthalate	9.35	100.0
4-Chlorophenyl phenyl ether	9.47	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID (1): CCV 240-181588/2 Instrument ID (1): A4HP9

GC Column (1): RXI-5SILMS ID: 0.45(mm) Date Analyzed (1): 05/20/2015 09:30

ANALYTE	RT	RESOLUTION (%)
4-Nitroaniline	9.48	100.0
Fluorene	9.50	100.0
4,6-Dinitro-2-methylphenol	9.51	100.0
N-Nitrosodiphenylamine	9.57	100.0
2,4,6-Tribromophenol (Surr)	9.71	100.0
4-Bromophenyl phenyl ether	9.90	100.0
Hexachlorobenzene	9.99	100.0
Pentachlorophenol	10.14	100.0
Phenanthrene	10.33	100.0
Anthracene	10.37	100.0
Carbazole	10.49	100.0
Di-n-butyl phthalate	10.73	100.0
Fluoranthene	11.36	100.0
Pyrene	11.56	100.0
Terphenyl-d14 (Surr)	11.64	100.0
Butyl benzyl phthalate	12.01	100.0
Bis(2-ethylhexyl) phthalate	12.50	100.0
3,3'-Dichlorobenzidine	12.54	100.0
Benzo[a]anthracene	12.61	100.0
Chrysene	12.65	100.0
Di-n-octyl phthalate	13.18	100.0
Benzo[b]fluoranthene	13.87	28.50
Benzo[k]fluoranthene	13.90	100.0
Benzo[a]pyrene	14.36	100.0
Indeno[1,2,3-cd]pyrene	16.42	100.0
Dibenz(a,h)anthracene	16.43	100.0

Resolution Report

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520002.D
Injection Date: 20-May-2015 09:30:30 Instrument ID: A4HP9
Lims ID: ccv lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL

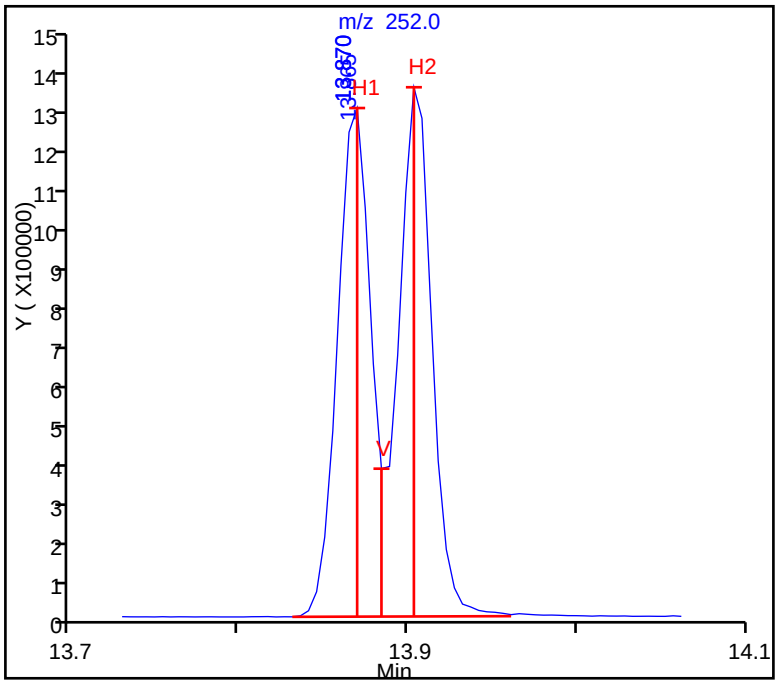
182 Benzo[b]fluoranthene - 183 Benzo[k]fluoranthene

SW-846 Method

Version C: %R = (V / (H1 + H2)) * 100
Version D: %R = (V / ((H1 + H2)/2)) * 100

V (Valley Height) = 360484
H1(182 Benzo[b]fluoranthen) = 1239833
H2(183 Benzo[k]fluoranthen) = 1290098

Version D: %R = 28.5 <= 50.0
Passed



FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID (1): CCV 240-181781/2 Instrument ID (1): A4HP9

GC Column (1): RXI-5SILMS ID: 0.45(mm) Date Analyzed (1): 05/21/2015 07:55

ANALYTE	RT	RESOLUTION (%)
2-Fluorophenol (Surr)	5.18	100.0
Phenol-d5 (Surr)	6.03	100.0
Phenol	6.05	100.0
Bis(2-chloroethyl)ether	6.13	100.0
2-Chlorophenol	6.22	100.0
1,3-Dichlorobenzene	6.35	100.0
1,4-Dichlorobenzene	6.42	100.0
Benzyl alcohol	6.49	100.0
1,2-Dichlorobenzene	6.56	100.0
2-Methylphenol	6.58	100.0
bis (2-chloroisopropyl) ether	6.61	100.0
3 & 4 Methylphenol	6.71	100.0
N-Nitrosodi-n-propylamine	6.72	100.0
Hexachloroethane	6.86	100.0
Nitrobenzene-d5 (Surr)	6.87	100.0
Nitrobenzene	6.89	100.0
Isophorone	7.09	100.0
2-Nitrophenol	7.17	100.0
2,4-Dimethylphenol	7.18	100.0
Benzoic acid	7.23	100.0
Bis(2-chloroethoxy)methane	7.25	100.0
2,4-Dichlorophenol	7.37	100.0
1,2,4-Trichlorobenzene	7.46	100.0
Naphthalene	7.53	100.0
4-Chloroaniline	7.55	100.0
Hexachlorobutadiene	7.64	100.0
4-Chloro-3-methylphenol	7.95	100.0
2-Methylnaphthalene	8.12	100.0
Hexachlorocyclopentadiene	8.27	100.0
2,4,6-Trichlorophenol	8.35	100.0
2,4,5-Trichlorophenol	8.39	100.0
2-Fluorobiphenyl (Surr)	8.42	100.0
2-Chloronaphthalene	8.54	100.0
2-Nitroaniline	8.61	100.0
Dimethyl phthalate	8.74	100.0
2,6-Dinitrotoluene	8.79	100.0
Acenaphthylene	8.90	100.0
3-Nitroaniline	8.95	100.0
2,4-Dinitrophenol	9.03	100.0
Acenaphthene	9.05	100.0
4-Nitrophenol	9.06	100.0
2,4-Dinitrotoluene	9.14	100.0
Dibenzofuran	9.20	100.0
Diethyl phthalate	9.33	100.0
4-Chlorophenyl phenyl ether	9.46	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID (1): CCV 240-181781/2 Instrument ID (1): A4HP9

GC Column (1): RXI-5SILMS ID: 0.45(mm) Date Analyzed (1): 05/21/2015 07:55

ANALYTE	RT	RESOLUTION (%)
4-Nitroaniline	9.47	100.0
Fluorene	9.49	100.0
4,6-Dinitro-2-methylphenol	9.50	100.0
N-Nitrosodiphenylamine	9.56	100.0
2,4,6-Tribromophenol (Surr)	9.69	100.0
4-Bromophenyl phenyl ether	9.88	100.0
Hexachlorobenzene	9.98	100.0
Pentachlorophenol	10.12	100.0
Phenanthrene	10.32	100.0
Anthracene	10.36	100.0
Carbazole	10.48	100.0
Di-n-butyl phthalate	10.71	100.0
Fluoranthene	11.34	100.0
Pyrene	11.54	100.0
Terphenyl-d14 (Surr)	11.62	100.0
Butyl benzyl phthalate	12.00	100.0
Bis(2-ethylhexyl) phthalate	12.49	100.0
3,3'-Dichlorobenzidine	12.52	100.0
Benzo[a]anthracene	12.59	100.0
Chrysene	12.63	100.0
Di-n-octyl phthalate	13.15	100.0
Benzo[b]fluoranthene	13.84	28.50
Benzo[k]fluoranthene	13.88	100.0
Benzo[a]pyrene	14.32	100.0
Indeno[1,2,3-cd]pyrene	16.38	100.0
Dibenz(a,h)anthracene	16.38	100.0

Resolution Report

TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150521-43883.b\50521002.D				
Injection Date:	21-May-2015 07:55:30	Instrument ID:	A4HP9		
Lims ID:	ccv lst1				
Client ID:					
Operator ID:	001574	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

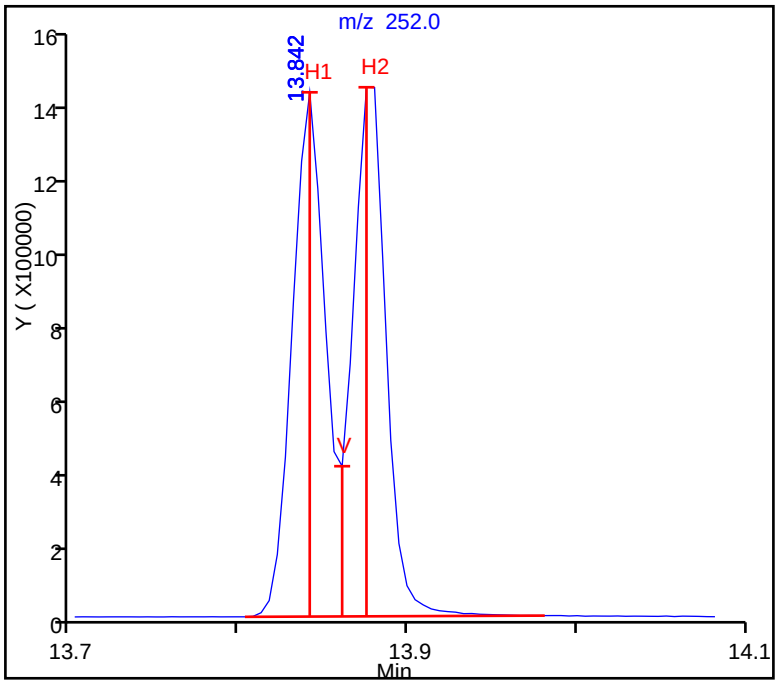
182 Benzo[b]fluoranthene - 183 Benzo[k]fluoranthene

SW-846 Method

Version C: %R = (V / (H1 + H2)) * 100
Version D: %R = (V / ((H1 + H2)/2)) * 100

V (Valley Height) = 395732
H1(182 Benzo[b]fluoranthen) = 1380912
H2(183 Benzo[k]fluoranthen) = 1393615

Version D: %R = 28.5 <= 50.0
Passed



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID: ICV 240-180308/11 Calibration Date: 05/12/2015 11:25

Instrument ID: A4HP9 Calib Start Date: 05/12/2015 07:38

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/12/2015 10:59

Lab File ID: 50512011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.8073	0.8123	0.0500	10.1	10.0	0.6	20.0
N-Nitrosodimethylamine	Ave	1.251	1.146	0.0500	9.17	10.0	-8.3	20.0
Pyridine	Ave	1.968	2.153	0.0500	10.9	10.0	9.4	20.0
Benzaldehyde	Ave	1.785	1.931	0.0500	21.6	20.0	8.2	20.0
Phenol	Ave	2.240	2.357	0.0500	10.5	10.0	5.2	20.0
Aniline	Ave	2.840	3.000	0.0500	10.6	10.0	5.6	20.0
Bis(2-chloroethyl)ether	Ave	1.805	1.839	0.0500	10.2	10.0	1.9	20.0
2-Chlorophenol	Ave	1.363	1.434	0.0500	10.5	10.0	5.2	20.0
1,3-Dichlorobenzene	Ave	1.566	1.558	0.0500	9.95	10.0	-0.5	20.0
1,4-Dichlorobenzene	Ave	1.582	1.672	0.0500	10.6	10.0	5.7	20.0
Benzyl alcohol	Ave	1.070	1.148	0.0500	10.7	10.0	7.3	20.0
1,2-Dichlorobenzene	Ave	1.502	1.495	0.0500	9.95	10.0	-0.5	20.0
2-Methylphenol	Ave	1.491	1.590	0.0500	10.7	10.0	6.7	20.0
bis (2-chloroisopropyl) ether	Ave	1.452	1.427	0.0500	9.83	10.0	-1.7	20.0
Indene	Ave	2.869	3.039	0.0500	21.2	20.0	5.9	20.0
3 & 4 Methylphenol	Ave	1.602	1.681	0.0500	10.5	10.0	4.9	20.0
N-Nitrosodi-n-propylamine	Ave	1.663	1.781	0.0500	10.7	10.0	7.1	20.0
Acetophenone	Ave	2.525	2.588	0.0500	10.2	10.0	2.5	20.0
Hexachloroethane	Ave	0.8286	0.8352	0.0500	10.1	10.0	0.8	20.0
Nitrobenzene	Ave	0.7027	0.6940	0.0500	9.88	10.0	-1.2	20.0
Isophorone	Ave	1.160	1.138	0.0500	9.81	10.0	-1.9	20.0
2-Nitrophenol	Ave	0.1879	0.1831	0.0500	9.74	10.0	-2.6	20.0
2,4-Dimethylphenol	Ave	0.5298	0.5074	0.0500	9.58	10.0	-4.2	20.0
Benzoic acid	Lin1		0.2201	0.0500	19.8	20.0	-1.2	20.0
Bis(2-chloroethoxy)methane	Ave	0.5744	0.5607	0.0500	9.76	10.0	-2.4	20.0
2,4-Dichlorophenol	Ave	0.3069	0.3077	0.0500	10.0	10.0	0.3	20.0
1,2,4-Trichlorobenzene	Ave	0.3491	0.3373	0.0500	9.66	10.0	-3.4	20.0
Naphthalene	Ave	1.053	1.057	0.0500	10.0	10.0	0.4	20.0
4-Chloroaniline	Ave	0.4532	0.4574	0.0500	10.1	10.0	0.9	20.0
2,6-Dichlorophenol	Ave	0.3175	0.2917	0.0500	9.19	10.0	-8.1	20.0
Hexachlorobutadiene	Ave	0.2521	0.2491	0.0500	9.88	10.0	-1.2	20.0
Caprolactam	Ave	0.1155	0.1090	0.0500	18.9	20.0	-5.6	20.0
4-Chloro-3-methylphenol	Ave	0.4294	0.4280	0.0500	9.97	10.0	-0.3	20.0
2-Methylnaphthalene	Ave	0.6973	0.6559	0.0500	9.41	10.0	-5.9	20.0
Hexachlorocyclopentadiene	Ave	0.4352	0.4458	0.0500	10.2	10.0	2.4	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.6336	0.6033	0.0500	9.52	10.0	-4.8	20.0
2,4,6-Trichlorophenol	Ave	0.4067	0.4015	0.0500	9.87	10.0	-1.3	20.0
2,4,5-Trichlorophenol	Ave	0.4215	0.4264	0.0500	10.1	10.0	1.2	20.0
1,1'-Biphenyl	Ave	1.442	1.373	0.0500	9.52	10.0	-4.8	20.0
2-Chloronaphthalene	Ave	1.181	1.088	0.0500	9.21	10.0	-7.9	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID: ICV 240-180308/11 Calibration Date: 05/12/2015 11:25

Instrument ID: A4HP9 Calib Start Date: 05/12/2015 07:38

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/12/2015 10:59

Lab File ID: 50512011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Nitroaniline	Lin1		0.5725	0.0500	9.22	10.0	-7.8	20.0
Dimethyl phthalate	Ave	1.370	1.277	0.0500	9.32	10.0	-6.8	20.0
1,3-Dinitrobenzene	Lin1		0.1938	0.0500	9.19	10.0	-8.1	20.0
2,6-Dinitrotoluene	Ave	0.2883	0.2879	0.0500	9.98	10.0	-0.2	20.0
Acenaphthylene	Ave	1.772	1.637	0.0500	9.24	10.0	-7.6	20.0
3-Nitroaniline	Ave	0.2720	0.2892	0.0500	10.6	10.0	6.3	20.0
2,4-Dinitrophenol	Lin1		0.1766	0.0500	16.6	20.0	-16.9	20.0
Acenaphthene	Ave	1.153	1.126	0.0500	9.77	10.0	-2.3	20.0
4-Nitrophenol	Lin1		0.3619	0.0500	18.3	20.0	-8.5	20.0
2,4-Dinitrotoluene	Ave	0.3877	0.3661	0.0500	9.44	10.0	-5.6	20.0
Dibenzofuran	Ave	1.625	1.458	0.0500	8.97	10.0	-10.3	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.3353	0.3457	0.0500	10.3	10.0	3.1	20.0
Diethyl phthalate	Ave	1.417	1.319	0.0500	9.31	10.0	-6.9	20.0
4-Chlorophenyl phenyl ether	Ave	0.6604	0.6180	0.0500	9.36	10.0	-6.4	20.0
4-Nitroaniline	Lin		0.2738	0.0500	8.70	10.0	-13.0	20.0
Fluorene	Ave	1.370	1.240	0.0500	9.05	10.0	-9.5	20.0
4,6-Dinitro-2-methylphenol	Lin1		0.1471	0.0500	18.1	20.0	-9.5	20.0
N-Nitrosodiphenylamine	Ave	0.6083	0.6329	0.0500	20.8	20.0	4.1	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	1.313	1.425	0.0500	10.9	10.0	8.6	20.0
4-Bromophenyl phenyl ether	Ave	0.2193	0.2282	0.0500	10.4	10.0	4.1	20.0
Hexachlorobenzene	Ave	0.2101	0.2127	0.0500	10.1	10.0	1.2	20.0
Atrazine	Ave	0.2250	0.2365	0.0500	21.0	20.0	5.1	20.0
Pentachlorophenol	Lin1		0.1607	0.0500	19.0	20.0	-4.8	20.0
Phenanthrene	Ave	1.085	1.046	0.0500	9.64	10.0	-3.6	20.0
Anthracene	Ave	1.109	1.056	0.0500	9.53	10.0	-4.7	20.0
Carbazole	Ave	0.9917	0.9645	0.0500	9.73	10.0	-2.7	20.0
Di-n-butyl phthalate	Ave	1.235	1.343	0.0500	10.9	10.0	8.7	20.0
Fluoranthene	Ave	1.243	1.257	0.0500	10.1	10.0	1.1	20.0
Benzidine	Lin1		0.5928	0.0500	18.9	20.0	-5.4	20.0
Pyrene	Ave	1.120	1.093	0.0500	9.76	10.0	-2.4	20.0
Butyl benzyl phthalate	Ave	0.5314	0.5238	0.0500	9.86	10.0	-1.4	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.7128	0.6876	0.0500	9.65	10.0	-3.5	20.0
3,3'-Dichlorobenzidine	Lin1		0.3407	0.0500	17.7	20.0	-11.3	20.0
Benzo[a]anthracene	Ave	1.164	1.114	0.0500	9.57	10.0	-4.3	20.0
Chrysene	Ave	1.053	1.074	0.0500	10.2	10.0	2.0	20.0
Di-n-octyl phthalate	Ave	1.543	1.489	0.0500	9.65	10.0	-3.5	20.0
Benzo[b]fluoranthene	Ave	1.262	1.274	0.0500	10.1	10.0	0.9	20.0
Benzo[k]fluoranthene	Ave	1.328	1.320	0.0500	9.94	10.0	-0.6	20.0
Benzo[a]pyrene	Ave	1.234	1.176	0.0500	9.53	10.0	-4.7	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.211	1.178	0.0500	9.72	10.0	-2.8	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID: ICV 240-180308/11 Calibration Date: 05/12/2015 11:25

Instrument ID: A4HP9 Calib Start Date: 05/12/2015 07:38

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/12/2015 10:59

Lab File ID: 50512011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibenz(a,h)anthracene	Ave	0.9736	0.9789	0.0500	10.1	10.0	0.5	20.0
Benzo[g,h,i]perylene	Ave	0.995	0.9663	0.0500	9.71	10.0	-2.9	20.0
2-Fluorophenol (Surr)	Ave	1.398	1.681	0.0500	12.0	10.0	20.3*	20.0
Phenol-d5 (Surr)	Ave	1.996	2.336	0.0500	11.7	10.0	17.0	20.0
Nitrobenzene-d5 (Surr)	Ave	0.7192	0.8380	0.0500	11.7	10.0	16.5	20.0
2-Fluorobiphenyl (Surr)	Ave	1.350	1.461	0.0500	10.8	10.0	8.2	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1452	0.1570	0.0500	10.8	10.0	8.1	20.0
Terphenyl-d14 (Surr)	Ave	0.8062	0.8522	0.0500	10.6	10.0	5.7	20.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512011.D
Lims ID: icv lst1
Client ID:
Sample Type: ICV
Inject. Date: 12-May-2015 11:25:30 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043530-011
Misc. Info.: ICV LST1ICV LST1
Operator ID: 001574 Instrument ID: A4HP9
Sublist:

Method: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 12-May-2015 15:32:23 Calib Date: 12-May-2015 10:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: ulmanm Date: 12-May-2015 12:27:08

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.326	6.326	0.000	91	158735	4.00	4.00	
* 2 Naphthalene-d8	136	7.446	7.446	0.000	98	629023	4.00	4.00	
* 3 Acenaphthene-d10	164	8.951	8.951	0.000	91	377890	4.00	4.00	
* 4 Phenanthrene-d10	188	10.221	10.221	0.000	98	580202	4.00	4.00	
* 5 Chrysene-d12	240	12.514	12.514	0.000	96	684958	4.00	4.00	
* 6 Perylene-d12	264	14.270	14.270	0.000	98	516825	4.00	4.00	
$ 7 2-Fluorophenol	112	5.090	5.090	0.000	92	667074	10.0	12.0	
$ 8 Phenol-d5	99	5.960	5.960	0.000	89	927047	10.0	11.7	
$ 9 Nitrobenzene-d5	82	6.802	6.802	0.000	86	1317723	10.0	11.7	
$ 10 2-Fluorobiphenyl (Surr)	172	8.350	8.350	0.000	98	1379989	10.0	10.8	
$ 11 2,4,6-Tribromophenol	330	9.620	9.620	0.000	76	148345	10.0	10.8	
$ 12 Terphenyl-d14	244	11.548	11.548	0.000	99	1459257	10.0	10.6	
25 1,4-Dioxane	88	2.892	2.892	0.000	91	322346	10.0	10.1	
26 N-Nitrosodimethylamine	74	3.392	3.392	0.000	90	454970	10.0	9.17	
27 Pyridine	79	3.464	3.464	0.000	94	854505	10.0	10.9	
41 Benzaldehyde	77	5.922	5.922	0.000	87	1532301	20.0	21.6	
43 Phenol	94	5.970	5.970	0.000	91	935458	10.0	10.5	
44 Aniline	93	6.018	6.018	0.000	94	1190643	10.0	10.6	
69 Bis(2-chloroethyl)ether	93	6.061	6.061	0.000	97	729867	10.0	10.2	
46 2-Chlorophenol	128	6.138	6.138	0.000	87	569079	10.0	10.5	
243 n-Decane	57	6.172	6.172	0.000	95	657824	NC	NC	
47 1,3-Dichlorobenzene	146	6.282	6.282	0.000	85	618390	10.0	9.95	
48 1,4-Dichlorobenzene	146	6.340	6.340	0.000	82	663323	10.0	10.6	
49 Benzyl alcohol	108	6.422	6.422	0.000	84	455522	10.0	10.7	
50 1,2-Dichlorobenzene	146	6.484	6.484	0.000	84	593324	10.0	9.95	
51 2-Methylphenol	108	6.513	6.513	0.000	90	631140	10.0	10.7	
53 2,2'-oxybis[1-chloropropan	45	6.547	6.547	0.000	86	566100	10.0	9.83	
52 Indene	115	6.561	6.561	0.000	88	2411665	20.0	21.2	
21 3 & 4 Methylphenol	108	6.643	6.643	0.000	96	667119	10.0	10.5	
57 N-Nitrosodi-n-propylamine	70	6.653	6.653	0.000	96	706874	10.0	10.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
58 Acetophenone	105	6.662	6.662	0.000	86	1026834	10.0	10.2	
61 Hexachloroethane	117	6.792	6.792	0.000	91	331447	10.0	10.1	
62 Nitrobenzene	77	6.821	6.821	0.000	83	1091388	10.0	9.88	
64 Isophorone	82	7.023	7.023	0.000	98	1790219	10.0	9.81	
66 2-Nitrophenol	139	7.100	7.100	0.000	70	287938	10.0	9.74	
65 2,4-Dimethylphenol	107	7.109	7.109	0.000	94	797846	10.0	9.58	
71 Benzoic acid	122	7.167	7.167	0.000	83	692114	20.0	19.8	
70 Bis(2-chloroethoxy)methane	93	7.186	7.186	0.000	99	881679	10.0	9.76	
73 2,4-Dichlorophenol	162	7.307	7.307	0.000	90	483868	10.0	10.0	
74 1,2,4-Trichlorobenzene	180	7.388	7.388	0.000	87	530437	10.0	9.66	
75 Naphthalene	128	7.460	7.460	0.000	97	1662610	10.0	10.0	
76 4-Chloroaniline	127	7.484	7.484	0.000	87	719230	10.0	10.1	
77 2,6-Dichlorophenol	162	7.499	7.499	0.000	84	458694	10.0	9.19	
79 Hexachlorobutadiene	225	7.566	7.566	0.000	94	391756	10.0	9.88	
84 Caprolactam	113	7.763	7.763	0.000	82	342940	20.0	18.9	
86 4-Chloro-3-methylphenol	107	7.879	7.879	0.000	87	673112	10.0	9.97	
87 2-Methylnaphthalene	142	8.052	8.052	0.000	86	1031357	10.0	9.41	
88 1-Methylnaphthalene	142	8.138	8.138	0.000	87	959989	10.0	10.3	
89 Hexachlorocyclopentadiene	237	8.196	8.196	0.000	93	421126	10.0	10.2	
91 1,2,4,5-Tetrachlorobenzene	216	8.201	8.201	0.000	93	569986	10.0	9.52	
92 2,4,6-Trichlorophenol	196	8.283	8.283	0.000	90	379317	10.0	9.87	
93 2,4,5-Trichlorophenol	196	8.316	8.316	0.000	86	402871	10.0	10.1	
98 1,1'-Biphenyl	154	8.441	8.441	0.000	98	1297348	10.0	9.52	
100 2-Chloronaphthalene	162	8.475	8.475	0.000	97	1028307	10.0	9.21	
102 2-Nitroaniline	65	8.533	8.533	0.000	69	540882	10.0	9.22	
105 Dimethyl phthalate	163	8.667	8.667	0.000	92	1206598	10.0	9.32	
106 1,3-Dinitrobenzene	168	8.701	8.701	0.000	78	183074	10.0	9.19	
107 2,6-Dinitrotoluene	165	8.725	8.725	0.000	75	271938	10.0	9.98	
109 Acenaphthylene	152	8.836	8.836	0.000	97	1546867	10.0	9.24	
110 3-Nitroaniline	138	8.879	8.879	0.000	82	273186	10.0	10.6	
111 2,4-Dinitrophenol	184	8.966	8.966	0.000	97	333646	20.0	16.6	
112 Acenaphthene	153	8.980	8.980	0.000	97	1063531	10.0	9.77	
113 4-Nitrophenol	109	8.990	8.990	0.000	84	683690	20.0	18.3	
114 2,4-Dinitrotoluene	165	9.076	9.076	0.000	78	345833	10.0	9.44	
116 Dibenzofuran	168	9.124	9.124	0.000	92	1377276	10.0	8.97	
119 2,3,4,6-Tetrachlorophenol	232	9.220	9.220	0.000	80	326580	10.0	10.3	
121 Diethyl phthalate	149	9.264	9.264	0.000	94	1246022	10.0	9.31	
247 Hexadecane	57	9.269	9.269	0.000	94	799871	NC	NC	
123 4-Chlorophenyl phenyl ethe	204	9.394	9.394	0.000	94	583861	10.0	9.36	
125 4-Nitroaniline	138	9.398	9.398	0.000	71	258646	10.0	8.70	
126 Fluorene	166	9.418	9.418	0.000	98	1171753	10.0	9.05	
128 4,6-Dinitro-2-methylphenol	198	9.432	9.432	0.000	94	426620	20.0	18.1	
131 N-Nitrosodiphenylamine	169	9.485	9.485	0.000	98	1836132	20.0	20.8	
133 Azobenzene	77	9.528	9.528	0.000	96	2067596	10.0	10.9	
132 1,2-Diphenylhydrazine	77	9.528	9.528	0.000	98	2067545	10.0	10.9	
139 4-Bromophenyl phenyl ether	248	9.812	9.812	0.000	77	330985	10.0	10.4	
141 Hexachlorobenzene	284	9.903	9.903	0.000	83	308568	10.0	10.1	
142 Atrazine	200	9.908	9.908	0.000	90	686194	20.0	21.0	
244 n-Octadecane	57	10.048	10.048	0.000	93	808749	NC	NC	
143 Pentachlorophenol	266	10.052	10.052	0.000	83	466249	20.0	19.0	
148 Phenanthrene	178	10.245	10.245	0.000	99	1517349	10.0	9.64	
149 Anthracene	178	10.288	10.288	0.000	99	1531948	10.0	9.53	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
151 Carbazole	167	10.403	10.403	0.000	98	1399074	10.0	9.73	
154 Di-n-butyl phthalate	149	10.644	10.644	0.000	99	1947397	10.0	10.9	
159 Fluoranthene	202	11.264	11.264	0.000	97	1822965	10.0	10.1	
160 Benzidine	184	11.336	11.336	0.000	98	2030358	20.0	18.9	
161 Pyrene	202	11.466	11.466	0.000	96	1871545	10.0	9.76	
168 Butyl benzyl phthalate	149	11.928	11.928	0.000	90	896878	10.0	9.86	
173 Bis(2-ethylhexyl) phthalat	149	12.413	12.413	0.000	97	1177485	10.0	9.65	
175 3,3'-Dichlorobenzidine	252	12.438	12.438	0.000	77	1166936	20.0	17.7	
177 Benzo[a]anthracene	228	12.505	12.505	0.000	98	1908042	10.0	9.57	
178 Chrysene	228	12.543	12.543	0.000	95	1839437	10.0	10.2	
180 Di-n-octyl phthalate	149	13.063	13.063	0.000	100	1923348	10.0	9.65	
182 Benzo[b]fluoranthene	252	13.721	13.721	0.000	95	1645642	10.0	10.1	
183 Benzo[k]fluoranthene	252	13.755	13.755	0.000	97	1705362	10.0	9.94	
184 Benzo[a]pyrene	252	14.188	14.188	0.000	76	1519178	10.0	9.53	
188 Indeno[1,2,3-cd]pyrene	276	16.169	16.169	0.000	93	1521602	10.0	9.72	
189 Dibenz(a,h)anthracene	278	16.179	16.179	0.000	88	1264756	10.0	10.1	
190 Benzo[g,h,i]perylene	276	16.756	16.756	0.000	96	1248543	10.0	9.71	
S 191 Methyl Phenols,Total	100				0			21.2	
S 245 Total Cresols	100				0			21.2	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SMLIST1 SS W_00004 Amount Added: 1.00 Units: mL

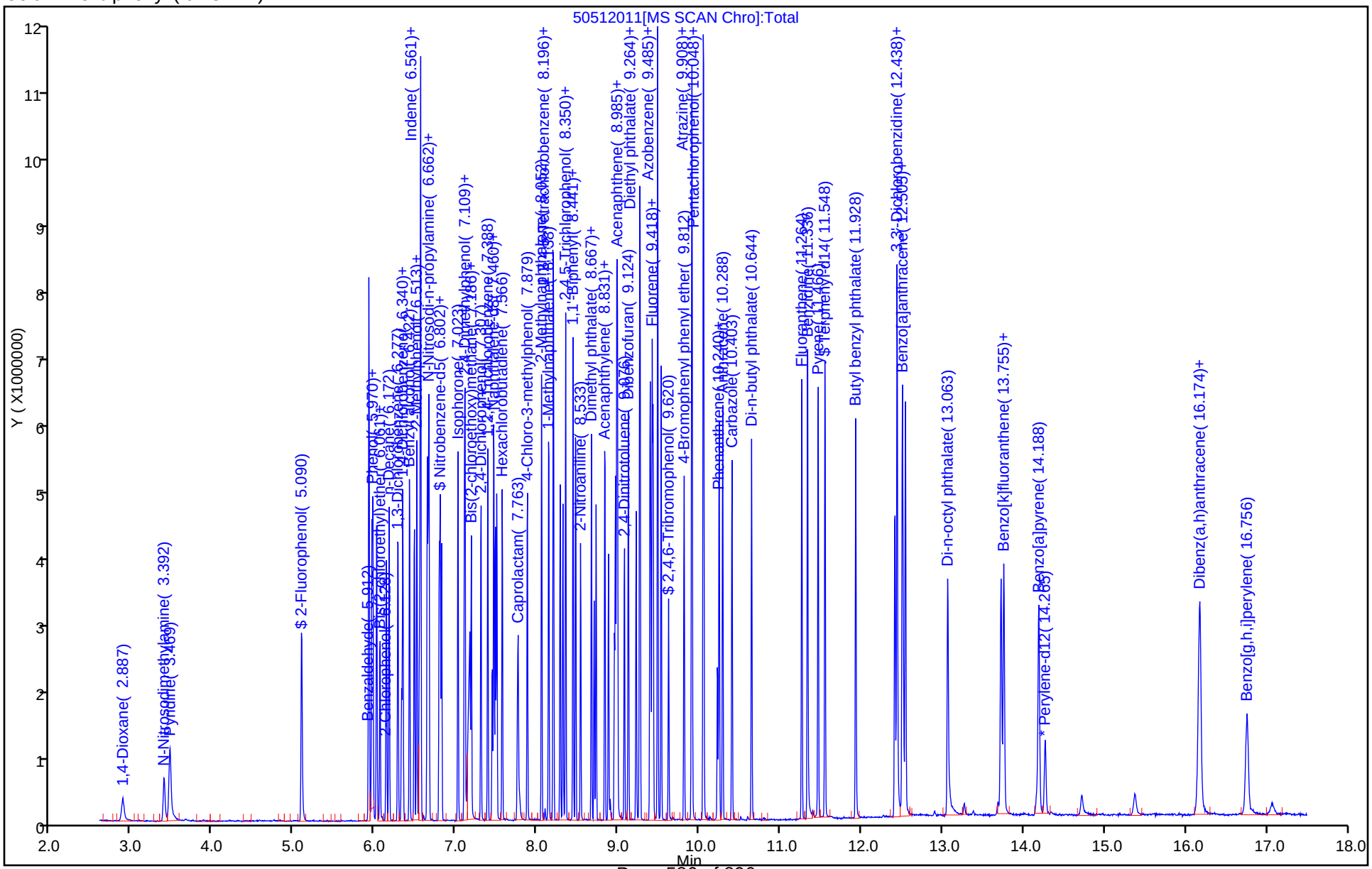
Report Date: 12-May-2015 15:32:25 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512011.D

Injection Date:	12-May-2015 11:25:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	icv lst1			Worklist Smp#:	11
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID: CCV 240-180709/2 Calibration Date: 05/14/2015 10:24

Instrument ID: A4HP9 Calib Start Date: 05/12/2015 07:38

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/12/2015 10:59

Lab File ID: 50514002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.8073	0.7954	0.0500	9.85	10.0	-1.5	20.0
N-Nitrosodimethylamine	Ave	1.251	1.273	0.0500	10.2	10.0	1.8	20.0
Pyridine	Ave	1.968	2.177	0.0500	11.1	10.0	10.6	20.0
Benzaldehyde	Ave	1.785	1.884	0.0500	21.1	20.0	5.6	20.0
Phenol	Ave	2.240	2.380	0.0500	10.6	10.0	6.3	20.0
Aniline	Ave	2.840	2.898	0.0500	10.2	10.0	2.0	20.0
Bis(2-chloroethyl)ether	Ave	1.805	1.864	0.0500	10.3	10.0	3.3	20.0
2-Chlorophenol	Ave	1.363	1.388	0.0500	10.2	10.0	1.9	20.0
1,3-Dichlorobenzene	Ave	1.566	1.582	0.0500	10.1	10.0	1.1	20.0
1,4-Dichlorobenzene	Ave	1.582	1.630	0.0500	10.3	10.0	3.1	20.0
Benzyl alcohol	Ave	1.070	1.106	0.0500	10.3	10.0	3.4	20.0
1,2-Dichlorobenzene	Ave	1.502	1.525	0.0500	10.2	10.0	1.5	20.0
2-Methylphenol	Ave	1.491	1.577	0.0500	10.6	10.0	5.8	20.0
bis (2-chloroisopropyl) ether	Ave	1.452	1.457	0.0500	10.0	10.0	0.4	20.0
Indene	Ave	2.869	2.958	0.0500	20.6	20.0	3.1	20.0
3 & 4 Methylphenol	Ave	1.602	1.626	0.0500	10.1	10.0	1.5	20.0
N-Nitrosodi-n-propylamine	Ave	1.663	1.746	0.0500	10.5	10.0	5.0	20.0
Acetophenone	Ave	2.525	2.535	0.0500	10.0	10.0	0.4	20.0
Hexachloroethane	Ave	0.8286	0.8730	0.0500	10.5	10.0	5.4	20.0
Nitrobenzene	Ave	0.7027	0.6871	0.0500	9.78	10.0	-2.2	20.0
Isophorone	Ave	1.160	1.144	0.0500	9.86	10.0	-1.4	20.0
2-Nitrophenol	Ave	0.1879	0.1906	0.0500	10.1	10.0	1.4	20.0
2,4-Dimethylphenol	Ave	0.5298	0.5220	0.0500	9.85	10.0	-1.5	20.0
Benzoic acid	Lin1		0.1996	0.0500	18.0	20.0	-10.0	20.0
Bis(2-chloroethoxy)methane	Ave	0.5744	0.5656	0.0500	9.85	10.0	-1.5	20.0
2,4-Dichlorophenol	Ave	0.3069	0.3042	0.0500	9.91	10.0	-0.9	20.0
1,2,4-Trichlorobenzene	Ave	0.3491	0.3514	0.0500	10.1	10.0	0.6	20.0
Naphthalene	Ave	1.053	1.053	0.0500	10.0	10.0	0.0	20.0
4-Chloroaniline	Ave	0.4532	0.4326	0.0500	9.54	10.0	-4.6	20.0
2,6-Dichlorophenol	Ave	0.3175	0.3071	0.0500	9.67	10.0	-3.3	20.0
Hexachlorobutadiene	Ave	0.2521	0.2523	0.0500	10.0	10.0	0.0	20.0
Caprolactam	Ave	0.1155	0.1141	0.0500	19.8	20.0	-1.2	20.0
4-Chloro-3-methylphenol	Ave	0.4294	0.4304	0.0500	10.0	10.0	0.2	20.0
2-Methylnaphthalene	Ave	0.6973	0.6956	0.0500	9.98	10.0	-0.2	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.6336	0.6464	0.0500	10.2	10.0	2.0	20.0
Hexachlorocyclopentadiene	Ave	0.4352	0.4642	0.0500	10.7	10.0	6.7	20.0
2,4,6-Trichlorophenol	Ave	0.4067	0.4061	0.0500	9.98	10.0	-0.2	20.0
2,4,5-Trichlorophenol	Ave	0.4215	0.4381	0.0500	10.4	10.0	3.9	20.0
1,1'-Biphenyl	Ave	1.442	1.425	0.0500	9.88	10.0	-1.2	20.0
2-Chloronaphthalene	Ave	1.181	1.156	0.0500	9.78	10.0	-2.2	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID: CCV 240-180709/2 Calibration Date: 05/14/2015 10:24

Instrument ID: A4HP9 Calib Start Date: 05/12/2015 07:38

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/12/2015 10:59

Lab File ID: 50514002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Nitroaniline	Lin1		0.5981	0.0500	9.62	10.0	-3.8	20.0
Dimethyl phthalate	Ave	1.370	1.334	0.0500	9.74	10.0	-2.6	20.0
1,3-Dinitrobenzene	Lin1		0.1970	0.0500	9.34	10.0	-6.6	20.0
2,6-Dinitrotoluene	Ave	0.2883	0.2925	0.0500	10.1	10.0	1.4	20.0
Acenaphthylene	Ave	1.772	1.811	0.0500	10.2	10.0	2.2	20.0
3-Nitroaniline	Ave	0.2720	0.3020	0.0500	11.1	10.0	11.0	20.0
2,4-Dinitrophenol	Lin1		0.1857	0.0500	17.4	20.0	-12.8	20.0
Acenaphthene	Ave	1.153	1.165	0.0500	10.1	10.0	1.1	20.0
4-Nitrophenol	Lin1		0.3716	0.0500	18.8	20.0	-6.1	20.0
2,4-Dinitrotoluene	Ave	0.3877	0.4037	0.0500	10.4	10.0	4.1	20.0
Dibenzofuran	Ave	1.625	1.630	0.0500	10.0	10.0	0.3	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.3353	0.3715	0.0500	11.1	10.0	10.8	20.0
Diethyl phthalate	Ave	1.417	1.376	0.0500	9.71	10.0	-2.9	20.0
4-Chlorophenyl phenyl ether	Ave	0.6604	0.6662	0.0500	10.1	10.0	0.9	20.0
4-Nitroaniline	Lin		0.2684	0.0500	8.54	10.0	-14.6	20.0
Fluorene	Ave	1.370	1.333	0.0500	9.73	10.0	-2.7	20.0
4,6-Dinitro-2-methylphenol	Lin1		0.1560	0.0500	19.2	20.0	-4.2	20.0
N-Nitrosodiphenylamine	Ave	0.6083	0.6681	0.0500	22.0	20.0	9.8	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	1.313	1.444	0.0500	11.0	10.0	10.0	20.0
4-Bromophenyl phenyl ether	Ave	0.2193	0.2462	0.0500	11.2	10.0	12.3	20.0
Hexachlorobenzene	Ave	0.2101	0.2324	0.0500	11.1	10.0	10.6	20.0
Atrazine	Ave	0.2250	0.2496	0.0500	22.2	20.0	10.9	20.0
Pentachlorophenol	Lin1		0.1533	0.0500	18.2	20.0	-9.0	20.0
Phenanthrene	Ave	1.085	1.119	0.0500	10.3	10.0	3.1	20.0
Anthracene	Ave	1.109	1.100	0.0500	9.92	10.0	-0.8	20.0
Carbazole	Ave	0.9917	1.001	0.0500	10.1	10.0	0.9	20.0
Di-n-butyl phthalate	Ave	1.235	1.365	0.0500	11.0	10.0	10.5	20.0
Fluoranthene	Ave	1.243	1.281	0.0500	10.3	10.0	3.1	20.0
Benzidine	Lin1		0.7107	0.0500	22.5	20.0	12.7	20.0
Pyrene	Ave	1.120	1.161	0.0500	10.4	10.0	3.7	20.0
Butyl benzyl phthalate	Ave	0.5314	0.5373	0.0500	10.1	10.0	1.1	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.7128	0.7333	0.0500	10.3	10.0	2.9	20.0
3,3'-Dichlorobenzidine	Lin1		0.3713	0.0500	19.3	20.0	-3.6	20.0
Benzo[a]anthracene	Ave	1.164	1.135	0.0500	9.75	10.0	-2.5	20.0
Chrysene	Ave	1.053	1.063	0.0500	10.1	10.0	0.9	20.0
Di-n-octyl phthalate	Ave	1.543	1.557	0.0500	10.1	10.0	0.9	20.0
Benzo[b]fluoranthene	Ave	1.262	1.232	0.0500	9.76	10.0	-2.4	20.0
Benzo[k]fluoranthene	Ave	1.328	1.373	0.0500	10.3	10.0	3.4	20.0
Benzo[a]pyrene	Ave	1.234	1.213	0.0500	9.82	10.0	-1.8	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.211	1.255	0.0500	10.4	10.0	3.6	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID: CCV 240-180709/2 Calibration Date: 05/14/2015 10:24

Instrument ID: A4HP9 Calib Start Date: 05/12/2015 07:38

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/12/2015 10:59

Lab File ID: 50514002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibenz(a,h)anthracene	Ave	0.9736	1.031	0.0500	10.6	10.0	5.9	20.0
Benzo[g,h,i]perylene	Ave	0.995	1.016	0.0500	10.2	10.0	2.1	20.0
2-Fluorophenol (Surr)	Ave	1.398	1.500	0.0500	10.7	10.0	7.3	20.0
Phenol-d5 (Surr)	Ave	1.996	2.124	0.0500	10.6	10.0	6.4	20.0
Nitrobenzene-d5 (Surr)	Ave	0.7192	0.7405	0.0500	10.3	10.0	3.0	20.0
2-Fluorobiphenyl (Surr)	Ave	1.350	1.330	0.0500	9.85	10.0	-1.5	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1452	0.1572	0.0500	10.8	10.0	8.3	20.0
Terphenyl-d14 (Surr)	Ave	0.8062	0.7822	0.0500	9.70	10.0	-3.0	20.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150514-43624.b\50514002.D
Lims ID: ccv lst1
Client ID:
Sample Type: CCVIS
Inject. Date: 14-May-2015 10:24:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043624-002
Misc. Info.: CCV LST1CCV LST1
Operator ID: 001574 Instrument ID: A4HP9
Sublist: chrom-8270 _9*sub34

Method: \\Ncchrom\ChromData\A4HP9\20150514-43624.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 14-May-2015 12:57:18 Calib Date: 12-May-2015 10:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK048

First Level Reviewer: ulmanm Date: 14-May-2015 11:14:10

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.278	6.278	0.000	92	141470	4.00	4.00	
* 2 Naphthalene-d8	136	7.398	7.398	0.000	98	546890	4.00	4.00	
* 3 Acenaphthene-d10	164	8.903	8.903	0.000	93	319471	4.00	4.00	
* 4 Phenanthrene-d10	188	10.173	10.173	0.000	98	495974	4.00	4.00	
* 5 Chrysene-d12	240	12.452	12.452	0.000	96	586435	4.00	4.00	
* 6 Perylene-d12	264	14.159	14.159	0.000	98	463907	4.00	4.00	
$ 7 2-Fluorophenol	112	5.032	5.032	0.000	93	530487	10.0	10.7	
$ 8 Phenol-d5	99	5.912	5.912	0.000	91	751193	10.0	10.6	
$ 9 Nitrobenzene-d5	82	6.754	6.754	0.000	86	1012418	10.0	10.3	
$ 10 2-Fluorobiphenyl (Surr)	172	8.307	8.307	0.000	98	1062095	10.0	9.85	
$ 11 2,4,6-Tribromophenol	330	9.572	9.572	0.000	77	125563	10.0	10.8	
$ 12 Terphenyl-d14	244	11.495	11.495	0.000	98	1146763	10.0	9.70	
25 1,4-Dioxane	88	2.700	2.700	0.000	89	281301	10.0	9.85	
26 N-Nitrosodimethylamine	74	3.243	3.243	0.000	89	450355	10.0	10.2	
27 Pyridine	79	3.325	3.325	0.000	93	769933	10.0	11.1	
41 Benzaldehyde	77	5.869	5.869	0.000	87	1332967	20.0	21.1	
43 Phenol	94	5.927	5.927	0.000	92	841837	10.0	10.6	
44 Aniline	93	5.970	5.970	0.000	94	1025125	10.0	10.2	
69 Bis(2-chloroethyl)ether	93	6.013	6.013	0.000	96	659378	10.0	10.3	
46 2-Chlorophenol	128	6.085	6.085	0.000	85	491005	10.0	10.2	
243 n-Decane	57	6.124	6.124	0.000	94	585753	NC	NC	
47 1,3-Dichlorobenzene	146	6.230	6.230	0.000	84	559610	10.0	10.1	
48 1,4-Dichlorobenzene	146	6.292	6.292	0.000	82	576535	10.0	10.3	
49 Benzyl alcohol	108	6.379	6.379	0.000	84	391287	10.0	10.3	
50 1,2-Dichlorobenzene	146	6.436	6.436	0.000	84	539456	10.0	10.2	
51 2-Methylphenol	108	6.470	6.470	0.000	90	557759	10.0	10.6	
53 2,2'-oxybis[1-chloropropan	45	6.499	6.499	0.000	91	515306	10.0	10.0	
52 Indene	115	6.513	6.513	0.000	88	2092493	20.0	20.6	
21 3 & 4 Methylphenol	108	6.600	6.600	0.000	94	574991	10.0	10.1	
57 N-Nitrosodi-n-propylamine	70	6.610	6.610	0.000	96	617342	10.0	10.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
58 Acetophenone	105	6.619	6.619	0.000	86	896594	10.0	10.0	
61 Hexachloroethane	117	6.744	6.744	0.000	93	308740	10.0	10.5	
62 Nitrobenzene	77	6.773	6.773	0.000	84	939415	10.0	9.78	
64 Isophorone	82	6.975	6.975	0.000	98	1564415	10.0	9.86	
66 2-Nitrophenol	139	7.057	7.057	0.000	78	260602	10.0	10.1	
65 2,4-Dimethylphenol	107	7.066	7.066	0.000	94	713668	10.0	9.85	
71 Benzoic acid	122	7.119	7.119	0.000	85	545747	20.0	18.0	
70 Bis(2-chloroethoxy)methane	93	7.143	7.143	0.000	98	773232	10.0	9.85	
73 2,4-Dichlorophenol	162	7.264	7.264	0.000	88	415914	10.0	9.91	
74 1,2,4-Trichlorobenzene	180	7.345	7.345	0.000	88	480375	10.0	10.1	
75 Naphthalene	128	7.417	7.417	0.000	98	1440210	10.0	10.0	
76 4-Chloroaniline	127	7.437	7.437	0.000	85	591453	10.0	9.54	
77 2,6-Dichlorophenol	162	7.456	7.456	0.000	84	419802	10.0	9.67	
79 Hexachlorobutadiene	225	7.523	7.523	0.000	94	344900	10.0	10.0	
84 Caprolactam	113	7.716	7.716	0.000	83	311892	20.0	19.8	
86 4-Chloro-3-methylphenol	107	7.836	7.836	0.000	86	588400	10.0	10.0	
87 2-Methylnaphthalene	142	8.009	8.009	0.000	88	951092	10.0	9.98	
88 1-Methylnaphthalene	142	8.095	8.095	0.000	88	806900	10.0	10.0	
89 Hexachlorocyclopentadiene	237	8.153	8.153	0.000	95	370744	10.0	10.7	
91 1,2,4,5-Tetrachlorobenzene	216	8.153	8.153	0.000	96	516227	10.0	10.2	
92 2,4,6-Trichlorophenol	196	8.240	8.240	0.000	91	324322	10.0	9.98	
93 2,4,5-Trichlorophenol	196	8.273	8.273	0.000	86	349900	10.0	10.4	
98 1,1'-Biphenyl	154	8.394	8.394	0.000	98	1138237	10.0	9.88	
100 2-Chloronaphthalene	162	8.427	8.427	0.000	98	923121	10.0	9.78	
102 2-Nitroaniline	65	8.490	8.490	0.000	69	477699	10.0	9.62	
105 Dimethyl phthalate	163	8.624	8.624	0.000	91	1065629	10.0	9.74	
106 1,3-Dinitrobenzene	168	8.653	8.653	0.000	78	157336	10.0	9.34	
107 2,6-Dinitrotoluene	165	8.682	8.682	0.000	74	233597	10.0	10.1	
109 Acenaphthylene	152	8.788	8.788	0.000	98	1446720	10.0	10.2	
110 3-Nitroaniline	138	8.831	8.831	0.000	83	241169	10.0	11.1	
111 2,4-Dinitrophenol	184	8.918	8.918	0.000	94	296689	20.0	17.4	
112 Acenaphthene	153	8.932	8.932	0.000	97	930833	10.0	10.1	
113 4-Nitrophenol	109	8.947	8.947	0.000	85	593565	20.0	18.8	
114 2,4-Dinitrotoluene	165	9.028	9.028	0.000	79	322411	10.0	10.4	
116 Dibenzofuran	168	9.076	9.076	0.000	94	1301720	10.0	10.0	
119 2,3,4,6-Tetrachlorophenol	232	9.173	9.173	0.000	79	296737	10.0	11.1	
121 Diethyl phthalate	149	9.216	9.216	0.000	94	1098807	10.0	9.71	
247 Hexadecane	57	9.221	9.221	0.000	88	702169	NC	NC	
123 4-Chlorophenyl phenyl ethe	204	9.346	9.346	0.000	95	532042	10.0	10.1	
125 4-Nitroaniline	138	9.351	9.351	0.000	71	214348	10.0	8.54	
126 Fluorene	166	9.370	9.370	0.000	99	1064866	10.0	9.73	
128 4,6-Dinitro-2-methylphenol	198	9.384	9.384	0.000	92	386965	20.0	19.2	
131 N-Nitrosodiphenylamine	169	9.437	9.437	0.000	98	1656673	20.0	22.0	
132 1,2-Diphenylhydrazine	77	9.480	9.480	0.000	98	1790511	10.0	11.0	
133 Azobenzene	77	9.480	9.480	0.000	96	1791041	10.0	11.0	
139 4-Bromophenyl phenyl ether	248	9.764	9.764	0.000	75	305289	10.0	11.2	
141 Hexachlorobenzene	284	9.855	9.855	0.000	86	288136	10.0	11.1	
142 Atrazine	200	9.860	9.860	0.000	90	618972	20.0	22.2	
244 n-Octadecane	57	10.000	10.000	0.000	95	711254	NC	NC	
143 Pentachlorophenol	266	10.005	10.005	0.000	86	380144	20.0	18.2	
148 Phenanthrene	178	10.192	10.192	0.000	99	1387062	10.0	10.3	
149 Anthracene	178	10.235	10.235	0.000	99	1364170	10.0	9.92	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
151 Carbazole	167	10.351	10.351	0.000	98	1240691	10.0	10.1	
154 Di-n-butyl phthalate	149	10.596	10.596	0.000	99	1692080	10.0	11.0	
159 Fluoranthene	202	11.212	11.212	0.000	98	1588129	10.0	10.3	
160 Benzidine	184	11.284	11.284	0.000	98	2084026	20.0	22.5	
161 Pyrene	202	11.409	11.409	0.000	96	1701970	10.0	10.4	
168 Butyl benzyl phthalate	149	11.875	11.875	0.000	91	787687	10.0	10.1	
173 Bis(2-ethylhexyl) phthalat	149	12.351	12.351	0.000	97	1075007	10.0	10.3	
175 3,3'-Dichlorobenzidine	252	12.375	12.375	0.000	77	1088816	20.0	19.3	
177 Benzo[a]anthracene	228	12.443	12.443	0.000	98	1664050	10.0	9.75	
178 Chrysene	228	12.476	12.476	0.000	95	1558172	10.0	10.1	
180 Di-n-octyl phthalate	149	12.991	12.991	0.000	99	1805256	10.0	10.1	
182 Benzo[b]fluoranthene	252	13.630	13.630	0.000	96	1428513	10.0	9.76	
183 Benzo[k]fluoranthene	252	13.664	13.664	0.000	97	1592507	10.0	10.3	
184 Benzo[a]pyrene	252	14.082	14.082	0.000	76	1406331	10.0	9.82	
188 Indeno[1,2,3-cd]pyrene	276	16.011	16.011	0.000	98	1455697	10.0	10.4	
189 Dibenz(a,h)anthracene	278	16.020	16.020	0.000	88	1195377	10.0	10.6	
190 Benzo[g,h,i]perylene	276	16.578	16.578	0.000	98	1177998	10.0	10.2	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SMLIST1 L6 W_00005 Amount Added: 1.00 Units: mL

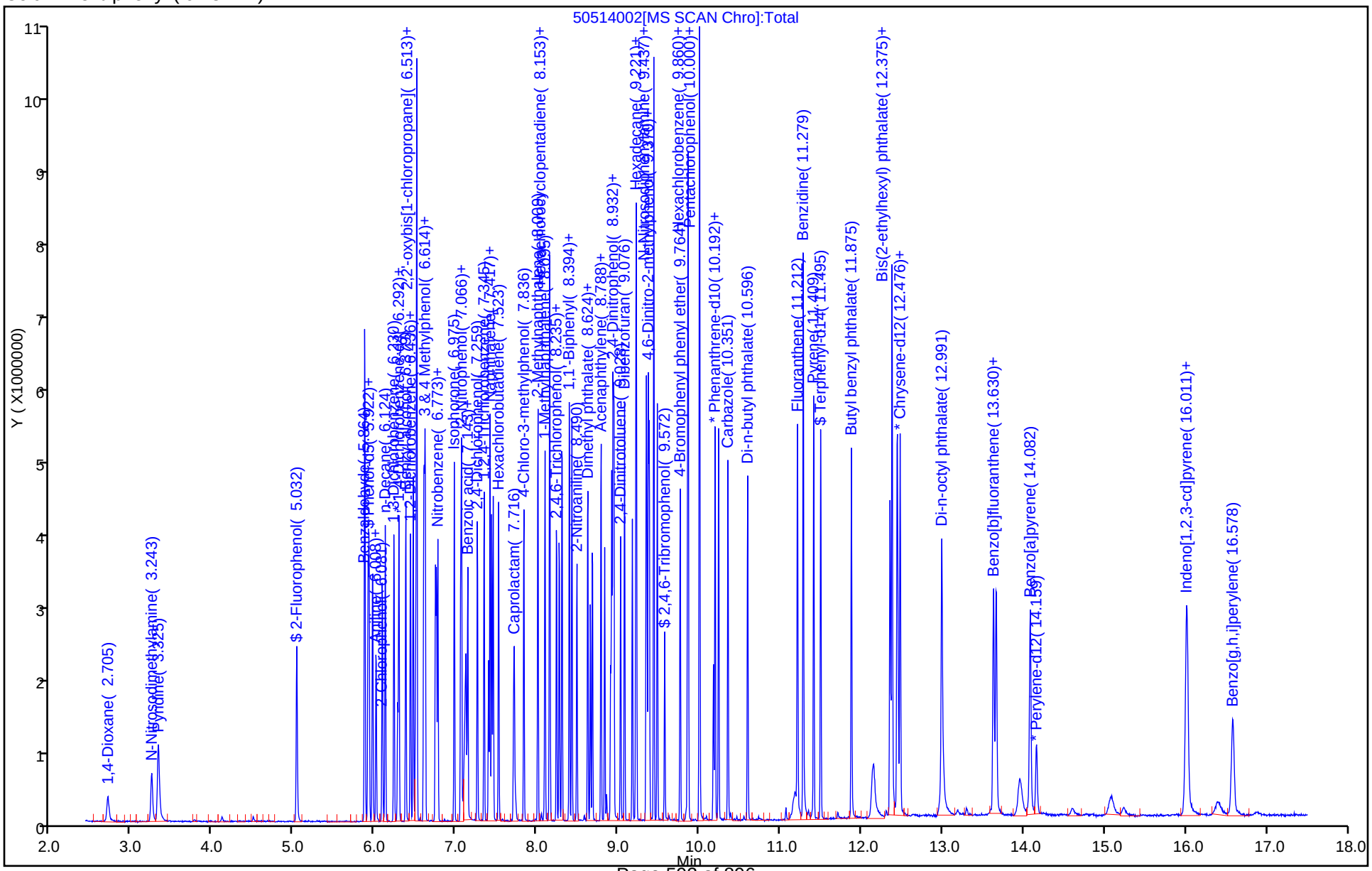
Report Date: 14-May-2015 12:57:20 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150514-43624.b\50514002.D

Injection Date:	14-May-2015 10:24:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	ccv lst1			Worklist Smp#:	2
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID: ICV 240-181539/11 Calibration Date: 05/19/2015 19:58

Instrument ID: A4HP9 Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/19/2015 19:33

Lab File ID: 50519011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.9041	0.9054	0.0500	10.0	10.0	0.1	20.0
N-Nitrosodimethylamine	Ave	1.396	1.187	0.0500	8.50	10.0	-15.0	20.0
Pyridine	Ave	2.418	2.428	0.0500	10.0	10.0	0.4	20.0
Benzaldehyde	Ave	1.430	1.394	0.0500	19.5	20.0	-2.5	20.0
Phenol	Ave	2.551	2.460	0.0500	9.64	10.0	-3.6	20.0
Aniline	Ave	3.116	3.029	0.0500	9.72	10.0	-2.8	20.0
Bis(2-chloroethyl)ether	Ave	2.009	1.980	0.0500	9.85	10.0	-1.5	20.0
2-Chlorophenol	Ave	1.581	1.582	0.0500	10.0	10.0	0.0	20.0
1,3-Dichlorobenzene	Ave	1.545	1.560	0.0500	10.1	10.0	1.0	20.0
1,4-Dichlorobenzene	Ave	1.562	1.566	0.0500	10.0	10.0	0.2	20.0
Benzyl alcohol	Ave	1.281	1.275	0.0500	9.96	10.0	-0.4	20.0
1,2-Dichlorobenzene	Ave	1.487	1.493	0.0500	10.0	10.0	0.4	20.0
2-Methylphenol	Ave	1.738	1.785	0.0500	10.3	10.0	2.7	20.0
bis (2-chloroisopropyl) ether	Ave	2.612	2.567	0.0500	9.83	10.0	-1.7	20.0
Indene	Ave	2.692	2.672	0.0500	19.8	20.0	-0.8	20.0
3 & 4 Methylphenol	Ave	1.836	1.834	0.0500	9.99	10.0	-0.0	20.0
N-Nitrosodi-n-propylamine	Ave	1.203	1.175	0.0500	9.77	10.0	-2.3	20.0
Acetophenone	Ave	2.276	2.225	0.0500	9.78	10.0	-2.2	20.0
Hexachloroethane	Ave	0.6369	0.6315	0.0500	9.91	10.0	-0.9	20.0
Nitrobenzene	Ave	0.4265	0.4128	0.0500	9.68	10.0	-3.2	20.0
Isophorone	Ave	0.7995	0.7856	0.0500	9.83	10.0	-1.7	20.0
2-Nitrophenol	Ave	0.1715	0.1659	0.0500	9.67	10.0	-3.3	20.0
2,4-Dimethylphenol	Ave	0.3630	0.3462	0.0500	9.54	10.0	-4.6	20.0
Benzoic acid	Ave	0.2007	0.2153	0.0500	21.5	20.0	7.3	20.0
Bis(2-chloroethoxy)methane	Ave	0.5177	0.4966	0.0500	9.59	10.0	-4.1	20.0
2,4-Dichlorophenol	Ave	0.2493	0.2423	0.0500	9.72	10.0	-2.8	20.0
1,2,4-Trichlorobenzene	Ave	0.2548	0.2536	0.0500	9.95	10.0	-0.5	20.0
Naphthalene	Ave	1.056	1.035	0.0500	9.80	10.0	-2.0	20.0
4-Chloroaniline	Ave	0.4836	0.4673	0.0500	9.66	10.0	-3.4	20.0
2,6-Dichlorophenol	Ave	0.2403	0.2391	0.0500	9.95	10.0	-0.5	20.0
Hexachlorobutadiene	Ave	0.1055	0.1043	0.0500	9.89	10.0	-1.1	20.0
Caprolactam	Ave	0.1206	0.1185	0.0500	19.6	20.0	-1.8	20.0
4-Chloro-3-methylphenol	Ave	0.3204	0.3110	0.0500	9.71	10.0	-2.9	20.0
2-Methylnaphthalene	Ave	0.6435	0.5990	0.0500	9.31	10.0	-6.9	20.0
Hexachlorocyclopentadiene	Ave	0.2335	0.2198	0.0500	9.41	10.0	-5.9	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.4013	0.3799	0.0500	9.47	10.0	-5.3	20.0
2,4,6-Trichlorophenol	Ave	0.3276	0.3227	0.0500	9.85	10.0	-1.5	20.0
2,4,5-Trichlorophenol	Ave	0.3425	0.3412	0.0500	9.96	10.0	-0.4	20.0
1,1'-Biphenyl	Ave	1.528	1.461	0.0500	9.56	10.0	-4.4	20.0
2-Chloronaphthalene	Ave	1.127	1.079	0.0500	9.57	10.0	-4.3	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID: ICV 240-181539/11 Calibration Date: 05/19/2015 19:58

Instrument ID: A4HP9 Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/19/2015 19:33

Lab File ID: 50519011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Nitroaniline	Ave	0.4439	0.4270	0.0500	9.62	10.0	-3.8	20.0
Dimethyl phthalate	Ave	1.149	1.127	0.0500	9.81	10.0	-1.9	20.0
1,3-Dinitrobenzene	Ave	0.1850	0.1852	0.0500	10.0	10.0	0.0	20.0
2,6-Dinitrotoluene	Ave	0.2594	0.2674	0.0500	10.3	10.0	3.1	20.0
Acenaphthylene	Ave	1.955	1.803	0.0500	9.22	10.0	-7.8	20.0
3-Nitroaniline	Ave	0.3816	0.3845	0.0500	10.1	10.0	0.7	20.0
2,4-Dinitrophenol	Ave	0.1257	0.1127	0.0500	17.9	20.0	-10.3	20.0
4-Nitrophenol	Ave	0.1185	0.1108	0.0500	18.7	20.0	-6.5	20.0
Acenaphthene	Ave	1.123	1.080	0.0500	9.62	10.0	-3.8	20.0
2,4-Dinitrotoluene	Ave	0.3227	0.3269	0.0500	10.1	10.0	1.3	20.0
Dibenzofuran	Ave	1.523	1.432	0.0500	9.40	10.0	-6.0	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.2445	0.2379	0.0500	9.73	10.0	-2.7	20.0
Diethyl phthalate	Ave	1.107	1.052	0.0500	9.50	10.0	-5.0	20.0
4-Chlorophenyl phenyl ether	Ave	0.4981	0.4688	0.0500	9.41	10.0	-5.9	20.0
4-Nitroaniline	Ave	0.3296	0.3075	0.0500	9.33	10.0	-6.7	20.0
Fluorene	Ave	1.237	1.155	0.0500	9.34	10.0	-6.6	20.0
4,6-Dinitro-2-methylphenol	Lin1		0.0932	0.0500	18.2	20.0	-9.0	20.0
N-Nitrosodiphenylamine	Ave	0.5447	0.5685	0.0500	20.9	20.0	4.4	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	1.191	1.277	0.0500	10.7	10.0	7.2	20.0
Azobenzene	Ave	1.193	1.277	0.0500	10.7	10.0	7.0	20.0
4-Bromophenyl phenyl ether	Ave	0.1674	0.1740	0.0500	10.4	10.0	3.9	20.0
Atrazine	Ave	0.1482	0.1532	0.0500	20.7	20.0	3.3	20.0
Hexachlorobenzene	Ave	0.1506	0.1518	0.0500	10.1	10.0	0.8	20.0
Pentachlorophenol	Ave	0.1092	0.1129	0.0500	20.7	20.0	3.4	20.0
Phenanthrene	Ave	1.145	1.081	0.0500	9.44	10.0	-5.6	20.0
Anthracene	Ave	1.159	1.131	0.0500	9.75	10.0	-2.5	20.0
Carbazole	Ave	1.046	1.021	0.0500	9.76	10.0	-2.4	20.0
Di-n-butyl phthalate	Ave	1.229	1.343	0.0500	10.9	10.0	9.3	20.0
Fluoranthene	Ave	0.9936	1.015	0.0500	10.2	10.0	2.2	20.0
Benzidine	Lin1		0.6002	0.0500	16.4	20.0	-18.2	20.0
Pyrene	Ave	1.212	1.117	0.0500	9.21	10.0	-7.9	20.0
Butyl benzyl phthalate	Ave	0.6609	0.6396	0.0500	9.68	10.0	-3.2	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.9242	0.8756	0.0500	9.47	10.0	-5.3	20.0
3,3'-Dichlorobenzidine	Ave	0.3475	0.3233	0.0500	18.6	20.0	-7.0	20.0
Benzo[a]anthracene	Ave	1.130	1.054	0.0500	9.33	10.0	-6.7	20.0
Chrysene	Ave	1.028	1.064	0.0500	10.3	10.0	3.5	20.0
Di-n-octyl phthalate	Ave	2.107	2.158	0.0500	10.2	10.0	2.4	20.0
Benzo[b]fluoranthene	Ave	1.234	1.214	0.0500	9.83	10.0	-1.7	20.0
Benzo[k]fluoranthene	Ave	1.259	1.300	0.0500	10.3	10.0	3.2	20.0
Benzo[a]pyrene	Ave	1.182	1.199	0.0500	10.1	10.0	1.5	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID: ICV 240-181539/11 Calibration Date: 05/19/2015 19:58

Instrument ID: A4HP9 Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/19/2015 19:33

Lab File ID: 50519011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Indeno[1,2,3-cd]pyrene	Ave	1.102	1.076	0.0500	9.76	10.0	-2.4	20.0
Dibenz(a,h)anthracene	Ave	0.9270	0.9027	0.0500	9.74	10.0	-2.6	20.0
Benzo[g,h,i]perylene	Ave	0.9195	0.8512	0.0500	9.26	10.0	-7.4	20.0
2-Fluorophenol (Surr)	Ave	1.729	1.923	0.0500	11.1	10.0	11.2	20.0
Phenol-d5 (Surr)	Ave	2.335	2.596	0.0500	11.1	10.0	11.2	20.0
Nitrobenzene-d5 (Surr)	Ave	0.4097	0.4442	0.0500	10.8	10.0	8.4	20.0
2-Fluorobiphenyl (Surr)	Ave	1.141	1.243	0.0500	10.9	10.0	9.0	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1049	0.1158	0.0500	11.0	10.0	10.3	20.0
Terphenyl-d14 (Surr)	Ave	0.7676	0.7679	0.0500	10.0	10.0	0.0	20.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519011.D
Lims ID: icv lst1
Client ID:
Sample Type: ICV
Inject. Date: 19-May-2015 19:58:30 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043834-011
Misc. Info.: ICV LST1ICV LST1
Operator ID: 001574 Instrument ID: A4HP9
Sublist:

Method: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 19-May-2015 20:27:41 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: ulmanm Date: 19-May-2015 20:26:57

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.415	6.415	0.000	96	185978	4.00	4.00	
* 2 Naphthalene-d8	136	7.531	7.531	0.000	99	801807	4.00	4.00	
* 3 Acenaphthene-d10	164	9.041	9.041	0.000	90	376179	4.00	4.00	
* 4 Phenanthrene-d10	188	10.315	10.315	0.000	95	519420	4.00	4.00	
* 5 Chrysene-d12	240	12.628	12.628	0.000	92	490052	4.00	4.00	
* 6 Perylene-d12	264	14.441	14.441	0.000	88	347707	4.00	4.00	
$ 7 2-Fluorophenol	112	5.189	5.189	0.000	91	893988	10.0	11.1	
$ 8 Phenol-d5	99	6.045	6.045	0.000	79	1207138	10.0	11.1	
$ 9 Nitrobenzene-d5	82	6.886	6.886	0.000	87	890475	10.0	10.8	
$ 10 2-Fluorobiphenyl (Surr)	172	8.435	8.435	0.000	99	1168968	10.0	10.9	
$ 11 2,4,6-Tribromophenol	330	9.709	9.709	0.000	81	108856	10.0	11.0	
$ 12 Terphenyl-d14	244	11.642	11.642	0.000	97	940782	10.0	10.0	
25 1,4-Dioxane	88	3.078	3.078	0.000	91	420950	10.0	10.0	
26 N-Nitrosodimethylamine	74	3.549	3.549	0.000	84	551967	10.0	8.50	
27 Pyridine	79	3.626	3.626	0.000	99	1128814	10.0	10.0	
41 Benzaldehyde	77	6.011	6.011	0.000	93	1296356	20.0	19.5	
43 Phenol	94	6.054	6.054	0.000	93	1143628	10.0	9.64	
44 Aniline	93	6.107	6.107	0.000	98	1408429	10.0	9.72	
69 Bis(2-chloroethyl)ether	93	6.146	6.146	0.000	93	920573	10.0	9.85	
46 2-Chlorophenol	128	6.227	6.227	0.000	97	735689	10.0	10.0	
243 n-Decane	57	6.256	6.256	0.000	91	1028819	NC	NC	
47 1,3-Dichlorobenzene	146	6.372	6.372	0.000	97	725215	10.0	10.1	
48 1,4-Dichlorobenzene	146	6.429	6.429	0.000	93	728020	10.0	10.0	
49 Benzyl alcohol	108	6.506	6.506	0.000	95	593003	10.0	9.96	
50 1,2-Dichlorobenzene	146	6.569	6.569	0.000	95	693940	10.0	10.0	
51 2-Methylphenol	108	6.598	6.598	0.000	74	830145	10.0	10.3	
53 2,2'-oxybis[1-chloropropan	45	6.631	6.631	0.000	86	1193317	10.0	9.83	
52 Indene	115	6.651	6.651	0.000	79	2484567	20.0	19.8	
21 3 & 4 Methylphenol	108	6.723	6.723	0.000	87	852779	10.0	10.0	
57 N-Nitrosodi-n-propylamine	70	6.737	6.737	0.000	88	546332	10.0	9.77	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
58 Acetophenone	105	6.747	6.747	0.000	79	1034613	10.0	9.78	
61 Hexachloroethane	117	6.877	6.877	0.000	88	293608	10.0	9.91	
62 Nitrobenzene	77	6.906	6.906	0.000	78	827533	10.0	9.68	
64 Isophorone	82	7.107	7.107	0.000	96	1574714	10.0	9.83	
66 2-Nitrophenol	139	7.184	7.184	0.000	90	332485	10.0	9.67	
65 2,4-Dimethylphenol	107	7.189	7.189	0.000	93	693919	10.0	9.54	
71 Benzoic acid	122	7.237	7.237	0.000	72	863179	20.0	21.5	
70 Bis(2-chloroethoxy)methane	93	7.266	7.266	0.000	94	995335	10.0	9.59	
73 2,4-Dichlorophenol	162	7.391	7.391	0.000	95	485611	10.0	9.72	
74 1,2,4-Trichlorobenzene	180	7.478	7.478	0.000	92	508283	10.0	9.95	
75 Naphthalene	128	7.550	7.550	0.000	97	2073766	10.0	9.80	
76 4-Chloroaniline	127	7.569	7.569	0.000	42	936713	10.0	9.66	
77 2,6-Dichlorophenol	162	7.588	7.588	0.000	53	479252	10.0	9.95	
79 Hexachlorobutadiene	225	7.656	7.656	0.000	95	209036	10.0	9.89	
84 Caprolactam	113	7.843	7.843	0.000	81	475168	20.0	19.6	
86 4-Chloro-3-methylphenol	107	7.959	7.959	0.000	96	623416	10.0	9.71	
87 2-Methylnaphthalene	142	8.141	8.141	0.000	91	1200615	10.0	9.31	
88 1-Methylnaphthalene	142	8.228	8.228	0.000	90	1130679	10.0	10.1	
89 Hexachlorocyclopentadiene	237	8.286	8.286	0.000	69	206697	10.0	9.41	
91 1,2,4,5-Tetrachlorobenzene	216	8.290	8.290	0.000	97	357232	10.0	9.47	
92 2,4,6-Trichlorophenol	196	8.367	8.367	0.000	94	303475	10.0	9.85	
93 2,4,5-Trichlorophenol	196	8.401	8.401	0.000	91	320863	10.0	9.96	
98 1,1'-Biphenyl	154	8.526	8.526	0.000	95	1373550	10.0	9.56	
100 2-Chloronaphthalene	162	8.560	8.560	0.000	91	1014402	10.0	9.57	
102 2-Nitroaniline	65	8.617	8.617	0.000	80	401579	10.0	9.62	
105 Dimethyl phthalate	163	8.752	8.752	0.000	97	1059884	10.0	9.81	
106 1,3-Dinitrobenzene	168	8.786	8.786	0.000	84	174130	10.0	10.0	
107 2,6-Dinitrotoluene	165	8.810	8.810	0.000	71	251489	10.0	10.3	
109 Acenaphthylene	152	8.920	8.920	0.000	94	1696087	10.0	9.22	
110 3-Nitroaniline	138	8.964	8.964	0.000	94	361551	10.0	10.1	
111 2,4-Dinitrophenol	184	9.050	9.050	0.000	85	212002	20.0	17.9	
112 Acenaphthene	153	9.069	9.069	0.000	95	1015827	10.0	9.62	
113 4-Nitrophenol	109	9.069	9.069	0.000	34	208364	20.0	18.7	
114 2,4-Dinitrotoluene	165	9.161	9.161	0.000	83	307396	10.0	10.1	
116 Dibenzofuran	168	9.214	9.214	0.000	90	1346373	10.0	9.40	
119 2,3,4,6-Tetrachlorophenol	232	9.310	9.310	0.000	74	223696	10.0	9.73	
121 Diethyl phthalate	149	9.344	9.344	0.000	97	989746	10.0	9.50	
247 Hexadecane	57	9.353	9.353	0.000	87	1097954	NC	NC	
123 4-Chlorophenyl phenyl ethe	204	9.478	9.478	0.000	94	440907	10.0	9.41	
125 4-Nitroaniline	138	9.488	9.488	0.000	86	289190	10.0	9.33	
126 Fluorene	166	9.507	9.507	0.000	97	1086061	10.0	9.34	
128 4,6-Dinitro-2-methylphenol	198	9.517	9.517	0.000	88	242106	20.0	18.2	
131 N-Nitrosodiphenylamine	169	9.574	9.574	0.000	98	1476537	20.0	20.9	
133 Azobenzene	77	9.618	9.618	0.000	95	1657845	10.0	10.7	
132 1,2-Diphenylhydrazine	77	9.618	9.618	0.000	97	1658189	10.0	10.7	
139 4-Bromophenyl phenyl ether	248	9.901	9.901	0.000	69	225938	10.0	10.4	
142 Atrazine	200	9.993	9.993	0.000	78	397819	20.0	20.7	
141 Hexachlorobenzene	284	9.998	9.998	0.000	73	197084	10.0	10.1	
244 n-Octadecane	57	10.132	10.132	0.000	78	1115277	NC	NC	
143 Pentachlorophenol	266	10.142	10.142	0.000	78	293103	20.0	20.7	
148 Phenanthrene	178	10.334	10.334	0.000	96	1403906	10.0	9.44	
149 Anthracene	178	10.377	10.377	0.000	97	1468443	10.0	9.75	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
151 Carbazole	167	10.493	10.493	0.000	82	1325348	10.0	9.76	
154 Di-n-butyl phthalate	149	10.728	10.728	0.000	99	1743862	10.0	10.9	
159 Fluoranthene	202	11.358	11.358	0.000	97	1318504	10.0	10.2	
160 Benzidine	184	11.426	11.426	0.000	98	1470514	20.0	16.4	
161 Pyrene	202	11.560	11.560	0.000	92	1368666	10.0	9.21	
168 Butyl benzyl phthalate	149	12.017	12.017	0.000	95	783610	10.0	9.68	
173 Bis(2-ethylhexyl) phthalat	149	12.508	12.508	0.000	95	1072718	10.0	9.47	
175 3,3'-Dichlorobenzidine	252	12.541	12.541	0.000	65	792196	20.0	18.6	
177 Benzo[a]anthracene	228	12.614	12.614	0.000	96	1291446	10.0	9.33	
178 Chrysene	228	12.652	12.652	0.000	90	1303480	10.0	10.3	
180 Di-n-octyl phthalate	149	13.181	13.181	0.000	99	1875514	10.0	10.2	
182 Benzo[b]fluoranthene	252	13.873	13.873	0.000	88	1054925	10.0	9.83	
183 Benzo[k]fluoranthene	252	13.912	13.912	0.000	88	1129682	10.0	10.3	
184 Benzo[a]pyrene	252	14.364	14.364	0.000	84	1042099	10.0	10.1	
188 Indeno[1,2,3-cd]pyrene	276	16.432	16.432	0.000	72	935378	10.0	9.76	
189 Dibenz(a,h)anthracene	278	16.441	16.441	0.000	43	784649	10.0	9.74	
190 Benzo[g,h,i]perylene	276	17.052	17.052	0.000	79	739928	10.0	9.26	
S 191 Methyl Phenols,Total	100				0			20.3	
S 245 Total Cresols	100				0			20.3	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SMLIST1 SS W_00004 Amount Added: 1.00 Units: mL

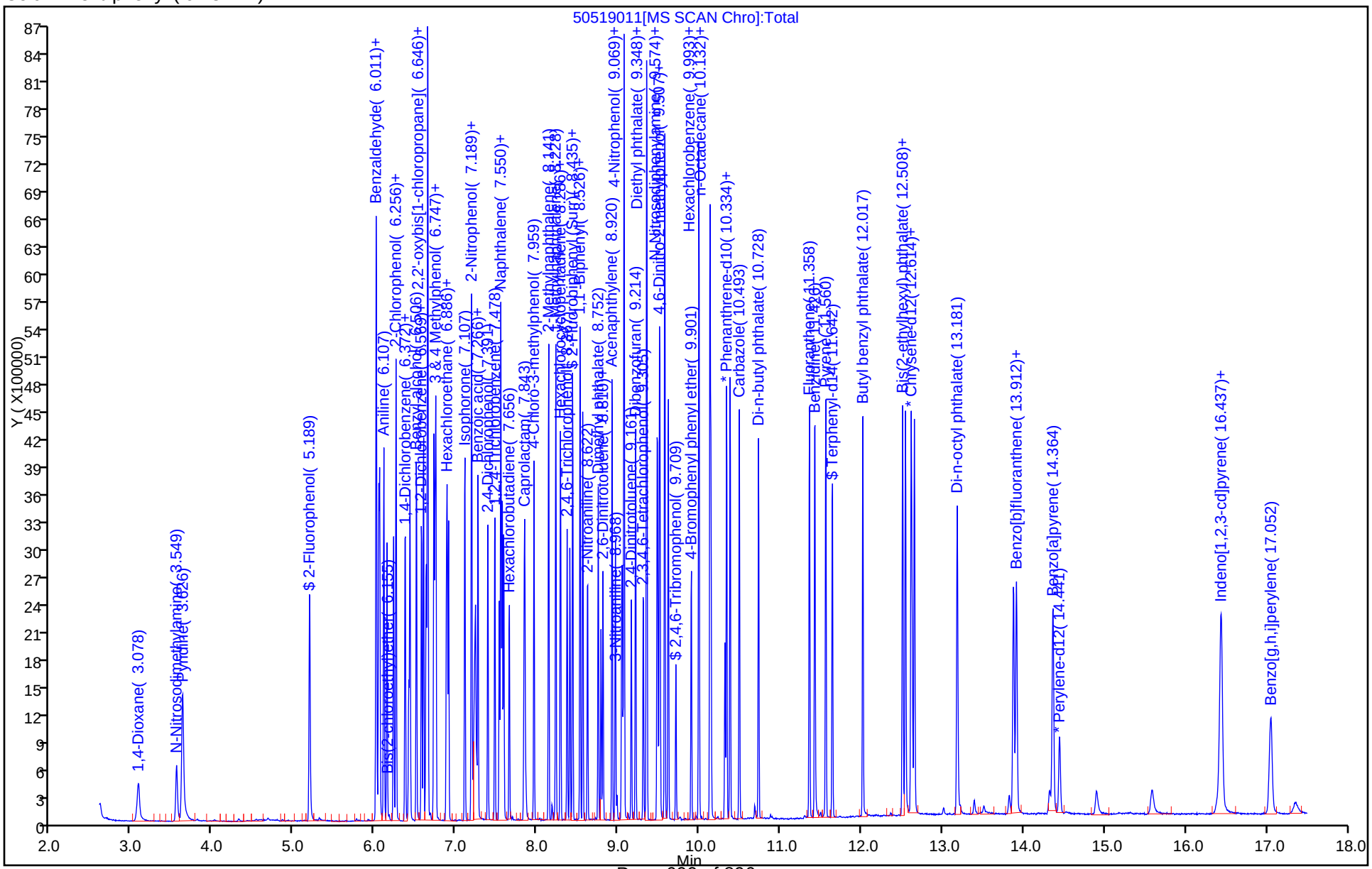
Report Date: 19-May-2015 20:27:42 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519011.D

Injection Date:	19-May-2015 19:58:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	icv lst1			Worklist Smp#:	11
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID: CCV 240-181588/2 Calibration Date: 05/20/2015 09:30

Instrument ID: A4HP9 Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/19/2015 19:33

Lab File ID: 50520002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.9041	0.8558	0.0500	9.47	10.0	-5.3	20.0
N-Nitrosodimethylamine	Ave	1.396	1.285	0.0500	9.20	10.0	-8.0	20.0
Pyridine	Ave	2.418	2.327	0.0500	9.63	10.0	-3.7	20.0
Benzaldehyde	Ave	1.430	1.348	0.0500	18.8	20.0	-5.8	20.0
Phenol	Ave	2.551	2.406	0.0500	9.43	10.0	-5.7	20.0
Aniline	Ave	3.116	2.976	0.0500	9.55	10.0	-4.5	20.0
Bis(2-chloroethyl)ether	Ave	2.009	2.048	0.0500	10.2	10.0	1.9	20.0
2-Chlorophenol	Ave	1.581	1.563	0.0500	9.88	10.0	-1.2	20.0
1,3-Dichlorobenzene	Ave	1.545	1.540	0.0500	9.96	10.0	-0.4	20.0
1,4-Dichlorobenzene	Ave	1.562	1.581	0.0500	10.1	10.0	1.2	20.0
Benzyl alcohol	Ave	1.281	1.243	0.0500	9.70	10.0	-3.0	20.0
1,2-Dichlorobenzene	Ave	1.487	1.514	0.0500	10.2	10.0	1.9	20.0
2-Methylphenol	Ave	1.738	1.709	0.0500	9.83	10.0	-1.7	20.0
bis (2-chloroisopropyl) ether	Ave	2.612	2.509	0.0500	9.61	10.0	-3.9	20.0
Indene	Ave	2.692	2.484	0.0500	18.5	20.0	-7.7	20.0
3 & 4 Methylphenol	Ave	1.836	1.766	0.0500	9.62	10.0	-3.8	20.0
N-Nitrosodi-n-propylamine	Ave	1.203	1.132	0.0500	9.41	10.0	-5.9	20.0
Acetophenone	Ave	2.276	2.223	0.0500	9.77	10.0	-2.3	20.0
Hexachloroethane	Ave	0.6369	0.6193	0.0500	9.72	10.0	-2.8	20.0
Nitrobenzene	Ave	0.4265	0.4265	0.0500	10.0	10.0	-0.0	20.0
Isophorone	Ave	0.7995	0.7860	0.0500	9.83	10.0	-1.7	20.0
2-Nitrophenol	Ave	0.1715	0.1751	0.0500	10.2	10.0	2.1	20.0
2,4-Dimethylphenol	Ave	0.3630	0.3497	0.0500	9.63	10.0	-3.7	20.0
Benzoic acid	Ave	0.2007	0.2130	0.0500	21.2	20.0	6.1	20.0
Bis(2-chloroethoxy)methane	Ave	0.5177	0.5096	0.0500	9.84	10.0	-1.6	20.0
2,4-Dichlorophenol	Ave	0.2493	0.2524	0.0500	10.1	10.0	1.2	20.0
1,2,4-Trichlorobenzene	Ave	0.2548	0.2574	0.0500	10.1	10.0	1.0	20.0
Naphthalene	Ave	1.056	1.031	0.0500	9.77	10.0	-2.3	20.0
4-Chloroaniline	Ave	0.4836	0.4920	0.0500	10.2	10.0	1.7	20.0
2,6-Dichlorophenol	Ave	0.2403	0.2442	0.0500	10.2	10.0	1.6	20.0
Hexachlorobutadiene	Ave	0.1055	0.1079	0.0500	10.2	10.0	2.3	20.0
Caprolactam	Ave	0.1206	0.1233	0.0500	20.4	20.0	2.2	20.0
4-Chloro-3-methylphenol	Ave	0.3204	0.3173	0.0500	9.90	10.0	-1.0	20.0
2-Methylnaphthalene	Ave	0.6435	0.6327	0.0500	9.83	10.0	-1.7	20.0
Hexachlorocyclopentadiene	Ave	0.2335	0.2112	0.0500	9.04	10.0	-9.6	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.4013	0.3738	0.0500	9.31	10.0	-6.9	20.0
2,4,6-Trichlorophenol	Ave	0.3276	0.3161	0.0500	9.65	10.0	-3.5	20.0
2,4,5-Trichlorophenol	Ave	0.3425	0.3303	0.0500	9.64	10.0	-3.6	20.0
1,1'-Biphenyl	Ave	1.528	1.423	0.0500	9.31	10.0	-6.9	20.0
2-Chloronaphthalene	Ave	1.127	1.071	0.0500	9.50	10.0	-5.0	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID: CCV 240-181588/2 Calibration Date: 05/20/2015 09:30

Instrument ID: A4HP9 Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/19/2015 19:33

Lab File ID: 50520002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Nitroaniline	Ave	0.4439	0.4340	0.0500	9.78	10.0	-2.2	20.0
Dimethyl phthalate	Ave	1.149	1.138	0.0500	9.90	10.0	-1.0	20.0
1,3-Dinitrobenzene	Ave	0.1850	0.1994	0.0500	10.8	10.0	7.8	20.0
2,6-Dinitrotoluene	Ave	0.2594	0.2754	0.0500	10.6	10.0	6.2	20.0
Acenaphthylene	Ave	1.955	1.833	0.0500	9.37	10.0	-6.3	20.0
3-Nitroaniline	Ave	0.3816	0.3808	0.0500	9.98	10.0	-0.2	20.0
2,4-Dinitrophenol	Ave	0.1257	0.1254	0.0500	20.0	20.0	-0.2	20.0
Acenaphthene	Ave	1.123	1.024	0.0500	9.12	10.0	-8.8	20.0
4-Nitrophenol	Ave	0.1185	0.1259	0.0500	21.3	20.0	6.3	20.0
2,4-Dinitrotoluene	Ave	0.3227	0.3412	0.0500	10.6	10.0	5.7	20.0
Dibenzofuran	Ave	1.523	1.444	0.0500	9.48	10.0	-5.2	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.2445	0.2290	0.0500	9.37	10.0	-6.3	20.0
Diethyl phthalate	Ave	1.107	0.9941	0.0500	8.98	10.0	-10.2	20.0
4-Chlorophenyl phenyl ether	Ave	0.4981	0.4764	0.0500	9.56	10.0	-4.4	20.0
4-Nitroaniline	Ave	0.3296	0.3620	0.0500	11.0	10.0	9.8	20.0
Fluorene	Ave	1.237	1.151	0.0500	9.30	10.0	-7.0	20.0
4,6-Dinitro-2-methylphenol	Lin1		0.1067	0.0500	20.7	20.0	3.7	20.0
N-Nitrosodiphenylamine	Ave	0.5447	0.5347	0.0500	19.6	20.0	-1.8	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	1.191	1.240	0.0500	10.4	10.0	4.1	20.0
Azobenzene	Ave	1.193	1.240	0.0500	10.4	10.0	4.0	20.0
4-Bromophenyl phenyl ether	Ave	0.1674	0.1728	0.0500	10.3	10.0	3.2	20.0
Hexachlorobenzene	Ave	0.1506	0.1463	0.0500	9.71	10.0	-2.9	20.0
Atrazine	Ave	0.1482	0.1524	0.0500	20.6	20.0	2.8	20.0
Pentachlorophenol	Ave	0.1092	0.1155	0.0500	21.2	20.0	5.8	20.0
Phenanthrene	Ave	1.145	1.132	0.0500	9.89	10.0	-1.1	20.0
Anthracene	Ave	1.159	1.154	0.0500	9.95	10.0	-0.5	20.0
Carbazole	Ave	1.046	1.146	0.0500	11.0	10.0	9.6	20.0
Di-n-butyl phthalate	Ave	1.229	1.413	0.0500	11.5	10.0	15.0	20.0
Fluoranthene	Ave	0.9936	1.111	0.0500	11.2	10.0	11.8	20.0
Benzidine	Lin1		0.7008	0.0500	19.0	20.0	-4.9	20.0
Pyrene	Ave	1.212	1.204	0.0500	9.93	10.0	-0.7	20.0
Butyl benzyl phthalate	Ave	0.6609	0.7027	0.0500	10.6	10.0	6.3	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.9242	1.011	0.0500	10.9	10.0	9.4	20.0
3,3'-Dichlorobenzidine	Ave	0.3475	0.3531	0.0500	20.3	20.0	1.6	20.0
Benzo[a]anthracene	Ave	1.130	1.113	0.0500	9.85	10.0	-1.5	20.0
Chrysene	Ave	1.028	1.044	0.0500	10.2	10.0	1.5	20.0
Di-n-octyl phthalate	Ave	2.107	2.187	0.0500	10.4	10.0	3.8	20.0
Benzo[b]fluoranthene	Ave	1.234	1.227	0.0500	9.94	10.0	-0.6	20.0
Benzo[k]fluoranthene	Ave	1.259	1.312	0.0500	10.4	10.0	4.2	20.0
Benzo[a]pyrene	Ave	1.182	1.217	0.0500	10.3	10.0	3.0	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID: CCV 240-181588/2 Calibration Date: 05/20/2015 09:30

Instrument ID: A4HP9 Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/19/2015 19:33

Lab File ID: 50520002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Indeno[1,2,3-cd]pyrene	Ave	1.102	1.222	0.0500	11.1	10.0	10.9	20.0
Dibenz(a,h)anthracene	Ave	0.9270	1.007	0.0500	10.9	10.0	8.7	20.0
Benzo[g,h,i]perylene	Ave	0.9195	1.032	0.0500	11.2	10.0	12.2	20.0
2-Fluorophenol (Surr)	Ave	1.729	1.705	0.0500	9.86	10.0	-1.4	20.0
Phenol-d5 (Surr)	Ave	2.335	2.227	0.0500	9.54	10.0	-4.6	20.0
Nitrobenzene-d5 (Surr)	Ave	0.4097	0.4083	0.0500	9.97	10.0	-0.3	20.0
2-Fluorobiphenyl (Surr)	Ave	1.141	1.104	0.0500	9.68	10.0	-3.2	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1049	0.0944	0.0500	9.00	10.0	-10.0	20.0
Terphenyl-d14 (Surr)	Ave	0.7676	0.7335	0.0500	9.55	10.0	-4.5	20.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520002.D
Lims ID: ccv lst1
Client ID:
Sample Type: CCVIS
Inject. Date: 20-May-2015 09:30:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043844-002
Misc. Info.: CCV LST1CCV LST1
Operator ID: 001574 Instrument ID: A4HP9
Sublist: chrom-8270 _9*sub34

Method: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-May-2015 08:02:18 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 20-May-2015 10:19:37

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.411	6.411	0.000	97	271983	4.00	4.00	
* 2 Naphthalene-d8	136	7.527	7.527	0.000	99	1130800	4.00	4.00	
* 3 Acenaphthene-d10	164	9.037	9.037	0.000	90	543389	4.00	4.00	
* 4 Phenanthrene-d10	188	10.311	10.311	0.000	95	736509	4.00	4.00	
* 5 Chrysene-d12	240	12.619	12.619	0.000	92	700237	4.00	4.00	
* 6 Perylene-d12	264	14.437	14.437	0.000	90	562092	4.00	4.00	
$ 7 2-Fluorophenol	112	5.199	5.199	0.000	91	1158991	10.0	9.86	
$ 8 Phenol-d5	99	6.046	6.046	0.000	93	1513957	10.0	9.54	
$ 9 Nitrobenzene-d5	82	6.887	6.887	0.000	86	1154381	10.0	9.97	
$ 10 2-Fluorobiphenyl (Surr)	172	8.431	8.431	0.000	99	1499445	10.0	9.68	
$ 11 2,4,6-Tribromophenol	330	9.710	9.710	0.000	91	128278	10.0	9.00	
$ 12 Terphenyl-d14	244	11.638	11.638	0.000	98	1283993	10.0	9.55	
25 1,4-Dioxane	88	3.151	3.151	0.000	92	581901	10.0	9.47	M
26 N-Nitrosodimethylamine	74	3.617	3.617	0.000	85	873598	10.0	9.20	
27 Pyridine	79	3.675	3.675	0.000	99	1582545	10.0	9.63	M
41 Benzaldehyde	77	6.017	6.017	0.000	97	1832839	20.0	18.8	
43 Phenol	94	6.055	6.055	0.000	94	1635829	10.0	9.43	
44 Aniline	93	6.108	6.108	0.000	99	2023454	10.0	9.55	
69 Bis(2-chloroethyl)ether	93	6.147	6.147	0.000	97	1392599	10.0	10.2	
46 2-Chlorophenol	128	6.228	6.228	0.000	97	1062469	10.0	9.88	
243 n-Decane	57	6.257	6.257	0.000	92	1442126	NC	NC	
47 1,3-Dichlorobenzene	146	6.368	6.368	0.000	98	1046802	10.0	9.96	
48 1,4-Dichlorobenzene	146	6.426	6.426	0.000	94	1075127	10.0	10.1	
49 Benzyl alcohol	108	6.507	6.507	0.000	97	845081	10.0	9.70	
50 1,2-Dichlorobenzene	146	6.570	6.570	0.000	97	1029581	10.0	10.2	
51 2-Methylphenol	108	6.594	6.594	0.000	90	1161714	10.0	9.83	
53 2,2'-oxybis[1-chloropropan	45	6.628	6.628	0.000	86	1706331	10.0	9.61	
52 Indene	115	6.647	6.647	0.000	91	3377665	20.0	18.5	
21 3 & 4 Methylphenol	108	6.724	6.724	0.000	87	1200708	10.0	9.62	
57 N-Nitrosodi-n-propylamine	70	6.738	6.738	0.000	90	769926	10.0	9.41	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
58 Acetophenone	105	6.748	6.748	0.000	98	1511732	10.0	9.77	
61 Hexachloroethane	117	6.878	6.878	0.000	88	421094	10.0	9.72	
62 Nitrobenzene	77	6.902	6.902	0.000	84	1205635	10.0	10.0	
64 Isophorone	82	7.104	7.104	0.000	98	2221943	10.0	9.83	
66 2-Nitrophenol	139	7.185	7.185	0.000	92	494984	10.0	10.2	
65 2,4-Dimethylphenol	107	7.190	7.190	0.000	95	988607	10.0	9.63	
71 Benzoic acid	122	7.238	7.238	0.000	85	1204374	20.0	21.2	M
70 Bis(2-chloroethoxy)methane	93	7.267	7.267	0.000	98	1440664	10.0	9.84	
73 2,4-Dichlorophenol	162	7.387	7.387	0.000	96	713645	10.0	10.1	
74 1,2,4-Trichlorobenzene	180	7.474	7.474	0.000	93	727631	10.0	10.1	
75 Naphthalene	128	7.546	7.546	0.000	97	2914819	10.0	9.77	
76 4-Chloroaniline	127	7.565	7.565	0.000	96	1390916	10.0	10.2	M
77 2,6-Dichlorophenol	162	7.585	7.585	0.000	96	690421	10.0	10.2	
79 Hexachlorobutadiene	225	7.652	7.652	0.000	98	305123	10.0	10.2	
84 Caprolactam	113	7.849	7.849	0.000	84	697337	20.0	20.4	
86 4-Chloro-3-methylphenol	107	7.955	7.955	0.000	95	897019	10.0	9.90	
87 2-Methylnaphthalene	142	8.138	8.138	0.000	94	1788493	10.0	9.83	
88 1-Methylnaphthalene	142	8.224	8.224	0.000	94	1582737	10.0	10.0	
89 Hexachlorocyclopentadiene	237	8.282	8.282	0.000	96	286956	10.0	9.04	
91 1,2,4,5-Tetrachlorobenzene	216	8.287	8.287	0.000	97	507723	10.0	9.31	
92 2,4,6-Trichlorophenol	196	8.364	8.364	0.000	94	429368	10.0	9.65	
93 2,4,5-Trichlorophenol	196	8.402	8.402	0.000	95	448716	10.0	9.64	
98 1,1'-Biphenyl	154	8.522	8.522	0.000	96	1932741	10.0	9.31	
100 2-Chloronaphthalene	162	8.556	8.556	0.000	97	1454496	10.0	9.50	
102 2-Nitroaniline	65	8.618	8.618	0.000	85	589542	10.0	9.78	
105 Dimethyl phthalate	163	8.748	8.748	0.000	97	1545714	10.0	9.90	
106 1,3-Dinitrobenzene	168	8.782	8.782	0.000	84	270862	10.0	10.8	
107 2,6-Dinitrotoluene	165	8.806	8.806	0.000	95	374181	10.0	10.6	
109 Acenaphthylene	152	8.921	8.921	0.000	100	2489631	10.0	9.37	
110 3-Nitroaniline	138	8.960	8.960	0.000	95	517316	10.0	9.98	
111 2,4-Dinitrophenol	184	9.046	9.046	0.000	86	340730	20.0	20.0	
112 Acenaphthene	153	9.066	9.066	0.000	94	1391432	10.0	9.12	
113 4-Nitrophenol	109	9.070	9.070	0.000	89	342028	20.0	21.3	
114 2,4-Dinitrotoluene	165	9.157	9.157	0.000	91	463488	10.0	10.6	
116 Dibenzofuran	168	9.210	9.210	0.000	98	1961291	10.0	9.48	
119 2,3,4,6-Tetrachlorophenol	232	9.306	9.306	0.000	77	311118	10.0	9.37	
121 Diethyl phthalate	149	9.345	9.345	0.000	98	1350517	10.0	8.98	
247 Hexadecane	57	9.349	9.349	0.000	89	1467415	NC	NC	
123 4-Chlorophenyl phenyl ethe	204	9.474	9.474	0.000	94	647167	10.0	9.56	
125 4-Nitroaniline	138	9.484	9.484	0.000	85	491750	10.0	11.0	
126 Fluorene	166	9.503	9.503	0.000	98	1562999	10.0	9.30	
128 4,6-Dinitro-2-methylphenol	198	9.513	9.513	0.000	89	392740	20.0	20.7	
131 N-Nitrosodiphenylamine	169	9.571	9.571	0.000	99	1969219	20.0	19.6	
133 Azobenzene	77	9.614	9.614	0.000	95	2282860	10.0	10.4	
132 1,2-Diphenylhydrazine	77	9.614	9.614	0.000	97	2282574	10.0	10.4	
139 4-Bromophenyl phenyl ether	248	9.898	9.898	0.000	74	318104	10.0	10.3	
141 Hexachlorobenzene	284	9.989	9.989	0.000	90	269277	10.0	9.71	
142 Atrazine	200	9.994	9.994	0.000	85	561316	20.0	20.6	
244 n-Octadecane	57	10.128	10.128	0.000	77	1501175	NC	NC	
143 Pentachlorophenol	266	10.143	10.143	0.000	90	425391	20.0	21.2	
148 Phenanthrene	178	10.330	10.330	0.000	97	2085208	10.0	9.89	
149 Anthracene	178	10.374	10.374	0.000	97	2124145	10.0	9.95	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
151 Carbazole	167	10.489	10.489	0.000	95	2109184	10.0	11.0	
154 Di-n-butyl phthalate	149	10.725	10.725	0.000	99	2602356	10.0	11.5	
159 Fluoranthene	202	11.355	11.355	0.000	98	2045341	10.0	11.2	
160 Benzidine	184	11.422	11.422	0.000	99	2453668	20.0	19.0	
161 Pyrene	202	11.557	11.557	0.000	94	2107660	10.0	9.93	
168 Butyl benzyl phthalate	149	12.013	12.013	0.000	95	1230207	10.0	10.6	
173 Bis(2-ethylhexyl) phthalat	149	12.504	12.504	0.000	97	1769326	10.0	10.9	
175 3,3'-Dichlorobenzidine	252	12.538	12.538	0.000	77	1236239	20.0	20.3	
177 Benzo[a]anthracene	228	12.610	12.610	0.000	98	1947772	10.0	9.85	
178 Chrysene	228	12.648	12.648	0.000	95	1826958	10.0	10.2	
180 Di-n-octyl phthalate	149	13.177	13.177	0.000	99	3073291	10.0	10.4	
182 Benzo[b]fluoranthene	252	13.870	13.870	0.000	94	1724437	10.0	9.94	
183 Benzo[k]fluoranthene	252	13.903	13.903	0.000	94	1843350	10.0	10.4	
184 Benzo[a]pyrene	252	14.355	14.355	0.000	87	1709848	10.0	10.3	
188 Indeno[1,2,3-cd]pyrene	276	16.423	16.423	0.000	87	1717829	10.0	11.1	
189 Dibenz(a,h)anthracene	278	16.428	16.428	0.000	88	1415382	10.0	10.9	
190 Benzo[g,h,i]perylene	276	17.039	17.039	0.000	87	1449488	10.0	11.2	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L6 W_00005 Amount Added: 1.00 Units: mL

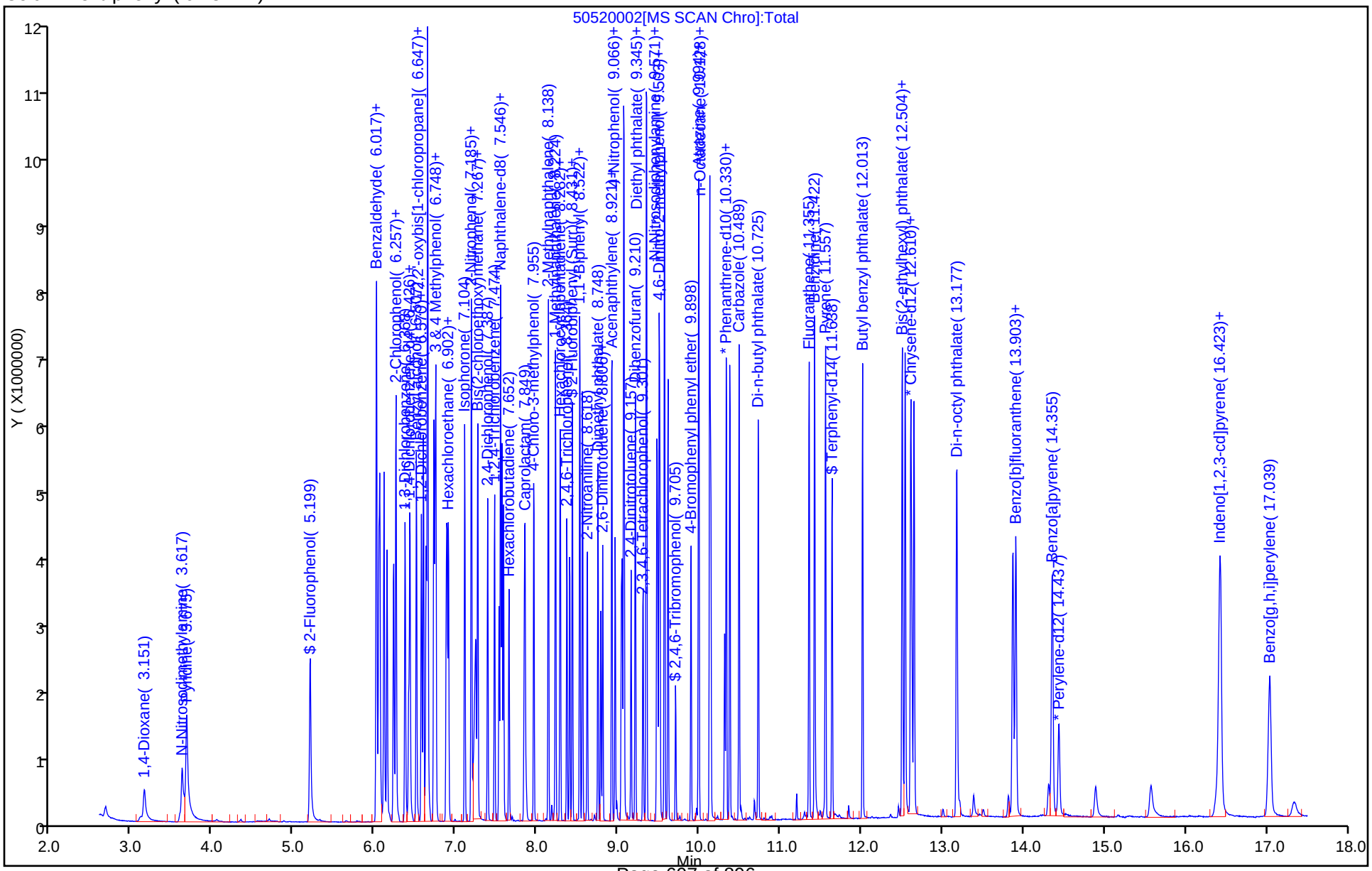
Report Date: 21-May-2015 08:02:20 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520002.D

Injection Date:	20-May-2015 09:30:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	ccv lst1			Worklist Smp#:	2
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

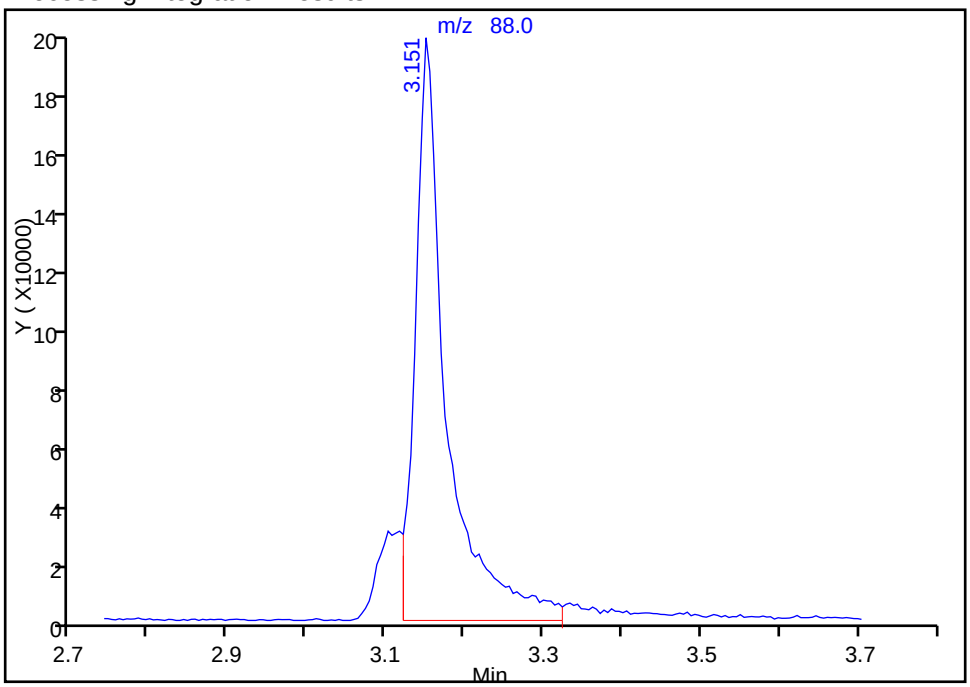
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520002.D
Injection Date: 20-May-2015 09:30:30 Instrument ID: A4HP9
Lims ID: ccv lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

25 1,4-Dioxane, CAS: 123-91-1

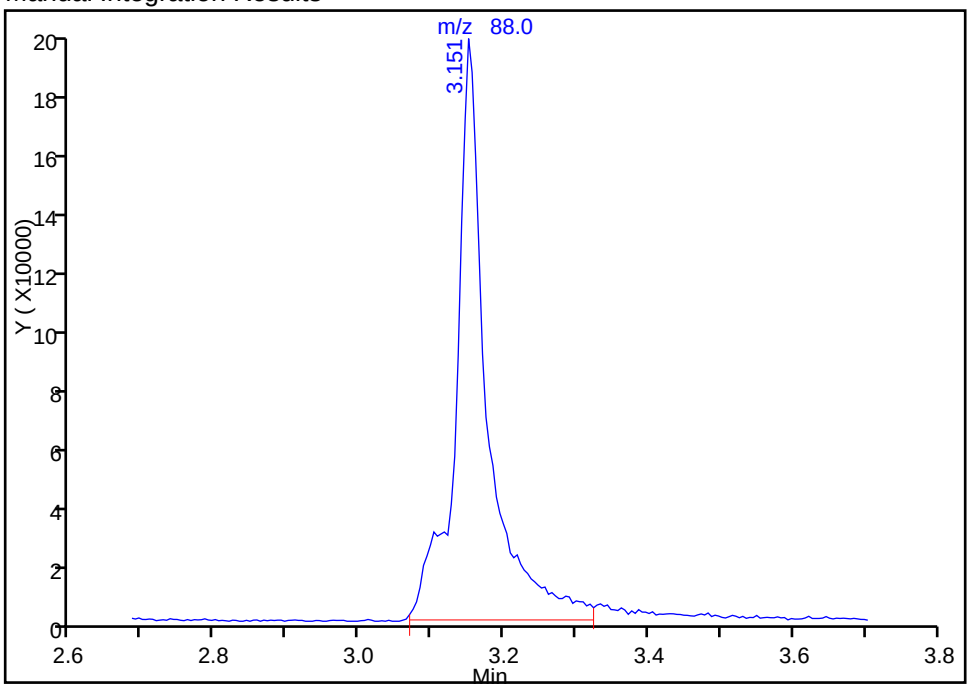
Processing Integration Results

RT: 3.15
Area: 529535
Amount: 8.613557
Amount Units: ng/ul



Manual Integration Results

RT: 3.15
Area: 581901
Amount: 9.465356
Amount Units: ng/ul



Reviewer: ulmanm, 20-May-2015 10:19:37
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Manual Integration/User Assign Peak Report

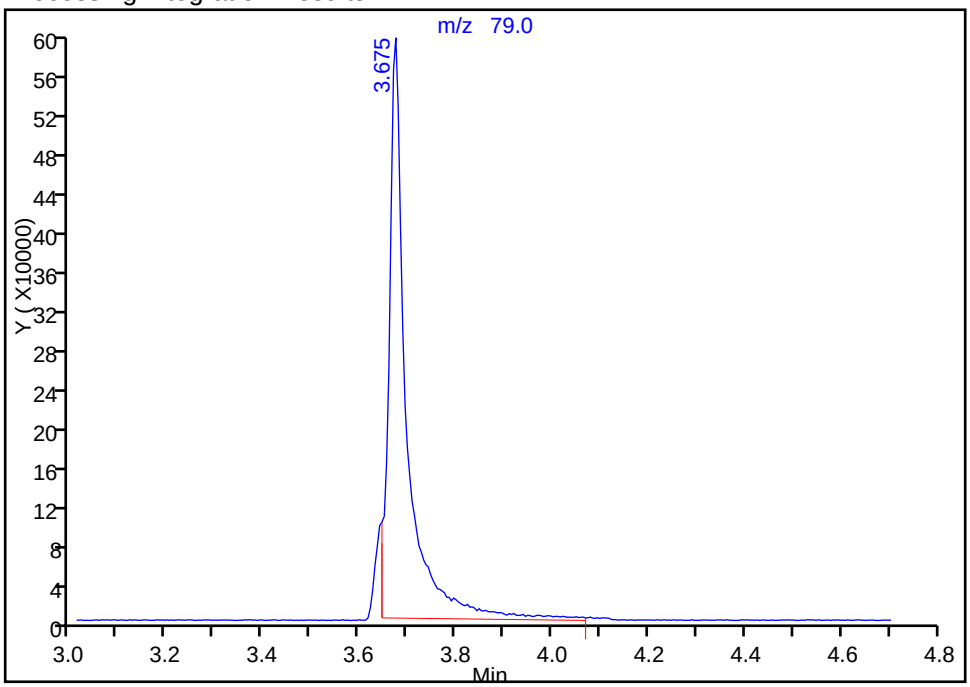
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520002.D
Injection Date: 20-May-2015 09:30:30 Instrument ID: A4HP9
Lims ID: ccv lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

27 Pyridine, CAS: 110-86-1

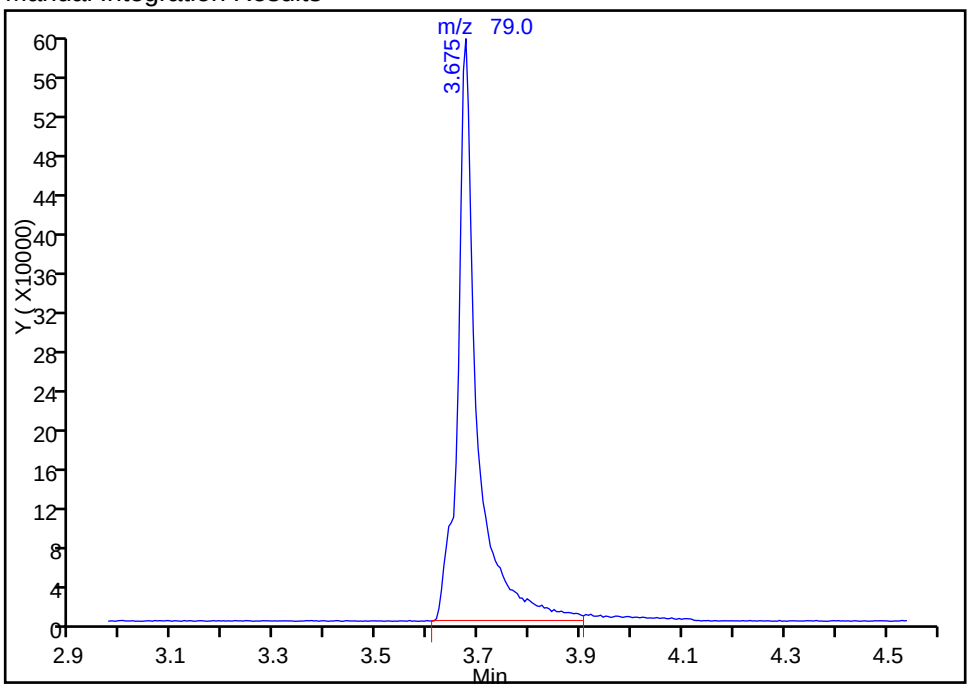
Processing Integration Results

RT: 3.67
Area: 1526883
Amount: 9.288541
Amount Units: ng/ul



Manual Integration Results

RT: 3.67
Area: 1582545
Amount: 9.627152
Amount Units: ng/ul



Reviewer: ulmanm, 20-May-2015 10:19:37
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

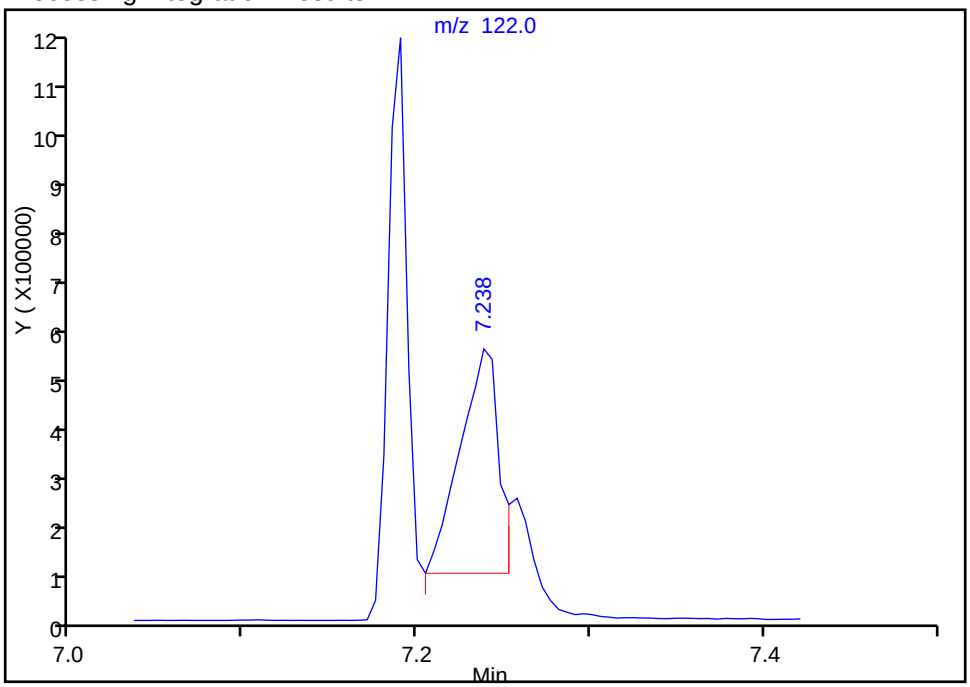
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520002.D				
Injection Date:	20-May-2015 09:30:30	Instrument ID:	A4HP9		
Lims ID:	ccv lst1				
Client ID:					
Operator ID:	001574	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

71 Benzoic acid, CAS: 65-85-0

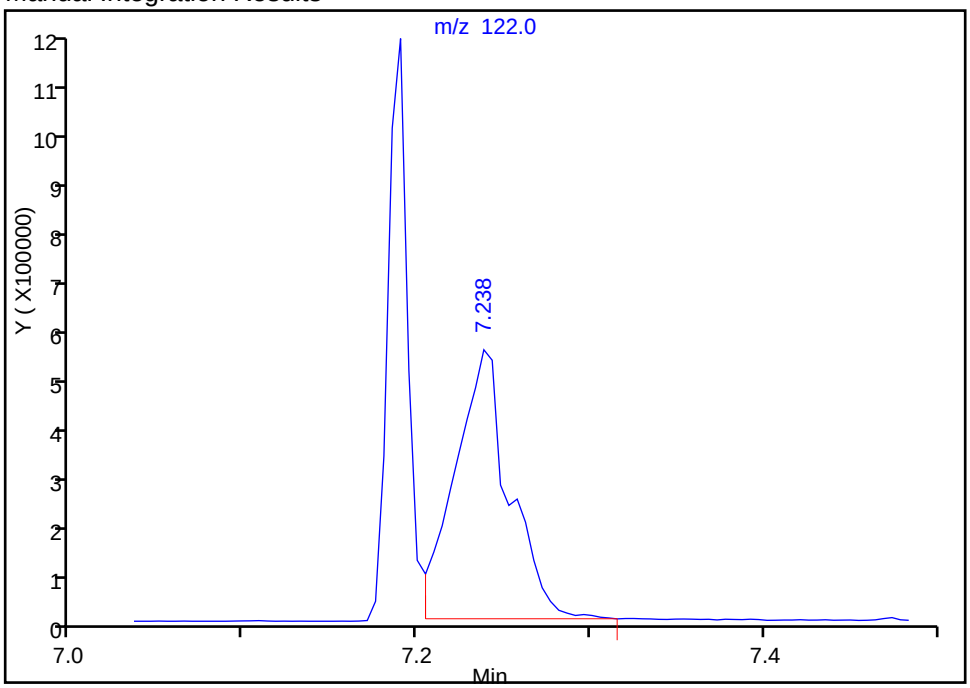
Processing Integration Results

RT: 7.24
Area: 711369
Amount: 12.537658
Amount Units: ng/ul



Manual Integration Results

RT: 7.24
Area: 1204374
Amount: 21.226719
Amount Units: ng/ul



Reviewer: ulmanm, 20-May-2015 10:19:37
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

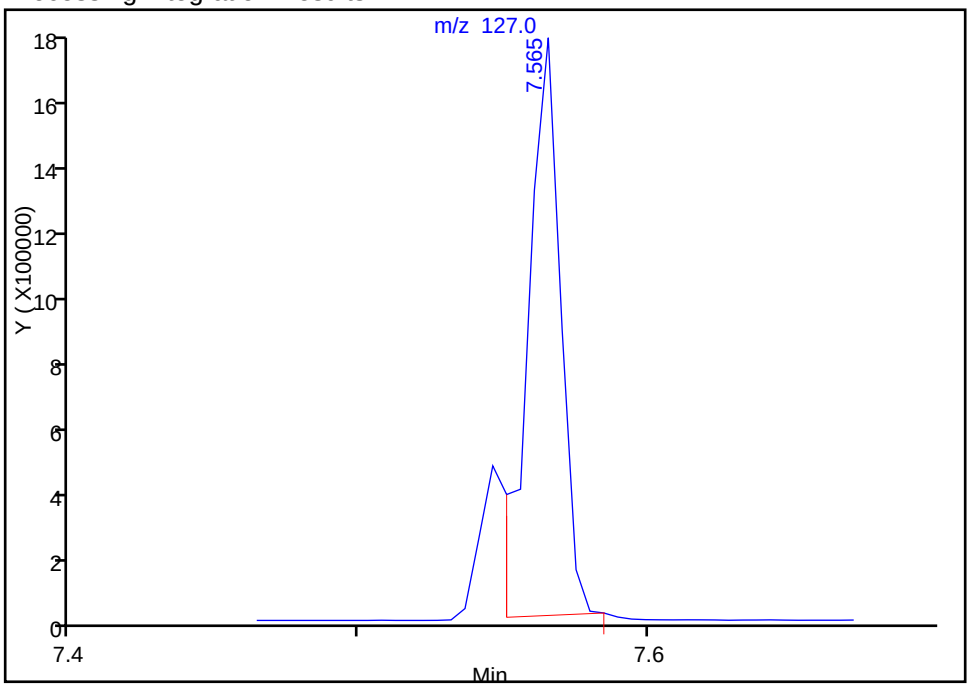
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520002.D
Injection Date: 20-May-2015 09:30:30 Instrument ID: A4HP9
Lims ID: ccv lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

76 4-Chloroaniline, CAS: 106-47-8

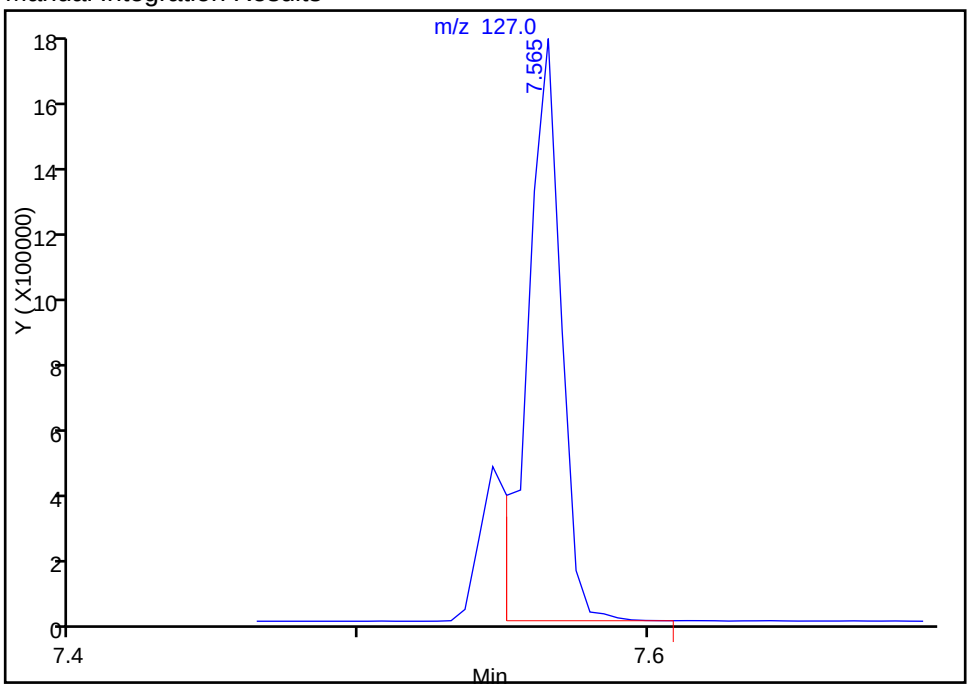
Processing Integration Results

RT: 7.57
Area: 1354705
Amount: 9.908797
Amount Units: ng/ul



Manual Integration Results

RT: 7.57
Area: 1390916
Amount: 10.173657
Amount Units: ng/ul



Reviewer: ulmanm, 20-May-2015 10:19:37
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Lab Sample ID: LODV 240-181588/21 | Calibration Date: 05/20/2015 18:16

Instrument ID: A4HP9 | Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS ID: 0.45(mm) | Calib End Date: 05/19/2015 19:33

Lab File ID: 50520021.D | Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Ave	1.056			0.110	0.100		
2-Methylnaphthalene	Ave	0.6435			0.105	0.100		
Acenaphthylene	Ave	1.955			0.0973	0.100		
Acenaphthene	Ave	1.123			0.114	0.100		
Fluorene	Ave	1.237			0.110	0.100		
Hexachlorobenzene	Ave	0.1506			0.101	0.100		
Phenanthrene	Ave	1.145			0.112	0.100		
Anthracene	Ave	1.159			0.102	0.100		
Fluoranthene	Ave	0.9936			0.0981	0.100		
Pyrene	Ave	1.212			0.112	0.100		
Benzo[a]anthracene	Ave	1.130			0.117	0.100		
Chrysene	Ave	1.028			0.111	0.100		
Benzo[b]fluoranthene	Ave	1.234			0.0995	0.100		
Benzo[k]fluoranthene	Ave	1.259			0.103	0.100		
Benzo[a]pyrene	Ave	1.182			0.102	0.100		
Indeno[1,2,3-cd]pyrene	Ave	1.102			0.0998	0.100		
Dibenz(a,h)anthracene	Ave	0.9270			0.0871	0.100		
Benzo[g,h,i]perylene	Ave	0.9195			0.0971	0.100		
1,1'-Biphenyl	Ave	1.528			0.000500	0.100		
2-Chloronaphthalene	Ave	1.127			0.000500	0.100		
Dibenzofuran	Ave	1.523			0.000100	0.100		
Nitrobenzene-d5 (Surr)	Ave	0.4097			0.0944	0.100	94	35-100
2-Fluorobiphenyl (Surr)	Ave	1.141			0.112	0.100	112*	45-105
Terphenyl-d14 (Surr)	Ave	0.7676			0.112	0.100	112	30-125
2,4,6-Tribromophenol (Surr)	Ave	0.1049			0.000000	0.100	0*	35-125
2-Fluorophenol (Surr)	Ave	1.729			0.000000	0.100	0*	35-105
Phenol-d5 (Surr)	Ave	2.335			0.000000	0.100	0*	40-100

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520021.D
Lims ID: lodv l1
Client ID:
Sample Type: LODV
Inject. Date: 20-May-2015 18:16:30 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043844-021
Misc. Info.: LODV L1LODV L1
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-May-2015 08:02:18 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 20-May-2015 18:43:50

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.412	6.411	0.001	97	262892	4.00	4.00	
* 2 Naphthalene-d8	136	7.528	7.527	0.001	99	1068610	4.00	4.00	
* 3 Acenaphthene-d10	164	9.033	9.037	-0.004	90	524034	4.00	4.00	
* 4 Phenanthrene-d10	188	10.307	10.311	-0.004	96	825265	4.00	4.00	
* 5 Chrysene-d12	240	12.615	12.619	-0.004	92	714536	4.00	4.00	
* 6 Perylene-d12	264	14.428	14.437	-0.009	91	556950	4.00	4.00	
$ 7 2-Fluorophenol	112		5.199				ND	ND	
$ 8 Phenol-d5	99		6.046				ND	ND	
$ 9 Nitrobenzene-d5	82	6.883	6.887	-0.004	84	10332	0.1000	0.0944	
$ 10 2-Fluorobiphenyl (Surr)	172	8.427	8.431	-0.004	98	16683	0.1000	0.1117	
$ 11 2,4,6-Tribromophenol	330		9.710				ND	ND	
$ 12 Terphenyl-d14	244	11.634	11.638	-0.004	97	15415	0.1000	0.1124	
25 1,4-Dioxane	88		3.151					ND	
26 N-Nitrosodimethylamine	74		3.617					ND	
27 Pyridine	79		3.675					ND	
20 Dimethylformamide	73		3.978					ND	
28 Ethyl methacrylate	69		4.089					ND	
31 2-Picoline	93		4.374					ND	
32 N-Nitrosomethylethylamine	88		4.504					ND	
35 Acrylamide	71	4.710	4.778	-0.068	1	392		NC	
34 Methyl methanesulfonate	80		4.826					ND	
233 n,n'-Dimethylacetamide	44		4.993					ND	
36 N-Nitrosodiethylamine	102		5.254					ND	
37 Ethyl methanesulfonate	79		5.523					ND	
42 Phenylmercaptan	110		5.768					ND	
38 2-Methylcyclohexanone	68		5.820					ND	
39 3-Methylcyclohexanone	69		5.854					ND	
40 4-Methylcyclohexanone	55		5.902					ND	
41 Benzaldehyde	77		6.017					ND	
45 Pentachloroethane	167		6.019					ND	
43 Phenol	94		6.055					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
44 Aniline	93		6.108					ND	
69 Bis(2-chloroethyl)ether	93		6.147					ND	
46 2-Chlorophenol	128		6.228					ND	
243 n-Decane	57	6.253	6.257	-0.004	88	13896			NC
47 1,3-Dichlorobenzene	146		6.368					ND	
232 1-Methyl-2-pyrrilidinone	99	6.412	6.421	-0.009	31	2256			NC
48 1,4-Dichlorobenzene	146		6.426					ND	
49 Benzyl alcohol	108		6.507					ND	
50 1,2-Dichlorobenzene	146		6.570					ND	
56 N-Nitrosopyrrolidine	100		6.572					ND	
286 4-Methyl-1-cyclohexanemeth	55	6.580	6.574	0.006	0	620			NC
51 2-Methylphenol	108		6.594					ND	
59 N-Nitrosomorpholine	56		6.605					ND	
53 2,2'-oxybis[1-chloropropan	45		6.628					ND	
60 2-Toluidine	106		6.639					ND	
52 Indene	115		6.647					ND	
287 4-Methyl-1-cyclohexanemeth	55	6.648	6.708	-0.060	0	885			NC
21 3 & 4 Methylphenol	108		6.724					ND	
57 N-Nitrosodi-n-propylamine	70		6.738					ND	
58 Acetophenone	105		6.748					ND	
61 Hexachloroethane	117		6.878					ND	
63 N-Nitrosopiperidine	114		6.884					ND	
62 Nitrobenzene	77		6.902					ND	
64 Isophorone	82		7.104					ND	
68 o,o',o''-Triethylphosphoro	198		7.105					ND	
67 1,3,5-Trichlorobenzene	180		7.123					ND	
66 2-Nitrophenol	139		7.185					ND	
65 2,4-Dimethylphenol	107		7.190					ND	
72 alpha,alpha-Dimethyl phene	58		7.216					ND	
71 Benzoic acid	122		7.238					ND	
70 Bis(2-chloroethoxy)methane	93		7.267					ND	
73 2,4-Dichlorophenol	162		7.387					ND	
74 1,2,4-Trichlorobenzene	180		7.474					ND	
78 Hexachloropropene	213		7.485					ND	
75 Naphthalene	128	7.542	7.546	-0.004	93	31050	0.1000	0.1101	
76 4-Chloroaniline	127		7.565					ND	
77 2,6-Dichlorophenol	162		7.585					ND	
80 1,2,3-Trichlorobenzene	180		7.590					ND	
79 Hexachlorobutadiene	225		7.652					ND	
81 Benzothiazole	135		7.676					ND	
82 Quinoline	129		7.682					ND	
83 N-Nitrosodi-n-butylamine	84		7.697					ND	
85 p-Phenylene diamine	108		7.716					ND	
84 Caprolactam	113		7.849					ND	
94 Safrole, Total	162		7.894					ND	
86 4-Chloro-3-methylphenol	107		7.955					ND	
87 2-Methylnaphthalene	142	8.133	8.138	-0.005	94	18059	0.1000	0.1050	
225 Isosafrole Peak 1	162		8.144					ND	
90 1,2,3,5-Tetrachlorobenzene	216	8.283	8.191	0.092	93	5869			NC
88 1-Methylnaphthalene	142	8.220	8.224	-0.004	92	15644	0.1000	0.1047	
89 Hexachlorocyclopentadiene	237		8.282					ND	
91 1,2,4,5-Tetrachlorobenzene	216		8.287					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
227 Isosafrole Peak 2	162	8.523	8.336	0.187	54	96		NC	
92 2,4,6-Trichlorophenol	196		8.364					ND	
93 2,4,5-Trichlorophenol	196		8.402					ND	
97 2,4-Toluene diamine	121		8.412					ND	
246 1-Chloronaphthalene	162		8.433					ND	
99 1,2,3,4 -Tetrachlorobenzen	216		8.446					ND	
96 3,4-Dichloronitrobenzene	109	8.499	8.465	0.034	53	2497		NC	
98 1,1'-Biphenyl	154		8.522				ND	ND	
101 Phenyl ether	170	8.427	8.523	-0.096	50	3407		NC	
103 1,4-Naphthoquinone	158		8.543					ND	
100 2-Chloronaphthalene	162		8.556				ND	ND	
104 1,4-Dinitrobenzene	168		8.567					ND	
102 2-Nitroaniline	65		8.618					ND	
105 Dimethyl phthalate	163		8.748					ND	
106 1,3-Dinitrobenzene	168		8.782					ND	
107 2,6-Dinitrotoluene	165		8.806					ND	
109 Acenaphthylene	152	8.917	8.921	-0.004	99	24913	0.1000	0.0973	
110 3-Nitroaniline	138		8.960					ND	
115 Pentachlorobenzene	250		9.034					ND	
111 2,4-Dinitrophenol	184		9.046					ND	
112 Acenaphthene	153	9.062	9.066	-0.004	93	16748	0.1000	0.1138	
113 4-Nitrophenol	109		9.070					ND	
117 1-Naphthylamine	143		9.115					ND	
118 2,3,5,6-Tetrachlorophenol	232		9.120					ND	
114 2,4-Dinitrotoluene	165		9.157					ND	
120 2-Naphthylamine	143		9.178					ND	
116 Dibenzofuran	168		9.210				ND	ND	
122 Thionazin	97		9.269					ND	
119 2,3,4,6-Tetrachlorophenol	232		9.306					ND	
124 N-Nitro-o-toluidine	152		9.332					ND	
121 Diethyl phthalate	149		9.345					ND	
247 Hexadecane	57	9.345	9.349	-0.004	90	17531		NC	
127 Tributyl phosphate	99		9.417					ND	
130 Diphenylamine	169		9.418					ND	
123 4-Chlorophenyl phenyl ethe	204		9.474					ND	
125 4-Nitroaniline	138		9.484					ND	
126 Fluorene	166	9.499	9.503	-0.004	98	17878	0.1000	0.1103	
297 Benzophenone	105	9.538	9.512	0.026	1	299		NC	
128 4,6-Dinitro-2-methylphenol	198		9.513					ND	
134 Sulfotepp	202		9.519					ND	
131 N-Nitrosodiphenylamine	169		9.571					ND	
135 1,3,5-Trinitrobenzene	213		9.601					ND	
133 Azobenzene	77		9.614					ND	
132 1,2-Diphenylhydrazine	77	9.610	9.614	-0.004	96	21965		0.0893	
137 Phenacetin	108		9.649					ND	
228 Diallate Peak 1	86		9.659					ND	
138 Phorate	121		9.664					ND	
230 Diallate Peak 2	86		9.736					ND	
140 Dimethoate	87		9.803					ND	
139 4-Bromophenyl phenyl ether	248		9.898					ND	
129 4-Aminobiphenyl	169		9.962					ND	
141 Hexachlorobenzene	284	9.990	9.989	0.001	76	3126	0.1000	0.1006	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
144 Pronamide	173	9.985	9.991	-0.006	62	2569		NC	
142 Atrazine	200		9.994					ND	
145 Pentachloronitrobenzene	237		10.000					ND	
146 Disulfoton	88		10.101					ND	
147 Dinoseb	211		10.116					ND	
244 n-Octadecane	57	10.124	10.128	-0.004	76	18160		NC	
143 Pentachlorophenol	266		10.143					ND	
148 Phenanthrene	178	10.326	10.330	-0.004	95	26343	0.1000	0.1115	
149 Anthracene	178	10.374	10.374	0.000	96	24504	0.1000	0.1024	
152 Methyl parathion	109		10.428					ND	
151 Carbazole	167		10.489					ND	
153 Diphenylsulfone	125		10.672					ND	
154 Di-n-butyl phthalate	149		10.725					ND	
155 Ethyl Parathion	97	10.721	10.746	-0.025	51	629		NC	
156 4-Nitroquinoline-1-oxide	190		10.808					ND	
157 Methapyrilene	58		10.851					ND	
158 Isodrin	66		11.068					ND	
159 Fluoranthene	202	11.351	11.355	-0.004	96	20114	0.1000	0.0981	
226 Aramite Peak 1	185		11.419					ND	
160 Benzidine	184		11.422					ND	
229 Aramite Peak 2	185	11.423	11.481	-0.058	52	2086		NC	
161 Pyrene	202	11.553	11.557	-0.005	94	24356	0.1000	0.1125	
163 p-Dimethylamino azobenzene	225		11.587					ND	
164 Chlorobenzilate	139		11.616					ND	
282 Kepone	272		11.764					ND	
167 Famphur	218		11.818					ND	
169 3,3'-Dimethylbenzidine	212		11.866					ND	
168 Butyl benzyl phthalate	149		12.013					ND	
171 2-Acetylaminofluorene	181		12.087					ND	
174 4,4'-Methylene bis(2-chlor	231		12.337					ND	
172 3,3'-Dimethoxybenzidine	244		12.379					ND	
173 Bis(2-ethylhexyl) phthalat	149		12.504					ND	
175 3,3'-Dichlorobenzidine	252		12.538					ND	
176 Hexabromobenzene	232	12.615	12.543	0.072	47	26351		NC	
177 Benzo[a]anthracene	228	12.606	12.610	-0.004	95	23586	0.1000	0.1168	
178 Chrysene	228	12.644	12.648	-0.004	92	20460	0.1000	0.1114	
179 6-Methylchrysene	242		12.895					ND	
180 Di-n-octyl phthalate	149		13.177					ND	
181 7,12-Dimethylbenz(a)anthra	256		13.559					ND	
281 Hexachlorophene	196		13.628					ND	
182 Benzo[b]fluoranthene	252	13.861	13.870	-0.009	95	17103	0.1000	0.0995	
183 Benzo[k]fluoranthene	252	13.894	13.903	-0.009	88	18129	0.1000	0.1034	
184 Benzo[a]pyrene	252	14.346	14.355	-0.009	77	16797	0.1000	0.1021	
185 3-Methylcholanthrene	268		14.535					ND	
187 Dibenz[a,h]acridine	279		15.453					ND	
186 Dibenz[a,j]acridine	279		15.746					ND	
188 Indeno[1,2,3-cd]pyrene	276	16.409	16.423	-0.014	64	15319	0.1000	0.0998	M
189 Dibenz(a,h)anthracene	278	16.414	16.428	-0.014	77	11248	0.1000	0.0871	M
190 Benzo[g,h,i]perylene	276	17.020	17.039	-0.019	1	12428	0.1000	0.0971	M
268 Endrin	1		0.000					ND	
291 Dipropylene Glycol Phenyl	1		0.000					ND	
264 alpha-BHC	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
267 2,6-Diaminotoluene	1		0.000					ND	
270 Toxaphene	1		0.000					ND	
294 Dowanol Peak 3	1		0.000					ND	
290 1-Phenoxy-2-propanol TIC	1		0.000					ND	
275 Dieldrin	1		0.000					ND	
299 Diisobutyl phthalate TIC	1		0.000					ND	
272 2,3-Dinitrotoluene	1		0.000					ND	
262 Isoquinoline	1		0.000					ND	
250 gamma-BHC (Lindane)	1		0.000					ND	
258 Aldrin	1		0.000					ND	
277 Chlorpyrifos	1		0.000					ND	
283 2-Ethoxyethanol	1		0.000					ND	
293 Dowanol Peak 4	1		0.000					ND	
273 3 & 4 Chlorophenol	1		0.000					ND	
259 o-Phenylphenol	1		0.000					ND	
260 Methoxychlor	1		0.000					ND	
251 Endosulfan sulfate	1		0.000					ND	
278 delta-BHC	1		0.000					ND	
252 4-tert-Butylphenol	1		0.000					ND	
253 Endrin aldehyde	1		0.000					ND	
257 Endosulfan I	1		0.000					ND	
261 Endosulfan II	1		0.000					ND	
274 Dibenz(a,i)pyrene	1		0.000					ND	
289 1-Phenoxy-2-propanol	1		0.000					ND	
266 Heptachlor	1		0.000					ND	
292 Dowanol Peak 2	1		0.000					ND	
269 Dibenzo[a,e]pyrene	1		0.000					ND	
271 3 & 4 Phenoxyphenol	1		0.000					ND	
265 Dibenzo[a,h]pyrene	1		0.000					ND	
276 Chlordane (technical)	1		0.000					ND	
249 4-Chlorophenol TIC	1		0.000					ND	
254 2-Chloroaniline	1		0.000					ND	
255 beta-BHC	1		0.000					ND	
285 Chlorobenzene TIC	1		0.000					ND	
279 3,4-Dichloroaniline	1		0.000					ND	
263 Heptachlor epoxide	1		0.000					ND	
150 DFTPP									
166 4,4'-DDE	246		11.583					ND	
165 4,4'-DDD	235	12.663	11.871	0.792	54	223			NR 7
170 4,4'-DDT	235	12.663	12.136	0.527	58	223			NR 7
S 95 Isosafrole	162		5.568					ND	
S 288 4-Methyl-1-cyclohexanemeth	55		6.400					ND	
S 136 Diallate	86		6.701					ND	
S 162 Aramite, Total	185		8.271					ND	
S 295 Dowanol	1		0.000					ND	
S 296 Dowanol Peak 1	1		0.000					ND	
S 191 Methyl Phenols,Total	100		0.000					ND	
S 245 Total Cresols	100		0.000					ND	
T 240 Trimethyl phosphate TIC	110	5.008	5.000	0.008	0	166			0
T 194 Decane TIC	142	6.253	5.800	0.453	91	13896			0
T 193 Hexamethylphosphoramide TI	135		6.500					ND	
T 234 2-Isopropylphenol TIC	121	7.258	7.250	0.008	0	182			0

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
T 235 4-isopropylphenol TIC	121	7.364	7.364	0.000	0	94		0	
T 236 3-isopropylphenol TIC	121	7.364	7.364	0.000	0	94		0	
T 300 Alpha-Terpineol TIC	59	7.484	7.500	-0.016	0	73		0	
T 237 3-(1,1-Dimethylethyl Pheno	135	7.754	7.720	0.034	12	954		0	
T 231 2,3,7,8-TCDD	322		8.850					ND	
T 195 Hydroquinone TIC	110	9.004	9.000	0.004	1	227		0	
T 192 Octadecane (TIC)	254	15.558	9.600	5.958	86	222779		0	
T 242 Triphenyl Phosphate TIC	326	11.995	11.995	-0.005	0	63		0	
T 196 Kepone TIC	272		12.000					ND	
T 241 Tricresyl phosphate TIC	368	12.375	12.495	-0.125	0	110		0	
T 280 2,3,7,8-TCDD TIC	198	12.466	12.495	-0.034	0	243		0	
T 248 2,3,7,8 TCDF TIC	304		13.000					ND	
T 197 Hexachlorophene TIC	198		13.600					ND	
T 239 Tris(2,3-dibromopropyl)pho	201	14.082	13.991	0.082	0	145		0	

QC Flag Legend

Processing Flags
- NR - Missing Quant Standard
- NC - Not Calibrated
- ND - Not Detected or Marked ND
- 7 - Failed Limit of Detection

Review Flags
- M - Manually Integrated

Reagents:

SMLIST1 L1 W_00006 Amount Added: 1.00 Units: mL

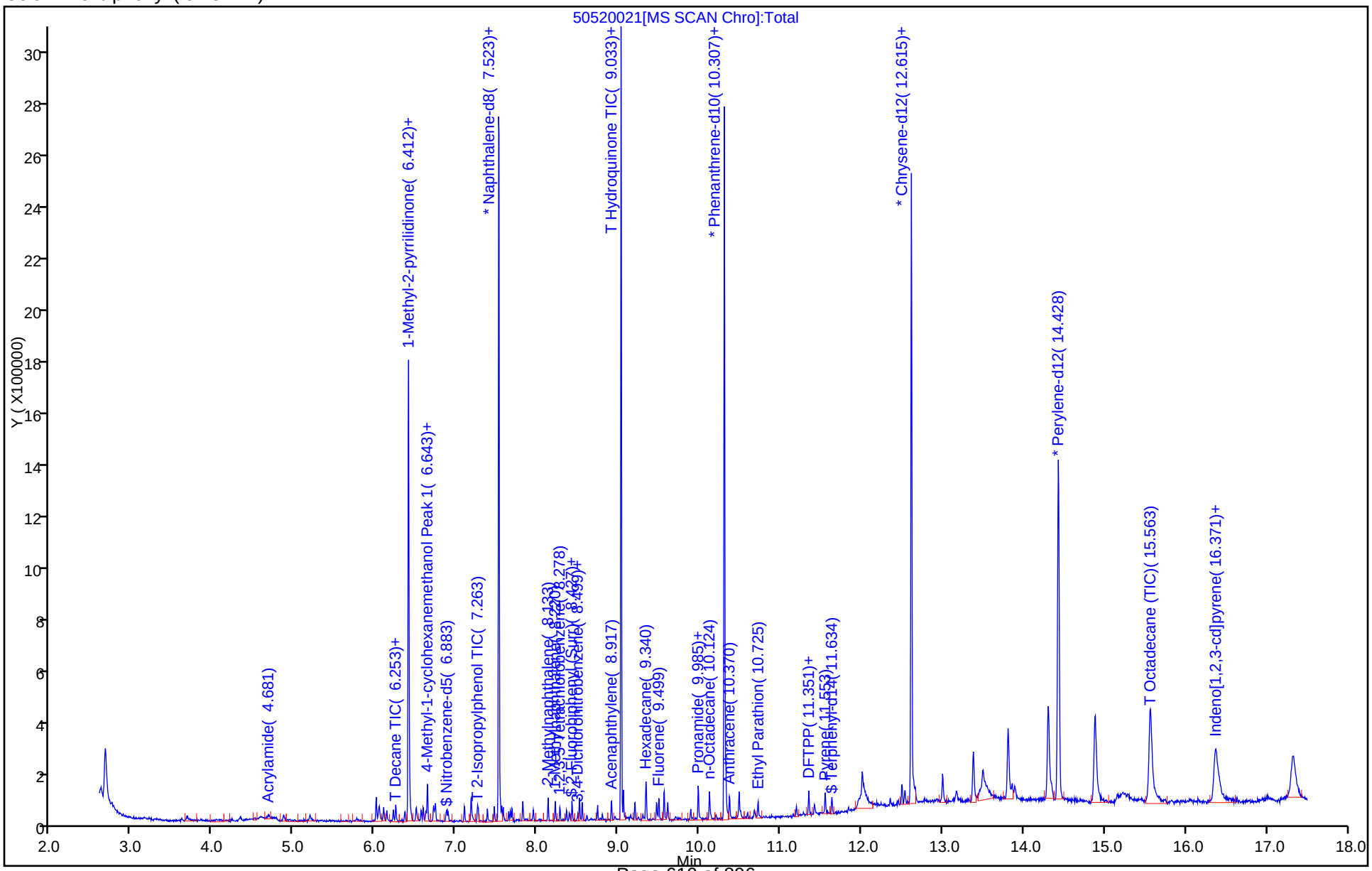
Report Date: 21-May-2015 08:02:51 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520021.D

Injection Date:	20-May-2015 18:16:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	lodv l1			Worklist Smp#:	21
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

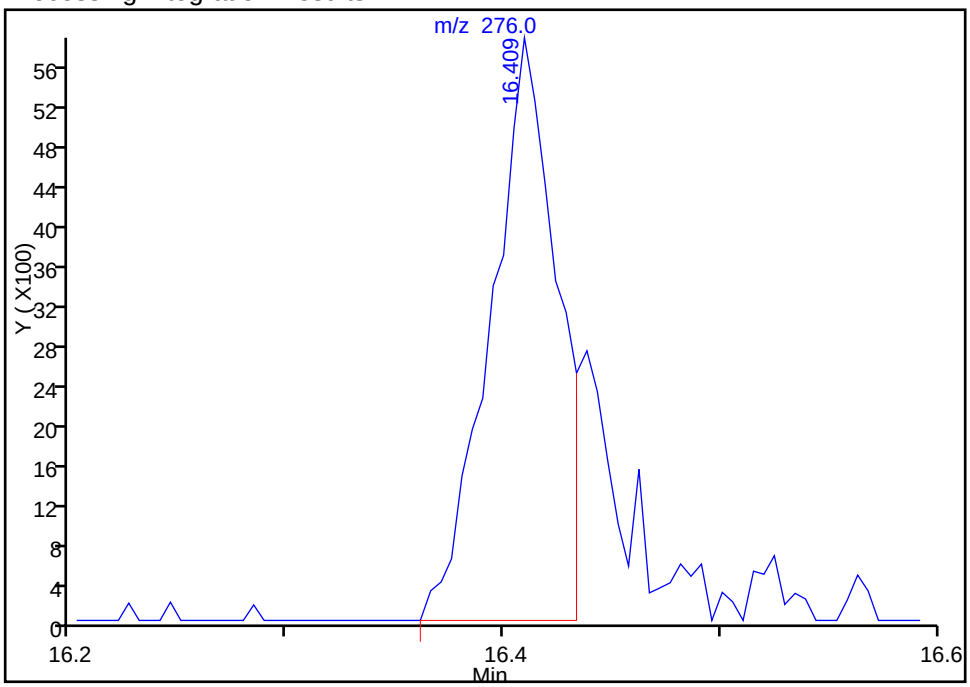
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520021.D
Injection Date: 20-May-2015 18:16:30 Instrument ID: A4HP9
Lims ID: lodv l1
Client ID:
Operator ID: 001574 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

188 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

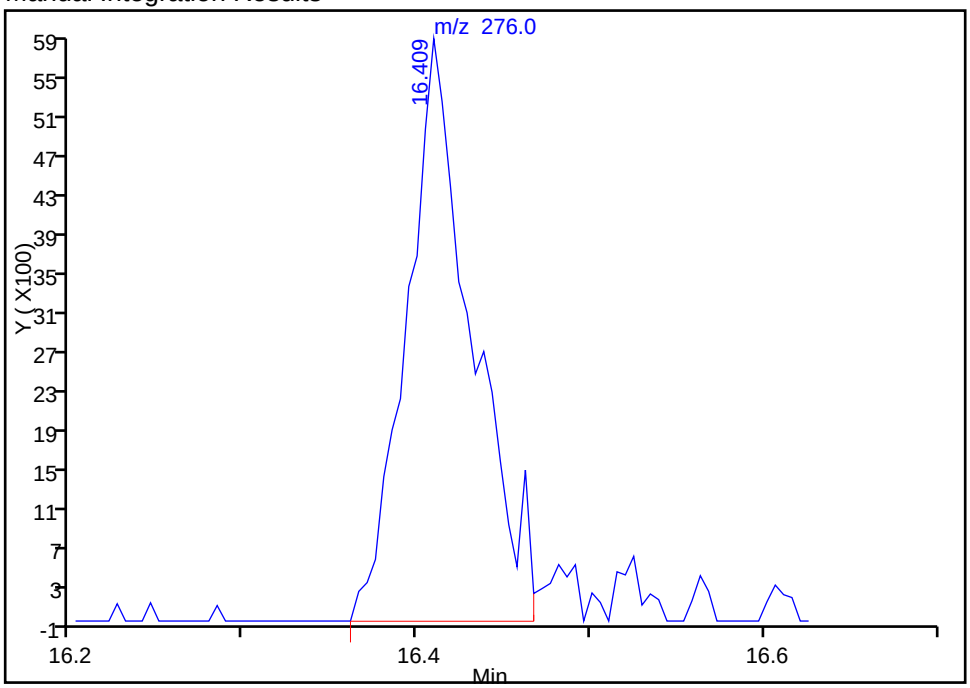
Processing Integration Results

RT: 16.41
Area: 12455
Amount: 0.081162
Amount Units: ng/ul



Manual Integration Results

RT: 16.41
Area: 15319
Amount: 0.099825
Amount Units: ng/ul



Reviewer: ulmanm, 21-May-2015 07:49:36
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

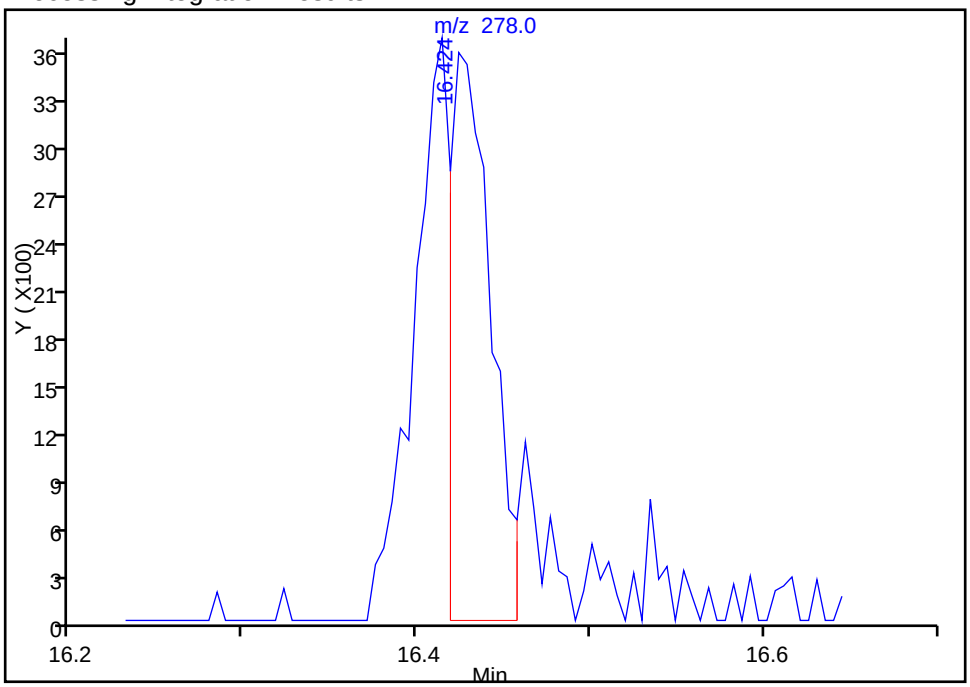
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520021.D
Injection Date: 20-May-2015 18:16:30 Instrument ID: A4HP9
Lims ID: lodv l1
Client ID:
Operator ID: 001574 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

189 Dibenz(a,h)anthracene, CAS: 53-70-3

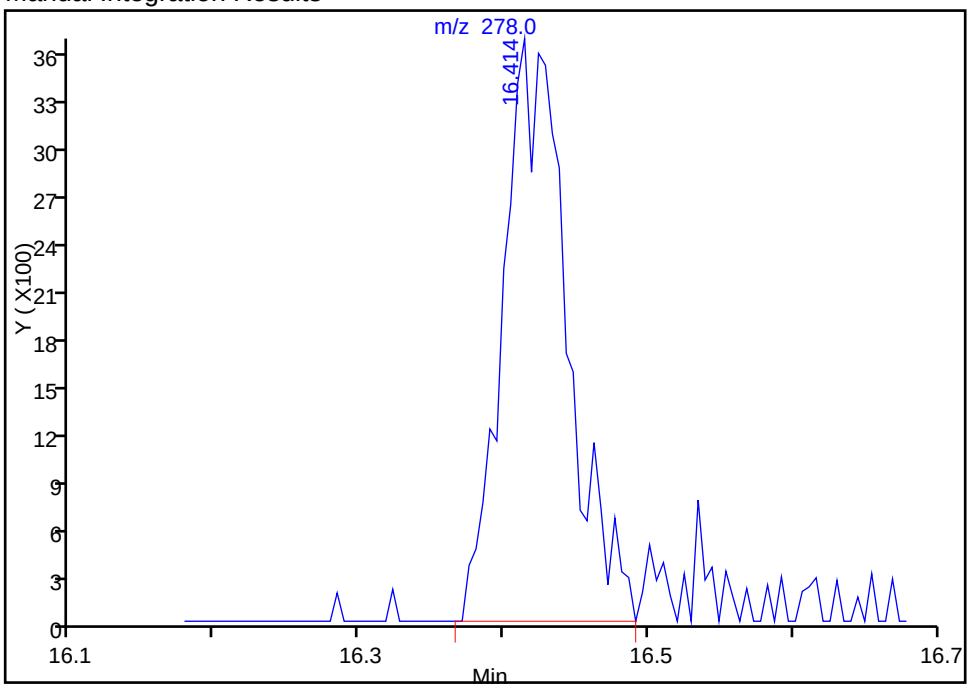
Processing Integration Results

RT: 16.42
Area: 5810
Amount: 0.045012
Amount Units: ng/ul



Manual Integration Results

RT: 16.41
Area: 11248
Amount: 0.087142
Amount Units: ng/ul



Reviewer: ulmanm, 21-May-2015 07:49:36
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Manual Integration/User Assign Peak Report

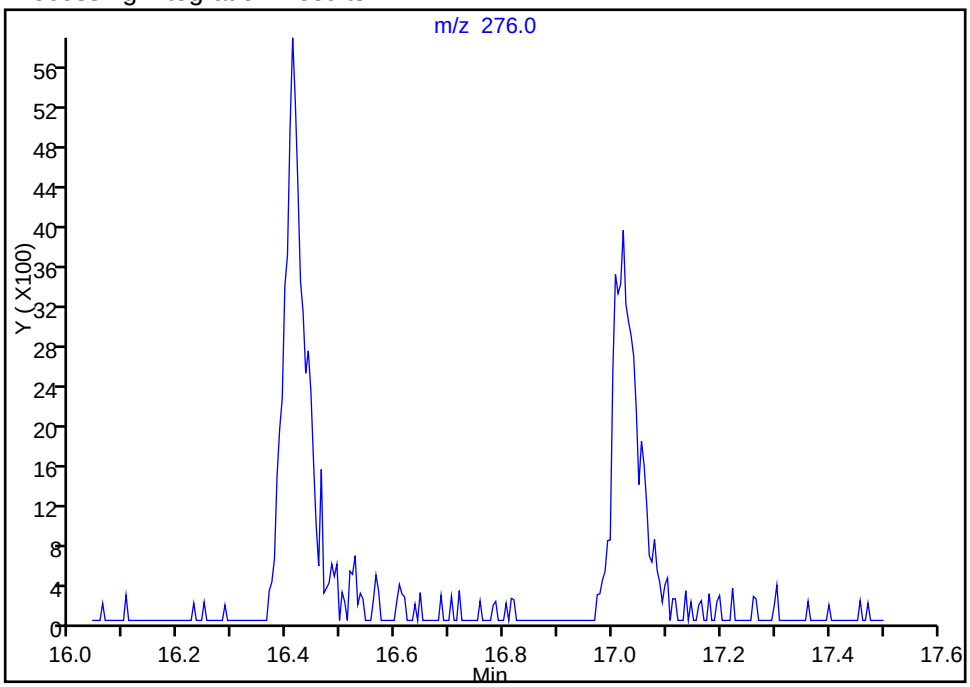
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520021.D				
Injection Date:	20-May-2015 18:16:30	Instrument ID:	A4HP9		
Lims ID:	lodv l1				
Client ID:					
Operator ID:	001574	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

190 Benzo[g,h,i]perylene, CAS: 191-24-2

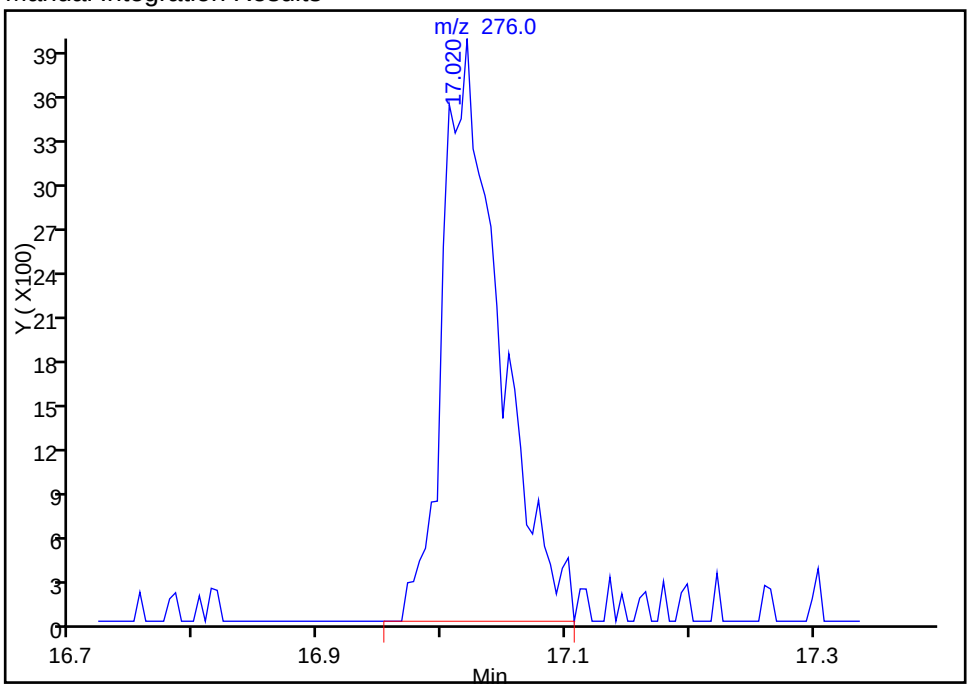
Not Detected
Expected RT: 17.04

Processing Integration Results



Manual Integration Results

RT: 17.02
Area: 12428
Amount: 0.097076
Amount Units: ng/ul



Reviewer: ulmanm, 21-May-2015 07:49:36
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID: LODV 240-181588/22 Calibration Date: 05/20/2015 18:41

Instrument ID: A4HP9 Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/19/2015 19:33

Lab File ID: 50520022.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.9041			0.452	0.500		
N-Nitrosodimethylamine	Ave	1.396			0.393	0.500		
Pyridine	Ave	2.418			0.403	0.500		
Benzaldehyde	Ave	1.430			0.999	1.00		
Phenol	Ave	2.551			0.480	0.500		
Aniline	Ave	3.116			0.491	0.500		
Bis(2-chloroethyl)ether	Ave	2.009			0.509	0.500		
2-Chlorophenol	Ave	1.581			0.504	0.500		
1,3-Dichlorobenzene	Ave	1.545			0.509	0.500		
1,4-Dichlorobenzene	Ave	1.562			0.532	0.500		
Benzyl alcohol	Ave	1.281			0.453	0.500		
1,2-Dichlorobenzene	Ave	1.487			0.500	0.500		
2-Methylphenol	Ave	1.738			0.500	0.500		
bis (2-chloroisopropyl) ether	Ave	2.612			0.503	0.500		
Indene	Ave	2.692			1.09	1.00		
3 & 4 Methylphenol	Ave	1.836			0.492	0.500		
N-Nitrosodi-n-propylamine	Ave	1.203			0.521	0.500		
Acetophenone	Ave	2.276			0.517	0.500		
Hexachloroethane	Ave	0.6369			0.464	0.500		
Nitrobenzene	Ave	0.4265			0.451	0.500		
Isophorone	Ave	0.7995			0.493	0.500		
2-Nitrophenol	Ave	0.1715			0.317	0.500		
2,4-Dimethylphenol	Ave	0.3630			0.503	0.500		
Bis(2-chloroethoxy)methane	Ave	0.5177			0.511	0.500		
2,4-Dichlorophenol	Ave	0.2493			0.496	0.500		
1,2,4-Trichlorobenzene	Ave	0.2548			0.523	0.500		
4-Chloroaniline	Ave	0.4836			0.483	0.500		
2,6-Dichlorophenol	Ave	0.2403			0.500	0.500		
Hexachlorobutadiene	Ave	0.1055			0.496	0.500		
Caprolactam	Ave	0.1206			0.958	1.00		
4-Chloro-3-methylphenol	Ave	0.3204			0.394	0.500		
Hexachlorocyclopentadiene	Ave	0.2335			0.182	0.500		
1,2,4,5-Tetrachlorobenzene	Ave	0.4013			0.541	0.500		
2,4,6-Trichlorophenol	Ave	0.3276			0.417	0.500		
2,4,5-Trichlorophenol	Ave	0.3425			0.401	0.500		
1,1'-Biphenyl	Ave	1.528			0.510	0.500		
2-Chloronaphthalene	Ave	1.127			0.501	0.500		
2-Nitroaniline	Ave	0.4439			0.272	0.500		
Dimethyl phthalate	Ave	1.149			0.509	0.500		
1,3-Dinitrobenzene	Ave	0.1850			0.182	0.500		

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID: LODV 240-181588/22 Calibration Date: 05/20/2015 18:41

Instrument ID: A4HP9 Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/19/2015 19:33

Lab File ID: 50520022.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,6-Dinitrotoluene	Ave	0.2594			0.294	0.500		
3-Nitroaniline	Ave	0.3816			0.268	0.500		
2,4-Dinitrotoluene	Ave	0.3227			0.217	0.500		
Dibenzofuran	Ave	1.523			0.535	0.500		
2,3,4,6-Tetrachlorophenol	Ave	0.2445			0.355	0.500		
Diethyl phthalate	Ave	1.107			0.534	0.500		
4-Chlorophenyl phenyl ether	Ave	0.4981			0.494	0.500		
4-Nitroaniline	Ave	0.3296			0.183	0.500		
N-Nitrosodiphenylamine	Ave	0.5447			0.956	1.00		
1,2-Diphenylhydrazine(as Azobenzene)	Ave	1.191			0.428	0.500		
Azobenzene	Ave	1.193			0.428	0.500		
4-Bromophenyl phenyl ether	Ave	0.1674			0.433	0.500		
Atrazine	Ave	0.1482			1.09	1.00		
Carbazole	Ave	1.046			0.489	0.500		
Di-n-butyl phthalate	Ave	1.229			0.513	0.500		
Benzidine	Lin1				1.05	1.00		
Butyl benzyl phthalate	Ave	0.6609			0.456	0.500		
Bis(2-ethylhexyl) phthalate	Ave	0.9242			0.467	0.500		
3,3'-Dichlorobenzidine	Ave	0.3475			0.813	1.00		
Di-n-octyl phthalate	Ave	2.107			0.432	0.500		
2,4-Dinitrophenol	Ave	0.1257			0.00100	1.00		
2-Methylnaphthalene	Ave	0.6435			0.000100	0.500		
4,6-Dinitro-2-methylphenol	Lin1				0.00400	1.00		
4-Nitrophenol	Ave	0.1185			0.00400	1.00		
Acenaphthene	Ave	1.123			0.000100	0.500		
Acenaphthylene	Ave	1.955			0.000100	0.500		
Anthracene	Ave	1.159			0.000100	0.500		
Benzo[a]anthracene	Ave	1.130			0.000100	0.500		
Benzo[a]pyrene	Ave	1.182			0.000100	0.500		
Benzo[b]fluoranthene	Ave	1.234			0.000100	0.500		
Benzo[g,h,i]perylene	Ave	0.9195			0.000100	0.500		
Benzo[k]fluoranthene	Ave	1.259			0.000100	0.500		
Benzoic acid	Ave	0.2007			0.0200	1.00		
Chrysene	Ave	1.028			0.000100	0.500		
Dibenz(a,h)anthracene	Ave	0.9270			0.000100	0.500		

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID: LODV 240-181588/22 Calibration Date: 05/20/2015 18:41

Instrument ID: A4HP9 Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/19/2015 19:33

Lab File ID: 50520022.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoranthene	Ave	0.9936			0.000100	0.500		
Fluorene	Ave	1.237			0.000100	0.500		
Hexachlorobenzene	Ave	0.1506			0.000100	0.500		
Indeno[1,2,3-cd]pyrene	Ave	1.102			0.000100	0.500		
Naphthalene	Ave	1.056			0.000100	0.500		
Pentachlorophenol	Ave	0.1092			0.00100	1.00		
Phenanthrene	Ave	1.145			0.000100	0.500		
Pyrene	Ave	1.212			0.000100	0.500		
2-Fluorophenol (Surr)	Ave	1.729			0.412	0.500	82	35-105
Phenol-d5 (Surr)	Ave	2.335			0.471	0.500	94	40-100
2,4,6-Tribromophenol (Surr)	Ave	0.1049			0.328	0.500	66	35-125
2-Fluorobiphenyl (Surr)	Ave	1.141			0.000000	0.500	0*	45-105
Nitrobenzene-d5 (Surr)	Ave	0.4097			0.000000	0.500	0*	35-100
Terphenyl-d14 (Surr)	Ave	0.7676			0.000000	0.500	0*	30-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520022.D
Lims ID: lodv l2
Client ID:
Sample Type: LODV
Inject. Date: 20-May-2015 18:41:30 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043844-022
Misc. Info.: LODV L2LODV L2
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-May-2015 08:02:18 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 20-May-2015 19:31:50

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.411	6.411	0.000	97	269971	4.00	4.00	
* 2 Naphthalene-d8	136	7.527	7.527	0.000	99	1119801	4.00	4.00	
* 3 Acenaphthene-d10	164	9.032	9.037	-0.005	90	535808	4.00	4.00	
* 4 Phenanthrene-d10	188	10.306	10.311	-0.005	96	857188	4.00	4.00	
* 5 Chrysene-d12	240	12.615	12.619	-0.004	92	736164	4.00	4.00	
* 6 Perylene-d12	264	14.428	14.437	-0.009	91	566955	4.00	4.00	
$ 7 2-Fluorophenol	112	5.195	5.199	-0.004	91	48116	0.5000	0.4124	
$ 8 Phenol-d5	99	6.041	6.046	-0.005	93	74174	0.5000	0.4707	
$ 9 Nitrobenzene-d5	82		6.887				ND	ND	
$ 10 2-Fluorobiphenyl (Surr)	172		8.431				ND	ND	
$ 11 2,4,6-Tribromophenol	330	9.705	9.710	-0.005	71	4614	0.5000	0.3283	
$ 12 Terphenyl-d14	244		11.638				ND	ND	
25 1,4-Dioxane	88	3.151	3.151	0.000	93	27558	0.5000	0.4516	M
26 N-Nitrosodimethylamine	74	3.617	3.617	0.000	84	37045	0.5000	0.3930	
27 Pyridine	79	3.680	3.675	0.005	95	65682	0.5000	0.4025	
20 Dimethylformamide	73		3.978					ND	
28 Ethyl methacrylate	69		4.089					ND	
31 2-Picoline	93		4.374					ND	
32 N-Nitrosomethylethylamine	88		4.504					ND	
35 Acrylamide	71	4.853	4.778	0.075	24	292		NC	
34 Methyl methanesulfonate	80		4.826					ND	
233 n,n'-Dimethylacetamide	44		4.993					ND	
36 N-Nitrosodiethylamine	102		5.254					ND	
37 Ethyl methanesulfonate	79		5.523					ND	
42 Phenylmercaptan	110		5.768					ND	
38 2-Methylcyclohexanone	68	5.810	5.820	-0.010	1	143		NC	
39 3-Methylcyclohexanone	69	5.815	5.854	-0.039	1	171		NC	
40 4-Methylcyclohexanone	55		5.902					ND	
41 Benzaldehyde	77	6.012	6.017	-0.005	93	96456	1.00	1.00	
45 Pentachloroethane	167		6.019					ND	
43 Phenol	94	6.056	6.055	0.001	94	82663	0.5000	0.4801	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
44 Aniline	93	6.104	6.108	-0.004	99	103340	0.5000	0.4914	
69 Bis(2-chloroethyl)ether	93	6.142	6.147	-0.005	97	68999	0.5000	0.5088	
46 2-Chlorophenol	128	6.224	6.228	-0.004	96	53759	0.5000	0.5038	
243 n-Decane	57	6.253	6.257	-0.004	89	77297	NC	NC	
47 1,3-Dichlorobenzene	146	6.368	6.368	0.000	98	53117	0.5000	0.5094	
232 1-Methyl-2-pyrrilidinone	99	6.411	6.421	-0.010	31	2375		NC	
48 1,4-Dichlorobenzene	146	6.426	6.426	0.000	92	56087	0.5000	0.5319	
49 Benzyl alcohol	108	6.508	6.507	0.001	94	39117	0.5000	0.4525	
50 1,2-Dichlorobenzene	146	6.570	6.570	0.000	97	50207	0.5000	0.5004	
56 N-Nitrosopyrrolidine	100		6.572					ND	
286 4-Methyl-1-cyclohexanemeth	55	6.570	6.574	-0.004	0	3904		NC	
51 2-Methylphenol	108	6.594	6.594	0.000	89	58708	0.5000	0.5004	
59 N-Nitrosomorpholine	56		6.605					ND	
53 2,2'-oxybis[1-chloropropan	45	6.628	6.628	0.000	84	88709	0.5000	0.5033	
60 2-Toluidine	106	6.719	6.639	0.080	58	223		NC	
52 Indene	115	6.647	6.647	0.000	89	198210	1.00	1.09	
287 4-Methyl-1-cyclohexanemeth	55	6.661	6.708	-0.047	0	440		NC	
21 3 & 4 Methylphenol	108	6.719	6.724	-0.005	86	60960	0.5000	0.4920	
57 N-Nitrosodi-n-propylamine	70	6.734	6.738	-0.004	95	42293	0.5000	0.5209	
58 Acetophenone	105	6.743	6.748	-0.005	97	79358	0.5000	0.5166	
61 Hexachloroethane	117	6.873	6.878	-0.005	88	19951	0.5000	0.4641	
63 N-Nitrosopiperidine	114		6.884					ND	
62 Nitrobenzene	77	6.902	6.902	0.000	85	53840	0.5000	0.4509	
64 Isophorone	82	7.099	7.104	-0.005	98	110269	0.5000	0.4927	
68 o,o',o''-Triethylphosphoro	198		7.105					ND	
67 1,3,5-Trichlorobenzene	180		7.123					ND	
66 2-Nitrophenol	139	7.181	7.185	-0.004	91	15202	0.5000	0.3166	
65 2,4-Dimethylphenol	107	7.186	7.190	-0.004	92	51083	0.5000	0.5027	
72 alpha,alpha-Dimethyl phene	58		7.216					ND	
71 Benzoic acid	122		7.238				ND	ND	
70 Bis(2-chloroethoxy)methane	93	7.263	7.267	-0.005	98	74039	0.5000	0.5109	
73 2,4-Dichlorophenol	162	7.383	7.387	-0.004	93	34615	0.5000	0.4959	
74 1,2,4-Trichlorobenzene	180	7.469	7.474	-0.005	94	37300	0.5000	0.5230	
78 Hexachloropropene	213		7.485					ND	
75 Naphthalene	128		7.546				ND	ND	
76 4-Chloroaniline	127	7.561	7.565	-0.004	95	65346	0.5000	0.4827	
77 2,6-Dichlorophenol	162	7.580	7.585	-0.005	97	33625	0.5000	0.4999	
80 1,2,3-Trichlorobenzene	180		7.590					ND	
79 Hexachlorobutadiene	225	7.647	7.652	-0.005	97	14657	0.5000	0.4964	
81 Benzothiazole	135	7.758	7.676	0.082	80	2219		NC	
82 Quinoline	129		7.682					ND	
83 N-Nitrosodi-n-butylamine	84		7.697					ND	
85 p-Phenylene diamine	108		7.716					ND	
84 Caprolactam	113	7.820	7.849	-0.029	81	32348	1.00	0.9578	
94 Safrole, Total	162		7.894					ND	
86 4-Chloro-3-methylphenol	107	7.950	7.955	-0.005	95	35351	0.5000	0.3941	
87 2-Methylnaphthalene	142		8.138				ND	ND	
225 Isosafrole Peak 1	162		8.144					ND	
90 1,2,3,5-Tetrachlorobenzene	216	8.282	8.191	0.091	94	29073		NC	
88 1-Methylnaphthalene	142		8.224				ND	ND	
89 Hexachlorocyclopentadiene	237	8.277	8.282	-0.005	90	5679	0.5000	0.1815	
91 1,2,4,5-Tetrachlorobenzene	216	8.282	8.287	-0.005	97	29073	0.5000	0.5409	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
227 Isosafrole Peak 2	162		8.336					ND	
92 2,4,6-Trichlorophenol	196	8.359	8.364	-0.005	95	18312	0.5000	0.4173	
93 2,4,5-Trichlorophenol	196	8.393	8.402	-0.009	94	18392	0.5000	0.4009	
97 2,4-Toluene diamine	121	8.489	8.412	0.077	81	3337		NC	
246 1-Chloronaphthalene	162		8.433					ND	
99 1,2,3,4 -Tetrachlorobenzen	216		8.446					ND	
96 3,4-Dichloronitrobenzene	109		8.465					ND	
98 1,1'-Biphenyl	154	8.522	8.522	0.000	95	104293	0.5000	0.5096	
101 Phenyl ether	170	8.426	8.523	-0.097	70	18644		NC	
103 1,4-Naphthoquinone	158		8.543					ND	
100 2-Chloronaphthalene	162	8.556	8.556	0.000	96	75665	0.5000	0.5011	
104 1,4-Dinitrobenzene	168		8.567					ND	
102 2-Nitroaniline	65	8.609	8.618	-0.009	83	16161	0.5000	0.2718	
105 Dimethyl phthalate	163	8.744	8.748	-0.004	98	78386	0.5000	0.5091	
106 1,3-Dinitrobenzene	168	8.777	8.782	-0.005	81	4522	0.5000	0.1824	
107 2,6-Dinitrotoluene	165	8.801	8.806	-0.005	90	10209	0.5000	0.2938	
109 Acenaphthylene	152		8.921				ND	ND	
110 3-Nitroaniline	138	8.955	8.960	-0.005	89	13690	0.5000	0.2678	
115 Pentachlorobenzene	250		9.034					ND	
111 2,4-Dinitrophenol	184		9.046				ND	ND	
112 Acenaphthene	153		9.066				ND	ND	
113 4-Nitrophenol	109		9.070				ND	ND	
117 1-Naphthylamine	143		9.115					ND	
118 2,3,5,6-Tetrachlorophenol	232		9.120					ND	
114 2,4-Dinitrotoluene	165	9.152	9.157	-0.005	85	9398	0.5000	0.2174	
120 2-Naphthylamine	143		9.178					ND	
116 Dibenzofuran	168	9.205	9.210	-0.005	98	109151	0.5000	0.5351	
122 Thionazin	97		9.269					ND	
119 2,3,4,6-Tetrachlorophenol	232	9.301	9.306	-0.005	79	11618	0.5000	0.3547	
124 N-Nitro-o-toluidine	152		9.332					ND	
121 Diethyl phthalate	149	9.335	9.345	-0.010	98	79233	0.5000	0.5341	
247 Hexadecane	57	9.345	9.349	-0.004	85	86171	NC	NC	
127 Tributyl phosphate	99		9.417					ND	
130 Diphenylamine	169		9.418					ND	
123 4-Chlorophenyl phenyl ethe	204	9.470	9.474	-0.004	93	32937	0.5000	0.4936	
125 4-Nitroaniline	138	9.479	9.484	-0.005	74	8058	0.5000	0.1825	
126 Fluorene	166		9.503				ND	ND	
297 Benzophenone	105	9.513	9.512	0.001	26	1683		NC	
128 4,6-Dinitro-2-methylphenol	198		9.513				ND	ND	
134 Sulfotepp	202		9.519					ND	
131 N-Nitrosodiphenylamine	169	9.566	9.571	-0.005	98	111640	1.00	0.9565	
135 1,3,5-Trinitrobenzene	213		9.601					ND	
133 Azobenzene	77	9.609	9.614	-0.005	95	109498	0.5000	0.4284	
132 1,2-Diphenylhydrazine	77	9.609	9.614	-0.005	98	109487	0.5000	0.4284	
137 Phenacetin	108		9.649					ND	
228 Diallate Peak 1	86		9.659					ND	
138 Phorate	121		9.664					ND	
230 Diallate Peak 2	86		9.736					ND	
140 Dimethoate	87		9.803					ND	
139 4-Bromophenyl phenyl ether	248	9.893	9.898	-0.005	74	15545	0.5000	0.4333	
129 4-Aminobiphenyl	169		9.962					ND	
141 Hexachlorobenzene	284		9.989				ND	ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
144 Pronamide	173	9.984	9.991	-0.007	62	9559		NC	
142 Atrazine	200	9.984	9.994	-0.010	81	34659	1.00	1.09	
145 Pentachloronitrobenzene	237		10.000					ND	
146 Disulfoton	88		10.101					ND	
147 Dinoseb	211		10.116					ND	
244 n-Octadecane	57	10.124	10.128	-0.004	76	86613	NC	NC	
143 Pentachlorophenol	266		10.143				ND	ND	
148 Phenanthrene	178		10.330				ND	ND	
149 Anthracene	178		10.374				ND	ND	
152 Methyl parathion	109		10.428					ND	
151 Carbazole	167	10.484	10.489	-0.005	95	109561	0.5000	0.4890	
153 Diphenylsulfone	125		10.672					ND	
154 Di-n-butyl phthalate	149	10.725	10.725	0.000	99	135099	0.5000	0.5130	
155 Ethyl Parathion	97	10.682	10.746	-0.064	52	993		NC	
156 4-Nitroquinoline-1-oxide	190		10.808					ND	
157 Methapyrilene	58		10.851					ND	
158 Isodrin	66		11.068					ND	
159 Fluoranthene	202		11.355				ND	ND	
226 Aramite Peak 1	185		11.419					ND	
160 Benzidine	184	11.417	11.422	-0.005	98	73277	1.00	1.05	
229 Aramite Peak 2	185	11.417	11.481	-0.064	52	8609		NC	
161 Pyrene	202		11.557				ND	ND	
163 p-Dimethylamino azobenzene	225		11.587					ND	
164 Chlorobenzilate	139		11.616					ND	
282 Kepone	272		11.764					ND	
167 Famphur	218		11.818					ND	
169 3,3'-Dimethylbenzidine	212		11.866					ND	
168 Butyl benzyl phthalate	149	12.009	12.013	-0.004	93	55445	0.5000	0.4559	
171 2-Acetylaminofluorene	181		12.087					ND	
174 4,4'-Methylene bis(2-chlor	231		12.337					ND	
172 3,3'-Dimethoxybenzidine	244		12.379					ND	
173 Bis(2-ethylhexyl) phthalat	149	12.499	12.504	-0.005	96	79471	0.5000	0.4672	
175 3,3'-Dichlorobenzidine	252	12.533	12.538	-0.005	78	51970	1.00	0.8127	
176 Hexabromobenzene	232	12.615	12.543	0.072	46	28766		NC	
177 Benzo[a]anthracene	228		12.610				ND	ND	
178 Chrysene	228		12.648				ND	ND	
179 6-Methylchrysene	242		12.895					ND	
180 Di-n-octyl phthalate	149	13.173	13.177	-0.004	98	128842	0.5000	0.4315	
181 7,12-Dimethylbenz(a)anthra	256		13.559					ND	
281 Hexachlorophene	196		13.628					ND	
182 Benzo[b]fluoranthene	252		13.870				ND	ND	
183 Benzo[k]fluoranthene	252		13.903				ND	ND	
184 Benzo[a]pyrene	252		14.355				ND	ND	
185 3-Methylcholanthrene	268		14.535					ND	
187 Dibenz[a,h]acridine	279		15.453					ND	
186 Dibenz[a,j]acridine	279		15.746					ND	
188 Indeno[1,2,3-cd]pyrene	276		16.423				ND	ND	
189 Dibenz(a,h)anthracene	278		16.428				ND	ND	
190 Benzo[g,h,i]perylene	276		17.039				ND	ND	
268 Endrin	1		0.000					ND	
291 Dipropylene Glycol Phenyl	1		0.000					ND	
264 alpha-BHC	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
267 2,6-Diaminotoluene	1		0.000					ND	
270 Toxaphene	1		0.000					ND	
294 Dowanol Peak 3	1		0.000					ND	
290 1-Phenoxy-2-propanol TIC	1		0.000					ND	
275 Dieldrin	1		0.000					ND	
299 Diisobutyl phthalate TIC	1		0.000					ND	
272 2,3-Dinitrotoluene	1		0.000					ND	
262 Isoquinoline	1		0.000					ND	
250 gamma-BHC (Lindane)	1		0.000					ND	
258 Aldrin	1		0.000					ND	
277 Chlorpyrifos	1		0.000					ND	
283 2-Ethoxyethanol	1		0.000					ND	
293 Dowanol Peak 4	1		0.000					ND	
273 3 & 4 Chlorophenol	1		0.000					ND	
259 o-Phenylphenol	1		0.000					ND	
260 Methoxychlor	1		0.000					ND	
251 Endosulfan sulfate	1		0.000					ND	
278 delta-BHC	1		0.000					ND	
252 4-tert-Butylphenol	1		0.000					ND	
253 Endrin aldehyde	1		0.000					ND	
257 Endosulfan I	1		0.000					ND	
261 Endosulfan II	1		0.000					ND	
274 Dibenz(a,i)pyrene	1		0.000					ND	
289 1-Phenoxy-2-propanol	1		0.000					ND	
266 Heptachlor	1		0.000					ND	
292 Dowanol Peak 2	1		0.000					ND	
269 Dibenzo[a,e]pyrene	1		0.000					ND	
271 3 & 4 Phenoxyphenol	1		0.000					ND	
265 Dibenzo[a,h]pyrene	1		0.000					ND	
276 Chlordane (technical)	1		0.000					ND	
249 4-Chlorophenol TIC	1		0.000					ND	
254 2-Chloroaniline	1		0.000					ND	
255 beta-BHC	1		0.000					ND	
285 Chlorobenzene TIC	1		0.000					ND	
279 3,4-Dichloroaniline	1		0.000					ND	
263 Heptachlor epoxide	1		0.000					ND	
150 DFTPP									
166 4,4'-DDE	246		11.583					ND	
165 4,4'-DDD	235	12.533	11.871	0.662	54	480		NR	7
170 4,4'-DDT	235	12.533	12.136	0.397	59	480		NR	7
S 95 Isosafrole	162		5.568					ND	
S 288 4-Methyl-1-cyclohexanemeth	55		6.400					ND	
S 136 Diallate	86		6.701					ND	
S 162 Aramite, Total	185		8.271					ND	
S 295 Dowanol	1		0.000					ND	
S 296 Dowanol Peak 1	1		0.000					ND	
S 191 Methyl Phenols,Total	100				0			0.99	
S 245 Total Cresols	100				0			0.99	
T 240 Trimethyl phosphate TIC	110	5.185	5.000	0.185	0	85		0	
T 194 Decane TIC	142	6.253	5.800	0.453	76	77297		0	
T 193 Hexamethylphosphoramide TI	135	5.767	6.500	-0.733	1	496		0	
T 234 2-Isopropylphenol TIC	121	7.243	7.250	-0.007	0	79		0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
T 235 4-isopropylphenol TIC	121	7.383	7.364	0.019	0	243		0	
T 236 3-isopropylphenol TIC	121	7.383	7.364	0.019	0	243		0	
T 300 Alpha-Terpineol TIC	59	7.527	7.500	0.027	0	470		0	
T 237 3-(1,1-Dimethylethyl Pheno	135		7.720					ND	
T 231 2,3,7,8-TCDD	322		8.850					ND	
T 195 Hydroquinone TIC	110	8.974	9.000	-0.026	1	204		0	
T 192 Octadecane (TIC)	254	10.124	9.600	0.524	90	87101		0	
T 242 Triphenyl Phosphate TIC	326	11.845	11.995	-0.155	0	59		0	
T 196 Kepone TIC	272		12.000					ND	
T 241 Tricresyl phosphate TIC	368		12.500					ND	
T 280 2,3,7,8-TCDD TIC	198	12.615	12.495	0.115	0	5907		0	
T 248 2,3,7,8 TCDF TIC	304		13.000					ND	
T 197 Hexachlorophene TIC	198		13.600					ND	
T 239 Tris(2,3-dibromopropyl)pho	201	14.033	13.991	0.033	0	94		0	

QC Flag Legend

Processing Flags
- NR - Missing Quant Standard
- NC - Not Calibrated
- ND - Not Detected or Marked ND
- 7 - Failed Limit of Detection

Review Flags
- M - Manually Integrated

Reagents:

SMLIST1 L2 W_00006 Amount Added: 1.00 Units: mL

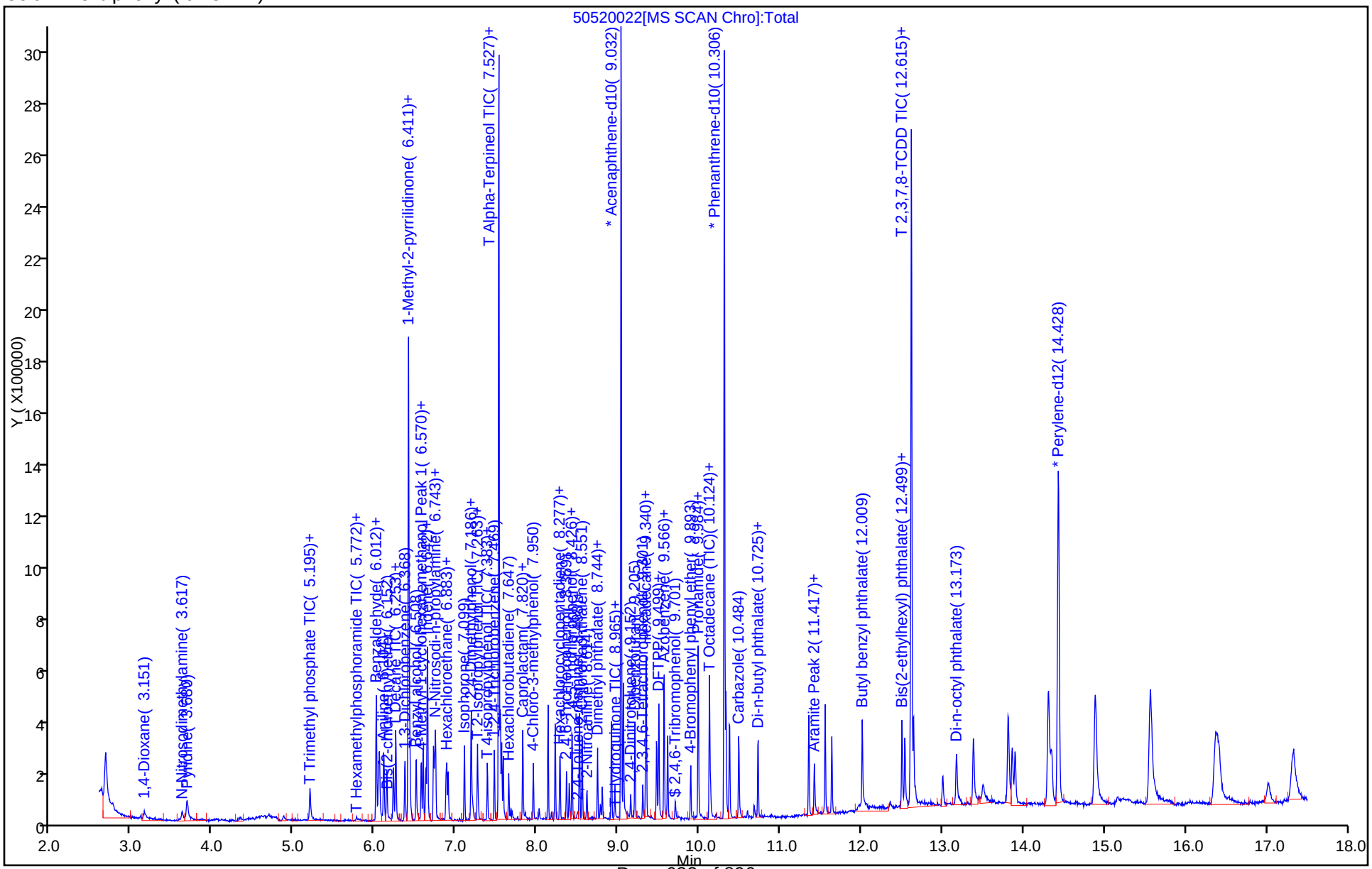
Report Date: 21-May-2015 08:02:53 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520022.D

Injection Date:	20-May-2015 18:41:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	lodv l2			Worklist Smp#:	22
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

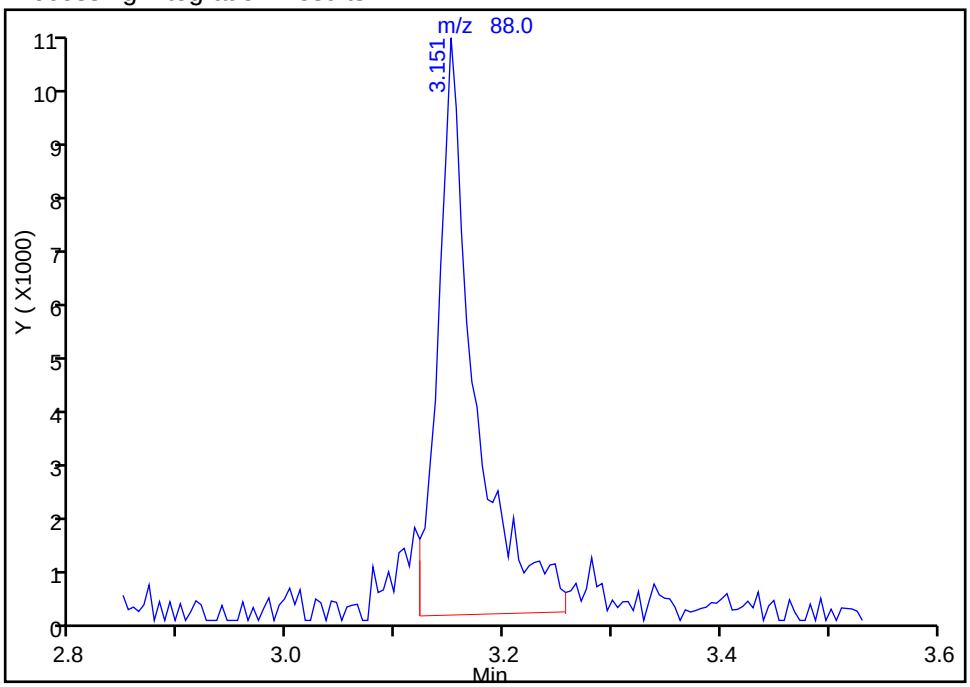
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520022.D
Injection Date: 20-May-2015 18:41:30 Instrument ID: A4HP9
Lims ID: lodv l2
Client ID:
Operator ID: 001574 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

25 1,4-Dioxane, CAS: 123-91-1

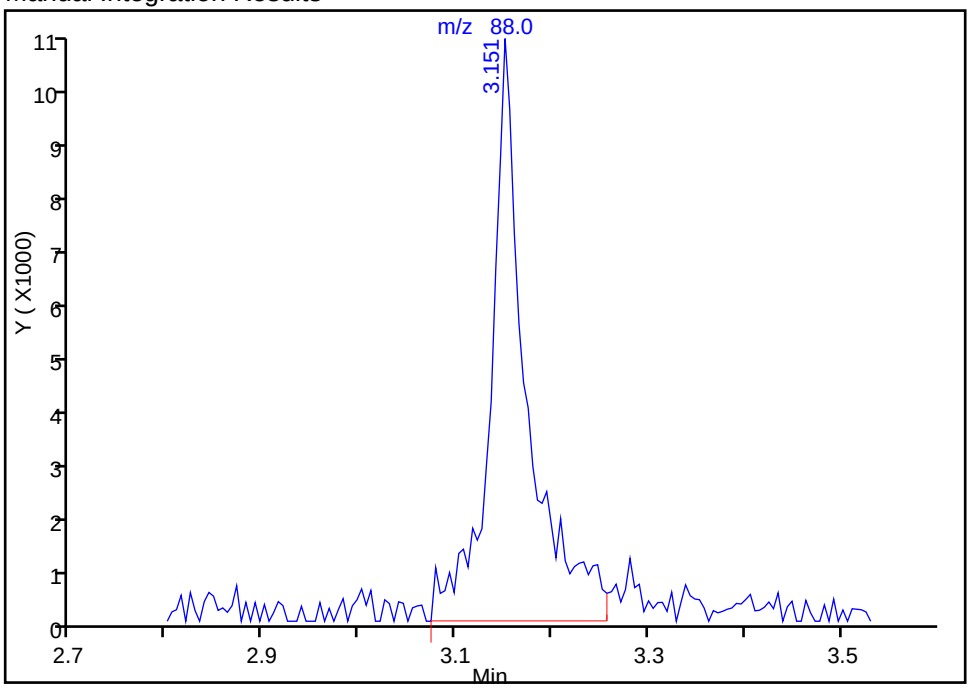
Processing Integration Results

RT: 3.15
Area: 24196
Amount: 0.396512
Amount Units: ng/ul



Manual Integration Results

RT: 3.15
Area: 27558
Amount: 0.451607
Amount Units: ng/ul



Reviewer: ulmanm, 21-May-2015 07:52:29
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID: LODV 240-181588/23 Calibration Date: 05/20/2015 19:06

Instrument ID: A4HP9 Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/19/2015 19:33

Lab File ID: 50520023.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Nitrophenol	Ave	0.1185			1.14	2.00		
4,6-Dinitro-2-methylphenol	Lin1				0.824	2.00		
1,2-Diphenylhydrazine(as Azobenzene)	Ave	1.191			0.917	1.00		
Pentachlorophenol	Ave	0.1092			1.26	2.00		
1,1'-Biphenyl	Ave	1.528			0.000500	1.00		
1,2,4,5-Tetrachlorobenzene	Ave	0.4013			0.00100	1.00		
1,2,4-Trichlorobenzene	Ave	0.2548			0.000500	1.00		
1,2-Dichlorobenzene	Ave	1.487			0.000500	1.00		
1,3-Dichlorobenzene	Ave	1.545			0.000500	1.00		
1,3-Dinitrobenzene	Ave	0.1850			0.00100	1.00		
1,4-Dichlorobenzene	Ave	1.562			0.000500	1.00		
1,4-Dioxane	Ave	0.9041			0.00100	1.00		
2,3,4,6-Tetrachlorophenol	Ave	0.2445			0.00100	1.00		
2,4,5-Trichlorophenol	Ave	0.3425			0.000500	1.00		
2,4,6-Trichlorophenol	Ave	0.3276			0.000500	1.00		
2,4-Dichlorophenol	Ave	0.2493			0.000500	1.00		
2,4-Dimethylphenol	Ave	0.3630			0.000500	1.00		
2,4-Dinitrophenol	Ave	0.1257			0.00100	2.00		
2,4-Dinitrotoluene	Ave	0.3227			0.000500	1.00		
2,6-Dichlorophenol	Ave	0.2403			0.00200	1.00		
2,6-Dinitrotoluene	Ave	0.2594			0.000500	1.00		
2-Chloronaphthalene	Ave	1.127			0.000500	1.00		
2-Chlorophenol	Ave	1.581			0.000500	1.00		
2-Methylnaphthalene	Ave	0.6435			0.000100	1.00		
2-Methylphenol	Ave	1.738			0.000500	1.00		
2-Nitroaniline	Ave	0.4439			0.000500	1.00		
2-Nitrophenol	Ave	0.1715			0.000500	1.00		
3 & 4 Methylphenol	Ave	1.836			0.00100	1.00		
3,3'-Dichlorobenzidine	Ave	0.3475			0.00100	2.00		
3-Nitroaniline	Ave	0.3816			0.000500	1.00		
4-Bromophenyl phenyl ether	Ave	0.1674			0.000500	1.00		
4-Chloro-3-methylphenol	Ave	0.3204			0.000500	1.00		

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID: LODV 240-181588/23 Calibration Date: 05/20/2015 19:06

Instrument ID: A4HP9 Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/19/2015 19:33

Lab File ID: 50520023.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Chloroaniline	Ave	0.4836			0.000500	1.00		
4-Chlorophenyl phenyl ether	Ave	0.4981			0.000500	1.00		
4-Nitroaniline	Ave	0.3296			0.000500	1.00		
Acenaphthene	Ave	1.123			0.000100	1.00		
Acenaphthylene	Ave	1.955			0.000100	1.00		
Acetophenone	Ave	2.276			0.000500	1.00		
Aniline	Ave	3.116			0.00100	1.00		
Anthracene	Ave	1.159			0.000100	1.00		
Atrazine	Ave	0.1482			0.000500	2.00		
Azobenzene	Ave	1.193			0.000500	1.00		
Benzaldehyde	Ave	1.430			0.000500	2.00		
Benzidine	Lin1				0.00100	2.00		
Benzo[a]anthracene	Ave	1.130			0.000100	1.00		
Benzo[a]pyrene	Ave	1.182			0.000100	1.00		
Benzo[b]fluoranthene	Ave	1.234			0.000100	1.00		
Benzo[g,h,i]perylene	Ave	0.9195			0.000100	1.00		
Benzo[k]fluoranthene	Ave	1.259			0.000100	1.00		
Benzoic acid	Ave	0.2007			0.0200	2.00		
Benzyl alcohol	Ave	1.281			0.000500	1.00		
bis (2-chloroisopropyl) ether	Ave	2.612			0.000500	1.00		
Bis(2-chloroethoxy)methane	Ave	0.5177			0.000500	1.00		
Bis(2-chloroethyl)ether	Ave	2.009			0.000100	1.00		
Bis(2-ethylhexyl) phthalate	Ave	0.9242			0.000500	1.00		
Butyl benzyl phthalate	Ave	0.6609			0.000500	1.00		
Caprolactam	Ave	0.1206			0.000500	2.00		
Carbazole	Ave	1.046			0.000500	1.00		
Chrysene	Ave	1.028			0.000100	1.00		
Dibenz(a,h)anthracene	Ave	0.9270			0.000100	1.00		
Dibenzofuran	Ave	1.523			0.000100	1.00		
Diethyl phthalate	Ave	1.107			0.00100	1.00		

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID: LODV 240-181588/23 Calibration Date: 05/20/2015 19:06

Instrument ID: A4HP9 Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/19/2015 19:33

Lab File ID: 50520023.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dimethyl phthalate	Ave	1.149			0.000500	1.00		
Di-n-butyl phthalate	Ave	1.229			0.00100	1.00		
Di-n-octyl phthalate	Ave	2.107			0.000500	1.00		
Fluoranthene	Ave	0.9936			0.000100	1.00		
Fluorene	Ave	1.237			0.000100	1.00		
Hexachlorobenzene	Ave	0.1506			0.000100	1.00		
Hexachlorobutadiene	Ave	0.1055			0.000500	1.00		
Hexachlorocyclopentadiene	Ave	0.2335			0.000500	1.00		
Hexachloroethane	Ave	0.6369			0.000500	1.00		
Indene	Ave	2.692			0.00100	2.00		
Indeno[1,2,3-cd]pyrene	Ave	1.102			0.000100	1.00		
Isophorone	Ave	0.7995			0.000500	1.00		
Naphthalene	Ave	1.056			0.000100	1.00		
Nitrobenzene	Ave	0.4265			0.000100	1.00		
N-Nitrosodimethylamine	Ave	1.396			0.000500	1.00		
N-Nitrosodi-n-propylamine	Ave	1.203			0.000500	1.00		
N-Nitrosodiphenylamine	Ave	0.5447			0.000500	2.00		
Phenanthrene	Ave	1.145			0.000100	1.00		
Phenol	Ave	2.551			0.00100	1.00		
Pyrene	Ave	1.212			0.000100	1.00		
Pyridine	Ave	2.418			0.000500	1.00		
2,4,6-Tribromophenol (Surr)	Ave	0.1049			0.000000	1.00	0*	35-125
2-Fluorobiphenyl (Surr)	Ave	1.141			0.000000	1.00	0*	45-105
2-Fluorophenol (Surr)	Ave	1.729			0.000000	1.00	0*	35-105
Nitrobenzene-d5 (Surr)	Ave	0.4097			0.000000	1.00	0*	35-100
Phenol-d5 (Surr)	Ave	2.335			0.000000	1.00	0*	40-100
Terphenyl-d14 (Surr)	Ave	0.7676			0.000000	1.00	0*	30-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520023.D
Lims ID: lodv l3
Client ID:
Sample Type: LODV
Inject. Date: 20-May-2015 19:06:30 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043844-023
Misc. Info.: LODV L3LODV L3
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-May-2015 08:02:18 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 20-May-2015 19:36:18

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.411	6.411	0.000	96	281362	4.00	4.00	
* 2 Naphthalene-d8	136	7.526	7.527	-0.001	99	1119060	4.00	4.00	
* 3 Acenaphthene-d10	164	9.036	9.037	-0.001	90	548089	4.00	4.00	
* 4 Phenanthrene-d10	188	10.306	10.311	-0.005	96	870602	4.00	4.00	
* 5 Chrysene-d12	240	12.614	12.619	-0.005	92	760646	4.00	4.00	
* 6 Perylene-d12	264	14.427	14.437	-0.010	91	576490	4.00	4.00	
$ 7 2-Fluorophenol	112		5.199				ND	ND	
$ 8 Phenol-d5	99		6.046				ND	ND	
$ 9 Nitrobenzene-d5	82		6.887				ND	ND	
$ 10 2-Fluorobiphenyl (Surr)	172		8.431				ND	ND	
$ 11 2,4,6-Tribromophenol	330		9.710				ND	ND	
$ 12 Terphenyl-d14	244		11.638				ND	ND	
25 1,4-Dioxane	88		3.151				ND	ND	
26 N-Nitrosodimethylamine	74		3.617				ND	ND	
27 Pyridine	79		3.675				ND	ND	
20 Dimethylformamide	73	3.953	3.978	-0.025	51	115			NC
28 Ethyl methacrylate	69		4.089					ND	
31 2-Picoline	93		4.374					ND	
32 N-Nitrosomethylethylamine	88		4.504					ND	
35 Acrylamide	71	4.761	4.778	-0.017	34	427			NC
34 Methyl methanesulfonate	80		4.826					ND	
233 n,n'-Dimethylacetamide	44		4.993					ND	
36 N-Nitrosodiethylamine	102		5.254					ND	
37 Ethyl methanesulfonate	79		5.523					ND	
42 Phenylmercaptan	110		5.768					ND	
38 2-Methylcyclohexanone	68		5.820					ND	
39 3-Methylcyclohexanone	69		5.854					ND	
40 4-Methylcyclohexanone	55		5.902					ND	
41 Benzaldehyde	77		6.017				ND	ND	
45 Pentachloroethane	167		6.019					ND	
43 Phenol	94		6.055				ND	ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
44 Aniline	93		6.108				ND	ND	
69 Bis(2-chloroethyl)ether	93		6.147				ND	ND	
46 2-Chlorophenol	128		6.228				ND	ND	
243 n-Decane	57	6.252	6.257	-0.005	92	163067	NC	NC	
47 1,3-Dichlorobenzene	146		6.368				ND	ND	
232 1-Methyl-2-pyrrilidinone	99	6.411	6.421	-0.010	31	1979		NC	
48 1,4-Dichlorobenzene	146		6.426				ND	ND	
49 Benzyl alcohol	108		6.507				ND	ND	
50 1,2-Dichlorobenzene	146		6.570				ND	ND	
56 N-Nitrosopyrrolidine	100		6.572					ND	
286 4-Methyl-1-cyclohexanemeth	55	6.565	6.574	-0.009	0	5631		NC	
51 2-Methylphenol	108		6.594				ND	ND	
59 N-Nitrosomorpholine	56		6.605					ND	
53 2,2'-oxybis[1-chloropropan	45		6.628				ND	ND	
60 2-Toluidine	106	6.593	6.639	-0.046	53	240		NC	
52 Indene	115		6.647				ND	ND	
287 4-Methyl-1-cyclohexanemeth	55	6.718	6.708	0.010	0	3794		NC	
21 3 & 4 Methylphenol	108		6.724				ND	ND	
57 N-Nitrosodi-n-propylamine	70		6.738				ND	ND	
58 Acetophenone	105		6.748				ND	ND	
61 Hexachloroethane	117		6.878				ND	ND	
63 N-Nitrosopiperidine	114		6.884					ND	
62 Nitrobenzene	77		6.902				ND	ND	
64 Isophorone	82		7.104				ND	ND	
68 o,o',o''-Triethylphosphoro	198		7.105					ND	
67 1,3,5-Trichlorobenzene	180		7.123					ND	
66 2-Nitrophenol	139		7.185				ND	ND	
65 2,4-Dimethylphenol	107		7.190				ND	ND	
72 alpha,alpha-Dimethyl phene	58		7.216					ND	
71 Benzoic acid	122		7.238				ND	ND	M
70 Bis(2-chloroethoxy)methane	93		7.267				ND	ND	
73 2,4-Dichlorophenol	162		7.387				ND	ND	
74 1,2,4-Trichlorobenzene	180		7.474				ND	ND	
78 Hexachloropropene	213		7.485					ND	
75 Naphthalene	128		7.546				ND	ND	
76 4-Chloroaniline	127		7.565				ND	ND	
77 2,6-Dichlorophenol	162		7.585				ND	ND	
80 1,2,3-Trichlorobenzene	180		7.590					ND	
79 Hexachlorobutadiene	225		7.652				ND	ND	
81 Benzothiazole	135		7.676					ND	
82 Quinoline	129		7.682					ND	
83 N-Nitrosodi-n-butylamine	84		7.697					ND	
85 p-Phenylene diamine	108		7.716					ND	
84 Caprolactam	113		7.849				ND	ND	
94 Safrole, Total	162		7.894					ND	
86 4-Chloro-3-methylphenol	107		7.955				ND	ND	
87 2-Methylnaphthalene	142		8.138				ND	ND	
225 Isosafrole Peak 1	162		8.144					ND	
90 1,2,3,5-Tetrachlorobenzene	216	8.281	8.191	0.090	93	56218		NC	
88 1-Methylnaphthalene	142		8.224				ND	ND	
89 Hexachlorocyclopentadiene	237		8.282				ND	ND	
91 1,2,4,5-Tetrachlorobenzene	216		8.287				ND	ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
227 Isosafrole Peak 2	162	8.363	8.336	0.027	54	3619		NC	
92 2,4,6-Trichlorophenol	196		8.364				ND	ND	
93 2,4,5-Trichlorophenol	196		8.402				ND	ND	
97 2,4-Toluene diamine	121	8.493	8.412	0.081	92	4865		NC	
246 1-Chloronaphthalene	162	8.522	8.433	0.089	51	86		NC	
99 1,2,3,4 -Tetrachlorobenzen	216		8.446					ND	
96 3,4-Dichloronitrobenzene	109		8.465					ND	
98 1,1'-Biphenyl	154		8.522				ND	ND	
101 Phenyl ether	170	8.430	8.523	-0.093	51	38222		NC	
103 1,4-Naphthoquinone	158		8.543					ND	
100 2-Chloronaphthalene	162		8.556				ND	ND	
104 1,4-Dinitrobenzene	168		8.567					ND	
102 2-Nitroaniline	65		8.618				ND	ND	
105 Dimethyl phthalate	163		8.748				ND	ND	
106 1,3-Dinitrobenzene	168		8.782				ND	ND	
107 2,6-Dinitrotoluene	165		8.806				ND	ND	
109 Acenaphthylene	152		8.921				ND	ND	
110 3-Nitroaniline	138		8.960				ND	ND	
115 Pentachlorobenzene	250		9.034					ND	
111 2,4-Dinitrophenol	184		9.046				ND	ND	
112 Acenaphthene	153		9.066				ND	ND	
113 4-Nitrophenol	109	9.070	9.070	0.000	82	18542	2.00	1.14	
117 1-Naphthylamine	143		9.115					ND	
118 2,3,5,6-Tetrachlorophenol	232		9.120					ND	
114 2,4-Dinitrotoluene	165		9.157				ND	ND	
120 2-Naphthylamine	143		9.178					ND	
116 Dibenzofuran	168		9.210				ND	ND	
122 Thionazin	97		9.269					ND	
119 2,3,4,6-Tetrachlorophenol	232		9.306				ND	ND	
124 N-Nitro-o-toluidine	152		9.332					ND	
121 Diethyl phthalate	149		9.345				ND	ND	
247 Hexadecane	57	9.344	9.349	-0.005	88	180258	NC	NC	
127 Tributyl phosphate	99		9.417					ND	
130 Diphenylamine	169		9.418					ND	
123 4-Chlorophenyl phenyl ethe	204		9.474				ND	ND	
125 4-Nitroaniline	138		9.484				ND	ND	
126 Fluorene	166		9.503				ND	ND	
297 Benzophenone	105	9.508	9.512	-0.004	56	6380		NC	
128 4,6-Dinitro-2-methylphenol	198	9.512	9.513	-0.001	91	7538	2.00	0.8237	
134 Sulfotepp	202		9.519					ND	
131 N-Nitrosodiphenylamine	169		9.571				ND	ND	
135 1,3,5-Trinitrobenzene	213		9.601					ND	
133 Azobenzene	77		9.614				ND	ND	
132 1,2-Diphenylhydrazine	77	9.609	9.614	-0.005	97	237975	1.00	0.9168	
137 Phenacetin	108		9.649					ND	
228 Diallate Peak 1	86		9.659					ND	
138 Phorate	121		9.664					ND	
230 Diallate Peak 2	86		9.736					ND	
140 Dimethoate	87		9.803					ND	
139 4-Bromophenyl phenyl ether	248		9.898				ND	ND	
129 4-Aminobiphenyl	169	9.892	9.962	-0.070	53	3968		NC	
141 Hexachlorobenzene	284		9.989				ND	ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
144 Pronamide	173	9.984	9.991	-0.007	64	22748		NC	
142 Atrazine	200		9.994				ND	ND	
145 Pentachloronitrobenzene	237		10.000					ND	
146 Disulfoton	88	10.133	10.101	0.032	58	514		NC	
147 Dinoseb	211		10.116					ND	
244 n-Octadecane	57	10.123	10.128	-0.005	77	179564	NC	NC	
143 Pentachlorophenol	266	10.137	10.143	-0.006	90	29855	2.00	1.26	
148 Phenanthrene	178		10.330				ND	ND	
149 Anthracene	178		10.374				ND	ND	
152 Methyl parathion	109		10.428					ND	
151 Carbazole	167		10.489				ND	ND	
153 Diphenylsulfone	125		10.672					ND	
154 Di-n-butyl phthalate	149		10.725				ND	ND	
155 Ethyl Parathion	97		10.746					ND	
156 4-Nitroquinoline-1-oxide	190		10.808					ND	
157 Methapyrilene	58		10.851					ND	
158 Isodrin	66		11.068					ND	
159 Fluoranthene	202		11.355				ND	ND	
226 Aramite Peak 1	185		11.419					ND	
160 Benzidine	184		11.422				ND	ND	
229 Aramite Peak 2	185	11.417	11.481	-0.064	52	23857		NC	
161 Pyrene	202		11.557				ND	ND	
163 p-Dimethylamino azobenzene	225		11.587					ND	
164 Chlorobenzilate	139		11.616					ND	
282 Kepone	272		11.764					ND	
167 Famphur	218		11.818					ND	
169 3,3'-Dimethylbenzidine	212		11.866					ND	
168 Butyl benzyl phthalate	149		12.013				ND	ND	
171 2-Acetylaminofluorene	181		12.087					ND	
174 4,4'-Methylene bis(2-chlor	231		12.337					ND	
172 3,3'-Dimethoxybenzidine	244		12.379					ND	
173 Bis(2-ethylhexyl) phthalat	149		12.504				ND	ND	
175 3,3'-Dichlorobenzidine	252		12.538				ND	ND	
176 Hexabromobenzene	232	12.614	12.543	0.071	45	28585		NC	
177 Benzo[a]anthracene	228		12.610				ND	ND	
178 Chrysene	228		12.648				ND	ND	
179 6-Methylchrysene	242		12.895					ND	
180 Di-n-octyl phthalate	149		13.177				ND	ND	
181 7,12-Dimethylbenz(a)anthra	256		13.559					ND	
281 Hexachlorophene	196	13.816	13.628	0.188	0	781		NC	
182 Benzo[b]fluoranthene	252		13.870				ND	ND	
183 Benzo[k]fluoranthene	252		13.903				ND	ND	
184 Benzo[a]pyrene	252		14.355				ND	ND	
185 3-Methylcholanthrene	268		14.535					ND	
187 Dibenz[a,h]acridine	279		15.453					ND	
186 Dibenz[a,j]acridine	279		15.746					ND	
188 Indeno[1,2,3-cd]pyrene	276		16.423				ND	ND	
189 Dibenz(a,h)anthracene	278		16.428				ND	ND	
190 Benzo[g,h,i]perylene	276		17.039				ND	ND	
268 Endrin	1		0.000					ND	
291 Dipropylene Glycol Phenyl	1		0.000					ND	
264 alpha-BHC	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
267 2,6-Diaminotoluene	1		0.000					ND	
270 Toxaphene	1		0.000					ND	
294 Dowanol Peak 3	1		0.000					ND	
290 1-Phenoxy-2-propanol TIC	1		0.000					ND	
275 Dieldrin	1		0.000					ND	
299 Diisobutyl phthalate TIC	1		0.000					ND	
272 2,3-Dinitrotoluene	1		0.000					ND	
262 Isoquinoline	1		0.000					ND	
250 gamma-BHC (Lindane)	1		0.000					ND	
258 Aldrin	1		0.000					ND	
277 Chlorpyrifos	1		0.000					ND	
283 2-Ethoxyethanol	1		0.000					ND	
293 Dowanol Peak 4	1		0.000					ND	
273 3 & 4 Chlorophenol	1		0.000					ND	
259 o-Phenylphenol	1		0.000					ND	
260 Methoxychlor	1		0.000					ND	
251 Endosulfan sulfate	1		0.000					ND	
278 delta-BHC	1		0.000					ND	
252 4-tert-Butylphenol	1		0.000					ND	
253 Endrin aldehyde	1		0.000					ND	
257 Endosulfan I	1		0.000					ND	
261 Endosulfan II	1		0.000					ND	
274 Dibenz(a,i)pyrene	1		0.000					ND	
289 1-Phenoxy-2-propanol	1		0.000					ND	
266 Heptachlor	1		0.000					ND	
292 Dowanol Peak 2	1		0.000					ND	
269 Dibenzo[a,e]pyrene	1		0.000					ND	
271 3 & 4 Phenoxyphenol	1		0.000					ND	
265 Dibenzo[a,h]pyrene	1		0.000					ND	
276 Chlordane (technical)	1		0.000					ND	
249 4-Chlorophenol TIC	1		0.000					ND	
254 2-Chloroaniline	1		0.000					ND	
255 beta-BHC	1		0.000					ND	
285 Chlorobenzene TIC	1		0.000					ND	
279 3,4-Dichloroaniline	1		0.000					ND	
263 Heptachlor epoxide	1		0.000					ND	
150 DFTPP									
166 4,4'-DDE	246		11.583					ND	
165 4,4'-DDD	235	12.532	11.871	0.661	54	737			NR 7
170 4,4'-DDT	235	12.532	12.136	0.396	59	737			NR 7
S 95 Isosafrole	162		5.568					ND	
S 288 4-Methyl-1-cyclohexanemeth	55		6.400					ND	
S 136 Diallate	86		6.701					ND	
S 162 Aramite, Total	185		8.271					ND	
S 295 Dowanol	1		0.000					ND	
S 296 Dowanol Peak 1	1		0.000					ND	
S 191 Methyl Phenols,Total	100		0.000					ND	
S 245 Total Cresols	100		0.000					ND	
T 240 Trimethyl phosphate TIC	110	4.910	5.000	-0.090	0	83			0
T 194 Decane TIC	142	6.252	5.800	0.452	90	163067			0
T 193 Hexamethylphosphoramide TI	135	6.916	6.500	0.416	1	284			0
T 234 2-Isopropylphenol TIC	121	7.243	7.250	-0.007	0	82			0

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
T 235 4-isopropylphenol TIC	121	7.406	7.364	0.042	0	106		0	
T 236 3-isopropylphenol TIC	121	7.406	7.364	0.042	0	106		0	
T 300 Alpha-Terpineol TIC	59	7.526	7.500	0.026	0	632		0	
T 237 3-(1,1-Dimethylethyl Pheno	135		7.720					ND	
T 231 2,3,7,8-TCDD	322		8.850					ND	
T 195 Hydroquinone TIC	110	8.993	9.000	-0.007	1	157		0	
T 192 Octadecane (TIC)	254	13.807	9.600	4.207	90	170501		0	
T 242 Triphenyl Phosphate TIC	326	12.133	11.995	0.133	0	67		0	
T 196 Kepone TIC	272		12.000					ND	
T 241 Tricresyl phosphate TIC	368		12.500					ND	
T 280 2,3,7,8-TCDD TIC	198	12.614	12.495	0.114	0	4876		0	
T 248 2,3,7,8 TCDF TIC	304		13.000					ND	
T 197 Hexachlorophene TIC	198		13.600					ND	
T 239 Tris(2,3-dibromopropyl)pho	201	13.927	13.991	-0.073	0	149		0	

QC Flag Legend

Processing Flags
- NR - Missing Quant Standard
- NC - Not Calibrated
- ND - Not Detected or Marked ND
- 7 - Failed Limit of Detection

Review Flags
- M - Manually Integrated

Reagents:

SMLIST1 L3 W_00006 Amount Added: 1.00 Units: mL

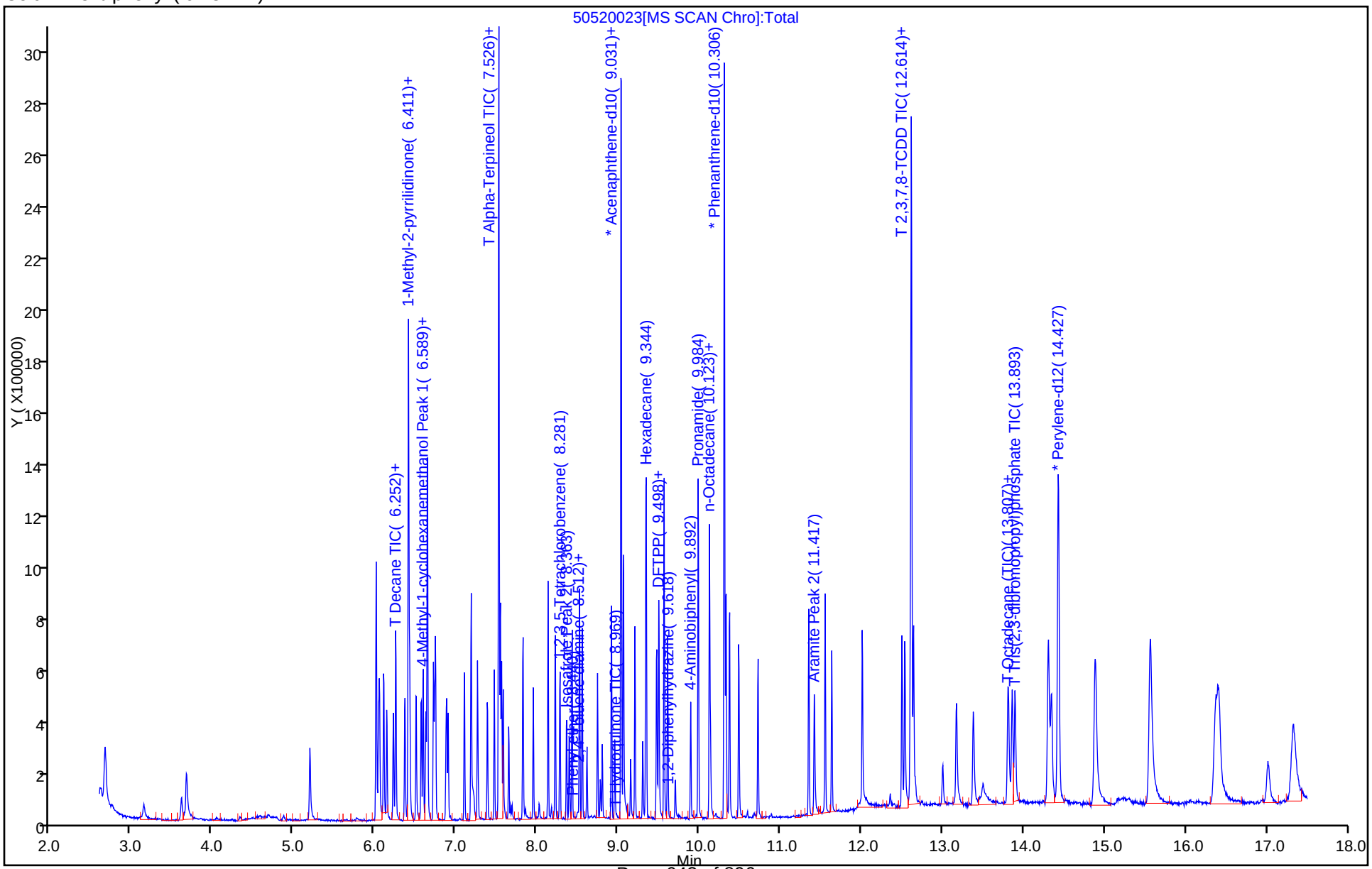
Report Date: 21-May-2015 08:02:55 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520023.D

Injection Date:	20-May-2015 19:06:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	lodv l3			Worklist Smp#:	23
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID: LODV 240-181588/24 Calibration Date: 05/20/2015 19:31

Instrument ID: A4HP9 Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/19/2015 19:33

Lab File ID: 50520024.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzoic acid	Ave	0.2007			1.45	4.00		
2,4-Dinitrophenol	Ave	0.1257			0.621	4.00		
1,2-Diphenylhydrazine(as Azobenzene)	Ave	1.191			1.82	2.00		
1,1'-Biphenyl	Ave	1.528			0.000500	2.00		
1,2,4,5-Tetrachlorobenzene	Ave	0.4013			0.00100	2.00		
1,2,4-Trichlorobenzene	Ave	0.2548			0.000500	2.00		
1,2-Dichlorobenzene	Ave	1.487			0.000500	2.00		
1,3-Dichlorobenzene	Ave	1.545			0.000500	2.00		
1,3-Dinitrobenzene	Ave	0.1850			0.00100	2.00		
1,4-Dichlorobenzene	Ave	1.562			0.000500	2.00		
1,4-Dioxane	Ave	0.9041			0.00100	2.00		
2,3,4,6-Tetrachlorophenol	Ave	0.2445			0.00100	2.00		
2,4,5-Trichlorophenol	Ave	0.3425			0.000500	2.00		
2,4,6-Trichlorophenol	Ave	0.3276			0.000500	2.00		
2,4-Dichlorophenol	Ave	0.2493			0.000500	2.00		
2,4-Dimethylphenol	Ave	0.3630			0.000500	2.00		
2,4-Dinitrotoluene	Ave	0.3227			0.000500	2.00		
2,6-Dichlorophenol	Ave	0.2403			0.00200	2.00		
2,6-Dinitrotoluene	Ave	0.2594			0.000500	2.00		
2-Chloronaphthalene	Ave	1.127			0.000500	2.00		
2-Chlorophenol	Ave	1.581			0.000500	2.00		
2-Methylnaphthalene	Ave	0.6435			0.000100	2.00		
2-Methylphenol	Ave	1.738			0.000500	2.00		
2-Nitroaniline	Ave	0.4439			0.000500	2.00		
2-Nitrophenol	Ave	0.1715			0.000500	2.00		
3 & 4 Methylphenol	Ave	1.836			0.00100	2.00		
3,3'-Dichlorobenzidine	Ave	0.3475			0.00100	4.00		
3-Nitroaniline	Ave	0.3816			0.000500	2.00		
4,6-Dinitro-2-methylphenol	Lin1				0.00400	4.00		
4-Bromophenyl phenyl ether	Ave	0.1674			0.000500	2.00		
4-Chloro-3-methylphenol	Ave	0.3204			0.000500	2.00		
4-Chloroaniline	Ave	0.4836			0.000500	2.00		

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Lab Sample ID: LODV 240-181588/24 | Calibration Date: 05/20/2015 19:31

Instrument ID: A4HP9 | Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS ID: 0.45(mm) | Calib End Date: 05/19/2015 19:33

Lab File ID: 50520024.D | Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Chlorophenyl phenyl ether	Ave	0.4981			0.000500	2.00		
4-Nitroaniline	Ave	0.3296			0.000500	2.00		
4-Nitrophenol	Ave	0.1185			0.00400	4.00		
Acenaphthene	Ave	1.123			0.000100	2.00		
Acenaphthylene	Ave	1.955			0.000100	2.00		
Acetophenone	Ave	2.276			0.000500	2.00		
Aniline	Ave	3.116			0.00100	2.00		
Anthracene	Ave	1.159			0.000100	2.00		
Atrazine	Ave	0.1482			0.000500	4.00		
Azobenzene	Ave	1.193			0.000500	2.00		
Benzaldehyde	Ave	1.430			0.000500	4.00		
Benzidine	Lin1				0.00100	4.00		
Benzo[a]anthracene	Ave	1.130			0.000100	2.00		
Benzo[a]pyrene	Ave	1.182			0.000100	2.00		
Benzo[b]fluoranthene	Ave	1.234			0.000100	2.00		
Benzo[g,h,i]perylene	Ave	0.9195			0.000100	2.00		
Benzo[k]fluoranthene	Ave	1.259			0.000100	2.00		
Benzyl alcohol	Ave	1.281			0.000500	2.00		
bis (2-chloroisopropyl) ether	Ave	2.612			0.000500	2.00		
Bis(2-chloroethoxy)methane	Ave	0.5177			0.000500	2.00		
Bis(2-chloroethyl)ether	Ave	2.009			0.000100	2.00		
Bis(2-ethylhexyl) phthalate	Ave	0.9242			0.000500	2.00		
Butyl benzyl phthalate	Ave	0.6609			0.000500	2.00		
Caprolactam	Ave	0.1206			0.000500	4.00		
Carbazole	Ave	1.046			0.000500	2.00		
Chrysene	Ave	1.028			0.000100	2.00		
Dibenz(a,h)anthracene	Ave	0.9270			0.000100	2.00		
Dibenzofuran	Ave	1.523			0.000100	2.00		
Diethyl phthalate	Ave	1.107			0.00100	2.00		
Dimethyl phthalate	Ave	1.149			0.000500	2.00		

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Lab Sample ID: LODV 240-181588/24 | Calibration Date: 05/20/2015 19:31

Instrument ID: A4HP9 | Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS ID: 0.45(mm) | Calib End Date: 05/19/2015 19:33

Lab File ID: 50520024.D | Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Di-n-butyl phthalate	Ave	1.229			0.00100	2.00		
Di-n-octyl phthalate	Ave	2.107			0.000500	2.00		
Fluoranthene	Ave	0.9936			0.000100	2.00		
Fluorene	Ave	1.237			0.000100	2.00		
Hexachlorobenzene	Ave	0.1506			0.000100	2.00		
Hexachlorobutadiene	Ave	0.1055			0.000500	2.00		
Hexachlorocyclopentadiene	Ave	0.2335			0.000500	2.00		
Hexachloroethane	Ave	0.6369			0.000500	2.00		
Indene	Ave	2.692			0.00100	4.00		
Indeno[1,2,3-cd]pyrene	Ave	1.102			0.000100	2.00		
Isophorone	Ave	0.7995			0.000500	2.00		
Naphthalene	Ave	1.056			0.000100	2.00		
Nitrobenzene	Ave	0.4265			0.000100	2.00		
N-Nitrosodimethylamine	Ave	1.396			0.000500	2.00		
N-Nitrosodi-n-propylamine	Ave	1.203			0.000500	2.00		
N-Nitrosodiphenylamine	Ave	0.5447			0.000500	4.00		
Pentachlorophenol	Ave	0.1092			0.00100	4.00		
Phenanthrene	Ave	1.145			0.000100	2.00		
Phenol	Ave	2.551			0.00100	2.00		
Pyrene	Ave	1.212			0.000100	2.00		
Pyridine	Ave	2.418			0.000500	2.00		
2,4,6-Tribromophenol (Surr)	Ave	0.1049			0.000000	2.00	0*	35-125
2-Fluorobiphenyl (Surr)	Ave	1.141			0.000000	2.00	0*	45-105
2-Fluorophenol (Surr)	Ave	1.729			0.000000	2.00	0*	35-105
Nitrobenzene-d5 (Surr)	Ave	0.4097			0.000000	2.00	0*	35-100
Phenol-d5 (Surr)	Ave	2.335			0.000000	2.00	0*	40-100
Terphenyl-d14 (Surr)	Ave	0.7676			0.000000	2.00	0*	30-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520024.D
Lims ID: lodv l4
Client ID:
Sample Type: LODV
Inject. Date: 20-May-2015 19:31:30 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043844-024
Misc. Info.: LODV L4LODV L4
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-May-2015 08:02:18 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 21-May-2015 07:57:43

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.411	6.411	0.000	96	267443	4.00	4.00	
* 2 Naphthalene-d8	136	7.526	7.527	-0.001	99	1085375	4.00	4.00	
* 3 Acenaphthene-d10	164	9.031	9.037	-0.006	90	537343	4.00	4.00	
* 4 Phenanthrene-d10	188	10.306	10.311	-0.005	96	847474	4.00	4.00	
* 5 Chrysene-d12	240	12.614	12.619	-0.005	92	736125	4.00	4.00	
* 6 Perylene-d12	264	14.427	14.437	-0.010	90	560333	4.00	4.00	
$ 7 2-Fluorophenol	112		5.199				ND	ND	
$ 8 Phenol-d5	99		6.046				ND	ND	
$ 9 Nitrobenzene-d5	82		6.887				ND	ND	
$ 10 2-Fluorobiphenyl (Surr)	172		8.431				ND	ND	
$ 11 2,4,6-Tribromophenol	330		9.710				ND	ND	
$ 12 Terphenyl-d14	244		11.638				ND	ND	
25 1,4-Dioxane	88		3.151				ND	ND	
26 N-Nitrosodimethylamine	74		3.617				ND	ND	
27 Pyridine	79		3.675				ND	ND	
20 Dimethylformamide	73		3.978					ND	
28 Ethyl methacrylate	69		4.089					ND	
31 2-Picoline	93		4.374					ND	
32 N-Nitrosomethylethylamine	88		4.504					ND	
35 Acrylamide	71	4.809	4.778	0.031	17	83			NC
34 Methyl methanesulfonate	80		4.826					ND	
233 n,n'-Dimethylacetamide	44		4.993					ND	
36 N-Nitrosodiethylamine	102		5.254					ND	
37 Ethyl methanesulfonate	79		5.523					ND	
42 Phenylmercaptan	110		5.768					ND	
38 2-Methylcyclohexanone	68	5.805	5.820	-0.015	1	353			NC
39 3-Methylcyclohexanone	69		5.854					ND	
40 4-Methylcyclohexanone	55		5.902					ND	
41 Benzaldehyde	77		6.017				ND	ND	
45 Pentachloroethane	167		6.019					ND	
43 Phenol	94		6.055				ND	ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
44 Aniline	93		6.108				ND	ND	
69 Bis(2-chloroethyl)ether	93		6.147				ND	ND	
46 2-Chlorophenol	128		6.228				ND	ND	
243 n-Decane	57	6.252	6.257	-0.005	92	303976	NC		NC
47 1,3-Dichlorobenzene	146		6.368				ND	ND	
232 1-Methyl-2-pyrrilidinone	99	6.406	6.421	-0.015	31	2458			NC
48 1,4-Dichlorobenzene	146		6.426				ND	ND	
49 Benzyl alcohol	108		6.507				ND	ND	
50 1,2-Dichlorobenzene	146		6.570				ND	ND	
56 N-Nitrosopyrrolidine	100		6.572					ND	
286 4-Methyl-1-cyclohexanemeth	55	6.564	6.574	-0.010	0	11409			NC
51 2-Methylphenol	108		6.594				ND	ND	
59 N-Nitrosomorpholine	56		6.605					ND	
53 2,2'-oxybis[1-chloropropan	45		6.628				ND	ND	
60 2-Toluidine	106		6.639					ND	
52 Indene	115		6.647				ND	ND	
287 4-Methyl-1-cyclohexanemeth	55	6.718	6.708	0.010	0	9484			NC
21 3 & 4 Methylphenol	108		6.724				ND	ND	
57 N-Nitrosodi-n-propylamine	70		6.738				ND	ND	
58 Acetophenone	105		6.748				ND	ND	
61 Hexachloroethane	117		6.878				ND	ND	
63 N-Nitrosopiperidine	114		6.884					ND	
62 Nitrobenzene	77		6.902				ND	ND	
64 Isophorone	82		7.104				ND	ND	
68 o,o',o''-Triethylphosphoro	198		7.105					ND	
67 1,3,5-Trichlorobenzene	180		7.123					ND	
66 2-Nitrophenol	139		7.185				ND	ND	
65 2,4-Dimethylphenol	107		7.190				ND	ND	
72 alpha,alpha-Dimethyl phene	58		7.216					ND	
71 Benzoic acid	122	7.223	7.238	-0.015	87	78940	4.00		1.45
70 Bis(2-chloroethoxy)methane	93		7.267				ND	ND	
73 2,4-Dichlorophenol	162		7.387				ND	ND	
74 1,2,4-Trichlorobenzene	180		7.474				ND	ND	
78 Hexachloropropene	213		7.485					ND	
75 Naphthalene	128		7.546				ND	ND	
76 4-Chloroaniline	127		7.565				ND	ND	
77 2,6-Dichlorophenol	162		7.585				ND	ND	
80 1,2,3-Trichlorobenzene	180		7.590					ND	
79 Hexachlorobutadiene	225		7.652				ND	ND	
81 Benzothiazole	135		7.676					ND	
82 Quinoline	129		7.682					ND	
83 N-Nitrosodi-n-butylamine	84		7.697					ND	
85 p-Phenylene diamine	108		7.716					ND	
84 Caprolactam	113		7.849				ND	ND	
94 Safrole, Total	162		7.894					ND	
86 4-Chloro-3-methylphenol	107		7.955				ND	ND	
87 2-Methylnaphthalene	142		8.138				ND	ND	
225 Isosafrole Peak 1	162	8.219	8.144	0.075	52	180			NC
90 1,2,3,5-Tetrachlorobenzene	216	8.281	8.191	0.090	95	115815			NC
88 1-Methylnaphthalene	142		8.224				ND	ND	
89 Hexachlorocyclopentadiene	237		8.282				ND	ND	
91 1,2,4,5-Tetrachlorobenzene	216		8.287				ND	ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
227 Isosafrole Peak 2	162	8.397	8.336	0.061	52	3222		NC	
92 2,4,6-Trichlorophenol	196		8.364				ND	ND	
93 2,4,5-Trichlorophenol	196		8.402				ND	ND	
97 2,4-Toluene diamine	121	8.488	8.412	0.076	84	6773		NC	
246 1-Chloronaphthalene	162	8.358	8.433	-0.075	52	9689		NC	
99 1,2,3,4 -Tetrachlorobenzen	216		8.446					ND	
96 3,4-Dichloronitrobenzene	109		8.465					ND	
98 1,1'-Biphenyl	154		8.522				ND	ND	
101 Phenyl ether	170	8.430	8.523	-0.093	51	73464		NC	
103 1,4-Naphthoquinone	158		8.543					ND	
100 2-Chloronaphthalene	162		8.556				ND	ND	
104 1,4-Dinitrobenzene	168		8.567					ND	
102 2-Nitroaniline	65		8.618				ND	ND	
105 Dimethyl phthalate	163		8.748				ND	ND	
106 1,3-Dinitrobenzene	168		8.782				ND	ND	
107 2,6-Dinitrotoluene	165		8.806				ND	ND	
109 Acenaphthylene	152		8.921				ND	ND	
110 3-Nitroaniline	138		8.960				ND	ND	
115 Pentachlorobenzene	250		9.034					ND	
111 2,4-Dinitrophenol	184	9.046	9.046	0.000	39	10477	4.00	0.6206	
112 Acenaphthene	153		9.066				ND	ND	
113 4-Nitrophenol	109		9.070				ND	ND	
117 1-Naphthylamine	143		9.115					ND	
118 2,3,5,6-Tetrachlorophenol	232		9.120					ND	
114 2,4-Dinitrotoluene	165		9.157				ND	ND	
120 2-Naphthylamine	143		9.178					ND	
116 Dibenzofuran	168		9.210				ND	ND	
122 Thionazin	97		9.269					ND	
119 2,3,4,6-Tetrachlorophenol	232		9.306				ND	ND	
124 N-Nitro-o-toluidine	152		9.332					ND	
121 Diethyl phthalate	149		9.345				ND	ND	
247 Hexadecane	57	9.344	9.349	-0.005	87	346250	NC	NC	
127 Tributyl phosphate	99		9.417					ND	
130 Diphenylamine	169		9.418					ND	
123 4-Chlorophenyl phenyl ethe	204		9.474				ND	ND	
125 4-Nitroaniline	138		9.484				ND	ND	
126 Fluorene	166		9.503				ND	ND	
297 Benzophenone	105	9.507	9.512	-0.005	53	13788		NC	
128 4,6-Dinitro-2-methylphenol	198		9.513				ND	ND	
134 Sulfotepp	202		9.519					ND	
131 N-Nitrosodiphenylamine	169		9.571				ND	ND	
135 1,3,5-Trinitrobenzene	213		9.601					ND	
133 Azobenzene	77		9.614				ND	ND	
132 1,2-Diphenylhydrazine	77	9.608	9.614	-0.006	97	459049	2.00	1.82	
137 Phenacetin	108		9.649					ND	
228 Diallate Peak 1	86		9.659					ND	
138 Phorate	121		9.664					ND	
230 Diallate Peak 2	86		9.736					ND	
140 Dimethoate	87	9.892	9.803	0.089	51	921		NC	
139 4-Bromophenyl phenyl ether	248		9.898				ND	ND	
129 4-Aminobiphenyl	169	9.892	9.962	-0.070	54	7541		NC	
141 Hexachlorobenzene	284		9.989				ND	ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
144 Pronamide	173	9.984	9.991	-0.007	63	41014			NC
142 Atrazine	200		9.994				ND	ND	
145 Pentachloronitrobenzene	237		10.000					ND	
146 Disulfoton	88	10.133	10.101	0.032	58	1118			NC
147 Dinoseb	211		10.116					ND	
244 n-Octadecane	57	10.123	10.128	-0.005	77	346610	NC		NC
143 Pentachlorophenol	266		10.143				ND	ND	
148 Phenanthrene	178		10.330				ND	ND	
149 Anthracene	178		10.374				ND	ND	
152 Methyl parathion	109		10.428					ND	
151 Carbazole	167		10.489				ND	ND	
153 Diphenylsulfone	125		10.672					ND	
154 Di-n-butyl phthalate	149		10.725				ND	ND	
155 Ethyl Parathion	97	10.676	10.746	-0.070	54	1214			NC
156 4-Nitroquinoline-1-oxide	190		10.808					ND	
157 Methapyrilene	58		10.851					ND	
158 Isodrin	66		11.068					ND	
159 Fluoranthene	202		11.355				ND	ND	
226 Aramite Peak 1	185		11.419					ND	
160 Benzidine	184		11.422				ND	ND	
229 Aramite Peak 2	185	11.498	11.481	0.017	50	531			NC
161 Pyrene	202		11.557				ND	ND	
163 p-Dimethylamino azobenzene	225		11.587					ND	
164 Chlorobenzilate	139		11.616					ND	
282 Kepone	272		11.764					ND	
167 Famphur	218		11.818					ND	
169 3,3'-Dimethylbenzidine	212		11.866					ND	
168 Butyl benzyl phthalate	149		12.013				ND	ND	
171 2-Acetylaminofluorene	181		12.087					ND	
174 4,4'-Methylene bis(2-chlor	231		12.337					ND	
172 3,3'-Dimethoxybenzidine	244		12.379					ND	
173 Bis(2-ethylhexyl) phthalat	149		12.504				ND	ND	
175 3,3'-Dichlorobenzidine	252		12.538				ND	ND	
176 Hexabromobenzene	232	12.614	12.543	0.071	49	30266			NC
177 Benzo[a]anthracene	228		12.610				ND	ND	
178 Chrysene	228		12.648				ND	ND	
179 6-Methylchrysene	242		12.895					ND	
180 Di-n-octyl phthalate	149		13.177				ND	ND	
181 7,12-Dimethylbenz(a)anthra	256		13.559					ND	
281 Hexachlorophene	196		13.628					ND	
182 Benzo[b]fluoranthene	252		13.870				ND	ND	
183 Benzo[k]fluoranthene	252		13.903				ND	ND	
184 Benzo[a]pyrene	252		14.355				ND	ND	
185 3-Methylcholanthrene	268		14.535					ND	
187 Dibenz[a,h]acridine	279		15.453					ND	
186 Dibenz[a,j]acridine	279		15.746					ND	
188 Indeno[1,2,3-cd]pyrene	276		16.423				ND	ND	
189 Dibenz(a,h)anthracene	278		16.428				ND	ND	
190 Benzo[g,h,i]perylene	276		17.039				ND	ND	
268 Endrin	1		0.000					ND	
291 Dipropylene Glycol Phenyl	1		0.000					ND	
264 alpha-BHC	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
267 2,6-Diaminotoluene	1		0.000					ND	
270 Toxaphene	1		0.000					ND	
294 Dowanol Peak 3	1		0.000					ND	
290 1-Phenoxy-2-propanol TIC	1		0.000					ND	
275 Dieldrin	1		0.000					ND	
299 Diisobutyl phthalate TIC	1		0.000					ND	
272 2,3-Dinitrotoluene	1		0.000					ND	
262 Isoquinoline	1		0.000					ND	
250 gamma-BHC (Lindane)	1		0.000					ND	
258 Aldrin	1		0.000					ND	
277 Chlorpyrifos	1		0.000					ND	
283 2-Ethoxyethanol	1		0.000					ND	
293 Dowanol Peak 4	1		0.000					ND	
273 3 & 4 Chlorophenol	1		0.000					ND	
259 o-Phenylphenol	1		0.000					ND	
260 Methoxychlor	1		0.000					ND	
251 Endosulfan sulfate	1		0.000					ND	
278 delta-BHC	1		0.000					ND	
252 4-tert-Butylphenol	1		0.000					ND	
253 Endrin aldehyde	1		0.000					ND	
257 Endosulfan I	1		0.000					ND	
261 Endosulfan II	1		0.000					ND	
274 Dibenz(a,i)pyrene	1		0.000					ND	
289 1-Phenoxy-2-propanol	1		0.000					ND	
266 Heptachlor	1		0.000					ND	
292 Dowanol Peak 2	1		0.000					ND	
269 Dibenzo[a,e]pyrene	1		0.000					ND	
271 3 & 4 Phenoxyphenol	1		0.000					ND	
265 Dibenzo[a,h]pyrene	1		0.000					ND	
276 Chlordane (technical)	1		0.000					ND	
249 4-Chlorophenol TIC	1		0.000					ND	
254 2-Chloroaniline	1		0.000					ND	
255 beta-BHC	1		0.000					ND	
285 Chlorobenzene TIC	1		0.000					ND	
279 3,4-Dichloroaniline	1		0.000					ND	
263 Heptachlor epoxide	1		0.000					ND	
150 DFTPP									
166 4,4'-DDE	246		11.583					ND	
165 4,4'-DDD	235	12.537	11.871	0.666	54	1288		NR	7
170 4,4'-DDT	235	12.537	12.136	0.401	59	1288		NR	7
S 95 Isosafrole	162		5.568					ND	
S 288 4-Methyl-1-cyclohexanemeth	55		6.400					ND	
S 136 Diallate	86		6.701					ND	
S 162 Aramite, Total	185		8.271					ND	
S 295 Dowanol	1		0.000					ND	
S 296 Dowanol Peak 1	1		0.000					ND	
S 191 Methyl Phenols,Total	100		0.000					ND	
S 245 Total Cresols	100		0.000					ND	
T 240 Trimethyl phosphate TIC	110	4.843	5.000	-0.157	0	84		0	
T 194 Decane TIC	142	6.252	5.800	0.452	76	303976		0	
T 193 Hexamethylphosphoramide TI	135	6.310	6.500	-0.190	1	373		0	
T 234 2-Isopropylphenol TIC	121	7.242	7.250	-0.008	0	274		0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
T 235 4-isopropylphenol TIC	121	7.363	7.364	-0.001	0	117		0	
T 236 3-isopropylphenol TIC	121	7.363	7.364	-0.001	0	117		0	
T 300 Alpha-Terpineol TIC	59	7.478	7.500	-0.022	0	258		0	
T 237 3-(1,1-Dimethylethyl Pheno	135	7.719	7.720	-0.001	1	102		0	
T 231 2,3,7,8-TCDD	322		8.850					ND	
T 195 Hydroquinone TIC	110	9.003	9.000	0.002	1	125		0	
T 192 Octadecane (TIC)	254	13.379	9.600	3.779	91	58509		0	
T 242 Triphenyl Phosphate TIC	326	12.056	11.995	0.056	0	194		0	
T 196 Kepone TIC	272		12.000					ND	
T 241 Tricresyl phosphate TIC	368	12.806	12.495	0.306	0	73		0	
T 280 2,3,7,8-TCDD TIC	198	12.532	12.495	0.032	0	752		0	
T 248 2,3,7,8 TCDF TIC	304		13.000					ND	
T 197 Hexachlorophene TIC	198		13.600					ND	
T 239 Tris(2,3-dibromopropyl)pho	201	13.893	13.991	-0.107	0	1290		0	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard
NC - Not Calibrated
ND - Not Detected or Marked ND
7 - Failed Limit of Detection

Reagents:

SMLIST1 L4 W_00006 Amount Added: 1.00 Units: mL

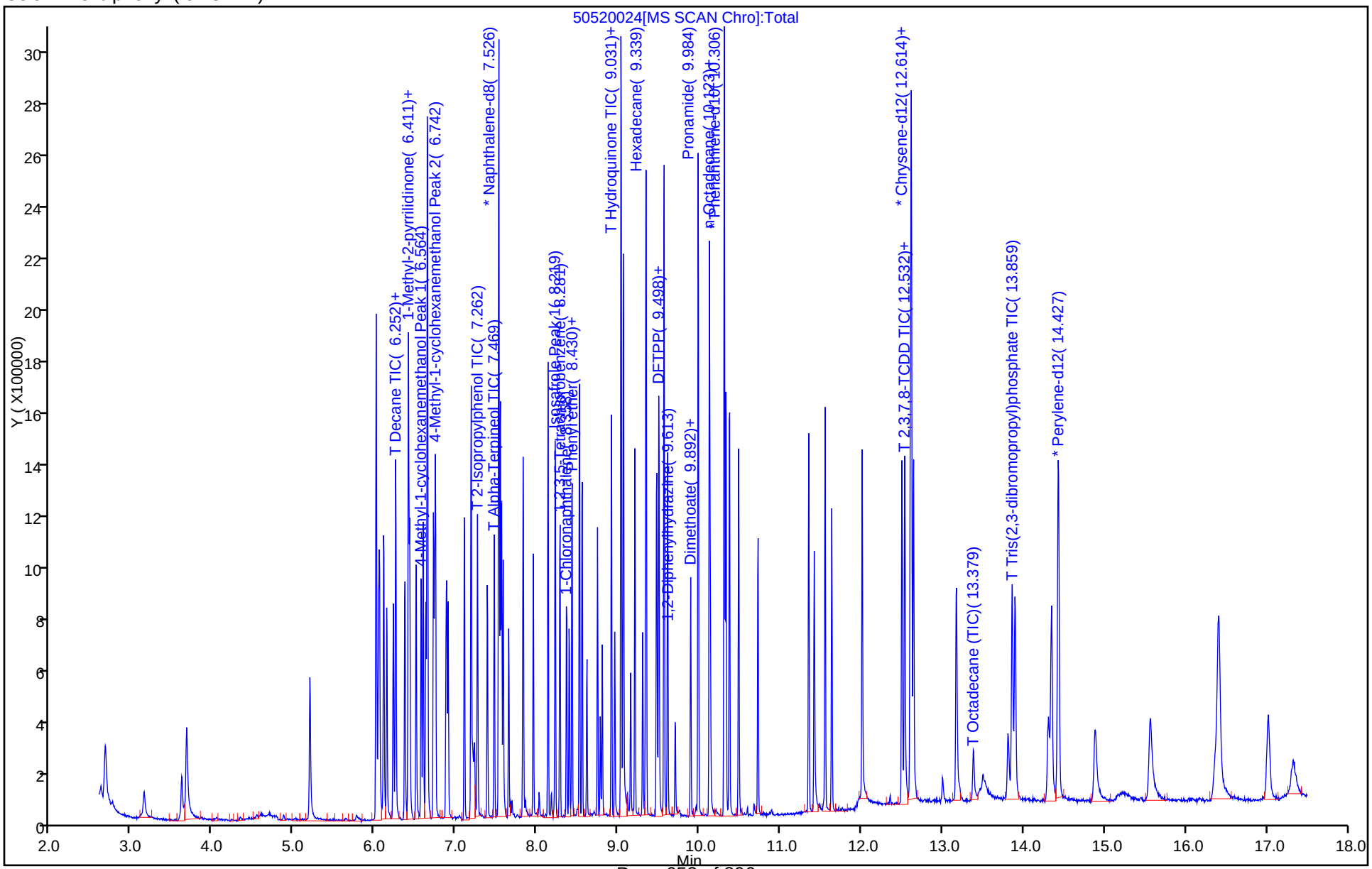
Report Date: 21-May-2015 08:06:38 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520024.D

Injection Date:	20-May-2015 19:31:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	lodv l4			Worklist Smp#:	24
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID: CCV 240-181781/2 Calibration Date: 05/21/2015 07:55

Instrument ID: A4HP9 Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/19/2015 19:33

Lab File ID: 50521002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.9041	0.8586	0.0500	9.50	10.0	-5.0	20.0
N-Nitrosodimethylamine	Ave	1.396	1.285	0.0500	9.20	10.0	-8.0	20.0
Pyridine	Ave	2.418	2.324	0.0500	9.61	10.0	-3.9	20.0
Benzaldehyde	Ave	1.430	1.280	0.0500	17.9	20.0	-10.5	20.0
Phenol	Ave	2.551	2.324	0.0500	9.11	10.0	-8.9	20.0
Aniline	Ave	3.116	2.868	0.0500	9.20	10.0	-8.0	20.0
Bis(2-chloroethyl)ether	Ave	2.009	1.952	0.0500	9.71	10.0	-2.9	20.0
2-Chlorophenol	Ave	1.581	1.541	0.0500	9.75	10.0	-2.5	20.0
1,3-Dichlorobenzene	Ave	1.545	1.525	0.0500	9.87	10.0	-1.3	20.0
1,4-Dichlorobenzene	Ave	1.562	1.528	0.0500	9.78	10.0	-2.2	20.0
Benzyl alcohol	Ave	1.281	1.181	0.0500	9.22	10.0	-7.8	20.0
1,2-Dichlorobenzene	Ave	1.487	1.467	0.0500	9.87	10.0	-1.3	20.0
2-Methylphenol	Ave	1.738	1.634	0.0500	9.40	10.0	-6.0	20.0
bis (2-chloroisopropyl) ether	Ave	2.612	2.352	0.0500	9.00	10.0	-10.0	20.0
Indene	Ave	2.692	2.359	0.0500	17.5	20.0	-12.4	20.0
3 & 4 Methylphenol	Ave	1.836	1.712	0.0500	9.33	10.0	-6.7	20.0
N-Nitrosodi-n-propylamine	Ave	1.203	1.062	0.0500	8.82	10.0	-11.8	20.0
Acetophenone	Ave	2.276	2.087	0.0500	9.17	10.0	-8.3	20.0
Hexachloroethane	Ave	0.6369	0.6043	0.0500	9.49	10.0	-5.1	20.0
Nitrobenzene	Ave	0.4265	0.4193	0.0500	9.83	10.0	-1.7	20.0
Isophorone	Ave	0.7995	0.7507	0.0500	9.39	10.0	-6.1	20.0
2-Nitrophenol	Ave	0.1715	0.1773	0.0500	10.3	10.0	3.4	20.0
2,4-Dimethylphenol	Ave	0.3630	0.3452	0.0500	9.51	10.0	-4.9	20.0
Benzoic acid	Ave	0.2007	0.2167	0.0500	21.6	20.0	7.9	20.0
Bis(2-chloroethoxy)methane	Ave	0.5177	0.4868	0.0500	9.40	10.0	-6.0	20.0
2,4-Dichlorophenol	Ave	0.2493	0.2539	0.0500	10.2	10.0	1.8	20.0
1,2,4-Trichlorobenzene	Ave	0.2548	0.2600	0.0500	10.2	10.0	2.1	20.0
Naphthalene	Ave	1.056	1.016	0.0500	9.62	10.0	-3.8	20.0
4-Chloroaniline	Ave	0.4836	0.4534	0.0500	9.38	10.0	-6.2	20.0
2,6-Dichlorophenol	Ave	0.2403	0.2459	0.0500	10.2	10.0	2.4	20.0
Hexachlorobutadiene	Ave	0.1055	0.1096	0.0500	10.4	10.0	3.9	20.0
Caprolactam	Ave	0.1206	0.1200	0.0500	19.9	20.0	-0.5	20.0
4-Chloro-3-methylphenol	Ave	0.3204	0.3049	0.0500	9.52	10.0	-4.8	20.0
2-Methylnaphthalene	Ave	0.6435	0.6122	0.0500	9.51	10.0	-4.9	20.0
Hexachlorocyclopentadiene	Ave	0.2335	0.2279	0.0500	9.76	10.0	-2.4	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.4013	0.3807	0.0500	9.49	10.0	-5.1	20.0
2,4,6-Trichlorophenol	Ave	0.3276	0.3270	0.0500	9.98	10.0	-0.2	20.0
2,4,5-Trichlorophenol	Ave	0.3425	0.3370	0.0500	9.84	10.0	-1.6	20.0
1,1'-Biphenyl	Ave	1.528	1.427	0.0500	9.34	10.0	-6.6	20.0
2-Chloronaphthalene	Ave	1.127	1.067	0.0500	9.46	10.0	-5.4	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID: CCV 240-181781/2 Calibration Date: 05/21/2015 07:55

Instrument ID: A4HP9 Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/19/2015 19:33

Lab File ID: 50521002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Nitroaniline	Ave	0.4439	0.4261	0.0500	9.60	10.0	-4.0	20.0
Dimethyl phthalate	Ave	1.149	1.129	0.0500	9.82	10.0	-1.8	20.0
1,3-Dinitrobenzene	Ave	0.1850	0.2049	0.0500	11.1	10.0	10.7	20.0
2,6-Dinitrotoluene	Ave	0.2594	0.2804	0.0500	10.8	10.0	8.1	20.0
Acenaphthylene	Ave	1.955	1.841	0.0500	9.42	10.0	-5.8	20.0
3-Nitroaniline	Ave	0.3816	0.3653	0.0500	9.57	10.0	-4.3	20.0
2,4-Dinitrophenol	Ave	0.1257	0.1381	0.0500	22.0	20.0	9.9	20.0
Acenaphthene	Ave	1.123	1.008	0.0500	8.98	10.0	-10.2	20.0
4-Nitrophenol	Ave	0.1185	0.1232	0.0500	20.8	20.0	3.9	20.0
2,4-Dinitrotoluene	Ave	0.3227	0.3414	0.0500	10.6	10.0	5.8	20.0
Dibenzofuran	Ave	1.523	1.470	0.0500	9.65	10.0	-3.5	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.2445	0.2316	0.0500	9.47	10.0	-5.3	20.0
Diethyl phthalate	Ave	1.107	0.9817	0.0500	8.87	10.0	-11.3	20.0
4-Chlorophenyl phenyl ether	Ave	0.4981	0.4789	0.0500	9.61	10.0	-3.9	20.0
4-Nitroaniline	Ave	0.3296	0.3612	0.0500	11.0	10.0	9.6	20.0
Fluorene	Ave	1.237	1.132	0.0500	9.15	10.0	-8.5	20.0
4,6-Dinitro-2-methylphenol	Lin1		0.1160	0.0500	22.5	20.0	12.5	20.0
N-Nitrosodiphenylamine	Ave	0.5447	0.5228	0.0500	19.2	20.0	-4.0	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	1.191	1.182	0.0500	9.91	10.0	-0.8	20.0
Azobenzene	Ave	1.193	1.182	0.0500	9.91	10.0	-0.9	20.0
4-Bromophenyl phenyl ether	Ave	0.1674	0.1743	0.0500	10.4	10.0	4.1	20.0
Hexachlorobenzene	Ave	0.1506	0.1437	0.0500	9.54	10.0	-4.6	20.0
Atrazine	Ave	0.1482	0.1439	0.0500	19.4	20.0	-2.9	20.0
Pentachlorophenol	Ave	0.1092	0.1130	0.0500	20.7	20.0	3.5	20.0
Phenanthrene	Ave	1.145	1.120	0.0500	9.78	10.0	-2.2	20.0
Anthracene	Ave	1.159	1.134	0.0500	9.78	10.0	-2.2	20.0
Carbazole	Ave	1.046	1.130	0.0500	10.8	10.0	8.1	20.0
Di-n-butyl phthalate	Ave	1.229	1.359	0.0500	11.1	10.0	10.6	20.0
Fluoranthene	Ave	0.9936	1.093	0.0500	11.0	10.0	10.0	20.0
Benzidine	Lin1		0.6593	0.0500	17.9	20.0	-10.4	20.0
Pyrene	Ave	1.212	1.210	0.0500	9.98	10.0	-0.2	20.0
Butyl benzyl phthalate	Ave	0.6609	0.6990	0.0500	10.6	10.0	5.8	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.9242	0.9922	0.0500	10.7	10.0	7.4	20.0
3,3'-Dichlorobenzidine	Ave	0.3475	0.3630	0.0500	20.9	20.0	4.5	20.0
Benzo[a]anthracene	Ave	1.130	1.122	0.0500	9.93	10.0	-0.7	20.0
Chrysene	Ave	1.028	1.041	0.0500	10.1	10.0	1.2	20.0
Di-n-octyl phthalate	Ave	2.107	2.196	0.0500	10.4	10.0	4.3	20.0
Benzo[b]fluoranthene	Ave	1.234	1.286	0.0500	10.4	10.0	4.2	20.0
Benzo[k]fluoranthene	Ave	1.259	1.285	0.0500	10.2	10.0	2.1	20.0
Benzo[a]pyrene	Ave	1.182	1.228	0.0500	10.4	10.0	3.9	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID: CCV 240-181781/2 Calibration Date: 05/21/2015 07:55

Instrument ID: A4HP9 Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/19/2015 19:33

Lab File ID: 50521002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Indeno[1,2,3-cd]pyrene	Ave	1.102	1.213	0.0500	11.0	10.0	10.1	20.0
Dibenz(a,h)anthracene	Ave	0.9270	1.004	0.0500	10.8	10.0	8.3	20.0
Benzo[g,h,i]perylene	Ave	0.9195	1.009	0.0500	11.0	10.0	9.8	20.0
2-Fluorophenol (Surr)	Ave	1.729	1.661	0.0500	9.61	10.0	-3.9	20.0
Phenol-d5 (Surr)	Ave	2.335	2.149	0.0500	9.21	10.0	-7.9	20.0
Nitrobenzene-d5 (Surr)	Ave	0.4097	0.4044	0.0500	9.87	10.0	-1.3	20.0
2-Fluorobiphenyl (Surr)	Ave	1.141	1.112	0.0500	9.75	10.0	-2.5	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1049	0.0986	0.0500	9.39	10.0	-6.1	20.0
Terphenyl-d14 (Surr)	Ave	0.7676	0.7429	0.0500	9.68	10.0	-3.2	20.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150521-43883.b\50521002.D
Lims ID: ccv lst1
Client ID:
Sample Type: CCVIS
Inject. Date: 21-May-2015 07:55:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043883-002
Misc. Info.: CCV LST1CCV LST1
Operator ID: 001574 Instrument ID: A4HP9
Sublist: chrom-8270 _9*sub34

Method: \\Ncchrom\ChromData\A4HP9\20150521-43883.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-May-2015 14:54:07 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 21-May-2015 08:46:05

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.397	6.397	0.000	93	317436	4.00	4.00	
* 2 Naphthalene-d8	136	7.513	7.513	0.000	99	1283281	4.00	4.00	
* 3 Acenaphthene-d10	164	9.023	9.023	0.000	87	600482	4.00	4.00	
* 4 Phenanthrene-d10	188	10.297	10.297	0.000	96	822233	4.00	4.00	
* 5 Chrysene-d12	240	12.601	12.601	0.000	92	766637	4.00	4.00	
* 6 Perylene-d12	264	14.404	14.404	0.000	90	607229	4.00	4.00	
$ 7 2-Fluorophenol	112	5.181	5.181	0.000	91	1317889	10.0	9.61	
$ 8 Phenol-d5	99	6.032	6.032	0.000	80	1705765	10.0	9.21	
$ 9 Nitrobenzene-d5	82	6.874	6.874	0.000	86	1297447	10.0	9.87	
$ 10 2-Fluorobiphenyl (Surr)	172	8.417	8.417	0.000	94	1669515	10.0	9.75	
$ 11 2,4,6-Tribromophenol	330	9.692	9.692	0.000	80	147948	10.0	9.39	
$ 12 Terphenyl-d14	244	11.620	11.620	0.000	97	1423777	10.0	9.68	
25 1,4-Dioxane	88	3.108	3.108	0.000	93	681376	10.0	9.50	M
26 N-Nitrosodimethylamine	74	3.584	3.584	0.000	83	1019730	10.0	9.20	
27 Pyridine	79	3.642	3.642	0.000	98	1844240	10.0	9.61	
41 Benzaldehyde	77	6.003	6.003	0.000	93	2031108	20.0	17.9	
43 Phenol	94	6.046	6.046	0.000	91	1844414	10.0	9.11	
44 Aniline	93	6.095	6.095	0.000	98	2275825	10.0	9.20	
69 Bis(2-chloroethyl)ether	93	6.133	6.133	0.000	92	1548710	10.0	9.71	
46 2-Chlorophenol	128	6.215	6.215	0.000	97	1222734	10.0	9.75	
243 n-Decane	57	6.244	6.244	0.000	91	1626707	NC	NC	
47 1,3-Dichlorobenzene	146	6.354	6.354	0.000	97	1209934	10.0	9.87	
48 1,4-Dichlorobenzene	146	6.417	6.417	0.000	93	1212356	10.0	9.78	
49 Benzyl alcohol	108	6.494	6.494	0.000	95	937592	10.0	9.22	
50 1,2-Dichlorobenzene	146	6.556	6.556	0.000	96	1163924	10.0	9.87	
51 2-Methylphenol	108	6.580	6.580	0.000	74	1296849	10.0	9.40	
53 2,2'-oxybis[1-chloropropan	45	6.614	6.614	0.000	85	1866280	10.0	9.00	
52 Indene	115	6.633	6.633	0.000	80	3743633	20.0	17.5	
21 3 & 4 Methylphenol	108	6.710	6.710	0.000	87	1358469	10.0	9.33	
57 N-Nitrosodi-n-propylamine	70	6.724	6.724	0.000	88	842500	10.0	8.82	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
58 Acetophenone	105	6.734	6.734	0.000	77	1655924	10.0	9.17	
61 Hexachloroethane	117	6.864	6.864	0.000	84	479561	10.0	9.49	
62 Nitrobenzene	77	6.893	6.893	0.000	78	1345293	10.0	9.83	
64 Isophorone	82	7.090	7.090	0.000	96	2408505	10.0	9.39	
66 2-Nitrophenol	139	7.172	7.172	0.000	75	568861	10.0	10.3	
65 2,4-Dimethylphenol	107	7.177	7.177	0.000	95	1107522	10.0	9.51	
71 Benzoic acid	122	7.234	7.234	0.000	80	1390139	20.0	21.6	
70 Bis(2-chloroethoxy)methane	93	7.253	7.253	0.000	92	1561792	10.0	9.40	
73 2,4-Dichlorophenol	162	7.374	7.374	0.000	96	814653	10.0	10.2	
74 1,2,4-Trichlorobenzene	180	7.460	7.460	0.000	92	834268	10.0	10.2	
75 Naphthalene	128	7.532	7.532	0.000	97	3258418	10.0	9.62	
76 4-Chloroaniline	127	7.552	7.552	0.000	54	1454738	10.0	9.38	M
77 2,6-Dichlorophenol	162	7.571	7.571	0.000	65	788976	10.0	10.2	
79 Hexachlorobutadiene	225	7.638	7.638	0.000	95	351574	10.0	10.4	
84 Caprolactam	113	7.835	7.835	0.000	84	770007	20.0	19.9	
86 4-Chloro-3-methylphenol	107	7.946	7.946	0.000	91	978321	10.0	9.52	
87 2-Methylnaphthalene	142	8.124	8.124	0.000	91	1963984	10.0	9.51	
88 1-Methylnaphthalene	142	8.210	8.210	0.000	91	1747085	10.0	9.74	
89 Hexachlorocyclopentadiene	237	8.268	8.268	0.000	79	342114	10.0	9.76	
91 1,2,4,5-Tetrachlorobenzene	216	8.273	8.273	0.000	96	571575	10.0	9.49	
92 2,4,6-Trichlorophenol	196	8.350	8.350	0.000	94	490833	10.0	9.98	
93 2,4,5-Trichlorophenol	196	8.388	8.388	0.000	94	505871	10.0	9.84	
98 1,1'-Biphenyl	154	8.509	8.509	0.000	96	2142782	10.0	9.34	
100 2-Chloronaphthalene	162	8.542	8.542	0.000	91	1601184	10.0	9.46	
102 2-Nitroaniline	65	8.605	8.605	0.000	86	639652	10.0	9.60	
105 Dimethyl phthalate	163	8.735	8.735	0.000	97	1694443	10.0	9.82	
106 1,3-Dinitrobenzene	168	8.768	8.768	0.000	84	307601	10.0	11.1	
107 2,6-Dinitrotoluene	165	8.792	8.792	0.000	70	420994	10.0	10.8	
109 Acenaphthylene	152	8.903	8.903	0.000	94	2763765	10.0	9.42	
110 3-Nitroaniline	138	8.946	8.946	0.000	94	548339	10.0	9.57	
111 2,4-Dinitrophenol	184	9.033	9.033	0.000	83	414751	20.0	22.0	
112 Acenaphthene	153	9.052	9.052	0.000	91	1513163	10.0	8.98	
113 4-Nitrophenol	109	9.057	9.057	0.000	45	369763	20.0	20.8	
114 2,4-Dinitrotoluene	165	9.143	9.143	0.000	82	512515	10.0	10.6	
116 Dibenzofuran	168	9.196	9.196	0.000	91	2206477	10.0	9.65	
119 2,3,4,6-Tetrachlorophenol	232	9.292	9.292	0.000	72	347671	10.0	9.47	
121 Diethyl phthalate	149	9.331	9.331	0.000	98	1473732	10.0	8.87	
247 Hexadecane	57	9.336	9.336	0.000	88	1566316	NC	NC	
123 4-Chlorophenyl phenyl ethe	204	9.461	9.461	0.000	94	718961	10.0	9.61	
125 4-Nitroaniline	138	9.470	9.470	0.000	85	542229	10.0	11.0	
126 Fluorene	166	9.490	9.490	0.000	98	1699184	10.0	9.15	
128 4,6-Dinitro-2-methylphenol	198	9.499	9.499	0.000	89	476790	20.0	22.5	
131 N-Nitrosodiphenylamine	169	9.557	9.557	0.000	98	2149164	20.0	19.2	
133 Azobenzene	77	9.600	9.600	0.000	95	2430573	10.0	9.91	
132 1,2-Diphenylhydrazine	77	9.600	9.600	0.000	96	2430519	10.0	9.91	
139 4-Bromophenyl phenyl ether	248	9.884	9.884	0.000	67	358210	10.0	10.4	
141 Hexachlorobenzene	284	9.975	9.975	0.000	80	295455	10.0	9.54	
142 Atrazine	200	9.980	9.980	0.000	82	591653	20.0	19.4	
244 n-Octadecane	57	10.115	10.115	0.000	77	1629657	NC	NC	
143 Pentachlorophenol	266	10.124	10.124	0.000	84	464721	20.0	20.7	
148 Phenanthrene	178	10.317	10.317	0.000	97	2302723	10.0	9.78	
149 Anthracene	178	10.360	10.360	0.000	97	2331472	10.0	9.78	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
151 Carbazole	167	10.475	10.475	0.000	82	2323639	10.0	10.8	
154 Di-n-butyl phthalate	149	10.711	10.711	0.000	99	2792678	10.0	11.1	
159 Fluoranthene	202	11.336	11.336	0.000	98	2246108	10.0	11.0	
160 Benzidine	184	11.403	11.403	0.000	99	2527278	20.0	17.9	
161 Pyrene	202	11.538	11.538	0.000	92	2319354	10.0	9.98	
168 Butyl benzyl phthalate	149	11.995	11.995	0.000	94	1339629	10.0	10.6	
173 Bis(2-ethylhexyl) phthalat	149	12.485	12.485	0.000	96	1901586	10.0	10.7	
175 3,3'-Dichlorobenzidine	252	12.519	12.519	0.000	58	1391438	20.0	20.9	
177 Benzo[a]anthracene	228	12.591	12.591	0.000	98	2149695	10.0	9.93	
178 Chrysene	228	12.630	12.630	0.000	91	1994453	10.0	10.1	
180 Di-n-octyl phthalate	149	13.154	13.154	0.000	99	3334364	10.0	10.4	
182 Benzo[b]fluoranthene	252	13.842	13.842	0.000	91	1952745	10.0	10.4	
183 Benzo[k]fluoranthene	252	13.875	13.875	0.000	88	1950950	10.0	10.2	
184 Benzo[a]pyrene	252	14.322	14.322	0.000	84	1864105	10.0	10.4	
188 Indeno[1,2,3-cd]pyrene	276	16.376	16.376	0.000	77	1842151	10.0	11.0	
189 Dibenz(a,h)anthracene	278	16.381	16.381	0.000	49	1523907	10.0	10.8	
190 Benzo[g,h,i]perylene	276	16.986	16.986	0.000	82	1531919	10.0	11.0	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L6 W_00005 Amount Added: 1.00 Units: mL

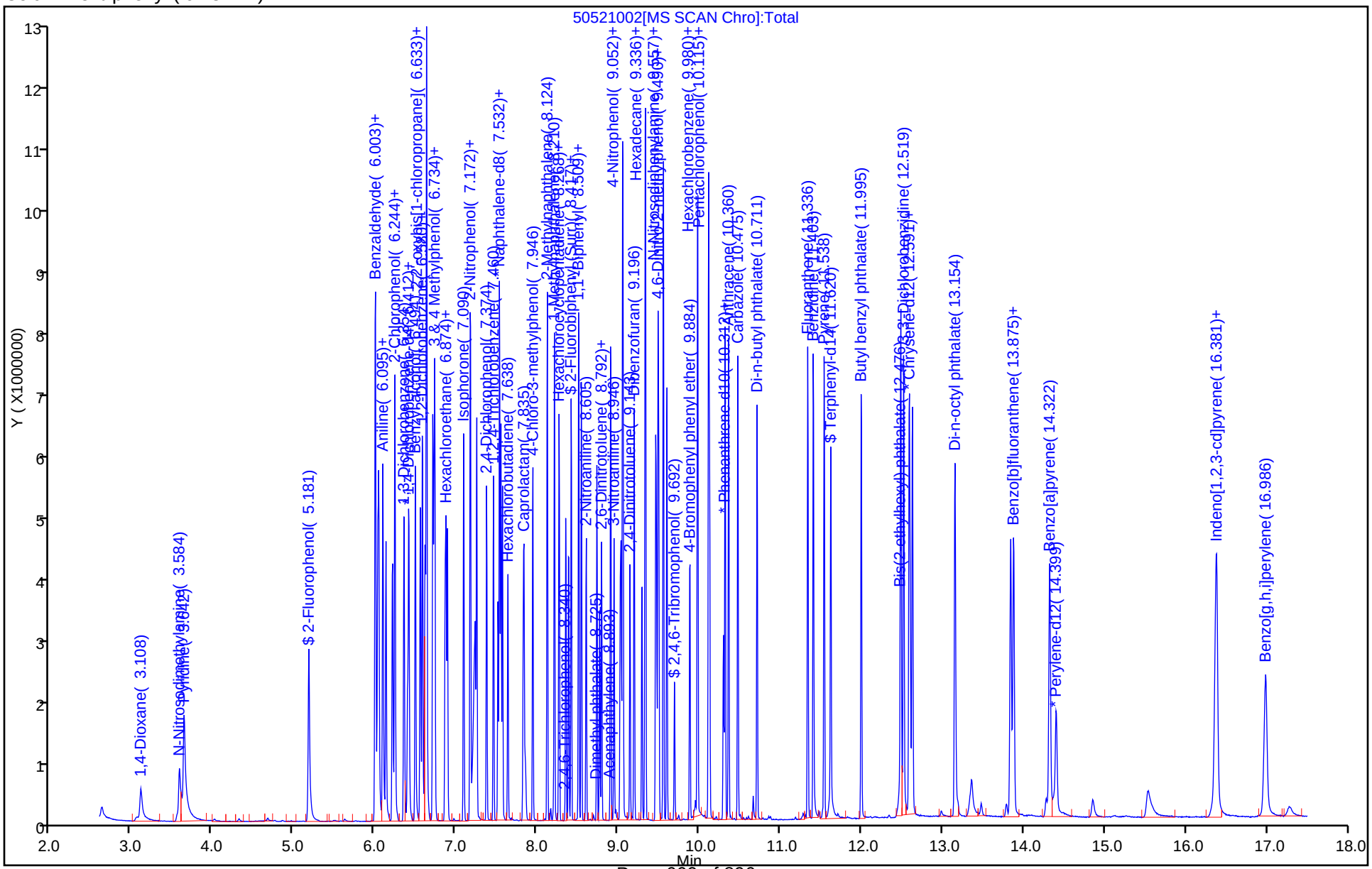
Report Date: 21-May-2015 14:54:09 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150521-43883.b\50521002.D

Injection Date:	21-May-2015 07:55:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	ccv lst1			Worklist Smp#:	2
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

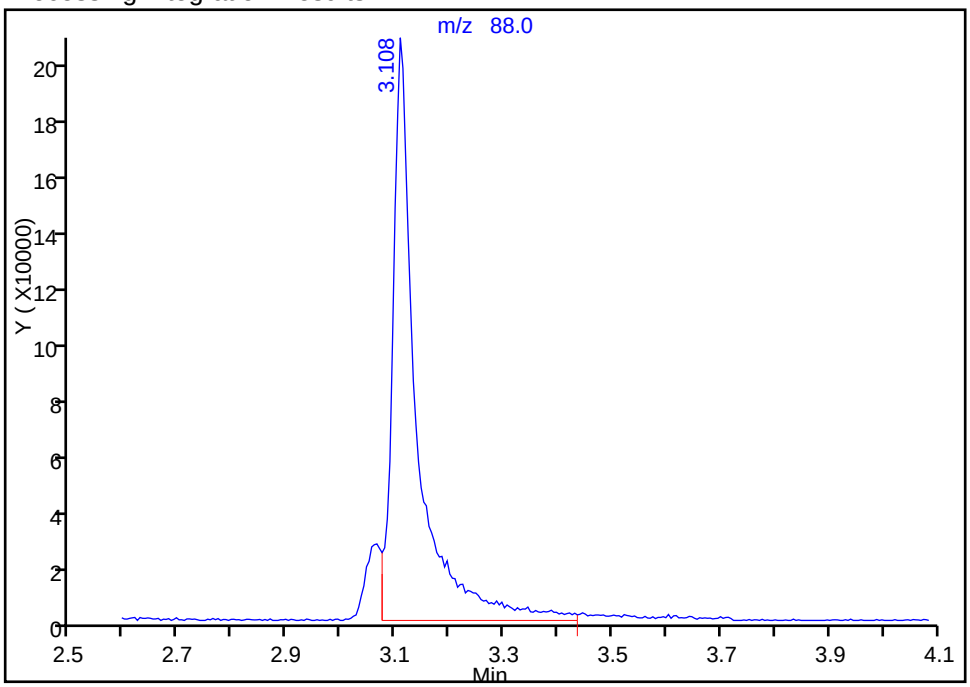
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150521-43883.b\50521002.D
Injection Date: 21-May-2015 07:55:30 Instrument ID: A4HP9
Lims ID: ccv lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

25 1,4-Dioxane, CAS: 123-91-1

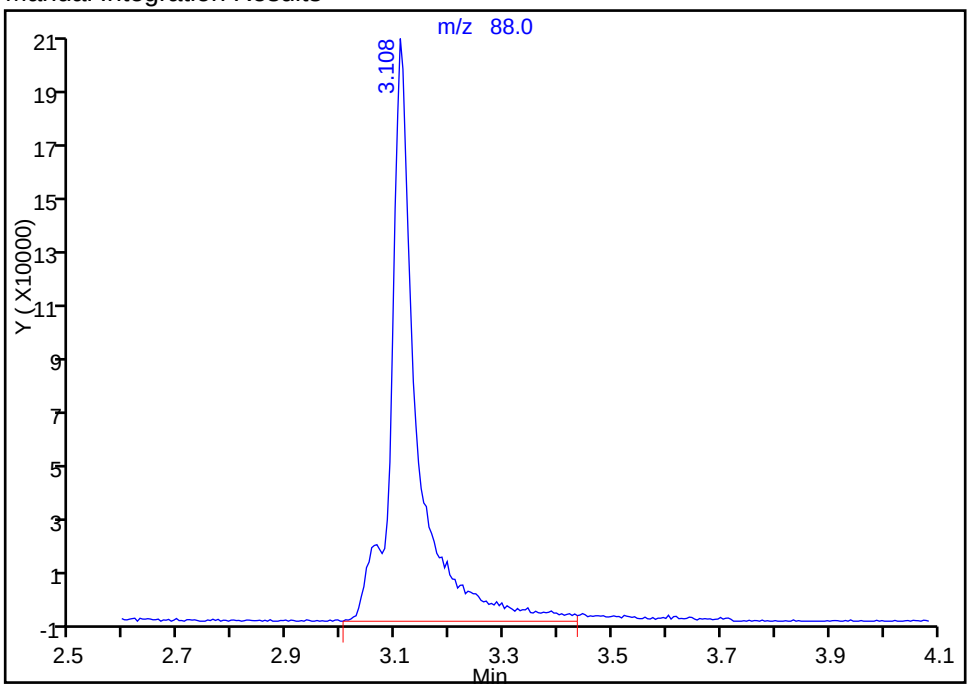
Processing Integration Results

RT: 3.11
Area: 630859
Amount: 8.792365
Amount Units: ng/ul



Manual Integration Results

RT: 3.11
Area: 681376
Amount: 9.496428
Amount Units: ng/ul



Reviewer: ulmanm, 21-May-2015 08:46:05
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

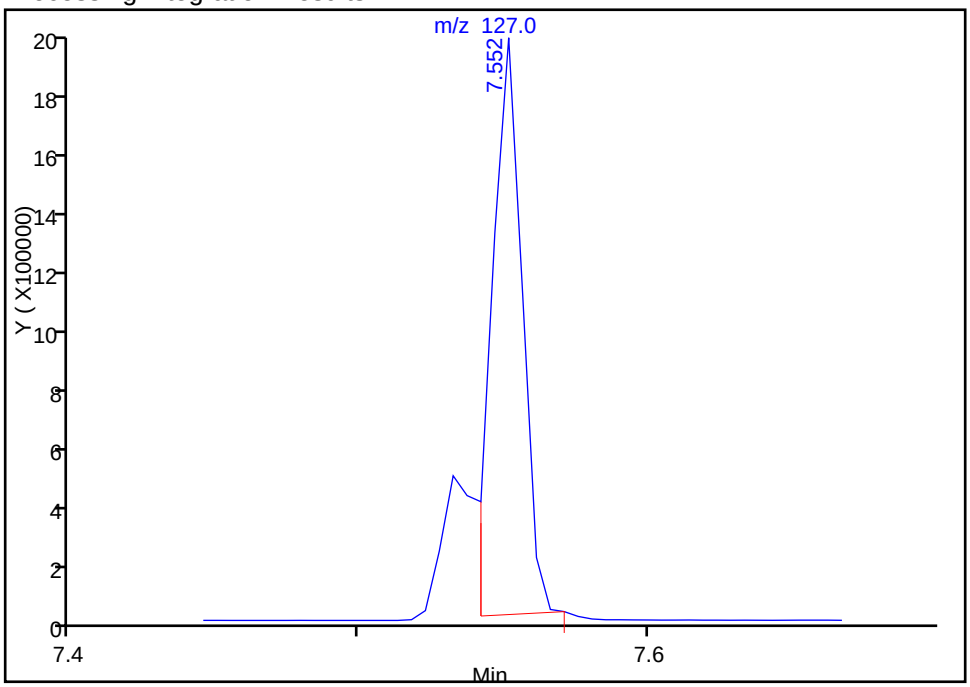
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150521-43883.b\50521002.D
Injection Date: 21-May-2015 07:55:30 Instrument ID: A4HP9
Lims ID: ccv lst1
Client ID:
Operator ID: 001574 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

76 4-Chloroaniline, CAS: 106-47-8

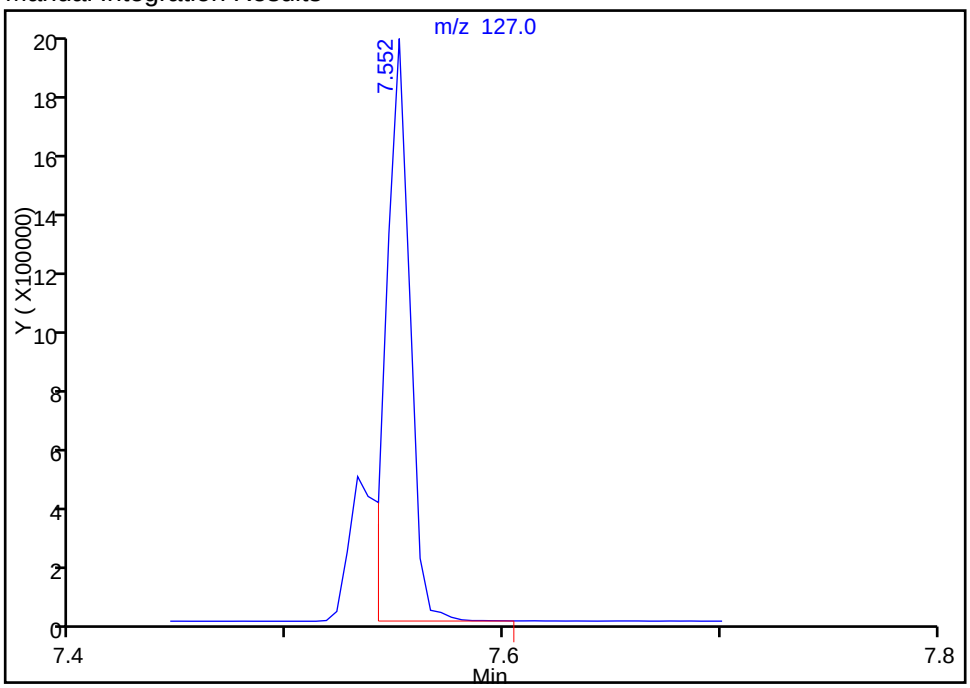
Processing Integration Results

RT: 7.55
Area: 1404831
Amount: 9.054496
Amount Units: ng/ul



Manual Integration Results

RT: 7.55
Area: 1454738
Amount: 9.376160
Amount Units: ng/ul



Reviewer: ulmanm, 21-May-2015 08:46:05
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID: LODV 240-181781/17 Calibration Date: 05/21/2015 12:04

Instrument ID: A4HP9 Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/19/2015 19:33

Lab File ID: 50521017.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Ave	1.056			0.113	0.100		
2-Methylnaphthalene	Ave	0.6435			0.111	0.100		
Acenaphthylene	Ave	1.955			0.101	0.100		
Acenaphthene	Ave	1.123			0.118	0.100		
Fluorene	Ave	1.237			0.107	0.100		
Hexachlorobenzene	Ave	0.1506			0.113	0.100		
Phenanthrene	Ave	1.145			0.0997	0.100		
Anthracene	Ave	1.159			0.106	0.100		
Fluoranthene	Ave	0.9936			0.109	0.100		
Pyrene	Ave	1.212			0.113	0.100		
Benzo[a]anthracene	Ave	1.130			0.116	0.100		
Chrysene	Ave	1.028			0.111	0.100		
Benzo[b]fluoranthene	Ave	1.234			0.0914	0.100		
Benzo[k]fluoranthene	Ave	1.259			0.0950	0.100		
Benzo[a]pyrene	Ave	1.182			0.0996	0.100		
Indeno[1,2,3-cd]pyrene	Ave	1.102			0.110	0.100		
Dibenz(a,h)anthracene	Ave	0.9270			0.0941	0.100		
Benzo[g,h,i]perylene	Ave	0.9195			0.121	0.100		
1,1'-Biphenyl	Ave	1.528			0.000500	0.100		
2-Chloronaphthalene	Ave	1.127			0.000500	0.100		
Dibenzofuran	Ave	1.523			0.000100	0.100		
Nitrobenzene-d5 (Surr)	Ave	0.4097			0.0988	0.100	99	35-100
2-Fluorobiphenyl (Surr)	Ave	1.141			0.110	0.100	110*	45-105
Terphenyl-d14 (Surr)	Ave	0.7676			0.117	0.100	117	30-125
2,4,6-Tribromophenol (Surr)	Ave	0.1049			0.000000	0.100	0*	35-125
2-Fluorophenol (Surr)	Ave	1.729			0.000000	0.100	0*	35-105
Phenol-d5 (Surr)	Ave	2.335			0.000000	0.100	0*	40-100

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150521-43883.b\50521017.D
Lims ID: lodv l1
Client ID:
Sample Type: LODV
Inject. Date: 21-May-2015 12:04:30 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043883-017
Misc. Info.: LODV L1LODV L1
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150521-43883.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-May-2015 14:54:07 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 21-May-2015 12:54:38

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.397	6.397	0.000	97	226652	4.00	4.00	
* 2 Naphthalene-d8	136	7.513	7.513	0.000	99	929868	4.00	4.00	
* 3 Acenaphthene-d10	164	9.023	9.023	0.000	90	447364	4.00	4.00	
* 4 Phenanthrene-d10	188	10.292	10.297	-0.005	96	686795	4.00	4.00	
* 5 Chrysene-d12	240	12.595	12.601	-0.006	93	567419	4.00	4.00	
* 6 Perylene-d12	264	14.399	14.404	-0.005	90	444312	4.00	4.00	
$ 7 2-Fluorophenol	112		5.181				ND	ND	
$ 8 Phenol-d5	99		6.032				ND	ND	
$ 9 Nitrobenzene-d5	82	6.873	6.874	-0.001	86	9410	0.1000	0.0988	
$ 10 2-Fluorobiphenyl (Surr)	172	8.417	8.417	0.000	98	14040	0.1000	0.1101	
$ 11 2,4,6-Tribromophenol	330		9.692				ND	ND	
$ 12 Terphenyl-d14	244	11.619	11.620	-0.001	96	12718	0.1000	0.1168	
25 1,4-Dioxane	88		3.108					ND	
26 N-Nitrosodimethylamine	74		3.584					ND	
27 Pyridine	79		3.642					ND	
20 Dimethylformamide	73	4.055	3.978	0.077	51	104			NC
28 Ethyl methacrylate	69		4.089					ND	
31 2-Picoline	93		4.374					ND	
32 N-Nitrosomethylethylamine	88		4.504					ND	
35 Acrylamide	71	4.796	4.778	0.018	1	145			NC
34 Methyl methanesulfonate	80		4.826					ND	
233 n,n'-Dimethylacetamide	44		4.993					ND	
36 N-Nitrosodiethylamine	102		5.254					ND	
37 Ethyl methanesulfonate	79		5.523					ND	
42 Phenylmercaptan	110		5.768					ND	
38 2-Methylcyclohexanone	68	5.854	5.820	0.034	2	224			NC
39 3-Methylcyclohexanone	69	5.844	5.854	-0.010	1	215			NC
40 4-Methylcyclohexanone	55		5.902					ND	
41 Benzaldehyde	77		6.003					ND	
45 Pentachloroethane	167		6.019					ND	
43 Phenol	94		6.046					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
44 Aniline	93		6.095					ND	
69 Bis(2-chloroethyl)ether	93		6.133					ND	
46 2-Chlorophenol	128		6.215					ND	
243 n-Decane	57	6.243	6.244	-0.001	90	13420			NC
47 1,3-Dichlorobenzene	146		6.354					ND	
48 1,4-Dichlorobenzene	146		6.417					ND	
232 1-Methyl-2-pyrrilidinone	99	6.397	6.421	-0.024	31	2027			NC
49 Benzyl alcohol	108		6.494					ND	
50 1,2-Dichlorobenzene	146		6.556					ND	
56 N-Nitrosopyrrolidine	100		6.572					ND	
286 4-Methyl-1-cyclohexanemeth	55	6.584	6.574	0.010	0	498			NC
51 2-Methylphenol	108		6.580					ND	
59 N-Nitrosomorpholine	56		6.605					ND	
53 2,2'-oxybis[1-chloropropan	45		6.614					ND	
52 Indene	115		6.633					ND	
60 2-Toluidine	106	6.714	6.639	0.075	58	44			NC
287 4-Methyl-1-cyclohexanemeth	55	6.724	6.708	0.016	0	219			NC
21 3 & 4 Methylphenol	108		6.710					ND	
57 N-Nitrosodi-n-propylamine	70		6.724					ND	
58 Acetophenone	105		6.734					ND	
61 Hexachloroethane	117		6.864					ND	
63 N-Nitrosopiperidine	114		6.884					ND	
62 Nitrobenzene	77		6.893					ND	
64 Isophorone	82		7.090					ND	
68 o,o',o''-Triethylphosphoro	198		7.105					ND	
67 1,3,5-Trichlorobenzene	180		7.123					ND	
66 2-Nitrophenol	139		7.172					ND	
65 2,4-Dimethylphenol	107		7.177					ND	
72 alpha,alpha-Dimethyl phene	58		7.216					ND	
71 Benzoic acid	122		7.234					ND	
70 Bis(2-chloroethoxy)methane	93		7.253					ND	
73 2,4-Dichlorophenol	162		7.374					ND	
74 1,2,4-Trichlorobenzene	180		7.460					ND	
78 Hexachloropropene	213		7.485					ND	
75 Naphthalene	128	7.532	7.532	0.000	93	27786	0.1000	0.1132	
76 4-Chloroaniline	127		7.552					ND	
77 2,6-Dichlorophenol	162		7.571					ND	
80 1,2,3-Trichlorobenzene	180		7.590					ND	
79 Hexachlorobutadiene	225		7.638					ND	
81 Benzothiazole	135		7.676					ND	
82 Quinoline	129		7.682					ND	
83 N-Nitrosodi-n-butylamine	84		7.697					ND	
85 p-Phenylene diamine	108		7.716					ND	
84 Caprolactam	113		7.835					ND	
94 Safrole, Total	162		7.894					ND	
86 4-Chloro-3-methylphenol	107		7.946					ND	
87 2-Methylnaphthalene	142	8.123	8.124	-0.001	91	16616	0.1000	0.1111	
225 Isosafrole Peak 1	162		8.144					ND	
90 1,2,3,5-Tetrachlorobenzene	216	8.268	8.191	0.077	91	4843			NC
88 1-Methylnaphthalene	142	8.210	8.210	0.000	91	14744	0.1000	0.1134	
89 Hexachlorocyclopentadiene	237		8.268					ND	
91 1,2,4,5-Tetrachlorobenzene	216		8.273					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
227 Isosafrole Peak 2	162		8.336					ND	
92 2,4,6-Trichlorophenol	196		8.350					ND	
93 2,4,5-Trichlorophenol	196		8.388					ND	
97 2,4-Toluene diamine	121		8.412					ND	
246 1-Chloronaphthalene	162		8.433					ND	
99 1,2,3,4 -Tetrachlorobenzen	216		8.446					ND	
96 3,4-Dichloronitrobenzene	109		8.465					ND	
98 1,1'-Biphenyl	154		8.509				ND	ND	
101 Phenyl ether	170		8.523					ND	
100 2-Chloronaphthalene	162		8.542				ND	ND	
103 1,4-Naphthoquinone	158		8.543					ND	
104 1,4-Dinitrobenzene	168		8.567					ND	
102 2-Nitroaniline	65		8.605					ND	
105 Dimethyl phthalate	163		8.735					ND	
106 1,3-Dinitrobenzene	168		8.768					ND	
107 2,6-Dinitrotoluene	165		8.792					ND	
109 Acenaphthylene	152	8.902	8.903	-0.001	99	22099	0.1000	0.1011	
110 3-Nitroaniline	138		8.946					ND	
111 2,4-Dinitrophenol	184		9.033					ND	
115 Pentachlorobenzene	250		9.034					ND	
112 Acenaphthene	153	9.047	9.052	-0.005	96	14803	0.1000	0.1179	
113 4-Nitrophenol	109		9.057					ND	
117 1-Naphthylamine	143		9.115					ND	
118 2,3,5,6-Tetrachlorophenol	232		9.120					ND	
114 2,4-Dinitrotoluene	165		9.143					ND	
120 2-Naphthylamine	143		9.178					ND	
116 Dibenzofuran	168		9.196				ND	ND	
122 Thionazin	97		9.269					ND	
119 2,3,4,6-Tetrachlorophenol	232		9.292					ND	
121 Diethyl phthalate	149		9.331					ND	
124 N-Nitro-o-toluidine	152		9.332					ND	
247 Hexadecane	57	9.330	9.336	-0.006	89	13641		NC	
127 Tributyl phosphate	99		9.417					ND	
130 Diphenylamine	169		9.418					ND	
123 4-Chlorophenyl phenyl ethe	204		9.461					ND	
125 4-Nitroaniline	138		9.470					ND	
126 Fluorene	166	9.489	9.490	-0.001	95	14779	0.1000	0.1069	
128 4,6-Dinitro-2-methylphenol	198		9.499					ND	
297 Benzophenone	105	9.595	9.512	0.083	63	4692		NC	
134 Sulfotepp	202		9.519					ND	
131 N-Nitrosodiphenylamine	169		9.557					ND	
133 Azobenzene	77		9.600					ND	
132 1,2-Diphenylhydrazine	77		9.600					ND	
135 1,3,5-Trinitrobenzene	213		9.601					ND	
137 Phenacetin	108		9.649					ND	
228 Diallate Peak 1	86		9.659					ND	
138 Phorate	121		9.664					ND	
230 Diallate Peak 2	86		9.736					ND	
140 Dimethoate	87		9.803					ND	
139 4-Bromophenyl phenyl ether	248		9.884					ND	
129 4-Aminobiphenyl	169		9.962					ND	
141 Hexachlorobenzene	284	9.975	9.975	0.000	76	2928	0.1000	0.1132	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
142 Atrazine	200		9.980					ND	
144 Pronamide	173	9.975	9.991	-0.016	64	2245		NC	
145 Pentachloronitrobenzene	237		10.000					ND	
146 Disulfoton	88		10.101					ND	
244 n-Octadecane	57	10.109	10.115	-0.006	76	14396		NC	
147 Dinoseb	211		10.116					ND	
143 Pentachlorophenol	266		10.124					ND	
148 Phenanthrene	178	10.316	10.317	-0.001	95	19606	0.1000	0.0997	
149 Anthracene	178	10.359	10.360	-0.001	96	21193	0.1000	0.1065	
152 Methyl parathion	109		10.428					ND	
151 Carbazole	167		10.475					ND	
153 Diphenylsulfone	125		10.672					ND	
154 Di-n-butyl phthalate	149		10.711					ND	
155 Ethyl Parathion	97	10.658	10.746	-0.088	53	543		NC	
156 4-Nitroquinoline-1-oxide	190		10.808					ND	
157 Methapyrilene	58		10.851					ND	
158 Isodrin	66		11.068					ND	
159 Fluoranthene	202	11.336	11.336	0.000	95	18620	0.1000	0.1091	
160 Benzidine	184		11.403					ND	
226 Aramite Peak 1	185		11.419					ND	
229 Aramite Peak 2	185		11.481					ND	
161 Pyrene	202	11.538	11.538	0.000	92	19362	0.1000	0.1126	
163 p-Dimethylamino azobenzene	225		11.587					ND	
164 Chlorobenzilate	139		11.616					ND	
282 Kepone	272		11.764					ND	
167 Famphur	218		11.818					ND	
169 3,3'-Dimethylbenzidine	212		11.866					ND	
168 Butyl benzyl phthalate	149		11.995					ND	
171 2-Acetylaminofluorene	181		12.087					ND	
174 4,4'-Methylene bis(2-chlor	231		12.337					ND	
172 3,3'-Dimethoxybenzidine	244		12.379					ND	
173 Bis(2-ethylhexyl) phthalat	149		12.485					ND	
175 3,3'-Dichlorobenzidine	252		12.519					ND	
176 Hexabromobenzene	232	12.595	12.543	0.052	46	22851		NC	
177 Benzo[a]anthracene	228	12.586	12.591	-0.005	94	18672	0.1000	0.1165	
178 Chrysene	228	12.624	12.630	-0.006	91	16184	0.1000	0.1110	
179 6-Methylchrysene	242		12.895					ND	
180 Di-n-octyl phthalate	149		13.154					ND	
181 7,12-Dimethylbenz(a)anthra	256		13.559					ND	
281 Hexachlorophene	196	13.702	13.628	0.074	0	140		NC	
182 Benzo[b]fluoranthene	252	13.836	13.842	-0.006	94	12527	0.1000	0.0914	
183 Benzo[k]fluoranthene	252	13.875	13.875	0.000	89	13277	0.1000	0.0950	
184 Benzo[a]pyrene	252	14.317	14.322	-0.005	35	13072	0.1000	0.0996	
185 3-Methylcholanthrene	268		14.535					ND	
187 Dibenz[a,h]acridine	279		15.453					ND	
186 Dibenz[a,j]acridine	279		15.746					ND	
188 Indeno[1,2,3-cd]pyrene	276	16.361	16.376	-0.015	50	13451	0.1000	0.1099	M
189 Dibenz(a,h)anthracene	278	16.375	16.381	-0.006	0	9690	0.1000	0.0941	M
190 Benzo[g,h,i]perylene	276	16.972	16.986	-0.014	51	12331	0.1000	0.1207	M
252 4-tert-Butylphenol	1		0.000					ND	
261 Endosulfan II	1		0.000					ND	
291 Dipropylene Glycol Phenyl	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
292 Dowanol Peak 2	1		0.000				ND		
253 Endrin aldehyde	1		0.000				ND		
278 delta-BHC	1		0.000				ND		
277 Chlorpyrifos	1		0.000				ND		
265 Dibenzo[a,h]pyrene	1		0.000				ND		
260 Methoxychlor	1		0.000				ND		
294 Dowanol Peak 3	1		0.000				ND		
274 Dibenz(a,i)pyrene	1		0.000				ND		
271 3 & 4 Phenoxyphenol	1		0.000				ND		
258 Aldrin	1		0.000				ND		
263 Heptachlor epoxide	1		0.000				ND		
285 Chlorobenzene TIC	1		0.000				ND		
293 Dowanol Peak 4	1		0.000				ND		
289 1-Phenoxy-2-propanol	1		0.000				ND		
276 Chlordane (technical)	1		0.000				ND		
255 beta-BHC	1		0.000				ND		
269 Dibenzo[a,e]pyrene	1		0.000				ND		
267 2,6-Diaminotoluene	1		0.000				ND		
251 Endosulfan sulfate	1		0.000				ND		
249 4-Chlorophenol TIC	1		0.000				ND		
275 Dieldrin	1		0.000				ND		
259 o-Phenylphenol	1		0.000				ND		
257 Endosulfan I	1		0.000				ND		
290 1-Phenoxy-2-propanol TIC	1		0.000				ND		
268 Endrin	1		0.000				ND		
272 2,3-Dinitrotoluene	1		0.000				ND		
266 Heptachlor	1		0.000				ND		
299 Diisobutyl phthalate TIC	1		0.000				ND		
262 Isoquinoline	1		0.000				ND		
264 alpha-BHC	1		0.000				ND		
283 2-Ethoxyethanol	1		0.000				ND		
254 2-Chloroaniline	1		0.000				ND		
250 gamma-BHC (Lindane)	1		0.000				ND		
270 Toxaphene	1		0.000				ND		
279 3,4-Dichloroaniline	1		0.000				ND		
273 3 & 4 Chlorophenol	1		0.000				ND		
150 DFTPP									
166 4,4'-DDE	246		11.572				ND		
165 4,4'-DDD	235	12.600	11.856	0.744	55	5646		NR	7
170 4,4'-DDT	235	12.600	12.115	0.485	59	5646		NR	7
S 95 Isosafrole	162		5.568				ND		
S 288 4-Methyl-1-cyclohexanemeth	55		6.400				ND		
S 136 Diallate	86		6.701				ND		
S 162 Aramite, Total	185		8.271				ND		
S 295 Dowanol	1		0.000				ND		
S 296 Dowanol Peak 1	1		0.000				ND		
S 191 Methyl Phenols,Total	100		0.000				ND		
S 245 Total Cresols	100		0.000				ND		
T 240 Trimethyl phosphate TIC	110	5.007	5.002	0.007	0	112		0	
T 194 Decane TIC	142	6.243	5.802	0.443	91	13420		0	
T 193 Hexamethylphosphoramide TI	135	5.772	6.498	-0.728	3	391		0	
T 234 2-Isopropylphenol TIC	121	7.258	7.247	0.008	0	135		0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
T 235 4-isopropylphenol TIC	121	7.412	7.361	0.048	0	107		0	
T 236 3-isopropylphenol TIC	121	7.412	7.361	0.048	0	107		0	
T 300 Alpha-Terpineol TIC	59	7.508	7.497	0.008	0	525		0	
T 237 3-(1,1-Dimethylethyl Pheno	135		7.720					ND	
T 231 2,3,7,8-TCDD	322		8.850					ND	
T 195 Hydroquinone TIC	110	9.023	8.997	0.023	17	889		0	
T 192 Octadecane (TIC)	254	10.109	9.600	0.509	87	14396		0	
T 242 Triphenyl Phosphate TIC	326	12.177	11.997	0.177	91	2449		0	
T 196 Kepone TIC	272		12.000					ND	
T 241 Tricresyl phosphate TIC	368	12.557	12.497	0.057	0	117		0	
T 280 2,3,7,8-TCDD TIC	198	12.600	12.497	0.100	0	2833		0	
T 248 2,3,7,8 TCDF TIC	304		13.000					ND	
T 197 Hexachlorophene TIC	198		13.600					ND	
T 239 Tris(2,3-dibromopropyl)pho	201	14.009	13.997	0.009	0	137		0	

QC Flag Legend

Processing Flags
- NR - Missing Quant Standard
- NC - Not Calibrated
- ND - Not Detected or Marked ND
- 7 - Failed Limit of Detection

Review Flags
- M - Manually Integrated

Reagents:

SMLIST1 L1 W_00006 Amount Added: 1.00 Units: mL

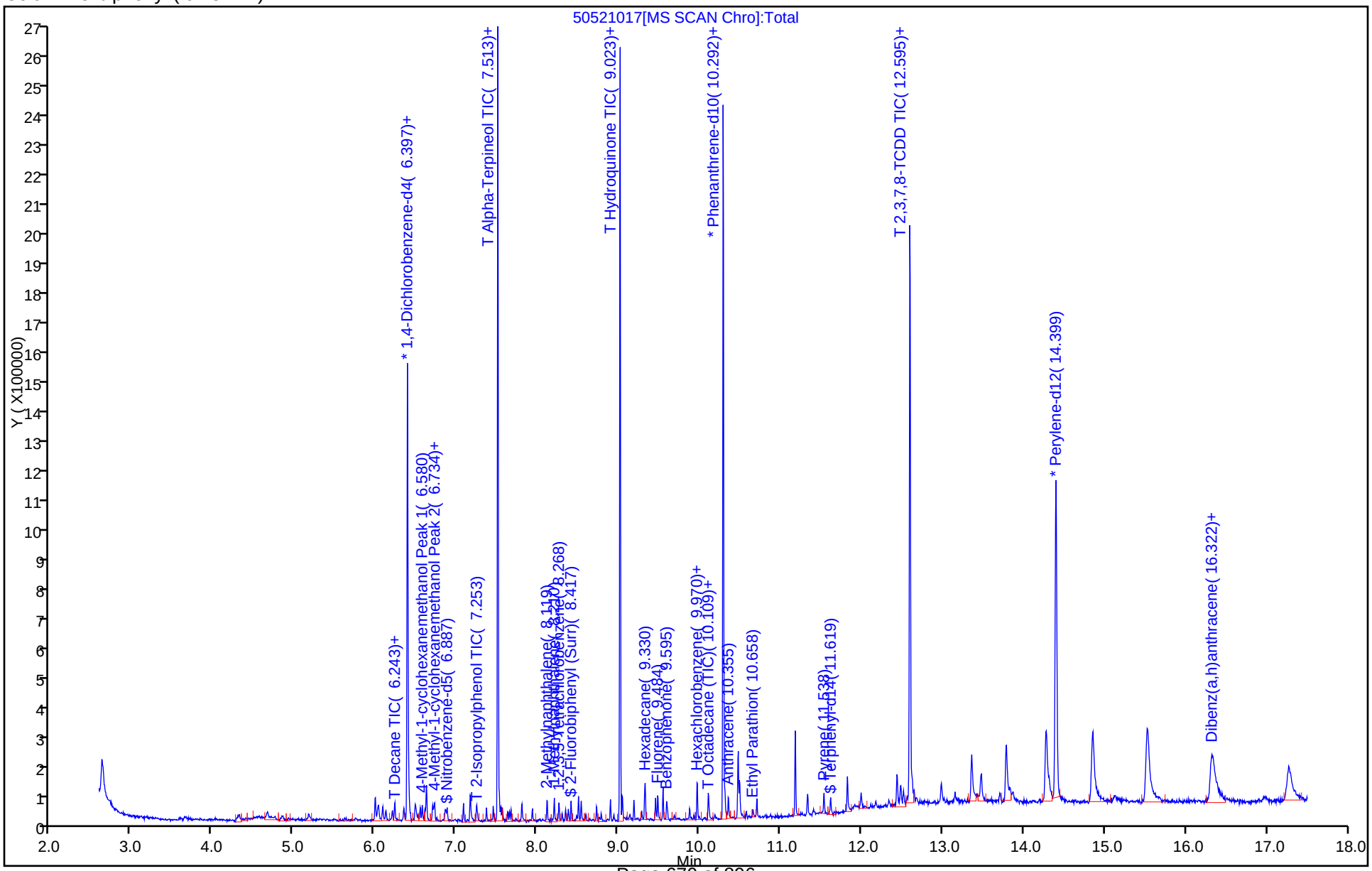
Report Date: 21-May-2015 14:54:13 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150521-43883.b\50521017.D

Injection Date:	21-May-2015 12:04:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	lodv l1			Worklist Smp#:	17
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

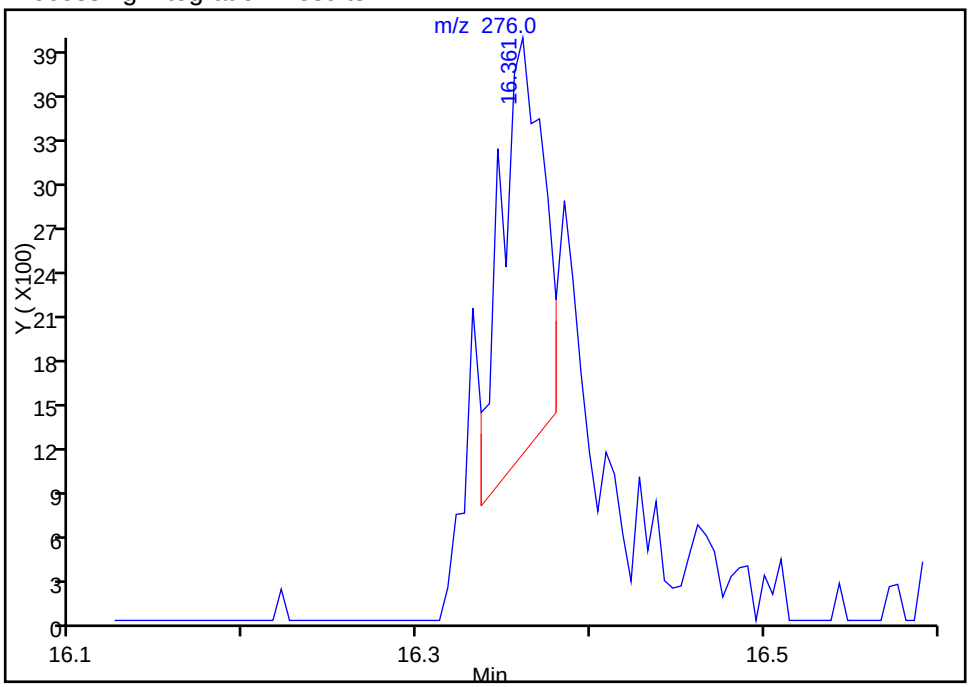
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150521-43883.b\50521017.D
Injection Date: 21-May-2015 12:04:30 Instrument ID: A4HP9
Lims ID: lodv l1
Client ID:
Operator ID: 001574 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

188 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

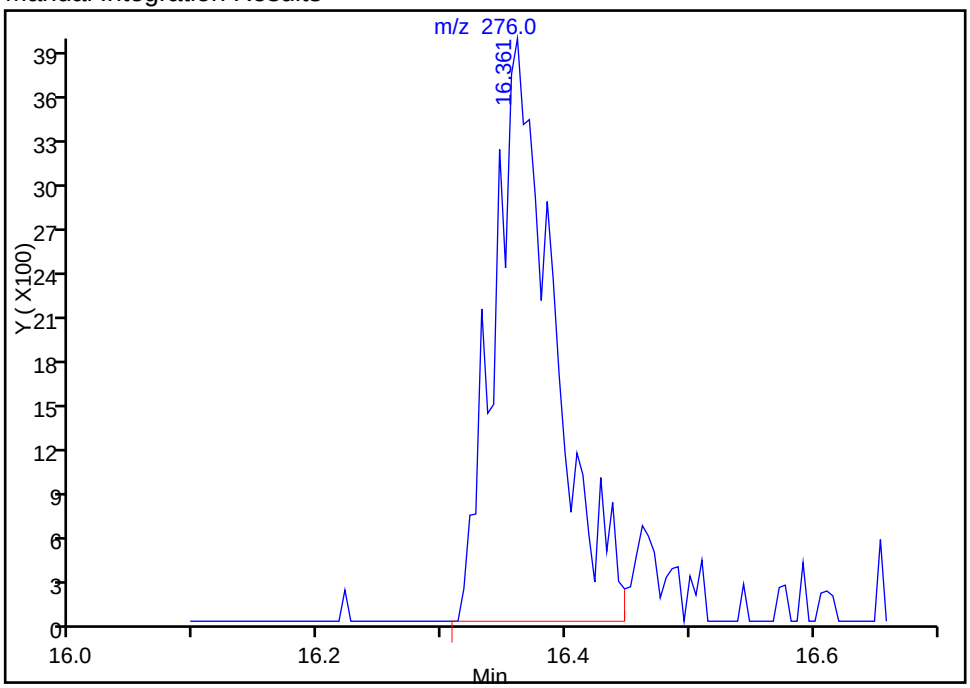
Processing Integration Results

RT: 16.36
Area: 4959
Amount: 0.040507
Amount Units: ng/ul



Manual Integration Results

RT: 16.36
Area: 13451
Amount: 0.109873
Amount Units: ng/ul



Reviewer: ulmanm, 21-May-2015 12:54:38
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

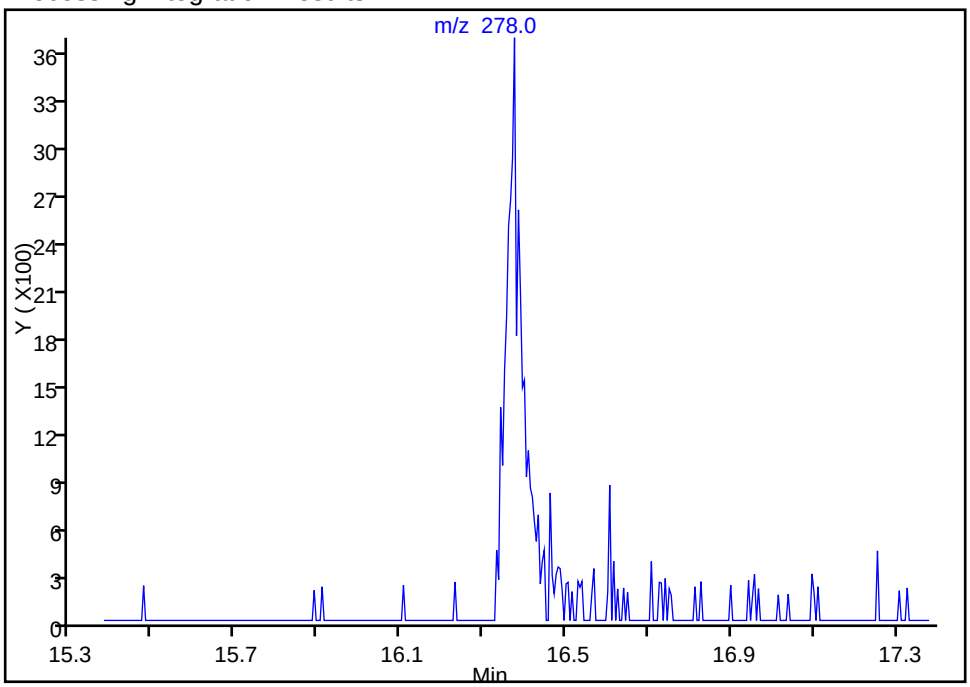
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150521-43883.b\50521017.D
Injection Date: 21-May-2015 12:04:30 Instrument ID: A4HP9
Lims ID: lodv l1
Client ID:
Operator ID: 001574 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

189 Dibenz(a,h)anthracene, CAS: 53-70-3

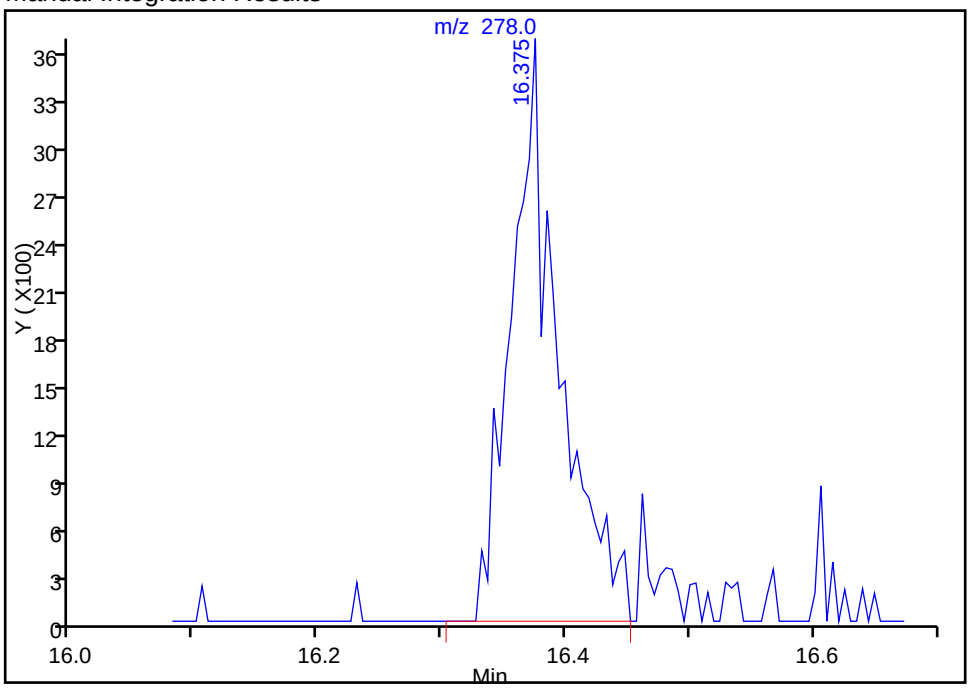
Not Detected
Expected RT: 16.38

Processing Integration Results



Manual Integration Results

RT: 16.38
Area: 9690
Amount: 0.094103
Amount Units: ng/ul



Reviewer: ulmanm, 21-May-2015 12:54:38
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Manual Integration/User Assign Peak Report

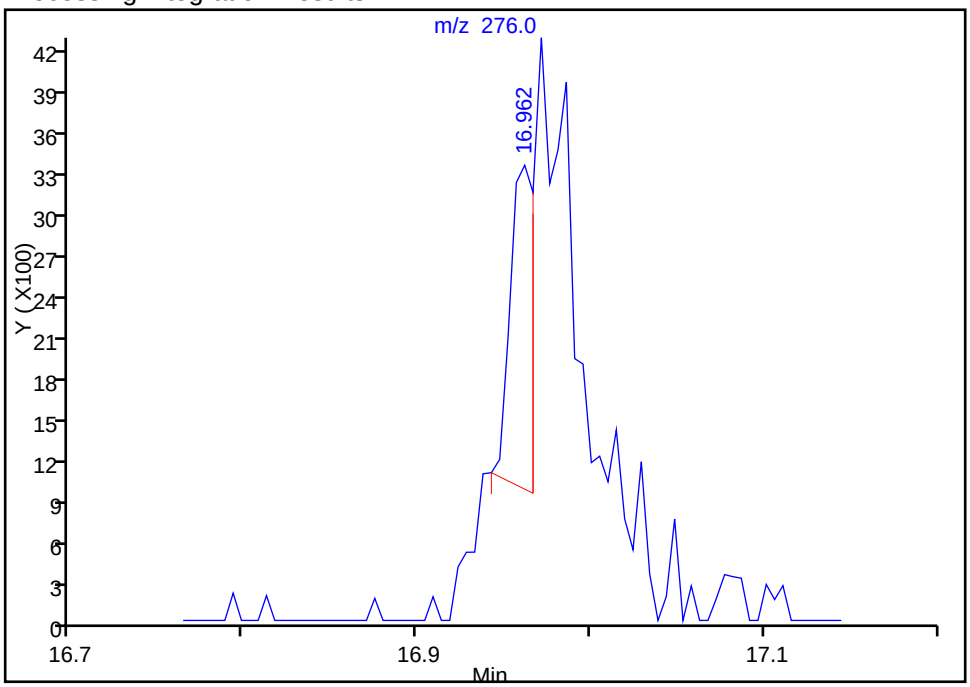
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150521-43883.b\50521017.D
Injection Date: 21-May-2015 12:04:30 Instrument ID: A4HP9
Lims ID: lodv l1
Client ID:
Operator ID: 001574 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

190 Benzo[g,h,i]perylene, CAS: 191-24-2

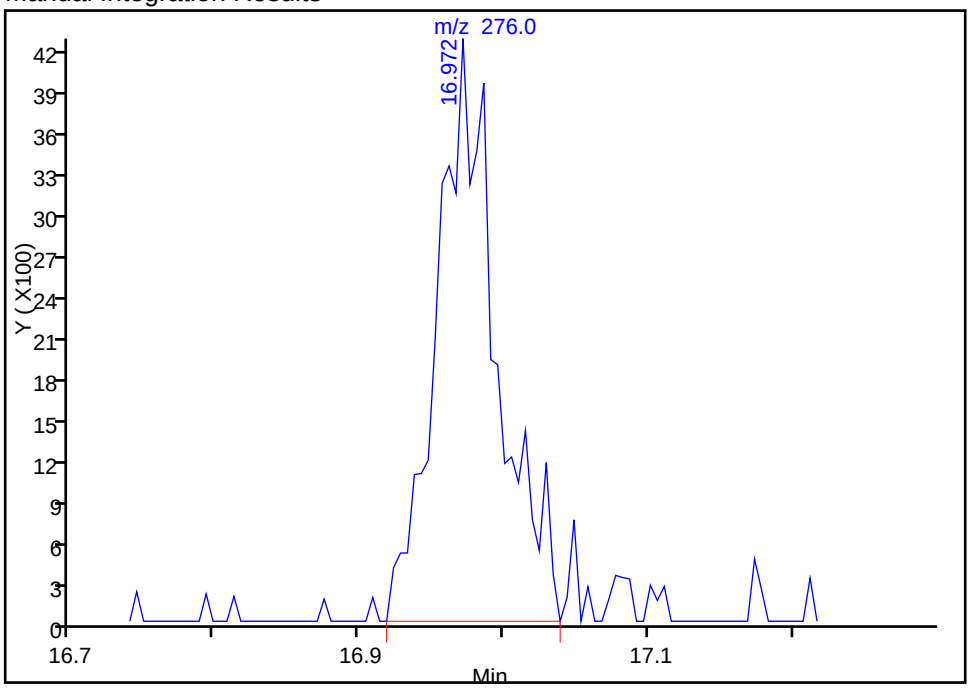
Processing Integration Results

RT: 16.96
Area: 2303
Amount: 0.022549
Amount Units: ng/ul



Manual Integration Results

RT: 16.97
Area: 12331
Amount: 0.120736
Amount Units: ng/ul



Reviewer: ulmanm, 21-May-2015 12:54:38
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID: LODV 240-181781/18 Calibration Date: 05/21/2015 12:29

Instrument ID: A4HP9 Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/19/2015 19:33

Lab File ID: 50521018.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.9041			0.485	0.500		
N-Nitrosodimethylamine	Ave	1.396			0.428	0.500		
Pyridine	Ave	2.418			0.454	0.500		
Benzaldehyde	Ave	1.430			1.06	1.00		
Phenol	Ave	2.551			0.490	0.500		
Aniline	Ave	3.116			0.492	0.500		
Bis(2-chloroethyl)ether	Ave	2.009			0.565	0.500		
2-Chlorophenol	Ave	1.581			0.479	0.500		
1,3-Dichlorobenzene	Ave	1.545			0.477	0.500		
1,4-Dichlorobenzene	Ave	1.562			0.524	0.500		
Benzyl alcohol	Ave	1.281			0.469	0.500		
1,2-Dichlorobenzene	Ave	1.487			0.540	0.500		
2-Methylphenol	Ave	1.738			0.490	0.500		
bis (2-chloroisopropyl) ether	Ave	2.612			0.490	0.500		
Indene	Ave	2.692			1.12	1.00		
3 & 4 Methylphenol	Ave	1.836			0.493	0.500		
N-Nitrosodi-n-propylamine	Ave	1.203			0.467	0.500		
Acetophenone	Ave	2.276			0.523	0.500		
Hexachloroethane	Ave	0.6369			0.490	0.500		
Nitrobenzene	Ave	0.4265			0.475	0.500		
Isophorone	Ave	0.7995			0.501	0.500		
2-Nitrophenol	Ave	0.1715			0.344	0.500		
2,4-Dimethylphenol	Ave	0.3630			0.512	0.500		
Bis(2-chloroethoxy)methane	Ave	0.5177			0.508	0.500		
2,4-Dichlorophenol	Ave	0.2493			0.502	0.500		
1,2,4-Trichlorobenzene	Ave	0.2548			0.556	0.500		
4-Chloroaniline	Ave	0.4836			0.456	0.500		
2,6-Dichlorophenol	Ave	0.2403			0.528	0.500		
Hexachlorobutadiene	Ave	0.1055			0.521	0.500		
Caprolactam	Ave	0.1206			0.996	1.00		
4-Chloro-3-methylphenol	Ave	0.3204			0.461	0.500		
Hexachlorocyclopentadiene	Ave	0.2335			0.285	0.500		
1,2,4,5-Tetrachlorobenzene	Ave	0.4013			0.560	0.500		
2,4,6-Trichlorophenol	Ave	0.3276			0.482	0.500		
2,4,5-Trichlorophenol	Ave	0.3425			0.475	0.500		
1,1'-Biphenyl	Ave	1.528			0.500	0.500		
2-Chloronaphthalene	Ave	1.127			0.521	0.500		
2-Nitroaniline	Ave	0.4439			0.332	0.500		
Dimethyl phthalate	Ave	1.149			0.529	0.500		
1,3-Dinitrobenzene	Ave	0.1850			0.254	0.500		

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID: LODV 240-181781/18 Calibration Date: 05/21/2015 12:29

Instrument ID: A4HP9 Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/19/2015 19:33

Lab File ID: 50521018.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,6-Dinitrotoluene	Ave	0.2594			0.374	0.500		
3-Nitroaniline	Ave	0.3816			0.348	0.500		
2,4-Dinitrotoluene	Ave	0.3227			0.348	0.500		
Dibenzofuran	Ave	1.523			0.530	0.500		
2,3,4,6-Tetrachlorophenol	Ave	0.2445			0.408	0.500		
Diethyl phthalate	Ave	1.107			0.547	0.500		
4-Chlorophenyl phenyl ether	Ave	0.4981			0.505	0.500		
4-Nitroaniline	Ave	0.3296			0.358	0.500		
N-Nitrosodiphenylamine	Ave	0.5447			0.982	1.00		
1,2-Diphenylhydrazine(as Azobenzene)	Ave	1.191			0.461	0.500		
Azobenzene	Ave	1.193			0.460	0.500		
4-Bromophenyl phenyl ether	Ave	0.1674			0.477	0.500		
Atrazine	Ave	0.1482			1.10	1.00		
Carbazole	Ave	1.046			0.486	0.500		
Di-n-butyl phthalate	Ave	1.229			0.514	0.500		
Butyl benzyl phthalate	Ave	0.6609			0.495	0.500		
Bis(2-ethylhexyl) phthalate	Ave	0.9242			0.463	0.500		
3,3'-Dichlorobenzidine	Ave	0.3475			0.774	1.00		
Di-n-octyl phthalate	Ave	2.107			0.384	0.500		
2,4-Dinitrophenol	Ave	0.1257			0.00100	1.00		
2-Methylnaphthalene	Ave	0.6435			0.000100	0.500		
4,6-Dinitro-2-methylphenol	Lin1				0.00400	1.00		
4-Nitrophenol	Ave	0.1185			0.00400	1.00		
Acenaphthene	Ave	1.123			0.000100	0.500		
Acenaphthylene	Ave	1.955			0.000100	0.500		
Anthracene	Ave	1.159			0.000100	0.500		
Benzidine	Lin1				0.00100	1.00		
Benzo[a]anthracene	Ave	1.130			0.000100	0.500		
Benzo[a]pyrene	Ave	1.182			0.000100	0.500		
Benzo[b]fluoranthene	Ave	1.234			0.000100	0.500		
Benzo[g,h,i]perylene	Ave	0.9195			0.000100	0.500		
Benzo[k]fluoranthene	Ave	1.259			0.000100	0.500		
Benzoic acid	Ave	0.2007			0.0200	1.00		
Chrysene	Ave	1.028			0.000100	0.500		
Dibenz(a,h)anthracene	Ave	0.9270			0.000100	0.500		

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID: LODV 240-181781/18 Calibration Date: 05/21/2015 12:29

Instrument ID: A4HP9 Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/19/2015 19:33

Lab File ID: 50521018.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoranthene	Ave	0.9936			0.000100	0.500		
Fluorene	Ave	1.237			0.000100	0.500		
Hexachlorobenzene	Ave	0.1506			0.000100	0.500		
Indeno[1,2,3-cd]pyrene	Ave	1.102			0.000100	0.500		
Naphthalene	Ave	1.056			0.000100	0.500		
Pentachlorophenol	Ave	0.1092			0.00100	1.00		
Phenanthrene	Ave	1.145			0.000100	0.500		
Pyrene	Ave	1.212			0.000100	0.500		
2-Fluorophenol (Surr)	Ave	1.729			0.465	0.500	93	35-105
Phenol-d5 (Surr)	Ave	2.335			0.501	0.500	100	40-100
2,4,6-Tribromophenol (Surr)	Ave	0.1049			0.457	0.500	91	35-125
2-Fluorobiphenyl (Surr)	Ave	1.141			0.000000	0.500	0*	45-105
Nitrobenzene-d5 (Surr)	Ave	0.4097			0.000000	0.500	0*	35-100
Terphenyl-d14 (Surr)	Ave	0.7676			0.000000	0.500	0*	30-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150521-43883.b\50521018.D
Lims ID: lodv l2
Client ID:
Sample Type: LODV
Inject. Date: 21-May-2015 12:29:30 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043883-018
Misc. Info.: LODV L2LODV L2
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150521-43883.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-May-2015 14:54:07 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 21-May-2015 13:10:22

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.399	6.397	0.002	96	254402	4.00	4.00	
* 2 Naphthalene-d8	136	7.515	7.513	0.002	99	1041817	4.00	4.00	
* 3 Acenaphthene-d10	164	9.020	9.023	-0.003	90	483663	4.00	4.00	
* 4 Phenanthrene-d10	188	10.294	10.297	-0.003	95	754051	4.00	4.00	
* 5 Chrysene-d12	240	12.598	12.601	-0.003	93	646831	4.00	4.00	
* 6 Perylene-d12	264	14.401	14.404	-0.003	90	500824	4.00	4.00	
$ 7 2-Fluorophenol	112	5.182	5.181	0.001	85	51086	0.5000	0.4646	
$ 8 Phenol-d5	99	6.029	6.032	-0.003	81	74390	0.5000	0.5009	
$ 9 Nitrobenzene-d5	82		6.874				ND	ND	
$ 10 2-Fluorobiphenyl (Surr)	172		8.417				ND	ND	
$ 11 2,4,6-Tribromophenol	330	9.693	9.692	0.001	63	5798	0.5000	0.4570	
$ 12 Terphenyl-d14	244		11.620				ND	ND	
25 1,4-Dioxane	88	3.115	3.108	0.007	70	27910	0.5000	0.4854	M
26 N-Nitrosodimethylamine	74	3.595	3.584	0.011	65	38044	0.5000	0.4284	M
27 Pyridine	79	3.653	3.642	0.011	95	69753	0.5000	0.4537	M
20 Dimethylformamide	73		3.978					ND	
28 Ethyl methacrylate	69		4.089					ND	
31 2-Picoline	93		4.374					ND	
32 N-Nitrosomethylethylamine	88		4.504					ND	
35 Acrylamide	71	4.836	4.778	0.058	1	145		NC	
34 Methyl methanesulfonate	80		4.826					ND	
233 n,n'-Dimethylacetamide	44		4.993					ND	
36 N-Nitrosodiethylamine	102		5.254					ND	
37 Ethyl methanesulfonate	79		5.523					ND	
42 Phenylmercaptan	110		5.768					ND	
38 2-Methylcyclohexanone	68	5.856	5.820	0.036	16	386		NC	
39 3-Methylcyclohexanone	69	5.856	5.854	0.002	13	261		NC	
40 4-Methylcyclohexanone	55		5.902					ND	
41 Benzaldehyde	77	6.000	6.003	-0.003	94	96874	1.00	1.06	
45 Pentachloroethane	167		6.019					ND	
43 Phenol	94	6.043	6.046	-0.003	84	79538	0.5000	0.4903	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
44 Aniline	93	6.091	6.095	-0.004	97	97441	0.5000	0.4917	
69 Bis(2-chloroethyl)ether	93	6.130	6.133	-0.003	90	72255	0.5000	0.5654	
46 2-Chlorophenol	128	6.211	6.215	-0.004	93	48170	0.5000	0.4790	
243 n-Decane	57	6.240	6.244	-0.004	91	71189	NC	NC	
47 1,3-Dichlorobenzene	146	6.356	6.354	0.002	95	46918	0.5000	0.4774	
48 1,4-Dichlorobenzene	146	6.413	6.417	-0.004	76	52060	0.5000	0.5239	
232 1-Methyl-2-pyrrilidinone	99	6.399	6.421	-0.022	6	1898		NC	
49 Benzyl alcohol	108	6.495	6.494	0.001	96	38197	0.5000	0.4689	
50 1,2-Dichlorobenzene	146	6.553	6.556	-0.003	94	51062	0.5000	0.5401	
56 N-Nitrosopyrrolidine	100		6.572					ND	
286 4-Methyl-1-cyclohexanemeth	55	6.577	6.574	0.003	0	1243		NC	
51 2-Methylphenol	108	6.582	6.580	0.002	71	54223	0.5000	0.4905	
59 N-Nitrosomorpholine	56		6.605					ND	
53 2,2'-oxybis[1-chloropropan	45	6.615	6.614	0.001	86	81311	0.5000	0.4895	
52 Indene	115	6.635	6.633	0.002	78	191561	1.00	1.12	
60 2-Toluidine	106	6.577	6.639	-0.062	54	260		NC	
287 4-Methyl-1-cyclohexanemeth	55	6.702	6.708	-0.006	0	1621		NC	
21 3 & 4 Methylphenol	108	6.707	6.710	-0.003	84	57543	0.5000	0.4929	
57 N-Nitrosodi-n-propylamine	70	6.721	6.724	-0.003	91	35728	0.5000	0.4669	
58 Acetophenone	105	6.731	6.734	-0.003	81	75631	0.5000	0.5225	
61 Hexachloroethane	117	6.861	6.864	-0.003	79	19830	0.5000	0.4895	
63 N-Nitrosopiperidine	114		6.884					ND	
62 Nitrobenzene	77	6.889	6.893	-0.004	73	52815	0.5000	0.4755	
64 Isophorone	82	7.087	7.090	-0.003	95	104280	0.5000	0.5008	
68 o,o',o''-Triethylphosphoro	198		7.105					ND	
67 1,3,5-Trichlorobenzene	180		7.123					ND	
66 2-Nitrophenol	139	7.168	7.172	-0.004	74	15386	0.5000	0.3444	
65 2,4-Dimethylphenol	107	7.173	7.177	-0.003	93	48386	0.5000	0.5118	
72 alpha,alpha-Dimethyl phene	58		7.216					ND	
71 Benzoic acid	122		7.234				ND	ND	
70 Bis(2-chloroethoxy)methane	93	7.250	7.253	-0.003	98	68525	0.5000	0.5082	
73 2,4-Dichlorophenol	162	7.375	7.374	0.001	91	32576	0.5000	0.5016	
74 1,2,4-Trichlorobenzene	180	7.457	7.460	-0.003	91	36912	0.5000	0.5563	
78 Hexachloropropene	213		7.485					ND	
75 Naphthalene	128		7.532				ND	ND	
76 4-Chloroaniline	127	7.548	7.552	-0.004	45	57430	0.5000	0.4559	
77 2,6-Dichlorophenol	162	7.567	7.571	-0.004	60	33036	0.5000	0.5279	
80 1,2,3-Trichlorobenzene	180		7.590					ND	
79 Hexachlorobutadiene	225	7.635	7.638	-0.003	94	14311	0.5000	0.5210	
81 Benzothiazole	135	7.745	7.676	0.069	61	3154		NC	
82 Quinoline	129		7.682					ND	
83 N-Nitrosodi-n-butylamine	84		7.697					ND	
85 p-Phenylene diamine	108		7.716					ND	
84 Caprolactam	113	7.813	7.835	-0.022	86	31286	1.00	1.00	
94 Safrole, Total	162		7.894					ND	
86 4-Chloro-3-methylphenol	107	7.938	7.946	-0.008	93	38484	0.5000	0.4612	
87 2-Methylnaphthalene	142		8.124				ND	ND	
225 Isosafrole Peak 1	162		8.144					ND	
90 1,2,3,5-Tetrachlorobenzene	216	8.270	8.191	0.079	94	27192		NC	
88 1-Methylnaphthalene	142		8.210				ND	ND	
89 Hexachlorocyclopentadiene	237	8.265	8.268	-0.003	65	8043	0.5000	0.2848	
91 1,2,4,5-Tetrachlorobenzene	216	8.270	8.273	-0.003	95	27192	0.5000	0.5604	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
227 Isosafrole Peak 2	162		8.336					ND	
92 2,4,6-Trichlorophenol	196	8.347	8.350	-0.003	90	19082	0.5000	0.4818	
93 2,4,5-Trichlorophenol	196	8.380	8.388	-0.008	88	19652	0.5000	0.4745	
97 2,4-Toluene diamine	121		8.412					ND	
246 1-Chloronaphthalene	162		8.433					ND	
99 1,2,3,4 -Tetrachlorobenzen	216		8.446					ND	
96 3,4-Dichloronitrobenzene	109		8.465					ND	
98 1,1'-Biphenyl	154	8.510	8.509	0.001	95	92372	0.5000	0.5000	
101 Phenyl ether	170		8.523					ND	
100 2-Chloronaphthalene	162	8.539	8.542	-0.003	97	70973	0.5000	0.5207	
103 1,4-Naphthoquinone	158		8.543					ND	
104 1,4-Dinitrobenzene	168		8.567					ND	
102 2-Nitroaniline	65	8.601	8.605	-0.004	66	17823	0.5000	0.3321	
105 Dimethyl phthalate	163	8.731	8.735	-0.004	97	73584	0.5000	0.5295	
106 1,3-Dinitrobenzene	168	8.765	8.768	-0.003	77	5694	0.5000	0.2545	
107 2,6-Dinitrotoluene	165	8.789	8.792	-0.003	68	11720	0.5000	0.3736	
109 Acenaphthylene	152		8.903				ND	ND	
110 3-Nitroaniline	138	8.943	8.946	-0.003	88	16072	0.5000	0.3483	
111 2,4-Dinitrophenol	184		9.033				ND	ND	
115 Pentachlorobenzene	250		9.034					ND	
112 Acenaphthene	153		9.052				ND	ND	
113 4-Nitrophenol	109		9.057				ND	ND	
117 1-Naphthylamine	143		9.115					ND	
118 2,3,5,6-Tetrachlorophenol	232		9.120					ND	
114 2,4-Dinitrotoluene	165	9.140	9.143	-0.003	75	13569	0.5000	0.3477	
120 2-Naphthylamine	143		9.178					ND	
116 Dibenzofuran	168	9.193	9.196	-0.003	89	97559	0.5000	0.5298	
122 Thionazin	97		9.269					ND	
119 2,3,4,6-Tetrachlorophenol	232	9.289	9.292	-0.003	73	12073	0.5000	0.4083	
121 Diethyl phthalate	149	9.323	9.331	-0.008	94	73211	0.5000	0.5468	
124 N-Nitro-o-toluidine	152		9.332					ND	
247 Hexadecane	57	9.332	9.336	-0.004	86	76347	NC	NC	
127 Tributyl phosphate	99		9.417					ND	
130 Diphenylamine	169		9.418					ND	
123 4-Chlorophenyl phenyl ethe	204	9.457	9.461	-0.004	93	30421	0.5000	0.5051	
125 4-Nitroaniline	138	9.462	9.470	-0.008	74	14285	0.5000	0.3584	M
126 Fluorene	166		9.490				ND	ND	
128 4,6-Dinitro-2-methylphenol	198		9.499				ND	ND	
297 Benzophenone	105	9.597	9.512	0.085	56	22284		NC	
134 Sulfotepp	202		9.519					ND	
131 N-Nitrosodiphenylamine	169	9.549	9.557	-0.008	96	100789	1.00	0.9816	
133 Azobenzene	77	9.597	9.600	-0.003	93	103524	0.5000	0.4605	
132 1,2-Diphenylhydrazine	77	9.597	9.600	-0.003	97	103608	0.5000	0.4608	
135 1,3,5-Trinitrobenzene	213		9.601					ND	
137 Phenacetin	108		9.649					ND	
228 Diallate Peak 1	86		9.659					ND	
138 Phorate	121		9.664					ND	
230 Diallate Peak 2	86		9.736					ND	
140 Dimethoate	87		9.803					ND	
139 4-Bromophenyl phenyl ether	248	9.881	9.884	-0.003	68	15048	0.5000	0.4768	
129 4-Aminobiphenyl	169		9.962					ND	
141 Hexachlorobenzene	284		9.975				ND	ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
142 Atrazine	200	9.972	9.980	-0.008	77	30823	1.00	1.10	
144 Pronamide	173		9.991					ND	
145 Pentachloronitrobenzene	237		10.000					ND	
146 Disulfoton	88		10.101					ND	
244 n-Octadecane	57	10.111	10.115	-0.004	60	77240	NC	NC	
147 Dinoseb	211		10.116					ND	
143 Pentachlorophenol	266		10.124				ND	ND	
148 Phenanthrene	178		10.317				ND	ND	
149 Anthracene	178		10.360				ND	ND	
152 Methyl parathion	109		10.428					ND	
151 Carbazole	167	10.472	10.475	-0.003	81	95886	0.5000	0.4865	
153 Diphenylsulfone	125		10.672					ND	
154 Di-n-butyl phthalate	149	10.708	10.711	-0.003	98	119042	0.5000	0.5139	
155 Ethyl Parathion	97		10.746					ND	
156 4-Nitroquinoline-1-oxide	190		10.808					ND	
157 Methapyrilene	58		10.851					ND	
158 Isodrin	66		11.068					ND	
159 Fluoranthene	202		11.336				ND	ND	
160 Benzidine	184		11.403				ND	ND	
226 Aramite Peak 1	185		11.419					ND	
229 Aramite Peak 2	185		11.481					ND	
161 Pyrene	202		11.538				ND	ND	
163 p-Dimethylamino azobenzene	225		11.587					ND	
164 Chlorobenzilate	139		11.616					ND	
282 Kepone	272		11.764					ND	
167 Famphur	218		11.818					ND	
169 3,3'-Dimethylbenzidine	212		11.866					ND	
168 Butyl benzyl phthalate	149	11.996	11.995	0.001	89	52947	0.5000	0.4955	
171 2-Acetylaminofluorene	181		12.087					ND	
174 4,4'-Methylene bis(2-chlor	231		12.337					ND	
172 3,3'-Dimethoxybenzidine	244		12.379					ND	
173 Bis(2-ethylhexyl) phthalat	149	12.482	12.485	-0.003	95	69220	0.5000	0.4632	
175 3,3'-Dichlorobenzidine	252	12.516	12.519	-0.003	62	43470	1.00	0.7736	
176 Hexabromobenzene	232	12.598	12.543	0.055	1	25227		NC	
177 Benzo[a]anthracene	228		12.591				ND	ND	
178 Chrysene	228		12.630				ND	ND	
179 6-Methylchrysene	242		12.895					ND	
180 Di-n-octyl phthalate	149	13.151	13.154	-0.004	95	101206	0.5000	0.3837	
181 7,12-Dimethylbenz(a)anthra	256		13.559					ND	
281 Hexachlorophene	196	13.776	13.628	0.148	0	372		NC	
182 Benzo[b]fluoranthene	252		13.842				ND	ND	
183 Benzo[k]fluoranthene	252		13.875				ND	ND	
184 Benzo[a]pyrene	252		14.322				ND	ND	
185 3-Methylcholanthrene	268		14.535					ND	
187 Dibenz[a,h]acridine	279		15.453					ND	
186 Dibenz[a,j]acridine	279		15.746					ND	
188 Indeno[1,2,3-cd]pyrene	276		16.376				ND	ND	
189 Dibenz(a,h)anthracene	278		16.381				ND	ND	
190 Benzo[g,h,i]perylene	276		16.986				ND	ND	
252 4-tert-Butylphenol	1		0.000					ND	
261 Endosulfan II	1		0.000					ND	
291 Dipropylene Glycol Phenyl	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
292 Dowanol Peak 2	1		0.000					ND	
253 Endrin aldehyde	1		0.000					ND	
278 delta-BHC	1		0.000					ND	
277 Chlorpyrifos	1		0.000					ND	
265 Dibenzo[a,h]pyrene	1		0.000					ND	
260 Methoxychlor	1		0.000					ND	
294 Dowanol Peak 3	1		0.000					ND	
274 Dibenz(a,i)pyrene	1		0.000					ND	
271 3 & 4 Phenoxyphenol	1		0.000					ND	
258 Aldrin	1		0.000					ND	
263 Heptachlor epoxide	1		0.000					ND	
285 Chlorobenzene TIC	1		0.000					ND	
293 Dowanol Peak 4	1		0.000					ND	
289 1-Phenoxy-2-propanol	1		0.000					ND	
276 Chlordane (technical)	1		0.000					ND	
255 beta-BHC	1		0.000					ND	
269 Dibenzo[a,e]pyrene	1		0.000					ND	
267 2,6-Diaminotoluene	1		0.000					ND	
251 Endosulfan sulfate	1		0.000					ND	
249 4-Chlorophenol TIC	1		0.000					ND	
275 Dieldrin	1		0.000					ND	
259 o-Phenylphenol	1		0.000					ND	
257 Endosulfan I	1		0.000					ND	
290 1-Phenoxy-2-propanol TIC	1		0.000					ND	
268 Endrin	1		0.000					ND	
272 2,3-Dinitrotoluene	1		0.000					ND	
266 Heptachlor	1		0.000					ND	
299 Diisobutyl phthalate TIC	1		0.000					ND	
262 Isoquinoline	1		0.000					ND	
264 alpha-BHC	1		0.000					ND	
283 2-Ethoxyethanol	1		0.000					ND	
254 2-Chloroaniline	1		0.000					ND	
250 gamma-BHC (Lindane)	1		0.000					ND	
270 Toxaphene	1		0.000					ND	
279 3,4-Dichloroaniline	1		0.000					ND	
273 3 & 4 Chlorophenol	1		0.000					ND	
150 DFTPP									
166 4,4'-DDE	246		11.572					ND	
165 4,4'-DDD	235	11.847	11.856	-0.009	1	502		NR	7
170 4,4'-DDT	235	12.117	12.115	0.002	1	170		NR	7
S 95 Isosafrole	162		5.568					ND	
S 288 4-Methyl-1-cyclohexanemeth	55		6.400					ND	
S 136 Diallate	86		6.701					ND	
S 162 Aramite, Total	185		8.271					ND	
S 295 Dowanol	1		0.000					ND	
S 296 Dowanol Peak 1	1		0.000					ND	
S 191 Methyl Phenols,Total	100				0			0.9833	
S 245 Total Cresols	100				0			0.9833	
T 240 Trimethyl phosphate TIC	110	5.081	5.002	0.081	0	152		0	
T 194 Decane TIC	142	5.726	5.802	-0.074	11	94		0	
T 193 Hexamethylphosphoramide TI	135	5.774	6.498	-0.726	1	482		0	
T 234 2-Isopropylphenol TIC	121	7.231	7.247	-0.019	0	222		0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
T 235 4-isopropylphenol TIC	121	7.356	7.361	-0.008	0	83		0	
T 236 3-isopropylphenol TIC	121	7.356	7.361	-0.008	0	83		0	
T 300 Alpha-Terpineol TIC	59	7.500	7.497	0.000	0	78		0	
T 237 3-(1,1-Dimethylethyl Pheno	135	7.697	7.717	-0.023	1	252		0	
T 231 2,3,7,8-TCDD	322		8.850					ND	
T 195 Hydroquinone TIC	110	9.005	8.997	0.005	1	46		0	
T 192 Octadecane (TIC)	254	9.924	9.600	0.324	2	55		0	
T 242 Triphenyl Phosphate TIC	326		12.000					ND	
T 196 Kepone TIC	272		12.000					ND	
T 241 Tricresyl phosphate TIC	368		12.500					ND	
T 280 2,3,7,8-TCDD TIC	198	12.598	12.497	0.098	0	4475		0	
T 248 2,3,7,8 TCDF TIC	304		13.000					ND	
T 197 Hexachlorophene TIC	198		13.600					ND	
T 239 Tris(2,3-dibromopropyl)pho	201	13.901	13.997	-0.099	0	49		0	

QC Flag Legend

Processing Flags
- NR - Missing Quant Standard
- NC - Not Calibrated
- ND - Not Detected or Marked ND
- 7 - Failed Limit of Detection

Review Flags
- M - Manually Integrated

Reagents:

SMLIST1 L2 W_00006 Amount Added: 1.00 Units: mL

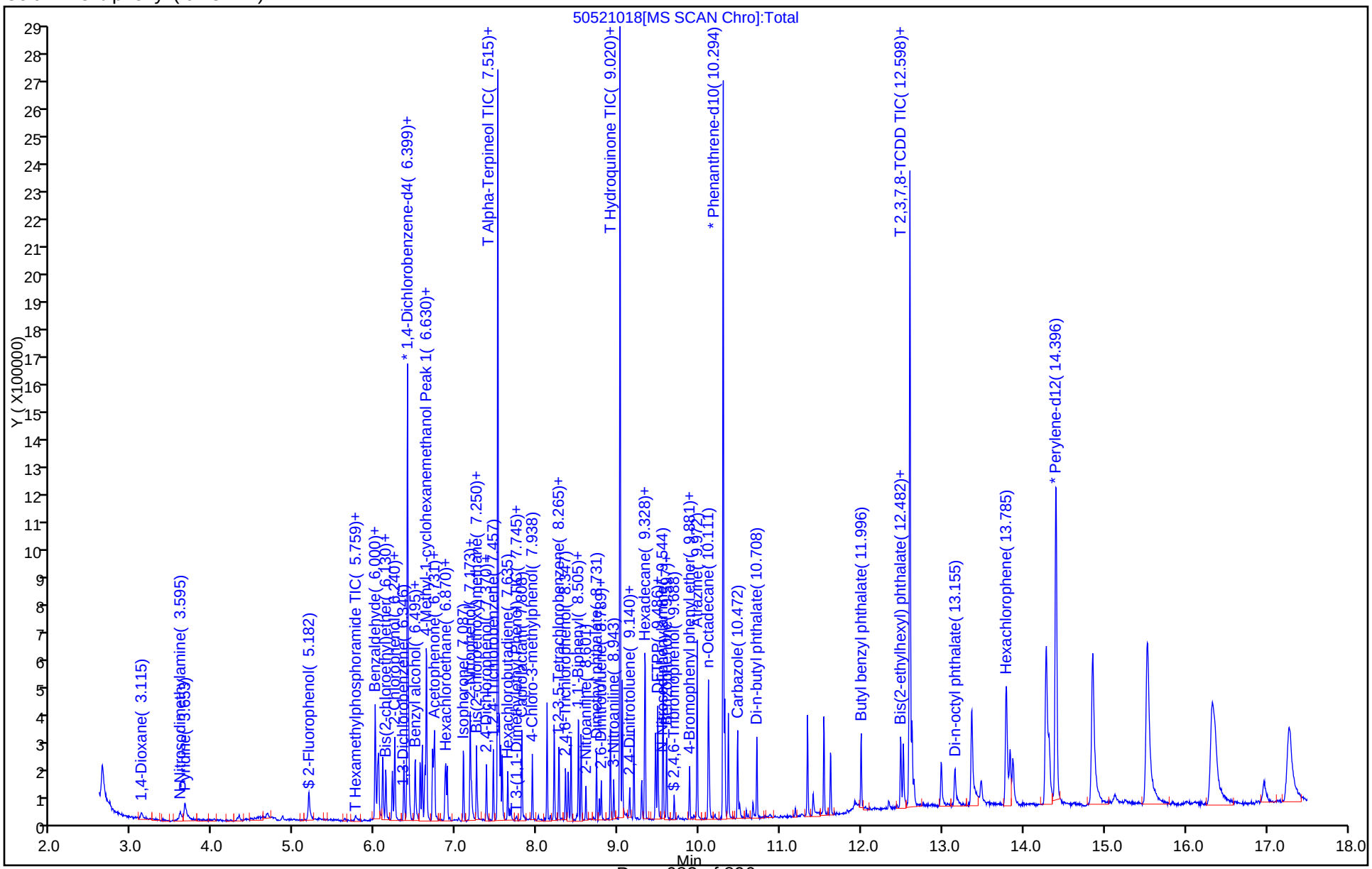
Report Date: 21-May-2015 14:54:16 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150521-43883.b\50521018.D

Injection Date:	21-May-2015 12:29:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	lodv l2			Worklist Smp#:	18
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



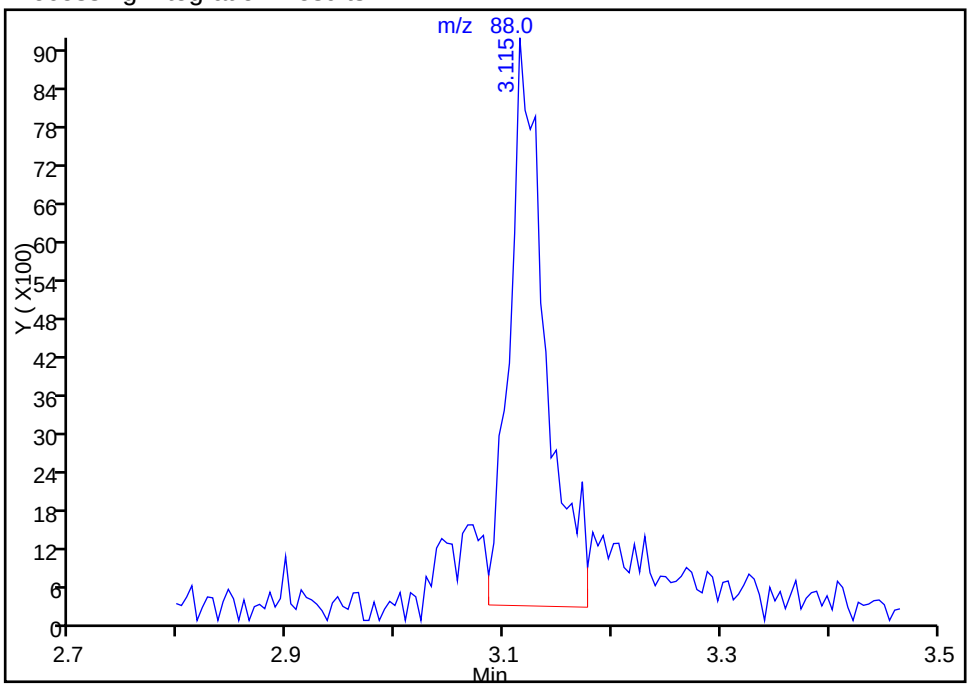
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150521-43883.b\50521018.D
Injection Date: 21-May-2015 12:29:30 Instrument ID: A4HP9
Lims ID: lodv l2
Client ID:
Operator ID: 001574 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

25 1,4-Dioxane, CAS: 123-91-1

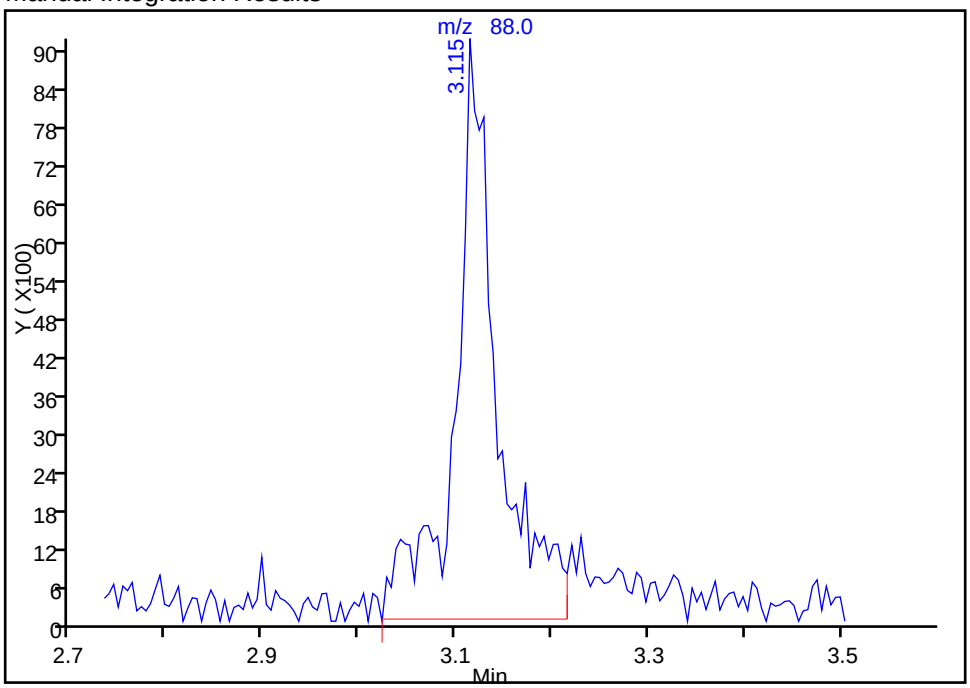
Processing Integration Results

RT: 3.11
Area: 20494
Amount: 0.356398
Amount Units: ng/ul



Manual Integration Results

RT: 3.11
Area: 27910
Amount: 0.485366
Amount Units: ng/ul



Reviewer: ulmanm, 21-May-2015 13:10:22
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

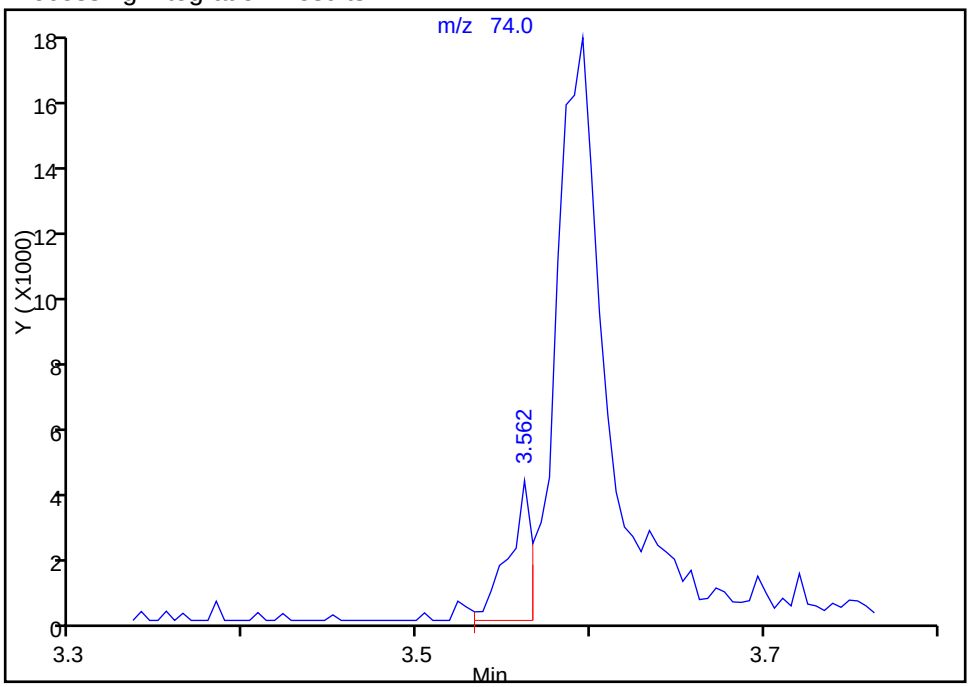
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150521-43883.b\50521018.D
Injection Date: 21-May-2015 12:29:30 Instrument ID: A4HP9
Lims ID: lodv l2
Client ID:
Operator ID: 001574 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

26 N-Nitrosodimethylamine, CAS: 62-75-9

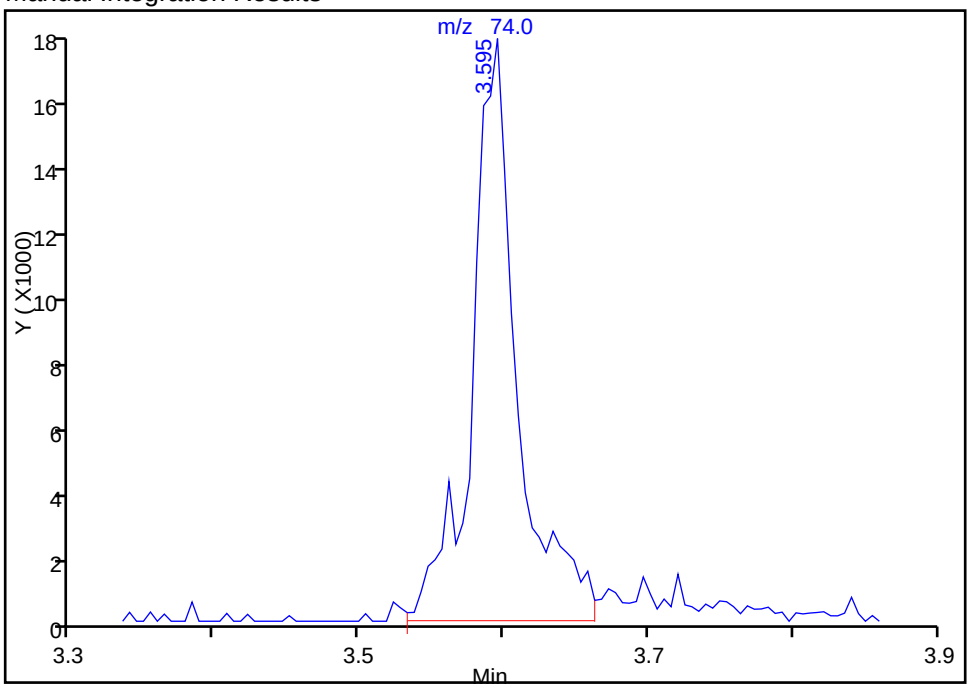
Processing Integration Results

RT: 3.56
Area: 3906
Amount: 0.043979
Amount Units: ng/ul



Manual Integration Results

RT: 3.60
Area: 38044
Amount: 0.428352
Amount Units: ng/ul



Reviewer: ulmanm, 21-May-2015 13:10:22
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Manual Integration/User Assign Peak Report

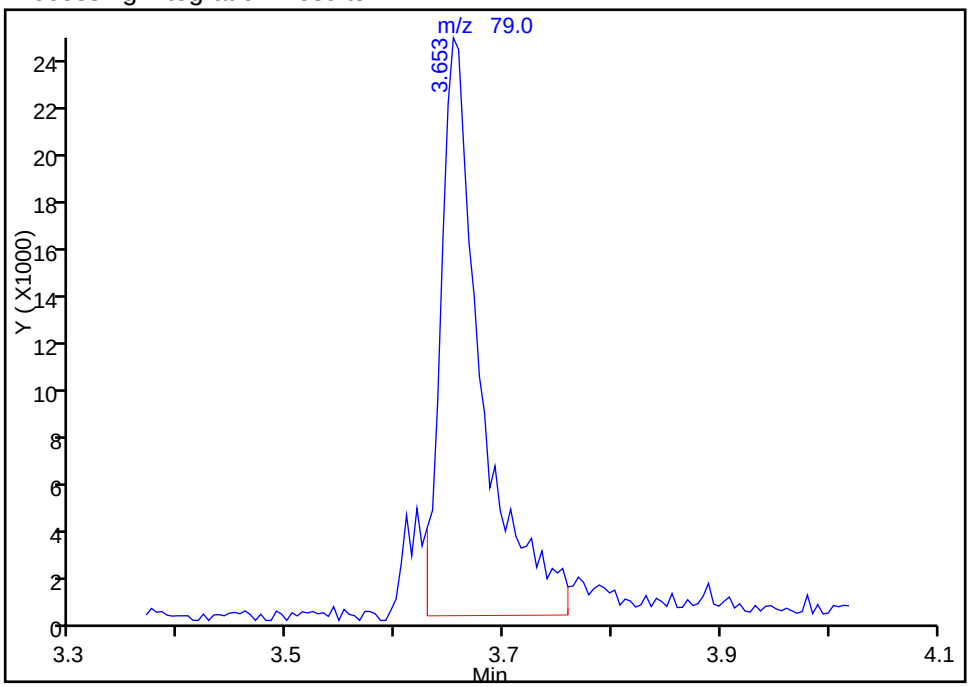
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150521-43883.b\50521018.D
Injection Date: 21-May-2015 12:29:30 Instrument ID: A4HP9
Lims ID: lodv l2
Client ID:
Operator ID: 001574 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

27 Pyridine, CAS: 110-86-1

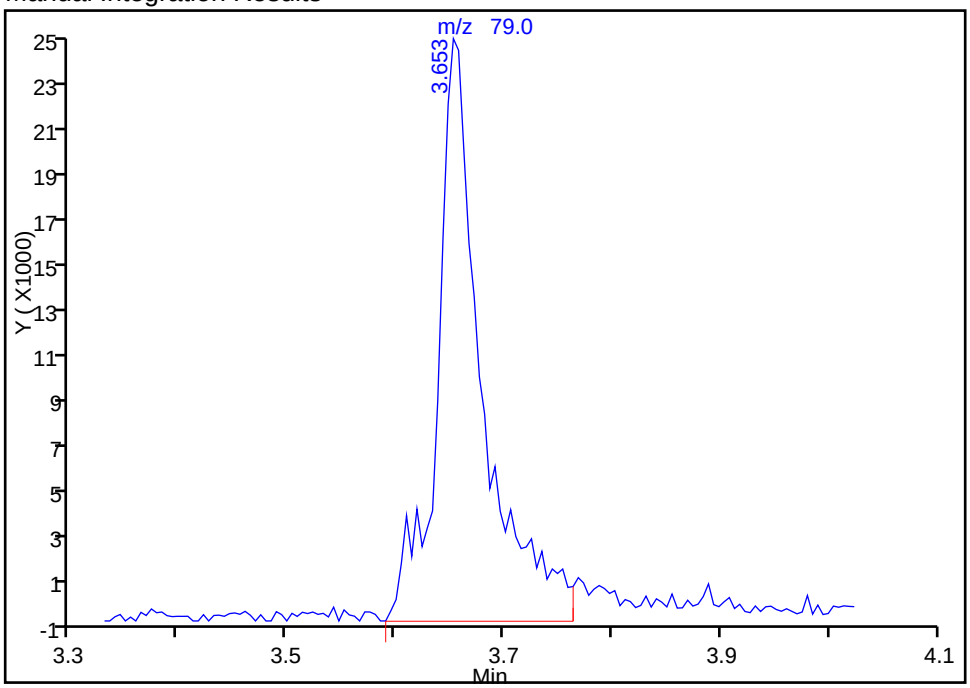
Processing Integration Results

RT: 3.65
Area: 62237
Amount: 0.404773
Amount Units: ng/ul



Manual Integration Results

RT: 3.65
Area: 69753
Amount: 0.453655
Amount Units: ng/ul



Reviewer: ulmanm, 21-May-2015 13:10:22
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

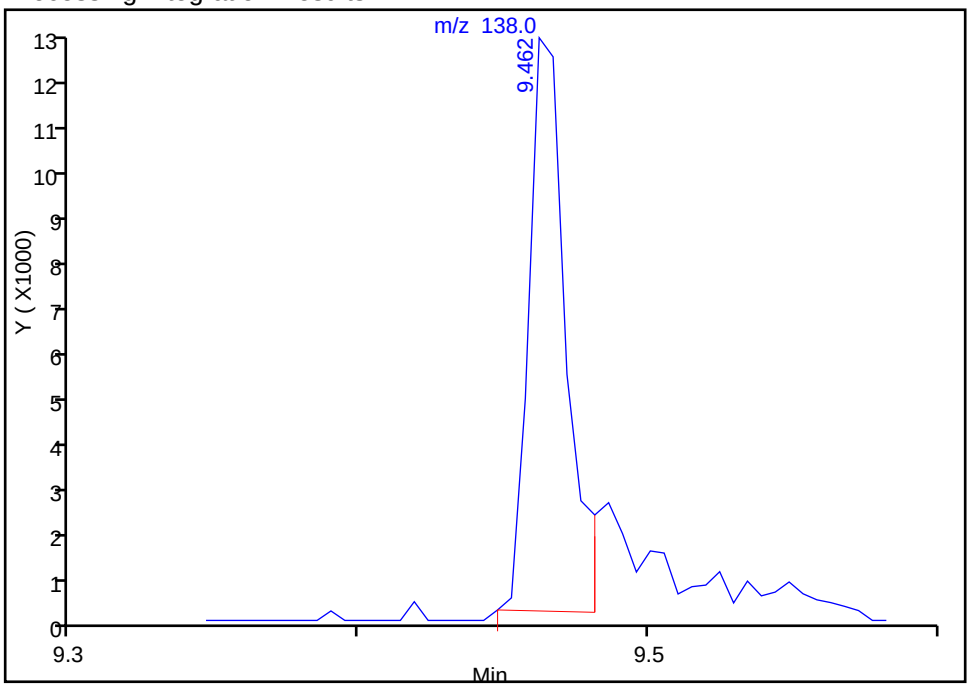
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150521-43883.b\50521018.D
Injection Date: 21-May-2015 12:29:30 Instrument ID: A4HP9
Lims ID: lodv l2
Client ID:
Operator ID: 001574 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

125 4-Nitroaniline, CAS: 100-01-6

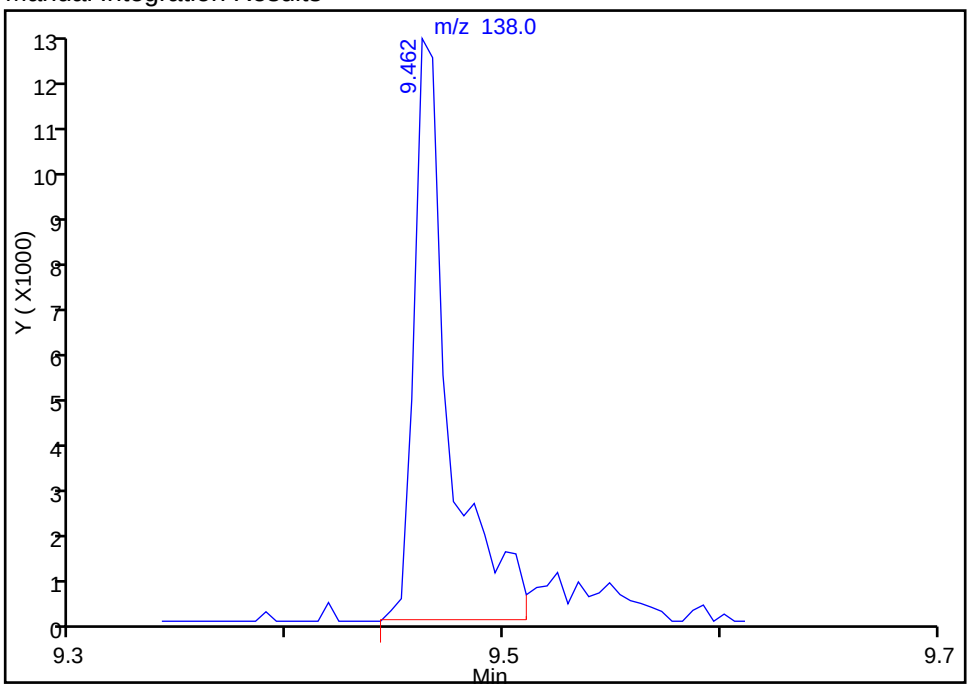
Processing Integration Results

RT: 9.46
Area: 11339
Amount: 0.284518
Amount Units: ng/ul



Manual Integration Results

RT: 9.46
Area: 14285
Amount: 0.358439
Amount Units: ng/ul



Reviewer: ulmanm, 21-May-2015 13:10:22
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID: LODV 240-181781/19 Calibration Date: 05/21/2015 12:54

Instrument ID: A4HP9 Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/19/2015 19:33

Lab File ID: 50521019.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzoic acid	Ave	0.2007			1.19	2.00		
2,4-Dinitrophenol	Ave	0.1257			0.538	2.00		
4-Nitrophenol	Ave	0.1185			1.41	2.00		
4,6-Dinitro-2-methylphenol	Lin1				1.22	2.00		
1,2-Diphenylhydrazine(as Azobenzene)	Ave	1.191			0.990	1.00		
Pentachlorophenol	Ave	0.1092			1.52	2.00		
Benzidine	Lin1				1.45	2.00		
1,1'-Biphenyl	Ave	1.528			0.000500	1.00		
1,2,4,5-Tetrachlorobenzene	Ave	0.4013			0.00100	1.00		
1,2,4-Trichlorobenzene	Ave	0.2548			0.000500	1.00		
1,2-Dichlorobenzene	Ave	1.487			0.000500	1.00		
1,3-Dichlorobenzene	Ave	1.545			0.000500	1.00		
1,3-Dinitrobenzene	Ave	0.1850			0.00100	1.00		
1,4-Dichlorobenzene	Ave	1.562			0.000500	1.00		
1,4-Dioxane	Ave	0.9041			0.00100	1.00		
2,3,4,6-Tetrachlorophenol	Ave	0.2445			0.00100	1.00		
2,4,5-Trichlorophenol	Ave	0.3425			0.000500	1.00		
2,4,6-Trichlorophenol	Ave	0.3276			0.000500	1.00		
2,4-Dichlorophenol	Ave	0.2493			0.000500	1.00		
2,4-Dimethylphenol	Ave	0.3630			0.000500	1.00		
2,4-Dinitrotoluene	Ave	0.3227			0.000500	1.00		
2,6-Dichlorophenol	Ave	0.2403			0.00200	1.00		
2,6-Dinitrotoluene	Ave	0.2594			0.000500	1.00		
2-Chloronaphthalene	Ave	1.127			0.000500	1.00		
2-Chlorophenol	Ave	1.581			0.000500	1.00		
2-Methylnaphthalene	Ave	0.6435			0.000100	1.00		
2-Methylphenol	Ave	1.738			0.000500	1.00		
2-Nitroaniline	Ave	0.4439			0.000500	1.00		
2-Nitrophenol	Ave	0.1715			0.000500	1.00		
3 & 4 Methylphenol	Ave	1.836			0.00100	1.00		
3,3'-Dichlorobenzidine	Ave	0.3475			0.00100	2.00		
3-Nitroaniline	Ave	0.3816			0.000500	1.00		

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Lab Sample ID: LODV 240-181781/19 | Calibration Date: 05/21/2015 12:54

Instrument ID: A4HP9 | Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS ID: 0.45(mm) | Calib End Date: 05/19/2015 19:33

Lab File ID: 50521019.D | Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Bromophenyl phenyl ether	Ave	0.1674			0.000500	1.00		
4-Chloro-3-methylphenol	Ave	0.3204			0.000500	1.00		
4-Chloroaniline	Ave	0.4836			0.000500	1.00		
4-Chlorophenyl phenyl ether	Ave	0.4981			0.000500	1.00		
4-Nitroaniline	Ave	0.3296			0.000500	1.00		
Acenaphthene	Ave	1.123			0.000100	1.00		
Acenaphthylene	Ave	1.955			0.000100	1.00		
Acetophenone	Ave	2.276			0.000500	1.00		
Aniline	Ave	3.116			0.00100	1.00		
Anthracene	Ave	1.159			0.000100	1.00		
Atrazine	Ave	0.1482			0.000500	2.00		
Azobenzene	Ave	1.193			0.000500	1.00		
Benzaldehyde	Ave	1.430			0.000500	2.00		
Benzo[a]anthracene	Ave	1.130			0.000100	1.00		
Benzo[a]pyrene	Ave	1.182			0.000100	1.00		
Benzo[b]fluoranthene	Ave	1.234			0.000100	1.00		
Benzo[g,h,i]perylene	Ave	0.9195			0.000100	1.00		
Benzo[k]fluoranthene	Ave	1.259			0.000100	1.00		
Benzyl alcohol	Ave	1.281			0.000500	1.00		
bis (2-chloroisopropyl) ether	Ave	2.612			0.000500	1.00		
Bis(2-chloroethoxy)methane	Ave	0.5177			0.000500	1.00		
Bis(2-chloroethyl)ether	Ave	2.009			0.000100	1.00		
Bis(2-ethylhexyl) phthalate	Ave	0.9242			0.000500	1.00		
Butyl benzyl phthalate	Ave	0.6609			0.000500	1.00		
Caprolactam	Ave	0.1206			0.000500	2.00		
Carbazole	Ave	1.046			0.000500	1.00		
Chrysene	Ave	1.028			0.000100	1.00		
Dibenz(a,h)anthracene	Ave	0.9270			0.000100	1.00		
Dibenzofuran	Ave	1.523			0.000100	1.00		

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Lab Sample ID: LODV 240-181781/19 Calibration Date: 05/21/2015 12:54

Instrument ID: A4HP9 Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/19/2015 19:33

Lab File ID: 50521019.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diethyl phthalate	Ave	1.107			0.00100	1.00		
Dimethyl phthalate	Ave	1.149			0.000500	1.00		
Di-n-butyl phthalate	Ave	1.229			0.00100	1.00		
Di-n-octyl phthalate	Ave	2.107			0.000500	1.00		
Fluoranthene	Ave	0.9936			0.000100	1.00		
Fluorene	Ave	1.237			0.000100	1.00		
Hexachlorobenzene	Ave	0.1506			0.000100	1.00		
Hexachlorobutadiene	Ave	0.1055			0.000500	1.00		
Hexachlorocyclopentadiene	Ave	0.2335			0.000500	1.00		
Hexachloroethane	Ave	0.6369			0.000500	1.00		
Indene	Ave	2.692			0.00100	2.00		
Indeno[1,2,3-cd]pyrene	Ave	1.102			0.000100	1.00		
Isophorone	Ave	0.7995			0.000500	1.00		
Naphthalene	Ave	1.056			0.000100	1.00		
Nitrobenzene	Ave	0.4265			0.000100	1.00		
N-Nitrosodimethylamine	Ave	1.396			0.000500	1.00		
N-Nitrosodi-n-propylamine	Ave	1.203			0.000500	1.00		
N-Nitrosodiphenylamine	Ave	0.5447			0.000500	2.00		
Phenanthrene	Ave	1.145			0.000100	1.00		
Phenol	Ave	2.551			0.00100	1.00		
Pyrene	Ave	1.212			0.000100	1.00		
Pyridine	Ave	2.418			0.000500	1.00		
2,4,6-Tribromophenol (Surr)	Ave	0.1049			0.000000	1.00	0*	35-125
2-Fluorobiphenyl (Surr)	Ave	1.141			0.000000	1.00	0*	45-105
2-Fluorophenol (Surr)	Ave	1.729			0.000000	1.00	0*	35-105
Nitrobenzene-d5 (Surr)	Ave	0.4097			0.000000	1.00	0*	35-100
Phenol-d5 (Surr)	Ave	2.335			0.000000	1.00	0*	40-100
Terphenyl-d14 (Surr)	Ave	0.7676			0.000000	1.00	0*	30-125

Report Date: 21-May-2015 14:54:18 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150521-43883.b\50521019.D
Lims ID: lodv l3
Client ID:
Sample Type: LODV
Inject. Date: 21-May-2015 12:54:30 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043883-019
Misc. Info.: LODV L3LODV L3
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150521-43883.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-May-2015 14:54:07 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 21-May-2015 13:25:19

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.396	6.397	-0.001	96	261559	4.00	4.00	
* 2 Naphthalene-d8	136	7.512	7.513	-0.001	99	1063616	4.00	4.00	
* 3 Acenaphthene-d10	164	9.022	9.023	-0.001	90	514685	4.00	4.00	
* 4 Phenanthrene-d10	188	10.292	10.297	-0.005	95	797573	4.00	4.00	
* 5 Chrysene-d12	240	12.600	12.601	-0.001	92	678365	4.00	4.00	
* 6 Perylene-d12	264	14.403	14.404	-0.001	89	532717	4.00	4.00	
$ 7 2-Fluorophenol	112		5.181				ND	ND	
$ 8 Phenol-d5	99		6.032				ND	ND	
$ 9 Nitrobenzene-d5	82		6.874				ND	ND	
$ 10 2-Fluorobiphenyl (Surr)	172		8.417				ND	ND	
$ 11 2,4,6-Tribromophenol	330		9.692				ND	ND	
$ 12 Terphenyl-d14	244		11.620				ND	ND	
25 1,4-Dioxane	88		3.108				ND	ND	
26 N-Nitrosodimethylamine	74		3.584				ND	ND	
27 Pyridine	79		3.642				ND	ND	
20 Dimethylformamide	73		3.978					ND	
28 Ethyl methacrylate	69		4.089					ND	
31 2-Picoline	93		4.374					ND	
32 N-Nitrosomethylethylamine	88		4.504					ND	
35 Acrylamide	71	4.790	4.778	0.012	1	126			NC
34 Methyl methanesulfonate	80		4.826					ND	
233 n,n'-Dimethylacetamide	44		4.993					ND	
36 N-Nitrosodiethylamine	102		5.254					ND	
37 Ethyl methanesulfonate	79		5.523					ND	
42 Phenylmercaptan	110		5.768					ND	
38 2-Methylcyclohexanone	68		5.820					ND	
39 3-Methylcyclohexanone	69		5.854					ND	
40 4-Methylcyclohexanone	55	5.983	5.902	0.081	1	182			NC
41 Benzaldehyde	77		6.003				ND	ND	
45 Pentachloroethane	167		6.019					ND	
43 Phenol	94		6.046				ND	ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
44 Aniline	93		6.095				ND	ND	
69 Bis(2-chloroethyl)ether	93		6.133				ND	ND	
46 2-Chlorophenol	128		6.215				ND	ND	
243 n-Decane	57	6.243	6.244	-0.001	92	152459	NC	NC	
47 1,3-Dichlorobenzene	146		6.354				ND	ND	
48 1,4-Dichlorobenzene	146		6.417				ND	ND	
232 1-Methyl-2-pyrrilidinone	99	6.401	6.421	-0.020	17	2250		NC	
49 Benzyl alcohol	108		6.494				ND	ND	
50 1,2-Dichlorobenzene	146		6.556				ND	ND	
56 N-Nitrosopyrrolidine	100		6.572					ND	
286 4-Methyl-1-cyclohexanemeth	55	6.579	6.574	0.005	0	2663		NC	
51 2-Methylphenol	108		6.580				ND	ND	
59 N-Nitrosomorpholine	56		6.605					ND	
53 2,2'-oxybis[1-chloropropan	45		6.614				ND	ND	
52 Indene	115		6.633				ND	ND	
60 2-Toluidine	106		6.639					ND	
287 4-Methyl-1-cyclohexanemeth	55	6.709	6.708	0.001	0	5593		NC	
21 3 & 4 Methylphenol	108		6.710				ND	ND	
57 N-Nitrosodi-n-propylamine	70		6.724				ND	ND	
58 Acetophenone	105		6.734				ND	ND	
61 Hexachloroethane	117		6.864				ND	ND	
63 N-Nitrosopiperidine	114		6.884					ND	
62 Nitrobenzene	77		6.893				ND	ND	
64 Isophorone	82		7.090				ND	ND	
68 o,o',o''-Triethylphosphoro	198		7.105					ND	
67 1,3,5-Trichlorobenzene	180		7.123					ND	
66 2-Nitrophenol	139		7.172				ND	ND	
65 2,4-Dimethylphenol	107		7.177				ND	ND	
72 alpha,alpha-Dimethyl phene	58		7.216					ND	
71 Benzoic acid	122	7.190	7.234	-0.044	0	63615	2.00	1.19	M
70 Bis(2-chloroethoxy)methane	93		7.253				ND	ND	
73 2,4-Dichlorophenol	162		7.374				ND	ND	
74 1,2,4-Trichlorobenzene	180		7.460				ND	ND	
78 Hexachloropropene	213		7.485					ND	
75 Naphthalene	128		7.532				ND	ND	
76 4-Chloroaniline	127		7.552				ND	ND	
77 2,6-Dichlorophenol	162		7.571				ND	ND	
80 1,2,3-Trichlorobenzene	180		7.590					ND	
79 Hexachlorobutadiene	225		7.638				ND	ND	
81 Benzothiazole	135		7.676					ND	
82 Quinoline	129		7.682					ND	
83 N-Nitrosodi-n-butylamine	84		7.697					ND	
85 p-Phenylene diamine	108		7.716					ND	
84 Caprolactam	113		7.835				ND	ND	
94 Safrole, Total	162		7.894					ND	
86 4-Chloro-3-methylphenol	107		7.946				ND	ND	
87 2-Methylnaphthalene	142		8.124				ND	ND	
225 Isosafrole Peak 1	162		8.144					ND	
90 1,2,3,5-Tetrachlorobenzene	216	8.267	8.191	0.076	92	55348		NC	
88 1-Methylnaphthalene	142		8.210				ND	ND	
89 Hexachlorocyclopentadiene	237		8.268				ND	ND	
91 1,2,4,5-Tetrachlorobenzene	216		8.273				ND	ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
227 Isosafrole Peak 2	162		8.336					ND	
92 2,4,6-Trichlorophenol	196		8.350				ND	ND	
93 2,4,5-Trichlorophenol	196		8.388				ND	ND	
97 2,4-Toluene diamine	121		8.412					ND	
246 1-Chloronaphthalene	162		8.433					ND	
99 1,2,3,4 -Tetrachlorobenzen	216		8.446					ND	
96 3,4-Dichloronitrobenzene	109		8.465					ND	
98 1,1'-Biphenyl	154		8.509				ND	ND	
101 Phenyl ether	170		8.523					ND	
100 2-Chloronaphthalene	162		8.542				ND	ND	
103 1,4-Naphthoquinone	158		8.543					ND	
104 1,4-Dinitrobenzene	168		8.567					ND	
102 2-Nitroaniline	65		8.605				ND	ND	
105 Dimethyl phthalate	163		8.735				ND	ND	
106 1,3-Dinitrobenzene	168		8.768				ND	ND	
107 2,6-Dinitrotoluene	165		8.792				ND	ND	
109 Acenaphthylene	152		8.903				ND	ND	
110 3-Nitroaniline	138		8.946				ND	ND	
111 2,4-Dinitrophenol	184	9.032	9.033	-0.001	52	8699	2.00	0.5380	
115 Pentachlorobenzene	250		9.034					ND	
112 Acenaphthene	153		9.052				ND	ND	
113 4-Nitrophenol	109	9.051	9.057	-0.006	39	21420	2.00	1.41	
117 1-Naphthylamine	143		9.115					ND	
118 2,3,5,6-Tetrachlorophenol	232		9.120					ND	
114 2,4-Dinitrotoluene	165		9.143				ND	ND	
120 2-Naphthylamine	143		9.178					ND	
116 Dibenzofuran	168		9.196				ND	ND	
122 Thionazin	97		9.269					ND	
119 2,3,4,6-Tetrachlorophenol	232		9.292				ND	ND	
121 Diethyl phthalate	149		9.331				ND	ND	
124 N-Nitro-o-toluidine	152		9.332					ND	
247 Hexadecane	57	9.330	9.336	-0.006	89	171156	NC	NC	
127 Tributyl phosphate	99		9.417					ND	
130 Diphenylamine	169		9.418					ND	
123 4-Chlorophenyl phenyl ethe	204		9.461				ND	ND	
125 4-Nitroaniline	138		9.470				ND	ND	
126 Fluorene	166		9.490				ND	ND	
128 4,6-Dinitro-2-methylphenol	198	9.493	9.499	-0.006	57	15298	2.00	1.22	
297 Benzophenone	105	9.594	9.512	0.082	56	46885		NC	
134 Sulfotepp	202		9.519					ND	
131 N-Nitrosodiphenylamine	169		9.557				ND	ND	
133 Azobenzene	77		9.600				ND	ND	
132 1,2-Diphenylhydrazine	77	9.594	9.600	-0.006	98	235539	1.00	0.99	
135 1,3,5-Trinitrobenzene	213		9.601					ND	
137 Phenacetin	108		9.649					ND	
228 Diallate Peak 1	86		9.659					ND	
138 Phorate	121		9.664					ND	
230 Diallate Peak 2	86		9.736					ND	
140 Dimethoate	87		9.803					ND	
139 4-Bromophenyl phenyl ether	248		9.884				ND	ND	
129 4-Aminobiphenyl	169		9.962					ND	
141 Hexachlorobenzene	284		9.975				ND	ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
142 Atrazine	200		9.980				ND	ND	
144 Pronamide	173		9.991					ND	
145 Pentachloronitrobenzene	237		10.000					ND	
146 Disulfoton	88		10.101					ND	
244 n-Octadecane	57	10.109	10.115	-0.006	58	170243	NC	NC	
147 Dinoseb	211		10.116					ND	
143 Pentachlorophenol	266	10.123	10.124	-0.001	73	32989	2.00	1.52	
148 Phenanthrene	178		10.317				ND	ND	
149 Anthracene	178		10.360				ND	ND	
152 Methyl parathion	109		10.428					ND	
151 Carbazole	167		10.475				ND	ND	
153 Diphenylsulfone	125		10.672					ND	
154 Di-n-butyl phthalate	149		10.711				ND	ND	
155 Ethyl Parathion	97		10.746					ND	
156 4-Nitroquinoline-1-oxide	190		10.808					ND	
157 Methapyrilene	58		10.851					ND	
158 Isodrin	66		11.068					ND	
159 Fluoranthene	202		11.336				ND	ND	
160 Benzidine	184	11.402	11.403	-0.001	97	119121	2.00	1.45	
226 Aramite Peak 1	185		11.419					ND	
229 Aramite Peak 2	185		11.481					ND	
161 Pyrene	202		11.538				ND	ND	
163 p-Dimethylamino azobenzene	225		11.587					ND	
164 Chlorobenzilate	139		11.616					ND	
282 Kepone	272		11.764					ND	
167 Famphur	218		11.818					ND	
169 3,3'-Dimethylbenzidine	212		11.866					ND	
168 Butyl benzyl phthalate	149		11.995				ND	ND	
171 2-Acetylaminofluorene	181		12.087					ND	
174 4,4'-Methylene bis(2-chlor	231		12.337					ND	
172 3,3'-Dimethoxybenzidine	244		12.379					ND	
173 Bis(2-ethylhexyl) phthalat	149		12.485				ND	ND	
175 3,3'-Dichlorobenzidine	252		12.519				ND	ND	
176 Hexabromobenzene	232	12.600	12.543	0.057	1	25879		NC	
177 Benzo[a]anthracene	228		12.591				ND	ND	
178 Chrysene	228		12.630				ND	ND	
179 6-Methylchrysene	242		12.895					ND	
180 Di-n-octyl phthalate	149		13.154				ND	ND	
181 7,12-Dimethylbenz(a)anthra	256		13.559					ND	
281 Hexachlorophene	196		13.628					ND	
182 Benzo[b]fluoranthene	252		13.842				ND	ND	
183 Benzo[k]fluoranthene	252		13.875				ND	ND	
184 Benzo[a]pyrene	252		14.322				ND	ND	
185 3-Methylcholanthrene	268		14.535					ND	
187 Dibenz[a,h]acridine	279		15.453					ND	
186 Dibenz[a,j]acridine	279		15.746					ND	
188 Indeno[1,2,3-cd]pyrene	276		16.376				ND	ND	
189 Dibenz(a,h)anthracene	278		16.381				ND	ND	
190 Benzo[g,h,i]perylene	276		16.986				ND	ND	
252 4-tert-Butylphenol	1		0.000					ND	
261 Endosulfan II	1		0.000					ND	
291 Dipropylene Glycol Phenyl	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
292 Dowanol Peak 2	1		0.000					ND	
253 Endrin aldehyde	1		0.000					ND	
278 delta-BHC	1		0.000					ND	
277 Chlorpyrifos	1		0.000					ND	
265 Dibenzo[a,h]pyrene	1		0.000					ND	
260 Methoxychlor	1		0.000					ND	
294 Dowanol Peak 3	1		0.000					ND	
274 Dibenz(a,i)pyrene	1		0.000					ND	
271 3 & 4 Phenoxyphenol	1		0.000					ND	
258 Aldrin	1		0.000					ND	
263 Heptachlor epoxide	1		0.000					ND	
285 Chlorobenzene TIC	1		0.000					ND	
293 Dowanol Peak 4	1		0.000					ND	
289 1-Phenoxy-2-propanol	1		0.000					ND	
276 Chlordane (technical)	1		0.000					ND	
255 beta-BHC	1		0.000					ND	
269 Dibenzo[a,e]pyrene	1		0.000					ND	
267 2,6-Diaminotoluene	1		0.000					ND	
251 Endosulfan sulfate	1		0.000					ND	
249 4-Chlorophenol TIC	1		0.000					ND	
275 Dieldrin	1		0.000					ND	
259 o-Phenylphenol	1		0.000					ND	
257 Endosulfan I	1		0.000					ND	
290 1-Phenoxy-2-propanol TIC	1		0.000					ND	
268 Endrin	1		0.000					ND	
272 2,3-Dinitrotoluene	1		0.000					ND	
266 Heptachlor	1		0.000					ND	
299 Diisobutyl phthalate TIC	1		0.000					ND	
262 Isoquinoline	1		0.000					ND	
264 alpha-BHC	1		0.000					ND	
283 2-Ethoxyethanol	1		0.000					ND	
254 2-Chloroaniline	1		0.000					ND	
250 gamma-BHC (Lindane)	1		0.000					ND	
270 Toxaphene	1		0.000					ND	
279 3,4-Dichloroaniline	1		0.000					ND	
273 3 & 4 Chlorophenol	1		0.000					ND	
150 DFTPP									
166 4,4'-DDE	246		11.572					ND	
165 4,4'-DDD	235	11.850	11.856	-0.006	1	478		NR	7
170 4,4'-DDT	235	12.600	12.115	0.485	1	6977		NR	7
S 95 Isosafrole	162		5.568					ND	
S 288 4-Methyl-1-cyclohexanemeth	55		6.400					ND	
S 136 Diallate	86		6.701					ND	
S 162 Aramite, Total	185		8.271					ND	
S 295 Dowanol	1		0.000					ND	
S 296 Dowanol Peak 1	1		0.000					ND	
S 191 Methyl Phenols,Total	100		0.000					ND	
S 245 Total Cresols	100		0.000					ND	
T 240 Trimethyl phosphate TIC	110	4.901	5.002	-0.099	0	195		0	
T 194 Decane TIC	142	6.127	5.802	0.327	1	1414		0	
T 193 Hexamethylphosphoramide TI	135		6.500					ND	
T 234 2-Isopropylphenol TIC	121	7.224	7.247	-0.026	0	71		0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
T 235 4-isopropylphenol TIC	121	7.377	7.361	0.013	0	52		0	
T 236 3-isopropylphenol TIC	121	7.377	7.361	0.013	0	52		0	
T 300 Alpha-Terpineol TIC	59	7.507	7.497	0.007	0	436		0	
T 237 3-(1,1-Dimethylethyl Pheno	135	7.719	7.717	-0.001	1	205		0	
T 231 2,3,7,8-TCDD	322		8.850					ND	
T 195 Hydroquinone TIC	110	9.022	8.997	0.022	24	347		0	
T 192 Octadecane (TIC)	254	9.686	9.600	0.086	1	97		0	
T 242 Triphenyl Phosphate TIC	326		12.000					ND	
T 196 Kepone TIC	272		12.000					ND	
T 241 Tricresyl phosphate TIC	368		12.500					ND	
T 280 2,3,7,8-TCDD TIC	198	12.456	12.497	-0.044	0	46		0	
T 248 2,3,7,8 TCDF TIC	304		13.000					ND	
T 197 Hexachlorophene TIC	198		13.600					ND	
T 239 Tris(2,3-dibromopropyl)pho	201	13.884	13.997	-0.116	0	238		0	

QC Flag Legend

Processing Flags
- NR - Missing Quant Standard
- NC - Not Calibrated
- ND - Not Detected or Marked ND
- 7 - Failed Limit of Detection

Review Flags
- M - Manually Integrated

Reagents:

SMLIST1 L3 W_00006 Amount Added: 1.00 Units: mL

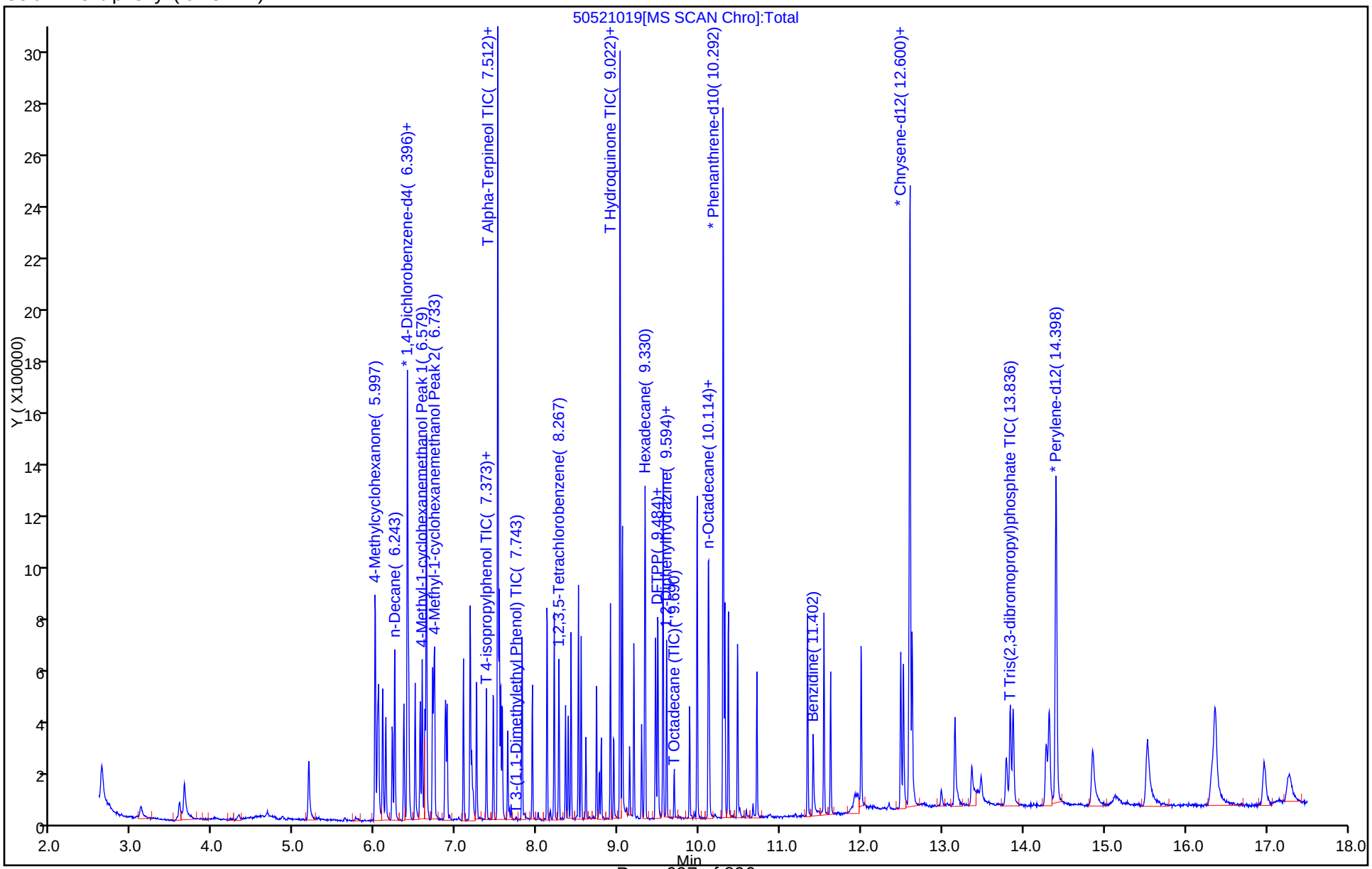
Report Date: 21-May-2015 14:54:18 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150521-43883.b\50521019.D

Injection Date:	21-May-2015 12:54:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	lodv l3			Worklist Smp#:	19
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

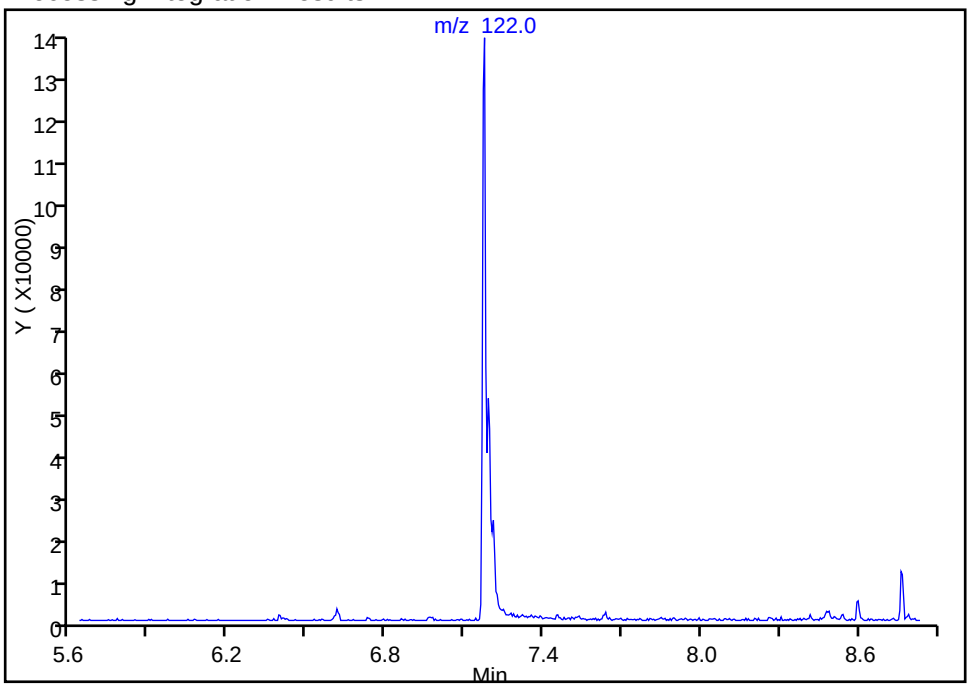
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150521-43883.b\50521019.D
Injection Date: 21-May-2015 12:54:30 Instrument ID: A4HP9
Lims ID: lodv l3
Client ID:
Operator ID: 001574 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

71 Benzoic acid, CAS: 65-85-0

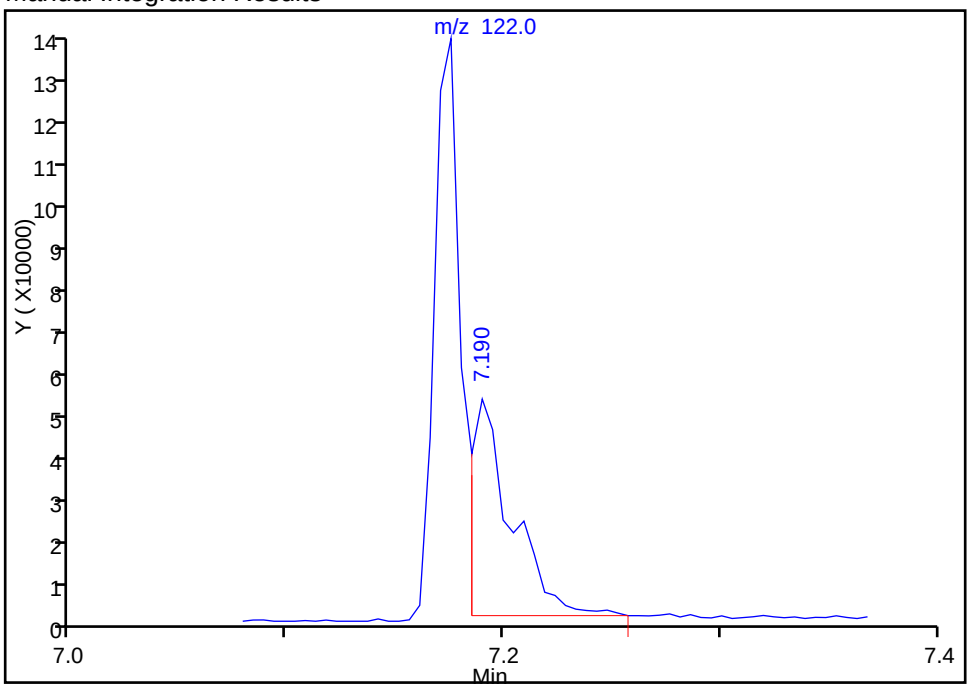
Not Detected
Expected RT: 7.23

Processing Integration Results



Manual Integration Results

RT: 7.19
Area: 63615
Amount: 1.192016
Amount Units: ng/ul



Reviewer: ulmanm, 21-May-2015 13:25:19
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-179064/2-A

Matrix: Water | Lab File ID: 50512013.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3520C | Date Extracted: 05/04/2015 05:57

Sample wt/vol: 1000(mL) | Date Analyzed: 05/12/2015 12:15

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 180308 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
83-32-9	Acenaphthene	0.10	U	0.20	0.10	0.044
208-96-8	Acenaphthylene	0.10	U	0.20	0.10	0.048
120-12-7	Anthracene	0.10	U	0.20	0.10	0.088
56-55-3	Benzo[a]anthracene	0.10	U	0.20	0.10	0.030
50-32-8	Benzo[a]pyrene	0.10	U	0.20	0.10	0.051
205-99-2	Benzo[b]fluoranthene	0.10	U	0.20	0.10	0.039
191-24-2	Benzo[g,h,i]perylene	0.10	U	0.20	0.10	0.046
65-85-0	Benzoic acid	20	U	25	20	10
207-08-9	Benzo[k]fluoranthene	0.10	U	0.20	0.10	0.045
100-51-6	Benzyl alcohol	0.50	U	5.0	0.50	0.38
111-91-1	Bis(2-chloroethoxy)methane	0.50	U	1.0	0.50	0.32
111-44-4	Bis(2-chloroethyl)ether	0.10	U	1.0	0.10	0.10
108-60-1	bis (2-chloroisopropyl) ether	0.50	U	1.0	0.50	0.40
117-81-7	Bis(2-ethylhexyl) phthalate	5.0	U	5.0	5.0	1.7
101-55-3	4-Bromophenyl phenyl ether	0.50	U	2.0	0.50	0.22
85-68-7	Butyl benzyl phthalate	0.50	U	5.0	0.50	0.26
86-74-8	Carbazole	0.50	U	1.0	0.50	0.28
106-47-8	4-Chloroaniline	0.50	U	2.0	0.50	0.21
59-50-7	4-Chloro-3-methylphenol	0.50	U	2.0	0.50	0.21
91-58-7	2-Chloronaphthalene	0.50	U	1.0	0.50	0.10
95-57-8	2-Chlorophenol	0.50	U	1.0	0.50	0.29
7005-72-3	4-Chlorophenyl phenyl ether	0.50	U	2.0	0.50	0.30
218-01-9	Chrysene	0.10	U	0.20	0.10	0.050
53-70-3	Dibenz(a,h)anthracene	0.10	U	0.20	0.10	0.045
132-64-9	Dibenzofuran	0.10	U	1.0	0.10	0.020
95-50-1	1,2-Dichlorobenzene	0.50	U	1.0	0.50	0.29
541-73-1	1,3-Dichlorobenzene	0.50	U	1.0	0.50	0.23
106-46-7	1,4-Dichlorobenzene	0.50	U	1.0	0.50	0.34
91-94-1	3,3'-Dichlorobenzidine	1.0	U	5.0	1.0	0.37
120-83-2	2,4-Dichlorophenol	0.50	U	2.0	0.50	0.19
84-66-2	Diethyl phthalate	1.0	U	2.0	1.0	0.60
105-67-9	2,4-Dimethylphenol	0.50	U	2.0	0.50	0.25
131-11-3	Dimethyl phthalate	0.50	U	2.0	0.50	0.29
84-74-2	Di-n-butyl phthalate	5.0	U	5.0	5.0	1.7

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-179064/2-A

Matrix: Water | Lab File ID: 50512013.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3520C | Date Extracted: 05/04/2015 05:57

Sample wt/vol: 1000(mL) | Date Analyzed: 05/12/2015 12:15

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 180308 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
534-52-1	4,6-Dinitro-2-methylphenol	4.0	U	5.0	4.0	2.4
51-28-5	2,4-Dinitrophenol	1.0	U	5.0	1.0	0.32
121-14-2	2,4-Dinitrotoluene	0.50	U	5.0	0.50	0.25
606-20-2	2,6-Dinitrotoluene	5.0	U	5.0	5.0	1.1
117-84-0	Di-n-octyl phthalate	0.50	U	2.0	0.50	0.23
206-44-0	Fluoranthene	0.10	U	0.20	0.10	0.045
86-73-7	Fluorene	0.10	U	0.20	0.10	0.041
118-74-1	Hexachlorobenzene	0.10	U	0.20	0.10	0.085
87-68-3	Hexachlorobutadiene	0.50	U	1.0	0.50	0.27
77-47-4	Hexachlorocyclopentadiene	0.50	U	10	0.50	0.24
67-72-1	Hexachloroethane	0.50	U	1.0	0.50	0.19
193-39-5	Indeno[1,2,3-cd]pyrene	0.10	U	0.20	0.10	0.043
78-59-1	Isophorone	0.50	U	1.0	0.50	0.27
91-57-6	2-Methylnaphthalene	0.10	U	0.20	0.10	0.090
95-48-7	2-Methylphenol	0.50	U	1.0	0.50	0.17
15831-10-4	3 & 4 Methylphenol	1.0	U	2.0	1.0	0.80
91-20-3	Naphthalene	0.10	U	0.20	0.10	0.063
88-74-4	2-Nitroaniline	0.50	U	2.0	0.50	0.21
99-09-2	3-Nitroaniline	0.50	U	2.0	0.50	0.28
100-01-6	4-Nitroaniline	0.50	U	2.0	0.50	0.22
98-95-3	Nitrobenzene	0.10	U	1.0	0.10	0.040
88-75-5	2-Nitrophenol	0.50	U	2.0	0.50	0.28
100-02-7	4-Nitrophenol	4.0	U	5.0	4.0	0.29
621-64-7	N-Nitrosodi-n-propylamine	0.50	U	1.0	0.50	0.24
86-30-6	N-Nitrosodiphenylamine	0.50	U	1.0	0.50	0.31
87-86-5	Pentachlorophenol	1.0	U	5.0	1.0	0.27
85-01-8	Phenanthrene	0.10	U	0.20	0.10	0.062
108-95-2	Phenol	1.0	U	1.0	1.0	0.60
129-00-0	Pyrene	0.10	U	0.20	0.10	0.042
120-82-1	1,2,4-Trichlorobenzene	0.50	U	1.0	0.50	0.28
95-95-4	2,4,5-Trichlorophenol	0.50	U	5.0	0.50	0.30
88-06-2	2,4,6-Trichlorophenol	0.50	U	5.0	0.50	0.24

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-179064/2-A

Matrix: Water | Lab File ID: 50512013.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3520C | Date Extracted: 05/04/2015 05:57

Sample wt/vol: 1000(mL) | Date Analyzed: 05/12/2015 12:15

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 180308 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	81		50-110
367-12-4	2-Fluorophenol (Surr)	79		20-110
4165-60-0	Nitrobenzene-d5 (Surr)	81		40-110
4165-62-2	Phenol-d5 (Surr)	80		10-115
1718-51-0	Terphenyl-d14 (Surr)	83		50-135
118-79-6	2,4,6-Tribromophenol (Surr)	84		40-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512013.D
Lims ID: MB 240-179064/2-A
Client ID:
Sample Type: MB
Inject. Date: 12-May-2015 12:15:30 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043530-013
Misc. Info.: MB 240-179064/2-AMB 240-179064/2-A
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 13-May-2015 09:12:46 Calib Date: 12-May-2015 10:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK049

First Level Reviewer: ulmanm Date: 12-May-2015 12:56:34

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.324	6.326	-0.002	88	120097	4.00	4.00	
* 2 Naphthalene-d8	136	7.444	7.446	-0.002	98	446485	4.00	4.00	
* 3 Acenaphthene-d10	164	8.954	8.951	0.003	94	269380	4.00	4.00	
* 4 Phenanthrene-d10	188	10.224	10.221	0.003	98	491465	4.00	4.00	
* 5 Chrysene-d12	240	12.513	12.514	-0.001	97	501223	4.00	4.00	
* 6 Perylene-d12	264	14.263	14.270	-0.007	98	343812	4.00	4.00	
$ 7 2-Fluorophenol	112	5.093	5.090	0.003	94	331172	10.0	7.89	
$ 8 Phenol-d5	99	5.958	5.960	-0.002	89	481170	10.0	8.03	
$ 9 Nitrobenzene-d5	82	6.800	6.802	-0.002	85	646956	10.0	8.06	
$ 10 2-Fluorobiphenyl (Surr)	172	8.348	8.350	-0.002	98	735588	10.0	8.09	
$ 11 2,4,6-Tribromophenol	330	9.622	9.620	0.002	80	81967	10.0	8.38	
$ 12 Terphenyl-d14	244	11.551	11.548	0.003	99	843072	10.0	8.35	
25 1,4-Dioxane	88		2.892					ND	
26 N-Nitrosodimethylamine	74		3.392					ND	
27 Pyridine	79		3.464					ND	
20 Dimethylformamide	73		3.978					ND	
28 Ethyl methacrylate	69		4.089					ND	
31 2-Picoline	93		4.374					ND	
32 N-Nitrosomethylethylamine	88		4.504					ND	
35 Acrylamide	71		4.778					ND	
34 Methyl methanesulfonate	80		4.826					ND	
233 n,n'-Dimethylacetamide	44		4.993					ND	
36 N-Nitrosodiethylamine	102		5.254					ND	
37 Ethyl methanesulfonate	79		5.523					ND	
42 Phenylmercaptan	110		5.768					ND	
38 2-Methylcyclohexanone	68		5.820					ND	
39 3-Methylcyclohexanone	69		5.854					ND	
40 4-Methylcyclohexanone	55		5.902					ND	
41 Benzaldehyde	77		5.922					ND	
43 Phenol	94		5.970					ND	
44 Aniline	93		6.018					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
45 Pentachloroethane	167		6.019					ND	
69 Bis(2-chloroethyl)ether	93		6.061					ND	
46 2-Chlorophenol	128		6.138					ND	
243 n-Decane	57		6.172					ND	
47 1,3-Dichlorobenzene	146		6.282					ND	
48 1,4-Dichlorobenzene	146		6.340					ND	
232 1-Methyl-2-pyrrilidinone	99		6.421					ND	
49 Benzyl alcohol	108		6.422					ND	
50 1,2-Dichlorobenzene	146		6.484					ND	
51 2-Methylphenol	108		6.513					ND	
53 2,2'-oxybis[1-chloropropan	45		6.547					ND	
52 Indene	115		6.561					ND	
56 N-Nitrosopyrrolidine	100		6.572					ND	
286 4-Methyl-1-cyclohexanemeth	55		6.574					ND	
59 N-Nitrosomorpholine	56		6.605					ND	
60 2-Toluidine	106		6.639					ND	
21 3 & 4 Methylphenol	108		6.643					ND	
57 N-Nitrosodi-n-propylamine	70		6.653					ND	
58 Acetophenone	105	6.660	6.662	-0.002	93	8112		0.1070	
287 4-Methyl-1-cyclohexanemeth	55		6.708					ND	
61 Hexachloroethane	117		6.792					ND	
62 Nitrobenzene	77		6.821					ND	
63 N-Nitrosopiperidine	114		6.884					ND	
64 Isophorone	82		7.023					ND	
66 2-Nitrophenol	139		7.100					ND	
68 o,o',o''-Triethylphosphoro	198		7.105					ND	
65 2,4-Dimethylphenol	107		7.109					ND	
67 1,3,5-Trichlorobenzene	180		7.123					ND	
71 Benzoic acid	122		7.167					ND	
70 Bis(2-chloroethoxy)methane	93		7.186					ND	
72 alpha,alpha-Dimethyl phene	58		7.216					ND	
73 2,4-Dichlorophenol	162		7.307					ND	
74 1,2,4-Trichlorobenzene	180		7.388					ND	
75 Naphthalene	128		7.460					ND	
76 4-Chloroaniline	127		7.484					ND	
78 Hexachloropropene	213		7.485					ND	
77 2,6-Dichlorophenol	162		7.499					ND	
79 Hexachlorobutadiene	225		7.566					ND	
80 1,2,3-Trichlorobenzene	180		7.590					ND	
81 Benzothiazole	135		7.676					ND	
82 Quinoline	129		7.682					ND	
83 N-Nitrosodi-n-butylamine	84		7.697					ND	
85 p-Phenylene diamine	108		7.716					ND	
84 Caprolactam	113	7.737	7.763	-0.026	68	6891		0.5347	M
86 4-Chloro-3-methylphenol	107		7.879					ND	
94 Safrole, Total	162		7.894					ND	
87 2-Methylnaphthalene	142		8.052					ND	
88 1-Methylnaphthalene	142		8.138					ND	
225 Isosafrole Peak 1	162		8.144					ND	
90 1,2,3,5-Tetrachlorobenzene	216		8.191					ND	
89 Hexachlorocyclopentadiene	237		8.196					ND	
91 1,2,4,5-Tetrachlorobenzene	216		8.201					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
92 2,4,6-Trichlorophenol	196		8.283					ND	
93 2,4,5-Trichlorophenol	196		8.316					ND	
227 Isosafrole Peak 2	162		8.336					ND	
97 2,4-Toluene diamine	121		8.412					ND	
246 1-Chloronaphthalene	162		8.433					ND	
98 1,1'-Biphenyl	154		8.441					ND	
99 1,2,3,4 -Tetrachlorobenzen	216		8.446					ND	
96 3,4-Dichloronitrobenzene	109		8.465					ND	
100 2-Chloronaphthalene	162		8.475					ND	
101 Phenyl ether	170		8.523					ND	
102 2-Nitroaniline	65		8.533					ND	
103 1,4-Naphthoquinone	158		8.543					ND	
104 1,4-Dinitrobenzene	168		8.567					ND	
105 Dimethyl phthalate	163		8.667					ND	
106 1,3-Dinitrobenzene	168		8.701					ND	
107 2,6-Dinitrotoluene	165		8.725					ND	
109 Acenaphthylene	152		8.836					ND	
110 3-Nitroaniline	138		8.879					ND	
111 2,4-Dinitrophenol	184		8.966					ND	
112 Acenaphthene	153		8.980					ND	
113 4-Nitrophenol	109		8.990					ND	
115 Pentachlorobenzene	250		9.034					ND	
114 2,4-Dinitrotoluene	165		9.076					ND	
117 1-Naphthylamine	143		9.115					ND	
118 2,3,5,6-Tetrachlorophenol	232		9.120					ND	
116 Dibenzofuran	168		9.124					ND	
120 2-Naphthylamine	143		9.178					ND	
119 2,3,4,6-Tetrachlorophenol	232		9.220					ND	
121 Diethyl phthalate	149		9.264					ND	
247 Hexadecane	57		9.269					ND	
122 Thionazin	97		9.269					ND	
124 N-Nitro-o-toluidine	152		9.332					ND	
123 4-Chlorophenyl phenyl ethe	204		9.394					ND	
125 4-Nitroaniline	138		9.398					ND	
127 Tributyl phosphate	99		9.417					ND	
126 Fluorene	166		9.418					ND	
130 Diphenylamine	169		9.418					ND	
128 4,6-Dinitro-2-methylphenol	198		9.432					ND	
131 N-Nitrosodiphenylamine	169		9.485					ND	
297 Benzophenone	105		9.512					ND	
134 Sulfotepp	202		9.519					ND	
133 Azobenzene	77		9.528					ND	
132 1,2-Diphenylhydrazine	77		9.528					ND	
135 1,3,5-Trinitrobenzene	213		9.601					ND	
137 Phenacetin	108		9.649					ND	
228 Diallate Peak 1	86		9.659					ND	
138 Phorate	121		9.664					ND	
230 Diallate Peak 2	86		9.736					ND	
140 Dimethoate	87		9.803					ND	
139 4-Bromophenyl phenyl ether	248		9.812					ND	
141 Hexachlorobenzene	284		9.903					ND	
142 Atrazine	200		9.908					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
129 4-Aminobiphenyl	169		9.962					ND	
144 Pronamide	173		9.991					ND	
145 Pentachloronitrobenzene	237		10.000					ND	
244 n-Octadecane	57		10.048					ND	
143 Pentachlorophenol	266		10.052					ND	
146 Disulfoton	88		10.101					ND	
147 Dinoseb	211		10.116					ND	
148 Phenanthrene	178		10.245					ND	
149 Anthracene	178		10.288					ND	
151 Carbazole	167		10.403					ND	
152 Methyl parathion	109		10.428					ND	
154 Di-n-butyl phthalate	149	10.642	10.644	-0.002	98	42968		0.2831	
153 Diphenylsulfone	125		10.672					ND	
155 Ethyl Parathion	97		10.746					ND	
156 4-Nitroquinoline-1-oxide	190		10.808					ND	
157 Methapyrilene	58		10.851					ND	
158 Isodrin	66		11.068					ND	
159 Fluoranthene	202		11.264					ND	
160 Benzidine	184		11.336					ND	
226 Aramite Peak 1	185		11.419					ND	
161 Pyrene	202		11.466					ND	
229 Aramite Peak 2	185		11.481					ND	
163 p-Dimethylamino azobenzene	225		11.587					ND	
164 Chlorobenzilate	139		11.616					ND	
282 Kepone	272		11.764					ND	
167 Famphur	218		11.818					ND	
169 3,3'-Dimethylbenzidine	212		11.866					ND	
168 Butyl benzyl phthalate	149		11.928					ND	
171 2-Acetylaminofluorene	181		12.087					ND	
174 4,4'-Methylene bis(2-chlor	231		12.337					ND	
172 3,3'-Dimethoxybenzidine	244		12.379					ND	
173 Bis(2-ethylhexyl) phthalat	149	12.412	12.413	-0.001	91	25948		0.2905	
175 3,3'-Dichlorobenzidine	252		12.438					ND	
177 Benzo[a]anthracene	228		12.505					ND	
176 Hexabromobenzene	232		12.543					ND	
178 Chrysene	228		12.543					ND	
179 6-Methylchrysene	242		12.895					ND	
180 Di-n-octyl phthalate	149		13.063					ND	
181 7,12-Dimethylbenz(a)anthra	256		13.559					ND	
281 Hexachlorophene	196		13.628					ND	
182 Benzo[b]fluoranthene	252		13.721					ND	
183 Benzo[k]fluoranthene	252		13.755					ND	
184 Benzo[a]pyrene	252		14.188					ND	
185 3-Methylcholanthrene	268		14.535					ND	
187 Dibenz[a,h]acridine	279		15.453					ND	
186 Dibenz[a,j]acridine	279		15.746					ND	
188 Indeno[1,2,3-cd]pyrene	276		16.169					ND	
189 Dibenz(a,h)anthracene	278		16.179					ND	
190 Benzo[g,h,i]perylene	276		16.756					ND	
268 Endrin	1		0.000					ND	
291 Dipropylene Glycol Phenyl	1		0.000					ND	
264 alpha-BHC	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
267 2,6-Diaminotoluene	1		0.000					ND	
270 Toxaphene	1		0.000					ND	
294 Dowanol Peak 3	1		0.000					ND	
290 1-Phenoxy-2-propanol TIC	1		0.000					ND	
275 Dieldrin	1		0.000					ND	
299 Diisobutyl phthalate TIC	1		0.000					ND	
272 2,3-Dinitrotoluene	1		0.000					ND	
262 Isoquinoline	1		0.000					ND	
250 gamma-BHC (Lindane)	1		0.000					ND	
258 Aldrin	1		0.000					ND	
277 Chlorpyrifos	1		0.000					ND	
283 2-Ethoxyethanol	1		0.000					ND	
293 Dowanol Peak 4	1		0.000					ND	
273 3 & 4 Chlorophenol	1		0.000					ND	
259 o-Phenylphenol	1		0.000					ND	
260 Methoxychlor	1		0.000					ND	
251 Endosulfan sulfate	1		0.000					ND	
278 delta-BHC	1		0.000					ND	
252 4-tert-Butylphenol	1		0.000					ND	
253 Endrin aldehyde	1		0.000					ND	
257 Endosulfan I	1		0.000					ND	
261 Endosulfan II	1		0.000					ND	
274 Dibenz(a,i)pyrene	1		0.000					ND	
289 1-Phenoxy-2-propanol	1		0.000					ND	
266 Heptachlor	1		0.000					ND	
292 Dowanol Peak 2	1		0.000					ND	
269 Dibenzo[a,e]pyrene	1		0.000					ND	
271 3 & 4 Phenoxyphenol	1		0.000					ND	
265 Dibenzo[a,h]pyrene	1		0.000					ND	
276 Chlordane (technical)	1		0.000					ND	
249 4-Chlorophenol TIC	1		0.000					ND	
254 2-Chloroaniline	1		0.000					ND	
255 beta-BHC	1		0.000					ND	
285 Chlorobenzene TIC	1		0.000					ND	
279 3,4-Dichloroaniline	1		0.000					ND	
263 Heptachlor epoxide	1		0.000					ND	
S 95 Isosafrole	162		5.568					ND	
S 288 4-Methyl-1-cyclohexanemeth	55		6.400					ND	
S 136 Diallate	86		6.701					ND	
S 162 Aramite, Total	185		8.271					ND	
S 295 Dowanol	1		0.000					ND	
S 296 Dowanol Peak 1	1		0.000					ND	
S 191 Methyl Phenols,Total	100		0.000					ND	
S 245 Total Cresols	100		0.000					ND	
T 240 Trimethyl phosphate TIC	110		5.000					ND	
T 194 Decane TIC	142		5.800					ND	
T 193 Hexamethylphosphoramide TI	135		6.500					ND	
T 234 2-Isopropylphenol TIC	121		7.250					ND	
T 235 4-isopropylphenol TIC	121		7.364					ND	
T 236 3-isopropylphenol TIC	121		7.364					ND	
T 300 Alpha-Terpineol TIC	59		7.500					ND	
T 237 3-(1,1-Dimethylethyl Pheno	135		7.720					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
T 231 2,3,7,8-TCDD	322		8.850					ND	
T 195 Hydroquinone TIC	110		9.000					ND	
T 192 Octadecane (TIC)	254		9.600					ND	
T 242 Triphenyl Phosphate TIC	326		12.000					ND	
T 196 Kepone TIC	272		12.000					ND	
T 241 Tricresyl phosphate TIC	368		12.500					ND	
T 280 2,3,7,8-TCDD TIC	198		12.500					ND	
T 248 2,3,7,8 TCDF TIC	304		13.000					ND	
T 197 Hexachlorophene TIC	198		13.600					ND	
T 239 Tris(2,3-dibromopropyl)pho	201		14.000					ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SMIS80PPMW_00011 Amount Added: 5.00 Units: uL Run Reagent

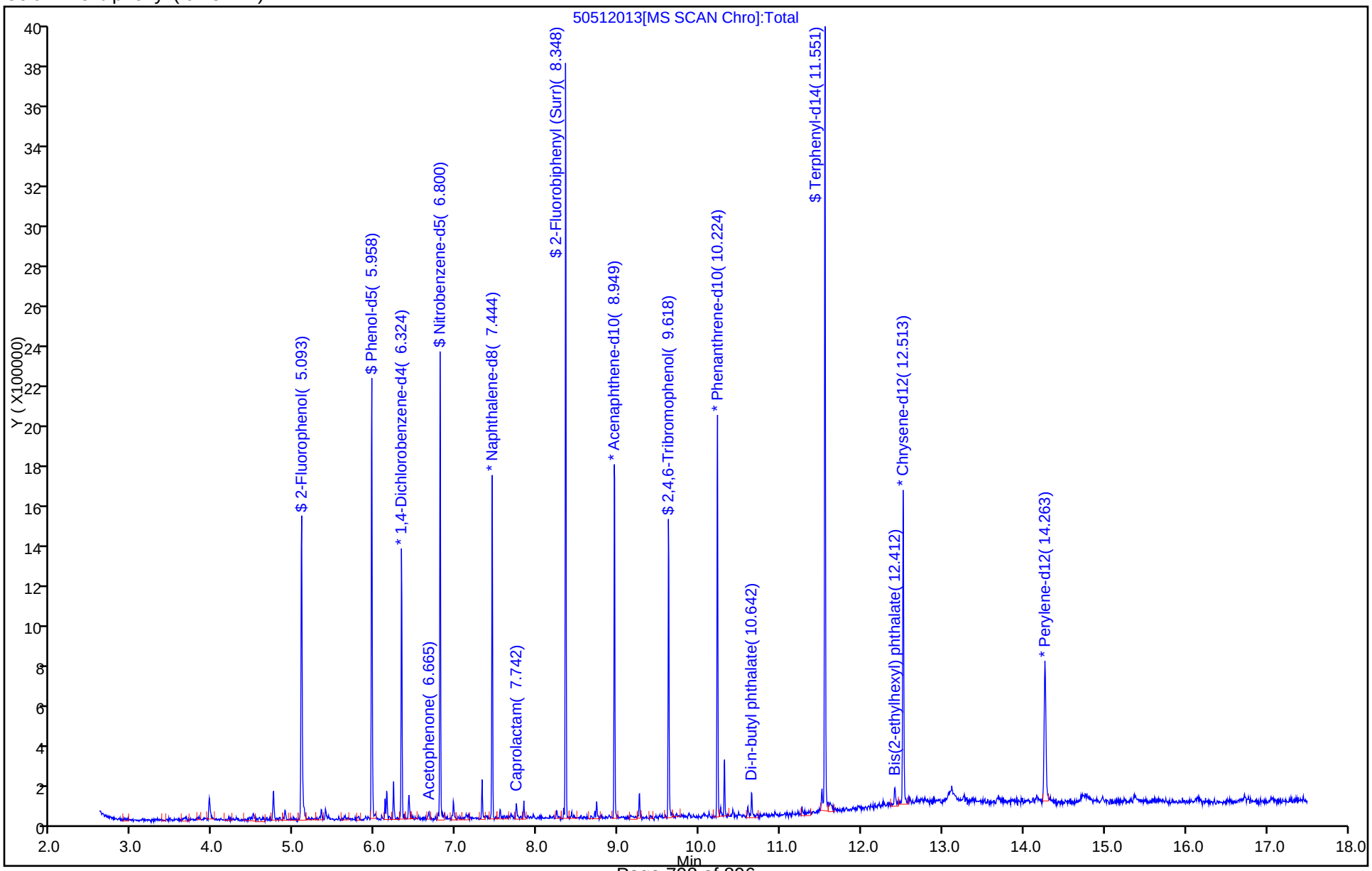
Report Date: 13-May-2015 09:13:05 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512013.D

Injection Date:	12-May-2015 12:15:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	MB 240-179064/2-A			Worklist Smp#:	13
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-179108/22-A

Matrix: Solid | Lab File ID: 50520004.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3540C | Date Extracted: 05/04/2015 09:17

Sample wt/vol: 30(g) | Date Analyzed: 05/20/2015 10:20

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
83-32-9	Acenaphthene	3.3	U	6.7	3.3	0.76
208-96-8	Acenaphthylene	1.7	U	6.7	1.7	0.35
120-12-7	Anthracene	3.3	U	6.7	3.3	0.78
56-55-3	Benzo[a]anthracene	3.3	U	6.7	3.3	0.63
50-32-8	Benzo[a]pyrene	3.3	U	6.7	3.3	0.64
205-99-2	Benzo[b]fluoranthene	3.3	U	6.7	3.3	0.59
191-24-2	Benzo[g,h,i]perylene	1.7	U	6.7	1.7	0.35
65-85-0	Benzoic acid	130	U	660	130	36
207-08-9	Benzo[k]fluoranthene	3.3	U	6.7	3.3	0.68
100-51-6	Benzyl alcohol	67	U	330	67	21
111-91-1	Bis(2-chloroethoxy)methane	67	U	100	67	22
111-44-4	Bis(2-chloroethyl)ether	3.3	U	100	3.3	2.0
108-60-1	bis (2-chloroisopropyl) ether	33	U	100	33	9.5
117-81-7	Bis(2-ethylhexyl) phthalate	33	U	70	33	19
101-55-3	4-Bromophenyl phenyl ether	33	U	50	33	13
85-68-7	Butyl benzyl phthalate	33	U	70	33	10
86-74-8	Carbazole	33	U	50	33	27
106-47-8	4-Chloroaniline	67	U	150	67	17
59-50-7	4-Chloro-3-methylphenol	67	U Q	150	67	21
91-58-7	2-Chloronaphthalene	1.7	U	50	1.7	0.45
95-57-8	2-Chlorophenol	33	U	50	33	8.2
7005-72-3	4-Chlorophenyl phenyl ether	33	U	50	33	13
218-01-9	Chrysene	3.3	U	6.7	3.3	1.1
53-70-3	Dibenz(a,h)anthracene	3.3	U	6.7	3.3	0.66
132-64-9	Dibenzofuran	3.3	U	50	3.3	0.66
95-50-1	1,2-Dichlorobenzene	33	U	50	33	9.7
541-73-1	1,3-Dichlorobenzene	33	U	50	33	11
106-46-7	1,4-Dichlorobenzene	33	U	50	33	20
91-94-1	3,3'-Dichlorobenzidine	67	U	100	67	18
120-83-2	2,4-Dichlorophenol	67	U	150	67	20
84-66-2	Diethyl phthalate	33	U	70	33	16
105-67-9	2,4-Dimethylphenol	67	U	150	67	20
131-11-3	Dimethyl phthalate	33	U	70	33	17
84-74-2	Di-n-butyl phthalate	33	U	70	33	15

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-179108/22-A

Matrix: Solid | Lab File ID: 50520004.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3540C | Date Extracted: 05/04/2015 09:17

Sample wt/vol: 30(g) | Date Analyzed: 05/20/2015 10:20

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
534-52-1	4,6-Dinitro-2-methylphenol	33	U Q	150	33	9.2
51-28-5	2,4-Dinitrophenol	67	U Q	330	67	21
121-14-2	2,4-Dinitrotoluene	67	U	200	67	17
606-20-2	2,6-Dinitrotoluene	67	U	200	67	21
117-84-0	Di-n-octyl phthalate	33	U	70	33	7.9
206-44-0	Fluoranthene	3.3	U	6.7	3.3	0.55
86-73-7	Fluorene	3.3	U	6.7	3.3	0.53
118-74-1	Hexachlorobenzene	3.3	U	6.7	3.3	2.1
87-68-3	Hexachlorobutadiene	33	U	50	33	5.6
77-47-4	Hexachlorocyclopentadiene	33	U Q	330	33	8.1
67-72-1	Hexachloroethane	33	U	50	33	9.0
193-39-5	Indeno[1,2,3-cd]pyrene	1.7	U	6.7	1.7	0.35
78-59-1	Isophorone	33	U	50	33	13
91-57-6	2-Methylnaphthalene	3.3	U	6.7	3.3	0.50
95-48-7	2-Methylphenol	67	U	200	67	11
15831-10-4	3 & 4 Methylphenol	67	U	400	67	20
91-20-3	Naphthalene	14.7		6.7	3.3	0.82
88-74-4	2-Nitroaniline	33	U	200	33	9.1
99-09-2	3-Nitroaniline	67	U	200	67	16
100-01-6	4-Nitroaniline	67	U	200	67	26
98-95-3	Nitrobenzene	3.3	U	100	3.3	2.2
88-75-5	2-Nitrophenol	33	U	50	33	8.3
100-02-7	4-Nitrophenol	67	U Q	330	67	17
621-64-7	N-Nitrosodi-n-propylamine	33	U	50	33	6.3
86-30-6	N-Nitrosodiphenylamine	33	U	50	33	21
87-86-5	Pentachlorophenol	33	U Q	150	33	9.1
85-01-8	Phenanthrene	3.3	U	6.7	3.3	0.73
108-95-2	Phenol	33	U	50	33	7.3
129-00-0	Pyrene	1.7	U	6.7	1.7	0.44
120-82-1	1,2,4-Trichlorobenzene	17	U	50	17	3.5
95-95-4	2,4,5-Trichlorophenol	67	U Q	150	67	25
88-06-2	2,4,6-Trichlorophenol	33	U Q	150	33	8.9

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-179108/22-A

Matrix: Solid | Lab File ID: 50520004.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3540C | Date Extracted: 05/04/2015 09:17

Sample wt/vol: 30(g) | Date Analyzed: 05/20/2015 10:20

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	88		45-105
367-12-4	2-Fluorophenol (Surr)	57		35-105
4165-60-0	Nitrobenzene-d5 (Surr)	84		35-100
4165-62-2	Phenol-d5 (Surr)	76		40-100
1718-51-0	Terphenyl-d14 (Surr)	88		30-125
118-79-6	2,4,6-Tribromophenol (Surr)	29	Q	35-125

Report Date: 21-May-2015 08:02:23 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520004.D
Lims ID: MB 240-179108/22-A
Client ID:
Sample Type: MB
Inject. Date: 20-May-2015 10:20:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043844-004
Misc. Info.: MB 240-179108/22-AMB 240-179108/22-A
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-May-2015 08:02:18 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 20-May-2015 10:52:20

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.416	6.411	0.005	97	225364	4.00	4.00	
* 2 Naphthalene-d8	136	7.526	7.527	-0.001	99	934184	4.00	4.00	
* 3 Acenaphthene-d10	164	9.036	9.037	-0.001	90	448317	4.00	4.00	
* 4 Phenanthrene-d10	188	10.311	10.311	0.000	95	690635	4.00	4.00	
* 5 Chrysene-d12	240	12.619	12.619	0.000	92	576128	4.00	4.00	
* 6 Perylene-d12	264	14.432	14.437	-0.005	90	384611	4.00	4.00	
$ 7 2-Fluorophenol	112	5.218	5.199	0.019	92	553302	10.0	5.68	
$ 8 Phenol-d5	99	6.050	6.046	0.004	93	1005932	10.0	7.65	
$ 9 Nitrobenzene-d5	82	6.887	6.887	0.000	86	800301	10.0	8.36	
$ 10 2-Fluorobiphenyl (Surr)	172	8.430	8.431	-0.001	99	1125201	10.0	8.80	
$ 11 2,4,6-Tribromophenol	330	9.705	9.710	-0.005	86	33808	10.0	2.87	
$ 12 Terphenyl-d14	244	11.638	11.638	0.000	97	969106	10.0	8.77	
25 1,4-Dioxane	88	3.150	3.151	-0.001	65	6482		0.1272	
26 N-Nitrosodimethylamine	74		3.617					ND	
27 Pyridine	79		3.675					ND	
20 Dimethylformamide	73		3.978					ND	
28 Ethyl methacrylate	69		4.089					ND	
31 2-Picoline	93		4.374					ND	
32 N-Nitrosomethylethylamine	88		4.504					ND	
35 Acrylamide	71		4.778					ND	
34 Methyl methanesulfonate	80		4.826					ND	
233 n,n'-Dimethylacetamide	44		4.993					ND	
36 N-Nitrosodiethylamine	102		5.254					ND	
37 Ethyl methanesulfonate	79		5.523					ND	
42 Phenylmercaptan	110		5.768					ND	
38 2-Methylcyclohexanone	68		5.820					ND	
39 3-Methylcyclohexanone	69		5.854					ND	
40 4-Methylcyclohexanone	55		5.902					ND	
41 Benzaldehyde	77		6.017					ND	
45 Pentachloroethane	167		6.019					ND	
43 Phenol	94		6.055					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
44 Aniline	93		6.108					ND	
69 Bis(2-chloroethyl)ether	93		6.147					ND	
46 2-Chlorophenol	128		6.228					ND	
243 n-Decane	57		6.257					ND	
47 1,3-Dichlorobenzene	146		6.368					ND	
232 1-Methyl-2-pyrrilidinone	99		6.421					ND	
48 1,4-Dichlorobenzene	146		6.426					ND	
49 Benzyl alcohol	108		6.507					ND	
50 1,2-Dichlorobenzene	146		6.570					ND	
56 N-Nitrosopyrrolidine	100		6.572					ND	
286 4-Methyl-1-cyclohexanemeth	55		6.574					ND	
51 2-Methylphenol	108		6.594					ND	
59 N-Nitrosomorpholine	56		6.605					ND	
53 2,2'-oxybis[1-chloropropan	45		6.628					ND	
60 2-Toluidine	106		6.639					ND	
52 Indene	115		6.647					ND	
287 4-Methyl-1-cyclohexanemeth	55		6.708					ND	
21 3 & 4 Methylphenol	108		6.724					ND	
57 N-Nitrosodi-n-propylamine	70		6.738					ND	
58 Acetophenone	105		6.748					ND	
61 Hexachloroethane	117		6.878					ND	
63 N-Nitrosopiperidine	114		6.884					ND	
62 Nitrobenzene	77		6.902					ND	
64 Isophorone	82		7.104					ND	
68 o,o',o''-Triethylphosphoro	198		7.105					ND	
67 1,3,5-Trichlorobenzene	180		7.123					ND	
66 2-Nitrophenol	139		7.185					ND	
65 2,4-Dimethylphenol	107		7.190					ND	
72 alpha,alpha-Dimethyl phene	58		7.216					ND	
71 Benzoic acid	122	7.199	7.238	-0.039	85	11353		0.2422	
70 Bis(2-chloroethoxy)methane	93		7.267					ND	
73 2,4-Dichlorophenol	162		7.387					ND	
74 1,2,4-Trichlorobenzene	180		7.474					ND	
78 Hexachloropropene	213		7.485					ND	
75 Naphthalene	128	7.546	7.546	0.000	96	54348		0.2204	
76 4-Chloroaniline	127		7.565					ND	
77 2,6-Dichlorophenol	162		7.585					ND	
80 1,2,3-Trichlorobenzene	180		7.590					ND	
79 Hexachlorobutadiene	225		7.652					ND	
81 Benzothiazole	135		7.676					ND	
82 Quinoline	129		7.682					ND	
83 N-Nitrosodi-n-butylamine	84		7.697					ND	
85 p-Phenylene diamine	108		7.716					ND	
84 Caprolactam	113	7.825	7.849	-0.025	84	10951		0.3887	
94 Safrole, Total	162		7.894					ND	
86 4-Chloro-3-methylphenol	107		7.955					ND	
87 2-Methylnaphthalene	142		8.138					ND	
225 Isosafrole Peak 1	162		8.144					ND	
90 1,2,3,5-Tetrachlorobenzene	216		8.191					ND	
88 1-Methylnaphthalene	142		8.224					ND	
89 Hexachlorocyclopentadiene	237		8.282					ND	
91 1,2,4,5-Tetrachlorobenzene	216		8.287					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
227 Isosafrole Peak 2	162		8.336					ND	
92 2,4,6-Trichlorophenol	196		8.364					ND	
93 2,4,5-Trichlorophenol	196		8.402					ND	
97 2,4-Toluene diamine	121		8.412					ND	
246 1-Chloronaphthalene	162		8.433					ND	
99 1,2,3,4 -Tetrachlorobenzen	216		8.446					ND	
96 3,4-Dichloronitrobenzene	109		8.465					ND	
98 1,1'-Biphenyl	154		8.522					ND	
101 Phenyl ether	170		8.523					ND	
103 1,4-Naphthoquinone	158		8.543					ND	
100 2-Chloronaphthalene	162		8.556					ND	
104 1,4-Dinitrobenzene	168		8.567					ND	
102 2-Nitroaniline	65		8.618					ND	
105 Dimethyl phthalate	163		8.748					ND	
106 1,3-Dinitrobenzene	168		8.782					ND	
107 2,6-Dinitrotoluene	165		8.806					ND	
109 Acenaphthylene	152		8.921					ND	
110 3-Nitroaniline	138		8.960					ND	
115 Pentachlorobenzene	250		9.034					ND	
111 2,4-Dinitrophenol	184		9.046					ND	
112 Acenaphthene	153		9.066					ND	
113 4-Nitrophenol	109		9.070					ND	
117 1-Naphthylamine	143		9.115					ND	
118 2,3,5,6-Tetrachlorophenol	232		9.120					ND	
114 2,4-Dinitrotoluene	165		9.157					ND	
120 2-Naphthylamine	143		9.178					ND	
116 Dibenzofuran	168		9.210					ND	
122 Thionazin	97		9.269					ND	
119 2,3,4,6-Tetrachlorophenol	232		9.306					ND	
124 N-Nitro-o-toluidine	152		9.332					ND	
121 Diethyl phthalate	149		9.345					ND	
247 Hexadecane	57		9.349					ND	
127 Tributyl phosphate	99		9.417					ND	
130 Diphenylamine	169		9.418					ND	
123 4-Chlorophenyl phenyl ethe	204		9.474					ND	
125 4-Nitroaniline	138		9.484					ND	
126 Fluorene	166		9.503					ND	
297 Benzophenone	105		9.512					ND	
128 4,6-Dinitro-2-methylphenol	198		9.513					ND	
134 Sulfotepp	202		9.519					ND	
131 N-Nitrosodiphenylamine	169		9.571					ND	
135 1,3,5-Trinitrobenzene	213		9.601					ND	
133 Azobenzene	77		9.614					ND	
132 1,2-Diphenylhydrazine	77		9.614					ND	
137 Phenacetin	108		9.649					ND	
228 Diallate Peak 1	86		9.659					ND	
138 Phorate	121		9.664					ND	
230 Diallate Peak 2	86		9.736					ND	
140 Dimethoate	87		9.803					ND	
139 4-Bromophenyl phenyl ether	248		9.898					ND	
129 4-Aminobiphenyl	169		9.962					ND	
141 Hexachlorobenzene	284		9.989					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
144 Pronamide	173		9.991					ND	
142 Atrazine	200		9.994					ND	
145 Pentachloronitrobenzene	237		10.000					ND	
146 Disulfoton	88		10.101					ND	
147 Dinoseb	211		10.116					ND	
244 n-Octadecane	57		10.128					ND	
143 Pentachlorophenol	266		10.143					ND	
148 Phenanthrene	178		10.330					ND	
149 Anthracene	178		10.374					ND	
152 Methyl parathion	109		10.428					ND	
151 Carbazole	167		10.489					ND	
153 Diphenylsulfone	125		10.672					ND	
154 Di-n-butyl phthalate	149	10.724	10.725	-0.001	99	39685		0.1870	
155 Ethyl Parathion	97		10.746					ND	
156 4-Nitroquinoline-1-oxide	190		10.808					ND	
157 Methapyrilene	58		10.851					ND	
158 Isodrin	66		11.068					ND	
159 Fluoranthene	202		11.355					ND	
226 Aramite Peak 1	185		11.419					ND	
160 Benzidine	184		11.422					ND	
229 Aramite Peak 2	185		11.481					ND	
161 Pyrene	202		11.557					ND	
163 p-Dimethylamino azobenzene	225		11.587					ND	
164 Chlorobenzilate	139		11.616					ND	
282 Kepone	272		11.764					ND	
167 Famphur	218		11.818					ND	
169 3,3'-Dimethylbenzidine	212		11.866					ND	
168 Butyl benzyl phthalate	149		12.013					ND	
171 2-Acetylaminofluorene	181		12.087					ND	
174 4,4'-Methylene bis(2-chlor	231		12.337					ND	
172 3,3'-Dimethoxybenzidine	244		12.379					ND	
173 Bis(2-ethylhexyl) phthalat	149	12.503	12.504	-0.001	94	37817		0.2841	
175 3,3'-Dichlorobenzidine	252		12.538					ND	
176 Hexabromobenzene	232		12.543					ND	
177 Benzo[a]anthracene	228		12.610					ND	
178 Chrysene	228		12.648					ND	
179 6-Methylchrysene	242		12.895					ND	
180 Di-n-octyl phthalate	149		13.177					ND	
181 7,12-Dimethylbenz(a)anthra	256		13.559					ND	
281 Hexachlorophene	196		13.628					ND	
182 Benzo[b]fluoranthene	252		13.870					ND	
183 Benzo[k]fluoranthene	252		13.903					ND	
184 Benzo[a]pyrene	252		14.355					ND	
185 3-Methylcholanthrene	268		14.535					ND	
187 Dibenz[a,h]acridine	279		15.453					ND	
186 Dibenz[a,j]acridine	279		15.746					ND	
188 Indeno[1,2,3-cd]pyrene	276		16.423					ND	
189 Dibenz(a,h)anthracene	278		16.428					ND	
190 Benzo[g,h,i]perylene	276		17.039					ND	
268 Endrin	1		0.000					ND	
291 Dipropylene Glycol Phenyl	1		0.000					ND	
264 alpha-BHC	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
267 2,6-Diaminotoluene	1		0.000					ND	
270 Toxaphene	1		0.000					ND	
294 Dowanol Peak 3	1		0.000					ND	
290 1-Phenoxy-2-propanol TIC	1		0.000					ND	
275 Dieldrin	1		0.000					ND	
299 Diisobutyl phthalate TIC	1		0.000					ND	
272 2,3-Dinitrotoluene	1		0.000					ND	
262 Isoquinoline	1		0.000					ND	
250 gamma-BHC (Lindane)	1		0.000					ND	
258 Aldrin	1		0.000					ND	
277 Chlorpyrifos	1		0.000					ND	
283 2-Ethoxyethanol	1		0.000					ND	
293 Dowanol Peak 4	1		0.000					ND	
273 3 & 4 Chlorophenol	1		0.000					ND	
259 o-Phenylphenol	1		0.000					ND	
260 Methoxychlor	1		0.000					ND	
251 Endosulfan sulfate	1		0.000					ND	
278 delta-BHC	1		0.000					ND	
252 4-tert-Butylphenol	1		0.000					ND	
253 Endrin aldehyde	1		0.000					ND	
257 Endosulfan I	1		0.000					ND	
261 Endosulfan II	1		0.000					ND	
274 Dibenz(a,i)pyrene	1		0.000					ND	
289 1-Phenoxy-2-propanol	1		0.000					ND	
266 Heptachlor	1		0.000					ND	
292 Dowanol Peak 2	1		0.000					ND	
269 Dibenzo[a,e]pyrene	1		0.000					ND	
271 3 & 4 Phenoxyphenol	1		0.000					ND	
265 Dibenzo[a,h]pyrene	1		0.000					ND	
276 Chlordane (technical)	1		0.000					ND	
249 4-Chlorophenol TIC	1		0.000					ND	
254 2-Chloroaniline	1		0.000					ND	
255 beta-BHC	1		0.000					ND	
285 Chlorobenzene TIC	1		0.000					ND	
279 3,4-Dichloroaniline	1		0.000					ND	
263 Heptachlor epoxide	1		0.000					ND	
S 95 Isosafrole	162		5.568					ND	
S 288 4-Methyl-1-cyclohexanemeth	55		6.400					ND	
S 136 Diallate	86		6.701					ND	
S 162 Aramite, Total	185		8.271					ND	
S 295 Dowanol	1		0.000					ND	
S 296 Dowanol Peak 1	1		0.000					ND	
S 191 Methyl Phenols,Total	100		0.000					ND	
S 245 Total Cresols	100		0.000					ND	
T 240 Trimethyl phosphate TIC	110		5.000					ND	
T 194 Decane TIC	142		5.800					ND	
T 193 Hexamethylphosphoramide TI	135		6.500					ND	
T 234 2-Isopropylphenol TIC	121		7.250					ND	
T 235 4-isopropylphenol TIC	121		7.364					ND	
T 236 3-isopropylphenol TIC	121		7.364					ND	
T 300 Alpha-Terpineol TIC	59		7.500					ND	
T 237 3-(1,1-Dimethylethyl Pheno	135		7.720					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
T 231 2,3,7,8-TCDD	322		8.850					ND	
T 195 Hydroquinone TIC	110		9.000					ND	
T 192 Octadecane (TIC)	254		9.600					ND	
T 242 Triphenyl Phosphate TIC	326		12.000					ND	
T 196 Kepone TIC	272		12.000					ND	
T 241 Tricresyl phosphate TIC	368		12.500					ND	
T 280 2,3,7,8-TCDD TIC	198		12.500					ND	
T 248 2,3,7,8 TCDF TIC	304		13.000					ND	
T 197 Hexachlorophene TIC	198		13.600					ND	
T 239 Tris(2,3-dibromopropyl)pho	201		14.000					ND	

Reagents:

SMIS80PPMW_00011 Amount Added: 5.00 Units: uL Run Reagent

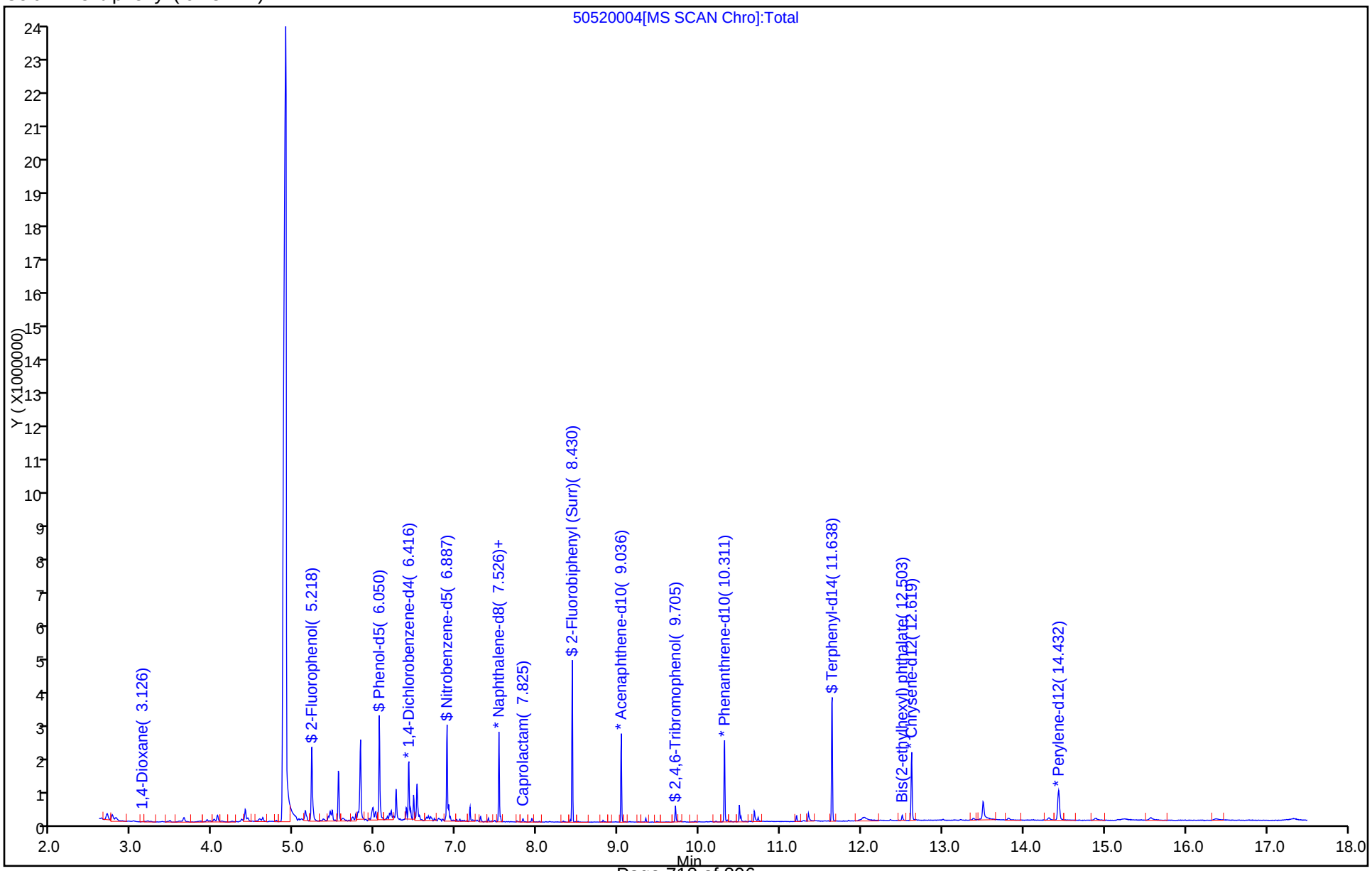
Report Date: 21-May-2015 08:02:23 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520004.D

Injection Date:	20-May-2015 10:20:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	MB 240-179108/22-A			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Report Date: 21-May-2015 08:02:23 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520004.D

Injection Date: 20-May-2015 10:20:30 Instrument ID: A4HP9

Lims ID: MB 240-179108/22-A

Client ID:

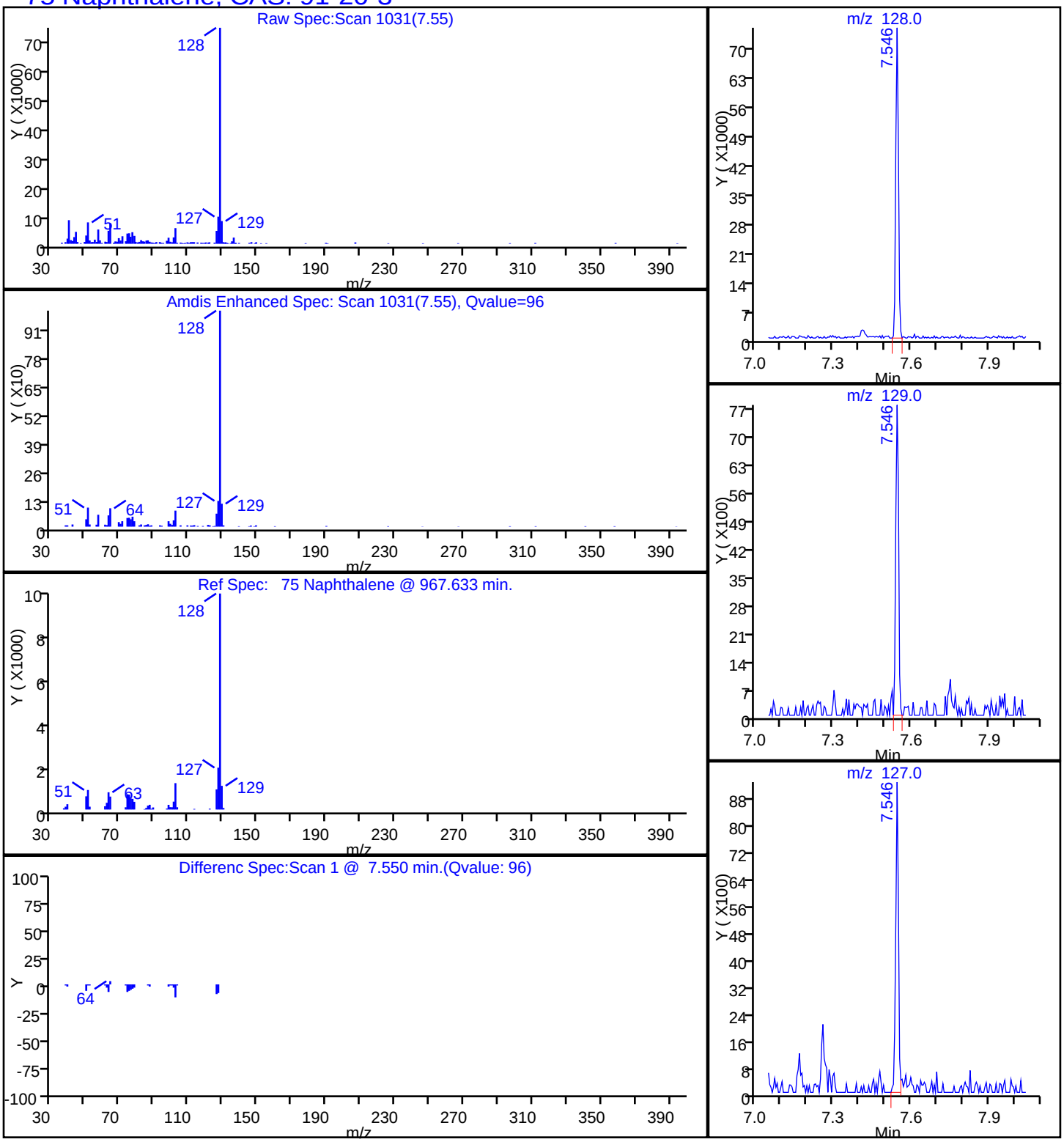
Operator ID: 001574 ALS Bottle#: 4 Worklist Smp#: 4

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL

Column: 5% phenyl (0.18 mm) Detector MS SCAN

75 Naphthalene, CAS: 91-20-3



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-180350/8-A

Matrix: Solid | Lab File ID: 50520006.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3540C | Date Extracted: 05/12/2015 10:00

Sample wt/vol: 30(g) | Date Analyzed: 05/20/2015 11:10

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
83-32-9	Acenaphthene	3.3	U	6.7	3.3	0.76
208-96-8	Acenaphthylene	1.7	U	6.7	1.7	0.35
120-12-7	Anthracene	3.3	U	6.7	3.3	0.78
56-55-3	Benzo[a]anthracene	3.3	U	6.7	3.3	0.63
50-32-8	Benzo[a]pyrene	3.3	U	6.7	3.3	0.64
205-99-2	Benzo[b]fluoranthene	3.3	U	6.7	3.3	0.59
191-24-2	Benzo[g,h,i]perylene	1.7	U	6.7	1.7	0.35
65-85-0	Benzoic acid	130	U	660	130	36
207-08-9	Benzo[k]fluoranthene	3.3	U	6.7	3.3	0.68
100-51-6	Benzyl alcohol	67	U	330	67	21
111-91-1	Bis(2-chloroethoxy)methane	67	U	100	67	22
111-44-4	Bis(2-chloroethyl)ether	3.3	U	100	3.3	2.0
108-60-1	bis (2-chloroisopropyl) ether	33	U	100	33	9.5
117-81-7	Bis(2-ethylhexyl) phthalate	33	U	70	33	19
101-55-3	4-Bromophenyl phenyl ether	33	U	50	33	13
85-68-7	Butyl benzyl phthalate	33	U	70	33	10
86-74-8	Carbazole	33	U	50	33	27
106-47-8	4-Chloroaniline	67	U	150	67	17
59-50-7	4-Chloro-3-methylphenol	67	U Q	150	67	21
91-58-7	2-Chloronaphthalene	1.7	U	50	1.7	0.45
95-57-8	2-Chlorophenol	33	U	50	33	8.2
7005-72-3	4-Chlorophenyl phenyl ether	33	U	50	33	13
218-01-9	Chrysene	3.3	U	6.7	3.3	1.1
53-70-3	Dibenz(a,h)anthracene	3.3	U	6.7	3.3	0.66
132-64-9	Dibenzofuran	3.3	U	50	3.3	0.66
95-50-1	1,2-Dichlorobenzene	33	U	50	33	9.7
541-73-1	1,3-Dichlorobenzene	33	U	50	33	11
106-46-7	1,4-Dichlorobenzene	33	U	50	33	20
91-94-1	3,3'-Dichlorobenzidine	67	U	100	67	18
120-83-2	2,4-Dichlorophenol	67	U	150	67	20
84-66-2	Diethyl phthalate	33	U	70	33	16
105-67-9	2,4-Dimethylphenol	67	U	150	67	20
131-11-3	Dimethyl phthalate	33	U	70	33	17
84-74-2	Di-n-butyl phthalate	33	U	70	33	15

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-180350/8-A

Matrix: Solid | Lab File ID: 50520006.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3540C | Date Extracted: 05/12/2015 10:00

Sample wt/vol: 30(g) | Date Analyzed: 05/20/2015 11:10

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
534-52-1	4,6-Dinitro-2-methylphenol	33	U Q	150	33	9.2
51-28-5	2,4-Dinitrophenol	67	U Q	330	67	21
121-14-2	2,4-Dinitrotoluene	67	U	200	67	17
606-20-2	2,6-Dinitrotoluene	67	U	200	67	21
117-84-0	Di-n-octyl phthalate	33	U	70	33	7.9
206-44-0	Fluoranthene	3.3	U	6.7	3.3	0.55
86-73-7	Fluorene	3.3	U	6.7	3.3	0.53
118-74-1	Hexachlorobenzene	3.3	U	6.7	3.3	2.1
87-68-3	Hexachlorobutadiene	33	U	50	33	5.6
77-47-4	Hexachlorocyclopentadiene	33	U Q	330	33	8.1
67-72-1	Hexachloroethane	33	U	50	33	9.0
193-39-5	Indeno[1,2,3-cd]pyrene	1.7	U	6.7	1.7	0.35
78-59-1	Isophorone	33	U	50	33	13
91-57-6	2-Methylnaphthalene	3.3	U	6.7	3.3	0.50
95-48-7	2-Methylphenol	67	U	200	67	11
15831-10-4	3 & 4 Methylphenol	67	U	400	67	20
91-20-3	Naphthalene	3.3	U	6.7	3.3	0.82
88-74-4	2-Nitroaniline	33	U	200	33	9.1
99-09-2	3-Nitroaniline	67	U	200	67	16
100-01-6	4-Nitroaniline	67	U	200	67	26
98-95-3	Nitrobenzene	3.3	U	100	3.3	2.2
88-75-5	2-Nitrophenol	33	U	50	33	8.3
100-02-7	4-Nitrophenol	67	U Q	330	67	17
621-64-7	N-Nitrosodi-n-propylamine	33	U	50	33	6.3
86-30-6	N-Nitrosodiphenylamine	33	U	50	33	21
87-86-5	Pentachlorophenol	33	U Q	150	33	9.1
85-01-8	Phenanthrene	3.3	U	6.7	3.3	0.73
108-95-2	Phenol	33	U	50	33	7.3
129-00-0	Pyrene	1.7	U	6.7	1.7	0.44
120-82-1	1,2,4-Trichlorobenzene	17	U	50	17	3.5
95-95-4	2,4,5-Trichlorophenol	67	U Q	150	67	25
88-06-2	2,4,6-Trichlorophenol	33	U Q	150	33	8.9

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-180350/8-A

Matrix: Solid | Lab File ID: 50520006.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3540C | Date Extracted: 05/12/2015 10:00

Sample wt/vol: 30(g) | Date Analyzed: 05/20/2015 11:10

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	70		45-105
367-12-4	2-Fluorophenol (Surr)	45		35-105
4165-60-0	Nitrobenzene-d5 (Surr)	67		35-100
4165-62-2	Phenol-d5 (Surr)	60		40-100
1718-51-0	Terphenyl-d14 (Surr)	70		30-125
118-79-6	2,4,6-Tribromophenol (Surr)	22	Q	35-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520006.D
Lims ID: MB 240-180350/8-A
Client ID:
Sample Type: MB
Inject. Date: 20-May-2015 11:10:30 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043844-006
Misc. Info.: MB 240-180350/8-AMB 240-180350/8-A
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-May-2015 08:02:18 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 20-May-2015 12:04:12

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.414	6.411	0.003	97	237805	4.00	4.00	
* 2 Naphthalene-d8	136	7.525	7.527	-0.002	99	967372	4.00	4.00	
* 3 Acenaphthene-d10	164	9.035	9.037	-0.002	90	472894	4.00	4.00	
* 4 Phenanthrene-d10	188	10.309	10.311	-0.002	96	718521	4.00	4.00	
* 5 Chrysene-d12	240	12.617	12.619	-0.002	93	614939	4.00	4.00	
* 6 Perylene-d12	264	14.430	14.437	-0.007	90	398820	4.00	4.00	
$ 7 2-Fluorophenol	112	5.217	5.199	0.018	91	463437	10.0	4.51	
$ 8 Phenol-d5	99	6.049	6.046	0.003	93	836714	10.0	6.03	
$ 9 Nitrobenzene-d5	82	6.885	6.887	-0.002	86	662031	10.0	6.68	
$ 10 2-Fluorobiphenyl (Surr)	172	8.429	8.431	-0.002	99	945911	10.0	7.02	
$ 11 2,4,6-Tribromophenol	330	9.708	9.710	-0.002	84	27302	10.0	2.20	
$ 12 Terphenyl-d14	244	11.636	11.638	-0.002	97	823023	10.0	6.97	
25 1,4-Dioxane	88		3.151					ND	
26 N-Nitrosodimethylamine	74		3.617					ND	
27 Pyridine	79		3.675					ND	
20 Dimethylformamide	73		3.978					ND	
28 Ethyl methacrylate	69		4.089					ND	
31 2-Picoline	93		4.374					ND	
32 N-Nitrosomethylethylamine	88		4.504					ND	
35 Acrylamide	71		4.778					ND	
34 Methyl methanesulfonate	80		4.826					ND	
233 n,n'-Dimethylacetamide	44		4.993					ND	
36 N-Nitrosodiethylamine	102		5.254					ND	
37 Ethyl methanesulfonate	79		5.523					ND	
42 Phenylmercaptan	110		5.768					ND	
38 2-Methylcyclohexanone	68		5.820					ND	
39 3-Methylcyclohexanone	69		5.854					ND	
40 4-Methylcyclohexanone	55		5.902					ND	
41 Benzaldehyde	77		6.017					ND	
45 Pentachloroethane	167		6.019					ND	
43 Phenol	94		6.055					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
44 Aniline	93		6.108					ND	
69 Bis(2-chloroethyl)ether	93		6.147					ND	
46 2-Chlorophenol	128		6.228					ND	
243 n-Decane	57		6.257					ND	
47 1,3-Dichlorobenzene	146		6.368					ND	
232 1-Methyl-2-pyrrilidinone	99		6.421					ND	
48 1,4-Dichlorobenzene	146		6.426					ND	
49 Benzyl alcohol	108		6.507					ND	
50 1,2-Dichlorobenzene	146		6.570					ND	
56 N-Nitrosopyrrolidine	100		6.572					ND	
286 4-Methyl-1-cyclohexanemeth	55		6.574					ND	
51 2-Methylphenol	108		6.594					ND	
59 N-Nitrosomorpholine	56		6.605					ND	
53 2,2'-oxybis[1-chloropropan	45		6.628					ND	
60 2-Toluidine	106		6.639					ND	
52 Indene	115		6.647					ND	
287 4-Methyl-1-cyclohexanemeth	55		6.708					ND	
21 3 & 4 Methylphenol	108		6.724					ND	
57 N-Nitrosodi-n-propylamine	70		6.738					ND	
58 Acetophenone	105		6.748					ND	
61 Hexachloroethane	117		6.878					ND	
63 N-Nitrosopiperidine	114		6.884					ND	
62 Nitrobenzene	77		6.902					ND	
64 Isophorone	82		7.104					ND	
68 o,o',o''-Triethylphosphoro	198		7.105					ND	
67 1,3,5-Trichlorobenzene	180		7.123					ND	
66 2-Nitrophenol	139		7.185					ND	
65 2,4-Dimethylphenol	107		7.190					ND	
72 alpha,alpha-Dimethyl phene	58		7.216					ND	
71 Benzoic acid	122		7.238					ND	
70 Bis(2-chloroethoxy)methane	93		7.267					ND	
73 2,4-Dichlorophenol	162		7.387					ND	
74 1,2,4-Trichlorobenzene	180		7.474					ND	
78 Hexachloropropene	213		7.485					ND	
75 Naphthalene	128		7.546					ND	
76 4-Chloroaniline	127		7.565					ND	
77 2,6-Dichlorophenol	162		7.585					ND	
80 1,2,3-Trichlorobenzene	180		7.590					ND	
79 Hexachlorobutadiene	225		7.652					ND	
81 Benzothiazole	135		7.676					ND	
82 Quinoline	129		7.682					ND	
83 N-Nitrosodi-n-butylamine	84		7.697					ND	
85 p-Phenylene diamine	108		7.716					ND	
84 Caprolactam	113	7.823	7.849	-0.026	82	9735		0.3337	
94 Safrole, Total	162		7.894					ND	
86 4-Chloro-3-methylphenol	107		7.955					ND	
87 2-Methylnaphthalene	142		8.138					ND	
225 Isosafrole Peak 1	162		8.144					ND	
90 1,2,3,5-Tetrachlorobenzene	216		8.191					ND	
88 1-Methylnaphthalene	142		8.224					ND	
89 Hexachlorocyclopentadiene	237		8.282					ND	
91 1,2,4,5-Tetrachlorobenzene	216		8.287					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
227 Isosafrole Peak 2	162		8.336					ND	
92 2,4,6-Trichlorophenol	196		8.364					ND	
93 2,4,5-Trichlorophenol	196		8.402					ND	
97 2,4-Toluene diamine	121		8.412					ND	
246 1-Chloronaphthalene	162		8.433					ND	
99 1,2,3,4 -Tetrachlorobenzen	216		8.446					ND	
96 3,4-Dichloronitrobenzene	109		8.465					ND	
98 1,1'-Biphenyl	154		8.522					ND	
101 Phenyl ether	170		8.523					ND	
103 1,4-Naphthoquinone	158		8.543					ND	
100 2-Chloronaphthalene	162		8.556					ND	
104 1,4-Dinitrobenzene	168		8.567					ND	
102 2-Nitroaniline	65		8.618					ND	
105 Dimethyl phthalate	163		8.748					ND	
106 1,3-Dinitrobenzene	168		8.782					ND	
107 2,6-Dinitrotoluene	165		8.806					ND	
109 Acenaphthylene	152		8.921					ND	
110 3-Nitroaniline	138		8.960					ND	
115 Pentachlorobenzene	250		9.034					ND	
111 2,4-Dinitrophenol	184		9.046					ND	
112 Acenaphthene	153		9.066					ND	
113 4-Nitrophenol	109		9.070					ND	
117 1-Naphthylamine	143		9.115					ND	
118 2,3,5,6-Tetrachlorophenol	232		9.120					ND	
114 2,4-Dinitrotoluene	165		9.157					ND	
120 2-Naphthylamine	143		9.178					ND	
116 Dibenzofuran	168		9.210					ND	
122 Thionazin	97		9.269					ND	
119 2,3,4,6-Tetrachlorophenol	232		9.306					ND	
124 N-Nitro-o-toluidine	152		9.332					ND	
121 Diethyl phthalate	149		9.345					ND	
247 Hexadecane	57		9.349					ND	
127 Tributyl phosphate	99		9.417					ND	
130 Diphenylamine	169		9.418					ND	
123 4-Chlorophenyl phenyl ethe	204		9.474					ND	
125 4-Nitroaniline	138		9.484					ND	
126 Fluorene	166		9.503					ND	
297 Benzophenone	105		9.512					ND	
128 4,6-Dinitro-2-methylphenol	198		9.513					ND	
134 Sulfotepp	202		9.519					ND	
131 N-Nitrosodiphenylamine	169		9.571					ND	
135 1,3,5-Trinitrobenzene	213		9.601					ND	
133 Azobenzene	77		9.614					ND	
132 1,2-Diphenylhydrazine	77		9.614					ND	
137 Phenacetin	108		9.649					ND	
228 Diallate Peak 1	86		9.659					ND	
138 Phorate	121		9.664					ND	
230 Diallate Peak 2	86		9.736					ND	
140 Dimethoate	87		9.803					ND	
139 4-Bromophenyl phenyl ether	248		9.898					ND	
129 4-Aminobiphenyl	169		9.962					ND	
141 Hexachlorobenzene	284		9.989					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
144 Pronamide	173		9.991					ND	
142 Atrazine	200		9.994					ND	
145 Pentachloronitrobenzene	237		10.000					ND	
146 Disulfoton	88		10.101					ND	
147 Dinoseb	211		10.116					ND	
244 n-Octadecane	57		10.128					ND	
143 Pentachlorophenol	266		10.143					ND	
148 Phenanthrene	178		10.330					ND	
149 Anthracene	178		10.374					ND	
152 Methyl parathion	109		10.428					ND	
151 Carbazole	167		10.489					ND	
153 Diphenylsulfone	125		10.672					ND	
154 Di-n-butyl phthalate	149		10.725					ND	
155 Ethyl Parathion	97		10.746					ND	
156 4-Nitroquinoline-1-oxide	190		10.808					ND	
157 Methapyrilene	58		10.851					ND	
158 Isodrin	66		11.068					ND	
159 Fluoranthene	202		11.355					ND	
226 Aramite Peak 1	185		11.419					ND	
160 Benzidine	184		11.422					ND	
229 Aramite Peak 2	185		11.481					ND	
161 Pyrene	202		11.557					ND	
163 p-Dimethylamino azobenzene	225		11.587					ND	
164 Chlorobenzilate	139		11.616					ND	
282 Kepone	272		11.764					ND	
167 Famphur	218		11.818					ND	
169 3,3'-Dimethylbenzidine	212		11.866					ND	
168 Butyl benzyl phthalate	149		12.013					ND	
171 2-Acetylaminofluorene	181		12.087					ND	
174 4,4'-Methylene bis(2-chlor	231		12.337					ND	
172 3,3'-Dimethoxybenzidine	244		12.379					ND	
173 Bis(2-ethylhexyl) phthalat	149		12.504					ND	
175 3,3'-Dichlorobenzidine	252		12.538					ND	
176 Hexabromobenzene	232		12.543					ND	
177 Benzo[a]anthracene	228		12.610					ND	
178 Chrysene	228		12.648					ND	
179 6-Methylchrysene	242		12.895					ND	
180 Di-n-octyl phthalate	149		13.177					ND	
181 7,12-Dimethylbenz(a)anthra	256		13.559					ND	
281 Hexachlorophene	196		13.628					ND	
182 Benzo[b]fluoranthene	252		13.870					ND	
183 Benzo[k]fluoranthene	252		13.903					ND	
184 Benzo[a]pyrene	252		14.355					ND	
185 3-Methylcholanthrene	268		14.535					ND	
187 Dibenz[a,h]acridine	279		15.453					ND	
186 Dibenz[a,j]acridine	279		15.746					ND	
188 Indeno[1,2,3-cd]pyrene	276		16.423					ND	
189 Dibenz(a,h)anthracene	278		16.428					ND	
190 Benzo[g,h,i]perylene	276		17.039					ND	
268 Endrin	1		0.000					ND	
291 Dipropylene Glycol Phenyl	1		0.000					ND	
264 alpha-BHC	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
267 2,6-Diaminotoluene	1		0.000					ND	
270 Toxaphene	1		0.000					ND	
294 Dowanol Peak 3	1		0.000					ND	
290 1-Phenoxy-2-propanol TIC	1		0.000					ND	
275 Dieldrin	1		0.000					ND	
299 Diisobutyl phthalate TIC	1		0.000					ND	
272 2,3-Dinitrotoluene	1		0.000					ND	
262 Isoquinoline	1		0.000					ND	
250 gamma-BHC (Lindane)	1		0.000					ND	
258 Aldrin	1		0.000					ND	
277 Chlorpyrifos	1		0.000					ND	
283 2-Ethoxyethanol	1		0.000					ND	
293 Dowanol Peak 4	1		0.000					ND	
273 3 & 4 Chlorophenol	1		0.000					ND	
259 o-Phenylphenol	1		0.000					ND	
260 Methoxychlor	1		0.000					ND	
251 Endosulfan sulfate	1		0.000					ND	
278 delta-BHC	1		0.000					ND	
252 4-tert-Butylphenol	1		0.000					ND	
253 Endrin aldehyde	1		0.000					ND	
257 Endosulfan I	1		0.000					ND	
261 Endosulfan II	1		0.000					ND	
274 Dibenz(a,i)pyrene	1		0.000					ND	
289 1-Phenoxy-2-propanol	1		0.000					ND	
266 Heptachlor	1		0.000					ND	
292 Dowanol Peak 2	1		0.000					ND	
269 Dibenzo[a,e]pyrene	1		0.000					ND	
271 3 & 4 Phenoxyphenol	1		0.000					ND	
265 Dibenzo[a,h]pyrene	1		0.000					ND	
276 Chlordane (technical)	1		0.000					ND	
249 4-Chlorophenol TIC	1		0.000					ND	
254 2-Chloroaniline	1		0.000					ND	
255 beta-BHC	1		0.000					ND	
285 Chlorobenzene TIC	1		0.000					ND	
279 3,4-Dichloroaniline	1		0.000					ND	
263 Heptachlor epoxide	1		0.000					ND	
S 95 Isosafrole	162		5.568					ND	
S 288 4-Methyl-1-cyclohexanemeth	55		6.400					ND	
S 136 Diallate	86		6.701					ND	
S 162 Aramite, Total	185		8.271					ND	
S 295 Dowanol	1		0.000					ND	
S 296 Dowanol Peak 1	1		0.000					ND	
S 191 Methyl Phenols,Total	100		0.000					ND	
S 245 Total Cresols	100		0.000					ND	
T 240 Trimethyl phosphate TIC	110		5.000					ND	
T 194 Decane TIC	142		5.800					ND	
T 193 Hexamethylphosphoramide TI	135		6.500					ND	
T 234 2-Isopropylphenol TIC	121		7.250					ND	
T 235 4-isopropylphenol TIC	121		7.364					ND	
T 236 3-isopropylphenol TIC	121		7.364					ND	
T 300 Alpha-Terpineol TIC	59		7.500					ND	
T 237 3-(1,1-Dimethylethyl Pheno	135		7.720					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
T 231 2,3,7,8-TCDD	322		8.850					ND	
T 195 Hydroquinone TIC	110		9.000					ND	
T 192 Octadecane (TIC)	254		9.600					ND	
T 242 Triphenyl Phosphate TIC	326		12.000					ND	
T 196 Kepone TIC	272		12.000					ND	
T 241 Tricresyl phosphate TIC	368		12.500					ND	
T 280 2,3,7,8-TCDD TIC	198		12.500					ND	
T 248 2,3,7,8 TCDF TIC	304		13.000					ND	
T 197 Hexachlorophene TIC	198		13.600					ND	
T 239 Tris(2,3-dibromopropyl)pho	201		14.000					ND	

Reagents:

SMIS80PPMW_00011 Amount Added: 5.00 Units: uL Run Reagent

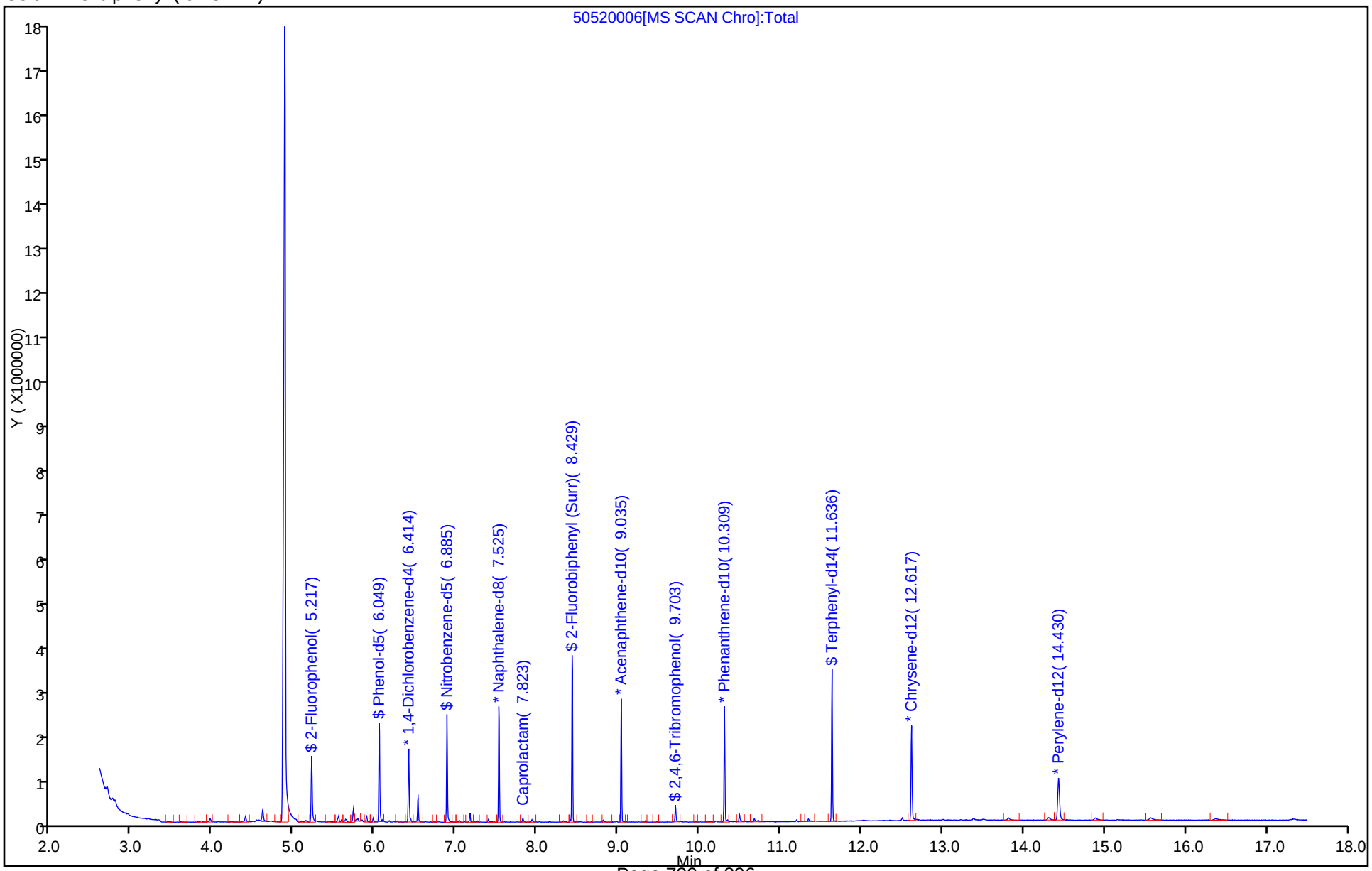
Report Date: 21-May-2015 08:02:26 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520006.D

Injection Date:	20-May-2015 11:10:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	MB 240-180350/8-A			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-180428/2-A

Matrix: Water | Lab File ID: 50514004.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3520C | Date Extracted: 05/12/2015 13:37

Sample wt/vol: 1000(mL) | Date Analyzed: 05/14/2015 11:14

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 180709 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
77-47-4	Hexachlorocyclopentadiene	0.50	U	10	0.50	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	88		50-110
367-12-4	2-Fluorophenol (Surr)	94		20-110
4165-60-0	Nitrobenzene-d5 (Surr)	81		40-110
4165-62-2	Phenol-d5 (Surr)	94		10-115
1718-51-0	Terphenyl-d14 (Surr)	87		50-135
118-79-6	2,4,6-Tribromophenol (Surr)	88		40-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150514-43624.b\50514004.D
Lims ID: MB 240-180428/2-A
Client ID:
Sample Type: MB
Inject. Date: 14-May-2015 11:14:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043624-004
Misc. Info.: MB 240-180428/2-AMB 240-180428/2-A
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150514-43624.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 14-May-2015 12:57:18 Calib Date: 12-May-2015 10:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK048

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.277	6.278	-0.001	93	115108	4.00	4.00	
* 2 Naphthalene-d8	136	7.398	7.398	0.000	98	451583	4.00	4.00	
* 3 Acenaphthene-d10	164	8.903	8.903	0.000	93	269333	4.00	4.00	
* 4 Phenanthrene-d10	188	10.172	10.173	-0.001	97	497807	4.00	4.00	
* 5 Chrysene-d12	240	12.452	12.452	0.000	97	510616	4.00	4.00	
* 6 Perylene-d12	264	14.159	14.159	0.000	99	362546	4.00	4.00	
$ 7 2-Fluorophenol	112	5.032	5.032	0.000	93	379233	10.0	9.43	
$ 8 Phenol-d5	99	5.912	5.912	0.000	91	541672	10.0	9.43	
$ 9 Nitrobenzene-d5	82	6.753	6.754	-0.001	86	660802	10.0	8.14	
$ 10 2-Fluorobiphenyl (Surr)	172	8.307	8.307	0.000	98	800814	10.0	8.81	
$ 11 2,4,6-Tribromophenol	330	9.571	9.572	-0.001	81	85813	10.0	8.78	
$ 12 Terphenyl-d14	244	11.495	11.495	0.000	98	890847	10.0	8.66	
25 1,4-Dioxane	88		2.700					ND	
26 N-Nitrosodimethylamine	74		3.243					ND	
27 Pyridine	79		3.325					ND	
20 Dimethylformamide	73		3.978					ND	
28 Ethyl methacrylate	69		4.089					ND	
31 2-Picoline	93		4.374					ND	
32 N-Nitrosomethylethylamine	88		4.504					ND	
35 Acrylamide	71	4.782	4.778	0.004	46	298			NC
34 Methyl methanesulfonate	80		4.826					ND	
233 n,n'-Dimethylacetamide	44		4.993					ND	
36 N-Nitrosodiethylamine	102		5.254					ND	
37 Ethyl methanesulfonate	79		5.523					ND	
42 Phenylmercaptan	110		5.768					ND	
38 2-Methylcyclohexanone	68	5.811	5.820	-0.009	7	402			NC
39 3-Methylcyclohexanone	69	5.912	5.854	0.058	50	120604			NC
41 Benzaldehyde	77		5.869					ND	
40 4-Methylcyclohexanone	55	5.950	5.902	0.048	1	3562			NC
43 Phenol	94		5.927					ND	
44 Aniline	93		5.970					ND	
69 Bis(2-chloroethyl)ether	93		6.013					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
45 Pentachloroethane	167		6.019					ND	
46 2-Chlorophenol	128		6.085					ND	
243 n-Decane	57	6.123	6.124	-0.001	66	3975			NC
47 1,3-Dichlorobenzene	146		6.230					ND	
48 1,4-Dichlorobenzene	146		6.292					ND	
49 Benzyl alcohol	108		6.379					ND	
232 1-Methyl-2-pyrrilidinone	99	6.402	6.421	-0.019	1	112			NC
50 1,2-Dichlorobenzene	146		6.436					ND	
51 2-Methylphenol	108		6.470					ND	
53 2,2'-oxybis[1-chloropropan	45		6.499					ND	
52 Indene	115		6.513					ND	
56 N-Nitrosopyrrolidine	100		6.572					ND	
286 4-Methyl-1-cyclohexanemeth	55	6.575	6.574	0.001	0	811			NC
21 3 & 4 Methylphenol	108		6.600					ND	
59 N-Nitrosomorpholine	56		6.605					ND	
57 N-Nitrosodi-n-propylamine	70		6.610					ND	
58 Acetophenone	105	6.619	6.619	0.000	92	8707		0.1198	
60 2-Toluidine	106		6.639					ND	
287 4-Methyl-1-cyclohexanemeth	55	6.705	6.708	-0.003	0	334			NC
61 Hexachloroethane	117		6.744					ND	
62 Nitrobenzene	77		6.773					ND	
63 N-Nitrosopiperidine	114		6.884					ND	
64 Isophorone	82		6.975					ND	
66 2-Nitrophenol	139		7.057					ND	
65 2,4-Dimethylphenol	107		7.066					ND	
68 o,o',o''-Triethylphosphoro	198		7.105					ND	
71 Benzoic acid	122		7.119					ND	
67 1,3,5-Trichlorobenzene	180		7.123					ND	
70 Bis(2-chloroethoxy)methane	93		7.143					ND	
72 alpha,alpha-Dimethyl phene	58		7.216					ND	
73 2,4-Dichlorophenol	162		7.264					ND	
74 1,2,4-Trichlorobenzene	180		7.345					ND	
75 Naphthalene	128		7.417					ND	
76 4-Chloroaniline	127		7.437					ND	
77 2,6-Dichlorophenol	162		7.456					ND	
78 Hexachloropropene	213		7.485					ND	
79 Hexachlorobutadiene	225		7.523					ND	
80 1,2,3-Trichlorobenzene	180		7.590					ND	
81 Benzothiazole	135		7.676					ND	
82 Quinoline	129		7.682					ND	
83 N-Nitrosodi-n-butylamine	84		7.697					ND	
84 Caprolactam	113	7.696	7.716	-0.020	77	5705		0.4376	
85 p-Phenylene diamine	108		7.716					ND	
86 4-Chloro-3-methylphenol	107		7.836					ND	
94 Safrole, Total	162		7.894					ND	
87 2-Methylnaphthalene	142		8.009					ND	
88 1-Methylnaphthalene	142		8.095					ND	
225 Isosafrole Peak 1	162		8.144					ND	
89 Hexachlorocyclopentadiene	237		8.153					ND	
91 1,2,4,5-Tetrachlorobenzene	216		8.153					ND	
90 1,2,3,5-Tetrachlorobenzene	216		8.191					ND	
92 2,4,6-Trichlorophenol	196		8.240					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
93 2,4,5-Trichlorophenol	196		8.273					ND	
227 Isosafrole Peak 2	162		8.336					ND	
98 1,1'-Biphenyl	154		8.394					ND	
97 2,4-Toluene diamine	121		8.412					ND	
100 2-Chloronaphthalene	162		8.427					ND	
246 1-Chloronaphthalene	162		8.433					ND	
99 1,2,3,4 -Tetrachlorobenzen	216		8.446					ND	
96 3,4-Dichloronitrobenzene	109		8.465					ND	
102 2-Nitroaniline	65		8.490					ND	
101 Phenyl ether	170		8.523					ND	
103 1,4-Naphthoquinone	158		8.543					ND	
104 1,4-Dinitrobenzene	168		8.567					ND	
105 Dimethyl phthalate	163		8.624					ND	
106 1,3-Dinitrobenzene	168		8.653					ND	
107 2,6-Dinitrotoluene	165		8.682					ND	
109 Acenaphthylene	152		8.788					ND	
110 3-Nitroaniline	138		8.831					ND	
111 2,4-Dinitrophenol	184		8.918					ND	
112 Acenaphthene	153		8.932					ND	
113 4-Nitrophenol	109		8.947					ND	
114 2,4-Dinitrotoluene	165		9.028					ND	
115 Pentachlorobenzene	250		9.034					ND	
116 Dibenzofuran	168		9.076					ND	
117 1-Naphthylamine	143		9.115					ND	
118 2,3,5,6-Tetrachlorophenol	232		9.120					ND	
119 2,3,4,6-Tetrachlorophenol	232		9.173					ND	
120 2-Naphthylamine	143		9.178					ND	
121 Diethyl phthalate	149		9.216					ND	
247 Hexadecane	57		9.221					ND	
122 Thionazin	97		9.269					ND	
124 N-Nitro-o-toluidine	152		9.332					ND	
123 4-Chlorophenyl phenyl ethe	204		9.346					ND	
125 4-Nitroaniline	138		9.351					ND	
126 Fluorene	166		9.370					ND	
128 4,6-Dinitro-2-methylphenol	198		9.384					ND	
127 Tributyl phosphate	99		9.417					ND	
130 Diphenylamine	169		9.418					ND	
131 N-Nitrosodiphenylamine	169		9.437					ND	
132 1,2-Diphenylhydrazine	77		9.480					ND	
133 Azobenzene	77		9.480					ND	
297 Benzophenone	105	9.480	9.512	-0.032	20	1581			NC
134 Sulfotepp	202		9.519					ND	
135 1,3,5-Trinitrobenzene	213		9.601					ND	
137 Phenacetin	108		9.649					ND	
228 Diallate Peak 1	86		9.659					ND	
138 Phorate	121		9.664					ND	
230 Diallate Peak 2	86		9.736					ND	
139 4-Bromophenyl phenyl ether	248		9.764					ND	
140 Dimethoate	87		9.803					ND	
141 Hexachlorobenzene	284		9.855					ND	
142 Atrazine	200		9.860					ND	
129 4-Aminobiphenyl	169		9.962					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
144 Pronamide	173		9.991					ND	
244 n-Octadecane	57		10.000					ND	
145 Pentachloronitrobenzene	237		10.000					ND	
143 Pentachlorophenol	266		10.005					ND	
146 Disulfoton	88		10.101					ND	
147 Dinoseb	211		10.116					ND	
148 Phenanthrene	178		10.192					ND	
149 Anthracene	178		10.235					ND	
151 Carbazole	167		10.351					ND	
152 Methyl parathion	109		10.428					ND	
154 Di-n-butyl phthalate	149	10.596	10.596	0.000	97	19459		0.1266	
153 Diphenylsulfone	125		10.672					ND	
155 Ethyl Parathion	97		10.746					ND	
156 4-Nitroquinoline-1-oxide	190		10.808					ND	
157 Methapyrilene	58		10.851					ND	
158 Isodrin	66		11.068					ND	
159 Fluoranthene	202		11.212					ND	
160 Benzidine	184		11.284					ND	
161 Pyrene	202		11.409					ND	
226 Aramite Peak 1	185		11.419					ND	
229 Aramite Peak 2	185		11.481					ND	
163 p-Dimethylamino azobenzene	225		11.587					ND	
164 Chlorobenzilate	139		11.616					ND	
282 Kepone	272	11.581	11.764	-0.183	1	77			NC
167 Famphur	218		11.818					ND	
169 3,3'-Dimethylbenzidine	212		11.866					ND	
168 Butyl benzyl phthalate	149		11.875					ND	
171 2-Acetylaminofluorene	181		12.087					ND	
174 4,4'-Methylene bis(2-chlor	231		12.337					ND	
173 Bis(2-ethylhexyl) phthalat	149	12.351	12.351	0.000	95	51114		0.5618	
175 3,3'-Dichlorobenzidine	252		12.375					ND	
172 3,3'-Dimethoxybenzidine	244		12.379					ND	
177 Benzo[a]anthracene	228		12.443					ND	
178 Chrysene	228		12.476					ND	
176 Hexabromobenzene	232	12.452	12.543	-0.091	45	22789			NC
179 6-Methylchrysene	242		12.895					ND	
180 Di-n-octyl phthalate	149		12.991					ND	
181 7,12-Dimethylbenz(a)anthra	256		13.559					ND	
281 Hexachlorophene	196	13.697	13.628	0.069	0	305			NC
182 Benzo[b]fluoranthene	252		13.630					ND	
183 Benzo[k]fluoranthene	252		13.664					ND	
184 Benzo[a]pyrene	252		14.082					ND	
185 3-Methylcholanthrene	268		14.535					ND	
187 Dibenz[a,h]acridine	279		15.453					ND	
186 Dibenz[a,j]acridine	279		15.746					ND	
188 Indeno[1,2,3-cd]pyrene	276		16.011					ND	
189 Dibenz(a,h)anthracene	278		16.020					ND	
190 Benzo[g,h,i]perylene	276		16.578					ND	
251 Endosulfan sulfate	1		0.000					ND	
259 o-Phenylphenol	1		0.000					ND	
261 Endosulfan II	1		0.000					ND	
272 2,3-Dinitrotoluene	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
250 gamma-BHC (Lindane)	1		0.000					ND	
267 2,6-Diaminotoluene	1		0.000					ND	
270 Toxaphene	1		0.000					ND	
262 Isoquinoline	1		0.000					ND	
273 3 & 4 Chlorophenol	1		0.000					ND	
278 delta-BHC	1		0.000					ND	
257 Endosulfan I	1		0.000					ND	
277 Chlorpyrifos	1		0.000					ND	
258 Aldrin	1		0.000					ND	
253 Endrin aldehyde	1		0.000					ND	
260 Methoxychlor	1		0.000					ND	
293 Dowanol Peak 4	1		0.000					ND	
283 2-Ethoxyethanol	1		0.000					ND	
264 alpha-BHC	1		0.000					ND	
289 1-Phenoxy-2-propanol	1		0.000					ND	
266 Heptachlor	1		0.000					ND	
292 Dowanol Peak 2	1		0.000					ND	
269 Dibenzo[a,e]pyrene	1		0.000					ND	
271 3 & 4 Phenoxyphenol	1		0.000					ND	
265 Dibenzo[a,h]pyrene	1		0.000					ND	
276 Chlordane (technical)	1		0.000					ND	
275 Dieldrin	1		0.000					ND	
285 Chlorobenzene TIC	1		0.000					ND	
252 4-tert-Butylphenol	1		0.000					ND	
294 Dowanol Peak 3	1		0.000					ND	
268 Endrin	1		0.000					ND	
263 Heptachlor epoxide	1		0.000					ND	
274 Dibenz(a,i)pyrene	1		0.000					ND	
291 Dipropylene Glycol Phenyl	1		0.000					ND	
299 Diisobutyl phthalate TIC	1		0.000					ND	
254 2-Chloroaniline	1		0.000					ND	
290 1-Phenoxy-2-propanol TIC	1		0.000					ND	
255 beta-BHC	1		0.000					ND	
279 3,4-Dichloroaniline	1		0.000					ND	
249 4-Chlorophenol TIC	1		0.000					ND	
S 95 Isosafrole	162		5.568					ND	
S 288 4-Methyl-1-cyclohexanemeth	55		6.400					ND	
S 136 Diallate	86		6.701					ND	
S 162 Aramite, Total	185		8.271					ND	
S 295 Dowanol	1		0.000					ND	
S 296 Dowanol Peak 1	1		0.000					ND	
S 191 Methyl Phenols,Total	100		0.000					ND	
S 245 Total Cresols	100		0.000					ND	
T 240 Trimethyl phosphate TIC	110	5.027	4.998	0.027	0	685			0
T 194 Decane TIC	142	6.128	5.798	0.328	58	508			0
T 193 Hexamethylphosphoramide TI	135	6.994	6.498	0.494	1	700			0
T 234 2-Isopropylphenol TIC	121	7.268	7.248	0.018	0	302			0
T 235 4-isopropylphenol TIC	121	7.340	7.362	-0.024	0	469			0
T 236 3-isopropylphenol TIC	121	7.340	7.362	-0.024	0	469			0
T 300 Alpha-Terpineol TIC	59	7.417	7.498	-0.083	0	561			0
T 237 3-(1,1-Dimethylethyl Pheno	135	7.725	7.718	0.005	1	254			0
T 231 2,3,7,8-TCDD	322	9.009	8.849	0.159	1	192			0

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
T 195 Hydroquinone TIC	110	9.014	8.997	0.014	1	725		0	
T 192 Octadecane (TIC)	254	14.053	9.598	4.453	53	11520		0	
T 242 Triphenyl Phosphate TIC	326	11.985	11.998	-0.015	0	189		0	
T 196 Kepone TIC	272		12.000					ND	
T 241 Tricresyl phosphate TIC	368	12.380	12.498	-0.120	0	72		0	
T 280 2,3,7,8-TCDD TIC	198	12.447	12.498	-0.053	0	6893		0	
T 248 2,3,7,8 TCDF TIC	304	12.832	12.998	-0.168	0	200		0	
T 197 Hexachlorophene TIC	198		13.600					ND	
T 239 Tris(2,3-dibromopropyl)pho	201	14.019	13.998	0.019	0	204		0	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SMIS80PPMW_00011 Amount Added: 5.00 Units: uL Run Reagent

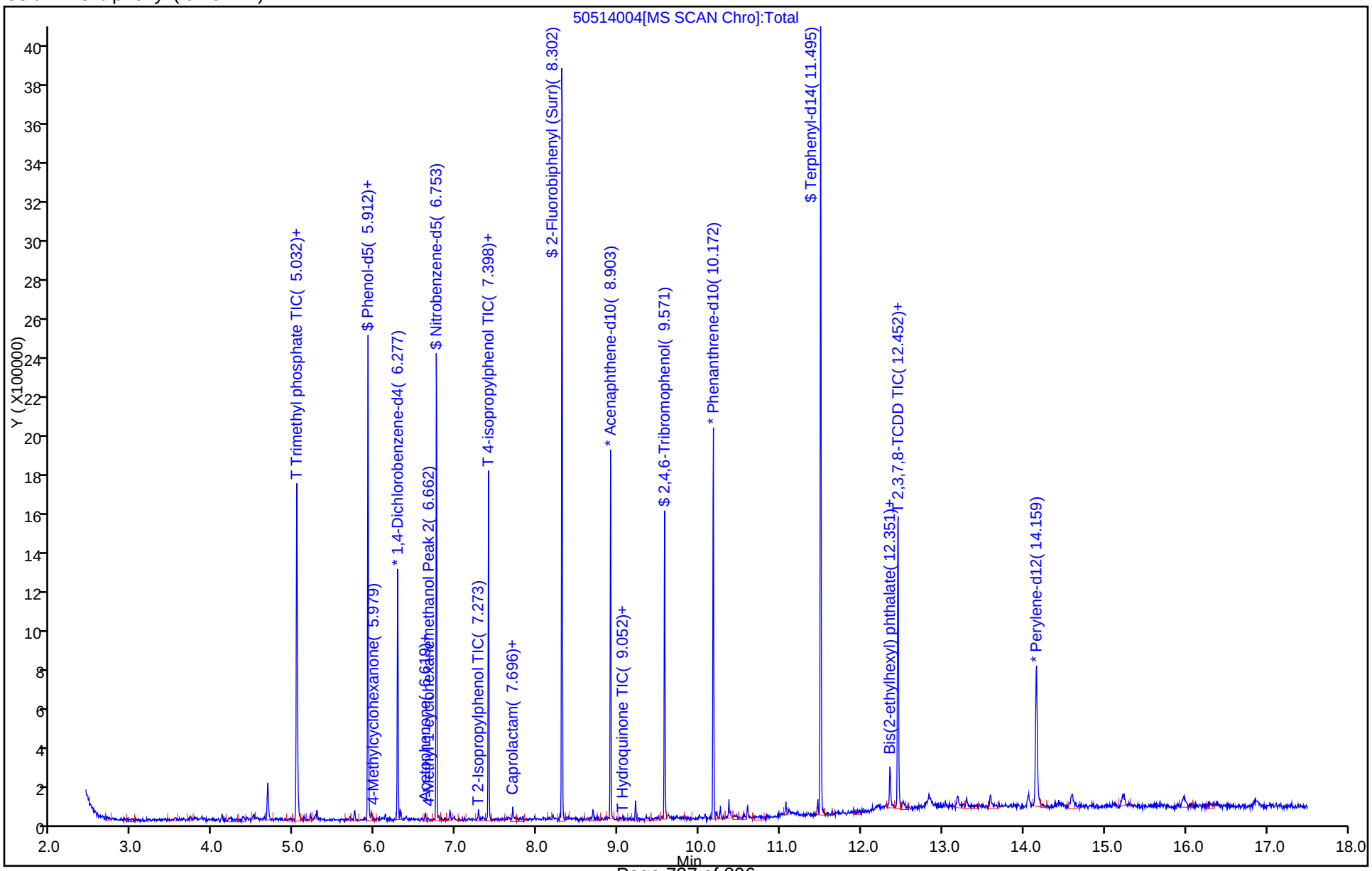
Report Date: 14-May-2015 12:57:22 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150514-43624.b\50514004.D

Injection Date:	14-May-2015 11:14:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	MB 240-180428/2-A			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-179064/3-A

Matrix: Water | Lab File ID: 50512014.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3520C | Date Extracted: 05/04/2015 05:57

Sample wt/vol: 1000(mL) | Date Analyzed: 05/12/2015 12:40

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 180308 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
83-32-9	Acenaphthene	14.8		0.20	0.10	0.044
208-96-8	Acenaphthylene	14.0		0.20	0.10	0.048
120-12-7	Anthracene	14.8		0.20	0.10	0.088
56-55-3	Benzo[a]anthracene	15.2		0.20	0.10	0.030
50-32-8	Benzo[a]pyrene	15.1		0.20	0.10	0.051
205-99-2	Benzo[b]fluoranthene	16.5		0.20	0.10	0.039
191-24-2	Benzo[g,h,i]perylene	16.9		0.20	0.10	0.046
65-85-0	Benzoic acid	20	U	25	20	10
207-08-9	Benzo[k]fluoranthene	18.0		0.20	0.10	0.045
100-51-6	Benzyl alcohol	14.1		5.0	0.50	0.38
111-91-1	Bis(2-chloroethoxy)methane	13.7		1.0	0.50	0.32
111-44-4	Bis(2-chloroethyl)ether	13.1		1.0	0.10	0.10
108-60-1	bis (2-chloroisopropyl) ether	12.6		1.0	0.50	0.40
117-81-7	Bis(2-ethylhexyl) phthalate	16.1		5.0	5.0	1.7
101-55-3	4-Bromophenyl phenyl ether	16.1		2.0	0.50	0.22
85-68-7	Butyl benzyl phthalate	15.5		5.0	0.50	0.26
86-74-8	Carbazole	14.9		1.0	0.50	0.28
106-47-8	4-Chloroaniline	13.4		2.0	0.50	0.21
59-50-7	4-Chloro-3-methylphenol	16.0		2.0	0.50	0.21
91-58-7	2-Chloronaphthalene	13.0		1.0	0.50	0.10
95-57-8	2-Chlorophenol	12.6		1.0	0.50	0.29
7005-72-3	4-Chlorophenyl phenyl ether	15.4		2.0	0.50	0.30
218-01-9	Chrysene	16.5		0.20	0.10	0.050
53-70-3	Dibenz(a,h)anthracene	16.5		0.20	0.10	0.045
132-64-9	Dibenzofuran	14.2		1.0	0.10	0.020
95-50-1	1,2-Dichlorobenzene	12.3		1.0	0.50	0.29
541-73-1	1,3-Dichlorobenzene	11.2		1.0	0.50	0.23
106-46-7	1,4-Dichlorobenzene	11.4		1.0	0.50	0.34
91-94-1	3,3'-Dichlorobenzidine	26.6		5.0	1.0	0.37
120-83-2	2,4-Dichlorophenol	14.0		2.0	0.50	0.19
84-66-2	Diethyl phthalate	16.4		2.0	1.0	0.60
105-67-9	2,4-Dimethylphenol	11.0		2.0	0.50	0.25
131-11-3	Dimethyl phthalate	15.8		2.0	0.50	0.29
84-74-2	Di-n-butyl phthalate	17.3		5.0	5.0	1.7

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-179064/3-A

Matrix: Water | Lab File ID: 50512014.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3520C | Date Extracted: 05/04/2015 05:57

Sample wt/vol: 1000(mL) | Date Analyzed: 05/12/2015 12:40

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 180308 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
534-52-1	4,6-Dinitro-2-methylphenol	25.5		5.0	4.0	2.4
51-28-5	2,4-Dinitrophenol	19.7		5.0	1.0	0.32
121-14-2	2,4-Dinitrotoluene	15.5		5.0	0.50	0.25
606-20-2	2,6-Dinitrotoluene	16.2		5.0	5.0	1.1
117-84-0	Di-n-octyl phthalate	16.3		2.0	0.50	0.23
206-44-0	Fluoranthene	15.3		0.20	0.10	0.045
86-73-7	Fluorene	14.4		0.20	0.10	0.041
118-74-1	Hexachlorobenzene	15.4		0.20	0.10	0.085
87-68-3	Hexachlorobutadiene	12.1		1.0	0.50	0.27
77-47-4	Hexachlorocyclopentadiene	0.451	J Q	10	0.50	0.24
67-72-1	Hexachloroethane	11.5		1.0	0.50	0.19
193-39-5	Indeno[1,2,3-cd]pyrene	16.9		0.20	0.10	0.043
78-59-1	Isophorone	15.5		1.0	0.50	0.27
91-57-6	2-Methylnaphthalene	14.0		0.20	0.10	0.090
95-48-7	2-Methylphenol	13.3		1.0	0.50	0.17
15831-10-4	3 & 4 Methylphenol	13.5		2.0	1.0	0.80
91-20-3	Naphthalene	13.0		0.20	0.10	0.063
88-74-4	2-Nitroaniline	14.4		2.0	0.50	0.21
99-09-2	3-Nitroaniline	16.4		2.0	0.50	0.28
100-01-6	4-Nitroaniline	12.6		2.0	0.50	0.22
98-95-3	Nitrobenzene	13.5		1.0	0.10	0.040
88-75-5	2-Nitrophenol	13.8		2.0	0.50	0.28
100-02-7	4-Nitrophenol	30.5		5.0	4.0	0.29
621-64-7	N-Nitrosodi-n-propylamine	14.5		1.0	0.50	0.24
86-30-6	N-Nitrosodiphenylamine	30.7		1.0	0.50	0.31
87-86-5	Pentachlorophenol	25.6		5.0	1.0	0.27
85-01-8	Phenanthrene	15.1		0.20	0.10	0.062
108-95-2	Phenol	13.8		1.0	1.0	0.60
129-00-0	Pyrene	15.4		0.20	0.10	0.042
120-82-1	1,2,4-Trichlorobenzene	12.4		1.0	0.50	0.28
95-95-4	2,4,5-Trichlorophenol	15.3		5.0	0.50	0.30
88-06-2	2,4,6-Trichlorophenol	15.6		5.0	0.50	0.24

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-179064/3-A

Matrix: Water | Lab File ID: 50512014.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3520C | Date Extracted: 05/04/2015 05:57

Sample wt/vol: 1000(mL) | Date Analyzed: 05/12/2015 12:40

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 180308 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	72		50-110
367-12-4	2-Fluorophenol (Surr)	68		20-110
4165-60-0	Nitrobenzene-d5 (Surr)	72		40-110
4165-62-2	Phenol-d5 (Surr)	68		10-115
1718-51-0	Terphenyl-d14 (Surr)	75		50-135
118-79-6	2,4,6-Tribromophenol (Surr)	83		40-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512014.D
Lims ID: LCS 240-179064/3-A
Client ID:
Sample Type: LCS
Inject. Date: 12-May-2015 12:40:30 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043530-014
Misc. Info.: LCS 240-179064/3-ALCS 240-179064/3-A
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 13-May-2015 09:12:46 Calib Date: 12-May-2015 10:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK049

First Level Reviewer: ulmanm Date: 12-May-2015 13:30:30

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.325	6.326	-0.001	91	120585	4.00	4.00	
* 2 Naphthalene-d8	136	7.446	7.446	0.000	97	450260	4.00	4.00	
* 3 Acenaphthene-d10	164	8.951	8.951	0.000	94	277989	4.00	4.00	
* 4 Phenanthrene-d10	188	10.225	10.221	0.004	98	463467	4.00	4.00	
* 5 Chrysene-d12	240	12.514	12.514	0.000	97	529836	4.00	4.00	
* 6 Perylene-d12	264	14.269	14.270	-0.001	98	361168	4.00	4.00	
$ 7 2-Fluorophenol	112	5.094	5.090	0.004	92	284473	10.0	6.75	
$ 8 Phenol-d5	99	5.960	5.960	0.000	89	409074	10.0	6.80	
$ 9 Nitrobenzene-d5	82	6.801	6.802	-0.001	86	586783	10.0	7.25	
$ 10 2-Fluorobiphenyl (Surr)	172	8.350	8.350	0.000	97	675702	10.0	7.20	
$ 11 2,4,6-Tribromophenol	330	9.619	9.620	-0.001	75	84131	10.0	8.34	
$ 12 Terphenyl-d14	244	11.548	11.548	0.000	99	796080	10.0	7.45	
25 1,4-Dioxane	88	2.877	2.892	-0.015	91	144452	10.0	5.94	
26 N-Nitrosodimethylamine	74	3.392	3.392	0.000	90	239615	10.0	6.35	
27 Pyridine	79	3.464	3.464	0.000	94	75948	10.0	1.28	
41 Benzaldehyde	77	5.921	5.922	-0.001	86	764000	20.0	14.2	
43 Phenol	94	5.969	5.970	-0.001	92	467469	10.0	6.92	
44 Aniline	93	6.017	6.018	-0.001	94	535555	10.0	6.25	
69 Bis(2-chloroethyl)ether	93	6.056	6.061	-0.005	97	356867	10.0	6.56	
46 2-Chlorophenol	128	6.138	6.138	0.000	84	257922	10.0	6.28	
243 n-Decane	57	6.171	6.172	-0.001	94	258044	NC	NC	
47 1,3-Dichlorobenzene	146	6.282	6.282	0.000	82	263409	10.0	5.58	
48 1,4-Dichlorobenzene	146	6.340	6.340	0.000	79	272664	10.0	5.72	
49 Benzyl alcohol	108	6.421	6.422	-0.001	82	226996	10.0	7.04	
50 1,2-Dichlorobenzene	146	6.484	6.484	0.000	85	277453	10.0	6.13	
51 2-Methylphenol	108	6.513	6.513	0.000	89	299569	10.0	6.66	
53 2,2'-oxybis[1-chloropropan	45	6.546	6.547	-0.001	89	275319	10.0	6.29	
52 Indene	115	6.561	6.561	0.000	87	1073673	20.0	12.4	
21 3 & 4 Methylphenol	108	6.643	6.643	0.000	96	326007	10.0	6.75	
57 N-Nitrosodi-n-propylamine	70	6.652	6.653	-0.001	95	362550	10.0	7.23	
58 Acetophenone	105	6.662	6.662	0.000	87	535005	10.0	7.03	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
61 Hexachloroethane	117	6.787	6.792	-0.005	91	143342	10.0	5.74	
62 Nitrobenzene	77	6.816	6.821	-0.005	83	533406	10.0	6.74	
64 Isophorone	82	7.022	7.023	-0.001	98	1010624	10.0	7.74	
66 2-Nitrophenol	139	7.099	7.100	-0.001	71	146386	10.0	6.92	
65 2,4-Dimethylphenol	107	7.109	7.109	0.000	94	327451	10.0	5.49	
71 Benzoic acid	122	7.167	7.167	0.000	85	13962	20.0	1.34	
70 Bis(2-chloroethoxy)methane	93	7.186	7.186	0.000	98	444340	10.0	6.87	
73 2,4-Dichlorophenol	162	7.306	7.307	-0.001	88	241223	10.0	6.98	
74 1,2,4-Trichlorobenzene	180	7.388	7.388	0.000	86	243148	10.0	6.19	
75 Naphthalene	128	7.465	7.460	0.005	97	769896	10.0	6.50	
76 4-Chloroaniline	127	7.484	7.484	0.000	87	341607	10.0	6.70	
77 2,6-Dichlorophenol	162	7.499	7.499	0.000	80	235325	10.0	6.58	
79 Hexachlorobutadiene	225	7.566	7.566	0.000	93	171743	10.0	6.05	
84 Caprolactam	113	7.749	7.763	-0.014	82	204348	20.0	15.7	
86 4-Chloro-3-methylphenol	107	7.874	7.879	-0.005	86	387208	10.0	8.01	
87 2-Methylnaphthalene	142	8.052	8.052	0.000	86	547747	10.0	6.98	
88 1-Methylnaphthalene	142	8.143	8.138	0.005	88	480320	10.0	7.23	
89 Hexachlorocyclopentadiene	237	8.196	8.196	0.000	50	6818	10.0	0.2254	
91 1,2,4,5-Tetrachlorobenzene	216	8.201	8.201	0.000	95	283656	10.0	6.44	
92 2,4,6-Trichlorophenol	196	8.282	8.283	-0.001	91	220099	10.0	7.79	
93 2,4,5-Trichlorophenol	196	8.316	8.316	0.000	85	224509	10.0	7.66	
98 1,1'-Biphenyl	154	8.441	8.441	0.000	98	685203	10.0	6.84	
100 2-Chloronaphthalene	162	8.475	8.475	0.000	97	534654	10.0	6.51	
102 2-Nitroaniline	65	8.532	8.533	-0.001	69	308667	10.0	7.21	
105 Dimethyl phthalate	163	8.667	8.667	0.000	92	751828	10.0	7.90	
106 1,3-Dinitrobenzene	168	8.701	8.701	0.000	78	106583	10.0	7.33	
107 2,6-Dinitrotoluene	165	8.725	8.725	0.000	74	162458	10.0	8.11	
109 Acenaphthylene	152	8.835	8.836	-0.001	98	863507	10.0	7.01	
110 3-Nitroaniline	138	8.879	8.879	0.000	81	154838	10.0	8.19	
111 2,4-Dinitrophenol	184	8.965	8.966	-0.001	95	140522	20.0	9.87	
112 Acenaphthene	153	8.980	8.980	0.000	96	590904	10.0	7.38	
113 4-Nitrophenol	109	8.989	8.990	-0.001	84	416161	20.0	15.2	
114 2,4-Dinitrotoluene	165	9.076	9.076	0.000	78	209386	10.0	7.77	
116 Dibenzofuran	168	9.124	9.124	0.000	92	802092	10.0	7.10	
119 2,3,4,6-Tetrachlorophenol	232	9.220	9.220	0.000	81	183878	10.0	7.89	
121 Diethyl phthalate	149	9.263	9.264	-0.001	94	808908	10.0	8.21	
247 Hexadecane	57	9.268	9.269	-0.001	93	439525	NC	NC	
123 4-Chlorophenyl phenyl ethe	204	9.393	9.394	-0.001	94	352434	10.0	7.68	
125 4-Nitroaniline	138	9.398	9.398	0.000	71	134086	10.0	6.31	
126 Fluorene	166	9.417	9.418	-0.001	98	685565	10.0	7.20	
128 4,6-Dinitro-2-methylphenol	198	9.427	9.432	-0.005	92	236025	20.0	12.8	
131 N-Nitrosodiphenylamine	169	9.485	9.485	0.000	98	1081929	20.0	15.4	
133 Azobenzene	77	9.528	9.528	0.000	96	1242272	10.0	8.17	
139 4-Bromophenyl phenyl ether	248	9.812	9.812	0.000	77	204829	10.0	8.06	
141 Hexachlorobenzene	284	9.903	9.903	0.000	84	187408	10.0	7.70	
142 Atrazine	200	9.908	9.908	0.000	88	453152	20.0	17.4	
244 n-Octadecane	57	10.047	10.048	-0.001	94	476467	NC	NC	
143 Pentachlorophenol	266	10.052	10.052	0.000	82	245273	20.0	12.8	
148 Phenanthrene	178	10.244	10.245	-0.001	98	951238	10.0	7.57	
149 Anthracene	178	10.288	10.288	0.000	99	950512	10.0	7.40	
151 Carbazole	167	10.403	10.403	0.000	98	858796	10.0	7.47	
154 Di-n-butyl phthalate	149	10.643	10.644	-0.001	99	1235784	10.0	8.63	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
159 Fluoranthene	202	11.264	11.264	0.000	98	1101014	10.0	7.65	
160 Benzidine	184	11.336	11.336	0.000	98	438683	20.0	5.80	
161 Pyrene	202	11.466	11.466	0.000	96	1145245	10.0	7.72	
168 Butyl benzyl phthalate	149	11.927	11.928	-0.001	89	544318	10.0	7.73	
173 Bis(2-ethylhexyl) phthalat	149	12.413	12.413	0.000	97	762180	10.0	8.07	
175 3,3'-Dichlorobenzidine	252	12.437	12.438	-0.001	77	670484	20.0	13.3	
177 Benzo[a]anthracene	228	12.504	12.505	-0.001	98	1171959	10.0	7.60	
178 Chrysene	228	12.543	12.543	0.000	95	1147560	10.0	8.23	
180 Di-n-octyl phthalate	149	13.062	13.063	-0.001	99	1134065	10.0	8.14	
182 Benzo[b]fluoranthene	252	13.721	13.721	0.000	96	941697	10.0	8.26	
183 Benzo[k]fluoranthene	252	13.755	13.755	0.000	97	1080766	10.0	9.02	
184 Benzo[a]pyrene	252	14.188	14.188	0.000	77	842832	10.0	7.56	
188 Indeno[1,2,3-cd]pyrene	276	16.169	16.169	0.000	97	925877	10.0	8.47	
189 Dibenz(a,h)anthracene	278	16.178	16.179	-0.001	89	724584	10.0	8.24	
190 Benzo[g,h,i]perylene	276	16.755	16.756	-0.001	97	759785	10.0	8.46	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SMIS80PPMW_00011 Amount Added: 5.00 Units: uL Run Reagent

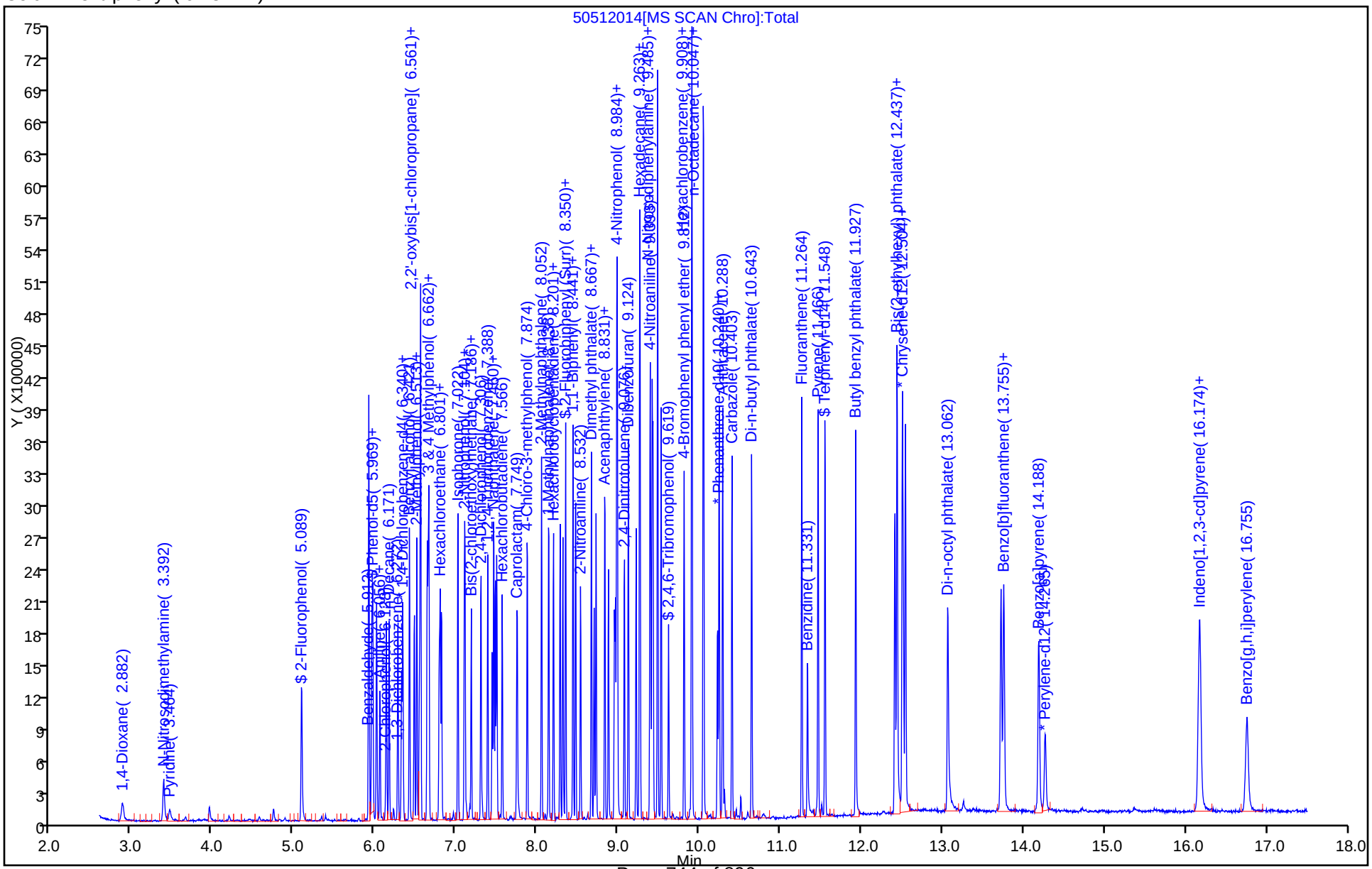
Report Date: 13-May-2015 09:13:06 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512014.D

Injection Date:	12-May-2015 12:40:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	LCS 240-179064/3-A			Worklist Smp#:	14
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-179108/23-A

Matrix: Solid | Lab File ID: 50520005.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3540C | Date Extracted: 05/04/2015 09:17

Sample wt/vol: 30(g) | Date Analyzed: 05/20/2015 10:45

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
83-32-9	Acenaphthene	526		6.7	3.3	0.76
208-96-8	Acenaphthylene	522		6.7	1.7	0.35
120-12-7	Anthracene	534		6.7	3.3	0.78
56-55-3	Benzo[a]anthracene	534		6.7	3.3	0.63
50-32-8	Benzo[a]pyrene	650		6.7	3.3	0.64
205-99-2	Benzo[b]fluoranthene	654		6.7	3.3	0.59
191-24-2	Benzo[g,h,i]perylene	728		6.7	1.7	0.35
65-85-0	Benzoic acid	89.6	J	660	130	36
207-08-9	Benzo[k]fluoranthene	655		6.7	3.3	0.68
100-51-6	Benzyl alcohol	538		330	67	21
111-91-1	Bis(2-chloroethoxy)methane	534		100	67	22
111-44-4	Bis(2-chloroethyl)ether	568		100	3.3	2.0
108-60-1	bis (2-chloroisopropyl) ether	498		100	33	9.5
117-81-7	Bis(2-ethylhexyl) phthalate	602		70	33	19
101-55-3	4-Bromophenyl phenyl ether	549		50	33	13
85-68-7	Butyl benzyl phthalate	591		70	33	10
86-74-8	Carbazole	585		50	33	27
106-47-8	4-Chloroaniline	479		150	67	17
59-50-7	4-Chloro-3-methylphenol	534		150	67	21
91-58-7	2-Chloronaphthalene	517		50	1.7	0.45
95-57-8	2-Chlorophenol	539		50	33	8.2
7005-72-3	4-Chlorophenyl phenyl ether	527		50	33	13
218-01-9	Chrysene	576		6.7	3.3	1.1
53-70-3	Dibenz(a,h)anthracene	701		6.7	3.3	0.66
132-64-9	Dibenzofuran	530		50	3.3	0.66
95-50-1	1,2-Dichlorobenzene	530		50	33	9.7
541-73-1	1,3-Dichlorobenzene	515		50	33	11
106-46-7	1,4-Dichlorobenzene	524		50	33	20
91-94-1	3,3'-Dichlorobenzidine	1050		100	67	18
120-83-2	2,4-Dichlorophenol	512		150	67	20
84-66-2	Diethyl phthalate	528		70	33	16
105-67-9	2,4-Dimethylphenol	443		150	67	20
131-11-3	Dimethyl phthalate	543		70	33	17
84-74-2	Di-n-butyl phthalate	642		70	33	15

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-179108/23-A

Matrix: Solid | Lab File ID: 50520005.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3540C | Date Extracted: 05/04/2015 09:17

Sample wt/vol: 30(g) | Date Analyzed: 05/20/2015 10:45

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
534-52-1	4,6-Dinitro-2-methylphenol	929		150	33	9.2
51-28-5	2,4-Dinitrophenol	678		330	67	21
121-14-2	2,4-Dinitrotoluene	566		200	67	17
606-20-2	2,6-Dinitrotoluene	561		200	67	21
117-84-0	Di-n-octyl phthalate	656		70	33	7.9
206-44-0	Fluoranthene	615		6.7	3.3	0.55
86-73-7	Fluorene	519		6.7	3.3	0.53
118-74-1	Hexachlorobenzene	523		6.7	3.3	2.1
87-68-3	Hexachlorobutadiene	529		50	33	5.6
77-47-4	Hexachlorocyclopentadiene	374		330	33	8.1
67-72-1	Hexachloroethane	496		50	33	9.0
193-39-5	Indeno[1,2,3-cd]pyrene	728		6.7	1.7	0.35
78-59-1	Isophorone	543		50	33	13
91-57-6	2-Methylnaphthalene	544		6.7	3.3	0.50
95-48-7	2-Methylphenol	531		200	67	11
15831-10-4	3 & 4 Methylphenol	522		400	67	20
91-20-3	Naphthalene	539		6.7	3.3	0.82
88-74-4	2-Nitroaniline	510		200	33	9.1
99-09-2	3-Nitroaniline	508		200	67	16
100-01-6	4-Nitroaniline	572		200	67	26
98-95-3	Nitrobenzene	537		100	3.3	2.2
88-75-5	2-Nitrophenol	535		50	33	8.3
100-02-7	4-Nitrophenol	1060		330	67	17
621-64-7	N-Nitrosodi-n-propylamine	509		50	33	6.3
86-30-6	N-Nitrosodiphenylamine	1030		50	33	21
87-86-5	Pentachlorophenol	692		150	33	9.1
85-01-8	Phenanthrene	538		6.7	3.3	0.73
108-95-2	Phenol	520		50	33	7.3
129-00-0	Pyrene	569		6.7	1.7	0.44
120-82-1	1,2,4-Trichlorobenzene	536		50	17	3.5
95-95-4	2,4,5-Trichlorophenol	383		150	67	25
88-06-2	2,4,6-Trichlorophenol	322		150	33	8.9

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-179108/23-A

Matrix: Solid | Lab File ID: 50520005.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3540C | Date Extracted: 05/04/2015 09:17

Sample wt/vol: 30(g) | Date Analyzed: 05/20/2015 10:45

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	83		45-105
367-12-4	2-Fluorophenol (Surr)	82		35-105
4165-60-0	Nitrobenzene-d5 (Surr)	83		35-100
4165-62-2	Phenol-d5 (Surr)	83		40-100
1718-51-0	Terphenyl-d14 (Surr)	83		30-125
118-79-6	2,4,6-Tribromophenol (Surr)	44		35-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520005.D
Lims ID: LCS 240-179108/23-A
Client ID:
Sample Type: LCS
Inject. Date: 20-May-2015 10:45:30 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043844-005
Misc. Info.: LCS 240-179108/23-ALCS 240-179108/23-A
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-May-2015 08:02:18 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 20-May-2015 11:12:25

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.416	6.411	0.005	96	231331	4.00	4.00	
* 2 Naphthalene-d8	136	7.527	7.527	0.000	99	974675	4.00	4.00	
* 3 Acenaphthene-d10	164	9.037	9.037	0.000	90	465988	4.00	4.00	
* 4 Phenanthrene-d10	188	10.311	10.311	0.000	96	667558	4.00	4.00	
* 5 Chrysene-d12	240	12.620	12.619	0.001	93	613024	4.00	4.00	
* 6 Perylene-d12	264	14.433	14.437	-0.004	90	418479	4.00	4.00	
$ 7 2-Fluorophenol	112	5.219	5.199	0.020	91	818598	10.0	8.19	
$ 8 Phenol-d5	99	6.051	6.046	0.005	92	1122712	10.0	8.31	
$ 9 Nitrobenzene-d5	82	6.888	6.887	0.001	86	830584	10.0	8.32	
$ 10 2-Fluorobiphenyl (Surr)	172	8.431	8.431	0.000	99	1102264	10.0	8.30	
$ 11 2,4,6-Tribromophenol	330	9.705	9.710	-0.005	84	54008	10.0	4.42	
$ 12 Terphenyl-d14	244	11.634	11.638	-0.004	97	976469	10.0	8.30	
25 1,4-Dioxane	88	3.156	3.151	0.005	90	204981	10.0	3.92	M
26 N-Nitrosodimethylamine	74	3.618	3.617	0.001	86	559352	10.0	6.93	
27 Pyridine	79	3.680	3.675	0.005	98	786232	10.0	5.62	M
41 Benzaldehyde	77	6.017	6.017	0.000	97	1383305	20.0	16.7	
43 Phenol	94	6.065	6.055	0.010	94	1150892	10.0	7.80	
44 Aniline	93	6.108	6.108	0.000	99	1184362	10.0	6.57	
69 Bis(2-chloroethyl)ether	93	6.147	6.147	0.000	98	990369	10.0	8.52	
46 2-Chlorophenol	128	6.234	6.228	0.006	97	738679	10.0	8.08	
243 n-Decane	57	6.258	6.257	0.001	92	848305	NC	NC	
47 1,3-Dichlorobenzene	146	6.368	6.368	0.000	97	690043	10.0	7.72	
48 1,4-Dichlorobenzene	146	6.431	6.426	0.005	94	709635	10.0	7.85	
49 Benzyl alcohol	108	6.508	6.507	0.001	97	597577	10.0	8.07	
50 1,2-Dichlorobenzene	146	6.570	6.570	0.000	97	683914	10.0	7.95	
51 2-Methylphenol	108	6.599	6.594	0.005	89	800188	10.0	7.96	
53 2,2'-oxybis[1-chloropropan	45	6.628	6.628	0.000	86	1127616	10.0	7.47	
52 Indene	115	6.647	6.647	0.000	90	2444450	20.0	15.7	
21 3 & 4 Methylphenol	108	6.724	6.724	0.000	88	831890	10.0	7.84	
57 N-Nitrosodi-n-propylamine	70	6.738	6.738	0.000	89	531375	10.0	7.64	
58 Acetophenone	105	6.748	6.748	0.000	97	1049817	10.0	7.98	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
61 Hexachloroethane	117	6.878	6.878	0.000	87	274061	10.0	7.44	
62 Nitrobenzene	77	6.902	6.902	0.000	84	836859	10.0	8.05	
64 Isophorone	82	7.104	7.104	0.000	98	1586082	10.0	8.14	
66 2-Nitrophenol	139	7.181	7.185	-0.004	93	335495	10.0	8.03	
65 2,4-Dimethylphenol	107	7.190	7.190	0.000	94	587951	10.0	6.65	
71 Benzoic acid	122	7.248	7.238	0.010	85	65707	20.0	1.34	
70 Bis(2-chloroethoxy)methane	93	7.267	7.267	0.000	98	1010000	10.0	8.01	
73 2,4-Dichlorophenol	162	7.388	7.387	0.001	96	467017	10.0	7.69	
74 1,2,4-Trichlorobenzene	180	7.474	7.474	0.000	95	498722	10.0	8.03	
75 Naphthalene	128	7.546	7.546	0.000	96	2078133	10.0	8.08	
76 4-Chloroaniline	127	7.566	7.565	0.001	95	846729	10.0	7.19	
77 2,6-Dichlorophenol	162	7.585	7.585	0.000	95	421825	10.0	7.21	
79 Hexachlorobutadiene	225	7.652	7.652	0.000	98	204047	10.0	7.94	
84 Caprolactam	113	7.835	7.849	-0.014	84	547931	20.0	18.6	
86 4-Chloro-3-methylphenol	107	7.955	7.955	0.000	94	625532	10.0	8.01	
87 2-Methylnaphthalene	142	8.138	8.138	0.000	94	1279808	10.0	8.16	
88 1-Methylnaphthalene	142	8.224	8.224	0.000	94	1131989	10.0	8.31	
89 Hexachlorocyclopentadiene	237	8.277	8.282	-0.005	95	152550	10.0	5.61	
91 1,2,4,5-Tetrachlorobenzene	216	8.282	8.287	-0.005	97	360147	10.0	7.70	
92 2,4,6-Trichlorophenol	196	8.364	8.364	0.000	94	184523	10.0	4.84	
93 2,4,5-Trichlorophenol	196	8.397	8.402	-0.005	91	229137	10.0	5.74	
98 1,1'-Biphenyl	154	8.523	8.522	0.000	96	1365170	10.0	7.67	
100 2-Chloronaphthalene	162	8.556	8.556	0.000	97	1017497	10.0	7.75	
102 2-Nitroaniline	65	8.614	8.618	-0.004	84	395706	10.0	7.65	
105 Dimethyl phthalate	163	8.749	8.748	0.001	98	1090985	10.0	8.15	
106 1,3-Dinitrobenzene	168	8.782	8.782	0.000	85	181856	10.0	8.44	
107 2,6-Dinitrotoluene	165	8.806	8.806	0.000	95	254467	10.0	8.42	
109 Acenaphthylene	152	8.917	8.921	-0.004	99	1783770	10.0	7.83	
110 3-Nitroaniline	138	8.960	8.960	0.000	95	338948	10.0	7.62	
111 2,4-Dinitrophenol	184	9.047	9.046	0.001	82	148959	20.0	10.2	
112 Acenaphthene	153	9.066	9.066	0.000	95	1032479	10.0	7.89	
113 4-Nitrophenol	109	9.066	9.070	-0.004	86	218597	20.0	15.8	
114 2,4-Dinitrotoluene	165	9.157	9.157	0.000	91	318932	10.0	8.48	
116 Dibenzofuran	168	9.210	9.210	0.000	98	1409068	10.0	7.94	
119 2,3,4,6-Tetrachlorophenol	232	9.302	9.306	-0.004	79	144019	10.0	5.06	
121 Diethyl phthalate	149	9.340	9.345	-0.005	98	1020888	10.0	7.91	
247 Hexadecane	57	9.345	9.349	-0.004	85	1063602	NC	NC	
123 4-Chlorophenyl phenyl ethe	204	9.475	9.474	0.001	95	458554	10.0	7.90	
125 4-Nitroaniline	138	9.484	9.484	0.000	88	329430	10.0	8.58	
126 Fluorene	166	9.504	9.503	0.001	98	1121869	10.0	7.79	
128 4,6-Dinitro-2-methylphenol	198	9.513	9.513	0.000	89	236286	20.0	13.9	
131 N-Nitrosodiphenylamine	169	9.566	9.571	-0.005	98	1407000	20.0	15.5	
133 Azobenzene	77	9.609	9.614	-0.005	95	1627771	10.0	8.18	
139 4-Bromophenyl phenyl ether	248	9.898	9.898	0.000	74	230048	10.0	8.23	
141 Hexachlorobenzene	284	9.989	9.989	0.000	73	197005	10.0	7.84	
142 Atrazine	200	9.989	9.994	-0.005	83	467883	20.0	18.9	
244 n-Octadecane	57	10.129	10.128	0.001	78	1104230	NC	NC	
143 Pentachlorophenol	266	10.138	10.143	-0.005	90	189263	20.0	10.4	
148 Phenanthrene	178	10.331	10.330	0.001	97	1542399	10.0	8.07	
149 Anthracene	178	10.374	10.374	0.000	97	1550920	10.0	8.02	
151 Carbazole	167	10.489	10.489	0.000	95	1531657	10.0	8.78	
154 Di-n-butyl phthalate	149	10.725	10.725	0.000	99	1975459	10.0	9.63	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
159 Fluoranthene	202	11.350	11.355	-0.005	97	1529357	10.0	9.22	
160 Benzidine	184	11.417	11.422	-0.005	99	822146	20.0	7.60	
161 Pyrene	202	11.552	11.557	-0.005	94	1585517	10.0	8.53	
168 Butyl benzyl phthalate	149	12.014	12.013	0.001	95	898377	10.0	8.87	
173 Bis(2-ethylhexyl) phthalat	149	12.499	12.504	-0.005	97	1279742	10.0	9.04	
175 3,3'-Dichlorobenzidine	252	12.538	12.538	0.000	77	835085	20.0	15.7	
177 Benzo[a]anthracene	228	12.605	12.610	-0.005	96	1387268	10.0	8.01	
178 Chrysene	228	12.644	12.648	-0.004	94	1361915	10.0	8.64	
180 Di-n-octyl phthalate	149	13.173	13.177	-0.004	99	2168989	10.0	9.84	
182 Benzo[b]fluoranthene	252	13.865	13.870	-0.005	93	1267338	10.0	9.82	
183 Benzo[k]fluoranthene	252	13.904	13.903	0.001	93	1294751	10.0	9.83	
184 Benzo[a]pyrene	252	14.351	14.355	-0.004	88	1204507	10.0	9.74	
188 Indeno[1,2,3-cd]pyrene	276	16.414	16.423	-0.009	91	1258302	10.0	10.9	
189 Dibenz(a,h)anthracene	278	16.423	16.428	-0.005	89	1019906	10.0	10.5	
190 Benzo[g,h,i]perylene	276	17.029	17.039	-0.010	84	1050887	10.0	10.9	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SMIS80PPMW_00011 Amount Added: 5.00 Units: uL Run Reagent

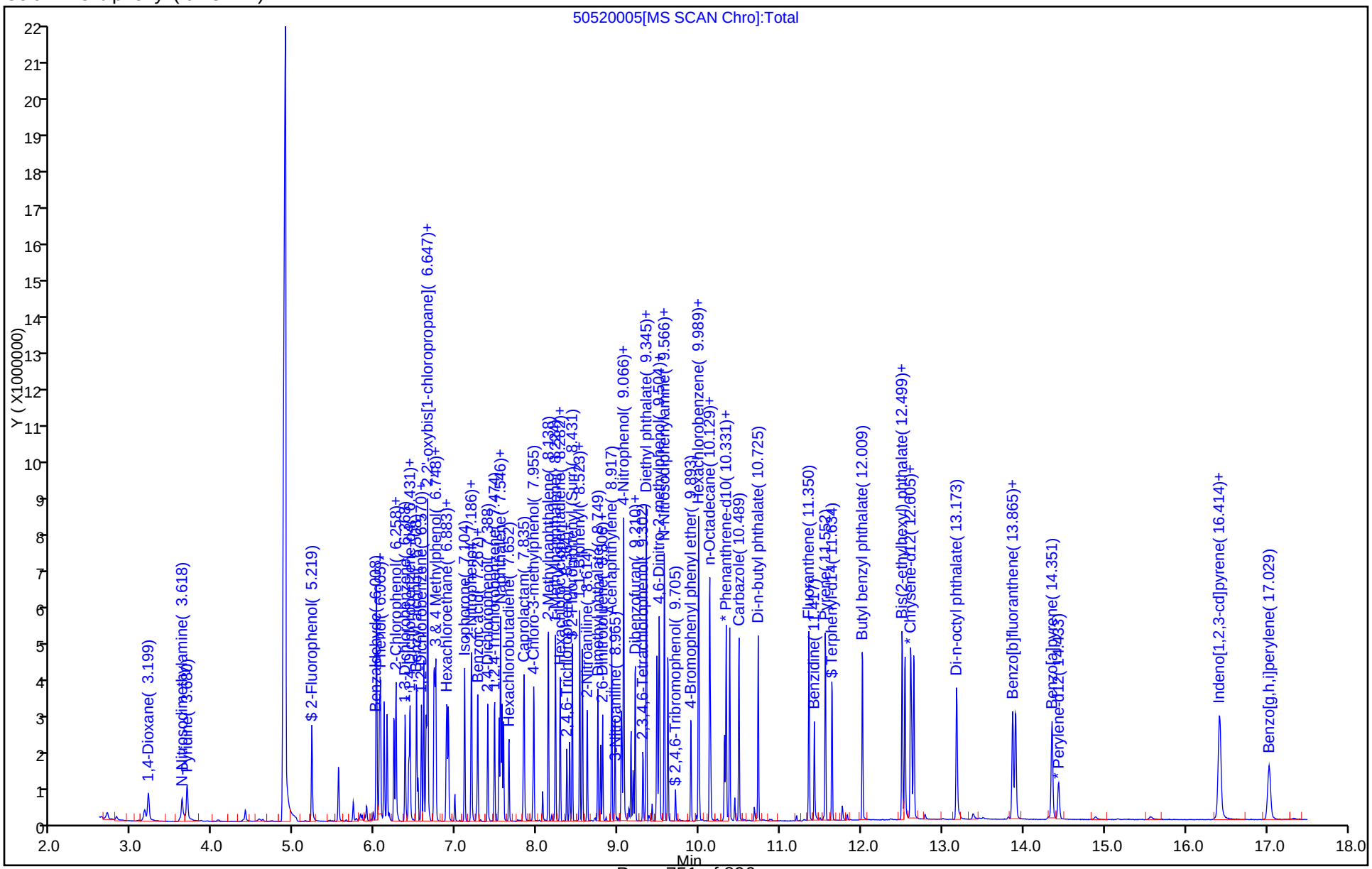
Report Date: 21-May-2015 08:02:25 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520005.D

Injection Date:	20-May-2015 10:45:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	LCS 240-179108/23-A			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-180350/9-A

Matrix: Solid | Lab File ID: 50520007.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3540C | Date Extracted: 05/12/2015 10:00

Sample wt/vol: 30(g) | Date Analyzed: 05/20/2015 11:35

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
83-32-9	Acenaphthene	486		6.7	3.3	0.76
208-96-8	Acenaphthylene	485		6.7	1.7	0.35
120-12-7	Anthracene	490		6.7	3.3	0.78
56-55-3	Benzo[a]anthracene	488		6.7	3.3	0.63
50-32-8	Benzo[a]pyrene	584		6.7	3.3	0.64
205-99-2	Benzo[b]fluoranthene	592		6.7	3.3	0.59
191-24-2	Benzo[g,h,i]perylene	655		6.7	1.7	0.35
65-85-0	Benzoic acid	315	J M	660	130	36
207-08-9	Benzo[k]fluoranthene	571		6.7	3.3	0.68
100-51-6	Benzyl alcohol	490		330	67	21
111-91-1	Bis(2-chloroethoxy)methane	489		100	67	22
111-44-4	Bis(2-chloroethyl)ether	499		100	3.3	2.0
108-60-1	bis (2-chloroisopropyl) ether	454		100	33	9.5
117-81-7	Bis(2-ethylhexyl) phthalate	551		70	33	19
101-55-3	4-Bromophenyl phenyl ether	522		50	33	13
85-68-7	Butyl benzyl phthalate	532		70	33	10
86-74-8	Carbazole	540		50	33	27
106-47-8	4-Chloroaniline	389		150	67	17
59-50-7	4-Chloro-3-methylphenol	492		150	67	21
91-58-7	2-Chloronaphthalene	482		50	1.7	0.45
95-57-8	2-Chlorophenol	492		50	33	8.2
7005-72-3	4-Chlorophenyl phenyl ether	474		50	33	13
218-01-9	Chrysene	527		6.7	3.3	1.1
53-70-3	Dibenz(a,h)anthracene	631		6.7	3.3	0.66
132-64-9	Dibenzofuran	490		50	3.3	0.66
95-50-1	1,2-Dichlorobenzene	474		50	33	9.7
541-73-1	1,3-Dichlorobenzene	462		50	33	11
106-46-7	1,4-Dichlorobenzene	472		50	33	20
91-94-1	3,3'-Dichlorobenzidine	914		100	67	18
120-83-2	2,4-Dichlorophenol	485		150	67	20
84-66-2	Diethyl phthalate	489		70	33	16
105-67-9	2,4-Dimethylphenol	331		150	67	20
131-11-3	Dimethyl phthalate	501		70	33	17
84-74-2	Di-n-butyl phthalate	599		70	33	15

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-180350/9-A

Matrix: Solid | Lab File ID: 50520007.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3540C | Date Extracted: 05/12/2015 10:00

Sample wt/vol: 30(g) | Date Analyzed: 05/20/2015 11:35

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
534-52-1	4,6-Dinitro-2-methylphenol	785		150	33	9.2
51-28-5	2,4-Dinitrophenol	473		330	67	21
121-14-2	2,4-Dinitrotoluene	519		200	67	17
606-20-2	2,6-Dinitrotoluene	526		200	67	21
117-84-0	Di-n-octyl phthalate	593		70	33	7.9
206-44-0	Fluoranthene	564		6.7	3.3	0.55
86-73-7	Fluorene	486		6.7	3.3	0.53
118-74-1	Hexachlorobenzene	483		6.7	3.3	2.1
87-68-3	Hexachlorobutadiene	461		50	33	5.6
77-47-4	Hexachlorocyclopentadiene	316	J	330	33	8.1
67-72-1	Hexachloroethane	448		50	33	9.0
193-39-5	Indeno[1,2,3-cd]pyrene	645		6.7	1.7	0.35
78-59-1	Isophorone	493		50	33	13
91-57-6	2-Methylnaphthalene	489		6.7	3.3	0.50
95-48-7	2-Methylphenol	479		200	67	11
15831-10-4	3 & 4 Methylphenol	484		400	67	20
91-20-3	Naphthalene	485		6.7	3.3	0.82
88-74-4	2-Nitroaniline	478		200	33	9.1
99-09-2	3-Nitroaniline	449		200	67	16
100-01-6	4-Nitroaniline	492		200	67	26
98-95-3	Nitrobenzene	479		100	3.3	2.2
88-75-5	2-Nitrophenol	497		50	33	8.3
100-02-7	4-Nitrophenol	1040		330	67	17
621-64-7	N-Nitrosodi-n-propylamine	470		50	33	6.3
86-30-6	N-Nitrosodiphenylamine	979		50	33	21
87-86-5	Pentachlorophenol	707		150	33	9.1
85-01-8	Phenanthrene	500		6.7	3.3	0.73
108-95-2	Phenol	477		50	33	7.3
129-00-0	Pyrene	506		6.7	1.7	0.44
120-82-1	1,2,4-Trichlorobenzene	483		50	17	3.5
95-95-4	2,4,5-Trichlorophenol	433		150	67	25
88-06-2	2,4,6-Trichlorophenol	453		150	33	8.9

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-180350/9-A

Matrix: Solid | Lab File ID: 50520007.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3540C | Date Extracted: 05/12/2015 10:00

Sample wt/vol: 30(g) | Date Analyzed: 05/20/2015 11:35

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	74		45-105
367-12-4	2-Fluorophenol (Surr)	75		35-105
4165-60-0	Nitrobenzene-d5 (Surr)	75		35-100
4165-62-2	Phenol-d5 (Surr)	75		40-100
1718-51-0	Terphenyl-d14 (Surr)	74		30-125
118-79-6	2,4,6-Tribromophenol (Surr)	59		35-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520007.D
Lims ID: LCS 240-180350/9-A
Client ID:
Sample Type: LCS
Inject. Date: 20-May-2015 11:35:30 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043844-007
Misc. Info.: LCS 240-180350/9-ALCS 240-180350/9-A
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-May-2015 08:02:18 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 20-May-2015 12:11:59

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.413	6.411	0.002	96	228889	4.00	4.00	
* 2 Naphthalene-d8	136	7.528	7.527	0.001	99	974971	4.00	4.00	
* 3 Acenaphthene-d10	164	9.038	9.037	0.001	90	462319	4.00	4.00	
* 4 Phenanthrene-d10	188	10.308	10.311	-0.003	95	652855	4.00	4.00	
* 5 Chrysene-d12	240	12.621	12.619	0.002	92	615468	4.00	4.00	
* 6 Perylene-d12	264	14.434	14.437	-0.003	91	418161	4.00	4.00	
$ 7 2-Fluorophenol	112	5.215	5.199	0.016	91	738779	10.0	7.47	
$ 8 Phenol-d5	99	6.052	6.046	0.006	93	1008691	10.0	7.55	
$ 9 Nitrobenzene-d5	82	6.884	6.887	-0.003	86	750175	10.0	7.51	
$ 10 2-Fluorobiphenyl (Surr)	172	8.432	8.431	0.001	99	979997	10.0	7.43	
$ 11 2,4,6-Tribromophenol	330	9.707	9.710	-0.003	88	71935	10.0	5.93	
$ 12 Terphenyl-d14	244	11.635	11.638	-0.003	97	871835	10.0	7.38	
25 1,4-Dioxane	88	3.157	3.151	0.006	92	158820	10.0	3.07	M
26 N-Nitrosodimethylamine	74	3.619	3.617	0.002	85	503347	10.0	6.30	
27 Pyridine	79	3.676	3.675	0.001	98	665148	10.0	4.81	M
41 Benzaldehyde	77	6.014	6.017	-0.003	97	1221673	20.0	14.9	
43 Phenol	94	6.066	6.055	0.011	94	1044810	10.0	7.16	
44 Aniline	93	6.110	6.108	0.002	99	1012908	10.0	5.68	
69 Bis(2-chloroethyl)ether	93	6.148	6.147	0.001	97	860205	10.0	7.48	
46 2-Chlorophenol	128	6.230	6.228	0.002	97	667191	10.0	7.37	
243 n-Decane	57	6.259	6.257	0.002	92	738632	NC	NC	
47 1,3-Dichlorobenzene	146	6.369	6.368	0.001	97	612169	10.0	6.92	
48 1,4-Dichlorobenzene	146	6.427	6.426	0.001	94	632380	10.0	7.07	
49 Benzyl alcohol	108	6.509	6.507	0.002	96	538163	10.0	7.34	
50 1,2-Dichlorobenzene	146	6.571	6.570	0.001	96	604429	10.0	7.11	
51 2-Methylphenol	108	6.600	6.594	0.006	90	714146	10.0	7.18	
53 2,2'-oxybis[1-chloropropan	45	6.629	6.628	0.001	86	1017928	10.0	6.81	
52 Indene	115	6.648	6.647	0.001	90	2179313	20.0	14.1	
21 3 & 4 Methylphenol	108	6.725	6.724	0.001	88	762605	10.0	7.26	
57 N-Nitrosodi-n-propylamine	70	6.735	6.738	-0.003	89	485606	10.0	7.05	
58 Acetophenone	105	6.749	6.748	0.001	97	925892	10.0	7.11	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
61 Hexachloroethane	117	6.874	6.878	-0.004	87	244776	10.0	6.72	
62 Nitrobenzene	77	6.903	6.902	0.001	84	747278	10.0	7.19	
64 Isophorone	82	7.100	7.104	-0.004	98	1441925	10.0	7.40	
66 2-Nitrophenol	139	7.182	7.185	-0.003	93	311800	10.0	7.46	
65 2,4-Dimethylphenol	107	7.187	7.190	-0.003	93	439752	10.0	4.97	
71 Benzoic acid	122	7.249	7.238	0.011	81	230796	20.0	4.72	M
70 Bis(2-chloroethoxy)methane	93	7.264	7.267	-0.003	98	926057	10.0	7.34	
73 2,4-Dichlorophenol	162	7.389	7.387	0.002	95	442420	10.0	7.28	
74 1,2,4-Trichlorobenzene	180	7.471	7.474	-0.003	93	449986	10.0	7.25	
75 Naphthalene	128	7.548	7.546	0.002	95	1872695	10.0	7.28	
76 4-Chloroaniline	127	7.562	7.565	-0.003	96	688319	10.0	5.84	
77 2,6-Dichlorophenol	162	7.581	7.585	-0.004	96	430287	10.0	7.35	
79 Hexachlorobutadiene	225	7.649	7.652	-0.003	98	177762	10.0	6.92	
84 Caprolactam	113	7.836	7.849	-0.013	84	498160	20.0	16.9	
86 4-Chloro-3-methylphenol	107	7.956	7.955	0.001	96	576343	10.0	7.38	
87 2-Methylnaphthalene	142	8.134	8.138	-0.004	94	1150035	10.0	7.33	
88 1-Methylnaphthalene	142	8.226	8.224	0.002	95	1005639	10.0	7.38	
89 Hexachlorocyclopentadiene	237	8.279	8.282	-0.004	95	128104	10.0	4.75	
91 1,2,4,5-Tetrachlorobenzene	216	8.283	8.287	-0.004	97	335865	10.0	7.24	
92 2,4,6-Trichlorophenol	196	8.365	8.364	0.001	95	256984	10.0	6.79	
93 2,4,5-Trichlorophenol	196	8.399	8.402	-0.003	91	257180	10.0	6.50	
98 1,1'-Biphenyl	154	8.524	8.522	0.002	95	1275649	10.0	7.22	
100 2-Chloronaphthalene	162	8.557	8.556	0.001	96	942666	10.0	7.24	
102 2-Nitroaniline	65	8.615	8.618	-0.003	84	368111	10.0	7.18	
105 Dimethyl phthalate	163	8.745	8.748	-0.003	97	998063	10.0	7.51	
106 1,3-Dinitrobenzene	168	8.783	8.782	0.001	85	159779	10.0	7.47	
107 2,6-Dinitrotoluene	165	8.807	8.806	0.001	94	236487	10.0	7.89	
109 Acenaphthylene	152	8.918	8.921	-0.003	100	1643534	10.0	7.27	
110 3-Nitroaniline	138	8.957	8.960	-0.003	95	297360	10.0	6.74	
111 2,4-Dinitrophenol	184	9.048	9.046	0.002	79	103033	20.0	7.09	
112 Acenaphthene	153	9.062	9.066	-0.004	95	947205	10.0	7.30	
113 4-Nitrophenol	109	9.067	9.070	-0.003	86	213681	20.0	15.6	
114 2,4-Dinitrotoluene	165	9.154	9.157	-0.003	90	290550	10.0	7.79	
116 Dibenzofuran	168	9.207	9.210	-0.003	98	1294450	10.0	7.35	
119 2,3,4,6-Tetrachlorophenol	232	9.303	9.306	-0.003	78	154106	10.0	5.45	
121 Diethyl phthalate	149	9.341	9.345	-0.004	98	937910	10.0	7.33	
247 Hexadecane	57	9.346	9.349	-0.003	90	981010	NC	NC	
123 4-Chlorophenyl phenyl ethe	204	9.476	9.474	0.002	93	409489	10.0	7.11	
125 4-Nitroaniline	138	9.481	9.484	-0.003	86	280901	10.0	7.37	
126 Fluorene	166	9.500	9.503	-0.003	98	1041844	10.0	7.29	
128 4,6-Dinitro-2-methylphenol	198	9.510	9.513	-0.003	89	194080	20.0	11.8	
131 N-Nitrosodiphenylamine	169	9.567	9.571	-0.004	98	1304848	20.0	14.7	
133 Azobenzene	77	9.611	9.614	-0.003	95	1512121	10.0	7.77	
139 4-Bromophenyl phenyl ether	248	9.894	9.898	-0.004	75	214080	10.0	7.83	
141 Hexachlorobenzene	284	9.990	9.989	0.001	72	177934	10.0	7.24	
142 Atrazine	200	9.990	9.994	-0.004	83	425576	20.0	17.6	
244 n-Octadecane	57	10.125	10.128	-0.003	77	1022080	NC	NC	
143 Pentachlorophenol	266	10.140	10.143	-0.003	89	188867	20.0	10.6	
148 Phenanthrene	178	10.332	10.330	0.002	97	1400701	10.0	7.50	
149 Anthracene	178	10.375	10.374	0.001	97	1390331	10.0	7.35	
151 Carbazole	167	10.486	10.489	-0.003	95	1383571	10.0	8.11	
154 Di-n-butyl phthalate	149	10.726	10.725	0.001	99	1801968	10.0	8.98	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
159 Fluoranthene	202	11.351	11.355	-0.004	97	1373026	10.0	8.47	
160 Benzidine	184	11.419	11.422	-0.003	99	475868	20.0	4.60	
161 Pyrene	202	11.553	11.557	-0.004	93	1414902	10.0	7.58	
168 Butyl benzyl phthalate	149	12.010	12.013	-0.003	95	810930	10.0	7.97	
173 Bis(2-ethylhexyl) phthalat	149	12.501	12.504	-0.003	97	1175366	10.0	8.27	
175 3,3'-Dichlorobenzidine	252	12.539	12.538	0.001	77	733105	20.0	13.7	
177 Benzo[a]anthracene	228	12.606	12.610	-0.004	96	1272092	10.0	7.32	
178 Chrysene	228	12.645	12.648	-0.003	94	1250090	10.0	7.90	
180 Di-n-octyl phthalate	149	13.174	13.177	-0.003	99	1959490	10.0	8.90	
182 Benzo[b]fluoranthene	252	13.866	13.870	-0.004	94	1145262	10.0	8.88	
183 Benzo[k]fluoranthene	252	13.900	13.903	-0.003	92	1127624	10.0	8.57	
184 Benzo[a]pyrene	252	14.352	14.355	-0.003	88	1081683	10.0	8.76	
188 Indeno[1,2,3-cd]pyrene	276	16.420	16.423	-0.003	85	1115557	10.0	9.68	
189 Dibenz(a,h)anthracene	278	16.425	16.428	-0.003	86	916841	10.0	9.46	
190 Benzo[g,h,i]perylene	276	17.031	17.039	-0.008	84	944385	10.0	9.82	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SMIS80PPMW_00011 Amount Added: 5.00 Units: uL Run Reagent

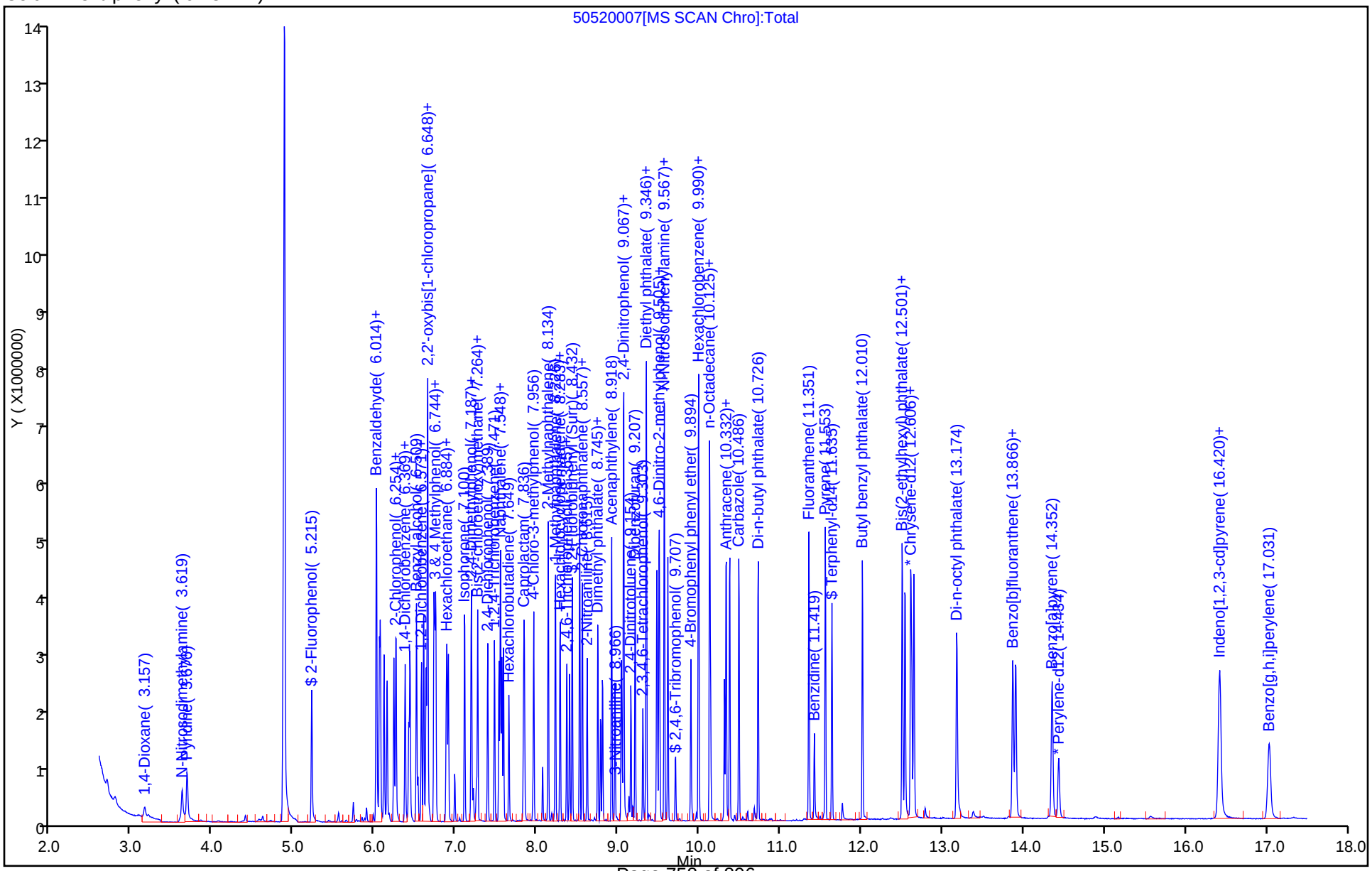
Report Date: 21-May-2015 08:02:28 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520007.D

Injection Date:	20-May-2015 11:35:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	LCS 240-180350/9-A			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

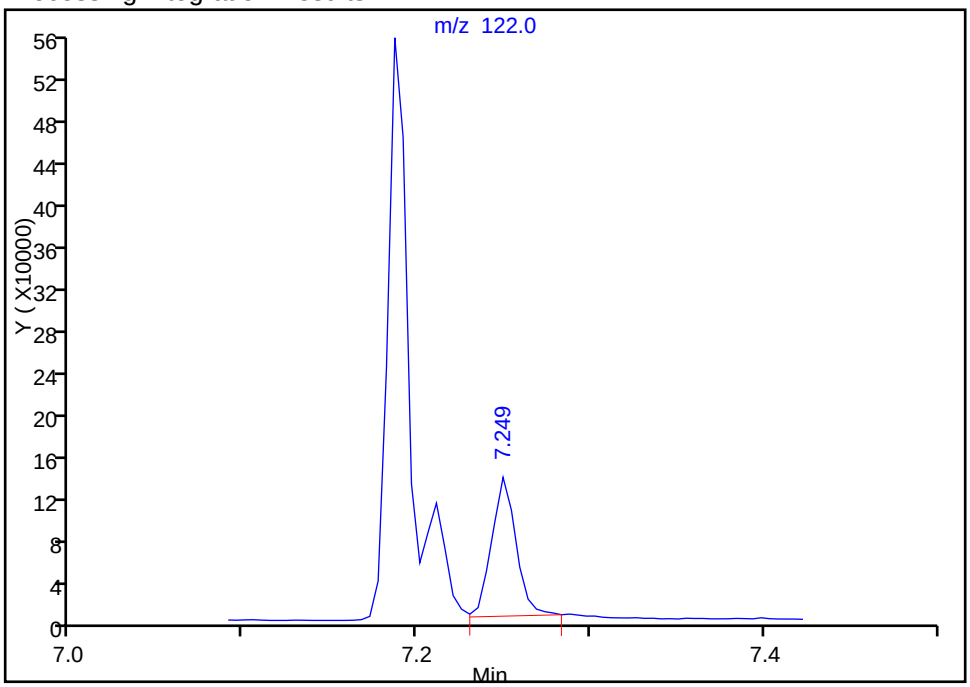
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520007.D
Injection Date: 20-May-2015 11:35:30 Instrument ID: A4HP9
Lims ID: LCS 240-180350/9-A
Client ID:
Operator ID: 001574 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

71 Benzoic acid, CAS: 65-85-0

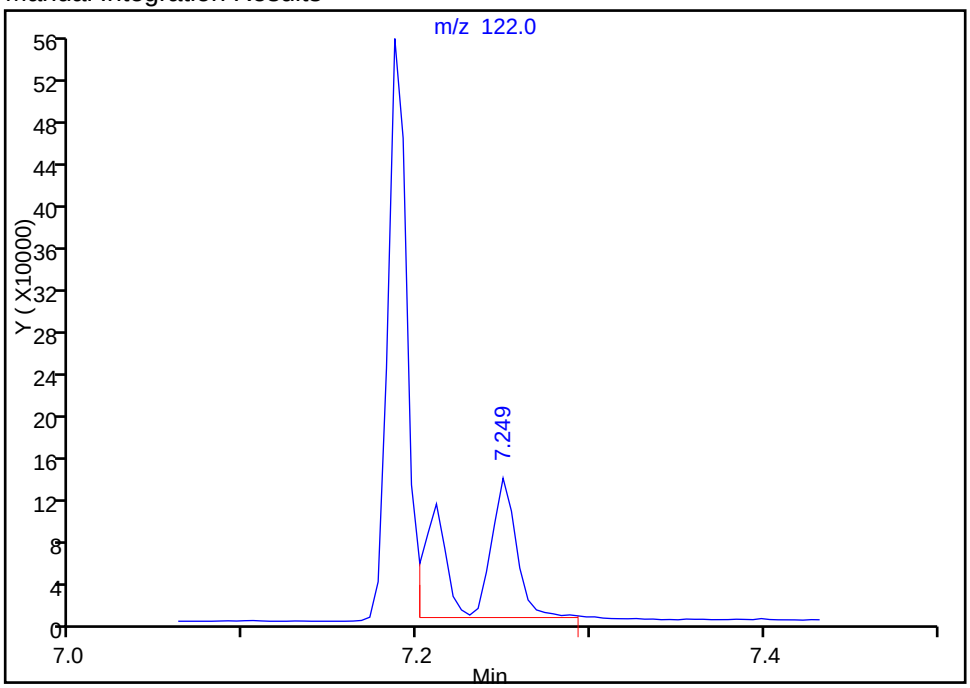
Processing Integration Results

RT: 7.25
Area: 130213
Amount: 2.661766
Amount Units: ng/ul



Manual Integration Results

RT: 7.25
Area: 230796
Amount: 4.717847
Amount Units: ng/ul



Reviewer: ulmanm, 20-May-2015 12:11:59
Audit Action: Manually Integrated
Audit Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-180428/3-A

Matrix: Water | Lab File ID: 50514005.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3520C | Date Extracted: 05/12/2015 13:37

Sample wt/vol: 1000(mL) | Date Analyzed: 05/14/2015 11:39

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 180709 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
77-47-4	Hexachlorocyclopentadiene	2.99	J	10	0.50	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	89		50-110
367-12-4	2-Fluorophenol (Surr)	78		20-110
4165-60-0	Nitrobenzene-d5 (Surr)	90		40-110
4165-62-2	Phenol-d5 (Surr)	86		10-115
1718-51-0	Terphenyl-d14 (Surr)	84		50-135
118-79-6	2,4,6-Tribromophenol (Surr)	107		40-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150514-43624.b\50514005.D
Lims ID: LCS 240-180428/3-A
Client ID:
Sample Type: LCS
Inject. Date: 14-May-2015 11:39:30 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043624-005
Misc. Info.: LCS 240-180428/3-ALCS 240-180428/3-A
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150514-43624.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 14-May-2015 12:57:18 Calib Date: 12-May-2015 10:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK048

First Level Reviewer: ulmanm Date: 14-May-2015 12:29:19

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.279	6.278	0.001	92	128413	4.00	4.00	
* 2 Naphthalene-d8	136	7.399	7.398	0.001	98	462830	4.00	4.00	
* 3 Acenaphthene-d10	164	8.905	8.903	0.002	94	276891	4.00	4.00	
* 4 Phenanthrene-d10	188	10.169	10.173	-0.004	98	481156	4.00	4.00	
* 5 Chrysene-d12	240	12.449	12.452	-0.003	97	563984	4.00	4.00	
* 6 Perylene-d12	264	14.156	14.159	-0.003	97	355259	4.00	4.00	
$ 7 2-Fluorophenol	112	5.034	5.032	0.002	91	350009	10.0	7.80	
$ 8 Phenol-d5	99	5.914	5.912	0.002	92	548260	10.0	8.56	
$ 9 Nitrobenzene-d5	82	6.755	6.754	0.001	86	752035	10.0	9.04	
$ 10 2-Fluorobiphenyl (Surr)	172	8.304	8.307	-0.003	98	828587	10.0	8.87	
$ 11 2,4,6-Tribromophenol	330	9.573	9.572	0.001	83	107370	10.0	10.7	
$ 12 Terphenyl-d14	244	11.497	11.495	0.002	99	951471	10.0	8.37	
25 1,4-Dioxane	88	2.701	2.700	0.001	88	185591	10.0	7.16	
26 N-Nitrosodimethylamine	74	3.245	3.243	0.002	90	342148	10.0	8.52	
27 Pyridine	79	3.326	3.325	0.001	93	107114	10.0	1.70	
41 Benzaldehyde	77	5.870	5.869	0.001	86	1020342	20.0	17.8	
43 Phenol	94	5.923	5.927	-0.004	91	603466	10.0	8.39	
44 Aniline	93	5.966	5.970	-0.004	94	708984	10.0	7.78	
69 Bis(2-chloroethyl)ether	93	6.010	6.013	-0.003	96	467704	10.0	8.07	
46 2-Chlorophenol	128	6.087	6.085	0.002	86	362933	10.0	8.29	
243 n-Decane	57	6.125	6.124	0.001	93	396761	NC	NC	
47 1,3-Dichlorobenzene	146	6.231	6.230	0.001	86	412947	10.0	8.22	
48 1,4-Dichlorobenzene	146	6.293	6.292	0.001	82	410189	10.0	8.08	
49 Benzyl alcohol	108	6.375	6.379	-0.004	83	279871	10.0	8.15	
50 1,2-Dichlorobenzene	146	6.433	6.436	-0.003	83	388679	10.0	8.06	
51 2-Methylphenol	108	6.467	6.470	-0.003	90	393491	10.0	8.22	
53 2,2'-oxybis[1-chloropropan	45	6.500	6.499	0.001	89	362155	10.0	7.77	
52 Indene	115	6.515	6.513	0.002	86	1482664	20.0	16.1	
21 3 & 4 Methylphenol	108	6.601	6.600	0.001	93	421652	10.0	8.20	
57 N-Nitrosodi-n-propylamine	70	6.606	6.610	-0.004	93	443602	10.0	8.31	
58 Acetophenone	105	6.616	6.619	-0.003	87	677735	10.0	8.36	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
61 Hexachloroethane	117	6.745	6.744	0.001	91	208837	10.0	7.85	
62 Nitrobenzene	77	6.774	6.773	0.001	83	685957	10.0	8.44	
64 Isophorone	82	6.976	6.975	0.001	98	1150963	10.0	8.57	
66 2-Nitrophenol	139	7.053	7.057	-0.004	72	177306	10.0	8.15	
65 2,4-Dimethylphenol	107	7.063	7.066	-0.003	94	466788	10.0	7.61	
71 Benzoic acid	122	7.097	7.119	-0.022	85	141698	20.0	6.08	M
70 Bis(2-chloroethoxy)methane	93	7.140	7.143	-0.003	98	553963	10.0	8.34	
73 2,4-Dichlorophenol	162	7.260	7.264	-0.004	90	306921	10.0	8.64	
74 1,2,4-Trichlorobenzene	180	7.342	7.345	-0.003	87	334807	10.0	8.29	
75 Naphthalene	128	7.419	7.417	0.002	98	1041092	10.0	8.55	
76 4-Chloroaniline	127	7.438	7.437	0.001	88	446275	10.0	8.51	
77 2,6-Dichlorophenol	162	7.457	7.456	0.001	85	305924	10.0	8.33	
79 Hexachlorobutadiene	225	7.525	7.523	0.002	95	248928	10.0	8.53	
84 Caprolactam	113	7.707	7.716	-0.009	83	260060	20.0	19.5	
86 4-Chloro-3-methylphenol	107	7.832	7.836	-0.004	86	444922	10.0	8.95	
87 2-Methylnaphthalene	142	8.005	8.009	-0.004	87	701100	10.0	8.69	
88 1-Methylnaphthalene	142	8.097	8.095	0.002	87	597633	10.0	8.75	
89 Hexachlorocyclopentadiene	237	8.150	8.153	-0.003	87	44998	10.0	1.49	
91 1,2,4,5-Tetrachlorobenzene	216	8.154	8.153	0.001	94	374813	10.0	8.55	
92 2,4,6-Trichlorophenol	196	8.236	8.240	-0.004	88	243275	10.0	8.64	
93 2,4,5-Trichlorophenol	196	8.270	8.273	-0.003	84	247438	10.0	8.48	
98 1,1'-Biphenyl	154	8.395	8.394	0.001	97	867460	10.0	8.69	
100 2-Chloronaphthalene	162	8.429	8.427	0.002	98	675251	10.0	8.26	
102 2-Nitroaniline	65	8.486	8.490	-0.004	69	355974	10.0	8.31	
105 Dimethyl phthalate	163	8.621	8.624	-0.003	92	876669	10.0	9.24	
106 1,3-Dinitrobenzene	168	8.655	8.653	0.002	80	126945	10.0	8.71	
107 2,6-Dinitrotoluene	165	8.679	8.682	-0.003	74	183455	10.0	9.19	
109 Acenaphthylene	152	8.784	8.788	-0.004	97	1057672	10.0	8.62	
110 3-Nitroaniline	138	8.833	8.831	0.002	82	193690	10.0	10.3	
111 2,4-Dinitrophenol	184	8.919	8.918	0.001	96	182594	20.0	12.6	
112 Acenaphthene	153	8.934	8.932	0.002	96	700752	10.0	8.78	
113 4-Nitrophenol	109	8.943	8.947	-0.004	85	450315	20.0	16.5	
114 2,4-Dinitrotoluene	165	9.025	9.028	-0.003	77	260012	10.0	9.69	
116 Dibenzofuran	168	9.073	9.076	-0.003	92	946128	10.0	8.41	
119 2,3,4,6-Tetrachlorophenol	232	9.174	9.173	0.001	80	220983	10.0	9.52	
121 Diethyl phthalate	149	9.217	9.216	0.001	94	920669	10.0	9.39	
247 Hexadecane	57	9.222	9.221	0.001	93	508370	NC	NC	
123 4-Chlorophenyl phenyl ethe	204	9.342	9.346	-0.004	95	424757	10.0	9.29	
125 4-Nitroaniline	138	9.352	9.351	0.001	74	176190	10.0	8.13	
126 Fluorene	166	9.366	9.370	-0.004	100	818301	10.0	8.63	
128 4,6-Dinitro-2-methylphenol	198	9.381	9.384	-0.003	93	288394	20.0	14.9	
131 N-Nitrosodiphenylamine	169	9.438	9.437	0.001	99	1261090	20.0	17.2	
133 Azobenzene	77	9.477	9.480	-0.003	96	1405598	10.0	8.90	
139 4-Bromophenyl phenyl ether	248	9.761	9.764	-0.003	75	237351	10.0	9.00	
141 Hexachlorobenzene	284	9.852	9.855	-0.003	87	230996	10.0	9.14	
142 Atrazine	200	9.862	9.860	0.002	89	497848	20.0	18.4	
244 n-Octadecane	57	9.996	10.000	-0.004	95	545755	NC	NC	
143 Pentachlorophenol	266	10.001	10.005	-0.004	84	278653	20.0	13.9	
148 Phenanthrene	178	10.193	10.192	0.001	99	1158620	10.0	8.88	
149 Anthracene	178	10.237	10.235	0.002	99	1110416	10.0	8.33	
151 Carbazole	167	10.352	10.351	0.001	98	1017263	10.0	8.53	
154 Di-n-butyl phthalate	149	10.593	10.596	-0.003	99	1408956	10.0	9.48	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
159 Fluoranthene	202	11.208	11.212	-0.004	98	1296586	10.0	8.67	
160 Benzidine	184	11.280	11.284	-0.004	98	1009634	20.0	11.7	
161 Pyrene	202	11.410	11.409	0.001	97	1398802	10.0	8.86	
168 Butyl benzyl phthalate	149	11.876	11.875	0.001	91	664072	10.0	8.86	
173 Bis(2-ethylhexyl) phthalat	149	12.353	12.351	0.002	96	904704	10.0	9.00	
175 3,3'-Dichlorobenzidine	252	12.377	12.375	0.002	77	867768	20.0	16.1	
177 Benzo[a]anthracene	228	12.439	12.443	-0.004	98	1385005	10.0	8.44	
178 Chrysene	228	12.478	12.476	0.002	96	1368924	10.0	9.22	
180 Di-n-octyl phthalate	149	12.987	12.991	-0.004	100	1331999	10.0	9.72	
182 Benzo[b]fluoranthene	252	13.627	13.630	-0.003	95	1137554	10.0	10.1	
183 Benzo[k]fluoranthene	252	13.661	13.664	-0.003	99	1302432	10.0	11.0	
184 Benzo[a]pyrene	252	14.079	14.082	-0.003	76	1082261	10.0	9.87	
188 Indeno[1,2,3-cd]pyrene	276	16.002	16.011	-0.009	97	1126846	10.0	10.5	
189 Dibenz(a,h)anthracene	278	16.012	16.020	-0.008	87	910907	10.0	10.5	
190 Benzo[g,h,i]perylene	276	16.575	16.578	-0.003	98	894987	10.0	10.1	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SMIS80PPMW_00011 Amount Added: 5.00 Units: uL Run Reagent

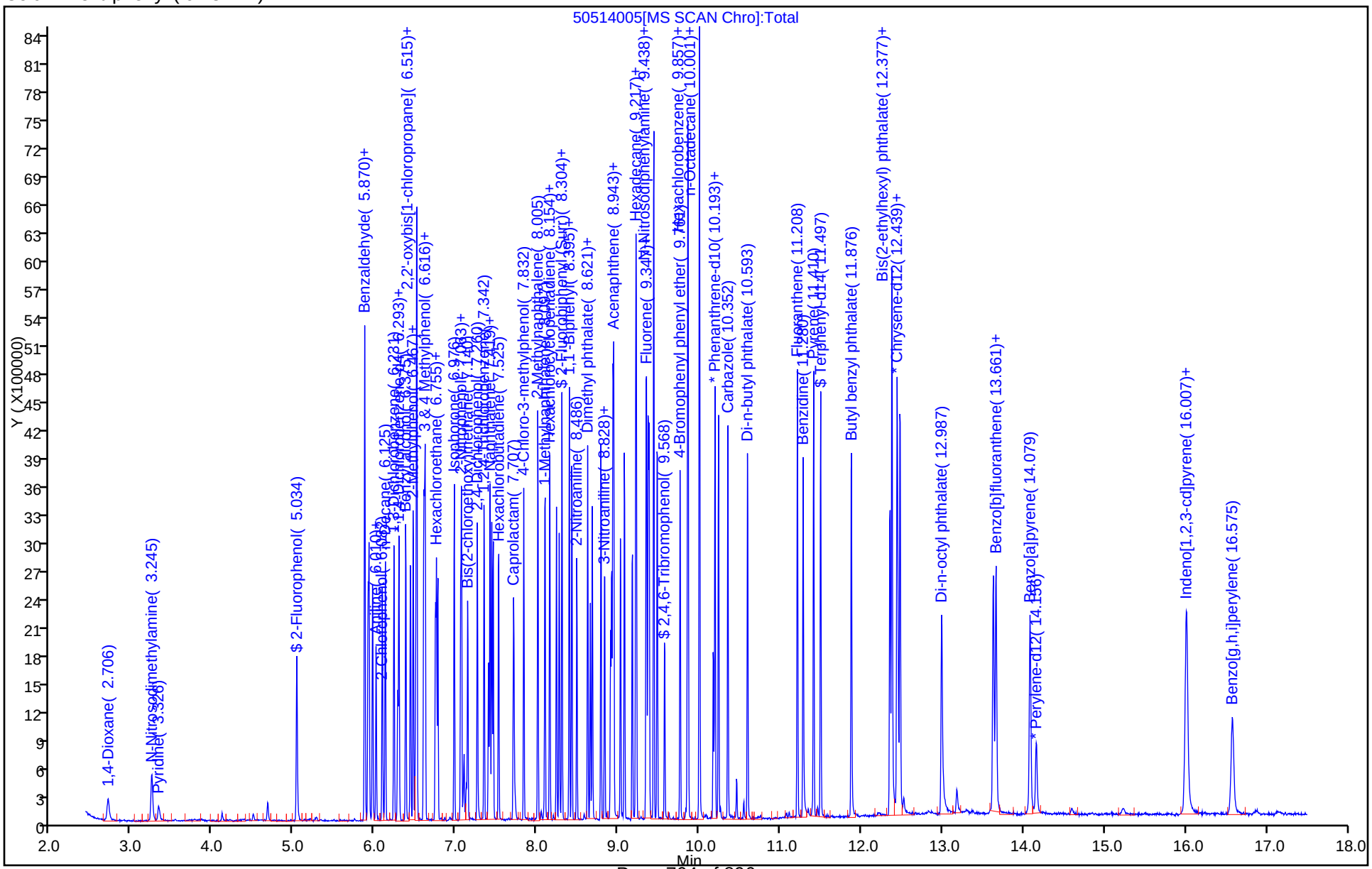
Report Date: 14-May-2015 12:57:23 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150514-43624.b\50514005.D

Injection Date:	14-May-2015 11:39:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	LCS 240-180428/3-A			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-180308/12

Matrix: Water | Lab File ID: 50512012.D

Analysis Method: 8270C | Date Collected:

Extract. Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 05/12/2015 11:50

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 180308 | Units: ng/uL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
83-32-9	Acenaphthene	5.17		0.00020	0.00010	0.000044
208-96-8	Acenaphthylene	5.24		0.00020	0.00010	0.000048
120-12-7	Anthracene	5.01		0.00020	0.00010	0.000088
56-55-3	Benzo[a]anthracene	5.00		0.00020	0.00010	0.000030
50-32-8	Benzo[a]pyrene	5.13		0.00020	0.00010	0.000051
205-99-2	Benzo[b]fluoranthene	5.36		0.00020	0.00010	0.000039
191-24-2	Benzo[g,h,i]perylene	5.23		0.00020	0.00010	0.000046
65-85-0	Benzoic acid	9.45		0.025	0.020	0.010
207-08-9	Benzo[k]fluoranthene	4.82		0.00020	0.00010	0.000045
100-51-6	Benzyl alcohol	5.18		0.0050	0.00050	0.00038
111-91-1	Bis(2-chloroethoxy)methane	5.03		0.0010	0.00050	0.00032
111-44-4	Bis(2-chloroethyl)ether	5.07		0.0010	0.00010	0.00010
108-60-1	bis (2-chloroisopropyl) ether	4.95		0.0010	0.00050	0.00040
117-81-7	Bis(2-ethylhexyl) phthalate	5.00		0.0050	0.00050	0.0017
101-55-3	4-Bromophenyl phenyl ether	5.37		0.0020	0.00050	0.00022
85-68-7	Butyl benzyl phthalate	5.00		0.0020	0.0050	0.00026
86-74-8	Carbazole	4.77		0.0010	0.00050	0.00028
106-47-8	4-Chloroaniline	5.06		0.0020	0.00050	0.00021
59-50-7	4-Chloro-3-methylphenol	5.29		0.0020	0.00050	0.00021
91-58-7	2-Chloronaphthalene	5.00		0.0010	0.00050	0.00010
95-57-8	2-Chlorophenol	5.02		0.0010	0.00050	0.00029
7005-72-3	4-Chlorophenyl phenyl ether	5.16		0.0020	0.00050	0.00030
218-01-9	Chrysene	5.20		0.00020	0.00010	0.000050
53-70-3	Dibenz(a,h)anthracene	5.39		0.00020	0.00010	0.000045
132-64-9	Dibenzofuran	5.14		0.0010	0.00010	0.000020
95-50-1	1,2-Dichlorobenzene	5.02		0.0010	0.00050	0.00029
541-73-1	1,3-Dichlorobenzene	4.98		0.0010	0.00050	0.00023
106-46-7	1,4-Dichlorobenzene	4.93		0.0010	0.00050	0.00034
91-94-1	3,3'-Dichlorobenzidine	9.46		0.0050	0.0010	0.00037
120-83-2	2,4-Dichlorophenol	4.96		0.0020	0.00050	0.00019
84-66-2	Diethyl phthalate	5.46		0.0020	0.0010	0.00060
105-67-9	2,4-Dimethylphenol	4.96		0.0020	0.00050	0.00025
131-11-3	Dimethyl phthalate	5.31		0.0020	0.00050	0.00029
84-74-2	Di-n-butyl phthalate	5.17		0.0050	0.0050	0.0017

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-180308/12

Matrix: Water | Lab File ID: 50512012.D

Analysis Method: 8270C | Date Collected:

Extract. Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 05/12/2015 11:50

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 180308 | Units: ng/uL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
534-52-1	4,6-Dinitro-2-methylphenol	9.25		0.0050	0.0040	0.0024
51-28-5	2,4-Dinitrophenol	9.23		0.0050	0.0010	0.00032
121-14-2	2,4-Dinitrotoluene	5.27		0.0050	0.00050	0.00025
606-20-2	2,6-Dinitrotoluene	5.23		0.0050	0.0050	0.0011
117-84-0	Di-n-octyl phthalate	5.03		0.0020	0.00050	0.00023
206-44-0	Fluoranthene	4.82		0.00020	0.00010	0.000045
86-73-7	Fluorene	4.94		0.00020	0.00010	0.000041
118-74-1	Hexachlorobenzene	5.14		0.00020	0.00010	0.000085
87-68-3	Hexachlorobutadiene	5.05		0.0010	0.00050	0.00027
77-47-4	Hexachlorocyclopentadiene	5.16		0.010	0.00050	0.00024
67-72-1	Hexachloroethane	5.13		0.0010	0.00050	0.00019
193-39-5	Indeno[1,2,3-cd]pyrene	5.30		0.00020	0.00010	0.000043
78-59-1	Isophorone	5.18		0.0010	0.00050	0.00027
91-57-6	2-Methylnaphthalene	5.07		0.00020	0.00010	0.000090
95-48-7	2-Methylphenol	5.17		0.0010	0.00050	0.00017
15831-10-4	3 & 4 Methylphenol	5.08		0.0020	0.0010	0.00080
91-20-3	Naphthalene	5.07		0.00020	0.00010	0.000063
88-74-4	2-Nitroaniline	5.05		0.0020	0.00050	0.00021
99-09-2	3-Nitroaniline	5.74		0.0020	0.00050	0.00028
100-01-6	4-Nitroaniline	4.58		0.0020	0.00050	0.00022
98-95-3	Nitrobenzene	5.09		0.0010	0.00010	0.000040
88-75-5	2-Nitrophenol	5.27		0.0020	0.00050	0.00028
100-02-7	4-Nitrophenol	10.5		0.0050	0.0040	0.00029
621-64-7	N-Nitrosodi-n-propylamine	5.25		0.0010	0.00050	0.00024
86-30-6	N-Nitrosodiphenylamine	10.3		0.0010	0.00050	0.00031
87-86-5	Pentachlorophenol	9.23		0.0050	0.0010	0.00027
85-01-8	Phenanthrene	5.14		0.00020	0.00010	0.000062
108-95-2	Phenol	5.28		0.0010	0.0010	0.00060
129-00-0	Pyrene	4.99		0.00020	0.00010	0.000042
120-82-1	1,2,4-Trichlorobenzene	5.08		0.0010	0.00050	0.00028
95-95-4	2,4,5-Trichlorophenol	5.48		0.0050	0.00050	0.00030
88-06-2	2,4,6-Trichlorophenol	5.44		0.0050	0.00050	0.00024

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-180308/12

Matrix: Water | Lab File ID: 50512012.D

Analysis Method: 8270C | Date Collected:

Extract. Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 05/12/2015 11:50

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 180308 | Units: ng/uL

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	105		70-130
367-12-4	2-Fluorophenol (Surr)	99		50-150
4165-60-0	Nitrobenzene-d5 (Surr)	105		50-150
4165-62-2	Phenol-d5 (Surr)	102		50-150
1718-51-0	Terphenyl-d14 (Surr)	97		50-150
118-79-6	2,4,6-Tribromophenol (Surr)	101		50-150

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512012.D
Lims ID: mrl qc
Client ID:
Sample Type: MRL
Inject. Date: 12-May-2015 11:50:30 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043530-012
Misc. Info.: MRL QCMRL QC
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 13-May-2015 09:12:46 Calib Date: 12-May-2015 10:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK049

First Level Reviewer: ulmanm Date: 12-May-2015 12:53:05

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.324	6.326	-0.002	89	173191	4.00	4.00	
* 2 Naphthalene-d8	136	7.444	7.446	-0.002	98	635723	4.00	4.00	
* 3 Acenaphthene-d10	164	8.954	8.951	0.003	94	370146	4.00	4.00	
* 4 Phenanthrene-d10	188	10.224	10.221	0.003	98	619122	4.00	4.00	
* 5 Chrysene-d12	240	12.517	12.514	0.003	97	713764	4.00	4.00	
* 6 Perylene-d12	264	14.263	14.270	-0.007	98	511552	4.00	4.00	
$ 7 2-Fluorophenol	112	5.093	5.090	0.003	92	299556	5.00	4.95	
$ 8 Phenol-d5	99	5.958	5.960	-0.002	90	441088	5.00	5.10	
$ 9 Nitrobenzene-d5	82	6.800	6.802	-0.002	86	599699	5.00	5.25	
$ 10 2-Fluorobiphenyl (Surr)	172	8.348	8.350	-0.002	98	656911	5.00	5.26	
$ 11 2,4,6-Tribromophenol	330	9.622	9.620	0.002	76	68082	5.00	5.07	
$ 12 Terphenyl-d14	244	11.551	11.548	0.003	99	700462	5.00	4.87	
25 1,4-Dioxane	88	2.876	2.892	-0.016	88	164621	5.00	4.71	
26 N-Nitrosodimethylamine	74	3.385	3.392	-0.007	90	278330	5.00	5.14	
27 Pyridine	79	3.462	3.464	-0.002	93	436250	5.00	5.12	
20 Dimethylformamide	73		3.978					ND	
28 Ethyl methacrylate	69		4.089					ND	
31 2-Picoline	93		4.374					ND	
32 N-Nitrosomethylethylamine	88		4.504					ND	
35 Acrylamide	71	4.761	4.778	-0.017	1	271		NC	
34 Methyl methanesulfonate	80		4.826					ND	
233 n,n'-Dimethylacetamide	44		4.993					ND	
36 N-Nitrosodiethylamine	102		5.254					ND	
37 Ethyl methanesulfonate	79		5.523					ND	
42 Phenylmercaptan	110		5.768					ND	
38 2-Methylcyclohexanone	68		5.820					ND	
39 3-Methylcyclohexanone	69	5.766	5.854	-0.088	1	133		NC	
40 4-Methylcyclohexanone	55		5.902					ND	
41 Benzaldehyde	77	5.920	5.922	-0.002	86	828725	10.0	10.7	
43 Phenol	94	5.968	5.970	-0.002	91	512159	5.00	5.28	
44 Aniline	93	6.016	6.018	-0.002	94	629158	5.00	5.12	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
45 Pentachloroethane	167		6.019					ND	
69 Bis(2-chloroethyl)ether	93	6.059	6.061	-0.002	96	396475	5.00	5.07	
46 2-Chlorophenol	128	6.136	6.138	-0.002	85	296292	5.00	5.02	
243 n-Decane	57	6.170	6.172	-0.002	93	342786	NC	NC	
47 1,3-Dichlorobenzene	146	6.280	6.282	-0.002	84	337486	5.00	4.98	
48 1,4-Dichlorobenzene	146	6.338	6.340	-0.002	80	337528	5.00	4.93	
232 1-Methyl-2-pyrrilidinone	99	6.324	6.421	-0.097	31	5128		NC	
49 Benzyl alcohol	108	6.425	6.422	0.003	83	239953	5.00	5.18	
50 1,2-Dichlorobenzene	146	6.482	6.484	-0.002	84	326694	5.00	5.02	
51 2-Methylphenol	108	6.511	6.513	-0.002	91	333735	5.00	5.17	
53 2,2'-oxybis[1-chloropropan	45	6.545	6.547	-0.002	87	311324	5.00	4.95	
52 Indene	115	6.559	6.561	-0.002	88	1227741	10.0	9.88	
56 N-Nitrosopyrrolidine	100		6.572					ND	
286 4-Methyl-1-cyclohexanemeth	55	6.559	6.574	-0.015	0	2834		NC	
59 N-Nitrosomorpholine	56		6.605					ND	
60 2-Toluidine	106		6.639					ND	
21 3 & 4 Methylphenol	108	6.641	6.643	-0.002	95	352011	5.00	5.08	
57 N-Nitrosodi-n-propylamine	70	6.655	6.653	0.002	96	377684	5.00	5.25	
58 Acetophenone	105	6.665	6.662	0.003	87	554617	5.00	5.07	
287 4-Methyl-1-cyclohexanemeth	55	6.752	6.708	0.044	0	509		NC	
61 Hexachloroethane	117	6.790	6.792	-0.002	90	184044	5.00	5.13	
62 Nitrobenzene	77	6.819	6.821	-0.002	84	568910	5.00	5.09	
63 N-Nitrosopiperidine	114		6.884					ND	
64 Isophorone	82	7.021	7.023	-0.002	98	954638	5.00	5.18	
66 2-Nitrophenol	139	7.098	7.100	-0.002	73	157286	5.00	5.27	
68 o,o',o''-Triethylphosphoro	198		7.105					ND	
65 2,4-Dimethylphenol	107	7.107	7.109	-0.002	94	417981	5.00	4.96	
67 1,3,5-Trichlorobenzene	180		7.123					ND	
71 Benzoic acid	122	7.151	7.167	-0.016	82	318843	10.0	9.45	
70 Bis(2-chloroethoxy)methane	93	7.184	7.186	-0.002	98	458852	5.00	5.03	
72 alpha,alpha-Dimethyl phene	58		7.216					ND	
73 2,4-Dichlorophenol	162	7.305	7.307	-0.002	86	241834	5.00	4.96	
74 1,2,4-Trichlorobenzene	180	7.391	7.388	0.003	89	281631	5.00	5.08	
75 Naphthalene	128	7.463	7.460	0.003	97	848350	5.00	5.07	
76 4-Chloroaniline	127	7.483	7.484	-0.002	86	364545	5.00	5.06	
78 Hexachloropropene	213		7.485					ND	
77 2,6-Dichlorophenol	162	7.502	7.499	0.003	83	246097	5.00	4.88	
79 Hexachlorobutadiene	225	7.569	7.566	0.003	93	202159	5.00	5.05	
80 1,2,3-Trichlorobenzene	180		7.590					ND	
81 Benzothiazole	135		7.676					ND	
82 Quinoline	129		7.682					ND	
83 N-Nitrosodi-n-butylamine	84	7.757	7.697	0.060	52	135142		NC	
85 p-Phenylene diamine	108		7.716					ND	
84 Caprolactam	113	7.752	7.763	-0.011	82	178727	10.0	9.74	
86 4-Chloro-3-methylphenol	107	7.877	7.879	-0.002	86	360966	5.00	5.29	
94 Safrole, Total	162		7.894					ND	
87 2-Methylnaphthalene	142	8.055	8.052	0.003	85	562270	5.00	5.07	
88 1-Methylnaphthalene	142	8.141	8.138	0.003	88	500863	5.00	5.34	
225 Isosafrole Peak 1	162	8.314	8.144	0.170	52	6026		NC	
90 1,2,3,5-Tetrachlorobenzene	216	8.199	8.191	0.008	92	297668		NC	
89 Hexachlorocyclopentadiene	237	8.194	8.196	-0.002	92	208003	5.00	5.16	
91 1,2,4,5-Tetrachlorobenzene	216	8.199	8.201	-0.002	94	297668	5.00	5.08	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
92 2,4,6-Trichlorophenol	196	8.281	8.283	-0.002	91	204569	5.00	5.44	
93 2,4,5-Trichlorophenol	196	8.314	8.316	-0.002	85	213554	5.00	5.48	
227 Isosafrole Peak 2	162	8.353	8.336	0.017	53	253		NC	
97 2,4-Toluene diamine	121		8.412					ND	
246 1-Chloronaphthalene	162	8.473	8.433	0.040	98	546675		NC	
98 1,1'-Biphenyl	154	8.439	8.441	-0.002	98	682878	5.00	5.12	
99 1,2,3,4 -Tetrachlorobenzen	216		8.446					ND	
96 3,4-Dichloronitrobenzene	109		8.465					ND	
100 2-Chloronaphthalene	162	8.473	8.475	-0.002	98	546675	5.00	5.00	
101 Phenyl ether	170		8.523					ND	
102 2-Nitroaniline	65	8.536	8.533	0.003	70	283880	5.00	5.05	
103 1,4-Naphthoquinone	158		8.543					ND	
104 1,4-Dinitrobenzene	168		8.567					ND	
105 Dimethyl phthalate	163	8.665	8.667	-0.002	92	673334	5.00	5.31	
106 1,3-Dinitrobenzene	168	8.704	8.701	0.003	80	95508	5.00	5.02	
107 2,6-Dinitrotoluene	165	8.728	8.725	0.003	75	139477	5.00	5.23	
109 Acenaphthylene	152	8.834	8.836	-0.002	98	859553	5.00	5.24	
110 3-Nitroaniline	138	8.877	8.879	-0.002	83	144368	5.00	5.74	
111 2,4-Dinitrophenol	184	8.964	8.966	-0.002	96	173927	10.0	9.23	
112 Acenaphthene	153	8.978	8.980	-0.002	94	550996	5.00	5.17	
113 4-Nitrophenol	109	8.988	8.990	-0.002	85	375385	10.0	10.5	
115 Pentachlorobenzene	250		9.034					ND	
114 2,4-Dinitrotoluene	165	9.074	9.076	-0.002	78	189140	5.00	5.27	
117 1-Naphthylamine	143		9.115					ND	
118 2,3,5,6-Tetrachlorophenol	232	9.218	9.120	0.098	86	169338		NC	
116 Dibenzofuran	168	9.122	9.124	-0.002	92	773371	5.00	5.14	
120 2-Naphthylamine	143		9.178					ND	
119 2,3,4,6-Tetrachlorophenol	232	9.218	9.220	-0.002	82	169338	5.00	5.46	
121 Diethyl phthalate	149	9.262	9.264	-0.002	94	715488	5.00	5.46	
247 Hexadecane	57	9.267	9.269	-0.002	89	416093	NC	NC	
122 Thionazin	97	9.218	9.269	-0.051	51	42036		NC	
124 N-Nitro-o-toluidine	152	9.392	9.332	0.060	52	1449		NC	
123 4-Chlorophenyl phenyl ethe	204	9.392	9.394	-0.002	94	315366	5.00	5.16	
125 4-Nitroaniline	138	9.396	9.398	-0.002	71	124400	5.00	4.58	
127 Tributyl phosphate	99	9.392	9.417	-0.025	54	52713		NC	
126 Fluorene	166	9.416	9.418	-0.002	98	625815	5.00	4.94	
130 Diphenylamine	169	9.483	9.418	0.065	93	974200		NC	
128 4,6-Dinitro-2-methylphenol	198	9.430	9.432	-0.002	93	223284	10.0	9.25	
131 N-Nitrosodiphenylamine	169	9.483	9.485	-0.002	98	974200	10.0	10.3	
297 Benzophenone	105	9.526	9.512	0.014	59	125844		NC	
134 Sulfotepp	202		9.519					ND	
133 Azobenzene	77	9.526	9.528	-0.002	96	1083514	5.00	5.33	
132 1,2-Diphenylhydrazine	77	9.526	9.528	-0.002	97	1083084	5.00	5.33	
135 1,3,5-Trinitrobenzene	213		9.601					ND	
137 Phenacetin	108		9.649					ND	
228 Diallate Peak 1	86		9.659					ND	
138 Phorate	121		9.664					ND	
230 Diallate Peak 2	86		9.736					ND	
140 Dimethoate	87		9.803					ND	
139 4-Bromophenyl phenyl ether	248	9.815	9.812	0.003	77	182328	5.00	5.37	
141 Hexachlorobenzene	284	9.901	9.903	-0.002	84	167135	5.00	5.14	
142 Atrazine	200	9.911	9.908	0.003	89	360186	10.0	10.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
129 4-Aminobiphenyl	169	9.906	9.962	-0.056	58	2358		NC	
144 Pronamide	173	9.911	9.991	-0.080	62	87094		NC	
145 Pentachloronitrobenzene	237	9.901	10.000	-0.099	57	3525		NC	
244 n-Octadecane	57	10.046	10.048	-0.002	94	436865	NC	NC	
143 Pentachlorophenol	266	10.055	10.052	0.003	82	230996	10.0	9.23	
146 Disulfoton	88	10.055	10.101	-0.046	64	4715		NC	
147 Dinoseb	211	10.050	10.116	-0.066	60	3832		NC	
148 Phenanthrene	178	10.243	10.245	-0.002	99	863003	5.00	5.14	
149 Anthracene	178	10.286	10.288	-0.002	99	859697	5.00	5.01	
151 Carbazole	167	10.401	10.403	-0.002	98	732089	5.00	4.77	
152 Methyl parathion	109		10.428					ND	
154 Di-n-butyl phthalate	149	10.647	10.644	0.003	100	989008	5.00	5.17	
153 Diphenylsulfone	125		10.672					ND	
155 Ethyl Parathion	97		10.746					ND	
156 4-Nitroquinoline-1-oxide	190		10.808					ND	
157 Methapyrilene	58		10.851					ND	
158 Isodrin	66		11.068					ND	
159 Fluoranthene	202	11.262	11.264	-0.002	98	927086	5.00	4.82	
160 Benzidine	184	11.334	11.336	-0.002	98	1007649	10.0	9.38	
226 Aramite Peak 1	185	11.334	11.419	-0.085	50	143765		NC	
161 Pyrene	202	11.464	11.466	-0.002	96	996672	5.00	4.99	
229 Aramite Peak 2	185		11.481					ND	
163 p-Dimethylamino azobenzene	225		11.587					ND	
164 Chlorobenzilate	139		11.616					ND	
282 Kepone	272	11.883	11.764	0.119	1	149		NC	
167 Famphur	218		11.818					ND	
169 3,3'-Dimethylbenzidine	212		11.866					ND	
168 Butyl benzyl phthalate	149	11.931	11.928	0.003	92	474003	5.00	5.00	
171 2-Acetylaminofluorene	181		12.087					ND	
174 4,4'-Methylene bis(2-chlor	231		12.337					ND	
172 3,3'-Dimethoxybenzidine	244		12.379					ND	
173 Bis(2-ethylhexyl) phthalat	149	12.412	12.413	-0.001	97	635446	5.00	5.00	
175 3,3'-Dichlorobenzidine	252	12.440	12.438	0.002	78	629405	10.0	9.46	
177 Benzo[a]anthracene	228	12.503	12.505	-0.002	98	1037341	5.00	5.00	
176 Hexabromobenzene	232	12.513	12.543	-0.030	47	34052		NC	
178 Chrysene	228	12.541	12.543	-0.002	95	976177	5.00	5.20	
179 6-Methylchrysene	242		12.895					ND	
180 Di-n-octyl phthalate	149	13.066	13.063	0.003	100	993163	5.00	5.03	
181 7,12-Dimethylbenz(a)anthra	256		13.559					ND	
281 Hexachlorophene	196	13.676	13.628	0.048	0	382		NC	
182 Benzo[b]fluoranthene	252	13.720	13.721	-0.001	95	864414	5.00	5.36	
183 Benzo[k]fluoranthene	252	13.753	13.755	-0.002	98	818723	5.00	4.82	
184 Benzo[a]pyrene	252	14.186	14.188	-0.002	77	810384	5.00	5.13	
185 3-Methylcholanthrene	268		14.535					ND	
187 Dibenz[a,h]acridine	279		15.453					ND	
186 Dibenz[a,j]acridine	279		15.746					ND	
188 Indeno[1,2,3-cd]pyrene	276	16.172	16.169	0.003	95	820937	5.00	5.30	
189 Dibenz(a,h)anthracene	278	16.177	16.179	-0.002	74	671405	5.00	5.39	
190 Benzo[g,h,i]perylene	276	16.749	16.756	-0.007	97	665866	5.00	5.23	
268 Endrin	1		0.000					ND	
291 Dipropylene Glycol Phenyl	1		0.000					ND	
264 alpha-BHC	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
267 2,6-Diaminotoluene	1		0.000					ND	
270 Toxaphene	1		0.000					ND	
294 Dowanol Peak 3	1		0.000					ND	
290 1-Phenoxy-2-propanol TIC	1		0.000					ND	
275 Dieldrin	1		0.000					ND	
299 Diisobutyl phthalate TIC	1		0.000					ND	
272 2,3-Dinitrotoluene	1		0.000					ND	
262 Isoquinoline	1		0.000					ND	
250 gamma-BHC (Lindane)	1		0.000					ND	
258 Aldrin	1		0.000					ND	
277 Chlorpyrifos	1		0.000					ND	
283 2-Ethoxyethanol	1		0.000					ND	
293 Dowanol Peak 4	1		0.000					ND	
273 3 & 4 Chlorophenol	1		0.000					ND	
259 o-Phenylphenol	1		0.000					ND	
260 Methoxychlor	1		0.000					ND	
251 Endosulfan sulfate	1		0.000					ND	
278 delta-BHC	1		0.000					ND	
252 4-tert-Butylphenol	1		0.000					ND	
253 Endrin aldehyde	1		0.000					ND	
257 Endosulfan I	1		0.000					ND	
261 Endosulfan II	1		0.000					ND	
274 Dibenz(a,i)pyrene	1		0.000					ND	
289 1-Phenoxy-2-propanol	1		0.000					ND	
266 Heptachlor	1		0.000					ND	
292 Dowanol Peak 2	1		0.000					ND	
269 Dibenzo[a,e]pyrene	1		0.000					ND	
271 3 & 4 Phenoxyphenol	1		0.000					ND	
265 Dibenzo[a,h]pyrene	1		0.000					ND	
276 Chlordane (technical)	1		0.000					ND	
249 4-Chlorophenol TIC	1		0.000					ND	
254 2-Chloroaniline	1		0.000					ND	
255 beta-BHC	1		0.000					ND	
285 Chlorobenzene TIC	1		0.000					ND	
279 3,4-Dichloroaniline	1		0.000					ND	
263 Heptachlor epoxide	1		0.000					ND	
150 DFTPP									
166 4,4'-DDE	246		11.500					ND	
165 4,4'-DDD	235		11.784					ND	
170 4,4'-DDT	235		12.043					ND	
S 95 Isosafrole	162		5.568					ND	
S 288 4-Methyl-1-cyclohexanemeth	55		6.400					ND	
S 136 Diallate	86		6.701					ND	
S 162 Aramite, Total	185		8.271					ND	
S 295 Dowanol	1		0.000					ND	
S 296 Dowanol Peak 1	1		0.000					ND	
S 191 Methyl Phenols,Total	100				0			10.2	
S 245 Total Cresols	100				0			10.2	
T 240 Trimethyl phosphate TIC	110	4.996	4.997	-0.004	0	413		0	
T 194 Decane TIC	142	6.170	5.797	0.370	70	342786		0	
T 193 Hexamethylphosphoramide TI	135	7.305	6.493	0.805	15	11786		0	
T 234 2-Isopropylphenol TIC	121	7.247	7.242	-0.003	0	454		0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
T 235 4-isopropylphenol TIC	121	7.357	7.356	-0.007	0	582		0	
T 236 3-isopropylphenol TIC	121	7.357	7.356	-0.007	0	582		0	
T 300 Alpha-Terpineol TIC	59	7.497	7.492	-0.003	0	860		0	
T 237 3-(1,1-Dimethylethyl Pheno	135	7.675	7.712	-0.045	1	593		0	
T 231 2,3,7,8-TCDD	322	8.858	8.848	0.008	1	181		0	
T 195 Hydroquinone TIC	110	8.988	8.990	-0.012	5	29942		0	
T 192 Octadecane (TIC)	254	10.046	9.600	0.446	86	438429		0	
T 242 Triphenyl Phosphate TIC	326	12.008	11.997	0.008	0	245		0	
T 196 Kepone TIC	272	10.055	11.997	-1.945	1	5671		0.0318	
T 241 Tricresyl phosphate TIC	368	12.503	12.497	0.003	0	70		0	
T 280 2,3,7,8-TCDD TIC	198	12.513	12.497	0.013	0	11995		0	
T 248 2,3,7,8 TCDF TIC	304		13.000					ND	
T 197 Hexachlorophene TIC	198	13.715	13.597	0.115	1	10186		0.0796	
T 239 Tris(2,3-dibromopropyl)pho	201	14.090	13.997	0.090	0	294		0	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

SMLIST1 L5 W_00005 Amount Added: 1.00 Units: mL

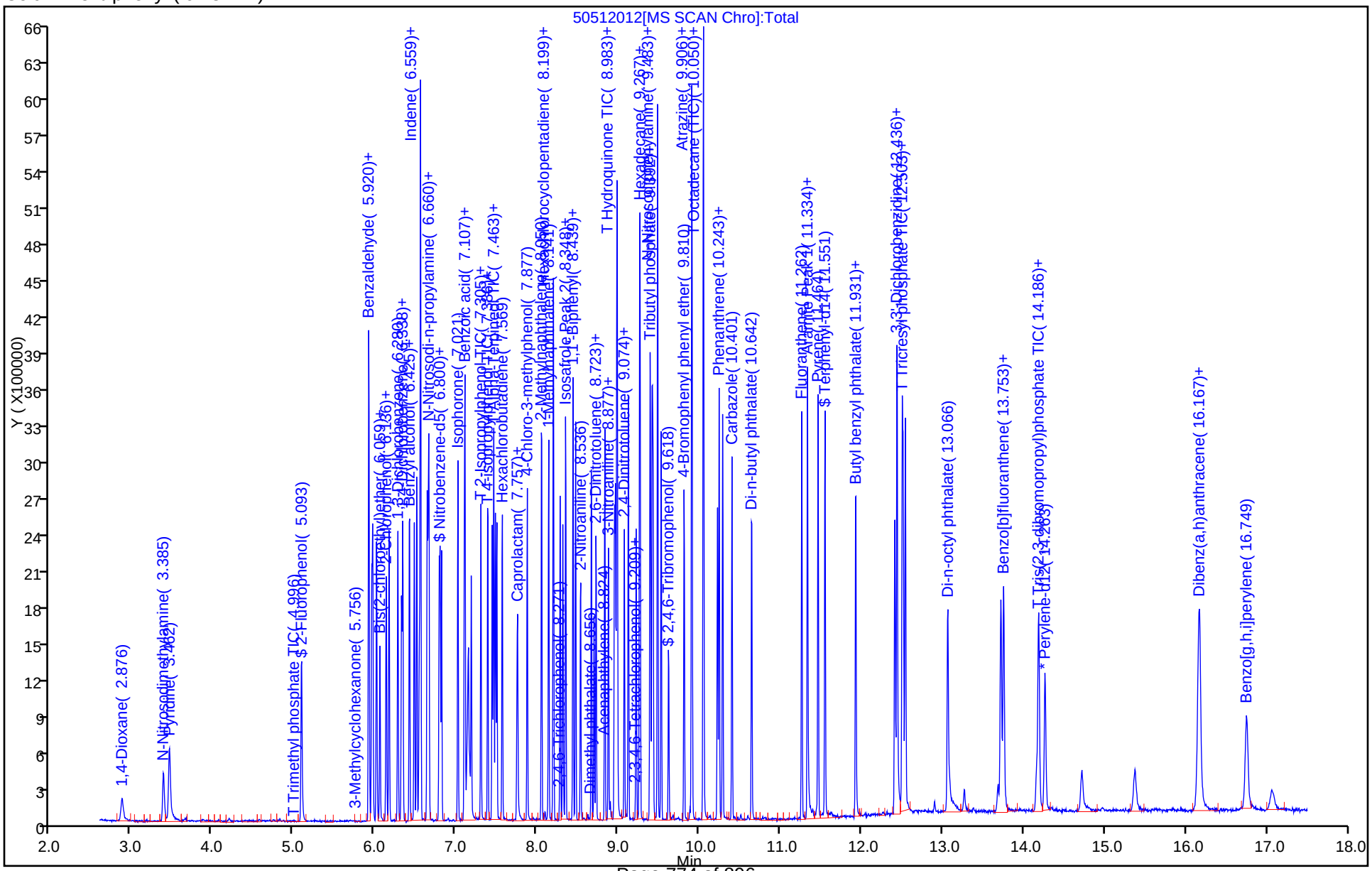
Report Date: 13-May-2015 09:13:04 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512012.D

Injection Date:	12-May-2015 11:50:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	mrl qc			Worklist Smp#:	12
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-180308/21

Matrix: Water | Lab File ID: 50512021.D

Analysis Method: 8270C | Date Collected:

Extract. Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 05/12/2015 15:37

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 180308 | Units: ng/uL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
83-32-9	Acenaphthene	5.01		0.00020	0.00010	0.000044
208-96-8	Acenaphthylene	5.06		0.00020	0.00010	0.000048
120-12-7	Anthracene	4.59		0.00020	0.00010	0.000088
56-55-3	Benzo[a]anthracene	4.62		0.00020	0.00010	0.000030
50-32-8	Benzo[a]pyrene	4.76		0.00020	0.00010	0.000051
205-99-2	Benzo[b]fluoranthene	4.55		0.00020	0.00010	0.000039
191-24-2	Benzo[g,h,i]perylene	4.82		0.00020	0.00010	0.000046
65-85-0	Benzoic acid	6.97	M	0.025	0.020	0.010
207-08-9	Benzo[k]fluoranthene	5.11		0.00020	0.00010	0.000045
100-51-6	Benzyl alcohol	4.67		0.0050	0.00050	0.00038
111-91-1	Bis(2-chloroethoxy)methane	4.75		0.0010	0.00050	0.00032
111-44-4	Bis(2-chloroethyl)ether	4.88		0.0010	0.00010	0.00010
108-60-1	bis (2-chloroisopropyl) ether	4.64		0.0010	0.00050	0.00040
117-81-7	Bis(2-ethylhexyl) phthalate	4.54		0.0050	0.00050	0.0017
101-55-3	4-Bromophenyl phenyl ether	4.66		0.0020	0.00050	0.00022
85-68-7	Butyl benzyl phthalate	4.64		0.0020	0.0050	0.00026
86-74-8	Carbazole	4.44		0.0010	0.00050	0.00028
106-47-8	4-Chloroaniline	5.05		0.0020	0.00050	0.00021
59-50-7	4-Chloro-3-methylphenol	5.00		0.0020	0.00050	0.00021
91-58-7	2-Chloronaphthalene	5.01		0.0010	0.00050	0.00010
95-57-8	2-Chlorophenol	4.60		0.0010	0.00050	0.00029
7005-72-3	4-Chlorophenyl phenyl ether	4.97		0.0020	0.00050	0.00030
218-01-9	Chrysene	4.84		0.00020	0.00010	0.000050
53-70-3	Dibenz(a,h)anthracene	4.65		0.00020	0.00010	0.000045
132-64-9	Dibenzofuran	4.74		0.0010	0.00010	0.000020
95-50-1	1,2-Dichlorobenzene	4.66		0.0010	0.00050	0.00029
541-73-1	1,3-Dichlorobenzene	4.67		0.0010	0.00050	0.00023
106-46-7	1,4-Dichlorobenzene	4.94		0.0010	0.00050	0.00034
91-94-1	3,3'-Dichlorobenzidine	8.29		0.0050	0.0010	0.00037
120-83-2	2,4-Dichlorophenol	4.81		0.0020	0.00050	0.00019
84-66-2	Diethyl phthalate	5.25		0.0020	0.0010	0.00060
105-67-9	2,4-Dimethylphenol	5.07		0.0020	0.00050	0.00025
131-11-3	Dimethyl phthalate	5.05		0.0020	0.00050	0.00029
84-74-2	Di-n-butyl phthalate	4.47		0.0050	0.0050	0.0017

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-180308/21

Matrix: Water | Lab File ID: 50512021.D

Analysis Method: 8270C | Date Collected:

Extract. Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 05/12/2015 15:37

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 180308 | Units: ng/uL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
534-52-1	4,6-Dinitro-2-methylphenol	7.51		0.0050	0.0040	0.0024
51-28-5	2,4-Dinitrophenol	7.26		0.0050	0.0010	0.00032
121-14-2	2,4-Dinitrotoluene	4.91		0.0050	0.00050	0.00025
606-20-2	2,6-Dinitrotoluene	5.08		0.0050	0.0050	0.0011
117-84-0	Di-n-octyl phthalate	4.38		0.0020	0.00050	0.00023
206-44-0	Fluoranthene	4.31		0.00020	0.00010	0.000045
86-73-7	Fluorene	4.92		0.00020	0.00010	0.000041
118-74-1	Hexachlorobenzene	4.80		0.00020	0.00010	0.000085
87-68-3	Hexachlorobutadiene	5.07		0.0010	0.00050	0.00027
77-47-4	Hexachlorocyclopentadiene	4.90		0.010	0.00050	0.00024
67-72-1	Hexachloroethane	4.70		0.0010	0.00050	0.00019
193-39-5	Indeno[1,2,3-cd]pyrene	4.85		0.00020	0.00010	0.000043
78-59-1	Isophorone	5.00		0.0010	0.00050	0.00027
91-57-6	2-Methylnaphthalene	4.90		0.00020	0.00010	0.000090
95-48-7	2-Methylphenol	4.57		0.0010	0.00050	0.00017
15831-10-4	3 & 4 Methylphenol	4.70		0.0020	0.0010	0.00080
91-20-3	Naphthalene	4.88		0.00020	0.00010	0.000063
88-74-4	2-Nitroaniline	4.76		0.0020	0.00050	0.00021
99-09-2	3-Nitroaniline	5.15		0.0020	0.00050	0.00028
100-01-6	4-Nitroaniline	4.25		0.0020	0.00050	0.00022
98-95-3	Nitrobenzene	4.94		0.0010	0.00010	0.000040
88-75-5	2-Nitrophenol	4.64		0.0020	0.00050	0.00028
100-02-7	4-Nitrophenol	9.39		0.0050	0.0040	0.00029
621-64-7	N-Nitrosodi-n-propylamine	5.08		0.0010	0.00050	0.00024
86-30-6	N-Nitrosodiphenylamine	9.57		0.0010	0.00050	0.00031
87-86-5	Pentachlorophenol	8.15		0.0050	0.0010	0.00027
85-01-8	Phenanthrene	4.87		0.00020	0.00010	0.000062
108-95-2	Phenol	4.94		0.0010	0.0010	0.00060
129-00-0	Pyrene	4.46		0.00020	0.00010	0.000042
120-82-1	1,2,4-Trichlorobenzene	4.68		0.0010	0.00050	0.00028
95-95-4	2,4,5-Trichlorophenol	4.91		0.0050	0.00050	0.00030
88-06-2	2,4,6-Trichlorophenol	4.96		0.0050	0.00050	0.00024

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-180308/21

Matrix: Water | Lab File ID: 50512021.D

Analysis Method: 8270C | Date Collected:

Extract. Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 05/12/2015 15:37

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 180308 | Units: ng/uL

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	101		70-130
367-12-4	2-Fluorophenol (Surr)	100		50-150
4165-60-0	Nitrobenzene-d5 (Surr)	105		50-150
4165-62-2	Phenol-d5 (Surr)	96		50-150
1718-51-0	Terphenyl-d14 (Surr)	91		50-150
118-79-6	2,4,6-Tribromophenol (Surr)	96		50-150

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512021.D
Lims ID: mrl qccl
Client ID:
Sample Type: MRL
Inject. Date: 12-May-2015 15:37:30 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043530-021
Misc. Info.: MRL QCCLMRL QCCL
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 13-May-2015 09:12:46 Calib Date: 12-May-2015 10:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK049

First Level Reviewer: ulmanm Date: 13-May-2015 09:00:43

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.325	6.326	-0.001	91	136164	4.00	4.00	
* 2 Naphthalene-d8	136	7.445	7.446	-0.001	98	493203	4.00	4.00	
* 3 Acenaphthene-d10	164	8.951	8.951	0.000	93	289741	4.00	4.00	
* 4 Phenanthrene-d10	188	10.220	10.221	-0.001	98	511237	4.00	4.00	
* 5 Chrysene-d12	240	12.514	12.514	0.000	97	578265	4.00	4.00	
* 6 Perylene-d12	264	14.264	14.270	-0.006	98	423862	4.00	4.00	
$ 7 2-Fluorophenol	112	5.094	5.090	0.004	93	237639	5.00	4.99	
$ 8 Phenol-d5	99	5.960	5.960	0.000	90	324869	5.00	4.78	
$ 9 Nitrobenzene-d5	82	6.801	6.802	-0.001	86	464969	5.00	5.24	
$ 10 2-Fluorobiphenyl (Surr)	172	8.349	8.350	-0.001	98	493966	5.00	5.05	
$ 11 2,4,6-Tribromophenol	330	9.619	9.620	-0.001	76	50688	5.00	4.82	
$ 12 Terphenyl-d14	244	11.547	11.548	-0.001	98	527520	5.00	4.53	
25 1,4-Dioxane	88	2.887	2.892	-0.005	92	125090	5.00	4.55	
26 N-Nitrosodimethylamine	74	3.392	3.392	0.000	91	216137	5.00	5.08	
27 Pyridine	79	3.469	3.464	0.005	93	308212	5.00	4.60	
20 Dimethylformamide	73		3.978					ND	
28 Ethyl methacrylate	69		4.089					ND	
31 2-Picoline	93		4.374					ND	
32 N-Nitrosomethylethylamine	88		4.504					ND	
35 Acrylamide	71		4.778					ND	
34 Methyl methanesulfonate	80		4.826					ND	
233 n,n'-Dimethylacetamide	44		4.993					ND	
36 N-Nitrosodiethylamine	102		5.254					ND	
37 Ethyl methanesulfonate	79		5.523					ND	
42 Phenylmercaptan	110		5.768					ND	
38 2-Methylcyclohexanone	68		5.820					ND	
39 3-Methylcyclohexanone	69		5.854					ND	
40 4-Methylcyclohexanone	55		5.902					ND	
41 Benzaldehyde	77	5.921	5.922	-0.001	85	628901	10.0	10.4	
43 Phenol	94	5.969	5.970	-0.001	91	376441	5.00	4.94	
44 Aniline	93	6.017	6.018	-0.001	94	462065	5.00	4.78	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
45 Pentachloroethane	167		6.019					ND	
69 Bis(2-chloroethyl)ether	93	6.060	6.061	-0.001	96	299965	5.00	4.88	
46 2-Chlorophenol	128	6.137	6.138	-0.001	85	213368	5.00	4.60	
243 n-Decane	57		6.172				ND	ND	
47 1,3-Dichlorobenzene	146	6.282	6.282	0.000	83	248836	5.00	4.67	
48 1,4-Dichlorobenzene	146	6.339	6.340	-0.001	82	265843	5.00	4.94	
232 1-Methyl-2-pyrrilidinone	99		6.421					ND	
49 Benzyl alcohol	108	6.421	6.422	-0.001	83	170225	5.00	4.67	
50 1,2-Dichlorobenzene	146	6.484	6.484	0.000	81	238043	5.00	4.66	
51 2-Methylphenol	108	6.513	6.513	0.000	89	231763	5.00	4.57	
53 2,2'-oxybis[1-chloropropan	45	6.546	6.547	-0.001	87	229135	5.00	4.64	
52 Indene	115	6.561	6.561	0.000	87	935057	10.0	9.58	
56 N-Nitrosopyrrolidine	100		6.572					ND	
286 4-Methyl-1-cyclohexanemeth	55		6.574					ND	
59 N-Nitrosomorpholine	56		6.605					ND	
60 2-Toluidine	106		6.639					ND	
21 3 & 4 Methylphenol	108	6.642	6.643	-0.001	95	256263	5.00	4.70	
57 N-Nitrosodi-n-propylamine	70	6.652	6.653	-0.001	97	287430	5.00	5.08	
58 Acetophenone	105	6.662	6.662	0.000	87	427299	5.00	4.97	
287 4-Methyl-1-cyclohexanemeth	55		6.708					ND	
61 Hexachloroethane	117	6.791	6.792	-0.001	89	132544	5.00	4.70	
62 Nitrobenzene	77	6.820	6.821	-0.001	83	427630	5.00	4.94	
63 N-Nitrosopiperidine	114		6.884					ND	
64 Isophorone	82	7.022	7.023	-0.001	98	714848	5.00	5.00	
66 2-Nitrophenol	139	7.099	7.100	-0.001	69	107526	5.00	4.64	
68 o,o',o''-Triethylphosphoro	198		7.105					ND	
65 2,4-Dimethylphenol	107	7.109	7.109	0.000	92	331312	5.00	5.07	
67 1,3,5-Trichlorobenzene	180		7.123					ND	
71 Benzoic acid	122	7.138	7.167	-0.029	83	176525	10.0	6.97	M
70 Bis(2-chloroethoxy)methane	93	7.186	7.186	0.000	96	336263	5.00	4.75	
72 alpha,alpha-Dimethyl phene	58		7.216					ND	
73 2,4-Dichlorophenol	162	7.306	7.307	-0.001	88	182101	5.00	4.81	
74 1,2,4-Trichlorobenzene	180	7.388	7.388	0.000	85	201393	5.00	4.68	
75 Naphthalene	128	7.465	7.460	0.005	97	633085	5.00	4.88	
76 4-Chloroaniline	127	7.484	7.484	0.000	87	282118	5.00	5.05	
78 Hexachloropropene	213		7.485					ND	
77 2,6-Dichlorophenol	162	7.503	7.499	0.004	86	181616	5.00	4.64	
79 Hexachlorobutadiene	225	7.570	7.566	0.004	93	157599	5.00	5.07	
80 1,2,3-Trichlorobenzene	180		7.590					ND	
81 Benzothiazole	135		7.676					ND	
82 Quinoline	129		7.682					ND	
83 N-Nitrosodi-n-butylamine	84		7.697					ND	
85 p-Phenylene diamine	108		7.716					ND	
84 Caprolactam	113	7.753	7.763	-0.010	80	119307	10.0	8.38	
86 4-Chloro-3-methylphenol	107	7.878	7.879	-0.001	85	264794	5.00	5.00	
94 Safrole, Total	162		7.894					ND	
87 2-Methylnaphthalene	142	8.051	8.052	-0.001	87	421596	5.00	4.90	
88 1-Methylnaphthalene	142	8.143	8.138	0.005	89	370559	5.00	5.09	
225 Isosafrole Peak 1	162		8.144					ND	
90 1,2,3,5-Tetrachlorobenzene	216		8.191					ND	
89 Hexachlorocyclopentadiene	237	8.196	8.196	0.000	92	154386	5.00	4.90	
91 1,2,4,5-Tetrachlorobenzene	216	8.200	8.201	-0.001	92	226220	5.00	4.93	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
92 2,4,6-Trichlorophenol	196	8.282	8.283	-0.001	89	146130	5.00	4.96	
93 2,4,5-Trichlorophenol	196	8.316	8.316	0.000	83	149777	5.00	4.91	
227 Isosafrole Peak 2	162		8.336					ND	
97 2,4-Toluene diamine	121		8.412					ND	
246 1-Chloronaphthalene	162		8.433					ND	
98 1,1'-Biphenyl	154	8.441	8.441	0.000	97	521153	5.00	4.99	
99 1,2,3,4 -Tetrachlorobenzen	216		8.446					ND	
96 3,4-Dichloronitrobenzene	109		8.465					ND	
100 2-Chloronaphthalene	162	8.475	8.475	-0.001	99	429093	5.00	5.01	
101 Phenyl ether	170		8.523					ND	
102 2-Nitroaniline	65	8.532	8.533	-0.001	72	208740	5.00	4.76	
103 1,4-Naphthoquinone	158		8.543					ND	
104 1,4-Dinitrobenzene	168		8.567					ND	
105 Dimethyl phthalate	163	8.667	8.667	0.000	91	500842	5.00	5.05	
106 1,3-Dinitrobenzene	168	8.701	8.701	0.000	77	65003	5.00	4.40	
107 2,6-Dinitrotoluene	165	8.725	8.725	0.000	73	106039	5.00	5.08	
109 Acenaphthylene	152	8.835	8.836	-0.001	98	649141	5.00	5.06	
110 3-Nitroaniline	138	8.878	8.879	-0.001	82	101474	5.00	5.15	
111 2,4-Dinitrophenol	184	8.965	8.966	-0.001	95	104195	10.0	7.26	
112 Acenaphthene	153	8.979	8.980	-0.001	98	418043	5.00	5.01	
113 4-Nitrophenol	109	8.989	8.990	-0.001	83	261917	10.0	9.39	
115 Pentachlorobenzene	250		9.034					ND	
114 2,4-Dinitrotoluene	165	9.076	9.076	0.000	77	137794	5.00	4.91	
117 1-Naphthylamine	143		9.115					ND	
118 2,3,5,6-Tetrachlorophenol	232		9.120					ND	
116 Dibenzofuran	168	9.124	9.124	0.000	90	557740	5.00	4.74	
120 2-Naphthylamine	143		9.178					ND	
119 2,3,4,6-Tetrachlorophenol	232	9.220	9.220	0.000	82	130768	5.00	5.38	
121 Diethyl phthalate	149	9.263	9.264	-0.001	94	539256	5.00	5.25	
247 Hexadecane	57		9.269				ND	ND	
122 Thionazin	97		9.269					ND	
124 N-Nitro-o-toluidine	152		9.332					ND	
123 4-Chlorophenyl phenyl ethe	204	9.393	9.394	-0.001	92	237714	5.00	4.97	
125 4-Nitroaniline	138	9.398	9.398	0.000	70	89176	5.00	4.25	
127 Tributyl phosphate	99		9.417					ND	
126 Fluorene	166	9.417	9.418	-0.001	99	488441	5.00	4.92	
130 Diphenylamine	169		9.418					ND	
128 4,6-Dinitro-2-methylphenol	198	9.427	9.432	-0.005	90	146711	10.0	7.51	
131 N-Nitrosodiphenylamine	169	9.484	9.485	-0.001	98	744074	10.0	9.57	
297 Benzophenone	105		9.512					ND	
134 Sulfotepp	202		9.519					ND	
133 Azobenzene	77	9.528	9.528	0.000	96	826259	5.00	4.93	
132 1,2-Diphenylhydrazine	77	9.528	9.528	0.000	97	824249	5.00	4.91	
135 1,3,5-Trinitrobenzene	213		9.601					ND	
137 Phenacetin	108		9.649					ND	
228 Diallate Peak 1	86		9.659					ND	
138 Phorate	121		9.664					ND	
230 Diallate Peak 2	86		9.736					ND	
140 Dimethoate	87		9.803					ND	
139 4-Bromophenyl phenyl ether	248	9.811	9.812	-0.001	77	130657	5.00	4.66	
141 Hexachlorobenzene	284	9.903	9.903	0.000	81	128887	5.00	4.80	
142 Atrazine	200	9.908	9.908	0.000	89	255517	10.0	8.89	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
129 4-Aminobiphenyl	169		9.962					ND	
144 Pronamide	173		9.991					ND	
145 Pentachloronitrobenzene	237		10.000					ND	
244 n-Octadecane	57		10.048				ND	ND	
143 Pentachlorophenol	266	10.052	10.052	0.000	79	166483	10.0	8.15	
146 Disulfoton	88		10.101					ND	
147 Dinoseb	211		10.116					ND	
148 Phenanthrene	178	10.244	10.245	-0.001	99	675444	5.00	4.87	
149 Anthracene	178	10.287	10.288	-0.001	99	650384	5.00	4.59	
151 Carbazole	167	10.403	10.403	0.000	98	562231	5.00	4.44	
152 Methyl parathion	109		10.428					ND	
154 Di-n-butyl phthalate	149	10.643	10.644	-0.001	99	705333	5.00	4.47	
153 Diphenylsulfone	125		10.672					ND	
155 Ethyl Parathion	97		10.746					ND	
156 4-Nitroquinoline-1-oxide	190		10.808					ND	
157 Methapyrilene	58		10.851					ND	
158 Isodrin	66		11.068					ND	
159 Fluoranthene	202	11.264	11.264	0.000	98	685159	5.00	4.31	
160 Benzidine	184	11.336	11.336	0.000	98	555935	10.0	6.62	
226 Aramite Peak 1	185		11.419					ND	
161 Pyrene	202	11.466	11.466	0.000	96	722030	5.00	4.46	
229 Aramite Peak 2	185		11.481					ND	
163 p-Dimethylamino azobenzene	225		11.587					ND	
164 Chlorobenzilate	139		11.616					ND	
282 Kepone	272		11.764					ND	
167 Famphur	218		11.818					ND	
169 3,3'-Dimethylbenzidine	212		11.866					ND	
168 Butyl benzyl phthalate	149	11.927	11.928	-0.001	91	356264	5.00	4.64	
171 2-Acetylaminofluorene	181		12.087					ND	
174 4,4'-Methylene bis(2-chlor	231		12.337					ND	
172 3,3'-Dimethoxybenzidine	244		12.379					ND	
173 Bis(2-ethylhexyl) phthalat	149	12.413	12.413	0.000	95	467491	5.00	4.54	
175 3,3'-Dichlorobenzidine	252	12.437	12.438	-0.001	78	442729	10.0	8.29	
177 Benzo[a]anthracene	228	12.504	12.505	-0.001	98	777757	5.00	4.62	
176 Hexabromobenzene	232		12.543					ND	
178 Chrysene	228	12.543	12.543	0.000	96	736015	5.00	4.84	
179 6-Methylchrysene	242		12.895					ND	
180 Di-n-octyl phthalate	149	13.067	13.063	0.004	99	715394	5.00	4.38	
181 7,12-Dimethylbenz(a)anthra	256		13.559					ND	
281 Hexachlorophene	196		13.628					ND	
182 Benzo[b]fluoranthene	252	13.721	13.721	0.000	95	609102	5.00	4.55	
183 Benzo[k]fluoranthene	252	13.750	13.755	-0.005	98	719386	5.00	5.11	
184 Benzo[a]pyrene	252	14.187	14.188	-0.001	77	622205	5.00	4.76	
185 3-Methylcholanthrene	268		14.535					ND	
187 Dibenz[a,h]acridine	279		15.453					ND	
186 Dibenz[a,j]acridine	279		15.746					ND	
188 Indeno[1,2,3-cd]pyrene	276	16.169	16.169	0.000	94	622473	5.00	4.85	
189 Dibenz(a,h)anthracene	278	16.173	16.179	-0.006	77	479675	5.00	4.65	
190 Benzo[g,h,i]perylene	276	16.755	16.756	-0.001	97	508206	5.00	4.82	
268 Endrin	1		0.000					ND	
291 Dipropylene Glycol Phenyl	1		0.000					ND	
264 alpha-BHC	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
267 2,6-Diaminotoluene	1		0.000					ND	
270 Toxaphene	1		0.000					ND	
294 Dowanol Peak 3	1		0.000					ND	
290 1-Phenoxy-2-propanol TIC	1		0.000					ND	
275 Dieldrin	1		0.000					ND	
299 Diisobutyl phthalate TIC	1		0.000					ND	
272 2,3-Dinitrotoluene	1		0.000					ND	
262 Isoquinoline	1		0.000					ND	
250 gamma-BHC (Lindane)	1		0.000					ND	
258 Aldrin	1		0.000					ND	
277 Chlorpyrifos	1		0.000					ND	
283 2-Ethoxyethanol	1		0.000					ND	
293 Dowanol Peak 4	1		0.000					ND	
273 3 & 4 Chlorophenol	1		0.000					ND	
259 o-Phenylphenol	1		0.000					ND	
260 Methoxychlor	1		0.000					ND	
251 Endosulfan sulfate	1		0.000					ND	
278 delta-BHC	1		0.000					ND	
252 4-tert-Butylphenol	1		0.000					ND	
253 Endrin aldehyde	1		0.000					ND	
257 Endosulfan I	1		0.000					ND	
261 Endosulfan II	1		0.000					ND	
274 Dibenz(a,i)pyrene	1		0.000					ND	
289 1-Phenoxy-2-propanol	1		0.000					ND	
266 Heptachlor	1		0.000					ND	
292 Dowanol Peak 2	1		0.000					ND	
269 Dibenzo[a,e]pyrene	1		0.000					ND	
271 3 & 4 Phenoxyphenol	1		0.000					ND	
265 Dibenzo[a,h]pyrene	1		0.000					ND	
276 Chlordane (technical)	1		0.000					ND	
249 4-Chlorophenol TIC	1		0.000					ND	
254 2-Chloroaniline	1		0.000					ND	
255 beta-BHC	1		0.000					ND	
285 Chlorobenzene TIC	1		0.000					ND	
279 3,4-Dichloroaniline	1		0.000					ND	
263 Heptachlor epoxide	1		0.000					ND	
150 DFTPP									
166 4,4'-DDE	246		11.500					ND	
165 4,4'-DDD	235		11.784					ND	
170 4,4'-DDT	235		12.043					ND	
S 95 Isosafrole	162		5.568					ND	
S 288 4-Methyl-1-cyclohexanemeth	55		6.400					ND	
S 136 Diallate	86		6.701					ND	
S 162 Aramite, Total	185		8.271					ND	
S 295 Dowanol	1		0.000					ND	
S 296 Dowanol Peak 1	1		0.000					ND	
S 191 Methyl Phenols,Total	100				0			9.27	
S 245 Total Cresols	100				0			9.27	
T 240 Trimethyl phosphate TIC	110	5.089	4.997	0.089	0	1972		0	
T 194 Decane TIC	142	6.171	5.797	0.371	95	261447		0	
T 193 Hexamethylphosphoramide TI	135		6.500					ND	
T 234 2-Isopropylphenol TIC	121	7.224	7.242	-0.026	0	624		0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
T 235 4-isopropylphenol TIC	121	7.368	7.356	0.004	0	141		0	
T 236 3-isopropylphenol TIC	121	7.368	7.356	0.004	0	141		0	
T 300 Alpha-Terpineol TIC	59	7.494	7.492	-0.006	0	385		0	
T 237 3-(1,1-Dimethylethyl Pheno	135	7.705	7.712	-0.015	1	190		0	
T 231 2,3,7,8-TCDD	322	8.792	8.848	-0.058	1	156		0	
T 195 Hydroquinone TIC	110	8.984	8.990	-0.016	12	21908		0	
T 192 Octadecane (TIC)	254	10.047	9.600	0.447	96	335490		0	
T 242 Triphenyl Phosphate TIC	326	11.961	11.997	-0.039	0	263		0	
T 196 Kepone TIC	272	10.057	11.997	-1.943	1	5071		0.0351	
T 241 Tricresyl phosphate TIC	368	12.490	12.497	-0.010	0	354		0	
T 280 2,3,7,8-TCDD TIC	198	12.442	12.497	-0.058	0	3433		0	
T 248 2,3,7,8 TCDF TIC	304		13.000					ND	
T 197 Hexachlorophene TIC	198		13.600					ND	
T 239 Tris(2,3-dibromopropyl)pho	201	14.009	13.997	0.009	0	385		0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L5 W_00005 Amount Added: 1.00 Units: mL

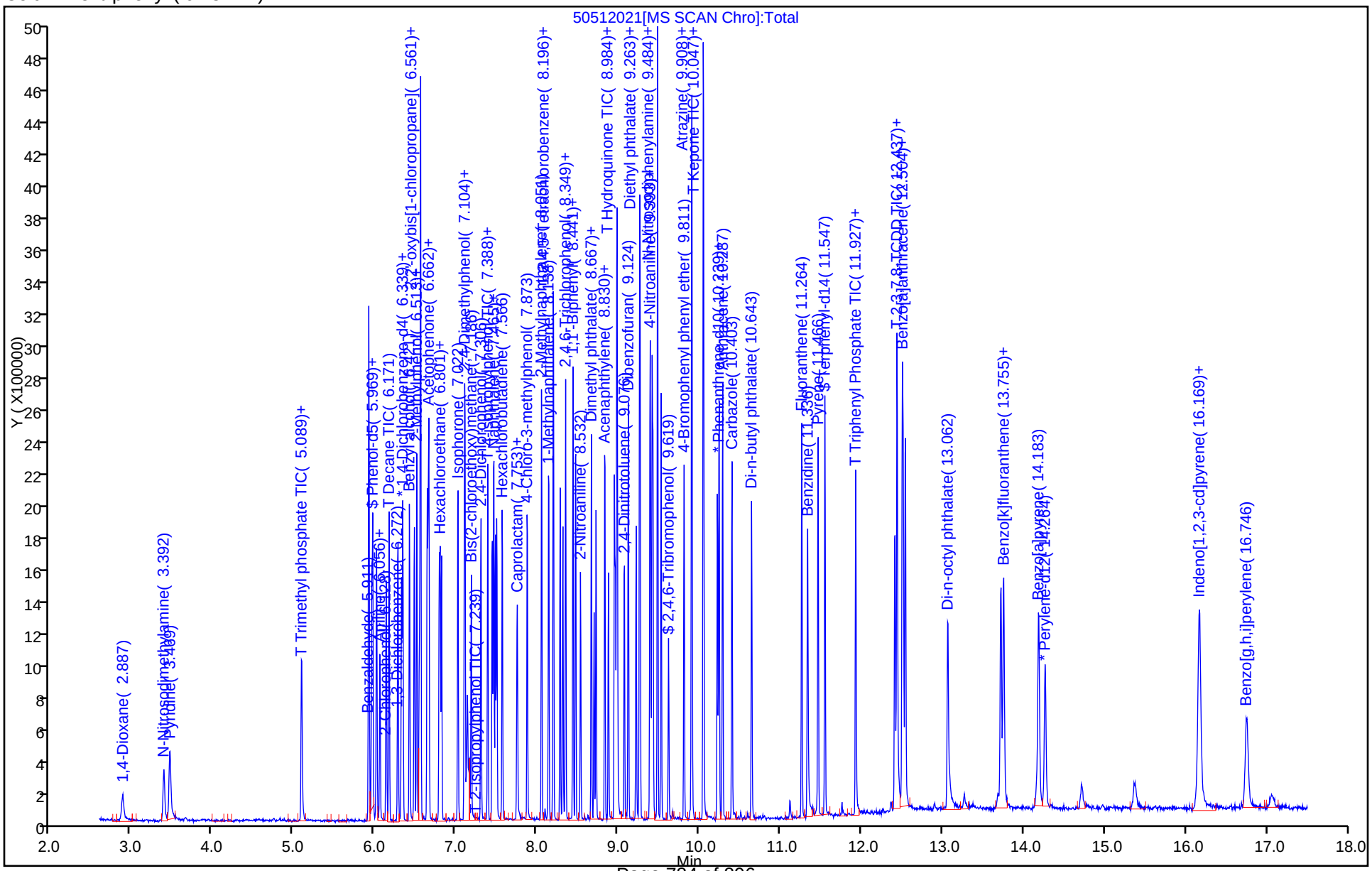
Report Date: 13-May-2015 09:13:16 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512021.D

Injection Date:	12-May-2015 15:37:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	mrl qccl			Worklist Smp#:	21
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

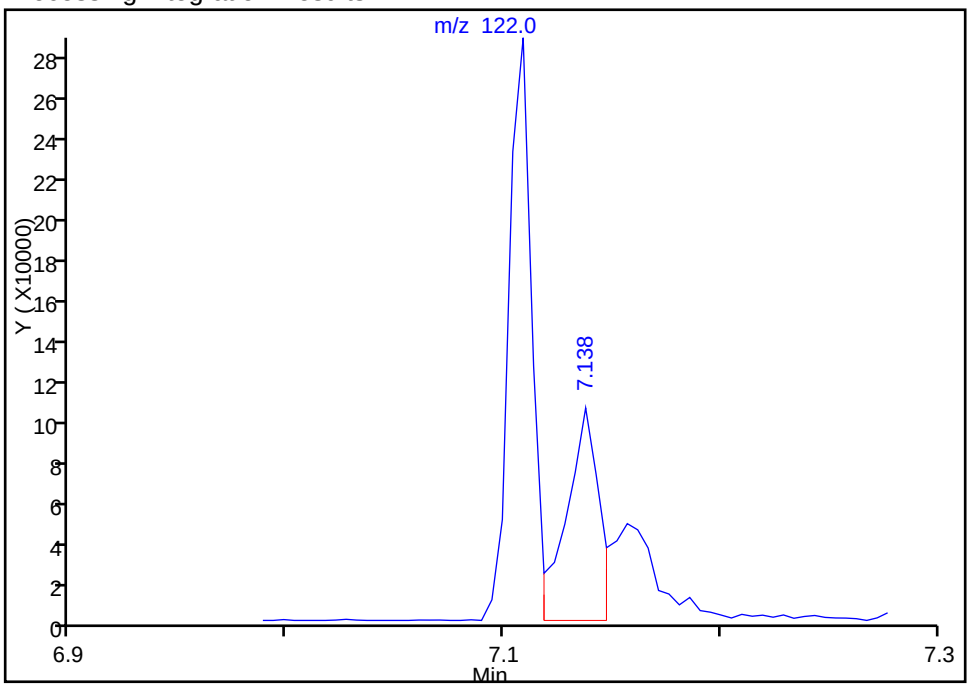
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512021.D
Injection Date: 12-May-2015 15:37:30 Instrument ID: A4HP9
Lims ID: mrl qccl
Client ID:
Operator ID: 001574 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

71 Benzoic acid, CAS: 65-85-0

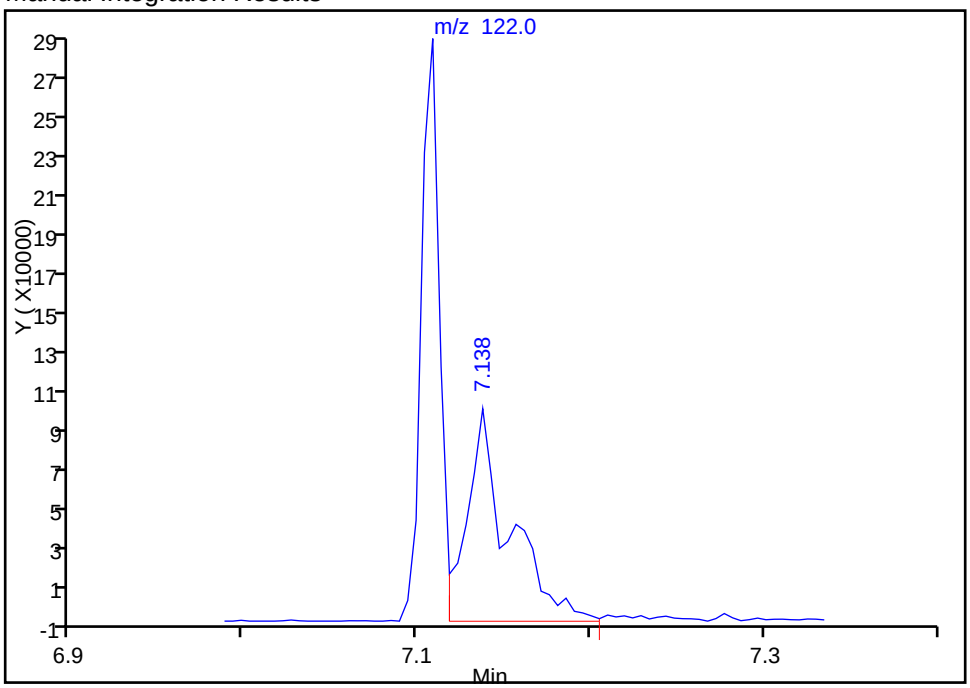
Processing Integration Results

RT: 7.14
Area: 110872
Amount: 4.679650
Amount Units: ng/ul



Manual Integration Results

RT: 7.14
Area: 176525
Amount: 6.972202
Amount Units: ng/ul



Reviewer: ulmanm, 13-May-2015 09:00:43
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-180709/3

Matrix: Water | Lab File ID: 50514003.D

Analysis Method: 8270C | Date Collected:

Extract. Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 05/14/2015 10:49

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 180709 | Units: ng/uL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
83-32-9	Acenaphthene	4.98		0.00020	0.00010	0.000044
208-96-8	Acenaphthylene	4.74		0.00020	0.00010	0.000048
120-12-7	Anthracene	4.63		0.00020	0.00010	0.000088
56-55-3	Benzo[a]anthracene	4.64		0.00020	0.00010	0.000030
50-32-8	Benzo[a]pyrene	4.72		0.00020	0.00010	0.000051
205-99-2	Benzo[b]fluoranthene	4.71		0.00020	0.00010	0.000039
191-24-2	Benzo[g,h,i]perylene	4.95	M	0.00020	0.00010	0.000046
65-85-0	Benzoic acid	8.37		0.025	0.020	0.010
207-08-9	Benzo[k]fluoranthene	5.15		0.00020	0.00010	0.000045
100-51-6	Benzyl alcohol	4.90		0.0050	0.00050	0.00038
111-91-1	Bis(2-chloroethoxy)methane	4.69		0.0010	0.00050	0.00032
111-44-4	Bis(2-chloroethyl)ether	5.02		0.0010	0.00010	0.00010
108-60-1	bis (2-chloroisopropyl) ether	4.98		0.0010	0.00050	0.00040
117-81-7	Bis(2-ethylhexyl) phthalate	4.58		0.0050	0.00050	0.0017
101-55-3	4-Bromophenyl phenyl ether	4.77		0.0020	0.00050	0.00022
85-68-7	Butyl benzyl phthalate	4.58		0.0020	0.0050	0.00026
86-74-8	Carbazole	4.32		0.0010	0.00050	0.00028
106-47-8	4-Chloroaniline	4.67		0.0020	0.00050	0.00021
59-50-7	4-Chloro-3-methylphenol	4.90		0.0020	0.00050	0.00021
91-58-7	2-Chloronaphthalene	4.57		0.0010	0.00050	0.00010
95-57-8	2-Chlorophenol	5.02		0.0010	0.00050	0.00029
7005-72-3	4-Chlorophenyl phenyl ether	5.09		0.0020	0.00050	0.00030
218-01-9	Chrysene	4.89		0.00020	0.00010	0.000050
53-70-3	Dibenz(a,h)anthracene	4.81		0.00020	0.00010	0.000045
132-64-9	Dibenzofuran	4.71		0.0010	0.00010	0.000020
95-50-1	1,2-Dichlorobenzene	5.07		0.0010	0.00050	0.00029
541-73-1	1,3-Dichlorobenzene	5.24		0.0010	0.00050	0.00023
106-46-7	1,4-Dichlorobenzene	4.97		0.0010	0.00050	0.00034
91-94-1	3,3'-Dichlorobenzidine	9.26		0.0050	0.0010	0.00037
120-83-2	2,4-Dichlorophenol	4.90		0.0020	0.00050	0.00019
84-66-2	Diethyl phthalate	4.91		0.0020	0.0010	0.00060
105-67-9	2,4-Dimethylphenol	4.86		0.0020	0.00050	0.00025
131-11-3	Dimethyl phthalate	4.86		0.0020	0.00050	0.00029
84-74-2	Di-n-butyl phthalate	4.43		0.0050	0.0050	0.0017

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-180709/3

Matrix: Water | Lab File ID: 50514003.D

Analysis Method: 8270C | Date Collected:

Extract. Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 05/14/2015 10:49

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 180709 | Units: ng/uL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
534-52-1	4,6-Dinitro-2-methylphenol	8.37		0.0050	0.0040	0.0024
51-28-5	2,4-Dinitrophenol	7.73		0.0050	0.0010	0.00032
121-14-2	2,4-Dinitrotoluene	5.14		0.0050	0.00050	0.00025
606-20-2	2,6-Dinitrotoluene	5.04		0.0050	0.0050	0.0011
117-84-0	Di-n-octyl phthalate	4.33		0.0020	0.00050	0.00023
206-44-0	Fluoranthene	4.49		0.00020	0.00010	0.000045
86-73-7	Fluorene	4.73		0.00020	0.00010	0.000041
118-74-1	Hexachlorobenzene	4.99		0.00020	0.00010	0.000085
87-68-3	Hexachlorobutadiene	4.83		0.0010	0.00050	0.00027
77-47-4	Hexachlorocyclopentadiene	4.96		0.010	0.00050	0.00024
67-72-1	Hexachloroethane	5.14		0.0010	0.00050	0.00019
193-39-5	Indeno[1,2,3-cd]pyrene	4.89		0.00020	0.00010	0.000043
78-59-1	Isophorone	4.82		0.0010	0.00050	0.00027
91-57-6	2-Methylnaphthalene	4.93		0.00020	0.00010	0.000090
95-48-7	2-Methylphenol	5.11		0.0010	0.00050	0.00017
15831-10-4	3 & 4 Methylphenol	5.01		0.0020	0.0010	0.00080
91-20-3	Naphthalene	4.85		0.00020	0.00010	0.000063
88-74-4	2-Nitroaniline	4.74		0.0020	0.00050	0.00021
99-09-2	3-Nitroaniline	5.31		0.0020	0.00050	0.00028
100-01-6	4-Nitroaniline	4.40		0.0020	0.00050	0.00022
98-95-3	Nitrobenzene	4.87		0.0010	0.00010	0.000040
88-75-5	2-Nitrophenol	4.81		0.0020	0.00050	0.00028
100-02-7	4-Nitrophenol	9.16		0.0050	0.0040	0.00029
621-64-7	N-Nitrosodi-n-propylamine	5.24		0.0010	0.00050	0.00024
86-30-6	N-Nitrosodiphenylamine	9.33		0.0010	0.00050	0.00031
87-86-5	Pentachlorophenol	8.01		0.0050	0.0010	0.00027
85-01-8	Phenanthrene	4.76		0.00020	0.00010	0.000062
108-95-2	Phenol	5.13		0.0010	0.0010	0.00060
129-00-0	Pyrene	4.72		0.00020	0.00010	0.000042
120-82-1	1,2,4-Trichlorobenzene	5.00		0.0010	0.00050	0.00028
95-95-4	2,4,5-Trichlorophenol	5.13		0.0050	0.00050	0.00030
88-06-2	2,4,6-Trichlorophenol	5.07		0.0050	0.00050	0.00024

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-180709/3

Matrix: Water | Lab File ID: 50514003.D

Analysis Method: 8270C | Date Collected:

Extract. Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 05/14/2015 10:49

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 180709 | Units: ng/uL

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	97		70-130
367-12-4	2-Fluorophenol (Surr)	103		50-150
4165-60-0	Nitrobenzene-d5 (Surr)	101		50-150
4165-62-2	Phenol-d5 (Surr)	102		50-150
1718-51-0	Terphenyl-d14 (Surr)	95		50-150
118-79-6	2,4,6-Tribromophenol (Surr)	113		50-150

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150514-43624.b\50514003.D
Lims ID: mrl qc
Client ID:
Sample Type: MRL
Inject. Date: 14-May-2015 10:49:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043624-003
Misc. Info.: MRL QCMRL QC
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150514-43624.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 14-May-2015 12:57:18 Calib Date: 12-May-2015 10:59:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK048

First Level Reviewer: ulmanm Date: 14-May-2015 11:15:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.279	6.278	0.001	91	144445	4.00	4.00	
* 2 Naphthalene-d8	136	7.399	7.398	0.001	97	565174	4.00	4.00	
* 3 Acenaphthene-d10	164	8.905	8.903	0.002	89	331166	4.00	4.00	
* 4 Phenanthrene-d10	188	10.174	10.173	0.001	98	583737	4.00	4.00	
* 5 Chrysene-d12	240	12.449	12.452	-0.003	80	635061	4.00	4.00	
* 6 Perylene-d12	264	14.156	14.159	-0.003	98	484652	4.00	4.00	
$ 7 2-Fluorophenol	112	5.033	5.032	0.001	90	260291	5.00	5.16	
$ 8 Phenol-d5	99	5.913	5.912	0.001	83	369332	5.00	5.12	
$ 9 Nitrobenzene-d5	82	6.755	6.754	0.001	83	512654	5.00	5.04	
$ 10 2-Fluorobiphenyl (Surr)	172	8.303	8.307	-0.004	97	539809	5.00	4.83	
$ 11 2,4,6-Tribromophenol	330	9.573	9.572	0.001	82	68038	5.00	5.66	
$ 12 Terphenyl-d14	244	11.496	11.495	0.001	98	607182	5.00	4.74	
25 1,4-Dioxane	88	2.706	2.700	0.006	90	150809	5.00	5.17	
26 N-Nitrosodimethylamine	74	3.245	3.243	0.002	89	236835	5.00	5.24	
27 Pyridine	79	3.331	3.325	0.006	80	390032	5.00	5.49	
20 Dimethylformamide	73		3.978					ND	
28 Ethyl methacrylate	69		4.089					ND	
31 2-Picoline	93		4.374					ND	
32 N-Nitrosomethylethylamine	88		4.504					ND	
35 Acrylamide	71	4.822	4.778	0.044	18	422		NC	
34 Methyl methanesulfonate	80		4.826					ND	
233 n,n'-Dimethylacetamide	44		4.993					ND	
36 N-Nitrosodiethylamine	102		5.254					ND	
37 Ethyl methanesulfonate	79		5.523					ND	
42 Phenylmercaptan	110		5.768					ND	
38 2-Methylcyclohexanone	68	5.837	5.820	0.017	1	380		NC	
39 3-Methylcyclohexanone	69	5.913	5.854	0.059	39	77008		NC	
41 Benzaldehyde	77	5.870	5.869	0.001	78	675209	10.0	10.5	
40 4-Methylcyclohexanone	55		5.902					ND	
43 Phenol	94	5.923	5.927	-0.004	89	414667	5.00	5.13	
44 Aniline	93	5.966	5.970	-0.004	80	516723	5.00	5.04	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
69 Bis(2-chloroethyl)ether	93	6.010	6.013	-0.003	95	327596	5.00	5.02	
45 Pentachloroethane	167		6.019					ND	
46 2-Chlorophenol	128	6.087	6.085	0.002	86	247254	5.00	5.02	
243 n-Decane	57	6.125	6.124	0.001	92	295636	NC	NC	
47 1,3-Dichlorobenzene	146	6.231	6.230	0.001	84	296349	5.00	5.24	
48 1,4-Dichlorobenzene	146	6.293	6.292	0.001	67	283972	5.00	4.97	
49 Benzyl alcohol	108	6.380	6.379	0.001	82	189172	5.00	4.90	
232 1-Methyl-2-pyrrilidinone	99	6.433	6.421	0.012	1	2826		NC	
50 1,2-Dichlorobenzene	146	6.433	6.436	-0.003	74	275014	5.00	5.07	
51 2-Methylphenol	108	6.466	6.470	-0.004	73	275298	5.00	5.11	
53 2,2'-oxybis[1-chloropropan	45	6.500	6.499	0.001	87	261192	5.00	4.98	
52 Indene	115	6.515	6.513	0.002	78	1016367	10.0	9.81	
56 N-Nitrosopyrrolidine	100		6.572					ND	
286 4-Methyl-1-cyclohexanemeth	55	6.601	6.574	0.027	0	15034		NC	
21 3 & 4 Methylphenol	108	6.596	6.600	-0.004	94	290054	5.00	5.01	
59 N-Nitrosomorpholine	56		6.605					ND	
57 N-Nitrosodi-n-propylamine	70	6.606	6.610	-0.004	92	314711	5.00	5.24	
58 Acetophenone	105	6.616	6.619	-0.003	86	470916	5.00	5.16	
60 2-Toluidine	106		6.639					ND	
287 4-Methyl-1-cyclohexanemeth	55	6.697	6.708	-0.011	0	446		NC	
61 Hexachloroethane	117	6.741	6.744	-0.003	88	153650	5.00	5.14	
62 Nitrobenzene	77	6.774	6.773	0.001	73	483539	5.00	4.87	
63 N-Nitrosopiperidine	114		6.884					ND	
64 Isophorone	82	6.976	6.975	0.001	94	789493	5.00	4.82	
66 2-Nitrophenol	139	7.053	7.057	-0.004	69	127724	5.00	4.81	
65 2,4-Dimethylphenol	107	7.063	7.066	-0.003	92	363618	5.00	4.86	
68 o,o',o''-Triethylphosphoro	198		7.105					ND	
71 Benzoic acid	122	7.106	7.119	-0.013	72	248298	10.0	8.37	
67 1,3,5-Trichlorobenzene	180		7.123					ND	
70 Bis(2-chloroethoxy)methane	93	7.140	7.143	-0.003	88	380888	5.00	4.69	
72 alpha,alpha-Dimethyl phene	58		7.216					ND	
73 2,4-Dichlorophenol	162	7.260	7.264	-0.004	84	212627	5.00	4.90	
74 1,2,4-Trichlorobenzene	180	7.342	7.345	-0.003	83	246609	5.00	5.00	
75 Naphthalene	128	7.419	7.417	0.002	90	721882	5.00	4.85	
76 4-Chloroaniline	127	7.438	7.437	0.001	41	298856	5.00	4.67	
77 2,6-Dichlorophenol	162	7.457	7.456	0.001	68	201209	5.00	4.49	
78 Hexachloropropene	213		7.485					ND	
79 Hexachlorobutadiene	225	7.524	7.523	0.001	93	172115	5.00	4.83	
80 1,2,3-Trichlorobenzene	180		7.590					ND	
81 Benzothiazole	135		7.676					ND	
82 Quinoline	129		7.682					ND	
83 N-Nitrosodi-n-butylamine	84		7.697					ND	
84 Caprolactam	113	7.707	7.716	-0.009	78	149089	10.0	9.14	
85 p-Phenylene diamine	108		7.716					ND	
86 4-Chloro-3-methylphenol	107	7.832	7.836	-0.004	78	297542	5.00	4.90	
94 Safrole, Total	162		7.894					ND	
87 2-Methylnaphthalene	142	8.005	8.009	-0.004	81	485583	5.00	4.93	
88 1-Methylnaphthalene	142	8.097	8.095	0.002	78	415082	5.00	4.97	
225 Isosafrole Peak 1	162		8.144					ND	
89 Hexachlorocyclopentadiene	237	8.150	8.153	-0.003	88	178744	5.00	4.96	
91 1,2,4,5-Tetrachlorobenzene	216	8.154	8.153	0.001	94	260096	5.00	4.96	
90 1,2,3,5-Tetrachlorobenzene	216	8.154	8.191	-0.037	91	260096		NC	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
92 2,4,6-Trichlorophenol	196	8.236	8.240	-0.004	89	170757	5.00	5.07	
93 2,4,5-Trichlorophenol	196	8.270	8.273	-0.003	87	179009	5.00	5.13	
227 Isosafrole Peak 2	162		8.336					ND	
98 1,1'-Biphenyl	154	8.395	8.394	0.001	98	581220	5.00	4.87	
97 2,4-Toluene diamine	121		8.412					ND	
100 2-Chloronaphthalene	162	8.428	8.427	0.001	97	447392	5.00	4.57	
246 1-Chloronaphthalene	162	8.428	8.433	-0.005	97	447392		NC	
99 1,2,3,4 -Tetrachlorobenzen	216		8.446					ND	
96 3,4-Dichloronitrobenzene	109		8.465					ND	
102 2-Nitroaniline	65	8.486	8.490	-0.004	69	237497	5.00	4.74	
101 Phenyl ether	170		8.523					ND	
103 1,4-Naphthoquinone	158		8.543					ND	
104 1,4-Dinitrobenzene	168	8.654	8.567	0.087	74	76380		NC	
105 Dimethyl phthalate	163	8.621	8.624	-0.003	90	551398	5.00	4.86	
106 1,3-Dinitrobenzene	168	8.654	8.653	0.001	72	76380	5.00	4.52	
107 2,6-Dinitrotoluene	165	8.679	8.682	-0.003	55	120377	5.00	5.04	
109 Acenaphthylene	152	8.784	8.788	-0.004	95	695701	5.00	4.74	
110 3-Nitroaniline	138	8.832	8.831	0.001	79	119672	5.00	5.31	
111 2,4-Dinitrophenol	184	8.919	8.918	0.001	95	127758	10.0	7.73	
112 Acenaphthene	153	8.933	8.932	0.001	76	475149	5.00	4.98	
113 4-Nitrophenol	109	8.943	8.947	-0.004	49	291417	10.0	9.16	
114 2,4-Dinitrotoluene	165	9.030	9.028	0.002	72	164882	5.00	5.14	
115 Pentachlorobenzene	250		9.034					ND	
116 Dibenzofuran	168	9.078	9.076	0.002	81	634216	5.00	4.71	
117 1-Naphthylamine	143		9.115					ND	
118 2,3,5,6-Tetrachlorophenol	232	9.174	9.120	0.054	87	138590		NC	
119 2,3,4,6-Tetrachlorophenol	232	9.174	9.173	0.001	76	138590	5.00	4.99	
120 2-Naphthylamine	143		9.178					ND	
121 Diethyl phthalate	149	9.217	9.216	0.001	94	576472	5.00	4.91	
247 Hexadecane	57	9.222	9.221	0.001	95	364834	NC	NC	
122 Thionazin	97		9.269					ND	
124 N-Nitro-o-toluidine	152		9.332					ND	
123 4-Chlorophenyl phenyl ethe	204	9.347	9.346	0.001	87	278432	5.00	5.09	
125 4-Nitroaniline	138	9.352	9.351	0.001	70	106167	5.00	4.40	
126 Fluorene	166	9.371	9.370	0.001	95	536541	5.00	4.73	
128 4,6-Dinitro-2-methylphenol	198	9.381	9.384	-0.003	92	188720	10.0	8.37	
127 Tributyl phosphate	99		9.417					ND	
130 Diphenylamine	169	9.438	9.418	0.020	89	828174		NC	
131 N-Nitrosodiphenylamine	169	9.438	9.437	0.001	98	828174	10.0	9.33	
132 1,2-Diphenylhydrazine	77	9.482	9.480	0.002	97	894290	5.00	4.67	
133 Azobenzene	77	9.482	9.480	0.002	96	892593	5.00	4.66	
297 Benzophenone	105	9.482	9.512	-0.030	54	103537		NC	
134 Sulfotepp	202		9.519					ND	
135 1,3,5-Trinitrobenzene	213		9.601					ND	
137 Phenacetin	108		9.649					ND	
228 Diallate Peak 1	86		9.659					ND	
138 Phorate	121		9.664					ND	
230 Diallate Peak 2	86		9.736					ND	
139 4-Bromophenyl phenyl ether	248	9.765	9.764	0.001	66	152519	5.00	4.77	
140 Dimethoate	87		9.803					ND	
141 Hexachlorobenzene	284	9.852	9.855	-0.003	74	152904	5.00	4.99	
142 Atrazine	200	9.861	9.860	0.001	87	310795	10.0	9.47	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
129 4-Aminobiphenyl	169		9.962					ND	
144 Pronamide	173		9.991					ND	
244 n-Octadecane	57	10.001	10.000	0.001	93	364568	NC	NC	
145 Pentachloronitrobenzene	237		10.000					ND	
143 Pentachlorophenol	266	10.006	10.005	0.001	78	186430	10.0	8.01	
146 Disulfoton	88		10.101					ND	
147 Dinoseb	211		10.116					ND	
148 Phenanthrene	178	10.193	10.192	0.001	97	753332	5.00	4.76	
149 Anthracene	178	10.237	10.235	0.002	99	748880	5.00	4.63	
151 Carbazole	167	10.352	10.351	0.001	83	625067	5.00	4.32	
152 Methyl parathion	109		10.428					ND	
154 Di-n-butyl phthalate	149	10.592	10.596	-0.004	98	798301	5.00	4.43	
153 Diphenylsulfone	125		10.672					ND	
155 Ethyl Parathion	97		10.746					ND	
156 4-Nitroquinoline-1-oxide	190		10.808					ND	
157 Methapyrilene	58		10.851					ND	
158 Isodrin	66		11.068					ND	
159 Fluoranthene	202	11.208	11.212	-0.004	98	814356	5.00	4.49	
160 Benzidine	184	11.280	11.284	-0.004	98	860752	10.0	9.04	
161 Pyrene	202	11.410	11.409	0.001	96	838740	5.00	4.72	
226 Aramite Peak 1	185		11.419					ND	
229 Aramite Peak 2	185		11.481					ND	
163 p-Dimethylamino azobenzene	225		11.587					ND	
164 Chlorobenzilate	139		11.616					ND	
282 Kepone	272	11.833	11.764	0.069	1	94		NC	
167 Famphur	218		11.818					ND	
169 3,3'-Dimethylbenzidine	212		11.866					ND	
168 Butyl benzyl phthalate	149	11.876	11.875	0.001	91	386520	5.00	4.58	
171 2-Acetylaminofluorene	181		12.087					ND	
174 4,4'-Methylene bis(2-chlor	231		12.337					ND	
173 Bis(2-ethylhexyl) phthalat	149	12.352	12.351	0.001	95	518041	5.00	4.58	
175 3,3'-Dichlorobenzidine	252	12.376	12.375	0.001	63	547369	10.0	9.26	
172 3,3'-Dimethoxybenzidine	244		12.379					ND	
177 Benzo[a]anthracene	228	12.439	12.443	-0.004	97	857488	5.00	4.64	
178 Chrysene	228	12.477	12.476	0.001	91	817920	5.00	4.89	
176 Hexabromobenzene	232	12.449	12.543	-0.094	1	29309		NC	
179 6-Methylchrysene	242		12.895					ND	
180 Di-n-octyl phthalate	149	12.987	12.991	-0.004	99	808753	5.00	4.33	
181 7,12-Dimethylbenz(a)anthra	256		13.559					ND	
281 Hexachlorophene	196	13.511	13.628	-0.117	0	214		NC	
182 Benzo[b]fluoranthene	252	13.627	13.630	-0.003	92	720413	5.00	4.71	
183 Benzo[k]fluoranthene	252	13.660	13.664	-0.004	86	828486	5.00	5.15	
184 Benzo[a]pyrene	252	14.079	14.082	-0.003	75	706373	5.00	4.72	
185 3-Methylcholanthrene	268		14.535					ND	
187 Dibenz[a,h]acridine	279		15.453					ND	
186 Dibenz[a,j]acridine	279		15.746					ND	
188 Indeno[1,2,3-cd]pyrene	276	16.007	16.011	-0.004	91	718216	5.00	4.89	
189 Dibenz(a,h)anthracene	278	16.012	16.020	-0.008	72	567877	5.00	4.81	
190 Benzo[g,h,i]perylene	276	16.570	16.578	-0.008	89	596349	5.00	4.95	M
251 Endosulfan sulfate	1		0.000					ND	
259 o-Phenylphenol	1		0.000					ND	
261 Endosulfan II	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
272 2,3-Dinitrotoluene	1		0.000					ND	
250 gamma-BHC (Lindane)	1		0.000					ND	
267 2,6-Diaminotoluene	1		0.000					ND	
270 Toxaphene	1		0.000					ND	
262 Isoquinoline	1		0.000					ND	
273 3 & 4 Chlorophenol	1		0.000					ND	
278 delta-BHC	1		0.000					ND	
257 Endosulfan I	1		0.000					ND	
277 Chlorpyrifos	1		0.000					ND	
258 Aldrin	1		0.000					ND	
253 Endrin aldehyde	1		0.000					ND	
260 Methoxychlor	1		0.000					ND	
293 Dowanol Peak 4	1		0.000					ND	
283 2-Ethoxyethanol	1		0.000					ND	
264 alpha-BHC	1		0.000					ND	
289 1-Phenoxy-2-propanol	1		0.000					ND	
266 Heptachlor	1		0.000					ND	
292 Dowanol Peak 2	1		0.000					ND	
269 Dibenzo[a,e]pyrene	1		0.000					ND	
271 3 & 4 Phenoxyphenol	1		0.000					ND	
265 Dibenzo[a,h]pyrene	1		0.000					ND	
276 Chlordane (technical)	1		0.000					ND	
275 Dieldrin	1		0.000					ND	
285 Chlorobenzene TIC	1		0.000					ND	
252 4-tert-Butylphenol	1		0.000					ND	
294 Dowanol Peak 3	1		0.000					ND	
268 Endrin	1		0.000					ND	
263 Heptachlor epoxide	1		0.000					ND	
274 Dibenz(a,i)pyrene	1		0.000					ND	
291 Dipropylene Glycol Phenyl	1		0.000					ND	
299 Diisobutyl phthalate TIC	1		0.000					ND	
254 2-Chloroaniline	1		0.000					ND	
290 1-Phenoxy-2-propanol TIC	1		0.000					ND	
255 beta-BHC	1		0.000					ND	
279 3,4-Dichloroaniline	1		0.000					ND	
249 4-Chlorophenol TIC	1		0.000					ND	
150 DFTPP									
166 4,4'-DDE	246		11.443					ND	
165 4,4'-DDD	235		11.731					ND	
170 4,4'-DDT	235		11.991					ND	
S 95 Isosafrole	162		5.568					ND	
S 288 4-Methyl-1-cyclohexanemeth	55		6.400					ND	
S 136 Diallate	86		6.701					ND	
S 162 Aramite, Total	185		8.271					ND	
S 295 Dowanol	1		0.000					ND	
S 296 Dowanol Peak 1	1		0.000					ND	
S 191 Methyl Phenols,Total	100				0			10.1	
S 245 Total Cresols	100				0			10.1	
T 240 Trimethyl phosphate TIC	110	5.038	4.998	0.038	0	3061		0	
T 194 Decane TIC	142	6.010	5.798	0.210	1	2691		0	
T 193 Hexamethylphosphoramide TI	135	6.745	6.498	0.245	1	1189		0	
T 234 2-Isopropylphenol TIC	121	7.265	7.248	0.015	0	106		0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
T 235 4-isopropylphenol TIC	121	7.346	7.362	-0.018	0	2313		0	
T 236 3-isopropylphenol TIC	121	7.346	7.362	-0.018	0	2313		0	
T 300 Alpha-Terpineol TIC	59	7.486	7.498	-0.014	0	560		0	
T 237 3-(1,1-Dimethylethyl Pheno	135	7.722	7.718	0.002	1	311		0	
T 231 2,3,7,8-TCDD	322	8.828	8.849	-0.022	1	208		0	
T 195 Hydroquinone TIC	110	9.006	8.997	0.006	1	640		0	
T 192 Octadecane (TIC)	254	9.400	9.598	-0.200	1	718		0	
T 242 Triphenyl Phosphate TIC	326	12.016	11.998	0.016	0	189		0	
T 196 Kepone TIC	272	10.006	11.998	-1.994	1	6035		0.0380	
T 241 Tricresyl phosphate TIC	368	12.477	12.498	-0.023	0	57		0	
T 280 2,3,7,8-TCDD TIC	198	12.391	12.498	-0.109	0	845		0	
T 248 2,3,7,8 TCDF TIC	304		13.000					ND	
T 197 Hexachlorophene TIC	198		13.600					ND	
T 239 Tris(2,3-dibromopropyl)pho	201	14.040	13.998	0.040	0	420		0	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L5 W_00006 Amount Added: 1.00 Units: mL

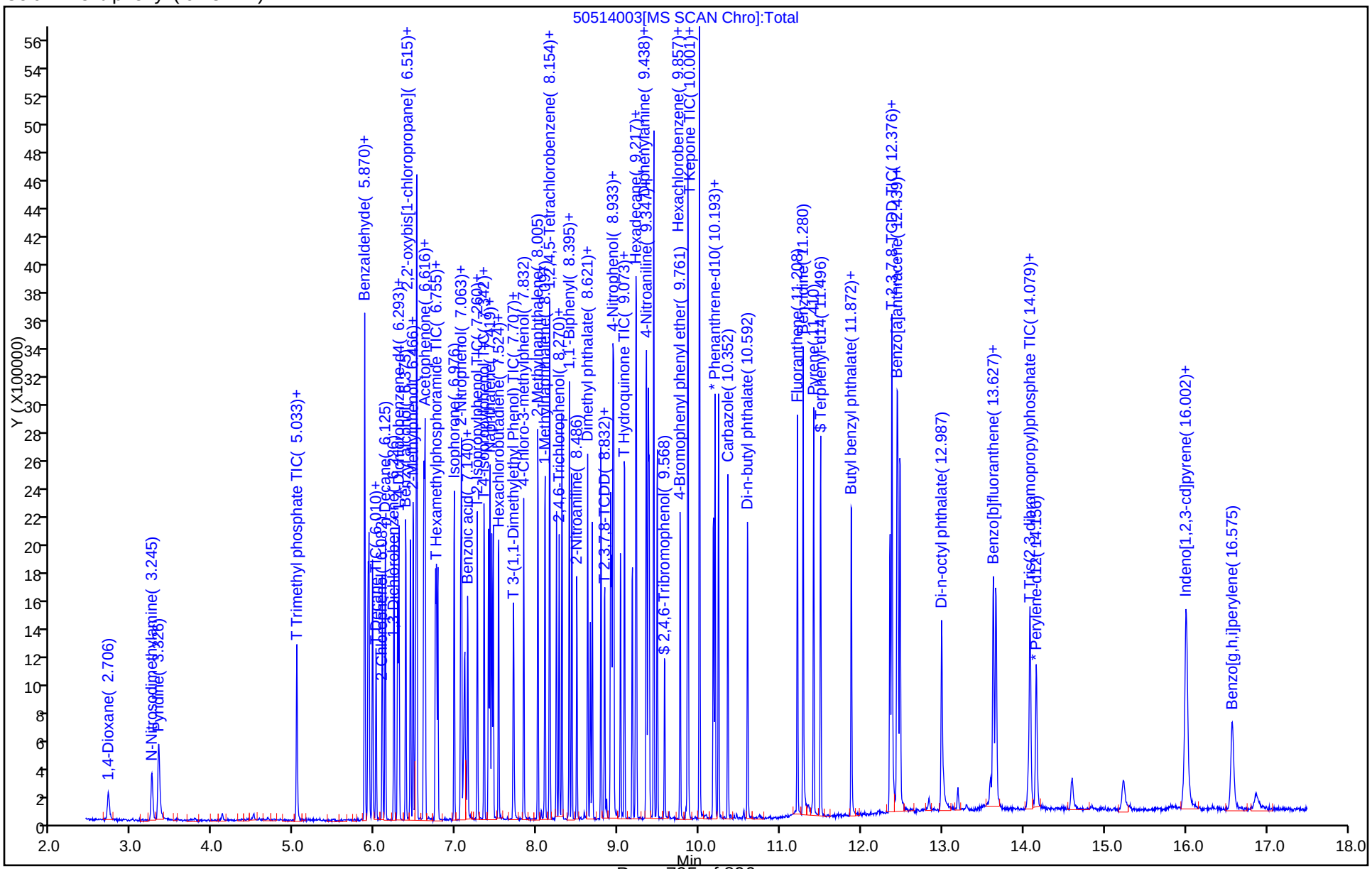
Report Date: 14-May-2015 12:57:21 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150514-43624.b\50514003.D

Injection Date:	14-May-2015 10:49:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	mrl qc			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

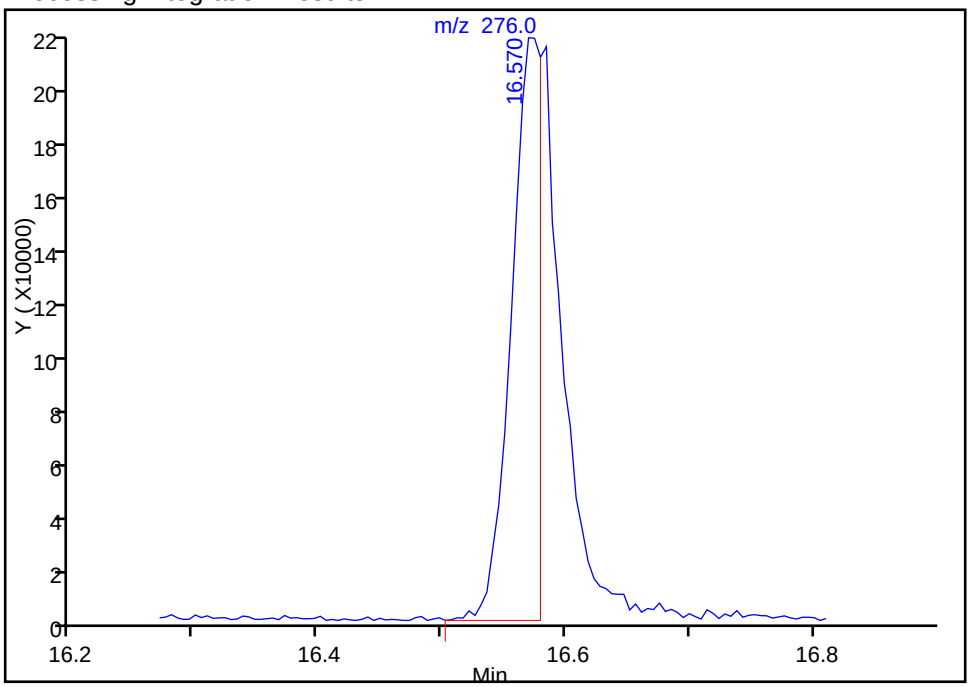
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150514-43624.b\50514003.D
Injection Date: 14-May-2015 10:49:30 Instrument ID: A4HP9
Lims ID: mrl qc
Client ID:
Operator ID: 001574 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

190 Benzo[g,h,i]perylene, CAS: 191-24-2

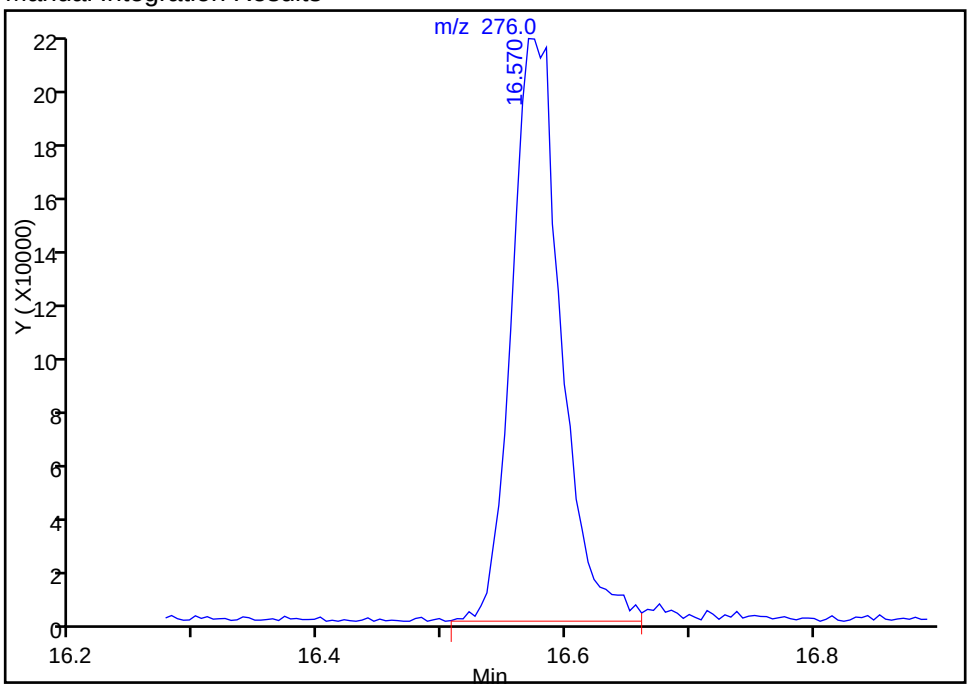
Processing Integration Results

RT: 16.57
Area: 359965
Amount: 2.985157
Amount Units: ng/ul



Manual Integration Results

RT: 16.57
Area: 596349
Amount: 4.945468
Amount Units: ng/ul



Reviewer: ulmanm, 14-May-2015 11:15:55
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-180709/7

Matrix: Water | Lab File ID: 50514007.D

Analysis Method: 8270C | Date Collected:

Extract. Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 05/14/2015 12:28

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 180709 | Units: ng/uL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
83-32-9	Acenaphthene	5.05		0.00020	0.00010	0.000044
208-96-8	Acenaphthylene	4.95		0.00020	0.00010	0.000048
120-12-7	Anthracene	4.97		0.00020	0.00010	0.000088
56-55-3	Benzo[a]anthracene	4.80		0.00020	0.00010	0.000030
50-32-8	Benzo[a]pyrene	4.65		0.00020	0.00010	0.000051
205-99-2	Benzo[b]fluoranthene	4.66		0.00020	0.00010	0.000039
191-24-2	Benzo[g,h,i]perylene	4.84		0.00020	0.00010	0.000046
65-85-0	Benzoic acid	7.73	M	0.025	0.020	0.010
207-08-9	Benzo[k]fluoranthene	4.67		0.00020	0.00010	0.000045
100-51-6	Benzyl alcohol	4.96		0.0050	0.00050	0.00038
111-91-1	Bis(2-chloroethoxy)methane	4.84		0.0010	0.00050	0.00032
111-44-4	Bis(2-chloroethyl)ether	4.90		0.0010	0.00010	0.00010
108-60-1	bis (2-chloroisopropyl) ether	4.65		0.0010	0.00050	0.00040
117-81-7	Bis(2-ethylhexyl) phthalate	4.54		0.0050	0.00050	0.0017
101-55-3	4-Bromophenyl phenyl ether	5.44		0.0020	0.00050	0.00022
85-68-7	Butyl benzyl phthalate	4.80		0.0020	0.0050	0.00026
86-74-8	Carbazole	4.52		0.0010	0.00050	0.00028
106-47-8	4-Chloroaniline	5.28		0.0020	0.00050	0.00021
59-50-7	4-Chloro-3-methylphenol	5.16		0.0020	0.00050	0.00021
91-58-7	2-Chloronaphthalene	4.84		0.0010	0.00050	0.00010
95-57-8	2-Chlorophenol	4.90		0.0010	0.00050	0.00029
7005-72-3	4-Chlorophenyl phenyl ether	5.35		0.0020	0.00050	0.00030
218-01-9	Chrysene	5.13		0.00020	0.00010	0.000050
53-70-3	Dibenz(a,h)anthracene	4.63		0.00020	0.00010	0.000045
132-64-9	Dibenzofuran	4.95		0.0010	0.00010	0.000020
95-50-1	1,2-Dichlorobenzene	4.94		0.0010	0.00050	0.00029
541-73-1	1,3-Dichlorobenzene	4.86		0.0010	0.00050	0.00023
106-46-7	1,4-Dichlorobenzene	4.76		0.0010	0.00050	0.00034
91-94-1	3,3'-Dichlorobenzidine	9.11		0.0050	0.0010	0.00037
120-83-2	2,4-Dichlorophenol	5.17		0.0020	0.00050	0.00019
84-66-2	Diethyl phthalate	5.31		0.0020	0.0010	0.00060
105-67-9	2,4-Dimethylphenol	5.10		0.0020	0.00050	0.00025
131-11-3	Dimethyl phthalate	5.07		0.0020	0.00050	0.00029
84-74-2	Di-n-butyl phthalate	4.76		0.0050	0.0050	0.0017

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-180709/7

Matrix: Water | Lab File ID: 50514007.D

Analysis Method: 8270C | Date Collected:

Extract. Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 05/14/2015 12:28

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 180709 | Units: ng/uL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
534-52-1	4,6-Dinitro-2-methylphenol	8.46		0.0050	0.0040	0.0024
51-28-5	2,4-Dinitrophenol	7.84		0.0050	0.0010	0.00032
121-14-2	2,4-Dinitrotoluene	5.34		0.0050	0.00050	0.00025
606-20-2	2,6-Dinitrotoluene	5.18		0.0050	0.0050	0.0011
117-84-0	Di-n-octyl phthalate	4.13		0.0020	0.00050	0.00023
206-44-0	Fluoranthene	4.56		0.00020	0.00010	0.000045
86-73-7	Fluorene	4.98		0.00020	0.00010	0.000041
118-74-1	Hexachlorobenzene	4.96		0.00020	0.00010	0.000085
87-68-3	Hexachlorobutadiene	5.16		0.0010	0.00050	0.00027
77-47-4	Hexachlorocyclopentadiene	5.22		0.010	0.00050	0.00024
67-72-1	Hexachloroethane	4.94		0.0010	0.00050	0.00019
193-39-5	Indeno[1,2,3-cd]pyrene	4.77		0.00020	0.00010	0.000043
78-59-1	Isophorone	5.07		0.0010	0.00050	0.00027
91-57-6	2-Methylnaphthalene	5.04		0.00020	0.00010	0.000090
95-48-7	2-Methylphenol	4.76		0.0010	0.00050	0.00017
15831-10-4	3 & 4 Methylphenol	4.70		0.0020	0.0010	0.00080
91-20-3	Naphthalene	4.90		0.00020	0.00010	0.000063
88-74-4	2-Nitroaniline	4.92		0.0020	0.00050	0.00021
99-09-2	3-Nitroaniline	5.40		0.0020	0.00050	0.00028
100-01-6	4-Nitroaniline	4.40		0.0020	0.00050	0.00022
98-95-3	Nitrobenzene	5.14		0.0010	0.00010	0.000040
88-75-5	2-Nitrophenol	5.06		0.0020	0.00050	0.00028
100-02-7	4-Nitrophenol	9.67		0.0050	0.0040	0.00029
621-64-7	N-Nitrosodi-n-propylamine	5.00		0.0010	0.00050	0.00024
86-30-6	N-Nitrosodiphenylamine	9.92		0.0010	0.00050	0.00031
87-86-5	Pentachlorophenol	8.35		0.0050	0.0010	0.00027
85-01-8	Phenanthrene	4.95		0.00020	0.00010	0.000062
108-95-2	Phenol	5.00		0.0010	0.0010	0.00060
129-00-0	Pyrene	4.80		0.00020	0.00010	0.000042
120-82-1	1,2,4-Trichlorobenzene	5.00		0.0010	0.00050	0.00028
95-95-4	2,4,5-Trichlorophenol	5.21		0.0050	0.00050	0.00030
88-06-2	2,4,6-Trichlorophenol	5.15		0.0050	0.00050	0.00024

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-180709/7

Matrix: Water | Lab File ID: 50514007.D

Analysis Method: 8270C | Date Collected:

Extract. Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 05/14/2015 12:28

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 180709 | Units: ng/uL

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	99		70-130
367-12-4	2-Fluorophenol (Surr)	103		50-150
4165-60-0	Nitrobenzene-d5 (Surr)	104		50-150
4165-62-2	Phenol-d5 (Surr)	96		50-150
1718-51-0	Terphenyl-d14 (Surr)	93		50-150
118-79-6	2,4,6-Tribromophenol (Surr)	112		50-150

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150514-43624.b\50514007.D
Lims ID: mrl qccl
Client ID:
Sample Type: MRL
Inject. Date: 14-May-2015 12:28:30 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043624-007
Misc. Info.: MRL QCCLMRL QCCL
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150514-43624.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 14-May-2015 12:57:18 Calib Date: 12-May-2015 10:59:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150512-43530.b\50512010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK048

First Level Reviewer: ulmanm Date: 14-May-2015 12:54:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.276	6.278	-0.002	89	166025	4.00	4.00	
* 2 Naphthalene-d8	136	7.396	7.398	-0.002	96	605290	4.00	4.00	
* 3 Acenaphthene-d10	164	8.906	8.903	0.003	85	359532	4.00	4.00	
* 4 Phenanthrene-d10	188	10.171	10.173	-0.002	94	623553	4.00	4.00	
* 5 Chrysene-d12	240	12.450	12.452	-0.002	80	714409	4.00	4.00	
* 6 Perylene-d12	264	14.157	14.159	-0.002	97	565226	4.00	4.00	
$ 7 2-Fluorophenol	112	5.035	5.032	0.003	90	300027	5.00	5.17	
$ 8 Phenol-d5	99	5.910	5.912	-0.002	82	397776	5.00	4.80	
$ 9 Nitrobenzene-d5	82	6.757	6.754	0.003	85	567995	5.00	5.22	
$ 10 2-Fluorobiphenyl (Surr)	172	8.305	8.307	-0.002	97	601744	5.00	4.96	
$ 11 2,4,6-Tribromophenol	330	9.575	9.572	0.002	87	73384	5.00	5.62	
$ 12 Terphenyl-d14	244	11.498	11.495	0.003	98	671916	5.00	4.67	
25 1,4-Dioxane	88	2.708	2.700	0.008	76	176344	5.00	5.26	
26 N-Nitrosodimethylamine	74	3.246	3.243	0.003	80	252845	5.00	4.87	
27 Pyridine	79	3.333	3.325	0.008	88	423959	5.00	5.19	
20 Dimethylformamide	73		3.978					ND	
28 Ethyl methacrylate	69	4.117	4.089	0.028	50	14072		NC	
31 2-Picoline	93		4.374					ND	
32 N-Nitrosomethylethylamine	88		4.504					ND	
35 Acrylamide	71	4.732	4.778	-0.046	30	479		NC	
34 Methyl methanesulfonate	80		4.826					ND	
233 n,n'-Dimethylacetamide	44		4.993					ND	
36 N-Nitrosodiethylamine	102		5.254					ND	
37 Ethyl methanesulfonate	79		5.523					ND	
42 Phenylmercaptan	110		5.768					ND	
38 2-Methylcyclohexanone	68	5.824	5.820	0.004	1	268		NC	
39 3-Methylcyclohexanone	69	5.862	5.854	0.008	5	199		NC	
41 Benzaldehyde	77	5.872	5.869	0.003	78	767662	10.0	10.4	
40 4-Methylcyclohexanone	55	5.848	5.902	-0.054	1	2456		NC	
43 Phenol	94	5.925	5.927	-0.002	89	464665	5.00	5.00	
44 Aniline	93	5.968	5.970	-0.002	94	567270	5.00	4.81	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
69 Bis(2-chloroethyl)ether	93	6.011	6.013	-0.002	96	366995	5.00	4.90	
45 Pentachloroethane	167		6.019					ND	
46 2-Chlorophenol	128	6.088	6.085	0.003	80	277161	5.00	4.90	
243 n-Decane	57	6.127	6.124	0.003	92	328498	NC	NC	
47 1,3-Dichlorobenzene	146	6.232	6.230	0.002	84	315642	5.00	4.86	
48 1,4-Dichlorobenzene	146	6.295	6.292	0.003	65	312339	5.00	4.76	
49 Benzyl alcohol	108	6.377	6.379	-0.002	80	220368	5.00	4.96	
232 1-Methyl-2-pyrrilidinone	99	6.434	6.421	0.013	1	2933		NC	
50 1,2-Dichlorobenzene	146	6.434	6.436	-0.002	83	308044	5.00	4.94	
51 2-Methylphenol	108	6.468	6.470	-0.002	85	294344	5.00	4.76	
53 2,2'-oxybis[1-chloropropan	45	6.502	6.499	0.003	86	280045	5.00	4.65	
52 Indene	115	6.511	6.513	-0.002	78	1190365	10.0	10.0	
56 N-Nitrosopyrrolidine	100		6.572					ND	
286 4-Methyl-1-cyclohexanemeth	55	6.598	6.574	0.024	0	16497		NC	
21 3 & 4 Methylphenol	108	6.598	6.600	-0.002	95	312746	5.00	4.70	
59 N-Nitrosomorpholine	56		6.605					ND	
57 N-Nitrosodi-n-propylamine	70	6.607	6.610	-0.003	93	345005	5.00	5.00	
58 Acetophenone	105	6.617	6.619	-0.002	85	513365	5.00	4.90	
60 2-Toluidine	106		6.639					ND	
287 4-Methyl-1-cyclohexanemeth	55	6.733	6.708	0.024	0	503		NC	
61 Hexachloroethane	117	6.742	6.744	-0.002	86	169942	5.00	4.94	
62 Nitrobenzene	77	6.771	6.773	-0.002	74	546782	5.00	5.14	
63 N-Nitrosopiperidine	114		6.884					ND	
64 Isophorone	82	6.973	6.975	-0.002	95	890035	5.00	5.07	
66 2-Nitrophenol	139	7.055	7.057	-0.002	68	143864	5.00	5.06	
65 2,4-Dimethylphenol	107	7.064	7.066	-0.002	93	408707	5.00	5.10	
68 o,o',o''-Triethylphosphoro	198		7.105					ND	
71 Benzoic acid	122	7.108	7.119	-0.011	73	243209	10.0	7.73	M
67 1,3,5-Trichlorobenzene	180		7.123					ND	
70 Bis(2-chloroethoxy)methane	93	7.141	7.143	-0.002	92	420868	5.00	4.84	
72 alpha,alpha-Dimethyl phene	58		7.216					ND	
73 2,4-Dichlorophenol	162	7.261	7.264	-0.003	88	239944	5.00	5.17	
74 1,2,4-Trichlorobenzene	180	7.343	7.345	-0.002	87	264198	5.00	5.00	
75 Naphthalene	128	7.415	7.417	-0.002	91	780250	5.00	4.90	
76 4-Chloroaniline	127	7.439	7.437	0.002	61	362380	5.00	5.28	
77 2,6-Dichlorophenol	162	7.454	7.456	-0.002	54	231184	5.00	4.81	
78 Hexachloropropene	213		7.485					ND	
79 Hexachlorobutadiene	225	7.521	7.523	-0.002	85	196764	5.00	5.16	
80 1,2,3-Trichlorobenzene	180		7.590					ND	
81 Benzothiazole	135		7.676					ND	
82 Quinoline	129		7.682					ND	
83 N-Nitrosodi-n-butylamine	84		7.697					ND	
84 Caprolactam	113	7.709	7.716	-0.007	80	177442	10.0	10.2	
85 p-Phenylene diamine	108		7.716					ND	
86 4-Chloro-3-methylphenol	107	7.834	7.836	-0.002	82	335286	5.00	5.16	
94 Safrole, Total	162		7.894					ND	
87 2-Methylnaphthalene	142	8.007	8.009	-0.002	82	532116	5.00	5.04	
88 1-Methylnaphthalene	142	8.093	8.095	-0.002	77	461076	5.00	5.16	
225 Isosafrole Peak 1	162		8.144					ND	
89 Hexachlorocyclopentadiene	237	8.151	8.153	-0.002	92	204249	5.00	5.22	
91 1,2,4,5-Tetrachlorobenzene	216	8.156	8.153	0.003	88	286246	5.00	5.03	
90 1,2,3,5-Tetrachlorobenzene	216	8.156	8.191	-0.035	85	286246		NC	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
92 2,4,6-Trichlorophenol	196	8.238	8.240	-0.002	91	188131	5.00	5.15	
93 2,4,5-Trichlorophenol	196	8.271	8.273	-0.002	88	197187	5.00	5.21	
227 Isosafrole Peak 2	162		8.336					ND	
98 1,1'-Biphenyl	154	8.396	8.394	0.002	97	656867	5.00	5.07	
97 2,4-Toluene diamine	121		8.412					ND	
100 2-Chloronaphthalene	162	8.425	8.427	-0.002	97	514418	5.00	4.84	
246 1-Chloronaphthalene	162	8.425	8.433	-0.008	96	514418		NC	
99 1,2,3,4 -Tetrachlorobenzen	216		8.446					ND	
96 3,4-Dichloronitrobenzene	109		8.465					ND	
102 2-Nitroaniline	65	8.488	8.490	-0.002	64	267884	5.00	4.92	
101 Phenyl ether	170		8.523					ND	
103 1,4-Naphthoquinone	158		8.543					ND	
104 1,4-Dinitrobenzene	168	8.656	8.567	0.089	77	93519		NC	
105 Dimethyl phthalate	163	8.622	8.624	-0.002	91	624373	5.00	5.07	
106 1,3-Dinitrobenzene	168	8.656	8.653	0.003	78	93519	5.00	5.06	
107 2,6-Dinitrotoluene	165	8.680	8.682	-0.002	54	134230	5.00	5.18	
109 Acenaphthylene	152	8.786	8.788	-0.002	96	788748	5.00	4.95	
110 3-Nitroaniline	138	8.829	8.831	-0.002	76	131948	5.00	5.40	
111 2,4-Dinitrophenol	184	8.916	8.918	-0.002	94	141031	10.0	7.84	
112 Acenaphthene	153	8.930	8.932	-0.002	80	523539	5.00	5.05	
113 4-Nitrophenol	109	8.945	8.947	-0.002	61	335302	10.0	9.67	
114 2,4-Dinitrotoluene	165	9.026	9.028	-0.002	69	186010	5.00	5.34	
115 Pentachlorobenzene	250		9.034					ND	
116 Dibenzofuran	168	9.074	9.076	-0.002	85	722292	5.00	4.95	
117 1-Naphthylamine	143		9.115					ND	
118 2,3,5,6-Tetrachlorophenol	232	9.171	9.120	0.051	81	164998		NC	
119 2,3,4,6-Tetrachlorophenol	232	9.171	9.173	-0.002	79	164998	5.00	5.48	
120 2-Naphthylamine	143		9.178					ND	
121 Diethyl phthalate	149	9.214	9.216	-0.002	93	676344	5.00	5.31	
247 Hexadecane	57	9.223	9.221	0.002	92	395945	NC	NC	
122 Thionazin	97		9.269					ND	
124 N-Nitro-o-toluidine	152		9.332					ND	
123 4-Chlorophenyl phenyl ethe	204	9.344	9.346	-0.002	91	317296	5.00	5.35	
125 4-Nitroaniline	138	9.348	9.351	-0.003	68	115231	5.00	4.40	
126 Fluorene	166	9.368	9.370	-0.002	98	612924	5.00	4.98	
128 4,6-Dinitro-2-methylphenol	198	9.382	9.384	-0.002	95	203944	10.0	8.46	
127 Tributyl phosphate	99		9.417					ND	
130 Diphenylamine	169	9.435	9.418	0.017	90	940186		NC	
131 N-Nitrosodiphenylamine	169	9.435	9.437	-0.002	97	940186	10.0	9.92	
132 1,2-Diphenylhydrazine	77	9.478	9.480	-0.002	97	1008423	5.00	4.93	
133 Azobenzene	77	9.478	9.480	-0.002	96	1007480	5.00	4.92	
297 Benzophenone	105	9.478	9.512	-0.034	53	115101		NC	
134 Sulfotepp	202		9.519					ND	
135 1,3,5-Trinitrobenzene	213		9.601					ND	
137 Phenacetin	108		9.649					ND	
228 Diallate Peak 1	86		9.659					ND	
138 Phorate	121		9.664					ND	
230 Diallate Peak 2	86		9.736					ND	
139 4-Bromophenyl phenyl ether	248	9.762	9.764	-0.002	72	185947	5.00	5.44	
140 Dimethoate	87		9.803					ND	
141 Hexachlorobenzene	284	9.853	9.855	-0.002	78	162584	5.00	4.96	
142 Atrazine	200	9.863	9.860	0.003	86	338752	10.0	9.66	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
129 4-Aminobiphenyl	169		9.962					ND	
144 Pronamide	173		9.991					ND	
244 n-Octadecane	57	9.998	10.000	-0.002	91	401666	NC	NC	
145 Pentachloronitrobenzene	237		10.000					ND	
143 Pentachlorophenol	266	10.002	10.005	-0.003	74	208459	10.0	8.35	
146 Disulfoton	88		10.101					ND	
147 Dinoseb	211		10.116					ND	
148 Phenanthrene	178	10.190	10.192	-0.002	97	837895	5.00	4.95	
149 Anthracene	178	10.238	10.235	0.003	87	858888	5.00	4.97	
151 Carbazole	167	10.354	10.351	0.003	85	697999	5.00	4.52	
152 Methyl parathion	109		10.428					ND	
154 Di-n-butyl phthalate	149	10.594	10.596	-0.002	99	916011	5.00	4.76	
153 Diphenylsulfone	125		10.672					ND	
155 Ethyl Parathion	97		10.746					ND	
156 4-Nitroquinoline-1-oxide	190		10.808					ND	
157 Methapyrilene	58		10.851					ND	
158 Isodrin	66		11.068					ND	
159 Fluoranthene	202	11.209	11.212	-0.003	98	884226	5.00	4.56	
160 Benzidine	184	11.282	11.284	-0.002	97	989330	10.0	9.22	
161 Pyrene	202	11.411	11.409	0.002	96	960338	5.00	4.80	
226 Aramite Peak 1	185		11.419					ND	
229 Aramite Peak 2	185		11.481					ND	
163 p-Dimethylamino azobenzene	225		11.587					ND	
164 Chlorobenzilate	139		11.616					ND	
282 Kepone	272		11.764					ND	
167 Famphur	218		11.818					ND	
169 3,3'-Dimethylbenzidine	212		11.866					ND	
168 Butyl benzyl phthalate	149	11.873	11.875	-0.002	88	455294	5.00	4.80	
171 2-Acetylaminofluorene	181		12.087					ND	
174 4,4'-Methylene bis(2-chlor	231		12.337					ND	
173 Bis(2-ethylhexyl) phthalat	149	12.354	12.351	0.003	91	577489	5.00	4.54	
175 3,3'-Dichlorobenzidine	252	12.378	12.375	0.003	59	604816	10.0	9.11	
172 3,3'-Dimethoxybenzidine	244		12.379					ND	
177 Benzo[a]anthracene	228	12.441	12.443	-0.002	98	996728	5.00	4.80	
178 Chrysene	228	12.474	12.476	-0.002	92	964468	5.00	5.13	
176 Hexabromobenzene	232	12.450	12.543	-0.093	2	36382		NC	
179 6-Methylchrysene	242		12.895					ND	
180 Di-n-octyl phthalate	149	12.989	12.991	-0.002	99	900656	5.00	4.13	
181 7,12-Dimethylbenz(a)anthra	256		13.559					ND	
281 Hexachlorophene	196	13.624	13.628	-0.004	0	524		NC	
182 Benzo[b]fluoranthene	252	13.628	13.630	-0.002	91	830851	5.00	4.66	
183 Benzo[k]fluoranthene	252	13.662	13.664	-0.002	97	875779	5.00	4.67	
184 Benzo[a]pyrene	252	14.080	14.082	-0.002	73	810877	5.00	4.65	
185 3-Methylcholanthrene	268		14.535					ND	
187 Dibenz[a,h]acridine	279		15.453					ND	
186 Dibenz[a,j]acridine	279		15.746					ND	
188 Indeno[1,2,3-cd]pyrene	276	16.013	16.011	0.002	95	817009	5.00	4.77	
189 Dibenz(a,h)anthracene	278	16.018	16.020	-0.002	61	636998	5.00	4.63	
190 Benzo[g,h,i]perylene	276	16.576	16.578	-0.002	89	680336	5.00	4.84	
251 Endosulfan sulfate	1		0.000					ND	
259 o-Phenylphenol	1		0.000					ND	
261 Endosulfan II	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
272 2,3-Dinitrotoluene	1		0.000					ND	
250 gamma-BHC (Lindane)	1		0.000					ND	
267 2,6-Diaminotoluene	1		0.000					ND	
270 Toxaphene	1		0.000					ND	
262 Isoquinoline	1		0.000					ND	
273 3 & 4 Chlorophenol	1		0.000					ND	
278 delta-BHC	1		0.000					ND	
257 Endosulfan I	1		0.000					ND	
277 Chlorpyrifos	1		0.000					ND	
258 Aldrin	1		0.000					ND	
253 Endrin aldehyde	1		0.000					ND	
260 Methoxychlor	1		0.000					ND	
293 Dowanol Peak 4	1		0.000					ND	
283 2-Ethoxyethanol	1		0.000					ND	
264 alpha-BHC	1		0.000					ND	
289 1-Phenoxy-2-propanol	1		0.000					ND	
266 Heptachlor	1		0.000					ND	
292 Dowanol Peak 2	1		0.000					ND	
269 Dibenzo[a,e]pyrene	1		0.000					ND	
271 3 & 4 Phenoxyphenol	1		0.000					ND	
265 Dibenzo[a,h]pyrene	1		0.000					ND	
276 Chlordane (technical)	1		0.000					ND	
275 Dieldrin	1		0.000					ND	
285 Chlorobenzene TIC	1		0.000					ND	
252 4-tert-Butylphenol	1		0.000					ND	
294 Dowanol Peak 3	1		0.000					ND	
268 Endrin	1		0.000					ND	
263 Heptachlor epoxide	1		0.000					ND	
274 Dibenz(a,i)pyrene	1		0.000					ND	
291 Dipropylene Glycol Phenyl	1		0.000					ND	
299 Diisobutyl phthalate TIC	1		0.000					ND	
254 2-Chloroaniline	1		0.000					ND	
290 1-Phenoxy-2-propanol TIC	1		0.000					ND	
255 beta-BHC	1		0.000					ND	
279 3,4-Dichloroaniline	1		0.000					ND	
249 4-Chlorophenol TIC	1		0.000					ND	
150 DFTPP									
166 4,4'-DDE	246		11.443					ND	
165 4,4'-DDD	235		11.731					ND	
170 4,4'-DDT	235		11.991					ND	
S 95 Isosafrole	162		5.568					ND	
S 288 4-Methyl-1-cyclohexanemeth	55		6.400					ND	
S 136 Diallate	86		6.701					ND	
S 162 Aramite, Total	185		8.271					ND	
S 295 Dowanol	1		0.000					ND	
S 296 Dowanol Peak 1	1		0.000					ND	
S 191 Methyl Phenols,Total	100				0			9.46	
S 245 Total Cresols	100				0			9.46	
T 240 Trimethyl phosphate TIC	110	5.035	4.998	0.035	0	2318		0	
T 194 Decane TIC	142	5.622	5.798	-0.178	1	400		0	
T 193 Hexamethylphosphoramide TI	135	7.261	6.498	0.761	14	10634		0	
T 234 2-Isopropylphenol TIC	121	7.247	7.248	-0.003	0	138		0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
T 235 4-isopropylphenol TIC	121	7.367	7.362	0.003	0	430		0	
T 236 3-isopropylphenol TIC	121	7.367	7.362	0.003	0	430		0	
T 300 Alpha-Terpineol TIC	59	7.459	7.498	-0.041	0	885		0	
T 237 3-(1,1-Dimethylethyl Pheno	135	7.733	7.718	0.013	1	198		0	
T 231 2,3,7,8-TCDD	322	8.906	8.849	0.056	1	228		0	
T 195 Hydroquinone TIC	110	9.017	8.997	0.017	20	278		0	
T 192 Octadecane (TIC)	254	9.474	9.598	-0.126	11	311		0	
T 242 Triphenyl Phosphate TIC	326	12.046	11.998	0.046	0	233		0	
T 196 Kepone TIC	272	10.002	11.998	-1.998	12	6571		0.0368	
T 241 Tricresyl phosphate TIC	368	12.618	12.498	0.118	0	159		0	
T 280 2,3,7,8-TCDD TIC	198	12.566	12.498	0.066	0	391		0	
T 248 2,3,7,8 TCDF TIC	304	12.301	12.998	-0.699	0	318		0	
T 197 Hexachlorophene TIC	198	13.628	13.598	0.028	1	10503		0.0743	
T 239 Tris(2,3-dibromopropyl)pho	201	13.975	13.998	-0.025	0	443		0	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L5 W_00006 Amount Added: 1.00 Units: mL

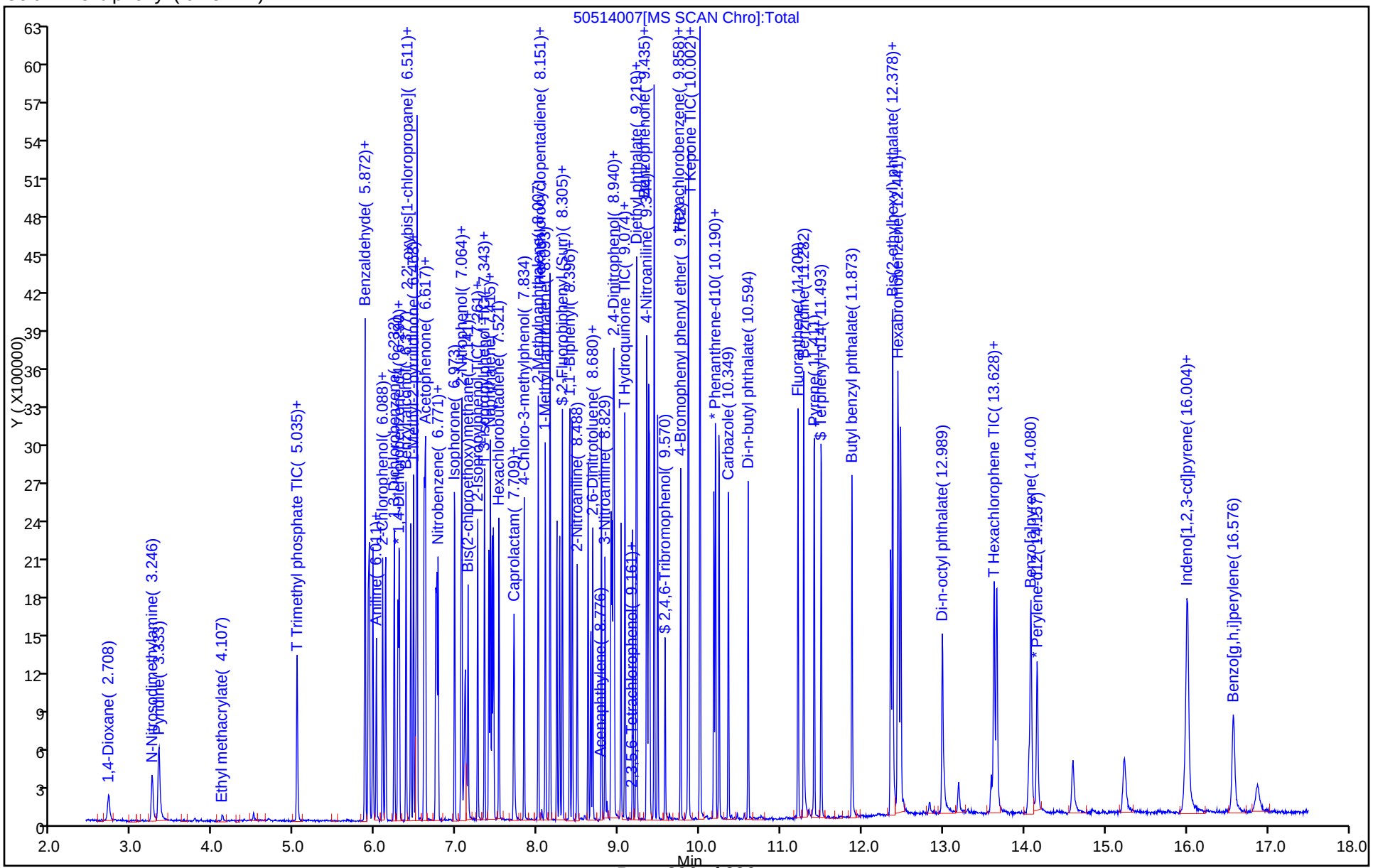
Report Date: 14-May-2015 12:57:25 Chrom Revision: 2.2 09-Apr-2015 10:05:40

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150514-43624.b\50514007.D

Injection Date:	14-May-2015 12:28:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	mrl qccl			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



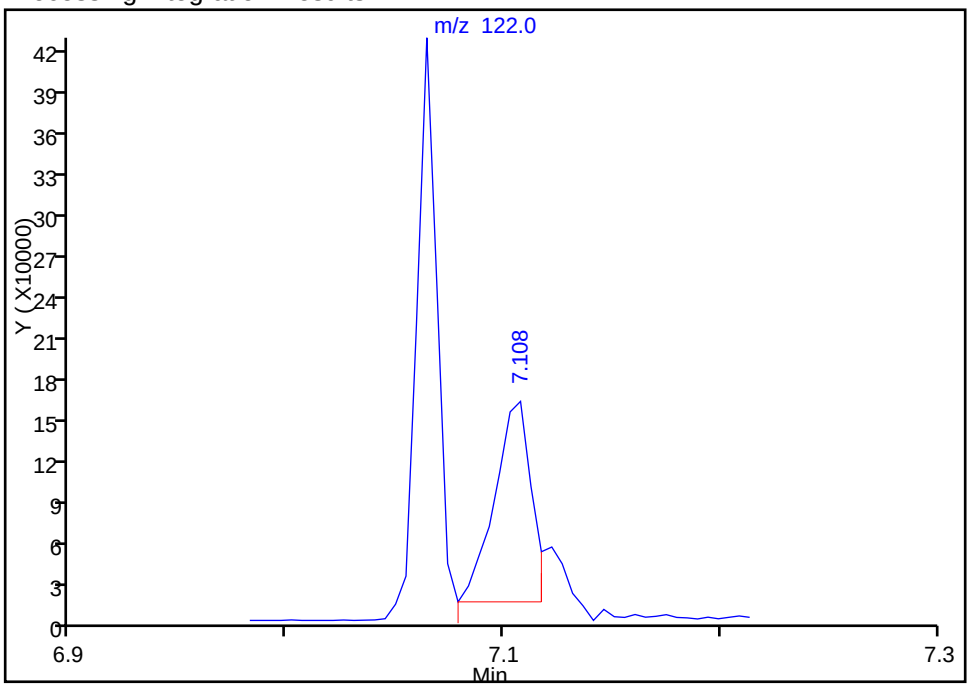
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150514-43624.b\50514007.D
Injection Date: 14-May-2015 12:28:30 Instrument ID: A4HP9
Lims ID: mrl qccl
Client ID:
Operator ID: 001574 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

71 Benzoic acid, CAS: 65-85-0

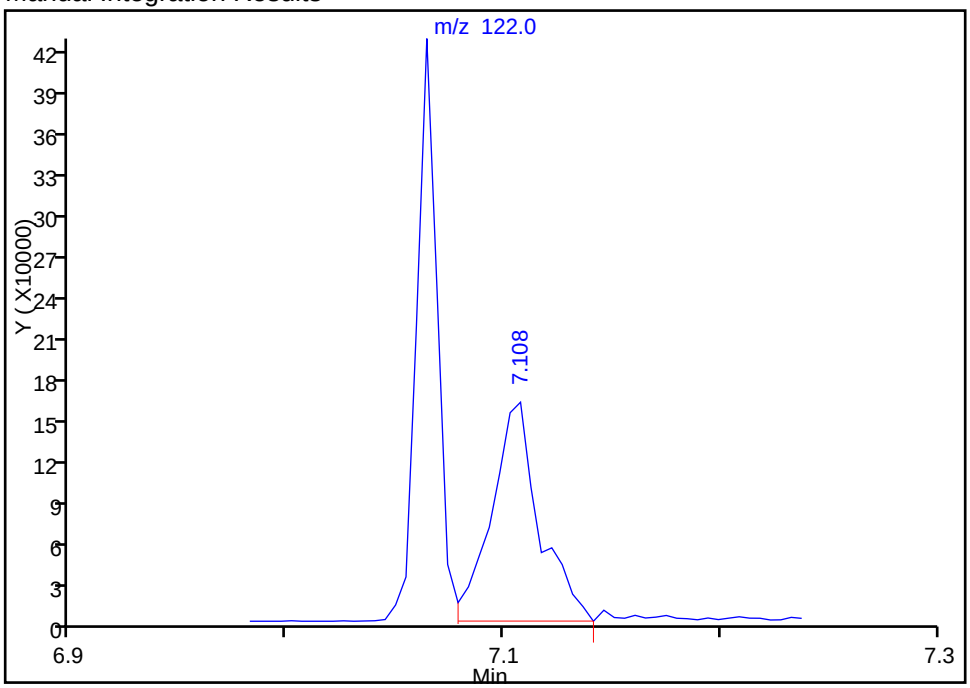
Processing Integration Results

RT: 7.11
Area: 172574
Amount: 5.718320
Amount Units: ng/ul



Manual Integration Results

RT: 7.11
Area: 243209
Amount: 7.728092
Amount Units: ng/ul



Reviewer: ulmanm, 14-May-2015 12:54:48
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-181588/3

Matrix: Solid | Lab File ID: 50520003.D

Analysis Method: 8270C | Date Collected:

Extract. Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 05/20/2015 09:55

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ng/uL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
83-32-9	Acenaphthene	5.11		0.00020	0.00010	0.000044
208-96-8	Acenaphthylene	4.99		0.00020	0.00010	0.000048
120-12-7	Anthracene	5.07		0.00020	0.00010	0.000088
56-55-3	Benzo[a]anthracene	4.87		0.00020	0.00010	0.000030
50-32-8	Benzo[a]pyrene	5.05		0.00020	0.00010	0.000051
205-99-2	Benzo[b]fluoranthene	4.95		0.00020	0.00010	0.000039
191-24-2	Benzo[g,h,i]perylene	5.63		0.00020	0.00010	0.000046
65-85-0	Benzoic acid	9.88	M	0.025	0.020	0.010
207-08-9	Benzo[k]fluoranthene	5.21		0.00020	0.00010	0.000045
100-51-6	Benzyl alcohol	4.99		0.0050	0.00050	0.00038
111-91-1	Bis(2-chloroethoxy)methane	5.10		0.0010	0.00050	0.00032
111-44-4	Bis(2-chloroethyl)ether	5.23		0.0010	0.00010	0.00010
108-60-1	bis (2-chloroisopropyl) ether	4.84		1.0	0.00050	0.00040
117-81-7	Bis(2-ethylhexyl) phthalate	5.43		0.0050	0.00050	0.0017
101-55-3	4-Bromophenyl phenyl ether	5.22		0.0020	0.00050	0.00022
85-68-7	Butyl benzyl phthalate	5.22		0.0020	0.00050	0.00026
86-74-8	Carbazole	5.15		0.0010	0.00050	0.00028
106-47-8	4-Chloroaniline	4.96		0.0020	0.00050	0.00021
59-50-7	4-Chloro-3-methylphenol	5.01		0.0020	0.00050	0.00021
91-58-7	2-Chloronaphthalene	4.94		0.0010	0.00050	0.00010
95-57-8	2-Chlorophenol	5.06		0.0010	0.00050	0.00029
7005-72-3	4-Chlorophenyl phenyl ether	4.98		0.0020	0.00050	0.00030
218-01-9	Chrysene	5.05		0.00020	0.00010	0.000050
53-70-3	Dibenz(a,h)anthracene	5.47		0.00020	0.00010	0.000045
132-64-9	Dibenzofuran	5.11		0.0010	0.00010	0.000020
95-50-1	1,2-Dichlorobenzene	5.20		0.0010	0.00050	0.00029
541-73-1	1,3-Dichlorobenzene	5.13		0.0010	0.00050	0.00023
106-46-7	1,4-Dichlorobenzene	5.20		0.0010	0.00050	0.00034
91-94-1	3,3'-Dichlorobenzidine	10.9		0.0050	0.0010	0.00037
120-83-2	2,4-Dichlorophenol	5.09		0.0020	0.00050	0.00019
84-66-2	Diethyl phthalate	5.27		0.0020	0.0010	0.00060
105-67-9	2,4-Dimethylphenol	5.03		0.0020	0.00050	0.00025
131-11-3	Dimethyl phthalate	5.21		0.0020	0.00050	0.00029
84-74-2	Di-n-butyl phthalate	5.67		0.0050	0.0010	0.0017

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-181588/3

Matrix: Solid | Lab File ID: 50520003.D

Analysis Method: 8270C | Date Collected:

Extract. Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 05/20/2015 09:55

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ng/uL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
534-52-1	4,6-Dinitro-2-methylphenol	9.06		0.0050	0.0040	0.0024
51-28-5	2,4-Dinitrophenol	8.72		0.0050	0.0010	0.00032
121-14-2	2,4-Dinitrotoluene	5.40		0.0050	0.00050	0.00025
606-20-2	2,6-Dinitrotoluene	5.49		0.0050	0.00050	0.00080
117-84-0	Di-n-octyl phthalate	5.16		0.0020	0.00050	0.00023
206-44-0	Fluoranthene	5.35		0.00020	0.00010	0.000045
86-73-7	Fluorene	5.09		0.00020	0.00010	0.000041
118-74-1	Hexachlorobenzene	5.21		0.00020	0.00010	0.000085
87-68-3	Hexachlorobutadiene	5.09		0.0010	0.00050	0.00027
77-47-4	Hexachlorocyclopentadiene	4.36		0.010	0.00050	0.00024
67-72-1	Hexachloroethane	4.91		0.0010	0.00050	0.00019
193-39-5	Indeno[1,2,3-cd]pyrene	5.57		0.00020	0.00010	0.000043
78-59-1	Isophorone	5.09		0.0010	0.00050	0.00027
91-57-6	2-Methylnaphthalene	5.17		0.00020	0.00010	0.000090
95-48-7	2-Methylphenol	5.04		0.0010	0.00050	0.00017
15831-10-4	3 & 4 Methylphenol	5.02		0.0020	0.0010	0.00080
91-20-3	Naphthalene	5.15		0.00020	0.00010	0.000063
88-74-4	2-Nitroaniline	4.70		0.0020	0.00050	0.00021
99-09-2	3-Nitroaniline	5.06		0.0020	0.00050	0.00028
100-01-6	4-Nitroaniline	5.20		0.0020	0.00050	0.00022
98-95-3	Nitrobenzene	5.01		0.0010	0.00010	0.000040
88-75-5	2-Nitrophenol	5.19		0.0020	0.00050	0.00028
100-02-7	4-Nitrophenol	10.4		0.0050	0.0040	0.00029
621-64-7	N-Nitrosodi-n-propylamine	4.92		0.0010	0.00050	0.00024
86-30-6	N-Nitrosodiphenylamine	10.7		0.0010	0.00050	0.00031
87-86-5	Pentachlorophenol	10.1		0.0050	0.0010	0.00027
85-01-8	Phenanthrene	5.16		0.00020	0.00010	0.000062
108-95-2	Phenol	4.88		0.0010	0.0010	0.00060
129-00-0	Pyrene	5.05		0.00020	0.00010	0.000042
120-82-1	1,2,4-Trichlorobenzene	5.15		0.0010	0.00050	0.00028
95-95-4	2,4,5-Trichlorophenol	4.90		0.0050	0.00050	0.00030
88-06-2	2,4,6-Trichlorophenol	4.94		0.0050	0.00050	0.00024

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-181588/3

Matrix: Solid | Lab File ID: 50520003.D

Analysis Method: 8270C | Date Collected:

Extract. Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 05/20/2015 09:55

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ng/uL

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	102		50-150
367-12-4	2-Fluorophenol (Surr)	100		50-150
4165-60-0	Nitrobenzene-d5 (Surr)	101		50-150
4165-62-2	Phenol-d5 (Surr)	99		50-150
1718-51-0	Terphenyl-d14 (Surr)	96		50-150
118-79-6	2,4,6-Tribromophenol (Surr)	99		50-150

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520003.D
Lims ID: mrl qc
Client ID:
Sample Type: MRL
Inject. Date: 20-May-2015 09:55:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043844-003
Misc. Info.: MRL QCMRL QC
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-May-2015 08:02:18 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 20-May-2015 10:22:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.414	6.411	0.003	96	289685	4.00	4.00	
* 2 Naphthalene-d8	136	7.525	7.527	-0.002	99	1221978	4.00	4.00	
* 3 Acenaphthene-d10	164	9.035	9.037	-0.002	91	578437	4.00	4.00	
* 4 Phenanthrene-d10	188	10.309	10.311	-0.002	96	830415	4.00	4.00	
* 5 Chrysene-d12	240	12.618	12.619	-0.001	93	772482	4.00	4.00	
* 6 Perylene-d12	264	14.435	14.437	-0.002	90	600989	4.00	4.00	
$ 7 2-Fluorophenol	112	5.198	5.199	-0.001	91	624933	5.00	4.99	
$ 8 Phenol-d5	99	6.044	6.046	-0.002	92	840532	5.00	4.97	
$ 9 Nitrobenzene-d5	82	6.885	6.887	-0.002	86	629403	5.00	5.03	
$ 10 2-Fluorobiphenyl (Surr)	172	8.429	8.431	-0.002	99	841223	5.00	5.10	
$ 11 2,4,6-Tribromophenol	330	9.708	9.710	-0.002	91	74808	5.00	4.93	
$ 12 Terphenyl-d14	244	11.637	11.638	-0.001	97	708961	5.00	4.78	
25 1,4-Dioxane	88	3.154	3.151	0.003	90	306060	5.00	4.67	M
26 N-Nitrosodimethylamine	74	3.620	3.617	0.003	85	488885	5.00	4.83	
27 Pyridine	79	3.678	3.675	0.003	99	809119	5.00	4.62	
20 Dimethylformamide	73		3.978					ND	
28 Ethyl methacrylate	69		4.089					ND	
31 2-Picoline	93		4.374					ND	
32 N-Nitrosomethylethylamine	88		4.504					ND	
35 Acrylamide	71	4.755	4.778	-0.023	9	321		NC	
34 Methyl methanesulfonate	80		4.826					ND	
233 n,n'-Dimethylacetamide	44		4.993					ND	
36 N-Nitrosodiethylamine	102		5.254					ND	
37 Ethyl methanesulfonate	79		5.523					ND	
42 Phenylmercaptan	110		5.768					ND	
38 2-Methylcyclohexanone	68	5.784	5.820	-0.036	1	238		NC	
39 3-Methylcyclohexanone	69	5.784	5.854	-0.070	1	334		NC	
40 4-Methylcyclohexanone	55		5.902					ND	
41 Benzaldehyde	77	6.015	6.017	-0.002	98	1014431	10.0	9.79	
45 Pentachloroethane	167		6.019					ND	
43 Phenol	94	6.054	6.055	-0.001	94	901049	5.00	4.88	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
44 Aniline	93	6.106	6.108	-0.002	99	1104940	5.00	4.90	
69 Bis(2-chloroethyl)ether	93	6.145	6.147	-0.002	98	760687	5.00	5.23	
46 2-Chlorophenol	128	6.227	6.228	-0.001	97	578857	5.00	5.06	
243 n-Decane	57	6.256	6.257	-0.001	91	792991	NC	NC	
47 1,3-Dichlorobenzene	146	6.366	6.368	-0.002	97	573849	5.00	5.13	
232 1-Methyl-2-pyrrilidinone	99	6.414	6.421	-0.007	31	2696		NC	
48 1,4-Dichlorobenzene	146	6.429	6.426	0.003	94	588686	5.00	5.20	
49 Benzyl alcohol	108	6.506	6.507	-0.001	97	462775	5.00	4.99	
50 1,2-Dichlorobenzene	146	6.568	6.570	-0.002	97	559893	5.00	5.20	
56 N-Nitrosopyrrolidine	100		6.572					ND	
286 4-Methyl-1-cyclohexanemeth	55	6.568	6.574	-0.006	0	27121		NC	
51 2-Methylphenol	108	6.592	6.594	-0.002	89	634449	5.00	5.04	
59 N-Nitrosomorpholine	56		6.605					ND	
53 2,2'-oxybis[1-chloropropan	45	6.626	6.628	-0.002	86	915498	5.00	4.84	
60 2-Toluidine	106		6.639					ND	
52 Indene	115	6.645	6.647	-0.002	90	2018496	10.0	10.4	
287 4-Methyl-1-cyclohexanemeth	55	6.703	6.708	-0.005	0	1021		NC	
21 3 & 4 Methylphenol	108	6.722	6.724	-0.002	86	667390	5.00	5.02	
57 N-Nitrosodi-n-propylamine	70	6.736	6.738	-0.002	90	428867	5.00	4.92	
58 Acetophenone	105	6.746	6.748	-0.002	98	848411	5.00	5.15	
61 Hexachloroethane	117	6.876	6.878	-0.002	88	226657	5.00	4.91	
63 N-Nitrosopiperidine	114		6.884					ND	
62 Nitrobenzene	77	6.905	6.902	0.003	84	652133	5.00	5.01	
64 Isophorone	82	7.102	7.104	-0.002	98	1243116	5.00	5.09	
68 o,o',o''-Triethylphosphoro	198		7.105					ND	
67 1,3,5-Trichlorobenzene	180		7.123					ND	
66 2-Nitrophenol	139	7.184	7.185	-0.001	92	271810	5.00	5.19	
65 2,4-Dimethylphenol	107	7.188	7.190	-0.002	94	557984	5.00	5.03	
72 alpha,alpha-Dimethyl phene	58		7.216					ND	
71 Benzoic acid	122	7.222	7.238	-0.016	86	605664	10.0	9.88	M
70 Bis(2-chloroethoxy)methane	93	7.265	7.267	-0.002	98	807032	5.00	5.10	
73 2,4-Dichlorophenol	162	7.386	7.387	-0.001	96	387363	5.00	5.09	
74 1,2,4-Trichlorobenzene	180	7.472	7.474	-0.002	94	401059	5.00	5.15	
78 Hexachloropropene	213		7.485					ND	
75 Naphthalene	128	7.544	7.546	-0.002	95	1661909	5.00	5.15	
76 4-Chloroaniline	127	7.564	7.565	-0.001	96	733376	5.00	4.96	
77 2,6-Dichlorophenol	162	7.583	7.585	-0.002	96	384390	5.00	5.24	
80 1,2,3-Trichlorobenzene	180		7.590					ND	
79 Hexachlorobutadiene	225	7.650	7.652	-0.002	98	164039	5.00	5.09	
81 Benzothiazole	135		7.676					ND	
82 Quinoline	129		7.682					ND	
83 N-Nitrosodi-n-butylamine	84		7.697					ND	
85 p-Phenylene diamine	108		7.716					ND	
84 Caprolactam	113	7.838	7.849	-0.011	84	375811	10.0	10.2	
94 Safrole, Total	162		7.894					ND	
86 4-Chloro-3-methylphenol	107	7.953	7.955	-0.002	95	490533	5.00	5.01	
87 2-Methylnaphthalene	142	8.136	8.138	-0.002	94	1015671	5.00	5.17	
225 Isosafrole Peak 1	162	8.131	8.144	-0.013	52	122		NC	
90 1,2,3,5-Tetrachlorobenzene	216	8.285	8.191	0.094	95	290053		NC	
88 1-Methylnaphthalene	142	8.222	8.224	-0.002	94	886325	5.00	5.19	
89 Hexachlorocyclopentadiene	237	8.280	8.282	-0.002	97	147315	5.00	4.36	
91 1,2,4,5-Tetrachlorobenzene	216	8.285	8.287	-0.002	97	290053	5.00	5.00	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
227 Isosafrole Peak 2	162	8.362	8.336	0.026	52	24714		NC	
92 2,4,6-Trichlorophenol	196	8.362	8.364	-0.002	94	233829	5.00	4.94	
93 2,4,5-Trichlorophenol	196	8.400	8.402	-0.002	95	242724	5.00	4.90	
97 2,4-Toluene diamine	121		8.412					ND	
246 1-Chloronaphthalene	162	8.362	8.433	-0.071	51	24714		NC	
99 1,2,3,4 -Tetrachlorobenzen	216		8.446					ND	
96 3,4-Dichloronitrobenzene	109		8.465					ND	
98 1,1'-Biphenyl	154	8.525	8.522	0.003	96	1086133	5.00	4.92	
101 Phenyl ether	170	8.607	8.523	0.084	81	3590		NC	
103 1,4-Naphthoquinone	158		8.543					ND	
100 2-Chloronaphthalene	162	8.554	8.556	-0.002	97	805817	5.00	4.94	
104 1,4-Dinitrobenzene	168		8.567					ND	
102 2-Nitroaniline	65	8.617	8.618	-0.001	86	301396	5.00	4.70	
105 Dimethyl phthalate	163	8.746	8.748	-0.002	98	865999	5.00	5.21	
106 1,3-Dinitrobenzene	168	8.780	8.782	-0.002	85	141260	5.00	5.28	
107 2,6-Dinitrotoluene	165	8.804	8.806	-0.002	95	205896	5.00	5.49	
109 Acenaphthylene	152	8.920	8.921	-0.001	100	1410280	5.00	4.99	
110 3-Nitroaniline	138	8.958	8.960	-0.002	94	279393	5.00	5.06	
115 Pentachlorobenzene	250		9.034					ND	
111 2,4-Dinitrophenol	184	9.045	9.046	-0.001	85	158548	10.0	8.72	
112 Acenaphthene	153	9.064	9.066	-0.002	96	829749	5.00	5.11	
113 4-Nitrophenol	109	9.069	9.070	-0.001	82	177752	10.0	10.4	
117 1-Naphthylamine	143		9.115					ND	
118 2,3,5,6-Tetrachlorophenol	232		9.120					ND	
114 2,4-Dinitrotoluene	165	9.155	9.157	-0.002	91	252216	5.00	5.40	
120 2-Naphthylamine	143		9.178					ND	
116 Dibenzofuran	168	9.208	9.210	-0.002	98	1124691	5.00	5.11	
122 Thionazin	97		9.269					ND	
119 2,3,4,6-Tetrachlorophenol	232	9.304	9.306	-0.002	76	183469	5.00	5.19	
124 N-Nitro-o-toluidine	152		9.332					ND	
121 Diethyl phthalate	149	9.343	9.345	-0.002	98	843728	5.00	5.27	
247 Hexadecane	57	9.348	9.349	-0.001	89	848900	NC	NC	
127 Tributyl phosphate	99	9.473	9.417	0.056	58	25694		NC	
130 Diphenylamine	169		9.418					ND	
123 4-Chlorophenyl phenyl ethe	204	9.473	9.474	-0.001	94	358850	5.00	4.98	
125 4-Nitroaniline	138	9.482	9.484	-0.002	85	248082	5.00	5.20	
126 Fluorene	166	9.501	9.503	-0.002	97	910736	5.00	5.09	
297 Benzophenone	105	9.511	9.512	-0.001	50	108670		NC	
128 4,6-Dinitro-2-methylphenol	198	9.511	9.513	-0.002	89	187443	10.0	9.06	
134 Sulfotepp	202	9.473	9.519	-0.046	54	1824		NC	
131 N-Nitrosodiphenylamine	169	9.569	9.571	-0.002	98	1206319	10.0	10.7	
135 1,3,5-Trinitrobenzene	213		9.601					ND	
133 Azobenzene	77	9.612	9.614	-0.002	95	1257012	5.00	5.08	
132 1,2-Diphenylhydrazine	77	9.612	9.614	-0.002	97	1258387	5.00	5.08	
137 Phenacetin	108		9.649					ND	
228 Diallate Peak 1	86		9.659					ND	
138 Phorate	121	9.569	9.664	-0.095	54	624		NC	
230 Diallate Peak 2	86		9.736					ND	
140 Dimethoate	87	9.896	9.803	0.093	50	1700		NC	
139 4-Bromophenyl phenyl ether	248	9.896	9.898	-0.002	75	181331	5.00	5.22	
129 4-Aminobiphenyl	169	9.896	9.962	-0.066	53	19422		NC	
141 Hexachlorobenzene	284	9.992	9.989	0.003	75	162914	5.00	5.21	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
144 Pronamide	173	9.987	9.991	-0.004	63	105751		NC	
142 Atrazine	200	9.992	9.994	-0.002	87	335686	10.0	10.9	
145 Pentachloronitrobenzene	237		10.000					ND	
146 Disulfoton	88	10.136	10.101	0.035	58	2556		NC	
147 Dinoseb	211		10.116					ND	
244 n-Octadecane	57	10.127	10.128	-0.001	77	891133	NC	NC	
143 Pentachlorophenol	266	10.141	10.143	-0.002	90	227927	10.0	10.1	
148 Phenanthrene	178	10.329	10.330	-0.001	97	1225855	5.00	5.16	
149 Anthracene	178	10.377	10.374	0.003	97	1219605	5.00	5.07	
152 Methyl parathion	109		10.428					ND	
151 Carbazole	167	10.487	10.489	-0.002	95	1117031	5.00	5.15	
153 Diphenylsulfone	125		10.672					ND	
154 Di-n-butyl phthalate	149	10.723	10.725	-0.002	99	1446370	5.00	5.67	
155 Ethyl Parathion	97		10.746					ND	
156 4-Nitroquinoline-1-oxide	190		10.808					ND	
157 Methapyrilene	58		10.851					ND	
158 Isodrin	66		11.068					ND	
159 Fluoranthene	202	11.353	11.355	-0.002	97	1104429	5.00	5.35	
226 Aramite Peak 1	185		11.419					ND	
160 Benzidine	184	11.420	11.422	-0.002	99	1190863	10.0	8.66	
229 Aramite Peak 2	185	11.483	11.481	0.002	51	1581		NC	
161 Pyrene	202	11.555	11.557	-0.002	93	1182653	5.00	5.05	
163 p-Dimethylamino azobenzene	225		11.587					ND	
164 Chlorobenzilate	139		11.616					ND	
282 Kepone	272		11.764					ND	
167 Famphur	218		11.818					ND	
169 3,3'-Dimethylbenzidine	212		11.866					ND	
168 Butyl benzyl phthalate	149	12.012	12.013	-0.001	95	666238	5.00	5.22	
171 2-Acetylaminofluorene	181		12.087					ND	
174 4,4'-Methylene bis(2-chlor	231		12.337					ND	
172 3,3'-Dimethoxybenzidine	244		12.379					ND	
173 Bis(2-ethylhexyl) phthalat	149	12.502	12.504	-0.002	97	969148	5.00	5.43	
175 3,3'-Dichlorobenzidine	252	12.536	12.538	-0.002	77	728807	10.0	10.9	
176 Hexabromobenzene	232	12.618	12.543	0.075	52	29657		NC	
177 Benzo[a]anthracene	228	12.608	12.610	-0.002	97	1062845	5.00	4.87	
178 Chrysene	228	12.646	12.648	-0.002	94	1002563	5.00	5.05	
179 6-Methylchrysene	242		12.895					ND	
180 Di-n-octyl phthalate	149	13.175	13.177	-0.002	99	1633309	5.00	5.16	
181 7,12-Dimethylbenz(a)anthra	256		13.559					ND	
281 Hexachlorophene	196	13.810	13.628	0.182	0	595		NC	
182 Benzo[b]fluoranthene	252	13.863	13.870	-0.007	93	918047	5.00	4.95	
183 Benzo[k]fluoranthene	252	13.902	13.903	-0.001	92	985030	5.00	5.21	
184 Benzo[a]pyrene	252	14.349	14.355	-0.006	88	896242	5.00	5.05	
185 3-Methylcholanthrene	268		14.535					ND	
187 Dibenz[a,h]acridine	279		15.453					ND	
186 Dibenz[a,j]acridine	279		15.746					ND	
188 Indeno[1,2,3-cd]pyrene	276	16.412	16.423	-0.011	90	922561	5.00	5.57	
189 Dibenz(a,h)anthracene	278	16.417	16.428	-0.011	80	762171	5.00	5.47	
190 Benzo[g,h,i]perylene	276	17.032	17.039	-0.007	84	778135	5.00	5.63	
268 Endrin	1		0.000					ND	
291 Dipropylene Glycol Phenyl	1		0.000					ND	
264 alpha-BHC	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
267 2,6-Diaminotoluene	1		0.000					ND	
270 Toxaphene	1		0.000					ND	
294 Dowanol Peak 3	1		0.000					ND	
290 1-Phenoxy-2-propanol TIC	1		0.000					ND	
275 Dieldrin	1		0.000					ND	
299 Diisobutyl phthalate TIC	1		0.000					ND	
272 2,3-Dinitrotoluene	1		0.000					ND	
262 Isoquinoline	1		0.000					ND	
250 gamma-BHC (Lindane)	1		0.000					ND	
258 Aldrin	1		0.000					ND	
277 Chlorpyrifos	1		0.000					ND	
283 2-Ethoxyethanol	1		0.000					ND	
293 Dowanol Peak 4	1		0.000					ND	
273 3 & 4 Chlorophenol	1		0.000					ND	
259 o-Phenylphenol	1		0.000					ND	
260 Methoxychlor	1		0.000					ND	
251 Endosulfan sulfate	1		0.000					ND	
278 delta-BHC	1		0.000					ND	
252 4-tert-Butylphenol	1		0.000					ND	
253 Endrin aldehyde	1		0.000					ND	
257 Endosulfan I	1		0.000					ND	
261 Endosulfan II	1		0.000					ND	
274 Dibenz(a,i)pyrene	1		0.000					ND	
289 1-Phenoxy-2-propanol	1		0.000					ND	
266 Heptachlor	1		0.000					ND	
292 Dowanol Peak 2	1		0.000					ND	
269 Dibenzo[a,e]pyrene	1		0.000					ND	
271 3 & 4 Phenoxyphenol	1		0.000					ND	
265 Dibenzo[a,h]pyrene	1		0.000					ND	
276 Chlordane (technical)	1		0.000					ND	
249 4-Chlorophenol TIC	1		0.000					ND	
254 2-Chloroaniline	1		0.000					ND	
255 beta-BHC	1		0.000					ND	
285 Chlorobenzene TIC	1		0.000					ND	
279 3,4-Dichloroaniline	1		0.000					ND	
263 Heptachlor epoxide	1		0.000					ND	
150 DFTPP									
166 4,4'-DDE	246		11.583					ND	
165 4,4'-DDD	235	12.536	11.871	0.665	54	2674		NR	7
170 4,4'-DDT	235	12.536	12.136	0.400	59	2674		NR	7
S 95 Isosafrole	162		5.568					ND	
S 288 4-Methyl-1-cyclohexanemeth	55		6.400					ND	
S 136 Diallate	86		6.701					ND	
S 162 Aramite, Total	185		8.271					ND	
S 295 Dowanol	1		0.000					ND	
S 296 Dowanol Peak 1	1		0.000					ND	
S 191 Methyl Phenols,Total	100				0			10.1	
S 245 Total Cresols	100				0			10.1	
T 240 Trimethyl phosphate TIC	110	5.000	5.000	0.000	0	149		0	
T 194 Decane TIC	142	6.256	5.800	0.456	90	792948		0	
T 193 Hexamethylphosphoramide TI	135		6.500					ND	
T 234 2-Isopropylphenol TIC	121	7.246	7.250	-0.004	0	1621		0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
T 235 4-isopropylphenol TIC	121	7.357	7.364	-0.007	0	141		0	
T 236 3-isopropylphenol TIC	121	7.357	7.364	-0.007	0	141		0	
T 300 Alpha-Terpineol TIC	59	7.496	7.500	-0.004	0	157		0	
T 237 3-(1,1-Dimethylethyl Pheno	135		7.720					ND	
T 231 2,3,7,8-TCDD	322		8.850					ND	
T 195 Hydroquinone TIC	110	8.997	9.000	-0.003	1	246		0	
T 192 Octadecane (TIC)	254	10.127	9.600	0.527	94	891668		0	
T 242 Triphenyl Phosphate TIC	326	11.973	11.995	-0.027	0	123		0	
T 196 Kepone TIC	272	10.136	11.995	-1.864	1	7490		0.0388	
T 241 Tricresyl phosphate TIC	368		12.500					ND	
T 280 2,3,7,8-TCDD TIC	198	11.819	12.495	-0.681	0	161		0	
T 248 2,3,7,8 TCDF TIC	304		13.000					ND	
T 197 Hexachlorophene TIC	198		13.600					ND	
T 239 Tris(2,3-dibromopropyl)pho	201	14.003	13.991	0.002	0	57		0	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

NC - Not Calibrated

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L5 W_00006 Amount Added: 1.00 Units: mL

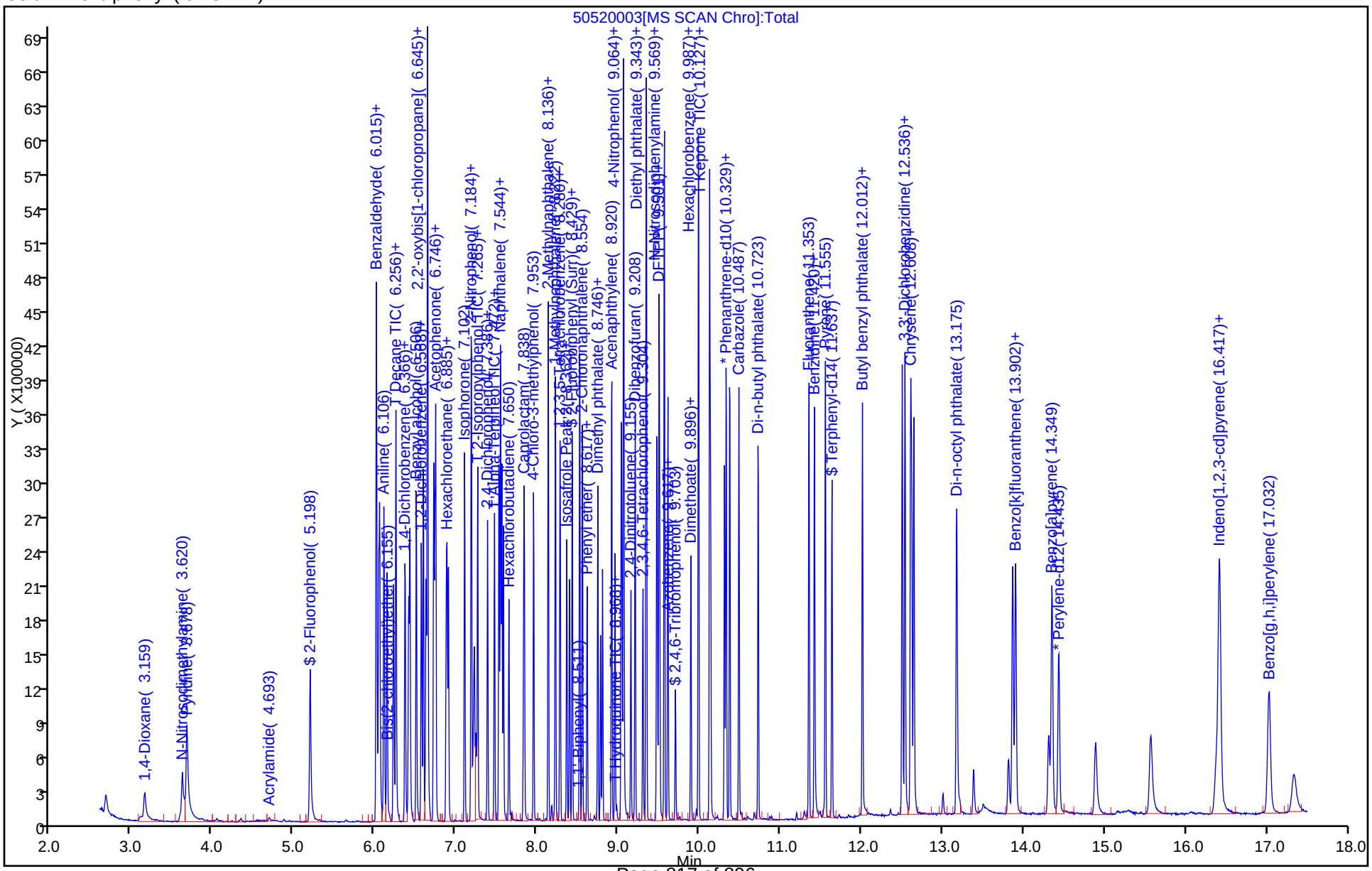
Report Date: 21-May-2015 08:02:21 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520003.D

Injection Date:	20-May-2015 09:55:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	mrl qc			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

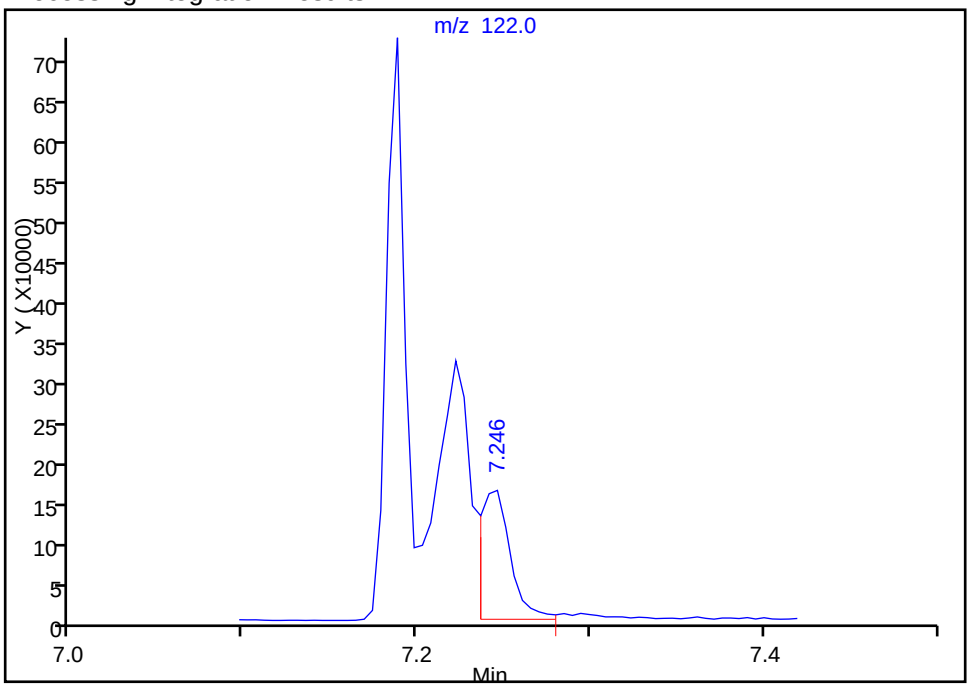
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520003.D
Injection Date: 20-May-2015 09:55:30 Instrument ID: A4HP9
Lims ID: mrl qc
Client ID:
Operator ID: 001574 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

71 Benzoic acid, CAS: 65-85-0

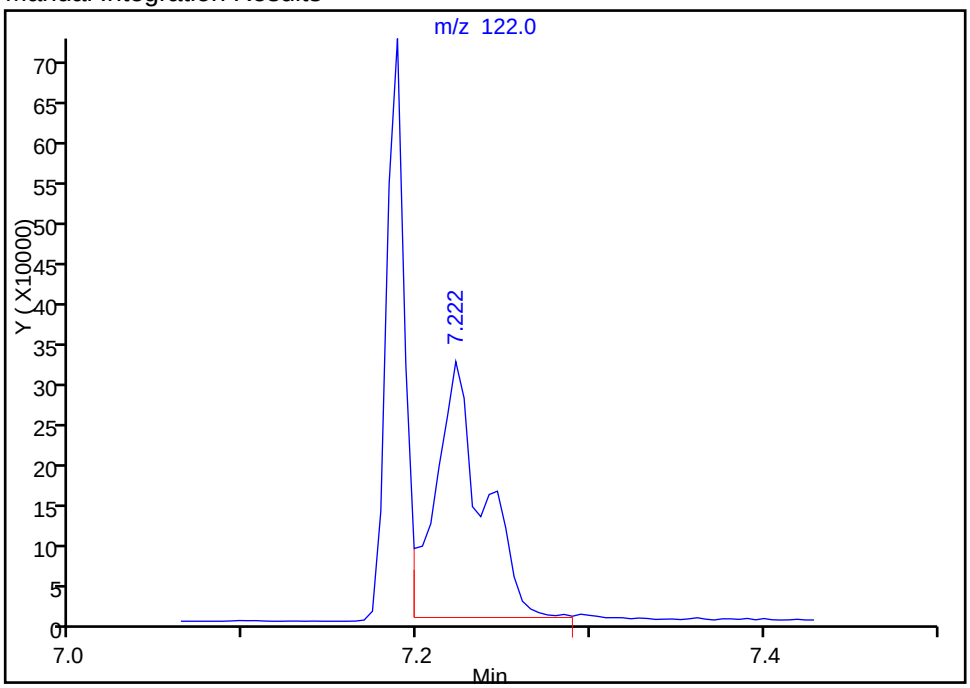
Processing Integration Results

RT: 7.25
Area: 193598
Amount: 3.157510
Amount Units: ng/ul



Manual Integration Results

RT: 7.22
Area: 605664
Amount: 9.878151
Amount Units: ng/ul



Reviewer: ulmanm, 20-May-2015 10:22:55
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-181588/20

Matrix: Solid | Lab File ID: 50520020.D

Analysis Method: 8270C | Date Collected:

Extract. Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 05/20/2015 17:51

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ng/uL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
83-32-9	Acenaphthene	5.15		0.00020	0.00010	0.000044
208-96-8	Acenaphthylene	4.98		0.00020	0.00010	0.000048
120-12-7	Anthracene	5.02		0.00020	0.00010	0.000088
56-55-3	Benzo[a]anthracene	4.90		0.00020	0.00010	0.000030
50-32-8	Benzo[a]pyrene	5.05		0.00020	0.00010	0.000051
205-99-2	Benzo[b]fluoranthene	5.01		0.00020	0.00010	0.000039
191-24-2	Benzo[g,h,i]perylene	5.46		0.00020	0.00010	0.000046
65-85-0	Benzoic acid	7.83	M	0.025	0.020	0.010
207-08-9	Benzo[k]fluoranthene	5.13		0.00020	0.00010	0.000045
100-51-6	Benzyl alcohol	4.73		0.0050	0.00050	0.00038
111-91-1	Bis(2-chloroethoxy)methane	5.04		0.0010	0.00050	0.00032
111-44-4	Bis(2-chloroethyl)ether	5.10		0.0010	0.00010	0.00010
108-60-1	bis (2-chloroisopropyl) ether	4.88		1.0	0.00050	0.00040
117-81-7	Bis(2-ethylhexyl) phthalate	5.21		0.0050	0.00050	0.0017
101-55-3	4-Bromophenyl phenyl ether	5.10		0.0020	0.00050	0.00022
85-68-7	Butyl benzyl phthalate	5.01		0.0020	0.00050	0.00026
86-74-8	Carbazole	4.75		0.0010	0.00050	0.00028
106-47-8	4-Chloroaniline	5.03		0.0020	0.00050	0.00021
59-50-7	4-Chloro-3-methylphenol	4.88		0.0020	0.00050	0.00021
91-58-7	2-Chloronaphthalene	4.92		0.0010	0.00050	0.00010
95-57-8	2-Chlorophenol	4.92		0.0010	0.00050	0.00029
7005-72-3	4-Chlorophenyl phenyl ether	5.06		0.0020	0.00050	0.00030
218-01-9	Chrysene	5.08		0.00020	0.00010	0.000050
53-70-3	Dibenz(a,h)anthracene	5.29		0.00020	0.00010	0.000045
132-64-9	Dibenzofuran	5.12		0.0010	0.00010	0.000020
95-50-1	1,2-Dichlorobenzene	5.00		0.0010	0.00050	0.00029
541-73-1	1,3-Dichlorobenzene	4.95		0.0010	0.00050	0.00023
106-46-7	1,4-Dichlorobenzene	5.08		0.0010	0.00050	0.00034
91-94-1	3,3'-Dichlorobenzidine	10.6		0.0050	0.0010	0.00037
120-83-2	2,4-Dichlorophenol	5.16		0.0020	0.00050	0.00019
84-66-2	Diethyl phthalate	5.29		0.0020	0.0010	0.00060
105-67-9	2,4-Dimethylphenol	5.07		0.0020	0.00050	0.00025
131-11-3	Dimethyl phthalate	5.15		0.0020	0.00050	0.00029
84-74-2	Di-n-butyl phthalate	5.29		0.0050	0.0010	0.0017

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-181588/20

Matrix: Solid | Lab File ID: 50520020.D

Analysis Method: 8270C | Date Collected:

Extract. Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 05/20/2015 17:51

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ng/uL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
534-52-1	4,6-Dinitro-2-methylphenol	5.07	^	0.0050	0.0040	0.0024
51-28-5	2,4-Dinitrophenol	3.78	^	0.0050	0.0010	0.00032
121-14-2	2,4-Dinitrotoluene	4.74		0.0050	0.00050	0.00025
606-20-2	2,6-Dinitrotoluene	4.79		0.0050	0.00050	0.00080
117-84-0	Di-n-octyl phthalate	5.05		0.0020	0.00050	0.00023
206-44-0	Fluoranthene	5.14		0.00020	0.00010	0.000045
86-73-7	Fluorene	5.06		0.00020	0.00010	0.000041
118-74-1	Hexachlorobenzene	5.16		0.00020	0.00010	0.000085
87-68-3	Hexachlorobutadiene	5.27		0.0010	0.00050	0.00027
77-47-4	Hexachlorocyclopentadiene	3.25	^	0.010	0.00050	0.00024
67-72-1	Hexachloroethane	4.59		0.0010	0.00050	0.00019
193-39-5	Indeno[1,2,3-cd]pyrene	5.52		0.00020	0.00010	0.000043
78-59-1	Isophorone	5.09		0.0010	0.00050	0.00027
91-57-6	2-Methylnaphthalene	5.12		0.00020	0.00010	0.000090
95-48-7	2-Methylphenol	4.91		0.0010	0.00050	0.00017
15831-10-4	3 & 4 Methylphenol	4.85		0.0020	0.0010	0.00080
91-20-3	Naphthalene	5.16		0.00020	0.00010	0.000063
88-74-4	2-Nitroaniline	4.41		0.0020	0.00050	0.00021
99-09-2	3-Nitroaniline	4.77		0.0020	0.00050	0.00028
100-01-6	4-Nitroaniline	4.59		0.0020	0.00050	0.00022
98-95-3	Nitrobenzene	4.89		0.0010	0.00010	0.000040
88-75-5	2-Nitrophenol	4.47		0.0020	0.00050	0.00028
100-02-7	4-Nitrophenol	8.39		0.0050	0.0040	0.00029
621-64-7	N-Nitrosodi-n-propylamine	4.90		0.0010	0.00050	0.00024
86-30-6	N-Nitrosodiphenylamine	10.1		0.0010	0.00050	0.00031
87-86-5	Pentachlorophenol	9.37		0.0050	0.0010	0.00027
85-01-8	Phenanthrene	4.99		0.00020	0.00010	0.000062
108-95-2	Phenol	4.85		0.0010	0.0010	0.00060
129-00-0	Pyrene	4.97		0.00020	0.00010	0.000042
120-82-1	1,2,4-Trichlorobenzene	5.20		0.0010	0.00050	0.00028
95-95-4	2,4,5-Trichlorophenol	4.85		0.0050	0.00050	0.00030
88-06-2	2,4,6-Trichlorophenol	5.00		0.0050	0.00050	0.00024

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-181588/20

Matrix: Solid | Lab File ID: 50520020.D

Analysis Method: 8270C | Date Collected:

Extract. Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 05/20/2015 17:51

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ng/uL

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	103		50-150
367-12-4	2-Fluorophenol (Surr)	94		50-150
4165-60-0	Nitrobenzene-d5 (Surr)	99		50-150
4165-62-2	Phenol-d5 (Surr)	96		50-150
1718-51-0	Terphenyl-d14 (Surr)	99		50-150
118-79-6	2,4,6-Tribromophenol (Surr)	104		50-150

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520020.D
Lims ID: mrl qccl
Client ID:
Sample Type: MRL
Inject. Date: 20-May-2015 17:51:30 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043844-020
Misc. Info.: MRL QCCLMRL QCCL
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-May-2015 08:02:18 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 20-May-2015 18:41:44

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.412	6.411	0.001	97	330847	4.00	4.00	
* 2 Naphthalene-d8	136	7.527	7.527	0.000	99	1351917	4.00	4.00	
* 3 Acenaphthene-d10	164	9.033	9.037	-0.004	90	641674	4.00	4.00	
* 4 Phenanthrene-d10	188	10.307	10.311	-0.004	96	982483	4.00	4.00	
* 5 Chrysene-d12	240	12.620	12.619	0.001	92	871974	4.00	4.00	
* 6 Perylene-d12	264	14.428	14.437	-0.009	90	682208	4.00	4.00	
$ 7 2-Fluorophenol	112	5.195	5.199	-0.004	92	675464	5.00	4.72	
$ 8 Phenol-d5	99	6.041	6.046	-0.005	93	928744	5.00	4.81	
$ 9 Nitrobenzene-d5	82	6.883	6.887	-0.004	87	686270	5.00	4.96	
$ 10 2-Fluorobiphenyl (Surr)	172	8.431	8.431	0.000	99	944394	5.00	5.16	
$ 11 2,4,6-Tribromophenol	330	9.706	9.710	-0.004	89	87754	5.00	5.21	
$ 12 Terphenyl-d14	244	11.634	11.638	-0.004	97	830353	5.00	4.96	
25 1,4-Dioxane	88	3.156	3.151	0.005	92	348506	5.00	4.66	M
26 N-Nitrosodimethylamine	74	3.618	3.617	0.001	84	557940	5.00	4.83	
27 Pyridine	79	3.676	3.675	0.001	99	959195	5.00	4.80	M
20 Dimethylformamide	73		3.978					ND	
28 Ethyl methacrylate	69		4.089					ND	
31 2-Picoline	93		4.374					ND	
32 N-Nitrosomethylethylamine	88		4.504					ND	
35 Acrylamide	71	4.772	4.778	-0.006	38	577		NC	
34 Methyl methanesulfonate	80		4.826					ND	
233 n,n'-Dimethylacetamide	44		4.993					ND	
36 N-Nitrosodiethylamine	102		5.254					ND	
37 Ethyl methanesulfonate	79		5.523					ND	
42 Phenylmercaptan	110		5.768					ND	
38 2-Methylcyclohexanone	68	5.883	5.820	0.063	1	182		NC	
39 3-Methylcyclohexanone	69	5.878	5.854	0.024	4	742		NC	
40 4-Methylcyclohexanone	55		5.902					ND	
41 Benzaldehyde	77	6.013	6.017	-0.004	98	1176456	10.0	9.94	
45 Pentachloroethane	167		6.019					ND	
43 Phenol	94	6.056	6.055	0.001	94	1022408	5.00	4.85	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
44 Aniline	93	6.109	6.108	0.001	98	1240321	5.00	4.81	
69 Bis(2-chloroethyl)ether	93	6.142	6.147	-0.005	96	848212	5.00	5.10	
46 2-Chlorophenol	128	6.224	6.228	-0.004	97	643814	5.00	4.92	
243 n-Decane	57	6.253	6.257	-0.004	91	923594	NC	NC	
47 1,3-Dichlorobenzene	146	6.368	6.368	0.000	97	632033	5.00	4.95	
232 1-Methyl-2-pyrrilidinone	99	6.412	6.421	-0.009	31	2649		NC	
48 1,4-Dichlorobenzene	146	6.426	6.426	0.000	94	655974	5.00	5.08	
49 Benzyl alcohol	108	6.508	6.507	0.001	97	500868	5.00	4.73	
50 1,2-Dichlorobenzene	146	6.570	6.570	0.000	97	614847	5.00	5.00	
56 N-Nitrosopyrrolidine	100		6.572					ND	
286 4-Methyl-1-cyclohexanemeth	55	6.566	6.574	-0.008	0	34596		NC	
51 2-Methylphenol	108	6.594	6.594	0.000	90	706576	5.00	4.91	
59 N-Nitrosomorpholine	56		6.605					ND	
53 2,2'-oxybis[1-chloropropan	45	6.623	6.628	-0.005	85	1054869	5.00	4.88	
60 2-Toluidine	106		6.639					ND	
52 Indene	115	6.647	6.647	0.000	90	2246819	10.0	10.1	
287 4-Methyl-1-cyclohexanemeth	55	6.720	6.708	0.012	0	26021		NC	
21 3 & 4 Methylphenol	108	6.720	6.724	-0.004	87	737021	5.00	4.85	
57 N-Nitrosodi-n-propylamine	70	6.734	6.738	-0.004	91	487842	5.00	4.90	
58 Acetophenone	105	6.744	6.748	-0.004	98	923341	5.00	4.91	
61 Hexachloroethane	117	6.873	6.878	-0.005	88	242023	5.00	4.59	
63 N-Nitrosopiperidine	114		6.884					ND	
62 Nitrobenzene	77	6.902	6.902	0.000	84	705545	5.00	4.89	
64 Isophorone	82	7.099	7.104	-0.005	98	1374495	5.00	5.09	
68 o,o',o''-Triethylphosphoro	198		7.105					ND	
67 1,3,5-Trichlorobenzene	180		7.123					ND	
66 2-Nitrophenol	139	7.181	7.185	-0.004	93	259278	5.00	4.47	
65 2,4-Dimethylphenol	107	7.186	7.190	-0.004	94	622574	5.00	5.07	
72 alpha,alpha-Dimethyl phene	58		7.216					ND	
71 Benzoic acid	122	7.215	7.238	-0.023	87	530978	10.0	7.83	M
70 Bis(2-chloroethoxy)methane	93	7.263	7.267	-0.004	99	882122	5.00	5.04	
73 2,4-Dichlorophenol	162	7.388	7.387	0.001	95	434776	5.00	5.16	
74 1,2,4-Trichlorobenzene	180	7.470	7.474	-0.004	94	447732	5.00	5.20	
78 Hexachloropropene	213		7.485					ND	
75 Naphthalene	128	7.547	7.546	0.001	94	1839686	5.00	5.16	
76 4-Chloroaniline	127	7.561	7.565	-0.004	95	822238	5.00	5.03	
77 2,6-Dichlorophenol	162	7.580	7.585	-0.005	96	420284	5.00	5.18	
80 1,2,3-Trichlorobenzene	180		7.590					ND	
79 Hexachlorobutadiene	225	7.648	7.652	-0.004	98	187967	5.00	5.27	
81 Benzothiazole	135		7.676					ND	
82 Quinoline	129		7.682					ND	
83 N-Nitrosodi-n-butylamine	84		7.697					ND	
85 p-Phenylene diamine	108		7.716					ND	
84 Caprolactam	113	7.835	7.849	-0.014	84	414382	10.0	10.2	
94 Safrole, Total	162		7.894					ND	
86 4-Chloro-3-methylphenol	107	7.955	7.955	0.000	96	528087	5.00	4.88	
87 2-Methylnaphthalene	142	8.133	8.138	-0.005	94	1113283	5.00	5.12	
225 Isosafrole Peak 1	162		8.144					ND	
90 1,2,3,5-Tetrachlorobenzene	216	8.282	8.191	0.091	96	340772		NC	
88 1-Methylnaphthalene	142	8.225	8.224	0.001	93	978417	5.00	5.18	
89 Hexachlorocyclopentadiene	237	8.278	8.282	-0.004	95	121785	5.00	3.25	
91 1,2,4,5-Tetrachlorobenzene	216	8.282	8.287	-0.005	98	340772	5.00	5.29	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
227 Isosafrole Peak 2	162	8.398	8.336	0.062	52	7977		NC	
92 2,4,6-Trichlorophenol	196	8.364	8.364	0.000	94	262928	5.00	5.00	
93 2,4,5-Trichlorophenol	196	8.398	8.402	-0.004	94	266337	5.00	4.85	
97 2,4-Toluene diamine	121		8.412					ND	
246 1-Chloronaphthalene	162	8.431	8.433	-0.002	50	396		NC	
99 1,2,3,4 -Tetrachlorobenzen	216		8.446					ND	
96 3,4-Dichloronitrobenzene	109		8.465					ND	
98 1,1'-Biphenyl	154	8.523	8.522	0.001	95	1230103	5.00	5.02	
101 Phenyl ether	170	8.431	8.523	-0.092	51	212639		NC	
103 1,4-Naphthoquinone	158		8.543					ND	
100 2-Chloronaphthalene	162	8.556	8.556	0.000	96	889624	5.00	4.92	
104 1,4-Dinitrobenzene	168		8.567					ND	
102 2-Nitroaniline	65	8.614	8.618	-0.004	85	314220	5.00	4.41	
105 Dimethyl phthalate	163	8.744	8.748	-0.004	98	950064	5.00	5.15	
106 1,3-Dinitrobenzene	168	8.778	8.782	-0.004	84	123852	5.00	4.17	
107 2,6-Dinitrotoluene	165	8.802	8.806	-0.004	94	199179	5.00	4.79	
109 Acenaphthylene	152	8.917	8.921	-0.004	100	1561900	5.00	4.98	
110 3-Nitroaniline	138	8.956	8.960	-0.004	94	291815	5.00	4.77	
115 Pentachlorobenzene	250		9.034					ND	
111 2,4-Dinitrophenol	184	9.042	9.046	-0.004	78	76293	10.0	3.78	
112 Acenaphthene	153	9.061	9.066	-0.005	94	927198	5.00	5.15	
113 4-Nitrophenol	109	9.066	9.070	-0.004	85	159534	10.0	8.39	
117 1-Naphthylamine	143		9.115					ND	
118 2,3,5,6-Tetrachlorophenol	232		9.120					ND	
114 2,4-Dinitrotoluene	165	9.153	9.157	-0.004	91	245422	5.00	4.74	
120 2-Naphthylamine	143		9.178					ND	
116 Dibenzofuran	168	9.206	9.210	-0.004	98	1250671	5.00	5.12	
122 Thionazin	97		9.269					ND	
119 2,3,4,6-Tetrachlorophenol	232	9.302	9.306	-0.004	75	205422	5.00	5.24	
124 N-Nitro-o-toluidine	152		9.332					ND	
121 Diethyl phthalate	149	9.340	9.345	-0.005	98	940063	5.00	5.29	
247 Hexadecane	57	9.345	9.349	-0.004	88	996682	NC	NC	
127 Tributyl phosphate	99		9.417					ND	
130 Diphenylamine	169		9.418					ND	
123 4-Chlorophenyl phenyl ethe	204	9.475	9.474	0.001	93	404502	5.00	5.06	
125 4-Nitroaniline	138	9.480	9.484	-0.004	84	242763	5.00	4.59	
126 Fluorene	166	9.499	9.503	-0.004	97	1004327	5.00	5.06	
297 Benzophenone	105	9.509	9.512	-0.003	49	64831		NC	
128 4,6-Dinitro-2-methylphenol	198	9.509	9.513	-0.004	88	118469	10.0	5.07	
134 Sulfotepp	202	9.475	9.519	-0.044	53	1820		NC	
131 N-Nitrosodiphenylamine	169	9.566	9.571	-0.005	98	1351369	10.0	10.1	
135 1,3,5-Trinitrobenzene	213		9.601					ND	
133 Azobenzene	77	9.610	9.614	-0.004	95	1362662	5.00	4.65	
132 1,2-Diphenylhydrazine	77	9.610	9.614	-0.004	97	1362533	5.00	4.65	
137 Phenacetin	108		9.649					ND	
228 Diallate Peak 1	86		9.659					ND	
138 Phorate	121		9.664					ND	
230 Diallate Peak 2	86		9.736					ND	
140 Dimethoate	87	9.893	9.803	0.090	50	1777		NC	
139 4-Bromophenyl phenyl ether	248	9.893	9.898	-0.005	73	209853	5.00	5.10	
129 4-Aminobiphenyl	169	9.893	9.962	-0.069	53	21395		NC	
141 Hexachlorobenzene	284	9.989	9.989	0.000	76	190750	5.00	5.16	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
144 Pronamide	173	9.989	9.991	-0.002	63	116601		NC	
142 Atrazine	200	9.989	9.994	-0.005	83	386383	10.0	10.6	
145 Pentachloronitrobenzene	237		10.000					ND	
146 Disulfoton	88	10.139	10.101	0.038	58	2951		NC	
147 Dinoseb	211		10.116					ND	
244 n-Octadecane	57	10.124	10.128	-0.004	77	1026318	NC	NC	
143 Pentachlorophenol	266	10.139	10.143	-0.004	91	251191	10.0	9.37	
148 Phenanthrene	178	10.331	10.330	0.001	97	1402206	5.00	4.99	
149 Anthracene	178	10.374	10.374	0.000	97	1428568	5.00	5.02	
152 Methyl parathion	109		10.428					ND	
151 Carbazole	167	10.485	10.489	-0.004	95	1221099	5.00	4.75	
153 Diphenylsulfone	125		10.672					ND	
154 Di-n-butyl phthalate	149	10.725	10.725	0.000	99	1597903	5.00	5.29	
155 Ethyl Parathion	97	10.677	10.746	-0.069	52	4734		NC	
156 4-Nitroquinoline-1-oxide	190		10.808					ND	
157 Methapyrilene	58		10.851					ND	
158 Isodrin	66		11.068					ND	
159 Fluoranthene	202	11.350	11.355	-0.005	97	1253590	5.00	5.14	
226 Aramite Peak 1	185		11.419					ND	
160 Benzidine	184	11.418	11.422	-0.004	99	1123478	10.0	7.32	
229 Aramite Peak 2	185	11.495	11.481	0.014	51	2495		NC	
161 Pyrene	202	11.552	11.557	-0.005	93	1313219	5.00	4.97	
163 p-Dimethylamino azobenzene	225		11.587					ND	
164 Chlorobenzilate	139		11.616					ND	
282 Kepone	272	11.870	11.764	0.106	1	63		NC	
167 Famphur	218		11.818					ND	
169 3,3'-Dimethylbenzidine	212		11.866					ND	
168 Butyl benzyl phthalate	149	12.009	12.013	-0.004	94	721275	5.00	5.01	
171 2-Acetylaminofluorene	181		12.087					ND	
174 4,4'-Methylene bis(2-chlor	231		12.337					ND	
172 3,3'-Dimethoxybenzidine	244		12.379					ND	
173 Bis(2-ethylhexyl) phthalat	149	12.500	12.504	-0.004	96	1050036	5.00	5.21	
175 3,3'-Dichlorobenzidine	252	12.533	12.538	-0.005	77	801058	10.0	10.6	
176 Hexabromobenzene	232	12.615	12.543	0.072	45	34806		NC	
177 Benzo[a]anthracene	228	12.605	12.610	-0.005	97	1205979	5.00	4.90	
178 Chrysene	228	12.644	12.648	-0.004	94	1139147	5.00	5.08	
179 6-Methylchrysene	242		12.895					ND	
180 Di-n-octyl phthalate	149	13.173	13.177	-0.004	99	1815523	5.00	5.05	
181 7,12-Dimethylbenz(a)anthra	256		13.559					ND	
281 Hexachlorophene	196	13.654	13.628	0.026	0	133		NC	
182 Benzo[b]fluoranthene	252	13.865	13.870	-0.005	94	1054410	5.00	5.01	
183 Benzo[k]fluoranthene	252	13.899	13.903	-0.004	93	1101735	5.00	5.13	
184 Benzo[a]pyrene	252	14.346	14.355	-0.009	88	1017223	5.00	5.05	
185 3-Methylcholanthrene	268		14.535					ND	
187 Dibenz[a,h]acridine	279		15.453					ND	
186 Dibenz[a,j]acridine	279		15.746					ND	
188 Indeno[1,2,3-cd]pyrene	276	16.414	16.423	-0.009	88	1037975	5.00	5.52	
189 Dibenz(a,h)anthracene	278	16.419	16.428	-0.009	80	837072	5.00	5.29	
190 Benzo[g,h,i]perylene	276	17.020	17.039	-0.019	85	856950	5.00	5.46	
268 Endrin	1		0.000					ND	
291 Dipropylene Glycol Phenyl	1		0.000					ND	
264 alpha-BHC	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
267 2,6-Diaminotoluene	1		0.000					ND	
270 Toxaphene	1		0.000					ND	
294 Dowanol Peak 3	1		0.000					ND	
290 1-Phenoxy-2-propanol TIC	1		0.000					ND	
275 Dieldrin	1		0.000					ND	
299 Diisobutyl phthalate TIC	1		0.000					ND	
272 2,3-Dinitrotoluene	1		0.000					ND	
262 Isoquinoline	1		0.000					ND	
250 gamma-BHC (Lindane)	1		0.000					ND	
258 Aldrin	1		0.000					ND	
277 Chlorpyrifos	1		0.000					ND	
283 2-Ethoxyethanol	1		0.000					ND	
293 Dowanol Peak 4	1		0.000					ND	
273 3 & 4 Chlorophenol	1		0.000					ND	
259 o-Phenylphenol	1		0.000					ND	
260 Methoxychlor	1		0.000					ND	
251 Endosulfan sulfate	1		0.000					ND	
278 delta-BHC	1		0.000					ND	
252 4-tert-Butylphenol	1		0.000					ND	
253 Endrin aldehyde	1		0.000					ND	
257 Endosulfan I	1		0.000					ND	
261 Endosulfan II	1		0.000					ND	
274 Dibenz(a,i)pyrene	1		0.000					ND	
289 1-Phenoxy-2-propanol	1		0.000					ND	
266 Heptachlor	1		0.000					ND	
292 Dowanol Peak 2	1		0.000					ND	
269 Dibenzo[a,e]pyrene	1		0.000					ND	
271 3 & 4 Phenoxyphenol	1		0.000					ND	
265 Dibenzo[a,h]pyrene	1		0.000					ND	
276 Chlordane (technical)	1		0.000					ND	
249 4-Chlorophenol TIC	1		0.000					ND	
254 2-Chloroaniline	1		0.000					ND	
255 beta-BHC	1		0.000					ND	
285 Chlorobenzene TIC	1		0.000					ND	
279 3,4-Dichloroaniline	1		0.000					ND	
263 Heptachlor epoxide	1		0.000					ND	
150 DFTPP									
166 4,4'-DDE	246		11.583					ND	
165 4,4'-DDD	235	12.129	11.871	0.258	53	715		NR	7
170 4,4'-DDT	235	12.129	12.136	-0.007	58	715		NR	7
S 95 Isosafrole	162		5.568					ND	
S 288 4-Methyl-1-cyclohexanemeth	55		6.400					ND	
S 136 Diallate	86		6.701					ND	
S 162 Aramite, Total	185		8.271					ND	
S 295 Dowanol	1		0.000					ND	
S 296 Dowanol Peak 1	1		0.000					ND	
S 191 Methyl Phenols,Total	100				0			9.77	
S 245 Total Cresols	100				0			9.77	
T 240 Trimethyl phosphate TIC	110	5.200	5.000	0.200	0	3141		0	
T 194 Decane TIC	142	6.253	5.800	0.453	81	923644		0	
T 193 Hexamethylphosphoramide TI	135	6.594	6.500	0.094	1	678		0	
T 234 2-Isopropylphenol TIC	121	7.234	7.250	-0.016	0	915		0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
T 235 4-isopropylphenol TIC	121	7.373	7.364	0.009	0	364		0	
T 236 3-isopropylphenol TIC	121	7.373	7.364	0.009	0	364		0	
T 300 Alpha-Terpineol TIC	59	7.527	7.500	0.027	0	853		0	
T 237 3-(1,1-Dimethylethyl Pheno	135	7.715	7.720	-0.005	1	191		0	
T 231 2,3,7,8-TCDD	322	9.542	8.847	0.692	1	45		0	
T 195 Hydroquinone TIC	110	8.994	9.000	-0.006	1	213		0	
T 192 Octadecane (TIC)	254	10.124	9.600	0.524	94	1026318		0	
T 242 Triphenyl Phosphate TIC	326	11.976	11.995	-0.024	0	99		0	
T 196 Kepone TIC	272	10.139	11.995	-1.861	1	7407		0.0340	
T 241 Tricresyl phosphate TIC	368	12.504	12.495	0.004	0	73		0	
T 280 2,3,7,8-TCDD TIC	198	12.533	12.495	0.033	0	3309		0	
T 248 2,3,7,8 TCDF TIC	304	12.759	12.995	-0.241	0	45		0	
T 197 Hexachlorophene TIC	198		13.600					ND	
T 239 Tris(2,3-dibromopropyl)pho	201	13.981	13.991	-0.019	0	290		0	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

NC - Not Calibrated

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L5 W_00006 Amount Added: 1.00 Units: mL

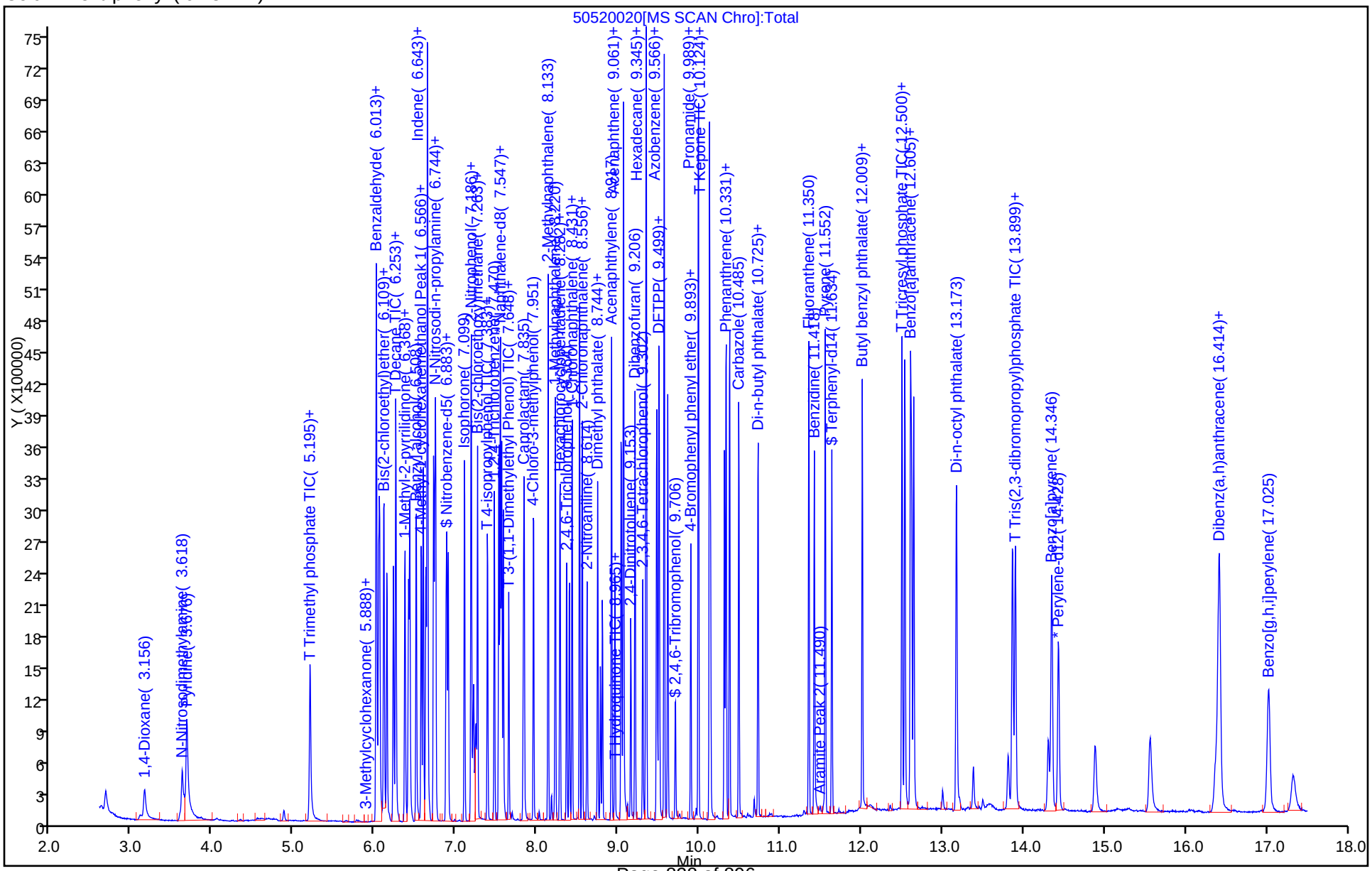
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TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520020.D

Injection Date:	20-May-2015 17:51:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	mrl qccl			Worklist Smp#:	20
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

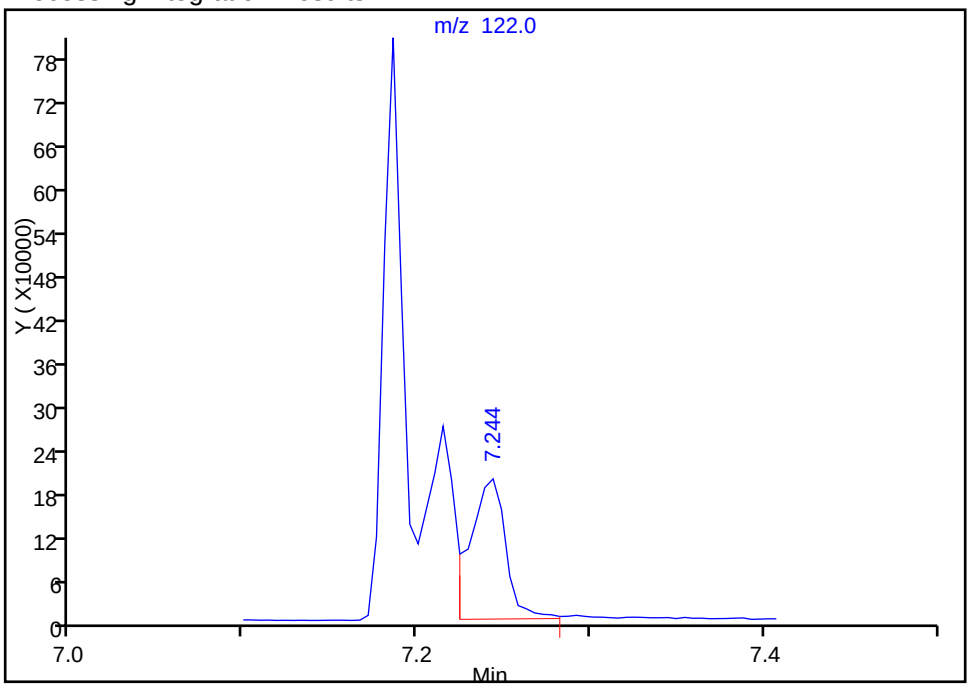
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520020.D
Injection Date: 20-May-2015 17:51:30 Instrument ID: A4HP9
Lims ID: mrl qccl
Client ID:
Operator ID: 001574 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

71 Benzoic acid, CAS: 65-85-0

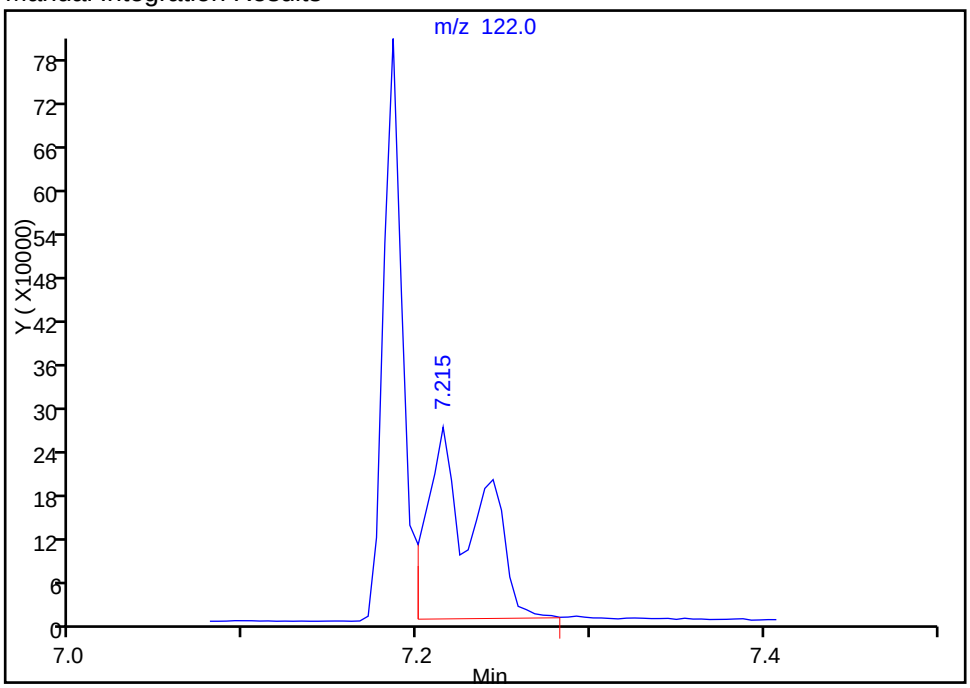
Processing Integration Results

RT: 7.24
Area: 277036
Amount: 4.084073
Amount Units: ng/ul



Manual Integration Results

RT: 7.21
Area: 530978
Amount: 7.827693
Amount Units: ng/ul



Reviewer: ulmanm, 20-May-2015 18:41:44
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-181781/3

Matrix: Solid | Lab File ID: 50521003.D

Analysis Method: 8270C | Date Collected:

Extract. Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 05/21/2015 08:20

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181781 | Units: ng/uL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
83-32-9	Acenaphthene	5.12		0.00020	0.00010	0.000044
208-96-8	Acenaphthylene	4.99		0.00020	0.00010	0.000048
120-12-7	Anthracene	5.02		0.00020	0.00010	0.000088
56-55-3	Benzo[a]anthracene	4.93		0.00020	0.00010	0.000030
50-32-8	Benzo[a]pyrene	5.15		0.00020	0.00010	0.000051
205-99-2	Benzo[b]fluoranthene	5.15		0.00020	0.00010	0.000039
191-24-2	Benzo[g,h,i]perylene	5.73		0.00020	0.00010	0.000046
65-85-0	Benzoic acid	10.5	M	0.025	0.020	0.010
207-08-9	Benzo[k]fluoranthene	5.04		0.00020	0.00010	0.000045
100-51-6	Benzyl alcohol	4.99		0.0050	0.00050	0.00038
111-91-1	Bis(2-chloroethoxy)methane	5.06		0.0010	0.00050	0.00032
111-44-4	Bis(2-chloroethyl)ether	5.32		0.0010	0.00010	0.00010
108-60-1	bis (2-chloroisopropyl) ether	4.72		1.0	0.00050	0.00040
117-81-7	Bis(2-ethylhexyl) phthalate	5.35		0.0050	0.00050	0.0017
101-55-3	4-Bromophenyl phenyl ether	5.10		0.0020	0.00050	0.00022
85-68-7	Butyl benzyl phthalate	5.23		0.0020	0.00050	0.00026
86-74-8	Carbazole	4.98		0.0010	0.00050	0.00028
106-47-8	4-Chloroaniline	5.27		0.0020	0.00050	0.00021
59-50-7	4-Chloro-3-methylphenol	5.03		0.0020	0.00050	0.00021
91-58-7	2-Chloronaphthalene	5.01		0.0010	0.00050	0.00010
95-57-8	2-Chlorophenol	5.11		0.0010	0.00050	0.00029
7005-72-3	4-Chlorophenyl phenyl ether	5.08		0.0020	0.00050	0.00030
218-01-9	Chrysene	5.15		0.00020	0.00010	0.000050
53-70-3	Dibenz(a,h)anthracene	5.47		0.00020	0.00010	0.000045
132-64-9	Dibenzofuran	5.10		0.0010	0.00010	0.000020
95-50-1	1,2-Dichlorobenzene	5.25		0.0010	0.00050	0.00029
541-73-1	1,3-Dichlorobenzene	5.13		0.0010	0.00050	0.00023
106-46-7	1,4-Dichlorobenzene	5.24		0.0010	0.00050	0.00034
91-94-1	3,3'-Dichlorobenzidine	10.5		0.0050	0.0010	0.00037
120-83-2	2,4-Dichlorophenol	5.27		0.0020	0.00050	0.00019
84-66-2	Diethyl phthalate	5.20		0.0020	0.0010	0.00060
105-67-9	2,4-Dimethylphenol	5.02		0.0020	0.00050	0.00025
131-11-3	Dimethyl phthalate	5.26		0.0020	0.00050	0.00029
84-74-2	Di-n-butyl phthalate	5.59		0.0050	0.0010	0.0017

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-181781/3

Matrix: Solid | Lab File ID: 50521003.D

Analysis Method: 8270C | Date Collected:

Extract. Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 05/21/2015 08:20

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181781 | Units: ng/uL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
534-52-1	4,6-Dinitro-2-methylphenol	9.77		0.0050	0.0040	0.0024
51-28-5	2,4-Dinitrophenol	9.28		0.0050	0.0010	0.00032
121-14-2	2,4-Dinitrotoluene	5.63		0.0050	0.00050	0.00025
606-20-2	2,6-Dinitrotoluene	5.53		0.0050	0.00050	0.00080
117-84-0	Di-n-octyl phthalate	5.13		0.0020	0.00050	0.00023
206-44-0	Fluoranthene	5.29		0.00020	0.00010	0.000045
86-73-7	Fluorene	5.14		0.00020	0.00010	0.000041
118-74-1	Hexachlorobenzene	5.10		0.00020	0.00010	0.000085
87-68-3	Hexachlorobutadiene	5.18		0.0010	0.00050	0.00027
77-47-4	Hexachlorocyclopentadiene	4.63		0.010	0.00050	0.00024
67-72-1	Hexachloroethane	4.92		0.0010	0.00050	0.00019
193-39-5	Indeno[1,2,3-cd]pyrene	5.67		0.00020	0.00010	0.000043
78-59-1	Isophorone	5.00		0.0010	0.00050	0.00027
91-57-6	2-Methylnaphthalene	5.22		0.00020	0.00010	0.000090
95-48-7	2-Methylphenol	5.11		0.0010	0.00050	0.00017
15831-10-4	3 & 4 Methylphenol	5.00		0.0020	0.0010	0.00080
91-20-3	Naphthalene	5.15		0.00020	0.00010	0.000063
88-74-4	2-Nitroaniline	4.85		0.0020	0.00050	0.00021
99-09-2	3-Nitroaniline	5.20		0.0020	0.00050	0.00028
100-01-6	4-Nitroaniline	5.00		0.0020	0.00050	0.00022
98-95-3	Nitrobenzene	4.96		0.0010	0.00010	0.000040
88-75-5	2-Nitrophenol	5.15		0.0020	0.00050	0.00028
100-02-7	4-Nitrophenol	9.85		0.0050	0.0040	0.00029
621-64-7	N-Nitrosodi-n-propylamine	4.92		0.0010	0.00050	0.00024
86-30-6	N-Nitrosodiphenylamine	10.5		0.0010	0.00050	0.00031
87-86-5	Pentachlorophenol	9.50		0.0050	0.0010	0.00027
85-01-8	Phenanthrene	5.10		0.00020	0.00010	0.000062
108-95-2	Phenol	4.93		0.0010	0.0010	0.00060
129-00-0	Pyrene	5.10		0.00020	0.00010	0.000042
120-82-1	1,2,4-Trichlorobenzene	5.27		0.0010	0.00050	0.00028
95-95-4	2,4,5-Trichlorophenol	5.08		0.0050	0.00050	0.00030
88-06-2	2,4,6-Trichlorophenol	5.07		0.0050	0.00050	0.00024

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-181781/3

Matrix: Solid | Lab File ID: 50521003.D

Analysis Method: 8270C | Date Collected:

Extract. Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 05/21/2015 08:20

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181781 | Units: ng/uL

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	102		50-150
367-12-4	2-Fluorophenol (Surr)	100		50-150
4165-60-0	Nitrobenzene-d5 (Surr)	100		50-150
4165-62-2	Phenol-d5 (Surr)	100		50-150
1718-51-0	Terphenyl-d14 (Surr)	100		50-150
118-79-6	2,4,6-Tribromophenol (Surr)	102		50-150

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150521-43883.b\50521003.D
Lims ID: mrl qc
Client ID:
Sample Type: MRL
Inject. Date: 21-May-2015 08:20:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043883-003
Misc. Info.: MRL QCMRL QC
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150521-43883.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-May-2015 14:54:07 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 21-May-2015 09:10:03

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.398	6.397	0.001	96	281817	4.00	4.00	
* 2 Naphthalene-d8	136	7.513	7.513	0.000	99	1189273	4.00	4.00	
* 3 Acenaphthene-d10	164	9.023	9.023	0.000	88	565062	4.00	4.00	
* 4 Phenanthrene-d10	188	10.293	10.297	-0.004	95	833907	4.00	4.00	
* 5 Chrysene-d12	240	12.601	12.601	0.000	93	745063	4.00	4.00	
* 6 Perylene-d12	264	14.399	14.404	-0.005	85	576359	4.00	4.00	
$ 7 2-Fluorophenol	112	5.181	5.181	0.000	90	611714	5.00	5.02	
$ 8 Phenol-d5	99	6.032	6.032	0.000	80	823364	5.00	5.01	
$ 9 Nitrobenzene-d5	82	6.874	6.874	0.000	86	608731	5.00	5.00	
$ 10 2-Fluorobiphenyl (Surr)	172	8.417	8.417	0.000	98	823593	5.00	5.11	
$ 11 2,4,6-Tribromophenol	330	9.692	9.692	0.000	85	75772	5.00	5.11	
$ 12 Terphenyl-d14	244	11.620	11.620	0.000	97	714824	5.00	5.00	
25 1,4-Dioxane	88	3.108	3.108	0.000	88	290499	5.00	4.56	M
26 N-Nitrosodimethylamine	74	3.584	3.584	0.000	75	457254	5.00	4.65	M
27 Pyridine	79	3.642	3.642	0.000	96	804070	5.00	4.72	
20 Dimethylformamide	73		3.978					ND	
28 Ethyl methacrylate	69		4.089					ND	
31 2-Picoline	93		4.374					ND	
32 N-Nitrosomethylethylamine	88		4.504					ND	
35 Acrylamide	71	4.864	4.778	0.086	1	212		NC	
34 Methyl methanesulfonate	80		4.826					ND	
233 n,n'-Dimethylacetamide	44		4.993					ND	
36 N-Nitrosodiethylamine	102		5.254					ND	
37 Ethyl methanesulfonate	79		5.523					ND	
42 Phenylmercaptan	110		5.768					ND	
38 2-Methylcyclohexanone	68	5.816	5.820	-0.004	11	277		NC	
39 3-Methylcyclohexanone	69	5.859	5.854	0.005	1	432		NC	
40 4-Methylcyclohexanone	55	5.825	5.902	-0.077	3	1186		NC	
41 Benzaldehyde	77	5.998	6.003	-0.005	94	1002874	10.0	9.95	
45 Pentachloroethane	167		6.019					ND	
43 Phenol	94	6.042	6.046	-0.004	86	886723	5.00	4.93	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
44 Aniline	93	6.095	6.095	0.000	98	1070148	5.00	4.88	
69 Bis(2-chloroethyl)ether	93	6.133	6.133	0.000	92	752454	5.00	5.32	
46 2-Chlorophenol	128	6.210	6.215	-0.005	97	569276	5.00	5.11	
243 n-Decane	57	6.244	6.244	0.000	91	762312	NC	NC	
47 1,3-Dichlorobenzene	146	6.354	6.354	0.000	97	557972	5.00	5.13	
48 1,4-Dichlorobenzene	146	6.412	6.417	-0.005	94	577001	5.00	5.24	
232 1-Methyl-2-pyrrilidinone	99	6.402	6.421	-0.019	5	2595		NC	
49 Benzyl alcohol	108	6.494	6.494	0.000	96	450092	5.00	4.99	
50 1,2-Dichlorobenzene	146	6.556	6.556	0.000	96	549520	5.00	5.25	
56 N-Nitrosopyrrolidine	100		6.572					ND	
286 4-Methyl-1-cyclohexanemeth	55	6.580	6.574	0.006	0	13216		NC	
51 2-Methylphenol	108	6.580	6.580	0.000	73	625613	5.00	5.11	
59 N-Nitrosomorpholine	56		6.605					ND	
53 2,2'-oxybis[1-chloropropan	45	6.614	6.614	0.000	86	867745	5.00	4.72	
52 Indene	115	6.633	6.633	0.000	80	1946084	10.0	10.3	
60 2-Toluidine	106		6.639					ND	
287 4-Methyl-1-cyclohexanemeth	55	6.710	6.708	0.002	0	22184		NC	
21 3 & 4 Methylphenol	108	6.710	6.710	0.000	87	646362	5.00	5.00	
57 N-Nitrosodi-n-propylamine	70	6.725	6.724	0.000	91	416633	5.00	4.92	
58 Acetophenone	105	6.734	6.734	0.000	77	823961	5.00	5.14	
61 Hexachloroethane	117	6.864	6.864	0.000	81	220736	5.00	4.92	
63 N-Nitrosopiperidine	114		6.884					ND	
62 Nitrobenzene	77	6.888	6.893	-0.005	78	628479	5.00	4.96	
64 Isophorone	82	7.090	7.090	0.000	96	1188122	5.00	5.00	
68 o,o',o''-Triethylphosphoro	198		7.105					ND	
67 1,3,5-Trichlorobenzene	180		7.123					ND	
66 2-Nitrophenol	139	7.167	7.172	-0.005	92	262638	5.00	5.15	
65 2,4-Dimethylphenol	107	7.177	7.177	0.001	93	541747	5.00	5.02	
72 alpha,alpha-Dimethyl phene	58		7.216					ND	
71 Benzoic acid	122	7.215	7.234	-0.019	56	629470	10.0	10.5	M
70 Bis(2-chloroethoxy)methane	93	7.253	7.253	0.000	93	779440	5.00	5.06	
73 2,4-Dichlorophenol	162	7.374	7.374	0.000	95	390591	5.00	5.27	
74 1,2,4-Trichlorobenzene	180	7.460	7.460	0.000	91	399195	5.00	5.27	
78 Hexachloropropene	213		7.485					ND	
75 Naphthalene	128	7.532	7.532	0.000	95	1615809	5.00	5.15	
76 4-Chloroaniline	127	7.552	7.552	0.000	42	758345	5.00	5.27	
77 2,6-Dichlorophenol	162	7.571	7.571	0.000	60	370154	5.00	5.18	
80 1,2,3-Trichlorobenzene	180		7.590					ND	
79 Hexachlorobutadiene	225	7.638	7.638	0.000	96	162542	5.00	5.18	
81 Benzothiazole	135		7.676					ND	
82 Quinoline	129		7.682					ND	
83 N-Nitrosodi-n-butylamine	84		7.697					ND	
85 p-Phenylene diamine	108		7.716					ND	
84 Caprolactam	113	7.826	7.835	-0.009	83	368772	10.0	10.3	
94 Safrole, Total	162		7.894					ND	
86 4-Chloro-3-methylphenol	107	7.941	7.946	-0.005	92	479371	5.00	5.03	
87 2-Methylnaphthalene	142	8.124	8.124	0.000	91	997779	5.00	5.22	
225 Isosafrole Peak 1	162		8.144					ND	
90 1,2,3,5-Tetrachlorobenzene	216	8.268	8.191	0.077	92	287140		NC	
88 1-Methylnaphthalene	142	8.210	8.210	0.000	90	871935	5.00	5.24	
89 Hexachlorocyclopentadiene	237	8.263	8.268	-0.005	91	152893	5.00	4.63	
91 1,2,4,5-Tetrachlorobenzene	216	8.268	8.273	-0.005	92	287140	5.00	5.07	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
227 Isosafrole Peak 2	162		8.336					ND	
92 2,4,6-Trichlorophenol	196	8.350	8.350	0.000	94	234798	5.00	5.07	
93 2,4,5-Trichlorophenol	196	8.384	8.388	-0.004	93	245748	5.00	5.08	
97 2,4-Toluene diamine	121		8.412					ND	
246 1-Chloronaphthalene	162	8.350	8.433	-0.083	51	22695		NC	
99 1,2,3,4 -Tetrachlorobenzen	216		8.446					ND	
96 3,4-Dichloronitrobenzene	109		8.465					ND	
98 1,1'-Biphenyl	154	8.509	8.509	0.000	95	1095452	5.00	5.08	
101 Phenyl ether	170		8.523					ND	
100 2-Chloronaphthalene	162	8.542	8.542	0.000	96	798550	5.00	5.01	
103 1,4-Naphthoquinone	158		8.543					ND	
104 1,4-Dinitrobenzene	168		8.567					ND	
102 2-Nitroaniline	65	8.600	8.605	-0.005	82	304081	5.00	4.85	
105 Dimethyl phthalate	163	8.735	8.735	0.000	98	853799	5.00	5.26	
106 1,3-Dinitrobenzene	168	8.768	8.768	0.000	86	137359	5.00	5.25	
107 2,6-Dinitrotoluene	165	8.792	8.792	0.000	67	202814	5.00	5.53	
109 Acenaphthylene	152	8.903	8.903	0.000	97	1377732	5.00	4.99	
110 3-Nitroaniline	138	8.946	8.946	0.000	95	280360	5.00	5.20	
111 2,4-Dinitrophenol	184	9.033	9.033	0.000	81	164825	10.0	9.28	
115 Pentachlorobenzene	250		9.034					ND	
112 Acenaphthene	153	9.052	9.052	0.000	95	812707	5.00	5.12	
113 4-Nitrophenol	109	9.052	9.057	-0.005	48	164915	10.0	9.85	
117 1-Naphthylamine	143		9.115					ND	
118 2,3,5,6-Tetrachlorophenol	232		9.120					ND	
114 2,4-Dinitrotoluene	165	9.143	9.143	0.000	92	256603	5.00	5.63	
120 2-Naphthylamine	143		9.178					ND	
116 Dibenzofuran	168	9.191	9.196	-0.005	90	1096721	5.00	5.10	
122 Thionazin	97		9.269					ND	
119 2,3,4,6-Tetrachlorophenol	232	9.288	9.292	-0.004	76	180919	5.00	5.24	
121 Diethyl phthalate	149	9.326	9.331	-0.005	97	813716	5.00	5.20	
124 N-Nitro-o-toluidine	152		9.332					ND	
247 Hexadecane	57	9.336	9.336	0.000	86	821118	NC	NC	
127 Tributyl phosphate	99		9.417					ND	
130 Diphenylamine	169		9.418					ND	
123 4-Chlorophenyl phenyl ethe	204	9.461	9.461	0.000	92	357706	5.00	5.08	
125 4-Nitroaniline	138	9.466	9.470	-0.004	82	232833	5.00	5.00	
126 Fluorene	166	9.490	9.490	0.000	97	898669	5.00	5.14	
128 4,6-Dinitro-2-methylphenol	198	9.499	9.499	0.000	85	203828	10.0	9.77	
297 Benzophenone	105	9.595	9.512	0.083	56	250269		NC	
134 Sulfotepp	202		9.519					ND	
131 N-Nitrosodiphenylamine	169	9.552	9.557	-0.005	98	1194626	10.0	10.5	
133 Azobenzene	77	9.595	9.600	-0.005	95	1223399	5.00	4.92	
132 1,2-Diphenylhydrazine	77	9.595	9.600	-0.005	98	1223460	5.00	4.92	
135 1,3,5-Trinitrobenzene	213		9.601					ND	
137 Phenacetin	108		9.649					ND	
228 Diallate Peak 1	86		9.659					ND	
138 Phorate	121		9.664					ND	
230 Diallate Peak 2	86		9.736					ND	
140 Dimethoate	87		9.803					ND	
139 4-Bromophenyl phenyl ether	248	9.884	9.884	0.000	65	178015	5.00	5.10	
129 4-Aminobiphenyl	169		9.962					ND	
141 Hexachlorobenzene	284	9.975	9.975	0.000	68	160060	5.00	5.10	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
142 Atrazine	200	9.975	9.980	-0.005	81	337598	10.0	10.9	
144 Pronamide	173		9.991					ND	
145 Pentachloronitrobenzene	237		10.000					ND	
146 Disulfoton	88		10.101					ND	
244 n-Octadecane	57	10.110	10.115	-0.005	72	840388	NC	NC	
147 Dinoseb	211		10.116					ND	
143 Pentachlorophenol	266	10.124	10.124	0.000	85	216142	10.0	9.50	
148 Phenanthrene	178	10.317	10.317	0.000	95	1218380	5.00	5.10	
149 Anthracene	178	10.360	10.360	0.000	97	1214473	5.00	5.02	
152 Methyl parathion	109		10.428					ND	
151 Carbazole	167	10.471	10.475	-0.004	82	1086630	5.00	4.98	
153 Diphenylsulfone	125		10.672					ND	
154 Di-n-butyl phthalate	149	10.711	10.711	0.000	100	1431440	5.00	5.59	
155 Ethyl Parathion	97		10.746					ND	
156 4-Nitroquinoline-1-oxide	190		10.808					ND	
157 Methapyrilene	58		10.851					ND	
158 Isodrin	66		11.068					ND	
159 Fluoranthene	202	11.336	11.336	0.000	97	1094760	5.00	5.29	
160 Benzidine	184	11.403	11.403	0.000	99	907154	10.0	6.95	
226 Aramite Peak 1	185		11.419					ND	
229 Aramite Peak 2	185		11.481					ND	
161 Pyrene	202	11.538	11.538	0.000	93	1152706	5.00	5.10	
163 p-Dimethylamino azobenzene	225		11.587					ND	
164 Chlorobenzilate	139		11.616					ND	
282 Kepone	272		11.764					ND	
167 Famphur	218		11.818					ND	
169 3,3'-Dimethylbenzidine	212		11.866					ND	
168 Butyl benzyl phthalate	149	11.995	11.995	0.000	94	643605	5.00	5.23	
171 2-Acetylaminofluorene	181		12.087					ND	
174 4,4'-Methylene bis(2-chlor	231		12.337					ND	
172 3,3'-Dimethoxybenzidine	244		12.379					ND	
173 Bis(2-ethylhexyl) phthalat	149	12.485	12.485	0.000	96	921539	5.00	5.35	
175 3,3'-Dichlorobenzidine	252	12.519	12.519	0.000	60	682725	10.0	10.5	
176 Hexabromobenzene	232	12.601	12.543	0.058	1	29512		NC	
177 Benzo[a]anthracene	228	12.586	12.591	-0.005	96	1038136	5.00	4.93	
178 Chrysene	228	12.625	12.630	-0.005	91	985799	5.00	5.15	
179 6-Methylchrysene	242		12.895					ND	
180 Di-n-octyl phthalate	149	13.154	13.154	0.000	99	1557629	5.00	5.13	
181 7,12-Dimethylbenz(a)anthra	256		13.559					ND	
281 Hexachlorophene	196	13.644	13.628	0.016	0	222		NC	
182 Benzo[b]fluoranthene	252	13.837	13.842	-0.005	88	914836	5.00	5.15	
183 Benzo[k]fluoranthene	252	13.870	13.875	-0.005	92	914722	5.00	5.04	
184 Benzo[a]pyrene	252	14.318	14.322	-0.004	86	876403	5.00	5.15	
185 3-Methylcholanthrene	268		14.535					ND	
187 Dibenz[a,h]acridine	279		15.453					ND	
186 Dibenz[a,j]acridine	279		15.746					ND	
188 Indeno[1,2,3-cd]pyrene	276	16.371	16.376	-0.005	74	900611	5.00	5.67	
189 Dibenz(a,h)anthracene	278	16.376	16.381	-0.005	53	730815	5.00	5.47	
190 Benzo[g,h,i]perylene	276	16.972	16.986	-0.014	75	759018	5.00	5.73	
252 4-tert-Butylphenol	1		0.000					ND	
261 Endosulfan II	1		0.000					ND	
291 Dipropylene Glycol Phenyl	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
292 Dowanol Peak 2	1		0.000					ND	
253 Endrin aldehyde	1		0.000					ND	
278 delta-BHC	1		0.000					ND	
277 Chlorpyrifos	1		0.000					ND	
265 Dibenzo[a,h]pyrene	1		0.000					ND	
260 Methoxychlor	1		0.000					ND	
294 Dowanol Peak 3	1		0.000					ND	
274 Dibenz(a,i)pyrene	1		0.000					ND	
271 3 & 4 Phenoxyphenol	1		0.000					ND	
258 Aldrin	1		0.000					ND	
263 Heptachlor epoxide	1		0.000					ND	
285 Chlorobenzene TIC	1		0.000					ND	
293 Dowanol Peak 4	1		0.000					ND	
289 1-Phenoxy-2-propanol	1		0.000					ND	
276 Chlordane (technical)	1		0.000					ND	
255 beta-BHC	1		0.000					ND	
269 Dibenzo[a,e]pyrene	1		0.000					ND	
267 2,6-Diaminotoluene	1		0.000					ND	
251 Endosulfan sulfate	1		0.000					ND	
249 4-Chlorophenol TIC	1		0.000					ND	
275 Dieldrin	1		0.000					ND	
259 o-Phenylphenol	1		0.000					ND	
257 Endosulfan I	1		0.000					ND	
290 1-Phenoxy-2-propanol TIC	1		0.000					ND	
268 Endrin	1		0.000					ND	
272 2,3-Dinitrotoluene	1		0.000					ND	
266 Heptachlor	1		0.000					ND	
299 Diisobutyl phthalate TIC	1		0.000					ND	
262 Isoquinoline	1		0.000					ND	
264 alpha-BHC	1		0.000					ND	
283 2-Ethoxyethanol	1		0.000					ND	
254 2-Chloroaniline	1		0.000					ND	
250 gamma-BHC (Lindane)	1		0.000					ND	
270 Toxaphene	1		0.000					ND	
279 3,4-Dichloroaniline	1		0.000					ND	
273 3 & 4 Chlorophenol	1		0.000					ND	
150 DFTPP									
166 4,4'-DDE	246		11.572					ND	
165 4,4'-DDD	235	11.860	11.856	0.004	1	617		NR	7
170 4,4'-DDT	235	12.115	12.115	0.000	1	487		NR	7
S 95 Isosafrole	162		5.568					ND	
S 288 4-Methyl-1-cyclohexanemeth	55		6.400					ND	
S 136 Diallate	86		6.701					ND	
S 162 Aramite, Total	185		8.271					ND	
S 295 Dowanol	1		0.000					ND	
S 296 Dowanol Peak 1	1		0.000					ND	
S 191 Methyl Phenols,Total	100				0			10.1	
S 245 Total Cresols	100				0			10.1	
T 240 Trimethyl phosphate TIC	110	5.032	5.002	0.032	0	134		0	
T 194 Decane TIC	142	5.921	5.802	0.121	7	141		0	
T 193 Hexamethylphosphoramide TI	135		6.500					ND	
T 234 2-Isopropylphenol TIC	121	7.258	7.247	0.008	0	234		0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
T 235 4-isopropylphenol TIC	121	7.340	7.361	-0.024	0	354		0	
T 236 3-isopropylphenol TIC	121	7.340	7.361	-0.024	0	354		0	
T 300 Alpha-Terpineol TIC	59	7.508	7.497	0.008	0	493		0	
T 237 3-(1,1-Dimethylethyl Pheno	135	7.715	7.717	-0.005	1	362		0	
T 231 2,3,7,8-TCDD	322		8.850					ND	
T 195 Hydroquinone TIC	110	9.028	8.997	0.028	48	1047		0	
T 192 Octadecane (TIC)	254	9.595	9.600	-0.005	1	105		0	
T 242 Triphenyl Phosphate TIC	326	11.779	11.997	-0.221	0	59		0	
T 196 Kepone TIC	272	10.124	11.997	-1.876	1	7005		0.0376	
T 241 Tricresyl phosphate TIC	368	12.086	12.497	-0.414	0	45		0	
T 280 2,3,7,8-TCDD TIC	198	12.519	12.497	0.019	0	2830		0	
T 248 2,3,7,8 TCDF TIC	304		13.000					ND	
T 197 Hexachlorophene TIC	198		13.600					ND	
T 239 Tris(2,3-dibromopropyl)pho	201	14.063	13.997	0.063	0	91		0	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

NC - Not Calibrated

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L5 W_00006 Amount Added: 1.00 Units: mL

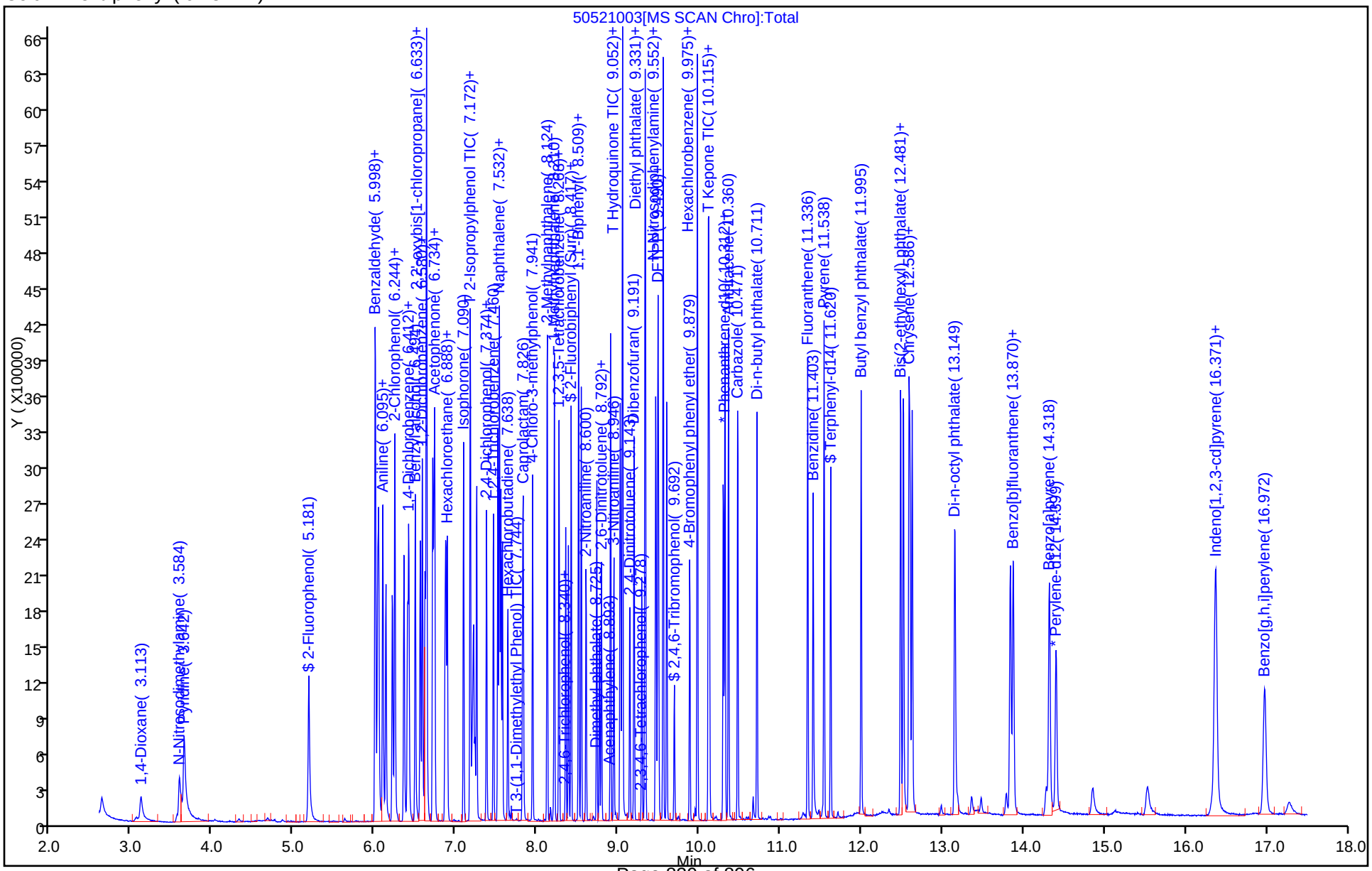
Report Date: 21-May-2015 14:54:10 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150521-43883.b\50521003.D

Injection Date:	21-May-2015 08:20:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	mrl qc			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

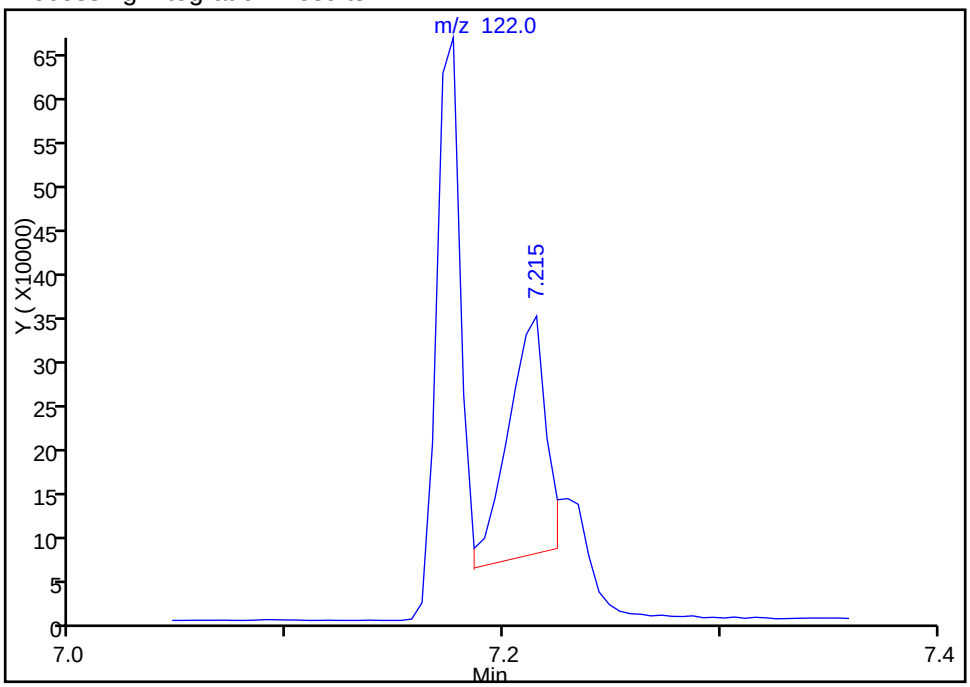
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150521-43883.b\50521003.D
Injection Date: 21-May-2015 08:20:30 Instrument ID: A4HP9
Lims ID: mrl qc
Client ID:
Operator ID: 001574 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

71 Benzoic acid, CAS: 65-85-0

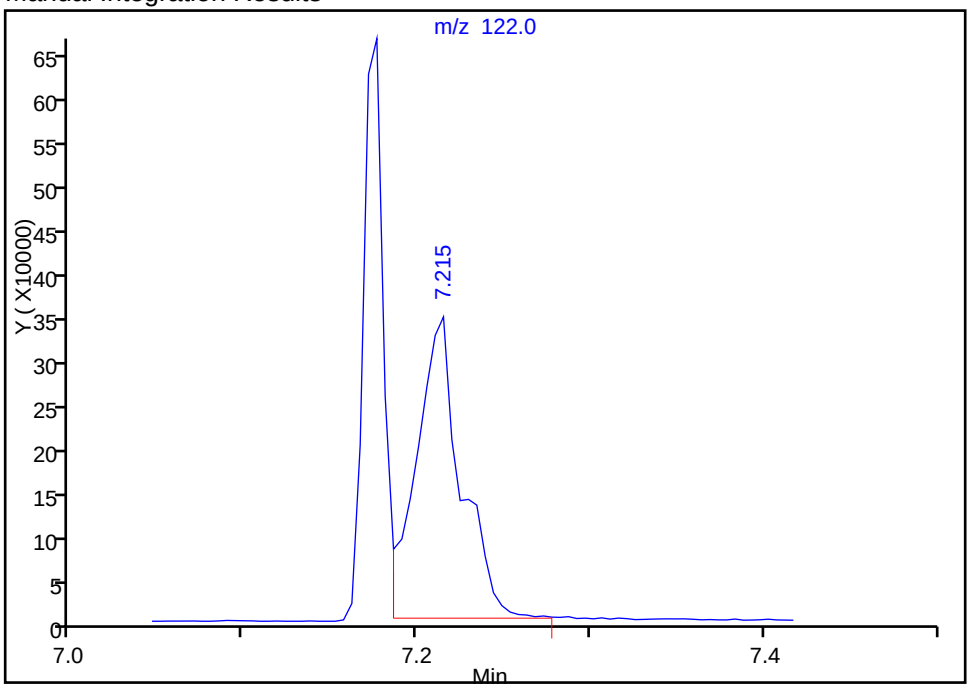
Processing Integration Results

RT: 7.22
Area: 337136
Amount: 5.649771
Amount Units: ng/ul



Manual Integration Results

RT: 7.22
Area: 629470
Amount: 10.548745
Amount Units: ng/ul



Reviewer: ulmanm, 21-May-2015 09:10:03
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-181781/16

Matrix: Solid | Lab File ID: 50521016.D

Analysis Method: 8270C | Date Collected:

Extract. Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 05/21/2015 11:15

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181781 | Units: ng/uL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
83-32-9	Acenaphthene	5.02		0.00020	0.00010	0.000044
208-96-8	Acenaphthylene	4.89		0.00020	0.00010	0.000048
120-12-7	Anthracene	4.96		0.00020	0.00010	0.000088
56-55-3	Benzo[a]anthracene	4.92		0.00020	0.00010	0.000030
50-32-8	Benzo[a]pyrene	4.98		0.00020	0.00010	0.000051
205-99-2	Benzo[b]fluoranthene	4.73		0.00020	0.00010	0.000039
191-24-2	Benzo[g,h,i]perylene	5.49		0.00020	0.00010	0.000046
65-85-0	Benzoic acid	9.70	M	0.025	0.020	0.010
207-08-9	Benzo[k]fluoranthene	5.18		0.00020	0.00010	0.000045
100-51-6	Benzyl alcohol	4.86		0.0050	0.00050	0.00038
111-91-1	Bis(2-chloroethoxy)methane	5.06		0.0010	0.00050	0.00032
111-44-4	Bis(2-chloroethyl)ether	5.26		0.0010	0.00010	0.00010
108-60-1	bis (2-chloroisopropyl) ether	4.79		1.0	0.00050	0.00040
117-81-7	Bis(2-ethylhexyl) phthalate	5.39		0.0050	0.00050	0.0017
101-55-3	4-Bromophenyl phenyl ether	4.94		0.0020	0.00050	0.00022
85-68-7	Butyl benzyl phthalate	5.29		0.0020	0.00050	0.00026
86-74-8	Carbazole	4.80		0.0010	0.00050	0.00028
106-47-8	4-Chloroaniline	4.95		0.0020	0.00050	0.00021
59-50-7	4-Chloro-3-methylphenol	4.93		0.0020	0.00050	0.00021
91-58-7	2-Chloronaphthalene	4.93		0.0010	0.00050	0.00010
95-57-8	2-Chlorophenol	5.07		0.0010	0.00050	0.00029
7005-72-3	4-Chlorophenyl phenyl ether	5.00		0.0020	0.00050	0.00030
218-01-9	Chrysene	5.16		0.00020	0.00010	0.000050
53-70-3	Dibenz(a,h)anthracene	5.36		0.00020	0.00010	0.000045
132-64-9	Dibenzofuran	5.03		0.0010	0.00010	0.000020
95-50-1	1,2-Dichlorobenzene	5.23		0.0010	0.00050	0.00029
541-73-1	1,3-Dichlorobenzene	5.10		0.0010	0.00050	0.00023
106-46-7	1,4-Dichlorobenzene	5.19		0.0010	0.00050	0.00034
91-94-1	3,3'-Dichlorobenzidine	10.3		0.0050	0.0010	0.00037
120-83-2	2,4-Dichlorophenol	5.19		0.0020	0.00050	0.00019
84-66-2	Diethyl phthalate	5.14		0.0020	0.0010	0.00060
105-67-9	2,4-Dimethylphenol	5.05		0.0020	0.00050	0.00025
131-11-3	Dimethyl phthalate	5.15		0.0020	0.00050	0.00029
84-74-2	Di-n-butyl phthalate	5.31		0.0050	0.0010	0.0017

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-181781/16

Matrix: Solid | Lab File ID: 50521016.D

Analysis Method: 8270C | Date Collected:

Extract. Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 05/21/2015 11:15

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181781 | Units: ng/uL

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
534-52-1	4,6-Dinitro-2-methylphenol	6.59	^	0.0050	0.0040	0.0024
51-28-5	2,4-Dinitrophenol	5.74	^	0.0050	0.0010	0.00032
121-14-2	2,4-Dinitrotoluene	5.05		0.0050	0.00050	0.00025
606-20-2	2,6-Dinitrotoluene	5.02		0.0050	0.00050	0.00080
117-84-0	Di-n-octyl phthalate	5.01		0.0020	0.00050	0.00023
206-44-0	Fluoranthene	4.98		0.00020	0.00010	0.000045
86-73-7	Fluorene	4.95		0.00020	0.00010	0.000041
118-74-1	Hexachlorobenzene	5.05		0.00020	0.00010	0.000085
87-68-3	Hexachlorobutadiene	5.10		0.0010	0.00050	0.00027
77-47-4	Hexachlorocyclopentadiene	4.09		0.010	0.00050	0.00024
67-72-1	Hexachloroethane	4.84		0.0010	0.00050	0.00019
193-39-5	Indeno[1,2,3-cd]pyrene	5.44		0.00020	0.00010	0.000043
78-59-1	Isophorone	5.11		0.0010	0.00050	0.00027
91-57-6	2-Methylnaphthalene	5.17		0.00020	0.00010	0.000090
95-48-7	2-Methylphenol	5.09		0.0010	0.00050	0.00017
15831-10-4	3 & 4 Methylphenol	5.05		0.0020	0.0010	0.00080
91-20-3	Naphthalene	5.22		0.00020	0.00010	0.000063
88-74-4	2-Nitroaniline	4.53		0.0020	0.00050	0.00021
99-09-2	3-Nitroaniline	4.81		0.0020	0.00050	0.00028
100-01-6	4-Nitroaniline	4.98		0.0020	0.00050	0.00022
98-95-3	Nitrobenzene	5.10		0.0010	0.00010	0.000040
88-75-5	2-Nitrophenol	4.77		0.0020	0.00050	0.00028
100-02-7	4-Nitrophenol	8.68		0.0050	0.0040	0.00029
621-64-7	N-Nitrosodi-n-propylamine	4.85		0.0010	0.00050	0.00024
86-30-6	N-Nitrosodiphenylamine	10.2		0.0010	0.00050	0.00031
87-86-5	Pentachlorophenol	9.18		0.0050	0.0010	0.00027
85-01-8	Phenanthrene	5.06		0.00020	0.00010	0.000062
108-95-2	Phenol	4.90		0.0010	0.0010	0.00060
129-00-0	Pyrene	5.21		0.00020	0.00010	0.000042
120-82-1	1,2,4-Trichlorobenzene	5.20		0.0010	0.00050	0.00028
95-95-4	2,4,5-Trichlorophenol	4.73		0.0050	0.00050	0.00030
88-06-2	2,4,6-Trichlorophenol	4.80		0.0050	0.00050	0.00024

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: | Lab Sample ID: MRL 240-181781/16

Matrix: Solid | Lab File ID: 50521016.D

Analysis Method: 8270C | Date Collected:

Extract. Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 05/21/2015 11:15

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181781 | Units: ng/uL

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	99		50-150
367-12-4	2-Fluorophenol (Surr)	98		50-150
4165-60-0	Nitrobenzene-d5 (Surr)	102		50-150
4165-62-2	Phenol-d5 (Surr)	99		50-150
1718-51-0	Terphenyl-d14 (Surr)	100		50-150
118-79-6	2,4,6-Tribromophenol (Surr)	98		50-150

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150521-43883.b\50521016.D
Lims ID: mrl qccl
Client ID:
Sample Type: MRL
Inject. Date: 21-May-2015 11:15:30 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043883-006
Misc. Info.: MRL QCCLMRL QCCL
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150521-43883.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-May-2015 15:10:05 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 21-May-2015 15:10:05

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.399	6.397	0.001	96	252766	4.00	4.00	
* 2 Naphthalene-d8	136	7.514	7.513	0.001	99	1054051	4.00	4.00	
* 3 Acenaphthene-d10	164	9.019	9.023	-0.004	87	509996	4.00	4.00	
* 4 Phenanthrene-d10	188	10.294	10.297	-0.003	95	763023	4.00	4.00	
* 5 Chrysene-d12	240	12.602	12.601	0.001	93	642879	4.00	4.00	
* 6 Perylene-d12	264	14.400	14.404	-0.004	86	512541	4.00	4.00	
$ 7 2-Fluorophenol	112	5.182	5.181	0.001	91	537898	5.00	4.92	
$ 8 Phenol-d5	99	6.028	6.032	-0.004	80	727786	5.00	4.93	
$ 9 Nitrobenzene-d5	82	6.870	6.874	-0.004	85	548025	5.00	5.08	
$ 10 2-Fluorobiphenyl (Surr)	172	8.418	8.417	0.001	99	721614	5.00	4.96	
$ 11 2,4,6-Tribromophenol	330	9.693	9.692	0.001	87	65753	5.00	4.92	
$ 12 Terphenyl-d14	244	11.621	11.620	0.001	97	615307	5.00	4.99	
25 1,4-Dioxane	88	3.114	3.108	0.006	87	233381	5.00	4.08	
26 N-Nitrosodimethylamine	74	3.585	3.584	0.001	78	412084	5.00	4.67	
27 Pyridine	79	3.643	3.642	0.001	96	727183	5.00	4.76	
20 Dimethylformamide	73	3.970	3.978	-0.008	51	564		NC	
28 Ethyl methacrylate	69		4.089					ND	
31 2-Picoline	93		4.374					ND	
32 N-Nitrosomethylethylamine	88		4.504					ND	
35 Acrylamide	71	4.788	4.778	0.010	9	214		NC	
34 Methyl methanesulfonate	80		4.826					ND	
233 n,n'-Dimethylacetamide	44		4.993					ND	
36 N-Nitrosodiethylamine	102		5.254					ND	
37 Ethyl methanesulfonate	79		5.523					ND	
42 Phenylmercaptan	110		5.768					ND	
38 2-Methylcyclohexanone	68	5.908	5.820	0.088	1	46		NC	
39 3-Methylcyclohexanone	69	5.855	5.854	0.001	1	176		NC	
40 4-Methylcyclohexanone	55		5.902					ND	
41 Benzaldehyde	77	5.999	6.003	-0.004	93	924084	10.0	10.2	
45 Pentachloroethane	167		6.019					ND	
43 Phenol	94	6.043	6.046	-0.003	86	789367	5.00	4.90	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
44 Aniline	93	6.096	6.095	0.001	98	962858	5.00	4.89	
69 Bis(2-chloroethyl)ether	93	6.129	6.133	-0.004	90	667572	5.00	5.26	
46 2-Chlorophenol	128	6.211	6.215	-0.004	97	506722	5.00	5.07	
243 n-Decane	57	6.240	6.244	-0.004	92	702019	NC	NC	
47 1,3-Dichlorobenzene	146	6.355	6.354	0.001	97	498269	5.00	5.10	
48 1,4-Dichlorobenzene	146	6.413	6.417	-0.004	84	512199	5.00	5.19	
232 1-Methyl-2-pyrrilidinone	99	6.413	6.421	-0.008	1	1402		NC	
49 Benzyl alcohol	108	6.495	6.494	0.001	96	393501	5.00	4.86	
50 1,2-Dichlorobenzene	146	6.557	6.556	0.001	96	491542	5.00	5.23	
56 N-Nitrosopyrrolidine	100		6.572					ND	
286 4-Methyl-1-cyclohexanemeth	55	6.552	6.574	-0.022	0	27612		NC	
51 2-Methylphenol	108	6.581	6.580	0.001	73	559270	5.00	5.09	
59 N-Nitrosomorpholine	56		6.605					ND	
53 2,2'-oxybis[1-chloropropan	45	6.615	6.614	0.001	86	790011	5.00	4.79	
52 Indene	115	6.634	6.633	0.001	79	1757779	10.0	10.3	
60 2-Toluidine	106		6.639					ND	
287 4-Methyl-1-cyclohexanemeth	55	6.778	6.708	0.070	0	239		NC	
21 3 & 4 Methylphenol	108	6.711	6.710	0.001	87	585816	5.00	5.05	
57 N-Nitrosodi-n-propylamine	70	6.721	6.724	-0.003	90	368522	5.00	4.85	
58 Acetophenone	105	6.735	6.734	0.001	72	740760	5.00	5.15	
61 Hexachloroethane	117	6.860	6.864	-0.004	82	194706	5.00	4.84	
63 N-Nitrosopiperidine	114		6.884					ND	
62 Nitrobenzene	77	6.889	6.893	-0.004	76	573548	5.00	5.10	
64 Isophorone	82	7.091	7.090	0.001	96	1077351	5.00	5.11	
68 o,o',o''-Triethylphosphoro	198		7.105					ND	
67 1,3,5-Trichlorobenzene	180		7.123					ND	
66 2-Nitrophenol	139	7.168	7.172	-0.004	89	215496	5.00	4.77	
65 2,4-Dimethylphenol	107	7.173	7.177	-0.003	92	483129	5.00	5.05	
72 alpha,alpha-Dimethyl phene	58		7.216					ND	
71 Benzoic acid	122	7.206	7.234	-0.028	69	513032	10.0	9.70	M
70 Bis(2-chloroethoxy)methane	93	7.250	7.253	-0.003	95	690263	5.00	5.06	
73 2,4-Dichlorophenol	162	7.375	7.374	0.001	94	340879	5.00	5.19	
74 1,2,4-Trichlorobenzene	180	7.456	7.460	-0.004	92	348977	5.00	5.20	
78 Hexachloropropene	213		7.485					ND	
75 Naphthalene	128	7.533	7.532	0.001	95	1452384	5.00	5.22	
76 4-Chloroaniline	127	7.548	7.552	-0.004	45	631380	5.00	4.95	
77 2,6-Dichlorophenol	162	7.567	7.571	-0.004	77	336423	5.00	5.31	
80 1,2,3-Trichlorobenzene	180		7.590					ND	
79 Hexachlorobutadiene	225	7.634	7.638	-0.004	94	141766	5.00	5.10	
81 Benzothiazole	135	7.745	7.676	0.069	52	4636		NC	
82 Quinoline	129		7.682					ND	
83 N-Nitrosodi-n-butylamine	84		7.697					ND	
85 p-Phenylene diamine	108		7.716					ND	
84 Caprolactam	113	7.822	7.835	-0.013	82	329645	10.0	10.4	
94 Safrole, Total	162		7.894					ND	
86 4-Chloro-3-methylphenol	107	7.942	7.946	-0.004	93	416581	5.00	4.93	
87 2-Methylnaphthalene	142	8.120	8.124	-0.004	91	877175	5.00	5.17	
225 Isosafrole Peak 1	162		8.144					ND	
90 1,2,3,5-Tetrachlorobenzene	216	8.269	8.191	0.078	94	252502		NC	
88 1-Methylnaphthalene	142	8.211	8.210	0.001	90	772421	5.00	5.24	
89 Hexachlorocyclopentadiene	237	8.264	8.268	-0.004	77	121786	5.00	4.09	
91 1,2,4,5-Tetrachlorobenzene	216	8.269	8.273	-0.004	94	252502	5.00	4.94	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
227 Isosafrole Peak 2	162		8.336					ND	
92 2,4,6-Trichlorophenol	196	8.351	8.350	0.001	93	200473	5.00	4.80	
93 2,4,5-Trichlorophenol	196	8.385	8.388	-0.003	94	206579	5.00	4.73	
97 2,4-Toluene diamine	121		8.412					ND	
246 1-Chloronaphthalene	162		8.433					ND	
99 1,2,3,4 -Tetrachlorobenzen	216		8.446					ND	
96 3,4-Dichloronitrobenzene	109		8.465					ND	
98 1,1'-Biphenyl	154	8.510	8.509	0.001	95	956677	5.00	4.91	
101 Phenyl ether	170		8.523					ND	
100 2-Chloronaphthalene	162	8.543	8.542	0.001	96	709030	5.00	4.93	
103 1,4-Naphthoquinone	158		8.543					ND	
104 1,4-Dinitrobenzene	168		8.567					ND	
102 2-Nitroaniline	65	8.601	8.605	-0.004	84	256220	5.00	4.53	
105 Dimethyl phthalate	163	8.731	8.735	-0.004	97	754791	5.00	5.15	
106 1,3-Dinitrobenzene	168	8.764	8.768	-0.004	84	111471	5.00	4.72	
107 2,6-Dinitrotoluene	165	8.793	8.792	0.001	72	166135	5.00	5.02	
109 Acenaphthylene	152	8.904	8.903	0.001	96	1219892	5.00	4.89	
110 3-Nitroaniline	138	8.942	8.946	-0.004	93	234265	5.00	4.81	
111 2,4-Dinitrophenol	184	9.029	9.033	-0.004	87	91911	10.0	5.74	
115 Pentachlorobenzene	250		9.034					ND	
112 Acenaphthene	153	9.048	9.052	-0.004	94	718722	5.00	5.02	
113 4-Nitrophenol	109	9.053	9.057	-0.004	52	131118	10.0	8.68	
117 1-Naphthylamine	143		9.115					ND	
118 2,3,5,6-Tetrachlorophenol	232		9.120					ND	
114 2,4-Dinitrotoluene	165	9.140	9.143	-0.003	81	207970	5.00	5.05	
120 2-Naphthylamine	143		9.178					ND	
116 Dibenzofuran	168	9.192	9.196	-0.004	92	977195	5.00	5.03	
122 Thionazin	97		9.269					ND	
119 2,3,4,6-Tetrachlorophenol	232	9.289	9.292	-0.003	76	153968	5.00	4.94	
121 Diethyl phthalate	149	9.327	9.331	-0.004	98	725013	5.00	5.14	
124 N-Nitro-o-toluidine	152		9.332					ND	
247 Hexadecane	57	9.332	9.336	-0.004	90	748037	NC	NC	
127 Tributyl phosphate	99		9.417					ND	
130 Diphenylamine	169		9.418					ND	
123 4-Chlorophenyl phenyl ethe	204	9.457	9.461	-0.004	93	317763	5.00	5.00	
125 4-Nitroaniline	138	9.467	9.470	-0.003	84	209270	5.00	4.98	
126 Fluorene	166	9.486	9.490	-0.004	97	780793	5.00	4.95	
128 4,6-Dinitro-2-methylphenol	198	9.495	9.499	-0.004	83	122452	10.0	6.59	
297 Benzophenone	105	9.495	9.512	-0.017	51	72517		NC	
134 Sulfotepp	202		9.519					ND	
131 N-Nitrosodiphenylamine	169	9.553	9.557	-0.004	98	1062150	10.0	10.2	
133 Azobenzene	77	9.596	9.600	-0.004	94	1098701	5.00	4.83	
132 1,2-Diphenylhydrazine	77	9.596	9.600	-0.004	98	1098661	5.00	4.83	
135 1,3,5-Trinitrobenzene	213		9.601					ND	
137 Phenacetin	108		9.649					ND	
228 Diallate Peak 1	86		9.659					ND	
138 Phorate	121		9.664					ND	
230 Diallate Peak 2	86		9.736					ND	
140 Dimethoate	87		9.803					ND	
139 4-Bromophenyl phenyl ether	248	9.880	9.884	-0.004	70	157651	5.00	4.94	
129 4-Aminobiphenyl	169		9.962					ND	
141 Hexachlorobenzene	284	9.976	9.975	0.001	73	145122	5.00	5.05	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
142 Atrazine	200	9.976	9.980	-0.004	83	298603	10.0	10.6	
144 Pronamide	173		9.991					ND	
145 Pentachloronitrobenzene	237		10.000					ND	
146 Disulfoton	88		10.101					ND	
244 n-Octadecane	57	10.111	10.115	-0.004	76	765682	NC	NC	
147 Dinoseb	211		10.116					ND	
143 Pentachlorophenol	266	10.125	10.124	0.001	87	191102	10.0	9.18	
148 Phenanthrene	178	10.313	10.317	-0.004	96	1106224	5.00	5.06	
149 Anthracene	178	10.361	10.360	0.001	97	1097642	5.00	4.96	
152 Methyl parathion	109		10.428					ND	
151 Carbazole	167	10.472	10.475	-0.003	81	958376	5.00	4.80	
153 Diphenylsulfone	125		10.672					ND	
154 Di-n-butyl phthalate	149	10.712	10.711	0.001	99	1243785	5.00	5.31	
155 Ethyl Parathion	97		10.746					ND	
156 4-Nitroquinoline-1-oxide	190		10.808					ND	
157 Methapyrilene	58		10.851					ND	
158 Isodrin	66		11.068					ND	
159 Fluoranthene	202	11.337	11.336	0.001	97	944357	5.00	4.98	
160 Benzidine	184	11.404	11.403	0.001	98	673141	10.0	6.05	
226 Aramite Peak 1	185		11.419					ND	
229 Aramite Peak 2	185		11.481					ND	
161 Pyrene	202	11.539	11.538	0.001	92	1015352	5.00	5.21	
163 p-Dimethylamino azobenzene	225		11.587					ND	
164 Chlorobenzilate	139		11.616					ND	
282 Kepone	272		11.764					ND	
167 Famphur	218		11.818					ND	
169 3,3'-Dimethylbenzidine	212		11.866					ND	
168 Butyl benzyl phthalate	149	11.996	11.995	0.001	94	561848	5.00	5.29	
171 2-Acetylaminofluorene	181		12.087					ND	
174 4,4'-Methylene bis(2-chlor	231		12.337					ND	
172 3,3'-Dimethoxybenzidine	244		12.379					ND	
173 Bis(2-ethylhexyl) phthalat	149	12.482	12.485	-0.003	95	800361	5.00	5.39	
175 3,3'-Dichlorobenzidine	252	12.520	12.519	0.001	60	577651	10.0	10.3	
176 Hexabromobenzene	232	12.602	12.543	0.059	2	26105		NC	
177 Benzo[a]anthracene	228	12.587	12.591	-0.004	96	894213	5.00	4.92	
178 Chrysene	228	12.626	12.630	-0.004	89	852550	5.00	5.16	
179 6-Methylchrysene	242		12.895					ND	
180 Di-n-octyl phthalate	149	13.150	13.154	-0.004	99	1352072	5.00	5.01	
181 7,12-Dimethylbenz(a)anthra	256		13.559					ND	
281 Hexachlorophene	196	13.785	13.628	0.157	0	490		NC	
182 Benzo[b]fluoranthene	252	13.838	13.842	-0.004	88	748521	5.00	4.73	
183 Benzo[k]fluoranthene	252	13.871	13.875	-0.004	86	836243	5.00	5.18	
184 Benzo[a]pyrene	252	14.319	14.322	-0.003	86	754077	5.00	4.98	
185 3-Methylcholanthrene	268		14.535					ND	
187 Dibenz[a,h]acridine	279		15.453					ND	
186 Dibenz[a,j]acridine	279		15.746					ND	
188 Indeno[1,2,3-cd]pyrene	276	16.367	16.376	-0.009	75	768077	5.00	5.44	
189 Dibenz(a,h)anthracene	278	16.372	16.372	-0.009	44	636948	5.00	5.36	
190 Benzo[g,h,i]perylene	276	16.973	16.986	-0.013	79	647018	5.00	5.49	
261 Endosulfan II	1		0.000					ND	
257 Endosulfan I	1		0.000					ND	
274 Dibenz(a,i)pyrene	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
266 Heptachlor	1		0.000					ND	
250 gamma-BHC (Lindane)	1		0.000					ND	
251 Endosulfan sulfate	1		0.000					ND	
270 Toxaphene	1		0.000					ND	
278 delta-BHC	1		0.000					ND	
273 3 & 4 Chlorophenol	1		0.000					ND	
252 4-tert-Butylphenol	1		0.000					ND	
292 Dowanol Peak 2	1		0.000					ND	
277 Chlorpyrifos	1		0.000					ND	
254 2-Chloroaniline	1		0.000					ND	
253 Endrin aldehyde	1		0.000					ND	
260 Methoxychlor	1		0.000					ND	
279 3,4-Dichloroaniline	1		0.000					ND	
283 2-Ethoxyethanol	1		0.000					ND	
265 Dibenzo[a,h]pyrene	1		0.000					ND	
289 1-Phenoxy-2-propanol	1		0.000					ND	
276 Chlordane (technical)	1		0.000					ND	
269 Dibenzo[a,e]pyrene	1		0.000					ND	
259 o-Phenylphenol	1		0.000					ND	
271 3 & 4 Phenoxyphenol	1		0.000					ND	
294 Dowanol Peak 3	1		0.000					ND	
275 Dieldrin	1		0.000					ND	
272 2,3-Dinitrotoluene	1		0.000					ND	
285 Chlorobenzene TIC	1		0.000					ND	
291 Dipropylene Glycol Phenyl	1		0.000					ND	
268 Endrin	1		0.000					ND	
264 alpha-BHC	1		0.000					ND	
263 Heptachlor epoxide	1		0.000					ND	
267 2,6-Diaminotoluene	1		0.000					ND	
262 Isoquinoline	1		0.000					ND	
299 Diisobutyl phthalate TIC	1		0.000					ND	
258 Aldrin	1		0.000					ND	
290 1-Phenoxy-2-propanol TIC	1		0.000					ND	
255 beta-BHC	1		0.000					ND	
293 Dowanol Peak 4	1		0.000					ND	
249 4-Chlorophenol TIC	1		0.000					ND	
150 DFTPP									
166 4,4'-DDE	246		11.572					ND	
165 4,4'-DDD	235	11.857	11.856	0.000	1	613		NR	7
170 4,4'-DDT	235	12.116	12.115	0.001	1	554		NR	7
S 95 Isosafrole	162		5.568					ND	
S 288 4-Methyl-1-cyclohexanemeth	55		6.400					ND	
S 136 Diallate	86		6.701					ND	
S 162 Aramite, Total	185		8.271					ND	
S 191 Methyl Phenols,Total	100				0			10.1	
S 245 Total Cresols	100				0			10.1	
S 295 Dowanol	1		0.000					ND	
S 296 Dowanol Peak 1	1		0.000					ND	
T 240 Trimethyl phosphate TIC	110	4.994	4.999	-0.006	0	154		0	
T 194 Decane TIC	142	6.129	5.799	0.329	1	5134		0	
T 193 Hexamethylphosphoramide TI	135	6.610	6.499	0.110	7	665		0	
T 234 2-Isopropylphenol TIC	121	7.259	7.249	0.009	0	201		0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
T 236 3-isopropylphenol TIC	121	7.380	7.363	0.016	0	98		0	
T 235 4-isopropylphenol TIC	121	7.380	7.363	0.016	0	98		0	
T 300 Alpha-Terpineol TIC	59	7.509	7.499	0.009	0	761		0	
T 237 3-(1,1-Dimethylethyl Pheno	135	7.721	7.719	0.001	1	184		0	
T 231 2,3,7,8-TCDD	322		8.850					ND	
T 195 Hydroquinone TIC	110	8.995	8.999	-0.005	1	52		0	
T 192 Octadecane (TIC)	254	9.688	9.600	0.088	7	274		0	
T 196 Kepone TIC	272	10.125	11.995	-1.875	1	5583		0.0347	
T 242 Triphenyl Phosphate TIC	326		12.000					ND	
T 280 2,3,7,8-TCDD TIC	198	12.515	12.494	0.015	0	2404		0	
T 241 Tricresyl phosphate TIC	368	12.688	12.494	0.188	0	173		0	
T 248 2,3,7,8 TCDF TIC	304		13.000					ND	
T 197 Hexachlorophene TIC	198		13.600					ND	
T 239 Tris(2,3-dibromopropyl)pho	201	14.020	13.994	0.020	0	145		0	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

NC - Not Calibrated

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L5 W_00006 Amount Added: 1.00 Units: mL

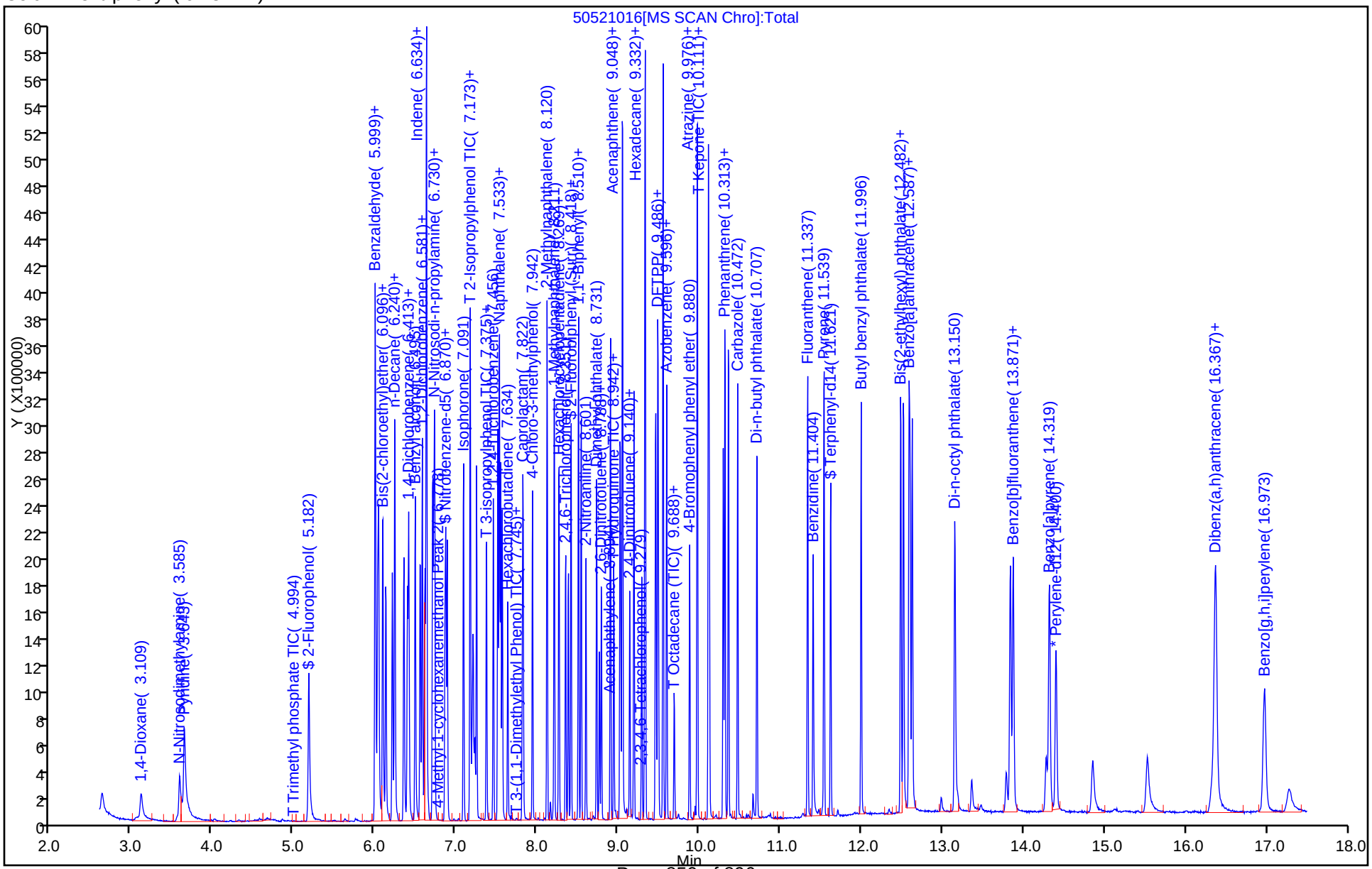
Report Date: 21-May-2015 15:10:05 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150521-43883.b\50521016.D

Injection Date:	21-May-2015 11:15:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	mrl qccl			Worklist Smp#:	16
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

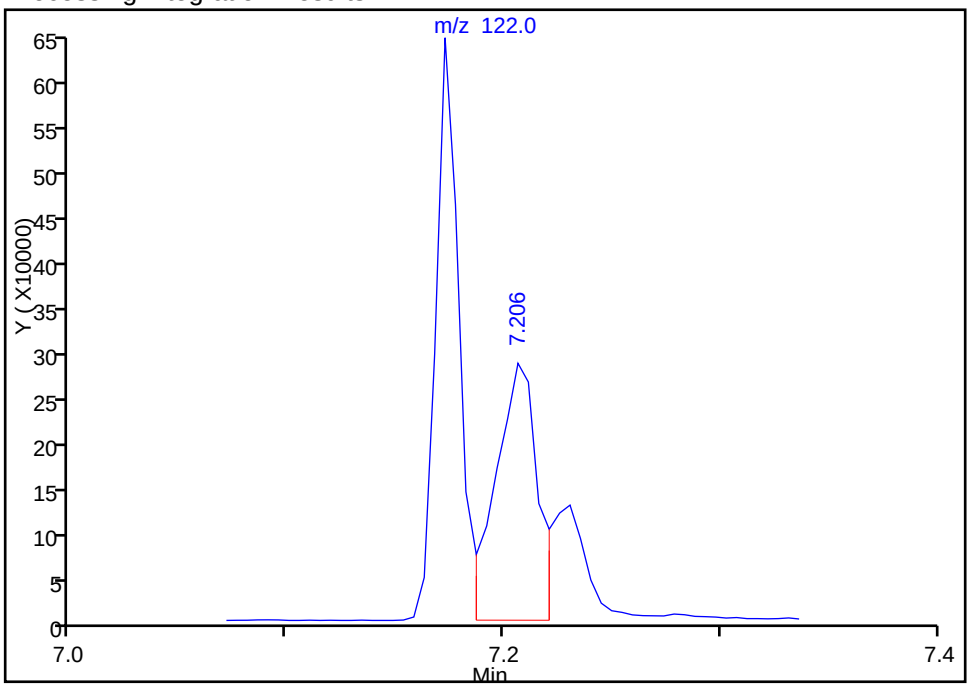
TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150521-43883.b\50521016.D
Injection Date: 21-May-2015 11:15:30 Instrument ID: A4HP9
Lims ID: mrl qccl
Client ID:
Operator ID: 001574 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 8270 _9 Limit Group: MSS 8270 DOD ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

71 Benzoic acid, CAS: 65-85-0

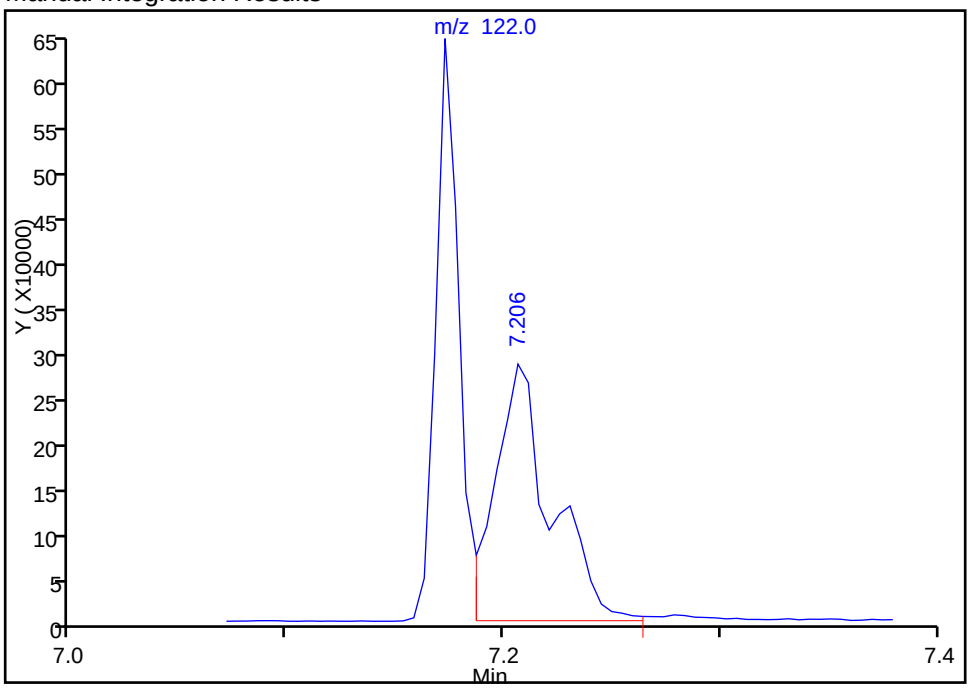
Processing Integration Results

RT: 7.21
Area: 390153
Amount: 7.377014
Amount Units: ng/ul



Manual Integration Results

RT: 7.21
Area: 513032
Amount: 9.700411
Amount Units: ng/ul



Reviewer: ulmanm, 21-May-2015 11:51:21
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0395M-0001-0002-SO | Lab Sample ID: 240-50067-7 MS

Matrix: Solid | Lab File ID: 50520010.D

Analysis Method: 8270C | Date Collected: 04/29/2015 15:50

Extract. Method: 3540C | Date Extracted: 05/12/2015 10:00

Sample wt/vol: 30.19(g) | Date Analyzed: 05/20/2015 12:50

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
83-32-9	Acenaphthene	465		6.8	3.4	0.78
208-96-8	Acenaphthylene	455		6.8	1.7	0.36
120-12-7	Anthracene	483		6.8	3.4	0.80
56-55-3	Benzo[a]anthracene	514		6.8	3.4	0.64
50-32-8	Benzo[a]pyrene	590		6.8	3.4	0.65
205-99-2	Benzo[b]fluoranthene	595		6.8	3.4	0.60
191-24-2	Benzo[g,h,i]perylene	658		6.8	1.7	0.36
65-85-0	Benzoic acid	535	J M	670	140	37
207-08-9	Benzo[k]fluoranthene	603		6.8	3.4	0.69
100-51-6	Benzyl alcohol	469		340	68	21
111-91-1	Bis(2-chloroethoxy)methane	462		100	68	22
111-44-4	Bis(2-chloroethyl)ether	473		100	3.4	2.0
108-60-1	bis (2-chloroisopropyl) ether	431		100	34	9.7
117-81-7	Bis(2-ethylhexyl) phthalate	589		72	34	19
101-55-3	4-Bromophenyl phenyl ether	499		51	34	13
85-68-7	Butyl benzyl phthalate	556		72	34	10
86-74-8	Carbazole	535		51	34	28
106-47-8	4-Chloroaniline	207	M	150	68	17
59-50-7	4-Chloro-3-methylphenol	433		150	68	21
91-58-7	2-Chloronaphthalene	463		51	1.7	0.46
95-57-8	2-Chlorophenol	469		51	34	8.4
7005-72-3	4-Chlorophenyl phenyl ether	532		51	34	13
218-01-9	Chrysene	549		6.8	3.4	1.1
53-70-3	Dibenz(a,h)anthracene	654		6.8	3.4	0.67
132-64-9	Dibenzofuran	504		51	3.4	0.67
95-50-1	1,2-Dichlorobenzene	438		51	34	9.9
541-73-1	1,3-Dichlorobenzene	443		51	34	11
106-46-7	1,4-Dichlorobenzene	429		51	34	20
91-94-1	3,3'-Dichlorobenzidine	530		100	68	18
120-83-2	2,4-Dichlorophenol	420		150	68	20
84-66-2	Diethyl phthalate	621		72	34	16
105-67-9	2,4-Dimethylphenol	312		150	68	20
131-11-3	Dimethyl phthalate	574		72	34	17
84-74-2	Di-n-butyl phthalate	628		72	34	15

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0395M-0001-0002-SO | Lab Sample ID: 240-50067-7 MS

Matrix: Solid | Lab File ID: 50520010.D

Analysis Method: 8270C | Date Collected: 04/29/2015 15:50

Extract. Method: 3540C | Date Extracted: 05/12/2015 10:00

Sample wt/vol: 30.19(g) | Date Analyzed: 05/20/2015 12:50

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
534-52-1	4,6-Dinitro-2-methylphenol	857		150	34	9.4
51-28-5	2,4-Dinitrophenol	861		340	68	21
121-14-2	2,4-Dinitrotoluene	630		200	68	17
606-20-2	2,6-Dinitrotoluene	581		200	68	21
117-84-0	Di-n-octyl phthalate	627		72	34	8.1
206-44-0	Fluoranthene	554		6.8	3.4	0.56
86-73-7	Fluorene	540		6.8	3.4	0.54
118-74-1	Hexachlorobenzene	483		6.8	3.4	2.1
87-68-3	Hexachlorobutadiene	451		51	34	5.7
77-47-4	Hexachlorocyclopentadiene	250	J	340	34	8.3
67-72-1	Hexachloroethane	418		51	34	9.2
193-39-5	Indeno[1,2,3-cd]pyrene	677		6.8	1.7	0.36
78-59-1	Isophorone	490		51	34	13
91-57-6	2-Methylnaphthalene	486		6.8	3.4	0.51
95-48-7	2-Methylphenol	455		200	68	11
15831-10-4	3 & 4 Methylphenol	435		410	68	20
91-20-3	Naphthalene	502		6.8	3.4	0.84
88-74-4	2-Nitroaniline	523		200	34	9.3
99-09-2	3-Nitroaniline	487		200	68	16
100-01-6	4-Nitroaniline	519		200	68	27
98-95-3	Nitrobenzene	464		100	3.4	2.2
88-75-5	2-Nitrophenol	478		51	34	8.5
100-02-7	4-Nitrophenol	1310		340	68	17
621-64-7	N-Nitrosodi-n-propylamine	447		51	34	6.4
86-30-6	N-Nitrosodiphenylamine	932		51	34	21
87-86-5	Pentachlorophenol	1050		150	34	9.3
85-01-8	Phenanthrene	514		6.8	3.4	0.75
108-95-2	Phenol	474		51	34	7.5
129-00-0	Pyrene	536		6.8	1.7	0.45
120-82-1	1,2,4-Trichlorobenzene	461		51	17	3.6
95-95-4	2,4,5-Trichlorophenol	515		150	68	26
88-06-2	2,4,6-Trichlorophenol	496		150	34	9.1

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0395M-0001-0002-SO | Lab Sample ID: 240-50067-7 MS

Matrix: Solid | Lab File ID: 50520010.D

Analysis Method: 8270C | Date Collected: 04/29/2015 15:50

Extract. Method: 3540C | Date Extracted: 05/12/2015 10:00

Sample wt/vol: 30.19(g) | Date Analyzed: 05/20/2015 12:50

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	73		45-105
367-12-4	2-Fluorophenol (Surr)	73		35-105
4165-60-0	Nitrobenzene-d5 (Surr)	71		35-100
4165-62-2	Phenol-d5 (Surr)	72		40-100
1718-51-0	Terphenyl-d14 (Surr)	75		30-125
118-79-6	2,4,6-Tribromophenol (Surr)	91		35-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520010.D
Lims ID: 240-50067-A-7-E MS
Client ID: 079SB-0395M-0001-0002-SO
Sample Type: MS
Inject. Date: 20-May-2015 12:50:30 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043844-010
Misc. Info.: 240-50067-A-7-E MS240-50067-A-7-E MS
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-May-2015 08:02:18 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 20-May-2015 13:20:35

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.416	6.411	0.005	96	257873	4.00	4.00	
* 2 Naphthalene-d8	136	7.527	7.527	0.000	99	1059555	4.00	4.00	
* 3 Acenaphthene-d10	164	9.037	9.037	0.000	90	422423	4.00	4.00	
* 4 Phenanthrene-d10	188	10.311	10.311	0.000	95	740905	4.00	4.00	
* 5 Chrysene-d12	240	12.619	12.619	0.000	92	677509	4.00	4.00	
* 6 Perylene-d12	264	14.432	14.437	-0.005	90	476487	4.00	4.00	
$ 7 2-Fluorophenol	112	5.233	5.199	0.034	93	813848	10.0	7.30	
$ 8 Phenol-d5	99	6.055	6.046	0.009	93	1085922	10.0	7.21	
$ 9 Nitrobenzene-d5	82	6.887	6.887	0.000	87	770750	10.0	7.10	
$ 10 2-Fluorobiphenyl (Surr)	172	8.431	8.431	0.000	99	878687	10.0	7.30	
$ 11 2,4,6-Tribromophenol	330	9.705	9.710	-0.005	85	101151	10.0	9.13	
$ 12 Terphenyl-d14	244	11.634	11.638	-0.004	97	973786	10.0	7.49	
43 Phenol	94	6.065	6.055	0.010	95	1144179	10.0	6.96	
69 Bis(2-chloroethyl)ether	93	6.152	6.147	0.005	96	898738	10.0	6.94	
46 2-Chlorophenol	128	6.233	6.228	0.005	97	701797	10.0	6.89	
47 1,3-Dichlorobenzene	146	6.373	6.368	0.005	97	648025	10.0	6.51	
48 1,4-Dichlorobenzene	146	6.430	6.426	0.004	93	634395	10.0	6.30	
49 Benzyl alcohol	108	6.512	6.507	0.005	97	569032	10.0	6.89	
50 1,2-Dichlorobenzene	146	6.570	6.570	0.000	97	616945	10.0	6.44	
51 2-Methylphenol	108	6.599	6.594	0.005	90	749414	10.0	6.69	
53 2,2'-oxybis[1-chloropropan	45	6.632	6.628	0.004	85	1066560	10.0	6.33	
21 3 & 4 Methylphenol	108	6.729	6.724	0.005	87	755291	10.0	6.38	
57 N-Nitrosodi-n-propylamine	70	6.738	6.738	0.000	88	509192	10.0	6.57	
61 Hexachloroethane	117	6.878	6.878	0.000	87	251867	10.0	6.13	
62 Nitrobenzene	77	6.907	6.902	0.005	84	768867	10.0	6.81	
64 Isophorone	82	7.104	7.104	0.000	98	1523345	10.0	7.19	
66 2-Nitrophenol	139	7.185	7.185	0.000	92	319152	10.0	7.03	
65 2,4-Dimethylphenol	107	7.190	7.190	0.000	92	440787	10.0	4.58	
71 Benzoic acid	122	7.214	7.238	-0.024	90	417457	20.0	7.85	M
70 Bis(2-chloroethoxy)methane	93	7.267	7.267	0.000	98	930329	10.0	6.78	
73 2,4-Dichlorophenol	162	7.392	7.387	0.005	96	406893	10.0	6.16	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
74 1,2,4-Trichlorobenzene	180	7.474	7.474	0.000	94	457133	10.0	6.77	
75 Naphthalene	128	7.546	7.546	0.000	97	2059786	10.0	7.37	
76 4-Chloroaniline	127	7.565	7.565	0.000	96	388536	10.0	3.03	M
79 Hexachlorobutadiene	225	7.652	7.652	0.000	98	184968	10.0	6.62	
86 4-Chloro-3-methylphenol	107	7.955	7.955	0.000	95	539459	10.0	6.36	
87 2-Methylnaphthalene	142	8.138	8.138	0.000	95	1215902	10.0	7.13	
89 Hexachlorocyclopentadiene	237	8.277	8.282	-0.005	94	90540	10.0	3.67	
92 2,4,6-Trichlorophenol	196	8.364	8.364	0.000	95	251903	10.0	7.28	
93 2,4,5-Trichlorophenol	196	8.397	8.402	-0.005	91	273743	10.0	7.57	
100 2-Chloronaphthalene	162	8.556	8.556	0.000	96	809444	10.0	6.80	
102 2-Nitroaniline	65	8.614	8.618	-0.004	83	359978	10.0	7.68	
105 Dimethyl phthalate	163	8.748	8.748	0.000	98	1023559	10.0	8.43	
107 2,6-Dinitrotoluene	165	8.806	8.806	0.000	94	233603	10.0	8.53	
109 Acenaphthylene	152	8.917	8.921	-0.004	100	1379827	10.0	6.68	
110 3-Nitroaniline	138	8.960	8.960	0.000	95	287951	10.0	7.14	
111 2,4-Dinitrophenol	184	9.046	9.046	0.000	83	167852	20.0	12.6	
112 Acenaphthene	153	9.066	9.066	0.000	95	809878	10.0	6.83	
113 4-Nitrophenol	109	9.071	9.070	0.000	85	240790	20.0	19.2	
114 2,4-Dinitrotoluene	165	9.157	9.157	0.000	91	315360	10.0	9.25	
116 Dibenzofuran	168	9.205	9.210	-0.005	98	1189322	10.0	7.40	
121 Diethyl phthalate	149	9.340	9.345	-0.005	98	1065887	10.0	9.11	
123 4-Chlorophenyl phenyl ethe	204	9.474	9.474	0.000	94	411128	10.0	7.82	
125 4-Nitroaniline	138	9.479	9.484	-0.005	84	265413	10.0	7.63	
126 Fluorene	166	9.503	9.503	0.000	97	1036418	10.0	7.94	
128 4,6-Dinitro-2-methylphenol	198	9.513	9.513	0.000	88	236019	20.0	12.6	
131 N-Nitrosodiphenylamine	169	9.566	9.571	-0.005	99	1380719	20.0	13.7	
139 4-Bromophenyl phenyl ether	248	9.898	9.898	0.000	74	227308	10.0	7.33	
141 Hexachlorobenzene	284	9.989	9.989	0.000	87	197692	10.0	7.09	
143 Pentachlorophenol	266	10.138	10.143	-0.005	90	311037	20.0	15.4	
148 Phenanthrene	178	10.330	10.330	0.000	97	1599907	10.0	7.54	
149 Anthracene	178	10.374	10.374	0.000	97	1522779	10.0	7.09	
151 Carbazole	167	10.489	10.489	0.000	95	1521133	10.0	7.85	
154 Di-n-butyl phthalate	149	10.725	10.725	0.000	99	2098648	10.0	9.22	
159 Fluoranthene	202	11.350	11.355	-0.005	97	1497566	10.0	8.14	
161 Pyrene	202	11.557	11.557	0.000	94	1616747	10.0	7.87	
168 Butyl benzyl phthalate	149	12.013	12.013	0.000	95	913926	10.0	8.16	
173 Bis(2-ethylhexyl) phthalat	149	12.504	12.504	0.000	97	1354304	10.0	8.65	
175 3,3'-Dichlorobenzidine	252	12.538	12.538	0.000	78	457580	20.0	7.77	
177 Benzo[a]anthracene	228	12.605	12.610	-0.005	96	1443835	10.0	7.54	
178 Chrysene	228	12.648	12.648	0.000	94	1404354	10.0	8.07	
180 Di-n-octyl phthalate	149	13.172	13.177	-0.005	99	2311527	10.0	9.21	
182 Benzo[b]fluoranthene	252	13.865	13.870	-0.005	93	1283288	10.0	8.73	
183 Benzo[k]fluoranthene	252	13.903	13.903	0.000	92	1327900	10.0	8.86	
184 Benzo[a]pyrene	252	14.351	14.355	-0.004	89	1219875	10.0	8.67	
188 Indeno[1,2,3-cd]pyrene	276	16.418	16.423	-0.005	86	1305962	10.0	9.95	
189 Dibenz(a,h)anthracene	278	16.423	16.428	-0.005	87	1060663	10.0	9.60	
190 Benzo[g,h,i]perylene	276	17.029	17.039	-0.010	83	1058573	10.0	9.66	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SMIS80PPMW_00011 Amount Added: 5.00 Units: uL Run Reagent

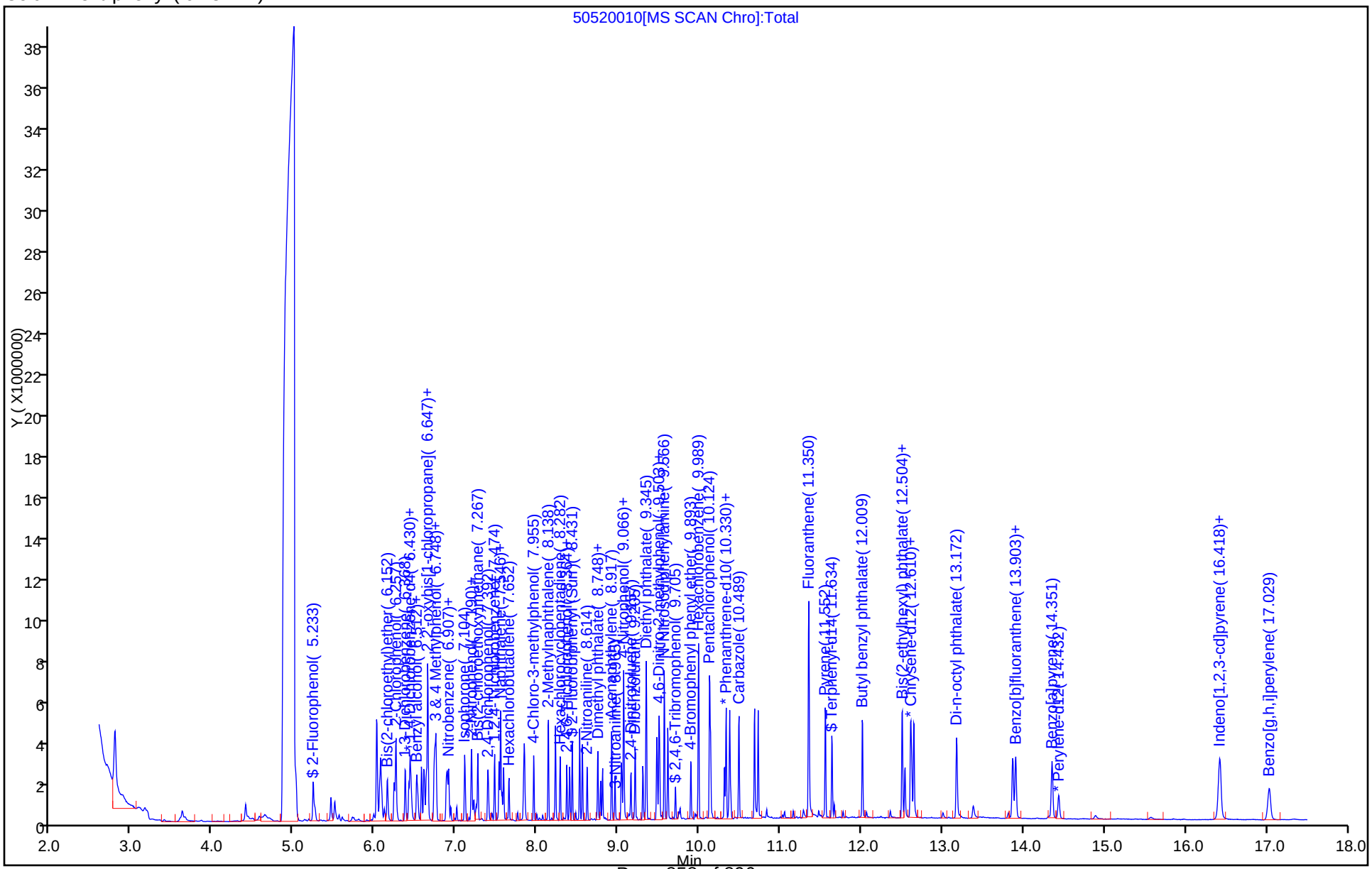
Report Date: 21-May-2015 08:02:33 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520010.D

Injection Date:	20-May-2015 12:50:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	240-50067-A-7-E MS			Worklist Smp#:	10
Client ID:	079SB-0395M-0001-0002-SO				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

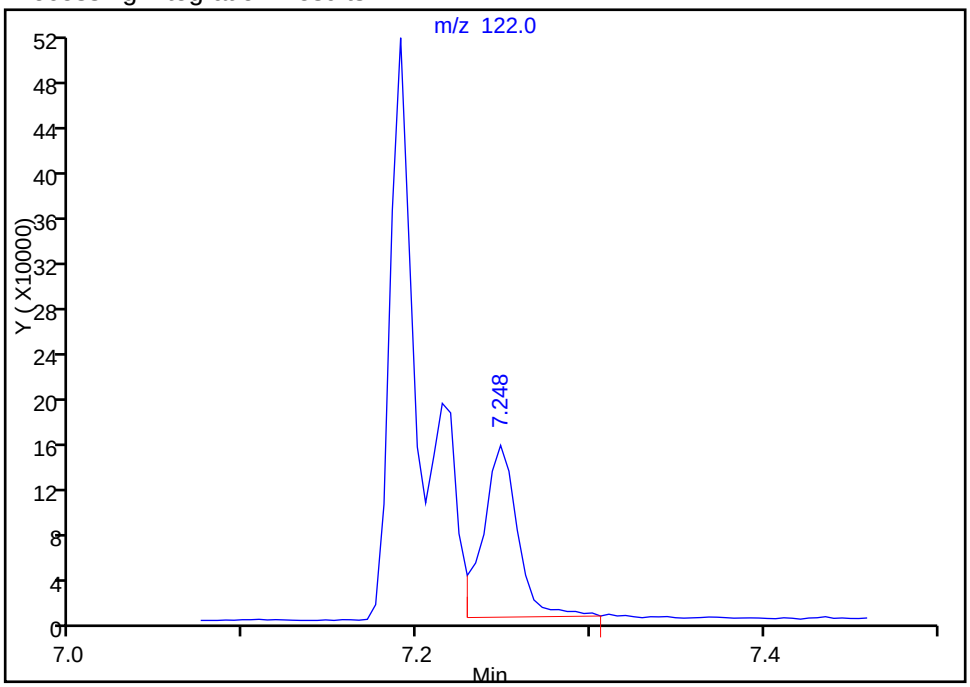
TestAmerica Canton

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Lims ID:	240-50067-A-7-E MS				
Client ID:	079SB-0395M-0001-0002-SO				
Operator ID:	001574	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

71 Benzoic acid, CAS: 65-85-0

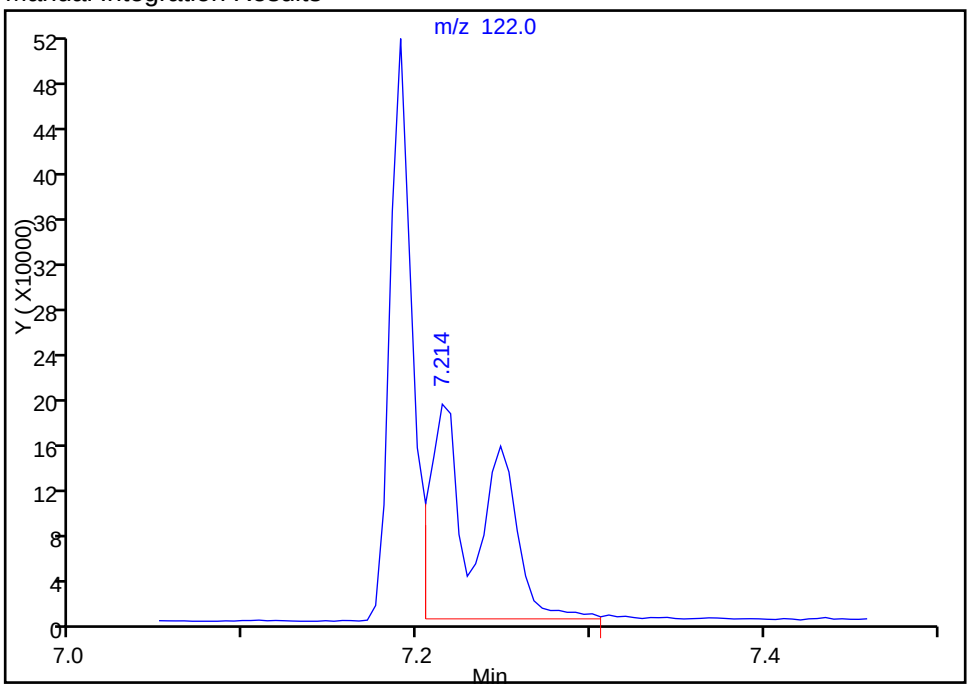
Processing Integration Results

RT: 7.25
Area: 211761
Amount: 3.983179
Amount Units: ng/ul



Manual Integration Results

RT: 7.21
Area: 417457
Amount: 7.852276
Amount Units: ng/ul



Reviewer: ulmanm, 20-May-2015 13:20:35
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

Manual Integration/User Assign Peak Report

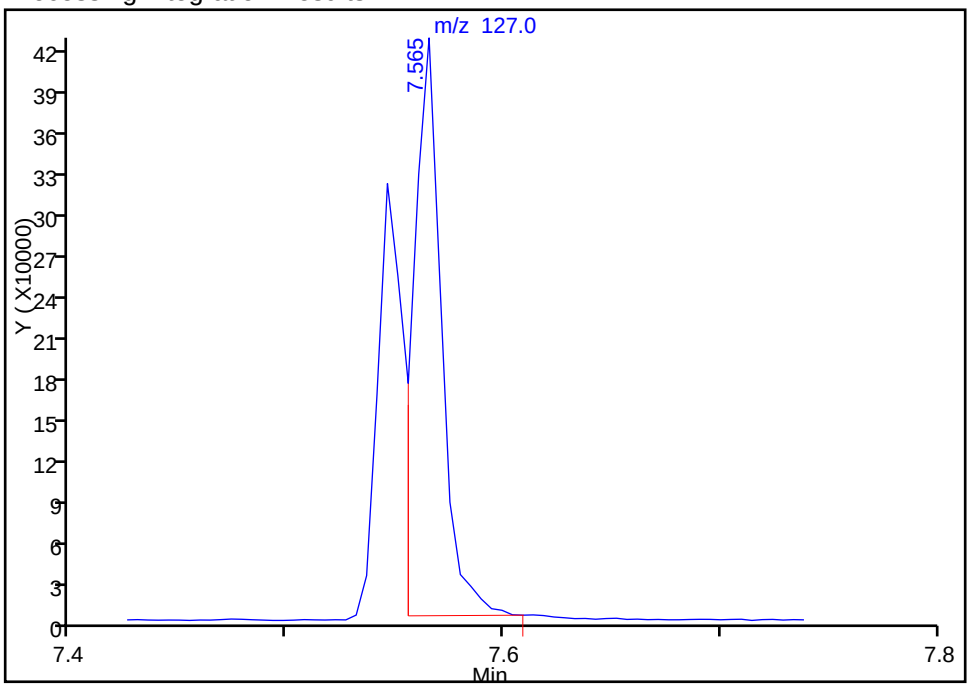
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520010.D				
Injection Date:	20-May-2015 12:50:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-7-E MS				
Client ID:	079SB-0395M-0001-0002-SO				
Operator ID:	001574	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

76 4-Chloroaniline, CAS: 106-47-8

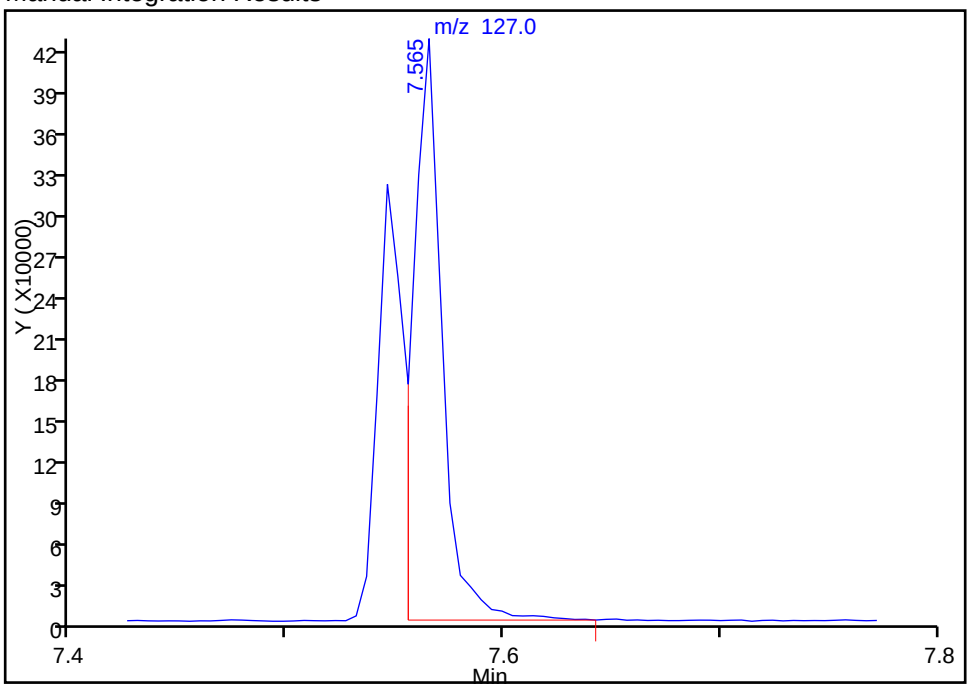
Processing Integration Results

RT: 7.57
Area: 376419
Amount: 2.938394
Amount Units: ng/ul



Manual Integration Results

RT: 7.57
Area: 388536
Amount: 3.032981
Amount Units: ng/ul



Reviewer: ulmanm, 20-May-2015 13:20:35
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0395M-0001-0002-SO | Lab Sample ID: 240-50067-7 MSD

Matrix: Solid | Lab File ID: 50520011.D

Analysis Method: 8270C | Date Collected: 04/29/2015 15:50

Extract. Method: 3540C | Date Extracted: 05/12/2015 10:00

Sample wt/vol: 30.04(g) | Date Analyzed: 05/20/2015 13:15

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
83-32-9	Acenaphthene	472		6.8	3.4	0.78
208-96-8	Acenaphthylene	469		6.8	1.7	0.36
120-12-7	Anthracene	485		6.8	3.4	0.80
56-55-3	Benzo[a]anthracene	500		6.8	3.4	0.65
50-32-8	Benzo[a]pyrene	591		6.8	3.4	0.66
205-99-2	Benzo[b]fluoranthene	588		6.8	3.4	0.61
191-24-2	Benzo[g,h,i]perylene	677		6.8	1.7	0.36
65-85-0	Benzoic acid	339	M J	680	140	37
207-08-9	Benzo[k]fluoranthene	603		6.8	3.4	0.70
100-51-6	Benzyl alcohol	479		340	68	22
111-91-1	Bis(2-chloroethoxy)methane	463		100	68	23
111-44-4	Bis(2-chloroethyl)ether	467		100	3.4	2.1
108-60-1	bis (2-chloroisopropyl) ether	442		100	34	9.8
117-81-7	Bis(2-ethylhexyl) phthalate	583		72	34	20
101-55-3	4-Bromophenyl phenyl ether	500		51	34	13
85-68-7	Butyl benzyl phthalate	541		72	34	10
86-74-8	Carbazole	534		51	34	28
106-47-8	4-Chloroaniline	251		150	68	17
59-50-7	4-Chloro-3-methylphenol	442		150	68	22
91-58-7	2-Chloronaphthalene	456		51	1.7	0.46
95-57-8	2-Chlorophenol	466		51	34	8.4
7005-72-3	4-Chlorophenyl phenyl ether	545		51	34	13
218-01-9	Chrysene	533		6.8	3.4	1.1
53-70-3	Dibenz(a,h)anthracene	655		6.8	3.4	0.68
132-64-9	Dibenzofuran	512		51	3.4	0.68
95-50-1	1,2-Dichlorobenzene	453		51	34	10
541-73-1	1,3-Dichlorobenzene	443		51	34	11
106-46-7	1,4-Dichlorobenzene	448		51	34	21
91-94-1	3,3'-Dichlorobenzidine	656		100	68	18
120-83-2	2,4-Dichlorophenol	417		150	68	21
84-66-2	Diethyl phthalate	626		72	34	16
105-67-9	2,4-Dimethylphenol	381		150	68	21
131-11-3	Dimethyl phthalate	586		72	34	17
84-74-2	Di-n-butyl phthalate	619		72	34	15

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0395M-0001-0002-SO | Lab Sample ID: 240-50067-7 MSD

Matrix: Solid | Lab File ID: 50520011.D

Analysis Method: 8270C | Date Collected: 04/29/2015 15:50

Extract. Method: 3540C | Date Extracted: 05/12/2015 10:00

Sample wt/vol: 30.04(g) | Date Analyzed: 05/20/2015 13:15

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
534-52-1	4,6-Dinitro-2-methylphenol	791		150	34	9.4
51-28-5	2,4-Dinitrophenol	873		340	68	22
121-14-2	2,4-Dinitrotoluene	635		210	68	17
606-20-2	2,6-Dinitrotoluene	594		210	68	22
117-84-0	Di-n-octyl phthalate	623		72	34	8.1
206-44-0	Fluoranthene	545		6.8	3.4	0.56
86-73-7	Fluorene	539		6.8	3.4	0.54
118-74-1	Hexachlorobenzene	489		6.8	3.4	2.2
87-68-3	Hexachlorobutadiene	455		51	34	5.7
77-47-4	Hexachlorocyclopentadiene	250	J	340	34	8.3
67-72-1	Hexachloroethane	420		51	34	9.2
193-39-5	Indeno[1,2,3-cd]pyrene	678		6.8	1.7	0.36
78-59-1	Isophorone	483		51	34	13
91-57-6	2-Methylnaphthalene	476		6.8	3.4	0.51
95-48-7	2-Methylphenol	466		210	68	11
15831-10-4	3 & 4 Methylphenol	441		410	68	21
91-20-3	Naphthalene	493		6.8	3.4	0.84
88-74-4	2-Nitroaniline	535		210	34	9.3
99-09-2	3-Nitroaniline	493		210	68	16
100-01-6	4-Nitroaniline	558		210	68	27
98-95-3	Nitrobenzene	470		100	3.4	2.3
88-75-5	2-Nitrophenol	479		51	34	8.5
100-02-7	4-Nitrophenol	1270		340	68	17
621-64-7	N-Nitrosodi-n-propylamine	449		51	34	6.5
86-30-6	N-Nitrosodiphenylamine	971		51	34	22
87-86-5	Pentachlorophenol	763	J	150	34	9.3
85-01-8	Phenanthrene	521		6.8	3.4	0.75
108-95-2	Phenol	488		51	34	7.5
129-00-0	Pyrene	517		6.8	1.7	0.45
120-82-1	1,2,4-Trichlorobenzene	475		51	17	3.6
95-95-4	2,4,5-Trichlorophenol	512		150	68	26
88-06-2	2,4,6-Trichlorophenol	510		150	34	9.1

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-50067-1

SDG No.:

Client Sample ID: 079SB-0395M-0001-0002-SO | Lab Sample ID: 240-50067-7 MSD

Matrix: Solid | Lab File ID: 50520011.D

Analysis Method: 8270C | Date Collected: 04/29/2015 15:50

Extract. Method: 3540C | Date Extracted: 05/12/2015 10:00

Sample wt/vol: 30.04(g) | Date Analyzed: 05/20/2015 13:15

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 2.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 181588 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	71		45-105
367-12-4	2-Fluorophenol (Surr)	73		35-105
4165-60-0	Nitrobenzene-d5 (Surr)	70		35-100
4165-62-2	Phenol-d5 (Surr)	72		40-100
1718-51-0	Terphenyl-d14 (Surr)	71		30-125
118-79-6	2,4,6-Tribromophenol (Surr)	90		35-125

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520011.D
Lims ID: 240-50067-A-7-F MSD
Client ID: 079SB-0395M-0001-0002-SO
Sample Type: MSD
Inject. Date: 20-May-2015 13:15:30 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0043844-011
Misc. Info.: 240-50067-A-7-F MSD240-50067-A-7-F MSD
Operator ID: 001574 Instrument ID: A4HP9

Method: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\8270 _9.m
Limit Group: MSS 8270 DOD ICAL
Last Update: 21-May-2015 08:02:18 Calib Date: 19-May-2015 19:33:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20150519-43834.b\50519010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: XAWRK034

First Level Reviewer: ulmanm Date: 20-May-2015 13:43:01

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.416	6.411	0.005	96	259936	4.00	4.00	
* 2 Naphthalene-d8	136	7.527	7.527	0.000	99	1072951	4.00	4.00	
* 3 Acenaphthene-d10	164	9.037	9.037	0.000	90	423444	4.00	4.00	
* 4 Phenanthrene-d10	188	10.311	10.311	0.000	95	738690	4.00	4.00	
* 5 Chrysene-d12	240	12.619	12.619	0.000	92	674617	4.00	4.00	
* 6 Perylene-d12	264	14.437	14.437	0.000	90	466369	4.00	4.00	
$ 7 2-Fluorophenol	112	5.238	5.199	0.039	92	815749	10.0	7.26	
$ 8 Phenol-d5	99	6.055	6.046	0.009	93	1089891	10.0	7.18	
$ 9 Nitrobenzene-d5	82	6.887	6.887	0.000	86	767503	10.0	6.98	
$ 10 2-Fluorobiphenyl (Surr)	172	8.431	8.431	0.000	99	861993	10.0	7.14	
$ 11 2,4,6-Tribromophenol	330	9.705	9.710	-0.005	84	100092	10.0	9.01	
$ 12 Terphenyl-d14	244	11.634	11.638	-0.004	97	923503	10.0	7.13	
43 Phenol	94	6.070	6.055	0.015	94	1182315	10.0	7.13	
69 Bis(2-chloroethyl)ether	93	6.147	6.147	0.000	97	891704	10.0	6.83	
46 2-Chlorophenol	128	6.233	6.228	0.005	97	699042	10.0	6.80	
47 1,3-Dichlorobenzene	146	6.373	6.368	0.005	97	649528	10.0	6.47	
48 1,4-Dichlorobenzene	146	6.430	6.426	0.004	93	664844	10.0	6.55	
49 Benzyl alcohol	108	6.512	6.507	0.005	97	582961	10.0	7.00	
50 1,2-Dichlorobenzene	146	6.570	6.570	0.000	97	639284	10.0	6.62	
51 2-Methylphenol	108	6.604	6.594	0.010	89	769120	10.0	6.81	
53 2,2'-oxybis[1-chloropropan	45	6.632	6.628	0.004	86	1095387	10.0	6.45	
21 3 & 4 Methylphenol	108	6.729	6.724	0.005	87	769431	10.0	6.45	
57 N-Nitrosodi-n-propylamine	70	6.738	6.738	0.000	89	512938	10.0	6.56	
61 Hexachloroethane	117	6.878	6.878	0.000	86	253962	10.0	6.14	
62 Nitrobenzene	77	6.907	6.902	0.005	84	785184	10.0	6.86	
64 Isophorone	82	7.104	7.104	0.000	98	1512448	10.0	7.05	
66 2-Nitrophenol	139	7.185	7.185	0.000	94	322086	10.0	7.00	
65 2,4-Dimethylphenol	107	7.190	7.190	0.000	93	542061	10.0	5.57	
71 Benzoic acid	122	7.209	7.238	-0.029	91	266279	20.0	4.95	M
70 Bis(2-chloroethoxy)methane	93	7.267	7.267	0.000	98	939015	10.0	6.76	
73 2,4-Dichlorophenol	162	7.392	7.387	0.005	96	407825	10.0	6.10	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
74 1,2,4-Trichlorobenzene	180	7.474	7.474	0.000	94	474378	10.0	6.94	
75 Naphthalene	128	7.546	7.546	0.000	95	2039297	10.0	7.20	
76 4-Chloroaniline	127	7.565	7.565	0.000	95	475205	10.0	3.66	
79 Hexachlorobutadiene	225	7.652	7.652	0.000	98	188157	10.0	6.65	
86 4-Chloro-3-methylphenol	107	7.955	7.955	0.000	94	554676	10.0	6.45	
87 2-Methylnaphthalene	142	8.138	8.138	0.000	94	1201450	10.0	6.96	
89 Hexachlorocyclopentadiene	237	8.282	8.282	0.000	93	90169	10.0	3.65	
92 2,4,6-Trichlorophenol	196	8.364	8.364	0.000	95	258231	10.0	7.45	
93 2,4,5-Trichlorophenol	196	8.397	8.402	-0.005	92	271440	10.0	7.49	
100 2-Chloronaphthalene	162	8.556	8.556	0.000	96	794484	10.0	6.66	
102 2-Nitroaniline	65	8.614	8.618	-0.004	84	367344	10.0	7.82	
105 Dimethyl phthalate	163	8.748	8.748	0.000	98	1041603	10.0	8.56	
107 2,6-Dinitrotoluene	165	8.806	8.806	0.000	95	238378	10.0	8.68	
109 Acenaphthylene	152	8.917	8.921	-0.004	100	1416953	10.0	6.85	
110 3-Nitroaniline	138	8.960	8.960	0.000	95	290980	10.0	7.20	
111 2,4-Dinitrophenol	184	9.046	9.046	0.000	82	169724	20.0	12.8	
112 Acenaphthene	153	9.066	9.066	0.000	95	818953	10.0	6.89	
113 4-Nitrophenol	109	9.066	9.070	-0.004	85	232631	20.0	18.5	
114 2,4-Dinitrotoluene	165	9.157	9.157	0.000	91	316754	10.0	9.27	
116 Dibenzofuran	168	9.210	9.210	0.000	98	1205063	10.0	7.48	
121 Diethyl phthalate	149	9.340	9.345	-0.005	98	1071679	10.0	9.14	
123 4-Chlorophenyl phenyl ethe	204	9.474	9.474	0.000	94	420079	10.0	7.97	
125 4-Nitroaniline	138	9.479	9.484	-0.005	86	284275	10.0	8.15	
126 Fluorene	166	9.503	9.503	0.000	98	1030934	10.0	7.87	
128 4,6-Dinitro-2-methylphenol	198	9.513	9.513	0.000	89	215096	20.0	11.5	
131 N-Nitrosodiphenylamine	169	9.566	9.571	-0.005	99	1427542	20.0	14.2	
139 4-Bromophenyl phenyl ether	248	9.898	9.898	0.000	75	225798	10.0	7.30	
141 Hexachlorobenzene	284	9.989	9.989	0.000	72	198712	10.0	7.15	
143 Pentachlorophenol	266	10.138	10.143	-0.005	90	224824	20.0	11.2	
148 Phenanthrene	178	10.330	10.330	0.000	97	1608446	10.0	7.61	
149 Anthracene	178	10.374	10.374	0.000	97	1516749	10.0	7.08	
151 Carbazole	167	10.489	10.489	0.000	95	1507337	10.0	7.81	
154 Di-n-butyl phthalate	149	10.725	10.725	0.000	99	2053803	10.0	9.05	
159 Fluoranthene	202	11.355	11.355	0.000	97	1462105	10.0	7.97	
161 Pyrene	202	11.557	11.557	0.000	93	1545458	10.0	7.56	
168 Butyl benzyl phthalate	149	12.013	12.013	0.000	94	880618	10.0	7.90	
173 Bis(2-ethylhexyl) phthalat	149	12.504	12.504	0.000	96	1328666	10.0	8.52	
175 3,3'-Dichlorobenzidine	252	12.538	12.538	0.000	77	561480	20.0	9.58	
177 Benzo[a]anthracene	228	12.610	12.610	0.000	97	1393050	10.0	7.31	
178 Chrysene	228	12.648	12.648	0.000	94	1349509	10.0	7.78	
180 Di-n-octyl phthalate	149	13.177	13.177	0.000	99	2236171	10.0	9.10	
182 Benzo[b]fluoranthene	252	13.870	13.870	0.000	93	1235134	10.0	8.59	
183 Benzo[k]fluoranthene	252	13.903	13.903	0.000	92	1292957	10.0	8.81	
184 Benzo[a]pyrene	252	14.351	14.355	-0.004	88	1190529	10.0	8.64	
188 Indeno[1,2,3-cd]pyrene	276	16.418	16.423	-0.005	85	1272744	10.0	9.90	
189 Dibenz(a,h)anthracene	278	16.423	16.428	-0.005	86	1034377	10.0	9.57	
190 Benzo[g,h,i]perylene	276	17.034	17.039	-0.005	82	1060333	10.0	9.89	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SMIS80PPMW_00011 Amount Added: 5.00 Units: uL Run Reagent

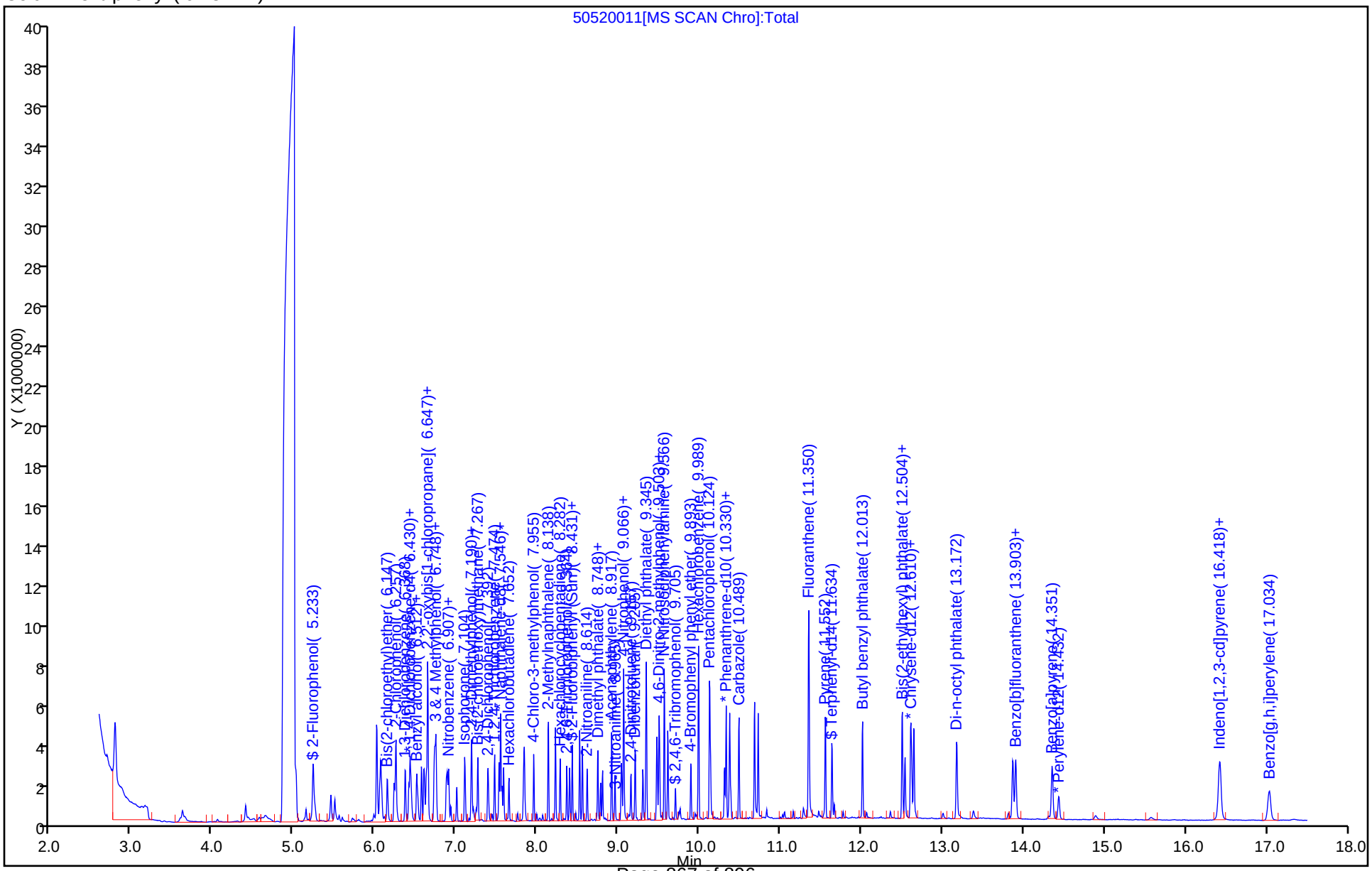
Report Date: 21-May-2015 08:02:34 Chrom Revision: 2.2 05-May-2015 11:39:10

TestAmerica Canton

Data File: \\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520011.D

Injection Date:	20-May-2015 13:15:30	Instrument ID:	A4HP9	Operator ID:	001574
Lims ID:	240-50067-A-7-F MSD			Worklist Smp#:	11
Client ID:	079SB-0395M-0001-0002-SO				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

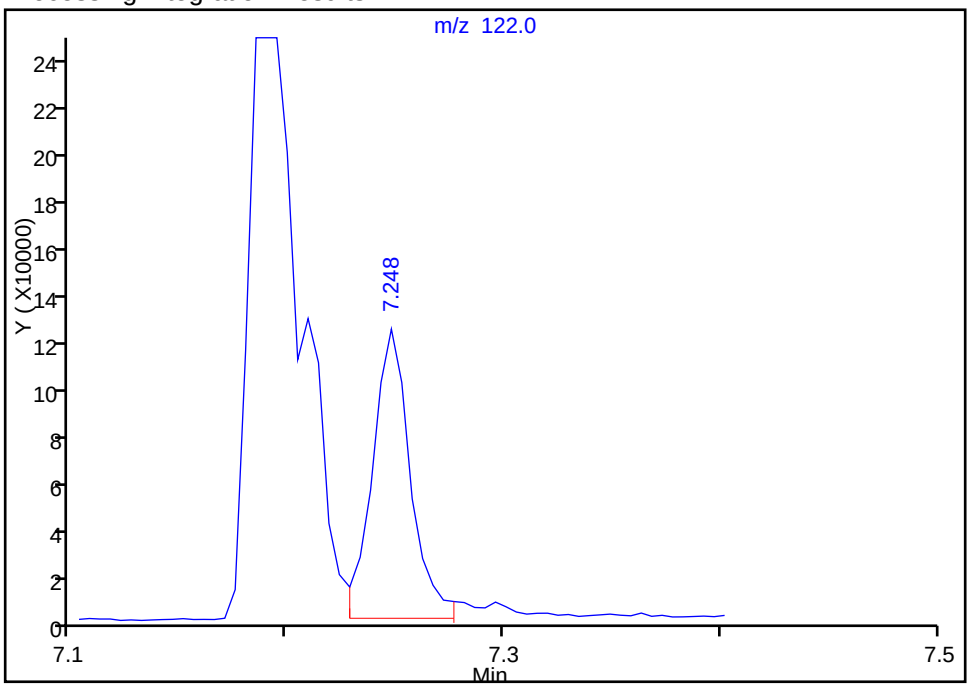
TestAmerica Canton

Data File:	\\Ncchrom\ChromData\A4HP9\20150520-43844.b\50520011.D				
Injection Date:	20-May-2015 13:15:30	Instrument ID:	A4HP9		
Lims ID:	240-50067-A-7-F MSD				
Client ID:	079SB-0395M-0001-0002-SO				
Operator ID:	001574	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	8270 _9	Limit Group:	MSS 8270 DOD ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

71 Benzoic acid, CAS: 65-85-0

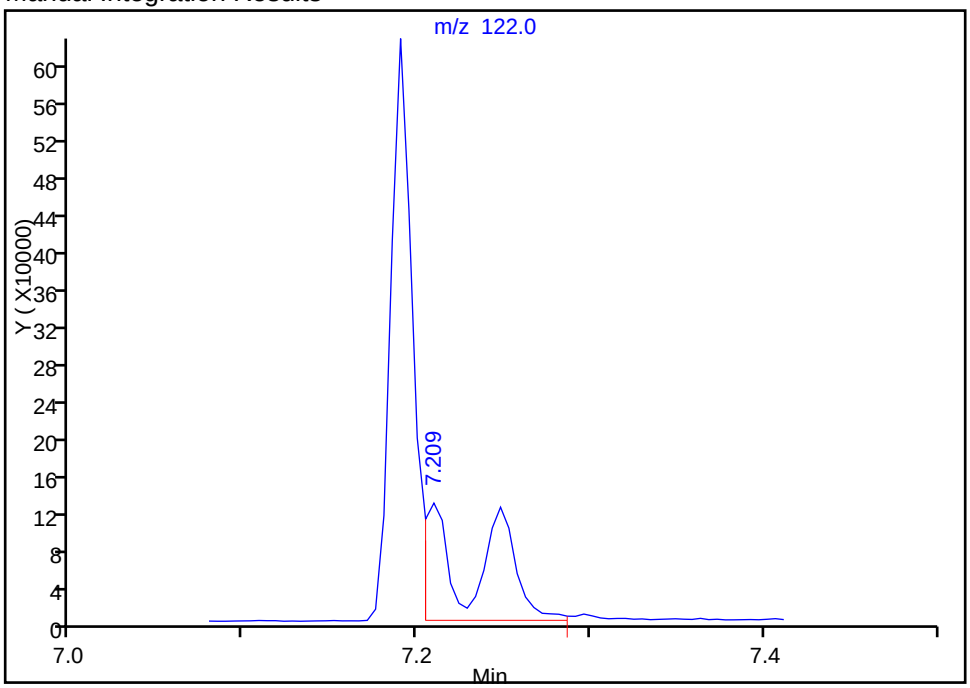
Processing Integration Results

RT: 7.25
Area: 148453
Amount: 2.757506
Amount Units: ng/ul



Manual Integration Results

RT: 7.21
Area: 266279
Amount: 4.946116
Amount Units: ng/ul



Reviewer: ulmanm, 20-May-2015 13:43:01
Audit Action: Manually Integrated
Audit Reason: Poor Chromatography

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Instrument ID: A4HP9 Start Date: 05/12/2015 07:17

Analysis Batch Number: 180308 End Date: 05/12/2015 15:37

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 240-180308/1		05/12/2015 07:17	1	50512001.D	RXI-5SILMS 0.45(mm)
STD5 240-180308/2 IC		05/12/2015 07:38	1	50512002.D	RXI-5SILMS 0.45(mm)
STD4 240-180308/3 IC		05/12/2015 08:03	1	50512003.D	RXI-5SILMS 0.45(mm)
STD3 240-180308/4 IC		05/12/2015 08:28	1	50512004.D	RXI-5SILMS 0.45(mm)
STD2 240-180308/5 IC		05/12/2015 08:53	1	50512005.D	RXI-5SILMS 0.45(mm)
STD1 240-180308/6 IC		05/12/2015 09:19	1	50512006.D	RXI-5SILMS 0.45(mm)
STD9 240-180308/7 IC		05/12/2015 09:44	1	50512007.D	RXI-5SILMS 0.45(mm)
STD8 240-180308/8 IC		05/12/2015 10:09	1	50512008.D	RXI-5SILMS 0.45(mm)
STD7 240-180308/9 IC		05/12/2015 10:34	1	50512009.D	RXI-5SILMS 0.45(mm)
STD6 240-180308/10 ICIS		05/12/2015 10:59	1	50512010.D	RXI-5SILMS 0.45(mm)
ICV 240-180308/11		05/12/2015 11:25	1	50512011.D	RXI-5SILMS 0.45(mm)
MRL 240-180308/12		05/12/2015 11:50	1	50512012.D	RXI-5SILMS 0.45(mm)
MB 240-179064/2-A		05/12/2015 12:15	1	50512013.D	RXI-5SILMS 0.45(mm)
LCS 240-179064/3-A		05/12/2015 12:40	1	50512014.D	RXI-5SILMS 0.45(mm)
ZZZZZ		05/12/2015 13:05	1		RXI-5SILMS 0.45(mm)
ZZZZZ		05/12/2015 13:31	1		RXI-5SILMS 0.45(mm)
240-50067-11	079SB-0399-0001-RB	05/12/2015 14:46	1	50512019.D	RXI-5SILMS 0.45(mm)
ZZZZZ		05/12/2015 15:12	1		RXI-5SILMS 0.45(mm)
MRL 240-180308/21		05/12/2015 15:37	1	50512021.D	RXI-5SILMS 0.45(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Instrument ID: A4HP9 Start Date: 05/14/2015 10:03

Analysis Batch Number: 180709 End Date: 05/14/2015 12:28

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 240-180709/1		05/14/2015 10:03	1	50514001.D	RXI-5SILMS 0.45(mm)
CCV 240-180709/2		05/14/2015 10:24	1	50514002.D	RXI-5SILMS 0.45(mm)
MRL 240-180709/3		05/14/2015 10:49	1	50514003.D	RXI-5SILMS 0.45(mm)
MB 240-180428/2-A		05/14/2015 11:14	1	50514004.D	RXI-5SILMS 0.45(mm)
LCS 240-180428/3-A		05/14/2015 11:39	1	50514005.D	RXI-5SILMS 0.45(mm)
240-50067-11 RE	079SB-0399-0001-RB RE	05/14/2015 12:03	1	50514006.D	RXI-5SILMS 0.45(mm)
MRL 240-180709/7		05/14/2015 12:28	1	50514007.D	RXI-5SILMS 0.45(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Instrument ID: A4HP9 Start Date: 05/19/2015 15:52

Analysis Batch Number: 181539 End Date: 05/19/2015 19:58

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 240-181539/1		05/19/2015 15:52	1	50519001.D	RXI-5SILMS 0.45(mm)
STD5 240-181539/2 IC		05/19/2015 16:13	1	50519002.D	RXI-5SILMS 0.45(mm)
STD4 240-181539/3 IC		05/19/2015 16:38	1	50519003.D	RXI-5SILMS 0.45(mm)
STD3 240-181539/4 IC		05/19/2015 17:03	1	50519004.D	RXI-5SILMS 0.45(mm)
STD2 240-181539/5 IC		05/19/2015 17:28	1	50519005.D	RXI-5SILMS 0.45(mm)
STD1 240-181539/6 IC		05/19/2015 17:53	1	50519006.D	RXI-5SILMS 0.45(mm)
STD9 240-181539/7 IC		05/19/2015 18:18	1	50519007.D	RXI-5SILMS 0.45(mm)
STD8 240-181539/8 IC		05/19/2015 18:43	1	50519008.D	RXI-5SILMS 0.45(mm)
STD7 240-181539/9 IC		05/19/2015 19:08	1	50519009.D	RXI-5SILMS 0.45(mm)
STD6 240-181539/10 ICIS		05/19/2015 19:33	1	50519010.D	RXI-5SILMS 0.45(mm)
ICV 240-181539/11		05/19/2015 19:58	1	50519011.D	RXI-5SILMS 0.45(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Instrument ID: A4HP9 Start Date: 05/20/2015 09:09

Analysis Batch Number: 181588 End Date: 05/20/2015 19:31

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 240-181588/1		05/20/2015 09:09	1	50520001.D	RXI-5SILMS 0.45(mm)
CCV 240-181588/2		05/20/2015 09:30	1	50520002.D	RXI-5SILMS 0.45(mm)
MRL 240-181588/3		05/20/2015 09:55	1	50520003.D	RXI-5SILMS 0.45(mm)
MB 240-179108/22-A		05/20/2015 10:20	1	50520004.D	RXI-5SILMS 0.45(mm)
LCS 240-179108/23-A		05/20/2015 10:45	1	50520005.D	RXI-5SILMS 0.45(mm)
MB 240-180350/8-A		05/20/2015 11:10	1	50520006.D	RXI-5SILMS 0.45(mm)
LCS 240-180350/9-A		05/20/2015 11:35	1	50520007.D	RXI-5SILMS 0.45(mm)
240-50067-10	079SB-0398-0001-SO	05/20/2015 12:00	1	50520008.D	RXI-5SILMS 0.45(mm)
240-50067-7	079SB-0395M-0001-0002-SO	05/20/2015 12:25	1	50520009.D	RXI-5SILMS 0.45(mm)
240-50067-7 MS	079SB-0395M-0001-0002-SO MS	05/20/2015 12:50	1	50520010.D	RXI-5SILMS 0.45(mm)
240-50067-7 MSD	079SB-0395M-0001-0002-SO MSD	05/20/2015 13:15	1	50520011.D	RXI-5SILMS 0.45(mm)
240-50067-8	079SB-0396M-0001-SO	05/20/2015 13:40	1	50520012.D	RXI-5SILMS 0.45(mm)
240-50067-9	079SB-0397M-0001-SO	05/20/2015 14:04	1	50520013.D	RXI-5SILMS 0.45(mm)
240-50067-2	079SB-0390M-0001-SO	05/20/2015 14:55	1	50520014.D	RXI-5SILMS 0.45(mm)
240-50067-3	079SB-0391M-0001-SO	05/20/2015 15:20	1	50520015.D	RXI-5SILMS 0.45(mm)
240-50067-4	079SB-0392M-0001-SO	05/20/2015 15:45	1	50520016.D	RXI-5SILMS 0.45(mm)
240-50067-5	079SB-0393M-0001-SO	05/20/2015 16:11	1	50520017.D	RXI-5SILMS 0.45(mm)
ZZZZZ		05/20/2015 16:36	1		RXI-5SILMS 0.45(mm)
240-50067-1	079SS-0389M-0001-SO	05/20/2015 17:01	1	50520019.D	RXI-5SILMS 0.45(mm)
MRL 240-181588/20		05/20/2015 17:51	1	50520020.D	RXI-5SILMS 0.45(mm)
LODV 240-181588/21		05/20/2015 18:16	1	50520021.D	RXI-5SILMS 0.45(mm)
LODV 240-181588/22		05/20/2015 18:41	1	50520022.D	RXI-5SILMS 0.45(mm)
LODV 240-181588/23		05/20/2015 19:06	1	50520023.D	RXI-5SILMS 0.45(mm)
LODV 240-181588/24		05/20/2015 19:31	1	50520024.D	RXI-5SILMS 0.45(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Instrument ID: A4HP9 Start Date: 05/21/2015 07:32

Analysis Batch Number: 181781 End Date: 05/21/2015 12:54

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 240-181781/1		05/21/2015 07:32	1	50521001.D	RXI-5SILMS 0.45(mm)
CCV 240-181781/2		05/21/2015 07:55	1	50521002.D	RXI-5SILMS 0.45(mm)
MRL 240-181781/3		05/21/2015 08:20	1	50521003.D	RXI-5SILMS 0.45(mm)
240-50067-6	079SB-0394M-0001-SO	05/21/2015 09:35	1	50521006.D	RXI-5SILMS 0.45(mm)
MRL 240-181781/16		05/21/2015 11:15	1	50521016.D	RXI-5SILMS 0.45(mm)
LODV 240-181781/17		05/21/2015 12:04	1	50521017.D	RXI-5SILMS 0.45(mm)
LODV 240-181781/18		05/21/2015 12:29	1	50521018.D	RXI-5SILMS 0.45(mm)
LODV 240-181781/19		05/21/2015 12:54	1	50521019.D	RXI-5SILMS 0.45(mm)

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Batch Number: 179064 Batch Start Date: 05/04/15 06:45 Batch Analyst: Coast, Chris

Batch Method: 3520C Batch End Date: 05/05/15 00:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ReceivedpH	FirstAdjustpH	EXBENZALDEHYD 00021	EXBNASPIKE 00040
240-50067-B-11	079SB-0399-0001-RB	3520C, 8270C	T	1050 mL	2 mL	5	2		
MB 240-179064/2		3520C, 8270C		1000 mL	2 mL	7	2		
LCS 240-179064/3		3520C, 8270C		1000 mL	2 mL	7	2	1 mL	1 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	EXBNASURR W 00022					
240-50067-B-11	079SB-0399-0001-RB	3520C, 8270C	T	1 mL					
MB 240-179064/2		3520C, 8270C		1 mL					
LCS 240-179064/3		3520C, 8270C		1 mL					

Batch Notes	
Acid used for pH adjust Lot #	1889346
Na2SO4 Lot Number	1942692
pH Paper Lot Number	1928957
Prep Solvent Lot #	1980775

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Batch Number: 179108 Batch Start Date: 05/04/15 12:45 Batch Analyst: Earle, Steve

Batch Method: 3540C Batch End Date: 05/05/15 04:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	EXBENZALDEHYD 00021	EXBNASPIKE 00040	EXBNASURR W 00022	
240-50067-A-10	079SB-0398-0001-SO	3540C, 8270C	T	30.06 g	2 mL			1 mL	
MB 240-179108/22		3540C, 8270C		30 g	2 mL			1 mL	
LCS 240-179108/23		3540C, 8270C		30 g	2 mL	1 mL	1 mL	1 mL	

Batch Notes	
Balance ID	1339907
Na2SO4 Lot Number	1942694
Prep Solvent Lot #	1937117

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Batch Number: 180350 Batch Start Date: 05/12/15 13:25 Batch Analyst: Earle, Steve

Batch Method: 3540C Batch End Date: 05/13/15 05:25

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	EXBENZALDEHYD 00021	EXBNASPIKE 00040	EXBNASURR W 00022	
240-50067-A-7-C MS	079SB-0395M-0001 -0002-SO	3540C, 8270C	T	30.19 g	2 mL	1 mL	1 mL	1 mL	
240-50067-A-7-D MSD	079SB-0395M-0001 -0002-SO	3540C, 8270C	T	30.04 g	2 mL	1 mL	1 mL	1 mL	
MB 240-180350/8		3540C, 8270C		30 g	2 mL			1 mL	
LCS 240-180350/9		3540C, 8270C		30 g	2 mL	1 mL	1 mL	1 mL	
240-50067-A-1-A	079SS-0389M-0001 -SO	3540C, 8270C	T	29.94 g	2 mL			1 mL	
240-50067-A-2-A	079SB-0390M-0001 -SO	3540C, 8270C	T	30.10 g	2 mL			1 mL	
240-50067-A-3-A	079SB-0391M-0001 -SO	3540C, 8270C	T	30.13 g	2 mL			1 mL	
240-50067-A-4-A	079SB-0392M-0001 -SO	3540C, 8270C	T	29.62 g	2 mL			1 mL	
240-50067-A-5-A	079SB-0393M-0001 -SO	3540C, 8270C	T	30.42 g	2 mL			1 mL	
240-50067-A-6-A	079SB-0394M-0001 -SO	3540C, 8270C	T	30.24 g	2 mL			1 mL	
240-50067-A-7-A	079SB-0395M-0001 -0002-SO	3540C, 8270C	T	29.86 g	2 mL			1 mL	
240-50067-A-8-A	079SB-0396M-0001 -SO	3540C, 8270C	T	30.31 g	2 mL			1 mL	
240-50067-A-9-A	079SB-0397M-0001 -SO	3540C, 8270C	T	30.12 g	2 mL			1 mL	

Batch Notes	
Balance ID	1339907
Na2SO4 Lot Number	1942694
Prep Solvent Lot #	1937117

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Batch Number: 180428 Batch Start Date: 05/12/15 13:45 Batch Analyst: Coast, Chris

Batch Method: 3520C Batch End Date: 05/13/15 07:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	FirstAdjustpH	SecondAdjustpH	EXBENZALDEHYD 00021
240-50067-A-11	079SB-0399-0001-RB	3520C, 8270C	T	5	1050 mL	2 mL	2	12	
MB 240-180428/2		3520C, 8270C		7	1000 mL	2 mL	2	12	
LCS 240-180428/3		3520C, 8270C		7	1000 mL	2 mL	2	12	1 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	EXBNASPIKE 00040	EXBNASURR W 00022				
240-50067-A-11	079SB-0399-0001-RB	3520C, 8270C	T		1 mL				
MB 240-180428/2		3520C, 8270C			1 mL				
LCS 240-180428/3		3520C, 8270C		1 mL	1 mL				

Batch Notes	
Acid used for pH adjust Lot #	1889346
Base used for pH adjust Lot #	1889397
Prep Solvent Lot #	2000054

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-50067-1

SDG No.:

Project: RVAAP - ECC

Client Sample ID	Lab Sample ID
079SS-0389M-0001-SO	240-50067-1
079SB-0390M-0001-SO	240-50067-2
079SB-0391M-0001-SO	240-50067-3
079SB-0392M-0001-SO	240-50067-4
079SB-0393M-0001-SO	240-50067-5
079SB-0394M-0001-SO	240-50067-6
079SB-0395M-0001-0002-SO	240-50067-7
079SB-0396M-0001-SO	240-50067-8
079SB-0397M-0001-SO	240-50067-9
079SB-0398-0001-SO	240-50067-10

Comments:

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-50067-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture LOQ Date: 01/28/2010 09:24

Analyte	Wavelength/ Mass	LOQ (%)	
Percent Moisture		0.1	
Percent Solids		0.1	

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-50067-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture XRL Date: 01/28/2010 09:24

Analyte	Wavelength/ Mass	XRL (mg/L)	
Percent Moisture		10	
Percent Solids		10	

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-50067-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture LOQ Date: 01/28/2010 09:24

ISM Prep Method: Increment, Prep

Analyte	Wavelength/ Mass	LOQ (%)	
Percent Moisture		0.1	
Percent Solids		0.1	

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-50067-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture XRL Date: 01/28/2010 09:24

Analyte	Wavelength/ Mass	XRL (mg/L)	
Percent Moisture		10	
Percent Solids		10	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 05/05/2015 13:33 End Date: 05/05/2015 16:41

Lab Sample Id	D/F	Type	Time	Analytes																									
				% Sol	Moist																								
ZZZZZZ			13:33	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 05/05/2015 13:33 End Date: 05/05/2015 16:41

Lab Sample Id	D/F	Type	Time	Analytes																									
				% Sol	Moist																								
ZZZZZZ			13:33																										
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FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 05/05/2015 13:33 End Date: 05/05/2015 16:41

Lab Sample Id	D/F	Type	Time	Analytes																									
				%Sol	Moist																								
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240-50067-10 DU	1	T	13:33	X	X																								
240-50067-10	1	T	16:41	X	X																								
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FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 05/05/2015 13:33 End Date: 05/05/2015 16:41

Lab Sample Id	D/F	Type	Time	Analytes																									
				% Sol	Moist																								
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Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 05/12/2015 15:52 End Date: 05/12/2015 15:52

Lab Sample Id	D/F	Type	Time	Analytes																									
				% Sol	Moist																								
240-50067-7 DU	1	T	15:52	X	X																								
240-50067-7	1	T	15:52	X	X																								
240-50067-1	1	T	15:52	X	X																								
240-50067-2	1	T	15:52	X	X																								
240-50067-3	1	T	15:52	X	X																								
240-50067-4	1	T	15:52	X	X																								
240-50067-5	1	T	15:52	X	X																								
240-50067-6	1	T	15:52	X	X																								
240-50067-8	1	T	15:52	X	X																								
240-50067-9	1	T	15:52	X	X																								
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FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 05/12/2015 15:52 End Date: 05/12/2015 15:52

Lab Sample Id	D/F	Type	Time	Analytes																									
				% Sol	Moist																								
ZZZZZZ			15:52																										
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Prep Types:
T = Total/NA

FORM XIII-IN

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Batch Number: 179415 Batch Start Date: 05/05/15 13:33 Batch Analyst: Eikelberry, Nicholas

Batch Method: Moisture Batch End Date: 05/06/15 11:34

Lab Sample ID	Client Sample ID	Method Chain	Basis	DishWeight	SampleMassWet	SampleMassDry			
240-50067-A-10 DU	079SB-0398-0001-SO	Moisture	T	4.2418 g	11.7621 g	10.7046 g			
240-50067-A-10	079SB-0398-0001-SO	Moisture	T	4.2418 g	11.7373 g	10.5826 g			

Batch Notes	
Balance ID	B047 No Unit
Date samples were placed in the oven	05/05/15
Oven Temp when samples are put in oven	102.9 Degrees C
Time samples were place in the oven	18:14
Date samples were removed from oven	5/6/15
Oven Temp when samples removed from oven	103.6 Degrees C
Time Samples were removed from oven	6:15
Oven ID	002
ID number of the thermometer	TempGuard Box-C #6

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-50067-1

SDG No.:

Batch Number: 180459 Batch Start Date: 05/12/15 15:52 Batch Analyst: Eikelberry, Nicholas

Batch Method: Moisture Batch End Date: 05/13/15 11:31

Lab Sample ID	Client Sample ID	Method Chain	Basis	DishWeight	SampleMassWet	SampleMassDry			
240-50067-A-7-BDU	079SB-0395M-0001-0002-SO	Moisture	T	4.2418 g	21.4813 g	21.0008 g			
240-50067-A-7-A	079SB-0395M-0001-0002-SO	Moisture	T	4.2418 g	24.3966 g	23.8462 g			
240-50067-A-1-A	079SS-0389M-0001-SO	Moisture	T	4.2418 g	21.7194 g	21.2413 g			
240-50067-A-2-A	079SB-0390M-0001-SO	Moisture	T	4.2418 g	18.8628 g	18.4808 g			
240-50067-A-3-A	079SB-0391M-0001-SO	Moisture	T	4.2418 g	18.4536 g	18.1343 g			
240-50067-A-4-A	079SB-0392M-0001-SO	Moisture	T	4.2418 g	20.5019 g	20.0762 g			
240-50067-A-5-A	079SB-0393M-0001-SO	Moisture	T	4.2418 g	17.4350 g	17.0977 g			
240-50067-A-6-A	079SB-0394M-0001-SO	Moisture	T	4.2418 g	17.4522 g	17.1536 g			
240-50067-A-8-A	079SB-0396M-0001-SO	Moisture	T	4.2418 g	15.6620 g	15.3871 g			
240-50067-A-9-A	079SB-0397M-0001-SO	Moisture	T	4.2418 g	16.2617 g	16.0100 g			

Batch Notes	
Balance ID	B047 No Unit
Date samples were placed in the oven	05/12/15
Oven Temp when samples are put in oven	102.9 Degrees C
Time samples were place in the oven	18:00
Date samples were removed from oven	5/13/15
Oven Temp when samples removed from oven	103.3 Degrees C
Time Samples were removed from oven	06:20
Oven ID	002
ID number of the thermometer	Tempguard Box C #6

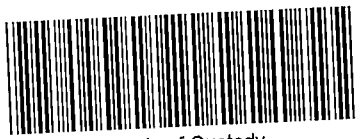
Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

TestAmerica Laboratories, Inc.

CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS



240-50067 Chain of Custody

4101 Shuffel Street, N.W. North Canton, OH 44720 **tel** 330.497.9396 **fax** 330.497.0772 **www.testamericainc.com**

TestAmerica Canton

4101 Shuffel Street, N. W.
North Canton, OH 44720
Phone: 330 497 9396 Fax: 330 497 [illegible]

4.8/C5.3 2.6/C3.1

TA PROJECT # 24009157

Chain of Custody Record

103000

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: A. EASTERDAY	Site Contact: J. DONOVAN	Date: 4-30-15	COC No: 103000
Company Name: ECC	Tel/Fax:	Lab Contact: MARK LOEB	Carrier: TA COURIER	1 of 1 COCs
Address: 33 BOSTON POST ROAD WEST #320	Analysis Turnaround Time			Sampler: TD, FR, DC
City/State/Zip: MARLBORO MA 01752	☒ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 508-229-2270	TAT if different from Below ____			Walk-in Client:
Fax:	☒ ~~2 weeks~~ 3 WEEKS			Lab Sampling:
Project Name: RAYRAMA	☐ 1 week			
Site: CC 29 DU05	☐ 4-30-15 2 days			Job / SDG No.:
PO # 5141.004	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	SVOC 8270	Sample Specific Notes:
07955-0389M-0001-SO	4-28-15	1600	ISM	SO	1	N	N	X	
0795B-0390M-0001-SO	4-29-15	1655						X	
0795B-0391M-0001-SO		1658						X	
0795B-0392M-0001-SO		1523						X	
0795B-0393M-0001-SO		0000						X	
0795B-0394M-0001-SO		1530						X	
0795B-0395M-0001-SO		1550						X	
0795B-0395M-0002-SO MS/MSD		1550			~~D1~~ 2 4-30-15			X	MS/MSD
0795B-0396M-0001-SO		1620						X	
0795B-0397M-0001-SO		1705	↓					X	
0795B-0398-0001-SO	↓	1640	COMP	↓	↓			X	COMPOSITE DO NOT DRY
0795B-0394-0001-RB	4-30-15	0805	G	DI	2	↓	↓	X	RINSATE BLK

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments:

"M" = ISM SAMPLE TYPE

~~DJA 4-30-15~~

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: ____ Corr'd: ____	Therm ID No.: ____
Relinquished by:	Company: ECC	Date/Time: 4-30-15 1140	Received by:	Company: TestAmerica	Date/Time: 4-30-15 1140
Relinquished by:	Company: TestAm 4/30/15	Date/Time: 1240	Received by:	Company: TA Can	Date/Time: 4/30/15 1240
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 50007**
Canton Facility

Client ECC Site Name Ravenna

Cooler unpacked by: Jerry Burns

Cooler Received on 4/30/15 Opened on 4/30/15

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off (TestAmerica Courier) Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # Foam Box Client Cooler Box Other Multiple

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

~~IR GUN# A (CF +4.0 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C~~

(IR GUN# 4) (CF +0.5 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C ☑ See Multiple Cooler Form

~~IR GUN# 5 (CF +0.4 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C~~

IR GUN# 8 (CF -1.2 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 ea (Yes) No
   -Were custody seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were custody seals on the bottle(s)? Yes (No)
3. Shippers' packing slip attached to the cooler(s)? Yes (No)
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Was/were the sampler(s) clearly identified on the COC? Yes (No)
7. Did all bottles arrive in good condition (Unbroken)? (Yes) No
8. Could all bottle labels be reconciled with the COC? (Yes) No
9. Were correct bottle(s) used for the test(s) indicated? (Yes) No
10. Sufficient quantity received to perform indicated analyses? (Yes) No
11. Were sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# **HC432654**
12. Were VOAs on the COC? Yes (No)
13. Were air bubbles >6 mm in any VOA vials? Yes No (NA)
14. Was a trip blank present in the cooler(s)? Trip Blank Lot # Yes (No)

Contacted PM Date by via Verbal Voice Mail Other

Concerning

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

15. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.

Sample(s) were received in a broken container.

Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory.

Time preserved: Preservative(s) added/Lot number(s):

TestAmerica Multiple Cooler Receipt Form/Narrative
Canton Facility

Login # : 50007

Cooler #	IR Gun #	Observed Temp °C	Corrected Temp °C	Coolant
Client	4	4.8	5.3	ICE
TA No#	1	2.6	3.1	J

ANALYTICAL REPORT

Job Number: 240-50650-1

Job Description: RVAAP - ECC

For:
Environmental Chemical Corp.
33 Boston Post Road West
Suite 420
Marlborough, MA 01752

Attention: Mr. Jackson Kiker



Approved for release.
Mark J Loeb
Project Manager II
6/3/2015 12:23 PM

Mark J Loeb, Project Manager II
4101 Shuffel Street NW, North Canton, OH, 44720
(330)966-9387
mark.loeb@testamericainc.com
06/03/2015

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of TestAmerica and its client. All questions regarding this report should be directed to the TestAmerica Project Manager who has signed this report.

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Client Chain of Custody 1005

Qualifiers

Metals

Qualifier	Qualifier Description
J	Estimated: The analyte was positively identified; the quantitation is an estimation
D	The reported value is from a dilution.
J	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
U	Undetected at the Limit of Detection.
B	Blank contamination: The analyte was detected above one-half the reporting limit in an associated blank.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

CASE NARRATIVE

Client: Environmental Chemical Corp.

Project: RVAAP - ECC

Report Number: 240-50650-1

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

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

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

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

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

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

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

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

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

RECEIPT

The samples were received on 5/13/2015 12:44 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.5º C.

TOTAL METALS (ICPMS) WITH INCREMENTAL SAMPLE PREPARATION

Samples 079SS-0400M-0001-SO (240-50650-1), 079SS-0402M-0001-SO (240-50650-3), 079SS-0403M-0001-SO (240-50650-4), 079SS-0404M-0001-SO (240-50650-5), 079SS-0405M-0001-SO (240-50650-6) and 079SS-0406M-0001-SO (240-50650-7) were analyzed for total metals (ICPMS) with incremental sample preparation in accordance with ITRC Technical and Regulatory Guidance: ISM, February 2012 and EPA SW-846 Method 6020 DoD. The samples began the drying process on 05/14/2015, were digested on 05/26/2015 and analyzed on 05/28/2015, 05/29/2015 and 06/01/2015.

Several analytes were detected in method blank MB 240-182339/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Antimony, Calcium and Iron failed the recovery criteria low for the MS of sample 079SS-0400M-0001-SOMS (240-50650-1) in batch 240-183211. Aluminum failed the recovery criteria high.

Samples 079SS-0400M-0001-SO (240-50650-1)[20X], 079SS-0402M-0001-SO (240-50650-3)[20X], 079SS-0403M-0001-SO (240-50650-4)[20X], 079SS-0404M-0001-SO (240-50650-5)[20X], 079SS-0405M-0001-SO (240-50650-6)[20X] and 079SS-0406M-0001-SO (240-50650-7)[20X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

TOTAL RECOVERABLE METALS (ICPMS)

Sample 079SS-0407-0001-RB (240-50650-8) was analyzed for total recoverable metals (ICPMS) in accordance with EPA SW-846

Method 6020 DoD. The samples were prepared on 05/14/2015 and analyzed on 05/18/2015 and 05/19/2015.

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

Several analytes were detected in method blank MB 240-180747/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Per SOP requirements, one matrix spike/ matrix spike duplicate MS/MSD or MS/DUP pair must be processed for each preperation batch. However, samples identified as field blanks cannot be used for matrix spike/ matrix spike duplicate (MS/MSD) analysis. Therefore, MS/MSD was not processed with the preperation batch 180747. Batch includes: 079SS-0407-0001-RB (240-50650-8).

Some requested practical quantitation limits (PQLs) on the following samples fall below the laboratory's verified standard quantitation limit: 079SS-0407-0001-RB (240-50650-8). The continuing calibration blanks and method blanks may not support the lower PQL.

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

TOTAL MERCURY

Sample 079SS-0407-0001-RB (240-50650-8) was analyzed for total mercury in accordance with EPA SW-846 Method 7470A. The samples were prepared on 05/14/2015 and analyzed on 05/15/2015.

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

MERCURY WITH INCREMENTAL SAMPLE PREPARATION

Samples 079SS-0400M-0001-SO (240-50650-1), 079SS-0402M-0001-SO (240-50650-3), 079SS-0403M-0001-SO (240-50650-4), 079SS-0404M-0001-SO (240-50650-5), 079SS-0405M-0001-SO (240-50650-6) and 079SS-0406M-0001-SO (240-50650-7) were analyzed for mercury with incremental sample preparation in accordance with ITRC Technical and Regulatory Guidance: ISM, February 2012 and EPA SW-846 Method 7471A DOD. The samples began the drying process on 05/14/2015, were digested on 05/26/2015 and analyzed on 05/28/2015.

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

TOTAL SOLIDS/PERCENT MOISTURE

Samples 079SS-0400M-0001-SO (240-50650-1), 079SS-0402M-0001-SO (240-50650-3), 079SS-0403M-0001-SO (240-50650-4), 079SS-0404M-0001-SO (240-50650-5), 079SS-0405M-0001-SO (240-50650-6) and 079SS-0406M-0001-SO (240-50650-7) were analyzed for Total Solids/Percent Moisture in accordance with Percent Moisture method. The samples were leached on 05/14/2015 and analyzed on 05/21/2015.

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

Detection Summary

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

TestAmerica Job ID: 240-50650-1

Client Sample ID: 079SS-0400M-0001-SO — Lab Sample ID: 240-50650-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	11000	J D	190	5.7	mg/Kg	20	☼	6020	Total/NA
Antimony	0.22	J D	0.37	0.013	mg/Kg	2	☼	6020	Total/NA
Arsenic	12	D	0.93	0.024	mg/Kg	2	☼	6020	Total/NA
Barium	84	D	0.93	0.20	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.67	D	0.19	0.010	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.27	J D	0.37	0.0034	mg/Kg	2	☼	6020	Total/NA
Calcium	3500	J D	370	20	mg/Kg	2	☼	6020	Total/NA
Chromium	17	D	0.93	0.056	mg/Kg	2	☼	6020	Total/NA
Cobalt	9.0	D	0.19	0.0016	mg/Kg	2	☼	6020	Total/NA
Copper	13	D	0.74	0.090	mg/Kg	2	☼	6020	Total/NA
Iron	22000	J D	930	30	mg/Kg	20	☼	6020	Total/NA
Lead	29	D	0.56	0.042	mg/Kg	2	☼	6020	Total/NA
Magnesium	1900	D	190	3.7	mg/Kg	2	☼	6020	Total/NA
Manganese	1000	J D	0.93	0.11	mg/Kg	2	☼	6020	Total/NA
Nickel	19	D	0.93	0.036	mg/Kg	2	☼	6020	Total/NA
Potassium	660	D	190	4.5	mg/Kg	2	☼	6020	Total/NA
Selenium	1.1	D	0.93	0.037	mg/Kg	2	☼	6020	Total/NA
Silver	0.060	J D	0.19	0.0013	mg/Kg	2	☼	6020	Total/NA
Sodium	48	J D	190	8.1	mg/Kg	2	☼	6020	Total/NA
Thallium	0.21	J D	0.37	0.018	mg/Kg	2	☼	6020	Total/NA
Vanadium	18	D	0.93	0.034	mg/Kg	2	☼	6020	Total/NA
Zinc	66	D	7.4	0.46	mg/Kg	2	☼	6020	Total/NA
Mercury	0.056	J	0.090	0.013	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: 079SS-0402M-0001-SO — Lab Sample ID: 240-50650-3

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	12000	D	180	5.6	mg/Kg	20	☼	6020	Total/NA
Antimony	0.11	J D	0.36	0.013	mg/Kg	2	☼	6020	Total/NA
Arsenic	8.6	D	0.91	0.024	mg/Kg	2	☼	6020	Total/NA
Barium	79	D	0.91	0.20	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.52	D	0.18	0.010	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.18	J D	0.36	0.0034	mg/Kg	2	☼	6020	Total/NA
Calcium	230	J D	360	20	mg/Kg	2	☼	6020	Total/NA
Chromium	15	D	0.91	0.055	mg/Kg	2	☼	6020	Total/NA
Cobalt	8.0	D	0.18	0.0015	mg/Kg	2	☼	6020	Total/NA
Copper	8.3	D	0.73	0.088	mg/Kg	2	☼	6020	Total/NA
Iron	23000	D	910	29	mg/Kg	20	☼	6020	Total/NA
Lead	15	D	0.55	0.041	mg/Kg	2	☼	6020	Total/NA
Magnesium	1700	D	180	3.6	mg/Kg	2	☼	6020	Total/NA
Manganese	940	D	0.91	0.11	mg/Kg	2	☼	6020	Total/NA
Nickel	16	D	0.91	0.035	mg/Kg	2	☼	6020	Total/NA
Potassium	650	D	180	4.5	mg/Kg	2	☼	6020	Total/NA
Selenium	0.75	J D	0.91	0.036	mg/Kg	2	☼	6020	Total/NA
Silver	0.057	J D	0.18	0.0013	mg/Kg	2	☼	6020	Total/NA
Sodium	29	J D	180	7.9	mg/Kg	2	☼	6020	Total/NA
Thallium	0.18	J D	0.36	0.017	mg/Kg	2	☼	6020	Total/NA
Vanadium	19	D	0.91	0.034	mg/Kg	2	☼	6020	Total/NA
Zinc	48	D	7.3	0.45	mg/Kg	2	☼	6020	Total/NA
Mercury	0.054	J	0.11	0.015	mg/Kg	1	☼	7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

TestAmerica Job ID: 240-50650-1

Client Sample ID: 079SS-0403M-0001-SO — Lab Sample ID: 240-50650-4

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	13000	D	200	6.3	mg/Kg	20	☼	6020	Total/NA
Antimony	0.15	J D	0.41	0.014	mg/Kg	2	☼	6020	Total/NA
Arsenic	11	D	1.0	0.026	mg/Kg	2	☼	6020	Total/NA
Barium	90	D	1.0	0.22	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.62	D	0.20	0.011	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.28	J D	0.41	0.0038	mg/Kg	2	☼	6020	Total/NA
Calcium	920	D	410	22	mg/Kg	2	☼	6020	Total/NA
Chromium	19	D	1.0	0.061	mg/Kg	2	☼	6020	Total/NA
Cobalt	9.9	D	0.20	0.0017	mg/Kg	2	☼	6020	Total/NA
Copper	15	D	0.81	0.099	mg/Kg	2	☼	6020	Total/NA
Iron	25000	D	1000	33	mg/Kg	20	☼	6020	Total/NA
Lead	20	D	0.61	0.046	mg/Kg	2	☼	6020	Total/NA
Magnesium	2500	D	200	4.1	mg/Kg	2	☼	6020	Total/NA
Manganese	1000	D	1.0	0.12	mg/Kg	2	☼	6020	Total/NA
Nickel	23	D	1.0	0.040	mg/Kg	2	☼	6020	Total/NA
Potassium	1000	D	200	5.0	mg/Kg	2	☼	6020	Total/NA
Selenium	0.89	J D	1.0	0.041	mg/Kg	2	☼	6020	Total/NA
Silver	0.053	J D	0.20	0.0014	mg/Kg	2	☼	6020	Total/NA
Sodium	38	J D	200	8.9	mg/Kg	2	☼	6020	Total/NA
Thallium	0.22	J D	0.41	0.019	mg/Kg	2	☼	6020	Total/NA
Vanadium	21	D	1.0	0.038	mg/Kg	2	☼	6020	Total/NA
Zinc	64	D	8.1	0.51	mg/Kg	2	☼	6020	Total/NA
Mercury	0.054	J	0.094	0.013	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: 079SS-0404M-0001-SO — Lab Sample ID: 240-50650-5

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	12000	D	200	6.1	mg/Kg	20	☼	6020	Total/NA
Antimony	0.16	J D	0.40	0.014	mg/Kg	2	☼	6020	Total/NA
Arsenic	9.5	D	0.99	0.026	mg/Kg	2	☼	6020	Total/NA
Barium	89	D	0.99	0.22	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.63	D	0.20	0.011	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.19	J D	0.40	0.0037	mg/Kg	2	☼	6020	Total/NA
Calcium	130	J D	400	22	mg/Kg	2	☼	6020	Total/NA
Chromium	15	D	0.99	0.059	mg/Kg	2	☼	6020	Total/NA
Cobalt	11	D	0.20	0.0017	mg/Kg	2	☼	6020	Total/NA
Copper	12	D	0.79	0.096	mg/Kg	2	☼	6020	Total/NA
Iron	20000	D	990	32	mg/Kg	20	☼	6020	Total/NA
Lead	19	D	0.59	0.045	mg/Kg	2	☼	6020	Total/NA
Magnesium	1800	D	200	4.0	mg/Kg	2	☼	6020	Total/NA
Manganese	1100	D	0.99	0.12	mg/Kg	2	☼	6020	Total/NA
Nickel	16	D	0.99	0.039	mg/Kg	2	☼	6020	Total/NA
Potassium	600	D	200	4.9	mg/Kg	2	☼	6020	Total/NA
Selenium	1.0	D	0.99	0.040	mg/Kg	2	☼	6020	Total/NA
Silver	0.070	J D	0.20	0.0014	mg/Kg	2	☼	6020	Total/NA
Sodium	31	J D	200	8.6	mg/Kg	2	☼	6020	Total/NA
Thallium	0.21	J D	0.40	0.019	mg/Kg	2	☼	6020	Total/NA
Vanadium	19	D	0.99	0.037	mg/Kg	2	☼	6020	Total/NA
Zinc	54	D	7.9	0.49	mg/Kg	2	☼	6020	Total/NA
Mercury	0.057	J	0.090	0.013	mg/Kg	1	☼	7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

TestAmerica Job ID: 240-50650-1

Client Sample ID: 079SS-0405M-0001-SO — Lab Sample ID: 240-50650-6

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	11000	D	140	4.4	mg/Kg	20	☼	6020	Total/NA
Antimony	0.10	J D	0.29	0.010	mg/Kg	2	☼	6020	Total/NA
Arsenic	12	D	0.71	0.019	mg/Kg	2	☼	6020	Total/NA
Barium	77	D	0.71	0.16	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.65	D	0.14	0.0079	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.21	J D	0.29	0.0026	mg/Kg	2	☼	6020	Total/NA
Calcium	2300	D	290	16	mg/Kg	2	☼	6020	Total/NA
Chromium	18	D	0.71	0.043	mg/Kg	2	☼	6020	Total/NA
Cobalt	11	D	0.14	0.0012	mg/Kg	2	☼	6020	Total/NA
Copper	15	D	0.57	0.069	mg/Kg	2	☼	6020	Total/NA
Iron	27000	D	710	23	mg/Kg	20	☼	6020	Total/NA
Lead	14	D	0.43	0.032	mg/Kg	2	☼	6020	Total/NA
Magnesium	2900	D	140	2.9	mg/Kg	2	☼	6020	Total/NA
Manganese	640	D	0.71	0.086	mg/Kg	2	☼	6020	Total/NA
Nickel	23	D	0.71	0.028	mg/Kg	2	☼	6020	Total/NA
Potassium	960	D	140	3.5	mg/Kg	2	☼	6020	Total/NA
Selenium	0.80	D	0.71	0.029	mg/Kg	2	☼	6020	Total/NA
Silver	0.028	J D	0.14	0.0010	mg/Kg	2	☼	6020	Total/NA
Sodium	39	J D	140	6.2	mg/Kg	2	☼	6020	Total/NA
Thallium	0.16	J D	0.29	0.014	mg/Kg	2	☼	6020	Total/NA
Vanadium	19	D	0.71	0.026	mg/Kg	2	☼	6020	Total/NA
Zinc	56	D	5.7	0.36	mg/Kg	2	☼	6020	Total/NA
Mercury	0.027	J	0.11	0.015	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: 079SS-0406M-0001-SO — Lab Sample ID: 240-50650-7

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	10000	D	150	4.8	mg/Kg	20	☼	6020	Total/NA
Antimony	0.13	J D	0.31	0.011	mg/Kg	2	☼	6020	Total/NA
Arsenic	8.6	D	0.77	0.020	mg/Kg	2	☼	6020	Total/NA
Barium	88	D	0.77	0.17	mg/Kg	2	☼	6020	Total/NA
Beryllium	0.50	D	0.15	0.0085	mg/Kg	2	☼	6020	Total/NA
Cadmium	0.19	J D	0.31	0.0029	mg/Kg	2	☼	6020	Total/NA
Calcium	360	D	310	17	mg/Kg	2	☼	6020	Total/NA
Chromium	14	D	0.77	0.046	mg/Kg	2	☼	6020	Total/NA
Cobalt	9.5	D	0.15	0.0013	mg/Kg	2	☼	6020	Total/NA
Copper	11	D	0.62	0.075	mg/Kg	2	☼	6020	Total/NA
Iron	19000	D	770	25	mg/Kg	20	☼	6020	Total/NA
Lead	19	D	0.46	0.035	mg/Kg	2	☼	6020	Total/NA
Magnesium	1800	D	150	3.1	mg/Kg	2	☼	6020	Total/NA
Manganese	1200	D	0.77	0.093	mg/Kg	2	☼	6020	Total/NA
Nickel	17	D	0.77	0.030	mg/Kg	2	☼	6020	Total/NA
Potassium	600	D	150	3.8	mg/Kg	2	☼	6020	Total/NA
Selenium	0.82	D	0.77	0.031	mg/Kg	2	☼	6020	Total/NA
Silver	0.044	J D	0.15	0.0011	mg/Kg	2	☼	6020	Total/NA
Sodium	29	J D	150	6.7	mg/Kg	2	☼	6020	Total/NA
Thallium	0.17	J D	0.31	0.015	mg/Kg	2	☼	6020	Total/NA
Vanadium	17	D	0.77	0.029	mg/Kg	2	☼	6020	Total/NA
Zinc	53	D	6.2	0.39	mg/Kg	2	☼	6020	Total/NA
Mercury	0.050	J	0.089	0.013	mg/Kg	1	☼	7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

TestAmerica Job ID: 240-50650-1

Client Sample ID: 079SS-0407-0001-RB

Lab Sample ID: 240-50650-8

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.19	J	2.0	0.16	ug/L	1		6020	Total Recoverable
Arsenic	2.4	J B	5.0	0.18	ug/L	1		6020	Total Recoverable
Beryllium	0.36	J	1.0	0.053	ug/L	1		6020	Total Recoverable
Cadmium	0.29	J	2.0	0.061	ug/L	1		6020	Total Recoverable
Chromium	2.5	J	6.0	0.20	ug/L	1		6020	Total Recoverable
Cobalt	0.28	J	1.0	0.021	ug/L	1		6020	Total Recoverable
Lead	0.24	J	1.0	0.11	ug/L	1		6020	Total Recoverable
Nickel	1.5	J	5.0	0.23	ug/L	1		6020	Total Recoverable
Selenium	0.38	J	5.0	0.25	ug/L	1		6020	Total Recoverable
Thallium	0.22	J	2.0	0.074	ug/L	1		6020	Total Recoverable
Vanadium	0.75	J	5.0	0.23	ug/L	1		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: 079SS-0400M-0001-SO

Lab Sample ID: 240-50650-1

Date Collected: 05/13/15 08:40
Matrix: Solid
Date Received: 05/13/15 12:44
Percent Solids: 97.2

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	11000	J D	190	5.7	mg/Kg	☼	05/26/15 10:39	05/29/15 00:04	20
Antimony	0.22	J D	0.37	0.013	mg/Kg	☼	05/26/15 10:39	05/28/15 23:00	2
Arsenic	12	D	0.93	0.024	mg/Kg	☼	05/26/15 10:39	05/28/15 23:00	2
Barium	84	D	0.93	0.20	mg/Kg	☼	05/26/15 10:39	05/28/15 23:00	2
Beryllium	0.67	D	0.19	0.010	mg/Kg	☼	05/26/15 10:39	06/01/15 14:01	2
Cadmium	0.27	J D	0.37	0.0034	mg/Kg	☼	05/26/15 10:39	05/28/15 23:00	2
Calcium	3500	J D	370	20	mg/Kg	☼	05/26/15 10:39	05/28/15 23:00	2
Chromium	17	D	0.93	0.056	mg/Kg	☼	05/26/15 10:39	05/28/15 23:00	2
Cobalt	9.0	D	0.19	0.0016	mg/Kg	☼	05/26/15 10:39	05/28/15 23:00	2
Copper	13	D	0.74	0.090	mg/Kg	☼	05/26/15 10:39	05/28/15 23:00	2
Iron	22000	J D	930	30	mg/Kg	☼	05/26/15 10:39	05/29/15 00:04	20
Lead	29	D	0.56	0.042	mg/Kg	☼	05/26/15 10:39	05/28/15 23:00	2
Magnesium	1900	D	190	3.7	mg/Kg	☼	05/26/15 10:39	05/28/15 23:00	2
Manganese	1000	J D	0.93	0.11	mg/Kg	☼	05/26/15 10:39	05/28/15 23:00	2
Nickel	19	D	0.93	0.036	mg/Kg	☼	05/26/15 10:39	05/28/15 23:00	2
Potassium	660	D	190	4.5	mg/Kg	☼	05/26/15 10:39	05/28/15 23:00	2
Selenium	1.1	D	0.93	0.037	mg/Kg	☼	05/26/15 10:39	05/28/15 23:00	2
Silver	0.060	J D	0.19	0.0013	mg/Kg	☼	05/26/15 10:39	05/28/15 23:00	2
Sodium	48	J D	190	8.1	mg/Kg	☼	05/26/15 10:39	05/28/15 23:00	2
Thallium	0.21	J D	0.37	0.018	mg/Kg	☼	05/26/15 10:39	05/28/15 23:00	2
Vanadium	18	D	0.93	0.034	mg/Kg	☼	05/26/15 10:39	06/01/15 14:01	2
Zinc	66	D	7.4	0.46	mg/Kg	☼	05/26/15 10:39	05/28/15 23:00	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.056	J	0.090	0.013	mg/Kg	☼	05/26/15 15:15	05/28/15 11:03	1

Client Sample ID: 079SS-0402M-0001-SO

Lab Sample ID: 240-50650-3

Date Collected: 05/12/15 17:20
Matrix: Solid
Date Received: 05/13/15 12:44
Percent Solids: 97.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	12000	D	180	5.6	mg/Kg	☼	05/26/15 10:39	05/29/15 00:21	20
Antimony	0.11	J D	0.36	0.013	mg/Kg	☼	05/26/15 10:39	05/28/15 23:17	2
Arsenic	8.6	D	0.91	0.024	mg/Kg	☼	05/26/15 10:39	05/28/15 23:17	2
Barium	79	D	0.91	0.20	mg/Kg	☼	05/26/15 10:39	05/28/15 23:17	2
Beryllium	0.52	D	0.18	0.010	mg/Kg	☼	05/26/15 10:39	06/01/15 14:26	2
Cadmium	0.18	J D	0.36	0.0034	mg/Kg	☼	05/26/15 10:39	05/28/15 23:17	2
Calcium	230	J D	360	20	mg/Kg	☼	05/26/15 10:39	05/28/15 23:17	2
Chromium	15	D	0.91	0.055	mg/Kg	☼	05/26/15 10:39	05/28/15 23:17	2
Cobalt	8.0	D	0.18	0.0015	mg/Kg	☼	05/26/15 10:39	05/28/15 23:17	2
Copper	8.3	D	0.73	0.088	mg/Kg	☼	05/26/15 10:39	05/28/15 23:17	2
Iron	23000	D	910	29	mg/Kg	☼	05/26/15 10:39	05/29/15 00:21	20
Lead	15	D	0.55	0.041	mg/Kg	☼	05/26/15 10:39	05/28/15 23:17	2
Magnesium	1700	D	180	3.6	mg/Kg	☼	05/26/15 10:39	05/28/15 23:17	2
Manganese	940	D	0.91	0.11	mg/Kg	☼	05/26/15 10:39	05/28/15 23:17	2
Nickel	16	D	0.91	0.035	mg/Kg	☼	05/26/15 10:39	05/28/15 23:17	2
Potassium	650	D	180	4.5	mg/Kg	☼	05/26/15 10:39	05/28/15 23:17	2
Selenium	0.75	J D	0.91	0.036	mg/Kg	☼	05/26/15 10:39	05/28/15 23:17	2

Client Sample ID: 079SS-0402M-0001-SO

Lab Sample ID: 240-50650-3

Date Collected: 05/12/15 17:20
Matrix: Solid
Date Received: 05/13/15 12:44
Percent Solids: 97.4

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.057	J D	0.18	0.0013	mg/Kg	☼	05/26/15 10:39	05/28/15 23:17	2
Sodium	29	J D	180	7.9	mg/Kg	☼	05/26/15 10:39	05/28/15 23:17	2
Thallium	0.18	J D	0.36	0.017	mg/Kg	☼	05/26/15 10:39	05/28/15 23:17	2
Vanadium	19	D	0.91	0.034	mg/Kg	☼	05/26/15 10:39	06/01/15 14:26	2
Zinc	48	D	7.3	0.45	mg/Kg	☼	05/26/15 10:39	05/28/15 23:17	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.054	J	0.11	0.015	mg/Kg	☼	05/26/15 15:15	05/28/15 11:08	1

Client Sample ID: 079SS-0403M-0001-SO

Lab Sample ID: 240-50650-4

Date Collected: 05/12/15 17:55
Matrix: Solid
Date Received: 05/13/15 12:44
Percent Solids: 97.2

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	13000	D	200	6.3	mg/Kg	☼	05/26/15 10:39	05/29/15 00:25	20
Antimony	0.15	J D	0.41	0.014	mg/Kg	☼	05/26/15 10:39	05/28/15 23:21	2
Arsenic	11	D	1.0	0.026	mg/Kg	☼	05/26/15 10:39	05/28/15 23:21	2
Barium	90	D	1.0	0.22	mg/Kg	☼	05/26/15 10:39	05/28/15 23:21	2
Beryllium	0.62	D	0.20	0.011	mg/Kg	☼	05/26/15 10:39	06/01/15 14:30	2
Cadmium	0.28	J D	0.41	0.0038	mg/Kg	☼	05/26/15 10:39	05/28/15 23:21	2
Calcium	920	D	410	22	mg/Kg	☼	05/26/15 10:39	05/28/15 23:21	2
Chromium	19	D	1.0	0.061	mg/Kg	☼	05/26/15 10:39	05/28/15 23:21	2
Cobalt	9.9	D	0.20	0.0017	mg/Kg	☼	05/26/15 10:39	05/28/15 23:21	2
Copper	15	D	0.81	0.099	mg/Kg	☼	05/26/15 10:39	05/28/15 23:21	2
Iron	25000	D	1000	33	mg/Kg	☼	05/26/15 10:39	05/29/15 00:25	20
Lead	20	D	0.61	0.046	mg/Kg	☼	05/26/15 10:39	05/28/15 23:21	2
Magnesium	2500	D	200	4.1	mg/Kg	☼	05/26/15 10:39	05/28/15 23:21	2
Manganese	1000	D	1.0	0.12	mg/Kg	☼	05/26/15 10:39	05/28/15 23:21	2
Nickel	23	D	1.0	0.040	mg/Kg	☼	05/26/15 10:39	05/28/15 23:21	2
Potassium	1000	D	200	5.0	mg/Kg	☼	05/26/15 10:39	05/28/15 23:21	2
Selenium	0.89	J D	1.0	0.041	mg/Kg	☼	05/26/15 10:39	05/28/15 23:21	2
Silver	0.053	J D	0.20	0.0014	mg/Kg	☼	05/26/15 10:39	05/28/15 23:21	2
Sodium	38	J D	200	8.9	mg/Kg	☼	05/26/15 10:39	05/28/15 23:21	2
Thallium	0.22	J D	0.41	0.019	mg/Kg	☼	05/26/15 10:39	05/28/15 23:21	2
Vanadium	21	D	1.0	0.038	mg/Kg	☼	05/26/15 10:39	06/01/15 14:30	2
Zinc	64	D	8.1	0.51	mg/Kg	☼	05/26/15 10:39	05/28/15 23:21	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.054	J	0.094	0.013	mg/Kg	☼	05/26/15 15:15	05/28/15 11:10	1

Client Sample ID: 079SS-0404M-0001-SO

Lab Sample ID: 240-50650-5

Date Collected: 05/12/15 16:50
Matrix: Solid
Date Received: 05/13/15 12:44
Percent Solids: 97.1

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	12000	D	200	6.1	mg/Kg	☼	05/26/15 10:39	05/29/15 00:29	20

Client Sample ID: 079SS-0404M-0001-SO

Date Collected: 05/12/15 16:50
Date Received: 05/13/15 12:44

Lab Sample ID: 240-50650-5

Matrix: Solid
Percent Solids: 97.1

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.16	J D	0.40	0.014	mg/Kg	☼	05/26/15 10:39	05/28/15 23:31	2
Arsenic	9.5	D	0.99	0.026	mg/Kg	☼	05/26/15 10:39	05/28/15 23:31	2
Barium	89	D	0.99	0.22	mg/Kg	☼	05/26/15 10:39	05/28/15 23:31	2
Beryllium	0.63	D	0.20	0.011	mg/Kg	☼	05/26/15 10:39	06/01/15 14:33	2
Cadmium	0.19	J D	0.40	0.0037	mg/Kg	☼	05/26/15 10:39	05/28/15 23:31	2
Calcium	130	J D	400	22	mg/Kg	☼	05/26/15 10:39	05/28/15 23:31	2
Chromium	15	D	0.99	0.059	mg/Kg	☼	05/26/15 10:39	05/28/15 23:31	2
Cobalt	11	D	0.20	0.0017	mg/Kg	☼	05/26/15 10:39	05/28/15 23:31	2
Copper	12	D	0.79	0.096	mg/Kg	☼	05/26/15 10:39	05/28/15 23:31	2
Iron	20000	D	990	32	mg/Kg	☼	05/26/15 10:39	05/29/15 00:29	20
Lead	19	D	0.59	0.045	mg/Kg	☼	05/26/15 10:39	05/28/15 23:31	2
Magnesium	1800	D	200	4.0	mg/Kg	☼	05/26/15 10:39	05/28/15 23:31	2
Manganese	1100	D	0.99	0.12	mg/Kg	☼	05/26/15 10:39	05/28/15 23:31	2
Nickel	16	D	0.99	0.039	mg/Kg	☼	05/26/15 10:39	05/28/15 23:31	2
Potassium	600	D	200	4.9	mg/Kg	☼	05/26/15 10:39	05/28/15 23:31	2
Selenium	1.0	D	0.99	0.040	mg/Kg	☼	05/26/15 10:39	05/28/15 23:31	2
Silver	0.070	J D	0.20	0.0014	mg/Kg	☼	05/26/15 10:39	05/28/15 23:31	2
Sodium	31	J D	200	8.6	mg/Kg	☼	05/26/15 10:39	05/28/15 23:31	2
Thallium	0.21	J D	0.40	0.019	mg/Kg	☼	05/26/15 10:39	05/28/15 23:31	2
Vanadium	19	D	0.99	0.037	mg/Kg	☼	05/26/15 10:39	06/01/15 14:33	2
Zinc	54	D	7.9	0.49	mg/Kg	☼	05/26/15 10:39	05/28/15 23:31	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.057	J	0.090	0.013	mg/Kg	☼	05/26/15 15:15	05/28/15 11:12	1

Client Sample ID: 079SS-0405M-0001-SO

Date Collected: 05/12/15 14:15
Date Received: 05/13/15 12:44

Lab Sample ID: 240-50650-6

Matrix: Solid
Percent Solids: 97.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	11000	D	140	4.4	mg/Kg	☼	05/26/15 10:39	05/29/15 00:32	20
Antimony	0.10	J D	0.29	0.010	mg/Kg	☼	05/26/15 10:39	05/28/15 23:35	2
Arsenic	12	D	0.71	0.019	mg/Kg	☼	05/26/15 10:39	05/28/15 23:35	2
Barium	77	D	0.71	0.16	mg/Kg	☼	05/26/15 10:39	05/28/15 23:35	2
Beryllium	0.65	D	0.14	0.0079	mg/Kg	☼	05/26/15 10:39	06/01/15 14:37	2
Cadmium	0.21	J D	0.29	0.0026	mg/Kg	☼	05/26/15 10:39	05/28/15 23:35	2
Calcium	2300	D	290	16	mg/Kg	☼	05/26/15 10:39	05/28/15 23:35	2
Chromium	18	D	0.71	0.043	mg/Kg	☼	05/26/15 10:39	05/28/15 23:35	2
Cobalt	11	D	0.14	0.0012	mg/Kg	☼	05/26/15 10:39	05/28/15 23:35	2
Copper	15	D	0.57	0.069	mg/Kg	☼	05/26/15 10:39	05/28/15 23:35	2
Iron	27000	D	710	23	mg/Kg	☼	05/26/15 10:39	05/29/15 00:32	20
Lead	14	D	0.43	0.032	mg/Kg	☼	05/26/15 10:39	05/28/15 23:35	2
Magnesium	2900	D	140	2.9	mg/Kg	☼	05/26/15 10:39	05/28/15 23:35	2
Manganese	640	D	0.71	0.086	mg/Kg	☼	05/26/15 10:39	05/28/15 23:35	2
Nickel	23	D	0.71	0.028	mg/Kg	☼	05/26/15 10:39	05/28/15 23:35	2
Potassium	960	D	140	3.5	mg/Kg	☼	05/26/15 10:39	05/28/15 23:35	2
Selenium	0.80	D	0.71	0.029	mg/Kg	☼	05/26/15 10:39	05/28/15 23:35	2
Silver	0.028	J D	0.14	0.0010	mg/Kg	☼	05/26/15 10:39	05/28/15 23:35	2

Client Sample ID: 079SS-0405M-0001-SO

Lab Sample ID: 240-50650-6
Date Collected: 05/12/15 14:15
Matrix: Solid
Date Received: 05/13/15 12:44
Percent Solids: 97.9

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	39	J D	140	6.2	mg/Kg	☼	05/26/15 10:39	05/28/15 23:35	2
Thallium	0.16	J D	0.29	0.014	mg/Kg	☼	05/26/15 10:39	05/28/15 23:35	2
Vanadium	19	D	0.71	0.026	mg/Kg	☼	05/26/15 10:39	06/01/15 14:37	2
Zinc	56	D	5.7	0.36	mg/Kg	☼	05/26/15 10:39	05/28/15 23:35	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027	J	0.11	0.015	mg/Kg	☼	05/26/15 15:15	05/28/15 11:14	1

Client Sample ID: 079SS-0406M-0001-SO

Lab Sample ID: 240-50650-7
Date Collected: 05/12/15 15:40
Matrix: Solid
Date Received: 05/13/15 12:44
Percent Solids: 97.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	10000	D	150	4.8	mg/Kg	☼	05/26/15 10:39	05/29/15 00:36	20
Antimony	0.13	J D	0.31	0.011	mg/Kg	☼	05/26/15 10:39	05/28/15 23:39	2
Arsenic	8.6	D	0.77	0.020	mg/Kg	☼	05/26/15 10:39	05/28/15 23:39	2
Barium	88	D	0.77	0.17	mg/Kg	☼	05/26/15 10:39	05/28/15 23:39	2
Beryllium	0.50	D	0.15	0.0085	mg/Kg	☼	05/26/15 10:39	06/01/15 14:40	2
Cadmium	0.19	J D	0.31	0.0029	mg/Kg	☼	05/26/15 10:39	05/28/15 23:39	2
Calcium	360	D	310	17	mg/Kg	☼	05/26/15 10:39	05/28/15 23:39	2
Chromium	14	D	0.77	0.046	mg/Kg	☼	05/26/15 10:39	05/28/15 23:39	2
Cobalt	9.5	D	0.15	0.0013	mg/Kg	☼	05/26/15 10:39	05/28/15 23:39	2
Copper	11	D	0.62	0.075	mg/Kg	☼	05/26/15 10:39	05/28/15 23:39	2
Iron	19000	D	770	25	mg/Kg	☼	05/26/15 10:39	05/29/15 00:36	20
Lead	19	D	0.46	0.035	mg/Kg	☼	05/26/15 10:39	05/28/15 23:39	2
Magnesium	1800	D	150	3.1	mg/Kg	☼	05/26/15 10:39	05/28/15 23:39	2
Manganese	1200	D	0.77	0.093	mg/Kg	☼	05/26/15 10:39	05/28/15 23:39	2
Nickel	17	D	0.77	0.030	mg/Kg	☼	05/26/15 10:39	05/28/15 23:39	2
Potassium	600	D	150	3.8	mg/Kg	☼	05/26/15 10:39	05/28/15 23:39	2
Selenium	0.82	D	0.77	0.031	mg/Kg	☼	05/26/15 10:39	05/28/15 23:39	2
Silver	0.044	J D	0.15	0.0011	mg/Kg	☼	05/26/15 10:39	05/28/15 23:39	2
Sodium	29	J D	150	6.7	mg/Kg	☼	05/26/15 10:39	05/28/15 23:39	2
Thallium	0.17	J D	0.31	0.015	mg/Kg	☼	05/26/15 10:39	05/28/15 23:39	2
Vanadium	17	D	0.77	0.029	mg/Kg	☼	05/26/15 10:39	06/01/15 14:40	2
Zinc	53	D	6.2	0.39	mg/Kg	☼	05/26/15 10:39	05/28/15 23:39	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.050	J	0.089	0.013	mg/Kg	☼	05/26/15 15:15	05/28/15 11:16	1

Client Sample ID: 079SS-0407-0001-RB

Lab Sample ID: 240-50650-8
Date Collected: 05/13/15 11:00
Matrix: Water
Date Received: 05/13/15 12:44

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	60	U	60	9.0	ug/L		05/14/15 09:26	05/18/15 19:57	1
Antimony	0.19	J	2.0	0.16	ug/L		05/14/15 09:26	05/18/15 19:57	1

Client Sample ID: 079SS-0407-0001-RB

Date Collected: 05/13/15 11:00
Date Received: 05/13/15 12:44

Lab Sample ID: 240-50650-8

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**2.4**	**J B**	5.0	0.18	ug/L		05/14/15 09:26	05/18/15 19:57	1
Barium	4.0	U	5.0	1.1	ug/L		05/14/15 09:26	05/18/15 19:57	1
Beryllium	**0.36**	**J**	1.0	0.053	ug/L		05/14/15 09:26	05/18/15 19:57	1
Cadmium	**0.29**	**J**	2.0	0.061	ug/L		05/14/15 09:26	05/18/15 19:57	1
Calcium	1000	U	2000	240	ug/L		05/14/15 09:26	05/18/15 19:57	1
Chromium	**2.5**	**J**	6.0	0.20	ug/L		05/14/15 09:26	05/18/15 19:57	1
Cobalt	**0.28**	**J**	1.0	0.021	ug/L		05/14/15 09:26	05/18/15 19:57	1
Copper	4.0	U	4.0	0.75	ug/L		05/14/15 09:26	05/18/15 19:57	1
Iron	100	U	150	16	ug/L		05/14/15 09:26	05/18/15 19:57	1
Lead	**0.24**	**J**	1.0	0.11	ug/L		05/14/15 09:26	05/18/15 19:57	1
Magnesium	300	U	1000	48	ug/L		05/14/15 09:26	05/18/15 19:57	1
Manganese	10	U	10	1.1	ug/L		05/14/15 09:26	05/18/15 19:57	1
Nickel	**1.5**	**J**	5.0	0.23	ug/L		05/14/15 09:26	05/19/15 22:29	1
Potassium	150	U	1000	30	ug/L		05/14/15 09:26	05/18/15 19:57	1
Selenium	**0.38**	**J**	5.0	0.25	ug/L		05/14/15 09:26	05/19/15 22:29	1
Silver	0.25	U	1.0	0.020	ug/L		05/14/15 09:26	05/18/15 19:57	1
Sodium	400	U	1000	68	ug/L		05/14/15 09:26	05/18/15 19:57	1
Thallium	**0.22**	**J**	2.0	0.074	ug/L		05/14/15 09:26	05/18/15 19:57	1
Vanadium	**0.75**	**J**	5.0	0.23	ug/L		05/14/15 09:26	05/18/15 19:57	1
Zinc	50	U	50	7.3	ug/L		05/14/15 09:26	05/18/15 19:57	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		05/14/15 14:00	05/15/15 11:49	1

Default Detection Limits

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

TestAmerica Job ID: 240-50650-1

Method: 6020 - Metals (ICP/MS)

Analyte	LOQ	DL	Units	Method
Aluminum	20	0.62	mg/Kg	6020
Antimony	0.40	0.014	mg/Kg	6020
Arsenic	1.0	0.026	mg/Kg	6020
Barium	1.0	0.22	mg/Kg	6020
Beryllium	0.20	0.011	mg/Kg	6020
Cadmium	0.40	0.0037	mg/Kg	6020
Calcium	400	22	mg/Kg	6020
Chromium	1.0	0.060	mg/Kg	6020
Cobalt	0.20	0.0017	mg/Kg	6020
Copper	0.80	0.097	mg/Kg	6020
Iron	100	3.2	mg/Kg	6020
Lead	0.60	0.045	mg/Kg	6020
Magnesium	200	4.0	mg/Kg	6020
Manganese	1.0	0.12	mg/Kg	6020
Nickel	1.0	0.039	mg/Kg	6020
Potassium	200	4.9	mg/Kg	6020
Selenium	1.0	0.040	mg/Kg	6020
Silver	0.20	0.0014	mg/Kg	6020
Sodium	200	8.7	mg/Kg	6020
Thallium	0.40	0.019	mg/Kg	6020
Vanadium	1.0	0.037	mg/Kg	6020
Zinc	8.0	0.50	mg/Kg	6020

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	LOQ	DL	Units	Method
Aluminum	60	9.0	ug/L	6020
Antimony	2.0	0.16	ug/L	6020
Arsenic	5.0	0.18	ug/L	6020
Barium	5.0	1.1	ug/L	6020
Beryllium	1.0	0.053	ug/L	6020
Cadmium	2.0	0.061	ug/L	6020
Calcium	2000	240	ug/L	6020
Chromium	6.0	0.20	ug/L	6020
Cobalt	1.0	0.021	ug/L	6020
Copper	4.0	0.75	ug/L	6020
Iron	150	16	ug/L	6020
Lead	1.0	0.11	ug/L	6020
Magnesium	1000	48	ug/L	6020
Manganese	10	1.1	ug/L	6020
Nickel	5.0	0.23	ug/L	6020
Potassium	1000	30	ug/L	6020
Selenium	5.0	0.25	ug/L	6020
Silver	1.0	0.020	ug/L	6020
Sodium	1000	68	ug/L	6020
Thallium	2.0	0.074	ug/L	6020
Vanadium	5.0	0.23	ug/L	6020
Zinc	50	7.3	ug/L	6020

Method: 7470A - Mercury (CVAA)

Default Detection Limits

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

TestAmerica Job ID: 240-50650-1

Method: 7470A - Mercury (CVAA)

Analyte	LOQ	DL	Units	Method
Mercury	0.20	0.090	ug/L	7470A

Method: 7471A - Mercury (CVAA)

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

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 240-182339/1-A ^2
Matrix: Solid
Analysis Batch: 182845

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 182339

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.803	J D	20	0.62	mg/Kg		05/26/15 10:39	05/28/15 22:52	2
Antimony	0.0180	J D	0.40	0.014	mg/Kg		05/26/15 10:39	05/28/15 22:52	2
Arsenic	0.0562	J D	1.0	0.026	mg/Kg		05/26/15 10:39	05/28/15 22:52	2
Barium	0.30	U	1.0	0.22	mg/Kg		05/26/15 10:39	05/28/15 22:52	2
Cadmium	0.0312	J D	0.40	0.0037	mg/Kg		05/26/15 10:39	05/28/15 22:52	2
Calcium	100	U	400	22	mg/Kg		05/26/15 10:39	05/28/15 22:52	2
Chromium	0.284	J D	1.0	0.060	mg/Kg		05/26/15 10:39	05/28/15 22:52	2
Cobalt	0.0110	J D	0.20	0.0017	mg/Kg		05/26/15 10:39	05/28/15 22:52	2
Copper	0.30	U	0.80	0.097	mg/Kg		05/26/15 10:39	05/28/15 22:52	2
Iron	4.25	J D	100	3.2	mg/Kg		05/26/15 10:39	05/28/15 22:52	2
Lead	0.0606	J D	0.60	0.045	mg/Kg		05/26/15 10:39	05/28/15 22:52	2
Magnesium	25	U	200	4.0	mg/Kg		05/26/15 10:39	05/28/15 22:52	2
Manganese	0.40	U	1.0	0.12	mg/Kg		05/26/15 10:39	05/28/15 22:52	2
Nickel	0.25	U	1.0	0.039	mg/Kg		05/26/15 10:39	05/28/15 22:52	2
Potassium	9.30	J D	200	4.9	mg/Kg		05/26/15 10:39	05/28/15 22:52	2
Selenium	0.060	U	1.0	0.040	mg/Kg		05/26/15 10:39	05/28/15 22:52	2
Silver	0.050	U	0.20	0.0014	mg/Kg		05/26/15 10:39	05/28/15 22:52	2
Sodium	15.3	J D	200	8.7	mg/Kg		05/26/15 10:39	05/28/15 22:52	2
Thallium	0.15	U	0.40	0.019	mg/Kg		05/26/15 10:39	05/28/15 22:52	2
Zinc	0.683	J D	8.0	0.50	mg/Kg		05/26/15 10:39	05/28/15 22:52	2

Lab Sample ID: MB 240-182339/1-A ^2
Matrix: Solid
Analysis Batch: 183211

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 182339

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	0.10	U	0.20	0.011	mg/Kg		05/26/15 10:39	06/01/15 13:54	2
Vanadium	0.198	J D	1.0	0.037	mg/Kg		05/26/15 10:39	06/01/15 13:54	2

Lab Sample ID: LCS 240-182339/2-A ^2
Matrix: Solid
Analysis Batch: 182845

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 182339

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1000	934	D	mg/Kg		93	80 - 120
Antimony	10.0	8.98	D	mg/Kg		90	68 - 113
Arsenic	100	89.6	D	mg/Kg		90	73 - 110
Barium	100	100	D	mg/Kg		100	70 - 110
Cadmium	100	95.5	D	mg/Kg		95	74 - 110
Calcium	1000	976	D	mg/Kg		98	80 - 120
Chromium	100	98.0	D	mg/Kg		98	70 - 110
Cobalt	100	97.9	D	mg/Kg		98	74 - 110
Copper	100	99.0	D	mg/Kg		99	73 - 110
Iron	1000	988	D	mg/Kg		99	80 - 120
Lead	100	96.4	D	mg/Kg		96	75 - 110
Magnesium	1000	981	D	mg/Kg		98	80 - 120
Manganese	100	101	D	mg/Kg		101	80 - 120
Nickel	100	97.4	D	mg/Kg		97	75 - 110

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

Lab Sample ID: LCS 240-182339/2-A ^2
Matrix: Solid
Analysis Batch: 182845

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 182339

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Potassium	1000	1020	D	mg/Kg		102	80 - 120
Selenium	100	91.3	D	mg/Kg		91	65 - 110
Silver	10.0	9.62	D	mg/Kg		96	60 - 114
Sodium	1000	969	D	mg/Kg		97	80 - 120
Thallium	25.0	24.2	D	mg/Kg		97	71 - 110
Zinc	100	96.2	D	mg/Kg		96	72 - 113

Lab Sample ID: LCS 240-182339/2-A ^2
Matrix: Solid
Analysis Batch: 183211

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 182339

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Beryllium	100	96.5	D	mg/Kg		97	79 - 110
Vanadium	100	94.1	D	mg/Kg		94	72 - 110

Lab Sample ID: 240-50650-1 MS
Matrix: Solid
Analysis Batch: 182845

Client Sample ID: 079SS-0400M-0001-SO
Prep Type: Total/NA
Prep Batch: 182339

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.22	J J D	9.27	2.79	J D	mg/Kg	☼	28	75 - 125
Arsenic	12	D	9.27	18.2	D	mg/Kg	☼	68	23 - 131
Barium	84	D	9.27	90.2	4 D	mg/Kg	☼	64	10 - 199
Cadmium	0.27	J D	9.27	8.32	D	mg/Kg	☼	87	58 - 110
Calcium	3500	J D	927	3930	J D	mg/Kg	☼	47	70 - 130
Chromium	17	D	9.27	25.8	D	mg/Kg	☼	94	10 - 199
Cobalt	9.0	D	9.27	17.0	D	mg/Kg	☼	87	55 - 110
Copper	13	D	9.27	20.1	D	mg/Kg	☼	81	10 - 199
Lead	29	D	9.27	36.1	D	mg/Kg	☼	74	10 - 199
Magnesium	1900	D	927	2670	D	mg/Kg	☼	82	70 - 130
Manganese	1000	J D	9.27	1000	4 D	mg/Kg	☼	57	10 - 199
Nickel	19	D	9.27	27.2	D	mg/Kg	☼	83	10 - 176
Potassium	660	D	927	1490	D	mg/Kg	☼	90	70 - 130
Selenium	1.1	D	9.27	8.60	D	mg/Kg	☼	80	39 - 116
Silver	0.060	J D	9.27	8.39	D	mg/Kg	☼	90	75 - 125
Sodium	48	J D	927	859	D	mg/Kg	☼	87	70 - 130
Thallium	0.21	J D	9.27	8.24	D	mg/Kg	☼	87	82 - 110
Zinc	66	D	9.27	74.7	4 D	mg/Kg	☼	92	10 - 199

Lab Sample ID: 240-50650-1 MS
Matrix: Solid
Analysis Batch: 182845

Client Sample ID: 079SS-0400M-0001-SO
Prep Type: Total/NA
Prep Batch: 182339

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	11000	J D	927	12300	4 D	mg/Kg	☼	188	70 - 130
Iron	22000	J D	927	20500	4 D	mg/Kg	☼	-111	70 - 130

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

Lab Sample ID: 240-50650-1 MS — **Client Sample ID: 079SS-0400M-0001-SO**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 183211 — **Prep Batch: 182339**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Beryllium	0.67	D	9.27	9.19	D	mg/Kg	☼	92	58 - 112
Vanadium	18	D	9.27	27.3	D	mg/Kg	☼	97	39 - 129

Lab Sample ID: 240-50650-1 DU — **Client Sample ID: 079SS-0400M-0001-SO**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 182845 — **Prep Batch: 182339**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	0.22	J J D	0.225	J D	mg/Kg	☼	3	20
Arsenic	12	D	11.2	D	mg/Kg	☼	7	20
Barium	84	D	83.1	D	mg/Kg	☼	1	20
Cadmium	0.27	J D	0.304	J D	mg/Kg	☼	13	20
Calcium	3500	J D	2910	D	mg/Kg	☼	18	20
Chromium	17	D	15.7	D	mg/Kg	☼	9	20
Cobalt	9.0	D	8.81	D	mg/Kg	☼	2	20
Copper	13	D	12.7	D	mg/Kg	☼	0.5	20
Lead	29	D	28.8	D	mg/Kg	☼	1	20
Magnesium	1900	D	1810	D	mg/Kg	☼	5	20
Manganese	1000	J D	997	D	mg/Kg	☼	0.1	20
Nickel	19	D	19.2	D	mg/Kg	☼	2	20
Potassium	660	D	618	D	mg/Kg	☼	7	20
Selenium	1.1	D	1.09	D	mg/Kg	☼	4	20
Silver	0.060	J D	0.0605	J D	mg/Kg	☼	0.6	20
Sodium	48	J D	43.8	J D	mg/Kg	☼	9	20
Thallium	0.21	J D	0.227	J D	mg/Kg	☼	6	20
Zinc	66	D	66.1	D	mg/Kg	☼	0.1	20

Lab Sample ID: 240-50650-1 DU — **Client Sample ID: 079SS-0400M-0001-SO**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 182845 — **Prep Batch: 182339**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Aluminum	11000	J D	10100	D	mg/Kg	☼	4	20
Iron	22000	J D	20400	D	mg/Kg	☼	5	20

Lab Sample ID: 240-50650-1 DU — **Client Sample ID: 079SS-0400M-0001-SO**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 183211 — **Prep Batch: 182339**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Beryllium	0.67	D	0.654	D	mg/Kg	☼	3	20
Vanadium	18	D	17.1	D	mg/Kg	☼	7	20

Lab Sample ID: MB 240-180747/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 181424 — **Prep Batch: 180747**

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	60	U	60	9.0	ug/L		05/14/15 09:26	05/18/15 19:50	1

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

Lab Sample ID: MB 240-180747/1-A
Matrix: Water
Analysis Batch: 181424

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 180747

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.334	J	2.0	0.16	ug/L		05/14/15 09:26	05/18/15 19:50	1
Arsenic	3.96	J	5.0	0.18	ug/L		05/14/15 09:26	05/18/15 19:50	1
Barium	4.0	U	5.0	1.1	ug/L		05/14/15 09:26	05/18/15 19:50	1
Beryllium	0.444	J	1.0	0.053	ug/L		05/14/15 09:26	05/18/15 19:50	1
Cadmium	0.617	J	2.0	0.061	ug/L		05/14/15 09:26	05/18/15 19:50	1
Calcium	1000	U	2000	240	ug/L		05/14/15 09:26	05/18/15 19:50	1
Chromium	2.16	J	6.0	0.20	ug/L		05/14/15 09:26	05/18/15 19:50	1
Cobalt	0.362	J	1.0	0.021	ug/L		05/14/15 09:26	05/18/15 19:50	1
Copper	4.0	U	4.0	0.75	ug/L		05/14/15 09:26	05/18/15 19:50	1
Iron	100	U	150	16	ug/L		05/14/15 09:26	05/18/15 19:50	1
Lead	0.463	J	1.0	0.11	ug/L		05/14/15 09:26	05/18/15 19:50	1
Magnesium	300	U	1000	48	ug/L		05/14/15 09:26	05/18/15 19:50	1
Manganese	10	U	10	1.1	ug/L		05/14/15 09:26	05/18/15 19:50	1
Potassium	150	U	1000	30	ug/L		05/14/15 09:26	05/18/15 19:50	1
Silver	0.0200	J	1.0	0.020	ug/L		05/14/15 09:26	05/18/15 19:50	1
Sodium	400	U	1000	68	ug/L		05/14/15 09:26	05/18/15 19:50	1
Thallium	0.476	J	2.0	0.074	ug/L		05/14/15 09:26	05/18/15 19:50	1
Vanadium	0.999	J	5.0	0.23	ug/L		05/14/15 09:26	05/18/15 19:50	1
Zinc	50	U	50	7.3	ug/L		05/14/15 09:26	05/18/15 19:50	1

Lab Sample ID: MB 240-180747/1-A
Matrix: Water
Analysis Batch: 181554

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 180747

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	3.0	U	5.0	0.23	ug/L		05/14/15 09:26	05/19/15 22:14	1
Selenium	1.92	J	5.0	0.25	ug/L		05/14/15 09:26	05/19/15 22:14	1

Lab Sample ID: LCS 240-180747/2-A
Matrix: Water
Analysis Batch: 181424

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 180747

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10000	8930		ug/L		89	80 - 120
Antimony	100	99.6		ug/L		100	80 - 120
Arsenic	1000	952		ug/L		95	80 - 120
Barium	1000	1060		ug/L		106	80 - 120
Beryllium	1000	993		ug/L		99	80 - 120
Cadmium	1000	1020		ug/L		102	80 - 120
Calcium	10000	9580		ug/L		96	80 - 120
Chromium	1000	932		ug/L		93	80 - 120
Cobalt	1000	883		ug/L		88	80 - 120
Copper	1000	901		ug/L		90	80 - 120
Iron	10000	9690		ug/L		97	80 - 120
Lead	1000	978		ug/L		98	80 - 120
Magnesium	10000	9450		ug/L		94	80 - 120
Manganese	1000	963		ug/L		96	80 - 120
Potassium	10000	9270		ug/L		93	80 - 120
Silver	100	97.4		ug/L		97	80 - 120

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

Lab Sample ID: LCS 240-180747/2-A
Matrix: Water
Analysis Batch: 181424

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 180747

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	10000	9470		ug/L		95	80 - 120
Thallium	250	236		ug/L		95	80 - 120
Vanadium	1000	903		ug/L		90	80 - 120
Zinc	1000	989		ug/L		99	80 - 120

Lab Sample ID: LCS 240-180747/2-A
Matrix: Water
Analysis Batch: 181554

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 180747

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nickel	1000	922		ug/L		92	80 - 120
Selenium	1000	915		ug/L		92	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-180745/1-A
Matrix: Water
Analysis Batch: 181029

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 180745

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		05/14/15 14:00	05/15/15 11:19	1

Lab Sample ID: LCS 240-180745/2-A
Matrix: Water
Analysis Batch: 181029

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 180745

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	4.86		ug/L		97	80 - 120

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 240-182343/1-A
Matrix: Solid
Analysis Batch: 182771

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 182343

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.033	U	0.10	0.014	mg/Kg		05/26/15 15:15	05/28/15 10:58	1

Lab Sample ID: LCS 240-182343/2-A
Matrix: Solid
Analysis Batch: 182771

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 182343

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.802		mg/Kg		96	80 - 120

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

Lab Sample ID: 240-50650-1 MS
Matrix: Solid
Analysis Batch: 182771

Client Sample ID: 079SS-0400M-0001-SO
Prep Type: Total/NA
Prep Batch: 182343

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.056	J	0.149	0.213		mg/Kg	☼	105	80 - 120

Lab Sample ID: 240-50650-1 DU
Matrix: Solid
Analysis Batch: 182771

Client Sample ID: 079SS-0400M-0001-SO
Prep Type: Total/NA
Prep Batch: 182343

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.056	J	0.0591	J	mg/Kg	☼	5	20

Metals

Prep Batch: 180745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-50650-8	079SS-0407-0001-RB	Total/NA	Water	7470A	
LCS 240-180745/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 240-180745/1-A	Method Blank	Total/NA	Water	7470A	

Prep Batch: 180747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-50650-8	079SS-0407-0001-RB	Total Recoverable	Water	3005A	
LCS 240-180747/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 240-180747/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 180787

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
CRA 240-180787/9-A	DL		Water	7470A	

Analysis Batch: 181029

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-50650-8	079SS-0407-0001-RB	Total/NA	Water	7470A	180745
CRA 240-180787/9-A	DL		Water	7470A	180787
CRA 240-180787/9-A	DL		Water	7470A	180787
LCS 240-180745/2-A	Lab Control Sample	Total/NA	Water	7470A	180745
MB 240-180745/1-A	Method Blank	Total/NA	Water	7470A	180745

Analysis Batch: 181424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-50650-8	079SS-0407-0001-RB	Total Recoverable	Water	6020	180747
CRI 240-181424/169	DL		Water	6020	
CRI 240-181424/9	DL		Water	6020	
ICSA 240-181424/10	ICS		Water	6020	
ICSA 240-181424/137	ICS		Water	6020	
ICSAB 240-181424/11	ICS		Water	6020	
ICSAB 240-181424/138	ICS		Water	6020	
LCS 240-180747/2-A	Lab Control Sample	Total Recoverable	Water	6020	180747
MB 240-180747/1-A	Method Blank	Total Recoverable	Water	6020	180747

Analysis Batch: 181554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-50650-8	079SS-0407-0001-RB	Total Recoverable	Water	6020	180747
CRI 240-181554/117	DL		Water	6020	
CRI 240-181554/9	DL		Water	6020	
ICSA 240-181554/10	ICS		Water	6020	
ICSAB 240-181554/11	ICS		Water	6020	
LCS 240-180747/2-A	Lab Control Sample	Total Recoverable	Water	6020	180747
MB 240-180747/1-A	Method Blank	Total Recoverable	Water	6020	180747

ISM Prep Batch: 181713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-50650-1	079SS-0400M-0001-SO	Total/NA	Solid	Increment, Prep	
240-50650-1 DU	079SS-0400M-0001-SO	Total/NA	Solid	Increment, Prep	
240-50650-1 MS	079SS-0400M-0001-SO	Total/NA	Solid	Increment, Prep	
240-50650-1 PDS	079SS-0400M-0001-SO	Total/NA	Solid	Increment, Prep	
240-50650-1 SD	079SS-0400M-0001-SO	Total/NA	Solid	Increment, Prep	

Metals (Continued)

ISM Prep Batch: 181713 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-50650-3	079SS-0402M-0001-SO	Total/NA	Solid	Increment, Prep	
240-50650-4	079SS-0403M-0001-SO	Total/NA	Solid	Increment, Prep	
240-50650-5	079SS-0404M-0001-SO	Total/NA	Solid	Increment, Prep	
240-50650-6	079SS-0405M-0001-SO	Total/NA	Solid	Increment, Prep	
240-50650-7	079SS-0406M-0001-SO	Total/NA	Solid	Increment, Prep	

Prep Batch: 182339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-50650-1	079SS-0400M-0001-SO	Total/NA	Solid	3050B	181713
240-50650-1 DU	079SS-0400M-0001-SO	Total/NA	Solid	3050B	181713
240-50650-1 MS	079SS-0400M-0001-SO	Total/NA	Solid	3050B	181713
240-50650-1 PDS	079SS-0400M-0001-SO	Total/NA	Solid	3050B	181713
240-50650-1 SD	079SS-0400M-0001-SO	Total/NA	Solid	3050B	181713
240-50650-3	079SS-0402M-0001-SO	Total/NA	Solid	3050B	181713
240-50650-4	079SS-0403M-0001-SO	Total/NA	Solid	3050B	181713
240-50650-5	079SS-0404M-0001-SO	Total/NA	Solid	3050B	181713
240-50650-6	079SS-0405M-0001-SO	Total/NA	Solid	3050B	181713
240-50650-7	079SS-0406M-0001-SO	Total/NA	Solid	3050B	181713
LCS 240-182339/2-A ^2	Lab Control Sample	Total/NA	Solid	3050B	
MB 240-182339/1-A ^2	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 182343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-50650-1	079SS-0400M-0001-SO	Total/NA	Solid	7471A	181713
240-50650-1 DU	079SS-0400M-0001-SO	Total/NA	Solid	7471A	181713
240-50650-1 MS	079SS-0400M-0001-SO	Total/NA	Solid	7471A	181713
240-50650-3	079SS-0402M-0001-SO	Total/NA	Solid	7471A	181713
240-50650-4	079SS-0403M-0001-SO	Total/NA	Solid	7471A	181713
240-50650-5	079SS-0404M-0001-SO	Total/NA	Solid	7471A	181713
240-50650-6	079SS-0405M-0001-SO	Total/NA	Solid	7471A	181713
240-50650-7	079SS-0406M-0001-SO	Total/NA	Solid	7471A	181713
LCS 240-182343/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 240-182343/1-A	Method Blank	Total/NA	Solid	7471A	

Prep Batch: 182695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
CRA 240-182695/9-A	DL		Solid	7471A	

Analysis Batch: 182771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-50650-1	079SS-0400M-0001-SO	Total/NA	Solid	7471A	182343
240-50650-1 DU	079SS-0400M-0001-SO	Total/NA	Solid	7471A	182343
240-50650-1 MS	079SS-0400M-0001-SO	Total/NA	Solid	7471A	182343
240-50650-3	079SS-0402M-0001-SO	Total/NA	Solid	7471A	182343
240-50650-4	079SS-0403M-0001-SO	Total/NA	Solid	7471A	182343
240-50650-5	079SS-0404M-0001-SO	Total/NA	Solid	7471A	182343
240-50650-6	079SS-0405M-0001-SO	Total/NA	Solid	7471A	182343
240-50650-7	079SS-0406M-0001-SO	Total/NA	Solid	7471A	182343
CRA 240-182695/9-A	DL		Solid	7471A	182695
CRA 240-182695/9-A	DL		Solid	7471A	182695
LCS 240-182343/2-A	Lab Control Sample	Total/NA	Solid	7471A	182343

Metals (Continued)

Analysis Batch: 182771 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-182343/1-A	Method Blank	Total/NA	Solid	7471A	182343

Analysis Batch: 182845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-50650-1	079SS-0400M-0001-SO	Total/NA	Solid	6020	182339
240-50650-1	079SS-0400M-0001-SO	Total/NA	Solid	6020	182339
240-50650-1 DU	079SS-0400M-0001-SO	Total/NA	Solid	6020	182339
240-50650-1 DU	079SS-0400M-0001-SO	Total/NA	Solid	6020	182339
240-50650-1 MS	079SS-0400M-0001-SO	Total/NA	Solid	6020	182339
240-50650-1 MS	079SS-0400M-0001-SO	Total/NA	Solid	6020	182339
240-50650-1 PDS	079SS-0400M-0001-SO	Total/NA	Solid	6020	182339
240-50650-1 PDS	079SS-0400M-0001-SO	Total/NA	Solid	6020	182339
240-50650-1 SD	079SS-0400M-0001-SO	Total/NA	Solid	6020	182339
240-50650-1 SD	079SS-0400M-0001-SO	Total/NA	Solid	6020	182339
240-50650-3	079SS-0402M-0001-SO	Total/NA	Solid	6020	182339
240-50650-3	079SS-0402M-0001-SO	Total/NA	Solid	6020	182339
240-50650-4	079SS-0403M-0001-SO	Total/NA	Solid	6020	182339
240-50650-4	079SS-0403M-0001-SO	Total/NA	Solid	6020	182339
240-50650-5	079SS-0404M-0001-SO	Total/NA	Solid	6020	182339
240-50650-5	079SS-0404M-0001-SO	Total/NA	Solid	6020	182339
240-50650-6	079SS-0405M-0001-SO	Total/NA	Solid	6020	182339
240-50650-6	079SS-0405M-0001-SO	Total/NA	Solid	6020	182339
240-50650-7	079SS-0406M-0001-SO	Total/NA	Solid	6020	182339
240-50650-7	079SS-0406M-0001-SO	Total/NA	Solid	6020	182339
CRI 240-182845/231	DL		Solid	6020	
CRI 240-182845/249	DL		Solid	6020	
CRI 240-182845/9	DL		Solid	6020	
ICSA 240-182845/10	ICS		Solid	6020	
ICSA 240-182845/180	ICS		Solid	6020	
ICSAB 240-182845/11	ICS		Solid	6020	
ICSAB 240-182845/181	ICS		Solid	6020	
LCS 240-182339/2-A ^2	Lab Control Sample	Total/NA	Solid	6020	182339
MB 240-182339/1-A ^2	Method Blank	Total/NA	Solid	6020	182339

Analysis Batch: 183211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-50650-1	079SS-0400M-0001-SO	Total/NA	Solid	6020	182339
240-50650-1 DU	079SS-0400M-0001-SO	Total/NA	Solid	6020	182339
240-50650-1 MS	079SS-0400M-0001-SO	Total/NA	Solid	6020	182339
240-50650-1 PDS	079SS-0400M-0001-SO	Total/NA	Solid	6020	182339
240-50650-1 SD	079SS-0400M-0001-SO	Total/NA	Solid	6020	182339
240-50650-3	079SS-0402M-0001-SO	Total/NA	Solid	6020	182339
240-50650-4	079SS-0403M-0001-SO	Total/NA	Solid	6020	182339
240-50650-5	079SS-0404M-0001-SO	Total/NA	Solid	6020	182339
240-50650-6	079SS-0405M-0001-SO	Total/NA	Solid	6020	182339
240-50650-7	079SS-0406M-0001-SO	Total/NA	Solid	6020	182339
CRI 240-183211/11	DL		Solid	6020	
CRI 240-183211/56	DL		Solid	6020	
ICSA 240-183211/12	ICS		Solid	6020	
ICSAB 240-183211/13	ICS		Solid	6020	
LCS 240-182339/2-A ^2	Lab Control Sample	Total/NA	Solid	6020	182339

Metals (Continued)

Analysis Batch: 183211 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-182339/1-A ^2	Method Blank	Total/NA	Solid	6020	182339

General Chemistry

ISM Prep Batch: 181713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-50650-1	079SS-0400M-0001-SO	Total/NA	Solid	Increment, Prep	
240-50650-3	079SS-0402M-0001-SO	Total/NA	Solid	Increment, Prep	
240-50650-4	079SS-0403M-0001-SO	Total/NA	Solid	Increment, Prep	
240-50650-5	079SS-0404M-0001-SO	Total/NA	Solid	Increment, Prep	
240-50650-6	079SS-0405M-0001-SO	Total/NA	Solid	Increment, Prep	
240-50650-7	079SS-0406M-0001-SO	Total/NA	Solid	Increment, Prep	
240-50650-7 DU	079SS-0406M-0001-SO	Total/NA	Solid	Increment, Prep	

Analysis Batch: 181834

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-50650-1	079SS-0400M-0001-SO	Total/NA	Solid	Moisture	181713
240-50650-3	079SS-0402M-0001-SO	Total/NA	Solid	Moisture	181713
240-50650-4	079SS-0403M-0001-SO	Total/NA	Solid	Moisture	181713
240-50650-5	079SS-0404M-0001-SO	Total/NA	Solid	Moisture	181713
240-50650-6	079SS-0405M-0001-SO	Total/NA	Solid	Moisture	181713
240-50650-7	079SS-0406M-0001-SO	Total/NA	Solid	Moisture	181713
240-50650-7 DU	079SS-0406M-0001-SO	Total/NA	Solid	Moisture	181713

Client Sample ID: 079SS-0400M-0001-SO

Lab Sample ID: 240-50650-1

Date Collected: 05/13/15 08:40
Matrix: Solid
Date Received: 05/13/15 12:44
Percent Solids: 97.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			181713	05/14/15 19:00	SMH	TAL CAN
Total/NA	Prep	3050B			182339	05/26/15 10:39	DEE	TAL CAN
Total/NA	Analysis	6020		2	182845	05/28/15 23:00	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			181713	05/14/15 19:00	SMH	TAL CAN
Total/NA	Prep	3050B			182339	05/26/15 10:39	DEE	TAL CAN
Total/NA	Analysis	6020		20	182845	05/29/15 00:04	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			181713	05/14/15 19:00	SMH	TAL CAN
Total/NA	Prep	3050B			182339	05/26/15 10:39	DEE	TAL CAN
Total/NA	Analysis	6020		2	183211	06/01/15 14:01	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			181713	05/14/15 19:00	SMH	TAL CAN
Total/NA	Prep	7471A			182343	05/26/15 15:15	DEE	TAL CAN
Total/NA	Analysis	7471A		1	182771	05/28/15 11:03	BW	TAL CAN
Total/NA	ISM Prep	Increment, Prep			181713	05/14/15 19:00	SMH	TAL CAN
Total/NA	Analysis	Moisture		1	181834	05/21/15 09:51	TPH	TAL CAN

Client Sample ID: 079SS-0402M-0001-SO

Lab Sample ID: 240-50650-3

Date Collected: 05/12/15 17:20
Matrix: Solid
Date Received: 05/13/15 12:44
Percent Solids: 97.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			181713	05/14/15 19:00	SMH	TAL CAN
Total/NA	Prep	3050B			182339	05/26/15 10:39	DEE	TAL CAN
Total/NA	Analysis	6020		2	182845	05/28/15 23:17	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			181713	05/14/15 19:00	SMH	TAL CAN
Total/NA	Prep	3050B			182339	05/26/15 10:39	DEE	TAL CAN
Total/NA	Analysis	6020		20	182845	05/29/15 00:21	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			181713	05/14/15 19:00	SMH	TAL CAN
Total/NA	Prep	3050B			182339	05/26/15 10:39	DEE	TAL CAN
Total/NA	Analysis	6020		2	183211	06/01/15 14:26	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			181713	05/14/15 19:00	SMH	TAL CAN
Total/NA	Prep	7471A			182343	05/26/15 15:15	DEE	TAL CAN
Total/NA	Analysis	7471A		1	182771	05/28/15 11:08	BW	TAL CAN
Total/NA	ISM Prep	Increment, Prep			181713	05/14/15 19:00	SMH	TAL CAN
Total/NA	Analysis	Moisture		1	181834	05/21/15 09:51	TPH	TAL CAN

Client Sample ID: 079SS-0403M-0001-SO

Lab Sample ID: 240-50650-4

Date Collected: 05/12/15 17:55
Matrix: Solid
Date Received: 05/13/15 12:44
Percent Solids: 97.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			181713	05/14/15 19:00	SMH	TAL CAN
Total/NA	Prep	3050B			182339	05/26/15 10:39	DEE	TAL CAN
Total/NA	Analysis	6020		2	182845	05/28/15 23:21	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			181713	05/14/15 19:00	SMH	TAL CAN

Client Sample ID: 079SS-0403M-0001-SO

Lab Sample ID: 240-50650-4
Date Collected: 05/12/15 17:55
Matrix: Solid
Date Received: 05/13/15 12:44
Percent Solids: 97.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			182339	05/26/15 10:39	DEE	TAL CAN
Total/NA	Analysis	6020		20	182845	05/29/15 00:25	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			181713	05/14/15 19:00	SMH	TAL CAN
Total/NA	Prep	3050B			182339	05/26/15 10:39	DEE	TAL CAN
Total/NA	Analysis	6020		2	183211	06/01/15 14:30	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			181713	05/14/15 19:00	SMH	TAL CAN
Total/NA	Prep	7471A			182343	05/26/15 15:15	DEE	TAL CAN
Total/NA	Analysis	7471A		1	182771	05/28/15 11:10	BW	TAL CAN
Total/NA	ISM Prep	Increment, Prep			181713	05/14/15 19:00	SMH	TAL CAN
Total/NA	Analysis	Moisture		1	181834	05/21/15 09:51	TPH	TAL CAN

Client Sample ID: 079SS-0404M-0001-SO

Lab Sample ID: 240-50650-5
Date Collected: 05/12/15 16:50
Matrix: Solid
Date Received: 05/13/15 12:44
Percent Solids: 97.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			181713	05/14/15 19:00	SMH	TAL CAN
Total/NA	Prep	3050B			182339	05/26/15 10:39	DEE	TAL CAN
Total/NA	Analysis	6020		2	182845	05/28/15 23:31	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			181713	05/14/15 19:00	SMH	TAL CAN
Total/NA	Prep	3050B			182339	05/26/15 10:39	DEE	TAL CAN
Total/NA	Analysis	6020		20	182845	05/29/15 00:29	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			181713	05/14/15 19:00	SMH	TAL CAN
Total/NA	Prep	3050B			182339	05/26/15 10:39	DEE	TAL CAN
Total/NA	Analysis	6020		2	183211	06/01/15 14:33	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			181713	05/14/15 19:00	SMH	TAL CAN
Total/NA	Prep	7471A			182343	05/26/15 15:15	DEE	TAL CAN
Total/NA	Analysis	7471A		1	182771	05/28/15 11:12	BW	TAL CAN
Total/NA	ISM Prep	Increment, Prep			181713	05/14/15 19:00	SMH	TAL CAN
Total/NA	Analysis	Moisture		1	181834	05/21/15 09:51	TPH	TAL CAN

Client Sample ID: 079SS-0405M-0001-SO

Lab Sample ID: 240-50650-6
Date Collected: 05/12/15 14:15
Matrix: Solid
Date Received: 05/13/15 12:44
Percent Solids: 97.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			181713	05/14/15 19:00	SMH	TAL CAN
Total/NA	Prep	3050B			182339	05/26/15 10:39	DEE	TAL CAN
Total/NA	Analysis	6020		2	182845	05/28/15 23:35	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			181713	05/14/15 19:00	SMH	TAL CAN
Total/NA	Prep	3050B			182339	05/26/15 10:39	DEE	TAL CAN
Total/NA	Analysis	6020		20	182845	05/29/15 00:32	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			181713	05/14/15 19:00	SMH	TAL CAN
Total/NA	Prep	3050B			182339	05/26/15 10:39	DEE	TAL CAN

Lab Chronicle

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

TestAmerica Job ID: 240-50650-1

Client Sample ID: 079SS-0405M-0001-SO

Lab Sample ID: 240-50650-6
Date Collected: 05/12/15 14:15
Matrix: Solid
Date Received: 05/13/15 12:44
Percent Solids: 97.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6020		2	183211	06/01/15 14:37	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			181713	05/14/15 19:00	SMH	TAL CAN
Total/NA	Prep	7471A			182343	05/26/15 15:15	DEE	TAL CAN
Total/NA	Analysis	7471A		1	182771	05/28/15 11:14	BW	TAL CAN
Total/NA	ISM Prep	Increment, Prep			181713	05/14/15 19:00	SMH	TAL CAN
Total/NA	Analysis	Moisture		1	181834	05/21/15 09:51	TPH	TAL CAN

Client Sample ID: 079SS-0406M-0001-SO

Lab Sample ID: 240-50650-7
Date Collected: 05/12/15 15:40
Matrix: Solid
Date Received: 05/13/15 12:44
Percent Solids: 97.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	ISM Prep	Increment, Prep			181713	05/14/15 19:00	SMH	TAL CAN
Total/NA	Prep	3050B			182339	05/26/15 10:39	DEE	TAL CAN
Total/NA	Analysis	6020		2	182845	05/28/15 23:39	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			181713	05/14/15 19:00	SMH	TAL CAN
Total/NA	Prep	3050B			182339	05/26/15 10:39	DEE	TAL CAN
Total/NA	Analysis	6020		20	182845	05/29/15 00:36	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			181713	05/14/15 19:00	SMH	TAL CAN
Total/NA	Prep	3050B			182339	05/26/15 10:39	DEE	TAL CAN
Total/NA	Analysis	6020		2	183211	06/01/15 14:40	AS1	TAL CAN
Total/NA	ISM Prep	Increment, Prep			181713	05/14/15 19:00	SMH	TAL CAN
Total/NA	Prep	7471A			182343	05/26/15 15:15	DEE	TAL CAN
Total/NA	Analysis	7471A		1	182771	05/28/15 11:16	BW	TAL CAN
Total/NA	ISM Prep	Increment, Prep			181713	05/14/15 19:00	SMH	TAL CAN
Total/NA	Analysis	Moisture		1	181834	05/21/15 09:51	TPH	TAL CAN

Client Sample ID: 079SS-0407-0001-RB

Lab Sample ID: 240-50650-8
Date Collected: 05/13/15 11:00
Matrix: Water
Date Received: 05/13/15 12:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			180747	05/14/15 09:26	WAL	TAL CAN
Total Recoverable	Analysis	6020		1	181424	05/18/15 19:57	AS1	TAL CAN
Total Recoverable	Prep	3005A			180747	05/14/15 09:26	WAL	TAL CAN
Total Recoverable	Analysis	6020		1	181554	05/19/15 22:29	AS1	TAL CAN
Total/NA	Prep	7470A			180745	05/14/15 14:00	WAL	TAL CAN
Total/NA	Analysis	7470A		1	181029	05/15/15 11:49	BW	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

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

TestAmerica Job ID: 240-50650-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-15
Florida	NELAP	4	E87225	06-30-15 *
Georgia	State Program	4	N/A	06-30-15 *
Illinois	NELAP	5	200004	07-31-15
Kansas	NELAP	7	E-10336	05-31-15 *
Kentucky (UST)	State Program	4	58	06-30-15 *
Kentucky (WW)	State Program	4	98016	12-31-15
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-15
Nevada	State Program	9	OH-000482008A	07-31-15
New Jersey	NELAP	2	OH001	06-30-15 *
New York	NELAP	2	10975	03-31-16 *
Ohio VAP	State Program	5	CL0024	10-31-15
Oregon	NELAP	10	4062	02-23-16
Pennsylvania	NELAP	3	68-00340	08-31-15
Texas	NELAP	6		08-31-15
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-15
Washington	State Program	10	C971	01-12-16
West Virginia DEP	State Program	3	210	12-31-15
Wisconsin	State Program	5	999518190	08-31-15

* Certification renewal pending - certification considered valid.

Method Summary

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

TestAmerica Job ID: 240-50650-1

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL CAN
7470A	Mercury (CVAA)	SW846	TAL CAN
7471A	Mercury (CVAA)	SW846	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

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

TestAmerica Job ID: 240-50650-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-50650-1	079SS-0400M-0001-SO	Solid	05/13/15 08:40	05/13/15 12:44
240-50650-3	079SS-0402M-0001-SO	Solid	05/12/15 17:20	05/13/15 12:44
240-50650-4	079SS-0403M-0001-SO	Solid	05/12/15 17:55	05/13/15 12:44
240-50650-5	079SS-0404M-0001-SO	Solid	05/12/15 16:50	05/13/15 12:44
240-50650-6	079SS-0405M-0001-SO	Solid	05/12/15 14:15	05/13/15 12:44
240-50650-7	079SS-0406M-0001-SO	Solid	05/12/15 15:40	05/13/15 12:44
240-50650-8	079SS-0407-0001-RB	Water	05/13/15 11:00	05/13/15 12:44

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
K2S2O8_00022	07/27/16	04/07/15	DIWATER, Lot DIWATER	2.5 L	MTK2S208_00020	125 g	Potassium persulfate	0.05 g/g
.MTK2S208_00020	07/27/16	Macron, Lot 0000046094			(Purchased Reagent)		Potassium persulfate	1 g/g
MT1TO1HN03_00980	05/26/15	05/26/15	DIWATER, Lot DI WATER	700 mL	MTTMHNO3_00057	350 mL	Nitric acid	0.5 mL/mL
.MTTMHNO3_00057	05/13/17	Macron/Avantor, Lot 0000104740			(Purchased Reagent)		Nitric acid	100 %
MTAQUAREGIA_01043	05/26/15	05/26/15	NA, Lot NA	280 mL	MTTMHCL_00066	210 mL	Hydrogen Chloride	0.75 mL/mL
					MTTMHNO3_00057	70 mL	Nitric acid	0.25 mL/mL
.MTTMHCL_00066	05/07/17	Macron/Avantor, Lot 0000086340			(Purchased Reagent)		Hydrogen Chloride	100 %
.MTTMHNO3_00057	05/13/17	Macron/Avantor, Lot 0000104740			(Purchased Reagent)		Nitric acid	100 %
MTAQUAREGIA_01047	05/28/15	05/28/15	NA, Lot NA	80 mL	MTTMHCL_00069	60 mL	Hydrogen Chloride	0.75 mL/mL
					MTTMHNO3_00058	20 mL	Nitric acid	0.25 mL/mL
.MTTMHCL_00069	05/28/17	Macron/Avantor, Lot 0000086340			(Purchased Reagent)		Hydrogen Chloride	100 %
.MTTMHNO3_00058	05/27/17	Macron/Avantor, Lot 0000084177			(Purchased Reagent)		Nitric acid	100 %
MTH202_00044	11/23/16	Macron, Lot 0000097651			(Purchased Reagent)		Hydrogen Peroxide	30 %
MTH2S04_00021	10/21/16	Macron, Lot 0000080085			(Purchased Reagent)		Sulfuric acid	100 %
MTHGCALW_00904	05/14/15	05/14/15	DIWATER, Lot DIWATER	100 mL	MTHGCAL_00016	1 mL	Mercury	100 ug/L
					MTTMHNO3_00056	0.15 mL	Nitric acid	1500000 ug/L
.MTHGCAL_00016	05/09/17	INORGANIC VENTURES, Lot H2-HG02126			(Purchased Reagent)		Mercury	10 ug/mL
.MTTMHNO3_00056	04/30/17	Macron/Avantor, Lot 0000104740			(Purchased Reagent)		Nitric acid	100 %
MTHGCALW_00914	05/26/15	05/26/15	DIWATER, Lot DIWATER	100 mL	MTHGCAL_00017	1 mL	Mercury	100 ug/L
					MTTMHNO3_00057	0.15 mL	Nitric acid	1500000 ug/L
.MTHGCAL_00017	04/30/16	INORGANIC VENTURES, Lot H2-HG02126			(Purchased Reagent)		Mercury	10 ug/mL
.MTTMHNO3_00057	05/13/17	Macron/Avantor, Lot 0000104740			(Purchased Reagent)		Nitric acid	100 %
MTHGCALW_00917	05/28/15	05/28/15	DIWATER, Lot DIWATER	100 mL	MTHGCAL_00017	1 mL	Mercury	100 ug/L
					MTTMHNO3_00057	0.15 mL	Nitric acid	1500000 ug/L
.MTHGCAL_00017	04/30/16	INORGANIC VENTURES, Lot H2-HG02126			(Purchased Reagent)		Mercury	10 ug/mL
.MTTMHNO3_00057	05/13/17	Macron/Avantor, Lot 0000104740			(Purchased Reagent)		Nitric acid	100 %
MTHgStd_00016	10/07/15	HPS, Lot 1509117			(Purchased Reagent)		Mercury	1 ug/mL
MTICPMS2_00021	05/01/16	Inorganic Ventures, Lot J2-MEB574105			(Purchased Reagent)		Aluminum	1000 ug/mL
							Calcium	1000 ug/mL
							Iron	1000 ug/mL
							Magnesium	1000 ug/mL
							Potassium	1000 ug/mL
							Sodium	1000 ug/mL
MTICPMSA_00021	12/15/15	High Purity Standards, Lot 1434610			(Purchased Reagent)		Arsenic	10 ug/mL
							B	10 ug/mL
							Barium	10 ug/mL
							Beryllium	10 ug/mL
							Cadmium	10 ug/mL
							Chromium	10 ug/mL
							Cobalt	10 ug/mL
							Copper	10 ug/mL
							Lead	10 ug/mL
							Manganese	10 ug/mL
							Nickel	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Selenium	10 ug/mL
							Sr	10 ug/mL
							Thallium	10 ug/mL
							Vanadium	10 ug/mL
							Zinc	10 ug/mL
MTICPMSA_00023	05/01/16	Inorganic Ventures, Lot H2-MEB552051			(Purchased Reagent)		Arsenic	100 ug/mL
							Barium	100 ug/mL
							Beryllium	100 ug/mL
							Cadmium	100 ug/mL
							Chromium	100 ug/mL
							Cobalt	100 ug/mL
							Copper	100 ug/mL
							Lead	100 ug/mL
							Manganese	100 ug/mL
							Nickel	100 ug/mL
							Selenium	100 ug/mL
							Sr	100 ug/mL
							Thallium	25 ug/mL
							Vanadium	100 ug/mL
							Zinc	100 ug/mL
MTICPMSB_00021	12/15/15	High Purity Standards, Lot 1434611			(Purchased Reagent)		Antimony	10 ug/mL
							Mo	10 ug/mL
							Silver	10 ug/mL
							Sn	10 ug/mL
							Ti	10 ug/mL
							W	10 ug/mL
							Zr	10 ug/mL
MTICPMSB_00023	05/01/16	Inorganic Ventures, Lot J2-MEB577026			(Purchased Reagent)		Antimony	10 ug/mL
							B	10 ug/mL
							Mo	10 ug/mL
							Silver	10 ug/mL
							Sn	100 ug/mL
							Ti	10 ug/mL
							W	10 ug/mL
MTKMN04W_00083	05/06/17	05/06/15	DIWATER, Lot DIWATER	2.5 L	MTKMN04_00020	125 g	Potassium Permanganate	0.05 g/g
.MTKMN04_00020	11/24/19	Fisher, Lot 121666			(Purchased Reagent)		Potassium Permanganate	1 g/g
MTKMN04W_00085	05/21/17	05/21/15	DIWATER, Lot DIWATER	2.5 L	MTKMN04_00020	125 g	Potassium Permanganate	0.05 g/g
.MTKMN04_00020	11/24/19	Fisher, Lot 121666			(Purchased Reagent)		Potassium Permanganate	1 g/g
MTMSCAL2CCVW_00120	10/01/15	05/05/15	DIWATER, Lot DIWATER	500 mL	MTMSCAL3_00008	5 mL	Aluminum	250 ug/L
							Arsenic	50 ug/L
							Barium	50 ug/L
							Beryllium	50 ug/L
							Cadmium	50 ug/L
							Calcium	25000 ug/L
							Chromium	50 ug/L
							Cobalt	50 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Copper	50 ug/L
							Iron	12500 ug/L
							Lead	50 ug/L
							Magnesium	25000 ug/L
							Manganese	250 ug/L
							Nickel	50 ug/L
							Potassium	25000 ug/L
							Selenium	50 ug/L
							Silver	50 ug/L
							Sodium	25000 ug/L
							Thallium	50 ug/L
							Vanadium	50 ug/L
							Zinc	50 ug/L
					MTMSCAL4_00009	5 mL	Antimony	50 ug/L
.MTMSCAL3_00008	10/01/15	INORGANIC VENTURES, Lot H2-MEB544052			(Purchased Reagent)		Aluminum	25 ug/mL
							Arsenic	5 ug/mL
							Barium	5 ug/mL
							Beryllium	5 ug/mL
							Cadmium	5 ug/mL
							Calcium	2500 ug/mL
							Chromium	5 ug/mL
							Cobalt	5 ug/mL
							Copper	5 ug/mL
							Iron	1250 ug/mL
							Lead	5 ug/mL
							Magnesium	2500 ug/mL
							Manganese	25 ug/mL
							Nickel	5 ug/mL
							Potassium	2500 ug/mL
							Selenium	5 ug/mL
							Silver	5 ug/mL
							Sodium	2500 ug/mL
							Thallium	5 ug/mL
							Vanadium	5 ug/mL
							Zinc	5 ug/mL
.MTMSCAL4_00009	10/01/15	INORGANIC VENTURES, Lot H2-MEB544053			(Purchased Reagent)		Antimony	5 ug/mL
MTMSCAL2CCVW_00121	10/01/15	05/13/15	DIWATER, Lot DIWATER	500 mL	MTMSCAL3_00008	5 mL	Aluminum	250 ug/L
							Arsenic	50 ug/L
							Barium	50 ug/L
							Beryllium	50 ug/L
							Cadmium	50 ug/L
							Calcium	25000 ug/L
							Chromium	50 ug/L
							Cobalt	50 ug/L
							Copper	50 ug/L
							Iron	12500 ug/L
							Lead	50 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Magnesium	25000 ug/L
							Manganese	250 ug/L
							Nickel	50 ug/L
							Potassium	25000 ug/L
							Selenium	50 ug/L
							Silver	50 ug/L
							Sodium	25000 ug/L
							Thallium	50 ug/L
							Vanadium	50 ug/L
							Zinc	50 ug/L
					MTMSCAL4_00009	5 mL	Antimony	50 ug/L
.MTMSCAL3_00008	10/01/15	INORGANIC VENTURES, Lot H2-MEB544052			(Purchased Reagent)		Aluminum	25 ug/mL
							Arsenic	5 ug/mL
							Barium	5 ug/mL
							Beryllium	5 ug/mL
							Cadmium	5 ug/mL
							Calcium	2500 ug/mL
							Chromium	5 ug/mL
							Cobalt	5 ug/mL
							Copper	5 ug/mL
							Iron	1250 ug/mL
							Lead	5 ug/mL
							Magnesium	2500 ug/mL
							Manganese	25 ug/mL
							Nickel	5 ug/mL
							Potassium	2500 ug/mL
							Selenium	5 ug/mL
							Silver	5 ug/mL
							Sodium	2500 ug/mL
							Thallium	5 ug/mL
							Vanadium	5 ug/mL
							Zinc	5 ug/mL
.MTMSCAL4_00009	10/01/15	INORGANIC VENTURES, Lot H2-MEB544053			(Purchased Reagent)		Antimony	5 ug/mL
MTMSCAL2CCVW_00122	08/19/15	05/18/15	DIWATER, Lot DIWATER	500 mL	MTMSCAL3_00008	5 mL	Aluminum	250 ug/L
							Arsenic	50 ug/L
							Barium	50 ug/L
							Beryllium	50 ug/L
							Cadmium	50 ug/L
							Calcium	25000 ug/L
							Chromium	50 ug/L
							Cobalt	50 ug/L
							Copper	50 ug/L
							Iron	12500 ug/L
							Lead	50 ug/L
							Magnesium	25000 ug/L
							Manganese	250 ug/L
							Nickel	50 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Potassium	25000 ug/L
							Selenium	50 ug/L
							Silver	50 ug/L
							Sodium	25000 ug/L
							Thallium	50 ug/L
							Vanadium	50 ug/L
							Zinc	50 ug/L
					MTMSCAL4_00009	5 mL	Antimony	50 ug/L
.MTMSCAL3_00008	10/01/15	INORGANIC VENTURES, Lot H2-MEB544052			(Purchased Reagent)		Aluminum	25 ug/mL
							Arsenic	5 ug/mL
							Barium	5 ug/mL
							Beryllium	5 ug/mL
							Cadmium	5 ug/mL
							Calcium	2500 ug/mL
							Chromium	5 ug/mL
							Cobalt	5 ug/mL
							Copper	5 ug/mL
							Iron	1250 ug/mL
							Lead	5 ug/mL
							Magnesium	2500 ug/mL
							Manganese	25 ug/mL
							Nickel	5 ug/mL
							Potassium	2500 ug/mL
							Selenium	5 ug/mL
							Silver	5 ug/mL
							Sodium	2500 ug/mL
							Thallium	5 ug/mL
							Vanadium	5 ug/mL
							Zinc	5 ug/mL
.MTMSCAL4_00009	10/01/15	INORGANIC VENTURES, Lot H2-MEB544053			(Purchased Reagent)		Antimony	5 ug/mL
MTMSCAL2CCVW_00123	08/19/15	05/27/15	DIWATER, Lot DIWATER	500 mL	MTMSCAL3_00008	5 mL	Aluminum	250 ug/L
							Arsenic	50 ug/L
							Barium	50 ug/L
							Beryllium	50 ug/L
							Cadmium	50 ug/L
							Calcium	25000 ug/L
							Chromium	50 ug/L
							Cobalt	50 ug/L
							Copper	50 ug/L
							Iron	12500 ug/L
							Lead	50 ug/L
							Magnesium	25000 ug/L
							Manganese	250 ug/L
							Nickel	50 ug/L
							Potassium	25000 ug/L
							Selenium	50 ug/L
							Silver	50 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Sodium	25000 ug/L
							Thallium	50 ug/L
							Vanadium	50 ug/L
							Zinc	50 ug/L
					MTMSCAL4_00009	5 mL	Antimony	50 ug/L
.MTMSCAL3_00008	10/01/15	INORGANIC VENTURES, Lot H2-MEB544052			(Purchased Reagent)		Aluminum	25 ug/mL
							Arsenic	5 ug/mL
							Barium	5 ug/mL
							Beryllium	5 ug/mL
							Cadmium	5 ug/mL
							Calcium	2500 ug/mL
							Chromium	5 ug/mL
							Cobalt	5 ug/mL
							Copper	5 ug/mL
							Iron	1250 ug/mL
							Lead	5 ug/mL
							Magnesium	2500 ug/mL
							Manganese	25 ug/mL
							Nickel	5 ug/mL
							Potassium	2500 ug/mL
							Selenium	5 ug/mL
							Silver	5 ug/mL
							Sodium	2500 ug/mL
							Thallium	5 ug/mL
							Vanadium	5 ug/mL
							Zinc	5 ug/mL
.MTMSCAL4_00009	10/01/15	INORGANIC VENTURES, Lot H2-MEB544053			(Purchased Reagent)		Antimony	5 ug/mL
MTMSCAL3W_00042	10/01/15	05/05/15	DIWATER, Lot DIWATER	250 mL	MTMSCAL3_00008	5 mL	Aluminum	500 ug/L
							Arsenic	100 ug/L
							Barium	100 ug/L
							Beryllium	100 ug/L
							Cadmium	100 ug/L
							Calcium	50000 ug/L
							Chromium	100 ug/L
							Cobalt	100 ug/L
							Copper	100 ug/L
							Iron	25000 ug/L
							Lead	100 ug/L
							Magnesium	50000 ug/L
							Manganese	500 ug/L
							Nickel	100 ug/L
							Potassium	50000 ug/L
							Selenium	100 ug/L
							Silver	100 ug/L
							Sodium	50000 ug/L
							Thallium	100 ug/L
							Vanadium	100 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Zinc	100 ug/L
.MTMSCAL3_00008	10/01/15	INORGANIC VENTURES, Lot H2-MEB544052			(Purchased Reagent)		Aluminum	25 ug/mL
							Arsenic	5 ug/mL
							Barium	5 ug/mL
							Beryllium	5 ug/mL
							Cadmium	5 ug/mL
							Calcium	2500 ug/mL
							Chromium	5 ug/mL
							Cobalt	5 ug/mL
							Copper	5 ug/mL
							Iron	1250 ug/mL
							Lead	5 ug/mL
							Magnesium	2500 ug/mL
							Manganese	25 ug/mL
							Nickel	5 ug/mL
							Potassium	2500 ug/mL
							Selenium	5 ug/mL
							Silver	5 ug/mL
							Sodium	2500 ug/mL
							Thallium	5 ug/mL
							Vanadium	5 ug/mL
							Zinc	5 ug/mL
MTMSCAL3W_00043	08/19/15	05/18/15	DIWATER, Lot DIWATER	250 mL	MTMSCAL3_00008	5 mL	Aluminum	500 ug/L
							Arsenic	100 ug/L
							Barium	100 ug/L
							Beryllium	100 ug/L
							Cadmium	100 ug/L
							Calcium	50000 ug/L
							Chromium	100 ug/L
							Cobalt	100 ug/L
							Copper	100 ug/L
							Iron	25000 ug/L
							Lead	100 ug/L
							Magnesium	50000 ug/L
							Manganese	500 ug/L
							Nickel	100 ug/L
							Potassium	50000 ug/L
							Selenium	100 ug/L
							Silver	100 ug/L
							Sodium	50000 ug/L
							Thallium	100 ug/L
							Vanadium	100 ug/L
							Zinc	100 ug/L
.MTMSCAL3_00008	10/01/15	INORGANIC VENTURES, Lot H2-MEB544052			(Purchased Reagent)		Aluminum	25 ug/mL
							Arsenic	5 ug/mL
							Barium	5 ug/mL
							Beryllium	5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Cadmium	5 ug/mL
							Calcium	2500 ug/mL
							Chromium	5 ug/mL
							Cobalt	5 ug/mL
							Copper	5 ug/mL
							Iron	1250 ug/mL
							Lead	5 ug/mL
							Magnesium	2500 ug/mL
							Manganese	25 ug/mL
							Nickel	5 ug/mL
							Potassium	2500 ug/mL
							Selenium	5 ug/mL
							Silver	5 ug/mL
							Sodium	2500 ug/mL
							Thallium	5 ug/mL
							Vanadium	5 ug/mL
							Zinc	5 ug/mL
MTMSCAL4W_00038	10/01/15	05/06/15	DIWATER, Lot DIWATER	250 mL	MTMSCAL4_00009	5 mL	Antimony	100 ug/L
.MTMSCAL4_00009	10/01/15		INORGANIC VENTURES, Lot H2-MEB544053		(Purchased Reagent)		Antimony	5 ug/mL
MTMSCAL4W_00039	08/19/15	05/18/15	DIWATER, Lot DIWATER	250 mL	MTMSCAL4_00009	5 mL	Antimony	100 ug/L
.MTMSCAL4_00009	10/01/15		INORGANIC VENTURES, Lot H2-MEB544053		(Purchased Reagent)		Antimony	5 ug/mL
MTMSCRI6020AW_00023	08/01/15	05/08/15	DIWATER, Lot DIWATER	500 mL	MS6020ACRIA_00002	0.5 mL	Aluminum	50 ug/L
							Arsenic	5 ug/L
							Barium	5 ug/L
							Beryllium	1 ug/L
							Cadmium	1 ug/L
							Calcium	1000 ug/L
							Chromium	2 ug/L
							Cobalt	1 ug/L
							Copper	2 ug/L
							Iron	100 ug/L
							Lead	1 ug/L
							Magnesium	1000 ug/L
							Manganese	5 ug/L
							Nickel	2 ug/L
							Potassium	1000 ug/L
							Selenium	5 ug/L
							Sodium	1000 ug/L
							Thallium	2 ug/L
							Vanadium	5 ug/L
							Zinc	20 ug/L
					MS6020ACRIB_00002	0.5 mL	Antimony	2 ug/L
					MTAGSPIKEW_00048	0.2 mL	Silver	1 ug/L
.MS6020ACRIA_00002	08/01/15		Inorganic Ventures, Lot H2-MEB537060		(Purchased Reagent)		Aluminum	50 ug/mL
							Arsenic	5 ug/mL
							Barium	5 ug/mL
							Beryllium	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Cadmium	1 ug/mL
							Calcium	1000 ug/mL
							Chromium	2 ug/mL
							Cobalt	1 ug/mL
							Copper	2 ug/mL
							Iron	100 ug/mL
							Lead	1 ug/mL
							Magnesium	1000 ug/mL
							Manganese	5 ug/mL
							Nickel	2 ug/mL
							Potassium	1000 ug/mL
							Selenium	5 ug/mL
							Sodium	1000 ug/mL
							Thallium	2 ug/mL
							Vanadium	5 ug/mL
							Zinc	20 ug/mL
.MS6020ACRIB_00002	08/01/15	Inorganic Ventures, Lot H2-MEB537061			(Purchased Reagent)		Antimony	2 ug/mL
.MTAGSPIKEW_00048	10/30/15	04/30/14	DIWATER, Lot DIWATER	1000 mL	MTAG_00005	2.5 mL	Silver	2500 ug/L
..MTAG_00005	12/27/15	HIGH PURITY STANDARDS, Lot 1401302			(Purchased Reagent)		Silver	1000 ug/mL
MTMSCRI6020AW_00024	08/01/15	05/18/15	DIWATER, Lot DIWATER	500 mL	MS6020ACRIA_00002	0.5 mL	Aluminum	50 ug/L
							Arsenic	5 ug/L
							Barium	5 ug/L
							Beryllium	1 ug/L
							Cadmium	1 ug/L
							Calcium	1000 ug/L
							Chromium	2 ug/L
							Cobalt	1 ug/L
							Copper	2 ug/L
							Iron	100 ug/L
							Lead	1 ug/L
							Magnesium	1000 ug/L
							Manganese	5 ug/L
							Nickel	2 ug/L
							Potassium	1000 ug/L
							Selenium	5 ug/L
							Sodium	1000 ug/L
							Thallium	2 ug/L
							Vanadium	5 ug/L
							Zinc	20 ug/L
					MS6020ACRIB_00002	0.5 mL	Antimony	2 ug/L
					MTAGSPIKEW_00048	0.2 mL	Silver	1 ug/L
.MS6020ACRIA_00002	08/01/15	Inorganic Ventures, Lot H2-MEB537060			(Purchased Reagent)		Aluminum	50 ug/mL
							Arsenic	5 ug/mL
							Barium	5 ug/mL
							Beryllium	1 ug/mL
							Cadmium	1 ug/mL
							Calcium	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chromium	2 ug/mL
							Cobalt	1 ug/mL
							Copper	2 ug/mL
							Iron	100 ug/mL
							Lead	1 ug/mL
							Magnesium	1000 ug/mL
							Manganese	5 ug/mL
							Nickel	2 ug/mL
							Potassium	1000 ug/mL
							Selenium	5 ug/mL
							Sodium	1000 ug/mL
							Thallium	2 ug/mL
							Vanadium	5 ug/mL
							Zinc	20 ug/mL
.MS6020ACRIB_00002	08/01/15	Inorganic Ventures, Lot H2-MEB537061			(Purchased Reagent)		Antimony	2 ug/mL
.MTAGSPIKEW_00048	10/30/15	04/30/14	DIWATER, Lot DIWATER	1000 mL	MTAG_00005	2.5 mL	Silver	2500 ug/L
..MTAG_00005	12/27/15	HIGH PURITY STANDARDS, Lot 1401302			(Purchased Reagent)		Silver	1000 ug/mL
MTMSICSABW_00048	02/10/16	05/08/15	DIWATER, Lot DIWATER	200 mL	MTMSICSA_00010	10 mL	Aluminum	50000 ug/L
							Calcium	50000 ug/L
							Iron	50000 ug/L
							Magnesium	50000 ug/L
							Mo	1100 ug/L
							Potassium	50000 ug/L
							Sodium	50000 ug/L
							Ti	1100 ug/L
					MTMSICSABSOLA_00006	1 mL	Arsenic	100 ug/L
							Barium	100 ug/L
							Beryllium	100 ug/L
							Cadmium	100 ug/L
							Chromium	100 ug/L
							Cobalt	100 ug/L
							Copper	100 ug/L
							Lead	100 ug/L
							Manganese	100 ug/L
							Nickel	100 ug/L
							Selenium	100 ug/L
							Sr	100 ug/L
							Thallium	100 ug/L
							Vanadium	100 ug/L
							Zinc	100 ug/L
					MTMSICSABSOLB_00006	1 mL	Antimony	100 ug/L
							Mo	1100 ug/L
							Silver	100 ug/L
							Sn	100 ug/L
							Ti	1100 ug/L
							W	100 ug/L
.MTMSICSA_00010	04/13/16	INORGANIC VENTURES, Lot J2-MEB533111			(Purchased Reagent)		Aluminum	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Calcium	1000 ug/mL
							Iron	1000 ug/mL
							Magnesium	1000 ug/mL
							Mo	20 ug/mL
							Potassium	1000 ug/mL
							Sodium	1000 ug/mL
							Ti	20 ug/mL
.MTMSICSABSOLA_00006	02/10/16	HIGH PURITY STANDARDS, Lot 1503726			(Purchased Reagent)		Arsenic	20 ug/mL
							Barium	20 ug/mL
							Beryllium	20 ug/mL
							Cadmium	20 ug/mL
							Chromium	20 ug/mL
							Cobalt	20 ug/mL
							Copper	20 ug/mL
							Lead	20 ug/mL
							Manganese	20 ug/mL
							Nickel	20 ug/mL
							Selenium	20 ug/mL
							Sr	20 ug/mL
							Thallium	20 ug/mL
							Vanadium	20 ug/mL
							Zinc	20 ug/mL
.MTMSICSABSOLB_00006	02/10/16	HIGH PURITY STANDARDS, Lot 1504002			(Purchased Reagent)		Antimony	20 ug/mL
							Mo	20 ug/mL
							Silver	20 ug/mL
							Sn	20 ug/mL
							Ti	20 ug/mL
							W	20 ug/mL
MTMSICSABW_00049	08/19/15	05/18/15	DIWATER, Lot DIWATER	200 mL	MTICPMSLi1_00002	20 mL	Li	100 ug/L
					MTMSICSA_00010	10 mL	Aluminum	50000 ug/L
							Calcium	50000 ug/L
							Iron	50000 ug/L
							Magnesium	50000 ug/L
							Mo	1100 ug/L
							Potassium	50000 ug/L
							Sodium	50000 ug/L
							Ti	1100 ug/L
					MTMSICSABSOLA_00006	1 mL	Arsenic	100 ug/L
							B	100 ug/L
							Barium	100 ug/L
							Beryllium	100 ug/L
							Cadmium	100 ug/L
							Chromium	100 ug/L
							Cobalt	100 ug/L
							Copper	100 ug/L
							Lead	100 ug/L
							Manganese	100 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Nickel	100 ug/L
							Selenium	100 ug/L
							Sr	100 ug/L
							Thallium	100 ug/L
							Vanadium	100 ug/L
							Zinc	100 ug/L
					MTMSICSABSOLB_00006	1 mL	Antimony	100 ug/L
							Mo	1100 ug/L
							Silver	100 ug/L
							Sn	100 ug/L
							Ti	1100 ug/L
							W	100 ug/L
.MTICPMSLi1_00002	08/19/15	05/18/15	DIWATER, Lot DIWATER	100 mL	MT6500CALLi_00008	0.1 mL	Li	1000 ppb
..MT6500CALLi_00008	08/19/15		High Purity, Lot 1231934		(Purchased Reagent)		Li	1000 ug/mL
.MTMSICSA_00010	04/13/16		INORGANIC VENTURES, Lot J2-MEB533111		(Purchased Reagent)		Aluminum	1000 ug/mL
							Calcium	1000 ug/mL
							Iron	1000 ug/mL
							Magnesium	1000 ug/mL
							Mo	20 ug/mL
							Potassium	1000 ug/mL
							Sodium	1000 ug/mL
							Ti	20 ug/mL
.MTMSICSABSOLA_00006	02/10/16		HIGH PURITY STANDARDS, Lot 1503726		(Purchased Reagent)		Arsenic	20 ug/mL
							B	20 ug/mL
							Barium	20 ug/mL
							Beryllium	20 ug/mL
							Cadmium	20 ug/mL
							Chromium	20 ug/mL
							Cobalt	20 ug/mL
							Copper	20 ug/mL
							Lead	20 ug/mL
							Manganese	20 ug/mL
							Nickel	20 ug/mL
							Selenium	20 ug/mL
							Sr	20 ug/mL
							Thallium	20 ug/mL
							Vanadium	20 ug/mL
							Zinc	20 ug/mL
.MTMSICSABSOLB_00006	02/10/16		HIGH PURITY STANDARDS, Lot 1504002		(Purchased Reagent)		Antimony	20 ug/mL
							Mo	20 ug/mL
							Silver	20 ug/mL
							Sn	20 ug/mL
							Ti	20 ug/mL
							W	20 ug/mL
MTMSICSAW_00049	04/13/16	05/08/15	DIWATER, Lot DIWATER	200 mL	MTMSICSA_00010	10 mL	Aluminum	50000 ug/L
							Calcium	50000 ug/L
							Iron	50000 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Magnesium	50000 ug/L
							Mo	1000 ug/L
							Potassium	50000 ug/L
							Sodium	50000 ug/L
							Ti	1000 ug/L
.MTMSICSA_00010	04/13/16	INORGANIC VENTURES, Lot J2-MEB533111			(Purchased Reagent)		Aluminum	1000 ug/mL
							Calcium	1000 ug/mL
							Iron	1000 ug/mL
							Magnesium	1000 ug/mL
							Mo	20 ug/mL
							Potassium	1000 ug/mL
							Sodium	1000 ug/mL
							Ti	20 ug/mL
MTMSICSAW_00050	04/13/15	05/18/15	DIWATER, Lot DIWATER	200 mL	MTMSICSA_00010	10 mL	Aluminum	50000 ug/L
							Calcium	50000 ug/L
							Iron	50000 ug/L
							Magnesium	50000 ug/L
							Mo	1000 ug/L
							Potassium	50000 ug/L
							Sodium	50000 ug/L
							Ti	1000 ug/L
.MTMSICSA_00010	04/13/16	INORGANIC VENTURES, Lot J2-MEB533111			(Purchased Reagent)		Aluminum	1000 ug/mL
							Calcium	1000 ug/mL
							Iron	1000 ug/mL
							Magnesium	1000 ug/mL
							Mo	20 ug/mL
							Potassium	1000 ug/mL
							Sodium	1000 ug/mL
							Ti	20 ug/mL
MTMSICVW_00047	08/01/15	05/05/15	DIWATER, Lot DIWATER	250 mL	MTMSICVA_00005	2.5 mL	Aluminum	200 ug/L
							Antimony	40 ug/L
							Arsenic	40 ug/L
							Barium	40 ug/L
							Beryllium	40 ug/L
							Cadmium	40 ug/L
							Chromium	40 ug/L
							Cobalt	40 ug/L
							Copper	40 ug/L
							Lead	40 ug/L
							Manganese	200 ug/L
							Nickel	40 ug/L
							Selenium	40 ug/L
							Silver	40 ug/L
							Thallium	40 ug/L
							Vanadium	40 ug/L
							Zinc	40 ug/L
					MTMSICVB_00005	2.5 mL	Calcium	20000 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Iron	10000 ug/L
							Magnesium	20000 ug/L
							Potassium	20000 ug/L
							Sodium	20000 ug/L
.MTMSICVA_00005	08/01/15		CPI, Lot 1063211		(Purchased Reagent)		Aluminum	20 mg/L
							Antimony	4 mg/L
							Arsenic	4 mg/L
							Barium	4 mg/L
							Beryllium	4 mg/L
							Cadmium	4 mg/L
							Chromium	4 mg/L
							Cobalt	4 mg/L
							Copper	4 mg/L
							Lead	4 mg/L
							Manganese	20 mg/L
							Nickel	4 mg/L
							Selenium	4 mg/L
							Silver	4 mg/L
							Thallium	4 mg/L
							Vanadium	4 mg/L
							Zinc	4 mg/L
.MTMSICVB_00005	08/01/15		CPI, Lot 1063211		(Purchased Reagent)		Calcium	2000 mg/L
							Iron	1000 mg/L
							Magnesium	2000 mg/L
							Potassium	2000 mg/L
							Sodium	2000 mg/L
MTMSICVW_00048	08/01/15	05/05/15	DIWATER, Lot DIWATER	250 mL	MTMSICVA_00005	2.5 mL	Aluminum	200 ug/L
							Antimony	40 ug/L
							Arsenic	40 ug/L
							Barium	40 ug/L
							Beryllium	40 ug/L
							Cadmium	40 ug/L
							Chromium	40 ug/L
							Cobalt	40 ug/L
							Copper	40 ug/L
							Lead	40 ug/L
							Manganese	200 ug/L
							Nickel	40 ug/L
							Selenium	40 ug/L
							Silver	40 ug/L
							Thallium	40 ug/L
							Vanadium	40 ug/L
							Zinc	40 ug/L
					MTMSICVB_00005	2.5 mL	Calcium	20000 ug/L
							Iron	10000 ug/L
							Magnesium	20000 ug/L
							Potassium	20000 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Sodium	20000 ug/L
.MTMSICVA_00005	08/01/15		CPI, Lot 1063211		(Purchased Reagent)		Aluminum	20 mg/L
							Antimony	4 mg/L
							Arsenic	4 mg/L
							Barium	4 mg/L
							Beryllium	4 mg/L
							Cadmium	4 mg/L
							Chromium	4 mg/L
							Cobalt	4 mg/L
							Copper	4 mg/L
							Lead	4 mg/L
							Manganese	20 mg/L
							Nickel	4 mg/L
							Selenium	4 mg/L
							Silver	4 mg/L
							Thallium	4 mg/L
							Vanadium	4 mg/L
							Zinc	4 mg/L
.MTMSICVB_00005	08/01/15		CPI, Lot 1063211		(Purchased Reagent)		Calcium	2000 mg/L
							Iron	1000 mg/L
							Magnesium	2000 mg/L
							Potassium	2000 mg/L
							Sodium	2000 mg/L
MTMSSCAL1_00017	10/01/15	05/05/15	DIWATER, Lot DIWATER	250 mL	MTMSCAL3_00008	0.5 mL	Aluminum	50 ug/L
							Arsenic	10 ug/L
							Barium	10 ug/L
							Beryllium	10 ug/L
							Cadmium	10 ug/L
							Calcium	5000 ug/L
							Chromium	10 ug/L
							Cobalt	10 ug/L
							Copper	10 ug/L
							Iron	2500 ug/L
							Lead	10 ug/L
							Magnesium	5000 ug/L
							Manganese	50 ug/L
							Nickel	10 ug/L
							Potassium	5000 ug/L
							Selenium	10 ug/L
							Silver	10 ug/L
							Sodium	5000 ug/L
							Thallium	10 ug/L
							Vanadium	10 ug/L
							Zinc	10 ug/L
					MTMSCAL4_00009	0.5 mL	Antimony	10 ug/L
.MTMSCAL3_00008	10/01/15		INORGANIC VENTURES, Lot H2-MEB544052		(Purchased Reagent)		Aluminum	25 ug/mL
							Arsenic	5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Barium	5 ug/mL
							Beryllium	5 ug/mL
							Cadmium	5 ug/mL
							Calcium	2500 ug/mL
							Chromium	5 ug/mL
							Cobalt	5 ug/mL
							Copper	5 ug/mL
							Iron	1250 ug/mL
							Lead	5 ug/mL
							Magnesium	2500 ug/mL
							Manganese	25 ug/mL
							Nickel	5 ug/mL
							Potassium	2500 ug/mL
							Selenium	5 ug/mL
							Silver	5 ug/mL
							Sodium	2500 ug/mL
							Thallium	5 ug/mL
							Vanadium	5 ug/mL
							Zinc	5 ug/mL
.MTMSCAL4_00009	10/01/15	INORGANIC VENTURES, Lot H2-MEB544053			(Purchased Reagent)		Antimony	5 ug/mL
MTMSSCAL1_00018	08/19/15	05/05/15	DIWATER, Lot DIWATER	250 mL	MTMSCAL3_00008	0.5 mL	Aluminum	50 ug/L
							Arsenic	10 ug/L
							Barium	10 ug/L
							Beryllium	10 ug/L
							Cadmium	10 ug/L
							Calcium	5000 ug/L
							Chromium	10 ug/L
							Cobalt	10 ug/L
							Copper	10 ug/L
							Iron	2500 ug/L
							Lead	10 ug/L
							Magnesium	5000 ug/L
							Manganese	50 ug/L
							Nickel	10 ug/L
							Potassium	5000 ug/L
							Selenium	10 ug/L
							Silver	10 ug/L
							Sodium	5000 ug/L
							Thallium	10 ug/L
							Vanadium	10 ug/L
							Zinc	10 ug/L
					MTMSCAL4_00009	0.5 mL	Antimony	10 ug/L
.MTMSCAL3_00008	10/01/15	INORGANIC VENTURES, Lot H2-MEB544052			(Purchased Reagent)		Aluminum	25 ug/mL
							Arsenic	5 ug/mL
							Barium	5 ug/mL
							Beryllium	5 ug/mL
							Cadmium	5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Calcium	2500 ug/mL
							Chromium	5 ug/mL
							Cobalt	5 ug/mL
							Copper	5 ug/mL
							Iron	1250 ug/mL
							Lead	5 ug/mL
							Magnesium	2500 ug/mL
							Manganese	25 ug/mL
							Nickel	5 ug/mL
							Potassium	2500 ug/mL
							Selenium	5 ug/mL
							Silver	5 ug/mL
							Sodium	2500 ug/mL
							Thallium	5 ug/mL
							Vanadium	5 ug/mL
							Zinc	5 ug/mL
.MTMSCAL4_00009	10/01/15	INORGANIC VENTURES, Lot H2-MEB544053			(Purchased Reagent)		Antimony	5 ug/mL
MTTMHCL_00066	05/07/17	Macron/Avantor, Lot 0000086340			(Purchased Reagent)		Hydrogen Chloride	100 %
MTTMHNO3_00056	04/30/17	Macron/Avantor, Lot 0000104740			(Purchased Reagent)		Nitric acid	100 %
MTTMHNO3_00057	05/13/17	Macron/Avantor, Lot 0000104740			(Purchased Reagent)		Nitric acid	100 %

Reagent

MS6020ACRIA_00002

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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	TA-ICPMS-6020A-CRI-A
Lot Number:	H2-MEB537060
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Ca, K, Mg, Na, 100 µg/mL ea: Fe, 50 µg/mL ea: Al, 20 µg/mL ea: B, Zn, 10 µg/mL ea: Sr, 5 µg/mL ea: As, Ba, Mn, Se, V, 2 µg/mL ea: Cr3, Cu, Ni, Tl, 1 µg/mL ea: Be, Cd, Co, Pb

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	50.02 ± 0.30 µg/mL	Arsenic, As	5.001 ± 0.032 µg/mL	Barium, Ba	5.001 ± 0.032 µg/mL
Beryllium, Be	1.000 ± 0.007 µg/mL	Boron, B	20.00 ± 0.13 µg/mL	Cadmium, Cd	0.999 ± 0.008 µg/mL
Calcium, Ca	1,000 ± 6 µg/mL	Chromium+3, Cr3	2.000 ± 0.012 µg/mL	Cobalt, Co	0.999 ± 0.008 µg/mL
Copper, Cu	2.001 ± 0.013 µg/mL	Iron, Fe	100.0 ± 0.5 µg/mL	Lead, Pb	1.000 ± 0.006 µg/mL
Magnesium, Mg	1,000 ± 5 µg/mL	Manganese, Mn	5.000 ± 0.029 µg/mL	Nickel, Ni	2.000 ± 0.012 µg/mL
Potassium, K	1,001 ± 4 µg/mL	Selenium, Se	5.000 ± 0.029 µg/mL	Sodium, Na	999 ± 4 µg/mL
Strontium, Sr	10.00 ± 0.06 µg/mL	Thallium, Tl	2.001 ± 0.013 µg/mL	Vanadium, V	5.000 ± 0.032 µg/mL
Zinc, Zn	20.02 ± 0.11 µg/mL				

Certified Density: 1.036 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
As	Calculated		See Sec. 4.2
As	ICP Assay	3103a	100818
B	Calculated		See Sec. 4.2
B	ICP Assay	3107	070514
Ba	Gravimetric		See Sec. 4.2
Ba	ICP Assay	3104a	070222
Be	Calculated		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Cd	ICP Assay	3108	060531
Cd	EDTA	928	928
Co	ICP Assay	3113	00630
Co	EDTA	928	928
Cr3	Calculated		See Sec. 4.2
Cr3	ICP Assay	3112a	030730
Cu	ICP Assay	3114	011017
Cu	EDTA	928	928
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
K	Gravimetric		See Sec. 4.2
K	ICP Assay	3141a	051220
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	Gravimetric		See Sec. 4.2
Na	ICP Assay	3152a	120715
Ni	ICP Assay	3136	000612
Ni	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Sr	ICP Assay	3153a	990906
Sr	EDTA	928	928
Tl	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	993012
V	ICP Assay	3165	992706
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\Sigma x_i}{n}$

Uncertainty $(\pm) = 2\,[\,\Sigma(s_i)^2\,]^{1/2}$

($\bar{x}$) = mean
x_i = individual results
n = number of measurements
2 = the coverage factor.
$[\,\Sigma(s_i)^2\,]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 14, 2014

11.2 Expiration Date

EXPIRES
1 Aug 2015

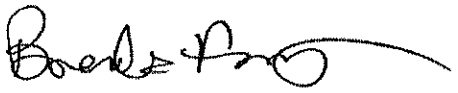
11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

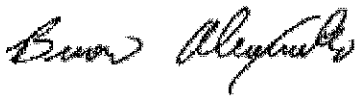
Certificate Prepared By:

Brenda Francis
Product Documentation Technician



Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



Reagent

MS6020ACRIB_00002

INORGANIC VENTURES™
300 Technology Drive
Christiansburg, VA 24073 - USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 - 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	TA-ICPMS-6020A-CRI-B
Lot Number:	H2-MEB537061
Matrix:	5% (v/v) HNO3 tr HF
Value / Analyte(s):	10 µg/mL ea: Mo, Sn, Ti, W, 2 µg/mL ea: Sb

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	2.001 ± 0.013 µg/mL	Molybdenum, Mo	10.00 ± 0.06 µg/mL	Tin, Sn	10.00 ± 0.06 µg/mL
Titanium, Ti	10.00 ± 0.07 µg/mL	Tungsten, W	10.00 ± 0.06 µg/mL		

Certified Density: 1.023 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Mo	Calculated		See Sec. 4.2
Mo	ICP Assay	3134	891307
Sb	Calculated		See Sec. 4.2
Sb	ICP Assay	3102A	061229
Sn	Calculated		See Sec. 4.2
Sn	ICP Assay	3161a	070330
Ti	Calculated		See Sec. 4.2
Ti	ICP Assay	3162a	060808
W	Calculated		See Sec. 4.2
W	ICP Assay	3163	060331

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\Sigma x_i}{n}$ ($\bar{x}$) = mean

x_i = individual results

n = number of measurements

Uncertainty $(\pm) = 2\,[\,\Sigma(s_i)^2\,]^{1/2}$ 2 = the coverage factor.

$[\,\Sigma(s_i)^2\,]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 14, 2014

11.2 Expiration Date



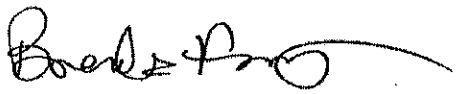
11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

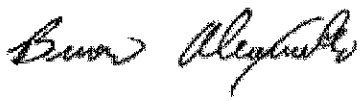
Certificate Prepared By:

Brenda Francis
Product Documentation Technician



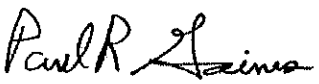
Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



Reagent

MT6500CALLi_00008

HIGH-PURITY STANDARDS
www.highpuritystandards.com

P.O. Box 41727
Charleston, SC 29423
Phone (843) 767-7900
Fax (843) 767-7906

Rec'd NJT 3-4-14

Certificate of Analysis

Product Description:

Name:	Lithium	Source Material:	Lithium Carbouate
Part Number:	**100029-1**	Material Purity:	99.999%
Lot Number:	**1231934**	Matrix:	1% (v/v) HNO_3

Certified Value: 1000 µg/mL ± 4 µg/mL

The Certified value is based on gravimetric and volumetric preparation, and confirmed against SRM 3129a (lot number 100714) by inductively coupled plasma optical emission spectrometry (ICP-OES) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.

Density: 1.004 g/mL ± 0.002 g/mL @ 22.2°C

Uncertified Values:

Trace Metal Impurity Scan: The data reported are based upon a scan of this specific lot at 1000 µg/mL via ICP analysis. The values are reported in µg/L.

Ag	<	0.02	Cu	<	0.1	Li		M	Rb	<	0.02	Th	<	0.02
Al	<	0.1	Dy	<	0.02	Lu	<	0.02	Re	<	0.02	Ti	<	0.02
As	<	1	Er	<	0.02	Mg	<	0.5	Rh	<	0.02	Tl	<	0.02
Au	<	0.02	Eu	<	0.02	Mn	<	0.1	Ru	<	0.02	Tm	<	0.02
B	<	1	Fe	<	1	Mo	<	0.02	Sb	<	0.02	U	<	0.1
Ba	<	5	Ga	<	0.1	Na		50	Sc	<	0.02	V	<	0.05
Be	<	0.02	Gd	<	0.02	Nb	<	0.02	Se	<	0.1	W	<	0.02
Bi	<	0.02	Ge	<	0.1	Nd	<	0.02	Si	<	5	Y	<	0.02
Ca	<	5	Hf	<	0.02	Ni	<	1	Sm	<	0.02	Yb	<	0.02
Cd	<	0.1	Ho	<	0.02	Os	<	0.02	Sn	<	1	Zn	<	0.5
Ce	<	0.02	In	<	0.02	Pb	<	0.05	Sr	<	5	Zr	<	0.02
Co	<	0.05	Ir	<	0.02	Pd	<	0.02	Ta	<	0.02			
Cr	<	0.1	K	<	5	Pr	<	0.02	Tb	<	0.02			
Cs	<	0.02	La	<	0.02	Pt	<	0.02	Te	<	0.02			

Preparation Information:

The standard solution is prepared using high purity materials and assayed by analytical methods for conformity prior to use. This standard was prepared using the methods developed at NIST for SRM Spectrometric Standard Solutions under appropriate laboratory conditions.

Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. This testing includes, but is not limited to, the effect of temperature and packaging on the product.

High-Purity Standards is certified to ISO 9001:2008 and accredited to ISO/IEC 17025:2005 and ISO Guide 34:2009.

Intended Use:

This Certified Reference Material (CRM) is intended for use as a calibration standard for the quantitative determination of lithium, calibration of instruments such as ICPOES, ICPMS, AAS and XRF, and validation of analytical methods. It also can be used in EPA, ASTM and other methods.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
The calibration of volumetric vessels is checked annually using the NBS 602 method.

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards:**
The Calibration Standard is directly traceable to SRM 3100 Series Spectrometric Standard Solutions.

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Refer to Material Safety Datasheet (MSDS) for hazardous information.

Expiration Information:

The expiry date is guaranteed to be valid for eighteen months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date:	**November 14, 2012**
Shipped Date:	**2/19/2014**
Expire Date:	**8/19/2015**
Certificate Issue Date:	**December 17, 2012**

Quality Information:

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

Vanny T. Yib,
Inorganic Laboratory Manager

ISO Guide 34:2009 (RMP) Accreditation
Certificate Number AR-1436

Angel Sellers
Quality Manager

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

High-Purity Standards is certified to ISO 9001:2008 and accredited to ISO/IEC 17025:2005 and ISO Guide 34:2009.

Reagent

MTAG_00005

HIGH-PURITY STANDARDS
www.highpuritystandards.com

P.O. Box 41727
Charleston, SC 29423
Phone (843) 767-7900
Fax (843) 767-7906

Certificate of Analysis

Product Description:

Name:	Silver	Source Material:	Silver metal
Part Number:	**100051-1**	Material Purity:	99.999%
Lot Number:	**1401302**	Matrix:	2% (v/v) HNO_3

Certified Value: 1000 µg/mL ± 3 µg/mL

The Certified value is based on gravimetric and volumetric preparation, and confirmed against SRM 3151 (lot number 992212) by inductively coupled plasma optical emission spectrometry (ICP-OES) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.

Density: 1.008 g/mL ± 0.002 g/mL @ 21.6°C

Uncertified Values:

Trace Metal Impurity Scan: The data reported are based upon a scan of this specific lot at 1000 µg/mL via ICP analysis. The values are reported in µg/L.

Ag		M	Cu	<	0.1	Li	<	0.5	Rb	<	0.02	Th	<	0.02
Al	<	0.1	Dy	<	0.02	Lu	<	0.02	Re	<	0.02	Ti	<	0.02
As	<	0.05	Er	<	0.02	Mg	<	0.5	Rh	<	0.02	Tl	<	0.02
Au	<	0.02	Eu	<	0.02	Mn	<	0.1	Ru	<	0.02	Tm	<	0.02
B	<	1	Fe	<	1	Mo	<	0.02	Sb	<	0.02	U	<	0.1
Ba	<	0.02	Ga	<	0.02	Na	<	3	Sc	<	0.02	V	<	0.05
Be	<	0.02	Gd	<	0.02	Nb	<	0.02	Se	<	0.1	W	<	0.02
Bi	<	0.02	Ge	<	0.02	Nd	<	0.02	Si	<	50	Y	<	0.02
Ca	<	1	Hf	<	0.02	Ni	<	0.1	Sm	<	0.02	Yb	<	0.02
Cd	<	0.02	Ho	<	0.02	Os	<	0.02	Sn	<	1	Zn	<	1
Ce	<	0.02	In	<	0.02	Pb	<	0.05	Sr	<	0.02	Zr	<	0.02
Co	<	1	Ir	<	0.02	Pd	<	0.1	Ta	<	0.02			
Cr	<	0.1	K	<	1	Pr	<	0.02	Tb	<	0.02			
Cs	<	6	La	<	0.02	Pt	<	0.02	Te	<	0.02			

Preparation Information:

The standard solution is prepared using high purity materials and assayed by analytical methods for conformity prior to use. This standard was prepared using the methods developed at NIST for SRM Spectrometric Standard Solutions under appropriate laboratory conditions.

Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. This testing includes, but is not limited to, the effect of temperature and packaging on the product.

High-Purity Standards is certified to ISO 9001:2008 and accredited to ISO/IEC 17025:2005 and ISO Guide 34:2009.

Intended Use:

This Certified Reference Material (CRM) is intended for use as a calibration standard for the quantitative determination of silver, calibration of instruments such as ICPOES, ICPMS, AAS and XRF, and validation of analytical methods. It also can be used in EPA, ASTM and other methods.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
   The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
   The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.
b. **Volumetric Device**
   The calibration of volumetric vessels is checked annually using the ASTM method E542.
c. **Thermometer**
   The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.
d. **Calibration Standards:**
   The Calibration Standard is directly traceable to SRM 3100 Series Spectrometric Standard Solutions.

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Refer to Material Safety Datasheet (MSDS) for hazardous information.

Expiration Information:

The expiry date is guaranteed to be valid for eighteen months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date:	**January 13, 2014**
Shipped Date:	**6/27/14**
Expiration Date:	**12/27/15**
Certificate Issue Date:	**February 28, 2014**

Quality Information:

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

ISO Guide 34:2009 (RMP) Accreditation
Certificate Number AR-1436

Angel Sellers
Quality Manager

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

Certificate Revision History: Rev No.: **5.2.1** –modified uncertainty. Rev No.: **5.2.0** – Original Certificate.

Reagent

MTHGCAL_00016

INORGANIC VENTURES™
300 Technology Drive
Christiansburg, VA 24073 • USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 • 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Mass Spec Solution
Catalog Number:	MSHGN-10PPM
Lot Number:	H2-HG02126
Matrix:	10% (v/v) HNO3
Value/Analyte(s):	10 µg/mL Mercury
Starting Material:	Hg metal
Starting Material Lot#:	1780
Starting Material Purity:	99.9997%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10.009 ± 0.077 µg/mL

Certified Density: 1.050 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1

ICP Assay NIST SRM 3133 Lot Number: 061204

Assay Method #2

EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

No correction has been applied for transpiration that will occur after the CRM/RM bottle has been removed from the sealed aluminized bag. See Sec. 7.0 (Instructions for the Correct Use of this Reference Material) for more information.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.004113	M	Er	<	0.010282	M	Mn	<	0.008226	O	S	<	0.025000	M	V	<	0.004113
O	Al			M	Eu	<	0.006169	M	Mo	<	0.004113	M	Sb	<	0.001028	M	W	<	0.020564
M	As	<	0.020564	O	Fe	<	0.001100	O	Na		0.000005	M	Sc	<	0.020564	M	Y	<	0.082257
M	Au	<	0.006169	M	Ga	<	0.002056	M	Nb	<	0.001028	M	Se	<	0.016451	M	Yb	<	0.002056
M	B	<	0.143950	M	Gd	<	0.002056	M	Nd	<	0.004113	O	Si	<	0.003400	M	Zn	<	0.041129
M	Ba	<	0.020564	O	Ge	<	0.018000	O	Ni	<	0.001000	M	Sm	<	0.002056	M	Zr	<	0.010282
M	Be	<	0.001028	M	Hf	<	0.004113	n	Os	<		M	Sn	<	0.010282				
M	Bi	<	0.000823	s	Hg	<		O	P	<	0.002600	M	Sr	<	0.001028				
O	Ca		0.000022	M	Ho	<	0.001028	M	Pb	<	0.006169	M	Ta	<	0.014395				
O	Cd	<	0.004600	M	In	<	0.020564	O	Pd	<	0.003800	M	Tb	<	0.000617				
M	Ce	<	0.010282	M	Ir	<	0.010282	M	Pr	<	0.000617	M	Te	<	0.061693				
M	Co	<	0.006169	O	K	<	0.002000	M	Pt	<	0.004113	M	Th	<	0.002056				
M	Cr	<	0.010282	M	La	<	0.001028	M	Rb	<	0.002056	M	Ti	<	0.102822				
M	Cs	<	0.000617	O	Li	<	0.000020	M	Re	<	0.002056	O	Tl	<	0.006000				
M	Cu	<	0.012339	M	Lu	<	0.000823	M	Rh	<	0.002056	M	Tm	<	0.000823				
M	Dy	<	0.012339	O	Mg		0.000006	M	Ru	<	0.004113	M	U	<	0.004113				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30°C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT.**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 200.59 +2 4 Hg(OH)(aq) 1+

Chemical Compatibility - Stable in HNO3. Avoid basic media forming insoluble carbonate. The sulfide, basic carbonate, oxalate, phosphate, arsenite, arsenate and iodide are insoluble in water.
Stability - 2-100 ppb levels not stable in 1% HNO3 / LDPE container, stable in 10% HNO3 packaged in borosilicate glass. 1-100 ppm levels stable in 7% HNO3 packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% HNO3 / LDPE container.
Hg Containing Samples (Preparation and Solution) - Metal (soluble in HNO3); Oxide (Soluble in HNO3); Ores and Organic based (The literature has more references to the preparation of Hg containing samples than any other element. Please consult the literature for your specific sample type, since such preparations are prone to error. Or e-mail our technical staff and we will contact you to discuss your particular sample preparation questions in further detail.).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 202 amu	9 ppt	n/a	186W16O
ICP-OES 184.950 nm	0.03 / 0.005 µg/mL	1	
ICP-OES 194.227 nm	0.03 / 0.005 µg/mL	1	V
ICP-OES 253.652 nm	0.1 / 0.03 µg/mL	1	Ta, Co, Th ,Rh , Fe, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

- May 09, 2014

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec. 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of opening the sealed TCT bag or after the date given in Sec. 11.3, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

11.3 Lot Expiration Date

- May 09, 2017

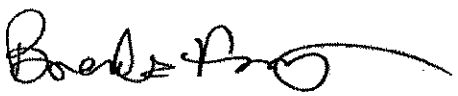
- The date after which this CRM/RM should not be used (See Sec. 11.2).

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

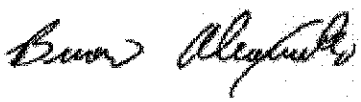
Certificate Prepared By:

Brenda Francis
Product Documentation Technician



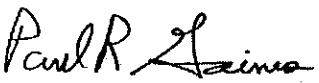
Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



Reagent

MTHGCAL_00017

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CERTIFICATE OF ANALYSIS

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info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Mass Spec Solution
Catalog Number:	MSHGN-10PPM
Lot Number:	H2-HG02126
Matrix:	10% (v/v) HNO3
Value/Analyte(s):	10 µg/mL Mercury
Starting Material:	Hg metal
Starting Material Lot#:	1780
Starting Material Purity:	99.9997%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10.009 ± 0.077 µg/mL

Certified Density: 1.050 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1

ICP Assay NIST SRM 3133 Lot Number: 061204

Assay Method #2

EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods **Characterization of CRM by one method**

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.004113	M	Eu	<	0.006169	O	Na		0.000005	M	Se	<	0.016451	M	Zn	<	0.041129
O	Al			O	Fe	<	0.001100	M	Nb	<	0.001028	O	Si	<	0.003400	M	Zr	<	0.010282
M	As	<	0.020564	M	Ga	<	0.002056	M	Nd	<	0.004113	M	Sm	<	0.002056				
M	Au	<	0.006169	M	Gd	<	0.002056	O	Ni	<	0.001000	M	Sn	<	0.010282				
M	B	<	0.143950	O	Ge	<	0.018000	n	Os	<		M	Sr	<	0.001028				
M	Ba	<	0.020564	M	Hf	<	0.004113	O	P	<	0.002600	M	Ta	<	0.014395				
M	Be	<	0.001028	s	Hg	<		M	Pb	<	0.006169	M	Tb	<	0.000617				
M	Bi	<	0.000823	M	Ho	<	0.001028	O	Pd	<	0.003800	M	Te	<	0.061693				
O	Ca		0.000022	M	In	<	0.020564	M	Pr	<	0.000617	M	Th	<	0.002056				
O	Cd	<	0.004600	M	Ir	<	0.010282	M	Pt	<	0.004113	M	Ti	<	0.102822				
M	Ce	<	0.010282	O	K	<	0.002000	M	Rb	<	0.002056	O	Tl	<	0.006000				
M	Co	<	0.006169	M	La	<	0.001028	M	Re	<	0.002056	M	Tm	<	0.000823				
M	Cr	<	0.010282	O	Li	<	0.000020	M	Rh	<	0.002056	M	U	<	0.004113				
M	Cs	<	0.000617	M	Lu	<	0.000823	M	Ru	<	0.004113	M	V	<	0.004113				
M	Cu	<	0.012339	O	Mg		0.000006	O	S	<	0.025000	M	W	<	0.020564				
M	Dy	<	0.012339	M	Mn	<	0.008226	M	Sb	<	0.001028	M	Y	<	0.082257				
M	Er	<	0.010282	M	Mo	<	0.004113	M	Sc	<	0.020564	M	Yb	<	0.002056				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 200.59 +2 4 Hg(OH)(aq) 1+

Chemical Compatibility - Stable in HNO3. Avoid basic media forming insoluble carbonate. The sulfide, basic carbonate, oxalate, phosphate, arsenite, arsenate and iodide are insoluble in water.
Stability - 2-100 ppb levels not stable in 1% HNO3 / LDPE container, stable in 10% HNO3 packaged in borosilicate glass. 1-100 ppm levels stable in 7% HNO3 packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% HNO3 / LDPE container.
Hg Containing Samples (Preparation and Solution) - Metal (soluble in HNO3); Oxide (Soluble in HNO3); Ores and Organic based (The literature has more references to the preparation of Hg containing samples than any other element. Please consult the literature for your specific sample type, since such preparations are prone to error. Or e-mail our technical staff and we will contact you to discuss your particular sample preparation questions in further detail.).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 202 amu	9 ppt	n/a	186W16O
ICP-OES 184.950 nm	0.03 / 0.005 µg/mL	1	
ICP-OES 194.227 nm	0.03 / 0.005 µg/mL	1	V
ICP-OES 253.652 nm	0.1 / 0.03 µg/mL	1	Ta, Co, Th ,Rh , Fe, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 09, 2014

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- May 09, 2017

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: 4/30/15 AMM

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Brenda Francis
Product Documentation Technician

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

Reagent

MTHgStd_00016

HIGH-PURITY STANDARDS
www.highpuritystandards.com

P.O. Box 41727
Charleston, SC 29423
Phone (843) 767-7900
Fax (843) 767-7906

Certificate of Analysis

Product Description:

Name:	Mercury	Source Material:	Mercury Metal
Part Number:	**1 33-1**	Material Purity:	99.9998%
Lot Number:	**1509117**	Matrix:	5% (v/v) HNO_3

Certified Value: 1.00 µg/mL ± 0.02 µg/mL

The Certified value is based on gravimetric and volumetric preparation, and confirmed against SRM 3133 (lot number 061204) by inductively coupled plasma optical emission spectrometry (ICP-OES) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.

Preparation Information:

The standard solution is prepared using high purity materials and assayed by analytical methods for conformity prior to use. This standard was prepared using the methods developed at NIST for SRM Spectrometric Standard Solutions under appropriate laboratory conditions.

Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. This testing includes, but is not limited to, the effect of temperature and packaging on the product.

Intended Use:

This Certified Reference Material (CRM) is intended for use as a calibration standard for the quantitative determination of mercury, calibration of instruments such as ICPOES, ICPMS, AAS and XRF, and validation of analytical methods. It also can be used in EPA, ASTM and other methods.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
The calibration of volumetric vessels is checked annually using the ASTM method E542.

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards:**
The Calibration Standard is directly traceable to SRM 3100 Series Spectrometric Standard Solutions.

High-Purity Standards is certified to ISO 9001:2008 and accredited to ISO/IEC 17025:2005 and ISO Guide 34:2009.

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Refer to Material Safety Datasheet (MSDS) for hazardous information.

Expiration Information:

The expiry date is guaranteed to be valid for six months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date:	**April 2, 2015**
Shipped Date:	**April 7, 2015**
Expiration Date:	**October 7, 2015**
Certificate Issue Date:	**April 2, 2015**

Quality Information:

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

ISO Guide 34:2009 (RMP) Accreditation
Certificate Number AR-1436

Angel Sellers
Quality Manager

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

High-Purity Standards is certified to ISO 9001:2008 and accredited to ISO/IEC 17025:2005 and ISO Guide 34:2009.

Reagent

MTICPMS2_00021

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CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	TA-84
Lot Number:	J2-MEB574105
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea:

Al, Ca, Fe,
K, Mg, Na

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	1 000 ± 5 µg/mL	Calcium, Ca	1 000 ± 4 µg/mL
Iron, Fe	1 000 ± 5 µg/mL	Magnesium, Mg	1 000 ± 5 µg/mL
Potassium, K	1 000 ± 4 µg/mL	Sodium, Na	1 000 ± 4 µg/mL

Certified Density: 1.035 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Fe	ICP Assay	3126a	051031
Fe	EOTA	928	928
K	Gravimetric		See Sec. 4.2
K	ICP Assay	3141a	051220
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Na	Gravimetric		See Sec. 4.2
Na	ICP Assay	3152a	120715

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\Sigma x_i}{n}$ ($\bar{x}$) = mean
x_i = individual results
n = number of measurements

Uncertainty (±) = $2 [\Sigma(s_i)^2]^{1/2}$ 2 = the coverage factor.
$[\Sigma(s_i)^2]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep cap tightly sealed when not in use. Store and use at 20 ± 4° C. Do not pipette from the container. Do not return removed aliquots to container.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 06, 2015

11.2 Expiration Date

EXPIRES
1 MAY 2016

11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Zach Saunders
Product Documentation Technician

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

Reagent

MTICPMSA_00021

HIGH-PURITY STANDARDS
www.highpuritystandards.com

P.O. Box 41727
Charleston, SC 29423
Phone (843) 767-7900
Fax (843) 767-7906

Certificate of Analysis

Product Description:

Name:	ICV/LCS-1 10ppm
Part Number:	**SM-606-021 Solution A**
Lot Number:	**1434610**
Matrix:	2% HNO_3
Purity:	99.99% - 99.9999%

Certified Values:

Element	(µg/mL)	SRM ID	SRM Lot#	Element	(µg/mL)	SRM ID	SRM Lot#
As	10.0 ± 0.1	3103a	100818	Pb	10.00 ± 0.06	3128	101026
Ba	10.00 ± 0.06	3104a	070222	Mn	10.0 ± 0.1	3132	050429
Be	10.0 ± 0.1	3105a	090514	Ni	10.00 ± 0.05	3136	120619
B	10.00 ± 0.05	3107	070514	Se	10.0 ± 0.1	3149	100901
Cd	10.00 ± 0.05	3108	130116	Sr	10.00 ± 0.05	3153a	990906
Cr	10.00 ± 0.05	3112a	030730	Tl	10.00 ± 0.05	3158	993012
Co	10.00 ± 0.05	3113	000630	V	10.00 ± 0.06	3165	992706
Cu	10.00 ± 0.05	3114	121207	Zn	10.00 ± 0.05	3168a	120629

The Certified values are based on gravimetric and volumetric preparation, and verified against SRM 3100 series developed by National Institute of Standards and Technology (NIST) via inductively coupled plasma optical emission spectrometry (ICP-OES) using an internal laboratory developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2
* Refer to Traceability Information, Section d

Preparation Information:

The standard is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials. Highest purity source materials were purchased from qualified vendors per ISO 9001:2008 guidelines and assayed by ICP-OES for conformity prior to use. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.

High-Purity Standards is certified to ISO 9001:2008 and accredited to ISO/IEC 17025:2005 and ISO Guide 34:2009.

The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights

b. **Volumetric Device**
The calibration of volumetric vessels is checked annually using the ASTM method E542

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**
The Calibration Standards are traceable to SRM 3100 Series Spectrometric Standard Solutions or second sources.

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Refer to Material Safety Datasheet (MSDS) for hazardous information.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date:	**December 12, 2014**
Shipped Date:	**December 15, 2014**
Expiration Date:	**December 15, 2015**
Certificate Issue Date:	**December 12, 2014**

Quality Information:

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

Angel Sellers
Quality Manager

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

Reagent

MTICPMSA_00023

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CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).

ACCREDITED Testing Laboratory Certificate 863.01
ACCREDITED Reference Material Producer Certificate 863.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	TA-ICPMS-1A
Lot Number:	H2-MEB552051
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	100 µg/mL ea:

As, Ba, Be,
Cd, Co, Cr3,
Cu, Mn, Ni,
Pb, Se, Sr,
V, Zn,

25 µg/mL ea:
Tl

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Arsenic, As	100.0 ± 0.9 µg/mL	Barium, Ba	100.0 ± 0.5 µg/mL
Beryllium, Be	100.0 ± 0.5 µg/mL	Cadmium, Cd	100.0 ± 0.5 µg/mL
Chromium+3, Cr3	100.0 ± 0.6 µg/mL	Cobalt, Co	100.0 ± 0.6 µg/mL
Copper, Cu	100.0 ± 0.6 µg/mL	Lead, Pb	100.0 ± 0.6 µg/mL
Manganese, Mn	100.0 ± 0.6 µg/mL	Nickel, Ni	100.0 ± 0.6 µg/mL
Selenium, Se	100.0 ± 0.6 µg/mL	Strontium, Sr	100.0 ± 0.5 µg/mL
Thallium, Tl	25.01 ± 0.15 µg/mL	Vanadium, V	100.0 ± 0.6 µg/mL
Zinc, Zn	100.0 ± 0.7 µg/mL		

Certified Density: 1.029 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
As	Calculated		See Sec. 4.2
As	ICP Assay	3103a	100818
Ba	Gravimetric		See Sec. 4.2
Ba	ICP Assay	3104a	070222
Be	Calculated		See Sec. 4.2
Be	ICP Assay	3105a	090514
Cd	ICP Assay	3108	060531
Cd	EDTA	928	928
Co	ICP Assay	3113	000630 Co
Co	EDTA	928	928
Cr3	Calculated		See Sec. 4.2
Cr3	ICP Assay	3112a	030730
Cu	ICP Assay	3114	011017
Cu	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Sr	ICP Assay	3153a	990906
Sr	EDTA	928	928
Tl	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	993012
V	ICP Assay	3165	992706
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\Sigma x_i}{n}$ ($\bar{x}$) = mean
x_i = individual results
n = number of measurements

Uncertainty $(\pm) = 2 [\Sigma(s_i)^2]^{1/2}$ 2 = the coverage factor.
$[\Sigma(s_i)^2]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep cap tightly sealed when not in use. Store and use at 20 ± 4° C. Do not pipette from the container. Do not return removed aliquots to container.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

October 22, 2014

11.2 Expiration Date



11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

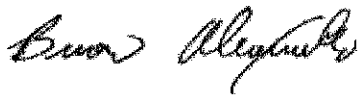
Certificate Prepared By:

Christy Shortridge
Product Documentation Technician



Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



Reagent

MTICPMSB_00021

HIGH-PURITY STANDARDS
www.highpuritystandards.com

P.O. Box 41727
Charleston, SC 29423
Phone (843) 767-7900
Fax (843) 767-7906

Certificate of Analysis

Product Description:

Name:	ICV/LCS-1 10ppm
Part Number:	**SM-606-021 Solution B**
Lot Number:	**1434611**
Matrix:	2% HNO_3 + Tr HF
Purity:	99.92% - 99.999%

Certified Values:

Element	(µg/mL)	SRM ID	SRM Lot#	Element	(µg/mL)	SRM ID	SRM Lot#
Sb	10.00 ± 0.06	*		Ti	10.00 ± 0.06	3162a	130925
Mo	10.00 ± 0.06	3134	891307	W	10.00 ± 0.06	3163	080331
Ag	10.00 ± 0.05	3151	992212	Zr	10.00 ± 0.06	3169	130920
Sn	10.00 ± 0.06	3161a	070330				

The Certified values are based on gravimetric and volumetric preparation, and verified against SRM 3100 series developed by National Institute of Standards and Technology (NIST) via inductively coupled plasma optical emission spectrometry (ICP-OES) using an internal laboratory developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2

* Refer to Traceability Information, Section d

Preparation Information:

The standard is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials. Highest purity source materials were purchased from qualified vendors per ISO 9001:2008 guidelines and assayed by ICP-OES for conformity prior to use. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

High-Purity Standards is certified to ISO 9001:2008 and accredited to ISO/IEC 17025:2005 and ISO Guide 34:2009.

b. **Volumetric Device**
The calibration of volumetric vessels is checked annually using the ASTM method E542

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**
The Calibration Standards are traceable to SRM 3100 Series Spectrometric Standard Solutions or second sources.

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Refer to Material Safety Datasheet (MSDS) for hazardous information.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date:	**December 12, 2014**
Shipped Date:	**December 15, 2014**
Expiration Date:	**December 15, 2015**
Certificate Issue Date:	**December 12, 2014**

Quality Information:

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

Angel Sellers
Quality Manager

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

Reagent

MTICPMSB_00023

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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	TA-ICPMS-1BREV1
Lot Number:	J2-MEB577026
Matrix:	5% (v/v) HNO3 tr. HF
Value / Analyte(s):	100 µg/mL ea: Sn, 10 µg/mL ea: Ag, B, Mo, Sb, Ti, W

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	**10.00 ± 0.07 µg/mL**	**Boron, B**	**10.00 ± 0.06 µg/mL**
Molybdenum, Mo	**10.00 ± 0.06 µg/mL**	**Silver, Ag**	**10.00 ± 0.07 µg/mL**
Tin, Sn	**100.0 ± 0.5 µg/mL**	**Titanium, Ti**	**10.00 ± 0.06 µg/mL**
Tungsten, W	**10.00 ± 0.06 µg/mL**		

Certified Density: 1.024 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999b	999b
B	Calculated		See Sec. 4.2
B	ICP Assay	3107	070514
Mo	Calculated		See Sec. 4.2
Mo	ICP Assay	3134	891307
Sb	Calculated		See Sec. 4.2
Sb	ICP Assay	3102A	061229
Sn	Calculated		See Sec. 4.2
Sn	ICP Assay	3161a	070330
Ti	Calculated		See Sec. 4.2
Ti	ICP Assay	3162a	060808
W	Calculated		See Sec. 4.2
W	ICP Assay	3163	080331

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\Sigma x_i}{n}$ ($\bar{x}$) = mean

x_i = individual results

n = number of measurements

Uncertainty $(\pm) = 2 [\Sigma(s_i)^2]^{1/2}$ 2 = the coverage factor.

$[\Sigma(s_i)^2]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep cap tightly sealed when not in use. Store and use at 20 ± 4° C. Do not pipette from the container. Do not return removed aliquots to container.

HF Note: This standard should not be prepared or stored in glass.

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 06, 2015

11.2 Expiration Date

EXPIRES
1 MAY 2016

11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Zach Saunders
Product Documentation Technician

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

Reagent

MTMSCAL3_00008

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CERTIFICATE OF ANALYSIS

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fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution

Catalog Number: STLPA-CAL-SPECA-REV

Lot Number: H2-MEB544052

Matrix: 3% (v/v) HNO3

Value / Analyte(s):

2 500 µg/mL ea:
Ca, K, Mg, Na,
1 250 µg/mL ea:
Fe,
25 µg/mL ea:
Al, Mn,
5 µg/mL ea:
Ag, As, Ba, Be, Cd, Co,
Cr3, Cu, Ni, Pb, Se, Sr,
Tl, V, Zn

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	25.01 ± 0.17 µg/mL	Arsenic, As	5.000 ± 0.032 µg/mL	Barium, Ba	5.002 ± 0.029 µg/mL
Beryllium, Be	4.999 ± 0.029 µg/mL	Cadmium, Cd	4.999 ± 0.032 µg/mL	Calcium, Ca	2 500 ± 11 µg/mL
Chromium+3, Cr3	5.002 ± 0.029 µg/mL	Cobalt, Co	5.000 ± 0.032 µg/mL	Copper, Cu	4.998 ± 0.032 µg/mL
Iron, Fe	1 250 ± 6 µg/mL	Lead, Pb	5.002 ± 0.025 µg/mL	Magnesium, Mg	2 500 ± 12 µg/mL
Manganese, Mn	25.01 ± 0.17 µg/mL	Nickel, Ni	5.000 ± 0.029 µg/mL	Potassium, K	2 501 ± 11 µg/mL
Selenium, Se	5.001 ± 0.029 µg/mL	Silver, Ag	4.999 ± 0.036 µg/mL	Sodium, Na	2 500 ± 11 µg/mL
Strontium, Sr	5.001 ± 0.032 µg/mL	Thallium, Tl	4.998 ± 0.032 µg/mL	Vanadium, V	5.000 ± 0.032 µg/mL
Zinc, Zn	5.002 ± 0.029 µg/mL				

Certified Density: 1.052 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999b	999b
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
As	Calculated		See Sec. 4.2
As	ICP Assay	3103a	100818
Ba	Gravimetric		See Sec. 4.2
Ba	ICP Assay	3104a	070222
Be	Calculated		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Cd	ICP Assay	3108	060531
Cd	EDTA	928	928
Co	ICP Assay	3113	00630
Co	EDTA	928	928
Cr3	Calculated		See Sec. 4.2
Cr3	ICP Assay	3112a	030730
Cu	ICP Assay	3114	011017
Cu	EDTA	928	928
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
K	Gravimetric		See Sec. 4.2
K	ICP Assay	3141a	051220
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	Gravimetric		See Sec. 4.2
Na	ICP Assay	3152a	120715
Ni	ICP Assay	3136	000612
Ni	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Sr	ICP Assay	3153a	990906
Sr	EDTA	928	928
Tl	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	993012
V	ICP Assay	3165	992706
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\Sigma x_i}{n}$ ($\bar{x}$) = mean

x_i = individual results

n = number of measurements

Uncertainty $(\pm) = 2\,[\,\Sigma(s_i)^2\,]^{1/2}$ 2 = the coverage factor.

$[\,\Sigma(s_i)^2\,]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 22, 2014

11.2 Expiration Date

EXPIRES
1 2015

11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

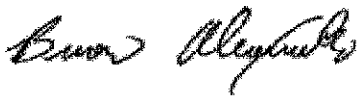
Certificate Prepared By:

Christy Shortridge
Product Documentation Technician



Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



Reagent

MTMSCAL4_00009

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CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CAL-SPECC
Lot Number:	H2-MEB544053
Matrix:	3% (v/v) HNO_3 tr. HF
Value / Analyte(s):	5 µg/mL ea: B, Mo, Sb, Sn, Ti, W

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	5.001 ± 0.047 µg/mL	Boron, B	5.000 ± 0.032 µg/mL	Molybdenum, Mo	5.001 ± 0.039 µg/mL
Tin, Sn	5.001 ± 0.036 µg/mL	Titanium, Ti	5.001 ± 0.043 µg/mL	Tungsten, W	5.002 ± 0.032 µg/mL

Certified Density: 1.017 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	Calculated		See Sec. 4.2
B	ICP Assay	3107	070514
Mo	Calculated		See Sec. 4.2
Mo	ICP Assay	3134	891307
Sb	Calculated		See Sec. 4.2
Sb	ICP Assay	3102A	061229
Sn	Calculated		See Sec. 4.2
Sn	ICP Assay	3161a	070330
Ti	ICP Assay	3162a	060808
W	Calculated		See Sec. 4.2
W	ICP Assay	3163	080331

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\Sigma x_i}{n}$ ($\bar{x}$) = mean
x_i = individual results
n = number of measurements

Uncertainty (±) = $2\ [\ \Sigma(s_i)^2\ ]^{1/2}$ 2 = the coverage factor.
$[\ \Sigma(s_i)^2\ ]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipette from the container. Do not return removed aliquots to container.

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 22, 2014

11.2 Expiration Date

EXPIRES
1 2015

11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Christy Shortridge
Product Documentation Technician

Christy Shortridge

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Brian Alexander

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

Paul R Gaines

Reagent

MTMSICSA_00010

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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	6020ICS-0A
Lot Number:	J2-MEB533111
Matrix:	1.4% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Cl-, 2 000 µg/mL ea: C, 1 000 µg/mL ea: Al, Ca, Fe, K, Mg, Na, P, S, 20 µg/mL ea: Mo, Ti

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	1 001 ± 5 µg/mL	Calcium, Ca	1 001 ± 6 µg/mL
Carbon, C	2 002 ± 10 µg/mL	Chloride, Chloride	10 010.0 ± 50.0 µg/mL
Iron, Fe	1 001 ± 5 µg/mL	Magnesium, Mg	1 001 ± 5 µg/mL
Molybdenum, Mo	20.02 ± 0.09 µg/mL	Phosphorus, P	1 001 ± 8 µg/mL
Potassium, K	1 001 ± 4 µg/mL	Sodium, Na	1 001 ± 4 µg/mL
Sulfur, S	1 001 ± 7 µg/mL	Titanium, Ti	20.03 ± 0.13 µg/mL

Certified Density: 1.033 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
C	Acidimetric	84L	84L
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Chloride	Acidimetric	84L	84L
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
K	Gravimetric		See Sec. 4.2
K	ICP Assay	3141a	051220
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mo	Calculated		See Sec. 4.2
Mo	ICP Assay	3134	891307
Na	Gravimetric		See Sec. 4.2
Na	ICP Assay	3152a	120715
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
S	ICP Assay	3154	892205
S	Acidimetric	84L	84L
Ti	Calculated		See Sec. 4.2
Ti	ICP Assay	3162a	060808

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\Sigma x_i}{n}$ ($\bar{x}$) = mean

x_i = individual results

n = number of measurements

Uncertainty $(\pm) = 2\,[\,\Sigma(s_i)^2\,]^{1/2}$ 2 = the coverage factor.

$[\,\Sigma(s_i)^2\,]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'In-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000410	M	Eu	<	0.000102	s	Na	<		M	Se	<	0.001333	M	Zn		0.005643
s	Al	<		s	Fe	<		M	Nb	<	0.000102	n	Si	<		M	Zr	<	0.000410
M	As	<	0.015390	M	Ga	<	0.000102	M	Nd	<	0.000205	M	Sm	<	0.000102				
M	Au	<	0.001026	M	Gd	<	0.000102	M	Ni	<	0.002770	M	Sn	<	0.000615				
O	B	<	0.010330	O	Ge	<	0.020660	M	Os	<	0.000102	O	Sr		0.003543				
M	Ba	<	0.001846	M	Hf	<	0.000102	s	P	<		M	Ta	<	0.000102				
O	Be	<	0.000103	M	Hg	<	0.000307	M	Pb		0.003796	M	Tb	<	0.000102				
M	Bi	<	0.000205	M	Ho	<	0.000102	M	Pd	<	0.000102	M	Te	<	0.000205				
s	Ca	<		M	In	<	0.000102	M	Pr	<	0.000102	M	Th	<	0.000102				
O	Cd		0.001549	M	Ir	<	0.000102	M	Pt	<	0.000102	s	Ti	<					
M	Ce	<	0.000410	s	K	<		M	Rb		0.012927	M	Tl	<	0.000102				
M	Co	<	0.004309	M	La	<	0.000205	M	Re	<	0.000102	M	Tm	<	0.000102				
M	Cr		0.012619	O	Li		0.000999	M	Rh	<	0.000102	M	U	<	0.000102				
M	Cs	<	0.000205	M	Lu	<	0.000102	M	Ru	<	0.000102	M	V	<	0.001436				
O	Cu	<	0.015495	s	Mg	<		s	S	<		M	W		0.001128				
M	Dy	<	0.000102	O	Mn		0.001169	M	Sb	<	0.000615	M	Y	<	0.000102				
M	Er	<	0.000102	s	Mo	<		M	Sc	<	0.000102	M	Yb	<	0.000102				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 26, 2015

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 26, 2018**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

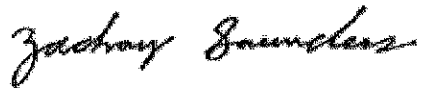
- Sealed TCT Bag Open Date: 4/13/15 AMM

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

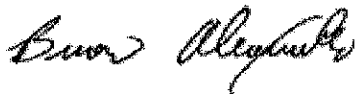
Certificate Prepared By:

Zach Saunders
Product Documentation Technician



Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



Reagent

MTMSICSABSOLA_00006

HIGH-PURITY STANDARDS
www.highpuritystandards.com

P.O. Box 41727
Charleston, SC 29423
Phone (843) 767-7900
Fax (843) 767-7906

Certificate of Analysis

Product Description:

Part Number:	**SM-606-031**
	Solution A
Lot Number:	**1503726**
Matrix:	2% HNO_3
Purity:	99.99% - 99.9995%

Certified Values:

Element	(µg/mL)	SRM ID	SRM Lot#	Element	(µg/mL)	SRM ID	SRM Lot#
As	20.0 ± 0.2	3103a	100818	Pb	20.00 ± 0.12	3128	101026
Ba	20.00 ± 0.12	3104a	070222	Mn	20.0 ± 0.2	3132	050429
Be	20.0 ± 0.2	3105a	090514	Ni	20.0 ± 0.1	3136	120619
B	20.0 ± 0.1	3107	070514	Se	20.0 ± 0.2	3149	100901
Cd	20.0 ± 0.1	3108	130116	Sr	20.0 ± 0.1	3153a	990906
Cr	20.0 ± 0.1	3112a	030730	Tl	20.0 ± 0.1	3158	993012
Co	20.0 ± 0.1	3113	000630	V	20.00 ± 0.12	3165	992706
Cu	20.0 ± 0.1	3114	121207	Zn	20.0 ± 0.1	3168a	120629

The Certified values are based on gravimetric and volumetric preparation, and verified against SRM 3100 series developed by National Institute of Standards and Technology (NIST) via inductively coupled plasma optical emission spectrometry (ICP-OES) using an internal laboratory developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2

* Refer to Traceability Information, Section d

Preparation Information:

The standard is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials. Highest purity source materials were purchased from qualified vendors per ISO 9001:2008 guidelines and assayed by ICP-OES for conformity prior to use. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
The calibration of volumetric vessels is checked annually using the ASTM method E542

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**
The Calibration Standards are traceable to SRM 3100 Series Spectrometric Standard Solutions or second sources.

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Refer to Material Safety Datasheet (MSDS) for hazardous information.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date:	**February 6, 2015**
Shipped Date:	**February 10, 2015**
Expiration Date:	**February 10, 2016**
Certificate Issue Date:	**February 6, 2015**

Quality Information:

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

Angel Sellers
Quality Manager

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

Reagent

MTMSICSABSOLB_00006

HIGH-PURITY STANDARDS
www.highpuritystandards.com

P.O. Box 41727
Charleston, SC 29423
Phone (843) 767-7900
Fax (843) 767-7908

Certificate of Analysis

Product Description:

Part Number:	**SM-606-031**
	Solution B
Lot Number:	**1504002**
Matrix:	2% HNO_3 + Tr HF
Purity:	99.92% - 99.999%

Certified Values:

Element	(µg/mL)	SRM ID	SRM Lot#	Element	(µg/mL)	SRM ID	SRM Lot#
Sb	20.00 ± 0.12	*		Ti	20.00 ± 0.12	3162a	130925
Mo	20.00 ± 0.12	3134	891307	W	20.00 ± 0.12	3163	080331
Ag	20.0 ± 0.1	3151	992212	Zr	20.00 ± 0.12	3169	130920
Sn	20.00 ± 0.12	3161a	070330				

The Certified values are based on gravimetric and volumetric preparation, and verified against SRM 3100 series developed by National Institute of Standards and Technology (NIST) via inductively coupled plasma optical emission spectrometry (ICP-OES) using an internal laboratory developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor k is about 2

* Refer to Traceability Information, Section d

Preparation Information:

The standard is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials. Highest purity source materials were purchased from qualified vendors per ISO 9001:2008 guidelines and assayed by ICP-OES for conformity prior to use. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**

The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.

The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

High-Purity Standards is certified to ISO 9001:2008 and accredited to ISO/IEC 17025:2005 and ISO Guide 34:2009.

b. **Volumetric Device**
The calibration of volumetric vessels is checked annually using the ASTM method E542

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**
The Calibration Standards are traceable to SRM 3100 Series Spectrometric Standard Solutions or second sources.

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Refer to Material Safety Datasheet (MSDS) for hazardous information.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date:	**February 9, 2015**
Shipped Date:	**February 10, 2015**
Expiration Date:	**February 10, 2016**
Certificate Issue Date:	**February 9, 2015**

Quality Information:

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

Angel Sellers
Quality Manager

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

Reagent

MTMSICVA_00005

USA

5580 Skylane Boulevard P: 707.525.5788
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F: 707.545.7901

Europe

P.O. Box 2704 P: +31 20 638 05 97
1000 CS Amsterdam F: +31 20 420 28 36
The Netherlands

Certificate of Analysis

Rev 1

Comment: Ca, K, Mg, Na, Fe, Shipped Separately

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
Z-G34-4400 -130611AM02	1063211	1-Aug-2015	5% HNO_3 + Tr HF	Z-G34-4400-130611AM02, 100 mL mg/L in 5% HNO_3 + Tr HF Solution A

Additional Information:

Date Received: 29/Aug/2014

Container: 4 oz (125 mL) Narrow Mouth, LDPE clean

Certified Values:

The certified value is based on gravimetric and volumetric preparation of this CRM. This CRM has been confirmed by inductively coupled plasma optical emission spectrometry (ICP-OES) using an internally developed method against an independent source which is directly traceable to the NIST SRM's listed below.
The uncertainty value is calculated for a 95% confidence interval with a *k* value of 2.

Element	Symbol	CAS No	SRM No	NIST Lot No	Source Lot No	Purity %	Concentration mg/L	Uncertainty ± mg/L
Aluminum	Al	7429-90-5	3101	060502	7001.46.7P	99.9995	20	0.09
Manganese	Mn	7439-96-5	3132	050429	7017.46.5P	99.95	20	0.07
Silver	Ag	7440-22-4	3151	992212	7000.29.1P	99.999	4	0.04001
Arsenic	As	7440-38-2	3103	010713	7002.46.5P	99.9999	4	0.04
Boron	B	7440-42-8	3107	070514	7003.46.5P	99.999	4	0.04
Barium	Ba	7440-39-3	3104	070222	7004.29.2P	99.997	4	0.04
Beryllium	Be	7440-41-7	3105	892707	7005.46.5P	99.999	4	0.04
Cadmium	Cd	7440-43-9	3108	060531	7007.46.3P	99.9999	4	0.04002
Cobalt	Co	7440-48-4	3113	000630	7008.46.8P	99.995	4	0.04003
Chromium	Cr	7440-47-3	3112	030730	7009.46.3P	99.998	4	0.044
Copper	Cu	7440-50-8	3114	011017	7011.46.5P	99.9995	4	0.04001
Molybdenum	Mo	7439-98-7	3134	891307	7018.29.3P	99.999	4	0.04
Nickel	Ni	7440-02-0	3136	000612	7021.46.8P	99.995	4	0.04001
Lead	Pb	7439-92-1	3128	030721	7023.29.2P	99.999	4	0.04001
Antimony	Sb	7440-36-0	3102	061229	7026.46.3P	99.999	4	0.04002
Selenium	Se	7782-49-2	3149	992106	7027.46.4P	99.999	4	0.04001
Tin	Sn	7440-31-5	3161	070330	7029.46.4P	99.999	4	0.04
Strontium	Sr	7440-24-6	3153	990906	7030.46.4P	99.998	4	0.04001
Titanium	Ti	7440-32-6	3162	060808	7033.343.1P	99.995	4	0.04001
Thallium	Tl	7440-28-0	3158	993012	7034.29.3P	99.999	4	0.04
Vanadium	V	7440-62-2	3165	992706	7036.46.5P	99.99	4	0.04
Tungsten	W	7440-33-7	3163	080331	7072.46.2P	99.99	4	0.044011
Zinc	Zn	7440-66-6	3168	080123	7037.46.5P	99.9995	4	0.04002
Calcium	Ca	7440-70-2	3109	050825	7006.29.2P	99.999	2000	7
Potassium	K	7440-09-7	3141	051220	7013.46.9P	99.999	2000	7
Magnesium	Mg	7439-95-4	3131	050302	7016.46.5P	99.99	2000	7
Sodium	Na	7440-23-5	3152	010728	7020.46.7P	99.999	2000	7
Iron	Fe	7439-89-6	3126	051031	7012.46.14P	99.99	1000	3.5

USA

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Europe

P.O. Box 2704 P: +31 20 638 05 97
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The Netherlands

Certificate of Analysis

Rev 1

Comment: Ca, K, Mg, Na, Fe, Shipped Separately

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
Z-G34-4400 -130611AM02	1063211	1-Aug-2015	5% HNO_3 + Tr HF	Z-G34-4400-130611AM02, 100 mL mg/L in 5% HNO_3 + Tr HF Solution A

Intended Uses:

This Certified Reference material, CRM, is intended for use as a calibration standard or a quality control standard for Inorganic Speetrometry Equipment such as ICP-OES, ICP-MS, AA, and XRF, It may aslo be used for various USEPA and ASTM methods.

Method of Preparation:

This standard was prepared gravimetrically using balances calibrated with NIST traceable weights (NIST Test Number 822/264157-00). Only calibrated Class A volumetric glassware was used to prepare this standard. Sub-boiled distilled acid and 18 megaohm deionized water were used to stabilize the product. All raw materials were checked for stoichiometry and purity prior to use. This standard has been spectrometrically certified by an independent source, which is directly traceable to NIST.

Packaging and Storage:

The Solution should be kept trightly capped and stored under normal laboratory conditions. Pre-cleaned polyethlene bottles are used to package this material. Special storage information: Ambient

Glassware Calibration:

Only Class A glassware is used in the manufacture and quality control of Standards. All Glassware is calibrated using NIST traceable weights.

Weights and Balance Calibration:

Weights used perform daily checks on balances calibrated annually by the State of South Carolina Department of Agriculture Metrology Laboratory and are traceable to the National Institute of Standards and Technology (NIST). Balances are checked daily in accordance to in house procedure O2-LB-004. Balances are calibrated annually by an ISO 17025 accredited metrology service.

Homogeneity:

Homogeneity has been established in accordance with internal procedure O2-QS-10 and has a maximum uncertainty of 0.1%. This is consistent with the intended use of this CRM. The homogeneity of this product has been confirmed by procedures consistent with ISO/IEC Guide 17025:2005 and ISO Guide 34:2009. The homogeneity of this CRM is valid for sample sub-sizes that the end user can quantitatively reproduce.

Hazardous information:

Refer to MSDS

USA

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Certificate of Analysis

Rev 1

Comment: Ca, K, Mg, Na, Fe, Shipped Separately

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
Z-G34-4400 -130611AM02	1063211	1-Aug-2015	5% HNO_3 + Tr HF	Z-G34-4400-130611AM02, 100 mL mg/L in 5% HNO_3 + Tr HF Solution A

Calculation of Uncertainty

The following equations are used to calculate the value of the expanded uncertainty:
$U=ku_c$ U=Expanded Uncertainty, k= the coverage factor at the 95% confidence level, k=2, u_c = the combined uncertainty
$u_c = \sqrt{\sum u_i^2}$ where u_i are the individual uncertainty components for raw material, transportation, homogeneity, and shelf life.

Expiration Information:

The Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. These tests include the effect of temperature and packaging on the product. This standard is guaranteed until the expiration date listed above.

Accreditation:

This standard was manufactured by an ISO 17025 Chemical Testing Lab (Certificate number 3031.01) and ISO Guide 34 Reference Material Producer (RMP) Certificate number 3031.02 accredited by The American Association of Laboratory Accreditation (A2LA). Manufacturer's Quality System audited and registered by NSF-ISR to ISO 9001:2008 (Certificate number IZ391-IS4).

Manufactured By:

Tiffany Kwasigroch

Manufacture Date: 7/18/2014

Certified By:

Zachary Spinelli

Certified Date:7/21/2014

Released By:

HuiChen Stavros, Ph.D.

Original Issue Date: 7/22/2014

Reagent

MTMSICVB_00005

USA

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Certificate of Analysis

Rev 1

Comment: Ca, K, Mg, Na, Fe, Shipped Separately

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
Z-G34-4400 -130611AM02	1063211	1-Aug-2015	5% HNO_3 + Tr HF	Z-G34-4400-130611AM02, 100 mL mg/L in 5% HNO_3 + Tr HF Solution A

Additional Information:

Date Received: 29/Aug/2014

Container: 4 oz (125 mL) Narrow Mouth, LDPE clean

Certified Values:

The certified value is based on gravimetric and volumetric preparation of this CRM. This CRM has been confirmed by inductively coupled plasma optical emission spectrometry (ICP-OES) using an internally developed method against an independent source which is directly traceable to the NIST SRM's listed below.
The uncertainty value is calculated for a 95% confidence interval with a *k* value of 2.

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Boron	B	7440-42-8	3107	070514	7003.46.5P	99.999	4	0.04
Barium	Ba	7440-39-3	3104	070222	7004.29.2P	99.997	4	0.04
Beryllium	Be	7440-41-7	3105	892707	7005.46.5P	99.999	4	0.04
Cadmium	Cd	7440-43-9	3108	060531	7007.46.3P	99.9999	4	0.04002
Cobalt	Co	7440-48-4	3113	000630	7008.46.8P	99.995	4	0.04003
Chromium	Cr	7440-47-3	3112	030730	7009.46.3P	99.998	4	0.044
Copper	Cu	7440-50-8	3114	011017	7011.46.5P	99.9995	4	0.04001
Molybdenum	Mo	7439-98-7	3134	891307	7018.29.3P	99.999	4	0.04
Nickel	Ni	7440-02-0	3136	000612	7021.46.8P	99.995	4	0.04001
Lead	Pb	7439-92-1	3128	030721	7023.29.2P	99.999	4	0.04001
Antimony	Sb	7440-36-0	3102	061229	7026.46.3P	99.999	4	0.04002
Selenium	Se	7782-49-2	3149	992106	7027.46.4P	99.999	4	0.04001
Tin	Sn	7440-31-5	3161	070330	7029.46.4P	99.999	4	0.04
Strontium	Sr	7440-24-6	3153	990906	7030.46.4P	99.998	4	0.04001
Titanium	Ti	7440-32-6	3162	060808	7033.343.1P	99.995	4	0.04001
Thallium	Tl	7440-28-0	3158	993012	7034.29.3P	99.999	4	0.04
Vanadium	V	7440-62-2	3165	992706	7036.46.5P	99.99	4	0.04
Tungsten	W	7440-33-7	3163	080331	7072.46.2P	99.99	4	0.044011
Zinc	Zn	7440-66-6	3168	080123	7037.46.5P	99.9995	4	0.04002
Calcium	Ca	7440-70-2	3109	050825	7006.29.2P	99.999	2000	7
Potassium	K	7440-09-7	3141	051220	7013.46.9P	99.999	2000	7
Magnesium	Mg	7439-95-4	3131	050302	7016.46.5P	99.99	2000	7
Sodium	Na	7440-23-5	3152	010728	7020.46.7P	99.999	2000	7
Iron	Fe	7439-89-6	3126	051031	7012.46.14P	99.99	1000	3.5

USA

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The Netherlands

Certificate of Analysis

Rev 1

Comment: Ca, K, Mg, Na, Fe, Shipped Separately

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
Z-G34-4400 -130611AM02	1063211	1-Aug-2015	5% HNO_3 + Tr HF	Z-G34-4400-130611AM02, 100 mL mg/L in 5% HNO_3 + Tr HF Solution A

Intended Uses:

This Certified Reference material, CRM, is intended for use as a calibration standard or a quality control standard for Inorganic Speetrometry Equipment such as ICP-OES, ICP-MS, AA, and XRF, It may aslo be used for various USEPA and ASTM methods.

Method of Preparation:

This standard was prepared gravimetrically using balances calibrated with NIST traceable weights (NIST Test Number 822/264157-00). Only calibrated Class A volumetric glassware was used to prepare this standard. Sub-boiled distilled acid and 18 megaohm deionized water were used to stabilize the product. All raw materials were checked for stoichiometry and purity prior to use. This standard has been spectrometrically certified by an independent source, which is directly traceable to NIST.

Packaging and Storage:

The Solution should be kept trightly capped and stored under normal laboratory conditions. Pre-cleaned polyethlene bottles are used to package this material. Special storage information: Ambient

Glassware Calibration:

Only Class A glassware is used in the manufacture and quality control of Standards. All Glassware is calibrated using NIST traceable weights.

Weights and Balance Calibration:

Weights used perform daily checks on balances calibrated annually by the State of South Carolina Department of Agriculture Metrology Laboratory and are traceable to the National Institute of Standards and Technology (NIST). Balances are checked daily in accordance to in house procedure O2-LB-004. Balances are calibrated annually by an ISO 17025 accredited metrology service.

Homogeneity:

Homogeneity has been established in accordance with internal procedure O2-QS-10 and has a maximum uncertainty of 0.1%. This is consistent with the intended use of this CRM. The homogeneity of this product has been confirmed by procedures consistent with ISO/IEC Guide 17025:2005 and ISO Guide 34:2009. The homogeneity of this CRM is valid for sample sub-sizes that the end user can quantitatively reproduce.

Hazardous information:

Refer to MSDS

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Certificate of Analysis

Rev 1

Comment: Ca, K, Mg, Na, Fe, Shipped Separately

Catalog No:	Lot No:	Expiration Date:	Matrix:	Description:
Z-G34-4400 -130611AM02	1063211	1-Aug-2015	5% HNO_3 + Tr HF	Z-G34-4400-130611AM02, 100 mL mg/L in 5% HNO_3 + Tr HF Solution A

Calculation of Uncertainty

The following equations are used to calculate the value of the expanded uncertainty:
$U=ku_c$ U=Expanded Uncertainty, k= the coverage factor at the 95% confidence level, k=2, u_c = the combined uncertainty
$u_c = \sqrt{\sum u_i^2}$ where u_i are the individual uncertainty components for raw material, transportation, homogeneity, and shelf life.

Expiration Information:

The Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. These tests include the effect of temperature and packaging on the product. This standard is guaranteed until the expiration date listed above.

Accreditation:

This standard was manufactured by an ISO 17025 Chemical Testing Lab (Certificate number 3031.01) and ISO Guide 34 Reference Material Producer (RMP) Certificate number 3031.02 accredited by The American Association of Laboratory Accreditation (A2LA). Manufacturer's Quality System audited and registered by NSF-ISR to ISO 9001:2008 (Certificate number IZ391-IS4).

Manufactured By:

Tiffany Kwasigroch

Manufacture Date: 7/18/2014

Certified By:

Zachary Spinelli

Certified Date:7/21/2014

Released By:

HuiChen Stavros, Ph.D.

Original Issue Date: 7/22/2014

METALS

COVER PAGE
METALS

Lab Name: TestAmerica Canton Job Number: 240-50650-1

SDG No.:

Project: RVAAP - ECC

Client Sample ID	Lab Sample ID
079SS-0400M-0001-SO	240-50650-1
079SS-0402M-0001-SO	240-50650-3
079SS-0403M-0001-SO	240-50650-4
079SS-0404M-0001-SO	240-50650-5
079SS-0405M-0001-SO	240-50650-6
079SS-0406M-0001-SO	240-50650-7
079SS-0407-0001-RB	240-50650-8

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SS-0400M-0001-SO
Lab Sample ID: 240-50650-1
Lab Name: TestAmerica Canton
Job No.: 240-50650-1
SDG ID.:
Matrix: Solid
Date Sampled: 05/13/2015 08:40
Reporting Basis: DRY
Date Received: 05/13/2015 12:44
% Solids: 97.2

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	11000	190	37	5.7	mg/Kg		J D	20	6020
Antimony	0.22	0.37	0.14	0.013	mg/Kg	J	J D	2	6020
Arsenic	12	0.93	0.14	0.024	mg/Kg		D	2	6020
Barium	84	0.93	0.28	0.20	mg/Kg		D	2	6020
Beryllium	0.67	0.19	0.093	0.010	mg/Kg		D	2	6020
Cadmium	0.27	0.37	0.0093	0.0034	mg/Kg	J	D	2	6020
Calcium	3500	370	93	20	mg/Kg		J D	2	6020
Chromium	17	0.93	0.42	0.056	mg/Kg		D	2	6020
Cobalt	9.0	0.19	0.014	0.0016	mg/Kg		D	2	6020
Copper	13	0.74	0.28	0.090	mg/Kg		D	2	6020
Iron	22000	930	280	30	mg/Kg		J D	20	6020
Lead	29	0.56	0.19	0.042	mg/Kg		D	2	6020
Magnesium	1900	190	23	3.7	mg/Kg		D	2	6020
Manganese	1000	0.93	0.37	0.11	mg/Kg		J D	2	6020
Nickel	19	0.93	0.23	0.036	mg/Kg		D	2	6020
Potassium	660	190	9.3	4.5	mg/Kg		D	2	6020
Selenium	1.1	0.93	0.056	0.037	mg/Kg		D	2	6020
Silver	0.060	0.19	0.046	0.0013	mg/Kg	J	D	2	6020
Sodium	48	190	37	8.1	mg/Kg	J	D	2	6020
Thallium	0.21	0.37	0.14	0.018	mg/Kg	J	D	2	6020
Vanadium	18	0.93	0.093	0.034	mg/Kg		D	2	6020
Zinc	66	7.4	1.9	0.46	mg/Kg		D	2	6020
Mercury	0.056	0.090	0.030	0.013	mg/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SS-0402M-0001-SO
Lab Sample ID: 240-50650-3
Lab Name: TestAmerica Canton
Job No.: 240-50650-1
SDG ID.:
Matrix: Solid
Date Sampled: 05/12/2015 17:20
Reporting Basis: DRY
Date Received: 05/13/2015 12:44
% Solids: 97.4

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	12000	180	36	5.6	mg/Kg		D	20	6020
Antimony	0.11	0.36	0.14	0.013	mg/Kg	J	D	2	6020
Arsenic	8.6	0.91	0.14	0.024	mg/Kg		D	2	6020
Barium	79	0.91	0.27	0.20	mg/Kg		D	2	6020
Beryllium	0.52	0.18	0.091	0.010	mg/Kg		D	2	6020
Cadmium	0.18	0.36	0.0091	0.0034	mg/Kg	J	D	2	6020
Calcium	230	360	91	20	mg/Kg	J	D	2	6020
Chromium	15	0.91	0.41	0.055	mg/Kg		D	2	6020
Cobalt	8.0	0.18	0.014	0.0015	mg/Kg		D	2	6020
Copper	8.3	0.73	0.27	0.088	mg/Kg		D	2	6020
Iron	23000	910	270	29	mg/Kg		D	20	6020
Lead	15	0.55	0.18	0.041	mg/Kg		D	2	6020
Magnesium	1700	180	23	3.6	mg/Kg		D	2	6020
Manganese	940	0.91	0.36	0.11	mg/Kg		D	2	6020
Nickel	16	0.91	0.23	0.035	mg/Kg		D	2	6020
Potassium	650	180	9.1	4.5	mg/Kg		D	2	6020
Selenium	0.75	0.91	0.055	0.036	mg/Kg	J	D	2	6020
Silver	0.057	0.18	0.045	0.0013	mg/Kg	J	D	2	6020
Sodium	29	180	36	7.9	mg/Kg	J	D	2	6020
Thallium	0.18	0.36	0.14	0.017	mg/Kg	J	D	2	6020
Vanadium	19	0.91	0.091	0.034	mg/Kg		D	2	6020
Zinc	48	7.3	1.8	0.45	mg/Kg		D	2	6020
Mercury	0.054	0.11	0.035	0.015	mg/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SS-0403M-0001-SO
Lab Sample ID: 240-50650-4
Lab Name: TestAmerica Canton
Job No.: 240-50650-1
SDG ID.:
Matrix: Solid
Date Sampled: 05/12/2015 17:55
Reporting Basis: DRY
Date Received: 05/13/2015 12:44
% Solids: 97.2

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	13000	200	41	6.3	mg/Kg		D	20	6020
Antimony	0.15	0.41	0.15	0.014	mg/Kg	J	D	2	6020
Arsenic	11	1.0	0.15	0.026	mg/Kg		D	2	6020
Barium	90	1.0	0.31	0.22	mg/Kg		D	2	6020
Beryllium	0.62	0.20	0.10	0.011	mg/Kg		D	2	6020
Cadmium	0.28	0.41	0.010	0.0038	mg/Kg	J	D	2	6020
Calcium	920	410	100	22	mg/Kg		D	2	6020
Chromium	19	1.0	0.46	0.061	mg/Kg		D	2	6020
Cobalt	9.9	0.20	0.015	0.0017	mg/Kg		D	2	6020
Copper	15	0.81	0.31	0.099	mg/Kg		D	2	6020
Iron	25000	1000	310	33	mg/Kg		D	20	6020
Lead	20	0.61	0.20	0.046	mg/Kg		D	2	6020
Magnesium	2500	200	25	4.1	mg/Kg		D	2	6020
Manganese	1000	1.0	0.41	0.12	mg/Kg		D	2	6020
Nickel	23	1.0	0.25	0.040	mg/Kg		D	2	6020
Potassium	1000	200	10	5.0	mg/Kg		D	2	6020
Selenium	0.89	1.0	0.061	0.041	mg/Kg	J	D	2	6020
Silver	0.053	0.20	0.051	0.0014	mg/Kg	J	D	2	6020
Sodium	38	200	41	8.9	mg/Kg	J	D	2	6020
Thallium	0.22	0.41	0.15	0.019	mg/Kg	J	D	2	6020
Vanadium	21	1.0	0.10	0.038	mg/Kg		D	2	6020
Zinc	64	8.1	2.0	0.51	mg/Kg		D	2	6020
Mercury	0.054	0.094	0.031	0.013	mg/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SS-0404M-0001-SO
Lab Sample ID: 240-50650-5
Lab Name: TestAmerica Canton
Job No.: 240-50650-1
SDG ID.:
Matrix: Solid
Date Sampled: 05/12/2015 16:50
Reporting Basis: DRY
Date Received: 05/13/2015 12:44
% Solids: 97.1

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	12000	200	40	6.1	mg/Kg		D	20	6020
Antimony	0.16	0.40	0.15	0.014	mg/Kg	J	D	2	6020
Arsenic	9.5	0.99	0.15	0.026	mg/Kg		D	2	6020
Barium	89	0.99	0.30	0.22	mg/Kg		D	2	6020
Beryllium	0.63	0.20	0.099	0.011	mg/Kg		D	2	6020
Cadmium	0.19	0.40	0.0099	0.0037	mg/Kg	J	D	2	6020
Calcium	130	400	99	22	mg/Kg	J	D	2	6020
Chromium	15	0.99	0.45	0.059	mg/Kg		D	2	6020
Cobalt	11	0.20	0.015	0.0017	mg/Kg		D	2	6020
Copper	12	0.79	0.30	0.096	mg/Kg		D	2	6020
Iron	20000	990	300	32	mg/Kg		D	20	6020
Lead	19	0.59	0.20	0.045	mg/Kg		D	2	6020
Magnesium	1800	200	25	4.0	mg/Kg		D	2	6020
Manganese	1100	0.99	0.40	0.12	mg/Kg		D	2	6020
Nickel	16	0.99	0.25	0.039	mg/Kg		D	2	6020
Potassium	600	200	9.9	4.9	mg/Kg		D	2	6020
Selenium	1.0	0.99	0.059	0.040	mg/Kg		D	2	6020
Silver	0.070	0.20	0.049	0.0014	mg/Kg	J	D	2	6020
Sodium	31	200	40	8.6	mg/Kg	J	D	2	6020
Thallium	0.21	0.40	0.15	0.019	mg/Kg	J	D	2	6020
Vanadium	19	0.99	0.099	0.037	mg/Kg		D	2	6020
Zinc	54	7.9	2.0	0.49	mg/Kg		D	2	6020
Mercury	0.057	0.090	0.030	0.013	mg/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SS-0405M-0001-SO
Lab Sample ID: 240-50650-6
Lab Name: TestAmerica Canton
Job No.: 240-50650-1
SDG ID.:
Matrix: Solid
Date Sampled: 05/12/2015 14:15
Reporting Basis: DRY
Date Received: 05/13/2015 12:44
% Solids: 97.9

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	11000	140	29	4.4	mg/Kg		D	20	6020
Antimony	0.10	0.29	0.11	0.010	mg/Kg	J	D	2	6020
Arsenic	12	0.71	0.11	0.019	mg/Kg		D	2	6020
Barium	77	0.71	0.21	0.16	mg/Kg		D	2	6020
Beryllium	0.65	0.14	0.071	0.0079	mg/Kg		D	2	6020
Cadmium	0.21	0.29	0.0071	0.0026	mg/Kg	J	D	2	6020
Calcium	2300	290	71	16	mg/Kg		D	2	6020
Chromium	18	0.71	0.32	0.043	mg/Kg		D	2	6020
Cobalt	11	0.14	0.011	0.0012	mg/Kg		D	2	6020
Copper	15	0.57	0.21	0.069	mg/Kg		D	2	6020
Iron	27000	710	210	23	mg/Kg		D	20	6020
Lead	14	0.43	0.14	0.032	mg/Kg		D	2	6020
Magnesium	2900	140	18	2.9	mg/Kg		D	2	6020
Manganese	640	0.71	0.29	0.086	mg/Kg		D	2	6020
Nickel	23	0.71	0.18	0.028	mg/Kg		D	2	6020
Potassium	960	140	7.1	3.5	mg/Kg		D	2	6020
Selenium	0.80	0.71	0.043	0.029	mg/Kg		D	2	6020
Silver	0.028	0.14	0.036	0.0010	mg/Kg	J	D	2	6020
Sodium	39	140	29	6.2	mg/Kg	J	D	2	6020
Thallium	0.16	0.29	0.11	0.014	mg/Kg	J	D	2	6020
Vanadium	19	0.71	0.071	0.026	mg/Kg		D	2	6020
Zinc	56	5.7	1.4	0.36	mg/Kg		D	2	6020
Mercury	0.027	0.11	0.035	0.015	mg/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SS-0406M-0001-SO
Lab Sample ID: 240-50650-7
Lab Name: TestAmerica Canton
Job No.: 240-50650-1
SDG ID.:
Matrix: Solid
Date Sampled: 05/12/2015 15:40
Reporting Basis: DRY
Date Received: 05/13/2015 12:44
% Solids: 97.4

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	10000	150	31	4.8	mg/Kg		D	20	6020
Antimony	0.13	0.31	0.12	0.011	mg/Kg	J	D	2	6020
Arsenic	8.6	0.77	0.12	0.020	mg/Kg		D	2	6020
Barium	88	0.77	0.23	0.17	mg/Kg		D	2	6020
Beryllium	0.50	0.15	0.077	0.0085	mg/Kg		D	2	6020
Cadmium	0.19	0.31	0.0077	0.0029	mg/Kg	J	D	2	6020
Calcium	360	310	77	17	mg/Kg		D	2	6020
Chromium	14	0.77	0.35	0.046	mg/Kg		D	2	6020
Cobalt	9.5	0.15	0.012	0.0013	mg/Kg		D	2	6020
Copper	11	0.62	0.23	0.075	mg/Kg		D	2	6020
Iron	19000	770	230	25	mg/Kg		D	20	6020
Lead	19	0.46	0.15	0.035	mg/Kg		D	2	6020
Magnesium	1800	150	19	3.1	mg/Kg		D	2	6020
Manganese	1200	0.77	0.31	0.093	mg/Kg		D	2	6020
Nickel	17	0.77	0.19	0.030	mg/Kg		D	2	6020
Potassium	600	150	7.7	3.8	mg/Kg		D	2	6020
Selenium	0.82	0.77	0.046	0.031	mg/Kg		D	2	6020
Silver	0.044	0.15	0.039	0.0011	mg/Kg	J	D	2	6020
Sodium	29	150	31	6.7	mg/Kg	J	D	2	6020
Thallium	0.17	0.31	0.12	0.015	mg/Kg	J	D	2	6020
Vanadium	17	0.77	0.077	0.029	mg/Kg		D	2	6020
Zinc	53	6.2	1.5	0.39	mg/Kg		D	2	6020
Mercury	0.050	0.089	0.029	0.013	mg/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: 079SS-0407-0001-RB
Lab Sample ID: 240-50650-8
Lab Name: TestAmerica Canton
Job No.: 240-50650-1
SDG ID.:
Matrix: Water
Date Sampled: 05/13/2015 11:00
Reporting Basis: WET
Date Received: 05/13/2015 12:44

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Mercury	0.20	0.20	0.20	0.090	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: 079SS-0407-0001-RB
Lab Sample ID: 240-50650-8
Lab Name: TestAmerica Canton
Job No.: 240-50650-1
SDG ID.:
Matrix: Water
Date Sampled: 05/13/2015 11:00
Reporting Basis: WET
Date Received: 05/13/2015 12:44

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	60	60	60	9.0	ug/L	U		1	6020
Antimony	0.19	2.0	1.0	0.16	ug/L	J		1	6020
Arsenic	2.4	5.0	1.0	0.18	ug/L	J	B	1	6020
Barium	4.0	5.0	4.0	1.1	ug/L	U		1	6020
Beryllium	0.36	1.0	1.0	0.053	ug/L	J		1	6020
Cadmium	0.29	2.0	1.0	0.061	ug/L	J		1	6020
Calcium	1000	2000	1000	240	ug/L	U		1	6020
Chromium	2.5	6.0	6.0	0.20	ug/L	J		1	6020
Cobalt	0.28	1.0	0.20	0.021	ug/L	J		1	6020
Copper	4.0	4.0	4.0	0.75	ug/L	U		1	6020
Iron	100	150	100	16	ug/L	U		1	6020
Lead	0.24	1.0	0.50	0.11	ug/L	J		1	6020
Magnesium	300	1000	300	48	ug/L	U		1	6020
Manganese	10	10	10	1.1	ug/L	U		1	6020
Nickel	1.5	5.0	3.0	0.23	ug/L	J		1	6020
Potassium	150	1000	150	30	ug/L	U		1	6020
Selenium	0.38	5.0	0.50	0.25	ug/L	J		1	6020
Silver	0.25	1.0	0.25	0.020	ug/L	U		1	6020
Sodium	400	1000	400	68	ug/L	U		1	6020
Thallium	0.22	2.0	1.5	0.074	ug/L	J		1	6020
Vanadium	0.75	5.0	1.5	0.23	ug/L	J		1	6020
Zinc	50	50	50	7.3	ug/L	U		1	6020

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

ICV Source: MTMSICVW_00047 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00121

Analyte	ICV 240-181424/7 05/18/2015 10:04				CCV 240-181424/160 05/18/2015 19:35				CCV 240-181424/167 05/18/2015 20:01			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	205		200	103	246		250	98	243		250	97
Antimony	42.7		40.0	107	51.0		50.0	102	51.7		50.0	103
Arsenic	39.7		40.0	99	47.7		50.0	95	49.0		50.0	98
Barium	40.7		40.0	102	50.4		50.0	101	50.7		50.0	101
Beryllium	40.5		40.0	101	49.4		50.0	99	50.1		50.0	100
Cadmium	40.6		40.0	102	49.9		50.0	100	49.7		50.0	99
Calcium	20600		20000	103	26200		25000	105	25800		25000	103
Chromium	40.2		40.0	100	49.2		50.0	98	48.9		50.0	98
Cobalt	38.5		40.0	96	45.1		50.0	90	45.4		50.0	91
Copper	39.3		40.0	98	45.1		50.0	90	45.3		50.0	91
Iron	10200		10000	102	12700		12500	102	12600		12500	100
Lead	39.1		40.0	98	47.1		50.0	94	46.9		50.0	94
Magnesium	20500		20000	103	24900		25000	100	24800		25000	99
Manganese	208		200	104	258		250	103	256		250	103
Potassium	20400		20000	102	24900		25000	100	24700		25000	99
Silver	38.5		40.0	96	46.1		50.0	92	46.4		50.0	93
Sodium	20400		20000	102	24900		25000	99	24800		25000	99
Thallium	37.2		40.0	93	45.3		50.0	91	45.1		50.0	90
Vanadium	39.8		40.0	100	49.0		50.0	98	48.4		50.0	97
Zinc	40.3	J	40.0	101	47.4	J	50.0	95	47.7	J	50.0	95
Nickel	40.8		40.0	102	46.5		50.0	93	46.6		50.0	93
Selenium	41.0		40.0	102	47.4		50.0	95	48.3		50.0	97

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

ICV Source: MTMSICVW_00048 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00122

Analyte	ICV 240-181554/7 05/19/2015 15:33				CCV 240-181554/100 05/19/2015 21:36				CCV 240-181554/112 05/19/2015 22:21			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Nickel	40.1		40.0	100	50.0		50.0	100	46.9		50.0	94
Selenium	40.1		40.0	100	54.7		50.0	109	49.6		50.0	99
Aluminum	195		200	97	255		250	102	238		250	95
Antimony	42.7		40.0	107					51.1		50.0	102
Arsenic	40.0		40.0	100	53.7		50.0	107	50.0		50.0	100
Barium	39.4		40.0	99	52.2		50.0	104	47.7		50.0	95
Beryllium	39.8		40.0	100	50.8		50.0	102	50.2		50.0	100
Cadmium	39.7		40.0	99	51.8		50.0	104	46.3		50.0	93
Calcium	18800		20000	94	24700		25000	99	23400		25000	94
Chromium	39.7		40.0	99	49.7		50.0	99	47.1		50.0	94
Cobalt	39.4		40.0	98	50.1		50.0	100	47.2		50.0	94
Copper	40.7		40.0	102	49.5		50.0	99	46.8		50.0	94
Iron	9910		10000	99	12500		12500	100	11700		12500	94
Lead	39.1		40.0	98	50.6		50.0	101	47.1		50.0	94
Magnesium	19700		20000	99	25100		25000	100	23400		25000	94
Manganese	193		200	97	248		250	99	234		250	94
Potassium	19700		20000	99	25400		25000	102	24300		25000	97
Silver	39.6		40.0	99	50.7		50.0	101	47.1		50.0	94
Sodium	19600		20000	98	24900		25000	100	23600		25000	94
Thallium	37.5		40.0	94	48.6		50.0	97	45.5		50.0	91
Vanadium	39.5		40.0	99	50.0		50.0	100	47.5		50.0	95
Zinc	40.1	J	40.0	100	50.0		50.0	100	47.3	J	50.0	95

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

ICV Source: MTMSICVW_00048 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00122

Analyte	CCV 240-181554/115 05/19/2015 22:33											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Nickel	48.0		50.0	96								
Selenium	51.4		50.0	103								
Aluminum	252		250	101								
Antimony	52.9		50.0	106								
Arsenic	50.6		50.0	101								
Barium	50.0		50.0	100								
Beryllium	51.7		50.0	103								
Cadmium	48.8		50.0	98								
Calcium	24200		25000	97								
Chromium	49.0		50.0	98								
Cobalt	48.8		50.0	98								
Copper	48.4		50.0	97								
Iron	12200		12500	98								
Lead	48.9		50.0	98								
Magnesium	24200		25000	97								
Manganese	244		250	98								
Potassium	25300		25000	101								
Silver	49.3		50.0	99								
Sodium	24000		25000	96								
Thallium	47.2		50.0	94								
Vanadium	49.2		50.0	98								
Zinc	48.3	J	50.0	97								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

ICV Source: MTMSICVW_00048 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00123

Analyte	ICV 240-182845/7 05/28/2015 10:27				CCV 240-182845/212 05/28/2015 22:42				CCV 240-182845/224 05/28/2015 23:24			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	202		200	101	230		250	92	264		250	105
Antimony	42.3		40.0	106	47.0		50.0	94	52.2		50.0	104
Arsenic	40.3		40.0	101	44.9		50.0	90	51.0		50.0	102
Barium	40.5		40.0	101	47.8		50.0	96	55.1		50.0	110
Cadmium	40.5		40.0	101	45.7		50.0	91	52.5		50.0	105
Calcium	19800		20000	99	23400		25000	94	26400		25000	106
Chromium	41.5		40.0	104	46.5		50.0	93	52.7		50.0	105
Cobalt	41.1		40.0	103	46.7		50.0	93	52.7		50.0	105
Copper	42.0		40.0	105	46.8		50.0	94	53.2		50.0	106
Iron	10300		10000	103	11800		12500	94	13400		12500	108
Lead	41.3		40.0	103	46.6		50.0	93	52.8		50.0	106
Magnesium	20700		20000	104	23200		25000	93	26500		25000	106
Manganese	205		200	102	236		250	94	268		250	107
Nickel	42.1		40.0	105	45.9		50.0	92	52.5		50.0	105
Potassium	20700		20000	103	24500		25000	98	27400		25000	110
Selenium	40.6		40.0	101	45.7		50.0	91	50.5		50.0	101
Silver	41.3		40.0	103	47.2		50.0	94	52.1		50.0	104
Sodium	20600		20000	103	23300		25000	93	26300		25000	105
Thallium	41.5		40.0	104	46.2		50.0	92	52.4		50.0	105
Zinc	41.3		40.0	103	46.8		50.0	94	52.9		50.0	106
Beryllium	39.8		40.0	99	48.9		50.0	98	49.8		50.0	100
Vanadium	41.4		40.0	103	46.7		50.0	93	52.8		50.0	106

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

ICV Source: MTMSICVW_00048 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00123

Analyte	CCV 240-182845/229 05/28/2015 23:42				CCV 240-182845/233 05/28/2015 23:56				CCV 240-182845/245 05/29/2015 00:39			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	243		250	97	240		250	96	231		250	92
Antimony	47.7		50.0	95	48.0		50.0	96	46.6		50.0	93
Arsenic	47.0		50.0	94	48.6		50.0	97	44.9		50.0	90
Barium	51.5		50.0	103	51.8		50.0	104	49.3		50.0	99
Cadmium	48.9		50.0	98	49.5		50.0	99	46.7		50.0	93
Calcium	24600		25000	98	24400		25000	98	23300		25000	93
Chromium	49.1		50.0	98	48.7		50.0	97	46.4		50.0	93
Cobalt	49.1		50.0	98	49.0		50.0	98	46.5		50.0	93
Copper	49.5		50.0	99	49.2		50.0	98	46.5		50.0	93
Iron	12600		12500	101	12400		12500	99	11800		12500	94
Lead	49.1		50.0	98	48.7		50.0	97	47.0		50.0	94
Magnesium	24500		25000	98	24100		25000	97	23100		25000	92
Manganese	250		250	100	247		250	99	236		250	94
Nickel	49.1		50.0	98	48.5		50.0	97	46.3		50.0	93
Potassium	25600		25000	102	25400		25000	102	24300		25000	97
Selenium	47.9		50.0	96	49.2		50.0	98	45.9		50.0	92
Silver	49.4		50.0	99	49.0		50.0	98	47.0		50.0	94
Sodium	24400		25000	97	24200		25000	97	23000		25000	92
Thallium	48.5		50.0	97	48.4		50.0	97	46.5		50.0	93
Zinc	49.1		50.0	98	48.9		50.0	98	46.0		50.0	92
Beryllium	50.4		50.0	101	53.2		50.0	106				
Vanadium	49.0		50.0	98	48.6		50.0	97	46.2		50.0	92

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

ICV Source: MTMSICVW_00048 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00122

Analyte	ICV 240-183211/7 06/01/2015 11:57				CCV 240-183211/32 06/01/2015 13:29				CCV 240-183211/44 06/01/2015 14:12			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Beryllium	41.7		40.0	104	51.6		50.0	103	50.5		50.0	101
Vanadium	40.0		40.0	100	49.3		50.0	99	47.3		50.0	95
Aluminum	201		200	101	247		250	99	246		250	98
Antimony	43.1		40.0	108	53.2		50.0	106	51.3		50.0	103
Arsenic	39.1		40.0	98	49.0		50.0	98	49.2		50.0	98
Barium	39.5		40.0	99	49.0		50.0	98	47.8		50.0	96
Cadmium	39.6		40.0	99	49.3		50.0	99	48.2		50.0	96
Calcium	20400		20000	102	25300		25000	101	25000		25000	100
Chromium	40.2		40.0	101	49.0		50.0	98	47.0		50.0	94
Cobalt	39.8		40.0	99	49.8		50.0	100	47.1		50.0	94
Copper	39.6		40.0	99	49.1		50.0	98	46.5		50.0	93
Iron	10200		10000	102	12600		12500	101	12400		12500	99
Lead	37.8		40.0	94	47.4		50.0	95	45.5		50.0	91
Magnesium	20400		20000	102	25000		25000	100	24800		25000	99
Manganese	208		200	104	258		250	103	248		250	99
Nickel	42.5		40.0	106	52.3		50.0	105	49.6		50.0	99
Potassium	20400		20000	102	24800		25000	99	24900		25000	100
Selenium	38.2		40.0	96	48.7		50.0	97	49.2		50.0	98
Silver	37.4		40.0	93	45.9		50.0	92				
Sodium	20300		20000	101	24700		25000	99	24800		25000	99
Thallium	36.1		40.0	90	45.4		50.0	91				
Zinc	41.4		40.0	103	51.4		50.0	103	48.7		50.0	97

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

ICV Source: MTMSICVW_00048 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00122

Analyte	CCV 240-183211/54 06/01/2015 14:47											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Beryllium	49.0		50.0	98								
Vanadium	47.9		50.0	96								
Aluminum	243		250	97								
Antimony	52.6		50.0	105								
Arsenic	48.1		50.0	96								
Barium	48.6		50.0	97								
Cadmium	47.9		50.0	96								
Calcium	24500		25000	98								
Chromium	47.9		50.0	96								
Cobalt	48.6		50.0	97								
Copper	47.8		50.0	96								
Iron	12400		12500	99								
Lead	45.8		50.0	92								
Magnesium	23700		25000	95								
Manganese	253		250	101								
Nickel	50.9		50.0	102								
Potassium	24100		25000	97								
Selenium	47.5		50.0	95								
Silver												
Sodium	23600		25000	94								
Thallium												
Zinc	51.1		50.0	102								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

ICV Source: MTHgStd_00016 Concentration Units: ug/L

CCV Source: MTHGCALW_00904

Analyte	ICV 240-180787/7-A 05/15/2015 08:53				CCV 240-180787/10-A 05/15/2015 11:16				CCV 240-180787/10-A 05/15/2015 11:36			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	4.80		5.00	96	4.93		5.00	99	4.96		5.00	99

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

ICV Source: MTHgStd_00016 Concentration Units: ug/L

CCV Source: MTHGCALW_00904

Analyte	CCV 240-180787/10-A 05/15/2015 11:53											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	4.95		5.00	99								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

ICV Source: MTHgStd_00016 Concentration Units: ug/L

CCV Source: MTHGCALW_00917

Analyte	ICV 240-182695/7-A 05/28/2015 10:29				CCV 240-182695/10-A 05/28/2015 10:54				CCV 240-182695/10-A 05/28/2015 11:20			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	4.72		5.00	94	4.72		5.00	94	4.88		5.00	98

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-181424/9 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00023

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	51.9	J	104	70-130
Antimony	2.00	2.17		109	70-130
Arsenic	5.00	5.03		101	70-130
Barium	5.00	5.06		101	70-130
Beryllium	1.00	0.885	J	89	70-130
Cadmium	1.00	1.07	J	107	70-130
Calcium	1000	1040	J	104	70-130
Chromium	2.00	2.09	J	105	70-130
Cobalt	1.00	0.978	J	98	70-130
Copper	2.00	1.98	J	99	70-130
Iron	100	107	J	107	70-130
Lead	1.00	0.991	J	99	70-130
Magnesium	1000	1070		107	70-130
Manganese	5.00	4.95	J	99	70-130
Nickel	2.00	1.90	J	95	70-130
Potassium	1000	1060		106	70-130
Selenium	5.00	5.11		102	70-130
Silver	1.00	0.986	J	99	70-130
Sodium	1000	1040		104	70-130
Thallium	2.00	1.82	J	91	70-130
Vanadium	5.00	5.09		102	70-130
Zinc	20.0	19.8	J	99	70-130

Lab Sample ID: CRI 240-181424/169 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00023

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	50.7	J	101	70-130
Antimony	2.00	2.05		102	70-130
Arsenic	5.00	4.90	J	98	70-130
Barium	5.00	5.12		102	70-130
Beryllium	1.00	0.979	J	98	70-130
Cadmium	1.00	1.16	J	116	70-130
Calcium	1000	1030	J	103	70-130
Chromium	2.00	2.02	J	101	70-130

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

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-181424/169 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00023

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Cobalt	1.00	0.980	J	98	70-130
Copper	2.00	1.65	J	83	70-130
Iron	100	108	J	108	70-130
Lead	1.00	1.02		102	70-130
Magnesium	1000	1050		105	70-130
Manganese	5.00	4.82	J	96	70-130
Nickel	2.00	1.25	J	62	70-130
Potassium	1000	1040		104	70-130
Selenium	5.00	5.06		101	70-130
Silver	1.00	0.992	J	99	70-130
Sodium	1000	1040		104	70-130
Thallium	2.00	1.82	J	91	70-130
Vanadium	5.00	5.07		101	70-130
Zinc	20.0	18.8	J	94	70-130

Lab Sample ID: CRI 240-181554/9 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00024

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	50.7	J	101	70-130
Antimony	2.00	1.99	J	99	70-130
Arsenic	5.00	4.66	J	93	70-130
Barium	5.00	4.78	J	96	70-130
Beryllium	1.00	0.877	J	88	70-130
Cadmium	1.00	0.936	J	94	70-130
Calcium	1000	939	J	94	70-130
Chromium	2.00	1.96	J	98	70-130
Cobalt	1.00	1.00		100	70-130
Copper	2.00	2.04	J	102	70-130
Iron	100	98.6	J	99	70-130
Lead	1.00	1.02		102	70-130
Magnesium	1000	999	J	100	70-130
Manganese	5.00	4.82	J	96	70-130
Nickel	2.00	2.07	J	103	70-130
Potassium	1000	987	J	99	70-130

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

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-181554/9 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00024

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Selenium	5.00	4.93	J	99	70-130
Silver	1.00	0.996	J	100	70-130
Sodium	1000	1010		101	70-130
Thallium	2.00	1.86	J	93	70-130
Vanadium	5.00	3.41	J	68	70-130
Zinc	20.0	19.6	J	98	70-130

Lab Sample ID: CRI 240-181554/117 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00024

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	48.3	J	97	70-130
Antimony	2.00	1.94	J	97	70-130
Arsenic	5.00	4.92	J	98	70-130
Barium	5.00	4.76	J	95	70-130
Beryllium	1.00	1.06		106	70-130
Cadmium	1.00	1.03	J	103	70-130
Calcium	1000	928	J	93	70-130
Chromium	2.00	1.95	J	98	70-130
Cobalt	1.00	1.03		103	70-130
Copper	2.00	1.82	J	91	70-130
Iron	100	96.3	J	96	70-130
Lead	1.00	1.00		100	70-130
Magnesium	1000	964	J	96	70-130
Manganese	5.00	4.70	J	94	70-130
Nickel	2.00	1.96	J	98	70-130
Potassium	1000	990	J	99	70-130
Selenium	5.00	5.24		105	70-130
Silver	1.00	0.981	J	98	70-130
Sodium	1000	988	J	99	70-130
Thallium	2.00	1.82	J	91	70-130
Vanadium	5.00	3.40	J	68	70-130
Zinc	20.0	19.0	J	95	70-130

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

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-182845/9 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00024

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	48.7	J	97	70-130
Antimony	2.00	2.18		109	70-130
Arsenic	5.00	5.05		101	70-130
Barium	5.00	4.99	J	100	70-130
Beryllium	1.00	0.968	J	97	70-130
Cadmium	1.00	1.04	J	104	70-130
Calcium	1000	988	J	99	70-130
Chromium	2.00	2.04		102	70-130
Cobalt	1.00	1.04		104	70-130
Copper	2.00	2.16	J	108	70-130
Iron	100	105	J	105	70-130
Lead	1.00	1.06		106	70-130
Magnesium	1000	1050		105	70-130
Manganese	5.00	4.71	J	94	70-130
Nickel	2.00	2.16	J	108	70-130
Potassium	1000	1040		104	70-130
Selenium	5.00	5.11		102	70-130
Silver	1.00	1.05		105	70-130
Sodium	1000	1040		104	70-130
Thallium	2.00	1.99	J	100	70-130
Vanadium	5.00	3.55	J	71	70-130
Zinc	20.0	20.3	J	101	70-130

Lab Sample ID: CRI 240-182845/231 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00024

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	49.8	J	100	70-130
Antimony	2.00	1.99	J	100	70-130
Arsenic	5.00	4.77	J	95	70-130
Barium	5.00	5.21		104	70-130
Beryllium	1.00	1.46		146	70-130
Cadmium	1.00	1.06	J	106	70-130
Calcium	1000	1020	J	102	70-130
Chromium	2.00	2.15		107	70-130

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

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-182845/231 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00024

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Cobalt	1.00	1.06		106	70-130
Copper	2.00	2.08	J	104	70-130
Iron	100	114	J	114	70-130
Lead	1.00	1.13		113	70-130
Magnesium	1000	1030		103	70-130
Manganese	5.00	5.08		102	70-130
Nickel	2.00	1.66	J	83	70-130
Potassium	1000	1080		108	70-130
Selenium	5.00	5.07		101	70-130
Silver	1.00	1.04		104	70-130
Sodium	1000	1040		104	70-130
Thallium	2.00	2.00		100	70-130
Vanadium	5.00	3.45	J	69	70-130
Zinc	20.0	20.5	J	102	70-130

Lab Sample ID: CRI 240-182845/249 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00024

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	48.3	J	97	70-130
Antimony	2.00	2.07		104	70-130
Arsenic	5.00	4.64	J	93	70-130
Barium	5.00	5.15		103	70-130
Beryllium	1.00	1.20		120	70-130
Cadmium	1.00	1.11	J	111	70-130
Calcium	1000	1010	J	101	70-130
Chromium	2.00	2.14		107	70-130
Cobalt	1.00	1.10		110	70-130
Copper	2.00	2.11	J	105	70-130
Iron	100	110	J	110	70-130
Lead	1.00	1.16		116	70-130
Magnesium	1000	1020		102	70-130
Manganese	5.00	4.99	J	100	70-130
Nickel	2.00	1.64	J	82	70-130
Potassium	1000	1100		110	70-130

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

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-182845/249 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00024

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Selenium	5.00	5.13		103	70-130
Silver	1.00	1.04		104	70-130
Sodium	1000	1040		104	70-130
Thallium	2.00	2.05		103	70-130
Vanadium	5.00	3.53	J	71	70-130
Zinc	20.0	20.7	J	103	70-130

Lab Sample ID: CRI 240-183211/11 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00024

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	49.7	J	99	70-130
Antimony	2.00	2.10		105	70-130
Arsenic	5.00	4.84	J	97	70-130
Barium	5.00	4.84	J	97	70-130
Beryllium	1.00	1.02		102	70-130
Cadmium	1.00	1.02	J	102	70-130
Calcium	1000	1010	J	101	70-130
Chromium	2.00	2.02		101	70-130
Cobalt	1.00	1.03		103	70-130
Copper	2.00	2.02	J	101	70-130
Iron	100	106	J	106	70-130
Lead	1.00	0.969	J	97	70-130
Magnesium	1000	1050		105	70-130
Manganese	5.00	4.72	J	94	70-130
Nickel	2.00	2.19	J	110	70-130
Potassium	1000	1040		104	70-130
Selenium	5.00	4.89	J	98	70-130
Silver	1.00	0.954	J	95	70-130
Sodium	1000	1030		103	70-130
Thallium	2.00	1.79	J	90	70-130
Vanadium	5.00	3.64	J	73	70-130
Zinc	20.0	20.4	J	102	70-130

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

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Method: 6020 Instrument ID: I10

Lab Sample ID: CRI 240-183211/56 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00024

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	50.0	50.9	J	102	70-130
Antimony	2.00	2.06		103	70-130
Arsenic	5.00	4.91	J	98	70-130
Barium	5.00	4.84	J	97	70-130
Beryllium	1.00	1.02		102	70-130
Cadmium	1.00	0.919	J	92	70-130
Calcium	1000	1010	J	101	70-130
Chromium	2.00	1.90	J	95	70-130
Cobalt	1.00	1.04		104	70-130
Copper	2.00	2.40	J	120	70-130
Iron	100	110	J	110	70-130
Lead	1.00	0.989	J	99	70-130
Magnesium	1000	1040		104	70-130
Manganese	5.00	4.99	J	100	70-130
Nickel	2.00	2.24	J	112	70-130
Potassium	1000	1050		105	70-130
Selenium	5.00	4.93	J	99	70-130
Silver	1.00	0.922	J	92	70-130
Sodium	1000	1010		101	70-130
Thallium	2.00	1.79	J	89	70-130
Vanadium	5.00	3.51	J	70	70-130
Zinc	20.0	19.4	J	97	70-130

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

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Method: 7470A Instrument ID: H1

Lab Sample ID: CRA 240-180787/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00904

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.193	J	96	

Lab Sample ID: CRA 240-180787/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00904

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.170	J	85	

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

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Method: 7471A Instrument ID: H4

Lab Sample ID: CRA 240-182695/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00917

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.233		116	

Lab Sample ID: CRA 240-182695/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00917

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.232		116	

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

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-181424/8 05/18/2015 10:07		CCB 240-181424/161 05/18/2015 19:39		CCB 240-181424/168 05/18/2015 20:05			
		Found	C	Found	C	Found	C	Found	C
Aluminum	60	60	U	60	U	60	U		
Antimony	2.0	0.335	J	1.0	U	1.0	U		
Arsenic	5.0	0.188	J	0.215	J	0.366	J		
Barium	5.0	4.0	U	4.0	U	4.0	U		
Beryllium	1.0	1.0	U	1.0	U	0.151	J		
Cadmium	2.0	1.0	U	0.0840	J	0.117	J		
Calcium	2000	1000	U	1000	U	1000	U		
Chromium	6.0	6.0	U	6.0	U	6.0	U		
Cobalt	1.0	0.20	U	0.20	U	0.0500	J		
Copper	4.0	4.0	U	4.0	U	4.0	U		
Iron	150	100	U	100	U	100	U		
Lead	1.0	0.50	U	0.50	U	0.50	U		
Magnesium	1000	300	U	300	U	300	U		
Manganese	10	10	U	10	U	10	U		
Potassium	1000	35.0	J	150	U	150	U		
Silver	1.0	0.25	U	0.25	U	0.25	U		
Sodium	1000	400	U	400	U	400	U		
Thallium	2.0	1.5	U	0.0750	J	0.130	J		
Vanadium	5.0	1.5	U	1.5	U	1.5	U		
Zinc	50	50	U	50	U	50	U		
Nickel	5.0	3.0	U	3.0	U	3.0	U		
Selenium	5.0	0.50	U	0.317	J	0.396	J		

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-181554/8 05/19/2015 15:37		CCB 240-181554/101 05/19/2015 21:40		CCB 240-181554/113 05/19/2015 22:25		CCB 240-181554/116 05/19/2015 22:37	
		Found	C	Found	C	Found	C	Found	C
Nickel	5.0	3.0	U	3.0	U	3.0	U	3.0	U
Selenium	5.0	0.50	U	0.292	J	0.444	J	0.272	J
Aluminum	60	60	U	60	U	60	U	60	U
Antimony	2.0	0.218	J	1.0	U	1.0	U	1.0	U
Arsenic	5.0	0.216	J	1.0	U	0.321	J	1.0	U
Barium	5.0	4.0	U	4.0	U	4.0	U	4.0	U
Beryllium	1.0	1.0	U	1.0	U	0.0630	J	1.0	U
Cadmium	2.0	1.0	U	0.0970	J	0.151	J	0.111	J
Calcium	2000	1000	U	1000	U	1000	U	1000	U
Chromium	6.0	6.0	U	6.0	U	6.0	U	6.0	U
Cobalt	1.0	0.20	U	0.20	U	0.0760	J	0.0390	J
Copper	4.0	4.0	U	4.0	U	4.0	U	4.0	U
Iron	150	100	U	100	U	100	U	100	U
Lead	1.0	0.50	U	0.50	U	0.50	U	0.50	U
Magnesium	1000	300	U	300	U	300	U	300	U
Manganese	10	10	U	10	U	10	U	10	U
Potassium	1000	150	U	150	U	150	U	150	U
Silver	1.0	0.25	U	0.25	U	0.25	U	0.25	U
Sodium	1000	400	U	400	U	400	U	400	U
Thallium	2.0	1.5	U	1.5	U	0.146	J	0.100	J
Vanadium	5.0	1.5	U	1.5	U	1.5	U	1.5	U
Zinc	50	50	U	50	U	50	U	50	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-182845/8 05/28/2015 10:31		CCB 240-182845/213 05/28/2015 22:45		CCB 240-182845/225 05/28/2015 23:28		CCB 240-182845/230 05/28/2015 23:46	
		Found	C	Found	C	Found	C	Found	C
Aluminum	60	60	U	60	U	60	U	60	U
Antimony	2.0	0.270	J	0.50	U	0.50	U	0.50	U
Arsenic	5.0	1.0	U	1.0	U	1.0	U	1.0	U
Barium	5.0	4.0	U	4.0	U	4.0	U	4.0	U
Cadmium	2.0	0.40	U	0.114	J	0.116	J	0.116	J
Calcium	2000	1000	U	1000	U	1000	U	1000	U
Chromium	2.0	1.5	U	1.5	U	1.5	U	1.5	U
Cobalt	1.0	0.20	U	0.0240	J	0.0320	J	0.0310	J
Copper	4.0	4.0	U	4.0	U	4.0	U	4.0	U
Iron	150	100	U	16.0	J	23.4	J	25.4	J
Lead	1.0	0.50	U	0.187	J	0.202	J	0.210	J
Magnesium	1000	300	U	300	U	300	U	300	U
Manganese	5.0	3.0	U	1.21	J	1.37	J	1.47	J
Nickel	5.0	1.5	U	1.5	U	1.5	U	1.5	U
Potassium	1000	50	U	50	U	50	U	50	U
Selenium	5.0	0.50	U	0.50	U	0.50	U	0.268	J
Silver	1.0	0.25	U	0.25	U	0.25	U	0.25	U
Sodium	1000	400	U	400	U	400	U	400	U
Thallium	2.0	1.0	U	0.102	J	0.119	J	0.0980	J
Zinc	40	20	U	20	U	20	U	20	U
Beryllium	1.0	0.50	U	0.239	J	0.308	J	0.180	J
Vanadium	5.0	1.5	U	1.5	U	1.5	U	1.5	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-182845/234 05/29/2015 00:00		CCB 240-182845/246 05/29/2015 00:43					
		Found	C	Found	C	Found	C	Found	C
Aluminum	60	60	U	60	U				
Antimony	2.0	0.50	U	0.50	U				
Arsenic	5.0	0.315	J	1.0	U				
Barium	5.0	4.0	U	4.0	U				
Cadmium	2.0	0.231	J	0.128	J				
Calcium	2000	1000	U	1000	U				
Chromium	2.0	1.5	U	1.5	U				
Cobalt	1.0	0.118	J	0.0580	J				
Copper	4.0	4.0	U	4.0	U				
Iron	150	21.3	J	28.6	J				
Lead	1.0	0.290	J	0.207	J				
Magnesium	1000	300	U	300	U				
Manganese	5.0	1.38	J	1.34	J				
Nickel	5.0	1.5	U	1.5	U				
Potassium	1000	50	U	50	U				
Selenium	5.0	0.518	J	0.50	U				
Silver	1.0	0.25	U	0.25	U				
Sodium	1000	400	U	400	U				
Thallium	2.0	0.265	J	0.198	J				
Zinc	40	20	U	20	U				
Beryllium	1.0	0.770	J	0.396	J				
Vanadium	5.0	1.5	U	1.5	U				

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-183211/8 06/01/2015 12:01		CCB 240-183211/33 06/01/2015 13:32		CCB 240-183211/45 06/01/2015 14:15		CCB 240-183211/55 06/01/2015 14:51	
		Found	C	Found	C	Found	C	Found	C
Beryllium	1.0	0.50	U	0.50	U	0.0620	J	0.119	J
Vanadium	5.0	1.5	U	1.5	U	1.5	U	1.5	U
Aluminum	60	60	U	60	U	60	U	60	U
Antimony	2.0	0.241	J	0.50	U	0.50	U	0.204	J
Arsenic	5.0	1.0	U	1.0	U	1.0	U	0.296	J
Barium	5.0	4.0	U	4.0	U	4.0	U	4.0	U
Cadmium	2.0	0.40	U	0.40	U	0.0800	J	0.40	U
Calcium	2000	1000	U	1000	U	1000	U	1000	U
Chromium	2.0	1.5	U	1.5	U	1.5	U	1.5	U
Cobalt	1.0	0.20	U	0.20	U	0.20	U	0.0740	J
Copper	4.0	4.0	U	4.0	U	4.0	U	4.0	U
Iron	150	100	U	100	U	100	U	16.4	J
Lead	1.0	0.50	U	0.50	U	0.50	U	0.50	U
Magnesium	1000	300	U	300	U	300	U	300	U
Manganese	5.0	3.0	U	3.0	U	3.0	U	3.0	U
Nickel	5.0	1.5	U	1.5	U	1.5	U	1.5	U
Potassium	1000	50	U	50	U	50	U	50	U
Selenium	5.0	0.50	U	0.50	U	0.50	U	0.445	J
Silver	1.0	0.25	U	0.25	U	0.25	U	0.25	U
Sodium	1000	400	U	400	U	400	U	400	U
Thallium	2.0	1.0	U	1.0	U	0.0910	J	0.138	J
Zinc	40	20	U	20	U	20	U	20	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-180787/8-A 05/15/2015 08:54		CCB 240-180787/11-A 05/15/2015 11:17		CCB 240-180787/11-A 05/15/2015 11:38		CCB 240-180787/11-A 05/15/2015 11:55	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U	0.20	U	0.20	U	0.20	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-182695/8-A 05/28/2015 10:31		CCB 240-182695/11-A 05/28/2015 10:56		CCB 240-182695/11-A 05/28/2015 11:21			
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U	0.20	U	0.20	U		

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-180747/1-A

Instrument Code: I10 Batch No.: 181424

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	60	U		6020_DoD
7440-36-0	Antimony	0.334	J		6020_DoD
7440-38-2	Arsenic	3.96	J		6020_DoD
7440-39-3	Barium	4.0	U		6020_DoD
7440-41-7	Beryllium	0.444	J		6020_DoD
7440-43-9	Cadmium	0.617	J		6020_DoD
7440-70-2	Calcium	1000	U		6020_DoD
7440-47-3	Chromium	2.16	J		6020_DoD
7440-48-4	Cobalt	0.362	J		6020_DoD
7440-50-8	Copper	4.0	U		6020_DoD
7439-89-6	Iron	100	U		6020_DoD
7439-92-1	Lead	0.463	J		6020_DoD
7439-95-4	Magnesium	300	U		6020_DoD
7439-96-5	Manganese	10	U		6020_DoD
7440-09-7	Potassium	150	U		6020_DoD
7440-22-4	Silver	0.0200	J		6020_DoD
7440-23-5	Sodium	400	U		6020_DoD
7440-28-0	Thallium	0.476	J		6020_DoD
7440-62-2	Vanadium	0.999	J		6020_DoD
7440-66-6	Zinc	50	U		6020_DoD

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-180747/1-A

Instrument Code: I10 Batch No.: 181554

CAS No.	Analyte	Concentration	C	Q	Method
7440-02-0	Nickel	3.0	U		6020_DoD
7782-49-2	Selenium	1.92	J		6020_DoD

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-182339/1-A ^2

Instrument Code: I10 Batch No.: 182845

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	0.803	J	D	6020_DoD
7440-36-0	Antimony	0.0180	J	D	6020_DoD
7440-38-2	Arsenic	0.0562	J	D	6020_DoD
7440-39-3	Barium	0.30	U		6020_DoD
7440-43-9	Cadmium	0.0312	J	D	6020_DoD
7440-70-2	Calcium	100	U		6020_DoD
7440-47-3	Chromium	0.284	J	D	6020_DoD
7440-48-4	Cobalt	0.0110	J	D	6020_DoD
7440-50-8	Copper	0.30	U		6020_DoD
7439-89-6	Iron	4.25	J	D	6020_DoD
7439-92-1	Lead	0.0606	J	D	6020_DoD
7439-95-4	Magnesium	25	U		6020_DoD
7439-96-5	Manganese	0.40	U		6020_DoD
7440-02-0	Nickel	0.25	U		6020_DoD
7440-09-7	Potassium	9.30	J	D	6020_DoD
7782-49-2	Selenium	0.060	U		6020_DoD
7440-22-4	Silver	0.050	U		6020_DoD
7440-23-5	Sodium	15.3	J	D	6020_DoD
7440-28-0	Thallium	0.15	U		6020_DoD
7440-66-6	Zinc	0.683	J	D	6020_DoD

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-182339/1-A ^2

Instrument Code: I10 Batch No.: 183211

CAS No.	Analyte	Concentration	C	Q	Method
7440-41-7	Beryllium	0.10	U		6020_DoD
7440-62-2	Vanadium	0.198	J	D	6020_DoD

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-180745/1-A

Instrument Code: H1 Batch No.: 181029

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.20	U		7470_DOD

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-182343/1-A

Instrument Code: H4 Batch No.: 182771

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.033	U		7471_DOD

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Lab Sample ID: ICSA 240-181424/10 Instrument ID: I10

Lab File ID: 010ICSA.d ICS Source: MTMSICSAW_00049

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**50000**	**47981**	**96**
Antimony		**0.199**	
Arsenic		**0.329**	
Barium		**0.0370**	
Beryllium		**0.0040**	
Cadmium		**0.205**	
Calcium	**50000**	**50477**	**101**
Chromium		**0.721**	
Cobalt		**0.0380**	
Copper		**0.327**	
Iron	**50000**	**49129**	**98**
Lead		**0.104**	
Magnesium	**50000**	**49954**	**100**
Manganese		**-0.0370**	
Potassium	**50000**	**48953**	**98**
Silver		**0.0090**	
Sodium	**50000**	**49998**	**100**
Thallium		**0.0310**	
Vanadium		**0.0320**	
Zinc		**-0.261**	
Boron		*1.40*	
Molybdenum	*1000*	*1086*	*109*
Nickel		*-0.293*	
Selenium		*0.298*	
Strontium		*0.333*	
Ti	*1000*	*1001*	*100*
Tin		*0.0610*	
Tungsten		*0.791*	

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Lab Sample ID: ICSAB 240-181424/11 Instrument ID: I10

Lab File ID: 011ICAB.d ICS Source: MTMSICSABW_00048

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Aluminum	**50000**	**47165**	**94**
Antimony	**100**	**107**	**107**
Arsenic	**100**	**104**	**104**
Barium	**100**	**101**	**101**
Beryllium	**100**	**102**	**102**
Cadmium	**100**	**101**	**101**
Calcium	**50000**	**49727**	**99**
Chromium	**100**	**99.4**	**99**
Cobalt	**100**	**102**	**102**
Copper	**100**	**102**	**102**
Iron	**50000**	**48874**	**98**
Lead	**100**	**101**	**101**
Magnesium	**50000**	**49138**	**98**
Manganese	**100**	**103**	**103**
Potassium	**50000**	**48478**	**97**
Silver	**100**	**101**	**101**
Sodium	**50000**	**48853**	**98**
Thallium	**100**	**102**	**102**
Vanadium	**100**	**100**	**100**
Zinc	**100**	**102**	**102**
Molybdenum	*1100*	*1191*	*108*
Nickel	*100*	*101*	*101*
Selenium	*100*	*104*	*104*
Strontium	*100*	*104*	*104*
Ti	*1100*	*1088*	*99*
Tin	*100*	*99.2*	*99*
Tungsten	*100*	*106*	*106*

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Lab Sample ID: ICSA 240-181424/137 Instrument ID: I10

Lab File ID: 137ICSA.d ICS Source: MTMSICSAW_00049

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**50000**	**50935**	**102**
Antimony		**0.0910**	
Arsenic		**0.236**	
Barium		**0.0450**	
Beryllium		**0.0280**	
Cadmium		**0.235**	
Calcium	**50000**	**53018**	**106**
Chromium		**0.797**	
Cobalt		**0.0470**	
Copper		**0.228**	
Iron	**50000**	**52072**	**104**
Lead		**0.136**	
Magnesium	**50000**	**52200**	**104**
Manganese		**0.0520**	
Potassium	**50000**	**52131**	**104**
Silver		**0.0130**	
Sodium	**50000**	**51552**	**103**
Thallium		**0.0380**	
Vanadium		**0.0580**	
Zinc		**-0.215**	
Boron		*19.6*	
Molybdenum	*1000*	*1139*	*114*
Nickel		*-0.562*	
Strontium		*0.346*	
Ti	*1000*	*1042*	*104*
Tin		*0.0340*	
Tungsten		*0.494*	

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Lab Sample ID: ICSAB 240-181424/138 Instrument ID: I10

Lab File ID: 138ICAB.d ICS Source: MTMSICSABW_00048

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Aluminum	**50000**	**47543**	**95**
Antimony	**100**	**106**	**106**
Arsenic	**100**	**102**	**102**
Barium	**100**	**103**	**103**
Beryllium	**100**	**106**	**106**
Cadmium	**100**	**99.7**	**100**
Calcium	**50000**	**49866**	**100**
Chromium	**100**	**100**	**100**
Cobalt	**100**	**99.6**	**100**
Copper	**100**	**95.7**	**96**
Iron	**50000**	**48002**	**96**
Lead	**100**	**101**	**101**
Magnesium	**50000**	**48822**	**98**
Manganese	**100**	**97.9**	**98**
Potassium	**50000**	**49285**	**99**
Silver	**100**	**100**	**100**
Sodium	**50000**	**48693**	**97**
Thallium	**100**	**102**	**102**
Vanadium	**100**	**103**	**103**
Zinc	**100**	**97.4**	**97**
Molybdenum	*1100*	*1196*	*109*
Nickel	*100*	*95.1*	*95*
Selenium	*100*	*102*	*102*
Strontium	*100*	*105*	*105*
Ti	*1100*	*1066*	*97*
Tin	*100*	*98.4*	*98*
Tungsten	*100*	*100*	*100*

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Lab Sample ID: ICSA 240-181554/10 Instrument ID: I10

Lab File ID: 010ICSA.d ICS Source: MTMSICSAW_00050

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Nickel		**0.0640**	
Selenium		**0.196**	
Aluminum	*50000*	*45166*	*90*
Antimony		*0.168*	
Arsenic		*0.409*	
Barium		*0.0300*	
Beryllium		*0.0010*	
Boron		*0.773*	
Cadmium		*0.0870*	
Calcium	*50000*	*47219*	*94*
Chromium		*0.645*	
Cobalt		*0.0220*	
Copper		*0.308*	
Iron	*50000*	*46946*	*94*
Lead		*0.0990*	
Lithium		*0.0100*	
Magnesium	*50000*	*46909*	*94*
Manganese		*0.127*	
Molybdenum	*1000*	*1055*	*105*
Potassium	*50000*	*46861*	*94*
Silver		*0.0110*	
Sodium	*50000*	*47013*	*94*
Strontium		*0.293*	
Thallium		*0.0290*	
Ti	*1000*	*982*	*98*
Tin		*0.0130*	
Tungsten		*0.653*	
Vanadium		*0.299*	
Zinc		*-0.320*	

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Lab Sample ID: ICSAB 240-181554/11 Instrument ID: I10

Lab File ID: 011ICAB.d ICS Source: MTMSICSABW_00049

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Nickel	**100**	**96.3**	**96**
Selenium	**100**	**101**	**101**
Aluminum	*50000*	*44646*	*89*
Antimony	*100*	*102*	*102*
Arsenic	*100*	*101*	*101*
Barium	*100*	*98.1*	*98*
Beryllium	*100*	*99.0*	*99*
Boron	*100*	*96.0*	*96*
Cadmium	*100*	*97.0*	*97*
Calcium	*50000*	*47589*	*95*
Chromium	*100*	*96.3*	*96*
Cobalt	*100*	*96.9*	*97*
Copper	*100*	*96.4*	*96*
Iron	*50000*	*47151*	*94*
Lead	*100*	*96.6*	*97*
Lithium	*100*	*83.9*	*84*
Magnesium	*50000*	*46808*	*94*
Manganese	*100*	*94.5*	*95*
Molybdenum	*1100*	*1178*	*107*
Potassium	*50000*	*47366*	*95*
Silver	*100*	*96.3*	*96*
Sodium	*50000*	*47591*	*95*
Strontium	*100*	*97.3*	*97*
Thallium	*100*	*96.5*	*97*
Ti	*1100*	*1086*	*99*
Tin	*100*	*101*	*101*
Tungsten	*100*	*99.1*	*99*
Vanadium	*100*	*95.6*	*96*
Zinc	*100*	*97.4*	*97*

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Lab Sample ID: ICSA 240-182845/10 Instrument ID: I10

Lab File ID: 010ICSA.d ICS Source: MTMSICSAW_00050

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**50000**	**45875**	**92**
Antimony		**0.120**	
Arsenic		**0.155**	
Barium		**0.0400**	
Cadmium		**0.0470**	
Calcium	**50000**	**48379**	**97**
Chromium		**0.659**	
Cobalt		**0.0310**	
Copper		**0.355**	
Iron	**50000**	**48170**	**96**
Lead		**0.109**	
Magnesium	**50000**	**48638**	**97**
Manganese		**-0.122**	
Nickel		**-0.0610**	
Potassium	**50000**	**48279**	**97**
Selenium		**0.0950**	
Silver		**0.0120**	
Sodium	**50000**	**48510**	**97**
Thallium		**0.0320**	
Zinc		**-0.569**	
Beryllium		*0.0340*	
Boron		*0.804*	
Molybdenum	*1000*	*1067*	*107*
Strontium		*0.320*	
Ti	*1000*	*990*	*99*
Tin		*0.151*	
Vanadium		*0.397*	

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Lab Sample ID: ICSAB 240-182845/11 Instrument ID: I10

Lab File ID: 011ICAB.d ICS Source: MTMSICSABW_00049

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Aluminum	**50000**	**46556**	**93**
Antimony	**100**	**98.9**	**99**
Arsenic	**100**	**101**	**101**
Barium	**100**	**101**	**101**
Cadmium	**100**	**101**	**101**
Calcium	**50000**	**50054**	**100**
Chromium	**100**	**100**	**100**
Cobalt	**100**	**102**	**102**
Copper	**100**	**100**	**100**
Iron	**50000**	**49359**	**99**
Lead	**100**	**99.5**	**99**
Magnesium	**50000**	**49145**	**98**
Manganese	**100**	**100.0**	**100**
Nickel	**100**	**101**	**101**
Potassium	**50000**	**48997**	**98**
Selenium	**100**	**101**	**101**
Silver	**100**	**99.5**	**100**
Sodium	**50000**	**49071**	**98**
Thallium	**100**	**98.1**	**98**
Zinc	**100**	**102**	**102**
Beryllium	*100*	*99.6*	*100*
Boron	*100*	*102*	*102*
Lithium	*100*	*84.3*	*84*
Molybdenum	*1100*	*1154*	*105*
Strontium	*100*	*101*	*101*
Ti	*1100*	*1093*	*99*
Tin	*100*	*101*	*101*
Tungsten	*100*	*101*	*101*
Vanadium	*100*	*99.4*	*99*

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Lab Sample ID: ICSA 240-182845/180 Instrument ID: I10

Lab File ID: 180ICSA.d ICS Source: MTMSICSAW_00050

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**50000**	**45621**	**91**
Antimony		**0.0490**	
Arsenic		**0.110**	
Barium		**0.0690**	
Cadmium		**-0.101**	
Calcium	**50000**	**49541**	**99**
Chromium		**0.729**	
Cobalt		**0.0440**	
Copper		**0.354**	
Iron	**50000**	**48406**	**97**
Lead		**0.181**	
Magnesium	**50000**	**48029**	**96**
Manganese		**-0.0450**	
Nickel		**-0.330**	
Potassium	**50000**	**49484**	**99**
Selenium		**0.237**	
Silver		**0.0160**	
Sodium	**50000**	**47571**	**95**
Thallium		**0.0330**	
Zinc		**-0.518**	
Beryllium		*0.107*	
Boron		*2.82*	
Molybdenum	*1000*	*1057*	*106*
Strontium		*0.362*	
Ti	*1000*	*988*	*99*
Tin		*0.124*	
Vanadium		*0.207*	

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Lab Sample ID: ICSAB 240-182845/181 Instrument ID: I10

Lab File ID: 181ICAB.d ICS Source: MTMSICSABW_00049

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Aluminum	**50000**	**46353**	**93**
Antimony	**100**	**101**	**101**
Arsenic	**100**	**97.3**	**97**
Barium	**100**	**105**	**105**
Cadmium	**100**	**97.2**	**97**
Calcium	**50000**	**51411**	**103**
Chromium	**100**	**99.9**	**100**
Cobalt	**100**	**101**	**101**
Copper	**100**	**99.9**	**100**
Iron	**50000**	**49478**	**99**
Lead	**100**	**99.8**	**100**
Magnesium	**50000**	**48442**	**97**
Manganese	**100**	**101**	**101**
Nickel	**100**	**101**	**101**
Potassium	**50000**	**50886**	**102**
Selenium	**100**	**99.6**	**100**
Silver	**100**	**99.8**	**100**
Sodium	**50000**	**48343**	**97**
Thallium	**100**	**100**	**100**
Zinc	**100**	**101**	**101**
Beryllium	*100*	*106*	*106*
Boron	*100*	*111*	*111*
Lithium	*100*	*84.0*	*84*
Molybdenum	*1100*	*1196*	*109*
Strontium	*100*	*107*	*107*
Ti	*1100*	*1113*	*101*
Tin	*100*	*102*	*102*
Tungsten	*100*	*96.2*	*96*
Vanadium	*100*	*99.9*	*100*

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Lab Sample ID: ICSA 240-183211/12 Instrument ID: I10

Lab File ID: 012ICSA.d ICS Source: MTMSICSAW_00050

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Beryllium		**0.0020**	
Vanadium		**0.339**	
Aluminum	*50000*	*46734*	*93*
Antimony		*0.0810*	
Arsenic		*0.166*	
Barium		*0.0360*	
Boron		*0.790*	
Cadmium		*0.129*	
Calcium	*50000*	*48159*	*96*
Chromium		*0.670*	
Cobalt		*0.0410*	
Copper		*0.279*	
Iron	*50000*	*47216*	*94*
Lead		*0.0930*	
Magnesium	*50000*	*47740*	*95*
Manganese		*-0.0150*	
Molybdenum	*1000*	*1079*	*108*
Nickel		*0.0960*	
Potassium	*50000*	*47979*	*96*
Selenium		*0.123*	
Silver		*0.0110*	
Sodium	*50000*	*47618*	*95*
Strontium		*0.295*	
Thallium		*0.0250*	
Ti	*1000*	*981*	*98*
Tin		*0.127*	
Zinc		*-1.62*	

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Lab Sample ID: ICSAB 240-183211/13 Instrument ID: I10

Lab File ID: 013ICAB.d ICS Source: MTMSICSABW_00049

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Beryllium	**100**	**103**	**103**
Vanadium	**100**	**95.2**	**95**
Aluminum	*50000*	*45286*	*91*
Antimony	*100*	*104*	*104*
Arsenic	*100*	*98.1*	*98*
Barium	*100*	*97.4*	*97*
Boron	*100*	*103*	*103*
Cadmium	*100*	*97.3*	*97*
Calcium	*50000*	*46999*	*94*
Chromium	*100*	*97.3*	*97*
Cobalt	*100*	*99.4*	*99*
Copper	*100*	*98.1*	*98*
Iron	*50000*	*46768*	*94*
Lead	*100*	*97.1*	*97*
Lithium	*100*	*89.2*	*89*
Magnesium	*50000*	*46638*	*93*
Manganese	*100*	*95.2*	*95*
Molybdenum	*1100*	*1193*	*108*
Nickel	*100*	*96.5*	*97*
Potassium	*50000*	*46349*	*93*
Selenium	*100*	*98.1*	*98*
Silver	*100*	*99.4*	*99*
Sodium	*50000*	*46316*	*93*
Strontium	*100*	*97.9*	*98*
Thallium	*100*	*97.1*	*97*
Ti	*1100*	*1047*	*95*
Tin	*100*	*101*	*101*
Tungsten	*100*	*98.0*	*98*
Zinc	*100*	*98.1*	*98*

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

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: 079SS-0400M-0001-SO MS
Lab ID: 240-50650-1 MS
Lab Name: TestAmerica Canton
Job No.: 240-50650-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 97.2

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	12300		11000		927	188	70-130	4 D	6020
Antimony	2.79		0.22	J	9.27	28	75-125	J D	6020
Arsenic	18.2		12		9.27	68	23-131	D	6020
Barium	90.2		84		9.27	64	10-199	4 D	6020
Beryllium	9.19		0.67		9.27	92	58-112	D	6020
Cadmium	8.32		0.27	J	9.27	87	58-110	D	6020
Calcium	3930		3500		927	47	70-130	J D	6020
Chromium	25.8		17		9.27	94	10-199	D	6020
Cobalt	17.0		9.0		9.27	87	55-110	D	6020
Copper	20.1		13		9.27	81	10-199	D	6020
Iron	20500		22000		927	-111	70-130	4 D	6020
Lead	36.1		29		9.27	74	10-199	D	6020
Magnesium	2670		1900		927	82	70-130	D	6020
Manganese	1000		1000		9.27	57	10-199	4 D	6020
Nickel	27.2		19		9.27	83	10-176	D	6020
Potassium	1490		660		927	90	70-130	D	6020
Selenium	8.60		1.1		9.27	80	39-116	D	6020
Silver	8.39		0.060	J	9.27	90	75-125	D	6020
Sodium	859		48	J	927	87	70-130	D	6020
Thallium	8.24		0.21	J	9.27	87	82-110	D	6020
Vanadium	27.3		18		9.27	97	39-129	D	6020
Zinc	74.7		66		9.27	92	10-199	4 D	6020
Mercury	0.213		0.056	J	0.149	105	80-120		7471A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: 079SS-0400M-0001-SO PDS | Lab ID: 240-50650-1 PDS

Lab Name: TestAmerica Canton | Job No.: 240-50650-1

SDG No.:

Matrix: Solid | Concentration Units: mg/Kg

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	28900		11000		18500	99	80-120	D	6020
Antimony	17.6		0.22	J	18.5	94	80-120	D	6020
Arsenic	187		12		185	94	80-120	D	6020
Barium	284		84		185	108	80-120	D	6020
Beryllium	167		0.67		185	90	80-120	D	6020
Cadmium	181		0.27	J	185	98	80-120	D	6020
Calcium	5100		3500		1850	87	80-120	D	6020
Chromium	195		17		185	96	80-120	D	6020
Cobalt	189		9.0		185	97	80-120	D	6020
Copper	194		13		185	98	80-120	D	6020
Iron	41200		22000		18500	106	80-120	D	6020
Lead	208		29		185	97	80-120	D	6020
Magnesium	3580		1900		1850	90	80-120	D	6020
Manganese	1100		1000		185	57	80-120	D J	6020
Nickel	204		19		185	99	80-120	D	6020
Potassium	2460		660		1850	97	80-120	D	6020
Selenium	178		1.1		185	96	80-120	D	6020
Silver	18.6		0.060	J	18.5	100	80-120	D	6020
Sodium	1840		48	J	1850	97	80-120	D	6020
Thallium	45.6		0.21	J	46.4	98	80-120	D	6020
Vanadium	186		18		185	90	80-120	D	6020
Zinc	235		66		185	91	80-120	D	6020

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VB - IN

6-IN
DUPLICATES
METALS

Client ID: 079SS-0400M-0001-SO DU
Lab ID: 240-50650-1 DU
Lab Name: TestAmerica Canton
Job No.: 240-50650-1
SDG No.:
% Solids for Sample: 97.2
% Solids for Duplicate: 97.2
Matrix: Solid
Concentration Units: mg/Kg

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Aluminum	190	11000		10100		4	D	6020
Antimony	0.37	0.22	J	0.225	J	3	D	6020
Arsenic	0.93	12		11.2		7	D	6020
Barium	0.93	84		83.1		1	D	6020
Beryllium	0.19	0.67		0.654		3	D	6020
Cadmium	0.37	0.27	J	0.304	J	13	D	6020
Calcium	370	3500		2910		18	D	6020
Chromium	0.93	17		15.7		9	D	6020
Cobalt	0.19	9.0		8.81		2	D	6020
Copper	0.74	13		12.7		0.5	D	6020
Iron	930	22000		20400		5	D	6020
Lead	0.56	29		28.8		1	D	6020
Magnesium	190	1900		1810		5	D	6020
Manganese	0.93	1000		997		0.1	D	6020
Nickel	0.93	19		19.2		2	D	6020
Potassium	190	660		618		7	D	6020
Selenium	0.93	1.1		1.09		4	D	6020
Silver	0.19	0.060	J	0.0605	J	0.6	D	6020
Sodium	190	48	J	43.8	J	9	D	6020
Thallium	0.37	0.21	J	0.227	J	6	D	6020
Vanadium	0.93	18		17.1		7	D	6020
Zinc	7.4	66		66.1		0.1	D	6020
Mercury	0.090	0.056	J	0.0591	J	5		7471A

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

FORM VI-IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 240-180747/2-A

Lab Name: TestAmerica Canton Job No.: 240-50650-1

Sample Matrix: Water LCS Source: MTICPMS2_00021

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Aluminum	10000	8930		89	80	120		6020
Antimony	100	99.6		100	80	120		6020
Arsenic	1000	952		95	80	120		6020
Barium	1000	1060		106	80	120		6020
Beryllium	1000	993		99	80	120		6020
Cadmium	1000	1020		102	80	120		6020
Calcium	10000	9580		96	80	120		6020
Chromium	1000	932		93	80	120		6020
Cobalt	1000	883		88	80	120		6020
Copper	1000	901		90	80	120		6020
Iron	10000	9690		97	80	120		6020
Lead	1000	978		98	80	120		6020
Magnesium	10000	9450		94	80	120		6020
Manganese	1000	963		96	80	120		6020
Potassium	10000	9270		93	80	120		6020
Silver	100	97.4		97	80	120		6020
Sodium	10000	9470		95	80	120		6020
Thallium	250	236		95	80	120		6020
Vanadium	1000	903		90	80	120		6020
Zinc	1000	989		99	80	120		6020

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

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 240-180747/2-A

Lab Name: TestAmerica Canton Job No.: 240-50650-1

Sample Matrix: Water LCS Source: MTICPMSA_00023

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Nickel	1000	922		92	80	120		6020
Selenium	1000	915		92	80	120		6020

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

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-182339/2-A ^2

Lab Name: TestAmerica Canton Job No.: 240-50650-1

Sample Matrix: Solid LCS Source: MTICPMS2_00021

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Aluminum	1000	934		93	80	120	D	6020
Antimony	10.0	8.98		90	68	113	D	6020
Arsenic	100	89.6		90	73	110	D	6020
Barium	100	100		100	70	110	D	6020
Cadmium	100	95.5		95	74	110	D	6020
Calcium	1000	976		98	80	120	D	6020
Chromium	100	98.0		98	70	110	D	6020
Cobalt	100	97.9		98	74	110	D	6020
Copper	100	99.0		99	73	110	D	6020
Iron	1000	988		99	80	120	D	6020
Lead	100	96.4		96	75	110	D	6020
Magnesium	1000	981		98	80	120	D	6020
Manganese	100	101		101	80	120	D	6020
Nickel	100	97.4		97	75	110	D	6020
Potassium	1000	1020		102	80	120	D	6020
Selenium	100	91.3		91	65	110	D	6020
Silver	10.0	9.62		96	60	114	D	6020
Sodium	1000	969		97	80	120	D	6020
Thallium	25.0	24.2		97	71	110	D	6020
Zinc	100	96.2		96	72	113	D	6020

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

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-182339/2-A ^2

Lab Name: TestAmerica Canton Job No.: 240-50650-1

Sample Matrix: Solid LCS Source: MTICPMSA_00023

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Beryllium	100	96.5		97	79	110	D	6020
Vanadium	100	94.1		94	72	110	D	6020

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

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-180745/2-A

Lab Name: TestAmerica Canton Job No.: 240-50650-1

Sample Matrix: Water LCS Source: MTHGCALW_00904

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	5.00	4.86		97	80	120		7470A

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

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-182343/2-A

Lab Name: TestAmerica Canton | Job No.: 240-50650-1

Sample Matrix: Solid | LCS Source: MTHGCALW_00914

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Mercury	0.833	0.802		96	80	120		7471A

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

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 240-50650-1

SDG No:

Lab Name: TestAmerica Canton Job No: 240-50650-1

Matrix: Solid Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Aluminum	11000		10400		1.4	D	6020
Antimony	0.33	J	0.226	J	NC	D	6020
Arsenic	12		11.3		NC	D	6020
Barium	82		77.7		5.1	D	6020
Beryllium	0.67		0.710	J	NC	D	6020
Cadmium	0.54	J	0.287	J	NC	D	6020
Calcium	3600	J	3480		NC	D	6020
Chromium	17		17.0		NC	D	6020
Cobalt	9.3		8.95		NC	D	6020
Copper	13		12.8		NC	D	6020
Iron	22000		21400		NC	D	6020
Lead	29		28.2		4.5	D	6020
Magnesium	1900		1910		NC	D	6020
Manganese	1100		994		7.4	D	6020
Nickel	19		19.4		NC	D	6020
Potassium	710	J	653	J	NC	D	6020
Selenium	1.3	J	1.16	J	NC	D	6020
Silver	0.061	J	0.0566	J	NC	D	6020
Sodium	110	J	75.3	J	NC	D	6020
Thallium	0.44	J	0.219	J	NC	D	6020
Vanadium	18		18.4		NC	D	6020
Zinc	71	J	66.3		NC	D	6020

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

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-50650-1

SDG Number:

Matrix: Solid Instrument ID: I10

Method: 6020 DL Date: 09/15/2014 17:22

Prep Method: 3050B

ISM Prep Method: Increment, Prep

Analyte	Wavelength/ Mass	LOQ (mg/Kg)	DL (mg/Kg)
Aluminum	27.00	20	0.62
Antimony	121.00	0.4	0.014
Arsenic	75.00	1	0.026
Barium	137.00	1	0.22
Beryllium	9.00	0.2	0.011
Cadmium	111.00	0.4	0.0037
Calcium	43.00	400	22
Chromium	52.00	1	0.06
Cobalt	59.00	0.2	0.0017
Copper	65.00	0.8	0.097
Iron	56.00	100	3.2
Lead	208.00	0.6	0.045
Magnesium	25.00	200	4
Manganese	55.00	1	0.12
Nickel	60.00	1	0.039
Potassium	39.00	200	4.9
Selenium	78.00	1	0.04
Silver	107.00	0.2	0.0014
Sodium	23.00	200	8.7
Thallium	205.00	0.4	0.019
Vanadium	51.00	1	0.037
Zinc	66.00	8	0.5

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-50650-1

SDG Number:

Matrix: Solid Instrument ID: I10

Method: 6020 XMDL Date: 09/15/2014 17:24

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Aluminum	27.00	60	9
Antimony	121.00	2	0.16
Arsenic	75.00	5	0.18
Barium	137.00	5	1.1
Beryllium	9.00	1	0.053
Cadmium	111.00	2	0.061
Calcium	43.00	2000	240
Chromium	52.00	2	0.2
Cobalt	59.00	1	0.021
Copper	65.00	4	0.75
Iron	56.00	150	16
Lead	208.00	1	0.11
Magnesium	25.00	1000	48
Manganese	55.00	5	1.1
Nickel	60.00	5	0.23
Potassium	39.00	1000	30
Selenium	78.00	5	0.25
Silver	107.00	1	0.02
Sodium	23.00	1000	68
Thallium	205.00	2	0.074
Vanadium	51.00	5	0.23
Zinc	66.00	40	7.3

9-IN
DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job Number: 240-50650-1

SDG Number:

Matrix: Water Instrument ID: I10

Method: 6020 DL Date: 09/15/2014 17:25

Prep Method: 3005A

Analyte	Wavelength/ Mass	LOQ (ug/L)	DL (ug/L)
Aluminum	27.00	60	9
Antimony	121.00	2	0.16
Arsenic	75.00	5	0.18
Barium	137.00	5	1.1
Beryllium	9.00	1	0.053
Cadmium	111.00	2	0.061
Calcium	43.00	2000	240
Chromium	52.00	6	0.2
Cobalt	59.00	1	0.021
Copper	65.00	4	0.75
Iron	56.00	150	16
Lead	208.00	1	0.11
Magnesium	25.00	1000	48
Manganese	55.00	10	1.1
Nickel	60.00	5	0.23
Potassium	39.00	1000	30
Selenium	78.00	5	0.25
Silver	107.00	1	0.02
Sodium	23.00	1000	68
Thallium	205.00	2	0.074
Vanadium	51.00	5	0.23
Zinc	66.00	50	7.3

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job Number: 240-50650-1

SDG Number:

Matrix: Water Instrument ID: I10

Method: 6020 XMDL Date: 09/15/2014 17:25

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Aluminum	27.00	60	9
Antimony	121.00	2	0.16
Arsenic	75.00	5	0.18
Barium	137.00	5	1.1
Beryllium	9.00	1	0.053
Cadmium	111.00	2	0.061
Calcium	43.00	2000	240
Chromium	52.00	6	0.2
Cobalt	59.00	1	0.021
Copper	65.00	4	0.75
Iron	56.00	150	16
Lead	208.00	1	0.11
Magnesium	25.00	1000	48
Manganese	55.00	10	1.1
Nickel	60.00	5	0.23
Potassium	39.00	1000	30
Selenium	78.00	5	0.25
Silver	107.00	1	0.02
Sodium	23.00	1000	68
Thallium	205.00	2	0.074
Vanadium	51.00	5	0.23
Zinc	66.00	50	7.3

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-50650-1

SDG Number:

Matrix: Water Instrument ID: H1

Method: 7470A DL Date: 12/03/2014 00:00

Prep Method: 7470A

Analyte	Wavelength/ Mass	LOQ (ug/L)	DL (ug/L)
Mercury	253.7	0.2	0.09

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-50650-1

SDG Number:

Matrix: Water Instrument ID: H1

Method: 7470A XMDL Date: 09/17/2014 14:19

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.2	0.09

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-50650-1

SDG Number:

Matrix: Solid Instrument ID: H4

Method: 7471A DL Date: 02/16/2010 09:46

Prep Method: 7471A

ISM Prep Method: Increment, Prep

Analyte	Wavelength/ Mass	LOQ (mg/Kg)	DL (mg/Kg)
Mercury	253.7	0.1	0.014

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-50650-1

SDG Number:

Matrix: Solid Instrument ID: H4

Method: 7471A XMDL Date: 09/17/2014 14:14

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.2	0.09

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-50650-1

SDG No.:

Instrument ID: I10 Date: 05/07/2015 07:54

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Aluminum		200000	6020
Antimony		300	6020
Arsenic		10000	6020
Barium		10000	6020
Beryllium		10000	6020
Cadmium		4000	6020
Calcium		500000	6020
Chromium		10000	6020
Cobalt		10000	6020
Copper		10000	6020
Iron		200000	6020
Lead		4000	6020
Magnesium		500000	6020
Manganese		10000	6020
Nickel		10000	6020
Potassium		500000	6020
Selenium		10000	6020
Silver		300	6020
Sodium		500000	6020
Thallium		5000	6020
Vanadium		10000	6020
Zinc		10000	6020

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-50650-1

SDG No.:

Instrument ID: H1 Date: 12/10/2013 15:54

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Mercury		10	7470A

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-50650-1

SDG No.:

Instrument ID: H4 Date: 12/10/2013 15:55

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Mercury		10	7471A

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-180747/1-A	05/14/2015 09:26	180747		50	50
LCS 240-180747/2-A	05/14/2015 09:26	180747		50	50
240-50650-8	05/14/2015 09:26	180747		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Prep Method: 3050B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-182339/1-A ^2	05/26/2015 10:39	182339	1.00		100
LCS 240-182339/2-A ^2	05/26/2015 10:39	182339	1.00		100
240-50650-1	05/26/2015 10:39	182339	1.11		100
240-50650-1 DU	05/26/2015 10:39	182339	1.11		100
240-50650-1 MS	05/26/2015 10:39	182339	1.11		100
240-50650-3	05/26/2015 10:39	182339	1.13		100
240-50650-4	05/26/2015 10:39	182339	1.01		100
240-50650-5	05/26/2015 10:39	182339	1.04		100
240-50650-6	05/26/2015 10:39	182339	1.43		100
240-50650-7	05/26/2015 10:39	182339	1.33		100

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-180745/1-A	05/14/2015 14:00	180745		50	50
LCS 240-180745/2-A	05/14/2015 14:00	180745		50	50
240-50650-8	05/14/2015 14:00	180745		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Prep Method: 7471A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-182343/1-A	05/26/2015 15:15	182343	0.60		100
LCS 240-182343/2-A	05/26/2015 15:15	182343	0.60		100
240-50650-1	05/26/2015 15:15	182343	0.69		100
240-50650-1 DU	05/26/2015 15:15	182343	0.69		100
240-50650-1 MS	05/26/2015 15:15	182343	0.69		100
240-50650-3	05/26/2015 15:15	182343	0.58		100
240-50650-4	05/26/2015 15:15	182343	0.66		100
240-50650-5	05/26/2015 15:15	182343	0.69		100
240-50650-6	05/26/2015 15:15	182343	0.58		100
240-50650-7	05/26/2015 15:15	182343	0.69		100

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 05/18/2015 09:41 End Date: 05/18/2015 20:16

Lab Sample Id	D/F	Type	Time	Analytes																									
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Pb	Sb	Tl	V	Zn						
ZZZZZZ			09:41																										
ICIS 240-181424/2			09:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
STD1 240-181424/3 IC	1		09:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
STD2 240-181424/4 IC	1		09:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
STD3 240-181424/5 IC	1		09:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
STD4 240-181424/6 IC	1		10:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ICV 240-181424/7	1		10:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ICB 240-181424/8	1		10:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CRI 240-181424/9	1		10:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ICSA 240-181424/10	1		10:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ICSAB 240-181424/11	1		10:19	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCV 240-181424/12			10:22																										
CCB 240-181424/13			10:26																										
CCV 240-181424/14			10:30																										
CCB 240-181424/15			10:34																										
CCV 240-181424/16			10:38																										
CCB 240-181424/17			10:42																										
ZZZZZZ			10:46																										
ZZZZZZ			10:49																										
ZZZZZZ			10:53																										
ZZZZZZ			10:57																										
ZZZZZZ			11:00																										
ZZZZZZ			11:04																										
ZZZZZZ			11:07																										
ZZZZZZ			11:11																										
ZZZZZZ			11:14																										
ZZZZZZ			11:18																										
CCV 240-181424/28			11:22																										
CCB 240-181424/29			11:26																										
ZZZZZZ			11:30																										
ZZZZZZ			11:33																										
ZZZZZZ			11:37																										
ZZZZZZ			11:41																										
ZZZZZZ			11:45																										
ZZZZZZ			11:48																										
ZZZZZZ			11:52																										
ZZZZZZ			11:56																										
ZZZZZZ			12:00																										
ZZZZZZ			12:04																										
CCV 240-181424/40			12:08																										
CCB 240-181424/41			12:12																										
ZZZZZZ			12:16																										

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 05/18/2015 09:41 End Date: 05/18/2015 20:16

Lab Sample Id	D/F	Type	Time	Analytes																										
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Pb	Sb	Tl	V	Zn							
ZZZZZZ			12:19																											
ZZZZZZ			12:23																											
ZZZZZZ			12:27																											
ZZZZZZ			12:30																											
ZZZZZZ			12:33																											
ZZZZZZ			12:37																											
ZZZZZZ			12:41																											
ZZZZZZ			12:44																											
ZZZZZZ			12:48																											
CCV 240-181424/52			12:52																											
CCB 240-181424/53			12:55																											
ZZZZZZ			12:59																											
ZZZZZZ			13:03																											
ZZZZZZ			13:07																											
ZZZZZZ			13:10																											
ZZZZZZ			13:14																											
ZZZZZZ			13:18																											
ZZZZZZ			13:21																											
ZZZZZZ			13:24																											
ZZZZZZ			13:28																											
ZZZZZZ			13:31																											
CCV 240-181424/64			13:35																											
CCB 240-181424/65			13:39																											
ZZZZZZ			13:43																											
ZZZZZZ			13:47																											
ZZZZZZ			13:50																											
ZZZZZZ			13:54																											
ZZZZZZ			13:58																											
ZZZZZZ			14:02																											
ZZZZZZ			14:05																											
ZZZZZZ			14:09																											
ZZZZZZ			14:13																											
ZZZZZZ			14:17																											
CCV 240-181424/76			14:21																											
CCB 240-181424/77			14:24																											
ZZZZZZ			14:28																											
ZZZZZZ			14:32																											
ZZZZZZ			14:36																											
ZZZZZZ			14:40																											
ZZZZZZ			14:43																											
ZZZZZZ			14:47																											
ZZZZZZ			14:51																											

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 05/18/2015 09:41 End Date: 05/18/2015 20:16

Lab Sample Id	D/F	Type	Time	Analytes																										
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Pb	Sb	Tl	V	Zn							
ZZZZZZ			14:54																											
ZZZZZZ			14:57																											
ZZZZZZ			15:01																											
CCV 240-181424/88			15:05																											
CCB 240-181424/89			15:08																											
ZZZZZZ			15:12																											
ZZZZZZ			15:16																											
ZZZZZZ			15:20																											
ZZZZZZ			15:24																											
ZZZZZZ			15:28																											
ZZZZZZ			15:31																											
ZZZZZZ			15:35																											
ZZZZZZ			15:39																											
ZZZZZZ			15:42																											
ZZZZZZ			15:45																											
CCV 240-181424/100			15:49																											
CCB 240-181424/101			15:53																											
ZZZZZZ			15:56																											
ZZZZZZ			16:00																											
ZZZZZZ			16:04																											
ZZZZZZ			16:08																											
ZZZZZZ			16:12																											
ZZZZZZ			16:15																											
ZZZZZZ			16:19																											
ZZZZZZ			16:23																											
ZZZZZZ			16:27																											
ZZZZZZ			16:31																											
CCV 240-181424/112			16:34																											
CCB 240-181424/113			16:38																											
ZZZZZZ			16:42																											
ZZZZZZ			16:46																											
ZZZZZZ			16:50																											
ZZZZZZ			16:53																											
ZZZZZZ			16:57																											
ZZZZZZ			17:01																											
ZZZZZZ			17:05																											
ZZZZZZ			17:09																											
ZZZZZZ			17:12																											
ZZZZZZ			17:16																											
CCV 240-181424/124			17:20																											
CCB 240-181424/125			17:24																											
ZZZZZZ			17:28																											

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 05/18/2015 09:41 End Date: 05/18/2015 20:16

Lab Sample Id	D/F	Type	Time	Analytes																									
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Pb	Sb	Tl	V	Zn						
ZZZZZZ			17:31																										
ZZZZZZ			17:35																										
ZZZZZZ			17:39																										
ZZZZZZ			17:42																										
ZZZZZZ			17:46																										
CCV 240-181424/132			17:50																										
CCB 240-181424/133			17:54																										
CRI 240-181424/134			17:57																										
CCV 240-181424/135			18:01																										
CCB 240-181424/136			18:05																										
ICSA 240-181424/137	1		18:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ICSAB 240-181424/138	1		18:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ZZZZZZ			18:16																										
ZZZZZZ			18:20																										
ZZZZZZ			18:24																										
ZZZZZZ			18:28																										
ZZZZZZ			18:32																										
ZZZZZZ			18:35																										
ZZZZZZ			18:39																										
ZZZZZZ			18:42																										
ZZZZZZ			18:46																										
ZZZZZZ			18:50																										
CCV 240-181424/149			18:54																										
CCB 240-181424/150			18:57																										
ZZZZZZ			19:01																										
ZZZZZZ			19:05																										
ZZZZZZ			19:09																										
ZZZZZZ			19:12																										
ZZZZZZ			19:16																										
ZZZZZZ			19:20																										
ZZZZZZ			19:24																										
ZZZZZZ			19:27																										
ZZZZZZ			19:31																										
CCV 240-181424/160	1		19:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCB 240-181424/161	1		19:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CRI 240-181424/162			19:43																										
ZZZZZZ			19:46																										
MB 240-180747/1-A	1	R	19:50	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
LCS 240-180747/2-A	1	R	19:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
240-50650-8	1	R	19:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCV 240-181424/167	1		20:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCB 240-181424/168	1		20:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 05/18/2015 09:41 End Date: 05/18/2015 20:16

Lab Sample Id	D/F	Type	Time	Analytes																											
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Pb	Sb	Tl	V	Zn								
CRI 240-181424/169	1		20:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCV 240-181424/170			20:12																												
CCB 240-181424/171			20:16																												

Prep Types:
R = Total Recoverable

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 05/19/2015 15:09 End Date: 05/19/2015 22:49

Lab Sample Id	D/F	Type	Time	Analytes																									
				Ni	Se																								
ZZZZZZ			15:09																										
ICIS 240-181554/2			15:13	X	X																								
STD1 240-181554/3 IC	1		15:17	X	X																								
STD2 240-181554/4 IC	1		15:21	X	X																								
STD3 240-181554/5 IC	1		15:25	X	X																								
STD4 240-181554/6 IC	1		15:29	X	X																								
ICV 240-181554/7	1		15:33	X	X																								
ICB 240-181554/8	1		15:37	X	X																								
CRI 240-181554/9	1		15:41	X	X																								
ICSA 240-181554/10	1		15:45	X	X																								
ICSAB 240-181554/11	1		15:49	X	X																								
CCV 240-181554/12			15:52																										
CCB 240-181554/13			15:56																										
ZZZZZZ			16:00																										
ZZZZZZ			16:04																										
ZZZZZZ			16:08																										
ZZZZZZ			16:12																										
ZZZZZZ			16:15																										
CCV 240-181554/19			16:19																										
CCB 240-181554/20			16:23																										
CRI 240-181554/21			16:27																										
CCV 240-181554/22			16:32																										
CCB 240-181554/23			16:36																										
ZZZZZZ			16:39																										
ZZZZZZ			16:43																										
ZZZZZZ			16:47																										
ZZZZZZ			16:51																										
ZZZZZZ			16:55																										
ZZZZZZ			16:59																										
ZZZZZZ			17:03																										
ZZZZZZ			17:07																										
ZZZZZZ			17:11																										
ZZZZZZ			17:15																										
CCV 240-181554/34			17:19																										
CCB 240-181554/35			17:23																										
CCV 240-181554/36			17:27																										
CCB 240-181554/37			17:30																										
ZZZZZZ			17:34																										
ZZZZZZ			17:38																										
ZZZZZZ			17:42																										
ZZZZZZ			17:46																										
ZZZZZZ			17:50																										

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 05/19/2015 15:09 End Date: 05/19/2015 22:49

Lab Sample Id	D/F	Type	Time	Analytes																									
				Ni	Se																								
ZZZZZZ			17:54																										
ZZZZZZ			17:58																										
ZZZZZZ			18:02																										
CCV 240-181554/46			18:06																										
CCB 240-181554/47			18:10																										
ZZZZZZ			18:14																										
ZZZZZZ			18:18																										
ZZZZZZ			18:22																										
ZZZZZZ			18:25																										
ZZZZZZ			18:29																										
ZZZZZZ			18:33																										
ZZZZZZ			18:37																										
ZZZZZZ			18:41																										
CCV 240-181554/56			18:45																										
CCB 240-181554/57			18:49																										
ZZZZZZ			18:53																										
ZZZZZZ			18:57																										
ZZZZZZ			19:01																										
ZZZZZZ			19:05																										
ZZZZZZ			19:09																										
ZZZZZZ			19:12																										
ZZZZZZ			19:16																										
ZZZZZZ			19:20																										
CCV 240-181554/66			19:24																										
CCB 240-181554/67			19:28																										
ZZZZZZ			19:32																										
ZZZZZZ			19:36																										
ZZZZZZ			19:40																										
ZZZZZZ			19:44																										
ZZZZZZ			19:48																										
ZZZZZZ			19:52																										
ZZZZZZ			19:56																										
ZZZZZZ			19:59																										
CCV 240-181554/76			20:03																										
CCB 240-181554/77			20:07																										
ZZZZZZ			20:11																										
ZZZZZZ			20:15																										
ZZZZZZ			20:19																										
ZZZZZZ			20:23																										
ZZZZZZ			20:27																										
ZZZZZZ			20:30																										
ZZZZZZ			20:34																										

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 05/19/2015 15:09 End Date: 05/19/2015 22:49

Lab Sample Id	D/F	Type	Time	Analytes																										
				Ni	Se																									
ZZZZZZ			20:38																											
ZZZZZZ			20:42																											
ZZZZZZ			20:45																											
CCV 240-181554/88			20:49																											
CCB 240-181554/89			20:53																											
ZZZZZZ			20:57																											
ZZZZZZ			21:01																											
ZZZZZZ			21:05																											
ZZZZZZ			21:09																											
ZZZZZZ			21:13																											
ZZZZZZ			21:17																											
ZZZZZZ			21:20																											
ZZZZZZ			21:24																											
ZZZZZZ			21:28																											
ZZZZZZ			21:32																											
CCV 240-181554/100	1		21:36	X	X																									
CCB 240-181554/101	1		21:40	X	X																									
ZZZZZZ			21:44																											
ZZZZZZ			21:47																											
ZZZZZZ			21:51																											
ZZZZZZ			21:55																											
ZZZZZZ			21:59																											
ZZZZZZ			22:03																											
ZZZZZZ			22:06																											
ZZZZZZ			22:10																											
MB 240-180747/1-A	1	R	22:14	X	X																									
LCS 240-180747/2-A	1	R	22:18	X	X																									
CCV 240-181554/112	1		22:21	X	X																									
CCB 240-181554/113	1		22:25	X	X																									
240-50650-8	1	R	22:29	X	X																									
CCV 240-181554/115	1		22:33	X	X																									
CCB 240-181554/116	1		22:37	X	X																									
CRI 240-181554/117	1		22:41	X	X																									
CCV 240-181554/118			22:45																											
CCB 240-181554/119			22:49																											

Prep Types:
R = Total Recoverable

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 05/28/2015 10:06 End Date: 05/29/2015 01:01

Lab Sample Id	D/F	Type	Time	Analytes																									
				Ag	Al	As	Ba	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl	Zn							
ZZZZZZ			10:06																										
ICIS 240-182845/2			10:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
STD1 240-182845/3 IC	1		10:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
STD2 240-182845/4 IC	1		10:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
STD3 240-182845/5 IC	1		10:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
STD4 240-182845/6 IC	1		10:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
ICV 240-182845/7	1		10:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
ICB 240-182845/8	1		10:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
CRI 240-182845/9	1		10:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
ICSA 240-182845/10	1		10:38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
ICSAB 240-182845/11	1		10:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
CCV 240-182845/12			10:45																										
CCB 240-182845/13			10:49																										
CCV 240-182845/14			10:55																										
CCB 240-182845/15			10:59																										
ZZZZZZ			11:03																										
ZZZZZZ			11:06																										
ZZZZZZ			11:10																										
ZZZZZZ			11:13																										
ZZZZZZ			11:17																										
ZZZZZZ			11:20																										
ZZZZZZ			11:24																										
ZZZZZZ			11:27																										
ZZZZZZ			11:31																										
ZZZZZZ			11:35																										
CCV 240-182845/26			11:38																										
CCB 240-182845/27			11:42																										
ZZZZZZ			11:45																										
ZZZZZZ			11:49																										
ZZZZZZ			11:53																										
ZZZZZZ			11:56																										
ZZZZZZ			12:00																										
ZZZZZZ			12:03																										
ZZZZZZ			12:07																										
ZZZZZZ			12:11																										
ZZZZZZ			12:14																										
ZZZZZZ			12:18																										
CCV 240-182845/38			12:21																										
CCB 240-182845/39			12:25																										
ZZZZZZ			12:29																										
ZZZZZZ			12:32																										
ZZZZZZ			12:36																										

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 05/28/2015 10:06 End Date: 05/29/2015 01:01

Lab Sample Id	D/F	Type	Time	Analytes																									
				Ag	Al	As	Ba	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl	Zn						
ZZZZZZ			12:39																									
ZZZZZZ			12:43																									
ZZZZZZ			12:47																									
ZZZZZZ			12:50																									
ZZZZZZ			12:54																									
ZZZZZZ			12:57																									
ZZZZZZ			13:00																									
CCV 240-182845/50			13:04																									
CCB 240-182845/51			13:07																									
ZZZZZZ			13:11																									
CCV 240-182845/53			13:14																									
CCB 240-182845/54			13:18																									
CRI 240-182845/55			13:22																									
ZZZZZZ			13:25																									
ZZZZZZ			13:29																									
ZZZZZZ			13:32																									
CCV 240-182845/59			13:36																									
CCB 240-182845/60			13:39																									
CRI 240-182845/61			13:43																									
ZZZZZZ			13:47																									
ZZZZZZ			13:50																									
ZZZZZZ			13:54																									
ZZZZZZ			13:57																									
ZZZZZZ			14:00																									
ZZZZZZ			14:04																									
ZZZZZZ			14:07																									
ZZZZZZ			14:11																									
ZZZZZZ			14:15																									
CCV 240-182845/71			14:18																									
CCB 240-182845/72			14:22																									
ZZZZZZ			14:25																									
ZZZZZZ			14:29																									
ZZZZZZ			14:33																									
ZZZZZZ			14:36																									
ZZZZZZ			14:40																									
ZZZZZZ			14:43																									
ZZZZZZ			14:47																									
ZZZZZZ			14:50																									
ZZZZZZ			14:54																									
ZZZZZZ			14:57																									
CCV 240-182845/83			15:01																									
CCB 240-182845/84			15:05																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 05/28/2015 10:06 End Date: 05/29/2015 01:01

Lab Sample Id	D/F	Type	Time	Analytes																									
				Ag	Al	As	Ba	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl	Zn							
ZZZZZZ			15:08																										
ZZZZZZ			15:12																										
ZZZZZZ			15:16																										
ZZZZZZ			15:19																										
CCV 240-182845/89			15:23																										
CCB 240-182845/90			15:26																										
ZZZZZZ			15:30																										
ZZZZZZ			15:33																										
ZZZZZZ			15:37																										
ZZZZZZ			15:40																										
ZZZZZZ			15:44																										
CCV 240-182845/96			15:48																										
CCB 240-182845/97			15:51																										
CRI 240-182845/98			15:55																										
ZZZZZZ			15:58																										
ZZZZZZ			16:02																										
ZZZZZZ			16:05																										
ZZZZZZ			16:09																										
ZZZZZZ			16:13																										
ZZZZZZ			16:16																										
ZZZZZZ			16:20																										
CCV 240-182845/106			16:23																										
CCB 240-182845/107			16:27																										
CRI 240-182845/108			16:30																										
ZZZZZZ			16:34																										
ZZZZZZ			16:37																										
ZZZZZZ			16:41																										
ZZZZZZ			16:45																										
ZZZZZZ			16:48																										
ZZZZZZ			16:52																										
ZZZZZZ			16:55																										
ZZZZZZ			16:59																										
ZZZZZZ			17:02																										
CCV 240-182845/118			17:06																										
CCB 240-182845/119			17:10																										
ZZZZZZ			17:13																										
ZZZZZZ			17:17																										
ZZZZZZ			17:20																										
ZZZZZZ			17:24																										
ZZZZZZ			17:27																										
ZZZZZZ			17:31																										
ZZZZZZ			17:34																										

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 05/28/2015 10:06 End Date: 05/29/2015 01:01

Lab Sample Id	D/F	Type	Time	Analytes																									
				Ag	Al	As	Ba	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl	Zn							
ZZZZZZ			17:38																										
ZZZZZZ			17:41																										
ZZZZZZ			17:45																										
CCV 240-182845/130			17:48																										
CCB 240-182845/131			17:52																										
ZZZZZZ			17:56																										
ZZZZZZ			17:59																										
ZZZZZZ			18:02																										
ZZZZZZ			18:06																										
ZZZZZZ			18:09																										
ZZZZZZ			18:13																										
ZZZZZZ			18:17																										
ZZZZZZ			18:20																										
ZZZZZZ			18:24																										
ZZZZZZ			18:27																										
CCV 240-182845/142			18:31																										
CCB 240-182845/143			18:35																										
ZZZZZZ			18:38																										
CCV 240-182845/145			18:42																										
CCB 240-182845/146			18:46																										
CRI 240-182845/147			18:49																										
ZZZZZZ			18:53																										
ZZZZZZ			18:56																										
ZZZZZZ			19:00																										
ZZZZZZ			19:03																										
ZZZZZZ			19:07																										
ZZZZZZ			19:11																										
ZZZZZZ			19:14																										
ZZZZZZ			19:17																										
ZZZZZZ			19:21																										
CCV 240-182845/157			19:24																										
CCB 240-182845/158			19:28																										
ZZZZZZ			19:32																										
ZZZZZZ			19:35																										
ZZZZZZ			19:39																										
ZZZZZZ			19:43																										
ZZZZZZ			19:46																										
ZZZZZZ			19:50																										
ZZZZZZ			19:53																										
ZZZZZZ			19:57																										
ZZZZZZ			20:00																										
ZZZZZZ			20:04																										

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 05/28/2015 10:06 End Date: 05/29/2015 01:01

Lab Sample Id	D/F	Type	Time	Analytes																									
				Ag	Al	As	Ba	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl	Zn							
CCV 240-182845/169			20:08																										
CCB 240-182845/170			20:11																										
ZZZZZZ			20:15																										
ZZZZZZ			20:18																										
ZZZZZZ			20:22																										
ZZZZZZ			20:26																										
ZZZZZZ			20:29																										
ZZZZZZ			20:33																										
ZZZZZZ			20:37																										
CCV 240-182845/178			20:40																										
CCB 240-182845/179			20:44																										
ICSA 240-182845/180	1		20:47	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ICSAB 240-182845/181	1		20:51	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ZZZZZZ			20:54																										
ZZZZZZ			20:58																										
ZZZZZZ			21:01																										
ZZZZZZ			21:05																										
ZZZZZZ			21:09																										
ZZZZZZ			21:12																										
ZZZZZZ			21:15																										
ZZZZZZ			21:19																										
ZZZZZZ			21:22																										
ZZZZZZ			21:26																										
CCV 240-182845/192			21:30																										
CCB 240-182845/193			21:33																										
ZZZZZZ			21:37																										
ZZZZZZ			21:41																										
ZZZZZZ			21:44																										
ZZZZZZ			21:48																										
ZZZZZZ			21:51																										
ZZZZZZ			21:55																										
ZZZZZZ			21:59																										
ZZZZZZ			22:02																										
ZZZZZZ			22:06																										
ZZZZZZ			22:09																										
CCV 240-182845/204			22:13																										
CCB 240-182845/205			22:17																										
ZZZZZZ			22:20																										
ZZZZZZ			22:24																										
ZZZZZZ			22:27																										
ZZZZZZ			22:31																										
ZZZZZZ			22:34																										

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 05/28/2015 10:06 End Date: 05/29/2015 01:01

Lab Sample Id	D/F	Type	Time	Analytes																									
				Ag	Al	As	Ba	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl	Zn							
ZZZZZZ			22:38																										
CCV 240-182845/212	1		22:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCB 240-182845/213	1		22:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CRI 240-182845/214			22:49																										
MB 240-182339/1-A ^2	2	T	22:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
LCS 240-182339/2-A ^2	2	T	22:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
240-50650-1	2	T	23:00	X		X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X						
240-50650-1 SD	10	T	23:03	X		X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X						
240-50650-1 PDS	2	T	23:07	X		X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X						
240-50650-1 DU	2	T	23:10	X		X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X						
240-50650-1 MS	2	T	23:14	X		X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X						
240-50650-3	2	T	23:17	X		X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X						
240-50650-4	2	T	23:21	X		X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X						
CCV 240-182845/224	1		23:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCB 240-182845/225	1		23:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
240-50650-5	2	T	23:31	X		X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X						
240-50650-6	2	T	23:35	X		X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X						
240-50650-7	2	T	23:39	X		X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X						
CCV 240-182845/229	1		23:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCB 240-182845/230	1		23:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CRI 240-182845/231	1		23:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
ZZZZZZ			23:53																										
CCV 240-182845/233	1		23:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCB 240-182845/234	1		00:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
240-50650-1	20	T	00:04		X								X																
240-50650-1 SD	100	T	00:07		X								X																
240-50650-1 PDS	20	T	00:11		X								X																
240-50650-1 DU	20	T	00:14		X								X																
240-50650-1 MS	20	T	00:18		X								X																
240-50650-3	20	T	00:21		X								X																
240-50650-4	20	T	00:25		X								X																
240-50650-5	20	T	00:29		X								X																
240-50650-6	20	T	00:32		X								X																
240-50650-7	20	T	00:36		X								X																
CCV 240-182845/245	1		00:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCB 240-182845/246	1		00:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCV 240-182845/247			00:47																										
CCB 240-182845/248			00:50																										
CRI 240-182845/249	1		00:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
CCV 240-182845/250			00:58																										
CCB 240-182845/251			01:01																										

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 05/28/2015 10:06 End Date: 05/29/2015 01:01

Lab Sample Id	D/F	Type	Time	Analytes																													
				Ag	Al	As	Ba	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl	Zn											

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 06/01/2015 11:35 End Date: 06/01/2015 14:54

Lab Sample Id	D/F	Type	Time	Analytes																									
				Be	V																								
ZZZZZZ			11:35																										
ICIS 240-183211/2			11:39	X	X																								
STD1 240-183211/3 IC	1		11:43	X	X																								
STD2 240-183211/4 IC	1		11:46	X	X																								
STD3 240-183211/5 IC	1		11:50	X	X																								
STD4 240-183211/6 IC	1		11:54	X	X																								
ICV 240-183211/7	1		11:57	X	X																								
ICB 240-183211/8	1		12:01	X	X																								
ZZZZZZ			12:05																										
ZZZZZZ			12:08																										
CRI 240-183211/11	1		12:12	X	X																								
ICSA 240-183211/12	1		12:16	X	X																								
ICSAB 240-183211/13	1		12:19	X	X																								
CCV 240-183211/14			12:23																										
CCB 240-183211/15			12:26																										
CCV 240-183211/16			12:31																										
CCB 240-183211/17			12:35																										
ZZZZZZ			12:38																										
ZZZZZZ			12:42																										
ZZZZZZ			12:46																										
ZZZZZZ			12:49																										
ZZZZZZ			12:53																										
ZZZZZZ			12:57																										
ZZZZZZ			13:00																										
ZZZZZZ			13:04																										
CCV 240-183211/26			13:07																										
CCB 240-183211/27			13:11																										
CRI 240-183211/28			13:14																										
ZZZZZZ			13:18																										
ZZZZZZ			13:22																										
ZZZZZZ			13:25																										
CCV 240-183211/32	1		13:29	X	X																								
CCB 240-183211/33	1		13:32	X	X																								
CRI 240-183211/34			13:36																										
ZZZZZZ			13:40																										
ZZZZZZ			13:43																										
ZZZZZZ			13:47																										
ZZZZZZ			13:51																										
MB 240-182339/1-A ^2	2	T	13:54	X	X																								
LCS 240-182339/2-A ^2	2	T	13:58	X	X																								
240-50650-1	2	T	14:01	X	X																								
240-50650-1 SD	10	T	14:05	X	X																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Instrument ID: I10 Analysis Method: 6020

Start Date: 06/01/2015 11:35 End Date: 06/01/2015 14:54

Lab Sample Id	D/F	Type	Time	Analytes																									
				Be	V																								
240-50650-1 PDS	2	T	14:09	X	X																								
CCV 240-183211/44	1		14:12	X	X																								
CCB 240-183211/45	1		14:15	X	X																								
240-50650-1 DU	2	T	14:19	X	X																								
240-50650-1 MS	2	T	14:23	X	X																								
240-50650-3	2	T	14:26	X	X																								
240-50650-4	2	T	14:30	X	X																								
240-50650-5	2	T	14:33	X	X																								
240-50650-6	2	T	14:37	X	X																								
240-50650-7	2	T	14:40	X	X																								
ZZZZZZ			14:44																										
CCV 240-183211/54	1		14:47	X	X																								
CCB 240-183211/55	1		14:51	X	X																								
CRI 240-183211/56	1		14:54	X	X																								

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Instrument ID: H1 Analysis Method: 7470A

Start Date: 05/15/2015 08:43 End Date: 05/15/2015 11:55

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
IC 240-180787/1-A			08:43	X																								
IC 240-180787/2-A			08:44	X																								
IC 240-180787/3-A			08:46	X																								
IC 240-180787/4-A			08:48	X																								
IC 240-180787/5-A			08:49	X																								
IC 240-180787/6-A			08:51	X																								
ICV 240-180787/7-A	1		08:53	X																								
ICB 240-180787/8-A	1		08:54	X																								
CRA 240-180787/9-A	1		08:56	X																								
CCV 240-180787/10-A			09:01																									
CCB 240-180787/11-A			09:02																									
ZZZZZZ			09:04																									
ZZZZZZ			09:06																									
ZZZZZZ			09:07																									
ZZZZZZ			09:09																									
ZZZZZZ			09:10																									
ZZZZZZ			09:12																									
ZZZZZZ			09:14																									
ZZZZZZ			09:16																									
ZZZZZZ			09:17																									
ZZZZZZ			09:19																									
CCV 240-180787/10-A			09:21																									
CCB 240-180787/11-A			09:23																									
ZZZZZZ			09:25																									
ZZZZZZ			09:27																									
ZZZZZZ			09:28																									
CCV 240-180787/10-A			09:30																									
CCB 240-180787/11-A			09:31																									
CCV 240-180787/10-A			10:00																									
CCB 240-180787/11-A			10:01																									
ZZZZZZ			10:03																									
ZZZZZZ			10:04																									
ZZZZZZ			10:05																									
ZZZZZZ			10:07																									
ZZZZZZ			10:08																									
ZZZZZZ			10:10																									
ZZZZZZ			10:11																									
ZZZZZZ			10:13																									
ZZZZZZ			10:15																									
ZZZZZZ			10:17																									
CCV 240-180787/10-A			10:18																									
CCB 240-180787/11-A			10:20																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Instrument ID: H1 Analysis Method: 7470A

Start Date: 05/15/2015 08:43 End Date: 05/15/2015 11:55

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
ZZZZZZ			10:21																									
ZZZZZZ			10:23																									
ZZZZZZ			10:25																									
ZZZZZZ			10:27																									
ZZZZZZ			10:29																									
ZZZZZZ			10:31																									
ZZZZZZ			10:32																									
ZZZZZZ			10:33																									
ZZZZZZ			10:35																									
ZZZZZZ			10:36																									
CCV 240-180787/10-A			10:38																									
CCB 240-180787/11-A			10:39																									
ZZZZZZ			10:41																									
ZZZZZZ			10:42																									
ZZZZZZ			10:44																									
ZZZZZZ			10:45																									
ZZZZZZ			10:46																									
ZZZZZZ			10:48																									
ZZZZZZ			10:50																									
ZZZZZZ			10:51																									
ZZZZZZ			10:53																									
ZZZZZZ			10:54																									
CCV 240-180787/10-A			10:55																									
CCB 240-180787/11-A			10:57																									
ZZZZZZ			10:59																									
ZZZZZZ			11:01																									
ZZZZZZ			11:02																									
ZZZZZZ			11:04																									
ZZZZZZ			11:06																									
ZZZZZZ			11:07																									
ZZZZZZ			11:10																									
ZZZZZZ			11:11																									
ZZZZZZ			11:12																									
ZZZZZZ			11:14																									
CCV 240-180787/10-A	1		11:16	X																								
CCB 240-180787/11-A	1		11:17	X																								
MB 240-180745/1-A	1	T	11:19	X																								
LCS 240-180745/2-A	1	T	11:21	X																								
ZZZZZZ			11:23																									
ZZZZZZ			11:25																									
ZZZZZZ			11:26																									
ZZZZZZ			11:28																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Instrument ID: H1 Analysis Method: 7470A

Start Date: 05/15/2015 08:43 End Date: 05/15/2015 11:55

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
ZZZZZZ			11:30																									
ZZZZZZ			11:32																									
ZZZZZZ			11:33																									
ZZZZZZ			11:35																									
CCV 240-180787/10-A	1		11:36	X																								
CCB 240-180787/11-A	1		11:38	X																								
ZZZZZZ			11:39																									
ZZZZZZ			11:41																									
ZZZZZZ			11:42																									
ZZZZZZ			11:44																									
ZZZZZZ			11:46																									
ZZZZZZ			11:47																									
240-50650-8	1	T	11:49	X																								
ZZZZZZ			11:50																									
CRA 240-180787/9-A	1		11:52	X																								
CCV 240-180787/10-A	1		11:53	X																								
CCB 240-180787/11-A	1		11:55	X																								

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Instrument ID: H4 Analysis Method: 7471A

Start Date: 05/28/2015 10:16 End Date: 05/28/2015 14:26

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
IC 240-182695/1-A			10:16	X																								
IC 240-182695/2-A			10:18	X																								
IC 240-182695/3-A			10:20	X																								
IC 240-182695/4-A			10:22	X																								
IC 240-182695/5-A			10:24	X																								
IC 240-182695/6-A			10:27	X																								
ICV 240-182695/7-A	1		10:29	X																								
ICB 240-182695/8-A	1		10:31	X																								
CRA 240-182695/9-A	1		10:33	X																								
CCV 240-182695/10-A	1		10:54	X																								
CCB 240-182695/11-A	1		10:56	X																								
MB 240-182343/1-A	1	T	10:58	X																								
LCS 240-182343/2-A	1	T	11:00	X																								
240-50650-1	1	T	11:03	X																								
240-50650-1 DU	1	T	11:05	X																								
240-50650-1 MS	1	T	11:06	X																								
240-50650-3	1	T	11:08	X																								
240-50650-4	1	T	11:10	X																								
240-50650-5	1	T	11:12	X																								
240-50650-6	1	T	11:14	X																								
240-50650-7	1	T	11:16	X																								
CRA 240-182695/9-A	1		11:18	X																								
CCV 240-182695/10-A	1		11:20	X																								
CCB 240-182695/11-A	1		11:21	X																								
CCV 240-182695/10-A			13:07																									
CCB 240-182695/11-A			13:09																									
ZZZZZZ			13:11																									
ZZZZZZ			13:13																									
ZZZZZZ			13:15																									
ZZZZZZ			13:17																									
ZZZZZZ			13:19																									
ZZZZZZ			13:21																									
ZZZZZZ			13:23																									
ZZZZZZ			13:25																									
ZZZZZZ			13:27																									
ZZZZZZ			13:28																									
CCV 240-182695/10-A			13:31																									
CCB 240-182695/11-A			13:33																									
ZZZZZZ			13:35																									
ZZZZZZ			13:37																									
ZZZZZZ			13:38																									
ZZZZZZ			13:40																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Instrument ID: H4 Analysis Method: 7471A

Start Date: 05/28/2015 10:16 End Date: 05/28/2015 14:26

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
ZZZZZZ			13:42																									
ZZZZZZ			13:44																									
ZZZZZZ			13:46																									
ZZZZZZ			13:48																									
ZZZZZZ			13:50																									
ZZZZZZ			13:52																									
CCV 240-182695/10-A			13:54																									
CCB 240-182695/11-A			13:56																									
ZZZZZZ			13:58																									
ZZZZZZ			14:00																									
ZZZZZZ			14:02																									
ZZZZZZ			14:04																									
ZZZZZZ			14:06																									
ZZZZZZ			14:08																									
ZZZZZZ			14:10																									
ZZZZZZ			14:12																									
ZZZZZZ			14:14																									
ZZZZZZ			14:16																									
CCV 240-182695/10-A			14:18																									
CCB 240-182695/11-A			14:20																									
ZZZZZZ			14:22																									
CCV 240-182695/10-A			14:24																									
CCB 240-182695/11-A			14:26																									

Prep Types:
T = Total/NA

FORM XIII-IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 05/18/2015 End Date: 05/18/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc/1	Q	Element Sc/2	Q	Element Rh	Q	Element In	Q
STD1 240-181424/3 I	09:48	96		103		98		100		102	
STD2 240-181424/4 I	09:52	97		99		101		95		97	
STD3 240-181424/5 I	09:56	94		100		98		93		95	
STD4 240-181424/6 I	10:00	96		102		98		102		103	
ICV 240-181424/7	10:04	96		100		99		96		98	
ICB 240-181424/8	10:07	98		100		98		99		101	
CRI 240-181424/9	10:11	98		100		99		99		101	
ICSA 240-181424/10	10:15	95		99		99		92		96	
ICSAB 240-181424/11	10:19	94		101		98		93		96	
ICSA 240-181424/137	18:09	89		88		95		85		90	
ICSAB 240-181424/13	18:13	87		94		94		89		94	
CCV 240-181424/160	19:35	88		89		94		90		93	
CCB 240-181424/161	19:39	89		87		92		89		90	
MB 240-180747/1-A	19:50	83		81		86		84		86	
LCS 240-180747/2-A	19:54	82		83		83		85		85	
240-50650-8	19:57	86		87		89		88		90	
CCV 240-181424/167	20:01	86		87		90		87		90	
CCB 240-181424/168	20:05	89		87		91		91		92	
CRI 240-181424/169	20:09	88		89		91		90		94	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 05/18/2015 End Date: 05/18/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD1 240-181424/3 I	09:48	100		100		100					
STD2 240-181424/4 I	09:52	98		98		96					
STD3 240-181424/5 I	09:56	97		96		93					
STD4 240-181424/6 I	10:00	101		101		102					
ICV 240-181424/7	10:04	99		100		97					
ICB 240-181424/8	10:07	99		99		98					
CRI 240-181424/9	10:11	99		100		100					
ICSA 240-181424/10	10:15	97		97		93					
ICSAB 240-181424/11	10:19	97		98		93					
ICSA 240-181424/137	18:09	93		94		91					
ICSAB 240-181424/13	18:13	96		98		95					
CCV 240-181424/160	19:35	95		95		93					
CCB 240-181424/161	19:39	92		93		94					
MB 240-180747/1-A	19:50	87		88		93					
LCS 240-180747/2-A	19:54	90		93		91					
240-50650-8	19:57	92		92		96					
CCV 240-181424/167	20:01	94		95		94					
CCB 240-181424/168	20:05	93		95		96					
CRI 240-181424/169	20:09	94		95		97					

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 05/19/2015 End Date: 05/19/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc/1	Q	Element Sc/2	Q	Element Rh	Q	Element In	Q
STD1 240-181554/3 I	15:17	101		97		100		96		97	
STD2 240-181554/4 I	15:21	96		101		97		96		97	
STD3 240-181554/5 I	15:25	100		96		103		91		95	
STD4 240-181554/6 I	15:29	103		104		101		103		104	
ICV 240-181554/7	15:33	101		100		100		97		97	
ICB 240-181554/8	15:37	103		105		104		103		106	
CRI 240-181554/9	15:41	102		103		101		102		105	
ICSA 240-181554/10	15:45	93		97		98		93		94	
ICSAB 240-181554/11	15:49	93		99		99		94		97	
CCV 240-181554/100	21:36	95		98		99		91		94	
CCB 240-181554/101	21:40	98		101		100		97		103	
MB 240-180747/1-A	22:14	94		103		102		101		107	
LCS 240-180747/2-A	22:18	92		100		99		96		101	
CCV 240-181554/112	22:21	97		107		107		100		107	
CCB 240-181554/113	22:25	97		108		104		103		109	
240-50650-8	22:29	92		100		98		97		102	
CCV 240-181554/115	22:33	94		100		103		93		100	
CCB 240-181554/116	22:37	97		106		103		101		112	
CRI 240-181554/117	22:41	98		107		103		102		110	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 05/19/2015 End Date: 05/19/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD1 240-181554/3 I	15:17	98		97		98					
STD2 240-181554/4 I	15:21	100		101		98					
STD3 240-181554/5 I	15:25	95		96		94					
STD4 240-181554/6 I	15:29	104		103		103					
ICV 240-181554/7	15:33	100		99		98					
ICB 240-181554/8	15:37	103		102		104					
CRI 240-181554/9	15:41	103		102		103					
ICSA 240-181554/10	15:45	99		99		96					
ICSAB 240-181554/11	15:49	101		101		97					
CCV 240-181554/100	21:36	95		94		94					
CCB 240-181554/101	21:40	101		99		100					
MB 240-180747/1-A	22:14	102		100		103					
LCS 240-180747/2-A	22:18	99		99		99					
CCV 240-181554/112	22:21	103		102		101					
CCB 240-181554/113	22:25	105		103		103					
240-50650-8	22:29	98		98		100					
CCV 240-181554/115	22:33	97		96		94					
CCB 240-181554/116	22:37	102		101		102					
CRI 240-181554/117	22:41	103		103		102					

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 05/28/2015 End Date: 05/29/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc/1	Q	Element Sc/2	Q	Element Rh	Q	Element In	Q
STD1 240-182845/3 I	10:13	98		98		97		97		99	
STD2 240-182845/4 I	10:17	96		96		95		93		94	
STD3 240-182845/5 I	10:20	94		95		98		91		92	
STD4 240-182845/6 I	10:24	98		97		98		99		98	
ICV 240-182845/7	10:27	96		94		97		94		94	
ICB 240-182845/8	10:31	103		102		102		102		103	
CRI 240-182845/9	10:35	105		105		104		104		103	
ICSA 240-182845/10	10:38	89		95		90		90		92	
ICSAB 240-182845/11	10:42	91		93		95		91		92	
ICSA 240-182845/180	20:47	70		77		82		75		79	
ICSAB 240-182845/18	20:51	68		80		77		79		84	
CCV 240-182845/212	22:42	72		85		80		85		88	
CCB 240-182845/213	22:45	73		81		80		84		85	
MB 240-182339/1-A ^	22:52	70		77		78		81		82	
LCS 240-182339/2-A	22:56	68		75		76		78		76	
240-50650-1	23:00	73		77		82		77		78	
240-50650-1 SD	23:03	80		82		91		86		87	
240-50650-1 PDS	23:07	71		80		83		79		79	
240-50650-1 DU	23:10	78		79		95		78		80	
240-50650-1 MS	23:14	69		83		80		82		83	
240-50650-3	23:17	68		83		79		82		83	
240-50650-4	23:21	63		74		76		73		74	
CCV 240-182845/224	23:24	65		70		76		73		72	
CCB 240-182845/225	23:28	67		79		78		84		86	
240-50650-5	23:31	68		73		81		71		72	
240-50650-6	23:35	60		73		74		72		72	
240-50650-7	23:39	62		69		77		71		70	
CCV 240-182845/229	23:42	59		70		69		72		73	
CCB 240-182845/230	23:46	61		70		70		75		75	
CRI 240-182845/231	23:49	48		71		54		75		76	
CCV 240-182845/233	23:56	58		71		70		72		73	
CCB 240-182845/234	00:00	74		70		88		75		75	
240-50650-1	00:04	61		72		71		75		77	
240-50650-1 SD	00:07	60		73		68		77		78	
240-50650-1 PDS	00:11	74		70		92		71		72	
240-50650-1 DU	00:14	57		71		64		75		75	
240-50650-1 MS	00:18	52		73		61		75		76	
240-50650-3	00:21	75		73		89		76		76	
240-50650-4	00:25	47		72		53		75		76	
240-50650-5	00:29	62		72		71		75		76	
240-50650-6	00:32	64		73		78		75		77	
240-50650-7	00:36	62		75		70		78		79	

FORM XV - IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 05/28/2015 End Date: 05/29/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc/1	Q	Element Sc/2	Q	Element Rh	Q	Element In	Q
CCV 240-182845/245	00:39	76		75		93		75		77	
CCB 240-182845/246	00:43	61		73		70		77		78	
CRI 240-182845/249	00:54	66		72		79		76		77	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 05/28/2015 End Date: 05/29/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD1 240-182845/3 I	10:13	101		99		99					
STD2 240-182845/4 I	10:17	99		98		96					
STD3 240-182845/5 I	10:20	98		97		94					
STD4 240-182845/6 I	10:24	101		99		100					
ICV 240-182845/7	10:27	99		98		97					
ICB 240-182845/8	10:31	104		102		102					
CRI 240-182845/9	10:35	105		105		105					
ICSA 240-182845/10	10:38	100		100		97					
ICSAB 240-182845/11	10:42	101		101		97					
ICSA 240-182845/180	20:47	88		88		85					
ICSAB 240-182845/18	20:51	91		90		88					
CCV 240-182845/212	22:42	93		93		90					
CCB 240-182845/213	22:45	88		87		88					
MB 240-182339/1-A ^	22:52	86		86		91					
LCS 240-182339/2-A	22:56	86		86		85					
240-50650-1	23:00	86		85		85					
240-50650-1 SD	23:03	90		90		91					
240-50650-1 PDS	23:07	88		88		85					
240-50650-1 DU	23:10	88		88		85					
240-50650-1 MS	23:14	91		90		88					
240-50650-3	23:17	92		90		88					
240-50650-4	23:21	83		82		80					
CCV 240-182845/224	23:24	81		80		79					
CCB 240-182845/225	23:28	89		89		89					
240-50650-5	23:31	81		81		80					
240-50650-6	23:35	84		83		80					
240-50650-7	23:39	82		81		79					
CCV 240-182845/229	23:42	82		82		80					
CCB 240-182845/230	23:46	82		81		81					
CRI 240-182845/231	23:49	82		82		84					
CCV 240-182845/233	23:56	81		82		79					
CCB 240-182845/234	00:00	81		81		82					
240-50650-1	00:04	82		82		84					
240-50650-1 SD	00:07	83		82		85					
240-50650-1 PDS	00:11	80		80		80					
240-50650-1 DU	00:14	82		82		84					
240-50650-1 MS	00:18	82		82		84					
240-50650-3	00:21	81		81		83					
240-50650-4	00:25	81		81		84					
240-50650-5	00:29	81		81		84					
240-50650-6	00:32	82		82		84					
240-50650-7	00:36	85		85		87					

FORM XV - IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 05/28/2015 End Date: 05/29/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
CCV 240-182845/245	00:39	84		84		82					
CCB 240-182845/246	00:43	84		83		84					
CRI 240-182845/249	00:54	82		81		83					

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 06/01/2015 End Date: 06/01/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc/1	Q	Element Sc/2	Q	Element Rh	Q	Element In	Q
STD1 240-183211/3 I	11:43	101		101		101		99		98	
STD2 240-183211/4 I	11:46	104		102		103		96		95	
STD3 240-183211/5 I	11:50	101		99		101		90		91	
STD4 240-183211/6 I	11:54	102		102		100		100		100	
ICV 240-183211/7	11:57	101		97		99		95		94	
ICB 240-183211/8	12:01	102		101		100		101		101	
CRI 240-183211/11	12:12	101		99		100		100		99	
ICSA 240-183211/12	12:16	97		100		99		92		93	
ICSAB 240-183211/13	12:19	98		103		100		94		95	
CCV 240-183211/32	13:29	98		95		99		94		94	
CCB 240-183211/33	13:32	101		97		99		99		97	
MB 240-182339/1-A ^	13:54	97		90		92		95		94	
LCS 240-182339/2-A	13:58	95		87		91		92		90	
240-50650-1	14:01	94		91		94		90		90	
240-50650-1 SD	14:05	106		93		105		98		96	
240-50650-1 PDS	14:09	101		108		110		94		96	
CCV 240-183211/44	14:12	105		106		106		100		100	
CCB 240-183211/45	14:15	102		100		102		100		100	
240-50650-1 DU	14:19	99		99		101		91		93	
240-50650-1 MS	14:23	100		98		101		91		92	
240-50650-3	14:26	97		95		99		93		92	
240-50650-4	14:30	97		96		101		92		91	
240-50650-5	14:33	99		95		100		93		93	
240-50650-6	14:37	97		97		99		90		90	
240-50650-7	14:40	97		95		99		93		92	
CCV 240-183211/54	14:47	100		95		105		96		96	
CCB 240-183211/55	14:51	105		106		108		101		103	
CRI 240-183211/56	14:54	103		108		107		103		105	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

ICP-MS Instrument ID: I10 Start Date: 06/01/2015 End Date: 06/01/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD1 240-183211/3 I	11:43	100		100		101					
STD2 240-183211/4 I	11:46	98		99		97					
STD3 240-183211/5 I	11:50	93		94		90					
STD4 240-183211/6 I	11:54	99		101		101					
ICV 240-183211/7	11:57	98		99		98					
ICB 240-183211/8	12:01	100		101		101					
CRI 240-183211/11	12:12	100		101		102					
ICSA 240-183211/12	12:16	97		97		94					
ICSAB 240-183211/13	12:19	100		101		98					
CCV 240-183211/32	13:29	97		98		96					
CCB 240-183211/33	13:32	100		99		101					
MB 240-182339/1-A ^	13:54	99		99		111					
LCS 240-182339/2-A	13:58	97		98		102					
240-50650-1	14:01	97		100		100					
240-50650-1 SD	14:05	102		103		106					
240-50650-1 PDS	14:09	97		97		94					
CCV 240-183211/44	14:12	101		101		98					
CCB 240-183211/45	14:15	99		99		100					
240-50650-1 DU	14:19	98		99		98					
240-50650-1 MS	14:23	99		98		95					
240-50650-3	14:26	99		100		97					
240-50650-4	14:30	99		99		99					
240-50650-5	14:33	101		101		99					
240-50650-6	14:37	100		100		98					
240-50650-7	14:40	100		101		99					
CCV 240-183211/54	14:47	101		102		100					
CCB 240-183211/55	14:51	103		103		101					
CRI 240-183211/56	14:54	100		101		100					

MTMSCCBDILH20-200 EPA Tune Solution Spex CL11-62YPY

TestAmerica ICP/MS Data Review Checklist

Run Date: 5/18/15 **Analyst:** AS **Instrument:** I10

Review Items

A. Tune/Daily performance	Yes	No	N/A	2nd Level
1. Resolution </= 0.9 AMU full width at 10% peak height, and within +/- 0.1 AMU of true mass?	✓			✓
B. Calibration/Instrument Run QC				
1. Instrument calibrated per manufacturer's instructions and at SOP specified levels? Correlation coefficient > 0.995?	✓			✓
2. ICV/CCV analyzed at appropriate frequency and within control limits? (*ICV:* = 90 – 110%) (*CCV:* 90 – 110%, 200.8 = 85 -115%)	✓			✓
3. ICB/CCB analyzed at appropriate frequency and within +/- RL?	✓			✓
4. CRI run and recovered within QC limits (+/-50%) or project limits?	✓			✓
5. ICSA/ICSAB run at required frequency and within SOP control limits?	✓			✓
C. Sample Results				
1. Were samples with concentrations > the linear range for any parameter diluted and reanalyzed?	✓			✓
2. All reported results bracketed by in control QC?	✓			✓
3. Were the internal standards within acceptance criteria for all results reported?	✓			✓
4. Sample analyses done within holding time?	✓			✓
D. Preparation/Matrix QC				
1. LCS done per prep batch and within QC limits?	✓			✓
2. Method blank done per prep batch and < RL?	✓			✓
3. MS run at required frequency and within limits?	✓			✓
4. MSD or DU run at required frequency and RPD within SOP limits?	✓			✓
5. Serial dilution done per prep batch?	✓			✓
6. Post digest spike analyzed if required?	✓			✓
E. Other				
1. Are all nonconformance's documented appropriately?	✓			✓
2. Current IDL/LR data on file?	✓			✓
3. Calculations checked for error?	✓			✓
4. Transcriptions checked for error?	✓			✓
5. All client/project specific requirements met?	✓			✓
6. Date/time of analysis verified as correct?	✓			✓

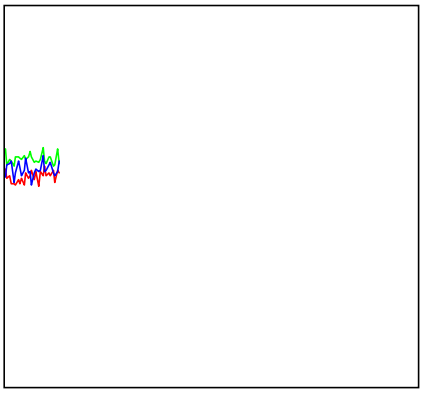
Level I Analyst: Anjali Sharma Date: 5/19/15 Time: 9:41 – 20:16
Level I Analyst: Date: Time:

Level II Reviewer: Date: 5/19/15 Time: 9:41 – 20:16
Level II Reviewer: Date: Time:

Comments:

Current Signal

[NoGas]



Mass	Range	Count	Avg. Count	RSD [%]
7	10000	5611	5523.3	2.69
89	20000	11727	11981.4	2.26
205	10000	5929	5714.0	3.19
156/140	1	0.652 %	0.648 %	14.27
70/140	5	2.550 %	2.231 %	11.19
115	200	129	126.8	14.86
63	5000	2581	2524.2	3.81
60	2000	1724	1678.1	4.38
121	50	33	27.8	17.73
Integration Time [sec]		0.10		

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.55	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	15.0	V
Extract 2	-185.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-85	V	Cell Exit	-50	V			

Cell Parameters

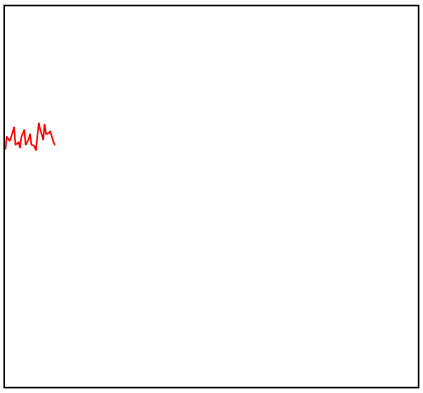
Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	190	V			

Meters

IF/BK Press	2.29E+2	Pa	Water RF/WC/IF	1.34	L/min	Plasma Gas	14.99	L/min
Analyzer Press	1.36E-4	Pa	Carrier Gas	0.55	L/min			

Current Signal

[He]



Mass	Range	Count	Avg. Count	RSD [%]
59	5000	3175	3267.9	3.11
51	2000	1104	1300.1	5.25
52	5000	2554	2523.9	3.68
51/59	50	34.785 %	39.816 %	5.96
52/59	100	80.440 %	77.297 %	4.63
7	50	18	23.2	26.40
89	5000	3860	3722.4	3.17
205	5000	2858	2785.2	3.00
6	20	7	4.2	58.72
63	2000	1511	1579.4	3.16
60	1000	788	771.4	4.74
Integration Time [sec]			0.10	

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.55	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	-2.0	V
Extract 2	-185.0	V	Cell Entrance	-50	V	Plate Bias	-70	V
Omega Bias	-85	V	Cell Exit	-70	V			

Cell Parameters

Use Gas	true		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	4.0	mL/min	OctP Bias	-20.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			

Meters

IF/BK Press	2.29E+2	Pa	Water RF/WC/IF	1.36	L/min	Plasma Gas	15.02	L/min
Analyzer Press	2.33E-4	Pa	Carrier Gas	0.55	L/min			

US EPA Tune Check Sample Report

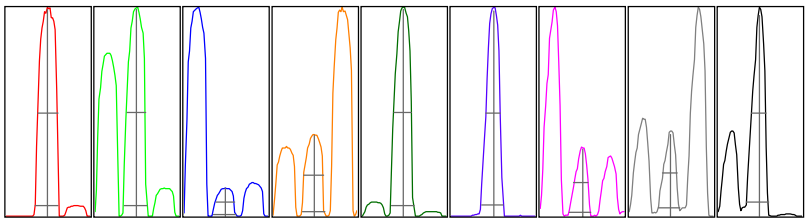
Batch Folder D:\Analytical Runs\I10051815A.b
Report Comment
Instrument Name I10 JP12452145

[NoGas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	94888	0.48	5.00	
24	290190	0.30	5.00	
25	38990	0.61	5.00	
26	45763	0.63	5.00	
59	466296	0.28	5.00	
115	532595	0.38	5.00	
206	97625	0.43	5.00	
207	86006	0.18	5.00	
208	204539	0.57	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	95642	94821	94632	94902	94441
24	290053	289521	290583	289304	291489
25	39020	38578	39098	39185	39070
26	45982	45660	45525	46148	45500
59	466527	464348	466055	466524	468026
115	530894	535223	530583	532161	534113
206	97480	97333	97758	98299	97257
207	85934	86068	85811	86219	86000
208	203347	205825	203264	205090	205171

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	14319	9.00	8.9 - 9.1		0.804	0.850	
24	45359	24.00	23.9 - 24.1		0.825	0.850	
25	6109	25.00	24.9 - 25.1		0.821	0.850	
26	7218	26.00	25.9 - 26.1		0.796	0.850	
59	76021	59.00	58.9 - 59.1		0.813	0.850	
115	97659	115.05	114.9 - 115.1		0.777	0.850	
206	18870	206.05	205.9 - 206.1		0.759	0.850	
207	16345	207.00	206.9 - 207.1		0.743	0.850	
208	40118	208.00	207.9 - 208.1		0.765	0.850	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 235 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.55	L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	15.0	V
Extract 2	-185.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-85	V	Cell Exit	-50	V			

Cell Parameters

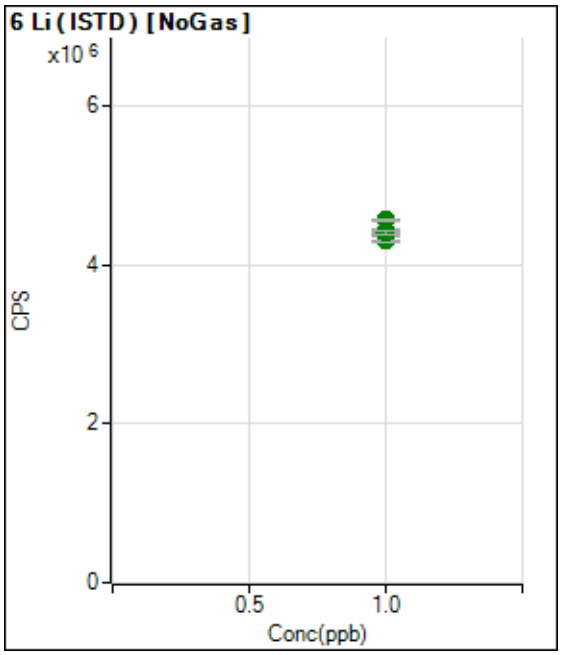
US EPA Tune Check Sample Report

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
ParameterName	**Value**	**Unit**	**ParameterName**	**Value**	**Unit**	**ParameterName**	**Value**	**Unit**
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	190	V			

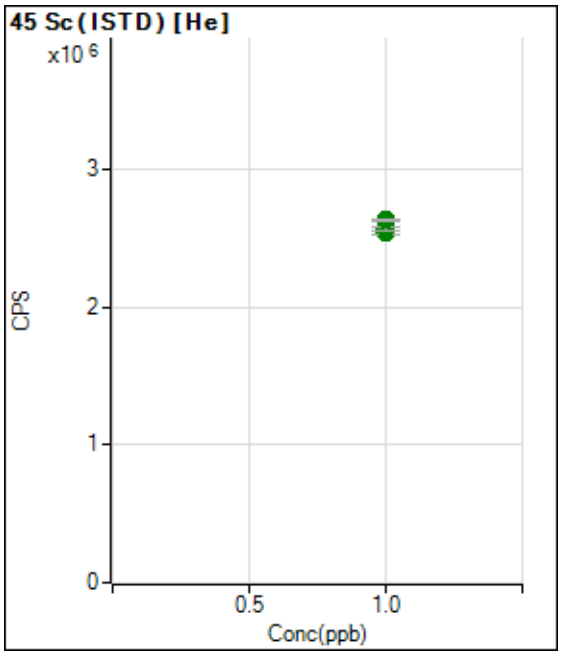
Calibration for 022SMPL.d

Batch Folder: D:\Analytical Runs\I10051815B.b\
Analysis File: I10051815B.batch.bin
DA Date-Time: 5/18/2015 11:02:36 AM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

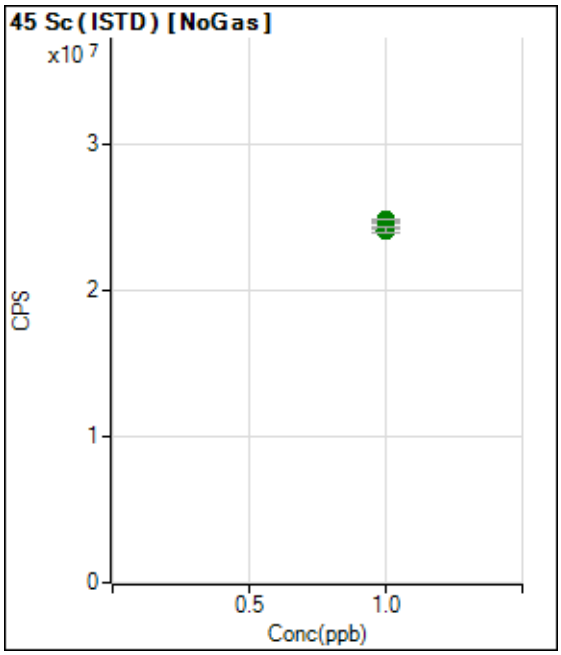
Level	Standard Data File	Sample Name	Acq. Date-Time
1	002CALB.d	ICIS	5/18/2015 9:45:04 AM
2	003CALS.d	STD1-1988989	5/18/2015 9:48:55 AM
3	004CALS.d	STD2-1988996	5/18/2015 9:52:42 AM
4	005CALS.d	STD3-1988997	5/18/2015 9:56:30 AM
5	006CALS.d	STD4-1990870	5/18/2015 10:00:11 AM



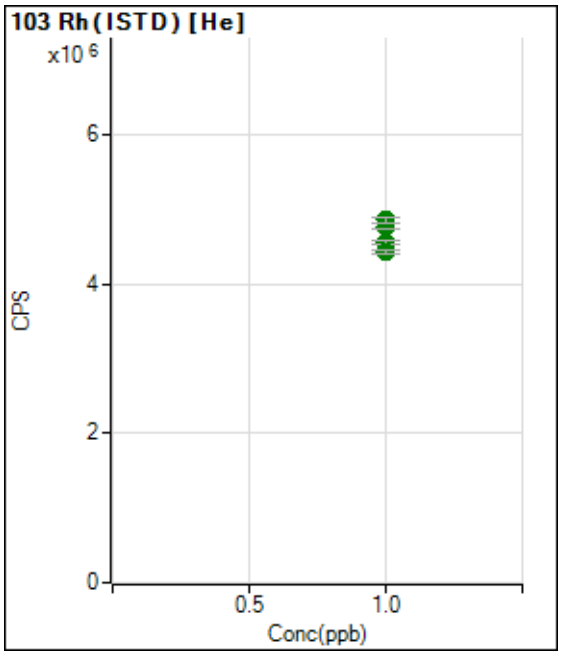
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		4563897.78		A	0.9
2	☐	1.000		4397206.74		A	2.1
3	☐	1.000		4419498.49		A	0.9
4	☐	1.000		4296698.46		A	0.2
5	☐	1.000		4401769.13		A	0.7



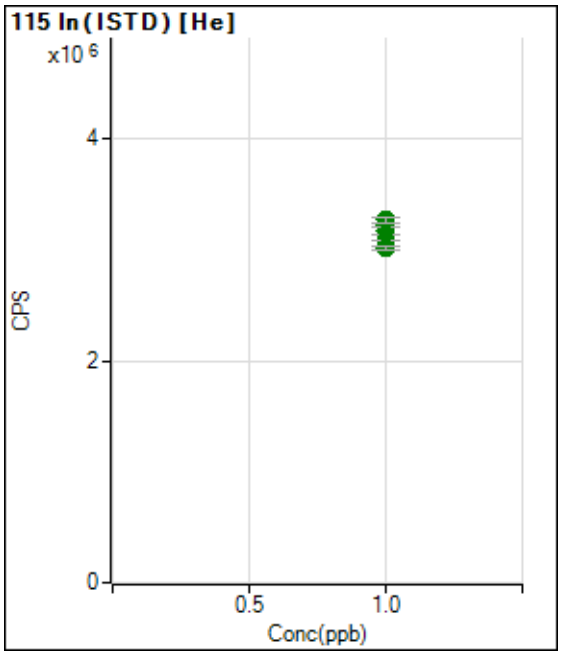
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2572368.45		A	1.1
2	☐	1.000		2635609.34		A	0.4
3	☐	1.000		2545701.47		A	1.1
4	☐	1.000		2568001.27		A	0.8
5	☐	1.000		2634299.65		A	1.0



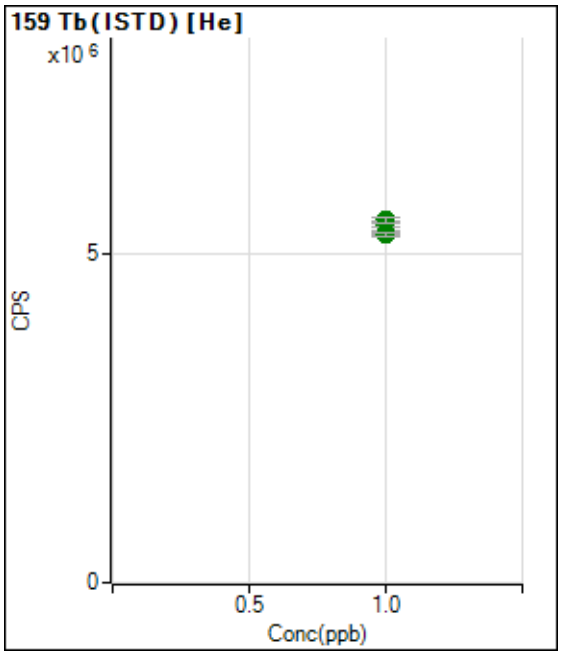
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2	☐	1.000		24098605.15		A	1.4
3	☐	1.000		24799520.68		A	0.1
4	☐	1.000		24036007.93		A	0.8
5	☐	1.000		24107064.60		A	1.3



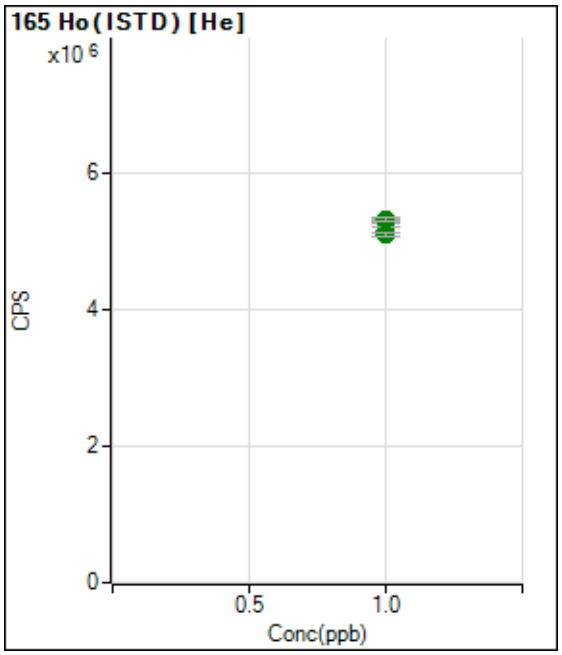
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1	☐	1.000		4780240.92		A	1.2
2	☐	1.000		4775011.75		A	1.4
3	☐	1.000		4557843.15		A	0.8
4	☐	1.000		4436902.88		A	1.1
5	☐	1.000		4863762.31		A	1.4



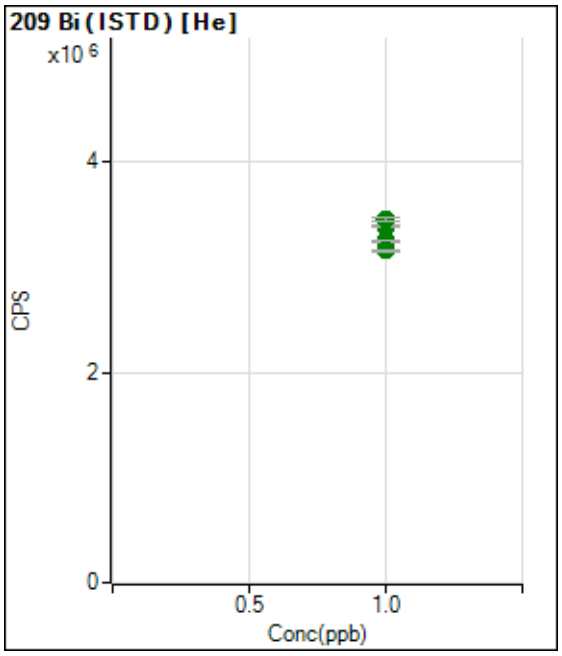
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1	☐	1.000		3171813.72		A	1.7
2	☐	1.000		3220700.89		A	1.1
3	☐	1.000		3080875.98		A	0.2
4	☐	1.000		3018978.29		A	0.9
5	☐	1.000		3271391.99		A	1.7



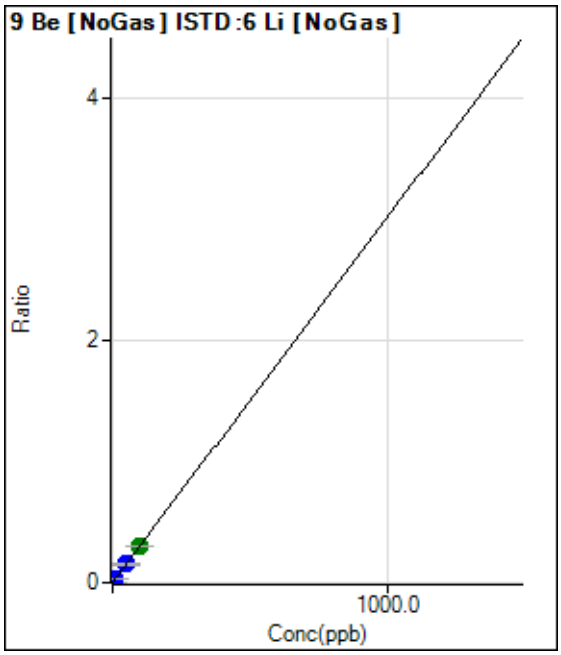
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		5469932.00		A	1.3
2	☐	1.000		5450824.23		A	0.8
3	☐	1.000		5338099.37		A	0.7
4	☐	1.000		5302246.04		A	1.3
5	☐	1.000		5531234.64		A	1.5



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		5294618.81		A	1.1
2	☐	1.000		5310183.95		A	1.5
3	☐	1.000		5171022.85		A	1.8
4	☐	1.000		5093282.99		A	1.1
5	☐	1.000		5321625.34		A	1.0



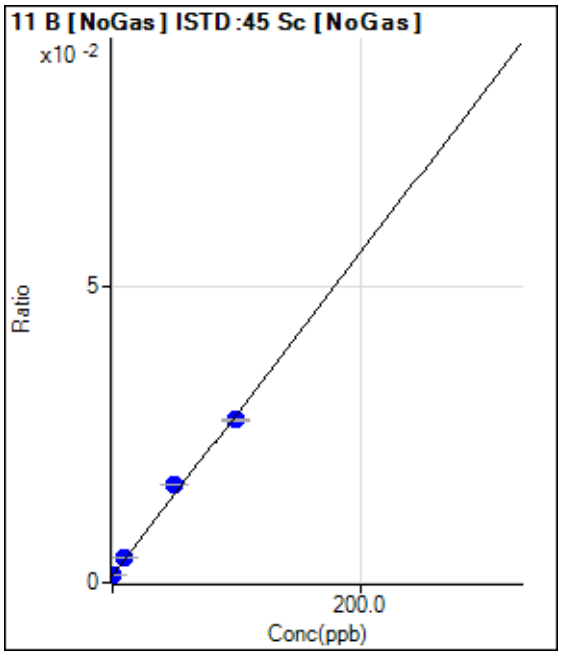
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3401163.41		A	0.5
2	☐	1.000		3391165.98		A	0.3
3	☐	1.000		3248017.44		A	0.9
4	☐	1.000		3158919.73		A	0.3
5	☐	1.000		3451930.07		A	1.0



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	229.64	0.0001	P	14.6
2	☐	10.000	9.044	120218.07	0.0273	P	0.7
3	☐	50.000	50.204	669634.07	0.1515	P	2.4
4	☐	100.000	99.994	1296645.09	0.3018	A	0.6
5	☐			370.39	0.0001	P	39.5

y = 0.0030 * x + 5.0311E-005
R = 0.9999
DL = 0.007287
BEC = 0.01667

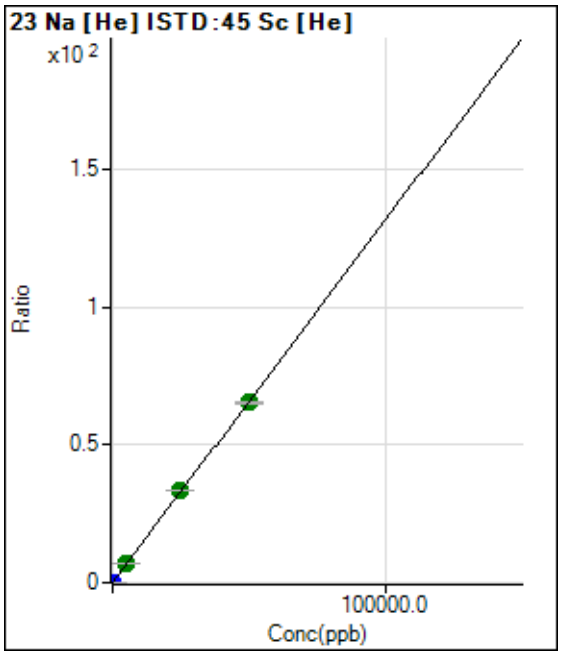
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Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	29075.63	0.0012	P	3.9
2	☐	10.000	11.049	101251.51	0.0042	P	2.3
3	☐	50.000	56.360	411404.47	0.0166	P	0.4
4	☐			35134.23	0.0015	P	1.1
5	☐	100.000	96.715	665911.95	0.0276	P	1.4

y = 2.7338E-004 * x + 0.0012
R = 0.9963
DL = 0.5042
BEC = 4.322

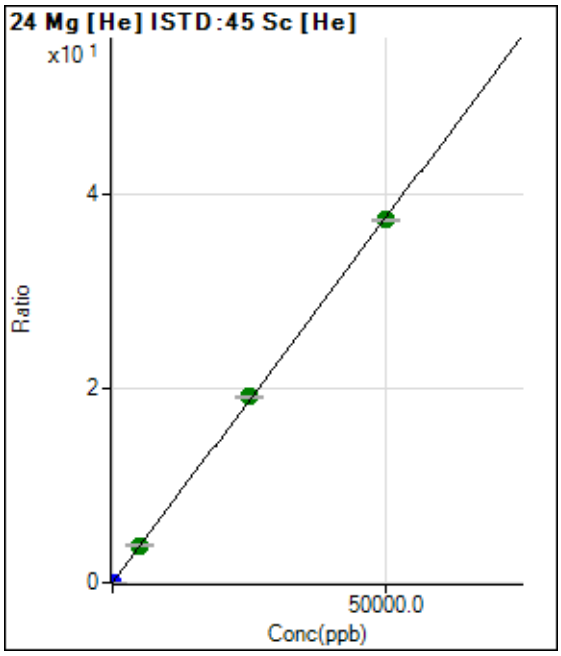
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1		0.000	0.000	29086.78	0.0113	P	1.6
2		5000.000	5074.237	17585510.41	6.6722	A	0.7
3		25000.000	25452.666	85083159.58	33.4226	A	0.7
4		50000.000	49766.243	167775082.22	65.3387	A	1.7
5				52401.60	0.0199	P	11.8

y = 0.0013 * x + 0.0113
R = 0.9999
DL = 0.4035
BEC = 8.614

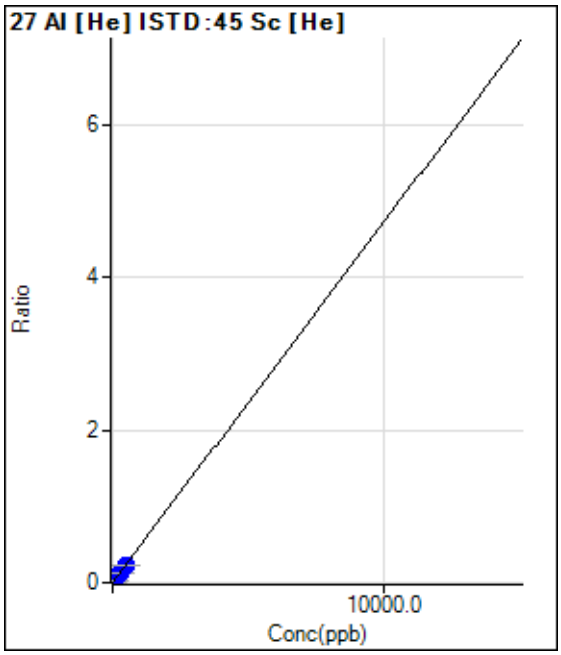
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1		0.000	0.000	1211.22	0.0005	P	5.9
2		5000.000	5125.496	10144386.40	3.8489	A	1.4
3		25000.000	25453.721	48648955.47	19.1120	A	1.5
4		50000.000	49760.590	95944685.08	37.3625	A	0.9
5				7157.34	0.0027	P	27.9

y = 7.5084E-004 * x + 4.7094E-004
R = 0.9999
DL = 0.1113
BEC = 0.6272

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1733.44	0.0007	P	6.1
2	☐	50.000	51.407	65622.01	0.0249	P	0.7
3	☐	250.000	253.396	305667.51	0.1201	P	0.8
4	☐	500.000	498.161	604519.47	0.2354	P	0.9
5	☐			1736.77	0.0007	P	11.3

y = 4.7122E-004 * x + 6.7376E-004

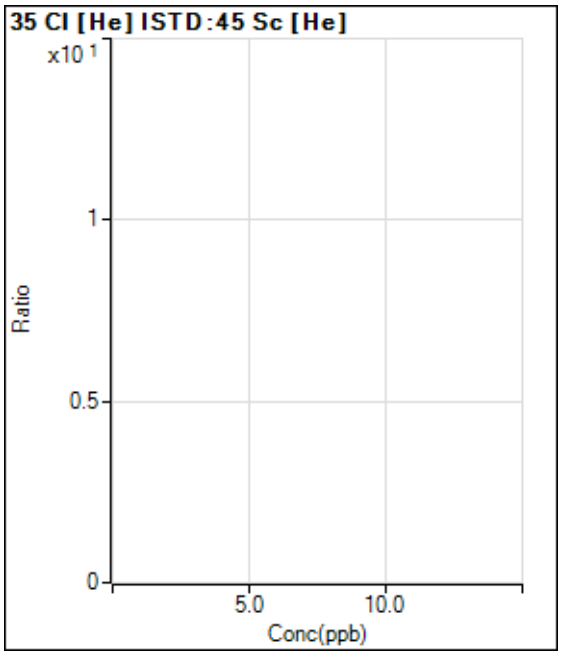
R = 1.0000

DL = 0.2602

BEC = 1.43

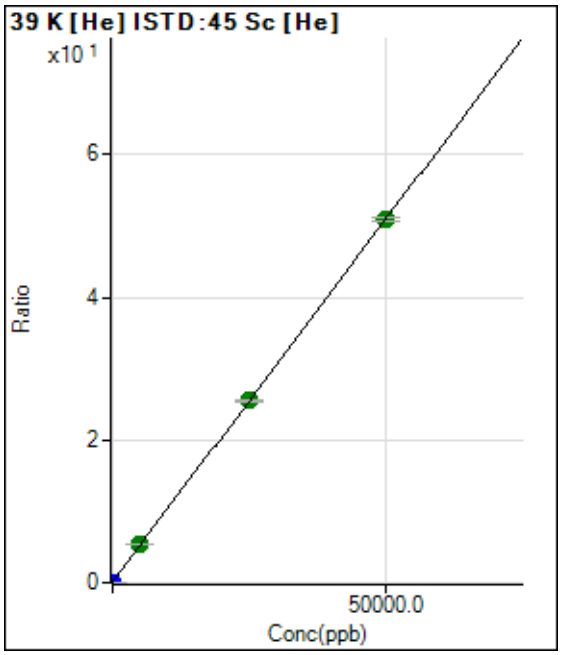
Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			47355922.19	18.4105	A	1.7
2	☐			47179868.50	17.9006	A	0.6
3	☐			48892264.73	19.2083	A	1.7
4	☐			49394127.67	19.2349	A	0.6
5	☐			47586320.33	18.0645	A	0.4

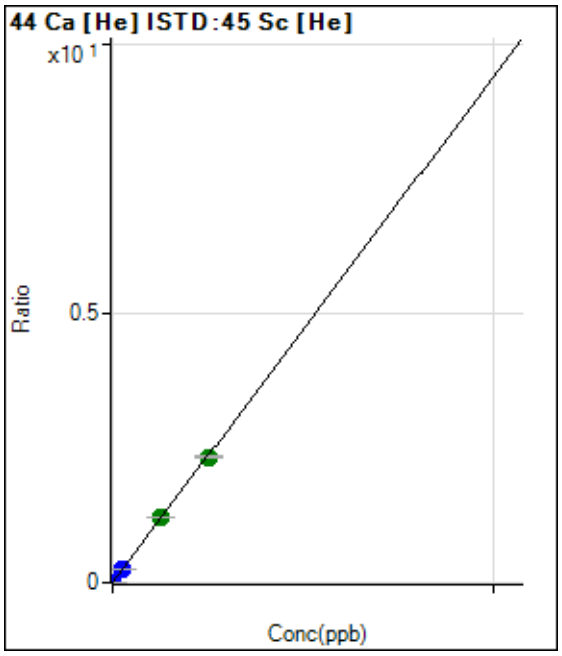
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	278289.64	0.1082	P	0.9
2	☐	5000.000	5085.905	13894551.76	5.2719	A	0.5
3	☐	25000.000	25056.961	65033538.16	25.5487	A	1.4
4	☐	50000.000	49962.929	130538891.11	50.8358	A	1.1
5	☐			397678.99	0.1510	P	2.7

y = 0.0010 * x + 0.1082
R = 1.0000
DL = 3.012
BEC = 106.5

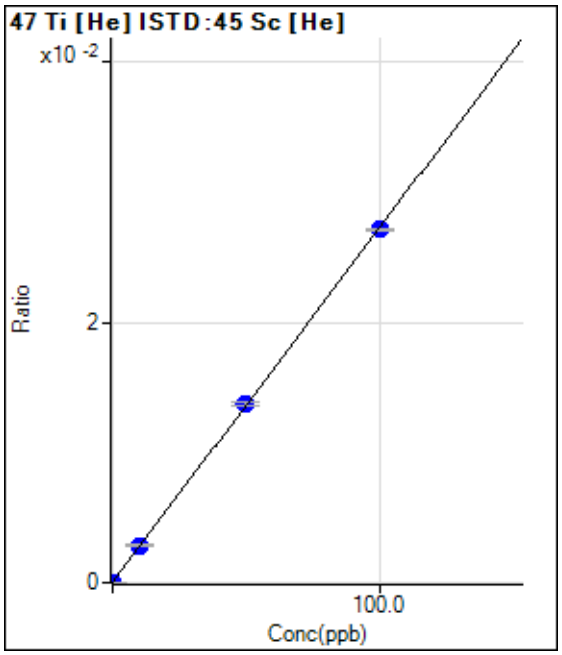
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3447.10	0.0013	P	6.1
2	☐	5000.000	5137.983	641287.95	0.2433	P	1.2
3	☐	25000.000	25808.054	3097457.67	1.2168	A	0.6
4	☐	50000.000	49582.174	5999291.82	2.3364	A	2.0
5	☐			1855.20	0.0007	P	10.7

y = 4.7095E-005 * x + 0.0013
R = 0.9998
DL = 5.168
BEC = 28.46

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	57.78	0.0000	P	56.3
2	☐	10.000	10.351	7477.18	0.0028	P	3.3
3	☐	50.000	50.540	35041.56	0.0138	P	1.6
4	☐			82.22	0.0000	P	42.4
5	☐	100.000	99.695	71472.26	0.0271	P	0.6

y = 2.7192E-004 * x + 2.2397E-005

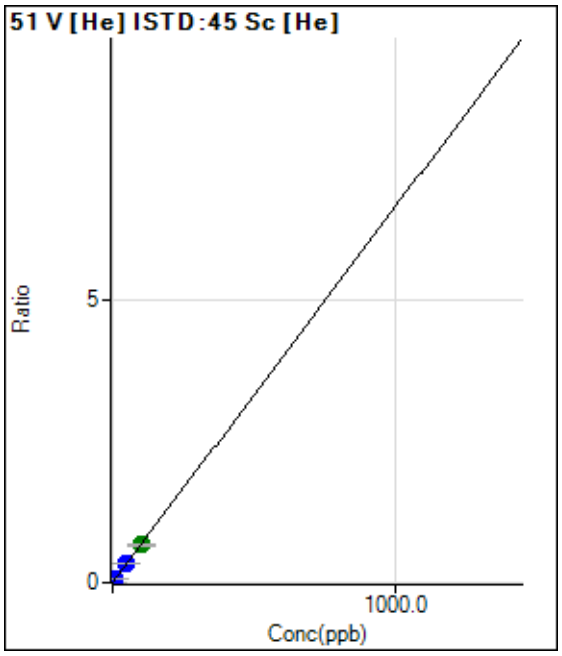
R = 1.0000

DL = 0.1391

BEC = 0.08237

Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2265.18	0.0009	P	11.2
2	☐	10.000	9.925	175308.35	0.0665	P	1.3
3	☐	50.000	49.451	834708.98	0.3279	P	1.0
4	☐	100.000	100.282	1704963.85	0.6640	A	2.2
5	☐			3028.94	0.0011	P	19.7

y = 0.0066 * x + 8.8109E-004

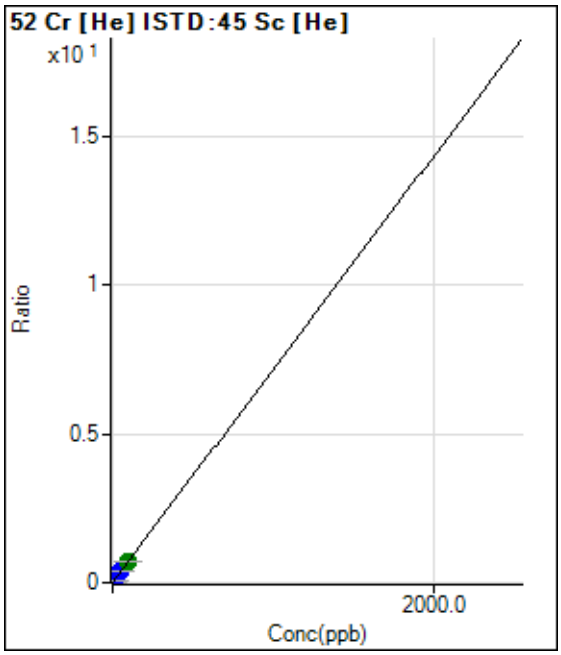
R = 1.0000

DL = 0.04472

BEC = 0.1332

Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	10587.67	0.0041	P	3.6
2	☐	10.000	10.067	201411.90	0.0764	P	0.6
3	☐	50.000	49.982	924276.32	0.3631	P	0.5
4	☐	100.000	100.002	1854794.30	0.7223	A	1.5
5	☐			10567.65	0.0040	P	2.9

y = 0.0072 * x + 0.0041

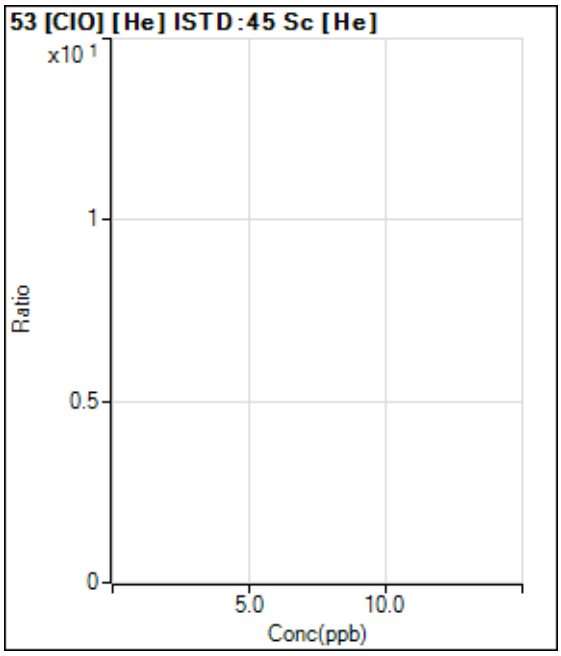
R = 1.0000

DL = 0.06202

BEC = 0.5731

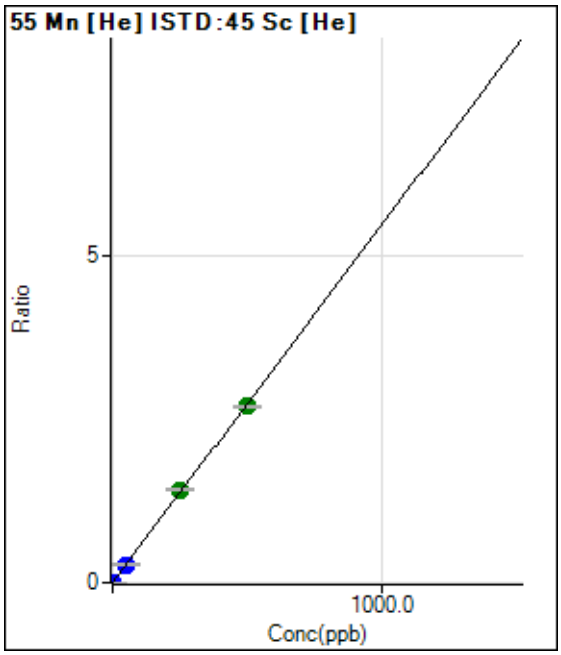
Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			1259.36	0.0005	P	5.5
2	☐			23349.25	0.0089	P	2.7
3	☐			110254.02	0.0433	P	2.5
4	☐			215765.01	0.0840	P	0.7
5	☐			1122.31	0.0004	P	14.4

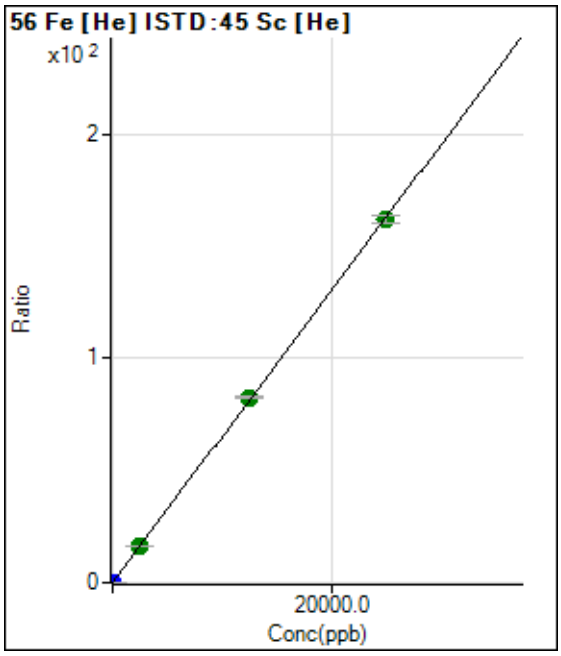
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5616.50	0.0022	P	4.9
2	☐	50.000	50.716	733791.60	0.2784	P	0.6
3	☐	250.000	260.030	3610725.83	1.4185	A	1.2
4	☐	500.000	494.913	6927406.67	2.6978	A	1.2
5	☐			1989.08	0.0008	P	15.4

y = 0.0054 * x + 0.0022
R = 0.9996
DL = 0.05848
BEC = 0.401

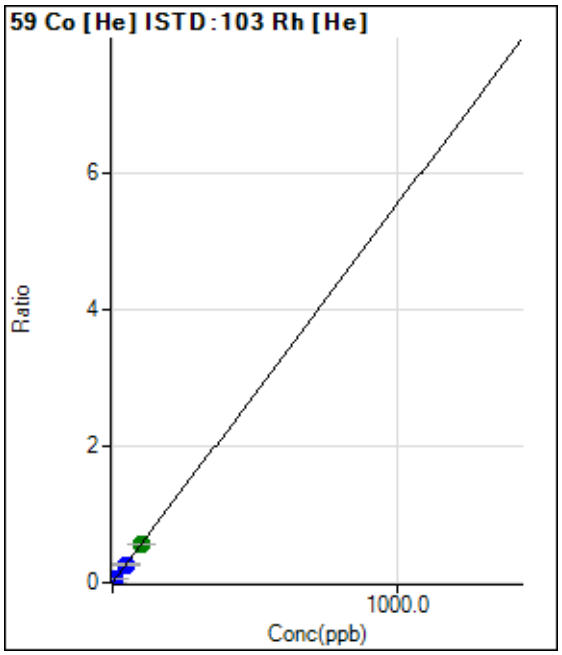
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	29980.65	0.0117	P	6.1
2	☐	2500.000	2561.035	43898416.03	16.6558	A	0.6
3	☐	12500.000	12711.945	210332413.86	82.6263	A	1.6
4	☐	25000.000	24887.924	415342819.05	161.7577	A	2.2
5	☐			168487.37	0.0639	P	17.1

y = 0.0065 * x + 0.0117
R = 0.9999
DL = 0.3257
BEC = 1.793

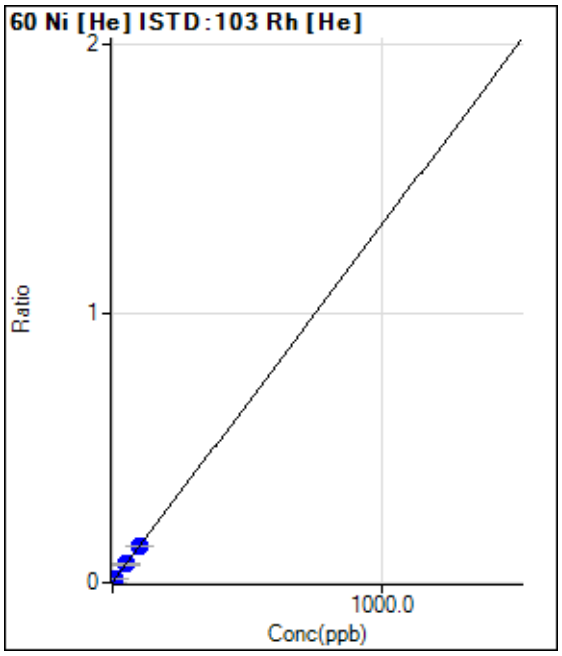
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	318.90	0.0001	P	10.6
2	☐	10.000	9.703	257329.64	0.0539	P	1.4
3	☐	50.000	48.098	1216431.58	0.2669	P	1.1
4	☐	100.000	100.981	2485722.54	0.5603	A	1.0
5	☐			630.02	0.0001	P	6.9

y = 0.0055 * x + 6.6767E-005
R = 0.9997
DL = 0.003829
BEC = 0.01204

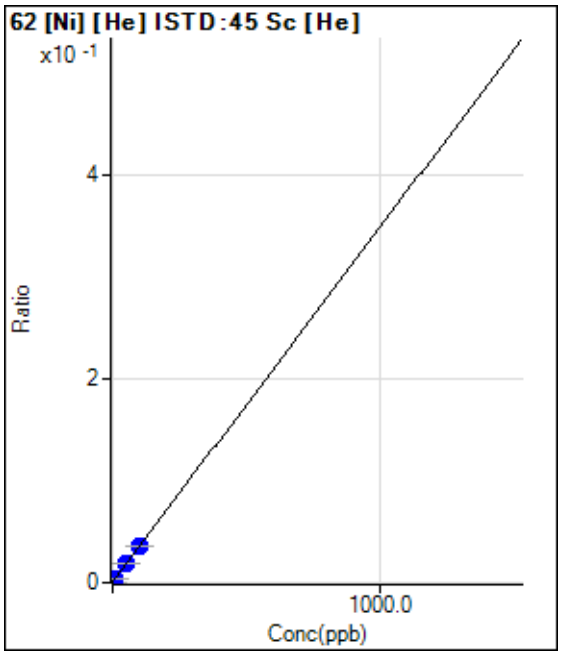
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5157.47	0.0011	P	3.4
2	☐	10.000	10.233	69858.63	0.0146	P	1.2
3	☐	50.000	50.476	309591.89	0.0679	P	1.3
4	☐	100.000	99.739	590828.33	0.1332	P	0.3
5	☐			3653.75	0.0008	P	8.1

y = 0.0013 * x + 0.0011
R = 1.0000
DL = 0.08352
BEC = 0.8145

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1256.73	0.0005	P	3.4
2	☐	10.000	10.487	10904.54	0.0041	P	4.1
3	☐	50.000	51.575	46919.88	0.0184	P	0.6
4	☐	100.000	99.164	89851.09	0.0350	P	0.3
5	☐			1187.83	0.0005	P	10.5

y = 3.4791E-004 * x + 4.8846E-004

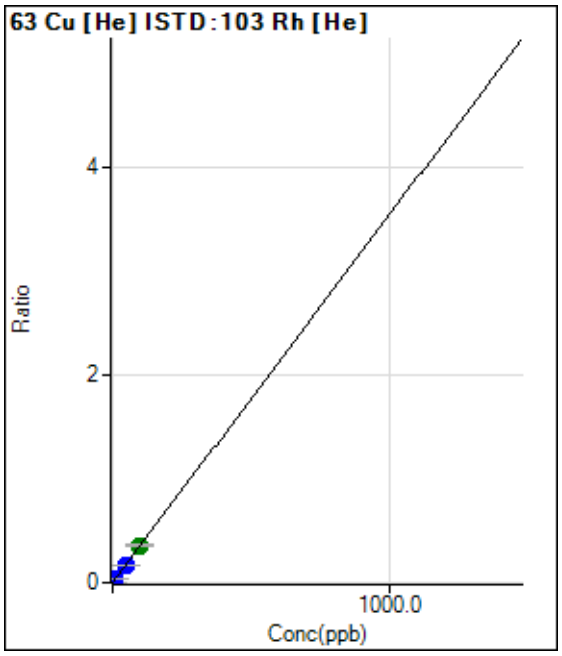
R = 0.9998

DL = 0.1419

BEC = 1.404

Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7391.62	0.0015	P	3.7
2	☐	10.000	9.861	173996.67	0.0364	P	0.6
3	☐	50.000	48.266	785469.90	0.1723	P	1.1
4	☐	100.000	100.881	1590568.76	0.3585	A	1.5
5	☐			7655.07	0.0016	P	7.3

y = 0.0035 * x + 0.0015

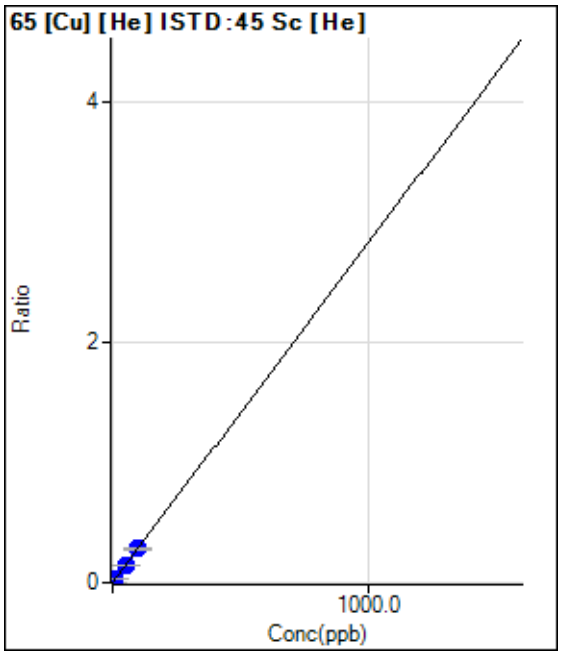
R = 0.9997

DL = 0.04827

BEC = 0.437

Weight: <None>

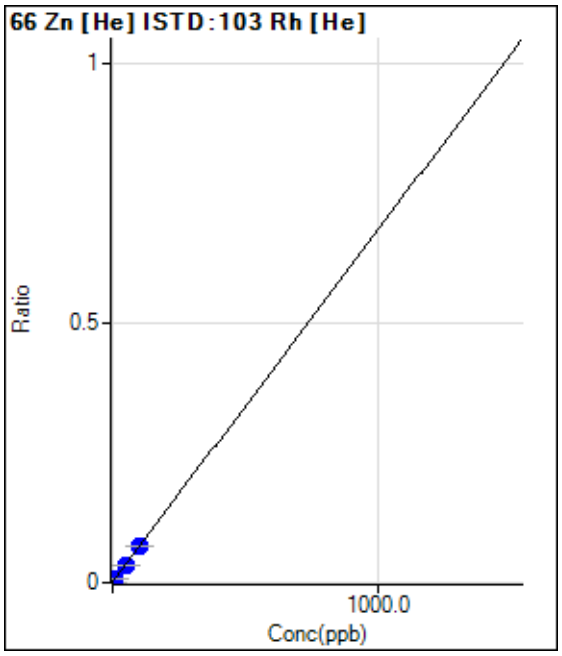
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3389.26	0.0013	P	3.5
2	☐	10.000	10.707	83157.93	0.0316	P	1.4
3	☐	50.000	52.045	377455.78	0.1483	P	0.7
4	☐	100.000	98.907	720559.36	0.2806	P	0.9
5	☐			3580.41	0.0014	P	4.5

y = 0.0028 * x + 0.0013
R = 0.9996
DL = 0.04957
BEC = 0.4667

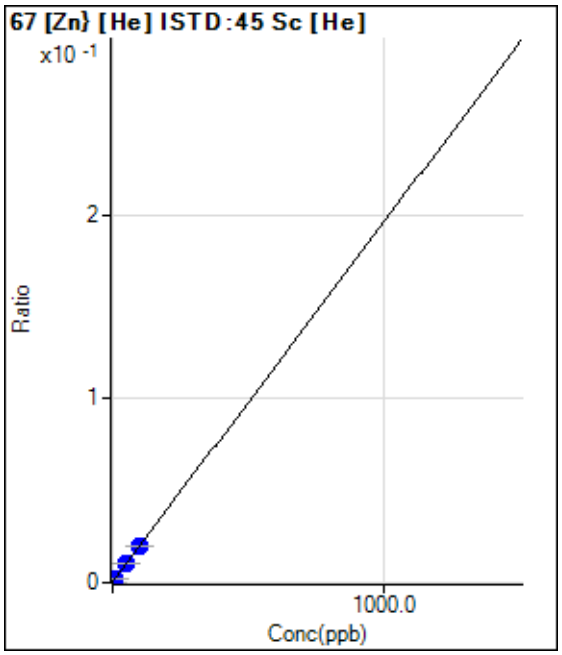
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5505.36	0.0012	P	3.0
2	☐	10.000	9.350	35877.05	0.0075	P	1.3
3	☐	50.000	49.557	158921.16	0.0349	P	1.5
4	☐	100.000	100.286	307840.66	0.0694	P	0.8
5	☐			2495.76	0.0005	P	3.8

y = 6.8039E-004 * x + 0.0012
R = 1.0000
DL = 0.1536
BEC = 1.693

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	863.37	0.0003	P	4.1
2	☐	10.000	9.494	5788.78	0.0022	P	1.9
3	☐	50.000	51.139	26365.10	0.0104	P	0.8
4	☐	100.000	99.481	50920.97	0.0198	P	2.0
5	☐			358.90	0.0001	P	13.5

y = 1.9597E-004 * x + 3.3571E-004

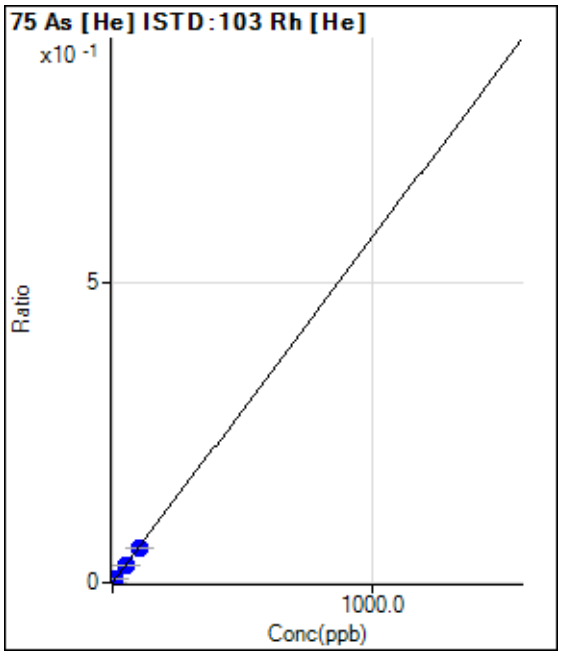
R = 0.9999

DL = 0.2111

BEC = 1.713

Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	662.95	0.0001	P	8.2
2	☐	10.000	9.747	27448.45	0.0057	P	1.2
3	☐	50.000	50.383	132777.63	0.0291	P	1.6
4	☐	100.000	99.834	255516.92	0.0576	P	1.2
5	☐			4342.72	0.0009	P	14.3

y = 5.7550E-004 * x + 1.3872E-004

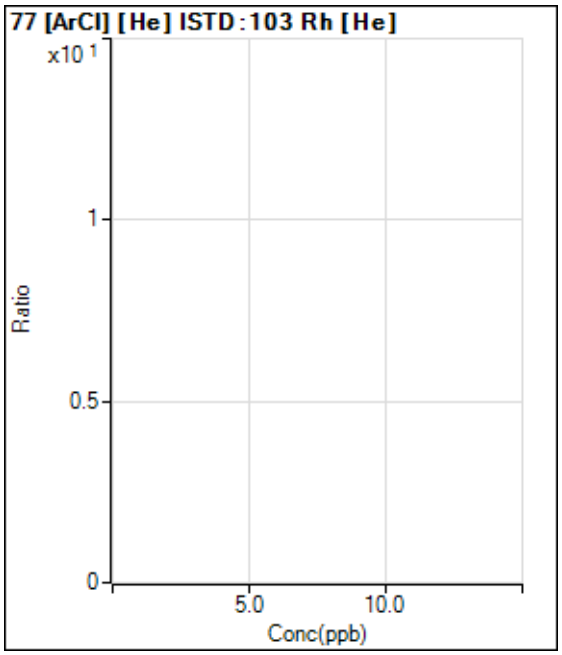
R = 1.0000

DL = 0.05948

BEC = 0.241

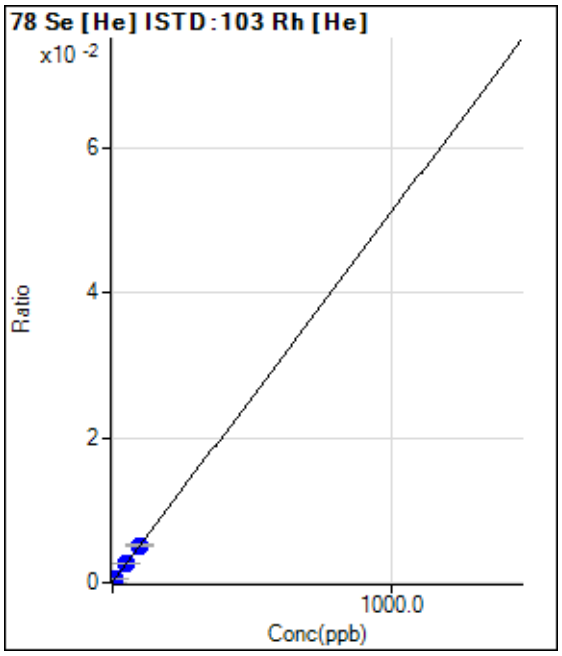
Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			111.12	0.0000	P	54.9
2	☐			911.18	0.0002	P	17.6
3	☐			3867.27	0.0008	P	11.8
4	☐			6890.53	0.0016	P	4.0
5	☐			140.75	0.0000	P	52.0

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	347.60	0.0001	P	7.3
2	☐	10.000	9.960	2767.05	0.0006	P	1.6
3	☐	50.000	50.260	11982.95	0.0026	P	1.9
4	☐	100.000	99.874	22861.83	0.0052	P	1.3
5	☐			557.22	0.0001	P	4.6

y = 5.0867E-005 * x + 7.2742E-005

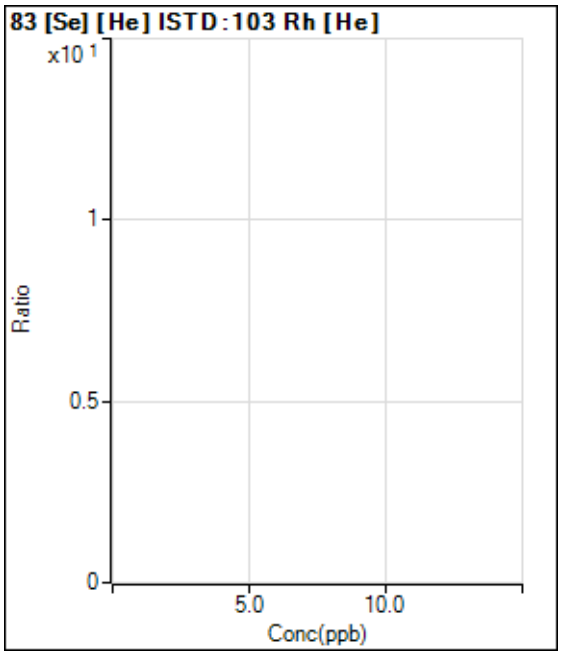
R = 1.0000

DL = 0.314

BEC = 1.43

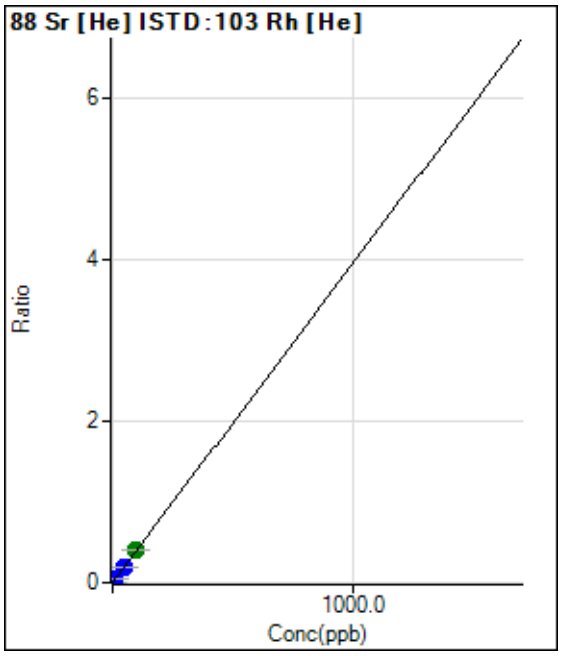
Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			538.40	0.0001	P	4.3
2	☐			547.15	0.0001	P	3.3
3	☐			545.13	0.0001	P	3.4
4	☐			530.99	0.0001	P	4.2
5	☐			559.94	0.0001	P	3.9

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	588.91	0.0001	P	8.8
2	☐	10.000	9.283	175823.32	0.0368	P	1.1
3	☐	50.000	46.941	846388.28	0.1857	P	1.2
4	☐	100.000	101.601	1782769.58	0.4018	A	0.7
5	☐			476.68	0.0001	P	10.6

y = 0.0040 * x + 1.2317E-004

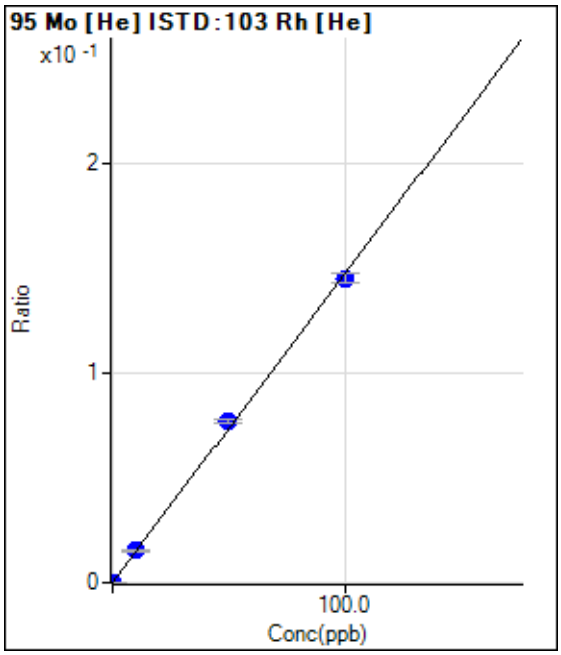
R = 0.9992

DL = 0.008214

BEC = 0.03115

Weight: <None>

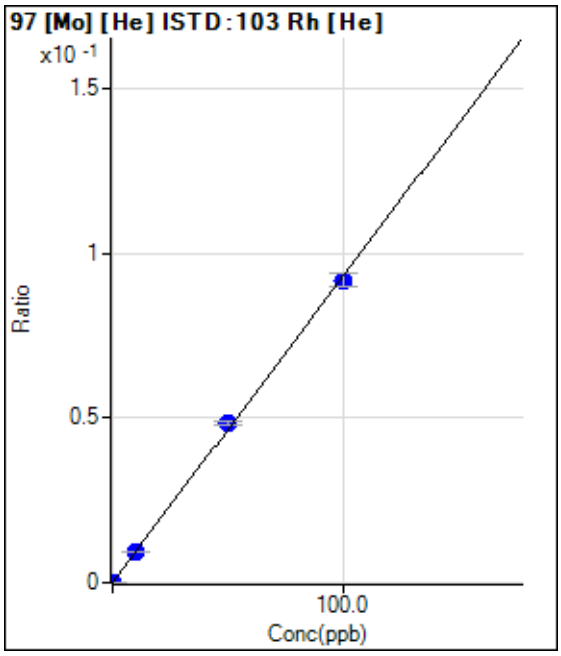
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1		0.000	0.000	268.89	0.0001	P	33.7
2		10.000	10.294	72547.32	0.0152	P	1.4
3		50.000	52.157	349766.28	0.0767	P	2.6
4				2094.61	0.0005	P	22.0
5		100.000	98.892	707298.84	0.1455	P	3.2

y = 0.0015 * x + 5.6294E-005
R = 0.9996
DL = 0.03876
BEC = 0.03829

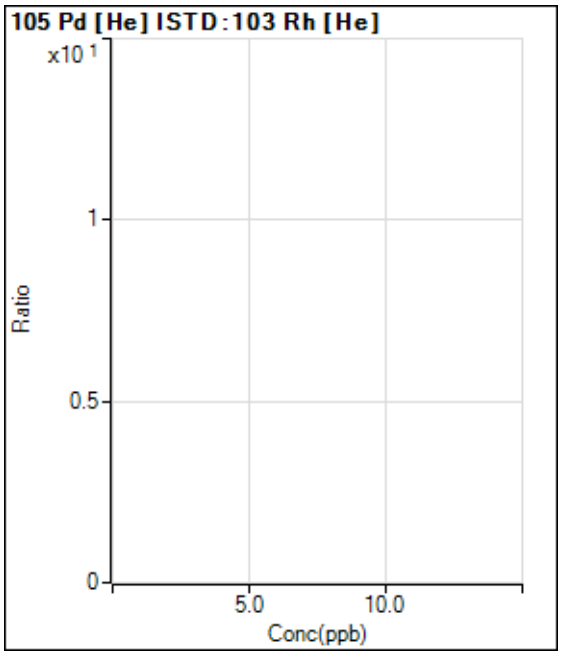
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1		0.000	0.000	137.05	0.0000	P	27.3
2		10.000	10.132	45148.23	0.0095	P	0.5
3		50.000	52.223	221551.51	0.0486	P	3.0
4				1463.10	0.0003	P	18.5
5		100.000	98.875	447375.63	0.0920	P	4.0

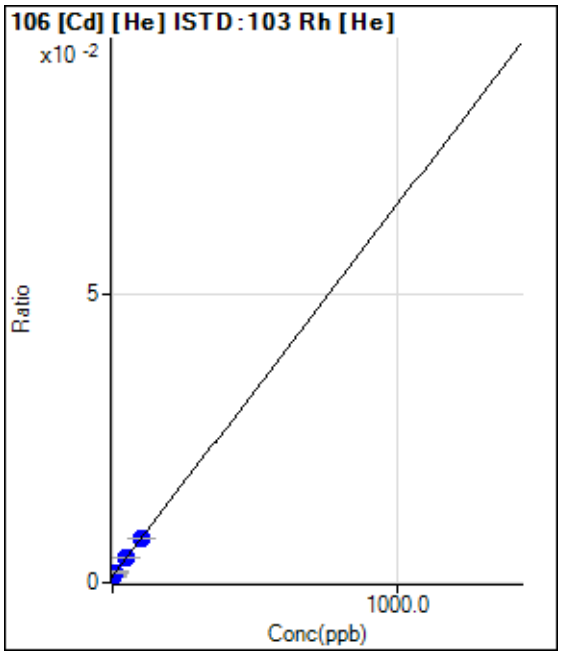
y = 9.3029E-004 * x + 2.8610E-005
R = 0.9996
DL = 0.02517
BEC = 0.03075

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			4763.86	0.0010	P	7.5
2	☐			5112.11	0.0011	P	5.2
3	☐			5386.31	0.0012	P	6.8
4	☐			6042.07	0.0014	P	10.9
5	☐			4656.41	0.0010	P	3.4

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5540.29	0.0012	P	2.8
2	☐	10.000	10.407	8730.83	0.0018	P	2.4
3	☐	50.000	50.118	19981.80	0.0044	P	2.1
4	☐	100.000	99.901	33663.67	0.0076	P	1.6
5	☐			5981.85	0.0012	P	1.7

y = 6.4354E-005 * x + 0.0012

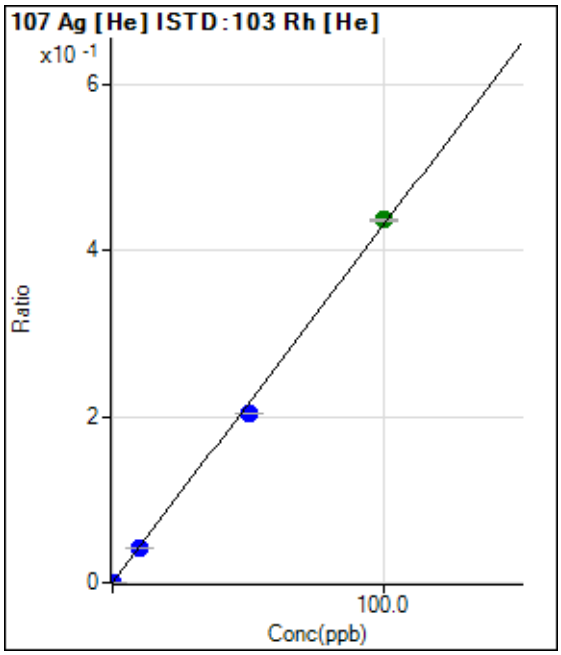
R = 1.0000

DL = 1.537

BEC = 18.01

Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	54.44	0.0000	P	14.9
2	☐	10.000	9.661	199028.77	0.0417	P	1.6
3	☐	50.000	47.275	929495.87	0.2039	P	1.0
4	☐	100.000	101.396	1940654.65	0.4374	A	0.6
5	☐			262.23	0.0001	P	20.9

y = 0.0043 * x + 1.1398E-005

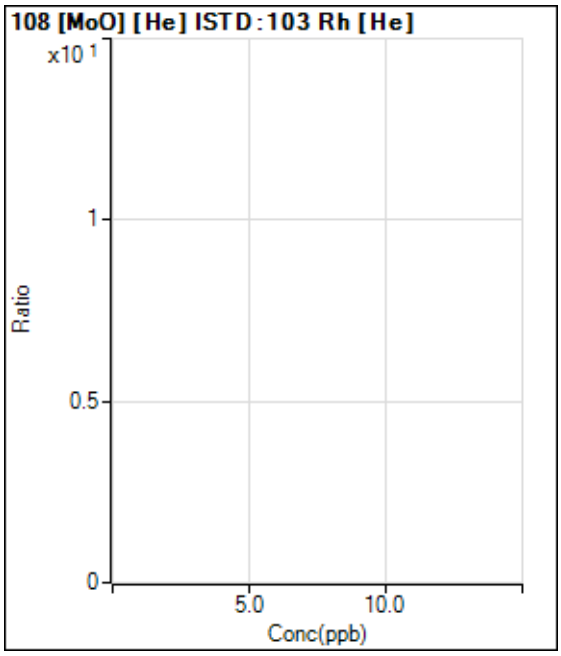
R = 0.9994

DL = 0.001181

BEC = 0.002642

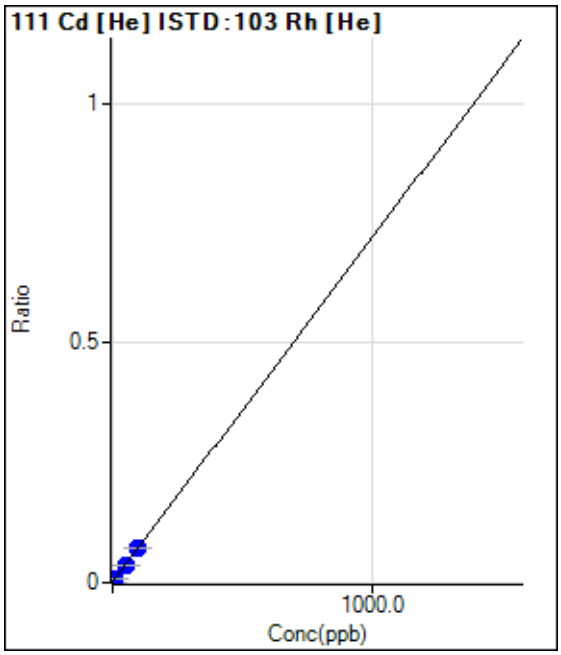
Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			22.23	0.0000	P	86.6
2	☐			2155.79	0.0005	P	11.5
3	☐			10989.23	0.0024	P	2.8
4	☐			21206.45	0.0048	P	0.2
5	☐			244.46	0.0001	P	24.6

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4231.83	0.0009	P	3.3
2	☐	10.000	10.099	38852.93	0.0081	P	1.1
3	☐	50.000	50.013	167725.04	0.0368	P	0.8
4	☐	100.000	99.984	322487.19	0.0727	P	0.6
5	☐			4569.11	0.0009	P	3.1

y = 7.1812E-004 * x + 8.8535E-004

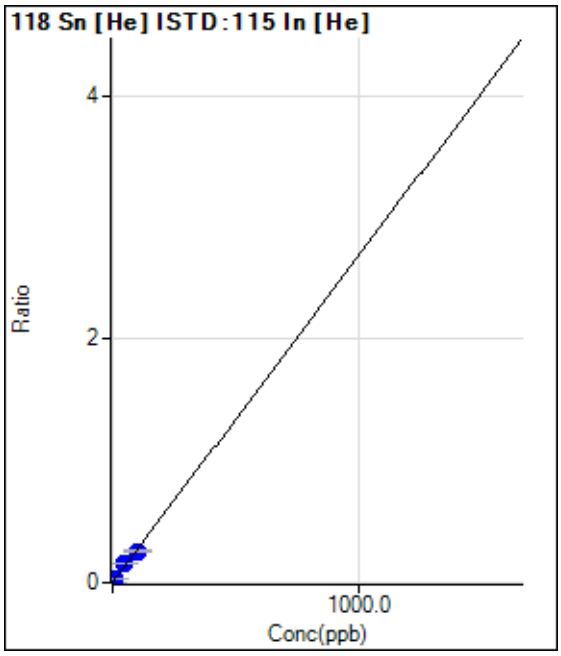
R = 1.0000

DL = 0.1211

BEC = 1.233

Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1551.99	0.0005	P	3.0
2	☐	10.000	9.753	86038.76	0.0267	P	0.5
3	☐	50.000	56.861	472561.56	0.1534	P	1.5
4	☐			2707.76	0.0009	P	12.6
5	☐	100.000	96.594	851143.66	0.2602	P	1.6

y = 0.0027 * x + 4.8947E-004

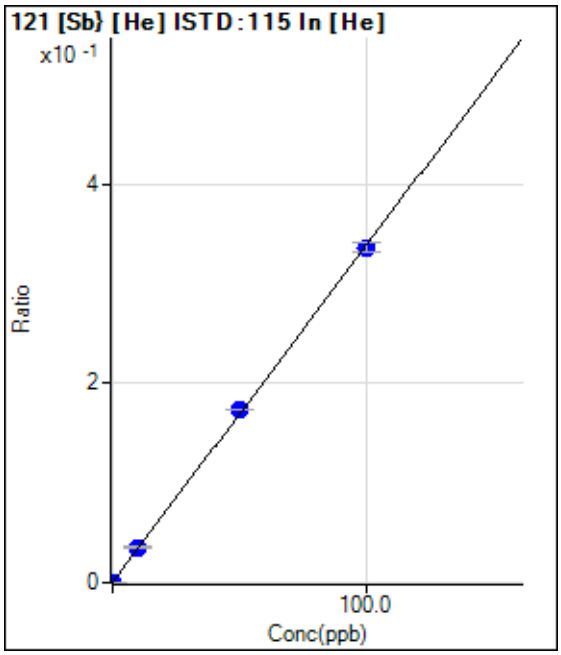
R = 0.9955

DL = 0.01628

BEC = 0.182

Weight: <None>

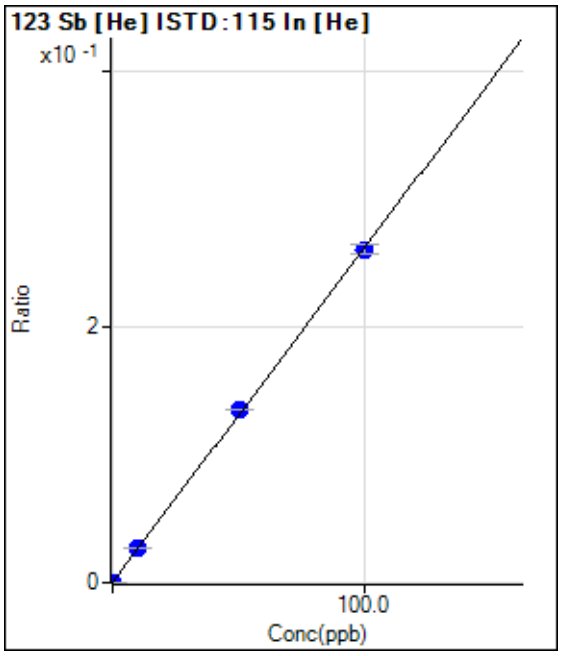
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1		0.000	0.000	800.03	0.0003	P	18.3
2		10.000	10.469	114891.95	0.0357	P	0.3
3		50.000	51.253	535025.50	0.1737	P	0.6
4				4566.23	0.0015	P	9.3
5		100.000	99.327	1099844.99	0.3363	P	2.9

y = 0.0034 * x + 2.5178E-004
R = 0.9999
DL = 0.04077
BEC = 0.07442

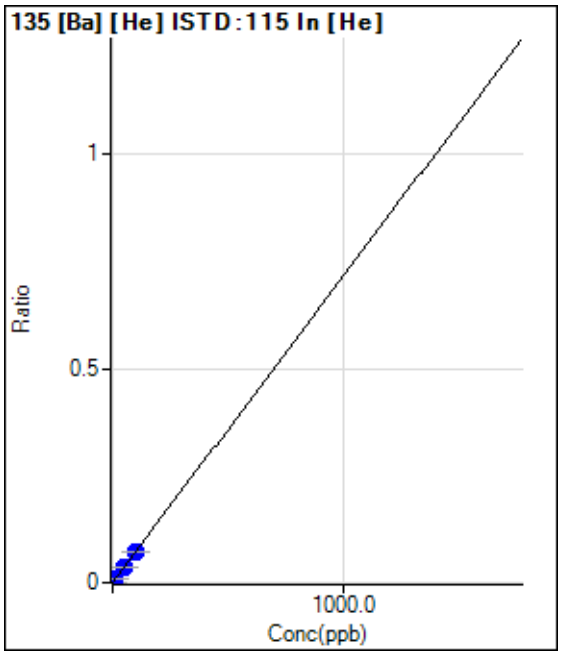
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1		0.000	0.000	632.24	0.0002	P	24.7
2		10.000	10.381	88485.59	0.0275	P	0.7
3		50.000	51.444	417026.22	0.1354	P	0.7
4				3494.85	0.0012	P	4.0
5		100.000	99.240	853355.70	0.2609	P	2.8

y = 0.0026 * x + 1.9878E-004
R = 0.9998
DL = 0.0561
BEC = 0.07566

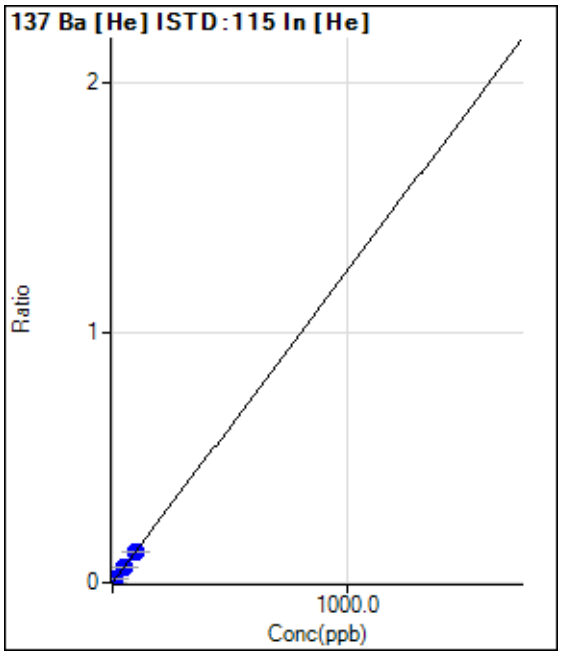
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	83.33	0.0000	P	8.2
2	☐	10.000	9.625	22242.48	0.0069	P	1.8
3	☐	50.000	49.481	109042.57	0.0354	P	0.8
4	☐	100.000	100.297	216485.99	0.0717	P	1.4
5	☐			184.45	0.0001	P	17.7

y = 7.1475E-004 * x + 2.6277E-005
R = 1.0000
DL = 0.00903
BEC = 0.03676

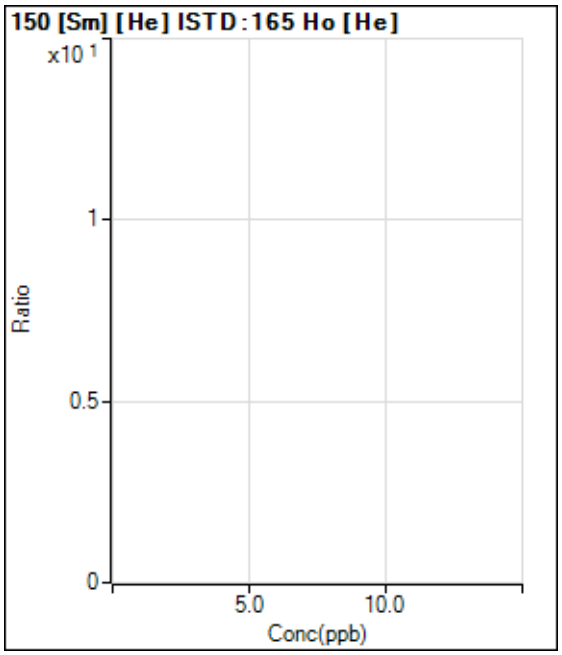
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	105.56	0.0000	P	12.9
2	☐	10.000	9.937	39874.69	0.0124	P	1.0
3	☐	50.000	50.153	192114.42	0.0624	P	0.6
4	☐	100.000	99.930	374975.93	0.1242	P	0.8
5	☐			346.68	0.0001	P	5.1

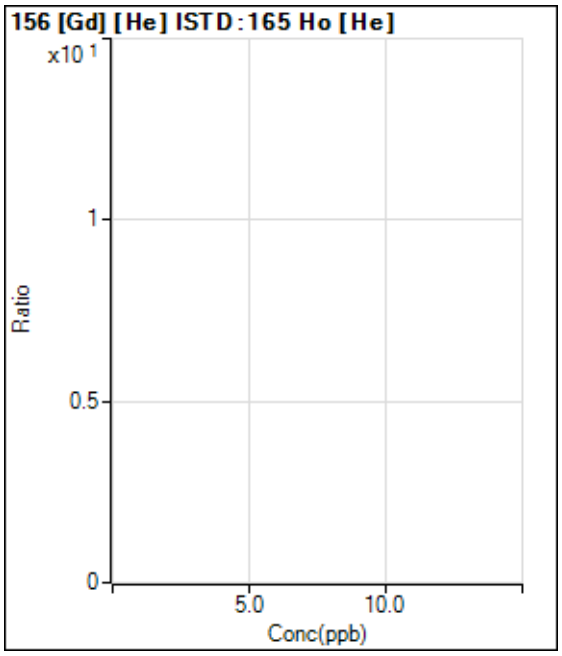
y = 0.0012 * x + 3.3242E-005
R = 1.0000
DL = 0.01032
BEC = 0.02675

Weight: <None>
Min Conc: <None>



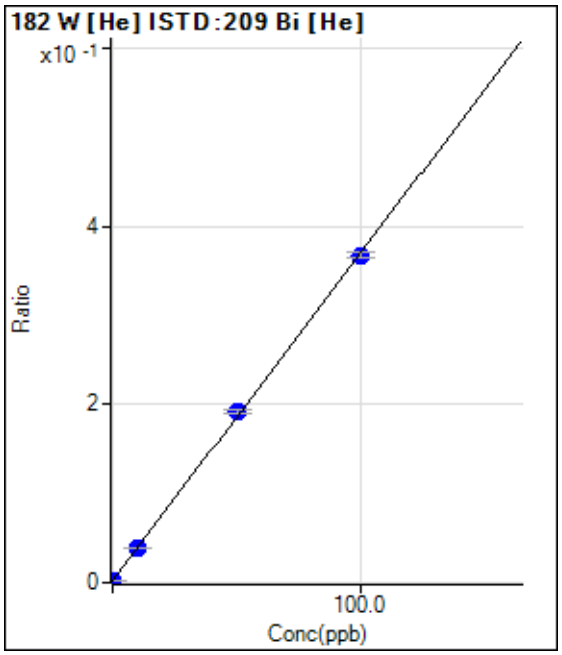
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			24.67	0.0000	P	30.5
2	☐			30.00	0.0000	P	7.9
3	☐			22.00	0.0000	P	56.0
4	☐			45.33	0.0000	P	18.9
5	☐			38.00	0.0000	P	45.9

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			37.33	0.0000	P	22.0
2	☐			48.00	0.0000	P	24.4
3	☐			56.67	0.0000	P	11.4
4	☐			48.67	0.0000	P	17.7
5	☐			40.67	0.0000	P	50.1

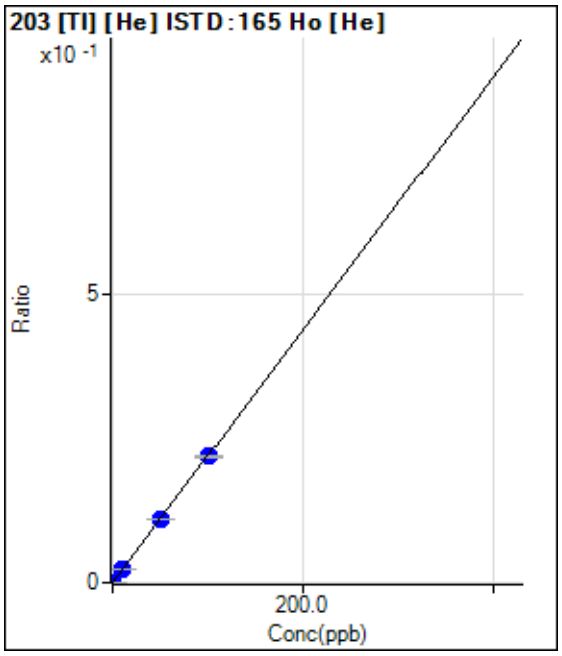
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8313.63	0.0024	P	4.9
2	☐	10.000	9.799	130650.57	0.0385	P	2.5
3	☐	50.000	51.648	625584.83	0.1926	P	1.9
4	☐			14110.45	0.0045	P	8.3
5	☐	100.000	99.196	1269172.49	0.3677	P	1.8

y = 0.0037 * x + 0.0024
R = 0.9997
DL = 0.09664
BEC = 0.6637

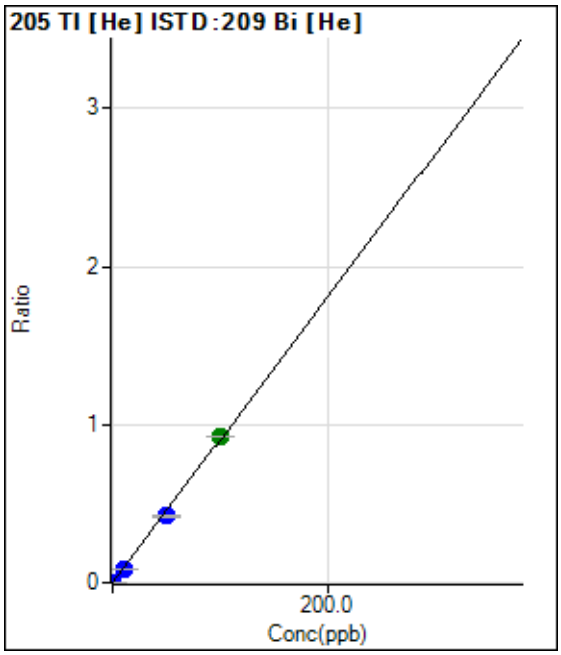
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	103.71	0.0000	P	37.9
2	☐	10.000	10.238	119346.18	0.0225	P	1.7
3	☐	50.000	50.364	571336.95	0.1105	P	1.1
4	☐	100.000	99.794	1115002.24	0.2189	P	1.1
5	☐			1674.26	0.0003	P	10.0

y = 0.0022 * x + 1.9592E-005
R = 1.0000
DL = 0.01016
BEC = 0.008932

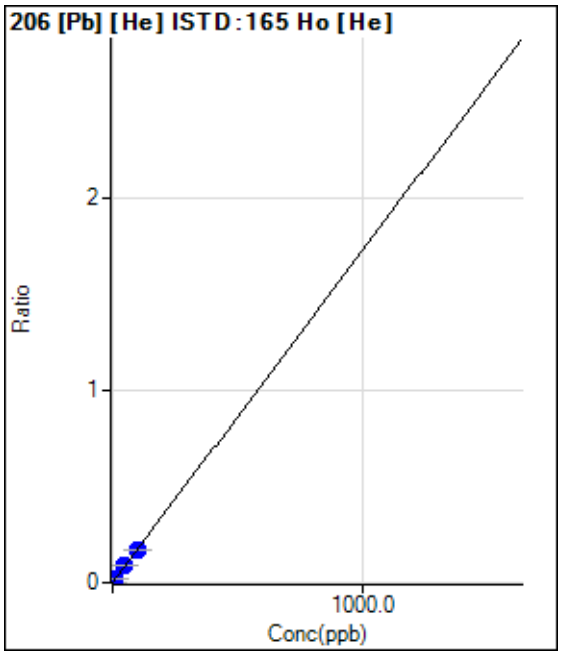
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	160.00	0.0000	P	6.3
2	☐	10.000	9.187	282820.28	0.0834	P	0.9
3	☐	50.000	46.323	1365175.43	0.4204	P	1.9
4	☐	100.000	101.920	2921384.19	0.9248	A	0.5
5	☐			2437.99	0.0007	P	2.3

y = 0.0091 * x + 4.7045E-005
R = 0.9989
DL = 0.0009871
BEC = 0.005185

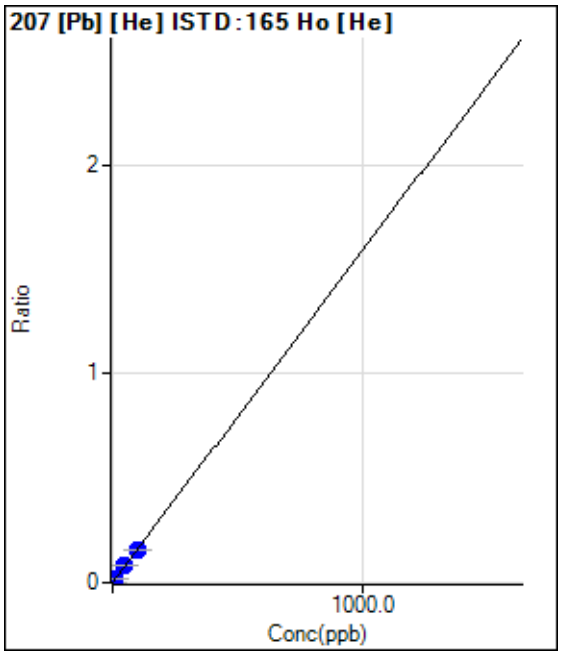
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	270.01	0.0001	P	1.9
2	☐	10.000	10.529	96945.43	0.0183	P	1.0
3	☐	50.000	51.114	457302.90	0.0884	P	0.7
4	☐	100.000	99.390	875609.05	0.1719	P	0.8
5	☐			544.46	0.0001	P	12.2

y = 0.0017 * x + 5.0997E-005
R = 0.9999
DL = 0.001679
BEC = 0.02949

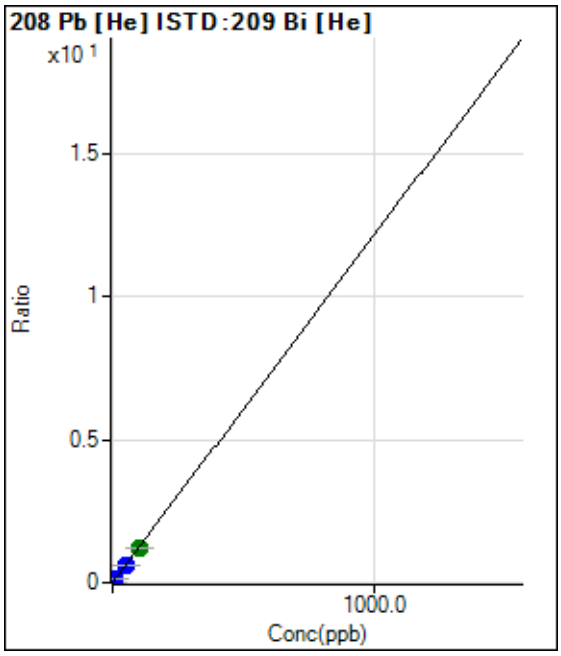
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	280.01	0.0001	P	12.0
2	☐	10.000	10.320	87151.15	0.0164	P	1.2
3	☐	50.000	50.101	410970.35	0.0795	P	0.9
4	☐	100.000	99.917	807019.79	0.1585	P	1.6
5	☐			456.68	0.0001	P	8.2

y = 0.0016 * x + 5.2880E-005
R = 1.0000
DL = 0.012
BEC = 0.03335

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1157.81	0.0003	P	9.3
2	☐	10.000	9.667	397698.95	0.1173	P	0.9
3	☐	50.000	47.756	1877236.82	0.5780	P	1.6
4	☐	100.000	101.155	3866272.43	1.2239	A	0.9
5	☐			2052.30	0.0006	P	7.2

y = 0.0121 * x + 3.4033E-004
R = 0.9996
DL = 0.007831
BEC = 0.02814

Weight: <None>
Min Conc: <None>

Calibration Blank Report

Sample Table

Sample Name	Blank
Data File Name	001CALB.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T09:41:15-04:00
Sample Type	CalBlk
Level	
Dilution	1
Comment	6020/200.8

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	6	2	NoGas	233	7.07
B	11	45	2	NoGas	29877	0.02
Na	23	45	1	He	30396	0.01
Mg	24	45	1	He	945	1.93
Al	27	45	1	He	1683	0.12
K	39	45	1	He	287062	0.00
Ca	44	45	1	He	3542	0.03
Ti	47	45	1	He	54	85.14
V	51	45	1	He	2246	1.71
Cr	52	45	1	He	10277	0.04
Mn	55	45	1	He	5439	0.03
Fe	56	45	1	He	30986	0.03
Co	59	103	1	He	270	2.78
Ni	60	103	1	He	5057	0.07
Cu	63	103	1	He	7309	0.03
Zn	66	103	1	He	5448	0.04
As	75	103	1	He	722	1.74
Se	78	103	1	He	354	2.21
Sr	88	103	1	He	546	0.42
Mo	95	103	1	He	492	6.34
Ag	107	103	1	He	48	55.30
Cd	111	103	1	He	4304	0.05
Sn	118	115	1	He	1611	0.50
Sb	123	115	1	He	792	2.88
Ba	137	115	1	He	110	19.86
W	182	209	1	He	9366	0.11
Tl	205	209	1	He	289	2.27
Pb	208	209	1	He	1247	0.50

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	2	NoGas	4698492	4.93
Sc	45	1	He	2563059	2.24
Sc	45	2	NoGas	25987147	7.04
Rh	103	1	He	4766832	1.86
In	115	1	He	3159478	3.07
Tb	159	1	He	5448493	3.34
Ho	165	1	He	5299148	2.50
Bi	209	1	He	3414078	2.10

Calibration Blank Report

Sample Table

Sample Name	ICIS
Data File Name	002CALB.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T09:45:04-04:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	6	2	NoGas	230	6.44
B	11	45	2	NoGas	29076	0.01
Na	23	45	1	He	29087	0.01
Mg	24	45	1	He	1211	0.45
Al	27	45	1	He	1733	0.38
K	39	45	1	He	278290	0.00
Ca	44	45	1	He	3447	0.16
Ti	47	45	1	He	58	98.00
V	51	45	1	He	2265	0.46
Cr	52	45	1	He	10588	0.03
Mn	55	45	1	He	5616	0.07
Fe	56	45	1	He	29981	0.02
Co	59	103	1	He	319	2.97
Ni	60	103	1	He	5157	0.09
Cu	63	103	1	He	7392	0.04
Zn	66	103	1	He	5505	0.06
As	75	103	1	He	663	1.19
Se	78	103	1	He	348	1.91
Sr	88	103	1	He	589	1.57
Mo	95	103	1	He	269	12.37
Ag	107	103	1	He	54	25.96
Cd	111	103	1	He	4232	0.07
Sn	118	115	1	He	1552	0.10
Sb	123	115	1	He	632	4.20
Ba	137	115	1	He	106	13.49
W	182	209	1	He	8314	0.06
Tl	205	209	1	He	160	3.91
Pb	208	209	1	He	1158	0.84

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	2	NoGas	4563898	0.86
Sc	45	1	He	2572368	1.14
Sc	45	2	NoGas	24609710	0.45
Rh	103	1	He	4780241	1.24
In	115	1	He	3171814	1.74
Tb	159	1	He	5469932	1.32
Ho	165	1	He	5294619	1.13
Bi	209	1	He	3401163	0.46

Calibration Standard Report

Sample Table

Sample Name	STD1-1988989
Data File Name	003CALS.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T09:48:55-04:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	120218	0.00
B	11	2	NoGas	101252	0.00
Na	23	1	He	17585510	0.00
Mg	24	1	He	10144386	0.00
Al	27	1	He	65622	0.00
K	39	1	He	13894552	0.00
Ca	44	1	He	641288	0.00
Ti	47	1	He	7477	0.05
V	51	1	He	175308	0.00
Cr	52	1	He	201412	0.00
Mn	55	1	He	733792	0.00
Fe	56	1	He	43898416	0.00
Co	59	1	He	257330	0.00
Ni	60	1	He	69859	0.00
Cu	63	1	He	173997	0.00
Zn	66	1	He	35877	0.01
As	75	1	He	27448	0.01
Se	78	1	He	2767	0.11
Sr	88	1	He	175823	0.00
Mo	95	1	He	72547	0.00
Ag	107	1	He	199029	0.00
Cd	111	1	He	38853	0.00
Sn	118	1	He	86039	0.00
Sb	123	1	He	88486	0.00
Ba	137	1	He	39875	0.00
W	182	1	He	130651	0.00
Tl	205	1	He	282820	0.00
Pb	208	1	He	397699	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4397207	2.12	4563898	96.35	30	120	
Sc	45	1	He	2635609	0.42	2572368	102.46	30	120	
Sc	45	2	NoGas	24098605	1.37	24609710	97.92	30	120	
Rh	103	1	He	4775012	1.41	4780241	99.89	30	120	
In	115	1	He	3220701	1.11	3171814	101.54	30	120	
Tb	159	1	He	5450824	0.78	5469932	99.65	30	120	
Ho	165	1	He	5310184	1.51	5294619	100.29	30	120	
Bi	209	1	He	3391166	0.32	3401163	99.71	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD2-1988996
Data File Name	004CALS.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T09:52:42-04:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	669634	0.00
B	11	2	NoGas	411404	0.00
Na	23	1	He	85083160	0.00
Mg	24	1	He	48648955	0.00
Al	27	1	He	305668	0.00
K	39	1	He	65033538	0.00
Ca	44	1	He	3097458	0.00
Ti	47	1	He	35042	0.01
V	51	1	He	834709	0.00
Cr	52	1	He	924276	0.00
Mn	55	1	He	3610726	0.00
Fe	56	1	He	210332414	0.00
Co	59	1	He	1216432	0.00
Ni	60	1	He	309592	0.00
Cu	63	1	He	785470	0.00
Zn	66	1	He	158921	0.00
As	75	1	He	132778	0.00
Se	78	1	He	11983	0.01
Sr	88	1	He	846388	0.00
Mo	95	1	He	349766	0.00
Ag	107	1	He	929496	0.00
Cd	111	1	He	167725	0.00
Sn	118	1	He	472562	0.00
Sb	123	1	He	417026	0.00
Ba	137	1	He	192114	0.00
W	182	1	He	625585	0.00
Tl	205	1	He	1365175	0.00
Pb	208	1	He	1877237	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4419498	0.88	4563898	96.84	30	120	
Sc	45	1	He	2545701	1.11	2572368	98.96	30	120	
Sc	45	2	NoGas	24799521	0.09	24609710	100.77	30	120	
Rh	103	1	He	4557843	0.83	4780241	95.35	30	120	
In	115	1	He	3080876	0.18	3171814	97.13	30	120	
Tb	159	1	He	5338099	0.74	5469932	97.59	30	120	
Ho	165	1	He	5171023	1.76	5294619	97.67	30	120	
Bi	209	1	He	3248017	0.86	3401163	95.50	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD3-1988997
Data File Name	005CALS.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T09:56:30-04:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	1296645	0.00
B	11	2	NoGas	35134	0.01
Na	23	1	He	167775082	0.00
Mg	24	1	He	95944685	0.00
Al	27	1	He	604519	0.00
K	39	1	He	130538891	0.00
Ca	44	1	He	5999292	0.00
Ti	47	1	He	82	52.26
V	51	1	He	1704964	0.00
Cr	52	1	He	1854794	0.00
Mn	55	1	He	6927407	0.00
Fe	56	1	He	415342819	0.00
Co	59	1	He	2485723	0.00
Ni	60	1	He	590828	0.00
Cu	63	1	He	1590569	0.00
Zn	66	1	He	307841	0.00
As	75	1	He	255517	0.00
Se	78	1	He	22862	0.00
Sr	88	1	He	1782770	0.00
Mo	95	1	He	2095	1.04
Ag	107	1	He	1940655	0.00
Cd	111	1	He	322487	0.00
Sn	118	1	He	2708	0.48
Sb	123	1	He	3495	0.10
Ba	137	1	He	374976	0.00
W	182	1	He	14110	0.06
Tl	205	1	He	2921384	0.00
Pb	208	1	He	3866272	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4296698	0.20	4563898	94.15	30	120	
Sc	45	1	He	2568001	0.83	2572368	99.83	30	120	
Sc	45	2	NoGas	24036008	0.85	24609710	97.67	30	120	
Rh	103	1	He	4436903	1.07	4780241	92.82	30	120	
In	115	1	He	3018978	0.85	3171814	95.18	30	120	
Tb	159	1	He	5302246	1.33	5469932	96.93	30	120	
Ho	165	1	He	5093283	1.05	5294619	96.20	30	120	
Bi	209	1	He	3158920	0.28	3401163	92.88	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD4-1990870
Data File Name	006CALS.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T10:00:11-04:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	2	NoGas	370	10.76
B	11	2	NoGas	665912	0.00
Na	23	1	He	52402	0.02
Mg	24	1	He	7157	0.38
Al	27	1	He	1737	0.63
K	39	1	He	397679	0.00
Ca	44	1	He	1855	0.52
Ti	47	1	He	71472	0.00
V	51	1	He	3029	0.66
Cr	52	1	He	10568	0.03
Mn	55	1	He	1989	0.74
Fe	56	1	He	168487	0.01
Co	59	1	He	630	0.88
Ni	60	1	He	3654	0.18
Cu	63	1	He	7655	0.08
Zn	66	1	He	2496	0.20
As	75	1	He	4343	0.35
Se	78	1	He	557	0.91
Sr	88	1	He	477	2.42
Mo	95	1	He	707299	0.00
Ag	107	1	He	262	7.42
Cd	111	1	He	4569	0.04
Sn	118	1	He	851144	0.00
Sb	123	1	He	853356	0.00
Ba	137	1	He	347	1.94
W	182	1	He	1269172	0.00
Tl	205	1	He	2438	0.06
Pb	208	1	He	2052	0.36

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4401769	0.71	4563898	96.45	30	120	
Sc	45	1	He	2634300	0.97	2572368	102.41	30	120	
Sc	45	2	NoGas	24107065	1.28	24609710	97.96	30	120	
Rh	103	1	He	4863762	1.35	4780241	101.75	30	120	
In	115	1	He	3271392	1.67	3171814	103.14	30	120	
Tb	159	1	He	5531235	1.51	5469932	101.12	30	120	
Ho	165	1	He	5321625	1.00	5294619	100.51	30	120	
Bi	209	1	He	3451930	0.98	3401163	101.49	30	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV-1987886
Data File Name	007_ICV.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T10:04:02-04:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	6	NoGas	40.490	1.651	537516	0.98	40	101.2	89.5	110.5	
B	11	45	NoGas	48.055	0.653	347029	0.21	40	120.1	89.5	110.5	ICV Failed
Na	23	45	He	20445.455	0.660	68909449	0.42	20000	102.2	89.5	110.5	
Mg	24	45	He	20511.681	0.459	39527898	0.58	20000	102.6	89.5	110.5	
Al	27	45	He	205.114	1.184	249784	0.83	200	102.6	89.5	110.5	
K	39	45	He	20368.980	0.559	53355763	0.90	20000	101.8	89.5	110.5	
Ca	44	45	He	20576.030	0.686	2490478	1.01	20000	102.9	89.5	110.5	
Ti	47	45	He	41.331	1.441	28901	1.12	40	103.3	89.5	110.5	
V	51	45	He	39.808	0.327	677851	0.30	40	99.5	89.5	110.5	
Cr	52	45	He	40.191	0.185	751392	0.25	40	100.5	89.5	110.5	
Mn	55	45	He	208.030	1.136	2913528	0.86	200	104.0	89.5	110.5	
Fe	56	45	He	10225.358	1.007	170583980	0.87	10000	102.3	89.5	110.5	
Co	59	103	He	38.483	2.048	979154	1.01	40	96.2	89.5	110.5	
Ni	60	103	He	40.754	2.411	252391	1.07	40	101.9	89.5	110.5	
Cu	63	103	He	39.316	1.492	645007	0.99	40	98.3	89.5	110.5	
Zn	66	103	He	40.251	0.275	130868	1.47	40	100.6	89.5	110.5	
As	75	103	He	39.651	1.618	105264	1.02	40	99.1	89.5	110.5	
Se	78	103	He	40.962	2.656	9886	1.43	40	102.4	89.5	110.5	
Sr	88	103	He	38.456	0.834	697749	1.21	40	96.1	89.5	110.5	
Mo	95	103	He	42.840	0.671	289116	1.64	40	107.1	89.5	110.5	
Ag	107	103	He	38.485	1.091	761272	0.88	40	96.2	89.5	110.5	
Cd	111	103	He	40.612	1.552	137786	1.31	40	101.5	89.5	110.5	
Sn	118	115	He	39.708	1.240	333903	0.79	40	99.3	89.5	110.5	
Sb	123	115	He	42.660	0.959	349526	0.55	40	106.6	89.5	110.5	
Ba	137	115	He	40.723	1.129	157634	0.69	40	101.8	89.5	110.5	
W	182	209	He	40.987	2.280	503046	1.30	40	102.5	89.5	110.5	
Tl	205	209	He	37.204	0.680	1107506	0.84	40	93.0	89.5	110.5	
Pb	208	209	He	39.088	0.517	1552172	1.06	40	97.7	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	NoGas	4398099	0.76	4563898	96.37	30	120	
Sc	45	He	2566520	0.40	2572368	99.77	30	120	
Sc	45	NoGas	24236465	0.81	24609710	98.48	30	120	
Rh	103	He	4585806	1.64	4780241	95.93	30	120	
In	115	He	3113073	0.44	3171814	98.15	30	120	
Tb	159	He	5405478	1.32	5469932	98.82	30	120	
Ho	165	He	5278472	1.21	5294619	99.70	30	120	
Bi	209	He	3280609	1.48	3401163	96.46	30	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	008_ICB.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T10:07:49-04:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Ti	47	1	He	0.015	88.8	68	14.2	20	
W	182	1	He	0.821	16.9	18233	9.7	10	
Ca	44	1	He	10.746	3.0	4745	0.5	1000	
Na	23	1	He	4.264	14.8	43437	4.5	400	
Mg	24	1	He	1.203	39.7	3530	25.9	1000	
K	39	1	He	35.025	6.1	369379	1.1	1000	
V	51	1	He	0.044	36.2	3006	9.6	2	
Cr	52	1	He	0.006	307.5	10692	2.5	2	
Mn	55	1	He	0.104	9.5	7075	1.1	2	
Fe	56	1	He	5.566	21.2	122920	16.3	50	
Co	59	1	He	0.001	87.6	344	7.5	1	
Ni	60	1	He	-0.237	-23.1	3629	9.8	2	
Cu	63	1	He	0.026	16.4	7764	1.5	2	
Zn	66	1	He	0.603	1.3	7408	0.4	20	
As	75	1	He	0.188	28.2	1170	12.1	2	
Se	78	1	He	0.138	91.5	378	8.1	2	
Sr	88	1	He	0.004	4.8	663	0.5	10	
Mo	95	1	He	0.333	43.5	2588	38.9	2	
Ag	107	1	He	0.003	69.0	123	39.3	0.2	
Cd	111	1	He	0.056	24.6	4388	0.7	0.2	
Ba	137	1	He	0.012	94.8	152	29.8	5	
Sn	118	1	He	0.346	15.2	4534	11.3	10	
Tl	205	1	He	0.049	10.8	1632	10.7	0.5	
Pb	208	1	He	0.014	6.0	1697	2.1	1	
Al	27	1	He	0.112	138.8	1867	10.2	50	
Sb	123	1	He	0.335	15.7	3448	14.1	1	
B	11	2	NoGas	1.253	4.9	36852	0.4	20	
Be	9	2	NoGas	0.002	163.7	252	15.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4484307	2.85	4563898	98.26	30	120	
Sc	45	1	He	2569951	0.99	2572368	99.91	30	120	
Sc	45	2	NoGas	24178696	1.21	24609710	98.25	30	120	
Rh	103	1	He	4742217	0.62	4780241	99.20	30	120	
In	115	1	He	3192381	1.34	3171814	100.65	30	120	
Tb	159	1	He	5439768	0.47	5469932	99.45	30	120	

Ho	165	1	He	5254552	1.06	5294619	99.24	30	120	
Bi	209	1	He	3334449	1.11	3401163	98.04	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1995671
Data File Name	009CRIA.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T10:11:39-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.885	0.885	0.975	12179	0.21	1	88.5	69.5	130.5	
B	11	2	NoGas	21.613	21.613	1.051	172382	0.77	20	108.1	69.5	130.5	
Na	23	1	He	1038.540	1038.540	1.549	3530958	0.65	1000	103.9	69.5	130.5	
Mg	24	1	He	1068.883	1068.883	1.563	2062789	0.86	1000	106.9	69.5	130.5	
Al	27	1	He	51.872	51.872	0.531	64525	1.21	50	103.7	69.5	130.5	
K	39	1	He	1063.014	1063.014	1.778	3050487	1.63	1000	106.3	69.5	130.5	
Ca	44	1	He	1042.416	1042.416	0.884	129556	0.83	1000	104.2	69.5	130.5	
Ti	47	1	He	10.208	10.208	3.523	7188	3.62	10	102.1	69.5	130.5	
V	51	1	He	5.088	5.088	1.626	88682	1.30	5	101.8	69.5	130.5	
Cr	52	1	He	2.091	2.091	1.558	49153	0.69	2	104.6	69.5	130.5	
Mn	55	1	He	4.951	4.951	1.219	74881	0.79	5	99.0	69.5	130.5	
Fe	56	1	He	107.222	107.222	2.369	1819864	1.61	100	107.2	69.5	130.5	
Co	59	1	He	0.978	0.978	1.010	26106	0.72	1	97.8	69.5	130.5	
Ni	60	1	He	1.897	1.897	2.894	17069	2.66	2	94.8	69.5	130.5	
Cu	63	1	He	1.980	1.980	1.187	40659	1.02	2	99.0	69.5	130.5	
Zn	66	1	He	19.780	19.780	1.846	69443	1.33	20	98.9	69.5	130.5	
As	75	1	He	5.027	5.027	0.809	14411	1.39	5	100.5	69.5	130.5	
Se	78	1	He	5.112	5.112	0.742	1582	1.23	5	102.2	69.5	130.5	
Sr	88	1	He	9.203	9.203	0.254	173547	0.81	10	92.0	69.5	130.5	
Mo	95	1	He	10.447	10.447	2.329	73292	2.92	10	104.5	69.5	130.5	
Ag	107	1	He	0.986	0.986	2.652	20265	2.27	1	98.6	69.5	130.5	
Cd	111	1	He	1.066	1.066	0.567	7848	0.40	1	106.6	69.5	130.5	
Sn	118	1	He	10.166	10.166	0.113	89244	0.78	10	101.7	69.5	130.5	
Sb	123	1	He	2.171	2.171	1.106	18928	0.41	2	108.5	69.5	130.5	
Ba	137	1	He	5.058	5.058	1.510	20267	1.53	5	101.2	69.5	130.5	
W	182	1	He	10.174	10.174	2.759	135942	2.39	10	101.7	69.5	130.5	
Tl	205	1	He	1.822	1.822	1.808	56488	1.51	2	91.1	69.5	130.5	
Pb	208	1	He	0.991	0.991	1.374	42013	0.93	1	99.1	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4477898	1.12	4563898	98.12	30	120	
Sc	45	1	He	2568980	0.89	2572368	99.87	30	120	
Sc	45	2	NoGas	24312853	0.47	24609710	98.79	30	120	
Rh	103	1	He	4753362	0.65	4780241	99.44	30	120	
In	115	1	He	3207216	0.71	3171814	101.12	30	120	
Tb	159	1	He	5433973	1.40	5469932	99.34	30	120	
Ho	165	1	He	5310868	1.08	5294619	100.31	30	120	
Bi	209	1	He	3406775	0.67	3401163	100.16	30	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA-1995708
Data File Name	010ICSA.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T10:15:29-04:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.004	94.1	267	16.7	1	
B	11	45	2	NoGas	1.404	7.3	38095	2.3	20	
Na	23	45	1	He	49997.795	0.6	167416667	0.4	75200	
Mg	24	45	1	He	49953.802	1.3	95657222	0.8	75200	
Al	27	45	1	He	47981.217	1.2	57663413	0.3	75200	
K	39	45	1	He	48952.740	1.9	127029184	1.3	75200	
Ca	44	45	1	He	50476.507	0.8	6066099	0.2	75200	
Ti	47	45	1	He	1001.033	1.1	694265	0.7	1505	
V	51	45	1	He	0.032	150.1	2791	30.0	4	
Cr	52	45	1	He	0.721	3.9	23712	2.0	4	
Mn	55	45	1	He	-0.037	-44.7	5051	4.1	4	
Fe	56	45	1	He	49128.588	1.6	814331310	1.4	75200	
Co	59	103	1	He	0.038	6.8	1223	4.6	2	
Ni	60	103	1	He	-0.293	-11.4	3036	5.7	4	
Cu	63	103	1	He	0.327	2.6	11890	0.6	4	
Zn	66	103	1	He	-0.261	-19.3	4282	3.3	10	
As	75	103	1	He	0.329	21.3	1442	12.9	4	
Se	78	103	1	He	0.298	32.8	387	6.1	4	
Sr	88	103	1	He	0.333	2.9	6323	2.9	20	
Mo	95	103	1	He	1086.455	2.8	7022084	2.4	1505	
Ag	107	103	1	He	0.009	14.7	216	11.8	1	
Cd	111	103	1	He	0.205	15.1	4538	2.8	1	
Sn	118	115	1	He	0.061	72.7	1985	18.5	20	
Sb	123	115	1	He	0.199	26.0	2186	18.9	1	
Ba	137	115	1	He	0.037	6.1	242	4.0	2	
W	182	209	1	He	0.791	16.3	16865	8.6	20	
Tl	205	209	1	He	0.031	18.6	1032	16.0	1	
Pb	208	209	1	He	0.104	5.5	5034	3.3	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4328020	0.83	4563898	94.83	30	120	
Sc	45	1	He	2550507	0.91	2572368	99.15	30	120	
Sc	45	2	NoGas	24332613	1.03	24609710	98.87	30	120	
Rh	103	1	He	4395933	0.70	4780241	91.96	30	120	
In	115	1	He	3033575	0.44	3171814	95.64	30	120	
Tb	159	1	He	5303830	0.68	5469932	96.96	30	120	
Ho	165	1	He	5120119	0.52	5294619	96.70	30	120	
Bi	209	1	He	3149969	1.60	3401163	92.61	30	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB-1995789
Data File Name	011ICAB.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T10:19:17-04:00
Sample Type	ICSAB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	6	2	NoGas	102.418	1.297	1323495	1.68	100	102.4	79.5	120.5	
B	11	45	2	NoGas	121.340	0.260	830220	0.26	100	121.3	79.5	120.5	Fail
Na	23	45	1	He	48852.596	0.728	166032527	0.29	50000	97.7	79.5	120.5	
Mg	24	45	1	He	49137.699	1.639	95506781	1.51	50000	98.3	79.5	120.5	
Al	27	45	1	He	47165.157	1.275	57533147	0.91	50000	94.3	79.5	120.5	
K	39	45	1	He	48477.564	0.613	127692317	0.55	50000	97.0	79.5	120.5	
Ca	44	45	1	He	49726.519	2.143	6065320	1.63	50000	99.5	79.5	120.5	
Ti	47	45	1	He	1087.734	0.669	765714	0.55	1100	98.9	79.5	120.5	
V	51	45	1	He	100.371	0.589	1720366	0.13	100	100.4	79.5	120.5	
Cr	52	45	1	He	99.399	0.891	1858614	0.44	100	99.4	79.5	120.5	
Mn	55	45	1	He	102.609	4.341	1452199	3.92	100	102.6	79.5	120.5	
Fe	56	45	1	He	48874.217	1.587	822248430	1.29	50000	97.7	79.5	120.5	
Co	59	103	1	He	101.838	2.122	2521281	1.99	100	101.8	79.5	120.5	
Ni	60	103	1	He	100.932	0.937	601285	1.21	100	100.9	79.5	120.5	
Cu	63	103	1	He	102.282	1.094	1621908	0.45	100	102.3	79.5	120.5	
Zn	66	103	1	He	102.236	1.696	315510	0.36	100	102.2	79.5	120.5	
As	75	103	1	He	103.607	1.064	266679	0.66	100	103.6	79.5	120.5	
Se	78	103	1	He	104.067	2.164	23944	1.23	100	104.1	79.5	120.5	
Sr	88	103	1	He	103.525	3.735	1826440	2.30	100	103.5	79.5	120.5	
Mo	95	103	1	He	1191.226	2.681	7816913	3.23	1100	108.3	79.5	120.5	
Ag	107	103	1	He	100.662	2.034	1937493	0.94	100	100.7	79.5	120.5	
Cd	111	103	1	He	100.550	0.668	326164	0.83	100	100.6	79.5	120.5	
Sn	118	115	1	He	99.218	0.965	813406	1.15	100	99.2	79.5	120.5	
Sb	123	115	1	He	106.687	1.183	853600	0.50	100	106.7	79.5	120.5	
Ba	137	115	1	He	101.190	0.811	382781	1.05	100	101.2	79.5	120.5	
W	182	209	1	He	106.301	0.951	1239744	0.91	100	106.3	79.5	120.5	
Tl	205	209	1	He	101.826	0.581	2908219	0.51	100	101.8	79.5	120.5	
Pb	208	209	1	He	101.055	1.157	3848529	0.49	100	101.1	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4281780	0.54	4563898	93.82	30	120	
Sc	45	1	He	2588682	0.53	2572368	100.63	30	120	
Sc	45	2	NoGas	24167176	0.48	24609710	98.20	30	120	
Rh	103	1	He	4462597	1.43	4780241	93.36	30	120	
In	115	1	He	3043511	1.58	3171814	95.95	30	120	
Tb	159	1	He	5309112	0.89	5469932	97.06	30	120	
Ho	165	1	He	5196475	0.39	5294619	98.15	30	120	
Bi	209	1	He	3147659	0.69	3401163	92.55	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2004624
Data File Name	012_CCV.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T10:22:54-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.686	1.575	642228	0.77	50	97.4	89.5	110.5	
B	11	45	2	NoGas	56.982	1.007	407439	0.82	50	114.0	89.5	110.5	CCV Failed
Na	23	45	1	He	24751.209	0.574	83886019	0.38	25000	99.0	89.5	110.5	
Mg	24	45	1	He	24903.197	1.276	48262694	1.66	25000	99.6	89.5	110.5	
Al	27	45	1	He	248.787	0.302	304322	0.97	250	99.5	89.5	110.5	
K	39	45	1	He	24790.543	0.452	65242162	0.34	25000	99.2	89.5	110.5	
Ca	44	45	1	He	25152.076	0.819	3060833	1.43	25000	100.6	89.5	110.5	
Ti	47	45	1	He	51.773	2.066	36394	2.34	50	103.5	89.5	110.5	
V	51	45	1	He	48.093	0.275	823089	0.85	50	96.2	89.5	110.5	
Cr	52	45	1	He	48.922	0.862	917498	1.37	50	97.8	89.5	110.5	
Mn	55	45	1	He	253.358	0.854	3567131	0.32	250	101.3	89.5	110.5	
Fe	56	45	1	He	12557.068	0.602	210656698	0.26	12500	100.5	89.5	110.5	
Co	59	103	1	He	46.940	1.656	1209402	0.33	50	93.9	89.5	110.5	
Ni	60	103	1	He	49.043	1.644	306571	0.38	50	98.1	89.5	110.5	
Cu	63	103	1	He	47.303	1.784	784366	0.75	50	94.6	89.5	110.5	
Zn	66	103	1	He	48.625	0.712	158972	0.68	50	97.3	89.5	110.5	
As	75	103	1	He	49.324	1.337	132445	0.73	50	98.6	89.5	110.5	
Se	78	103	1	He	49.147	1.186	11946	0.53	50	98.3	89.5	110.5	
Sr	88	103	1	He	45.772	1.458	840835	0.82	50	91.5	89.5	110.5	
Mo	95	103	1	He	56.930	1.856	388932	1.37	50	113.9	89.5	110.5	CCV Failed
Ag	107	103	1	He	46.104	1.473	923512	1.17	50	92.2	89.5	110.5	
Cd	111	103	1	He	48.870	1.450	167061	0.57	50	97.7	89.5	110.5	
Sn	118	115	1	He	55.731	1.029	468267	1.56	50	111.5	89.5	110.5	CCV Failed
Sb	123	115	1	He	51.135	0.875	419034	0.40	50	102.3	89.5	110.5	
Ba	137	115	1	He	49.830	1.451	192949	0.87	50	99.7	89.5	110.5	
W	182	209	1	He	51.819	1.952	628140	1.08	50	103.6	89.5	110.5	
Tl	205	209	1	He	45.850	1.343	1352377	0.51	50	91.7	89.5	110.5	
Pb	208	209	1	He	47.417	1.678	1865377	0.62	50	94.8	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4370745	1.38	4563898	95.77	30	120	
Sc	45	1	He	2581021	0.72	2572368	100.34	30	120	
Sc	45	2	NoGas	24312726	1.28	24609710	98.79	30	120	
Rh	103	1	He	4643730	1.36	4780241	97.14	30	120	
In	115	1	He	3114597	1.12	3171814	98.20	30	120	
Tb	159	1	He	5424459	0.48	5469932	99.17	30	120	
Ho	165	1	He	5297888	0.94	5294619	100.06	30	120	
Bi	209	1	He	3250784	1.33	3401163	95.58	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	013_CCB.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T10:26:41-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.010	35.9	359	14.3	1	
B	11	45	2	NoGas	1.234	7.5	36470	1.8	20	
Na	23	45	1	He	6.945	16.0	52011	7.7	400	
Mg	24	45	1	He	2.349	32.1	5694	26.0	1000	
Al	27	45	1	He	0.472	29.9	2282	8.1	50	
K	39	45	1	He	61.637	3.8	434748	1.8	1000	
Ca	44	45	1	He	1.952	64.2	3647	4.9	1000	
Ti	47	45	1	He	0.138	35.7	152	21.9	20	
V	51	45	1	He	0.016	32.2	2508	3.9	2	
Cr	52	45	1	He	0.018	77.3	10811	2.3	2	
Mn	55	45	1	He	-0.011	-175.4	5414	5.4	2	
Fe	56	45	1	He	7.651	18.7	156177	14.7	50	
Co	59	103	1	He	0.001	89.7	356	10.8	1	
Ni	60	103	1	He	-0.410	-4.5	2547	3.8	2	
Cu	63	103	1	He	0.005	300.0	7439	2.7	2	
Zn	66	103	1	He	0.081	19.5	5741	1.1	20	
As	75	103	1	He	0.114	37.5	972	10.6	2	
Se	78	103	1	He	0.006	1256.5	347	4.4	2	
Sr	88	103	1	He	0.000	-101.3	577	2.9	10	
Mo	95	103	1	He	1.068	36.1	7713	33.6	2	
Ag	107	103	1	He	0.004	15.0	143	10.7	0.2	
Cd	111	103	1	He	0.068	5.2	4446	1.3	0.2	
Sn	118	115	1	He	0.266	14.7	3841	9.0	10	
Sb	123	115	1	He	0.246	12.5	2697	11.0	1	
Ba	137	115	1	He	-0.003	-52.7	94	7.3	5	
W	182	209	1	He	0.544	27.5	14937	11.0	10	
Tl	205	209	1	He	0.069	14.0	2258	11.9	0.5	
Pb	208	209	1	He	0.013	10.8	1683	4.8	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4413114	1.50	4563898	96.70	30	120	
Sc	45	1	He	2545920	0.76	2572368	98.97	30	120	
Sc	45	2	NoGas	24010063	1.25	24609710	97.56	30	120	
Rh	103	1	He	4757477	1.41	4780241	99.52	30	120	
In	115	1	He	3190985	1.46	3171814	100.60	30	120	
Tb	159	1	He	5441723	1.24	5469932	99.48	30	120	
Ho	165	1	He	5298545	0.69	5294619	100.07	30	120	
Bi	209	1	He	3363383	1.38	3401163	98.89	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2004624
Data File Name	014_CCV.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T10:30:33-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	49.248	2.609	640543	0.99	50	98.5	89.5	110.5	
B	11	45	2	NoGas	58.105	1.452	403559	0.25	50	116.2	89.5	110.5	CCV Failed
Na	23	45	1	He	25207.094	1.272	83519145	1.07	25000	100.8	89.5	110.5	
Mg	24	45	1	He	25633.669	1.539	48562978	0.91	25000	102.5	89.5	110.5	
Al	27	45	1	He	253.091	0.485	302628	0.70	250	101.2	89.5	110.5	
K	39	45	1	He	25328.431	0.452	65162696	0.92	25000	101.3	89.5	110.5	
Ca	44	45	1	He	25803.795	0.706	3069680	0.65	25000	103.2	89.5	110.5	
Ti	47	45	1	He	51.490	3.054	35380	2.24	50	103.0	89.5	110.5	
V	51	45	1	He	49.138	2.173	822035	1.62	50	98.3	89.5	110.5	
Cr	52	45	1	He	50.367	1.814	923070	1.19	50	100.7	89.5	110.5	
Mn	55	45	1	He	258.435	1.599	3557046	1.08	250	103.4	89.5	110.5	
Fe	56	45	1	He	12910.678	1.077	211738649	0.27	12500	103.3	89.5	110.5	
Co	59	103	1	He	48.518	1.163	1208673	0.62	50	97.0	89.5	110.5	
Ni	60	103	1	He	50.401	0.818	304504	0.52	50	100.8	89.5	110.5	
Cu	63	103	1	He	48.678	0.848	780267	0.58	50	97.4	89.5	110.5	
Zn	66	103	1	He	50.253	0.745	158673	0.44	50	100.5	89.5	110.5	
As	75	103	1	He	50.970	1.339	132312	1.02	50	101.9	89.5	110.5	
Se	78	103	1	He	50.446	1.814	11846	1.06	50	100.9	89.5	110.5	
Sr	88	103	1	He	47.349	1.278	841001	1.27	50	94.7	89.5	110.5	
Mo	95	103	1	He	53.729	1.647	354941	1.91	50	107.5	89.5	110.5	
Ag	107	103	1	He	47.980	1.418	929265	1.47	50	96.0	89.5	110.5	
Cd	111	103	1	He	50.938	1.175	168198	0.69	50	101.9	89.5	110.5	
Sn	118	115	1	He	56.927	1.096	467617	0.02	50	113.9	89.5	110.5	CCV Failed
Sb	123	115	1	He	52.157	0.800	417927	1.38	50	104.3	89.5	110.5	
Ba	137	115	1	He	50.877	0.354	192644	1.40	50	101.8	89.5	110.5	
W	182	209	1	He	52.703	2.722	623725	2.17	50	105.4	89.5	110.5	
Tl	205	209	1	He	47.095	1.886	1356445	1.03	50	94.2	89.5	110.5	
Pb	208	209	1	He	48.617	1.495	1867721	0.76	50	97.2	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4310225	1.63	4563898	94.44	30	120	
Sc	45	1	He	2523311	0.81	2572368	98.09	30	120	
Sc	45	2	NoGas	23649439	1.43	24609710	96.10	30	120	
Rh	103	1	He	4489659	0.78	4780241	93.92	30	120	
In	115	1	He	3045396	1.11	3171814	96.01	30	120	
Tb	159	1	He	5225592	0.29	5469932	95.53	30	120	
Ho	165	1	He	5109126	0.55	5294619	96.50	30	120	
Bi	209	1	He	3174450	1.12	3401163	93.33	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	015_CCB.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T10:34:23-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.005	15.5	289	3.8	1	
B	11	45	2	NoGas	1.185	5.7	36017	2.7	20	
Na	23	45	1	He	6.302	11.0	49497	6.2	400	
Mg	24	45	1	He	1.796	38.9	4612	30.4	1000	
Al	27	45	1	He	0.164	22.0	1898	1.0	50	
K	39	45	1	He	54.329	3.3	412709	1.5	1000	
Ca	44	45	1	He	1.742	53.6	3595	4.6	1000	
Ti	47	45	1	He	0.080	28.1	111	12.5	20	
V	51	45	1	He	0.018	90.7	2530	11.3	2	
Cr	52	45	1	He	0.032	6.2	10973	1.5	2	
Mn	55	45	1	He	-0.008	-184.6	5415	4.4	2	
Fe	56	45	1	He	6.369	19.6	133837	13.9	50	
Co	59	103	1	He	0.002	54.8	377	8.7	1	
Ni	60	103	1	He	-0.413	-4.9	2534	5.5	2	
Cu	63	103	1	He	0.007	178.3	7502	2.6	2	
Zn	66	103	1	He	0.007	610.9	5514	2.2	20	
As	75	103	1	He	0.125	31.0	1006	11.0	2	
Se	78	103	1	He	0.107	27.9	373	2.4	2	
Sr	88	103	1	He	-0.002	-98.7	554	5.5	10	
Mo	95	103	1	He	0.468	35.3	3552	33.0	2	
Ag	107	103	1	He	0.003	80.1	111	40.8	0.2	
Cd	111	103	1	He	0.099	29.7	4562	2.1	0.2	
Sn	118	115	1	He	0.244	19.1	3678	11.0	10	
Sb	123	115	1	He	0.250	12.8	2746	9.9	1	
Ba	137	115	1	He	0.005	114.9	127	18.2	5	
W	182	209	1	He	0.581	35.1	15397	16.3	10	
Tl	205	209	1	He	0.061	7.0	2019	6.5	0.5	
Pb	208	209	1	He	0.011	29.3	1578	8.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4432978	0.85	4563898	97.13	30	120	
Sc	45	1	He	2526828	1.59	2572368	98.23	30	120	
Sc	45	2	NoGas	23921901	1.96	24609710	97.21	30	120	
Rh	103	1	He	4769986	0.46	4780241	99.79	30	120	
In	115	1	He	3210304	0.16	3171814	101.21	30	120	
Tb	159	1	He	5414727	1.02	5469932	98.99	30	120	
Ho	165	1	He	5249099	0.92	5294619	99.14	30	120	
Bi	209	1	He	3360494	0.18	3401163	98.80	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2004624
Data File Name	016_CCV.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T10:38:27-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	49.609	0.712	650105	0.61	50	99.2	89.5	110.5	
B	11	45	2	NoGas	57.394	0.628	407087	0.95	50	114.8	89.5	110.5	CCV Failed
Na	23	45	1	He	24877.957	1.782	84496834	1.30	25000	99.5	89.5	110.5	
Mg	24	45	1	He	25225.095	0.763	48991522	0.56	25000	100.9	89.5	110.5	
Al	27	45	1	He	249.314	1.220	305616	0.83	250	99.7	89.5	110.5	
K	39	45	1	He	25003.511	0.561	65944155	0.09	25000	100.0	89.5	110.5	
Ca	44	45	1	He	25533.780	1.136	3113995	1.47	25000	102.1	89.5	110.5	
Ti	47	45	1	He	50.385	0.918	35496	0.58	50	100.8	89.5	110.5	
V	51	45	1	He	48.152	1.308	825853	0.96	50	96.3	89.5	110.5	
Cr	52	45	1	He	48.994	0.896	920808	0.68	50	98.0	89.5	110.5	
Mn	55	45	1	He	256.979	0.930	3625972	0.38	250	102.8	89.5	110.5	
Fe	56	45	1	He	12552.961	0.802	211052321	0.83	12500	100.4	89.5	110.5	
Co	59	103	1	He	48.242	0.901	1212505	0.94	50	96.5	89.5	110.5	
Ni	60	103	1	He	50.240	1.065	306238	0.61	50	100.5	89.5	110.5	
Cu	63	103	1	He	48.418	0.971	783015	0.88	50	96.8	89.5	110.5	
Zn	66	103	1	He	49.966	0.611	159203	1.12	50	99.9	89.5	110.5	
As	75	103	1	He	50.638	1.184	132622	1.20	50	101.3	89.5	110.5	
Se	78	103	1	He	50.787	1.105	12031	0.93	50	101.6	89.5	110.5	
Sr	88	103	1	He	47.176	1.200	845359	1.24	50	94.4	89.5	110.5	
Mo	95	103	1	He	52.583	1.955	350439	1.86	50	105.2	89.5	110.5	
Ag	107	103	1	He	47.312	0.999	924427	0.46	50	94.6	89.5	110.5	
Cd	111	103	1	He	50.308	0.593	167645	0.86	50	100.6	89.5	110.5	
Sn	118	115	1	He	56.706	0.817	470497	0.45	50	113.4	89.5	110.5	CCV Failed
Sb	123	115	1	He	51.661	0.373	418108	1.11	50	103.3	89.5	110.5	
Ba	137	115	1	He	49.859	0.827	190683	1.52	50	99.7	89.5	110.5	
W	182	209	1	He	51.198	2.369	615507	2.20	50	102.4	89.5	110.5	
Tl	205	209	1	He	45.804	1.617	1339666	1.49	50	91.6	89.5	110.5	
Pb	208	209	1	He	47.584	0.843	1856300	0.71	50	95.2	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4341582	0.49	4563898	95.13	30	120	
Sc	45	1	He	2586677	0.65	2572368	100.56	30	120	
Sc	45	2	NoGas	24129438	1.50	24609710	98.05	30	120	
Rh	103	1	He	4529601	1.31	4780241	94.76	30	120	
In	115	1	He	3075891	0.79	3171814	96.98	30	120	
Tb	159	1	He	5379987	1.44	5469932	98.36	30	120	
Ho	165	1	He	5190749	0.12	5294619	98.04	30	120	
Bi	209	1	He	3223163	0.14	3401163	94.77	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	017_CCB.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T10:42:16-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.007	28.7	315	7.3	1	
B	11	45	2	NoGas	1.172	2.3	35709	0.9	20	
Na	23	45	1	He	6.371	13.1	50942	5.5	400	
Mg	24	45	1	He	2.515	16.8	6109	13.3	1000	
Al	27	45	1	He	0.164	19.7	1946	2.3	50	
K	39	45	1	He	41.416	1.8	389074	0.6	1000	
Ca	44	45	1	He	1.927	98.0	3707	6.4	1000	
Ti	47	45	1	He	0.022	88.5	73	18.2	20	
V	51	45	1	He	0.030	188.9	2800	34.7	2	
Cr	52	45	1	He	0.010	52.2	10847	0.6	2	
Mn	55	45	1	He	-0.003	-446.6	5618	2.9	2	
Fe	56	45	1	He	6.198	15.8	134508	12.4	50	
Co	59	103	1	He	0.000	1780.0	323	9.9	1	
Ni	60	103	1	He	-0.390	-3.9	2709	2.9	2	
Cu	63	103	1	He	0.012	87.1	7649	2.2	2	
Zn	66	103	1	He	0.028	137.1	5639	2.9	20	
As	75	103	1	He	0.140	27.4	1055	8.7	2	
Se	78	103	1	He	0.072	39.6	368	1.3	2	
Sr	88	103	1	He	0.001	92.0	612	3.3	10	
Mo	95	103	1	He	0.336	36.3	2641	31.2	2	
Ag	107	103	1	He	0.005	24.6	152	17.0	0.2	
Cd	111	103	1	He	0.099	14.6	4608	2.0	0.2	
Sn	118	115	1	He	0.265	9.7	3860	6.0	10	
Sb	123	115	1	He	0.244	10.5	2695	7.9	1	
Ba	137	115	1	He	0.002	261.3	116	20.3	5	
W	182	209	1	He	0.574	22.3	15642	11.0	10	
Tl	205	209	1	He	0.065	8.6	2176	8.5	0.5	
Pb	208	209	1	He	0.013	42.0	1710	12.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4405158	1.76	4563898	96.52	30	120	
Sc	45	1	He	2589902	0.41	2572368	100.68	30	120	
Sc	45	2	NoGas	23776190	1.21	24609710	96.61	30	120	
Rh	103	1	He	4816312	1.40	4780241	100.75	30	120	
In	115	1	He	3209489	0.89	3171814	101.19	30	120	
Tb	159	1	He	5455730	0.76	5469932	99.74	30	120	
Ho	165	1	He	5369063	0.72	5294619	101.41	30	120	
Bi	209	1	He	3429363	0.80	3401163	100.83	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-180744/1-a
Data File Name	018_Blk.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T10:46:06-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.006	71.4	300	22.2	1	
B	11	45	2	NoGas	3.798	4.4	50651	2.8	20	
Na	23	45	1	He	79.319	1.3	273645	1.2	400	
Mg	24	45	1	He	38.704	3.7	69993	2.3	1000	
Al	27	45	1	He	25.740	1.5	30350	0.2	50	
K	39	45	1	He	40.563	5.8	354115	2.1	1000	
Ca	44	45	1	He	123.879	1.6	17007	0.2	1000	
Ti	47	45	1	He	0.147	35.7	148	21.7	20	
V	51	45	1	He	0.568	13.7	10986	10.0	2	
Cr	52	45	1	He	1.891	4.0	41942	1.8	2	
Mn	55	45	1	He	0.080	11.7	6214	0.7	2	
Fe	56	45	1	He	19.395	8.6	326235	6.4	50	
Co	59	103	1	He	0.007	15.3	476	7.3	1	
Ni	60	103	1	He	0.484	21.8	7833	6.6	2	
Cu	63	103	1	He	1.449	7.2	30410	3.8	2	
Zn	66	103	1	He	10.496	2.4	37797	0.2	20	
As	75	103	1	He	0.244	20.2	1271	8.3	2	
Se	78	103	1	He	-0.046	-37.8	321	0.8	2	
Sr	88	103	1	He	0.288	1.5	5754	0.8	10	
Mo	95	103	1	He	0.212	33.7	1673	27.0	2	
Ag	107	103	1	He	0.008	7.0	207	4.3	0.2	
Cd	111	103	1	He	0.064	48.7	4248	3.9	0.2	
Sn	118	115	1	He	1.020	7.8	9718	5.9	10	
Sb	123	115	1	He	0.438	30.8	4037	23.0	1	
Ba	137	115	1	He	0.643	2.2	2504	2.1	5	
W	182	209	1	He	0.169	69.3	11049	10.0	10	
Tl	205	209	1	He	0.048	0.3	1740	3.7	0.5	
Pb	208	209	1	He	0.095	7.3	5390	9.4	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4293959	2.50	4563898	94.09	30	120	
Sc	45	1	He	2370880	1.48	2572368	92.17	30	120	
Sc	45	2	NoGas	22814916	0.73	24609710	92.71	30	120	
Rh	103	1	He	4558810	1.89	4780241	95.37	30	120	
In	115	1	He	3009299	3.22	3171814	94.88	30	120	
Tb	159	1	He	5292970	2.35	5469932	96.76	30	120	
Ho	165	1	He	5155741	2.45	5294619	97.38	30	120	
Bi	209	1	He	3616437	3.93	3401163	106.33	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-180744/2-a
Data File Name	019_LCS.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T10:49:58-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	952.019	952.019	1.746	12351567	0.34	1000	95.2	79.5	120.5	
B	11	2	NoGas	126.978	126.978	0.937	830009	0.49	100	127.0	79.5	120.5	LCS Failed
Na	23	1	He	9950.088	9950.088	0.767	31661002	0.72	10000	99.5	79.5	120.5	
Mg	24	1	He	9963.134	9963.134	1.876	18118175	1.54	10000	99.6	79.5	120.5	
Al	27	1	He	9317.984	9317.984	0.716	10635720	0.43	10000	93.2	79.5	120.5	
K	39	1	He	9488.594	9488.594	1.874	23592199	0.74	10000	94.9	79.5	120.5	
Ca	44	1	He	11053.591	11053.591	1.282	1263950	0.24	10000	110.5	79.5	120.5	
Ti	47	1	He	96.311	96.311	0.825	63482	0.86	100	96.3	79.5	120.5	
V	51	1	He	919.950	919.950	0.236	14735584	0.97	1000	92.0	79.5	120.5	
Cr	52	1	He	976.410	976.410	1.733	16992447	0.72	1000	97.6	79.5	120.5	
Mn	55	1	He	988.983	988.983	1.744	13050092	0.73	1000	98.9	79.5	120.5	
Fe	56	1	He	10011.647	10011.647	1.787	157598269	0.70	10000	100.1	79.5	120.5	
Co	59	1	He	927.959	927.959	1.497	23243661	0.68	1000	92.8	79.5	120.5	
Ni	60	1	He	991.587	991.587	0.917	5934159	0.43	1000	99.2	79.5	120.5	
Cu	63	1	He	951.536	951.536	1.503	15209647	0.90	1000	95.2	79.5	120.5	
Zn	66	1	He	1005.270	1005.270	0.892	3093471	0.22	1000	100.5	79.5	120.5	
As	75	1	He	979.688	979.688	1.432	2546263	0.87	1000	98.0	79.5	120.5	
Se	78	1	He	937.329	937.329	1.111	215606	0.19	1000	93.7	79.5	120.5	
Sr	88	1	He	905.531	905.531	0.602	16166003	0.70	1000	90.6	79.5	120.5	
Mo	95	1	He	100.675	100.675	1.686	668589	0.64	100	100.7	79.5	120.5	
Ag	107	1	He	100.156	100.156	1.084	1950793	0.63	100	100.2	79.5	120.5	
Cd	111	1	He	1041.172	1041.172	1.237	3380002	1.15	1000	104.1	79.5	120.5	
Sn	118	1	He	1037.388	1037.388	0.908	8394764	0.64	1000	103.7	79.5	120.5	
Sb	123	1	He	100.980	100.980	1.238	798869	0.38	100	101.0	79.5	120.5	
Ba	137	1	He	1047.809	1047.809	2.009	3917657	1.19	1000	104.8	79.5	120.5	
W	182	1	He	98.826	98.826	1.046	1226408	0.58	100	98.8	79.5	120.5	
Tl	205	1	He	239.328	239.328	0.986	7269727	0.52	250	95.7	79.5	120.5	
Pb	208	1	He	988.091	988.091	0.732	40014868	0.94	1000	98.8	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4300588	1.93	4563898	94.23	30	120	
Sc	45	1	He	2422041	1.15	2572368	94.16	30	120	
Sc	45	2	NoGas	23125359	1.40	24609710	93.97	30	120	
Rh	103	1	He	4515449	1.05	4780241	94.46	30	120	
In	115	1	He	3009060	0.87	3171814	94.87	30	120	
Tb	159	1	He	5402622	0.70	5469932	98.77	30	120	
Ho	165	1	He	5273055	0.16	5294619	99.59	30	120	
Bi	209	1	He	3347814	0.48	3401163	98.43	30	120	

Sample Report

Sample Table

Sample Name	240-50587-b-1-a
Data File Name	020SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T10:53:23-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.107	0.107	4.27	1559	0.01	10000	
B	11	45	2	NoGas	98.149	98.149	0.69	639526	0.02	300	
Na	23	45	1	He	87902.926	87902.926	1.87	275692567	0.03	500000	
Mg	24	45	1	He	30270.745	30270.745	1.57	54300427	0.06	500000	
Al	27	45	1	He	9.541	9.541	1.63	12352	0.08	200000	
K	39	45	1	He	5242.440	5242.440	1.58	12974601	0.04	500000	
Ca	44	45	1	He	130318.696	130318.696	1.53	14667009	0.89	500000	
Ti	47	45	1	He	0.444	0.444	10.00	342	0.13	2500	
V	51	45	1	He	-26.393	-26.393	-30.08	-414340	0.01	10000	
Cr	52	45	1	He	695.559	695.559	0.74	11945291	0.01	10000	
Mn	55	45	1	He	3.097	3.097	1.91	45523	0.01	10000	
Fe	56	45	1	He	27.205	27.205	3.44	450226	0.01	200000	
Co	59	103	1	He	0.210	0.210	15.40	5254	0.00	10000	
Ni	60	103	1	He	7.992	7.992	3.01	49707	0.02	10000	
Cu	63	103	1	He	1.519	1.519	0.64	29507	0.01	10000	
Zn	66	103	1	He	1.590	1.590	11.59	9517	0.02	10000	
As	75	103	1	He	3.395	3.395	9.86	8926	0.04	10000	
Se	78	103	1	He	2.150	2.150	8.11	776	0.28	10000	
Sr	88	103	1	He	176.821	176.821	2.17	2980098	0.01	10000	
Mo	95	103	1	He	9.665	9.665	1.36	60810	0.02	2000	
Ag	107	103	1	He	0.013	0.013	31.27	281	0.00	300	
Cd	111	103	1	He	0.292	0.292	35.50	4665	0.01	4000	
Sn	118	115	1	He	1.414	1.414	0.28	12516	0.01	2000	
Sb	123	115	1	He	0.819	0.819	5.02	6855	0.01	300	
Ba	137	115	1	He	56.065	56.065	3.04	203186	0.03	10000	
W	182	209	1	He	0.938	0.938	19.96	18574	0.01	2500	
Tl	205	209	1	He	0.130	0.130	20.71	3856	0.00	5000	
Pb	208	209	1	He	0.150	0.150	12.43	6787	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4166282	1.38	4563898	91.29	30	120	
Sc	45	1	He	2389362	1.26	2572368	92.89	30	120	
Sc	45	2	NoGas	22830065	1.40	24609710	92.77	30	120	
Rh	103	1	He	4262652	1.01	4780241	89.17	30	120	
In	115	1	He	2916035	1.74	3171814	91.94	30	120	
Tb	159	1	He	5262626	0.88	5469932	96.21	30	120	
Ho	165	1	He	5044158	0.68	5294619	95.27	30	120	
Bi	209	1	He	3149190	0.42	3401163	92.59	30	120	

Sample Report

Sample Table

Sample Name	SD 240-50587-b-1-a@5
Data File Name	021SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T10:57:10-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.050	0.050	19.62	926	0.01	10000	
B	11	45	2	NoGas	19.248	19.248	6.18	175590	0.01	300	
Na	23	45	1	He	18042.543	18042.543	0.52	60945183	0.03	500000	
Mg	24	45	1	He	6294.766	6294.766	0.72	12157174	0.05	500000	
Al	27	45	1	He	7.242	7.242	1.08	10510	0.07	200000	
K	39	45	1	He	1111.199	1111.199	0.67	3179913	0.03	500000	
Ca	44	45	1	He	27413.072	27413.072	1.07	3324031	0.82	500000	
Ti	47	45	1	He	0.104	0.104	29.51	130	0.08	2500	
V	51	45	1	He	-2.282	-2.282	-40.90	-36587	0.01	10000	
Cr	52	45	1	He	145.112	145.112	0.44	2691099	0.01	10000	
Mn	55	45	1	He	0.553	0.553	2.54	13362	0.00	10000	
Fe	56	45	1	He	4.357	4.357	0.97	102796	0.00	200000	
Co	59	103	1	He	0.055	0.055	5.68	1718	0.00	10000	
Ni	60	103	1	He	1.333	1.333	0.60	13183	0.01	10000	
Cu	63	103	1	He	0.538	0.538	1.83	15999	0.00	10000	
Zn	66	103	1	He	0.069	0.069	80.32	5559	0.00	10000	
As	75	103	1	He	0.508	0.508	16.83	1998	0.03	10000	
Se	78	103	1	He	0.352	0.352	19.36	420	0.08	10000	
Sr	88	103	1	He	33.660	33.660	1.36	617571	0.01	10000	
Mo	95	103	1	He	1.947	1.947	0.43	13532	0.01	2000	
Ag	107	103	1	He	0.004	0.004	17.12	131	0.00	300	
Cd	111	103	1	He	0.160	0.160	25.21	4638	0.00	4000	
Sn	118	115	1	He	0.102	0.102	21.76	2426	0.00	2000	
Sb	123	115	1	He	0.122	0.122	20.54	1645	0.01	300	
Ba	137	115	1	He	11.269	11.269	1.74	44489	0.03	10000	
W	182	209	1	He	0.102	0.102	89.20	9511	0.00	2500	
Tl	205	209	1	He	0.017	0.017	7.90	676	0.00	5000	
Pb	208	209	1	He	0.050	0.050	10.15	3202	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4650052	6.81	4563898	101.89	30	120	
Sc	45	1	He	2571995	0.57	2572368	99.99	30	120	
Sc	45	2	NoGas	27399850	16.17	24609710	111.34	30	120	
Rh	103	1	He	4636415	0.71	4780241	96.99	30	120	
In	115	1	He	3169830	1.55	3171814	99.94	30	120	
Tb	159	1	He	5447868	0.64	5469932	99.60	30	120	
Ho	165	1	He	5323575	1.88	5294619	100.55	30	120	
Bi	209	1	He	3376676	1.22	3401163	99.28	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-50587-b-1-a
Data File Name	022SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T11:00:56-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	991.630	991.630	0.40	12618374	0.01	10000	
B	11	45	2	NoGas	220.236	220.236	0.68	1415304	0.02	300	
Na	23	45	1	He	100246.664	100246.664	4.65	312695765	0.03	500000	
Mg	24	45	1	He	41214.468	41214.468	5.57	73503456	0.06	500000	
Al	27	45	1	He	10075.984	10075.984	4.80	11282863	0.09	200000	
K	39	45	1	He	15477.204	15477.204	4.74	37594716	0.04	500000	
Ca	44	45	1	He	143288.833	143288.833	5.82	16030116	0.89	500000	
Ti	47	45	1	He	102.421	102.421	6.37	66186	0.15	2500	
V	51	45	1	He	969.084	969.084	6.20	15219319	0.01	10000	
Cr	52	45	1	He	1697.710	1697.710	6.93	28956572	0.01	10000	
Mn	55	45	1	He	1016.256	1016.256	6.15	13149646	0.01	10000	
Fe	56	45	1	He	10383.982	10383.982	5.66	160315771	0.01	200000	
Co	59	103	1	He	960.092	960.092	6.57	22968107	0.00	10000	
Ni	60	103	1	He	1016.109	1016.109	6.71	5807036	0.02	10000	
Cu	63	103	1	He	986.436	986.436	7.81	15051184	0.01	10000	
Zn	66	103	1	He	1026.097	1026.097	6.16	3016014	0.03	10000	
As	75	103	1	He	1050.960	1050.960	7.19	2608059	0.04	10000	
Se	78	103	1	He	981.125	981.125	6.16	215555	0.46	10000	
Sr	88	103	1	He	1137.276	1137.276	6.62	19389118	0.01	10000	
Mo	95	103	1	He	117.737	117.737	6.10	746880	0.02	2000	
Ag	107	103	1	He	100.692	100.692	7.42	1872412	0.01	300	
Cd	111	103	1	He	1052.751	1052.751	5.35	3265389	0.03	4000	
Sn	118	115	1	He	1108.175	1108.175	5.13	8482489	0.01	2000	
Sb	123	115	1	He	108.067	108.067	4.65	808796	0.01	300	
Ba	137	115	1	He	1165.831	1165.831	4.03	4124819	0.03	10000	
W	182	209	1	He	110.008	110.008	4.33	1261910	0.01	2500	
Tl	205	209	1	He	252.899	252.899	4.06	7106227	0.00	5000	
Pb	208	209	1	He	1047.402	1047.402	4.60	39232578	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4217024	1.11	4563898	92.40	30	120	
Sc	45	1	He	2379983	5.38	2572368	92.52	30	120	
Sc	45	2	NoGas	23054902	0.94	24609710	93.68	30	120	
Rh	103	1	He	4323227	5.87	4780241	90.44	30	120	
In	115	1	He	2850666	4.62	3171814	89.87	30	120	
Tb	159	1	He	5181596	5.36	5469932	94.73	30	120	
Ho	165	1	He	5008600	5.33	5294619	94.60	30	120	
Bi	209	1	He	3100232	4.14	3401163	91.15	30	120	

Sample Report

Sample Table

Sample Name	240-50587-b-1-b ms
Data File Name	023SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T11:04:20-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1003.138	1003.138	2.17	12929484	0.01	10000	
B	11	45	2	NoGas	223.143	223.143	2.45	1477062	0.02	300	
Na	23	45	1	He	97013.415	97013.415	1.09	311603921	0.03	500000	
Mg	24	45	1	He	40003.966	40003.966	0.50	73493738	0.05	500000	
Al	27	45	1	He	9690.831	9690.831	1.37	11173973	0.09	200000	
K	39	45	1	He	14979.461	14979.461	1.01	37475794	0.04	500000	
Ca	44	45	1	He	139676.003	139676.003	0.83	16098180	0.87	500000	
Ti	47	45	1	He	101.397	101.397	0.47	67521	0.15	2500	
V	51	45	1	He	940.315	940.315	1.40	15217666	0.01	10000	
Cr	52	45	1	He	1672.073	1672.073	0.58	29392668	0.01	10000	
Mn	55	45	1	He	1010.587	1010.587	0.77	13472729	0.01	10000	
Fe	56	45	1	He	10164.968	10164.968	0.50	161668571	0.01	200000	
Co	59	103	1	He	976.917	976.917	1.64	23418790	0.00	10000	
Ni	60	103	1	He	1027.032	1027.032	1.35	5881924	0.02	10000	
Cu	63	103	1	He	981.436	981.436	1.43	15013190	0.01	10000	
Zn	66	103	1	He	1034.283	1034.283	1.14	3045785	0.03	10000	
As	75	103	1	He	1079.434	1079.434	0.74	2685030	0.04	10000	
Se	78	103	1	He	1001.178	1001.178	0.53	220383	0.45	10000	
Sr	88	103	1	He	1143.245	1143.245	1.09	19532008	0.01	10000	
Mo	95	103	1	He	118.570	118.570	0.63	753606	0.02	2000	
Ag	107	103	1	He	102.780	102.780	1.32	1915841	0.01	300	
Cd	111	103	1	He	1070.095	1070.095	0.91	3324441	0.03	4000	
Sn	118	115	1	He	1111.293	1111.293	2.10	8604036	0.01	2000	
Sb	123	115	1	He	107.606	107.606	2.53	814402	0.01	300	
Ba	137	115	1	He	1171.890	1171.890	2.40	4192177	0.03	10000	
W	182	209	1	He	111.536	111.536	0.35	1277821	0.01	2500	
Tl	205	209	1	He	255.974	255.974	0.63	7183791	0.00	5000	
Pb	208	209	1	He	1058.873	1058.873	0.96	39614702	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4272290	1.39	4563898	93.61	30	120	
Sc	45	1	He	2446883	1.31	2572368	95.12	30	120	
Sc	45	2	NoGas	23756689	0.98	24609710	96.53	30	120	
Rh	103	1	He	4321355	0.88	4780241	90.40	30	120	
In	115	1	He	2879637	2.11	3171814	90.79	30	120	
Tb	159	1	He	5276161	0.83	5469932	96.46	30	120	
Ho	165	1	He	5123601	1.68	5294619	96.77	30	120	
Bi	209	1	He	3092990	0.99	3401163	90.94	30	120	

Sample Report

Sample Table

Sample Name	240-50587-b-1-c msd
Data File Name	024SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T11:07:43-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	985.394	985.394	2.42	12703132	0.01	10000	
B	11	45	2	NoGas	218.943	218.943	0.60	1473525	0.01	300	
Na	23	45	1	He	94872.145	94872.145	2.07	304557536	0.03	500000	
Mg	24	45	1	He	38665.831	38665.831	1.26	70996842	0.05	500000	
Al	27	45	1	He	9425.938	9425.938	0.52	10863908	0.09	200000	
K	39	45	1	He	14652.035	14652.035	1.23	36643187	0.04	500000	
Ca	44	45	1	He	134930.953	134930.953	0.94	15545116	0.87	500000	
Ti	47	45	1	He	98.343	98.343	1.34	65448	0.15	2500	
V	51	45	1	He	915.561	915.561	0.91	14808000	0.01	10000	
Cr	52	45	1	He	1622.133	1622.133	1.24	28499748	0.01	10000	
Mn	55	45	1	He	970.925	970.925	2.23	12936304	0.01	10000	
Fe	56	45	1	He	9853.993	9853.993	1.55	156632216	0.01	200000	
Co	59	103	1	He	946.443	946.443	1.91	22664455	0.00	10000	
Ni	60	103	1	He	995.847	995.847	1.39	5697525	0.02	10000	
Cu	63	103	1	He	953.171	953.171	0.25	14566824	0.01	10000	
Zn	66	103	1	He	1009.561	1009.561	0.92	2970075	0.03	10000	
As	75	103	1	He	1035.099	1035.099	1.59	2571979	0.04	10000	
Se	78	103	1	He	969.752	969.752	0.30	213255	0.45	10000	
Sr	88	103	1	He	1114.337	1114.337	1.12	19018351	0.01	10000	
Mo	95	103	1	He	115.602	115.602	0.55	733983	0.02	2000	
Ag	107	103	1	He	100.662	100.662	0.32	1874544	0.01	300	
Cd	111	103	1	He	1035.723	1035.723	0.45	3214525	0.03	4000	
Sn	118	115	1	He	1082.603	1082.603	0.40	8360573	0.01	2000	
Sb	123	115	1	He	105.058	105.058	0.86	793150	0.01	300	
Ba	137	115	1	He	1137.847	1137.847	2.05	4059833	0.03	10000	
W	182	209	1	He	107.823	107.823	2.85	1237948	0.01	2500	
Tl	205	209	1	He	249.709	249.709	2.63	7021851	0.00	5000	
Pb	208	209	1	He	1020.623	1020.623	2.03	38264421	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4272791	0.82	4563898	93.62	30	120	
Sc	45	1	He	2445633	1.12	2572368	95.07	30	120	
Sc	45	2	NoGas	24141537	1.12	24609710	98.10	30	120	
Rh	103	1	He	4316797	0.55	4780241	90.31	30	120	
In	115	1	He	2871558	0.94	3171814	90.53	30	120	
Tb	159	1	He	5224241	1.27	5469932	95.51	30	120	
Ho	165	1	He	5089480	1.44	5294619	96.13	30	120	
Bi	209	1	He	3100093	1.95	3401163	91.15	30	120	

Sample Report

Sample Table

Sample Name	240-50587-b-2-a
Data File Name	025SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T11:11:07-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.197	0.197	12.92	2782	0.01	10000	
B	11	45	2	NoGas	90.134	90.134	0.76	610991	0.01	300	
Na	23	45	1	He	36959.947	36959.947	1.88	119723473	0.03	500000	
Mg	24	45	1	He	22460.905	22460.905	1.71	41608860	0.05	500000	
Al	27	45	1	He	5.841	5.841	0.83	8453	0.07	200000	
K	39	45	1	He	3052.191	3052.191	2.23	7912343	0.04	500000	
Ca	44	45	1	He	93640.629	93640.629	2.64	10882659	0.86	500000	
Ti	47	45	1	He	0.319	0.319	27.05	269	0.12	2500	
V	51	45	1	He	0.579	0.579	6.21	11625	0.00	10000	
Cr	52	45	1	He	5.807	5.807	2.64	113051	0.01	10000	
Mn	55	45	1	He	187.495	187.495	0.42	2524938	0.01	10000	
Fe	56	45	1	He	156.573	156.573	0.53	2539310	0.01	200000	
Co	59	103	1	He	0.447	0.447	1.36	11278	0.00	10000	
Ni	60	103	1	He	2.756	2.756	3.37	20946	0.01	10000	
Cu	63	103	1	He	1.614	1.614	3.56	32161	0.01	10000	
Zn	66	103	1	He	2.891	2.891	4.79	13815	0.02	10000	
As	75	103	1	He	2.275	2.275	11.97	6415	0.04	10000	
Se	78	103	1	He	1.222	1.222	17.83	598	0.20	10000	
Sr	88	103	1	He	203.612	203.612	2.11	3566672	0.01	10000	
Mo	95	103	1	He	1.419	1.419	10.45	9489	0.01	2000	
Ag	107	103	1	He	0.010	0.010	18.26	247	0.00	300	
Cd	111	103	1	He	0.394	0.394	9.60	5175	0.01	4000	
Sn	118	115	1	He	2.044	2.044	6.63	17792	0.01	2000	
Sb	123	115	1	He	0.198	0.198	13.10	2139	0.01	300	
Ba	137	115	1	He	51.921	51.921	0.97	191913	0.03	10000	
W	182	209	1	He	0.794	0.794	23.13	17277	0.00	2500	
Tl	205	209	1	He	0.204	0.204	11.09	6098	0.00	5000	
Pb	208	209	1	He	0.293	0.293	4.17	12493	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4317447	0.32	4563898	94.60	30	120	
Sc	45	1	He	2467280	0.81	2572368	95.91	30	120	
Sc	45	2	NoGas	23661486	0.72	24609710	96.15	30	120	
Rh	103	1	He	4430565	1.04	4780241	92.68	30	120	
In	115	1	He	2972849	0.58	3171814	93.73	30	120	
Tb	159	1	He	5340224	1.36	5469932	97.63	30	120	
Ho	165	1	He	5207227	0.80	5294619	98.35	30	120	
Bi	209	1	He	3220157	0.77	3401163	94.68	30	120	

Sample Report

Sample Table

Sample Name	240-50587-b-3-a
Data File Name	026SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T11:14:54-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.110	0.110	12.97	1611	0.01	10000	
B	11	45	2	NoGas	86.122	86.122	0.96	583629	0.01	300	
Na	23	45	1	He	41402.313	41402.313	1.17	132664632	0.03	500000	
Mg	24	45	1	He	35283.825	35283.825	0.84	64657836	0.05	500000	
Al	27	45	1	He	2.382	2.382	10.38	4382	0.05	200000	
K	39	45	1	He	3419.137	3419.137	1.46	8735968	0.04	500000	
Ca	44	45	1	He	138759.724	138759.724	0.17	15953031	0.87	500000	
Ti	47	45	1	He	0.293	0.293	14.77	249	0.12	2500	
V	51	45	1	He	0.870	0.870	5.68	16185	0.01	10000	
Cr	52	45	1	He	3.246	3.246	1.41	66932	0.00	10000	
Mn	55	45	1	He	212.955	212.955	2.14	2835808	0.01	10000	
Fe	56	45	1	He	1784.468	1784.468	1.47	28330794	0.01	200000	
Co	59	103	1	He	0.745	0.745	3.12	18287	0.00	10000	
Ni	60	103	1	He	4.232	4.232	1.90	29093	0.01	10000	
Cu	63	103	1	He	3.825	3.825	1.25	65660	0.01	10000	
Zn	66	103	1	He	25.474	25.474	0.37	80462	0.03	10000	
As	75	103	1	He	2.988	2.988	2.22	8091	0.04	10000	
Se	78	103	1	He	0.353	0.353	41.44	395	0.09	10000	
Sr	88	103	1	He	446.077	446.077	1.07	7677349	0.01	10000	
Mo	95	103	1	He	0.681	0.681	3.11	4605	0.01	2000	
Ag	107	103	1	He	0.008	0.008	40.87	192	0.00	300	
Cd	111	103	1	He	0.211	0.211	10.19	4515	0.00	4000	
Sn	118	115	1	He	1.143	1.143	0.70	10489	0.01	2000	
Sb	123	115	1	He	0.138	0.138	16.73	1656	0.01	300	
Ba	137	115	1	He	38.984	38.984	0.25	142707	0.03	10000	
W	182	209	1	He	0.237	0.237	46.44	10567	0.00	2500	
Tl	205	209	1	He	0.076	0.076	6.48	2358	0.00	5000	
Pb	208	209	1	He	0.300	0.300	0.32	12645	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4224613	2.80	4563898	92.57	30	120	
Sc	45	1	He	2440704	1.09	2572368	94.88	30	120	
Sc	45	2	NoGas	23603129	0.81	24609710	95.91	30	120	
Rh	103	1	He	4353183	1.11	4780241	91.07	30	120	
In	115	1	He	2943826	0.45	3171814	92.81	30	120	
Tb	159	1	He	5340626	1.23	5469932	97.64	30	120	
Ho	165	1	He	5164832	1.02	5294619	97.55	30	120	
Bi	209	1	He	3187203	0.87	3401163	93.71	30	120	

Sample Report

Sample Table

Sample Name	240-50587-b-4-a
Data File Name	027SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T11:18:39-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.129	0.129	89.49	2163	0.01	10000	
B	11	45	2	NoGas	52.551	52.551	25.21	487150	0.01	300	
Na	23	45	1	He	34487.718	34487.718	1.14	114066218	0.03	500000	
Mg	24	45	1	He	19404.234	19404.234	0.46	36705961	0.05	500000	
Al	27	45	1	He	1.423	1.423	0.83	3387	0.04	200000	
K	39	45	1	He	3593.438	3593.438	0.44	9463684	0.04	500000	
Ca	44	45	1	He	74793.500	74793.500	1.54	8875900	0.84	500000	
Ti	47	45	1	He	0.176	0.176	32.02	177	0.10	2500	
V	51	45	1	He	0.682	0.682	4.19	13594	0.01	10000	
Cr	52	45	1	He	1.968	1.968	1.18	45979	0.00	10000	
Mn	55	45	1	He	441.158	441.158	1.54	6059136	0.01	10000	
Fe	56	45	1	He	69.282	69.282	1.22	1163561	0.01	200000	
Co	59	103	1	He	0.408	0.408	4.46	10469	0.00	10000	
Ni	60	103	1	He	0.895	0.895	3.22	10180	0.01	10000	
Cu	63	103	1	He	2.117	2.117	3.15	40648	0.01	10000	
Zn	66	103	1	He	13.865	13.865	0.97	47604	0.03	10000	
As	75	103	1	He	2.335	2.335	2.88	6666	0.04	10000	
Se	78	103	1	He	0.297	0.297	2.62	395	0.08	10000	
Sr	88	103	1	He	198.530	198.530	1.29	3530480	0.01	10000	
Mo	95	103	1	He	3.394	3.394	1.44	22696	0.01	2000	
Ag	107	103	1	He	0.004	0.004	19.31	130	0.00	300	
Cd	111	103	1	He	0.158	0.158	14.51	4492	0.00	4000	
Sn	118	115	1	He	0.566	0.566	4.10	6105	0.01	2000	
Sb	123	115	1	He	0.072	0.072	3.64	1178	0.01	300	
Ba	137	115	1	He	99.581	99.581	2.44	375383	0.03	10000	
W	182	209	1	He	0.040	0.040	177.72	8399	0.00	2500	
Tl	205	209	1	He	0.033	0.033	7.97	1111	0.00	5000	
Pb	208	209	1	He	0.366	0.366	0.79	15451	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	5484994	19.61	4563898	120.18	30	120	ISTD Failed
Sc	45	1	He	2519275	1.65	2572368	97.94	30	120	
Sc	45	2	NoGas	32390610	21.06	24609710	131.62	30	120	ISTD Failed
Rh	103	1	He	4497243	0.43	4780241	94.08	30	120	
In	115	1	He	3033666	1.99	3171814	95.64	30	120	
Tb	159	1	He	5371442	0.63	5469932	98.20	30	120	
Ho	165	1	He	5270924	0.18	5294619	99.55	30	120	
Bi	209	1	He	3243815	0.56	3401163	95.37	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2004624
Data File Name	028_CCV.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T11:22:28-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	50.382	1.176	673849	0.80	50	100.8	89.5	110.5	
B	11	45	2	NoGas	59.779	1.269	430181	0.98	50	119.6	89.5	110.5	CCV Failed
Na	23	45	1	He	25244.885	1.716	86404485	1.27	25000	101.0	89.5	110.5	
Mg	24	45	1	He	25223.252	1.497	49365130	1.24	25000	100.9	89.5	110.5	
Al	27	45	1	He	247.039	1.639	305167	0.87	250	98.8	89.5	110.5	
K	39	45	1	He	24805.707	1.037	65928153	0.47	25000	99.2	89.5	110.5	
Ca	44	45	1	He	25523.565	0.846	3136908	1.72	25000	102.1	89.5	110.5	
Ti	47	45	1	He	50.169	0.838	35619	1.49	50	100.3	89.5	110.5	
V	51	45	1	He	48.228	0.517	833576	0.98	50	96.5	89.5	110.5	
Cr	52	45	1	He	49.337	0.680	934328	0.28	50	98.7	89.5	110.5	
Mn	55	45	1	He	254.609	1.619	3620333	1.49	250	101.8	89.5	110.5	
Fe	56	45	1	He	12579.890	0.718	213134085	0.46	12500	100.6	89.5	110.5	
Co	59	103	1	He	47.943	1.181	1233431	0.89	50	95.9	89.5	110.5	
Ni	60	103	1	He	49.847	1.342	311057	0.93	50	99.7	89.5	110.5	
Cu	63	103	1	He	48.424	0.871	801612	0.53	50	96.8	89.5	110.5	
Zn	66	103	1	He	49.413	1.071	161216	1.13	50	98.8	89.5	110.5	
As	75	103	1	He	50.414	0.820	135157	0.57	50	100.8	89.5	110.5	
Se	78	103	1	He	49.370	1.568	11980	0.48	50	98.7	89.5	110.5	
Sr	88	103	1	He	46.629	1.277	855261	0.22	50	93.3	89.5	110.5	
Mo	95	103	1	He	52.053	0.622	355148	1.90	50	104.1	89.5	110.5	
Ag	107	103	1	He	47.123	0.565	942509	0.77	50	94.2	89.5	110.5	
Cd	111	103	1	He	49.968	1.108	170463	0.24	50	99.9	89.5	110.5	
Sn	118	115	1	He	55.641	1.823	478639	0.67	50	111.3	89.5	110.5	CCV Failed
Sb	123	115	1	He	50.936	2.789	427341	1.68	50	101.9	89.5	110.5	
Ba	137	115	1	He	49.865	1.303	197704	0.42	50	99.7	89.5	110.5	
W	182	209	1	He	50.362	1.461	632624	1.72	50	100.7	89.5	110.5	
Tl	205	209	1	He	45.526	0.967	1390959	1.23	50	91.1	89.5	110.5	
Pb	208	209	1	He	47.133	1.565	1920727	1.67	50	94.3	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4431203	0.63	4563898	97.09	30	120	
Sc	45	1	He	2606671	0.94	2572368	101.33	30	120	
Sc	45	2	NoGas	24549921	1.28	24609710	99.76	30	120	
Rh	103	1	He	4636583	1.28	4780241	96.99	30	120	
In	115	1	He	3189188	1.18	3171814	100.55	30	120	
Tb	159	1	He	5482630	0.91	5469932	100.23	30	120	
Ho	165	1	He	5401950	0.89	5294619	102.03	30	120	
Bi	209	1	He	3366974	0.75	3401163	98.99	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	029_CCB.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T11:26:15-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.053	14.4	985	10.5	1	
B	11	45	2	NoGas	1.728	3.2	53029	0.7	20	
Na	23	45	1	He	21.074	3.5	82216	2.9	400	
Mg	24	45	1	He	2.231	19.7	4527	15.4	1000	
Al	27	45	1	He	-0.007	-1194.7	1415	6.4	50	
K	39	45	1	He	34.686	4.2	302505	1.3	1000	
Ca	44	45	1	He	4.407	37.9	3265	4.6	1000	
Ti	47	45	1	He	0.009	445.2	52	42.5	20	
V	51	45	1	He	0.068	15.0	2801	4.7	2	
Cr	52	45	1	He	0.162	17.2	11145	4.0	2	
Mn	55	45	1	He	0.129	8.2	6092	1.6	2	
Fe	56	45	1	He	5.869	21.4	105061	16.6	50	
Co	59	103	1	He	0.030	1.6	924	1.8	1	
Ni	60	103	1	He	-0.430	-9.6	2009	11.3	2	
Cu	63	103	1	He	0.262	7.7	9771	3.4	2	
Zn	66	103	1	He	0.090	74.7	4786	3.1	20	
As	75	103	1	He	0.226	28.2	1059	13.2	2	
Se	78	103	1	He	0.407	36.2	369	7.7	2	
Sr	88	103	1	He	0.011	67.6	653	17.4	10	
Mo	95	103	1	He	0.268	33.0	1776	28.6	2	
Ag	107	103	1	He	0.005	13.4	138	9.2	0.2	
Cd	111	103	1	He	0.107	35.5	3797	2.7	0.2	
Sn	118	115	1	He	0.228	22.8	2889	12.0	10	
Sb	123	115	1	He	0.210	6.5	1970	5.4	1	
Ba	137	115	1	He	0.015	54.4	134	17.6	5	
W	182	209	1	He	0.483	27.1	11964	12.6	10	
Tl	205	209	1	He	0.080	7.6	2199	8.2	0.5	
Pb	208	209	1	He	0.031	11.8	2016	5.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4713555	0.55	4563898	103.28	30	120	
Sc	45	1	He	2109555	0.47	2572368	82.01	30	120	
Sc	45	2	NoGas	32062844	1.01	24609710	130.29	30	120	ISTD Failed
Rh	103	1	He	3947338	0.64	4780241	82.58	30	120	
In	115	1	He	2624776	1.66	3171814	82.75	30	120	
Tb	159	1	He	4488449	0.60	5469932	82.06	30	120	
Ho	165	1	He	4398551	1.47	5294619	83.08	30	120	
Bi	209	1	He	2829839	1.27	3401163	83.20	30	120	

Sample Report

Sample Table

Sample Name	240-50587-b-5-a
Data File Name	030SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T11:30:07-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.056	0.056	21.07	878	0.01	10000	
B	11	45	2	NoGas	31.140	31.140	0.81	210113	0.01	300	
Na	23	45	1	He	126595.276	126595.276	1.38	383719955	0.03	500000	
Mg	24	45	1	He	21964.486	21964.486	1.73	38076961	0.06	500000	
Al	27	45	1	He	3.720	3.720	4.17	5603	0.07	200000	
K	39	45	1	He	2584.649	2584.649	2.06	6308333	0.04	500000	
Ca	44	45	1	He	108541.349	108541.349	1.44	11805807	0.92	500000	
Ti	47	45	1	He	0.234	0.234	7.63	199	0.12	2500	
V	51	45	1	He	0.629	0.629	9.86	11639	0.01	10000	
Cr	52	45	1	He	2.420	2.420	3.52	49628	0.00	10000	
Mn	55	45	1	He	518.887	518.887	1.70	6530040	0.01	10000	
Fe	56	45	1	He	357.407	357.407	1.87	5389638	0.01	200000	
Co	59	103	1	He	4.395	4.395	0.50	100257	0.00	10000	
Ni	60	103	1	He	2.574	2.574	1.91	18402	0.01	10000	
Cu	63	103	1	He	1.346	1.346	3.87	25873	0.01	10000	
Zn	66	103	1	He	1.575	1.575	6.50	9116	0.02	10000	
As	75	103	1	He	3.184	3.184	4.12	8082	0.04	10000	
Se	78	103	1	He	0.301	0.301	46.96	361	0.08	10000	
Sr	88	103	1	He	191.503	191.503	0.79	3105435	0.01	10000	
Mo	95	103	1	He	1.329	1.329	4.88	8245	0.02	2000	
Ag	107	103	1	He	0.008	0.008	24.16	196	0.00	300	
Cd	111	103	1	He	0.154	0.154	11.91	4084	0.00	4000	
Sn	118	115	1	He	0.611	0.611	7.10	5942	0.01	2000	
Sb	123	115	1	He	0.331	0.331	23.74	2978	0.01	300	
Ba	137	115	1	He	113.890	113.890	1.23	394494	0.03	10000	
W	182	209	1	He	0.674	0.674	4.60	14755	0.00	2500	
Tl	205	209	1	He	0.068	0.068	4.29	1993	0.00	5000	
Pb	208	209	1	He	0.061	0.061	1.78	3242	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3982871	0.81	4563898	87.27	30	120	
Sc	45	1	He	2309133	1.34	2572368	89.77	30	120	
Sc	45	2	NoGas	21673231	0.45	24609710	88.07	30	120	
Rh	103	1	He	4100946	0.88	4780241	85.79	30	120	
In	115	1	He	2786903	0.56	3171814	87.86	30	120	
Tb	159	1	He	4973416	1.14	5469932	90.92	30	120	
Ho	165	1	He	4840269	1.22	5294619	91.42	30	120	
Bi	209	1	He	2994413	0.31	3401163	88.04	30	120	

Sample Report

Sample Table

Sample Name	240-50587-b-6-a
Data File Name	031SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T11:33:52-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.051	0.051	15.21	837	0.01	10000	
B	11	45	2	NoGas	91.999	91.999	0.99	586312	0.02	300	
Na	23	45	1	He	38859.605	38859.605	2.08	117533151	0.03	500000	
Mg	24	45	1	He	16982.243	16982.243	3.17	29369101	0.06	500000	
Al	27	45	1	He	253.173	253.173	3.17	276328	0.09	200000	
K	39	45	1	He	3255.343	3255.343	3.07	7861959	0.04	500000	
Ca	44	45	1	He	65898.916	65898.916	3.05	7151270	0.92	500000	
Ti	47	45	1	He	3.589	3.589	4.81	2299	0.16	2500	
V	51	45	1	He	1.391	1.391	8.50	23201	0.01	10000	
Cr	52	45	1	He	3.478	3.478	2.94	67022	0.01	10000	
Mn	55	45	1	He	153.756	153.756	2.43	1934074	0.01	10000	
Fe	56	45	1	He	648.542	648.542	2.91	9734971	0.01	200000	
Co	59	103	1	He	1.150	1.150	1.55	27369	0.00	10000	
Ni	60	103	1	He	2.664	2.664	1.80	19551	0.01	10000	
Cu	63	103	1	He	3.108	3.108	0.99	53252	0.01	10000	
Zn	66	103	1	He	3.818	3.818	1.74	15918	0.02	10000	
As	75	103	1	He	1.101	1.101	1.81	3278	0.03	10000	
Se	78	103	1	He	0.337	0.337	20.45	382	0.09	10000	
Sr	88	103	1	He	150.025	150.025	0.55	2518376	0.01	10000	
Mo	95	103	1	He	1.964	1.964	0.98	12498	0.02	2000	
Ag	107	103	1	He	0.005	0.005	33.09	146	0.00	300	
Cd	111	103	1	He	0.161	0.161	24.54	4248	0.00	4000	
Sn	118	115	1	He	0.415	0.415	6.85	4560	0.01	2000	
Sb	123	115	1	He	0.195	0.195	12.22	2016	0.01	300	
Ba	137	115	1	He	64.897	64.897	1.90	228909	0.03	10000	
W	182	209	1	He	0.346	0.346	16.15	11742	0.00	2500	
Tl	205	209	1	He	0.028	0.028	8.74	940	0.00	5000	
Pb	208	209	1	He	0.546	0.546	2.70	21920	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4076563	0.86	4563898	89.32	30	120	
Sc	45	1	He	2304311	2.26	2572368	89.58	30	120	
Sc	45	2	NoGas	22265486	0.97	24609710	90.47	30	120	
Rh	103	1	He	4245067	1.27	4780241	88.80	30	120	
In	115	1	He	2838071	2.17	3171814	89.48	30	120	
Tb	159	1	He	5162743	0.72	5469932	94.38	30	120	
Ho	165	1	He	5009625	2.32	5294619	94.62	30	120	
Bi	209	1	He	3158152	0.79	3401163	92.86	30	120	

Sample Report

Sample Table

Sample Name	240-50587-b-7-a
Data File Name	032SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T11:37:39-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.061	0.061	28.97	970	0.01	10000	
B	11	45	2	NoGas	97.767	97.767	0.24	625303	0.02	300	
Na	23	45	1	He	33182.796	33182.796	1.58	100687774	0.03	500000	
Mg	24	45	1	He	19709.464	19709.464	2.56	34197168	0.06	500000	
Al	27	45	1	He	355.368	355.368	1.56	388545	0.09	200000	
K	39	45	1	He	3735.805	3735.805	1.32	9015630	0.04	500000	
Ca	44	45	1	He	82680.064	82680.064	2.58	9000716	0.92	500000	
Ti	47	45	1	He	6.134	6.134	9.20	3904	0.16	2500	
V	51	45	1	He	1.451	1.451	7.35	24209	0.01	10000	
Cr	52	45	1	He	19.213	19.213	1.58	328395	0.01	10000	
Mn	55	45	1	He	32.883	32.883	1.43	418940	0.01	10000	
Fe	56	45	1	He	1647.644	1647.644	1.62	24772588	0.01	200000	
Co	59	103	1	He	1.833	1.833	4.45	43165	0.00	10000	
Ni	60	103	1	He	16.919	16.919	3.15	99038	0.02	10000	
Cu	63	103	1	He	4.723	4.723	2.22	77010	0.01	10000	
Zn	66	103	1	He	12.823	12.823	2.71	41655	0.03	10000	
As	75	103	1	He	2.088	2.088	2.43	5653	0.04	10000	
Se	78	103	1	He	0.670	0.670	9.13	451	0.15	10000	
Sr	88	103	1	He	136.864	136.864	3.26	2282298	0.01	10000	
Mo	95	103	1	He	1.949	1.949	2.18	12323	0.02	2000	
Ag	107	103	1	He	0.016	0.016	17.33	342	0.00	300	
Cd	111	103	1	He	0.100	0.100	26.62	4036	0.00	4000	
Sn	118	115	1	He	0.348	0.348	6.81	4071	0.01	2000	
Sb	123	115	1	He	0.145	0.145	21.51	1660	0.01	300	
Ba	137	115	1	He	45.703	45.703	2.73	162256	0.03	10000	
W	182	209	1	He	0.588	0.588	8.87	14385	0.00	2500	
Tl	205	209	1	He	0.019	0.019	10.77	684	0.00	5000	
Pb	208	209	1	He	1.161	1.161	3.62	44813	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4117358	1.15	4563898	90.22	30	120	
Sc	45	1	He	2311229	1.17	2572368	89.85	30	120	
Sc	45	2	NoGas	22405037	0.05	24609710	91.04	30	120	
Rh	103	1	He	4219078	2.46	4780241	88.26	30	120	
In	115	1	He	2856208	1.80	3171814	90.05	30	120	
Tb	159	1	He	5103056	1.37	5469932	93.29	30	120	
Ho	165	1	He	4956782	2.20	5294619	93.62	30	120	
Bi	209	1	He	3118379	2.78	3401163	91.69	30	120	

Sample Report

Sample Table

Sample Name	240-50587-b-8-a
Data File Name	033SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T11:41:24-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.037	0.037	24.83	648	0.01	10000	
B	11	45	2	NoGas	104.853	104.853	1.18	654384	0.02	300	
Na	23	45	1	He	104225.928	104225.928	2.50	321194284	0.03	500000	
Mg	24	45	1	He	17511.924	17511.924	1.81	30864237	0.06	500000	
Al	27	45	1	He	77.600	77.600	1.78	87424	0.09	200000	
K	39	45	1	He	4301.957	4301.957	1.32	10505332	0.04	500000	
Ca	44	45	1	He	79440.246	79440.246	0.81	8783803	0.90	500000	
Ti	47	45	1	He	1.335	1.335	10.43	903	0.15	2500	
V	51	45	1	He	0.000	0.000	-337279.44	2146	0.00	10000	
Cr	52	45	1	He	96.765	96.765	2.02	1641069	0.01	10000	
Mn	55	45	1	He	11.008	11.008	1.40	145865	0.01	10000	
Fe	56	45	1	He	223.473	223.473	1.44	3436117	0.01	200000	
Co	59	103	1	He	0.881	0.881	2.56	20891	0.00	10000	
Ni	60	103	1	He	3.899	3.899	1.41	26322	0.01	10000	
Cu	63	103	1	He	1.812	1.812	3.61	33554	0.01	10000	
Zn	66	103	1	He	2.418	2.418	7.08	11790	0.02	10000	
As	75	103	1	He	1.680	1.680	2.75	4660	0.04	10000	
Se	78	103	1	He	0.599	0.599	24.76	435	0.14	10000	
Sr	88	103	1	He	122.650	122.650	1.33	2044985	0.01	10000	
Mo	95	103	1	He	0.701	0.701	4.52	4585	0.02	2000	
Ag	107	103	1	He	0.017	0.017	9.25	361	0.00	300	
Cd	111	103	1	He	0.105	0.105	29.29	4051	0.00	4000	
Sn	118	115	1	He	0.271	0.271	21.66	3519	0.01	2000	
Sb	123	115	1	He	0.088	0.088	25.07	1243	0.01	300	
Ba	137	115	1	He	37.528	37.528	1.02	135147	0.03	10000	
W	182	209	1	He	0.648	0.648	6.67	14837	0.00	2500	
Tl	205	209	1	He	0.011	0.011	23.05	460	0.00	5000	
Pb	208	209	1	He	0.350	0.350	4.02	14037	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4019148	1.22	4563898	88.06	30	120	
Sc	45	1	He	2347163	1.94	2572368	91.25	30	120	
Sc	45	2	NoGas	21927060	1.12	24609710	89.10	30	120	
Rh	103	1	He	4216428	1.11	4780241	88.21	30	120	
In	115	1	He	2896315	1.92	3171814	91.31	30	120	
Tb	159	1	He	5166377	1.70	5469932	94.45	30	120	
Ho	165	1	He	5060909	1.36	5294619	95.59	30	120	
Bi	209	1	He	3072399	1.71	3401163	90.33	30	120	

Sample Report

Sample Table

Sample Name	240-50587-b-9-a
Data File Name	034SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T11:45:10-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.020	0.020	24.33	456	0.00	10000	
B	11	45	2	NoGas	103.787	103.787	0.48	657327	0.02	300	
Na	23	45	1	He	103415.679	103415.679	3.39	312332314	0.03	500000	
Mg	24	45	1	He	16540.170	16540.170	2.05	28576727	0.06	500000	
Al	27	45	1	He	44.000	44.000	2.48	49263	0.09	200000	
K	39	45	1	He	4212.865	4212.865	2.83	10089838	0.04	500000	
Ca	44	45	1	He	77152.392	77152.392	2.35	8363163	0.92	500000	
Ti	47	45	1	He	0.761	0.761	11.94	528	0.14	2500	
V	51	45	1	He	-0.066	-0.066	-367.46	969	-0.01	10000	
Cr	52	45	1	He	92.108	92.108	1.50	1531765	0.01	10000	
Mn	55	45	1	He	4.443	4.443	2.58	60710	0.01	10000	
Fe	56	45	1	He	109.797	109.797	3.71	1668310	0.01	200000	
Co	59	103	1	He	0.624	0.624	0.49	14941	0.00	10000	
Ni	60	103	1	He	2.240	2.240	2.76	17115	0.01	10000	
Cu	63	103	1	He	1.628	1.628	4.12	30918	0.01	10000	
Zn	66	103	1	He	8.357	8.357	1.28	28935	0.03	10000	
As	75	103	1	He	1.513	1.513	3.63	4271	0.04	10000	
Se	78	103	1	He	0.413	0.413	19.62	397	0.10	10000	
Sr	88	103	1	He	118.118	118.118	1.34	1976677	0.01	10000	
Mo	95	103	1	He	0.362	0.362	4.19	2491	0.01	2000	
Ag	107	103	1	He	0.007	0.007	19.59	172	0.00	300	
Cd	111	103	1	He	0.107	0.107	14.73	4071	0.00	4000	
Sn	118	115	1	He	0.308	0.308	9.08	3775	0.01	2000	
Sb	123	115	1	He	0.068	0.068	19.78	1086	0.01	300	
Ba	137	115	1	He	36.735	36.735	2.14	130857	0.03	10000	
W	182	209	1	He	0.249	0.249	3.61	10511	0.00	2500	
Tl	205	209	1	He	0.012	0.012	6.44	479	0.00	5000	
Pb	208	209	1	He	0.156	0.156	1.36	6958	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4069437	0.34	4563898	89.17	30	120	
Sc	45	1	He	2301739	2.44	2572368	89.48	30	120	
Sc	45	2	NoGas	22240516	0.74	24609710	90.37	30	120	
Rh	103	1	He	4231587	0.24	4780241	88.52	30	120	
In	115	1	He	2865113	1.45	3171814	90.33	30	120	
Tb	159	1	He	5176050	1.53	5469932	94.63	30	120	
Ho	165	1	He	5067660	1.16	5294619	95.71	30	120	
Bi	209	1	He	3126628	1.14	3401163	91.93	30	120	

Sample Report

Sample Table

Sample Name	240-50587-b-10-a
Data File Name	035SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T11:48:54-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.035	0.035	8.77	641	0.01	10000	
B	11	45	2	NoGas	90.371	90.371	0.93	574693	0.02	300	
Na	23	45	1	He	82757.759	82757.759	1.68	255877390	0.03	500000	
Mg	24	45	1	He	10512.829	10512.829	2.02	18590649	0.06	500000	
Al	27	45	1	He	391.490	391.490	2.90	436011	0.09	200000	
K	39	45	1	He	2828.969	2828.969	1.71	7019378	0.04	500000	
Ca	44	45	1	He	58606.291	58606.291	1.49	6503502	0.90	500000	
Ti	47	45	1	He	7.544	7.544	9.83	4886	0.15	2500	
V	51	45	1	He	1.875	1.875	4.95	31274	0.01	10000	
Cr	52	45	1	He	10.593	10.593	1.32	188886	0.01	10000	
Mn	55	45	1	He	25.840	25.840	1.96	336594	0.01	10000	
Fe	56	45	1	He	1053.495	1053.495	1.92	16151889	0.01	200000	
Co	59	103	1	He	2.300	2.300	2.29	55117	0.00	10000	
Ni	60	103	1	He	7.806	7.806	2.13	49053	0.02	10000	
Cu	63	103	1	He	3.931	3.931	2.25	66413	0.01	10000	
Zn	66	103	1	He	10.509	10.509	2.32	35670	0.03	10000	
As	75	103	1	He	1.301	1.301	2.29	3813	0.03	10000	
Se	78	103	1	He	0.198	0.198	44.50	356	0.06	10000	
Sr	88	103	1	He	84.363	84.363	4.77	1433379	0.01	10000	
Mo	95	103	1	He	3.074	3.074	1.95	19665	0.02	2000	
Ag	107	103	1	He	0.174	0.174	2.54	3270	0.01	300	
Cd	111	103	1	He	0.117	0.117	14.15	4166	0.00	4000	
Sn	118	115	1	He	0.263	0.263	13.04	3456	0.01	2000	
Sb	123	115	1	He	0.188	0.188	6.52	1997	0.01	300	
Ba	137	115	1	He	43.340	43.340	1.05	155467	0.03	10000	
W	182	209	1	He	3.960	3.960	2.43	54757	0.01	2500	
Tl	205	209	1	He	0.016	0.016	3.20	614	0.00	5000	
Pb	208	209	1	He	0.856	0.856	0.82	34390	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4108517	1.52	4563898	90.02	30	120	
Sc	45	1	He	2355450	1.22	2572368	91.57	30	120	
Sc	45	2	NoGas	22200965	0.86	24609710	90.21	30	120	
Rh	103	1	He	4297004	0.83	4780241	89.89	30	120	
In	115	1	He	2884831	0.40	3171814	90.95	30	120	
Tb	159	1	He	5249912	0.61	5469932	95.98	30	120	
Ho	165	1	He	5134124	1.20	5294619	96.97	30	120	
Bi	209	1	He	3216411	0.68	3401163	94.57	30	120	

Sample Report

Sample Table

Sample Name	240-50587-b-11-a
Data File Name	036SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T11:52:41-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	-0.016	-0.016	-0.89	48	-0.03	10000	
B	11	45	2	NoGas	-3.024	-3.024	-6.14	29728	-0.01	300	
Na	23	45	1	He	1.908	1.908	190.73	108258	0.00	500000	
Mg	24	45	1	He	0.118	0.118	427.52	4283	0.00	500000	
Al	27	45	1	He	-0.642	-0.642	-59.34	2896	-0.02	200000	
K	39	45	1	He	-93.923	-93.923	-1.89	101917	-0.09	500000	
Ca	44	45	1	He	-23.723	-23.723	-6.88	1751	-1.36	500000	
Ti	47	45	1	He	0.067	0.067	131.03	312	0.02	2500	
V	51	45	1	He	-0.100	-0.100	-4.53	1751	-0.01	10000	
Cr	52	45	1	He	-0.476	-0.476	-3.10	5548	-0.01	10000	
Mn	55	45	1	He	-0.362	-0.362	-1.07	1712	-0.02	10000	
Fe	56	45	1	He	-1.404	-1.404	-10.55	19917	-0.01	200000	
Co	59	103	1	He	-0.007	-0.007	-6.68	434	0.00	10000	
Ni	60	103	1	He	-0.767	-0.767	-1.45	983	-0.08	10000	
Cu	63	103	1	He	-0.247	-0.247	-11.79	10672	0.00	10000	
Zn	66	103	1	He	-1.562	-1.562	-0.77	1426	-0.11	10000	
As	75	103	1	He	-0.182	-0.182	-3.87	537	-0.03	10000	
Se	78	103	1	He	-1.006	-1.006	-5.25	342	-0.29	10000	
Sr	88	103	1	He	-0.020	-0.020	-13.80	713	0.00	10000	
Mo	95	103	1	He	-0.027	-0.027	-8.16	271	-0.01	2000	
Ag	107	103	1	He	-0.001	-0.001	-49.99	124	0.00	300	
Cd	111	103	1	He	-0.037	-0.037	-19.47	13738	0.00	4000	
Sn	118	115	1	He	-0.046	-0.046	-27.66	3809	0.00	2000	
Sb	123	115	1	He	-0.060	-0.060	-2.64	421	-0.01	300	
Ba	137	115	1	He	-0.019	-0.019	-21.30	102	-0.02	10000	
W	182	209	1	He	-0.083	-0.083	-50.85	25803	0.00	2500	
Tl	205	209	1	He	-0.003	-0.003	-17.66	219	0.00	5000	
Pb	208	209	1	He	-0.011	-0.011	-22.31	2468	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	17885150	21.40	4563898	391.88	30	120	ISTD Failed
Sc	45	1	He	8044823	12.84	2572368	312.74	30	120	ISTD Failed
Sc	45	2	NoGas	85614617	23.35	24609710	347.89	30	120	ISTD Failed
Rh	103	1	He	16001199	11.47	4780241	334.74	30	120	ISTD Failed
In	115	1	He	10487702	12.06	3171814	330.65	30	120	ISTD Failed
Tb	159	1	He	19513966	11.91	5469932	356.75	30	120	ISTD Failed
Ho	165	1	He	19099607	11.68	5294619	360.74	30	120	ISTD Failed
Bi	209	1	He	12106520	11.81	3401163	355.95	30	120	ISTD Failed

Sample Report

Sample Table

Sample Name	240-50587-b-12-a
Data File Name	037SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T11:56:31-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	-0.015	-0.015	-6.29	89	-0.02	10000	
B	11	45	2	NoGas	-3.122	-3.122	-1.69	27966	-0.01	300	
Na	23	45	1	He	-1.476	-1.476	-111.80	77095	0.00	500000	
Mg	24	45	1	He	-0.106	-0.106	-466.95	3149	0.00	500000	
Al	27	45	1	He	-1.170	-1.170	-10.41	1006	-0.12	200000	
K	39	45	1	He	-94.898	-94.898	-0.95	97751	-0.10	500000	
Ca	44	45	1	He	-24.861	-24.861	-4.61	1392	-1.79	500000	
Ti	47	45	1	He	-0.047	-0.047	-14.89	80	-0.06	2500	
V	51	45	1	He	-0.108	-0.108	-2.59	1364	-0.01	10000	
Cr	52	45	1	He	-0.497	-0.497	-1.81	4517	-0.01	10000	
Mn	55	45	1	He	-0.362	-0.362	-2.06	1736	-0.02	10000	
Fe	56	45	1	He	-1.532	-1.532	-9.01	13852	-0.01	200000	
Co	59	103	1	He	-0.006	-0.006	-31.96	524	0.00	10000	
Ni	60	103	1	He	-0.765	-0.765	-1.25	1059	-0.07	10000	
Cu	63	103	1	He	-0.297	-0.297	-2.30	8035	0.00	10000	
Zn	66	103	1	He	-1.561	-1.561	-0.34	1451	-0.11	10000	
As	75	103	1	He	-0.183	-0.183	-2.49	540	-0.03	10000	
Se	78	103	1	He	-1.003	-1.003	-3.87	352	-0.28	10000	
Sr	88	103	1	He	-0.024	-0.024	-8.76	470	-0.01	10000	
Mo	95	103	1	He	-0.029	-0.029	-10.34	229	-0.01	2000	
Ag	107	103	1	He	-0.001	-0.001	-36.46	100	0.00	300	
Cd	111	103	1	He	-0.017	-0.017	-122.35	14215	0.00	4000	
Sn	118	115	1	He	-0.041	-0.041	-7.92	4071	0.00	2000	
Sb	123	115	1	He	-0.062	-0.062	-1.58	386	-0.02	300	
Ba	137	115	1	He	-0.021	-0.021	-12.88	70	-0.03	10000	
W	182	209	1	He	-0.117	-0.117	-11.84	24661	0.00	2500	
Tl	205	209	1	He	-0.003	-0.003	-36.51	221	0.00	5000	
Pb	208	209	1	He	-0.012	-0.012	-30.49	2391	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	17989112	8.22	4563898	394.16	30	120	ISTD Failed
Sc	45	1	He	8289448	5.90	2572368	322.25	30	120	ISTD Failed
Sc	45	2	NoGas	85412788	8.20	24609710	347.07	30	120	ISTD Failed
Rh	103	1	He	16267664	4.97	4780241	340.31	30	120	ISTD Failed
In	115	1	He	10751847	4.52	3171814	338.98	30	120	ISTD Failed
Tb	159	1	He	19646259	5.08	5469932	359.17	30	120	ISTD Failed
Ho	165	1	He	19169061	5.18	5294619	362.05	30	120	ISTD Failed
Bi	209	1	He	12256010	5.33	3401163	360.35	30	120	ISTD Failed

Sample Report

Sample Table

Sample Name	240-50587-b-11-a
Data File Name	038SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T12:00:44-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.018	0.018	31.25	441	0.00	10000	
B	11	45	2	NoGas	20.125	20.125	1.33	145331	0.01	300	
Na	23	45	1	He	87.155	87.155	2.58	289827	0.03	500000	
Mg	24	45	1	He	9.938	9.938	4.04	18291	0.05	500000	
Al	27	45	1	He	2.391	2.391	6.88	4151	0.06	200000	
K	39	45	1	He	-6.779	-6.779	-15.57	233555	0.00	500000	
Ca	44	45	1	He	33.127	33.127	6.85	6691	0.50	500000	
Ti	47	45	1	He	0.055	0.055	63.42	87	0.06	2500	
V	51	45	1	He	0.590	0.590	6.06	11022	0.01	10000	
Cr	52	45	1	He	2.517	2.517	4.78	51162	0.00	10000	
Mn	55	45	1	He	0.364	0.364	3.16	9608	0.00	10000	
Fe	56	45	1	He	19.711	19.711	2.07	322183	0.01	200000	
Co	59	103	1	He	0.045	0.045	3.60	1391	0.00	10000	
Ni	60	103	1	He	1.542	1.542	5.54	13773	0.01	10000	
Cu	63	103	1	He	1.172	1.172	3.57	25134	0.00	10000	
Zn	66	103	1	He	1.065	1.065	3.26	8281	0.01	10000	
As	75	103	1	He	0.237	0.237	5.49	1214	0.02	10000	
Se	78	103	1	He	0.130	0.130	42.50	350	0.04	10000	
Sr	88	103	1	He	0.171	0.171	3.77	3536	0.00	10000	
Mo	95	103	1	He	0.122	0.122	9.68	1043	0.01	2000	
Ag	107	103	1	He	0.004	0.004	8.46	131	0.00	300	
Cd	111	103	1	He	0.042	0.042	88.67	4039	0.00	4000	
Sn	118	115	1	He	0.370	0.370	13.16	4397	0.01	2000	
Sb	123	115	1	He	0.027	0.027	61.04	797	0.00	300	
Ba	137	115	1	He	0.763	0.763	3.92	2906	0.03	10000	
W	182	209	1	He	-0.054	-0.054	-90.73	7695	0.00	2500	
Tl	205	209	1	He	0.003	0.003	13.98	250	0.00	5000	
Pb	208	209	1	He	0.036	0.036	11.57	2645	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4150423	1.11	4563898	90.94	30	120	
Sc	45	1	He	2305874	1.87	2572368	89.64	30	120	
Sc	45	2	NoGas	21747076	1.42	24609710	88.37	30	120	
Rh	103	1	He	4413890	0.90	4780241	92.34	30	120	
In	115	1	He	2960218	0.37	3171814	93.33	30	120	
Tb	159	1	He	5187397	2.26	5469932	94.83	30	120	
Ho	165	1	He	5036354	0.24	5294619	95.12	30	120	
Bi	209	1	He	3427393	1.14	3401163	100.77	30	120	

Sample Report

Sample Table

Sample Name	240-50587-b-12-a
Data File Name	039SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T12:04:33-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.010	0.010	80.55	326	0.00	10000	
B	11	45	2	NoGas	113.648	113.648	1.22	710326	0.02	300	
Na	23	45	1	He	68444.669	68444.669	0.84	209726784	0.03	500000	
Mg	24	45	1	He	56903.325	56903.325	1.29	99717281	0.06	500000	
Al	27	45	1	He	2.453	2.453	6.96	4272	0.06	200000	
K	39	45	1	He	5509.472	5509.472	2.05	13307186	0.04	500000	
Ca	44	45	1	He	312024.295	312024.295	1.83	34297520	0.91	500000	
Ti	47	45	1	He	0.211	0.211	30.59	187	0.11	2500	
V	51	45	1	He	0.720	0.720	9.53	13176	0.01	10000	
Cr	52	45	1	He	2.169	2.169	1.90	45968	0.00	10000	
Mn	55	45	1	He	3539.626	3539.626	0.84	45001706	0.01	10000	
Fe	56	45	1	He	43.023	43.023	1.15	679783	0.01	200000	
Co	59	103	1	He	6.229	6.229	0.93	141799	0.00	10000	
Ni	60	103	1	He	11.895	11.895	1.09	68942	0.02	10000	
Cu	63	103	1	He	1.290	1.290	6.52	25043	0.01	10000	
Zn	66	103	1	He	4.922	4.922	1.05	18434	0.03	10000	
As	75	103	1	He	1.386	1.386	2.70	3836	0.04	10000	
Se	78	103	1	He	0.213	0.213	18.46	342	0.06	10000	
Sr	88	103	1	He	383.986	383.986	1.74	6218530	0.01	10000	
Mo	95	103	1	He	0.431	0.431	3.94	2826	0.02	2000	
Ag	107	103	1	He	0.009	0.009	10.60	206	0.00	300	
Cd	111	103	1	He	0.153	0.153	13.06	4076	0.00	4000	
Sn	118	115	1	He	0.304	0.304	4.23	3649	0.01	2000	
Sb	123	115	1	He	0.142	0.142	1.56	1597	0.01	300	
Ba	137	115	1	He	31.554	31.554	2.06	109553	0.03	10000	
W	182	209	1	He	0.144	0.144	39.83	9051	0.00	2500	
Tl	205	209	1	He	0.039	0.039	11.63	1209	0.00	5000	
Pb	208	209	1	He	0.052	0.052	10.01	2956	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4006053	1.34	4563898	87.78	30	120	
Sc	45	1	He	2334156	1.27	2572368	90.74	30	120	
Sc	45	2	NoGas	22025861	0.54	24609710	89.50	30	120	
Rh	103	1	He	4096032	0.92	4780241	85.69	30	120	
In	115	1	He	2792109	1.53	3171814	88.03	30	120	
Tb	159	1	He	5136621	0.96	5469932	93.91	30	120	
Ho	165	1	He	5030302	0.30	5294619	95.01	30	120	
Bi	209	1	He	3045580	0.52	3401163	89.55	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2004624
Data File Name	040_CCV.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T12:08:22-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	49.708	0.320	628689	0.35	50	99.4	89.5	110.5	
B	11	45	2	NoGas	60.100	0.304	404976	0.81	50	120.2	89.5	110.5	CCV Failed
Na	23	45	1	He	24955.916	0.763	80507067	0.78	25000	99.8	89.5	110.5	
Mg	24	45	1	He	25024.161	0.531	46159868	0.49	25000	100.1	89.5	110.5	
Al	27	45	1	He	245.359	0.684	285689	0.62	250	98.1	89.5	110.5	
K	39	45	1	He	24526.760	2.053	61442664	2.06	25000	98.1	89.5	110.5	
Ca	44	45	1	He	25358.962	0.916	2937228	0.87	25000	101.4	89.5	110.5	
Ti	47	45	1	He	49.264	2.597	32964	2.65	50	98.5	89.5	110.5	
V	51	45	1	He	48.352	0.876	787632	0.83	50	96.7	89.5	110.5	
Cr	52	45	1	He	49.233	1.167	878766	1.13	50	98.5	89.5	110.5	
Mn	55	45	1	He	256.002	0.851	3430794	0.79	250	102.4	89.5	110.5	
Fe	56	45	1	He	12565.272	0.650	200644725	0.60	12500	100.5	89.5	110.5	
Co	59	103	1	He	46.273	0.281	1152524	0.68	50	92.5	89.5	110.5	
Ni	60	103	1	He	48.050	0.784	290459	0.95	50	96.1	89.5	110.5	
Cu	63	103	1	He	47.142	1.053	755724	1.68	50	94.3	89.5	110.5	
Zn	66	103	1	He	48.085	1.404	152010	0.84	50	96.2	89.5	110.5	
As	75	103	1	He	48.799	0.744	126676	0.99	50	97.6	89.5	110.5	
Se	78	103	1	He	48.865	1.065	11483	1.12	50	97.7	89.5	110.5	
Sr	88	103	1	He	46.111	0.020	818839	0.73	50	92.2	89.5	110.5	
Mo	95	103	1	He	51.496	1.776	340134	2.43	50	103.0	89.5	110.5	
Ag	107	103	1	He	46.748	0.835	905225	1.55	50	93.5	89.5	110.5	
Cd	111	103	1	He	49.564	0.371	163729	0.38	50	99.1	89.5	110.5	
Sn	118	115	1	He	56.123	1.882	456842	1.93	50	112.2	89.5	110.5	CCV Failed
Sb	123	115	1	He	51.962	1.178	412541	1.27	50	103.9	89.5	110.5	
Ba	137	115	1	He	50.959	1.284	191171	0.84	50	101.9	89.5	110.5	
W	182	209	1	He	50.413	2.493	623218	2.73	50	100.8	89.5	110.5	
Tl	205	209	1	He	45.868	1.155	1379168	1.24	50	91.7	89.5	110.5	
Pb	208	209	1	He	47.488	1.378	1904502	1.55	50	95.0	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4190109	0.51	4563898	91.81	30	120	
Sc	45	1	He	2456687	0.06	2572368	95.50	30	120	
Sc	45	2	NoGas	22994735	0.66	24609710	93.44	30	120	
Rh	103	1	He	4488494	0.72	4780241	93.90	30	120	
In	115	1	He	3017517	0.94	3171814	95.14	30	120	
Tb	159	1	He	5380839	0.92	5469932	98.37	30	120	
Ho	165	1	He	5273867	1.12	5294619	99.61	30	120	
Bi	209	1	He	3313519	0.49	3401163	97.42	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	041_CCB.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T12:12:08-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.021	45.3	463	24.5	1	
B	11	45	2	NoGas	2.674	5.4	42023	2.4	20	
Na	23	45	1	He	27.225	8.7	108200	5.3	400	
Mg	24	45	1	He	3.700	30.1	7469	25.3	1000	
Al	27	45	1	He	0.143	58.4	1705	3.1	50	
K	39	45	1	He	12.374	16.4	277814	0.8	1000	
Ca	44	45	1	He	10.748	17.7	4248	4.0	1000	
Ti	47	45	1	He	0.037	98.3	74	30.5	20	
V	51	45	1	He	0.015	62.8	2253	6.6	2	
Cr	52	45	1	He	0.081	43.4	10807	3.9	2	
Mn	55	45	1	He	0.404	11.1	10094	5.2	2	
Fe	56	45	1	He	6.577	20.4	125016	15.0	50	
Co	59	103	1	He	0.009	39.0	521	16.1	1	
Ni	60	103	1	He	-0.537	-4.9	1629	8.6	2	
Cu	63	103	1	He	0.156	13.0	9318	3.4	2	
Zn	66	103	1	He	0.020	549.5	5176	5.6	20	
As	75	103	1	He	0.151	24.5	1002	9.6	2	
Se	78	103	1	He	0.249	41.4	379	5.4	2	
Sr	88	103	1	He	0.017	50.5	837	17.0	10	
Mo	95	103	1	He	0.251	35.1	1891	30.7	2	
Ag	107	103	1	He	0.005	50.2	150	32.7	0.2	
Cd	111	103	1	He	0.006	280.4	3954	2.3	0.2	
Sn	118	115	1	He	0.229	23.9	3271	9.9	10	
Sb	123	115	1	He	0.194	9.0	2098	4.8	1	
Ba	137	115	1	He	0.011	20.6	140	4.8	5	
W	182	209	1	He	0.443	17.8	13258	7.8	10	
Tl	205	209	1	He	0.077	11.2	2418	10.8	0.5	
Pb	208	209	1	He	0.017	15.3	1789	5.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4082671	1.44	4563898	89.46	30	120	
Sc	45	1	He	2301485	2.33	2572368	89.47	30	120	
Sc	45	2	NoGas	21971230	0.38	24609710	89.28	30	120	
Rh	103	1	He	4443211	0.89	4780241	92.95	30	120	
In	115	1	He	2968475	3.34	3171814	93.59	30	120	
Tb	159	1	He	5179366	2.80	5469932	94.69	30	120	
Ho	165	1	He	5060593	2.80	5294619	95.58	30	120	
Bi	209	1	He	3254263	2.50	3401163	95.68	30	120	

Sample Report

Sample Table

Sample Name	240-50545-b-1-d
Data File Name	042SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T12:16:00-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.022	0.022	90.51	467	0.00	10000	
B	11	45	2	NoGas	96.323	96.323	2.15	587316	0.02	300	
Na	23	45	1	He	89569.005	89569.005	1.46	268238086	0.03	500000	
Mg	24	45	1	He	22024.039	22024.039	1.49	37723138	0.06	500000	
Al	27	45	1	He	2.829	2.829	2.06	4579	0.06	200000	
K	39	45	1	He	3934.658	3934.658	1.28	9360037	0.04	500000	
Ca	44	45	1	He	98249.460	98249.460	1.54	10558173	0.93	500000	
Ti	47	45	1	He	0.265	0.265	22.50	216	0.12	2500	
V	51	45	1	He	-7.500	-7.500	-21.85	-111114	0.01	10000	
Cr	52	45	1	He	340.535	340.535	0.93	5588571	0.01	10000	
Mn	55	45	1	He	0.200	0.200	22.21	7465	0.00	10000	
Fe	56	45	1	He	6.680	6.680	9.39	125678	0.01	200000	
Co	59	103	1	He	0.110	0.110	1.79	2840	0.00	10000	
Ni	60	103	1	He	0.755	0.755	1.34	8716	0.01	10000	
Cu	63	103	1	He	1.217	1.217	2.66	24536	0.00	10000	
Zn	66	103	1	He	2.601	2.601	5.61	12248	0.02	10000	
As	75	103	1	He	1.303	1.303	2.49	3727	0.03	10000	
Se	78	103	1	He	0.969	0.969	2.56	512	0.19	10000	
Sr	88	103	1	He	141.309	141.309	2.62	2342920	0.01	10000	
Mo	95	103	1	He	0.256	0.256	10.34	1816	0.01	2000	
Ag	107	103	1	He	0.006	0.006	8.88	152	0.00	300	
Cd	111	103	1	He	0.085	0.085	50.53	3968	0.00	4000	
Sn	118	115	1	He	0.408	0.408	1.73	4549	0.01	2000	
Sb	123	115	1	He	0.319	0.319	26.86	2968	0.01	300	
Ba	137	115	1	He	53.722	53.722	0.83	191509	0.03	10000	
W	182	209	1	He	0.233	0.233	23.84	10567	0.00	2500	
Tl	205	209	1	He	0.051	0.051	3.01	1619	0.00	5000	
Pb	208	209	1	He	0.052	0.052	6.57	3090	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4040937	1.81	4563898	88.54	30	120	
Sc	45	1	He	2281350	0.96	2572368	88.69	30	120	
Sc	45	2	NoGas	21350931	1.80	24609710	86.76	30	120	
Rh	103	1	He	4193262	0.75	4780241	87.72	30	120	
In	115	1	He	2867336	0.68	3171814	90.40	30	120	
Tb	159	1	He	5250718	0.65	5469932	95.99	30	120	
Ho	165	1	He	5137537	1.24	5294619	97.03	30	120	
Bi	209	1	He	3201810	1.48	3401163	94.14	30	120	

Sample Report

Sample Table

Sample Name	SD 240-50545-b-1-d@5
Data File Name	043SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T12:19:48-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.007	0.007	83.16	311	0.00	10000	
B	11	45	2	NoGas	19.717	19.717	5.85	155478	0.01	300	
Na	23	45	1	He	18723.038	18723.038	1.46	59341155	0.03	500000	
Mg	24	45	1	He	4600.658	4600.658	0.68	8337864	0.06	500000	
Al	27	45	1	He	2.348	2.348	3.74	4297	0.05	200000	
K	39	45	1	He	844.220	844.220	1.37	2330007	0.04	500000	
Ca	44	45	1	He	20770.187	20770.187	0.95	2363835	0.88	500000	
Ti	47	45	1	He	0.045	0.045	98.79	83	0.05	2500	
V	51	45	1	He	-1.709	-1.709	-6.66	-25134	0.01	10000	
Cr	52	45	1	He	70.270	70.270	1.38	1227800	0.01	10000	
Mn	55	45	1	He	0.138	0.138	20.91	7076	0.00	10000	
Fe	56	45	1	He	0.861	0.861	6.93	41635	0.00	200000	
Co	59	103	1	He	0.026	0.026	8.49	939	0.00	10000	
Ni	60	103	1	He	-0.327	-0.327	-6.52	2888	-0.01	10000	
Cu	63	103	1	He	0.409	0.409	9.38	13393	0.00	10000	
Zn	66	103	1	He	0.603	0.603	7.54	6984	0.01	10000	
As	75	103	1	He	0.228	0.228	5.45	1206	0.02	10000	
Se	78	103	1	He	0.174	0.174	60.81	365	0.05	10000	
Sr	88	103	1	He	26.974	26.974	0.70	477351	0.01	10000	
Mo	95	103	1	He	0.048	0.048	38.33	567	0.01	2000	
Ag	107	103	1	He	0.002	0.002	44.57	94	0.00	300	
Cd	111	103	1	He	0.073	0.073	32.05	4192	0.00	4000	
Sn	118	115	1	He	0.059	0.059	44.21	1993	0.00	2000	
Sb	123	115	1	He	0.006	0.006	281.45	659	0.00	300	
Ba	137	115	1	He	10.863	10.863	0.45	41564	0.03	10000	
W	182	209	1	He	0.007	0.007	582.40	8317	0.00	2500	
Tl	205	209	1	He	0.007	0.007	15.59	363	0.00	5000	
Pb	208	209	1	He	0.019	0.019	6.12	1907	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4449073	3.65	4563898	97.48	30	120	
Sc	45	1	He	2413603	2.04	2572368	93.83	30	120	
Sc	45	2	NoGas	23691806	4.50	24609710	96.27	30	120	
Rh	103	1	He	4470797	0.32	4780241	93.53	30	120	
In	115	1	He	3071600	0.56	3171814	96.84	30	120	
Tb	159	1	He	5390565	0.43	5469932	98.55	30	120	
Ho	165	1	He	5288823	0.51	5294619	99.89	30	120	
Bi	209	1	He	3365527	1.30	3401163	98.95	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-50545-b-1-d
Data File Name	044SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T12:23:37-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1037.858	1037.858	1.61	13078260	0.01	10000	
B	11	45	2	NoGas	231.316	231.316	3.32	1443144	0.02	300	
Na	23	45	1	He	96768.724	96768.724	0.86	292304492	0.03	500000	
Mg	24	45	1	He	31469.268	31469.268	2.02	54362266	0.06	500000	
Al	27	45	1	He	9665.948	9665.948	1.52	10481042	0.09	200000	
K	39	45	1	He	13601.075	13601.075	1.25	32021726	0.04	500000	
Ca	44	45	1	He	107295.945	107295.945	1.13	11629578	0.92	500000	
Ti	47	45	1	He	103.096	103.096	1.19	64554	0.16	2500	
V	51	45	1	He	975.288	975.288	1.70	14840497	0.01	10000	
Cr	52	45	1	He	1340.944	1340.944	1.39	22168105	0.01	10000	
Mn	55	45	1	He	1016.225	1016.225	1.44	12740048	0.01	10000	
Fe	56	45	1	He	10260.894	10260.894	1.57	153454461	0.01	200000	
Co	59	103	1	He	969.430	969.430	1.18	22369827	0.00	10000	
Ni	60	103	1	He	1020.926	1020.926	0.58	5628439	0.02	10000	
Cu	63	103	1	He	976.657	976.657	1.36	14380932	0.01	10000	
Zn	66	103	1	He	1037.174	1037.174	2.01	2939775	0.04	10000	
As	75	103	1	He	1064.296	1064.296	1.23	2548192	0.04	10000	
Se	78	103	1	He	984.362	984.362	0.77	208579	0.47	10000	
Sr	88	103	1	He	1119.855	1119.855	1.47	18415608	0.01	10000	
Mo	95	103	1	He	111.261	111.261	0.78	680711	0.02	2000	
Ag	107	103	1	He	105.334	105.334	1.16	1889994	0.01	300	
Cd	111	103	1	He	1104.986	1104.986	1.75	3304038	0.03	4000	
Sn	118	115	1	He	1131.110	1131.110	1.92	8415344	0.01	2000	
Sb	123	115	1	He	110.590	110.590	0.63	804378	0.01	300	
Ba	137	115	1	He	1210.688	1210.688	0.15	4162272	0.03	10000	
W	182	209	1	He	112.120	112.120	0.70	1305467	0.01	2500	
Tl	205	209	1	He	257.139	257.139	1.63	7333697	0.00	5000	
Pb	208	209	1	He	1067.320	1067.320	1.79	40581834	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4176699	3.57	4563898	91.52	30	120	
Sc	45	1	He	2301081	1.29	2572368	89.45	30	120	
Sc	45	2	NoGas	22397861	1.89	24609710	91.01	30	120	
Rh	103	1	He	4159786	1.32	4780241	87.02	30	120	
In	115	1	He	2766546	0.33	3171814	87.22	30	120	
Tb	159	1	He	5216549	1.14	5469932	95.37	30	120	
Ho	165	1	He	5143055	0.33	5294619	97.14	30	120	
Bi	209	1	He	3143545	0.94	3401163	92.43	30	120	

Sample Report

Sample Table

Sample Name	240-50545-b-1-e ms
Data File Name	045SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T12:27:01-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1093.287	1093.287	2.38	14766540	0.01	10000	
B	11	45	2	NoGas	219.012	219.012	4.93	1621384	0.01	300	
Na	23	45	1	He	104393.450	104393.450	1.73	490561610	0.02	500000	
Mg	24	45	1	He	34116.589	34116.589	1.44	91695463	0.04	500000	
Al	27	45	1	He	11101.643	11101.643	2.69	18727177	0.06	200000	
K	39	45	1	He	15822.334	15822.334	0.06	57895718	0.03	500000	
Ca	44	45	1	He	116101.220	116101.220	1.31	19578543	0.59	500000	
Ti	47	45	1	He	104.697	104.697	2.07	101983	0.10	2500	
V	51	45	1	He	937.075	937.075	1.90	22182792	0.00	10000	
Cr	52	45	1	He	1225.207	1225.207	1.39	31512547	0.00	10000	
Mn	55	45	1	He	1011.982	1011.982	0.91	19738716	0.01	10000	
Fe	56	45	1	He	9649.527	9649.527	1.71	224524911	0.00	200000	
Co	59	103	1	He	1190.179	1190.179	1.80	30621601	0.00	10000	
Ni	60	103	1	He	1206.594	1206.594	2.04	7415392	0.02	10000	
Cu	63	103	1	He	1146.848	1146.848	2.34	18827176	0.01	10000	
Zn	66	103	1	He	1291.116	1291.116	1.36	4080079	0.03	10000	
As	75	103	1	He	1370.234	1370.234	1.61	3657872	0.04	10000	
Se	78	103	1	He	1333.154	1333.154	2.02	314827	0.42	10000	
Sr	88	103	1	He	1432.464	1432.464	1.92	26265916	0.01	10000	
Mo	95	103	1	He	121.682	121.682	1.84	830012	0.01	2000	
Ag	107	103	1	He	107.344	107.344	1.44	2147657	0.00	300	
Cd	111	103	1	He	1148.445	1148.445	2.81	3828279	0.03	4000	
Sn	118	115	1	He	1157.652	1157.652	1.05	10379503	0.01	2000	
Sb	123	115	1	He	112.111	112.111	0.85	982679	0.01	300	
Ba	137	115	1	He	1194.549	1194.549	2.40	4948390	0.02	10000	
W	182	209	1	He	114.011	114.011	1.45	1197795	0.01	2500	
Tl	205	209	1	He	264.144	264.144	0.94	6798806	0.00	5000	
Pb	208	209	1	He	1086.544	1086.544	0.24	37285609	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4467574	12.16	4563898	97.89	30	120	
Sc	45	1	He	3579847	0.91	2572368	139.17	30	120	ISTD Failed
Sc	45	2	NoGas	26739092	22.10	24609710	108.65	30	120	
Rh	103	1	He	4639030	2.44	4780241	97.05	30	120	
In	115	1	He	3334089	1.34	3171814	105.12	30	120	
Tb	159	1	He	5149234	0.88	5469932	94.14	30	120	
Ho	165	1	He	4956889	1.51	5294619	93.62	30	120	
Bi	209	1	He	2836808	0.88	3401163	83.41	30	120	

Sample Report

Sample Table

Sample Name	240-50545-b-1-f msd
Data File Name	046SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T12:30:26-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1049.161	1049.161	0.36	13321830	0.01	10000	
B	11	45	2	NoGas	225.418	225.418	0.93	1428802	0.02	300	
Na	23	45	1	He	99835.108	99835.108	0.77	306449306	0.03	500000	
Mg	24	45	1	He	32326.887	32326.887	0.64	56750577	0.06	500000	
Al	27	45	1	He	10117.433	10117.433	1.09	11147920	0.09	200000	
K	39	45	1	He	14242.913	14242.913	1.36	34061678	0.04	500000	
Ca	44	45	1	He	109243.498	109243.498	0.95	12031520	0.91	500000	
Ti	47	45	1	He	104.830	104.830	1.37	66698	0.16	2500	
V	51	45	1	He	999.715	999.715	1.96	15456913	0.01	10000	
Cr	52	45	1	He	1368.740	1368.740	1.36	22992308	0.01	10000	
Mn	55	45	1	He	1054.821	1054.821	0.58	13438480	0.01	10000	
Fe	56	45	1	He	10649.176	10649.176	1.11	161858514	0.01	200000	
Co	59	103	1	He	997.756	997.756	0.20	23524098	0.00	10000	
Ni	60	103	1	He	1054.031	1054.031	1.15	5936966	0.02	10000	
Cu	63	103	1	He	1019.831	1019.831	1.22	15342524	0.01	10000	
Zn	66	103	1	He	1068.887	1068.887	1.68	3095311	0.03	10000	
As	75	103	1	He	1093.964	1093.964	1.05	2675974	0.04	10000	
Se	78	103	1	He	1017.665	1017.665	0.35	220304	0.46	10000	
Sr	88	103	1	He	1135.423	1135.423	1.46	19076421	0.01	10000	
Mo	95	103	1	He	114.405	114.405	1.28	715082	0.02	2000	
Ag	107	103	1	He	109.117	109.117	1.39	2000401	0.01	300	
Cd	111	103	1	He	1122.473	1122.473	1.69	3429066	0.03	4000	
Sn	118	115	1	He	1162.910	1162.910	1.46	8936331	0.01	2000	
Sb	123	115	1	He	113.668	113.668	0.61	853965	0.01	300	
Ba	137	115	1	He	1233.188	1233.188	1.49	4379773	0.03	10000	
W	182	209	1	He	115.106	115.106	1.30	1358433	0.01	2500	
Tl	205	209	1	He	265.512	265.512	0.34	7677921	0.00	5000	
Pb	208	209	1	He	1105.173	1105.173	0.43	42603626	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4208031	1.04	4563898	92.20	30	120	
Sc	45	1	He	2338137	1.07	2572368	90.89	30	120	
Sc	45	2	NoGas	22751042	1.41	24609710	92.45	30	120	
Rh	103	1	He	4249864	1.14	4780241	88.90	30	120	
In	115	1	He	2857739	1.34	3171814	90.10	30	120	
Tb	159	1	He	5321714	0.95	5469932	97.29	30	120	
Ho	165	1	He	5191336	0.78	5294619	98.05	30	120	
Bi	209	1	He	3186908	1.41	3401163	93.70	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-180204/1-a
Data File Name	047_Blk.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T12:33:50-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.219	11.5	3037	10.1	1	
B	11	45	2	NoGas	10.822	2.2	92850	1.2	20	
Na	23	45	1	He	168.258	2.1	542648	2.1	400	
Mg	24	45	1	He	52.908	1.1	93946	1.2	1000	
Al	27	45	1	He	3.471	11.1	5398	8.0	50	
K	39	45	1	He	54.716	4.5	382659	1.2	1000	
Ca	44	45	1	He	210.496	1.3	26301	0.7	1000	
Ti	47	45	1	He	0.204	31.8	182	23.2	20	
V	51	45	1	He	0.497	20.3	9745	16.0	2	
Cr	52	45	1	He	1.770	0.3	39339	0.7	2	
Mn	55	45	1	He	0.520	5.2	11722	3.0	2	
Fe	56	45	1	He	17.747	4.8	296771	4.0	50	
Co	59	103	1	He	0.155	9.4	4213	9.6	1	
Ni	60	103	1	He	0.180	17.2	5989	2.3	2	
Cu	63	103	1	He	1.345	0.6	28700	1.0	2	
Zn	66	103	1	He	15.247	0.9	52445	1.5	20	
As	75	103	1	He	1.414	19.2	4329	15.6	2	
Se	78	103	1	He	0.937	14.7	548	4.9	2	
Sr	88	103	1	He	0.539	5.5	10261	6.0	10	
Mo	95	103	1	He	0.349	31.4	2587	27.5	2	
Ag	107	103	1	He	0.012	12.3	289	10.7	0.2	
Cd	111	103	1	He	0.296	22.4	4997	5.2	0.2	Blank Failed
Sn	118	115	1	He	2.234	9.5	19545	9.9	10	
Sb	123	115	1	He	0.181	16.0	2027	10.4	1	
Ba	137	115	1	He	0.929	2.2	3572	2.9	5	
W	182	209	1	He	0.839	25.6	19064	13.9	10	
Tl	205	209	1	He	0.238	10.4	7623	10.6	0.5	
Pb	208	209	1	He	0.231	8.5	10793	8.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4281113	1.10	4563898	93.80	30	120	
Sc	45	1	He	2337200	0.55	2572368	90.86	30	120	
Sc	45	2	NoGas	22428291	0.67	24609710	91.14	30	120	
Rh	103	1	He	4550182	0.90	4780241	95.19	30	120	
In	115	1	He	3007271	1.18	3171814	94.81	30	120	
Tb	159	1	He	5325613	1.06	5469932	97.36	30	120	
Ho	165	1	He	5249195	0.02	5294619	99.14	30	120	
Bi	209	1	He	3447416	0.42	3401163	101.36	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-180204/2-a
Data File Name	048_LCS.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T12:37:41-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	958.983	958.983	0.655	12278561	0.97	1000	95.9	79.5	120.5	
B	11	2	NoGas	133.742	133.742	0.745	845958	1.32	100	133.7	79.5	120.5	LCS Failed
Na	23	1	He	10301.829	10301.829	0.954	31274978	0.47	10000	103.0	79.5	120.5	
Mg	24	1	He	10393.047	10393.047	1.376	18033424	1.25	10000	103.9	79.5	120.5	
Al	27	1	He	9580.647	9580.647	1.294	10433483	0.53	10000	95.8	79.5	120.5	
K	39	1	He	9787.341	9787.341	2.092	23211114	1.31	10000	97.9	79.5	120.5	
Ca	44	1	He	11572.441	11572.441	1.508	1262443	0.96	10000	115.7	79.5	120.5	
Ti	47	1	He	99.814	99.814	1.473	62767	0.85	100	99.8	79.5	120.5	
V	51	1	He	942.750	942.750	0.552	14407586	0.46	1000	94.3	79.5	120.5	
Cr	52	1	He	984.532	984.532	1.162	16348643	0.67	1000	98.5	79.5	120.5	
Mn	55	1	He	1001.582	1001.582	0.974	12611139	1.03	1000	100.2	79.5	120.5	
Fe	56	1	He	10261.658	10261.658	1.203	154132732	0.75	10000	102.6	79.5	120.5	
Co	59	1	He	931.953	931.953	1.385	22434302	1.07	1000	93.2	79.5	120.5	
Ni	60	1	He	992.735	992.735	0.881	5709456	0.67	1000	99.3	79.5	120.5	
Cu	63	1	He	960.426	960.426	0.986	14753742	0.86	1000	96.0	79.5	120.5	
Zn	66	1	He	1026.269	1026.269	0.906	3034895	0.67	1000	102.6	79.5	120.5	
As	75	1	He	1002.732	1002.732	1.427	2504573	1.10	1000	100.3	79.5	120.5	
Se	78	1	He	946.405	946.405	0.841	209209	0.52	1000	94.6	79.5	120.5	
Sr	88	1	He	919.647	919.647	1.005	15777614	0.79	1000	92.0	79.5	120.5	
Mo	95	1	He	102.743	102.743	1.054	655763	0.82	100	102.7	79.5	120.5	
Ag	107	1	He	105.232	105.232	1.604	1969777	1.47	100	105.2	79.5	120.5	
Cd	111	1	He	1073.305	1073.305	1.045	3348416	1.22	1000	107.3	79.5	120.5	
Sn	118	1	He	1083.584	1083.584	1.992	8563466	1.79	1000	108.4	79.5	120.5	
Sb	123	1	He	103.394	103.394	1.696	798795	0.38	100	103.4	79.5	120.5	
Ba	137	1	He	1053.234	1053.234	2.791	3845612	1.74	1000	105.3	79.5	120.5	
W	182	1	He	102.771	102.771	2.144	1258342	0.87	100	102.8	79.5	120.5	
Tl	205	1	He	243.928	243.928	1.727	7312616	0.39	250	97.6	79.5	120.5	
Pb	208	1	He	1007.239	1007.239	1.740	40255888	0.60	1000	100.7	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4243233	0.95	4563898	92.97	30	120	
Sc	45	1	He	2310881	0.76	2572368	89.83	30	120	
Sc	45	2	NoGas	22412462	0.68	24609710	91.07	30	120	
Rh	103	1	He	4339255	0.33	4780241	90.77	30	120	
In	115	1	He	2938821	1.32	3171814	92.65	30	120	
Tb	159	1	He	5354172	2.00	5469932	97.88	30	120	
Ho	165	1	He	5277905	0.46	5294619	99.68	30	120	
Bi	209	1	He	3304462	1.35	3401163	97.16	30	120	

Sample Report

Sample Table

Sample Name	240-50395-f-1-a
Data File Name	049SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T12:41:06-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.215	0.215	4.42	2867	0.01	10000	
B	11	45	2	NoGas	871.489	871.489	0.97	5351618	0.02	300	>LDR
Na	23	45	1	He	102345.038	102345.038	2.31	311518106	0.03	500000	
Mg	24	45	1	He	42187.702	42187.702	1.25	73449171	0.06	500000	
Al	27	45	1	He	8.426	8.426	1.89	10770	0.08	200000	
K	39	45	1	He	13131.789	13131.789	1.47	31165578	0.04	500000	
Ca	44	45	1	He	236174.476	236174.476	1.36	25793003	0.92	500000	
Ti	47	45	1	He	0.434	0.434	10.90	326	0.13	2500	
V	51	45	1	He	1.272	1.272	2.90	21554	0.01	10000	
Cr	52	45	1	He	2.105	2.105	1.06	44598	0.00	10000	
Mn	55	45	1	He	629.294	629.294	1.24	7952545	0.01	10000	
Fe	56	45	1	He	150.985	150.985	0.47	2302449	0.01	200000	
Co	59	103	1	He	0.833	0.833	2.98	19276	0.00	10000	
Ni	60	103	1	He	2.583	2.583	2.66	18494	0.01	10000	
Cu	63	103	1	He	4.855	4.855	1.83	76949	0.01	10000	
Zn	66	103	1	He	8.032	8.032	3.56	27192	0.03	10000	
As	75	103	1	He	4.784	4.784	8.49	11880	0.04	10000	
Se	78	103	1	He	3.455	3.455	5.78	1021	0.34	10000	
Sr	88	103	1	He	4439.041	4439.041	1.51	72124050	0.01	10000	
Mo	95	103	1	He	1.470	1.470	7.98	9114	0.02	2000	
Ag	107	103	1	He	0.017	0.017	2.97	344	0.00	300	
Cd	111	103	1	He	0.424	0.424	9.72	4890	0.01	4000	
Sn	118	115	1	He	1.918	1.918	8.92	15797	0.01	2000	
Sb	123	115	1	He	0.463	0.463	9.31	3956	0.01	300	
Ba	137	115	1	He	130.268	130.268	0.66	452830	0.03	10000	
W	182	209	1	He	0.961	0.961	14.66	18563	0.01	2500	
Tl	205	209	1	He	0.220	0.220	9.09	6345	0.00	5000	
Pb	208	209	1	He	0.165	0.165	6.19	7267	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4096045	0.95	4563898	89.75	30	120	
Sc	45	1	He	2318907	0.96	2572368	90.15	30	120	
Sc	45	2	NoGas	22351121	0.55	24609710	90.82	30	120	
Rh	103	1	He	4110026	1.24	4780241	85.98	30	120	
In	115	1	He	2796860	0.87	3171814	88.18	30	120	
Tb	159	1	He	5188541	1.01	5469932	94.86	30	120	
Ho	165	1	He	5082029	0.82	5294619	95.98	30	120	
Bi	209	1	He	3104385	0.49	3401163	91.27	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-179921/1-a
Data File Name	050_Blk.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T12:44:51-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.127	12.5	1830	11.8	1	
B	11	45	2	NoGas	15.423	2.0	120370	0.5	20	
Na	23	45	1	He	158.037	1.7	512727	2.3	400	
Mg	24	45	1	He	40.257	0.9	71941	0.7	1000	
Al	27	45	1	He	2.247	9.7	4059	5.2	50	
K	39	45	1	He	55.994	3.4	386775	1.6	1000	
Ca	44	45	1	He	117.033	2.1	16059	2.0	1000	
Ti	47	45	1	He	0.094	60.5	112	31.8	20	
V	51	45	1	He	0.531	6.1	10296	4.2	2	
Cr	52	45	1	He	1.843	3.1	40665	1.8	2	
Mn	55	45	1	He	0.325	2.2	9272	1.7	2	
Fe	56	45	1	He	13.678	1.8	235634	1.1	50	
Co	59	103	1	He	0.075	3.7	2187	3.6	1	
Ni	60	103	1	He	0.209	28.3	6107	5.1	2	
Cu	63	103	1	He	1.304	3.4	27765	1.6	2	
Zn	66	103	1	He	5.139	2.8	20958	3.3	20	
As	75	103	1	He	0.516	20.3	1962	12.8	2	
Se	78	103	1	He	0.210	37.0	376	5.9	2	
Sr	88	103	1	He	0.561	6.7	10558	7.4	10	
Mo	95	103	1	He	0.086	27.9	820	18.3	2	
Ag	107	103	1	He	0.005	8.9	158	5.3	0.2	
Cd	111	103	1	He	0.119	37.1	4378	2.7	0.2	
Sn	118	115	1	He	0.705	18.4	7117	15.1	10	
Sb	123	115	1	He	0.071	26.2	1151	12.7	1	
Ba	137	115	1	He	0.894	3.8	3410	3.3	5	
W	182	209	1	He	0.183	26.8	10752	5.8	10	
Tl	205	209	1	He	0.074	11.4	2472	10.3	0.5	
Pb	208	209	1	He	0.121	3.8	6207	3.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4214153	0.95	4563898	92.34	30	120	
Sc	45	1	He	2343620	0.71	2572368	91.11	30	120	
Sc	45	2	NoGas	22303699	1.78	24609710	90.63	30	120	
Rh	103	1	He	4508231	1.14	4780241	94.31	30	120	
In	115	1	He	2981900	0.52	3171814	94.01	30	120	
Tb	159	1	He	5261408	0.49	5469932	96.19	30	120	
Ho	165	1	He	5174537	0.92	5294619	97.73	30	120	
Bi	209	1	He	3448718	0.90	3401163	101.40	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-179921/2-a
Data File Name	051_LCS.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T12:48:41-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	1011.019	1011.019	2.089	12746231	1.71	1000	101.1	79.5	120.5	
B	11	2	NoGas	142.413	142.413	0.600	894685	0.35	100	142.4	79.5	120.5	LCS Failed
Na	23	1	He	10763.954	10763.954	0.801	32173632	0.33	10000	107.6	79.5	120.5	
Mg	24	1	He	10669.507	10669.507	2.574	18225731	1.61	10000	106.7	79.5	120.5	
Al	27	1	He	9951.334	9951.334	1.240	10670231	0.52	10000	99.5	79.5	120.5	
K	39	1	He	10254.990	10254.990	1.395	23935954	1.42	10000	102.5	79.5	120.5	
Ca	44	1	He	11739.493	11739.493	1.267	1260894	0.40	10000	117.4	79.5	120.5	
Ti	47	1	He	103.221	103.221	1.899	63908	1.35	100	103.2	79.5	120.5	
V	51	1	He	982.962	982.962	1.943	14789314	0.98	1000	98.3	79.5	120.5	
Cr	52	1	He	1032.008	1032.008	0.981	16872819	0.67	1000	103.2	79.5	120.5	
Mn	55	1	He	1049.445	1049.445	1.785	13009084	1.04	1000	104.9	79.5	120.5	
Fe	56	1	He	10727.052	10727.052	1.333	158637185	0.56	10000	107.3	79.5	120.5	
Co	59	1	He	965.518	965.518	0.842	23324466	0.13	1000	96.6	79.5	120.5	
Ni	60	1	He	1023.255	1023.255	1.409	5905548	1.11	1000	102.3	79.5	120.5	
Cu	63	1	He	995.714	995.714	1.226	15349276	0.78	1000	99.6	79.5	120.5	
Zn	66	1	He	1046.545	1046.545	0.329	3105816	0.99	1000	104.7	79.5	120.5	
As	75	1	He	1024.497	1024.497	0.742	2567988	0.15	1000	102.4	79.5	120.5	
Se	78	1	He	971.762	971.762	1.074	215560	0.37	1000	97.2	79.5	120.5	
Sr	88	1	He	960.932	960.932	1.544	16543445	0.88	1000	96.1	79.5	120.5	
Mo	95	1	He	106.162	106.162	0.875	679961	0.27	100	106.2	79.5	120.5	
Ag	107	1	He	105.596	105.596	1.777	1983482	1.16	100	105.6	79.5	120.5	
Cd	111	1	He	1092.479	1092.479	1.735	3420023	1.34	1000	109.2	79.5	120.5	
Sn	118	1	He	1125.319	1125.319	1.919	8688039	0.22	1000	112.5	79.5	120.5	
Sb	123	1	He	108.526	108.526	2.320	819079	0.44	100	108.5	79.5	120.5	
Ba	137	1	He	1137.923	1137.923	2.038	4059447	0.25	1000	113.8	79.5	120.5	
W	182	1	He	104.758	104.758	0.985	1273192	0.99	100	104.8	79.5	120.5	
Tl	205	1	He	251.302	251.302	0.150	7478711	0.20	250	100.5	79.5	120.5	
Pb	208	1	He	1049.215	1049.215	0.423	41627733	0.65	1000	104.9	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4178451	1.09	4563898	91.55	30	120	
Sc	45	1	He	2275316	0.98	2572368	88.45	30	120	
Sc	45	2	NoGas	22304000	0.80	24609710	90.63	30	120	
Rh	103	1	He	4354643	0.72	4780241	91.10	30	120	
In	115	1	He	2871488	1.96	3171814	90.53	30	120	
Tb	159	1	He	5257774	0.81	5469932	96.12	30	120	
Ho	165	1	He	5174030	0.59	5294619	97.72	30	120	
Bi	209	1	He	3279858	0.27	3401163	96.43	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2004624
Data File Name	052_CCV.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T12:52:03-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	49.154	0.526	631828	0.52	50	98.3	89.5	110.5	
B	11	45	2	NoGas	62.769	1.995	422167	0.85	50	125.5	89.5	110.5	CCV Failed
Na	23	45	1	He	25314.672	1.056	80410804	1.50	25000	101.3	89.5	110.5	
Mg	24	45	1	He	25482.320	1.752	46285584	2.34	25000	101.9	89.5	110.5	
Al	27	45	1	He	250.538	2.216	287179	1.66	250	100.2	89.5	110.5	
K	39	45	1	He	24903.341	1.851	61416544	0.76	25000	99.6	89.5	110.5	
Ca	44	45	1	He	25575.847	2.524	2916164	0.39	25000	102.3	89.5	110.5	
Ti	47	45	1	He	50.129	1.995	33022	0.44	50	100.3	89.5	110.5	
V	51	45	1	He	49.088	1.647	787273	1.30	50	98.2	89.5	110.5	
Cr	52	45	1	He	49.784	2.703	874645	0.95	50	99.6	89.5	110.5	
Mn	55	45	1	He	257.478	1.848	3397219	1.05	250	103.0	89.5	110.5	
Fe	56	45	1	He	12721.495	2.527	199973663	0.42	12500	101.8	89.5	110.5	
Co	59	103	1	He	46.090	3.092	1148652	1.33	50	92.2	89.5	110.5	
Ni	60	103	1	He	48.096	1.667	290975	1.52	50	96.2	89.5	110.5	
Cu	63	103	1	He	46.436	2.205	745049	1.52	50	92.9	89.5	110.5	
Zn	66	103	1	He	48.535	1.814	153519	1.65	50	97.1	89.5	110.5	
As	75	103	1	He	50.378	1.795	130855	0.93	50	100.8	89.5	110.5	
Se	78	103	1	He	48.989	3.074	11518	0.87	50	98.0	89.5	110.5	
Sr	88	103	1	He	45.697	1.907	812146	1.62	50	91.4	89.5	110.5	
Mo	95	103	1	He	51.533	2.876	340599	2.08	50	103.1	89.5	110.5	
Ag	107	103	1	He	46.415	1.342	899512	1.49	50	92.8	89.5	110.5	
Cd	111	103	1	He	49.576	2.654	163879	1.11	50	99.2	89.5	110.5	
Sn	118	115	1	He	56.417	3.744	462313	0.69	50	112.8	89.5	110.5	CCV Failed
Sb	123	115	1	He	51.648	4.810	412706	1.29	50	103.3	89.5	110.5	
Ba	137	115	1	He	50.444	4.649	190473	0.99	50	100.9	89.5	110.5	
W	182	209	1	He	51.461	3.119	634325	2.41	50	102.9	89.5	110.5	
Tl	205	209	1	He	46.292	2.595	1388210	1.26	50	92.6	89.5	110.5	
Pb	208	209	1	He	47.851	1.959	1914086	1.00	50	95.7	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4258635	1.03	4563898	93.31	30	120	
Sc	45	1	He	2419340	2.34	2572368	94.05	30	120	
Sc	45	2	NoGas	23020219	1.16	24609710	93.54	30	120	
Rh	103	1	He	4493347	2.69	4780241	94.00	30	120	
In	115	1	He	3040816	4.13	3171814	95.87	30	120	
Tb	159	1	He	5378376	1.97	5469932	98.33	30	120	
Ho	165	1	He	5226093	3.03	5294619	98.71	30	120	
Bi	209	1	He	3305904	2.39	3401163	97.20	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	053_CCB.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T12:55:50-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.115	16.8	1652	15.0	1	
B	11	45	2	NoGas	4.736	1.9	54867	0.8	20	
Na	23	45	1	He	28.525	6.4	112690	3.7	400	
Mg	24	45	1	He	1.905	27.0	4390	19.1	1000	
Al	27	45	1	He	0.565	10.0	2173	2.5	50	
K	39	45	1	He	13.207	10.3	281138	0.2	1000	
Ca	44	45	1	He	28.929	3.1	6249	0.5	1000	
Ti	47	45	1	He	0.024	136.9	67	30.4	20	
V	51	45	1	He	0.041	18.0	2669	4.9	2	
Cr	52	45	1	He	0.135	22.4	11758	3.1	2	
Mn	55	45	1	He	0.430	5.4	10465	1.8	2	
Fe	56	45	1	He	7.317	15.4	137043	13.5	50	
Co	59	103	1	He	0.061	16.7	1835	15.3	1	
Ni	60	103	1	He	-0.542	-1.2	1628	2.0	2	
Cu	63	103	1	He	0.078	1.2	8225	1.5	2	
Zn	66	103	1	He	1.591	4.8	10074	2.7	20	
As	75	103	1	He	0.398	26.5	1655	15.1	2	
Se	78	103	1	He	0.370	12.8	413	2.3	2	
Sr	88	103	1	He	0.034	8.4	1158	5.8	10	
Mo	95	103	1	He	0.301	36.5	2240	31.0	2	
Ag	107	103	1	He	0.007	29.8	179	22.5	0.2	
Cd	111	103	1	He	0.123	32.5	4390	2.1	0.2	
Sn	118	115	1	He	0.486	6.1	5394	3.8	10	
Sb	123	115	1	He	0.263	7.5	2667	5.2	1	
Ba	137	115	1	He	0.035	55.3	230	31.8	5	
W	182	209	1	He	0.653	38.6	16068	19.3	10	
Tl	205	209	1	He	0.137	1.5	4273	1.1	0.5	
Pb	208	209	1	He	0.060	3.4	3542	1.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4146336	0.42	4563898	90.85	30	120	
Sc	45	1	He	2312448	1.21	2572368	89.90	30	120	
Sc	45	2	NoGas	22158972	1.76	24609710	90.04	30	120	
Rh	103	1	He	4509615	1.54	4780241	94.34	30	120	
In	115	1	He	3001364	0.70	3171814	94.63	30	120	
Tb	159	1	He	5237802	0.87	5469932	95.76	30	120	
Ho	165	1	He	5106407	0.60	5294619	96.45	30	120	
Bi	209	1	He	3312350	0.40	3401163	97.39	30	120	

Sample Report

Sample Table

Sample Name	240-50394-f-1-a
Data File Name	054SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T12:59:39-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.040	0.040	13.85	537	0.01	10000	
B	11	45	2	NoGas	31863.468	31863.468	0.72	134393672	0.02	300	>LDR
Na	23	45	1	He	OR	OR	#VALUE!	OR	#VALUE!	500000	
Mg	24	45	1	He	716824.988	716824.988	3.50	962469058	0.07	500000	>LDR
Al	27	45	1	He	2.175	2.175	10.80	3036	0.07	200000	
K	39	45	1	He	524658.858	524658.858	3.17	952806629	0.06	500000	>LDR
Ca	44	45	1	He	5371863.622	5371863.622	3.33	452406181	1.19	500000	>LDR
Ti	47	45	1	He	0.476	0.476	11.03	271	0.18	2500	
V	51	45	1	He	1.347	1.347	7.75	17519	0.01	10000	
Cr	52	45	1	He	3.973	3.973	4.43	58392	0.01	10000	
Mn	55	45	1	He	4236.967	4236.967	2.73	41276492	0.01	10000	
Fe	56	45	1	He	2711.912	2711.912	2.42	31544194	0.01	200000	
Co	59	103	1	He	5.175	5.175	1.69	73852	0.01	10000	
Ni	60	103	1	He	8.803	8.803	3.81	32674	0.03	10000	
Cu	63	103	1	He	3.318	3.318	7.05	34125	0.01	10000	
Zn	66	103	1	He	9.099	9.099	6.77	18828	0.05	10000	
As	75	103	1	He	12.487	12.487	3.58	18805	0.07	10000	
Se	78	103	1	He	3.139	3.139	6.13	596	0.53	10000	
Sr	88	103	1	He	224147.423	224147.423	2.60	2273870487	0.01	10000	>LDR
Mo	95	103	1	He	1.370	1.370	0.64	5314	0.03	2000	
Ag	107	103	1	He	0.455	0.455	6.98	5061	0.01	300	
Cd	111	103	1	He	1.274	1.274	3.31	4621	0.03	4000	
Sn	118	115	1	He	3.951	3.951	36.99	19060	0.02	2000	
Sb	123	115	1	He	2.272	2.272	14.40	10615	0.02	300	
Ba	137	115	1	He	979.117	979.117	0.99	2094017	0.05	10000	
W	182	209	1	He	0.605	0.605	32.03	6728	0.01	2500	
Tl	205	209	1	He	0.276	0.276	17.21	3670	0.01	5000	
Pb	208	209	1	He	0.342	0.342	11.11	6439	0.01	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3165882	1.95	4563898	69.37	30	120	
Sc	45	1	He	1789513	3.18	2572368	69.57	30	120	
Sc	45	2	NoGas	15426993	1.01	24609710	62.69	30	120	
Rh	103	1	He	2567174	2.94	4780241	53.70	30	120	
In	115	1	He	1721245	2.30	3171814	54.27	30	120	
Tb	159	1	He	3135428	2.35	5469932	57.32	30	120	
Ho	165	1	He	3053576	4.15	5294619	57.67	30	120	
Bi	209	1	He	1448636	8.87	3401163	42.59	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-180755/1-a
Data File Name	055_Blk.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T13:03:21-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.038	48.2	667	33.3	1	
B	11	45	2	NoGas	221.861	3.1	1377952	2.0	20	Blank Failed
Na	23	45	1	He	449.330	9.8	1372702	7.0	400	Blank Failed
Mg	24	45	1	He	61.558	15.2	106521	12.3	1000	
Al	27	45	1	He	1.242	9.5	2881	6.8	50	
K	39	45	1	He	74.912	11.9	421056	2.3	1000	
Ca	44	45	1	He	250.383	19.6	29946	14.9	1000	
Ti	47	45	1	He	0.053	117.5	84	47.6	20	
V	51	45	1	He	0.491	8.2	9441	7.0	2	
Cr	52	45	1	He	1.824	1.7	39379	3.1	2	
Mn	55	45	1	He	0.275	24.9	8412	7.5	2	
Fe	56	45	1	He	9.186	1.9	163253	4.2	50	
Co	59	103	1	He	0.006	54.0	457	19.7	1	
Ni	60	103	1	He	-0.151	-29.8	3953	7.2	2	
Cu	63	103	1	He	1.852	5.6	36412	4.5	2	
Zn	66	103	1	He	6.689	1.6	25631	0.2	20	
As	75	103	1	He	0.367	15.6	1572	9.5	2	
Se	78	103	1	He	0.419	5.3	423	2.2	2	
Sr	88	103	1	He	5.645	24.4	100851	24.0	10	
Mo	95	103	1	He	0.054	32.9	612	18.8	2	
Ag	107	103	1	He	0.010	3.0	248	2.1	0.2	
Cd	111	103	1	He	0.106	37.0	4322	2.0	0.2	
Sn	118	115	1	He	0.940	14.3	9133	10.7	10	
Sb	123	115	1	He	0.139	10.7	1709	8.1	1	
Ba	137	115	1	He	0.590	4.9	2322	3.4	5	
W	182	209	1	He	0.089	85.0	9507	9.7	10	
Tl	205	209	1	He	0.037	17.3	1309	15.3	0.5	
Pb	208	209	1	He	0.149	7.2	7360	5.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4009212	0.38	4563898	87.85	30	120	
Sc	45	1	He	2287366	2.61	2572368	88.92	30	120	
Sc	45	2	NoGas	22289764	1.21	24609710	90.57	30	120	
Rh	103	1	He	4494827	1.16	4780241	94.03	30	120	
In	115	1	He	3029032	1.26	3171814	95.50	30	120	
Tb	159	1	He	5371336	1.30	5469932	98.20	30	120	
Ho	165	1	He	5226414	0.55	5294619	98.71	30	120	
Bi	209	1	He	3432225	0.70	3401163	100.91	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-180755/2-a
Data File Name	056_LCS.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T13:07:11-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	980.446	980.446	0.402	11846806	0.35	1000	98.0	79.5	120.5	
B	11	2	NoGas	245.048	245.048	1.337	1494968	1.20	100	245.0	79.5	120.5	LCS Failed
Na	23	1	He	10226.011	10226.011	1.716	29719894	0.67	10000	102.3	79.5	120.5	
Mg	24	1	He	10020.336	10020.336	1.828	16644336	0.82	10000	100.2	79.5	120.5	
Al	27	1	He	9598.935	9598.935	2.353	10006522	0.55	10000	96.0	79.5	120.5	
K	39	1	He	9863.327	9863.327	2.923	22388692	0.89	10000	98.6	79.5	120.5	
Ca	44	1	He	11161.943	11161.943	1.199	1165958	1.59	10000	111.6	79.5	120.5	
Ti	47	1	He	98.452	98.452	2.026	59268	0.36	100	98.5	79.5	120.5	
V	51	1	He	967.173	967.173	3.123	14146593	0.95	1000	96.7	79.5	120.5	
Cr	52	1	He	1001.862	1001.862	2.309	15924773	0.08	1000	100.2	79.5	120.5	
Mn	55	1	He	1026.239	1026.239	2.326	12368429	0.18	1000	102.6	79.5	120.5	
Fe	56	1	He	10379.349	10379.349	2.339	149232132	0.15	10000	103.8	79.5	120.5	
Co	59	1	He	922.043	922.043	2.523	22003684	0.54	1000	92.2	79.5	120.5	
Ni	60	1	He	978.394	978.394	2.010	5578656	0.20	1000	97.8	79.5	120.5	
Cu	63	1	He	946.739	946.739	2.317	14418180	0.83	1000	94.7	79.5	120.5	
Zn	66	1	He	1015.088	1015.088	1.601	2976294	0.87	1000	101.5	79.5	120.5	
As	75	1	He	978.892	978.892	1.971	2424071	0.27	1000	97.9	79.5	120.5	
Se	78	1	He	948.438	948.438	2.042	207854	0.22	1000	94.8	79.5	120.5	
Sr	88	1	He	939.924	939.924	2.467	15986118	0.82	1000	94.0	79.5	120.5	
Mo	95	1	He	101.735	101.735	2.169	643741	0.51	100	101.7	79.5	120.5	
Ag	107	1	He	102.848	102.848	3.565	1908180	1.44	100	102.8	79.5	120.5	
Cd	111	1	He	1083.100	1083.100	3.191	3349235	1.08	1000	108.3	79.5	120.5	
Sn	118	1	He	1089.837	1089.837	3.317	8506943	1.16	1000	109.0	79.5	120.5	
Sb	123	1	He	105.023	105.023	2.854	801514	1.04	100	105.0	79.5	120.5	
Ba	137	1	He	1123.440	1123.440	4.119	4051341	1.35	1000	112.3	79.5	120.5	
W	182	1	He	99.218	99.218	3.090	1244086	0.83	100	99.2	79.5	120.5	
Tl	205	1	He	249.316	249.316	1.151	7654614	1.55	250	99.7	79.5	120.5	
Pb	208	1	He	1024.221	1024.221	1.668	41919098	1.10	1000	102.4	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4004435	0.75	4563898	87.74	30	120	
Sc	45	1	He	2212749	2.37	2572368	86.02	30	120	
Sc	45	2	NoGas	21929584	0.63	24609710	89.11	30	120	
Rh	103	1	He	4303154	2.21	4780241	90.02	30	120	
In	115	1	He	2904286	3.06	3171814	91.57	30	120	
Tb	159	1	He	5317423	2.87	5469932	97.21	30	120	
Ho	165	1	He	5212505	3.22	5294619	98.45	30	120	
Bi	209	1	He	3384425	2.69	3401163	99.51	30	120	

Sample Report

Sample Table

Sample Name	240-50653-b-1-a
Data File Name	057SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T13:10:33-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.177	0.177	14.27	2311	0.01	10000	
B	11	45	2	NoGas	165.083	165.083	2.59	1019776	0.02	300	
Na	23	45	1	He	41238.637	41238.637	1.43	125392484	0.03	500000	
Mg	24	45	1	He	19985.017	19985.017	1.31	34752538	0.06	500000	
Al	27	45	1	He	53.680	53.680	2.41	60140	0.09	200000	
K	39	45	1	He	4782.359	4782.359	2.08	11494814	0.04	500000	
Ca	44	45	1	He	87853.489	87853.489	1.65	9584862	0.92	500000	
Ti	47	45	1	He	1.074	1.074	11.56	729	0.15	2500	
V	51	45	1	He	0.724	0.724	4.59	13128	0.01	10000	
Cr	52	45	1	He	7.916	7.916	2.31	141184	0.01	10000	
Mn	55	45	1	He	3.807	3.807	3.20	53080	0.01	10000	
Fe	56	45	1	He	179.382	179.382	2.10	2726684	0.01	200000	
Co	59	103	1	He	1.223	1.223	4.73	29688	0.00	10000	
Ni	60	103	1	He	5.892	5.892	3.53	38480	0.02	10000	
Cu	63	103	1	He	1.761	1.761	8.29	33697	0.01	10000	
Zn	66	103	1	He	1.437	1.437	6.56	9225	0.02	10000	
As	75	103	1	He	2.821	2.821	12.51	7640	0.04	10000	
Se	78	103	1	He	1.735	1.735	15.69	698	0.25	10000	
Sr	88	103	1	He	151.631	151.631	1.36	2598274	0.01	10000	
Mo	95	103	1	He	1.891	1.891	1.28	12293	0.02	2000	
Ag	107	103	1	He	0.014	0.014	20.84	306	0.00	300	
Cd	111	103	1	He	0.195	0.195	16.41	4444	0.00	4000	
Sn	118	115	1	He	1.504	1.504	8.80	13417	0.01	2000	
Sb	123	115	1	He	0.331	0.331	3.47	3164	0.01	300	
Ba	137	115	1	He	50.790	50.790	2.78	187043	0.03	10000	
W	182	209	1	He	1.168	1.168	14.05	22869	0.01	2500	
Tl	205	209	1	He	0.154	0.154	15.80	4874	0.00	5000	
Pb	208	209	1	He	0.279	0.279	5.04	12577	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3951446	1.27	4563898	86.58	30	120	
Sc	45	1	He	2316184	1.40	2572368	90.04	30	120	
Sc	45	2	NoGas	22023796	1.17	24609710	89.49	30	120	
Rh	103	1	He	4333426	0.89	4780241	90.65	30	120	
In	115	1	He	2963133	2.06	3171814	93.42	30	120	
Tb	159	1	He	5548186	2.51	5469932	101.43	30	120	
Ho	165	1	He	5374255	2.25	5294619	101.50	30	120	
Bi	209	1	He	3388321	1.49	3401163	99.62	30	120	

Sample Report

Sample Table

Sample Name	SD 240-50653-b-1-a@5
Data File Name	058SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T13:14:19-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.111	0.111	5.85	1578	0.01	10000	
B	11	45	2	NoGas	85.706	85.706	1.34	558889	0.02	300	
Na	23	45	1	He	8945.557	8945.557	7.64	27559128	0.03	500000	
Mg	24	45	1	He	4254.587	4254.587	7.14	7493308	0.06	500000	
Al	27	45	1	He	11.734	11.734	7.46	14552	0.08	200000	
K	39	45	1	He	1063.487	1063.487	7.68	2786335	0.04	500000	
Ca	44	45	1	He	19031.568	19031.568	9.27	2103092	0.90	500000	
Ti	47	45	1	He	0.194	0.194	20.49	176	0.11	2500	
V	51	45	1	He	0.245	0.245	19.25	5922	0.00	10000	
Cr	52	45	1	He	1.764	1.764	10.41	39347	0.00	10000	
Mn	55	45	1	He	0.735	0.735	13.63	14502	0.01	10000	
Fe	56	45	1	He	35.659	35.659	8.94	570427	0.01	200000	
Co	59	103	1	He	0.262	0.262	5.30	6758	0.00	10000	
Ni	60	103	1	He	0.713	0.713	18.79	8981	0.01	10000	
Cu	63	103	1	He	0.576	0.576	8.48	15968	0.00	10000	
Zn	66	103	1	He	-0.073	-0.073	-104.25	4903	0.00	10000	
As	75	103	1	He	0.486	0.486	26.38	1852	0.03	10000	
Se	78	103	1	He	0.396	0.396	37.94	413	0.10	10000	
Sr	88	103	1	He	29.275	29.275	7.62	514711	0.01	10000	
Mo	95	103	1	He	0.367	0.367	14.28	2638	0.01	2000	
Ag	107	103	1	He	0.005	0.005	28.58	151	0.00	300	
Cd	111	103	1	He	0.133	0.133	35.72	4365	0.00	4000	
Sn	118	115	1	He	0.156	0.156	20.39	2819	0.01	2000	
Sb	123	115	1	He	0.039	0.039	92.24	924	0.00	300	
Ba	137	115	1	He	10.317	10.317	6.46	39801	0.03	10000	
W	182	209	1	He	0.216	0.216	36.20	11215	0.00	2500	
Tl	205	209	1	He	0.045	0.045	12.74	1590	0.00	5000	
Pb	208	209	1	He	0.088	0.088	7.48	4895	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4112857	0.72	4563898	90.12	30	120	
Sc	45	1	He	2353957	7.77	2572368	91.51	30	120	
Sc	45	2	NoGas	22710008	1.34	24609710	92.28	30	120	
Rh	103	1	He	4459234	7.47	4780241	93.28	30	120	
In	115	1	He	3105305	6.73	3171814	97.90	30	120	
Tb	159	1	He	5459544	7.27	5469932	99.81	30	120	
Ho	165	1	He	5367834	6.66	5294619	101.38	30	120	
Bi	209	1	He	3474054	5.59	3401163	102.14	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-50653-b-1-a
Data File Name	059SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T13:18:07-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1021.708	1021.708	1.35	12161628	0.01	10000	
B	11	45	2	NoGas	268.601	268.601	1.07	1620200	0.02	300	
Na	23	45	1	He	51389.436	51389.436	0.86	150820913	0.03	500000	
Mg	24	45	1	He	30025.358	30025.358	1.75	50393992	0.06	500000	
Al	27	45	1	He	9726.789	9726.789	0.56	10247187	0.09	200000	
K	39	45	1	He	14538.146	14538.146	1.03	33237230	0.04	500000	
Ca	44	45	1	He	98745.032	98745.032	1.69	10397945	0.95	500000	
Ti	47	45	1	He	101.557	101.557	1.35	61782	0.16	2500	
V	51	45	1	He	963.208	963.208	2.30	14239714	0.01	10000	
Cr	52	45	1	He	1008.925	1008.925	1.61	16206423	0.01	10000	
Mn	55	45	1	He	1033.049	1033.049	1.81	12581831	0.01	10000	
Fe	56	45	1	He	10574.440	10574.440	1.28	153643914	0.01	200000	
Co	59	103	1	He	951.966	951.966	0.83	22020060	0.00	10000	
Ni	60	103	1	He	990.568	990.568	2.06	5474336	0.02	10000	
Cu	63	103	1	He	952.429	952.429	0.67	14058684	0.01	10000	
Zn	66	103	1	He	994.369	994.369	2.21	2825514	0.04	10000	
As	75	103	1	He	1029.969	1029.969	3.18	2471786	0.04	10000	
Se	78	103	1	He	973.731	973.731	0.43	206820	0.47	10000	
Sr	88	103	1	He	1123.301	1123.301	1.01	18517799	0.01	10000	
Mo	95	103	1	He	111.214	111.214	0.94	682029	0.02	2000	
Ag	107	103	1	He	105.740	105.740	3.23	1901706	0.01	300	
Cd	111	103	1	He	1090.615	1090.615	2.61	3268944	0.03	4000	
Sn	118	115	1	He	1148.488	1148.488	2.15	8713558	0.01	2000	
Sb	123	115	1	He	110.521	110.521	1.14	819842	0.01	300	
Ba	137	115	1	He	1198.360	1198.360	1.01	4201733	0.03	10000	
W	182	209	1	He	108.452	108.452	3.07	1318096	0.01	2500	
Tl	205	209	1	He	254.327	254.327	2.90	7570299	0.00	5000	
Pb	208	209	1	He	1058.456	1058.456	1.97	42009504	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3944946	1.00	4563898	86.44	30	120	
Sc	45	1	He	2235419	0.53	2572368	86.90	30	120	
Sc	45	2	NoGas	21716415	1.11	24609710	88.24	30	120	
Rh	103	1	He	4169415	0.37	4780241	87.22	30	120	
In	115	1	He	2821753	1.56	3171814	88.96	30	120	
Tb	159	1	He	5313667	0.36	5469932	97.14	30	120	
Ho	165	1	He	5191812	1.56	5294619	98.06	30	120	
Bi	209	1	He	3282118	2.54	3401163	96.50	30	120	

Sample Report

Sample Table

Sample Name	240-50653-b-1-b ms
Data File Name	060SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T13:21:28-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	980.289	980.289	1.23	11714686	0.01	10000	
B	11	45	2	NoGas	252.725	252.725	0.60	1554183	0.02	300	
Na	23	45	1	He	51254.223	51254.223	0.84	149535920	0.03	500000	
Mg	24	45	1	He	29895.142	29895.142	2.23	49873428	0.06	500000	
Al	27	45	1	He	9482.516	9482.516	2.22	9929578	0.10	200000	
K	39	45	1	He	14334.176	14334.176	0.60	32582347	0.04	500000	
Ca	44	45	1	He	98845.771	98845.771	1.24	10347044	0.96	500000	
Ti	47	45	1	He	100.445	100.445	0.70	60747	0.17	2500	
V	51	45	1	He	936.745	936.745	3.15	13763402	0.01	10000	
Cr	52	45	1	He	972.173	972.173	1.19	15524510	0.01	10000	
Mn	55	45	1	He	986.744	986.744	0.65	11948774	0.01	10000	
Fe	56	45	1	He	10119.076	10119.076	1.06	146164403	0.01	200000	
Co	59	103	1	He	898.683	898.683	1.59	20848342	0.00	10000	
Ni	60	103	1	He	963.514	963.514	2.24	5339865	0.02	10000	
Cu	63	103	1	He	905.928	905.928	1.68	13411250	0.01	10000	
Zn	66	103	1	He	960.461	960.461	1.80	2737447	0.04	10000	
As	75	103	1	He	983.050	983.050	2.93	2365902	0.04	10000	
Se	78	103	1	He	927.144	927.144	1.47	197518	0.47	10000	
Sr	88	103	1	He	1078.592	1078.592	0.40	17835473	0.01	10000	
Mo	95	103	1	He	106.031	106.031	1.10	652209	0.02	2000	
Ag	107	103	1	He	98.944	98.944	0.42	1785301	0.01	300	
Cd	111	103	1	He	1024.080	1024.080	2.64	3078473	0.03	4000	
Sn	118	115	1	He	1098.559	1098.559	1.77	8391427	0.01	2000	
Sb	123	115	1	He	105.314	105.314	0.50	786601	0.01	300	
Ba	137	115	1	He	1142.060	1142.060	0.93	4031493	0.03	10000	
W	182	209	1	He	101.772	101.772	0.99	1259604	0.01	2500	
Tl	205	209	1	He	238.160	238.160	1.12	7216306	0.00	5000	
Pb	208	209	1	He	991.853	991.853	2.64	40058542	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3960326	0.04	4563898	86.78	30	120	
Sc	45	1	He	2222403	1.71	2572368	86.40	30	120	
Sc	45	2	NoGas	22117032	0.47	24609710	89.87	30	120	
Rh	103	1	He	4182519	2.10	4780241	87.50	30	120	
In	115	1	He	2840961	2.19	3171814	89.57	30	120	
Tb	159	1	He	5308704	0.78	5469932	97.05	30	120	
Ho	165	1	He	5214903	0.99	5294619	98.49	30	120	
Bi	209	1	He	3339798	1.80	3401163	98.20	30	120	

Sample Report

Sample Table

Sample Name	240-50653-b-1-c msd
Data File Name	061SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T13:24:51-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1012.050	1012.050	1.68	12099203	0.01	10000	
B	11	45	2	NoGas	256.908	256.908	0.93	1591189	0.02	300	
Na	23	45	1	He	51816.414	51816.414	1.33	154807123	0.03	500000	
Mg	24	45	1	He	30115.520	30115.520	0.49	51460100	0.06	500000	
Al	27	45	1	He	9473.335	9473.335	1.07	10159978	0.09	200000	
K	39	45	1	He	14539.986	14539.986	0.35	33844438	0.04	500000	
Ca	44	45	1	He	100484.319	100484.319	1.37	10771832	0.93	500000	
Ti	47	45	1	He	100.839	100.839	0.51	62452	0.16	2500	
V	51	45	1	He	955.177	955.177	1.35	14376108	0.01	10000	
Cr	52	45	1	He	979.428	979.428	0.98	16018257	0.01	10000	
Mn	55	45	1	He	1009.824	1009.824	0.86	12521325	0.01	10000	
Fe	56	45	1	He	10188.882	10188.882	0.63	150726670	0.01	200000	
Co	59	103	1	He	931.723	931.723	2.22	21793861	0.00	10000	
Ni	60	103	1	He	980.655	980.655	1.64	5480653	0.02	10000	
Cu	63	103	1	He	941.965	941.965	1.13	14060923	0.01	10000	
Zn	66	103	1	He	1006.167	1006.167	1.16	2891350	0.03	10000	
As	75	103	1	He	1030.366	1030.366	1.32	2500742	0.04	10000	
Se	78	103	1	He	959.018	959.018	1.55	205986	0.47	10000	
Sr	88	103	1	He	1108.762	1108.762	2.68	18481574	0.01	10000	
Mo	95	103	1	He	109.217	109.217	1.89	677296	0.02	2000	
Ag	107	103	1	He	105.991	105.991	1.27	1927858	0.01	300	
Cd	111	103	1	He	1089.107	1089.107	1.65	3301276	0.03	4000	
Sn	118	115	1	He	1121.423	1121.423	0.29	8728018	0.01	2000	
Sb	123	115	1	He	106.584	106.584	0.74	810981	0.01	300	
Ba	137	115	1	He	1181.095	1181.095	1.59	4247606	0.03	10000	
W	182	209	1	He	109.509	109.509	2.23	1302163	0.01	2500	
Tl	205	209	1	He	260.222	260.222	2.33	7579056	0.00	5000	
Pb	208	209	1	He	1064.016	1064.016	1.67	41315403	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3962365	1.22	4563898	86.82	30	120	
Sc	45	1	He	2275849	1.41	2572368	88.47	30	120	
Sc	45	2	NoGas	22279291	1.26	24609710	90.53	30	120	
Rh	103	1	He	4216799	1.31	4780241	88.21	30	120	
In	115	1	He	2893990	0.15	3171814	91.24	30	120	
Tb	159	1	He	5363231	0.34	5469932	98.05	30	120	
Ho	165	1	He	5280133	1.27	5294619	99.73	30	120	
Bi	209	1	He	3210176	1.15	3401163	94.38	30	120	

Sample Report

Sample Table

Sample Name	240-50653-b-2-a
Data File Name	062SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T13:28:14-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.286	0.286	7.09	3615	0.01	10000	
B	11	45	2	NoGas	113.722	113.722	0.52	713851	0.02	300	
Na	23	45	1	He	52616.704	52616.704	1.39	156115349	0.03	500000	
Mg	24	45	1	He	46381.442	46381.442	1.90	78699478	0.06	500000	
Al	27	45	1	He	2.131	2.131	8.45	3792	0.06	200000	
K	39	45	1	He	4583.061	4583.061	1.28	10760641	0.04	500000	
Ca	44	45	1	He	266958.344	266958.344	1.09	28415779	0.94	500000	
Ti	47	45	1	He	0.306	0.306	7.48	239	0.13	2500	
V	51	45	1	He	0.664	0.664	12.68	11924	0.01	10000	
Cr	52	45	1	He	2.584	2.584	4.40	51241	0.01	10000	
Mn	55	45	1	He	2280.486	2280.486	0.68	28076538	0.01	10000	
Fe	56	45	1	He	1623.000	1623.000	0.54	23865430	0.01	200000	
Co	59	103	1	He	3.987	3.987	0.56	91164	0.00	10000	
Ni	60	103	1	He	8.211	8.211	0.83	49112	0.02	10000	
Cu	63	103	1	He	0.903	0.903	4.62	19481	0.00	10000	
Zn	66	103	1	He	2.298	2.298	5.01	11159	0.02	10000	
As	75	103	1	He	4.066	4.066	9.95	10181	0.04	10000	
Se	78	103	1	He	1.775	1.775	8.85	670	0.26	10000	
Sr	88	103	1	He	258.548	258.548	1.65	4200715	0.01	10000	
Mo	95	103	1	He	0.762	0.762	12.39	4833	0.02	2000	
Ag	107	103	1	He	0.021	0.021	17.39	411	0.00	300	
Cd	111	103	1	He	0.411	0.411	8.52	4850	0.01	4000	
Sn	118	115	1	He	1.432	1.432	12.20	12487	0.01	2000	
Sb	123	115	1	He	0.338	0.338	6.86	3134	0.01	300	
Ba	137	115	1	He	27.965	27.965	2.43	100131	0.03	10000	
W	182	209	1	He	1.162	1.162	17.04	21263	0.01	2500	
Tl	205	209	1	He	0.281	0.281	9.60	8232	0.00	5000	
Pb	208	209	1	He	0.285	0.285	6.58	11974	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3963554	1.12	4563898	86.85	30	120	
Sc	45	1	He	2260115	1.00	2572368	87.86	30	120	
Sc	45	2	NoGas	22120684	0.86	24609710	89.89	30	120	
Rh	103	1	He	4109039	0.81	4780241	85.96	30	120	
In	115	1	He	2879267	1.50	3171814	90.78	30	120	
Tb	159	1	He	5271791	0.93	5469932	96.38	30	120	
Ho	165	1	He	5181390	0.76	5294619	97.86	30	120	
Bi	209	1	He	3165633	1.46	3401163	93.08	30	120	

Sample Report

Sample Table

Sample Name	240-50653-b-3-a
Data File Name	063SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T13:31:59-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.160	0.160	22.62	2048	0.01	10000	
B	11	45	2	NoGas	116.506	116.506	1.46	709933	0.02	300	
Na	23	45	1	He	59472.045	59472.045	1.56	174508134	0.03	500000	
Mg	24	45	1	He	52649.806	52649.806	1.20	88356730	0.06	500000	
Al	27	45	1	He	4.765	4.765	1.27	6525	0.07	200000	
K	39	45	1	He	5063.271	5063.271	1.67	11731397	0.04	500000	
Ca	44	45	1	He	300977.699	300977.699	1.92	31682111	0.95	500000	
Ti	47	45	1	He	0.374	0.374	18.39	278	0.13	2500	
V	51	45	1	He	0.523	0.523	70.25	9674	0.01	10000	
Cr	52	45	1	He	3.543	3.543	3.31	66076	0.01	10000	
Mn	55	45	1	He	2616.292	2616.292	0.90	31855194	0.01	10000	
Fe	56	45	1	He	2302.636	2302.636	1.41	33473236	0.01	200000	
Co	59	103	1	He	4.595	4.595	1.26	104650	0.00	10000	
Ni	60	103	1	He	10.601	10.601	1.12	61891	0.02	10000	
Cu	63	103	1	He	1.444	1.444	2.01	27259	0.01	10000	
Zn	66	103	1	He	4.410	4.410	2.77	16998	0.03	10000	
As	75	103	1	He	3.490	3.490	3.83	8792	0.04	10000	
Se	78	103	1	He	0.789	0.789	21.03	462	0.17	10000	
Sr	88	103	1	He	292.137	292.137	1.68	4729358	0.01	10000	
Mo	95	103	1	He	0.795	0.795	3.95	5016	0.02	2000	
Ag	107	103	1	He	0.021	0.021	4.71	410	0.01	300	
Cd	111	103	1	He	0.295	0.295	6.37	4492	0.01	4000	
Sn	118	115	1	He	0.577	0.577	11.62	5761	0.01	2000	
Sb	123	115	1	He	0.223	0.223	11.33	2214	0.01	300	
Ba	137	115	1	He	32.519	32.519	0.73	114208	0.03	10000	
W	182	209	1	He	0.666	0.666	16.15	15174	0.00	2500	
Tl	205	209	1	He	0.149	0.149	8.09	4335	0.00	5000	
Pb	208	209	1	He	0.191	0.191	1.86	8229	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3858478	1.84	4563898	84.54	30	120	
Sc	45	1	He	2235333	1.46	2572368	86.90	30	120	
Sc	45	2	NoGas	21493574	0.62	24609710	87.34	30	120	
Rh	103	1	He	4094140	0.35	4780241	85.65	30	120	
In	115	1	He	2824034	0.60	3171814	89.04	30	120	
Tb	159	1	He	5264841	1.00	5469932	96.25	30	120	
Ho	165	1	He	5129525	0.93	5294619	96.88	30	120	
Bi	209	1	He	3100065	0.23	3401163	91.15	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2004624
Data File Name	064_CCV.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T13:35:43-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	51.195	2.229	620008	1.06	50	102.4	89.5	110.5	
B	11	45	2	NoGas	99.190	0.444	641458	0.95	50	198.4	89.5	110.5	CCV Failed
Na	23	45	1	He	25364.874	4.173	77651262	0.09	25000	101.5	89.5	110.5	
Mg	24	45	1	He	25450.476	5.493	44535665	1.45	25000	101.8	89.5	110.5	
Al	27	45	1	He	252.112	4.433	278522	0.88	250	100.8	89.5	110.5	
K	39	45	1	He	25147.517	4.745	59769237	0.96	25000	100.6	89.5	110.5	
Ca	44	45	1	He	26664.313	5.227	2929950	1.46	25000	106.7	89.5	110.5	
Ti	47	45	1	He	51.140	5.172	32465	1.63	50	102.3	89.5	110.5	
V	51	45	1	He	49.449	5.040	764208	1.30	50	98.9	89.5	110.5	
Cr	52	45	1	He	50.543	5.086	855683	0.91	50	101.1	89.5	110.5	
Mn	55	45	1	He	267.240	5.421	3397370	1.37	250	106.9	89.5	110.5	
Fe	56	45	1	He	13080.719	4.224	198216863	0.51	12500	104.6	89.5	110.5	
Co	59	103	1	He	46.707	4.604	1126515	0.84	50	93.4	89.5	110.5	
Ni	60	103	1	He	47.888	5.724	280271	2.00	50	95.8	89.5	110.5	
Cu	63	103	1	He	46.867	4.536	727564	0.81	50	93.7	89.5	110.5	
Zn	66	103	1	He	49.083	5.224	150144	1.48	50	98.2	89.5	110.5	
As	75	103	1	He	49.932	5.095	125485	1.26	50	99.9	89.5	110.5	
Se	78	103	1	He	50.111	4.781	11395	1.07	50	100.2	89.5	110.5	
Sr	88	103	1	He	48.069	5.463	826398	1.87	50	96.1	89.5	110.5	
Mo	95	103	1	He	52.785	6.716	337409	2.88	50	105.6	89.5	110.5	
Ag	107	103	1	He	47.963	4.945	899228	1.15	50	95.9	89.5	110.5	
Cd	111	103	1	He	51.299	5.230	163944	1.31	50	102.6	89.5	110.5	
Sn	118	115	1	He	57.744	5.672	465513	1.37	50	115.5	89.5	110.5	CCV Failed
Sb	123	115	1	He	53.128	4.855	417860	0.43	50	106.3	89.5	110.5	
Ba	137	115	1	He	52.645	6.193	195586	1.73	50	105.3	89.5	110.5	
W	182	209	1	He	51.070	6.590	638305	3.24	50	102.1	89.5	110.5	
Tl	205	209	1	He	48.541	10.732	1474580	7.38	50	97.1	89.5	110.5	
Pb	208	209	1	He	48.286	4.554	1959047	1.33	50	96.6	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4013479	2.28	4563898	87.94	30	120	
Sc	45	1	He	2333958	4.02	2572368	90.73	30	120	
Sc	45	2	NoGas	22667684	0.60	24609710	92.11	30	120	
Rh	103	1	He	4351337	3.70	4780241	91.03	30	120	
In	115	1	He	2993528	4.32	3171814	94.38	30	120	
Tb	159	1	He	5289802	4.14	5469932	96.71	30	120	
Ho	165	1	He	5209134	3.66	5294619	98.39	30	120	
Bi	209	1	He	3355357	3.18	3401163	98.65	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	065_CCB.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T13:39:28-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.129	19.5	1726	17.6	1	
B	11	45	2	NoGas	41.662	1.1	281415	0.4	20	CCB Failed
Na	23	45	1	He	85.050	2.8	285860	2.1	400	
Mg	24	45	1	He	4.231	17.2	8476	14.4	1000	
Al	27	45	1	He	0.590	22.2	2213	7.2	50	
K	39	45	1	He	5.762	19.5	265123	0.3	1000	
Ca	44	45	1	He	37.524	7.6	7225	4.1	1000	
Ti	47	45	1	He	0.035	50.0	74	14.4	20	
V	51	45	1	He	0.042	53.9	2691	12.2	2	
Cr	52	45	1	He	0.084	6.4	10973	0.8	2	
Mn	55	45	1	He	0.497	2.9	11373	1.4	2	
Fe	56	45	1	He	7.421	16.0	139304	13.4	50	
Co	59	103	1	He	0.019	13.9	764	8.3	1	
Ni	60	103	1	He	-0.687	-0.9	757	4.9	2	
Cu	63	103	1	He	0.473	4.3	14380	2.3	2	
Zn	66	103	1	He	1.494	5.6	9685	2.8	20	
As	75	103	1	He	0.267	24.8	1306	13.2	2	
Se	78	103	1	He	0.364	29.9	408	6.3	2	
Sr	88	103	1	He	0.245	10.1	4881	8.8	10	
Mo	95	103	1	He	0.280	35.1	2093	31.0	2	
Ag	107	103	1	He	0.008	27.3	211	20.5	0.2	
Cd	111	103	1	He	0.148	12.8	4430	1.1	0.2	
Sn	118	115	1	He	0.358	16.9	4419	10.2	10	
Sb	123	115	1	He	0.229	6.5	2434	3.2	1	
Ba	137	115	1	He	0.025	26.7	198	14.1	5	
W	182	209	1	He	0.585	25.2	15612	10.8	10	
Tl	205	209	1	He	0.107	4.0	3447	4.3	0.5	
Pb	208	209	1	He	0.083	5.6	4571	4.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3928436	0.36	4563898	86.08	30	120	
Sc	45	1	He	2325181	0.77	2572368	90.39	30	120	
Sc	45	2	NoGas	22386790	0.72	24609710	90.97	30	120	
Rh	103	1	He	4467521	0.24	4780241	93.46	30	120	
In	115	1	He	3045543	1.66	3171814	96.02	30	120	
Tb	159	1	He	5326392	1.11	5469932	97.38	30	120	
Ho	165	1	He	5227594	1.48	5294619	98.73	30	120	
Bi	209	1	He	3398196	1.01	3401163	99.91	30	120	

Sample Report

Sample Table

Sample Name	240-50653-b-4-a
Data File Name	066SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T13:43:19-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.098	0.098	10.20	1378	0.01	10000	
B	11	45	2	NoGas	143.756	143.756	1.32	885146	0.02	300	
Na	23	45	1	He	34084.061	34084.061	1.52	101474077	0.03	500000	
Mg	24	45	1	He	15424.854	15424.854	1.40	26261365	0.06	500000	
Al	27	45	1	He	2.557	2.557	6.98	4259	0.06	200000	
K	39	45	1	He	2758.189	2758.189	0.57	6595367	0.04	500000	
Ca	44	45	1	He	79899.952	79899.952	1.38	8534764	0.94	500000	
Ti	47	45	1	He	0.224	0.224	27.71	189	0.12	2500	
V	51	45	1	He	0.699	0.699	4.24	12472	0.01	10000	
Cr	52	45	1	He	2.587	2.587	1.90	51464	0.01	10000	
Mn	55	45	1	He	0.988	0.988	5.86	17153	0.01	10000	
Fe	56	45	1	He	16.013	16.013	3.68	262495	0.01	200000	
Co	59	103	1	He	0.357	0.357	2.01	8784	0.00	10000	
Ni	60	103	1	He	0.903	0.903	3.86	9753	0.01	10000	
Cu	63	103	1	He	1.068	1.068	4.22	22827	0.00	10000	
Zn	66	103	1	He	1.211	1.211	8.57	8471	0.01	10000	
As	75	103	1	He	0.813	0.813	8.71	2603	0.03	10000	
Se	78	103	1	He	0.539	0.539	19.06	430	0.13	10000	
Sr	88	103	1	He	140.847	140.847	0.29	2388448	0.01	10000	
Mo	95	103	1	He	1.062	1.062	2.23	6938	0.02	2000	
Ag	107	103	1	He	0.013	0.013	2.43	283	0.00	300	
Cd	111	103	1	He	0.204	0.204	11.57	4424	0.00	4000	
Sn	118	115	1	He	0.722	0.722	17.15	7239	0.01	2000	
Sb	123	115	1	He	0.376	0.376	18.75	3542	0.01	300	
Ba	137	115	1	He	46.512	46.512	1.73	172352	0.03	10000	
W	182	209	1	He	0.452	0.452	20.51	13877	0.00	2500	
Tl	205	209	1	He	0.090	0.090	11.38	2907	0.00	5000	
Pb	208	209	1	He	0.123	0.123	4.79	6173	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3980994	1.06	4563898	87.23	30	120	
Sc	45	1	He	2267681	1.56	2572368	88.16	30	120	
Sc	45	2	NoGas	21867709	1.39	24609710	88.86	30	120	
Rh	103	1	He	4288275	1.18	4780241	89.71	30	120	
In	115	1	He	2980814	1.81	3171814	93.98	30	120	
Tb	159	1	He	5366356	1.37	5469932	98.11	30	120	
Ho	165	1	He	5306220	1.39	5294619	100.22	30	120	
Bi	209	1	He	3375507	1.74	3401163	99.25	30	120	

Sample Report

Sample Table

Sample Name	240-50653-b-5-a
Data File Name	067SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T13:47:07-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.079	0.079	18.28	1152	0.01	10000	
B	11	45	2	NoGas	51.492	51.492	1.64	329539	0.02	300	
Na	23	45	1	He	168.986	168.986	1.24	518204	0.03	500000	
Mg	24	45	1	He	24.267	24.267	1.77	41544	0.06	500000	
Al	27	45	1	He	5.999	5.999	1.70	7783	0.08	200000	
K	39	45	1	He	7.554	7.554	24.55	257504	0.00	500000	
Ca	44	45	1	He	101.089	101.089	1.87	13564	0.75	500000	
Ti	47	45	1	He	0.045	0.045	59.27	77	0.06	2500	
V	51	45	1	He	0.599	0.599	18.10	10773	0.01	10000	
Cr	52	45	1	He	4.194	4.194	3.30	76091	0.01	10000	
Mn	55	45	1	He	1.569	1.569	3.32	23846	0.01	10000	
Fe	56	45	1	He	29.665	29.665	1.75	454427	0.01	200000	
Co	59	103	1	He	0.127	0.127	2.15	3406	0.00	10000	
Ni	60	103	1	He	2.554	2.554	3.52	19635	0.01	10000	
Cu	63	103	1	He	0.849	0.849	2.17	20025	0.00	10000	
Zn	66	103	1	He	10.912	10.912	2.57	37746	0.03	10000	
As	75	103	1	He	0.310	0.310	13.89	1396	0.02	10000	
Se	78	103	1	He	0.216	0.216	4.61	368	0.06	10000	
Sr	88	103	1	He	0.654	0.654	3.29	11930	0.01	10000	
Mo	95	103	1	He	0.604	0.604	2.50	4154	0.01	2000	
Ag	107	103	1	He	0.010	0.010	15.18	233	0.00	300	
Cd	111	103	1	He	0.119	0.119	16.76	4272	0.00	4000	
Sn	118	115	1	He	0.440	0.440	3.13	4956	0.01	2000	
Sb	123	115	1	He	0.141	0.141	13.96	1683	0.01	300	
Ba	137	115	1	He	0.316	0.316	9.59	1263	0.03	10000	
W	182	209	1	He	0.173	0.173	23.09	10563	0.00	2500	
Tl	205	209	1	He	0.036	0.036	4.42	1287	0.00	5000	
Pb	208	209	1	He	0.143	0.143	3.27	7103	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3987073	1.31	4563898	87.36	30	120	
Sc	45	1	He	2222991	1.38	2572368	86.42	30	120	
Sc	45	2	NoGas	21599113	1.15	24609710	87.77	30	120	
Rh	103	1	He	4401910	0.68	4780241	92.09	30	120	
In	115	1	He	2961981	1.13	3171814	93.38	30	120	
Tb	159	1	He	5314642	0.11	5469932	97.16	30	120	
Ho	165	1	He	5197057	0.81	5294619	98.16	30	120	
Bi	209	1	He	3426396	1.38	3401163	100.74	30	120	

Sample Report

Sample Table

Sample Name	240-50653-b-6-a
Data File Name	068SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T13:50:56-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.091	0.091	5.14	1311	0.01	10000	
B	11	45	2	NoGas	101.613	101.613	1.30	650656	0.02	300	
Na	23	45	1	He	27175.841	27175.841	0.91	80823858	0.03	500000	
Mg	24	45	1	He	20254.208	20254.208	1.06	34447658	0.06	500000	
Al	27	45	1	He	142.974	142.974	0.86	154128	0.09	200000	
K	39	45	1	He	3243.770	3243.770	1.36	7704244	0.04	500000	
Ca	44	45	1	He	81497.013	81497.013	0.86	8696495	0.94	500000	
Ti	47	45	1	He	2.060	2.060	5.87	1319	0.16	2500	
V	51	45	1	He	1.018	1.018	7.37	17252	0.01	10000	
Cr	52	45	1	He	6.248	6.248	1.12	110957	0.01	10000	
Mn	55	45	1	He	15.848	15.848	0.97	200447	0.01	10000	
Fe	56	45	1	He	350.435	350.435	1.84	5184471	0.01	200000	
Co	59	103	1	He	1.536	1.536	1.19	36366	0.00	10000	
Ni	60	103	1	He	4.868	4.868	1.76	31877	0.02	10000	
Cu	63	103	1	He	1.425	1.425	1.89	27909	0.01	10000	
Zn	66	103	1	He	3.024	3.024	2.55	13593	0.02	10000	
As	75	103	1	He	0.919	0.919	5.62	2828	0.03	10000	
Se	78	103	1	He	0.377	0.377	44.50	389	0.10	10000	
Sr	88	103	1	He	190.433	190.433	0.88	3189565	0.01	10000	
Mo	95	103	1	He	1.213	1.213	2.27	7795	0.02	2000	
Ag	107	103	1	He	0.019	0.019	22.64	403	0.00	300	
Cd	111	103	1	He	0.137	0.137	24.71	4166	0.00	4000	
Sn	118	115	1	He	0.306	0.306	12.79	3864	0.01	2000	
Sb	123	115	1	He	0.111	0.111	18.54	1442	0.01	300	
Ba	137	115	1	He	52.573	52.573	0.38	192283	0.03	10000	
W	182	209	1	He	0.408	0.408	19.65	12980	0.00	2500	
Tl	205	209	1	He	0.030	0.030	3.42	1047	0.00	5000	
Pb	208	209	1	He	0.341	0.341	2.52	14685	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4031574	2.37	4563898	88.34	30	120	
Sc	45	1	He	2264993	0.63	2572368	88.05	30	120	
Sc	45	2	NoGas	22467283	0.23	24609710	91.29	30	120	
Rh	103	1	He	4235717	0.29	4780241	88.61	30	120	
In	115	1	He	2941791	0.44	3171814	92.75	30	120	
Tb	159	1	He	5287471	1.27	5469932	96.66	30	120	
Ho	165	1	He	5180739	1.07	5294619	97.85	30	120	
Bi	209	1	He	3290028	0.20	3401163	96.73	30	120	

Sample Report

Sample Table

Sample Name	240-50653-b-7-a
Data File Name	069SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T13:54:40-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.060	0.060	36.43	900	0.01	10000	
B	11	45	2	NoGas	105.825	105.825	1.43	677030	0.02	300	
Na	23	45	1	He	71326.980	71326.980	1.83	215335910	0.03	500000	
Mg	24	45	1	He	113532.587	113532.587	1.20	196014585	0.06	500000	
Al	27	45	1	He	3.909	3.909	1.49	5784	0.07	200000	
K	39	45	1	He	6383.145	6383.145	1.72	15151848	0.04	500000	
Ca	44	45	1	He	525760.056	525760.056	0.99	56937109	0.92	500000	>LDR
Ti	47	45	1	He	0.277	0.277	24.60	224	0.12	2500	
V	51	45	1	He	0.647	0.647	10.48	11868	0.01	10000	
Cr	52	45	1	He	2.494	2.494	1.64	50646	0.00	10000	
Mn	55	45	1	He	4075.454	4075.454	0.50	51045652	0.01	10000	
Fe	56	45	1	He	133.156	133.156	0.92	2016593	0.01	200000	
Co	59	103	1	He	8.873	8.873	1.17	196265	0.00	10000	
Ni	60	103	1	He	21.466	21.466	1.39	117488	0.02	10000	
Cu	63	103	1	He	0.847	0.847	5.11	18096	0.00	10000	
Zn	66	103	1	He	4.776	4.776	2.03	17523	0.03	10000	
As	75	103	1	He	2.762	2.762	2.93	6882	0.04	10000	
Se	78	103	1	He	0.846	0.846	5.72	461	0.18	10000	
Sr	88	103	1	He	488.411	488.411	0.60	7689179	0.01	10000	
Mo	95	103	1	He	0.443	0.443	4.85	2816	0.02	2000	
Ag	107	103	1	He	0.009	0.009	14.06	198	0.00	300	
Cd	111	103	1	He	0.211	0.211	28.01	4129	0.01	4000	
Sn	118	115	1	He	0.269	0.269	6.14	3401	0.01	2000	
Sb	123	115	1	He	0.333	0.333	8.24	3009	0.01	300	
Ba	137	115	1	He	31.468	31.468	1.13	109654	0.03	10000	
W	182	209	1	He	0.130	0.130	13.40	8769	0.00	2500	
Tl	205	209	1	He	0.042	0.042	3.58	1275	0.00	5000	
Pb	208	209	1	He	0.217	0.217	4.01	8892	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3885271	1.31	4563898	85.13	30	120	
Sc	45	1	He	2299510	1.29	2572368	89.39	30	120	
Sc	45	2	NoGas	22484068	0.50	24609710	91.36	30	120	
Rh	103	1	He	3981806	0.65	4780241	83.30	30	120	
In	115	1	He	2801826	0.34	3171814	88.34	30	120	
Tb	159	1	He	5095534	1.14	5469932	93.16	30	120	
Ho	165	1	He	4989440	0.89	5294619	94.24	30	120	
Bi	209	1	He	3001799	1.31	3401163	88.26	30	120	

Sample Report

Sample Table

Sample Name	240-50653-b-8-a
Data File Name	070SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T13:58:27-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.046	0.046	47.37	759	0.01	10000	
B	11	45	2	NoGas	106.291	106.291	0.95	682902	0.02	300	
Na	23	45	1	He	96159.281	96159.281	1.08	295648122	0.03	500000	
Mg	24	45	1	He	29900.601	29900.601	0.94	52578705	0.06	500000	
Al	27	45	1	He	4.990	4.990	6.10	7086	0.07	200000	
K	39	45	1	He	5301.594	5301.594	1.43	12859493	0.04	500000	
Ca	44	45	1	He	126037.373	126037.373	1.92	13903640	0.91	500000	
Ti	47	45	1	He	0.282	0.282	18.89	232	0.12	2500	
V	51	45	1	He	0.654	0.654	6.95	12182	0.01	10000	
Cr	52	45	1	He	8.521	8.521	0.65	152968	0.01	10000	
Mn	55	45	1	He	1.488	1.488	4.41	24097	0.01	10000	
Fe	56	45	1	He	77.851	77.851	0.64	1212229	0.01	200000	
Co	59	103	1	He	0.733	0.733	0.63	17219	0.00	10000	
Ni	60	103	1	He	12.006	12.006	0.24	70694	0.02	10000	
Cu	63	103	1	He	2.666	2.666	0.87	45722	0.01	10000	
Zn	66	103	1	He	2.001	2.001	3.51	10464	0.02	10000	
As	75	103	1	He	0.764	0.764	10.47	2410	0.03	10000	
Se	78	103	1	He	0.874	0.874	13.64	488	0.18	10000	
Sr	88	103	1	He	259.293	259.293	0.19	4269104	0.01	10000	
Mo	95	103	1	He	2.592	2.592	1.38	16101	0.02	2000	
Ag	107	103	1	He	0.060	0.060	2.48	1122	0.01	300	
Cd	111	103	1	He	0.194	0.194	7.60	4267	0.00	4000	
Sn	118	115	1	He	0.215	0.215	14.37	3123	0.01	2000	
Sb	123	115	1	He	0.037	0.037	23.46	863	0.00	300	
Ba	137	115	1	He	106.923	106.923	0.79	389177	0.03	10000	
W	182	209	1	He	0.505	0.505	1.62	13517	0.00	2500	
Tl	205	209	1	He	0.021	0.021	16.90	734	0.00	5000	
Pb	208	209	1	He	0.111	0.111	1.74	5286	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4004687	0.21	4563898	87.75	30	120	
Sc	45	1	He	2342057	0.84	2572368	91.05	30	120	
Sc	45	2	NoGas	22584516	0.96	24609710	91.77	30	120	
Rh	103	1	He	4163865	0.21	4780241	87.11	30	120	
In	115	1	He	2928395	0.58	3171814	92.33	30	120	
Tb	159	1	He	5247364	0.59	5469932	95.93	30	120	
Ho	165	1	He	5198451	0.98	5294619	98.18	30	120	
Bi	209	1	He	3141035	0.70	3401163	92.35	30	120	

Sample Report

Sample Table

Sample Name	240-50653-b-9-a
Data File Name	071SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T14:02:14-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.044	0.044	11.17	748	0.01	10000	
B	11	45	2	NoGas	89.496	89.496	0.26	594403	0.02	300	
Na	23	45	1	He	89085.809	89085.809	2.37	269322671	0.03	500000	
Mg	24	45	1	He	21524.412	21524.412	2.23	37218357	0.06	500000	
Al	27	45	1	He	64.427	64.427	2.91	71458	0.09	200000	
K	39	45	1	He	4562.564	4562.564	3.06	10915909	0.04	500000	
Ca	44	45	1	He	91680.798	91680.798	1.77	9946849	0.92	500000	
Ti	47	45	1	He	1.426	1.426	3.44	946	0.15	2500	
V	51	45	1	He	0.814	0.814	2.23	14425	0.01	10000	
Cr	52	45	1	He	4.881	4.881	2.14	90212	0.01	10000	
Mn	55	45	1	He	16.251	16.251	2.79	208847	0.01	10000	
Fe	56	45	1	He	241.203	241.203	1.65	3637176	0.01	200000	
Co	59	103	1	He	1.066	1.066	4.60	25237	0.00	10000	
Ni	60	103	1	He	3.824	3.824	4.69	25923	0.01	10000	
Cu	63	103	1	He	1.220	1.220	4.51	24746	0.00	10000	
Zn	66	103	1	He	2.389	2.389	2.93	11724	0.02	10000	
As	75	103	1	He	1.501	1.501	1.97	4233	0.04	10000	
Se	78	103	1	He	0.614	0.614	14.49	439	0.14	10000	
Sr	88	103	1	He	185.505	185.505	2.43	3096262	0.01	10000	
Mo	95	103	1	He	0.807	0.807	5.07	5242	0.02	2000	
Ag	107	103	1	He	0.028	0.028	6.83	558	0.01	300	
Cd	111	103	1	He	0.145	0.145	3.95	4178	0.00	4000	
Sn	118	115	1	He	0.388	0.388	8.82	4467	0.01	2000	
Sb	123	115	1	He	0.042	0.042	48.96	897	0.00	300	
Ba	137	115	1	He	40.806	40.806	1.66	147996	0.03	10000	
W	182	209	1	He	0.511	0.511	4.72	14007	0.00	2500	
Tl	205	209	1	He	0.011	0.011	17.56	474	0.00	5000	
Pb	208	209	1	He	0.325	0.325	1.30	13818	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4076999	0.92	4563898	89.33	30	120	
Sc	45	1	He	2303684	2.39	2572368	89.55	30	120	
Sc	45	2	NoGas	23175561	0.57	24609710	94.17	30	120	
Rh	103	1	He	4223081	3.10	4780241	88.34	30	120	
In	115	1	He	2917440	2.38	3171814	91.98	30	120	
Tb	159	1	He	5267754	2.55	5469932	96.30	30	120	
Ho	165	1	He	5253607	0.53	5294619	99.23	30	120	
Bi	209	1	He	3238098	2.76	3401163	95.21	30	120	

Sample Report

Sample Table

Sample Name	240-50653-b-10-a
Data File Name	072SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T14:05:59-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.061	0.061	10.85	904	0.01	10000	
B	11	45	2	NoGas	96.692	96.692	0.34	607193	0.02	300	
Na	23	45	1	He	125435.383	125435.383	6.12	356315867	0.04	500000	
Mg	24	45	1	He	28450.001	28450.001	5.56	46233016	0.06	500000	
Al	27	45	1	He	298.959	298.959	6.12	306290	0.10	200000	
K	39	45	1	He	6682.809	6682.809	5.82	14918218	0.04	500000	
Ca	44	45	1	He	119518.811	119518.811	5.61	12184688	0.98	500000	
Ti	47	45	1	He	6.012	6.012	2.77	3592	0.17	2500	
V	51	45	1	He	1.337	1.337	15.10	21036	0.01	10000	
Cr	52	45	1	He	12.608	12.608	5.82	204887	0.01	10000	
Mn	55	45	1	He	32.790	32.790	5.19	391313	0.01	10000	
Fe	56	45	1	He	842.450	842.450	4.65	11878582	0.01	200000	
Co	59	103	1	He	2.115	2.115	5.69	47131	0.00	10000	
Ni	60	103	1	He	8.151	8.151	5.01	47432	0.02	10000	
Cu	63	103	1	He	2.939	2.939	5.57	47715	0.01	10000	
Zn	66	103	1	He	10.232	10.232	7.85	32386	0.03	10000	
As	75	103	1	He	1.783	1.783	8.23	4648	0.04	10000	
Se	78	103	1	He	0.770	0.770	10.44	447	0.17	10000	
Sr	88	103	1	He	268.617	268.617	5.69	4241467	0.01	10000	
Mo	95	103	1	He	1.782	1.782	6.29	10685	0.02	2000	
Ag	107	103	1	He	0.061	0.061	10.26	1094	0.01	300	
Cd	111	103	1	He	0.157	0.157	36.20	3987	0.00	4000	
Sn	118	115	1	He	0.154	0.154	23.10	2489	0.01	2000	
Sb	123	115	1	He	0.076	0.076	3.38	1097	0.01	300	
Ba	137	115	1	He	76.738	76.738	4.78	263004	0.03	10000	
W	182	209	1	He	11.499	11.499	6.84	138415	0.01	2500	
Tl	205	209	1	He	0.022	0.022	7.84	766	0.00	5000	
Pb	208	209	1	He	0.935	0.935	6.04	36003	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3881916	1.23	4563898	85.06	30	120	
Sc	45	1	He	2168523	5.30	2572368	84.30	30	120	
Sc	45	2	NoGas	21987551	1.00	24609710	89.35	30	120	
Rh	103	1	He	4001437	5.39	4780241	83.71	30	120	
In	115	1	He	2761091	4.59	3171814	87.05	30	120	
Tb	159	1	He	5120358	4.54	5469932	93.61	30	120	
Ho	165	1	He	5028363	4.94	5294619	94.97	30	120	
Bi	209	1	He	3097059	4.88	3401163	91.06	30	120	

Sample Report

Sample Table

Sample Name	240-50653-b-11-a
Data File Name	073SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T14:09:48-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.041	0.041	31.12	693	0.01	10000	
B	11	45	2	NoGas	111.984	111.984	0.42	704996	0.02	300	
Na	23	45	1	He	54631.016	54631.016	0.48	158555553	0.03	500000	
Mg	24	45	1	He	25258.962	25258.962	0.71	41926482	0.06	500000	
Al	27	45	1	He	177.692	177.692	0.77	186584	0.10	200000	
K	39	45	1	He	1829.149	1829.149	0.92	4344534	0.04	500000	
Ca	44	45	1	He	109315.018	109315.018	0.93	11383405	0.96	500000	
Ti	47	45	1	He	5.503	5.503	2.97	3357	0.16	2500	
V	51	45	1	He	1.268	1.268	6.09	20472	0.01	10000	
Cr	52	45	1	He	5.473	5.473	0.75	95999	0.01	10000	
Mn	55	45	1	He	13.734	13.734	1.43	170177	0.01	10000	
Fe	56	45	1	He	743.513	743.513	1.89	10706887	0.01	200000	
Co	59	103	1	He	0.994	0.994	1.38	23408	0.00	10000	
Ni	60	103	1	He	2.830	2.830	1.69	20234	0.01	10000	
Cu	63	103	1	He	2.235	2.235	1.44	39637	0.01	10000	
Zn	66	103	1	He	4.479	4.479	2.02	17605	0.03	10000	
As	75	103	1	He	1.541	1.541	2.04	4301	0.04	10000	
Se	78	103	1	He	1.055	1.055	1.39	530	0.20	10000	
Sr	88	103	1	He	143.625	143.625	2.60	2380930	0.01	10000	
Mo	95	103	1	He	0.837	0.837	6.76	5392	0.02	2000	
Ag	107	103	1	He	0.016	0.016	12.08	340	0.00	300	
Cd	111	103	1	He	0.143	0.143	2.44	4143	0.00	4000	
Sn	118	115	1	He	0.179	0.179	16.61	2808	0.01	2000	
Sb	123	115	1	He	0.112	0.112	8.54	1428	0.01	300	
Ba	137	115	1	He	49.181	49.181	0.55	176753	0.03	10000	
W	182	209	1	He	1.186	1.186	5.94	22168	0.01	2500	
Tl	205	209	1	He	0.017	0.017	10.04	642	0.00	5000	
Pb	208	209	1	He	1.035	1.035	0.75	41841	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3991782	2.71	4563898	87.46	30	120	
Sc	45	1	He	2210684	1.02	2572368	85.94	30	120	
Sc	45	2	NoGas	22173262	1.05	24609710	90.10	30	120	
Rh	103	1	He	4192896	1.31	4780241	87.71	30	120	
In	115	1	He	2890500	0.66	3171814	91.13	30	120	
Tb	159	1	He	5360995	0.56	5469932	98.01	30	120	
Ho	165	1	He	5259953	0.30	5294619	99.35	30	120	
Bi	209	1	He	3253662	0.61	3401163	95.66	30	120	

Sample Report

Sample Table

Sample Name	240-50653-b-12-a
Data File Name	074SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T14:13:35-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.033	0.033	34.48	596	0.01	10000	
B	11	45	2	NoGas	81.898	81.898	0.64	521151	0.02	300	
Na	23	45	1	He	65154.471	65154.471	1.60	192864748	0.03	500000	
Mg	24	45	1	He	17369.168	17369.168	0.98	29406625	0.06	500000	
Al	27	45	1	He	36.293	36.293	2.91	40074	0.09	200000	
K	39	45	1	He	3108.461	3108.461	1.23	7360127	0.04	500000	
Ca	44	45	1	He	75895.765	75895.765	0.96	8062388	0.94	500000	
Ti	47	45	1	He	0.809	0.809	16.90	547	0.15	2500	
V	51	45	1	He	0.788	0.788	12.14	13743	0.01	10000	
Cr	52	45	1	He	2.990	2.990	0.93	57708	0.01	10000	
Mn	55	45	1	He	9.379	9.379	1.84	120096	0.01	10000	
Fe	56	45	1	He	141.893	141.893	1.15	2105559	0.01	200000	
Co	59	103	1	He	0.306	0.306	4.17	7428	0.00	10000	
Ni	60	103	1	He	0.734	0.734	5.69	8623	0.01	10000	
Cu	63	103	1	He	0.793	0.793	1.74	18307	0.00	10000	
Zn	66	103	1	He	2.391	2.391	3.14	11686	0.02	10000	
As	75	103	1	He	0.892	0.892	4.04	2743	0.03	10000	
Se	78	103	1	He	0.318	0.318	9.20	374	0.09	10000	
Sr	88	103	1	He	123.615	123.615	0.24	2056416	0.01	10000	
Mo	95	103	1	He	0.400	0.400	1.76	2710	0.01	2000	
Ag	107	103	1	He	0.005	0.005	23.51	137	0.00	300	
Cd	111	103	1	He	0.128	0.128	12.98	4111	0.00	4000	
Sn	118	115	1	He	0.233	0.233	9.18	3226	0.01	2000	
Sb	123	115	1	He	0.038	0.038	28.03	860	0.00	300	
Ba	137	115	1	He	23.022	23.022	0.77	82783	0.03	10000	
W	182	209	1	He	0.186	0.186	8.61	10278	0.00	2500	
Tl	205	209	1	He	0.005	0.005	42.73	291	0.00	5000	
Pb	208	209	1	He	0.248	0.248	2.04	10977	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3957369	0.53	4563898	86.71	30	120	
Sc	45	1	He	2254983	1.33	2572368	87.66	30	120	
Sc	45	2	NoGas	22108984	1.31	24609710	89.84	30	120	
Rh	103	1	He	4206641	0.85	4780241	88.00	30	120	
In	115	1	He	2890374	1.13	3171814	91.13	30	120	
Tb	159	1	He	5336335	0.58	5469932	97.56	30	120	
Ho	165	1	He	5203648	1.56	5294619	98.28	30	120	
Bi	209	1	He	3285820	0.81	3401163	96.61	30	120	

Sample Report

Sample Table

Sample Name	240-50653-b-13-a
Data File Name	075SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T14:17:21-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.024	0.024	12.01	485	0.00	10000	
B	11	45	2	NoGas	104.433	104.433	1.11	655604	0.02	300	
Na	23	45	1	He	82436.081	82436.081	0.88	243614894	0.03	500000	
Mg	24	45	1	He	21177.792	21177.792	2.39	35787998	0.06	500000	
Al	27	45	1	He	14.825	14.825	5.81	17236	0.09	200000	
K	39	45	1	He	2766.164	2766.164	1.85	6564900	0.04	500000	
Ca	44	45	1	He	93359.041	93359.041	0.36	9900784	0.94	500000	
Ti	47	45	1	He	0.380	0.380	16.44	283	0.13	2500	
V	51	45	1	He	-11.870	-11.870	-7.05	-174606	0.01	10000	
Cr	52	45	1	He	564.499	564.499	1.54	9134553	0.01	10000	
Mn	55	45	1	He	0.901	0.901	2.71	15961	0.01	10000	
Fe	56	45	1	He	35.164	35.164	1.80	540611	0.01	200000	
Co	59	103	1	He	0.527	0.527	2.95	12439	0.00	10000	
Ni	60	103	1	He	1.954	1.954	4.33	15249	0.01	10000	
Cu	63	103	1	He	0.688	0.688	3.23	16562	0.00	10000	
Zn	66	103	1	He	1.966	1.966	1.05	10354	0.02	10000	
As	75	103	1	He	1.490	1.490	2.30	4144	0.04	10000	
Se	78	103	1	He	0.944	0.944	10.71	502	0.19	10000	
Sr	88	103	1	He	137.910	137.910	1.71	2268268	0.01	10000	
Mo	95	103	1	He	3.246	3.246	2.29	20081	0.02	2000	
Ag	107	103	1	He	0.011	0.011	26.75	249	0.00	300	
Cd	111	103	1	He	0.113	0.113	35.57	4021	0.00	4000	
Sn	118	115	1	He	0.369	0.369	10.86	4230	0.01	2000	
Sb	123	115	1	He	0.040	0.040	28.94	869	0.00	300	
Ba	137	115	1	He	48.811	48.811	1.45	173085	0.03	10000	
W	182	209	1	He	0.646	0.646	4.52	15408	0.00	2500	
Tl	205	209	1	He	0.007	0.007	23.56	353	0.00	5000	
Pb	208	209	1	He	0.098	0.098	1.09	4891	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3949651	0.49	4563898	86.54	30	120	
Sc	45	1	He	2251269	2.00	2572368	87.52	30	120	
Sc	45	2	NoGas	22050295	1.23	24609710	89.60	30	120	
Rh	103	1	He	4159709	1.42	4780241	87.02	30	120	
In	115	1	He	2852203	0.80	3171814	89.92	30	120	
Tb	159	1	He	5304831	1.36	5469932	96.98	30	120	
Ho	165	1	He	5165548	0.66	5294619	97.56	30	120	
Bi	209	1	He	3194050	0.90	3401163	93.91	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2004624
Data File Name	076_CCV.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T14:21:09-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	50.020	1.176	616363	1.79	50	100.0	89.5	110.5	
B	11	45	2	NoGas	80.887	1.230	528004	1.77	50	161.8	89.5	110.5	CCV Failed
Na	23	45	1	He	24829.578	0.680	78322939	0.82	25000	99.3	89.5	110.5	
Mg	24	45	1	He	24994.490	0.886	45081945	0.77	25000	100.0	89.5	110.5	
Al	27	45	1	He	248.124	0.866	282484	1.01	250	99.2	89.5	110.5	
K	39	45	1	He	25041.261	0.055	61334562	0.46	25000	100.2	89.5	110.5	
Ca	44	45	1	He	25756.222	2.121	2917056	2.24	25000	103.0	89.5	110.5	
Ti	47	45	1	He	49.508	1.068	32392	0.97	50	99.0	89.5	110.5	
V	51	45	1	He	48.908	2.269	778950	1.87	50	97.8	89.5	110.5	
Cr	52	45	1	He	49.234	1.881	859257	1.59	50	98.5	89.5	110.5	
Mn	55	45	1	He	257.064	1.382	3368580	1.37	250	102.8	89.5	110.5	
Fe	56	45	1	He	12713.684	0.385	198510414	0.41	12500	101.7	89.5	110.5	
Co	59	103	1	He	45.990	1.068	1124521	0.96	50	92.0	89.5	110.5	
Ni	60	103	1	He	47.083	1.162	279511	1.20	50	94.2	89.5	110.5	
Cu	63	103	1	He	46.162	0.932	726598	0.91	50	92.3	89.5	110.5	
Zn	66	103	1	He	48.400	0.967	150181	0.79	50	96.8	89.5	110.5	
As	75	103	1	He	48.855	0.698	124504	1.10	50	97.7	89.5	110.5	
Se	78	103	1	He	48.798	1.237	11259	1.86	50	97.6	89.5	110.5	
Sr	88	103	1	He	46.933	0.990	818203	1.29	50	93.9	89.5	110.5	
Mo	95	103	1	He	51.616	1.498	334689	1.98	50	103.2	89.5	110.5	
Ag	107	103	1	He	46.978	0.764	893013	0.78	50	94.0	89.5	110.5	
Cd	111	103	1	He	49.840	0.251	161617	1.01	50	99.7	89.5	110.5	
Sn	118	115	1	He	56.113	1.815	463450	1.16	50	112.2	89.5	110.5	CCV Failed
Sb	123	115	1	He	51.573	1.655	415456	0.64	50	103.1	89.5	110.5	
Ba	137	115	1	He	50.960	1.743	193981	0.82	50	101.9	89.5	110.5	
W	182	209	1	He	49.343	0.550	623364	1.33	50	98.7	89.5	110.5	
Tl	205	209	1	He	45.625	1.001	1401551	1.31	50	91.3	89.5	110.5	
Pb	208	209	1	He	47.432	0.385	1943437	1.08	50	94.9	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4082420	1.57	4563898	89.45	30	120	
Sc	45	1	He	2402193	0.43	2572368	93.38	30	120	
Sc	45	2	NoGas	22665509	0.73	24609710	92.10	30	120	
Rh	103	1	He	4406529	0.87	4780241	92.18	30	120	
In	115	1	He	3061960	1.03	3171814	96.54	30	120	
Tb	159	1	He	5443244	0.71	5469932	99.51	30	120	
Ho	165	1	He	5305686	2.40	5294619	100.21	30	120	
Bi	209	1	He	3385304	1.20	3401163	99.53	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	077_CCB.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T14:24:59-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.040	17.6	689	11.3	1	
B	11	45	2	NoGas	24.725	1.4	180261	1.0	20	CCB Failed
Na	23	45	1	He	67.385	3.9	233899	2.3	400	
Mg	24	45	1	He	3.536	34.6	7313	28.2	1000	
Al	27	45	1	He	0.455	16.6	2082	4.0	50	
K	39	45	1	He	-2.742	-53.7	247208	2.8	1000	
Ca	44	45	1	He	30.377	8.1	6496	2.8	1000	
Ti	47	45	1	He	-0.004	-1092.4	50	57.7	20	
V	51	45	1	He	0.044	89.0	2750	23.2	2	
Cr	52	45	1	He	0.092	12.6	11199	3.1	2	
Mn	55	45	1	He	0.373	5.8	9887	1.4	2	
Fe	56	45	1	He	7.307	11.7	138827	10.8	50	
Co	59	103	1	He	0.003	108.0	372	21.6	1	
Ni	60	103	1	He	-0.704	-1.4	652	7.9	2	
Cu	63	103	1	He	0.362	4.4	12580	2.6	2	
Zn	66	103	1	He	1.470	0.3	9570	1.1	20	
As	75	103	1	He	0.186	27.3	1094	12.1	2	
Se	78	103	1	He	0.415	30.8	417	6.8	2	
Sr	88	103	1	He	0.026	8.1	998	4.2	10	
Mo	95	103	1	He	0.261	37.2	1958	32.9	2	
Ag	107	103	1	He	0.007	53.3	187	39.2	0.2	
Cd	111	103	1	He	0.109	25.3	4284	2.2	0.2	
Sn	118	115	1	He	0.320	23.5	4134	14.6	10	
Sb	123	115	1	He	0.181	1.1	2060	1.0	1	
Ba	137	115	1	He	0.015	52.9	159	19.0	5	
W	182	209	1	He	0.479	19.1	14225	7.0	10	
Tl	205	209	1	He	0.068	6.6	2242	5.2	0.5	
Pb	208	209	1	He	0.045	7.4	2982	5.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4041383	1.53	4563898	88.55	30	120	
Sc	45	1	He	2345282	1.53	2572368	91.17	30	120	
Sc	45	2	NoGas	22701284	0.92	24609710	92.25	30	120	
Rh	103	1	He	4447840	1.03	4780241	93.05	30	120	
In	115	1	He	3060784	0.39	3171814	96.50	30	120	
Tb	159	1	He	5340150	0.43	5469932	97.63	30	120	
Ho	165	1	He	5171130	0.90	5294619	97.67	30	120	
Bi	209	1	He	3381675	1.11	3401163	99.43	30	120	

Sample Report

Sample Table

Sample Name	240-50653-b-14-a
Data File Name	078SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T14:28:49-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.031	0.031	10.17	544	0.01	10000	
B	11	45	2	NoGas	150.586	150.586	1.26	918244	0.02	300	
Na	23	45	1	He	215551.364	215551.364	0.85	634159841	0.03	500000	
Mg	24	45	1	He	35303.331	35303.331	1.65	59406040	0.06	500000	
Al	27	45	1	He	43.528	43.528	1.48	47478	0.09	200000	
K	39	45	1	He	10736.833	10736.833	1.26	24673229	0.04	500000	
Ca	44	45	1	He	200619.870	200619.870	0.59	21177572	0.95	500000	
Ti	47	45	1	He	1.340	1.340	3.94	867	0.15	2500	
V	51	45	1	He	-2.969	-2.969	-23.13	-42035	0.01	10000	
Cr	52	45	1	He	238.493	238.493	1.25	3848055	0.01	10000	
Mn	55	45	1	He	3.497	3.497	2.19	47581	0.01	10000	
Fe	56	45	1	He	152.506	152.506	1.54	2247334	0.01	200000	
Co	59	103	1	He	1.005	1.005	0.77	22395	0.00	10000	
Ni	60	103	1	He	150.830	150.830	1.07	797014	0.02	10000	
Cu	63	103	1	He	1.133	1.133	3.84	22054	0.01	10000	
Zn	66	103	1	He	2.222	2.222	8.02	10570	0.02	10000	
As	75	103	1	He	2.142	2.142	1.40	5444	0.04	10000	
Se	78	103	1	He	1.485	1.485	4.85	588	0.25	10000	
Sr	88	103	1	He	294.375	294.375	2.36	4619211	0.01	10000	
Mo	95	103	1	He	1.538	1.538	1.19	9200	0.02	2000	
Ag	107	103	1	He	0.026	0.026	9.43	486	0.01	300	
Cd	111	103	1	He	0.191	0.191	5.85	4058	0.00	4000	
Sn	118	115	1	He	0.413	0.413	3.36	4501	0.01	2000	
Sb	123	115	1	He	0.369	0.369	24.20	3288	0.01	300	
Ba	137	115	1	He	64.871	64.871	1.17	226903	0.03	10000	
W	182	209	1	He	1.119	1.119	11.08	19998	0.01	2500	
Tl	205	209	1	He	0.050	0.050	11.35	1535	0.00	5000	
Pb	208	209	1	He	0.274	0.274	1.99	11138	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3760194	1.79	4563898	82.39	30	120	
Sc	45	1	He	2241203	0.64	2572368	87.13	30	120	
Sc	45	2	NoGas	21684150	0.89	24609710	88.11	30	120	
Rh	103	1	He	3968779	0.52	4780241	83.02	30	120	
In	115	1	He	2813804	1.31	3171814	88.71	30	120	
Tb	159	1	He	5166091	1.34	5469932	94.45	30	120	
Ho	165	1	He	5014010	0.92	5294619	94.70	30	120	
Bi	209	1	He	3047634	1.30	3401163	89.61	30	120	

Sample Report

Sample Table

Sample Name	240-50653-b-15-a
Data File Name	079SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T14:32:34-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.031	0.031	43.07	574	0.01	10000	
B	11	45	2	NoGas	111.059	111.059	0.27	699984	0.02	300	
Na	23	45	1	He	26282.694	26282.694	1.48	77919828	0.03	500000	
Mg	24	45	1	He	21334.297	21334.297	1.30	36167350	0.06	500000	
Al	27	45	1	He	42.741	42.741	1.25	46994	0.09	200000	
K	39	45	1	He	3029.369	3029.369	1.49	7188459	0.04	500000	
Ca	44	45	1	He	96499.951	96499.951	1.63	10263560	0.94	500000	
Ti	47	45	1	He	1.677	1.677	12.73	1080	0.16	2500	
V	51	45	1	He	0.777	0.777	6.27	13592	0.01	10000	
Cr	52	45	1	He	6.706	6.706	0.76	118041	0.01	10000	
Mn	55	45	1	He	11.034	11.034	1.67	140621	0.01	10000	
Fe	56	45	1	He	170.627	170.627	1.34	2529936	0.01	200000	
Co	59	103	1	He	0.471	0.471	2.75	11269	0.00	10000	
Ni	60	103	1	He	2.126	2.126	0.69	16383	0.01	10000	
Cu	63	103	1	He	0.999	0.999	3.17	21373	0.00	10000	
Zn	66	103	1	He	2.065	2.065	4.07	10759	0.02	10000	
As	75	103	1	He	1.341	1.341	2.56	3829	0.04	10000	
Se	78	103	1	He	0.640	0.640	11.67	443	0.14	10000	
Sr	88	103	1	He	136.203	136.203	1.18	2266186	0.01	10000	
Mo	95	103	1	He	0.602	0.602	1.42	3959	0.02	2000	
Ag	107	103	1	He	0.013	0.013	17.00	289	0.00	300	
Cd	111	103	1	He	0.133	0.133	33.29	4124	0.00	4000	
Sn	118	115	1	He	0.169	0.169	9.66	2734	0.01	2000	
Sb	123	115	1	He	0.114	0.114	33.90	1440	0.01	300	
Ba	137	115	1	He	43.852	43.852	0.34	157820	0.03	10000	
W	182	209	1	He	0.322	0.322	14.68	11812	0.00	2500	
Tl	205	209	1	He	0.015	0.015	20.50	589	0.00	5000	
Pb	208	209	1	He	0.282	0.282	2.00	12198	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4015451	0.71	4563898	87.98	30	120	
Sc	45	1	He	2257830	0.44	2572368	87.77	30	120	
Sc	45	2	NoGas	22191312	1.31	24609710	90.17	30	120	
Rh	103	1	He	4207551	1.45	4780241	88.02	30	120	
In	115	1	He	2894441	0.38	3171814	91.26	30	120	
Tb	159	1	He	5298209	0.61	5469932	96.86	30	120	
Ho	165	1	He	5167209	0.78	5294619	97.59	30	120	
Bi	209	1	He	3254653	0.76	3401163	95.69	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-180970/1-a
Data File Name	080_Blk.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T14:36:19-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.012	78.2	352	33.5	1	
B	11	45	2	NoGas	29.609	0.9	205401	1.5	20	Blank Failed
Na	23	45	1	He	191.077	2.0	595983	1.1	400	
Mg	24	45	1	He	50.943	2.6	88032	1.8	1000	
Al	27	45	1	He	2.079	2.8	3759	0.8	50	
K	39	45	1	He	12.039	7.3	273766	0.4	1000	
Ca	44	45	1	He	152.388	6.1	19362	4.5	1000	
Ti	47	45	1	He	0.078	10.7	99	5.2	20	
V	51	45	1	He	0.469	13.0	9054	10.8	2	
Cr	52	45	1	He	1.651	1.9	36319	2.1	2	
Mn	55	45	1	He	0.095	14.4	6142	2.2	2	
Fe	56	45	1	He	10.234	3.8	177712	2.7	50	
Co	59	103	1	He	0.004	33.6	386	7.7	1	
Ni	60	103	1	He	-0.235	-11.9	3383	4.9	2	
Cu	63	103	1	He	0.881	3.3	20544	1.2	2	
Zn	66	103	1	He	3.420	4.7	15323	3.8	20	
As	75	103	1	He	0.203	18.7	1125	8.0	2	
Se	78	103	1	He	0.185	31.9	362	2.8	2	
Sr	88	103	1	He	0.430	2.2	8037	1.1	10	
Mo	95	103	1	He	0.013	24.9	333	6.0	2	
Ag	107	103	1	He	0.001	90.1	74	28.8	0.2	
Cd	111	103	1	He	0.071	50.6	4123	1.9	0.2	
Sn	118	115	1	He	0.811	6.0	7987	6.3	10	
Sb	123	115	1	He	0.036	31.2	873	10.3	1	
Ba	137	115	1	He	0.757	4.6	2913	3.5	5	
W	182	209	1	He	-0.031	-79.5	8073	4.1	10	
Tl	205	209	1	He	0.004	46.3	278	18.4	0.5	
Pb	208	209	1	He	0.109	6.3	5758	4.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4069201	1.44	4563898	89.16	30	120	
Sc	45	1	He	2273873	0.91	2572368	88.40	30	120	
Sc	45	2	NoGas	22141972	0.70	24609710	89.97	30	120	
Rh	103	1	He	4404673	0.96	4780241	92.14	30	120	
In	115	1	He	2990135	1.49	3171814	94.27	30	120	
Tb	159	1	He	5304640	0.91	5469932	96.98	30	120	
Ho	165	1	He	5213178	0.75	5294619	98.46	30	120	
Bi	209	1	He	3463169	0.72	3401163	101.82	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-180970/2-a
Data File Name	081_LCS.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T14:40:10-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	1019.371	1019.371	0.764	12598510	0.78	1000	101.9	79.5	120.5	
B	11	2	NoGas	151.897	151.897	1.654	940955	2.22	100	151.9	79.5	120.5	LCS Failed
Na	23	1	He	10047.304	10047.304	5.695	30898729	2.11	10000	100.5	79.5	120.5	
Mg	24	1	He	10074.566	10074.566	4.708	17711429	1.00	10000	100.7	79.5	120.5	
Al	27	1	He	9556.471	9556.471	5.645	10542227	1.91	10000	95.6	79.5	120.5	
K	39	1	He	9825.636	9825.636	5.902	23603284	2.12	10000	98.3	79.5	120.5	
Ca	44	1	He	11417.700	11417.700	3.389	1262545	1.02	10000	114.2	79.5	120.5	
Ti	47	1	He	96.705	96.705	3.535	61637	0.33	100	96.7	79.5	120.5	
V	51	1	He	962.325	962.325	3.500	14905322	0.65	1000	96.2	79.5	120.5	
Cr	52	1	He	997.503	997.503	4.264	16784865	0.79	1000	99.8	79.5	120.5	
Mn	55	1	He	1028.197	1028.197	4.518	13117714	1.15	1000	102.8	79.5	120.5	
Fe	56	1	He	10134.677	10134.677	5.079	154221025	1.29	10000	101.3	79.5	120.5	
Co	59	1	He	932.172	932.172	2.485	23046957	0.78	1000	93.2	79.5	120.5	
Ni	60	1	He	981.345	981.345	3.179	5795959	0.92	1000	98.1	79.5	120.5	
Cu	63	1	He	935.981	935.981	3.595	14764053	0.93	1000	93.6	79.5	120.5	
Zn	66	1	He	1006.693	1006.693	2.695	3057485	0.44	1000	100.7	79.5	120.5	
As	75	1	He	995.639	995.639	3.627	2553754	1.63	1000	99.6	79.5	120.5	
Se	78	1	He	952.363	952.363	3.498	216175	0.78	1000	95.2	79.5	120.5	
Sr	88	1	He	954.099	954.099	3.473	16808163	0.82	1000	95.4	79.5	120.5	
Mo	95	1	He	100.824	100.824	3.647	660783	1.20	100	100.8	79.5	120.5	
Ag	107	1	He	102.068	102.068	2.128	1962337	0.63	100	102.1	79.5	120.5	
Cd	111	1	He	1076.509	1076.509	2.506	3449187	0.94	1000	107.7	79.5	120.5	
Sn	118	1	He	1097.422	1097.422	4.046	8738773	1.11	1000	109.7	79.5	120.5	
Sb	123	1	He	104.794	104.794	3.668	815870	0.41	100	104.8	79.5	120.5	
Ba	137	1	He	1140.901	1140.901	4.084	4197849	0.84	1000	114.1	79.5	120.5	
W	182	1	He	101.348	101.348	4.370	1263446	1.94	100	101.3	79.5	120.5	
Tl	205	1	He	253.325	253.325	3.430	7732277	0.74	250	101.3	79.5	120.5	
Pb	208	1	He	1056.494	1056.494	2.892	42995529	0.27	1000	105.6	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4095944	0.91	4563898	89.75	30	120	
Sc	45	1	He	2344144	3.89	2572368	91.13	30	120	
Sc	45	2	NoGas	22031424	0.75	24609710	89.52	30	120	
Rh	103	1	He	4458537	2.77	4780241	93.27	30	120	
In	115	1	He	2963536	3.34	3171814	93.43	30	120	
Tb	159	1	He	5437517	3.25	5469932	99.41	30	120	
Ho	165	1	He	5340101	2.94	5294619	100.86	30	120	
Bi	209	1	He	3366156	2.86	3401163	98.97	30	120	

Sample Report

Sample Table

Sample Name	240-50668-d-1-a
Data File Name	082SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T14:43:33-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.156	0.156	13.90	2082	0.01	10000	
B	11	45	2	NoGas	198.938	198.938	0.95	1257412	0.02	300	
Na	23	45	1	He	85473.556	85473.556	0.63	253753360	0.03	500000	
Mg	24	45	1	He	30055.457	30055.457	0.68	51033255	0.06	500000	
Al	27	45	1	He	55.603	55.603	1.22	60772	0.09	200000	
K	39	45	1	He	9630.033	9630.033	0.36	22355741	0.04	500000	
Ca	44	45	1	He	171855.423	171855.423	1.70	18304213	0.94	500000	
Ti	47	45	1	He	1.876	1.876	0.24	1205	0.16	2500	
V	51	45	1	He	1.601	1.601	8.50	25913	0.01	10000	
Cr	52	45	1	He	3.081	3.081	1.69	59351	0.01	10000	
Mn	55	45	1	He	26.649	26.649	0.88	333201	0.01	10000	
Fe	56	45	1	He	122.934	122.934	1.41	1832998	0.01	200000	
Co	59	103	1	He	0.562	0.562	11.29	12958	0.00	10000	
Ni	60	103	1	He	2.724	2.724	2.54	19098	0.01	10000	
Cu	63	103	1	He	20.545	20.545	0.72	302583	0.01	10000	
Zn	66	103	1	He	28.575	28.575	1.04	83925	0.03	10000	
As	75	103	1	He	4.469	4.469	8.70	11055	0.04	10000	
Se	78	103	1	He	2.304	2.304	3.83	774	0.30	10000	
Sr	88	103	1	He	458.977	458.977	0.85	7395665	0.01	10000	
Mo	95	103	1	He	6.834	6.834	0.74	41181	0.02	2000	
Ag	107	103	1	He	0.014	0.014	37.54	293	0.00	300	
Cd	111	103	1	He	0.436	0.436	15.18	4883	0.01	4000	
Sn	118	115	1	He	1.322	1.322	13.34	11475	0.01	2000	
Sb	123	115	1	He	0.770	0.770	4.23	6307	0.01	300	
Ba	137	115	1	He	106.642	106.642	0.87	376149	0.03	10000	
W	182	209	1	He	0.968	0.968	17.08	19245	0.01	2500	
Tl	205	209	1	He	0.164	0.164	13.52	4912	0.00	5000	
Pb	208	209	1	He	0.424	0.424	15.21	17492	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3997196	1.16	4563898	87.58	30	120	
Sc	45	1	He	2261476	1.03	2572368	87.91	30	120	
Sc	45	2	NoGas	22629189	0.59	24609710	91.95	30	120	
Rh	103	1	He	4075562	1.21	4780241	85.26	30	120	
In	115	1	He	2837825	0.75	3171814	89.47	30	120	
Tb	159	1	He	5205890	1.19	5469932	95.17	30	120	
Ho	165	1	He	5145891	0.73	5294619	97.19	30	120	
Bi	209	1	He	3202689	1.12	3401163	94.16	30	120	

Sample Report

Sample Table

Sample Name	SD 240-50668-d-1-a@5
Data File Name	083SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T14:47:19-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.087	0.087	17.46	1300	0.01	10000	
B	11	45	2	NoGas	55.480	55.480	1.49	380538	0.01	300	
Na	23	45	1	He	17397.920	17397.920	3.94	55043779	0.03	500000	
Mg	24	45	1	He	6078.662	6078.662	4.04	10995795	0.06	500000	
Al	27	45	1	He	11.807	11.807	6.35	15020	0.08	200000	
K	39	45	1	He	1955.718	1955.718	4.00	5044583	0.04	500000	
Ca	44	45	1	He	35104.433	35104.433	4.47	3985309	0.88	500000	
Ti	47	45	1	He	0.308	0.308	15.65	256	0.12	2500	
V	51	45	1	He	0.279	0.279	18.08	6558	0.00	10000	
Cr	52	45	1	He	0.616	0.616	11.06	20572	0.00	10000	
Mn	55	45	1	He	5.361	5.361	4.19	75605	0.01	10000	
Fe	56	45	1	He	22.868	22.868	4.96	386040	0.01	200000	
Co	59	103	1	He	0.096	0.096	8.80	2730	0.00	10000	
Ni	60	103	1	He	-0.109	-0.109	-23.99	4248	0.00	10000	
Cu	63	103	1	He	4.031	4.031	1.71	71915	0.01	10000	
Zn	66	103	1	He	5.454	5.454	2.70	22116	0.02	10000	
As	75	103	1	He	0.640	0.640	9.24	2306	0.03	10000	
Se	78	103	1	He	0.336	0.336	33.03	409	0.08	10000	
Sr	88	103	1	He	91.536	91.536	2.51	1646476	0.01	10000	
Mo	95	103	1	He	1.257	1.257	3.40	8664	0.01	2000	
Ag	107	103	1	He	0.002	0.002	107.40	83	0.00	300	
Cd	111	103	1	He	0.131	0.131	6.00	4453	0.00	4000	
Sn	118	115	1	He	0.079	0.079	17.59	2189	0.00	2000	
Sb	123	115	1	He	0.110	0.110	4.59	1520	0.01	300	
Ba	137	115	1	He	20.899	20.899	2.57	81075	0.03	10000	
W	182	209	1	He	0.107	0.107	64.16	9963	0.00	2500	
Tl	205	209	1	He	0.037	0.037	8.64	1355	0.00	5000	
Pb	208	209	1	He	0.091	0.091	13.66	5064	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4147489	1.39	4563898	90.88	30	120	
Sc	45	1	He	2411430	3.85	2572368	93.74	30	120	
Sc	45	2	NoGas	23275710	0.46	24609710	94.58	30	120	
Rh	103	1	He	4548722	1.04	4780241	95.16	30	120	
In	115	1	He	3118876	1.85	3171814	98.33	30	120	
Tb	159	1	He	5549643	2.16	5469932	101.46	30	120	
Ho	165	1	He	5417334	1.50	5294619	102.32	30	120	
Bi	209	1	He	3507990	2.72	3401163	103.14	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-50668-d-1-a
Data File Name	084SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T14:51:07-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1273.769	1273.769	4.45	12507833	0.01	10000	
B	11	45	2	NoGas	427.805	427.805	3.68	1996848	0.02	300	>LDR
Na	23	45	1	He	89954.941	89954.941	2.72	280434959	0.03	500000	
Mg	24	45	1	He	37663.855	37663.855	2.17	67160997	0.06	500000	
Al	27	45	1	He	9309.916	9309.916	2.93	10419022	0.09	200000	
K	39	45	1	He	18411.627	18411.627	3.25	44645086	0.04	500000	
Ca	44	45	1	He	170913.937	170913.937	3.42	19115246	0.89	500000	
Ti	47	45	1	He	99.245	99.245	3.43	64142	0.15	2500	
V	51	45	1	He	926.908	926.908	2.30	14557918	0.01	10000	
Cr	52	45	1	He	943.310	943.310	2.34	16099222	0.01	10000	
Mn	55	45	1	He	993.610	993.610	1.55	12859015	0.01	10000	
Fe	56	45	1	He	9785.713	9785.713	1.50	151078176	0.01	200000	
Co	59	103	1	He	913.273	913.273	4.05	21625799	0.00	10000	
Ni	60	103	1	He	961.416	961.416	3.00	5440728	0.02	10000	
Cu	63	103	1	He	937.413	937.413	3.73	14166464	0.01	10000	
Zn	66	103	1	He	989.614	989.614	4.35	2878723	0.03	10000	
As	75	103	1	He	1033.844	1033.844	4.42	2539849	0.04	10000	
Se	78	103	1	He	966.368	966.368	4.00	210129	0.46	10000	
Sr	88	103	1	He	1398.919	1398.919	4.18	23609431	0.01	10000	
Mo	95	103	1	He	112.260	112.260	4.14	704765	0.02	2000	
Ag	107	103	1	He	99.314	99.314	5.29	1828080	0.01	300	
Cd	111	103	1	He	1052.826	1052.826	4.38	3230552	0.03	4000	
Sn	118	115	1	He	1117.174	1117.174	3.40	8716806	0.01	2000	
Sb	123	115	1	He	106.723	106.723	2.88	814151	0.01	300	
Ba	137	115	1	He	1213.157	1213.157	2.76	4374341	0.03	10000	
W	182	209	1	He	106.555	106.555	2.28	1268099	0.01	2500	
Tl	205	209	1	He	252.729	252.729	2.66	7365042	0.00	5000	
Pb	208	209	1	He	1033.543	1033.543	2.97	40156376	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3257732	3.67	4563898	71.38	30	120	
Sc	45	1	He	2375646	2.27	2572368	92.35	30	120	
Sc	45	2	NoGas	16914256	2.74	24609710	68.73	30	120	
Rh	103	1	He	4273111	4.18	4780241	89.39	30	120	
In	115	1	He	2902815	2.35	3171814	91.52	30	120	
Tb	159	1	He	5410812	4.07	5469932	98.92	30	120	
Ho	165	1	He	5338419	2.83	5294619	100.83	30	120	
Bi	209	1	He	3213238	2.60	3401163	94.47	30	120	

Sample Report

Sample Table

Sample Name	240-50668-d-1-b ms
Data File Name	085SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T14:54:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1013.727	1013.727	0.21	12295233	0.01	10000	
B	11	45	2	NoGas	327.469	327.469	0.90	2053892	0.02	300	>LDR
Na	23	45	1	He	96195.346	96195.346	0.14	287096796	0.03	500000	
Mg	24	45	1	He	40292.817	40292.817	1.23	68777182	0.06	500000	
Al	27	45	1	He	10032.978	10032.978	2.03	10749060	0.09	200000	
K	39	45	1	He	19631.818	19631.818	0.27	45559799	0.04	500000	
Ca	44	45	1	He	181818.505	181818.505	1.35	19468890	0.93	500000	
Ti	47	45	1	He	104.582	104.582	0.99	64701	0.16	2500	
V	51	45	1	He	994.059	994.059	1.34	14945140	0.01	10000	
Cr	52	45	1	He	1018.994	1018.994	1.98	16646292	0.01	10000	
Mn	55	45	1	He	1061.238	1061.238	1.60	13145187	0.01	10000	
Fe	56	45	1	He	10615.032	10615.032	1.74	156856740	0.01	200000	
Co	59	103	1	He	975.697	975.697	1.47	22376023	0.00	10000	
Ni	60	103	1	He	1022.198	1022.198	1.46	5600600	0.02	10000	
Cu	63	103	1	He	991.830	991.830	1.96	14514168	0.01	10000	
Zn	66	103	1	He	1042.498	1042.498	0.80	2936905	0.04	10000	
As	75	103	1	He	1094.163	1094.163	0.84	2603574	0.04	10000	
Se	78	103	1	He	1010.846	1010.846	0.38	212860	0.47	10000	
Sr	88	103	1	He	1471.437	1471.437	0.68	24049151	0.01	10000	
Mo	95	103	1	He	118.033	118.033	0.73	717658	0.02	2000	
Ag	107	103	1	He	103.948	103.948	1.07	1853635	0.01	300	
Cd	111	103	1	He	1105.493	1105.493	1.34	3285322	0.03	4000	
Sn	118	115	1	He	1145.990	1145.990	2.09	8774783	0.01	2000	
Sb	123	115	1	He	109.988	109.988	2.08	823280	0.01	300	
Ba	137	115	1	He	1270.515	1270.515	1.46	4495194	0.03	10000	
W	182	209	1	He	110.483	110.483	2.60	1288823	0.01	2500	
Tl	205	209	1	He	261.987	261.987	1.82	7486506	0.00	5000	
Pb	208	209	1	He	1079.502	1079.502	1.29	41127798	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4019469	0.51	4563898	88.07	30	120	
Sc	45	1	He	2273401	0.32	2572368	88.38	30	120	
Sc	45	2	NoGas	22644158	0.44	24609710	92.01	30	120	
Rh	103	1	He	4133919	0.57	4780241	86.48	30	120	
In	115	1	He	2847526	1.44	3171814	89.78	30	120	
Tb	159	1	He	5281067	1.59	5469932	96.55	30	120	
Ho	165	1	He	5153834	2.82	5294619	97.34	30	120	
Bi	209	1	He	3150102	2.02	3401163	92.62	30	120	

Sample Report

Sample Table

Sample Name	240-50668-d-1-c msd
Data File Name	086SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T14:57:52-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1044.787	1044.787	1.36	12536782	0.01	10000	
B	11	45	2	NoGas	326.044	326.044	0.55	2055498	0.02	300	>LDR
Na	23	45	1	He	97239.234	97239.234	1.54	291230551	0.03	500000	
Mg	24	45	1	He	40944.472	40944.472	1.65	70136290	0.06	500000	
Al	27	45	1	He	10189.251	10189.251	2.45	10953853	0.09	200000	
K	39	45	1	He	20022.937	20022.937	1.02	46629010	0.04	500000	
Ca	44	45	1	He	183311.128	183311.128	0.80	19700033	0.93	500000	
Ti	47	45	1	He	106.258	106.258	1.69	65966	0.16	2500	
V	51	45	1	He	1013.452	1013.452	2.77	15288726	0.01	10000	
Cr	52	45	1	He	1035.090	1035.090	2.80	16965495	0.01	10000	
Mn	55	45	1	He	1082.852	1082.852	2.28	13458231	0.01	10000	
Fe	56	45	1	He	10707.774	10707.774	2.94	158748638	0.01	200000	
Co	59	103	1	He	999.142	999.142	2.19	22767851	0.00	10000	
Ni	60	103	1	He	1049.759	1049.759	1.75	5715142	0.02	10000	
Cu	63	103	1	He	1022.881	1022.881	1.60	14874911	0.01	10000	
Zn	66	103	1	He	1079.116	1079.116	1.60	3020798	0.04	10000	
As	75	103	1	He	1116.268	1116.268	2.07	2639314	0.04	10000	
Se	78	103	1	He	1039.341	1039.341	0.91	217494	0.48	10000	
Sr	88	103	1	He	1486.575	1486.575	0.88	24147173	0.01	10000	
Mo	95	103	1	He	119.137	119.137	1.63	719816	0.02	2000	
Ag	107	103	1	He	105.081	105.081	0.59	1862327	0.01	300	
Cd	111	103	1	He	1113.784	1113.784	1.55	3289238	0.03	4000	
Sn	118	115	1	He	1152.688	1152.688	1.66	8701660	0.01	2000	
Sb	123	115	1	He	111.980	111.980	2.35	826306	0.01	300	
Ba	137	115	1	He	1307.363	1307.363	1.76	4560336	0.03	10000	
W	182	209	1	He	111.831	111.831	0.86	1284433	0.01	2500	
Tl	205	209	1	He	266.090	266.090	0.61	7486512	0.00	5000	
Pb	208	209	1	He	1106.818	1106.818	0.60	41514406	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3977049	1.23	4563898	87.14	30	120	
Sc	45	1	He	2281903	2.47	2572368	88.71	30	120	
Sc	45	2	NoGas	22759140	0.97	24609710	92.48	30	120	
Rh	103	1	He	4108698	1.99	4780241	85.95	30	120	
In	115	1	He	2807628	2.14	3171814	88.52	30	120	
Tb	159	1	He	5122800	1.50	5469932	93.65	30	120	
Ho	165	1	He	5057073	2.32	5294619	95.51	30	120	
Bi	209	1	He	3100855	1.14	3401163	91.17	30	120	

Sample Report

Sample Table

Sample Name	240-50678-a-1-a
Data File Name	087SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T15:01:16-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.351	0.351	8.39	4167	0.01	10000	
B	11	45	2	NoGas	1816.323	1816.323	2.13	11015374	0.02	300	>LDR
Na	23	45	1	He	869872.297	869872.297	1.61	2496898686	0.03	500000	>LDR
Mg	24	45	1	He	87691.476	87691.476	2.14	143966776	0.06	500000	
Al	27	45	1	He	14.989	14.989	5.17	16912	0.09	200000	
K	39	45	1	He	49171.205	49171.205	0.70	109416122	0.04	500000	
Ca	44	45	1	He	134992.846	134992.846	1.67	13905154	0.97	500000	
Ti	47	45	1	He	1.579	1.579	9.26	989	0.16	2500	
V	51	45	1	He	1.659	1.659	5.83	25902	0.01	10000	
Cr	52	45	1	He	3.058	3.058	3.65	57009	0.01	10000	
Mn	55	45	1	He	69.708	69.708	2.25	834926	0.01	10000	
Fe	56	45	1	He	1201.594	1201.594	2.27	17100250	0.01	200000	
Co	59	103	1	He	0.457	0.457	10.41	9878	0.00	10000	
Ni	60	103	1	He	0.968	0.968	6.84	8969	0.01	10000	
Cu	63	103	1	He	2.726	2.726	3.13	42534	0.01	10000	
Zn	66	103	1	He	4.051	4.051	5.87	14847	0.03	10000	
As	75	103	1	He	11.895	11.895	1.60	26539	0.04	10000	
Se	78	103	1	He	2.138	2.138	7.40	690	0.31	10000	
Sr	88	103	1	He	9486.548	9486.548	0.90	142509039	0.01	10000	
Mo	95	103	1	He	115.256	115.256	0.84	644124	0.02	2000	
Ag	107	103	1	He	0.063	0.063	13.13	1074	0.01	300	
Cd	111	103	1	He	0.626	0.626	10.42	5070	0.01	4000	
Sn	118	115	1	He	1.886	1.886	8.90	14922	0.01	2000	
Sb	123	115	1	He	2.393	2.393	1.35	17403	0.01	300	
Ba	137	115	1	He	82.687	82.687	0.10	275762	0.03	10000	
W	182	209	1	He	21.856	21.856	1.63	228861	0.01	2500	
Tl	205	209	1	He	0.260	0.260	10.84	6629	0.00	5000	
Pb	208	209	1	He	0.490	0.490	9.13	17277	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3755219	0.74	4563898	82.28	30	120	
Sc	45	1	He	2187061	1.73	2572368	85.02	30	120	
Sc	45	2	NoGas	22136249	1.64	24609710	89.95	30	120	
Rh	103	1	He	3799717	0.61	4780241	79.49	30	120	
In	115	1	He	2682896	0.46	3171814	84.59	30	120	
Tb	159	1	He	4856761	0.63	5469932	88.79	30	120	
Ho	165	1	He	4743471	0.78	5294619	89.59	30	120	
Bi	209	1	He	2760341	1.39	3401163	81.16	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2004624
Data File Name	088_CCV.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T15:05:05-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	49.842	0.898	627710	1.16	50	99.7	89.5	110.5	
B	11	45	2	NoGas	88.424	0.624	589690	0.87	50	176.8	89.5	110.5	CCV Failed
Na	23	45	1	He	25513.089	2.186	80543534	0.68	25000	102.1	89.5	110.5	
Mg	24	45	1	He	25382.857	1.271	45825098	0.75	25000	101.5	89.5	110.5	
Al	27	45	1	He	250.365	2.537	285235	0.61	250	100.1	89.5	110.5	
K	39	45	1	He	25227.765	2.263	61838048	0.24	25000	100.9	89.5	110.5	
Ca	44	45	1	He	26002.484	1.758	2947568	1.33	25000	104.0	89.5	110.5	
Ti	47	45	1	He	50.059	2.412	32787	3.08	50	100.1	89.5	110.5	
V	51	45	1	He	48.576	1.923	774419	1.36	50	97.2	89.5	110.5	
Cr	52	45	1	He	49.279	1.451	860853	0.82	50	98.6	89.5	110.5	
Mn	55	45	1	He	258.872	1.126	3395484	1.08	250	103.5	89.5	110.5	
Fe	56	45	1	He	12724.876	1.745	198869828	1.45	12500	101.8	89.5	110.5	
Co	59	103	1	He	46.536	0.798	1138861	0.98	50	93.1	89.5	110.5	
Ni	60	103	1	He	47.791	0.905	283905	1.78	50	95.6	89.5	110.5	
Cu	63	103	1	He	46.734	1.345	736124	1.04	50	93.5	89.5	110.5	
Zn	66	103	1	He	48.605	1.004	150926	0.86	50	97.2	89.5	110.5	
As	75	103	1	He	49.563	1.510	126398	0.77	50	99.1	89.5	110.5	
Se	78	103	1	He	49.507	1.142	11427	0.56	50	99.0	89.5	110.5	
Sr	88	103	1	He	47.806	1.325	834137	1.75	50	95.6	89.5	110.5	
Mo	95	103	1	He	52.260	2.291	339137	2.34	50	104.5	89.5	110.5	
Ag	107	103	1	He	46.842	1.698	891215	1.92	50	93.7	89.5	110.5	
Cd	111	103	1	He	50.434	1.964	163618	1.01	50	100.9	89.5	110.5	
Sn	118	115	1	He	56.626	1.926	464132	1.22	50	113.3	89.5	110.5	CCV Failed
Sb	123	115	1	He	52.307	2.125	418146	0.81	50	104.6	89.5	110.5	
Ba	137	115	1	He	51.189	1.995	193378	1.31	50	102.4	89.5	110.5	
W	182	209	1	He	51.358	3.083	633617	2.25	50	102.7	89.5	110.5	
Tl	205	209	1	He	46.239	2.238	1387930	1.27	50	92.5	89.5	110.5	
Pb	208	209	1	He	47.740	2.267	1911263	0.78	50	95.5	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4172357	0.87	4563898	91.42	30	120	
Sc	45	1	He	2404812	2.01	2572368	93.49	30	120	
Sc	45	2	NoGas	23257199	0.49	24609710	94.50	30	120	
Rh	103	1	He	4410573	1.61	4780241	92.27	30	120	
In	115	1	He	3039271	2.41	3171814	95.82	30	120	
Tb	159	1	He	5350252	1.14	5469932	97.81	30	120	
Ho	165	1	He	5275277	0.43	5294619	99.63	30	120	
Bi	209	1	He	3308498	1.59	3401163	97.28	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	089_CCB.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T15:08:53-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.145	16.3	2030	14.6	1	
B	11	45	2	NoGas	24.267	0.6	179155	1.2	20	CCB Failed
Na	23	45	1	He	113.213	5.4	380646	4.7	400	
Mg	24	45	1	He	4.000	26.6	8265	22.5	1000	
Al	27	45	1	He	0.528	14.6	2197	4.6	50	
K	39	45	1	He	9.900	26.2	281433	2.0	1000	
Ca	44	45	1	He	30.569	2.7	6617	0.8	1000	
Ti	47	45	1	He	0.002	625.7	54	12.7	20	
V	51	45	1	He	0.069	28.5	3191	10.4	2	
Cr	52	45	1	He	0.083	16.0	11214	1.5	2	
Mn	55	45	1	He	0.326	7.9	9423	3.0	2	
Fe	56	45	1	He	7.062	15.1	137023	12.2	50	
Co	59	103	1	He	0.026	16.0	956	11.1	1	
Ni	60	103	1	He	-0.695	-0.8	711	4.5	2	
Cu	63	103	1	He	0.218	9.5	10451	3.4	2	
Zn	66	103	1	He	1.480	3.9	9726	1.6	20	
As	75	103	1	He	0.217	24.3	1188	11.2	2	
Se	78	103	1	He	0.367	30.0	412	5.8	2	
Sr	88	103	1	He	0.220	10.0	4477	9.0	10	
Mo	95	103	1	He	0.289	32.3	2166	28.3	2	
Ag	107	103	1	He	0.008	6.4	207	4.8	0.2	
Cd	111	103	1	He	0.190	13.4	4605	1.5	0.2	
Sn	118	115	1	He	0.356	10.9	4438	7.3	10	
Sb	123	115	1	He	0.207	10.6	2279	7.5	1	
Ba	137	115	1	He	0.031	35.1	220	19.0	5	
W	182	209	1	He	0.583	28.4	15364	13.1	10	
Tl	205	209	1	He	0.108	2.7	3430	2.5	0.5	
Pb	208	209	1	He	0.089	10.9	4763	8.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4156532	1.25	4563898	91.07	30	120	
Sc	45	1	He	2380503	0.64	2572368	92.54	30	120	
Sc	45	2	NoGas	22921648	0.75	24609710	93.14	30	120	
Rh	103	1	He	4505657	0.34	4780241	94.26	30	120	
In	115	1	He	3069450	0.23	3171814	96.77	30	120	
Tb	159	1	He	5308487	0.10	5469932	97.05	30	120	
Ho	165	1	He	5127949	0.50	5294619	96.85	30	120	
Bi	209	1	He	3347402	1.54	3401163	98.42	30	120	

Sample Report

Sample Table

Sample Name	240-50678-a-2-a
Data File Name	090SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T15:12:43-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.124	0.124	4.30	1556	0.01	10000	
B	11	45	2	NoGas	1632.905	1632.905	0.59	9544299	0.02	300	>LDR
Na	23	45	1	He	776636.734	776636.734	0.50	2192532061	0.04	500000	>LDR
Mg	24	45	1	He	83391.106	83391.106	2.12	134636465	0.06	500000	
Al	27	45	1	He	8.423	8.423	2.88	9987	0.08	200000	
K	39	45	1	He	42899.231	42899.231	1.12	93899644	0.05	500000	
Ca	44	45	1	He	134640.646	134640.646	1.50	13638499	0.99	500000	
Ti	47	45	1	He	1.544	1.544	10.58	952	0.16	2500	
V	51	45	1	He	1.341	1.341	2.85	20976	0.01	10000	
Cr	52	45	1	He	2.701	2.701	1.28	50565	0.01	10000	
Mn	55	45	1	He	72.911	72.911	1.29	858677	0.01	10000	
Fe	56	45	1	He	1254.370	1254.370	1.91	17556106	0.01	200000	
Co	59	103	1	He	0.401	0.401	0.56	8563	0.00	10000	
Ni	60	103	1	He	1.023	1.023	7.75	9085	0.01	10000	
Cu	63	103	1	He	2.193	2.193	3.88	34756	0.01	10000	
Zn	66	103	1	He	4.913	4.913	1.58	16784	0.03	10000	
As	75	103	1	He	11.208	11.208	0.42	24605	0.05	10000	
Se	78	103	1	He	1.234	1.234	13.59	506	0.24	10000	
Sr	88	103	1	He	10058.045	10058.045	0.63	148506381	0.01	10000	>LDR
Mo	95	103	1	He	106.887	106.887	0.67	587100	0.02	2000	
Ag	107	103	1	He	0.048	0.048	16.75	820	0.01	300	
Cd	111	103	1	He	0.419	0.419	10.79	4430	0.01	4000	
Sn	118	115	1	He	1.040	1.040	10.48	8717	0.01	2000	
Sb	123	115	1	He	2.156	2.156	1.65	15568	0.01	300	
Ba	137	115	1	He	78.686	78.686	0.70	259695	0.03	10000	
W	182	209	1	He	17.210	17.210	1.09	184639	0.01	2500	
Tl	205	209	1	He	0.108	0.108	3.32	2870	0.00	5000	
Pb	208	209	1	He	0.254	0.254	3.51	9558	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3677196	1.22	4563898	80.57	30	120	
Sc	45	1	He	2150715	1.45	2572368	83.61	30	120	
Sc	45	2	NoGas	21324664	1.50	24609710	86.65	30	120	
Rh	103	1	He	3734412	0.77	4780241	78.12	30	120	
In	115	1	He	2655136	0.90	3171814	83.71	30	120	
Tb	159	1	He	4849747	0.52	5469932	88.66	30	120	
Ho	165	1	He	4774921	1.05	5294619	90.18	30	120	
Bi	209	1	He	2805335	1.19	3401163	82.48	30	120	

Sample Report

Sample Table

Sample Name	190-7286-d-1-a
Data File Name	091SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T15:16:36-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.084	0.084	8.87	1196	0.01	10000	
B	11	45	2	NoGas	139.036	139.036	1.17	868293	0.02	300	
Na	23	45	1	He	252682.679	252682.679	8.26	724940771	0.03	500000	
Mg	24	45	1	He	8796.960	8796.960	8.92	14432027	0.06	500000	
Al	27	45	1	He	11.843	11.843	10.61	13661	0.09	200000	
K	39	45	1	He	136788.290	136788.290	7.86	303829018	0.05	500000	
Ca	44	45	1	He	20250.938	20250.938	8.40	2087223	0.97	500000	
Ti	47	45	1	He	0.625	0.625	11.04	420	0.15	2500	
V	51	45	1	He	0.926	0.926	3.02	15357	0.01	10000	
Cr	52	45	1	He	1.921	1.921	10.50	39154	0.00	10000	
Mn	55	45	1	He	37.098	37.098	8.41	446356	0.01	10000	
Fe	56	45	1	He	32.598	32.598	9.57	488279	0.01	200000	
Co	59	103	1	He	0.112	0.112	11.70	2724	0.00	10000	
Ni	60	103	1	He	321.075	321.075	7.25	1690530	0.02	10000	
Cu	63	103	1	He	3.121	3.121	10.17	49892	0.01	10000	
Zn	66	103	1	He	56.089	56.089	7.85	155881	0.04	10000	
As	75	103	1	He	1.887	1.887	10.24	4854	0.04	10000	
Se	78	103	1	He	0.699	0.699	34.65	429	0.16	10000	
Sr	88	103	1	He	70.471	70.471	7.49	1105276	0.01	10000	
Mo	95	103	1	He	5.997	5.997	8.76	35170	0.02	2000	
Ag	107	103	1	He	0.008	0.008	28.67	177	0.00	300	
Cd	111	103	1	He	0.209	0.209	7.92	4119	0.01	4000	
Sn	118	115	1	He	1.510	1.510	9.97	12531	0.01	2000	
Sb	123	115	1	He	4.846	4.846	9.30	35608	0.01	300	
Ba	137	115	1	He	2.663	2.663	8.30	9207	0.03	10000	
W	182	209	1	He	0.516	0.516	23.29	13295	0.00	2500	
Tl	205	209	1	He	0.148	0.148	6.60	4240	0.00	5000	
Pb	208	209	1	He	0.265	0.265	8.60	10845	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3920300	1.43	4563898	85.90	30	120	
Sc	45	1	He	2194259	7.26	2572368	85.30	30	120	
Sc	45	2	NoGas	22156316	0.75	24609710	90.03	30	120	
Rh	103	1	He	3978215	6.55	4780241	83.22	30	120	
In	115	1	He	2765590	7.06	3171814	87.19	30	120	
Tb	159	1	He	5017020	7.34	5469932	91.72	30	120	
Ho	165	1	He	4931442	6.88	5294619	93.14	30	120	
Bi	209	1	He	3068571	7.40	3401163	90.22	30	120	

Sample Report

Sample Table

Sample Name	190-7287-d-1-a
Data File Name	092SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T15:20:27-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.106	0.106	10.65	1393	0.01	10000	
B	11	45	2	NoGas	35985.829	35985.829	0.67	212435340	0.02	300	>LDR
Na	23	45	1	He	436425.806	436425.806	1.46	1244374884	0.04	500000	
Mg	24	45	1	He	33423.979	33423.979	0.62	54514237	0.06	500000	
Al	27	45	1	He	854.450	854.450	0.72	876053	0.10	200000	
K	39	45	1	He	18041.353	18041.353	1.06	40024063	0.05	500000	
Ca	44	45	1	He	110330.612	110330.612	1.02	11289238	0.98	500000	
Ti	47	45	1	He	0.719	0.719	15.59	473	0.15	2500	
V	51	45	1	He	1.975	1.975	2.52	30284	0.01	10000	
Cr	52	45	1	He	2.553	2.553	0.08	48766	0.01	10000	
Mn	55	45	1	He	597.526	597.526	0.55	7074186	0.01	10000	
Fe	56	45	1	He	583.406	583.406	1.75	8260653	0.01	200000	
Co	59	103	1	He	2.036	2.036	1.18	44234	0.00	10000	
Ni	60	103	1	He	9.313	9.313	2.49	52217	0.02	10000	
Cu	63	103	1	He	6.854	6.854	1.34	100465	0.01	10000	
Zn	66	103	1	He	58.129	58.129	1.08	158484	0.04	10000	
As	75	103	1	He	2.069	2.069	1.00	5178	0.04	10000	
Se	78	103	1	He	0.975	0.975	15.32	477	0.20	10000	
Sr	88	103	1	He	569.596	569.596	1.03	8769093	0.01	10000	
Mo	95	103	1	He	576.823	576.823	2.57	3302164	0.02	2000	
Ag	107	103	1	He	0.009	0.009	30.54	201	0.00	300	
Cd	111	103	1	He	0.300	0.300	2.29	4287	0.01	4000	
Sn	118	115	1	He	0.707	0.707	1.94	6479	0.01	2000	
Sb	123	115	1	He	10.043	10.043	1.71	72018	0.01	300	
Ba	137	115	1	He	67.263	67.263	1.55	226526	0.03	10000	
W	182	209	1	He	7.918	7.918	2.52	93204	0.01	2500	
Tl	205	209	1	He	0.041	0.041	4.64	1242	0.00	5000	
Pb	208	209	1	He	5.342	5.342	0.72	191575	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3775523	1.92	4563898	82.73	30	120	
Sc	45	1	He	2172294	1.11	2572368	84.45	30	120	
Sc	45	2	NoGas	21591575	0.84	24609710	87.74	30	120	
Rh	103	1	He	3894114	1.42	4780241	81.46	30	120	
In	115	1	He	2709178	0.57	3171814	85.41	30	120	
Tb	159	1	He	5022174	0.43	5469932	91.81	30	120	
Ho	165	1	He	4961189	2.57	5294619	93.70	30	120	
Bi	209	1	He	2949457	1.29	3401163	86.72	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-180749/1-a
Data File Name	093_Blk.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T15:24:17-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.071	7.2	1096	6.5	1	
B	11	45	2	NoGas	365.936	2.5	2301087	2.5	20	Blank Failed
Na	23	45	1	He	300.133	10.2	927006	8.4	400	
Mg	24	45	1	He	48.282	6.0	84036	4.6	1000	
Al	27	45	1	He	2.244	4.2	3964	2.8	50	
K	39	45	1	He	40.310	14.8	341241	2.2	1000	
Ca	44	45	1	He	146.218	6.3	18824	3.5	1000	
Ti	47	45	1	He	0.082	60.4	102	29.4	20	
V	51	45	1	He	0.535	8.3	10108	6.3	2	
Cr	52	45	1	He	1.916	1.5	40924	1.2	2	
Mn	55	45	1	He	0.488	13.9	11072	6.0	2	
Fe	56	45	1	He	17.165	1.5	282077	1.1	50	
Co	59	103	1	He	0.027	12.7	978	8.5	1	
Ni	60	103	1	He	-0.195	-12.4	3669	3.9	2	
Cu	63	103	1	He	1.171	3.7	25431	2.3	2	
Zn	66	103	1	He	9.640	1.2	34459	0.4	20	
As	75	103	1	He	0.229	9.0	1210	4.8	2	
Se	78	103	1	He	0.185	73.5	367	8.3	2	
Sr	88	103	1	He	0.733	10.2	13491	9.5	10	
Mo	95	103	1	He	1.434	27.6	9682	27.3	2	
Ag	107	103	1	He	0.005	33.8	141	21.3	0.2	
Cd	111	103	1	He	0.155	3.9	4455	0.2	0.2	
Sn	118	115	1	He	0.191	17.7	3030	8.8	10	
Sb	123	115	1	He	0.065	20.0	1117	9.7	1	
Ba	137	115	1	He	0.681	9.9	2657	9.6	5	
W	182	209	1	He	0.273	37.9	12061	10.2	10	
Tl	205	209	1	He	0.021	9.0	844	7.6	0.5	
Pb	208	209	1	He	0.155	3.2	7750	2.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4130460	1.54	4563898	90.50	30	120	
Sc	45	1	He	2289822	2.11	2572368	89.02	30	120	
Sc	45	2	NoGas	22733078	0.07	24609710	92.37	30	120	
Rh	103	1	He	4469133	0.65	4780241	93.49	30	120	
In	115	1	He	3020120	0.77	3171814	95.22	30	120	
Tb	159	1	He	5350395	1.46	5469932	97.81	30	120	
Ho	165	1	He	5275651	0.33	5294619	99.64	30	120	
Bi	209	1	He	3498321	1.02	3401163	102.86	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-180749/3-a
Data File Name	094_LCS.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T15:28:07-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	976.234	976.234	1.949	12346417	0.85	1000	97.6	79.5	120.5	
B	11	2	NoGas	295.079	295.079	1.299	1876641	1.65	100	295.1	79.5	120.5	LCS Failed
Na	23	1	He	10083.814	10083.814	3.190	30401600	0.74	10000	100.8	79.5	120.5	
Mg	24	1	He	9923.946	9923.946	3.293	17099555	0.58	10000	99.2	79.5	120.5	
Al	27	1	He	9433.176	9433.176	3.248	10201765	0.48	10000	94.3	79.5	120.5	
K	39	1	He	9845.761	9845.761	2.763	23190235	0.99	10000	98.5	79.5	120.5	
Ca	44	1	He	11484.331	11484.331	2.566	1244443	1.66	10000	114.8	79.5	120.5	
Ti	47	1	He	96.430	96.430	2.087	60236	1.04	100	96.4	79.5	120.5	
V	51	1	He	942.315	942.315	2.891	14301722	0.72	1000	94.2	79.5	120.5	
Cr	52	1	He	984.136	984.136	2.896	16229800	0.55	1000	98.4	79.5	120.5	
Mn	55	1	He	1007.040	1007.040	2.727	12592727	0.64	1000	100.7	79.5	120.5	
Fe	56	1	He	10062.944	10062.944	3.111	150103105	0.38	10000	100.6	79.5	120.5	
Co	59	1	He	923.299	923.299	0.348	22375094	0.90	1000	92.3	79.5	120.5	
Ni	60	1	He	974.589	974.589	0.478	5642808	1.22	1000	97.5	79.5	120.5	
Cu	63	1	He	946.876	946.876	0.354	14643019	0.91	1000	94.7	79.5	120.5	
Zn	66	1	He	1067.691	1067.691	1.251	3178306	1.45	1000	106.8	79.5	120.5	
As	75	1	He	1002.559	1002.559	0.835	2521025	1.54	1000	100.3	79.5	120.5	
Se	78	1	He	949.502	949.502	0.761	211289	0.12	1000	95.0	79.5	120.5	
Sr	88	1	He	943.833	943.833	0.391	16300655	0.54	1000	94.4	79.5	120.5	
Mo	95	1	He	100.956	100.956	0.756	648653	0.43	100	101.0	79.5	120.5	
Ag	107	1	He	102.944	102.944	1.778	1939678	1.00	100	102.9	79.5	120.5	
Cd	111	1	He	1065.992	1065.992	2.505	3347331	1.65	1000	106.6	79.5	120.5	
Sn	118	1	He	1087.839	1087.839	1.518	8564815	0.73	1000	108.8	79.5	120.5	
Sb	123	1	He	104.191	104.191	1.272	801982	0.18	100	104.2	79.5	120.5	
Ba	137	1	He	1124.930	1124.930	1.813	4092396	0.78	1000	112.5	79.5	120.5	
W	182	1	He	99.804	99.804	1.739	1234284	0.69	100	99.8	79.5	120.5	
Tl	205	1	He	249.079	249.079	1.937	7540076	0.45	250	99.6	79.5	120.5	
Pb	208	1	He	1040.999	1040.999	1.745	42012719	0.24	1000	104.1	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4191877	1.22	4563898	91.85	30	120	
Sc	45	1	He	2296079	2.72	2572368	89.26	30	120	
Sc	45	2	NoGas	22928097	1.23	24609710	93.17	30	120	
Rh	103	1	He	4368245	0.87	4780241	91.38	30	120	
In	115	1	He	2927883	1.30	3171814	92.31	30	120	
Tb	159	1	He	5377126	0.53	5469932	98.30	30	120	
Ho	165	1	He	5288257	1.15	5294619	99.88	30	120	
Bi	209	1	He	3336926	1.53	3401163	98.11	30	120	

Sample Report

Sample Table

Sample Name	240-50633-b-2-a
Data File Name	095SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T15:31:31-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.239	0.239	4.56	3160	0.01	10000	
B	11	45	2	NoGas	156.136	156.136	1.11	993984	0.02	300	
Na	23	45	1	He	12849.918	12849.918	1.68	38618851	0.03	500000	
Mg	24	45	1	He	11729.935	11729.935	1.21	20152431	0.06	500000	
Al	27	45	1	He	2.568	2.568	1.96	4311	0.06	200000	
K	39	45	1	He	1267.292	1267.292	1.39	3191493	0.04	500000	
Ca	44	45	1	He	64429.878	64429.878	1.47	6945715	0.93	500000	
Ti	47	45	1	He	0.181	0.181	51.79	164	0.11	2500	
V	51	45	1	He	0.783	0.783	7.42	13865	0.01	10000	
Cr	52	45	1	He	2.172	2.172	1.76	45108	0.00	10000	
Mn	55	45	1	He	0.132	0.132	10.90	6642	0.00	10000	
Fe	56	45	1	He	10.577	10.577	7.50	184053	0.01	200000	
Co	59	103	1	He	0.201	0.201	6.86	5071	0.00	10000	
Ni	60	103	1	He	0.009	0.009	359.13	4676	0.00	10000	
Cu	63	103	1	He	2.138	2.138	2.04	39057	0.01	10000	
Zn	66	103	1	He	3.357	3.357	0.68	14727	0.02	10000	
As	75	103	1	He	2.002	2.002	15.02	5537	0.04	10000	
Se	78	103	1	He	1.605	1.605	4.09	662	0.24	10000	
Sr	88	103	1	He	136.140	136.140	1.26	2307793	0.01	10000	
Mo	95	103	1	He	0.629	0.629	20.65	4209	0.01	2000	
Ag	107	103	1	He	0.008	0.008	11.27	204	0.00	300	
Cd	111	103	1	He	0.259	0.259	21.70	4592	0.01	4000	
Sn	118	115	1	He	1.123	1.123	6.98	10389	0.01	2000	
Sb	123	115	1	He	0.187	0.187	11.94	2047	0.01	300	
Ba	137	115	1	He	100.713	100.713	1.10	370727	0.03	10000	
W	182	209	1	He	0.849	0.849	23.81	18549	0.00	2500	
Tl	205	209	1	He	0.138	0.138	11.11	4338	0.00	5000	
Pb	208	209	1	He	0.204	0.204	5.77	9365	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4101417	1.43	4563898	89.87	30	120	
Sc	45	1	He	2288272	1.26	2572368	88.96	30	120	
Sc	45	2	NoGas	22660787	0.79	24609710	92.08	30	120	
Rh	103	1	He	4286927	1.14	4780241	89.68	30	120	
In	115	1	He	2961665	1.14	3171814	93.37	30	120	
Tb	159	1	He	5414351	0.99	5469932	98.98	30	120	
Ho	165	1	He	5260204	0.17	5294619	99.35	30	120	
Bi	209	1	He	3331682	0.61	3401163	97.96	30	120	

Sample Report

Sample Table

Sample Name	SD 240-50633-b-2-a@5
Data File Name	096SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T15:35:19-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.116	0.116	4.68	1667	0.01	10000	
B	11	45	2	NoGas	105.741	105.741	1.12	690151	0.02	300	
Na	23	45	1	He	2661.308	2661.308	0.65	8445100	0.03	500000	
Mg	24	45	1	He	2418.780	2418.780	1.58	4377066	0.06	500000	
Al	27	45	1	He	0.911	0.911	13.30	2658	0.03	200000	
K	39	45	1	He	245.700	245.700	1.30	861775	0.03	500000	
Ca	44	45	1	He	13388.801	13388.801	0.40	1522600	0.88	500000	
Ti	47	45	1	He	0.004	0.004	652.51	57	0.01	2500	
V	51	45	1	He	0.205	0.205	16.15	5397	0.00	10000	
Cr	52	45	1	He	0.504	0.504	4.58	18650	0.00	10000	
Mn	55	45	1	He	-0.021	-0.021	-50.39	4982	0.00	10000	
Fe	56	45	1	He	1.135	1.135	0.71	45860	0.00	200000	
Co	59	103	1	He	0.062	0.062	5.85	1868	0.00	10000	
Ni	60	103	1	He	-0.591	-0.591	-3.01	1350	-0.04	10000	
Cu	63	103	1	He	0.437	0.437	11.30	14132	0.00	10000	
Zn	66	103	1	He	0.353	0.353	6.01	6360	0.01	10000	
As	75	103	1	He	0.317	0.317	18.52	1468	0.02	10000	
Se	78	103	1	He	0.311	0.311	6.87	405	0.08	10000	
Sr	88	103	1	He	25.116	25.116	0.11	454363	0.01	10000	
Mo	95	103	1	He	0.155	0.155	26.59	1297	0.01	2000	
Ag	107	103	1	He	0.003	0.003	10.54	113	0.00	300	
Cd	111	103	1	He	0.144	0.144	17.02	4517	0.00	4000	
Sn	118	115	1	He	0.087	0.087	15.49	2267	0.00	2000	
Sb	123	115	1	He	0.003	0.003	296.21	650	0.00	300	
Ba	137	115	1	He	20.156	20.156	0.93	78694	0.03	10000	
W	182	209	1	He	0.204	0.204	33.42	11308	0.00	2500	
Tl	205	209	1	He	0.035	0.035	12.23	1279	0.00	5000	
Pb	208	209	1	He	0.085	0.085	2.52	4850	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4167391	2.41	4563898	91.31	30	120	
Sc	45	1	He	2409618	0.43	2572368	93.67	30	120	
Sc	45	2	NoGas	22938127	0.70	24609710	93.21	30	120	
Rh	103	1	He	4569986	0.63	4780241	95.60	30	120	
In	115	1	He	3137571	0.80	3171814	98.92	30	120	
Tb	159	1	He	5538323	1.32	5469932	101.25	30	120	
Ho	165	1	He	5421484	0.50	5294619	102.40	30	120	
Bi	209	1	He	3540332	0.51	3401163	104.09	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-50633-b-2-a
Data File Name	097SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T15:39:09-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	989.188	989.188	1.90	12117374	0.01	10000	
B	11	45	2	NoGas	251.202	251.202	0.62	1557800	0.02	300	
Na	23	45	1	He	22252.651	22252.651	1.36	67095186	0.03	500000	
Mg	24	45	1	He	21291.564	21291.564	3.15	36703159	0.06	500000	
Al	27	45	1	He	9593.167	9593.167	0.95	10380992	0.09	200000	
K	39	45	1	He	11062.844	11062.844	0.60	26039016	0.04	500000	
Ca	44	45	1	He	72654.582	72654.582	1.22	7859362	0.92	500000	
Ti	47	45	1	He	100.065	100.065	1.99	62525	0.16	2500	
V	51	45	1	He	939.787	939.787	0.81	14270845	0.01	10000	
Cr	52	45	1	He	965.672	965.672	0.50	15934288	0.01	10000	
Mn	55	45	1	He	993.684	993.684	1.01	12432202	0.01	10000	
Fe	56	45	1	He	10241.800	10241.800	0.87	152858194	0.01	200000	
Co	59	103	1	He	929.650	929.650	1.26	21726744	0.00	10000	
Ni	60	103	1	He	979.538	979.538	0.19	5469742	0.02	10000	
Cu	63	103	1	He	931.946	931.946	1.36	13898901	0.01	10000	
Zn	66	103	1	He	1005.585	1005.585	0.36	2887291	0.03	10000	
As	75	103	1	He	1025.026	1025.026	0.66	2485733	0.04	10000	
Se	78	103	1	He	960.465	960.465	0.62	206132	0.47	10000	
Sr	88	103	1	He	1098.411	1098.411	0.36	18295923	0.01	10000	
Mo	95	103	1	He	107.397	107.397	0.46	665502	0.02	2000	
Ag	107	103	1	He	105.979	105.979	2.04	1925836	0.01	300	
Cd	111	103	1	He	1080.479	1080.479	1.85	3272301	0.03	4000	
Sn	118	115	1	He	1132.593	1132.593	0.55	8831927	0.01	2000	
Sb	123	115	1	He	106.649	106.649	1.28	813011	0.01	300	
Ba	137	115	1	He	1214.082	1214.082	1.80	4374450	0.03	10000	
W	182	209	1	He	105.346	105.346	1.89	1276291	0.01	2500	
Tl	205	209	1	He	251.024	251.024	1.72	7447746	0.00	5000	
Pb	208	209	1	He	1029.041	1029.041	1.34	40702278	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4060108	0.97	4563898	88.96	30	120	
Sc	45	1	He	2296212	0.82	2572368	89.26	30	120	
Sc	45	2	NoGas	22299477	1.19	24609710	90.61	30	120	
Rh	103	1	He	4212969	0.84	4780241	88.13	30	120	
In	115	1	He	2899644	0.67	3171814	91.42	30	120	
Tb	159	1	He	5349250	0.65	5469932	97.79	30	120	
Ho	165	1	He	5224726	0.50	5294619	98.68	30	120	
Bi	209	1	He	3270339	1.82	3401163	96.15	30	120	

Sample Report

Sample Table

Sample Name	240-50633-b-2-b ms
Data File Name	098SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T15:42:33-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1076.823	1076.823	0.23	13290183	0.01	10000	
B	11	45	2	NoGas	243.634	243.634	1.60	1553023	0.02	300	
Na	23	45	1	He	23444.678	23444.678	1.69	70221406	0.03	500000	
Mg	24	45	1	He	22369.276	22369.276	1.43	38309266	0.06	500000	
Al	27	45	1	He	10128.955	10128.955	1.95	10887416	0.09	200000	
K	39	45	1	He	11695.479	11695.479	2.01	27329465	0.04	500000	
Ca	44	45	1	He	76550.849	76550.849	1.32	8225835	0.93	500000	
Ti	47	45	1	He	104.635	104.635	0.74	64950	0.16	2500	
V	51	45	1	He	1037.532	1037.532	1.35	15650214	0.01	10000	
Cr	52	45	1	He	1061.335	1061.335	2.37	17394005	0.01	10000	
Mn	55	45	1	He	1086.088	1086.088	2.30	13496559	0.01	10000	
Fe	56	45	1	He	10695.693	10695.693	2.56	158559634	0.01	200000	
Co	59	103	1	He	996.449	996.449	1.01	23531249	0.00	10000	
Ni	60	103	1	He	1045.676	1045.676	0.52	5899444	0.02	10000	
Cu	63	103	1	He	1007.807	1007.807	0.65	15188061	0.01	10000	
Zn	66	103	1	He	1075.070	1075.070	0.74	3118537	0.03	10000	
As	75	103	1	He	1099.786	1099.786	0.83	2694709	0.04	10000	
Se	78	103	1	He	1028.678	1028.678	0.87	223045	0.46	10000	
Sr	88	103	1	He	1167.245	1167.245	0.99	19644827	0.01	10000	
Mo	95	103	1	He	110.514	110.514	1.22	691910	0.02	2000	
Ag	107	103	1	He	108.664	108.664	1.50	1995257	0.01	300	
Cd	111	103	1	He	1156.014	1156.014	0.97	3537489	0.03	4000	
Sn	118	115	1	He	1177.075	1177.075	1.63	9089096	0.01	2000	
Sb	123	115	1	He	112.805	112.805	1.07	851575	0.01	300	
Ba	137	115	1	He	1319.017	1319.017	1.17	4706412	0.03	10000	
W	182	209	1	He	107.868	107.868	1.53	1319162	0.01	2500	
Tl	205	209	1	He	265.879	265.879	1.10	7965295	0.00	5000	
Pb	208	209	1	He	1103.811	1103.811	0.13	44080842	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4090113	1.04	4563898	89.62	30	120	
Sc	45	1	He	2281032	0.94	2572368	88.67	30	120	
Sc	45	2	NoGas	22909050	0.78	24609710	93.09	30	120	
Rh	103	1	He	4256889	1.10	4780241	89.05	30	120	
In	115	1	He	2871408	0.66	3171814	90.53	30	120	
Tb	159	1	He	5285681	1.50	5469932	96.63	30	120	
Ho	165	1	He	5200988	1.95	5294619	98.23	30	120	
Bi	209	1	He	3301395	1.65	3401163	97.07	30	120	

Sample Report

Sample Table

Sample Name	240-50633-b-2-c msd
Data File Name	099SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T15:45:55-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1019.703	1019.703	0.88	12834252	0.01	10000	
B	11	45	2	NoGas	232.220	232.220	0.81	1500445	0.02	300	
Na	23	45	1	He	22803.172	22803.172	0.65	69416690	0.03	500000	
Mg	24	45	1	He	21912.865	21912.865	1.15	38140671	0.06	500000	
Al	27	45	1	He	9862.892	9862.892	0.68	10775302	0.09	200000	
K	39	45	1	He	11337.738	11337.738	1.43	26934801	0.04	500000	
Ca	44	45	1	He	74816.430	74816.430	1.92	8170430	0.92	500000	
Ti	47	45	1	He	102.534	102.534	0.09	64686	0.16	2500	
V	51	45	1	He	978.411	978.411	1.86	14999544	0.01	10000	
Cr	52	45	1	He	1006.277	1006.277	1.88	16761937	0.01	10000	
Mn	55	45	1	He	1031.844	1031.844	1.41	13032593	0.01	10000	
Fe	56	45	1	He	10468.541	10468.541	1.90	157733265	0.01	200000	
Co	59	103	1	He	955.027	955.027	0.26	22685536	0.00	10000	
Ni	60	103	1	He	1003.214	1003.214	1.02	5693188	0.02	10000	
Cu	63	103	1	He	976.920	976.920	1.14	14807777	0.01	10000	
Zn	66	103	1	He	1035.426	1035.426	0.68	3021321	0.03	10000	
As	75	103	1	He	1069.190	1069.190	0.74	2635196	0.04	10000	
Se	78	103	1	He	994.392	994.392	0.21	216887	0.46	10000	
Sr	88	103	1	He	1126.431	1126.431	0.27	19069065	0.01	10000	
Mo	95	103	1	He	109.613	109.613	0.45	690326	0.02	2000	
Ag	107	103	1	He	108.552	108.552	0.75	2004981	0.01	300	
Cd	111	103	1	He	1108.147	1108.147	0.81	3411025	0.03	4000	
Sn	118	115	1	He	1160.266	1160.266	0.77	9071494	0.01	2000	
Sb	123	115	1	He	110.226	110.226	0.35	842458	0.01	300	
Ba	137	115	1	He	1254.755	1254.755	1.56	4532835	0.03	10000	
W	182	209	1	He	109.084	109.084	1.81	1320670	0.01	2500	
Tl	205	209	1	He	257.925	257.925	0.82	7648550	0.00	5000	
Pb	208	209	1	He	1070.200	1070.200	1.28	42307676	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4171262	1.04	4563898	91.40	30	120	
Sc	45	1	He	2318237	0.83	2572368	90.12	30	120	
Sc	45	2	NoGas	23203712	0.67	24609710	94.29	30	120	
Rh	103	1	He	4281672	0.51	4780241	89.57	30	120	
In	115	1	He	2907103	0.80	3171814	91.65	30	120	
Tb	159	1	He	5415029	0.47	5469932	99.00	30	120	
Ho	165	1	He	5280886	0.47	5294619	99.74	30	120	
Bi	209	1	He	3268408	1.15	3401163	96.10	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2004624
Data File Name	100_CCV.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T15:49:19-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	50.384	2.228	641453	1.10	50	100.8	89.5	110.5	
B	11	45	2	NoGas	125.522	0.849	845286	0.60	50	251.0	89.5	110.5	CCV Failed
Na	23	45	1	He	25124.990	0.353	81676641	0.32	25000	100.5	89.5	110.5	
Mg	24	45	1	He	24902.232	0.843	46288494	0.66	25000	99.6	89.5	110.5	
Al	27	45	1	He	247.714	0.773	290636	0.49	250	99.1	89.5	110.5	
K	39	45	1	He	25106.919	0.842	63373405	0.59	25000	100.4	89.5	110.5	
Ca	44	45	1	He	25740.459	0.476	3004342	0.46	25000	103.0	89.5	110.5	
Ti	47	45	1	He	49.355	1.730	33278	1.45	50	98.7	89.5	110.5	
V	51	45	1	He	48.267	0.561	792309	0.36	50	96.5	89.5	110.5	
Cr	52	45	1	He	48.788	0.870	877619	0.63	50	97.6	89.5	110.5	
Mn	55	45	1	He	258.150	1.213	3486129	0.95	250	103.3	89.5	110.5	
Fe	56	45	1	He	12519.769	1.721	201452965	1.44	12500	100.2	89.5	110.5	
Co	59	103	1	He	45.573	0.676	1146744	1.24	50	91.1	89.5	110.5	
Ni	60	103	1	He	47.048	0.969	287414	0.79	50	94.1	89.5	110.5	
Cu	63	103	1	He	45.270	0.958	733378	0.71	50	90.5	89.5	110.5	
Zn	66	103	1	He	47.834	1.554	152786	0.43	50	95.7	89.5	110.5	
As	75	103	1	He	50.270	1.207	131805	0.43	50	100.5	89.5	110.5	
Se	78	103	1	He	49.214	0.320	11682	1.39	50	98.4	89.5	110.5	
Sr	88	103	1	He	46.701	0.340	837830	1.40	50	93.4	89.5	110.5	
Mo	95	103	1	He	51.080	1.044	340872	2.43	50	102.2	89.5	110.5	
Ag	107	103	1	He	46.306	0.424	905839	1.06	50	92.6	89.5	110.5	
Cd	111	103	1	He	49.644	0.671	165680	1.67	50	99.3	89.5	110.5	
Sn	118	115	1	He	56.559	1.078	476094	0.93	50	113.1	89.5	110.5	CCV Failed
Sb	123	115	1	He	51.372	0.782	421802	0.85	50	102.7	89.5	110.5	
Ba	137	115	1	He	50.642	0.738	196481	0.98	50	101.3	89.5	110.5	
W	182	209	1	He	50.901	1.085	642709	2.16	50	101.8	89.5	110.5	
Tl	205	209	1	He	45.579	0.992	1399874	1.08	50	91.2	89.5	110.5	
Pb	208	209	1	He	47.370	1.042	1940561	1.37	50	94.7	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4218589	1.24	4563898	92.43	30	120	
Sc	45	1	He	2475620	0.28	2572368	96.24	30	120	
Sc	45	2	NoGas	23814969	1.41	24609710	96.77	30	120	
Rh	103	1	He	4534734	1.48	4780241	94.86	30	120	
In	115	1	He	3120782	1.62	3171814	98.39	30	120	
Tb	159	1	He	5492473	0.40	5469932	100.41	30	120	
Ho	165	1	He	5409701	0.70	5294619	102.17	30	120	
Bi	209	1	He	3384687	1.10	3401163	99.52	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	101_CCB.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T15:53:08-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.210	8.4	2904	8.0	1	
B	11	45	2	NoGas	62.495	0.6	436991	1.0	20	CCB Failed
Na	23	45	1	He	68.587	6.5	248705	1.2	400	
Mg	24	45	1	He	2.455	38.3	5638	25.5	1000	
Al	27	45	1	He	0.811	28.2	2588	5.7	50	
K	39	45	1	He	3.777	135.3	274991	0.5	1000	
Ca	44	45	1	He	30.716	17.1	6834	4.7	1000	
Ti	47	45	1	He	0.037	65.0	80	23.2	20	
V	51	45	1	He	0.092	46.6	3652	16.1	2	
Cr	52	45	1	He	0.108	26.3	12014	1.5	2	
Mn	55	45	1	He	0.362	11.1	10195	1.1	2	
Fe	56	45	1	He	7.174	12.4	143555	13.3	50	
Co	59	103	1	He	0.081	10.7	2395	5.5	1	
Ni	60	103	1	He	-0.670	-3.9	891	17.7	2	
Cu	63	103	1	He	-0.021	-55.8	6845	1.9	2	
Zn	66	103	1	He	1.583	16.8	10341	3.3	20	
As	75	103	1	He	0.394	14.2	1704	12.9	2	
Se	78	103	1	He	0.585	28.9	476	4.7	2	
Sr	88	103	1	He	0.060	22.4	1673	9.9	10	
Mo	95	103	1	He	0.319	35.2	2465	35.1	2	
Ag	107	103	1	He	0.010	27.6	243	16.7	0.2	
Cd	111	103	1	He	0.227	8.5	4879	5.6	0.2	CCB Failed
Sn	118	115	1	He	0.485	14.2	5694	7.9	10	
Sb	123	115	1	He	0.195	16.7	2260	12.7	1	
Ba	137	115	1	He	0.054	15.3	321	14.5	5	
W	182	209	1	He	0.709	23.0	17677	15.6	10	
Tl	205	209	1	He	0.152	7.1	4955	2.1	0.5	
Pb	208	209	1	He	0.118	17.4	6126	9.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4252575	0.38	4563898	93.18	30	120	
Sc	45	1	He	2458396	4.50	2572368	95.57	30	120	
Sc	45	2	NoGas	23923128	0.83	24609710	97.21	30	120	
Rh	103	1	He	4652026	4.62	4780241	97.32	30	120	
In	115	1	He	3183978	4.43	3171814	100.38	30	120	
Tb	159	1	He	5531611	5.81	5469932	101.13	30	120	
Ho	165	1	He	5414134	5.48	5294619	102.26	30	120	
Bi	209	1	He	3487495	4.65	3401163	102.54	30	120	

Sample Report

Sample Table

Sample Name	240-50652-i-1-a
Data File Name	102SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T15:56:59-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.183	0.183	3.51	2478	0.01	10000	
B	11	45	2	NoGas	113.882	113.882	0.60	750796	0.02	300	
Na	23	45	1	He	5200.075	5200.075	0.37	15645829	0.03	500000	
Mg	24	45	1	He	63883.312	63883.312	0.34	109759822	0.06	500000	
Al	27	45	1	He	26.292	26.292	1.57	29890	0.09	200000	
K	39	45	1	He	2064.773	2064.773	1.32	5044859	0.04	500000	
Ca	44	45	1	He	280198.318	280198.318	1.18	30199979	0.93	500000	
Ti	47	45	1	He	0.423	0.423	23.90	314	0.13	2500	
V	51	45	1	He	0.862	0.862	9.11	15068	0.01	10000	
Cr	52	45	1	He	1.921	1.921	2.83	41000	0.00	10000	
Mn	55	45	1	He	4.659	4.659	0.76	63062	0.01	10000	
Fe	56	45	1	He	37.636	37.636	2.19	586421	0.01	200000	
Co	59	103	1	He	0.310	0.310	5.71	7353	0.00	10000	
Ni	60	103	1	He	0.691	0.691	11.75	8214	0.01	10000	
Cu	63	103	1	He	0.542	0.542	5.31	14278	0.00	10000	
Zn	66	103	1	He	3.256	3.256	1.69	13874	0.02	10000	
As	75	103	1	He	1.476	1.476	10.36	4073	0.04	10000	
Se	78	103	1	He	1.134	1.134	11.32	537	0.21	10000	
Sr	88	103	1	He	532.845	532.845	0.97	8681099	0.01	10000	
Mo	95	103	1	He	0.142	0.142	38.21	1096	0.01	2000	
Ag	107	103	1	He	0.012	0.012	9.44	260	0.00	300	
Cd	111	103	1	He	0.378	0.378	18.52	4766	0.01	4000	
Sn	118	115	1	He	0.969	0.969	9.37	8988	0.01	2000	
Sb	123	115	1	He	0.318	0.318	19.82	3006	0.01	300	
Ba	137	115	1	He	29.255	29.255	0.89	105673	0.03	10000	
W	182	209	1	He	0.425	0.425	22.37	12835	0.00	2500	
Tl	205	209	1	He	0.161	0.161	10.02	4817	0.00	5000	
Pb	208	209	1	He	0.290	0.290	0.15	12308	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4118484	1.00	4563898	90.24	30	120	
Sc	45	1	He	2288289	0.65	2572368	88.96	30	120	
Sc	45	2	NoGas	23235211	1.40	24609710	94.41	30	120	
Rh	103	1	He	4120596	0.63	4780241	86.20	30	120	
In	115	1	He	2904111	0.52	3171814	91.56	30	120	
Tb	159	1	He	5217079	0.94	5469932	95.38	30	120	
Ho	165	1	He	5075565	1.33	5294619	95.86	30	120	
Bi	209	1	He	3199188	1.11	3401163	94.06	30	120	

Sample Report

Sample Table

Sample Name	240-50629-a-1-a
Data File Name	103SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T16:00:44-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.137	0.137	5.40	1922	0.01	10000	
B	11	45	2	NoGas	94.341	94.341	1.74	615755	0.02	300	
Na	23	45	1	He	17929.609	17929.609	1.26	55352509	0.03	500000	
Mg	24	45	1	He	8476.778	8476.778	2.07	14960462	0.06	500000	
Al	27	45	1	He	2.601	2.601	10.16	4462	0.06	200000	
K	39	45	1	He	1758.024	1758.024	2.55	4449534	0.04	500000	
Ca	44	45	1	He	50799.071	50799.071	1.74	5626396	0.90	500000	
Ti	47	45	1	He	0.080	0.080	63.05	104	0.08	2500	
V	51	45	1	He	0.643	0.643	17.05	12081	0.01	10000	
Cr	52	45	1	He	1.975	1.975	2.77	43022	0.00	10000	
Mn	55	45	1	He	0.787	0.787	2.11	15214	0.01	10000	
Fe	56	45	1	He	6.550	6.550	4.45	127433	0.01	200000	
Co	59	103	1	He	288.042	288.042	1.38	6949627	0.00	10000	
Ni	60	103	1	He	0.669	0.669	8.83	8544	0.01	10000	
Cu	63	103	1	He	0.652	0.652	3.40	16755	0.00	10000	
Zn	66	103	1	He	1.911	1.911	0.49	10662	0.02	10000	
As	75	103	1	He	0.802	0.802	10.42	2608	0.03	10000	
Se	78	103	1	He	0.566	0.566	14.71	441	0.13	10000	
Sr	88	103	1	He	112.241	112.241	1.03	1930208	0.01	10000	
Mo	95	103	1	He	7.708	7.708	0.22	49533	0.02	2000	
Ag	107	103	1	He	0.005	0.005	31.40	143	0.00	300	
Cd	111	103	1	He	0.200	0.200	10.56	4476	0.00	4000	
Sn	118	115	1	He	0.410	0.410	2.57	4793	0.01	2000	
Sb	123	115	1	He	0.632	0.632	2.88	5603	0.01	300	
Ba	137	115	1	He	75.059	75.059	0.63	281149	0.03	10000	
W	182	209	1	He	21.459	21.459	0.63	271553	0.01	2500	
Tl	205	209	1	He	0.057	0.057	3.62	1876	0.00	5000	
Pb	208	209	1	He	0.124	0.124	8.47	6133	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4137941	0.98	4563898	90.67	30	120	
Sc	45	1	He	2351002	1.97	2572368	91.39	30	120	
Sc	45	2	NoGas	22831266	0.91	24609710	92.77	30	120	
Rh	103	1	He	4348798	1.37	4780241	90.97	30	120	
In	115	1	He	3013192	0.66	3171814	95.00	30	120	
Tb	159	1	He	5378667	0.61	5469932	98.33	30	120	
Ho	165	1	He	5243346	0.50	5294619	99.03	30	120	
Bi	209	1	He	3333358	1.25	3401163	98.01	30	120	

Sample Report

Sample Table

Sample Name	240-50629-a-2-a
Data File Name	104SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T16:04:31-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.108	0.108	10.65	1574	0.01	10000	
B	11	45	2	NoGas	90.643	90.643	0.79	601361	0.02	300	
Na	23	45	1	He	18099.081	18099.081	1.91	54746142	0.03	500000	
Mg	24	45	1	He	8600.729	8600.729	1.23	14874806	0.06	500000	
Al	27	45	1	He	3.142	3.142	3.19	4962	0.06	200000	
K	39	45	1	He	1790.510	1790.510	1.35	4436283	0.04	500000	
Ca	44	45	1	He	52129.136	52129.136	0.08	5657747	0.92	500000	
Ti	47	45	1	He	0.125	0.125	41.86	130	0.10	2500	
V	51	45	1	He	0.625	0.625	6.46	11552	0.01	10000	
Cr	52	45	1	He	2.091	2.091	1.66	44073	0.00	10000	
Mn	55	45	1	He	0.927	0.927	3.01	16663	0.01	10000	
Fe	56	45	1	He	9.783	9.783	2.90	173274	0.01	200000	
Co	59	103	1	He	298.607	298.607	0.41	7116492	0.00	10000	
Ni	60	103	1	He	0.836	0.836	4.51	9391	0.01	10000	
Cu	63	103	1	He	0.701	0.701	3.75	17305	0.00	10000	
Zn	66	103	1	He	2.302	2.302	3.43	11675	0.02	10000	
As	75	103	1	He	0.811	0.811	6.22	2601	0.03	10000	
Se	78	103	1	He	0.492	0.492	37.32	420	0.12	10000	
Sr	88	103	1	He	113.343	113.343	0.52	1925552	0.01	10000	
Mo	95	103	1	He	7.827	7.827	0.65	49677	0.02	2000	
Ag	107	103	1	He	0.002	0.002	43.22	91	0.00	300	
Cd	111	103	1	He	0.158	0.158	16.95	4289	0.00	4000	
Sn	118	115	1	He	0.335	0.335	9.83	4090	0.01	2000	
Sb	123	115	1	He	0.663	0.663	7.49	5704	0.01	300	
Ba	137	115	1	He	78.242	78.242	0.32	285917	0.03	10000	
W	182	209	1	He	21.757	21.757	2.00	274065	0.01	2500	
Tl	205	209	1	He	0.040	0.040	3.91	1355	0.00	5000	
Pb	208	209	1	He	0.125	0.125	6.41	6131	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4192810	1.61	4563898	91.87	30	120	
Sc	45	1	He	2303332	0.48	2572368	89.54	30	120	
Sc	45	2	NoGas	23164493	1.01	24609710	94.13	30	120	
Rh	103	1	He	4295778	0.40	4780241	89.87	30	120	
In	115	1	He	2939718	0.58	3171814	92.68	30	120	
Tb	159	1	He	5354622	0.48	5469932	97.89	30	120	
Ho	165	1	He	5205171	0.54	5294619	98.31	30	120	
Bi	209	1	He	3319903	0.80	3401163	97.61	30	120	

Sample Report

Sample Table

Sample Name	240-50629-a-3-a
Data File Name	105SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T16:08:19-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.092	0.092	12.05	1348	0.01	10000	
B	11	45	2	NoGas	99.988	99.988	0.58	650155	0.02	300	
Na	23	45	1	He	19812.477	19812.477	0.29	60045492	0.03	500000	
Mg	24	45	1	He	9750.322	9750.322	0.93	16895610	0.06	500000	
Al	27	45	1	He	4.931	4.931	0.69	6917	0.07	200000	
K	39	45	1	He	1519.803	1519.803	0.88	3810619	0.04	500000	
Ca	44	45	1	He	52707.896	52707.896	0.32	5731594	0.92	500000	
Ti	47	45	1	He	0.151	0.151	26.60	147	0.10	2500	
V	51	45	1	He	0.730	0.730	8.34	13165	0.01	10000	
Cr	52	45	1	He	2.572	2.572	0.71	52135	0.00	10000	
Mn	55	45	1	He	0.803	0.803	5.35	15128	0.01	10000	
Fe	56	45	1	He	4.240	4.240	0.27	90490	0.00	200000	
Co	59	103	1	He	0.306	0.306	6.28	7636	0.00	10000	
Ni	60	103	1	He	0.367	0.367	10.43	6779	0.01	10000	
Cu	63	103	1	He	2.980	2.980	1.31	52383	0.01	10000	
Zn	66	103	1	He	2.480	2.480	0.27	12302	0.02	10000	
As	75	103	1	He	0.842	0.842	1.75	2702	0.03	10000	
Se	78	103	1	He	0.493	0.493	20.22	424	0.12	10000	
Sr	88	103	1	He	178.700	178.700	1.50	3061517	0.01	10000	
Mo	95	103	1	He	46.469	46.469	1.89	296261	0.02	2000	
Ag	107	103	1	He	0.004	0.004	30.81	124	0.00	300	
Cd	111	103	1	He	0.145	0.145	6.23	4286	0.00	4000	
Sn	118	115	1	He	0.259	0.259	7.49	3482	0.01	2000	
Sb	123	115	1	He	3.258	3.258	0.66	25715	0.01	300	
Ba	137	115	1	He	84.973	84.973	0.73	310122	0.03	10000	
W	182	209	1	He	481.704	481.704	1.45	5897800	0.01	2500	
Tl	205	209	1	He	0.030	0.030	5.13	1056	0.00	5000	
Pb	208	209	1	He	0.124	0.124	6.25	6117	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4120552	1.67	4563898	90.29	30	120	
Sc	45	1	He	2307768	0.52	2572368	89.71	30	120	
Sc	45	2	NoGas	22799210	0.34	24609710	92.64	30	120	
Rh	103	1	He	4332816	0.73	4780241	90.64	30	120	
In	115	1	He	2936185	0.96	3171814	92.57	30	120	
Tb	159	1	He	5313159	0.91	5469932	97.13	30	120	
Ho	165	1	He	5238245	1.37	5294619	98.94	30	120	
Bi	209	1	He	3320582	0.71	3401163	97.63	30	120	

Sample Report

Sample Table

Sample Name	240-50629-a-4-a
Data File Name	106SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T16:12:08-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.065	0.065	23.29	1007	0.01	10000	
B	11	45	2	NoGas	91.606	91.606	0.66	592619	0.02	300	
Na	23	45	1	He	20806.175	20806.175	0.28	63422479	0.03	500000	
Mg	24	45	1	He	7921.449	7921.449	0.17	13806953	0.06	500000	
Al	27	45	1	He	3.826	3.826	3.83	5749	0.07	200000	
K	39	45	1	He	1516.976	1516.976	1.21	3826137	0.04	500000	
Ca	44	45	1	He	46757.107	46757.107	1.83	5114089	0.91	500000	
Ti	47	45	1	He	0.113	0.113	43.23	123	0.09	2500	
V	51	45	1	He	0.711	0.711	7.82	12957	0.01	10000	
Cr	52	45	1	He	2.081	2.081	1.75	44247	0.00	10000	
Mn	55	45	1	He	1.134	1.134	3.11	19411	0.01	10000	
Fe	56	45	1	He	2.788	2.788	3.14	69105	0.00	200000	
Co	59	103	1	He	0.341	0.341	5.06	8428	0.00	10000	
Ni	60	103	1	He	0.203	0.203	23.56	5801	0.00	10000	
Cu	63	103	1	He	0.941	0.941	1.23	21007	0.00	10000	
Zn	66	103	1	He	3.013	3.013	0.49	13794	0.02	10000	
As	75	103	1	He	0.756	0.756	6.08	2472	0.03	10000	
Se	78	103	1	He	0.421	0.421	21.30	406	0.10	10000	
Sr	88	103	1	He	112.493	112.493	2.20	1916477	0.01	10000	
Mo	95	103	1	He	39.668	39.668	1.08	251526	0.02	2000	
Ag	107	103	1	He	0.004	0.004	17.03	123	0.00	300	
Cd	111	103	1	He	0.158	0.158	16.47	4303	0.00	4000	
Sn	118	115	1	He	0.220	0.220	8.93	3230	0.01	2000	
Sb	123	115	1	He	1.067	1.067	4.43	8966	0.01	300	
Ba	137	115	1	He	72.733	72.733	0.60	270122	0.03	10000	
W	182	209	1	He	445.313	445.313	0.87	5387515	0.01	2500	
Tl	205	209	1	He	0.022	0.022	6.32	819	0.00	5000	
Pb	208	209	1	He	0.088	0.088	5.13	4615	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4086709	1.23	4563898	89.54	30	120	
Sc	45	1	He	2321213	0.55	2572368	90.24	30	120	
Sc	45	2	NoGas	22598120	0.46	24609710	91.83	30	120	
Rh	103	1	He	4308638	1.27	4780241	90.13	30	120	
In	115	1	He	2987470	1.13	3171814	94.19	30	120	
Tb	159	1	He	5367294	1.89	5469932	98.12	30	120	
Ho	165	1	He	5272601	2.10	5294619	99.58	30	120	
Bi	209	1	He	3280804	1.47	3401163	96.46	30	120	

Sample Report

Sample Table

Sample Name	240-50632-a-1-a
Data File Name	107SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T16:15:55-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.063	0.063	21.22	970	0.01	10000	
B	11	45	2	NoGas	77.665	77.665	0.75	503140	0.02	300	
Na	23	45	1	He	24036.278	24036.278	1.22	72395625	0.03	500000	
Mg	24	45	1	He	14040.928	14040.928	1.09	24182148	0.06	500000	
Al	27	45	1	He	1.417	1.417	13.36	3077	0.05	200000	
K	39	45	1	He	1139.681	1139.681	1.71	2902132	0.04	500000	
Ca	44	45	1	He	77404.216	77404.216	1.34	8364081	0.93	500000	
Ti	47	45	1	He	0.098	0.098	38.35	112	0.09	2500	
V	51	45	1	He	0.626	0.626	15.40	11506	0.01	10000	
Cr	52	45	1	He	2.103	2.103	1.75	44092	0.00	10000	
Mn	55	45	1	He	0.147	0.147	5.77	6849	0.00	10000	
Fe	56	45	1	He	4.596	4.596	1.58	95248	0.00	200000	
Co	59	103	1	He	0.162	0.162	1.92	4092	0.00	10000	
Ni	60	103	1	He	-0.037	-0.037	-90.24	4369	0.00	10000	
Cu	63	103	1	He	0.906	0.906	2.38	20180	0.00	10000	
Zn	66	103	1	He	26.662	26.662	1.46	81901	0.03	10000	
As	75	103	1	He	0.719	0.719	5.55	2345	0.03	10000	
Se	78	103	1	He	0.476	0.476	20.73	412	0.12	10000	
Sr	88	103	1	He	149.103	149.103	1.89	2503138	0.01	10000	
Mo	95	103	1	He	9.532	9.532	1.56	59737	0.02	2000	
Ag	107	103	1	He	0.002	0.002	19.57	86	0.00	300	
Cd	111	103	1	He	0.114	0.114	26.91	4108	0.00	4000	
Sn	118	115	1	He	0.151	0.151	8.27	2600	0.01	2000	
Sb	123	115	1	He	0.043	0.043	38.21	907	0.00	300	
Ba	137	115	1	He	124.395	124.395	1.35	448276	0.03	10000	
W	182	209	1	He	168.210	168.210	0.67	2006268	0.01	2500	
Tl	205	209	1	He	0.019	0.019	5.32	721	0.00	5000	
Pb	208	209	1	He	0.206	0.206	0.79	9133	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4054313	1.13	4563898	88.83	30	120	
Sc	45	1	He	2293841	1.04	2572368	89.17	30	120	
Sc	45	2	NoGas	22448121	0.75	24609710	91.22	30	120	
Rh	103	1	He	4245545	0.63	4780241	88.81	30	120	
In	115	1	He	2899638	1.16	3171814	91.42	30	120	
Tb	159	1	He	5237448	1.04	5469932	95.75	30	120	
Ho	165	1	He	5158070	0.65	5294619	97.42	30	120	
Bi	209	1	He	3226419	0.60	3401163	94.86	30	120	

Sample Report

Sample Table

Sample Name	240-50632-a-2-a
Data File Name	108SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T16:19:42-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.066	0.066	4.47	1026	0.01	10000	
B	11	45	2	NoGas	72.917	72.917	2.64	476533	0.02	300	
Na	23	45	1	He	20861.298	20861.298	0.73	62241485	0.03	500000	
Mg	24	45	1	He	9269.847	9269.847	1.62	15812477	0.06	500000	
Al	27	45	1	He	1.685	1.685	6.49	3334	0.05	200000	
K	39	45	1	He	1450.903	1450.903	1.75	3592217	0.04	500000	
Ca	44	45	1	He	54013.971	54013.971	1.58	5781749	0.93	500000	
Ti	47	45	1	He	0.103	0.103	35.22	114	0.09	2500	
V	51	45	1	He	0.685	0.685	6.14	12289	0.01	10000	
Cr	52	45	1	He	2.069	2.069	2.98	43110	0.00	10000	
Mn	55	45	1	He	0.534	0.534	4.71	11568	0.00	10000	
Fe	56	45	1	He	4.269	4.269	1.99	89497	0.00	200000	
Co	59	103	1	He	0.122	0.122	3.48	3173	0.00	10000	
Ni	60	103	1	He	0.083	0.083	39.35	5053	0.00	10000	
Cu	63	103	1	He	0.947	0.947	4.87	20823	0.00	10000	
Zn	66	103	1	He	6.877	6.877	3.46	24801	0.03	10000	
As	75	103	1	He	0.818	0.818	5.05	2592	0.03	10000	
Se	78	103	1	He	0.450	0.450	14.75	407	0.11	10000	
Sr	88	103	1	He	104.229	104.229	1.01	1753514	0.01	10000	
Mo	95	103	1	He	7.863	7.863	0.86	49424	0.02	2000	
Ag	107	103	1	He	0.003	0.003	35.70	108	0.00	300	
Cd	111	103	1	He	0.130	0.130	17.75	4164	0.00	4000	
Sn	118	115	1	He	0.142	0.142	12.77	2545	0.01	2000	
Sb	123	115	1	He	0.407	0.407	1.52	3706	0.01	300	
Ba	137	115	1	He	100.128	100.128	0.67	363836	0.03	10000	
W	182	209	1	He	31.035	31.035	0.57	383839	0.01	2500	
Tl	205	209	1	He	0.014	0.014	10.88	559	0.00	5000	
Pb	208	209	1	He	0.125	0.125	0.59	6109	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4100349	1.68	4563898	89.84	30	120	
Sc	45	1	He	2272057	1.44	2572368	88.33	30	120	
Sc	45	2	NoGas	22574699	1.83	24609710	91.73	30	120	
Rh	103	1	He	4254295	1.32	4780241	89.00	30	120	
In	115	1	He	2923427	0.67	3171814	92.17	30	120	
Tb	159	1	He	5322657	0.44	5469932	97.31	30	120	
Ho	165	1	He	5192976	0.73	5294619	98.08	30	120	
Bi	209	1	He	3288492	1.48	3401163	96.69	30	120	

Sample Report

Sample Table

Sample Name	240-50633-a-1-a
Data File Name	109SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T16:23:30-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.036	0.036	24.63	670	0.01	10000	
B	11	45	2	NoGas	69.480	69.480	8.47	471429	0.01	300	
Na	23	45	1	He	27676.730	27676.730	7.38	79948538	0.03	500000	
Mg	24	45	1	He	13517.054	13517.054	8.48	22315628	0.06	500000	
Al	27	45	1	He	1.230	1.230	28.80	2749	0.04	200000	
K	39	45	1	He	1519.081	1519.081	8.90	3629201	0.04	500000	
Ca	44	45	1	He	75994.973	75994.973	8.06	7873540	0.97	500000	
Ti	47	45	1	He	0.172	0.172	9.54	152	0.11	2500	
V	51	45	1	He	0.682	0.682	26.21	11775	0.01	10000	
Cr	52	45	1	He	2.049	2.049	10.80	41403	0.00	10000	
Mn	55	45	1	He	-0.207	-0.207	-7.03	2320	-0.01	10000	
Fe	56	45	1	He	1.156	1.156	23.30	42127	0.00	200000	
Co	59	103	1	He	0.100	0.100	10.99	2564	0.00	10000	
Ni	60	103	1	He	0.246	0.246	20.55	5812	0.00	10000	
Cu	63	103	1	He	1.732	1.732	8.59	31726	0.01	10000	
Zn	66	103	1	He	2.379	2.379	6.20	11467	0.02	10000	
As	75	103	1	He	0.701	0.701	9.04	2241	0.03	10000	
Se	78	103	1	He	0.389	0.389	34.99	383	0.10	10000	
Sr	88	103	1	He	191.657	191.657	8.04	3130686	0.01	10000	
Mo	95	103	1	He	3.742	3.742	9.37	22946	0.02	2000	
Ag	107	103	1	He	0.002	0.002	106.70	79	0.00	300	
Cd	111	103	1	He	0.115	0.115	35.00	4018	0.00	4000	
Sn	118	115	1	He	0.099	0.099	12.04	2159	0.00	2000	
Sb	123	115	1	He	0.021	0.021	81.99	724	0.00	300	
Ba	137	115	1	He	141.541	141.541	7.51	501133	0.03	10000	
W	182	209	1	He	16.079	16.079	6.80	197585	0.01	2500	
Tl	205	209	1	He	0.012	0.012	24.59	493	0.00	5000	
Pb	208	209	1	He	0.126	0.126	8.72	5961	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4198823	4.60	4563898	92.00	30	120	
Sc	45	1	He	2208120	7.58	2572368	85.84	30	120	
Sc	45	2	NoGas	23471374	8.48	24609710	95.37	30	120	
Rh	103	1	He	4146723	7.16	4780241	86.75	30	120	
In	115	1	He	2857794	6.42	3171814	90.10	30	120	
Tb	159	1	He	5239143	7.49	5469932	95.78	30	120	
Ho	165	1	He	5117715	7.16	5294619	96.66	30	120	
Bi	209	1	He	3213744	6.40	3401163	94.49	30	120	

Sample Report

Sample Table

Sample Name	240-50633-a-3-a
Data File Name	110SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T16:27:19-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.039	0.039	31.18	678	0.01	10000	
B	11	45	2	NoGas	70.796	70.796	1.31	456252	0.02	300	
Na	23	45	1	He	28575.942	28575.942	15.05	79252626	0.04	500000	
Mg	24	45	1	He	14132.164	14132.164	13.85	22435412	0.06	500000	
Al	27	45	1	He	1.246	1.246	19.71	2677	0.05	200000	
K	39	45	1	He	1549.379	1549.379	15.36	3553081	0.04	500000	
Ca	44	45	1	He	79546.039	79546.039	14.28	7920544	1.00	500000	
Ti	47	45	1	He	0.169	0.169	39.97	143	0.12	2500	
V	51	45	1	He	0.700	0.700	12.94	11691	0.01	10000	
Cr	52	45	1	He	2.175	2.175	18.49	41708	0.01	10000	
Mn	55	45	1	He	0.904	0.904	24.11	14993	0.01	10000	
Fe	56	45	1	He	1.531	1.531	34.10	45601	0.00	200000	
Co	59	103	1	He	0.104	0.104	15.21	2544	0.00	10000	
Ni	60	103	1	He	0.339	0.339	53.44	6003	0.01	10000	
Cu	63	103	1	He	1.782	1.782	18.76	30867	0.01	10000	
Zn	66	103	1	He	3.767	3.767	22.05	14601	0.03	10000	
As	75	103	1	He	0.701	0.701	17.73	2135	0.03	10000	
Se	78	103	1	He	0.457	0.457	51.77	378	0.12	10000	
Sr	88	103	1	He	198.562	198.562	15.07	3086299	0.01	10000	
Mo	95	103	1	He	3.961	3.961	17.55	23060	0.02	2000	
Ag	107	103	1	He	0.003	0.003	15.05	99	0.00	300	
Cd	111	103	1	He	0.104	0.104	18.77	3828	0.00	4000	
Sn	118	115	1	He	0.158	0.158	29.97	2471	0.01	2000	
Sb	123	115	1	He	0.026	0.026	100.14	712	0.00	300	
Ba	137	115	1	He	151.887	151.887	14.93	510349	0.03	10000	
W	182	209	1	He	16.505	16.505	12.91	195083	0.01	2500	
Tl	205	209	1	He	0.010	0.010	3.84	429	0.00	5000	
Pb	208	209	1	He	0.135	0.135	15.82	6093	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4050009	0.83	4563898	88.74	30	120	
Sc	45	1	He	2138837	12.45	2572368	83.15	30	120	
Sc	45	2	NoGas	22217277	0.94	24609710	90.28	30	120	
Rh	103	1	He	3988577	14.43	4780241	83.44	30	120	
In	115	1	He	2739815	13.34	3171814	86.38	30	120	
Tb	159	1	He	5012215	14.53	5469932	91.63	30	120	
Ho	165	1	He	4951734	14.75	5294619	93.52	30	120	
Bi	209	1	He	3116464	11.90	3401163	91.63	30	120	

Sample Report

Sample Table

Sample Name	240-50652-i-2-a
Data File Name	111SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T16:31:09-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.193	0.193	6.64	2437	0.01	10000	
B	11	45	2	NoGas	161.326	161.326	1.62	1004470	0.02	300	
Na	23	45	1	He	5095.645	5095.645	0.78	15007402	0.03	500000	
Mg	24	45	1	He	83842.871	83842.871	0.49	141005820	0.06	500000	
Al	27	45	1	He	37.332	37.332	1.10	40909	0.09	200000	
K	39	45	1	He	4053.961	4053.961	0.23	9461978	0.04	500000	
Ca	44	45	1	He	565903.419	565903.419	1.41	59687459	0.95	500000	>LDR
Ti	47	45	1	He	0.507	0.507	15.01	359	0.14	2500	
V	51	45	1	He	0.797	0.797	11.30	13787	0.01	10000	
Cr	52	45	1	He	1.967	1.967	1.24	40863	0.00	10000	
Mn	55	45	1	He	8927.856	8927.856	1.59	108900431	0.01	10000	
Fe	56	45	1	He	48515.087	48515.087	1.36	706134692	0.01	200000	
Co	59	103	1	He	135.742	135.742	1.67	2981582	0.00	10000	
Ni	60	103	1	He	129.803	129.803	1.35	684818	0.02	10000	
Cu	63	103	1	He	0.426	0.426	10.59	12089	0.00	10000	
Zn	66	103	1	He	37.564	37.564	0.14	105742	0.04	10000	
As	75	103	1	He	4.554	4.554	1.53	10924	0.04	10000	
Se	78	103	1	He	0.984	0.984	13.97	486	0.20	10000	
Sr	88	103	1	He	1618.193	1618.193	1.14	25328055	0.01	10000	
Mo	95	103	1	He	0.242	0.242	6.22	1631	0.01	2000	
Ag	107	103	1	He	0.008	0.008	43.14	173	0.00	300	
Cd	111	103	1	He	0.197	0.197	2.27	4065	0.00	4000	
Sn	118	115	1	He	0.099	0.099	26.34	2093	0.00	2000	
Sb	123	115	1	He	0.096	0.096	14.68	1248	0.01	300	
Ba	137	115	1	He	9.569	9.569	2.95	33063	0.03	10000	
W	182	209	1	He	0.733	0.733	29.79	15393	0.00	2500	
Tl	205	209	1	He	0.023	0.023	14.10	771	0.00	5000	
Pb	208	209	1	He	0.218	0.218	2.02	8912	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3853107	0.22	4563898	84.43	30	120	
Sc	45	1	He	2239906	2.05	2572368	87.08	30	120	
Sc	45	2	NoGas	22181810	0.82	24609710	90.13	30	120	
Rh	103	1	He	3958900	0.32	4780241	82.82	30	120	
In	115	1	He	2773202	1.06	3171814	87.43	30	120	
Tb	159	1	He	5022646	0.94	5469932	91.82	30	120	
Ho	165	1	He	4874913	0.39	5294619	92.07	30	120	
Bi	209	1	He	2996378	1.11	3401163	88.10	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2004624
Data File Name	112_CCV.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T16:34:51-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	49.972	2.221	604889	1.09	50	99.9	89.5	110.5	
B	11	45	2	NoGas	97.008	0.890	644549	0.56	50	194.0	89.5	110.5	CCV Failed
Na	23	45	1	He	24819.846	0.440	76836740	0.34	25000	99.3	89.5	110.5	
Mg	24	45	1	He	24860.937	1.640	44006206	1.17	25000	99.4	89.5	110.5	
Al	27	45	1	He	243.684	1.616	272289	1.13	250	97.5	89.5	110.5	
K	39	45	1	He	24863.235	1.378	59765948	0.82	25000	99.5	89.5	110.5	
Ca	44	45	1	He	25814.348	2.007	2869052	1.37	25000	103.3	89.5	110.5	
Ti	47	45	1	He	48.624	1.303	31222	0.79	50	97.2	89.5	110.5	
V	51	45	1	He	48.092	2.441	751721	1.81	50	96.2	89.5	110.5	
Cr	52	45	1	He	48.473	1.642	830383	0.94	50	96.9	89.5	110.5	
Mn	55	45	1	He	256.336	1.994	3296397	1.34	250	102.5	89.5	110.5	
Fe	56	45	1	He	12543.347	0.751	192208446	0.15	12500	100.3	89.5	110.5	
Co	59	103	1	He	45.674	1.332	1091289	0.82	50	91.3	89.5	110.5	
Ni	60	103	1	He	47.391	2.321	274879	2.04	50	94.8	89.5	110.5	
Cu	63	103	1	He	45.718	1.247	703234	0.90	50	91.4	89.5	110.5	
Zn	66	103	1	He	48.103	1.201	145881	0.69	50	96.2	89.5	110.5	
As	75	103	1	He	49.125	0.912	122328	0.79	50	98.2	89.5	110.5	
Se	78	103	1	He	48.348	2.190	10902	1.45	50	96.7	89.5	110.5	
Sr	88	103	1	He	46.891	1.105	798767	0.55	50	93.8	89.5	110.5	
Mo	95	103	1	He	51.179	1.399	324257	0.90	50	102.4	89.5	110.5	
Ag	107	103	1	He	46.534	1.330	864363	0.89	50	93.1	89.5	110.5	
Cd	111	103	1	He	49.161	0.794	155826	0.95	50	98.3	89.5	110.5	
Sn	118	115	1	He	56.003	0.115	448786	0.31	50	112.0	89.5	110.5	CCV Failed
Sb	123	115	1	He	51.954	0.871	406062	0.63	50	103.9	89.5	110.5	
Ba	137	115	1	He	51.482	1.492	190135	1.39	50	103.0	89.5	110.5	
W	182	209	1	He	49.800	2.947	603851	2.89	50	99.6	89.5	110.5	
Tl	205	209	1	He	45.238	1.279	1334024	1.14	50	90.5	89.5	110.5	
Pb	208	209	1	He	47.000	0.924	1848651	0.96	50	94.0	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4010861	1.16	4563898	87.88	30	120	
Sc	45	1	He	2357580	0.69	2572368	91.65	30	120	
Sc	45	2	NoGas	23267915	0.29	24609710	94.55	30	120	
Rh	103	1	He	4305947	0.67	4780241	90.08	30	120	
In	115	1	He	2970570	0.38	3171814	93.66	30	120	
Tb	159	1	He	5279382	0.07	5469932	96.52	30	120	
Ho	165	1	He	5174281	0.64	5294619	97.73	30	120	
Bi	209	1	He	3249704	0.24	3401163	95.55	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	113_CCB.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T16:38:38-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.032	19.4	633	11.5	1	
B	11	45	2	NoGas	43.754	2.8	315828	0.2	20	CCB Failed
Na	23	45	1	He	53.398	4.5	197502	3.3	400	
Mg	24	45	1	He	2.159	11.9	5075	8.4	1000	
Al	27	45	1	He	0.529	30.3	2240	8.1	50	
K	39	45	1	He	-8.285	-8.5	242092	0.7	1000	
Ca	44	45	1	He	31.640	5.7	6868	2.3	1000	
Ti	47	45	1	He	0.012	126.1	62	16.4	20	
V	51	45	1	He	0.073	52.1	3307	19.2	2	
Cr	52	45	1	He	0.075	18.0	11297	3.0	2	
Mn	55	45	1	He	0.558	0.4	12672	1.1	2	
Fe	56	45	1	He	7.589	20.9	148066	17.5	50	
Co	59	103	1	He	0.004	37.5	407	9.5	1	
Ni	60	103	1	He	-0.715	-1.5	607	10.5	2	
Cu	63	103	1	He	0.051	67.3	7911	5.6	2	
Zn	66	103	1	He	1.442	10.8	9776	5.0	20	
As	75	103	1	He	0.169	27.5	1081	10.9	2	
Se	78	103	1	He	0.401	7.0	427	2.5	2	
Sr	88	103	1	He	0.028	5.8	1070	1.4	10	
Mo	95	103	1	He	0.259	39.2	2002	33.5	2	
Ag	107	103	1	He	0.004	18.7	126	11.1	0.2	
Cd	111	103	1	He	0.117	25.7	4445	3.5	0.2	
Sn	118	115	1	He	0.274	21.6	3834	12.9	10	
Sb	123	115	1	He	0.140	9.8	1776	6.6	1	
Ba	137	115	1	He	0.012	51.3	152	16.1	5	
W	182	209	1	He	0.768	27.8	17770	13.7	10	
Tl	205	209	1	He	0.072	9.5	2372	8.1	0.5	
Pb	208	209	1	He	0.051	7.2	3226	5.4	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4311162	1.71	4563898	94.46	30	120	
Sc	45	1	He	2426670	0.90	2572368	94.34	30	120	
Sc	45	2	NoGas	24040940	2.66	24609710	97.69	30	120	
Rh	103	1	He	4583384	1.55	4780241	95.88	30	120	
In	115	1	He	3128057	0.26	3171814	98.62	30	120	
Tb	159	1	He	5328882	1.45	5469932	97.42	30	120	
Ho	165	1	He	5267778	0.90	5294619	99.49	30	120	
Bi	209	1	He	3374494	1.39	3401163	99.22	30	120	

Sample Report

Sample Table

Sample Name	240-50652-e-3-a
Data File Name	114SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T16:42:30-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.037	0.037	19.80	663	0.01	10000	
B	11	45	2	NoGas	74.608	74.608	0.94	482877	0.02	300	
Na	23	45	1	He	785.488	785.488	0.71	2332915	0.03	500000	
Mg	24	45	1	He	8.111	8.111	3.33	14680	0.06	500000	
Al	27	45	1	He	13.371	13.371	1.01	15608	0.09	200000	
K	39	45	1	He	44.819	44.819	3.75	343931	0.01	500000	
Ca	44	45	1	He	22.335	22.335	6.02	5354	0.42	500000	
Ti	47	45	1	He	0.281	0.281	21.59	221	0.13	2500	
V	51	45	1	He	0.780	0.780	4.49	13509	0.01	10000	
Cr	52	45	1	He	2.104	2.104	4.98	43025	0.00	10000	
Mn	55	45	1	He	0.156	0.156	7.18	6787	0.00	10000	
Fe	56	45	1	He	8.152	8.152	12.65	144696	0.01	200000	
Co	59	103	1	He	0.023	0.023	24.10	849	0.00	10000	
Ni	60	103	1	He	-0.006	-0.006	-795.69	4655	0.00	10000	
Cu	63	103	1	He	0.970	0.970	3.40	21654	0.00	10000	
Zn	66	103	1	He	1.332	1.332	8.71	8948	0.01	10000	
As	75	103	1	He	0.283	0.283	11.95	1311	0.02	10000	
Se	78	103	1	He	0.274	0.274	24.08	377	0.07	10000	
Sr	88	103	1	He	0.334	0.334	4.34	6281	0.01	10000	
Mo	95	103	1	He	0.085	0.085	38.00	787	0.01	2000	
Ag	107	103	1	He	0.045	0.045	3.87	884	0.01	300	
Cd	111	103	1	He	0.105	0.105	28.37	4175	0.00	4000	
Sn	118	115	1	He	0.348	0.348	15.39	4190	0.01	2000	
Sb	123	115	1	He	0.197	0.197	21.80	2107	0.01	300	
Ba	137	115	1	He	0.113	0.113	1.60	512	0.02	10000	
W	182	209	1	He	0.416	0.416	45.45	13302	0.00	2500	
Tl	205	209	1	He	0.047	0.047	7.79	1597	0.00	5000	
Pb	208	209	1	He	0.081	0.081	5.72	4436	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4109936	1.06	4563898	90.05	30	120	
Sc	45	1	He	2238055	0.91	2572368	87.00	30	120	
Sc	45	2	NoGas	22379571	1.02	24609710	90.94	30	120	
Rh	103	1	He	4347186	0.99	4780241	90.94	30	120	
In	115	1	He	2939091	0.46	3171814	92.66	30	120	
Tb	159	1	He	5208862	0.90	5469932	95.23	30	120	
Ho	165	1	He	5126897	0.93	5294619	96.83	30	120	
Bi	209	1	He	3351822	1.84	3401163	98.55	30	120	

Sample Report

Sample Table

Sample Name	240-50652-i-4-a
Data File Name	115SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T16:46:20-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.026	0.026	36.30	522	0.01	10000	
B	11	45	2	NoGas	71.913	71.913	0.33	458833	0.02	300	
Na	23	45	1	He	1047.730	1047.730	1.79	3141791	0.03	500000	
Mg	24	45	1	He	56.324	56.324	1.75	96894	0.06	500000	
Al	27	45	1	He	7.552	7.552	3.36	9592	0.08	200000	
K	39	45	1	He	119.589	119.589	3.46	520206	0.02	500000	
Ca	44	45	1	He	306.199	306.199	2.09	35712	0.86	500000	
Ti	47	45	1	He	0.078	0.078	10.08	99	0.08	2500	
V	51	45	1	He	0.722	0.722	9.81	12811	0.01	10000	
Cr	52	45	1	He	1.930	1.930	2.79	40738	0.00	10000	
Mn	55	45	1	He	4.347	4.347	0.39	58603	0.01	10000	
Fe	56	45	1	He	9.211	9.211	3.91	162022	0.01	200000	
Co	59	103	1	He	0.036	0.036	4.45	1163	0.00	10000	
Ni	60	103	1	He	-0.018	-0.018	-138.06	4646	0.00	10000	
Cu	63	103	1	He	1.181	1.181	5.80	25208	0.00	10000	
Zn	66	103	1	He	2.590	2.590	2.68	12840	0.02	10000	
As	75	103	1	He	0.276	0.276	7.91	1311	0.02	10000	
Se	78	103	1	He	0.193	0.193	47.17	364	0.05	10000	
Sr	88	103	1	He	1.187	1.187	2.39	21215	0.01	10000	
Mo	95	103	1	He	0.049	0.049	18.28	564	0.01	2000	
Ag	107	103	1	He	0.008	0.008	22.85	208	0.00	300	
Cd	111	103	1	He	0.098	0.098	36.06	4212	0.00	4000	
Sn	118	115	1	He	0.140	0.140	6.82	2597	0.01	2000	
Sb	123	115	1	He	0.163	0.163	15.38	1885	0.01	300	
Ba	137	115	1	He	0.452	0.452	5.88	1785	0.03	10000	
W	182	209	1	He	0.178	0.178	47.29	10545	0.00	2500	
Tl	205	209	1	He	0.017	0.017	4.14	684	0.00	5000	
Pb	208	209	1	He	0.139	0.139	1.92	6867	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4029353	1.07	4563898	88.29	30	120	
Sc	45	1	He	2265946	0.78	2572368	88.09	30	120	
Sc	45	2	NoGas	22016494	1.47	24609710	89.46	30	120	
Rh	103	1	He	4406056	1.88	4780241	92.17	30	120	
In	115	1	He	3000690	1.53	3171814	94.60	30	120	
Tb	159	1	He	5309270	0.39	5469932	97.06	30	120	
Ho	165	1	He	5184296	0.94	5294619	97.92	30	120	
Bi	209	1	He	3398441	0.98	3401163	99.92	30	120	

Sample Report

Sample Table

Sample Name	240-50652-i-5-a
Data File Name	116SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T16:50:08-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.061	0.061	33.27	933	0.01	10000	
B	11	45	2	NoGas	74.056	74.056	2.07	477119	0.02	300	
Na	23	45	1	He	7119.391	7119.391	0.91	20717512	0.03	500000	
Mg	24	45	1	He	30680.294	30680.294	1.17	51004983	0.06	500000	
Al	27	45	1	He	11.924	11.924	2.42	13933	0.09	200000	
K	39	45	1	He	2177.949	2177.949	0.51	5135766	0.04	500000	
Ca	44	45	1	He	363046.338	363046.338	0.47	37860194	0.96	500000	
Ti	47	45	1	He	0.447	0.447	10.98	319	0.14	2500	
V	51	45	1	He	1.032	1.032	7.19	17075	0.01	10000	
Cr	52	45	1	He	1.920	1.920	0.89	39652	0.00	10000	
Mn	55	45	1	He	1653.301	1653.301	0.47	19944734	0.01	10000	
Fe	56	45	1	He	1011.818	1011.818	0.46	14586575	0.01	200000	
Co	59	103	1	He	1.017	1.017	2.19	22996	0.00	10000	
Ni	60	103	1	He	0.494	0.494	7.86	6985	0.01	10000	
Cu	63	103	1	He	0.393	0.393	9.95	11844	0.00	10000	
Zn	66	103	1	He	1.067	1.067	7.90	7568	0.01	10000	
As	75	103	1	He	5.204	5.204	0.93	12627	0.04	10000	
Se	78	103	1	He	0.624	0.624	17.10	421	0.15	10000	
Sr	88	103	1	He	603.173	603.173	1.28	9609971	0.01	10000	
Mo	95	103	1	He	0.501	0.501	5.99	3198	0.02	2000	
Ag	107	103	1	He	0.003	0.003	64.26	94	0.00	300	
Cd	111	103	1	He	0.147	0.147	10.92	3994	0.00	4000	
Sn	118	115	1	He	0.102	0.102	13.98	2130	0.00	2000	
Sb	123	115	1	He	0.200	0.200	6.78	2019	0.01	300	
Ba	137	115	1	He	24.091	24.091	0.44	83555	0.03	10000	
W	182	209	1	He	0.196	0.196	29.46	9722	0.00	2500	
Tl	205	209	1	He	0.017	0.017	8.21	622	0.00	5000	
Pb	208	209	1	He	0.405	0.405	1.47	16062	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3954044	1.21	4563898	86.64	30	120	
Sc	45	1	He	2214278	1.17	2572368	86.08	30	120	
Sc	45	2	NoGas	22270761	1.48	24609710	90.50	30	120	
Rh	103	1	He	4029755	0.52	4780241	84.30	30	120	
In	115	1	He	2787938	0.59	3171814	87.90	30	120	
Tb	159	1	He	5044953	1.01	5469932	92.23	30	120	
Ho	165	1	He	4959725	0.11	5294619	93.67	30	120	
Bi	209	1	He	3069048	1.05	3401163	90.24	30	120	

Sample Report

Sample Table

Sample Name	240-50652-h-6-a
Data File Name	117SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T16:53:59-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.289	0.289	9.95	3582	0.01	10000	
B	11	45	2	NoGas	135.626	135.626	1.47	852551	0.02	300	
Na	23	45	1	He	13356.149	13356.149	1.29	38754323	0.03	500000	
Mg	24	45	1	He	91449.765	91449.765	0.80	151681527	0.06	500000	
Al	27	45	1	He	164.358	164.358	0.81	172577	0.10	200000	
K	39	45	1	He	5841.261	5841.261	1.99	13340464	0.04	500000	
Ca	44	45	1	He	441656.367	441656.367	0.94	45950739	0.96	500000	
Ti	47	45	1	He	5.944	5.944	4.36	3619	0.16	2500	
V	51	45	1	He	1.130	1.130	1.61	18458	0.01	10000	
Cr	52	45	1	He	2.381	2.381	1.44	46863	0.01	10000	
Mn	55	45	1	He	35161.198	35161.198	1.09	423043121	0.01	10000	>LDR
Fe	56	45	1	He	157.119	157.119	0.86	2281485	0.01	200000	
Co	59	103	1	He	87.137	87.137	1.63	1892930	0.00	10000	
Ni	60	103	1	He	185.005	185.005	1.43	963506	0.02	10000	
Cu	63	103	1	He	2.017	2.017	0.58	34004	0.01	10000	
Zn	66	103	1	He	51.231	51.231	1.27	140989	0.04	10000	
As	75	103	1	He	1.502	1.502	3.13	3929	0.04	10000	
Se	78	103	1	He	0.909	0.909	4.65	466	0.20	10000	
Sr	88	103	1	He	704.394	704.394	1.56	10904529	0.01	10000	
Mo	95	103	1	He	0.058	0.058	10.88	553	0.01	2000	
Ag	107	103	1	He	0.006	0.006	21.27	138	0.00	300	
Cd	111	103	1	He	1.783	1.783	5.58	8479	0.02	4000	
Sn	118	115	1	He	0.132	0.132	22.11	2308	0.01	2000	
Sb	123	115	1	He	0.102	0.102	16.11	1277	0.01	300	
Ba	137	115	1	He	13.883	13.883	0.88	47200	0.03	10000	
W	182	209	1	He	0.174	0.174	37.24	9136	0.00	2500	
Tl	205	209	1	He	0.041	0.041	11.57	1239	0.00	5000	
Pb	208	209	1	He	0.199	0.199	1.40	8146	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3892217	1.34	4563898	85.28	30	120	
Sc	45	1	He	2209121	0.84	2572368	85.88	30	120	
Sc	45	2	NoGas	22284517	0.71	24609710	90.55	30	120	
Rh	103	1	He	3915825	1.35	4780241	81.92	30	120	
In	115	1	He	2730678	0.72	3171814	86.09	30	120	
Tb	159	1	He	4894066	1.12	5469932	89.47	30	120	
Ho	165	1	He	4775616	0.80	5294619	90.20	30	120	
Bi	209	1	He	2961431	0.45	3401163	87.07	30	120	

Sample Report

Sample Table

Sample Name	240-50652-i-7-a
Data File Name	118SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T16:57:45-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.043	0.043	10.99	693	0.01	10000	
B	11	45	2	NoGas	146.580	146.580	1.03	922402	0.02	300	
Na	23	45	1	He	13206.463	13206.463	0.28	38599856	0.03	500000	
Mg	24	45	1	He	78918.396	78918.396	1.45	131853617	0.06	500000	
Al	27	45	1	He	6.361	6.361	4.86	8170	0.08	200000	
K	39	45	1	He	4255.041	4255.041	0.44	9853808	0.04	500000	
Ca	44	45	1	He	429144.931	429144.931	0.97	44975209	0.95	500000	
Ti	47	45	1	He	0.395	0.395	16.11	289	0.14	2500	
V	51	45	1	He	0.702	0.702	3.26	12291	0.01	10000	
Cr	52	45	1	He	1.735	1.735	1.28	36884	0.00	10000	
Mn	55	45	1	He	289.071	289.071	0.61	3508285	0.01	10000	
Fe	56	45	1	He	2693.894	2693.894	1.18	38984020	0.01	200000	
Co	59	103	1	He	0.441	0.441	4.01	9833	0.00	10000	
Ni	60	103	1	He	0.789	0.789	5.34	8310	0.01	10000	
Cu	63	103	1	He	0.340	0.340	7.91	10761	0.00	10000	
Zn	66	103	1	He	10.182	10.182	0.51	31631	0.03	10000	
As	75	103	1	He	1.532	1.532	2.79	3994	0.04	10000	
Se	78	103	1	He	0.602	0.602	1.22	405	0.15	10000	
Sr	88	103	1	He	2743.517	2743.517	0.60	42462973	0.01	10000	
Mo	95	103	1	He	0.053	0.053	18.21	522	0.01	2000	
Ag	107	103	1	He	0.007	0.007	36.22	170	0.00	300	
Cd	111	103	1	He	0.158	0.158	16.75	3910	0.00	4000	
Sn	118	115	1	He	0.059	0.059	54.92	1767	0.00	2000	
Sb	123	115	1	He	0.083	0.083	13.15	1135	0.01	300	
Ba	137	115	1	He	15.827	15.827	0.28	53698	0.03	10000	
W	182	209	1	He	0.119	0.119	72.99	8328	0.00	2500	
Tl	205	209	1	He	0.010	0.010	29.22	399	0.00	5000	
Pb	208	209	1	He	0.252	0.252	5.87	9804	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3835670	0.73	4563898	84.04	30	120	
Sc	45	1	He	2225147	0.41	2572368	86.50	30	120	
Sc	45	2	NoGas	22359683	0.30	24609710	90.86	30	120	
Rh	103	1	He	3915011	1.98	4780241	81.90	30	120	
In	115	1	He	2725621	1.32	3171814	85.93	30	120	
Tb	159	1	He	4874380	0.62	5469932	89.11	30	120	
Ho	165	1	He	4759495	2.04	5294619	89.89	30	120	
Bi	209	1	He	2892016	2.04	3401163	85.03	30	120	

Sample Report

Sample Table

Sample Name	240-50652-i-8-a
Data File Name	119SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T17:01:31-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.181	0.181	9.15	2400	0.01	10000	
B	11	45	2	NoGas	212.979	212.979	0.51	1378972	0.02	300	
Na	23	45	1	He	32532.772	32532.772	1.05	98033426	0.03	500000	
Mg	24	45	1	He	53413.730	53413.730	1.53	92039813	0.06	500000	
Al	27	45	1	He	94.656	94.656	1.48	103911	0.09	200000	
K	39	45	1	He	14223.227	14223.227	1.98	33389155	0.04	500000	
Ca	44	45	1	He	244696.696	244696.696	0.53	26450388	0.93	500000	
Ti	47	45	1	He	1.198	1.198	12.41	799	0.15	2500	
V	51	45	1	He	0.774	0.774	8.29	13768	0.01	10000	
Cr	52	45	1	He	2.422	2.422	2.57	49366	0.00	10000	
Mn	55	45	1	He	11255.421	11255.421	2.87	140689039	0.01	10000	>LDR
Fe	56	45	1	He	69950.542	69950.542	1.60	1043327745	0.01	200000	
Co	59	103	1	He	40.770	40.770	0.90	924733	0.00	10000	
Ni	60	103	1	He	50.531	50.531	1.21	277925	0.02	10000	
Cu	63	103	1	He	0.453	0.453	10.99	12878	0.00	10000	
Zn	66	103	1	He	33.857	33.857	0.69	98862	0.03	10000	
As	75	103	1	He	18.441	18.441	0.56	43945	0.04	10000	
Se	78	103	1	He	0.666	0.666	20.74	436	0.15	10000	
Sr	88	103	1	He	2078.054	2078.054	0.87	33580682	0.01	10000	
Mo	95	103	1	He	0.691	0.691	5.60	4383	0.02	2000	
Ag	107	103	1	He	0.008	0.008	16.46	180	0.00	300	
Cd	111	103	1	He	0.181	0.181	10.66	4150	0.00	4000	
Sn	118	115	1	He	0.097	0.097	24.54	2126	0.00	2000	
Sb	123	115	1	He	0.073	0.073	25.60	1106	0.01	300	
Ba	137	115	1	He	15.544	15.544	1.45	54873	0.03	10000	
W	182	209	1	He	0.193	0.193	54.60	9622	0.00	2500	
Tl	205	209	1	He	0.042	0.042	8.24	1297	0.00	5000	
Pb	208	209	1	He	0.158	0.158	2.67	6861	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4019500	0.42	4563898	88.07	30	120	
Sc	45	1	He	2295031	0.38	2572368	89.22	30	120	
Sc	45	2	NoGas	23213028	0.60	24609710	94.32	30	120	
Rh	103	1	He	4087440	0.90	4780241	85.51	30	120	
In	115	1	He	2836573	2.27	3171814	89.43	30	120	
Tb	159	1	He	5041876	0.32	5469932	92.17	30	120	
Ho	165	1	He	4934022	0.22	5294619	93.19	30	120	
Bi	209	1	He	3051686	0.95	3401163	89.72	30	120	

Sample Report

Sample Table

Sample Name	240-50652-i-9-a
Data File Name	120SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T17:05:17-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	5.281	5.281	1.02	67452	0.01	10000	
B	11	45	2	NoGas	133.046	133.046	0.45	897158	0.01	300	
Na	23	45	1	He	9966.391	9966.391	1.49	31180067	0.03	500000	
Mg	24	45	1	He	44902.618	44902.618	2.26	80275680	0.06	500000	
Al	27	45	1	He	9422.780	9422.780	1.69	10574299	0.09	200000	
K	39	45	1	He	12233.188	12233.188	1.84	29832019	0.04	500000	
Ca	44	45	1	He	156482.259	156482.259	1.43	17552193	0.89	500000	
Ti	47	45	1	He	89.180	89.180	10.53	57741	0.15	2500	
V	51	45	1	He	4.917	4.917	3.77	79544	0.01	10000	
Cr	52	45	1	He	6.398	6.398	2.35	119213	0.01	10000	
Mn	55	45	1	He	15463.947	15463.947	1.65	200559370	0.01	10000	>LDR
Fe	56	45	1	He	36629.829	36629.829	3.00	566789044	0.01	200000	
Co	59	103	1	He	166.588	166.588	0.87	3876684	0.00	10000	
Ni	60	103	1	He	282.477	282.477	0.88	1573638	0.02	10000	
Cu	63	103	1	He	17.851	17.851	1.05	271440	0.01	10000	
Zn	66	103	1	He	557.112	557.112	0.80	1594750	0.03	10000	
As	75	103	1	He	5.428	5.428	0.19	13685	0.04	10000	
Se	78	103	1	He	2.809	2.809	9.55	904	0.31	10000	
Sr	88	103	1	He	226.099	226.099	0.92	3749989	0.01	10000	
Mo	95	103	1	He	0.201	0.201	10.94	1478	0.01	2000	
Ag	107	103	1	He	0.027	0.027	9.48	536	0.01	300	
Cd	111	103	1	He	2.124	2.124	2.34	10110	0.02	4000	
Sn	118	115	1	He	0.369	0.369	6.45	4279	0.01	2000	
Sb	123	115	1	He	0.206	0.206	1.65	2137	0.01	300	
Ba	137	115	1	He	55.981	55.981	1.58	201040	0.03	10000	
W	182	209	1	He	0.119	0.119	63.30	9211	0.00	2500	
Tl	205	209	1	He	0.316	0.316	1.84	9303	0.00	5000	
Pb	208	209	1	He	5.028	5.028	0.29	195484	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4219683	1.05	4563898	92.46	30	120	
Sc	45	1	He	2381615	1.75	2572368	92.58	30	120	
Sc	45	2	NoGas	23890306	0.45	24609710	97.08	30	120	
Rh	103	1	He	4194498	0.26	4780241	87.75	30	120	
In	115	1	He	2888893	1.15	3171814	91.08	30	120	
Tb	159	1	He	5151904	0.50	5469932	94.19	30	120	
Ho	165	1	He	5057506	0.75	5294619	95.52	30	120	
Bi	209	1	He	3196416	0.56	3401163	93.98	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-180824/1-a@10
Data File Name	121_Blk.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T17:09:01-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.031	17.0	607	11.2	1	
B	11	45	2	NoGas	29.332	1.4	224250	1.2	20	Blank Failed
Na	23	45	1	He	54.467	0.5	200470	1.1	400	
Mg	24	45	1	He	7.126	10.5	14102	10.7	1000	
Al	27	45	1	He	0.756	28.3	2495	10.5	50	
K	39	45	1	He	-6.815	-10.7	245136	0.7	1000	
Ca	44	45	1	He	14.676	20.8	4917	6.4	1000	
Ti	47	45	1	He	0.000	29272.3	54	45.9	20	
V	51	45	1	He	0.142	20.3	4410	9.4	2	
Cr	52	45	1	He	0.446	2.5	17720	0.2	2	
Mn	55	45	1	He	1.476	13.4	24760	11.1	2	
Fe	56	45	1	He	11.499	10.8	208971	8.0	50	
Co	59	103	1	He	0.011	51.3	580	25.3	1	
Ni	60	103	1	He	-0.649	-1.5	1006	6.8	2	
Cu	63	103	1	He	0.029	12.5	7582	1.9	2	
Zn	66	103	1	He	-0.314	-17.6	4315	3.9	20	
As	75	103	1	He	0.035	42.3	730	4.4	2	
Se	78	103	1	He	0.221	27.6	386	3.2	2	
Sr	88	103	1	He	0.069	5.8	1826	4.5	10	
Mo	95	103	1	He	-0.007	-73.0	210	16.8	2	
Ag	107	103	1	He	0.001	75.9	67	17.3	0.2	
Cd	111	103	1	He	0.074	29.8	4314	0.6	0.2	
Sn	118	115	1	He	3.106	1.3	27204	2.5	10	
Sb	123	115	1	He	-0.045	-2.9	248	3.1	1	
Ba	137	115	1	He	0.364	11.0	1495	9.1	5	
W	182	209	1	He	0.000	23386.3	8121	3.3	10	
Tl	205	209	1	He	0.002	61.3	220	17.5	0.5	
Pb	208	209	1	He	0.036	12.5	2593	6.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4221164	2.45	4563898	92.49	30	120	
Sc	45	1	He	2421027	1.26	2572368	94.12	30	120	
Sc	45	2	NoGas	24374270	0.92	24609710	99.04	30	120	
Rh	103	1	He	4599031	1.13	4780241	96.21	30	120	
In	115	1	He	3076652	1.34	3171814	97.00	30	120	
Tb	159	1	He	5303417	0.45	5469932	96.96	30	120	
Ho	165	1	He	5203103	1.81	5294619	98.27	30	120	
Bi	209	1	He	3322425	0.52	3401163	97.68	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-180824/2-a@10
Data File Name	122LCSS.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T17:12:53-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	98.749	98.749	1.736	1249978	2.73	500	19.7	78.6	110.5	LCSS Failed
B	11	2	NoGas	41.018	41.018	1.157	297509	1.53	50	82.0	79.5	120.5	
Na	23	1	He	1037.282	1037.282	5.112	3448767	2.64	5000	20.7	79.5	120.5	LCSS Failed
Mg	24	1	He	1005.704	1005.704	3.639	1898471	1.15	5000	20.1	79.5	120.5	LCSS Failed
Al	27	1	He	943.915	943.915	4.027	1119182	1.55	5000	18.9	79.5	120.5	LCSS Failed
K	39	1	He	996.115	996.115	4.029	2812939	1.24	5000	19.9	79.5	120.5	LCSS Failed
Ca	44	1	He	987.621	987.621	4.233	120223	1.70	5000	19.8	79.5	120.5	LCSS Failed
Ti	47	1	He	9.115	9.115	5.156	6282	2.94	50	18.2	79.5	120.5	LCSS Failed
V	51	1	He	97.756	97.756	4.331	1626179	1.84	500	19.6	71.5	110.5	LCSS Failed
Cr	52	1	He	98.353	98.353	3.087	1785408	1.33	500	19.7	69.5	110.5	LCSS Failed
Mn	55	1	He	96.312	96.312	1.814	1323915	0.77	500	19.3	79.5	120.5	LCSS Failed
Fe	56	1	He	1000.864	1000.864	3.414	16373325	1.05	5000	20.0	79.5	120.5	LCSS Failed
Co	59	1	He	95.537	95.537	5.712	2446711	2.26	500	19.1	73.9	110.5	LCSS Failed
Ni	60	1	He	92.718	92.718	4.525	571921	1.22	500	18.5	74.9	110.5	LCSS Failed
Cu	63	1	He	96.904	96.904	3.549	1590850	1.49	500	19.4	72.6	110.5	LCSS Failed
Zn	66	1	He	92.885	92.885	3.677	297173	0.30	500	18.6	71.5	113.4	LCSS Failed
As	75	1	He	91.045	91.045	3.620	242615	0.70	500	18.2	73.4	110.5	LCSS Failed
Se	78	1	He	90.866	90.866	3.433	21683	0.36	500	18.2	64.6	110.5	LCSS Failed
Sr	88	1	He	97.771	97.771	3.827	1785749	1.55	500	19.6	79.5	120.5	LCSS Failed
Mo	95	1	He	9.773	9.773	3.697	66623	0.21	50	19.5	29.5	140.5	LCSS Failed
Ag	107	1	He	9.124	9.124	3.681	181819	0.19	50	18.2	59.5	114.5	LCSS Failed
Cd	111	1	He	94.853	94.853	3.313	318680	0.34	500	19.0	73.5	110.5	LCSS Failed
Sn	118	1	He	97.707	97.707	4.152	826294	1.01	500	19.5	79.5	120.5	LCSS Failed
Sb	123	1	He	9.950	9.950	3.755	82694	0.92	50	19.9	67.5	113.4	LCSS Failed
Ba	137	1	He	97.118	97.118	3.825	378981	0.52	500	19.4	69.5	110.5	LCSS Failed
W	182	1	He	9.065	9.065	1.675	122633	1.32	50	18.1	74.6	125.4	LCSS Failed
Tl	205	1	He	21.744	21.744	3.335	675291	0.50	125	17.4	70.6	110.5	LCSS Failed
Pb	208	1	He	97.946	97.946	2.719	4055907	0.13	500	19.6	74.6	110.5	LCSS Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4194341	2.14	4563898	91.90	30	120	
Sc	45	1	He	2514126	2.56	2572368	97.74	30	120	
Sc	45	2	NoGas	24002028	0.86	24609710	97.53	30	120	
Rh	103	1	He	4622065	3.59	4780241	96.69	30	120	
In	115	1	He	3142464	3.86	3171814	99.07	30	120	
Tb	159	1	He	5491906	4.67	5469932	100.40	30	120	
Ho	165	1	He	5351521	3.85	5294619	101.07	30	120	
Bi	209	1	He	3424170	2.88	3401163	100.68	30	120	

Sample Report

Sample Table

Sample Name	680-112195-a-1-h@10
Data File Name	123SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T17:16:37-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.835	0.835	3.17	11041	0.01	10000	
B	11	45	2	NoGas	35.174	35.174	1.94	264591	0.01	300	
Na	23	45	1	He	591.978	591.978	1.63	1955527	0.03	500000	
Mg	24	45	1	He	2266.074	2266.074	0.85	4221747	0.05	500000	
Al	27	45	1	He	14147.116	14147.116	2.48	16535193	0.09	200000	
K	39	45	1	He	1246.151	1246.151	1.92	3406465	0.04	500000	
Ca	44	45	1	He	3458.057	3458.057	1.97	407250	0.85	500000	
Ti	47	45	1	He	206.284	206.284	2.58	139172	0.15	2500	
V	51	45	1	He	41.951	41.951	2.88	690151	0.01	10000	
Cr	52	45	1	He	32.969	32.969	2.60	597461	0.01	10000	
Mn	55	45	1	He	531.937	531.937	2.19	7191253	0.01	10000	
Fe	56	45	1	He	22384.922	22384.922	1.64	360869452	0.01	200000	
Co	59	103	1	He	4.680	4.680	2.60	116775	0.00	10000	
Ni	60	103	1	He	14.499	14.499	1.21	90986	0.02	10000	
Cu	63	103	1	He	13.162	13.162	1.47	215893	0.01	10000	
Zn	66	103	1	He	44.754	44.754	1.41	141779	0.03	10000	
As	75	103	1	He	9.105	9.105	1.08	24131	0.04	10000	
Se	78	103	1	He	1.900	1.900	2.47	760	0.25	10000	
Sr	88	103	1	He	30.611	30.611	1.61	543494	0.01	10000	
Mo	95	103	1	He	1.063	1.063	1.93	7263	0.01	2000	
Ag	107	103	1	He	0.067	0.067	14.64	1346	0.00	300	
Cd	111	103	1	He	0.609	0.609	3.00	5936	0.01	4000	
Sn	118	115	1	He	3.089	3.089	1.28	26556	0.01	2000	
Sb	123	115	1	He	0.138	0.138	6.70	1697	0.01	300	
Ba	137	115	1	He	30.864	30.864	1.12	115882	0.03	10000	
W	182	209	1	He	0.218	0.218	46.15	10863	0.00	2500	
Tl	205	209	1	He	0.158	0.158	4.85	4932	0.00	5000	
Pb	208	209	1	He	30.280	30.280	2.15	1225072	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4296027	1.93	4563898	94.13	30	120	
Sc	45	1	He	2480734	1.44	2572368	96.44	30	120	
Sc	45	2	NoGas	24508359	1.30	24609710	99.59	30	120	
Rh	103	1	He	4486805	1.24	4780241	93.86	30	120	
In	115	1	He	3019076	1.36	3171814	95.18	30	120	
Tb	159	1	He	5336171	0.53	5469932	97.55	30	120	
Ho	165	1	He	5235996	2.43	5294619	98.89	30	120	
Bi	209	1	He	3342314	1.73	3401163	98.27	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2004624
Data File Name	124_CCV.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T17:20:24-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.948	2.900	619374	0.77	50	97.9	89.5	110.5	
B	11	45	2	NoGas	81.208	0.643	561984	1.03	50	162.4	89.5	110.5	CCV Failed
Na	23	45	1	He	24807.708	1.794	80484486	1.09	25000	99.2	89.5	110.5	
Mg	24	45	1	He	25042.746	1.118	46458399	0.28	25000	100.2	89.5	110.5	
Al	27	45	1	He	245.791	0.761	287848	1.25	250	98.3	89.5	110.5	
K	39	45	1	He	25169.412	0.380	63410103	0.94	25000	100.7	89.5	110.5	
Ca	44	45	1	He	26016.873	1.224	3030560	0.23	25000	104.1	89.5	110.5	
Ti	47	45	1	He	49.460	1.805	33286	1.92	50	98.9	89.5	110.5	
V	51	45	1	He	47.975	0.688	786007	0.35	50	96.0	89.5	110.5	
Cr	52	45	1	He	48.437	1.163	869674	0.42	50	96.9	89.5	110.5	
Mn	55	45	1	He	256.359	1.437	3455183	0.68	250	102.5	89.5	110.5	
Fe	56	45	1	He	12533.371	0.984	201282730	0.38	12500	100.3	89.5	110.5	
Co	59	103	1	He	46.785	1.687	1135810	0.79	50	93.6	89.5	110.5	
Ni	60	103	1	He	48.170	1.810	283812	0.90	50	96.3	89.5	110.5	
Cu	63	103	1	He	47.273	1.366	738662	1.00	50	94.5	89.5	110.5	
Zn	66	103	1	He	49.166	0.526	151418	1.76	50	98.3	89.5	110.5	
As	75	103	1	He	50.617	1.305	128058	0.84	50	101.2	89.5	110.5	
Se	78	103	1	He	49.998	1.233	11446	0.93	50	100.0	89.5	110.5	
Sr	88	103	1	He	47.652	1.579	824780	0.37	50	95.3	89.5	110.5	
Mo	95	103	1	He	51.688	1.475	332797	2.01	50	103.4	89.5	110.5	
Ag	107	103	1	He	46.538	0.802	878428	1.14	50	93.1	89.5	110.5	
Cd	111	103	1	He	50.029	1.443	161062	1.03	50	100.1	89.5	110.5	
Sn	118	115	1	He	55.815	1.255	460616	2.01	50	111.6	89.5	110.5	CCV Failed
Sb	123	115	1	He	51.479	0.850	414336	1.23	50	103.0	89.5	110.5	
Ba	137	115	1	He	50.464	0.528	191927	1.07	50	100.9	89.5	110.5	
W	182	209	1	He	50.311	1.764	605822	2.10	50	100.6	89.5	110.5	
Tl	205	209	1	He	45.635	0.463	1336545	0.77	50	91.3	89.5	110.5	
Pb	208	209	1	He	47.305	0.460	1847891	0.64	50	94.6	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4193905	2.20	4563898	91.89	30	120	
Sc	45	1	He	2470922	1.04	2572368	96.06	30	120	
Sc	45	2	NoGas	24035658	1.41	24609710	97.67	30	120	
Rh	103	1	He	4375845	1.82	4780241	91.54	30	120	
In	115	1	He	3058926	0.84	3171814	96.44	30	120	
Tb	159	1	He	5344817	0.78	5469932	97.71	30	120	
Ho	165	1	He	5241557	0.60	5294619	99.00	30	120	
Bi	209	1	He	3227494	0.54	3401163	94.89	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	125_CCB.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T17:24:15-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.035	44.4	644	25.7	1	
B	11	45	2	NoGas	25.887	6.4	192347	1.4	20	CCB Failed
Na	23	45	1	He	35.079	2.1	143693	1.8	400	
Mg	24	45	1	He	2.016	45.7	4975	35.0	1000	
Al	27	45	1	He	0.647	13.0	2452	4.8	50	
K	39	45	1	He	-7.923	-8.8	250878	1.3	1000	
Ca	44	45	1	He	27.236	1.4	6572	1.2	1000	
Ti	47	45	1	He	-0.022	-62.4	41	23.4	20	
V	51	45	1	He	0.043	33.0	2918	7.5	2	
Cr	52	45	1	He	0.032	109.3	10878	5.0	2	
Mn	55	45	1	He	0.664	1.5	14528	0.4	2	
Fe	56	45	1	He	7.590	16.3	152719	12.7	50	
Co	59	103	1	He	0.003	59.6	389	11.7	1	
Ni	60	103	1	He	-0.722	-1.4	569	10.1	2	
Cu	63	103	1	He	0.595	4.1	16965	1.5	2	
Zn	66	103	1	He	1.413	3.6	9817	2.2	20	
As	75	103	1	He	0.158	26.2	1068	10.6	2	
Se	78	103	1	He	0.417	17.3	436	4.2	2	
Sr	88	103	1	He	0.019	14.9	923	4.7	10	
Mo	95	103	1	He	0.240	37.0	1899	32.0	2	
Ag	107	103	1	He	0.003	35.0	114	19.0	0.2	
Cd	111	103	1	He	0.114	20.8	4494	2.6	0.2	
Sn	118	115	1	He	0.277	28.3	3890	16.3	10	
Sb	123	115	1	He	0.116	8.4	1592	5.9	1	
Ba	137	115	1	He	0.007	55.7	133	10.9	5	
W	182	209	1	He	0.543	25.7	14885	10.5	10	
Tl	205	209	1	He	0.070	5.1	2286	3.7	0.5	
Pb	208	209	1	He	0.038	2.8	2675	2.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4199977	7.80	4563898	92.03	30	120	
Sc	45	1	He	2505374	0.73	2572368	97.40	30	120	
Sc	45	2	NoGas	23340794	6.01	24609710	94.84	30	120	
Rh	103	1	He	4646533	0.95	4780241	97.20	30	120	
In	115	1	He	3155565	1.75	3171814	99.49	30	120	
Tb	159	1	He	5430741	0.85	5469932	99.28	30	120	
Ho	165	1	He	5261187	0.33	5294619	99.37	30	120	
Bi	209	1	He	3354015	1.13	3401163	98.61	30	120	

Sample Report

Sample Table

Sample Name	SD 680-112195-a-1-h@50
Data File Name	126SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T17:28:06-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.187	0.187	8.30	2600	0.01	10000	
B	11	45	2	NoGas	26.143	26.143	3.26	202938	0.01	300	
Na	23	45	1	He	141.746	141.746	2.09	487354	0.03	500000	
Mg	24	45	1	He	465.696	465.696	1.06	864589	0.05	500000	
Al	27	45	1	He	2952.766	2952.766	0.86	3437511	0.09	200000	
K	39	45	1	He	235.153	235.153	1.21	856703	0.03	500000	
Ca	44	45	1	He	689.862	689.862	0.87	83538	0.83	500000	
Ti	47	45	1	He	41.758	41.758	3.43	28094	0.15	2500	
V	51	45	1	He	8.683	8.683	2.46	143975	0.01	10000	
Cr	52	45	1	He	6.767	6.767	0.53	130171	0.01	10000	
Mn	55	45	1	He	110.115	110.115	1.44	1486360	0.01	10000	
Fe	56	45	1	He	4535.877	4535.877	1.40	72825666	0.01	200000	
Co	59	103	1	He	0.942	0.942	1.72	24201	0.00	10000	
Ni	60	103	1	He	2.309	2.309	0.97	18923	0.01	10000	
Cu	63	103	1	He	3.204	3.204	1.38	58944	0.01	10000	
Zn	66	103	1	He	8.307	8.307	2.42	31122	0.03	10000	
As	75	103	1	He	1.763	1.763	1.99	5277	0.03	10000	
Se	78	103	1	He	0.512	0.512	10.85	452	0.11	10000	
Sr	88	103	1	He	6.068	6.068	0.81	110307	0.01	10000	
Mo	95	103	1	He	0.239	0.239	13.56	1862	0.01	2000	
Ag	107	103	1	He	0.014	0.014	9.67	334	0.00	300	
Cd	111	103	1	He	0.229	0.229	7.85	4805	0.00	4000	
Sn	118	115	1	He	0.602	0.602	9.69	6709	0.01	2000	
Sb	123	115	1	He	0.038	0.038	46.55	951	0.00	300	
Ba	137	115	1	He	5.933	5.933	1.57	23568	0.03	10000	
W	182	209	1	He	0.151	0.151	54.11	10285	0.00	2500	
Tl	205	209	1	He	0.045	0.045	11.63	1552	0.00	5000	
Pb	208	209	1	He	6.005	6.005	1.41	250183	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4232430	0.62	4563898	92.74	30	120	
Sc	45	1	He	2469509	1.08	2572368	96.00	30	120	
Sc	45	2	NoGas	24375442	1.91	24609710	99.05	30	120	
Rh	103	1	He	4575067	1.07	4780241	95.71	30	120	
In	115	1	He	3182299	0.37	3171814	100.33	30	120	
Tb	159	1	He	5367908	0.85	5469932	98.13	30	120	
Ho	165	1	He	5334279	0.49	5294619	100.75	30	120	
Bi	209	1	He	3428901	1.72	3401163	100.82	30	120	

Sample Report

Sample Table

Sample Name	PDS 680-112195-a-1-h@10
Data File Name	127SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T17:31:57-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1012.417	1012.417	1.71	12810721	0.01	10000	
B	11	45	2	NoGas	145.854	145.854	1.01	991288	0.01	300	
Na	23	45	1	He	10704.797	10704.797	0.97	34113498	0.03	500000	
Mg	24	45	1	He	12481.529	12481.529	0.66	22733909	0.05	500000	
Al	27	45	1	He	23458.066	23458.066	0.43	26815082	0.09	200000	
K	39	45	1	He	11345.604	11345.604	0.24	28205044	0.04	500000	
Ca	44	45	1	He	14682.740	14682.740	0.21	1680588	0.87	500000	
Ti	47	45	1	He	295.769	295.769	0.35	195143	0.15	2500	
V	51	45	1	He	1012.903	1012.903	0.73	16249294	0.01	10000	
Cr	52	45	1	He	1030.400	1030.400	0.25	17961045	0.01	10000	
Mn	55	45	1	He	1544.380	1544.380	0.51	20409400	0.01	10000	
Fe	56	45	1	He	31546.985	31546.985	1.26	497357420	0.01	200000	
Co	59	103	1	He	984.522	984.522	2.36	24034510	0.00	10000	
Ni	60	103	1	He	1040.177	1040.177	1.31	6066731	0.02	10000	
Cu	63	103	1	He	992.519	992.519	0.88	15462428	0.01	10000	
Zn	66	103	1	He	1083.611	1083.611	1.41	3249519	0.03	10000	
As	75	103	1	He	1073.024	1073.024	0.52	2718147	0.04	10000	
Se	78	103	1	He	987.737	987.737	0.94	221424	0.45	10000	
Sr	88	103	1	He	1035.899	1035.899	0.92	18023708	0.01	10000	
Mo	95	103	1	He	106.229	106.229	0.71	687614	0.02	2000	
Ag	107	103	1	He	104.573	104.573	0.32	1985219	0.01	300	
Cd	111	103	1	He	1098.180	1098.180	1.45	3474329	0.03	4000	
Sn	118	115	1	He	1138.104	1138.104	1.42	9108975	0.01	2000	
Sb	123	115	1	He	108.389	108.389	0.65	848113	0.01	300	
Ba	137	115	1	He	1194.170	1194.170	0.74	4416616	0.03	10000	
W	182	209	1	He	101.034	101.034	0.56	1242148	0.01	2500	
Tl	205	209	1	He	253.221	253.221	1.25	7620735	0.00	5000	
Pb	208	209	1	He	1097.145	1097.145	0.58	44022898	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4193669	1.51	4563898	91.89	30	120	
Sc	45	1	He	2425725	0.18	2572368	94.30	30	120	
Sc	45	2	NoGas	24144971	1.38	24609710	98.11	30	120	
Rh	103	1	He	4400786	0.53	4780241	92.06	30	120	
In	115	1	He	2976143	0.40	3171814	93.83	30	120	
Tb	159	1	He	5298453	0.13	5469932	96.87	30	120	
Ho	165	1	He	5207724	0.86	5294619	98.36	30	120	
Bi	209	1	He	3317087	1.08	3401163	97.53	30	120	

Sample Report

Sample Table

Sample Name	680-112195-a-1-i ms@10
Data File Name	128SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T17:35:23-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	96.717	96.717	1.50	1244232	0.01	10000	
B	11	45	2	NoGas	43.961	43.961	0.38	313046	0.01	300	
Na	23	45	1	He	1637.563	1637.563	2.93	5205499	0.03	500000	
Mg	24	45	1	He	3569.930	3569.930	2.12	6457637	0.06	500000	
Al	27	45	1	He	18514.264	18514.264	2.81	21024031	0.09	200000	
K	39	45	1	He	2273.463	2273.463	1.19	5823316	0.04	500000	
Ca	44	45	1	He	4834.511	4834.511	2.91	551717	0.88	500000	
Ti	47	45	1	He	242.363	242.363	2.93	158747	0.15	2500	
V	51	45	1	He	145.389	145.389	3.22	2317433	0.01	10000	
Cr	52	45	1	He	138.618	138.618	4.33	2406139	0.01	10000	
Mn	55	45	1	He	675.719	675.719	2.74	8867705	0.01	10000	
Fe	56	45	1	He	25064.567	25064.567	2.76	392245451	0.01	200000	
Co	59	103	1	He	101.791	101.791	2.75	2467096	0.00	10000	
Ni	60	103	1	He	112.640	112.640	1.97	656432	0.02	10000	
Cu	63	103	1	He	115.100	115.100	1.71	1786178	0.01	10000	
Zn	66	103	1	He	143.091	143.091	1.65	430379	0.03	10000	
As	75	103	1	He	101.618	101.618	1.43	256123	0.04	10000	
Se	78	103	1	He	94.022	94.022	1.45	21214	0.44	10000	
Sr	88	103	1	He	137.281	137.281	1.27	2371815	0.01	10000	
Mo	95	103	1	He	11.118	11.118	0.72	71669	0.02	2000	
Ag	107	103	1	He	9.210	9.210	2.39	173592	0.01	300	
Cd	111	103	1	He	96.904	96.904	1.91	307875	0.03	4000	
Sn	118	115	1	He	96.933	96.933	4.15	784854	0.01	2000	
Sb	123	115	1	He	4.330	4.330	3.90	34790	0.01	300	
Ba	137	115	1	He	137.220	137.220	4.20	512603	0.03	10000	
W	182	209	1	He	6.305	6.305	5.30	85384	0.01	2500	
Tl	205	209	1	He	21.644	21.644	3.05	653751	0.00	5000	
Pb	208	209	1	He	131.146	131.146	2.12	5281369	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4262772	0.53	4563898	93.40	30	120	
Sc	45	1	He	2409824	4.62	2572368	93.68	30	120	
Sc	45	2	NoGas	23716752	1.25	24609710	96.37	30	120	
Rh	103	1	He	4369639	2.16	4780241	91.41	30	120	
In	115	1	He	3008835	4.00	3171814	94.86	30	120	
Tb	159	1	He	5216909	1.56	5469932	95.37	30	120	
Ho	165	1	He	5121822	3.27	5294619	96.74	30	120	
Bi	209	1	He	3329389	1.90	3401163	97.89	30	120	

Sample Report

Sample Table

Sample Name	680-112195-a-1-j msd@10
Data File Name	129SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T17:39:04-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	96.579	96.579	1.81	1240731	0.01	10000	
B	11	45	2	NoGas	41.123	41.123	1.34	300869	0.01	300	
Na	23	45	1	He	1629.394	1629.394	4.18	5129501	0.03	500000	
Mg	24	45	1	He	3546.112	3546.112	5.22	6352766	0.06	500000	
Al	27	45	1	He	18379.651	18379.651	4.36	20661841	0.09	200000	
K	39	45	1	He	2284.995	2284.995	4.01	5793075	0.04	500000	
Ca	44	45	1	He	6451.076	6451.076	3.51	728075	0.89	500000	
Ti	47	45	1	He	249.196	249.196	3.97	161713	0.15	2500	
V	51	45	1	He	144.918	144.918	4.14	2288195	0.01	10000	
Cr	52	45	1	He	136.528	136.528	3.77	2349218	0.01	10000	
Mn	55	45	1	He	712.148	712.148	3.36	9261122	0.01	10000	
Fe	56	45	1	He	25396.821	25396.821	3.09	393893967	0.01	200000	
Co	59	103	1	He	102.683	102.683	4.73	2484524	0.00	10000	
Ni	60	103	1	He	112.272	112.272	4.96	653081	0.02	10000	
Cu	63	103	1	He	114.217	114.217	4.50	1769421	0.01	10000	
Zn	66	103	1	He	143.026	143.026	5.00	429379	0.03	10000	
As	75	103	1	He	100.648	100.648	4.71	253206	0.04	10000	
Se	78	103	1	He	93.078	93.078	3.28	20973	0.44	10000	
Sr	88	103	1	He	139.730	139.730	4.14	2410101	0.01	10000	
Mo	95	103	1	He	10.622	10.622	4.60	68358	0.02	2000	
Ag	107	103	1	He	9.288	9.288	5.42	174744	0.01	300	
Cd	111	103	1	He	96.498	96.498	4.55	306091	0.03	4000	
Sn	118	115	1	He	94.702	94.702	3.77	765078	0.01	2000	
Sb	123	115	1	He	3.917	3.917	2.81	31468	0.01	300	
Ba	137	115	1	He	131.633	131.633	4.04	490576	0.03	10000	
W	182	209	1	He	5.741	5.741	4.39	77824	0.01	2500	
Tl	205	209	1	He	22.005	22.005	3.20	659062	0.00	5000	
Pb	208	209	1	He	134.348	134.348	3.40	5363764	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4257621	1.77	4563898	93.29	30	120	
Sc	45	1	He	2387816	3.35	2572368	92.83	30	120	
Sc	45	2	NoGas	24219002	1.13	24609710	98.41	30	120	
Rh	103	1	He	4366485	4.01	4780241	91.34	30	120	
In	115	1	He	3001413	3.62	3171814	94.63	30	120	
Tb	159	1	He	5223335	3.61	5469932	95.49	30	120	
Ho	165	1	He	5085415	2.78	5294619	96.05	30	120	
Bi	209	1	He	3301935	2.81	3401163	97.08	30	120	

Sample Report

Sample Table

Sample Name	680-112195-a-2-c@10
Data File Name	130SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T17:42:45-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.878	0.878	1.50	10540	0.01	10000	
B	11	45	2	NoGas	33.203	33.203	5.52	217891	0.02	300	
Na	23	45	1	He	284.873	284.873	5.57	948929	0.03	500000	
Mg	24	45	1	He	2048.998	2048.998	5.36	3790615	0.05	500000	
Al	27	45	1	He	11105.739	11105.739	4.89	12893874	0.09	200000	
K	39	45	1	He	1118.448	1118.448	5.64	3063726	0.04	500000	
Ca	44	45	1	He	2513.129	2513.129	4.56	294899	0.85	500000	
Ti	47	45	1	He	202.373	202.373	5.87	135581	0.15	2500	
V	51	45	1	He	38.867	38.867	4.16	635468	0.01	10000	
Cr	52	45	1	He	32.809	32.809	5.56	590521	0.01	10000	
Mn	55	45	1	He	534.782	534.782	5.73	7179104	0.01	10000	
Fe	56	45	1	He	20483.458	20483.458	5.73	327892040	0.01	200000	
Co	59	103	1	He	4.473	4.473	6.53	113450	0.00	10000	
Ni	60	103	1	He	26.753	26.753	6.64	166462	0.02	10000	
Cu	63	103	1	He	11.426	11.426	6.14	191437	0.01	10000	
Zn	66	103	1	He	40.137	40.137	5.49	129819	0.03	10000	
As	75	103	1	He	8.198	8.198	5.67	22153	0.04	10000	
Se	78	103	1	He	1.659	1.659	9.98	717	0.23	10000	
Sr	88	103	1	He	24.671	24.671	6.08	445355	0.01	10000	
Mo	95	103	1	He	1.080	1.080	4.60	7503	0.01	2000	
Ag	107	103	1	He	0.071	0.071	1.51	1460	0.00	300	
Cd	111	103	1	He	0.648	0.648	7.46	6169	0.01	4000	
Sn	118	115	1	He	3.834	3.834	6.01	33665	0.01	2000	
Sb	123	115	1	He	0.134	0.134	5.57	1723	0.01	300	
Ba	137	115	1	He	26.554	26.554	5.54	102972	0.03	10000	
W	182	209	1	He	0.223	0.223	25.45	11449	0.00	2500	
Tl	205	209	1	He	0.173	0.173	7.46	5659	0.00	5000	
Pb	208	209	1	He	26.373	26.373	4.56	1117425	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3905763	4.11	4563898	85.58	30	120	
Sc	45	1	He	2466924	4.29	2572368	95.90	30	120	
Sc	45	2	NoGas	21272982	4.84	24609710	86.44	30	120	
Rh	103	1	He	4570021	5.36	4780241	95.60	30	120	
In	115	1	He	3122984	4.81	3171814	98.46	30	120	
Tb	159	1	He	5493564	4.35	5469932	100.43	30	120	
Ho	165	1	He	5377411	5.09	5294619	101.56	30	120	
Bi	209	1	He	3503331	4.02	3401163	103.00	30	120	

Sample Report

Sample Table

Sample Name	680-112195-a-3-c@10
Data File Name	131SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T17:46:32-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.009	1.009	1.00	13205	0.01	10000	
B	11	45	2	NoGas	31.232	31.232	1.30	237561	0.01	300	
Na	23	45	1	He	430.857	430.857	1.88	1405722	0.03	500000	
Mg	24	45	1	He	2944.331	2944.331	0.61	5388016	0.05	500000	
Al	27	45	1	He	20091.204	20091.204	1.18	23070878	0.09	200000	
K	39	45	1	He	1537.402	1537.402	1.53	4067080	0.04	500000	
Ca	44	45	1	He	6282.949	6282.949	0.51	724278	0.87	500000	
Ti	47	45	1	He	268.510	268.510	0.35	177966	0.15	2500	
V	51	45	1	He	54.001	54.001	1.03	872238	0.01	10000	
Cr	52	45	1	He	43.978	43.978	0.99	779666	0.01	10000	
Mn	55	45	1	He	713.714	713.714	0.62	9477680	0.01	10000	
Fe	56	45	1	He	27743.320	27743.320	0.54	439376063	0.01	200000	
Co	59	103	1	He	6.107	6.107	3.10	151392	0.00	10000	
Ni	60	103	1	He	21.023	21.023	2.65	128976	0.02	10000	
Cu	63	103	1	He	15.686	15.686	2.57	254444	0.01	10000	
Zn	66	103	1	He	60.065	60.065	1.84	187407	0.03	10000	
As	75	103	1	He	10.768	10.768	1.21	28258	0.04	10000	
Se	78	103	1	He	1.726	1.726	5.40	716	0.24	10000	
Sr	88	103	1	He	43.793	43.793	1.89	772763	0.01	10000	
Mo	95	103	1	He	1.176	1.176	2.16	7962	0.01	2000	
Ag	107	103	1	He	0.099	0.099	3.93	1962	0.01	300	
Cd	111	103	1	He	0.900	0.900	6.39	6833	0.01	4000	
Sn	118	115	1	He	3.621	3.621	2.58	31538	0.01	2000	
Sb	123	115	1	He	0.147	0.147	13.30	1808	0.01	300	
Ba	137	115	1	He	37.694	37.694	1.45	144560	0.03	10000	
W	182	209	1	He	0.148	0.148	50.24	10115	0.00	2500	
Tl	205	209	1	He	0.199	0.199	0.91	6272	0.00	5000	
Pb	208	209	1	He	34.365	34.365	0.49	1408977	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4267492	0.83	4563898	93.51	30	120	
Sc	45	1	He	2436727	0.24	2572368	94.73	30	120	
Sc	45	2	NoGas	24441641	0.56	24609710	99.32	30	120	
Rh	103	1	He	4460867	1.60	4780241	93.32	30	120	
In	115	1	He	3084107	0.20	3171814	97.23	30	120	
Tb	159	1	He	5366896	0.21	5469932	98.12	30	120	
Ho	165	1	He	5239217	1.22	5294619	98.95	30	120	
Bi	209	1	He	3386768	0.97	3401163	99.58	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2004624
Data File Name	132_CCV.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T17:50:19-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	50.726	2.028	632387	1.01	50	101.5	89.5	110.5	
B	11	45	2	NoGas	76.219	1.088	519589	0.45	50	152.4	89.5	110.5	CCV Failed
Na	23	45	1	He	24771.975	1.491	78399534	1.01	25000	99.1	89.5	110.5	
Mg	24	45	1	He	25221.973	1.274	45643140	0.61	25000	100.9	89.5	110.5	
Al	27	45	1	He	251.636	0.320	287422	0.77	250	100.7	89.5	110.5	
K	39	45	1	He	25630.260	1.663	62979094	1.33	25000	102.5	89.5	110.5	
Ca	44	45	1	He	26176.806	0.622	2974554	0.81	25000	104.7	89.5	110.5	
Ti	47	45	1	He	50.714	1.245	33294	1.91	50	101.4	89.5	110.5	
V	51	45	1	He	48.615	1.376	776920	1.26	50	97.2	89.5	110.5	
Cr	52	45	1	He	48.655	1.040	852144	0.79	50	97.3	89.5	110.5	
Mn	55	45	1	He	258.887	0.600	3403766	0.29	250	103.6	89.5	110.5	
Fe	56	45	1	He	12622.327	1.045	197743365	0.94	12500	101.0	89.5	110.5	
Co	59	103	1	He	46.270	0.907	1118519	0.89	50	92.5	89.5	110.5	
Ni	60	103	1	He	47.494	1.872	278700	1.92	50	95.0	89.5	110.5	
Cu	63	103	1	He	46.337	0.624	721027	0.61	50	92.7	89.5	110.5	
Zn	66	103	1	He	49.228	0.911	150928	0.91	50	98.5	89.5	110.5	
As	75	103	1	He	50.416	0.980	126998	0.99	50	100.8	89.5	110.5	
Se	78	103	1	He	50.350	0.275	11474	0.24	50	100.7	89.5	110.5	
Sr	88	103	1	He	47.206	0.196	813572	0.05	50	94.4	89.5	110.5	
Mo	95	103	1	He	51.981	0.492	333206	0.67	50	104.0	89.5	110.5	
Ag	107	103	1	He	46.496	0.138	873806	0.31	50	93.0	89.5	110.5	
Cd	111	103	1	He	49.687	0.525	159296	0.64	50	99.4	89.5	110.5	
Sn	118	115	1	He	56.339	0.582	460144	0.76	50	112.7	89.5	110.5	CCV Failed
Sb	123	115	1	He	51.735	0.237	412139	0.63	50	103.5	89.5	110.5	
Ba	137	115	1	He	50.345	1.100	189523	1.52	50	100.7	89.5	110.5	
W	182	209	1	He	50.824	1.558	611672	1.69	50	101.6	89.5	110.5	
Tl	205	209	1	He	45.889	1.372	1343509	1.74	50	91.8	89.5	110.5	
Pb	208	209	1	He	47.504	0.852	1855013	1.14	50	95.0	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4130788	1.04	4563898	90.51	30	120	
Sc	45	1	He	2410279	0.77	2572368	93.70	30	120	
Sc	45	2	NoGas	23599512	1.07	24609710	95.90	30	120	
Rh	103	1	He	4356306	0.18	4780241	91.13	30	120	
In	115	1	He	3027720	0.86	3171814	95.46	30	120	
Tb	159	1	He	5327886	0.58	5469932	97.40	30	120	
Ho	165	1	He	5158807	0.64	5294619	97.43	30	120	
Bi	209	1	He	3226291	0.47	3401163	94.86	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	133_CCB.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T17:54:05-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.050	3.5	845	4.7	1	
B	11	45	2	NoGas	19.691	0.8	154199	0.3	20	
Na	23	45	1	He	28.716	2.6	118402	2.9	400	
Mg	24	45	1	He	1.815	36.0	4438	27.7	1000	
Al	27	45	1	He	1.161	13.7	2950	6.9	50	
K	39	45	1	He	-9.603	-1.9	237802	1.0	1000	
Ca	44	45	1	He	29.334	4.4	6577	3.2	1000	
Ti	47	45	1	He	0.012	290.3	62	37.6	20	
V	51	45	1	He	0.042	86.3	2790	19.7	2	
Cr	52	45	1	He	0.040	21.4	10644	1.2	2	
Mn	55	45	1	He	0.396	3.0	10483	1.5	2	
Fe	56	45	1	He	9.061	14.6	170303	11.4	50	
Co	59	103	1	He	0.017	22.3	744	13.2	1	
Ni	60	103	1	He	-0.711	-0.9	623	6.3	2	
Cu	63	103	1	He	0.175	11.8	9859	3.4	2	
Zn	66	103	1	He	1.410	1.6	9617	0.7	20	
As	75	103	1	He	0.144	25.5	1008	9.5	2	
Se	78	103	1	He	0.387	9.4	421	1.9	2	
Sr	88	103	1	He	0.018	35.9	878	13.0	10	
Mo	95	103	1	He	0.231	42.9	1807	36.8	2	
Ag	107	103	1	He	0.003	59.8	110	31.6	0.2	
Cd	111	103	1	He	0.111	9.6	4397	0.8	0.2	
Sn	118	115	1	He	0.337	18.0	4308	12.6	10	
Sb	123	115	1	He	0.131	12.0	1677	8.3	1	
Ba	137	115	1	He	0.020	33.1	180	14.7	5	
W	182	209	1	He	0.476	21.9	14359	8.9	10	
Tl	205	209	1	He	0.081	7.5	2681	6.9	0.5	
Pb	208	209	1	He	0.040	10.7	2828	6.4	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4203083	2.38	4563898	92.09	30	120	
Sc	45	1	He	2415999	0.96	2572368	93.92	30	120	
Sc	45	2	NoGas	23489942	0.92	24609710	95.45	30	120	
Rh	103	1	He	4555432	0.06	4780241	95.30	30	120	
In	115	1	He	3084762	1.06	3171814	97.26	30	120	
Tb	159	1	He	5363093	0.59	5469932	98.05	30	120	
Ho	165	1	He	5212019	0.47	5294619	98.44	30	120	
Bi	209	1	He	3422004	0.20	3401163	100.61	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1995671
Data File Name	134CRIA.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T17:57:56-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.863	0.863	4.147	11263	3.23	1	86.3	69.5	130.5	
B	11	2	NoGas	38.673	38.673	1.314	279068	0.42	20	193.4	69.5	130.5	6020A CR1 Failed
Na	23	1	He	1066.194	1066.194	4.432	3421774	1.26	1000	106.6	69.5	130.5	
Mg	24	1	He	1060.181	1060.181	3.848	1932235	2.31	1000	106.0	69.5	130.5	
Al	27	1	He	51.044	51.044	3.307	59983	0.44	50	102.1	69.5	130.5	
K	39	1	He	1053.247	1053.247	4.173	2856206	0.39	1000	105.3	69.5	130.5	
Ca	44	1	He	1035.713	1035.713	3.624	121570	0.72	1000	103.6	69.5	130.5	
Ti	47	1	He	10.439	10.439	6.066	6936	2.62	10	104.4	69.5	130.5	
V	51	1	He	5.072	5.072	5.621	83459	2.16	5	101.4	69.5	130.5	
Cr	52	1	He	2.078	2.078	4.910	46180	0.42	2	103.9	69.5	130.5	
Mn	55	1	He	4.960	4.960	3.238	70838	1.23	5	99.2	69.5	130.5	
Fe	56	1	He	109.367	109.367	5.976	1751684	3.22	100	109.4	69.5	130.5	
Co	59	1	He	0.971	0.971	2.747	24831	1.76	1	97.1	69.5	130.5	
Ni	60	1	He	1.209	1.209	7.039	12203	3.89	2	60.5	69.5	130.5	6020A CR1 Failed
Cu	63	1	He	2.040	2.040	2.318	39900	0.98	2	102.0	69.5	130.5	
Zn	66	1	He	19.045	19.045	2.637	64238	1.17	20	95.2	69.5	130.5	
As	75	1	He	4.983	4.983	1.237	13689	0.17	5	99.7	69.5	130.5	
Se	78	1	He	5.238	5.238	1.550	1545	2.25	5	104.8	69.5	130.5	
Sr	88	1	He	9.367	9.367	1.935	169177	0.78	10	93.7	69.5	130.5	
Mo	95	1	He	10.222	10.222	2.735	68683	1.57	10	102.2	69.5	130.5	
Ag	107	1	He	0.971	0.971	3.366	19128	2.15	1	97.1	69.5	130.5	
Cd	111	1	He	1.144	1.144	5.114	7771	1.33	1	114.4	69.5	130.5	
Sn	118	1	He	10.064	10.064	2.424	85730	1.90	10	100.6	69.5	130.5	
Sb	123	1	He	2.086	2.086	3.140	17666	0.87	2	104.3	69.5	130.5	
Ba	137	1	He	5.197	5.197	1.276	20203	2.10	5	103.9	69.5	130.5	
W	182	1	He	9.794	9.794	2.735	129920	0.96	10	97.9	69.5	130.5	
Tl	205	1	He	1.830	1.830	4.724	56171	3.43	2	91.5	69.5	130.5	
Pb	208	1	He	0.993	0.993	2.002	41663	0.85	1	99.3	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4245521	1.59	4563898	93.02	30	120	
Sc	45	1	He	2427636	3.40	2572368	94.37	30	120	
Sc	45	2	NoGas	23743929	0.91	24609710	96.48	30	120	
Rh	103	1	He	4553616	1.27	4780241	95.26	30	120	
In	115	1	He	3112516	2.20	3171814	98.13	30	120	
Tb	159	1	He	5328988	2.07	5469932	97.42	30	120	
Ho	165	1	He	5210640	0.91	5294619	98.41	30	120	
Bi	209	1	He	3374617	1.59	3401163	99.22	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2004624
Data File Name	135_CCV.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T18:01:46-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	49.872	0.757	613769	0.63	50	99.7	89.5	110.5	
B	11	45	2	NoGas	74.313	0.430	494672	0.61	50	148.6	89.5	110.5	CCV Failed
Na	23	45	1	He	25336.154	0.318	78292408	0.48	25000	101.3	89.5	110.5	
Mg	24	45	1	He	25398.683	1.146	44877743	0.99	25000	101.6	89.5	110.5	
Al	27	45	1	He	251.150	0.481	280083	0.35	250	100.5	89.5	110.5	
K	39	45	1	He	25448.296	1.008	61057262	0.95	25000	101.8	89.5	110.5	
Ca	44	45	1	He	26203.805	0.788	2907223	0.92	25000	104.8	89.5	110.5	
Ti	47	45	1	He	50.480	0.868	32354	0.84	50	101.0	89.5	110.5	
V	51	45	1	He	48.897	1.459	762954	1.45	50	97.8	89.5	110.5	
Cr	52	45	1	He	49.067	0.911	838965	0.88	50	98.1	89.5	110.5	
Mn	55	45	1	He	259.515	0.835	3331422	1.00	250	103.8	89.5	110.5	
Fe	56	45	1	He	12800.284	0.599	195792330	0.67	12500	102.4	89.5	110.5	
Co	59	103	1	He	45.755	0.991	1103298	0.46	50	91.5	89.5	110.5	
Ni	60	103	1	He	46.836	0.761	274220	0.58	50	93.7	89.5	110.5	
Cu	63	103	1	He	45.513	1.252	706552	0.72	50	91.0	89.5	110.5	
Zn	66	103	1	He	47.965	1.220	146814	0.25	50	95.9	89.5	110.5	
As	75	103	1	He	49.587	0.534	124613	0.82	50	99.2	89.5	110.5	
Se	78	103	1	He	49.098	1.566	11168	0.43	50	98.2	89.5	110.5	
Sr	88	103	1	He	46.976	0.919	807594	0.64	50	94.0	89.5	110.5	
Mo	95	103	1	He	51.408	0.709	328737	1.60	50	102.8	89.5	110.5	
Ag	107	103	1	He	46.392	0.612	869676	0.63	50	92.8	89.5	110.5	
Cd	111	103	1	He	49.501	0.778	158331	1.55	50	99.0	89.5	110.5	
Sn	118	115	1	He	55.719	1.527	452616	1.82	50	111.4	89.5	110.5	CCV Failed
Sb	123	115	1	He	52.037	0.443	412259	0.46	50	104.1	89.5	110.5	
Ba	137	115	1	He	50.607	0.844	189458	1.14	50	101.2	89.5	110.5	
W	182	209	1	He	50.103	3.365	607326	2.33	50	100.2	89.5	110.5	
Tl	205	209	1	He	45.411	1.797	1338938	0.84	50	90.8	89.5	110.5	
Pb	208	209	1	He	47.313	1.599	1860647	0.48	50	94.6	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4077347	0.97	4563898	89.34	30	120	
Sc	45	1	He	2353256	0.16	2572368	91.48	30	120	
Sc	45	2	NoGas	23010996	0.40	24609710	93.50	30	120	
Rh	103	1	He	4345721	1.23	4780241	90.91	30	120	
In	115	1	He	3011092	0.78	3171814	94.93	30	120	
Tb	159	1	He	5276972	0.87	5469932	96.47	30	120	
Ho	165	1	He	5126411	0.74	5294619	96.82	30	120	
Bi	209	1	He	3249615	1.12	3401163	95.54	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	136_CCB.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T18:05:32-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.035	29.8	644	20.7	1	
B	11	45	2	NoGas	18.988	0.9	150945	1.7	20	
Na	23	45	1	He	27.501	4.8	115268	1.9	400	
Mg	24	45	1	He	1.897	35.5	4601	25.7	1000	
Al	27	45	1	He	0.662	18.3	2396	3.7	50	
K	39	45	1	He	-6.240	-39.1	247662	0.8	1000	
Ca	44	45	1	He	26.699	10.7	6315	3.1	1000	
Ti	47	45	1	He	0.052	50.5	89	19.2	20	
V	51	45	1	He	0.051	102.7	2977	29.7	2	
Cr	52	45	1	He	0.020	99.7	10365	3.1	2	
Mn	55	45	1	He	0.395	5.2	10541	1.2	2	
Fe	56	45	1	He	7.676	17.9	149894	15.9	50	
Co	59	103	1	He	0.014	26.7	659	12.6	1	
Ni	60	103	1	He	-0.713	-0.6	617	2.9	2	
Cu	63	103	1	He	0.084	25.0	8433	2.4	2	
Zn	66	103	1	He	1.397	12.6	9615	4.4	20	
As	75	103	1	He	0.127	33.1	970	12.5	2	
Se	78	103	1	He	0.314	20.2	406	4.1	2	
Sr	88	103	1	He	0.017	14.8	873	4.8	10	
Mo	95	103	1	He	0.270	34.0	2077	31.3	2	
Ag	107	103	1	He	0.004	38.2	134	22.5	0.2	
Cd	111	103	1	He	0.110	26.1	4412	1.0	0.2	
Sn	118	115	1	He	0.342	18.7	4419	11.3	10	
Sb	123	115	1	He	0.149	8.4	1856	6.9	1	
Ba	137	115	1	He	0.025	27.6	201	12.4	5	
W	182	209	1	He	0.517	20.0	14793	10.0	10	
Tl	205	209	1	He	0.079	1.6	2586	2.7	0.5	
Pb	208	209	1	He	0.042	7.2	2885	5.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4154323	1.56	4563898	91.03	30	120	
Sc	45	1	He	2432630	2.15	2572368	94.57	30	120	
Sc	45	2	NoGas	23685788	1.16	24609710	96.25	30	120	
Rh	103	1	He	4576441	1.90	4780241	95.74	30	120	
In	115	1	He	3140158	2.13	3171814	99.00	30	120	
Tb	159	1	He	5338830	2.20	5469932	97.60	30	120	
Ho	165	1	He	5208402	2.10	5294619	98.37	30	120	
Bi	209	1	He	3400178	1.22	3401163	99.97	30	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA-1995708
Data File Name	137ICSA.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T18:09:24-04:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.028	62.1	541	38.0	1	
B	11	45	2	NoGas	19.643	1.0	152415	1.3	20	
Na	23	45	1	He	51551.846	4.9	153767312	0.8	75200	
Mg	24	45	1	He	52200.344	5.6	89029711	1.4	75200	
Al	27	45	1	He	50934.925	5.3	54523691	1.2	75200	
K	39	45	1	He	52131.073	4.0	120526603	1.0	75200	
Ca	44	45	1	He	53017.844	5.4	5674832	1.3	75200	
Ti	47	45	1	He	1042.114	5.2	643788	1.1	1505	
V	51	45	1	He	0.058	67.0	2879	21.0	4	
Cr	52	45	1	He	0.797	3.6	22374	2.3	4	
Mn	55	45	1	He	0.052	122.9	5590	9.9	4	
Fe	56	45	1	He	52072.341	5.1	768833321	1.0	75200	
Co	59	103	1	He	0.047	11.7	1337	3.2	2	
Ni	60	103	1	He	-0.562	-2.2	1353	1.7	4	
Cu	63	103	1	He	0.228	9.8	9554	3.0	4	
Zn	66	103	1	He	-0.215	-39.4	4075	1.3	10	
As	75	103	1	He	0.236	4.1	1117	6.7	4	
Se	78	103	1	He	0.535	27.1	405	1.4	4	
Sr	88	103	1	He	0.346	8.1	6041	4.4	20	
Mo	95	103	1	He	1138.795	8.4	6780785	2.0	1505	
Ag	107	103	1	He	0.013	5.9	271	1.4	1	
Cd	111	103	1	He	0.235	30.6	4280	6.3	1	
Sn	118	115	1	He	0.034	66.6	1656	9.5	20	
Sb	123	115	1	He	0.091	34.1	1255	21.7	1	
Ba	137	115	1	He	0.045	21.4	254	16.4	2	
W	182	209	1	He	0.494	20.6	13273	11.4	20	
Tl	205	209	1	He	0.038	12.6	1215	13.9	1	
Pb	208	209	1	He	0.136	6.1	6162	1.8	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4040011	1.63	4563898	88.52	30	120	
Sc	45	1	He	2274870	4.02	2572368	88.43	30	120	
Sc	45	2	NoGas	23263481	0.95	24609710	94.53	30	120	
Rh	103	1	He	4063308	6.10	4780241	85.00	30	120	
In	115	1	He	2857266	4.02	3171814	90.08	30	120	
Tb	159	1	He	5060332	4.70	5469932	92.51	30	120	
Ho	165	1	He	4990561	5.03	5294619	94.26	30	120	
Bi	209	1	He	3108840	4.63	3401163	91.41	30	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB-1995789
Data File Name	138ICAB.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T18:13:12-04:00
Sample Type	ICSAB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	6	2	NoGas	105.895	1.943	1267180	3.19	100	105.9	79.5	120.5	
B	11	45	2	NoGas	134.964	0.478	882955	1.06	100	135.0	79.5	120.5	Fail
Na	23	45	1	He	48693.166	1.951	154734398	0.63	50000	97.4	79.5	120.5	
Mg	24	45	1	He	48821.600	2.049	88724687	0.90	50000	97.6	79.5	120.5	
Al	27	45	1	He	47543.301	1.503	54228457	0.63	50000	95.1	79.5	120.5	
K	39	45	1	He	49284.724	1.323	121382091	0.35	50000	98.6	79.5	120.5	
Ca	44	45	1	He	49866.482	1.913	5687366	0.66	50000	99.7	79.5	120.5	
Ti	47	45	1	He	1066.078	1.018	701745	0.39	1100	96.9	79.5	120.5	
V	51	45	1	He	102.515	0.552	1643174	1.63	100	102.5	79.5	120.5	
Cr	52	45	1	He	100.472	1.920	1756468	0.56	100	100.5	79.5	120.5	
Mn	55	45	1	He	97.949	4.861	1296289	3.85	100	97.9	79.5	120.5	
Fe	56	45	1	He	48002.007	2.509	755062921	1.26	50000	96.0	79.5	120.5	
Co	59	103	1	He	99.644	1.597	2350509	1.05	100	99.6	79.5	120.5	
Ni	60	103	1	He	95.140	0.407	540288	0.22	100	95.1	79.5	120.5	
Cu	63	103	1	He	95.691	4.118	1446375	4.37	100	95.7	79.5	120.5	
Zn	66	103	1	He	97.423	0.357	286732	0.82	100	97.4	79.5	120.5	
As	75	103	1	He	102.393	0.865	251128	0.48	100	102.4	79.5	120.5	
Se	78	103	1	He	101.722	0.574	22309	0.70	100	101.7	79.5	120.5	
Sr	88	103	1	He	105.453	0.713	1773153	0.50	100	105.5	79.5	120.5	
Mo	95	103	1	He	1196.025	1.087	7477107	0.65	1100	108.7	79.5	120.5	
Ag	107	103	1	He	100.225	0.258	1838275	0.58	100	100.2	79.5	120.5	
Cd	111	103	1	He	99.714	1.213	308209	0.76	100	99.7	79.5	120.5	
Sn	118	115	1	He	98.439	2.307	786037	0.61	100	98.4	79.5	120.5	
Sb	123	115	1	He	106.492	2.100	829937	0.30	100	106.5	79.5	120.5	
Ba	137	115	1	He	102.812	2.636	378779	0.87	100	102.8	79.5	120.5	
W	182	209	1	He	100.328	2.524	1199758	1.80	100	100.3	79.5	120.5	
Tl	205	209	1	He	102.384	1.776	2997228	0.51	100	102.4	79.5	120.5	
Pb	208	209	1	He	100.882	1.139	3938250	0.20	100	100.9	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3964495	1.29	4563898	86.87	30	120	
Sc	45	1	He	2420804	1.41	2572368	94.11	30	120	
Sc	45	2	NoGas	23188604	1.26	24609710	94.23	30	120	
Rh	103	1	He	4251782	0.55	4780241	88.94	30	120	
In	115	1	He	2964945	1.84	3171814	93.48	30	120	
Tb	159	1	He	5270710	0.39	5469932	96.36	30	120	
Ho	165	1	He	5178666	0.25	5294619	97.81	30	120	
Bi	209	1	He	3226731	1.27	3401163	94.87	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-180187/1-a@10
Data File Name	139_Blk.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T18:16:52-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.042	15.0	726	11.5	1	
B	11	45	2	NoGas	18.280	3.2	142852	1.1	20	
Na	23	45	1	He	46.666	3.7	165741	2.2	400	
Mg	24	45	1	He	12.631	6.5	22745	6.8	1000	
Al	27	45	1	He	6.666	6.6	8719	6.8	50	
K	39	45	1	He	32.495	14.5	322393	1.5	1000	
Ca	44	45	1	He	27.647	16.5	6026	3.7	1000	
Ti	47	45	1	He	1.551	17.2	1010	11.5	20	
V	51	45	1	He	0.165	53.1	4486	28.6	2	
Cr	52	45	1	He	0.476	7.3	17208	1.7	2	
Mn	55	45	1	He	-0.038	-52.5	4514	2.2	2	
Fe	56	45	1	He	30.291	15.3	474703	10.0	50	
Co	59	103	1	He	0.013	19.8	602	10.6	1	
Ni	60	103	1	He	-0.652	-1.6	939	7.8	2	
Cu	63	103	1	He	0.312	7.3	11579	5.7	2	
Zn	66	103	1	He	0.795	7.2	7383	2.3	20	
As	75	103	1	He	0.099	44.3	852	9.3	2	
Se	78	103	1	He	0.309	59.2	385	5.9	2	
Sr	88	103	1	He	0.061	5.8	1597	8.0	10	
Mo	95	103	1	He	5.996	35.7	38397	31.8	2	Blank Failed
Ag	107	103	1	He	0.012	27.7	274	23.7	0.2	
Cd	111	103	1	He	0.114	27.9	4225	6.6	0.2	
Sn	118	115	1	He	3.897	4.5	32551	0.6	10	
Sb	123	115	1	He	0.131	19.9	1609	8.8	1	
Ba	137	115	1	He	0.237	13.5	974	11.7	5	
W	182	209	1	He	0.689	25.2	16498	10.1	10	
Tl	205	209	1	He	0.108	1.9	3420	3.8	0.5	
Pb	208	209	1	He	0.087	3.4	4634	1.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4127143	2.79	4563898	90.43	30	120	
Sc	45	1	He	2286163	4.75	2572368	88.87	30	120	
Sc	45	2	NoGas	23125032	1.49	24609710	93.97	30	120	
Rh	103	1	He	4365361	4.35	4780241	91.32	30	120	
In	115	1	He	2971227	3.79	3171814	93.68	30	120	
Tb	159	1	He	5207082	4.25	5469932	95.19	30	120	
Ho	165	1	He	5064471	3.99	5294619	95.65	30	120	
Bi	209	1	He	3320310	2.95	3401163	97.62	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-180187/2-a@10
Data File Name	140LCSS.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T18:20:43-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	98.194	98.194	2.723	1209938	0.57	500	19.6	78.6	110.5	LCSS Failed
B	11	2	NoGas	29.366	29.366	0.477	207705	0.67	50	58.7	79.5	120.5	LCSS Failed
Na	23	1	He	1030.503	1030.503	2.094	3174879	0.44	5000	20.6	79.5	120.5	LCSS Failed
Mg	24	1	He	1032.810	1032.810	1.983	1806073	0.31	5000	20.7	79.5	120.5	LCSS Failed
Al	27	1	He	957.725	957.725	1.817	1052020	0.16	5000	19.2	79.5	120.5	LCSS Failed
K	39	1	He	1023.859	1023.859	1.246	2671709	1.00	5000	20.5	79.5	120.5	LCSS Failed
Ca	44	1	He	1002.328	1002.328	0.908	113011	1.41	5000	20.0	79.5	120.5	LCSS Failed
Ti	47	1	He	10.058	10.058	1.379	6420	2.91	50	20.1	79.5	120.5	LCSS Failed
V	51	1	He	101.898	101.898	1.506	1570487	0.63	500	20.4	71.5	110.5	LCSS Failed
Cr	52	1	He	102.993	102.993	1.859	1731316	0.59	500	20.6	69.5	110.5	LCSS Failed
Mn	55	1	He	97.617	97.617	1.375	1242706	0.45	500	19.5	79.5	120.5	LCSS Failed
Fe	56	1	He	1026.538	1026.538	0.682	15557874	1.09	5000	20.5	79.5	120.5	LCSS Failed
Co	59	1	He	94.200	94.200	1.775	2317067	1.55	500	18.8	73.9	110.5	LCSS Failed
Ni	60	1	He	91.654	91.654	0.245	542902	0.30	500	18.3	74.9	110.5	LCSS Failed
Cu	63	1	He	93.970	93.970	5.376	1481161	5.55	500	18.8	72.6	110.5	LCSS Failed
Zn	66	1	He	93.389	93.389	1.374	286804	1.27	500	18.7	71.5	113.4	LCSS Failed
As	75	1	He	92.097	92.097	0.411	235591	0.65	500	18.4	73.4	110.5	LCSS Failed
Se	78	1	He	91.915	91.915	0.268	21051	0.56	500	18.4	64.6	110.5	LCSS Failed
Sr	88	1	He	99.186	99.186	1.161	1739116	1.45	500	19.8	79.5	120.5	LCSS Failed
Mo	95	1	He	10.791	10.791	2.358	70592	2.07	50	21.6	29.5	140.5	LCSS Failed
Ag	107	1	He	9.180	9.180	0.520	175602	0.37	50	18.4	59.5	114.5	LCSS Failed
Cd	111	1	He	96.199	96.199	0.513	310190	0.22	500	19.2	73.5	110.5	LCSS Failed
Sn	118	1	He	99.195	99.195	0.600	806780	0.46	500	19.8	79.5	120.5	LCSS Failed
Sb	123	1	He	10.058	10.058	0.419	80386	0.67	50	20.1	67.5	113.4	LCSS Failed
Ba	137	1	He	99.240	99.240	0.626	372444	1.08	500	19.8	69.5	110.5	LCSS Failed
W	182	1	He	9.318	9.318	1.280	124354	0.77	50	18.6	74.6	125.4	LCSS Failed
Tl	205	1	He	21.811	21.811	1.234	669729	1.01	125	17.4	70.6	110.5	LCSS Failed
Pb	208	1	He	98.792	98.792	1.296	4044251	0.90	500	19.8	74.6	110.5	LCSS Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4084730	2.53	4563898	89.50	30	120	
Sc	45	1	He	2328105	1.68	2572368	90.50	30	120	
Sc	45	2	NoGas	22552692	0.57	24609710	91.64	30	120	
Rh	103	1	He	4433367	0.29	4780241	92.74	30	120	
In	115	1	He	3019250	0.58	3171814	95.19	30	120	
Tb	159	1	He	5276559	1.18	5469932	96.46	30	120	
Ho	165	1	He	5163198	0.41	5294619	97.52	30	120	
Bi	209	1	He	3383440	0.49	3401163	99.48	30	120	

Sample Report

Sample Table

Sample Name	680-112108-a-13-e@10
Data File Name	141SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T18:24:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.248	0.248	10.27	3226	0.01	10000	
B	11	45	2	NoGas	21.604	21.604	2.11	169332	0.01	300	
Na	23	45	1	He	727.906	727.906	1.87	2319714	0.03	500000	
Mg	24	45	1	He	1703.412	1703.412	1.05	3069732	0.06	500000	
Al	27	45	1	He	12930.424	12930.424	1.51	14620393	0.09	200000	
K	39	45	1	He	881.018	881.018	1.34	2405680	0.04	500000	
Ca	44	45	1	He	124155.725	124155.725	0.81	14031794	0.88	500000	
Ti	47	45	1	He	5667.054	5667.054	0.72	3697305	0.15	2500	>LDR
V	51	45	1	He	543.173	543.173	0.23	8619857	0.01	10000	
Cr	52	45	1	He	248.540	248.540	0.62	4292589	0.01	10000	
Mn	55	45	1	He	924.346	924.346	0.54	12084514	0.01	10000	
Fe	56	45	1	He	35739.215	35739.215	1.27	557301951	0.01	200000	
Co	59	103	1	He	15.782	15.782	0.16	367756	0.00	10000	
Ni	60	103	1	He	16.053	16.053	1.00	93758	0.02	10000	
Cu	63	103	1	He	19.975	19.975	0.82	303151	0.01	10000	
Zn	66	103	1	He	100.249	100.249	0.24	291112	0.03	10000	
As	75	103	1	He	2.545	2.545	2.98	6730	0.04	10000	
Se	78	103	1	He	1.196	1.196	9.60	561	0.21	10000	
Sr	88	103	1	He	2109.178	2109.178	0.91	34998900	0.01	10000	
Mo	95	103	1	He	2.497	2.497	5.75	15640	0.02	2000	
Ag	107	103	1	He	0.294	0.294	8.81	5366	0.01	300	
Cd	111	103	1	He	1.411	1.411	3.47	7970	0.02	4000	
Sn	118	115	1	He	10.815	10.815	2.85	87956	0.01	2000	
Sb	123	115	1	He	0.303	0.303	1.47	2961	0.01	300	
Ba	137	115	1	He	36.603	36.603	1.45	135377	0.03	10000	
W	182	209	1	He	3.865	3.865	1.30	54429	0.01	2500	
Tl	205	209	1	He	0.085	0.085	4.84	2660	0.00	5000	
Pb	208	209	1	He	31.830	31.830	1.21	1257480	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4040169	1.52	4563898	88.52	30	120	
Sc	45	1	He	2399320	0.51	2572368	93.27	30	120	
Sc	45	2	NoGas	23887275	1.37	24609710	97.06	30	120	
Rh	103	1	He	4197113	0.52	4780241	87.80	30	120	
In	115	1	He	2974238	0.57	3171814	93.77	30	120	
Tb	159	1	He	5242533	0.39	5469932	95.84	30	120	
Ho	165	1	He	5130460	1.15	5294619	96.90	30	120	
Bi	209	1	He	3263442	1.28	3401163	95.95	30	120	

Sample Report

Sample Table

Sample Name	SD 680-112108-a-13-e@50
Data File Name	142SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T18:28:15-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.069	0.069	23.17	1045	0.01	10000	
B	11	45	2	NoGas	17.170	17.170	3.18	136402	0.01	300	
Na	23	45	1	He	169.795	169.795	1.01	581732	0.03	500000	
Mg	24	45	1	He	359.684	359.684	0.93	671962	0.05	500000	
Al	27	45	1	He	2841.765	2841.765	2.06	3329153	0.09	200000	
K	39	45	1	He	191.402	191.402	6.13	751931	0.03	500000	
Ca	44	45	1	He	27198.158	27198.158	1.61	3185471	0.85	500000	
Ti	47	45	1	He	1164.102	1164.102	0.43	786056	0.15	2500	
V	51	45	1	He	116.759	116.759	1.28	1918796	0.01	10000	
Cr	52	45	1	He	50.235	50.235	0.92	905955	0.01	10000	
Mn	55	45	1	He	201.545	201.545	0.99	2731440	0.01	10000	
Fe	56	45	1	He	7634.856	7634.856	1.08	123213271	0.01	200000	
Co	59	103	1	He	3.275	3.275	1.21	80227	0.00	10000	
Ni	60	103	1	He	2.719	2.719	5.12	20585	0.01	10000	
Cu	63	103	1	He	4.279	4.279	3.44	73415	0.01	10000	
Zn	66	103	1	He	20.940	20.940	1.80	67746	0.03	10000	
As	75	103	1	He	0.525	0.525	2.92	1939	0.03	10000	
Se	78	103	1	He	0.617	0.617	22.15	458	0.13	10000	
Sr	88	103	1	He	434.342	434.342	1.97	7555376	0.01	10000	
Mo	95	103	1	He	0.612	0.612	8.69	4203	0.01	2000	
Ag	107	103	1	He	0.059	0.059	15.27	1169	0.01	300	
Cd	111	103	1	He	0.437	0.437	12.78	5276	0.01	4000	
Sn	118	115	1	He	2.385	2.385	2.36	21626	0.01	2000	
Sb	123	115	1	He	0.040	0.040	15.72	952	0.00	300	
Ba	137	115	1	He	7.298	7.298	2.38	28512	0.03	10000	
W	182	209	1	He	0.748	0.748	6.19	17354	0.00	2500	
Tl	205	209	1	He	0.027	0.027	5.35	976	0.00	5000	
Pb	208	209	1	He	6.411	6.411	0.51	260052	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4070656	2.81	4563898	89.19	30	120	
Sc	45	1	He	2483375	4.82	2572368	96.54	30	120	
Sc	45	2	NoGas	23220941	1.53	24609710	94.36	30	120	
Rh	103	1	He	4398736	1.19	4780241	92.02	30	120	
In	115	1	He	3132363	0.37	3171814	98.76	30	120	
Tb	159	1	He	5249224	0.47	5469932	95.97	30	120	
Ho	165	1	He	5114467	0.94	5294619	96.60	30	120	
Bi	209	1	He	3338518	1.48	3401163	98.16	30	120	

Sample Report

Sample Table

Sample Name	PDS 680-112108-a-13-e@10
Data File Name	143SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T18:32:00-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1010.378	1010.378	2.25	11996575	0.01	10000	
B	11	45	2	NoGas	136.875	136.875	2.07	895911	0.02	300	
Na	23	45	1	He	10784.926	10784.926	1.65	33537127	0.03	500000	
Mg	24	45	1	He	11693.415	11693.415	1.74	20782693	0.06	500000	
Al	27	45	1	He	22574.513	22574.513	2.01	25179100	0.09	200000	
K	39	45	1	He	10935.297	10935.297	2.82	26531371	0.04	500000	
Ca	44	45	1	He	133318.339	133318.339	2.11	14863481	0.90	500000	
Ti	47	45	1	He	5599.421	5599.421	4.14	3602642	0.16	2500	>LDR
V	51	45	1	He	1482.187	1482.187	4.14	23193363	0.01	10000	
Cr	52	45	1	He	1219.349	1219.349	2.82	20734687	0.01	10000	
Mn	55	45	1	He	1922.180	1922.180	3.12	24780421	0.01	10000	
Fe	56	45	1	He	45636.092	45636.092	1.41	702087830	0.01	200000	
Co	59	103	1	He	997.131	997.131	1.05	23027132	0.00	10000	
Ni	60	103	1	He	1029.784	1029.784	0.50	5681757	0.02	10000	
Cu	63	103	1	He	992.904	992.904	1.23	14631792	0.01	10000	
Zn	66	103	1	He	1148.000	1148.000	1.59	3256128	0.04	10000	
As	75	103	1	He	1095.865	1095.865	2.19	2625678	0.04	10000	
Se	78	103	1	He	1001.843	1001.843	0.78	212442	0.47	10000	
Sr	88	103	1	He	3073.027	3073.027	0.96	50575966	0.01	10000	
Mo	95	103	1	He	111.688	111.688	1.31	683826	0.02	2000	
Ag	107	103	1	He	104.306	104.306	1.41	1873294	0.01	300	
Cd	111	103	1	He	1112.499	1112.499	0.87	3329320	0.03	4000	
Sn	118	115	1	He	1174.586	1174.586	2.17	8912909	0.01	2000	
Sb	123	115	1	He	112.308	112.308	2.15	833118	0.01	300	
Ba	137	115	1	He	1192.484	1192.484	1.56	4181614	0.03	10000	
W	182	209	1	He	106.373	106.373	2.28	1283199	0.01	2500	
Tl	205	209	1	He	250.761	250.761	2.42	7407617	0.00	5000	
Pb	208	209	1	He	1084.325	1084.325	2.87	42699533	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3935935	1.92	4563898	86.24	30	120	
Sc	45	1	He	2367599	2.32	2572368	92.04	30	120	
Sc	45	2	NoGas	23209977	0.45	24609710	94.31	30	120	
Rh	103	1	He	4162970	1.06	4780241	87.09	30	120	
In	115	1	He	2822508	2.34	3171814	88.99	30	120	
Tb	159	1	He	5089304	1.19	5469932	93.04	30	120	
Ho	165	1	He	4976962	0.15	5294619	94.00	30	120	
Bi	209	1	He	3256723	2.17	3401163	95.75	30	120	

Sample Report

Sample Table

Sample Name	680-112108-a-13-f ms@10
Data File Name	144SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T18:35:25-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	97.857	97.857	1.07	1173387	0.01	10000	
B	11	45	2	NoGas	33.289	33.289	1.90	249375	0.01	300	
Na	23	45	1	He	1837.678	1837.678	1.76	6001261	0.03	500000	
Mg	24	45	1	He	3239.681	3239.681	0.47	6024728	0.05	500000	
Al	27	45	1	He	19510.190	19510.190	1.38	22767134	0.09	200000	
K	39	45	1	He	2072.027	2072.027	1.38	5477344	0.04	500000	
Ca	44	45	1	He	170686.608	170686.608	0.72	19909094	0.86	500000	
Ti	47	45	1	He	7626.988	7626.988	0.99	5135612	0.15	2500	>LDR
V	51	45	1	He	822.095	822.095	0.81	13463504	0.01	10000	
Cr	52	45	1	He	422.116	422.116	0.84	7517497	0.01	10000	
Mn	55	45	1	He	1274.583	1274.583	0.30	17196669	0.01	10000	
Fe	56	45	1	He	47510.641	47510.641	1.48	764608503	0.01	200000	
Co	59	103	1	He	115.904	115.904	0.82	2670992	0.00	10000	
Ni	60	103	1	He	116.572	116.572	1.05	645679	0.02	10000	
Cu	63	103	1	He	125.245	125.245	1.14	1847174	0.01	10000	
Zn	66	103	1	He	227.433	227.433	0.72	647505	0.04	10000	
As	75	103	1	He	99.050	99.050	0.68	237335	0.04	10000	
Se	78	103	1	He	97.001	97.001	0.71	20796	0.47	10000	
Sr	88	103	1	He	3016.790	3016.790	0.54	49540839	0.01	10000	
Mo	95	103	1	He	13.306	13.306	1.19	81496	0.02	2000	
Ag	107	103	1	He	9.446	9.446	1.19	169284	0.01	300	
Cd	111	103	1	He	97.079	97.079	0.38	293238	0.03	4000	
Sn	118	115	1	He	109.589	109.589	0.77	856781	0.01	2000	
Sb	123	115	1	He	6.124	6.124	0.67	47281	0.01	300	
Ba	137	115	1	He	145.403	145.403	0.56	524562	0.03	10000	
W	182	209	1	He	12.373	12.373	0.62	154029	0.01	2500	
Tl	205	209	1	He	21.888	21.888	1.76	637345	0.00	5000	
Pb	208	209	1	He	134.037	134.037	1.84	5203015	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3973278	0.66	4563898	87.06	30	120	
Sc	45	1	He	2476363	0.65	2572368	96.27	30	120	
Sc	45	2	NoGas	24252576	0.79	24609710	98.55	30	120	
Rh	103	1	He	4153559	0.61	4780241	86.89	30	120	
In	115	1	He	2902678	0.42	3171814	91.51	30	120	
Tb	159	1	He	5130386	0.95	5469932	93.79	30	120	
Ho	165	1	He	5023801	1.03	5294619	94.89	30	120	
Bi	209	1	He	3208801	1.02	3401163	94.34	30	120	

Sample Report

Sample Table

Sample Name	680-112108-a-13-g msd@10
Data File Name	145SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T18:39:05-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	98.978	98.978	0.53	1198909	0.01	10000	
B	11	45	2	NoGas	32.514	32.514	1.18	245145	0.01	300	
Na	23	45	1	He	1751.650	1751.650	0.77	5718100	0.03	500000	
Mg	24	45	1	He	2889.063	2889.063	0.98	5369221	0.05	500000	
Al	27	45	1	He	17279.190	17279.190	1.45	20150108	0.09	200000	
K	39	45	1	He	2005.109	2005.109	0.38	5305574	0.04	500000	
Ca	44	45	1	He	153699.726	153699.726	0.36	17915754	0.86	500000	
Ti	47	45	1	He	6827.250	6827.250	0.25	4594094	0.15	2500	>LDR
V	51	45	1	He	749.742	749.742	0.79	12270627	0.01	10000	
Cr	52	45	1	He	385.906	385.906	0.21	6868733	0.01	10000	
Mn	55	45	1	He	1156.700	1156.700	0.95	15595387	0.01	10000	
Fe	56	45	1	He	42770.128	42770.128	0.84	687869466	0.01	200000	
Co	59	103	1	He	114.174	114.174	0.89	2647276	0.00	10000	
Ni	60	103	1	He	112.258	112.258	0.59	625797	0.02	10000	
Cu	63	103	1	He	125.634	125.634	1.46	1864322	0.01	10000	
Zn	66	103	1	He	224.865	224.865	0.69	644198	0.03	10000	
As	75	103	1	He	99.189	99.189	0.50	239132	0.04	10000	
Se	78	103	1	He	96.585	96.585	0.28	20836	0.46	10000	
Sr	88	103	1	He	2734.597	2734.597	0.35	45183999	0.01	10000	
Mo	95	103	1	He	12.693	12.693	0.79	78233	0.02	2000	
Ag	107	103	1	He	9.520	9.520	0.65	171663	0.01	300	
Cd	111	103	1	He	97.473	97.473	0.68	296228	0.03	4000	
Sn	118	115	1	He	108.372	108.372	1.06	851912	0.01	2000	
Sb	123	115	1	He	6.504	6.504	1.51	50455	0.01	300	
Ba	137	115	1	He	144.220	144.220	0.57	523163	0.03	10000	
W	182	209	1	He	11.540	11.540	1.11	143165	0.01	2500	
Tl	205	209	1	He	22.199	22.199	1.32	641861	0.00	5000	
Pb	208	209	1	He	134.146	134.146	0.52	5170855	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4013615	0.30	4563898	87.94	30	120	
Sc	45	1	He	2474624	0.31	2572368	96.20	30	120	
Sc	45	2	NoGas	24344188	0.76	24609710	98.92	30	120	
Rh	103	1	He	4179121	0.41	4780241	87.42	30	120	
In	115	1	He	2918675	0.47	3171814	92.02	30	120	
Tb	159	1	He	5196016	0.72	5469932	94.99	30	120	
Ho	165	1	He	5056865	0.30	5294619	95.51	30	120	
Bi	209	1	He	3186112	1.05	3401163	93.68	30	120	

Sample Report

Sample Table

Sample Name	680-112108-a-5-b@10
Data File Name	146SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T18:42:46-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.147	0.147	23.82	2534	0.01	10000	
B	11	45	2	NoGas	11.570	11.570	30.77	135572	0.01	300	
Na	23	45	1	He	240.861	240.861	1.02	779586	0.03	500000	
Mg	24	45	1	He	498.334	498.334	1.26	891819	0.06	500000	
Al	27	45	1	He	1291.238	1291.238	1.11	1450155	0.09	200000	
K	39	45	1	He	173.536	173.536	1.72	676944	0.03	500000	
Ca	44	45	1	He	4831.981	4831.981	1.56	544889	0.89	500000	
Ti	47	45	1	He	997.974	997.974	1.15	646044	0.15	2500	
V	51	45	1	He	37.358	37.358	1.67	590130	0.01	10000	
Cr	52	45	1	He	19.687	19.687	2.21	346363	0.01	10000	
Mn	55	45	1	He	80.943	80.943	0.55	1054732	0.01	10000	
Fe	56	45	1	He	2359.893	2359.893	0.88	36538863	0.01	200000	
Co	59	103	1	He	1.870	1.870	1.05	46573	0.00	10000	
Ni	60	103	1	He	5.178	5.178	0.72	35402	0.01	10000	
Cu	63	103	1	He	11.795	11.795	2.13	193084	0.01	10000	
Zn	66	103	1	He	37.000	37.000	0.92	117434	0.03	10000	
As	75	103	1	He	2.814	2.814	1.40	7841	0.04	10000	
Se	78	103	1	He	0.803	0.803	8.18	507	0.16	10000	
Sr	88	103	1	He	42.738	42.738	0.19	754303	0.01	10000	
Mo	95	103	1	He	2.430	2.430	0.83	16188	0.02	2000	
Ag	107	103	1	He	0.097	0.097	6.72	1918	0.01	300	
Cd	111	103	1	He	1.247	1.247	1.45	7943	0.02	4000	
Sn	118	115	1	He	6.831	6.831	0.36	57279	0.01	2000	
Sb	123	115	1	He	0.110	0.110	7.41	1482	0.01	300	
Ba	137	115	1	He	20.220	20.220	0.67	76429	0.03	10000	
W	182	209	1	He	1.147	1.147	2.92	22494	0.01	2500	
Tl	205	209	1	He	0.152	0.152	3.08	4809	0.00	5000	
Pb	208	209	1	He	21.283	21.283	1.50	869511	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	5259722	17.97	4563898	115.25	30	120	
Sc	45	1	He	2380675	1.04	2572368	92.55	30	120	
Sc	45	2	NoGas	32263385	22.24	24609710	131.10	30	120	ISTD Failed
Rh	103	1	He	4460796	0.47	4780241	93.32	30	120	
In	115	1	He	3037646	0.32	3171814	95.77	30	120	
Tb	159	1	He	5313890	0.93	5469932	97.15	30	120	
Ho	165	1	He	5138776	1.08	5294619	97.06	30	120	
Bi	209	1	He	3373425	1.44	3401163	99.18	30	120	

Sample Report

Sample Table

Sample Name	680-112108-a-6-b@10
Data File Name	147SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T18:46:34-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.495	1.495	2.28	19266	0.01	10000	
B	11	45	2	NoGas	25.156	25.156	1.02	196482	0.01	300	
Na	23	45	1	He	1136.388	1136.388	0.35	3740080	0.03	500000	
Mg	24	45	1	He	3669.386	3669.386	1.49	6858339	0.05	500000	
Al	27	45	1	He	27445.445	27445.445	1.22	32188444	0.09	200000	
K	39	45	1	He	2174.928	2174.928	2.15	5766037	0.04	500000	
Ca	44	45	1	He	3684.725	3684.725	0.27	435136	0.85	500000	
Ti	47	45	1	He	263.391	263.391	0.49	178244	0.15	2500	
V	51	45	1	He	128.936	128.936	0.30	2123631	0.01	10000	
Cr	52	45	1	He	74.091	74.091	0.57	1334208	0.01	10000	
Mn	55	45	1	He	358.423	358.423	0.29	4862581	0.01	10000	
Fe	56	45	1	He	26260.143	26260.143	0.89	424673912	0.01	200000	
Co	59	103	1	He	7.044	7.044	0.81	171649	0.00	10000	
Ni	60	103	1	He	11.475	11.475	1.53	71376	0.02	10000	
Cu	63	103	1	He	14.206	14.206	1.73	227234	0.01	10000	
Zn	66	103	1	He	58.839	58.839	0.72	180609	0.03	10000	
As	75	103	1	He	12.429	12.429	1.60	31977	0.04	10000	
Se	78	103	1	He	2.288	2.288	3.58	829	0.28	10000	
Sr	88	103	1	He	49.034	49.034	2.06	850745	0.01	10000	
Mo	95	103	1	He	1.179	1.179	3.29	7852	0.02	2000	
Ag	107	103	1	He	0.069	0.069	4.51	1358	0.01	300	
Cd	111	103	1	He	0.593	0.593	6.39	5750	0.01	4000	
Sn	118	115	1	He	4.107	4.107	2.41	34799	0.01	2000	
Sb	123	115	1	He	0.053	0.053	5.06	1021	0.01	300	
Ba	137	115	1	He	48.167	48.167	1.17	180698	0.03	10000	
W	182	209	1	He	0.109	0.109	61.99	9563	0.00	2500	
Tl	205	209	1	He	0.248	0.248	2.34	7704	0.00	5000	
Pb	208	209	1	He	21.691	21.691	1.24	881695	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4224405	1.21	4563898	92.56	30	120	
Sc	45	1	He	2488189	3.16	2572368	96.73	30	120	
Sc	45	2	NoGas	24380742	1.08	24609710	99.07	30	120	
Rh	103	1	He	4385134	0.80	4780241	91.73	30	120	
In	115	1	He	3017621	1.71	3171814	95.14	30	120	
Tb	159	1	He	5317037	0.42	5469932	97.20	30	120	
Ho	165	1	He	5194333	0.21	5294619	98.11	30	120	
Bi	209	1	He	3356414	1.62	3401163	98.68	30	120	

Sample Report

Sample Table

Sample Name	680-112108-a-7-b@10
Data File Name	148SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T18:50:21-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.732	0.732	4.35	8947	0.01	10000	
B	11	45	2	NoGas	13.636	13.636	2.25	136823	0.01	300	
Na	23	45	1	He	773.285	773.285	0.42	3071182	0.03	500000	
Mg	24	45	1	He	864.243	864.243	0.49	1943290	0.04	500000	
Al	27	45	1	He	4945.618	4945.618	0.97	6978035	0.07	200000	
K	39	45	1	He	107.304	107.304	3.31	650097	0.02	500000	
Ca	44	45	1	He	91929.058	91929.058	1.01	12959468	0.71	500000	
Ti	47	45	1	He	16935.218	16935.218	1.44	13774826	0.12	2500	>LDR
V	51	45	1	He	2420.219	2420.219	1.39	47873835	0.01	10000	
Cr	52	45	1	He	1067.053	1067.053	2.31	22928691	0.00	10000	
Mn	55	45	1	He	2402.357	2402.357	1.04	39149937	0.01	10000	
Fe	56	45	1	He	34970.039	34970.039	1.42	679838906	0.01	200000	
Co	59	103	1	He	2.656	2.656	2.94	60998	0.00	10000	
Ni	60	103	1	He	59.051	59.051	1.30	326705	0.02	10000	
Cu	63	103	1	He	40.003	40.003	1.69	589696	0.01	10000	
Zn	66	103	1	He	28.157	28.157	2.94	83696	0.03	10000	
As	75	103	1	He	1.285	1.285	4.24	3620	0.04	10000	
Se	78	103	1	He	2.254	2.254	3.90	772	0.29	10000	
Sr	88	103	1	He	399.825	399.825	2.87	6515107	0.01	10000	
Mo	95	103	1	He	2.799	2.799	1.76	17191	0.02	2000	
Ag	107	103	1	He	2.339	2.339	3.39	41637	0.01	300	
Cd	111	103	1	He	10.564	10.564	4.06	34910	0.03	4000	
Sn	118	115	1	He	21.436	21.436	0.26	166714	0.01	2000	
Sb	123	115	1	He	1.206	1.206	2.48	9653	0.01	300	
Ba	137	115	1	He	194.328	194.328	0.76	692651	0.03	10000	
W	182	209	1	He	1.068	1.068	2.60	19727	0.01	2500	
Tl	205	209	1	He	0.048	0.048	7.34	1503	0.00	5000	
Pb	208	209	1	He	19.100	19.100	0.26	715931	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3960144	0.31	4563898	86.77	30	120	
Sc	45	1	He	2992609	5.03	2572368	116.34	30	120	
Sc	45	2	NoGas	27871622	1.72	24609710	113.25	30	120	
Rh	103	1	He	4120530	0.83	4780241	86.20	30	120	
In	115	1	He	2868092	1.34	3171814	90.42	30	120	
Tb	159	1	He	5061794	0.53	5469932	92.54	30	120	
Ho	165	1	He	4923179	1.28	5294619	92.98	30	120	
Bi	209	1	He	3094142	0.97	3401163	90.97	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2004624
Data File Name	149_CCV.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T18:54:04-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.806	1.150	601615	1.48	50	97.6	89.5	110.5	
B	11	45	2	NoGas	67.697	2.040	457874	1.09	50	135.4	89.5	110.5	CCV Failed
Na	23	45	1	He	24856.990	1.468	74853179	2.08	25000	99.4	89.5	110.5	
Mg	24	45	1	He	24821.665	1.506	42737100	1.47	25000	99.3	89.5	110.5	
Al	27	45	1	He	243.811	0.649	264998	1.04	250	97.5	89.5	110.5	
K	39	45	1	He	24936.768	0.731	58305705	0.85	25000	99.7	89.5	110.5	
Ca	44	45	1	He	25662.081	1.346	2774428	1.58	25000	102.6	89.5	110.5	
Ti	47	45	1	He	60.121	1.679	37544	2.74	50	120.2	89.5	110.5	CCV Failed
V	51	45	1	He	48.331	0.654	734883	0.96	50	96.7	89.5	110.5	
Cr	52	45	1	He	48.511	0.806	808386	1.26	50	97.0	89.5	110.5	
Mn	55	45	1	He	257.277	0.378	3218534	1.67	250	102.9	89.5	110.5	
Fe	56	45	1	He	12628.063	1.099	188226508	1.56	12500	101.0	89.5	110.5	
Co	59	103	1	He	46.001	0.973	1064502	1.04	50	92.0	89.5	110.5	
Ni	60	103	1	He	47.241	0.939	265392	0.49	50	94.5	89.5	110.5	
Cu	63	103	1	He	45.940	1.025	684382	1.28	50	91.9	89.5	110.5	
Zn	66	103	1	He	48.270	0.702	141764	0.87	50	96.5	89.5	110.5	
As	75	103	1	He	49.248	0.641	118771	0.78	50	98.5	89.5	110.5	
Se	78	103	1	He	48.758	0.843	10646	0.80	50	97.5	89.5	110.5	
Sr	88	103	1	He	46.627	1.417	769242	0.96	50	93.3	89.5	110.5	
Mo	95	103	1	He	51.601	1.790	316607	0.47	50	103.2	89.5	110.5	
Ag	107	103	1	He	46.525	0.669	837011	1.28	50	93.0	89.5	110.5	
Cd	111	103	1	He	50.255	1.316	154185	0.85	50	100.5	89.5	110.5	
Sn	118	115	1	He	55.742	1.173	433474	0.39	50	111.5	89.5	110.5	CCV Failed
Sb	123	115	1	He	52.140	1.141	395458	0.35	50	104.3	89.5	110.5	
Ba	137	115	1	He	50.718	0.535	181784	0.85	50	101.4	89.5	110.5	
W	182	209	1	He	49.430	2.926	575670	1.45	50	98.9	89.5	110.5	
Tl	205	209	1	He	45.209	1.365	1280550	0.61	50	90.4	89.5	110.5	
Pb	208	209	1	He	47.146	1.575	1781096	0.22	50	94.3	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4083659	0.40	4563898	89.48	30	120	
Sc	45	1	He	2293233	1.41	2572368	89.15	30	120	
Sc	45	2	NoGas	23258733	1.14	24609710	94.51	30	120	
Rh	103	1	He	4170458	1.39	4780241	87.24	30	120	
In	115	1	He	2882870	1.20	3171814	90.89	30	120	
Tb	159	1	He	5117815	1.26	5469932	93.56	30	120	
Ho	165	1	He	4969618	0.87	5294619	93.86	30	120	
Bi	209	1	He	3121880	1.73	3401163	91.79	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	150_CCB.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T18:57:50-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.049	30.3	1056	23.5	1	
B	11	45	2	NoGas	11.422	16.4	148286	15.7	20	
Na	23	45	1	He	21.951	3.9	92709	2.2	400	
Mg	24	45	1	He	1.338	43.0	3434	32.7	1000	
Al	27	45	1	He	0.838	7.4	2469	2.6	50	
K	39	45	1	He	-1.824	-190.7	245649	1.8	1000	
Ca	44	45	1	He	28.818	9.6	6230	1.6	1000	
Ti	47	45	1	He	0.777	23.2	537	16.2	20	
V	51	45	1	He	0.071	38.4	3118	11.0	2	
Cr	52	45	1	He	0.062	73.6	10528	2.6	2	
Mn	55	45	1	He	0.412	10.8	10222	1.2	2	
Fe	56	45	1	He	7.555	20.2	139799	11.7	50	
Co	59	103	1	He	0.011	16.5	556	9.6	1	
Ni	60	103	1	He	-0.712	-1.4	599	9.0	2	
Cu	63	103	1	He	0.081	18.6	8086	5.2	2	
Zn	66	103	1	He	1.538	7.4	9686	3.2	20	
As	75	103	1	He	0.180	24.7	1065	6.5	2	
Se	78	103	1	He	0.341	24.9	397	2.6	2	
Sr	88	103	1	He	0.034	20.2	1139	7.1	10	
Mo	95	103	1	He	0.268	43.1	1967	33.9	2	
Ag	107	103	1	He	0.004	12.8	128	10.5	0.2	
Cd	111	103	1	He	0.103	50.1	4228	5.1	0.2	
Sn	118	115	1	He	0.352	15.2	4256	5.9	10	
Sb	123	115	1	He	0.118	24.5	1510	12.8	1	
Ba	137	115	1	He	0.019	21.1	171	12.5	5	
W	182	209	1	He	0.474	22.4	13766	6.9	10	
Tl	205	209	1	He	0.081	8.6	2562	6.8	0.5	
Pb	208	209	1	He	0.055	4.3	3312	4.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	5317051	3.13	4563898	116.50	30	120	
Sc	45	1	He	2312798	4.88	2572368	89.91	30	120	
Sc	45	2	NoGas	34346648	4.91	24609710	139.57	30	120	ISTD Failed
Rh	103	1	He	4408732	4.03	4780241	92.23	30	120	
In	115	1	He	2972749	4.06	3171814	93.72	30	120	
Tb	159	1	He	5135318	2.90	5469932	93.88	30	120	
Ho	165	1	He	5063964	2.60	5294619	95.64	30	120	
Bi	209	1	He	3290746	2.51	3401163	96.75	30	120	

Sample Report

Sample Table

Sample Name	680-112108-a-8-b@10
Data File Name	151SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T19:01:42-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.258	1.258	5.38	15559	0.01	10000	
B	11	45	2	NoGas	14.062	14.062	2.45	148283	0.01	300	
Na	23	45	1	He	820.419	820.419	0.80	3274841	0.03	500000	
Mg	24	45	1	He	942.117	942.117	2.22	2129687	0.04	500000	
Al	27	45	1	He	6351.356	6351.356	3.12	9005360	0.07	200000	
K	39	45	1	He	97.216	97.216	4.01	622460	0.02	500000	
Ca	44	45	1	He	131889.888	131889.888	1.93	18693295	0.71	500000	
Ti	47	45	1	He	13914.565	13914.565	1.82	11386142	0.12	2500	>LDR
V	51	45	1	He	1491.115	1491.115	1.41	29671956	0.01	10000	
Cr	52	45	1	He	773.854	773.854	2.35	16733496	0.00	10000	
Mn	55	45	1	He	6448.243	6448.243	1.46	105686194	0.01	10000	
Fe	56	45	1	He	52660.613	52660.613	2.46	1029678430	0.01	200000	
Co	59	103	1	He	3.851	3.851	1.14	89467	0.00	10000	
Ni	60	103	1	He	83.189	83.189	1.16	464440	0.02	10000	
Cu	63	103	1	He	56.062	56.062	0.69	834691	0.01	10000	
Zn	66	103	1	He	12.501	12.501	2.46	40321	0.03	10000	
As	75	103	1	He	1.785	1.785	2.88	4868	0.04	10000	
Se	78	103	1	He	3.860	3.860	2.17	1123	0.34	10000	
Sr	88	103	1	He	512.577	512.577	1.58	8460646	0.01	10000	
Mo	95	103	1	He	1.190	1.190	1.31	7542	0.02	2000	
Ag	107	103	1	He	1.236	1.236	4.13	22312	0.01	300	
Cd	111	103	1	He	6.102	6.102	2.83	21995	0.03	4000	
Sn	118	115	1	He	6.454	6.454	0.53	52203	0.01	2000	
Sb	123	115	1	He	1.075	1.075	1.87	8845	0.01	300	
Ba	137	115	1	He	125.831	125.831	0.37	457542	0.03	10000	
W	182	209	1	He	0.333	0.333	19.51	11790	0.00	2500	
Tl	205	209	1	He	0.048	0.048	11.45	1549	0.00	5000	
Pb	208	209	1	He	5.305	5.305	0.80	207203	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4045999	0.41	4563898	88.65	30	120	
Sc	45	1	He	3009550	2.06	2572368	117.00	30	120	
Sc	45	2	NoGas	29511230	2.30	24609710	119.92	30	120	
Rh	103	1	He	4175158	1.15	4780241	87.34	30	120	
In	115	1	He	2925483	0.45	3171814	92.23	30	120	
Tb	159	1	He	5213800	0.56	5469932	95.32	30	120	
Ho	165	1	He	5091483	0.51	5294619	96.16	30	120	
Bi	209	1	He	3212353	1.03	3401163	94.45	30	120	

Sample Report

Sample Table

Sample Name	680-112108-a-9-b@10
Data File Name	152SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T19:05:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.492	0.492	6.89	6216	0.01	10000	
B	11	45	2	NoGas	14.491	14.491	1.16	134394	0.01	300	
Na	23	45	1	He	938.611	938.611	0.87	3289458	0.03	500000	
Mg	24	45	1	He	1109.688	1109.688	0.68	2205477	0.05	500000	
Al	27	45	1	He	3923.019	3923.019	0.57	4892349	0.08	200000	
K	39	45	1	He	151.215	151.215	2.24	692319	0.02	500000	
Ca	44	45	1	He	144128.295	144128.295	1.09	17959417	0.80	500000	
Ti	47	45	1	He	16013.318	16013.318	0.71	11519125	0.14	2500	>LDR
V	51	45	1	He	1054.021	1054.021	1.39	18439461	0.01	10000	
Cr	52	45	1	He	548.813	548.813	1.26	10437764	0.01	10000	
Mn	55	45	1	He	6724.469	6724.469	1.54	96892161	0.01	10000	
Fe	56	45	1	He	40772.003	40772.003	1.42	700977910	0.01	200000	
Co	59	103	1	He	3.547	3.547	2.23	82737	0.00	10000	
Ni	60	103	1	He	61.216	61.216	1.36	344238	0.02	10000	
Cu	63	103	1	He	55.450	55.450	1.50	828689	0.01	10000	
Zn	66	103	1	He	16.559	16.559	1.25	52037	0.03	10000	
As	75	103	1	He	0.882	0.882	1.95	2709	0.03	10000	
Se	78	103	1	He	1.677	1.677	0.60	662	0.25	10000	
Sr	88	103	1	He	527.880	527.880	1.12	8746222	0.01	10000	
Mo	95	103	1	He	0.858	0.858	1.08	5521	0.02	2000	
Ag	107	103	1	He	0.950	0.950	2.76	17224	0.01	300	
Cd	111	103	1	He	4.896	4.896	2.48	18443	0.03	4000	
Sn	118	115	1	He	8.678	8.678	1.07	69698	0.01	2000	
Sb	123	115	1	He	0.944	0.944	1.37	7834	0.01	300	
Ba	137	115	1	He	116.070	116.070	0.96	422060	0.03	10000	
W	182	209	1	He	0.172	0.172	26.28	9870	0.00	2500	
Tl	205	209	1	He	0.031	0.031	6.14	1066	0.00	5000	
Pb	208	209	1	He	6.336	6.336	0.87	246782	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4047191	1.39	4563898	88.68	30	120	
Sc	45	1	He	2645495	0.70	2572368	102.84	30	120	
Sc	45	2	NoGas	26131724	1.24	24609710	106.18	30	120	
Rh	103	1	He	4190734	0.88	4780241	87.67	30	120	
In	115	1	He	2925589	0.56	3171814	92.24	30	120	
Tb	159	1	He	5152402	0.24	5469932	94.19	30	120	
Ho	165	1	He	5104799	0.54	5294619	96.41	30	120	
Bi	209	1	He	3205662	0.38	3401163	94.25	30	120	

Sample Report

Sample Table

Sample Name	680-112108-a-10-b@10
Data File Name	153SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T19:09:14-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.375	0.375	7.47	4608	0.01	10000	
B	11	45	2	NoGas	14.191	14.191	1.90	119662	0.01	300	
Na	23	45	1	He	1148.686	1148.686	1.64	3654467	0.03	500000	
Mg	24	45	1	He	832.742	832.742	1.79	1505266	0.06	500000	
Al	27	45	1	He	3333.136	3333.136	1.56	3779896	0.09	200000	
K	39	45	1	He	311.071	311.071	1.09	1020015	0.03	500000	
Ca	44	45	1	He	14623.175	14623.175	2.80	1659799	0.88	500000	
Ti	47	45	1	He	6411.516	6411.516	0.67	4194099	0.15	2500	>LDR
V	51	45	1	He	596.452	596.452	1.23	9490040	0.01	10000	
Cr	52	45	1	He	297.772	297.772	0.36	5154657	0.01	10000	
Mn	55	45	1	He	1391.730	1391.730	0.57	18241199	0.01	10000	
Fe	56	45	1	He	8470.445	8470.445	1.80	132451964	0.01	200000	
Co	59	103	1	He	2.788	2.788	1.00	65635	0.00	10000	
Ni	60	103	1	He	35.643	35.643	0.61	203987	0.02	10000	
Cu	63	103	1	He	90.406	90.406	1.10	1358061	0.01	10000	
Zn	66	103	1	He	52.207	52.207	1.37	154932	0.03	10000	
As	75	103	1	He	0.793	0.793	1.97	2514	0.03	10000	
Se	78	103	1	He	2.110	2.110	7.52	761	0.28	10000	
Sr	88	103	1	He	116.402	116.402	2.02	1944784	0.01	10000	
Mo	95	103	1	He	3.373	3.373	2.38	21191	0.02	2000	
Ag	107	103	1	He	1.518	1.518	0.95	27707	0.01	300	
Cd	111	103	1	He	7.010	7.010	2.66	25009	0.03	4000	
Sn	118	115	1	He	32.271	32.271	0.82	250669	0.01	2000	
Sb	123	115	1	He	0.980	0.980	2.12	7968	0.01	300	
Ba	137	115	1	He	235.199	235.199	1.01	839653	0.03	10000	
W	182	209	1	He	0.038	0.038	86.50	8332	0.00	2500	
Tl	205	209	1	He	0.038	0.038	8.17	1259	0.00	5000	
Pb	208	209	1	He	54.499	54.499	0.75	2125574	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3896234	0.85	4563898	85.37	30	120	
Sc	45	1	He	2405710	0.56	2572368	93.52	30	120	
Sc	45	2	NoGas	23644596	0.94	24609710	96.08	30	120	
Rh	103	1	He	4225193	1.67	4780241	88.39	30	120	
In	115	1	He	2872632	0.78	3171814	90.57	30	120	
Tb	159	1	He	5083138	0.28	5469932	92.93	30	120	
Ho	165	1	He	4988489	0.50	5294619	94.22	30	120	
Bi	209	1	He	3222779	1.15	3401163	94.76	30	120	

Sample Report

Sample Table

Sample Name	680-112108-a-11-b@10
Data File Name	154SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T19:12:58-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.081	0.081	20.09	1200	0.01	10000	
B	11	45	2	NoGas	13.935	13.935	0.33	115991	0.01	300	
Na	23	45	1	He	198.135	198.135	1.54	637987	0.03	500000	
Mg	24	45	1	He	508.091	508.091	0.65	897967	0.06	500000	
Al	27	45	1	He	1196.502	1196.502	0.66	1327149	0.09	200000	
K	39	45	1	He	115.788	115.788	1.56	530668	0.02	500000	
Ca	44	45	1	He	5401.833	5401.833	1.05	601192	0.90	500000	
Ti	47	45	1	He	701.652	701.652	1.02	448564	0.16	2500	
V	51	45	1	He	44.324	44.324	0.70	691088	0.01	10000	
Cr	52	45	1	He	29.940	29.940	0.59	515177	0.01	10000	
Mn	55	45	1	He	158.692	158.692	1.55	2037256	0.01	10000	
Fe	56	45	1	He	1935.730	1935.730	1.01	29600954	0.01	200000	
Co	59	103	1	He	1.093	1.093	0.07	26640	0.00	10000	
Ni	60	103	1	He	9.334	9.334	1.27	58403	0.02	10000	
Cu	63	103	1	He	36.140	36.140	0.86	562456	0.01	10000	
Zn	66	103	1	He	17.042	17.042	2.32	55391	0.03	10000	
As	75	103	1	He	2.128	2.128	2.63	5923	0.04	10000	
Se	78	103	1	He	0.478	0.478	7.93	422	0.11	10000	
Sr	88	103	1	He	31.954	31.954	1.24	549523	0.01	10000	
Mo	95	103	1	He	1.551	1.551	2.47	10158	0.02	2000	
Ag	107	103	1	He	0.153	0.153	7.82	2919	0.01	300	
Cd	111	103	1	He	1.613	1.613	3.52	8879	0.02	4000	
Sn	118	115	1	He	6.292	6.292	3.18	52151	0.01	2000	
Sb	123	115	1	He	0.078	0.078	12.40	1208	0.01	300	
Ba	137	115	1	He	17.625	17.625	1.58	65712	0.03	10000	
W	182	209	1	He	0.161	0.161	30.86	10248	0.00	2500	
Tl	205	209	1	He	0.092	0.092	2.41	2987	0.00	5000	
Pb	208	209	1	He	17.882	17.882	1.06	731103	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4085215	1.61	4563898	89.51	30	120	
Sc	45	1	He	2350963	1.17	2572368	91.39	30	120	
Sc	45	2	NoGas	23239701	0.34	24609710	94.43	30	120	
Rh	103	1	He	4345858	1.08	4780241	90.91	30	120	
In	115	1	He	2996015	0.81	3171814	94.46	30	120	
Tb	159	1	He	5232447	1.06	5469932	95.66	30	120	
Ho	165	1	He	5117154	0.65	5294619	96.65	30	120	
Bi	209	1	He	3374695	0.42	3401163	99.22	30	120	

Sample Report

Sample Table

Sample Name	680-112108-a-12-b@10
Data File Name	155SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T19:16:46-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	1.844	1.844	1.75	23093	0.01	10000	
B	11	45	2	NoGas	24.801	24.801	0.13	192002	0.01	300	
Na	23	45	1	He	1611.104	1611.104	0.70	5089446	0.03	500000	
Mg	24	45	1	He	4571.201	4571.201	1.38	8216785	0.06	500000	
Al	27	45	1	He	34941.353	34941.353	1.13	39413618	0.09	200000	
K	39	45	1	He	2819.016	2819.016	0.40	7110170	0.04	500000	
Ca	44	45	1	He	4112.816	4112.816	0.63	466849	0.88	500000	
Ti	47	45	1	He	320.108	320.108	0.46	208412	0.15	2500	
V	51	45	1	He	134.966	134.966	0.28	2138439	0.01	10000	
Cr	52	45	1	He	72.023	72.023	1.06	1248021	0.01	10000	
Mn	55	45	1	He	438.817	438.817	1.68	5726203	0.01	10000	
Fe	56	45	1	He	32215.458	32215.458	1.12	501190522	0.01	200000	
Co	59	103	1	He	7.634	7.634	1.38	183350	0.00	10000	
Ni	60	103	1	He	13.200	13.200	1.47	80222	0.02	10000	
Cu	63	103	1	He	17.876	17.876	2.08	280073	0.01	10000	
Zn	66	103	1	He	60.915	60.915	1.90	184112	0.03	10000	
As	75	103	1	He	12.762	12.762	1.65	32345	0.04	10000	
Se	78	103	1	He	2.827	2.827	4.53	936	0.30	10000	
Sr	88	103	1	He	59.387	59.387	1.17	1015409	0.01	10000	
Mo	95	103	1	He	1.574	1.574	2.91	10245	0.02	2000	
Ag	107	103	1	He	0.129	0.129	11.52	2448	0.01	300	
Cd	111	103	1	He	1.081	1.081	9.32	7185	0.02	4000	
Sn	118	115	1	He	4.745	4.745	0.81	39368	0.01	2000	
Sb	123	115	1	He	0.067	0.067	14.34	1114	0.01	300	
Ba	137	115	1	He	61.525	61.525	2.07	227214	0.03	10000	
W	182	209	1	He	0.075	0.075	26.77	9062	0.00	2500	
Tl	205	209	1	He	0.257	0.257	2.01	7911	0.00	5000	
Pb	208	209	1	He	26.317	26.317	1.86	1061389	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4113704	0.56	4563898	90.14	30	120	
Sc	45	1	He	2393738	0.30	2572368	93.06	30	120	
Sc	45	2	NoGas	24115382	0.60	24609710	97.99	30	120	
Rh	103	1	He	4322815	1.31	4780241	90.43	30	120	
In	115	1	He	2971102	1.41	3171814	93.67	30	120	
Tb	159	1	He	5322165	1.05	5469932	97.30	30	120	
Ho	165	1	He	5201971	1.31	5294619	98.25	30	120	
Bi	209	1	He	3331209	1.33	3401163	97.94	30	120	

Sample Report

Sample Table

Sample Name	680-112108-a-14-b@10
Data File Name	156SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T19:20:31-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.256	0.256	1.21	3386	0.01	10000	
B	11	45	2	NoGas	18.520	18.520	1.33	156428	0.01	300	
Na	23	45	1	He	591.815	591.815	3.73	1910554	0.03	500000	
Mg	24	45	1	He	1827.545	1827.545	2.64	3327580	0.05	500000	
Al	27	45	1	He	16777.892	16777.892	1.68	19168666	0.09	200000	
K	39	45	1	He	813.257	813.257	1.55	2264111	0.04	500000	
Ca	44	45	1	He	165417.013	165417.013	1.73	18889429	0.88	500000	
Ti	47	45	1	He	7258.927	7258.927	2.68	4785166	0.15	2500	>LDR
V	51	45	1	He	760.966	760.966	2.40	12200886	0.01	10000	
Cr	52	45	1	He	335.564	335.564	2.27	5852444	0.01	10000	
Mn	55	45	1	He	1104.385	1104.385	2.54	14587604	0.01	10000	
Fe	56	45	1	He	46690.963	46690.963	2.42	735662175	0.01	200000	
Co	59	103	1	He	20.903	20.903	1.90	475902	0.00	10000	
Ni	60	103	1	He	21.782	21.782	2.05	122739	0.02	10000	
Cu	63	103	1	He	39.241	39.241	2.04	575875	0.01	10000	
Zn	66	103	1	He	161.766	161.766	1.54	456178	0.04	10000	
As	75	103	1	He	3.326	3.326	3.16	8420	0.04	10000	
Se	78	103	1	He	1.066	1.066	7.65	521	0.20	10000	
Sr	88	103	1	He	2790.122	2790.122	2.68	45242160	0.01	10000	
Mo	95	103	1	He	2.721	2.721	1.74	16642	0.02	2000	
Ag	107	103	1	He	0.449	0.449	0.58	7989	0.01	300	
Cd	111	103	1	He	2.071	2.071	3.37	9735	0.02	4000	
Sn	118	115	1	He	18.983	18.983	1.04	146888	0.01	2000	
Sb	123	115	1	He	0.432	0.432	1.84	3805	0.01	300	
Ba	137	115	1	He	43.002	43.002	1.21	152408	0.03	10000	
W	182	209	1	He	4.873	4.873	1.06	63417	0.01	2500	
Tl	205	209	1	He	0.055	0.055	6.94	1683	0.00	5000	
Pb	208	209	1	He	50.654	50.654	2.98	1905678	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4119204	0.62	4563898	90.26	30	120	
Sc	45	1	He	2424626	1.02	2572368	94.26	30	120	
Sc	45	2	NoGas	25051635	0.60	24609710	101.80	30	120	
Rh	103	1	He	4102411	1.58	4780241	85.82	30	120	
In	115	1	He	2850598	1.23	3171814	89.87	30	120	
Tb	159	1	He	5053805	1.65	5469932	92.39	30	120	
Ho	165	1	He	4941228	1.94	5294619	93.33	30	120	
Bi	209	1	He	3110686	3.58	3401163	91.46	30	120	

Sample Report

Sample Table

Sample Name	680-112108-a-15-b@10
Data File Name	157SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T19:24:14-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.341	0.341	14.42	3619	0.01	10000	
B	11	45	2	NoGas	23.810	23.810	2.37	155291	0.02	300	
Na	23	45	1	He	1104.875	1104.875	0.76	3829972	0.03	500000	
Mg	24	45	1	He	1625.625	1625.625	1.30	3199561	0.05	500000	
Al	27	45	1	He	20756.961	20756.961	0.54	25634585	0.08	200000	
K	39	45	1	He	672.108	672.108	1.81	2072484	0.03	500000	
Ca	44	45	1	He	174778.572	174778.572	1.55	21574698	0.81	500000	
Ti	47	45	1	He	7804.093	7804.093	0.43	5561290	0.14	2500	>LDR
V	51	45	1	He	747.742	747.742	0.50	12958531	0.01	10000	
Cr	52	45	1	He	341.760	341.760	0.95	6441877	0.01	10000	
Mn	55	45	1	He	1141.110	1141.110	1.45	16287589	0.01	10000	
Fe	56	45	1	He	45215.820	45215.820	0.86	769967649	0.01	200000	
Co	59	103	1	He	18.995	18.995	2.48	454297	0.00	10000	
Ni	60	103	1	He	17.878	17.878	2.29	106652	0.02	10000	
Cu	63	103	1	He	40.427	40.427	1.63	622946	0.01	10000	
Zn	66	103	1	He	164.170	164.170	2.11	486187	0.03	10000	
As	75	103	1	He	3.122	3.122	2.36	8338	0.04	10000	
Se	78	103	1	He	1.084	1.084	5.74	551	0.20	10000	
Sr	88	103	1	He	3017.456	3017.456	3.11	51393132	0.01	10000	
Mo	95	103	1	He	2.487	2.487	1.50	15997	0.02	2000	
Ag	107	103	1	He	0.492	0.492	6.46	9189	0.01	300	
Cd	111	103	1	He	2.331	2.331	6.25	11025	0.02	4000	
Sn	118	115	1	He	21.317	21.317	1.95	172883	0.01	2000	
Sb	123	115	1	He	0.394	0.394	7.81	3688	0.01	300	
Ba	137	115	1	He	50.956	50.956	1.83	189494	0.03	10000	
W	182	209	1	He	4.669	4.669	0.61	62525	0.01	2500	
Tl	205	209	1	He	0.049	0.049	12.00	1566	0.00	5000	
Pb	208	209	1	He	65.163	65.163	1.41	2510531	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3357753	0.82	4563898	73.57	30	120	
Sc	45	1	He	2620721	4.16	2572368	101.88	30	120	
Sc	45	2	NoGas	20195452	1.51	24609710	82.06	30	120	
Rh	103	1	He	4308332	1.44	4780241	90.13	30	120	
In	115	1	He	2991389	2.06	3171814	94.31	30	120	
Tb	159	1	He	5279663	2.06	5469932	96.52	30	120	
Ho	165	1	He	5140363	2.27	5294619	97.09	30	120	
Bi	209	1	He	3184364	2.36	3401163	93.63	30	120	

Sample Report

Sample Table

Sample Name	680-112108-a-16-b@10
Data File Name	158SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T19:27:55-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	3.300	3.300	3.26	40167	0.01	10000	
B	11	45	2	NoGas	4.771	4.771	2.56	141855	0.00	300	
Na	23	45	1	He	123.661	123.661	0.98	1029383	0.01	500000	
Mg	24	45	1	He	207.534	207.534	1.10	926557	0.02	500000	
Al	27	45	1	He	8737.654	8737.654	2.40	24410611	0.04	200000	
K	39	45	1	He	-44.924	-44.924	-2.85	370883	-0.01	500000	
Ca	44	45	1	He	10833.894	10833.894	1.60	3032510	0.36	500000	
Ti	47	45	1	He	7530.045	7530.045	1.45	12138708	0.06	2500	>LDR
V	51	45	1	He	5563.505	5563.505	1.63	218087661	0.00	10000	
Cr	52	45	1	He	1923.280	1923.280	1.46	81910872	0.00	10000	
Mn	55	45	1	He	469.337	469.337	1.21	15167616	0.00	10000	
Fe	56	45	1	He	13486.026	13486.026	1.75	519627944	0.00	200000	
Co	59	103	1	He	4.524	4.524	1.43	106367	0.00	10000	
Ni	60	103	1	He	204.752	204.752	1.77	1150722	0.02	10000	
Cu	63	103	1	He	23.086	23.086	1.38	351850	0.01	10000	
Zn	66	103	1	He	18.065	18.065	0.19	56825	0.03	10000	
As	75	103	1	He	3.757	3.757	1.44	9726	0.04	10000	
Se	78	103	1	He	5.176	5.176	2.95	1420	0.36	10000	
Sr	88	103	1	He	95.983	95.983	1.83	1604534	0.01	10000	
Mo	95	103	1	He	27.301	27.301	2.22	169910	0.02	2000	
Ag	107	103	1	He	8.198	8.198	2.21	149528	0.01	300	
Cd	111	103	1	He	37.790	37.790	1.57	118453	0.03	4000	
Sn	118	115	1	He	3.753	3.753	3.90	30447	0.01	2000	
Sb	123	115	1	He	0.251	0.251	6.09	2469	0.01	300	
Ba	137	115	1	He	62.231	62.231	1.72	222666	0.03	10000	
W	182	209	1	He	14.302	14.302	4.79	177329	0.01	2500	
Tl	205	209	1	He	0.046	0.046	8.80	1499	0.00	5000	
Pb	208	209	1	He	8.171	8.171	4.01	319189	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4014427	1.22	4563898	87.96	30	120	
Sc	45	1	He	5928861	1.38	2572368	230.48	30	120	ISTD Failed
Sc	45	2	NoGas	57068560	0.74	24609710	231.89	30	120	ISTD Failed
Rh	103	1	He	4227202	0.69	4780241	88.43	30	120	
In	115	1	He	2878578	1.46	3171814	90.75	30	120	
Tb	159	1	He	5224024	2.00	5469932	95.50	30	120	
Ho	165	1	He	5075160	1.91	5294619	95.86	30	120	
Bi	209	1	He	3220981	3.22	3401163	94.70	30	120	

Sample Report

Sample Table

Sample Name	680-112108-a-16-b@50
Data File Name	159SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T19:31:39-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.690	0.690	2.92	8547	0.01	10000	
B	11	45	2	NoGas	8.517	8.517	1.72	104108	0.01	300	
Na	23	45	1	He	54.574	54.574	3.70	257218	0.02	500000	
Mg	24	45	1	He	81.177	81.177	2.95	190484	0.04	500000	
Al	27	45	1	He	3443.989	3443.989	4.50	5032964	0.07	200000	
K	39	45	1	He	-34.230	-34.230	-9.31	227624	-0.02	500000	
Ca	44	45	1	He	4087.217	4087.217	3.99	600938	0.68	500000	
Ti	47	45	1	He	2972.510	2972.510	4.75	2505579	0.12	2500	>LDR
V	51	45	1	He	2129.046	2129.046	3.74	43653540	0.00	10000	
Cr	52	45	1	He	749.799	749.799	3.89	16708859	0.00	10000	
Mn	55	45	1	He	188.890	188.890	4.59	3195993	0.01	10000	
Fe	56	45	1	He	5289.512	5289.512	4.33	106607278	0.00	200000	
Co	59	103	1	He	0.892	0.892	4.62	22317	0.00	10000	
Ni	60	103	1	He	39.664	39.664	4.29	238439	0.02	10000	
Cu	63	103	1	He	4.587	4.587	5.08	79068	0.01	10000	
Zn	66	103	1	He	3.270	3.270	7.63	15016	0.02	10000	
As	75	103	1	He	0.701	0.701	5.69	2413	0.03	10000	
Se	78	103	1	He	1.047	1.047	9.56	561	0.19	10000	
Sr	88	103	1	He	16.804	16.804	4.45	296044	0.01	10000	
Mo	95	103	1	He	5.191	5.191	5.17	34195	0.02	2000	
Ag	107	103	1	He	1.609	1.609	3.71	30931	0.01	300	
Cd	111	103	1	He	7.279	7.279	6.27	27190	0.03	4000	
Sn	118	115	1	He	0.650	0.650	6.29	6787	0.01	2000	
Sb	123	115	1	He	0.002	0.002	373.46	621	0.00	300	
Ba	137	115	1	He	12.192	12.192	5.75	46026	0.03	10000	
W	182	209	1	He	2.159	2.159	3.99	35518	0.01	2500	
Tl	205	209	1	He	0.012	0.012	26.42	541	0.00	5000	
Pb	208	209	1	He	1.618	1.618	3.61	68040	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4009914	3.37	4563898	87.86	30	120	
Sc	45	1	He	3103413	3.68	2572368	120.64	30	120	ISTD Failed
Sc	45	2	NoGas	29661822	2.10	24609710	120.53	30	120	ISTD Failed
Rh	103	1	He	4452301	3.53	4780241	93.14	30	120	
In	115	1	He	3038220	6.03	3171814	95.79	30	120	
Tb	159	1	He	5279536	4.09	5469932	96.52	30	120	
Ho	165	1	He	5195647	3.69	5294619	98.13	30	120	
Bi	209	1	He	3418676	3.01	3401163	100.51	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2004624
Data File Name	160_CCV.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T19:35:25-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	49.416	0.770	598544	1.59	50	98.8	89.5	110.5	
B	11	45	2	NoGas	65.321	2.392	437957	2.23	50	130.6	89.5	110.5	CCV Failed
Na	23	45	1	He	24850.150	0.863	75050601	0.31	25000	99.4	89.5	110.5	
Mg	24	45	1	He	24928.322	1.310	43047559	0.25	25000	99.7	89.5	110.5	
Al	27	45	1	He	245.683	1.135	267806	0.24	250	98.3	89.5	110.5	
K	39	45	1	He	24942.938	2.028	58488770	0.92	25000	99.8	89.5	110.5	
Ca	44	45	1	He	26201.661	0.271	2841207	0.82	25000	104.8	89.5	110.5	
Ti	47	45	1	He	58.346	2.687	36542	2.82	50	116.7	89.5	110.5	CCV Failed
V	51	45	1	He	48.960	1.506	746588	0.42	50	97.9	89.5	110.5	
Cr	52	45	1	He	49.219	1.478	822425	0.45	50	98.4	89.5	110.5	
Mn	55	45	1	He	258.450	1.105	3242493	0.16	250	103.4	89.5	110.5	
Fe	56	45	1	He	12705.408	1.496	189929424	0.66	12500	101.6	89.5	110.5	
Co	59	103	1	He	45.096	0.665	1071730	0.44	50	90.2	89.5	110.5	
Ni	60	103	1	He	46.478	0.694	268232	0.52	50	93.0	89.5	110.5	
Cu	63	103	1	He	45.061	0.595	689540	1.04	50	90.1	89.5	110.5	
Zn	66	103	1	He	47.394	0.408	143040	0.74	50	94.8	89.5	110.5	
As	75	103	1	He	47.730	0.787	118235	0.70	50	95.5	89.5	110.5	
Se	78	103	1	He	47.370	2.625	10630	1.44	50	94.7	89.5	110.5	
Sr	88	103	1	He	46.155	0.756	782050	0.80	50	92.3	89.5	110.5	
Mo	95	103	1	He	50.689	0.598	319463	1.49	50	101.4	89.5	110.5	
Ag	107	103	1	He	46.067	1.501	851064	0.50	50	92.1	89.5	110.5	
Cd	111	103	1	He	49.918	1.989	157301	0.83	50	99.8	89.5	110.5	
Sn	118	115	1	He	55.415	1.231	438859	0.68	50	110.8	89.5	110.5	CCV Failed
Sb	123	115	1	He	50.989	0.850	393853	0.37	50	102.0	89.5	110.5	
Ba	137	115	1	He	50.364	1.492	183815	0.62	50	100.7	89.5	110.5	
W	182	209	1	He	49.361	1.142	583264	1.74	50	98.7	89.5	110.5	
Tl	205	209	1	He	45.262	0.438	1300488	0.67	50	90.5	89.5	110.5	
Pb	208	209	1	He	47.131	0.814	1806193	0.64	50	94.3	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4012811	1.45	4563898	87.93	30	120	
Sc	45	1	He	2300068	1.09	2572368	89.41	30	120	
Sc	45	2	NoGas	23003325	0.48	24609710	93.47	30	120	
Rh	103	1	He	4282969	1.10	4780241	89.60	30	120	
In	115	1	He	2935769	0.97	3171814	92.56	30	120	
Tb	159	1	He	5211066	0.89	5469932	95.27	30	120	
Ho	165	1	He	5051518	1.03	5294619	95.41	30	120	
Bi	209	1	He	3166340	0.77	3401163	93.10	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	161_CCB.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T19:39:14-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.023	24.7	489	13.8	1	
B	11	45	2	NoGas	10.613	3.0	92782	2.5	20	
Na	23	45	1	He	18.031	12.3	77611	2.5	400	
Mg	24	45	1	He	0.753	7.0	2304	3.1	1000	
Al	27	45	1	He	0.966	12.3	2511	5.8	50	
K	39	45	1	He	-8.774	-66.8	220471	0.8	1000	
Ca	44	45	1	He	28.465	17.2	5947	1.8	1000	
Ti	47	45	1	He	0.665	13.4	454	16.9	20	
V	51	45	1	He	0.160	20.6	4297	5.5	2	
Cr	52	45	1	He	0.087	40.0	10537	2.6	2	
Mn	55	45	1	He	0.384	15.4	9496	5.7	2	
Fe	56	45	1	He	6.273	18.6	117193	18.9	50	
Co	59	103	1	He	0.005	67.6	398	16.3	1	
Ni	60	103	1	He	-0.700	-2.2	639	7.4	2	
Cu	63	103	1	He	-0.049	-62.9	5810	3.4	2	
Zn	66	103	1	He	1.546	16.4	9313	1.9	20	
As	75	103	1	He	0.215	15.0	1115	12.3	2	
Se	78	103	1	He	0.317	5.1	377	6.3	2	
Sr	88	103	1	He	0.045	9.3	1277	9.5	10	
Mo	95	103	1	He	0.251	27.0	1818	28.3	2	
Ag	107	103	1	He	0.004	56.6	119	28.1	0.2	
Cd	111	103	1	He	0.084	35.2	4012	7.3	0.2	
Sn	118	115	1	He	0.293	20.5	3641	15.5	10	
Sb	123	115	1	He	0.134	13.8	1569	9.2	1	
Ba	137	115	1	He	0.022	17.1	172	12.6	5	
W	182	209	1	He	0.462	27.5	13325	15.0	10	
Tl	205	209	1	He	0.075	2.3	2327	3.9	0.5	
Pb	208	209	1	He	0.044	16.3	2781	5.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4047141	2.69	4563898	88.68	30	120	
Sc	45	1	He	2226697	6.50	2572368	86.56	30	120	
Sc	45	2	NoGas	22723352	0.50	24609710	92.33	30	120	
Rh	103	1	He	4238815	5.73	4780241	88.67	30	120	
In	115	1	He	2848638	6.14	3171814	89.81	30	120	
Tb	159	1	He	5055517	5.46	5469932	92.42	30	120	
Ho	165	1	He	4940822	5.67	5294619	93.32	30	120	
Bi	209	1	He	3205829	4.69	3401163	94.26	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1995671
Data File Name	162CRIA.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T19:43:03-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.839	0.839	7.918	9618	7.85	1	83.9	69.5	130.5	
B	11	2	NoGas	31.077	31.077	1.693	202830	1.63	20	155.4	69.5	130.5	6020A CR1 Failed
Na	23	1	He	1061.117	1061.117	4.533	3208756	1.58	1000	106.1	69.5	130.5	
Mg	24	1	He	1062.040	1062.040	3.530	1823580	0.14	1000	106.2	69.5	130.5	
Al	27	1	He	51.163	51.163	3.858	56638	0.54	50	102.3	69.5	130.5	
K	39	1	He	1043.723	1043.723	1.413	2670760	2.62	1000	104.4	69.5	130.5	
Ca	44	1	He	1020.810	1020.810	4.325	112921	0.89	1000	102.1	69.5	130.5	
Ti	47	1	He	10.708	10.708	2.203	6710	3.39	10	107.1	69.5	130.5	
V	51	1	He	5.145	5.145	4.600	79759	1.65	5	102.9	69.5	130.5	
Cr	52	1	He	2.127	2.127	6.372	44303	2.19	2	106.3	69.5	130.5	
Mn	55	1	He	4.911	4.911	4.696	66109	0.93	5	98.2	69.5	130.5	
Fe	56	1	He	110.701	110.701	4.074	1670852	1.54	100	110.7	69.5	130.5	
Co	59	1	He	0.924	0.924	2.867	22480	0.97	1	92.4	69.5	130.5	
Ni	60	1	He	1.280	1.280	1.697	12009	1.50	2	64.0	69.5	130.5	6020A CR1 Failed
Cu	63	1	He	1.768	1.768	3.226	33780	1.27	2	88.4	69.5	130.5	
Zn	66	1	He	18.635	18.635	2.889	59869	0.13	20	93.2	69.5	130.5	
As	75	1	He	4.693	4.693	1.728	12294	1.83	5	93.9	69.5	130.5	
Se	78	1	He	5.035	5.035	3.905	1424	1.45	5	100.7	69.5	130.5	
Sr	88	1	He	9.249	9.249	2.618	158822	0.54	10	92.5	69.5	130.5	
Mo	95	1	He	10.225	10.225	2.064	65333	1.32	10	102.2	69.5	130.5	
Ag	107	1	He	0.976	0.976	3.682	18270	2.81	1	97.6	69.5	130.5	
Cd	111	1	He	1.126	1.126	3.907	7334	1.24	1	112.6	69.5	130.5	
Sn	118	1	He	10.010	10.010	1.072	80579	2.06	10	100.1	69.5	130.5	
Sb	123	1	He	2.053	2.053	2.528	16442	0.95	2	102.7	69.5	130.5	
Ba	137	1	He	5.108	5.108	1.026	18761	2.42	5	102.2	69.5	130.5	
W	182	1	He	9.342	9.342	1.079	121051	2.15	10	93.4	69.5	130.5	
Tl	205	1	He	1.790	1.790	2.012	53513	0.76	2	89.5	69.5	130.5	
Pb	208	1	He	1.011	1.011	3.416	41297	1.14	1	101.1	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3725748	2.52	4563898	81.64	30	120	
Sc	45	1	He	2287367	3.46	2572368	88.92	30	120	
Sc	45	2	NoGas	20959439	0.96	24609710	85.17	30	120	
Rh	103	1	He	4330694	2.52	4780241	90.60	30	120	
In	115	1	He	2940348	2.32	3171814	92.70	30	120	
Tb	159	1	He	5186406	3.35	5469932	94.82	30	120	
Ho	165	1	He	5049125	3.30	5294619	95.36	30	120	
Bi	209	1	He	3285736	2.18	3401163	96.61	30	120	

Sample Report

Sample Table

Sample Name	HIGH STD
Data File Name	163SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T19:46:55-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	2038.222	2038.222	1.77	23704750	0.01	10000	
B	11	45	2	NoGas	239.924	239.924	0.81	1480351	0.02	300	
Na	23	45	1	He	20364.240	20364.240	0.54	59260990	0.03	500000	
Mg	24	45	1	He	20542.994	20542.994	0.85	34177533	0.06	500000	
Al	27	45	1	He	20005.819	20005.819	0.89	20891020	0.10	200000	
K	39	45	1	He	20617.605	20617.605	0.36	46627881	0.04	500000	
Ca	44	45	1	He	22477.992	22477.992	1.34	2348382	0.96	500000	
Ti	47	45	1	He	205.304	205.304	0.91	123742	0.17	2500	
V	51	45	1	He	1970.387	1970.387	0.27	28872669	0.01	10000	
Cr	52	45	1	He	2016.145	2016.145	0.89	32094801	0.01	10000	
Mn	55	45	1	He	2097.405	2097.405	0.60	25316913	0.01	10000	
Fe	56	45	1	He	20933.726	20933.726	0.45	301485695	0.01	200000	
Co	59	103	1	He	1958.884	1958.884	1.00	43909410	0.00	10000	
Ni	60	103	1	He	2050.008	2050.008	0.94	10974292	0.02	10000	
Cu	63	103	1	He	1960.318	1960.318	0.49	28037041	0.01	10000	
Zn	66	103	1	He	2086.148	2086.148	0.73	5740366	0.04	10000	
As	75	103	1	He	2129.178	2129.178	0.38	4951933	0.04	10000	
Se	78	103	1	He	1971.062	1971.062	0.51	405441	0.49	10000	
Sr	88	103	1	He	2029.150	2029.150	1.12	32420920	0.01	10000	
Mo	95	103	1	He	212.237	212.237	1.04	1261133	0.02	2000	
Ag	107	103	1	He	209.213	209.213	1.24	3646463	0.01	300	
Cd	111	103	1	He	2189.205	2189.205	0.64	6355917	0.03	4000	
Sn	118	115	1	He	2302.558	2302.558	1.12	16891386	0.01	2000	>LDR
Sb	123	115	1	He	249.267	249.267	0.28	1787100	0.01	300	
Ba	137	115	1	He	2338.720	2338.720	1.09	7928056	0.03	10000	
W	182	209	1	He	234.571	234.571	1.86	2635595	0.01	2500	
Tl	205	209	1	He	519.455	519.455	1.57	14341877	0.00	5000	
Pb	208	209	1	He	2155.458	2155.458	1.43	79340182	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3853557	1.83	4563898	84.44	30	120	
Sc	45	1	He	2215919	1.80	2572368	86.14	30	120	
Sc	45	2	NoGas	22170348	2.78	24609710	90.09	30	120	
Rh	103	1	He	4040845	1.27	4780241	84.53	30	120	
In	115	1	He	2727947	0.41	3171814	86.01	30	120	
Tb	159	1	He	4933537	0.90	5469932	90.19	30	120	
Ho	165	1	He	4825718	0.75	5294619	91.14	30	120	
Bi	209	1	He	3043526	2.08	3401163	89.48	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-180747/1-a
Data File Name	164_Blk.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T19:50:18-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.444	4.7	5294	5.4	1	
B	11	45	2	NoGas	17.334	3.9	124546	2.2	20	
Na	23	45	1	He	33.409	5.0	114669	2.3	400	
Mg	24	45	1	He	1.992	44.6	4056	30.1	1000	
Al	27	45	1	He	2.172	45.6	3508	23.7	50	
K	39	45	1	He	1.527	134.1	228319	4.8	1000	
Ca	44	45	1	He	-12.419	-14.1	1571	10.4	1000	
Ti	47	45	1	He	0.655	28.9	420	30.0	20	
V	51	45	1	He	0.999	9.6	15568	7.8	2	
Cr	52	45	1	He	2.160	5.2	40833	5.0	2	Blank Failed
Mn	55	45	1	He	0.113	62.8	5808	10.1	2	
Fe	56	45	1	He	14.687	11.6	223468	14.6	50	
Co	59	103	1	He	0.362	21.3	8308	20.3	1	
Ni	60	103	1	He	-0.037	-129.8	4126	6.1	2	
Cu	63	103	1	He	0.343	22.7	11065	9.8	2	
Zn	66	103	1	He	2.237	9.9	10714	5.4	20	
As	75	103	1	He	3.962	15.8	9696	15.0	2	Blank Failed
Se	78	103	1	He	2.920	17.1	887	11.7	2	Blank Failed
Sr	88	103	1	He	0.462	12.0	7816	11.0	10	
Mo	95	103	1	He	1.098	35.2	6698	34.2	2	
Ag	107	103	1	He	0.020	39.5	391	34.6	0.2	
Cd	111	103	1	He	0.617	36.8	5325	12.0	0.2	Blank Failed
Sn	118	115	1	He	8.573	2.6	64162	4.7	10	
Sb	123	115	1	He	0.334	11.5	2936	11.3	1	
Ba	137	115	1	He	0.389	30.8	1406	27.8	5	
W	182	209	1	He	1.891	21.2	29562	14.3	10	
Tl	205	209	1	He	0.476	21.8	13771	22.8	0.5	
Pb	208	209	1	He	0.463	19.3	18721	19.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3805055	1.39	4563898	83.37	30	120	
Sc	45	1	He	2080642	4.15	2572368	80.88	30	120	
Sc	45	2	NoGas	21042204	1.49	24609710	85.50	30	120	
Rh	103	1	He	4008019	0.22	4780241	83.85	30	120	
In	115	1	He	2724505	2.08	3171814	85.90	30	120	
Tb	159	1	He	4742410	0.42	5469932	86.70	30	120	
Ho	165	1	He	4658386	0.20	5294619	87.98	30	120	
Bi	209	1	He	3147347	1.44	3401163	92.54	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-180747/2-a
Data File Name	165_LCS.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T19:54:09-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	992.931	992.931	4.510	11186993	5.07	1000	99.3	79.5	120.5	
B	11	2	NoGas	141.290	141.290	2.256	809309	2.53	100	141.3	79.5	120.5	LCS Failed
Na	23	1	He	9467.267	9467.267	2.357	26566527	1.63	10000	94.7	79.5	120.5	
Mg	24	1	He	9447.903	9447.903	3.482	15148959	1.90	10000	94.5	79.5	120.5	
Al	27	1	He	8934.779	8934.779	1.401	8993846	0.44	10000	89.3	79.5	120.5	
K	39	1	He	9271.481	9271.481	2.494	20334310	0.91	10000	92.7	79.5	120.5	
Ca	44	1	He	9582.596	9582.596	1.797	966705	0.34	10000	95.8	79.5	120.5	
Ti	47	1	He	95.163	95.163	0.773	55321	1.05	100	95.2	79.5	120.5	
V	51	1	He	903.135	903.135	0.990	12757918	1.02	1000	90.3	79.5	120.5	
Cr	52	1	He	932.131	932.131	0.881	14308027	0.71	1000	93.2	79.5	120.5	
Mn	55	1	He	962.803	962.803	1.443	11205192	0.89	1000	96.3	79.5	120.5	
Fe	56	1	He	9693.486	9693.486	2.074	134568910	0.58	10000	96.9	79.5	120.5	
Co	59	1	He	882.856	882.856	1.645	19804944	0.52	1000	88.3	79.5	120.5	
Ni	60	1	He	937.519	937.519	1.852	5025181	1.76	1000	93.8	79.5	120.5	
Cu	63	1	He	900.845	900.845	1.620	12896173	0.57	1000	90.1	79.5	120.5	
Zn	66	1	He	988.506	988.506	1.812	2724209	0.56	1000	98.9	79.5	120.5	
As	75	1	He	952.482	952.482	2.225	2217061	1.59	1000	95.2	79.5	120.5	
Se	78	1	He	888.507	888.507	1.408	183051	0.15	1000	88.9	79.5	120.5	
Sr	88	1	He	896.099	896.099	1.467	14326802	0.79	1000	89.6	79.5	120.5	
Mo	95	1	He	96.334	96.334	1.748	572975	0.46	100	96.3	79.5	120.5	
Ag	107	1	He	97.394	97.394	1.508	1699143	2.14	100	97.4	79.5	120.5	
Cd	111	1	He	1015.212	1015.212	0.517	2951873	1.08	1000	101.5	79.5	120.5	
Sn	118	1	He	1051.784	1051.784	0.587	7624511	0.49	1000	105.2	79.5	120.5	
Sb	123	1	He	99.553	99.553	0.690	705544	0.21	100	99.6	79.5	120.5	
Ba	137	1	He	1063.812	1063.812	0.771	3563465	1.15	1000	106.4	79.5	120.5	
W	182	1	He	94.202	94.202	0.772	1078994	0.21	100	94.2	79.5	120.5	
Tl	205	1	He	236.299	236.299	1.081	6623261	1.70	250	94.5	79.5	120.5	
Pb	208	1	He	977.560	977.560	0.780	36528088	1.23	1000	97.8	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3733609	1.86	4563898	81.81	30	120	
Sc	45	1	He	2136158	1.59	2572368	83.04	30	120	
Sc	45	2	NoGas	20338658	3.70	24609710	82.64	30	120	
Rh	103	1	He	4044242	1.55	4780241	84.60	30	120	
In	115	1	He	2695490	0.48	3171814	84.98	30	120	
Tb	159	1	He	4939857	1.55	5469932	90.31	30	120	
Ho	165	1	He	4905157	1.03	5294619	92.64	30	120	
Bi	209	1	He	3089021	0.91	3401163	90.82	30	120	

Sample Report

Sample Table

Sample Name	240-50650-a-8-b
Data File Name	166SMPL.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T19:57:35-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	6	2	NoGas	0.362	0.362	4.25	4490	0.01	10000	
B	11	45	2	NoGas	14.458	14.458	0.81	112295	0.01	300	
Na	23	45	1	He	58.683	58.683	0.39	196933	0.03	500000	
Mg	24	45	1	He	2.016	2.016	17.53	4423	0.05	500000	
Al	27	45	1	He	3.040	3.040	9.53	4694	0.06	200000	
K	39	45	1	He	-5.529	-5.529	-10.13	228632	0.00	500000	
Ca	44	45	1	He	17.493	17.493	14.14	4824	0.36	500000	
Ti	47	45	1	He	0.330	0.330	15.89	250	0.13	2500	
V	51	45	1	He	0.753	0.753	5.64	13065	0.01	10000	
Cr	52	45	1	He	2.484	2.484	1.45	48940	0.01	10000	
Mn	55	45	1	He	0.551	0.551	4.53	11559	0.00	10000	
Fe	56	45	1	He	7.309	7.309	11.59	131974	0.01	200000	
Co	59	103	1	He	0.278	0.278	12.34	6752	0.00	10000	
Ni	60	103	1	He	1.321	1.321	1.58	11891	0.01	10000	
Cu	63	103	1	He	0.272	0.272	2.97	10554	0.00	10000	
Zn	66	103	1	He	3.070	3.070	1.82	13622	0.02	10000	
As	75	103	1	He	2.428	2.428	16.51	6462	0.04	10000	
Se	78	103	1	He	1.647	1.647	15.83	658	0.25	10000	
Sr	88	103	1	He	0.377	0.377	4.35	6777	0.01	10000	
Mo	95	103	1	He	0.796	0.796	12.86	5161	0.02	2000	
Ag	107	103	1	He	0.016	0.016	2.69	341	0.00	300	
Cd	111	103	1	He	0.290	0.290	8.00	4597	0.01	4000	
Sn	118	115	1	He	1.707	1.707	2.99	14481	0.01	2000	
Sb	123	115	1	He	0.193	0.193	7.84	2010	0.01	300	
Ba	137	115	1	He	0.268	0.268	12.21	1043	0.03	10000	
W	182	209	1	He	0.848	0.848	27.10	18204	0.00	2500	
Tl	205	209	1	He	0.219	0.219	10.45	6628	0.00	5000	
Pb	208	209	1	He	0.244	0.244	11.73	10723	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3927504	0.33	4563898	86.06	30	120	
Sc	45	1	He	2229213	1.38	2572368	86.66	30	120	
Sc	45	2	NoGas	21872652	0.81	24609710	88.88	30	120	
Rh	103	1	He	4204057	0.96	4780241	87.95	30	120	
In	115	1	He	2850080	0.86	3171814	89.86	30	120	
Tb	159	1	He	5017719	1.27	5469932	91.73	30	120	
Ho	165	1	He	4890575	0.37	5294619	92.37	30	120	
Bi	209	1	He	3265023	1.92	3401163	96.00	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2004624
Data File Name	167_CCV.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T20:01:26-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	50.058	1.537	593204	0.40	50	100.1	89.5	110.5	
B	11	45	2	NoGas	65.219	0.833	420925	1.20	50	130.4	89.5	110.5	CCV Failed
Na	23	45	1	He	24771.182	2.046	72874721	0.77	25000	99.1	89.5	110.5	
Mg	24	45	1	He	24840.025	0.954	41789578	0.39	25000	99.4	89.5	110.5	
Al	27	45	1	He	242.785	1.611	257840	1.30	250	97.1	89.5	110.5	
K	39	45	1	He	24719.467	1.156	56474994	0.22	25000	98.9	89.5	110.5	
Ca	44	45	1	He	25775.674	1.070	2722797	0.27	25000	103.1	89.5	110.5	
Ti	47	45	1	He	49.859	1.870	30425	1.00	50	99.7	89.5	110.5	
V	51	45	1	He	48.374	0.891	718678	0.47	50	96.7	89.5	110.5	
Cr	52	45	1	He	48.923	1.207	796464	0.54	50	97.8	89.5	110.5	
Mn	55	45	1	He	256.310	2.973	3132202	1.64	250	102.5	89.5	110.5	
Fe	56	45	1	He	12560.652	1.891	182913308	0.71	12500	100.5	89.5	110.5	
Co	59	103	1	He	45.356	0.548	1043569	0.36	50	90.7	89.5	110.5	
Ni	60	103	1	He	46.611	0.511	260420	0.62	50	93.2	89.5	110.5	
Cu	63	103	1	He	45.324	0.354	671408	0.31	50	90.6	89.5	110.5	
Zn	66	103	1	He	47.659	0.577	139230	0.87	50	95.3	89.5	110.5	
As	75	103	1	He	48.979	0.656	117446	0.14	50	98.0	89.5	110.5	
Se	78	103	1	He	48.305	2.338	10489	1.67	50	96.6	89.5	110.5	
Sr	88	103	1	He	46.034	0.207	755151	0.46	50	92.1	89.5	110.5	
Mo	95	103	1	He	51.054	1.135	311507	1.79	50	102.1	89.5	110.5	
Ag	107	103	1	He	46.403	0.368	830030	0.73	50	92.8	89.5	110.5	
Cd	111	103	1	He	49.691	0.294	151629	0.38	50	99.4	89.5	110.5	
Sn	118	115	1	He	55.910	0.798	432462	0.91	50	111.8	89.5	110.5	CCV Failed
Sb	123	115	1	He	51.698	0.572	390024	0.70	50	103.4	89.5	110.5	
Ba	137	115	1	He	50.660	1.409	180599	1.42	50	101.3	89.5	110.5	
W	182	209	1	He	49.822	2.356	590852	1.53	50	99.6	89.5	110.5	
Tl	205	209	1	He	45.098	1.867	1300746	1.24	50	90.2	89.5	110.5	
Pb	208	209	1	He	46.864	1.759	1802886	1.13	50	93.7	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3926674	1.70	4563898	86.04	30	120	
Sc	45	1	He	2240769	1.35	2572368	87.11	30	120	
Sc	45	2	NoGas	22141040	0.90	24609710	89.97	30	120	
Rh	103	1	He	4146382	0.66	4780241	86.74	30	120	
In	115	1	He	2867251	0.14	3171814	90.40	30	120	
Tb	159	1	He	5117524	1.71	5469932	93.56	30	120	
Ho	165	1	He	5033891	0.35	5294619	95.08	30	120	
Bi	209	1	He	3178748	0.78	3401163	93.46	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	168_CCB.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T20:05:13-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.151	5.9	2052	5.8	1	
B	11	45	2	NoGas	10.055	2.7	87505	1.5	20	
Na	23	45	1	He	22.313	5.0	90496	5.3	400	
Mg	24	45	1	He	3.008	18.8	6094	17.7	1000	
Al	27	45	1	He	0.742	28.2	2280	9.3	50	
K	39	45	1	He	-4.494	-40.7	230842	1.0	1000	
Ca	44	45	1	He	29.422	5.7	6074	2.8	1000	
Ti	47	45	1	He	0.129	47.4	128	27.6	20	
V	51	45	1	He	0.047	118.1	2666	33.2	2	
Cr	52	45	1	He	0.078	5.6	10415	2.3	2	
Mn	55	45	1	He	0.410	2.5	9843	2.2	2	
Fe	56	45	1	He	7.307	18.5	131552	13.3	50	
Co	59	103	1	He	0.050	6.1	1498	3.6	1	
Ni	60	103	1	He	-0.672	-1.5	821	6.1	2	
Cu	63	103	1	He	-0.168	-3.1	4145	3.2	2	
Zn	66	103	1	He	1.445	3.1	9280	0.3	20	
As	75	103	1	He	0.366	26.4	1517	15.0	2	
Se	78	103	1	He	0.396	34.2	403	5.9	2	
Sr	88	103	1	He	0.032	8.8	1093	4.6	10	
Mo	95	103	1	He	0.303	36.2	2174	31.4	2	
Ag	107	103	1	He	0.008	8.0	194	4.3	0.2	
Cd	111	103	1	He	0.117	4.5	4215	2.0	0.2	
Sn	118	115	1	He	0.401	13.0	4597	8.5	10	
Sb	123	115	1	He	0.157	8.9	1795	5.8	1	
Ba	137	115	1	He	0.025	33.3	189	15.2	5	
W	182	209	1	He	0.628	21.4	15527	10.2	10	
Tl	205	209	1	He	0.130	3.0	4007	2.0	0.5	
Pb	208	209	1	He	0.075	8.3	4079	7.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4047016	1.23	4563898	88.67	30	120	
Sc	45	1	He	2228519	2.53	2572368	86.63	30	120	
Sc	45	2	NoGas	22264673	0.66	24609710	90.47	30	120	
Rh	103	1	He	4347313	1.71	4780241	90.94	30	120	
In	115	1	He	2931096	1.07	3171814	92.41	30	120	
Tb	159	1	He	5086867	1.31	5469932	93.00	30	120	
Ho	165	1	He	5018796	1.60	5294619	94.79	30	120	
Bi	209	1	He	3265430	1.52	3401163	96.01	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-1995671
Data File Name	169CRIA.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T20:09:03-04:00
Sample Type	CRI6020A
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	2	NoGas	0.979	0.979	4.330	12023	5.19	1	97.9	69.5	130.5	
B	11	2	NoGas	29.301	29.301	1.982	205255	2.50	20	146.5	69.5	130.5	6020A CR1 Failed
Na	23	1	He	1038.315	1038.315	1.494	3161749	1.49	1000	103.8	69.5	130.5	
Mg	24	1	He	1047.919	1047.919	0.828	1811267	0.84	1000	104.8	69.5	130.5	
Al	27	1	He	50.658	50.658	0.584	56469	0.58	50	101.3	69.5	130.5	
K	39	1	He	1043.976	1043.976	1.129	2687461	1.04	1000	104.4	69.5	130.5	
Ca	44	1	He	1028.942	1028.942	1.034	114567	1.01	1000	102.9	69.5	130.5	
Ti	47	1	He	10.454	10.454	4.117	6591	4.07	10	104.5	69.5	130.5	
V	51	1	He	5.069	5.069	1.237	79148	1.20	5	101.4	69.5	130.5	
Cr	52	1	He	2.024	2.024	1.311	42916	1.02	2	101.2	69.5	130.5	
Mn	55	1	He	4.816	4.816	0.388	65367	0.37	5	96.3	69.5	130.5	
Fe	56	1	He	108.042	108.042	0.772	1642237	0.75	100	108.0	69.5	130.5	
Co	59	1	He	0.980	0.980	1.613	23717	0.30	1	98.0	69.5	130.5	
Ni	60	1	He	1.245	1.245	4.015	11757	1.23	2	62.2	69.5	130.5	6020A CR1 Failed
Cu	63	1	He	1.651	1.651	1.599	31862	0.83	2	82.6	69.5	130.5	
Zn	66	1	He	18.789	18.789	3.337	60075	1.82	20	93.9	69.5	130.5	
As	75	1	He	4.904	4.904	1.967	12765	0.81	5	98.1	69.5	130.5	
Se	78	1	He	5.056	5.056	5.192	1422	3.56	5	101.1	69.5	130.5	
Sr	88	1	He	9.247	9.247	0.922	158167	0.39	10	92.5	69.5	130.5	
Mo	95	1	He	10.405	10.405	1.471	66205	1.18	10	104.0	69.5	130.5	
Ag	107	1	He	0.992	0.992	1.373	18501	0.20	1	99.2	69.5	130.5	
Cd	111	1	He	1.155	1.155	5.685	7392	1.46	1	115.5	69.5	130.5	
Sn	118	1	He	9.739	9.739	0.690	79787	1.31	10	97.4	69.5	130.5	
Sb	123	1	He	2.048	2.048	1.400	16684	1.20	2	102.4	69.5	130.5	
Ba	137	1	He	5.123	5.123	2.004	19137	1.02	5	102.5	69.5	130.5	
W	182	1	He	9.626	9.626	1.731	124708	1.72	10	96.3	69.5	130.5	
Tl	205	1	He	1.824	1.824	1.798	54615	0.94	2	91.2	69.5	130.5	
Pb	208	1	He	1.016	1.016	1.906	41570	0.84	1	101.6	69.5	130.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	4001001	1.55	4563898	87.67	30	120	
Sc	45	1	He	2300643	0.02	2572368	89.44	30	120	
Sc	45	2	NoGas	22329456	1.64	24609710	90.73	30	120	
Rh	103	1	He	4311908	1.30	4780241	90.20	30	120	
In	115	1	He	2991028	1.98	3171814	94.30	30	120	
Tb	159	1	He	5151650	0.48	5469932	94.18	30	120	
Ho	165	1	He	5027722	1.66	5294619	94.96	30	120	
Bi	209	1	He	3291319	1.04	3401163	96.77	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2004624
Data File Name	170_CCV.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T20:12:54-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	6	2	NoGas	48.863	2.784	572353	1.80	50	97.7	89.5	110.5	
B	11	45	2	NoGas	64.204	0.748	412515	0.28	50	128.4	89.5	110.5	CCV Failed
Na	23	45	1	He	24979.833	1.299	73915204	1.32	25000	99.9	89.5	110.5	
Mg	24	45	1	He	24887.916	1.321	42109086	1.28	25000	99.6	89.5	110.5	
Al	27	45	1	He	244.177	0.781	260789	0.51	250	97.7	89.5	110.5	
K	39	45	1	He	24885.035	0.217	57178166	0.72	25000	99.5	89.5	110.5	
Ca	44	45	1	He	26088.122	1.586	2771550	1.64	25000	104.4	89.5	110.5	
Ti	47	45	1	He	49.670	1.339	30486	1.56	50	99.3	89.5	110.5	
V	51	45	1	He	47.828	0.779	714637	0.60	50	95.7	89.5	110.5	
Cr	52	45	1	He	48.318	0.786	791225	0.18	50	96.6	89.5	110.5	
Mn	55	45	1	He	255.981	0.991	3146668	1.24	250	102.4	89.5	110.5	
Fe	56	45	1	He	12576.663	0.250	184208250	0.57	12500	100.6	89.5	110.5	
Co	59	103	1	He	45.504	0.773	1041271	0.51	50	91.0	89.5	110.5	
Ni	60	103	1	He	46.813	0.567	260103	0.74	50	93.6	89.5	110.5	
Cu	63	103	1	He	45.204	1.080	665987	0.78	50	90.4	89.5	110.5	
Zn	66	103	1	He	48.082	0.793	139654	0.54	50	96.2	89.5	110.5	
As	75	103	1	He	49.023	1.111	116909	0.35	50	98.0	89.5	110.5	
Se	78	103	1	He	48.672	2.077	10509	1.30	50	97.3	89.5	110.5	
Sr	88	103	1	He	46.582	1.290	759933	0.59	50	93.2	89.5	110.5	
Mo	95	103	1	He	50.789	2.446	308157	1.77	50	101.6	89.5	110.5	
Ag	107	103	1	He	46.471	1.108	826675	0.45	50	92.9	89.5	110.5	
Cd	111	103	1	He	49.505	1.399	150246	0.66	50	99.0	89.5	110.5	
Sn	118	115	1	He	55.404	0.600	431512	0.39	50	110.8	89.5	110.5	CCV Failed
Sb	123	115	1	He	51.462	1.014	390914	0.64	50	102.9	89.5	110.5	
Ba	137	115	1	He	50.404	0.764	180934	1.46	50	100.8	89.5	110.5	
W	182	209	1	He	49.213	1.290	578815	1.58	50	98.4	89.5	110.5	
Tl	205	209	1	He	44.892	0.517	1283886	1.49	50	89.8	89.5	110.5	
Pb	208	209	1	He	46.688	0.461	1780949	1.31	50	93.4	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3881706	2.05	4563898	85.05	30	120	
Sc	45	1	He	2253398	0.60	2572368	87.60	30	120	
Sc	45	2	NoGas	22020384	0.49	24609710	89.48	30	120	
Rh	103	1	He	4123817	0.77	4780241	86.27	30	120	
In	115	1	He	2887091	0.78	3171814	91.02	30	120	
Tb	159	1	He	5127721	0.08	5469932	93.74	30	120	
Ho	165	1	He	4994909	1.12	5294619	94.34	30	120	
Bi	209	1	He	3151583	0.99	3401163	92.66	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	171_CCB.d
Data Path Name	D:\Analytical Runs\I10051815B.b
Acq Date Time	2015-05-18T20:16:41-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	6	2	NoGas	0.084	16.5	1133	13.9	1	
B	11	45	2	NoGas	10.020	4.0	81634	1.8	20	
Na	23	45	1	He	22.708	4.7	87143	3.6	400	
Mg	24	45	1	He	3.094	23.3	5923	19.6	1000	
Al	27	45	1	He	0.520	15.4	1948	4.4	50	
K	39	45	1	He	3.678	54.7	237197	2.1	1000	
Ca	44	45	1	He	27.895	6.4	5625	3.2	1000	
Ti	47	45	1	He	0.072	68.5	89	31.9	20	
V	51	45	1	He	0.008	750.9	1980	42.9	2	
Cr	52	45	1	He	0.046	33.8	9421	2.2	2	
Mn	55	45	1	He	0.380	2.7	9016	1.3	2	
Fe	56	45	1	He	7.185	13.7	123644	10.7	50	
Co	59	103	1	He	0.035	7.4	1066	4.2	1	
Ni	60	103	1	He	-0.694	-0.4	650	4.0	2	
Cu	63	103	1	He	-0.207	-7.3	3314	6.6	2	
Zn	66	103	1	He	1.406	6.4	8599	2.6	20	
As	75	103	1	He	0.275	22.3	1212	13.9	2	
Se	78	103	1	He	0.499	8.9	400	4.1	2	
Sr	88	103	1	He	0.034	11.4	1056	4.4	10	
Mo	95	103	1	He	0.277	38.3	1901	35.7	2	
Ag	107	103	1	He	0.007	56.9	170	40.2	0.2	
Cd	111	103	1	He	0.094	41.9	3885	1.6	0.2	
Sn	118	115	1	He	0.373	5.4	4167	4.4	10	
Sb	123	115	1	He	0.160	6.9	1729	5.4	1	
Ba	137	115	1	He	0.022	45.7	168	19.9	5	
W	182	209	1	He	0.554	32.1	13966	13.5	10	
Tl	205	209	1	He	0.097	1.9	2900	1.9	0.5	
Pb	208	209	1	He	0.066	5.5	3554	3.8	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3733349	0.73	4563898	81.80	30	120	
Sc	45	1	He	2119403	0.32	2572368	82.39	30	120	
Sc	45	2	NoGas	20825078	1.29	24609710	84.62	30	120	
Rh	103	1	He	4079785	1.95	4780241	85.35	30	120	
In	115	1	He	2790292	1.00	3171814	87.97	30	120	
Tb	159	1	He	4857603	0.53	5469932	88.81	30	120	
Ho	165	1	He	4735117	0.63	5294619	89.43	30	120	
Bi	209	1	He	3117466	1.12	3401163	91.66	30	120	

MTMSCCBDILH20-200 EPA Tune Solution Spex CL11-62YPY

TestAmerica ICP/MS Data Review Checklist

Run Date: 5/19/15 Analyst: AS Instrument: I10

Review Items

A. Tune/Daily performance	Yes	No	N/A	2nd Level
1. Resolution </= 0.9 AMU full width at 10% peak height, and within +/- 0.1 AMU of true mass?	✓			✓
B. Calibration/Instrument Run QC				
1. Instrument calibrated per manufacturer's instructions and at SOP specified levels? Correlation coefficient > 0.995?	✓			✓
2. ICV/CCV analyzed at appropriate frequency and within control limits? (*ICV:* = 90 – 110%) (*CCV:* 90 – 110%, 200.8 = 85 -115%)	✓			✓
3. ICB/CCB analyzed at appropriate frequency and within +/- RL?	✓			✓
4. CRI run and recovered within QC limits (+/-50%) or project limits?	✓			✓
5. ICSA/ICSAB run at required frequency and within SOP control limits?	✓			✓
C. Sample Results				
1. Were samples with concentrations > the linear range for any parameter diluted and reanalyzed?	✓			✓
2. All reported results bracketed by in control QC?	✓			✓
3. Were the internal standards within acceptance criteria for all results reported?	✓			✓
4. Sample analyses done within holding time?	✓			✓
D. Preparation/Matrix QC				
1. LCS done per prep batch and within QC limits?	✓			✓
2. Method blank done per prep batch and < RL?	✓			✓
3. MS run at required frequency and within limits?	✓			✓
4. MSD or DU run at required frequency and RPD within SOP limits?	✓			✓
5. Serial dilution done per prep batch?	✓			✓
6. Post digest spike analyzed if required?	✓			✓
E. Other				
1. Are all nonconformance's documented appropriately?	✓			✓
2. Current IDL/LR data on file?	✓			✓
3. Calculations checked for error?	✓			✓
4. Transcriptions checked for error?	✓			✓
5. All client/project specific requirements met?	✓			✓
6. Date/time of analysis verified as correct?	✓			✓

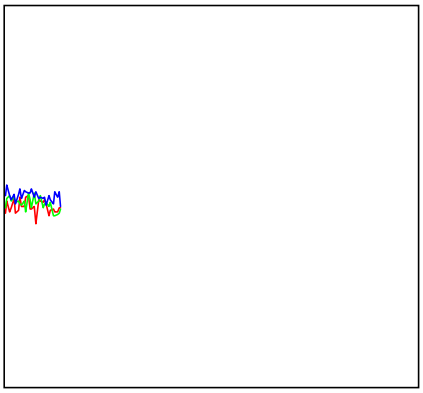
Level I Analyst: Anjali Sharma Date: 5/19/15 Time: 15:09 – 16:27
Level I Analyst: Anjali Sharma Date: 5/20/15 Time: 15:09 – 22:49

Level II Reviewer: [signature] Date: 5/19/15 Time: 15:09-16:27
Level II Reviewer: [signature] Date: 5/20/15 Time: 15:09-22:49

Comments:

Current Signal

[NoGas]



Mass	Range	Count	Avg. Count	RSD [%]
7	5000	2350	2363.2	3.61
89	10000	4675	4798.7	3.48
205	10000	4722	5014.1	2.70
156/140	1	0.505 %	0.638 %	21.41
70/140	5	3.362 %	2.903 %	15.13
115	100	83	76.7	12.82
Integration Time [sec]		0.10		

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.55	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	13.0	V
Extract 2	-185.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-85	V	Cell Exit	-50	V			

Cell Parameters

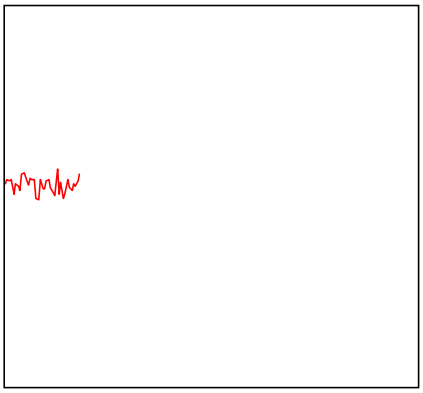
Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			

Meters

IF/BK Press	2.36E+2	Pa	Water RF/WC/IF	1.32	L/min	Plasma Gas	15.01	L/min
Analyzer Press	1.71E-4	Pa	Carrier Gas	0.55	L/min			

Current Signal

[He]



Mass	Range	Count	Avg. Count	RSD [%]
59	2000	1118	1061.1	3.83
51	200	156	161.4	10.35
52	500	317	276.8	8.71
51/59	20	13.950 %	15.202 %	9.00
52/59	50	28.348 %	26.113 %	8.99
Integration Time [sec]			0.10	

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.55	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	-2.0	V
Extract 2	-185.0	V	Cell Entrance	-50	V	Plate Bias	-70	V
Omega Bias	-85	V	Cell Exit	-70	V			

Cell Parameters

Use Gas	true		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	4.0	mL/min	OctP Bias	-20.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			

Meters

IF/BK Press	2.36E+2	Pa	Water RF/WC/IF	1.36	L/min	Plasma Gas	14.97	L/min
Analyzer Press	2.33E-4	Pa	Carrier Gas	0.55	L/min			

US EPA Tune Check Sample Report

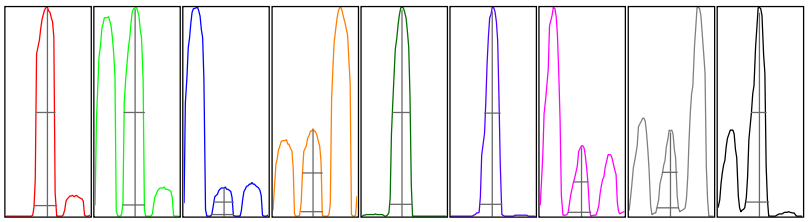
Batch Folder D:\Analytical Runs\I10051915B_LITHIUM .b
Report Comment
Instrument Name I10 JP12452145

[NoGas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	36684	0.27	5.00	
24	104638	0.13	5.00	
25	14077	0.45	5.00	
26	16392	1.26	5.00	
59	168223	0.45	5.00	
115	259592	0.29	5.00	
206	85967	0.29	5.00	
207	76100	0.39	5.00	
208	178514	0.39	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	36780	36717	36760	36540	36624
24	104505	104655	104750	104787	104495
25	14133	14150	14015	14018	14068
26	16209	16217	16543	16673	16320
59	167075	168136	168134	169033	168739
115	259276	259354	259299	259109	260922
206	86225	86244	85821	85787	85759
207	76545	75978	76255	75877	75846
208	178240	179264	178311	177586	179169

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	5834	9.00	8.9 - 9.1		0.774	0.850	
24	16986	23.95	23.9 - 24.1		0.758	0.850	
25	2303	24.95	24.9 - 25.1		0.766	0.850	
26	2648	25.95	25.9 - 26.1		0.781	0.850	
59	27955	58.95	58.9 - 59.1		0.801	0.850	
115	48667	115.00	114.9 - 115.1		0.764	0.850	
206	16577	206.00	205.9 - 206.1		0.765	0.850	
207	14554	207.00	206.9 - 207.1		0.764	0.850	
208	35397	208.00	207.9 - 208.1		0.778	0.850	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 235 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.55	L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	13.0	V
Extract 2	-185.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-85	V	Cell Exit	-50	V			

Cell Parameters

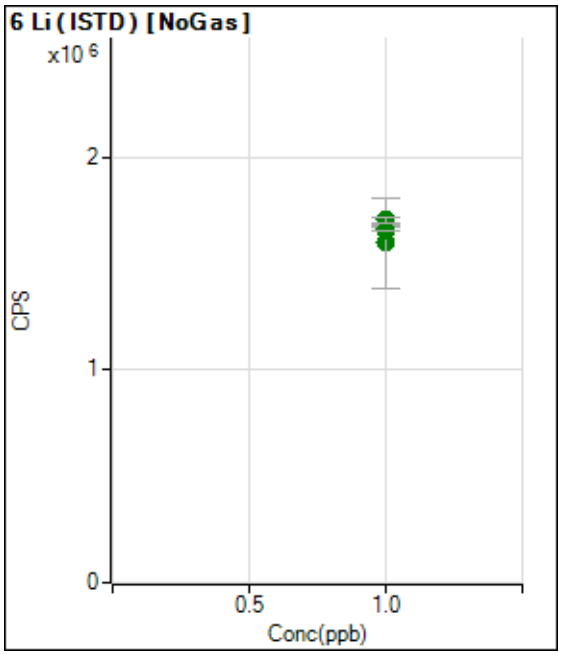
US EPA Tune Check Sample Report

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
ParameterName	**Value**	**Unit**	**ParameterName**	**Value**	**Unit**	**ParameterName**	**Value**	**Unit**
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			

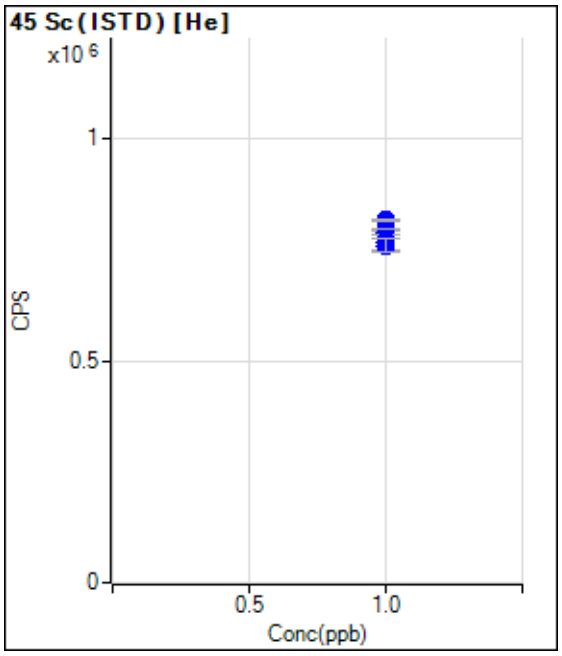
Calibration for 012_CCV.d

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Analysis File: I10051915C_LITHIUM .batch.bin
DA Date-Time: 5/19/2015 3:54:48 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

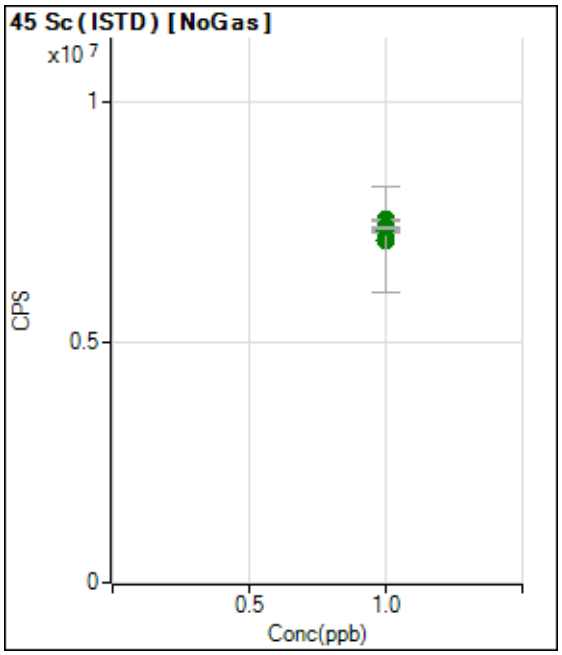
Level	Standard Data File	Sample Name	Acq. Date-Time
1	002CALB.d	ICIS	5/19/2015 3:13:53 PM
2	003CALS.d	STD1-2012420	5/19/2015 3:17:49 PM
3	004CALS.d	STD2-2012431	5/19/2015 3:21:43 PM
4	005CALS.d	STD3-2012433	5/19/2015 3:25:37 PM
5	006CALS.d	STD4-2012443	5/19/2015 3:29:29 PM



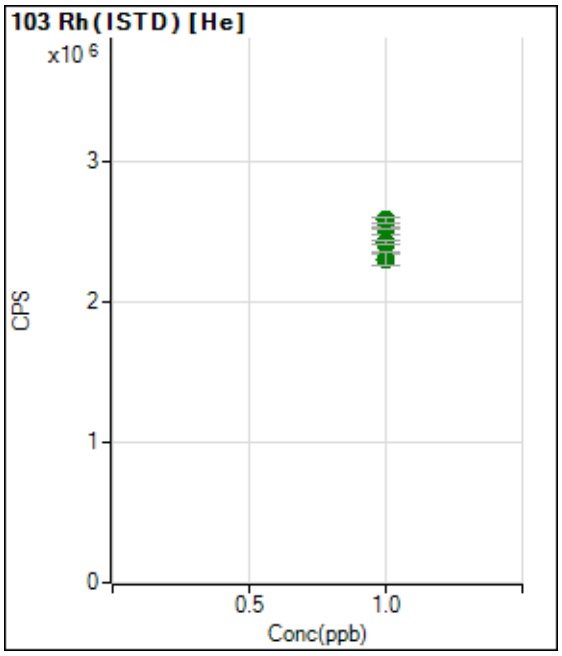
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1663341.88		A	1.3
2	☐	1.000		1684174.40		A	0.7
3	☐	1.000		1596613.00		A	26.8
4	☐	1.000		1656505.77		A	0.2
5	☐	1.000		1706185.46		A	1.5



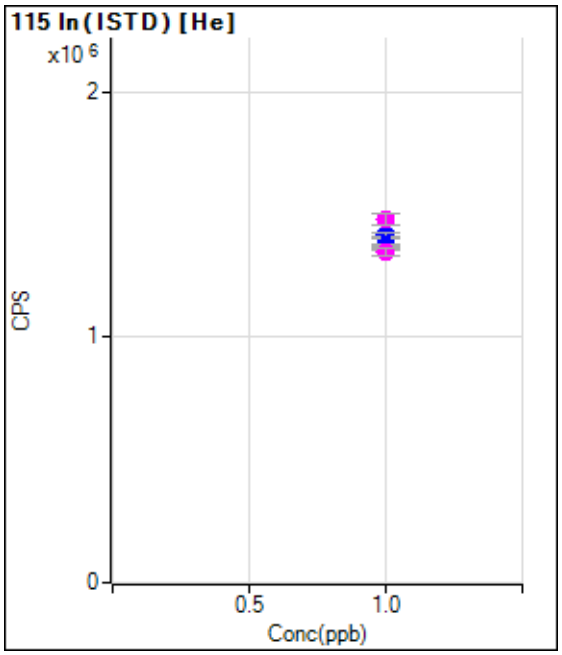
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		788655.01		P	0.7
2	☐	1.000		767964.94		P	4.3
3	☐	1.000		797144.54		P	0.1
4	☐	1.000		759628.56		P	3.9
5	☐	1.000		818092.77		P	0.4



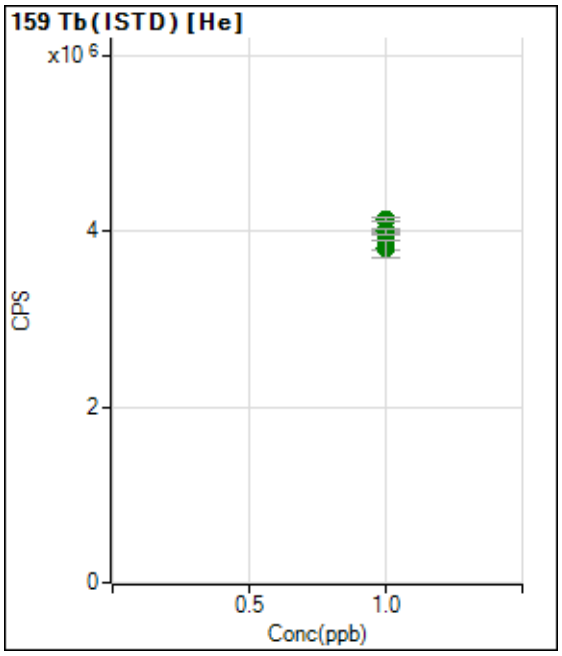
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		7332115.82		A	0.6
2	☐	1.000		7333708.87		A	1.7
3	☐	1.000		7120655.69		A	30.8
4	☐	1.000		7543253.59		A	0.4
5	☐	1.000		7380266.93		A	0.8



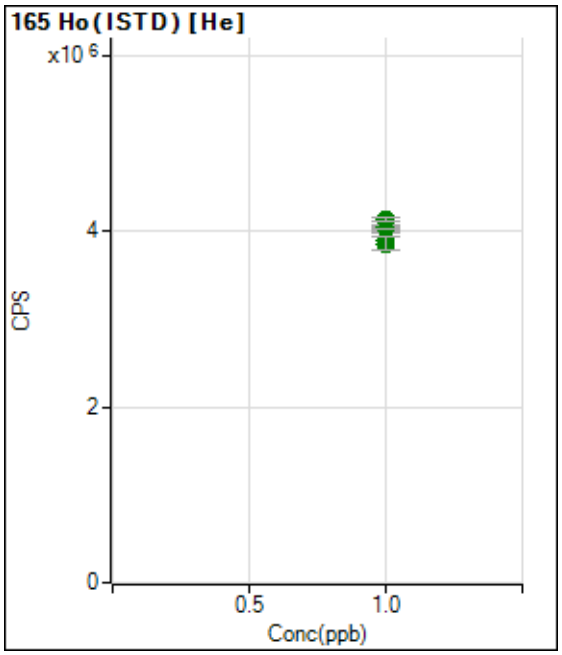
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2523919.44		A	0.6
2	☐	1.000		2417046.53		A	5.6
3	☐	1.000		2425912.30		A	1.4
4	☐	1.000		2305927.99		A	4.1
5	☐	1.000		2587007.93		A	1.6



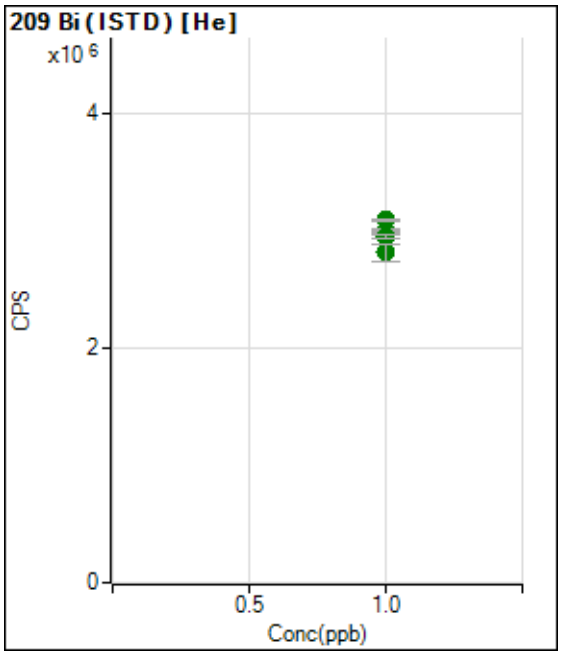
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1420677.31		P	1.3
2	☐	1.000		1379011.80		P	3.9
3	☐	1.000		1374590.18		P	0.6
4	☐	1.000		1346642.73		M	2.3
5	☐	1.000		1478793.12		M	3.0



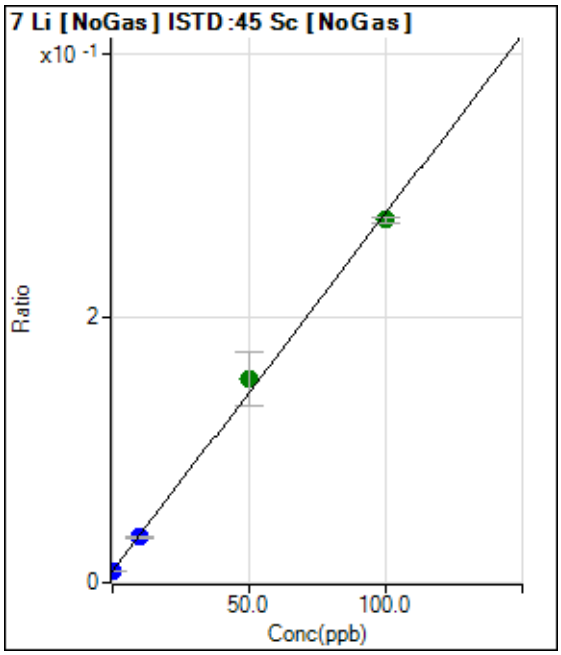
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1	☐	1.000		3983717.13		A	0.7
2	☐	1.000		3882689.11		A	5.3
3	☐	1.000		3995551.82		A	1.8
4	☐	1.000		3794634.73		A	5.2
5	☐	1.000		4125000.77		A	0.9



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		4030812.75		A	0.8
2	☐	1.000		3892987.03		A	4.9
3	☐	1.000		4053594.10		A	1.5
4	☐	1.000		3867011.40		A	4.2
5	☐	1.000		4133673.17		A	1.2



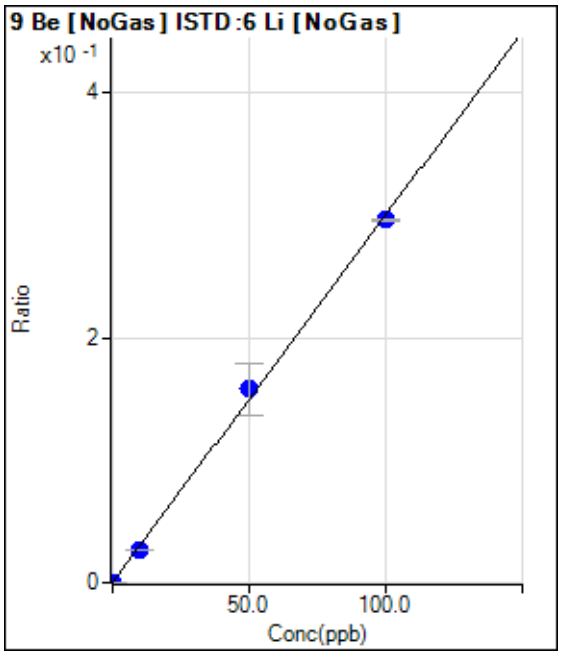
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1	☐	1.000		2997463.08		A	0.8
2	☐	1.000		2947598.39		A	4.1
3	☐	1.000		2946730.06		A	1.1
4	☐	1.000		2815582.88		A	4.9
5	☐	1.000		3093296.31		A	0.7



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	64872.87	0.0088	P	2.5
2	☐	10.000	9.372	250587.11	0.0342	P	2.7
3	☐	50.000	53.731	1035659.39	0.1541	A	27.3
4	☐			68269.97	0.0091	P	2.5
5	☐	100.000	98.197	2024031.28	0.2743	A	1.8

y = 0.0027 * x + 0.0088
R = 0.9986
DL = 0.2424
BEC = 3.273

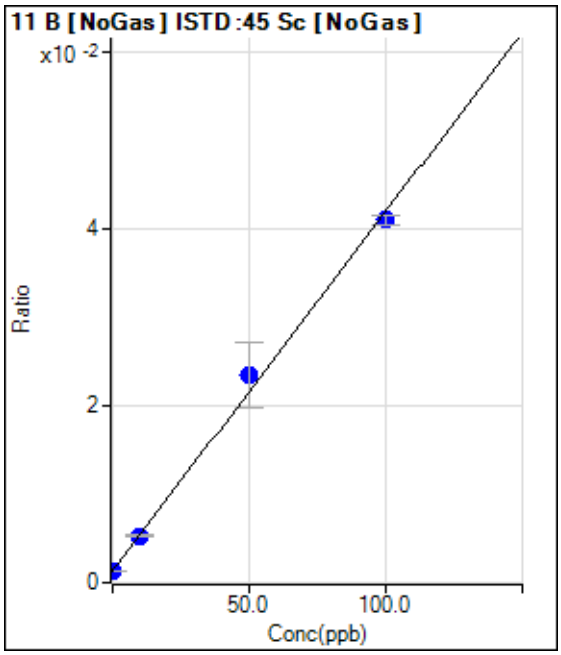
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	62.97	0.0000	P	19.5
2	☐	10.000	8.856	44795.69	0.0266	P	1.8
3	☐	50.000	52.648	239799.34	0.1579	P	27.6
4	☐	100.000	98.791	490813.22	0.2963	P	0.6
5	☐			88.89	0.0001	P	51.3

y = 0.0030 * x + 3.7816E-005
R = 0.9992
DL = 0.007366
BEC = 0.01261

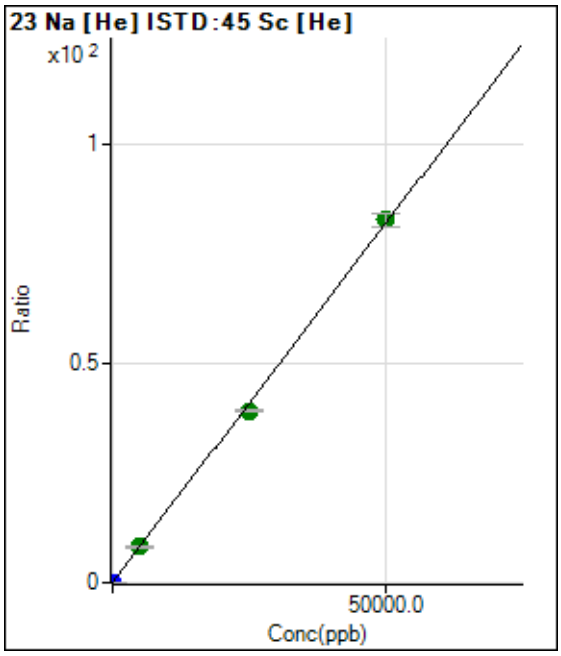
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	9858.55	0.0013	P	4.0
2	☐	10.000	9.785	39005.00	0.0053	P	1.4
3	☐	50.000	54.503	156534.00	0.0235	P	31.2
4	☐			13864.95	0.0018	P	4.6
5	☐	100.000	97.770	302954.93	0.0411	P	2.5

y = 4.0616E-004 * x + 0.0013
R = 0.9981
DL = 0.3978
BEC = 3.31

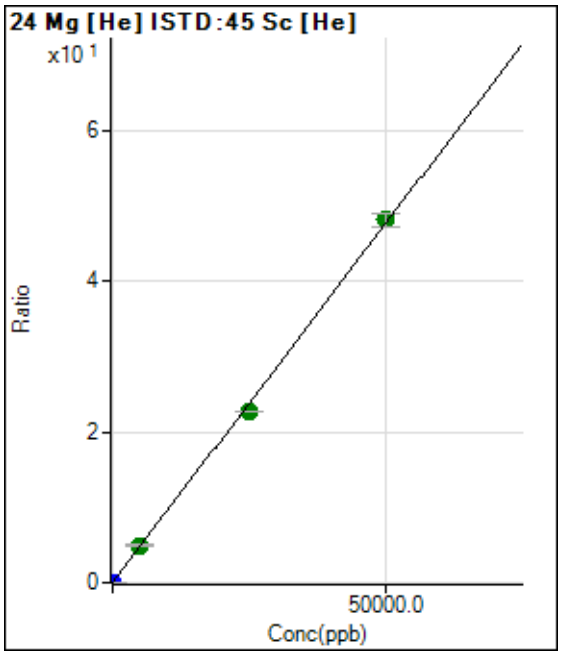
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Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	14291.28	0.0181	P	2.5
2	☐	5000.000	5051.351	6356053.45	8.2901	A	5.8
3	☐	25000.000	23931.625	31254461.72	39.2080	A	0.7
4	☐	50000.000	50529.052	62813614.17	82.7634	A	3.6
5	☐			23334.36	0.0285	P	6.1

y = 0.0016 * x + 0.0181
R = 0.9996
DL = 0.8393
BEC = 11.07

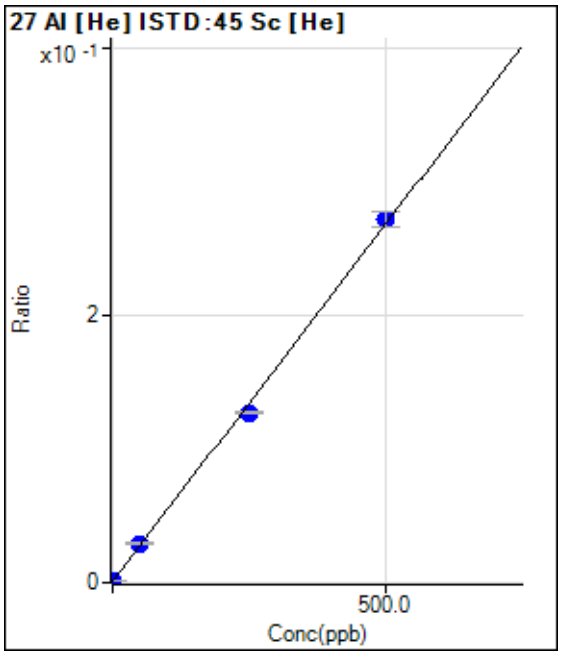
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Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	329.65	0.0004	P	36.2
2	☐	5000.000	5141.476	3756271.49	4.8968	A	3.9
3	☐	25000.000	23901.974	18145254.83	22.7628	A	0.5
4	☐	50000.000	50534.866	36522107.81	48.1260	A	3.8
5	☐			2115.04	0.0026	P	22.8

y = 9.5232E-004 * x + 4.1814E-004
R = 0.9995
DL = 0.4772
BEC = 0.4391

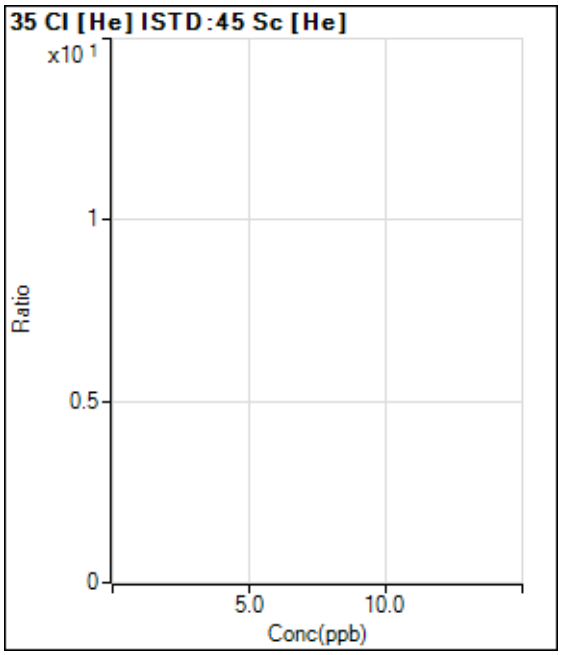
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	654.47	0.0008	P	10.2
2	☐	50.000	52.532	22167.80	0.0289	P	4.8
3	☐	250.000	236.570	101444.53	0.1273	P	0.9
4	☐	500.000	506.462	206008.26	0.2715	P	4.3
5	☐			1072.27	0.0013	P	9.6

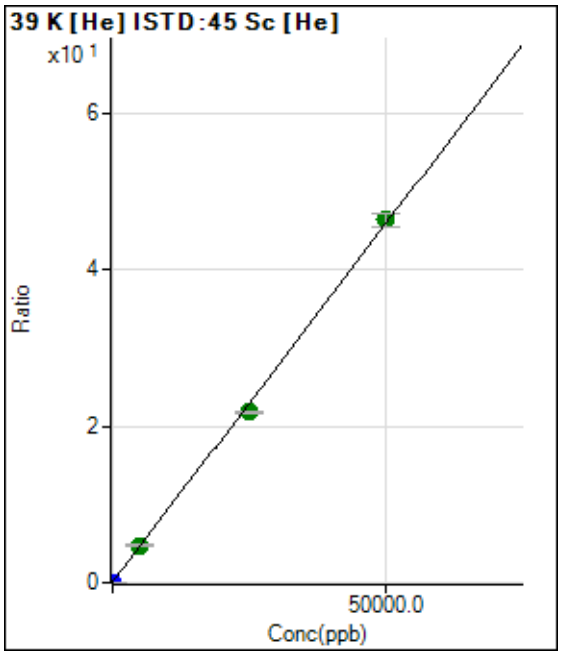
y = 5.3443E-004 * x + 8.3016E-004
R = 0.9993
DL = 0.4743
BEC = 1.553

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			12062640.72	15.2955	A	0.4
2	☐			12903240.23	16.8168	A	3.2
3	☐			13418131.87	16.8327	A	0.6
4	☐			12902444.39	17.0033	A	4.2
5	☐			14049142.50	17.1734	A	1.2

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	41370.15	0.0525	P	4.6
2	☐	5000.000	5076.365	3606659.58	4.7035	A	5.2
3	☐	25000.000	23800.499	17424784.96	21.8588	A	1.4
4	☐	50000.000	50592.114	35215376.38	46.4056	A	3.9
5	☐			46660.85	0.0570	P	1.9

y = 9.1621E-004 * x + 0.0525

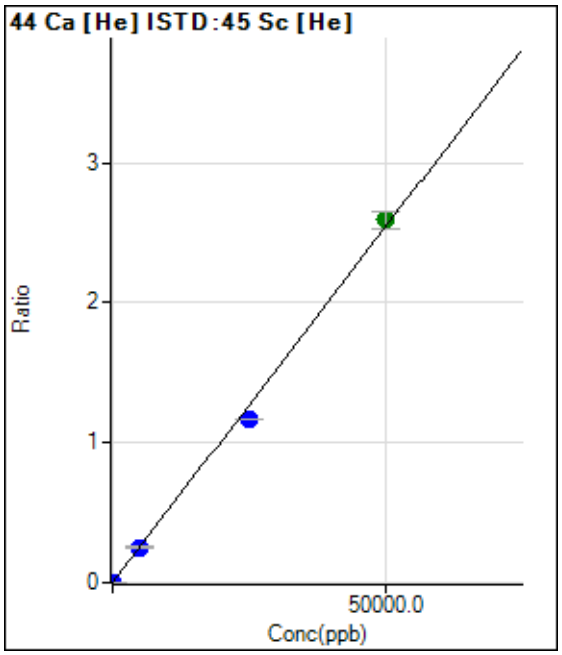
R = 0.9995

DL = 7.897

BEC = 57.27

Weight: <None>

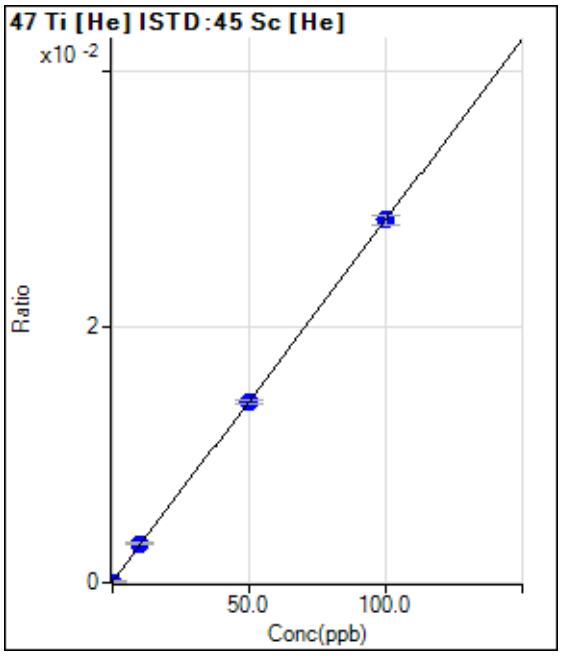
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	402.79	0.0005	P	14.9
2	☐	5000.000	4892.139	190981.90	0.2490	P	4.3
3	☐	25000.000	23011.696	932134.73	1.1693	P	0.5
4	☐	50000.000	51004.938	1965985.27	2.5912	A	4.7
5	☐			458.82	0.0006	P	12.1

y = 5.0793E-005 * x + 5.1076E-004
R = 0.9986
DL = 4.48
BEC = 10.06

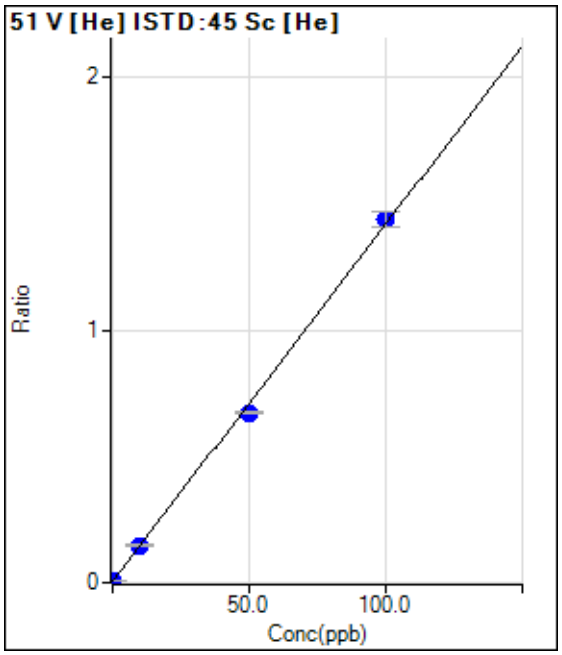
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	54.45	0.0001	P	68.8
2	☐	10.000	10.640	2361.30	0.0031	P	8.6
3	☐	50.000	49.806	11296.96	0.0142	P	2.0
4	☐			64.44	0.0001	P	18.1
5	☐	100.000	100.033	23227.15	0.0284	P	2.5

y = 2.8315E-004 * x + 6.9172E-005
R = 1.0000
DL = 0.5044
BEC = 0.2443

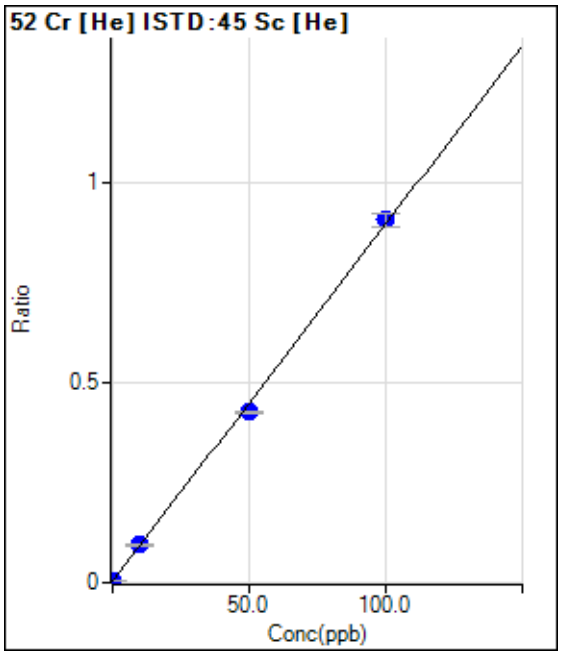
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3271.49	0.0041	P	12.0
2	☐	10.000	10.178	113399.38	0.1478	P	4.3
3	☐	50.000	47.295	535588.75	0.6719	P	0.7
4	☐	100.000	101.334	1088750.31	1.4348	P	4.3
5	☐			3373.36	0.0041	P	14.6

y = 0.0141 * x + 0.0041
R = 0.9993
DL = 0.1062
BEC = 0.2939

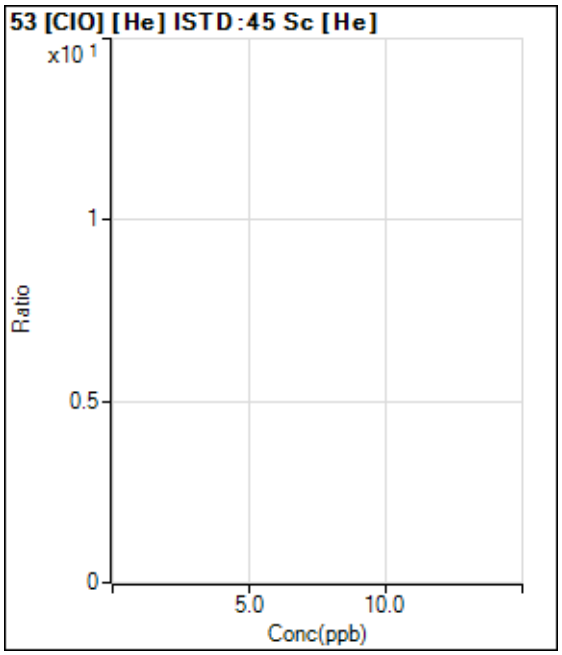
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2530.22	0.0032	P	3.6
2	☐	10.000	10.183	72083.31	0.0940	P	4.7
3	☐	50.000	47.424	339567.37	0.4260	P	1.2
4	☐	100.000	101.270	687513.05	0.9060	P	4.0
5	☐			2868.05	0.0035	P	3.7

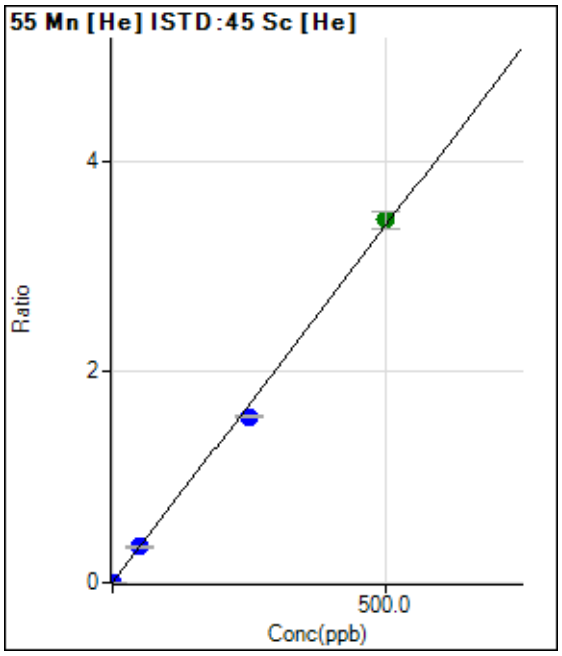
y = 0.0089 * x + 0.0032
R = 0.9994
DL = 0.03904
BEC = 0.3599

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			440.77	0.0006	P	19.4
2	☐			9217.64	0.0120	P	3.2
3	☐			41185.11	0.0517	P	1.7
4	☐			83676.28	0.1103	P	5.4
5	☐			400.03	0.0005	P	43.4

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	896.71	0.0011	P	5.9
2	☐	50.000	49.898	259656.13	0.3386	P	4.7
3	☐	250.000	233.019	1257004.81	1.5769	P	0.6
4	☐	500.000	508.500	2609963.23	3.4398	A	4.5
5	☐			687.80	0.0008	P	4.7

y = 0.0068 * x + 0.0011

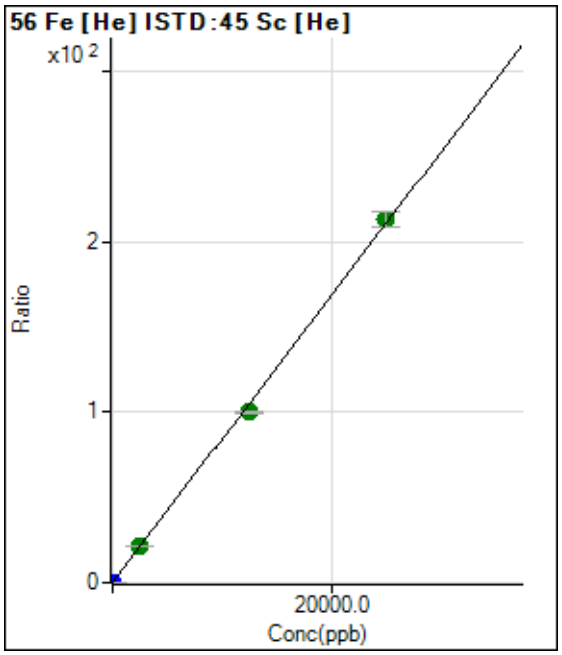
R = 0.9990

DL = 0.02985

BEC = 0.1681

Weight: <None>

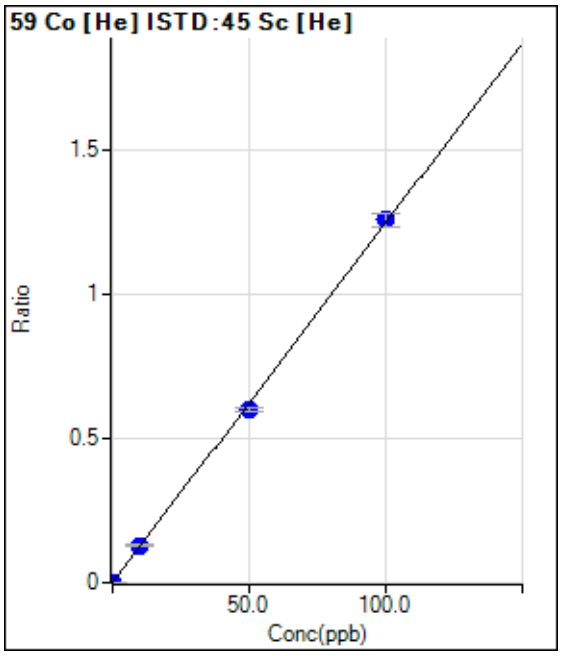
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5772.11	0.0073	P	5.5
2	☐	2500.000	2551.524	16490342.68	21.4960	A	3.8
3	☐	12500.000	11876.877	79740025.72	100.0331	A	1.1
4	☐	25000.000	25306.409	161725398.02	213.1353	A	4.3
5	☐			53521.46	0.0655	P	16.1

y = 0.0084 * x + 0.0073
R = 0.9994
DL = 0.1424
BEC = 0.869

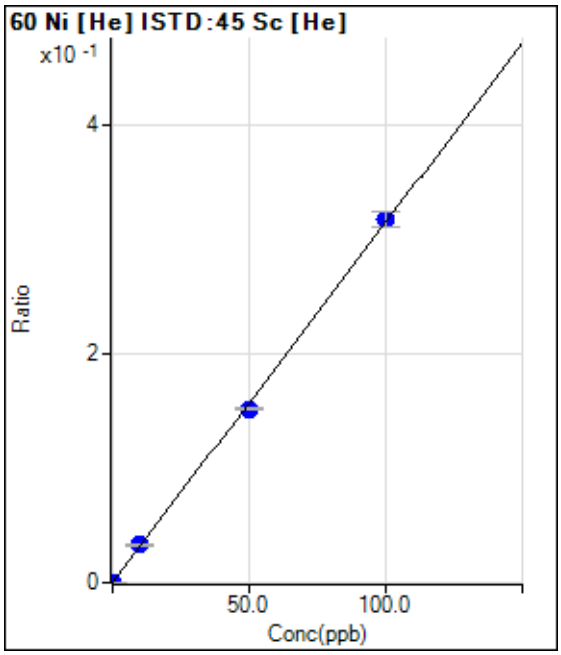
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	105.56	0.0001	P	17.3
2	☐	10.000	10.326	98987.74	0.1290	P	4.0
3	☐	50.000	48.120	478981.68	0.6009	P	1.4
4	☐	100.000	100.907	956126.91	1.2599	P	3.8
5	☐			174.45	0.0002	P	10.5

y = 0.0125 * x + 1.3375E-004
R = 0.9997
DL = 0.005555
BEC = 0.01071

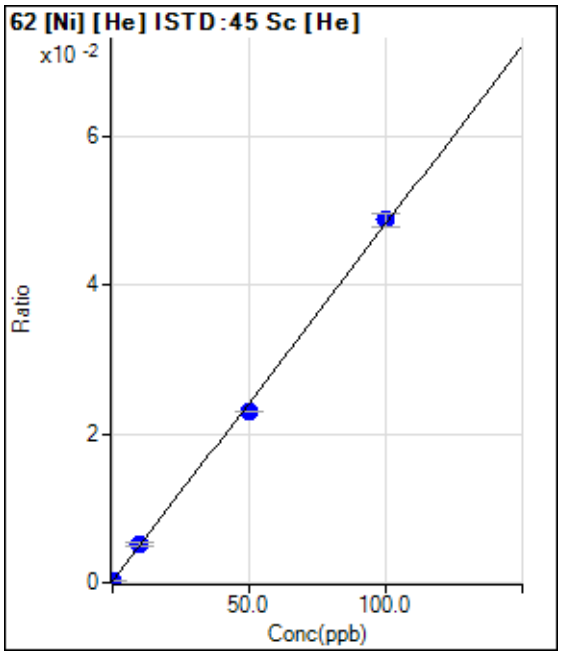
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	61.11	0.0001	P	35.1
2	☐	10.000	10.452	25280.09	0.0330	P	6.1
3	☐	50.000	48.248	121120.14	0.1519	P	0.7
4	☐	100.000	100.831	240892.95	0.3175	P	4.1
5	☐			140.00	0.0002	P	30.6

y = 0.0031 * x + 7.7614E-005
R = 0.9997
DL = 0.02599
BEC = 0.02466

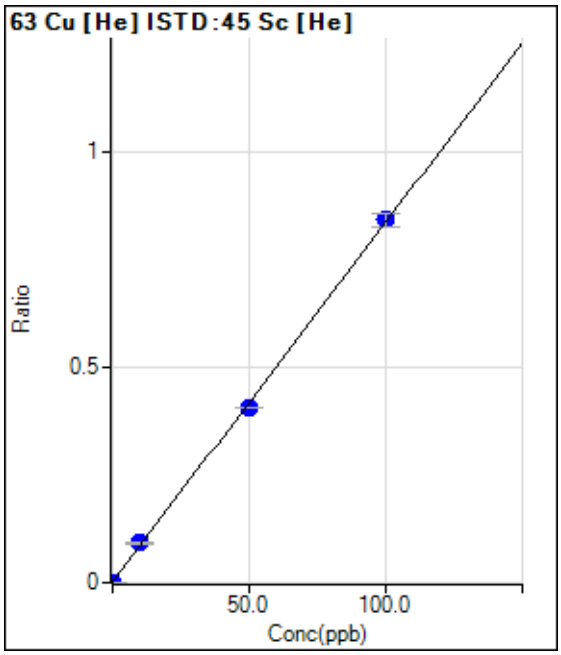
Weight: <None>
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	140.00	0.0002	P	23.2
2	☐	10.000	10.402	3971.60	0.0052	P	6.4
3	☐	50.000	47.482	18336.20	0.0230	P	0.4
4	☐	100.000	101.219	37059.31	0.0488	P	3.9
5	☐			187.78	0.0002	P	11.4

y = 4.8070E-004 * x + 1.7768E-004
R = 0.9994
DL = 0.2569
BEC = 0.3696

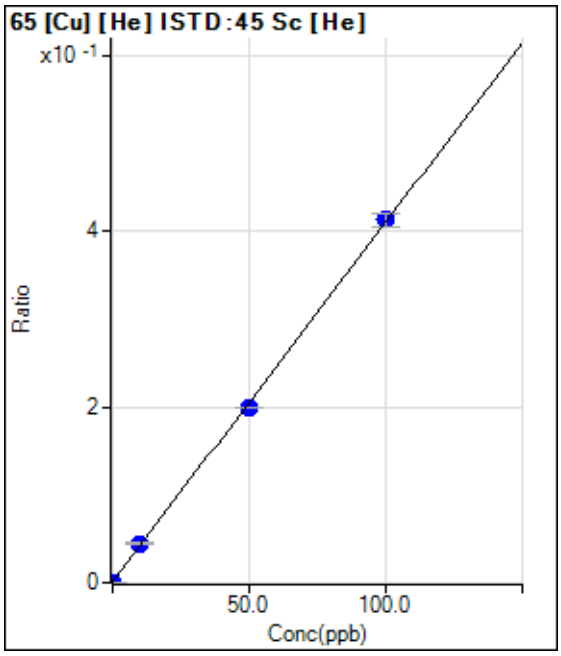
Weight: <None>
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1447.85	0.0018	P	6.9
2	☐	10.000	10.768	70163.80	0.0915	P	5.3
3	☐	50.000	48.357	322467.78	0.4045	P	0.3
4	☐	100.000	100.745	638097.19	0.8408	P	3.6
5	☐			1742.33	0.0021	P	3.4

y = 0.0083 * x + 0.0018
R = 0.9997
DL = 0.04576
BEC = 0.2205

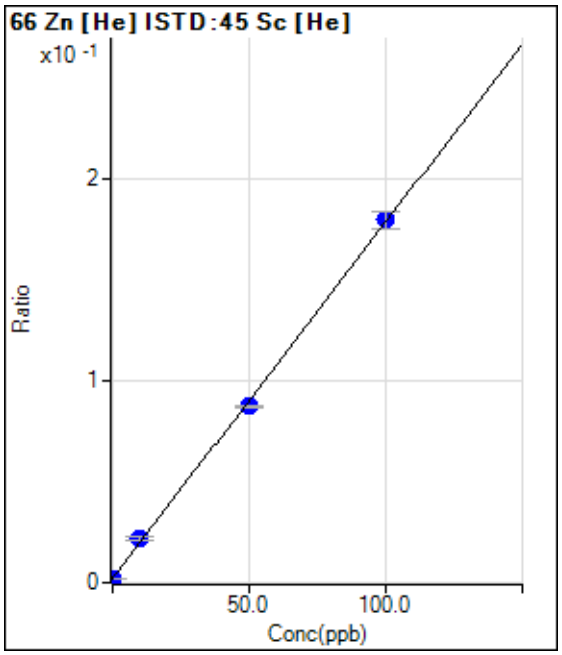
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	678.91	0.0009	P	3.9
2	☐	10.000	10.579	33817.47	0.0441	P	5.2
3	☐	50.000	48.421	158452.15	0.1988	P	0.5
4	☐	100.000	100.732	313112.98	0.4126	P	3.7
5	☐			833.37	0.0010	P	4.6

y = 0.0041 * x + 8.6088E-004
R = 0.9997
DL = 0.02468
BEC = 0.2106

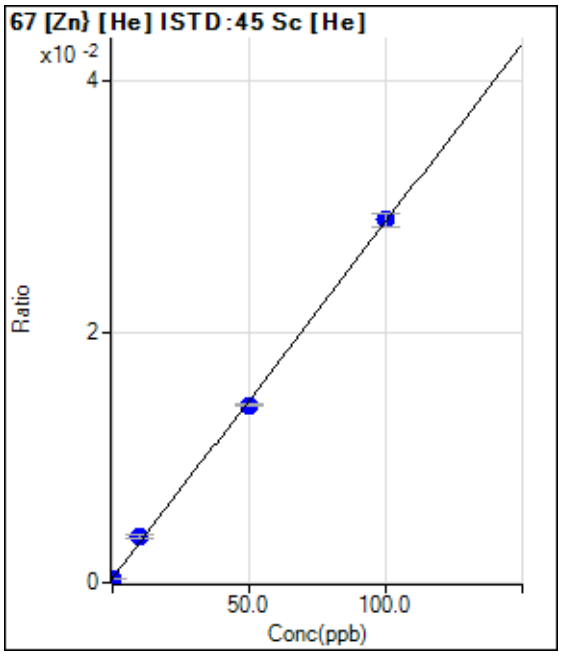
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1666.77	0.0021	P	2.4
2	☐	10.000	11.214	16822.48	0.0219	P	4.8
3	☐	50.000	48.379	69840.58	0.0876	P	0.9
4	☐	100.000	100.689	136615.81	0.1801	P	4.7
5	☐			1367.85	0.0017	P	10.0

y = 0.0018 * x + 0.0021
R = 0.9996
DL = 0.08731
BEC = 1.196

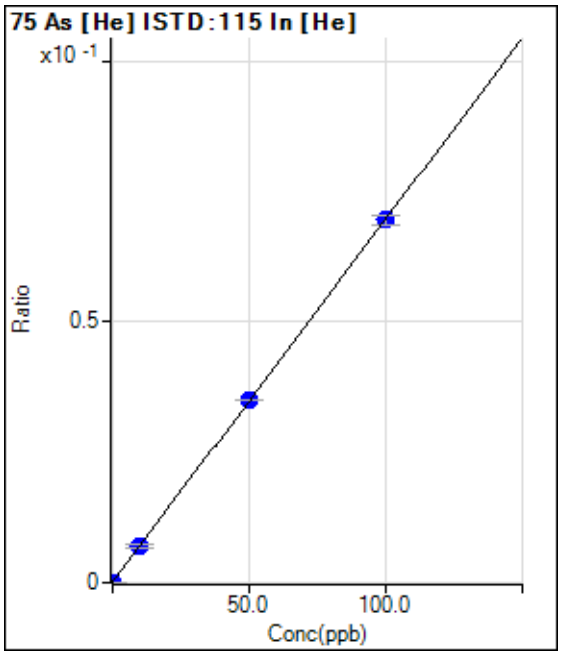
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	270.01	0.0003	P	1.7
2	☐	10.000	11.619	2803.58	0.0036	P	8.0
3	☐	50.000	48.565	11285.90	0.0142	P	1.6
4	☐	100.000	100.556	21968.05	0.0289	P	3.8
5	☐			162.23	0.0002	P	12.8

y = 2.8448E-004 * x + 3.4235E-004
R = 0.9996
DL = 0.06146
BEC = 1.203

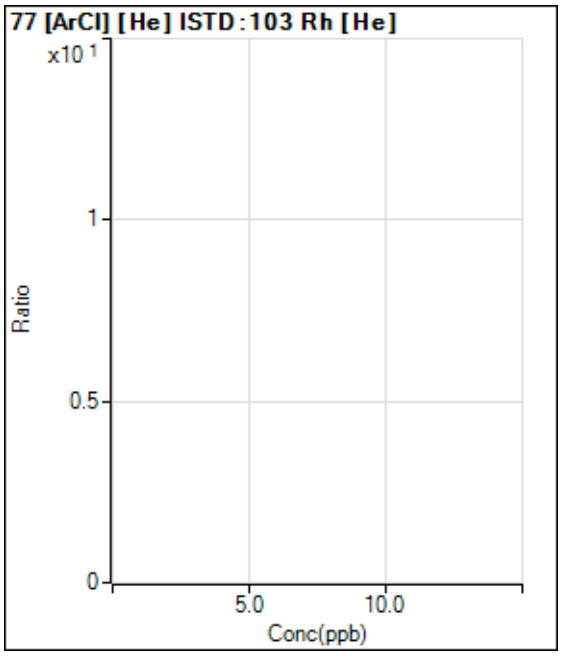
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	140.48	0.0001	P	20.1
2	☐	10.000	9.933	9647.72	0.0070	P	6.3
3	☐	50.000	50.277	48203.33	0.0351	P	0.6
4	☐	100.000	99.868	93637.99	0.0696	P	2.5
5	☐			2081.64	0.0014	P	7.7

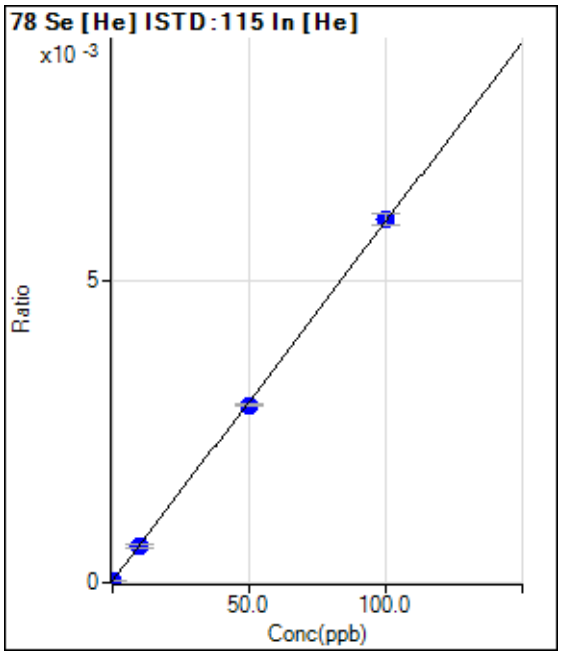
y = 6.9553E-004 * x + 9.9040E-005
R = 1.0000
DL = 0.08606
BEC = 0.1424

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			40.74	0.0000	P	41.2
2	☐			240.75	0.0001	P	7.2
3	☐			1296.41	0.0005	P	6.7
4	☐			2592.95	0.0011	P	2.3
5	☐			40.74	0.0000	P	56.1

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	39.47	0.0000	P	22.5
2	☐	10.000	9.907	850.60	0.0006	P	9.5
3	☐	50.000	48.953	4048.89	0.0029	P	0.9
4	☐	100.000	100.533	8102.50	0.0060	P	3.2
5	☐			138.64	0.0001	P	4.4

y = 5.9601E-005 * x + 2.7833E-005

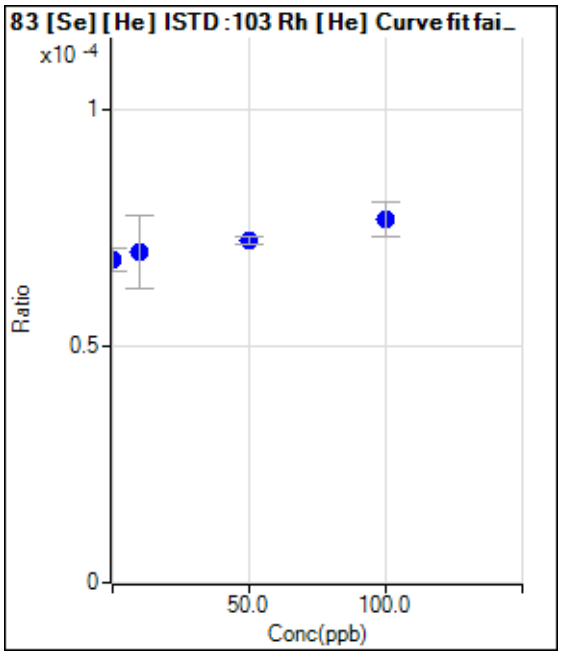
R = 0.9999

DL = 0.3154

BEC = 0.467

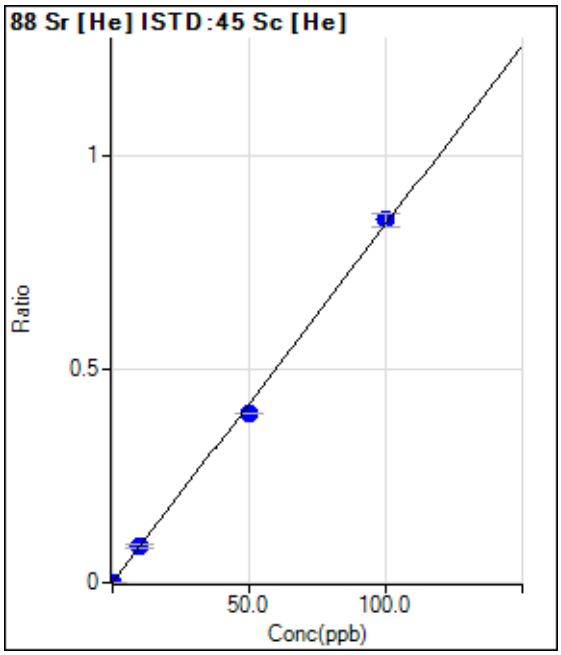
Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000		172.73	0.0001	P	7.3
2	☐	10.000		167.68	0.0001	P	22.5
3	☐	50.000		175.42	0.0001	P	2.5
4	☐	100.000		177.11	0.0001	P	9.5
5	☐			173.74	0.0001	P	13.8

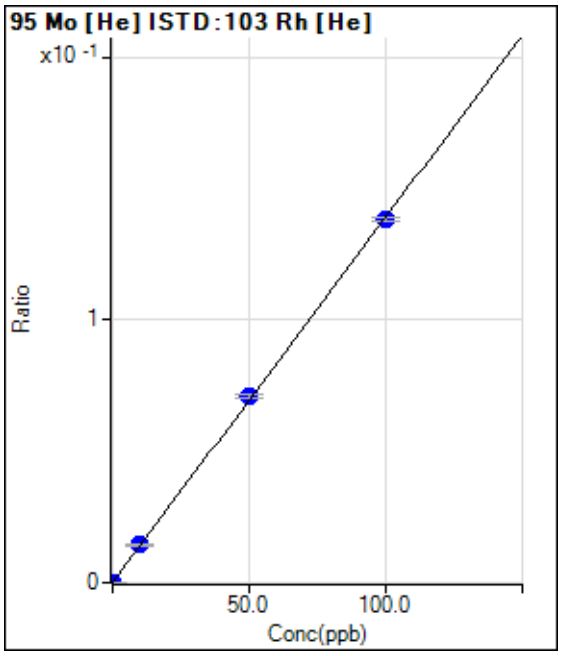
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	200.01	0.0003	P	32.3
2	☐	10.000	10.177	65616.10	0.0856	P	5.4
3	☐	50.000	47.386	316884.36	0.3975	P	0.4
4	☐	100.000	101.289	644602.75	0.8494	P	3.9
5	☐			181.11	0.0002	P	17.2

y = 0.0084 * x + 2.5365E-004
R = 0.9994
DL = 0.0293
BEC = 0.03026

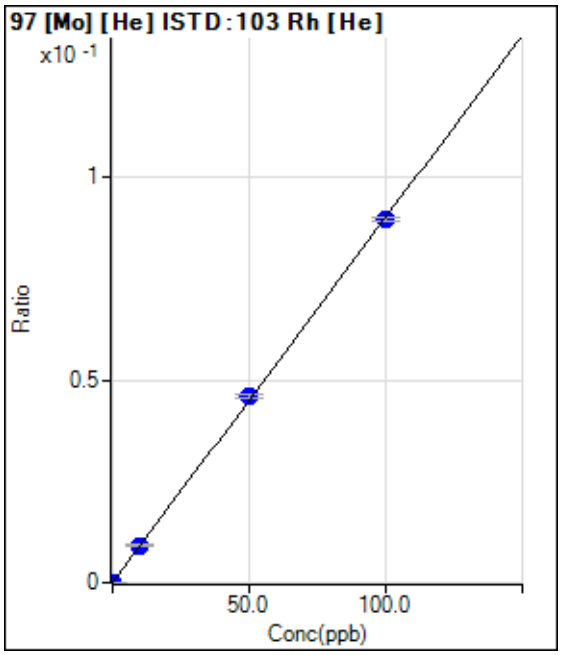
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	101.11	0.0000	P	16.6
2	☐	10.000	10.393	34939.31	0.0145	P	6.3
3	☐	50.000	51.188	172699.05	0.0712	P	2.6
4	☐			882.26	0.0004	P	20.4
5	☐	100.000	99.367	357452.23	0.1382	P	1.2

y = 0.0014 * x + 4.0060E-005
R = 0.9999
DL = 0.01435
BEC = 0.02881

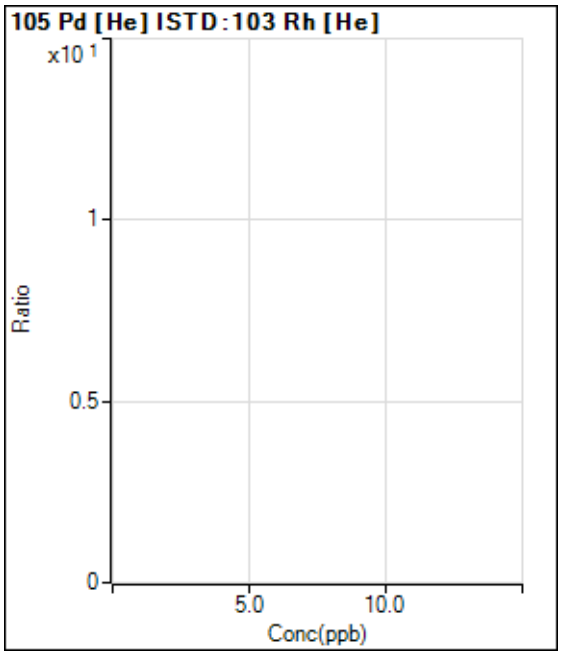
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	44.45	0.0000	P	109.3
2	☐	10.000	10.255	22333.67	0.0093	P	6.2
3	☐	50.000	51.148	111866.04	0.0461	P	1.5
4	☐			666.72	0.0003	P	47.1
5	☐	100.000	99.400	231801.21	0.0896	P	1.1

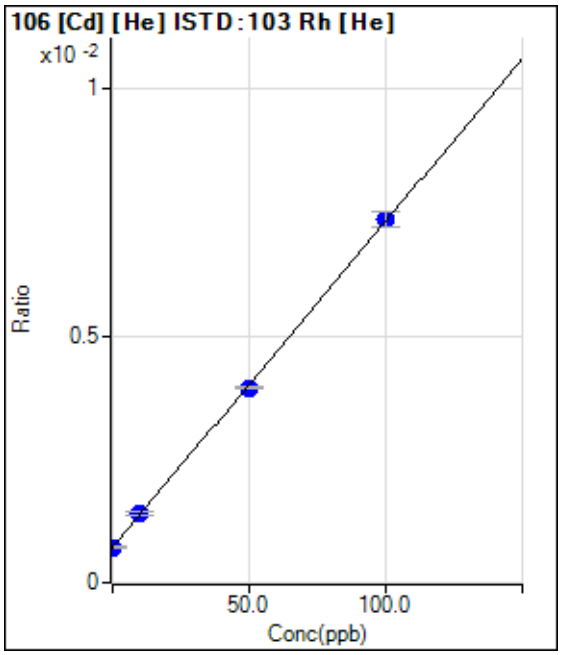
y = 9.0133E-004 * x + 1.7642E-005
R = 0.9999
DL = 0.06418
BEC = 0.01957

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			1644.61	0.0007	P	13.2
2	☐			1596.47	0.0007	P	9.9
3	☐			1885.38	0.0008	P	15.0
4	☐			2089.11	0.0009	P	8.2
5	☐			1729.82	0.0007	P	3.9

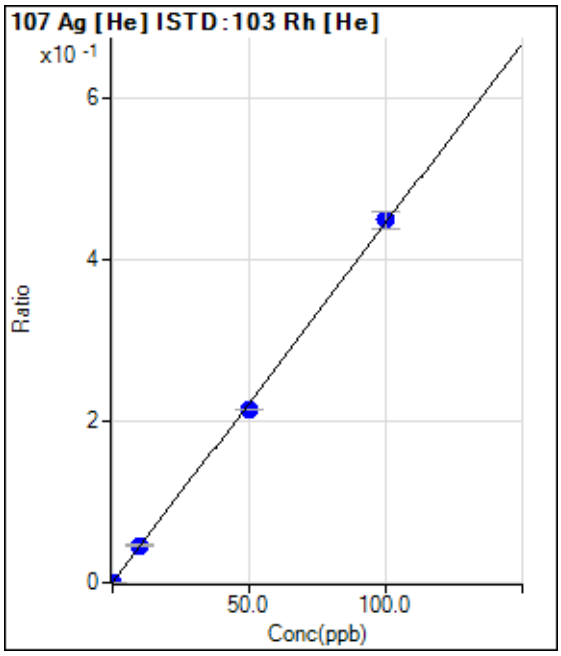
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1815.26	0.0007	P	3.1
2	☐	10.000	10.370	3386.20	0.0014	P	6.2
3	☐	50.000	48.945	9583.80	0.0040	P	1.1
4	☐	100.000	100.491	16938.20	0.0074	P	4.3
5	☐			1997.77	0.0008	P	6.5

y = 6.6022E-005 * x + 7.1929E-004
R = 0.9999
DL = 0.9991
BEC = 10.89

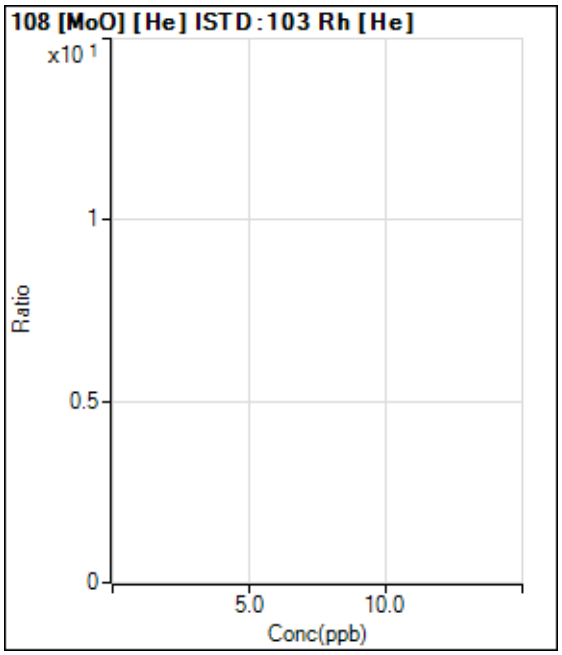
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	27.78	0.0000	P	47.8
2	☐	10.000	10.303	110812.53	0.0459	P	5.8
3	☐	50.000	48.129	520540.86	0.2146	P	0.8
4	☐	100.000	100.905	1036065.20	0.4499	P	4.7
5	☐			161.11	0.0001	P	30.5

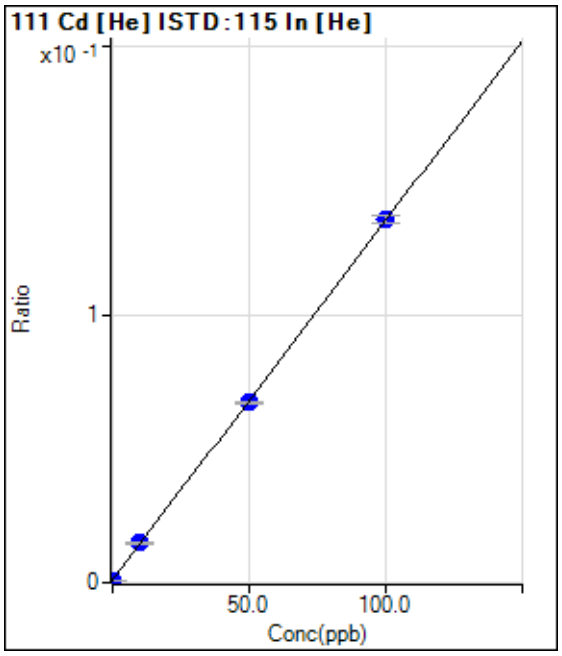
y = 0.0045 * x + 1.0984E-005
R = 0.9997
DL = 0.003534
BEC = 0.002464

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			7.41	0.0000	P	173.2
2	☐			1137.13	0.0005	P	8.0
3	☐			6097.64	0.0025	P	8.3
4	☐			11504.41	0.0050	P	5.8
5	☐			129.63	0.0001	P	18.4

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1385.30	0.0010	P	0.6
2	☐	10.000	10.391	20513.15	0.0149	P	5.6
3	☐	50.000	49.447	92402.20	0.0672	P	1.3
4	☐	100.000	100.237	182107.78	0.1353	P	2.1
5	☐			1544.44	0.0010	P	9.4

y = 0.0013 * x + 9.7509E-004

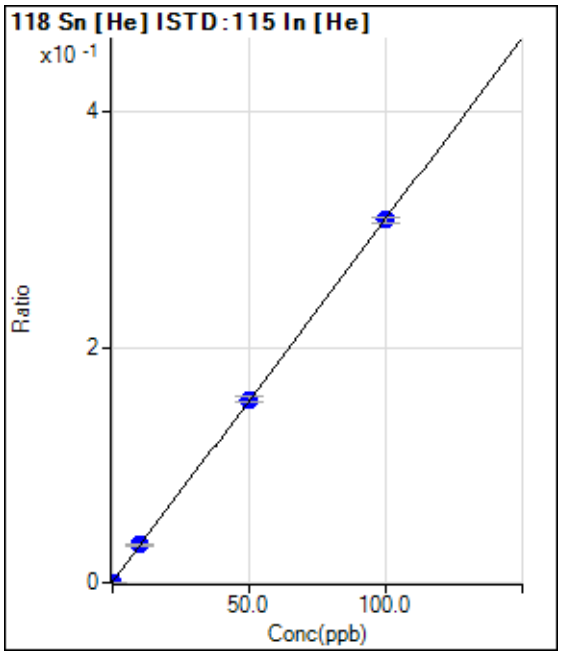
R = 1.0000

DL = 0.01344

BEC = 0.7278

Weight: <None>

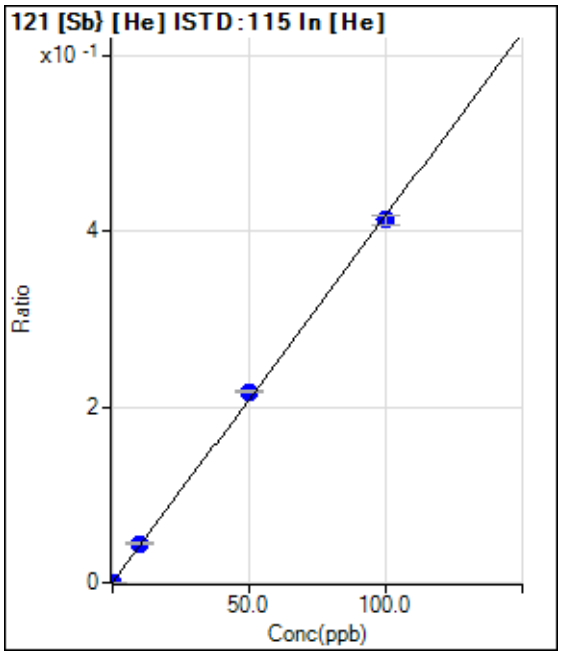
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	837.11	0.0006	P	4.8
2	☐	10.000	10.304	44540.84	0.0323	P	5.1
3	☐	50.000	50.359	214108.42	0.1558	P	2.4
4	☐			1670.53	0.0012	P	6.6
5	☐	100.000	99.790	455418.78	0.3081	P	1.9

y = 0.0031 * x + 5.8922E-004
R = 1.0000
DL = 0.02758
BEC = 0.1912

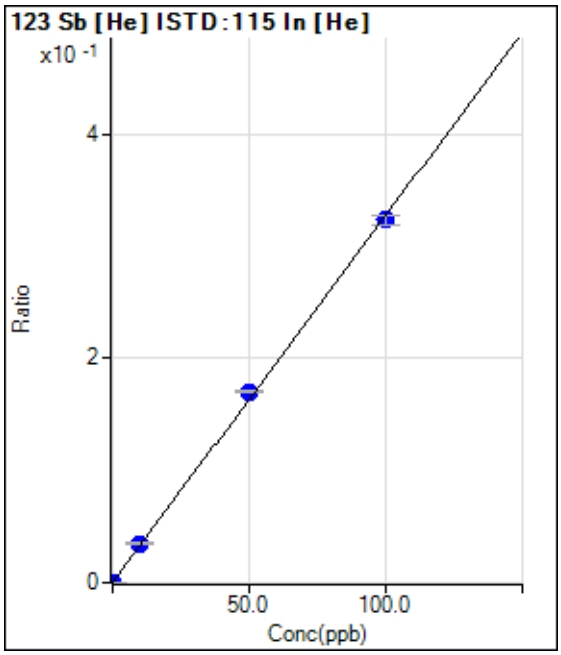
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	150.00	0.0001	P	42.1
2	☐	10.000	10.591	61128.31	0.0444	P	4.3
3	☐	50.000	52.116	299582.64	0.2180	P	1.1
4	☐			1403.41	0.0010	P	7.7
5	☐	100.000	98.883	611059.18	0.4134	P	2.8

y = 0.0042 * x + 1.0595E-004
R = 0.9996
DL = 0.03198
BEC = 0.02535

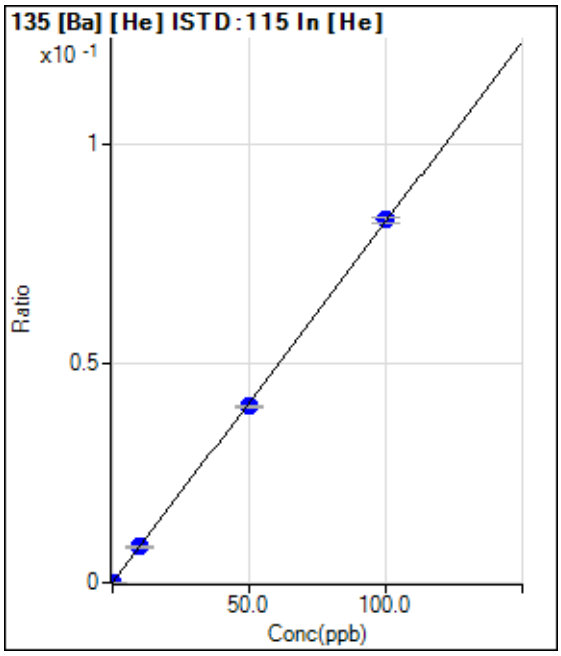
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	125.56	0.0001	P	20.7
2	☐	10.000	10.674	48163.15	0.0350	P	4.9
3	☐	50.000	52.091	234103.26	0.1703	P	1.3
4	☐			1061.16	0.0008	P	9.9
5	☐	100.000	98.887	477768.71	0.3232	P	2.5

y = 0.0033 * x + 8.8228E-005
R = 0.9996
DL = 0.01681
BEC = 0.027

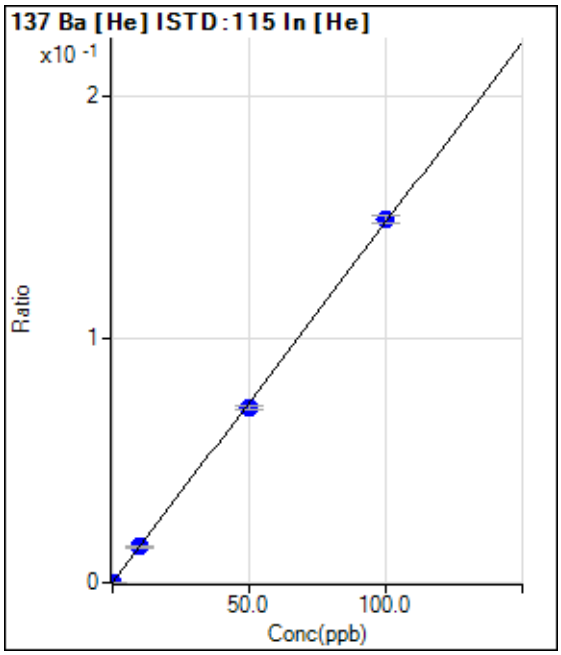
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	23.33	0.0000	P	37.1
2	☐	10.000	9.896	11219.42	0.0081	P	2.2
3	☐	50.000	48.881	55184.89	0.0401	P	0.8
4	☐	100.000	100.570	111180.51	0.0826	P	1.7
5	☐			50.00	0.0000	P	13.9

y = 8.2098E-004 * x + 1.6393E-005
R = 0.9999
DL = 0.02225
BEC = 0.01997

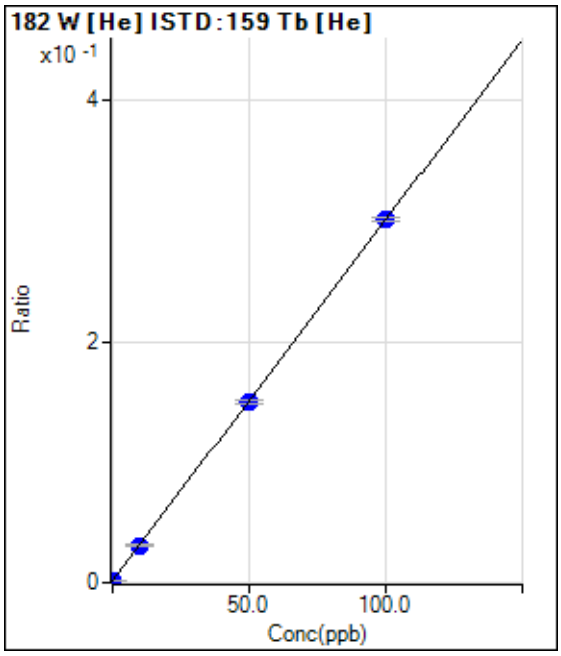
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	43.34	0.0000	P	57.2
2	☐	10.000	10.003	20426.93	0.0148	P	3.6
3	☐	50.000	48.619	98894.97	0.0719	P	1.5
4	☐	100.000	100.690	200548.45	0.1490	P	2.1
5	☐			144.45	0.0001	P	25.8

y = 0.0015 * x + 3.0390E-005
R = 0.9998
DL = 0.03523
BEC = 0.02055

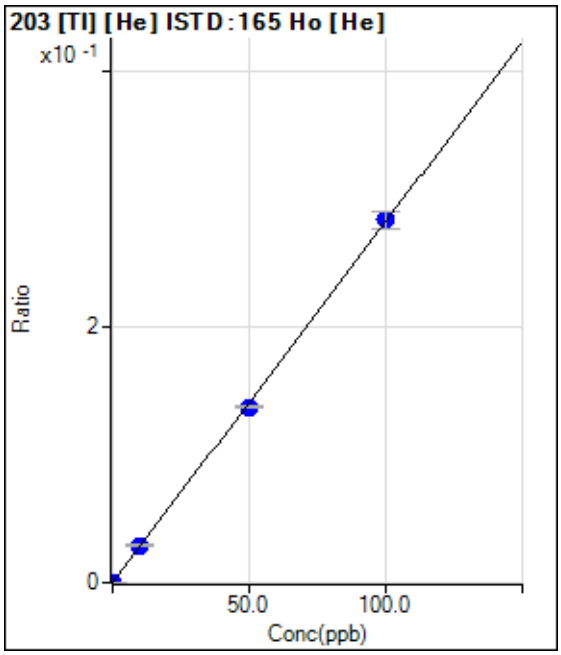
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5297.44	0.0013	P	7.6
2	☐	10.000	9.920	120301.80	0.0310	P	5.8
3	☐	50.000	49.813	601395.85	0.1505	P	1.8
4	☐			11234.10	0.0030	P	8.9
5	☐	100.000	100.101	1242332.04	0.3012	P	0.9

y = 0.0030 * x + 0.0013
R = 1.0000
DL = 0.1016
BEC = 0.4441

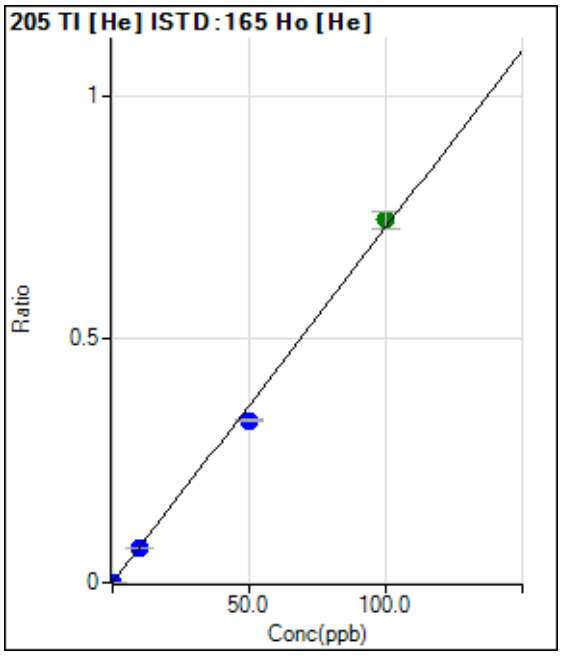
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	88.89	0.0000	P	12.1
2	☐	10.000	10.367	113552.05	0.0292	P	6.9
3	☐	50.000	48.628	555442.17	0.1370	P	1.2
4	☐	100.000	100.649	1095365.61	0.2836	P	4.4
5	☐			2166.92	0.0005	P	12.9

y = 0.0028 * x + 2.2048E-005
R = 0.9998
DL = 0.002846
BEC = 0.007825

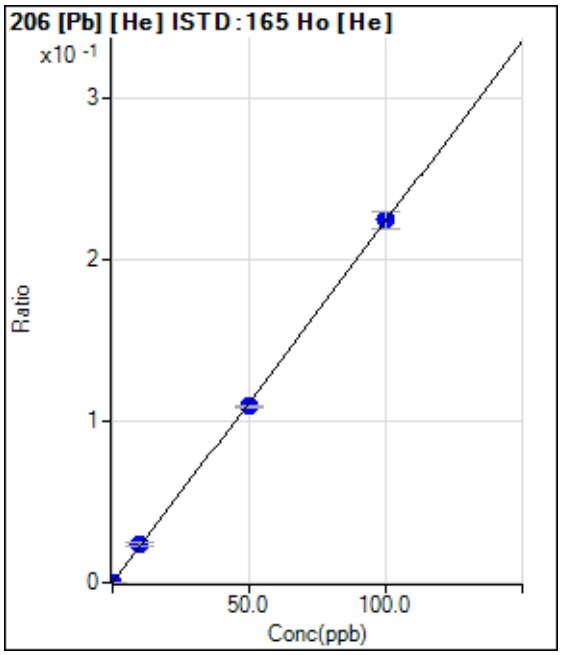
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	208.89	0.0001	P	12.3
2	☐	10.000	9.762	276557.88	0.0712	P	5.2
3	☐	50.000	45.575	1345796.33	0.3320	P	1.1
4	☐	100.000	102.236	2876258.43	0.7448	A	4.8
5	☐			3889.41	0.0009	P	5.6

y = 0.0073 * x + 5.1855E-005
R = 0.9983
DL = 0.002631
BEC = 0.007119

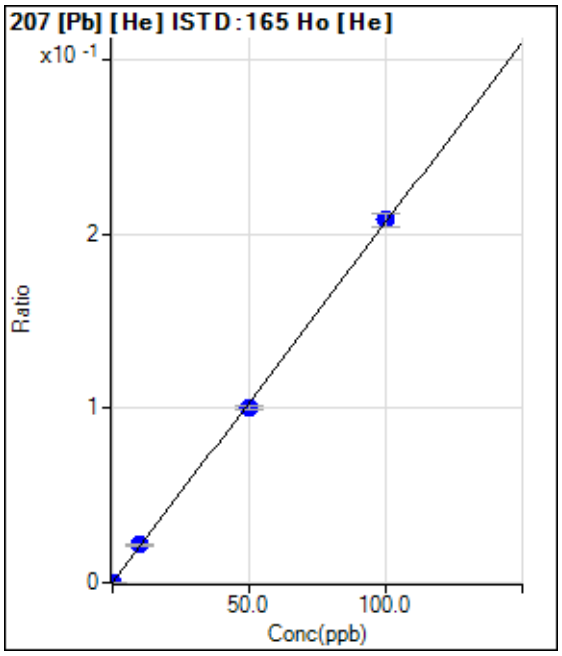
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	243.34	0.0001	P	17.7
2	☐	10.000	10.594	92401.11	0.0238	P	6.1
3	☐	50.000	48.934	444359.95	0.1096	P	1.0
4	☐	100.000	100.474	869132.78	0.2250	P	4.5
5	☐			555.58	0.0001	P	11.2

y = 0.0022 * x + 6.0354E-005
R = 0.9999
DL = 0.01429
BEC = 0.02695

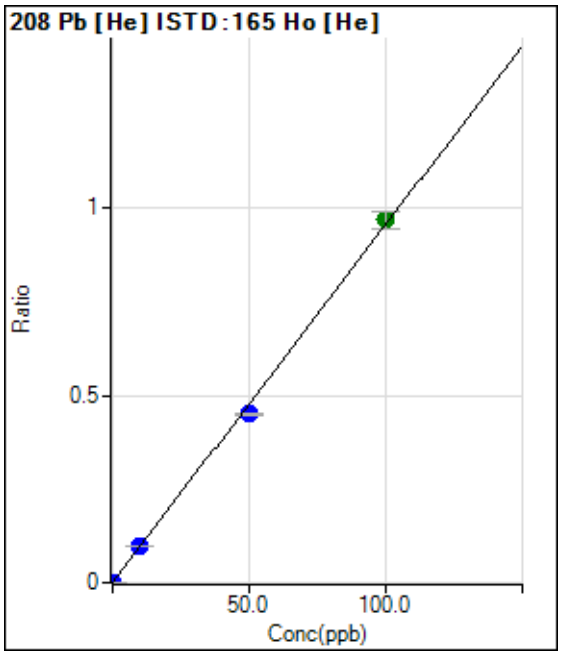
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	223.34	0.0001	P	21.3
2	☐	10.000	10.458	84253.93	0.0217	P	5.6
3	☐	50.000	48.510	406796.97	0.1004	P	2.0
4	☐	100.000	100.699	804631.65	0.2083	P	3.9
5	☐			510.02	0.0001	P	4.0

y = 0.0021 * x + 5.5386E-005
R = 0.9998
DL = 0.01712
BEC = 0.02678

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1024.47	0.0003	P	9.6
2	☐	10.000	10.192	378862.33	0.0975	P	5.0
3	☐	50.000	47.154	1824188.72	0.4501	P	1.6
4	☐	100.000	101.404	3736777.20	0.9676	A	4.8
5	☐			2263.43	0.0005	P	7.4

y = 0.0095 * x + 2.5406E-004

R = 0.9993

DL = 0.007704

BEC = 0.02663

Weight: <None>

Min Conc: <None>

Calibration Blank Report

Sample Table

Sample Name	Blank
Data File Name	001CALB.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T15:09:57-04:00
Sample Type	CalBlk
Level	
Dilution	1
Comment	6020/200.8

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	45	2	NoGas	64724	0.00
Be	9	6	2	NoGas	48	146.42
B	11	45	2	NoGas	11734	0.05
Na	23	45	1	He	15793	0.01
Mg	24	45	1	He	359	4.74
Al	27	45	1	He	664	0.90
K	39	45	1	He	42777	0.00
Ca	44	45	1	He	451	0.75
Ti	47	45	1	He	68	29.33
V	51	45	1	He	3282	0.29
Cr	52	45	1	He	2666	0.27
Mn	55	45	1	He	852	0.48
Fe	56	45	1	He	6676	0.14
Co	59	45	1	He	133	27.24
Ni	60	45	1	He	61	31.34
Cu	63	45	1	He	1512	0.55
Zn	66	45	1	He	1660	0.26
As	75	115	1	He	169	9.90
Se	78	115	1	He	44	46.31
Sr	88	45	1	He	172	0.65
Mo	95	103	1	He	144	26.56
Ag	107	103	1	He	26	117.83
Cd	111	115	1	He	1399	0.54
Sn	118	115	1	He	907	1.68
Sb	123	115	1	He	161	3.92
Ba	137	115	1	He	23	306.09
W	182	159	1	He	5920	0.06
Tl	205	165	1	He	343	1.98
Pb	208	165	1	He	978	0.76

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	2	NoGas	1731511	1.27
Sc	45	1	He	805657	8.52
Sc	45	2	NoGas	7413976	0.98
Rh	103	1	He	2562105	8.79
In	115	1	He	1478910	9.58
Tb	159	1	He	4020969	8.31
Ho	165	1	He	4072428	8.19
Bi	209	1	He	3029768	6.08

Calibration Blank Report

Sample Table

Sample Name	ICIS
Data File Name	002CALB.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T15:13:53-04:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	45	2	NoGas	64873	0.00
Be	9	6	2	NoGas	63	32.36
B	11	45	2	NoGas	9859	0.05
Na	23	45	1	He	14291	0.02
Mg	24	45	1	He	330	10.93
Al	27	45	1	He	654	1.48
K	39	45	1	He	41370	0.01
Ca	44	45	1	He	403	3.67
Ti	47	45	1	He	54	125.38
V	51	45	1	He	3271	0.36
Cr	52	45	1	He	2530	0.14
Mn	55	45	1	He	897	0.73
Fe	56	45	1	He	5772	0.09
Co	59	45	1	He	106	17.01
Ni	60	45	1	He	61	56.68
Cu	63	45	1	He	1448	0.46
Zn	66	45	1	He	1667	0.13
As	75	115	1	He	140	13.56
Se	78	115	1	He	39	54.30
Sr	88	45	1	He	200	16.07
Mo	95	103	1	He	101	16.41
Ag	107	103	1	He	28	174.58
Cd	111	115	1	He	1385	0.11
Sn	118	115	1	He	837	0.60
Sb	123	115	1	He	126	17.60
Ba	137	115	1	He	43	134.00
W	182	159	1	He	5297	0.13
Tl	205	165	1	He	209	5.53
Pb	208	165	1	He	1024	1.01

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	2	NoGas	1663342	1.26
Sc	45	1	He	788655	0.73
Sc	45	2	NoGas	7332116	0.58
Rh	103	1	He	2523919	0.60
In	115	1	He	1420677	1.32
Tb	159	1	He	3983717	0.66
Ho	165	1	He	4030813	0.83
Bi	209	1	He	2997463	0.77

Calibration Standard Report

Sample Table

Sample Name	STD1-2012420
Data File Name	003CALS.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T15:17:49-04:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	2	NoGas	250587	0.00
Be	9	2	NoGas	44796	0.01
B	11	2	NoGas	39005	0.01
Na	23	1	He	6356053	0.00
Mg	24	1	He	3756271	0.00
Al	27	1	He	22168	0.00
K	39	1	He	3606660	0.00
Ca	44	1	He	190982	0.00
Ti	47	1	He	2361	0.20
V	51	1	He	113399	0.00
Cr	52	1	He	72083	0.00
Mn	55	1	He	259656	0.00
Fe	56	1	He	16490343	0.00
Co	59	1	He	98988	0.00
Ni	60	1	He	25280	0.01
Cu	63	1	He	70164	0.00
Zn	66	1	He	16822	0.01
As	75	1	He	9648	0.02
Se	78	1	He	851	0.66
Sr	88	1	He	65616	0.00
Mo	95	1	He	34939	0.00
Ag	107	1	He	110813	0.00
Cd	111	1	He	20513	0.01
Sn	118	1	He	44541	0.00
Sb	123	1	He	48163	0.00
Ba	137	1	He	20427	0.00
W	182	1	He	120302	0.00
Tl	205	1	He	276558	0.00
Pb	208	1	He	378862	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1684174	0.65	1663342	101.25	30	120	
Sc	45	1	He	767965	4.35	788655	97.38	30	120	
Sc	45	2	NoGas	7333709	1.67	7332116	100.02	30	120	
Rh	103	1	He	2417047	5.61	2523919	95.77	30	120	
In	115	1	He	1379012	3.91	1420677	97.07	30	120	
Tb	159	1	He	3882689	5.30	3983717	97.46	30	120	
Ho	165	1	He	3892987	4.92	4030813	96.58	30	120	
Bi	209	1	He	2947598	4.12	2997463	98.34	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD2-2012431
Data File Name	004CALS.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T15:21:43-04:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	2	NoGas	1035659	0.00
Be	9	2	NoGas	239799	0.00
B	11	2	NoGas	156534	0.00
Na	23	1	He	31254462	0.00
Mg	24	1	He	18145255	0.00
Al	27	1	He	101445	0.00
K	39	1	He	17424785	0.00
Ca	44	1	He	932135	0.00
Ti	47	1	He	11297	0.02
V	51	1	He	535589	0.00
Cr	52	1	He	339567	0.00
Mn	55	1	He	1257005	0.00
Fe	56	1	He	79740026	0.00
Co	59	1	He	478982	0.00
Ni	60	1	He	121120	0.00
Cu	63	1	He	322468	0.00
Zn	66	1	He	69841	0.00
As	75	1	He	48203	0.00
Se	78	1	He	4049	0.03
Sr	88	1	He	316884	0.00
Mo	95	1	He	172699	0.00
Ag	107	1	He	520541	0.00
Cd	111	1	He	92402	0.00
Sn	118	1	He	214108	0.00
Sb	123	1	He	234103	0.00
Ba	137	1	He	98895	0.00
W	182	1	He	601396	0.00
Tl	205	1	He	1345796	0.00
Pb	208	1	He	1824189	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1596613	26.77	1663342	95.99	30	120	
Sc	45	1	He	797145	0.15	788655	101.08	30	120	
Sc	45	2	NoGas	7120656	30.84	7332116	97.12	30	120	
Rh	103	1	He	2425912	1.43	2523919	96.12	30	120	
In	115	1	He	1374590	0.57	1420677	96.76	30	120	
Tb	159	1	He	3995552	1.76	3983717	100.30	30	120	
Ho	165	1	He	4053594	1.50	4030813	100.57	30	120	
Bi	209	1	He	2946730	1.11	2997463	98.31	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD3-2012433
Data File Name	005CALS.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T15:25:37-04:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	2	NoGas	68270	0.00
Be	9	2	NoGas	490813	0.00
B	11	2	NoGas	13865	0.03
Na	23	1	He	62813614	0.00
Mg	24	1	He	36522108	0.00
Al	27	1	He	206008	0.00
K	39	1	He	35215376	0.00
Ca	44	1	He	1965985	0.00
Ti	47	1	He	64	24.52
V	51	1	He	1088750	0.00
Cr	52	1	He	687513	0.00
Mn	55	1	He	2609963	0.00
Fe	56	1	He	161725398	0.00
Co	59	1	He	956127	0.00
Ni	60	1	He	240893	0.00
Cu	63	1	He	638097	0.00
Zn	66	1	He	136616	0.00
As	75	1	He	93638	0.00
Se	78	1	He	8103	0.01
Sr	88	1	He	644603	0.00
Mo	95	1	He	882	2.49
Ag	107	1	He	1036065	0.00
Cd	111	1	He	182108	0.00
Sn	118	1	He	1671	0.52
Sb	123	1	He	1061	0.83
Ba	137	1	He	200548	0.00
W	182	1	He	11234	0.09
Tl	205	1	He	2876258	0.00
Pb	208	1	He	3736777	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1656506	0.22	1663342	99.59	30	120	
Sc	45	1	He	759629	3.87	788655	96.32	30	120	
Sc	45	2	NoGas	7543254	0.35	7332116	102.88	30	120	
Rh	103	1	He	2305928	4.12	2523919	91.36	30	120	
In	115	1	He	1346643	2.27	1420677	94.79	30	120	
Tb	159	1	He	3794635	5.16	3983717	95.25	30	120	
Ho	165	1	He	3867011	4.19	4030813	95.94	30	120	
Bi	209	1	He	2815583	4.93	2997463	93.93	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD4-2012443
Data File Name	006CALS.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T15:29:29-04:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	2	NoGas	2024031	0.00
Be	9	2	NoGas	89	56.25
B	11	2	NoGas	302955	0.00
Na	23	1	He	23334	0.03
Mg	24	1	He	2115	1.10
Al	27	1	He	1072	0.93
K	39	1	He	46661	0.00
Ca	44	1	He	459	2.60
Ti	47	1	He	23227	0.01
V	51	1	He	3373	0.44
Cr	52	1	He	2868	0.12
Mn	55	1	He	688	0.68
Fe	56	1	He	53521	0.03
Co	59	1	He	174	6.23
Ni	60	1	He	140	21.71
Cu	63	1	He	1742	0.17
Zn	66	1	He	1368	0.76
As	75	1	He	2082	0.32
Se	78	1	He	139	4.40
Sr	88	1	He	181	9.66
Mo	95	1	He	357452	0.00
Ag	107	1	He	161	18.22
Cd	111	1	He	1544	0.46
Sn	118	1	He	455419	0.00
Sb	123	1	He	477769	0.00
Ba	137	1	He	144	16.40
W	182	1	He	1242332	0.00
Tl	205	1	He	3889	0.11
Pb	208	1	He	2263	0.28

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1706185	1.54	1663342	102.58	30	120	
Sc	45	1	He	818093	0.43	788655	103.73	30	120	
Sc	45	2	NoGas	7380267	0.76	7332116	100.66	30	120	
Rh	103	1	He	2587008	1.59	2523919	102.50	30	120	
In	115	1	He	1478793	3.04	1420677	104.09	30	120	
Tb	159	1	He	4125001	0.90	3983717	103.55	30	120	
Ho	165	1	He	4133673	1.21	4030813	102.55	30	120	
Bi	209	1	He	3093296	0.74	2997463	103.20	30	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV-2012491
Data File Name	007_ICV.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T15:33:27-04:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	45	NoGas	39.644	0.284	853765	0.98	40	99.1	89.5	110.5	
Be	9	6	NoGas	39.840	2.026	200215	0.61	40	99.6	89.5	110.5	
B	11	45	NoGas	43.097	2.030	138722	1.72	40	107.7	89.5	110.5	
Na	23	45	He	19646.192	1.119	25247814	0.31	20000	98.2	89.5	110.5	
Mg	24	45	He	19706.696	0.711	14720521	0.70	20000	98.5	89.5	110.5	
Al	27	45	He	194.908	0.998	82357	1.52	200	97.5	89.5	110.5	
K	39	45	He	19719.808	0.732	14212542	0.63	20000	98.6	89.5	110.5	
Ca	44	45	He	18797.675	0.734	749294	0.48	20000	94.0	89.5	110.5	
Ti	47	45	He	41.470	0.586	9265	1.06	40	103.7	89.5	110.5	
V	51	45	He	39.488	0.685	440540	0.61	40	98.7	89.5	110.5	
Cr	52	45	He	39.676	1.260	279934	0.64	40	99.2	89.5	110.5	
Mn	55	45	He	193.017	0.924	1024648	0.40	200	96.5	89.5	110.5	
Fe	56	45	He	9911.552	1.461	65476526	0.90	10000	99.1	89.5	110.5	
Co	59	45	He	39.363	1.035	385538	0.51	40	98.4	89.5	110.5	
Ni	60	45	He	40.071	1.220	98995	1.71	40	100.2	89.5	110.5	
Cu	63	45	He	40.683	0.805	267173	0.74	40	101.7	89.5	110.5	
Zn	66	45	He	40.075	1.042	57216	2.03	40	100.2	89.5	110.5	
As	75	115	He	39.974	0.964	38516	0.46	40	99.9	89.5	110.5	
Se	78	115	He	40.054	1.245	3334	1.04	40	100.1	89.5	110.5	
Sr	88	45	He	40.034	0.544	263455	0.69	40	100.1	89.5	110.5	
Mo	95	103	He	42.628	1.548	144733	0.41	40	106.6	89.5	110.5	
Ag	107	103	He	39.600	0.719	430933	0.89	40	99.0	89.5	110.5	
Cd	111	115	He	39.650	0.441	74679	0.14	40	99.1	89.5	110.5	
Sn	118	115	He	42.071	0.433	179774	0.42	40	105.2	89.5	110.5	
Sb	123	115	He	42.719	0.648	192831	0.13	40	106.8	89.5	110.5	
Ba	137	115	He	39.427	0.612	80552	1.10	40	98.6	89.5	110.5	
W	182	159	He	40.454	0.191	486615	0.83	40	101.1	89.5	110.5	
Tl	205	165	He	37.466	0.661	1093061	0.05	40	93.7	89.5	110.5	
Pb	208	165	He	39.085	0.469	1494096	0.24	40	97.7	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	NoGas	1675803	2.41	1663342	100.75	30	120	
Sc	45	He	784396	1.18	788655	99.46	30	120	
Sc	45	NoGas	7360084	0.72	7332116	100.38	30	120	
Rh	103	He	2440765	1.16	2523919	96.71	30	120	
In	115	He	1380459	0.55	1420677	97.17	30	120	
Tb	159	He	3972010	0.97	3983717	99.71	30	120	
Ho	165	He	4004517	0.69	4030813	99.35	30	120	
Bi	209	He	2945032	0.48	2997463	98.25	30	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB-2010135
Data File Name	008_ICB.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T15:37:21-04:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Ti	47	1	He	-0.074	-68.3	40	28.9	20	
W	182	1	He	0.514	21.9	11757	12.4	10	
Ca	44	1	He	5.899	13.7	672	5.2	1000	
Na	23	1	He	4.101	16.1	20609	5.2	1000	
Mg	24	1	He	1.186	31.5	1285	23.8	1000	
K	39	1	He	3.440	65.9	46145	4.4	1000	
V	51	1	He	-0.019	-62.5	3216	5.3	2	
Cr	52	1	He	-0.017	-24.5	2538	1.8	2	
Mn	55	1	He	0.083	23.8	1407	8.5	2	
Fe	56	1	He	2.304	11.7	22156	7.7	50	
Co	59	1	He	-0.001	-103.0	103	8.5	1	
Ni	60	1	He	-0.003	-323.2	58	37.1	2	
Cu	63	1	He	0.037	29.3	1777	4.4	2	
Zn	66	1	He	0.471	4.9	2444	2.2	20	
As	75	1	He	0.216	36.3	373	19.8	2	
Se	78	1	He	0.226	85.5	62	25.6	2	
Sr	88	1	He	-0.005	-47.4	178	9.6	10	
Mo	95	1	He	0.159	43.8	674	37.1	2	
Ag	107	1	He	0.003	7.9	59	3.3	0.2	
Cd	111	1	He	0.008	325.9	1479	0.6	0.2	
Ba	137	1	He	0.009	119.3	66	38.8	5	
Sn	118	1	He	0.129	42.4	1482	16.3	10	
Tl	205	1	He	0.047	7.8	1636	6.1	0.5	
Pb	208	1	He	0.016	14.0	1688	4.7	1	
Al	27	1	He	1.009	16.7	1136	5.8	50	
Sb	123	1	He	0.218	10.4	1202	6.4	2	
B	11	2	NoGas	1.572	8.5	15081	2.3	20	
Be	9	2	NoGas	0.006	141.6	96	46.6	1	
Li	7	2	NoGas	0.032	102.0	67950	1.7	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1706497	0.34	1663342	102.59	30	120	
Sc	45	1	He	829530	0.87	788655	105.18	30	120	
Sc	45	2	NoGas	7605941	1.16	7332116	103.73	30	120	
Rh	103	1	He	2589556	1.20	2523919	102.60	30	120	

In	115	1	He	1501833	3.12	1420677	105.71	30	120	
Tb	159	1	He	4096209	1.12	3983717	102.82	30	120	
Ho	165	1	He	4125773	0.69	4030813	102.36	30	120	
Bi	209	1	He	3102420	0.54	2997463	103.50	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-2012498
Data File Name	009CRI.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T15:41:17-04:00
Sample Type	CRI
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	2	NoGas	7.984	7.984	3.355	224614	1.79	8	99.8	49.5	150.5	
Be	9	2	NoGas	0.877	0.877	11.098	4538	12.37	1	87.7	49.5	150.5	
B	11	2	NoGas	19.550	19.550	1.026	68546	0.27	20	97.8	49.5	150.5	
Na	23	1	He	1011.152	1011.152	0.975	1365619	0.73	1000	101.1	49.5	150.5	
Mg	24	1	He	998.767	998.767	0.618	776311	0.91	1000	99.9	49.5	150.5	
Al	27	1	He	50.667	50.667	2.696	22767	2.54	50	101.3	49.5	150.5	
K	39	1	He	986.947	986.947	1.561	780458	0.65	1000	98.7	49.5	150.5	
Ca	44	1	He	939.139	939.139	2.225	39328	1.21	1000	93.9	49.5	150.5	
Ti	47	1	He	10.158	10.158	3.521	2402	2.30	10	101.6	49.5	150.5	
V	51	1	He	3.405	3.405	3.166	42607	3.23	5	68.1	49.5	150.5	
Cr	52	1	He	1.959	1.959	0.824	16866	1.73	2	97.9	49.5	150.5	
Mn	55	1	He	4.824	4.824	0.981	27541	1.32	5	96.5	49.5	150.5	
Fe	56	1	He	98.580	98.580	1.098	683258	0.15	100	98.6	49.5	150.5	
Co	59	1	He	1.003	1.003	4.098	10326	3.22	1	100.3	49.5	150.5	
Ni	60	1	He	2.068	2.068	5.409	5371	4.37	2	103.4	49.5	150.5	
Cu	63	1	He	2.040	2.040	2.602	15358	1.71	2	102.0	49.5	150.5	
Zn	66	1	He	19.595	19.595	1.404	29975	0.98	20	98.0	49.5	150.5	
As	75	1	He	4.661	4.661	2.151	4980	1.99	5	93.2	49.5	150.5	
Se	78	1	He	4.925	4.925	1.763	479	2.91	5	98.5	49.5	150.5	
Sr	88	1	He	9.706	9.706	1.309	66591	0.69	10	97.1	49.5	150.5	
Mo	95	1	He	10.122	10.122	0.848	36180	0.85	10	101.2	49.5	150.5	
Ag	107	1	He	0.996	0.996	0.481	11414	0.92	1	99.6	49.5	150.5	
Cd	111	1	He	0.936	0.936	3.321	3324	2.55	1	93.6	49.5	150.5	
Sn	118	1	He	9.589	9.589	4.558	44893	0.77	10	95.9	49.5	150.5	
Sb	123	1	He	1.988	1.988	4.932	9810	1.44	2	99.4	49.5	150.5	
Ba	137	1	He	4.784	4.784	3.016	10592	2.59	5	95.7	49.5	150.5	
W	182	1	He	9.562	9.562	1.343	123182	1.78	10	95.6	49.5	150.5	
Tl	205	1	He	1.857	1.857	0.676	55634	1.72	2	92.9	49.5	150.5	
Pb	208	1	He	1.016	1.016	1.567	40717	0.74	1	101.6	49.5	150.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1699625	1.53	1663342	102.18	30	120	
Sc	45	1	He	815850	1.21	788655	103.45	30	120	
Sc	45	2	NoGas	7382727	0.63	7332116	100.69	30	120	
Rh	103	1	He	2563542	0.56	2523919	101.57	30	120	
In	115	1	He	1491393	3.84	1420677	104.98	30	120	
Tb	159	1	He	4109972	1.78	3983717	103.17	30	120	
Ho	165	1	He	4096288	1.92	4030813	101.62	30	120	
Bi	209	1	He	3086249	0.96	2997463	102.96	30	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA-2012514
Data File Name	010ICSA.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T15:45:12-04:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	0.010	245.3	63999	0.9	4	
Be	9	6	2	NoGas	0.001	153.5	63	10.2	2	
B	11	45	2	NoGas	0.773	16.5	11960	2.0	20	
Na	23	45	1	He	47012.647	1.6	59056046	0.6	75200	
Mg	24	45	1	He	46909.132	2.0	34258853	0.7	75200	
Al	27	45	1	He	45165.692	1.0	18513900	1.2	75200	
K	39	45	1	He	46860.796	0.2	32974190	2.1	75200	
Ca	44	45	1	He	47219.381	1.4	1839824	0.8	75200	
Ti	47	45	1	He	982.128	1.7	213335	1.4	1505	
V	51	45	1	He	0.299	10.2	6423	4.1	4	
Cr	52	45	1	He	0.645	6.6	6868	4.5	4	
Mn	55	45	1	He	0.127	16.9	1531	6.4	4	
Fe	56	45	1	He	46946.094	1.8	303213650	0.5	75200	
Co	59	45	1	He	0.022	41.1	317	30.1	2	
Ni	60	45	1	He	0.064	9.4	214	6.3	4	
Cu	63	45	1	He	0.308	11.1	3374	4.6	4	
Zn	66	45	1	He	-0.320	-8.8	1187	2.0	20	
As	75	115	1	He	0.409	15.6	515	12.6	4	
Se	78	115	1	He	0.196	61.5	53	19.5	4	
Sr	88	45	1	He	0.293	5.9	2079	3.6	20	
Mo	95	103	1	He	1054.648	1.7	3428041	0.0	1505	
Ag	107	103	1	He	0.011	24.7	142	19.9	1	
Cd	111	115	1	He	0.087	58.3	1465	6.2	1	
Sn	118	115	1	He	0.013	258.6	845	17.3	20	
Sb	123	115	1	He	0.168	18.9	858	17.8	4	
Ba	137	115	1	He	0.030	30.0	101	19.3	2	
W	182	159	1	He	0.653	14.3	12998	9.8	20	
Tl	205	165	1	He	0.029	8.9	1049	7.4	2	
Pb	208	165	1	He	0.099	1.6	4790	2.5	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1549032	0.65	1663342	93.13	30	120	
Sc	45	1	He	767087	2.19	788655	97.27	30	120	
Sc	45	2	NoGas	7213037	1.12	7332116	98.38	30	120	
Rh	103	1	He	2338305	1.69	2523919	92.65	30	120	
In	115	1	He	1341588	1.37	1420677	94.43	30	120	
Tb	159	1	He	3951646	1.55	3983717	99.19	30	120	
Ho	165	1	He	4004506	1.31	4030813	99.35	30	120	
Bi	209	1	He	2866734	1.10	2997463	95.64	30	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB-2012515
Data File Name	011ICAB.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T15:49:02-04:00
Sample Type	ICSAB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	45	2	NoGas	83.923	0.603	1705787	0.78	100	83.9	49.5	150.5	
Be	9	6	2	NoGas	99.029	1.438	460086	1.65	100	99.0	49.5	150.5	
B	11	45	2	NoGas	95.992	0.896	291917	1.06	100	96.0	49.5	150.5	
Na	23	45	1	He	47590.588	1.289	60571066	0.91	50000	95.2	49.5	150.5	
Mg	24	45	1	He	46807.875	0.729	34638013	0.07	50000	93.6	49.5	150.5	
Al	27	45	1	He	44645.748	2.120	18539652	1.41	50000	89.3	49.5	150.5	
K	39	45	1	He	47366.278	1.007	33762149	0.29	50000	94.7	49.5	150.5	
Ca	44	45	1	He	47588.636	0.354	1878683	0.40	50000	95.2	49.5	150.5	
Ti	47	45	1	He	1086.377	1.155	239086	1.15	1100	98.8	49.5	150.5	
V	51	45	1	He	95.622	1.399	1052229	0.65	100	95.6	49.5	150.5	
Cr	52	45	1	He	96.280	1.539	669424	1.04	100	96.3	49.5	150.5	
Mn	55	45	1	He	94.514	1.341	497504	0.60	100	94.5	49.5	150.5	
Fe	56	45	1	He	47150.540	1.218	308560868	0.57	50000	94.3	49.5	150.5	
Co	59	45	1	He	96.873	1.445	939822	0.70	100	96.9	49.5	150.5	
Ni	60	45	1	He	96.302	1.026	235597	0.56	100	96.3	49.5	150.5	
Cu	63	45	1	He	96.448	0.772	625531	0.14	100	96.4	49.5	150.5	
Zn	66	45	1	He	97.369	1.010	135358	0.69	100	97.4	49.5	150.5	
As	75	115	1	He	101.095	0.802	96754	0.22	100	101.1	49.5	150.5	
Se	78	115	1	He	100.975	0.108	8308	0.57	100	101.0	49.5	150.5	
Sr	88	45	1	He	97.309	1.018	634128	1.03	100	97.3	49.5	150.5	
Mo	95	103	1	He	1178.221	0.688	3893750	1.07	1100	107.1	49.5	150.5	
Ag	107	103	1	He	96.329	0.657	1020840	0.30	100	96.3	49.5	150.5	
Cd	111	115	1	He	97.010	0.528	179939	0.63	100	97.0	49.5	150.5	
Sn	118	115	1	He	101.494	0.981	430548	0.39	100	101.5	49.5	150.5	
Sb	123	115	1	He	102.204	1.391	459040	0.77	100	102.2	49.5	150.5	
Ba	137	115	1	He	98.092	0.766	199419	0.73	100	98.1	49.5	150.5	
W	182	159	1	He	99.084	1.473	1203664	0.49	100	99.1	49.5	150.5	
Tl	205	165	1	He	96.548	0.574	2856238	0.85	100	96.5	49.5	150.5	
Pb	208	165	1	He	96.602	0.242	3743383	0.11	100	96.6	49.5	150.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1549346	2.46	1663342	93.15	30	120	
Sc	45	1	He	777072	0.75	788655	98.53	30	120	
Sc	45	2	NoGas	7237682	0.20	7332116	98.71	30	120	
Rh	103	1	He	2376921	0.44	2523919	94.18	30	120	
In	115	1	He	1374117	0.62	1420677	96.72	30	120	
Tb	159	1	He	4037878	1.66	3983717	101.36	30	120	
Ho	165	1	He	4060891	0.28	4030813	100.75	30	120	
Bi	209	1	He	2911984	0.69	2997463	97.15	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2012431
Data File Name	012_CCV.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T15:52:52-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	46.497	0.278	987517	0.52	50	93.0	89.5	110.5	
Be	9	6	2	NoGas	48.343	0.751	230799	1.48	50	96.7	89.5	110.5	
B	11	45	2	NoGas	47.941	2.272	152796	1.41	50	95.9	89.5	110.5	
Na	23	45	1	He	23470.008	0.880	30590276	0.58	25000	93.9	89.5	110.5	
Mg	24	45	1	He	23561.583	0.375	17851597	0.94	25000	94.2	89.5	110.5	
Al	27	45	1	He	236.167	0.265	101072	0.60	250	94.5	89.5	110.5	
K	39	45	1	He	23792.543	0.658	17383828	0.25	25000	95.2	89.5	110.5	
Ca	44	45	1	He	23068.030	0.733	932538	0.11	25000	92.3	89.5	110.5	
Ti	47	45	1	He	49.710	1.617	11252	1.26	50	99.4	89.5	110.5	
V	51	45	1	He	47.564	0.538	537555	1.00	50	95.1	89.5	110.5	
Cr	52	45	1	He	47.608	0.793	340195	0.56	50	95.2	89.5	110.5	
Mn	55	45	1	He	233.632	0.785	1257776	0.43	250	93.5	89.5	110.5	
Fe	56	45	1	He	11980.488	0.773	80274363	0.13	12500	95.8	89.5	110.5	
Co	59	45	1	He	48.033	0.606	477159	0.42	50	96.1	89.5	110.5	
Ni	60	45	1	He	47.555	0.621	119143	0.19	50	95.1	89.5	110.5	
Cu	63	45	1	He	48.259	0.510	321177	0.42	50	96.5	89.5	110.5	
Zn	66	45	1	He	48.089	1.708	69292	1.34	50	96.2	89.5	110.5	
As	75	115	1	He	49.758	0.485	48725	0.79	50	99.5	89.5	110.5	
Se	78	115	1	He	48.974	1.054	4137	1.29	50	97.9	89.5	110.5	
Sr	88	45	1	He	47.946	0.495	319983	0.32	50	95.9	89.5	110.5	
Mo	95	103	1	He	55.089	2.232	188994	2.33	50	110.2	89.5	110.5	
Ag	107	103	1	He	47.565	0.717	523036	0.74	50	95.1	89.5	110.5	
Cd	111	115	1	He	49.194	0.732	93899	0.89	50	98.4	89.5	110.5	
Sn	118	115	1	He	50.057	1.365	217364	1.21	50	100.1	89.5	110.5	
Sb	123	115	1	He	52.208	0.466	239638	0.75	50	104.4	89.5	110.5	
Ba	137	115	1	He	48.678	0.266	101127	0.61	50	97.4	89.5	110.5	
W	182	159	1	He	50.369	0.619	613742	0.70	50	100.7	89.5	110.5	
Tl	205	165	1	He	45.657	0.976	1356481	0.59	50	91.3	89.5	110.5	
Pb	208	165	1	He	47.336	0.571	1842557	0.12	50	94.7	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1591555	0.74	1663342	95.68	30	120	
Sc	45	1	He	795570	0.80	788655	100.88	30	120	
Sc	45	2	NoGas	7341017	0.73	7332116	100.12	30	120	
Rh	103	1	He	2466296	0.35	2523919	97.72	30	120	
In	115	1	He	1403857	0.36	1420677	98.82	30	120	
Tb	159	1	He	4032109	0.11	3983717	101.21	30	120	
Ho	165	1	He	4078090	0.45	4030813	101.17	30	120	
Bi	209	1	He	2987327	0.48	2997463	99.66	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	013_CCB.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T15:56:46-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.038	-100.2	62557	1.1	2	
Be	9	6	2	NoGas	-0.002	-380.9	48	93.3	1	
B	11	45	2	NoGas	1.223	4.4	13172	1.5	20	
Na	23	45	1	He	7.985	25.8	23943	5.4	1000	
Mg	24	45	1	He	2.639	49.4	2319	53.0	1000	
Al	27	45	1	He	1.135	37.5	1117	24.5	50	
K	39	45	1	He	6.851	116.3	45005	3.7	1000	
Ca	44	45	1	He	3.650	38.5	541	20.4	1000	
Ti	47	45	1	He	0.129	71.9	80	12.5	20	
V	51	45	1	He	0.004	2022.6	3192	13.2	2	
Cr	52	45	1	He	-0.012	-367.3	2376	7.8	2	
Mn	55	45	1	He	-0.025	-103.0	742	10.0	2	
Fe	56	45	1	He	6.681	15.1	48663	4.5	50	
Co	59	45	1	He	0.000	832.6	109	36.8	1	
Ni	60	45	1	He	0.001	575.8	61	13.7	2	
Cu	63	45	1	He	0.039	113.3	1650	6.0	2	
Zn	66	45	1	He	0.079	184.3	1728	3.8	20	
As	75	115	1	He	0.176	44.8	311	15.9	2	
Se	78	115	1	He	0.148	83.5	52	12.9	2	
Sr	88	45	1	He	-0.001	-400.1	186	15.3	10	
Mo	95	103	1	He	0.938	42.7	3265	35.7	2	
Ag	107	103	1	He	0.008	35.8	119	39.7	0.2	
Cd	111	115	1	He	0.014	158.0	1429	16.6	0.2	
Sn	118	115	1	He	0.220	31.4	1789	3.8	10	
Sb	123	115	1	He	0.194	9.3	1029	6.2	2	
Ba	137	115	1	He	0.005	147.9	53	28.6	5	
W	182	159	1	He	0.549	27.1	11790	6.0	10	
Tl	205	165	1	He	0.090	13.5	2833	2.1	0.5	
Pb	208	165	1	He	0.019	19.9	1750	12.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1600497	1.43	1663342	96.22	30	120	
Sc	45	1	He	773507	12.31	788655	98.08	30	120	
Sc	45	2	NoGas	7153270	0.35	7332116	97.56	30	120	
Rh	103	1	He	2501874	12.70	2523919	99.13	30	120	
In	115	1	He	1434567	13.91	1420677	100.98	30	120	
Tb	159	1	He	4011476	12.61	3983717	100.70	30	120	
Ho	165	1	He	4024820	12.34	4030813	99.85	30	120	
Bi	209	1	He	3011196	10.64	2997463	100.46	30	120	

Sample Report

Sample Table

Sample Name	680-112195-a-1-h@10
Data File Name	014SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T16:00:42-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	15.510	15.510	3.66	348689	0.00	10000	
Be	9	6	2	NoGas	0.756	0.756	3.12	3649	0.02	10000	
B	11	45	2	NoGas	7.733	7.733	8.42	30801	0.03	300	
Na	23	45	1	He	535.455	535.455	0.36	709629	0.08	500000	
Mg	24	45	1	He	2154.439	2154.439	2.03	1627104	0.13	500000	
Al	27	45	1	He	12926.236	12926.236	0.79	5478203	0.24	200000	
K	39	45	1	He	1150.433	1150.433	0.82	877359	0.13	500000	
Ca	44	45	1	He	3000.489	3000.489	0.09	121248	2.47	500000	
Ti	47	45	1	He	197.387	197.387	1.02	44371	0.44	2500	
V	51	45	1	He	36.068	36.068	1.23	407052	0.01	10000	
Cr	52	45	1	He	31.199	31.199	1.09	223073	0.01	10000	
Mn	55	45	1	He	512.494	512.494	1.39	2748778	0.02	10000	
Fe	56	45	1	He	20483.379	20483.379	1.53	136785657	0.01	200000	
Co	59	45	1	He	4.679	4.679	0.65	46423	0.01	10000	
Ni	60	45	1	He	14.655	14.655	0.90	36637	0.04	10000	
Cu	63	45	1	He	13.611	13.611	0.79	91326	0.01	10000	
Zn	66	45	1	He	46.458	46.458	1.58	66777	0.07	10000	
As	75	115	1	He	8.177	8.177	4.33	8238	0.10	10000	
Se	78	115	1	He	1.036	1.036	11.11	128	0.81	10000	
Sr	88	45	1	He	30.343	30.343	1.70	201898	0.02	10000	
Mo	95	103	1	He	1.376	1.376	4.12	4875	0.03	2000	
Ag	107	103	1	He	0.068	0.068	3.57	779	0.01	300	
Cd	111	115	1	He	0.420	0.420	19.75	2188	0.02	4000	
Sn	118	115	1	He	3.247	3.247	4.11	15085	0.02	2000	
Sb	123	115	1	He	0.267	0.267	8.25	1373	0.02	300	
Ba	137	115	1	He	27.494	27.494	2.27	57971	0.05	10000	
W	182	159	1	He	0.274	0.274	22.52	8629	0.00	2500	
Tl	205	165	1	He	0.168	0.168	1.84	5198	0.00	5000	
Pb	208	165	1	He	29.931	29.931	0.51	1162487	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1583487	3.08	1663342	95.20	30	120	
Sc	45	1	He	792910	0.30	788655	100.54	30	120	
Sc	45	2	NoGas	6872239	2.85	7332116	93.73	30	120	
Rh	103	1	He	2494145	1.95	2523919	98.82	30	120	
In	115	1	He	1425167	3.68	1420677	100.32	30	120	
Tb	159	1	He	4009876	0.70	3983717	100.66	30	120	
Ho	165	1	He	4067760	0.48	4030813	100.92	30	120	
Bi	209	1	He	3021221	0.67	2997463	100.79	30	120	

Sample Report

Sample Table

Sample Name	SD 680-112195-a-1-h@50
Data File Name	015SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T16:04:34-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	2.785	2.785	2.92	120606	0.00	10000	
Be	9	6	2	NoGas	0.130	0.130	12.40	711	0.02	10000	
B	11	45	2	NoGas	1.568	1.568	10.73	14592	0.01	300	
Na	23	45	1	He	113.362	113.362	0.76	161856	0.07	500000	
Mg	24	45	1	He	433.257	433.257	0.40	328078	0.13	500000	
Al	27	45	1	He	2688.790	2688.790	0.95	1142110	0.24	200000	
K	39	45	1	He	233.728	233.728	1.52	211779	0.11	500000	
Ca	44	45	1	He	636.451	636.451	1.16	26085	2.44	500000	
Ti	47	45	1	He	40.788	40.788	1.78	9229	0.44	2500	
V	51	45	1	He	7.337	7.337	1.12	85575	0.01	10000	
Cr	52	45	1	He	6.451	6.451	1.45	48227	0.01	10000	
Mn	55	45	1	He	102.625	102.625	0.27	552164	0.02	10000	
Fe	56	45	1	He	4226.132	4226.132	0.65	28278100	0.01	200000	
Co	59	45	1	He	0.976	0.976	2.60	9786	0.01	10000	
Ni	60	45	1	He	2.959	2.959	0.75	7461	0.04	10000	
Cu	63	45	1	He	2.831	2.831	0.44	20184	0.01	10000	
Zn	66	45	1	He	10.146	10.146	0.90	15922	0.06	10000	
As	75	115	1	He	1.642	1.642	2.18	1821	0.09	10000	
Se	78	115	1	He	0.178	0.178	28.20	57	0.32	10000	
Sr	88	45	1	He	6.169	6.169	2.47	41283	0.01	10000	
Mo	95	103	1	He	0.350	0.350	17.14	1337	0.03	2000	
Ag	107	103	1	He	0.013	0.013	14.16	179	0.01	300	
Cd	111	115	1	He	0.074	0.074	15.87	1576	0.00	4000	
Sn	118	115	1	He	0.551	0.551	12.19	3349	0.02	2000	
Sb	123	115	1	He	0.075	0.075	17.79	491	0.02	300	
Ba	137	115	1	He	5.369	5.369	4.55	11690	0.05	10000	
W	182	159	1	He	0.089	0.089	36.45	6483	0.00	2500	
Tl	205	165	1	He	0.041	0.041	7.45	1437	0.00	5000	
Pb	208	165	1	He	6.056	6.056	1.93	238075	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1663667	1.46	1663342	100.02	30	120	
Sc	45	1	He	794341	0.13	788655	100.72	30	120	
Sc	45	2	NoGas	7365404	0.50	7332116	100.45	30	120	
Rh	103	1	He	2538342	1.25	2523919	100.57	30	120	
In	115	1	He	1467639	3.02	1420677	103.31	30	120	
Tb	159	1	He	4059201	0.50	3983717	101.89	30	120	
Ho	165	1	He	4103248	1.12	4030813	101.80	30	120	
Bi	209	1	He	3114132	0.41	2997463	103.89	30	120	

Sample Report

Sample Table

Sample Name	PDS 680-112195-a-1-h@10
Data File Name	016SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T16:08:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	12.823	12.823	0.48	345303	0.00	10000	
Be	9	6	2	NoGas	923.876	923.876	2.15	4676493	0.02	10000	
B	11	45	2	NoGas	100.730	100.730	0.54	335379	0.03	300	
Na	23	45	1	He	10177.553	10177.553	2.41	13044186	0.08	500000	
Mg	24	45	1	He	11794.717	11794.717	2.98	8781075	0.13	500000	
Al	27	45	1	He	22047.688	22047.688	2.82	9211963	0.24	200000	
K	39	45	1	He	10641.626	10641.626	3.01	7662862	0.14	500000	
Ca	44	45	1	He	9751.904	9751.904	2.02	387680	2.52	500000	
Ti	47	45	1	He	295.308	295.308	2.95	65421	0.45	2500	
V	51	45	1	He	1002.809	1002.809	2.92	11071197	0.01	10000	
Cr	52	45	1	He	1004.038	1004.038	2.77	6999851	0.01	10000	
Mn	55	45	1	He	1447.145	1447.145	2.83	7651292	0.02	10000	
Fe	56	45	1	He	29998.799	29998.799	3.07	197504685	0.02	200000	
Co	59	45	1	He	994.191	994.191	3.12	9702488	0.01	10000	
Ni	60	45	1	He	1041.058	1041.058	2.89	2561699	0.04	10000	
Cu	63	45	1	He	1024.503	1024.503	1.97	6672076	0.02	10000	
Zn	66	45	1	He	1084.151	1084.151	4.58	1499072	0.07	10000	
As	75	115	1	He	1044.596	1044.596	2.37	962937	0.11	10000	
Se	78	115	1	He	1028.499	1028.499	1.97	81273	1.27	10000	
Sr	88	45	1	He	1044.620	1044.620	2.31	6847180	0.02	10000	
Mo	95	103	1	He	106.888	106.888	3.42	358268	0.03	2000	
Ag	107	103	1	He	98.303	98.303	2.54	1056548	0.01	300	
Cd	111	115	1	He	1111.515	1111.515	1.90	1974954	0.06	4000	
Sn	118	115	1	He	1165.072	1165.072	1.88	4758688	0.02	2000	
Sb	123	115	1	He	107.908	107.908	1.80	467448	0.02	300	
Ba	137	115	1	He	1145.929	1145.929	2.47	2246247	0.05	10000	
W	182	159	1	He	102.605	102.605	1.16	1227524	0.01	2500	
Tl	205	165	1	He	249.886	249.886	2.33	7271916	0.00	5000	
Pb	208	165	1	He	1053.722	1053.722	3.00	40152112	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1688166	1.08	1663342	101.49	30	120	
Sc	45	1	He	782132	2.59	788655	99.17	30	120	
Sc	45	2	NoGas	7936969	1.50	7332116	108.25	30	120	
Rh	103	1	He	2411798	2.91	2523919	95.56	30	120	
In	115	1	He	1325569	1.91	1420677	93.31	30	120	
Tb	159	1	He	3977143	1.74	3983717	99.83	30	120	
Ho	165	1	He	3996542	2.89	4030813	99.15	30	120	
Bi	209	1	He	2968996	2.19	2997463	99.05	30	120	

Sample Report

Sample Table

Sample Name	680-112195-a-1-i ms@10
Data File Name	017SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T16:12:07-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	16.118	16.118	0.86	400872	0.00	10000	
Be	9	6	2	NoGas	90.200	90.200	1.49	456824	0.02	10000	
B	11	45	2	NoGas	15.671	15.671	0.69	58964	0.03	300	
Na	23	45	1	He	1573.563	1573.563	2.50	2008743	0.08	500000	
Mg	24	45	1	He	3465.024	3465.024	4.80	2553430	0.14	500000	
Al	27	45	1	He	17431.918	17431.918	3.99	7209816	0.24	200000	
K	39	45	1	He	2233.360	2233.360	3.19	1624360	0.14	500000	
Ca	44	45	1	He	4210.875	4210.875	4.59	165886	2.54	500000	
Ti	47	45	1	He	243.006	243.006	4.57	53294	0.46	2500	
V	51	45	1	He	134.354	134.354	3.62	1471203	0.01	10000	
Cr	52	45	1	He	132.204	132.204	4.35	914431	0.01	10000	
Mn	55	45	1	He	644.047	644.047	3.77	3371351	0.02	10000	
Fe	56	45	1	He	23963.887	23963.887	4.10	156180398	0.02	200000	
Co	59	45	1	He	101.197	101.197	3.93	977752	0.01	10000	
Ni	60	45	1	He	115.925	115.925	3.95	282425	0.04	10000	
Cu	63	45	1	He	113.877	113.877	3.77	735296	0.02	10000	
Zn	66	45	1	He	147.763	147.763	3.43	203742	0.07	10000	
As	75	115	1	He	99.316	99.316	2.24	97053	0.10	10000	
Se	78	115	1	He	91.224	91.224	2.98	7666	1.19	10000	
Sr	88	45	1	He	128.234	128.234	3.56	832196	0.02	10000	
Mo	95	103	1	He	10.875	10.875	4.80	36891	0.03	2000	
Ag	107	103	1	He	9.563	9.563	4.48	103789	0.01	300	
Cd	111	115	1	He	93.705	93.705	1.72	177519	0.05	4000	
Sn	118	115	1	He	97.208	97.208	2.89	421037	0.02	2000	
Sb	123	115	1	He	4.329	4.329	3.63	19970	0.02	300	
Ba	137	115	1	He	127.863	127.863	2.09	265403	0.05	10000	
W	182	159	1	He	6.391	6.391	7.29	81121	0.01	2500	
Tl	205	165	1	He	22.725	22.725	4.83	659824	0.00	5000	
Pb	208	165	1	He	132.393	132.393	4.58	5034252	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1688869	1.66	1663342	101.53	30	120	
Sc	45	1	He	774476	3.11	788655	98.20	30	120	
Sc	45	2	NoGas	7648672	0.82	7332116	104.32	30	120	
Rh	103	1	He	2436734	4.11	2523919	96.55	30	120	
In	115	1	He	1403394	2.01	1420677	98.78	30	120	
Tb	159	1	He	3970076	4.74	3983717	99.66	30	120	
Ho	165	1	He	3990335	4.34	4030813	99.00	30	120	
Bi	209	1	He	2995760	3.88	2997463	99.94	30	120	

Sample Report

Sample Table

Sample Name	680-112195-a-1-j msd@10
Data File Name	018SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T16:15:59-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	16.072	16.072	1.90	404565	0.00	10000	
Be	9	6	2	NoGas	87.817	87.817	0.73	456250	0.02	10000	
B	11	45	2	NoGas	14.888	14.888	1.77	57196	0.03	300	
Na	23	45	1	He	1528.909	1528.909	2.10	2024671	0.08	500000	
Mg	24	45	1	He	3357.894	3357.894	0.98	2567668	0.13	500000	
Al	27	45	1	He	16819.507	16819.507	0.41	7217352	0.23	200000	
K	39	45	1	He	2165.252	2165.252	0.09	1634874	0.13	500000	
Ca	44	45	1	He	5429.668	5429.668	0.83	221823	2.45	500000	
Ti	47	45	1	He	235.537	235.537	2.43	53594	0.44	2500	
V	51	45	1	He	127.653	127.653	0.68	1450257	0.01	10000	
Cr	52	45	1	He	124.788	124.788	0.66	895698	0.01	10000	
Mn	55	45	1	He	653.961	653.961	0.67	3551343	0.02	10000	
Fe	56	45	1	He	23383.454	23383.454	1.32	158104763	0.01	200000	
Co	59	45	1	He	97.127	97.127	1.01	973577	0.01	10000	
Ni	60	45	1	He	111.358	111.358	1.05	281464	0.04	10000	
Cu	63	45	1	He	108.843	108.843	1.33	729135	0.01	10000	
Zn	66	45	1	He	140.856	140.856	0.85	201551	0.07	10000	
As	75	115	1	He	97.413	97.413	1.20	95841	0.10	10000	
Se	78	115	1	He	89.209	89.209	1.74	7549	1.18	10000	
Sr	88	45	1	He	126.584	126.584	0.57	852211	0.01	10000	
Mo	95	103	1	He	10.092	10.092	1.30	35831	0.03	2000	
Ag	107	103	1	He	9.209	9.209	0.55	104587	0.01	300	
Cd	111	115	1	He	92.490	92.490	0.56	176415	0.05	4000	
Sn	118	115	1	He	94.168	94.168	1.56	410704	0.02	2000	
Sb	123	115	1	He	3.886	3.886	3.36	18061	0.02	300	
Ba	137	115	1	He	120.758	120.758	1.23	252353	0.05	10000	
W	182	159	1	He	5.597	5.597	3.76	74114	0.01	2500	
Tl	205	165	1	He	21.661	21.661	0.77	651954	0.00	5000	
Pb	208	165	1	He	128.220	128.220	0.87	5053405	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1732295	0.53	1663342	104.15	30	120	
Sc	45	1	He	802867	0.87	788655	101.80	30	120	
Sc	45	2	NoGas	7738082	0.77	7332116	105.54	30	120	
Rh	103	1	He	2546537	0.27	2523919	100.90	30	120	
In	115	1	He	1412564	0.91	1420677	99.43	30	120	
Tb	159	1	He	4096606	0.81	3983717	102.83	30	120	
Ho	165	1	He	4130597	0.90	4030813	102.48	30	120	
Bi	209	1	He	3102576	0.53	2997463	103.51	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2012431
Data File Name	019_CCV.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T16:19:51-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	47.840	1.408	1028350	0.57	50	95.7	89.5	110.5	
Be	9	6	2	NoGas	48.224	2.288	234501	0.94	50	96.4	89.5	110.5	
B	11	45	2	NoGas	48.286	0.762	156000	0.99	50	96.6	89.5	110.5	
Na	23	45	1	He	23986.919	1.159	31560424	0.55	25000	95.9	89.5	110.5	
Mg	24	45	1	He	23869.799	0.886	18256771	0.96	25000	95.5	89.5	110.5	
Al	27	45	1	He	234.912	1.130	101491	0.62	250	94.0	89.5	110.5	
K	39	45	1	He	23684.998	1.728	17469447	1.25	25000	94.7	89.5	110.5	
Ca	44	45	1	He	23015.145	0.863	939248	0.36	25000	92.1	89.5	110.5	
Ti	47	45	1	He	48.797	0.946	11152	1.14	50	97.6	89.5	110.5	
V	51	45	1	He	47.839	0.057	545774	0.69	50	95.7	89.5	110.5	
Cr	52	45	1	He	47.917	1.213	345635	0.92	50	95.8	89.5	110.5	
Mn	55	45	1	He	235.599	1.248	1280395	0.65	250	94.2	89.5	110.5	
Fe	56	45	1	He	12084.364	1.462	81738148	0.83	12500	96.7	89.5	110.5	
Co	59	45	1	He	48.712	0.857	488500	0.29	50	97.4	89.5	110.5	
Ni	60	45	1	He	48.558	1.246	122807	0.62	50	97.1	89.5	110.5	
Cu	63	45	1	He	48.851	0.587	328188	0.09	50	97.7	89.5	110.5	
Zn	66	45	1	He	48.400	1.253	70394	1.05	50	96.8	89.5	110.5	
As	75	115	1	He	50.075	0.507	49303	0.45	50	100.2	89.5	110.5	
Se	78	115	1	He	49.517	2.061	4205	2.28	50	99.0	89.5	110.5	
Sr	88	45	1	He	47.822	0.639	322192	0.54	50	95.6	89.5	110.5	
Mo	95	103	1	He	51.108	1.760	176810	1.37	50	102.2	89.5	110.5	
Ag	107	103	1	He	47.797	0.730	530007	0.06	50	95.6	89.5	110.5	
Cd	111	115	1	He	49.255	0.446	94528	0.68	50	98.5	89.5	110.5	
Sn	118	115	1	He	49.889	0.321	217831	0.51	50	99.8	89.5	110.5	
Sb	123	115	1	He	51.649	0.976	238371	0.93	50	103.3	89.5	110.5	
Ba	137	115	1	He	48.331	0.975	100956	0.99	50	96.7	89.5	110.5	
W	182	159	1	He	50.547	0.780	619485	0.91	50	101.1	89.5	110.5	
Tl	205	165	1	He	45.421	0.337	1363128	0.40	50	90.8	89.5	110.5	
Pb	208	165	1	He	46.934	0.425	1845413	0.33	50	93.9	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1621510	1.67	1663342	97.49	30	120	
Sc	45	1	He	803132	0.64	788655	101.84	30	120	
Sc	45	2	NoGas	7444362	1.28	7332116	101.53	30	120	
Rh	103	1	He	2487102	0.76	2523919	98.54	30	120	
In	115	1	He	1411557	0.27	1420677	99.36	30	120	
Tb	159	1	He	4055699	0.56	3983717	101.81	30	120	
Ho	165	1	He	4119342	0.73	4030813	102.20	30	120	
Bi	209	1	He	3001204	0.28	2997463	100.12	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	020_CCB.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T16:23:45-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.006	-1007.3	55651	8.5	2	
Be	9	6	2	NoGas	0.027	54.5	170	32.2	1	
B	11	45	2	NoGas	1.711	26.9	12786	2.1	20	
Na	23	45	1	He	5.682	10.7	21654	3.3	1000	
Mg	24	45	1	He	1.103	26.6	1159	18.7	1000	
Al	27	45	1	He	0.414	37.3	830	7.7	50	
K	39	45	1	He	3.573	34.8	44010	1.8	1000	
Ca	44	45	1	He	5.112	36.2	608	12.5	1000	
Ti	47	45	1	He	-0.100	-81.5	32	57.0	20	
V	51	45	1	He	-0.020	-53.2	3050	3.7	2	
Cr	52	45	1	He	-0.024	-51.0	2367	3.3	2	
Mn	55	45	1	He	0.033	74.8	1076	12.2	2	
Fe	56	45	1	He	5.536	22.0	42608	19.3	50	
Co	59	45	1	He	0.019	14.2	294	9.1	1	
Ni	60	45	1	He	0.005	219.1	73	36.1	2	
Cu	63	45	1	He	0.037	74.5	1695	10.5	2	
Zn	66	45	1	He	0.270	25.9	2046	4.6	20	
As	75	115	1	He	0.168	20.3	309	11.3	2	
Se	78	115	1	He	0.186	36.2	56	10.1	2	
Sr	88	45	1	He	-0.001	-588.1	197	10.6	10	
Mo	95	103	1	He	0.213	42.2	859	37.1	2	
Ag	107	103	1	He	0.003	56.2	59	29.0	0.2	
Cd	111	115	1	He	0.048	63.5	1488	3.7	0.2	
Sn	118	115	1	He	0.271	22.1	2041	13.5	10	
Sb	123	115	1	He	0.109	29.7	637	24.4	2	
Ba	137	115	1	He	0.010	47.7	64	14.9	5	
W	182	159	1	He	0.415	29.9	10385	13.6	10	
Tl	205	165	1	He	0.086	5.1	2774	5.1	0.5	
Pb	208	165	1	He	0.029	10.4	2181	5.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1447913	8.91	1663342	87.05	30	120	
Sc	45	1	He	789578	0.30	788655	100.12	30	120	
Sc	45	2	NoGas	6309453	10.38	7332116	86.05	30	120	
Rh	103	1	He	2554020	0.69	2523919	101.19	30	120	
In	115	1	He	1431444	0.72	1420677	100.76	30	120	
Tb	159	1	He	4039033	0.88	3983717	101.39	30	120	
Ho	165	1	He	4106480	0.54	4030813	101.88	30	120	
Bi	209	1	He	3053991	0.34	2997463	101.89	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-2012498
Data File Name	021CRI.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T16:27:41-04:00
Sample Type	CRI
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	2	NoGas	7.475	7.475	2.364	216104	1.45	8	93.4	49.5	150.5	
Be	9	2	NoGas	0.911	0.911	7.028	4623	7.56	1	91.1	49.5	150.5	
B	11	2	NoGas	19.377	19.377	4.925	68542	3.99	20	96.9	49.5	150.5	
Na	23	1	He	1065.675	1065.675	8.715	1355752	1.02	1000	106.6	49.5	150.5	
Mg	24	1	He	1045.054	1045.054	9.898	765011	1.55	1000	104.5	49.5	150.5	
Al	27	1	He	51.005	51.005	10.351	21581	1.76	50	102.0	49.5	150.5	
K	39	1	He	1040.018	1040.018	10.346	772488	1.32	1000	104.0	49.5	150.5	
Ca	44	1	He	973.226	973.226	9.465	38385	1.05	1000	97.3	49.5	150.5	
Ti	47	1	He	9.621	9.621	10.932	2147	5.19	10	96.2	49.5	150.5	
V	51	1	He	3.709	3.709	9.444	43444	0.45	5	74.2	49.5	150.5	
Cr	52	1	He	2.109	2.109	10.905	16915	2.15	2	105.4	49.5	150.5	
Mn	55	1	He	4.971	4.971	9.687	26712	1.83	5	99.4	49.5	150.5	
Fe	56	1	He	106.018	106.018	10.086	691623	1.61	100	106.0	49.5	150.5	
Co	59	1	He	1.087	1.087	9.092	10531	1.20	1	108.7	49.5	150.5	
Ni	60	1	He	2.092	2.092	5.076	5133	3.66	2	104.6	49.5	150.5	
Cu	63	1	He	2.268	2.268	9.411	15933	0.27	2	113.4	49.5	150.5	
Zn	66	1	He	21.037	21.037	10.473	30190	1.46	20	105.2	49.5	150.5	
As	75	1	He	5.076	5.076	8.545	5220	1.75	5	101.5	49.5	150.5	
Se	78	1	He	5.283	5.283	9.726	493	2.10	5	105.7	49.5	150.5	
Sr	88	1	He	10.217	10.217	9.409	66028	1.33	10	102.2	49.5	150.5	
Mo	95	1	He	10.725	10.725	8.488	36432	0.93	10	107.3	49.5	150.5	
Ag	107	1	He	1.045	1.045	10.239	11372	1.55	1	104.5	49.5	150.5	
Cd	111	1	He	1.013	1.013	10.641	3358	1.23	1	101.3	49.5	150.5	
Sn	118	1	He	10.320	10.320	10.686	46531	3.48	10	103.2	49.5	150.5	
Sb	123	1	He	2.096	2.096	8.465	9977	1.60	2	104.8	49.5	150.5	
Ba	137	1	He	4.943	4.943	3.700	10582	3.87	5	98.9	49.5	150.5	
W	182	1	He	10.297	10.297	9.144	125493	0.40	10	103.0	49.5	150.5	
Tl	205	1	He	1.983	1.983	9.743	56761	0.61	2	99.2	49.5	150.5	
Pb	208	1	He	1.068	1.068	10.280	40895	0.86	1	106.8	49.5	150.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1669087	1.18	1663342	100.35	30	120	
Sc	45	1	He	772440	8.04	788655	97.94	30	120	
Sc	45	2	NoGas	7439269	1.19	7332116	101.46	30	120	
Rh	103	1	He	2448060	8.31	2523919	96.99	30	120	
In	115	1	He	1443462	6.81	1420677	101.60	30	120	
Tb	159	1	He	3918638	8.06	3983717	98.37	30	120	
Ho	165	1	He	3937433	8.68	4030813	97.68	30	120	
Bi	209	1	He	3002863	6.81	2997463	100.18	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2012431
Data File Name	022_CCV.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T16:32:07-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	47.807	2.181	1014810	1.99	50	95.6	89.5	110.5	
Be	9	6	2	NoGas	48.516	2.466	235954	0.61	50	97.0	89.5	110.5	
B	11	45	2	NoGas	48.299	1.324	154071	0.51	50	96.6	89.5	110.5	
Na	23	45	1	He	24040.616	0.522	31235169	0.76	25000	96.2	89.5	110.5	
Mg	24	45	1	He	23955.218	0.803	18091622	0.42	25000	95.8	89.5	110.5	
Al	27	45	1	He	237.610	1.414	101359	0.99	250	95.0	89.5	110.5	
K	39	45	1	He	24078.846	0.347	17537028	0.40	25000	96.3	89.5	110.5	
Ca	44	45	1	He	23319.238	0.168	939739	0.82	25000	93.3	89.5	110.5	
Ti	47	45	1	He	49.934	3.801	11267	3.55	50	99.9	89.5	110.5	
V	51	45	1	He	48.144	0.829	542314	0.08	50	96.3	89.5	110.5	
Cr	52	45	1	He	48.227	0.639	343489	0.14	50	96.5	89.5	110.5	
Mn	55	45	1	He	236.292	0.202	1268086	0.55	250	94.5	89.5	110.5	
Fe	56	45	1	He	12124.034	0.400	80981537	0.77	12500	97.0	89.5	110.5	
Co	59	45	1	He	48.512	0.956	480384	0.30	50	97.0	89.5	110.5	
Ni	60	45	1	He	48.595	1.202	121357	0.46	50	97.2	89.5	110.5	
Cu	63	45	1	He	48.662	1.597	322806	0.98	50	97.3	89.5	110.5	
Zn	66	45	1	He	48.634	1.952	69835	1.49	50	97.3	89.5	110.5	
As	75	115	1	He	50.402	0.613	48404	0.53	50	100.8	89.5	110.5	
Se	78	115	1	He	49.653	1.526	4114	2.64	50	99.3	89.5	110.5	
Sr	88	45	1	He	48.192	0.717	320604	0.16	50	96.4	89.5	110.5	
Mo	95	103	1	He	51.277	0.765	173699	1.04	50	102.6	89.5	110.5	
Ag	107	103	1	He	48.177	0.933	523055	0.19	50	96.4	89.5	110.5	
Cd	111	115	1	He	49.767	0.466	93151	1.11	50	99.5	89.5	110.5	
Sn	118	115	1	He	51.023	0.392	217301	1.42	50	102.0	89.5	110.5	
Sb	123	115	1	He	52.648	0.513	237010	0.93	50	105.3	89.5	110.5	
Ba	137	115	1	He	49.208	0.795	100264	1.17	50	98.4	89.5	110.5	
W	182	159	1	He	49.538	0.297	599966	0.55	50	99.1	89.5	110.5	
Tl	205	165	1	He	45.915	0.818	1348741	0.31	50	91.8	89.5	110.5	
Pb	208	165	1	He	47.515	0.053	1828683	0.49	50	95.0	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1621857	1.91	1663342	97.51	30	120	
Sc	45	1	He	793048	0.74	788655	100.56	30	120	
Sc	45	2	NoGas	7350654	0.88	7332116	100.25	30	120	
Rh	103	1	He	2435139	0.78	2523919	96.48	30	120	
In	115	1	He	1376912	1.13	1420677	96.92	30	120	
Tb	159	1	He	4007259	0.79	3983717	100.59	30	120	
Ho	165	1	He	4032084	0.51	4030813	100.03	30	120	
Bi	209	1	He	2942678	1.35	2997463	98.17	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	023_CCB.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T16:36:00-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.049	-120.1	63100	2.1	2	
Be	9	6	2	NoGas	0.014	97.1	133	52.0	1	
B	11	45	2	NoGas	0.660	29.9	11678	5.2	20	
Na	23	45	1	He	5.020	11.9	20909	3.6	1000	
Mg	24	45	1	He	1.143	24.7	1196	18.4	1000	
Al	27	45	1	He	0.157	108.2	726	9.9	50	
K	39	45	1	He	4.290	54.5	44767	4.0	1000	
Ca	44	45	1	He	6.041	20.3	649	7.2	1000	
Ti	47	45	1	He	-0.106	-77.9	31	59.0	20	
V	51	45	1	He	-0.029	-108.1	2967	11.7	2	
Cr	52	45	1	He	-0.007	-277.4	2499	4.6	2	
Mn	55	45	1	He	0.042	34.5	1127	6.8	2	
Fe	56	45	1	He	4.630	20.5	36742	16.9	50	
Co	59	45	1	He	0.013	58.3	239	31.9	1	
Ni	60	45	1	He	0.011	26.3	89	7.8	2	
Cu	63	45	1	He	0.006	356.4	1499	10.4	2	
Zn	66	45	1	He	0.283	21.8	2075	3.7	20	
As	75	115	1	He	0.128	26.1	269	11.8	2	
Se	78	115	1	He	0.082	43.3	47	5.8	2	
Sr	88	45	1	He	-0.003	-296.3	180	35.3	10	
Mo	95	103	1	He	0.216	37.8	873	33.9	2	
Ag	107	103	1	He	0.004	31.0	78	19.3	0.2	
Cd	111	115	1	He	0.015	255.5	1426	4.8	0.2	
Sn	118	115	1	He	0.210	28.0	1774	15.4	10	
Sb	123	115	1	He	0.097	15.5	582	11.8	2	
Ba	137	115	1	He	0.008	71.2	60	20.0	5	
W	182	159	1	He	0.433	22.7	10637	12.1	10	
Tl	205	165	1	He	0.074	4.7	2377	4.1	0.5	
Pb	208	165	1	He	0.022	19.3	1861	8.8	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1644697	0.70	1663342	98.88	30	120	
Sc	45	1	He	793749	0.61	788655	100.65	30	120	
Sc	45	2	NoGas	7241156	0.25	7332116	98.76	30	120	
Rh	103	1	He	2558941	0.53	2523919	101.39	30	120	
In	115	1	He	1433862	0.69	1420677	100.93	30	120	
Tb	159	1	He	4044262	1.09	3983717	101.52	30	120	
Ho	165	1	He	4042842	0.26	4030813	100.30	30	120	
Bi	209	1	He	3036785	0.63	2997463	101.31	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	IDL-1
Data File Name	024_Blk.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T16:39:56-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.005	-467.3	63988	1.1	2	
Be	9	6	2	NoGas	0.006	119.7	89	37.5	1	
B	11	45	2	NoGas	0.512	29.5	11248	4.5	20	
Na	23	45	1	He	2.495	10.0	17717	1.7	1000	
Mg	24	45	1	He	0.033	186.7	359	14.6	1000	
Al	27	45	1	He	-0.362	-13.4	508	4.3	50	
K	39	45	1	He	3.064	78.9	44092	3.7	1000	
Ca	44	45	1	He	7.588	26.8	714	10.2	1000	
Ti	47	45	1	He	-0.142	-43.8	23	62.3	20	
V	51	45	1	He	-0.026	-137.3	3012	13.1	2	
Cr	52	45	1	He	0.007	218.7	2607	2.3	2	
Mn	55	45	1	He	0.082	9.5	1351	3.8	2	
Fe	56	45	1	He	3.016	12.7	26075	8.1	50	
Co	59	45	1	He	0.013	26.1	233	15.1	1	
Ni	60	45	1	He	0.006	130.1	77	24.2	2	
Cu	63	45	1	He	0.022	38.8	1608	3.1	2	
Zn	66	45	1	He	0.383	8.3	2226	1.1	20	
As	75	115	1	He	0.038	27.9	183	2.5	2	
Se	78	115	1	He	-0.003	-330.3	40	4.3	2	
Sr	88	45	1	He	-0.008	-74.8	146	28.6	10	
Mo	95	103	1	He	0.044	47.8	259	28.7	2	
Ag	107	103	1	He	0.001	208.6	39	58.4	0.2	
Cd	111	115	1	He	-0.001	-3051.0	1424	2.2	0.2	
Sn	118	115	1	He	0.058	82.5	1119	15.5	10	
Sb	123	115	1	He	0.031	44.2	280	24.8	2	
Ba	137	115	1	He	0.002	362.1	49	32.2	5	
W	182	159	1	He	0.119	76.0	6802	14.6	10	
Tl	205	165	1	He	0.023	7.1	888	4.2	0.5	
Pb	208	165	1	He	0.012	5.4	1508	0.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1616997	1.35	1663342	97.21	30	120	
Sc	45	1	He	797837	1.82	788655	101.16	30	120	
Sc	45	2	NoGas	7244806	0.89	7332116	98.81	30	120	
Rh	103	1	He	2549436	0.77	2523919	101.01	30	120	
In	115	1	He	1463659	4.53	1420677	103.03	30	120	
Tb	159	1	He	4038196	1.68	3983717	101.37	30	120	
Ho	165	1	He	4075724	2.37	4030813	101.11	30	120	
Bi	209	1	He	3072305	1.54	2997463	102.50	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	IDL-2
Data File Name	025_Blk.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T16:43:52-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	0.183	19.4	58500	4.5	2	
Be	9	6	2	NoGas	0.005	142.8	78	37.8	1	
B	11	45	2	NoGas	1.515	23.7	12245	3.3	20	
Na	23	45	1	He	2.571	12.6	17772	2.2	1000	
Mg	24	45	1	He	0.132	35.6	433	9.2	1000	
Al	27	45	1	He	-0.503	-9.9	447	3.9	50	
K	39	45	1	He	4.263	32.3	44860	1.4	1000	
Ca	44	45	1	He	-2.043	-69.1	324	18.6	1000	
Ti	47	45	1	He	-0.146	-35.7	22	52.7	20	
V	51	45	1	He	-0.018	-81.8	3100	4.6	2	
Cr	52	45	1	He	-0.012	-165.0	2469	4.7	2	
Mn	55	45	1	He	-0.048	-18.8	647	8.5	2	
Fe	56	45	1	He	1.354	20.7	14909	13.4	50	
Co	59	45	1	He	0.015	46.4	257	28.1	1	
Ni	60	45	1	He	0.007	18.1	80	4.2	2	
Cu	63	45	1	He	0.032	59.9	1673	8.5	2	
Zn	66	45	1	He	-0.377	-24.9	1151	11.3	20	
As	75	115	1	He	0.035	32.2	181	2.1	2	
Se	78	115	1	He	-0.002	-46.8	41	4.6	2	
Sr	88	45	1	He	-0.009	-19.5	140	8.6	10	
Mo	95	103	1	He	0.033	54.9	218	29.8	2	
Ag	107	103	1	He	0.002	66.8	53	31.2	0.2	
Cd	111	115	1	He	-0.010	-209.5	1409	2.3	0.2	
Sn	118	115	1	He	0.036	51.0	1022	3.9	10	
Sb	123	115	1	He	0.025	8.0	250	3.5	2	
Ba	137	115	1	He	0.008	148.0	62	40.9	5	
W	182	159	1	He	0.061	91.3	6168	11.2	10	
Tl	205	165	1	He	0.012	9.9	560	5.9	0.5	
Pb	208	165	1	He	0.008	20.1	1377	4.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1473857	6.18	1663342	88.61	30	120	
Sc	45	1	He	795878	0.97	788655	100.92	30	120	
Sc	45	2	NoGas	6262044	4.34	7332116	85.41	30	120	
Rh	103	1	He	2545555	0.71	2523919	100.86	30	120	
In	115	1	He	1465999	4.47	1420677	103.19	30	120	
Tb	159	1	He	4074293	0.56	3983717	102.27	30	120	
Ho	165	1	He	4109241	1.72	4030813	101.95	30	120	
Bi	209	1	He	3090524	1.38	2997463	103.10	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	IDL-3
Data File Name	026_Blk.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T16:47:48-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.074	-98.2	62490	1.6	2	
Be	9	6	2	NoGas	-0.001	-282.5	56	34.6	1	
B	11	45	2	NoGas	0.656	13.9	11641	1.8	20	
Na	23	45	1	He	1.330	8.1	16093	1.0	1000	
Mg	24	45	1	He	0.018	813.7	344	30.8	1000	
Al	27	45	1	He	-0.716	-10.1	354	7.9	50	
K	39	45	1	He	2.907	14.9	43706	1.2	1000	
Ca	44	45	1	He	-0.836	-133.6	371	12.5	1000	
Ti	47	45	1	He	-0.131	-45.0	26	52.7	20	
V	51	45	1	He	-0.017	-115.7	3100	7.3	2	
Cr	52	45	1	He	-0.025	-148.3	2369	10.2	2	
Mn	55	45	1	He	-0.059	-16.2	582	8.1	2	
Fe	56	45	1	He	0.619	19.9	9934	8.2	50	
Co	59	45	1	He	0.013	24.4	234	14.0	1	
Ni	60	45	1	He	0.005	109.3	74	18.6	2	
Cu	63	45	1	He	-0.002	-876.1	1445	5.8	2	
Zn	66	45	1	He	-0.329	-34.6	1213	12.5	20	
As	75	115	1	He	0.018	148.9	160	13.9	2	
Se	78	115	1	He	-0.005	-331.9	40	3.3	2	
Sr	88	45	1	He	-0.012	-16.8	123	10.8	10	
Mo	95	103	1	He	0.026	48.9	192	23.7	2	
Ag	107	103	1	He	0.001	242.2	37	59.6	0.2	
Cd	111	115	1	He	-0.013	-207.6	1384	1.0	0.2	
Sn	118	115	1	He	0.029	65.1	978	6.0	10	
Sb	123	115	1	He	0.013	14.8	190	4.6	2	
Ba	137	115	1	He	0.000	6072.3	44	38.5	5	
W	182	159	1	He	0.007	429.0	5394	8.1	10	
Tl	205	165	1	He	0.007	9.8	428	4.8	0.5	
Pb	208	165	1	He	0.005	27.2	1236	4.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1638761	1.12	1663342	98.52	30	120	
Sc	45	1	He	792755	0.90	788655	100.52	30	120	
Sc	45	2	NoGas	7226444	0.67	7332116	98.56	30	120	
Rh	103	1	He	2518732	0.52	2523919	99.79	30	120	
In	115	1	He	1444731	2.72	1420677	101.69	30	120	
Tb	159	1	He	3988050	1.91	3983717	100.11	30	120	
Ho	165	1	He	4051618	0.63	4030813	100.52	30	120	
Bi	209	1	He	3006520	0.36	2997463	100.30	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	IDL-4
Data File Name	027_Blk.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T16:51:42-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.053	-48.0	63720	1.3	2	
Be	9	6	2	NoGas	-0.006	-0.9	33	0.0	1	
B	11	45	2	NoGas	0.053	173.4	9999	2.2	20	
Na	23	45	1	He	1.866	32.1	16286	3.6	1000	
Mg	24	45	1	He	-0.038	-263.0	293	22.3	1000	
Al	27	45	1	He	-0.436	-18.4	459	5.5	50	
K	39	45	1	He	5.733	52.8	44378	2.8	1000	
Ca	44	45	1	He	-2.832	-39.5	282	16.5	1000	
Ti	47	45	1	He	-0.117	-63.0	28	59.2	20	
V	51	45	1	He	-0.011	-339.7	3071	10.3	2	
Cr	52	45	1	He	-0.006	-308.1	2427	2.4	2	
Mn	55	45	1	He	-0.048	-10.2	623	4.0	2	
Fe	56	45	1	He	-0.012	-402.5	5559	7.3	50	
Co	59	45	1	He	0.017	10.2	270	7.5	1	
Ni	60	45	1	He	-0.002	-127.3	54	14.1	2	
Cu	63	45	1	He	0.001	1112.1	1416	2.5	2	
Zn	66	45	1	He	-0.336	-3.6	1169	3.2	20	
As	75	115	1	He	0.009	87.9	147	6.4	2	
Se	78	115	1	He	0.025	299.6	41	12.9	2	
Sr	88	45	1	He	-0.011	-38.9	123	24.0	10	
Mo	95	103	1	He	0.004	232.7	116	33.4	2	
Ag	107	103	1	He	0.000	-4417.8	27	50.0	0.2	
Cd	111	115	1	He	-0.024	-95.6	1316	4.6	0.2	
Sn	118	115	1	He	0.027	161.7	933	17.3	10	
Sb	123	115	1	He	0.016	18.5	196	7.9	2	
Ba	137	115	1	He	-0.007	-80.4	28	38.6	5	
W	182	159	1	He	-0.019	-68.5	4986	4.0	10	
Tl	205	165	1	He	0.007	31.9	397	14.8	0.5	
Pb	208	165	1	He	0.004	68.2	1141	7.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1647196	0.77	1663342	99.03	30	120	
Sc	45	1	He	769399	2.58	788655	97.56	30	120	
Sc	45	2	NoGas	7320276	0.56	7332116	99.84	30	120	
Rh	103	1	He	2483172	3.25	2523919	98.39	30	120	
In	115	1	He	1394849	2.56	1420677	98.18	30	120	
Tb	159	1	He	3919634	3.27	3983717	98.39	30	120	
Ho	165	1	He	3949655	2.14	4030813	97.99	30	120	
Bi	209	1	He	2960928	3.42	2997463	98.78	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	IDL-5
Data File Name	028_Blk.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T16:55:41-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.030	-205.3	64014	2.1	2	
Be	9	6	2	NoGas	0.005	148.9	89	45.1	1	
B	11	45	2	NoGas	0.183	41.1	10363	3.0	20	
Na	23	45	1	He	4.133	19.1	19711	4.6	1000	
Mg	24	45	1	He	0.111	90.7	415	17.8	1000	
Al	27	45	1	He	-0.073	-132.9	627	6.0	50	
K	39	45	1	He	3.573	27.4	44155	2.1	1000	
Ca	44	45	1	He	21.428	5.8	1267	4.4	1000	
Ti	47	45	1	He	-0.195	-16.0	11	62.5	20	
V	51	45	1	He	-0.026	-64.4	2996	5.8	2	
Cr	52	45	1	He	-0.014	-234.6	2445	8.6	2	
Mn	55	45	1	He	0.506	4.7	3609	3.9	2	
Fe	56	45	1	He	0.142	43.2	6745	6.5	50	
Co	59	45	1	He	0.012	24.4	228	13.6	1	
Ni	60	45	1	He	0.004	139.7	71	19.5	2	
Cu	63	45	1	He	0.020	80.9	1585	7.0	2	
Zn	66	45	1	He	0.859	4.7	2876	1.4	20	
As	75	115	1	He	-0.004	-363.9	137	9.5	2	
Se	78	115	1	He	-0.005	-1316.8	39	14.1	2	
Sr	88	45	1	He	-0.004	-102.1	174	14.8	10	
Mo	95	103	1	He	-0.002	-446.6	92	39.8	2	
Ag	107	103	1	He	0.000	-541.4	26	41.9	0.2	
Cd	111	115	1	He	-0.007	-92.8	1371	1.7	0.2	
Sn	118	115	1	He	0.074	55.6	1159	15.8	10	
Sb	123	115	1	He	0.001	1045.9	130	38.3	2	
Ba	137	115	1	He	0.009	100.3	61	30.0	5	
W	182	159	1	He	-0.050	-51.9	4705	5.6	10	
Tl	205	165	1	He	0.003	68.8	287	18.1	0.5	
Pb	208	165	1	He	0.005	6.0	1206	0.4	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1638005	1.15	1663342	98.48	30	120	
Sc	45	1	He	792106	0.65	788655	100.44	30	120	
Sc	45	2	NoGas	7303349	0.93	7332116	99.61	30	120	
Rh	103	1	He	2509250	0.35	2523919	99.42	30	120	
In	115	1	He	1419749	0.88	1420677	99.93	30	120	
Tb	159	1	He	3987192	1.64	3983717	100.09	30	120	
Ho	165	1	He	4024243	0.77	4030813	99.84	30	120	
Bi	209	1	He	3005178	0.52	2997463	100.26	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	IDL-6
Data File Name	029_Blk.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T16:59:36-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.159	-101.4	66334	7.6	2	
Be	9	6	2	NoGas	-0.005	-124.3	41	68.6	1	
B	11	45	2	NoGas	0.354	150.5	11634	3.9	20	
Na	23	45	1	He	1.025	67.9	15722	6.5	1000	
Mg	24	45	1	He	-0.071	-39.9	278	6.9	1000	
Al	27	45	1	He	-0.433	-17.9	476	7.8	50	
K	39	45	1	He	3.415	63.9	44125	3.0	1000	
Ca	44	45	1	He	5.656	21.6	634	8.5	1000	
Ti	47	45	1	He	-0.180	-17.3	14	48.0	20	
V	51	45	1	He	-0.014	-200.8	3135	10.8	2	
Cr	52	45	1	He	-0.017	-196.1	2426	10.3	2	
Mn	55	45	1	He	0.072	13.5	1288	4.7	2	
Fe	56	45	1	He	2.208	5.4	20574	4.7	50	
Co	59	45	1	He	0.012	39.6	221	20.8	1	
Ni	60	45	1	He	0.004	283.8	72	41.4	2	
Cu	63	45	1	He	0.010	144.7	1526	7.3	2	
Zn	66	45	1	He	0.404	15.8	2245	3.2	20	
As	75	115	1	He	0.013	139.3	154	11.5	2	
Se	78	115	1	He	0.001	4853.5	40	14.4	2	
Sr	88	45	1	He	-0.006	-42.8	163	10.8	10	
Mo	95	103	1	He	0.005	223.0	117	32.9	2	
Ag	107	103	1	He	0.001	144.6	36	32.9	0.2	
Cd	111	115	1	He	-0.004	-433.3	1382	3.1	0.2	
Sn	118	115	1	He	0.029	28.6	967	3.0	10	
Sb	123	115	1	He	0.007	78.3	158	16.4	2	
Ba	137	115	1	He	0.002	641.2	48	61.0	5	
W	182	159	1	He	0.019	238.7	5501	9.6	10	
Tl	205	165	1	He	0.003	53.4	299	17.4	0.5	
Pb	208	165	1	He	0.003	101.9	1148	9.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1743640	6.25	1663342	104.83	30	120	
Sc	45	1	He	793801	0.87	788655	100.65	30	120	
Sc	45	2	NoGas	7914987	12.98	7332116	107.95	30	120	
Rh	103	1	He	2489981	0.90	2523919	98.66	30	120	
In	115	1	He	1425010	0.73	1420677	100.30	30	120	
Tb	159	1	He	3965377	1.57	3983717	99.54	30	120	
Ho	165	1	He	4044781	1.66	4030813	100.35	30	120	
Bi	209	1	He	3029543	0.39	2997463	101.07	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	IDL-7
Data File Name	030_Blk.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T17:03:32-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.023	-289.1	64858	0.8	2	
Be	9	6	2	NoGas	0.001	548.0	70	50.8	1	
B	11	45	2	NoGas	0.417	8.1	11178	2.1	20	
Na	23	45	1	He	0.947	78.1	15789	5.2	1000	
Mg	24	45	1	He	-0.154	-38.5	219	23.5	1000	
Al	27	45	1	He	-0.599	-20.1	409	10.4	50	
K	39	45	1	He	2.468	113.3	43921	3.4	1000	
Ca	44	45	1	He	-3.070	-9.9	285	6.8	1000	
Ti	47	45	1	He	-0.195	-11.5	11	45.8	20	
V	51	45	1	He	-0.001	-571.2	3317	1.2	2	
Cr	52	45	1	He	0.002	1069.0	2588	3.7	2	
Mn	55	45	1	He	-0.068	-13.1	541	7.7	2	
Fe	56	45	1	He	0.748	6.4	10938	5.5	50	
Co	59	45	1	He	0.011	54.2	218	26.4	1	
Ni	60	45	1	He	0.007	191.2	81	43.9	2	
Cu	63	45	1	He	0.026	51.1	1649	3.3	2	
Zn	66	45	1	He	-0.446	-8.1	1063	2.6	20	
As	75	115	1	He	0.005	260.6	150	11.2	2	
Se	78	115	1	He	0.032	93.8	43	7.0	2	
Sr	88	45	1	He	-0.014	-6.7	108	3.6	10	
Mo	95	103	1	He	0.009	205.3	133	49.2	2	
Ag	107	103	1	He	0.000	1194.0	29	43.7	0.2	
Cd	111	115	1	He	-0.025	-134.6	1370	2.8	0.2	
Sn	118	115	1	He	-0.016	-127.0	785	12.4	10	
Sb	123	115	1	He	0.005	80.0	154	16.2	2	
Ba	137	115	1	He	-0.001	-465.9	42	25.4	5	
W	182	159	1	He	-0.024	-153.5	5105	9.4	10	
Tl	205	165	1	He	0.000	-501.3	208	12.0	0.5	
Pb	208	165	1	He	0.002	97.7	1117	5.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1684719	2.74	1663342	101.29	30	120	
Sc	45	1	He	802984	2.54	788655	101.82	30	120	
Sc	45	2	NoGas	7383213	1.24	7332116	100.70	30	120	
Rh	103	1	He	2545799	2.30	2523919	100.87	30	120	
In	115	1	He	1455666	2.75	1420677	102.46	30	120	
Tb	159	1	He	4053331	0.83	3983717	101.75	30	120	
Ho	165	1	He	4090194	1.23	4030813	101.47	30	120	
Bi	209	1	He	3041082	1.23	2997463	101.46	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	IDL-8
Data File Name	031_Blk.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T17:07:29-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	0.016	893.5	64422	4.4	2	
Be	9	6	2	NoGas	-0.001	-630.2	56	69.3	1	
B	11	45	2	NoGas	0.047	513.0	9881	7.4	20	
Na	23	45	1	He	0.512	209.8	15240	2.1	1000	
Mg	24	45	1	He	-0.172	-35.1	204	17.5	1000	
Al	27	45	1	He	-0.688	-24.0	370	12.6	50	
K	39	45	1	He	0.462	559.6	42617	3.0	1000	
Ca	44	45	1	He	-2.316	-12.8	317	5.9	1000	
Ti	47	45	1	He	-0.219	-14.3	6	124.9	20	
V	51	45	1	He	-0.035	-139.3	2930	12.0	2	
Cr	52	45	1	He	-0.032	-78.3	2352	3.9	2	
Mn	55	45	1	He	-0.067	-28.3	547	14.8	2	
Fe	56	45	1	He	0.313	43.7	7996	6.0	50	
Co	59	45	1	He	0.013	5.6	241	4.9	1	
Ni	60	45	1	He	0.007	86.2	80	19.1	2	
Cu	63	45	1	He	-0.028	-83.8	1288	5.1	2	
Zn	66	45	1	He	-0.370	-6.3	1178	6.4	20	
As	75	115	1	He	-0.004	-528.5	142	11.2	2	
Se	78	115	1	He	0.010	329.6	42	5.8	2	
Sr	88	45	1	He	-0.013	-28.7	117	15.1	10	
Mo	95	103	1	He	-0.001	-782.5	97	33.3	2	
Ag	107	103	1	He	-0.001	-54.5	20	16.7	0.2	
Cd	111	115	1	He	-0.033	-72.6	1380	6.5	0.2	
Sn	118	115	1	He	-0.020	-318.6	767	31.8	10	
Sb	123	115	1	He	-0.005	-54.6	104	4.9	2	
Ba	137	115	1	He	-0.005	-156.8	34	53.3	5	
W	182	159	1	He	-0.040	-23.3	4923	7.0	10	
Tl	205	165	1	He	-0.001	-106.6	182	14.0	0.5	
Pb	208	165	1	He	-0.001	-338.4	1022	1.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1632140	1.28	1663342	98.12	30	120	
Sc	45	1	He	807595	7.59	788655	102.40	30	120	
Sc	45	2	NoGas	7246756	0.96	7332116	98.84	30	120	
Rh	103	1	He	2549179	6.27	2523919	101.00	30	120	
In	115	1	He	1485265	9.27	1420677	104.55	30	120	
Tb	159	1	He	4067756	6.64	3983717	102.11	30	120	
Ho	165	1	He	4120186	6.18	4030813	102.22	30	120	
Bi	209	1	He	3070274	5.43	2997463	102.43	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	IDL-9
Data File Name	032_Blk.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T17:11:27-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.039	-256.7	63193	2.0	2	
Be	9	6	2	NoGas	-0.005	-142.7	37	96.4	1	
B	11	45	2	NoGas	0.162	62.9	10192	1.7	20	
Na	23	45	1	He	0.674	8.7	15107	0.7	1000	
Mg	24	45	1	He	-0.112	-92.8	244	31.5	1000	
Al	27	45	1	He	-0.386	-39.6	490	12.9	50	
K	39	45	1	He	2.316	159.7	42874	5.1	1000	
Ca	44	45	1	He	-0.417	-606.5	384	25.0	1000	
Ti	47	45	1	He	-0.214	-7.2	7	50.0	20	
V	51	45	1	He	-0.013	-250.5	3113	12.8	2	
Cr	52	45	1	He	-0.011	-89.0	2447	3.7	2	
Mn	55	45	1	He	-0.052	-14.7	614	5.7	2	
Fe	56	45	1	He	-0.138	-32.7	4837	6.3	50	
Co	59	45	1	He	0.014	39.9	241	22.8	1	
Ni	60	45	1	He	0.001	1060.2	62	21.6	2	
Cu	63	45	1	He	-0.021	-31.8	1308	3.5	2	
Zn	66	45	1	He	-0.334	-20.2	1197	6.7	20	
As	75	115	1	He	-0.013	-39.7	130	1.3	2	
Se	78	115	1	He	-0.006	-1705.3	40	20.6	2	
Sr	88	45	1	He	-0.007	-97.2	153	30.1	10	
Mo	95	103	1	He	0.003	328.5	112	29.3	2	
Ag	107	103	1	He	0.001	299.8	34	55.9	0.2	
Cd	111	115	1	He	-0.030	-138.1	1357	1.6	0.2	
Sn	118	115	1	He	-0.003	-960.6	841	9.9	10	
Sb	123	115	1	He	0.004	263.2	147	35.3	2	
Ba	137	115	1	He	-0.007	-98.3	30	48.4	5	
W	182	159	1	He	-0.037	-47.0	4875	3.9	10	
Tl	205	165	1	He	-0.002	-48.2	151	16.6	0.5	
Pb	208	165	1	He	0.000	6992.1	1023	9.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1637004	0.96	1663342	98.42	30	120	
Sc	45	1	He	785756	1.15	788655	99.63	30	120	
Sc	45	2	NoGas	7230064	1.20	7332116	98.61	30	120	
Rh	103	1	He	2550830	0.29	2523919	101.07	30	120	
In	115	1	He	1453449	4.43	1420677	102.31	30	120	
Tb	159	1	He	3997093	0.99	3983717	100.34	30	120	
Ho	165	1	He	4023201	1.66	4030813	99.81	30	120	
Bi	209	1	He	3036618	0.76	2997463	101.31	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	IDL-10
Data File Name	033_Blk.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T17:15:25-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.054	-73.8	63286	1.9	2	
Be	9	6	2	NoGas	0.005	119.2	89	33.1	1	
B	11	45	2	NoGas	0.429	15.0	11048	2.4	20	
Na	23	45	1	He	4.322	1.0	19715	2.2	1000	
Mg	24	45	1	He	0.007	1481.6	333	25.2	1000	
Al	27	45	1	He	-0.074	-182.1	618	7.0	50	
K	39	45	1	He	4.839	35.0	44500	1.1	1000	
Ca	44	45	1	He	18.712	22.5	1141	13.2	1000	
Ti	47	45	1	He	-0.154	-25.1	20	44.1	20	
V	51	45	1	He	-0.003	-662.8	3212	7.8	2	
Cr	52	45	1	He	0.000	-39195.0	2508	4.5	2	
Mn	55	45	1	He	0.547	8.7	3782	5.6	2	
Fe	56	45	1	He	0.074	98.8	6218	9.7	50	
Co	59	45	1	He	0.012	53.0	217	25.7	1	
Ni	60	45	1	He	0.012	30.4	90	9.8	2	
Cu	63	45	1	He	0.009	189.8	1497	6.1	2	
Zn	66	45	1	He	0.907	13.1	2905	3.7	20	
As	75	115	1	He	-0.001	-1187.6	139	6.2	2	
Se	78	115	1	He	0.034	299.1	42	20.8	2	
Sr	88	45	1	He	0.003	86.1	216	6.3	10	
Mo	95	103	1	He	-0.008	-109.9	72	41.4	2	
Ag	107	103	1	He	-0.001	-112.2	18	57.3	0.2	
Cd	111	115	1	He	0.021	97.9	1409	4.2	0.2	
Sn	118	115	1	He	0.096	40.7	1241	13.4	10	
Sb	123	115	1	He	0.003	262.2	137	25.3	2	
Ba	137	115	1	He	0.012	107.8	67	37.7	5	
W	182	159	1	He	-0.036	-108.5	4827	9.1	10	
Tl	205	165	1	He	-0.001	-59.9	166	14.1	0.5	
Pb	208	165	1	He	0.006	18.2	1230	3.8	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1662443	2.04	1663342	99.95	30	120	
Sc	45	1	He	782334	2.03	788655	99.20	30	120	
Sc	45	2	NoGas	7274066	1.16	7332116	99.21	30	120	
Rh	103	1	He	2466989	3.27	2523919	97.74	30	120	
In	115	1	He	1403982	1.69	1420677	98.82	30	120	
Tb	159	1	He	3949072	2.52	3983717	99.13	30	120	
Ho	165	1	He	3972147	1.31	4030813	98.54	30	120	
Bi	209	1	He	2995031	2.30	2997463	99.92	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2012431
Data File Name	034_CCV.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T17:19:19-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	48.235	2.266	1021048	1.78	50	96.5	89.5	110.5	
Be	9	6	2	NoGas	49.083	1.772	239213	0.83	50	98.2	89.5	110.5	
B	11	45	2	NoGas	46.921	0.523	149636	0.38	50	93.8	89.5	110.5	
Na	23	45	1	He	24022.657	12.023	30872637	0.74	25000	96.1	89.5	110.5	
Mg	24	45	1	He	24309.336	12.970	18148663	1.70	25000	97.2	89.5	110.5	
Al	27	45	1	He	242.725	12.066	102409	0.53	250	97.1	89.5	110.5	
K	39	45	1	He	24488.736	11.433	17650091	0.27	25000	98.0	89.5	110.5	
Ca	44	45	1	He	23690.423	12.365	944089	0.87	25000	94.8	89.5	110.5	
Ti	47	45	1	He	49.706	13.159	11086	1.59	50	99.4	89.5	110.5	
V	51	45	1	He	48.468	12.200	539986	0.74	50	96.9	89.5	110.5	
Cr	52	45	1	He	48.840	12.767	343888	1.17	50	97.7	89.5	110.5	
Mn	55	45	1	He	238.997	12.113	1268645	0.78	250	95.6	89.5	110.5	
Fe	56	45	1	He	12139.744	12.137	80199599	0.63	12500	97.1	89.5	110.5	
Co	59	45	1	He	48.758	11.801	477705	0.76	50	97.5	89.5	110.5	
Ni	60	45	1	He	48.774	11.657	120527	0.52	50	97.5	89.5	110.5	
Cu	63	45	1	He	49.136	12.084	322418	0.52	50	98.3	89.5	110.5	
Zn	66	45	1	He	48.899	11.656	69483	0.19	50	97.8	89.5	110.5	
As	75	115	1	He	49.244	9.622	48394	0.66	50	98.5	89.5	110.5	
Se	78	115	1	He	49.062	10.612	4156	1.27	50	98.1	89.5	110.5	
Sr	88	45	1	He	49.116	11.779	323269	0.26	50	98.2	89.5	110.5	
Mo	95	103	1	He	52.007	13.044	172373	1.36	50	104.0	89.5	110.5	
Ag	107	103	1	He	49.068	12.394	521480	0.35	50	98.1	89.5	110.5	
Cd	111	115	1	He	48.455	9.801	92831	0.46	50	96.9	89.5	110.5	
Sn	118	115	1	He	54.449	10.224	237108	0.81	50	108.9	89.5	110.5	
Sb	123	115	1	He	51.428	10.116	236816	0.80	50	102.9	89.5	110.5	
Ba	137	115	1	He	48.091	9.808	100250	0.73	50	96.2	89.5	110.5	
W	182	159	1	He	49.741	11.194	591893	1.13	50	99.5	89.5	110.5	
Tl	205	165	1	He	46.604	10.763	1344563	0.23	50	93.2	89.5	110.5	
Pb	208	165	1	He	48.127	11.185	1818667	0.86	50	96.3	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1625013	1.58	1663342	97.70	30	120	
Sc	45	1	He	791745	11.55	788655	100.39	30	120	
Sc	45	2	NoGas	7334581	0.59	7332116	100.03	30	120	
Rh	103	1	He	2407130	11.85	2523919	95.37	30	120	
In	115	1	He	1417547	9.66	1420677	99.78	30	120	
Tb	159	1	He	3967406	10.40	3983717	99.59	30	120	
Ho	165	1	He	3990335	10.61	4030813	99.00	30	120	
Bi	209	1	He	2921057	9.17	2997463	97.45	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	035_CCB.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T17:23:10-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	0.045	62.7	65374	0.9	2	
Be	9	6	2	NoGas	0.003	262.0	78	51.5	1	
B	11	45	2	NoGas	0.174	51.0	10318	2.9	20	
Na	23	45	1	He	4.218	2.8	19982	1.3	1000	
Mg	24	45	1	He	2.361	9.9	2130	9.2	1000	
Al	27	45	1	He	0.167	95.2	734	10.2	50	
K	39	45	1	He	3.783	29.4	44648	0.7	1000	
Ca	44	45	1	He	5.893	25.2	646	8.2	1000	
Ti	47	45	1	He	-0.126	-72.5	27	76.0	20	
V	51	45	1	He	-0.047	-88.6	2775	16.0	2	
Cr	52	45	1	He	-0.012	-212.4	2475	7.4	2	
Mn	55	45	1	He	0.061	38.0	1239	9.5	2	
Fe	56	45	1	He	4.708	22.4	37478	18.4	50	
Co	59	45	1	He	0.012	19.4	223	11.3	1	
Ni	60	45	1	He	0.010	120.4	87	33.5	2	
Cu	63	45	1	He	0.008	106.9	1518	4.2	2	
Zn	66	45	1	He	0.239	52.4	2025	8.5	20	
As	75	115	1	He	0.115	40.1	258	15.7	2	
Se	78	115	1	He	0.112	96.1	50	16.8	2	
Sr	88	45	1	He	-0.001	-185.7	194	6.5	10	
Mo	95	103	1	He	0.215	41.7	867	37.3	2	
Ag	107	103	1	He	0.006	11.5	93	7.1	0.2	
Cd	111	115	1	He	0.020	143.4	1446	1.8	0.2	
Sn	118	115	1	He	0.111	43.8	1345	14.9	10	
Sb	123	115	1	He	0.090	23.3	552	16.0	2	
Ba	137	115	1	He	0.005	42.4	56	6.9	5	
W	182	159	1	He	0.440	20.5	10589	11.1	10	
Tl	205	165	1	He	0.066	2.9	2115	2.1	0.5	
Pb	208	165	1	He	0.017	10.6	1657	3.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1654008	0.84	1663342	99.44	30	120	
Sc	45	1	He	798351	1.15	788655	101.23	30	120	
Sc	45	2	NoGas	7290355	0.67	7332116	99.43	30	120	
Rh	103	1	He	2553114	0.89	2523919	101.16	30	120	
In	115	1	He	1444370	2.31	1420677	101.67	30	120	
Tb	159	1	He	3997491	1.17	3983717	100.35	30	120	
Ho	165	1	He	3991548	0.56	4030813	99.03	30	120	
Bi	209	1	He	3038934	1.43	2997463	101.38	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2012431
Data File Name	036_CCV.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T17:27:04-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	51.449	2.110	1035293	1.37	50	102.9	89.5	110.5	
Be	9	6	2	NoGas	50.933	1.906	241248	0.68	50	101.9	89.5	110.5	
B	11	45	2	NoGas	50.063	2.034	151733	0.56	50	100.1	89.5	110.5	
Na	23	45	1	He	24106.358	0.470	31221227	0.51	25000	96.4	89.5	110.5	
Mg	24	45	1	He	24071.326	0.302	18122255	0.58	25000	96.3	89.5	110.5	
Al	27	45	1	He	241.937	0.465	102869	0.20	250	96.8	89.5	110.5	
K	39	45	1	He	24199.391	0.905	17568730	0.77	25000	96.8	89.5	110.5	
Ca	44	45	1	He	23359.088	0.198	938355	0.51	25000	93.4	89.5	110.5	
Ti	47	45	1	He	49.487	3.015	11131	2.70	50	99.0	89.5	110.5	
V	51	45	1	He	47.835	0.703	537178	1.01	50	95.7	89.5	110.5	
Cr	52	45	1	He	47.547	1.183	337627	1.44	50	95.1	89.5	110.5	
Mn	55	45	1	He	236.156	0.566	1263355	0.84	250	94.5	89.5	110.5	
Fe	56	45	1	He	11992.331	1.046	79849455	1.36	12500	95.9	89.5	110.5	
Co	59	45	1	He	48.251	0.499	476311	0.78	50	96.5	89.5	110.5	
Ni	60	45	1	He	48.470	0.927	120666	0.74	50	96.9	89.5	110.5	
Cu	63	45	1	He	48.722	0.415	322198	0.51	50	97.4	89.5	110.5	
Zn	66	45	1	He	48.276	1.156	69119	1.41	50	96.6	89.5	110.5	
As	75	115	1	He	49.960	0.694	48391	0.38	50	99.9	89.5	110.5	
Se	78	115	1	He	49.881	1.266	4167	1.23	50	99.8	89.5	110.5	
Sr	88	45	1	He	48.435	0.560	321208	0.86	50	96.9	89.5	110.5	
Mo	95	103	1	He	51.031	1.073	171786	1.33	50	102.1	89.5	110.5	
Ag	107	103	1	He	48.052	1.904	518394	0.39	50	96.1	89.5	110.5	
Cd	111	115	1	He	49.017	0.692	92550	0.50	50	98.0	89.5	110.5	
Sn	118	115	1	He	55.409	0.493	237913	0.31	50	110.8	89.5	110.5	CCV Failed
Sb	123	115	1	He	51.739	1.285	234903	0.98	50	103.5	89.5	110.5	
Ba	137	115	1	He	48.598	0.934	99864	0.63	50	97.2	89.5	110.5	
W	182	159	1	He	48.736	1.029	593828	0.73	50	97.5	89.5	110.5	
Tl	205	165	1	He	45.251	0.537	1328472	0.70	50	90.5	89.5	110.5	
Pb	208	165	1	He	46.967	0.397	1806495	0.68	50	93.9	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1579495	2.18	1663342	94.96	30	120	
Sc	45	1	He	790529	0.32	788655	100.24	30	120	
Sc	45	2	NoGas	7001049	1.93	7332116	95.48	30	120	
Rh	103	1	He	2420164	1.91	2523919	95.89	30	120	
In	115	1	He	1388639	0.32	1420677	97.74	30	120	
Tb	159	1	He	4031029	0.82	3983717	101.19	30	120	
Ho	165	1	He	4029579	0.29	4030813	99.97	30	120	
Bi	209	1	He	2964075	0.45	2997463	98.89	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	037_CCB.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T17:30:56-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	0.003	1793.4	66192	1.5	2	
Be	9	6	2	NoGas	0.014	69.2	137	37.5	1	
B	11	45	2	NoGas	1.138	11.4	13509	4.0	20	
Na	23	45	1	He	5.055	25.1	21317	6.4	1000	
Mg	24	45	1	He	1.650	35.2	1604	26.4	1000	
Al	27	45	1	He	0.119	33.9	722	2.3	50	
K	39	45	1	He	5.837	41.6	46698	2.3	1000	
Ca	44	45	1	He	7.201	26.9	708	9.9	1000	
Ti	47	45	1	He	-0.186	-20.3	13	66.1	20	
V	51	45	1	He	-0.014	-140.2	3193	5.6	2	
Cr	52	45	1	He	0.003	412.7	2611	2.1	2	
Mn	55	45	1	He	0.029	61.4	1073	7.3	2	
Fe	56	45	1	He	4.784	14.9	38499	13.6	50	
Co	59	45	1	He	0.008	34.3	184	13.3	1	
Ni	60	45	1	He	-0.002	-44.8	57	5.9	2	
Cu	63	45	1	He	0.010	128.9	1547	3.8	2	
Zn	66	45	1	He	0.249	51.4	2063	9.2	20	
As	75	115	1	He	0.119	27.9	267	11.6	2	
Se	78	115	1	He	0.030	78.1	43	4.6	2	
Sr	88	45	1	He	-0.003	-6.7	187	1.8	10	
Mo	95	103	1	He	0.215	34.4	876	32.6	2	
Ag	107	103	1	He	0.005	75.8	83	48.0	0.2	
Cd	111	115	1	He	0.024	101.1	1479	3.9	0.2	
Sn	118	115	1	He	0.198	23.8	1759	11.1	10	
Sb	123	115	1	He	0.117	11.3	689	8.1	2	
Ba	137	115	1	He	0.003	278.0	51	35.9	5	
W	182	159	1	He	0.492	28.1	11282	14.8	10	
Tl	205	165	1	He	0.072	3.1	2336	2.5	0.5	
Pb	208	165	1	He	0.019	8.8	1760	2.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1693559	1.31	1663342	101.82	30	120	
Sc	45	1	He	808039	1.54	788655	102.46	30	120	
Sc	45	2	NoGas	7475680	1.68	7332116	101.96	30	120	
Rh	103	1	He	2569936	2.61	2523919	101.82	30	120	
In	115	1	He	1467723	1.25	1420677	103.31	30	120	
Tb	159	1	He	4022479	0.20	3983717	100.97	30	120	
Ho	165	1	He	4071151	1.70	4030813	101.00	30	120	
Bi	209	1	He	3042574	0.99	2997463	101.50	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-181002/1-a
Data File Name	038_Blk.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T17:34:53-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	0.125	43.7	65701	0.2	2	
Be	9	6	2	NoGas	0.007	137.3	96	48.0	1	
B	11	45	2	NoGas	7.921	3.4	32637	3.4	20	
Na	23	45	1	He	12.688	2.2	30626	0.7	1000	
Mg	24	45	1	He	1.016	41.4	1089	28.1	1000	
Al	27	45	1	He	0.565	35.9	891	9.5	50	
K	39	45	1	He	8.913	7.0	47741	1.4	1000	
Ca	44	45	1	He	8.754	27.6	753	14.0	1000	
Ti	47	45	1	He	-0.120	-7.8	28	6.9	20	
V	51	45	1	He	0.933	8.5	13637	5.9	2	
Cr	52	45	1	He	1.369	2.2	12135	3.0	2	
Mn	55	45	1	He	0.044	42.8	1129	7.7	2	
Fe	56	45	1	He	7.248	10.4	53786	8.2	50	
Co	59	45	1	He	0.022	11.7	320	8.1	1	
Ni	60	45	1	He	0.368	13.5	974	13.7	2	
Cu	63	45	1	He	0.532	1.8	4934	1.9	2	
Zn	66	45	1	He	2.354	1.9	4940	2.0	20	
As	75	115	1	He	0.261	15.5	393	9.3	2	
Se	78	115	1	He	0.098	57.3	47	10.4	2	
Sr	88	45	1	He	0.039	5.3	460	2.9	10	
Mo	95	103	1	He	0.079	30.8	374	21.5	2	
Ag	107	103	1	He	0.008	49.2	117	37.4	0.2	
Cd	111	115	1	He	0.040	49.8	1443	2.6	0.2	
Sn	118	115	1	He	1.875	3.1	8932	2.1	10	
Sb	123	115	1	He	0.164	12.5	876	9.9	2	
Ba	137	115	1	He	0.115	5.9	281	4.2	5	
W	182	159	1	He	0.156	33.2	7228	9.2	10	
Tl	205	165	1	He	0.153	29.7	4757	28.6	0.5	
Pb	208	165	1	He	0.102	23.5	4986	18.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1660050	0.93	1663342	99.80	30	120	
Sc	45	1	He	787392	1.26	788655	99.84	30	120	
Sc	45	2	NoGas	7153957	1.44	7332116	97.57	30	120	
Rh	103	1	He	2499958	1.23	2523919	99.05	30	120	
In	115	1	He	1403179	0.82	1420677	98.77	30	120	
Tb	159	1	He	4018479	1.06	3983717	100.87	30	120	
Ho	165	1	He	4064624	0.41	4030813	100.84	30	120	
Bi	209	1	He	3409569	4.81	2997463	113.75	30	120	

Sample Report

Sample Table

Sample Name	240-46416-a-1-c mdls
Data File Name	039SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T17:38:51-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	1.595	1.595	5.55	77282	0.00	10000	
Be	9	6	2	NoGas	0.230	0.230	6.37	1067	0.02	10000	
B	11	45	2	NoGas	15.350	15.350	11.88	44413	0.03	300	
Na	23	45	1	He	108.398	108.398	0.91	151675	0.07	500000	
Mg	24	45	1	He	39.941	39.941	2.80	29814	0.13	500000	
Al	27	45	1	He	1.568	1.568	8.82	1293	0.12	200000	
K	39	45	1	He	45.579	45.579	4.38	73054	0.06	500000	
Ca	44	45	1	He	176.379	176.379	3.85	7342	2.40	500000	
Ti	47	45	1	He	-0.108	-0.108	-24.64	30	-0.36	2500	
V	51	45	1	He	1.149	1.149	8.24	15793	0.01	10000	
Cr	52	45	1	He	1.838	1.838	1.18	15189	0.01	10000	
Mn	55	45	1	He	3.773	3.773	1.24	20664	0.02	10000	
Fe	56	45	1	He	41.442	41.442	1.52	276270	0.02	200000	
Co	59	45	1	He	0.019	0.019	17.90	283	0.01	10000	
Ni	60	45	1	He	0.050	0.050	13.82	181	0.03	10000	
Cu	63	45	1	He	0.408	0.408	1.15	4061	0.01	10000	
Zn	66	45	1	He	2.224	2.224	2.48	4686	0.05	10000	
As	75	115	1	He	0.204	0.204	8.51	332	0.06	10000	
Se	78	115	1	He	-0.003	-0.003	-832.14	38	-0.01	10000	
Sr	88	45	1	He	1.909	1.909	2.63	12604	0.02	10000	
Mo	95	103	1	He	0.017	0.017	112.81	157	0.01	2000	
Ag	107	103	1	He	0.006	0.006	13.98	91	0.01	300	
Cd	111	115	1	He	0.017	0.017	87.26	1377	0.00	4000	
Sn	118	115	1	He	0.562	0.562	10.46	3200	0.02	2000	
Sb	123	115	1	He	0.106	0.106	18.93	601	0.02	300	
Ba	137	115	1	He	0.113	0.113	23.22	273	0.04	10000	
W	182	159	1	He	0.046	0.046	95.32	5775	0.00	2500	
Tl	205	165	1	He	0.026	0.026	9.95	973	0.00	5000	
Pb	208	165	1	He	0.064	0.064	18.20	3447	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1467182	3.38	1663342	88.21	30	120	
Sc	45	1	He	775316	0.15	788655	98.31	30	120	
Sc	45	2	NoGas	5876707	4.49	7332116	80.15	30	120	
Rh	103	1	He	2440323	0.70	2523919	96.69	30	120	
In	115	1	He	1379284	0.29	1420677	97.09	30	120	
Tb	159	1	He	3932528	0.78	3983717	98.72	30	120	
Ho	165	1	He	3994865	0.77	4030813	99.11	30	120	
Bi	209	1	He	3129473	1.47	2997463	104.40	30	120	

Sample Report

Sample Table

Sample Name	240-46416-a-2-c mdls
Data File Name	040SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T17:42:49-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	1.065	1.065	7.48	85748	0.00	10000	
Be	9	6	2	NoGas	0.218	0.218	7.96	1170	0.02	10000	
B	11	45	2	NoGas	13.767	13.767	2.80	50718	0.03	300	
Na	23	45	1	He	111.131	111.131	1.75	154633	0.07	500000	
Mg	24	45	1	He	40.682	40.682	2.52	30259	0.13	500000	
Al	27	45	1	He	3.236	3.236	3.65	1978	0.16	200000	
K	39	45	1	He	50.098	50.098	1.69	76014	0.07	500000	
Ca	44	45	1	He	193.136	193.136	4.81	7976	2.42	500000	
Ti	47	45	1	He	-0.133	-0.133	-17.82	24	-0.54	2500	
V	51	45	1	He	1.113	1.113	1.47	15350	0.01	10000	
Cr	52	45	1	He	1.884	1.884	6.44	15457	0.01	10000	
Mn	55	45	1	He	3.826	3.826	3.18	20871	0.02	10000	
Fe	56	45	1	He	40.670	40.670	1.44	270322	0.02	200000	
Co	59	45	1	He	0.026	0.026	20.07	359	0.01	10000	
Ni	60	45	1	He	0.089	0.089	4.99	276	0.03	10000	
Cu	63	45	1	He	1.536	1.536	2.65	11300	0.01	10000	
Zn	66	45	1	He	2.086	2.086	2.36	4483	0.05	10000	
As	75	115	1	He	0.208	0.208	11.63	338	0.06	10000	
Se	78	115	1	He	0.073	0.073	66.80	45	0.16	10000	
Sr	88	45	1	He	1.849	1.849	1.77	12178	0.02	10000	
Mo	95	103	1	He	0.010	0.010	33.96	136	0.01	2000	
Ag	107	103	1	He	0.006	0.006	22.85	89	0.01	300	
Cd	111	115	1	He	0.007	0.007	128.78	1364	0.00	4000	
Sn	118	115	1	He	0.824	0.824	8.77	4338	0.02	2000	
Sb	123	115	1	He	0.081	0.081	6.67	491	0.02	300	
Ba	137	115	1	He	0.208	0.208	11.09	469	0.04	10000	
W	182	159	1	He	0.011	0.011	496.24	5375	0.00	2500	
Tl	205	165	1	He	0.012	0.012	19.00	543	0.00	5000	
Pb	208	165	1	He	0.085	0.085	0.60	4228	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1692917	1.06	1663342	101.78	30	120	
Sc	45	1	He	772749	0.45	788655	97.98	30	120	
Sc	45	2	NoGas	7313251	1.08	7332116	99.74	30	120	
Rh	103	1	He	2482157	1.81	2523919	98.35	30	120	
In	115	1	He	1385916	0.20	1420677	97.55	30	120	
Tb	159	1	He	3942418	0.50	3983717	98.96	30	120	
Ho	165	1	He	3966576	0.55	4030813	98.41	30	120	
Bi	209	1	He	3159872	1.77	2997463	105.42	30	120	

Sample Report

Sample Table

Sample Name	240-46416-a-3-c mdls
Data File Name	041SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T17:46:45-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	1.028	1.028	9.97	85659	0.00	10000	
Be	9	6	2	NoGas	0.216	0.216	8.42	1167	0.02	10000	
B	11	45	2	NoGas	14.837	14.837	1.81	54317	0.03	300	
Na	23	45	1	He	106.094	106.094	9.45	154188	0.07	500000	
Mg	24	45	1	He	37.100	37.100	7.30	28779	0.13	500000	
Al	27	45	1	He	1.122	1.122	26.72	1148	0.10	200000	
K	39	45	1	He	44.167	44.167	20.01	74683	0.06	500000	
Ca	44	45	1	He	184.894	184.894	6.51	7967	2.32	500000	
Ti	47	45	1	He	-0.138	-0.138	-29.66	24	-0.56	2500	
V	51	45	1	He	0.976	0.976	7.95	14431	0.01	10000	
Cr	52	45	1	He	1.654	1.654	9.40	14437	0.01	10000	
Mn	55	45	1	He	3.997	3.997	6.77	22661	0.02	10000	
Fe	56	45	1	He	38.694	38.694	8.34	267826	0.01	200000	
Co	59	45	1	He	0.016	0.016	10.09	270	0.01	10000	
Ni	60	45	1	He	0.058	0.058	24.08	208	0.03	10000	
Cu	63	45	1	He	0.268	0.268	12.35	3269	0.01	10000	
Zn	66	45	1	He	1.681	1.681	10.71	4091	0.04	10000	
As	75	115	1	He	0.144	0.144	10.05	289	0.05	10000	
Se	78	115	1	He	0.005	0.005	2600.37	41	0.01	10000	
Sr	88	45	1	He	1.841	1.841	4.84	12635	0.01	10000	
Mo	95	103	1	He	0.010	0.010	176.88	138	0.01	2000	
Ag	107	103	1	He	0.005	0.005	33.47	81	0.01	300	
Cd	111	115	1	He	-0.015	-0.015	-126.75	1390	0.00	4000	
Sn	118	115	1	He	0.268	0.268	22.91	2045	0.01	2000	
Sb	123	115	1	He	0.056	0.056	41.59	392	0.01	300	
Ba	137	115	1	He	0.067	0.067	7.53	189	0.04	10000	
W	182	159	1	He	0.002	0.002	1978.31	5475	0.00	2500	
Tl	205	165	1	He	0.003	0.003	25.87	308	0.00	5000	
Pb	208	165	1	He	0.052	0.052	3.08	3087	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1702992	0.20	1663342	102.38	30	120	
Sc	45	1	He	807054	7.40	788655	102.33	30	120	
Sc	45	2	NoGas	7369007	0.42	7332116	100.50	30	120	
Rh	103	1	He	2573848	6.09	2523919	101.98	30	120	
In	115	1	He	1454708	8.41	1420677	102.40	30	120	
Tb	159	1	He	4100908	7.01	3983717	102.94	30	120	
Ho	165	1	He	4137722	6.25	4030813	102.65	30	120	
Bi	209	1	He	3198815	6.11	2997463	106.72	30	120	

Sample Report

Sample Table

Sample Name	240-46416-a-4-c mdls
Data File Name	042SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T17:50:39-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	1.097	1.097	7.08	84650	0.00	10000	
Be	9	6	2	NoGas	0.246	0.246	19.66	1293	0.02	10000	
B	11	45	2	NoGas	13.550	13.550	1.97	49080	0.03	300	
Na	23	45	1	He	104.373	104.373	5.74	153699	0.07	500000	
Mg	24	45	1	He	37.572	37.572	4.25	29447	0.13	500000	
Al	27	45	1	He	3.335	3.335	9.51	2129	0.16	200000	
K	39	45	1	He	42.738	42.738	11.05	74509	0.06	500000	
Ca	44	45	1	He	180.708	180.708	7.61	7874	2.29	500000	
Ti	47	45	1	He	-0.085	-0.085	-47.79	37	-0.23	2500	
V	51	45	1	He	1.107	1.107	10.14	16094	0.01	10000	
Cr	52	45	1	He	1.760	1.760	6.12	15362	0.01	10000	
Mn	55	45	1	He	3.539	3.539	7.54	20366	0.02	10000	
Fe	56	45	1	He	39.678	39.678	6.69	277522	0.01	200000	
Co	59	45	1	He	0.032	0.032	5.49	437	0.01	10000	
Ni	60	45	1	He	0.069	0.069	23.25	239	0.03	10000	
Cu	63	45	1	He	0.302	0.302	1.12	3542	0.01	10000	
Zn	66	45	1	He	2.040	2.040	10.16	4650	0.04	10000	
As	75	115	1	He	0.180	0.180	22.95	330	0.05	10000	
Se	78	115	1	He	-0.021	-0.021	-220.08	39	-0.05	10000	
Sr	88	45	1	He	1.794	1.794	5.62	12437	0.01	10000	
Mo	95	103	1	He	-0.001	-0.001	-1221.18	101	0.00	2000	
Ag	107	103	1	He	0.004	0.004	26.89	74	0.01	300	
Cd	111	115	1	He	0.007	0.007	442.57	1455	0.00	4000	
Sn	118	115	1	He	0.283	0.283	20.37	2148	0.01	2000	
Sb	123	115	1	He	0.047	0.047	24.76	354	0.01	300	
Ba	137	115	1	He	0.076	0.076	34.19	210	0.04	10000	
W	182	159	1	He	-0.034	-0.034	-97.76	5012	0.00	2500	
Tl	205	165	1	He	0.002	0.002	66.44	276	0.00	5000	
Pb	208	165	1	He	0.047	0.047	2.32	2927	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1667175	1.06	1663342	100.23	30	120	
Sc	45	1	He	814466	5.07	788655	103.27	30	120	
Sc	45	2	NoGas	7168798	1.83	7332116	97.77	30	120	
Rh	103	1	He	2583570	4.03	2523919	102.36	30	120	
In	115	1	He	1479513	7.40	1420677	104.14	30	120	
Tb	159	1	He	4088713	3.12	3983717	102.64	30	120	
Ho	165	1	He	4165583	3.93	4030813	103.34	30	120	
Bi	209	1	He	3234463	4.18	2997463	107.91	30	120	

Sample Report

Sample Table

Sample Name	240-46416-a-5-c mdls
Data File Name	043SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T17:54:35-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	0.985	0.985	10.48	83892	0.00	10000	
Be	9	6	2	NoGas	0.208	0.208	10.14	1104	0.02	10000	
B	11	45	2	NoGas	11.420	11.420	1.82	43608	0.03	300	
Na	23	45	1	He	106.979	106.979	5.53	147603	0.07	500000	
Mg	24	45	1	He	39.473	39.473	6.59	29009	0.14	500000	
Al	27	45	1	He	1.257	1.257	19.41	1147	0.11	200000	
K	39	45	1	He	46.120	46.120	10.69	72337	0.06	500000	
Ca	44	45	1	He	178.144	178.144	5.57	7299	2.44	500000	
Ti	47	45	1	He	-0.135	-0.135	-60.94	23	-0.58	2500	
V	51	45	1	He	1.177	1.177	8.31	15845	0.01	10000	
Cr	52	45	1	He	1.869	1.869	5.44	15172	0.01	10000	
Mn	55	45	1	He	3.714	3.714	5.65	20041	0.02	10000	
Fe	56	45	1	He	39.862	39.862	5.54	261894	0.02	200000	
Co	59	45	1	He	0.022	0.022	8.93	311	0.01	10000	
Ni	60	45	1	He	0.069	0.069	1.17	227	0.03	10000	
Cu	63	45	1	He	0.285	0.285	3.34	3219	0.01	10000	
Zn	66	45	1	He	1.305	1.305	12.04	3374	0.04	10000	
As	75	115	1	He	0.191	0.191	4.63	325	0.06	10000	
Se	78	115	1	He	-0.006	-0.006	-1881.08	38	-0.02	10000	
Sr	88	45	1	He	1.923	1.923	6.55	12500	0.02	10000	
Mo	95	103	1	He	0.000	0.000	1723.65	99	0.00	2000	
Ag	107	103	1	He	0.008	0.008	32.92	111	0.01	300	
Cd	111	115	1	He	-0.045	-0.045	-67.28	1285	0.00	4000	
Sn	118	115	1	He	0.186	0.186	14.41	1630	0.01	2000	
Sb	123	115	1	He	0.035	0.035	27.47	286	0.01	300	
Ba	137	115	1	He	0.099	0.099	17.76	249	0.04	10000	
W	182	159	1	He	-0.079	-0.079	-45.63	4253	0.00	2500	
Tl	205	165	1	He	-0.001	-0.001	-347.98	188	0.00	5000	
Pb	208	165	1	He	0.039	0.039	1.56	2463	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1667077	1.75	1663342	100.22	30	120	
Sc	45	1	He	764717	4.54	788655	96.96	30	120	
Sc	45	2	NoGas	7289195	0.75	7332116	99.41	30	120	
Rh	103	1	He	2444564	4.62	2523919	96.86	30	120	
In	115	1	He	1404182	2.07	1420677	98.84	30	120	
Tb	159	1	He	3899239	5.58	3983717	97.88	30	120	
Ho	165	1	He	3924352	4.94	4030813	97.36	30	120	
Bi	209	1	He	3029487	4.22	2997463	101.07	30	120	

Sample Report

Sample Table

Sample Name	240-46416-a-6-c mdls
Data File Name	044SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T17:58:31-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	1.288	1.288	7.55	78171	0.00	10000	
Be	9	6	2	NoGas	0.257	0.257	8.28	1222	0.02	10000	
B	11	45	2	NoGas	14.639	14.639	6.44	46188	0.03	300	
Na	23	45	1	He	115.467	115.467	17.16	146867	0.08	500000	
Mg	24	45	1	He	42.792	42.792	15.81	29179	0.15	500000	
Al	27	45	1	He	2.074	2.074	40.87	1366	0.15	200000	
K	39	45	1	He	57.287	57.287	28.11	74483	0.08	500000	
Ca	44	45	1	He	202.723	202.723	13.82	7678	2.64	500000	
Ti	47	45	1	He	-0.073	-0.073	-70.35	36	-0.21	2500	
V	51	45	1	He	1.245	1.245	15.25	15445	0.01	10000	
Cr	52	45	1	He	2.059	2.059	16.55	15301	0.01	10000	
Mn	55	45	1	He	3.985	3.985	14.61	19933	0.02	10000	
Fe	56	45	1	He	43.909	43.909	14.04	267687	0.02	200000	
Co	59	45	1	He	0.024	0.024	16.32	307	0.01	10000	
Ni	60	45	1	He	0.086	0.086	17.54	248	0.03	10000	
Cu	63	45	1	He	0.415	0.415	23.79	3749	0.01	10000	
Zn	66	45	1	He	1.698	1.698	25.63	3627	0.05	10000	
As	75	115	1	He	0.236	0.236	18.07	334	0.07	10000	
Se	78	115	1	He	0.138	0.138	112.19	45	0.31	10000	
Sr	88	45	1	He	2.036	2.036	13.32	12306	0.02	10000	
Mo	95	103	1	He	0.003	0.003	209.39	101	0.00	2000	
Ag	107	103	1	He	0.005	0.005	55.33	76	0.01	300	
Cd	111	115	1	He	0.001	0.001	7123.84	1244	0.00	4000	
Sn	118	115	1	He	0.337	0.337	41.89	2056	0.02	2000	
Sb	123	115	1	He	0.054	0.054	15.22	334	0.02	300	
Ba	137	115	1	He	0.100	0.100	24.31	224	0.04	10000	
W	182	159	1	He	-0.020	-0.020	-249.37	4638	0.00	2500	
Tl	205	165	1	He	-0.001	-0.001	-164.31	170	0.00	5000	
Pb	208	165	1	He	0.050	0.050	19.67	2653	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1516225	4.90	1663342	91.16	30	120	
Sc	45	1	He	717685	11.93	788655	91.00	30	120	
Sc	45	2	NoGas	6344605	4.16	7332116	86.53	30	120	
Rh	103	1	He	2301462	10.99	2523919	91.19	30	120	
In	115	1	He	1280785	12.23	1420677	90.15	30	120	
Tb	159	1	He	3674091	10.95	3983717	92.23	30	120	
Ho	165	1	He	3663304	12.00	4030813	90.88	30	120	
Bi	209	1	He	2889050	11.10	2997463	96.38	30	120	

Sample Report

Sample Table

Sample Name	240-46416-a-7-c mdls
Data File Name	045SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T18:02:28-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	1.098	1.098	14.07	87028	0.00	10000	
Be	9	6	2	NoGas	0.219	0.219	8.36	1196	0.02	10000	
B	11	45	2	NoGas	15.825	15.825	3.26	57259	0.03	300	
Na	23	45	1	He	105.323	105.323	1.07	152034	0.07	500000	
Mg	24	45	1	He	39.773	39.773	1.05	30549	0.13	500000	
Al	27	45	1	He	1.333	1.333	23.02	1230	0.11	200000	
K	39	45	1	He	45.016	45.016	3.27	74754	0.06	500000	
Ca	44	45	1	He	194.638	194.638	1.08	8293	2.35	500000	
Ti	47	45	1	He	-0.166	-0.166	-13.90	18	-0.93	2500	
V	51	45	1	He	0.844	0.844	7.25	12811	0.01	10000	
Cr	52	45	1	He	1.521	1.521	1.88	13372	0.01	10000	
Mn	55	45	1	He	3.730	3.730	0.44	21027	0.02	10000	
Fe	56	45	1	He	40.008	40.008	0.86	274602	0.01	200000	
Co	59	45	1	He	0.015	0.015	33.74	253	0.01	10000	
Ni	60	45	1	He	0.033	0.033	32.95	144	0.02	10000	
Cu	63	45	1	He	0.224	0.224	7.26	2950	0.01	10000	
Zn	66	45	1	He	3.868	3.868	4.65	7137	0.05	10000	
As	75	115	1	He	0.093	0.093	14.77	234	0.04	10000	
Se	78	115	1	He	-0.048	-0.048	-113.55	36	-0.13	10000	
Sr	88	45	1	He	1.858	1.858	1.75	12626	0.01	10000	
Mo	95	103	1	He	-0.004	-0.004	-56.83	87	-0.01	2000	
Ag	107	103	1	He	0.004	0.004	21.40	74	0.01	300	
Cd	111	115	1	He	-0.017	-0.017	-54.80	1360	0.00	4000	
Sn	118	115	1	He	0.092	0.092	44.98	1248	0.01	2000	
Sb	123	115	1	He	0.025	0.025	31.59	241	0.01	300	
Ba	137	115	1	He	0.114	0.114	17.80	283	0.04	10000	
W	182	159	1	He	-0.014	-0.014	-290.43	5168	0.00	2500	
Tl	205	165	1	He	-0.003	-0.003	-48.51	137	0.00	5000	
Pb	208	165	1	He	0.030	0.030	6.77	2201	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1725770	2.27	1663342	103.75	30	120	
Sc	45	1	He	797686	0.81	788655	101.15	30	120	
Sc	45	2	NoGas	7369948	2.12	7332116	100.52	30	120	
Rh	103	1	He	2555698	1.24	2523919	101.26	30	120	
In	115	1	He	1428000	0.28	1420677	100.52	30	120	
Tb	159	1	He	4018177	1.40	3983717	100.87	30	120	
Ho	165	1	He	4083624	1.12	4030813	101.31	30	120	
Bi	209	1	He	3133665	0.86	2997463	104.54	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2012431
Data File Name	046_CCV.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T18:06:23-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	49.006	0.455	1045805	1.20	50	98.0	89.5	110.5	
Be	9	6	2	NoGas	48.816	0.396	240463	0.87	50	97.6	89.5	110.5	
B	11	45	2	NoGas	48.154	0.951	154704	1.49	50	96.3	89.5	110.5	
Na	23	45	1	He	24481.214	0.948	31592130	0.43	25000	97.9	89.5	110.5	
Mg	24	45	1	He	24226.313	1.377	18172696	0.81	25000	96.9	89.5	110.5	
Al	27	45	1	He	240.868	2.580	102037	1.56	250	96.3	89.5	110.5	
K	39	45	1	He	24423.044	1.926	17665613	0.87	25000	97.7	89.5	110.5	
Ca	44	45	1	He	23592.222	2.407	944180	1.22	25000	94.4	89.5	110.5	
Ti	47	45	1	He	50.232	2.586	11257	1.83	50	100.5	89.5	110.5	
V	51	45	1	He	48.766	2.248	545540	1.40	50	97.5	89.5	110.5	
Cr	52	45	1	He	48.745	2.316	344771	1.03	50	97.5	89.5	110.5	
Mn	55	45	1	He	238.970	1.167	1273748	0.30	250	95.6	89.5	110.5	
Fe	56	45	1	He	12148.973	1.864	80592388	0.63	12500	97.2	89.5	110.5	
Co	59	45	1	He	49.397	1.391	485840	0.50	50	98.8	89.5	110.5	
Ni	60	45	1	He	49.114	0.956	121828	0.32	50	98.2	89.5	110.5	
Cu	63	45	1	He	49.419	1.442	325596	0.71	50	98.8	89.5	110.5	
Zn	66	45	1	He	48.962	2.064	69817	1.01	50	97.9	89.5	110.5	
As	75	115	1	He	49.586	2.373	48319	0.57	50	99.2	89.5	110.5	
Se	78	115	1	He	48.748	2.500	4098	1.47	50	97.5	89.5	110.5	
Sr	88	45	1	He	48.914	1.305	323201	0.16	50	97.8	89.5	110.5	
Mo	95	103	1	He	52.280	1.321	174218	0.05	50	104.6	89.5	110.5	
Ag	107	103	1	He	49.166	1.316	525157	0.73	50	98.3	89.5	110.5	
Cd	111	115	1	He	49.146	4.133	93319	1.22	50	98.3	89.5	110.5	
Sn	118	115	1	He	54.464	3.501	235232	0.92	50	108.9	89.5	110.5	
Sb	123	115	1	He	51.715	3.817	236150	0.99	50	103.4	89.5	110.5	
Ba	137	115	1	He	48.612	3.589	100475	0.86	50	97.2	89.5	110.5	
W	182	159	1	He	50.112	0.789	596131	1.03	50	100.2	89.5	110.5	
Tl	205	165	1	He	46.527	2.261	1343277	0.40	50	93.1	89.5	110.5	
Pb	208	165	1	He	48.465	2.910	1832962	0.57	50	96.9	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1642225	1.07	1663342	98.73	30	120	
Sc	45	1	He	787737	1.27	788655	99.88	30	120	
Sc	45	2	NoGas	7401047	0.91	7332116	100.94	30	120	
Rh	103	1	He	2395873	1.34	2523919	94.93	30	120	
In	115	1	He	1397639	2.86	1420677	98.38	30	120	
Tb	159	1	He	3936405	0.82	3983717	98.81	30	120	
Ho	165	1	He	3964312	2.58	4030813	98.35	30	120	
Bi	209	1	He	2891265	0.36	2997463	96.46	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	047_CCB.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T18:10:17-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.003	-1382.7	66226	2.0	2	
Be	9	6	2	NoGas	-0.001	-494.4	59	39.0	1	
B	11	45	2	NoGas	0.795	18.1	12490	3.1	20	
Na	23	45	1	He	3.423	24.6	19044	5.0	1000	
Mg	24	45	1	He	0.971	14.7	1078	9.8	1000	
Al	27	45	1	He	0.285	32.8	789	5.8	50	
K	39	45	1	He	4.721	41.8	45592	2.6	1000	
Ca	44	45	1	He	4.680	9.2	601	2.9	1000	
Ti	47	45	1	He	-0.181	-20.0	14	58.1	20	
V	51	45	1	He	-0.018	-166.6	3127	10.0	2	
Cr	52	45	1	He	0.020	136.2	2718	7.8	2	
Mn	55	45	1	He	0.041	39.3	1133	7.7	2	
Fe	56	45	1	He	4.265	17.2	34748	15.2	50	
Co	59	45	1	He	0.005	28.9	158	10.0	1	
Ni	60	45	1	He	-0.001	-573.6	59	31.2	2	
Cu	63	45	1	He	-0.005	-250.9	1442	4.8	2	
Zn	66	45	1	He	0.228	79.7	2021	13.0	20	
As	75	115	1	He	0.118	27.6	260	11.4	2	
Se	78	115	1	He	0.041	78.5	43	7.5	2	
Sr	88	45	1	He	-0.009	-50.8	141	21.9	10	
Mo	95	103	1	He	0.195	44.3	797	38.5	2	
Ag	107	103	1	He	0.004	20.1	78	13.1	0.2	
Cd	111	115	1	He	0.015	315.4	1428	5.4	0.2	
Sn	118	115	1	He	0.166	3.6	1582	2.1	10	
Sb	123	115	1	He	0.075	26.7	480	19.2	2	
Ba	137	115	1	He	0.005	149.0	53	27.2	5	
W	182	159	1	He	0.409	21.8	10293	10.8	10	
Tl	205	165	1	He	0.060	7.3	1981	5.4	0.5	
Pb	208	165	1	He	0.019	5.6	1769	3.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1691870	1.01	1663342	101.72	30	120	
Sc	45	1	He	802885	0.99	788655	101.80	30	120	
Sc	45	2	NoGas	7491376	0.89	7332116	102.17	30	120	
Rh	103	1	He	2559335	1.07	2523919	101.40	30	120	
In	115	1	He	1435025	1.20	1420677	101.01	30	120	
Tb	159	1	He	4026828	1.09	3983717	101.08	30	120	
Ho	165	1	He	4036678	1.13	4030813	100.15	30	120	
Bi	209	1	He	3037715	0.43	2997463	101.34	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-181002/1-a
Data File Name	048_Blk.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T18:14:12-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	0.195	47.8	66704	3.0	2	
Be	9	6	2	NoGas	0.001	557.6	70	55.5	1	
B	11	45	2	NoGas	8.993	5.1	35543	1.6	20	
Na	23	45	1	He	10.213	14.7	27632	2.0	1000	
Mg	24	45	1	He	0.374	57.4	611	22.0	1000	
Al	27	45	1	He	0.476	101.7	856	19.5	50	
K	39	45	1	He	9.715	76.9	48585	5.2	1000	
Ca	44	45	1	He	4.621	14.6	593	8.3	1000	
Ti	47	45	1	He	-0.111	-32.5	30	29.4	20	
V	51	45	1	He	0.729	6.6	11461	2.9	2	
Cr	52	45	1	He	0.869	8.1	8691	2.3	2	
Mn	55	45	1	He	0.003	599.2	916	4.2	2	
Fe	56	45	1	He	8.357	5.7	61714	5.7	50	
Co	59	45	1	He	0.017	42.9	270	22.5	1	
Ni	60	45	1	He	0.058	36.3	208	29.1	2	
Cu	63	45	1	He	0.335	13.8	3667	4.3	2	
Zn	66	45	1	He	1.982	12.1	4453	1.7	20	
As	75	115	1	He	0.231	12.2	372	6.3	2	
Se	78	115	1	He	0.093	86.5	48	6.4	2	
Sr	88	45	1	He	0.025	22.9	369	14.4	10	
Mo	95	103	1	He	0.045	51.9	260	34.9	2	
Ag	107	103	1	He	0.003	52.7	60	30.9	0.2	
Cd	111	115	1	He	-0.005	-492.0	1393	9.9	0.2	
Sn	118	115	1	He	1.287	7.7	6535	6.5	10	
Sb	123	115	1	He	0.107	28.3	630	24.1	2	
Ba	137	115	1	He	0.081	21.7	214	9.1	5	
W	182	159	1	He	0.164	45.2	7406	17.0	10	
Tl	205	165	1	He	0.035	2.4	1249	8.1	0.5	
Pb	208	165	1	He	0.044	13.5	2705	2.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1671179	2.19	1663342	100.47	30	120	
Sc	45	1	He	795059	5.74	788655	100.81	30	120	
Sc	45	2	NoGas	7118736	3.60	7332116	97.09	30	120	
Rh	103	1	He	2510016	6.40	2523919	99.45	30	120	
In	115	1	He	1438375	8.07	1420677	101.25	30	120	
Tb	159	1	He	4050587	6.90	3983717	101.68	30	120	
Ho	165	1	He	4046335	6.18	4030813	100.39	30	120	
Bi	209	1	He	3168199	3.95	2997463	105.70	30	120	

Sample Report

Sample Table

Sample Name	240-46416-a-10-b mdls
Data File Name	049SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T18:18:08-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	1.001	1.001	10.08	85063	0.00	10000	
Be	9	6	2	NoGas	0.178	0.178	11.64	956	0.02	10000	
B	11	45	2	NoGas	11.895	11.895	2.60	45471	0.03	300	
Na	23	45	1	He	108.949	108.949	3.08	154211	0.07	500000	
Mg	24	45	1	He	40.505	40.505	3.45	30593	0.13	500000	
Al	27	45	1	He	1.808	1.808	22.30	1409	0.13	200000	
K	39	45	1	He	48.143	48.143	7.60	75776	0.06	500000	
Ca	44	45	1	He	184.573	184.573	0.36	7759	2.38	500000	
Ti	47	45	1	He	-0.160	-0.160	-22.83	19	-0.85	2500	
V	51	45	1	He	1.164	1.164	4.01	16150	0.01	10000	
Cr	52	45	1	He	1.891	1.891	1.66	15747	0.01	10000	
Mn	55	45	1	He	3.834	3.834	3.09	21233	0.02	10000	
Fe	56	45	1	He	41.662	41.662	1.54	281103	0.01	200000	
Co	59	45	1	He	0.016	0.016	20.70	258	0.01	10000	
Ni	60	45	1	He	0.064	0.064	9.80	220	0.03	10000	
Cu	63	45	1	He	0.302	0.302	10.93	3413	0.01	10000	
Zn	66	45	1	He	2.293	2.293	1.20	4841	0.05	10000	
As	75	115	1	He	0.190	0.190	21.51	325	0.06	10000	
Se	78	115	1	He	-0.010	-0.010	-311.73	38	-0.03	10000	
Sr	88	45	1	He	1.884	1.884	3.96	12594	0.01	10000	
Mo	95	103	1	He	0.014	0.014	60.44	150	0.01	2000	
Ag	107	103	1	He	0.004	0.004	20.71	77	0.01	300	
Cd	111	115	1	He	0.007	0.007	392.13	1391	0.00	4000	
Sn	118	115	1	He	0.226	0.226	11.42	1819	0.01	2000	
Sb	123	115	1	He	0.068	0.068	19.78	437	0.02	300	
Ba	137	115	1	He	0.106	0.106	11.14	266	0.04	10000	
W	182	159	1	He	0.049	0.049	91.40	5783	0.00	2500	
Tl	205	165	1	He	0.009	0.009	33.54	450	0.00	5000	
Pb	208	165	1	He	0.048	0.048	5.15	2806	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1671340	0.99	1663342	100.48	30	120	
Sc	45	1	He	784908	1.75	788655	99.52	30	120	
Sc	45	2	NoGas	7362424	0.77	7332116	100.41	30	120	
Rh	103	1	He	2493512	2.46	2523919	98.80	30	120	
In	115	1	He	1412840	4.08	1420677	99.45	30	120	
Tb	159	1	He	3919480	2.00	3983717	98.39	30	120	
Ho	165	1	He	3950744	1.75	4030813	98.01	30	120	
Bi	209	1	He	2996856	1.42	2997463	99.98	30	120	

Sample Report

Sample Table

Sample Name	240-46416-a-11-b mdls
Data File Name	050SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T18:22:02-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	1.020	1.020	8.69	84357	0.00	10000	
Be	9	6	2	NoGas	0.225	0.225	5.06	1215	0.02	10000	
B	11	45	2	NoGas	13.372	13.372	1.00	49262	0.03	300	
Na	23	45	1	He	108.385	108.385	18.43	151040	0.07	500000	
Mg	24	45	1	He	39.730	39.730	20.22	29447	0.13	500000	
Al	27	45	1	He	4.633	4.633	26.71	2548	0.18	200000	
K	39	45	1	He	46.712	46.712	34.40	73653	0.06	500000	
Ca	44	45	1	He	196.553	196.553	19.43	8089	2.43	500000	
Ti	47	45	1	He	-0.117	-0.117	-31.91	29	-0.41	2500	
V	51	45	1	He	1.149	1.149	20.13	15753	0.01	10000	
Cr	52	45	1	He	1.903	1.903	17.81	15604	0.01	10000	
Mn	55	45	1	He	3.733	3.733	16.31	20393	0.02	10000	
Fe	56	45	1	He	40.445	40.445	16.36	268842	0.02	200000	
Co	59	45	1	He	0.019	0.019	26.16	290	0.01	10000	
Ni	60	45	1	He	0.076	0.076	15.10	248	0.03	10000	
Cu	63	45	1	He	1.443	1.443	17.88	10710	0.01	10000	
Zn	66	45	1	He	1.943	1.943	32.07	4269	0.05	10000	
As	75	115	1	He	0.179	0.179	39.76	313	0.06	10000	
Se	78	115	1	He	0.053	0.053	242.88	43	0.12	10000	
Sr	88	45	1	He	1.918	1.918	14.17	12648	0.02	10000	
Mo	95	103	1	He	0.012	0.012	164.26	136	0.01	2000	
Ag	107	103	1	He	0.006	0.006	25.31	93	0.01	300	
Cd	111	115	1	He	-0.023	-0.023	-184.18	1347	0.00	4000	
Sn	118	115	1	He	0.536	0.536	38.77	3119	0.02	2000	
Sb	123	115	1	He	0.046	0.046	31.61	336	0.01	300	
Ba	137	115	1	He	0.073	0.073	8.11	198	0.04	10000	
W	182	159	1	He	-0.027	-0.027	-101.80	4953	0.00	2500	
Tl	205	165	1	He	0.001	0.001	465.92	216	0.00	5000	
Pb	208	165	1	He	0.068	0.068	12.30	3568	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1706609	2.34	1663342	102.60	30	120	
Sc	45	1	He	784872	14.58	788655	99.52	30	120	
Sc	45	2	NoGas	7271035	1.27	7332116	99.17	30	120	
Rh	103	1	He	2500508	12.75	2523919	99.07	30	120	
In	115	1	He	1431686	15.74	1420677	100.77	30	120	
Tb	159	1	He	3972804	12.93	3983717	99.73	30	120	
Ho	165	1	He	3985031	13.01	4030813	98.86	30	120	
Bi	209	1	He	2998410	13.35	2997463	100.03	30	120	

Sample Report

Sample Table

Sample Name	240-46416-a-12-b mdls
Data File Name	051SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T18:25:58-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	1.053	1.053	6.19	84182	0.00	10000	
Be	9	6	2	NoGas	0.220	0.220	17.74	1178	0.02	10000	
B	11	45	2	NoGas	14.969	14.969	2.73	53463	0.03	300	
Na	23	45	1	He	106.861	106.861	3.06	150508	0.07	500000	
Mg	24	45	1	He	38.673	38.673	2.69	29035	0.13	500000	
Al	27	45	1	He	1.172	1.172	21.60	1136	0.10	200000	
K	39	45	1	He	47.157	47.157	2.61	74568	0.06	500000	
Ca	44	45	1	He	184.578	184.578	3.80	7705	2.40	500000	
Ti	47	45	1	He	-0.164	-0.164	-37.24	18	-0.92	2500	
V	51	45	1	He	1.040	1.040	7.40	14678	0.01	10000	
Cr	52	45	1	He	1.758	1.758	2.32	14717	0.01	10000	
Mn	55	45	1	He	3.905	3.905	1.18	21469	0.02	10000	
Fe	56	45	1	He	39.372	39.372	1.27	264146	0.01	200000	
Co	59	45	1	He	0.015	0.015	6.64	251	0.01	10000	
Ni	60	45	1	He	0.239	0.239	5.16	648	0.04	10000	
Cu	63	45	1	He	0.232	0.232	2.26	2937	0.01	10000	
Zn	66	45	1	He	1.851	1.851	9.44	4196	0.04	10000	
As	75	115	1	He	0.150	0.150	8.04	282	0.05	10000	
Se	78	115	1	He	0.021	0.021	282.10	40	0.05	10000	
Sr	88	45	1	He	1.910	1.910	3.45	12679	0.02	10000	
Mo	95	103	1	He	0.003	0.003	113.97	109	0.00	2000	
Ag	107	103	1	He	0.004	0.004	37.86	69	0.01	300	
Cd	111	115	1	He	0.013	0.013	249.76	1377	0.00	4000	
Sn	118	115	1	He	0.193	0.193	23.13	1641	0.01	2000	
Sb	123	115	1	He	0.035	0.035	26.67	279	0.01	300	
Ba	137	115	1	He	0.062	0.062	18.19	170	0.04	10000	
W	182	159	1	He	-0.028	-0.028	-97.03	4871	0.00	2500	
Tl	205	165	1	He	-0.001	-0.001	-50.70	176	0.00	5000	
Pb	208	165	1	He	0.039	0.039	3.42	2478	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1683817	3.24	1663342	101.23	30	120	
Sc	45	1	He	779437	0.58	788655	98.83	30	120	
Sc	45	2	NoGas	7200486	1.65	7332116	98.20	30	120	
Rh	103	1	He	2459231	1.08	2523919	97.44	30	120	
In	115	1	He	1386094	0.42	1420677	97.57	30	120	
Tb	159	1	He	3905463	1.03	3983717	98.04	30	120	
Ho	165	1	He	3956839	0.54	4030813	98.16	30	120	
Bi	209	1	He	3036991	0.45	2997463	101.32	30	120	

Sample Report

Sample Table

Sample Name	240-46416-a-13-b mdls
Data File Name	052SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T18:29:55-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	1.002	1.002	6.40	84081	0.00	10000	
Be	9	6	2	NoGas	0.202	0.202	10.02	1089	0.02	10000	
B	11	45	2	NoGas	13.274	13.274	1.76	49006	0.03	300	
Na	23	45	1	He	109.037	109.037	1.97	152639	0.07	500000	
Mg	24	45	1	He	40.028	40.028	3.66	29911	0.13	500000	
Al	27	45	1	He	0.981	0.981	15.81	1051	0.09	200000	
K	39	45	1	He	47.937	47.937	4.49	74810	0.06	500000	
Ca	44	45	1	He	186.463	186.463	1.08	7747	2.41	500000	
Ti	47	45	1	He	-0.087	-0.087	-57.10	34	-0.25	2500	
V	51	45	1	He	1.192	1.192	2.03	16286	0.01	10000	
Cr	52	45	1	He	1.870	1.870	2.24	15430	0.01	10000	
Mn	55	45	1	He	3.746	3.746	1.27	20545	0.02	10000	
Fe	56	45	1	He	42.833	42.833	1.93	285639	0.01	200000	
Co	59	45	1	He	0.028	0.028	15.78	374	0.01	10000	
Ni	60	45	1	He	0.086	0.086	11.82	271	0.03	10000	
Cu	63	45	1	He	0.292	0.292	3.32	3315	0.01	10000	
Zn	66	45	1	He	2.107	2.107	4.44	4531	0.05	10000	
As	75	115	1	He	0.169	0.169	20.41	299	0.06	10000	
Se	78	115	1	He	0.079	0.079	133.47	45	0.18	10000	
Sr	88	45	1	He	1.889	1.889	2.08	12490	0.02	10000	
Mo	95	103	1	He	0.009	0.009	136.23	129	0.01	2000	
Ag	107	103	1	He	0.005	0.005	39.92	79	0.01	300	
Cd	111	115	1	He	0.002	0.002	1115.05	1351	0.00	4000	
Sn	118	115	1	He	0.835	0.835	10.55	4367	0.02	2000	
Sb	123	115	1	He	0.040	0.040	54.12	300	0.01	300	
Ba	137	115	1	He	0.064	0.064	45.48	173	0.04	10000	
W	182	159	1	He	-0.057	-0.057	-26.91	4538	0.00	2500	
Tl	205	165	1	He	-0.002	-0.002	-98.53	146	0.00	5000	
Pb	208	165	1	He	0.042	0.042	7.00	2568	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1691686	0.99	1663342	101.70	30	120	
Sc	45	1	He	776143	0.68	788655	98.41	30	120	
Sc	45	2	NoGas	7275552	0.21	7332116	99.23	30	120	
Rh	103	1	He	2480138	0.65	2523919	98.27	30	120	
In	115	1	He	1381307	0.86	1420677	97.23	30	120	
Tb	159	1	He	3915438	0.23	3983717	98.29	30	120	
Ho	165	1	He	3946268	0.29	4030813	97.90	30	120	
Bi	209	1	He	3034197	0.36	2997463	101.23	30	120	

Sample Report

Sample Table

Sample Name	240-46416-a-14-b mdls
Data File Name	053SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T18:33:50-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	1.048	1.048	8.12	83917	0.00	10000	
Be	9	6	2	NoGas	0.206	0.206	19.93	1078	0.02	10000	
B	11	45	2	NoGas	11.291	11.291	0.91	42609	0.03	300	
Na	23	45	1	He	106.642	106.642	1.66	149256	0.07	500000	
Mg	24	45	1	He	39.257	39.257	5.31	29272	0.13	500000	
Al	27	45	1	He	1.352	1.352	14.16	1202	0.11	200000	
K	39	45	1	He	43.900	43.900	4.85	71775	0.06	500000	
Ca	44	45	1	He	179.745	179.745	1.15	7465	2.41	500000	
Ti	47	45	1	He	-0.123	-0.123	-42.94	27	-0.46	2500	
V	51	45	1	He	1.155	1.155	5.71	15834	0.01	10000	
Cr	52	45	1	He	1.859	1.859	3.53	15320	0.01	10000	
Mn	55	45	1	He	3.769	3.769	1.30	20615	0.02	10000	
Fe	56	45	1	He	39.056	39.056	0.98	260371	0.02	200000	
Co	59	45	1	He	0.014	0.014	22.78	243	0.01	10000	
Ni	60	45	1	He	0.089	0.089	10.67	277	0.03	10000	
Cu	63	45	1	He	0.225	0.225	10.09	2870	0.01	10000	
Zn	66	45	1	He	1.313	1.313	3.91	3433	0.04	10000	
As	75	115	1	He	0.194	0.194	14.89	323	0.06	10000	
Se	78	115	1	He	0.086	0.086	113.93	45	0.19	10000	
Sr	88	45	1	He	1.915	1.915	2.01	12629	0.02	10000	
Mo	95	103	1	He	-0.001	-0.001	-1172.23	97	0.00	2000	
Ag	107	103	1	He	0.003	0.003	75.60	61	0.01	300	
Cd	111	115	1	He	0.006	0.006	468.71	1355	0.00	4000	
Sn	118	115	1	He	0.132	0.132	11.21	1374	0.01	2000	
Sb	123	115	1	He	0.041	0.041	37.05	306	0.01	300	
Ba	137	115	1	He	0.081	0.081	13.29	208	0.04	10000	
W	182	159	1	He	-0.064	-0.064	-90.70	4542	0.00	2500	
Tl	205	165	1	He	-0.003	-0.003	-1.06	113	0.00	5000	
Pb	208	165	1	He	0.032	0.032	6.74	2243	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1643479	0.39	1663342	98.81	30	120	
Sc	45	1	He	774346	0.41	788655	98.19	30	120	
Sc	45	2	NoGas	7184794	0.47	7332116	97.99	30	120	
Rh	103	1	He	2462924	1.64	2523919	97.58	30	120	
In	115	1	He	1378080	1.10	1420677	97.00	30	120	
Tb	159	1	He	3989714	0.44	3983717	100.15	30	120	
Ho	165	1	He	3983103	2.12	4030813	98.82	30	120	
Bi	209	1	He	3074476	0.31	2997463	102.57	30	120	

Sample Report

Sample Table

Sample Name	240-46416-a-15-b mdls
Data File Name	054SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T18:37:45-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	1.053	1.053	6.95	82236	0.00	10000	
Be	9	6	2	NoGas	0.195	0.195	11.47	1015	0.02	10000	
B	11	45	2	NoGas	11.256	11.256	5.12	41603	0.03	300	
Na	23	45	1	He	103.585	103.585	2.82	144139	0.07	500000	
Mg	24	45	1	He	38.582	38.582	3.48	28527	0.14	500000	
Al	27	45	1	He	1.565	1.565	13.10	1280	0.12	200000	
K	39	45	1	He	44.907	44.907	1.55	71876	0.06	500000	
Ca	44	45	1	He	175.091	175.091	4.59	7219	2.43	500000	
Ti	47	45	1	He	-0.152	-0.152	-46.23	20	-0.76	2500	
V	51	45	1	He	1.115	1.115	9.41	15273	0.01	10000	
Cr	52	45	1	He	1.867	1.867	0.98	15240	0.01	10000	
Mn	55	45	1	He	3.584	3.584	2.25	19482	0.02	10000	
Fe	56	45	1	He	39.114	39.114	1.09	258550	0.02	200000	
Co	59	45	1	He	0.015	0.015	11.45	251	0.01	10000	
Ni	60	45	1	He	0.060	0.060	15.34	206	0.03	10000	
Cu	63	45	1	He	0.275	0.275	11.46	3169	0.01	10000	
Zn	66	45	1	He	1.248	1.248	10.50	3316	0.04	10000	
As	75	115	1	He	0.177	0.177	17.47	303	0.06	10000	
Se	78	115	1	He	0.006	0.006	696.01	38	0.02	10000	
Sr	88	45	1	He	1.877	1.877	1.32	12276	0.02	10000	
Mo	95	103	1	He	-0.003	-0.003	-283.78	89	0.00	2000	
Ag	107	103	1	He	0.004	0.004	35.37	72	0.01	300	
Cd	111	115	1	He	0.007	0.007	326.78	1342	0.00	4000	
Sn	118	115	1	He	0.116	0.116	24.72	1293	0.01	2000	
Sb	123	115	1	He	0.030	0.030	9.78	252	0.01	300	
Ba	137	115	1	He	0.076	0.076	32.11	196	0.04	10000	
W	182	159	1	He	-0.070	-0.070	-33.90	4360	0.00	2500	
Tl	205	165	1	He	-0.003	-0.003	-9.19	109	0.00	5000	
Pb	208	165	1	He	0.035	0.035	6.97	2329	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1626485	1.83	1663342	97.78	30	120	
Sc	45	1	He	767824	0.92	788655	97.36	30	120	
Sc	45	2	NoGas	7033457	0.96	7332116	95.93	30	120	
Rh	103	1	He	2450425	0.56	2523919	97.09	30	120	
In	115	1	He	1363408	1.01	1420677	95.97	30	120	
Tb	159	1	He	3893220	0.10	3983717	97.73	30	120	
Ho	165	1	He	3946840	1.52	4030813	97.92	30	120	
Bi	209	1	He	2994546	0.68	2997463	99.90	30	120	

Sample Report

Sample Table

Sample Name	240-46416-a-16-b mdls
Data File Name	055SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T18:41:39-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	1.003	1.003	6.28	83769	0.00	10000	
Be	9	6	2	NoGas	0.187	0.187	9.42	989	0.02	10000	
B	11	45	2	NoGas	15.661	15.661	1.16	55844	0.03	300	
Na	23	45	1	He	108.471	108.471	0.80	149789	0.07	500000	
Mg	24	45	1	He	40.911	40.911	3.92	30130	0.14	500000	
Al	27	45	1	He	2.152	2.152	8.48	1516	0.14	200000	
K	39	45	1	He	45.690	45.690	1.97	72184	0.06	500000	
Ca	44	45	1	He	189.440	189.440	1.07	7754	2.44	500000	
Ti	47	45	1	He	-0.141	-0.141	-38.56	22	-0.64	2500	
V	51	45	1	He	0.890	0.890	2.85	12786	0.01	10000	
Cr	52	45	1	He	1.656	1.656	4.34	13752	0.01	10000	
Mn	55	45	1	He	3.806	3.806	1.11	20564	0.02	10000	
Fe	56	45	1	He	40.293	40.293	1.09	265259	0.02	200000	
Co	59	45	1	He	0.010	0.010	35.36	202	0.01	10000	
Ni	60	45	1	He	0.050	0.050	19.06	179	0.03	10000	
Cu	63	45	1	He	0.155	0.155	14.54	2391	0.01	10000	
Zn	66	45	1	He	4.051	4.051	2.85	7095	0.06	10000	
As	75	115	1	He	0.098	0.098	7.93	233	0.04	10000	
Se	78	115	1	He	-0.010	-0.010	-142.89	38	-0.03	10000	
Sr	88	45	1	He	1.901	1.901	1.94	12386	0.02	10000	
Mo	95	103	1	He	-0.005	-0.005	-227.46	82	-0.01	2000	
Ag	107	103	1	He	0.003	0.003	43.64	58	0.00	300	
Cd	111	115	1	He	-0.011	-0.011	-288.09	1338	0.00	4000	
Sn	118	115	1	He	0.019	0.019	125.14	900	0.00	2000	
Sb	123	115	1	He	0.016	0.016	38.99	197	0.01	300	
Ba	137	115	1	He	0.116	0.116	5.04	282	0.04	10000	
W	182	159	1	He	-0.056	-0.056	-66.15	4516	0.00	2500	
Tl	205	165	1	He	-0.004	-0.004	-4.75	97	0.00	5000	
Pb	208	165	1	He	0.026	0.026	3.31	1989	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1657019	1.68	1663342	99.62	30	120	
Sc	45	1	He	765230	0.96	788655	97.03	30	120	
Sc	45	2	NoGas	7247382	0.49	7332116	98.84	30	120	
Rh	103	1	He	2437856	0.94	2523919	96.59	30	120	
In	115	1	He	1393975	1.36	1420677	98.12	30	120	
Tb	159	1	He	3876465	2.40	3983717	97.31	30	120	
Ho	165	1	He	3938544	1.06	4030813	97.71	30	120	
Bi	209	1	He	3066532	1.72	2997463	102.30	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2012431
Data File Name	056_CCV.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T18:45:34-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	49.664	1.113	1044542	1.39	50	99.3	89.5	110.5	
Be	9	6	2	NoGas	49.414	0.309	241950	1.02	50	98.8	89.5	110.5	
B	11	45	2	NoGas	48.712	1.948	154249	2.01	50	97.4	89.5	110.5	
Na	23	45	1	He	23881.709	0.878	31114270	0.70	25000	95.5	89.5	110.5	
Mg	24	45	1	He	23853.954	2.033	18064962	1.84	25000	95.4	89.5	110.5	
Al	27	45	1	He	238.345	0.823	101955	0.70	250	95.3	89.5	110.5	
K	39	45	1	He	23877.379	0.638	17438912	0.70	25000	95.5	89.5	110.5	
Ca	44	45	1	He	23091.370	0.251	933120	0.07	25000	92.4	89.5	110.5	
Ti	47	45	1	He	48.908	2.919	11068	2.99	50	97.8	89.5	110.5	
V	51	45	1	He	47.493	1.013	536516	0.84	50	95.0	89.5	110.5	
Cr	52	45	1	He	47.438	1.052	338848	0.85	50	94.9	89.5	110.5	
Mn	55	45	1	He	233.526	0.332	1256716	0.20	250	93.4	89.5	110.5	
Fe	56	45	1	He	11810.277	0.367	79103650	0.36	12500	94.5	89.5	110.5	
Co	59	45	1	He	47.680	0.647	473469	0.45	50	95.4	89.5	110.5	
Ni	60	45	1	He	47.695	0.613	119446	0.52	50	95.4	89.5	110.5	
Cu	63	45	1	He	48.137	1.027	320240	0.96	50	96.3	89.5	110.5	
Zn	66	45	1	He	47.917	1.290	69024	1.16	50	95.8	89.5	110.5	
As	75	115	1	He	49.725	0.449	47804	0.53	50	99.4	89.5	110.5	
Se	78	115	1	He	49.105	1.715	4072	1.76	50	98.2	89.5	110.5	
Sr	88	45	1	He	47.434	1.046	316440	0.85	50	94.9	89.5	110.5	
Mo	95	103	1	He	50.746	0.451	170284	0.64	50	101.5	89.5	110.5	
Ag	107	103	1	He	47.716	0.655	513186	0.58	50	95.4	89.5	110.5	
Cd	111	115	1	He	49.093	0.141	91998	0.01	50	98.2	89.5	110.5	
Sn	118	115	1	He	54.473	1.176	232157	1.21	50	108.9	89.5	110.5	
Sb	123	115	1	He	51.677	0.643	232871	0.50	50	103.4	89.5	110.5	
Ba	137	115	1	He	48.739	1.275	99405	1.21	50	97.5	89.5	110.5	
W	182	159	1	He	48.896	0.780	587909	1.17	50	97.8	89.5	110.5	
Tl	205	165	1	He	45.564	0.307	1328095	0.38	50	91.1	89.5	110.5	
Pb	208	165	1	He	47.433	0.516	1811372	0.42	50	94.9	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1632345	0.93	1663342	98.14	30	120	
Sc	45	1	He	795235	0.20	788655	100.83	30	120	
Sc	45	2	NoGas	7300132	0.47	7332116	99.56	30	120	
Rh	103	1	He	2412180	0.22	2523919	95.57	30	120	
In	115	1	He	1378246	0.15	1420677	97.01	30	120	
Tb	159	1	He	3977641	0.56	3983717	99.85	30	120	
Ho	165	1	He	4000831	0.43	4030813	99.26	30	120	
Bi	209	1	He	2919860	1.21	2997463	97.41	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	057_CCB.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T18:49:26-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	0.041	144.3	65177	2.4	2	
Be	9	6	2	NoGas	0.007	99.1	96	33.3	1	
B	11	45	2	NoGas	0.571	40.8	11463	5.4	20	
Na	23	45	1	He	3.062	22.1	18391	4.6	1000	
Mg	24	45	1	He	0.432	54.2	659	26.9	1000	
Al	27	45	1	He	0.285	59.4	781	9.4	50	
K	39	45	1	He	5.423	46.7	45659	3.8	1000	
Ca	44	45	1	He	5.095	20.4	612	7.1	1000	
Ti	47	45	1	He	-0.131	-28.6	26	32.8	20	
V	51	45	1	He	-0.057	-52.9	2658	12.9	2	
Cr	52	45	1	He	0.016	114.5	2666	4.8	2	
Mn	55	45	1	He	0.025	20.4	1040	2.9	2	
Fe	56	45	1	He	4.098	19.7	33260	16.4	50	
Co	59	45	1	He	0.004	127.4	150	37.1	1	
Ni	60	45	1	He	0.006	82.9	78	17.3	2	
Cu	63	45	1	He	-0.013	-36.5	1373	2.1	2	
Zn	66	45	1	He	0.191	30.1	1949	3.9	20	
As	75	115	1	He	0.127	14.6	267	6.9	2	
Se	78	115	1	He	0.156	47.7	53	11.9	2	
Sr	88	45	1	He	-0.008	-91.0	149	32.4	10	
Mo	95	103	1	He	0.191	43.8	768	38.7	2	
Ag	107	103	1	He	0.003	66.4	62	36.5	0.2	
Cd	111	115	1	He	0.018	156.2	1424	3.8	0.2	
Sn	118	115	1	He	0.160	46.0	1541	21.0	10	
Sb	123	115	1	He	0.084	11.2	519	8.5	2	
Ba	137	115	1	He	-0.006	-110.5	31	43.3	5	
W	182	159	1	He	0.427	20.0	10378	10.5	10	
Tl	205	165	1	He	0.057	8.4	1887	8.1	0.5	
Pb	208	165	1	He	0.016	8.7	1631	2.8	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1653537	1.69	1663342	99.41	30	120	
Sc	45	1	He	794994	0.21	788655	100.80	30	120	
Sc	45	2	NoGas	7274741	0.67	7332116	99.22	30	120	
Rh	103	1	He	2507716	1.30	2523919	99.36	30	120	
In	115	1	He	1424420	0.05	1420677	100.26	30	120	
Tb	159	1	He	3973615	0.83	3983717	99.75	30	120	
Ho	165	1	He	4008250	0.77	4030813	99.44	30	120	
Bi	209	1	He	2972887	0.53	2997463	99.18	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-181014/1-a@2
Data File Name	058_Blk.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T18:53:22-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	0.046	23.9	63616	1.0	2	
Be	9	6	2	NoGas	0.002	457.5	74	70.9	1	
B	11	45	2	NoGas	1.062	27.4	12586	6.1	20	
Na	23	45	1	He	60.899	3.0	90075	2.3	1000	
Mg	24	45	1	He	22.335	5.7	16575	5.2	1000	
Al	27	45	1	He	2.938	7.0	1835	4.1	50	
K	39	45	1	He	33.643	5.2	63668	2.3	1000	
Ca	44	45	1	He	76.164	7.4	3347	6.1	1000	
Ti	47	45	1	He	0.002	3034.7	53	27.2	20	
V	51	45	1	He	0.648	1.9	10169	0.9	2	
Cr	52	45	1	He	0.850	9.0	8245	6.0	2	
Mn	55	45	1	He	0.225	7.9	2030	4.1	2	
Fe	56	45	1	He	10.909	6.3	75809	5.3	50	
Co	59	45	1	He	0.012	50.8	219	27.4	1	
Ni	60	45	1	He	0.106	17.2	316	14.2	2	
Cu	63	45	1	He	0.544	3.1	4863	1.9	2	
Zn	66	45	1	He	3.169	4.7	5897	3.4	20	
As	75	115	1	He	0.239	33.0	362	20.6	2	
Se	78	115	1	He	0.105	116.3	46	21.1	2	
Sr	88	45	1	He	0.179	9.0	1342	8.1	10	
Mo	95	103	1	He	0.090	57.2	402	43.8	2	
Ag	107	103	1	He	0.004	42.7	73	27.3	0.2	
Cd	111	115	1	He	0.025	150.3	1374	4.4	0.2	
Sn	118	115	1	He	17.513	0.3	74367	0.7	10	Blank Failed
Sb	123	115	1	He	0.110	25.5	612	20.5	2	
Ba	137	115	1	He	1.551	3.7	3170	4.7	5	
W	182	159	1	He	0.208	25.7	7584	9.0	10	
Tl	205	165	1	He	0.034	1.6	1161	2.1	0.5	
Pb	208	165	1	He	0.087	11.0	4244	8.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1648208	2.10	1663342	99.09	30	120	
Sc	45	1	He	764358	0.45	788655	96.92	30	120	
Sc	45	2	NoGas	7090128	0.88	7332116	96.70	30	120	
Rh	103	1	He	2429118	1.01	2523919	96.24	30	120	
In	115	1	He	1363169	1.03	1420677	95.95	30	120	
Tb	159	1	He	3882731	1.56	3983717	97.47	30	120	
Ho	165	1	He	3900956	0.97	4030813	96.78	30	120	
Bi	209	1	He	3073435	2.32	2997463	102.53	30	120	

Sample Report

Sample Table

Sample Name	240-46416-a-19-c mdls@2
Data File Name	059SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T18:57:17-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	0.532	0.532	5.50	74329	0.00	10000	
Be	9	6	2	NoGas	0.003	0.003	197.31	78	0.00	10000	
B	11	45	2	NoGas	3.559	3.559	3.99	20160	0.02	300	
Na	23	45	1	He	64.847	64.847	0.82	95215	0.07	500000	
Mg	24	45	1	He	19.418	19.418	5.36	14488	0.13	500000	
Al	27	45	1	He	7.833	7.833	3.12	3843	0.20	200000	
K	39	45	1	He	40.838	40.838	3.75	68842	0.06	500000	
Ca	44	45	1	He	68.490	68.490	3.52	3055	2.24	500000	
Ti	47	45	1	He	-0.024	-0.024	-414.47	48	-0.05	2500	
V	51	45	1	He	0.777	0.777	5.76	11584	0.01	10000	
Cr	52	45	1	He	0.818	0.818	3.81	8040	0.01	10000	
Mn	55	45	1	He	0.799	0.799	4.97	5012	0.02	10000	
Fe	56	45	1	He	8.432	8.432	2.58	60000	0.01	200000	
Co	59	45	1	He	0.011	0.011	17.42	212	0.01	10000	
Ni	60	45	1	He	0.085	0.085	15.00	266	0.03	10000	
Cu	63	45	1	He	0.477	0.477	4.52	4451	0.01	10000	
Zn	66	45	1	He	3.601	3.601	3.59	6492	0.06	10000	
As	75	115	1	He	0.170	0.170	15.21	299	0.06	10000	
Se	78	115	1	He	0.122	0.122	11.07	48	0.25	10000	
Sr	88	45	1	He	0.139	0.139	4.81	1088	0.01	10000	
Mo	95	103	1	He	0.051	0.051	38.62	270	0.02	2000	
Ag	107	103	1	He	0.004	0.004	20.35	72	0.01	300	
Cd	111	115	1	He	0.010	0.010	51.33	1358	0.00	4000	
Sn	118	115	1	He	16.884	16.884	0.83	72299	0.02	2000	
Sb	123	115	1	He	0.057	0.057	19.35	376	0.02	300	
Ba	137	115	1	He	2.789	2.789	3.62	5711	0.05	10000	
W	182	159	1	He	0.106	0.106	40.99	6453	0.00	2500	
Tl	205	165	1	He	0.005	0.005	16.98	357	0.00	5000	
Pb	208	165	1	He	3.091	3.091	0.62	117376	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1657285	1.70	1663342	99.64	30	120	
Sc	45	1	He	765933	0.78	788655	97.12	30	120	
Sc	45	2	NoGas	7226607	0.65	7332116	98.56	30	120	
Rh	103	1	He	2429641	1.24	2523919	96.26	30	120	
In	115	1	He	1374140	0.95	1420677	96.72	30	120	
Tb	159	1	He	3913441	0.77	3983717	98.24	30	120	
Ho	165	1	He	3947096	0.80	4030813	97.92	30	120	
Bi	209	1	He	2973137	1.40	2997463	99.19	30	120	

Sample Report

Sample Table

Sample Name	240-46416-a-20-c mdls@2
Data File Name	060SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T19:01:11-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	0.475	0.475	33.29	71802	0.00	10000	
Be	9	6	2	NoGas	-0.003	-0.003	-324.33	48	-0.01	10000	
B	11	45	2	NoGas	3.275	3.275	8.34	18955	0.02	300	
Na	23	45	1	He	36.864	36.864	1.44	61195	0.06	500000	
Mg	24	45	1	He	19.982	19.982	0.87	15162	0.13	500000	
Al	27	45	1	He	6.711	6.711	10.98	3441	0.20	200000	
K	39	45	1	He	23.930	23.930	10.47	58001	0.04	500000	
Ca	44	45	1	He	66.836	66.836	4.78	3046	2.19	500000	
Ti	47	45	1	He	-0.114	-0.114	-18.98	29	-0.39	2500	
V	51	45	1	He	0.702	0.702	5.75	10965	0.01	10000	
Cr	52	45	1	He	0.830	0.830	4.09	8272	0.01	10000	
Mn	55	45	1	He	0.739	0.739	3.37	4781	0.02	10000	
Fe	56	45	1	He	7.160	7.160	3.93	52705	0.01	200000	
Co	59	45	1	He	0.014	0.014	28.76	238	0.01	10000	
Ni	60	45	1	He	0.114	0.114	0.93	341	0.03	10000	
Cu	63	45	1	He	0.356	0.356	1.15	3743	0.01	10000	
Zn	66	45	1	He	2.315	2.315	2.95	4837	0.05	10000	
As	75	115	1	He	0.142	0.142	14.55	272	0.05	10000	
Se	78	115	1	He	-0.062	-0.062	-96.51	33	-0.19	10000	
Sr	88	45	1	He	0.131	0.131	8.06	1053	0.01	10000	
Mo	95	103	1	He	0.031	0.031	57.01	203	0.02	2000	
Ag	107	103	1	He	0.005	0.005	45.54	80	0.01	300	
Cd	111	115	1	He	0.020	0.020	137.75	1377	0.00	4000	
Sn	118	115	1	He	17.622	17.622	0.77	75434	0.02	2000	
Sb	123	115	1	He	0.033	0.033	34.07	271	0.01	300	
Ba	137	115	1	He	2.668	2.668	4.34	5468	0.05	10000	
W	182	159	1	He	0.055	0.055	63.99	5901	0.00	2500	
Tl	205	165	1	He	0.001	0.001	171.20	249	0.00	5000	
Pb	208	165	1	He	3.032	3.032	0.98	116455	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1625919	1.29	1663342	97.75	30	120	
Sc	45	1	He	779703	1.27	788655	98.86	30	120	
Sc	45	2	NoGas	7089943	1.40	7332116	96.70	30	120	
Rh	103	1	He	2456214	1.15	2523919	97.32	30	120	
In	115	1	He	1374348	1.06	1420677	96.74	30	120	
Tb	159	1	He	3950571	0.74	3983717	99.17	30	120	
Ho	165	1	He	3991660	0.91	4030813	99.03	30	120	
Bi	209	1	He	3023030	0.29	2997463	100.85	30	120	

Sample Report

Sample Table

Sample Name	240-46416-a-21-c mdls@2
Data File Name	061SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T19:05:06-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	0.493	0.493	6.97	71853	0.00	10000	
Be	9	6	2	NoGas	0.004	0.004	344.64	78	0.00	10000	
B	11	45	2	NoGas	2.712	2.712	7.91	17264	0.02	300	
Na	23	45	1	He	41.529	41.529	4.90	64759	0.06	500000	
Mg	24	45	1	He	23.256	23.256	0.74	16968	0.14	500000	
Al	27	45	1	He	7.350	7.350	1.78	3578	0.21	200000	
K	39	45	1	He	28.806	28.806	8.58	59297	0.05	500000	
Ca	44	45	1	He	76.955	76.955	9.00	3324	2.32	500000	
Ti	47	45	1	He	-0.114	-0.114	-68.73	28	-0.41	2500	
V	51	45	1	He	0.766	0.766	3.28	11250	0.01	10000	
Cr	52	45	1	He	0.832	0.832	8.30	7993	0.01	10000	
Mn	55	45	1	He	1.067	1.067	2.15	6282	0.02	10000	
Fe	56	45	1	He	7.754	7.754	1.89	54612	0.01	200000	
Co	59	45	1	He	0.017	0.017	13.21	262	0.01	10000	
Ni	60	45	1	He	0.098	0.098	26.19	291	0.03	10000	
Cu	63	45	1	He	0.325	0.325	6.64	3417	0.01	10000	
Zn	66	45	1	He	3.363	3.363	2.88	6058	0.06	10000	
As	75	115	1	He	0.113	0.113	20.66	240	0.05	10000	
Se	78	115	1	He	0.033	0.033	139.75	40	0.08	10000	
Sr	88	45	1	He	0.125	0.125	14.33	977	0.01	10000	
Mo	95	103	1	He	0.006	0.006	87.14	117	0.01	2000	
Ag	107	103	1	He	0.003	0.003	41.22	56	0.00	300	
Cd	111	115	1	He	-0.001	-0.001	-701.44	1316	0.00	4000	
Sn	118	115	1	He	18.466	18.466	2.99	77685	0.02	2000	
Sb	123	115	1	He	0.019	0.019	9.71	202	0.01	300	
Ba	137	115	1	He	2.693	2.693	2.13	5423	0.05	10000	
W	182	159	1	He	-0.005	-0.005	-856.26	5097	0.00	2500	
Tl	205	165	1	He	0.000	0.000	172.08	217	0.00	5000	
Pb	208	165	1	He	3.102	3.102	0.65	116861	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1616720	1.71	1663342	97.20	30	120	
Sc	45	1	He	751972	0.45	788655	95.35	30	120	
Sc	45	2	NoGas	7059218	0.79	7332116	96.28	30	120	
Rh	103	1	He	2393217	0.72	2523919	94.82	30	120	
In	115	1	He	1351157	0.70	1420677	95.11	30	120	
Tb	159	1	He	3874107	1.37	3983717	97.25	30	120	
Ho	165	1	He	3915699	1.00	4030813	97.14	30	120	
Bi	209	1	He	2963942	0.47	2997463	98.88	30	120	

Sample Report

Sample Table

Sample Name	240-46416-a-22-c mdls@2
Data File Name	062SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T19:09:01-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	0.540	0.540	11.59	73114	0.00	10000	
Be	9	6	2	NoGas	0.010	0.010	45.43	111	0.01	10000	
B	11	45	2	NoGas	3.414	3.414	4.91	19374	0.02	300	
Na	23	45	1	He	55.391	55.391	1.96	82949	0.07	500000	
Mg	24	45	1	He	25.284	25.284	6.55	18666	0.14	500000	
Al	27	45	1	He	10.147	10.147	6.45	4766	0.21	200000	
K	39	45	1	He	36.426	36.426	3.52	65422	0.06	500000	
Ca	44	45	1	He	78.086	78.086	10.11	3411	2.29	500000	
Ti	47	45	1	He	-0.085	-0.085	-102.07	34	-0.25	2500	
V	51	45	1	He	0.791	0.791	2.31	11668	0.01	10000	
Cr	52	45	1	He	0.911	0.911	2.12	8635	0.01	10000	
Mn	55	45	1	He	0.816	0.816	6.24	5072	0.02	10000	
Fe	56	45	1	He	7.356	7.356	1.34	52799	0.01	200000	
Co	59	45	1	He	0.015	0.015	26.49	246	0.01	10000	
Ni	60	45	1	He	0.091	0.091	5.58	278	0.03	10000	
Cu	63	45	1	He	0.372	0.372	9.29	3760	0.01	10000	
Zn	66	45	1	He	3.246	3.246	3.52	5983	0.05	10000	
As	75	115	1	He	0.156	0.156	16.90	281	0.06	10000	
Se	78	115	1	He	0.003	0.003	1763.52	38	0.01	10000	
Sr	88	45	1	He	0.156	0.156	1.97	1192	0.01	10000	
Mo	95	103	1	He	0.014	0.014	70.70	142	0.01	2000	
Ag	107	103	1	He	0.003	0.003	16.04	60	0.01	300	
Cd	111	115	1	He	0.007	0.007	383.13	1333	0.00	4000	
Sn	118	115	1	He	18.120	18.120	3.20	76440	0.02	2000	
Sb	123	115	1	He	0.025	0.025	65.18	232	0.01	300	
Ba	137	115	1	He	2.794	2.794	1.94	5640	0.05	10000	
W	182	159	1	He	-0.016	-0.016	-137.35	4986	0.00	2500	
Tl	205	165	1	He	-0.002	-0.002	-64.31	153	0.00	5000	
Pb	208	165	1	He	3.178	3.178	0.72	119725	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1627364	0.33	1663342	97.84	30	120	
Sc	45	1	He	762150	0.79	788655	96.64	30	120	
Sc	45	2	NoGas	7094654	0.19	7332116	96.76	30	120	
Rh	103	1	He	2384686	0.73	2523919	94.48	30	120	
In	115	1	He	1354786	0.30	1420677	95.36	30	120	
Tb	159	1	He	3890826	0.69	3983717	97.67	30	120	
Ho	165	1	He	3915688	1.19	4030813	97.14	30	120	
Bi	209	1	He	2932819	1.17	2997463	97.84	30	120	

Sample Report

Sample Table

Sample Name	240-46416-a-23-c mdls@2
Data File Name	063SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T19:12:57-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	0.560	0.560	4.41	72797	0.00	10000	
Be	9	6	2	NoGas	0.012	0.012	66.01	119	0.01	10000	
B	11	45	2	NoGas	3.427	3.427	9.54	19222	0.02	300	
Na	23	45	1	He	60.238	60.238	2.29	89833	0.07	500000	
Mg	24	45	1	He	25.517	25.517	3.75	19014	0.13	500000	
Al	27	45	1	He	6.277	6.277	3.61	3219	0.19	200000	
K	39	45	1	He	47.507	47.507	3.21	73850	0.06	500000	
Ca	44	45	1	He	87.743	87.743	2.76	3822	2.30	500000	
Ti	47	45	1	He	-0.071	-0.071	-107.20	38	-0.19	2500	
V	51	45	1	He	0.979	0.979	5.95	13822	0.01	10000	
Cr	52	45	1	He	1.279	1.279	1.50	11241	0.01	10000	
Mn	55	45	1	He	16.286	16.286	0.81	85603	0.02	10000	
Fe	56	45	1	He	20.405	20.405	0.44	137844	0.01	200000	
Co	59	45	1	He	0.018	0.018	21.85	273	0.01	10000	
Ni	60	45	1	He	0.096	0.096	9.67	291	0.03	10000	
Cu	63	45	1	He	0.400	0.400	4.37	3974	0.01	10000	
Zn	66	45	1	He	3.506	3.506	2.23	6393	0.05	10000	
As	75	115	1	He	0.132	0.132	9.54	260	0.05	10000	
Se	78	115	1	He	-0.008	-0.008	-690.96	37	-0.02	10000	
Sr	88	45	1	He	0.179	0.179	5.97	1347	0.01	10000	
Mo	95	103	1	He	0.128	0.128	11.15	528	0.02	2000	
Ag	107	103	1	He	0.005	0.005	26.36	79	0.01	300	
Cd	111	115	1	He	0.013	0.013	95.27	1354	0.00	4000	
Sn	118	115	1	He	17.762	17.762	2.12	75483	0.02	2000	
Sb	123	115	1	He	0.026	0.026	18.17	238	0.01	300	
Ba	137	115	1	He	2.758	2.758	1.14	5609	0.05	10000	
W	182	159	1	He	0.003	0.003	1110.71	5216	0.00	2500	
Tl	205	165	1	He	-0.002	-0.002	-19.36	144	0.00	5000	
Pb	208	165	1	He	3.121	3.121	2.17	116847	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1627577	2.19	1663342	97.85	30	120	
Sc	45	1	He	769378	0.84	788655	97.56	30	120	
Sc	45	2	NoGas	7027038	0.93	7332116	95.84	30	120	
Rh	103	1	He	2415136	0.80	2523919	95.69	30	120	
In	115	1	He	1364490	0.45	1420677	96.05	30	120	
Tb	159	1	He	3890042	1.12	3983717	97.65	30	120	
Ho	165	1	He	3892095	1.11	4030813	96.56	30	120	
Bi	209	1	He	2924720	0.52	2997463	97.57	30	120	

Sample Report

Sample Table

Sample Name	240-46416-a-24-c mdls@2
Data File Name	064SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T19:16:50-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	0.557	0.557	16.33	72478	0.00	10000	
Be	9	6	2	NoGas	0.001	0.001	494.31	67	0.00	10000	
B	11	45	2	NoGas	2.631	2.631	3.99	16894	0.02	300	
Na	23	45	1	He	73.394	73.394	1.00	104606	0.07	500000	
Mg	24	45	1	He	18.838	18.838	1.85	13884	0.14	500000	
Al	27	45	1	He	6.997	6.997	3.19	3456	0.20	200000	
K	39	45	1	He	46.679	46.679	1.34	72033	0.06	500000	
Ca	44	45	1	He	84.696	84.696	2.45	3640	2.33	500000	
Ti	47	45	1	He	-0.098	-0.098	-136.01	31	-0.32	2500	
V	51	45	1	He	0.669	0.669	6.93	10279	0.01	10000	
Cr	52	45	1	He	0.744	0.744	6.25	7445	0.01	10000	
Mn	55	45	1	He	0.822	0.822	4.97	5065	0.02	10000	
Fe	56	45	1	He	6.087	6.087	0.71	44308	0.01	200000	
Co	59	45	1	He	0.010	0.010	16.21	200	0.01	10000	
Ni	60	45	1	He	0.102	0.102	16.59	302	0.03	10000	
Cu	63	45	1	He	0.315	0.315	6.24	3373	0.01	10000	
Zn	66	45	1	He	4.277	4.277	3.11	7316	0.06	10000	
As	75	115	1	He	0.099	0.099	12.26	229	0.04	10000	
Se	78	115	1	He	-0.033	-0.033	-228.92	35	-0.09	10000	
Sr	88	45	1	He	0.161	0.161	3.99	1211	0.01	10000	
Mo	95	103	1	He	0.012	0.012	38.26	138	0.01	2000	
Ag	107	103	1	He	0.003	0.003	86.39	59	0.01	300	
Cd	111	115	1	He	-0.023	-0.023	-104.47	1288	0.00	4000	
Sn	118	115	1	He	18.050	18.050	0.45	76715	0.02	2000	
Sb	123	115	1	He	0.012	0.012	21.54	172	0.01	300	
Ba	137	115	1	He	2.687	2.687	1.94	5467	0.05	10000	
W	182	159	1	He	-0.050	-0.050	-51.98	4542	0.00	2500	
Tl	205	165	1	He	-0.003	-0.003	-22.06	107	0.00	5000	
Pb	208	165	1	He	3.122	3.122	0.48	117153	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1605791	1.07	1663342	96.54	30	120	
Sc	45	1	He	756342	0.84	788655	95.90	30	120	
Sc	45	2	NoGas	7002745	1.96	7332116	95.51	30	120	
Rh	103	1	He	2405354	0.96	2523919	95.30	30	120	
In	115	1	He	1364846	0.32	1420677	96.07	30	120	
Tb	159	1	He	3849442	0.44	3983717	96.63	30	120	
Ho	165	1	He	3900395	0.70	4030813	96.76	30	120	
Bi	209	1	He	2950320	0.24	2997463	98.43	30	120	

Sample Report

Sample Table

Sample Name	240-46416-a-25-c mdls@2
Data File Name	065SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T19:20:45-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	0.530	0.530	4.28	72117	0.00	10000	
Be	9	6	2	NoGas	0.001	0.001	627.90	67	0.00	10000	
B	11	45	2	NoGas	2.877	2.877	8.81	17631	0.02	300	
Na	23	45	1	He	62.764	62.764	3.83	91296	0.07	500000	
Mg	24	45	1	He	19.575	19.575	6.00	14391	0.14	500000	
Al	27	45	1	He	7.745	7.745	6.90	3753	0.21	200000	
K	39	45	1	He	34.222	34.222	4.61	63296	0.05	500000	
Ca	44	45	1	He	81.855	81.855	0.98	3525	2.32	500000	
Ti	47	45	1	He	-0.120	-0.120	-22.76	27	-0.45	2500	
V	51	45	1	He	0.780	0.780	1.72	11446	0.01	10000	
Cr	52	45	1	He	0.820	0.820	1.23	7943	0.01	10000	
Mn	55	45	1	He	0.831	0.831	3.19	5102	0.02	10000	
Fe	56	45	1	He	8.278	8.278	1.47	58174	0.01	200000	
Co	59	45	1	He	0.016	0.016	7.61	253	0.01	10000	
Ni	60	45	1	He	0.133	0.133	4.49	374	0.04	10000	
Cu	63	45	1	He	0.315	0.315	8.23	3365	0.01	10000	
Zn	66	45	1	He	4.303	4.303	4.06	7339	0.06	10000	
As	75	115	1	He	0.115	0.115	3.01	241	0.05	10000	
Se	78	115	1	He	0.036	0.036	203.45	40	0.09	10000	
Sr	88	45	1	He	0.156	0.156	7.63	1180	0.01	10000	
Mo	95	103	1	He	0.008	0.008	135.78	121	0.01	2000	
Ag	107	103	1	He	0.005	0.005	31.79	77	0.01	300	
Cd	111	115	1	He	0.005	0.005	229.98	1320	0.00	4000	
Sn	118	115	1	He	17.710	17.710	1.43	74214	0.02	2000	
Sb	123	115	1	He	0.009	0.009	65.26	159	0.01	300	
Ba	137	115	1	He	2.672	2.672	3.69	5358	0.05	10000	
W	182	159	1	He	-0.041	-0.041	-38.41	4682	0.00	2500	
Tl	205	165	1	He	-0.004	-0.004	-18.01	100	0.00	5000	
Pb	208	165	1	He	3.130	3.130	1.14	117124	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1597597	2.15	1663342	96.05	30	120	
Sc	45	1	He	755142	0.21	788655	95.75	30	120	
Sc	45	2	NoGas	7016268	0.05	7332116	95.69	30	120	
Rh	103	1	He	2369737	1.91	2523919	93.89	30	120	
In	115	1	He	1345478	1.01	1420677	94.71	30	120	
Tb	159	1	He	3872915	1.56	3983717	97.22	30	120	
Ho	165	1	He	3889536	0.94	4030813	96.50	30	120	
Bi	209	1	He	2933587	0.37	2997463	97.87	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2012431
Data File Name	066_CCV.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T19:24:40-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	49.636	1.862	1060349	1.31	50	99.3	89.5	110.5	
Be	9	6	2	NoGas	49.525	1.610	244849	0.28	50	99.1	89.5	110.5	
B	11	45	2	NoGas	48.107	1.443	154850	1.26	50	96.2	89.5	110.5	
Na	23	45	1	He	24102.008	1.995	31382745	1.13	25000	96.4	89.5	110.5	
Mg	24	45	1	He	23799.674	1.783	18013965	1.07	25000	95.2	89.5	110.5	
Al	27	45	1	He	237.737	1.725	101638	0.78	250	95.1	89.5	110.5	
K	39	45	1	He	23816.023	1.398	17384466	0.62	25000	95.3	89.5	110.5	
Ca	44	45	1	He	23296.674	0.956	940910	0.04	25000	93.2	89.5	110.5	
Ti	47	45	1	He	49.379	0.722	11168	0.42	50	98.8	89.5	110.5	
V	51	45	1	He	47.713	0.537	538728	0.46	50	95.4	89.5	110.5	
Cr	52	45	1	He	47.727	1.286	340715	0.39	50	95.5	89.5	110.5	
Mn	55	45	1	He	234.435	1.169	1260936	0.76	250	93.8	89.5	110.5	
Fe	56	45	1	He	11910.154	1.230	79729046	0.55	12500	95.3	89.5	110.5	
Co	59	45	1	He	48.046	1.441	476839	0.70	50	96.1	89.5	110.5	
Ni	60	45	1	He	47.710	1.368	119417	0.53	50	95.4	89.5	110.5	
Cu	63	45	1	He	47.795	1.493	317795	0.57	50	95.6	89.5	110.5	
Zn	66	45	1	He	47.965	1.533	69053	0.57	50	95.9	89.5	110.5	
As	75	115	1	He	49.656	0.375	47829	0.58	50	99.3	89.5	110.5	
Se	78	115	1	He	49.456	1.418	4109	1.56	50	98.9	89.5	110.5	
Sr	88	45	1	He	48.011	0.882	320120	0.42	50	96.0	89.5	110.5	
Mo	95	103	1	He	50.909	0.993	171236	0.69	50	101.8	89.5	110.5	
Ag	107	103	1	He	48.006	0.897	517542	0.23	50	96.0	89.5	110.5	
Cd	111	115	1	He	48.974	1.359	91951	0.75	50	97.9	89.5	110.5	
Sn	118	115	1	He	55.250	0.690	235904	0.11	50	110.5	89.5	110.5	
Sb	123	115	1	He	52.045	0.232	234980	0.48	50	104.1	89.5	110.5	
Ba	137	115	1	He	48.964	0.357	100057	0.47	50	97.9	89.5	110.5	
W	182	159	1	He	49.239	1.939	585116	0.54	50	98.5	89.5	110.5	
Tl	205	165	1	He	45.970	2.355	1335923	0.07	50	91.9	89.5	110.5	
Pb	208	165	1	He	47.721	2.356	1816894	0.06	50	95.4	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1648451	1.46	1663342	99.10	30	120	
Sc	45	1	He	794854	0.93	788655	100.79	30	120	
Sc	45	2	NoGas	7415080	0.48	7332116	101.13	30	120	
Rh	103	1	He	2418050	0.88	2523919	95.81	30	120	
In	115	1	He	1380909	0.71	1420677	97.20	30	120	
Tb	159	1	He	3932268	1.62	3983717	98.71	30	120	
Ho	165	1	He	3990319	2.40	4030813	99.00	30	120	
Bi	209	1	He	2923774	0.29	2997463	97.54	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	067_CCB.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T19:28:33-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	0.075	100.5	66091	1.2	2	
Be	9	6	2	NoGas	-0.003	-418.9	48	133.2	1	
B	11	45	2	NoGas	0.455	48.4	11174	6.7	20	
Na	23	45	1	He	2.780	34.1	18462	6.6	1000	
Mg	24	45	1	He	0.498	54.2	726	28.5	1000	
Al	27	45	1	He	0.411	67.5	856	14.7	50	
K	39	45	1	He	1.218	79.3	43631	0.8	1000	
Ca	44	45	1	He	4.524	47.3	603	14.2	1000	
Ti	47	45	1	He	-0.182	-16.7	14	48.0	20	
V	51	45	1	He	-0.039	-20.5	2928	3.7	2	
Cr	52	45	1	He	-0.035	-57.0	2362	6.6	2	
Mn	55	45	1	He	0.033	81.4	1106	13.9	2	
Fe	56	45	1	He	4.326	17.6	35618	14.2	50	
Co	59	45	1	He	0.000	-2471.4	108	31.0	1	
Ni	60	45	1	He	-0.002	-930.3	59	69.9	2	
Cu	63	45	1	He	-0.019	-36.6	1368	3.5	2	
Zn	66	45	1	He	0.152	15.0	1940	1.5	20	
As	75	115	1	He	0.101	23.1	250	8.6	2	
Se	78	115	1	He	0.136	74.2	53	15.9	2	
Sr	88	45	1	He	-0.007	-107.9	159	32.1	10	
Mo	95	103	1	He	0.199	33.7	811	29.8	2	
Ag	107	103	1	He	0.004	32.5	76	19.9	0.2	
Cd	111	115	1	He	0.013	19.5	1467	3.4	0.2	
Sn	118	115	1	He	0.144	34.2	1522	11.7	10	
Sb	123	115	1	He	0.065	8.1	446	5.3	2	
Ba	137	115	1	He	-0.005	-46.5	34	11.2	5	
W	182	159	1	He	0.465	23.5	10971	11.9	10	
Tl	205	165	1	He	0.052	5.0	1770	4.4	0.5	
Pb	208	165	1	He	0.012	25.1	1509	8.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1665539	1.52	1663342	100.13	30	120	
Sc	45	1	He	814334	0.82	788655	103.26	30	120	
Sc	45	2	NoGas	7304281	1.01	7332116	99.62	30	120	
Rh	103	1	He	2562998	0.55	2523919	101.55	30	120	
In	115	1	He	1479004	3.15	1420677	104.11	30	120	
Tb	159	1	He	4031368	1.27	3983717	101.20	30	120	
Ho	165	1	He	4080868	0.39	4030813	101.24	30	120	
Bi	209	1	He	3049677	0.43	2997463	101.74	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-181014/1-a@2
Data File Name	068_Blk.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T19:32:28-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	0.070	95.7	63126	2.0	2	
Be	9	6	2	NoGas	0.000	1673.9	63	56.7	1	
B	11	45	2	NoGas	0.350	25.0	10385	2.8	20	
Na	23	45	1	He	60.699	1.7	89774	1.1	1000	
Mg	24	45	1	He	23.347	5.4	17301	4.9	1000	
Al	27	45	1	He	3.141	4.3	1917	3.2	50	
K	39	45	1	He	35.164	2.0	64694	1.2	1000	
Ca	44	45	1	He	80.155	5.7	3500	4.9	1000	
Ti	47	45	1	He	0.028	631.9	59	65.6	20	
V	51	45	1	He	0.575	11.7	9370	7.3	2	
Cr	52	45	1	He	0.782	8.6	7777	5.5	2	
Mn	55	45	1	He	0.245	3.1	2132	1.6	2	
Fe	56	45	1	He	10.851	4.6	75396	3.9	50	
Co	59	45	1	He	0.010	21.8	196	10.0	1	
Ni	60	45	1	He	0.107	23.9	318	19.6	2	
Cu	63	45	1	He	0.422	3.3	4088	2.5	2	
Zn	66	45	1	He	2.975	4.9	5630	3.1	20	
As	75	115	1	He	0.201	7.7	326	4.7	2	
Se	78	115	1	He	0.045	142.1	42	12.0	2	
Sr	88	45	1	He	0.180	1.3	1346	1.3	10	
Mo	95	103	1	He	0.062	43.0	303	29.5	2	
Ag	107	103	1	He	0.004	42.1	66	25.1	0.2	
Cd	111	115	1	He	0.021	78.2	1368	2.4	0.2	
Sn	118	115	1	He	17.233	4.0	73252	3.5	10	Blank Failed
Sb	123	115	1	He	0.095	25.9	543	20.6	2	
Ba	137	115	1	He	1.602	1.8	3276	2.2	5	
W	182	159	1	He	0.224	43.0	7765	14.5	10	
Tl	205	165	1	He	0.030	2.7	1041	3.3	0.5	
Pb	208	165	1	He	0.062	1.9	3286	2.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1610134	0.33	1663342	96.80	30	120	
Sc	45	1	He	763916	0.43	788655	96.86	30	120	
Sc	45	2	NoGas	6985036	0.42	7332116	95.27	30	120	
Rh	103	1	He	2392787	0.21	2523919	94.80	30	120	
In	115	1	He	1364469	0.56	1420677	96.04	30	120	
Tb	159	1	He	3877588	0.67	3983717	97.34	30	120	
Ho	165	1	He	3895508	1.26	4030813	96.64	30	120	
Bi	209	1	He	2995727	0.79	2997463	99.94	30	120	

Sample Report

Sample Table

Sample Name	240-46416-a-28-b mdls@2
Data File Name	069SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T19:36:24-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	0.453	0.453	6.02	73649	0.00	10000	
Be	9	6	2	NoGas	-0.003	-0.003	-241.43	48	-0.01	10000	
B	11	45	2	NoGas	2.604	2.604	4.62	17565	0.01	300	
Na	23	45	1	He	63.641	63.641	1.75	94009	0.07	500000	
Mg	24	45	1	He	20.122	20.122	3.68	15044	0.13	500000	
Al	27	45	1	He	7.265	7.265	5.64	3620	0.20	200000	
K	39	45	1	He	37.937	37.937	4.89	67020	0.06	500000	
Ca	44	45	1	He	66.792	66.792	4.92	2999	2.23	500000	
Ti	47	45	1	He	-0.153	-0.153	-26.02	20	-0.76	2500	
V	51	45	1	He	0.688	0.688	6.13	10652	0.01	10000	
Cr	52	45	1	He	0.770	0.770	4.40	7743	0.01	10000	
Mn	55	45	1	He	0.760	0.760	4.15	4825	0.02	10000	
Fe	56	45	1	He	8.382	8.382	1.82	59871	0.01	200000	
Co	59	45	1	He	0.008	0.008	19.80	182	0.00	10000	
Ni	60	45	1	He	0.085	0.085	25.20	264	0.03	10000	
Cu	63	45	1	He	0.396	0.396	3.39	3943	0.01	10000	
Zn	66	45	1	He	3.572	3.572	2.14	6476	0.06	10000	
As	75	115	1	He	0.157	0.157	8.68	284	0.06	10000	
Se	78	115	1	He	0.051	0.051	20.25	42	0.12	10000	
Sr	88	45	1	He	0.144	0.144	0.77	1120	0.01	10000	
Mo	95	103	1	He	0.027	0.027	52.15	190	0.01	2000	
Ag	107	103	1	He	0.003	0.003	89.20	62	0.01	300	
Cd	111	115	1	He	0.012	0.012	180.81	1354	0.00	4000	
Sn	118	115	1	He	16.522	16.522	1.34	70305	0.02	2000	
Sb	123	115	1	He	0.042	0.042	20.55	310	0.01	300	
Ba	137	115	1	He	2.855	2.855	2.34	5807	0.05	10000	
W	182	159	1	He	0.102	0.102	44.82	6387	0.00	2500	
Tl	205	165	1	He	0.006	0.006	31.51	380	0.00	5000	
Pb	208	165	1	He	3.028	3.028	1.12	113984	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1679017	2.12	1663342	100.94	30	120	
Sc	45	1	He	768422	0.76	788655	97.43	30	120	
Sc	45	2	NoGas	7312985	0.36	7332116	99.74	30	120	
Rh	103	1	He	2432024	1.27	2523919	96.36	30	120	
In	115	1	He	1365125	0.61	1420677	96.09	30	120	
Tb	159	1	He	3901559	0.83	3983717	97.94	30	120	
Ho	165	1	He	3910988	0.31	4030813	97.03	30	120	
Bi	209	1	He	2947598	0.88	2997463	98.34	30	120	

Sample Report

Sample Table

Sample Name	240-46416-a-29-b mdls@2
Data File Name	070SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T19:40:19-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	0.523	0.523	16.06	73683	0.00	10000	
Be	9	6	2	NoGas	0.000	0.000	5912.50	63	0.00	10000	
B	11	45	2	NoGas	2.941	2.941	10.79	18232	0.02	300	
Na	23	45	1	He	36.945	36.945	3.16	60165	0.06	500000	
Mg	24	45	1	He	20.068	20.068	4.03	14944	0.13	500000	
Al	27	45	1	He	5.848	5.848	2.76	3027	0.19	200000	
K	39	45	1	He	26.008	26.008	6.82	58377	0.04	500000	
Ca	44	45	1	He	70.000	70.000	6.84	3111	2.25	500000	
Ti	47	45	1	He	-0.116	-0.116	-56.32	28	-0.42	2500	
V	51	45	1	He	0.729	0.729	6.84	11052	0.01	10000	
Cr	52	45	1	He	0.863	0.863	3.87	8340	0.01	10000	
Mn	55	45	1	He	0.785	0.785	3.92	4931	0.02	10000	
Fe	56	45	1	He	7.095	7.095	1.05	51324	0.01	200000	
Co	59	45	1	He	0.009	0.009	33.93	184	0.00	10000	
Ni	60	45	1	He	0.122	0.122	7.17	352	0.03	10000	
Cu	63	45	1	He	0.307	0.307	6.98	3363	0.01	10000	
Zn	66	45	1	He	2.534	2.534	2.12	5044	0.05	10000	
As	75	115	1	He	0.154	0.154	2.96	283	0.05	10000	
Se	78	115	1	He	0.055	0.055	172.99	43	0.13	10000	
Sr	88	45	1	He	0.125	0.125	10.14	993	0.01	10000	
Mo	95	103	1	He	0.023	0.023	61.56	174	0.01	2000	
Ag	107	103	1	He	0.001	0.001	196.88	40	0.00	300	
Cd	111	115	1	He	0.026	0.026	80.90	1384	0.00	4000	
Sn	118	115	1	He	17.936	17.936	1.14	76523	0.02	2000	
Sb	123	115	1	He	0.039	0.039	53.71	294	0.01	300	
Ba	137	115	1	He	2.624	2.624	6.00	5359	0.05	10000	
W	182	159	1	He	0.026	0.026	230.35	5423	0.00	2500	
Tl	205	165	1	He	0.002	0.002	46.56	248	0.00	5000	
Pb	208	165	1	He	3.015	3.015	0.54	113846	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1647146	1.64	1663342	99.03	30	120	
Sc	45	1	He	765205	0.74	788655	97.03	30	120	
Sc	45	2	NoGas	7181681	0.39	7332116	97.95	30	120	
Rh	103	1	He	2419366	0.13	2523919	95.86	30	120	
In	115	1	He	1370006	0.65	1420677	96.43	30	120	
Tb	159	1	He	3854189	0.25	3983717	96.75	30	120	
Ho	165	1	He	3923444	1.09	4030813	97.34	30	120	
Bi	209	1	He	2954189	0.48	2997463	98.56	30	120	

Sample Report

Sample Table

Sample Name	240-46416-a-30-b mdls@2
Data File Name	071SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T19:44:14-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	0.579	0.579	4.09	72779	0.00	10000	
Be	9	6	2	NoGas	-0.001	-0.001	-1007.59	56	0.00	10000	
B	11	45	2	NoGas	2.610	2.610	12.84	16805	0.02	300	
Na	23	45	1	He	40.713	40.713	1.20	64985	0.06	500000	
Mg	24	45	1	He	22.818	22.818	2.83	16971	0.13	500000	
Al	27	45	1	He	7.615	7.615	0.68	3755	0.20	200000	
K	39	45	1	He	29.249	29.249	3.32	60743	0.05	500000	
Ca	44	45	1	He	71.216	71.216	3.55	3163	2.25	500000	
Ti	47	45	1	He	-0.008	-0.008	-2456.25	51	-0.02	2500	
V	51	45	1	He	0.755	0.755	4.14	11344	0.01	10000	
Cr	52	45	1	He	0.827	0.827	2.24	8111	0.01	10000	
Mn	55	45	1	He	1.035	1.035	1.45	6236	0.02	10000	
Fe	56	45	1	He	7.548	7.548	1.61	54322	0.01	200000	
Co	59	45	1	He	0.008	0.008	7.17	177	0.00	10000	
Ni	60	45	1	He	0.072	0.072	3.96	233	0.03	10000	
Cu	63	45	1	He	0.265	0.265	17.60	3096	0.01	10000	
Zn	66	45	1	He	3.478	3.478	2.86	6330	0.05	10000	
As	75	115	1	He	0.129	0.129	8.50	256	0.05	10000	
Se	78	115	1	He	-0.035	-0.035	-184.89	35	-0.10	10000	
Sr	88	45	1	He	0.133	0.133	8.56	1047	0.01	10000	
Mo	95	103	1	He	0.010	0.010	114.88	130	0.01	2000	
Ag	107	103	1	He	0.001	0.001	80.79	42	0.00	300	
Cd	111	115	1	He	0.029	0.029	47.00	1377	0.00	4000	
Sn	118	115	1	He	18.173	18.173	1.69	76844	0.02	2000	
Sb	123	115	1	He	0.024	0.024	37.19	226	0.01	300	
Ba	137	115	1	He	2.637	2.637	0.98	5339	0.05	10000	
W	182	159	1	He	-0.012	-0.012	-130.65	5012	0.00	2500	
Tl	205	165	1	He	-0.001	-0.001	-127.88	173	0.00	5000	
Pb	208	165	1	He	3.074	3.074	2.73	115200	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1615403	1.29	1663342	97.12	30	120	
Sc	45	1	He	766362	0.87	788655	97.17	30	120	
Sc	45	2	NoGas	6990923	1.01	7332116	95.35	30	120	
Rh	103	1	He	2407095	0.47	2523919	95.37	30	120	
In	115	1	He	1358056	0.75	1420677	95.59	30	120	
Tb	159	1	He	3870065	1.60	3983717	97.15	30	120	
Ho	165	1	He	3896277	1.98	4030813	96.66	30	120	
Bi	209	1	He	2970460	1.01	2997463	99.10	30	120	

Sample Report

Sample Table

Sample Name	240-46416-a-31-b mdls@2
Data File Name	072SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T19:48:08-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	0.511	0.511	3.20	71686	0.00	10000	
Be	9	6	2	NoGas	-0.005	-0.005	-96.50	37	-0.01	10000	
B	11	45	2	NoGas	2.923	2.923	8.43	17735	0.02	300	
Na	23	45	1	He	54.868	54.868	1.79	81670	0.07	500000	
Mg	24	45	1	He	25.478	25.478	3.14	18669	0.14	500000	
Al	27	45	1	He	9.894	9.894	4.49	4627	0.21	200000	
K	39	45	1	He	36.174	36.174	1.62	64753	0.06	500000	
Ca	44	45	1	He	78.752	78.752	7.54	3412	2.31	500000	
Ti	47	45	1	He	-0.151	-0.151	-10.28	20	-0.75	2500	
V	51	45	1	He	0.789	0.789	5.11	11560	0.01	10000	
Cr	52	45	1	He	0.899	0.899	6.41	8489	0.01	10000	
Mn	55	45	1	He	0.817	0.817	5.08	5041	0.02	10000	
Fe	56	45	1	He	7.213	7.213	1.73	51485	0.01	200000	
Co	59	45	1	He	0.009	0.009	29.61	188	0.00	10000	
Ni	60	45	1	He	0.096	0.096	4.70	288	0.03	10000	
Cu	63	45	1	He	0.332	0.332	4.69	3482	0.01	10000	
Zn	66	45	1	He	3.250	3.250	7.74	5944	0.05	10000	
As	75	115	1	He	0.136	0.136	5.43	261	0.05	10000	
Se	78	115	1	He	0.011	0.011	73.76	38	0.03	10000	
Sr	88	45	1	He	0.160	0.160	3.75	1209	0.01	10000	
Mo	95	103	1	He	0.007	0.007	83.40	119	0.01	2000	
Ag	107	103	1	He	0.001	0.001	274.65	33	0.00	300	
Cd	111	115	1	He	-0.022	-0.022	-114.85	1278	0.00	4000	
Sn	118	115	1	He	17.773	17.773	0.67	74764	0.02	2000	
Sb	123	115	1	He	0.022	0.022	23.27	217	0.01	300	
Ba	137	115	1	He	2.781	2.781	2.13	5598	0.05	10000	
W	182	159	1	He	-0.041	-0.041	-67.95	4612	0.00	2500	
Tl	205	165	1	He	-0.003	-0.003	-16.06	102	0.00	5000	
Pb	208	165	1	He	3.122	3.122	0.43	116371	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1613611	0.79	1663342	97.01	30	120	
Sc	45	1	He	756369	0.41	788655	95.91	30	120	
Sc	45	2	NoGas	7007993	1.47	7332116	95.58	30	120	
Rh	103	1	He	2365081	1.13	2523919	93.71	30	120	
In	115	1	He	1350583	1.11	1420677	95.07	30	120	
Tb	159	1	He	3814384	1.60	3983717	95.75	30	120	
Ho	165	1	He	3874393	0.80	4030813	96.12	30	120	
Bi	209	1	He	2894839	1.62	2997463	96.58	30	120	

Sample Report

Sample Table

Sample Name	240-46416-a-32-b mdls@2
Data File Name	073SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T19:52:04-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	0.554	0.554	18.31	72965	0.00	10000	
Be	9	6	2	NoGas	0.000	0.000	2598.80	63	0.00	10000	
B	11	45	2	NoGas	2.911	2.911	4.35	17828	0.02	300	
Na	23	45	1	He	61.659	61.659	2.31	90470	0.07	500000	
Mg	24	45	1	He	26.129	26.129	1.50	19218	0.14	500000	
Al	27	45	1	He	6.386	6.386	8.31	3224	0.20	200000	
K	39	45	1	He	45.148	45.148	5.42	71273	0.06	500000	
Ca	44	45	1	He	86.778	86.778	5.58	3736	2.32	500000	
Ti	47	45	1	He	-0.121	-0.121	-45.89	27	-0.45	2500	
V	51	45	1	He	1.014	1.014	7.77	14031	0.01	10000	
Cr	52	45	1	He	1.335	1.335	2.22	11477	0.01	10000	
Mn	55	45	1	He	16.322	16.322	0.50	84706	0.02	10000	
Fe	56	45	1	He	20.548	20.548	0.21	137011	0.01	200000	
Co	59	45	1	He	0.011	0.011	52.89	201	0.01	10000	
Ni	60	45	1	He	0.128	0.128	8.21	366	0.04	10000	
Cu	63	45	1	He	0.344	0.344	2.64	3568	0.01	10000	
Zn	66	45	1	He	3.575	3.575	2.18	6405	0.06	10000	
As	75	115	1	He	0.137	0.137	12.27	263	0.05	10000	
Se	78	115	1	He	-0.014	-0.014	-300.60	37	-0.04	10000	
Sr	88	45	1	He	0.170	0.170	5.13	1277	0.01	10000	
Mo	95	103	1	He	0.129	0.129	22.44	530	0.02	2000	
Ag	107	103	1	He	0.002	0.002	122.15	44	0.00	300	
Cd	111	115	1	He	0.032	0.032	41.24	1381	0.00	4000	
Sn	118	115	1	He	17.603	17.603	0.50	74425	0.02	2000	
Sb	123	115	1	He	0.019	0.019	34.88	203	0.01	300	
Ba	137	115	1	He	2.764	2.764	3.69	5591	0.05	10000	
W	182	159	1	He	-0.003	-0.003	-784.92	5123	0.00	2500	
Tl	205	165	1	He	-0.002	-0.002	-26.50	142	0.00	5000	
Pb	208	165	1	He	3.106	3.106	0.88	116168	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1637216	1.46	1663342	98.43	30	120	
Sc	45	1	He	759607	0.60	788655	96.32	30	120	
Sc	45	2	NoGas	7055173	0.82	7332116	96.22	30	120	
Rh	103	1	He	2418539	1.23	2523919	95.82	30	120	
In	115	1	He	1357407	0.76	1420677	95.55	30	120	
Tb	159	1	He	3878748	1.34	3983717	97.37	30	120	
Ho	165	1	He	3887747	1.36	4030813	96.45	30	120	
Bi	209	1	He	2934016	0.51	2997463	97.88	30	120	

Sample Report

Sample Table

Sample Name	240-46416-a-33-b mdls@2
Data File Name	074SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T19:56:00-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	0.547	0.547	2.19	73496	0.00	10000	
Be	9	6	2	NoGas	-0.004	-0.004	-63.21	41	-0.01	10000	
B	11	45	2	NoGas	2.556	2.556	16.03	16953	0.02	300	
Na	23	45	1	He	73.459	73.459	2.71	107072	0.07	500000	
Mg	24	45	1	He	19.054	19.054	10.09	14351	0.13	500000	
Al	27	45	1	He	7.092	7.092	4.22	3574	0.20	200000	
K	39	45	1	He	43.023	43.023	5.80	71076	0.06	500000	
Ca	44	45	1	He	84.154	84.154	3.33	3702	2.27	500000	
Ti	47	45	1	He	-0.133	-0.133	-18.41	24	-0.54	2500	
V	51	45	1	He	0.652	0.652	4.13	10330	0.01	10000	
Cr	52	45	1	He	0.704	0.704	4.01	7335	0.01	10000	
Mn	55	45	1	He	0.781	0.781	5.12	4964	0.02	10000	
Fe	56	45	1	He	5.954	5.954	2.68	44449	0.01	200000	
Co	59	45	1	He	0.003	0.003	42.48	134	0.00	10000	
Ni	60	45	1	He	0.099	0.099	12.71	301	0.03	10000	
Cu	63	45	1	He	0.274	0.274	6.89	3187	0.01	10000	
Zn	66	45	1	He	4.342	4.342	1.51	7573	0.06	10000	
As	75	115	1	He	0.105	0.105	26.20	238	0.04	10000	
Se	78	115	1	He	0.040	0.040	277.32	42	0.10	10000	
Sr	88	45	1	He	0.144	0.144	7.76	1132	0.01	10000	
Mo	95	103	1	He	0.017	0.017	23.28	154	0.01	2000	
Ag	107	103	1	He	0.003	0.003	44.97	58	0.01	300	
Cd	111	115	1	He	-0.015	-0.015	-187.90	1321	0.00	4000	
Sn	118	115	1	He	17.973	17.973	0.86	77453	0.02	2000	
Sb	123	115	1	He	0.006	0.006	94.26	151	0.00	300	
Ba	137	115	1	He	2.629	2.629	0.38	5423	0.05	10000	
W	182	159	1	He	-0.042	-0.042	-24.42	4731	0.00	2500	
Tl	205	165	1	He	-0.003	-0.003	-40.61	128	0.00	5000	
Pb	208	165	1	He	3.064	3.064	1.20	116907	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1621625	0.58	1663342	97.49	30	120	
Sc	45	1	He	773694	1.28	788655	98.10	30	120	
Sc	45	2	NoGas	7117783	1.16	7332116	97.08	30	120	
Rh	103	1	He	2423348	1.59	2523919	96.02	30	120	
In	115	1	He	1383773	0.33	1420677	97.40	30	120	
Tb	159	1	He	3932125	0.36	3983717	98.70	30	120	
Ho	165	1	He	3964910	1.20	4030813	98.37	30	120	
Bi	209	1	He	2972052	0.52	2997463	99.15	30	120	

Sample Report

Sample Table

Sample Name	240-46416-a-34-b mdls@2
Data File Name	075SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T19:59:55-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	0.551	0.551	12.10	72422	0.00	10000	
Be	9	6	2	NoGas	-0.007	-0.007	-18.59	26	-0.03	10000	
B	11	45	2	NoGas	2.382	2.382	5.47	16200	0.01	300	
Na	23	45	1	He	62.387	62.387	1.84	91533	0.07	500000	
Mg	24	45	1	He	19.163	19.163	2.69	14206	0.13	500000	
Al	27	45	1	He	7.669	7.669	3.54	3750	0.20	200000	
K	39	45	1	He	33.098	33.098	2.35	63002	0.05	500000	
Ca	44	45	1	He	79.523	79.523	7.04	3462	2.30	500000	
Ti	47	45	1	He	-0.110	-0.110	-89.68	29	-0.38	2500	
V	51	45	1	He	0.743	0.743	8.88	11142	0.01	10000	
Cr	52	45	1	He	0.803	0.803	7.12	7890	0.01	10000	
Mn	55	45	1	He	0.839	0.839	6.38	5180	0.02	10000	
Fe	56	45	1	He	8.266	8.266	0.68	58544	0.01	200000	
Co	59	45	1	He	0.010	0.010	37.39	197	0.01	10000	
Ni	60	45	1	He	0.131	0.131	9.31	373	0.04	10000	
Cu	63	45	1	He	0.289	0.289	2.28	3228	0.01	10000	
Zn	66	45	1	He	4.108	4.108	4.15	7133	0.06	10000	
As	75	115	1	He	0.120	0.120	13.26	246	0.05	10000	
Se	78	115	1	He	0.061	0.061	25.49	42	0.14	10000	
Sr	88	45	1	He	0.152	0.152	6.98	1162	0.01	10000	
Mo	95	103	1	He	0.009	0.009	114.92	128	0.01	2000	
Ag	107	103	1	He	0.004	0.004	59.81	72	0.01	300	
Cd	111	115	1	He	0.016	0.016	37.81	1340	0.00	4000	
Sn	118	115	1	He	17.552	17.552	1.55	73519	0.02	2000	
Sb	123	115	1	He	0.008	0.008	140.96	153	0.01	300	
Ba	137	115	1	He	2.739	2.739	0.73	5489	0.05	10000	
W	182	159	1	He	-0.026	-0.026	-154.55	4842	0.00	2500	
Tl	205	165	1	He	-0.003	-0.003	-58.98	107	0.00	5000	
Pb	208	165	1	He	3.121	3.121	0.92	116022	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1636951	1.99	1663342	98.41	30	120	
Sc	45	1	He	760974	0.25	788655	96.49	30	120	
Sc	45	2	NoGas	7007597	0.83	7332116	95.57	30	120	
Rh	103	1	He	2412701	0.25	2523919	95.59	30	120	
In	115	1	He	1344719	0.46	1420677	94.65	30	120	
Tb	159	1	He	3861287	0.35	3983717	96.93	30	120	
Ho	165	1	He	3863764	0.24	4030813	95.86	30	120	
Bi	209	1	He	2912975	1.25	2997463	97.18	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2012431
Data File Name	076_CCV.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T20:03:51-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	49.992	1.641	1037011	1.11	50	100.0	89.5	110.5	
Be	9	6	2	NoGas	49.058	0.821	241069	0.36	50	98.1	89.5	110.5	
B	11	45	2	NoGas	47.974	1.425	150037	1.12	50	95.9	89.5	110.5	
Na	23	45	1	He	23731.660	11.994	30637321	1.59	25000	94.9	89.5	110.5	
Mg	24	45	1	He	23842.640	12.259	17888901	1.80	25000	95.4	89.5	110.5	
Al	27	45	1	He	240.345	12.383	101852	1.86	250	96.1	89.5	110.5	
K	39	45	1	He	23854.409	10.834	17277918	0.93	25000	95.4	89.5	110.5	
Ca	44	45	1	He	23250.571	11.438	931372	0.93	25000	93.0	89.5	110.5	
Ti	47	45	1	He	49.773	12.742	11155	2.19	50	99.5	89.5	110.5	
V	51	45	1	He	47.919	11.978	536402	1.65	50	95.8	89.5	110.5	
Cr	52	45	1	He	47.762	12.003	338059	1.53	50	95.5	89.5	110.5	
Mn	55	45	1	He	235.519	11.420	1256449	0.95	250	94.2	89.5	110.5	
Fe	56	45	1	He	12048.609	11.276	80007168	0.78	12500	96.4	89.5	110.5	
Co	59	45	1	He	47.937	11.301	471933	0.82	50	95.9	89.5	110.5	
Ni	60	45	1	He	47.853	11.665	118777	1.54	50	95.7	89.5	110.5	
Cu	63	45	1	He	47.970	11.473	316353	1.13	50	95.9	89.5	110.5	
Zn	66	45	1	He	47.506	13.180	67783	2.37	50	95.0	89.5	110.5	
As	75	115	1	He	49.619	13.285	47343	1.13	50	99.2	89.5	110.5	
Se	78	115	1	He	48.554	14.225	3995	3.42	50	97.1	89.5	110.5	
Sr	88	45	1	He	48.309	11.503	319466	1.08	50	96.6	89.5	110.5	
Mo	95	103	1	He	51.417	10.305	170509	0.92	50	102.8	89.5	110.5	
Ag	107	103	1	He	48.156	10.387	511829	1.04	50	96.3	89.5	110.5	
Cd	111	115	1	He	49.194	13.474	91482	1.11	50	98.4	89.5	110.5	
Sn	118	115	1	He	54.824	12.783	231974	1.65	50	109.6	89.5	110.5	
Sb	123	115	1	He	51.883	13.617	231952	1.83	50	103.8	89.5	110.5	
Ba	137	115	1	He	48.721	12.965	98641	0.81	50	97.4	89.5	110.5	
W	182	159	1	He	49.224	11.560	581805	1.13	50	98.4	89.5	110.5	
Tl	205	165	1	He	45.457	10.205	1321929	1.09	50	90.9	89.5	110.5	
Pb	208	165	1	He	47.314	9.851	1803067	0.81	50	94.6	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1638265	0.91	1663342	98.49	30	120	
Sc	45	1	He	794763	10.67	788655	100.77	30	120	
Sc	45	2	NoGas	7203449	0.82	7332116	98.25	30	120	
Rh	103	1	He	2399750	9.64	2523919	95.08	30	120	
In	115	1	He	1382909	12.41	1420677	97.34	30	120	
Tb	159	1	He	3942196	10.64	3983717	98.96	30	120	
Ho	165	1	He	4016834	9.23	4030813	99.65	30	120	
Bi	209	1	He	2904224	9.45	2997463	96.89	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	077_CCB.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T20:07:47-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.223	-61.7	89392	17.6	2	
Be	9	6	2	NoGas	-0.006	-56.9	44	66.2	1	
B	11	45	2	NoGas	-0.968	-54.4	10051	3.5	20	
Na	23	45	1	He	3.993	8.8	19567	5.9	1000	
Mg	24	45	1	He	1.003	54.8	1096	40.2	1000	
Al	27	45	1	He	0.503	32.3	870	5.9	50	
K	39	45	1	He	3.516	75.2	44114	0.9	1000	
Ca	44	45	1	He	4.697	27.0	593	6.6	1000	
Ti	47	45	1	He	-0.151	-13.2	21	24.1	20	
V	51	45	1	He	-0.036	-84.8	2879	10.7	2	
Cr	52	45	1	He	0.003	388.4	2566	1.6	2	
Mn	55	45	1	He	0.029	44.3	1057	8.4	2	
Fe	56	45	1	He	4.839	21.4	37970	14.7	50	
Co	59	45	1	He	0.001	521.2	113	34.7	1	
Ni	60	45	1	He	0.009	57.2	84	18.7	2	
Cu	63	45	1	He	-0.037	-31.2	1211	3.1	2	
Zn	66	45	1	He	0.219	44.0	1981	5.7	20	
As	75	115	1	He	0.117	37.4	255	12.5	2	
Se	78	115	1	He	0.095	50.5	47	4.2	2	
Sr	88	45	1	He	-0.010	-78.3	134	40.4	10	
Mo	95	103	1	He	0.229	32.4	887	27.0	2	
Ag	107	103	1	He	0.005	50.4	79	34.2	0.2	
Cd	111	115	1	He	0.046	34.3	1471	5.6	0.2	
Sn	118	115	1	He	0.164	61.1	1548	26.5	10	
Sb	123	115	1	He	0.068	13.1	438	5.7	2	
Ba	137	115	1	He	0.000	2711.4	43	48.0	5	
W	182	159	1	He	0.514	24.5	11119	9.7	10	
Tl	205	165	1	He	0.056	4.9	1816	6.6	0.5	
Pb	208	165	1	He	0.012	13.3	1468	7.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2235158	18.57	1663342	134.38	30	120	ISTD Failed
Sc	45	1	He	792979	3.66	788655	100.55	30	120	
Sc	45	2	NoGas	10900278	20.56	7332116	148.66	30	120	ISTD Failed
Rh	103	1	He	2484675	3.54	2523919	98.45	30	120	
In	115	1	He	1418239	4.30	1420677	99.83	30	120	
Tb	159	1	He	3886895	3.20	3983717	97.57	30	120	
Ho	165	1	He	3943758	3.42	4030813	97.84	30	120	
Bi	209	1	He	2963129	2.33	2997463	98.85	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-181296/1-a
Data File Name	078_Blk.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T20:11:44-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	0.090	60.2	64196	2.0	2	
Be	9	6	2	NoGas	0.000	3683.5	63	20.4	1	
B	11	45	2	NoGas	2.628	10.6	17035	5.1	20	
Na	23	45	1	He	104.732	1.7	146277	0.8	1000	
Mg	24	45	1	He	47.195	2.0	34997	2.5	1000	
Al	27	45	1	He	7.559	6.5	3756	4.6	50	
K	39	45	1	He	30.957	7.8	62348	2.0	1000	
Ca	44	45	1	He	157.037	6.1	6548	6.1	1000	
Ti	47	45	1	He	-0.050	-356.2	42	91.5	20	
V	51	45	1	He	0.664	3.7	10431	3.2	2	
Cr	52	45	1	He	0.996	3.0	9323	1.4	2	
Mn	55	45	1	He	0.510	4.4	3535	3.0	2	
Fe	56	45	1	He	17.963	2.6	122339	1.7	50	
Co	59	45	1	He	0.080	8.7	872	8.4	1	
Ni	60	45	1	He	0.263	12.6	698	10.8	2	
Cu	63	45	1	He	0.624	1.8	5426	0.7	2	
Zn	66	45	1	He	5.364	1.7	8943	1.8	20	
As	75	115	1	He	0.191	2.2	319	1.2	2	
Se	78	115	1	He	0.046	21.0	42	1.8	2	
Sr	88	45	1	He	0.347	7.2	2437	6.5	10	
Mo	95	103	1	He	0.061	38.3	304	25.3	2	
Ag	107	103	1	He	0.006	54.9	88	38.8	0.2	
Cd	111	115	1	He	0.023	131.6	1387	4.0	0.2	
Sn	118	115	1	He	0.812	4.8	4264	3.9	10	
Sb	123	115	1	He	0.101	6.8	577	5.3	2	
Ba	137	115	1	He	0.744	11.0	1560	10.7	5	
W	182	159	1	He	0.151	51.1	6928	11.9	10	
Tl	205	165	1	He	0.026	6.7	938	6.0	0.5	
Pb	208	165	1	He	1.023	1.6	39296	0.8	1	Blank Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1658629	2.38	1663342	99.72	30	120	
Sc	45	1	He	771451	0.79	788655	97.82	30	120	
Sc	45	2	NoGas	7062323	0.43	7332116	96.32	30	120	
Rh	103	1	He	2433036	0.87	2523919	96.40	30	120	
In	115	1	He	1378918	0.09	1420677	97.06	30	120	
Tb	159	1	He	3887415	1.48	3983717	97.58	30	120	
Ho	165	1	He	3924438	0.77	4030813	97.36	30	120	
Bi	209	1	He	3057014	0.53	2997463	101.99	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-181296/2-a
Data File Name	079_LCS.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T20:15:40-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	2	NoGas	0.105	0.105	23.497	65589	2.26	1000	0.0	79.5	120.5	LCS Failed
Be	9	2	NoGas	381.899	381.899	1.128	1886110	0.69	1000	38.2	79.5	120.5	LCS Failed
B	11	2	NoGas	154.069	154.069	0.808	459101	0.83	100	154.1	79.5	120.5	LCS Failed
Na	23	1	He	9023.247	9023.247	0.928	11272762	0.97	10000	90.2	79.5	120.5	
Mg	24	1	He	8968.998	8968.998	1.450	6508297	1.06	10000	89.7	79.5	120.5	
Al	27	1	He	8572.130	8572.130	1.021	3491244	0.65	10000	85.7	79.5	120.5	
K	39	1	He	8795.375	8795.375	0.382	6180149	0.02	10000	88.0	79.5	120.5	
Ca	44	1	He	7825.434	7825.434	0.916	303247	0.60	10000	78.3	79.5	120.5	LCS Failed
Ti	47	1	He	143.626	143.626	1.363	31040	1.15	100	143.6	79.5	120.5	LCS Failed
V	51	1	He	371.490	371.490	0.642	3999505	0.38	1000	37.1	79.5	120.5	LCS Failed
Cr	52	1	He	379.455	379.455	0.713	2579937	0.52	1000	37.9	79.5	120.5	LCS Failed
Mn	55	1	He	369.050	369.050	1.346	1902459	1.44	1000	36.9	79.5	120.5	LCS Failed
Fe	56	1	He	8920.915	8920.915	0.638	57252300	0.62	10000	89.2	79.5	120.5	
Co	59	1	He	379.492	379.492	0.418	3610022	0.42	1000	37.9	79.5	120.5	LCS Failed
Ni	60	1	He	371.547	371.547	0.500	891150	0.15	1000	37.2	79.5	120.5	LCS Failed
Cu	63	1	He	396.307	396.307	0.701	2516078	0.76	1000	39.6	79.5	120.5	LCS Failed
Zn	66	1	He	393.576	393.576	0.458	531611	0.56	1000	39.4	79.5	120.5	LCS Failed
As	75	1	He	387.732	387.732	0.594	352286	0.09	1000	38.8	79.5	120.5	LCS Failed
Se	78	1	He	393.912	393.912	0.547	30694	0.33	1000	39.4	79.5	120.5	LCS Failed
Sr	88	1	He	388.218	388.218	1.256	2480067	0.87	1000	38.8	79.5	120.5	LCS Failed
Mo	95	1	He	147.159	147.159	1.174	479403	0.36	100	147.2	79.5	120.5	LCS Failed
Ag	107	1	He	150.618	150.618	1.957	1573114	0.92	100	150.6	79.5	120.5	LCS Failed
Cd	111	1	He	387.617	387.617	1.363	679414	0.94	1000	38.8	79.5	120.5	LCS Failed
Sn	118	1	He	1572.783	1572.783	1.160	6329349	0.91	100	1572.8	79.5	120.5	LCS Failed
Sb	123	1	He	150.273	150.273	0.733	641370	0.14	100	150.3	79.5	120.5	LCS Failed
Ba	137	1	He	379.104	379.104	1.205	732287	0.53	1000	37.9	79.5	120.5	LCS Failed
W	182	1	He	158.939	158.939	1.140	1838861	1.20	100	158.9	79.5	120.5	LCS Failed
Tl	205	1	He	95.607	95.607	0.766	2681166	0.22	250	38.2	79.5	120.5	LCS Failed
Pb	208	1	He	392.923	392.923	0.889	14430334	0.13	1000	39.3	79.5	120.5	LCS Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1646902	0.62	1663342	99.01	30	120	
Sc	45	1	He	761963	0.39	788655	96.62	30	120	
Sc	45	2	NoGas	7182883	1.53	7332116	97.96	30	120	
Rh	103	1	He	2342928	1.17	2523919	92.83	30	120	
In	115	1	He	1305861	0.67	1420677	91.92	30	120	
Tb	159	1	He	3851540	0.46	3983717	96.68	30	120	
Ho	165	1	He	3849710	0.98	4030813	95.51	30	120	
Bi	209	1	He	2877822	1.01	2997463	96.01	30	120	

Sample Report

Sample Table

Sample Name	240-50818-b-3-a
Data File Name	080SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T20:19:24-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	38.823	38.823	0.56	831852	0.00	10000	
Be	9	6	2	NoGas	0.023	0.023	88.01	178	0.01	10000	
B	11	45	2	NoGas	81.262	81.262	1.06	251130	0.03	300	
Na	23	45	1	He	14823.454	14823.454	1.49	18377887	0.08	500000	
Mg	24	45	1	He	52095.474	52095.474	0.63	37531274	0.14	500000	
Al	27	45	1	He	10.351	10.351	1.55	4813	0.22	200000	
K	39	45	1	He	2290.856	2290.856	1.71	1627569	0.14	500000	
Ca	44	45	1	He	82289.299	82289.299	1.96	3162380	2.60	500000	
Ti	47	45	1	He	0.332	0.332	17.16	123	0.27	2500	
V	51	45	1	He	1.173	1.173	1.62	15665	0.01	10000	
Cr	52	45	1	He	1.248	1.248	5.64	10846	0.01	10000	
Mn	55	45	1	He	7.755	7.755	0.64	40531	0.02	10000	
Fe	56	45	1	He	444.062	444.062	0.98	2834691	0.02	200000	
Co	59	45	1	He	8.888	8.888	0.34	84038	0.01	10000	
Ni	60	45	1	He	1.871	1.871	4.98	4515	0.04	10000	
Cu	63	45	1	He	1.348	1.348	3.20	9883	0.01	10000	
Zn	66	45	1	He	4.592	4.592	3.86	7740	0.06	10000	
As	75	115	1	He	5.066	5.066	3.15	4768	0.11	10000	
Se	78	115	1	He	0.634	0.634	19.62	86	0.73	10000	
Sr	88	45	1	He	6477.419	6477.419	0.98	41081649	0.02	10000	
Mo	95	103	1	He	51.266	51.266	0.67	164582	0.03	2000	
Ag	107	103	1	He	0.021	0.021	21.78	237	0.01	300	
Cd	111	115	1	He	0.147	0.147	28.94	1542	0.01	4000	
Sn	118	115	1	He	1.397	1.397	11.56	6439	0.02	2000	
Sb	123	115	1	He	0.258	0.258	18.83	1228	0.02	300	
Ba	137	115	1	He	56.288	56.288	1.21	109628	0.05	10000	
W	182	159	1	He	1.582	1.582	10.68	23522	0.01	2500	
Tl	205	165	1	He	0.091	0.091	6.45	2788	0.00	5000	
Pb	208	165	1	He	0.166	0.166	4.85	7169	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1669031	0.70	1663342	100.34	30	120	
Sc	45	1	He	756476	0.57	788655	95.92	30	120	
Sc	45	2	NoGas	7310889	0.75	7332116	99.71	30	120	
Rh	103	1	He	2307734	1.08	2523919	91.43	30	120	
In	115	1	He	1316136	0.66	1420677	92.64	30	120	
Tb	159	1	He	3875320	0.72	3983717	97.28	30	120	
Ho	165	1	He	3893521	0.82	4030813	96.59	30	120	
Bi	209	1	He	2793734	0.60	2997463	93.20	30	120	

Sample Report

Sample Table

Sample Name	SD 240-50818-b-3-a@5
Data File Name	081SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T20:23:17-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	8.110	8.110	0.95	229375	0.00	10000	
Be	9	6	2	NoGas	0.017	0.017	45.38	152	0.01	10000	
B	11	45	2	NoGas	16.299	16.299	1.61	59373	0.03	300	
Na	23	45	1	He	3038.515	3038.515	1.78	4121692	0.07	500000	
Mg	24	45	1	He	10564.986	10564.986	2.51	8303296	0.13	500000	
Al	27	45	1	He	2.524	2.524	5.16	1798	0.14	200000	
K	39	45	1	He	449.143	449.143	1.16	382975	0.12	500000	
Ca	44	45	1	He	15799.165	15799.165	1.83	662743	2.38	500000	
Ti	47	45	1	He	-0.088	-0.088	-117.62	37	-0.24	2500	
V	51	45	1	He	0.324	0.324	8.64	7199	0.00	10000	
Cr	52	45	1	He	0.244	0.244	8.51	4445	0.01	10000	
Mn	55	45	1	He	1.678	1.678	3.43	10303	0.02	10000	
Fe	56	45	1	He	87.782	87.782	2.16	616166	0.01	200000	
Co	59	45	1	He	1.803	1.803	1.41	18690	0.01	10000	
Ni	60	45	1	He	0.413	0.413	3.20	1136	0.04	10000	
Cu	63	45	1	He	0.231	0.231	3.60	3104	0.01	10000	
Zn	66	45	1	He	1.347	1.347	10.45	3712	0.04	10000	
As	75	115	1	He	0.961	0.961	6.47	1112	0.09	10000	
Se	78	115	1	He	0.152	0.152	67.35	53	0.28	10000	
Sr	88	45	1	He	1303.915	1303.915	1.57	9022636	0.01	10000	
Mo	95	103	1	He	10.121	10.121	1.34	35637	0.03	2000	
Ag	107	103	1	He	0.005	0.005	37.12	84	0.01	300	
Cd	111	115	1	He	0.033	0.033	137.60	1479	0.00	4000	
Sn	118	115	1	He	0.109	0.109	14.43	1341	0.01	2000	
Sb	123	115	1	He	0.034	0.034	30.58	290	0.01	300	
Ba	137	115	1	He	11.181	11.181	3.23	24012	0.05	10000	
W	182	159	1	He	0.284	0.284	23.42	8962	0.00	2500	
Tl	205	165	1	He	0.013	0.013	11.48	596	0.00	5000	
Pb	208	165	1	He	0.042	0.042	2.34	2722	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1722914	0.29	1663342	103.58	30	120	
Sc	45	1	He	825542	2.23	788655	104.68	30	120	
Sc	45	2	NoGas	7455055	0.17	7332116	101.68	30	120	
Rh	103	1	He	2525761	0.94	2523919	100.07	30	120	
In	115	1	He	1449385	1.22	1420677	102.02	30	120	
Tb	159	1	He	4107588	1.03	3983717	103.11	30	120	
Ho	165	1	He	4144992	1.67	4030813	102.83	30	120	
Bi	209	1	He	3043482	0.25	2997463	101.54	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-50818-b-3-a
Data File Name	082SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T20:27:09-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	38.567	38.567	0.69	804987	0.00	10000	
Be	9	6	2	NoGas	979.296	979.296	1.39	4698062	0.02	10000	
B	11	45	2	NoGas	183.892	183.892	0.57	541221	0.03	300	
Na	23	45	1	He	26360.440	26360.440	8.98	30531646	0.09	500000	
Mg	24	45	1	He	65572.717	65572.717	8.66	44157733	0.15	500000	
Al	27	45	1	He	10156.668	10156.668	10.84	3833927	0.26	200000	
K	39	45	1	He	12777.639	12777.639	9.73	8310379	0.15	500000	
Ca	44	45	1	He	94106.073	94106.073	8.77	3380240	2.78	500000	
Ti	47	45	1	He	105.243	105.243	9.89	21107	0.50	2500	
V	51	45	1	He	1027.938	1027.938	9.29	10261683	0.01	10000	
Cr	52	45	1	He	1031.011	1031.011	9.14	6499747	0.02	10000	
Mn	55	45	1	He	1026.439	1026.439	9.88	4905520	0.02	10000	
Fe	56	45	1	He	10883.568	10883.568	9.39	64792640	0.02	200000	
Co	59	45	1	He	1022.680	1022.680	9.47	9024204	0.01	10000	
Ni	60	45	1	He	1051.335	1051.335	8.76	2339910	0.04	10000	
Cu	63	45	1	He	1044.338	1044.338	9.99	6146171	0.02	10000	
Zn	66	45	1	He	1007.522	1007.522	9.01	1260357	0.08	10000	
As	75	115	1	He	1113.390	1113.390	10.28	916471	0.12	10000	
Se	78	115	1	He	1116.157	1116.157	9.39	78795	1.42	10000	
Sr	88	45	1	He	8047.323	8047.323	9.13	47694326	0.02	10000	
Mo	95	103	1	He	168.838	168.838	9.53	502095	0.03	2000	
Ag	107	103	1	He	104.149	104.149	9.03	993356	0.01	300	
Cd	111	115	1	He	1147.334	1147.334	9.38	1821197	0.06	4000	
Sn	118	115	1	He	1234.241	1234.241	9.61	4503127	0.03	2000	
Sb	123	115	1	He	116.267	116.267	9.77	449844	0.03	300	
Ba	137	115	1	He	1243.582	1243.582	10.95	2175790	0.06	10000	
W	182	159	1	He	109.528	109.528	9.25	1200387	0.01	2500	
Tl	205	165	1	He	255.617	255.617	8.15	6790472	0.00	5000	
Pb	208	165	1	He	1052.066	1052.066	7.98	36604458	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1599778	0.68	1663342	96.18	30	120	
Sc	45	1	He	710728	8.79	788655	90.12	30	120	
Sc	45	2	NoGas	7118225	0.36	7332116	97.08	30	120	
Rh	103	1	He	2150826	8.95	2523919	85.22	30	120	
In	115	1	He	1191047	9.49	1420677	83.84	30	120	
Tb	159	1	He	3663024	8.52	3983717	91.95	30	120	
Ho	165	1	He	3662919	8.13	4030813	90.87	30	120	
Bi	209	1	He	2675674	8.56	2997463	89.26	30	120	

Sample Report

Sample Table

Sample Name	240-50818-b-3-b ms
Data File Name	083SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T20:30:46-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	38.400	38.400	1.69	808470	0.00	10000	
Be	9	6	2	NoGas	452.795	452.795	3.04	2177087	0.02	10000	
B	11	45	2	NoGas	247.874	247.874	0.83	732354	0.03	300	
Na	23	45	1	He	25566.392	25566.392	2.26	30985605	0.08	500000	
Mg	24	45	1	He	63915.288	63915.288	1.75	45028555	0.14	500000	
Al	27	45	1	He	9955.536	9955.536	1.47	3936626	0.25	200000	
K	39	45	1	He	12556.098	12556.098	1.63	8549263	0.15	500000	
Ca	44	45	1	He	93227.512	93227.512	1.39	3503631	2.66	500000	
Ti	47	45	1	He	161.665	161.665	1.05	33917	0.48	2500	
V	51	45	1	He	451.389	451.389	2.14	4717430	0.01	10000	
Cr	52	45	1	He	454.845	454.845	1.67	3002042	0.02	10000	
Mn	55	45	1	He	453.520	453.520	0.79	2269743	0.02	10000	
Fe	56	45	1	He	10586.107	10586.107	1.27	65961275	0.02	200000	
Co	59	45	1	He	458.525	458.525	0.87	4235075	0.01	10000	
Ni	60	45	1	He	435.762	435.762	1.31	1014755	0.04	10000	
Cu	63	45	1	He	462.514	462.514	2.99	2850709	0.02	10000	
Zn	66	45	1	He	449.377	449.377	2.20	589070	0.08	10000	
As	75	115	1	He	489.002	489.002	1.67	422278	0.12	10000	
Se	78	115	1	He	486.712	486.712	1.86	36039	1.35	10000	
Sr	88	45	1	He	7178.938	7178.938	2.17	44522874	0.02	10000	
Mo	95	103	1	He	227.398	227.398	1.88	705886	0.03	2000	
Ag	107	103	1	He	172.641	172.641	2.34	1718287	0.01	300	
Cd	111	115	1	He	469.768	469.768	1.17	782447	0.06	4000	
Sn	118	115	1	He	1846.523	1846.523	2.32	7062912	0.03	2000	
Sb	123	115	1	He	175.008	175.008	2.02	709953	0.02	300	
Ba	137	115	1	He	531.491	531.491	1.98	975819	0.05	10000	
W	182	159	1	He	187.750	187.750	0.64	2115867	0.01	2500	
Tl	205	165	1	He	115.004	115.004	2.01	3191755	0.00	5000	
Pb	208	165	1	He	463.116	463.116	3.16	16829398	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1603911	1.95	1663342	96.43	30	120	
Sc	45	1	He	739844	0.91	788655	93.81	30	120	
Sc	45	2	NoGas	7179250	2.03	7332116	97.92	30	120	
Rh	103	1	He	2232731	1.18	2523919	88.46	30	120	
In	115	1	He	1241354	1.13	1420677	87.38	30	120	
Tb	159	1	He	3753262	0.14	3983717	94.22	30	120	
Ho	165	1	He	3810686	2.16	4030813	94.54	30	120	
Bi	209	1	He	2750115	1.49	2997463	91.75	30	120	

Sample Report

Sample Table

Sample Name	240-50818-b-3-c msd
Data File Name	084SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T20:34:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	38.352	38.352	0.55	792132	0.00	10000	
Be	9	6	2	NoGas	454.883	454.883	0.63	2157655	0.02	10000	
B	11	45	2	NoGas	249.561	249.561	1.95	723069	0.03	300	
Na	23	45	1	He	26101.902	26101.902	5.59	30516124	0.09	500000	
Mg	24	45	1	He	64754.960	64754.960	5.74	44005514	0.15	500000	
Al	27	45	1	He	10062.089	10062.089	5.95	3837483	0.26	200000	
K	39	45	1	He	12699.025	12699.025	7.29	8334843	0.15	500000	
Ca	44	45	1	He	93760.026	93760.026	4.83	3399997	2.76	500000	
Ti	47	45	1	He	164.365	164.365	8.04	33229	0.49	2500	
V	51	45	1	He	468.878	468.878	6.80	4724621	0.01	10000	
Cr	52	45	1	He	471.164	471.164	6.00	2999248	0.02	10000	
Mn	55	45	1	He	473.635	473.635	6.13	2285936	0.02	10000	
Fe	56	45	1	He	10829.728	10829.728	5.53	65094751	0.02	200000	
Co	59	45	1	He	478.015	478.015	5.89	4258381	0.01	10000	
Ni	60	45	1	He	452.797	452.797	6.11	1016905	0.04	10000	
Cu	63	45	1	He	473.616	473.616	6.25	2815124	0.02	10000	
Zn	66	45	1	He	462.433	462.433	6.77	584435	0.08	10000	
As	75	115	1	He	486.759	486.759	2.76	420616	0.12	10000	
Se	78	115	1	He	480.061	480.061	2.87	35570	1.35	10000	
Sr	88	45	1	He	7329.941	7329.941	6.44	43837722	0.02	10000	
Mo	95	103	1	He	228.514	228.514	6.43	694891	0.03	2000	
Ag	107	103	1	He	170.684	170.684	4.64	1665502	0.01	300	
Cd	111	115	1	He	471.255	471.255	2.24	785490	0.06	4000	
Sn	118	115	1	He	1810.513	1810.513	2.42	6930431	0.03	2000	
Sb	123	115	1	He	170.818	170.818	2.30	693491	0.02	300	
Ba	137	115	1	He	531.785	531.785	2.24	977136	0.05	10000	
W	182	159	1	He	184.823	184.823	7.74	2065163	0.01	2500	
Tl	205	165	1	He	116.560	116.560	7.76	3171091	0.00	5000	
Pb	208	165	1	He	474.542	474.542	8.33	16901867	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1581739	1.11	1663342	95.09	30	120	
Sc	45	1	He	715334	6.42	788655	90.70	30	120	
Sc	45	2	NoGas	7040861	0.70	7332116	96.03	30	120	
Rh	103	1	He	2192832	6.26	2523919	86.88	30	120	
In	115	1	He	1242687	2.95	1420677	87.47	30	120	
Tb	159	1	He	3735356	7.38	3983717	93.77	30	120	
Ho	165	1	He	3750749	8.35	4030813	93.05	30	120	
Bi	209	1	He	2703474	6.40	2997463	90.19	30	120	

Sample Report

Sample Table

Sample Name	190-7334-a-1-b
Data File Name	085SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T20:38:10-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	7.768	7.768	1.45	199460	0.00	10000	
Be	9	6	2	NoGas	0.082	0.082	28.40	422	0.02	10000	
B	11	45	2	NoGas	84.826	84.826	0.68	239247	0.04	300	
Na	23	45	1	He	284589.426	284589.426	0.58	335213653	0.08	500000	
Mg	24	45	1	He	23085.791	23085.791	0.39	15812693	0.15	500000	
Al	27	45	1	He	278.798	278.798	0.22	107763	0.26	200000	
K	39	45	1	He	23990.502	23990.502	0.16	15846835	0.15	500000	
Ca	44	45	1	He	73906.768	73906.768	0.70	2700411	2.74	500000	
Ti	47	45	1	He	3.918	3.918	4.92	848	0.46	2500	
V	51	45	1	He	3.567	3.567	0.97	39206	0.01	10000	
Cr	52	45	1	He	4.784	4.784	1.78	32981	0.01	10000	
Mn	55	45	1	He	41.616	41.616	0.60	203232	0.02	10000	
Fe	56	45	1	He	2592.619	2592.619	0.19	15709546	0.02	200000	
Co	59	45	1	He	0.400	0.400	6.32	3689	0.01	10000	
Ni	60	45	1	He	11.975	11.975	2.11	27165	0.04	10000	
Cu	63	45	1	He	70.475	70.475	0.25	423426	0.02	10000	
Zn	66	45	1	He	768.609	768.609	0.19	978506	0.08	10000	
As	75	115	1	He	2.207	2.207	9.35	2099	0.11	10000	
Se	78	115	1	He	1.828	1.828	5.71	176	1.04	10000	
Sr	88	45	1	He	7330.530	7330.530	0.45	44201830	0.02	10000	
Mo	95	103	1	He	7.787	7.787	1.49	24008	0.03	2000	
Ag	107	103	1	He	0.047	0.047	8.00	483	0.01	300	
Cd	111	115	1	He	0.274	0.274	18.24	1726	0.02	4000	
Sn	118	115	1	He	7.398	7.398	2.86	30064	0.02	2000	
Sb	123	115	1	He	2.267	2.267	2.55	9635	0.02	300	
Ba	137	115	1	He	75.962	75.962	0.84	144460	0.05	10000	
W	182	159	1	He	1.450	1.450	14.12	21574	0.01	2500	
Tl	205	165	1	He	0.137	0.137	7.30	4034	0.00	5000	
Pb	208	165	1	He	0.761	0.761	2.37	28859	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1494927	1.36	1663342	89.87	30	120	
Sc	45	1	He	719239	0.70	788655	91.20	30	120	
Sc	45	2	NoGas	6683397	0.24	7332116	91.15	30	120	
Rh	103	1	He	2209334	0.59	2523919	87.54	30	120	
In	115	1	He	1285322	0.82	1420677	90.47	30	120	
Tb	159	1	He	3800833	0.56	3983717	95.41	30	120	
Ho	165	1	He	3838755	0.79	4030813	95.24	30	120	
Bi	209	1	He	2885671	0.78	2997463	96.27	30	120	

Sample Report

Sample Table

Sample Name	240-50774-e-1-a
Data File Name	086SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T20:42:03-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	2.055	2.055	5.33	98640	0.00	10000	
Be	9	6	2	NoGas	0.063	0.063	14.77	352	0.02	10000	
B	11	45	2	NoGas	14.384	14.384	3.06	49233	0.03	300	
Na	23	45	1	He	4258.119	4258.119	1.08	5108126	0.08	500000	
Mg	24	45	1	He	18793.382	18793.382	0.98	13077329	0.14	500000	
Al	27	45	1	He	8.736	8.736	8.24	4020	0.22	200000	
K	39	45	1	He	1879.281	1879.281	0.63	1296482	0.14	500000	
Ca	44	45	1	He	72488.318	72488.318	2.10	2690300	2.69	500000	
Ti	47	45	1	He	0.079	0.079	114.26	67	0.12	2500	
V	51	45	1	He	1.248	1.248	6.49	15904	0.01	10000	
Cr	52	45	1	He	1.235	1.235	3.83	10392	0.01	10000	
Mn	55	45	1	He	5.040	5.040	3.26	25730	0.02	10000	
Fe	56	45	1	He	11.682	11.682	4.13	77215	0.02	200000	
Co	59	45	1	He	0.148	0.148	5.05	1450	0.01	10000	
Ni	60	45	1	He	1.410	1.410	3.72	3299	0.04	10000	
Cu	63	45	1	He	0.991	0.991	1.57	7373	0.01	10000	
Zn	66	45	1	He	6.795	6.795	1.89	10318	0.07	10000	
As	75	115	1	He	1.006	1.006	8.11	1033	0.10	10000	
Se	78	115	1	He	0.289	0.289	25.49	58	0.50	10000	
Sr	88	45	1	He	587.959	587.959	1.32	3601812	0.02	10000	
Mo	95	103	1	He	0.709	0.709	5.79	2289	0.03	2000	
Ag	107	103	1	He	0.009	0.009	19.85	112	0.01	300	
Cd	111	115	1	He	0.077	0.077	20.43	1396	0.01	4000	
Sn	118	115	1	He	0.697	0.697	3.43	3545	0.02	2000	
Sb	123	115	1	He	0.185	0.185	9.37	898	0.02	300	
Ba	137	115	1	He	28.816	28.816	0.99	55210	0.05	10000	
W	182	159	1	He	0.313	0.313	36.38	8447	0.00	2500	
Tl	205	165	1	He	0.039	0.039	5.24	1271	0.00	5000	
Pb	208	165	1	He	0.208	0.208	2.42	8522	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1550828	2.11	1663342	93.24	30	120	
Sc	45	1	He	730751	1.77	788655	92.66	30	120	
Sc	45	2	NoGas	6849961	0.78	7332116	93.42	30	120	
Rh	103	1	He	2231332	1.05	2523919	88.41	30	120	
In	115	1	He	1294362	0.85	1420677	91.11	30	120	
Tb	159	1	He	3723071	0.10	3983717	93.46	30	120	
Ho	165	1	He	3801664	0.64	4030813	94.32	30	120	
Bi	209	1	He	2785017	1.51	2997463	92.91	30	120	

Sample Report

Sample Table

Sample Name	240-50818-b-1-a
Data File Name	087SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T20:45:56-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	22.912	22.912	2.06	506972	0.00	10000	
Be	9	6	2	NoGas	0.031	0.031	17.65	211	0.01	10000	
B	11	45	2	NoGas	19.005	19.005	1.48	64929	0.03	300	
Na	23	45	1	He	11478.372	11478.372	1.56	13795270	0.08	500000	
Mg	24	45	1	He	75509.358	75509.358	1.96	52724979	0.14	500000	
Al	27	45	1	He	54.651	54.651	3.66	22033	0.25	200000	
K	39	45	1	He	1626.778	1626.778	2.07	1131284	0.14	500000	
Ca	44	45	1	He	67714.113	67714.113	1.93	2522249	2.68	500000	
Ti	47	45	1	He	0.963	0.963	23.75	251	0.38	2500	
V	51	45	1	He	1.712	1.712	4.47	20762	0.01	10000	
Cr	52	45	1	He	1.360	1.360	2.60	11239	0.01	10000	
Mn	55	45	1	He	1.136	1.136	7.53	6463	0.02	10000	
Fe	56	45	1	He	53.064	53.064	2.89	333009	0.02	200000	
Co	59	45	1	He	0.112	0.112	6.22	1122	0.01	10000	
Ni	60	45	1	He	0.928	0.928	6.32	2199	0.04	10000	
Cu	63	45	1	He	0.869	0.869	2.93	6655	0.01	10000	
Zn	66	45	1	He	2.985	2.985	5.48	5416	0.06	10000	
As	75	115	1	He	0.917	0.917	4.10	950	0.10	10000	
Se	78	115	1	He	1.633	1.633	18.34	161	1.01	10000	
Sr	88	45	1	He	544.494	544.494	2.38	3347088	0.02	10000	
Mo	95	103	1	He	46.395	46.395	1.19	144007	0.03	2000	
Ag	107	103	1	He	0.009	0.009	26.07	111	0.01	300	
Cd	111	115	1	He	0.133	0.133	22.49	1487	0.01	4000	
Sn	118	115	1	He	0.491	0.491	9.00	2711	0.02	2000	
Sb	123	115	1	He	0.155	0.155	8.06	769	0.02	300	
Ba	137	115	1	He	51.436	51.436	1.51	98144	0.05	10000	
W	182	159	1	He	0.304	0.304	27.74	8480	0.00	2500	
Tl	205	165	1	He	0.076	0.076	5.48	2322	0.00	5000	
Pb	208	165	1	He	0.154	0.154	3.52	6627	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1602939	1.48	1663342	96.37	30	120	
Sc	45	1	He	733325	1.50	788655	92.98	30	120	
Sc	45	2	NoGas	7164392	1.28	7332116	97.71	30	120	
Rh	103	1	He	2231426	1.61	2523919	88.41	30	120	
In	115	1	He	1289470	0.43	1420677	90.76	30	120	
Tb	159	1	He	3786233	1.25	3983717	95.04	30	120	
Ho	165	1	He	3844695	0.47	4030813	95.38	30	120	
Bi	209	1	He	2748937	1.79	2997463	91.71	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2012431
Data File Name	088_CCV.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T20:49:49-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	49.786	2.405	1005789	0.50	50	99.6	89.5	110.5	
Be	9	6	2	NoGas	50.506	1.259	236577	1.13	50	101.0	89.5	110.5	
B	11	45	2	NoGas	49.996	2.924	151856	2.41	50	100.0	89.5	110.5	
Na	23	45	1	He	24145.825	0.944	31039997	0.18	25000	96.6	89.5	110.5	
Mg	24	45	1	He	23928.953	1.507	17880454	0.55	25000	95.7	89.5	110.5	
Al	27	45	1	He	239.889	1.486	101244	0.65	250	96.0	89.5	110.5	
K	39	45	1	He	24288.403	1.249	17501973	0.19	25000	97.2	89.5	110.5	
Ca	44	45	1	He	23329.925	0.950	930217	0.27	25000	93.3	89.5	110.5	
Ti	47	45	1	He	48.713	1.583	10877	0.68	50	97.4	89.5	110.5	
V	51	45	1	He	48.096	1.746	536047	0.77	50	96.2	89.5	110.5	
Cr	52	45	1	He	47.742	0.639	336481	0.55	50	95.5	89.5	110.5	
Mn	55	45	1	He	235.028	0.933	1247975	0.27	250	94.0	89.5	110.5	
Fe	56	45	1	He	11913.167	1.116	78730464	0.30	12500	95.3	89.5	110.5	
Co	59	45	1	He	47.713	1.129	467492	0.55	50	95.4	89.5	110.5	
Ni	60	45	1	He	47.141	0.725	116491	0.59	50	94.3	89.5	110.5	
Cu	63	45	1	He	47.808	1.031	313836	0.83	50	95.6	89.5	110.5	
Zn	66	45	1	He	48.887	1.627	69451	1.27	50	97.8	89.5	110.5	
As	75	115	1	He	50.222	0.642	47894	0.04	50	100.4	89.5	110.5	
Se	78	115	1	He	50.299	1.553	4137	1.76	50	100.6	89.5	110.5	
Sr	88	45	1	He	48.677	0.572	320422	0.74	50	97.4	89.5	110.5	
Mo	95	103	1	He	51.605	1.113	169303	0.82	50	103.2	89.5	110.5	
Ag	107	103	1	He	48.586	1.539	510880	0.72	50	97.2	89.5	110.5	
Cd	111	115	1	He	49.026	1.355	91138	0.92	50	98.1	89.5	110.5	
Sn	118	115	1	He	54.890	0.281	232062	0.43	50	109.8	89.5	110.5	
Sb	123	115	1	He	52.707	0.464	235615	0.60	50	105.4	89.5	110.5	
Ba	137	115	1	He	49.480	1.433	100107	0.86	50	99.0	89.5	110.5	
W	182	159	1	He	49.200	1.146	589370	0.21	50	98.4	89.5	110.5	
Tl	205	165	1	He	46.120	0.120	1327166	0.29	50	92.2	89.5	110.5	
Pb	208	165	1	He	48.105	0.262	1813638	0.42	50	96.2	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1561614	0.54	1663342	93.88	30	120	
Sc	45	1	He	784706	1.07	788655	99.50	30	120	
Sc	45	2	NoGas	7015130	1.77	7332116	95.68	30	120	
Rh	103	1	He	2358532	0.82	2523919	93.45	30	120	
In	115	1	He	1367263	0.63	1420677	96.24	30	120	
Tb	159	1	He	3963502	0.97	3983717	99.49	30	120	
Ho	165	1	He	3949831	0.17	4030813	97.99	30	120	
Bi	209	1	He	2906829	0.81	2997463	96.98	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	089_CCB.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T20:53:41-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	0.036	171.6	63929	2.5	2	
Be	9	6	2	NoGas	0.015	33.1	133	16.7	1	
B	11	45	2	NoGas	1.090	2.4	12775	1.5	20	
Na	23	45	1	He	15.705	3.9	34555	3.1	1000	
Mg	24	45	1	He	3.004	11.0	2585	10.5	1000	
Al	27	45	1	He	0.533	19.8	879	5.9	50	
K	39	45	1	He	5.464	23.2	45302	2.9	1000	
Ca	44	45	1	He	6.631	27.8	668	11.8	1000	
Ti	47	45	1	He	-0.185	-13.8	13	43.3	20	
V	51	45	1	He	0.009	219.4	3365	5.9	2	
Cr	52	45	1	He	0.033	69.3	2757	4.8	2	
Mn	55	45	1	He	0.064	9.3	1235	2.0	2	
Fe	56	45	1	He	6.911	13.5	51605	11.1	50	
Co	59	45	1	He	0.014	45.9	240	26.5	1	
Ni	60	45	1	He	0.002	494.1	66	33.1	2	
Cu	63	45	1	He	-0.016	-57.5	1341	4.7	2	
Zn	66	45	1	He	0.240	54.5	1999	8.4	20	
As	75	115	1	He	0.131	30.1	269	14.1	2	
Se	78	115	1	He	0.272	40.9	63	14.5	2	
Sr	88	45	1	He	0.101	6.4	868	5.8	10	
Mo	95	103	1	He	0.236	35.2	906	30.3	2	
Ag	107	103	1	He	0.007	55.8	101	40.7	0.2	
Cd	111	115	1	He	0.080	10.8	1537	1.0	0.2	
Sn	118	115	1	He	0.225	36.7	1819	19.8	10	
Sb	123	115	1	He	0.090	22.6	542	16.9	2	
Ba	137	115	1	He	0.006	110.9	57	27.0	5	
W	182	159	1	He	0.483	20.2	11000	9.6	10	
Tl	205	165	1	He	0.071	6.2	2268	5.1	0.5	
Pb	208	165	1	He	0.042	8.6	2597	5.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1595777	1.55	1663342	95.94	30	120	
Sc	45	1	He	788130	0.96	788655	99.93	30	120	
Sc	45	2	NoGas	7147623	0.93	7332116	97.48	30	120	
Rh	103	1	He	2464847	1.79	2523919	97.66	30	120	
In	115	1	He	1419842	0.59	1420677	99.94	30	120	
Tb	159	1	He	3962162	1.24	3983717	99.46	30	120	
Ho	165	1	He	3984545	0.78	4030813	98.85	30	120	
Bi	209	1	He	2965873	0.82	2997463	98.95	30	120	

Sample Report

Sample Table

Sample Name	240-50818-b-2-a
Data File Name	090SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T20:57:36-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	84.842	84.842	0.93	1639131	0.01	10000	
Be	9	6	2	NoGas	0.020	0.020	80.94	148	0.01	10000	
B	11	45	2	NoGas	61.211	61.211	2.09	180356	0.03	300	
Na	23	45	1	He	17130.123	17130.123	1.52	20471524	0.08	500000	
Mg	24	45	1	He	2488.794	2488.794	1.41	1728860	0.14	500000	
Al	27	45	1	He	16.280	16.280	5.06	6949	0.23	200000	
K	39	45	1	He	5302.790	5302.790	2.12	3581370	0.15	500000	
Ca	44	45	1	He	123226.223	123226.223	1.89	4564995	2.70	500000	
Ti	47	45	1	He	0.083	0.083	95.15	68	0.12	2500	
V	51	45	1	He	1.372	1.372	7.83	17155	0.01	10000	
Cr	52	45	1	He	2.082	2.082	0.54	15876	0.01	10000	
Mn	55	45	1	He	0.575	0.575	2.08	3667	0.02	10000	
Fe	56	45	1	He	44.418	44.418	1.94	278149	0.02	200000	
Co	59	45	1	He	0.884	0.884	1.25	8146	0.01	10000	
Ni	60	45	1	He	1.767	1.767	4.24	4112	0.04	10000	
Cu	63	45	1	He	1.055	1.055	2.37	7747	0.01	10000	
Zn	66	45	1	He	3.452	3.452	8.01	5990	0.06	10000	
As	75	115	1	He	1.102	1.102	3.41	1134	0.10	10000	
Se	78	115	1	He	0.255	0.255	11.74	56	0.45	10000	
Sr	88	45	1	He	3535.752	3535.752	1.18	21620002	0.02	10000	
Mo	95	103	1	He	34.103	34.103	1.10	106286	0.03	2000	
Ag	107	103	1	He	0.014	0.014	18.62	166	0.01	300	
Cd	111	115	1	He	0.109	0.109	41.10	1469	0.01	4000	
Sn	118	115	1	He	0.551	0.551	6.09	2997	0.02	2000	
Sb	123	115	1	He	0.269	0.269	10.84	1268	0.02	300	
Ba	137	115	1	He	75.857	75.857	0.91	147161	0.05	10000	
W	182	159	1	He	0.265	0.265	35.07	7991	0.00	2500	
Tl	205	165	1	He	0.056	0.056	5.34	1749	0.00	5000	
Pb	208	165	1	He	0.265	0.265	2.36	10632	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1523336	0.81	1663342	91.58	30	120	
Sc	45	1	He	729396	1.31	788655	92.49	30	120	
Sc	45	2	NoGas	6882357	0.37	7332116	93.87	30	120	
Rh	103	1	He	2240157	2.34	2523919	88.76	30	120	
In	115	1	He	1311091	0.77	1420677	92.29	30	120	
Tb	159	1	He	3758797	1.90	3983717	94.35	30	120	
Ho	165	1	He	3827474	1.81	4030813	94.96	30	120	
Bi	209	1	He	2819791	0.99	2997463	94.07	30	120	

Sample Report

Sample Table

Sample Name	240-50818-b-4-a
Data File Name	091SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T21:01:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	13.113	13.113	1.20	292389	0.00	10000	
Be	9	6	2	NoGas	0.018	0.018	110.27	137	0.01	10000	
B	11	45	2	NoGas	69.967	69.967	1.79	196487	0.04	300	
Na	23	45	1	He	10051.711	10051.711	3.33	11554908	0.09	500000	
Mg	24	45	1	He	45785.683	45785.683	2.38	30577640	0.15	500000	
Al	27	45	1	He	25.611	25.611	2.33	10181	0.25	200000	
K	39	45	1	He	1202.908	1202.908	1.42	809785	0.15	500000	
Ca	44	45	1	He	89404.549	89404.549	3.17	3184772	2.81	500000	
Ti	47	45	1	He	0.460	0.460	24.32	140	0.33	2500	
V	51	45	1	He	1.236	1.236	1.74	15150	0.01	10000	
Cr	52	45	1	He	1.189	1.189	4.29	9682	0.01	10000	
Mn	55	45	1	He	119.886	119.886	1.06	569417	0.02	10000	
Fe	56	45	1	He	53.068	53.068	2.42	318565	0.02	200000	
Co	59	45	1	He	0.117	0.117	10.28	1121	0.01	10000	
Ni	60	45	1	He	2.081	2.081	4.26	4650	0.04	10000	
Cu	63	45	1	He	0.857	0.857	2.22	6291	0.01	10000	
Zn	66	45	1	He	3.543	3.543	5.33	5872	0.06	10000	
As	75	115	1	He	0.670	0.670	3.41	712	0.09	10000	
Se	78	115	1	He	0.184	0.184	57.33	49	0.38	10000	
Sr	88	45	1	He	182.962	182.962	1.79	1075910	0.02	10000	
Mo	95	103	1	He	32.389	32.389	1.99	97532	0.03	2000	
Ag	107	103	1	He	0.006	0.006	38.07	84	0.01	300	
Cd	111	115	1	He	0.113	0.113	16.40	1420	0.01	4000	
Sn	118	115	1	He	0.328	0.328	23.09	2015	0.02	2000	
Sb	123	115	1	He	0.133	0.133	4.37	659	0.02	300	
Ba	137	115	1	He	50.512	50.512	1.06	94162	0.05	10000	
W	182	159	1	He	0.160	0.160	35.63	6705	0.00	2500	
Tl	205	165	1	He	0.065	0.065	3.47	1970	0.00	5000	
Pb	208	165	1	He	0.156	0.156	2.20	6508	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1473645	0.79	1663342	88.60	30	120	
Sc	45	1	He	701430	1.43	788655	88.94	30	120	
Sc	45	2	NoGas	6602035	0.41	7332116	90.04	30	120	
Rh	103	1	He	2164566	2.19	2523919	85.76	30	120	
In	115	1	He	1259722	0.34	1420677	88.67	30	120	
Tb	159	1	He	3704249	1.01	3983717	92.98	30	120	
Ho	165	1	He	3735061	0.94	4030813	92.66	30	120	
Bi	209	1	He	2746831	2.35	2997463	91.64	30	120	

Sample Report

Sample Table

Sample Name	240-50818-b-5-a
Data File Name	092SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T21:05:23-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	53.062	53.062	1.14	1055384	0.01	10000	
Be	9	6	2	NoGas	0.011	0.011	54.66	107	0.01	10000	
B	11	45	2	NoGas	79.331	79.331	1.47	232661	0.03	300	
Na	23	45	1	He	21426.932	21426.932	1.18	25243530	0.08	500000	
Mg	24	45	1	He	97855.706	97855.706	0.86	67012988	0.15	500000	
Al	27	45	1	He	18.484	18.484	0.16	7701	0.24	200000	
K	39	45	1	He	2968.375	2968.375	1.07	1993622	0.15	500000	
Ca	44	45	1	He	39854.117	39854.117	5.26	1456587	2.74	500000	
Ti	47	45	1	He	0.623	0.623	30.24	177	0.35	2500	
V	51	45	1	He	1.549	1.549	11.31	18726	0.01	10000	
Cr	52	45	1	He	1.109	1.109	2.98	9419	0.01	10000	
Mn	55	45	1	He	1.565	1.565	3.45	8424	0.02	10000	
Fe	56	45	1	He	102.828	102.828	1.11	628006	0.02	200000	
Co	59	45	1	He	0.106	0.106	3.90	1047	0.01	10000	
Ni	60	45	1	He	1.401	1.401	2.34	3227	0.04	10000	
Cu	63	45	1	He	0.655	0.655	4.19	5240	0.01	10000	
Zn	66	45	1	He	4.440	4.440	1.61	7163	0.06	10000	
As	75	115	1	He	3.633	3.633	2.92	3321	0.11	10000	
Se	78	115	1	He	0.160	0.160	7.13	47	0.34	10000	
Sr	88	45	1	He	20158.336	20158.336	1.22	121520146	0.02	10000	>LDR
Mo	95	103	1	He	82.602	82.602	0.99	250868	0.03	2000	
Ag	107	103	1	He	0.031	0.031	7.85	326	0.01	300	
Cd	111	115	1	He	0.099	0.099	35.25	1401	0.01	4000	
Sn	118	115	1	He	1.707	1.707	12.26	7398	0.02	2000	
Sb	123	115	1	He	0.328	0.328	11.58	1466	0.02	300	
Ba	137	115	1	He	49.073	49.073	1.31	91840	0.05	10000	
W	182	159	1	He	0.048	0.048	145.05	5486	0.00	2500	
Tl	205	165	1	He	0.012	0.012	6.16	527	0.00	5000	
Pb	208	165	1	He	0.157	0.157	2.90	6607	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1548433	1.35	1663342	93.09	30	120	
Sc	45	1	He	719115	1.15	788655	91.18	30	120	
Sc	45	2	NoGas	6931517	1.18	7332116	94.54	30	120	
Rh	103	1	He	2183797	1.75	2523919	86.52	30	120	
In	115	1	He	1264665	0.27	1420677	89.02	30	120	
Tb	159	1	He	3722430	0.31	3983717	93.44	30	120	
Ho	165	1	He	3764824	0.18	4030813	93.40	30	120	
Bi	209	1	He	2729319	1.36	2997463	91.05	30	120	

Sample Report

Sample Table

Sample Name	240-50818-b-6-a
Data File Name	093SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T21:09:16-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	23.335	23.335	0.78	506116	0.00	10000	
Be	9	6	2	NoGas	0.012	0.012	101.57	115	0.01	10000	
B	11	45	2	NoGas	19.977	19.977	2.83	66571	0.03	300	
Na	23	45	1	He	11296.042	11296.042	3.55	13788330	0.08	500000	
Mg	24	45	1	He	73908.429	73908.429	3.33	52413528	0.14	500000	
Al	27	45	1	He	41.778	41.778	2.65	17247	0.24	200000	
K	39	45	1	He	1640.579	1640.579	2.34	1158674	0.14	500000	
Ca	44	45	1	He	68374.974	68374.974	1.72	2587457	2.64	500000	
Ti	47	45	1	He	0.629	0.629	31.90	183	0.34	2500	
V	51	45	1	He	2.080	2.080	4.26	24963	0.01	10000	
Cr	52	45	1	He	1.162	1.162	2.78	10105	0.01	10000	
Mn	55	45	1	He	1.273	1.273	4.77	7260	0.02	10000	
Fe	56	45	1	He	42.840	42.840	2.41	274180	0.02	200000	
Co	59	45	1	He	0.084	0.084	12.01	879	0.01	10000	
Ni	60	45	1	He	0.869	0.869	3.49	2098	0.04	10000	
Cu	63	45	1	He	0.854	0.854	6.17	6661	0.01	10000	
Zn	66	45	1	He	3.949	3.949	3.37	6772	0.06	10000	
As	75	115	1	He	0.865	0.865	1.76	919	0.09	10000	
Se	78	115	1	He	1.405	1.405	10.85	146	0.96	10000	
Sr	88	45	1	He	544.087	544.087	3.35	3396933	0.02	10000	
Mo	95	103	1	He	46.709	46.709	1.19	146884	0.03	2000	
Ag	107	103	1	He	0.010	0.010	20.95	128	0.01	300	
Cd	111	115	1	He	0.105	0.105	18.48	1463	0.01	4000	
Sn	118	115	1	He	0.266	0.266	17.09	1845	0.01	2000	
Sb	123	115	1	He	0.144	0.144	14.84	732	0.02	300	
Ba	137	115	1	He	51.767	51.767	1.74	100408	0.05	10000	
W	182	159	1	He	0.099	0.099	47.35	6246	0.00	2500	
Tl	205	165	1	He	0.063	0.063	5.46	2008	0.00	5000	
Pb	208	165	1	He	0.136	0.136	3.49	6085	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1561959	1.08	1663342	93.90	30	120	
Sc	45	1	He	745174	3.06	788655	94.49	30	120	
Sc	45	2	NoGas	7037717	0.86	7332116	95.98	30	120	
Rh	103	1	He	2260513	1.09	2523919	89.56	30	120	
In	115	1	He	1310951	1.61	1420677	92.28	30	120	
Tb	159	1	He	3837841	0.38	3983717	96.34	30	120	
Ho	165	1	He	3913488	0.58	4030813	97.09	30	120	
Bi	209	1	He	2803678	0.48	2997463	93.54	30	120	

Sample Report

Sample Table

Sample Name	240-50818-b-7-a
Data File Name	094SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T21:13:09-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	0.295	0.295	24.44	67567	0.00	10000	
Be	9	6	2	NoGas	0.010	0.010	23.28	111	0.01	10000	
B	11	45	2	NoGas	24.218	24.218	1.69	78324	0.03	300	
Na	23	45	1	He	2139.488	2139.488	4.31	2768706	0.08	500000	
Mg	24	45	1	He	166.721	166.721	3.17	125181	0.13	500000	
Al	27	45	1	He	4.007	4.007	6.68	2338	0.17	200000	
K	39	45	1	He	413.305	413.305	3.89	339026	0.12	500000	
Ca	44	45	1	He	614.317	614.317	5.63	24928	2.46	500000	
Ti	47	45	1	He	-0.056	-0.056	-89.77	42	-0.13	2500	
V	51	45	1	He	2.141	2.141	2.59	27046	0.01	10000	
Cr	52	45	1	He	1.065	1.065	2.17	9992	0.01	10000	
Mn	55	45	1	He	0.041	0.041	24.37	1110	0.00	10000	
Fe	56	45	1	He	0.931	0.931	2.97	11930	0.01	200000	
Co	59	45	1	He	0.011	0.011	14.77	213	0.01	10000	
Ni	60	45	1	He	0.159	0.159	20.16	454	0.03	10000	
Cu	63	45	1	He	0.240	0.240	8.97	3017	0.01	10000	
Zn	66	45	1	He	11.416	11.416	4.57	17525	0.07	10000	
As	75	115	1	He	0.423	0.423	10.03	556	0.08	10000	
Se	78	115	1	He	0.018	0.018	557.09	41	0.04	10000	
Sr	88	45	1	He	5.095	5.095	3.84	33785	0.02	10000	
Mo	95	103	1	He	0.221	0.221	29.89	853	0.03	2000	
Ag	107	103	1	He	0.006	0.006	25.89	94	0.01	300	
Cd	111	115	1	He	0.037	0.037	59.99	1450	0.00	4000	
Sn	118	115	1	He	0.319	0.319	18.69	2215	0.01	2000	
Sb	123	115	1	He	0.074	0.074	7.77	468	0.02	300	
Ba	137	115	1	He	0.400	0.400	13.62	877	0.05	10000	
W	182	159	1	He	0.025	0.025	86.38	5638	0.00	2500	
Tl	205	165	1	He	0.009	0.009	18.12	468	0.00	5000	
Pb	208	165	1	He	0.143	0.143	10.04	6457	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1607617	0.56	1663342	96.65	30	120	
Sc	45	1	He	786867	3.05	788655	99.77	30	120	
Sc	45	2	NoGas	7005867	0.90	7332116	95.55	30	120	
Rh	103	1	He	2441722	3.44	2523919	96.74	30	120	
In	115	1	He	1416256	6.31	1420677	99.69	30	120	
Tb	159	1	He	4013913	3.75	3983717	100.76	30	120	
Ho	165	1	He	4002284	3.08	4030813	99.29	30	120	
Bi	209	1	He	3036156	2.51	2997463	101.29	30	120	

Sample Report

Sample Table

Sample Name	240-50818-b-8-a
Data File Name	095SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T21:17:04-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	0.346	0.346	19.93	67013	0.00	10000	
Be	9	6	2	NoGas	0.011	0.011	128.28	111	0.01	10000	
B	11	45	2	NoGas	22.856	22.856	0.49	72802	0.03	300	
Na	23	45	1	He	1959.986	1959.986	2.35	2408943	0.08	500000	
Mg	24	45	1	He	141.503	141.503	0.84	100901	0.14	500000	
Al	27	45	1	He	4.854	4.854	2.80	2557	0.19	200000	
K	39	45	1	He	382.059	382.059	2.77	300408	0.13	500000	
Ca	44	45	1	He	523.774	523.774	0.06	20242	2.59	500000	
Ti	47	45	1	He	-0.042	-0.042	-411.41	42	-0.10	2500	
V	51	45	1	He	1.810	1.810	6.95	22190	0.01	10000	
Cr	52	45	1	He	1.183	1.183	4.97	10270	0.01	10000	
Mn	55	45	1	He	0.362	0.362	7.18	2676	0.01	10000	
Fe	56	45	1	He	3.371	3.371	1.50	26652	0.01	200000	
Co	59	45	1	He	0.017	0.017	22.40	254	0.01	10000	
Ni	60	45	1	He	0.305	0.305	12.79	773	0.04	10000	
Cu	63	45	1	He	0.312	0.312	2.88	3311	0.01	10000	
Zn	66	45	1	He	7.589	7.589	1.01	11591	0.07	10000	
As	75	115	1	He	0.386	0.386	2.79	495	0.08	10000	
Se	78	115	1	He	0.064	0.064	39.02	43	0.15	10000	
Sr	88	45	1	He	3.656	3.656	1.91	23069	0.02	10000	
Mo	95	103	1	He	0.089	0.089	10.03	384	0.02	2000	
Ag	107	103	1	He	0.005	0.005	26.24	78	0.01	300	
Cd	111	115	1	He	0.034	0.034	25.82	1376	0.00	4000	
Sn	118	115	1	He	0.171	0.171	14.32	1504	0.01	2000	
Sb	123	115	1	He	0.044	0.044	7.60	312	0.01	300	
Ba	137	115	1	He	0.359	0.359	7.89	757	0.05	10000	
W	182	159	1	He	-0.016	-0.016	-116.17	4938	0.00	2500	
Tl	205	165	1	He	0.004	0.004	33.14	312	0.00	5000	
Pb	208	165	1	He	0.084	0.084	3.30	4084	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1570513	0.91	1663342	94.42	30	120	
Sc	45	1	He	746522	1.89	788655	94.66	30	120	
Sc	45	2	NoGas	6850588	1.20	7332116	93.43	30	120	
Rh	103	1	He	2353159	1.05	2523919	93.23	30	120	
In	115	1	He	1347650	0.28	1420677	94.86	30	120	
Tb	159	1	He	3846158	0.92	3983717	96.55	30	120	
Ho	165	1	He	3868811	0.55	4030813	95.98	30	120	
Bi	209	1	He	2907659	1.09	2997463	97.00	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-181297/1-a@2
Data File Name	096_Blk.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T21:20:59-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	0.043	113.2	60685	1.8	2	
Be	9	6	2	NoGas	0.003	224.6	70	39.7	1	
B	11	45	2	NoGas	1.735	11.8	13872	3.8	20	
Na	23	45	1	He	51.620	3.5	75399	2.2	1000	
Mg	24	45	1	He	17.506	1.4	12553	0.2	1000	
Al	27	45	1	He	2.244	8.8	1490	3.9	50	
K	39	45	1	He	28.103	4.9	57455	1.4	1000	
Ca	44	45	1	He	65.848	0.6	2832	1.9	1000	
Ti	47	45	1	He	-0.116	-12.6	27	12.5	20	
V	51	45	1	He	1.194	6.2	15423	3.6	2	
Cr	52	45	1	He	0.822	8.1	7736	4.4	2	
Mn	55	45	1	He	0.353	8.5	2588	5.6	2	
Fe	56	45	1	He	14.147	2.6	92881	1.1	50	
Co	59	45	1	He	0.010	46.9	186	21.1	1	
Ni	60	45	1	He	0.108	6.6	308	4.5	2	
Cu	63	45	1	He	0.228	17.8	2741	8.2	2	
Zn	66	45	1	He	2.937	2.6	5365	2.0	20	
As	75	115	1	He	0.233	15.1	351	9.8	2	
Se	78	115	1	He	0.069	140.1	43	17.8	2	
Sr	88	45	1	He	0.338	5.7	2270	4.6	10	
Mo	95	103	1	He	0.038	65.3	216	37.8	2	
Ag	107	103	1	He	0.002	47.8	50	23.1	0.2	
Cd	111	115	1	He	0.030	66.3	1367	2.0	0.2	
Sn	118	115	1	He	19.063	0.5	79843	0.2	10	Blank Failed
Sb	123	115	1	He	0.021	33.6	211	14.2	2	
Ba	137	115	1	He	1.484	2.1	2995	1.4	5	
W	182	159	1	He	-0.015	-251.1	4934	8.1	10	
Tl	205	165	1	He	0.000	-503.4	191	18.2	0.5	
Pb	208	165	1	He	0.214	3.9	8782	4.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1529483	0.99	1663342	91.95	30	120	
Sc	45	1	He	734630	1.37	788655	93.15	30	120	
Sc	45	2	NoGas	6770639	0.62	7332116	92.34	30	120	
Rh	103	1	He	2330709	1.06	2523919	92.34	30	120	
In	115	1	He	1345789	0.69	1420677	94.73	30	120	
Tb	159	1	He	3839854	0.79	3983717	96.39	30	120	
Ho	165	1	He	3825273	0.59	4030813	94.90	30	120	
Bi	209	1	He	2924481	1.56	2997463	97.57	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-181297/2-a@2
Data File Name	097LCSS.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T21:24:54-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	2	NoGas	-0.002	-0.002	-2391.037	55888	1.44	500	0.0	79.5	120.5	LCSS Failed
Be	9	2	NoGas	477.453	477.453	1.391	2067618	0.20	500	95.5	78.6	110.5	
B	11	2	NoGas	51.175	51.175	0.571	139879	0.40	50	102.4	79.5	120.5	
Na	23	1	He	4700.174	4700.174	1.485	5484385	0.74	5000	94.0	79.5	120.5	
Mg	24	1	He	4791.048	4791.048	2.324	3243713	1.90	5000	95.8	79.5	120.5	
Al	27	1	He	4644.561	4644.561	1.187	1765118	0.03	5000	92.9	79.5	120.5	
K	39	1	He	4739.800	4739.800	2.723	3124021	1.48	5000	94.8	79.5	120.5	
Ca	44	1	He	3272.089	3272.089	1.362	118511	0.81	5000	65.4	79.5	120.5	LCSS Failed
Ti	47	1	He	49.070	49.070	1.554	9927	2.00	50	98.1	79.5	120.5	
V	51	1	He	467.047	467.047	1.412	4690428	0.59	500	93.4	71.5	110.5	
Cr	52	1	He	468.755	468.755	1.505	2972840	0.33	500	93.8	69.5	110.5	
Mn	55	1	He	480.840	480.840	1.735	2312202	0.65	500	96.2	79.5	120.5	
Fe	56	1	He	4743.382	4743.382	1.186	28403679	0.47	5000	94.9	79.5	120.5	
Co	59	1	He	478.051	478.051	1.871	4242468	0.74	500	95.6	73.9	110.5	
Ni	60	1	He	467.056	467.056	1.251	1045113	0.12	500	93.4	74.9	110.5	
Cu	63	1	He	496.479	496.479	1.681	2940320	0.85	500	99.3	72.6	110.5	
Zn	66	1	He	470.487	470.487	2.259	592550	1.18	500	94.1	71.5	113.4	
As	75	1	He	460.839	460.839	2.371	408001	0.75	500	92.2	73.4	110.5	
Se	78	1	He	460.241	460.241	2.113	34942	0.17	500	92.0	64.6	110.5	
Sr	88	1	He	502.987	502.987	1.302	2997900	0.86	500	100.6	79.5	120.5	
Mo	95	1	He	49.926	49.926	1.990	153450	0.69	50	99.9	29.5	140.5	
Ag	107	1	He	48.036	48.036	2.112	473195	0.21	50	96.1	59.5	114.5	
Cd	111	1	He	470.794	470.794	2.306	803898	0.40	500	94.2	73.5	110.5	
Sn	118	1	He	559.820	559.820	1.521	2196164	1.01	50	1119.6	79.5	120.5	LCSS Failed
Sb	123	1	He	50.444	50.444	2.443	209876	0.64	50	100.9	67.5	113.4	
Ba	137	1	He	476.966	476.966	1.891	897879	0.62	500	95.4	69.5	110.5	
W	182	1	He	47.842	47.842	0.696	540200	0.57	50	95.7	74.6	125.4	
Tl	205	1	He	121.461	121.461	1.162	3322789	0.87	125	97.2	70.6	110.5	
Pb	208	1	He	495.989	495.989	0.951	17769560	0.49	500	99.2	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1444190	1.22	1663342	86.82	30	120	
Sc	45	1	He	710944	1.20	788655	90.15	30	120	
Sc	45	2	NoGas	6321099	0.91	7332116	86.21	30	120	
Rh	103	1	He	2209987	2.03	2523919	87.56	30	120	
In	115	1	He	1272932	2.25	1420677	89.60	30	120	
Tb	159	1	He	3734895	1.14	3983717	93.75	30	120	
Ho	165	1	He	3755417	0.54	4030813	93.17	30	120	
Bi	209	1	He	2813629	1.05	2997463	93.87	30	120	

Sample Report

Sample Table

Sample Name	240-50782-h-1-a@2
Data File Name	098SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T21:28:37-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	9.642	9.642	2.34	249046	0.00	10000	
Be	9	6	2	NoGas	0.387	0.387	5.89	1841	0.02	10000	
B	11	45	2	NoGas	11.555	11.555	1.54	43077	0.03	300	
Na	23	45	1	He	630.461	630.461	1.45	768620	0.08	500000	
Mg	24	45	1	He	23236.966	23236.966	1.11	16191309	0.14	500000	
Al	27	45	1	He	6188.386	6188.386	2.05	2420452	0.26	200000	
K	39	45	1	He	612.960	612.960	1.91	449277	0.14	500000	
Ca	44	45	1	He	714945.755	714945.755	2.02	26568815	2.69	500000	>LDR
Ti	47	45	1	He	336.169	336.169	2.13	69696	0.48	2500	
V	51	45	1	He	37.076	37.076	2.70	386028	0.01	10000	
Cr	52	45	1	He	40.250	40.250	2.78	264888	0.02	10000	
Mn	55	45	1	He	628.367	628.367	2.29	3109877	0.02	10000	
Fe	56	45	1	He	15607.853	15607.853	1.84	96181641	0.02	200000	
Co	59	45	1	He	3.747	3.747	1.76	34324	0.01	10000	
Ni	60	45	1	He	17.257	17.257	1.90	39801	0.04	10000	
Cu	63	45	1	He	17.144	17.144	2.27	105803	0.02	10000	
Zn	66	45	1	He	73.585	73.585	2.64	96701	0.08	10000	
As	75	115	1	He	7.235	7.235	3.73	6411	0.11	10000	
Se	78	115	1	He	1.759	1.759	14.23	166	1.06	10000	
Sr	88	45	1	He	425.328	425.328	2.71	2609052	0.02	10000	
Mo	95	103	1	He	2.965	2.965	1.33	8723	0.03	2000	
Ag	107	103	1	He	0.052	0.052	14.84	511	0.01	300	
Cd	111	115	1	He	0.496	0.496	4.07	2049	0.02	4000	
Sn	118	115	1	He	15.838	15.838	1.76	61713	0.03	2000	
Sb	123	115	1	He	0.433	0.433	6.76	1880	0.02	300	
Ba	137	115	1	He	34.546	34.546	2.18	63859	0.05	10000	
W	182	159	1	He	1.174	1.174	9.39	18241	0.01	2500	
Tl	205	165	1	He	0.267	0.267	0.98	7630	0.00	5000	
Pb	208	165	1	He	19.635	19.635	1.62	715406	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1535614	1.82	1663342	92.32	30	120	
Sc	45	1	He	731626	0.73	788655	92.77	30	120	
Sc	45	2	NoGas	7135291	1.24	7332116	97.32	30	120	
Rh	103	1	He	2095720	1.58	2523919	83.03	30	120	
In	115	1	He	1249173	1.93	1420677	87.93	30	120	
Tb	159	1	He	3762495	1.70	3983717	94.45	30	120	
Ho	165	1	He	3814168	0.81	4030813	94.63	30	120	
Bi	209	1	He	2625413	1.50	2997463	87.59	30	120	

Sample Report

Sample Table

Sample Name	SD 240-50782-h-1-a@10
Data File Name	099SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T21:32:28-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	1.927	1.927	1.82	103864	0.00	10000	
Be	9	6	2	NoGas	0.084	0.084	9.08	467	0.02	10000	
B	11	45	2	NoGas	2.720	2.720	3.15	18098	0.02	300	
Na	23	45	1	He	134.147	134.147	1.62	192290	0.07	500000	
Mg	24	45	1	He	4778.954	4778.954	0.85	3680656	0.13	500000	
Al	27	45	1	He	1274.670	1274.670	0.99	551548	0.23	200000	
K	39	45	1	He	126.331	126.331	2.60	136019	0.09	500000	
Ca	44	45	1	He	146728.226	146728.226	0.92	6027153	2.43	500000	
Ti	47	45	1	He	68.051	68.051	3.02	15640	0.44	2500	
V	51	45	1	He	7.710	7.710	3.42	91366	0.01	10000	
Cr	52	45	1	He	8.338	8.338	3.19	62692	0.01	10000	
Mn	55	45	1	He	127.943	127.943	0.95	700561	0.02	10000	
Fe	56	45	1	He	3268.495	3268.495	0.69	22266111	0.01	200000	
Co	59	45	1	He	0.785	0.785	1.24	8035	0.01	10000	
Ni	60	45	1	He	3.740	3.740	2.74	9582	0.04	10000	
Cu	63	45	1	He	3.614	3.614	0.92	25823	0.01	10000	
Zn	66	45	1	He	16.678	16.678	1.08	25545	0.07	10000	
As	75	115	1	He	1.279	1.279	3.98	1428	0.09	10000	
Se	78	115	1	He	0.256	0.256	21.77	62	0.41	10000	
Sr	88	45	1	He	81.767	81.767	0.64	554558	0.01	10000	
Mo	95	103	1	He	0.588	0.588	3.39	2085	0.03	2000	
Ag	107	103	1	He	0.013	0.013	27.18	169	0.01	300	
Cd	111	115	1	He	0.133	0.133	15.60	1665	0.01	4000	
Sn	118	115	1	He	2.779	2.779	3.81	13221	0.02	2000	
Sb	123	115	1	He	0.075	0.075	14.89	482	0.02	300	
Ba	137	115	1	He	6.812	6.812	2.25	14592	0.05	10000	
W	182	159	1	He	0.224	0.224	15.30	8036	0.00	2500	
Tl	205	165	1	He	0.055	0.055	8.12	1830	0.00	5000	
Pb	208	165	1	He	4.148	4.148	2.19	160291	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1607767	0.86	1663342	96.66	30	120	
Sc	45	1	He	808708	1.05	788655	102.54	30	120	
Sc	45	2	NoGas	7389821	0.45	7332116	100.79	30	120	
Rh	103	1	He	2430877	2.10	2523919	96.31	30	120	
In	115	1	He	1444178	1.81	1420677	101.65	30	120	
Tb	159	1	He	4013711	0.71	3983717	100.75	30	120	
Ho	165	1	He	4025482	1.60	4030813	99.87	30	120	
Bi	209	1	He	2967744	0.39	2997463	99.01	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2012431
Data File Name	100_CCV.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T21:36:22-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	47.933	1.395	1003907	1.74	50	95.9	89.5	110.5	
Be	9	6	2	NoGas	50.795	0.852	239469	0.95	50	101.6	89.5	110.5	
B	11	45	2	NoGas	47.718	1.046	150333	1.44	50	95.4	89.5	110.5	
Na	23	45	1	He	24935.522	7.765	31473949	0.70	25000	99.7	89.5	110.5	
Mg	24	45	1	He	25053.797	8.189	18378875	1.11	25000	100.2	89.5	110.5	
Al	27	45	1	He	255.362	8.817	105736	1.73	250	102.1	89.5	110.5	
K	39	45	1	He	25436.197	7.794	17995412	0.78	25000	101.7	89.5	110.5	
Ca	44	45	1	He	24708.658	8.486	967024	1.61	25000	98.8	89.5	110.5	
Ti	47	45	1	He	51.030	9.622	11177	2.68	50	102.1	89.5	110.5	
V	51	45	1	He	49.988	9.399	546547	2.22	50	100.0	89.5	110.5	
Cr	52	45	1	He	49.708	9.091	343685	2.00	50	99.4	89.5	110.5	
Mn	55	45	1	He	248.029	8.528	1292660	1.49	250	99.2	89.5	110.5	
Fe	56	45	1	He	12483.977	8.821	80975141	2.21	12500	99.9	89.5	110.5	
Co	59	45	1	He	50.107	7.735	482066	1.13	50	100.2	89.5	110.5	
Ni	60	45	1	He	49.994	8.362	121266	1.38	50	100.0	89.5	110.5	
Cu	63	45	1	He	49.475	8.406	318755	1.42	50	98.9	89.5	110.5	
Zn	66	45	1	He	49.989	7.873	69697	0.73	50	100.0	89.5	110.5	
As	75	115	1	He	53.676	9.476	49634	1.82	50	107.4	89.5	110.5	
Se	78	115	1	He	54.707	8.912	4362	1.94	50	109.4	89.5	110.5	
Sr	88	45	1	He	51.277	8.832	331238	1.72	50	102.6	89.5	110.5	
Mo	95	103	1	He	54.549	10.030	173107	1.97	50	109.1	89.5	110.5	
Ag	107	103	1	He	50.653	9.406	515406	1.63	50	101.3	89.5	110.5	
Cd	111	115	1	He	51.819	9.351	93362	1.61	50	103.6	89.5	110.5	
Sn	118	115	1	He	59.401	9.800	243455	2.22	50	118.8	89.5	110.5	CCV Failed
Sb	123	115	1	He	55.969	9.999	242573	2.35	50	111.9	89.5	110.5	CCV Failed
Ba	137	115	1	He	52.235	9.418	102501	2.38	50	104.5	89.5	110.5	
W	182	159	1	He	52.453	10.287	594765	2.41	50	104.9	89.5	110.5	
Tl	205	165	1	He	48.577	10.426	1331174	1.45	50	97.2	89.5	110.5	
Pb	208	165	1	He	50.617	10.182	1817484	1.20	50	101.2	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1571764	1.26	1663342	94.49	30	120	
Sc	45	1	He	773155	6.80	788655	98.03	30	120	
Sc	45	2	NoGas	7253291	0.46	7332116	98.92	30	120	
Rh	103	1	He	2293358	7.89	2523919	90.86	30	120	
In	115	1	He	1332057	7.25	1420677	93.76	30	120	
Tb	159	1	He	3773143	7.74	3983717	94.71	30	120	
Ho	165	1	He	3783984	8.63	4030813	93.88	30	120	
Bi	209	1	He	2803110	7.68	2997463	93.52	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	101_CCB.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T21:40:15-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.067	-41.5	63761	1.5	2	
Be	9	6	2	NoGas	0.003	202.6	74	34.6	1	
B	11	45	2	NoGas	1.320	12.4	13839	4.2	20	
Na	23	45	1	He	12.051	6.9	30289	4.0	1000	
Mg	24	45	1	He	1.841	45.6	1737	36.9	1000	
Al	27	45	1	He	0.999	12.0	1091	4.3	50	
K	39	45	1	He	4.076	10.9	44964	0.9	1000	
Ca	44	45	1	He	12.737	23.9	926	13.3	1000	
Ti	47	45	1	He	-0.097	-40.4	33	26.5	20	
V	51	45	1	He	-0.017	-114.7	3132	6.7	2	
Cr	52	45	1	He	0.018	101.8	2698	4.5	2	
Mn	55	45	1	He	0.060	15.6	1237	4.3	2	
Fe	56	45	1	He	7.362	11.6	55462	10.6	50	
Co	59	45	1	He	0.004	13.9	150	4.4	1	
Ni	60	45	1	He	-0.003	-260.4	56	30.8	2	
Cu	63	45	1	He	-0.072	-14.2	992	6.8	2	
Zn	66	45	1	He	0.200	9.8	1973	1.8	20	
As	75	115	1	He	0.135	32.5	280	13.9	2	
Se	78	115	1	He	0.292	29.0	66	9.5	2	
Sr	88	45	1	He	0.026	15.2	378	7.4	10	
Mo	95	103	1	He	0.230	18.9	886	18.8	2	
Ag	107	103	1	He	0.004	52.0	74	30.5	0.2	
Cd	111	115	1	He	0.097	36.7	1610	2.8	0.2	
Sn	118	115	1	He	0.189	19.5	1708	8.7	10	
Sb	123	115	1	He	0.079	32.6	506	22.8	2	
Ba	137	115	1	He	0.007	209.3	60	55.6	5	
W	182	159	1	He	0.453	20.5	10749	9.6	10	
Tl	205	165	1	He	0.068	7.4	2186	6.2	0.5	
Pb	208	165	1	He	0.034	12.2	2297	7.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1624358	0.33	1663342	97.66	30	120	
Sc	45	1	He	800039	0.48	788655	101.44	30	120	
Sc	45	2	NoGas	7358349	0.71	7332116	100.36	30	120	
Rh	103	1	He	2451241	2.65	2523919	97.12	30	120	
In	115	1	He	1457859	2.14	1420677	102.62	30	120	
Tb	159	1	He	4002068	0.92	3983717	100.46	30	120	
Ho	165	1	He	3995463	0.77	4030813	99.12	30	120	
Bi	209	1	He	3004594	0.13	2997463	100.24	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-50782-h-1-a@2
Data File Name	102SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T21:44:10-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	9.325	9.325	0.63	246765	0.00	10000	
Be	9	6	2	NoGas	1036.149	1036.149	0.52	4751779	0.02	10000	
B	11	45	2	NoGas	107.177	107.177	0.78	325214	0.03	300	
Na	23	45	1	He	10387.398	10387.398	3.05	12866631	0.08	500000	
Mg	24	45	1	He	32061.510	32061.510	3.51	23069895	0.14	500000	
Al	27	45	1	He	15572.561	15572.561	2.45	6289491	0.25	200000	
K	39	45	1	He	10545.351	10545.351	3.08	7339903	0.14	500000	
Ca	44	45	1	He	705889.900	705889.900	2.82	27093105	2.61	500000	>LDR
Ti	47	45	1	He	426.612	426.612	3.60	91319	0.47	2500	
V	51	45	1	He	998.812	998.812	3.43	10657883	0.01	10000	
Cr	52	45	1	He	991.808	991.808	3.22	6682994	0.01	10000	
Mn	55	45	1	He	1561.463	1561.463	3.64	7978752	0.02	10000	
Fe	56	45	1	He	24816.041	24816.041	4.01	157909287	0.02	200000	
Co	59	45	1	He	949.308	949.308	2.52	8955847	0.01	10000	
Ni	60	45	1	He	968.103	968.103	3.23	2302496	0.04	10000	
Cu	63	45	1	He	932.613	932.613	2.97	5869772	0.02	10000	
Zn	66	45	1	He	950.700	950.700	2.82	1271171	0.07	10000	
As	75	115	1	He	1025.593	1025.593	5.91	907547	0.11	10000	
Se	78	115	1	He	1014.879	1014.879	6.23	76975	1.32	10000	
Sr	88	45	1	He	1418.087	1418.087	3.19	8983520	0.02	10000	
Mo	95	103	1	He	114.963	114.963	2.59	341408	0.03	2000	
Ag	107	103	1	He	96.747	96.747	2.59	921163	0.01	300	
Cd	111	115	1	He	1016.761	1016.761	6.91	1733520	0.06	4000	
Sn	118	115	1	He	1153.354	1153.354	6.21	4521277	0.03	2000	
Sb	123	115	1	He	105.685	105.685	6.15	439413	0.02	300	
Ba	137	115	1	He	1147.084	1147.084	7.13	2157522	0.05	10000	
W	182	159	1	He	102.998	102.998	2.81	1158254	0.01	2500	
Tl	205	165	1	He	242.894	242.894	3.30	6678908	0.00	5000	
Pb	208	165	1	He	1002.162	1002.162	2.82	36091540	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1529273	0.61	1663342	91.94	30	120	
Sc	45	1	He	755931	2.27	788655	95.85	30	120	
Sc	45	2	NoGas	7247241	0.44	7332116	98.84	30	120	
Rh	103	1	He	2136131	1.93	2523919	84.64	30	120	
In	115	1	He	1274823	5.45	1420677	89.73	30	120	
Tb	159	1	He	3738773	1.61	3983717	93.85	30	120	
Ho	165	1	He	3776570	2.25	4030813	93.69	30	120	
Bi	209	1	He	2643100	2.21	2997463	88.18	30	120	

Sample Report

Sample Table

Sample Name	240-50782-h-1-b ms@2
Data File Name	103SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T21:47:48-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	10.227	10.227	13.98	295876	0.00	10000	
Be	9	6	2	NoGas	434.315	434.315	9.21	2119200	0.02	10000	
B	11	45	2	NoGas	51.017	51.017	14.33	178577	0.03	300	
Na	23	45	1	He	5187.894	5187.894	0.75	6458305	0.08	500000	
Mg	24	45	1	He	23590.131	23590.131	1.33	17041539	0.14	500000	
Al	27	45	1	He	12102.828	12102.828	0.26	4907231	0.25	200000	
K	39	45	1	He	5646.884	5646.884	1.51	3964360	0.14	500000	
Ca	44	45	1	He	881620.577	881620.577	0.90	33969113	2.60	500000	>LDR
Ti	47	45	1	He	360.237	360.237	1.29	77427	0.47	2500	
V	51	45	1	He	462.407	462.407	1.03	4955463	0.01	10000	
Cr	52	45	1	He	457.746	457.746	0.58	3097981	0.01	10000	
Mn	55	45	1	He	776.521	776.521	1.69	3984171	0.02	10000	
Fe	56	45	1	He	15081.924	15081.924	1.31	96355605	0.02	200000	
Co	59	45	1	He	435.787	435.787	1.57	4126951	0.01	10000	
Ni	60	45	1	He	429.137	429.137	1.54	1024670	0.04	10000	
Cu	63	45	1	He	439.628	439.628	1.66	2778443	0.02	10000	
Zn	66	45	1	He	482.216	482.216	1.07	648069	0.07	10000	
As	75	115	1	He	477.010	477.010	0.12	421349	0.11	10000	
Se	78	115	1	He	464.761	464.761	0.39	35203	1.32	10000	
Sr	88	45	1	He	991.082	991.082	1.09	6302977	0.02	10000	
Mo	95	103	1	He	53.664	53.664	1.55	158655	0.03	2000	
Ag	107	103	1	He	45.635	45.635	1.11	432447	0.01	300	
Cd	111	115	1	He	440.688	440.688	0.65	750836	0.06	4000	
Sn	118	115	1	He	555.640	555.640	1.18	2174418	0.03	2000	
Sb	123	115	1	He	41.340	41.340	0.43	171626	0.02	300	
Ba	137	115	1	He	511.733	511.733	0.83	961044	0.05	10000	
W	182	159	1	He	45.821	45.821	0.20	516220	0.01	2500	
Tl	205	165	1	He	111.987	111.987	1.56	3089360	0.00	5000	
Pb	208	165	1	He	474.416	474.416	0.91	17139774	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1633854	6.85	1663342	98.23	30	120	
Sc	45	1	He	758593	0.61	788655	96.19	30	120	
Sc	45	2	NoGas	8166499	10.06	7332116	111.38	30	120	
Rh	103	1	He	2125569	1.49	2523919	84.22	30	120	
In	115	1	He	1269602	0.75	1420677	89.37	30	120	
Tb	159	1	He	3724872	0.81	3983717	93.50	30	120	
Ho	165	1	He	3786986	0.34	4030813	93.95	30	120	
Bi	209	1	He	2628242	1.72	2997463	87.68	30	120	

Sample Report

Sample Table

Sample Name	240-50782-h-1-c msd@2
Data File Name	104SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T21:51:31-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	12.532	12.532	0.08	311777	0.00	10000	
Be	9	6	2	NoGas	482.591	482.591	0.37	2160154	0.02	10000	
B	11	45	2	NoGas	57.496	57.496	0.88	180248	0.03	300	
Na	23	45	1	He	5262.779	5262.779	7.22	6388936	0.08	500000	
Mg	24	45	1	He	23257.952	23257.952	7.64	16381939	0.14	500000	
Al	27	45	1	He	13791.957	13791.957	7.51	5452574	0.25	200000	
K	39	45	1	He	5801.735	5801.735	7.15	3971285	0.15	500000	
Ca	44	45	1	He	840327.883	840327.883	6.21	31589082	2.66	500000	>LDR
Ti	47	45	1	He	450.004	450.004	6.71	94337	0.48	2500	
V	51	45	1	He	480.558	480.558	6.83	5022976	0.01	10000	
Cr	52	45	1	He	471.651	471.651	6.15	3114329	0.02	10000	
Mn	55	45	1	He	792.217	792.217	8.34	3961832	0.02	10000	
Fe	56	45	1	He	17230.967	17230.967	8.06	107316616	0.02	200000	
Co	59	45	1	He	448.028	448.028	8.38	4135741	0.01	10000	
Ni	60	45	1	He	442.844	442.844	7.60	1031025	0.04	10000	
Cu	63	45	1	He	452.478	452.478	7.22	2788758	0.02	10000	
Zn	66	45	1	He	491.846	491.846	7.62	644473	0.08	10000	
As	75	115	1	He	498.180	498.180	7.20	425874	0.12	10000	
Se	78	115	1	He	482.378	482.378	7.42	35356	1.36	10000	
Sr	88	45	1	He	967.512	967.512	7.56	5999604	0.02	10000	
Mo	95	103	1	He	55.498	55.498	7.48	159983	0.03	2000	
Ag	107	103	1	He	47.066	47.066	7.57	434865	0.01	300	
Cd	111	115	1	He	457.572	457.572	7.21	754473	0.06	4000	
Sn	118	115	1	He	578.740	578.740	6.57	2192621	0.03	2000	
Sb	123	115	1	He	43.263	43.263	7.46	173802	0.02	300	
Ba	137	115	1	He	533.559	533.559	7.42	969694	0.06	10000	
W	182	159	1	He	46.726	46.726	8.01	513993	0.01	2500	
Tl	205	165	1	He	117.944	117.944	7.89	3116955	0.00	5000	
Pb	208	165	1	He	497.625	497.625	8.21	17219922	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1492642	1.39	1663342	89.74	30	120	
Sc	45	1	He	742135	6.70	788655	94.10	30	120	
Sc	45	2	NoGas	7298324	0.99	7332116	99.54	30	120	
Rh	103	1	He	2080221	7.61	2523919	82.42	30	120	
In	115	1	He	1232879	7.03	1420677	86.78	30	120	
Tb	159	1	He	3653049	8.03	3983717	91.70	30	120	
Ho	165	1	He	3641901	7.42	4030813	90.35	30	120	
Bi	209	1	He	2557379	5.68	2997463	85.32	30	120	

Sample Report

Sample Table

Sample Name	240-50812-c-1-a@2
Data File Name	105SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T21:55:16-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	85.120	85.120	0.47	1858140	0.00	10000	
Be	9	6	2	NoGas	2.806	2.806	1.10	12916	0.02	10000	
B	11	45	2	NoGas	49.112	49.112	0.85	165592	0.03	300	
Na	23	45	1	He	1180.955	1180.955	2.92	1594760	0.07	500000	
Mg	24	45	1	He	85280.476	85280.476	1.07	66352071	0.13	500000	
Al	27	45	1	He	43620.634	43620.634	0.25	19046020	0.23	200000	
K	39	45	1	He	9308.951	9308.951	1.01	7011062	0.13	500000	
Ca	44	45	1	He	220330.019	220330.019	0.79	9143511	2.41	500000	
Ti	47	45	1	He	995.266	995.266	1.13	230300	0.43	2500	
V	51	45	1	He	98.105	98.105	1.04	1135016	0.01	10000	
Cr	52	45	1	He	77.105	77.105	0.97	564204	0.01	10000	
Mn	55	45	1	He	1462.982	1462.982	0.78	8083478	0.02	10000	
Fe	56	45	1	He	92935.133	92935.133	0.95	639450321	0.01	200000	
Co	59	45	1	He	43.266	43.266	0.96	441408	0.01	10000	
Ni	60	45	1	He	112.918	112.918	0.66	290439	0.04	10000	
Cu	63	45	1	He	87.168	87.168	0.55	594543	0.01	10000	
Zn	66	45	1	He	241.891	241.891	0.73	350984	0.07	10000	
As	75	115	1	He	33.896	33.896	1.19	32195	0.11	10000	
Se	78	115	1	He	5.586	5.586	7.01	491	1.14	10000	
Sr	88	45	1	He	315.024	315.024	1.21	2157973	0.01	10000	
Mo	95	103	1	He	10.875	10.875	1.07	34949	0.03	2000	
Ag	107	103	1	He	0.317	0.317	7.76	3279	0.01	300	
Cd	111	115	1	He	1.828	1.828	6.02	4655	0.04	4000	
Sn	118	115	1	He	14.435	14.435	0.37	61285	0.02	2000	
Sb	123	115	1	He	0.756	0.756	6.85	3482	0.02	300	
Ba	137	115	1	He	726.803	726.803	0.53	1461924	0.05	10000	
W	182	159	1	He	0.738	0.738	22.29	14133	0.01	2500	
Tl	205	165	1	He	1.418	1.418	1.43	41988	0.00	5000	
Pb	208	165	1	He	47.170	47.170	0.81	1821692	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1528118	0.53	1663342	91.87	30	120	
Sc	45	1	He	816973	0.56	788655	103.59	30	120	
Sc	45	2	NoGas	7777336	1.05	7332116	106.07	30	120	
Rh	103	1	He	2305434	0.95	2523919	91.34	30	120	
In	115	1	He	1359770	0.90	1420677	95.71	30	120	
Tb	159	1	He	3987982	1.07	3983717	100.11	30	120	
Ho	165	1	He	4046036	0.86	4030813	100.38	30	120	
Bi	209	1	He	2808742	0.40	2997463	93.70	30	120	

Sample Report

Sample Table

Sample Name	240-50812-c-2-a@2
Data File Name	106SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T21:59:06-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	14.776	14.776	0.14	354009	0.00	10000	
Be	9	6	2	NoGas	0.648	0.648	13.19	2989	0.02	10000	
B	11	45	2	NoGas	5.553	5.553	4.00	26119	0.02	300	
Na	23	45	1	He	349.848	349.848	0.87	472696	0.07	500000	
Mg	24	45	1	He	3343.378	3343.378	0.73	2546802	0.13	500000	
Al	27	45	1	He	16392.448	16392.448	1.36	7007357	0.23	200000	
K	39	45	1	He	731.669	731.669	1.27	578111	0.13	500000	
Ca	44	45	1	He	6028.407	6028.407	0.43	245302	2.46	500000	
Ti	47	45	1	He	816.610	816.610	0.26	184986	0.44	2500	
V	51	45	1	He	25.847	25.847	1.10	295180	0.01	10000	
Cr	52	45	1	He	22.971	22.971	0.10	166349	0.01	10000	
Mn	55	45	1	He	115.449	115.449	1.22	625308	0.02	10000	
Fe	56	45	1	He	11510.441	11510.441	1.29	77536224	0.01	200000	
Co	59	45	1	He	5.661	5.661	0.84	56629	0.01	10000	
Ni	60	45	1	He	17.762	17.762	1.44	44778	0.04	10000	
Cu	63	45	1	He	8.993	8.993	1.39	61362	0.01	10000	
Zn	66	45	1	He	43.135	43.135	1.71	62660	0.07	10000	
As	75	115	1	He	4.826	4.826	1.95	4989	0.10	10000	
Se	78	115	1	He	1.335	1.335	15.12	155	0.86	10000	
Sr	88	45	1	He	31.627	31.627	0.31	212261	0.01	10000	
Mo	95	103	1	He	1.251	1.251	4.34	4388	0.03	2000	
Ag	107	103	1	He	0.043	0.043	7.53	496	0.01	300	
Cd	111	115	1	He	0.477	0.477	6.02	2331	0.02	4000	
Sn	118	115	1	He	9.805	9.805	1.04	44478	0.02	2000	
Sb	123	115	1	He	0.164	0.164	15.21	901	0.02	300	
Ba	137	115	1	He	100.919	100.919	0.49	215591	0.05	10000	
W	182	159	1	He	0.272	0.272	24.28	8610	0.00	2500	
Tl	205	165	1	He	0.220	0.220	7.54	6605	0.00	5000	
Pb	208	165	1	He	13.692	13.692	1.62	522722	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1507644	1.44	1663342	90.64	30	120	
Sc	45	1	He	799781	0.21	788655	101.41	30	120	
Sc	45	2	NoGas	7256679	0.71	7332116	98.97	30	120	
Rh	103	1	He	2466215	0.74	2523919	97.71	30	120	
In	115	1	He	1443941	0.55	1420677	101.64	30	120	
Tb	159	1	He	4015184	0.71	3983717	100.79	30	120	
Ho	165	1	He	3994464	1.03	4030813	99.10	30	120	
Bi	209	1	He	2993533	0.84	2997463	99.87	30	120	

Sample Report

Sample Table

Sample Name	240-50812-c-3-a@2
Data File Name	107SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T22:03:01-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	72.289	72.289	1.62	1617830	0.00	10000	
Be	9	6	2	NoGas	2.761	2.761	1.67	13012	0.02	10000	
B	11	45	2	NoGas	34.536	34.536	2.08	121762	0.03	300	
Na	23	45	1	He	506.118	506.118	0.96	706307	0.07	500000	
Mg	24	45	1	He	58976.102	58976.102	0.70	46840436	0.13	500000	
Al	27	45	1	He	42742.318	42742.318	1.10	19051254	0.22	200000	
K	39	45	1	He	6525.448	6525.448	1.10	5030098	0.13	500000	
Ca	44	45	1	He	428078.382	428078.382	1.14	18134176	2.36	500000	
Ti	47	45	1	He	737.244	737.244	0.74	174160	0.42	2500	
V	51	45	1	He	89.724	89.724	1.12	1059919	0.01	10000	
Cr	52	45	1	He	75.772	75.772	1.77	566035	0.01	10000	
Mn	55	45	1	He	3068.435	3068.435	0.62	17306102	0.02	10000	
Fe	56	45	1	He	81024.407	81024.407	1.10	569138591	0.01	200000	
Co	59	45	1	He	39.709	39.709	1.12	413546	0.01	10000	
Ni	60	45	1	He	108.207	108.207	0.71	284115	0.04	10000	
Cu	63	45	1	He	64.950	64.950	1.31	452612	0.01	10000	
Zn	66	45	1	He	177.553	177.553	1.32	263449	0.07	10000	
As	75	115	1	He	26.303	26.303	0.39	24824	0.11	10000	
Se	78	115	1	He	4.061	4.061	7.57	364	1.11	10000	
Sr	88	45	1	He	417.244	417.244	2.06	2917346	0.01	10000	
Mo	95	103	1	He	11.100	11.100	0.24	35101	0.03	2000	
Ag	107	103	1	He	0.214	0.214	0.81	2187	0.01	300	
Cd	111	115	1	He	2.124	2.124	1.68	5157	0.04	4000	
Sn	118	115	1	He	12.533	12.533	2.82	52916	0.02	2000	
Sb	123	115	1	He	0.606	0.606	11.85	2790	0.02	300	
Ba	137	115	1	He	430.667	430.667	0.95	859782	0.05	10000	
W	182	159	1	He	0.210	0.210	9.66	7825	0.00	2500	
Tl	205	165	1	He	1.251	1.251	2.27	36407	0.00	5000	
Pb	208	165	1	He	33.501	33.501	1.16	1270812	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1564859	1.22	1663342	94.08	30	120	
Sc	45	1	He	834015	1.08	788655	105.75	30	120	
Sc	45	2	NoGas	7922287	1.10	7332116	108.05	30	120	
Rh	103	1	He	2268744	1.73	2523919	89.89	30	120	
In	115	1	He	1349601	0.74	1420677	95.00	30	120	
Tb	159	1	He	3991362	1.37	3983717	100.19	30	120	
Ho	165	1	He	3973365	0.71	4030813	98.57	30	120	
Bi	209	1	He	2740268	0.59	2997463	91.42	30	120	

Sample Report

Sample Table

Sample Name	240-50812-c-4-a@2
Data File Name	108SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T22:06:51-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	88.140	88.140	0.41	1973490	0.00	10000	
Be	9	6	2	NoGas	2.596	2.596	6.17	12067	0.02	10000	
B	11	45	2	NoGas	50.556	50.556	2.12	174733	0.03	300	
Na	23	45	1	He	1080.971	1080.971	0.72	1507324	0.07	500000	
Mg	24	45	1	He	84952.057	84952.057	1.01	68191105	0.12	500000	
Al	27	45	1	He	38745.312	38745.312	0.88	17453925	0.22	200000	
K	39	45	1	He	8414.086	8414.086	0.89	6542074	0.13	500000	
Ca	44	45	1	He	244654.372	244654.372	1.07	10474713	2.34	500000	
Ti	47	45	1	He	775.469	775.469	0.92	185136	0.42	2500	
V	51	45	1	He	97.737	97.737	0.02	1166591	0.01	10000	
Cr	52	45	1	He	77.523	77.523	0.40	585216	0.01	10000	
Mn	55	45	1	He	1613.836	1613.836	0.67	9199578	0.02	10000	
Fe	56	45	1	He	85257.839	85257.839	0.71	605222643	0.01	200000	
Co	59	45	1	He	36.309	36.309	0.81	382179	0.01	10000	
Ni	60	45	1	He	94.083	94.083	0.44	249673	0.04	10000	
Cu	63	45	1	He	64.245	64.245	0.95	452493	0.01	10000	
Zn	66	45	1	He	191.982	191.982	0.99	287764	0.07	10000	
As	75	115	1	He	31.499	31.499	0.65	30797	0.10	10000	
Se	78	115	1	He	3.658	3.658	3.89	344	1.06	10000	
Sr	88	45	1	He	265.127	265.127	1.02	1873713	0.01	10000	
Mo	95	103	1	He	14.885	14.885	2.15	49454	0.03	2000	
Ag	107	103	1	He	0.202	0.202	5.05	2170	0.01	300	
Cd	111	115	1	He	1.279	1.279	3.05	3763	0.03	4000	
Sn	118	115	1	He	12.079	12.079	2.27	52916	0.02	2000	
Sb	123	115	1	He	0.490	0.490	5.84	2362	0.02	300	
Ba	137	115	1	He	260.576	260.576	0.47	539433	0.05	10000	
W	182	159	1	He	0.731	0.731	5.21	14396	0.01	2500	
Tl	205	165	1	He	0.935	0.935	2.21	28125	0.00	5000	
Pb	208	165	1	He	39.358	39.358	0.94	1539330	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1542352	0.75	1663342	92.73	30	120	
Sc	45	1	He	842884	0.07	788655	106.88	30	120	
Sc	45	2	NoGas	7987516	0.98	7332116	108.94	30	120	
Rh	103	1	He	2385288	0.48	2523919	94.51	30	120	
In	115	1	He	1399377	0.62	1420677	98.50	30	120	
Tb	159	1	He	4089481	1.41	3983717	102.65	30	120	
Ho	165	1	He	4097116	0.80	4030813	101.64	30	120	
Bi	209	1	He	2863449	1.12	2997463	95.53	30	120	

Sample Report

Sample Table

Sample Name	HIGH STD
Data File Name	109SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T22:10:42-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	-0.141	-0.141	-28.59	66642	0.00	10000	
Be	9	6	2	NoGas	2064.925	2064.925	2.28	9965570	0.02	10000	
B	11	45	2	NoGas	183.692	183.692	1.58	598049	0.03	300	
Na	23	45	1	He	19170.281	19170.281	0.77	26881041	0.07	500000	
Mg	24	45	1	He	19139.053	19139.053	0.78	15597528	0.12	500000	
Al	27	45	1	He	18845.221	18845.221	0.54	8619426	0.22	200000	
K	39	45	1	He	19801.550	19801.550	0.68	15570232	0.13	500000	
Ca	44	45	1	He	13839.628	13839.628	1.45	601971	2.30	500000	
Ti	47	45	1	He	201.875	201.875	0.98	48975	0.41	2500	
V	51	45	1	He	1949.048	1949.048	1.60	23550740	0.01	10000	
Cr	52	45	1	He	1922.356	1922.356	1.69	14667446	0.01	10000	
Mn	55	45	1	He	1942.705	1942.705	1.75	11242602	0.02	10000	
Fe	56	45	1	He	19432.122	19432.122	1.20	140050301	0.01	200000	
Co	59	45	1	He	1945.043	1945.043	1.35	20779098	0.01	10000	
Ni	60	45	1	He	1943.970	1943.970	1.90	5236225	0.04	10000	
Cu	63	45	1	He	1941.161	1941.161	1.90	13835193	0.01	10000	
Zn	66	45	1	He	2057.290	2057.290	2.52	3112983	0.07	10000	
As	75	115	1	He	2037.927	2037.927	3.68	2276719	0.09	10000	
Se	78	115	1	He	1909.052	1909.052	5.03	182699	1.04	10000	
Sr	88	45	1	He	2108.072	2108.072	1.36	15124672	0.01	10000	
Mo	95	103	1	He	214.358	214.358	1.72	762354	0.03	2000	
Ag	107	103	1	He	213.643	213.643	2.84	2437118	0.01	300	
Cd	111	115	1	He	1950.434	1950.434	3.19	4199471	0.05	4000	
Sn	118	115	1	He	2099.065	2099.065	4.41	10386572	0.02	2000	>LDR
Sb	123	115	1	He	201.099	201.099	4.58	1055274	0.02	300	
Ba	137	115	1	He	2023.139	2023.139	3.34	4806943	0.04	10000	
W	182	159	1	He	213.262	213.262	1.53	2690971	0.01	2500	
Tl	205	165	1	He	489.715	489.715	1.17	15117499	0.00	5000	
Pb	208	165	1	He	2020.084	2020.084	1.18	81668016	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1609921	2.66	1663342	96.79	30	120	
Sc	45	1	He	855762	0.53	788655	108.51	30	120	
Sc	45	2	NoGas	7873638	1.26	7332116	107.39	30	120	
Rh	103	1	He	2558056	1.26	2523919	101.35	30	120	
In	115	1	He	1608058	5.08	1420677	113.19	30	120	
Tb	159	1	He	4203329	0.91	3983717	105.51	30	120	
Ho	165	1	He	4238302	1.70	4030813	105.15	30	120	
Bi	209	1	He	3080226	1.27	2997463	102.76	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-180747/1-a
Data File Name	110_Blk.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T22:14:13-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.049	-46.4	65088	0.8	2	
Be	9	6	2	NoGas	0.212	9.7	1052	9.5	1	
B	11	45	2	NoGas	4.642	2.8	24124	1.3	20	
Na	23	45	1	He	22.126	1.1	44291	1.7	1000	
Mg	24	45	1	He	2.308	14.7	2134	13.3	1000	
Al	27	45	1	He	1.804	6.6	1462	4.1	50	
K	39	45	1	He	4.742	26.4	46285	1.0	1000	
Ca	44	45	1	He	8.314	13.0	760	5.5	1000	
Ti	47	45	1	He	0.277	73.5	120	38.6	20	
V	51	45	1	He	0.924	5.3	14010	3.3	2	
Cr	52	45	1	He	1.224	3.4	11506	3.7	2	
Mn	55	45	1	He	0.145	33.0	1725	15.8	2	
Fe	56	45	1	He	19.709	7.6	141154	6.5	50	
Co	59	45	1	He	0.333	4.1	3494	4.9	1	
Ni	60	45	1	He	0.199	3.7	572	2.2	2	
Cu	63	45	1	He	0.360	24.6	3942	16.0	2	
Zn	66	45	1	He	2.894	10.7	5891	8.3	20	
As	75	115	1	He	2.561	24.8	2863	22.7	2	Blank Failed
Se	78	115	1	He	1.915	19.1	216	15.6	2	
Sr	88	45	1	He	0.333	12.7	2485	12.1	10	
Mo	95	103	1	He	1.124	46.2	4042	43.5	2	
Ag	107	103	1	He	0.015	12.1	193	12.1	0.2	
Cd	111	115	1	He	0.488	27.4	2482	10.2	0.2	Blank Failed
Sn	118	115	1	He	8.877	7.9	42502	3.5	10	
Sb	123	115	1	He	0.228	13.0	1268	8.5	2	
Ba	137	115	1	He	0.779	25.8	1801	24.0	5	
W	182	159	1	He	2.045	27.4	30134	21.5	10	
Tl	205	165	1	He	0.489	20.6	14645	20.9	0.5	
Pb	208	165	1	He	0.426	11.8	17492	11.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1563972	0.56	1663342	94.03	30	120	
Sc	45	1	He	814818	1.10	788655	103.32	30	120	
Sc	45	2	NoGas	7470389	1.50	7332116	101.89	30	120	
Rh	103	1	He	2535279	1.82	2523919	100.45	30	120	
In	115	1	He	1524468	4.45	1420677	107.31	30	120	
Tb	159	1	He	4047154	1.35	3983717	101.59	30	120	
Ho	165	1	He	4048413	0.61	4030813	100.44	30	120	
Bi	209	1	He	3080404	0.13	2997463	102.77	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-180747/2-a
Data File Name	111_LCS.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T22:18:08-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	2	NoGas	-0.067	-0.067	-54.076	62683	1.84	1000	0.0	79.5	120.5	LCS Failed
Be	9	2	NoGas	938.473	938.473	1.331	4287569	1.49	1000	93.8	79.5	120.5	
B	11	2	NoGas	93.180	93.180	1.258	283477	1.89	100	93.2	79.5	120.5	
Na	23	1	He	8748.551	8748.551	0.421	11304653	0.89	10000	87.5	79.5	120.5	
Mg	24	1	He	8821.104	8821.104	0.953	6620348	0.52	10000	88.2	79.5	120.5	
Al	27	1	He	8523.894	8523.894	1.546	3590375	0.65	10000	85.2	79.5	120.5	
K	39	1	He	9041.364	9041.364	1.276	6569188	0.34	10000	90.4	79.5	120.5	
Ca	44	1	He	6444.445	6444.445	2.193	258329	1.00	10000	64.4	79.5	120.5	LCS Failed
Ti	47	1	He	93.404	93.404	2.551	20895	2.10	100	93.4	79.5	120.5	
V	51	1	He	875.324	875.324	1.084	9742039	0.49	1000	87.5	79.5	120.5	
Cr	52	1	He	877.811	877.811	1.278	6169160	0.15	1000	87.8	79.5	120.5	
Mn	55	1	He	900.199	900.199	1.329	4797904	0.16	1000	90.0	79.5	120.5	
Fe	56	1	He	8842.117	8842.117	2.115	58684367	1.08	10000	88.4	79.5	120.5	
Co	59	1	He	895.716	895.716	1.841	8811815	1.01	1000	89.6	79.5	120.5	
Ni	60	1	He	922.139	922.139	2.054	2287185	0.94	1000	92.2	79.5	120.5	
Cu	63	1	He	911.537	911.537	1.961	5982890	0.77	1000	91.2	79.5	120.5	
Zn	66	1	He	912.818	912.818	2.294	1272832	1.14	1000	91.3	79.5	120.5	
As	75	1	He	895.532	895.532	5.066	892660	0.50	1000	89.6	79.5	120.5	
Se	78	1	He	915.279	915.279	5.066	78206	0.25	1000	91.5	79.5	120.5	
Sr	88	1	He	954.774	954.774	1.200	6307951	0.02	1000	95.5	79.5	120.5	
Mo	95	1	He	95.422	95.422	1.952	321950	1.07	100	95.4	79.5	120.5	
Ag	107	1	He	91.198	91.198	1.756	986442	0.47	100	91.2	79.5	120.5	
Cd	111	1	He	947.080	947.080	4.047	1820253	1.25	1000	94.7	79.5	120.5	
Sn	118	1	He	1002.995	1002.995	4.551	4430663	1.91	100	1003.0	79.5	120.5	LCS Failed
Sb	123	1	He	94.201	94.201	4.999	441239	0.46	100	94.2	79.5	120.5	
Ba	137	1	He	961.581	961.581	5.822	2037643	0.71	1000	96.2	79.5	120.5	
W	182	1	He	92.302	92.302	0.782	1100647	0.45	100	92.3	79.5	120.5	
Tl	205	1	He	224.179	224.179	1.970	6498091	0.77	250	89.7	79.5	120.5	
Pb	208	1	He	933.069	933.069	2.200	35417988	0.20	1000	93.3	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1523582	1.70	1663342	91.60	30	120	
Sc	45	1	He	788100	1.18	788655	99.93	30	120	
Sc	45	2	NoGas	7232997	0.77	7332116	98.65	30	120	
Rh	103	1	He	2426434	1.48	2523919	96.14	30	120	
In	115	1	He	1435411	5.18	1420677	101.04	30	120	
Tb	159	1	He	3961801	0.86	3983717	99.45	30	120	
Ho	165	1	He	3980042	1.99	4030813	98.74	30	120	
Bi	209	1	He	2957579	1.03	2997463	98.67	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2012431
Data File Name	112_CCV.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T22:21:47-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	45.151	1.198	1025734	1.43	50	90.3	89.5	110.5	
Be	9	6	2	NoGas	50.163	1.823	243323	1.59	50	100.3	89.5	110.5	
B	11	45	2	NoGas	45.978	0.188	156885	0.37	50	92.0	89.5	110.5	
Na	23	45	1	He	23554.825	1.154	32439133	0.85	25000	94.2	89.5	110.5	
Mg	24	45	1	He	23408.623	1.788	18738359	1.11	25000	93.6	89.5	110.5	
Al	27	45	1	He	237.545	1.776	107406	1.05	250	95.0	89.5	110.5	
K	39	45	1	He	24347.810	1.917	18795377	1.57	25000	97.4	89.5	110.5	
Ca	44	45	1	He	23413.322	0.541	1000108	0.58	25000	93.7	89.5	110.5	
Ti	47	45	1	He	49.030	4.243	11728	4.24	50	98.1	89.5	110.5	
V	51	45	1	He	47.486	0.613	567062	0.72	50	95.0	89.5	110.5	
Cr	52	45	1	He	47.050	0.572	355282	0.58	50	94.1	89.5	110.5	
Mn	55	45	1	He	234.216	1.027	1332298	0.25	250	93.7	89.5	110.5	
Fe	56	45	1	He	11737.229	1.115	83096763	0.44	12500	93.9	89.5	110.5	
Co	59	45	1	He	47.186	0.417	495295	0.49	50	94.4	89.5	110.5	
Ni	60	45	1	He	46.925	0.119	124226	0.88	50	93.8	89.5	110.5	
Cu	63	45	1	He	46.761	0.521	328874	0.35	50	93.5	89.5	110.5	
Zn	66	45	1	He	47.336	1.510	72100	1.43	50	94.7	89.5	110.5	
As	75	115	1	He	49.964	2.783	52932	0.76	50	99.9	89.5	110.5	
Se	78	115	1	He	49.641	2.380	4536	1.26	50	99.3	89.5	110.5	
Sr	88	45	1	He	49.190	1.114	346858	0.34	50	98.4	89.5	110.5	
Mo	95	103	1	He	51.341	0.397	179734	0.61	50	102.7	89.5	110.5	
Ag	107	103	1	He	47.109	0.509	528594	0.69	50	94.2	89.5	110.5	
Cd	111	115	1	He	46.333	2.789	95766	0.82	50	92.7	89.5	110.5	
Sn	118	115	1	He	54.391	3.327	255425	0.42	50	108.8	89.5	110.5	
Sb	123	115	1	He	51.052	3.812	253462	0.41	50	102.1	89.5	110.5	
Ba	137	115	1	He	47.654	3.468	107091	0.46	50	95.3	89.5	110.5	
W	182	159	1	He	49.662	0.572	613399	0.20	50	99.3	89.5	110.5	
Tl	205	165	1	He	45.512	0.855	1364362	0.69	50	91.0	89.5	110.5	
Pb	208	165	1	He	47.134	0.669	1851253	0.72	50	94.3	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1617175	0.63	1663342	97.22	30	120	
Sc	45	1	He	840622	0.78	788655	106.59	30	120	
Sc	45	2	NoGas	7836906	0.51	7332116	106.88	30	120	
Rh	103	1	He	2516611	0.21	2523919	99.71	30	120	
In	115	1	He	1519816	3.53	1420677	106.98	30	120	
Tb	159	1	He	4086806	0.38	3983717	102.59	30	120	
Ho	165	1	He	4115074	1.38	4030813	102.09	30	120	
Bi	209	1	He	3016517	0.80	2997463	100.64	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	113_CCB.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T22:25:41-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.089	-43.7	65702	1.8	2	
Be	9	6	2	NoGas	0.063	18.8	363	14.5	1	
B	11	45	2	NoGas	1.050	24.2	13517	5.8	20	
Na	23	45	1	He	10.847	9.9	30445	2.2	1000	
Mg	24	45	1	He	1.663	13.1	1696	7.4	1000	
Al	27	45	1	He	1.071	9.6	1192	7.2	50	
K	39	45	1	He	2.522	120.8	46468	2.0	1000	
Ca	44	45	1	He	9.158	15.3	828	6.8	1000	
Ti	47	45	1	He	-0.174	-16.8	17	40.0	20	
V	51	45	1	He	-0.008	-512.6	3423	12.3	2	
Cr	52	45	1	He	0.036	48.7	2994	1.3	2	
Mn	55	45	1	He	0.063	46.4	1328	12.3	2	
Fe	56	45	1	He	9.893	24.1	77300	25.1	50	
Co	59	45	1	He	0.076	3.6	921	3.3	1	
Ni	60	45	1	He	0.028	21.9	140	8.6	2	
Cu	63	45	1	He	-0.049	-13.4	1211	1.4	2	
Zn	66	45	1	He	0.274	26.0	2209	8.1	20	
As	75	115	1	He	0.321	28.4	503	23.3	2	
Se	78	115	1	He	0.444	25.6	84	12.0	2	
Sr	88	45	1	He	0.029	12.8	423	4.2	10	
Mo	95	103	1	He	0.318	31.9	1266	32.4	2	
Ag	107	103	1	He	0.005	67.6	84	41.8	0.2	
Cd	111	115	1	He	0.151	18.8	1827	2.9	0.2	
Sn	118	115	1	He	0.418	11.8	2923	12.2	10	
Sb	123	115	1	He	0.114	15.0	718	17.6	2	
Ba	137	115	1	He	0.042	33.2	142	19.9	5	
W	182	159	1	He	0.698	29.2	14318	19.1	10	
Tl	205	165	1	He	0.146	4.8	4622	2.0	0.5	
Pb	208	165	1	He	0.081	11.3	4224	6.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1607580	1.22	1663342	96.65	30	120	
Sc	45	1	He	849233	3.27	788655	107.68	30	120	
Sc	45	2	NoGas	7633643	0.71	7332116	104.11	30	120	
Rh	103	1	He	2609324	4.49	2523919	103.38	30	120	
In	115	1	He	1553478	5.35	1420677	109.35	30	120	
Tb	159	1	He	4181196	2.98	3983717	104.96	30	120	
Ho	165	1	He	4138358	2.65	4030813	102.67	30	120	
Bi	209	1	He	3100032	4.60	2997463	103.42	30	120	

Sample Report

Sample Table

Sample Name	240-50650-a-8-b
Data File Name	114SMPL.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T22:29:37-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	-0.018	-0.018	-75.46	63226	0.00	10000	
Be	9	6	2	NoGas	0.079	0.079	28.65	419	0.02	10000	
B	11	45	2	NoGas	2.206	2.206	5.60	16100	0.01	300	
Na	23	45	1	He	47.134	47.134	3.04	74923	0.06	500000	
Mg	24	45	1	He	1.789	1.789	25.88	1667	0.11	500000	
Al	27	45	1	He	2.261	2.261	16.50	1603	0.14	200000	
K	39	45	1	He	9.449	9.449	12.11	48053	0.02	500000	
Ca	44	45	1	He	27.626	27.626	9.22	1504	1.84	500000	
Ti	47	45	1	He	-0.035	-0.035	-39.25	47	-0.07	2500	
V	51	45	1	He	1.083	1.083	8.80	15283	0.01	10000	
Cr	52	45	1	He	1.650	1.650	4.99	14085	0.01	10000	
Mn	55	45	1	He	0.191	0.191	8.52	1907	0.01	10000	
Fe	56	45	1	He	8.631	8.631	13.91	62882	0.01	200000	
Co	59	45	1	He	0.156	0.156	16.05	1632	0.01	10000	
Ni	60	45	1	He	1.454	1.454	7.38	3659	0.04	10000	
Cu	63	45	1	He	0.143	0.143	1.47	2381	0.01	10000	
Zn	66	45	1	He	2.366	2.366	1.75	4950	0.05	10000	
As	75	115	1	He	0.488	0.488	28.69	636	0.08	10000	
Se	78	115	1	He	0.378	0.378	48.22	73	0.52	10000	
Sr	88	45	1	He	0.336	0.336	4.82	2411	0.01	10000	
Mo	95	103	1	He	0.506	0.506	13.30	1821	0.03	2000	
Ag	107	103	1	He	0.007	0.007	22.60	100	0.01	300	
Cd	111	115	1	He	0.236	0.236	3.71	1876	0.01	4000	
Sn	118	115	1	He	1.130	1.130	6.47	5912	0.02	2000	
Sb	123	115	1	He	0.128	0.128	15.55	737	0.02	300	
Ba	137	115	1	He	0.415	0.415	9.58	934	0.04	10000	
W	182	159	1	He	0.448	0.448	43.22	10460	0.00	2500	
Tl	205	165	1	He	0.121	0.121	7.76	3697	0.00	5000	
Pb	208	165	1	He	0.140	0.140	3.88	6307	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1524565	0.83	1663342	91.66	30	120	
Sc	45	1	He	786224	0.83	788655	99.69	30	120	
Sc	45	2	NoGas	7185803	0.34	7332116	98.00	30	120	
Rh	103	1	He	2445371	1.13	2523919	96.89	30	120	
In	115	1	He	1453212	3.35	1420677	102.29	30	120	
Tb	159	1	He	3920291	0.88	3983717	98.41	30	120	
Ho	165	1	He	3955279	0.93	4030813	98.13	30	120	
Bi	209	1	He	2988985	0.55	2997463	99.72	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2012431
Data File Name	115_CCV.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T22:33:33-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	46.288	2.385	1009271	0.30	50	92.6	89.5	110.5	
Be	9	6	2	NoGas	51.687	2.247	242148	0.88	50	103.4	89.5	110.5	
B	11	45	2	NoGas	45.542	0.923	149529	1.63	50	91.1	89.5	110.5	
Na	23	45	1	He	23999.212	8.522	30844519	1.55	25000	96.0	89.5	110.5	
Mg	24	45	1	He	24168.143	9.099	18050342	1.89	25000	96.7	89.5	110.5	
Al	27	45	1	He	252.029	9.235	106277	1.86	250	100.8	89.5	110.5	
K	39	45	1	He	25296.176	9.619	18212073	1.92	25000	101.2	89.5	110.5	
Ca	44	45	1	He	24219.524	8.896	965227	1.15	25000	96.9	89.5	110.5	
Ti	47	45	1	He	50.780	10.934	11325	5.20	50	101.6	89.5	110.5	
V	51	45	1	He	49.166	8.838	547698	1.09	50	98.3	89.5	110.5	
Cr	52	45	1	He	49.038	8.590	345449	1.33	50	98.1	89.5	110.5	
Mn	55	45	1	He	244.136	8.844	1295730	0.94	250	97.7	89.5	110.5	
Fe	56	45	1	He	12241.413	9.467	80838899	1.44	12500	97.9	89.5	110.5	
Co	59	45	1	He	48.805	9.331	477868	1.65	50	97.6	89.5	110.5	
Ni	60	45	1	He	48.042	7.989	118718	1.22	50	96.1	89.5	110.5	
Cu	63	45	1	He	48.370	9.187	317330	1.95	50	96.7	89.5	110.5	
Zn	66	45	1	He	48.315	7.672	68677	0.80	50	96.6	89.5	110.5	
As	75	115	1	He	50.580	9.139	49721	1.43	50	101.2	89.5	110.5	
Se	78	115	1	He	51.440	10.601	4357	2.41	50	102.9	89.5	110.5	
Sr	88	45	1	He	51.375	8.469	338079	0.89	50	102.8	89.5	110.5	
Mo	95	103	1	He	53.337	7.833	172995	1.60	50	106.7	89.5	110.5	
Ag	107	103	1	He	49.341	7.109	513096	0.96	50	98.7	89.5	110.5	
Cd	111	115	1	He	48.776	8.750	93505	1.57	50	97.6	89.5	110.5	
Sn	118	115	1	He	55.303	8.144	241145	1.68	50	110.6	89.5	110.5	CCV Failed
Sb	123	115	1	He	52.888	8.552	243777	0.70	50	105.8	89.5	110.5	
Ba	137	115	1	He	49.983	8.528	104281	1.65	50	100.0	89.5	110.5	
W	182	159	1	He	50.373	6.911	585199	2.00	50	100.7	89.5	110.5	
Tl	205	165	1	He	47.150	6.826	1326309	0.51	50	94.3	89.5	110.5	
Pb	208	165	1	He	48.906	7.244	1802018	0.86	50	97.8	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1562358	2.27	1663342	93.93	30	120	
Sc	45	1	He	787884	7.70	788655	99.90	30	120	
Sc	45	2	NoGas	7536941	2.31	7332116	102.79	30	120	
Rh	103	1	He	2339709	6.69	2523919	92.70	30	120	
In	115	1	He	1416040	7.78	1420677	99.67	30	120	
Tb	159	1	He	3853728	5.48	3983717	96.74	30	120	
Ho	165	1	He	3872123	6.31	4030813	96.06	30	120	
Bi	209	1	He	2813539	5.77	2997463	93.86	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	116_CCB.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T22:37:27-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.110	-39.5	64568	0.9	2	
Be	9	6	2	NoGas	0.046	21.0	285	16.2	1	
B	11	45	2	NoGas	1.122	10.3	13598	3.1	20	
Na	23	45	1	He	10.714	11.6	29814	6.7	1000	
Mg	24	45	1	He	1.546	36.7	1582	29.2	1000	
Al	27	45	1	He	1.064	5.3	1169	2.6	50	
K	39	45	1	He	3.105	67.0	46208	2.7	1000	
Ca	44	45	1	He	5.252	37.7	650	14.0	1000	
Ti	47	45	1	He	-0.165	-31.8	19	66.8	20	
V	51	45	1	He	-0.033	-72.5	3075	8.2	2	
Cr	52	45	1	He	0.006	514.8	2726	9.1	2	
Mn	55	45	1	He	0.046	12.6	1210	3.8	2	
Fe	56	45	1	He	9.552	24.4	73239	21.5	50	
Co	59	45	1	He	0.039	22.9	513	16.7	1	
Ni	60	45	1	He	0.002	773.8	69	45.7	2	
Cu	63	45	1	He	-0.092	-9.8	896	6.8	2	
Zn	66	45	1	He	0.175	66.5	2023	8.3	20	
As	75	115	1	He	0.174	28.0	349	14.9	2	
Se	78	115	1	He	0.272	31.8	70	10.9	2	
Sr	88	45	1	He	0.012	48.1	299	14.9	10	
Mo	95	103	1	He	0.280	39.0	1101	36.1	2	
Ag	107	103	1	He	0.003	36.4	68	20.5	0.2	
Cd	111	115	1	He	0.111	6.6	1783	1.4	0.2	
Sn	118	115	1	He	0.310	19.3	2448	11.1	10	
Sb	123	115	1	He	0.090	16.5	606	11.8	2	
Ba	137	115	1	He	0.014	28.9	82	13.0	5	
W	182	159	1	He	0.625	21.5	13050	12.7	10	
Tl	205	165	1	He	0.100	6.4	3180	5.4	0.5	
Pb	208	165	1	He	0.053	6.8	3099	4.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1610728	1.09	1663342	96.84	30	120	
Sc	45	1	He	835574	1.16	788655	105.95	30	120	
Sc	45	2	NoGas	7552452	0.63	7332116	103.01	30	120	
Rh	103	1	He	2557006	0.89	2523919	101.31	30	120	
In	115	1	He	1586808	1.21	1420677	111.69	30	120	
Tb	159	1	He	4075723	0.89	3983717	102.31	30	120	
Ho	165	1	He	4066499	0.53	4030813	100.89	30	120	
Bi	209	1	He	3068915	0.21	2997463	102.38	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-2012498
Data File Name	117CRI.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T22:41:22-04:00
Sample Type	CRI
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	2	NoGas	7.332	7.332	3.568	216932	2.02	8	91.6	49.5	150.5	
Be	9	2	NoGas	1.059	1.059	3.651	5223	3.43	1	105.9	49.5	150.5	
B	11	2	NoGas	18.367	18.367	0.317	66639	0.69	20	91.8	49.5	150.5	
Na	23	1	He	988.457	988.457	3.246	1384166	1.04	1000	98.8	49.5	150.5	
Mg	24	1	He	964.405	964.405	4.022	776855	0.74	1000	96.4	49.5	150.5	
Al	27	1	He	48.338	48.338	4.084	22544	1.02	50	96.7	49.5	150.5	
K	39	1	He	989.711	989.711	3.378	811202	1.08	1000	99.0	49.5	150.5	
Ca	44	1	He	928.223	928.223	4.924	40284	0.99	1000	92.8	49.5	150.5	
Ti	47	1	He	9.573	9.573	4.410	2350	1.21	10	95.7	49.5	150.5	
V	51	1	He	3.403	3.403	5.135	44116	1.06	5	68.1	49.5	150.5	
Cr	52	1	He	1.952	1.952	5.170	17424	2.29	2	97.6	49.5	150.5	
Mn	55	1	He	4.698	4.698	5.905	27809	2.30	5	94.0	49.5	150.5	
Fe	56	1	He	96.331	96.331	4.948	691938	1.03	100	96.3	49.5	150.5	
Co	59	1	He	1.031	1.031	4.069	10992	1.04	1	103.1	49.5	150.5	
Ni	60	1	He	1.956	1.956	6.561	5268	2.54	2	97.8	49.5	150.5	
Cu	63	1	He	1.820	1.820	7.871	14357	3.41	2	91.0	49.5	150.5	
Zn	66	1	He	18.954	18.954	4.231	30108	0.08	20	94.8	49.5	150.5	
As	75	1	He	4.921	4.921	7.998	5470	0.76	5	98.4	49.5	150.5	
Se	78	1	He	5.243	5.243	10.293	528	1.74	5	104.9	49.5	150.5	
Sr	88	1	He	9.938	9.938	3.489	70669	0.96	10	99.4	49.5	150.5	
Mo	95	1	He	10.042	10.042	4.610	36148	0.92	10	100.4	49.5	150.5	
Ag	107	1	He	0.981	0.981	2.220	11327	2.03	1	98.1	49.5	150.5	
Cd	111	1	He	1.032	1.032	12.123	3663	2.01	1	103.2	49.5	150.5	
Sn	118	1	He	9.930	9.930	6.683	48470	1.35	10	99.3	49.5	150.5	
Sb	123	1	He	1.936	1.936	9.157	9959	2.77	2	96.8	49.5	150.5	
Ba	137	1	He	4.758	4.758	6.607	10987	2.73	5	95.2	49.5	150.5	
W	182	1	He	9.457	9.457	4.712	121163	0.88	10	94.6	49.5	150.5	
Tl	205	1	He	1.815	1.815	3.899	55192	0.66	2	90.7	49.5	150.5	
Pb	208	1	He	1.004	1.004	2.889	40900	0.46	1	100.4	49.5	150.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1625737	1.32	1663342	97.74	30	120	
Sc	45	1	He	846392	4.13	788655	107.32	30	120	
Sc	45	2	NoGas	7568736	0.54	7332116	103.23	30	120	
Rh	103	1	He	2584951	4.18	2523919	102.42	30	120	
In	115	1	He	1559642	8.16	1420677	109.78	30	120	
Tb	159	1	He	4089767	3.71	3983717	102.66	30	120	
Ho	165	1	He	4162405	3.28	4030813	103.26	30	120	
Bi	209	1	He	3068225	3.84	2997463	102.36	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2012431
Data File Name	118_CCV.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T22:45:17-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	0.121	64.975	251077	16.48	50	0.2	89.5	110.5	CCV Failed
Be	9	6	2	NoGas	-0.007	-29.787	100	29.40	50	0.0	89.5	110.5	CCV Failed
B	11	45	2	NoGas	-2.583	-1.904	8024	8.62	50	-5.2	89.5	110.5	CCV Failed
Na	23	45	1	He	-5.284	-21.720	23705	16.39	25000	0.0	89.5	110.5	CCV Failed
Mg	24	45	1	He	1.457	76.549	4460	59.18	25000	0.0	89.5	110.5	CCV Failed
Al	27	45	1	He	2.889	45.220	5895	22.97	250	1.2	89.5	110.5	CCV Failed
K	39	45	1	He	-47.096	-2.759	23401	10.14	25000	-0.2	89.5	110.5	CCV Failed
Ca	44	45	1	He	-2.451	-161.571	955	51.31	25000	0.0	89.5	110.5	CCV Failed
Ti	47	45	1	He	0.459	81.090	501	56.31	50	0.9	89.5	110.5	CCV Failed
V	51	45	1	He	-0.249	-2.596	1587	16.53	50	-0.5	89.5	110.5	CCV Failed
Cr	52	45	1	He	-0.301	-4.893	1321	27.50	50	-0.6	89.5	110.5	CCV Failed
Mn	55	45	1	He	-0.121	-14.391	789	33.43	250	0.0	89.5	110.5	CCV Failed
Fe	56	45	1	He	1.048	64.204	40497	35.97	12500	0.0	89.5	110.5	CCV Failed
Co	59	45	1	He	0.013	66.013	726	29.78	50	0.0	89.5	110.5	CCV Failed
Ni	60	45	1	He	-0.007	-128.901	137	47.49	50	0.0	89.5	110.5	CCV Failed
Cu	63	45	1	He	-0.162	-7.169	1229	16.03	50	-0.3	89.5	110.5	CCV Failed
Zn	66	45	1	He	-1.031	-1.020	738	14.73	50	-2.1	89.5	110.5	CCV Failed
As	75	115	1	He	-0.084	-10.624	200	17.34	50	-0.2	89.5	110.5	CCV Failed
Se	78	115	1	He	-0.246	-7.314	65	6.25	50	-0.5	89.5	110.5	CCV Failed
Sr	88	45	1	He	0.011	232.882	862	64.99	50	0.0	89.5	110.5	CCV Failed
Mo	95	103	1	He	0.021	37.133	546	27.64	50	0.0	89.5	110.5	CCV Failed
Ag	107	103	1	He	0.001	368.541	110	85.92	50	0.0	89.5	110.5	CCV Failed
Cd	111	115	1	He	0.058	7.284	5232	13.99	50	0.1	89.5	110.5	CCV Failed
Sn	118	115	1	He	0.104	76.146	4533	33.15	50	0.2	89.5	110.5	CCV Failed
Sb	123	115	1	He	0.005	116.687	519	25.62	50	0.0	89.5	110.5	CCV Failed
Ba	137	115	1	He	0.017	128.857	282	66.84	50	0.0	89.5	110.5	CCV Failed
W	182	159	1	He	0.113	27.346	21658	17.31	50	0.2	89.5	110.5	CCV Failed
Tl	205	165	1	He	0.017	35.584	2297	30.52	50	0.0	89.5	110.5	CCV Failed
Pb	208	165	1	He	0.007	117.817	4087	20.72	50	0.0	89.5	110.5	CCV Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	6358711	14.92	1663342	382.29	30	120	ISTD Failed
Sc	45	1	He	2530901	12.21	788655	320.91	30	120	ISTD Failed
Sc	45	2	NoGas	27341027	15.37	7332116	372.89	30	120	ISTD Failed
Rh	103	1	He	7788755	13.86	2523919	308.60	30	120	ISTD Failed
In	115	1	He	4965035	13.60	1420677	349.48	30	120	ISTD Failed
Tb	159	1	He	12933286	13.02	3983717	324.65	30	120	ISTD Failed
Ho	165	1	He	13008080	13.52	4030813	322.72	30	120	ISTD Failed
Bi	209	1	He	9518083	12.98	2997463	317.54	30	120	ISTD Failed

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	119_CCB.d
Data Path Name	D:\Analytical Runs\I10051915C_LITHIUM .b
Acq Date Time	2015-05-19T22:49:13-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	0.254	29.4	152262	7.5	2	
Be	9	6	2	NoGas	-0.007	-57.0	63	83.4	1	
B	11	45	2	NoGas	-2.067	-7.1	8024	6.1	20	
Na	23	45	1	He	-6.615	-8.9	18999	5.3	1000	
Mg	24	45	1	He	0.029	1123.1	1141	62.5	1000	
Al	27	45	1	He	-0.640	-41.4	1260	19.7	50	
K	39	45	1	He	-48.750	-1.9	20376	5.0	1000	
Ca	44	45	1	He	-7.226	-16.5	367	33.7	1000	
Ti	47	45	1	He	0.090	44.4	247	4.9	20	
V	51	45	1	He	-0.266	-1.6	1016	10.9	2	
Cr	52	45	1	He	-0.320	-0.9	947	14.4	2	
Mn	55	45	1	He	-0.137	-6.3	540	19.9	2	
Fe	56	45	1	He	-0.281	-73.2	12842	28.5	50	
Co	59	45	1	He	0.004	20.4	498	10.4	1	
Ni	60	45	1	He	-0.016	-8.9	70	9.5	2	
Cu	63	45	1	He	-0.176	-3.0	976	4.8	2	
Zn	66	45	1	He	-1.057	-1.1	643	10.2	20	
As	75	115	1	He	-0.097	-2.1	154	1.9	2	
Se	78	115	1	He	-0.277	-5.6	56	6.2	2	
Sr	88	45	1	He	-0.021	-26.4	192	56.4	10	
Mo	95	103	1	He	-0.004	-174.2	272	34.3	2	
Ag	107	103	1	He	0.000	-448.8	79	35.9	0.2	
Cd	111	115	1	He	0.039	22.6	5075	7.2	0.2	
Sn	118	115	1	He	0.030	144.1	3371	20.4	10	
Sb	123	115	1	He	-0.005	-161.1	352	32.0	2	
Ba	137	115	1	He	-0.016	-17.3	36	54.9	5	
W	182	159	1	He	0.063	24.9	19766	8.2	10	
Tl	205	165	1	He	0.003	65.0	972	14.8	0.5	
Pb	208	165	1	He	-0.004	-95.8	2780	14.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3813985	7.77	1663342	229.30	30	120	ISTD Failed
Sc	45	1	He	2627067	9.69	788655	333.11	30	120	ISTD Failed
Sc	45	2	NoGas	15958136	5.43	7332116	217.65	30	120	ISTD Failed
Rh	103	1	He	7876872	7.19	2523919	312.09	30	120	ISTD Failed
In	115	1	He	4937686	6.56	1420677	347.56	30	120	ISTD Failed
Tb	159	1	He	13006937	6.84	3983717	326.50	30	120	ISTD Failed
Ho	165	1	He	13166008	6.54	4030813	326.63	30	120	ISTD Failed
Bi	209	1	He	9703523	7.14	2997463	323.72	30	120	ISTD Failed

MTMSCCBDILH20-200 EPA Tune Solution Spex CL11-62YPY

TestAmerica ICP/MS Data Review Checklist

Run Date: 5/28/15 Analyst: AS Instrument: I10

Review Items

A. Tune/Daily performance	Yes	No	N/A	2nd Level
1. Resolution </= 0.9 AMU full width at 10% peak height, and within +/- 0.1 AMU of true mass?	✓			✓
B. Calibration/Instrument Run QC				
1. Instrument calibrated per manufacturer's instructions and at SOP specified levels? Correlation coefficient ≥ 0.995?	✓			✓
2. ICV/CCV analyzed at appropriate frequency and within control limits? (*ICV:* = 90 – 110%) (*CCV:* 90 – 110%, 200.8 = 85 -115%)	✓			✓
3. ICB/CCB analyzed at appropriate frequency and within +/- RL?	✓			✓
4. CRI run and recovered within QC limits (+/-50%) or project limits?	✓			✓
5. ICSA/ICSAB run at required frequency and within SOP control limits?	✓			✓
C. Sample Results				
1. Were samples with concentrations > the linear range for any parameter diluted and reanalyzed?	✓			✓
2. All reported results bracketed by in control QC?	✓			✓
3. Were the internal standards within acceptance criteria for all results reported?	✓			✓
4. Sample analyses done within holding time?	✓			✓
D. Preparation/Matrix QC				
1. LCS done per prep batch and within QC limits?	✓			✓
2. Method blank done per prep batch and < RL?	✓			✓
3. MS run at required frequency and within limits?	✓			✓
4. MSD or DU run at required frequency and RPD within SOP limits?	✓			✓
5. Serial dilution done per prep batch?	✓			✓
6. Post digest spike analyzed if required?	✓			✓
E. Other				
1. Are all nonconformance's documented appropriately?	✓			✓
2. Current IDL/LR data on file?	✓			✓
3. Calculations checked for error?	✓			✓
4. Transcriptions checked for error?	✓			✓
5. All client/project specific requirements met?	✓			✓
6. Date/time of analysis verified as correct?	✓			✓

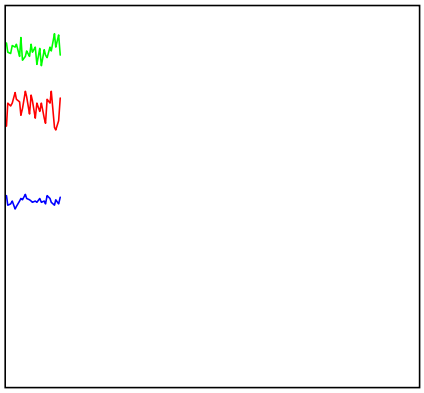
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Level I Analyst: Date: Time:

Level II Reviewer: Date: 5/29/15 Time: 10:06 - 1:01
Level II Reviewer: Date: Time:

Comments:

Current Signal

[NoGas]



Mass	Range	Count	Avg. Count	RSD [%]
7	2000	1521	1469.9	4.15
89	5000	4358	4427.8	2.37
205	10000	4996	4880.5	1.89
156/140	2	1.067 %	1.145 %	13.55
70/140	50	21.196 %	22.259 %	4.15
115	100	76	72.0	16.64
Integration Time [sec]			0.10	

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.75	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.35	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	13.0	V
Extract 2	-185.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-85	V	Cell Exit	-50	V			

Cell Parameters

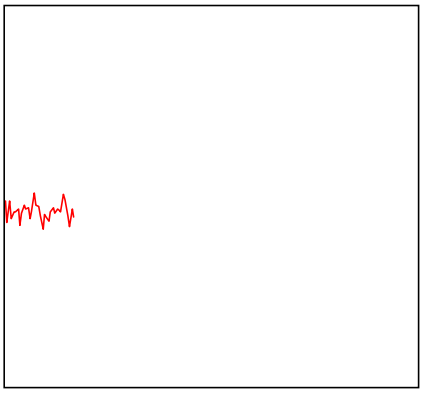
Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			

Meters

IF/BK Press	1.92E+2	Pa	Water RF/WC/IF	1.33	L/min	Plasma Gas	15.01	L/min
Analyzer Press	1.47E-4	Pa	Carrier Gas	0.76	L/min			

Current Signal

[He]



Mass	Range	Count	Avg. Count	RSD [%]
59	2000	889	919.6	4.77
51	1000	781	789.6	5.77
52	500	277	277.4	12.19
51/59	100	87.849 %	86.015 %	6.77
52/59	50	31.153 %	30.217 %	12.63
Integration Time [sec]			0.10	

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.75	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.35	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	-2.0	V
Extract 2	-185.0	V	Cell Entrance	-50	V	Plate Bias	-70	V
Omega Bias	-85	V	Cell Exit	-70	V			

Cell Parameters

Use Gas	true		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	4.0	mL/min	OctP Bias	-20.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			

Meters

IF/BK Press	1.93E+2	Pa	Water RF/WC/IF	1.28	L/min	Plasma Gas	15.01	L/min
Analyzer Press	1.97E-4	Pa	Carrier Gas	0.75	L/min			

US EPA Tune Check Sample Report

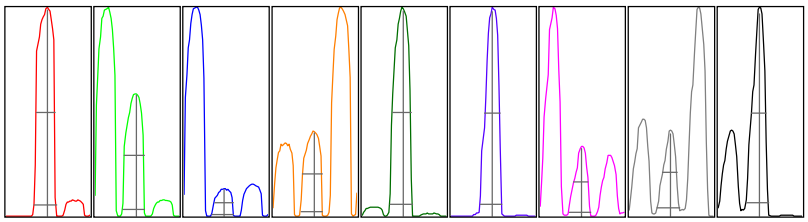
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Report Comment
Instrument Name I10 JP12452145

[NoGas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	24338	0.65	5.00	
24	116635	0.24	5.00	
25	15149	0.78	5.00	
26	17714	0.87	5.00	
59	131290	0.24	5.00	
115	241535	0.53	5.00	
206	82629	0.38	5.00	
207	73092	0.32	5.00	
208	172736	0.41	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	24538	24280	24170	24472	24229
24	117136	116567	116454	116476	116544
25	15256	15038	15011	15184	15257
26	17736	17649	17579	17970	17637
59	130849	131237	131210	131489	131666
115	241113	242031	239572	242994	241964
206	82960	82649	82127	82590	82819
207	73031	72805	73129	73448	73046
208	172246	173124	171744	173395	173170

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	3851	9.00	8.9 - 9.1		0.777	0.850	
24	18786	24.00	23.9 - 24.1		0.774	0.850	
25	2447	24.95	24.9 - 25.1		0.777	0.850	
26	2841	26.00	25.9 - 26.1		0.785	0.850	
59	21429	59.00	58.9 - 59.1		0.811	0.850	
115	44191	115.00	114.9 - 115.1		0.769	0.850	
206	15700	206.00	205.9 - 206.1		0.774	0.850	
207	13736	207.00	206.9 - 207.1		0.781	0.850	
208	33626	208.00	207.9 - 208.1		0.792	0.850	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 235 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.75	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.35	L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	13.0	V
Extract 2	-185.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-85	V	Cell Exit	-50	V			

Cell Parameters

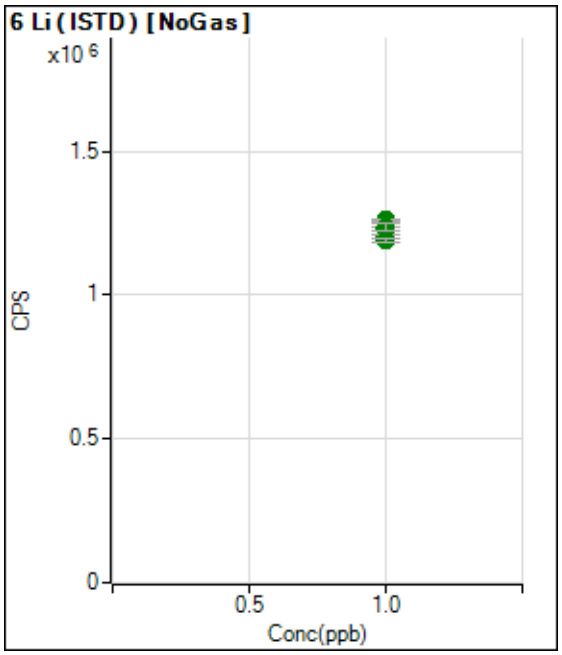
US EPA Tune Check Sample Report

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
ParameterName	**Value**	**Unit**	**ParameterName**	**Value**	**Unit**	**ParameterName**	**Value**	**Unit**
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			

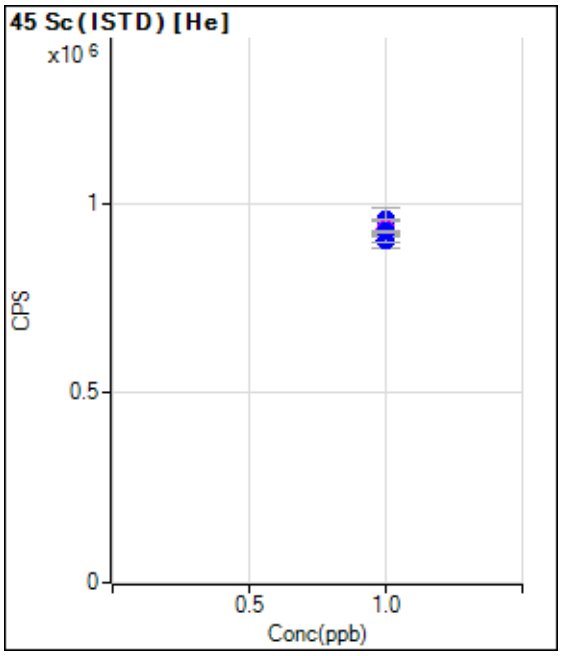
Calibration for 207LCSS.d

Batch Folder: D:\Analytical Runs\I10052815B_LITHIUM .b\
Analysis File: I10052815B_LITHIUM .batch.bin
DA Date-Time: 5/29/2015 8:13:04 AM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

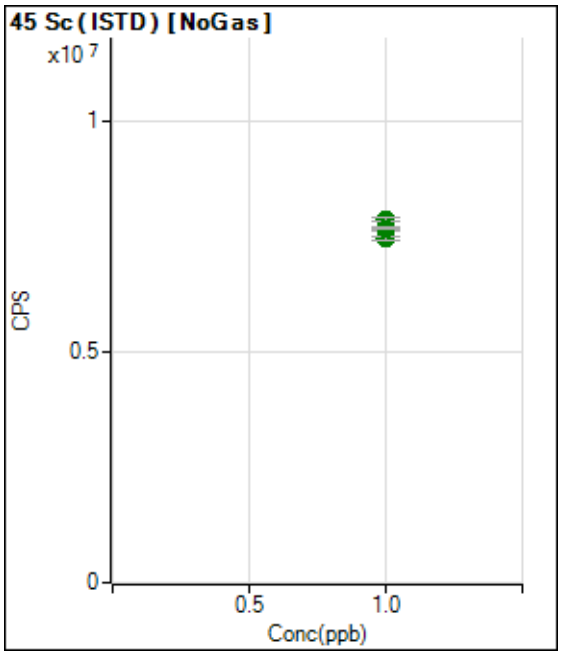
Level	Standard Data File	Sample Name	Acq. Date-Time
1	002CALB.d	ICIS	5/28/2015 10:09:56 AM
2	003CALS.d	STD1-2012420	5/28/2015 10:13:34 AM
3	004CALS.d	STD2-2012431	5/28/2015 10:17:10 AM
4	005CALS.d	STD3-2012433	5/28/2015 10:20:48 AM
5	006CALS.d	STD4-2012443	5/28/2015 10:24:18 AM



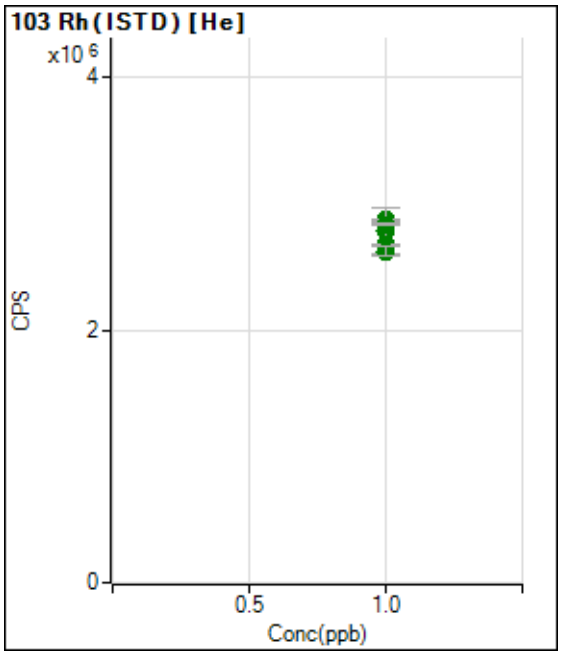
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1261090.41		A	0.6
2	☐	1.000		1230006.80		A	1.3
3	☐	1.000		1204200.44		A	1.4
4	☐	1.000		1189927.32		A	1.4
5	☐	1.000		1237386.84		A	2.5



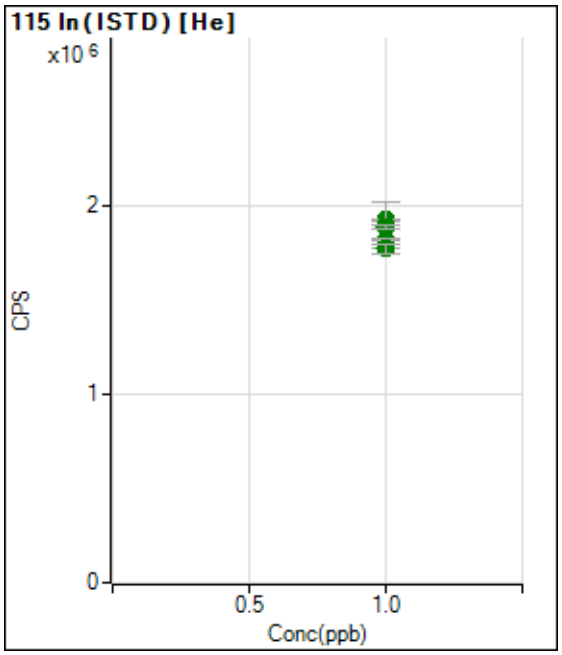
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		955957.51		P	0.3
2	☐	1.000		933799.07		M	11.7
3	☐	1.000		919041.53		P	0.0
4	☐	1.000		903571.91		P	1.7
5	☐	1.000		925763.37		P	0.2



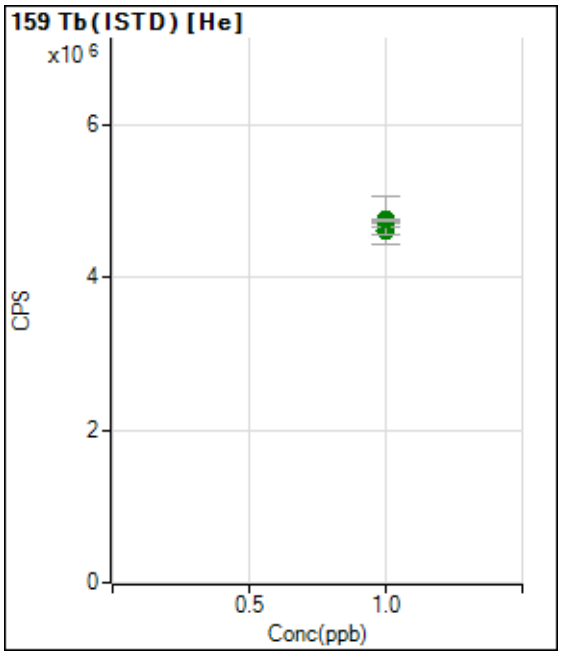
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		7862387.19		A	1.1
2	☐	1.000		7643626.64		A	0.5
3	☐	1.000		7447707.48		A	0.9
4	☐	1.000		7681308.58		A	0.1
5	☐	1.000		7676095.25		A	0.6



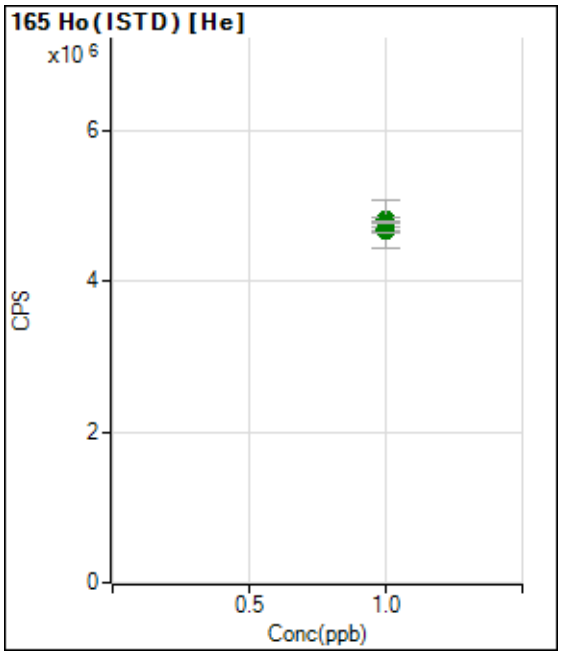
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2873429.02		A	0.6
2	☐	1.000		2786784.39		A	12.9
3	☐	1.000		2675432.88		A	0.6
4	☐	1.000		2623572.25		A	3.2
5	☐	1.000		2839591.21		A	0.1



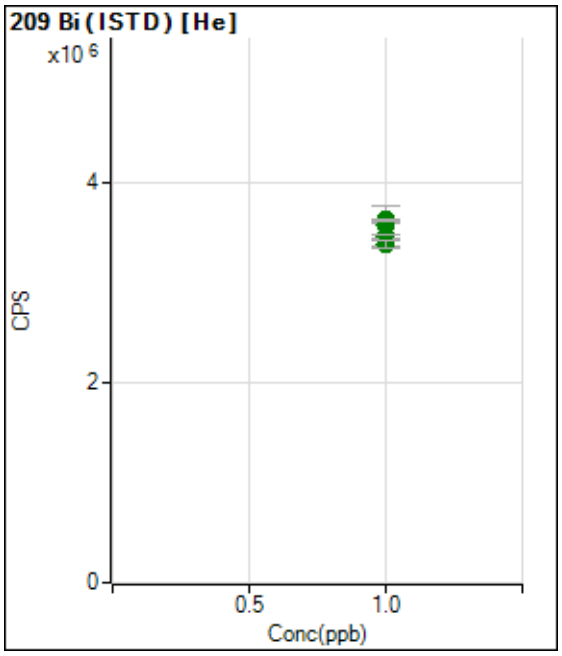
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1	☐	1.000		1922589.21		A	0.3
2	☐	1.000		1896824.04		A	13.3
3	☐	1.000		1815859.97		A	0.4
4	☐	1.000		1768086.80		A	2.4
5	☐	1.000		1884134.90		A	0.9



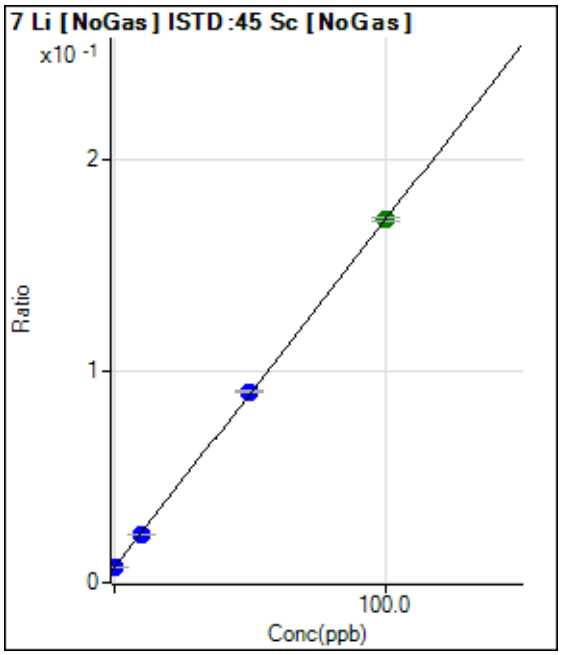
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		4725150.76		A	0.7
2	☐	1.000		4748560.34		A	13.2
3	☐	1.000		4658646.70		A	0.4
4	☐	1.000		4610545.25		A	2.0
5	☐	1.000		4749995.87		A	0.9



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		4813139.72		A	1.1
2	☐	1.000		4764724.72		A	13.5
3	☐	1.000		4701220.24		A	0.9
4	☐	1.000		4676905.56		A	1.3
5	☐	1.000		4777389.10		A	0.5



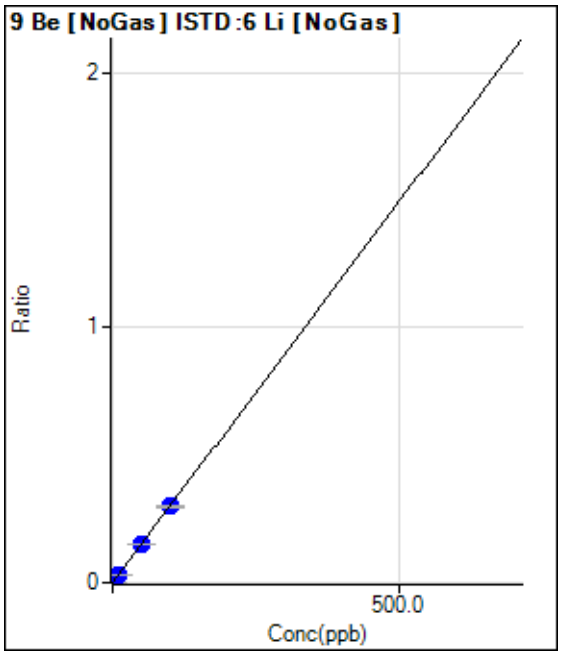
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3617561.82		A	0.5
2	☐	1.000		3575874.11		A	11.7
3	☐	1.000		3463809.12		A	1.1
4	☐	1.000		3391054.64		A	1.8
5	☐	1.000		3633760.36		A	0.8



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	54158.31	0.0069	P	0.9
2	☐	10.000	9.502	172374.19	0.0226	P	1.7
3	☐	50.000	50.592	672411.71	0.0903	P	1.5
4	☐			53233.81	0.0069	P	0.0
5	☐	100.000	99.754	1315158.63	0.1713	A	1.2

y = 0.0016 * x + 0.0069
R = 0.9999
DL = 0.1158
BEC = 4.178

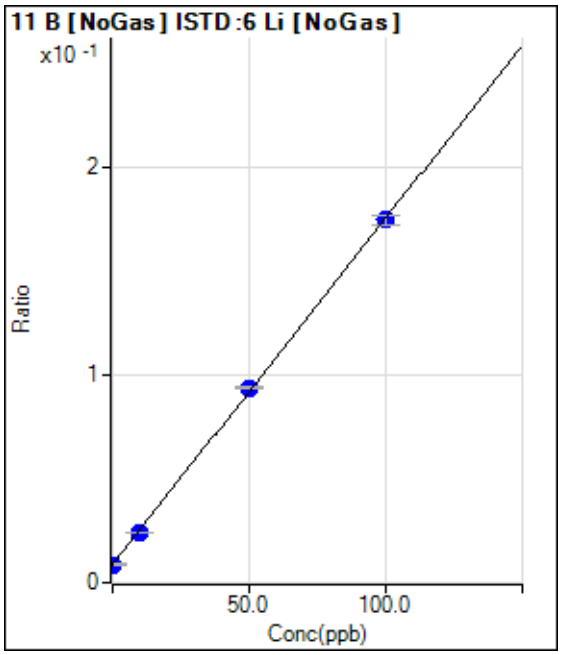
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Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	155.56	0.0001	P	21.9
2	☐	10.000	8.994	33252.94	0.0270	P	2.4
3	☐	50.000	49.857	179788.46	0.1493	P	1.8
4	☐	100.000	100.172	356793.38	0.2999	P	1.7
5	☐			400.02	0.0003	P	12.0

y = 0.0030 * x + 1.2344E-004
R = 1.0000
DL = 0.02711
BEC = 0.04125

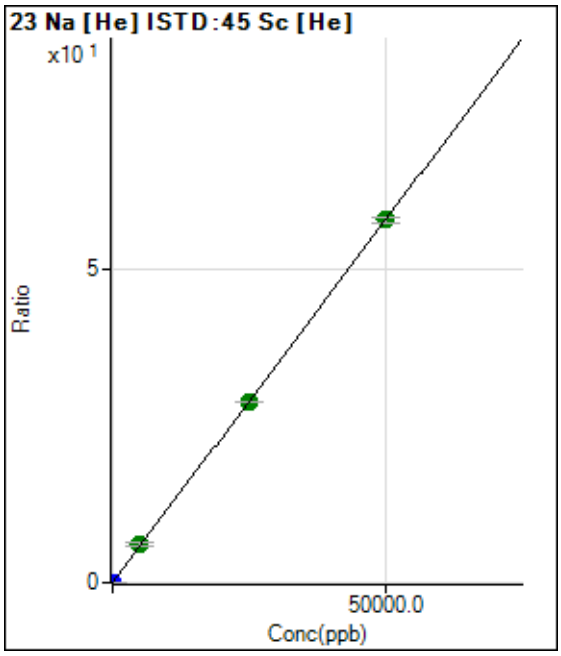
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	11077.79	0.0088	P	3.0
2	☐	10.000	9.276	29817.53	0.0242	P	1.2
3	☐	50.000	51.007	112932.01	0.0938	P	0.7
4	☐			11033.27	0.0093	P	2.7
5	☐	100.000	99.569	216092.22	0.1747	P	2.6

y = 0.0017 * x + 0.0088
R = 0.9999
DL = 0.4792
BEC = 5.272

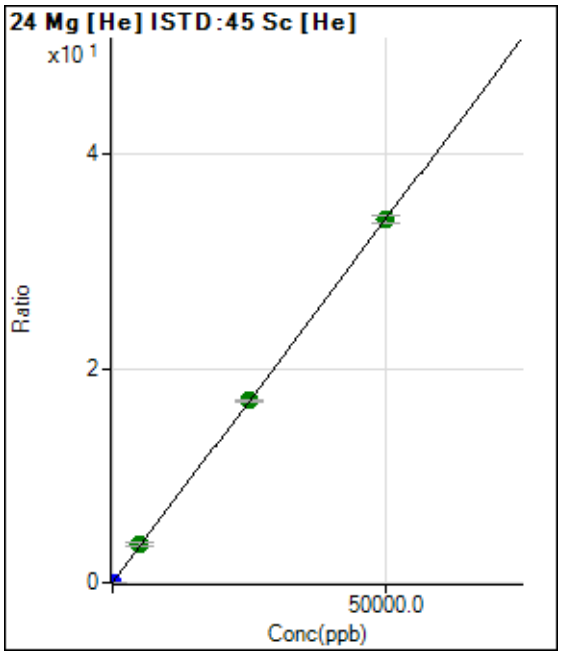
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	26367.81	0.0276	P	0.5
2	☐	5000.000	5241.144	5625345.61	6.0828	A	12.4
3	☐	25000.000	24923.994	26489446.17	28.8229	A	0.6
4	☐	50000.000	50013.888	52226392.37	57.8099	A	1.5
5	☐			39368.99	0.0425	P	4.4

y = 0.0012 * x + 0.0276
R = 1.0000
DL = 0.3807
BEC = 23.87

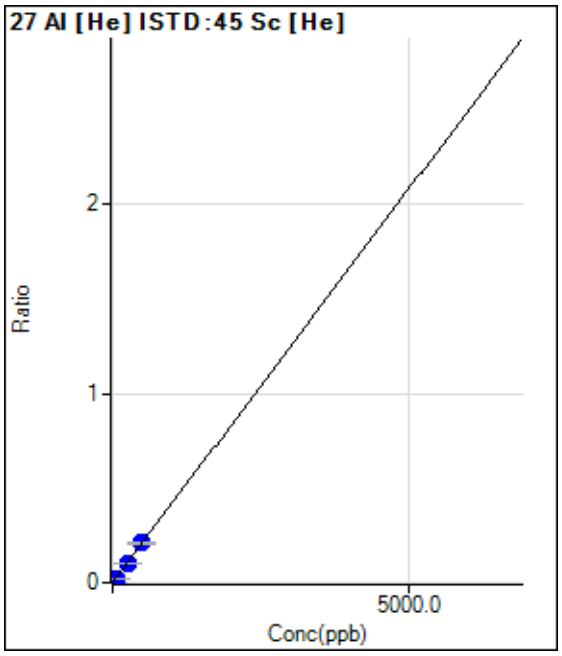
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3248.59	0.0034	P	11.2
2	☐	5000.000	5245.742	3288533.90	3.5584	A	13.4
3	☐	25000.000	25045.708	15602176.70	16.9766	A	1.0
4	☐	50000.000	49952.572	30583795.08	33.8556	A	2.1
5	☐			5104.71	0.0055	P	4.6

y = 6.7769E-004 * x + 0.0034
R = 1.0000
DL = 1.689
BEC = 5.015

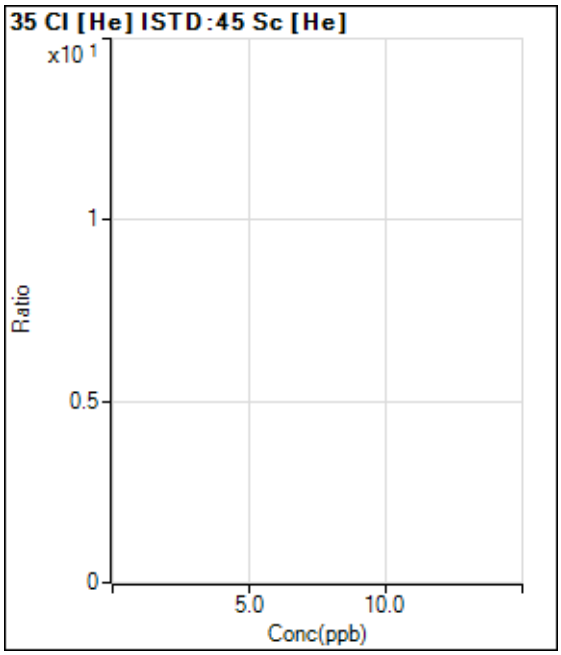
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	706.69	0.0007	P	15.5
2	☐	50.000	51.498	20492.58	0.0222	P	13.4
3	☐	250.000	245.654	94660.27	0.1030	P	1.3
4	☐	500.000	502.023	189441.34	0.2097	P	2.6
5	☐			613.35	0.0007	P	13.5

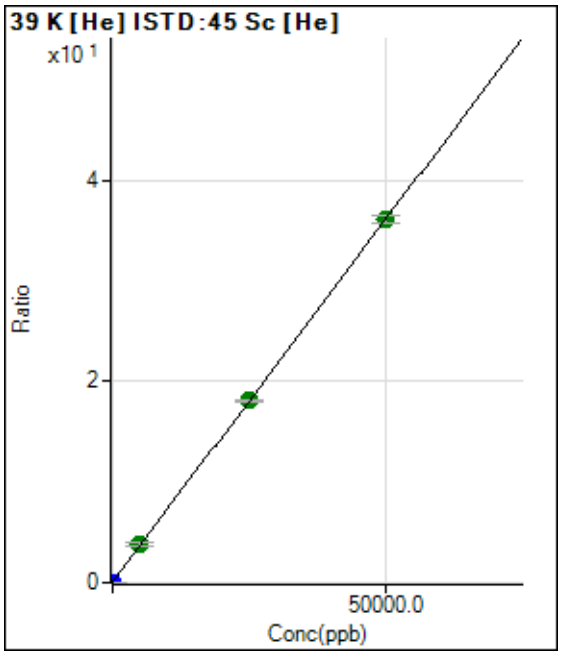
y = 4.1627E-004 * x + 7.3944E-004
R = 0.9999
DL = 0.8278
BEC = 1.776

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			12718381.44	13.3043	A	0.4
2	☐			12986645.32	14.0359	A	11.8
3	☐			12967005.50	14.1093	A	0.7
4	☐			12391926.36	13.7171	A	1.8
5	☐			13534270.76	14.6195	A	0.6

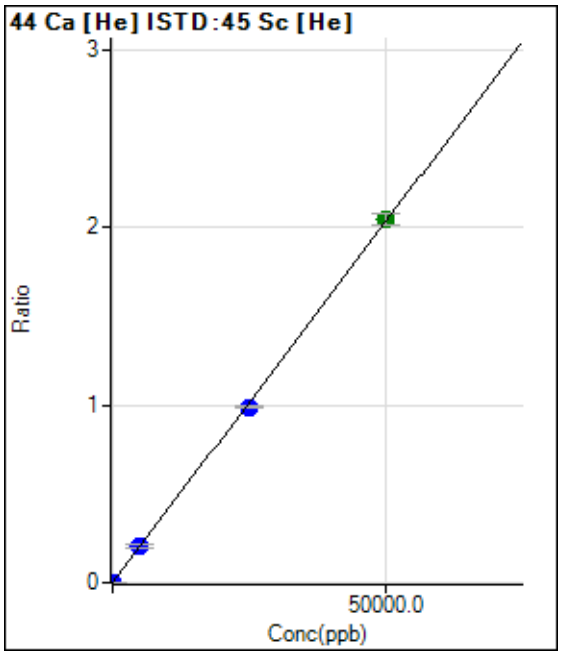
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	54616.32	0.0571	P	2.4
2	☐	5000.000	5252.020	3550486.32	3.8400	A	12.8
3	☐	25000.000	25024.168	16617478.04	18.0813	A	0.4
4	☐	50000.000	49962.714	32560742.22	36.0438	A	2.1
5	☐			58431.59	0.0631	P	1.6

y = 7.2027E-004 * x + 0.0571
R = 1.0000
DL = 5.628
BEC = 79.32

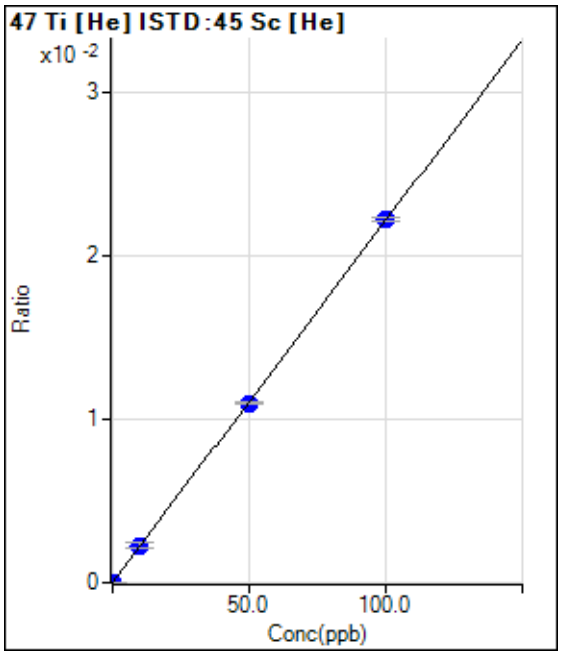
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Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	769.25	0.0008	P	14.4
2	☐	5000.000	5044.621	189928.14	0.2054	P	12.4
3	☐	25000.000	24353.720	908372.51	0.9884	P	0.3
4	☐	50000.000	50318.678	1843832.88	2.0413	A	3.1
5	☐			575.75	0.0006	P	9.9

y = 4.0552E-005 * x + 8.0449E-004
R = 0.9998
DL = 8.555
BEC = 19.84

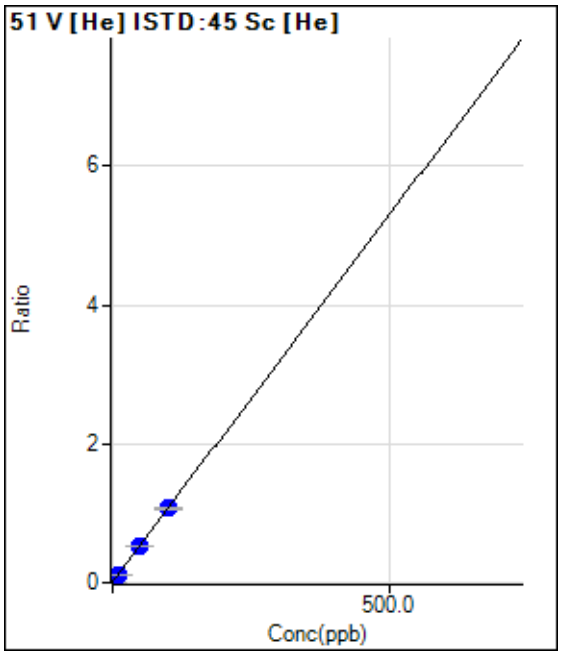
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6.67	0.0000	P	0.3
2	☐	10.000	10.149	2073.48	0.0022	P	16.7
3	☐	50.000	49.462	10051.77	0.0109	P	0.9
4	☐			22.22	0.0000	P	62.2
5	☐	100.000	100.254	20516.13	0.0222	P	1.0

y = 2.2098E-004 * x + 6.9773E-006
R = 1.0000
DL = 0.0002497
BEC = 0.03157

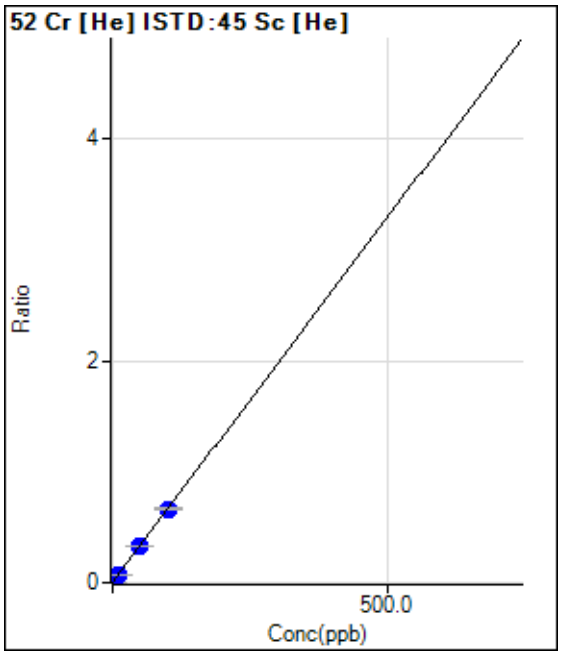
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7930.26	0.0083	P	11.4
2	☐	10.000	10.213	107976.88	0.1166	P	10.9
3	☐	50.000	49.454	489672.32	0.5328	P	1.3
4	☐	100.000	100.252	968015.90	1.0716	P	2.2
5	☐			6656.89	0.0072	P	4.8

y = 0.0106 * x + 0.0083
R = 1.0000
DL = 0.2673
BEC = 0.7821

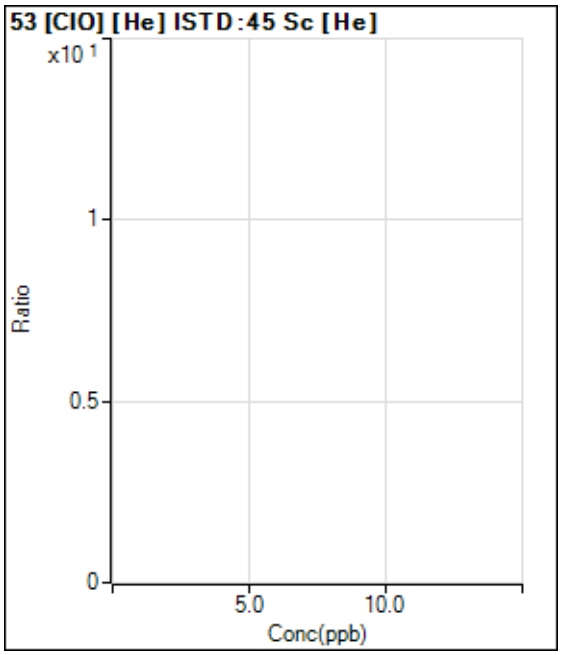
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2562.44	0.0027	P	7.1
2	☐	10.000	10.351	65484.18	0.0709	P	13.6
3	☐	50.000	49.633	302909.47	0.3296	P	0.7
4	☐	100.000	100.149	598289.16	0.6623	P	2.4
5	☐			2725.80	0.0029	P	5.7

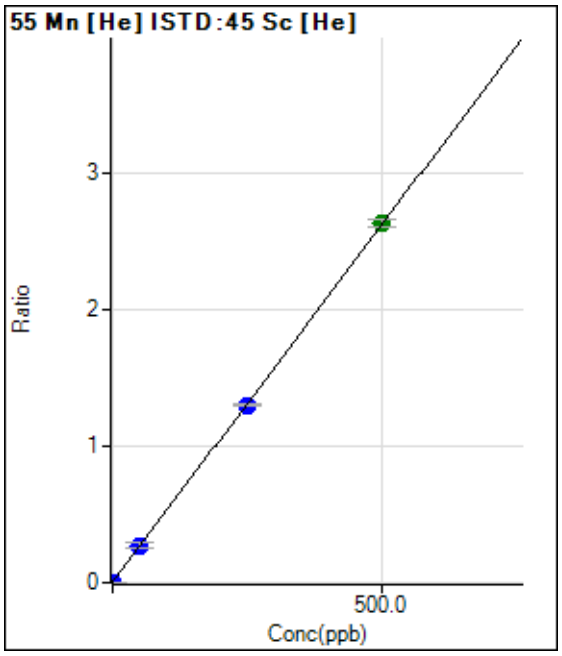
y = 0.0066 * x + 0.0027
R = 1.0000
DL = 0.08612
BEC = 0.4069

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			1326.05	0.0014	P	18.2
2	☐			8780.38	0.0094	P	4.9
3	☐			36897.82	0.0401	P	3.4
4	☐			73089.27	0.0809	P	1.3
5	☐			1048.23	0.0011	P	5.6

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2315.74	0.0024	P	4.9
2	☐	50.000	51.621	251837.22	0.2725	P	13.2
3	☐	250.000	247.212	1190793.29	1.2957	P	0.7
4	☐	500.000	501.232	2370919.07	2.6246	A	2.2
5	☐			630.02	0.0007	P	7.6

y = 0.0052 * x + 0.0024

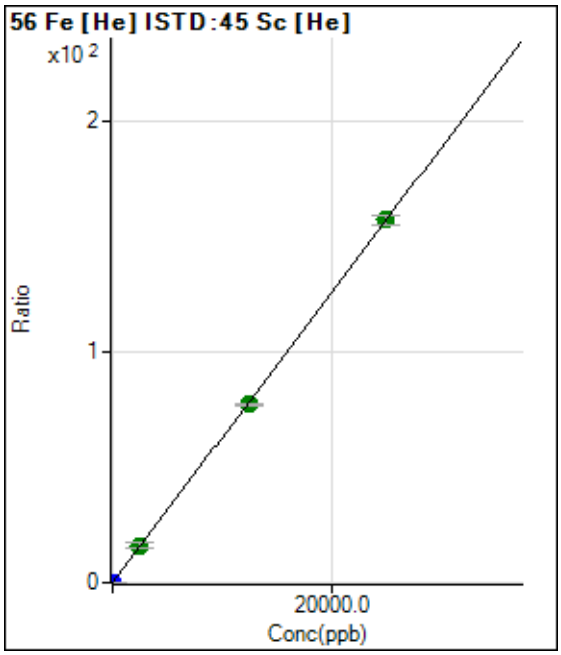
R = 1.0000

DL = 0.06764

BEC = 0.4631

Weight: <None>

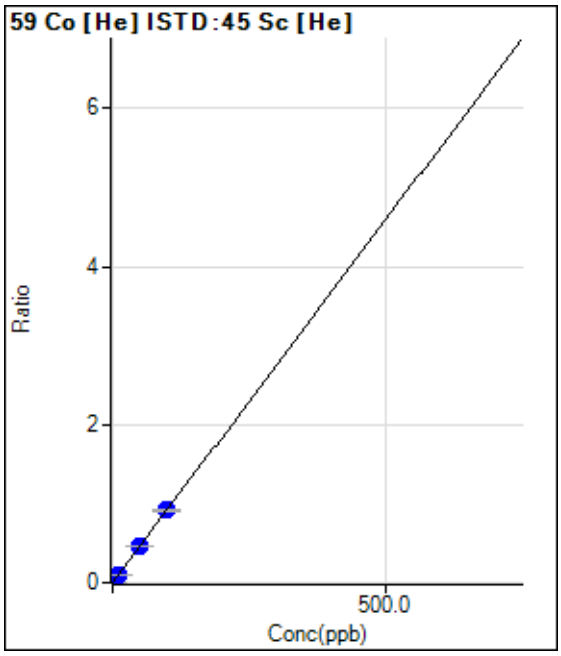
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8741.12	0.0091	P	11.5
2	☐	2500.000	2573.613	14912402.19	16.1325	A	13.1
3	☐	12500.000	12318.413	70933790.52	77.1823	A	0.7
4	☐	25000.000	25083.432	141956603.25	157.1534	A	2.7
5	☐			149799.85	0.1618	P	14.7

y = 0.0063 * x + 0.0091
R = 0.9999
DL = 0.5036
BEC = 1.46

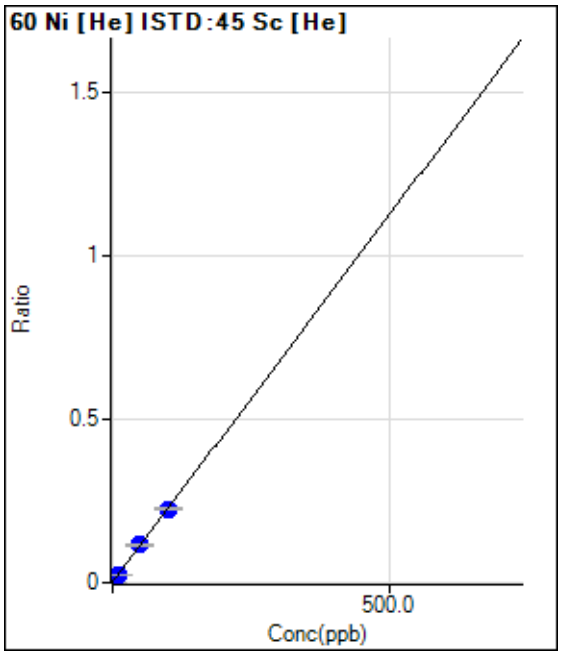
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Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	70.00	0.0001	P	20.7
2	☐	10.000	10.640	90589.85	0.0980	P	13.2
3	☐	50.000	50.038	423357.36	0.4607	P	0.2
4	☐	100.000	99.917	830859.38	0.9198	P	2.4
5	☐			193.34	0.0002	P	8.1

y = 0.0092 * x + 7.3214E-005
R = 1.0000
DL = 0.004933
BEC = 0.007954

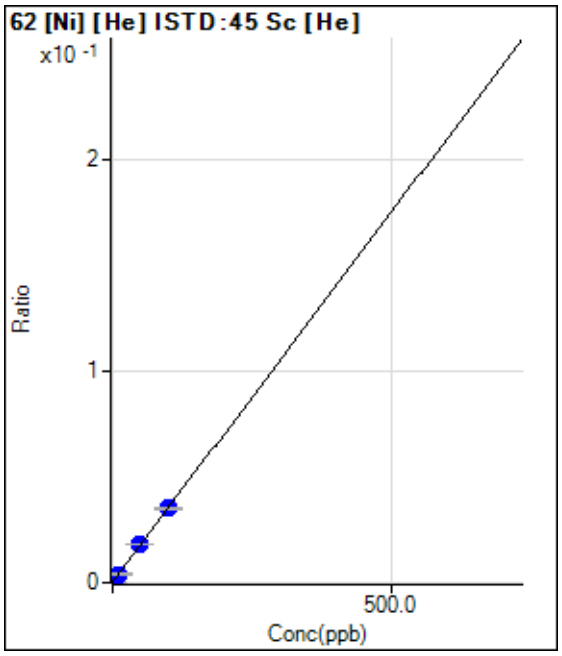
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1026.71	0.0011	P	10.6
2	☐	10.000	10.577	23019.31	0.0249	P	12.3
3	☐	50.000	50.615	105721.32	0.1150	P	1.0
4	☐	100.000	99.635	203606.72	0.2254	P	2.8
5	☐			967.82	0.0010	P	9.1

y = 0.0023 * x + 0.0011
R = 1.0000
DL = 0.1511
BEC = 0.4771

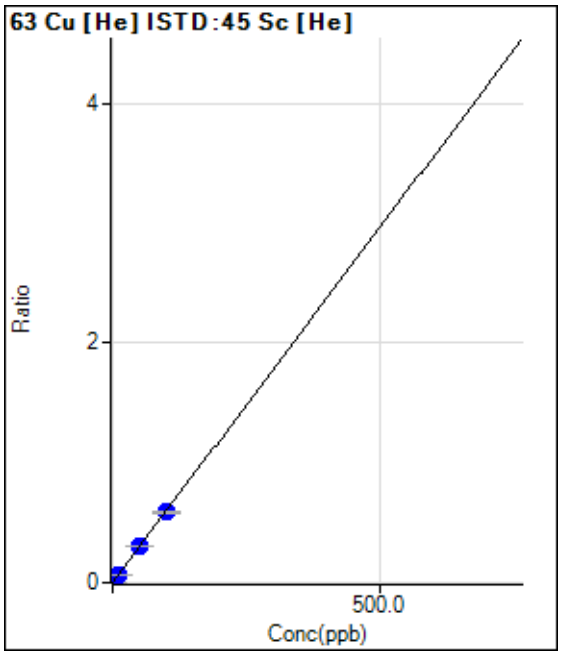
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	308.90	0.0003	P	23.2
2	☐	10.000	10.343	3625.98	0.0039	P	16.9
3	☐	50.000	50.629	16544.45	0.0180	P	1.0
4	☐	100.000	99.651	31723.63	0.0351	P	2.7
5	☐			307.79	0.0003	P	16.5

y = 3.4918E-004 * x + 3.2301E-004
R = 1.0000
DL = 0.6437
BEC = 0.925

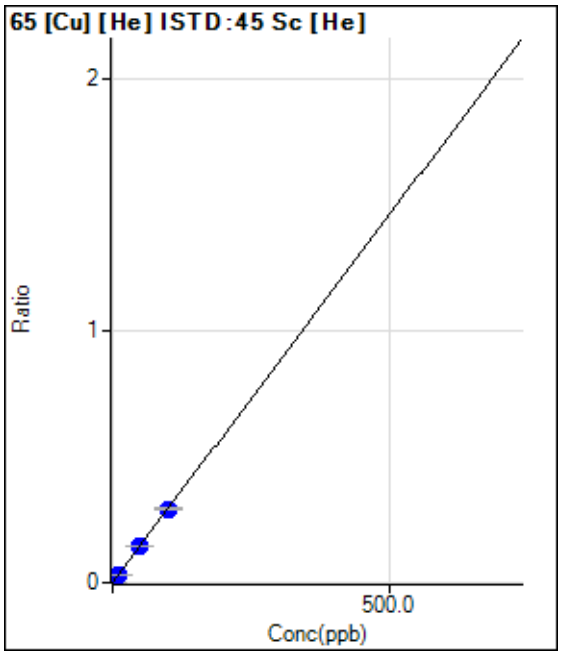
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	751.14	0.0008	P	9.2
2	☐	10.000	10.679	59218.11	0.0641	P	14.1
3	☐	50.000	50.333	275054.41	0.2993	P	0.9
4	☐	100.000	99.766	535161.51	0.5924	P	2.6
5	☐			1083.38	0.0012	P	1.4

y = 0.0059 * x + 7.8568E-004
R = 1.0000
DL = 0.03671
BEC = 0.1325

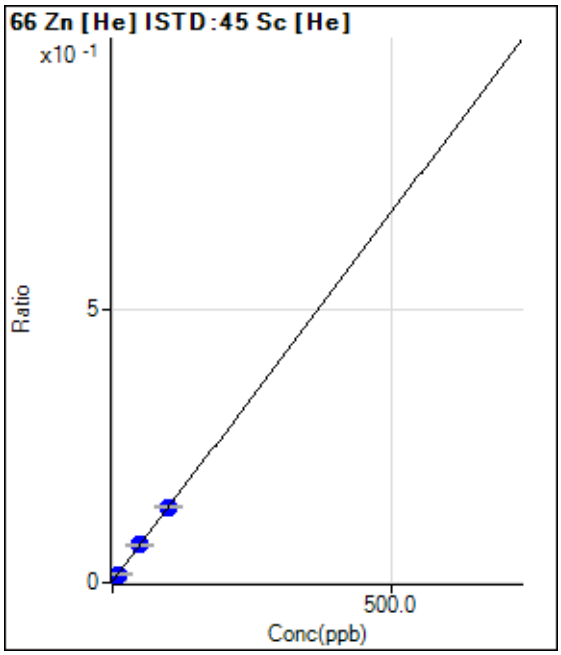
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	345.56	0.0004	P	19.1
2	☐	10.000	10.595	28863.27	0.0312	P	13.3
3	☐	50.000	50.319	135076.79	0.1470	P	0.7
4	☐	100.000	99.781	262959.49	0.2911	P	2.2
5	☐			541.13	0.0006	P	11.3

y = 0.0029 * x + 3.6159E-004
R = 1.0000
DL = 0.071
BEC = 0.1241

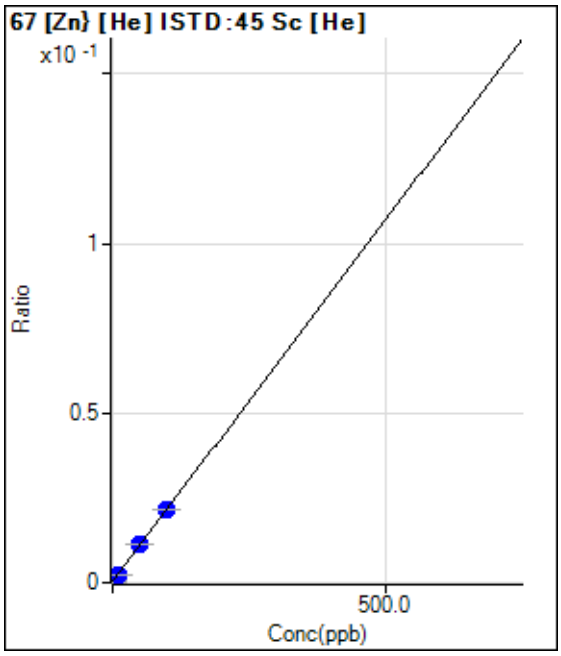
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2053.48	0.0021	P	2.7
2	☐	10.000	9.865	14343.66	0.0155	P	12.5
3	☐	50.000	49.406	63483.80	0.0691	P	1.9
4	☐	100.000	100.311	124692.82	0.1380	P	2.3
5	☐			1238.95	0.0013	P	3.6

y = 0.0014 * x + 0.0021
R = 1.0000
DL = 0.1269
BEC = 1.586

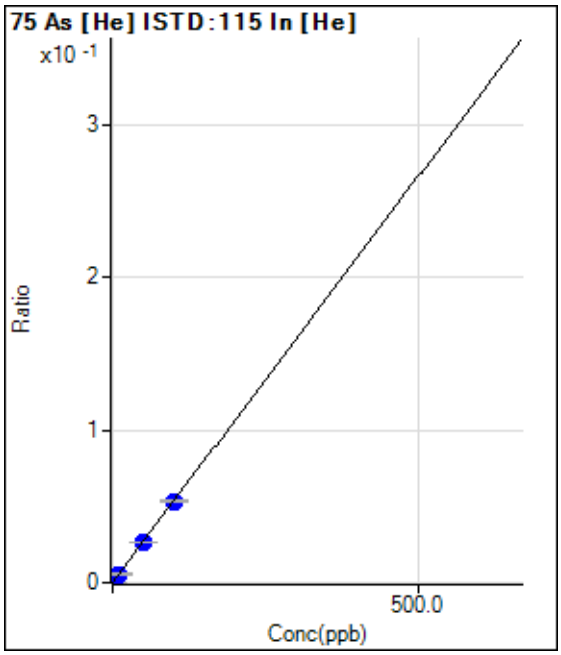
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	323.34	0.0003	P	32.5
2	☐	10.000	9.481	2187.95	0.0024	P	12.9
3	☐	50.000	51.103	10356.44	0.0113	P	3.6
4	☐	100.000	99.501	19534.13	0.0216	P	1.2
5	☐			172.22	0.0002	P	2.0

y = 2.1390E-004 * x + 3.3805E-004
R = 0.9999
DL = 1.54
BEC = 1.58

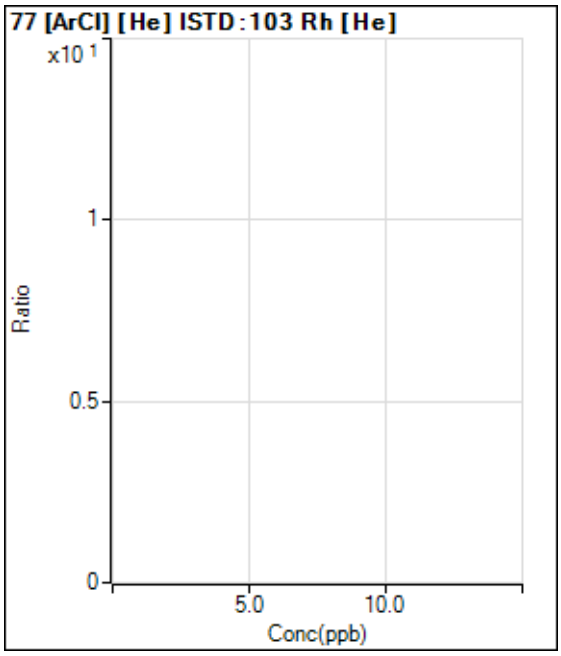
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	197.89	0.0001	P	9.4
2	☐	10.000	10.066	10217.84	0.0055	P	14.7
3	☐	50.000	49.650	48139.68	0.0265	P	0.9
4	☐	100.000	100.168	94339.48	0.0534	P	2.8
5	☐			783.32	0.0004	P	7.4

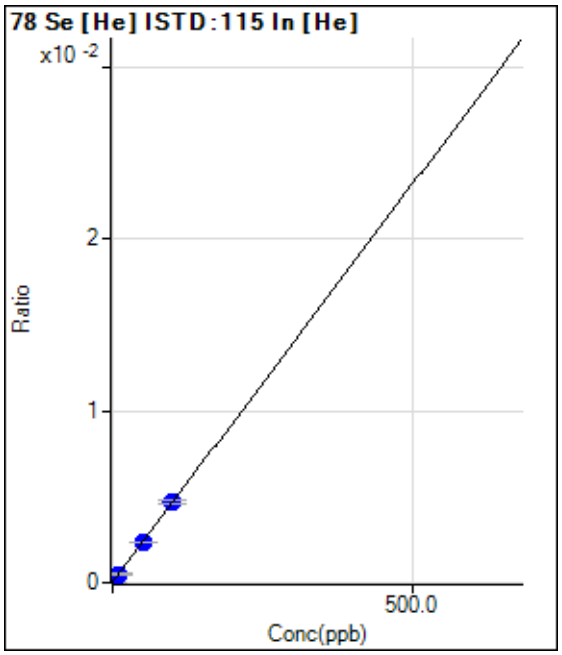
y = 5.3189E-004 * x + 1.0291E-004
R = 1.0000
DL = 0.05442
BEC = 0.1935

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			48.15	0.0000	P	66.7
2	☐			318.54	0.0001	P	26.0
3	☐			1437.16	0.0005	P	5.4
4	☐			2563.28	0.0010	P	12.6
5	☐			44.45	0.0000	P	24.9

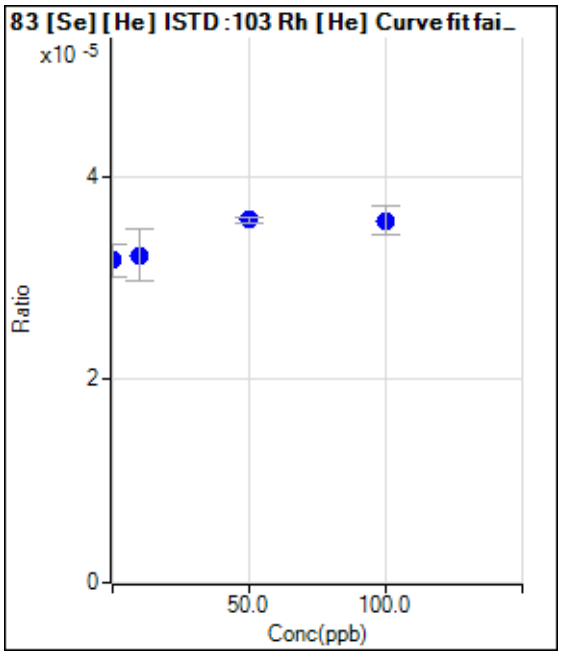
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	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	51.41	0.0000	P	11.1
2	☐	10.000	10.229	941.65	0.0005	P	11.0
3	☐	50.000	49.611	4226.38	0.0023	P	1.8
4	☐	100.000	100.172	8254.98	0.0047	P	4.2
5	☐			98.01	0.0001	P	13.9

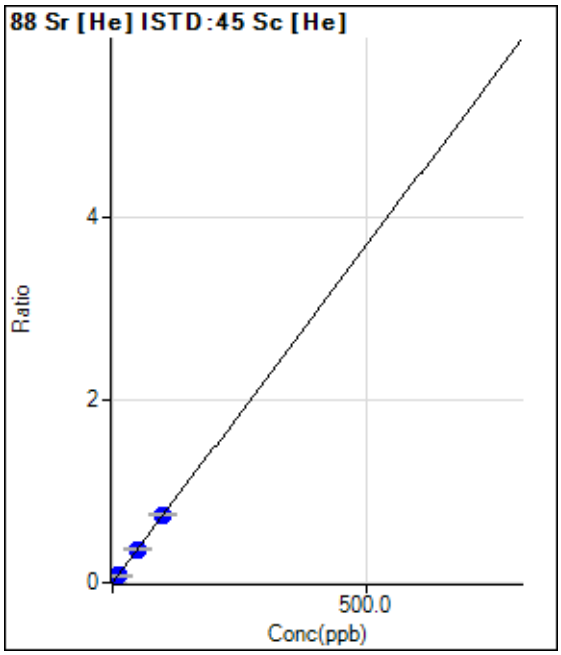
y = 4.6373E-005 * x + 2.6737E-005
R = 1.0000
DL = 0.1916
BEC = 0.5766

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000		91.25	0.0000	P	9.9
2	☐	10.000		88.89	0.0000	P	16.2
3	☐	50.000		95.62	0.0000	P	1.5
4	☐	100.000		93.60	0.0000	P	8.0
5	☐			94.61	0.0000	P	25.1

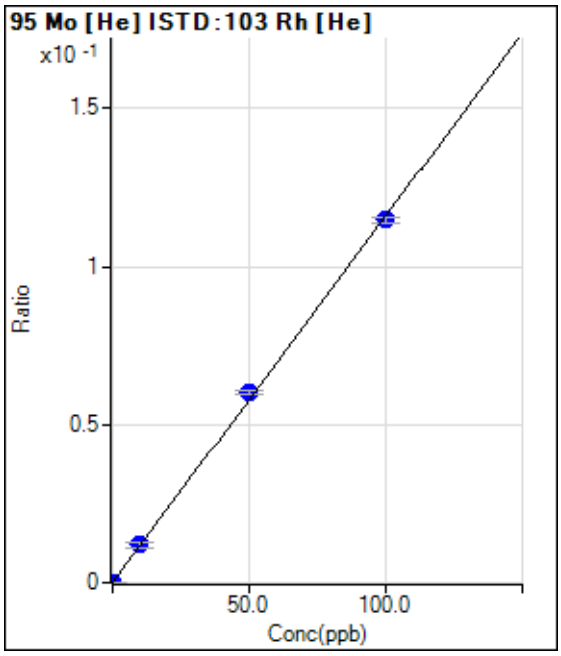
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	154.45	0.0002	P	9.2
2	☐	10.000	10.199	69908.70	0.0755	P	11.6
3	☐	50.000	49.680	337588.36	0.3673	P	0.9
4	☐	100.000	100.140	668659.85	0.7402	P	2.8
5	☐			187.78	0.0002	P	27.9

y = 0.0074 * x + 1.6158E-004
R = 1.0000
DL = 0.006019
BEC = 0.02186

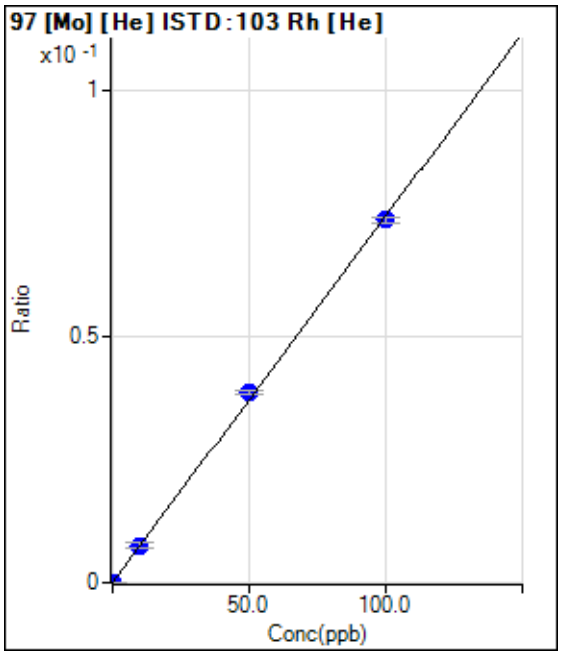
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	57.78	0.0000	P	53.3
2	☐	10.000	10.258	32819.73	0.0119	P	13.0
3	☐	50.000	51.852	160789.07	0.0601	P	2.2
4	☐			1148.95	0.0004	P	26.7
5	☐	100.000	99.048	325957.10	0.1148	P	1.9

y = 0.0012 * x + 2.0086E-005
R = 0.9997
DL = 0.02772
BEC = 0.01733

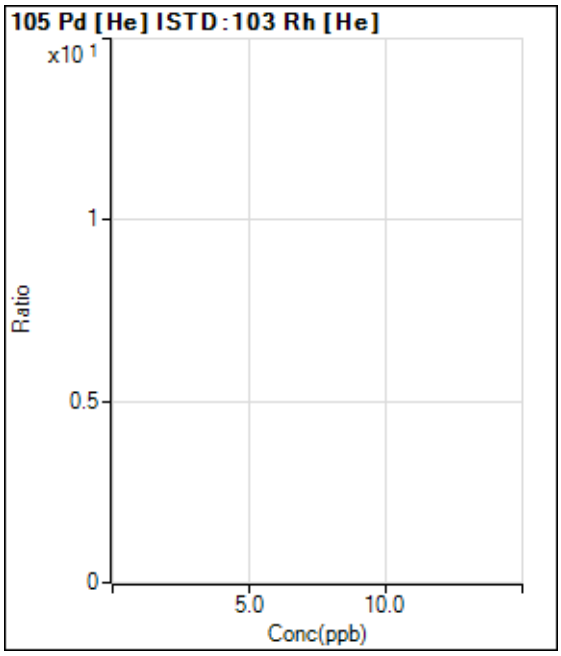
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	25.93	0.0000	P	173.2
2	☐	10.000	10.168	20824.49	0.0076	P	15.1
3	☐	50.000	51.823	103119.14	0.0385	P	1.7
4	☐			666.71	0.0003	P	16.9
5	☐	100.000	99.071	209217.35	0.0737	P	1.6

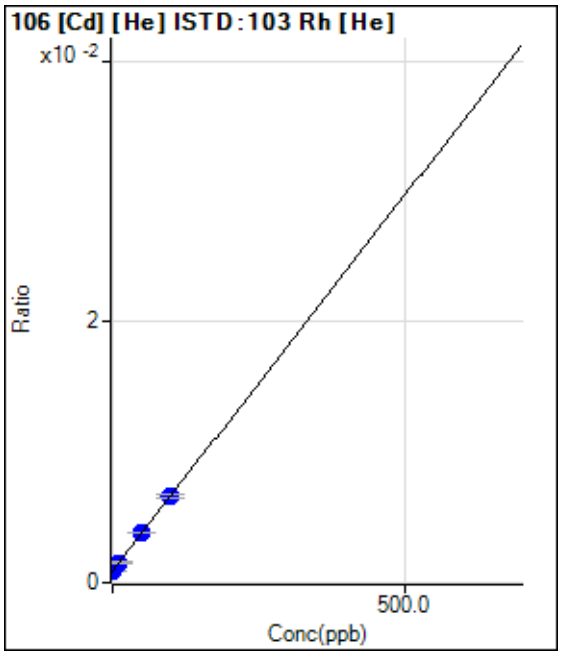
y = 7.4360E-004 * x + 8.9955E-006
R = 0.9997
DL = 0.06286
BEC = 0.0121

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			3333.84	0.0012	P	4.2
2	☐			3022.65	0.0011	P	9.4
3	☐			3207.90	0.0012	P	7.0
4	☐			3730.23	0.0014	P	12.1
5	☐			2992.99	0.0011	P	7.6

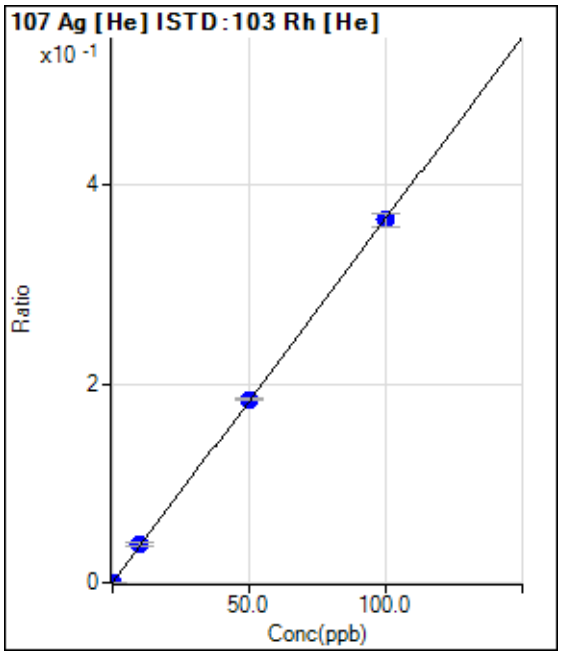
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2624.79	0.0009	P	1.7
2	☐	10.000	10.382	4192.11	0.0015	P	6.0
3	☐	50.000	50.233	10186.16	0.0038	P	0.3
4	☐	100.000	99.845	17470.71	0.0067	P	4.7
5	☐			2465.84	0.0009	P	0.9

y = 5.7609E-005 * x + 9.1344E-004
R = 1.0000
DL = 0.7909
BEC = 15.86

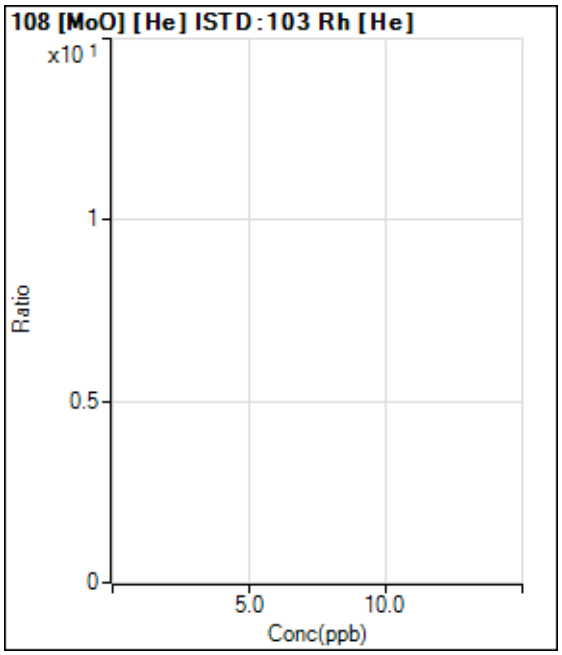
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	10.00	0.0000	P	88.1
2	☐	10.000	10.554	106323.51	0.0386	P	14.6
3	☐	50.000	50.443	494022.17	0.1847	P	0.5
4	☐	100.000	99.723	957007.43	0.3651	P	3.6
5	☐			133.34	0.0000	P	6.5

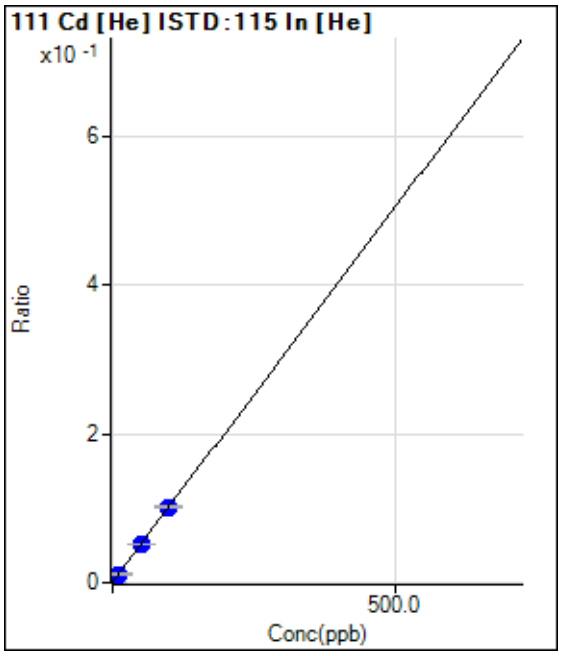
y = 0.0037 * x + 3.4835E-006
R = 1.0000
DL = 0.002514
BEC = 0.0009516

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			3.70	0.0000	P	173.2
2	☐			1114.91	0.0004	P	15.5
3	☐			5523.41	0.0021	P	7.1
4	☐			11559.96	0.0044	P	4.6
5	☐			88.89	0.0000	P	66.1

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2007.43	0.0010	P	1.8
2	☐	10.000	10.374	21520.12	0.0115	P	13.3
3	☐	50.000	49.908	93048.48	0.0512	P	0.6
4	☐	100.000	100.008	179614.31	0.1016	P	2.9
5	☐			1950.14	0.0010	P	3.9

y = 0.0010 * x + 0.0010

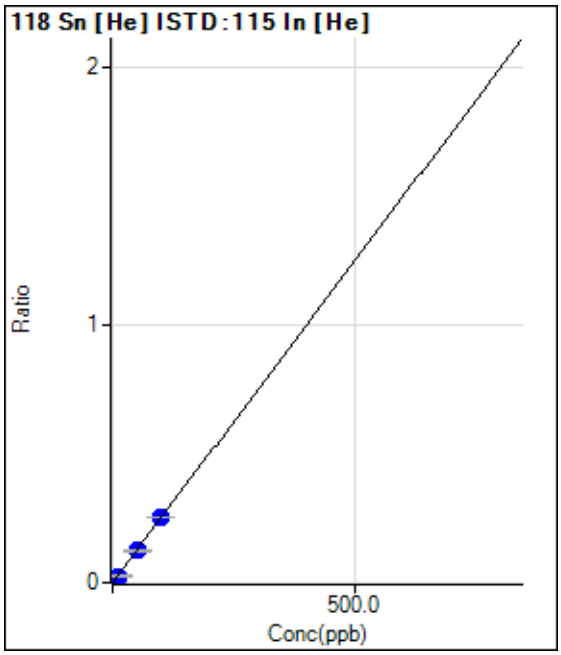
R = 1.0000

DL = 0.05622

BEC = 1.038

Weight: <None>

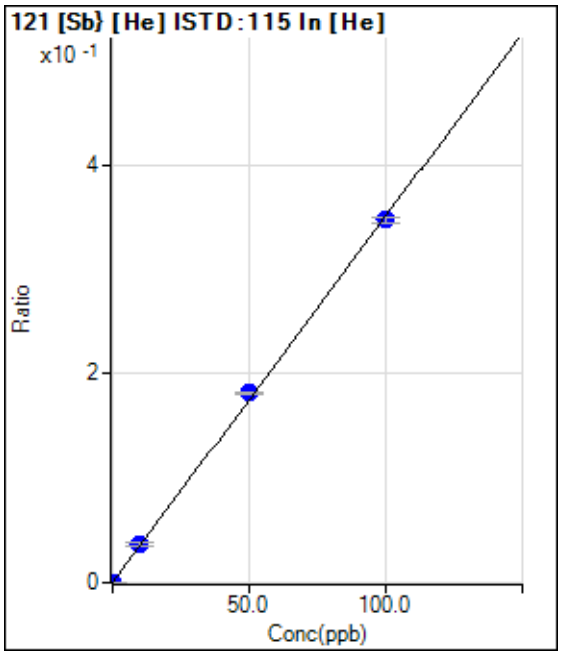
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	740.79	0.0004	P	9.9
2	☐	10.000	9.848	46865.09	0.0251	P	15.7
3	☐	50.000	48.994	223525.68	0.1231	P	0.6
4	☐			2389.19	0.0013	P	12.5
5	☐	100.000	100.518	475033.68	0.2521	P	1.2

y = 0.0025 * x + 3.8536E-004
R = 0.9999
DL = 0.04548
BEC = 0.1539

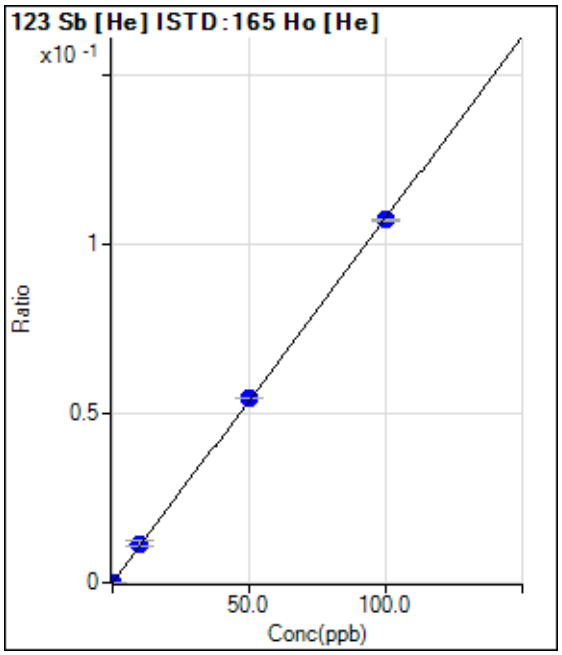
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	162.23	0.0001	P	14.9
2	☐	10.000	10.483	68958.87	0.0368	P	14.1
3	☐	50.000	51.737	329291.80	0.1813	P	0.2
4	☐			1686.77	0.0010	P	8.4
5	☐	100.000	99.083	654147.94	0.3472	P	1.4

y = 0.0035 * x + 8.4360E-005
R = 0.9997
DL = 0.01076
BEC = 0.02408

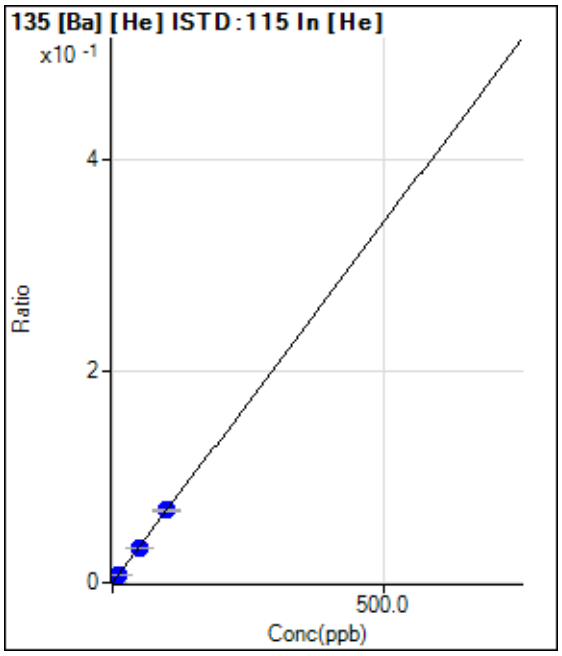
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	101.11	0.0000	P	7.0
2	☐	10.000	10.572	53607.07	0.0114	P	14.4
3	☐	50.000	50.675	256458.38	0.0546	P	0.6
4	☐			1428.97	0.0003	P	5.6
5	☐	100.000	99.605	512167.62	0.1072	P	0.5

y = 0.0011 * x + 2.1009E-005
R = 1.0000
DL = 0.004086
BEC = 0.01952

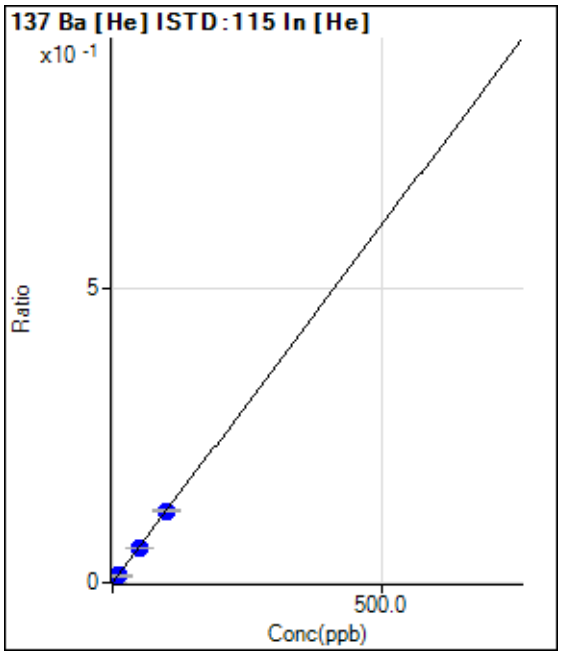
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13.33	0.0000	P	86.6
2	☐	10.000	10.161	12927.28	0.0069	P	14.3
3	☐	50.000	48.801	60137.09	0.0331	P	0.3
4	☐	100.000	100.583	120611.37	0.0683	P	3.1
5	☐			57.78	0.0000	P	31.4

y = 6.7848E-004 * x + 6.9337E-006
R = 0.9999
DL = 0.02655
BEC = 0.01022

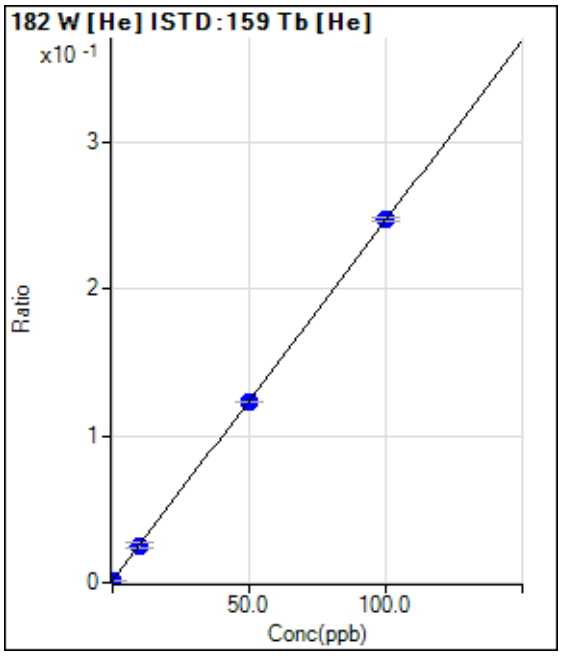
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	35.56	0.0000	P	5.4
2	☐	10.000	9.994	22864.47	0.0122	P	15.2
3	☐	50.000	49.169	109002.39	0.0600	P	0.4
4	☐	100.000	100.416	216633.53	0.1226	P	2.6
5	☐			163.34	0.0001	P	17.4

y = 0.0012 * x + 1.8494E-005
R = 0.9999
DL = 0.002453
BEC = 0.01515

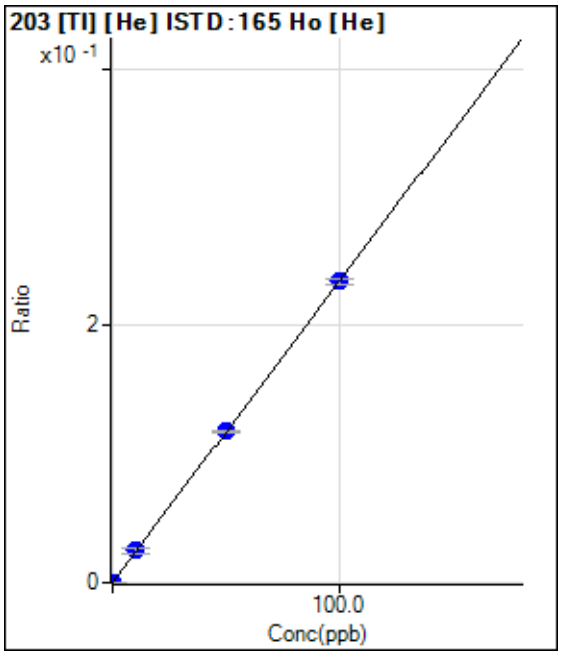
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6835.14	0.0014	P	12.0
2	☐	10.000	9.675	118041.17	0.0252	P	13.7
3	☐	50.000	49.636	573386.90	0.1231	P	0.4
4	☐			13813.86	0.0030	P	4.6
5	☐	100.000	100.215	1173281.58	0.2470	P	1.2

y = 0.0025 * x + 0.0014
R = 1.0000
DL = 0.2125
BEC = 0.5901

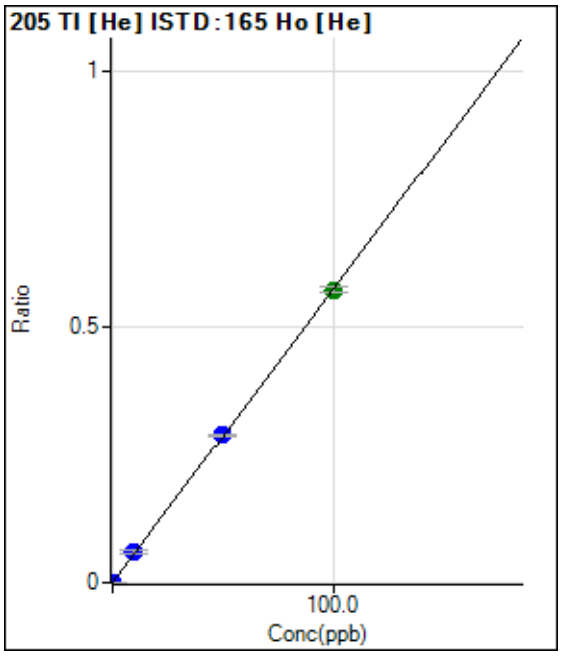
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	66.67	0.0000	P	115.7
2	☐	10.000	10.610	117007.02	0.0249	P	15.9
3	☐	50.000	50.175	553621.32	0.1178	P	0.7
4	☐	100.000	99.851	1095818.22	0.2343	P	2.0
5	☐			1992.83	0.0004	P	12.0

y = 0.0023 * x + 1.3883E-005
R = 1.0000
DL = 0.02053
BEC = 0.005916

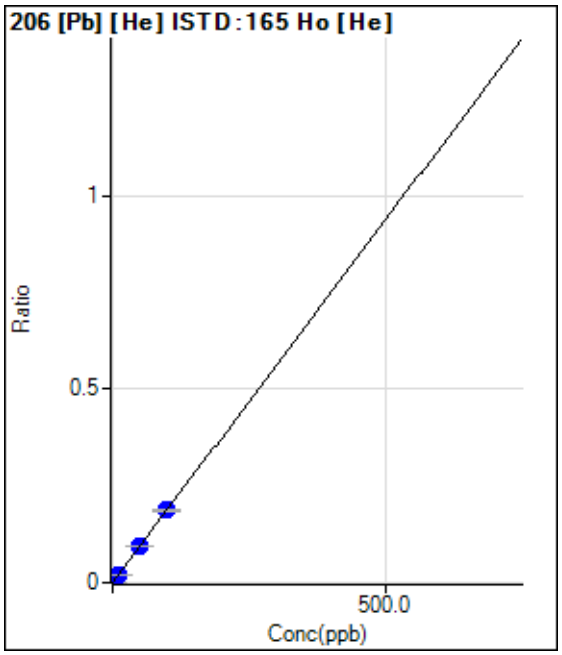
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	181.11	0.0000	P	18.5
2	☐	10.000	10.535	283881.82	0.0604	P	14.8
3	☐	50.000	50.190	1351470.81	0.2875	P	0.9
4	☐	100.000	99.852	2674398.57	0.5719	A	1.7
5	☐			3422.64	0.0007	P	7.5

y = 0.0057 * x + 3.7624E-005
R = 1.0000
DL = 0.003646
BEC = 0.006569

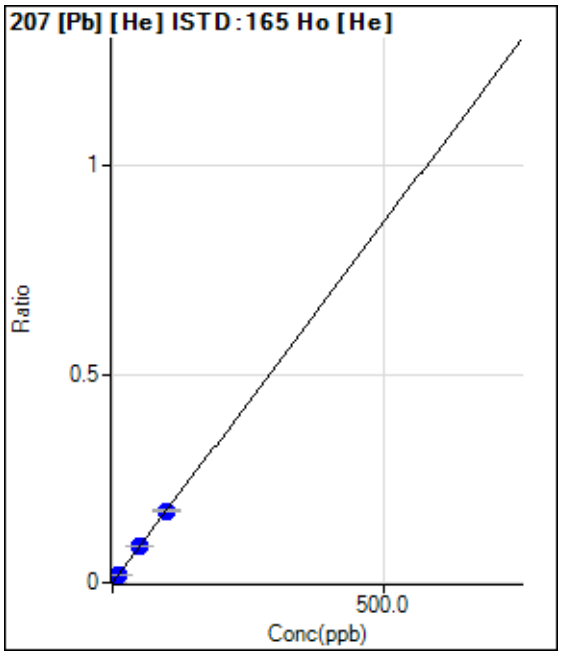
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	196.67	0.0000	P	14.9
2	☐	10.000	10.703	94761.13	0.0201	P	13.9
3	☐	50.000	50.753	448212.66	0.0953	P	0.5
4	☐	100.000	99.553	874320.28	0.1870	P	2.1
5	☐			653.36	0.0001	P	16.5

y = 0.0019 * x + 4.0908E-005
R = 0.9999
DL = 0.00976
BEC = 0.02179

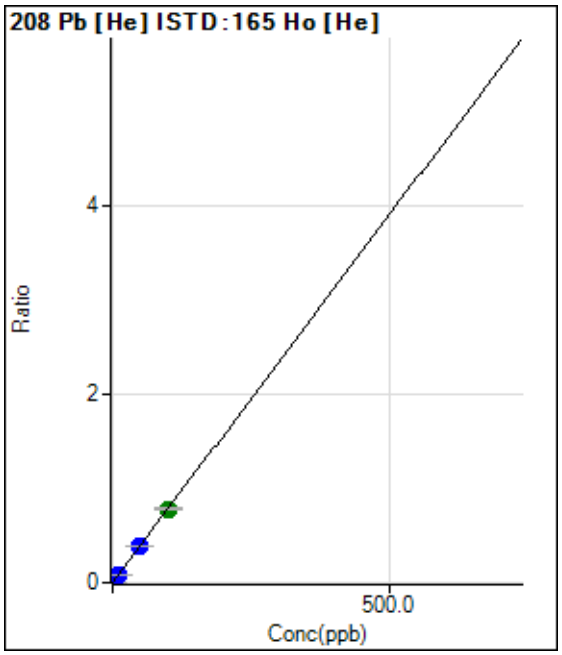
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	162.23	0.0000	P	12.1
2	☐	10.000	10.692	87058.66	0.0185	P	15.0
3	☐	50.000	50.641	411693.42	0.0876	P	0.8
4	☐	100.000	99.610	805386.01	0.1722	P	1.6
5	☐			641.13	0.0001	P	14.9

y = 0.0017 * x + 3.3726E-005
R = 1.0000
DL = 0.007098
BEC = 0.01951

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	705.57	0.0001	P	12.0
2	☐	10.000	10.594	389437.24	0.0828	P	14.6
3	☐	50.000	50.204	1842502.08	0.3919	P	0.8
4	☐	100.000	99.839	3644170.31	0.7793	A	1.4
5	☐			2763.47	0.0006	P	13.1

y = 0.0078 * x + 1.4672E-004

R = 1.0000

DL = 0.006753

BEC = 0.0188

Weight: <None>

Min Conc: <None>

Calibration Blank Report

Sample Table

Sample Name	Blank
Data File Name	001CALB.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T10:06:21-04:00
Sample Type	CalBlk
Level	
Dilution	1
Comment	6020/200.8

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	45	2	NoGas	54374	0.00
Be	9	6	2	NoGas	211	17.98
B	11	6	2	NoGas	11752	0.02
Na	23	45	1	He	27358	0.01
Mg	24	45	1	He	3656	0.18
Al	27	45	1	He	658	0.95
K	39	45	1	He	54955	0.00
Ca	44	45	1	He	832	1.61
Ti	47	45	1	He	6	624.54
V	51	45	1	He	7480	0.13
Cr	52	45	1	He	2744	0.05
Mn	55	45	1	He	2297	0.09
Fe	56	45	1	He	14378	0.16
Co	59	45	1	He	88	19.51
Ni	60	45	1	He	1086	0.76
Cu	63	45	1	He	706	2.63
Zn	66	45	1	He	2001	0.35
As	75	115	1	He	173	5.58
Se	78	115	1	He	48	22.12
Sr	88	45	1	He	201	4.54
Mo	95	103	1	He	169	34.52
Ag	107	103	1	He	14	184.51
Cd	111	115	1	He	1961	0.55
Sn	118	115	1	He	1056	0.36
Sb	123	165	1	He	160	15.79
Ba	137	115	1	He	31	39.73
W	182	159	1	He	7743	0.10
Tl	205	165	1	He	546	6.29
Pb	208	165	1	He	799	1.25

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	2	NoGas	1293865	3.23
Sc	45	1	He	966211	16.07
Sc	45	2	NoGas	7895719	0.70
Rh	103	1	He	2881560	13.06
In	115	1	He	1924299	14.72
Tb	159	1	He	4753741	13.12
Ho	165	1	He	4822525	13.53
Bi	209	1	He	3589432	12.11

Calibration Blank Report

Sample Table

Sample Name	ICIS
Data File Name	002CALB.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T10:09:56-04:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	45	2	NoGas	54158	0.00
Be	9	6	2	NoGas	156	13.77
B	11	6	2	NoGas	11078	0.02
Na	23	45	1	He	26368	0.00
Mg	24	45	1	He	3249	0.34
Al	27	45	1	He	707	2.17
K	39	45	1	He	54616	0.00
Ca	44	45	1	He	769	1.91
Ti	47	45	1	He	7	0.00
V	51	45	1	He	7930	0.14
Cr	52	45	1	He	2562	0.28
Mn	55	45	1	He	2316	0.21
Fe	56	45	1	He	8741	0.13
Co	59	45	1	He	70	29.66
Ni	60	45	1	He	1027	1.01
Cu	63	45	1	He	751	1.25
Zn	66	45	1	He	2053	0.13
As	75	115	1	He	198	4.88
Se	78	115	1	He	51	21.83
Sr	88	45	1	He	154	5.82
Mo	95	103	1	He	58	92.78
Ag	107	103	1	He	10	881.98
Cd	111	115	1	He	2007	0.10
Sn	118	115	1	He	741	1.30
Sb	123	165	1	He	101	6.79
Ba	137	115	1	He	36	15.25
W	182	159	1	He	6835	0.18
Tl	205	165	1	He	181	10.23
Pb	208	165	1	He	706	1.55

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	2	NoGas	1261090	0.56
Sc	45	1	He	955958	0.26
Sc	45	2	NoGas	7862387	1.14
Rh	103	1	He	2873429	0.60
In	115	1	He	1922589	0.28
Tb	159	1	He	4725151	0.67
Ho	165	1	He	4813140	1.14
Bi	209	1	He	3617562	0.53

Calibration Standard Report

Sample Table

Sample Name	STD1-2012420
Data File Name	003CALS.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T10:13:34-04:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	2	NoGas	172374	0.00
Be	9	2	NoGas	33253	0.01
B	11	2	NoGas	29818	0.00
Na	23	1	He	5625346	0.00
Mg	24	1	He	3288534	0.00
Al	27	1	He	20493	0.01
K	39	1	He	3550486	0.00
Ca	44	1	He	189928	0.00
Ti	47	1	He	2073	0.27
V	51	1	He	107977	0.00
Cr	52	1	He	65484	0.00
Mn	55	1	He	251837	0.00
Fe	56	1	He	14912402	0.00
Co	59	1	He	90590	0.00
Ni	60	1	He	23019	0.00
Cu	63	1	He	59218	0.00
Zn	66	1	He	14344	0.01
As	75	1	He	10218	0.02
Se	78	1	He	942	0.41
Sr	88	1	He	69909	0.00
Mo	95	1	He	32820	0.01
Ag	107	1	He	106324	0.00
Cd	111	1	He	21520	0.00
Sn	118	1	He	46865	0.01
Sb	123	1	He	53607	0.00
Ba	137	1	He	22864	0.01
W	182	1	He	118041	0.00
Tl	205	1	He	283882	0.00
Pb	208	1	He	389437	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1230007	1.29	1261090	97.54	30	120	
Sc	45	1	He	933799	11.68	955958	97.68	30	120	
Sc	45	2	NoGas	7643627	0.53	7862387	97.22	30	120	
Rh	103	1	He	2786784	12.85	2873429	96.98	30	120	
In	115	1	He	1896824	13.26	1922589	98.66	30	120	
Tb	159	1	He	4748560	13.20	4725151	100.50	30	120	
Ho	165	1	He	4764725	13.50	4813140	98.99	30	120	
Bi	209	1	He	3575874	11.67	3617562	98.85	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD2-2012431
Data File Name	004CALS.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T10:17:10-04:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	2	NoGas	672412	0.00
Be	9	2	NoGas	179788	0.00
B	11	2	NoGas	112932	0.00
Na	23	1	He	26489446	0.00
Mg	24	1	He	15602177	0.00
Al	27	1	He	94660	0.00
K	39	1	He	16617478	0.00
Ca	44	1	He	908373	0.00
Ti	47	1	He	10052	0.01
V	51	1	He	489672	0.00
Cr	52	1	He	302909	0.00
Mn	55	1	He	1190793	0.00
Fe	56	1	He	70933791	0.00
Co	59	1	He	423357	0.00
Ni	60	1	He	105721	0.00
Cu	63	1	He	275054	0.00
Zn	66	1	He	63484	0.00
As	75	1	He	48140	0.00
Se	78	1	He	4226	0.05
Sr	88	1	He	337588	0.00
Mo	95	1	He	160789	0.00
Ag	107	1	He	494022	0.00
Cd	111	1	He	93048	0.00
Sn	118	1	He	223526	0.00
Sb	123	1	He	256458	0.00
Ba	137	1	He	109002	0.00
W	182	1	He	573387	0.00
Tl	205	1	He	1351471	0.00
Pb	208	1	He	1842502	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1204200	1.39	1261090	95.49	30	120	
Sc	45	1	He	919042	0.02	955958	96.14	30	120	
Sc	45	2	NoGas	7447707	0.94	7862387	94.73	30	120	
Rh	103	1	He	2675433	0.57	2873429	93.11	30	120	
In	115	1	He	1815860	0.44	1922589	94.45	30	120	
Tb	159	1	He	4658647	0.42	4725151	98.59	30	120	
Ho	165	1	He	4701220	0.89	4813140	97.67	30	120	
Bi	209	1	He	3463809	1.12	3617562	95.75	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD3-2012433
Data File Name	005CALS.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T10:20:48-04:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	2	NoGas	53234	0.00
Be	9	2	NoGas	356793	0.00
B	11	2	NoGas	11033	0.03
Na	23	1	He	52226392	0.00
Mg	24	1	He	30583795	0.00
Al	27	1	He	189441	0.00
K	39	1	He	32560742	0.00
Ca	44	1	He	1843833	0.00
Ti	47	1	He	22	272.81
V	51	1	He	968016	0.00
Cr	52	1	He	598289	0.00
Mn	55	1	He	2370919	0.00
Fe	56	1	He	141956603	0.00
Co	59	1	He	830859	0.00
Ni	60	1	He	203607	0.00
Cu	63	1	He	535162	0.00
Zn	66	1	He	124693	0.00
As	75	1	He	94339	0.00
Se	78	1	He	8255	0.02
Sr	88	1	He	668660	0.00
Mo	95	1	He	1149	2.39
Ag	107	1	He	957007	0.00
Cd	111	1	He	179614	0.00
Sn	118	1	He	2389	0.61
Sb	123	1	He	1429	0.30
Ba	137	1	He	216634	0.00
W	182	1	He	13814	0.05
Tl	205	1	He	2674399	0.00
Pb	208	1	He	3644170	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1189927	1.37	1261090	94.36	30	120	
Sc	45	1	He	903572	1.69	955958	94.52	30	120	
Sc	45	2	NoGas	7681309	0.09	7862387	97.70	30	120	
Rh	103	1	He	2623572	3.16	2873429	91.30	30	120	
In	115	1	He	1768087	2.44	1922589	91.96	30	120	
Tb	159	1	He	4610545	1.97	4725151	97.57	30	120	
Ho	165	1	He	4676906	1.29	4813140	97.17	30	120	
Bi	209	1	He	3391055	1.81	3617562	93.74	30	120	

Calibration Standard Report

Sample Table

Sample Name	STD4-2012443
Data File Name	006CALS.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T10:24:18-04:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	2	NoGas	1315159	0.00
Be	9	2	NoGas	400	3.61
B	11	2	NoGas	216092	0.00
Na	23	1	He	39369	0.01
Mg	24	1	He	5105	0.09
Al	27	1	He	613	2.18
K	39	1	He	58432	0.00
Ca	44	1	He	576	1.76
Ti	47	1	He	20516	0.00
V	51	1	He	6657	0.07
Cr	52	1	He	2726	0.20
Mn	55	1	He	630	1.18
Fe	56	1	He	149800	0.01
Co	59	1	He	193	4.09
Ni	60	1	He	968	0.92
Cu	63	1	He	1083	0.15
Zn	66	1	He	1239	0.31
As	75	1	He	783	1.01
Se	78	1	He	98	14.99
Sr	88	1	He	188	14.96
Mo	95	1	He	325957	0.00
Ag	107	1	He	133	4.96
Cd	111	1	He	1950	0.17
Sn	118	1	He	475034	0.00
Sb	123	1	He	512168	0.00
Ba	137	1	He	163	11.11
W	182	1	He	1173282	0.00
Tl	205	1	He	3423	0.22
Pb	208	1	He	2763	0.47

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1237387	2.46	1261090	98.12	30	120	
Sc	45	1	He	925763	0.23	955958	96.84	30	120	
Sc	45	2	NoGas	7676095	0.63	7862387	97.63	30	120	
Rh	103	1	He	2839591	0.09	2873429	98.82	30	120	
In	115	1	He	1884135	0.87	1922589	98.00	30	120	
Tb	159	1	He	4749996	0.86	4725151	100.53	30	120	
Ho	165	1	He	4777389	0.51	4813140	99.26	30	120	
Bi	209	1	He	3633760	0.77	3617562	100.45	30	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV-2012491
Data File Name	007_ICV.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T10:27:57-04:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	45	NoGas	39.358	0.717	549789	0.34	40	98.4	89.5	110.5	
Be	9	6	NoGas	39.765	1.037	144776	1.15	40	99.4	89.5	110.5	
B	11	6	NoGas	42.983	1.207	97732	1.33	40	107.5	89.5	110.5	
Na	23	45	He	20646.094	1.532	21516570	1.17	20000	103.2	89.5	110.5	
Mg	24	45	He	20702.297	1.565	12643935	1.21	20000	103.5	89.5	110.5	
Al	27	45	He	202.082	1.196	76461	0.77	200	101.0	89.5	110.5	
K	39	45	He	20660.051	0.686	13459579	0.48	20000	103.3	89.5	110.5	
Ca	44	45	He	19841.354	1.260	725681	0.85	20000	99.2	89.5	110.5	
Ti	47	45	He	41.624	1.991	8294	2.00	40	104.1	89.5	110.5	
V	51	45	He	41.391	1.810	403009	1.37	40	103.5	89.5	110.5	
Cr	52	45	He	41.450	1.577	248404	1.13	40	103.6	89.5	110.5	
Mn	55	45	He	204.985	0.870	968403	0.44	200	102.5	89.5	110.5	
Fe	56	45	He	10264.964	1.853	57950051	1.43	10000	102.6	89.5	110.5	
Co	59	45	He	41.101	1.428	340933	1.01	40	102.8	89.5	110.5	
Ni	60	45	He	42.082	1.325	86337	0.88	40	105.2	89.5	110.5	
Cu	63	45	He	42.014	1.450	225204	1.02	40	105.0	89.5	110.5	
Zn	66	45	He	41.334	0.296	52387	0.30	40	103.3	89.5	110.5	
As	75	115	He	40.273	0.630	38796	0.35	40	100.7	89.5	110.5	
Se	78	115	He	40.567	0.844	3439	0.81	40	101.4	89.5	110.5	
Sr	88	45	He	41.267	1.607	274937	1.18	40	103.2	89.5	110.5	
Mo	95	103	He	43.282	1.731	134883	1.17	40	108.2	89.5	110.5	
Ag	107	103	He	41.311	1.607	406544	0.38	40	103.3	89.5	110.5	
Cd	111	115	He	40.515	0.899	75337	0.90	40	101.3	89.5	110.5	
Sn	118	115	He	41.273	0.996	187024	0.70	40	103.2	89.5	110.5	
Sb	123	165	He	42.300	0.553	214144	0.43	40	105.7	89.5	110.5	
Ba	137	115	He	40.473	0.837	89071	0.63	40	101.2	89.5	110.5	
W	182	159	He	41.512	0.705	482111	1.06	40	103.8	89.5	110.5	
Tl	205	165	He	41.530	0.501	1118633	0.19	40	103.8	89.5	110.5	
Pb	208	165	He	41.292	0.731	1515979	0.56	40	103.2	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	NoGas	1215368	0.31	1261090	96.37	30	120	
Sc	45	He	901044	0.43	955958	94.26	30	120	
Sc	45	NoGas	7660443	0.98	7862387	97.43	30	120	
Rh	103	He	2688659	1.31	2873429	93.57	30	120	
In	115	He	1802546	0.29	1922589	93.76	30	120	
Tb	159	He	4672823	0.38	4725151	98.89	30	120	
Ho	165	He	4702395	0.31	4813140	97.70	30	120	
Bi	209	He	3491085	0.49	3617562	96.50	30	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB-2010135
Data File Name	008_ICB.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T10:31:33-04:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Ti	47	1	He	0.057	64.8	19	40.7	20	
W	182	1	He	0.633	17.3	14722	8.8	10	
Ca	44	1	He	0.522	263.0	802	6.9	1000	
Na	23	1	He	7.047	22.2	34715	5.0	1000	
Mg	24	1	He	0.711	23.9	3771	3.4	1000	
K	39	1	He	3.972	47.5	58291	1.1	1000	
V	51	1	He	-0.156	-39.0	6451	9.1	2	
Cr	52	1	He	0.012	71.7	2684	2.6	2	
Mn	55	1	He	-0.048	-32.2	2109	3.1	2	
Fe	56	1	He	7.587	11.9	55028	8.5	50	
Co	59	1	He	0.005	74.2	117	30.2	1	
Ni	60	1	He	-0.009	-376.2	1024	7.0	2	
Cu	63	1	He	0.022	47.7	892	5.1	2	
Zn	66	1	He	-0.293	-9.8	1702	3.7	20	
As	75	1	He	0.040	22.0	246	4.5	2	
Se	78	1	He	0.100	15.2	62	1.7	2	
Sr	88	1	He	0.005	215.4	196	43.3	10	
Mo	95	1	He	0.205	17.6	754	15.6	2	
Ag	107	1	He	0.008	36.4	94	33.9	0.2	
Cd	111	1	He	-0.054	-46.1	1956	1.7	0.2	
Ba	137	1	He	0.007	121.3	53	38.0	5	
Sn	118	1	He	0.172	9.9	1611	5.9	10	
Tl	205	1	He	0.034	11.3	1151	10.6	0.5	
Pb	208	1	He	0.030	24.1	1861	15.8	1	
Al	27	1	He	-0.269	-121.3	610	22.0	50	
Sb	123	1	He	0.270	8.8	1527	7.4	2	
B	11	2	NoGas	0.993	13.7	13554	1.7	20	
Be	9	2	NoGas	0.038	25.3	307	12.7	1	
Li	7	2	NoGas	0.020	284.1	55429	0.9	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1298348	0.80	1261090	102.95	30	120	
Sc	45	1	He	971873	1.81	955958	101.66	30	120	
Sc	45	2	NoGas	8008635	0.74	7862387	101.86	30	120	
Rh	103	1	He	2926302	1.67	2873429	101.84	30	120	

In	115	1	He	1976322	0.99	1922589	102.79	30	120	
Tb	159	1	He	4913619	0.27	4725151	103.99	30	120	
Ho	165	1	He	4910002	1.17	4813140	102.01	30	120	
Bi	209	1	He	3693183	0.56	3617562	102.09	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-2012498
Data File Name	009CRI.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T10:35:10-04:00
Sample Type	CRI
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	2	NoGas	7.789	7.789	1.020	161291	0.65	8	97.4	49.5	150.5	
Be	9	2	NoGas	0.968	0.968	5.083	3997	4.90	1	96.8	49.5	150.5	
B	11	2	NoGas	19.976	19.976	2.195	55680	1.79	20	99.9	49.5	150.5	
Na	23	1	He	1042.318	1042.318	0.639	1232440	0.71	1000	104.2	49.5	150.5	
Mg	24	1	He	1050.665	1050.665	1.148	715760	0.08	1000	105.1	49.5	150.5	
Al	27	1	He	48.733	48.733	1.418	21035	0.71	50	97.5	49.5	150.5	
K	39	1	He	1043.134	1043.134	1.373	808845	0.20	1000	104.3	49.5	150.5	
Ca	44	1	He	987.914	987.914	2.512	40882	1.36	1000	98.8	49.5	150.5	
Ti	47	1	He	10.095	10.095	4.704	2239	4.65	10	101.0	49.5	150.5	
V	51	1	He	3.553	3.553	2.956	46007	2.29	5	71.1	49.5	150.5	
Cr	52	1	He	2.039	2.039	4.644	16118	3.13	2	102.0	49.5	150.5	
Mn	55	1	He	4.708	4.708	2.645	27065	1.43	5	94.2	49.5	150.5	
Fe	56	1	He	104.842	104.842	1.839	666249	0.71	100	104.8	49.5	150.5	
Co	59	1	He	1.041	1.041	1.973	9663	0.91	1	104.1	49.5	150.5	
Ni	60	1	He	2.158	2.158	3.679	5936	3.06	2	107.9	49.5	150.5	
Cu	63	1	He	2.159	2.159	2.843	13594	1.85	2	107.9	49.5	150.5	
Zn	66	1	He	20.271	20.271	0.845	29627	1.89	20	101.4	49.5	150.5	
As	75	1	He	5.051	5.051	1.388	5539	1.56	5	101.0	49.5	150.5	
Se	78	1	He	5.113	5.113	3.711	524	2.42	5	102.3	49.5	150.5	
Sr	88	1	He	10.063	10.063	2.742	74563	1.81	10	100.6	49.5	150.5	
Mo	95	1	He	10.304	10.304	2.930	35596	2.02	10	103.0	49.5	150.5	
Ag	107	1	He	1.051	1.051	3.821	11462	3.07	1	105.1	49.5	150.5	
Cd	111	1	He	1.038	1.038	5.827	4147	4.17	1	103.8	49.5	150.5	
Sn	118	1	He	10.109	10.109	2.984	51033	1.68	10	101.1	49.5	150.5	
Sb	123	1	He	2.181	2.181	2.437	11908	3.61	2	109.0	49.5	150.5	
Ba	137	1	He	4.994	4.994	2.741	12139	1.82	5	99.9	49.5	150.5	
W	182	1	He	9.714	9.714	0.810	125689	0.99	10	97.1	49.5	150.5	
Tl	205	1	He	1.991	1.991	1.124	57516	0.81	2	99.5	49.5	150.5	
Pb	208	1	He	1.063	1.063	0.935	42458	0.42	1	106.3	49.5	150.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1323380	0.08	1261090	104.94	30	120	
Sc	45	1	He	1000558	1.11	955958	104.67	30	120	
Sc	45	2	NoGas	8175070	0.06	7862387	103.98	30	120	
Rh	103	1	He	2976957	0.92	2873429	103.60	30	120	
In	115	1	He	1986061	1.64	1922589	103.30	30	120	
Tb	159	1	He	4978317	1.71	4725151	105.36	30	120	
Ho	165	1	He	5028016	1.18	4813140	104.46	30	120	
Bi	209	1	He	3783973	0.75	3617562	104.60	30	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA-2012514
Data File Name	010ICSA.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T10:38:47-04:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	0.115	21.8	49814	2.0	4	
Be	9	6	2	NoGas	0.034	122.7	252	55.9	2	
B	11	6	2	NoGas	0.804	43.8	11311	4.5	20	
Na	23	45	1	He	48509.847	0.9	50675492	1.1	75200	
Mg	24	45	1	He	48637.997	1.8	29788572	0.1	75200	
Al	27	45	1	He	45874.617	1.5	17257997	0.9	75200	
K	39	45	1	He	48279.094	1.6	31476102	0.5	75200	
Ca	44	45	1	He	48379.080	1.4	1773668	0.9	75200	
Ti	47	45	1	He	990.261	0.7	197781	1.2	1505	
V	51	45	1	He	0.397	18.4	11306	7.7	4	
Cr	52	45	1	He	0.659	4.2	6348	3.2	4	
Mn	55	45	1	He	-0.122	-13.5	1613	6.1	4	
Fe	56	45	1	He	48170.056	1.6	272720816	0.8	75200	
Co	59	45	1	He	0.031	28.9	326	22.7	2	
Ni	60	45	1	He	-0.061	-26.5	847	5.1	4	
Cu	63	45	1	He	0.355	5.1	2611	5.2	4	
Zn	66	45	1	He	-0.569	-4.9	1246	3.9	20	
As	75	115	1	He	0.155	24.9	329	9.7	4	
Se	78	115	1	He	0.095	86.8	55	10.9	4	
Sr	88	45	1	He	0.320	6.1	2286	4.6	20	
Mo	95	103	1	He	1066.636	0.6	3178671	1.3	1505	
Ag	107	103	1	He	0.012	18.4	123	18.9	1	
Cd	111	115	1	He	0.047	261.3	1936	10.6	1	
Sn	118	115	1	He	0.151	17.2	1356	10.1	20	
Sb	123	165	1	He	0.120	14.5	720	11.6	4	
Ba	137	115	1	He	0.040	34.5	120	23.7	2	
W	182	159	1	He	0.460	10.9	12168	4.3	20	
Tl	205	165	1	He	0.032	21.8	1070	17.3	2	
Pb	208	165	1	He	0.109	1.3	4768	2.0	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1117732	1.37	1261090	88.63	30	120	
Sc	45	1	He	903844	1.84	955958	94.55	30	120	
Sc	45	2	NoGas	7037537	1.42	7862387	89.51	30	120	
Rh	103	1	He	2571966	1.85	2873429	89.51	30	120	
In	115	1	He	1775063	1.53	1922589	92.33	30	120	
Tb	159	1	He	4730973	0.47	4725151	100.12	30	120	
Ho	165	1	He	4798766	0.91	4813140	99.70	30	120	
Bi	209	1	He	3512422	0.82	3617562	97.09	30	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB-2012515
Data File Name	011ICAB.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T10:42:21-04:00
Sample Type	ICSAB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	45	2	NoGas	84.339	0.536	1088333	0.48	100	84.3	49.5	150.5	
Be	9	6	2	NoGas	99.562	0.590	340322	1.01	100	99.6	49.5	150.5	
B	11	6	2	NoGas	102.103	1.512	204281	0.14	100	102.1	49.5	150.5	
Na	23	45	1	He	49070.592	0.665	50352735	0.35	50000	98.1	49.5	150.5	
Mg	24	45	1	He	49145.233	0.906	29570268	1.20	50000	98.3	49.5	150.5	
Al	27	45	1	He	46555.544	0.577	17205315	0.78	50000	93.1	49.5	150.5	
K	39	45	1	He	48997.012	0.245	31380767	0.60	50000	98.0	49.5	150.5	
Ca	44	45	1	He	50054.220	0.958	1802635	0.72	50000	100.1	49.5	150.5	
Ti	47	45	1	He	1092.782	0.287	214388	0.30	1100	99.3	49.5	150.5	
V	51	45	1	He	99.375	0.554	943049	0.90	100	99.4	49.5	150.5	
Cr	52	45	1	He	100.163	0.446	588068	0.80	100	100.2	49.5	150.5	
Mn	55	45	1	He	99.959	0.240	466378	0.38	100	100.0	49.5	150.5	
Fe	56	45	1	He	49359.011	0.405	274528042	0.71	50000	98.7	49.5	150.5	
Co	59	45	1	He	101.814	0.163	832030	0.28	100	101.8	49.5	150.5	
Ni	60	45	1	He	100.995	0.068	202823	0.42	100	101.0	49.5	150.5	
Cu	63	45	1	He	100.484	0.389	529720	0.09	100	100.5	49.5	150.5	
Zn	66	45	1	He	102.135	0.834	124733	0.49	100	102.1	49.5	150.5	
As	75	115	1	He	100.846	0.819	94856	0.47	100	100.8	49.5	150.5	
Se	78	115	1	He	101.245	0.932	8334	0.71	100	101.2	49.5	150.5	
Sr	88	45	1	He	101.496	0.254	666057	0.37	100	101.5	49.5	150.5	
Mo	95	103	1	He	1153.790	0.721	3492063	0.72	1100	104.9	49.5	150.5	
Ag	107	103	1	He	99.502	0.835	951352	0.26	100	99.5	49.5	150.5	
Cd	111	115	1	He	100.658	0.599	180543	0.36	100	100.7	49.5	150.5	
Sn	118	115	1	He	101.363	1.014	448765	0.67	100	101.4	49.5	150.5	
Sb	123	165	1	He	98.939	0.850	516664	0.52	100	98.9	49.5	150.5	
Ba	137	115	1	He	101.012	1.186	217631	0.84	100	101.0	49.5	150.5	
W	182	159	1	He	100.513	1.194	1178831	1.26	100	100.5	49.5	150.5	
Tl	205	165	1	He	98.148	0.276	2727528	0.48	100	98.1	49.5	150.5	
Pb	208	165	1	He	99.469	0.724	3766946	0.45	100	99.5	49.5	150.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1141810	1.31	1261090	90.54	30	120	
Sc	45	1	He	887755	0.36	955958	92.87	30	120	
Sc	45	2	NoGas	7458052	0.07	7862387	94.86	30	120	
Rh	103	1	He	2612040	1.09	2873429	90.90	30	120	
In	115	1	He	1765063	0.35	1922589	91.81	30	120	
Tb	159	1	He	4758048	0.23	4725151	100.70	30	120	
Ho	165	1	He	4851924	0.43	4813140	100.81	30	120	
Bi	209	1	He	3515561	1.24	3617562	97.18	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2026839
Data File Name	012_CCV.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T10:45:54-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	47.332	1.075	667075	0.19	50	94.7	89.5	110.5	
Be	9	6	2	NoGas	48.939	0.238	177066	1.13	50	97.9	89.5	110.5	
B	11	6	2	NoGas	50.937	0.569	113148	0.60	50	101.9	89.5	110.5	
Na	23	45	1	He	24480.046	0.728	26598016	1.03	25000	97.9	89.5	110.5	
Mg	24	45	1	He	24656.618	0.727	15702174	0.99	25000	98.6	89.5	110.5	
Al	27	45	1	He	246.189	1.767	96971	1.01	250	98.5	89.5	110.5	
K	39	45	1	He	24710.623	0.316	16777213	1.81	25000	98.8	89.5	110.5	
Ca	44	45	1	He	24237.480	1.037	924156	0.67	25000	96.9	89.5	110.5	
Ti	47	45	1	He	51.689	1.481	10740	2.72	50	103.4	89.5	110.5	
V	51	45	1	He	49.643	2.262	502393	0.68	50	99.3	89.5	110.5	
Cr	52	45	1	He	49.329	0.344	307788	1.23	50	98.7	89.5	110.5	
Mn	55	45	1	He	247.687	0.586	1219676	0.99	250	99.1	89.5	110.5	
Fe	56	45	1	He	12395.271	0.206	72970408	1.36	12500	99.2	89.5	110.5	
Co	59	45	1	He	49.971	0.728	432217	0.96	50	99.9	89.5	110.5	
Ni	60	45	1	He	49.632	1.251	105996	0.95	50	99.3	89.5	110.5	
Cu	63	45	1	He	50.168	0.466	280270	1.15	50	100.3	89.5	110.5	
Zn	66	45	1	He	50.018	1.077	65676	0.79	50	100.0	89.5	110.5	
As	75	115	1	He	50.077	5.336	49317	1.20	50	100.2	89.5	110.5	
Se	78	115	1	He	49.993	6.160	4325	2.52	50	100.0	89.5	110.5	
Sr	88	45	1	He	49.911	1.578	346680	0.40	50	99.8	89.5	110.5	
Mo	95	103	1	He	59.456	1.616	187021	3.09	50	118.9	89.5	110.5	CCV Failed
Ag	107	103	1	He	51.213	4.371	508343	0.51	50	102.4	89.5	110.5	
Cd	111	115	1	He	50.202	5.371	95061	0.39	50	100.4	89.5	110.5	
Sn	118	115	1	He	50.882	6.625	235649	1.02	50	101.8	89.5	110.5	
Sb	123	165	1	He	50.805	3.830	265108	0.93	50	101.6	89.5	110.5	
Ba	137	115	1	He	49.726	4.933	111990	0.95	50	99.5	89.5	110.5	
W	182	159	1	He	51.547	3.320	614594	0.38	50	103.1	89.5	110.5	
Tl	205	165	1	He	50.879	5.213	1412075	0.71	50	101.8	89.5	110.5	
Pb	208	165	1	He	50.665	4.810	1916674	0.25	50	101.3	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1207999	0.90	1261090	95.79	30	120	
Sc	45	1	He	939588	1.56	955958	98.29	30	120	
Sc	45	2	NoGas	7856083	1.15	7862387	99.92	30	120	
Rh	103	1	He	2715192	4.66	2873429	94.49	30	120	
In	115	1	He	1848085	5.60	1922589	96.12	30	120	
Tb	159	1	He	4814201	3.58	4725151	101.88	30	120	
Ho	165	1	He	4853019	4.63	4813140	100.83	30	120	
Bi	209	1	He	3558657	2.36	3617562	98.37	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	013_CCB.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T10:49:31-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	0.160	45.9	49130	5.9	2	
Be	9	6	2	NoGas	0.067	7.8	367	5.2	1	
B	11	6	2	NoGas	1.107	19.7	12038	3.1	20	
Na	23	45	1	He	12.711	19.2	40216	5.5	1000	
Mg	24	45	1	He	0.869	27.6	3804	9.4	1000	
Al	27	45	1	He	1.049	21.1	1120	8.8	50	
K	39	45	1	He	9.713	100.4	60810	2.5	1000	
Ca	44	45	1	He	3.225	23.2	892	9.1	1000	
Ti	47	45	1	He	0.462	15.7	103	8.5	20	
V	51	45	1	He	-0.016	-302.7	7730	2.8	2	
Cr	52	45	1	He	0.023	93.9	2698	4.7	2	
Mn	55	45	1	He	0.012	262.8	2365	3.5	2	
Fe	56	45	1	He	18.204	17.5	116785	12.7	50	
Co	59	45	1	He	0.004	92.3	102	28.1	1	
Ni	60	45	1	He	-0.099	-22.6	810	7.9	2	
Cu	63	45	1	He	0.061	24.4	1092	6.2	2	
Zn	66	45	1	He	-0.043	-327.8	1985	1.3	20	
As	75	115	1	He	0.061	36.7	264	1.4	2	
Se	78	115	1	He	0.157	64.9	66	6.0	2	
Sr	88	45	1	He	0.007	51.1	203	6.6	10	
Mo	95	103	1	He	1.287	43.4	4374	41.3	2	
Ag	107	103	1	He	0.010	21.1	121	13.9	0.2	
Cd	111	115	1	He	-0.019	-124.6	2005	8.9	0.2	
Sn	118	115	1	He	0.339	22.5	2408	16.3	10	
Sb	123	165	1	He	0.186	8.5	1104	1.4	2	
Ba	137	115	1	He	0.009	103.6	58	39.3	5	
W	182	159	1	He	0.763	14.5	16361	8.1	10	
Tl	205	165	1	He	0.118	7.5	3566	2.2	0.5	
Pb	208	165	1	He	0.028	11.4	1849	9.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1133161	3.84	1261090	89.86	30	120	
Sc	45	1	He	954427	8.86	955958	99.84	30	120	
Sc	45	2	NoGas	6871492	6.28	7862387	87.40	30	120	
Rh	103	1	He	2930303	7.69	2873429	101.98	30	120	
In	115	1	He	1954362	7.64	1922589	101.65	30	120	
Tb	159	1	He	4944604	7.05	4725151	104.64	30	120	
Ho	165	1	He	5016869	7.95	4813140	104.23	30	120	
Bi	209	1	He	3731163	6.71	3617562	103.14	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2026839
Data File Name	014_CCV.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T10:55:53-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	45.417	1.138	670401	0.67	50	90.8	89.5	110.5	
Be	9	6	2	NoGas	47.271	3.155	177553	1.91	50	94.5	89.5	110.5	
B	11	6	2	NoGas	48.503	2.662	112410	2.80	50	97.0	89.5	110.5	
Na	23	45	1	He	24386.051	0.603	27785606	0.61	25000	97.5	89.5	110.5	
Mg	24	45	1	He	24292.326	0.905	16223071	0.71	25000	97.2	89.5	110.5	
Al	27	45	1	He	242.015	0.827	99988	0.82	250	96.8	89.5	110.5	
K	39	45	1	He	24802.241	0.960	17657258	0.97	25000	99.2	89.5	110.5	
Ca	44	45	1	He	24142.603	0.922	965383	0.92	25000	96.6	89.5	110.5	
Ti	47	45	1	He	48.910	3.488	10657	3.78	50	97.8	89.5	110.5	
V	51	45	1	He	48.720	1.065	517281	1.09	50	97.4	89.5	110.5	
Cr	52	45	1	He	48.879	1.168	319837	1.05	50	97.8	89.5	110.5	
Mn	55	45	1	He	244.333	0.990	1261738	0.87	250	97.7	89.5	110.5	
Fe	56	45	1	He	12194.799	0.958	75280113	0.65	12500	97.6	89.5	110.5	
Co	59	45	1	He	49.326	1.177	447404	1.09	50	98.7	89.5	110.5	
Ni	60	45	1	He	49.390	1.429	110620	1.23	50	98.8	89.5	110.5	
Cu	63	45	1	He	49.342	1.134	289079	1.09	50	98.7	89.5	110.5	
Zn	66	45	1	He	49.525	0.742	68217	0.42	50	99.1	89.5	110.5	
As	75	115	1	He	49.507	1.959	51059	1.10	50	99.0	89.5	110.5	
Se	78	115	1	He	50.016	3.127	4531	2.33	50	100.0	89.5	110.5	
Sr	88	45	1	He	49.407	1.251	359917	1.17	50	98.8	89.5	110.5	
Mo	95	103	1	He	51.667	0.759	170588	0.94	50	103.3	89.5	110.5	
Ag	107	103	1	He	49.816	0.732	519442	0.87	50	99.6	89.5	110.5	
Cd	111	115	1	He	49.200	1.754	97602	0.87	50	98.4	89.5	110.5	
Sn	118	115	1	He	49.048	1.713	238022	0.89	50	98.1	89.5	110.5	
Sb	123	165	1	He	50.084	1.107	271075	0.79	50	100.2	89.5	110.5	
Ba	137	115	1	He	49.054	1.695	115680	1.16	50	98.1	89.5	110.5	
W	182	159	1	He	49.020	1.594	603905	1.64	50	98.0	89.5	110.5	
Tl	205	165	1	He	49.316	1.859	1420199	1.36	50	98.6	89.5	110.5	
Pb	208	165	1	He	49.196	1.913	1930937	1.45	50	98.4	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1254400	1.43	1261090	99.47	30	120	
Sc	45	1	He	985260	0.33	955958	103.07	30	120	
Sc	45	2	NoGas	8199711	0.38	7862387	104.29	30	120	
Rh	103	1	He	2848437	0.54	2873429	99.13	30	120	
In	115	1	He	1931736	0.86	1922589	100.48	30	120	
Tb	159	1	He	4967489	0.21	4725151	105.13	30	120	
Ho	165	1	He	5027904	0.62	4813140	104.46	30	120	
Bi	209	1	He	3664437	0.73	3617562	101.30	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	015_CCB.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T10:59:29-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.089	-64.1	56934	2.1	2	
Be	9	6	2	NoGas	0.056	22.2	389	12.5	1	
B	11	6	2	NoGas	0.334	93.7	12464	4.7	20	
Na	23	45	1	He	8.992	10.6	37325	2.0	1000	
Mg	24	45	1	He	1.087	83.0	4062	13.9	1000	
Al	27	45	1	He	0.606	32.8	974	7.6	50	
K	39	45	1	He	7.879	24.4	61739	1.6	1000	
Ca	44	45	1	He	3.806	30.8	942	4.0	1000	
Ti	47	45	1	He	0.147	82.9	39	69.3	20	
V	51	45	1	He	-0.149	-23.2	6603	4.6	2	
Cr	52	45	1	He	0.035	68.7	2860	5.9	2	
Mn	55	45	1	He	0.032	76.6	2549	6.0	2	
Fe	56	45	1	He	14.716	13.3	99700	13.1	50	
Co	59	45	1	He	0.006	59.9	122	23.8	1	
Ni	60	45	1	He	-0.097	-35.4	840	8.7	2	
Cu	63	45	1	He	0.034	5.0	973	1.7	2	
Zn	66	45	1	He	-0.021	-674.7	2083	8.1	20	
As	75	115	1	He	0.059	47.3	268	11.9	2	
Se	78	115	1	He	0.191	9.9	71	2.5	2	
Sr	88	45	1	He	0.006	127.9	202	26.8	10	
Mo	95	103	1	He	0.503	38.3	1803	37.7	2	
Ag	107	103	1	He	0.007	17.3	91	15.2	0.2	
Cd	111	115	1	He	-0.034	-57.0	2010	2.5	0.2	
Sn	118	115	1	He	0.272	16.2	2122	11.2	10	
Sb	123	165	1	He	0.193	6.5	1150	6.7	2	
Ba	137	115	1	He	0.002	153.1	42	19.9	5	
W	182	159	1	He	0.611	6.7	14618	3.4	10	
Tl	205	165	1	He	0.109	4.7	3334	4.4	0.5	
Pb	208	165	1	He	0.031	18.7	1951	11.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1334809	0.95	1261090	105.85	30	120	
Sc	45	1	He	983130	1.02	955958	102.84	30	120	
Sc	45	2	NoGas	8444322	0.76	7862387	107.40	30	120	
Rh	103	1	He	2983850	0.70	2873429	103.84	30	120	
In	115	1	He	1988947	0.90	1922589	103.45	30	120	
Tb	159	1	He	4967500	0.76	4725151	105.13	30	120	
Ho	165	1	He	5015576	0.94	4813140	104.21	30	120	
Bi	209	1	He	3805716	0.86	3617562	105.20	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-182340/1-a
Data File Name	016_Blk.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T11:03:04-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	0.292	85.6	59011	5.3	2	
Be	9	6	2	NoGas	0.058	41.5	389	18.7	1	
B	11	6	2	NoGas	4.176	6.3	20879	4.3	20	
Na	23	45	1	He	15.101	6.7	43188	2.0	1000	
Mg	24	45	1	He	1.355	43.4	4141	9.5	1000	
Al	27	45	1	He	1.225	23.9	1199	10.6	50	
K	39	45	1	He	21.372	6.6	69563	0.5	1000	
Ca	44	45	1	He	9.443	18.5	1139	6.2	1000	
Ti	47	45	1	He	0.188	57.3	47	50.0	20	
V	51	45	1	He	2.096	8.0	29292	6.6	2	Blank Failed
Cr	52	45	1	He	1.140	6.5	9773	4.7	2	
Mn	55	45	1	He	-0.046	-14.6	2091	2.5	2	
Fe	56	45	1	He	14.585	5.2	96449	5.6	50	
Co	59	45	1	He	0.006	29.1	127	13.9	1	
Ni	60	45	1	He	0.164	22.5	1385	4.9	2	
Cu	63	45	1	He	0.367	2.2	2841	2.1	2	
Zn	66	45	1	He	2.955	2.0	5900	1.6	20	
As	75	115	1	He	0.347	4.6	555	2.2	2	
Se	78	115	1	He	0.240	7.2	73	3.1	2	
Sr	88	45	1	He	0.036	5.7	412	3.6	10	
Mo	95	103	1	He	0.297	49.1	1068	46.3	2	
Ag	107	103	1	He	0.010	4.9	121	4.2	0.2	
Cd	111	115	1	He	-0.031	-134.3	1955	4.0	0.2	
Sn	118	115	1	He	0.778	2.7	4505	1.2	10	
Sb	123	165	1	He	0.186	16.0	1107	15.0	2	
Ba	137	115	1	He	0.086	16.1	238	13.2	5	
W	182	159	1	He	0.214	25.7	9737	8.0	10	
Tl	205	165	1	He	0.081	10.0	2516	8.4	0.5	
Pb	208	165	1	He	0.064	19.9	3215	14.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1327752	6.87	1261090	105.29	30	120	
Sc	45	1	He	959243	0.90	955958	100.34	30	120	
Sc	45	2	NoGas	8040532	11.13	7862387	102.27	30	120	
Rh	103	1	He	2935031	0.42	2873429	102.14	30	120	
In	115	1	He	1929993	1.04	1922589	100.39	30	120	
Tb	159	1	He	4940917	1.29	4725151	104.57	30	120	
Ho	165	1	He	4997639	1.11	4813140	103.83	30	120	
Bi	209	1	He	3943047	2.48	3617562	109.00	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-182340/2-a@10
Data File Name	017_LCS.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T11:06:41-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	2	NoGas	148.735	148.735	11.015	1409607	1.25	1000	14.9	79.5	120.5	LCS Failed
Be	9	2	NoGas	7.455	7.455	6.788	20197	1.13	1000	0.7	79.5	120.5	LCS Failed
B	11	2	NoGas	154.053	154.053	7.558	238971	1.49	100	154.1	79.5	120.5	LCS Failed
Na	23	1	He	5024.811	5024.811	1.054	5986304	0.88	10000	50.2	79.5	120.5	LCS Failed
Mg	24	1	He	5117.068	5117.068	0.963	3562499	0.87	10000	51.2	79.5	120.5	LCS Failed
Al	27	1	He	195.145	195.145	1.140	84129	0.86	10000	2.0	79.5	120.5	LCS Failed
K	39	1	He	5134.351	5134.351	1.650	3854098	1.67	10000	51.3	79.5	120.5	LCS Failed
Ca	44	1	He	4954.244	4954.244	1.594	207015	1.56	10000	49.5	79.5	120.5	LCS Failed
Ti	47	1	He	102.115	102.115	0.252	23167	0.52	100	102.1	79.5	120.5	
V	51	1	He	36.704	36.704	0.811	408053	1.03	1000	3.7	79.5	120.5	LCS Failed
Cr	52	1	He	20.321	20.321	0.668	140123	0.73	1000	2.0	79.5	120.5	LCS Failed
Mn	55	1	He	50.262	50.262	0.408	272347	0.41	1000	5.0	79.5	120.5	LCS Failed
Fe	56	1	He	103.013	103.013	0.794	671725	0.56	10000	1.0	79.5	120.5	LCS Failed
Co	59	1	He	51.203	51.203	1.024	483773	0.91	1000	5.1	79.5	120.5	LCS Failed
Ni	60	1	He	52.381	52.381	1.112	122144	1.12	1000	5.2	79.5	120.5	LCS Failed
Cu	63	1	He	26.036	26.036	0.405	159278	0.56	1000	2.6	79.5	120.5	LCS Failed
Zn	66	1	He	51.832	51.832	1.939	74266	1.69	1000	5.2	79.5	120.5	LCS Failed
As	75	1	He	198.782	198.782	0.461	216099	0.56	1000	19.9	79.5	120.5	LCS Failed
Se	78	1	He	200.800	200.800	1.092	19068	0.61	1000	20.1	79.5	120.5	LCS Failed
Sr	88	1	He	99.276	99.276	1.038	753167	0.89	1000	9.9	79.5	120.5	LCS Failed
Mo	95	1	He	101.665	101.665	1.394	360867	1.83	100	101.7	79.5	120.5	
Ag	107	1	He	5.181	5.181	0.684	58100	0.34	100	5.2	79.5	120.5	LCS Failed
Cd	111	1	He	5.015	5.015	0.547	12431	1.20	1000	0.5	79.5	120.5	LCS Failed
Sn	118	1	He	195.877	195.877	0.251	1002538	0.91	100	195.9	79.5	120.5	LCS Failed
Sb	123	1	He	51.020	51.020	1.641	287717	1.30	100	51.0	79.5	120.5	LCS Failed
Ba	137	1	He	194.650	194.650	0.369	485133	0.68	1000	19.5	79.5	120.5	LCS Failed
W	182	1	He	0.076	0.076	69.268	8410	7.37	100	0.1	79.5	120.5	LCS Failed
Tl	205	1	He	199.908	199.908	1.526	5997639	0.42	250	80.0	79.5	120.5	
Pb	208	1	He	51.278	51.278	1.114	2097117	0.94	1000	5.1	79.5	120.5	LCS Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	902624	5.82	1261090	71.57	30	120	
Sc	45	1	He	1026319	0.29	955958	107.36	30	120	
Sc	45	2	NoGas	5633011	10.30	7862387	71.65	30	120	
Rh	103	1	He	3062676	0.62	2873429	106.59	30	120	
In	115	1	He	2041964	1.00	1922589	106.21	30	120	
Tb	159	1	He	5155152	1.19	4725151	109.10	30	120	
Ho	165	1	He	5238951	1.20	4813140	108.85	30	120	
Bi	209	1	He	3896327	1.02	3617562	107.71	30	120	

Sample Report

Sample Table

Sample Name	240-50351-b-3-f
Data File Name	018SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T11:10:15-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	9.320	9.320	0.76	176248	0.01	10000	
Be	9	6	2	NoGas	0.026	0.026	35.39	248	0.01	10000	
B	11	6	2	NoGas	42.333	42.333	1.94	98127	0.04	300	
Na	23	45	1	He	124118.738	124118.738	9.05	129928336	0.10	500000	
Mg	24	45	1	He	14261.096	14261.096	9.85	8754277	0.16	500000	
Al	27	45	1	He	4.001	4.001	25.87	2168	0.18	200000	
K	39	45	1	He	2873.320	2873.320	9.31	1926672	0.15	500000	
Ca	44	45	1	He	39759.027	39759.027	9.42	1461010	2.72	500000	
Ti	47	45	1	He	0.444	0.444	38.75	96	0.46	2500	
V	51	45	1	He	3.549	3.549	16.60	41538	0.01	10000	
Cr	52	45	1	He	1.352	1.352	8.86	10510	0.01	10000	
Mn	55	45	1	He	0.383	0.383	26.04	4005	0.01	10000	
Fe	56	45	1	He	17.580	17.580	11.38	107985	0.02	200000	
Co	59	45	1	He	0.046	0.046	2.50	451	0.01	10000	
Ni	60	45	1	He	0.576	0.576	14.38	2149	0.03	10000	
Cu	63	45	1	He	1.614	1.614	7.18	9397	0.02	10000	
Zn	66	45	1	He	5.846	5.846	11.05	9122	0.06	10000	
As	75	115	1	He	2.244	2.244	16.46	2319	0.10	10000	
Se	78	115	1	He	0.673	0.673	13.86	104	0.64	10000	
Sr	88	45	1	He	109.899	109.899	9.73	735647	0.01	10000	
Mo	95	103	1	He	1.822	1.822	19.55	5609	0.03	2000	
Ag	107	103	1	He	0.009	0.009	9.49	100	0.01	300	
Cd	111	115	1	He	-0.073	-0.073	-44.82	1752	0.00	4000	
Sn	118	115	1	He	2.849	2.849	4.41	13532	0.02	2000	
Sb	123	165	1	He	0.326	0.326	10.10	1790	0.02	300	
Ba	137	115	1	He	17.346	17.346	9.94	37990	0.05	10000	
W	182	159	1	He	0.022	0.022	219.28	7106	0.00	2500	
Tl	205	165	1	He	0.214	0.214	20.53	6128	0.00	5000	
Pb	208	165	1	He	0.279	0.279	6.62	11166	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1237061	0.78	1261090	98.09	30	120	
Sc	45	1	He	910500	8.38	955958	95.24	30	120	
Sc	45	2	NoGas	7920458	0.54	7862387	100.74	30	120	
Rh	103	1	He	2649218	7.40	2873429	92.20	30	120	
In	115	1	He	1802403	8.03	1922589	93.75	30	120	
Tb	159	1	He	4742203	7.93	4725151	100.36	30	120	
Ho	165	1	He	4826349	7.71	4813140	100.27	30	120	
Bi	209	1	He	3524768	7.45	3617562	97.43	30	120	

Sample Report

Sample Table

Sample Name	SD 240-50351-b-3-f@5
Data File Name	019SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T11:13:49-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	1.977	1.977	2.19	82487	0.00	10000	
Be	9	6	2	NoGas	0.011	0.011	85.36	204	0.01	10000	
B	11	6	2	NoGas	7.853	7.853	6.25	28545	0.03	300	
Na	23	45	1	He	25589.743	25589.743	1.48	28607481	0.09	500000	
Mg	24	45	1	He	3008.843	3008.843	1.35	1974579	0.15	500000	
Al	27	45	1	He	0.692	0.692	29.90	992	0.07	200000	
K	39	45	1	He	594.728	594.728	2.05	469309	0.13	500000	
Ca	44	45	1	He	8156.780	8156.780	2.26	320498	2.55	500000	
Ti	47	45	1	He	0.088	0.088	56.03	26	0.35	2500	
V	51	45	1	He	1.636	1.636	13.34	24766	0.01	10000	
Cr	52	45	1	He	0.316	0.316	10.07	4600	0.01	10000	
Mn	55	45	1	He	0.018	0.018	130.52	2434	0.00	10000	
Fe	56	45	1	He	3.316	3.316	5.08	28914	0.01	200000	
Co	59	45	1	He	0.007	0.007	59.22	131	0.01	10000	
Ni	60	45	1	He	0.028	0.028	190.61	1098	0.00	10000	
Cu	63	45	1	He	0.331	0.331	4.67	2657	0.01	10000	
Zn	66	45	1	He	1.071	1.071	16.10	3482	0.03	10000	
As	75	115	1	He	0.467	0.467	2.56	688	0.07	10000	
Se	78	115	1	He	0.061	0.061	117.85	58	0.10	10000	
Sr	88	45	1	He	22.414	22.414	2.09	160284	0.01	10000	
Mo	95	103	1	He	0.378	0.378	12.34	1327	0.03	2000	
Ag	107	103	1	He	0.004	0.004	63.46	56	0.01	300	
Cd	111	115	1	He	-0.044	-0.044	-63.50	1961	0.00	4000	
Sn	118	115	1	He	0.307	0.307	36.67	2260	0.01	2000	
Sb	123	165	1	He	0.081	0.081	11.56	541	0.01	300	
Ba	137	115	1	He	3.430	3.430	1.95	8241	0.04	10000	
W	182	159	1	He	-0.027	-0.027	-140.94	6809	0.00	2500	
Tl	205	165	1	He	0.027	0.027	3.00	974	0.00	5000	
Pb	208	165	1	He	0.059	0.059	2.47	3042	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1305712	1.98	1261090	103.54	30	120	
Sc	45	1	He	966918	2.26	955958	101.15	30	120	
Sc	45	2	NoGas	8129470	0.49	7862387	103.40	30	120	
Rh	103	1	He	2899458	0.81	2873429	100.91	30	120	
In	115	1	He	1959880	1.33	1922589	101.94	30	120	
Tb	159	1	He	4932351	1.16	4725151	104.39	30	120	
Ho	165	1	He	5007377	0.73	4813140	104.04	30	120	
Bi	209	1	He	3769478	1.35	3617562	104.20	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-50351-b-3-f
Data File Name	020SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T11:17:25-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	8.969	8.969	0.72	160609	0.01	10000	
Be	9	6	2	NoGas	953.330	953.330	1.59	3344776	0.03	10000	
B	11	6	2	NoGas	147.640	147.640	1.54	298754	0.05	300	
Na	23	45	1	He	127933.051	127933.051	0.17	129401702	0.10	500000	
Mg	24	45	1	He	23470.213	23470.213	0.32	13925604	0.17	500000	
Al	27	45	1	He	9342.803	9342.803	0.87	3404905	0.27	200000	
K	39	45	1	He	12490.882	12490.882	0.67	7925126	0.16	500000	
Ca	44	45	1	He	48955.766	48955.766	0.93	1738430	2.82	500000	
Ti	47	45	1	He	98.112	98.112	2.51	18983	0.52	2500	
V	51	45	1	He	979.253	979.253	0.60	9098422	0.01	10000	
Cr	52	45	1	He	966.161	966.161	0.41	5572688	0.02	10000	
Mn	55	45	1	He	974.267	974.267	0.52	4463452	0.02	10000	
Fe	56	45	1	He	9858.442	9858.442	1.07	54069045	0.02	200000	
Co	59	45	1	He	976.037	976.037	0.74	7863997	0.01	10000	
Ni	60	45	1	He	1007.084	1007.084	0.36	1985729	0.05	10000	
Cu	63	45	1	He	983.806	983.806	0.70	5107673	0.02	10000	
Zn	66	45	1	He	1001.606	1001.606	0.77	1189544	0.08	10000	
As	75	115	1	He	1004.474	1004.474	0.99	912574	0.11	10000	
Se	78	115	1	He	1001.525	1001.525	1.13	79361	1.26	10000	
Sr	88	45	1	He	1092.154	1092.154	0.69	7065371	0.02	10000	
Mo	95	103	1	He	108.681	108.681	0.81	321893	0.03	2000	
Ag	107	103	1	He	101.870	101.870	0.18	953013	0.01	300	
Cd	111	115	1	He	1018.067	1018.067	0.40	1750577	0.06	4000	
Sn	118	115	1	He	1037.835	1037.835	1.38	4439625	0.02	2000	
Sb	123	165	1	He	96.324	96.324	0.61	491179	0.02	300	
Ba	137	115	1	He	1049.023	1049.023	1.26	2186490	0.05	10000	
W	182	159	1	He	102.982	102.982	1.58	1173222	0.01	2500	
Tl	205	165	1	He	240.939	240.939	0.55	6537802	0.00	5000	
Pb	208	165	1	He	963.807	963.807	0.71	35634971	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1172545	1.43	1261090	92.98	30	120	
Sc	45	1	He	875333	0.31	955958	91.57	30	120	
Sc	45	2	NoGas	7410180	1.32	7862387	94.25	30	120	
Rh	103	1	He	2555617	0.44	2873429	88.94	30	120	
In	115	1	He	1707856	0.84	1922589	88.83	30	120	
Tb	159	1	He	4622798	0.50	4725151	97.83	30	120	
Ho	165	1	He	4737750	0.36	4813140	98.43	30	120	
Bi	209	1	He	3379220	0.58	3617562	93.41	30	120	

Sample Report

Sample Table

Sample Name	240-50351-b-3-g ms@10
Data File Name	021SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T11:20:44-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	89.881	89.881	1.03	1299838	0.01	10000	
Be	9	6	2	NoGas	5.061	5.061	1.37	20297	0.02	10000	
B	11	6	2	NoGas	97.887	97.887	1.01	228513	0.04	300	
Na	23	45	1	He	17208.527	17208.527	3.12	19278285	0.09	500000	
Mg	24	45	1	He	6437.411	6437.411	1.97	4228737	0.15	500000	
Al	27	45	1	He	191.507	191.507	2.24	77926	0.25	200000	
K	39	45	1	He	5314.442	5314.442	3.15	3761937	0.14	500000	
Ca	44	45	1	He	8766.086	8766.086	2.55	345031	2.54	500000	
Ti	47	45	1	He	99.590	99.590	1.44	21324	0.47	2500	
V	51	45	1	He	36.235	36.235	2.22	380233	0.01	10000	
Cr	52	45	1	He	19.857	19.857	2.13	129268	0.02	10000	
Mn	55	45	1	He	49.612	49.612	2.85	253678	0.02	10000	
Fe	56	45	1	He	108.166	108.166	2.21	665138	0.02	200000	
Co	59	45	1	He	50.113	50.113	2.84	446747	0.01	10000	
Ni	60	45	1	He	50.739	50.739	3.17	111661	0.05	10000	
Cu	63	45	1	He	25.816	25.816	2.55	149025	0.02	10000	
Zn	66	45	1	He	51.600	51.600	2.98	69770	0.07	10000	
As	75	115	1	He	191.933	191.933	1.53	202106	0.09	10000	
Se	78	115	1	He	191.715	191.715	2.09	17635	1.09	10000	
Sr	88	45	1	He	108.237	108.237	2.39	774842	0.01	10000	
Mo	95	103	1	He	101.648	101.648	2.43	338222	0.03	2000	
Ag	107	103	1	He	5.111	5.111	2.62	53717	0.01	300	
Cd	111	115	1	He	4.888	4.888	2.48	11789	0.04	4000	
Sn	118	115	1	He	192.266	192.266	2.05	953103	0.02	2000	
Sb	123	165	1	He	49.606	49.606	0.95	272026	0.02	300	
Ba	137	115	1	He	187.794	187.794	1.81	453324	0.04	10000	
W	182	159	1	He	0.762	0.762	9.29	16672	0.00	2500	
Tl	205	165	1	He	193.723	193.723	2.07	5651568	0.00	5000	
Pb	208	165	1	He	49.487	49.487	1.26	1967950	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1329344	1.21	1261090	105.41	30	120	
Sc	45	1	He	968831	2.54	955958	101.35	30	120	
Sc	45	2	NoGas	8382743	0.86	7862387	106.62	30	120	
Rh	103	1	He	2871806	1.87	2873429	99.94	30	120	
In	115	1	He	1978060	1.54	1922589	102.89	30	120	
Tb	159	1	He	5028627	1.31	4725151	106.42	30	120	
Ho	165	1	He	5094079	0.70	4813140	105.84	30	120	
Bi	209	1	He	3741918	0.44	3617562	103.44	30	120	

Sample Report

Sample Table

Sample Name	240-50351-b-3-h msd@10
Data File Name	022SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T11:24:19-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	93.407	93.407	1.09	1337951	0.01	10000	
Be	9	6	2	NoGas	5.080	5.080	4.59	20189	0.03	10000	
B	11	6	2	NoGas	101.882	101.882	0.21	235260	0.04	300	
Na	23	45	1	He	17805.481	17805.481	0.90	20114245	0.09	500000	
Mg	24	45	1	He	6587.336	6587.336	0.45	4362762	0.15	500000	
Al	27	45	1	He	197.345	197.345	0.22	80944	0.24	200000	
K	39	45	1	He	5410.730	5410.730	0.77	3861355	0.14	500000	
Ca	44	45	1	He	8948.340	8948.340	0.52	355130	2.52	500000	
Ti	47	45	1	He	103.464	103.464	0.99	22334	0.46	2500	
V	51	45	1	He	37.060	37.060	0.95	391923	0.01	10000	
Cr	52	45	1	He	20.288	20.288	0.31	133112	0.02	10000	
Mn	55	45	1	He	50.393	50.393	0.69	259795	0.02	10000	
Fe	56	45	1	He	105.059	105.059	0.96	651634	0.02	200000	
Co	59	45	1	He	50.901	50.901	0.75	457575	0.01	10000	
Ni	60	45	1	He	51.983	51.983	0.86	115338	0.05	10000	
Cu	63	45	1	He	26.131	26.131	1.31	152093	0.02	10000	
Zn	66	45	1	He	52.574	52.574	1.22	71646	0.07	10000	
As	75	115	1	He	199.067	199.067	1.08	208010	0.10	10000	
Se	78	115	1	He	199.820	199.820	0.84	18239	1.10	10000	
Sr	88	45	1	He	110.534	110.534	0.12	797878	0.01	10000	
Mo	95	103	1	He	103.369	103.369	0.83	346569	0.03	2000	
Ag	107	103	1	He	5.192	5.192	0.16	54993	0.01	300	
Cd	111	115	1	He	5.003	5.003	3.33	11924	0.04	4000	
Sn	118	115	1	He	198.519	198.519	0.82	976598	0.02	2000	
Sb	123	165	1	He	51.303	51.303	1.32	280419	0.02	300	
Ba	137	115	1	He	195.441	195.441	0.96	468193	0.04	10000	
W	182	159	1	He	0.141	0.141	69.86	8962	0.00	2500	
Tl	205	165	1	He	197.806	197.806	1.41	5752236	0.00	5000	
Pb	208	165	1	He	50.518	50.518	1.24	2002472	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1317486	1.49	1261090	104.47	30	120	
Sc	45	1	He	976526	0.77	955958	102.15	30	120	
Sc	45	2	NoGas	8316844	0.60	7862387	105.78	30	120	
Rh	103	1	He	2892968	0.35	2873429	100.68	30	120	
In	115	1	He	1962711	0.57	1922589	102.09	30	120	
Tb	159	1	He	4998771	0.41	4725151	105.79	30	120	
Ho	165	1	He	5077788	0.88	4813140	105.50	30	120	
Bi	209	1	He	3729794	1.03	3617562	103.10	30	120	

Sample Report

Sample Table

Sample Name	240-50351-b-4-f
Data File Name	023SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T11:27:55-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	10.130	10.130	1.70	174873	0.01	10000	
Be	9	6	2	NoGas	0.263	0.263	23.75	1108	0.02	10000	
B	11	6	2	NoGas	45.059	45.059	3.40	101766	0.04	300	
Na	23	45	1	He	119675.041	119675.041	0.15	126477843	0.09	500000	
Mg	24	45	1	He	14086.233	14086.233	1.24	8734461	0.16	500000	
Al	27	45	1	He	3.635	3.635	11.50	2061	0.18	200000	
K	39	45	1	He	2840.706	2840.706	0.77	1923469	0.15	500000	
Ca	44	45	1	He	38719.708	38719.708	1.34	1436675	2.70	500000	
Ti	47	45	1	He	0.446	0.446	12.55	97	0.46	2500	
V	51	45	1	He	3.930	3.930	12.20	45736	0.01	10000	
Cr	52	45	1	He	1.366	1.366	3.99	10682	0.01	10000	
Mn	55	45	1	He	0.248	0.248	8.62	3405	0.01	10000	
Fe	56	45	1	He	16.922	16.922	3.46	105335	0.02	200000	
Co	59	45	1	He	0.071	0.071	24.59	668	0.01	10000	
Ni	60	45	1	He	0.452	0.452	17.98	1912	0.02	10000	
Cu	63	45	1	He	1.844	1.844	1.81	10719	0.02	10000	
Zn	66	45	1	He	5.174	5.174	2.86	8374	0.06	10000	
As	75	115	1	He	2.332	2.332	8.43	2437	0.10	10000	
Se	78	115	1	He	0.821	0.821	23.32	118	0.70	10000	
Sr	88	45	1	He	105.676	105.676	0.27	714438	0.01	10000	
Mo	95	103	1	He	1.762	1.762	19.69	5461	0.03	2000	
Ag	107	103	1	He	0.008	0.008	21.21	86	0.01	300	
Cd	111	115	1	He	-0.018	-0.018	-199.22	1861	0.00	4000	
Sn	118	115	1	He	3.605	3.605	8.15	17068	0.02	2000	
Sb	123	165	1	He	0.409	0.409	14.72	2222	0.02	300	
Ba	137	115	1	He	16.569	16.569	0.93	36705	0.05	10000	
W	182	159	1	He	0.027	0.027	234.75	7191	0.00	2500	
Tl	205	165	1	He	0.353	0.353	19.21	9909	0.00	5000	
Pb	208	165	1	He	0.339	0.339	2.97	13457	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1214126	3.15	1261090	96.28	30	120	
Sc	45	1	He	914584	1.02	955958	95.67	30	120	
Sc	45	2	NoGas	7414870	2.42	7862387	94.31	30	120	
Rh	103	1	He	2646840	0.48	2873429	92.11	30	120	
In	115	1	He	1813452	0.57	1922589	94.32	30	120	
Tb	159	1	He	4751098	1.07	4725151	100.55	30	120	
Ho	165	1	He	4814438	1.41	4813140	100.03	30	120	
Bi	209	1	He	3467333	0.95	3617562	95.85	30	120	

Sample Report

Sample Table

Sample Name	240-50351-b-4-g ms@10
Data File Name	024SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T11:31:31-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	96.302	96.302	0.69	1368777	0.01	10000	
Be	9	6	2	NoGas	4.847	4.847	6.96	19570	0.02	10000	
B	11	6	2	NoGas	103.246	103.246	3.45	242063	0.04	300	
Na	23	45	1	He	17682.555	17682.555	1.03	20455857	0.09	500000	
Mg	24	45	1	He	6669.468	6669.468	0.96	4522967	0.15	500000	
Al	27	45	1	He	197.254	197.254	0.71	82848	0.24	200000	
K	39	45	1	He	5423.528	5423.528	1.53	3963352	0.14	500000	
Ca	44	45	1	He	8990.843	8990.843	1.11	365382	2.46	500000	
Ti	47	45	1	He	102.091	102.091	2.12	22565	0.45	2500	
V	51	45	1	He	37.967	37.967	0.79	410962	0.01	10000	
Cr	52	45	1	He	20.479	20.479	1.18	137557	0.01	10000	
Mn	55	45	1	He	50.512	50.512	1.06	266657	0.02	10000	
Fe	56	45	1	He	104.418	104.418	0.29	663292	0.02	200000	
Co	59	45	1	He	51.182	51.182	0.79	471172	0.01	10000	
Ni	60	45	1	He	52.151	52.151	0.44	118490	0.04	10000	
Cu	63	45	1	He	26.358	26.358	0.92	157098	0.02	10000	
Zn	66	45	1	He	52.349	52.349	1.82	73058	0.07	10000	
As	75	115	1	He	199.621	199.621	0.89	213585	0.09	10000	
Se	78	115	1	He	198.471	198.471	1.03	18550	1.07	10000	
Sr	88	45	1	He	110.712	110.712	0.76	818347	0.01	10000	
Mo	95	103	1	He	103.770	103.770	0.65	355776	0.03	2000	
Ag	107	103	1	He	5.248	5.248	0.21	56840	0.01	300	
Cd	111	115	1	He	4.932	4.932	2.84	12069	0.04	4000	
Sn	118	115	1	He	196.465	196.465	0.71	989698	0.02	2000	
Sb	123	165	1	He	51.589	51.589	0.44	285726	0.02	300	
Ba	137	115	1	He	195.150	195.150	1.03	478705	0.04	10000	
W	182	159	1	He	-0.022	-0.022	-143.61	7028	0.00	2500	
Tl	205	165	1	He	198.755	198.755	0.56	5856929	0.00	5000	
Pb	208	165	1	He	50.938	50.938	0.65	2045920	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1339353	2.66	1261090	106.21	30	120	
Sc	45	1	He	999986	0.63	955958	104.61	30	120	
Sc	45	2	NoGas	8263213	0.28	7862387	105.10	30	120	
Rh	103	1	He	2958334	0.44	2873429	102.95	30	120	
In	115	1	He	2009847	1.42	1922589	104.54	30	120	
Tb	159	1	He	5048630	0.46	4725151	106.85	30	120	
Ho	165	1	He	5145032	0.90	4813140	106.90	30	120	
Bi	209	1	He	3782670	0.99	3617562	104.56	30	120	

Sample Report

Sample Table

Sample Name	240-50351-b-4-h msd@10
Data File Name	025SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T11:35:06-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	100.589	100.589	2.06	1382876	0.01	10000	
Be	9	6	2	NoGas	4.931	4.931	4.63	19552	0.03	10000	
B	11	6	2	NoGas	105.720	105.720	2.39	243070	0.04	300	
Na	23	45	1	He	18925.930	18925.930	12.50	20359320	0.09	500000	
Mg	24	45	1	He	7167.865	7167.865	12.29	4521182	0.16	500000	
Al	27	45	1	He	211.027	211.027	11.59	82447	0.26	200000	
K	39	45	1	He	5781.853	5781.853	10.97	3931320	0.15	500000	
Ca	44	45	1	He	9549.495	9549.495	12.19	360973	2.65	500000	
Ti	47	45	1	He	109.596	109.596	13.40	22514	0.49	2500	
V	51	45	1	He	40.453	40.453	12.45	406797	0.01	10000	
Cr	52	45	1	He	21.851	21.851	13.25	136272	0.02	10000	
Mn	55	45	1	He	54.312	54.312	12.98	266390	0.02	10000	
Fe	56	45	1	He	112.276	112.276	12.59	662644	0.02	200000	
Co	59	45	1	He	55.106	55.106	12.03	471938	0.01	10000	
Ni	60	45	1	He	55.510	55.510	12.13	117269	0.05	10000	
Cu	63	45	1	He	28.146	28.146	12.29	155986	0.02	10000	
Zn	66	45	1	He	57.255	57.255	12.70	74133	0.08	10000	
As	75	115	1	He	215.995	215.995	10.43	213831	0.10	10000	
Se	78	115	1	He	213.633	213.633	9.34	18486	1.16	10000	
Sr	88	45	1	He	118.527	118.527	12.35	814849	0.01	10000	
Mo	95	103	1	He	112.004	112.004	10.94	355166	0.03	2000	
Ag	107	103	1	He	5.540	5.540	11.44	55484	0.01	300	
Cd	111	115	1	He	5.419	5.419	10.52	12092	0.04	4000	
Sn	118	115	1	He	214.833	214.833	10.49	1001276	0.02	2000	
Sb	123	165	1	He	55.514	55.514	12.27	286003	0.02	300	
Ba	137	115	1	He	210.626	210.626	10.36	478106	0.04	10000	
W	182	159	1	He	-0.031	-0.031	-45.28	6550	0.00	2500	
Tl	205	165	1	He	212.339	212.339	11.74	5822720	0.00	5000	
Pb	208	165	1	He	54.578	54.578	11.02	2041069	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1314536	1.81	1261090	104.24	30	120	
Sc	45	1	He	939646	12.41	955958	98.29	30	120	
Sc	45	2	NoGas	8007347	0.74	7862387	101.84	30	120	
Rh	103	1	He	2758165	10.95	2873429	95.99	30	120	
In	115	1	He	1872786	10.13	1922589	97.41	30	120	
Tb	159	1	He	4777522	11.89	4725151	101.11	30	120	
Ho	165	1	He	4830841	11.39	4813140	100.37	30	120	
Bi	209	1	He	3539029	9.13	3617562	97.83	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2026839
Data File Name	026_CCV.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T11:38:40-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	47.858	0.586	705356	0.21	50	95.7	89.5	110.5	
Be	9	6	2	NoGas	48.524	1.491	185445	0.83	50	97.0	89.5	110.5	
B	11	6	2	NoGas	52.902	0.890	123717	1.85	50	105.8	89.5	110.5	
Na	23	45	1	He	24823.467	2.736	27848307	1.11	25000	99.3	89.5	110.5	
Mg	24	45	1	He	24673.918	2.523	16225233	1.23	25000	98.7	89.5	110.5	
Al	27	45	1	He	242.030	3.724	98434	0.98	250	96.8	89.5	110.5	
K	39	45	1	He	24725.086	3.119	17329718	0.40	25000	98.9	89.5	110.5	
Ca	44	45	1	He	24161.537	2.876	951220	0.58	25000	96.6	89.5	110.5	
Ti	47	45	1	He	50.082	4.204	10740	1.59	50	100.2	89.5	110.5	
V	51	45	1	He	49.111	2.729	513333	0.21	50	98.2	89.5	110.5	
Cr	52	45	1	He	49.271	2.916	317404	0.57	50	98.5	89.5	110.5	
Mn	55	45	1	He	245.200	2.813	1246684	0.72	250	98.1	89.5	110.5	
Fe	56	45	1	He	12206.807	3.037	74189219	0.52	12500	97.7	89.5	110.5	
Co	59	45	1	He	49.450	3.307	441563	0.78	50	98.9	89.5	110.5	
Ni	60	45	1	He	49.597	3.963	109347	1.58	50	99.2	89.5	110.5	
Cu	63	45	1	He	49.887	3.364	287725	0.83	50	99.8	89.5	110.5	
Zn	66	45	1	He	49.379	3.526	66964	0.71	50	98.8	89.5	110.5	
As	75	115	1	He	49.845	2.178	51153	0.43	50	99.7	89.5	110.5	
Se	78	115	1	He	50.295	2.931	4534	1.49	50	100.6	89.5	110.5	
Sr	88	45	1	He	49.413	3.257	354372	0.54	50	98.8	89.5	110.5	
Mo	95	103	1	He	52.388	1.865	170407	0.99	50	104.8	89.5	110.5	
Ag	107	103	1	He	50.271	0.872	516457	0.37	50	100.5	89.5	110.5	
Cd	111	115	1	He	49.011	1.215	96763	0.58	50	98.0	89.5	110.5	
Sn	118	115	1	He	50.984	2.728	246147	0.99	50	102.0	89.5	110.5	
Sb	123	165	1	He	50.246	2.533	271143	0.89	50	100.5	89.5	110.5	
Ba	137	115	1	He	48.862	1.885	114658	0.73	50	97.7	89.5	110.5	
W	182	159	1	He	49.272	2.021	601169	0.84	50	98.5	89.5	110.5	
Tl	205	165	1	He	49.883	1.615	1432429	0.43	50	99.8	89.5	110.5	
Pb	208	165	1	He	49.536	1.943	1938661	0.20	50	99.1	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1276155	1.36	1261090	101.19	30	120	
Sc	45	1	He	970535	2.72	955958	101.52	30	120	
Sc	45	2	NoGas	8222496	0.33	7862387	104.58	30	120	
Rh	103	1	He	2806593	1.09	2873429	97.67	30	120	
In	115	1	He	1922433	1.73	1922589	99.99	30	120	
Tb	159	1	He	4921067	1.77	4725151	104.15	30	120	
Ho	165	1	He	5014187	1.75	4813140	104.18	30	120	
Bi	209	1	He	3650738	1.01	3617562	100.92	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	027_CCB.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T11:42:16-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	0.079	72.3	58011	1.4	2	
Be	9	6	2	NoGas	0.113	49.1	622	35.7	1	
B	11	6	2	NoGas	1.342	22.6	14858	4.3	20	
Na	23	45	1	He	19.414	8.3	49705	3.5	1000	
Mg	24	45	1	He	-0.587	-65.7	2982	8.6	1000	
Al	27	45	1	He	-0.253	-21.6	630	3.2	50	
K	39	45	1	He	5.785	32.5	60922	1.8	1000	
Ca	44	45	1	He	2.985	65.9	920	8.7	1000	
Ti	47	45	1	He	0.155	74.4	41	61.9	20	
V	51	45	1	He	-0.144	-32.2	6726	7.6	2	
Cr	52	45	1	He	0.007	196.7	2708	3.4	2	
Mn	55	45	1	He	0.001	431.9	2415	1.2	2	
Fe	56	45	1	He	12.596	16.5	87544	15.0	50	
Co	59	45	1	He	0.010	25.0	166	14.3	1	
Ni	60	45	1	He	-0.219	-15.4	578	13.3	2	
Cu	63	45	1	He	0.053	8.5	1096	2.5	2	
Zn	66	45	1	He	-0.010	-804.9	2122	5.3	20	
As	75	115	1	He	0.164	24.5	383	12.3	2	
Se	78	115	1	He	0.211	74.7	74	20.9	2	
Sr	88	45	1	He	0.011	22.7	244	8.0	10	
Mo	95	103	1	He	0.432	29.5	1572	27.8	2	
Ag	107	103	1	He	0.005	54.9	71	47.0	0.2	
Cd	111	115	1	He	-0.025	-124.8	2051	2.2	0.2	
Sn	118	115	1	He	0.774	11.0	4682	10.0	10	
Sb	123	165	1	He	0.250	7.0	1487	7.2	2	
Ba	137	115	1	He	0.017	19.9	78	9.9	5	
W	182	159	1	He	0.548	19.8	14144	9.8	10	
Tl	205	165	1	He	0.176	1.4	5345	0.9	0.5	
Pb	208	165	1	He	0.037	15.7	2228	9.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1348201	0.31	1261090	106.91	30	120	
Sc	45	1	He	993918	0.38	955958	103.97	30	120	
Sc	45	2	NoGas	8265704	0.35	7862387	105.13	30	120	
Rh	103	1	He	3021335	0.67	2873429	105.15	30	120	
In	115	1	He	2013583	1.01	1922589	104.73	30	120	
Tb	159	1	He	5069645	0.47	4725151	107.29	30	120	
Ho	165	1	He	5123650	0.81	4813140	106.45	30	120	
Bi	209	1	He	3801352	0.79	3617562	105.08	30	120	

Sample Report

Sample Table

Sample Name	240-50351-b-1-h
Data File Name	028SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T11:45:53-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	9.936	9.936	1.72	179134	0.01	10000	
Be	9	6	2	NoGas	0.128	0.128	23.92	630	0.02	10000	
B	11	6	2	NoGas	43.465	43.465	2.14	100704	0.04	300	
Na	23	45	1	He	124760.317	124760.317	5.28	130153673	0.10	500000	
Mg	24	45	1	He	14655.749	14655.749	5.41	8969397	0.16	500000	
Al	27	45	1	He	4.743	4.743	6.21	2452	0.19	200000	
K	39	45	1	He	2897.239	2897.239	5.14	1935766	0.15	500000	
Ca	44	45	1	He	39530.265	39530.265	7.30	1446725	2.73	500000	
Ti	47	45	1	He	0.289	0.289	54.73	63	0.46	2500	
V	51	45	1	He	3.249	3.249	8.93	38746	0.01	10000	
Cr	52	45	1	He	1.362	1.362	10.75	10508	0.01	10000	
Mn	55	45	1	He	0.861	0.861	7.05	6258	0.01	10000	
Fe	56	45	1	He	24.369	24.369	4.05	146175	0.02	200000	
Co	59	45	1	He	0.056	0.056	14.47	536	0.01	10000	
Ni	60	45	1	He	0.475	0.475	16.21	1939	0.02	10000	
Cu	63	45	1	He	2.008	2.008	10.33	11442	0.02	10000	
Zn	66	45	1	He	13.696	13.696	5.47	18692	0.07	10000	
As	75	115	1	He	1.680	1.680	6.33	1807	0.09	10000	
Se	78	115	1	He	0.319	0.319	24.38	76	0.42	10000	
Sr	88	45	1	He	109.859	109.859	6.12	732898	0.01	10000	
Mo	95	103	1	He	1.146	1.146	6.38	3616	0.03	2000	
Ag	107	103	1	He	0.007	0.007	22.81	78	0.01	300	
Cd	111	115	1	He	-0.070	-0.070	-12.17	1771	0.00	4000	
Sn	118	115	1	He	1.753	1.753	9.38	8643	0.02	2000	
Sb	123	165	1	He	0.217	0.217	22.75	1262	0.02	300	
Ba	137	115	1	He	16.994	16.994	7.27	37601	0.05	10000	
W	182	159	1	He	0.153	0.153	24.63	8784	0.00	2500	
Tl	205	165	1	He	0.155	0.155	13.21	4524	0.00	5000	
Pb	208	165	1	He	0.304	0.304	10.95	12292	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1240078	0.93	1261090	98.33	30	120	
Sc	45	1	He	904796	6.27	955958	94.65	30	120	
Sc	45	2	NoGas	7698893	0.78	7862387	97.92	30	120	
Rh	103	1	He	2689188	7.83	2873429	93.59	30	120	
In	115	1	He	1817437	7.06	1922589	94.53	30	120	
Tb	159	1	He	4818445	7.92	4725151	101.97	30	120	
Ho	165	1	He	4907534	7.51	4813140	101.96	30	120	
Bi	209	1	He	3563227	5.63	3617562	98.50	30	120	

Sample Report

Sample Table

Sample Name	240-50351-b-2-h
Data File Name	029SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T11:49:30-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	10.058	10.058	3.08	180556	0.01	10000	
Be	9	6	2	NoGas	0.088	0.088	17.35	493	0.02	10000	
B	11	6	2	NoGas	39.481	39.481	1.31	95253	0.04	300	
Na	23	45	1	He	122072.179	122072.179	6.68	129566047	0.09	500000	
Mg	24	45	1	He	14244.017	14244.017	6.95	8868400	0.16	500000	
Al	27	45	1	He	4.215	4.215	3.66	2296	0.18	200000	
K	39	45	1	He	2869.778	2869.778	7.22	1950702	0.15	500000	
Ca	44	45	1	He	38871.429	38871.429	7.64	1447894	2.68	500000	
Ti	47	45	1	He	0.264	0.264	27.62	60	0.44	2500	
V	51	45	1	He	4.343	4.343	3.60	50046	0.01	10000	
Cr	52	45	1	He	1.343	1.343	8.28	10592	0.01	10000	
Mn	55	45	1	He	0.334	0.334	15.44	3833	0.01	10000	
Fe	56	45	1	He	15.201	15.201	5.54	95967	0.02	200000	
Co	59	45	1	He	0.046	0.046	19.00	453	0.01	10000	
Ni	60	45	1	He	0.447	0.447	20.45	1909	0.02	10000	
Cu	63	45	1	He	1.688	1.688	9.15	9907	0.02	10000	
Zn	66	45	1	He	9.112	9.112	7.74	13317	0.07	10000	
As	75	115	1	He	1.680	1.680	5.90	1822	0.09	10000	
Se	78	115	1	He	0.207	0.207	31.97	66	0.31	10000	
Sr	88	45	1	He	107.138	107.138	6.92	727341	0.01	10000	
Mo	95	103	1	He	1.070	1.070	6.64	3357	0.03	2000	
Ag	107	103	1	He	0.007	0.007	38.09	74	0.01	300	
Cd	111	115	1	He	-0.047	-0.047	-90.35	1824	0.00	4000	
Sn	118	115	1	He	0.817	0.817	10.68	4442	0.02	2000	
Sb	123	165	1	He	0.141	0.141	10.82	844	0.02	300	
Ba	137	115	1	He	16.702	16.702	7.03	37221	0.04	10000	
W	182	159	1	He	0.001	0.001	5019.62	6876	0.00	2500	
Tl	205	165	1	He	0.061	0.061	8.85	1887	0.00	5000	
Pb	208	165	1	He	0.269	0.269	9.06	10893	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1277267	0.90	1261090	101.28	30	120	
Sc	45	1	He	921526	7.37	955958	96.40	30	120	
Sc	45	2	NoGas	7696398	2.69	7862387	97.89	30	120	
Rh	103	1	He	2671654	8.42	2873429	92.98	30	120	
In	115	1	He	1831003	7.89	1922589	95.24	30	120	
Tb	159	1	He	4743072	5.89	4725151	100.38	30	120	
Ho	165	1	He	4867494	6.78	4813140	101.13	30	120	
Bi	209	1	He	3497865	5.70	3617562	96.69	30	120	

Sample Report

Sample Table

Sample Name	240-50351-b-5-d
Data File Name	030SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T11:53:05-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	0.293	0.293	18.96	56680	0.00	10000	
Be	9	6	2	NoGas	0.064	0.064	24.18	407	0.02	10000	
B	11	6	2	NoGas	1.323	1.323	46.96	14191	0.01	300	
Na	23	45	1	He	67.565	67.565	6.47	96377	0.07	500000	
Mg	24	45	1	He	0.544	0.544	111.99	3438	0.02	500000	
Al	27	45	1	He	2.410	2.410	5.36	1590	0.15	200000	
K	39	45	1	He	13.688	13.688	16.50	61119	0.02	500000	
Ca	44	45	1	He	5.778	5.778	17.36	948	0.61	500000	
Ti	47	45	1	He	0.096	0.096	97.08	26	0.38	2500	
V	51	45	1	He	4.459	4.459	1.70	50714	0.01	10000	
Cr	52	45	1	He	1.426	1.426	1.43	11012	0.01	10000	
Mn	55	45	1	He	-0.065	-0.065	-23.67	1898	0.00	10000	
Fe	56	45	1	He	5.179	5.179	2.41	37948	0.01	200000	
Co	59	45	1	He	0.017	0.017	17.18	207	0.01	10000	
Ni	60	45	1	He	0.154	0.154	18.60	1297	0.01	10000	
Cu	63	45	1	He	0.670	0.670	2.97	4343	0.02	10000	
Zn	66	45	1	He	1.893	1.893	3.12	4299	0.04	10000	
As	75	115	1	He	0.685	0.685	5.14	855	0.08	10000	
Se	78	115	1	He	0.174	0.174	52.14	64	0.27	10000	
Sr	88	45	1	He	0.065	0.065	1.77	587	0.01	10000	
Mo	95	103	1	He	0.063	0.063	24.49	262	0.02	2000	
Ag	107	103	1	He	0.007	0.007	18.90	79	0.01	300	
Cd	111	115	1	He	-0.089	-0.089	-19.83	1747	-0.01	4000	
Sn	118	115	1	He	0.618	0.618	6.85	3534	0.02	2000	
Sb	123	165	1	He	0.085	0.085	5.42	540	0.02	300	
Ba	137	115	1	He	0.104	0.104	12.88	267	0.04	10000	
W	182	159	1	He	-0.040	-0.040	-151.90	6365	0.00	2500	
Tl	205	165	1	He	0.045	0.045	8.49	1406	0.00	5000	
Pb	208	165	1	He	0.046	0.046	11.05	2410	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1291600	0.31	1261090	102.42	30	120	
Sc	45	1	He	912397	1.69	955958	95.44	30	120	
Sc	45	2	NoGas	7689450	0.93	7862387	97.80	30	120	
Rh	103	1	He	2804522	1.37	2873429	97.60	30	120	
In	115	1	He	1829569	2.09	1922589	95.16	30	120	
Tb	159	1	He	4716447	1.26	4725151	99.82	30	120	
Ho	165	1	He	4792014	1.07	4813140	99.56	30	120	
Bi	209	1	He	3663781	1.30	3617562	101.28	30	120	

Sample Report

Sample Table

Sample Name	240-50352-b-1-d
Data File Name	031SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T11:56:42-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	9.575	9.575	1.74	177953	0.01	10000	
Be	9	6	2	NoGas	0.060	0.060	45.47	378	0.02	10000	
B	11	6	2	NoGas	41.590	41.590	2.01	97249	0.04	300	
Na	23	45	1	He	125051.031	125051.031	0.91	127729936	0.10	500000	
Mg	24	45	1	He	14371.892	14371.892	0.52	8612046	0.17	500000	
Al	27	45	1	He	4.690	4.690	3.95	2379	0.20	200000	
K	39	45	1	He	2914.513	2914.513	1.05	1906081	0.15	500000	
Ca	44	45	1	He	40043.457	40043.457	1.36	1436050	2.79	500000	
Ti	47	45	1	He	0.184	0.184	18.22	42	0.44	2500	
V	51	45	1	He	4.362	4.362	11.50	48236	0.01	10000	
Cr	52	45	1	He	1.377	1.377	5.77	10389	0.01	10000	
Mn	55	45	1	He	0.382	0.382	6.76	3909	0.01	10000	
Fe	56	45	1	He	16.244	16.244	2.39	98044	0.02	200000	
Co	59	45	1	He	0.045	0.045	18.08	432	0.01	10000	
Ni	60	45	1	He	0.410	0.410	16.69	1767	0.02	10000	
Cu	63	45	1	He	1.428	1.428	3.35	8183	0.02	10000	
Zn	66	45	1	He	5.253	5.253	2.54	8190	0.06	10000	
As	75	115	1	He	1.682	1.682	4.47	1748	0.10	10000	
Se	78	115	1	He	0.228	0.228	55.87	65	0.35	10000	
Sr	88	45	1	He	109.639	109.639	0.43	716382	0.02	10000	
Mo	95	103	1	He	1.001	1.001	2.90	3084	0.03	2000	
Ag	107	103	1	He	0.005	0.005	27.11	59	0.01	300	
Cd	111	115	1	He	-0.058	-0.058	-38.41	1728	0.00	4000	
Sn	118	115	1	He	0.447	0.447	13.87	2637	0.02	2000	
Sb	123	165	1	He	0.092	0.092	22.46	572	0.02	300	
Ba	137	115	1	He	17.399	17.399	2.46	37259	0.05	10000	
W	182	159	1	He	-0.055	-0.055	-49.85	6116	0.00	2500	
Tl	205	165	1	He	0.026	0.026	15.51	879	0.00	5000	
Pb	208	165	1	He	0.263	0.263	4.49	10426	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1245356	1.21	1261090	98.75	30	120	
Sc	45	1	He	883915	0.88	955958	92.46	30	120	
Sc	45	2	NoGas	7849453	1.50	7862387	99.84	30	120	
Rh	103	1	He	2613668	0.97	2873429	90.96	30	120	
In	115	1	He	1752878	1.14	1922589	91.17	30	120	
Tb	159	1	He	4659261	1.79	4725151	98.61	30	120	
Ho	165	1	He	4746201	1.39	4813140	98.61	30	120	
Bi	209	1	He	3392920	0.54	3617562	93.79	30	120	

Sample Report

Sample Table

Sample Name	240-50352-b-2-d
Data File Name	032SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T12:00:18-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	9.585	9.585	0.50	178072	0.01	10000	
Be	9	6	2	NoGas	0.060	0.060	37.27	382	0.02	10000	
B	11	6	2	NoGas	42.044	42.044	2.14	99527	0.04	300	
Na	23	45	1	He	126328.654	126328.654	1.49	133221484	0.09	500000	
Mg	24	45	1	He	14461.134	14461.134	1.90	8946530	0.16	500000	
Al	27	45	1	He	6.241	6.241	2.84	3046	0.20	200000	
K	39	45	1	He	2887.220	2887.220	1.10	1950067	0.15	500000	
Ca	44	45	1	He	40453.072	40453.072	2.16	1497773	2.70	500000	
Ti	47	45	1	He	0.161	0.161	32.00	39	0.41	2500	
V	51	45	1	He	5.057	5.057	7.24	56513	0.01	10000	
Cr	52	45	1	He	1.319	1.319	3.23	10376	0.01	10000	
Mn	55	45	1	He	0.527	0.527	9.31	4724	0.01	10000	
Fe	56	45	1	He	15.868	15.868	2.37	99064	0.02	200000	
Co	59	45	1	He	0.040	0.040	8.49	403	0.01	10000	
Ni	60	45	1	He	0.463	0.463	9.85	1933	0.02	10000	
Cu	63	45	1	He	1.618	1.618	1.86	9474	0.02	10000	
Zn	66	45	1	He	9.265	9.265	2.84	13415	0.07	10000	
As	75	115	1	He	1.798	1.798	1.07	1925	0.09	10000	
Se	78	115	1	He	0.162	0.162	40.39	62	0.26	10000	
Sr	88	45	1	He	110.349	110.349	0.92	744459	0.01	10000	
Mo	95	103	1	He	0.961	0.961	3.22	3000	0.03	2000	
Ag	107	103	1	He	0.007	0.007	53.38	72	0.01	300	
Cd	111	115	1	He	-0.080	-0.080	-24.40	1751	0.00	4000	
Sn	118	115	1	He	0.546	0.546	8.38	3186	0.02	2000	
Sb	123	165	1	He	0.081	0.081	21.18	523	0.02	300	
Ba	137	115	1	He	17.268	17.268	1.32	38314	0.05	10000	
W	182	159	1	He	-0.048	-0.048	-75.79	6339	0.00	2500	
Tl	205	165	1	He	0.018	0.018	2.46	683	0.00	5000	
Pb	208	165	1	He	0.274	0.274	1.64	11115	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1262286	0.29	1261090	100.09	30	120	
Sc	45	1	He	912734	1.39	955958	95.48	30	120	
Sc	45	2	NoGas	7847856	0.43	7862387	99.82	30	120	
Rh	103	1	He	2647196	0.88	2873429	92.13	30	120	
In	115	1	He	1816544	1.12	1922589	94.48	30	120	
Tb	159	1	He	4778067	1.39	4725151	101.12	30	120	
Ho	165	1	He	4858468	1.54	4813140	100.94	30	120	
Bi	209	1	He	3468791	0.25	3617562	95.89	30	120	

Sample Report

Sample Table

Sample Name	240-50352-b-3-d
Data File Name	033SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T12:03:55-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	9.705	9.705	1.20	178338	0.01	10000	
Be	9	6	2	NoGas	0.030	0.030	129.32	267	0.01	10000	
B	11	6	2	NoGas	43.303	43.303	1.75	101101	0.04	300	
Na	23	45	1	He	124775.010	124775.010	2.15	130589421	0.10	500000	
Mg	24	45	1	He	14660.064	14660.064	2.10	9001412	0.16	500000	
Al	27	45	1	He	3.946	3.946	2.37	2158	0.18	200000	
K	39	45	1	He	2849.944	2849.944	1.74	1911086	0.15	500000	
Ca	44	45	1	He	40050.974	40050.974	2.42	1471675	2.72	500000	
Ti	47	45	1	He	0.257	0.257	19.22	58	0.44	2500	
V	51	45	1	He	5.390	5.390	1.76	59310	0.01	10000	
Cr	52	45	1	He	1.280	1.280	1.10	10070	0.01	10000	
Mn	55	45	1	He	0.373	0.373	1.72	3963	0.01	10000	
Fe	56	45	1	He	15.194	15.194	0.69	94524	0.02	200000	
Co	59	45	1	He	0.048	0.048	6.96	468	0.01	10000	
Ni	60	45	1	He	0.671	0.671	7.85	2342	0.03	10000	
Cu	63	45	1	He	3.231	3.231	2.32	18065	0.02	10000	
Zn	66	45	1	He	15.095	15.095	2.17	20468	0.07	10000	
As	75	115	1	He	1.849	1.849	3.31	1954	0.09	10000	
Se	78	115	1	He	0.143	0.143	13.05	60	0.24	10000	
Sr	88	45	1	He	109.383	109.383	1.86	732363	0.01	10000	
Mo	95	103	1	He	0.978	0.978	3.34	3049	0.03	2000	
Ag	107	103	1	He	0.006	0.006	23.76	63	0.01	300	
Cd	111	115	1	He	-0.097	-0.097	-24.77	1703	-0.01	4000	
Sn	118	115	1	He	0.274	0.274	11.40	1930	0.01	2000	
Sb	123	165	1	He	0.072	0.072	12.51	471	0.02	300	
Ba	137	115	1	He	17.014	17.014	3.34	37361	0.05	10000	
W	182	159	1	He	-0.101	-0.101	-27.81	5701	0.00	2500	
Tl	205	165	1	He	0.013	0.013	3.84	536	0.00	5000	
Pb	208	165	1	He	0.380	0.380	1.12	14929	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1249111	0.99	1261090	99.05	30	120	
Sc	45	1	He	906040	2.48	955958	94.78	30	120	
Sc	45	2	NoGas	7792207	0.96	7862387	99.11	30	120	
Rh	103	1	He	2643645	3.80	2873429	92.00	30	120	
In	115	1	He	1798775	2.97	1922589	93.56	30	120	
Tb	159	1	He	4753551	3.30	4725151	100.60	30	120	
Ho	165	1	He	4798803	2.87	4813140	99.70	30	120	
Bi	209	1	He	3453277	1.79	3617562	95.46	30	120	

Sample Report

Sample Table

Sample Name	240-50352-b-4-d
Data File Name	034SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T12:07:31-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	9.807	9.807	0.39	174812	0.01	10000	
Be	9	6	2	NoGas	0.044	0.044	54.42	315	0.01	10000	
B	11	6	2	NoGas	43.627	43.627	0.87	100726	0.04	300	
Na	23	45	1	He	128546.800	128546.800	1.29	130378628	0.10	500000	
Mg	24	45	1	He	14730.223	14730.223	0.87	8765202	0.17	500000	
Al	27	45	1	He	3.892	3.892	13.16	2070	0.19	200000	
K	39	45	1	He	2962.686	2962.686	1.22	1923184	0.15	500000	
Ca	44	45	1	He	40695.504	40695.504	1.96	1449196	2.81	500000	
Ti	47	45	1	He	0.118	0.118	37.82	29	0.41	2500	
V	51	45	1	He	6.223	6.223	3.37	65213	0.01	10000	
Cr	52	45	1	He	1.430	1.430	4.61	10619	0.01	10000	
Mn	55	45	1	He	0.429	0.429	14.75	4096	0.01	10000	
Fe	56	45	1	He	16.132	16.132	1.08	96738	0.02	200000	
Co	59	45	1	He	0.038	0.038	5.97	372	0.01	10000	
Ni	60	45	1	He	0.463	0.463	16.52	1859	0.02	10000	
Cu	63	45	1	He	1.700	1.700	6.33	9540	0.02	10000	
Zn	66	45	1	He	8.220	8.220	0.82	11661	0.07	10000	
As	75	115	1	He	1.869	1.869	1.31	1917	0.10	10000	
Se	78	115	1	He	0.179	0.179	70.31	61	0.29	10000	
Sr	88	45	1	He	111.405	111.405	0.91	722830	0.02	10000	
Mo	95	103	1	He	1.004	1.004	2.25	3047	0.03	2000	
Ag	107	103	1	He	0.006	0.006	60.62	69	0.01	300	
Cd	111	115	1	He	-0.072	-0.072	-33.55	1698	0.00	4000	
Sn	118	115	1	He	0.300	0.300	13.85	1985	0.02	2000	
Sb	123	165	1	He	0.061	0.061	19.38	406	0.02	300	
Ba	137	115	1	He	17.375	17.375	1.58	37075	0.05	10000	
W	182	159	1	He	-0.082	-0.082	-33.96	5761	0.00	2500	
Tl	205	165	1	He	0.011	0.011	11.92	482	0.00	5000	
Pb	208	165	1	He	0.291	0.291	2.23	11287	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1236126	0.94	1261090	98.02	30	120	
Sc	45	1	He	877812	1.10	955958	91.83	30	120	
Sc	45	2	NoGas	7582108	0.21	7862387	96.44	30	120	
Rh	103	1	He	2574352	1.27	2873429	89.59	30	120	
In	115	1	He	1747025	1.33	1922589	90.87	30	120	
Tb	159	1	He	4625993	0.39	4725151	97.90	30	120	
Ho	165	1	He	4674288	0.55	4813140	97.12	30	120	
Bi	209	1	He	3380668	0.86	3617562	93.45	30	120	

Sample Report

Sample Table

Sample Name	240-50352-b-5-d
Data File Name	035SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T12:11:06-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	0.145	0.145	34.41	56949	0.00	10000	
Be	9	6	2	NoGas	0.047	0.047	73.68	344	0.01	10000	
B	11	6	2	NoGas	5.755	5.755	5.12	24005	0.02	300	
Na	23	45	1	He	72.675	72.675	3.88	103287	0.07	500000	
Mg	24	45	1	He	1.585	1.585	4.58	4141	0.04	500000	
Al	27	45	1	He	6.365	6.365	8.93	3138	0.20	200000	
K	39	45	1	He	9.909	9.909	9.23	59509	0.02	500000	
Ca	44	45	1	He	-0.309	-0.309	-517.78	733	-0.04	500000	
Ti	47	45	1	He	0.104	0.104	39.33	28	0.38	2500	
V	51	45	1	He	5.668	5.668	5.67	63347	0.01	10000	
Cr	52	45	1	He	1.318	1.318	4.83	10521	0.01	10000	
Mn	55	45	1	He	0.400	0.400	5.98	4179	0.01	10000	
Fe	56	45	1	He	3.057	3.057	3.26	26198	0.01	200000	
Co	59	45	1	He	0.011	0.011	22.07	164	0.01	10000	
Ni	60	45	1	He	0.108	0.108	43.79	1220	0.01	10000	
Cu	63	45	1	He	0.639	0.639	0.94	4235	0.02	10000	
Zn	66	45	1	He	1.128	1.128	13.29	3404	0.03	10000	
As	75	115	1	He	0.800	0.800	7.56	975	0.08	10000	
Se	78	115	1	He	0.019	0.019	392.72	51	0.04	10000	
Sr	88	45	1	He	0.046	0.046	20.93	461	0.01	10000	
Mo	95	103	1	He	0.034	0.034	17.09	170	0.02	2000	
Ag	107	103	1	He	0.005	0.005	22.72	63	0.01	300	
Cd	111	115	1	He	-0.040	-0.040	-34.04	1851	0.00	4000	
Sn	118	115	1	He	0.276	0.276	13.83	1985	0.01	2000	
Sb	123	165	1	He	0.031	0.031	27.88	264	0.01	300	
Ba	137	115	1	He	0.065	0.065	25.24	180	0.04	10000	
W	182	159	1	He	-0.061	-0.061	-41.70	6190	0.00	2500	
Tl	205	165	1	He	0.010	0.010	23.77	472	0.00	5000	
Pb	208	165	1	He	0.029	0.029	8.60	1807	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1306208	1.55	1261090	103.58	30	120	
Sc	45	1	He	925955	0.09	955958	96.86	30	120	
Sc	45	2	NoGas	7989929	0.35	7862387	101.62	30	120	
Rh	103	1	He	2832022	0.60	2873429	98.56	30	120	
In	115	1	He	1844176	1.31	1922589	95.92	30	120	
Tb	159	1	He	4771260	0.09	4725151	100.98	30	120	
Ho	165	1	He	4882445	0.73	4813140	101.44	30	120	
Bi	209	1	He	3713885	0.20	3617562	102.66	30	120	

Sample Report

Sample Table

Sample Name	240-50354-b-1-d
Data File Name	036SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T12:14:42-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	9.815	9.815	1.12	170727	0.01	10000	
Be	9	6	2	NoGas	0.017	0.017	31.12	215	0.01	10000	
B	11	6	2	NoGas	42.937	42.937	2.87	98477	0.04	300	
Na	23	45	1	He	136040.805	136040.805	10.96	126510947	0.11	500000	
Mg	24	45	1	He	15778.445	15778.445	10.15	8612424	0.18	500000	
Al	27	45	1	He	3.809	3.809	12.79	1876	0.20	200000	
K	39	45	1	He	3122.711	3122.711	9.11	1858633	0.17	500000	
Ca	44	45	1	He	43520.670	43520.670	9.52	1422291	3.06	500000	
Ti	47	45	1	He	0.230	0.230	55.00	47	0.49	2500	
V	51	45	1	He	6.618	6.618	9.54	63252	0.01	10000	
Cr	52	45	1	He	1.486	1.486	17.62	10016	0.01	10000	
Mn	55	45	1	He	0.360	0.360	19.17	3469	0.01	10000	
Fe	56	45	1	He	16.356	16.356	11.37	89851	0.02	200000	
Co	59	45	1	He	0.045	0.045	11.09	394	0.01	10000	
Ni	60	45	1	He	0.556	0.556	13.02	1877	0.03	10000	
Cu	63	45	1	He	2.180	2.180	10.90	11041	0.02	10000	
Zn	66	45	1	He	10.061	10.061	10.08	12714	0.08	10000	
As	75	115	1	He	2.028	2.028	11.85	1881	0.11	10000	
Se	78	115	1	He	0.209	0.209	70.53	58	0.36	10000	
Sr	88	45	1	He	118.006	118.006	10.45	702214	0.02	10000	
Mo	95	103	1	He	1.071	1.071	16.58	2961	0.04	2000	
Ag	107	103	1	He	0.004	0.004	30.78	41	0.01	300	
Cd	111	115	1	He	-0.073	-0.073	-11.60	1558	0.00	4000	
Sn	118	115	1	He	0.294	0.294	7.32	1793	0.02	2000	
Sb	123	165	1	He	0.062	0.062	8.48	384	0.02	300	
Ba	137	115	1	He	18.878	18.878	12.82	36667	0.05	10000	
W	182	159	1	He	-0.062	-0.062	-34.05	5520	0.00	2500	
Tl	205	165	1	He	0.008	0.008	16.66	360	0.00	5000	
Pb	208	165	1	He	0.337	0.337	10.20	12083	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1226192	1.87	1261090	97.23	30	120	
Sc	45	1	He	809982	8.81	955958	84.73	30	120	
Sc	45	2	NoGas	7400767	1.35	7862387	94.13	30	120	
Rh	103	1	He	2375959	11.43	2873429	82.69	30	120	
In	115	1	He	1603920	10.17	1922589	83.42	30	120	
Tb	159	1	He	4277155	10.48	4725151	90.52	30	120	
Ho	165	1	He	4378232	10.16	4813140	90.96	30	120	
Bi	209	1	He	3147497	9.44	3617562	87.01	30	120	

Sample Report

Sample Table

Sample Name	240-50354-b-2-d
Data File Name	037SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T12:18:18-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	9.857	9.857	1.13	173633	0.01	10000	
Be	9	6	2	NoGas	0.035	0.035	33.04	274	0.01	10000	
B	11	6	2	NoGas	44.338	44.338	1.92	99448	0.04	300	
Na	23	45	1	He	130551.338	130551.338	10.06	128832921	0.10	500000	
Mg	24	45	1	He	14945.637	14945.637	10.34	8651524	0.17	500000	
Al	27	45	1	He	3.363	3.363	16.04	1827	0.18	200000	
K	39	45	1	He	2975.342	2975.342	9.40	1879892	0.16	500000	
Ca	44	45	1	He	41914.851	41914.851	9.90	1452473	2.89	500000	
Ti	47	45	1	He	0.148	0.148	19.28	34	0.43	2500	
V	51	45	1	He	6.307	6.307	11.57	64207	0.01	10000	
Cr	52	45	1	He	1.422	1.422	11.90	10292	0.01	10000	
Mn	55	45	1	He	0.400	0.400	19.82	3859	0.01	10000	
Fe	56	45	1	He	15.756	15.756	12.20	92053	0.02	200000	
Co	59	45	1	He	0.044	0.044	38.07	400	0.01	10000	
Ni	60	45	1	He	0.440	0.440	18.55	1765	0.02	10000	
Cu	63	45	1	He	1.592	1.592	7.23	8752	0.02	10000	
Zn	66	45	1	He	7.955	7.955	13.19	11031	0.07	10000	
As	75	115	1	He	2.005	2.005	14.09	1952	0.10	10000	
Se	78	115	1	He	0.149	0.149	50.60	56	0.26	10000	
Sr	88	45	1	He	113.457	113.457	9.92	716263	0.02	10000	
Mo	95	103	1	He	0.941	0.941	11.54	2808	0.03	2000	
Ag	107	103	1	He	0.004	0.004	53.50	42	0.01	300	
Cd	111	115	1	He	-0.045	-0.045	-17.06	1681	0.00	4000	
Sn	118	115	1	He	0.378	0.378	30.50	2208	0.02	2000	
Sb	123	165	1	He	0.056	0.056	21.72	374	0.01	300	
Ba	137	115	1	He	18.041	18.041	12.14	36788	0.05	10000	
W	182	159	1	He	-0.051	-0.051	-113.01	6046	0.00	2500	
Tl	205	165	1	He	0.006	0.006	5.60	327	0.00	5000	
Pb	208	165	1	He	0.281	0.281	11.57	10840	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1202985	0.64	1261090	95.39	30	120	
Sc	45	1	He	858830	8.46	955958	89.84	30	120	
Sc	45	2	NoGas	7504782	1.16	7862387	95.45	30	120	
Rh	103	1	He	2546817	9.44	2873429	88.63	30	120	
In	115	1	He	1683150	10.22	1922589	87.55	30	120	
Tb	159	1	He	4554186	8.41	4725151	96.38	30	120	
Ho	165	1	He	4662072	9.34	4813140	96.86	30	120	
Bi	209	1	He	3356687	7.37	3617562	92.79	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2026839
Data File Name	038_CCV.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T12:21:53-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	48.955	0.794	645368	0.68	50	97.9	89.5	110.5	
Be	9	6	2	NoGas	46.820	1.869	166658	1.47	50	93.6	89.5	110.5	
B	11	6	2	NoGas	49.066	0.899	107616	0.53	50	98.1	89.5	110.5	
Na	23	45	1	He	25394.430	0.426	26301567	1.98	25000	101.6	89.5	110.5	
Mg	24	45	1	He	25403.303	0.228	15421517	1.78	25000	101.6	89.5	110.5	
Al	27	45	1	He	245.814	0.465	92309	1.97	250	98.3	89.5	110.5	
K	39	45	1	He	24994.825	0.285	16175350	1.97	25000	100.0	89.5	110.5	
Ca	44	45	1	He	24439.583	0.080	888347	1.86	25000	97.8	89.5	110.5	
Ti	47	45	1	He	51.299	4.446	10163	5.85	50	102.6	89.5	110.5	
V	51	45	1	He	50.754	0.445	489568	2.23	50	101.5	89.5	110.5	
Cr	52	45	1	He	49.919	0.203	296877	1.84	50	99.8	89.5	110.5	
Mn	55	45	1	He	248.970	0.504	1168750	2.29	250	99.6	89.5	110.5	
Fe	56	45	1	He	12418.680	0.069	69689108	1.86	12500	99.3	89.5	110.5	
Co	59	45	1	He	50.063	0.373	412790	2.12	50	100.1	89.5	110.5	
Ni	60	45	1	He	50.542	0.624	102882	2.07	50	101.1	89.5	110.5	
Cu	63	45	1	He	50.803	0.396	270546	2.03	50	101.6	89.5	110.5	
Zn	66	45	1	He	50.342	1.284	62994	1.14	50	100.7	89.5	110.5	
As	75	115	1	He	48.841	1.066	46640	1.66	50	97.7	89.5	110.5	
Se	78	115	1	He	48.586	0.518	4077	0.51	50	97.2	89.5	110.5	
Sr	88	45	1	He	49.931	0.541	330663	2.28	50	99.9	89.5	110.5	
Mo	95	103	1	He	52.269	1.966	159521	2.90	50	104.5	89.5	110.5	
Ag	107	103	1	He	51.273	0.967	494169	2.02	50	102.5	89.5	110.5	
Cd	111	115	1	He	49.987	1.082	91780	1.81	50	100.0	89.5	110.5	
Sn	118	115	1	He	49.785	1.165	223675	1.89	50	99.6	89.5	110.5	
Sb	123	165	1	He	49.400	0.722	255313	1.80	50	98.8	89.5	110.5	
Ba	137	115	1	He	49.620	0.926	108332	1.66	50	99.2	89.5	110.5	
W	182	159	1	He	50.030	2.066	587135	2.52	50	100.1	89.5	110.5	
Tl	205	165	1	He	50.553	0.546	1390182	1.79	50	101.1	89.5	110.5	
Pb	208	165	1	He	50.693	0.378	1899932	1.56	50	101.4	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1188487	0.40	1261090	94.24	30	120	
Sc	45	1	He	895620	1.80	955958	93.69	30	120	
Sc	45	2	NoGas	7367955	0.88	7862387	93.71	30	120	
Rh	103	1	He	2632678	1.07	2873429	91.62	30	120	
In	115	1	He	1788217	0.76	1922589	93.01	30	120	
Tb	159	1	He	4732965	0.72	4725151	100.17	30	120	
Ho	165	1	He	4800742	1.24	4813140	99.74	30	120	
Bi	209	1	He	3526944	1.05	3617562	97.50	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	039_CCB.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T12:25:28-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	0.050	137.2	51755	1.7	2	
Be	9	6	2	NoGas	0.061	72.4	374	42.5	1	
B	11	6	2	NoGas	0.800	32.6	12442	1.8	20	
Na	23	45	1	He	45.972	6.1	71435	4.1	1000	
Mg	24	45	1	He	-0.042	-1835.9	2982	15.0	1000	
Al	27	45	1	He	0.247	13.6	746	2.6	50	
K	39	45	1	He	9.851	12.1	56853	0.7	1000	
Ca	44	45	1	He	27.119	7.7	1685	3.6	1000	
Ti	47	45	1	He	0.156	71.6	37	59.6	20	
V	51	45	1	He	0.031	203.8	7635	8.6	2	
Cr	52	45	1	He	0.041	23.7	2610	2.5	2	
Mn	55	45	1	He	0.394	7.5	3969	2.7	2	
Fe	56	45	1	He	13.868	16.5	85059	15.6	50	
Co	59	45	1	He	0.005	78.0	103	29.6	1	
Ni	60	45	1	He	-0.221	-15.4	511	14.1	2	
Cu	63	45	1	He	0.045	30.7	931	6.8	2	
Zn	66	45	1	He	1.717	5.8	3960	3.1	20	
As	75	115	1	He	0.088	38.0	275	10.2	2	
Se	78	115	1	He	0.160	69.7	63	13.8	2	
Sr	88	45	1	He	0.024	48.5	301	26.0	10	
Mo	95	103	1	He	0.326	25.3	1105	26.3	2	
Ag	107	103	1	He	0.005	46.6	58	37.1	0.2	
Cd	111	115	1	He	-0.061	-67.2	1804	2.5	0.2	
Sn	118	115	1	He	0.384	17.8	2474	12.1	10	
Sb	123	165	1	He	0.139	20.6	809	17.4	2	
Ba	137	115	1	He	0.015	95.8	68	46.7	5	
W	182	159	1	He	0.674	14.6	14566	9.7	10	
Tl	205	165	1	He	0.110	2.4	3180	2.8	0.5	
Pb	208	165	1	He	0.088	6.1	3959	4.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1230461	2.54	1261090	97.57	30	120	
Sc	45	1	He	885256	0.98	955958	92.60	30	120	
Sc	45	2	NoGas	7424785	0.40	7862387	94.43	30	120	
Rh	103	1	He	2767007	2.60	2873429	96.30	30	120	
In	115	1	He	1837231	1.82	1922589	95.56	30	120	
Tb	159	1	He	4698621	2.02	4725151	99.44	30	120	
Ho	165	1	He	4750719	1.59	4813140	98.70	30	120	
Bi	209	1	He	3636332	1.59	3617562	100.52	30	120	

Sample Report

Sample Table

Sample Name	240-50354-b-3-d
Data File Name	040SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T12:29:06-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	10.162	10.162	0.80	171117	0.01	10000	
Be	9	6	2	NoGas	0.036	0.036	35.70	270	0.01	10000	
B	11	6	2	NoGas	45.883	45.883	1.58	100157	0.05	300	
Na	23	45	1	He	117649.480	117649.480	5.58	118409647	0.10	500000	
Mg	24	45	1	He	15575.960	15575.960	6.19	9194578	0.17	500000	
Al	27	45	1	He	1.697	1.697	6.62	1263	0.13	200000	
K	39	45	1	He	2838.100	2838.100	5.37	1830455	0.16	500000	
Ca	44	45	1	He	35590.069	35590.069	5.99	1257528	2.83	500000	
Ti	47	45	1	He	0.250	0.250	10.85	54	0.46	2500	
V	51	45	1	He	3.468	3.468	3.91	39382	0.01	10000	
Cr	52	45	1	He	1.337	1.337	4.92	10011	0.01	10000	
Mn	55	45	1	He	0.306	0.306	16.10	3506	0.01	10000	
Fe	56	45	1	He	20.155	20.155	2.79	118074	0.02	200000	
Co	59	45	1	He	0.043	0.043	16.98	410	0.01	10000	
Ni	60	45	1	He	1.230	1.230	2.91	3351	0.04	10000	
Cu	63	45	1	He	13.283	13.283	5.93	69288	0.02	10000	
Zn	66	45	1	He	67.517	67.517	6.71	81502	0.08	10000	
As	75	115	1	He	1.566	1.566	2.84	1606	0.10	10000	
Se	78	115	1	He	0.116	0.116	87.91	55	0.21	10000	
Sr	88	45	1	He	106.662	106.662	5.70	686691	0.02	10000	
Mo	95	103	1	He	0.993	0.993	7.07	2959	0.03	2000	
Ag	107	103	1	He	0.009	0.009	26.70	97	0.01	300	
Cd	111	115	1	He	-0.014	-0.014	-148.21	1768	0.00	4000	
Sn	118	115	1	He	0.608	0.608	9.43	3267	0.02	2000	
Sb	123	165	1	He	0.163	0.163	2.55	918	0.02	300	
Ba	137	115	1	He	19.522	19.522	3.61	40867	0.05	10000	
W	182	159	1	He	0.165	0.165	66.52	8521	0.00	2500	
Tl	205	165	1	He	0.056	0.056	11.95	1670	0.00	5000	
Pb	208	165	1	He	0.505	0.505	6.27	19070	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1174983	0.59	1261090	93.17	30	120	
Sc	45	1	He	872842	5.75	955958	91.31	30	120	
Sc	45	2	NoGas	7238077	0.33	7862387	92.06	30	120	
Rh	103	1	He	2531007	3.81	2873429	88.08	30	120	
In	115	1	He	1715172	3.21	1922589	89.21	30	120	
Tb	159	1	He	4592608	3.27	4725151	97.19	30	120	
Ho	165	1	He	4673209	3.92	4813140	97.09	30	120	
Bi	209	1	He	3392580	2.40	3617562	93.78	30	120	

Sample Report

Sample Table

Sample Name	240-50354-b-4-d
Data File Name	041SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T12:32:42-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	14.531	14.531	20.35	151729	0.01	10000	
Be	9	6	2	NoGas	0.069	0.069	27.15	233	0.03	10000	
B	11	6	2	NoGas	80.237	80.237	36.22	92700	0.09	300	
Na	23	45	1	He	118460.964	118460.964	10.00	117313073	0.10	500000	
Mg	24	45	1	He	16186.447	16186.447	10.63	9399491	0.17	500000	
Al	27	45	1	He	1.024	1.024	16.95	1003	0.10	200000	
K	39	45	1	He	2883.376	2883.376	10.19	1828925	0.16	500000	
Ca	44	45	1	He	35824.269	35824.269	10.51	1245219	2.88	500000	
Ti	47	45	1	He	0.117	0.117	49.30	28	0.42	2500	
V	51	45	1	He	4.538	4.538	15.31	48252	0.01	10000	
Cr	52	45	1	He	1.402	1.402	15.31	10202	0.01	10000	
Mn	55	45	1	He	0.167	0.167	60.33	2811	0.01	10000	
Fe	56	45	1	He	14.763	14.763	12.09	87036	0.02	200000	
Co	59	45	1	He	0.043	0.043	8.32	407	0.01	10000	
Ni	60	45	1	He	2.003	2.003	13.29	4783	0.04	10000	
Cu	63	45	1	He	21.642	21.642	11.47	110555	0.02	10000	
Zn	66	45	1	He	26.159	26.159	11.10	32198	0.08	10000	
As	75	115	1	He	1.731	1.731	15.26	1724	0.10	10000	
Se	78	115	1	He	0.163	0.163	86.06	58	0.28	10000	
Sr	88	45	1	He	107.270	107.270	10.54	679268	0.02	10000	
Mo	95	103	1	He	0.921	0.921	18.16	2727	0.03	2000	
Ag	107	103	1	He	0.007	0.007	16.43	77	0.01	300	
Cd	111	115	1	He	-0.028	-0.028	-96.47	1731	0.00	4000	
Sn	118	115	1	He	0.627	0.627	22.80	3282	0.02	2000	
Sb	123	165	1	He	0.236	0.236	21.89	1259	0.02	300	
Ba	137	115	1	He	19.730	19.730	11.67	40654	0.05	10000	
W	182	159	1	He	0.019	0.019	198.99	6805	0.00	2500	
Tl	205	165	1	He	0.013	0.013	21.01	531	0.00	5000	
Pb	208	165	1	He	3.847	3.847	9.00	139232	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	698741	31.08	1261090	55.41	30	120	
Sc	45	1	He	863152	10.73	955958	90.29	30	120	
Sc	45	2	NoGas	5011736	17.88	7862387	63.74	30	120	
Rh	103	1	He	2538919	10.26	2873429	88.36	30	120	
In	115	1	He	1701862	11.38	1922589	88.52	30	120	
Tb	159	1	He	4574840	9.73	4725151	96.82	30	120	
Ho	165	1	He	4639665	8.83	4813140	96.40	30	120	
Bi	209	1	He	3351822	9.18	3617562	92.65	30	120	

Sample Report

Sample Table

Sample Name	240-50354-b-5-d
Data File Name	042SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T12:36:19-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	0.381	0.381	57.67	42667	0.00	10000	
Be	9	6	2	NoGas	0.047	0.047	15.18	267	0.02	10000	
B	11	6	2	NoGas	3.620	3.620	2.88	14873	0.02	300	
Na	23	45	1	He	69.538	69.538	5.17	95175	0.07	500000	
Mg	24	45	1	He	0.612	0.612	160.46	3363	0.02	500000	
Al	27	45	1	He	1.978	1.978	9.95	1378	0.14	200000	
K	39	45	1	He	13.539	13.539	7.36	58978	0.02	500000	
Ca	44	45	1	He	4.336	4.336	14.67	864	0.50	500000	
Ti	47	45	1	He	0.065	0.065	91.67	19	0.35	2500	
V	51	45	1	He	4.450	4.450	1.16	48936	0.01	10000	
Cr	52	45	1	He	1.514	1.514	2.07	11157	0.01	10000	
Mn	55	45	1	He	-0.201	-0.201	-10.71	1209	-0.02	10000	
Fe	56	45	1	He	5.778	5.778	2.62	39981	0.01	200000	
Co	59	45	1	He	0.011	0.011	20.74	150	0.01	10000	
Ni	60	45	1	He	0.086	0.086	18.76	1118	0.01	10000	
Cu	63	45	1	He	0.633	0.633	4.89	4003	0.02	10000	
Zn	66	45	1	He	1.600	1.600	8.11	3805	0.04	10000	
As	75	115	1	He	0.727	0.727	3.70	853	0.09	10000	
Se	78	115	1	He	0.052	0.052	120.76	51	0.10	10000	
Sr	88	45	1	He	0.048	0.048	12.56	452	0.01	10000	
Mo	95	103	1	He	0.042	0.042	53.51	190	0.02	2000	
Ag	107	103	1	He	0.005	0.005	43.23	63	0.01	300	
Cd	111	115	1	He	-0.025	-0.025	-39.74	1775	0.00	4000	
Sn	118	115	1	He	0.330	0.330	7.25	2111	0.02	2000	
Sb	123	165	1	He	0.049	0.049	27.07	343	0.01	300	
Ba	137	115	1	He	0.077	0.077	12.40	197	0.04	10000	
W	182	159	1	He	-0.019	-0.019	-221.42	6465	0.00	2500	
Tl	205	165	1	He	0.010	0.010	17.96	454	0.00	5000	
Pb	208	165	1	He	0.036	0.036	8.57	1989	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1004025	3.34	1261090	79.62	30	120	
Sc	45	1	He	881840	0.36	955958	92.25	30	120	
Sc	45	2	NoGas	5674368	1.17	7862387	72.17	30	120	
Rh	103	1	He	2773111	0.22	2873429	96.51	30	120	
In	115	1	He	1741800	1.51	1922589	90.60	30	120	
Tb	159	1	He	4616028	0.88	4725151	97.69	30	120	
Ho	165	1	He	4666597	0.86	4813140	96.96	30	120	
Bi	209	1	He	3672954	0.62	3617562	101.53	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	lb 240-182417/2-b
Data File Name	043_Blk.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T12:39:56-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	0.191	8.9	51637	0.6	2	
Be	9	6	2	NoGas	0.020	54.6	222	18.0	1	
B	11	6	2	NoGas	5.673	3.2	22144	1.6	20	
Na	23	45	1	He	59.944	25.1	82466	2.0	1000	
Mg	24	45	1	He	0.197	510.1	3004	6.0	1000	
Al	27	45	1	He	2.425	35.7	1485	5.6	50	
K	39	45	1	He	12.458	143.4	56192	0.7	1000	
Ca	44	45	1	He	87.128	24.2	3686	2.0	1000	
Ti	47	45	1	He	0.086	69.8	23	65.5	20	
V	51	45	1	He	3.968	27.5	42630	4.5	2	Blank Failed
Cr	52	45	1	He	1.332	30.2	9695	4.6	2	
Mn	55	45	1	He	-0.066	-113.0	1766	1.2	2	
Fe	56	45	1	He	2.060	40.2	18665	5.6	50	
Co	59	45	1	He	0.014	49.5	169	13.1	1	
Ni	60	45	1	He	-0.043	-253.6	828	8.7	2	
Cu	63	45	1	He	0.377	40.8	2532	11.9	2	
Zn	66	45	1	He	4.915	29.2	7462	3.5	20	
As	75	115	1	He	0.728	27.8	836	4.9	2	
Se	78	115	1	He	0.103	208.2	53	14.6	2	
Sr	88	45	1	He	0.060	35.1	512	15.6	10	
Mo	95	103	1	He	0.048	55.7	192	23.1	2	
Ag	107	103	1	He	0.002	69.1	30	40.1	0.2	
Cd	111	115	1	He	-0.004	-189.5	1819	17.3	0.2	
Sn	118	115	1	He	0.395	36.6	2337	10.4	10	
Sb	123	165	1	He	0.047	31.4	324	5.8	2	
Ba	137	115	1	He	0.073	30.1	187	25.9	5	
W	182	159	1	He	-0.015	-105.4	6498	18.6	10	
Tl	205	165	1	He	0.010	44.5	430	10.9	0.5	
Pb	208	165	1	He	0.042	25.8	2177	3.4	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1214100	0.26	1261090	96.27	30	120	
Sc	45	1	He	871716	19.27	955958	91.19	30	120	
Sc	45	2	NoGas	7168871	0.20	7862387	91.18	30	120	
Rh	103	1	He	2677880	18.88	2873429	93.19	30	120	
In	115	1	He	1747822	16.88	1922589	90.91	30	120	
Tb	159	1	He	4610005	18.62	4725151	97.56	30	120	
Ho	165	1	He	4662211	19.01	4813140	96.86	30	120	
Bi	209	1	He	3699840	18.61	3617562	102.27	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-182576/2-a
Data File Name	044_Blk.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T12:43:33-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	0.663	13.6	48424	4.4	2	
Be	9	6	2	NoGas	0.017	34.2	196	11.8	1	
B	11	6	2	NoGas	8.664	5.6	26327	1.2	20	
Na	23	45	1	He	40.251	6.9	65008	2.1	1000	
Mg	24	45	1	He	-0.565	-24.6	2648	4.6	1000	
Al	27	45	1	He	-0.008	-2935.0	647	13.7	50	
K	39	45	1	He	10.210	38.2	56582	1.9	1000	
Ca	44	45	1	He	-1.750	-110.4	643	8.4	1000	
Ti	47	45	1	He	0.014	75.6	9	21.6	20	
V	51	45	1	He	3.672	2.7	41469	0.8	2	Blank Failed
Cr	52	45	1	He	1.180	3.4	9176	0.4	2	
Mn	55	45	1	He	-0.249	-1.7	983	3.6	2	
Fe	56	45	1	He	0.243	10.4	9364	1.9	50	
Co	59	45	1	He	0.009	57.7	136	28.7	1	
Ni	60	45	1	He	-0.085	-28.0	776	5.7	2	
Cu	63	45	1	He	0.165	8.1	1547	2.1	2	
Zn	66	45	1	He	1.166	3.0	3274	3.5	20	
As	75	115	1	He	0.631	3.2	794	6.3	2	
Se	78	115	1	He	0.019	137.3	50	4.7	2	
Sr	88	45	1	He	0.024	13.5	299	7.4	10	
Mo	95	103	1	He	0.015	82.3	101	38.5	2	
Ag	107	103	1	He	0.002	26.9	33	20.0	0.2	
Cd	111	115	1	He	-0.006	-551.2	1876	0.6	0.2	
Sn	118	115	1	He	0.176	29.1	1489	12.0	10	
Sb	123	165	1	He	0.029	19.8	246	13.0	2	
Ba	137	115	1	He	0.047	18.2	137	15.2	5	
W	182	159	1	He	-0.077	-27.9	5916	6.4	10	
Tl	205	165	1	He	0.004	50.3	287	16.4	0.5	
Pb	208	165	1	He	0.017	20.0	1341	7.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1134443	3.09	1261090	89.96	30	120	
Sc	45	1	He	878077	2.50	955958	91.85	30	120	
Sc	45	2	NoGas	6071158	6.07	7862387	77.22	30	120	
Rh	103	1	He	2719241	1.05	2873429	94.63	30	120	
In	115	1	He	1808813	3.84	1922589	94.08	30	120	
Tb	159	1	He	4702351	2.26	4725151	99.52	30	120	
Ho	165	1	He	4743268	2.63	4813140	98.55	30	120	
Bi	209	1	He	3612518	1.17	3617562	99.86	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-182576/3-a
Data File Name	045_LCS.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T12:47:09-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	2	NoGas	0.067	0.067	146.459	47533	1.94	1000	0.0	79.5	120.5	LCS Failed
Be	9	2	NoGas	910.402	910.402	1.218	3048994	0.99	1000	91.0	79.5	120.5	
B	11	2	NoGas	104.031	104.031	0.669	203839	0.52	100	104.0	79.5	120.5	
Na	23	1	He	10344.950	10344.950	1.164	9567079	0.38	10000	103.4	79.5	120.5	
Mg	24	1	He	10349.550	10349.550	2.024	5603729	0.91	10000	103.5	79.5	120.5	
Al	27	1	He	9527.631	9527.631	2.077	3167822	1.01	10000	95.3	79.5	120.5	
K	39	1	He	9942.676	9942.676	0.514	5765242	0.74	10000	99.4	79.5	120.5	
Ca	44	1	He	9945.243	9945.243	1.000	322735	0.67	10000	99.5	79.5	120.5	
Ti	47	1	He	97.495	97.495	4.684	17207	3.54	100	97.5	79.5	120.5	
V	51	1	He	977.421	977.421	1.124	8285702	0.23	1000	97.7	79.5	120.5	
Cr	52	1	He	981.215	981.215	1.824	5163319	0.69	1000	98.1	79.5	120.5	
Mn	55	1	He	993.719	993.719	0.882	4153739	0.44	1000	99.4	79.5	120.5	
Fe	56	1	He	10135.749	10135.749	1.490	50718148	0.42	10000	101.4	79.5	120.5	
Co	59	1	He	988.877	988.877	1.542	7269105	0.37	1000	98.9	79.5	120.5	
Ni	60	1	He	1028.777	1028.777	1.329	1850713	0.39	1000	102.9	79.5	120.5	
Cu	63	1	He	1009.981	1009.981	1.475	4784024	0.49	1000	101.0	79.5	120.5	
Zn	66	1	He	1008.369	1008.369	1.322	1092627	0.39	1000	100.8	79.5	120.5	
As	75	1	He	928.886	928.886	1.070	800740	0.23	1000	92.9	79.5	120.5	
Se	78	1	He	942.683	942.683	1.288	70878	0.50	1000	94.3	79.5	120.5	
Sr	88	1	He	996.392	996.392	1.789	5881054	1.26	1000	99.6	79.5	120.5	
Mo	95	1	He	102.528	102.528	1.224	291313	0.64	100	102.5	79.5	120.5	
Ag	107	1	He	101.739	101.739	0.798	913081	0.40	100	101.7	79.5	120.5	
Cd	111	1	He	1019.762	1019.762	1.186	1663786	1.20	1000	102.0	79.5	120.5	
Sn	118	1	He	1037.455	1037.455	0.941	4211038	0.14	100	1037.5	79.5	120.5	LCS Failed
Sb	123	1	He	93.120	93.120	0.500	451075	0.33	100	93.1	79.5	120.5	
Ba	137	1	He	1018.575	1018.575	1.098	2014464	0.76	1000	101.9	79.5	120.5	
W	182	1	He	101.110	101.110	1.439	1103541	1.26	100	101.1	79.5	120.5	
Tl	205	1	He	246.680	246.680	0.832	6358437	0.41	250	98.7	79.5	120.5	
Pb	208	1	He	988.468	988.468	0.647	34717353	0.33	1000	98.8	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1119129	0.77	1261090	88.74	30	120	
Sc	45	1	He	798700	1.18	955958	83.55	30	120	
Sc	45	2	NoGas	6791925	0.85	7862387	86.39	30	120	
Rh	103	1	He	2451829	1.10	2873429	85.33	30	120	
In	115	1	He	1620492	0.86	1922589	84.29	30	120	
Tb	159	1	He	4428117	0.40	4725151	93.71	30	120	
Ho	165	1	He	4500643	0.71	4813140	93.51	30	120	
Bi	209	1	He	3377155	0.96	3617562	93.35	30	120	

Sample Report

Sample Table

Sample Name	500-96124-b-1-i
Data File Name	046SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T12:50:27-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	24.953	24.953	1.20	333858	0.01	10000	
Be	9	6	2	NoGas	0.482	0.482	5.53	1667	0.03	10000	
B	11	6	2	NoGas	680.223	680.223	0.32	1215890	0.06	300	>LDR
Na	23	45	1	He	62509.267	62509.267	4.57	56378574	0.11	500000	
Mg	24	45	1	He	31.035	31.035	8.42	19051	0.16	500000	
Al	27	45	1	He	3.164	3.164	5.49	1606	0.20	200000	
K	39	45	1	He	731811.724	731811.724	4.38	411408621	0.18	500000	>LDR
Ca	44	45	1	He	947104.785	947104.785	5.28	29966723	3.16	500000	>LDR
Ti	47	45	1	He	0.240	0.240	26.06	47	0.51	2500	
V	51	45	1	He	21.653	21.653	7.64	185550	0.01	10000	
Cr	52	45	1	He	41.626	41.626	5.29	216012	0.02	10000	
Mn	55	45	1	He	0.211	0.211	8.18	2754	0.01	10000	
Fe	56	45	1	He	13.899	13.899	10.41	75055	0.02	200000	
Co	59	45	1	He	0.627	0.627	4.98	4570	0.01	10000	
Ni	60	45	1	He	0.745	0.745	7.37	2151	0.03	10000	
Cu	63	45	1	He	2.404	2.404	0.94	11753	0.02	10000	
Zn	66	45	1	He	2062.203	2062.203	3.56	2182293	0.09	10000	
As	75	115	1	He	5.295	5.295	10.28	4356	0.12	10000	
Se	78	115	1	He	6.494	6.494	2.56	491	1.32	10000	
Sr	88	45	1	He	3476.566	3476.566	5.06	20047895	0.02	10000	
Mo	95	103	1	He	203.366	203.366	4.34	524452	0.04	2000	
Ag	107	103	1	He	0.022	0.022	4.28	183	0.01	300	
Cd	111	115	1	He	0.254	0.254	28.26	1945	0.01	4000	
Sn	118	115	1	He	1.836	1.836	5.64	7469	0.02	2000	
Sb	123	165	1	He	0.240	0.240	10.10	1178	0.02	300	
Ba	137	115	1	He	237.986	237.986	5.15	433988	0.05	10000	
W	182	159	1	He	3.706	3.706	7.14	43671	0.01	2500	
Tl	205	165	1	He	0.193	0.193	17.08	4832	0.00	5000	
Pb	208	165	1	He	28.429	28.429	4.01	935810	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1064390	0.32	1261090	84.40	30	120	
Sc	45	1	He	781325	4.03	955958	81.73	30	120	
Sc	45	2	NoGas	6952263	1.17	7862387	88.42	30	120	
Rh	103	1	He	2228032	4.13	2873429	77.54	30	120	
In	115	1	He	1496284	4.36	1922589	77.83	30	120	
Tb	159	1	He	4154221	4.01	4725151	87.92	30	120	
Ho	165	1	He	4219543	3.86	4813140	87.67	30	120	
Bi	209	1	He	2896848	3.26	3617562	80.08	30	120	

Sample Report

Sample Table

Sample Name	SD 500-96124-b-1-i@5
Data File Name	047SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T12:54:02-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	5.194	5.194	0.79	103905	0.00	10000	
Be	9	6	2	NoGas	0.286	0.286	14.96	1037	0.03	10000	
B	11	6	2	NoGas	139.987	139.987	1.29	256034	0.05	300	
Na	23	45	1	He	12888.952	12888.952	1.00	12100645	0.11	500000	
Mg	24	45	1	He	3.947	3.947	7.69	4927	0.08	500000	
Al	27	45	1	He	0.474	0.474	33.90	760	0.06	200000	
K	39	45	1	He	150185.444	150185.444	0.37	87790324	0.17	500000	
Ca	44	45	1	He	191244.145	191244.145	0.59	6291175	3.04	500000	
Ti	47	45	1	He	0.080	0.080	60.72	20	0.40	2500	
V	51	45	1	He	5.319	5.319	1.09	52483	0.01	10000	
Cr	52	45	1	He	8.489	8.489	0.97	47529	0.02	10000	
Mn	55	45	1	He	-0.059	-0.059	-48.18	1713	0.00	10000	
Fe	56	45	1	He	0.842	0.842	4.91	11697	0.01	200000	
Co	59	45	1	He	0.125	0.125	2.66	991	0.01	10000	
Ni	60	45	1	He	-0.087	-0.087	-34.47	712	-0.01	10000	
Cu	63	45	1	He	0.744	0.744	4.04	4216	0.02	10000	
Zn	66	45	1	He	445.971	445.971	0.68	491774	0.09	10000	
As	75	115	1	He	0.826	0.826	8.35	896	0.09	10000	
Se	78	115	1	He	1.228	1.228	19.59	138	0.89	10000	
Sr	88	45	1	He	735.868	735.868	0.39	4411487	0.02	10000	
Mo	95	103	1	He	39.526	39.526	1.10	109484	0.04	2000	
Ag	107	103	1	He	0.009	0.009	35.86	91	0.01	300	
Cd	111	115	1	He	0.110	0.110	35.42	1908	0.01	4000	
Sn	118	115	1	He	0.216	0.216	10.52	1530	0.01	2000	
Sb	123	165	1	He	0.038	0.038	11.66	274	0.01	300	
Ba	137	115	1	He	47.217	47.217	1.24	95268	0.05	10000	
W	182	159	1	He	0.670	0.670	11.76	13554	0.00	2500	
Tl	205	165	1	He	0.041	0.041	8.99	1211	0.00	5000	
Pb	208	165	1	He	6.021	6.021	1.38	209338	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1057781	0.86	1261090	83.88	30	120	
Sc	45	1	He	811144	0.55	955958	84.85	30	120	
Sc	45	2	NoGas	6724510	0.73	7862387	85.53	30	120	
Rh	103	1	He	2389526	0.81	2873429	83.16	30	120	
In	115	1	He	1652838	1.57	1922589	85.97	30	120	
Tb	159	1	He	4387702	0.80	4725151	92.86	30	120	
Ho	165	1	He	4441384	0.92	4813140	92.28	30	120	
Bi	209	1	He	3262730	0.60	3617562	90.19	30	120	

Sample Report

Sample Table

Sample Name	PDS 500-96124-b-1-i
Data File Name	048SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T12:57:37-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	25.171	25.171	0.49	283543	0.01	10000	
Be	9	6	2	NoGas	928.202	928.202	1.28	2513580	0.04	10000	
B	11	6	2	NoGas	791.037	791.037	1.68	1200770	0.07	300	>LDR
Na	23	45	1	He	71298.536	71298.536	0.78	57085920	0.12	500000	
Mg	24	45	1	He	9959.288	9959.288	0.62	4678269	0.21	500000	
Al	27	45	1	He	9480.248	9480.248	0.79	2734559	0.35	200000	
K	39	45	1	He	726803.785	726803.785	0.85	362712667	0.20	500000	>LDR
Ca	44	45	1	He	939038.417	939038.417	1.20	26380939	3.56	500000	>LDR
Ti	47	45	1	He	100.363	100.363	0.89	15370	0.65	2500	
V	51	45	1	He	995.771	995.771	0.91	7322361	0.01	10000	
Cr	52	45	1	He	998.809	998.809	1.46	4559351	0.02	10000	
Mn	55	45	1	He	972.433	972.433	1.80	3525770	0.03	10000	
Fe	56	45	1	He	9680.908	9680.908	0.71	42023853	0.02	200000	
Co	59	45	1	He	941.614	941.614	0.77	6004558	0.02	10000	
Ni	60	45	1	He	947.355	947.355	2.80	1478239	0.06	10000	
Cu	63	45	1	He	932.940	932.940	1.12	3833479	0.02	10000	
Zn	66	45	1	He	2913.344	2913.344	0.35	2735711	0.11	10000	
As	75	115	1	He	1000.172	1000.172	0.52	710079	0.14	10000	
Se	78	115	1	He	1007.193	1007.193	0.33	62367	1.61	10000	
Sr	88	45	1	He	4492.374	4492.374	0.99	23001081	0.02	10000	
Mo	95	103	1	He	312.497	312.497	1.59	720555	0.04	2000	
Ag	107	103	1	He	97.522	97.522	0.51	710384	0.01	300	
Cd	111	115	1	He	972.216	972.216	0.42	1306395	0.07	4000	
Sn	118	115	1	He	1071.842	1071.842	0.24	3583091	0.03	2000	
Sb	123	165	1	He	92.101	92.101	0.98	394414	0.02	300	
Ba	137	115	1	He	1313.552	1313.552	0.62	2139493	0.06	10000	
W	182	159	1	He	106.020	106.020	0.56	1017502	0.01	2500	
Tl	205	165	1	He	238.564	238.564	0.80	5436564	0.00	5000	
Pb	208	165	1	He	970.706	970.706	0.57	30141278	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	904926	0.65	1261090	71.76	30	120	
Sc	45	1	He	692824	1.06	955958	72.47	30	120	
Sc	45	2	NoGas	5860316	0.65	7862387	74.54	30	120	
Rh	103	1	He	1989979	0.90	2873429	69.25	30	120	
In	115	1	He	1334539	0.34	1922589	69.41	30	120	
Tb	159	1	He	3894810	0.66	4725151	82.43	30	120	
Ho	165	1	He	3978883	0.52	4813140	82.67	30	120	
Bi	209	1	He	2741259	1.36	3617562	75.78	30	120	

Sample Report

Sample Table

Sample Name	500-96124-b-1-j ms
Data File Name	049SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T13:00:57-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	26.592	26.592	0.52	292583	0.01	10000	
Be	9	6	2	NoGas	914.562	914.562	1.50	2424435	0.04	10000	
B	11	6	2	NoGas	824.272	824.272	0.40	1224585	0.07	300	>LDR
Na	23	45	1	He	80265.482	80265.482	6.04	57611911	0.14	500000	
Mg	24	45	1	He	10811.330	10811.330	5.96	4552716	0.24	500000	
Al	27	45	1	He	10308.706	10308.706	6.66	2665100	0.39	200000	
K	39	45	1	He	817064.729	817064.729	5.94	365558785	0.22	500000	>LDR
Ca	44	45	1	He	1054550.682	1054550.682	5.71	26563451	3.97	500000	>LDR
Ti	47	45	1	He	108.157	108.157	7.37	14843	0.73	2500	
V	51	45	1	He	1056.035	1056.035	6.44	6960472	0.02	10000	
Cr	52	45	1	He	1064.135	1064.135	6.53	4354095	0.02	10000	
Mn	55	45	1	He	1032.145	1032.145	7.95	3352747	0.03	10000	
Fe	56	45	1	He	10508.996	10508.996	7.25	40877814	0.03	200000	
Co	59	45	1	He	1014.000	1014.000	6.58	5795680	0.02	10000	
Ni	60	45	1	He	997.685	997.685	6.39	1395625	0.07	10000	
Cu	63	45	1	He	994.884	994.884	4.72	3666724	0.03	10000	
Zn	66	45	1	He	3275.349	3275.349	6.52	2756555	0.12	10000	
As	75	115	1	He	1027.762	1027.762	5.16	675668	0.15	10000	
Se	78	115	1	He	1033.965	1033.965	3.94	59307	1.74	10000	
Sr	88	45	1	He	5077.290	5077.290	6.17	23304262	0.02	10000	
Mo	95	103	1	He	340.949	340.949	5.17	725599	0.05	2000	
Ag	107	103	1	He	101.648	101.648	4.43	683512	0.01	300	
Cd	111	115	1	He	1004.053	1004.053	4.67	1249483	0.08	4000	
Sn	118	115	1	He	1132.312	1132.312	5.08	3505156	0.03	2000	
Sb	123	165	1	He	94.706	94.706	4.03	380801	0.02	300	
Ba	137	115	1	He	1389.226	1389.226	5.27	2095256	0.07	10000	
W	182	159	1	He	111.141	111.141	4.73	1001216	0.01	2500	
Tl	205	165	1	He	247.043	247.043	3.74	5286185	0.00	5000	
Pb	208	165	1	He	1007.446	1007.446	3.84	29372768	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	885862	0.68	1261090	70.25	30	120	
Sc	45	1	He	622476	5.58	955958	65.12	30	120	
Sc	45	2	NoGas	5767746	0.22	7862387	73.36	30	120	
Rh	103	1	He	1839339	4.44	2873429	64.01	30	120	
In	115	1	He	1237620	4.33	1922589	64.37	30	120	
Tb	159	1	He	3661176	3.88	4725151	77.48	30	120	
Ho	165	1	He	3739575	3.78	4813140	77.70	30	120	
Bi	209	1	He	2572459	3.62	3617562	71.11	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2026839
Data File Name	050_CCV.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T13:04:17-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	47.570	0.602	511363	0.40	50	95.1	89.5	110.5	
Be	9	6	2	NoGas	49.450	1.418	137952	0.88	50	98.9	89.5	110.5	
B	11	6	2	NoGas	58.998	1.694	99769	2.10	50	118.0	89.5	110.5	CCV Failed
Na	23	45	1	He	25741.332	12.306	21192853	0.69	25000	103.0	89.5	110.5	
Mg	24	45	1	He	25497.046	12.476	12302212	0.82	25000	102.0	89.5	110.5	
Al	27	45	1	He	250.256	13.221	74646	1.50	250	100.1	89.5	110.5	
K	39	45	1	He	25156.983	12.409	12940113	0.71	25000	100.6	89.5	110.5	
Ca	44	45	1	He	24493.368	12.429	707648	0.79	25000	98.0	89.5	110.5	
Ti	47	45	1	He	49.781	14.686	7822	3.20	50	99.6	89.5	110.5	
V	51	45	1	He	50.147	12.640	384512	0.78	50	100.3	89.5	110.5	
Cr	52	45	1	He	50.447	12.526	238450	0.86	50	100.9	89.5	110.5	
Mn	55	45	1	He	254.066	12.742	947671	1.07	250	101.6	89.5	110.5	
Fe	56	45	1	He	12715.632	12.825	56697316	1.16	12500	101.7	89.5	110.5	
Co	59	45	1	He	50.939	12.084	333935	0.71	50	101.9	89.5	110.5	
Ni	60	45	1	He	50.775	13.074	82110	1.44	50	101.6	89.5	110.5	
Cu	63	45	1	He	52.140	12.352	220712	1.07	50	104.3	89.5	110.5	
Zn	66	45	1	He	52.595	12.348	52269	0.65	50	105.2	89.5	110.5	
As	75	115	1	He	47.787	12.147	38086	0.90	50	95.6	89.5	110.5	
Se	78	115	1	He	48.101	12.894	3367	2.20	50	96.2	89.5	110.5	
Sr	88	45	1	He	52.091	11.779	274324	0.67	50	104.2	89.5	110.5	
Mo	95	103	1	He	51.878	13.694	134929	1.51	50	103.8	89.5	110.5	
Ag	107	103	1	He	50.231	12.929	412852	0.93	50	100.5	89.5	110.5	
Cd	111	115	1	He	50.701	12.261	77670	0.81	50	101.4	89.5	110.5	
Sn	118	115	1	He	51.579	11.887	193411	0.86	50	103.2	89.5	110.5	
Sb	123	165	1	He	47.990	13.333	217243	1.22	50	96.0	89.5	110.5	
Ba	137	115	1	He	51.162	12.863	93169	1.88	50	102.3	89.5	110.5	
W	182	159	1	He	51.411	13.288	528152	1.00	50	102.8	89.5	110.5	
Tl	205	165	1	He	51.320	12.371	1237158	1.01	50	102.6	89.5	110.5	
Pb	208	165	1	He	51.532	12.740	1692526	0.76	50	103.1	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	931502	0.85	1261090	73.86	30	120	
Sc	45	1	He	718900	11.84	955958	75.20	30	120	
Sc	45	2	NoGas	5994339	0.88	7862387	76.24	30	120	
Rh	103	1	He	2269121	12.33	2873429	78.97	30	120	
In	115	1	He	1506433	11.58	1922589	78.35	30	120	
Tb	159	1	He	4190869	12.71	4725151	88.69	30	120	
Ho	165	1	He	4251223	12.30	4813140	88.33	30	120	
Bi	209	1	He	3169680	11.52	3617562	87.62	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	051_CCB.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T13:07:52-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.021	-187.8	41778	0.9	2	
Be	9	6	2	NoGas	0.609	9.3	1885	9.1	1	
B	11	6	2	NoGas	4.942	8.1	16490	3.3	20	
Na	23	45	1	He	72.078	8.6	83429	2.7	1000	
Mg	24	45	1	He	-0.157	-343.5	2474	7.7	1000	
Al	27	45	1	He	0.065	391.0	576	10.0	50	
K	39	45	1	He	58.258	12.9	74598	2.1	1000	
Ca	44	45	1	He	38.561	2.8	1786	4.9	1000	
Ti	47	45	1	He	0.138	89.8	28	70.3	20	
V	51	45	1	He	-0.141	-90.1	5111	16.9	2	
Cr	52	45	1	He	0.043	53.9	2230	4.5	2	
Mn	55	45	1	He	0.413	10.5	3451	0.8	2	
Fe	56	45	1	He	13.875	11.7	72555	13.6	50	
Co	59	45	1	He	0.036	20.4	308	21.3	1	
Ni	60	45	1	He	-0.244	-26.4	392	24.1	2	
Cu	63	45	1	He	0.579	5.9	3176	3.0	2	
Zn	66	45	1	He	1.947	12.7	3603	4.8	20	
As	75	115	1	He	0.206	32.8	345	20.7	2	
Se	78	115	1	He	0.272	39.1	64	16.7	2	
Sr	88	45	1	He	0.099	17.6	678	19.0	10	
Mo	95	103	1	He	0.470	31.6	1376	32.7	2	
Ag	107	103	1	He	0.012	39.6	116	36.1	0.2	
Cd	111	115	1	He	0.067	9.5	1798	3.8	0.2	
Sn	118	115	1	He	0.529	13.8	2763	10.0	10	
Sb	123	165	1	He	0.164	3.3	859	2.4	2	
Ba	137	115	1	He	0.025	30.5	79	14.8	5	
W	182	159	1	He	0.854	12.1	15108	9.7	10	
Tl	205	165	1	He	0.161	5.4	4187	3.0	0.5	
Pb	208	165	1	He	0.147	9.1	5624	5.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	968997	1.26	1261090	76.84	30	120	
Sc	45	1	He	753925	4.31	955958	78.87	30	120	
Sc	45	2	NoGas	6096150	0.53	7862387	77.54	30	120	
Rh	103	1	He	2426461	2.73	2873429	84.44	30	120	
In	115	1	He	1618411	4.37	1922589	84.18	30	120	
Tb	159	1	He	4265288	2.76	4725151	90.27	30	120	
Ho	165	1	He	4357214	3.01	4813140	90.53	30	120	
Bi	209	1	He	3289304	2.64	3617562	90.93	30	120	

Sample Report

Sample Table

Sample Name	500-96124-b-1-k msd
Data File Name	052SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T13:11:31-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	25.188	25.188	0.10	266984	0.01	10000	
Be	9	6	2	NoGas	890.903	890.903	0.98	2248558	0.04	10000	
B	11	6	2	NoGas	802.465	802.465	1.41	1135201	0.07	300	>LDR
Na	23	45	1	He	72132.465	72132.465	1.21	55008129	0.13	500000	
Mg	24	45	1	He	9553.463	9553.463	0.73	4274520	0.22	500000	
Al	27	45	1	He	9144.036	9144.036	0.86	2512244	0.36	200000	
K	39	45	1	He	740677.590	740677.590	1.03	352077608	0.21	500000	>LDR
Ca	44	45	1	He	961910.360	961910.360	0.65	25741225	3.74	500000	>LDR
Ti	47	45	1	He	96.547	96.547	0.75	14083	0.69	2500	
V	51	45	1	He	957.725	957.725	1.05	6708287	0.01	10000	
Cr	52	45	1	He	962.687	962.687	1.24	4185894	0.02	10000	
Mn	55	45	1	He	928.800	928.800	1.14	3207798	0.03	10000	
Fe	56	45	1	He	9337.827	9337.827	0.91	38609114	0.02	200000	
Co	59	45	1	He	907.071	907.071	0.83	5509524	0.02	10000	
Ni	60	45	1	He	899.793	899.793	1.16	1337527	0.07	10000	
Cu	63	45	1	He	893.363	893.363	0.54	3496643	0.03	10000	
Zn	66	45	1	He	2944.009	2944.009	1.27	2633159	0.11	10000	
As	75	115	1	He	954.751	954.751	0.46	655432	0.15	10000	
Se	78	115	1	He	960.882	960.882	0.57	57535	1.67	10000	
Sr	88	45	1	He	4600.468	4600.468	1.07	22435591	0.02	10000	
Mo	95	103	1	He	311.014	311.014	0.62	692036	0.04	2000	
Ag	107	103	1	He	93.206	93.206	1.32	655107	0.01	300	
Cd	111	115	1	He	929.173	929.173	0.42	1207347	0.08	4000	
Sn	118	115	1	He	1040.554	1040.554	0.74	3363487	0.03	2000	
Sb	123	165	1	He	88.179	88.179	0.62	365587	0.02	300	
Ba	137	115	1	He	1266.451	1266.451	0.57	1994591	0.06	10000	
W	182	159	1	He	100.000	100.000	0.19	941030	0.01	2500	
Tl	205	165	1	He	228.812	228.812	0.79	5048154	0.00	5000	
Pb	208	165	1	He	931.380	931.380	0.21	27998587	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	843353	0.23	1261090	66.87	30	120	
Sc	45	1	He	659898	0.82	955958	69.03	30	120	
Sc	45	2	NoGas	5514726	1.07	7862387	70.14	30	120	
Rh	103	1	He	1920229	1.05	2873429	66.83	30	120	
In	115	1	He	1290424	0.60	1922589	67.12	30	120	
Tb	159	1	He	3817604	0.17	4725151	80.79	30	120	
Ho	165	1	He	3852013	0.47	4813140	80.03	30	120	
Bi	209	1	He	2701954	1.22	3617562	74.69	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2026839
Data File Name	053_CCV.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T13:14:53-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	47.266	0.894	495004	0.42	50	94.5	89.5	110.5	
Be	9	6	2	NoGas	48.950	1.694	132057	1.14	50	97.9	89.5	110.5	
B	11	6	2	NoGas	57.308	0.972	93950	2.19	50	114.6	89.5	110.5	CCV Failed
Na	23	45	1	He	25797.603	2.745	20325530	0.38	25000	103.2	89.5	110.5	
Mg	24	45	1	He	25784.382	3.116	11906943	0.64	25000	103.1	89.5	110.5	
Al	27	45	1	He	250.299	2.483	71497	0.31	250	100.1	89.5	110.5	
K	39	45	1	He	25360.396	1.759	12486355	0.80	25000	101.4	89.5	110.5	
Ca	44	45	1	He	24823.784	2.090	686479	0.44	25000	99.3	89.5	110.5	
Ti	47	45	1	He	50.340	4.239	7583	2.23	50	100.7	89.5	110.5	
V	51	45	1	He	50.908	2.065	373567	0.53	50	101.8	89.5	110.5	
Cr	52	45	1	He	50.800	2.701	229799	0.24	50	101.6	89.5	110.5	
Mn	55	45	1	He	254.377	2.422	908374	0.14	250	101.8	89.5	110.5	
Fe	56	45	1	He	12730.295	3.058	54341581	0.53	12500	101.8	89.5	110.5	
Co	59	45	1	He	50.946	2.102	319585	0.44	50	101.9	89.5	110.5	
Ni	60	45	1	He	50.507	2.250	78219	0.70	50	101.0	89.5	110.5	
Cu	63	45	1	He	52.386	2.926	212197	0.42	50	104.8	89.5	110.5	
Zn	66	45	1	He	52.433	3.659	49852	1.50	50	104.9	89.5	110.5	
As	75	115	1	He	48.179	2.708	36639	0.34	50	96.4	89.5	110.5	
Se	78	115	1	He	48.029	1.940	3210	1.03	50	96.1	89.5	110.5	
Sr	88	45	1	He	52.198	2.862	262943	0.49	50	104.4	89.5	110.5	
Mo	95	103	1	He	52.224	1.082	129323	0.13	50	104.4	89.5	110.5	
Ag	107	103	1	He	50.511	0.875	395032	0.41	50	101.0	89.5	110.5	
Cd	111	115	1	He	51.215	2.597	74845	0.12	50	102.4	89.5	110.5	
Sn	118	115	1	He	52.614	2.661	188204	0.73	50	105.2	89.5	110.5	
Sb	123	165	1	He	48.186	2.253	210726	0.47	50	96.4	89.5	110.5	
Ba	137	115	1	He	51.449	2.078	89455	0.36	50	102.9	89.5	110.5	
W	182	159	1	He	51.176	2.623	505685	0.74	50	102.4	89.5	110.5	
Tl	205	165	1	He	51.156	2.411	1190310	0.71	50	102.3	89.5	110.5	
Pb	208	165	1	He	51.216	1.949	1624310	0.31	50	102.4	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	900857	1.53	1261090	71.43	30	120	
Sc	45	1	He	681637	2.49	955958	71.30	30	120	
Sc	45	2	NoGas	5836814	0.41	7862387	74.24	30	120	
Rh	103	1	He	2136526	1.08	2873429	74.35	30	120	
In	115	1	He	1424648	2.39	1922589	74.10	30	120	
Tb	159	1	He	3987664	1.84	4725151	84.39	30	120	
Ho	165	1	He	4063518	2.01	4813140	84.43	30	120	
Bi	209	1	He	3030868	1.19	3617562	83.78	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	054_CCB.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T13:18:29-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.010	-524.7	41295	0.8	2	
Be	9	6	2	NoGas	0.568	10.6	1752	8.4	1	
B	11	6	2	NoGas	4.189	6.4	15151	1.4	20	
Na	23	45	1	He	67.583	8.1	75503	4.2	1000	
Mg	24	45	1	He	-0.644	-131.8	2115	18.2	1000	
Al	27	45	1	He	0.239	110.5	600	13.5	50	
K	39	45	1	He	76.538	8.1	80248	3.0	1000	
Ca	44	45	1	He	41.738	8.7	1785	4.9	1000	
Ti	47	45	1	He	0.187	18.5	34	14.8	20	
V	51	45	1	He	-0.101	-50.9	5170	9.4	2	
Cr	52	45	1	He	0.024	74.4	2028	4.5	2	
Mn	55	45	1	He	0.433	3.5	3354	2.2	2	
Fe	56	45	1	He	13.669	15.6	67890	16.0	50	
Co	59	45	1	He	0.034	9.8	276	9.9	1	
Ni	60	45	1	He	-0.230	-9.4	398	9.0	2	
Cu	63	45	1	He	0.524	7.1	2781	4.7	2	
Zn	66	45	1	He	1.942	7.9	3418	5.5	20	
As	75	115	1	He	0.216	26.9	337	13.8	2	
Se	78	115	1	He	0.427	20.9	72	8.5	2	
Sr	88	45	1	He	0.097	8.5	626	5.2	10	
Mo	95	103	1	He	0.449	33.1	1252	32.9	2	
Ag	107	103	1	He	0.013	28.2	116	26.2	0.2	
Cd	111	115	1	He	0.099	32.4	1769	2.1	0.2	
Sn	118	115	1	He	0.567	7.7	2793	6.2	10	
Sb	123	165	1	He	0.166	4.6	833	4.6	2	
Ba	137	115	1	He	0.046	48.4	116	34.8	5	
W	182	159	1	He	0.819	9.3	14255	6.8	10	
Tl	205	165	1	He	0.157	7.3	3905	6.3	0.5	
Pb	208	165	1	He	0.159	3.3	5800	2.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	961264	1.41	1261090	76.22	30	120	
Sc	45	1	He	715083	1.82	955958	74.80	30	120	
Sc	45	2	NoGas	6010253	0.60	7862387	76.44	30	120	
Rh	103	1	He	2312119	1.40	2873429	80.47	30	120	
In	115	1	He	1547389	2.22	1922589	80.48	30	120	
Tb	159	1	He	4126606	1.39	4725151	87.33	30	120	
Ho	165	1	He	4176026	1.06	4813140	86.76	30	120	
Bi	209	1	He	3216467	2.26	3617562	88.91	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-2012498
Data File Name	055CRI.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T13:22:10-04:00
Sample Type	CRI
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	2	NoGas	5.580	5.580	6.850	128334	1.34	8	69.8	49.5	150.5	
Be	9	2	NoGas	1.067	1.067	8.256	3956	8.03	1	106.7	49.5	150.5	
B	11	2	NoGas	16.644	16.644	6.575	43544	1.53	20	83.2	49.5	150.5	
Na	23	1	He	1113.589	1113.589	3.456	973246	0.20	1000	111.4	49.5	150.5	
Mg	24	1	He	1076.608	1076.608	2.834	542926	0.58	1000	107.7	49.5	150.5	
Al	27	1	He	50.881	50.881	1.557	16241	1.86	50	101.8	49.5	150.5	
K	39	1	He	1117.748	1117.748	3.504	638566	0.12	1000	111.8	49.5	150.5	
Ca	44	1	He	1026.242	1026.242	4.737	31409	1.77	1000	102.6	49.5	150.5	
Ti	47	1	He	10.593	10.593	0.205	1740	3.17	10	105.9	49.5	150.5	
V	51	1	He	3.792	3.792	6.646	35910	2.45	5	75.8	49.5	150.5	
Cr	52	1	He	2.270	2.270	3.286	13062	1.68	2	113.5	49.5	150.5	
Mn	55	1	He	5.013	5.013	3.031	21220	1.74	5	100.3	49.5	150.5	
Fe	56	1	He	110.232	110.232	2.604	518313	0.82	100	110.2	49.5	150.5	
Co	59	1	He	1.089	1.089	6.230	7474	2.87	1	108.9	49.5	150.5	
Ni	60	1	He	2.028	2.028	4.055	4177	1.05	2	101.4	49.5	150.5	
Cu	63	1	He	2.526	2.526	4.824	11674	1.76	2	126.3	49.5	150.5	
Zn	66	1	He	21.584	21.584	5.535	23239	2.59	20	107.9	49.5	150.5	
As	75	1	He	4.903	4.903	5.256	4343	1.25	5	98.1	49.5	150.5	
Se	78	1	He	4.934	4.934	8.459	409	3.75	5	98.7	49.5	150.5	
Sr	88	1	He	10.722	10.722	1.716	58828	1.65	10	107.2	49.5	150.5	
Mo	95	1	He	10.326	10.326	4.123	28676	1.24	10	103.3	49.5	150.5	
Ag	107	1	He	1.059	1.059	4.894	9280	1.93	1	105.9	49.5	150.5	
Cd	111	1	He	0.985	0.985	10.115	3260	1.57	1	98.5	49.5	150.5	
Sn	118	1	He	10.600	10.600	3.408	43170	1.27	10	106.0	49.5	150.5	
Sb	123	1	He	2.075	2.075	2.364	9635	1.02	2	103.8	49.5	150.5	
Ba	137	1	He	5.231	5.231	5.018	10260	2.08	5	104.6	49.5	150.5	
W	182	1	He	10.201	10.201	3.899	111032	1.02	10	102.0	49.5	150.5	
Tl	205	1	He	2.124	2.124	4.475	52140	1.08	2	106.2	49.5	150.5	
Pb	208	1	He	1.154	1.154	2.583	39125	1.80	1	115.4	49.5	150.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1193917	4.14	1261090	94.67	30	120	
Sc	45	1	He	741151	3.33	955958	77.53	30	120	
Sc	45	2	NoGas	7987383	4.95	7862387	101.59	30	120	
Rh	103	1	He	2394549	2.92	2873429	83.33	30	120	
In	115	1	He	1604080	3.70	1922589	83.43	30	120	
Tb	159	1	He	4201459	2.63	4725151	88.92	30	120	
Ho	165	1	He	4276494	3.32	4813140	88.85	30	120	
Bi	209	1	He	3283499	1.91	3617562	90.77	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-182080/1-a
Data File Name	056_Blk.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T13:25:46-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	0.076	83.7	43415	1.9	2	
Be	9	6	2	NoGas	0.431	1.6	1411	2.8	1	
B	11	6	2	NoGas	4.170	6.2	15711	1.0	20	
Na	23	45	1	He	130.533	3.3	131564	2.7	1000	
Mg	24	45	1	He	47.617	2.9	26309	3.3	1000	
Al	27	45	1	He	1.225	18.5	921	7.1	50	
K	39	45	1	He	86.710	3.1	88194	1.4	1000	
Ca	44	45	1	He	214.089	2.3	6996	2.0	1000	
Ti	47	45	1	He	0.105	45.7	22	34.7	20	
V	51	45	1	He	2.028	10.2	21977	7.1	2	Blank Failed
Cr	52	45	1	He	1.165	5.0	7633	3.1	2	
Mn	55	45	1	He	0.140	19.3	2327	4.6	2	
Fe	56	45	1	He	15.813	6.0	79826	6.1	50	
Co	59	45	1	He	0.150	5.1	1073	4.4	1	
Ni	60	45	1	He	0.047	179.1	870	15.7	2	
Cu	63	45	1	He	1.301	4.0	6268	3.1	2	
Zn	66	45	1	He	16.207	1.8	17776	1.2	20	
As	75	115	1	He	0.604	4.5	662	4.7	2	
Se	78	115	1	He	0.389	38.4	70	16.5	2	
Sr	88	45	1	He	0.460	8.3	2627	8.0	10	
Mo	95	103	1	He	0.194	40.9	578	37.6	2	
Ag	107	103	1	He	0.012	3.0	110	3.0	0.2	
Cd	111	115	1	He	0.069	52.3	1737	2.1	0.2	
Sn	118	115	1	He	1.630	11.0	6968	8.8	10	
Sb	123	165	1	He	0.125	6.6	662	6.2	2	
Ba	137	115	1	He	0.765	9.3	1486	8.3	5	
W	182	159	1	He	0.409	17.3	10259	8.1	10	
Tl	205	165	1	He	0.099	5.2	2575	4.0	0.5	
Pb	208	165	1	He	0.242	8.1	8669	6.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	998853	1.69	1261090	79.21	30	120	
Sc	45	1	He	737528	0.64	955958	77.15	30	120	
Sc	45	2	NoGas	6189854	1.06	7862387	78.73	30	120	
Rh	103	1	He	2355190	0.39	2873429	81.96	30	120	
In	115	1	He	1560735	1.35	1922589	81.18	30	120	
Tb	159	1	He	4189042	1.15	4725151	88.65	30	120	
Ho	165	1	He	4255971	0.86	4813140	88.42	30	120	
Bi	209	1	He	3343645	0.45	3617562	92.43	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-182080/2-a
Data File Name	057_LCS.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T13:29:23-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	2	NoGas	0.048	0.048	115.135	42111	1.30	1000	0.0	79.5	120.5	LCS Failed
Be	9	2	NoGas	964.398	964.398	0.640	2786349	0.28	1000	96.4	79.5	120.5	
B	11	2	NoGas	105.382	105.382	1.596	178019	1.15	100	105.4	79.5	120.5	
Na	23	1	He	10612.390	10612.390	0.866	8906937	0.48	10000	106.1	79.5	120.5	
Mg	24	1	He	10631.591	10631.591	0.465	5224852	0.36	10000	106.3	79.5	120.5	
Al	27	1	He	9817.809	9817.809	1.094	2962852	0.91	10000	98.2	79.5	120.5	
K	39	1	He	10371.122	10371.122	0.494	5455960	0.31	10000	103.7	79.5	120.5	
Ca	44	1	He	10398.445	10398.445	0.660	306227	0.31	10000	104.0	79.5	120.5	
Ti	47	1	He	99.622	99.622	2.311	15962	1.99	100	99.6	79.5	120.5	
V	51	1	He	997.917	997.917	1.206	7677541	0.88	1000	99.8	79.5	120.5	
Cr	52	1	He	998.906	998.906	0.827	4770896	0.44	1000	99.9	79.5	120.5	
Mn	55	1	He	1016.499	1016.499	0.862	3856193	0.53	1000	101.6	79.5	120.5	
Fe	56	1	He	10437.761	10437.761	1.121	47403664	0.74	10000	104.4	79.5	120.5	
Co	59	1	He	1012.640	1012.640	1.129	6756087	0.74	1000	101.3	79.5	120.5	
Ni	60	1	He	1046.275	1046.275	0.195	1708310	0.55	1000	104.6	79.5	120.5	
Cu	63	1	He	1035.451	1035.451	1.384	4451549	1.26	1000	103.5	79.5	120.5	
Zn	66	1	He	1058.006	1058.006	0.901	1040409	0.58	1000	105.8	79.5	120.5	
As	75	1	He	966.110	966.110	1.404	759012	0.27	1000	96.6	79.5	120.5	
Se	78	1	He	996.097	996.097	1.656	68254	0.40	1000	99.6	79.5	120.5	
Sr	88	1	He	1044.452	1044.452	1.093	5595082	0.76	1000	104.4	79.5	120.5	
Mo	95	1	He	103.360	103.360	1.756	271518	0.58	100	103.4	79.5	120.5	
Ag	107	1	He	102.307	102.307	1.778	848874	0.39	100	102.3	79.5	120.5	
Cd	111	1	He	1049.062	1049.062	1.893	1559729	0.62	1000	104.9	79.5	120.5	
Sn	118	1	He	1081.822	1081.822	1.499	4001867	0.31	100	1081.8	79.5	120.5	LCS Failed
Sb	123	1	He	95.072	95.072	2.137	438238	0.74	100	95.1	79.5	120.5	
Ba	137	1	He	1081.348	1081.348	0.917	1949124	0.38	1000	108.1	79.5	120.5	
W	182	1	He	101.694	101.694	1.149	1046421	0.39	100	101.7	79.5	120.5	
Tl	205	1	He	252.282	252.282	1.538	6188631	0.85	250	100.9	79.5	120.5	
Pb	208	1	He	1012.810	1012.810	1.845	33851478	0.29	1000	101.3	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	965457	0.68	1261090	76.56	30	120	
Sc	45	1	He	724844	0.39	955958	75.82	30	120	
Sc	45	2	NoGas	6043615	0.72	7862387	76.87	30	120	
Rh	103	1	He	2267016	1.40	2873429	78.90	30	120	
In	115	1	He	1476960	1.30	1922589	76.82	30	120	
Tb	159	1	He	4175093	0.82	4725151	88.36	30	120	
Ho	165	1	He	4283619	1.54	4813140	89.00	30	120	
Bi	209	1	He	3195531	0.33	3617562	88.33	30	120	

Sample Report

Sample Table

Sample Name	240-51030-a-2-a
Data File Name	058SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T13:32:45-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	14.870	14.870	0.94	205269	0.01	10000	
Be	9	6	2	NoGas	0.911	0.911	11.62	2800	0.03	10000	
B	11	6	2	NoGas	71.460	71.460	3.42	125723	0.06	300	
Na	23	45	1	He	720283.539	720283.539	0.26	612680376	0.12	500000	>LDR
Mg	24	45	1	He	51051.970	51051.970	0.67	25474836	0.20	500000	
Al	27	45	1	He	41.381	41.381	5.16	13229	0.31	200000	
K	39	45	1	He	7001.856	7001.856	0.40	3755062	0.19	500000	
Ca	44	45	1	He	173545.402	173545.402	0.52	5181609	3.35	500000	
Ti	47	45	1	He	1.213	1.213	19.33	202	0.60	2500	
V	51	45	1	He	4.438	4.438	6.67	40777	0.01	10000	
Cr	52	45	1	He	4.276	4.276	2.64	22709	0.02	10000	
Mn	55	45	1	He	1280.691	1280.691	1.62	4934502	0.03	10000	
Fe	56	45	1	He	229.045	229.045	0.21	1063151	0.02	200000	
Co	59	45	1	He	4.600	4.600	3.13	31223	0.01	10000	
Ni	60	45	1	He	17.309	17.309	0.44	29484	0.06	10000	
Cu	63	45	1	He	1.480	1.480	1.77	7038	0.02	10000	
Zn	66	45	1	He	4.437	4.437	2.19	6008	0.07	10000	
As	75	115	1	He	4.041	4.041	7.68	3284	0.12	10000	
Se	78	115	1	He	1.960	1.960	8.18	171	1.14	10000	
Sr	88	45	1	He	934.345	934.345	0.70	5083832	0.02	10000	
Mo	95	103	1	He	112.834	112.834	0.82	287158	0.04	2000	
Ag	107	103	1	He	0.017	0.017	27.90	146	0.01	300	
Cd	111	115	1	He	0.302	0.302	33.08	1965	0.02	4000	
Sn	118	115	1	He	2.617	2.617	8.13	10118	0.03	2000	
Sb	123	165	1	He	0.603	0.603	5.83	2830	0.02	300	
Ba	137	115	1	He	447.166	447.166	0.43	795688	0.06	10000	
W	182	159	1	He	1.810	1.810	11.01	24464	0.01	2500	
Tl	205	165	1	He	0.253	0.253	15.83	6279	0.00	5000	
Pb	208	165	1	He	0.302	0.302	11.58	10570	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	983350	0.66	1261090	77.98	30	120	
Sc	45	1	He	736223	1.17	955958	77.01	30	120	
Sc	45	2	NoGas	6536604	0.19	7862387	83.14	30	120	
Rh	103	1	He	2196230	2.08	2873429	76.43	30	120	
In	115	1	He	1457880	0.97	1922589	75.83	30	120	
Tb	159	1	He	4157199	0.75	4725151	87.98	30	120	
Ho	165	1	He	4224676	0.74	4813140	87.77	30	120	
Bi	209	1	He	2917940	2.65	3617562	80.66	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2026839
Data File Name	059_CCV.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T13:36:20-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	47.222	1.534	557350	0.49	50	94.4	89.5	110.5	
Be	9	6	2	NoGas	48.982	0.632	148785	0.36	50	98.0	89.5	110.5	
B	11	6	2	NoGas	51.018	0.808	95134	0.50	50	102.0	89.5	110.5	
Na	23	45	1	He	25735.637	3.084	22947385	0.93	25000	102.9	89.5	110.5	
Mg	24	45	1	He	25668.325	3.428	13414080	0.40	25000	102.7	89.5	110.5	
Al	27	45	1	He	249.313	3.810	80584	1.40	250	99.7	89.5	110.5	
K	39	45	1	He	25450.632	3.130	14178425	0.68	25000	101.8	89.5	110.5	
Ca	44	45	1	He	24919.050	3.828	779639	0.26	25000	99.7	89.5	110.5	
Ti	47	45	1	He	50.373	6.290	8582	2.71	50	100.7	89.5	110.5	
V	51	45	1	He	51.149	3.286	424673	0.58	50	102.3	89.5	110.5	
Cr	52	45	1	He	50.462	3.629	258312	0.18	50	100.9	89.5	110.5	
Mn	55	45	1	He	255.751	3.591	1033375	0.58	250	102.3	89.5	110.5	
Fe	56	45	1	He	12694.101	3.740	61316653	0.15	12500	101.6	89.5	110.5	
Co	59	45	1	He	51.106	3.339	362748	0.43	50	102.2	89.5	110.5	
Ni	60	45	1	He	51.222	4.323	89727	0.60	50	102.4	89.5	110.5	
Cu	63	45	1	He	51.789	2.663	237448	1.19	50	103.6	89.5	110.5	
Zn	66	45	1	He	52.081	4.272	56040	0.36	50	104.2	89.5	110.5	
As	75	115	1	He	48.284	1.378	41493	0.38	50	96.6	89.5	110.5	
Se	78	115	1	He	48.334	2.891	3649	1.15	50	96.7	89.5	110.5	
Sr	88	45	1	He	52.388	2.328	298719	1.54	50	104.8	89.5	110.5	
Mo	95	103	1	He	52.539	1.851	143631	1.54	50	105.1	89.5	110.5	
Ag	107	103	1	He	51.192	2.779	441881	0.65	50	102.4	89.5	110.5	
Cd	111	115	1	He	50.200	0.677	82939	1.09	50	100.4	89.5	110.5	
Sn	118	115	1	He	50.344	2.335	203503	0.57	50	100.7	89.5	110.5	
Sb	123	165	1	He	49.534	1.468	235318	1.49	50	99.1	89.5	110.5	
Ba	137	115	1	He	50.936	2.604	100063	1.78	50	101.9	89.5	110.5	
W	182	159	1	He	50.405	2.838	544620	0.29	50	100.8	89.5	110.5	
Tl	205	165	1	He	51.128	1.601	1292314	0.96	50	102.3	89.5	110.5	
Pb	208	165	1	He	51.384	1.553	1770134	0.81	50	102.8	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1014199	0.28	1261090	80.42	30	120	
Sc	45	1	He	771645	3.72	955958	80.72	30	120	
Sc	45	2	NoGas	6578017	0.92	7862387	83.66	30	120	
Rh	103	1	He	2359444	3.29	2873429	82.11	30	120	
In	115	1	He	1609473	1.74	1922589	83.71	30	120	
Tb	159	1	He	4360664	3.06	4725151	92.29	30	120	
Ho	165	1	He	4413796	2.34	4813140	91.70	30	120	
Bi	209	1	He	3290523	2.40	3617562	90.96	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	060_CCB.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T13:39:55-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.095	-43.0	45384	1.3	2	
Be	9	6	2	NoGas	0.402	15.0	1393	13.9	1	
B	11	6	2	NoGas	1.312	18.7	11526	3.3	20	
Na	23	45	1	He	109.879	2.4	124974	2.2	1000	
Mg	24	45	1	He	0.108	499.3	2808	10.7	1000	
Al	27	45	1	He	0.374	166.1	725	29.4	50	
K	39	45	1	He	32.291	7.4	65009	1.9	1000	
Ca	44	45	1	He	32.224	12.5	1708	8.1	1000	
Ti	47	45	1	He	0.087	81.4	21	59.8	20	
V	51	45	1	He	-0.096	-55.5	5882	7.5	2	
Cr	52	45	1	He	0.035	66.1	2356	5.1	2	
Mn	55	45	1	He	0.444	10.5	3835	4.6	2	
Fe	56	45	1	He	13.413	17.2	75327	15.2	50	
Co	59	45	1	He	0.026	14.7	250	10.7	1	
Ni	60	45	1	He	-0.260	-11.7	396	14.3	2	
Cu	63	45	1	He	0.231	14.6	1742	9.5	2	
Zn	66	45	1	He	1.680	3.3	3578	2.2	20	
As	75	115	1	He	0.163	28.0	330	12.9	2	
Se	78	115	1	He	0.133	130.1	57	24.9	2	
Sr	88	45	1	He	0.057	14.3	473	10.0	10	
Mo	95	103	1	He	0.387	24.8	1199	23.9	2	
Ag	107	103	1	He	0.011	35.2	112	33.1	0.2	
Cd	111	115	1	He	-0.033	-126.9	1757	3.6	0.2	
Sn	118	115	1	He	0.406	19.3	2437	14.0	10	
Sb	123	165	1	He	0.154	8.4	851	8.0	2	
Ba	137	115	1	He	0.026	22.2	88	14.4	5	
W	182	159	1	He	0.688	12.1	14085	6.4	10	
Tl	205	165	1	He	0.129	7.0	3536	6.2	0.5	
Pb	208	165	1	He	0.132	3.2	5362	3.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1050723	0.48	1261090	83.32	30	120	
Sc	45	1	He	808714	0.54	955958	84.60	30	120	
Sc	45	2	NoGas	6741841	0.75	7862387	85.75	30	120	
Rh	103	1	He	2559203	1.09	2873429	89.06	30	120	
In	115	1	He	1737431	0.60	1922589	90.37	30	120	
Tb	159	1	He	4496925	0.12	4725151	95.17	30	120	
Ho	165	1	He	4546654	0.64	4813140	94.46	30	120	
Bi	209	1	He	3449715	0.54	3617562	95.36	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-2012498
Data File Name	061CRI.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T13:43:33-04:00
Sample Type	CRI
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	2	NoGas	8.143	8.143	2.673	131023	1.20	8	101.8	49.5	150.5	
Be	9	2	NoGas	1.347	1.347	6.531	4345	7.09	1	134.7	49.5	150.5	
B	11	2	NoGas	20.305	20.305	1.009	44555	1.50	20	101.5	49.5	150.5	
Na	23	1	He	1115.398	1115.398	2.038	1093944	0.29	1000	111.5	49.5	150.5	
Mg	24	1	He	1049.204	1049.204	1.789	593792	0.12	1000	104.9	49.5	150.5	
Al	27	1	He	49.444	49.444	3.281	17719	1.48	50	98.9	49.5	150.5	
K	39	1	He	1070.241	1070.241	1.612	688201	0.25	1000	107.0	49.5	150.5	
Ca	44	1	He	1001.485	1001.485	0.150	34430	1.67	1000	100.1	49.5	150.5	
Ti	47	1	He	10.134	10.134	2.881	1868	4.17	10	101.3	49.5	150.5	
V	51	1	He	3.711	3.711	3.426	39601	1.14	5	74.2	49.5	150.5	
Cr	52	1	He	2.082	2.082	3.928	13624	2.17	2	104.1	49.5	150.5	
Mn	55	1	He	4.906	4.906	1.905	23344	0.31	5	98.1	49.5	150.5	
Fe	56	1	He	106.792	106.792	1.316	563696	0.41	100	106.8	49.5	150.5	
Co	59	1	He	1.043	1.043	3.633	8042	2.53	1	104.3	49.5	150.5	
Ni	60	1	He	1.873	1.873	3.770	4401	4.66	2	93.7	49.5	150.5	
Cu	63	1	He	2.349	2.349	3.470	12235	3.67	2	117.5	49.5	150.5	
Zn	66	1	He	21.092	21.092	0.826	25536	0.98	20	105.5	49.5	150.5	
As	75	1	He	4.800	4.800	1.905	4714	1.40	5	96.0	49.5	150.5	
Se	78	1	He	5.096	5.096	14.383	467	12.31	5	101.9	49.5	150.5	
Sr	88	1	He	10.440	10.440	2.440	64260	0.71	10	104.4	49.5	150.5	
Mo	95	1	He	10.313	10.313	0.567	30831	0.31	10	103.1	49.5	150.5	
Ag	107	1	He	1.050	1.050	6.733	9912	6.53	1	105.0	49.5	150.5	
Cd	111	1	He	0.968	0.968	4.206	3582	1.41	1	96.8	49.5	150.5	
Sn	118	1	He	10.036	10.036	0.315	45299	0.76	10	100.4	49.5	150.5	
Sb	123	1	He	2.115	2.115	0.802	10509	0.27	2	105.8	49.5	150.5	
Ba	137	1	He	4.993	4.993	2.803	10848	2.15	5	99.9	49.5	150.5	
W	182	1	He	9.902	9.902	0.897	116178	0.76	10	99.0	49.5	150.5	
Tl	205	1	He	2.068	2.068	1.193	54342	1.00	2	103.4	49.5	150.5	
Pb	208	1	He	1.130	1.130	1.968	40995	1.41	1	113.0	49.5	150.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1045335	0.82	1261090	82.89	30	120	
Sc	45	1	He	831307	1.70	955958	86.96	30	120	
Sc	45	2	NoGas	6450994	0.85	7862387	82.05	30	120	
Rh	103	1	He	2575629	0.26	2873429	89.64	30	120	
In	115	1	He	1774935	0.70	1922589	92.32	30	120	
Tb	159	1	He	4518894	0.76	4725151	95.63	30	120	
Ho	165	1	He	4574649	0.53	4813140	95.04	30	120	
Bi	209	1	He	3518021	0.40	3617562	97.25	30	120	

Sample Report

Sample Table

Sample Name	240-51038-e-1-a
Data File Name	062SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T13:47:10-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	2.172	2.172	3.30	68923	0.00	10000	
Be	9	6	2	NoGas	0.410	0.410	22.53	1359	0.03	10000	
B	11	6	2	NoGas	39.741	39.741	2.83	75483	0.05	300	
Na	23	45	1	He	242143.306	242143.306	0.98	211398325	0.11	500000	
Mg	24	45	1	He	107243.212	107243.212	1.28	54915535	0.20	500000	
Al	27	45	1	He	263.065	263.065	1.41	83299	0.32	200000	
K	39	45	1	He	3510.018	3510.018	1.31	1953356	0.18	500000	
Ca	44	45	1	He	321280.439	321280.439	1.94	9844427	3.26	500000	
Ti	47	45	1	He	6.005	6.005	1.79	1008	0.60	2500	
V	51	45	1	He	3.284	3.284	5.63	32585	0.01	10000	
Cr	52	45	1	He	2.584	2.584	3.86	14884	0.02	10000	
Mn	55	45	1	He	3024.267	3024.267	1.40	11956036	0.03	10000	
Fe	56	45	1	He	22309.684	22309.684	1.16	105612454	0.02	200000	
Co	59	45	1	He	3.394	3.394	2.54	23660	0.01	10000	
Ni	60	45	1	He	2.858	2.858	4.84	5673	0.05	10000	
Cu	63	45	1	He	1.564	1.564	2.95	7602	0.02	10000	
Zn	66	45	1	He	6.947	6.947	5.54	8733	0.08	10000	
As	75	115	1	He	12.183	12.183	2.01	9777	0.12	10000	
Se	78	115	1	He	0.618	0.618	18.09	82	0.75	10000	
Sr	88	45	1	He	1237.736	1237.736	1.14	6911942	0.02	10000	
Mo	95	103	1	He	5.378	5.378	2.81	13677	0.04	2000	
Ag	107	103	1	He	0.017	0.017	6.06	146	0.01	300	
Cd	111	115	1	He	0.076	0.076	34.80	1664	0.00	4000	
Sn	118	115	1	He	1.284	1.284	7.42	5349	0.02	2000	
Sb	123	165	1	He	0.220	0.220	13.31	1106	0.02	300	
Ba	137	115	1	He	595.562	595.562	0.60	1079582	0.06	10000	
W	182	159	1	He	0.342	0.342	17.49	9600	0.00	2500	
Tl	205	165	1	He	0.113	0.113	2.79	2950	0.00	5000	
Pb	208	165	1	He	0.752	0.752	1.31	25816	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1006354	0.40	1261090	79.80	30	120	
Sc	45	1	He	755608	0.68	955958	79.04	30	120	
Sc	45	2	NoGas	6583969	1.39	7862387	83.74	30	120	
Rh	103	1	He	2187752	0.04	2873429	76.14	30	120	
In	115	1	He	1485190	0.14	1922589	77.25	30	120	
Tb	159	1	He	4200315	0.52	4725151	88.89	30	120	
Ho	165	1	He	4291513	0.38	4813140	89.16	30	120	
Bi	209	1	He	3018850	0.08	3617562	83.45	30	120	

Sample Report

Sample Table

Sample Name	SD 240-51038-e-1-a@5
Data File Name	063SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T13:50:41-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	0.283	0.283	15.32	49555	0.00	10000	
Be	9	6	2	NoGas	0.306	0.306	9.62	1085	0.03	10000	
B	11	6	2	NoGas	8.177	8.177	7.42	23430	0.03	300	
Na	23	45	1	He	48400.166	48400.166	9.41	47028888	0.10	500000	
Mg	24	45	1	He	21575.374	21575.374	10.18	12288186	0.18	500000	
Al	27	45	1	He	52.643	52.643	11.01	19030	0.28	200000	
K	39	45	1	He	704.768	704.768	9.92	474883	0.15	500000	
Ca	44	45	1	He	65361.466	65361.466	9.20	2229049	2.93	500000	
Ti	47	45	1	He	1.172	1.172	28.09	223	0.52	2500	
V	51	45	1	He	0.719	0.719	14.35	13410	0.01	10000	
Cr	52	45	1	He	0.520	0.520	16.15	5139	0.01	10000	
Mn	55	45	1	He	614.051	614.051	10.03	2701388	0.02	10000	
Fe	56	45	1	He	4437.225	4437.225	10.15	23365337	0.02	200000	
Co	59	45	1	He	0.690	0.690	8.10	5405	0.01	10000	
Ni	60	45	1	He	0.327	0.327	29.61	1521	0.02	10000	
Cu	63	45	1	He	0.469	0.469	12.16	2997	0.02	10000	
Zn	66	45	1	He	1.820	1.820	20.42	3875	0.05	10000	
As	75	115	1	He	2.182	2.182	9.26	2203	0.10	10000	
Se	78	115	1	He	0.121	0.121	35.71	57	0.21	10000	
Sr	88	45	1	He	248.157	248.157	11.18	1540276	0.02	10000	
Mo	95	103	1	He	0.996	0.996	4.03	2947	0.03	2000	
Ag	107	103	1	He	0.006	0.006	29.53	63	0.01	300	
Cd	111	115	1	He	-0.005	-0.005	-663.50	1817	0.00	4000	
Sn	118	115	1	He	0.186	0.186	3.97	1489	0.01	2000	
Sb	123	165	1	He	0.050	0.050	14.22	356	0.01	300	
Ba	137	115	1	He	111.563	111.563	8.39	237312	0.05	10000	
W	182	159	1	He	0.075	0.075	65.75	7595	0.00	2500	
Tl	205	165	1	He	0.019	0.019	33.63	693	0.00	5000	
Pb	208	165	1	He	0.189	0.189	9.78	7683	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1045738	1.09	1261090	82.92	30	120	
Sc	45	1	He	845396	9.01	955958	88.43	30	120	
Sc	45	2	NoGas	6736808	0.80	7862387	85.68	30	120	
Rh	103	1	He	2514576	7.25	2873429	87.51	30	120	
In	115	1	He	1749738	7.29	1922589	91.01	30	120	
Tb	159	1	He	4671249	9.14	4725151	98.86	30	120	
Ho	165	1	He	4751755	8.37	4813140	98.72	30	120	
Bi	209	1	He	3424003	7.50	3617562	94.65	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-51038-e-1-a
Data File Name	064SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T13:54:14-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	2.011	2.011	1.94	64308	0.00	10000	
Be	9	6	2	NoGas	952.467	952.467	0.57	2720478	0.04	10000	
B	11	6	2	NoGas	144.420	144.420	0.34	238071	0.06	300	
Na	23	45	1	He	248641.962	248641.962	0.88	213408629	0.12	500000	
Mg	24	45	1	He	116147.699	116147.699	1.47	58472451	0.20	500000	
Al	27	45	1	He	9748.690	9748.690	1.37	3015079	0.32	200000	
K	39	45	1	He	13220.973	13220.973	1.34	7116146	0.19	500000	
Ca	44	45	1	He	327205.069	327205.069	1.10	9857066	3.32	500000	
Ti	47	45	1	He	107.829	107.829	3.02	17707	0.61	2500	
V	51	45	1	He	986.216	986.216	0.41	7776220	0.01	10000	
Cr	52	45	1	He	972.301	972.301	0.27	4759300	0.02	10000	
Mn	55	45	1	He	3939.823	3939.823	0.10	15312532	0.03	10000	
Fe	56	45	1	He	31886.809	31886.809	0.37	148402172	0.02	200000	
Co	59	45	1	He	947.539	947.539	0.40	6478932	0.01	10000	
Ni	60	45	1	He	979.255	979.255	0.78	1638625	0.06	10000	
Cu	63	45	1	He	948.566	948.566	1.32	4179317	0.02	10000	
Zn	66	45	1	He	951.174	951.174	0.32	958763	0.10	10000	
As	75	115	1	He	1002.371	1002.371	0.82	765022	0.13	10000	
Se	78	115	1	He	988.401	988.401	0.83	65795	1.50	10000	
Sr	88	45	1	He	2225.840	2225.840	0.90	12219848	0.02	10000	
Mo	95	103	1	He	115.759	115.759	1.84	289985	0.04	2000	
Ag	107	103	1	He	100.964	100.964	2.05	798889	0.01	300	
Cd	111	115	1	He	1005.136	1005.136	1.15	1451863	0.07	4000	
Sn	118	115	1	He	1084.948	1084.948	0.92	3898923	0.03	2000	
Sb	123	165	1	He	91.956	91.956	0.57	426778	0.02	300	
Ba	137	115	1	He	1691.655	1691.655	1.03	2962003	0.06	10000	
W	182	159	1	He	102.219	102.219	1.26	1054349	0.01	2500	
Tl	205	165	1	He	239.658	239.658	0.92	5918519	0.00	5000	
Pb	208	165	1	He	948.893	948.893	1.42	31929049	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	954399	0.77	1261090	75.68	30	120	
Sc	45	1	He	742849	0.35	955958	77.71	30	120	
Sc	45	2	NoGas	6302779	0.85	7862387	80.16	30	120	
Rh	103	1	He	2162161	2.23	2873429	75.25	30	120	
In	115	1	He	1434730	1.14	1922589	74.62	30	120	
Tb	159	1	He	4185476	1.40	4725151	88.58	30	120	
Ho	165	1	He	4312142	1.14	4813140	89.59	30	120	
Bi	209	1	He	2973455	0.70	3617562	82.19	30	120	

Sample Report

Sample Table

Sample Name	240-51038-e-1-b ms
Data File Name	065SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T13:57:35-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	2.005	2.005	1.83	65855	0.00	10000	
Be	9	6	2	NoGas	1007.319	1007.319	1.36	2890475	0.03	10000	
B	11	6	2	NoGas	150.279	150.279	1.38	248556	0.06	300	
Na	23	45	1	He	252657.102	252657.102	0.10	217529532	0.12	500000	
Mg	24	45	1	He	117998.645	117998.645	1.24	59588349	0.20	500000	
Al	27	45	1	He	10452.587	10452.587	1.80	3242629	0.32	200000	
K	39	45	1	He	13963.064	13963.064	0.67	7536478	0.19	500000	
Ca	44	45	1	He	329826.571	329826.571	0.75	9966664	3.31	500000	
Ti	47	45	1	He	110.911	110.911	1.77	18266	0.61	2500	
V	51	45	1	He	1042.965	1042.965	0.49	8248703	0.01	10000	
Cr	52	45	1	He	1025.717	1025.717	0.97	5036049	0.02	10000	
Mn	55	45	1	He	4031.595	4031.595	0.71	15716859	0.03	10000	
Fe	56	45	1	He	32819.463	32819.463	1.06	153205092	0.02	200000	
Co	59	45	1	He	1003.961	1003.961	0.76	6885624	0.01	10000	
Ni	60	45	1	He	1017.088	1017.088	1.64	1707031	0.06	10000	
Cu	63	45	1	He	998.010	998.010	1.36	4410402	0.02	10000	
Zn	66	45	1	He	994.438	994.438	1.09	1005345	0.10	10000	
As	75	115	1	He	1040.979	1040.979	1.64	807379	0.13	10000	
Se	78	115	1	He	1019.284	1019.284	1.46	68952	1.48	10000	
Sr	88	45	1	He	2296.185	2296.185	0.70	12644829	0.02	10000	
Mo	95	103	1	He	119.750	119.750	0.30	305877	0.04	2000	
Ag	107	103	1	He	102.576	102.576	1.02	827584	0.01	300	
Cd	111	115	1	He	1045.589	1045.589	1.49	1534801	0.07	4000	
Sn	118	115	1	He	1125.032	1125.032	2.11	4108574	0.03	2000	
Sb	123	165	1	He	94.768	94.768	0.48	444116	0.02	300	
Ba	137	115	1	He	1743.226	1743.226	0.77	3102037	0.06	10000	
W	182	159	1	He	106.539	106.539	0.65	1119013	0.01	2500	
Tl	205	165	1	He	250.108	250.108	0.53	6236967	0.00	5000	
Pb	208	165	1	He	997.420	997.420	0.05	33891711	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	958863	0.43	1261090	76.03	30	120	
Sc	45	1	He	745153	1.27	955958	77.95	30	120	
Sc	45	2	NoGas	6460519	0.47	7862387	82.17	30	120	
Rh	103	1	He	2204086	0.64	2873429	76.71	30	120	
In	115	1	He	1458056	0.84	1922589	75.84	30	120	
Tb	159	1	He	4262533	0.36	4725151	90.21	30	120	
Ho	165	1	He	4354057	0.45	4813140	90.46	30	120	
Bi	209	1	He	3018399	0.67	3617562	83.44	30	120	

Sample Report

Sample Table

Sample Name	240-51038-e-1-c msd
Data File Name	066SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T14:00:57-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	1.803	1.803	1.43	64248	0.00	10000	
Be	9	6	2	NoGas	953.123	953.123	0.80	2739623	0.03	10000	
B	11	6	2	NoGas	142.302	142.302	0.58	236208	0.06	300	
Na	23	45	1	He	243536.425	243536.425	0.73	204425607	0.12	500000	
Mg	24	45	1	He	114125.465	114125.465	1.17	56190233	0.20	500000	
Al	27	45	1	He	10007.349	10007.349	1.20	3026871	0.33	200000	
K	39	45	1	He	13279.007	13279.007	0.83	6989966	0.19	500000	
Ca	44	45	1	He	320056.624	320056.624	0.78	9429465	3.39	500000	
Ti	47	45	1	He	106.962	106.962	1.23	17176	0.62	2500	
V	51	45	1	He	991.832	991.832	1.08	7648266	0.01	10000	
Cr	52	45	1	He	982.397	982.397	1.19	4702866	0.02	10000	
Mn	55	45	1	He	3876.040	3876.040	1.66	14732929	0.03	10000	
Fe	56	45	1	He	31695.844	31695.844	1.11	144266039	0.02	200000	
Co	59	45	1	He	956.325	956.325	1.32	6395101	0.01	10000	
Ni	60	45	1	He	990.581	990.581	1.30	1621080	0.06	10000	
Cu	63	45	1	He	960.891	960.891	1.97	4140585	0.02	10000	
Zn	66	45	1	He	960.029	960.029	0.79	946364	0.10	10000	
As	75	115	1	He	1001.501	1001.501	0.86	755541	0.13	10000	
Se	78	115	1	He	982.614	982.614	1.10	64657	1.52	10000	
Sr	88	45	1	He	2204.700	2204.700	0.16	11837209	0.02	10000	
Mo	95	103	1	He	114.617	114.617	1.01	287623	0.04	2000	
Ag	107	103	1	He	99.222	99.222	0.64	786470	0.01	300	
Cd	111	115	1	He	1011.263	1011.263	0.66	1443879	0.07	4000	
Sn	118	115	1	He	1094.464	1094.464	0.67	3887858	0.03	2000	
Sb	123	165	1	He	92.490	92.490	0.96	423875	0.02	300	
Ba	137	115	1	He	1680.720	1680.720	1.03	2908794	0.06	10000	
W	182	159	1	He	103.120	103.120	0.74	1060469	0.01	2500	
Tl	205	165	1	He	240.509	240.509	1.43	5865279	0.00	5000	
Pb	208	165	1	He	957.763	957.763	0.51	31826075	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	960507	1.36	1261090	76.16	30	120	
Sc	45	1	He	726473	0.42	955958	75.99	30	120	
Sc	45	2	NoGas	6515678	0.22	7862387	82.87	30	120	
Rh	103	1	He	2165279	0.73	2873429	75.36	30	120	
In	115	1	He	1418109	1.07	1922589	73.76	30	120	
Tb	159	1	He	4172620	0.96	4725151	88.31	30	120	
Ho	165	1	He	4257996	0.20	4813140	88.47	30	120	
Bi	209	1	He	2942733	0.97	3617562	81.35	30	120	

Sample Report

Sample Table

Sample Name	240-51005-j-2-a
Data File Name	067SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T14:04:20-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	230.114	230.114	0.57	2396192	0.01	10000	
Be	9	6	2	NoGas	92.351	92.351	0.96	260969	0.04	10000	
B	11	6	2	NoGas	24.175	24.175	1.79	46314	0.05	300	
Na	23	45	1	He	167603.159	167603.159	0.90	141736257	0.12	500000	
Mg	24	45	1	He	22932.974	22932.974	0.41	11377209	0.20	500000	
Al	27	45	1	He	929.583	929.583	0.25	283755	0.33	200000	
K	39	45	1	He	6854.639	6854.639	0.23	3655303	0.19	500000	
Ca	44	45	1	He	17016.368	17016.368	0.62	505615	3.37	500000	
Ti	47	45	1	He	1.512	1.512	26.58	250	0.60	2500	
V	51	45	1	He	2.511	2.511	2.44	25569	0.01	10000	
Cr	52	45	1	He	1.595	1.595	2.75	9649	0.02	10000	
Mn	55	45	1	He	10518.854	10518.854	1.26	40274482	0.03	10000	>LDR
Fe	56	45	1	He	83.915	83.915	3.16	391482	0.02	200000	
Co	59	45	1	He	659.199	659.199	0.95	4440749	0.01	10000	
Ni	60	45	1	He	1450.314	1450.314	1.52	2390565	0.06	10000	
Cu	63	45	1	He	65.493	65.493	0.16	284842	0.02	10000	
Zn	66	45	1	He	2383.947	2383.947	0.88	2365108	0.10	10000	
As	75	115	1	He	2.310	2.310	11.54	1983	0.12	10000	
Se	78	115	1	He	2.477	2.477	5.83	211	1.17	10000	
Sr	88	45	1	He	136.912	136.912	0.67	740668	0.02	10000	
Mo	95	103	1	He	0.463	0.463	33.12	1253	0.04	2000	
Ag	107	103	1	He	0.191	0.191	6.55	1582	0.01	300	
Cd	111	115	1	He	3.109	3.109	1.26	6216	0.05	4000	
Sn	118	115	1	He	3.738	3.738	14.58	14537	0.03	2000	
Sb	123	165	1	He	0.242	0.242	15.73	1221	0.02	300	
Ba	137	115	1	He	131.147	131.147	0.80	238502	0.05	10000	
W	182	159	1	He	1.142	1.142	14.54	18122	0.01	2500	
Tl	205	165	1	He	0.566	0.566	5.04	14271	0.00	5000	
Pb	208	165	1	He	1.644	1.644	3.39	56435	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	943898	0.94	1261090	74.85	30	120	
Sc	45	1	He	731898	0.73	955958	76.56	30	120	
Sc	45	2	NoGas	6203914	0.54	7862387	78.91	30	120	
Rh	103	1	He	2256022	0.92	2873429	78.51	30	120	
In	115	1	He	1489948	0.93	1922589	77.50	30	120	
Tb	159	1	He	4270628	0.42	4725151	90.38	30	120	
Ho	165	1	He	4348897	0.57	4813140	90.35	30	120	
Bi	209	1	He	3115407	0.76	3617562	86.12	30	120	

Sample Report

Sample Table

Sample Name	240-51005-k-2-a
Data File Name	068SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T14:07:53-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	265.685	265.685	4.29	2500157	0.01	10000	
Be	9	6	2	NoGas	97.539	97.539	1.72	262622	0.04	10000	
B	11	6	2	NoGas	28.648	28.648	3.08	50833	0.06	300	
Na	23	45	1	He	163100.866	163100.866	1.70	141369131	0.12	500000	
Mg	24	45	1	He	21838.462	21838.462	1.61	11103824	0.20	500000	
Al	27	45	1	He	834.033	834.033	2.28	260974	0.32	200000	
K	39	45	1	He	6617.208	6617.208	2.63	3617694	0.18	500000	
Ca	44	45	1	He	16184.501	16184.501	2.00	492894	3.28	500000	
Ti	47	45	1	He	0.398	0.398	28.92	71	0.56	2500	
V	51	45	1	He	2.005	2.005	3.42	22177	0.01	10000	
Cr	52	45	1	He	1.546	1.546	3.26	9647	0.02	10000	
Mn	55	45	1	He	10133.892	10133.892	1.46	39768025	0.03	10000	>LDR
Fe	56	45	1	He	12.986	12.986	2.05	67894	0.02	200000	
Co	59	45	1	He	631.649	631.649	2.25	4360909	0.01	10000	
Ni	60	45	1	He	1397.742	1397.742	3.06	2361094	0.06	10000	
Cu	63	45	1	He	61.665	61.665	1.86	274899	0.02	10000	
Zn	66	45	1	He	2273.567	2273.567	2.19	2311694	0.10	10000	
As	75	115	1	He	1.236	1.236	4.76	1177	0.10	10000	
Se	78	115	1	He	1.550	1.550	9.78	153	1.01	10000	
Sr	88	45	1	He	130.957	130.957	2.16	726062	0.02	10000	
Mo	95	103	1	He	0.122	0.122	34.56	374	0.03	2000	
Ag	107	103	1	He	0.130	0.130	4.31	1108	0.01	300	
Cd	111	115	1	He	2.653	2.653	2.39	5753	0.05	4000	
Sn	118	115	1	He	1.257	1.257	5.90	5479	0.02	2000	
Sb	123	165	1	He	0.095	0.095	10.75	553	0.02	300	
Ba	137	115	1	He	128.035	128.035	1.46	242158	0.05	10000	
W	182	159	1	He	0.283	0.283	29.92	9344	0.00	2500	
Tl	205	165	1	He	0.389	0.389	5.15	10159	0.00	5000	
Pb	208	165	1	He	1.320	1.320	4.29	46812	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	899572	2.16	1261090	71.33	30	120	
Sc	45	1	He	750202	1.39	955958	78.48	30	120	
Sc	45	2	NoGas	5624658	3.50	7862387	71.54	30	120	
Rh	103	1	He	2313532	1.83	2873429	80.51	30	120	
In	115	1	He	1549753	2.04	1922589	80.61	30	120	
Tb	159	1	He	4362444	2.24	4725151	92.32	30	120	
Ho	165	1	He	4483705	2.17	4813140	93.16	30	120	
Bi	209	1	He	3154483	1.83	3617562	87.20	30	120	

Sample Report

Sample Table

Sample Name	240-51005-j-3-a
Data File Name	069SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T14:11:26-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	6.547	6.547	2.83	111245	0.01	10000	
Be	9	6	2	NoGas	2.085	2.085	8.19	6268	0.03	10000	
B	11	6	2	NoGas	24.003	24.003	4.17	48104	0.05	300	
Na	23	45	1	He	9944.007	9944.007	0.75	8853274	0.11	500000	
Mg	24	45	1	He	689.864	689.864	1.42	362007	0.19	500000	
Al	27	45	1	He	59.978	59.978	0.35	19763	0.30	200000	
K	39	45	1	He	774.092	774.092	0.82	472542	0.16	500000	
Ca	44	45	1	He	2363.744	2363.744	1.17	74306	3.18	500000	
Ti	47	45	1	He	0.584	0.584	57.56	104	0.56	2500	
V	51	45	1	He	2.284	2.284	8.33	25002	0.01	10000	
Cr	52	45	1	He	1.454	1.454	0.18	9423	0.02	10000	
Mn	55	45	1	He	86.841	86.841	0.75	351108	0.02	10000	
Fe	56	45	1	He	5284.512	5284.512	1.24	25457371	0.02	200000	
Co	59	45	1	He	15.955	15.955	0.53	112959	0.01	10000	
Ni	60	45	1	He	19.978	19.978	1.82	35403	0.06	10000	
Cu	63	45	1	He	1.781	1.781	0.85	8724	0.02	10000	
Zn	66	45	1	He	16.128	16.128	2.60	18445	0.09	10000	
As	75	115	1	He	1.058	1.058	8.81	1099	0.10	10000	
Se	78	115	1	He	0.125	0.125	73.33	54	0.23	10000	
Sr	88	45	1	He	10.289	10.289	2.08	58581	0.02	10000	
Mo	95	103	1	He	0.133	0.133	30.56	418	0.03	2000	
Ag	107	103	1	He	0.006	0.006	32.84	61	0.01	300	
Cd	111	115	1	He	-0.002	-0.002	-2209.79	1720	0.00	4000	
Sn	118	115	1	He	0.872	0.872	1.04	4241	0.02	2000	
Sb	123	165	1	He	0.061	0.061	4.91	384	0.02	300	
Ba	137	115	1	He	12.038	12.038	0.96	24288	0.05	10000	
W	182	159	1	He	0.095	0.095	130.53	7376	0.00	2500	
Tl	205	165	1	He	0.063	0.063	5.22	1782	0.00	5000	
Pb	208	165	1	He	0.216	0.216	2.09	8166	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	986645	3.27	1261090	78.24	30	120	
Sc	45	1	He	768784	0.87	955958	80.42	30	120	
Sc	45	2	NoGas	6293633	2.52	7862387	80.05	30	120	
Rh	103	1	He	2407418	1.56	2873429	83.78	30	120	
In	115	1	He	1650957	0.78	1922589	85.87	30	120	
Tb	159	1	He	4394123	0.63	4725151	92.99	30	120	
Ho	165	1	He	4449525	0.41	4813140	92.45	30	120	
Bi	209	1	He	3403529	0.22	3617562	94.08	30	120	

Sample Report

Sample Table

Sample Name	240-51005-k-3-a
Data File Name	070SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T14:15:00-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	6.592	6.592	1.50	111143	0.01	10000	
Be	9	6	2	NoGas	2.033	2.033	2.02	6072	0.03	10000	
B	11	6	2	NoGas	18.495	18.495	2.83	38756	0.05	300	
Na	23	45	1	He	8768.672	8768.672	4.35	7713070	0.11	500000	
Mg	24	45	1	He	602.366	602.366	2.89	312638	0.19	500000	
Al	27	45	1	He	31.045	31.045	5.53	10372	0.30	200000	
K	39	45	1	He	727.294	727.294	4.41	441163	0.16	500000	
Ca	44	45	1	He	1927.714	1927.714	3.72	59975	3.21	500000	
Ti	47	45	1	He	0.194	0.194	34.47	38	0.51	2500	
V	51	45	1	He	2.036	2.036	7.61	22685	0.01	10000	
Cr	52	45	1	He	1.277	1.277	1.01	8428	0.02	10000	
Mn	55	45	1	He	75.855	75.855	3.54	303203	0.03	10000	
Fe	56	45	1	He	4125.227	4125.227	3.58	19633492	0.02	200000	
Co	59	45	1	He	14.396	14.396	4.00	100675	0.01	10000	
Ni	60	45	1	He	18.713	18.713	2.40	32822	0.06	10000	
Cu	63	45	1	He	0.843	0.843	2.48	4397	0.02	10000	
Zn	66	45	1	He	18.381	18.381	5.09	20535	0.09	10000	
As	75	115	1	He	0.991	0.991	6.31	1007	0.10	10000	
Se	78	115	1	He	0.335	0.335	50.20	68	0.50	10000	
Sr	88	45	1	He	8.581	8.581	3.60	48283	0.02	10000	
Mo	95	103	1	He	0.061	0.061	10.82	218	0.03	2000	
Ag	107	103	1	He	0.005	0.005	56.18	56	0.01	300	
Cd	111	115	1	He	-0.014	-0.014	-193.06	1647	0.00	4000	
Sn	118	115	1	He	0.527	0.527	12.85	2723	0.02	2000	
Sb	123	165	1	He	0.048	0.048	41.54	320	0.01	300	
Ba	137	115	1	He	11.126	11.126	1.34	21733	0.05	10000	
W	182	159	1	He	0.012	0.012	408.16	6387	0.00	2500	
Tl	205	165	1	He	0.047	0.047	4.35	1347	0.00	5000	
Pb	208	165	1	He	0.182	0.182	0.90	6942	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	978777	3.09	1261090	77.61	30	120	
Sc	45	1	He	760026	3.41	955958	79.50	30	120	
Sc	45	2	NoGas	6260056	2.21	7862387	79.62	30	120	
Rh	103	1	He	2391569	2.16	2873429	83.23	30	120	
In	115	1	He	1598641	2.32	1922589	83.15	30	120	
Tb	159	1	He	4334881	3.07	4725151	91.74	30	120	
Ho	165	1	He	4429035	2.03	4813140	92.02	30	120	
Bi	209	1	He	3392914	1.06	3617562	93.79	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2026839
Data File Name	071_CCV.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T14:18:37-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	46.680	0.713	527968	0.44	50	93.4	89.5	110.5	
Be	9	6	2	NoGas	49.328	2.278	140876	2.35	50	98.7	89.5	110.5	
B	11	6	2	NoGas	49.896	0.569	87662	0.42	50	99.8	89.5	110.5	
Na	23	45	1	He	24853.483	1.370	23147998	0.84	25000	99.4	89.5	110.5	
Mg	24	45	1	He	24793.913	0.884	13535545	0.42	25000	99.2	89.5	110.5	
Al	27	45	1	He	244.237	2.597	82470	1.44	250	97.7	89.5	110.5	
K	39	45	1	He	24891.130	1.037	14485415	0.37	25000	99.6	89.5	110.5	
Ca	44	45	1	He	24378.565	1.295	796849	0.69	25000	97.5	89.5	110.5	
Ti	47	45	1	He	48.580	5.122	8651	4.71	50	97.2	89.5	110.5	
V	51	45	1	He	48.922	0.892	424582	0.35	50	97.8	89.5	110.5	
Cr	52	45	1	He	49.513	1.550	264807	0.56	50	99.0	89.5	110.5	
Mn	55	45	1	He	248.413	1.365	1048587	0.74	250	99.4	89.5	110.5	
Fe	56	45	1	He	12338.667	1.808	62260533	0.70	12500	98.7	89.5	110.5	
Co	59	45	1	He	49.655	1.043	368173	0.81	50	99.3	89.5	110.5	
Ni	60	45	1	He	49.001	1.609	89717	0.59	50	98.0	89.5	110.5	
Cu	63	45	1	He	49.855	1.334	238754	0.73	50	99.7	89.5	110.5	
Zn	66	45	1	He	49.864	1.037	56138	1.73	50	99.7	89.5	110.5	
As	75	115	1	He	47.096	0.256	41865	0.89	50	94.2	89.5	110.5	
Se	78	115	1	He	47.457	0.327	3708	0.87	50	94.9	89.5	110.5	
Sr	88	45	1	He	50.981	1.119	303584	0.43	50	102.0	89.5	110.5	
Mo	95	103	1	He	51.338	2.856	145761	1.75	50	102.7	89.5	110.5	
Ag	107	103	1	He	49.864	1.271	447173	0.39	50	99.7	89.5	110.5	
Cd	111	115	1	He	48.986	1.347	83741	0.72	50	98.0	89.5	110.5	
Sn	118	115	1	He	49.075	1.143	205223	1.46	50	98.2	89.5	110.5	
Sb	123	165	1	He	48.270	0.810	236827	0.41	50	96.5	89.5	110.5	
Ba	137	115	1	He	50.109	1.325	101817	0.88	50	100.2	89.5	110.5	
W	182	159	1	He	49.715	2.332	544934	1.44	50	99.4	89.5	110.5	
Tl	205	165	1	He	49.573	0.212	1294148	0.67	50	99.1	89.5	110.5	
Pb	208	165	1	He	50.093	0.284	1782336	0.65	50	100.2	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	953552	0.53	1261090	75.61	30	120	
Sc	45	1	He	805456	1.17	955958	84.26	30	120	
Sc	45	2	NoGas	6297184	0.50	7862387	80.09	30	120	
Rh	103	1	He	2449984	1.12	2873429	85.26	30	120	
In	115	1	He	1664478	1.12	1922589	86.57	30	120	
Tb	159	1	He	4421087	0.86	4725151	93.56	30	120	
Ho	165	1	He	4557598	0.63	4813140	94.69	30	120	
Bi	209	1	He	3355424	0.60	3617562	92.75	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	072_CCB.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T14:22:13-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.149	-31.7	43090	2.0	2	
Be	9	6	2	NoGas	0.394	17.2	1319	14.2	1	
B	11	6	2	NoGas	0.280	200.3	9381	8.9	20	
Na	23	45	1	He	82.724	13.8	97263	3.4	1000	
Mg	24	45	1	He	0.091	1372.5	2723	19.9	1000	
Al	27	45	1	He	0.128	125.3	629	9.7	50	
K	39	45	1	He	22.928	52.3	58116	3.2	1000	
Ca	44	45	1	He	29.246	21.4	1575	10.0	1000	
Ti	47	45	1	He	0.150	55.3	31	40.6	20	
V	51	45	1	He	-0.173	-16.3	5126	6.8	2	
Cr	52	45	1	He	0.024	197.5	2239	3.1	2	
Mn	55	45	1	He	0.618	17.3	4470	1.6	2	
Fe	56	45	1	He	14.021	22.1	76505	15.2	50	
Co	59	45	1	He	0.038	7.7	338	3.7	1	
Ni	60	45	1	He	-0.281	-17.6	346	17.5	2	
Cu	63	45	1	He	0.186	23.1	1490	5.2	2	
Zn	66	45	1	He	1.812	10.1	3649	6.4	20	
As	75	115	1	He	0.118	38.8	280	7.1	2	
Se	78	115	1	He	0.121	161.3	54	18.6	2	
Sr	88	45	1	He	0.041	26.5	366	13.3	10	
Mo	95	103	1	He	0.313	45.2	947	35.1	2	
Ag	107	103	1	He	0.009	26.2	88	15.8	0.2	
Cd	111	115	1	He	-0.034	-50.1	1719	9.1	0.2	
Sn	118	115	1	He	0.368	19.9	2215	10.6	10	
Sb	123	165	1	He	0.131	7.8	726	5.3	2	
Ba	137	115	1	He	0.040	29.1	114	14.7	5	
W	182	159	1	He	0.631	23.7	13228	4.0	10	
Tl	205	165	1	He	0.125	8.3	3380	3.4	0.5	
Pb	208	165	1	He	0.151	8.6	5922	4.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1014690	1.38	1261090	80.46	30	120	
Sc	45	1	He	794733	9.03	955958	83.13	30	120	
Sc	45	2	NoGas	6486705	0.84	7862387	82.50	30	120	
Rh	103	1	He	2523022	10.02	2873429	87.81	30	120	
In	115	1	He	1704611	10.73	1922589	88.66	30	120	
Tb	159	1	He	4454747	9.37	4725151	94.28	30	120	
Ho	165	1	He	4488662	9.01	4813140	93.26	30	120	
Bi	209	1	He	3418620	9.76	3617562	94.50	30	120	

Sample Report

Sample Table

Sample Name	240-51005-j-2-a@5
Data File Name	073SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T14:25:49-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	49.306	49.306	0.77	572544	0.01	10000	
Be	9	6	2	NoGas	19.302	19.302	2.38	57541	0.03	10000	
B	11	6	2	NoGas	4.016	4.016	13.35	15385	0.03	300	
Na	23	45	1	He	32840.602	32840.602	20.15	30945962	0.11	500000	
Mg	24	45	1	He	4610.849	4610.849	20.98	2547001	0.18	500000	
Al	27	45	1	He	182.488	182.488	20.29	62518	0.29	200000	
K	39	45	1	He	1370.421	1370.421	21.06	851260	0.16	500000	
Ca	44	45	1	He	3321.854	3321.854	19.87	110497	3.01	500000	
Ti	47	45	1	He	0.260	0.260	9.32	53	0.49	2500	
V	51	45	1	He	0.417	0.417	71.93	10308	0.00	10000	
Cr	52	45	1	He	0.306	0.306	50.95	3820	0.01	10000	
Mn	55	45	1	He	2067.404	2067.404	21.01	8807474	0.02	10000	
Fe	56	45	1	He	15.687	15.687	23.73	87415	0.02	200000	
Co	59	45	1	He	131.651	131.651	20.65	987093	0.01	10000	
Ni	60	45	1	He	287.479	287.479	21.04	527863	0.05	10000	
Cu	63	45	1	He	12.899	12.899	21.44	62906	0.02	10000	
Zn	66	45	1	He	473.010	473.010	21.50	523184	0.09	10000	
As	75	115	1	He	0.196	0.196	26.77	352	0.06	10000	
Se	78	115	1	He	0.259	0.259	78.41	65	0.40	10000	
Sr	88	45	1	He	27.022	27.022	21.12	162710	0.02	10000	
Mo	95	103	1	He	0.091	0.091	38.80	314	0.03	2000	
Ag	107	103	1	He	0.037	0.037	29.84	338	0.01	300	
Cd	111	115	1	He	0.475	0.475	24.43	2598	0.02	4000	
Sn	118	115	1	He	0.217	0.217	46.78	1552	0.01	2000	
Sb	123	165	1	He	0.064	0.064	20.06	417	0.02	300	
Ba	137	115	1	He	24.969	24.969	21.13	51236	0.05	10000	
W	182	159	1	He	0.135	0.135	34.70	8147	0.00	2500	
Tl	205	165	1	He	0.105	0.105	21.92	2933	0.00	5000	
Pb	208	165	1	He	0.327	0.327	18.03	12433	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	994334	3.75	1261090	78.85	30	120	
Sc	45	1	He	834636	17.53	955958	87.31	30	120	
Sc	45	2	NoGas	6494516	3.34	7862387	82.60	30	120	
Rh	103	1	He	2513599	15.22	2873429	87.48	30	120	
In	115	1	He	1721298	16.95	1922589	89.53	30	120	
Tb	159	1	He	4606037	14.75	4725151	97.48	30	120	
Ho	165	1	He	4684923	15.42	4813140	97.34	30	120	
Bi	209	1	He	3513624	13.30	3617562	97.13	30	120	

Sample Report

Sample Table

Sample Name	240-51005-k-2-a@5
Data File Name	074SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T14:29:25-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	48.649	48.649	1.16	573476	0.01	10000	
Be	9	6	2	NoGas	17.674	17.674	1.66	54840	0.03	10000	
B	11	6	2	NoGas	4.178	4.178	2.09	16293	0.03	300	
Na	23	45	1	He	34474.284	34474.284	0.89	31182995	0.11	500000	
Mg	24	45	1	He	4703.295	4703.295	1.01	2496365	0.19	500000	
Al	27	45	1	He	178.832	178.832	0.79	58822	0.30	200000	
K	39	45	1	He	1416.961	1416.961	0.47	843167	0.17	500000	
Ca	44	45	1	He	3373.755	3373.755	0.94	107662	3.13	500000	
Ti	47	45	1	He	0.110	0.110	9.02	24	0.45	2500	
V	51	45	1	He	0.466	0.466	6.06	10362	0.00	10000	
Cr	52	45	1	He	0.324	0.324	4.08	3765	0.01	10000	
Mn	55	45	1	He	2155.231	2155.231	0.42	8823321	0.02	10000	
Fe	56	45	1	He	3.285	3.285	8.91	23258	0.01	200000	
Co	59	45	1	He	136.037	136.037	0.19	979718	0.01	10000	
Ni	60	45	1	He	298.520	298.520	0.39	526695	0.06	10000	
Cu	63	45	1	He	13.255	13.255	0.61	62113	0.02	10000	
Zn	66	45	1	He	486.468	486.468	0.36	517278	0.09	10000	
As	75	115	1	He	0.210	0.210	8.74	361	0.06	10000	
Se	78	115	1	He	0.324	0.324	22.68	70	0.46	10000	
Sr	88	45	1	He	27.432	27.432	0.73	158749	0.02	10000	
Mo	95	103	1	He	0.047	0.047	64.22	179	0.03	2000	
Ag	107	103	1	He	0.027	0.027	27.90	249	0.01	300	
Cd	111	115	1	He	0.443	0.443	7.83	2507	0.02	4000	
Sn	118	115	1	He	0.138	0.138	12.41	1230	0.01	2000	
Sb	123	165	1	He	0.029	0.029	31.26	234	0.01	300	
Ba	137	115	1	He	25.772	25.772	0.42	52978	0.05	10000	
W	182	159	1	He	0.047	0.047	44.93	6920	0.00	2500	
Tl	205	165	1	He	0.084	0.084	7.60	2351	0.00	5000	
Pb	208	165	1	He	0.300	0.300	1.93	11233	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1034812	2.91	1261090	82.06	30	120	
Sc	45	1	He	782379	0.96	955958	81.84	30	120	
Sc	45	2	NoGas	6585743	2.11	7862387	83.76	30	120	
Rh	103	1	He	2409613	1.86	2873429	83.86	30	120	
In	115	1	He	1683292	1.06	1922589	87.55	30	120	
Tb	159	1	He	4435782	0.34	4725151	93.88	30	120	
Ho	165	1	He	4511491	1.19	4813140	93.73	30	120	
Bi	209	1	He	3420491	0.59	3617562	94.55	30	120	

Sample Report

Sample Table

Sample Name	240-51005-j-4-b
Data File Name	075SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T14:33:01-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	109.374	109.374	6.26	1013667	0.01	10000	
Be	9	6	2	NoGas	0.641	0.641	8.73	1848	0.03	10000	
B	11	6	2	NoGas	48.001	48.001	5.03	79916	0.06	300	
Na	23	45	1	He	37791.567	37791.567	2.51	31609951	0.12	500000	
Mg	24	45	1	He	11495.218	11495.218	2.42	5639019	0.20	500000	
Al	27	45	1	He	15.942	15.942	3.66	5336	0.30	200000	
K	39	45	1	He	10345.427	10345.427	2.28	5432907	0.19	500000	
Ca	44	45	1	He	18987.212	18987.212	1.83	557707	3.40	500000	
Ti	47	45	1	He	0.295	0.295	20.22	52	0.56	2500	
V	51	45	1	He	1.781	1.781	6.29	19670	0.01	10000	
Cr	52	45	1	He	1.268	1.268	5.75	7979	0.02	10000	
Mn	55	45	1	He	2872.865	2872.865	2.30	10875865	0.03	10000	
Fe	56	45	1	He	20406.509	20406.509	2.26	92506612	0.02	200000	
Co	59	45	1	He	325.325	325.325	2.53	2166620	0.02	10000	
Ni	60	45	1	He	484.233	484.233	2.31	789624	0.06	10000	
Cu	63	45	1	He	0.651	0.651	8.98	3359	0.02	10000	
Zn	66	45	1	He	321.220	321.220	2.28	316397	0.10	10000	
As	75	115	1	He	0.825	0.825	7.79	811	0.10	10000	
Se	78	115	1	He	0.243	0.243	45.35	57	0.43	10000	
Sr	88	45	1	He	1154.404	1154.404	2.65	6172844	0.02	10000	
Mo	95	103	1	He	0.170	0.170	14.61	481	0.04	2000	
Ag	107	103	1	He	0.008	0.008	7.21	74	0.01	300	
Cd	111	115	1	He	-0.017	-0.017	-136.01	1540	0.00	4000	
Sn	118	115	1	He	0.589	0.589	10.01	2786	0.02	2000	
Sb	123	165	1	He	0.084	0.084	4.66	469	0.02	300	
Ba	137	115	1	He	85.583	85.583	2.57	156554	0.05	10000	
W	182	159	1	He	0.026	0.026	78.21	6231	0.00	2500	
Tl	205	165	1	He	0.167	0.167	1.54	4175	0.00	5000	
Pb	208	165	1	He	0.129	0.129	7.90	4840	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	902123	7.08	1261090	71.54	30	120	
Sc	45	1	He	723711	1.58	955958	75.71	30	120	
Sc	45	2	NoGas	5430401	7.12	7862387	69.07	30	120	
Rh	103	1	He	2215642	2.61	2873429	77.11	30	120	
In	115	1	He	1499073	2.10	1922589	77.97	30	120	
Tb	159	1	He	4124905	3.28	4725151	87.30	30	120	
Ho	165	1	He	4211472	3.58	4813140	87.50	30	120	
Bi	209	1	He	3167053	3.28	3617562	87.55	30	120	

Sample Report

Sample Table

Sample Name	240-51005-k-4-a
Data File Name	076SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T14:36:35-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	87.530	87.530	12.70	1012593	0.01	10000	
Be	9	6	2	NoGas	0.453	0.453	15.68	1485	0.03	10000	
B	11	6	2	NoGas	44.622	44.622	8.65	83799	0.05	300	
Na	23	45	1	He	39412.637	39412.637	0.08	32961581	0.12	500000	
Mg	24	45	1	He	11133.307	11133.307	0.16	5460775	0.20	500000	
Al	27	45	1	He	13.487	13.487	1.11	4597	0.29	200000	
K	39	45	1	He	10277.925	10277.925	0.40	5397170	0.19	500000	
Ca	44	45	1	He	18723.669	18723.669	0.79	549939	3.40	500000	
Ti	47	45	1	He	0.238	0.238	37.12	43	0.55	2500	
V	51	45	1	He	1.656	1.656	3.73	18711	0.01	10000	
Cr	52	45	1	He	1.190	1.190	2.02	7611	0.02	10000	
Mn	55	45	1	He	2791.275	2791.275	0.45	10566349	0.03	10000	
Fe	56	45	1	He	13058.304	13058.304	0.62	59184500	0.02	200000	
Co	59	45	1	He	304.905	304.905	0.27	2030311	0.02	10000	
Ni	60	45	1	He	454.135	454.135	0.44	740451	0.06	10000	
Cu	63	45	1	He	0.417	0.417	3.99	2358	0.02	10000	
Zn	66	45	1	He	287.494	287.494	0.44	283283	0.10	10000	
As	75	115	1	He	0.583	0.583	6.16	625	0.09	10000	
Se	78	115	1	He	0.241	0.241	19.91	57	0.42	10000	
Sr	88	45	1	He	1104.906	1104.906	0.24	5907792	0.02	10000	
Mo	95	103	1	He	0.177	0.177	16.99	509	0.03	2000	
Ag	107	103	1	He	0.005	0.005	39.27	51	0.01	300	
Cd	111	115	1	He	-0.029	-0.029	-57.89	1535	0.00	4000	
Sn	118	115	1	He	0.475	0.475	16.21	2385	0.02	2000	
Sb	123	165	1	He	0.051	0.051	23.49	327	0.02	300	
Ba	137	115	1	He	82.918	82.918	0.24	153144	0.05	10000	
W	182	159	1	He	-0.018	-0.018	-313.36	5927	0.00	2500	
Tl	205	165	1	He	0.145	0.145	6.91	3729	0.00	5000	
Pb	208	165	1	He	0.293	0.293	1.72	10485	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1012157	8.22	1261090	80.26	30	120	
Sc	45	1	He	723436	2.43	955958	75.68	30	120	
Sc	45	2	NoGas	6769200	13.13	7862387	86.10	30	120	
Rh	103	1	He	2261014	1.40	2873429	78.69	30	120	
In	115	1	He	1512993	1.57	1922589	78.70	30	120	
Tb	159	1	He	4232682	1.21	4725151	89.58	30	120	
Ho	165	1	He	4309771	1.35	4813140	89.54	30	120	
Bi	209	1	He	3236105	1.56	3617562	89.46	30	120	

Sample Report

Sample Table

Sample Name	240-51005-j-5-a
Data File Name	077SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T14:40:08-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	2.420	2.420	1.03	71063	0.00	10000	
Be	9	6	2	NoGas	3.545	3.545	1.58	10596	0.03	10000	
B	11	6	2	NoGas	24.177	24.177	2.49	48449	0.05	300	
Na	23	45	1	He	21177.615	21177.615	1.49	19381812	0.11	500000	
Mg	24	45	1	He	7217.454	7217.454	0.79	3872826	0.19	500000	
Al	27	45	1	He	241.908	241.908	2.61	80271	0.30	200000	
K	39	45	1	He	1889.707	1889.707	0.77	1122140	0.17	500000	
Ca	44	45	1	He	4085.631	4085.631	1.63	131736	3.10	500000	
Ti	47	45	1	He	2.420	2.420	10.84	429	0.56	2500	
V	51	45	1	He	1.953	1.953	5.99	22954	0.01	10000	
Cr	52	45	1	He	1.709	1.709	3.56	11028	0.02	10000	
Mn	55	45	1	He	1039.684	1039.684	1.51	4305735	0.02	10000	
Fe	56	45	1	He	101698.756	101698.756	1.57	504153313	0.02	200000	
Co	59	45	1	He	77.073	77.073	0.99	561372	0.01	10000	
Ni	60	45	1	He	57.588	57.588	1.01	103441	0.06	10000	
Cu	63	45	1	He	5.434	5.434	1.46	26122	0.02	10000	
Zn	66	45	1	He	63.585	63.585	1.34	69853	0.09	10000	
As	75	115	1	He	3.370	3.370	1.50	3107	0.11	10000	
Se	78	115	1	He	0.765	0.765	1.92	102	0.75	10000	
Sr	88	45	1	He	43.945	43.945	1.34	257106	0.02	10000	
Mo	95	103	1	He	0.327	0.327	5.60	968	0.03	2000	
Ag	107	103	1	He	0.054	0.054	4.35	486	0.01	300	
Cd	111	115	1	He	0.056	0.056	38.33	1804	0.00	4000	
Sn	118	115	1	He	0.569	0.569	6.60	2971	0.02	2000	
Sb	123	165	1	He	0.109	0.109	8.49	628	0.02	300	
Ba	137	115	1	He	108.878	108.878	1.00	217791	0.05	10000	
W	182	159	1	He	-0.011	-0.011	-123.80	6294	0.00	2500	
Tl	205	165	1	He	0.020	0.020	8.37	698	0.00	5000	
Pb	208	165	1	He	0.655	0.655	1.54	23767	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	987402	1.10	1261090	78.30	30	120	
Sc	45	1	He	791196	1.31	955958	82.76	30	120	
Sc	45	2	NoGas	6533035	0.74	7862387	83.09	30	120	
Rh	103	1	He	2424843	1.12	2873429	84.39	30	120	
In	115	1	He	1638900	1.66	1922589	85.24	30	120	
Tb	159	1	He	4438531	0.86	4725151	93.93	30	120	
Ho	165	1	He	4523189	1.43	4813140	93.98	30	120	
Bi	209	1	He	3337399	0.70	3617562	92.26	30	120	

Sample Report

Sample Table

Sample Name	240-51005-k-5-a
Data File Name	078SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T14:43:42-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	1.366	1.366	27.25	66741	0.00	10000	
Be	9	6	2	NoGas	2.298	2.298	8.22	7261	0.03	10000	
B	11	6	2	NoGas	20.049	20.049	13.11	43675	0.05	300	
Na	23	45	1	He	20452.546	20452.546	0.68	19223857	0.11	500000	
Mg	24	45	1	He	6932.912	6932.912	0.89	3820161	0.18	500000	
Al	27	45	1	He	45.212	45.212	0.92	15895	0.28	200000	
K	39	45	1	He	1908.391	1908.391	0.46	1163377	0.16	500000	
Ca	44	45	1	He	3527.851	3527.851	0.51	116899	3.02	500000	
Ti	47	45	1	He	0.172	0.172	20.09	37	0.47	2500	
V	51	45	1	He	1.600	1.600	5.53	20526	0.01	10000	
Cr	52	45	1	He	1.459	1.459	1.13	9985	0.01	10000	
Mn	55	45	1	He	912.653	912.653	0.45	3881455	0.02	10000	
Fe	56	45	1	He	105774.953	105774.953	0.33	538464441	0.02	200000	
Co	59	45	1	He	60.452	60.452	0.24	452206	0.01	10000	
Ni	60	45	1	He	36.889	36.889	0.59	68361	0.05	10000	
Cu	63	45	1	He	0.535	0.535	6.96	3216	0.02	10000	
Zn	66	45	1	He	24.049	24.049	1.03	28218	0.09	10000	
As	75	115	1	He	3.282	3.282	2.64	3097	0.11	10000	
Se	78	115	1	He	0.690	0.690	11.05	98	0.70	10000	
Sr	88	45	1	He	40.857	40.857	0.53	245477	0.02	10000	
Mo	95	103	1	He	0.060	0.060	36.27	224	0.03	2000	
Ag	107	103	1	He	0.005	0.005	78.45	52	0.01	300	
Cd	111	115	1	He	-0.039	-0.039	-87.76	1682	0.00	4000	
Sn	118	115	1	He	0.364	0.364	7.59	2174	0.02	2000	
Sb	123	165	1	He	0.063	0.063	5.87	404	0.02	300	
Ba	137	115	1	He	96.025	96.025	1.08	196341	0.05	10000	
W	182	159	1	He	-0.062	-0.062	-65.22	5846	0.00	2500	
Tl	205	165	1	He	0.010	0.010	26.11	420	0.00	5000	
Pb	208	165	1	He	0.101	0.101	6.17	4265	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1041207	8.66	1261090	82.56	30	120	
Sc	45	1	He	812559	1.44	955958	85.00	30	120	
Sc	45	2	NoGas	7335933	10.36	7862387	93.30	30	120	
Rh	103	1	He	2502562	0.32	2873429	87.09	30	120	
In	115	1	He	1675192	1.32	1922589	87.13	30	120	
Tb	159	1	He	4517930	1.08	4725151	95.61	30	120	
Ho	165	1	He	4545869	0.56	4813140	94.45	30	120	
Bi	209	1	He	3390732	1.06	3617562	93.73	30	120	

Sample Report

Sample Table

Sample Name	240-51005-j-6-a
Data File Name	079SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T14:47:18-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	164.037	164.037	1.13	1835547	0.01	10000	
Be	9	6	2	NoGas	29.299	29.299	1.18	88308	0.03	10000	
B	11	6	2	NoGas	37.846	37.846	2.69	72255	0.05	300	
Na	23	45	1	He	106783.834	106783.834	5.48	88748735	0.12	500000	
Mg	24	45	1	He	20140.153	20140.153	6.32	9816307	0.21	500000	
Al	27	45	1	He	541.679	541.679	6.18	162664	0.33	200000	
K	39	45	1	He	9737.658	9737.658	6.46	5084157	0.19	500000	
Ca	44	45	1	He	17866.549	17866.549	6.69	521437	3.43	500000	
Ti	47	45	1	He	0.427	0.427	38.32	72	0.59	2500	
V	51	45	1	He	1.675	1.675	5.24	18783	0.01	10000	
Cr	52	45	1	He	1.477	1.477	6.68	8928	0.02	10000	
Mn	55	45	1	He	5876.151	5876.151	7.53	22094637	0.03	10000	
Fe	56	45	1	He	25532.273	25532.273	7.04	114984707	0.02	200000	
Co	59	45	1	He	627.684	627.684	5.92	4154650	0.02	10000	
Ni	60	45	1	He	1272.872	1272.872	7.02	2060795	0.06	10000	
Cu	63	45	1	He	9.987	9.987	6.17	43152	0.02	10000	
Zn	66	45	1	He	2032.325	2032.325	5.24	1981782	0.10	10000	
As	75	115	1	He	1.053	1.053	2.27	1000	0.11	10000	
Se	78	115	1	He	1.163	1.163	12.75	122	0.96	10000	
Sr	88	45	1	He	318.931	318.931	6.81	1694505	0.02	10000	
Mo	95	103	1	He	0.139	0.139	8.79	408	0.03	2000	
Ag	107	103	1	He	0.008	0.008	69.25	71	0.01	300	
Cd	111	115	1	He	0.364	0.364	14.42	2126	0.02	4000	
Sn	118	115	1	He	0.462	0.462	9.15	2326	0.02	2000	
Sb	123	165	1	He	0.049	0.049	31.36	311	0.02	300	
Ba	137	115	1	He	31.605	31.605	6.63	58140	0.05	10000	
W	182	159	1	He	-0.076	-0.076	-48.46	5334	0.00	2500	
Tl	205	165	1	He	0.300	0.300	4.35	7484	0.00	5000	
Pb	208	165	1	He	0.314	0.314	10.11	11041	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1005747	2.70	1261090	79.75	30	120	
Sc	45	1	He	720617	5.43	955958	75.38	30	120	
Sc	45	2	NoGas	6620388	2.86	7862387	84.20	30	120	
Rh	103	1	He	2238789	6.73	2873429	77.91	30	120	
In	115	1	He	1509834	4.98	1922589	78.53	30	120	
Tb	159	1	He	4225737	5.76	4725151	89.43	30	120	
Ho	165	1	He	4270479	5.91	4813140	88.73	30	120	
Bi	209	1	He	3132857	5.92	3617562	86.60	30	120	

Sample Report

Sample Table

Sample Name	240-51005-k-6-a
Data File Name	080SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T14:50:50-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	165.230	165.230	0.88	1834954	0.01	10000	
Be	9	6	2	NoGas	34.984	34.984	0.41	104337	0.03	10000	
B	11	6	2	NoGas	36.892	36.892	3.09	69932	0.05	300	
Na	23	45	1	He	102343.920	102343.920	0.16	90554882	0.11	500000	
Mg	24	45	1	He	18677.033	18677.033	0.60	9693310	0.19	500000	
Al	27	45	1	He	565.119	565.119	1.01	180673	0.31	200000	
K	39	45	1	He	9110.353	9110.353	0.46	5067979	0.18	500000	
Ca	44	45	1	He	17808.514	17808.514	0.26	553551	3.22	500000	
Ti	47	45	1	He	0.257	0.257	29.45	49	0.53	2500	
V	51	45	1	He	1.576	1.576	5.10	19141	0.01	10000	
Cr	52	45	1	He	1.352	1.352	1.11	8871	0.02	10000	
Mn	55	45	1	He	5477.806	5477.806	0.39	21943056	0.02	10000	
Fe	56	45	1	He	15115.088	15115.088	0.77	72507359	0.02	200000	
Co	59	45	1	He	599.348	599.348	0.33	4224148	0.01	10000	
Ni	60	45	1	He	1242.207	1242.207	0.08	2142322	0.06	10000	
Cu	63	45	1	He	12.834	12.834	0.65	58875	0.02	10000	
Zn	66	45	1	He	1993.769	1993.769	0.41	2069565	0.10	10000	
As	75	115	1	He	0.941	0.941	4.58	980	0.10	10000	
Se	78	115	1	He	1.290	1.290	7.99	140	0.92	10000	
Sr	88	45	1	He	282.494	282.494	0.75	1598760	0.02	10000	
Mo	95	103	1	He	0.049	0.049	1.74	182	0.03	2000	
Ag	107	103	1	He	0.005	0.005	20.30	48	0.01	300	
Cd	111	115	1	He	0.597	0.597	6.89	2669	0.02	4000	
Sn	118	115	1	He	0.284	0.284	9.71	1778	0.02	2000	
Sb	123	165	1	He	0.045	0.045	20.07	312	0.01	300	
Ba	137	115	1	He	30.335	30.335	2.68	60123	0.05	10000	
W	182	159	1	He	-0.081	-0.081	-47.82	5509	0.00	2500	
Tl	205	165	1	He	0.297	0.297	3.26	7834	0.00	5000	
Pb	208	165	1	He	0.169	0.169	6.97	6582	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	995492	1.18	1261090	78.94	30	120	
Sc	45	1	He	765674	1.48	955958	80.09	30	120	
Sc	45	2	NoGas	6570618	1.35	7862387	83.57	30	120	
Rh	103	1	He	2355133	2.86	2873429	81.96	30	120	
In	115	1	He	1623689	2.39	1922589	84.45	30	120	
Tb	159	1	He	4418772	0.23	4725151	93.52	30	120	
Ho	165	1	He	4500167	0.58	4813140	93.50	30	120	
Bi	209	1	He	3246125	0.96	3617562	89.73	30	120	

Sample Report

Sample Table

Sample Name	240-51005-j-7-a
Data File Name	081SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T14:54:20-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	17.358	17.358	7.74	200716	0.01	10000	
Be	9	6	2	NoGas	1.955	1.955	4.58	5720	0.03	10000	
B	11	6	2	NoGas	29.443	29.443	1.89	55387	0.05	300	
Na	23	45	1	He	6412.652	6412.652	8.25	6112624	0.10	500000	
Mg	24	45	1	He	706.638	706.638	8.42	396395	0.18	500000	
Al	27	45	1	He	942.727	942.727	8.98	323034	0.29	200000	
K	39	45	1	He	1147.689	1147.689	8.31	726651	0.16	500000	
Ca	44	45	1	He	852.382	852.382	8.92	29065	2.93	500000	
Ti	47	45	1	He	17.501	17.501	15.10	3180	0.55	2500	
V	51	45	1	He	4.322	4.322	11.28	44469	0.01	10000	
Cr	52	45	1	He	4.468	4.468	9.12	26393	0.02	10000	
Mn	55	45	1	He	80.021	80.021	8.67	345992	0.02	10000	
Fe	56	45	1	He	4543.410	4543.410	8.82	23394421	0.02	200000	
Co	59	45	1	He	8.353	8.353	8.60	63240	0.01	10000	
Ni	60	45	1	He	17.954	17.954	11.11	34050	0.05	10000	
Cu	63	45	1	He	7.153	7.153	9.10	35498	0.02	10000	
Zn	66	45	1	He	188.996	188.996	8.60	212184	0.09	10000	
As	75	115	1	He	1.091	1.091	6.57	1191	0.09	10000	
Se	78	115	1	He	0.108	0.108	31.04	55	0.20	10000	
Sr	88	45	1	He	6.376	6.376	9.97	38822	0.02	10000	
Mo	95	103	1	He	0.319	0.319	12.25	1017	0.03	2000	
Ag	107	103	1	He	0.009	0.009	22.46	98	0.01	300	
Cd	111	115	1	He	-0.026	-0.026	-144.96	1780	0.00	4000	
Sn	118	115	1	He	0.836	0.836	12.06	4312	0.02	2000	
Sb	123	165	1	He	0.099	0.099	13.71	600	0.02	300	
Ba	137	115	1	He	14.937	14.937	8.97	31739	0.05	10000	
W	182	159	1	He	-0.048	-0.048	-58.21	6201	0.00	2500	
Tl	205	165	1	He	0.046	0.046	11.62	1413	0.00	5000	
Pb	208	165	1	He	0.804	0.804	7.94	30205	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	957705	2.80	1261090	75.94	30	120	
Sc	45	1	He	826539	10.11	955958	86.46	30	120	
Sc	45	2	NoGas	5668266	6.34	7862387	72.09	30	120	
Rh	103	1	He	2621782	9.46	2873429	91.24	30	120	
In	115	1	He	1748894	9.33	1922589	90.97	30	120	
Tb	159	1	He	4665904	8.50	4725151	98.75	30	120	
Ho	165	1	He	4726309	8.56	4813140	98.20	30	120	
Bi	209	1	He	3644838	8.03	3617562	100.75	30	120	

Sample Report

Sample Table

Sample Name	240-51005-k-7-a
Data File Name	082SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T14:57:57-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	22.547	22.547	9.03	199709	0.01	10000	
Be	9	6	2	NoGas	1.926	1.926	16.72	4371	0.04	10000	
B	11	6	2	NoGas	44.789	44.789	8.02	61936	0.07	300	
Na	23	45	1	He	6454.761	6454.761	0.88	5984654	0.11	500000	
Mg	24	45	1	He	480.445	480.445	0.62	263136	0.18	500000	
Al	27	45	1	He	29.957	29.957	1.39	10562	0.28	200000	
K	39	45	1	He	1003.616	1003.616	0.42	623865	0.16	500000	
Ca	44	45	1	He	549.226	549.226	2.59	18453	2.98	500000	
Ti	47	45	1	He	0.498	0.498	21.98	93	0.53	2500	
V	51	45	1	He	1.682	1.682	5.55	20894	0.01	10000	
Cr	52	45	1	He	1.329	1.329	2.43	9142	0.01	10000	
Mn	55	45	1	He	71.291	71.291	0.77	300145	0.02	10000	
Fe	56	45	1	He	133.660	133.660	1.38	676742	0.02	200000	
Co	59	45	1	He	7.193	7.193	0.19	53006	0.01	10000	
Ni	60	45	1	He	15.188	15.188	1.51	28218	0.05	10000	
Cu	63	45	1	He	1.322	1.322	3.49	6894	0.02	10000	
Zn	66	45	1	He	32.880	32.880	1.78	37328	0.09	10000	
As	75	115	1	He	0.417	0.417	8.85	561	0.07	10000	
Se	78	115	1	He	0.098	0.098	83.52	54	0.18	10000	
Sr	88	45	1	He	5.443	5.443	0.86	32293	0.02	10000	
Mo	95	103	1	He	0.032	0.032	38.73	146	0.02	2000	
Ag	107	103	1	He	0.005	0.005	24.85	51	0.01	300	
Cd	111	115	1	He	-0.080	-0.080	-58.97	1664	0.00	4000	
Sn	118	115	1	He	0.297	0.297	20.62	1948	0.02	2000	
Sb	123	165	1	He	0.025	0.025	21.92	219	0.01	300	
Ba	137	115	1	He	9.388	9.388	0.36	19821	0.05	10000	
W	182	159	1	He	-0.077	-0.077	-8.27	5638	0.00	2500	
Tl	205	165	1	He	0.021	0.021	19.65	736	0.00	5000	
Pb	208	165	1	He	0.102	0.102	2.03	4329	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	744684	6.33	1261090	59.05	30	120	
Sc	45	1	He	799741	4.00	955958	83.66	30	120	
Sc	45	2	NoGas	4551293	7.99	7862387	57.89	30	120	
Rh	103	1	He	2559686	0.65	2873429	89.08	30	120	
In	115	1	He	1727072	0.86	1922589	89.83	30	120	
Tb	159	1	He	4482755	2.00	4725151	94.87	30	120	
Ho	165	1	He	4579237	1.02	4813140	95.14	30	120	
Bi	209	1	He	3565070	1.09	3617562	98.55	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2026839
Data File Name	083_CCV.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T15:01:35-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	45.839	0.842	558142	0.68	50	91.7	89.5	110.5	
Be	9	6	2	NoGas	48.309	1.980	147817	1.06	50	96.6	89.5	110.5	
B	11	6	2	NoGas	48.787	0.593	92041	0.60	50	97.6	89.5	110.5	
Na	23	45	1	He	25268.553	17.856	24328106	1.66	25000	101.1	89.5	110.5	
Mg	24	45	1	He	25267.709	18.762	14244732	1.85	25000	101.1	89.5	110.5	
Al	27	45	1	He	247.411	18.279	86332	1.35	250	99.0	89.5	110.5	
K	39	45	1	He	25679.629	17.434	15454805	2.09	25000	102.7	89.5	110.5	
Ca	44	45	1	He	25054.672	18.412	846030	1.91	25000	100.2	89.5	110.5	
Ti	47	45	1	He	51.257	17.796	9437	0.65	50	102.5	89.5	110.5	
V	51	45	1	He	50.644	17.684	454322	2.07	50	101.3	89.5	110.5	
Cr	52	45	1	He	50.696	18.175	280178	2.19	50	101.4	89.5	110.5	
Mn	55	45	1	He	254.543	18.149	1110321	1.71	250	101.8	89.5	110.5	
Fe	56	45	1	He	12690.827	18.411	66159097	2.20	12500	101.5	89.5	110.5	
Co	59	45	1	He	51.085	18.516	391247	2.08	50	102.2	89.5	110.5	
Ni	60	45	1	He	51.013	18.180	96501	2.34	50	102.0	89.5	110.5	
Cu	63	45	1	He	51.482	17.985	254818	1.94	50	103.0	89.5	110.5	
Zn	66	45	1	He	51.885	21.084	60132	4.44	50	103.8	89.5	110.5	
As	75	115	1	He	49.103	18.430	44507	2.76	50	98.2	89.5	110.5	
Se	78	115	1	He	49.260	18.884	3921	1.48	50	98.5	89.5	110.5	
Sr	88	45	1	He	52.500	17.786	323193	2.10	50	105.0	89.5	110.5	
Mo	95	103	1	He	52.352	16.993	152929	2.67	50	104.7	89.5	110.5	
Ag	107	103	1	He	50.842	16.877	469074	1.57	50	101.7	89.5	110.5	
Cd	111	115	1	He	50.516	19.322	87956	2.07	50	101.0	89.5	110.5	
Sn	118	115	1	He	51.093	18.905	217739	1.01	50	102.2	89.5	110.5	
Sb	123	165	1	He	50.066	16.672	246603	2.18	50	100.1	89.5	110.5	
Ba	137	115	1	He	51.356	18.521	106403	1.31	50	102.7	89.5	110.5	
W	182	159	1	He	49.779	17.548	558054	1.08	50	99.6	89.5	110.5	
Tl	205	165	1	He	51.289	16.394	1344575	1.32	50	102.6	89.5	110.5	
Pb	208	165	1	He	51.579	16.816	1842134	1.13	50	103.2	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1021734	0.95	1261090	81.02	30	120	
Sc	45	1	He	849114	16.40	955958	88.82	30	120	
Sc	45	2	NoGas	6768921	0.46	7862387	86.09	30	120	
Rh	103	1	He	2565635	15.70	2873429	89.29	30	120	
In	115	1	He	1734151	17.33	1922589	90.20	30	120	
Tb	159	1	He	4606700	16.07	4725151	97.49	30	120	
Ho	165	1	He	4656250	15.62	4813140	96.74	30	120	
Bi	209	1	He	3441454	15.21	3617562	95.13	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	084_CCB.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T15:05:13-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.140	-40.5	45565	0.7	2	
Be	9	6	2	NoGas	0.155	5.2	626	4.5	1	
B	11	6	2	NoGas	0.073	581.6	9481	8.1	20	
Na	23	45	1	He	62.485	5.5	85673	3.5	1000	
Mg	24	45	1	He	-2.047	-22.0	1726	14.7	1000	
Al	27	45	1	He	0.237	46.5	720	6.1	50	
K	39	45	1	He	19.658	8.1	61219	1.0	1000	
Ca	44	45	1	He	45.726	9.4	2283	6.3	1000	
Ti	47	45	1	He	0.003	878.5	7	86.6	20	
V	51	45	1	He	-0.175	-21.2	5530	6.3	2	
Cr	52	45	1	He	0.030	47.0	2470	2.7	2	
Mn	55	45	1	He	0.897	2.2	6109	2.1	2	
Fe	56	45	1	He	14.442	16.5	85571	15.1	50	
Co	59	45	1	He	0.019	23.7	212	16.1	1	
Ni	60	45	1	He	-0.335	-4.9	274	11.0	2	
Cu	63	45	1	He	0.087	17.2	1119	6.5	2	
Zn	66	45	1	He	3.216	7.4	5586	5.4	20	
As	75	115	1	He	0.076	13.7	261	3.6	2	
Se	78	115	1	He	0.211	33.7	66	9.4	2	
Sr	88	45	1	He	0.030	15.3	332	9.5	10	
Mo	95	103	1	He	0.269	26.7	881	25.2	2	
Ag	107	103	1	He	0.004	20.3	49	17.2	0.2	
Cd	111	115	1	He	-0.050	-98.6	1807	5.4	0.2	
Sn	118	115	1	He	0.360	11.3	2337	7.4	10	
Sb	123	165	1	He	0.116	3.2	679	2.0	2	
Ba	137	115	1	He	0.029	42.7	98	27.6	5	
W	182	159	1	He	0.580	9.8	13176	4.5	10	
Tl	205	165	1	He	0.094	3.5	2686	3.3	0.5	
Pb	208	165	1	He	0.150	3.3	6128	3.4	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1064349	0.34	1261090	84.40	30	120	
Sc	45	1	He	858787	0.64	955958	89.84	30	120	
Sc	45	2	NoGas	6844671	0.76	7862387	87.06	30	120	
Rh	103	1	He	2659735	0.87	2873429	92.56	30	120	
In	115	1	He	1816840	0.50	1922589	94.50	30	120	
Tb	159	1	He	4596565	0.50	4725151	97.28	30	120	
Ho	165	1	He	4654824	0.83	4813140	96.71	30	120	
Bi	209	1	He	3526054	0.53	3617562	97.47	30	120	

Sample Report

Sample Table

Sample Name	240-51038-e-2-a
Data File Name	085SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T15:08:51-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	18.062	18.062	0.81	257341	0.01	10000	
Be	9	6	2	NoGas	0.173	0.173	8.63	663	0.03	10000	
B	11	6	2	NoGas	71.670	71.670	1.76	132439	0.05	300	
Na	23	45	1	He	380554.404	380554.404	0.43	338948638	0.11	500000	
Mg	24	45	1	He	102913.838	102913.838	0.87	53764066	0.19	500000	
Al	27	45	1	He	29.568	29.568	2.89	10060	0.29	200000	
K	39	45	1	He	4334.646	4334.646	0.44	2450806	0.18	500000	
Ca	44	45	1	He	274538.557	274538.557	0.46	8582679	3.20	500000	
Ti	47	45	1	He	0.855	0.855	11.63	151	0.57	2500	
V	51	45	1	He	2.887	2.887	13.57	30017	0.01	10000	
Cr	52	45	1	He	1.495	1.495	1.38	9656	0.02	10000	
Mn	55	45	1	He	521.739	521.739	0.90	2105786	0.02	10000	
Fe	56	45	1	He	6330.547	6330.547	1.14	30578803	0.02	200000	
Co	59	45	1	He	0.899	0.899	3.04	6431	0.01	10000	
Ni	60	45	1	He	2.655	2.655	3.03	5438	0.05	10000	
Cu	63	45	1	He	0.505	0.505	16.65	2916	0.02	10000	
Zn	66	45	1	He	4.650	4.650	2.57	6512	0.07	10000	
As	75	115	1	He	18.306	18.306	0.32	14878	0.12	10000	
Se	78	115	1	He	0.244	0.244	10.56	58	0.42	10000	
Sr	88	45	1	He	1442.653	1442.653	0.71	8218933	0.02	10000	
Mo	95	103	1	He	10.950	10.950	2.14	28450	0.04	2000	
Ag	107	103	1	He	0.013	0.013	35.48	118	0.01	300	
Cd	111	115	1	He	0.008	0.008	489.82	1591	0.00	4000	
Sn	118	115	1	He	0.568	0.568	8.25	2734	0.02	2000	
Sb	123	165	1	He	0.272	0.272	14.19	1348	0.02	300	
Ba	137	115	1	He	385.318	385.318	0.68	711142	0.05	10000	
W	182	159	1	He	0.195	0.195	9.66	8095	0.00	2500	
Tl	205	165	1	He	0.065	0.065	6.87	1753	0.00	5000	
Pb	208	165	1	He	0.239	0.239	1.34	8661	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1033013	0.79	1261090	81.91	30	120	
Sc	45	1	He	770875	1.04	955958	80.64	30	120	
Sc	45	2	NoGas	7019089	1.21	7862387	89.27	30	120	
Rh	103	1	He	2238706	1.60	2873429	77.91	30	120	
In	115	1	He	1512103	0.84	1922589	78.65	30	120	
Tb	159	1	He	4207117	1.39	4725151	89.04	30	120	
Ho	165	1	He	4300428	0.96	4813140	89.35	30	120	
Bi	209	1	He	2963619	1.40	3617562	81.92	30	120	

Sample Report

Sample Table

Sample Name	240-51038-e-10-a
Data File Name	086SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T15:12:26-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	19.402	19.402	1.45	270680	0.01	10000	
Be	9	6	2	NoGas	0.136	0.136	51.75	552	0.02	10000	
B	11	6	2	NoGas	100.833	100.833	1.75	183771	0.05	300	
Na	23	45	1	He	246177.126	246177.126	1.03	227767650	0.11	500000	
Mg	24	45	1	He	91113.450	91113.450	0.59	49446785	0.18	500000	
Al	27	45	1	He	21.795	21.795	4.06	7856	0.28	200000	
K	39	45	1	He	3931.556	3931.556	1.48	2313383	0.17	500000	
Ca	44	45	1	He	210224.272	210224.272	1.22	6826987	3.08	500000	
Ti	47	45	1	He	0.817	0.817	38.58	150	0.54	2500	
V	51	45	1	He	4.259	4.259	11.13	42817	0.01	10000	
Cr	52	45	1	He	1.538	1.538	2.83	10257	0.01	10000	
Mn	55	45	1	He	695.643	695.643	0.21	2916098	0.02	10000	
Fe	56	45	1	He	438.521	438.521	0.58	2207229	0.02	200000	
Co	59	45	1	He	3.118	3.118	2.24	23039	0.01	10000	
Ni	60	45	1	He	12.624	12.624	0.91	23620	0.05	10000	
Cu	63	45	1	He	1.382	1.382	1.03	7192	0.02	10000	
Zn	66	45	1	He	7.342	7.342	0.80	9685	0.08	10000	
As	75	115	1	He	3.908	3.908	2.41	3404	0.11	10000	
Se	78	115	1	He	0.407	0.407	33.03	71	0.57	10000	
Sr	88	45	1	He	1542.884	1542.884	0.40	9131252	0.02	10000	
Mo	95	103	1	He	12.053	12.053	1.79	32507	0.04	2000	
Ag	107	103	1	He	0.011	0.011	30.42	98	0.01	300	
Cd	111	115	1	He	0.101	0.101	23.70	1787	0.01	4000	
Sn	118	115	1	He	0.515	0.515	9.97	2611	0.02	2000	
Sb	123	165	1	He	0.117	0.117	7.38	651	0.02	300	
Ba	137	115	1	He	372.751	372.751	2.85	709707	0.05	10000	
W	182	159	1	He	0.036	0.036	142.39	6676	0.00	2500	
Tl	205	165	1	He	0.046	0.046	2.68	1325	0.00	5000	
Pb	208	165	1	He	0.244	0.244	3.26	9110	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1039288	0.67	1261090	82.41	30	120	
Sc	45	1	He	800778	0.59	955958	83.77	30	120	
Sc	45	2	NoGas	6962818	0.65	7862387	88.56	30	120	
Rh	103	1	He	2324283	0.61	2873429	80.89	30	120	
In	115	1	He	1560776	2.81	1922589	81.18	30	120	
Tb	159	1	He	4350027	0.77	4725151	92.06	30	120	
Ho	165	1	He	4438447	0.26	4813140	92.22	30	120	
Bi	209	1	He	3085570	0.53	3617562	85.29	30	120	

Sample Report

Sample Table

Sample Name	240-51038-e-11-a
Data File Name	087SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T15:16:00-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	20.965	20.965	0.58	297403	0.01	10000	
Be	9	6	2	NoGas	0.137	0.137	16.94	563	0.02	10000	
B	11	6	2	NoGas	62.598	62.598	0.45	119695	0.05	300	
Na	23	45	1	He	447956.706	447956.706	9.18	423831035	0.11	500000	
Mg	24	45	1	He	77802.327	77802.327	10.06	43156845	0.18	500000	
Al	27	45	1	He	45.753	45.753	12.50	16176	0.28	200000	
K	39	45	1	He	5103.252	5103.252	9.57	3056366	0.17	500000	
Ca	44	45	1	He	188371.522	188371.522	9.81	6253692	3.01	500000	
Ti	47	45	1	He	1.909	1.909	60.89	345	0.55	2500	
V	51	45	1	He	4.431	4.431	14.53	45214	0.01	10000	
Cr	52	45	1	He	1.473	1.473	14.80	10125	0.01	10000	
Mn	55	45	1	He	42.791	42.791	9.13	185319	0.02	10000	
Fe	56	45	1	He	5618.209	5618.209	9.61	28823644	0.02	200000	
Co	59	45	1	He	0.292	0.292	8.10	2259	0.01	10000	
Ni	60	45	1	He	1.654	1.654	14.39	3925	0.04	10000	
Cu	63	45	1	He	0.670	0.670	7.79	3903	0.02	10000	
Zn	66	45	1	He	6.906	6.906	13.44	9411	0.07	10000	
As	75	115	1	He	1.898	1.898	9.88	1783	0.11	10000	
Se	78	115	1	He	0.219	0.219	42.17	59	0.37	10000	
Sr	88	45	1	He	1280.123	1280.123	9.74	7745001	0.02	10000	
Mo	95	103	1	He	1.644	1.644	12.69	4557	0.04	2000	
Ag	107	103	1	He	0.013	0.013	22.40	120	0.01	300	
Cd	111	115	1	He	0.026	0.026	111.23	1726	0.00	4000	
Sn	118	115	1	He	0.734	0.734	10.00	3597	0.02	2000	
Sb	123	165	1	He	0.065	0.065	14.79	418	0.02	300	
Ba	137	115	1	He	1616.140	1616.140	9.04	3161199	0.05	10000	
W	182	159	1	He	0.047	0.047	36.21	7006	0.00	2500	
Tl	205	165	1	He	0.007	0.007	27.18	362	0.00	5000	
Pb	208	165	1	He	0.289	0.289	10.68	10913	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1058308	1.57	1261090	83.92	30	120	
Sc	45	1	He	823450	9.04	955958	86.14	30	120	
Sc	45	2	NoGas	7175132	0.98	7862387	91.26	30	120	
Rh	103	1	He	2384730	8.65	2873429	82.99	30	120	
In	115	1	He	1610516	8.12	1922589	83.77	30	120	
Tb	159	1	He	4490356	9.59	4725151	95.03	30	120	
Ho	165	1	He	4569371	9.19	4813140	94.94	30	120	
Bi	209	1	He	3162054	8.85	3617562	87.41	30	120	

Sample Report

Sample Table

Sample Name	240-51038-e-12-a
Data File Name	088SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T15:19:31-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	20.758	20.758	0.63	288841	0.01	10000	
Be	9	6	2	NoGas	0.141	0.141	20.36	544	0.03	10000	
B	11	6	2	NoGas	64.368	64.368	4.41	115972	0.06	300	
Na	23	45	1	He	473958.081	473958.081	4.93	438718383	0.11	500000	
Mg	24	45	1	He	82586.714	82586.714	4.53	44846537	0.18	500000	
Al	27	45	1	He	67.879	67.879	1.60	23270	0.29	200000	
K	39	45	1	He	5370.821	5370.821	4.49	3145474	0.17	500000	
Ca	44	45	1	He	198649.754	198649.754	4.22	6455698	3.08	500000	
Ti	47	45	1	He	1.854	1.854	22.96	332	0.56	2500	
V	51	45	1	He	4.023	4.023	5.60	40837	0.01	10000	
Cr	52	45	1	He	1.689	1.689	3.36	11069	0.02	10000	
Mn	55	45	1	He	43.862	43.862	4.93	185776	0.02	10000	
Fe	56	45	1	He	6001.947	6001.947	4.42	30136394	0.02	200000	
Co	59	45	1	He	0.278	0.278	8.28	2112	0.01	10000	
Ni	60	45	1	He	1.647	1.647	3.16	3835	0.04	10000	
Cu	63	45	1	He	0.753	0.753	17.61	4193	0.02	10000	
Zn	66	45	1	He	4.155	4.155	8.16	6229	0.07	10000	
As	75	115	1	He	1.853	1.853	7.05	1711	0.11	10000	
Se	78	115	1	He	0.253	0.253	14.86	61	0.42	10000	
Sr	88	45	1	He	1346.580	1346.580	4.43	7974523	0.02	10000	
Mo	95	103	1	He	1.693	1.693	4.26	4581	0.04	2000	
Ag	107	103	1	He	0.012	0.012	24.39	106	0.01	300	
Cd	111	115	1	He	0.022	0.022	10.81	1680	0.00	4000	
Sn	118	115	1	He	0.914	0.914	7.93	4204	0.02	2000	
Sb	123	165	1	He	0.061	0.061	11.02	384	0.02	300	
Ba	137	115	1	He	1700.764	1700.764	5.32	3263920	0.05	10000	
W	182	159	1	He	0.041	0.041	51.47	6709	0.00	2500	
Tl	205	165	1	He	0.006	0.006	32.20	316	0.00	5000	
Pb	208	165	1	He	0.256	0.256	5.21	9477	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	999850	2.11	1261090	79.28	30	120	
Sc	45	1	He	802289	4.33	955958	83.93	30	120	
Sc	45	2	NoGas	7025977	0.65	7862387	89.36	30	120	
Rh	103	1	He	2313152	4.30	2873429	80.50	30	120	
In	115	1	He	1575272	5.19	1922589	81.93	30	120	
Tb	159	1	He	4341349	2.78	4725151	91.88	30	120	
Ho	165	1	He	4430408	3.51	4813140	92.05	30	120	
Bi	209	1	He	3036401	3.17	3617562	83.94	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2026839
Data File Name	089_CCV.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T15:23:05-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	45.266	0.516	570825	0.15	50	90.5	89.5	110.5	
Be	9	6	2	NoGas	48.348	0.588	151595	0.71	50	96.7	89.5	110.5	
B	11	6	2	NoGas	49.506	1.621	95558	1.06	50	99.0	89.5	110.5	
Na	23	45	1	He	24322.128	8.185	24269846	2.33	25000	97.3	89.5	110.5	
Mg	24	45	1	He	24096.613	9.242	14086178	3.15	25000	96.4	89.5	110.5	
Al	27	45	1	He	237.355	9.037	85860	2.98	250	94.9	89.5	110.5	
K	39	45	1	He	24557.892	8.798	15307092	2.66	25000	98.2	89.5	110.5	
Ca	44	45	1	He	23760.394	8.399	831999	2.55	25000	95.0	89.5	110.5	
Ti	47	45	1	He	49.754	7.906	9494	1.81	50	99.5	89.5	110.5	
V	51	45	1	He	48.387	9.588	449695	3.28	50	96.8	89.5	110.5	
Cr	52	45	1	He	48.093	9.094	275527	2.98	50	96.2	89.5	110.5	
Mn	55	45	1	He	241.799	9.015	1093121	2.91	250	96.7	89.5	110.5	
Fe	56	45	1	He	12049.265	9.088	65112835	2.95	12500	96.4	89.5	110.5	
Co	59	45	1	He	48.383	8.318	384288	2.16	50	96.8	89.5	110.5	
Ni	60	45	1	He	47.669	8.138	93538	2.13	50	95.3	89.5	110.5	
Cu	63	45	1	He	48.964	8.484	251192	2.41	50	97.9	89.5	110.5	
Zn	66	45	1	He	48.288	9.520	58266	3.03	50	96.6	89.5	110.5	
As	75	115	1	He	45.613	11.235	43699	3.10	50	91.2	89.5	110.5	
Se	78	115	1	He	46.014	10.902	3876	2.68	50	92.0	89.5	110.5	
Sr	88	45	1	He	50.100	8.726	319532	2.52	50	100.2	89.5	110.5	
Mo	95	103	1	He	49.549	10.968	149654	2.80	50	99.1	89.5	110.5	
Ag	107	103	1	He	48.113	10.259	459109	2.04	50	96.2	89.5	110.5	
Cd	111	115	1	He	46.938	11.153	86570	2.99	50	93.9	89.5	110.5	
Sn	118	115	1	He	47.014	10.118	212029	1.94	50	94.0	89.5	110.5	
Sb	123	165	1	He	47.963	10.228	245376	2.18	50	95.9	89.5	110.5	
Ba	137	115	1	He	48.109	10.391	105398	2.24	50	96.2	89.5	110.5	
W	182	159	1	He	47.110	10.622	546686	2.30	50	94.2	89.5	110.5	
Tl	205	165	1	He	47.748	9.963	1299866	1.72	50	95.5	89.5	110.5	
Pb	208	165	1	He	48.216	10.089	1788900	1.87	50	96.4	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1046891	0.87	1261090	83.01	30	120	
Sc	45	1	He	865916	6.61	955958	90.58	30	120	
Sc	45	2	NoGas	7003102	0.59	7862387	89.07	30	120	
Rh	103	1	He	2622296	8.70	2873429	91.26	30	120	
In	115	1	He	1805312	8.68	1922589	93.90	30	120	
Tb	159	1	He	4705587	8.71	4725151	99.59	30	120	
Ho	165	1	He	4780466	8.74	4813140	99.32	30	120	
Bi	209	1	He	3475137	7.34	3617562	96.06	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	090_CCB.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T15:26:43-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.107	-50.6	46989	1.3	2	
Be	9	6	2	NoGas	0.107	10.1	470	7.6	1	
B	11	6	2	NoGas	0.064	409.0	9447	5.0	20	
Na	23	45	1	He	130.583	13.4	160686	3.7	1000	
Mg	24	45	1	He	1.970	67.2	4241	10.9	1000	
Al	27	45	1	He	0.253	97.2	760	3.9	50	
K	39	45	1	He	17.099	54.2	62586	1.2	1000	
Ca	44	45	1	He	46.794	8.3	2441	4.2	1000	
Ti	47	45	1	He	0.077	47.2	22	43.3	20	
V	51	45	1	He	-0.098	-50.2	6550	3.2	2	
Cr	52	45	1	He	0.004	1103.4	2439	4.9	2	
Mn	55	45	1	He	0.738	16.5	5659	1.6	2	
Fe	56	45	1	He	13.516	4.2	85134	11.4	50	
Co	59	45	1	He	0.020	33.9	231	16.6	1	
Ni	60	45	1	He	-0.360	-5.3	237	9.9	2	
Cu	63	45	1	He	0.151	34.6	1506	10.5	2	
Zn	66	45	1	He	2.982	16.7	5572	2.5	20	
As	75	115	1	He	0.059	28.4	259	8.3	2	
Se	78	115	1	He	0.092	109.2	59	10.8	2	
Sr	88	45	1	He	0.077	18.6	656	8.6	10	
Mo	95	103	1	He	0.263	20.1	917	23.5	2	
Ag	107	103	1	He	0.008	48.1	90	37.6	0.2	
Cd	111	115	1	He	-0.056	-12.1	1903	8.1	0.2	
Sn	118	115	1	He	0.315	20.4	2245	5.7	10	
Sb	123	165	1	He	0.115	17.1	712	9.0	2	
Ba	137	115	1	He	0.097	10.0	263	3.8	5	
W	182	159	1	He	0.494	5.9	12954	7.4	10	
Tl	205	165	1	He	0.092	12.0	2790	3.6	0.5	
Pb	208	165	1	He	0.140	9.4	6124	1.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1062521	0.29	1261090	84.25	30	120	
Sc	45	1	He	906422	9.04	955958	94.82	30	120	
Sc	45	2	NoGas	7001792	1.42	7862387	89.05	30	120	
Rh	103	1	He	2805128	7.33	2873429	97.62	30	120	
In	115	1	He	1928119	8.84	1922589	100.29	30	120	
Tb	159	1	He	4879101	7.99	4725151	103.26	30	120	
Ho	165	1	He	4956403	8.01	4813140	102.98	30	120	
Bi	209	1	He	3709832	6.41	3617562	102.55	30	120	

Sample Report

Sample Table

Sample Name	500-96124-b-1-i@5
Data File Name	091SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T15:30:21-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	4.628	4.628	0.91	97047	0.00	10000	
Be	9	6	2	NoGas	0.110	0.110	15.38	441	0.02	10000	
B	11	6	2	NoGas	134.710	134.710	2.15	227196	0.06	300	
Na	23	45	1	He	12606.777	12606.777	1.02	11642522	0.11	500000	
Mg	24	45	1	He	6.435	6.435	9.03	6194	0.10	500000	
Al	27	45	1	He	0.524	0.524	80.92	767	0.07	200000	
K	39	45	1	He	151076.427	151076.427	1.25	86860589	0.17	500000	
Ca	44	45	1	He	193704.173	193704.173	1.61	6267053	3.09	500000	
Ti	47	45	1	He	0.062	0.062	152.43	17	0.37	2500	
V	51	45	1	He	4.228	4.228	0.31	42408	0.01	10000	
Cr	52	45	1	He	8.643	8.643	2.61	47556	0.02	10000	
Mn	55	45	1	He	0.105	0.105	47.48	2369	0.00	10000	
Fe	56	45	1	He	5.623	5.623	9.04	35454	0.02	200000	
Co	59	45	1	He	0.101	0.101	13.52	798	0.01	10000	
Ni	60	45	1	He	-0.185	-0.185	-27.15	523	-0.04	10000	
Cu	63	45	1	He	0.450	0.450	1.75	2758	0.02	10000	
Zn	66	45	1	He	449.802	449.802	1.57	487819	0.09	10000	
As	75	115	1	He	0.503	0.503	2.15	608	0.08	10000	
Se	78	115	1	He	1.088	1.088	6.81	127	0.86	10000	
Sr	88	45	1	He	750.868	750.868	0.55	4428010	0.02	10000	
Mo	95	103	1	He	39.761	39.761	1.29	109794	0.04	2000	
Ag	107	103	1	He	0.005	0.005	21.45	56	0.01	300	
Cd	111	115	1	He	-0.048	-0.048	-29.30	1636	0.00	4000	
Sn	118	115	1	He	0.161	0.161	18.21	1296	0.01	2000	
Sb	123	165	1	He	0.059	0.059	9.04	378	0.02	300	
Ba	137	115	1	He	49.016	49.016	2.49	98219	0.05	10000	
W	182	159	1	He	0.592	0.592	3.00	12672	0.00	2500	
Tl	205	165	1	He	0.034	0.034	16.82	1031	0.00	5000	
Pb	208	165	1	He	5.977	5.977	1.79	208720	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	974132	1.30	1261090	77.25	30	120	
Sc	45	1	He	797997	2.86	955958	83.48	30	120	
Sc	45	2	NoGas	6684436	1.26	7862387	85.02	30	120	
Rh	103	1	He	2382046	0.44	2873429	82.90	30	120	
In	115	1	He	1642131	3.07	1922589	85.41	30	120	
Tb	159	1	He	4374390	1.64	4725151	92.58	30	120	
Ho	165	1	He	4461457	1.30	4813140	92.69	30	120	
Bi	209	1	He	3219634	0.94	3617562	89.00	30	120	

Sample Report

Sample Table

Sample Name	SD 500-96124-b-1-i@25
Data File Name	092SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T15:33:59-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	0.630	0.630	11.92	55942	0.00	10000	
Be	9	6	2	NoGas	0.080	0.080	13.80	382	0.02	10000	
B	11	6	2	NoGas	25.789	25.789	2.91	54302	0.05	300	
Na	23	45	1	He	2724.042	2724.042	0.45	2598308	0.10	500000	
Mg	24	45	1	He	0.107	0.107	371.50	2841	0.00	500000	
Al	27	45	1	He	0.161	0.161	54.72	660	0.02	200000	
K	39	45	1	He	31249.857	31249.857	0.64	18467986	0.17	500000	
Ca	44	45	1	He	40626.268	40626.268	2.27	1348945	3.01	500000	
Ti	47	45	1	He	-0.025	-0.025	-41.64	1	-2.29	2500	
V	51	45	1	He	0.963	0.963	3.83	15150	0.01	10000	
Cr	52	45	1	He	1.710	1.710	2.16	11414	0.01	10000	
Mn	55	45	1	He	0.032	0.032	60.58	2118	0.00	10000	
Fe	56	45	1	He	1.406	1.406	16.22	14695	0.01	200000	
Co	59	45	1	He	0.025	0.025	5.69	248	0.01	10000	
Ni	60	45	1	He	-0.316	-0.316	-1.00	297	-0.11	10000	
Cu	63	45	1	He	0.149	0.149	12.07	1368	0.01	10000	
Zn	66	45	1	He	94.547	94.547	1.64	106579	0.09	10000	
As	75	115	1	He	0.106	0.106	21.49	276	0.04	10000	
Se	78	115	1	He	0.331	0.331	20.66	73	0.45	10000	
Sr	88	45	1	He	151.340	151.340	0.98	915511	0.02	10000	
Mo	95	103	1	He	7.827	7.827	1.44	22687	0.03	2000	
Ag	107	103	1	He	0.003	0.003	61.25	34	0.01	300	
Cd	111	115	1	He	-0.084	-0.084	-10.24	1666	-0.01	4000	
Sn	118	115	1	He	0.042	0.042	11.05	852	0.00	2000	
Sb	123	165	1	He	0.010	0.010	66.33	143	0.01	300	
Ba	137	115	1	He	9.418	9.418	1.94	19989	0.05	10000	
W	182	159	1	He	0.109	0.109	67.07	7680	0.00	2500	
Tl	205	165	1	He	0.008	0.008	27.40	389	0.00	5000	
Pb	208	165	1	He	1.274	1.274	0.44	45904	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1049101	2.86	1261090	83.19	30	120	
Sc	45	1	He	818426	0.27	955958	85.61	30	120	
Sc	45	2	NoGas	7059227	3.73	7862387	89.78	30	120	
Rh	103	1	He	2495724	0.42	2873429	86.86	30	120	
In	115	1	He	1736578	1.73	1922589	90.32	30	120	
Tb	159	1	He	4482723	1.06	4725151	94.87	30	120	
Ho	165	1	He	4550852	0.91	4813140	94.55	30	120	
Bi	209	1	He	3446764	1.67	3617562	95.28	30	120	

Sample Report

Sample Table

Sample Name	PDS 500-96124-b-1-i@5
Data File Name	093SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T15:37:36-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	3.339	3.339	10.13	94937	0.00	10000	
Be	9	6	2	NoGas	814.922	814.922	3.58	2589312	0.03	10000	
B	11	6	2	NoGas	200.104	200.104	4.26	363314	0.06	300	
Na	23	45	1	He	19998.536	19998.536	10.14	19124238	0.10	500000	
Mg	24	45	1	He	8993.416	8993.416	10.19	5041357	0.18	500000	
Al	27	45	1	He	8624.348	8624.348	11.08	2966882	0.29	200000	
K	39	45	1	He	143833.877	143833.877	10.22	85692074	0.17	500000	
Ca	44	45	1	He	183050.632	183050.632	10.11	6137591	2.98	500000	
Ti	47	45	1	He	89.442	89.442	12.02	16329	0.55	2500	
V	51	45	1	He	892.007	892.007	10.20	7828031	0.01	10000	
Cr	52	45	1	He	883.977	883.977	10.18	4815642	0.02	10000	
Mn	55	45	1	He	901.988	901.988	10.36	3902518	0.02	10000	
Fe	56	45	1	He	8935.912	8935.912	10.55	46277596	0.02	200000	
Co	59	45	1	He	871.407	871.407	10.74	6628710	0.01	10000	
Ni	60	45	1	He	899.981	899.981	11.33	1674869	0.05	10000	
Cu	63	45	1	He	869.584	869.584	10.23	4263869	0.02	10000	
Zn	66	45	1	He	1268.312	1268.312	10.07	1422275	0.09	10000	
As	75	115	1	He	870.825	870.825	9.83	780697	0.11	10000	
Se	78	115	1	He	872.543	872.543	10.10	68220	1.28	10000	
Sr	88	45	1	He	1607.851	1607.851	9.87	9825647	0.02	10000	
Mo	95	103	1	He	135.985	135.985	9.86	379551	0.04	2000	
Ag	107	103	1	He	91.360	91.360	9.07	805842	0.01	300	
Cd	111	115	1	He	883.450	883.450	10.02	1499009	0.06	4000	
Sn	118	115	1	He	956.304	956.304	9.83	4036785	0.02	2000	
Sb	123	165	1	He	87.055	87.055	8.62	439699	0.02	300	
Ba	137	115	1	He	1013.706	1013.706	9.03	2085956	0.05	10000	
W	182	159	1	He	91.212	91.212	9.87	1033913	0.01	2500	
Tl	205	165	1	He	225.124	225.124	9.32	6048080	0.00	5000	
Pb	208	165	1	He	893.700	893.700	8.63	32728249	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1062739	4.07	1261090	84.27	30	120	
Sc	45	1	He	831967	9.32	955958	87.03	30	120	
Sc	45	2	NoGas	7674807	6.24	7862387	97.61	30	120	
Rh	103	1	He	2422198	8.64	2873429	84.30	30	120	
In	115	1	He	1694932	8.82	1922589	88.16	30	120	
Tb	159	1	He	4624631	9.50	4725151	97.87	30	120	
Ho	165	1	He	4715765	8.55	4813140	97.98	30	120	
Bi	209	1	He	3373604	7.73	3617562	93.26	30	120	

Sample Report

Sample Table

Sample Name	500-96124-b-1-j ms@5
Data File Name	094SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T15:40:59-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	4.483	4.483	2.08	95182	0.00	10000	
Be	9	6	2	NoGas	188.744	188.744	0.09	538456	0.04	10000	
B	11	6	2	NoGas	158.710	158.710	0.32	260446	0.06	300	
Na	23	45	1	He	15083.390	15083.390	0.87	13317513	0.11	500000	
Mg	24	45	1	He	2027.905	2027.905	0.87	1051188	0.19	500000	
Al	27	45	1	He	1942.233	1942.233	0.42	617485	0.31	200000	
K	39	45	1	He	158652.796	158652.796	0.78	87236880	0.18	500000	
Ca	44	45	1	He	203627.094	203627.094	0.27	6301437	3.23	500000	
Ti	47	45	1	He	21.105	21.105	3.92	3564	0.59	2500	
V	51	45	1	He	200.296	200.296	1.23	1627245	0.01	10000	
Cr	52	45	1	He	203.849	203.849	0.94	1026523	0.02	10000	
Mn	55	45	1	He	197.013	197.013	1.33	788242	0.02	10000	
Fe	56	45	1	He	2013.714	2013.714	1.23	9632894	0.02	200000	
Co	59	45	1	He	196.981	196.981	0.87	1383498	0.01	10000	
Ni	60	45	1	He	195.016	195.016	0.88	335845	0.06	10000	
Cu	63	45	1	He	195.072	195.072	1.46	883283	0.02	10000	
Zn	66	45	1	He	655.091	655.091	1.25	678750	0.10	10000	
As	75	115	1	He	186.953	186.953	2.24	159126	0.12	10000	
Se	78	115	1	He	187.763	187.763	2.08	13962	1.34	10000	
Sr	88	45	1	He	993.443	993.443	0.79	5602299	0.02	10000	
Mo	95	103	1	He	63.062	63.062	1.15	167327	0.04	2000	
Ag	107	103	1	He	19.649	19.649	1.51	164662	0.01	300	
Cd	111	115	1	He	188.888	188.888	1.88	305394	0.06	4000	
Sn	118	115	1	He	202.711	202.711	2.16	812225	0.02	2000	
Sb	123	165	1	He	19.523	19.523	0.44	92751	0.02	300	
Ba	137	115	1	He	247.790	247.790	2.13	483487	0.05	10000	
W	182	159	1	He	20.896	20.896	1.58	226787	0.01	2500	
Tl	205	165	1	He	48.204	48.204	0.80	1217760	0.00	5000	
Pb	208	165	1	He	201.889	201.889	0.64	6949491	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	953116	1.02	1261090	75.58	30	120	
Sc	45	1	He	763066	1.28	955958	79.82	30	120	
Sc	45	2	NoGas	6666405	1.21	7862387	84.79	30	120	
Rh	103	1	He	2289499	1.62	2873429	79.68	30	120	
In	115	1	He	1599029	1.91	1922589	83.17	30	120	
Tb	159	1	He	4307636	1.04	4725151	91.16	30	120	
Ho	165	1	He	4410484	0.56	4813140	91.63	30	120	
Bi	209	1	He	3192002	0.19	3617562	88.24	30	120	

Sample Report

Sample Table

Sample Name	500-96124-b-1-k msd@5
Data File Name	095SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T15:44:33-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	4.606	4.606	3.52	89460	0.01	10000	
Be	9	6	2	NoGas	192.956	192.956	1.10	511316	0.04	10000	
B	11	6	2	NoGas	160.968	160.968	0.94	245255	0.07	300	
Na	23	45	1	He	14551.913	14551.913	5.33	12681683	0.11	500000	
Mg	24	45	1	He	1944.998	1944.998	5.51	995159	0.20	500000	
Al	27	45	1	He	1860.135	1860.135	4.86	583786	0.32	200000	
K	39	45	1	He	152591.983	152591.983	4.28	82838960	0.18	500000	
Ca	44	45	1	He	196200.745	196200.745	4.70	5993472	3.27	500000	
Ti	47	45	1	He	19.177	19.177	8.36	3194	0.60	2500	
V	51	45	1	He	193.944	193.944	5.07	1555441	0.01	10000	
Cr	52	45	1	He	196.891	196.891	5.12	978706	0.02	10000	
Mn	55	45	1	He	191.059	191.059	4.96	754619	0.03	10000	
Fe	56	45	1	He	1928.158	1928.158	4.73	9105471	0.02	200000	
Co	59	45	1	He	191.502	191.502	4.96	1327658	0.01	10000	
Ni	60	45	1	He	189.826	189.826	5.31	322681	0.06	10000	
Cu	63	45	1	He	189.889	189.889	5.02	848734	0.02	10000	
Zn	66	45	1	He	634.603	634.603	5.27	649028	0.10	10000	
As	75	115	1	He	182.278	182.278	6.76	152349	0.12	10000	
Se	78	115	1	He	183.756	183.756	6.99	13417	1.37	10000	
Sr	88	45	1	He	964.804	964.804	5.28	5369932	0.02	10000	
Mo	95	103	1	He	60.439	60.439	6.03	159045	0.04	2000	
Ag	107	103	1	He	19.266	19.266	5.17	160161	0.01	300	
Cd	111	115	1	He	185.462	185.462	7.04	294430	0.06	4000	
Sn	118	115	1	He	197.407	197.407	6.89	776673	0.03	2000	
Sb	123	165	1	He	18.536	18.536	4.17	87251	0.02	300	
Ba	137	115	1	He	242.677	242.677	6.56	464999	0.05	10000	
W	182	159	1	He	19.865	19.865	4.16	214789	0.01	2500	
Tl	205	165	1	He	47.262	47.262	4.54	1182790	0.00	5000	
Pb	208	165	1	He	197.763	197.763	4.68	6743337	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	885334	0.77	1261090	70.20	30	120	
Sc	45	1	He	754342	4.74	955958	78.91	30	120	
Sc	45	2	NoGas	6178290	1.43	7862387	78.58	30	120	
Rh	103	1	He	2274333	4.43	2873429	79.15	30	120	
In	115	1	He	1574266	6.40	1922589	81.88	30	120	
Tb	159	1	He	4289609	3.94	4725151	90.78	30	120	
Ho	165	1	He	4374707	4.23	4813140	90.89	30	120	
Bi	209	1	He	3191072	4.32	3617562	88.21	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2026839
Data File Name	096_CCV.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T15:48:07-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	42.753	0.122	506389	1.50	50	85.5	89.5	110.5	CCV Failed
Be	9	6	2	NoGas	47.789	1.579	134303	2.51	50	95.6	89.5	110.5	
B	11	6	2	NoGas	50.425	1.503	87093	2.66	50	100.9	89.5	110.5	
Na	23	45	1	He	26957.563	9.838	21342076	2.55	25000	107.8	89.5	110.5	
Mg	24	45	1	He	26870.396	9.278	12472756	2.00	25000	107.5	89.5	110.5	
Al	27	45	1	He	263.936	9.394	75747	2.11	250	105.6	89.5	110.5	
K	39	45	1	He	27201.005	9.881	13452555	2.58	25000	108.8	89.5	110.5	
Ca	44	45	1	He	26554.631	9.892	737781	2.60	25000	106.2	89.5	110.5	
Ti	47	45	1	He	53.564	10.029	8109	3.34	50	107.1	89.5	110.5	
V	51	45	1	He	53.992	9.938	397742	2.51	50	108.0	89.5	110.5	
Cr	52	45	1	He	53.787	10.149	244358	2.78	50	107.6	89.5	110.5	
Mn	55	45	1	He	271.036	9.494	972578	2.20	250	108.4	89.5	110.5	
Fe	56	45	1	He	13475.102	9.133	57822893	1.87	12500	107.8	89.5	110.5	
Co	59	45	1	He	54.120	9.035	341234	1.77	50	108.2	89.5	110.5	
Ni	60	45	1	He	53.773	10.208	83616	2.83	50	107.5	89.5	110.5	
Cu	63	45	1	He	54.622	9.829	222321	2.52	50	109.2	89.5	110.5	
Zn	66	45	1	He	55.296	9.576	52768	2.16	50	110.6	89.5	110.5	CCV Failed
As	75	115	1	He	52.568	11.026	39406	2.01	50	105.1	89.5	110.5	
Se	78	115	1	He	52.802	11.373	3475	2.52	50	105.6	89.5	110.5	
Sr	88	45	1	He	56.373	9.376	285411	2.10	50	112.7	89.5	110.5	CCV Failed
Mo	95	103	1	He	55.951	10.307	136507	2.30	50	111.9	89.5	110.5	CCV Failed
Ag	107	103	1	He	54.040	10.205	416415	2.07	50	108.1	89.5	110.5	
Cd	111	115	1	He	54.775	11.343	78821	2.13	50	109.6	89.5	110.5	
Sn	118	115	1	He	57.192	11.044	201675	2.04	50	114.4	89.5	110.5	CCV Failed
Sb	123	165	1	He	52.144	11.580	223710	2.06	50	104.3	89.5	110.5	
Ba	137	115	1	He	56.602	10.637	97052	1.72	50	113.2	89.5	110.5	CCV Failed
W	182	159	1	He	54.124	10.314	522082	1.29	50	108.2	89.5	110.5	
Tl	205	165	1	He	54.268	11.195	1239111	1.69	50	108.5	89.5	110.5	
Pb	208	165	1	He	54.470	11.197	1695057	1.71	50	108.9	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	938257	1.61	1261090	74.40	30	120	
Sc	45	1	He	687800	7.01	955958	71.95	30	120	
Sc	45	2	NoGas	6545046	1.47	7862387	83.25	30	120	
Rh	103	1	He	2116231	7.82	2873429	73.65	30	120	
In	115	1	He	1413075	8.60	1922589	73.50	30	120	
Tb	159	1	He	3916593	8.53	4725151	82.89	30	120	
Ho	165	1	He	4013170	8.98	4813140	83.38	30	120	
Bi	209	1	He	3011079	9.12	3617562	83.24	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	097_CCB.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T15:51:41-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.162	-17.5	40984	1.0	2	
Be	9	6	2	NoGas	0.350	17.9	1126	15.9	1	
B	11	6	2	NoGas	1.189	47.0	10366	9.1	20	
Na	23	45	1	He	95.038	4.8	105734	2.1	1000	
Mg	24	45	1	He	-0.645	-47.0	2278	5.3	1000	
Al	27	45	1	He	0.914	7.7	862	2.3	50	
K	39	45	1	He	60.421	7.3	77471	1.6	1000	
Ca	44	45	1	He	75.261	1.5	2969	2.1	1000	
Ti	47	45	1	He	0.053	82.1	14	53.3	20	
V	51	45	1	He	-0.261	-11.6	4257	5.1	2	
Cr	52	45	1	He	0.007	331.7	2099	6.0	2	
Mn	55	45	1	He	1.238	1.4	6851	2.6	2	
Fe	56	45	1	He	14.305	15.1	76158	15.4	50	
Co	59	45	1	He	0.040	31.1	342	25.9	1	
Ni	60	45	1	He	-0.315	-2.7	281	6.9	2	
Cu	63	45	1	He	0.224	17.8	1625	9.7	2	
Zn	66	45	1	He	4.795	4.7	6655	3.2	20	
As	75	115	1	He	0.176	44.8	328	21.8	2	
Se	78	115	1	He	0.330	47.2	70	17.7	2	
Sr	88	45	1	He	0.089	5.3	630	3.2	10	
Mo	95	103	1	He	0.369	30.3	1107	30.0	2	
Ag	107	103	1	He	0.010	12.2	97	10.3	0.2	
Cd	111	115	1	He	-0.039	-12.5	1677	0.6	0.2	
Sn	118	115	1	He	0.847	12.6	4182	11.2	10	
Sb	123	165	1	He	0.167	6.8	882	6.7	2	
Ba	137	115	1	He	0.073	5.3	180	4.9	5	
W	182	159	1	He	0.754	13.4	14055	7.6	10	
Tl	205	165	1	He	0.145	6.2	3799	5.2	0.5	
Pb	208	165	1	He	0.182	2.6	6875	1.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	962797	2.40	1261090	76.35	30	120	
Sc	45	1	He	769973	1.73	955958	80.54	30	120	
Sc	45	2	NoGas	6189481	0.34	7862387	78.72	30	120	
Rh	103	1	He	2469340	1.18	2873429	85.94	30	120	
In	115	1	He	1667982	0.53	1922589	86.76	30	120	
Tb	159	1	He	4268159	1.01	4725151	90.33	30	120	
Ho	165	1	He	4386105	0.72	4813140	91.13	30	120	
Bi	209	1	He	3318106	0.64	3617562	91.72	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-2012498
Data File Name	098CRI.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T15:55:16-04:00
Sample Type	CRI
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	2	NoGas	7.147	7.147	2.067	116257	0.53	8	89.3	49.5	150.5	
Be	9	2	NoGas	1.126	1.126	4.967	3356	5.14	1	112.6	49.5	150.5	
B	11	2	NoGas	19.194	19.194	3.711	39168	3.47	20	96.0	49.5	150.5	
Na	23	1	He	1107.151	1107.151	2.487	1030836	0.11	1000	110.7	49.5	150.5	
Mg	24	1	He	1043.472	1043.472	3.283	560469	1.00	1000	104.3	49.5	150.5	
Al	27	1	He	49.138	49.138	6.243	16712	4.01	50	98.3	49.5	150.5	
K	39	1	He	1083.384	1083.384	2.129	660716	0.76	1000	108.3	49.5	150.5	
Ca	44	1	He	1015.651	1015.651	4.091	33118	1.80	1000	101.6	49.5	150.5	
Ti	47	1	He	10.928	10.928	7.397	1911	7.72	10	109.3	49.5	150.5	
V	51	1	He	3.568	3.568	3.494	36400	1.52	5	71.4	49.5	150.5	
Cr	52	1	He	2.036	2.036	4.204	12692	1.19	2	101.8	49.5	150.5	
Mn	55	1	He	4.867	4.867	1.213	22004	1.70	5	97.3	49.5	150.5	
Fe	56	1	He	106.836	106.836	3.228	535163	0.91	100	106.8	49.5	150.5	
Co	59	1	He	1.066	1.066	5.634	7793	3.34	1	106.6	49.5	150.5	
Ni	60	1	He	1.842	1.842	8.824	4117	4.88	2	92.1	49.5	150.5	
Cu	63	1	He	2.196	2.196	1.779	10895	1.05	2	109.8	49.5	150.5	
Zn	66	1	He	20.615	20.615	4.277	23719	1.67	20	103.1	49.5	150.5	
As	75	1	He	4.757	4.757	1.772	4503	0.48	5	95.1	49.5	150.5	
Se	78	1	He	5.228	5.228	4.817	460	4.65	5	104.6	49.5	150.5	
Sr	88	1	He	10.653	10.653	3.426	62227	1.11	10	106.5	49.5	150.5	
Mo	95	1	He	10.088	10.088	1.310	28903	0.62	10	100.9	49.5	150.5	
Ag	107	1	He	1.012	1.012	2.075	9150	2.62	1	101.2	49.5	150.5	
Cd	111	1	He	0.949	0.949	7.729	3417	2.92	1	94.9	49.5	150.5	
Sn	118	1	He	10.195	10.195	1.387	44329	0.99	10	102.0	49.5	150.5	
Sb	123	1	He	2.065	2.065	3.825	9900	2.28	2	103.3	49.5	150.5	
Ba	137	1	He	5.087	5.087	2.203	10648	1.01	5	101.7	49.5	150.5	
W	182	1	He	9.608	9.608	1.060	109143	0.65	10	96.1	49.5	150.5	
Tl	205	1	He	2.028	2.028	3.213	51418	1.58	2	101.4	49.5	150.5	
Pb	208	1	He	1.123	1.123	3.414	39332	1.68	1	112.3	49.5	150.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	960594	0.65	1261090	76.17	30	120	
Sc	45	1	He	789183	2.34	955958	82.55	30	120	
Sc	45	2	NoGas	6227253	0.83	7862387	79.20	30	120	
Rh	103	1	He	2468662	1.52	2873429	85.91	30	120	
In	115	1	He	1710377	1.33	1922589	88.96	30	120	
Tb	159	1	He	4367593	1.51	4725151	92.43	30	120	
Ho	165	1	He	4414629	1.90	4813140	91.72	30	120	
Bi	209	1	He	3364163	0.97	3617562	93.00	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-182519/1-a
Data File Name	099_Blk.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T15:58:55-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.066	-35.6	40352	2.0	2	
Be	9	6	2	NoGas	0.301	15.1	930	10.8	1	
B	11	6	2	NoGas	3.195	3.7	12857	4.5	20	
Na	23	45	1	He	156.579	17.1	150381	3.1	1000	
Mg	24	45	1	He	32.983	14.1	18610	1.6	1000	
Al	27	45	1	He	2.115	13.1	1179	10.5	50	
K	39	45	1	He	76.273	25.0	80980	1.2	1000	
Ca	44	45	1	He	139.702	18.3	4660	3.8	1000	
Ti	47	45	1	He	0.153	78.1	31	68.0	20	
V	51	45	1	He	1.614	16.8	18387	3.0	2	
Cr	52	45	1	He	1.104	21.3	7169	2.3	2	
Mn	55	45	1	He	0.174	65.5	2401	7.7	2	
Fe	56	45	1	He	18.023	18.1	87904	4.5	50	
Co	59	45	1	He	0.131	13.3	926	5.9	1	
Ni	60	45	1	He	-0.105	-69.0	604	11.6	2	
Cu	63	45	1	He	0.839	12.4	4169	2.8	2	
Zn	66	45	1	He	7.233	14.6	8636	1.9	20	
As	75	115	1	He	0.469	23.7	545	4.8	2	
Se	78	115	1	He	0.323	23.1	65	13.0	2	
Sr	88	45	1	He	0.724	11.5	3989	4.4	10	
Mo	95	103	1	He	0.165	60.5	479	43.6	2	
Ag	107	103	1	He	0.008	47.2	80	47.3	0.2	
Cd	111	115	1	He	0.030	201.9	1678	7.1	0.2	
Sn	118	115	1	He	2.686	13.8	11045	1.5	10	
Sb	123	165	1	He	0.167	33.0	836	19.8	2	
Ba	137	115	1	He	0.867	7.6	1679	5.2	5	
W	182	159	1	He	0.346	8.7	9600	10.1	10	
Tl	205	165	1	He	0.129	8.9	3268	6.9	0.5	
Pb	208	165	1	He	0.223	11.0	7944	8.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	910998	3.25	1261090	72.24	30	120	
Sc	45	1	He	730533	13.29	955958	76.42	30	120	
Sc	45	2	NoGas	5953217	2.58	7862387	75.72	30	120	
Rh	103	1	He	2342924	13.26	2873429	81.54	30	120	
In	115	1	He	1569749	12.43	1922589	81.65	30	120	
Tb	159	1	He	4193216	12.62	4725151	88.74	30	120	
Ho	165	1	He	4231897	11.92	4813140	87.92	30	120	
Bi	209	1	He	3311861	11.45	3617562	91.55	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-182519/3-a
Data File Name	100_LCS.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T16:02:34-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	2	NoGas	-0.129	-0.129	-27.920	40609	0.96	1000	0.0	79.5	120.5	LCS Failed
Be	9	2	NoGas	928.473	928.473	0.621	2519914	1.53	1000	92.8	79.5	120.5	
B	11	2	NoGas	99.879	99.879	1.432	158897	0.92	100	99.9	79.5	120.5	
Na	23	1	He	10311.848	10311.848	8.570	8172478	1.13	10000	103.1	79.5	120.5	
Mg	24	1	He	10283.691	10283.691	7.600	4774136	0.18	10000	102.8	79.5	120.5	
Al	27	1	He	9596.667	9596.667	9.441	2733401	2.00	10000	96.0	79.5	120.5	
K	39	1	He	10262.394	10262.394	7.646	5100288	0.18	10000	102.6	79.5	120.5	
Ca	44	1	He	10216.072	10216.072	8.464	284095	1.03	10000	102.2	79.5	120.5	
Ti	47	1	He	102.092	102.092	8.397	15447	1.13	100	102.1	79.5	120.5	
V	51	1	He	999.792	999.792	9.179	7260760	1.71	1000	100.0	79.5	120.5	
Cr	52	1	He	1001.480	1001.480	8.418	4516780	1.27	1000	100.1	79.5	120.5	
Mn	55	1	He	1018.608	1018.608	9.269	3647388	1.79	1000	101.9	79.5	120.5	
Fe	56	1	He	10256.948	10256.948	8.260	43990586	0.83	10000	102.6	79.5	120.5	
Co	59	1	He	1002.867	1002.867	8.589	6317837	1.54	1000	100.3	79.5	120.5	
Ni	60	1	He	1048.903	1048.903	9.143	1616589	1.73	1000	104.9	79.5	120.5	
Cu	63	1	He	1034.126	1034.126	8.862	4197199	1.43	1000	103.4	79.5	120.5	
Zn	66	1	He	1055.335	1055.335	8.576	979892	1.14	1000	105.5	79.5	120.5	
As	75	1	He	958.806	958.806	13.024	721800	1.40	1000	95.9	79.5	120.5	
Se	78	1	He	988.296	988.296	13.155	64884	1.50	1000	98.8	79.5	120.5	
Sr	88	1	He	1073.248	1073.248	9.424	5426470	2.02	1000	107.3	79.5	120.5	
Mo	95	1	He	103.622	103.622	10.838	257832	1.36	100	103.6	79.5	120.5	
Ag	107	1	He	103.631	103.631	10.055	814850	0.64	100	103.6	79.5	120.5	
Cd	111	1	He	1038.593	1038.593	12.419	1480386	0.81	1000	103.9	79.5	120.5	
Sn	118	1	He	1075.236	1075.236	13.274	3810566	1.62	100	1075.2	79.5	120.5	LCS Failed
Sb	123	1	He	95.809	95.809	11.114	413975	1.02	100	95.8	79.5	120.5	
Ba	137	1	He	1081.849	1081.849	12.377	1869327	0.77	1000	108.2	79.5	120.5	
W	182	1	He	100.338	100.338	10.636	974413	0.75	100	100.3	79.5	120.5	
Tl	205	1	He	253.413	253.413	10.635	5828394	0.68	250	101.4	79.5	120.5	
Pb	208	1	He	1018.004	1018.004	10.451	31906862	0.51	1000	101.8	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	906871	1.06	1261090	71.91	30	120	
Sc	45	1	He	687188	7.13	955958	71.88	30	120	
Sc	45	2	NoGas	6082589	0.10	7862387	77.36	30	120	
Rh	103	1	He	2160908	8.93	2873429	75.20	30	120	
In	115	1	He	1428772	11.08	1922589	74.31	30	120	
Tb	159	1	He	3966008	9.38	4725151	83.93	30	120	
Ho	165	1	He	4042922	9.50	4813140	84.00	30	120	
Bi	209	1	He	3049922	7.84	3617562	84.31	30	120	

Sample Report

Sample Table

Sample Name	240-50308-b-5-b
Data File Name	101SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T16:05:57-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	0.068	0.068	29.43	44480	0.00	10000	
Be	9	6	2	NoGas	0.737	0.737	7.75	2241	0.03	10000	
B	11	6	2	NoGas	18.937	18.937	2.99	38808	0.05	300	
Na	23	45	1	He	13605.665	13605.665	6.98	12231986	0.11	500000	
Mg	24	45	1	He	10779.758	10779.758	6.73	5678140	0.19	500000	
Al	27	45	1	He	3.029	3.029	22.74	1549	0.20	200000	
K	39	45	1	He	1929.902	1929.902	6.96	1124312	0.17	500000	
Ca	44	45	1	He	29012.764	29012.764	6.78	914635	3.17	500000	
Ti	47	45	1	He	0.249	0.249	37.36	48	0.52	2500	
V	51	45	1	He	2.110	2.110	6.98	23846	0.01	10000	
Cr	52	45	1	He	1.503	1.503	7.17	9781	0.02	10000	
Mn	55	45	1	He	0.820	0.820	11.38	5212	0.02	10000	
Fe	56	45	1	He	17.333	17.333	7.03	91601	0.02	200000	
Co	59	45	1	He	0.405	0.405	17.62	2940	0.01	10000	
Ni	60	45	1	He	1.068	1.068	10.66	2702	0.04	10000	
Cu	63	45	1	He	1.340	1.340	7.33	6786	0.02	10000	
Zn	66	45	1	He	8.928	8.928	7.61	11067	0.08	10000	
As	75	115	1	He	2.968	2.968	3.69	2723	0.11	10000	
Se	78	115	1	He	1.594	1.594	10.20	163	0.98	10000	
Sr	88	45	1	He	64.063	64.063	7.62	367805	0.02	10000	
Mo	95	103	1	He	0.607	0.607	19.45	1747	0.03	2000	
Ag	107	103	1	He	0.014	0.014	59.09	128	0.01	300	
Cd	111	115	1	He	0.232	0.232	29.10	2065	0.01	4000	
Sn	118	115	1	He	2.969	2.969	17.67	12583	0.02	2000	
Sb	123	165	1	He	0.323	0.323	4.34	1670	0.02	300	
Ba	137	115	1	He	28.883	28.883	6.87	56970	0.05	10000	
W	182	159	1	He	0.926	0.926	5.41	16476	0.01	2500	
Tl	205	165	1	He	0.221	0.221	20.47	5860	0.00	5000	
Pb	208	165	1	He	0.301	0.301	20.37	11222	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	962020	0.54	1261090	76.28	30	120	
Sc	45	1	He	779466	7.42	955958	81.54	30	120	
Sc	45	2	NoGas	6353649	0.41	7862387	80.81	30	120	
Rh	103	1	He	2409101	6.56	2873429	83.84	30	120	
In	115	1	He	1620530	7.17	1922589	84.29	30	120	
Tb	159	1	He	4433213	6.33	4725151	93.82	30	120	
Ho	165	1	He	4532050	6.97	4813140	94.16	30	120	
Bi	209	1	He	3358591	6.67	3617562	92.84	30	120	

Sample Report

Sample Table

Sample Name	SD 240-50308-b-5-b@5
Data File Name	102SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T16:09:36-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	-0.206	-0.206	-27.60	44519	0.00	10000	
Be	9	6	2	NoGas	0.439	0.439	11.44	1474	0.03	10000	
B	11	6	2	NoGas	4.194	4.194	5.13	16171	0.03	300	
Na	23	45	1	He	3004.264	3004.264	0.75	2829086	0.11	500000	
Mg	24	45	1	He	2370.089	2370.089	1.34	1301531	0.18	500000	
Al	27	45	1	He	0.548	0.548	22.50	782	0.07	200000	
K	39	45	1	He	434.971	434.971	0.84	299549	0.15	500000	
Ca	44	45	1	He	6218.280	6218.280	0.24	204565	3.04	500000	
Ti	47	45	1	He	0.080	0.080	106.90	20	0.40	2500	
V	51	45	1	He	0.572	0.572	18.03	11617	0.00	10000	
Cr	52	45	1	He	0.363	0.363	6.31	4102	0.01	10000	
Mn	55	45	1	He	0.188	0.188	11.01	2754	0.01	10000	
Fe	56	45	1	He	1.600	1.600	1.64	15502	0.01	200000	
Co	59	45	1	He	0.089	0.089	16.08	722	0.01	10000	
Ni	60	45	1	He	-0.022	-0.022	-58.81	829	0.00	10000	
Cu	63	45	1	He	0.318	0.318	10.53	2161	0.01	10000	
Zn	66	45	1	He	1.675	1.675	10.79	3573	0.05	10000	
As	75	115	1	He	0.557	0.557	3.37	684	0.08	10000	
Se	78	115	1	He	0.344	0.344	34.77	73	0.47	10000	
Sr	88	45	1	He	13.545	13.545	1.05	81082	0.02	10000	
Mo	95	103	1	He	0.115	0.115	34.46	378	0.03	2000	
Ag	107	103	1	He	0.004	0.004	76.51	48	0.01	300	
Cd	111	115	1	He	-0.048	-0.048	-73.32	1706	0.00	4000	
Sn	118	115	1	He	0.314	0.314	10.55	2008	0.02	2000	
Sb	123	165	1	He	0.090	0.090	15.74	528	0.02	300	
Ba	137	115	1	He	5.986	5.986	2.35	12549	0.05	10000	
W	182	159	1	He	0.210	0.210	46.55	8770	0.00	2500	
Tl	205	165	1	He	0.058	0.058	9.49	1661	0.00	5000	
Pb	208	165	1	He	0.112	0.112	3.24	4598	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1025245	0.40	1261090	81.30	30	120	
Sc	45	1	He	808676	0.84	955958	84.59	30	120	
Sc	45	2	NoGas	6798633	0.77	7862387	86.47	30	120	
Rh	103	1	He	2454607	0.63	2873429	85.42	30	120	
In	115	1	He	1713139	0.42	1922589	89.11	30	120	
Tb	159	1	He	4473516	0.70	4725151	94.67	30	120	
Ho	165	1	He	4491285	0.35	4813140	93.31	30	120	
Bi	209	1	He	3423925	1.76	3617562	94.65	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-50308-b-5-b
Data File Name	103SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T16:13:15-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	0.036	0.036	133.20	44068	0.00	10000	
Be	9	6	2	NoGas	963.262	963.262	1.58	2726880	0.04	10000	
B	11	6	2	NoGas	125.019	125.019	2.41	205378	0.06	300	
Na	23	45	1	He	23509.251	23509.251	1.61	20294274	0.12	500000	
Mg	24	45	1	He	20635.904	20635.904	2.65	10440517	0.20	500000	
Al	27	45	1	He	9183.923	9183.923	2.76	2854016	0.32	200000	
K	39	45	1	He	11748.192	11748.192	1.10	6359095	0.18	500000	
Ca	44	45	1	He	39196.660	39196.660	1.76	1187048	3.30	500000	
Ti	47	45	1	He	101.514	101.514	1.69	16750	0.61	2500	
V	51	45	1	He	995.865	995.865	1.70	7890126	0.01	10000	
Cr	52	45	1	He	990.603	990.603	2.32	4872161	0.02	10000	
Mn	55	45	1	He	1006.128	1006.128	1.35	3930716	0.03	10000	
Fe	56	45	1	He	9874.170	9874.170	2.29	46179307	0.02	200000	
Co	59	45	1	He	989.165	989.165	1.92	6796037	0.01	10000	
Ni	60	45	1	He	1024.160	1024.160	1.78	1722005	0.06	10000	
Cu	63	45	1	He	1014.157	1014.157	2.18	4489897	0.02	10000	
Zn	66	45	1	He	1019.244	1019.244	2.27	1032187	0.10	10000	
As	75	115	1	He	962.918	962.918	1.69	781004	0.12	10000	
Se	78	115	1	He	985.452	985.452	1.48	69715	1.41	10000	
Sr	88	45	1	He	1114.191	1114.191	2.07	6146437	0.02	10000	
Mo	95	103	1	He	105.383	105.383	1.30	279579	0.04	2000	
Ag	107	103	1	He	102.302	102.302	0.71	857290	0.01	300	
Cd	111	115	1	He	1032.176	1032.176	2.99	1584299	0.07	4000	
Sn	118	115	1	He	1071.904	1071.904	1.57	4093735	0.03	2000	
Sb	123	165	1	He	93.825	93.825	0.64	439272	0.02	300	
Ba	137	115	1	He	1106.544	1106.544	2.40	2058888	0.05	10000	
W	182	159	1	He	100.528	100.528	1.77	1054659	0.01	2500	
Tl	205	165	1	He	250.500	250.500	1.32	6240331	0.00	5000	
Pb	208	165	1	He	1004.124	1004.124	0.92	34085790	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	946105	1.68	1261090	75.02	30	120	
Sc	45	1	He	746509	1.02	955958	78.09	30	120	
Sc	45	2	NoGas	6342389	1.35	7862387	80.67	30	120	
Rh	103	1	He	2289234	0.40	2873429	79.67	30	120	
In	115	1	He	1524819	1.35	1922589	79.31	30	120	
Tb	159	1	He	4256722	1.00	4725151	90.09	30	120	
Ho	165	1	He	4350099	1.57	4813140	90.38	30	120	
Bi	209	1	He	3227477	0.68	3617562	89.22	30	120	

Sample Report

Sample Table

Sample Name	240-50308-b-5-e ms
Data File Name	104SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T16:16:38-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	0.354	0.354	1.93	40492	0.00	10000	
Be	9	6	2	NoGas	1087.893	1087.893	1.00	2757837	0.04	10000	
B	11	6	2	NoGas	140.898	140.898	2.13	206326	0.07	300	
Na	23	45	1	He	23959.712	23959.712	0.64	20770953	0.12	500000	
Mg	24	45	1	He	21066.702	21066.702	1.19	10704172	0.20	500000	
Al	27	45	1	He	9371.914	9371.914	0.43	2924995	0.32	200000	
K	39	45	1	He	11912.295	11912.295	0.79	6474364	0.18	500000	
Ca	44	45	1	He	39810.197	39810.197	0.63	1210745	3.29	500000	
Ti	47	45	1	He	99.838	99.838	1.64	16542	0.60	2500	
V	51	45	1	He	984.748	984.748	0.56	7835578	0.01	10000	
Cr	52	45	1	He	980.667	980.667	0.77	4844198	0.02	10000	
Mn	55	45	1	He	999.119	999.119	1.62	3919425	0.03	10000	
Fe	56	45	1	He	10062.809	10062.809	1.32	47261741	0.02	200000	
Co	59	45	1	He	978.297	978.297	1.37	6749826	0.01	10000	
Ni	60	45	1	He	1016.104	1016.104	1.14	1715646	0.06	10000	
Cu	63	45	1	He	1003.328	1003.328	1.28	4461013	0.02	10000	
Zn	66	45	1	He	1005.652	1005.652	1.17	1022787	0.10	10000	
As	75	115	1	He	957.478	957.478	0.61	774511	0.12	10000	
Se	78	115	1	He	979.974	979.974	0.96	69137	1.42	10000	
Sr	88	45	1	He	1102.946	1102.946	1.16	6110181	0.02	10000	
Mo	95	103	1	He	104.198	104.198	1.51	280662	0.04	2000	
Ag	107	103	1	He	100.257	100.257	1.03	853001	0.01	300	
Cd	111	115	1	He	1014.803	1014.803	1.93	1553802	0.07	4000	
Sn	118	115	1	He	1077.685	1077.685	1.39	4104346	0.03	2000	
Sb	123	165	1	He	93.800	93.800	1.09	439567	0.02	300	
Ba	137	115	1	He	1100.297	1100.297	0.89	2041872	0.05	10000	
W	182	159	1	He	99.702	99.702	1.06	1057983	0.01	2500	
Tl	205	165	1	He	246.767	246.767	1.38	6153372	0.00	5000	
Pb	208	165	1	He	990.575	990.575	1.56	33657454	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	847182	1.73	1261090	67.18	30	120	
Sc	45	1	He	749631	1.33	955958	78.42	30	120	
Sc	45	2	NoGas	5419270	2.05	7862387	68.93	30	120	
Rh	103	1	He	2324280	0.63	2873429	80.89	30	120	
In	115	1	He	1520623	1.65	1922589	79.09	30	120	
Tb	159	1	He	4305141	1.44	4725151	91.11	30	120	
Ho	165	1	He	4354420	1.57	4813140	90.47	30	120	
Bi	209	1	He	3176026	1.59	3617562	87.79	30	120	

Sample Report

Sample Table

Sample Name	240-50308-b-5-f msd
Data File Name	105SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T16:20:01-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	0.027	0.027	335.35	42748	0.00	10000	
Be	9	6	2	NoGas	952.763	952.763	1.42	2641456	0.04	10000	
B	11	6	2	NoGas	125.684	125.684	1.48	202127	0.06	300	
Na	23	45	1	He	23444.333	23444.333	1.15	20611849	0.11	500000	
Mg	24	45	1	He	20702.198	20702.198	0.92	10668156	0.19	500000	
Al	27	45	1	He	9314.067	9314.067	0.86	2948075	0.32	200000	
K	39	45	1	He	11775.470	11775.470	0.20	6491367	0.18	500000	
Ca	44	45	1	He	38740.548	38740.548	0.67	1194916	3.24	500000	
Ti	47	45	1	He	99.107	99.107	1.49	16656	0.60	2500	
V	51	45	1	He	977.375	977.375	1.47	7886682	0.01	10000	
Cr	52	45	1	He	971.191	971.191	1.97	4864864	0.02	10000	
Mn	55	45	1	He	990.495	990.495	1.53	3940952	0.03	10000	
Fe	56	45	1	He	9961.289	9961.289	1.07	47448737	0.02	200000	
Co	59	45	1	He	974.545	974.545	0.60	6819532	0.01	10000	
Ni	60	45	1	He	1016.955	1016.955	1.73	1741520	0.06	10000	
Cu	63	45	1	He	986.042	986.042	1.66	4445988	0.02	10000	
Zn	66	45	1	He	1001.104	1001.104	0.66	1032610	0.10	10000	
As	75	115	1	He	938.755	938.755	1.12	777943	0.12	10000	
Se	78	115	1	He	956.683	956.683	0.55	69152	1.38	10000	
Sr	88	45	1	He	1087.068	1087.068	0.36	6107854	0.02	10000	
Mo	95	103	1	He	104.368	104.368	3.26	280666	0.04	2000	
Ag	107	103	1	He	100.406	100.406	2.13	853017	0.01	300	
Cd	111	115	1	He	991.410	991.410	1.58	1554920	0.06	4000	
Sn	118	115	1	He	1055.482	1055.482	0.74	4118659	0.03	2000	
Sb	123	165	1	He	93.919	93.919	1.17	440160	0.02	300	
Ba	137	115	1	He	1080.926	1080.926	1.78	2054962	0.05	10000	
W	182	159	1	He	99.098	99.098	1.05	1054932	0.01	2500	
Tl	205	165	1	He	246.563	246.563	1.68	6148771	0.00	5000	
Pb	208	165	1	He	986.501	986.501	1.76	33521147	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	926333	1.49	1261090	73.45	30	120	
Sc	45	1	He	760237	0.48	955958	79.53	30	120	
Sc	45	2	NoGas	6165554	1.13	7862387	78.42	30	120	
Rh	103	1	He	2321578	2.32	2873429	80.79	30	120	
In	115	1	He	1557834	1.05	1922589	81.03	30	120	
Tb	159	1	He	4318671	0.83	4725151	91.40	30	120	
Ho	165	1	He	4354554	0.85	4813140	90.47	30	120	
Bi	209	1	He	3167815	1.44	3617562	87.57	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2026839
Data File Name	106_CCV.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T16:23:25-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	45.777	1.022	540136	0.62	50	91.6	89.5	110.5	
Be	9	6	2	NoGas	49.170	0.434	145265	0.89	50	98.3	89.5	110.5	
B	11	6	2	NoGas	50.460	1.012	91613	1.43	50	100.9	89.5	110.5	
Na	23	45	1	He	24957.409	0.463	23286025	1.16	25000	99.8	89.5	110.5	
Mg	24	45	1	He	24782.623	0.510	13553484	1.43	25000	99.1	89.5	110.5	
Al	27	45	1	He	243.148	0.762	82257	0.72	250	97.3	89.5	110.5	
K	39	45	1	He	25432.019	0.793	14826470	1.99	25000	101.7	89.5	110.5	
Ca	44	45	1	He	24636.518	0.303	806707	1.13	25000	98.5	89.5	110.5	
Ti	47	45	1	He	51.760	0.695	9235	1.87	50	103.5	89.5	110.5	
V	51	45	1	He	49.708	0.937	432035	0.74	50	99.4	89.5	110.5	
Cr	52	45	1	He	49.484	0.978	265114	0.46	50	99.0	89.5	110.5	
Mn	55	45	1	He	249.496	0.830	1055053	1.57	250	99.8	89.5	110.5	
Fe	56	45	1	He	12494.101	0.114	63161649	1.34	12500	100.0	89.5	110.5	
Co	59	45	1	He	49.916	0.413	370766	1.50	50	99.8	89.5	110.5	
Ni	60	45	1	He	49.142	0.978	90132	0.54	50	98.3	89.5	110.5	
Cu	63	45	1	He	50.611	0.902	242783	0.53	50	101.2	89.5	110.5	
Zn	66	45	1	He	50.387	0.824	56811	2.21	50	100.8	89.5	110.5	
As	75	115	1	He	48.002	0.368	43179	1.08	50	96.0	89.5	110.5	
Se	78	115	1	He	49.393	0.259	3903	1.22	50	98.8	89.5	110.5	
Sr	88	45	1	He	51.520	1.123	307315	0.71	50	103.0	89.5	110.5	
Mo	95	103	1	He	51.899	0.521	145390	1.27	50	103.8	89.5	110.5	
Ag	107	103	1	He	50.589	1.161	447596	2.02	50	101.2	89.5	110.5	
Cd	111	115	1	He	48.638	1.756	84156	1.24	50	97.3	89.5	110.5	
Sn	118	115	1	He	49.724	0.889	210438	2.16	50	99.4	89.5	110.5	
Sb	123	165	1	He	49.629	0.598	237504	0.74	50	99.3	89.5	110.5	
Ba	137	115	1	He	49.505	0.423	101809	1.77	50	99.0	89.5	110.5	
W	182	159	1	He	49.779	0.570	545069	0.83	50	99.6	89.5	110.5	
Tl	205	165	1	He	50.209	1.212	1278425	0.70	50	100.4	89.5	110.5	
Pb	208	165	1	He	50.424	0.798	1749911	0.72	50	100.8	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	986394	0.56	1261090	78.22	30	120	
Sc	45	1	He	806844	1.43	955958	84.40	30	120	
Sc	45	2	NoGas	6558985	1.00	7862387	83.42	30	120	
Rh	103	1	He	2416792	0.93	2873429	84.11	30	120	
In	115	1	He	1684466	1.44	1922589	87.61	30	120	
Tb	159	1	He	4416160	1.07	4725151	93.46	30	120	
Ho	165	1	He	4445567	1.13	4813140	92.36	30	120	
Bi	209	1	He	3274102	0.50	3617562	90.51	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	107_CCB.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T16:27:01-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.033	-488.6	34293	9.7	2	
Be	9	6	2	NoGas	1.114	22.2	2697	12.6	1	CCB Failed
B	11	6	2	NoGas	3.136	15.7	11022	2.9	20	
Na	23	45	1	He	80.908	4.8	98159	3.8	1000	
Mg	24	45	1	He	-1.139	-65.3	2130	19.4	1000	
Al	27	45	1	He	1.036	33.3	949	12.0	50	
K	39	45	1	He	27.457	8.1	62360	2.2	1000	
Ca	44	45	1	He	74.603	2.4	3105	1.7	1000	
Ti	47	45	1	He	0.037	77.3	12	41.7	20	
V	51	45	1	He	-0.191	-14.8	5086	4.4	2	
Cr	52	45	1	He	0.051	44.1	2446	4.6	2	
Mn	55	45	1	He	1.336	3.6	7631	2.4	2	
Fe	56	45	1	He	14.956	13.7	83396	12.7	50	
Co	59	45	1	He	0.080	12.1	657	11.0	1	
Ni	60	45	1	He	-0.286	-11.9	349	17.7	2	
Cu	63	45	1	He	0.260	13.4	1888	9.0	2	
Zn	66	45	1	He	4.903	3.3	7127	2.7	20	
As	75	115	1	He	0.319	17.3	475	10.5	2	
Se	78	115	1	He	0.475	18.1	85	9.0	2	
Sr	88	45	1	He	0.074	13.8	572	10.6	10	
Mo	95	103	1	He	0.343	26.0	1068	25.1	2	
Ag	107	103	1	He	0.011	13.0	108	11.7	0.2	
Cd	111	115	1	He	0.028	79.5	1871	3.0	0.2	
Sn	118	115	1	He	0.892	7.7	4568	6.3	10	
Sb	123	165	1	He	0.186	3.9	992	3.0	2	
Ba	137	115	1	He	0.072	22.3	186	18.2	5	
W	182	159	1	He	0.878	9.9	15864	5.9	10	
Tl	205	165	1	He	0.214	3.5	5677	3.4	0.5	
Pb	208	165	1	He	0.245	5.7	9232	5.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	789425	8.70	1261090	62.60	30	120	
Sc	45	1	He	810830	0.36	955958	84.82	30	120	
Sc	45	2	NoGas	5012720	6.76	7862387	63.76	30	120	
Rh	103	1	He	2556976	0.44	2873429	88.99	30	120	
In	115	1	He	1743917	1.01	1922589	90.71	30	120	
Tb	159	1	He	4408367	0.19	4725151	93.30	30	120	
Ho	165	1	He	4490248	0.66	4813140	93.29	30	120	
Bi	209	1	He	3362426	0.45	3617562	92.95	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-2012498
Data File Name	108CRI.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T16:30:39-04:00
Sample Type	CRI
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	2	NoGas	5.908	5.908	13.516	128944	2.69	8	73.9	49.5	150.5	
Be	9	2	NoGas	1.484	1.484	13.686	5086	2.64	1	148.4	49.5	150.5	
B	11	2	NoGas	17.170	17.170	16.158	41707	4.18	20	85.8	49.5	150.5	
Na	23	1	He	1126.897	1126.897	15.383	1056969	1.20	1000	112.7	49.5	150.5	
Mg	24	1	He	1074.659	1074.659	15.680	581413	1.44	1000	107.5	49.5	150.5	
Al	27	1	He	51.181	51.181	16.963	17504	2.39	50	102.4	49.5	150.5	
K	39	1	He	1102.213	1102.213	16.397	676427	1.26	1000	110.2	49.5	150.5	
Ca	44	1	He	1033.338	1033.338	15.040	33967	1.11	1000	103.3	49.5	150.5	
Ti	47	1	He	10.264	10.264	13.294	1816	7.72	10	102.6	49.5	150.5	
V	51	1	He	3.599	3.599	18.254	36941	1.54	5	72.0	49.5	150.5	
Cr	52	1	He	2.104	2.104	15.775	13172	1.76	2	105.2	49.5	150.5	
Mn	55	1	He	4.870	4.870	15.224	22206	0.32	5	97.4	49.5	150.5	
Fe	56	1	He	109.360	109.360	15.299	551948	0.92	100	109.4	49.5	150.5	
Co	59	1	He	1.124	1.124	15.304	8282	1.51	1	112.4	49.5	150.5	
Ni	60	1	He	1.829	1.829	22.326	4118	4.73	2	91.5	49.5	150.5	
Cu	63	1	He	2.320	2.320	15.137	11571	1.14	2	116.0	49.5	150.5	
Zn	66	1	He	21.295	21.295	15.916	24648	0.64	20	106.5	49.5	150.5	
As	75	1	He	4.923	4.923	18.400	4603	2.05	5	98.5	49.5	150.5	
Se	78	1	He	5.146	5.146	24.106	447	8.47	5	102.9	49.5	150.5	
Sr	88	1	He	10.703	10.703	15.582	62991	1.36	10	107.0	49.5	150.5	
Mo	95	1	He	10.378	10.378	15.143	29949	0.41	10	103.8	49.5	150.5	
Ag	107	1	He	1.060	1.060	14.820	9656	0.66	1	106.0	49.5	150.5	
Cd	111	1	He	1.060	1.060	17.991	3602	7.20	1	106.0	49.5	150.5	
Sn	118	1	He	10.410	10.410	18.004	44760	4.46	10	104.1	49.5	150.5	
Sb	123	1	He	2.116	2.116	16.014	10098	2.23	2	105.8	49.5	150.5	
Ba	137	1	He	5.201	5.201	19.244	10751	3.94	5	104.0	49.5	150.5	
W	182	1	He	9.760	9.760	14.858	110112	1.88	10	97.6	49.5	150.5	
Tl	205	1	He	2.119	2.119	15.745	53504	0.88	2	106.0	49.5	150.5	
Pb	208	1	He	1.187	1.187	14.431	41418	1.61	1	118.7	49.5	150.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1124929	10.81	1261090	89.20	30	120	
Sc	45	1	He	806106	13.72	955958	84.32	30	120	
Sc	45	2	NoGas	7797317	10.46	7862387	99.17	30	120	
Rh	103	1	He	2522452	14.24	2873429	87.79	30	120	
In	115	1	He	1722949	15.50	1922589	89.62	30	120	
Tb	159	1	He	4402826	15.08	4725151	93.18	30	120	
Ho	165	1	He	4464919	15.00	4813140	92.77	30	120	
Bi	209	1	He	3377985	13.45	3617562	93.38	30	120	

Sample Report

Sample Table

Sample Name	240-51131-a-1-a
Data File Name	109SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T16:34:16-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	4.584	4.584	1.66	85386	0.01	10000	
Be	9	6	2	NoGas	0.682	0.682	14.05	1996	0.03	10000	
B	11	6	2	NoGas	383.446	383.446	1.11	597253	0.06	300	>LDR
Na	23	45	1	He	153194.104	153194.104	2.14	126401632	0.12	500000	
Mg	24	45	1	He	2523.203	2523.203	2.90	1223569	0.21	500000	
Al	27	45	1	He	290.953	290.953	3.18	86998	0.33	200000	
K	39	45	1	He	18822.787	18822.787	2.70	9720924	0.19	500000	
Ca	44	45	1	He	4815.128	4815.128	2.49	140004	3.44	500000	
Ti	47	45	1	He	3.360	3.360	4.39	536	0.63	2500	
V	51	45	1	He	4.057	4.057	1.82	36652	0.01	10000	
Cr	52	45	1	He	5.898	5.898	3.94	29648	0.02	10000	
Mn	55	45	1	He	22.234	22.234	2.40	84790	0.03	10000	
Fe	56	45	1	He	978.832	978.832	2.43	4385266	0.02	200000	
Co	59	45	1	He	0.451	0.451	3.74	3016	0.01	10000	
Ni	60	45	1	He	4.950	4.950	3.14	8728	0.06	10000	
Cu	63	45	1	He	38.632	38.632	3.15	164136	0.02	10000	
Zn	66	45	1	He	94.315	94.315	1.79	92775	0.10	10000	
As	75	115	1	He	1.714	1.714	3.78	1541	0.11	10000	
Se	78	115	1	He	1.666	1.666	10.79	158	1.05	10000	
Sr	88	45	1	He	22.016	22.016	1.96	116304	0.02	10000	
Mo	95	103	1	He	63.812	63.812	3.40	167510	0.04	2000	
Ag	107	103	1	He	0.402	0.402	5.46	3343	0.01	300	
Cd	111	115	1	He	0.294	0.294	13.00	2035	0.01	4000	
Sn	118	115	1	He	5.415	5.415	4.22	21177	0.03	2000	
Sb	123	165	1	He	0.353	0.353	17.26	1692	0.02	300	
Ba	137	115	1	He	83.398	83.398	1.51	154628	0.05	10000	
W	182	159	1	He	0.707	0.707	7.33	13410	0.01	2500	
Tl	205	165	1	He	0.148	0.148	11.24	3741	0.00	5000	
Pb	208	165	1	He	1.214	1.214	2.74	40715	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	922073	1.03	1261090	73.12	30	120	
Sc	45	1	He	714357	2.85	955958	74.73	30	120	
Sc	45	2	NoGas	5910709	1.04	7862387	75.18	30	120	
Rh	103	1	He	2266571	3.49	2873429	78.88	30	120	
In	115	1	He	1519132	1.70	1922589	79.01	30	120	
Tb	159	1	He	4219237	1.15	4725151	89.29	30	120	
Ho	165	1	He	4233340	2.89	4813140	87.95	30	120	
Bi	209	1	He	3251324	0.72	3617562	89.88	30	120	

Sample Report

Sample Table

Sample Name	240-51154-a-2-a
Data File Name	110SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T16:37:53-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	8.669	8.669	0.86	144548	0.01	10000	
Be	9	6	2	NoGas	0.550	0.550	10.74	1796	0.03	10000	
B	11	6	2	NoGas	88.490	88.490	2.01	158693	0.06	300	
Na	23	45	1	He	9965.796	9965.796	1.73	9103916	0.11	500000	
Mg	24	45	1	He	2651.724	2651.724	2.71	1420223	0.19	500000	
Al	27	45	1	He	14285.627	14285.627	2.61	4691624	0.30	200000	
K	39	45	1	He	893.168	893.168	1.92	552541	0.16	500000	
Ca	44	45	1	He	4746.831	4746.831	2.25	152481	3.11	500000	
Ti	47	45	1	He	1900.693	1900.693	4.92	331352	0.57	2500	
V	51	45	1	He	503.167	503.167	1.69	4216273	0.01	10000	
Cr	52	45	1	He	1087.916	1087.916	1.83	5654571	0.02	10000	
Mn	55	45	1	He	29.652	29.652	1.35	124274	0.02	10000	
Fe	56	45	1	He	86667.162	86667.162	2.38	428319619	0.02	200000	
Co	59	45	1	He	2.179	2.179	1.13	15875	0.01	10000	
Ni	60	45	1	He	12.527	12.527	1.52	23096	0.05	10000	
Cu	63	45	1	He	58.856	58.856	1.54	275953	0.02	10000	
Zn	66	45	1	He	3690.972	3690.972	1.75	3945812	0.09	10000	
As	75	115	1	He	0.652	0.652	3.66	699	0.09	10000	
Se	78	115	1	He	0.374	0.374	11.45	68	0.55	10000	
Sr	88	45	1	He	10.892	10.892	1.32	63621	0.02	10000	
Mo	95	103	1	He	0.842	0.842	16.18	2314	0.04	2000	
Ag	107	103	1	He	0.648	0.648	4.99	5512	0.01	300	
Cd	111	115	1	He	3.090	3.090	10.49	6456	0.05	4000	
Sn	118	115	1	He	2.873	2.873	19.14	11742	0.02	2000	
Sb	123	165	1	He	0.158	0.158	10.30	818	0.02	300	
Ba	137	115	1	He	287.480	287.480	1.53	545166	0.05	10000	
W	182	159	1	He	0.263	0.263	36.77	8870	0.00	2500	
Tl	205	165	1	He	0.082	0.082	5.25	2180	0.00	5000	
Pb	208	165	1	He	6.189	6.189	1.22	207979	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1015903	2.03	1261090	80.56	30	120	
Sc	45	1	He	788792	0.67	955958	82.51	30	120	
Sc	45	2	NoGas	6824600	0.23	7862387	86.80	30	120	
Rh	103	1	He	2317340	2.13	2873429	80.65	30	120	
In	115	1	He	1554083	2.85	1922589	80.83	30	120	
Tb	159	1	He	4241942	1.06	4725151	89.77	30	120	
Ho	165	1	He	4293752	1.81	4813140	89.21	30	120	
Bi	209	1	He	3319725	1.26	3617562	91.77	30	120	

Sample Report

Sample Table

Sample Name	240-51154-a-3-a
Data File Name	111SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T16:41:29-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	9.711	9.711	1.87	156773	0.01	10000	
Be	9	6	2	NoGas	0.557	0.557	5.66	1811	0.03	10000	
B	11	6	2	NoGas	103.219	103.219	2.62	182947	0.06	300	
Na	23	45	1	He	11082.274	11082.274	1.03	10365016	0.11	500000	
Mg	24	45	1	He	2947.794	2947.794	1.46	1616352	0.18	500000	
Al	27	45	1	He	16407.350	16407.350	1.05	5517857	0.30	200000	
K	39	45	1	He	1023.833	1023.833	0.26	641840	0.16	500000	
Ca	44	45	1	He	5893.849	5893.849	0.53	193721	3.04	500000	
Ti	47	45	1	He	1864.730	1864.730	1.58	332842	0.56	2500	
V	51	45	1	He	793.928	793.928	1.06	6808374	0.01	10000	
Cr	52	45	1	He	1714.984	1714.984	0.78	9126632	0.02	10000	
Mn	55	45	1	He	35.583	35.583	1.14	152318	0.02	10000	
Fe	56	45	1	He	104859.692	104859.692	0.90	530647232	0.02	200000	
Co	59	45	1	He	2.503	2.503	0.59	18668	0.01	10000	
Ni	60	45	1	He	14.196	14.196	1.82	26684	0.05	10000	
Cu	63	45	1	He	66.016	66.016	1.38	316861	0.02	10000	
Zn	66	45	1	He	4352.633	4352.633	1.63	4764318	0.09	10000	
As	75	115	1	He	0.495	0.495	5.77	604	0.08	10000	
Se	78	115	1	He	0.209	0.209	27.44	60	0.35	10000	
Sr	88	45	1	He	12.436	12.436	1.05	74368	0.02	10000	
Mo	95	103	1	He	0.832	0.832	8.79	2387	0.03	2000	
Ag	107	103	1	He	0.754	0.754	3.91	6698	0.01	300	
Cd	111	115	1	He	3.425	3.425	6.78	7396	0.05	4000	
Sn	118	115	1	He	2.046	2.046	8.52	9077	0.02	2000	
Sb	123	165	1	He	0.154	0.154	7.84	832	0.02	300	
Ba	137	115	1	He	318.203	318.203	1.54	640271	0.05	10000	
W	182	159	1	He	0.142	0.142	32.87	7880	0.00	2500	
Tl	205	165	1	He	0.059	0.059	8.60	1662	0.00	5000	
Pb	208	165	1	He	6.230	6.230	1.26	216964	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1012105	1.19	1261090	80.26	30	120	
Sc	45	1	He	807791	1.05	955958	84.50	30	120	
Sc	45	2	NoGas	6847582	1.26	7862387	87.09	30	120	
Rh	103	1	He	2424559	0.48	2873429	84.38	30	120	
In	115	1	He	1648989	2.53	1922589	85.77	30	120	
Tb	159	1	He	4394668	0.53	4725151	93.01	30	120	
Ho	165	1	He	4449461	1.68	4813140	92.44	30	120	
Bi	209	1	He	3329083	0.98	3617562	92.03	30	120	

Sample Report

Sample Table

Sample Name	240-51154-a-4-a
Data File Name	112SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T16:45:03-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	28.051	28.051	0.86	347010	0.01	10000	
Be	9	6	2	NoGas	0.635	0.635	4.68	1967	0.03	10000	
B	11	6	2	NoGas	119.750	119.750	2.30	202173	0.06	300	
Na	23	45	1	He	4531.563	4531.563	1.57	4087980	0.11	500000	
Mg	24	45	1	He	2443.639	2443.639	1.25	1288926	0.19	500000	
Al	27	45	1	He	8069.427	8069.427	1.63	2609334	0.31	200000	
K	39	45	1	He	734.087	734.087	0.26	455105	0.16	500000	
Ca	44	45	1	He	1191.801	1191.801	1.06	38165	3.12	500000	
Ti	47	45	1	He	314.844	314.844	2.60	54066	0.58	2500	
V	51	45	1	He	6586.667	6586.667	0.70	54266719	0.01	10000	
Cr	52	45	1	He	14379.012	14379.012	0.66	73564548	0.02	10000	>LDR
Mn	55	45	1	He	125.119	125.119	1.01	510258	0.02	10000	
Fe	56	45	1	He	165486.497	165486.497	1.27	805207772	0.02	200000	
Co	59	45	1	He	6.675	6.675	1.25	47779	0.01	10000	
Ni	60	45	1	He	45.437	45.437	1.01	80304	0.06	10000	
Cu	63	45	1	He	221.531	221.531	1.28	1020970	0.02	10000	
Zn	66	45	1	He	2465.225	2465.225	1.90	2595160	0.09	10000	
As	75	115	1	He	7.767	7.767	0.47	6816	0.11	10000	
Se	78	115	1	He	0.312	0.312	24.33	66	0.47	10000	
Sr	88	45	1	He	10.772	10.772	0.74	61962	0.02	10000	
Mo	95	103	1	He	15.061	15.061	1.14	42392	0.04	2000	
Ag	107	103	1	He	0.130	0.130	3.88	1165	0.01	300	
Cd	111	115	1	He	0.517	0.517	23.07	2518	0.02	4000	
Sn	118	115	1	He	15.090	15.090	2.20	61463	0.02	2000	
Sb	123	165	1	He	0.258	0.258	1.25	1306	0.02	300	
Ba	137	115	1	He	17.263	17.263	1.06	33949	0.05	10000	
W	182	159	1	He	0.256	0.256	23.13	8962	0.00	2500	
Tl	205	165	1	He	0.068	0.068	7.93	1867	0.00	5000	
Pb	208	165	1	He	9.313	9.313	0.81	318698	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	970777	2.64	1261090	76.98	30	120	
Sc	45	1	He	776778	1.81	955958	81.26	30	120	
Sc	45	2	NoGas	6531210	0.65	7862387	83.07	30	120	
Rh	103	1	He	2426235	0.35	2873429	84.44	30	120	
In	115	1	He	1609870	0.92	1922589	83.73	30	120	
Tb	159	1	He	4322014	0.76	4725151	91.47	30	120	
Ho	165	1	He	4376352	0.57	4813140	90.93	30	120	
Bi	209	1	He	3244277	0.75	3617562	89.68	30	120	

Sample Report

Sample Table

Sample Name	240-51154-a-5-a
Data File Name	113SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T16:48:38-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	23.876	23.876	0.80	303024	0.01	10000	
Be	9	6	2	NoGas	0.614	0.614	6.84	1904	0.03	10000	
B	11	6	2	NoGas	123.790	123.790	1.18	208651	0.06	300	
Na	23	45	1	He	4028.078	4028.078	1.61	3599869	0.11	500000	
Mg	24	45	1	He	1993.927	1993.927	0.88	1041656	0.19	500000	
Al	27	45	1	He	7445.607	7445.607	0.72	2383824	0.31	200000	
K	39	45	1	He	736.121	736.121	1.49	451626	0.16	500000	
Ca	44	45	1	He	1101.719	1101.719	0.90	34972	3.15	500000	
Ti	47	45	1	He	499.891	499.891	2.50	84956	0.59	2500	
V	51	45	1	He	2662.734	2662.734	0.41	21722441	0.01	10000	
Cr	52	45	1	He	5752.428	5752.428	0.32	29136830	0.02	10000	
Mn	55	45	1	He	107.556	107.556	0.75	434525	0.02	10000	
Fe	56	45	1	He	162054.711	162054.711	0.65	780669249	0.02	200000	
Co	59	45	1	He	6.043	6.043	0.96	42831	0.01	10000	
Ni	60	45	1	He	47.349	47.349	0.87	82800	0.06	10000	
Cu	63	45	1	He	196.679	196.679	0.64	897488	0.02	10000	
Zn	66	45	1	He	2384.069	2384.069	0.39	2484997	0.10	10000	
As	75	115	1	He	7.000	7.000	1.63	6047	0.12	10000	
Se	78	115	1	He	0.289	0.289	34.43	63	0.46	10000	
Sr	88	45	1	He	9.118	9.118	1.67	51943	0.02	10000	
Mo	95	103	1	He	13.866	13.866	1.20	39006	0.04	2000	
Ag	107	103	1	He	0.102	0.102	4.92	913	0.01	300	
Cd	111	115	1	He	0.336	0.336	20.24	2183	0.02	4000	
Sn	118	115	1	He	12.271	12.271	1.89	49180	0.02	2000	
Sb	123	165	1	He	0.254	0.254	8.77	1288	0.02	300	
Ba	137	115	1	He	12.520	12.520	2.57	24175	0.05	10000	
W	182	159	1	He	0.220	0.220	8.04	8529	0.00	2500	
Tl	205	165	1	He	0.060	0.060	13.44	1665	0.00	5000	
Pb	208	165	1	He	7.803	7.803	1.00	267123	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	970217	1.02	1261090	76.93	30	120	
Sc	45	1	He	768943	0.52	955958	80.44	30	120	
Sc	45	2	NoGas	6552084	0.58	7862387	83.33	30	120	
Rh	103	1	He	2424800	0.92	2873429	84.39	30	120	
In	115	1	He	1580618	1.77	1922589	82.21	30	120	
Tb	159	1	He	4293741	0.84	4725151	90.87	30	120	
Ho	165	1	He	4376170	0.58	4813140	90.92	30	120	
Bi	209	1	He	3273095	0.59	3617562	90.48	30	120	

Sample Report

Sample Table

Sample Name	240-51154-a-6-a
Data File Name	114SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T16:52:13-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	7.838	7.838	1.66	124579	0.01	10000	
Be	9	6	2	NoGas	0.594	0.594	6.81	1759	0.03	10000	
B	11	6	2	NoGas	101.016	101.016	1.93	163716	0.06	300	
Na	23	45	1	He	4636.416	4636.416	2.44	3965999	0.12	500000	
Mg	24	45	1	He	524.510	524.510	1.80	264343	0.20	500000	
Al	27	45	1	He	7753.709	7753.709	1.84	2378178	0.33	200000	
K	39	45	1	He	664.735	664.735	2.01	394777	0.17	500000	
Ca	44	45	1	He	1649.414	1649.414	1.92	49864	3.31	500000	
Ti	47	45	1	He	73.185	73.185	10.03	11923	0.61	2500	
V	51	45	1	He	5458.966	5458.966	0.90	42658005	0.01	10000	
Cr	52	45	1	He	11867.735	11867.735	1.03	57585802	0.02	10000	>LDR
Mn	55	45	1	He	6.224	6.224	1.42	25770	0.02	10000	
Fe	56	45	1	He	4056.855	4056.855	0.93	18729806	0.02	200000	
Co	59	45	1	He	0.426	0.426	4.00	2944	0.01	10000	
Ni	60	45	1	He	4.934	4.934	2.40	8976	0.05	10000	
Cu	63	45	1	He	20.203	20.203	2.19	88834	0.02	10000	
Zn	66	45	1	He	2244.208	2244.208	1.52	2241299	0.10	10000	
As	75	115	1	He	1.545	1.545	3.88	1449	0.11	10000	
Se	78	115	1	He	0.136	0.136	61.24	52	0.26	10000	
Sr	88	45	1	He	10.185	10.185	1.60	55567	0.02	10000	
Mo	95	103	1	He	0.459	0.459	7.45	1301	0.04	2000	
Ag	107	103	1	He	0.032	0.032	20.17	282	0.01	300	
Cd	111	115	1	He	0.189	0.189	24.14	1933	0.01	4000	
Sn	118	115	1	He	2.282	2.282	2.91	9555	0.02	2000	
Sb	123	165	1	He	0.088	0.088	4.29	489	0.02	300	
Ba	137	115	1	He	22.482	22.482	1.23	43008	0.05	10000	
W	182	159	1	He	0.068	0.068	39.51	6757	0.00	2500	
Tl	205	165	1	He	0.052	0.052	2.60	1419	0.00	5000	
Pb	208	165	1	He	6.226	6.226	1.47	206328	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	924433	1.08	1261090	73.30	30	120	
Sc	45	1	He	736709	0.88	955958	77.07	30	120	
Sc	45	2	NoGas	6288613	0.72	7862387	79.98	30	120	
Rh	103	1	He	2358857	0.38	2873429	82.09	30	120	
In	115	1	He	1566464	0.68	1922589	81.48	30	120	
Tb	159	1	He	4190562	0.50	4725151	88.69	30	120	
Ho	165	1	He	4234365	0.90	4813140	87.98	30	120	
Bi	209	1	He	3297604	0.51	3617562	91.16	30	120	

Sample Report

Sample Table

Sample Name	240-51154-a-7-a
Data File Name	115SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T16:55:47-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	10.169	10.169	1.30	145008	0.01	10000	
Be	9	6	2	NoGas	0.516	0.516	8.31	1526	0.03	10000	
B	11	6	2	NoGas	91.618	91.618	1.92	147666	0.06	300	
Na	23	45	1	He	5019.738	5019.738	0.42	4371919	0.11	500000	
Mg	24	45	1	He	630.824	630.824	1.31	323299	0.20	500000	
Al	27	45	1	He	9205.685	9205.685	1.15	2875820	0.32	200000	
K	39	45	1	He	754.655	754.655	1.14	450703	0.17	500000	
Ca	44	45	1	He	1826.517	1826.517	0.80	56176	3.25	500000	
Ti	47	45	1	He	57.729	57.729	14.06	9580	0.60	2500	
V	51	45	1	He	7106.591	7106.591	0.43	56557252	0.01	10000	
Cr	52	45	1	He	15470.640	15470.640	0.46	76455381	0.02	10000	>LDR
Mn	55	45	1	He	7.546	7.546	0.76	31437	0.02	10000	
Fe	56	45	1	He	5122.498	5122.498	0.57	24084721	0.02	200000	
Co	59	45	1	He	0.541	0.541	5.20	3794	0.01	10000	
Ni	60	45	1	He	3.638	3.638	3.61	6951	0.05	10000	
Cu	63	45	1	He	21.528	21.528	0.46	96382	0.02	10000	
Zn	66	45	1	He	2720.690	2720.690	1.33	2766997	0.10	10000	
As	75	115	1	He	1.740	1.740	1.32	1687	0.10	10000	
Se	78	115	1	He	0.150	0.150	67.10	55	0.27	10000	
Sr	88	45	1	He	12.317	12.317	0.68	68422	0.02	10000	
Mo	95	103	1	He	0.386	0.386	4.07	1118	0.03	2000	
Ag	107	103	1	He	0.043	0.043	9.04	381	0.01	300	
Cd	111	115	1	He	0.250	0.250	21.97	2125	0.01	4000	
Sn	118	115	1	He	2.552	2.552	7.57	11112	0.02	2000	
Sb	123	165	1	He	0.071	0.071	16.26	421	0.02	300	
Ba	137	115	1	He	27.485	27.485	1.03	55056	0.05	10000	
W	182	159	1	He	0.021	0.021	185.91	6398	0.00	2500	
Tl	205	165	1	He	0.047	0.047	8.83	1335	0.00	5000	
Pb	208	165	1	He	7.513	7.513	0.75	254995	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	914582	0.35	1261090	72.52	30	120	
Sc	45	1	He	750291	0.46	955958	78.49	30	120	
Sc	45	2	NoGas	6130933	0.60	7862387	77.98	30	120	
Rh	103	1	He	2392028	0.74	2873429	83.25	30	120	
In	115	1	He	1640548	2.00	1922589	85.33	30	120	
Tb	159	1	He	4270607	0.85	4725151	90.38	30	120	
Ho	165	1	He	4338203	0.54	4813140	90.13	30	120	
Bi	209	1	He	3286644	1.56	3617562	90.85	30	120	

Sample Report

Sample Table

Sample Name	240-51154-a-8-a
Data File Name	116SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T16:59:21-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	10.885	10.885	0.58	159754	0.01	10000	
Be	9	6	2	NoGas	0.400	0.400	19.45	1267	0.03	10000	
B	11	6	2	NoGas	95.029	95.029	1.93	160555	0.06	300	
Na	23	45	1	He	3869.070	3869.070	0.52	3406387	0.11	500000	
Mg	24	45	1	He	443.509	443.509	0.74	230210	0.19	500000	
Al	27	45	1	He	9079.549	9079.549	0.26	2863142	0.32	200000	
K	39	45	1	He	529.230	529.230	0.58	331977	0.16	500000	
Ca	44	45	1	He	1160.477	1160.477	0.55	36251	3.20	500000	
Ti	47	45	1	He	476.473	476.473	8.85	79761	0.60	2500	
V	51	45	1	He	4939.167	4939.167	0.26	39681637	0.01	10000	
Cr	52	45	1	He	10780.877	10780.877	0.79	53783031	0.02	10000	>LDR
Mn	55	45	1	He	5.518	5.518	1.03	23698	0.02	10000	
Fe	56	45	1	He	480.690	480.690	0.27	2287749	0.02	200000	
Co	59	45	1	He	0.431	0.431	2.49	3058	0.01	10000	
Ni	60	45	1	He	4.907	4.907	2.83	9181	0.05	10000	
Cu	63	45	1	He	20.723	20.723	1.17	93674	0.02	10000	
Zn	66	45	1	He	1961.633	1961.633	1.07	2014272	0.10	10000	
As	75	115	1	He	1.491	1.491	5.09	1454	0.10	10000	
Se	78	115	1	He	0.323	0.323	27.46	68	0.48	10000	
Sr	88	45	1	He	10.890	10.890	0.22	61079	0.02	10000	
Mo	95	103	1	He	0.331	0.331	8.39	962	0.03	2000	
Ag	107	103	1	He	0.035	0.035	14.81	317	0.01	300	
Cd	111	115	1	He	0.121	0.121	26.76	1893	0.01	4000	
Sn	118	115	1	He	1.301	1.301	2.60	5916	0.02	2000	
Sb	123	165	1	He	0.089	0.089	4.64	506	0.02	300	
Ba	137	115	1	He	40.844	40.844	2.11	80962	0.05	10000	
W	182	159	1	He	0.036	0.036	257.98	6516	0.00	2500	
Tl	205	165	1	He	0.038	0.038	0.23	1100	0.00	5000	
Pb	208	165	1	He	5.702	5.702	0.83	193201	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	960626	0.61	1261090	76.17	30	120	
Sc	45	1	He	757379	0.23	955958	79.23	30	120	
Sc	45	2	NoGas	6433349	0.79	7862387	81.82	30	120	
Rh	103	1	He	2386523	1.43	2873429	83.05	30	120	
In	115	1	He	1624141	2.80	1922589	84.48	30	120	
Tb	159	1	He	4241667	1.09	4725151	89.77	30	120	
Ho	165	1	He	4327921	0.49	4813140	89.92	30	120	
Bi	209	1	He	3300326	0.52	3617562	91.23	30	120	

Sample Report

Sample Table

Sample Name	240-51154-a-9-a
Data File Name	117SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T17:02:57-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	8.994	8.994	2.11	138895	0.01	10000	
Be	9	6	2	NoGas	0.373	0.373	3.81	1174	0.03	10000	
B	11	6	2	NoGas	114.594	114.594	2.44	189225	0.06	300	
Na	23	45	1	He	3603.987	3603.987	0.95	3202254	0.11	500000	
Mg	24	45	1	He	370.813	370.813	1.51	194588	0.19	500000	
Al	27	45	1	He	7859.980	7859.980	0.19	2500351	0.31	200000	
K	39	45	1	He	448.974	448.974	1.13	290718	0.15	500000	
Ca	44	45	1	He	894.627	894.627	1.38	28332	3.16	500000	
Ti	47	45	1	He	407.011	407.011	4.01	68723	0.59	2500	
V	51	45	1	He	2672.088	2672.088	0.28	21658812	0.01	10000	
Cr	52	45	1	He	5781.183	5781.183	0.11	29094602	0.02	10000	
Mn	55	45	1	He	3.742	3.742	1.47	16806	0.02	10000	
Fe	56	45	1	He	347.033	347.033	0.32	1668041	0.02	200000	
Co	59	45	1	He	0.375	0.375	1.74	2690	0.01	10000	
Ni	60	45	1	He	4.633	4.633	2.05	8790	0.05	10000	
Cu	63	45	1	He	18.921	18.921	1.29	86329	0.02	10000	
Zn	66	45	1	He	1640.016	1640.016	2.04	1699039	0.10	10000	
As	75	115	1	He	1.190	1.190	2.42	1187	0.10	10000	
Se	78	115	1	He	0.192	0.192	63.27	58	0.33	10000	
Sr	88	45	1	He	8.933	8.933	0.17	50561	0.02	10000	
Mo	95	103	1	He	0.275	0.275	0.65	821	0.03	2000	
Ag	107	103	1	He	0.032	0.032	16.22	290	0.01	300	
Cd	111	115	1	He	0.201	0.201	20.37	2012	0.01	4000	
Sn	118	115	1	He	1.145	1.145	3.61	5242	0.02	2000	
Sb	123	165	1	He	0.082	0.082	3.62	477	0.02	300	
Ba	137	115	1	He	27.716	27.716	2.66	54561	0.05	10000	
W	182	159	1	He	0.032	0.032	143.02	6539	0.00	2500	
Tl	205	165	1	He	0.031	0.031	11.20	950	0.00	5000	
Pb	208	165	1	He	4.758	4.758	2.30	162632	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	947381	1.10	1261090	75.12	30	120	
Sc	45	1	He	764016	0.11	955958	79.92	30	120	
Sc	45	2	NoGas	6396887	0.98	7862387	81.36	30	120	
Rh	103	1	He	2427219	0.96	2873429	84.47	30	120	
In	115	1	He	1612863	2.82	1922589	83.89	30	120	
Tb	159	1	He	4289270	1.69	4725151	90.78	30	120	
Ho	165	1	He	4364521	2.69	4813140	90.68	30	120	
Bi	209	1	He	3323255	0.52	3617562	91.86	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2026839
Data File Name	118_CCV.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T17:06:30-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	44.015	0.426	531834	1.00	50	88.0	89.5	110.5	CCV Failed
Be	9	6	2	NoGas	48.925	0.591	140581	1.38	50	97.8	89.5	110.5	
B	11	6	2	NoGas	51.343	4.812	90474	2.82	50	102.7	89.5	110.5	
Na	23	45	1	He	24631.705	0.210	23187468	0.15	25000	98.5	89.5	110.5	
Mg	24	45	1	He	24521.585	1.187	13530099	1.18	25000	98.1	89.5	110.5	
Al	27	45	1	He	240.888	0.446	82228	0.53	250	96.4	89.5	110.5	
K	39	45	1	He	25452.623	0.320	14969721	0.26	25000	101.8	89.5	110.5	
Ca	44	45	1	He	24604.054	0.767	812829	0.68	25000	98.4	89.5	110.5	
Ti	47	45	1	He	52.028	0.937	9365	0.86	50	104.1	89.5	110.5	
V	51	45	1	He	49.929	0.610	437819	0.52	50	99.9	89.5	110.5	
Cr	52	45	1	He	50.444	0.615	272643	0.53	50	100.9	89.5	110.5	
Mn	55	45	1	He	250.150	0.590	1067223	0.50	250	100.1	89.5	110.5	
Fe	56	45	1	He	12499.565	0.211	63751620	0.16	12500	100.0	89.5	110.5	
Co	59	45	1	He	49.924	0.519	374123	0.43	50	99.8	89.5	110.5	
Ni	60	45	1	He	49.972	0.509	92461	0.42	50	99.9	89.5	110.5	
Cu	63	45	1	He	50.423	0.876	244057	0.80	50	100.8	89.5	110.5	
Zn	66	45	1	He	50.160	1.862	57060	1.71	50	100.3	89.5	110.5	
As	75	115	1	He	46.461	1.038	42504	0.80	50	92.9	89.5	110.5	
Se	78	115	1	He	46.621	0.212	3749	1.19	50	93.2	89.5	110.5	
Sr	88	45	1	He	51.708	0.633	311208	0.57	50	103.4	89.5	110.5	
Mo	95	103	1	He	51.218	0.433	145931	1.63	50	102.4	89.5	110.5	
Ag	107	103	1	He	49.906	0.612	449026	0.77	50	99.8	89.5	110.5	
Cd	111	115	1	He	47.906	1.127	84321	0.56	50	95.8	89.5	110.5	
Sn	118	115	1	He	48.151	2.094	207218	1.66	50	96.3	89.5	110.5	
Sb	123	165	1	He	49.319	0.968	236686	0.66	50	98.6	89.5	110.5	
Ba	137	115	1	He	49.346	0.675	103198	1.43	50	98.7	89.5	110.5	
W	182	159	1	He	48.644	1.792	529559	2.10	50	97.3	89.5	110.5	
Tl	205	165	1	He	49.308	1.263	1259087	0.97	50	98.6	89.5	110.5	
Pb	208	165	1	He	49.573	1.280	1725282	1.00	50	99.1	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	959411	1.57	1261090	76.08	30	120	
Sc	45	1	He	814019	0.09	955958	85.15	30	120	
Sc	45	2	NoGas	6693961	1.04	7862387	85.14	30	120	
Rh	103	1	He	2457949	1.20	2873429	85.54	30	120	
In	115	1	He	1712941	1.08	1922589	89.10	30	120	
Tb	159	1	He	4389170	0.75	4725151	92.89	30	120	
Ho	165	1	He	4458071	0.31	4813140	92.62	30	120	
Bi	209	1	He	3247032	0.35	3617562	89.76	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	119_CCB.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T17:10:08-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.194	-54.6	37120	0.9	2	
Be	9	6	2	NoGas	0.191	16.7	600	13.0	1	
B	11	6	2	NoGas	2.512	17.7	11211	5.2	20	
Na	23	45	1	He	56.319	5.8	73930	2.3	1000	
Mg	24	45	1	He	-1.210	-131.4	2048	39.7	1000	
Al	27	45	1	He	1.041	31.0	937	12.1	50	
K	39	45	1	He	18.957	25.0	56477	2.9	1000	
Ca	44	45	1	He	66.524	9.8	2795	7.1	1000	
Ti	47	45	1	He	0.120	28.1	27	21.7	20	
V	51	45	1	He	-0.059	-73.8	6123	4.2	2	
Cr	52	45	1	He	0.359	14.1	4024	4.7	2	
Mn	55	45	1	He	1.183	6.7	6870	3.1	2	
Fe	56	45	1	He	17.260	5.2	93658	6.0	50	
Co	59	45	1	He	0.029	20.0	273	13.7	1	
Ni	60	45	1	He	-0.343	-3.3	241	9.4	2	
Cu	63	45	1	He	0.079	27.6	998	8.6	2	
Zn	66	45	1	He	5.052	6.7	7177	4.5	20	
As	75	115	1	He	0.077	25.4	244	8.4	2	
Se	78	115	1	He	0.215	21.5	62	3.9	2	
Sr	88	45	1	He	0.045	18.1	394	13.9	10	
Mo	95	103	1	He	0.258	38.2	801	35.4	2	
Ag	107	103	1	He	0.010	30.0	101	28.4	0.2	
Cd	111	115	1	He	0.044	47.8	1849	3.4	0.2	
Sn	118	115	1	He	0.572	9.6	3089	9.0	10	
Sb	123	165	1	He	0.122	10.8	669	8.8	2	
Ba	137	115	1	He	0.037	17.5	108	15.3	5	
W	182	159	1	He	0.577	9.1	12424	4.4	10	
Tl	205	165	1	He	0.103	4.1	2745	4.4	0.5	
Pb	208	165	1	He	0.167	8.0	6354	7.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	864563	2.11	1261090	68.56	30	120	
Sc	45	1	He	798356	1.92	955958	83.51	30	120	
Sc	45	2	NoGas	5652876	2.40	7862387	71.90	30	120	
Rh	103	1	He	2513228	1.37	2873429	87.46	30	120	
In	115	1	He	1699524	2.76	1922589	88.40	30	120	
Tb	159	1	He	4344342	0.39	4725151	91.94	30	120	
Ho	165	1	He	4392296	0.62	4813140	91.26	30	120	
Bi	209	1	He	3298133	1.31	3617562	91.17	30	120	

Sample Report

Sample Table

Sample Name	240-50966-ad-9-k
Data File Name	120SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T17:13:47-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	5.252	5.252	1.95	99504	0.01	10000	
Be	9	6	2	NoGas	0.217	0.217	4.40	733	0.03	10000	
B	11	6	2	NoGas	141.253	141.253	2.61	231813	0.06	300	
Na	23	45	1	He	25916.000	25916.000	7.75	20915869	0.12	500000	
Mg	24	45	1	He	60779.428	60779.428	8.64	28735854	0.21	500000	
Al	27	45	1	He	2.560	2.560	18.73	1258	0.20	200000	
K	39	45	1	He	15110.877	15110.877	8.64	7632655	0.20	500000	
Ca	44	45	1	He	152528.227	152528.227	8.90	4314968	3.53	500000	
Ti	47	45	1	He	0.479	0.479	9.37	79	0.61	2500	
V	51	45	1	He	2.036	2.036	8.01	20883	0.01	10000	
Cr	52	45	1	He	1.978	1.978	10.41	10958	0.02	10000	
Mn	55	45	1	He	1609.232	1609.232	8.34	5875336	0.03	10000	
Fe	56	45	1	He	1140.233	1140.233	8.83	4989163	0.02	200000	
Co	59	45	1	He	2.078	2.078	8.32	13394	0.02	10000	
Ni	60	45	1	He	12.839	12.839	10.35	20900	0.06	10000	
Cu	63	45	1	He	0.820	0.820	8.40	3945	0.02	10000	
Zn	66	45	1	He	489.611	489.611	8.64	464187	0.11	10000	
As	75	115	1	He	1.146	1.146	8.18	1008	0.11	10000	
Se	78	115	1	He	0.370	0.370	41.05	62	0.60	10000	
Sr	88	45	1	He	328.960	328.960	7.84	1696802	0.02	10000	
Mo	95	103	1	He	0.760	0.760	4.48	1879	0.04	2000	
Ag	107	103	1	He	0.018	0.018	13.82	143	0.01	300	
Cd	111	115	1	He	0.146	0.146	17.77	1689	0.01	4000	
Sn	118	115	1	He	0.926	0.926	20.25	3804	0.02	2000	
Sb	123	165	1	He	0.152	0.152	18.63	720	0.02	300	
Ba	137	115	1	He	146.925	146.925	8.99	253233	0.06	10000	
W	182	159	1	He	0.214	0.214	26.95	7680	0.00	2500	
Tl	205	165	1	He	0.108	0.108	9.75	2580	0.00	5000	
Pb	208	165	1	He	1.140	1.140	10.69	35423	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	949693	1.97	1261090	75.31	30	120	
Sc	45	1	He	700722	7.76	955958	73.30	30	120	
Sc	45	2	NoGas	6400421	0.23	7862387	81.41	30	120	
Rh	103	1	He	2092106	8.51	2873429	72.81	30	120	
In	115	1	He	1418382	7.49	1922589	73.77	30	120	
Tb	159	1	He	3882048	8.97	4725151	82.16	30	120	
Ho	165	1	He	3942705	9.50	4813140	81.92	30	120	
Bi	209	1	He	2841222	7.25	3617562	78.54	30	120	

Sample Report

Sample Table

Sample Name	SD 240-50966-ad-9-k@5
Data File Name	121SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T17:17:22-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	0.842	0.842	6.91	54606	0.00	10000	
Be	9	6	2	NoGas	0.143	0.143	19.99	537	0.03	10000	
B	11	6	2	NoGas	29.943	29.943	1.71	57311	0.05	300	
Na	23	45	1	He	5070.161	5070.161	0.89	4664215	0.11	500000	
Mg	24	45	1	He	11738.048	11738.048	0.14	6306846	0.19	500000	
Al	27	45	1	He	0.581	0.581	20.52	778	0.07	200000	
K	39	45	1	He	3036.178	3036.178	0.63	1778427	0.17	500000	
Ca	44	45	1	He	29278.581	29278.581	0.02	941580	3.11	500000	
Ti	47	45	1	He	0.127	0.127	17.66	28	0.46	2500	
V	51	45	1	He	0.536	0.536	10.87	11084	0.00	10000	
Cr	52	45	1	He	0.527	0.527	2.60	4873	0.01	10000	
Mn	55	45	1	He	310.782	310.782	0.25	1290409	0.02	10000	
Fe	56	45	1	He	218.679	218.679	0.46	1092976	0.02	200000	
Co	59	45	1	He	0.414	0.414	4.64	3080	0.01	10000	
Ni	60	45	1	He	2.232	2.232	4.52	4834	0.05	10000	
Cu	63	45	1	He	0.247	0.247	9.36	1782	0.01	10000	
Zn	66	45	1	He	94.991	94.991	0.43	103683	0.09	10000	
As	75	115	1	He	0.175	0.175	18.56	322	0.05	10000	
Se	78	115	1	He	0.139	0.139	63.31	55	0.25	10000	
Sr	88	45	1	He	60.004	60.004	0.11	351575	0.02	10000	
Mo	95	103	1	He	0.142	0.142	9.69	442	0.03	2000	
Ag	107	103	1	He	0.006	0.006	86.34	57	0.01	300	
Cd	111	115	1	He	0.072	0.072	94.74	1838	0.00	4000	
Sn	118	115	1	He	0.208	0.208	47.92	1489	0.01	2000	
Sb	123	165	1	He	0.034	0.034	18.73	252	0.01	300	
Ba	137	115	1	He	27.033	27.033	1.28	54383	0.05	10000	
W	182	159	1	He	0.117	0.117	94.16	7422	0.00	2500	
Tl	205	165	1	He	0.023	0.023	2.30	739	0.00	5000	
Pb	208	165	1	He	0.276	0.276	3.45	10024	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	976657	0.80	1261090	77.45	30	120	
Sc	45	1	He	792508	0.54	955958	82.90	30	120	
Sc	45	2	NoGas	6598183	0.21	7862387	83.92	30	120	
Rh	103	1	He	2398136	0.82	2873429	83.46	30	120	
In	115	1	He	1647681	1.96	1922589	85.70	30	120	
Tb	159	1	He	4283225	0.50	4725151	90.65	30	120	
Ho	165	1	He	4355349	1.58	4813140	90.49	30	120	
Bi	209	1	He	3232866	1.12	3617562	89.37	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-50966-ad-9-k
Data File Name	122SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T17:20:58-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	4.868	4.868	2.41	99129	0.00	10000	
Be	9	6	2	NoGas	962.604	962.604	2.52	2730935	0.04	10000	
B	11	6	2	NoGas	243.031	243.031	2.38	392248	0.06	300	
Na	23	45	1	He	33206.479	33206.479	0.76	28624477	0.12	500000	
Mg	24	45	1	He	64239.182	64239.182	1.73	32459739	0.20	500000	
Al	27	45	1	He	9376.608	9376.608	1.73	2910655	0.32	200000	
K	39	45	1	He	23656.756	23656.756	1.65	12746589	0.19	500000	
Ca	44	45	1	He	148077.606	148077.606	1.95	4477578	3.31	500000	
Ti	47	45	1	He	100.214	100.214	0.55	16517	0.61	2500	
V	51	45	1	He	983.222	983.222	2.16	7781418	0.01	10000	
Cr	52	45	1	He	977.870	977.870	2.50	4804240	0.02	10000	
Mn	55	45	1	He	2423.152	2423.152	2.36	9453258	0.03	10000	
Fe	56	45	1	He	10912.161	10912.161	2.22	50977989	0.02	200000	
Co	59	45	1	He	961.408	961.408	2.00	6598317	0.01	10000	
Ni	60	45	1	He	988.519	988.519	2.46	1660255	0.06	10000	
Cu	63	45	1	He	964.131	964.131	1.18	4263640	0.02	10000	
Zn	66	45	1	He	1386.898	1386.898	1.71	1402364	0.10	10000	
As	75	115	1	He	988.110	988.110	0.99	761155	0.13	10000	
Se	78	115	1	He	1000.134	1000.134	1.38	67193	1.49	10000	
Sr	88	45	1	He	1302.078	1302.078	1.10	7175049	0.02	10000	
Mo	95	103	1	He	107.438	107.438	0.35	276481	0.04	2000	
Ag	107	103	1	He	100.282	100.282	0.63	815160	0.01	300	
Cd	111	115	1	He	1011.007	1011.007	0.86	1473987	0.07	4000	
Sn	118	115	1	He	1106.381	1106.381	1.05	4013006	0.03	2000	
Sb	123	165	1	He	94.375	94.375	1.08	426063	0.02	300	
Ba	137	115	1	He	1235.974	1235.974	1.27	2184210	0.06	10000	
W	182	159	1	He	99.038	99.038	0.99	1014543	0.01	2500	
Tl	205	165	1	He	242.524	242.524	1.31	5826261	0.00	5000	
Pb	208	165	1	He	971.168	971.168	1.45	31790248	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	948321	2.43	1261090	75.20	30	120	
Sc	45	1	He	745594	0.70	955958	77.99	30	120	
Sc	45	2	NoGas	6647476	1.12	7862387	84.55	30	120	
Rh	103	1	He	2220538	1.58	2873429	77.28	30	120	
In	115	1	He	1448148	2.14	1922589	75.32	30	120	
Tb	159	1	He	4155472	0.98	4725151	87.94	30	120	
Ho	165	1	He	4194572	1.00	4813140	87.15	30	120	
Bi	209	1	He	2993121	1.34	3617562	82.74	30	120	

Sample Report

Sample Table

Sample Name	240-50966-ad-9-I ms
Data File Name	123SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T17:24:20-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	5.258	5.258	1.29	103606	0.01	10000	
Be	9	6	2	NoGas	981.096	981.096	1.04	2778476	0.04	10000	
B	11	6	2	NoGas	259.495	259.495	0.74	417528	0.06	300	
Na	23	45	1	He	35134.998	35134.998	1.51	30575827	0.11	500000	
Mg	24	45	1	He	68274.291	68274.291	1.77	34831117	0.20	500000	
Al	27	45	1	He	9514.948	9514.948	2.53	2982222	0.32	200000	
K	39	45	1	He	24615.578	24615.578	1.47	13389082	0.18	500000	
Ca	44	45	1	He	158365.844	158365.844	1.85	4834670	3.28	500000	
Ti	47	45	1	He	101.916	101.916	1.66	16961	0.60	2500	
V	51	45	1	He	993.026	993.026	1.63	7934179	0.01	10000	
Cr	52	45	1	He	979.990	979.990	2.17	4860537	0.02	10000	
Mn	55	45	1	He	2520.274	2520.274	1.54	9926667	0.03	10000	
Fe	56	45	1	He	11043.333	11043.333	2.21	52083732	0.02	200000	
Co	59	45	1	He	965.346	965.346	1.34	6688881	0.01	10000	
Ni	60	45	1	He	998.096	998.096	2.42	1692173	0.06	10000	
Cu	63	45	1	He	975.557	975.557	1.02	4355884	0.02	10000	
Zn	66	45	1	He	1415.347	1415.347	1.82	1444799	0.10	10000	
As	75	115	1	He	990.657	990.657	3.12	777800	0.13	10000	
Se	78	115	1	He	998.375	998.375	2.91	68372	1.46	10000	
Sr	88	45	1	He	1341.608	1341.608	1.45	7464349	0.02	10000	
Mo	95	103	1	He	108.244	108.244	0.88	282193	0.04	2000	
Ag	107	103	1	He	100.099	100.099	0.30	824280	0.01	300	
Cd	111	115	1	He	1005.082	1005.082	3.42	1493410	0.07	4000	
Sn	118	115	1	He	1086.205	1086.205	4.11	4014856	0.03	2000	
Sb	123	165	1	He	93.504	93.504	0.65	428246	0.02	300	
Ba	137	115	1	He	1235.487	1235.487	3.05	2225495	0.06	10000	
W	182	159	1	He	100.964	100.964	1.03	1032651	0.01	2500	
Tl	205	165	1	He	242.706	242.706	0.77	5915165	0.00	5000	
Pb	208	165	1	He	970.074	970.074	0.59	32214816	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	946362	1.04	1261090	75.04	30	120	
Sc	45	1	He	752849	1.71	955958	78.75	30	120	
Sc	45	2	NoGas	6660299	1.08	7862387	84.71	30	120	
Rh	103	1	He	2249549	1.24	2873429	78.29	30	120	
In	115	1	He	1477137	4.22	1922589	76.83	30	120	
Tb	159	1	He	4149549	1.35	4725151	87.82	30	120	
Ho	165	1	He	4255304	0.99	4813140	88.41	30	120	
Bi	209	1	He	3023498	0.73	3617562	83.58	30	120	

Sample Report

Sample Table

Sample Name	240-50966-ad-9-m msd
Data File Name	124SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T17:27:43-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	4.960	4.960	1.48	101695	0.00	10000	
Be	9	6	2	NoGas	950.455	950.455	1.43	2723965	0.03	10000	
B	11	6	2	NoGas	252.772	252.772	0.60	411814	0.06	300	
Na	23	45	1	He	34492.113	34492.113	1.13	30119678	0.11	500000	
Mg	24	45	1	He	66729.592	66729.592	0.51	34159892	0.20	500000	
Al	27	45	1	He	9343.466	9343.466	0.82	2938311	0.32	200000	
K	39	45	1	He	24199.979	24199.979	0.84	13208865	0.18	500000	
Ca	44	45	1	He	155499.586	155499.586	0.97	4763627	3.26	500000	
Ti	47	45	1	He	98.680	98.680	1.82	16478	0.60	2500	
V	51	45	1	He	980.644	980.644	0.38	7862240	0.01	10000	
Cr	52	45	1	He	972.758	972.758	0.97	4841444	0.02	10000	
Mn	55	45	1	He	2498.942	2498.942	0.32	9876194	0.03	10000	
Fe	56	45	1	He	10892.261	10892.261	0.22	51550105	0.02	200000	
Co	59	45	1	He	963.000	963.000	0.55	6695410	0.01	10000	
Ni	60	45	1	He	998.653	998.653	0.36	1699173	0.06	10000	
Cu	63	45	1	He	968.939	968.939	1.59	4340899	0.02	10000	
Zn	66	45	1	He	1399.664	1399.664	0.78	1433800	0.10	10000	
As	75	115	1	He	956.411	956.411	0.79	770200	0.12	10000	
Se	78	115	1	He	968.749	968.749	0.69	68044	1.42	10000	
Sr	88	45	1	He	1322.523	1322.523	0.61	7382708	0.02	10000	
Mo	95	103	1	He	105.077	105.077	0.20	278194	0.04	2000	
Ag	107	103	1	He	98.116	98.116	0.35	820501	0.01	300	
Cd	111	115	1	He	974.413	974.413	0.97	1485163	0.07	4000	
Sn	118	115	1	He	1056.479	1056.479	1.02	4006036	0.03	2000	
Sb	123	165	1	He	92.120	92.120	0.76	423003	0.02	300	
Ba	137	115	1	He	1207.024	1207.024	0.61	2230045	0.05	10000	
W	182	159	1	He	98.817	98.817	0.91	1023734	0.01	2500	
Tl	205	165	1	He	241.351	241.351	1.29	5897162	0.00	5000	
Pb	208	165	1	He	956.899	956.899	1.12	31859140	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	957671	0.72	1261090	75.94	30	120	
Sc	45	1	He	755333	0.49	955958	79.01	30	120	
Sc	45	2	NoGas	6750284	0.62	7862387	85.86	30	120	
Rh	103	1	He	2284463	0.63	2873429	79.50	30	120	
In	115	1	He	1513811	0.85	1922589	78.74	30	120	
Tb	159	1	He	4202614	0.39	4725151	88.94	30	120	
Ho	165	1	He	4266409	0.73	4813140	88.64	30	120	
Bi	209	1	He	3018900	0.84	3617562	83.45	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-182057/1-a
Data File Name	125_Blk.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T17:31:05-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.229	-28.1	41868	1.4	2	
Be	9	6	2	NoGas	1.360	6.5	4093	5.4	1	Blank Failed
B	11	6	2	NoGas	5.152	4.2	16964	1.8	20	
Na	23	45	1	He	173.633	3.7	179724	1.5	1000	
Mg	24	45	1	He	58.081	3.3	33680	1.6	1000	
Al	27	45	1	He	5.804	4.5	2486	3.2	50	
K	39	45	1	He	59.820	7.4	78938	2.0	1000	
Ca	44	45	1	He	263.375	4.6	9046	3.5	1000	
Ti	47	45	1	He	0.345	30.2	66	28.0	20	
V	51	45	1	He	1.809	2.7	21660	3.4	2	
Cr	52	45	1	He	1.538	3.2	10088	0.9	2	
Mn	55	45	1	He	0.862	3.1	5462	3.0	2	
Fe	56	45	1	He	28.439	3.7	147609	4.6	50	
Co	59	45	1	He	0.353	4.8	2616	3.1	1	
Ni	60	45	1	He	-0.068	-38.5	726	6.0	2	
Cu	63	45	1	He	1.206	10.7	6246	8.0	2	
Zn	66	45	1	He	20.215	4.1	23261	2.7	20	Blank Failed
As	75	115	1	He	1.426	12.6	1443	12.6	2	
Se	78	115	1	He	1.278	23.8	144	17.9	2	
Sr	88	45	1	He	0.763	6.1	4570	4.2	10	
Mo	95	103	1	He	0.390	33.5	1183	33.2	2	
Ag	107	103	1	He	0.016	24.2	157	22.4	0.2	
Cd	111	115	1	He	0.406	10.5	2429	1.4	0.2	Blank Failed
Sn	118	115	1	He	2.591	8.7	11489	6.8	10	
Sb	123	165	1	He	0.251	5.9	1267	6.8	2	
Ba	137	115	1	He	1.051	8.6	2175	7.0	5	
W	182	159	1	He	1.174	7.5	18530	6.6	10	
Tl	205	165	1	He	0.369	15.6	9358	13.9	0.5	
Pb	208	165	1	He	0.400	11.5	14222	9.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	976697	1.03	1261090	77.45	30	120	
Sc	45	1	He	787921	1.79	955958	82.42	30	120	
Sc	45	2	NoGas	6432310	2.23	7862387	81.81	30	120	
Rh	103	1	He	2501162	1.51	2873429	87.04	30	120	
In	115	1	He	1672613	1.56	1922589	87.00	30	120	
Tb	159	1	He	4283448	1.58	4725151	90.65	30	120	
Ho	165	1	He	4353614	1.49	4813140	90.45	30	120	
Bi	209	1	He	3332874	0.99	3617562	92.13	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-182057/2-a@10
Data File Name	126_LCS.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T17:34:44-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	2	NoGas	86.127	86.127	0.920	988874	0.60	1000	8.6	79.5	120.5	LCS Failed
Be	9	2	NoGas	5.539	5.539	2.917	16282	2.77	1000	0.6	79.5	120.5	LCS Failed
B	11	2	NoGas	96.540	96.540	2.793	165415	1.75	100	96.5	79.5	120.5	
Na	23	1	He	4991.266	4991.266	0.311	4693683	1.25	10000	49.9	79.5	120.5	LCS Failed
Mg	24	1	He	5023.863	5023.863	0.923	2760622	0.95	10000	50.2	79.5	120.5	LCS Failed
Al	27	1	He	188.251	188.251	0.260	64079	1.02	10000	1.9	79.5	120.5	LCS Failed
K	39	1	He	5170.768	5170.768	1.083	3063037	0.23	10000	51.7	79.5	120.5	LCS Failed
Ca	44	1	He	4887.170	4887.170	0.375	161191	0.84	10000	48.9	79.5	120.5	LCS Failed
Ti	47	1	He	97.025	97.025	0.207	17374	0.80	100	97.0	79.5	120.5	
V	51	1	He	34.930	34.930	0.453	306819	0.62	1000	3.5	79.5	120.5	LCS Failed
Cr	52	1	He	19.561	19.561	0.807	106545	1.70	1000	2.0	79.5	120.5	LCS Failed
Mn	55	1	He	49.188	49.188	0.561	210404	0.47	1000	4.9	79.5	120.5	LCS Failed
Fe	56	1	He	101.417	101.417	0.762	522067	0.25	10000	1.0	79.5	120.5	LCS Failed
Co	59	1	He	49.220	49.220	0.832	367043	0.44	1000	4.9	79.5	120.5	LCS Failed
Ni	60	1	He	49.566	49.566	1.164	91266	0.53	1000	5.0	79.5	120.5	LCS Failed
Cu	63	1	He	25.209	25.209	0.094	121743	0.98	1000	2.5	79.5	120.5	LCS Failed
Zn	66	1	He	50.396	50.396	1.364	57041	1.36	1000	5.0	79.5	120.5	LCS Failed
As	75	1	He	178.698	178.698	0.554	163528	1.40	1000	17.9	79.5	120.5	LCS Failed
Se	78	1	He	182.448	182.448	0.729	14587	1.47	1000	18.2	79.5	120.5	LCS Failed
Sr	88	1	He	99.630	99.630	0.108	596593	0.96	1000	10.0	79.5	120.5	LCS Failed
Mo	95	1	He	96.450	96.450	0.948	277235	1.26	100	96.4	79.5	120.5	
Ag	107	1	He	4.964	4.964	2.213	45073	1.50	100	5.0	79.5	120.5	LCS Failed
Cd	111	1	He	4.825	4.825	3.302	10134	1.92	1000	0.5	79.5	120.5	LCS Failed
Sn	118	1	He	183.297	183.297	0.955	789590	0.15	100	183.3	79.5	120.5	LCS Failed
Sb	123	1	He	48.003	48.003	1.276	228027	0.16	100	48.0	79.5	120.5	LCS Failed
Ba	137	1	He	186.570	186.570	0.349	391364	0.80	1000	18.7	79.5	120.5	LCS Failed
W	182	1	He	0.242	0.242	41.168	8832	11.39	100	0.2	79.5	120.5	LCS Failed
Tl	205	1	He	194.890	194.890	1.081	4925469	0.32	250	78.0	79.5	120.5	LCS Failed
Pb	208	1	He	49.201	49.201	1.184	1694928	0.26	1000	4.9	79.5	120.5	LCS Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	975131	1.04	1261090	77.32	30	120	
Sc	45	1	He	810066	1.01	955958	84.74	30	120	
Sc	45	2	NoGas	6642452	0.35	7862387	84.48	30	120	
Rh	103	1	He	2480346	1.66	2873429	86.32	30	120	
In	115	1	He	1718607	0.99	1922589	89.39	30	120	
Tb	159	1	He	4335178	1.28	4725151	91.75	30	120	
Ho	165	1	He	4413075	1.37	4813140	91.69	30	120	
Bi	209	1	He	3293691	1.11	3617562	91.05	30	120	

Sample Report

Sample Table

Sample Name	240-50985-x-4-a
Data File Name	127SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T17:38:20-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	13.332	13.332	0.91	187953	0.01	10000	
Be	9	6	2	NoGas	0.955	0.955	2.05	2774	0.03	10000	
B	11	6	2	NoGas	1415.966	1415.966	2.54	2202935	0.06	300	>LDR
Na	23	45	1	He	122359.729	122359.729	0.98	106612914	0.11	500000	
Mg	24	45	1	He	34406.098	34406.098	0.67	17583527	0.20	500000	
Al	27	45	1	He	1448.588	1448.588	0.14	455233	0.32	200000	
K	39	45	1	He	2874.362	2874.362	1.04	1604181	0.18	500000	
Ca	44	45	1	He	137668.382	137668.382	1.74	4209778	3.27	500000	
Ti	47	45	1	He	20.411	20.411	6.78	3405	0.60	2500	
V	51	45	1	He	15.422	15.422	2.55	129590	0.01	10000	
Cr	52	45	1	He	28.208	28.208	0.92	142109	0.02	10000	
Mn	55	45	1	He	148.914	148.914	0.33	589216	0.03	10000	
Fe	56	45	1	He	7892.843	7892.843	0.84	37290490	0.02	200000	
Co	59	45	1	He	1.860	1.860	2.20	12967	0.01	10000	
Ni	60	45	1	He	44.256	44.256	1.17	75939	0.06	10000	
Cu	63	45	1	He	4.387	4.387	2.06	20208	0.02	10000	
Zn	66	45	1	He	13.664	13.664	2.19	15577	0.09	10000	
As	75	115	1	He	5.206	5.206	4.17	4292	0.12	10000	
Se	78	115	1	He	1.173	1.173	6.21	121	0.97	10000	
Sr	88	45	1	He	219.585	219.585	0.86	1223760	0.02	10000	
Mo	95	103	1	He	1.653	1.653	14.87	4288	0.04	2000	
Ag	107	103	1	He	0.017	0.017	26.59	142	0.01	300	
Cd	111	115	1	He	0.253	0.253	9.15	1940	0.01	4000	
Sn	118	115	1	He	3.081	3.081	2.20	12108	0.03	2000	
Sb	123	165	1	He	0.519	0.519	6.05	2438	0.02	300	
Ba	137	115	1	He	684.980	684.980	0.77	1249261	0.05	10000	
W	182	159	1	He	1.350	1.350	4.71	19883	0.01	2500	
Tl	205	165	1	He	0.369	0.369	6.84	9027	0.00	5000	
Pb	208	165	1	He	2.432	2.432	0.80	80409	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	930553	2.66	1261090	73.79	30	120	
Sc	45	1	He	754009	0.61	955958	78.87	30	120	
Sc	45	2	NoGas	6511036	0.86	7862387	82.81	30	120	
Rh	103	1	He	2213213	1.45	2873429	77.02	30	120	
In	115	1	He	1494294	0.27	1922589	77.72	30	120	
Tb	159	1	He	4183712	0.62	4725151	88.54	30	120	
Ho	165	1	He	4204181	0.97	4813140	87.35	30	120	
Bi	209	1	He	2956338	0.28	3617562	81.72	30	120	

Sample Report

Sample Table

Sample Name	SD 240-50985-x-4-a@5
Data File Name	128SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T17:41:55-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	2.706	2.706	5.96	69913	0.00	10000	
Be	9	6	2	NoGas	0.508	0.508	8.36	1508	0.03	10000	
B	11	6	2	NoGas	291.270	291.270	2.14	453804	0.06	300	
Na	23	45	1	He	25263.057	25263.057	0.88	22801379	0.11	500000	
Mg	24	45	1	He	7210.149	7210.149	0.87	3816255	0.19	500000	
Al	27	45	1	He	281.351	281.351	0.59	91983	0.31	200000	
K	39	45	1	He	578.865	578.865	0.97	370002	0.16	500000	
Ca	44	45	1	He	27955.991	27955.991	0.79	885428	3.16	500000	
Ti	47	45	1	He	2.803	2.803	4.92	489	0.57	2500	
V	51	45	1	He	3.088	3.088	2.20	32037	0.01	10000	
Cr	52	45	1	He	5.857	5.857	2.53	32201	0.02	10000	
Mn	55	45	1	He	30.581	30.581	0.83	126748	0.02	10000	
Fe	56	45	1	He	1626.256	1626.256	0.66	7958792	0.02	200000	
Co	59	45	1	He	0.417	0.417	5.30	3054	0.01	10000	
Ni	60	45	1	He	9.164	9.164	1.53	16943	0.05	10000	
Cu	63	45	1	He	1.021	1.021	2.94	5338	0.02	10000	
Zn	66	45	1	He	2.419	2.419	8.34	4235	0.06	10000	
As	75	115	1	He	0.991	0.991	9.97	1032	0.10	10000	
Se	78	115	1	He	0.297	0.297	10.10	66	0.45	10000	
Sr	88	45	1	He	45.342	45.342	0.39	261657	0.02	10000	
Mo	95	103	1	He	0.299	0.299	21.94	868	0.03	2000	
Ag	107	103	1	He	0.007	0.007	34.26	73	0.01	300	
Cd	111	115	1	He	0.141	0.141	12.98	1943	0.01	4000	
Sn	118	115	1	He	0.487	0.487	18.56	2630	0.02	2000	
Sb	123	165	1	He	0.127	0.127	12.48	686	0.02	300	
Ba	137	115	1	He	131.402	131.402	0.76	262810	0.05	10000	
W	182	159	1	He	0.296	0.296	21.27	9225	0.00	2500	
Tl	205	165	1	He	0.087	0.087	4.21	2329	0.00	5000	
Pb	208	165	1	He	0.584	0.584	2.39	20426	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	918507	1.43	1261090	72.83	30	120	
Sc	45	1	He	780450	0.66	955958	81.64	30	120	
Sc	45	2	NoGas	6161225	1.56	7862387	78.36	30	120	
Rh	103	1	He	2372675	1.09	2873429	82.57	30	120	
In	115	1	He	1638549	0.49	1922589	85.23	30	120	
Tb	159	1	He	4250085	0.50	4725151	89.95	30	120	
Ho	165	1	He	4340126	0.18	4813140	90.17	30	120	
Bi	209	1	He	3191161	1.74	3617562	88.21	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-50985-x-4-a
Data File Name	129SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T17:45:31-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	12.710	12.710	0.98	187509	0.01	10000	
Be	9	6	2	NoGas	1011.845	1011.845	1.82	2793904	0.04	10000	
B	11	6	2	NoGas	1526.324	1526.324	1.63	2354869	0.06	300	>LDR
Na	23	45	1	He	127741.939	127741.939	1.13	112816070	0.11	500000	
Mg	24	45	1	He	42952.804	42952.804	1.71	22249609	0.19	500000	
Al	27	45	1	He	10702.812	10702.812	1.89	3406030	0.31	200000	
K	39	45	1	He	12657.680	12657.680	1.34	7011657	0.18	500000	
Ca	44	45	1	He	142730.347	142730.347	2.63	4424305	3.23	500000	
Ti	47	45	1	He	115.566	115.566	2.37	19530	0.59	2500	
V	51	45	1	He	1000.080	1000.080	1.32	8114014	0.01	10000	
Cr	52	45	1	He	1003.166	1003.166	0.75	5052542	0.02	10000	
Mn	55	45	1	He	1137.465	1137.465	0.09	4549968	0.02	10000	
Fe	56	45	1	He	17430.934	17430.934	1.19	83475739	0.02	200000	
Co	59	45	1	He	967.293	967.293	1.75	6804836	0.01	10000	
Ni	60	45	1	He	1034.910	1034.910	1.67	1781937	0.06	10000	
Cu	63	45	1	He	966.332	966.332	1.89	4380816	0.02	10000	
Zn	66	45	1	He	968.335	968.335	1.44	1004269	0.10	10000	
As	75	115	1	He	983.086	983.086	0.66	793376	0.12	10000	
Se	78	115	1	He	987.390	987.390	0.49	69504	1.42	10000	
Sr	88	45	1	He	1254.039	1254.039	1.30	7083800	0.02	10000	
Mo	95	103	1	He	109.010	109.010	0.52	283985	0.04	2000	
Ag	107	103	1	He	100.144	100.144	0.61	824033	0.01	300	
Cd	111	115	1	He	982.864	982.864	0.93	1501205	0.07	4000	
Sn	118	115	1	He	1068.524	1068.524	0.91	4060118	0.03	2000	
Sb	123	165	1	He	95.908	95.908	0.41	436461	0.02	300	
Ba	137	115	1	He	1736.246	1736.246	1.21	3214340	0.05	10000	
W	182	159	1	He	101.260	101.260	0.46	1037538	0.01	2500	
Tl	205	165	1	He	243.338	243.338	0.67	5892721	0.00	5000	
Pb	208	165	1	He	982.324	982.324	0.58	32411969	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	922788	1.46	1261090	73.17	30	120	
Sc	45	1	He	764323	1.53	955958	79.95	30	120	
Sc	45	2	NoGas	6735125	1.30	7862387	85.66	30	120	
Rh	103	1	He	2247797	1.20	2873429	78.23	30	120	
In	115	1	He	1517119	2.28	1922589	78.91	30	120	
Tb	159	1	He	4156961	1.61	4725151	87.98	30	120	
Ho	165	1	He	4228036	1.19	4813140	87.84	30	120	
Bi	209	1	He	2993522	1.18	3617562	82.75	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2026839
Data File Name	130_CCV.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T17:48:50-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	44.241	1.689	529360	0.61	50	88.5	89.5	110.5	CCV Failed
Be	9	6	2	NoGas	50.221	0.450	145351	0.75	50	100.4	89.5	110.5	
B	11	6	2	NoGas	69.332	1.186	120142	1.56	50	138.7	89.5	110.5	CCV Failed
Na	23	45	1	He	24877.006	2.760	23052239	0.69	25000	99.5	89.5	110.5	
Mg	24	45	1	He	24830.454	3.419	13484801	1.00	25000	99.3	89.5	110.5	
Al	27	45	1	He	243.391	2.951	81781	1.58	250	97.4	89.5	110.5	
K	39	45	1	He	25706.371	3.497	14880614	1.28	25000	102.8	89.5	110.5	
Ca	44	45	1	He	24643.054	2.922	801383	0.90	25000	98.6	89.5	110.5	
Ti	47	45	1	He	51.963	1.392	9214	4.04	50	103.9	89.5	110.5	
V	51	45	1	He	49.948	3.085	431114	0.49	50	99.9	89.5	110.5	
Cr	52	45	1	He	49.821	2.324	265115	0.54	50	99.6	89.5	110.5	
Mn	55	45	1	He	250.916	2.954	1053739	0.97	250	100.4	89.5	110.5	
Fe	56	45	1	He	12575.504	3.050	63134106	0.96	12500	100.6	89.5	110.5	
Co	59	45	1	He	49.854	1.830	367831	1.42	50	99.7	89.5	110.5	
Ni	60	45	1	He	49.607	2.170	90370	1.00	50	99.2	89.5	110.5	
Cu	63	45	1	He	50.342	3.469	239832	1.18	50	100.7	89.5	110.5	
Zn	66	45	1	He	49.891	2.297	55883	0.97	50	99.8	89.5	110.5	
As	75	115	1	He	48.677	2.369	42898	1.10	50	97.4	89.5	110.5	
Se	78	115	1	He	49.508	1.557	3834	1.92	50	99.0	89.5	110.5	
Sr	88	45	1	He	51.939	2.776	307710	0.73	50	103.9	89.5	110.5	
Mo	95	103	1	He	51.749	2.629	145797	1.56	50	103.5	89.5	110.5	
Ag	107	103	1	He	49.468	2.876	440121	1.49	50	98.9	89.5	110.5	
Cd	111	115	1	He	48.961	0.897	83008	1.02	50	97.9	89.5	110.5	
Sn	118	115	1	He	50.003	2.650	207327	1.96	50	100.0	89.5	110.5	
Sb	123	165	1	He	49.551	4.306	233472	1.43	50	99.1	89.5	110.5	
Ba	137	115	1	He	50.549	1.672	101863	1.65	50	101.1	89.5	110.5	
W	182	159	1	He	50.059	4.262	534914	1.42	50	100.1	89.5	110.5	
Tl	205	165	1	He	49.383	3.540	1238223	0.57	50	98.8	89.5	110.5	
Pb	208	165	1	He	49.578	3.947	1694113	0.76	50	99.2	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	966363	0.69	1261090	76.63	30	120	
Sc	45	1	He	801674	2.64	955958	83.86	30	120	
Sc	45	2	NoGas	6632356	1.10	7862387	84.36	30	120	
Rh	103	1	He	2431496	2.57	2873429	84.62	30	120	
In	115	1	He	1650734	1.67	1922589	85.86	30	120	
Tb	159	1	He	4313622	3.29	4725151	91.29	30	120	
Ho	165	1	He	4380844	3.37	4813140	91.02	30	120	
Bi	209	1	He	3204638	2.73	3617562	88.59	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	131_CCB.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T17:52:26-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.194	-26.5	39332	5.4	2	
Be	9	6	2	NoGas	0.813	6.7	2319	1.2	1	
B	11	6	2	NoGas	11.734	6.5	25722	1.7	20	
Na	23	45	1	He	76.310	14.7	97229	3.5	1000	
Mg	24	45	1	He	-1.115	-51.2	2219	8.9	1000	
Al	27	45	1	He	1.215	16.5	1050	6.0	50	
K	39	45	1	He	19.777	35.1	60096	1.3	1000	
Ca	44	45	1	He	69.128	10.8	3035	1.1	1000	
Ti	47	45	1	He	0.117	46.9	28	36.7	20	
V	51	45	1	He	-0.178	-38.9	5390	5.6	2	
Cr	52	45	1	He	0.140	26.7	3031	1.7	2	
Mn	55	45	1	He	1.240	10.3	7503	2.8	2	
Fe	56	45	1	He	15.782	5.5	91422	11.5	50	
Co	59	45	1	He	0.089	4.5	752	10.4	1	
Ni	60	45	1	He	-0.333	-7.9	271	11.0	2	
Cu	63	45	1	He	0.180	33.7	1549	12.2	2	
Zn	66	45	1	He	4.590	6.8	7053	3.4	20	
As	75	115	1	He	0.206	22.4	389	16.6	2	
Se	78	115	1	He	0.339	16.2	78	10.6	2	
Sr	88	45	1	He	0.069	14.6	567	4.7	10	
Mo	95	103	1	He	0.319	27.5	1046	32.8	2	
Ag	107	103	1	He	0.008	9.0	83	0.0	0.2	
Cd	111	115	1	He	0.157	9.7	2197	7.8	0.2	
Sn	118	115	1	He	0.748	6.5	4116	2.6	10	
Sb	123	165	1	He	0.158	17.2	869	7.9	2	
Ba	137	115	1	He	0.102	21.5	258	11.7	5	
W	182	159	1	He	0.724	11.8	14689	12.5	10	
Tl	205	165	1	He	0.174	9.3	4723	1.6	0.5	
Pb	208	165	1	He	0.238	11.6	9136	2.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	909280	5.95	1261090	72.10	30	120	
Sc	45	1	He	845213	8.27	955958	88.42	30	120	
Sc	45	2	NoGas	5987365	4.60	7862387	76.15	30	120	
Rh	103	1	He	2655447	8.38	2873429	92.41	30	120	
In	115	1	He	1827623	7.99	1922589	95.06	30	120	
Tb	159	1	He	4555065	7.87	4725151	96.40	30	120	
Ho	165	1	He	4580257	8.44	4813140	95.16	30	120	
Bi	209	1	He	3439539	6.95	3617562	95.08	30	120	

Sample Report

Sample Table

Sample Name	240-50985-x-4-b ms
Data File Name	132SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T17:56:03-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	13.981	13.981	0.41	201220	0.01	10000	
Be	9	6	2	NoGas	953.541	953.541	2.13	2647019	0.04	10000	
B	11	6	2	NoGas	1553.930	1553.930	1.71	2410297	0.06	300	>LDR
Na	23	45	1	He	130303.619	130303.619	13.32	114217910	0.11	500000	
Mg	24	45	1	He	43859.902	43859.902	14.25	22534383	0.19	500000	
Al	27	45	1	He	11865.600	11865.600	14.39	3744461	0.32	200000	
K	39	45	1	He	12802.761	12802.761	13.79	7036466	0.18	500000	
Ca	44	45	1	He	146135.900	146135.900	14.13	4493283	3.25	500000	
Ti	47	45	1	He	120.206	120.206	10.83	20207	0.59	2500	
V	51	45	1	He	966.110	966.110	14.19	7774181	0.01	10000	
Cr	52	45	1	He	972.079	972.079	13.73	4857517	0.02	10000	
Mn	55	45	1	He	1091.902	1091.902	13.40	4334676	0.03	10000	
Fe	56	45	1	He	17655.945	17655.945	13.90	83878259	0.02	200000	
Co	59	45	1	He	928.576	928.576	13.40	6483244	0.01	10000	
Ni	60	45	1	He	995.671	995.671	13.00	1701755	0.06	10000	
Cu	63	45	1	He	939.155	939.155	14.06	4223231	0.02	10000	
Zn	66	45	1	He	933.486	933.486	13.87	960509	0.10	10000	
As	75	115	1	He	959.001	959.001	15.00	757394	0.13	10000	
Se	78	115	1	He	961.955	961.955	14.78	66276	1.45	10000	
Sr	88	45	1	He	1210.343	1210.343	14.10	6781666	0.02	10000	
Mo	95	103	1	He	103.637	103.637	11.80	267057	0.04	2000	
Ag	107	103	1	He	95.437	95.437	11.61	776892	0.01	300	
Cd	111	115	1	He	955.040	955.040	14.87	1427780	0.07	4000	
Sn	118	115	1	He	1045.183	1045.183	15.37	3885781	0.03	2000	
Sb	123	165	1	He	91.043	91.043	12.58	414876	0.02	300	
Ba	137	115	1	He	1760.201	1760.201	14.40	3190890	0.06	10000	
W	182	159	1	He	94.044	94.044	12.63	971439	0.01	2500	
Tl	205	165	1	He	232.207	232.207	12.23	5631981	0.00	5000	
Pb	208	165	1	He	932.728	932.728	12.60	30817420	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	927810	1.67	1261090	73.57	30	120	
Sc	45	1	He	765937	10.84	955958	80.12	30	120	
Sc	45	2	NoGas	6721672	0.54	7862387	85.49	30	120	
Rh	103	1	He	2240001	9.38	2873429	77.96	30	120	
In	115	1	He	1502359	11.85	1922589	78.14	30	120	
Tb	159	1	He	4223195	9.67	4725151	89.38	30	120	
Ho	165	1	He	4270062	10.14	4813140	88.72	30	120	
Bi	209	1	He	3045797	9.59	3617562	84.19	30	120	

Sample Report

Sample Table

Sample Name	240-50985-x-4-c msd
Data File Name	133SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T17:59:25-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	13.887	13.887	1.84	193546	0.01	10000	
Be	9	6	2	NoGas	916.925	916.925	2.06	2531101	0.04	10000	
B	11	6	2	NoGas	1503.949	1503.949	2.11	2319780	0.06	300	>LDR
Na	23	45	1	He	130175.598	130175.598	2.24	114318195	0.11	500000	
Mg	24	45	1	He	43408.548	43408.548	2.49	22358061	0.19	500000	
Al	27	45	1	He	11554.683	11554.683	3.21	3655300	0.32	200000	
K	39	45	1	He	12701.045	12701.045	2.50	6995484	0.18	500000	
Ca	44	45	1	He	146782.113	146782.113	3.26	4523351	3.24	500000	
Ti	47	45	1	He	109.248	109.248	2.12	18356	0.60	2500	
V	51	45	1	He	961.121	961.121	2.41	7753033	0.01	10000	
Cr	52	45	1	He	960.117	960.117	1.93	4808377	0.02	10000	
Mn	55	45	1	He	1098.853	1098.853	2.56	4370325	0.03	10000	
Fe	56	45	1	He	17601.832	17601.832	2.95	83800286	0.02	200000	
Co	59	45	1	He	929.535	929.535	2.73	6501795	0.01	10000	
Ni	60	45	1	He	984.351	984.351	2.90	1684925	0.06	10000	
Cu	63	45	1	He	933.432	933.432	2.05	4207783	0.02	10000	
Zn	66	45	1	He	929.106	929.106	2.41	958136	0.10	10000	
As	75	115	1	He	937.962	937.962	2.31	754443	0.12	10000	
Se	78	115	1	He	934.766	934.766	2.06	65583	1.43	10000	
Sr	88	45	1	He	1213.360	1213.360	2.47	6814850	0.02	10000	
Mo	95	103	1	He	98.720	98.720	3.24	258707	0.04	2000	
Ag	107	103	1	He	89.695	89.695	2.13	742634	0.01	300	
Cd	111	115	1	He	934.452	934.452	2.21	1422655	0.07	4000	
Sn	118	115	1	He	983.139	983.139	2.87	3723105	0.03	2000	
Sb	123	165	1	He	87.135	87.135	1.01	395455	0.02	300	
Ba	137	115	1	He	1705.991	1705.991	2.36	3148056	0.05	10000	
W	182	159	1	He	91.096	91.096	1.98	937825	0.01	2500	
Tl	205	165	1	He	231.941	231.941	0.73	5601731	0.00	5000	
Pb	208	165	1	He	924.929	924.929	0.85	30436128	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	922470	0.84	1261090	73.15	30	120	
Sc	45	1	He	760309	2.93	955958	79.53	30	120	
Sc	45	2	NoGas	6498733	0.36	7862387	82.66	30	120	
Rh	103	1	He	2262835	3.31	2873429	78.75	30	120	
In	115	1	He	1512535	2.60	1922589	78.67	30	120	
Tb	159	1	He	4175268	2.24	4725151	88.36	30	120	
Ho	165	1	He	4216931	1.54	4813140	87.61	30	120	
Bi	209	1	He	2994947	2.35	3617562	82.79	30	120	

Sample Report

Sample Table

Sample Name	240-50985-h-1-a
Data File Name	134SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T18:02:48-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	11.533	11.533	0.64	170586	0.01	10000	
Be	9	6	2	NoGas	1.385	1.385	7.10	4041	0.03	10000	
B	11	6	2	NoGas	188.274	188.274	1.80	305620	0.06	300	
Na	23	45	1	He	100448.487	100448.487	0.88	89409987	0.11	500000	
Mg	24	45	1	He	32282.002	32282.002	1.06	16853520	0.19	500000	
Al	27	45	1	He	2002.953	2002.953	0.94	642791	0.31	200000	
K	39	45	1	He	3645.550	3645.550	0.99	2066531	0.18	500000	
Ca	44	45	1	He	129110.881	129110.881	1.37	4033401	3.20	500000	
Ti	47	45	1	He	26.002	26.002	4.04	4431	0.59	2500	
V	51	45	1	He	9.010	9.010	4.51	79984	0.01	10000	
Cr	52	45	1	He	12.346	12.346	1.40	64698	0.02	10000	
Mn	55	45	1	He	167.088	167.088	1.19	675145	0.02	10000	
Fe	56	45	1	He	9120.064	9120.064	1.41	44015490	0.02	200000	
Co	59	45	1	He	2.562	2.562	1.58	18219	0.01	10000	
Ni	60	45	1	He	13.590	13.590	3.99	24393	0.06	10000	
Cu	63	45	1	He	4.836	4.836	1.71	22693	0.02	10000	
Zn	66	45	1	He	19.035	19.035	2.41	21515	0.09	10000	
As	75	115	1	He	4.522	4.522	3.28	3917	0.12	10000	
Se	78	115	1	He	1.826	1.826	14.50	174	1.05	10000	
Sr	88	45	1	He	203.445	203.445	1.33	1158233	0.02	10000	
Mo	95	103	1	He	1.562	1.562	6.25	4217	0.04	2000	
Ag	107	103	1	He	0.026	0.026	2.11	224	0.01	300	
Cd	111	115	1	He	0.463	0.463	14.70	2356	0.02	4000	
Sn	118	115	1	He	3.429	3.429	11.83	13992	0.02	2000	
Sb	123	165	1	He	0.392	0.392	7.05	1898	0.02	300	
Ba	137	115	1	He	255.987	255.987	2.03	487647	0.05	10000	
W	182	159	1	He	1.363	1.363	11.44	20184	0.01	2500	
Tl	205	165	1	He	0.313	0.313	8.71	7853	0.00	5000	
Pb	208	165	1	He	2.943	2.943	1.52	99095	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	947729	1.46	1261090	75.15	30	120	
Sc	45	1	He	770287	0.68	955958	80.58	30	120	
Sc	45	2	NoGas	6586189	0.43	7862387	83.77	30	120	
Rh	103	1	He	2304318	0.84	2873429	80.19	30	120	
In	115	1	He	1561081	1.77	1922589	81.20	30	120	
Tb	159	1	He	4216011	0.66	4725151	89.22	30	120	
Ho	165	1	He	4287748	0.98	4813140	89.08	30	120	
Bi	209	1	He	3049449	1.06	3617562	84.30	30	120	

Sample Report

Sample Table

Sample Name	240-50985-h-2-a
Data File Name	135SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T18:06:22-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	-0.296	-0.296	-7.46	40619	0.00	10000	
Be	9	6	2	NoGas	0.977	0.977	13.73	2878	0.03	10000	
B	11	6	2	NoGas	15.687	15.687	5.21	32997	0.05	300	
Na	23	45	1	He	467.285	467.285	1.06	434839	0.11	500000	
Mg	24	45	1	He	24.306	24.306	3.84	15225	0.16	500000	
Al	27	45	1	He	16.184	16.184	2.67	5729	0.28	200000	
K	39	45	1	He	54.696	54.696	8.99	73961	0.07	500000	
Ca	44	45	1	He	105.953	105.953	5.82	3909	2.71	500000	
Ti	47	45	1	He	0.283	0.283	24.58	53	0.53	2500	
V	51	45	1	He	1.710	1.710	1.23	20251	0.01	10000	
Cr	52	45	1	He	1.502	1.502	4.64	9634	0.02	10000	
Mn	55	45	1	He	0.613	0.613	7.89	4314	0.01	10000	
Fe	56	45	1	He	41.172	41.172	2.72	204657	0.02	200000	
Co	59	45	1	He	0.231	0.231	4.15	1682	0.01	10000	
Ni	60	45	1	He	-0.133	-0.133	-28.44	594	-0.02	10000	
Cu	63	45	1	He	0.858	0.858	7.65	4500	0.02	10000	
Zn	66	45	1	He	7.212	7.212	3.42	9132	0.08	10000	
As	75	115	1	He	0.654	0.654	9.63	748	0.09	10000	
Se	78	115	1	He	0.446	0.446	22.98	79	0.57	10000	
Sr	88	45	1	He	0.401	0.401	4.31	2397	0.02	10000	
Mo	95	103	1	He	0.119	0.119	18.10	388	0.03	2000	
Ag	107	103	1	He	0.011	0.011	26.50	104	0.01	300	
Cd	111	115	1	He	0.162	0.162	11.88	2001	0.01	4000	
Sn	118	115	1	He	1.278	1.278	3.73	5946	0.02	2000	
Sb	123	165	1	He	0.284	0.284	9.40	1400	0.02	300	
Ba	137	115	1	He	0.522	0.522	6.95	1087	0.05	10000	
W	182	159	1	He	0.323	0.323	17.11	9507	0.00	2500	
Tl	205	165	1	He	0.132	0.132	8.14	3417	0.00	5000	
Pb	208	165	1	He	0.454	0.454	2.05	15829	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	944872	0.70	1261090	74.93	30	120	
Sc	45	1	He	766289	0.43	955958	80.16	30	120	
Sc	45	2	NoGas	6347160	0.09	7862387	80.73	30	120	
Rh	103	1	He	2446406	0.80	2873429	85.14	30	120	
In	115	1	He	1657810	0.63	1922589	86.23	30	120	
Tb	159	1	He	4247754	0.93	4725151	89.90	30	120	
Ho	165	1	He	4292395	0.30	4813140	89.18	30	120	
Bi	209	1	He	3265346	0.60	3617562	90.26	30	120	

Sample Report

Sample Table

Sample Name	240-50985-h-6-a
Data File Name	136SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T18:09:59-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	10.375	10.375	1.23	153119	0.01	10000	
Be	9	6	2	NoGas	0.823	0.823	13.25	2393	0.03	10000	
B	11	6	2	NoGas	97.093	97.093	0.27	157732	0.06	300	
Na	23	45	1	He	32142.214	32142.214	1.39	27596903	0.12	500000	
Mg	24	45	1	He	37573.250	37573.250	1.37	18911448	0.20	500000	
Al	27	45	1	He	195.088	195.088	1.68	60857	0.32	200000	
K	39	45	1	He	3324.279	3324.279	2.65	1820371	0.18	500000	
Ca	44	45	1	He	196708.364	196708.364	0.82	5924570	3.32	500000	
Ti	47	45	1	He	3.878	3.878	17.78	641	0.60	2500	
V	51	45	1	He	412.806	412.806	1.71	3257427	0.01	10000	
Cr	52	45	1	He	894.361	894.361	0.65	4376782	0.02	10000	
Mn	55	45	1	He	900.240	900.240	1.32	3499132	0.03	10000	
Fe	56	45	1	He	19509.499	19509.499	0.94	90775074	0.02	200000	
Co	59	45	1	He	14.160	14.160	1.79	96845	0.01	10000	
Ni	60	45	1	He	123.688	123.688	1.08	207607	0.06	10000	
Cu	63	45	1	He	31.956	31.956	0.23	141330	0.02	10000	
Zn	66	45	1	He	25.331	25.331	1.84	27078	0.09	10000	
As	75	115	1	He	4.743	4.743	0.70	3920	0.12	10000	
Se	78	115	1	He	0.954	0.954	7.32	106	0.90	10000	
Sr	88	45	1	He	422.150	422.150	0.96	2317048	0.02	10000	
Mo	95	103	1	He	53.453	53.453	1.01	138048	0.04	2000	
Ag	107	103	1	He	0.057	0.057	16.20	473	0.01	300	
Cd	111	115	1	He	0.597	0.597	7.68	2455	0.02	4000	
Sn	118	115	1	He	1.567	1.567	7.69	6435	0.02	2000	
Sb	123	165	1	He	1.809	1.809	4.58	8263	0.02	300	
Ba	137	115	1	He	97.943	97.943	0.65	178477	0.05	10000	
W	182	159	1	He	1.641	1.641	2.38	22632	0.01	2500	
Tl	205	165	1	He	0.122	0.122	5.10	3083	0.00	5000	
Pb	208	165	1	He	2.873	2.873	1.56	94775	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	924664	0.67	1261090	73.32	30	120	
Sc	45	1	He	742672	0.97	955958	77.69	30	120	
Sc	45	2	NoGas	6382240	0.36	7862387	81.17	30	120	
Rh	103	1	He	2228229	1.04	2873429	77.55	30	120	
In	115	1	He	1492851	0.43	1922589	77.65	30	120	
Tb	159	1	He	4139187	0.91	4725151	87.60	30	120	
Ho	165	1	He	4200110	0.19	4813140	87.26	30	120	
Bi	209	1	He	3031569	0.22	3617562	83.80	30	120	

Sample Report

Sample Table

Sample Name	240-50985-h-8-a
Data File Name	137SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T18:13:33-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	14.100	14.100	0.73	194025	0.01	10000	
Be	9	6	2	NoGas	0.719	0.719	11.31	2093	0.03	10000	
B	11	6	2	NoGas	945.310	945.310	0.79	1455216	0.06	300	>LDR
Na	23	45	1	He	153766.174	153766.174	0.51	134189798	0.11	500000	
Mg	24	45	1	He	41765.087	41765.087	0.67	21378911	0.20	500000	
Al	27	45	1	He	42.591	42.591	1.46	13951	0.31	200000	
K	39	45	1	He	12262.981	12262.981	0.74	6713839	0.18	500000	
Ca	44	45	1	He	132949.092	132949.092	1.03	4072191	3.26	500000	
Ti	47	45	1	He	0.875	0.875	16.59	151	0.58	2500	
V	51	45	1	He	3.724	3.724	1.35	36096	0.01	10000	
Cr	52	45	1	He	5.468	5.468	1.63	29224	0.02	10000	
Mn	55	45	1	He	58.076	58.076	1.59	231278	0.03	10000	
Fe	56	45	1	He	6235.166	6235.166	1.15	29508199	0.02	200000	
Co	59	45	1	He	1.418	1.418	3.42	9907	0.01	10000	
Ni	60	45	1	He	24.511	24.511	0.42	42494	0.06	10000	
Cu	63	45	1	He	0.769	0.769	6.98	4042	0.02	10000	
Zn	66	45	1	He	6.998	6.998	1.97	8783	0.08	10000	
As	75	115	1	He	4.332	4.332	0.97	3621	0.12	10000	
Se	78	115	1	He	0.465	0.465	18.87	73	0.64	10000	
Sr	88	45	1	He	304.530	304.530	1.58	1699739	0.02	10000	
Mo	95	103	1	He	1.236	1.236	7.69	3236	0.04	2000	
Ag	107	103	1	He	0.009	0.009	15.18	84	0.01	300	
Cd	111	115	1	He	0.216	0.216	12.38	1898	0.01	4000	
Sn	118	115	1	He	1.108	1.108	8.01	4753	0.02	2000	
Sb	123	165	1	He	0.164	0.164	11.30	837	0.02	300	
Ba	137	115	1	He	691.461	691.461	0.27	1269367	0.05	10000	
W	182	159	1	He	0.159	0.159	29.47	7624	0.00	2500	
Tl	205	165	1	He	0.061	0.061	6.73	1643	0.00	5000	
Pb	208	165	1	He	0.514	0.514	1.53	17639	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	918710	1.40	1261090	72.85	30	120	
Sc	45	1	He	755276	1.36	955958	79.01	30	120	
Sc	45	2	NoGas	6438593	0.71	7862387	81.89	30	120	
Rh	103	1	He	2226744	1.17	2873429	77.49	30	120	
In	115	1	He	1504111	0.55	1922589	78.23	30	120	
Tb	159	1	He	4155313	0.64	4725151	87.94	30	120	
Ho	165	1	He	4244188	1.00	4813140	88.18	30	120	
Bi	209	1	He	2992954	0.70	3617562	82.73	30	120	

Sample Report

Sample Table

Sample Name	240-50985-h-9-a
Data File Name	138SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T18:17:09-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	13.995	13.995	0.66	192474	0.01	10000	
Be	9	6	2	NoGas	0.642	0.642	9.76	1837	0.03	10000	
B	11	6	2	NoGas	972.931	972.931	1.01	1465800	0.07	300	>LDR
Na	23	45	1	He	155053.723	155053.723	0.46	132742258	0.12	500000	
Mg	24	45	1	He	42112.891	42112.891	0.24	21147539	0.20	500000	
Al	27	45	1	He	35.310	35.310	3.48	11437	0.31	200000	
K	39	45	1	He	12536.677	12536.677	0.35	6732633	0.19	500000	
Ca	44	45	1	He	134575.754	134575.754	0.37	4043875	3.33	500000	
Ti	47	45	1	He	0.755	0.755	7.29	129	0.59	2500	
V	51	45	1	He	4.350	4.350	4.99	40321	0.01	10000	
Cr	52	45	1	He	6.798	6.798	1.22	35160	0.02	10000	
Mn	55	45	1	He	58.554	58.554	0.56	228757	0.03	10000	
Fe	56	45	1	He	6250.603	6250.603	0.03	29020192	0.02	200000	
Co	59	45	1	He	1.429	1.429	3.45	9799	0.01	10000	
Ni	60	45	1	He	25.543	25.543	1.14	43403	0.06	10000	
Cu	63	45	1	He	0.842	0.842	1.34	4282	0.02	10000	
Zn	66	45	1	He	6.336	6.336	2.34	7952	0.08	10000	
As	75	115	1	He	4.384	4.384	0.90	3613	0.12	10000	
Se	78	115	1	He	0.407	0.407	7.93	68	0.60	10000	
Sr	88	45	1	He	309.006	309.006	1.25	1692077	0.02	10000	
Mo	95	103	1	He	1.076	1.076	8.65	2816	0.04	2000	
Ag	107	103	1	He	0.010	0.010	19.50	87	0.01	300	
Cd	111	115	1	He	0.172	0.172	9.04	1806	0.01	4000	
Sn	118	115	1	He	0.971	0.971	6.23	4182	0.02	2000	
Sb	123	165	1	He	0.122	0.122	11.15	639	0.02	300	
Ba	137	115	1	He	699.202	699.202	0.60	1266254	0.06	10000	
W	182	159	1	He	0.193	0.193	8.44	7947	0.00	2500	
Tl	205	165	1	He	0.049	0.049	4.26	1326	0.00	5000	
Pb	208	165	1	He	0.509	0.509	1.72	17306	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	899309	1.96	1261090	71.31	30	120	
Sc	45	1	He	740909	0.90	955958	77.50	30	120	
Sc	45	2	NoGas	6424727	1.38	7862387	81.71	30	120	
Rh	103	1	He	2222302	0.18	2873429	77.34	30	120	
In	115	1	He	1483879	1.37	1922589	77.18	30	120	
Tb	159	1	He	4142625	0.56	4725151	87.67	30	120	
Ho	165	1	He	4203716	1.35	4813140	87.34	30	120	
Bi	209	1	He	2948099	0.71	3617562	81.49	30	120	

Sample Report

Sample Table

Sample Name	240-51008-g-1-a
Data File Name	139SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T18:20:43-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	14.886	14.886	1.36	203067	0.01	10000	
Be	9	6	2	NoGas	0.550	0.550	9.47	1663	0.03	10000	
B	11	6	2	NoGas	76.175	76.175	1.93	127516	0.06	300	
Na	23	45	1	He	21283.983	21283.983	10.60	19317271	0.11	500000	
Mg	24	45	1	He	11919.641	11919.641	10.65	6341011	0.19	500000	
Al	27	45	1	He	1005.045	1005.045	11.56	328672	0.31	200000	
K	39	45	1	He	2863.464	2863.464	11.01	1663109	0.17	500000	
Ca	44	45	1	He	13947.077	13947.077	11.68	444126	3.14	500000	
Ti	47	45	1	He	9.409	9.409	20.68	1627	0.58	2500	
V	51	45	1	He	51.548	51.548	12.70	434977	0.01	10000	
Cr	52	45	1	He	106.726	106.726	12.49	553052	0.02	10000	
Mn	55	45	1	He	39.916	39.916	11.36	165691	0.02	10000	
Fe	56	45	1	He	1449.496	1449.496	11.35	7129381	0.02	200000	
Co	59	45	1	He	1.233	1.233	9.95	8967	0.01	10000	
Ni	60	45	1	He	60.334	60.334	12.20	107333	0.06	10000	
Cu	63	45	1	He	4.924	4.924	11.36	23526	0.02	10000	
Zn	66	45	1	He	27.560	27.560	12.75	30952	0.09	10000	
As	75	115	1	He	0.934	0.934	16.18	987	0.09	10000	
Se	78	115	1	He	0.378	0.378	60.51	73	0.52	10000	
Sr	88	45	1	He	179.635	179.635	11.33	1041382	0.02	10000	
Mo	95	103	1	He	7.836	7.836	6.33	21976	0.04	2000	
Ag	107	103	1	He	0.020	0.020	18.09	190	0.01	300	
Cd	111	115	1	He	0.212	0.212	18.17	2081	0.01	4000	
Sn	118	115	1	He	0.611	0.611	6.06	3167	0.02	2000	
Sb	123	165	1	He	0.101	0.101	28.50	570	0.02	300	
Ba	137	115	1	He	26.238	26.238	8.10	52884	0.05	10000	
W	182	159	1	He	0.099	0.099	89.17	7328	0.00	2500	
Tl	205	165	1	He	0.060	0.060	5.35	1691	0.00	5000	
Pb	208	165	1	He	0.984	0.984	7.90	34485	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	939589	1.33	1261090	74.51	30	120	
Sc	45	1	He	790118	9.73	955958	82.65	30	120	
Sc	45	2	NoGas	6461562	0.78	7862387	82.18	30	120	
Rh	103	1	He	2420654	5.50	2873429	84.24	30	120	
In	115	1	He	1657226	7.72	1922589	86.20	30	120	
Tb	159	1	He	4357914	7.04	4725151	92.23	30	120	
Ho	165	1	He	4420301	6.43	4813140	91.84	30	120	
Bi	209	1	He	3263313	5.33	3617562	90.21	30	120	

Sample Report

Sample Table

Sample Name	240-51008-g-2-a
Data File Name	140SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T18:24:21-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	51.106	51.106	2.48	541963	0.01	10000	
Be	9	6	2	NoGas	0.457	0.457	13.99	1304	0.04	10000	
B	11	6	2	NoGas	208.546	208.546	2.72	311633	0.07	300	
Na	23	45	1	He	73723.886	73723.886	1.59	64731720	0.11	500000	
Mg	24	45	1	He	31502.637	31502.637	1.90	16221963	0.19	500000	
Al	27	45	1	He	0.759	0.759	24.53	802	0.09	200000	
K	39	45	1	He	4861.203	4861.203	1.26	2703605	0.18	500000	
Ca	44	45	1	He	32349.691	32349.691	1.44	997271	3.24	500000	
Ti	47	45	1	He	0.200	0.200	59.15	39	0.51	2500	
V	51	45	1	He	6.129	6.129	5.00	55683	0.01	10000	
Cr	52	45	1	He	10.315	10.315	1.73	53656	0.02	10000	
Mn	55	45	1	He	0.684	0.684	13.01	4556	0.02	10000	
Fe	56	45	1	He	11.799	11.799	6.28	63103	0.02	200000	
Co	59	45	1	He	0.115	0.115	7.94	857	0.01	10000	
Ni	60	45	1	He	15.871	15.871	1.90	27965	0.06	10000	
Cu	63	45	1	He	0.930	0.930	1.24	4787	0.02	10000	
Zn	66	45	1	He	8.881	8.881	2.57	10772	0.08	10000	
As	75	115	1	He	0.610	0.610	8.46	662	0.09	10000	
Se	78	115	1	He	0.385	0.385	19.61	69	0.56	10000	
Sr	88	45	1	He	592.770	592.770	0.83	3328595	0.02	10000	
Mo	95	103	1	He	3.210	3.210	2.84	8563	0.04	2000	
Ag	107	103	1	He	0.014	0.014	18.69	124	0.01	300	
Cd	111	115	1	He	0.559	0.559	5.66	2486	0.02	4000	
Sn	118	115	1	He	0.418	0.418	14.37	2219	0.02	2000	
Sb	123	165	1	He	0.109	0.109	23.15	589	0.02	300	
Ba	137	115	1	He	16.368	16.368	1.07	30947	0.05	10000	
W	182	159	1	He	0.071	0.071	62.08	6798	0.00	2500	
Tl	205	165	1	He	0.029	0.029	13.56	870	0.00	5000	
Pb	208	165	1	He	0.152	0.152	4.22	5659	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	874972	2.38	1261090	69.38	30	120	
Sc	45	1	He	759796	0.71	955958	79.48	30	120	
Sc	45	2	NoGas	5948794	2.49	7862387	75.66	30	120	
Rh	103	1	He	2290124	1.40	2873429	79.70	30	120	
In	115	1	He	1547813	1.44	1922589	80.51	30	120	
Tb	159	1	He	4197131	0.38	4725151	88.83	30	120	
Ho	165	1	He	4257216	0.40	4813140	88.45	30	120	
Bi	209	1	He	3078322	0.29	3617562	85.09	30	120	

Sample Report

Sample Table

Sample Name	240-51008-g-3-a
Data File Name	141SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T18:27:59-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	30.713	30.713	0.65	389142	0.01	10000	
Be	9	6	2	NoGas	0.466	0.466	1.26	1467	0.03	10000	
B	11	6	2	NoGas	115.555	115.555	1.91	194656	0.06	300	
Na	23	45	1	He	58219.737	58219.737	0.95	51132926	0.11	500000	
Mg	24	45	1	He	44782.841	44782.841	0.60	23065375	0.19	500000	
Al	27	45	1	He	2256.527	2256.527	0.57	714399	0.32	200000	
K	39	45	1	He	6043.491	6043.491	0.48	3351330	0.18	500000	
Ca	44	45	1	He	59949.539	59949.539	0.39	1848164	3.24	500000	
Ti	47	45	1	He	23.435	23.435	10.32	3942	0.59	2500	
V	51	45	1	He	8.291	8.291	3.52	73112	0.01	10000	
Cr	52	45	1	He	9.064	9.064	1.04	47403	0.02	10000	
Mn	55	45	1	He	58.362	58.362	0.85	233850	0.02	10000	
Fe	56	45	1	He	2940.185	2940.185	0.68	14004471	0.02	200000	
Co	59	45	1	He	1.927	1.927	0.69	13535	0.01	10000	
Ni	60	45	1	He	10.529	10.529	0.89	18833	0.06	10000	
Cu	63	45	1	He	5.247	5.247	0.25	24244	0.02	10000	
Zn	66	45	1	He	28.661	28.661	1.95	31138	0.09	10000	
As	75	115	1	He	1.610	1.610	3.51	1474	0.11	10000	
Se	78	115	1	He	0.558	0.558	7.07	81	0.69	10000	
Sr	88	45	1	He	1171.497	1171.497	0.34	6579717	0.02	10000	
Mo	95	103	1	He	3.521	3.521	1.71	9362	0.04	2000	
Ag	107	103	1	He	0.029	0.029	1.77	253	0.01	300	
Cd	111	115	1	He	0.263	0.263	16.03	2009	0.01	4000	
Sn	118	115	1	He	0.645	0.645	12.99	3067	0.02	2000	
Sb	123	165	1	He	0.135	0.135	8.49	703	0.02	300	
Ba	137	115	1	He	44.800	44.800	3.28	83994	0.05	10000	
W	182	159	1	He	0.089	0.089	66.44	6943	0.00	2500	
Tl	205	165	1	He	0.048	0.048	9.61	1316	0.00	5000	
Pb	208	165	1	He	1.700	1.700	33.50	56761	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	966815	0.52	1261090	76.67	30	120	
Sc	45	1	He	759953	1.42	955958	79.50	30	120	
Sc	45	2	NoGas	6765344	0.53	7862387	86.05	30	120	
Rh	103	1	He	2283010	2.10	2873429	79.45	30	120	
In	115	1	He	1536989	4.12	1922589	79.94	30	120	
Tb	159	1	He	4168938	1.87	4725151	88.23	30	120	
Ho	165	1	He	4227752	2.19	4813140	87.84	30	120	
Bi	209	1	He	3016924	2.32	3617562	83.40	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2026839
Data File Name	142_CCV.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T18:31:35-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	54.173	6.953	516089	0.24	50	108.3	89.5	110.5	
Be	9	6	2	NoGas	58.723	7.964	138690	2.24	50	117.4	89.5	110.5	CCV Failed
B	11	6	2	NoGas	69.468	9.874	98153	2.12	50	138.9	89.5	110.5	CCV Failed
Na	23	45	1	He	25068.921	1.239	22829564	2.43	25000	100.3	89.5	110.5	
Mg	24	45	1	He	24724.309	1.499	13197748	2.75	25000	98.9	89.5	110.5	
Al	27	45	1	He	243.604	2.105	80446	3.41	250	97.4	89.5	110.5	
K	39	45	1	He	25805.180	1.023	14684039	3.14	25000	103.2	89.5	110.5	
Ca	44	45	1	He	24823.391	1.581	793384	2.89	25000	99.3	89.5	110.5	
Ti	47	45	1	He	51.195	3.984	8916	4.89	50	102.4	89.5	110.5	
V	51	45	1	He	50.369	1.378	427302	3.40	50	100.7	89.5	110.5	
Cr	52	45	1	He	50.053	1.538	261753	3.06	50	100.1	89.5	110.5	
Mn	55	45	1	He	251.460	1.314	1037900	2.78	250	100.6	89.5	110.5	
Fe	56	45	1	He	12622.137	0.781	62282555	2.61	12500	101.0	89.5	110.5	
Co	59	45	1	He	50.204	0.946	363986	2.68	50	100.4	89.5	110.5	
Ni	60	45	1	He	49.899	2.198	89327	3.43	50	99.8	89.5	110.5	
Cu	63	45	1	He	50.369	0.908	235863	2.59	50	100.7	89.5	110.5	
Zn	66	45	1	He	49.957	1.412	54989	2.99	50	99.9	89.5	110.5	
As	75	115	1	He	48.031	1.595	41675	2.84	50	96.1	89.5	110.5	
Se	78	115	1	He	48.282	1.176	3681	2.93	50	96.6	89.5	110.5	
Sr	88	45	1	He	52.329	1.079	304691	2.58	50	104.7	89.5	110.5	
Mo	95	103	1	He	52.164	3.709	142556	3.68	50	104.3	89.5	110.5	
Ag	107	103	1	He	50.653	3.196	437097	2.31	50	101.3	89.5	110.5	
Cd	111	115	1	He	48.927	2.372	81646	2.91	50	97.9	89.5	110.5	
Sn	118	115	1	He	49.610	1.664	202492	2.51	50	99.2	89.5	110.5	
Sb	123	165	1	He	50.188	2.313	231074	2.59	50	100.4	89.5	110.5	
Ba	137	115	1	He	51.416	1.714	101972	2.01	50	102.8	89.5	110.5	
W	182	159	1	He	49.136	0.765	513078	2.56	50	98.3	89.5	110.5	
Tl	205	165	1	He	50.479	1.368	1236702	2.14	50	101.0	89.5	110.5	
Pb	208	165	1	He	50.596	1.170	1689454	2.10	50	101.2	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	791466	7.02	1261090	62.76	30	120	
Sc	45	1	He	787543	2.53	955958	82.38	30	120	
Sc	45	2	NoGas	5379411	6.26	7862387	68.42	30	120	
Rh	103	1	He	2358193	2.61	2873429	82.07	30	120	
In	115	1	He	1624632	1.79	1922589	84.50	30	120	
Tb	159	1	He	4210369	2.04	4725151	89.11	30	120	
Ho	165	1	He	4277460	2.28	4813140	88.87	30	120	
Bi	209	1	He	3166262	1.39	3617562	87.52	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	143_CCB.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T18:35:12-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.364	-15.4	41097	1.8	2	
Be	9	6	2	NoGas	0.362	11.4	1159	11.9	1	
B	11	6	2	NoGas	6.859	7.0	19404	2.6	20	
Na	23	45	1	He	86.412	2.7	99742	2.1	1000	
Mg	24	45	1	He	-0.077	-1044.5	2619	16.3	1000	
Al	27	45	1	He	1.003	12.6	906	4.4	50	
K	39	45	1	He	22.511	20.8	57391	3.0	1000	
Ca	44	45	1	He	74.391	3.0	2991	0.8	1000	
Ti	47	45	1	He	0.065	32.1	17	20.0	20	
V	51	45	1	He	-0.087	-68.1	5764	6.9	2	
Cr	52	45	1	He	0.156	24.1	2901	5.8	2	
Mn	55	45	1	He	1.306	2.4	7243	1.1	2	
Fe	56	45	1	He	16.316	15.8	87096	13.5	50	
Co	59	45	1	He	0.036	1.6	319	2.4	1	
Ni	60	45	1	He	-0.343	-11.5	236	28.6	2	
Cu	63	45	1	He	0.154	7.1	1331	3.6	2	
Zn	66	45	1	He	4.889	6.1	6870	6.2	20	
As	75	115	1	He	0.125	62.8	287	24.1	2	
Se	78	115	1	He	0.294	85.9	68	28.4	2	
Sr	88	45	1	He	0.079	18.1	584	14.2	10	
Mo	95	103	1	He	0.305	32.7	914	29.9	2	
Ag	107	103	1	He	0.008	44.7	82	40.0	0.2	
Cd	111	115	1	He	0.109	17.6	1955	1.1	0.2	
Sn	118	115	1	He	0.612	17.7	3249	13.6	10	
Sb	123	165	1	He	0.131	8.1	699	6.5	2	
Ba	137	115	1	He	0.049	45.0	133	35.0	5	
W	182	159	1	He	0.645	14.4	12761	6.6	10	
Tl	205	165	1	He	0.106	3.1	2764	3.3	0.5	
Pb	208	165	1	He	0.212	4.6	7742	5.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	960264	2.15	1261090	76.15	30	120	
Sc	45	1	He	782871	1.64	955958	81.89	30	120	
Sc	45	2	NoGas	6536020	0.28	7862387	83.13	30	120	
Rh	103	1	He	2452092	1.69	2873429	85.34	30	120	
In	115	1	He	1694252	0.65	1922589	88.12	30	120	
Tb	159	1	He	4216514	0.99	4725151	89.24	30	120	
Ho	165	1	He	4303681	1.46	4813140	89.42	30	120	
Bi	209	1	He	3277097	1.29	3617562	90.59	30	120	

Sample Report

Sample Table

Sample Name	240-51008-g-4-a
Data File Name	144SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T18:38:50-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	36.821	36.821	8.77	453268	0.01	10000	
Be	9	6	2	NoGas	0.384	0.384	6.28	1152	0.03	10000	
B	11	6	2	NoGas	227.150	227.150	11.23	348732	0.07	300	
Na	23	45	1	He	56354.290	56354.290	0.93	47948287	0.12	500000	
Mg	24	45	1	He	66920.278	66920.278	0.83	33387277	0.20	500000	
Al	27	45	1	He	388.076	388.076	1.36	119464	0.32	200000	
K	39	45	1	He	6946.873	6946.873	0.25	3725472	0.19	500000	
Ca	44	45	1	He	126228.981	126228.981	0.47	3768813	3.35	500000	
Ti	47	45	1	He	4.013	4.013	11.55	658	0.61	2500	
V	51	45	1	He	2.773	2.773	1.22	27754	0.01	10000	
Cr	52	45	1	He	2.124	2.124	2.74	12272	0.02	10000	
Mn	55	45	1	He	1281.346	1281.346	0.61	4936296	0.03	10000	
Fe	56	45	1	He	6264.140	6264.140	1.16	28895328	0.02	200000	
Co	59	45	1	He	4.489	4.489	0.97	30474	0.01	10000	
Ni	60	45	1	He	6.601	6.601	1.22	11732	0.06	10000	
Cu	63	45	1	He	1.244	1.244	1.63	6010	0.02	10000	
Zn	66	45	1	He	11.242	11.242	4.62	12791	0.09	10000	
As	75	115	1	He	3.741	3.741	1.34	3094	0.12	10000	
Se	78	115	1	He	0.551	0.551	3.82	77	0.71	10000	
Sr	88	45	1	He	1421.710	1421.710	1.13	7734826	0.02	10000	
Mo	95	103	1	He	0.744	0.744	5.26	1947	0.04	2000	
Ag	107	103	1	He	0.015	0.015	22.99	128	0.01	300	
Cd	111	115	1	He	0.287	0.287	7.44	1971	0.01	4000	
Sn	118	115	1	He	0.698	0.698	6.37	3152	0.02	2000	
Sb	123	165	1	He	0.161	0.161	13.76	809	0.02	300	
Ba	137	115	1	He	90.420	90.420	0.08	163192	0.06	10000	
W	182	159	1	He	0.279	0.279	35.72	8732	0.00	2500	
Tl	205	165	1	He	0.081	0.081	4.66	2086	0.00	5000	
Pb	208	165	1	He	0.479	0.479	0.70	16124	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	907126	10.19	1261090	71.93	30	120	
Sc	45	1	He	736145	0.31	955958	77.01	30	120	
Sc	45	2	NoGas	6734262	7.97	7862387	85.65	30	120	
Rh	103	1	He	2204973	1.06	2873429	76.74	30	120	
In	115	1	He	1478518	0.46	1922589	76.90	30	120	
Tb	159	1	He	4102407	0.82	4725151	86.82	30	120	
Ho	165	1	He	4152475	1.01	4813140	86.27	30	120	
Bi	209	1	He	3034581	0.45	3617562	83.88	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2026839
Data File Name	145_CCV.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T18:42:25-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	43.735	0.963	509871	0.17	50	87.5	89.5	110.5	CCV Failed
Be	9	6	2	NoGas	49.777	0.790	137298	0.84	50	99.6	89.5	110.5	
B	11	6	2	NoGas	56.425	1.803	94699	2.65	50	112.8	89.5	110.5	CCV Failed
Na	23	45	1	He	24241.518	1.116	21878066	0.71	25000	97.0	89.5	110.5	
Mg	24	45	1	He	24178.667	1.804	12789180	0.80	25000	96.7	89.5	110.5	
Al	27	45	1	He	237.300	1.757	77667	1.59	250	94.9	89.5	110.5	
K	39	45	1	He	25262.537	1.237	14244498	0.67	25000	101.1	89.5	110.5	
Ca	44	45	1	He	24244.258	0.720	767919	1.20	25000	97.0	89.5	110.5	
Ti	47	45	1	He	50.581	0.868	8729	1.18	50	101.2	89.5	110.5	
V	51	45	1	He	48.618	1.267	408876	0.62	50	97.2	89.5	110.5	
Cr	52	45	1	He	48.828	1.170	253076	0.83	50	97.7	89.5	110.5	
Mn	55	45	1	He	245.397	1.501	1003724	0.92	250	98.2	89.5	110.5	
Fe	56	45	1	He	12252.609	1.276	59913475	1.39	12500	98.0	89.5	110.5	
Co	59	45	1	He	48.740	1.468	350155	0.55	50	97.5	89.5	110.5	
Ni	60	45	1	He	48.425	1.644	85921	0.39	50	96.9	89.5	110.5	
Cu	63	45	1	He	49.091	1.111	227815	0.70	50	98.2	89.5	110.5	
Zn	66	45	1	He	48.671	1.034	53136	1.84	50	97.3	89.5	110.5	
As	75	115	1	He	46.567	0.888	40130	1.06	50	93.1	89.5	110.5	
Se	78	115	1	He	47.846	1.632	3623	1.17	50	95.7	89.5	110.5	
Sr	88	45	1	He	51.483	1.260	297051	0.53	50	103.0	89.5	110.5	
Mo	95	103	1	He	51.191	1.269	139114	0.95	50	102.4	89.5	110.5	
Ag	107	103	1	He	49.491	1.754	424723	0.62	50	99.0	89.5	110.5	
Cd	111	115	1	He	48.438	1.038	80293	0.87	50	96.9	89.5	110.5	
Sn	118	115	1	He	48.832	2.820	197921	1.59	50	97.7	89.5	110.5	
Sb	123	165	1	He	48.654	0.574	224839	0.83	50	97.3	89.5	110.5	
Ba	137	115	1	He	49.936	1.259	98360	0.31	50	99.9	89.5	110.5	
W	182	159	1	He	47.999	1.101	505712	1.07	50	96.0	89.5	110.5	
Tl	205	165	1	He	49.029	1.235	1205521	1.02	50	98.1	89.5	110.5	
Pb	208	165	1	He	49.402	0.872	1655566	0.45	50	98.8	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	920978	1.00	1261090	73.03	30	120	
Sc	45	1	He	780504	1.80	955958	81.65	30	120	
Sc	45	2	NoGas	6455336	0.82	7862387	82.10	30	120	
Rh	103	1	He	2344889	2.18	2873429	81.61	30	120	
In	115	1	He	1613573	1.24	1922589	83.93	30	120	
Tb	159	1	He	4247743	1.91	4725151	89.90	30	120	
Ho	165	1	He	4292795	0.91	4813140	89.19	30	120	
Bi	209	1	He	3138719	0.48	3617562	86.76	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	146_CCB.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T18:46:01-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.209	-25.1	37410	3.9	2	
Be	9	6	2	NoGas	0.342	5.8	978	1.1	1	
B	11	6	2	NoGas	6.811	8.6	17171	3.3	20	
Na	23	45	1	He	87.179	7.5	100461	4.6	1000	
Mg	24	45	1	He	-0.162	-771.4	2574	25.1	1000	
Al	27	45	1	He	1.101	25.4	939	10.9	50	
K	39	45	1	He	25.048	11.5	58874	1.2	1000	
Ca	44	45	1	He	77.579	10.5	3092	6.6	1000	
Ti	47	45	1	He	0.083	80.4	20	60.1	20	
V	51	45	1	He	-0.164	-37.5	5143	11.8	2	
Cr	52	45	1	He	0.141	10.3	2826	1.9	2	
Mn	55	45	1	He	1.345	6.3	7408	2.9	2	
Fe	56	45	1	He	16.618	11.4	88809	12.0	50	
Co	59	45	1	He	0.030	12.5	273	11.6	1	
Ni	60	45	1	He	-0.351	-6.5	223	19.6	2	
Cu	63	45	1	He	0.164	19.5	1375	9.4	2	
Zn	66	45	1	He	4.636	3.4	6604	3.1	20	
As	75	115	1	He	0.097	51.9	259	18.3	2	
Se	78	115	1	He	0.288	16.0	67	4.8	2	
Sr	88	45	1	He	0.078	17.6	576	12.1	10	
Mo	95	103	1	He	0.320	33.2	971	32.6	2	
Ag	107	103	1	He	0.009	13.1	89	12.1	0.2	
Cd	111	115	1	He	0.139	7.9	1980	2.1	0.2	
Sn	118	115	1	He	0.546	7.3	2930	5.5	10	
Sb	123	165	1	He	0.120	4.5	646	4.9	2	
Ba	137	115	1	He	0.045	29.2	123	21.5	5	
W	182	159	1	He	0.671	10.3	13228	6.4	10	
Tl	205	165	1	He	0.107	3.2	2796	4.6	0.5	
Pb	208	165	1	He	0.201	6.3	7391	4.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	853726	4.56	1261090	67.70	30	120	
Sc	45	1	He	783443	1.79	955958	81.95	30	120	
Sc	45	2	NoGas	5718113	4.51	7862387	72.73	30	120	
Rh	103	1	He	2475623	1.27	2873429	86.16	30	120	
In	115	1	He	1672318	1.63	1922589	86.98	30	120	
Tb	159	1	He	4279443	0.99	4725151	90.57	30	120	
Ho	165	1	He	4314055	1.68	4813140	89.63	30	120	
Bi	209	1	He	3246849	1.00	3617562	89.75	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-2012498
Data File Name	147CRI.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T18:49:37-04:00
Sample Type	CRI
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	2	NoGas	11.184	11.184	9.075	109055	1.81	8	139.8	49.5	150.5	
Be	9	2	NoGas	1.798	1.798	22.131	3704	10.07	1	179.8	49.5	150.5	CRI Failed
B	11	2	NoGas	35.711	35.711	13.589	46303	2.19	20	178.6	49.5	150.5	CRI Failed
Na	23	1	He	1083.000	1083.000	1.306	1001509	0.08	1000	108.3	49.5	150.5	
Mg	24	1	He	1034.166	1034.166	1.791	551510	0.46	1000	103.4	49.5	150.5	
Al	27	1	He	49.661	49.661	0.139	16771	1.44	50	99.3	49.5	150.5	
K	39	1	He	1084.506	1084.506	1.475	656497	0.05	1000	108.5	49.5	150.5	
Ca	44	1	He	1016.659	1016.659	1.844	32916	0.63	1000	101.7	49.5	150.5	
Ti	47	1	He	10.165	10.165	2.016	1765	0.85	10	101.6	49.5	150.5	
V	51	1	He	3.602	3.602	2.081	36413	0.45	5	72.0	49.5	150.5	
Cr	52	1	He	2.131	2.131	4.488	13090	2.75	2	106.6	49.5	150.5	
Mn	55	1	He	4.972	4.972	1.472	22267	0.56	5	99.4	49.5	150.5	
Fe	56	1	He	107.638	107.638	1.145	535288	0.27	100	107.6	49.5	150.5	
Co	59	1	He	1.058	1.058	3.959	7686	2.83	1	105.8	49.5	150.5	
Ni	60	1	He	1.693	1.693	7.279	3827	6.07	2	84.6	49.5	150.5	
Cu	63	1	He	2.169	2.169	2.785	10691	3.03	2	108.5	49.5	150.5	
Zn	66	1	He	20.586	20.586	1.026	23523	0.51	20	102.9	49.5	150.5	
As	75	1	He	4.660	4.660	1.627	4389	1.30	5	93.2	49.5	150.5	
Se	78	1	He	4.878	4.878	5.225	430	4.21	5	97.6	49.5	150.5	
Sr	88	1	He	10.785	10.785	2.185	62546	1.32	10	107.8	49.5	150.5	
Mo	95	1	He	10.132	10.132	1.959	28942	2.33	10	101.3	49.5	150.5	
Ag	107	1	He	1.057	1.057	3.693	9528	3.26	1	105.7	49.5	150.5	
Cd	111	1	He	1.061	1.061	0.873	3589	0.68	1	106.1	49.5	150.5	
Sn	118	1	He	9.807	9.807	2.319	42413	1.38	10	98.1	49.5	150.5	
Sb	123	1	He	2.081	2.081	1.924	9730	1.93	2	104.1	49.5	150.5	
Ba	137	1	He	4.996	4.996	1.851	10398	0.97	5	99.9	49.5	150.5	
W	182	1	He	9.510	9.510	2.356	105376	1.83	10	95.1	49.5	150.5	
Tl	205	1	He	2.023	2.023	0.936	50015	1.50	2	101.1	49.5	150.5	
Pb	208	1	He	1.136	1.136	1.319	38798	0.23	1	113.6	49.5	150.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	684106	11.40	1261090	54.25	30	120	
Sc	45	1	He	783252	1.32	955958	81.93	30	120	
Sc	45	2	NoGas	4321986	8.37	7862387	54.97	30	120	
Rh	103	1	He	2460858	0.43	2873429	85.64	30	120	
In	115	1	He	1700328	0.92	1922589	88.44	30	120	
Tb	159	1	He	4257808	0.41	4725151	90.11	30	120	
Ho	165	1	He	4303879	1.12	4813140	89.42	30	120	
Bi	209	1	He	3288119	1.34	3617562	90.89	30	120	

Sample Report

Sample Table

Sample Name	240-51011-i-1-b@50
Data File Name	148SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T18:53:15-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	-0.178	-0.178	-36.70	43618	0.00	10000	
Be	9	6	2	NoGas	0.203	0.203	11.87	711	0.03	10000	
B	11	6	2	NoGas	6.884	6.884	3.79	19741	0.03	300	
Na	23	45	1	He	18910.427	18910.427	16.20	17020862	0.11	500000	
Mg	24	45	1	He	24535.710	24535.710	17.13	12928302	0.19	500000	
Al	27	45	1	He	0.310	0.310	135.28	676	0.05	200000	
K	39	45	1	He	748.440	748.440	16.82	464367	0.16	500000	
Ca	44	45	1	He	112943.333	112943.333	16.64	3562860	3.17	500000	
Ti	47	45	1	He	0.049	0.049	117.46	14	0.34	2500	
V	51	45	1	He	-0.033	-0.033	-370.30	6199	0.00	10000	
Cr	52	45	1	He	0.219	0.219	43.08	3209	0.01	10000	
Mn	55	45	1	He	1140.745	1140.745	16.77	4642380	0.02	10000	
Fe	56	45	1	He	2.402	2.402	34.91	18773	0.01	200000	
Co	59	45	1	He	0.113	0.113	21.67	861	0.01	10000	
Ni	60	45	1	He	0.107	0.107	100.67	1024	0.01	10000	
Cu	63	45	1	He	0.060	0.060	42.55	892	0.01	10000	
Zn	66	45	1	He	0.377	0.377	100.17	2062	0.02	10000	
As	75	115	1	He	0.131	0.131	37.82	281	0.05	10000	
Se	78	115	1	He	0.167	0.167	35.05	57	0.29	10000	
Sr	88	45	1	He	89.984	89.984	15.99	517668	0.02	10000	
Mo	95	103	1	He	0.217	0.217	48.73	614	0.04	2000	
Ag	107	103	1	He	0.004	0.004	65.10	42	0.01	300	
Cd	111	115	1	He	0.156	0.156	13.24	1987	0.01	4000	
Sn	118	115	1	He	0.476	0.476	42.45	2530	0.02	2000	
Sb	123	165	1	He	0.034	0.034	29.39	246	0.01	300	
Ba	137	115	1	He	2.533	2.533	17.53	5058	0.05	10000	
W	182	159	1	He	0.333	0.333	23.47	9570	0.00	2500	
Tl	205	165	1	He	0.046	0.046	22.46	1283	0.00	5000	
Pb	208	165	1	He	0.100	0.100	18.15	3930	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	974394	0.91	1261090	77.27	30	120	
Sc	45	1	He	790471	14.65	955958	82.69	30	120	
Sc	45	2	NoGas	6614643	0.80	7862387	84.13	30	120	
Rh	103	1	He	2359647	15.95	2873429	82.12	30	120	
In	115	1	He	1656396	15.85	1922589	86.15	30	120	
Tb	159	1	He	4270088	16.23	4725151	90.37	30	120	
Ho	165	1	He	4311229	14.97	4813140	89.57	30	120	
Bi	209	1	He	3158525	14.66	3617562	87.31	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-182091/1-a
Data File Name	149_Blk.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T18:56:51-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.255	-11.3	40793	1.5	2	
Be	9	6	2	NoGas	0.242	12.5	796	10.8	1	
B	11	6	2	NoGas	4.404	0.7	15159	0.7	20	
Na	23	45	1	He	152.254	2.5	153284	2.1	1000	
Mg	24	45	1	He	49.148	3.7	27651	3.6	1000	
Al	27	45	1	He	2.742	10.4	1417	6.0	50	
K	39	45	1	He	48.014	1.9	69087	0.4	1000	
Ca	44	45	1	He	174.457	0.9	5935	0.9	1000	
Ti	47	45	1	He	0.142	43.3	29	35.2	20	
V	51	45	1	He	1.776	4.6	20440	2.9	2	
Cr	52	45	1	He	1.391	8.1	8919	6.0	2	
Mn	55	45	1	He	0.518	6.2	3865	3.6	2	
Fe	56	45	1	He	16.951	5.9	86887	5.5	50	
Co	59	45	1	He	0.043	22.2	352	19.1	1	
Ni	60	45	1	He	-0.179	-23.7	506	14.5	2	
Cu	63	45	1	He	0.889	3.4	4563	2.6	2	
Zn	66	45	1	He	5.896	2.2	7635	2.1	20	
As	75	115	1	He	0.362	9.1	468	4.0	2	
Se	78	115	1	He	0.245	88.2	60	26.0	2	
Sr	88	45	1	He	0.626	11.8	3606	11.3	10	
Mo	95	103	1	He	0.043	35.1	166	25.0	2	
Ag	107	103	1	He	0.008	15.0	76	13.5	0.2	
Cd	111	115	1	He	0.162	49.4	1912	5.2	0.2	
Sn	118	115	1	He	0.579	14.2	2904	9.3	10	
Sb	123	165	1	He	0.078	16.2	442	13.3	2	
Ba	137	115	1	He	0.901	4.9	1773	6.8	5	
W	182	159	1	He	0.128	52.5	7291	9.6	10	
Tl	205	165	1	He	0.043	7.7	1205	6.4	0.5	
Pb	208	165	1	He	0.214	4.4	7649	3.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	940135	0.67	1261090	74.55	30	120	
Sc	45	1	He	753299	0.35	955958	78.80	30	120	
Sc	45	2	NoGas	6306619	0.83	7862387	80.21	30	120	
Rh	103	1	He	2374219	0.13	2873429	82.63	30	120	
In	115	1	He	1584895	1.94	1922589	82.44	30	120	
Tb	159	1	He	4144808	1.18	4725151	87.72	30	120	
Ho	165	1	He	4212706	0.51	4813140	87.53	30	120	
Bi	209	1	He	3301423	1.41	3617562	91.26	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-182091/3-a
Data File Name	150_LCS.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T19:00:29-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	2	NoGas	-0.409	-0.409	-3.159	40827	0.97	1000	0.0	79.5	120.5	LCS Failed
Be	9	2	NoGas	935.193	935.193	0.115	2667644	1.48	1000	93.5	79.5	120.5	
B	11	2	NoGas	102.150	102.150	0.499	170620	1.13	100	102.2	79.5	120.5	
Na	23	1	He	10393.484	10393.484	1.515	8901418	0.78	10000	103.9	79.5	120.5	
Mg	24	1	He	10289.484	10289.484	0.924	5159941	0.24	10000	102.9	79.5	120.5	
Al	27	1	He	9777.389	9777.389	1.251	3010843	0.74	10000	97.8	79.5	120.5	
K	39	1	He	10605.209	10605.209	1.047	5691912	0.25	10000	106.1	79.5	120.5	
Ca	44	1	He	10482.749	10482.749	2.266	314996	1.89	10000	104.8	79.5	120.5	
Ti	47	1	He	99.598	99.598	1.017	16285	1.54	100	99.6	79.5	120.5	
V	51	1	He	1000.529	1000.529	1.528	7854797	1.27	1000	100.1	79.5	120.5	
Cr	52	1	He	996.248	996.248	1.869	4855356	1.71	1000	99.6	79.5	120.5	
Mn	55	1	He	1017.390	1017.390	1.644	3938140	0.58	1000	101.7	79.5	120.5	
Fe	56	1	He	10428.392	10428.392	1.512	48328371	1.29	10000	104.3	79.5	120.5	
Co	59	1	He	1011.060	1011.060	2.056	6883086	1.61	1000	101.1	79.5	120.5	
Ni	60	1	He	1052.043	1052.043	4.970	1752670	4.77	1000	105.2	79.5	120.5	
Cu	63	1	He	1039.142	1039.142	1.872	4558539	1.59	1000	103.9	79.5	120.5	
Zn	66	1	He	1035.672	1035.672	2.257	1039220	1.73	1000	103.6	79.5	120.5	
As	75	1	He	951.998	951.998	2.739	773190	1.32	1000	95.2	79.5	120.5	
Se	78	1	He	986.066	986.066	2.562	69852	1.15	1000	98.6	79.5	120.5	
Sr	88	1	He	1067.685	1067.685	0.926	5836346	0.55	1000	106.8	79.5	120.5	
Mo	95	1	He	102.613	102.613	1.320	271186	0.82	100	102.6	79.5	120.5	
Ag	107	1	He	101.547	101.547	0.767	847717	1.07	100	101.5	79.5	120.5	
Cd	111	1	He	1008.992	1008.992	3.145	1550902	1.77	1000	100.9	79.5	120.5	
Sn	118	1	He	1060.603	1060.603	2.084	4056196	0.69	100	1060.6	79.5	120.5	LCS Failed
Sb	123	1	He	95.615	95.615	1.014	430686	1.25	100	95.6	79.5	120.5	
Ba	137	1	He	1062.976	1062.976	1.596	1980865	0.29	1000	106.3	79.5	120.5	
W	182	1	He	97.450	97.450	1.458	988946	0.32	100	97.5	79.5	120.5	
Tl	205	1	He	250.292	250.292	0.456	5999370	1.16	250	100.1	79.5	120.5	
Pb	208	1	He	1007.003	1007.003	0.615	32888823	1.02	1000	100.7	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	953168	1.51	1261090	75.58	30	120	
Sc	45	1	He	739674	1.14	955958	77.38	30	120	
Sc	45	2	NoGas	6570683	1.31	7862387	83.57	30	120	
Rh	103	1	He	2280556	1.18	2873429	79.37	30	120	
In	115	1	He	1527065	1.44	1922589	79.43	30	120	
Tb	159	1	He	4117038	1.77	4725151	87.13	30	120	
Ho	165	1	He	4185272	1.60	4813140	86.96	30	120	
Bi	209	1	He	3128054	1.73	3617562	86.47	30	120	

Sample Report

Sample Table

Sample Name	240-51025-ae-8-a
Data File Name	151SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T19:03:53-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	5.066	5.066	1.71	99817	0.01	10000	
Be	9	6	2	NoGas	0.825	0.825	2.26	2482	0.03	10000	
B	11	6	2	NoGas	31.933	31.933	4.28	59355	0.05	300	
Na	23	45	1	He	17939.127	17939.127	1.00	15789739	0.11	500000	
Mg	24	45	1	He	37743.515	37743.515	0.82	19463982	0.19	500000	
Al	27	45	1	He	301.473	301.473	1.32	96041	0.31	200000	
K	39	45	1	He	2115.914	2115.914	0.83	1203051	0.18	500000	
Ca	44	45	1	He	90623.850	90623.850	0.44	2796830	3.24	500000	
Ti	47	45	1	He	6.051	6.051	10.44	1023	0.59	2500	
V	51	45	1	He	2.399	2.399	7.69	25684	0.01	10000	
Cr	52	45	1	He	2.162	2.162	1.66	12872	0.02	10000	
Mn	55	45	1	He	31.890	31.890	0.70	128775	0.02	10000	
Fe	56	45	1	He	1013.861	1013.861	0.70	4839726	0.02	200000	
Co	59	45	1	He	0.450	0.450	18.03	3204	0.01	10000	
Ni	60	45	1	He	3.477	3.477	5.72	6770	0.05	10000	
Cu	63	45	1	He	2.514	2.514	4.93	11944	0.02	10000	
Zn	66	45	1	He	29.401	29.401	3.64	31940	0.09	10000	
As	75	115	1	He	9.111	9.111	1.94	7766	0.12	10000	
Se	78	115	1	He	1.399	1.399	11.49	144	0.97	10000	
Sr	88	45	1	He	145.427	145.427	0.93	817868	0.02	10000	
Mo	95	103	1	He	2.983	2.983	0.45	7995	0.04	2000	
Ag	107	103	1	He	1.386	1.386	3.10	11668	0.01	300	
Cd	111	115	1	He	0.369	0.369	15.21	2221	0.02	4000	
Sn	118	115	1	He	2.261	2.261	11.60	9492	0.02	2000	
Sb	123	165	1	He	0.225	0.225	12.79	1126	0.02	300	
Ba	137	115	1	He	167.529	167.529	1.17	320886	0.05	10000	
W	182	159	1	He	0.980	0.980	16.13	16194	0.01	2500	
Tl	205	165	1	He	0.220	0.220	17.30	5548	0.00	5000	
Pb	208	165	1	He	0.988	0.988	5.20	33528	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	957342	0.44	1261090	75.91	30	120	
Sc	45	1	He	760923	1.76	955958	79.60	30	120	
Sc	45	2	NoGas	6550646	1.97	7862387	83.32	30	120	
Rh	103	1	He	2299844	2.61	2873429	80.04	30	120	
In	115	1	He	1569335	0.96	1922589	81.63	30	120	
Tb	159	1	He	4205522	1.64	4725151	89.00	30	120	
Ho	165	1	He	4270532	0.89	4813140	88.73	30	120	
Bi	209	1	He	3140968	0.14	3617562	86.83	30	120	

Sample Report

Sample Table

Sample Name	SD 240-51025-ae-8-a@5
Data File Name	152SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T19:07:30-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	0.729	0.729	4.96	54036	0.00	10000	
Be	9	6	2	NoGas	0.525	0.525	17.77	1656	0.03	10000	
B	11	6	2	NoGas	8.486	8.486	1.62	22370	0.04	300	
Na	23	45	1	He	3785.439	3785.439	12.84	3490137	0.11	500000	
Mg	24	45	1	He	7890.615	7890.615	13.21	4241613	0.19	500000	
Al	27	45	1	He	68.391	68.391	15.46	23116	0.30	200000	
K	39	45	1	He	457.028	457.028	14.79	306368	0.15	500000	
Ca	44	45	1	He	18529.525	18529.525	13.29	596232	3.11	500000	
Ti	47	45	1	He	1.749	1.749	59.46	302	0.58	2500	
V	51	45	1	He	0.672	0.672	19.95	12266	0.01	10000	
Cr	52	45	1	He	0.565	0.565	22.24	5073	0.01	10000	
Mn	55	45	1	He	6.627	6.627	14.88	29384	0.02	10000	
Fe	56	45	1	He	210.298	210.298	14.22	1050790	0.02	200000	
Co	59	45	1	He	0.109	0.109	10.38	856	0.01	10000	
Ni	60	45	1	He	0.486	0.486	14.58	1728	0.03	10000	
Cu	63	45	1	He	0.578	0.578	13.49	3346	0.02	10000	
Zn	66	45	1	He	6.058	6.058	13.46	8226	0.07	10000	
As	75	115	1	He	1.705	1.705	18.64	1671	0.10	10000	
Se	78	115	1	He	0.246	0.246	16.30	64	0.38	10000	
Sr	88	45	1	He	29.701	29.701	13.03	174156	0.02	10000	
Mo	95	103	1	He	0.616	0.616	17.50	1749	0.04	2000	
Ag	107	103	1	He	0.294	0.294	13.55	2585	0.01	300	
Cd	111	115	1	He	0.168	0.168	21.05	2044	0.01	4000	
Sn	118	115	1	He	0.285	0.285	19.02	1834	0.02	2000	
Sb	123	165	1	He	0.048	0.048	47.16	310	0.02	300	
Ba	137	115	1	He	33.787	33.787	16.50	68319	0.05	10000	
W	182	159	1	He	0.241	0.241	34.07	8747	0.00	2500	
Tl	205	165	1	He	0.056	0.056	16.45	1565	0.00	5000	
Pb	208	165	1	He	0.286	0.286	14.04	10330	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	975677	0.91	1261090	77.37	30	120	
Sc	45	1	He	801394	12.40	955958	83.83	30	120	
Sc	45	2	NoGas	6679580	1.00	7862387	84.96	30	120	
Rh	103	1	He	2418104	12.92	2873429	84.15	30	120	
In	115	1	He	1681655	13.98	1922589	87.47	30	120	
Tb	159	1	He	4323248	12.59	4725151	91.49	30	120	
Ho	165	1	He	4386998	12.31	4813140	91.15	30	120	
Bi	209	1	He	3290841	11.52	3617562	90.97	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-51025-ae-8-a
Data File Name	153SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T19:11:10-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	4.684	4.684	2.04	97517	0.00	10000	
Be	9	6	2	NoGas	973.742	973.742	0.94	2736724	0.04	10000	
B	11	6	2	NoGas	135.189	135.189	0.73	219821	0.06	300	
Na	23	45	1	He	26991.021	26991.021	1.31	23731655	0.11	500000	
Mg	24	45	1	He	46262.662	46262.662	1.49	23841270	0.19	500000	
Al	27	45	1	He	9660.406	9660.406	1.33	3058255	0.32	200000	
K	39	45	1	He	12149.756	12149.756	1.40	6697466	0.18	500000	
Ca	44	45	1	He	98299.513	98299.513	0.95	3031549	3.24	500000	
Ti	47	45	1	He	106.375	106.375	0.52	17879	0.59	2500	
V	51	45	1	He	984.645	984.645	1.56	7946986	0.01	10000	
Cr	52	45	1	He	986.193	986.193	1.96	4941190	0.02	10000	
Mn	55	45	1	He	1027.370	1027.370	2.35	4088543	0.03	10000	
Fe	56	45	1	He	10937.729	10937.729	1.51	52109801	0.02	200000	
Co	59	45	1	He	966.284	966.284	1.59	6762961	0.01	10000	
Ni	60	45	1	He	1001.425	1001.425	1.87	1715255	0.06	10000	
Cu	63	45	1	He	979.991	979.991	1.00	4419632	0.02	10000	
Zn	66	45	1	He	997.420	997.420	1.24	1029005	0.10	10000	
As	75	115	1	He	978.871	978.871	0.49	792526	0.12	10000	
Se	78	115	1	He	989.001	989.001	0.58	69839	1.42	10000	
Sr	88	45	1	He	1186.564	1186.564	0.98	6667928	0.02	10000	
Mo	95	103	1	He	108.548	108.548	0.75	285948	0.04	2000	
Ag	107	103	1	He	101.535	101.535	1.52	844820	0.01	300	
Cd	111	115	1	He	993.109	993.109	0.70	1521710	0.07	4000	
Sn	118	115	1	He	1088.082	1088.082	0.14	4148116	0.03	2000	
Sb	123	165	1	He	94.363	94.363	0.18	434280	0.02	300	
Ba	137	115	1	He	1253.110	1253.110	0.78	2327558	0.05	10000	
W	182	159	1	He	98.231	98.231	0.03	1014532	0.01	2500	
Tl	205	165	1	He	244.863	244.863	0.74	5996353	0.00	5000	
Pb	208	165	1	He	977.003	977.003	0.34	32601714	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	939190	1.24	1261090	74.47	30	120	
Sc	45	1	He	760338	0.37	955958	79.54	30	120	
Sc	45	2	NoGas	6674671	0.66	7862387	84.89	30	120	
Rh	103	1	He	2273005	0.92	2873429	79.10	30	120	
In	115	1	He	1521964	2.17	1922589	79.16	30	120	
Tb	159	1	He	4189476	0.95	4725151	88.66	30	120	
Ho	165	1	He	4275986	1.44	4813140	88.84	30	120	
Bi	209	1	He	3121775	1.29	3617562	86.29	30	120	

Sample Report

Sample Table

Sample Name	240-51025-ae-8-d ms
Data File Name	154SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T19:14:32-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	4.495	4.495	2.44	94545	0.00	10000	
Be	9	6	2	NoGas	947.438	947.438	0.67	2655744	0.04	10000	
B	11	6	2	NoGas	128.665	128.665	1.74	209047	0.06	300	
Na	23	45	1	He	26460.282	26460.282	1.66	23423979	0.11	500000	
Mg	24	45	1	He	44542.660	44542.660	0.43	23111033	0.19	500000	
Al	27	45	1	He	9664.595	9664.595	1.17	3080437	0.31	200000	
K	39	45	1	He	12085.618	12085.618	0.80	6707633	0.18	500000	
Ca	44	45	1	He	94839.789	94839.789	0.87	2944800	3.22	500000	
Ti	47	45	1	He	104.858	104.858	0.72	17744	0.59	2500	
V	51	45	1	He	968.507	968.507	0.85	7870021	0.01	10000	
Cr	52	45	1	He	960.568	960.568	0.34	4845509	0.02	10000	
Mn	55	45	1	He	999.087	999.087	0.58	4003005	0.02	10000	
Fe	56	45	1	He	10886.833	10886.833	1.13	52220430	0.02	200000	
Co	59	45	1	He	944.805	944.805	1.56	6657668	0.01	10000	
Ni	60	45	1	He	984.610	984.610	0.90	1697914	0.06	10000	
Cu	63	45	1	He	963.338	963.338	2.08	4374210	0.02	10000	
Zn	66	45	1	He	982.190	982.190	0.59	1020216	0.10	10000	
As	75	115	1	He	920.498	920.498	0.95	781314	0.12	10000	
Se	78	115	1	He	930.005	930.005	1.04	68852	1.35	10000	
Sr	88	45	1	He	1160.116	1160.116	1.03	6563772	0.02	10000	
Mo	95	103	1	He	104.066	104.066	0.65	280762	0.04	2000	
Ag	107	103	1	He	96.200	96.200	1.41	819751	0.01	300	
Cd	111	115	1	He	927.372	927.372	0.84	1489896	0.06	4000	
Sn	118	115	1	He	1014.461	1014.461	1.87	4054261	0.03	2000	
Sb	123	165	1	He	91.605	91.605	0.75	426741	0.02	300	
Ba	137	115	1	He	1167.409	1167.409	1.55	2273315	0.05	10000	
W	182	159	1	He	94.339	94.339	1.13	992905	0.01	2500	
Tl	205	165	1	He	235.688	235.688	1.20	5842675	0.00	5000	
Pb	208	165	1	He	941.343	941.343	0.93	31796917	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	936691	1.00	1261090	74.28	30	120	
Sc	45	1	He	765531	0.20	955958	80.08	30	120	
Sc	45	2	NoGas	6611946	0.59	7862387	84.10	30	120	
Rh	103	1	He	2327970	0.95	2873429	81.02	30	120	
In	115	1	He	1595535	0.56	1922589	82.99	30	120	
Tb	159	1	He	4268445	0.87	4725151	90.33	30	120	
Ho	165	1	He	4328231	0.47	4813140	89.93	30	120	
Bi	209	1	He	3113753	0.51	3617562	86.07	30	120	

Sample Report

Sample Table

Sample Name	240-51025-ae-8-e msd
Data File Name	155SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T19:17:56-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	4.426	4.426	2.94	94163	0.00	10000	
Be	9	6	2	NoGas	944.140	944.140	0.60	2634712	0.04	10000	
B	11	6	2	NoGas	130.243	130.243	1.23	210578	0.06	300	
Na	23	45	1	He	26542.085	26542.085	3.96	23471348	0.11	500000	
Mg	24	45	1	He	44957.994	44957.994	3.71	23302539	0.19	500000	
Al	27	45	1	He	9863.411	9863.411	4.78	3139783	0.31	200000	
K	39	45	1	He	12184.407	12184.407	3.08	6756319	0.18	500000	
Ca	44	45	1	He	95537.097	95537.097	3.72	2963635	3.22	500000	
Ti	47	45	1	He	104.307	104.307	6.30	17628	0.59	2500	
V	51	45	1	He	965.263	965.263	3.65	7835791	0.01	10000	
Cr	52	45	1	He	961.202	961.202	3.64	4843841	0.02	10000	
Mn	55	45	1	He	1008.489	1008.489	3.30	4036928	0.02	10000	
Fe	56	45	1	He	10917.918	10917.918	3.71	52315556	0.02	200000	
Co	59	45	1	He	944.265	944.265	3.16	6647883	0.01	10000	
Ni	60	45	1	He	977.452	977.452	2.69	1684286	0.06	10000	
Cu	63	45	1	He	968.400	968.400	3.10	4393232	0.02	10000	
Zn	66	45	1	He	987.258	987.258	3.48	1024483	0.10	10000	
As	75	115	1	He	943.420	943.420	2.79	782378	0.12	10000	
Se	78	115	1	He	956.711	956.711	3.07	69197	1.38	10000	
Sr	88	45	1	He	1166.973	1166.973	2.99	6596832	0.02	10000	
Mo	95	103	1	He	105.224	105.224	4.53	280651	0.04	2000	
Ag	107	103	1	He	97.259	97.259	4.51	819333	0.01	300	
Cd	111	115	1	He	952.899	952.899	2.89	1495643	0.06	4000	
Sn	118	115	1	He	1041.993	1041.993	3.80	4067978	0.03	2000	
Sb	123	165	1	He	92.953	92.953	3.40	427377	0.02	300	
Ba	137	115	1	He	1207.795	1207.795	2.88	2297861	0.05	10000	
W	182	159	1	He	95.769	95.769	3.48	989747	0.01	2500	
Tl	205	165	1	He	241.634	241.634	3.09	5912334	0.00	5000	
Pb	208	165	1	He	956.165	956.165	2.90	31879010	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	932480	0.04	1261090	73.94	30	120	
Sc	45	1	He	765375	3.32	955958	80.06	30	120	
Sc	45	2	NoGas	6638875	0.33	7862387	84.44	30	120	
Rh	103	1	He	2304216	4.22	2873429	80.19	30	120	
In	115	1	He	1559578	2.65	1922589	81.12	30	120	
Tb	159	1	He	4194509	3.23	4725151	88.77	30	120	
Ho	165	1	He	4274634	3.05	4813140	88.81	30	120	
Bi	209	1	He	3063922	2.68	3617562	84.70	30	120	

Sample Report

Sample Table

Sample Name	240-51025-k-2-a
Data File Name	156SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T19:21:20-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	4.326	4.326	2.39	94800	0.00	10000	
Be	9	6	2	NoGas	1.585	1.585	3.94	4742	0.03	10000	
B	11	6	2	NoGas	19.166	19.166	0.63	39673	0.05	300	
Na	23	45	1	He	6723.644	6723.644	1.04	5991609	0.11	500000	
Mg	24	45	1	He	35198.242	35198.242	0.66	18336246	0.19	500000	
Al	27	45	1	He	1.718	1.718	7.40	1118	0.15	200000	
K	39	45	1	He	1608.466	1608.466	0.32	934352	0.17	500000	
Ca	44	45	1	He	94842.358	94842.358	0.25	2956656	3.21	500000	
Ti	47	45	1	He	0.413	0.413	11.73	76	0.55	2500	
V	51	45	1	He	2.233	2.233	4.16	24579	0.01	10000	
Cr	52	45	1	He	1.607	1.607	2.26	10194	0.02	10000	
Mn	55	45	1	He	49.013	49.013	0.52	198937	0.02	10000	
Fe	56	45	1	He	19.173	19.173	7.35	99341	0.02	200000	
Co	59	45	1	He	0.780	0.780	3.42	5575	0.01	10000	
Ni	60	45	1	He	0.977	0.977	12.80	2516	0.04	10000	
Cu	63	45	1	He	0.816	0.816	2.67	4325	0.02	10000	
Zn	66	45	1	He	3.622	3.622	5.20	5422	0.07	10000	
As	75	115	1	He	1.925	1.925	13.45	1791	0.11	10000	
Se	78	115	1	He	1.903	1.903	12.17	183	1.04	10000	
Sr	88	45	1	He	102.772	102.772	0.77	583900	0.02	10000	
Mo	95	103	1	He	3.628	3.628	3.36	9805	0.04	2000	
Ag	107	103	1	He	0.019	0.019	11.28	170	0.01	300	
Cd	111	115	1	He	0.516	0.516	22.57	2485	0.02	4000	
Sn	118	115	1	He	2.853	2.853	8.91	11983	0.02	2000	
Sb	123	165	1	He	0.326	0.326	10.78	1595	0.02	300	
Ba	137	115	1	He	52.911	52.911	1.90	102700	0.05	10000	
W	182	159	1	He	1.193	1.193	13.50	18597	0.01	2500	
Tl	205	165	1	He	0.403	0.403	8.02	10066	0.00	5000	
Pb	208	165	1	He	0.413	0.413	5.79	14482	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	974240	2.26	1261090	77.25	30	120	
Sc	45	1	He	768598	0.21	955958	80.40	30	120	
Sc	45	2	NoGas	6761646	0.43	7862387	86.00	30	120	
Rh	103	1	He	2321090	1.19	2873429	80.78	30	120	
In	115	1	He	1590151	1.27	1922589	82.71	30	120	
Tb	159	1	He	4256659	0.56	4725151	90.09	30	120	
Ho	165	1	He	4293624	0.42	4813140	89.21	30	120	
Bi	209	1	He	3161993	0.41	3617562	87.41	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2026839
Data File Name	157_CCV.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T19:24:56-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	50.115	4.998	515517	0.93	50	100.2	89.5	110.5	
Be	9	6	2	NoGas	54.635	7.796	141365	1.95	50	109.3	89.5	110.5	
B	11	6	2	NoGas	56.010	6.017	88316	0.95	50	112.0	89.5	110.5	CCV Failed
Na	23	45	1	He	24476.286	2.845	22983461	1.63	25000	97.9	89.5	110.5	
Mg	24	45	1	He	24491.651	3.240	13478874	1.81	25000	98.0	89.5	110.5	
Al	27	45	1	He	240.472	4.185	81865	2.38	250	96.2	89.5	110.5	
K	39	45	1	He	25486.658	2.437	14952943	1.52	25000	101.9	89.5	110.5	
Ca	44	45	1	He	24510.950	3.164	807686	1.76	25000	98.0	89.5	110.5	
Ti	47	45	1	He	50.360	2.482	9043	2.36	50	100.7	89.5	110.5	
V	51	45	1	He	49.083	3.075	429435	2.02	50	98.2	89.5	110.5	
Cr	52	45	1	He	49.104	3.123	264780	1.65	50	98.2	89.5	110.5	
Mn	55	45	1	He	247.354	2.387	1052837	2.24	250	98.9	89.5	110.5	
Fe	56	45	1	He	12387.936	2.756	63028031	2.05	12500	99.1	89.5	110.5	
Co	59	45	1	He	49.535	3.212	370271	2.00	50	99.1	89.5	110.5	
Ni	60	45	1	He	49.260	3.305	90925	1.94	50	98.5	89.5	110.5	
Cu	63	45	1	He	49.694	3.079	239924	1.59	50	99.4	89.5	110.5	
Zn	66	45	1	He	49.160	2.815	55814	0.69	50	98.3	89.5	110.5	
As	75	115	1	He	47.585	1.667	42656	1.88	50	95.2	89.5	110.5	
Se	78	115	1	He	48.647	2.557	3832	3.05	50	97.3	89.5	110.5	
Sr	88	45	1	He	51.524	2.740	309343	1.96	50	103.0	89.5	110.5	
Mo	95	103	1	He	51.072	3.403	144678	2.85	50	102.1	89.5	110.5	
Ag	107	103	1	He	49.455	2.530	442465	2.18	50	98.9	89.5	110.5	
Cd	111	115	1	He	48.080	1.816	82918	0.91	50	96.2	89.5	110.5	
Sn	118	115	1	He	49.078	2.375	206929	0.76	50	98.2	89.5	110.5	
Sb	123	165	1	He	49.547	1.361	235454	1.80	50	99.1	89.5	110.5	
Ba	137	115	1	He	49.748	1.869	101940	1.53	50	99.5	89.5	110.5	
W	182	159	1	He	47.911	2.690	519336	1.81	50	95.8	89.5	110.5	
Tl	205	165	1	He	49.029	0.971	1239689	1.22	50	98.1	89.5	110.5	
Pb	208	165	1	He	49.327	1.079	1699886	1.36	50	98.7	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	866806	6.31	1261090	68.73	30	120	
Sc	45	1	He	812426	3.38	955958	84.99	30	120	
Sc	45	2	NoGas	5766526	4.00	7862387	73.34	30	120	
Rh	103	1	He	2444483	1.88	2873429	85.07	30	120	
In	115	1	He	1678725	2.06	1922589	87.32	30	120	
Tb	159	1	He	4370501	1.69	4725151	92.49	30	120	
Ho	165	1	He	4414180	0.59	4813140	91.71	30	120	
Bi	209	1	He	3221009	2.18	3617562	89.04	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	158_CCB.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T19:28:33-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.336	-4.3	41576	1.1	2	
Be	9	6	2	NoGas	0.814	6.7	2460	4.5	1	
B	11	6	2	NoGas	2.761	7.9	12883	4.0	20	
Na	23	45	1	He	63.663	3.1	80230	1.9	1000	
Mg	24	45	1	He	-0.611	-53.6	2367	7.1	1000	
Al	27	45	1	He	1.053	26.3	934	10.0	50	
K	39	45	1	He	20.646	8.6	57121	1.5	1000	
Ca	44	45	1	He	71.291	5.7	2932	4.4	1000	
Ti	47	45	1	He	0.076	94.7	19	66.8	20	
V	51	45	1	He	-0.113	-31.8	5633	5.1	2	
Cr	52	45	1	He	0.117	26.3	2740	5.9	2	
Mn	55	45	1	He	1.333	5.1	7453	3.7	2	
Fe	56	45	1	He	15.257	15.1	83111	14.1	50	
Co	59	45	1	He	0.079	12.0	638	11.3	1	
Ni	60	45	1	He	-0.329	-10.5	264	23.0	2	
Cu	63	45	1	He	0.163	14.6	1391	7.7	2	
Zn	66	45	1	He	4.964	1.7	7039	0.9	20	
As	75	115	1	He	0.197	26.3	356	12.9	2	
Se	78	115	1	He	0.327	28.5	72	10.6	2	
Sr	88	45	1	He	0.079	21.2	593	16.5	10	
Mo	95	103	1	He	0.308	24.5	947	22.7	2	
Ag	107	103	1	He	0.010	29.5	97	27.4	0.2	
Cd	111	115	1	He	0.207	18.9	2146	3.1	0.2	CCB Failed
Sn	118	115	1	He	0.638	11.6	3397	9.3	10	
Sb	123	165	1	He	0.139	7.8	748	7.3	2	
Ba	137	115	1	He	0.058	11.8	153	9.5	5	
W	182	159	1	He	0.798	13.8	14744	8.3	10	
Tl	205	165	1	He	0.172	5.6	4475	4.9	0.5	
Pb	208	165	1	He	0.255	2.1	9346	2.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	962267	1.82	1261090	76.30	30	120	
Sc	45	1	He	793350	0.38	955958	82.99	30	120	
Sc	45	2	NoGas	6562992	1.44	7862387	83.47	30	120	
Rh	103	1	He	2516919	0.92	2873429	87.59	30	120	
In	115	1	He	1712804	0.42	1922589	89.09	30	120	
Tb	159	1	He	4333811	0.31	4725151	91.72	30	120	
Ho	165	1	He	4380139	0.78	4813140	91.00	30	120	
Bi	209	1	He	3287390	0.73	3617562	90.87	30	120	

Sample Report

Sample Table

Sample Name	240-51025-n-3-a
Data File Name	159SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T19:32:11-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	5.452	5.452	1.57	104814	0.01	10000	
Be	9	6	2	NoGas	0.838	0.838	8.78	2485	0.03	10000	
B	11	6	2	NoGas	94.369	94.369	0.45	156716	0.06	300	
Na	23	45	1	He	17178.867	17178.867	1.40	15076830	0.11	500000	
Mg	24	45	1	He	54386.066	54386.066	0.80	27962310	0.19	500000	
Al	27	45	1	He	20.535	20.535	2.98	7045	0.29	200000	
K	39	45	1	He	1968.006	1968.006	1.25	1118620	0.18	500000	
Ca	44	45	1	He	99503.473	99503.473	1.48	3061494	3.25	500000	
Ti	47	45	1	He	0.717	0.717	4.46	126	0.57	2500	
V	51	45	1	He	2.095	2.095	7.56	23143	0.01	10000	
Cr	52	45	1	He	1.585	1.585	2.03	9952	0.02	10000	
Mn	55	45	1	He	104.646	104.646	0.92	417123	0.03	10000	
Fe	56	45	1	He	323.592	323.592	2.33	1544679	0.02	200000	
Co	59	45	1	He	0.589	0.589	3.74	4169	0.01	10000	
Ni	60	45	1	He	4.279	4.279	4.51	8123	0.05	10000	
Cu	63	45	1	He	0.805	0.805	4.92	4218	0.02	10000	
Zn	66	45	1	He	8.963	8.963	2.00	10840	0.08	10000	
As	75	115	1	He	1.318	1.318	10.82	1237	0.11	10000	
Se	78	115	1	He	0.618	0.618	13.23	85	0.73	10000	
Sr	88	45	1	He	118.952	118.952	1.81	667014	0.02	10000	
Mo	95	103	1	He	3.305	3.305	2.75	8768	0.04	2000	
Ag	107	103	1	He	0.013	0.013	20.38	117	0.01	300	
Cd	111	115	1	He	0.316	0.316	9.57	2095	0.02	4000	
Sn	118	115	1	He	1.077	1.077	7.17	4738	0.02	2000	
Sb	123	165	1	He	0.142	0.142	15.26	739	0.02	300	
Ba	137	115	1	He	55.101	55.101	0.50	103470	0.05	10000	
W	182	159	1	He	0.334	0.334	34.20	9481	0.00	2500	
Tl	205	165	1	He	0.167	0.167	11.88	4243	0.00	5000	
Pb	208	165	1	He	0.367	0.367	1.51	12814	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	943810	0.83	1261090	74.84	30	120	
Sc	45	1	He	758615	0.72	955958	79.36	30	120	
Sc	45	2	NoGas	6602438	0.99	7862387	83.97	30	120	
Rh	103	1	He	2277434	0.66	2873429	79.26	30	120	
In	115	1	He	1538177	1.15	1922589	80.01	30	120	
Tb	159	1	He	4185778	0.75	4725151	88.59	30	120	
Ho	165	1	He	4258663	0.85	4813140	88.48	30	120	
Bi	209	1	He	3143211	1.37	3617562	86.89	30	120	

Sample Report

Sample Table

Sample Name	240-51025-k-5-a
Data File Name	160SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T19:35:47-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	3.528	3.528	2.89	87611	0.00	10000	
Be	9	6	2	NoGas	0.637	0.637	9.00	1989	0.03	10000	
B	11	6	2	NoGas	23.662	23.662	3.02	47313	0.05	300	
Na	23	45	1	He	6096.258	6096.258	0.97	5527191	0.11	500000	
Mg	24	45	1	He	43132.921	43132.921	0.95	22851102	0.19	500000	
Al	27	45	1	He	2.511	2.511	8.32	1396	0.18	200000	
K	39	45	1	He	1729.946	1729.946	1.34	1018596	0.17	500000	
Ca	44	45	1	He	118957.111	118957.111	1.29	3771305	3.15	500000	
Ti	47	45	1	He	0.425	0.425	11.37	79	0.54	2500	
V	51	45	1	He	2.689	2.689	6.02	28793	0.01	10000	
Cr	52	45	1	He	1.679	1.679	2.55	10743	0.02	10000	
Mn	55	45	1	He	0.442	0.442	0.37	3699	0.01	10000	
Fe	56	45	1	He	137.590	137.590	1.26	680936	0.02	200000	
Co	59	45	1	He	0.188	0.188	5.93	1407	0.01	10000	
Ni	60	45	1	He	-0.014	-0.014	-412.66	813	0.00	10000	
Cu	63	45	1	He	1.248	1.248	4.86	6401	0.02	10000	
Zn	66	45	1	He	278.789	278.789	0.74	296887	0.09	10000	
As	75	115	1	He	1.061	1.061	4.93	1068	0.10	10000	
Se	78	115	1	He	0.450	0.450	3.18	76	0.59	10000	
Sr	88	45	1	He	129.509	129.509	1.41	748237	0.02	10000	
Mo	95	103	1	He	0.902	0.902	2.26	2499	0.04	2000	
Ag	107	103	1	He	0.020	0.020	1.68	179	0.01	300	
Cd	111	115	1	He	0.361	0.361	17.98	2249	0.02	4000	
Sn	118	115	1	He	0.703	0.703	9.37	3430	0.02	2000	
Sb	123	165	1	He	0.089	0.089	2.97	504	0.02	300	
Ba	137	115	1	He	58.199	58.199	1.70	113594	0.05	10000	
W	182	159	1	He	0.163	0.163	55.70	7880	0.00	2500	
Tl	205	165	1	He	0.081	0.081	3.33	2175	0.00	5000	
Pb	208	165	1	He	8.030	8.030	0.96	272246	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	981606	2.51	1261090	77.84	30	120	
Sc	45	1	He	781721	1.58	955958	81.77	30	120	
Sc	45	2	NoGas	6896566	0.67	7862387	87.72	30	120	
Rh	103	1	He	2345004	2.65	2873429	81.61	30	120	
In	115	1	He	1599173	2.11	1922589	83.18	30	120	
Tb	159	1	He	4267873	0.84	4725151	90.32	30	120	
Ho	165	1	He	4334881	1.62	4813140	90.06	30	120	
Bi	209	1	He	3198982	0.67	3617562	88.43	30	120	

Sample Report

Sample Table

Sample Name	240-51025-n-6-a
Data File Name	161SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T19:39:26-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	5.954	5.954	1.69	121735	0.00	10000	
Be	9	6	2	NoGas	0.541	0.541	4.06	1793	0.03	10000	
B	11	6	2	NoGas	107.521	107.521	0.60	193289	0.06	300	
Na	23	45	1	He	23259.733	23259.733	1.18	21604134	0.11	500000	
Mg	24	45	1	He	58988.177	58988.177	1.30	32106568	0.18	500000	
Al	27	45	1	He	3.419	3.419	15.51	1736	0.20	200000	
K	39	45	1	He	2946.777	2946.777	1.92	1750235	0.17	500000	
Ca	44	45	1	He	105948.444	105948.444	1.02	3451153	3.07	500000	
Ti	47	45	1	He	0.368	0.368	41.26	71	0.52	2500	
V	51	45	1	He	2.984	2.984	7.68	32107	0.01	10000	
Cr	52	45	1	He	1.675	1.675	1.10	11018	0.02	10000	
Mn	55	45	1	He	215.254	215.254	1.62	906271	0.02	10000	
Fe	56	45	1	He	538.926	538.926	1.29	2718915	0.02	200000	
Co	59	45	1	He	3.344	3.344	1.58	24779	0.01	10000	
Ni	60	45	1	He	4.220	4.220	1.64	8497	0.05	10000	
Cu	63	45	1	He	0.366	0.366	9.16	2375	0.02	10000	
Zn	66	45	1	He	5.860	5.860	7.14	8094	0.07	10000	
As	75	115	1	He	1.497	1.497	3.35	1486	0.10	10000	
Se	78	115	1	He	0.259	0.259	17.43	64	0.41	10000	
Sr	88	45	1	He	132.131	132.131	1.75	784312	0.02	10000	
Mo	95	103	1	He	3.983	3.983	1.34	11010	0.04	2000	
Ag	107	103	1	He	0.015	0.015	21.94	143	0.01	300	
Cd	111	115	1	He	0.183	0.183	14.16	2028	0.01	4000	
Sn	118	115	1	He	0.648	0.648	8.07	3315	0.02	2000	
Sb	123	165	1	He	0.076	0.076	7.08	450	0.02	300	
Ba	137	115	1	He	79.977	79.977	1.47	161251	0.05	10000	
W	182	159	1	He	0.817	0.817	8.63	14978	0.01	2500	
Tl	205	165	1	He	0.059	0.059	6.79	1649	0.00	5000	
Pb	208	165	1	He	0.237	0.237	3.09	8739	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1028368	0.65	1261090	81.55	30	120	
Sc	45	1	He	803246	2.54	955958	84.03	30	120	
Sc	45	2	NoGas	7287894	0.58	7862387	92.69	30	120	
Rh	103	1	He	2375934	2.89	2873429	82.69	30	120	
In	115	1	He	1651958	2.07	1922589	85.92	30	120	
Tb	159	1	He	4340740	1.31	4725151	91.86	30	120	
Ho	165	1	He	4375423	1.40	4813140	90.91	30	120	
Bi	209	1	He	3160334	1.04	3617562	87.36	30	120	

Sample Report

Sample Table

Sample Name	240-51025-n-7-a
Data File Name	162SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T19:43:01-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	6.213	6.213	1.68	122995	0.01	10000	
Be	9	6	2	NoGas	0.429	0.429	17.81	1430	0.03	10000	
B	11	6	2	NoGas	110.880	110.880	2.45	196795	0.06	300	
Na	23	45	1	He	24545.620	24545.620	9.82	21959210	0.11	500000	
Mg	24	45	1	He	62510.344	62510.344	10.37	32762493	0.19	500000	
Al	27	45	1	He	5.016	5.016	13.69	2190	0.23	200000	
K	39	45	1	He	3101.747	3101.747	7.68	1775355	0.17	500000	
Ca	44	45	1	He	110405.500	110405.500	9.27	3465382	3.19	500000	
Ti	47	45	1	He	0.327	0.327	30.29	62	0.52	2500	
V	51	45	1	He	3.373	3.373	8.19	34185	0.01	10000	
Cr	52	45	1	He	1.739	1.739	9.74	10952	0.02	10000	
Mn	55	45	1	He	76.233	76.233	10.11	310342	0.02	10000	
Fe	56	45	1	He	568.842	568.842	8.69	2766071	0.02	200000	
Co	59	45	1	He	3.590	3.590	9.96	25619	0.01	10000	
Ni	60	45	1	He	4.540	4.540	8.17	8752	0.05	10000	
Cu	63	45	1	He	0.447	0.447	9.07	2664	0.02	10000	
Zn	66	45	1	He	3.469	3.469	11.13	5305	0.07	10000	
As	75	115	1	He	1.577	1.577	9.35	1487	0.11	10000	
Se	78	115	1	He	0.250	0.250	44.73	61	0.41	10000	
Sr	88	45	1	He	139.673	139.673	9.43	798890	0.02	10000	
Mo	95	103	1	He	4.256	4.256	8.13	11436	0.04	2000	
Ag	107	103	1	He	0.013	0.013	19.15	119	0.01	300	
Cd	111	115	1	He	0.232	0.232	26.25	2024	0.01	4000	
Sn	118	115	1	He	0.416	0.416	10.86	2256	0.02	2000	
Sb	123	165	1	He	0.068	0.068	12.32	403	0.02	300	
Ba	137	115	1	He	85.069	85.069	10.49	163759	0.05	10000	
W	182	159	1	He	0.805	0.805	8.02	14392	0.01	2500	
Tl	205	165	1	He	0.048	0.048	12.68	1335	0.00	5000	
Pb	208	165	1	He	0.234	0.234	6.45	8413	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1016886	1.06	1261090	80.64	30	120	
Sc	45	1	He	778675	9.97	955958	81.45	30	120	
Sc	45	2	NoGas	7179899	0.73	7862387	91.32	30	120	
Rh	103	1	He	2321674	9.80	2873429	80.80	30	120	
In	115	1	He	1588117	10.03	1922589	82.60	30	120	
Tb	159	1	He	4218422	6.74	4725151	89.28	30	120	
Ho	165	1	He	4271729	6.35	4813140	88.75	30	120	
Bi	209	1	He	3080691	6.00	3617562	85.16	30	120	

Sample Report

Sample Table

Sample Name	240-51025-n-9-a
Data File Name	163SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T19:46:37-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	3.516	3.516	2.72	89630	0.00	10000	
Be	9	6	2	NoGas	0.395	0.395	9.93	1311	0.03	10000	
B	11	6	2	NoGas	23.549	23.549	2.75	48312	0.05	300	
Na	23	45	1	He	12548.063	12548.063	16.28	11606727	0.11	500000	
Mg	24	45	1	He	35620.503	35620.503	17.22	19272273	0.18	500000	
Al	27	45	1	He	5.929	5.929	17.71	2570	0.23	200000	
K	39	45	1	He	1649.307	1649.307	16.61	995334	0.17	500000	
Ca	44	45	1	He	91866.819	91866.819	16.65	2976658	3.09	500000	
Ti	47	45	1	He	0.320	0.320	51.76	61	0.52	2500	
V	51	45	1	He	3.905	3.905	20.79	39709	0.01	10000	
Cr	52	45	1	He	2.935	2.935	19.57	17572	0.02	10000	
Mn	55	45	1	He	0.035	0.035	308.57	2071	0.00	10000	
Fe	56	45	1	He	12.567	12.567	20.23	70131	0.02	200000	
Co	59	45	1	He	0.116	0.116	17.53	916	0.01	10000	
Ni	60	45	1	He	0.008	0.008	1359.18	867	0.00	10000	
Cu	63	45	1	He	0.505	0.505	16.71	3030	0.02	10000	
Zn	66	45	1	He	4.297	4.297	18.79	6386	0.07	10000	
As	75	115	1	He	1.011	1.011	13.85	1046	0.10	10000	
Se	78	115	1	He	0.514	0.514	16.50	83	0.62	10000	
Sr	88	45	1	He	107.034	107.034	16.89	631803	0.02	10000	
Mo	95	103	1	He	1.628	1.628	18.26	4520	0.04	2000	
Ag	107	103	1	He	0.095	0.095	14.66	833	0.01	300	
Cd	111	115	1	He	0.169	0.169	15.29	2008	0.01	4000	
Sn	118	115	1	He	0.462	0.462	21.41	2508	0.02	2000	
Sb	123	165	1	He	0.052	0.052	33.19	328	0.02	300	
Ba	137	115	1	He	44.637	44.637	18.17	88323	0.05	10000	
W	182	159	1	He	0.158	0.158	46.89	7880	0.00	2500	
Tl	205	165	1	He	0.031	0.031	18.57	937	0.00	5000	
Pb	208	165	1	He	0.217	0.217	18.09	7936	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1006027	1.28	1261090	79.77	30	120	
Sc	45	1	He	812930	15.79	955958	85.04	30	120	
Sc	45	2	NoGas	7066759	0.76	7862387	89.88	30	120	
Rh	103	1	He	2419149	16.65	2873429	84.19	30	120	
In	115	1	He	1653143	16.27	1922589	85.99	30	120	
Tb	159	1	He	4344332	16.91	4725151	91.94	30	120	
Ho	165	1	He	4392510	17.34	4813140	91.26	30	120	
Bi	209	1	He	3187137	16.60	3617562	88.10	30	120	

Sample Report

Sample Table

Sample Name	240-51025-n-10-a
Data File Name	164SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T19:50:14-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	5.120	5.120	1.12	102945	0.00	10000	
Be	9	6	2	NoGas	0.403	0.403	13.39	1282	0.03	10000	
B	11	6	2	NoGas	19.147	19.147	3.49	39250	0.05	300	
Na	23	45	1	He	7495.548	7495.548	0.24	6844141	0.11	500000	
Mg	24	45	1	He	36691.559	36691.559	0.75	19592114	0.19	500000	
Al	27	45	1	He	1.769	1.769	14.95	1163	0.15	200000	
K	39	45	1	He	1793.543	1793.543	1.35	1062733	0.17	500000	
Ca	44	45	1	He	95656.310	95656.310	0.56	3056642	3.13	500000	
Ti	47	45	1	He	0.243	0.243	25.32	48	0.51	2500	
V	51	45	1	He	3.066	3.066	3.46	32152	0.01	10000	
Cr	52	45	1	He	1.560	1.560	2.40	10206	0.02	10000	
Mn	55	45	1	He	19.998	19.998	0.46	84329	0.02	10000	
Fe	56	45	1	He	559.186	559.186	0.29	2767130	0.02	200000	
Co	59	45	1	He	0.162	0.162	6.77	1232	0.01	10000	
Ni	60	45	1	He	0.012	0.012	315.45	868	0.00	10000	
Cu	63	45	1	He	0.343	0.343	0.88	2221	0.02	10000	
Zn	66	45	1	He	2.061	2.061	6.11	3892	0.05	10000	
As	75	115	1	He	1.989	1.989	3.61	1879	0.11	10000	
Se	78	115	1	He	0.243	0.243	11.27	62	0.40	10000	
Sr	88	45	1	He	107.509	107.509	0.24	626090	0.02	10000	
Mo	95	103	1	He	3.384	3.384	3.50	9376	0.04	2000	
Ag	107	103	1	He	0.007	0.007	42.46	68	0.01	300	
Cd	111	115	1	He	0.175	0.175	25.62	1975	0.01	4000	
Sn	118	115	1	He	0.375	0.375	17.08	2145	0.02	2000	
Sb	123	165	1	He	0.026	0.026	32.73	212	0.01	300	
Ba	137	115	1	He	57.228	57.228	1.75	113086	0.05	10000	
W	182	159	1	He	0.038	0.038	89.87	6531	0.00	2500	
Tl	205	165	1	He	0.021	0.021	17.85	673	0.00	5000	
Pb	208	165	1	He	0.171	0.171	3.76	6434	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	964767	1.32	1261090	76.50	30	120	
Sc	45	1	He	787829	0.27	955958	82.41	30	120	
Sc	45	2	NoGas	6715467	0.24	7862387	85.41	30	120	
Rh	103	1	He	2378782	1.28	2873429	82.79	30	120	
In	115	1	He	1618830	0.95	1922589	84.20	30	120	
Tb	159	1	He	4243765	0.75	4725151	89.81	30	120	
Ho	165	1	He	4333919	1.07	4813140	90.04	30	120	
Bi	209	1	He	3161770	1.44	3617562	87.40	30	120	

Sample Report

Sample Table

Sample Name	240-51025-h-11-a
Data File Name	165SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T19:53:49-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	2.666	2.666	0.13	72794	0.00	10000	
Be	9	6	2	NoGas	0.398	0.398	11.40	1211	0.03	10000	
B	11	6	2	NoGas	28.476	28.476	3.07	51899	0.05	300	
Na	23	45	1	He	5954.438	5954.438	0.56	5249920	0.11	500000	
Mg	24	45	1	He	34044.543	34044.543	0.42	17539324	0.19	500000	
Al	27	45	1	He	1.922	1.922	11.28	1170	0.16	200000	
K	39	45	1	He	1967.425	1967.425	0.55	1120548	0.18	500000	
Ca	44	45	1	He	93284.019	93284.019	0.17	2875947	3.24	500000	
Ti	47	45	1	He	0.405	0.405	42.50	73	0.55	2500	
V	51	45	1	He	2.944	2.944	2.87	30036	0.01	10000	
Cr	52	45	1	He	1.581	1.581	2.21	9952	0.02	10000	
Mn	55	45	1	He	214.259	214.259	0.63	853823	0.03	10000	
Fe	56	45	1	He	3889.980	3889.980	0.39	18530780	0.02	200000	
Co	59	45	1	He	2.767	2.767	0.58	19416	0.01	10000	
Ni	60	45	1	He	3.431	3.431	3.81	6688	0.05	10000	
Cu	63	45	1	He	0.382	0.382	3.27	2321	0.02	10000	
Zn	66	45	1	He	171.338	171.338	0.22	178055	0.10	10000	
As	75	115	1	He	51.693	51.693	0.58	42111	0.12	10000	
Se	78	115	1	He	0.342	0.342	9.74	65	0.53	10000	
Sr	88	45	1	He	117.862	117.862	0.80	662217	0.02	10000	
Mo	95	103	1	He	5.865	5.865	2.62	15558	0.04	2000	
Ag	107	103	1	He	0.017	0.017	23.59	147	0.01	300	
Cd	111	115	1	He	0.254	0.254	8.30	1984	0.01	4000	
Sn	118	115	1	He	0.376	0.376	6.34	2026	0.02	2000	
Sb	123	165	1	He	0.040	0.040	12.49	273	0.01	300	
Ba	137	115	1	He	198.369	198.369	0.40	369458	0.05	10000	
W	182	159	1	He	0.038	0.038	73.50	6431	0.00	2500	
Tl	205	165	1	He	0.070	0.070	2.89	1858	0.00	5000	
Pb	208	165	1	He	0.850	0.850	1.47	28737	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	922819	1.41	1261090	73.18	30	120	
Sc	45	1	He	760103	0.19	955958	79.51	30	120	
Sc	45	2	NoGas	6451518	0.30	7862387	82.06	30	120	
Rh	103	1	He	2282511	0.57	2873429	79.44	30	120	
In	115	1	He	1525903	0.19	1922589	79.37	30	120	
Tb	159	1	He	4177377	0.67	4725151	88.41	30	120	
Ho	165	1	He	4240967	1.38	4813140	88.11	30	120	
Bi	209	1	He	3115379	1.05	3617562	86.12	30	120	

Sample Report

Sample Table

Sample Name	240-51026-g-1-a
Data File Name	166SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T19:57:24-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	37.159	37.159	0.66	425352	0.01	10000	
Be	9	6	2	NoGas	0.356	0.356	6.64	1070	0.03	10000	
B	11	6	2	NoGas	148.974	148.974	0.47	231629	0.06	300	
Na	23	45	1	He	88729.563	88729.563	0.96	76102314	0.12	500000	
Mg	24	45	1	He	7993.296	7993.296	0.93	4022895	0.20	500000	
Al	27	45	1	He	1.821	1.821	22.91	1111	0.16	200000	
K	39	45	1	He	40560.143	40560.143	0.65	21724913	0.19	500000	
Ca	44	45	1	He	12464.571	12464.571	1.19	375736	3.32	500000	
Ti	47	45	1	He	0.219	0.219	23.39	41	0.53	2500	
V	51	45	1	He	2.992	2.992	4.24	29704	0.01	10000	
Cr	52	45	1	He	2.854	2.854	1.68	15941	0.02	10000	
Mn	55	45	1	He	5.441	5.441	1.40	22921	0.02	10000	
Fe	56	45	1	He	634.492	634.492	1.14	2957112	0.02	200000	
Co	59	45	1	He	0.126	0.126	10.08	918	0.01	10000	
Ni	60	45	1	He	0.282	0.282	15.84	1269	0.02	10000	
Cu	63	45	1	He	0.401	0.401	1.56	2347	0.02	10000	
Zn	66	45	1	He	2.526	2.526	10.72	4134	0.06	10000	
As	75	115	1	He	66.925	66.925	1.80	54545	0.12	10000	
Se	78	115	1	He	0.200	0.200	53.86	55	0.36	10000	
Sr	88	45	1	He	170.708	170.708	0.83	936475	0.02	10000	
Mo	95	103	1	He	4.145	4.145	1.77	10937	0.04	2000	
Ag	107	103	1	He	0.007	0.007	27.05	64	0.01	300	
Cd	111	115	1	He	0.134	0.134	22.77	1802	0.01	4000	
Sn	118	115	1	He	0.290	0.290	33.32	1696	0.02	2000	
Sb	123	165	1	He	0.027	0.027	22.39	211	0.01	300	
Ba	137	115	1	He	42.142	42.142	1.60	78616	0.05	10000	
W	182	159	1	He	0.157	0.157	45.30	7461	0.00	2500	
Tl	205	165	1	He	0.011	0.011	21.98	424	0.00	5000	
Pb	208	165	1	He	0.482	0.482	4.49	16325	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	901135	0.40	1261090	71.46	30	120	
Sc	45	1	He	742207	0.61	955958	77.64	30	120	
Sc	45	2	NoGas	6241948	1.06	7862387	79.39	30	120	
Rh	103	1	He	2267656	0.85	2873429	78.92	30	120	
In	115	1	He	1528170	1.52	1922589	79.49	30	120	
Tb	159	1	He	4075962	1.47	4725151	86.26	30	120	
Ho	165	1	He	4179343	0.58	4813140	86.83	30	120	
Bi	209	1	He	3034558	0.58	3617562	83.88	30	120	

Sample Report

Sample Table

Sample Name	240-51026-g-2-a
Data File Name	167SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T20:00:59-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	38.253	38.253	0.90	436129	0.01	10000	
Be	9	6	2	NoGas	0.339	0.339	18.02	967	0.04	10000	
B	11	6	2	NoGas	771.874	771.874	1.93	1102381	0.07	300	>LDR
Na	23	45	1	He	324453.060	324453.060	9.94	276561774	0.12	500000	
Mg	24	45	1	He	4375.558	4375.558	10.01	2190077	0.20	500000	
Al	27	45	1	He	33.571	33.571	6.30	10880	0.31	200000	
K	39	45	1	He	13071.396	13071.396	8.48	6994101	0.19	500000	
Ca	44	45	1	He	15674.795	15674.795	9.64	469629	3.34	500000	
Ti	47	45	1	He	1.836	1.836	16.41	303	0.61	2500	
V	51	45	1	He	2.899	2.899	10.70	28832	0.01	10000	
Cr	52	45	1	He	2.543	2.543	7.64	14360	0.02	10000	
Mn	55	45	1	He	105.239	105.239	9.63	408034	0.03	10000	
Fe	56	45	1	He	1814.817	1814.817	10.00	8394485	0.02	200000	
Co	59	45	1	He	0.108	0.108	18.45	789	0.01	10000	
Ni	60	45	1	He	0.682	0.682	8.52	1933	0.04	10000	
Cu	63	45	1	He	0.343	0.343	21.39	2078	0.02	10000	
Zn	66	45	1	He	3.387	3.387	17.27	4965	0.07	10000	
As	75	115	1	He	0.787	0.787	14.39	793	0.10	10000	
Se	78	115	1	He	0.214	0.214	64.10	56	0.38	10000	
Sr	88	45	1	He	354.827	354.827	10.89	1933662	0.02	10000	
Mo	95	103	1	He	0.123	0.123	31.36	353	0.03	2000	
Ag	107	103	1	He	0.009	0.009	9.58	81	0.01	300	
Cd	111	115	1	He	0.124	0.124	26.58	1788	0.01	4000	
Sn	118	115	1	He	0.372	0.372	25.28	1997	0.02	2000	
Sb	123	165	1	He	0.139	0.139	20.61	708	0.02	300	
Ba	137	115	1	He	1508.253	1508.253	8.95	2800302	0.05	10000	
W	182	159	1	He	0.073	0.073	33.20	6683	0.00	2500	
Tl	205	165	1	He	0.009	0.009	28.63	376	0.00	5000	
Pb	208	165	1	He	0.690	0.690	8.06	22994	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	851299	2.11	1261090	67.50	30	120	
Sc	45	1	He	741985	8.65	955958	77.62	30	120	
Sc	45	2	NoGas	6235051	1.12	7862387	79.30	30	120	
Rh	103	1	He	2199530	8.76	2873429	76.55	30	120	
In	115	1	He	1527961	7.54	1922589	79.47	30	120	
Tb	159	1	He	4124762	8.87	4725151	87.29	30	120	
Ho	165	1	He	4173724	7.65	4813140	86.72	30	120	
Bi	209	1	He	3021438	6.64	3617562	83.52	30	120	

Sample Report

Sample Table

Sample Name	240-51026-g-3-a
Data File Name	168SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T20:04:33-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	16.532	16.532	0.03	210148	0.01	10000	
Be	9	6	2	NoGas	0.277	0.277	2.46	833	0.03	10000	
B	11	6	2	NoGas	288.978	288.978	1.84	428673	0.07	300	
Na	23	45	1	He	116996.705	116996.705	0.01	98733100	0.12	500000	
Mg	24	45	1	He	6779.315	6779.315	0.71	3357574	0.20	500000	
Al	27	45	1	He	3.027	3.027	4.43	1460	0.21	200000	
K	39	45	1	He	4575.614	4575.614	0.69	2448492	0.19	500000	
Ca	44	45	1	He	27979.369	27979.369	0.60	829174	3.37	500000	
Ti	47	45	1	He	0.189	0.189	49.59	36	0.53	2500	
V	51	45	1	He	2.143	2.143	7.64	22663	0.01	10000	
Cr	52	45	1	He	1.712	1.712	2.73	10194	0.02	10000	
Mn	55	45	1	He	51.781	51.781	0.78	199590	0.03	10000	
Fe	56	45	1	He	777.579	777.579	0.59	3564189	0.02	200000	
Co	59	45	1	He	0.107	0.107	2.71	772	0.01	10000	
Ni	60	45	1	He	-0.096	-0.096	-86.85	626	-0.02	10000	
Cu	63	45	1	He	0.415	0.415	7.53	2372	0.02	10000	
Zn	66	45	1	He	1.922	1.922	3.71	3470	0.06	10000	
As	75	115	1	He	4.082	4.082	3.62	3391	0.12	10000	
Se	78	115	1	He	0.378	0.378	44.98	66	0.57	10000	
Sr	88	45	1	He	379.519	379.519	1.44	2048395	0.02	10000	
Mo	95	103	1	He	0.430	0.430	1.69	1145	0.04	2000	
Ag	107	103	1	He	0.010	0.010	35.84	90	0.01	300	
Cd	111	115	1	He	0.120	0.120	34.25	1736	0.01	4000	
Sn	118	115	1	He	0.418	0.418	35.74	2137	0.02	2000	
Sb	123	165	1	He	0.027	0.027	14.80	207	0.01	300	
Ba	137	115	1	He	768.073	768.073	0.17	1397615	0.05	10000	
W	182	159	1	He	0.033	0.033	64.78	6239	0.00	2500	
Tl	205	165	1	He	0.008	0.008	39.93	346	0.00	5000	
Pb	208	165	1	He	0.121	0.121	6.24	4528	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	874373	1.42	1261090	69.33	30	120	
Sc	45	1	He	730292	0.41	955958	76.39	30	120	
Sc	45	2	NoGas	6154908	0.06	7862387	78.28	30	120	
Rh	103	1	He	2207371	1.01	2873429	76.82	30	120	
In	115	1	He	1490876	0.48	1922589	77.55	30	120	
Tb	159	1	He	4087468	0.59	4725151	86.50	30	120	
Ho	165	1	He	4145665	0.42	4813140	86.13	30	120	
Bi	209	1	He	3022039	0.83	3617562	83.54	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2026839
Data File Name	169_CCV.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T20:08:09-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	55.938	5.557	488799	0.51	50	111.9	89.5	110.5	CCV Failed
Be	9	6	2	NoGas	63.026	7.528	133546	1.69	50	126.1	89.5	110.5	CCV Failed
B	11	6	2	NoGas	72.452	6.194	91721	1.44	50	144.9	89.5	110.5	CCV Failed
Na	23	45	1	He	24882.761	3.444	21650031	1.12	25000	99.5	89.5	110.5	
Mg	24	45	1	He	24825.740	3.404	12660895	1.17	25000	99.3	89.5	110.5	
Al	27	45	1	He	243.481	3.896	76804	0.76	250	97.4	89.5	110.5	
K	39	45	1	He	25642.770	2.995	13941234	1.57	25000	102.6	89.5	110.5	
Ca	44	45	1	He	24904.205	2.908	760568	1.66	25000	99.6	89.5	110.5	
Ti	47	45	1	He	49.983	3.618	8315	1.01	50	100.0	89.5	110.5	
V	51	45	1	He	49.907	3.678	404473	0.94	50	99.8	89.5	110.5	
Cr	52	45	1	He	50.255	3.534	251060	1.09	50	100.5	89.5	110.5	
Mn	55	45	1	He	251.108	3.744	990111	1.04	250	100.4	89.5	110.5	
Fe	56	45	1	He	12552.300	4.047	59163784	1.08	12500	100.4	89.5	110.5	
Co	59	45	1	He	50.127	3.555	347202	1.36	50	100.3	89.5	110.5	
Ni	60	45	1	He	50.225	3.385	85892	1.26	50	100.4	89.5	110.5	
Cu	63	45	1	He	50.331	3.366	225173	1.20	50	100.7	89.5	110.5	
Zn	66	45	1	He	50.390	4.433	52962	0.70	50	100.8	89.5	110.5	
As	75	115	1	He	48.397	5.061	39995	0.95	50	96.8	89.5	110.5	
Se	78	115	1	He	48.309	5.523	3508	1.96	50	96.6	89.5	110.5	
Sr	88	45	1	He	52.466	3.372	291868	1.19	50	104.9	89.5	110.5	
Mo	95	103	1	He	52.239	1.647	135803	1.46	50	104.5	89.5	110.5	
Ag	107	103	1	He	50.854	1.746	417508	1.55	50	101.7	89.5	110.5	
Cd	111	115	1	He	49.998	3.972	79473	1.84	50	100.0	89.5	110.5	
Sn	118	115	1	He	49.859	4.207	193904	1.76	50	99.7	89.5	110.5	
Sb	123	165	1	He	50.445	1.952	225327	0.94	50	100.9	89.5	110.5	
Ba	137	115	1	He	51.486	5.232	97264	0.56	50	103.0	89.5	110.5	
W	182	159	1	He	48.859	1.213	493910	1.43	50	97.7	89.5	110.5	
Tl	205	165	1	He	50.357	1.963	1196845	0.95	50	100.7	89.5	110.5	
Pb	208	165	1	He	50.978	2.085	1651273	0.79	50	102.0	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	710127	7.23	1261090	56.31	30	120	
Sc	45	1	He	753164	4.51	955958	78.79	30	120	
Sc	45	2	NoGas	4940126	4.73	7862387	62.83	30	120	
Rh	103	1	He	2243506	3.07	2873429	78.08	30	120	
In	115	1	He	1550408	5.59	1922589	80.64	30	120	
Tb	159	1	He	4076788	2.58	4725151	86.28	30	120	
Ho	165	1	He	4150851	2.84	4813140	86.24	30	120	
Bi	209	1	He	3083588	1.89	3617562	85.24	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	170_CCB.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T20:11:45-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.307	-27.0	39058	2.0	2	
Be	9	6	2	NoGas	0.237	19.8	752	16.3	1	
B	11	6	2	NoGas	3.643	18.7	13420	6.8	20	
Na	23	45	1	He	97.831	1.0	104483	2.4	1000	
Mg	24	45	1	He	-0.739	-23.9	2152	2.4	1000	
Al	27	45	1	He	1.035	19.5	869	5.7	50	
K	39	45	1	He	26.397	12.6	56556	1.5	1000	
Ca	44	45	1	He	71.059	3.3	2738	2.0	1000	
Ti	47	45	1	He	0.076	83.4	18	60.3	20	
V	51	45	1	He	-0.107	-41.7	5316	4.9	2	
Cr	52	45	1	He	0.106	30.1	2510	4.6	2	
Mn	55	45	1	He	1.307	1.2	6883	2.5	2	
Fe	56	45	1	He	15.246	17.3	77627	14.1	50	
Co	59	45	1	He	0.021	17.1	196	12.0	1	
Ni	60	45	1	He	-0.361	-7.7	194	25.0	2	
Cu	63	45	1	He	0.109	23.8	1066	11.8	2	
Zn	66	45	1	He	4.967	3.6	6594	1.2	20	
As	75	115	1	He	0.119	22.5	266	8.9	2	
Se	78	115	1	He	0.288	32.6	64	11.1	2	
Sr	88	45	1	He	0.052	3.9	406	3.3	10	
Mo	95	103	1	He	0.297	36.9	852	33.5	2	
Ag	107	103	1	He	0.012	11.8	108	12.5	0.2	
Cd	111	115	1	He	0.073	29.7	1785	1.1	0.2	
Sn	118	115	1	He	0.565	10.0	2874	7.3	10	
Sb	123	165	1	He	0.110	13.4	579	10.1	2	
Ba	137	115	1	He	0.053	36.8	132	29.2	5	
W	182	159	1	He	0.635	8.2	12298	3.4	10	
Tl	205	165	1	He	0.104	5.1	2640	2.9	0.5	
Pb	208	165	1	He	0.198	1.9	7045	0.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	903715	0.81	1261090	71.66	30	120	
Sc	45	1	He	743004	1.66	955958	77.72	30	120	
Sc	45	2	NoGas	6120541	0.82	7862387	77.85	30	120	
Rh	103	1	He	2343746	1.70	2873429	81.57	30	120	
In	115	1	He	1597304	1.00	1922589	83.08	30	120	
Tb	159	1	He	4099043	0.96	4725151	86.75	30	120	
Ho	165	1	He	4158292	1.94	4813140	86.39	30	120	
Bi	209	1	He	3173844	1.19	3617562	87.73	30	120	

Sample Report

Sample Table

Sample Name	240-51026-g-4-a
Data File Name	171SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T20:15:22-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	20.245	20.245	4.23	222424	0.01	10000	
Be	9	6	2	NoGas	0.311	0.311	27.10	867	0.04	10000	
B	11	6	2	NoGas	176.208	176.208	2.70	248803	0.07	300	
Na	23	45	1	He	38818.273	38818.273	5.22	33294612	0.12	500000	
Mg	24	45	1	He	18288.095	18288.095	5.87	9195462	0.20	500000	
Al	27	45	1	He	17.733	17.733	4.63	6028	0.29	200000	
K	39	45	1	He	3935.637	3935.637	5.92	2145059	0.18	500000	
Ca	44	45	1	He	107124.346	107124.346	6.18	3222528	3.32	500000	
Ti	47	45	1	He	0.465	0.465	21.40	81	0.57	2500	
V	51	45	1	He	1.800	1.800	4.56	20351	0.01	10000	
Cr	52	45	1	He	1.675	1.675	8.99	10167	0.02	10000	
Mn	55	45	1	He	168.758	168.758	6.39	656502	0.03	10000	
Fe	56	45	1	He	1004.358	1004.358	7.14	4671542	0.02	200000	
Co	59	45	1	He	0.287	0.287	11.33	2008	0.01	10000	
Ni	60	45	1	He	2.180	2.180	6.38	4438	0.05	10000	
Cu	63	45	1	He	0.336	0.336	17.97	2057	0.02	10000	
Zn	66	45	1	He	6.630	6.630	6.94	8258	0.08	10000	
As	75	115	1	He	1.354	1.354	5.83	1257	0.11	10000	
Se	78	115	1	He	0.374	0.374	5.02	67	0.55	10000	
Sr	88	45	1	He	605.647	605.647	6.00	3320005	0.02	10000	
Mo	95	103	1	He	0.997	0.997	3.67	2622	0.04	2000	
Ag	107	103	1	He	0.009	0.009	6.09	82	0.01	300	
Cd	111	115	1	He	0.169	0.169	28.40	1855	0.01	4000	
Sn	118	115	1	He	1.252	1.252	8.60	5368	0.02	2000	
Sb	123	165	1	He	0.233	0.233	18.27	1147	0.02	300	
Ba	137	115	1	He	1203.087	1203.087	8.42	2237108	0.05	10000	
W	182	159	1	He	0.199	0.199	6.92	8102	0.00	2500	
Tl	205	165	1	He	0.055	0.055	7.83	1483	0.00	5000	
Pb	208	165	1	He	1.745	1.745	8.93	58253	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	823053	2.45	1261090	65.27	30	120	
Sc	45	1	He	743469	5.97	955958	77.77	30	120	
Sc	45	2	NoGas	5527768	2.75	7862387	70.31	30	120	
Rh	103	1	He	2233082	7.20	2873429	77.71	30	120	
In	115	1	He	1530207	7.78	1922589	79.59	30	120	
Tb	159	1	He	4188427	7.53	4725151	88.64	30	120	
Ho	165	1	He	4252991	8.32	4813140	88.36	30	120	
Bi	209	1	He	3119476	5.39	3617562	86.23	30	120	

Sample Report

Sample Table

Sample Name	240-51026-g-5-a
Data File Name	172SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T20:18:56-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	10.019	10.019	1.78	145214	0.01	10000	
Be	9	6	2	NoGas	0.514	0.514	18.77	1411	0.04	10000	
B	11	6	2	NoGas	348.856	348.856	1.85	501601	0.07	300	>LDR
Na	23	45	1	He	210893.196	210893.196	9.60	168106901	0.13	500000	
Mg	24	45	1	He	2715.726	2715.726	9.53	1272060	0.21	500000	
Al	27	45	1	He	7088.394	7088.394	8.66	2037394	0.35	200000	
K	39	45	1	He	2026.113	2026.113	9.98	1046175	0.19	500000	
Ca	44	45	1	He	4304.225	4304.225	9.46	120982	3.56	500000	
Ti	47	45	1	He	28.220	28.220	11.20	4303	0.66	2500	
V	51	45	1	He	2.506	2.506	11.18	24079	0.01	10000	
Cr	52	45	1	He	2.112	2.112	9.92	11456	0.02	10000	
Mn	55	45	1	He	15.665	15.665	10.61	58181	0.03	10000	
Fe	56	45	1	He	2174.086	2174.086	9.23	9404861	0.02	200000	
Co	59	45	1	He	0.247	0.247	13.90	1625	0.02	10000	
Ni	60	45	1	He	1.168	1.168	10.44	2559	0.05	10000	
Cu	63	45	1	He	1.768	1.768	5.90	7797	0.02	10000	
Zn	66	45	1	He	14.666	14.666	10.94	15190	0.10	10000	
As	75	115	1	He	2.932	2.932	9.36	2354	0.12	10000	
Se	78	115	1	He	0.482	0.482	49.00	69	0.70	10000	
Sr	88	45	1	He	95.110	95.110	9.50	485062	0.02	10000	
Mo	95	103	1	He	1.402	1.402	11.11	3393	0.04	2000	
Ag	107	103	1	He	0.021	0.021	13.65	169	0.01	300	
Cd	111	115	1	He	0.142	0.142	30.61	1692	0.01	4000	
Sn	118	115	1	He	1.441	1.441	11.78	5653	0.03	2000	
Sb	123	165	1	He	0.379	0.379	6.41	1701	0.02	300	
Ba	137	115	1	He	66.509	66.509	8.65	114965	0.06	10000	
W	182	159	1	He	0.196	0.196	17.35	7587	0.00	2500	
Tl	205	165	1	He	0.030	0.030	9.18	826	0.00	5000	
Pb	208	165	1	He	2.676	2.676	7.30	83424	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	850142	1.52	1261090	67.41	30	120	
Sc	45	1	He	694062	9.44	955958	72.60	30	120	
Sc	45	2	NoGas	6204841	0.82	7862387	78.92	30	120	
Rh	103	1	He	2077701	10.15	2873429	72.31	30	120	
In	115	1	He	1423011	8.67	1922589	74.02	30	120	
Tb	159	1	He	3933518	8.55	4725151	83.25	30	120	
Ho	165	1	He	3982211	7.92	4813140	82.74	30	120	
Bi	209	1	He	2935146	7.92	3617562	81.14	30	120	

Sample Report

Sample Table

Sample Name	240-51026-g-6-a
Data File Name	173SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T20:22:32-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	16.339	16.339	3.59	207474	0.01	10000	
Be	9	6	2	NoGas	0.234	0.234	5.23	696	0.03	10000	
B	11	6	2	NoGas	1004.001	1004.001	2.22	1419950	0.07	300	>LDR
Na	23	45	1	He	337942.552	337942.552	1.08	274883782	0.12	500000	
Mg	24	45	1	He	1056.581	1056.581	2.33	506449	0.21	500000	
Al	27	45	1	He	732.190	732.190	1.02	215098	0.34	200000	
K	39	45	1	He	2319.232	2319.232	0.72	1216259	0.19	500000	
Ca	44	45	1	He	2854.471	2854.471	0.46	82060	3.48	500000	
Ti	47	45	1	He	6.959	6.959	14.51	1087	0.64	2500	
V	51	45	1	He	2.328	2.328	4.45	23225	0.01	10000	
Cr	52	45	1	He	2.365	2.365	3.30	12851	0.02	10000	
Mn	55	45	1	He	25.666	25.666	2.12	96226	0.03	10000	
Fe	56	45	1	He	439.465	439.465	1.57	1944641	0.02	200000	
Co	59	45	1	He	0.151	0.151	5.98	1030	0.01	10000	
Ni	60	45	1	He	0.739	0.739	3.54	1927	0.04	10000	
Cu	63	45	1	He	0.995	0.995	6.17	4708	0.02	10000	
Zn	66	45	1	He	5.798	5.798	6.63	7040	0.08	10000	
As	75	115	1	He	0.758	0.758	5.07	735	0.10	10000	
Se	78	115	1	He	0.335	0.335	33.39	61	0.55	10000	
Sr	88	45	1	He	54.906	54.906	1.52	285777	0.02	10000	
Mo	95	103	1	He	1.263	1.263	6.21	3173	0.04	2000	
Ag	107	103	1	He	0.011	0.011	27.43	92	0.01	300	
Cd	111	115	1	He	0.116	0.116	37.32	1685	0.01	4000	
Sn	118	115	1	He	0.614	0.614	17.42	2789	0.02	2000	
Sb	123	165	1	He	0.079	0.079	12.80	433	0.02	300	
Ba	137	115	1	He	122.671	122.671	0.23	217347	0.06	10000	
W	182	159	1	He	0.331	0.331	10.20	9029	0.00	2500	
Tl	205	165	1	He	0.013	0.013	20.52	467	0.00	5000	
Pb	208	165	1	He	0.848	0.848	2.29	27563	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	844354	0.76	1261090	66.95	30	120	
Sc	45	1	He	704042	0.89	955958	73.65	30	120	
Sc	45	2	NoGas	6136233	2.00	7862387	78.05	30	120	
Rh	103	1	He	2138877	0.87	2873429	74.44	30	120	
In	115	1	He	1451515	0.64	1922589	75.50	30	120	
Tb	159	1	He	4000208	0.87	4725151	84.66	30	120	
Ho	165	1	He	4074592	0.21	4813140	84.66	30	120	
Bi	209	1	He	2974412	1.02	3617562	82.22	30	120	

Sample Report

Sample Table

Sample Name	240-51026-g-7-a
Data File Name	174SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T20:26:10-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	21.703	21.703	1.15	258130	0.01	10000	
Be	9	6	2	NoGas	0.183	0.183	17.64	567	0.03	10000	
B	11	6	2	NoGas	416.609	416.609	0.55	592411	0.07	300	>LDR
Na	23	45	1	He	207698.598	207698.598	1.39	170659375	0.12	500000	
Mg	24	45	1	He	655.001	655.001	1.29	318078	0.21	500000	
Al	27	45	1	He	15.012	15.012	6.24	4969	0.30	200000	
K	39	45	1	He	8427.772	8427.772	1.29	4357355	0.19	500000	
Ca	44	45	1	He	5709.333	5709.333	1.61	165215	3.46	500000	
Ti	47	45	1	He	0.371	0.371	25.82	63	0.59	2500	
V	51	45	1	He	1.821	1.821	1.62	19634	0.01	10000	
Cr	52	45	1	He	1.481	1.481	1.09	8842	0.02	10000	
Mn	55	45	1	He	12.848	12.848	0.77	49520	0.03	10000	
Fe	56	45	1	He	258.453	258.453	1.47	1157922	0.02	200000	
Co	59	45	1	He	0.102	0.102	6.32	718	0.01	10000	
Ni	60	45	1	He	0.160	0.160	43.19	1020	0.02	10000	
Cu	63	45	1	He	0.347	0.347	3.97	2023	0.02	10000	
Zn	66	45	1	He	1.756	1.756	4.93	3219	0.05	10000	
As	75	115	1	He	1.516	1.516	4.34	1351	0.11	10000	
Se	78	115	1	He	0.195	0.195	50.90	53	0.37	10000	
Sr	88	45	1	He	255.807	255.807	1.45	1344516	0.02	10000	
Mo	95	103	1	He	0.509	0.509	5.35	1340	0.04	2000	
Ag	107	103	1	He	0.007	0.007	19.27	67	0.01	300	
Cd	111	115	1	He	0.032	0.032	40.36	1600	0.00	4000	
Sn	118	115	1	He	0.469	0.469	1.09	2319	0.02	2000	
Sb	123	165	1	He	0.180	0.180	5.36	892	0.02	300	
Ba	137	115	1	He	32.666	32.666	1.81	59284	0.06	10000	
W	182	159	1	He	0.322	0.322	27.85	9077	0.00	2500	
Tl	205	165	1	He	0.006	0.006	9.01	306	0.00	5000	
Pb	208	165	1	He	0.227	0.227	2.13	7964	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	842646	0.46	1261090	66.82	30	120	
Sc	45	1	He	711180	0.92	955958	74.39	30	120	
Sc	45	2	NoGas	6049940	0.60	7862387	76.95	30	120	
Rh	103	1	He	2197657	1.11	2873429	76.48	30	120	
In	115	1	He	1486459	1.02	1922589	77.32	30	120	
Tb	159	1	He	4062406	2.27	4725151	85.97	30	120	
Ho	165	1	He	4158431	0.64	4813140	86.40	30	120	
Bi	209	1	He	3073596	0.99	3617562	84.96	30	120	

Sample Report

Sample Table

Sample Name	240-51026-g-8-a
Data File Name	175SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T20:29:47-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	14.664	14.664	0.55	188263	0.01	10000	
Be	9	6	2	NoGas	0.175	0.175	29.71	544	0.03	10000	
B	11	6	2	NoGas	463.946	463.946	0.94	657873	0.07	300	>LDR
Na	23	45	1	He	229235.775	229235.775	9.97	179498482	0.13	500000	
Mg	24	45	1	He	7133.420	7133.420	10.31	3277659	0.22	500000	
Al	27	45	1	He	17.331	17.331	14.17	5382	0.32	200000	
K	39	45	1	He	3005.227	3005.227	10.27	1505579	0.20	500000	
Ca	44	45	1	He	20575.990	20575.990	10.48	565816	3.64	500000	
Ti	47	45	1	He	0.134	0.134	38.24	24	0.55	2500	
V	51	45	1	He	1.957	1.957	17.99	19662	0.01	10000	
Cr	52	45	1	He	1.985	1.985	10.05	10689	0.02	10000	
Mn	55	45	1	He	37.725	37.725	11.57	135260	0.03	10000	
Fe	56	45	1	He	408.401	408.401	9.75	1740374	0.02	200000	
Co	59	45	1	He	0.113	0.113	6.97	753	0.01	10000	
Ni	60	45	1	He	0.522	0.522	27.45	1520	0.03	10000	
Cu	63	45	1	He	0.445	0.445	9.60	2325	0.02	10000	
Zn	66	45	1	He	4.349	4.349	17.87	5438	0.08	10000	
As	75	115	1	He	1.808	1.808	8.16	1508	0.12	10000	
Se	78	115	1	He	0.216	0.216	63.73	52	0.42	10000	
Sr	88	45	1	He	394.831	394.831	9.58	1978072	0.02	10000	
Mo	95	103	1	He	1.663	1.663	12.53	4028	0.04	2000	
Ag	107	103	1	He	0.009	0.009	24.50	72	0.01	300	
Cd	111	115	1	He	0.037	0.037	39.70	1538	0.00	4000	
Sn	118	115	1	He	0.666	0.666	10.41	2908	0.02	2000	
Sb	123	165	1	He	0.878	0.878	11.41	3824	0.02	300	
Ba	137	115	1	He	315.227	315.227	8.96	544682	0.06	10000	
W	182	159	1	He	0.050	0.050	75.71	6127	0.00	2500	
Tl	205	165	1	He	0.005	0.005	62.35	250	0.00	5000	
Pb	208	165	1	He	0.712	0.712	11.68	22544	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	841430	1.57	1261090	66.72	30	120	
Sc	45	1	He	681965	9.46	955958	71.34	30	120	
Sc	45	2	NoGas	6060860	0.78	7862387	77.09	30	120	
Rh	103	1	He	2087090	10.59	2873429	72.63	30	120	
In	115	1	He	1422796	8.37	1922589	74.00	30	120	
Tb	159	1	He	3918277	9.95	4725151	82.92	30	120	
Ho	165	1	He	3983707	9.80	4813140	82.77	30	120	
Bi	209	1	He	2868699	10.24	3617562	79.30	30	120	

Sample Report

Sample Table

Sample Name	240-51026-g-9-a
Data File Name	176SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T20:33:24-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	10.342	10.342	1.25	143130	0.01	10000	
Be	9	6	2	NoGas	0.422	0.422	24.19	1145	0.04	10000	
B	11	6	2	NoGas	359.373	359.373	0.45	502051	0.07	300	>LDR
Na	23	45	1	He	209284.333	209284.333	1.79	165091142	0.13	500000	
Mg	24	45	1	He	2980.354	2980.354	1.75	1381212	0.22	500000	
Al	27	45	1	He	8474.662	8474.662	1.17	2409021	0.35	200000	
K	39	45	1	He	2002.250	2002.250	1.69	1023584	0.20	500000	
Ca	44	45	1	He	4242.611	4242.611	2.01	118004	3.60	500000	
Ti	47	45	1	He	31.965	31.965	2.16	4827	0.66	2500	
V	51	45	1	He	2.803	2.803	0.87	25960	0.01	10000	
Cr	52	45	1	He	2.447	2.447	2.94	12831	0.02	10000	
Mn	55	45	1	He	16.106	16.106	1.99	59176	0.03	10000	
Fe	56	45	1	He	2599.120	2599.120	1.87	11122750	0.02	200000	
Co	59	45	1	He	0.322	0.322	8.30	2075	0.02	10000	
Ni	60	45	1	He	1.465	1.465	3.15	2986	0.05	10000	
Cu	63	45	1	He	2.091	2.091	1.64	9005	0.02	10000	
Zn	66	45	1	He	13.648	13.648	2.22	14089	0.10	10000	
As	75	115	1	He	2.975	2.975	2.26	2394	0.12	10000	
Se	78	115	1	He	0.430	0.430	15.89	66	0.65	10000	
Sr	88	45	1	He	97.979	97.979	2.09	494459	0.02	10000	
Mo	95	103	1	He	1.433	1.433	3.06	3485	0.04	2000	
Ag	107	103	1	He	0.020	0.020	25.35	160	0.01	300	
Cd	111	115	1	He	0.117	0.117	49.28	1651	0.01	4000	
Sn	118	115	1	He	1.429	1.429	5.43	5631	0.03	2000	
Sb	123	165	1	He	0.402	0.402	6.41	1846	0.02	300	
Ba	137	115	1	He	69.297	69.297	0.80	120202	0.06	10000	
W	182	159	1	He	0.201	0.201	10.07	7721	0.00	2500	
Tl	205	165	1	He	0.015	0.015	21.98	511	0.00	5000	
Pb	208	165	1	He	2.983	2.983	1.21	95413	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	826213	0.37	1261090	65.52	30	120	
Sc	45	1	He	682773	0.88	955958	71.42	30	120	
Sc	45	2	NoGas	5979352	0.43	7862387	76.05	30	120	
Rh	103	1	He	2073936	0.17	2873429	72.18	30	120	
In	115	1	He	1420949	0.48	1922589	73.91	30	120	
Tb	159	1	He	3982048	1.28	4725151	84.27	30	120	
Ho	165	1	He	4073000	0.64	4813140	84.62	30	120	
Bi	209	1	He	2959789	0.60	3617562	81.82	30	120	

Sample Report

Sample Table

Sample Name	240-51026-g-10-a
Data File Name	177SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T20:37:02-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	17.735	17.735	0.80	219797	0.01	10000	
Be	9	6	2	NoGas	0.168	0.168	21.60	530	0.03	10000	
B	11	6	2	NoGas	175.203	175.203	1.92	254385	0.07	300	
Na	23	45	1	He	40081.025	40081.025	0.66	33148707	0.12	500000	
Mg	24	45	1	He	18796.859	18796.859	0.60	9116452	0.21	500000	
Al	27	45	1	He	16.297	16.297	2.33	5382	0.30	200000	
K	39	45	1	He	3980.455	3980.455	0.97	2092183	0.19	500000	
Ca	44	45	1	He	111067.609	111067.609	1.01	3222802	3.45	500000	
Ti	47	45	1	He	0.502	0.502	11.34	84	0.59	2500	
V	51	45	1	He	2.082	2.082	3.66	21738	0.01	10000	
Cr	52	45	1	He	1.738	1.738	0.44	10106	0.02	10000	
Mn	55	45	1	He	171.089	171.089	0.71	642071	0.03	10000	
Fe	56	45	1	He	1070.617	1070.617	0.71	4805299	0.02	200000	
Co	59	45	1	He	0.330	0.330	2.53	2222	0.01	10000	
Ni	60	45	1	He	2.980	2.980	2.99	5569	0.05	10000	
Cu	63	45	1	He	0.484	0.484	4.52	2616	0.02	10000	
Zn	66	45	1	He	7.251	7.251	4.60	8565	0.08	10000	
As	75	115	1	He	1.478	1.478	5.48	1314	0.11	10000	
Se	78	115	1	He	0.275	0.275	22.48	58	0.47	10000	
Sr	88	45	1	He	627.928	627.928	0.76	3320345	0.02	10000	
Mo	95	103	1	He	1.080	1.080	3.62	2786	0.04	2000	
Ag	107	103	1	He	0.008	0.008	27.01	70	0.01	300	
Cd	111	115	1	He	0.033	0.033	170.48	1592	0.00	4000	
Sn	118	115	1	He	1.124	1.124	5.20	4731	0.02	2000	
Sb	123	165	1	He	0.199	0.199	3.41	972	0.02	300	
Ba	137	115	1	He	1202.495	1202.495	0.28	2169300	0.06	10000	
W	182	159	1	He	-0.019	-0.019	-43.77	5757	0.00	2500	
Tl	205	165	1	He	0.002	0.002	66.04	200	0.00	5000	
Pb	208	165	1	He	2.233	2.233	1.84	72595	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	845854	0.41	1261090	67.07	30	120	
Sc	45	1	He	715455	0.91	955958	74.84	30	120	
Sc	45	2	NoGas	6084607	1.31	7862387	77.39	30	120	
Rh	103	1	He	2190745	0.92	2873429	76.24	30	120	
In	115	1	He	1478076	0.17	1922589	76.88	30	120	
Tb	159	1	He	4112583	0.15	4725151	87.04	30	120	
Ho	165	1	He	4132023	0.66	4813140	85.85	30	120	
Bi	209	1	He	3022741	1.04	3617562	83.56	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2026839
Data File Name	178_CCV.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T20:40:35-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	43.340	1.330	472685	0.87	50	86.7	89.5	110.5	CCV Failed
Be	9	6	2	NoGas	48.515	2.266	126178	1.45	50	97.0	89.5	110.5	
B	11	6	2	NoGas	54.536	1.921	86560	2.21	50	109.1	89.5	110.5	
Na	23	45	1	He	24531.156	1.039	21266785	1.21	25000	98.1	89.5	110.5	
Mg	24	45	1	He	24499.303	0.752	12449445	1.54	25000	98.0	89.5	110.5	
Al	27	45	1	He	241.566	1.284	75937	1.34	250	96.6	89.5	110.5	
K	39	45	1	He	25486.433	0.785	13804645	1.39	25000	101.9	89.5	110.5	
Ca	44	45	1	He	24549.988	0.964	746935	1.50	25000	98.2	89.5	110.5	
Ti	47	45	1	He	50.156	2.712	8312	0.54	50	100.3	89.5	110.5	
V	51	45	1	He	49.437	0.335	399324	1.85	50	98.9	89.5	110.5	
Cr	52	45	1	He	49.327	1.555	245550	0.63	50	98.7	89.5	110.5	
Mn	55	45	1	He	249.298	1.069	979485	1.16	250	99.7	89.5	110.5	
Fe	56	45	1	He	12349.269	1.138	58003829	1.16	12500	98.8	89.5	110.5	
Co	59	45	1	He	49.154	1.348	339216	1.11	50	98.3	89.5	110.5	
Ni	60	45	1	He	48.901	1.092	83342	1.17	50	97.8	89.5	110.5	
Cu	63	45	1	He	49.797	1.044	221975	1.14	50	99.6	89.5	110.5	
Zn	66	45	1	He	49.575	0.659	51957	1.53	50	99.1	89.5	110.5	
As	75	115	1	He	47.587	3.298	39490	1.25	50	95.2	89.5	110.5	
Se	78	115	1	He	47.867	2.688	3491	1.80	50	95.7	89.5	110.5	
Sr	88	45	1	He	52.472	0.804	290842	1.37	50	104.9	89.5	110.5	
Mo	95	103	1	He	51.547	0.892	136287	1.56	50	103.1	89.5	110.5	
Ag	107	103	1	He	49.863	0.307	416368	1.69	50	99.7	89.5	110.5	
Cd	111	115	1	He	49.014	3.882	78216	1.16	50	98.0	89.5	110.5	
Sn	118	115	1	He	50.167	2.188	195906	2.49	50	100.3	89.5	110.5	
Sb	123	165	1	He	49.518	0.566	224827	0.53	50	99.0	89.5	110.5	
Ba	137	115	1	He	51.668	3.683	98005	0.90	50	103.3	89.5	110.5	
W	182	159	1	He	47.631	1.407	493410	1.29	50	95.3	89.5	110.5	
Tl	205	165	1	He	49.509	1.145	1196089	1.41	50	99.0	89.5	110.5	
Pb	208	165	1	He	50.070	0.992	1648634	1.10	50	100.1	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	868466	0.82	1261090	68.87	30	120	
Sc	45	1	He	749756	2.17	955958	78.43	30	120	
Sc	45	2	NoGas	6034129	0.45	7862387	76.75	30	120	
Rh	103	1	He	2281140	1.93	2873429	79.39	30	120	
In	115	1	He	1555394	4.52	1922589	80.90	30	120	
Tb	159	1	He	4175718	1.02	4725151	88.37	30	120	
Ho	165	1	He	4217721	0.95	4813140	87.63	30	120	
Bi	209	1	He	3108849	1.75	3617562	85.94	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	179_CCB.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T20:44:12-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.347	-18.0	38314	1.4	2	
Be	9	6	2	NoGas	0.113	38.3	411	28.6	1	
B	11	6	2	NoGas	4.032	11.1	13798	5.6	20	
Na	23	45	1	He	119.888	13.3	121721	4.1	1000	
Mg	24	45	1	He	-0.391	-253.2	2311	23.7	1000	
Al	27	45	1	He	0.992	60.3	838	10.3	50	
K	39	45	1	He	26.757	45.9	55931	0.5	1000	
Ca	44	45	1	He	71.783	17.9	2714	2.2	1000	
Ti	47	45	1	He	0.202	100.9	36	78.1	20	
V	51	45	1	He	-0.143	-27.3	4989	6.6	2	
Cr	52	45	1	He	0.090	58.8	2402	6.0	2	
Mn	55	45	1	He	1.327	19.0	6848	4.3	2	
Fe	56	45	1	He	14.441	20.4	72633	10.9	50	
Co	59	45	1	He	0.025	20.5	226	17.0	1	
Ni	60	45	1	He	-0.367	-5.3	180	9.3	2	
Cu	63	45	1	He	0.151	13.9	1242	14.5	2	
Zn	66	45	1	He	4.897	19.6	6413	3.1	20	
As	75	115	1	He	0.076	48.7	229	2.0	2	
Se	78	115	1	He	0.193	27.6	58	16.5	2	
Sr	88	45	1	He	0.070	4.8	502	8.8	10	
Mo	95	103	1	He	0.278	23.6	798	13.7	2	
Ag	107	103	1	He	0.011	19.8	103	9.7	0.2	
Cd	111	115	1	He	0.020	144.0	1723	14.7	0.2	
Sn	118	115	1	He	0.387	18.7	2167	2.9	10	
Sb	123	165	1	He	0.111	18.8	586	9.3	2	
Ba	137	115	1	He	0.078	30.9	180	14.7	5	
W	182	159	1	He	0.548	13.2	11527	8.9	10	
Tl	205	165	1	He	0.097	10.7	2481	4.1	0.5	
Pb	208	165	1	He	0.205	10.9	7323	4.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	889748	1.05	1261090	70.55	30	120	
Sc	45	1	He	738997	12.20	955958	77.30	30	120	
Sc	45	2	NoGas	6066091	0.68	7862387	77.15	30	120	
Rh	103	1	He	2367539	12.50	2873429	82.39	30	120	
In	115	1	He	1616362	12.43	1922589	84.07	30	120	
Tb	159	1	He	4153676	13.40	4725151	87.91	30	120	
Ho	165	1	He	4219025	12.65	4813140	87.66	30	120	
Bi	209	1	He	3217329	11.22	3617562	88.94	30	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA-2012514
Data File Name	180ICSA.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T20:47:51-04:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.490	-8.7	38946	0.6	4	
Be	9	6	2	NoGas	0.107	28.5	393	20.9	2	
B	11	6	2	NoGas	2.822	14.3	11915	3.0	20	
Na	23	45	1	He	47570.562	0.9	40323661	0.2	75200	
Mg	24	45	1	He	48029.322	0.5	23872181	0.5	75200	
Al	27	45	1	He	45620.690	0.8	13927482	1.0	75200	
K	39	45	1	He	49484.062	0.0	26180568	0.9	75200	
Ca	44	45	1	He	49541.325	0.4	1473881	0.5	75200	
Ti	47	45	1	He	988.354	0.9	160173	0.3	1505	
V	51	45	1	He	0.207	19.6	7699	4.9	4	
Cr	52	45	1	He	0.729	2.8	5490	2.7	4	
Mn	55	45	1	He	-0.045	-53.5	1603	6.4	4	
Fe	56	45	1	He	48405.797	0.5	222399364	0.6	75200	
Co	59	45	1	He	0.044	7.0	351	6.1	2	
Ni	60	45	1	He	-0.330	-9.9	243	22.8	4	
Cu	63	45	1	He	0.354	2.9	2118	3.0	4	
Zn	66	45	1	He	-0.518	-3.8	1061	2.0	20	
As	75	115	1	He	0.110	24.5	244	10.3	4	
Se	78	115	1	He	0.237	32.0	57	10.3	4	
Sr	88	45	1	He	0.362	7.5	2078	6.3	20	
Mo	95	103	1	He	1056.514	2.4	2649307	0.8	1505	
Ag	107	103	1	He	0.016	7.5	133	6.6	1	
Cd	111	115	1	He	-0.101	-48.2	1426	7.2	1	
Sn	118	115	1	He	0.124	38.0	1052	18.0	20	
Sb	123	165	1	He	0.049	22.7	314	16.2	4	
Ba	137	115	1	He	0.069	2.3	156	4.5	2	
W	182	159	1	He	0.284	16.7	8873	5.3	20	
Tl	205	165	1	He	0.033	9.4	962	7.7	2	
Pb	208	165	1	He	0.181	1.7	6638	1.5	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	884141	3.12	1261090	70.11	30	120	
Sc	45	1	He	733369	0.93	955958	76.72	30	120	
Sc	45	2	NoGas	6406120	1.37	7862387	81.48	30	120	
Rh	103	1	He	2164605	1.73	2873429	75.33	30	120	
In	115	1	He	1511341	2.85	1922589	78.61	30	120	
Tb	159	1	He	4140702	0.38	4725151	87.63	30	120	
Ho	165	1	He	4246976	0.19	4813140	88.24	30	120	
Bi	209	1	He	3083182	0.36	3617562	85.23	30	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB-2012515
Data File Name	181ICAB.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T20:51:24-04:00
Sample Type	ICSAB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	45	2	NoGas	84.005	3.886	882227	0.47	100	84.0	49.5	150.5	
Be	9	6	2	NoGas	105.915	3.952	273188	0.63	100	105.9	49.5	150.5	
B	11	6	2	NoGas	110.687	3.818	166503	0.63	100	110.7	49.5	150.5	
Na	23	45	1	He	48342.859	0.126	42901818	1.08	50000	96.7	49.5	150.5	
Mg	24	45	1	He	48441.941	0.630	25207729	1.55	50000	96.9	49.5	150.5	
Al	27	45	1	He	46352.654	0.988	14814766	1.43	50000	92.7	49.5	150.5	
K	39	45	1	He	50885.522	0.307	28183169	1.06	50000	101.8	49.5	150.5	
Ca	44	45	1	He	51411.303	1.977	1601377	2.71	50000	102.8	49.5	150.5	
Ti	47	45	1	He	1113.412	0.732	188909	1.21	1100	101.2	49.5	150.5	
V	51	45	1	He	99.877	0.348	819670	1.26	100	99.9	49.5	150.5	
Cr	52	45	1	He	99.924	0.774	507376	1.46	100	99.9	49.5	150.5	
Mn	55	45	1	He	101.273	0.796	408608	1.06	100	101.3	49.5	150.5	
Fe	56	45	1	He	49478.008	0.271	237989999	1.02	50000	99.0	49.5	150.5	
Co	59	45	1	He	100.739	0.448	711960	1.02	100	100.7	49.5	150.5	
Ni	60	45	1	He	100.783	0.253	175043	1.20	100	100.8	49.5	150.5	
Cu	63	45	1	He	99.861	0.063	455283	1.01	100	99.9	49.5	150.5	
Zn	66	45	1	He	100.810	1.347	106504	2.24	100	100.8	49.5	150.5	
As	75	115	1	He	97.304	0.326	83246	1.34	100	97.3	49.5	150.5	
Se	78	115	1	He	99.558	0.587	7454	0.59	100	99.6	49.5	150.5	
Sr	88	45	1	He	107.496	0.332	610060	0.76	100	107.5	49.5	150.5	
Mo	95	103	1	He	1196.174	0.900	3155134	0.56	1100	108.7	49.5	150.5	
Ag	107	103	1	He	99.833	0.390	831905	0.74	100	99.8	49.5	150.5	
Cd	111	115	1	He	97.186	0.281	158590	0.87	100	97.2	49.5	150.5	
Sn	118	115	1	He	102.216	1.195	411541	0.12	100	102.2	49.5	150.5	
Sb	123	165	1	He	100.536	0.555	468636	0.74	100	100.5	49.5	150.5	
Ba	137	115	1	He	104.773	0.512	205299	1.03	100	104.8	49.5	150.5	
W	182	159	1	He	96.229	0.972	1018230	0.85	100	96.2	49.5	150.5	
Tl	205	165	1	He	100.160	1.397	2484452	1.02	100	100.2	49.5	150.5	
Pb	208	165	1	He	99.773	1.476	3372674	1.23	100	99.8	49.5	150.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	862528	4.18	1261090	68.40	30	120	
Sc	45	1	He	767753	0.96	955958	80.31	30	120	
Sc	45	2	NoGas	6074812	4.16	7862387	77.26	30	120	
Rh	103	1	He	2276414	0.95	2873429	79.22	30	120	
In	115	1	He	1605268	1.15	1922589	83.50	30	120	
Tb	159	1	He	4292030	1.51	4725151	90.83	30	120	
Ho	165	1	He	4330982	0.82	4813140	89.98	30	120	
Bi	209	1	He	3164292	1.35	3617562	87.47	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-182288/1-a
Data File Name	182_Blk.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T20:54:55-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.149	-97.5	34771	5.1	2	
Be	9	6	2	NoGas	0.256	11.0	689	7.0	1	
B	11	6	2	NoGas	13.171	5.7	23849	1.3	20	
Na	23	45	1	He	127.262	4.6	133641	2.6	1000	
Mg	24	45	1	He	3.104	26.3	4212	9.9	1000	
Al	27	45	1	He	6.072	6.5	2500	3.9	50	
K	39	45	1	He	47.508	9.3	69927	3.0	1000	
Ca	44	45	1	He	70.350	10.8	2801	9.2	1000	
Ti	47	45	1	He	2.931	2.9	501	2.5	20	
V	51	45	1	He	1.676	8.6	19952	4.8	2	
Cr	52	45	1	He	1.278	2.6	8493	1.3	2	
Mn	55	45	1	He	-0.116	-13.1	1390	3.1	2	
Fe	56	45	1	He	61.378	6.5	301454	6.9	50	Blank Failed
Co	59	45	1	He	0.046	14.9	382	11.7	1	
Ni	60	45	1	He	-0.173	-2.1	523	2.3	2	
Cu	63	45	1	He	0.668	12.9	3638	11.8	2	
Zn	66	45	1	He	5.900	1.6	7763	0.2	20	
As	75	115	1	He	0.358	10.3	487	6.2	2	
Se	78	115	1	He	0.264	19.7	65	6.8	2	
Sr	88	45	1	He	0.265	10.2	1625	8.7	10	
Mo	95	103	1	He	7.377	35.8	20949	35.1	2	Blank Failed
Ag	107	103	1	He	0.018	7.2	170	7.1	0.2	
Cd	111	115	1	He	0.061	51.5	1835	3.6	0.2	
Sn	118	115	1	He	1.104	10.9	5231	9.8	10	
Sb	123	165	1	He	0.232	9.2	1186	9.1	2	
Ba	137	115	1	He	0.253	13.2	542	12.3	5	
W	182	159	1	He	0.955	8.2	16498	5.2	10	
Tl	205	165	1	He	0.160	19.6	4168	18.3	0.5	
Pb	208	165	1	He	0.259	7.5	9518	6.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	776686	3.33	1261090	61.59	30	120	
Sc	45	1	He	765602	1.23	955958	80.09	30	120	
Sc	45	2	NoGas	5232725	1.98	7862387	66.55	30	120	
Rh	103	1	He	2448599	0.70	2873429	85.22	30	120	
In	115	1	He	1659561	0.73	1922589	86.32	30	120	
Tb	159	1	He	4357501	0.19	4725151	92.22	30	120	
Ho	165	1	He	4384871	0.58	4813140	91.10	30	120	
Bi	209	1	He	3420368	0.77	3617562	94.55	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-182288/2-a
Data File Name	183_LCS.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T20:58:33-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	2	NoGas	-0.483	-0.483	-8.672	37515	1.74	1000	0.0	79.5	120.5	LCS Failed
Be	9	2	NoGas	972.534	972.534	1.556	2531902	0.72	1000	97.3	79.5	120.5	
B	11	2	NoGas	111.468	111.468	2.288	169284	3.38	100	111.5	79.5	120.5	
Na	23	1	He	9842.602	9842.602	0.299	8384210	0.13	10000	98.4	79.5	120.5	
Mg	24	1	He	9701.699	9701.699	1.879	4838208	1.60	10000	97.0	79.5	120.5	
Al	27	1	He	9285.415	9285.415	1.971	2843450	1.68	10000	92.9	79.5	120.5	
K	39	1	He	10110.172	10110.172	1.226	5398085	1.04	10000	101.1	79.5	120.5	
Ca	44	1	He	9866.183	9866.183	1.605	294860	1.32	10000	98.7	79.5	120.5	
Ti	47	1	He	99.749	99.749	2.992	16217	2.70	100	99.7	79.5	120.5	
V	51	1	He	975.470	975.470	1.815	7615524	1.52	1000	97.5	79.5	120.5	
Cr	52	1	He	973.769	973.769	2.616	4719305	2.35	1000	97.4	79.5	120.5	
Mn	55	1	He	1004.139	1004.139	2.478	3865365	2.20	1000	100.4	79.5	120.5	
Fe	56	1	He	9993.871	9993.871	1.049	46057260	0.76	10000	99.9	79.5	120.5	
Co	59	1	He	996.799	996.799	0.998	6748500	0.80	1000	99.7	79.5	120.5	
Ni	60	1	He	1035.998	1035.998	2.977	1716532	3.19	1000	103.6	79.5	120.5	
Cu	63	1	He	1020.802	1020.802	1.459	4453276	1.38	1000	102.1	79.5	120.5	
Zn	66	1	He	1010.146	1010.146	0.657	1008064	0.36	1000	101.0	79.5	120.5	
As	75	1	He	922.409	922.409	1.702	762501	0.79	1000	92.2	79.5	120.5	
Se	78	1	He	956.649	956.649	1.545	68976	0.95	1000	95.7	79.5	120.5	
Sr	88	1	He	1066.051	1066.051	1.275	5794952	0.99	1000	106.6	79.5	120.5	
Mo	95	1	He	103.842	103.842	2.190	275375	0.69	100	103.8	79.5	120.5	
Ag	107	1	He	101.481	101.481	2.104	850045	0.61	100	101.5	79.5	120.5	
Cd	111	1	He	984.748	984.748	1.711	1540671	0.77	1000	98.5	79.5	120.5	
Sn	118	1	He	1040.672	1040.672	0.386	4051467	2.10	100	1040.7	79.5	120.5	LCS Failed
Sb	123	1	He	94.444	94.444	0.952	434481	0.93	100	94.4	79.5	120.5	
Ba	137	1	He	1055.482	1055.482	0.792	2002514	3.24	1000	105.5	79.5	120.5	
W	182	1	He	95.679	95.679	0.365	998907	1.43	100	95.7	79.5	120.5	
Tl	205	1	He	247.279	247.279	1.345	6053165	0.61	250	98.9	79.5	120.5	
Pb	208	1	He	995.742	995.742	1.420	33212324	0.23	1000	99.6	79.5	120.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	870038	1.34	1261090	68.99	30	120	
Sc	45	1	He	735527	0.29	955958	76.94	30	120	
Sc	45	2	NoGas	6158730	1.07	7862387	78.33	30	120	
Rh	103	1	He	2288710	1.52	2873429	79.65	30	120	
In	115	1	He	1554278	2.46	1922589	80.84	30	120	
Tb	159	1	He	4234224	1.14	4725151	89.61	30	120	
Ho	165	1	He	4274629	1.64	4813140	88.81	30	120	
Bi	209	1	He	3144915	2.96	3617562	86.93	30	120	

Sample Report

Sample Table

Sample Name	240-50925-q-1-d
Data File Name	184SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T21:01:54-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	1.186	1.186	7.48	53686	0.00	10000	
Be	9	6	2	NoGas	0.910	0.910	7.08	2408	0.04	10000	
B	11	6	2	NoGas	123.744	123.744	0.77	181835	0.07	300	
Na	23	45	1	He	26808.873	26808.873	1.67	22399968	0.12	500000	
Mg	24	45	1	He	20883.674	20883.674	0.76	10229171	0.20	500000	
Al	27	45	1	He	9.938	9.938	1.88	3524	0.28	200000	
K	39	45	1	He	2587.580	2587.580	0.62	1388095	0.19	500000	
Ca	44	45	1	He	96187.407	96187.407	0.68	2819124	3.41	500000	
Ti	47	45	1	He	0.719	0.719	29.73	120	0.60	2500	
V	51	45	1	He	2.165	2.165	7.01	22591	0.01	10000	
Cr	52	45	1	He	1.569	1.569	2.76	9401	0.02	10000	
Mn	55	45	1	He	0.969	0.969	8.02	5411	0.02	10000	
Fe	56	45	1	He	22.437	22.437	4.58	108190	0.02	200000	
Co	59	45	1	He	0.427	0.427	11.02	2892	0.01	10000	
Ni	60	45	1	He	1.910	1.910	2.83	3884	0.05	10000	
Cu	63	45	1	He	1.074	1.074	3.84	5171	0.02	10000	
Zn	66	45	1	He	3.937	3.937	2.65	5406	0.07	10000	
As	75	115	1	He	3.106	3.106	5.40	2633	0.12	10000	
Se	78	115	1	He	1.650	1.650	17.83	155	1.07	10000	
Sr	88	45	1	He	232.879	232.879	1.08	1243758	0.02	10000	
Mo	95	103	1	He	5.346	5.346	3.37	13885	0.04	2000	
Ag	107	103	1	He	0.016	0.016	28.08	142	0.01	300	
Cd	111	115	1	He	0.248	0.248	12.98	1939	0.01	4000	
Sn	118	115	1	He	2.133	2.133	20.83	8580	0.02	2000	
Sb	123	165	1	He	0.338	0.338	4.13	1622	0.02	300	
Ba	137	115	1	He	42.146	42.146	1.13	77161	0.05	10000	
W	182	159	1	He	0.931	0.931	11.17	15549	0.01	2500	
Tl	205	165	1	He	0.233	0.233	14.16	5782	0.00	5000	
Pb	208	165	1	He	0.342	0.342	4.13	11887	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	845772	0.31	1261090	67.07	30	120	
Sc	45	1	He	722620	0.70	955958	75.59	30	120	
Sc	45	2	NoGas	6071257	0.54	7862387	77.22	30	120	
Rh	103	1	He	2234184	0.67	2873429	77.75	30	120	
In	115	1	He	1499601	0.77	1922589	78.00	30	120	
Tb	159	1	He	4170956	0.58	4725151	88.27	30	120	
Ho	165	1	He	4220638	0.42	4813140	87.69	30	120	
Bi	209	1	He	3066232	0.64	3617562	84.76	30	120	

Sample Report

Sample Table

Sample Name	SD 240-50925-q-1-d@5
Data File Name	185SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T21:05:33-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	-0.147	-0.147	-36.05	42070	0.00	10000	
Be	9	6	2	NoGas	0.445	0.445	11.16	1326	0.03	10000	
B	11	6	2	NoGas	25.876	25.876	2.49	47309	0.05	300	
Na	23	45	1	He	5611.156	5611.156	0.19	5005085	0.11	500000	
Mg	24	45	1	He	4424.432	4424.432	0.13	2307748	0.19	500000	
Al	27	45	1	He	4.904	4.904	4.06	2138	0.23	200000	
K	39	45	1	He	533.350	533.350	0.85	339265	0.16	500000	
Ca	44	45	1	He	19365.669	19365.669	0.37	604360	3.20	500000	
Ti	47	45	1	He	0.152	0.152	32.72	31	0.49	2500	
V	51	45	1	He	0.465	0.465	7.71	10168	0.00	10000	
Cr	52	45	1	He	0.362	0.362	9.25	3895	0.01	10000	
Mn	55	45	1	He	0.398	0.398	6.93	3464	0.01	10000	
Fe	56	45	1	He	2.139	2.139	3.13	17332	0.01	200000	
Co	59	45	1	He	0.104	0.104	2.08	794	0.01	10000	
Ni	60	45	1	He	0.066	0.066	77.50	940	0.01	10000	
Cu	63	45	1	He	0.234	0.234	5.31	1671	0.01	10000	
Zn	66	45	1	He	1.258	1.258	9.55	2961	0.04	10000	
As	75	115	1	He	0.500	0.500	16.01	618	0.08	10000	
Se	78	115	1	He	0.263	0.263	13.67	65	0.40	10000	
Sr	88	45	1	He	47.521	47.521	0.92	270132	0.02	10000	
Mo	95	103	1	He	1.075	1.075	4.77	3030	0.04	2000	
Ag	107	103	1	He	0.005	0.005	33.54	53	0.01	300	
Cd	111	115	1	He	-0.013	-0.013	-122.70	1725	0.00	4000	
Sn	118	115	1	He	0.259	0.259	16.27	1730	0.01	2000	
Sb	123	165	1	He	0.062	0.062	17.37	384	0.02	300	
Ba	137	115	1	He	8.148	8.148	3.22	16675	0.05	10000	
W	182	159	1	He	0.184	0.184	40.90	8262	0.00	2500	
Tl	205	165	1	He	0.058	0.058	3.10	1615	0.00	5000	
Pb	208	165	1	He	0.146	0.146	3.78	5637	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	911530	0.73	1261090	72.28	30	120	
Sc	45	1	He	768793	0.34	955958	80.42	30	120	
Sc	45	2	NoGas	6329747	0.77	7862387	80.51	30	120	
Rh	103	1	He	2395298	1.52	2873429	83.36	30	120	
In	115	1	He	1673935	0.79	1922589	87.07	30	120	
Tb	159	1	He	4353534	0.50	4725151	92.14	30	120	
Ho	165	1	He	4382041	0.51	4813140	91.04	30	120	
Bi	209	1	He	3286983	0.24	3617562	90.86	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-50925-q-1-d
Data File Name	186SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T21:09:11-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	1.075	1.075	3.49	53609	0.00	10000	
Be	9	6	2	NoGas	968.761	968.761	1.03	2490982	0.04	10000	
B	11	6	2	NoGas	221.102	221.102	1.13	324110	0.07	300	
Na	23	45	1	He	36428.345	36428.345	1.96	29763564	0.12	500000	
Mg	24	45	1	He	30806.217	30806.217	2.19	14756085	0.21	500000	
Al	27	45	1	He	9705.237	9705.237	1.53	2856082	0.34	200000	
K	39	45	1	He	12891.959	12891.959	2.45	6602280	0.20	500000	
Ca	44	45	1	He	105161.905	105161.905	1.04	3015142	3.49	500000	
Ti	47	45	1	He	104.371	104.371	4.14	16319	0.64	2500	
V	51	45	1	He	1016.727	1016.727	2.02	7626801	0.01	10000	
Cr	52	45	1	He	1012.783	1012.783	1.89	4716574	0.02	10000	
Mn	55	45	1	He	1037.734	1037.734	2.54	3837970	0.03	10000	
Fe	56	45	1	He	10368.892	10368.892	1.99	45915419	0.02	200000	
Co	59	45	1	He	1006.642	1006.642	1.99	6548412	0.02	10000	
Ni	60	45	1	He	1040.578	1040.578	2.21	1656488	0.06	10000	
Cu	63	45	1	He	1014.036	1014.036	1.94	4250687	0.02	10000	
Zn	66	45	1	He	1002.300	1002.300	2.32	961029	0.10	10000	
As	75	115	1	He	974.732	974.732	3.08	755462	0.13	10000	
Se	78	115	1	He	982.855	982.855	3.74	66429	1.48	10000	
Sr	88	45	1	He	1329.919	1329.919	2.95	6944993	0.02	10000	
Mo	95	103	1	He	112.282	112.282	2.35	284826	0.04	2000	
Ag	107	103	1	He	101.513	101.513	1.68	813483	0.01	300	
Cd	111	115	1	He	1009.893	1009.893	3.08	1481374	0.07	4000	
Sn	118	115	1	He	1101.630	1101.630	2.44	4020908	0.03	2000	
Sb	123	165	1	He	95.100	95.100	1.61	428483	0.02	300	
Ba	137	115	1	He	1162.505	1162.505	3.13	2067016	0.06	10000	
W	182	159	1	He	99.081	99.081	2.98	1009192	0.01	2500	
Tl	205	165	1	He	247.831	247.831	0.38	5942838	0.00	5000	
Pb	208	165	1	He	986.252	986.252	1.03	32221780	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	859199	0.61	1261090	68.13	30	120	
Sc	45	1	He	707053	3.46	955958	73.96	30	120	
Sc	45	2	NoGas	6190503	0.96	7862387	78.74	30	120	
Rh	103	1	He	2189867	3.01	2873429	76.21	30	120	
In	115	1	He	1458088	4.12	1922589	75.84	30	120	
Tb	159	1	He	4134536	3.30	4725151	87.50	30	120	
Ho	165	1	He	4186901	1.78	4813140	86.99	30	120	
Bi	209	1	He	3043582	1.11	3617562	84.13	30	120	

Sample Report

Sample Table

Sample Name	240-50925-q-1-e ms
Data File Name	187SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T21:12:34-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	1.208	1.208	4.44	54470	0.00	10000	
Be	9	6	2	NoGas	980.644	980.644	2.48	2487824	0.04	10000	
B	11	6	2	NoGas	231.862	231.862	1.42	335011	0.07	300	
Na	23	45	1	He	37609.828	37609.828	0.57	31194028	0.12	500000	
Mg	24	45	1	He	31207.710	31207.710	0.92	15175830	0.21	500000	
Al	27	45	1	He	9373.644	9373.644	2.23	2800014	0.33	200000	
K	39	45	1	He	12748.767	12748.767	0.60	6628995	0.19	500000	
Ca	44	45	1	He	109789.336	109789.336	1.48	3194775	3.44	500000	
Ti	47	45	1	He	101.113	101.113	1.89	16036	0.63	2500	
V	51	45	1	He	989.750	989.750	0.69	7537284	0.01	10000	
Cr	52	45	1	He	992.007	992.007	0.47	4689719	0.02	10000	
Mn	55	45	1	He	1002.965	1002.965	1.58	3766140	0.03	10000	
Fe	56	45	1	He	10064.299	10064.299	0.60	45242724	0.02	200000	
Co	59	45	1	He	969.926	969.926	0.76	6405282	0.02	10000	
Ni	60	45	1	He	1009.068	1009.068	0.10	1630771	0.06	10000	
Cu	63	45	1	He	986.859	986.859	0.85	4199434	0.02	10000	
Zn	66	45	1	He	971.675	971.675	0.75	945910	0.10	10000	
As	75	115	1	He	965.680	965.680	1.70	746716	0.13	10000	
Se	78	115	1	He	978.991	978.991	1.75	66026	1.48	10000	
Sr	88	45	1	He	1294.563	1294.563	0.77	6864320	0.02	10000	
Mo	95	103	1	He	111.691	111.691	1.50	284332	0.04	2000	
Ag	107	103	1	He	100.536	100.536	0.85	808466	0.01	300	
Cd	111	115	1	He	994.499	994.499	1.74	1455452	0.07	4000	
Sn	118	115	1	He	1108.854	1108.854	1.15	4037476	0.03	2000	
Sb	123	165	1	He	93.012	93.012	0.80	421615	0.02	300	
Ba	137	115	1	He	1148.495	1148.495	1.81	2037401	0.06	10000	
W	182	159	1	He	98.038	98.038	1.91	1004386	0.01	2500	
Tl	205	165	1	He	242.423	242.423	1.38	5847386	0.00	5000	
Pb	208	165	1	He	968.448	968.448	0.73	31830200	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	847879	1.38	1261090	67.23	30	120	
Sc	45	1	He	717449	0.05	955958	75.05	30	120	
Sc	45	2	NoGas	6133858	0.80	7862387	78.02	30	120	
Rh	103	1	He	2196796	0.93	2873429	76.45	30	120	
In	115	1	He	1453808	1.92	1922589	75.62	30	120	
Tb	159	1	He	4156176	0.95	4725151	87.96	30	120	
Ho	165	1	He	4211611	0.49	4813140	87.50	30	120	
Bi	209	1	He	3031408	0.74	3617562	83.80	30	120	

Sample Report

Sample Table

Sample Name	240-50925-q-1-f msd
Data File Name	188SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T21:15:59-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	1.148	1.148	8.44	54892	0.00	10000	
Be	9	6	2	NoGas	976.906	976.906	1.14	2501561	0.04	10000	
B	11	6	2	NoGas	232.804	232.804	0.99	339469	0.07	300	
Na	23	45	1	He	37149.088	37149.088	0.90	31357477	0.12	500000	
Mg	24	45	1	He	31165.402	31165.402	1.39	15423348	0.20	500000	
Al	27	45	1	He	9250.522	9250.522	1.78	2812326	0.33	200000	
K	39	45	1	He	12650.468	12650.468	0.33	6694790	0.19	500000	
Ca	44	45	1	He	109188.103	109188.103	0.91	3233632	3.38	500000	
Ti	47	45	1	He	101.276	101.276	1.34	16346	0.62	2500	
V	51	45	1	He	989.508	989.508	0.44	7668859	0.01	10000	
Cr	52	45	1	He	983.275	983.275	0.68	4730884	0.02	10000	
Mn	55	45	1	He	992.060	992.060	0.55	3791222	0.03	10000	
Fe	56	45	1	He	10026.929	10026.929	0.71	45873208	0.02	200000	
Co	59	45	1	He	971.422	971.422	0.94	6528857	0.01	10000	
Ni	60	45	1	He	1000.884	1000.884	1.36	1646237	0.06	10000	
Cu	63	45	1	He	982.890	982.890	0.42	4256636	0.02	10000	
Zn	66	45	1	He	961.722	961.722	1.03	952815	0.10	10000	
As	75	115	1	He	969.322	969.322	1.28	754133	0.13	10000	
Se	78	115	1	He	983.354	983.354	1.14	66728	1.47	10000	
Sr	88	45	1	He	1290.657	1290.657	0.48	6964826	0.02	10000	
Mo	95	103	1	He	113.202	113.202	1.20	289596	0.04	2000	
Ag	107	103	1	He	101.044	101.044	1.11	816506	0.01	300	
Cd	111	115	1	He	999.343	999.343	1.40	1471489	0.07	4000	
Sn	118	115	1	He	1109.892	1109.892	1.26	4065832	0.03	2000	
Sb	123	165	1	He	94.728	94.728	1.05	428763	0.02	300	
Ba	137	115	1	He	1160.593	1160.593	1.50	2071504	0.06	10000	
W	182	159	1	He	97.695	97.695	1.36	1007286	0.01	2500	
Tl	205	165	1	He	245.777	245.777	0.77	5919909	0.00	5000	
Pb	208	165	1	He	978.448	978.448	0.51	32113264	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	855634	0.39	1261090	67.85	30	120	
Sc	45	1	He	730156	0.47	955958	76.38	30	120	
Sc	45	2	NoGas	6251833	0.95	7862387	79.52	30	120	
Rh	103	1	He	2207637	1.21	2873429	76.83	30	120	
In	115	1	He	1462538	0.96	1922589	76.07	30	120	
Tb	159	1	He	4182616	1.68	4725151	88.52	30	120	
Ho	165	1	He	4205601	1.23	4813140	87.38	30	120	
Bi	209	1	He	3032822	0.43	3617562	83.84	30	120	

Sample Report

Sample Table

Sample Name	240-50925-f-2-e
Data File Name	189SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T21:19:22-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	1.261	1.261	3.24	55493	0.00	10000	
Be	9	6	2	NoGas	1.931	1.931	2.21	5075	0.04	10000	
B	11	6	2	NoGas	187.466	187.466	1.89	276106	0.07	300	
Na	23	45	1	He	31991.315	31991.315	6.79	26826167	0.12	500000	
Mg	24	45	1	He	23915.300	23915.300	7.57	11753085	0.20	500000	
Al	27	45	1	He	5.465	5.465	6.34	2191	0.25	200000	
K	39	45	1	He	3656.374	3656.374	7.01	1951423	0.19	500000	
Ca	44	45	1	He	97336.100	97336.100	7.38	2862636	3.40	500000	
Ti	47	45	1	He	0.559	0.559	19.66	96	0.58	2500	
V	51	45	1	He	2.102	2.102	11.91	22175	0.01	10000	
Cr	52	45	1	He	1.602	1.602	8.25	9597	0.02	10000	
Mn	55	45	1	He	0.185	0.185	41.29	2459	0.01	10000	
Fe	56	45	1	He	17.045	17.045	2.81	84278	0.02	200000	
Co	59	45	1	He	0.554	0.554	8.67	3758	0.01	10000	
Ni	60	45	1	He	0.604	0.604	15.90	1766	0.03	10000	
Cu	63	45	1	He	0.918	0.918	7.16	4518	0.02	10000	
Zn	66	45	1	He	5.327	5.327	5.42	6800	0.08	10000	
As	75	115	1	He	1.938	1.938	16.22	1699	0.11	10000	
Se	78	115	1	He	1.504	1.504	14.20	145	1.04	10000	
Sr	88	45	1	He	234.543	234.543	7.03	1257163	0.02	10000	
Mo	95	103	1	He	2.547	2.547	11.02	6616	0.04	2000	
Ag	107	103	1	He	0.018	0.018	29.17	157	0.01	300	
Cd	111	115	1	He	0.377	0.377	10.44	2147	0.02	4000	
Sn	118	115	1	He	2.496	2.496	8.69	10018	0.02	2000	
Sb	123	165	1	He	0.352	0.352	5.20	1669	0.02	300	
Ba	137	115	1	He	69.947	69.947	6.91	128262	0.05	10000	
W	182	159	1	He	1.728	1.728	9.41	23281	0.01	2500	
Tl	205	165	1	He	0.350	0.350	9.38	8548	0.00	5000	
Pb	208	165	1	He	0.422	0.422	9.70	14403	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	859722	1.09	1261090	68.17	30	120	
Sc	45	1	He	727282	6.14	955958	76.08	30	120	
Sc	45	2	NoGas	6188205	0.57	7862387	78.71	30	120	
Rh	103	1	He	2230522	3.84	2873429	77.63	30	120	
In	115	1	He	1506441	6.23	1922589	78.35	30	120	
Tb	159	1	He	4106285	4.72	4725151	86.90	30	120	
Ho	165	1	He	4185475	5.14	4813140	86.96	30	120	
Bi	209	1	He	3049527	4.32	3617562	84.30	30	120	

Sample Report

Sample Table

Sample Name	240-50925-f-3-e
Data File Name	190SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T21:22:58-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	0.476	0.476	129.75	51704	0.00	10000	
Be	9	6	2	NoGas	1.241	1.241	28.19	3337	0.04	10000	
B	11	6	2	NoGas	44.827	44.827	34.91	72100	0.06	300	
Na	23	45	1	He	41893.069	41893.069	1.43	35066272	0.12	500000	
Mg	24	45	1	He	27485.979	27485.979	1.06	13490122	0.20	500000	
Al	27	45	1	He	7.114	7.114	6.71	2679	0.27	200000	
K	39	45	1	He	1855.863	1855.863	0.95	1009295	0.18	500000	
Ca	44	45	1	He	99347.154	99347.154	1.63	2917669	3.41	500000	
Ti	47	45	1	He	0.267	0.267	38.11	48	0.56	2500	
V	51	45	1	He	1.984	1.984	7.40	21238	0.01	10000	
Cr	52	45	1	He	1.421	1.421	0.79	8717	0.02	10000	
Mn	55	45	1	He	215.059	215.059	1.32	816393	0.03	10000	
Fe	56	45	1	He	6.254	6.254	6.82	34984	0.02	200000	
Co	59	45	1	He	0.524	0.524	1.48	3545	0.01	10000	
Ni	60	45	1	He	0.644	0.644	8.59	1828	0.04	10000	
Cu	63	45	1	He	0.609	0.609	3.75	3183	0.02	10000	
Zn	66	45	1	He	3.080	3.080	9.86	4575	0.07	10000	
As	75	115	1	He	1.069	1.069	8.26	1006	0.11	10000	
Se	78	115	1	He	0.798	0.798	20.12	95	0.84	10000	
Sr	88	45	1	He	236.637	236.637	1.87	1266409	0.02	10000	
Mo	95	103	1	He	1.279	1.279	9.68	3295	0.04	2000	
Ag	107	103	1	He	0.010	0.010	23.19	84	0.01	300	
Cd	111	115	1	He	0.200	0.200	25.12	1863	0.01	4000	
Sn	118	115	1	He	0.945	0.945	5.71	4116	0.02	2000	
Sb	123	165	1	He	0.117	0.117	12.96	612	0.02	300	
Ba	137	115	1	He	48.126	48.126	1.49	87907	0.05	10000	
W	182	159	1	He	0.645	0.645	16.84	12398	0.01	2500	
Tl	205	165	1	He	0.148	0.148	5.03	3684	0.00	5000	
Pb	208	165	1	He	0.249	0.249	2.43	8724	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	915194	27.59	1261090	72.57	30	120	
Sc	45	1	He	724127	0.72	955958	75.75	30	120	
Sc	45	2	NoGas	6916934	29.46	7862387	87.97	30	120	
Rh	103	1	He	2191796	0.98	2873429	76.28	30	120	
In	115	1	He	1496361	1.89	1922589	77.83	30	120	
Tb	159	1	He	4097221	0.14	4725151	86.71	30	120	
Ho	165	1	He	4172607	1.16	4813140	86.69	30	120	
Bi	209	1	He	3014152	1.22	3617562	83.32	30	120	

Sample Report

Sample Table

Sample Name	240-50925-f-4-e
Data File Name	191SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T21:26:35-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	0.155	0.155	28.35	49271	0.00	10000	
Be	9	6	2	NoGas	0.935	0.935	8.11	2752	0.03	10000	
B	11	6	2	NoGas	117.523	117.523	2.08	192746	0.06	300	
Na	23	45	1	He	19220.999	19220.999	0.60	16925696	0.11	500000	
Mg	24	45	1	He	12224.700	12224.700	1.60	6308880	0.19	500000	
Al	27	45	1	He	9.238	9.238	7.22	3490	0.26	200000	
K	39	45	1	He	1337.952	1337.952	0.89	777106	0.17	500000	
Ca	44	45	1	He	62345.704	62345.704	1.31	1925151	3.24	500000	
Ti	47	45	1	He	0.246	0.246	70.85	47	0.53	2500	
V	51	45	1	He	2.217	2.217	6.78	24210	0.01	10000	
Cr	52	45	1	He	1.472	1.472	3.43	9421	0.02	10000	
Mn	55	45	1	He	31.125	31.125	1.07	125796	0.02	10000	
Fe	56	45	1	He	3.436	3.436	5.54	23347	0.01	200000	
Co	59	45	1	He	0.673	0.673	5.30	4773	0.01	10000	
Ni	60	45	1	He	12.118	12.118	1.71	21586	0.06	10000	
Cu	63	45	1	He	0.736	0.736	4.92	3920	0.02	10000	
Zn	66	45	1	He	3.439	3.439	10.26	5181	0.07	10000	
As	75	115	1	He	1.549	1.549	0.97	1461	0.11	10000	
Se	78	115	1	He	0.699	0.699	4.49	93	0.75	10000	
Sr	88	45	1	He	128.929	128.929	0.51	725472	0.02	10000	
Mo	95	103	1	He	4.764	4.764	2.23	12926	0.04	2000	
Ag	107	103	1	He	0.010	0.010	37.12	97	0.01	300	
Cd	111	115	1	He	0.153	0.153	32.75	1887	0.01	4000	
Sn	118	115	1	He	0.573	0.573	4.49	2867	0.02	2000	
Sb	123	165	1	He	0.308	0.308	7.97	1516	0.02	300	
Ba	137	115	1	He	26.149	26.149	0.82	50314	0.05	10000	
W	182	159	1	He	0.195	0.195	35.56	8169	0.00	2500	
Tl	205	165	1	He	0.134	0.134	5.52	3456	0.00	5000	
Pb	208	165	1	He	0.205	0.205	2.84	7503	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	942083	1.69	1261090	74.70	30	120	
Sc	45	1	He	761252	0.49	955958	79.63	30	120	
Sc	45	2	NoGas	6896008	0.73	7862387	87.71	30	120	
Rh	103	1	He	2332771	0.21	2873429	81.18	30	120	
In	115	1	He	1575654	1.08	1922589	81.95	30	120	
Tb	159	1	He	4244045	0.66	4725151	89.82	30	120	
Ho	165	1	He	4305423	1.04	4813140	89.45	30	120	
Bi	209	1	He	3134193	0.68	3617562	86.64	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2026839
Data File Name	192_CCV.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T21:30:12-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	42.576	0.640	474543	0.96	50	85.2	89.5	110.5	CCV Failed
Be	9	6	2	NoGas	49.477	1.854	126856	1.61	50	99.0	89.5	110.5	
B	11	6	2	NoGas	53.499	2.030	83840	1.55	50	107.0	89.5	110.5	
Na	23	45	1	He	24847.029	4.893	21765649	1.81	25000	99.4	89.5	110.5	
Mg	24	45	1	He	24584.644	5.611	12618893	1.07	25000	98.3	89.5	110.5	
Al	27	45	1	He	240.278	4.390	76338	1.86	250	96.1	89.5	110.5	
K	39	45	1	He	25663.147	4.817	14044856	1.42	25000	102.7	89.5	110.5	
Ca	44	45	1	He	24830.485	4.852	763333	1.60	25000	99.3	89.5	110.5	
Ti	47	45	1	He	49.926	4.812	8364	2.94	50	99.9	89.5	110.5	
V	51	45	1	He	49.920	4.954	407352	2.00	50	99.8	89.5	110.5	
Cr	52	45	1	He	49.898	4.865	251010	2.36	50	99.8	89.5	110.5	
Mn	55	45	1	He	251.569	4.539	998852	1.83	250	100.6	89.5	110.5	
Fe	56	45	1	He	12552.639	4.383	59588127	2.16	12500	100.4	89.5	110.5	
Co	59	45	1	He	50.091	4.400	349367	2.00	50	100.2	89.5	110.5	
Ni	60	45	1	He	49.825	3.368	85850	3.40	50	99.7	89.5	110.5	
Cu	63	45	1	He	50.501	4.630	227471	1.63	50	101.0	89.5	110.5	
Zn	66	45	1	He	50.584	5.625	53524	1.99	50	101.2	89.5	110.5	
As	75	115	1	He	47.589	4.070	40265	2.37	50	95.2	89.5	110.5	
Se	78	115	1	He	48.555	3.255	3611	3.01	50	97.1	89.5	110.5	
Sr	88	45	1	He	52.822	5.193	295800	1.79	50	105.6	89.5	110.5	
Mo	95	103	1	He	51.308	2.980	137025	2.64	50	102.6	89.5	110.5	
Ag	107	103	1	He	50.033	3.270	421921	2.07	50	100.1	89.5	110.5	
Cd	111	115	1	He	49.000	4.118	79735	2.12	50	98.0	89.5	110.5	
Sn	118	115	1	He	49.595	4.932	197333	1.65	50	99.2	89.5	110.5	
Sb	123	165	1	He	49.517	3.082	227446	1.81	50	99.0	89.5	110.5	
Ba	137	115	1	He	50.897	4.504	98422	1.58	50	101.8	89.5	110.5	
W	182	159	1	He	48.416	3.075	500163	1.48	50	96.8	89.5	110.5	
Tl	205	165	1	He	49.297	3.560	1204629	1.22	50	98.6	89.5	110.5	
Pb	208	165	1	He	49.698	3.173	1655350	1.34	50	99.4	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	856090	0.42	1261090	67.88	30	120	
Sc	45	1	He	758909	5.92	955958	79.39	30	120	
Sc	45	2	NoGas	6156720	1.02	7862387	78.31	30	120	
Rh	103	1	He	2306166	5.12	2873429	80.26	30	120	
In	115	1	He	1586735	5.88	1922589	82.53	30	120	
Tb	159	1	He	4168551	4.37	4725151	88.22	30	120	
Ho	165	1	He	4270474	4.40	4813140	88.73	30	120	
Bi	209	1	He	3131410	3.35	3617562	86.56	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	193_CCB.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T21:33:48-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.422	-8.1	38315	1.5	2	
Be	9	6	2	NoGas	0.616	17.3	1796	16.4	1	
B	11	6	2	NoGas	2.931	4.9	12475	1.0	20	
Na	23	45	1	He	83.345	7.7	93584	3.3	1000	
Mg	24	45	1	He	0.296	111.0	2734	13.0	1000	
Al	27	45	1	He	1.164	25.6	924	9.0	50	
K	39	45	1	He	21.693	35.8	54910	1.6	1000	
Ca	44	45	1	He	71.270	7.4	2793	5.2	1000	
Ti	47	45	1	He	0.124	45.5	26	27.1	20	
V	51	45	1	He	-0.166	-29.2	4953	12.4	2	
Cr	52	45	1	He	0.101	59.4	2519	3.0	2	
Mn	55	45	1	He	1.288	12.2	6910	2.0	2	
Fe	56	45	1	He	14.966	20.9	77248	11.5	50	
Co	59	45	1	He	0.052	14.4	419	9.6	1	
Ni	60	45	1	He	-0.377	-4.2	169	9.7	2	
Cu	63	45	1	He	0.115	22.5	1113	13.5	2	
Zn	66	45	1	He	4.635	11.0	6359	2.4	20	
As	75	115	1	He	0.115	50.7	271	12.1	2	
Se	78	115	1	He	0.208	78.0	60	13.8	2	
Sr	88	45	1	He	0.080	18.9	569	14.6	10	
Mo	95	103	1	He	0.358	50.4	1030	42.9	2	
Ag	107	103	1	He	0.010	29.1	97	31.6	0.2	
Cd	111	115	1	He	0.066	68.0	1848	5.4	0.2	
Sn	118	115	1	He	0.503	13.4	2726	3.7	10	
Sb	123	165	1	He	0.120	8.2	644	4.4	2	
Ba	137	115	1	He	0.054	7.9	140	10.9	5	
W	182	159	1	He	0.631	23.9	12728	8.0	10	
Tl	205	165	1	He	0.137	7.3	3530	8.6	0.5	
Pb	208	165	1	He	0.229	1.2	8312	5.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	912773	0.79	1261090	72.38	30	120	
Sc	45	1	He	757973	8.45	955958	79.29	30	120	
Sc	45	2	NoGas	6187501	0.68	7862387	78.70	30	120	
Rh	103	1	He	2409182	6.27	2873429	83.84	30	120	
In	115	1	He	1666440	7.60	1922589	86.68	30	120	
Tb	159	1	He	4270877	5.74	4725151	90.39	30	120	
Ho	165	1	He	4292791	5.39	4813140	89.19	30	120	
Bi	209	1	He	3250887	4.49	3617562	89.86	30	120	

Sample Report

Sample Table

Sample Name	240-50925-f-5-e
Data File Name	194SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T21:37:26-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	0.699	0.699	61.31	53889	0.00	10000	
Be	9	6	2	NoGas	0.584	0.584	18.63	1641	0.04	10000	
B	11	6	2	NoGas	211.598	211.598	13.09	317172	0.07	300	
Na	23	45	1	He	26443.309	26443.309	3.82	21102574	0.13	500000	
Mg	24	45	1	He	19279.422	19279.422	3.76	9019161	0.21	500000	
Al	27	45	1	He	8.684	8.684	0.30	3008	0.29	200000	
K	39	45	1	He	2664.325	2664.325	3.90	1363795	0.20	500000	
Ca	44	45	1	He	85225.483	85225.483	3.98	2385533	3.57	500000	
Ti	47	45	1	He	0.304	0.304	22.99	51	0.59	2500	
V	51	45	1	He	1.995	1.995	2.79	20357	0.01	10000	
Cr	52	45	1	He	1.436	1.436	4.53	8376	0.02	10000	
Mn	55	45	1	He	1.212	1.212	8.14	6044	0.02	10000	
Fe	56	45	1	He	13.496	13.496	5.76	64728	0.02	200000	
Co	59	45	1	He	0.249	0.249	7.44	1632	0.02	10000	
Ni	60	45	1	He	0.326	0.326	7.80	1248	0.03	10000	
Cu	63	45	1	He	1.415	1.415	5.61	6330	0.02	10000	
Zn	66	45	1	He	4.481	4.481	10.80	5665	0.08	10000	
As	75	115	1	He	1.443	1.443	3.81	1244	0.12	10000	
Se	78	115	1	He	0.666	0.666	23.33	82	0.81	10000	
Sr	88	45	1	He	227.107	227.107	4.33	1158284	0.02	10000	
Mo	95	103	1	He	3.553	3.553	3.67	8693	0.04	2000	
Ag	107	103	1	He	0.014	0.014	44.01	117	0.01	300	
Cd	111	115	1	He	0.226	0.226	16.67	1819	0.01	4000	
Sn	118	115	1	He	0.799	0.799	10.44	3408	0.02	2000	
Sb	123	165	1	He	0.325	0.325	2.50	1491	0.02	300	
Ba	137	115	1	He	43.209	43.209	3.16	75415	0.06	10000	
W	182	159	1	He	0.270	0.270	26.16	8410	0.00	2500	
Tl	205	165	1	He	0.135	0.135	11.55	3257	0.00	5000	
Pb	208	165	1	He	0.219	0.219	8.22	7455	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	885837	10.96	1261090	70.24	30	120	
Sc	45	1	He	690782	3.78	955958	72.26	30	120	
Sc	45	2	NoGas	6754411	13.37	7862387	85.91	30	120	
Rh	103	1	He	2102964	3.44	2873429	73.19	30	120	
In	115	1	He	1430306	2.62	1922589	74.39	30	120	
Tb	159	1	He	3984782	2.49	4725151	84.33	30	120	
Ho	165	1	He	4022630	2.87	4813140	83.58	30	120	
Bi	209	1	He	3001894	1.26	3617562	82.98	30	120	

Sample Report

Sample Table

Sample Name	240-50925-f-6-e
Data File Name	195SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T21:41:02-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	1.306	1.306	4.31	57946	0.00	10000	
Be	9	6	2	NoGas	0.555	0.555	4.53	1556	0.04	10000	
B	11	6	2	NoGas	105.453	105.453	0.37	160990	0.07	300	
Na	23	45	1	He	42892.216	42892.216	8.77	34737395	0.12	500000	
Mg	24	45	1	He	26582.040	26582.040	9.00	12622160	0.21	500000	
Al	27	45	1	He	8.269	8.269	12.53	2929	0.28	200000	
K	39	45	1	He	2719.247	2719.247	8.50	1412568	0.19	500000	
Ca	44	45	1	He	107871.799	107871.799	9.78	3063537	3.52	500000	
Ti	47	45	1	He	0.290	0.290	23.25	50	0.58	2500	
V	51	45	1	He	2.132	2.132	18.10	21603	0.01	10000	
Cr	52	45	1	He	1.504	1.504	13.19	8813	0.02	10000	
Mn	55	45	1	He	1.981	1.981	7.00	8972	0.02	10000	
Fe	56	45	1	He	4.800	4.800	15.32	27433	0.02	200000	
Co	59	45	1	He	0.225	0.225	5.79	1507	0.01	10000	
Ni	60	45	1	He	0.291	0.291	45.22	1210	0.02	10000	
Cu	63	45	1	He	0.912	0.912	8.42	4345	0.02	10000	
Zn	66	45	1	He	4.757	4.757	7.35	6031	0.08	10000	
As	75	115	1	He	1.155	1.155	10.57	1034	0.11	10000	
Se	78	115	1	He	0.522	0.522	49.93	73	0.72	10000	
Sr	88	45	1	He	287.125	287.125	12.04	1484317	0.02	10000	
Mo	95	103	1	He	1.029	1.029	13.98	2584	0.04	2000	
Ag	107	103	1	He	0.011	0.011	22.08	90	0.01	300	
Cd	111	115	1	He	0.141	0.141	32.48	1713	0.01	4000	
Sn	118	115	1	He	0.441	0.441	11.30	2145	0.02	2000	
Sb	123	165	1	He	0.234	0.234	12.19	1103	0.02	300	
Ba	137	115	1	He	99.019	99.019	8.93	174090	0.06	10000	
W	182	159	1	He	0.109	0.109	28.20	6861	0.00	2500	
Tl	205	165	1	He	0.060	0.060	15.22	1539	0.00	5000	
Pb	208	165	1	He	0.171	0.171	11.08	5997	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	872494	0.91	1261090	69.19	30	120	
Sc	45	1	He	703898	8.06	955958	73.63	30	120	
Sc	45	2	NoGas	6409018	0.64	7862387	81.51	30	120	
Rh	103	1	He	2144706	7.43	2873429	74.64	30	120	
In	115	1	He	1446834	7.61	1922589	75.25	30	120	
Tb	159	1	He	4009712	7.05	4725151	84.86	30	120	
Ho	165	1	He	4071135	7.65	4813140	84.58	30	120	
Bi	209	1	He	2972180	7.40	3617562	82.16	30	120	

Sample Report

Sample Table

Sample Name	240-50925-f-7-e
Data File Name	196SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T21:44:37-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	1.968	1.968	27.05	66130	0.00	10000	
Be	9	6	2	NoGas	0.499	0.499	12.00	1430	0.03	10000	
B	11	6	2	NoGas	132.432	132.432	19.25	200778	0.07	300	
Na	23	45	1	He	43890.850	43890.850	1.07	36851961	0.12	500000	
Mg	24	45	1	He	27561.031	27561.031	1.78	13568249	0.20	500000	
Al	27	45	1	He	5.522	5.522	5.72	2207	0.25	200000	
K	39	45	1	He	2565.573	2565.573	0.85	1383774	0.19	500000	
Ca	44	45	1	He	117341.570	117341.570	1.30	3456761	3.39	500000	
Ti	47	45	1	He	0.225	0.225	38.44	41	0.55	2500	
V	51	45	1	He	2.481	2.481	2.86	25140	0.01	10000	
Cr	52	45	1	He	2.566	2.566	1.75	14222	0.02	10000	
Mn	55	45	1	He	232.241	232.241	1.49	884203	0.03	10000	
Fe	56	45	1	He	143.213	143.213	1.31	658315	0.02	200000	
Co	59	45	1	He	0.284	0.284	1.49	1951	0.01	10000	
Ni	60	45	1	He	0.158	0.158	8.43	1038	0.02	10000	
Cu	63	45	1	He	0.553	0.553	9.03	2953	0.02	10000	
Zn	66	45	1	He	3.106	3.106	2.17	4616	0.07	10000	
As	75	115	1	He	5.003	5.003	1.34	4086	0.12	10000	
Se	78	115	1	He	0.240	0.240	54.27	56	0.43	10000	
Sr	88	45	1	He	638.483	638.483	1.40	3427455	0.02	10000	
Mo	95	103	1	He	4.299	4.299	6.06	11006	0.04	2000	
Ag	107	103	1	He	0.009	0.009	19.41	81	0.01	300	
Cd	111	115	1	He	0.119	0.119	16.85	1720	0.01	4000	
Sn	118	115	1	He	0.455	0.455	12.25	2256	0.02	2000	
Sb	123	165	1	He	0.125	0.125	9.53	649	0.02	300	
Ba	137	115	1	He	221.232	221.232	0.94	399152	0.06	10000	
W	182	159	1	He	0.089	0.089	58.48	6813	0.00	2500	
Tl	205	165	1	He	0.036	0.036	10.27	1022	0.00	5000	
Pb	208	165	1	He	0.165	0.165	4.02	5982	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	894369	17.62	1261090	70.92	30	120	
Sc	45	1	He	726410	1.27	955958	75.99	30	120	
Sc	45	2	NoGas	6590835	16.95	7862387	83.83	30	120	
Rh	103	1	He	2202247	2.28	2873429	76.64	30	120	
In	115	1	He	1478276	1.12	1922589	76.89	30	120	
Tb	159	1	He	4090779	2.09	4725151	86.57	30	120	
Ho	165	1	He	4180945	0.78	4813140	86.87	30	120	
Bi	209	1	He	3031814	1.59	3617562	83.81	30	120	

Sample Report

Sample Table

Sample Name	240-50925-f-8-e
Data File Name	197SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T21:48:14-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	1.075	1.075	8.76	48572	0.00	10000	
Be	9	6	2	NoGas	0.448	0.448	14.68	1200	0.04	10000	
B	11	6	2	NoGas	148.572	148.572	2.81	210168	0.07	300	
Na	23	45	1	He	28006.719	28006.719	1.47	24031062	0.12	500000	
Mg	24	45	1	He	18007.774	18007.774	1.50	9058270	0.20	500000	
Al	27	45	1	He	6.139	6.139	7.71	2445	0.25	200000	
K	39	45	1	He	5369.070	5369.070	1.79	2911979	0.18	500000	
Ca	44	45	1	He	57357.817	57357.817	0.93	1726688	3.32	500000	
Ti	47	45	1	He	0.117	0.117	64.49	24	0.48	2500	
V	51	45	1	He	2.177	2.177	4.41	23303	0.01	10000	
Cr	52	45	1	He	1.402	1.402	5.19	8846	0.02	10000	
Mn	55	45	1	He	6.486	6.486	0.21	26981	0.02	10000	
Fe	56	45	1	He	2.755	2.755	5.59	19592	0.01	200000	
Co	59	45	1	He	0.243	0.243	2.18	1712	0.01	10000	
Ni	60	45	1	He	2.163	2.163	8.42	4408	0.05	10000	
Cu	63	45	1	He	0.884	0.884	2.99	4473	0.02	10000	
Zn	66	45	1	He	2.938	2.938	4.45	4548	0.06	10000	
As	75	115	1	He	1.102	1.102	3.80	1060	0.10	10000	
Se	78	115	1	He	0.361	0.361	27.17	67	0.54	10000	
Sr	88	45	1	He	132.571	132.571	2.08	727118	0.02	10000	
Mo	95	103	1	He	5.383	5.383	1.28	14136	0.04	2000	
Ag	107	103	1	He	0.008	0.008	32.60	74	0.01	300	
Cd	111	115	1	He	0.091	0.091	41.73	1746	0.01	4000	
Sn	118	115	1	He	0.558	0.558	8.18	2741	0.02	2000	
Sb	123	165	1	He	0.135	0.135	0.78	696	0.02	300	
Ba	137	115	1	He	71.534	71.534	0.63	134307	0.05	10000	
W	182	159	1	He	0.068	0.068	60.46	6661	0.00	2500	
Tl	205	165	1	He	0.038	0.038	2.50	1053	0.00	5000	
Pb	208	165	1	He	0.161	0.161	1.10	5871	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	820177	2.64	1261090	65.04	30	120	
Sc	45	1	He	742167	1.55	955958	77.64	30	120	
Sc	45	2	NoGas	5611329	4.06	7862387	71.37	30	120	
Rh	103	1	He	2259029	0.03	2873429	78.62	30	120	
In	115	1	He	1538082	1.22	1922589	80.00	30	120	
Tb	159	1	He	4129371	0.47	4725151	87.39	30	120	
Ho	165	1	He	4173414	0.18	4813140	86.71	30	120	
Bi	209	1	He	3068453	0.99	3617562	84.82	30	120	

Sample Report

Sample Table

Sample Name	240-50925-f-9-e
Data File Name	198SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T21:51:49-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	2.800	2.800	5.05	71633	0.00	10000	
Be	9	6	2	NoGas	0.354	0.354	10.96	1022	0.03	10000	
B	11	6	2	NoGas	244.253	244.253	1.27	359064	0.07	300	
Na	23	45	1	He	127709.887	127709.887	0.67	105678470	0.12	500000	
Mg	24	45	1	He	31559.151	31559.151	1.16	15318095	0.21	500000	
Al	27	45	1	He	5.076	5.076	7.95	2042	0.25	200000	
K	39	45	1	He	10915.933	10915.933	0.50	5671281	0.19	500000	
Ca	44	45	1	He	134171.557	134171.557	1.17	3896771	3.44	500000	
Ti	47	45	1	He	0.292	0.292	33.05	51	0.57	2500	
V	51	45	1	He	2.160	2.160	9.09	22344	0.01	10000	
Cr	52	45	1	He	1.631	1.631	4.00	9614	0.02	10000	
Mn	55	45	1	He	44.241	44.241	1.23	167470	0.03	10000	
Fe	56	45	1	He	12.818	12.818	2.98	64055	0.02	200000	
Co	59	45	1	He	0.928	0.928	8.41	6169	0.02	10000	
Ni	60	45	1	He	2.820	2.820	4.67	5316	0.05	10000	
Cu	63	45	1	He	0.469	0.469	7.07	2555	0.02	10000	
Zn	66	45	1	He	2.834	2.834	7.17	4287	0.07	10000	
As	75	115	1	He	2.853	2.853	2.13	2362	0.12	10000	
Se	78	115	1	He	0.292	0.292	35.04	59	0.50	10000	
Sr	88	45	1	He	357.975	357.975	1.07	1894683	0.02	10000	
Mo	95	103	1	He	6.655	6.655	2.26	16580	0.04	2000	
Ag	107	103	1	He	0.006	0.006	3.35	58	0.01	300	
Cd	111	115	1	He	0.103	0.103	47.83	1673	0.01	4000	
Sn	118	115	1	He	0.406	0.406	1.59	2045	0.02	2000	
Sb	123	165	1	He	0.061	0.061	13.10	353	0.02	300	
Ba	137	115	1	He	398.269	398.269	0.71	708680	0.06	10000	
W	182	159	1	He	0.053	0.053	45.48	6361	0.00	2500	
Tl	205	165	1	He	0.019	0.019	7.23	610	0.00	5000	
Pb	208	165	1	He	0.131	0.131	5.16	4793	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	863653	1.88	1261090	68.48	30	120	
Sc	45	1	He	716118	0.42	955958	74.91	30	120	
Sc	45	2	NoGas	6227863	1.24	7862387	79.21	30	120	
Rh	103	1	He	2144150	0.69	2873429	74.62	30	120	
In	115	1	He	1457892	0.10	1922589	75.83	30	120	
Tb	159	1	He	4037380	0.52	4725151	85.44	30	120	
Ho	165	1	He	4099456	0.97	4813140	85.17	30	120	
Bi	209	1	He	2898123	0.06	3617562	80.11	30	120	

Sample Report

Sample Table

Sample Name	240-50925-f-12-e
Data File Name	199SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T21:55:24-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	-0.414	-0.414	-6.38	39834	0.00	10000	
Be	9	6	2	NoGas	0.316	0.316	9.95	989	0.03	10000	
B	11	6	2	NoGas	10.793	10.793	0.99	24762	0.04	300	
Na	23	45	1	He	405.919	405.919	4.69	389938	0.10	500000	
Mg	24	45	1	He	6.068	6.068	25.15	5886	0.10	500000	
Al	27	45	1	He	6.473	6.473	2.43	2698	0.24	200000	
K	39	45	1	He	33.159	33.159	7.66	63638	0.05	500000	
Ca	44	45	1	He	164.426	164.426	3.27	5869	2.80	500000	
Ti	47	45	1	He	0.310	0.310	169.17	61	0.51	2500	
V	51	45	1	He	2.156	2.156	5.09	24482	0.01	10000	
Cr	52	45	1	He	1.392	1.392	1.70	9311	0.01	10000	
Mn	55	45	1	He	-0.008	-0.008	-180.06	1872	0.00	10000	
Fe	56	45	1	He	2.285	2.285	3.44	18434	0.01	200000	
Co	59	45	1	He	0.079	0.079	1.40	630	0.01	10000	
Ni	60	45	1	He	-0.291	-0.291	-11.49	328	-0.09	10000	
Cu	63	45	1	He	0.437	0.437	7.05	2652	0.02	10000	
Zn	66	45	1	He	3.187	3.187	8.02	5075	0.06	10000	
As	75	115	1	He	0.432	0.432	10.75	561	0.08	10000	
Se	78	115	1	He	0.160	0.160	8.19	58	0.28	10000	
Sr	88	45	1	He	0.514	0.514	4.01	3111	0.02	10000	
Mo	95	103	1	He	0.071	0.071	20.61	253	0.03	2000	
Ag	107	103	1	He	0.006	0.006	33.29	66	0.01	300	
Cd	111	115	1	He	0.077	0.077	73.00	1898	0.00	4000	
Sn	118	115	1	He	0.360	0.360	5.30	2174	0.02	2000	
Sb	123	165	1	He	0.046	0.046	14.25	308	0.01	300	
Ba	137	115	1	He	0.301	0.301	7.27	651	0.05	10000	
W	182	159	1	He	-0.002	-0.002	-1717.44	6227	0.00	2500	
Tl	205	165	1	He	0.020	0.020	20.14	658	0.00	5000	
Pb	208	165	1	He	0.141	0.141	10.38	5449	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	924954	0.53	1261090	73.35	30	120	
Sc	45	1	He	785857	2.91	955958	82.21	30	120	
Sc	45	2	NoGas	6418393	0.94	7862387	81.63	30	120	
Rh	103	1	He	2476669	5.08	2873429	86.19	30	120	
In	115	1	He	1690374	2.95	1922589	87.92	30	120	
Tb	159	1	He	4315259	4.51	4725151	91.33	30	120	
Ho	165	1	He	4378932	4.10	4813140	90.98	30	120	
Bi	209	1	He	3341802	3.10	3617562	92.38	30	120	

Sample Report

Sample Table

Sample Name	240-50925-f-13-e
Data File Name	200SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T21:59:00-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	1.245	1.245	3.03	56000	0.00	10000	
Be	9	6	2	NoGas	0.318	0.318	22.81	937	0.03	10000	
B	11	6	2	NoGas	126.554	126.554	1.01	191364	0.07	300	
Na	23	45	1	He	27845.519	27845.519	0.81	23573623	0.12	500000	
Mg	24	45	1	He	21917.935	21917.935	0.72	10877489	0.20	500000	
Al	27	45	1	He	9.148	9.148	3.04	3329	0.27	200000	
K	39	45	1	He	2698.161	2698.161	1.77	1464782	0.18	500000	
Ca	44	45	1	He	99806.004	99806.004	0.39	2963809	3.37	500000	
Ti	47	45	1	He	0.243	0.243	31.73	44	0.55	2500	
V	51	45	1	He	2.469	2.469	6.17	25254	0.01	10000	
Cr	52	45	1	He	1.673	1.673	3.23	10033	0.02	10000	
Mn	55	45	1	He	0.724	0.724	9.59	4547	0.02	10000	
Fe	56	45	1	He	2.939	2.939	2.61	20176	0.01	200000	
Co	59	45	1	He	0.221	0.221	3.63	1541	0.01	10000	
Ni	60	45	1	He	1.636	1.636	5.86	3483	0.05	10000	
Cu	63	45	1	He	0.896	0.896	2.80	4465	0.02	10000	
Zn	66	45	1	He	2.787	2.787	12.53	4337	0.06	10000	
As	75	115	1	He	2.281	2.281	1.84	1965	0.12	10000	
Se	78	115	1	He	0.506	0.506	13.10	75	0.68	10000	
Sr	88	45	1	He	241.326	241.326	0.44	1305913	0.02	10000	
Mo	95	103	1	He	4.819	4.819	2.32	12380	0.04	2000	
Ag	107	103	1	He	0.007	0.007	61.24	66	0.01	300	
Cd	111	115	1	He	0.138	0.138	20.82	1766	0.01	4000	
Sn	118	115	1	He	0.255	0.255	13.80	1530	0.02	2000	
Sb	123	165	1	He	0.128	0.128	14.20	660	0.02	300	
Ba	137	115	1	He	44.067	44.067	1.01	80299	0.05	10000	
W	182	159	1	He	0.045	0.045	99.98	6353	0.00	2500	
Tl	205	165	1	He	0.019	0.019	6.28	599	0.00	5000	
Pb	208	165	1	He	0.142	0.142	6.71	5228	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	871116	0.45	1261090	69.08	30	120	
Sc	45	1	He	732159	0.71	955958	76.59	30	120	
Sc	45	2	NoGas	6263041	0.61	7862387	79.66	30	120	
Rh	103	1	He	2209702	1.41	2873429	76.90	30	120	
In	115	1	He	1492561	0.74	1922589	77.63	30	120	
Tb	159	1	He	4080979	0.68	4725151	86.37	30	120	
Ho	165	1	He	4168265	0.70	4813140	86.60	30	120	
Bi	209	1	He	3024862	0.80	3617562	83.62	30	120	

Sample Report

Sample Table

Sample Name	240-51089-b-1-b
Data File Name	201SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T22:02:36-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	12.436	12.436	1.01	167479	0.01	10000	
Be	9	6	2	NoGas	0.255	0.255	9.22	759	0.03	10000	
B	11	6	2	NoGas	249.441	249.441	0.97	363273	0.07	300	
Na	23	45	1	He	34212.007	34212.007	0.50	28900110	0.12	500000	
Mg	24	45	1	He	1071.726	1071.726	0.35	533175	0.20	500000	
Al	27	45	1	He	219.707	219.707	1.84	67360	0.33	200000	
K	39	45	1	He	3601.839	3601.839	1.56	1937153	0.19	500000	
Ca	44	45	1	He	18961.308	18961.308	0.43	562408	3.37	500000	
Ti	47	45	1	He	0.195	0.195	75.65	37	0.53	2500	
V	51	45	1	He	49.616	49.616	0.86	390542	0.01	10000	
Cr	52	45	1	He	4.528	4.528	1.76	23746	0.02	10000	
Mn	55	45	1	He	-0.011	-0.011	-76.55	1729	0.00	10000	
Fe	56	45	1	He	8.856	8.856	3.25	47215	0.02	200000	
Co	59	45	1	He	0.170	0.170	12.23	1198	0.01	10000	
Ni	60	45	1	He	-0.094	-0.094	-57.26	629	-0.02	10000	
Cu	63	45	1	He	1.370	1.370	2.81	6511	0.02	10000	
Zn	66	45	1	He	1.921	1.921	6.59	3471	0.06	10000	
As	75	115	1	He	115.134	115.134	2.16	95054	0.12	10000	
Se	78	115	1	He	6.051	6.051	3.30	476	1.27	10000	
Sr	88	45	1	He	140.993	140.993	1.06	761438	0.02	10000	
Mo	95	103	1	He	33.333	33.333	1.50	87868	0.04	2000	
Ag	107	103	1	He	0.007	0.007	39.34	62	0.01	300	
Cd	111	115	1	He	0.087	0.087	15.30	1755	0.00	4000	
Sn	118	115	1	He	0.292	0.292	15.58	1730	0.02	2000	
Sb	123	165	1	He	3.117	3.117	1.36	14078	0.02	300	
Ba	137	115	1	He	17.113	17.113	2.49	32394	0.05	10000	
W	182	159	1	He	7.979	7.979	2.24	85738	0.01	2500	
Tl	205	165	1	He	0.161	0.161	1.35	3998	0.00	5000	
Pb	208	165	1	He	0.133	0.133	4.85	4943	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	855884	0.70	1261090	67.87	30	120	
Sc	45	1	He	730686	1.19	955958	76.44	30	120	
Sc	45	2	NoGas	6114852	0.72	7862387	77.77	30	120	
Rh	103	1	He	2273874	0.44	2873429	79.13	30	120	
In	115	1	He	1549895	1.40	1922589	80.61	30	120	
Tb	159	1	He	4082955	0.58	4725151	86.41	30	120	
Ho	165	1	He	4171074	1.50	4813140	86.66	30	120	
Bi	209	1	He	3115752	0.78	3617562	86.13	30	120	

Sample Report

Sample Table

Sample Name	240-51089-b-2-b
Data File Name	202SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T22:06:12-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	12.884	12.884	2.94	162102	0.01	10000	
Be	9	6	2	NoGas	0.231	0.231	17.86	678	0.03	10000	
B	11	6	2	NoGas	247.112	247.112	0.20	350002	0.07	300	
Na	23	45	1	He	34660.325	34660.325	2.39	28411534	0.12	500000	
Mg	24	45	1	He	1085.132	1085.132	2.91	523764	0.21	500000	
Al	27	45	1	He	162.074	162.074	3.01	48355	0.34	200000	
K	39	45	1	He	3569.759	3569.759	2.08	1863648	0.19	500000	
Ca	44	45	1	He	18868.859	18868.859	3.01	543030	3.47	500000	
Ti	47	45	1	He	0.125	0.125	37.87	24	0.51	2500	
V	51	45	1	He	38.579	38.579	3.99	295915	0.01	10000	
Cr	52	45	1	He	3.350	3.350	2.46	17548	0.02	10000	
Mn	55	45	1	He	1.873	1.873	3.15	8669	0.02	10000	
Fe	56	45	1	He	42.366	42.366	2.92	194658	0.02	200000	
Co	59	45	1	He	0.176	0.176	6.19	1203	0.01	10000	
Ni	60	45	1	He	-0.081	-0.081	-42.43	632	-0.01	10000	
Cu	63	45	1	He	1.101	1.101	2.03	5187	0.02	10000	
Zn	66	45	1	He	3.368	3.368	5.70	4758	0.07	10000	
As	75	115	1	He	90.530	90.530	3.96	71475	0.13	10000	
Se	78	115	1	He	5.483	5.483	3.83	416	1.32	10000	
Sr	88	45	1	He	133.250	133.250	3.18	698252	0.02	10000	
Mo	95	103	1	He	28.365	28.365	3.07	73108	0.04	2000	
Ag	107	103	1	He	0.005	0.005	16.80	47	0.01	300	
Cd	111	115	1	He	0.112	0.112	27.31	1714	0.01	4000	
Sn	118	115	1	He	0.227	0.227	20.35	1415	0.02	2000	
Sb	123	165	1	He	2.680	2.680	6.97	11765	0.02	300	
Ba	137	115	1	He	13.800	13.800	0.03	24994	0.06	10000	
W	182	159	1	He	6.763	6.763	2.12	72321	0.01	2500	
Tl	205	165	1	He	0.146	0.146	6.97	3544	0.00	5000	
Pb	208	165	1	He	0.124	0.124	6.96	4505	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	832187	0.63	1261090	65.99	30	120	
Sc	45	1	He	709297	2.49	955958	74.20	30	120	
Sc	45	2	NoGas	5764611	1.99	7862387	73.32	30	120	
Rh	103	1	He	2224318	3.13	2873429	77.41	30	120	
In	115	1	He	1482306	2.82	1922589	77.10	30	120	
Tb	159	1	He	4015221	2.66	4725151	84.98	30	120	
Ho	165	1	He	4056057	3.10	4813140	84.27	30	120	
Bi	209	1	He	3051175	2.39	3617562	84.34	30	120	

Sample Report

Sample Table

Sample Name	240-51089-b-3-b
Data File Name	203SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T22:09:50-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	12.000	12.000	0.09	155404	0.01	10000	
Be	9	6	2	NoGas	0.202	0.202	30.59	600	0.03	10000	
B	11	6	2	NoGas	237.410	237.410	1.69	332641	0.07	300	
Na	23	45	1	He	36887.419	36887.419	11.76	27488361	0.13	500000	
Mg	24	45	1	He	1169.660	1169.660	10.92	513439	0.23	500000	
Al	27	45	1	He	191.121	191.121	11.69	51765	0.37	200000	
K	39	45	1	He	3767.231	3767.231	12.28	1785544	0.21	500000	
Ca	44	45	1	He	20555.407	20555.407	11.72	537836	3.82	500000	
Ti	47	45	1	He	0.209	0.209	17.29	34	0.61	2500	
V	51	45	1	He	43.985	43.985	11.88	306070	0.01	10000	
Cr	52	45	1	He	3.944	3.944	10.30	18510	0.02	10000	
Mn	55	45	1	He	0.737	0.737	18.98	4047	0.02	10000	
Fe	56	45	1	He	28.069	28.069	12.68	119220	0.02	200000	
Co	59	45	1	He	0.193	0.193	16.20	1189	0.02	10000	
Ni	60	45	1	He	0.069	0.069	163.76	788	0.01	10000	
Cu	63	45	1	He	1.193	1.193	13.38	5074	0.02	10000	
Zn	66	45	1	He	4.006	4.006	22.14	4870	0.08	10000	
As	75	115	1	He	101.474	101.474	10.02	73928	0.14	10000	
Se	78	115	1	He	6.006	6.006	15.01	416	1.44	10000	
Sr	88	45	1	He	141.386	141.386	11.46	673774	0.02	10000	
Mo	95	103	1	He	30.812	30.812	9.98	73262	0.04	2000	
Ag	107	103	1	He	0.008	0.008	12.82	69	0.01	300	
Cd	111	115	1	He	0.075	0.075	100.58	1540	0.00	4000	
Sn	118	115	1	He	0.376	0.376	14.22	1815	0.02	2000	
Sb	123	165	1	He	2.891	2.891	11.49	11855	0.02	300	
Ba	137	115	1	He	15.721	15.721	11.70	26233	0.06	10000	
W	182	159	1	He	7.458	7.458	12.84	73403	0.01	2500	
Tl	205	165	1	He	0.168	0.168	5.56	3794	0.00	5000	
Pb	208	165	1	He	0.127	0.127	7.02	4334	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	822535	0.82	1261090	65.22	30	120	
Sc	45	1	He	649619	9.89	955958	67.95	30	120	
Sc	45	2	NoGas	5826791	0.72	7862387	74.11	30	120	
Rh	103	1	He	2062842	8.84	2873429	71.79	30	120	
In	115	1	He	1375092	8.69	1922589	71.52	30	120	
Tb	159	1	He	3750957	9.82	4725151	79.38	30	120	
Ho	165	1	He	3810873	8.86	4813140	79.18	30	120	
Bi	209	1	He	2863906	7.41	3617562	79.17	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2026839
Data File Name	204_CCV.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T22:13:27-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	46.662	4.253	457506	0.45	50	93.3	89.5	110.5	
Be	9	6	2	NoGas	51.685	1.704	123381	0.74	50	103.4	89.5	110.5	
B	11	6	2	NoGas	57.016	1.517	82739	1.18	50	114.0	89.5	110.5	CCV Failed
Na	23	45	1	He	24514.387	11.914	20654565	0.32	25000	98.1	89.5	110.5	
Mg	24	45	1	He	24531.033	13.128	12102600	1.25	25000	98.1	89.5	110.5	
Al	27	45	1	He	241.244	13.737	73608	1.97	250	96.5	89.5	110.5	
K	39	45	1	He	25376.786	12.192	13355506	0.22	25000	101.5	89.5	110.5	
Ca	44	45	1	He	24558.254	13.283	725358	1.39	25000	98.2	89.5	110.5	
Ti	47	45	1	He	49.919	14.726	8026	3.43	50	99.8	89.5	110.5	
V	51	45	1	He	49.138	13.285	385370	1.15	50	98.3	89.5	110.5	
Cr	52	45	1	He	49.384	14.199	238523	2.20	50	98.8	89.5	110.5	
Mn	55	45	1	He	249.235	13.240	950727	1.40	250	99.7	89.5	110.5	
Fe	56	45	1	He	12483.017	13.518	56911402	1.68	12500	99.9	89.5	110.5	
Co	59	45	1	He	49.478	12.916	331617	1.44	50	99.0	89.5	110.5	
Ni	60	45	1	He	48.797	13.256	80756	1.64	50	97.6	89.5	110.5	
Cu	63	45	1	He	49.483	13.264	214193	2.24	50	99.0	89.5	110.5	
Zn	66	45	1	He	49.268	13.661	50148	2.26	50	98.5	89.5	110.5	
As	75	115	1	He	47.710	14.033	38310	1.07	50	95.4	89.5	110.5	
Se	78	115	1	He	47.675	14.545	3364	2.06	50	95.3	89.5	110.5	
Sr	88	45	1	He	52.252	12.488	281340	0.65	50	104.5	89.5	110.5	
Mo	95	103	1	He	51.270	12.479	132463	2.66	50	102.5	89.5	110.5	
Ag	107	103	1	He	49.212	11.034	401881	0.80	50	98.4	89.5	110.5	
Cd	111	115	1	He	49.286	13.687	76144	0.61	50	98.6	89.5	110.5	
Sn	118	115	1	He	50.255	14.472	189754	1.48	50	100.5	89.5	110.5	
Sb	123	165	1	He	48.646	12.554	216066	1.78	50	97.3	89.5	110.5	
Ba	137	115	1	He	51.471	13.689	94504	0.82	50	102.9	89.5	110.5	
W	182	159	1	He	47.619	11.522	479171	1.42	50	95.2	89.5	110.5	
Tl	205	165	1	He	49.031	12.316	1158906	1.43	50	98.1	89.5	110.5	
Pb	208	165	1	He	49.465	12.354	1593359	1.05	50	98.9	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	797274	2.27	1261090	63.22	30	120	
Sc	45	1	He	735598	12.10	955958	76.95	30	120	
Sc	45	2	NoGas	5463423	3.39	7862387	69.49	30	120	
Rh	103	1	He	2248298	10.65	2873429	78.24	30	120	
In	115	1	He	1522337	13.35	1922589	79.18	30	120	
Tb	159	1	He	4087617	10.29	4725151	86.51	30	120	
Ho	165	1	He	4165749	11.67	4813140	86.55	30	120	
Bi	209	1	He	3095892	10.14	3617562	85.58	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	205_CCB.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T22:17:02-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.421	-8.2	36677	0.2	2	
Be	9	6	2	NoGas	0.150	10.0	485	8.0	1	
B	11	6	2	NoGas	4.214	11.4	13420	5.3	20	
Na	23	45	1	He	84.739	4.7	84092	4.6	1000	
Mg	24	45	1	He	0.901	113.2	2715	24.2	1000	
Al	27	45	1	He	1.353	27.6	870	7.0	50	
K	39	45	1	He	27.490	27.7	51459	1.6	1000	
Ca	44	45	1	He	76.781	11.9	2619	4.6	1000	
Ti	47	45	1	He	0.693	143.4	100	132.8	20	
V	51	45	1	He	-0.059	-140.1	5122	3.2	2	
Cr	52	45	1	He	0.121	44.9	2322	2.5	2	
Mn	55	45	1	He	1.363	11.3	6386	2.9	2	
Fe	56	45	1	He	16.539	19.7	75142	12.6	50	
Co	59	45	1	He	0.033	23.1	256	25.6	1	
Ni	60	45	1	He	-0.345	-5.4	198	10.2	2	
Cu	63	45	1	He	0.090	15.8	883	8.2	2	
Zn	66	45	1	He	4.917	8.7	5894	2.4	20	
As	75	115	1	He	0.148	36.2	261	8.1	2	
Se	78	115	1	He	0.263	31.4	56	7.7	2	
Sr	88	45	1	He	0.064	2.2	428	9.3	10	
Mo	95	103	1	He	0.343	37.4	879	30.4	2	
Ag	107	103	1	He	0.011	4.6	94	8.9	0.2	
Cd	111	115	1	He	0.090	18.5	1644	8.5	0.2	
Sn	118	115	1	He	0.582	19.6	2656	12.4	10	
Sb	123	165	1	He	0.114	15.0	559	16.5	2	
Ba	137	115	1	He	0.034	31.7	87	25.2	5	
W	182	159	1	He	0.711	14.0	12098	6.8	10	
Tl	205	165	1	He	0.099	16.7	2341	10.8	0.5	
Pb	208	165	1	He	0.207	3.8	6860	7.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	848919	0.26	1261090	67.32	30	120	
Sc	45	1	He	671342	7.74	955958	70.23	30	120	
Sc	45	2	NoGas	5921981	0.82	7862387	75.32	30	120	
Rh	103	1	He	2132217	5.27	2873429	74.20	30	120	
In	115	1	He	1448308	7.63	1922589	75.33	30	120	
Tb	159	1	He	3800440	5.48	4725151	80.43	30	120	
Ho	165	1	He	3887817	5.68	4813140	80.78	30	120	
Bi	209	1	He	2906358	4.18	3617562	80.34	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-182318/1-a@2
Data File Name	206_Blk.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T22:20:40-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.497	-14.5	34709	1.6	2	
Be	9	6	2	NoGas	0.207	13.9	607	11.9	1	
B	11	6	2	NoGas	3.740	9.2	12253	4.0	20	
Na	23	45	1	He	94.741	10.8	90693	2.2	1000	
Mg	24	45	1	He	16.976	13.4	9851	1.6	1000	
Al	27	45	1	He	3.163	24.8	1356	7.8	50	
K	39	45	1	He	52.453	31.3	62668	3.4	1000	
Ca	44	45	1	He	77.925	16.5	2618	6.6	1000	
Ti	47	45	1	He	0.144	29.6	26	19.9	20	
V	51	45	1	He	1.500	10.3	16043	5.0	2	
Cr	52	45	1	He	1.552	10.5	8540	1.6	2	
Mn	55	45	1	He	0.313	38.4	2676	5.3	2	
Fe	56	45	1	He	22.456	9.1	99209	4.7	50	
Co	59	45	1	He	0.065	21.0	439	8.5	1	
Ni	60	45	1	He	-0.253	-26.5	329	19.7	2	
Cu	63	45	1	He	0.361	14.6	1937	4.3	2	
Zn	66	45	1	He	3.420	9.4	4494	3.7	20	
As	75	115	1	He	0.315	15.9	384	3.9	2	
Se	78	115	1	He	0.213	15.8	52	6.9	2	
Sr	88	45	1	He	0.297	11.7	1556	3.4	10	
Mo	95	103	1	He	0.208	23.7	560	18.5	2	
Ag	107	103	1	He	0.007	51.6	64	41.8	0.2	
Cd	111	115	1	He	0.088	44.4	1616	7.5	0.2	
Sn	118	115	1	He	20.779	7.6	74578	0.7	10	Blank Failed
Sb	123	165	1	He	0.108	18.9	530	14.2	2	
Ba	137	115	1	He	0.401	5.5	723	1.7	5	
W	182	159	1	He	0.324	13.4	8462	7.6	10	
Tl	205	165	1	He	0.077	8.7	1846	3.2	0.5	
Pb	208	165	1	He	0.225	9.6	7365	2.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	815917	0.35	1261090	64.70	30	120	
Sc	45	1	He	665378	9.49	955958	69.60	30	120	
Sc	45	2	NoGas	5719878	1.26	7862387	72.75	30	120	
Rh	103	1	He	2162186	7.82	2873429	75.25	30	120	
In	115	1	He	1427308	6.72	1922589	74.24	30	120	
Tb	159	1	He	3776544	5.42	4725151	79.92	30	120	
Ho	165	1	He	3887405	6.09	4813140	80.77	30	120	
Bi	209	1	He	3166647	7.79	3617562	87.54	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-182318/2-a@2
Data File Name	207LCSS.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T22:24:17-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	2	NoGas	-0.515	-0.515	-15.245	34622	1.86	500	-0.1	79.5	120.5	LCSS Failed
Be	9	2	NoGas	475.251	475.251	0.580	1149792	0.10	500	95.1	78.6	110.5	
B	11	2	NoGas	53.488	53.488	1.794	79153	1.14	50	107.0	79.5	120.5	
Na	23	1	He	4959.019	4959.019	1.008	3915637	0.68	5000	99.2	79.5	120.5	
Mg	24	1	He	4987.820	4987.820	0.023	2301485	0.68	5000	99.8	79.5	120.5	
Al	27	1	He	4605.413	4605.413	0.612	1304537	1.22	5000	92.1	79.5	120.5	
K	39	1	He	5098.505	5098.505	0.833	2536753	1.18	5000	102.0	79.5	120.5	
Ca	44	1	He	5017.007	5017.007	1.635	138921	0.99	5000	100.3	79.5	120.5	
Ti	47	1	He	49.822	49.822	3.666	7493	3.28	50	99.6	79.5	120.5	
V	51	1	He	491.736	491.736	1.160	3552921	0.46	500	98.3	71.5	110.5	
Cr	52	1	He	496.371	496.371	2.022	2225442	1.32	500	99.3	69.5	110.5	
Mn	55	1	He	506.320	506.320	1.433	1803196	0.73	500	101.3	79.5	120.5	
Fe	56	1	He	5019.099	5019.099	1.241	21392952	0.57	5000	100.4	79.5	120.5	
Co	59	1	He	498.639	498.639	1.217	3121839	0.80	500	99.7	73.9	110.5	
Ni	60	1	He	492.099	492.099	0.896	754336	0.38	500	98.4	74.9	110.5	
Cu	63	1	He	510.554	510.554	1.829	2059869	1.21	500	102.1	72.6	110.5	
Zn	66	1	He	489.713	489.713	0.703	452683	0.34	500	97.9	71.5	113.4	
As	75	1	He	446.410	446.410	1.232	336802	0.07	500	89.3	73.4	110.5	
Se	78	1	He	454.101	454.101	1.524	29895	0.64	500	90.8	64.6	110.5	
Sr	88	1	He	536.624	536.624	0.627	2697633	0.27	500	107.3	79.5	120.5	
Mo	95	1	He	50.375	50.375	1.612	126566	0.63	50	100.8	29.5	140.5	
Ag	107	1	He	49.651	49.651	2.152	393935	0.75	50	99.3	59.5	114.5	
Cd	111	1	He	483.715	483.715	1.437	691304	0.27	500	96.7	73.5	110.5	
Sn	118	1	He	561.352	561.352	0.870	1994040	0.35	50	1122.7	79.5	120.5	LCSS Failed
Sb	123	1	He	45.943	45.943	1.600	199432	0.93	50	91.9	67.5	113.4	
Ba	137	1	He	506.709	506.709	1.030	876894	0.25	500	101.3	69.5	110.5	
W	182	1	He	47.029	47.029	1.021	463440	0.67	50	94.1	74.6	125.4	
Tl	205	1	He	123.634	123.634	1.089	2855331	0.05	125	98.9	70.6	110.5	
Pb	208	1	He	492.218	492.218	0.966	15489813	0.56	500	98.4	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	808401	0.50	1261090	64.10	30	120	
Sc	45	1	He	680192	0.70	955958	71.15	30	120	
Sc	45	2	NoGas	5733336	1.00	7862387	72.92	30	120	
Rh	103	1	He	2167847	1.47	2873429	75.44	30	120	
In	115	1	He	1418002	1.18	1922589	73.75	30	120	
Tb	159	1	He	3971840	1.39	4725151	84.06	30	120	
Ho	165	1	He	4032613	1.13	4813140	83.78	30	120	
Bi	209	1	He	3106912	0.59	3617562	85.88	30	120	

Sample Report

Sample Table

Sample Name	680-112650-a-1-b210
Data File Name	208SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T22:27:43-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	2.339	2.339	5.07	58316	0.00	10000	
Be	9	6	2	NoGas	0.808	0.808	9.72	2048	0.04	10000	
B	11	6	2	NoGas	4.731	4.731	5.11	13420	0.04	300	
Na	23	45	1	He	108.626	108.626	3.14	111154	0.10	500000	
Mg	24	45	1	He	601.318	601.318	1.46	298397	0.20	500000	
Al	27	45	1	He	6693.761	6693.761	1.59	2023976	0.33	200000	
K	39	45	1	He	512.768	512.768	2.35	309679	0.17	500000	
Ca	44	45	1	He	1997.595	1997.595	1.56	59409	3.36	500000	
Ti	47	45	1	He	247.004	247.004	1.66	39645	0.62	2500	
V	51	45	1	He	21.997	21.997	2.81	175421	0.01	10000	
Cr	52	45	1	He	25.187	25.187	2.59	122407	0.02	10000	
Mn	55	45	1	He	52.480	52.480	1.71	201126	0.03	10000	
Fe	56	45	1	He	9652.008	9652.008	2.03	43916313	0.02	200000	
Co	59	45	1	He	1.397	1.397	1.53	9390	0.01	10000	
Ni	60	45	1	He	8.789	8.789	3.68	15148	0.06	10000	
Cu	63	45	1	He	4.438	4.438	2.10	19683	0.02	10000	
Zn	66	45	1	He	23.897	23.897	1.94	25068	0.10	10000	
As	75	115	1	He	2.481	2.481	1.61	2204	0.11	10000	
Se	78	115	1	He	1.131	1.131	3.00	123	0.92	10000	
Sr	88	45	1	He	30.280	30.280	1.17	162631	0.02	10000	
Mo	95	103	1	He	0.811	0.811	2.82	2202	0.04	2000	
Ag	107	103	1	He	0.039	0.039	5.22	337	0.01	300	
Cd	111	115	1	He	0.308	0.308	20.78	2096	0.01	4000	
Sn	118	115	1	He	3.889	3.889	8.89	15664	0.02	2000	
Sb	123	165	1	He	0.266	0.266	0.43	1285	0.02	300	
Ba	137	115	1	He	39.076	39.076	4.50	73850	0.05	10000	
W	182	159	1	He	0.515	0.515	8.00	11127	0.00	2500	
Tl	205	165	1	He	0.192	0.192	9.33	4763	0.00	5000	
Pb	208	165	1	He	16.903	16.903	2.02	552190	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	805444	3.04	1261090	63.87	30	120	
Sc	45	1	He	726276	1.33	955958	75.97	30	120	
Sc	45	2	NoGas	5430165	3.86	7862387	69.07	30	120	
Rh	103	1	He	2295897	0.66	2873429	79.90	30	120	
In	115	1	He	1549474	3.46	1922589	80.59	30	120	
Tb	159	1	He	4109558	1.34	4725151	86.97	30	120	
Ho	165	1	He	4182339	1.69	4813140	86.89	30	120	
Bi	209	1	He	3219779	0.51	3617562	89.00	30	120	

Sample Report

Sample Table

Sample Name	680-112721-a-1-b@10
Data File Name	209SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T22:31:19-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	0.152	0.152	14.24	44162	0.00	10000	
Be	9	6	2	NoGas	0.381	0.381	7.44	1122	0.03	10000	
B	11	6	2	NoGas	3.193	3.193	9.96	12509	0.03	300	
Na	23	45	1	He	81.086	81.086	5.67	85245	0.10	500000	
Mg	24	45	1	He	347.281	347.281	5.54	167774	0.21	500000	
Al	27	45	1	He	814.450	814.450	5.84	238746	0.34	200000	
K	39	45	1	He	157.751	157.751	7.25	120020	0.13	500000	
Ca	44	45	1	He	1594.300	1594.300	5.92	45992	3.47	500000	
Ti	47	45	1	He	1329.214	1329.214	5.00	206453	0.64	2500	
V	51	45	1	He	31.075	31.075	5.12	237473	0.01	10000	
Cr	52	45	1	He	37.398	37.398	5.56	174986	0.02	10000	
Mn	55	45	1	He	102.399	102.399	5.15	378189	0.03	10000	
Fe	56	45	1	He	23908.897	23908.897	4.90	105284631	0.02	200000	
Co	59	45	1	He	5.181	5.181	6.39	33557	0.02	10000	
Ni	60	45	1	He	21.328	21.328	5.07	34506	0.06	10000	
Cu	63	45	1	He	15.374	15.374	4.51	64644	0.02	10000	
Zn	66	45	1	He	35.985	35.985	5.27	35770	0.10	10000	
As	75	115	1	He	0.621	0.621	5.26	645	0.10	10000	
Se	78	115	1	He	0.537	0.537	13.58	77	0.70	10000	
Sr	88	45	1	He	27.770	27.770	5.35	144343	0.02	10000	
Mo	95	103	1	He	0.814	0.814	6.23	2127	0.04	2000	
Ag	107	103	1	He	0.016	0.016	27.71	138	0.01	300	
Cd	111	115	1	He	0.176	0.176	51.92	1815	0.01	4000	
Sn	118	115	1	He	2.846	2.846	5.06	11172	0.03	2000	
Sb	123	165	1	He	0.085	0.085	13.26	447	0.02	300	
Ba	137	115	1	He	9.040	9.040	3.86	16437	0.05	10000	
W	182	159	1	He	0.161	0.161	36.54	7239	0.00	2500	
Tl	205	165	1	He	0.056	0.056	16.85	1405	0.00	5000	
Pb	208	165	1	He	3.108	3.108	7.14	96439	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	887246	1.98	1261090	70.36	30	120	
Sc	45	1	He	703936	4.71	955958	73.64	30	120	
Sc	45	2	NoGas	6185904	0.20	7862387	78.68	30	120	
Rh	103	1	He	2211667	6.77	2873429	76.97	30	120	
In	115	1	He	1488921	4.74	1922589	77.44	30	120	
Tb	159	1	He	3923903	5.52	4725151	83.04	30	120	
Ho	165	1	He	3964824	6.54	4813140	82.38	30	120	
Bi	209	1	He	3066544	7.22	3617562	84.77	30	120	

Sample Report

Sample Table

Sample Name	680-112721-a-2-b@10
Data File Name	210SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T22:34:54-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	0.161	0.161	34.21	47565	0.00	10000	
Be	9	6	2	NoGas	0.288	0.288	3.65	948	0.03	10000	
B	11	6	2	NoGas	1.638	1.638	19.67	11122	0.01	300	
Na	23	45	1	He	73.626	73.626	5.77	86822	0.08	500000	
Mg	24	45	1	He	316.139	316.139	5.92	167673	0.19	500000	
Al	27	45	1	He	815.873	815.873	5.40	262256	0.31	200000	
K	39	45	1	He	136.784	136.784	9.60	119906	0.11	500000	
Ca	44	45	1	He	2357.279	2357.279	4.96	74287	3.17	500000	
Ti	47	45	1	He	1173.019	1173.019	4.71	199779	0.59	2500	
V	51	45	1	He	28.414	28.414	5.66	238591	0.01	10000	
Cr	52	45	1	He	34.281	34.281	5.28	176056	0.02	10000	
Mn	55	45	1	He	82.806	82.806	5.47	335651	0.02	10000	
Fe	56	45	1	He	16965.193	16965.193	5.44	81901035	0.02	200000	
Co	59	45	1	He	4.304	4.304	4.63	30593	0.01	10000	
Ni	60	45	1	He	20.673	20.673	5.32	36695	0.06	10000	
Cu	63	45	1	He	12.144	12.144	5.88	56092	0.02	10000	
Zn	66	45	1	He	38.461	38.461	5.86	41797	0.09	10000	
As	75	115	1	He	0.429	0.429	9.42	545	0.08	10000	
Se	78	115	1	He	0.417	0.417	64.64	76	0.55	10000	
Sr	88	45	1	He	39.148	39.148	5.26	223059	0.02	10000	
Mo	95	103	1	He	0.763	0.763	5.10	2131	0.04	2000	
Ag	107	103	1	He	0.014	0.014	34.87	132	0.01	300	
Cd	111	115	1	He	0.270	0.270	6.90	2167	0.01	4000	
Sn	118	115	1	He	2.234	2.234	7.07	9851	0.02	2000	
Sb	123	165	1	He	0.069	0.069	2.84	412	0.02	300	
Ba	137	115	1	He	8.337	8.337	5.46	16770	0.05	10000	
W	182	159	1	He	0.097	0.097	48.25	7135	0.00	2500	
Tl	205	165	1	He	0.039	0.039	6.52	1127	0.00	5000	
Pb	208	165	1	He	2.995	2.995	2.78	101280	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	964825	6.39	1261090	76.51	30	120	
Sc	45	1	He	771815	4.71	955958	80.74	30	120	
Sc	45	2	NoGas	6647206	3.44	7862387	84.54	30	120	
Rh	103	1	He	2359994	3.85	2873429	82.13	30	120	
In	115	1	He	1648572	5.88	1922589	85.75	30	120	
Tb	159	1	He	4231368	3.91	4725151	89.55	30	120	
Ho	165	1	He	4308505	3.82	4813140	89.52	30	120	
Bi	209	1	He	3265229	3.21	3617562	90.26	30	120	

Sample Report

Sample Table

Sample Name	680-112721-a-3-b@10
Data File Name	211SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T22:38:31-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	-0.083	-0.083	-193.70	48109	0.00	10000	
Be	9	6	2	NoGas	0.256	0.256	24.31	870	0.03	10000	
B	11	6	2	NoGas	1.452	1.452	64.39	11011	0.01	300	
Na	23	45	1	He	66.094	66.094	21.32	77674	0.09	500000	
Mg	24	45	1	He	292.307	292.307	16.43	150496	0.19	500000	
Al	27	45	1	He	810.112	810.112	16.83	252282	0.32	200000	
K	39	45	1	He	137.241	137.241	24.63	116567	0.12	500000	
Ca	44	45	1	He	1663.645	1663.645	16.11	51004	3.26	500000	
Ti	47	45	1	He	1129.365	1129.365	16.88	186290	0.61	2500	
V	51	45	1	He	27.577	27.577	17.81	224399	0.01	10000	
Cr	52	45	1	He	28.663	28.663	17.52	142859	0.02	10000	
Mn	55	45	1	He	99.227	99.227	16.50	389427	0.03	10000	
Fe	56	45	1	He	17626.733	17626.733	16.68	82445359	0.02	200000	
Co	59	45	1	He	3.770	3.770	17.41	25945	0.01	10000	
Ni	60	45	1	He	15.827	15.827	15.42	27450	0.06	10000	
Cu	63	45	1	He	15.016	15.016	17.36	67035	0.02	10000	
Zn	66	45	1	He	58.712	58.712	16.50	61016	0.10	10000	
As	75	115	1	He	0.497	0.497	21.23	590	0.08	10000	
Se	78	115	1	He	0.305	0.305	34.02	66	0.46	10000	
Sr	88	45	1	He	31.081	31.081	16.20	171685	0.02	10000	
Mo	95	103	1	He	0.836	0.836	13.20	2297	0.04	2000	
Ag	107	103	1	He	0.018	0.018	31.27	163	0.01	300	
Cd	111	115	1	He	0.130	0.130	12.80	1915	0.01	4000	
Sn	118	115	1	He	2.827	2.827	21.55	11913	0.02	2000	
Sb	123	165	1	He	0.101	0.101	25.25	539	0.02	300	
Ba	137	115	1	He	7.504	7.504	13.43	14740	0.05	10000	
W	182	159	1	He	0.071	0.071	35.61	6768	0.00	2500	
Tl	205	165	1	He	0.029	0.029	15.23	857	0.00	5000	
Pb	208	165	1	He	3.194	3.194	14.07	104405	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	992766	11.06	1261090	78.72	30	120	
Sc	45	1	He	758777	14.53	955958	79.37	30	120	
Sc	45	2	NoGas	7149174	12.44	7862387	90.93	30	120	
Rh	103	1	He	2351834	13.97	2873429	81.85	30	120	
In	115	1	He	1627682	14.90	1922589	84.66	30	120	
Tb	159	1	He	4183543	13.39	4725151	88.54	30	120	
Ho	165	1	He	4213583	12.57	4813140	87.54	30	120	
Bi	209	1	He	3193653	10.86	3617562	88.28	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2026839
Data File Name	212_CCV.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T22:42:06-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	43.504	1.144	495687	0.37	50	87.0	89.5	110.5	CCV Failed
Be	9	6	2	NoGas	48.878	1.143	133415	0.95	50	97.8	89.5	110.5	
B	11	6	2	NoGas	49.131	0.327	82623	0.66	50	98.3	89.5	110.5	
Na	23	45	1	He	23283.763	12.161	21718390	0.87	25000	93.1	89.5	110.5	
Mg	24	45	1	He	23205.637	12.175	12686356	0.86	25000	92.8	89.5	110.5	
Al	27	45	1	He	230.239	14.047	77784	2.77	250	92.1	89.5	110.5	
K	39	45	1	He	24487.401	12.311	14270030	1.07	25000	97.9	89.5	110.5	
Ca	44	45	1	He	23395.772	12.832	765435	1.56	25000	93.6	89.5	110.5	
Ti	47	45	1	He	49.832	15.944	8860	4.90	50	99.7	89.5	110.5	
V	51	45	1	He	46.675	13.714	405517	2.28	50	93.3	89.5	110.5	
Cr	52	45	1	He	46.527	13.096	249162	1.73	50	93.1	89.5	110.5	
Mn	55	45	1	He	236.228	12.748	998223	1.45	250	94.5	89.5	110.5	
Fe	56	45	1	He	11768.950	12.793	59444480	1.55	12500	94.2	89.5	110.5	
Co	59	45	1	He	46.731	12.808	346798	1.54	50	93.5	89.5	110.5	
Ni	60	45	1	He	45.923	12.919	84216	1.68	50	91.8	89.5	110.5	
Cu	63	45	1	He	46.810	12.671	224446	1.36	50	93.6	89.5	110.5	
Zn	66	45	1	He	46.755	14.537	52737	2.91	50	93.5	89.5	110.5	
As	75	115	1	He	44.865	13.297	40163	0.99	50	89.7	89.5	110.5	
Se	78	115	1	He	45.707	13.040	3598	1.32	50	91.4	89.5	110.5	
Sr	88	45	1	He	49.530	13.152	295133	1.91	50	99.1	89.5	110.5	
Mo	95	103	1	He	48.713	12.693	136560	2.38	50	97.4	89.5	110.5	
Ag	107	103	1	He	47.174	11.686	417952	1.32	50	94.3	89.5	110.5	
Cd	111	115	1	He	45.723	13.636	78814	1.11	50	91.4	89.5	110.5	
Sn	118	115	1	He	46.513	14.803	195613	2.64	50	93.0	89.5	110.5	
Sb	123	165	1	He	46.982	11.610	223430	1.04	50	94.0	89.5	110.5	
Ba	137	115	1	He	47.781	14.019	97691	1.88	50	95.6	89.5	110.5	
W	182	159	1	He	45.276	12.810	490097	2.19	50	90.6	89.5	110.5	
Tl	205	165	1	He	46.155	11.847	1167682	1.20	50	92.3	89.5	110.5	
Pb	208	165	1	He	46.648	12.104	1608180	1.59	50	93.3	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	911375	0.54	1261090	72.27	30	120	
Sc	45	1	He	814495	12.06	955958	85.20	30	120	
Sc	45	2	NoGas	6306146	0.71	7862387	80.21	30	120	
Rh	103	1	He	2441456	11.13	2873429	84.97	30	120	
In	115	1	He	1695519	13.17	1922589	88.19	30	120	
Tb	159	1	He	4402418	11.30	4725151	93.17	30	120	
Ho	165	1	He	4456928	11.43	4813140	92.60	30	120	
Bi	209	1	He	3263020	10.59	3617562	90.20	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	213_CCB.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T22:45:43-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.424	-12.4	38884	1.2	2	
Be	9	6	2	NoGas	0.239	7.7	767	6.3	1	
B	11	6	2	NoGas	1.538	13.4	10381	3.4	20	
Na	23	45	1	He	48.032	3.8	64123	2.3	1000	
Mg	24	45	1	He	-0.432	-136.3	2397	12.5	1000	
Al	27	45	1	He	0.943	27.8	873	9.0	50	
K	39	45	1	He	20.807	4.9	55671	1.7	1000	
Ca	44	45	1	He	66.773	3.9	2712	3.8	1000	
Ti	47	45	1	He	0.444	51.8	81	48.7	20	
V	51	45	1	He	-0.256	-9.7	4309	4.7	2	
Cr	52	45	1	He	0.071	19.3	2430	2.7	2	
Mn	55	45	1	He	1.209	4.1	6752	3.4	2	
Fe	56	45	1	He	15.984	15.7	84347	14.3	50	
Co	59	45	1	He	0.024	19.8	230	15.1	1	
Ni	60	45	1	He	-0.394	-2.7	144	12.7	2	
Cu	63	45	1	He	0.036	1.4	771	0.5	2	
Zn	66	45	1	He	4.611	0.8	6480	1.0	20	
As	75	115	1	He	0.068	23.2	227	5.3	2	
Se	78	115	1	He	0.236	47.2	62	14.1	2	
Sr	88	45	1	He	0.049	13.0	407	8.3	10	
Mo	95	103	1	He	0.283	22.1	839	21.9	2	
Ag	107	103	1	He	0.005	54.0	56	45.4	0.2	
Cd	111	115	1	He	0.114	34.0	1897	4.0	0.2	
Sn	118	115	1	He	0.522	6.5	2771	5.9	10	
Sb	123	165	1	He	0.121	5.7	633	4.6	2	
Ba	137	115	1	He	0.038	25.9	106	19.3	5	
W	182	159	1	He	0.659	6.5	12724	4.1	10	
Tl	205	165	1	He	0.102	2.9	2617	3.0	0.5	
Pb	208	165	1	He	0.187	2.8	6744	2.4	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	914755	0.37	1261090	72.54	30	120	
Sc	45	1	He	771911	0.77	955958	80.75	30	120	
Sc	45	2	NoGas	6282781	0.31	7862387	79.91	30	120	
Rh	103	1	He	2408909	1.22	2873429	83.83	30	120	
In	115	1	He	1636850	0.88	1922589	85.14	30	120	
Tb	159	1	He	4155027	0.77	4725151	87.93	30	120	
Ho	165	1	He	4202925	0.37	4813140	87.32	30	120	
Bi	209	1	He	3176187	1.55	3617562	87.80	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-2012498
Data File Name	214CRI.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T22:49:20-04:00
Sample Type	CRI
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	2	NoGas	6.472	6.472	0.526	111493	1.06	8	80.9	49.5	150.5	
Be	9	2	NoGas	1.126	1.126	10.878	3204	10.15	1	112.6	49.5	150.5	
B	11	2	NoGas	19.653	19.653	2.385	38092	0.75	20	98.3	49.5	150.5	
Na	23	1	He	1079.606	1079.606	18.970	957405	1.53	1000	108.0	49.5	150.5	
Mg	24	1	He	1056.398	1056.398	19.167	539899	1.94	1000	105.6	49.5	150.5	
Al	27	1	He	51.031	51.031	18.646	16519	0.92	50	102.1	49.5	150.5	
K	39	1	He	1105.268	1105.268	18.474	641692	0.70	1000	110.5	49.5	150.5	
Ca	44	1	He	1044.295	1044.295	19.586	32380	3.13	1000	104.4	49.5	150.5	
Ti	47	1	He	10.442	10.442	24.956	1726	7.92	10	104.4	49.5	150.5	
V	51	1	He	3.574	3.574	20.469	34762	1.23	5	71.5	49.5	150.5	
Cr	52	1	He	2.128	2.128	19.809	12563	1.49	2	106.4	49.5	150.5	
Mn	55	1	He	4.928	4.928	19.938	21195	1.71	5	98.6	49.5	150.5	
Fe	56	1	He	109.220	109.220	18.651	520875	1.39	100	109.2	49.5	150.5	
Co	59	1	He	1.101	1.101	19.121	7664	1.93	1	110.1	49.5	150.5	
Ni	60	1	He	1.715	1.715	25.787	3699	3.33	2	85.7	49.5	150.5	
Cu	63	1	He	2.159	2.159	20.733	10193	2.41	2	107.9	49.5	150.5	
Zn	66	1	He	20.924	20.924	19.989	22897	2.27	20	104.6	49.5	150.5	
As	75	1	He	4.715	4.715	21.160	4237	1.59	5	94.3	49.5	150.5	
Se	78	1	He	4.943	4.943	20.054	417	0.84	5	98.9	49.5	150.5	
Sr	88	1	He	10.828	10.828	16.984	60327	0.17	10	108.3	49.5	150.5	
Mo	95	1	He	10.369	10.369	16.762	27858	0.40	10	103.7	49.5	150.5	
Ag	107	1	He	1.052	1.052	17.200	8915	0.88	1	105.2	49.5	150.5	
Cd	111	1	He	1.120	1.120	19.156	3568	9.03	1	112.0	49.5	150.5	
Sn	118	1	He	10.068	10.068	17.730	41689	2.62	10	100.7	49.5	150.5	
Sb	123	1	He	2.114	2.114	16.640	9485	1.36	2	105.7	49.5	150.5	
Ba	137	1	He	5.155	5.155	21.735	10220	3.39	5	103.1	49.5	150.5	
W	182	1	He	9.697	9.697	15.302	102372	1.74	10	97.0	49.5	150.5	
Tl	205	1	He	2.014	2.014	16.662	47815	0.61	2	100.7	49.5	150.5	
Pb	208	1	He	1.137	1.137	18.193	37214	3.29	1	113.7	49.5	150.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	917334	2.31	1261090	72.74	30	120	
Sc	45	1	He	766766	16.70	955958	80.21	30	120	
Sc	45	2	NoGas	6349848	0.78	7862387	80.76	30	120	
Rh	103	1	He	2358725	16.79	2873429	82.09	30	120	
In	115	1	He	1664668	18.71	1922589	86.58	30	120	
Tb	159	1	He	4125779	16.36	4725151	87.32	30	120	
Ho	165	1	He	4207989	16.39	4813140	87.43	30	120	
Bi	209	1	He	3194095	14.44	3617562	88.29	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-182339/1-a@2
Data File Name	215_Blk.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T22:52:57-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.431	-8.5	37832	0.5	2	
Be	9	6	2	NoGas	0.213	7.3	667	7.3	1	
B	11	6	2	NoGas	1.589	3.4	10029	1.2	20	
Na	23	45	1	He	76.413	14.4	84832	2.3	1000	
Mg	24	45	1	He	19.100	8.0	11997	3.0	1000	
Al	27	45	1	He	4.013	16.9	1765	4.5	50	
K	39	45	1	He	46.481	28.4	66352	1.2	1000	
Ca	44	45	1	He	77.028	13.3	2876	1.2	1000	
Ti	47	45	1	He	0.481	30.1	82	19.2	20	
V	51	45	1	He	1.281	20.9	15997	3.6	2	
Cr	52	45	1	He	1.421	14.4	8818	4.6	2	
Mn	55	45	1	He	0.317	37.2	2980	6.3	2	
Fe	56	45	1	He	21.231	15.9	103833	5.6	50	
Co	59	45	1	He	0.055	13.9	424	7.9	1	
Ni	60	45	1	He	-0.271	-2.7	341	7.9	2	
Cu	63	45	1	He	0.314	18.3	1938	5.9	2	
Zn	66	45	1	He	3.413	16.5	4957	2.8	20	
As	75	115	1	He	0.281	25.9	395	5.2	2	
Se	78	115	1	He	0.192	74.2	56	12.0	2	
Sr	88	45	1	He	0.288	16.1	1670	5.6	10	
Mo	95	103	1	He	0.190	33.5	549	25.3	2	
Ag	107	103	1	He	0.004	62.0	41	57.5	0.2	
Cd	111	115	1	He	0.156	15.8	1898	10.5	0.2	
Sn	118	115	1	He	18.952	14.4	74850	2.0	10	Blank Failed
Sb	123	165	1	He	0.090	25.2	478	10.0	2	
Ba	137	115	1	He	0.570	17.2	1118	11.6	5	
W	182	159	1	He	0.370	30.6	9462	3.8	10	
Tl	205	165	1	He	0.094	15.3	2350	3.6	0.5	
Pb	208	165	1	He	0.303	9.6	10289	2.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	877201	1.43	1261090	69.56	30	120	
Sc	45	1	He	736993	9.18	955958	77.09	30	120	
Sc	45	2	NoGas	6124539	0.51	7862387	77.90	30	120	
Rh	103	1	He	2311765	9.34	2873429	80.45	30	120	
In	115	1	He	1582844	12.42	1922589	82.33	30	120	
Tb	159	1	He	4051874	9.99	4725151	85.75	30	120	
Ho	165	1	He	4120330	10.50	4813140	85.61	30	120	
Bi	209	1	He	3293474	10.26	3617562	91.04	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-182339/2-a@2
Data File Name	216LCSS.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T22:56:34-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	2	NoGas	-0.461	-0.461	-15.602	36618	1.87	500	-0.1	79.5	120.5	LCSS Failed
Be	9	2	NoGas	467.106	467.106	1.598	1189629	1.66	500	93.4	78.6	110.5	
B	11	2	NoGas	49.803	49.803	1.564	78100	1.31	50	99.6	79.5	120.5	
Na	23	1	He	4847.331	4847.331	2.316	4015390	0.76	5000	96.9	79.5	120.5	
Mg	24	1	He	4904.438	4904.438	2.327	2373833	0.83	5000	98.1	79.5	120.5	
Al	27	1	He	4671.309	4671.309	1.425	1388069	0.25	5000	93.4	79.5	120.5	
K	39	1	He	5096.763	5096.763	1.902	2660223	1.03	5000	101.9	79.5	120.5	
Ca	44	1	He	4879.299	4879.299	0.891	141773	1.15	5000	97.6	79.5	120.5	
Ti	47	1	He	49.725	49.725	2.579	7845	1.30	50	99.5	79.5	120.5	
V	51	1	He	483.881	483.881	1.834	3667808	0.55	500	96.8	71.5	110.5	
Cr	52	1	He	489.945	489.945	1.987	2304476	0.45	500	98.0	69.5	110.5	
Mn	55	1	He	504.695	504.695	1.306	1885726	0.32	500	100.9	79.5	120.5	
Fe	56	1	He	4940.908	4940.908	1.892	22092977	0.48	5000	98.8	79.5	120.5	
Co	59	1	He	489.710	489.710	2.630	3216063	1.14	500	97.9	73.9	110.5	
Ni	60	1	He	486.836	486.836	1.639	782896	0.39	500	97.4	74.9	110.5	
Cu	63	1	He	494.891	494.891	1.113	2094878	0.66	500	99.0	72.6	110.5	
Zn	66	1	He	480.936	480.936	1.357	466433	0.92	500	96.2	71.5	113.4	
As	75	1	He	448.072	448.072	0.347	349574	0.58	500	89.6	73.4	110.5	
Se	78	1	He	456.490	456.490	0.447	31076	0.67	500	91.3	64.6	110.5	
Sr	88	1	He	523.836	523.836	2.894	2762189	1.45	500	104.8	79.5	120.5	
Mo	95	1	He	49.008	49.008	1.691	127598	1.46	50	98.0	29.5	140.5	
Ag	107	1	He	48.091	48.091	1.178	395419	0.48	50	96.2	59.5	114.5	
Cd	111	1	He	477.416	477.416	0.567	705566	0.18	500	95.5	73.5	110.5	
Sn	118	1	He	542.787	542.787	1.866	1993609	1.29	50	1085.6	79.5	120.5	LCSS Failed
Sb	123	1	He	44.904	44.904	1.476	199278	0.14	50	89.8	67.5	113.4	
Ba	137	1	He	500.561	500.561	0.223	895754	0.58	500	100.1	69.5	110.5	
W	182	1	He	46.228	46.228	0.143	465795	0.65	50	92.5	74.6	125.4	
Tl	205	1	He	121.137	121.137	1.995	2859987	0.78	125	96.9	70.6	110.5	
Pb	208	1	He	481.885	481.885	1.263	15503296	0.63	500	96.4	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	850974	0.26	1261090	67.48	30	120	
Sc	45	1	He	713661	1.57	955958	74.65	30	120	
Sc	45	2	NoGas	5974843	0.29	7862387	75.99	30	120	
Rh	103	1	He	2246302	1.27	2873429	78.17	30	120	
In	115	1	He	1466180	0.64	1922589	76.26	30	120	
Tb	159	1	He	4059932	0.57	4725151	85.92	30	120	
Ho	165	1	He	4122921	1.61	4813140	85.66	30	120	
Bi	209	1	He	3087652	1.39	3617562	85.35	30	120	

Sample Report

Sample Table

Sample Name	240-50650-a-1-b@2
Data File Name	217SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T23:00:00-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	49.943	49.943	1.18	575961	0.01	10000	
Be	9	6	2	NoGas	3.779	3.779	1.58	10526	0.04	10000	
B	11	6	2	NoGas	16.963	16.963	4.69	34103	0.05	300	
Na	23	45	1	He	259.256	259.256	21.60	236785	0.11	500000	
Mg	24	45	1	He	10276.262	10276.262	19.30	5046267	0.20	500000	
Al	27	45	1	He	53917.686	53917.686	21.19	16223064	0.33	200000	
K	39	45	1	He	3572.530	3572.530	18.98	1906538	0.19	500000	
Ca	44	45	1	He	18803.420	18803.420	20.00	552444	3.40	500000	
Ti	47	45	1	He	535.643	535.643	19.61	85710	0.62	2500	
V	51	45	1	He	104.551	104.551	21.10	807678	0.01	10000	
Cr	52	45	1	He	92.124	92.124	21.00	440641	0.02	10000	
Mn	55	45	1	He	5381.869	5381.869	20.75	20361064	0.03	10000	
Fe	56	45	1	He	114108.507	114108.507	20.76	516949562	0.02	200000	
Co	59	45	1	He	48.515	48.515	20.39	323097	0.02	10000	
Ni	60	45	1	He	105.143	105.143	21.08	171917	0.06	10000	
Cu	63	45	1	He	67.901	67.901	20.51	291843	0.02	10000	
Zn	66	45	1	He	356.559	356.559	20.41	350993	0.10	10000	
As	75	115	1	He	64.606	64.606	19.33	50321	0.13	10000	
Se	78	115	1	He	6.118	6.118	20.11	454	1.35	10000	
Sr	88	45	1	He	80.865	80.865	19.73	432760	0.02	10000	
Mo	95	103	1	He	8.891	8.891	17.80	22338	0.04	2000	
Ag	107	103	1	He	0.324	0.324	13.76	2584	0.01	300	
Cd	111	115	1	He	1.441	1.441	16.69	3677	0.04	4000	
Sn	118	115	1	He	14.806	14.806	20.52	54640	0.03	2000	
Sb	123	165	1	He	1.180	1.180	21.45	5200	0.02	300	
Ba	137	115	1	He	454.341	454.341	19.27	809596	0.06	10000	
W	182	159	1	He	1.023	1.023	24.19	15831	0.01	2500	
Tl	205	165	1	He	1.150	1.150	16.52	26786	0.00	5000	
Pb	208	165	1	He	157.340	157.340	17.35	4963445	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	920802	2.24	1261090	73.02	30	120	
Sc	45	1	He	739360	15.88	955958	77.34	30	120	
Sc	45	2	NoGas	6455868	1.08	7862387	82.11	30	120	
Rh	103	1	He	2198496	13.24	2873429	76.51	30	120	
In	115	1	He	1489132	15.27	1922589	77.45	30	120	
Tb	159	1	He	4057357	13.85	4725151	85.87	30	120	
Ho	165	1	He	4109172	14.20	4813140	85.37	30	120	
Bi	209	1	He	3055956	12.55	3617562	84.48	30	120	

Sample Report

Sample Table

Sample Name	SD 240-50650-a-1-b@10
Data File Name	218SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T23:03:32-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	9.234	9.234	12.84	156487	0.01	10000	
Be	9	6	2	NoGas	0.842	0.842	16.13	2652	0.03	10000	
B	11	6	2	NoGas	3.435	3.435	24.47	14580	0.02	300	
Na	23	45	1	He	81.223	81.223	0.63	95583	0.08	500000	
Mg	24	45	1	He	2057.832	2057.832	0.40	1100482	0.19	500000	
Al	27	45	1	He	10818.100	10818.100	1.19	3545520	0.31	200000	
K	39	45	1	He	704.528	704.528	0.72	444449	0.16	500000	
Ca	44	45	1	He	3749.224	3749.224	1.27	120314	3.12	500000	
Ti	47	45	1	He	105.022	105.022	1.98	18276	0.57	2500	
V	51	45	1	He	20.262	20.262	1.14	175697	0.01	10000	
Cr	52	45	1	He	18.312	18.312	0.53	97056	0.02	10000	
Mn	55	45	1	He	1071.613	1071.613	0.20	4415021	0.02	10000	
Fe	56	45	1	He	22527.652	22527.652	0.87	111106260	0.02	200000	
Co	59	45	1	He	9.655	9.655	1.25	70013	0.01	10000	
Ni	60	45	1	He	20.924	20.924	1.41	37933	0.06	10000	
Cu	63	45	1	He	13.806	13.806	0.04	65071	0.02	10000	
Zn	66	45	1	He	71.485	71.485	1.79	77919	0.09	10000	
As	75	115	1	He	12.237	12.237	0.62	11065	0.11	10000	
Se	78	115	1	He	1.255	1.255	5.22	142	0.88	10000	
Sr	88	45	1	He	15.850	15.850	1.16	92340	0.02	10000	
Mo	95	103	1	He	1.640	1.640	8.61	4734	0.03	2000	
Ag	107	103	1	He	0.061	0.061	12.40	559	0.01	300	
Cd	111	115	1	He	0.309	0.309	9.77	2268	0.01	4000	
Sn	118	115	1	He	2.597	2.597	10.97	11528	0.02	2000	
Sb	123	165	1	He	0.244	0.244	2.97	1233	0.02	300	
Ba	137	115	1	He	83.800	83.800	0.53	171207	0.05	10000	
W	182	159	1	He	0.201	0.201	27.74	8262	0.00	2500	
Tl	205	165	1	He	0.236	0.236	2.59	6042	0.00	5000	
Pb	208	165	1	He	30.374	30.374	0.66	1031061	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	1009069	6.92	1261090	80.02	30	120	
Sc	45	1	He	787207	0.44	955958	82.35	30	120	
Sc	45	2	NoGas	7120956	10.36	7862387	90.57	30	120	
Rh	103	1	He	2464786	0.06	2873429	85.78	30	120	
In	115	1	He	1673672	0.45	1922589	87.05	30	120	
Tb	159	1	He	4262110	0.65	4725151	90.20	30	120	
Ho	165	1	He	4347273	1.10	4813140	90.32	30	120	
Bi	209	1	He	3285280	0.56	3617562	90.81	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-50650-a-1-b@2
Data File Name	219SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T23:07:05-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	47.934	47.934	1.02	559851	0.01	10000	
Be	9	6	2	NoGas	967.862	967.862	1.78	2580144	0.04	10000	
B	11	6	2	NoGas	119.032	119.032	2.28	184511	0.06	300	
Na	23	45	1	He	9915.985	9915.985	0.38	8748453	0.11	500000	
Mg	24	45	1	He	19296.268	19296.268	0.91	9964735	0.19	500000	
Al	27	45	1	He	59392.727	59392.727	1.40	18835601	0.32	200000	
K	39	45	1	He	13255.668	13255.668	1.30	7317192	0.18	500000	
Ca	44	45	1	He	27524.126	27524.126	1.08	850923	3.23	500000	
Ti	47	45	1	He	592.672	592.672	1.52	99781	0.59	2500	
V	51	45	1	He	1062.475	1062.475	0.98	8591058	0.01	10000	
Cr	52	45	1	He	1052.898	1052.898	1.46	5285345	0.02	10000	
Mn	55	45	1	He	5947.372	5947.372	1.82	23704732	0.03	10000	
Fe	56	45	1	He	115283.464	115283.464	1.57	550225774	0.02	200000	
Co	59	45	1	He	1018.429	1018.429	2.07	7141628	0.01	10000	
Ni	60	45	1	He	1099.867	1099.867	1.56	1887384	0.06	10000	
Cu	63	45	1	He	1043.972	1043.972	1.28	4717239	0.02	10000	
Zn	66	45	1	He	1265.759	1265.759	0.56	1307900	0.10	10000	
As	75	115	1	He	1008.184	1008.184	2.08	812519	0.12	10000	
Se	78	115	1	He	962.145	962.145	2.56	67626	1.42	10000	
Sr	88	45	1	He	1126.467	1126.467	1.26	6342420	0.02	10000	
Mo	95	103	1	He	114.069	114.069	0.88	298529	0.04	2000	
Ag	107	103	1	He	100.498	100.498	0.51	830799	0.01	300	
Cd	111	115	1	He	978.572	978.572	1.88	1492739	0.07	4000	
Sn	118	115	1	He	1090.779	1090.779	1.82	4139508	0.03	2000	
Sb	123	165	1	He	95.034	95.034	1.32	432301	0.02	300	
Ba	137	115	1	He	1532.003	1532.003	1.82	2832782	0.05	10000	
W	182	159	1	He	97.318	97.318	1.32	996603	0.01	2500	
Tl	205	165	1	He	245.824	245.824	1.30	5950276	0.00	5000	
Pb	208	165	1	He	1123.182	1123.182	1.53	37044027	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	890992	2.02	1261090	70.65	30	120	
Sc	45	1	He	761810	0.25	955958	79.69	30	120	
Sc	45	2	NoGas	6516945	0.70	7862387	82.89	30	120	
Rh	103	1	He	2258288	0.90	2873429	78.59	30	120	
In	115	1	He	1515589	3.18	1922589	78.83	30	120	
Tb	159	1	He	4154116	1.24	4725151	87.91	30	120	
Ho	165	1	He	4226657	1.37	4813140	87.81	30	120	
Bi	209	1	He	3056591	0.89	3617562	84.49	30	120	

Sample Report

Sample Table

Sample Name	240-50650-a-1-c du@2
Data File Name	220SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T23:10:27-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	40.705	40.705	3.96	549894	0.01	10000	
Be	9	6	2	NoGas	4.035	4.035	10.11	12034	0.03	10000	
B	11	6	2	NoGas	14.429	14.429	5.38	32418	0.04	300	
Na	23	45	1	He	236.401	236.401	6.04	225166	0.10	500000	
Mg	24	45	1	He	9780.907	9780.907	5.65	4965725	0.20	500000	
Al	27	45	1	He	51535.765	51535.765	5.04	16066749	0.32	200000	
K	39	45	1	He	3329.621	3329.621	4.08	1839558	0.18	500000	
Ca	44	45	1	He	15708.792	15708.792	5.64	477579	3.29	500000	
Ti	47	45	1	He	495.827	495.827	6.10	82035	0.60	2500	
V	51	45	1	He	98.801	98.801	5.27	790932	0.01	10000	
Cr	52	45	1	He	84.441	84.441	5.74	418449	0.02	10000	
Mn	55	45	1	He	5376.617	5376.617	5.53	21063037	0.03	10000	
Fe	56	45	1	He	107127.241	107127.241	5.56	502539429	0.02	200000	
Co	59	45	1	He	47.478	47.478	4.80	327364	0.01	10000	
Ni	60	45	1	He	103.364	103.364	5.47	175071	0.06	10000	
Cu	63	45	1	He	68.236	68.236	5.23	303627	0.02	10000	
Zn	66	45	1	He	356.148	356.148	5.51	362870	0.10	10000	
As	75	115	1	He	60.455	60.455	6.64	49330	0.12	10000	
Se	78	115	1	He	5.882	5.882	3.52	459	1.28	10000	
Sr	88	45	1	He	85.427	85.427	5.45	472881	0.02	10000	
Mo	95	103	1	He	8.909	8.909	5.33	23183	0.04	2000	
Ag	107	103	1	He	0.326	0.326	2.62	2687	0.01	300	
Cd	111	115	1	He	1.640	1.640	8.22	4122	0.04	4000	
Sn	118	115	1	He	15.154	15.154	9.05	58568	0.03	2000	
Sb	123	165	1	He	1.212	1.212	8.42	5572	0.02	300	
Ba	137	115	1	He	448.077	448.077	7.28	836074	0.05	10000	
W	182	159	1	He	1.169	1.169	1.12	17833	0.01	2500	
Tl	205	165	1	He	1.226	1.226	8.65	29641	0.00	5000	
Pb	208	165	1	He	155.278	155.278	6.45	5093604	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	988325	3.57	1261090	78.37	30	120	
Sc	45	1	He	750100	4.77	955958	78.47	30	120	
Sc	45	2	NoGas	7437676	3.37	7862387	94.60	30	120	
Rh	103	1	He	2245428	5.22	2873429	78.14	30	120	
In	115	1	He	1533661	6.62	1922589	79.77	30	120	
Tb	159	1	He	4136719	5.66	4725151	87.55	30	120	
Ho	165	1	He	4212716	5.41	4813140	87.53	30	120	
Bi	209	1	He	3057938	4.66	3617562	84.53	30	120	

Sample Report

Sample Table

Sample Name	240-50650-a-1-d ms@2
Data File Name	221SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T23:14:00-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	58.362	58.362	2.11	646177	0.01	10000	
Be	9	6	2	NoGas	49.795	49.795	1.26	128993	0.04	10000	
B	11	6	2	NoGas	57.107	57.107	2.46	89902	0.06	300	
Na	23	45	1	He	4633.924	4633.924	5.64	4248749	0.11	500000	
Mg	24	45	1	He	14378.964	14378.964	4.91	7697852	0.19	500000	
Al	27	45	1	He	60945.384	60945.384	5.51	20031828	0.30	200000	
K	39	45	1	He	8059.005	8059.005	5.26	4628667	0.17	500000	
Ca	44	45	1	He	21169.932	21169.932	5.22	678518	3.12	500000	
Ti	47	45	1	He	544.747	544.747	6.51	95027	0.57	2500	
V	51	45	1	He	147.804	147.804	5.43	1244336	0.01	10000	
Cr	52	45	1	He	139.157	139.157	5.20	725883	0.02	10000	
Mn	55	45	1	He	5410.337	5410.337	5.03	22352451	0.02	10000	
Fe	56	45	1	He	104027.782	104027.782	5.34	514607482	0.02	200000	
Co	59	45	1	He	91.863	91.863	5.38	667709	0.01	10000	
Ni	60	45	1	He	146.672	146.672	5.00	261630	0.06	10000	
Cu	63	45	1	He	108.592	108.592	5.11	509157	0.02	10000	
Zn	66	45	1	He	402.595	402.595	4.61	432426	0.09	10000	
As	75	115	1	He	98.387	98.387	7.69	83761	0.12	10000	
Se	78	115	1	He	46.365	46.365	9.01	3475	1.33	10000	
Sr	88	45	1	He	131.160	131.160	5.00	765592	0.02	10000	
Mo	95	103	1	He	53.919	53.919	6.19	147363	0.04	2000	
Ag	107	103	1	He	45.239	45.239	6.15	390487	0.01	300	
Cd	111	115	1	He	44.841	44.841	7.38	73733	0.06	4000	
Sn	118	115	1	He	51.783	51.783	7.08	207859	0.02	2000	
Sb	123	165	1	He	15.023	15.023	6.24	70212	0.02	300	
Ba	137	115	1	He	486.561	486.561	8.01	948520	0.05	10000	
W	182	159	1	He	33.100	33.100	5.76	354341	0.01	2500	
Tl	205	165	1	He	44.409	44.409	5.69	1103537	0.00	5000	
Pb	208	165	1	He	194.419	194.419	5.53	6583158	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	865103	2.24	1261090	68.60	30	120	
Sc	45	1	He	790804	4.27	955958	82.72	30	120	
Sc	45	2	NoGas	6269164	2.25	7862387	79.74	30	120	
Rh	103	1	He	2363171	5.44	2873429	82.24	30	120	
In	115	1	He	1603274	7.09	1922589	83.39	30	120	
Tb	159	1	He	4298715	4.09	4725151	90.98	30	120	
Ho	165	1	He	4346691	5.15	4813140	90.31	30	120	
Bi	209	1	He	3163951	4.02	3617562	87.46	30	120	

Sample Report

Sample Table

Sample Name	240-50650-a-3-b@2
Data File Name	222SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T23:17:33-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	66.889	66.889	1.53	722704	0.01	10000	
Be	9	6	2	NoGas	3.221	3.221	5.77	8306	0.04	10000	
B	11	6	2	NoGas	10.869	10.869	4.34	22896	0.05	300	
Na	23	45	1	He	162.032	162.032	6.15	170801	0.09	500000	
Mg	24	45	1	He	9474.791	9474.791	4.57	5109783	0.19	500000	
Al	27	45	1	He	56073.851	56073.851	3.52	18570959	0.30	200000	
K	39	45	1	He	3551.477	3551.477	2.88	2080910	0.17	500000	
Ca	44	45	1	He	1247.633	1247.633	5.27	40875	3.05	500000	
Ti	47	45	1	He	399.586	399.586	3.97	70250	0.57	2500	
V	51	45	1	He	98.843	98.843	4.95	840358	0.01	10000	
Cr	52	45	1	He	80.426	80.426	4.59	423470	0.02	10000	
Mn	55	45	1	He	5196.280	5196.280	4.88	21621762	0.02	10000	
Fe	56	45	1	He	109588.566	109588.566	4.18	546131907	0.02	200000	
Co	59	45	1	He	44.002	44.002	4.54	322204	0.01	10000	
Ni	60	45	1	He	88.545	88.545	3.78	159453	0.06	10000	
Cu	63	45	1	He	45.594	45.594	4.63	215687	0.02	10000	
Zn	66	45	1	He	266.606	266.606	4.50	288979	0.09	10000	
As	75	115	1	He	47.563	47.563	6.15	40243	0.12	10000	
Se	78	115	1	He	4.107	4.107	10.37	344	1.19	10000	
Sr	88	45	1	He	17.797	17.797	4.51	104748	0.02	10000	
Mo	95	103	1	He	6.820	6.820	6.42	18714	0.04	2000	
Ag	107	103	1	He	0.313	0.313	7.84	2715	0.01	300	
Cd	111	115	1	He	1.001	1.001	8.98	3253	0.03	4000	
Sn	118	115	1	He	10.894	10.894	4.57	43865	0.02	2000	
Sb	123	165	1	He	0.616	0.616	4.66	2973	0.02	300	
Ba	137	115	1	He	434.650	434.650	5.87	840564	0.05	10000	
W	182	159	1	He	0.543	0.543	11.50	12009	0.00	2500	
Tl	205	165	1	He	0.988	0.988	4.95	24760	0.00	5000	
Pb	208	165	1	He	84.484	84.484	3.91	2866023	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	851339	1.98	1261090	67.51	30	120	
Sc	45	1	He	796224	3.50	955958	83.29	30	120	
Sc	45	2	NoGas	6169358	1.31	7862387	78.47	30	120	
Rh	103	1	He	2366652	4.56	2873429	82.36	30	120	
In	115	1	He	1587955	5.62	1922589	82.59	30	120	
Tb	159	1	He	4330325	3.58	4725151	91.64	30	120	
Ho	165	1	He	4349939	3.42	4813140	90.38	30	120	
Bi	209	1	He	3179700	3.95	3617562	87.90	30	120	

Sample Report

Sample Table

Sample Name	240-50650-a-4-b@2
Data File Name	223SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T23:21:07-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	65.400	65.400	0.81	685436	0.01	10000	
Be	9	6	2	NoGas	3.489	3.489	9.07	8447	0.04	10000	
B	11	6	2	NoGas	16.478	16.478	5.38	28976	0.06	300	
Na	23	45	1	He	185.875	185.875	13.94	170402	0.11	500000	
Mg	24	45	1	He	12398.380	12398.380	14.07	5901777	0.21	500000	
Al	27	45	1	He	60328.510	60328.510	13.22	17645852	0.34	200000	
K	39	45	1	He	5069.611	5069.611	12.59	2607700	0.19	500000	
Ca	44	45	1	He	4516.560	4516.560	13.02	129283	3.49	500000	
Ti	47	45	1	He	506.501	506.501	13.44	78636	0.64	2500	
V	51	45	1	He	108.369	108.369	13.91	813057	0.01	10000	
Cr	52	45	1	He	92.367	92.367	13.47	429285	0.02	10000	
Mn	55	45	1	He	4895.310	4895.310	13.04	17998300	0.03	10000	
Fe	56	45	1	He	120635.791	120635.791	13.97	530672530	0.02	200000	
Co	59	45	1	He	48.408	48.408	12.99	313181	0.02	10000	
Ni	60	45	1	He	111.275	111.275	13.38	176777	0.06	10000	
Cu	63	45	1	He	74.275	74.275	12.50	310248	0.02	10000	
Zn	66	45	1	He	313.241	313.241	12.74	299798	0.10	10000	
As	75	115	1	He	54.132	54.132	13.75	40336	0.13	10000	
Se	78	115	1	He	4.367	4.367	15.23	320	1.36	10000	
Sr	88	45	1	He	33.269	33.269	13.21	172875	0.02	10000	
Mo	95	103	1	He	7.701	7.701	12.76	18540	0.04	2000	
Ag	107	103	1	He	0.259	0.259	7.09	1979	0.01	300	
Cd	111	115	1	He	1.385	1.385	11.98	3425	0.04	4000	
Sn	118	115	1	He	12.642	12.642	15.81	44656	0.03	2000	
Sb	123	165	1	He	0.733	0.733	10.89	3174	0.02	300	
Ba	137	115	1	He	442.770	442.770	13.80	754302	0.06	10000	
W	182	159	1	He	0.592	0.592	24.39	11238	0.01	2500	
Tl	205	165	1	He	1.060	1.060	11.43	23946	0.00	5000	
Pb	208	165	1	He	96.470	96.470	11.08	2951104	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	799399	0.39	1261090	63.39	30	120	
Sc	45	1	He	710771	13.02	955958	74.35	30	120	
Sc	45	2	NoGas	5975891	0.78	7862387	76.01	30	120	
Rh	103	1	He	2094299	11.99	2873429	72.89	30	120	
In	115	1	He	1413739	13.83	1922589	73.53	30	120	
Tb	159	1	He	3916354	11.35	4725151	82.88	30	120	
Ho	165	1	He	3949927	10.56	4813140	82.07	30	120	
Bi	209	1	He	2902489	9.51	3617562	80.23	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2026839
Data File Name	224_CCV.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T23:24:41-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	41.800	0.785	451706	0.45	50	83.6	89.5	110.5	CCV Failed
Be	9	6	2	NoGas	49.821	1.520	122178	1.27	50	99.6	89.5	110.5	
B	11	6	2	NoGas	50.255	1.813	75766	1.42	50	100.5	89.5	110.5	
Na	23	45	1	He	26321.639	8.484	20395776	0.11	25000	105.3	89.5	110.5	
Mg	24	45	1	He	26458.935	9.233	12012705	1.01	25000	105.8	89.5	110.5	
Al	27	45	1	He	263.697	10.870	73959	2.32	250	105.5	89.5	110.5	
K	39	45	1	He	27441.846	8.515	13282930	0.70	25000	109.8	89.5	110.5	
Ca	44	45	1	He	26438.361	9.271	718647	0.85	25000	105.8	89.5	110.5	
Ti	47	45	1	He	54.508	10.990	8065	2.47	50	109.0	89.5	110.5	
V	51	45	1	He	52.751	11.164	379942	2.49	50	105.5	89.5	110.5	
Cr	52	45	1	He	52.706	9.982	234239	1.57	50	105.4	89.5	110.5	
Mn	55	45	1	He	267.611	9.220	939362	0.76	250	107.0	89.5	110.5	
Fe	56	45	1	He	13438.713	8.186	56430793	0.53	12500	107.5	89.5	110.5	
Co	59	45	1	He	52.657	9.361	324678	0.99	50	105.3	89.5	110.5	
Ni	60	45	1	He	52.456	8.907	79845	0.50	50	104.9	89.5	110.5	
Cu	63	45	1	He	53.160	9.597	211655	1.11	50	106.3	89.5	110.5	
Zn	66	45	1	He	52.868	10.179	49392	1.41	50	105.7	89.5	110.5	
As	75	115	1	He	51.049	10.217	37706	0.73	50	102.1	89.5	110.5	
Se	78	115	1	He	50.483	10.290	3276	1.17	50	101.0	89.5	110.5	
Sr	88	45	1	He	56.291	9.467	278729	1.15	50	112.6	89.5	110.5	CCV Failed
Mo	95	103	1	He	54.190	11.833	130466	1.81	50	108.4	89.5	110.5	
Ag	107	103	1	He	52.075	10.561	396270	0.74	50	104.1	89.5	110.5	
Cd	111	115	1	He	52.544	10.353	74559	0.65	50	105.1	89.5	110.5	
Sn	118	115	1	He	53.547	11.064	185975	1.58	50	107.1	89.5	110.5	
Sb	123	165	1	He	52.200	9.206	214913	0.54	50	104.4	89.5	110.5	
Ba	137	115	1	He	55.078	10.486	93005	0.96	50	110.2	89.5	110.5	
W	182	159	1	He	50.814	10.330	476909	1.81	50	101.6	89.5	110.5	
Tl	205	165	1	He	52.436	9.911	1148262	1.25	50	104.9	89.5	110.5	
Pb	208	165	1	He	52.790	9.796	1575646	1.12	50	105.6	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	818830	0.36	1261090	64.93	30	120	
Sc	45	1	He	673139	8.03	955958	70.42	30	120	
Sc	45	2	NoGas	5959349	0.45	7862387	75.80	30	120	
Rh	103	1	He	2092756	9.53	2873429	72.83	30	120	
In	115	1	He	1391914	8.98	1922589	72.40	30	120	
Tb	159	1	He	3807412	8.31	4725151	80.58	30	120	
Ho	165	1	He	3844161	8.32	4813140	79.87	30	120	
Bi	209	1	He	2856525	8.46	3617562	78.96	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	225_CCB.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T23:28:17-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.459	-17.1	37728	1.3	2	
Be	9	6	2	NoGas	0.308	15.7	889	14.7	1	
B	11	6	2	NoGas	0.679	12.0	8428	2.0	20	
Na	23	45	1	He	38.204	15.6	53902	2.2	1000	
Mg	24	45	1	He	-0.624	-175.0	2219	18.5	1000	
Al	27	45	1	He	2.025	17.8	1196	12.4	50	
K	39	45	1	He	17.379	39.3	52413	0.6	1000	
Ca	44	45	1	He	71.303	16.4	2774	6.4	1000	
Ti	47	45	1	He	0.264	37.8	50	40.0	20	
V	51	45	1	He	-0.241	-12.7	4348	12.9	2	
Cr	52	45	1	He	0.065	60.2	2339	4.4	2	
Mn	55	45	1	He	1.367	11.9	7199	1.4	2	
Fe	56	45	1	He	23.416	4.3	117739	9.1	50	
Co	59	45	1	He	0.032	20.1	274	12.2	1	
Ni	60	45	1	He	-0.380	-5.2	163	13.4	2	
Cu	63	45	1	He	0.020	128.0	678	10.2	2	
Zn	66	45	1	He	4.688	12.4	6389	2.4	20	
As	75	115	1	He	0.059	26.7	223	14.3	2	
Se	78	115	1	He	0.222	21.0	61	3.7	2	
Sr	88	45	1	He	0.042	47.4	353	26.3	10	
Mo	95	103	1	He	0.255	23.0	766	27.3	2	
Ag	107	103	1	He	0.010	34.7	97	26.9	0.2	
Cd	111	115	1	He	0.116	26.9	1921	10.8	0.2	
Sn	118	115	1	He	0.504	9.1	2719	6.8	10	
Sb	123	165	1	He	0.100	4.1	550	8.5	2	
Ba	137	115	1	He	0.038	44.5	106	25.3	5	
W	182	159	1	He	0.646	6.6	12709	7.8	10	
Tl	205	165	1	He	0.119	7.5	3055	3.6	0.5	
Pb	208	165	1	He	0.202	11.3	7295	3.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	849873	1.07	1261090	67.39	30	120	
Sc	45	1	He	755372	7.96	955958	79.02	30	120	
Sc	45	2	NoGas	6154676	2.77	7862387	78.28	30	120	
Rh	103	1	He	2410570	8.59	2873429	83.89	30	120	
In	115	1	He	1653158	8.30	1922589	85.99	30	120	
Tb	159	1	He	4196956	7.54	4725151	88.82	30	120	
Ho	165	1	He	4265586	7.70	4813140	88.62	30	120	
Bi	209	1	He	3233155	7.07	3617562	89.37	30	120	

Sample Report

Sample Table

Sample Name	240-50650-a-5-b@2
Data File Name	226SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T23:31:54-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	44.907	44.907	5.52	514319	0.01	10000	
Be	9	6	2	NoGas	3.200	3.200	7.39	8287	0.04	10000	
B	11	6	2	NoGas	8.288	8.288	10.34	19307	0.04	300	
Na	23	45	1	He	157.440	157.440	13.57	145268	0.11	500000	
Mg	24	45	1	He	8929.249	8929.249	11.67	4199204	0.21	500000	
Al	27	45	1	He	58540.605	58540.605	11.61	16902384	0.35	200000	
K	39	45	1	He	3048.325	3048.325	10.82	1563654	0.19	500000	
Ca	44	45	1	He	656.734	656.734	9.24	19068	3.44	500000	
Ti	47	45	1	He	572.924	572.924	9.28	87963	0.65	2500	
V	51	45	1	He	102.310	102.310	11.69	758339	0.01	10000	
Cr	52	45	1	He	75.685	75.685	12.59	347383	0.02	10000	
Mn	55	45	1	He	5575.164	5575.164	11.39	20233794	0.03	10000	
Fe	56	45	1	He	101005.778	101005.778	11.60	438894080	0.02	200000	
Co	59	45	1	He	53.480	53.480	11.73	341437	0.02	10000	
Ni	60	45	1	He	83.140	83.140	11.76	130569	0.06	10000	
Cu	63	45	1	He	58.225	58.225	11.18	240109	0.02	10000	
Zn	66	45	1	He	270.809	270.809	11.37	255985	0.11	10000	
As	75	115	1	He	48.227	48.227	12.90	35145	0.14	10000	
Se	78	115	1	He	5.202	5.202	22.53	363	1.43	10000	
Sr	88	45	1	He	16.640	16.640	10.65	85477	0.02	10000	
Mo	95	103	1	He	8.308	8.308	13.53	19538	0.04	2000	
Ag	107	103	1	He	0.356	0.356	12.03	2650	0.01	300	
Cd	111	115	1	He	0.949	0.949	10.55	2745	0.03	4000	
Sn	118	115	1	He	11.654	11.654	11.59	40408	0.03	2000	
Sb	123	165	1	He	0.799	0.799	14.08	3389	0.02	300	
Ba	137	115	1	He	451.016	451.016	13.24	750949	0.06	10000	
W	182	159	1	He	0.611	0.611	16.08	11193	0.01	2500	
Tl	205	165	1	He	1.044	1.044	12.78	23152	0.00	5000	
Pb	208	165	1	He	94.851	94.851	11.27	2851999	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	856380	5.55	1261090	67.91	30	120	
Sc	45	1	He	699399	10.79	955958	73.16	30	120	
Sc	45	2	NoGas	6364874	4.23	7862387	80.95	30	120	
Rh	103	1	He	2047067	11.77	2873429	71.24	30	120	
In	115	1	He	1379851	12.88	1922589	71.77	30	120	
Tb	159	1	He	3826351	10.57	4725151	80.98	30	120	
Ho	165	1	He	3884734	11.19	4813140	80.71	30	120	
Bi	209	1	He	2901502	11.83	3617562	80.21	30	120	

Sample Report

Sample Table

Sample Name	240-50650-a-6-b@2
Data File Name	227SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T23:35:28-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	104.155	104.155	2.07	1043839	0.01	10000	
Be	9	6	2	NoGas	4.510	4.510	3.03	10374	0.04	10000	
B	11	6	2	NoGas	20.446	20.446	2.18	32648	0.06	300	
Na	23	45	1	He	270.252	270.252	1.44	237486	0.11	500000	
Mg	24	45	1	He	20329.205	20329.205	1.53	9630126	0.21	500000	
Al	27	45	1	He	74655.053	74655.053	1.15	21718207	0.34	200000	
K	39	45	1	He	6738.980	6738.980	1.35	3432087	0.20	500000	
Ca	44	45	1	He	15911.305	15911.305	0.88	451471	3.52	500000	
Ti	47	45	1	He	488.007	488.007	0.96	75373	0.65	2500	
V	51	45	1	He	134.972	134.972	0.46	1006198	0.01	10000	
Cr	52	45	1	He	125.913	125.913	0.73	581468	0.02	10000	
Mn	55	45	1	He	4487.543	4487.543	0.93	16407152	0.03	10000	
Fe	56	45	1	He	181107.109	181107.109	0.75	792911915	0.02	200000	
Co	59	45	1	He	75.337	75.337	0.27	484660	0.02	10000	
Ni	60	45	1	He	164.421	164.421	1.00	259456	0.06	10000	
Cu	63	45	1	He	107.522	107.522	0.43	446164	0.02	10000	
Zn	66	45	1	He	390.346	390.346	0.25	371041	0.11	10000	
As	75	115	1	He	85.622	85.622	0.60	63484	0.13	10000	
Se	78	115	1	He	5.594	5.594	6.77	398	1.41	10000	
Sr	88	45	1	He	57.133	57.133	0.51	295201	0.02	10000	
Mo	95	103	1	He	8.489	8.489	2.38	20361	0.04	2000	
Ag	107	103	1	He	0.198	0.198	5.41	1502	0.01	300	
Cd	111	115	1	He	1.465	1.465	4.09	3502	0.04	4000	
Sn	118	115	1	He	10.891	10.891	2.30	38474	0.03	2000	
Sb	123	165	1	He	0.728	0.728	3.91	3208	0.02	300	
Ba	137	115	1	He	539.190	539.190	0.86	915305	0.06	10000	
W	182	159	1	He	0.285	0.285	8.91	8525	0.00	2500	
Tl	205	165	1	He	1.132	1.132	1.91	26009	0.00	5000	
Pb	208	165	1	He	98.956	98.956	0.52	3081212	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	761791	0.57	1261090	60.41	30	120	
Sc	45	1	He	698844	0.70	955958	73.10	30	120	
Sc	45	2	NoGas	5845767	1.51	7862387	74.35	30	120	
Rh	103	1	He	2065971	1.92	2873429	71.90	30	120	
In	115	1	He	1390844	0.23	1922589	72.34	30	120	
Tb	159	1	He	3976661	0.88	4725151	84.16	30	120	
Ho	165	1	He	3989251	0.46	4813140	82.88	30	120	
Bi	209	1	He	2909006	0.28	3617562	80.41	30	120	

Sample Report

Sample Table

Sample Name	240-50650-a-7-b@2
Data File Name	228SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T23:39:01-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	59.036	59.036	2.09	630161	0.01	10000	
Be	9	6	2	NoGas	3.389	3.389	1.70	7961	0.04	10000	
B	11	6	2	NoGas	11.081	11.081	2.06	21135	0.05	300	
Na	23	45	1	He	185.586	185.586	2.74	160092	0.12	500000	
Mg	24	45	1	He	11864.412	11864.412	1.12	5321980	0.22	500000	
Al	27	45	1	He	65631.262	65631.262	1.85	18075380	0.36	200000	
K	39	45	1	He	3863.205	3863.205	2.10	1878654	0.21	500000	
Ca	44	45	1	He	2326.749	2326.749	2.09	62955	3.70	500000	
Ti	47	45	1	He	488.391	488.391	0.39	71417	0.68	2500	
V	51	45	1	He	111.644	111.644	1.61	788899	0.01	10000	
Cr	52	45	1	He	88.482	88.482	1.56	387352	0.02	10000	
Mn	55	45	1	He	7998.256	7998.256	1.29	27684862	0.03	10000	
Fe	56	45	1	He	123089.892	123089.892	0.96	510218966	0.02	200000	
Co	59	45	1	He	61.298	61.298	1.16	373352	0.02	10000	
Ni	60	45	1	He	113.106	113.106	1.20	169200	0.07	10000	
Cu	63	45	1	He	71.125	71.125	1.56	279585	0.03	10000	
Zn	66	45	1	He	344.095	344.095	1.81	309806	0.11	10000	
As	75	115	1	He	55.436	55.436	0.84	40007	0.14	10000	
Se	78	115	1	He	5.296	5.296	2.50	368	1.44	10000	
Sr	88	45	1	He	29.308	29.308	1.02	143418	0.02	10000	
Mo	95	103	1	He	8.939	8.939	0.53	21189	0.04	2000	
Ag	107	103	1	He	0.283	0.283	8.03	2122	0.01	300	
Cd	111	115	1	He	1.254	1.254	5.01	3117	0.04	4000	
Sn	118	115	1	He	12.366	12.366	2.36	42395	0.03	2000	
Sb	123	165	1	He	0.837	0.837	3.64	3585	0.02	300	
Ba	137	115	1	He	573.049	573.049	1.47	945650	0.06	10000	
W	182	159	1	He	0.565	0.565	10.00	10923	0.01	2500	
Tl	205	165	1	He	1.109	1.109	4.60	24845	0.00	5000	
Pb	208	165	1	He	124.306	124.306	1.51	3774931	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	775498	0.90	1261090	61.49	30	120	
Sc	45	1	He	661689	1.37	955958	69.22	30	120	
Sc	45	2	NoGas	6048390	1.96	7862387	76.93	30	120	
Rh	103	1	He	2041511	1.07	2873429	71.05	30	120	
In	115	1	He	1352209	1.19	1922589	70.33	30	120	
Tb	159	1	He	3857410	1.40	4725151	81.64	30	120	
Ho	165	1	He	3891176	1.07	4813140	80.84	30	120	
Bi	209	1	He	2844490	0.65	3617562	78.63	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2026839
Data File Name	229_CCV.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T23:42:34-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	42.154	0.633	415571	0.30	50	84.3	89.5	110.5	CCV Failed
Be	9	6	2	NoGas	50.440	1.114	112399	0.66	50	100.9	89.5	110.5	
B	11	6	2	NoGas	49.889	1.299	68392	0.87	50	99.8	89.5	110.5	
Na	23	45	1	He	24366.169	1.333	18766418	0.18	25000	97.5	89.5	110.5	
Mg	24	45	1	He	24471.245	1.553	11046688	0.41	25000	97.9	89.5	110.5	
Al	27	45	1	He	242.572	1.888	67740	1.00	250	97.0	89.5	110.5	
K	39	45	1	He	25582.921	1.783	12309374	0.30	25000	102.3	89.5	110.5	
Ca	44	45	1	He	24591.256	1.768	664643	0.47	25000	98.4	89.5	110.5	
Ti	47	45	1	He	50.126	2.394	7382	1.77	50	100.3	89.5	110.5	
V	51	45	1	He	48.998	1.665	351621	0.90	50	98.0	89.5	110.5	
Cr	52	45	1	He	49.134	0.993	217325	0.52	50	98.3	89.5	110.5	
Mn	55	45	1	He	250.062	1.811	872797	0.36	250	100.0	89.5	110.5	
Fe	56	45	1	He	12586.530	1.746	52518846	0.33	12500	100.7	89.5	110.5	
Co	59	45	1	He	49.137	1.289	301267	0.27	50	98.3	89.5	110.5	
Ni	60	45	1	He	49.095	2.090	74327	0.77	50	98.2	89.5	110.5	
Cu	63	45	1	He	49.531	1.396	196153	0.69	50	99.1	89.5	110.5	
Zn	66	45	1	He	49.096	1.802	45724	0.83	50	98.2	89.5	110.5	
As	75	115	1	He	46.975	1.794	35149	0.59	50	93.9	89.5	110.5	
Se	78	115	1	He	47.862	2.566	3147	1.11	50	95.7	89.5	110.5	
Sr	88	45	1	He	53.125	1.860	261575	0.36	50	106.3	89.5	110.5	
Mo	95	103	1	He	50.457	2.790	120519	0.87	50	100.9	89.5	110.5	
Ag	107	103	1	He	49.425	2.487	372838	0.49	50	98.9	89.5	110.5	
Cd	111	115	1	He	48.870	2.321	70324	0.77	50	97.7	89.5	110.5	
Sn	118	115	1	He	49.803	1.095	175333	2.23	50	99.6	89.5	110.5	
Sb	123	165	1	He	47.732	1.923	202099	0.76	50	95.5	89.5	110.5	
Ba	137	115	1	He	51.536	1.911	88146	0.44	50	103.1	89.5	110.5	
W	182	159	1	He	47.305	3.233	453867	1.65	50	94.6	89.5	110.5	
Tl	205	165	1	He	48.541	1.700	1093578	0.34	50	97.1	89.5	110.5	
Pb	208	165	1	He	49.098	1.554	1507597	0.24	50	98.2	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	744052	0.45	1261090	59.00	30	120	
Sc	45	1	He	666075	1.51	955958	69.68	30	120	
Sc	45	2	NoGas	5440746	0.36	7862387	69.20	30	120	
Rh	103	1	He	2061396	2.08	2873429	71.74	30	120	
In	115	1	He	1401275	1.76	1922589	72.88	30	120	
Tb	159	1	He	3868359	1.59	4725151	81.87	30	120	
Ho	165	1	He	3933710	1.38	4813140	81.73	30	120	
Bi	209	1	He	2874332	1.76	3617562	79.45	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	230_CCB.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T23:46:09-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.411	-22.3	34276	2.2	2	
Be	9	6	2	NoGas	0.180	19.2	507	15.8	1	
B	11	6	2	NoGas	0.548	34.0	7431	2.6	20	
Na	23	45	1	He	35.531	6.4	45899	3.4	1000	
Mg	24	45	1	He	-0.878	-47.4	1874	9.5	1000	
Al	27	45	1	He	1.857	24.9	1011	12.4	50	
K	39	45	1	He	22.986	14.3	49279	2.7	1000	
Ca	44	45	1	He	70.282	3.7	2444	2.9	1000	
Ti	47	45	1	He	0.096	48.6	19	36.7	20	
V	51	45	1	He	-0.269	-27.6	3643	14.2	2	
Cr	52	45	1	He	0.090	30.4	2190	6.0	2	
Mn	55	45	1	He	1.473	4.7	6772	3.0	2	
Fe	56	45	1	He	25.352	10.2	112374	10.0	50	
Co	59	45	1	He	0.031	25.5	238	19.9	1	
Ni	60	45	1	He	-0.397	-2.0	121	10.4	2	
Cu	63	45	1	He	0.015	19.3	584	2.3	2	
Zn	66	45	1	He	4.806	4.3	5792	3.7	20	
As	75	115	1	He	0.064	29.7	197	7.5	2	
Se	78	115	1	He	0.268	39.8	56	12.8	2	
Sr	88	45	1	He	0.038	23.8	297	14.7	10	
Mo	95	103	1	He	0.268	27.5	709	26.0	2	
Ag	107	103	1	He	0.007	23.0	59	19.9	0.2	
Cd	111	115	1	He	0.116	14.5	1666	1.5	0.2	
Sn	118	115	1	He	0.560	9.5	2567	7.6	10	
Sb	123	165	1	He	0.101	12.1	506	9.9	2	
Ba	137	115	1	He	0.048	8.0	110	6.1	5	
W	182	159	1	He	0.595	7.5	11178	3.8	10	
Tl	205	165	1	He	0.098	2.4	2340	2.1	0.5	
Pb	208	165	1	He	0.210	4.0	6962	4.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	766397	0.79	1261090	60.77	30	120	
Sc	45	1	He	668836	0.59	955958	69.97	30	120	
Sc	45	2	NoGas	5518407	0.54	7862387	70.19	30	120	
Rh	103	1	He	2143239	0.22	2873429	74.59	30	120	
In	115	1	He	1435873	0.16	1922589	74.68	30	120	
Tb	159	1	He	3848865	0.19	4725151	81.45	30	120	
Ho	165	1	He	3898820	0.57	4813140	81.00	30	120	
Bi	209	1	He	2946140	0.43	3617562	81.44	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-2012498
Data File Name	231CRI.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T23:49:47-04:00
Sample Type	CRI
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	2	NoGas	8.919	8.919	12.241	90999	2.56	8	111.5	49.5	150.5	
Be	9	2	NoGas	1.464	1.464	7.818	2697	6.39	1	146.4	49.5	150.5	
B	11	2	NoGas	27.034	27.034	9.917	32184	2.61	20	135.2	49.5	150.5	
Na	23	1	He	1043.821	1043.821	0.987	837135	0.66	1000	104.4	49.5	150.5	
Mg	24	1	He	1026.192	1026.192	0.865	474268	0.73	1000	102.6	49.5	150.5	
Al	27	1	He	49.754	49.754	2.368	14558	2.40	50	99.5	49.5	150.5	
K	39	1	He	1084.373	1084.373	1.339	568812	0.62	1000	108.4	49.5	150.5	
Ca	44	1	He	1020.030	1020.030	0.691	28619	1.30	1000	102.0	49.5	150.5	
Ti	47	1	He	10.493	10.493	7.804	1578	7.15	10	104.9	49.5	150.5	
V	51	1	He	3.449	3.449	2.462	30455	2.30	5	69.0	49.5	150.5	
Cr	52	1	He	2.149	2.149	2.706	11427	2.94	2	107.5	49.5	150.5	
Mn	55	1	He	5.076	5.076	0.440	19666	0.31	5	101.5	49.5	150.5	
Fe	56	1	He	113.558	113.558	0.053	489029	0.63	100	113.6	49.5	150.5	
Co	59	1	He	1.059	1.059	2.241	6662	1.69	1	105.9	49.5	150.5	
Ni	60	1	He	1.655	1.655	2.136	3257	0.98	2	82.7	49.5	150.5	
Cu	63	1	He	2.076	2.076	1.981	8889	1.46	2	103.8	49.5	150.5	
Zn	66	1	He	20.463	20.463	1.699	20270	1.66	20	102.3	49.5	150.5	
As	75	1	He	4.768	4.768	0.391	3849	0.07	5	95.4	49.5	150.5	
Se	78	1	He	5.068	5.068	4.610	382	4.04	5	101.4	49.5	150.5	
Sr	88	1	He	10.853	10.853	0.424	54547	0.78	10	108.5	49.5	150.5	
Mo	95	1	He	10.229	10.229	1.416	25518	1.53	10	102.3	49.5	150.5	
Ag	107	1	He	1.035	1.035	1.527	8152	1.60	1	103.5	49.5	150.5	
Cd	111	1	He	1.060	1.060	3.358	3077	1.49	1	106.0	49.5	150.5	
Sn	118	1	He	10.325	10.325	3.622	38278	3.49	10	103.2	49.5	150.5	
Sb	123	1	He	1.994	1.994	2.099	8522	2.13	2	99.7	49.5	150.5	
Ba	137	1	He	5.213	5.213	0.901	9307	1.22	5	104.3	49.5	150.5	
W	182	1	He	9.598	9.598	1.042	96452	0.59	10	96.0	49.5	150.5	
Tl	205	1	He	2.004	2.004	0.365	45284	0.20	2	100.2	49.5	150.5	
Pb	208	1	He	1.127	1.127	0.837	35157	1.28	1	112.7	49.5	150.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	600524	8.62	1261090	47.62	30	120	
Sc	45	1	He	678670	0.68	955958	70.99	30	120	
Sc	45	2	NoGas	4241294	11.42	7862387	53.94	30	120	
Rh	103	1	He	2149303	0.61	2873429	74.80	30	120	
In	115	1	He	1458565	0.40	1922589	75.86	30	120	
Tb	159	1	He	3863767	1.30	4725151	81.77	30	120	
Ho	165	1	He	3932765	0.46	4813140	81.71	30	120	
Bi	209	1	He	3020152	0.42	3617562	83.49	30	120	

Sample Report

Sample Table

Sample Name	HIGH STD
Data File Name	232SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T23:53:27-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	-0.711	-0.711	-33.70	30795	0.00	10000	
Be	9	6	2	NoGas	2332.193	2332.193	27.64	4622235	0.05	10000	
B	11	6	2	NoGas	236.230	236.230	28.93	266265	0.09	300	
Na	23	45	1	He	20045.663	20045.663	0.56	15419050	0.13	500000	
Mg	24	45	1	He	20136.092	20136.092	1.15	9076330	0.22	500000	
Al	27	45	1	He	19355.584	19355.584	0.61	5358360	0.36	200000	
K	39	45	1	He	21045.003	21045.003	1.02	10117645	0.21	500000	
Ca	44	45	1	He	20457.449	20457.449	0.68	552189	3.70	500000	
Ti	47	45	1	He	201.725	201.725	2.20	29648	0.68	2500	
V	51	45	1	He	1990.543	1990.543	1.08	14044227	0.01	10000	
Cr	52	45	1	He	1983.731	1983.731	1.18	8690272	0.02	10000	
Mn	55	45	1	He	2062.300	2062.300	1.16	7175728	0.03	10000	
Fe	56	45	1	He	20472.300	20472.300	0.98	85292917	0.02	200000	
Co	59	45	1	He	1996.472	1996.472	0.78	12220051	0.02	10000	
Ni	60	45	1	He	2042.677	2042.677	0.70	3059029	0.07	10000	
Cu	63	45	1	He	1995.075	1995.075	1.23	7868229	0.03	10000	
Zn	66	45	1	He	2100.311	2100.311	1.31	1893460	0.11	10000	
As	75	115	1	He	1939.752	1939.752	4.12	1402535	0.14	10000	
Se	78	115	1	He	1978.126	1978.126	4.12	124724	1.59	10000	
Sr	88	45	1	He	2219.377	2219.377	1.28	10907043	0.02	10000	
Mo	95	103	1	He	210.518	210.518	0.95	497888	0.04	2000	
Ag	107	103	1	He	201.272	201.272	0.91	1503695	0.01	300	
Cd	111	115	1	He	2111.587	2111.587	3.49	2888836	0.07	4000	
Sn	118	115	1	He	2224.390	2224.390	4.01	7573387	0.03	2000	>LDR
Sb	123	165	1	He	196.049	196.049	0.73	816792	0.02	300	
Ba	137	115	1	He	2281.152	2281.152	3.96	3784573	0.06	10000	
W	182	159	1	He	203.002	203.002	2.14	1915633	0.01	2500	
Tl	205	165	1	He	506.186	506.186	0.57	11223103	0.00	5000	
Pb	208	165	1	He	2047.796	2047.796	0.80	61866389	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	690527	22.27	1261090	54.76	30	120	
Sc	45	1	He	664988	0.49	955958	69.56	30	120	
Sc	45	2	NoGas	5450760	25.20	7862387	69.33	30	120	
Rh	103	1	He	2040991	0.77	2873429	71.03	30	120	
In	115	1	He	1360775	4.04	1922589	70.78	30	120	
Tb	159	1	He	3840251	1.07	4725151	81.27	30	120	
Ho	165	1	He	3871285	0.17	4813140	80.43	30	120	
Bi	209	1	He	2835750	1.38	3617562	78.39	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2026839
Data File Name	233_CCV.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-28T23:56:48-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	41.178	0.340	411591	0.43	50	82.4	89.5	110.5	CCV Failed
Be	9	6	2	NoGas	53.175	1.224	117040	1.07	50	106.3	89.5	110.5	
B	11	6	2	NoGas	52.999	1.235	71366	1.15	50	106.0	89.5	110.5	
Na	23	45	1	He	24176.438	1.619	18844310	0.44	25000	96.7	89.5	110.5	
Mg	24	45	1	He	24139.805	1.248	11028657	0.31	25000	96.6	89.5	110.5	
Al	27	45	1	He	239.820	2.230	67780	0.86	250	95.9	89.5	110.5	
K	39	45	1	He	25404.861	1.476	12371780	0.67	25000	101.6	89.5	110.5	
Ca	44	45	1	He	24399.313	1.639	667410	0.26	25000	97.6	89.5	110.5	
Ti	47	45	1	He	50.121	1.218	7472	2.47	50	100.2	89.5	110.5	
V	51	45	1	He	48.558	0.809	352731	0.65	50	97.1	89.5	110.5	
Cr	52	45	1	He	48.661	1.497	217830	0.29	50	97.3	89.5	110.5	
Mn	55	45	1	He	246.854	1.135	872057	0.27	250	98.7	89.5	110.5	
Fe	56	45	1	He	12414.808	1.711	52427271	0.69	12500	99.3	89.5	110.5	
Co	59	45	1	He	49.001	1.523	304044	0.26	50	98.0	89.5	110.5	
Ni	60	45	1	He	48.541	2.103	74383	0.92	50	97.1	89.5	110.5	
Cu	63	45	1	He	49.184	1.379	197126	0.35	50	98.4	89.5	110.5	
Zn	66	45	1	He	48.854	0.977	46057	0.97	50	97.7	89.5	110.5	
As	75	115	1	He	48.567	2.104	36267	0.55	50	97.1	89.5	110.5	
Se	78	115	1	He	49.174	3.143	3226	1.64	50	98.3	89.5	110.5	
Sr	88	45	1	He	52.522	0.775	261750	0.74	50	105.0	89.5	110.5	
Mo	95	103	1	He	51.191	1.373	122326	0.99	50	102.4	89.5	110.5	
Ag	107	103	1	He	49.013	0.830	369888	0.27	50	98.0	89.5	110.5	
Cd	111	115	1	He	49.487	1.913	71066	0.72	50	99.0	89.5	110.5	
Sn	118	115	1	He	59.936	3.915	210411	2.37	50	119.9	89.5	110.5	CCV Failed
Sb	123	165	1	He	47.994	2.200	203004	0.83	50	96.0	89.5	110.5	
Ba	137	115	1	He	51.830	1.465	88489	0.64	50	103.7	89.5	110.5	
W	182	159	1	He	49.429	2.528	467933	0.41	50	98.9	89.5	110.5	
Tl	205	165	1	He	48.401	1.422	1089380	0.59	50	96.8	89.5	110.5	
Pb	208	165	1	He	48.736	1.112	1495097	0.50	50	97.5	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	734953	0.15	1261090	58.28	30	120	
Sc	45	1	He	674092	1.41	955958	70.51	30	120	
Sc	45	2	NoGas	5504489	0.13	7862387	70.01	30	120	
Rh	103	1	He	2061686	1.04	2873429	71.75	30	120	
In	115	1	He	1398656	1.56	1922589	72.75	30	120	
Tb	159	1	He	3819040	2.31	4725151	80.82	30	120	
Ho	165	1	He	3929923	1.54	4813140	81.65	30	120	
Bi	209	1	He	2873308	1.79	3617562	79.43	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	234_CCB.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-29T00:00:25-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.513	-10.9	41961	2.4	2	
Be	9	6	2	NoGas	0.770	23.9	2256	22.0	1	
B	11	6	2	NoGas	0.269	50.7	8588	2.6	20	
Na	23	45	1	He	41.756	1.3	50604	1.0	1000	
Mg	24	45	1	He	-0.232	-395.8	2163	19.2	1000	
Al	27	45	1	He	1.403	8.5	883	3.6	50	
K	39	45	1	He	27.012	8.4	51114	2.3	1000	
Ca	44	45	1	He	69.547	2.9	2419	2.2	1000	
Ti	47	45	1	He	0.277	16.9	46	15.2	20	
V	51	45	1	He	-0.213	-7.5	4031	2.6	2	
Cr	52	45	1	He	0.107	31.2	2257	6.4	2	
Mn	55	45	1	He	1.381	4.7	6437	3.4	2	
Fe	56	45	1	He	21.260	13.1	94977	12.0	50	
Co	59	45	1	He	0.118	28.9	776	27.2	1	
Ni	60	45	1	He	-0.321	-6.9	234	14.0	2	
Cu	63	45	1	He	0.151	21.5	1122	11.7	2	
Zn	66	45	1	He	4.787	6.2	5762	4.8	20	
As	75	115	1	He	0.315	35.0	392	21.6	2	
Se	78	115	1	He	0.518	13.3	73	6.4	2	
Sr	88	45	1	He	0.070	3.5	453	2.5	10	
Mo	95	103	1	He	0.383	49.3	1006	47.9	2	
Ag	107	103	1	He	0.014	46.1	119	42.5	0.2	
Cd	111	115	1	He	0.231	2.4	1846	0.5	0.2	CCB Failed
Sn	118	115	1	He	2.512	16.5	9663	15.5	10	
Sb	123	165	1	He	0.158	5.7	746	5.2	2	
Ba	137	115	1	He	0.081	22.1	170	18.7	5	
W	182	159	1	He	1.036	10.2	15341	7.2	10	
Tl	205	165	1	He	0.265	4.0	6065	4.0	0.5	
Pb	208	165	1	He	0.290	4.3	9388	4.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	930255	2.13	1261090	73.77	30	120	
Sc	45	1	He	667378	0.21	955958	69.81	30	120	
Sc	45	2	NoGas	6943665	2.20	7862387	88.31	30	120	
Rh	103	1	He	2161575	0.84	2873429	75.23	30	120	
In	115	1	He	1447025	0.12	1922589	75.26	30	120	
Tb	159	1	He	3847567	0.93	4725151	81.43	30	120	
Ho	165	1	He	3899632	0.07	4813140	81.02	30	120	
Bi	209	1	He	2950159	0.92	3617562	81.55	30	120	

Sample Report

Sample Table

Sample Name	240-50650-a-1-b@20
Data File Name	235SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-29T00:04:04-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	4.865	4.865	2.02	83274	0.01	10000	
Be	9	6	2	NoGas	1.142	1.142	19.43	2737	0.04	10000	
B	11	6	2	NoGas	1.984	1.984	19.92	9351	0.02	300	
Na	23	45	1	He	61.554	61.554	19.53	67041	0.09	500000	
Mg	24	45	1	He	1043.756	1043.756	14.79	482394	0.22	500000	
Al	27	45	1	He	5680.369	5680.369	14.87	1605163	0.35	200000	
K	39	45	1	He	381.522	381.522	15.78	225651	0.17	500000	
Ca	44	45	1	He	1914.180	1914.180	15.15	53217	3.60	500000	
Ti	47	45	1	He	52.513	52.513	14.18	7885	0.67	2500	
V	51	45	1	He	10.231	10.231	15.37	79310	0.01	10000	
Cr	52	45	1	He	9.406	9.406	16.92	43806	0.02	10000	
Mn	55	45	1	He	578.675	578.675	14.79	2056189	0.03	10000	
Fe	56	45	1	He	11596.872	11596.872	14.73	49317661	0.02	200000	
Co	59	45	1	He	5.007	5.007	16.21	31288	0.02	10000	
Ni	60	45	1	He	10.274	10.274	13.80	16453	0.06	10000	
Cu	63	45	1	He	7.183	7.183	16.64	29403	0.02	10000	
Zn	66	45	1	He	38.035	38.035	14.90	36443	0.10	10000	
As	75	115	1	He	6.344	6.344	15.44	5091	0.12	10000	
Se	78	115	1	He	0.704	0.704	31.99	87	0.81	10000	
Sr	88	45	1	He	8.406	8.406	15.92	42227	0.02	10000	
Mo	95	103	1	He	0.940	0.940	14.35	2370	0.04	2000	
Ag	107	103	1	He	0.033	0.033	3.84	264	0.01	300	
Cd	111	115	1	He	0.290	0.290	6.51	1982	0.01	4000	
Sn	118	115	1	He	2.739	2.739	26.51	10511	0.03	2000	
Sb	123	165	1	He	0.180	0.180	21.39	833	0.02	300	
Ba	137	115	1	He	44.163	44.163	16.00	78855	0.06	10000	
W	182	159	1	He	0.454	0.454	33.74	9748	0.00	2500	
Tl	205	165	1	He	0.237	0.237	13.05	5457	0.00	5000	
Pb	208	165	1	He	15.895	15.895	15.12	484509	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	773369	0.20	1261090	61.33	30	120	
Sc	45	1	He	688350	14.27	955958	72.01	30	120	
Sc	45	2	NoGas	5586212	1.25	7862387	71.05	30	120	
Rh	103	1	He	2165269	14.12	2873429	75.35	30	120	
In	115	1	He	1485350	14.44	1922589	77.26	30	120	
Tb	159	1	He	3865626	15.25	4725151	81.81	30	120	
Ho	165	1	He	3958853	14.45	4813140	82.25	30	120	
Bi	209	1	He	3048269	13.64	3617562	84.26	30	120	

Sample Report

Sample Table

Sample Name	SD 240-50650-a-1-b@100
Data File Name	236SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-29T00:07:40-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	0.746	0.746	5.04	43218	0.00	10000	
Be	9	6	2	NoGas	0.637	0.637	1.96	1526	0.04	10000	
B	11	6	2	NoGas	0.481	0.481	87.07	7202	0.01	300	
Na	23	45	1	He	33.048	33.048	19.17	45182	0.07	500000	
Mg	24	45	1	He	208.724	208.724	14.76	99274	0.21	500000	
Al	27	45	1	He	1120.648	1120.648	12.80	320627	0.35	200000	
K	39	45	1	He	88.682	88.682	19.97	83171	0.11	500000	
Ca	44	45	1	He	388.705	388.705	14.12	11363	3.42	500000	
Ti	47	45	1	He	11.119	11.119	15.46	1689	0.66	2500	
V	51	45	1	He	1.834	1.834	21.51	19009	0.01	10000	
Cr	52	45	1	He	1.894	1.894	17.78	10385	0.02	10000	
Mn	55	45	1	He	112.934	112.934	13.13	407003	0.03	10000	
Fe	56	45	1	He	2312.351	2312.351	12.88	9947300	0.02	200000	
Co	59	45	1	He	1.066	1.066	15.68	6768	0.02	10000	
Ni	60	45	1	He	1.935	1.935	13.61	3732	0.05	10000	
Cu	63	45	1	He	1.409	1.409	12.27	6280	0.02	10000	
Zn	66	45	1	He	7.895	7.895	12.71	8827	0.09	10000	
As	75	115	1	He	1.337	1.337	11.25	1208	0.11	10000	
Se	78	115	1	He	0.347	0.347	51.18	64	0.54	10000	
Sr	88	45	1	He	1.714	1.714	8.97	8830	0.02	10000	
Mo	95	103	1	He	0.206	0.206	22.59	564	0.04	2000	
Ag	107	103	1	He	0.009	0.009	20.21	80	0.01	300	
Cd	111	115	1	He	0.147	0.147	32.52	1783	0.01	4000	
Sn	118	115	1	He	0.869	0.869	20.40	3786	0.02	2000	
Sb	123	165	1	He	0.065	0.065	5.92	357	0.02	300	
Ba	137	115	1	He	8.653	8.653	13.13	15670	0.06	10000	
W	182	159	1	He	0.193	0.193	34.41	7484	0.00	2500	
Tl	205	165	1	He	0.108	0.108	6.34	2584	0.00	5000	
Pb	208	165	1	He	3.295	3.295	11.02	101408	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	751377	1.13	1261090	59.58	30	120	
Sc	45	1	He	692632	10.92	955958	72.45	30	120	
Sc	45	2	NoGas	5323926	0.64	7862387	67.71	30	120	
Rh	103	1	He	2205128	8.27	2873429	76.74	30	120	
In	115	1	He	1493942	9.85	1922589	77.70	30	120	
Tb	159	1	He	3896367	8.06	4725151	82.46	30	120	
Ho	165	1	He	3948068	9.39	4813140	82.03	30	120	
Bi	209	1	He	3056088	7.31	3617562	84.48	30	120	

Sample Report

Sample Table

Sample Name	PDS 240-50650-a-1-b@20
Data File Name	237SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-29T00:11:18-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	3.067	3.067	1.50	86582	0.00	10000	
Be	9	6	2	NoGas	787.700	787.700	1.57	2188514	0.04	10000	
B	11	6	2	NoGas	82.480	82.480	2.87	135770	0.06	300	
Na	23	45	1	He	10284.871	10284.871	21.58	7748274	0.13	500000	
Mg	24	45	1	He	11411.402	11411.402	21.35	5034508	0.23	500000	
Al	27	45	1	He	15573.615	15573.615	22.50	4212159	0.37	200000	
K	39	45	1	He	11132.205	11132.205	20.75	5260291	0.21	500000	
Ca	44	45	1	He	12425.969	12425.969	22.10	328117	3.79	500000	
Ti	47	45	1	He	158.508	158.508	25.04	22685	0.70	2500	
V	51	45	1	He	1016.855	1016.855	22.68	7011493	0.01	10000	
Cr	52	45	1	He	1015.087	1015.087	22.95	4343258	0.02	10000	
Mn	55	45	1	He	1581.755	1581.755	22.71	5376745	0.03	10000	
Fe	56	45	1	He	22195.518	22195.518	22.34	90366085	0.02	200000	
Co	59	45	1	He	1014.262	1014.262	22.20	6067890	0.02	10000	
Ni	60	45	1	He	1065.284	1065.284	22.67	1558709	0.07	10000	
Cu	63	45	1	He	1031.321	1031.321	21.76	3978529	0.03	10000	
Zn	66	45	1	He	1057.114	1057.114	21.74	932887	0.11	10000	
As	75	115	1	He	972.304	972.304	23.62	692157	0.14	10000	
Se	78	115	1	He	995.759	995.759	23.19	61869	1.61	10000	
Sr	88	45	1	He	1118.546	1118.546	20.87	5383071	0.02	10000	
Mo	95	103	1	He	107.817	107.817	20.64	249281	0.04	2000	
Ag	107	103	1	He	104.587	104.587	21.36	763072	0.01	300	
Cd	111	115	1	He	1019.592	1019.592	23.83	1373373	0.07	4000	
Sn	118	115	1	He	1138.867	1138.867	23.57	3817366	0.03	2000	
Sb	123	165	1	He	100.749	100.749	22.69	404119	0.02	300	
Ba	137	115	1	He	1175.871	1175.871	23.85	1920124	0.06	10000	
W	182	159	1	He	100.124	100.124	22.21	904024	0.01	2500	
Tl	205	165	1	He	258.742	258.742	21.43	5532044	0.00	5000	
Pb	208	165	1	He	1059.229	1059.229	22.23	30822936	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	928456	0.81	1261090	73.62	30	120	
Sc	45	1	He	669530	19.87	955958	70.04	30	120	
Sc	45	2	NoGas	7248516	0.87	7862387	92.19	30	120	
Rh	103	1	He	2047175	18.67	2873429	71.25	30	120	
In	115	1	He	1383321	20.90	1922589	71.95	30	120	
Tb	159	1	He	3767941	19.10	4725151	79.74	30	120	
Ho	165	1	He	3839610	19.60	4813140	79.77	30	120	
Bi	209	1	He	2886901	17.97	3617562	79.80	30	120	

Sample Report

Sample Table

Sample Name	240-50650-a-1-c du@20
Data File Name	238SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-29T00:14:42-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	5.236	5.236	7.32	78372	0.01	10000	
Be	9	6	2	NoGas	1.650	1.650	5.43	3641	0.05	10000	
B	11	6	2	NoGas	3.154	3.154	16.24	10107	0.03	300	
Na	23	45	1	He	51.022	51.022	6.61	58553	0.09	500000	
Mg	24	45	1	He	1011.216	1011.216	1.65	466067	0.22	500000	
Al	27	45	1	He	5445.567	5445.567	0.59	1534649	0.35	200000	
K	39	45	1	He	356.420	356.420	1.54	212408	0.17	500000	
Ca	44	45	1	He	1630.196	1630.196	2.36	45282	3.60	500000	
Ti	47	45	1	He	50.909	50.909	1.26	7618	0.67	2500	
V	51	45	1	He	9.845	9.845	1.09	76287	0.01	10000	
Cr	52	45	1	He	8.706	8.706	2.72	40622	0.02	10000	
Mn	55	45	1	He	565.815	565.815	0.75	2004887	0.03	10000	
Fe	56	45	1	He	11002.239	11002.239	0.88	46654824	0.02	200000	
Co	59	45	1	He	4.974	4.974	1.16	31036	0.02	10000	
Ni	60	45	1	He	10.415	10.415	0.85	16597	0.06	10000	
Cu	63	45	1	He	7.320	7.320	1.54	29908	0.02	10000	
Zn	66	45	1	He	40.541	40.541	1.44	38622	0.10	10000	
As	75	115	1	He	6.747	6.747	1.65	5349	0.13	10000	
Se	78	115	1	He	1.869	1.869	6.02	164	1.14	10000	
Sr	88	45	1	He	8.957	8.957	0.95	44910	0.02	10000	
Mo	95	103	1	He	1.352	1.352	11.83	3414	0.04	2000	
Ag	107	103	1	He	0.042	0.042	6.91	336	0.01	300	
Cd	111	115	1	He	0.383	0.383	6.27	2071	0.02	4000	
Sn	118	115	1	He	6.449	6.449	4.94	23962	0.03	2000	
Sb	123	165	1	He	0.448	0.448	4.56	1988	0.02	300	
Ba	137	115	1	He	44.935	44.935	1.00	79495	0.06	10000	
W	182	159	1	He	1.292	1.292	15.29	17881	0.01	2500	
Tl	205	165	1	He	0.472	0.472	3.86	10816	0.00	5000	
Pb	208	165	1	He	16.068	16.068	0.62	495882	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	720255	4.27	1261090	57.11	30	120	
Sc	45	1	He	676791	0.60	955958	70.80	30	120	
Sc	45	2	NoGas	5056130	5.06	7862387	64.31	30	120	
Rh	103	1	He	2151066	0.48	2873429	74.86	30	120	
In	115	1	He	1449019	0.19	1922589	75.37	30	120	
Tb	159	1	He	3876740	0.17	4725151	82.04	30	120	
Ho	165	1	He	3950162	0.53	4813140	82.07	30	120	
Bi	209	1	He	3054926	0.56	3617562	84.45	30	120	

Sample Report

Sample Table

Sample Name	240-50650-a-1-d ms@20
Data File Name	239SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-29T00:18:19-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	7.008	7.008	29.49	85765	0.01	10000	
Be	9	6	2	NoGas	7.219	7.219	21.37	13802	0.05	10000	
B	11	6	2	NoGas	8.429	8.429	40.60	14432	0.06	300	
Na	23	45	1	He	502.039	502.039	0.48	420864	0.12	500000	
Mg	24	45	1	He	1544.457	1544.457	0.58	727328	0.21	500000	
Al	27	45	1	He	6621.049	6621.049	0.58	1909627	0.35	200000	
K	39	45	1	He	862.416	862.416	0.58	469848	0.18	500000	
Ca	44	45	1	He	2242.638	2242.638	1.08	63548	3.53	500000	
Ti	47	45	1	He	57.476	57.476	1.63	8802	0.65	2500	
V	51	45	1	He	15.345	15.345	1.54	118482	0.01	10000	
Cr	52	45	1	He	14.748	14.748	1.03	69141	0.02	10000	
Mn	55	45	1	He	586.829	586.829	2.06	2127926	0.03	10000	
Fe	56	45	1	He	11043.072	11043.072	0.89	47926097	0.02	200000	
Co	59	45	1	He	9.756	9.756	1.65	62249	0.02	10000	
Ni	60	45	1	He	15.202	15.202	2.01	24454	0.06	10000	
Cu	63	45	1	He	11.790	11.790	1.36	48972	0.02	10000	
Zn	66	45	1	He	44.906	44.906	0.42	43625	0.10	10000	
As	75	115	1	He	10.307	10.307	2.71	8146	0.13	10000	
Se	78	115	1	He	5.023	5.023	5.09	379	1.33	10000	
Sr	88	45	1	He	14.149	14.149	0.45	72544	0.02	10000	
Mo	95	103	1	He	5.270	5.270	1.49	13267	0.04	2000	
Ag	107	103	1	He	4.706	4.706	1.02	37315	0.01	300	
Cd	111	115	1	He	4.931	4.931	1.97	8757	0.06	4000	
Sn	118	115	1	He	6.587	6.587	5.26	24622	0.03	2000	
Sb	123	165	1	He	1.658	1.658	0.77	7127	0.02	300	
Ba	137	115	1	He	50.477	50.477	0.78	89887	0.06	10000	
W	182	159	1	He	3.494	3.494	1.41	38881	0.01	2500	
Tl	205	165	1	He	4.875	4.875	0.56	110373	0.00	5000	
Pb	208	165	1	He	20.536	20.536	0.48	633275	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	652509	18.76	1261090	51.74	30	120	
Sc	45	1	He	692677	0.82	955958	72.46	30	120	
Sc	45	2	NoGas	4770693	20.60	7862387	60.68	30	120	
Rh	103	1	He	2165683	0.28	2873429	75.37	30	120	
In	115	1	He	1458626	0.54	1922589	75.87	30	120	
Tb	159	1	He	3885258	0.44	4725151	82.23	30	120	
Ho	165	1	He	3947951	0.45	4813140	82.02	30	120	
Bi	209	1	He	3029933	0.77	3617562	83.76	30	120	

Sample Report

Sample Table

Sample Name	240-50650-a-3-b@20
Data File Name	240SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-29T00:21:54-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	5.167	5.167	6.81	107782	0.00	10000	
Be	9	6	2	NoGas	0.766	0.766	7.54	2293	0.03	10000	
B	11	6	2	NoGas	0.097	0.097	437.02	8484	0.00	300	
Na	23	45	1	He	39.030	39.030	27.04	49445	0.08	500000	
Mg	24	45	1	He	1110.711	1110.711	19.55	512844	0.22	500000	
Al	27	45	1	He	6733.625	6733.625	19.71	1901081	0.35	200000	
K	39	45	1	He	420.707	420.707	22.36	244471	0.17	500000	
Ca	44	45	1	He	149.404	149.404	21.88	4655	3.21	500000	
Ti	47	45	1	He	44.997	44.997	24.47	6711	0.67	2500	
V	51	45	1	He	11.304	11.304	21.71	86864	0.01	10000	
Cr	52	45	1	He	9.456	9.456	20.73	44043	0.02	10000	
Mn	55	45	1	He	629.615	629.615	19.09	2236772	0.03	10000	
Fe	56	45	1	He	12875.941	12875.941	19.10	54738821	0.02	200000	
Co	59	45	1	He	5.192	5.192	17.65	32532	0.02	10000	
Ni	60	45	1	He	10.128	10.128	20.13	16199	0.06	10000	
Cu	63	45	1	He	5.397	5.397	20.41	22228	0.02	10000	
Zn	66	45	1	He	32.219	32.219	20.22	31064	0.10	10000	
As	75	115	1	He	5.402	5.402	22.71	4226	0.13	10000	
Se	78	115	1	He	0.822	0.822	32.04	93	0.89	10000	
Sr	88	45	1	He	2.066	2.066	17.85	10487	0.02	10000	
Mo	95	103	1	He	0.806	0.806	25.06	2010	0.04	2000	
Ag	107	103	1	He	0.035	0.035	23.03	277	0.01	300	
Cd	111	115	1	He	0.210	0.210	11.03	1836	0.01	4000	
Sn	118	115	1	He	2.081	2.081	27.47	7910	0.03	2000	
Sb	123	165	1	He	0.116	0.116	24.26	559	0.02	300	
Ba	137	115	1	He	48.790	48.790	21.15	84677	0.06	10000	
W	182	159	1	He	0.216	0.216	44.52	7495	0.00	2500	
Tl	205	165	1	He	0.207	0.207	23.74	4670	0.00	5000	
Pb	208	165	1	He	10.014	10.014	19.59	299580	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	951464	6.46	1261090	75.45	30	120	
Sc	45	1	He	693812	17.41	955958	72.58	30	120	
Sc	45	2	NoGas	7002857	4.16	7862387	89.07	30	120	
Rh	103	1	He	2171545	18.28	2873429	75.57	30	120	
In	115	1	He	1462191	19.82	1922589	76.05	30	120	
Tb	159	1	He	3842630	18.53	4725151	81.32	30	120	
Ho	165	1	He	3916345	17.75	4813140	81.37	30	120	
Bi	209	1	He	3005763	16.14	3617562	83.09	30	120	

Sample Report

Sample Table

Sample Name	240-50650-a-4-b@20
Data File Name	241SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-29T00:25:30-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	9.579	9.579	7.37	93838	0.01	10000	
Be	9	6	2	NoGas	1.163	1.163	10.24	2130	0.05	10000	
B	11	6	2	NoGas	3.309	3.309	31.72	8421	0.04	300	
Na	23	45	1	He	39.092	39.092	4.05	49761	0.08	500000	
Mg	24	45	1	He	1296.853	1296.853	1.13	603483	0.21	500000	
Al	27	45	1	He	6433.866	6433.866	1.27	1832479	0.35	200000	
K	39	45	1	He	532.010	532.010	0.21	301200	0.18	500000	
Ca	44	45	1	He	473.171	473.171	4.03	13675	3.46	500000	
Ti	47	45	1	He	52.047	52.047	4.21	7873	0.66	2500	
V	51	45	1	He	10.739	10.739	2.26	83584	0.01	10000	
Cr	52	45	1	He	9.475	9.475	0.70	44523	0.02	10000	
Mn	55	45	1	He	522.646	522.646	0.69	1871922	0.03	10000	
Fe	56	45	1	He	12411.725	12411.725	0.33	53196317	0.02	200000	
Co	59	45	1	He	5.035	5.035	0.38	31755	0.02	10000	
Ni	60	45	1	He	10.955	10.955	1.51	17605	0.06	10000	
Cu	63	45	1	He	7.759	7.759	0.61	32013	0.02	10000	
Zn	66	45	1	He	34.784	34.784	1.00	33703	0.10	10000	
As	75	115	1	He	5.364	5.364	1.03	4291	0.13	10000	
Se	78	115	1	He	0.734	0.734	23.88	88	0.83	10000	
Sr	88	45	1	He	3.450	3.450	0.31	17553	0.02	10000	
Mo	95	103	1	He	0.775	0.775	6.36	1969	0.04	2000	
Ag	107	103	1	He	0.031	0.031	16.48	253	0.01	300	
Cd	111	115	1	He	0.241	0.241	5.55	1868	0.01	4000	
Sn	118	115	1	He	1.828	1.828	7.83	7202	0.03	2000	
Sb	123	165	1	He	0.131	0.131	10.06	630	0.02	300	
Ba	137	115	1	He	42.551	42.551	1.20	75409	0.06	10000	
W	182	159	1	He	0.190	0.190	19.92	7343	0.00	2500	
Tl	205	165	1	He	0.175	0.175	2.02	4058	0.00	5000	
Pb	208	165	1	He	9.942	9.942	0.59	302806	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	592087	6.90	1261090	46.95	30	120	
Sc	45	1	He	684049	0.59	955958	71.56	30	120	
Sc	45	2	NoGas	4147431	7.05	7862387	52.75	30	120	
Rh	103	1	He	2142829	1.46	2873429	74.57	30	120	
In	115	1	He	1451649	1.12	1922589	75.50	30	120	
Tb	159	1	He	3840394	1.02	4725151	81.28	30	120	
Ho	165	1	He	3895369	0.24	4813140	80.93	30	120	
Bi	209	1	He	3035488	1.39	3617562	83.91	30	120	

Sample Report

Sample Table

Sample Name	240-50650-a-5-b@20
Data File Name	242SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-29T00:29:07-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	4.686	4.686	1.87	81600	0.01	10000	
Be	9	6	2	NoGas	0.808	0.808	14.30	1971	0.04	10000	
B	11	6	2	NoGas	0.525	0.525	47.66	7491	0.01	300	
Na	23	45	1	He	34.560	34.560	6.15	46281	0.07	500000	
Mg	24	45	1	He	910.824	910.824	6.72	425009	0.21	500000	
Al	27	45	1	He	6114.653	6114.653	5.65	1744183	0.35	200000	
K	39	45	1	He	309.473	309.473	7.29	191823	0.16	500000	
Ca	44	45	1	He	71.359	71.359	10.55	2531	2.82	500000	
Ti	47	45	1	He	58.171	58.171	6.91	8810	0.66	2500	
V	51	45	1	He	9.924	9.924	7.73	77744	0.01	10000	
Cr	52	45	1	He	7.497	7.497	6.74	35655	0.02	10000	
Mn	55	45	1	He	575.328	575.328	5.96	2063225	0.03	10000	
Fe	56	45	1	He	10157.926	10157.926	6.61	43585276	0.02	200000	
Co	59	45	1	He	5.379	5.379	4.19	33984	0.02	10000	
Ni	60	45	1	He	8.194	8.194	6.13	13373	0.06	10000	
Cu	63	45	1	He	5.958	5.958	6.24	24739	0.02	10000	
Zn	66	45	1	He	28.612	28.612	6.33	28020	0.10	10000	
As	75	115	1	He	4.518	4.518	6.14	3669	0.12	10000	
Se	78	115	1	He	0.736	0.736	22.12	89	0.83	10000	
Sr	88	45	1	He	1.661	1.661	8.57	8511	0.02	10000	
Mo	95	103	1	He	0.747	0.747	11.86	1900	0.04	2000	
Ag	107	103	1	He	0.039	0.039	13.28	311	0.01	300	
Cd	111	115	1	He	0.200	0.200	23.54	1827	0.01	4000	
Sn	118	115	1	He	1.426	1.426	8.22	5790	0.02	2000	
Sb	123	165	1	He	0.100	0.100	15.44	501	0.02	300	
Ba	137	115	1	He	41.493	41.493	6.37	74154	0.06	10000	
W	182	159	1	He	0.119	0.119	36.34	6676	0.00	2500	
Tl	205	165	1	He	0.147	0.147	11.61	3446	0.00	5000	
Pb	208	165	1	He	9.428	9.428	6.01	288176	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	775408	0.10	1261090	61.49	30	120	
Sc	45	1	He	686443	5.45	955958	71.81	30	120	
Sc	45	2	NoGas	5584022	0.51	7862387	71.02	30	120	
Rh	103	1	He	2154719	5.87	2873429	74.99	30	120	
In	115	1	He	1466880	5.03	1922589	76.30	30	120	
Tb	159	1	He	3848282	4.61	4725151	81.44	30	120	
Ho	165	1	He	3918012	5.81	4813140	81.40	30	120	
Bi	209	1	He	3052134	4.64	3617562	84.37	30	120	

Sample Report

Sample Table

Sample Name	240-50650-a-6-b@20
Data File Name	243SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-29T00:32:43-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	9.564	9.564	11.60	137511	0.01	10000	
Be	9	6	2	NoGas	0.903	0.903	10.03	2252	0.04	10000	
B	11	6	2	NoGas	1.048	1.048	44.54	8410	0.01	300	
Na	23	45	1	He	48.965	48.965	4.17	58594	0.08	500000	
Mg	24	45	1	He	2143.913	2143.913	2.53	1013826	0.21	500000	
Al	27	45	1	He	8050.328	8050.328	2.94	2333361	0.35	200000	
K	39	45	1	He	714.564	714.564	3.06	398069	0.18	500000	
Ca	44	45	1	He	1663.837	1663.837	3.42	47527	3.50	500000	
Ti	47	45	1	He	52.125	52.125	6.52	8022	0.65	2500	
V	51	45	1	He	13.806	13.806	3.53	107700	0.01	10000	
Cr	52	45	1	He	13.057	13.057	2.32	61741	0.02	10000	
Mn	55	45	1	He	487.451	487.451	2.94	1776857	0.03	10000	
Fe	56	45	1	He	18813.982	18813.982	2.83	82058270	0.02	200000	
Co	59	45	1	He	7.909	7.909	1.80	50738	0.02	10000	
Ni	60	45	1	He	16.782	16.782	3.36	27052	0.06	10000	
Cu	63	45	1	He	11.549	11.549	1.49	48232	0.02	10000	
Zn	66	45	1	He	42.726	42.726	4.21	41785	0.10	10000	
As	75	115	1	He	8.442	8.442	3.90	6749	0.13	10000	
Se	78	115	1	He	0.513	0.513	34.58	74	0.69	10000	
Sr	88	45	1	He	5.938	5.938	3.83	30661	0.02	10000	
Mo	95	103	1	He	0.808	0.808	2.56	2065	0.04	2000	
Ag	107	103	1	He	0.023	0.023	18.52	189	0.01	300	
Cd	111	115	1	He	0.220	0.220	47.16	1857	0.01	4000	
Sn	118	115	1	He	1.359	1.359	0.39	5575	0.02	2000	
Sb	123	165	1	He	0.094	0.094	6.28	481	0.02	300	
Ba	137	115	1	He	52.433	52.433	3.85	94060	0.06	10000	
W	182	159	1	He	0.062	0.062	70.87	6202	0.00	2500	
Tl	205	165	1	He	0.155	0.155	2.80	3657	0.00	5000	
Pb	208	165	1	He	10.403	10.403	1.98	320491	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	801224	8.23	1261090	63.53	30	120	
Sc	45	1	He	696382	1.85	955958	72.85	30	120	
Sc	45	2	NoGas	6101952	9.82	7862387	77.61	30	120	
Rh	103	1	He	2157662	2.77	2873429	75.09	30	120	
In	115	1	He	1470918	4.03	1922589	76.51	30	120	
Tb	159	1	He	3879537	2.58	4725151	82.10	30	120	
Ho	165	1	He	3941348	1.73	4813140	81.89	30	120	
Bi	209	1	He	3037559	1.70	3617562	83.97	30	120	

Sample Report

Sample Table

Sample Name	240-50650-a-7-b@20
Data File Name	244SMPL.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-29T00:36:20-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	6.655	6.655	1.23	98681	0.01	10000	
Be	9	6	2	NoGas	0.762	0.762	11.19	1867	0.04	10000	
B	11	6	2	NoGas	0.583	0.583	17.12	7583	0.01	300	
Na	23	45	1	He	35.681	35.681	10.19	49255	0.07	500000	
Mg	24	45	1	He	1199.544	1199.544	6.17	584353	0.21	500000	
Al	27	45	1	He	6782.315	6782.315	7.18	2020720	0.34	200000	
K	39	45	1	He	389.220	389.220	7.39	241579	0.16	500000	
Ca	44	45	1	He	234.412	234.412	6.17	7382	3.18	500000	
Ti	47	45	1	He	47.020	47.020	6.27	7443	0.63	2500	
V	51	45	1	He	10.826	10.826	6.96	88125	0.01	10000	
Cr	52	45	1	He	8.701	8.701	6.56	42942	0.02	10000	
Mn	55	45	1	He	820.382	820.382	6.83	3073104	0.03	10000	
Fe	56	45	1	He	12291.327	12291.327	6.83	55114343	0.02	200000	
Co	59	45	1	He	6.216	6.216	6.47	41009	0.02	10000	
Ni	60	45	1	He	10.890	10.890	8.51	18305	0.06	10000	
Cu	63	45	1	He	7.211	7.211	6.85	31169	0.02	10000	
Zn	66	45	1	He	34.717	34.717	8.10	35185	0.10	10000	
As	75	115	1	He	5.397	5.397	7.35	4471	0.12	10000	
Se	78	115	1	He	0.651	0.651	24.65	85	0.76	10000	
Sr	88	45	1	He	2.896	2.896	7.66	15428	0.02	10000	
Mo	95	103	1	He	0.822	0.822	5.78	2171	0.04	2000	
Ag	107	103	1	He	0.026	0.026	22.67	217	0.01	300	
Cd	111	115	1	He	0.188	0.188	21.49	1859	0.01	4000	
Sn	118	115	1	He	1.277	1.277	14.15	5371	0.02	2000	
Sb	123	165	1	He	0.093	0.093	21.68	492	0.02	300	
Ba	137	115	1	He	55.048	55.048	8.28	100981	0.05	10000	
W	182	159	1	He	0.103	0.103	47.84	6813	0.00	2500	
Tl	205	165	1	He	0.150	0.150	8.25	3643	0.00	5000	
Pb	208	165	1	He	12.465	12.465	7.36	395008	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	777258	0.52	1261090	61.63	30	120	
Sc	45	1	He	717615	6.04	955958	75.07	30	120	
Sc	45	2	NoGas	5525436	0.33	7862387	70.28	30	120	
Rh	103	1	He	2237244	6.33	2873429	77.86	30	120	
In	115	1	He	1509005	7.73	1922589	78.49	30	120	
Tb	159	1	He	4013102	7.27	4725151	84.93	30	120	
Ho	165	1	He	4068919	7.15	4813140	84.54	30	120	
Bi	209	1	He	3129145	5.60	3617562	86.50	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2026839
Data File Name	245_CCV.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-29T00:39:54-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	30.070	5.507	412732	0.55	50	60.1	89.5	110.5	CCV Failed
Be	9	6	2	NoGas	39.054	6.345	111621	1.52	50	78.1	89.5	110.5	CCV Failed
B	11	6	2	NoGas	36.231	5.523	66021	1.49	50	72.5	89.5	110.5	CCV Failed
Na	23	45	1	He	23006.118	9.547	18839253	1.52	25000	92.0	89.5	110.5	
Mg	24	45	1	He	23123.615	8.536	11104285	0.35	25000	92.5	89.5	110.5	
Al	27	45	1	He	231.228	9.653	68674	1.47	250	92.5	89.5	110.5	
K	39	45	1	He	24267.013	8.664	12422666	0.45	25000	97.1	89.5	110.5	
Ca	44	45	1	He	23297.043	9.275	669587	1.12	25000	93.2	89.5	110.5	
Ti	47	45	1	He	47.840	8.091	7498	2.41	50	95.7	89.5	110.5	
V	51	45	1	He	46.159	9.411	352567	1.25	50	92.3	89.5	110.5	
Cr	52	45	1	He	46.430	10.253	218351	2.10	50	92.9	89.5	110.5	
Mn	55	45	1	He	235.956	9.517	875728	1.36	250	94.4	89.5	110.5	
Fe	56	45	1	He	11793.948	9.734	52315922	1.59	12500	94.4	89.5	110.5	
Co	59	45	1	He	46.538	8.897	303465	0.72	50	93.1	89.5	110.5	
Ni	60	45	1	He	46.260	9.264	74526	1.41	50	92.5	89.5	110.5	
Cu	63	45	1	He	46.548	9.293	196043	1.10	50	93.1	89.5	110.5	
Zn	66	45	1	He	46.009	6.946	45726	1.68	50	92.0	89.5	110.5	
As	75	115	1	He	44.884	9.138	35157	0.79	50	89.8	89.5	110.5	
Se	78	115	1	He	45.909	8.368	3163	0.89	50	91.8	89.5	110.5	
Sr	88	45	1	He	50.223	9.661	262905	1.51	50	100.4	89.5	110.5	
Mo	95	103	1	He	48.512	9.601	120796	1.68	50	97.0	89.5	110.5	
Ag	107	103	1	He	47.044	8.967	370069	0.93	50	94.1	89.5	110.5	
Cd	111	115	1	He	46.738	8.311	70505	0.63	50	93.5	89.5	110.5	
Sn	118	115	1	He	47.835	10.553	176104	2.48	50	95.7	89.5	110.5	
Sb	123	165	1	He	46.629	9.251	201781	1.53	50	93.3	89.5	110.5	
Ba	137	115	1	He	49.341	9.616	88305	1.37	50	98.7	89.5	110.5	
W	182	159	1	He	45.171	8.759	443366	1.88	50	90.3	89.5	110.5	
Tl	205	165	1	He	46.517	9.295	1071015	1.54	50	93.0	89.5	110.5	
Pb	208	165	1	He	46.967	9.020	1474093	1.23	50	93.9	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	956156	5.26	1261090	75.82	30	120	
Sc	45	1	He	711950	8.64	955958	74.48	30	120	
Sc	45	2	NoGas	7320109	4.28	7862387	93.10	30	120	
Rh	103	1	He	2159825	8.46	2873429	75.17	30	120	
In	115	1	He	1474193	8.77	1922589	76.68	30	120	
Tb	159	1	He	3970097	7.16	4725151	84.02	30	120	
Ho	165	1	He	4040059	8.20	4813140	83.94	30	120	
Bi	209	1	He	2964832	6.41	3617562	81.96	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	246_CCB.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-29T00:43:30-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.447	-18.9	33639	1.8	2	
Be	9	6	2	NoGas	0.396	8.2	1000	8.0	1	
B	11	6	2	NoGas	0.324	61.1	7124	2.8	20	
Na	23	45	1	He	34.719	6.9	46946	1.8	1000	
Mg	24	45	1	He	1.498	39.6	3071	13.2	1000	
Al	27	45	1	He	1.324	15.8	894	3.8	50	
K	39	45	1	He	24.690	25.2	51923	2.5	1000	
Ca	44	45	1	He	71.025	6.0	2556	4.6	1000	
Ti	47	45	1	He	0.170	23.9	31	24.7	20	
V	51	45	1	He	-0.200	-14.8	4281	3.2	2	
Cr	52	45	1	He	0.106	47.1	2344	8.7	2	
Mn	55	45	1	He	1.341	4.0	6548	1.2	2	
Fe	56	45	1	He	28.583	24.7	131426	27.4	50	
Co	59	45	1	He	0.058	9.9	423	12.7	1	
Ni	60	45	1	He	-0.376	-6.7	159	29.1	2	
Cu	63	45	1	He	0.047	52.1	737	10.5	2	
Zn	66	45	1	He	4.590	5.1	5807	4.9	20	
As	75	115	1	He	0.077	9.7	215	3.7	2	
Se	78	115	1	He	0.247	33.9	57	9.2	2	
Sr	88	45	1	He	0.043	3.3	332	4.5	10	
Mo	95	103	1	He	0.484	40.7	1299	42.4	2	
Ag	107	103	1	He	0.009	32.1	82	27.0	0.2	
Cd	111	115	1	He	0.128	9.7	1758	3.5	0.2	
Sn	118	115	1	He	0.750	12.8	3386	7.6	10	
Sb	123	165	1	He	0.119	9.6	598	8.4	2	
Ba	137	115	1	He	0.048	30.1	116	19.6	5	
W	182	159	1	He	0.815	29.0	13658	19.1	10	
Tl	205	165	1	He	0.198	20.7	4710	23.2	0.5	
Pb	208	165	1	He	0.207	8.6	7036	4.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	764099	0.72	1261090	60.59	30	120	
Sc	45	1	He	694210	4.27	955958	72.62	30	120	
Sc	45	2	NoGas	5469341	0.66	7862387	69.56	30	120	
Rh	103	1	He	2218125	3.98	2873429	77.19	30	120	
In	115	1	He	1499047	4.05	1922589	77.97	30	120	
Tb	159	1	He	3957023	2.98	4725151	83.74	30	120	
Ho	165	1	He	4007545	3.70	4813140	83.26	30	120	
Bi	209	1	He	3025730	3.56	3617562	83.64	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2026839
Data File Name	247_CCV.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-29T00:47:10-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	40.406	37.514	414034	0.96	50	80.8	89.5	110.5	CCV Failed
Be	9	6	2	NoGas	50.416	38.044	111619	4.05	50	100.8	89.5	110.5	
B	11	6	2	NoGas	50.166	42.248	68300	4.10	50	100.3	89.5	110.5	
Na	23	45	1	He	24690.304	2.398	19118108	0.51	25000	98.8	89.5	110.5	
Mg	24	45	1	He	24869.659	2.268	11287211	0.07	25000	99.5	89.5	110.5	
Al	27	45	1	He	246.351	2.849	69155	0.73	250	98.5	89.5	110.5	
K	39	45	1	He	26190.628	2.262	12669427	0.31	25000	104.8	89.5	110.5	
Ca	44	45	1	He	25145.401	2.702	683253	0.37	25000	100.6	89.5	110.5	
Ti	47	45	1	He	51.958	7.734	7686	5.33	50	103.9	89.5	110.5	
V	51	45	1	He	49.975	2.510	360449	0.82	50	99.9	89.5	110.5	
Cr	52	45	1	He	49.965	3.338	222117	1.01	50	99.9	89.5	110.5	
Mn	55	45	1	He	254.912	2.783	894464	0.44	250	102.0	89.5	110.5	
Fe	56	45	1	He	12688.014	2.271	53229802	0.15	12500	101.5	89.5	110.5	
Co	59	45	1	He	49.738	2.400	306593	0.68	50	99.5	89.5	110.5	
Ni	60	45	1	He	49.421	2.051	75228	0.33	50	98.8	89.5	110.5	
Cu	63	45	1	He	49.861	3.195	198492	0.86	50	99.7	89.5	110.5	
Zn	66	45	1	He	50.097	2.658	46876	0.27	50	100.2	89.5	110.5	
As	75	115	1	He	48.543	2.524	35953	0.60	50	97.1	89.5	110.5	
Se	78	115	1	He	49.737	2.303	3236	0.42	50	99.5	89.5	110.5	
Sr	88	45	1	He	54.053	2.476	267582	0.35	50	108.1	89.5	110.5	
Mo	95	103	1	He	51.805	3.299	122765	1.11	50	103.6	89.5	110.5	
Ag	107	103	1	He	49.938	2.439	373782	0.32	50	99.9	89.5	110.5	
Cd	111	115	1	He	49.958	1.506	71151	0.49	50	99.9	89.5	110.5	
Sn	118	115	1	He	52.055	2.837	181352	0.94	50	104.1	89.5	110.5	
Sb	123	165	1	He	49.514	2.565	205110	0.79	50	99.0	89.5	110.5	
Ba	137	115	1	He	53.180	2.572	90048	0.96	50	106.4	89.5	110.5	
W	182	159	1	He	48.571	3.347	454971	1.27	50	97.1	89.5	110.5	
Tl	205	165	1	He	49.094	3.295	1081950	0.81	50	98.2	89.5	110.5	
Pb	208	165	1	He	49.814	3.001	1496326	0.58	50	99.6	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	814126	37.10	1261090	64.56	30	120	
Sc	45	1	He	669810	2.31	955958	70.07	30	120	
Sc	45	2	NoGas	6117544	35.61	7862387	77.81	30	120	
Rh	103	1	He	2045439	2.26	2873429	71.18	30	120	
In	115	1	He	1387399	1.90	1922589	72.16	30	120	
Tb	159	1	He	3778334	2.02	4725151	79.96	30	120	
Ho	165	1	He	3849518	2.45	4813140	79.98	30	120	
Bi	209	1	He	2840654	1.72	3617562	78.52	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	248_CCB.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-29T00:50:49-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.559	-3.2	36826	4.7	2	
Be	9	6	2	NoGas	0.375	12.3	1022	7.1	1	
B	11	6	2	NoGas	-0.126	-240.7	7042	1.4	20	
Na	23	45	1	He	40.614	13.5	49166	2.1	1000	
Mg	24	45	1	He	1.557	48.2	2960	16.3	1000	
Al	27	45	1	He	1.376	27.9	866	8.4	50	
K	39	45	1	He	31.537	24.8	52722	0.9	1000	
Ca	44	45	1	He	80.725	11.2	2691	3.1	1000	
Ti	47	45	1	He	0.122	109.2	23	86.9	20	
V	51	45	1	He	-0.197	-14.6	4107	7.1	2	
Cr	52	45	1	He	0.106	15.0	2239	9.0	2	
Mn	55	45	1	He	1.366	6.8	6323	1.3	2	
Fe	56	45	1	He	27.735	26.8	122034	29.6	50	
Co	59	45	1	He	0.062	16.7	422	10.1	1	
Ni	60	45	1	He	-0.375	-5.4	152	23.4	2	
Cu	63	45	1	He	0.069	26.8	790	3.7	2	
Zn	66	45	1	He	5.020	12.1	5904	3.6	20	
As	75	115	1	He	0.086	30.0	212	10.7	2	
Se	78	115	1	He	0.184	28.6	50	7.7	2	
Sr	88	45	1	He	0.046	14.4	331	9.5	10	
Mo	95	103	1	He	0.520	49.1	1337	51.2	2	
Ag	107	103	1	He	0.009	19.6	80	19.1	0.2	
Cd	111	115	1	He	0.130	22.7	1674	3.0	0.2	
Sn	118	115	1	He	0.774	14.2	3312	12.9	10	
Sb	123	165	1	He	0.126	9.3	598	13.2	2	
Ba	137	115	1	He	0.058	58.2	128	49.1	5	
W	182	159	1	He	0.945	20.3	14133	17.3	10	
Tl	205	165	1	He	0.210	21.8	4729	25.3	0.5	
Pb	208	165	1	He	0.224	7.2	7190	2.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	822937	5.39	1261090	65.26	30	120	
Sc	45	1	He	662187	6.10	955958	69.27	30	120	
Sc	45	2	NoGas	6172205	5.12	7862387	78.50	30	120	
Rh	103	1	He	2115243	5.59	2873429	73.61	30	120	
In	115	1	He	1426106	5.33	1922589	74.18	30	120	
Tb	159	1	He	3740162	5.22	4725151	79.15	30	120	
Ho	165	1	He	3796322	5.41	4813140	78.87	30	120	
Bi	209	1	He	2894041	4.73	3617562	80.00	30	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-2012498
Data File Name	249CRI.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-29T00:54:25-04:00
Sample Type	CRI
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	2	NoGas	5.507	5.507	3.932	98540	1.84	8	68.8	49.5	150.5	
Be	9	2	NoGas	1.197	1.197	7.909	3089	8.17	1	119.7	49.5	150.5	
B	11	2	NoGas	16.927	16.927	6.000	30827	1.98	20	84.6	49.5	150.5	
Na	23	1	He	1037.415	1037.415	1.248	841232	0.85	1000	103.7	49.5	150.5	
Mg	24	1	He	1022.833	1022.833	1.149	477914	1.20	1000	102.3	49.5	150.5	
Al	27	1	He	48.333	48.333	2.804	14312	3.00	50	96.7	49.5	150.5	
K	39	1	He	1096.011	1096.011	0.837	580818	0.52	1000	109.6	49.5	150.5	
Ca	44	1	He	1013.708	1013.708	1.280	28756	1.19	1000	101.4	49.5	150.5	
Ti	47	1	He	10.251	10.251	2.157	1559	1.79	10	102.5	49.5	150.5	
V	51	1	He	3.534	3.534	1.849	31410	1.55	5	70.7	49.5	150.5	
Cr	52	1	He	2.137	2.137	1.377	11497	1.64	2	106.9	49.5	150.5	
Mn	55	1	He	4.990	4.990	0.837	19573	0.71	5	99.8	49.5	150.5	
Fe	56	1	He	110.223	110.223	0.323	480058	0.81	100	110.2	49.5	150.5	
Co	59	1	He	1.097	1.097	2.858	6977	2.51	1	109.7	49.5	150.5	
Ni	60	1	He	1.641	1.641	4.480	3271	3.77	2	82.0	49.5	150.5	
Cu	63	1	He	2.106	2.106	0.770	9110	0.97	2	105.3	49.5	150.5	
Zn	66	1	He	20.655	20.655	1.929	20670	1.29	20	103.3	49.5	150.5	
As	75	1	He	4.635	4.635	0.700	3797	0.86	5	92.7	49.5	150.5	
Se	78	1	He	5.127	5.127	0.942	391	1.21	5	102.5	49.5	150.5	
Sr	88	1	He	10.874	10.874	0.789	55246	0.30	10	108.7	49.5	150.5	
Mo	95	1	He	10.168	10.168	3.056	25642	2.70	10	101.7	49.5	150.5	
Ag	107	1	He	1.035	1.035	3.341	8238	2.78	1	103.5	49.5	150.5	
Cd	111	1	He	1.105	1.105	5.653	3186	2.80	1	110.5	49.5	150.5	
Sn	118	1	He	10.391	10.391	1.206	39046	1.05	10	103.9	49.5	150.5	
Sb	123	1	He	2.072	2.072	1.568	8733	0.60	2	103.6	49.5	150.5	
Ba	137	1	He	5.149	5.149	1.101	9318	1.51	5	103.0	49.5	150.5	
W	182	1	He	9.645	9.645	0.441	96720	0.69	10	96.4	49.5	150.5	
Tl	205	1	He	2.050	2.050	0.963	45697	0.72	2	102.5	49.5	150.5	
Pb	208	1	He	1.155	1.155	1.140	35544	0.67	1	115.5	49.5	150.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	834014	2.80	1261090	66.13	30	120	
Sc	45	1	He	686109	0.50	955958	71.77	30	120	
Sc	45	2	NoGas	6174915	3.90	7862387	78.54	30	120	
Rh	103	1	He	2172942	0.69	2873429	75.62	30	120	
In	115	1	He	1478438	0.42	1922589	76.90	30	120	
Tb	159	1	He	3856414	1.10	4725151	81.61	30	120	
Ho	165	1	He	3880413	0.98	4813140	80.62	30	120	
Bi	209	1	He	2986369	0.48	3617562	82.55	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2026839
Data File Name	250_CCV.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-29T00:58:03-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	40.998	0.831	420150	1.15	50	82.0	89.5	110.5	CCV Failed
Be	9	6	2	NoGas	50.714	0.846	114146	0.76	50	101.4	89.5	110.5	
B	11	6	2	NoGas	49.810	2.735	68984	2.62	50	99.6	89.5	110.5	
Na	23	45	1	He	23817.007	0.252	19094435	0.71	25000	95.3	89.5	110.5	
Mg	24	45	1	He	23836.868	0.486	11200600	0.19	25000	95.3	89.5	110.5	
Al	27	45	1	He	234.657	0.380	68228	0.42	250	93.9	89.5	110.5	
K	39	45	1	He	25379.814	0.530	12711907	0.27	25000	101.5	89.5	110.5	
Ca	44	45	1	He	24341.055	0.411	684822	0.46	25000	97.4	89.5	110.5	
Ti	47	45	1	He	48.906	1.422	7497	1.88	50	97.8	89.5	110.5	
V	51	45	1	He	48.030	0.604	358883	0.43	50	96.1	89.5	110.5	
Cr	52	45	1	He	48.170	0.154	221802	0.36	50	96.3	89.5	110.5	
Mn	55	45	1	He	245.634	0.465	892484	0.59	250	98.3	89.5	110.5	
Fe	56	45	1	He	12219.459	0.157	53075586	0.63	12500	97.8	89.5	110.5	
Co	59	45	1	He	48.387	0.332	308803	0.37	50	96.8	89.5	110.5	
Ni	60	45	1	He	47.946	0.595	75578	0.13	50	95.9	89.5	110.5	
Cu	63	45	1	He	48.314	0.658	199168	0.56	50	96.6	89.5	110.5	
Zn	66	45	1	He	48.544	1.744	47074	1.25	50	97.1	89.5	110.5	
As	75	115	1	He	47.299	1.129	35841	0.52	50	94.6	89.5	110.5	
Se	78	115	1	He	48.419	1.965	3224	2.42	50	96.8	89.5	110.5	
Sr	88	45	1	He	52.206	0.410	267577	0.18	50	104.4	89.5	110.5	
Mo	95	103	1	He	50.090	0.970	122775	0.95	50	100.2	89.5	110.5	
Ag	107	103	1	He	48.348	0.554	374254	0.55	50	96.7	89.5	110.5	
Cd	111	115	1	He	49.000	0.483	71411	0.62	50	98.0	89.5	110.5	
Sn	118	115	1	He	50.449	0.341	179837	1.32	50	100.9	89.5	110.5	
Sb	123	165	1	He	48.321	1.208	203575	0.96	50	96.6	89.5	110.5	
Ba	137	115	1	He	51.841	1.132	89797	0.28	50	103.7	89.5	110.5	
W	182	159	1	He	46.725	1.110	448507	0.71	50	93.4	89.5	110.5	
Tl	205	165	1	He	48.319	1.093	1083149	0.91	50	96.6	89.5	110.5	
Pb	208	165	1	He	48.744	0.654	1489261	0.58	50	97.5	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	751526	0.21	1261090	59.59	30	120	
Sc	45	1	He	693231	0.49	955958	72.52	30	120	
Sc	45	2	NoGas	5641329	0.40	7862387	71.75	30	120	
Rh	103	1	He	2114579	0.03	2873429	73.59	30	120	
In	115	1	He	1418937	1.08	1922589	73.80	30	120	
Tb	159	1	He	3868487	1.11	4725151	81.87	30	120	
Ho	165	1	He	3913578	0.27	4813140	81.31	30	120	
Bi	209	1	He	2889194	0.90	3617562	79.87	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	251_CCB.d
Data Path Name	D:\Analytical Runs\I10052815B_LITHIUM .b
Acq Date Time	2015-05-29T01:01:41-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

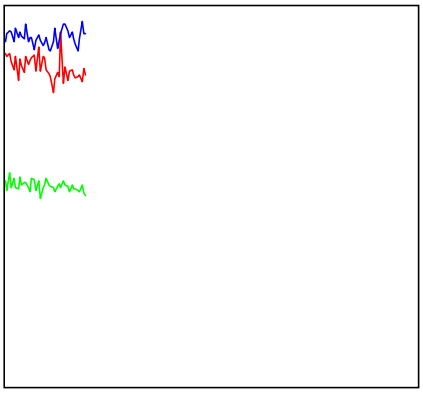
Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.613	-7.0	37226	4.4	2	
Be	9	6	2	NoGas	0.303	17.9	859	14.2	1	
B	11	6	2	NoGas	-0.116	-268.2	7187	6.8	20	
Na	23	45	1	He	41.286	6.8	51718	4.4	1000	
Mg	24	45	1	He	1.172	131.4	2882	25.3	1000	
Al	27	45	1	He	1.239	11.5	862	4.3	50	
K	39	45	1	He	25.051	12.0	51645	3.0	1000	
Ca	44	45	1	He	72.675	5.0	2577	3.9	1000	
Ti	47	45	1	He	0.114	87.8	22	69.3	20	
V	51	45	1	He	-0.229	-13.8	4032	6.0	2	
Cr	52	45	1	He	0.086	22.4	2232	4.2	2	
Mn	55	45	1	He	1.305	2.4	6356	1.7	2	
Fe	56	45	1	He	26.019	30.5	118338	29.3	50	
Co	59	45	1	He	0.055	8.0	399	7.5	1	
Ni	60	45	1	He	-0.356	-4.6	188	13.8	2	
Cu	63	45	1	He	0.051	17.2	747	4.3	2	
Zn	66	45	1	He	4.713	3.2	5862	2.5	20	
As	75	115	1	He	0.108	37.4	235	13.4	2	
Se	78	115	1	He	0.288	22.6	59	7.5	2	
Sr	88	45	1	He	0.051	12.1	368	8.4	10	
Mo	95	103	1	He	0.453	46.5	1191	45.7	2	
Ag	107	103	1	He	0.008	18.8	70	17.2	0.2	
Cd	111	115	1	He	0.090	21.9	1662	1.8	0.2	
Sn	118	115	1	He	0.795	18.8	3482	15.9	10	
Sb	123	165	1	He	0.138	17.2	664	15.8	2	
Ba	137	115	1	He	0.049	24.2	116	18.5	5	
W	182	159	1	He	1.016	26.5	15178	16.5	10	
Tl	205	165	1	He	0.205	22.8	4760	22.9	0.5	
Pb	208	165	1	He	0.211	2.3	7048	2.4	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	836511	3.44	1261090	66.33	30	120	
Sc	45	1	He	686980	0.49	955958	71.86	30	120	
Sc	45	2	NoGas	6331375	3.19	7862387	80.53	30	120	
Rh	103	1	He	2179136	1.22	2873429	75.84	30	120	
In	115	1	He	1464674	0.14	1922589	76.18	30	120	
Tb	159	1	He	3858919	0.33	4725151	81.67	30	120	
Ho	165	1	He	3924630	0.76	4813140	81.54	30	120	
Bi	209	1	He	2974841	1.19	3617562	82.23	30	120	

Current Signal

[NoGas]



Mass	Range	Count	Avg. Count	RSD [%]
7	5000	4096	4198.7	3.63
89	20000	10036	10546.3	2.65
205	5000	4645	4598.4	2.17
156/140	1	0.424 %	0.594 %	19.62
70/140	5	3.032 %	3.385 %	8.18
115	200	97	93.7	12.68

Integration Time [sec] 0.10

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.55	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	13.0	V
Extract 2	-185.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-85	V	Cell Exit	-50	V			

Cell Parameters

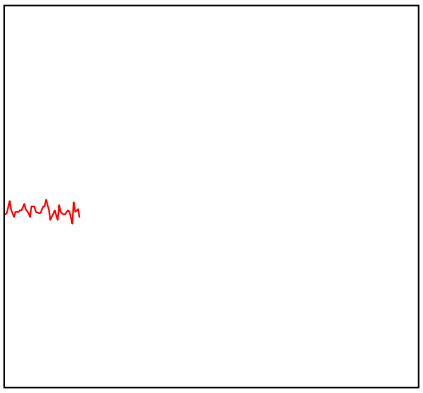
Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			

Meters

IF/BK Press	2.35E+2	Pa	Water RF/WC/IF	1.31	L/min	Plasma Gas	15.03	L/min
Analyzer Press	1.52E-4	Pa	Carrier Gas	0.55	L/min			

Current Signal

[He]



Mass	Range	Count	Avg. Count	RSD [%]
59	5000	2220	2305.5	3.03
51	1000	804	755.3	5.09
52	2000	1386	1325.1	7.74
51/59	50	36.218 %	32.786 %	5.73
52/59	100	62.401 %	57.516 %	8.09
Integration Time [sec]			0.10	

Tune Parameters

Plasma Parameters

RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.55	L/min

Lenses Parameters

Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	-2.0	V
Extract 2	-185.0	V	Cell Entrance	-50	V	Plate Bias	-70	V
Omega Bias	-85	V	Cell Exit	-70	V			

Cell Parameters

Use Gas	true		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
He Flow	4.0	mL/min	OctP Bias	-20.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			

Meters

IF/BK Press	2.36E+2	Pa	Water RF/WC/IF	1.30	L/min	Plasma Gas	15.00	L/min
Analyzer Press	2.14E-4	Pa	Carrier Gas	0.56	L/min			

US EPA Tune Check Sample Report

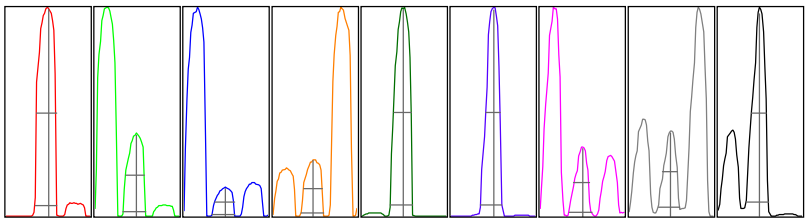
Batch Folder D:\Analytical Runs\I10060115A_LITHIUM .b
Report Comment
Instrument Name I10 JP12452145

[NoGas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	74690	1.79	5.00	
24	263610	1.44	5.00	
25	36407	1.00	5.00	
26	42718	1.17	5.00	
59	432972	1.48	5.00	
115	446041	1.38	5.00	
206	80794	1.13	5.00	
207	72857	1.37	5.00	
208	172075	1.05	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	73295	73820	74105	76042	76189
24	258429	261030	264542	266881	267166
25	36001	36115	36478	36921	36519
26	42042	42592	42616	43407	42934
59	425015	427488	434894	439473	437988
115	437624	442780	446063	453126	450614
206	79784	79941	80931	81431	81881
207	71779	71984	72803	73727	73993
208	170147	170440	171991	173670	174128

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	11593	9.05	8.9 - 9.1		0.773	0.850	
24	42645	24.00	23.9 - 24.1		0.789	0.850	
25	5774	25.00	24.9 - 25.1		0.792	0.850	
26	6810	25.95	25.9 - 26.1		0.803	0.850	
59	70801	59.00	58.9 - 59.1		0.793	0.850	
115	82595	115.05	114.9 - 115.1		0.748	0.850	
206	15229	206.05	205.9 - 206.1		0.791	0.850	
207	13420	207.00	206.9 - 207.1		0.765	0.850	
208	32501	208.00	207.9 - 208.1		0.797	0.850	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 235 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.55	L/min	S/C Temp	2	℃
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch	Dilution Gas	
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps	Makeup/Dilution Gas	0.55	L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	13.0	V
Extract 2	-185.0	V	Cell Entrance	-30	V	Plate Bias	-40	V
Omega Bias	-85	V	Cell Exit	-50	V			

Cell Parameters

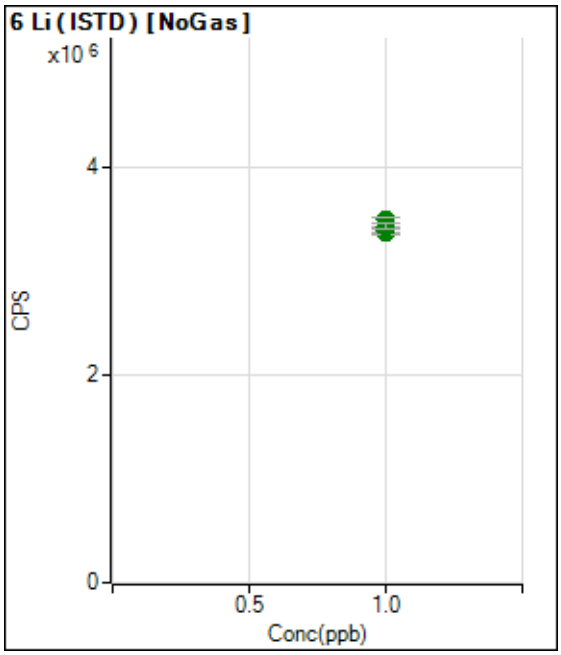
US EPA Tune Check Sample Report

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		3rd Gas Flow	0	%	Energy Discrimination	4.0	V
ParameterName	**Value**	**Unit**	**ParameterName**	**Value**	**Unit**	**ParameterName**	**Value**	**Unit**
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			

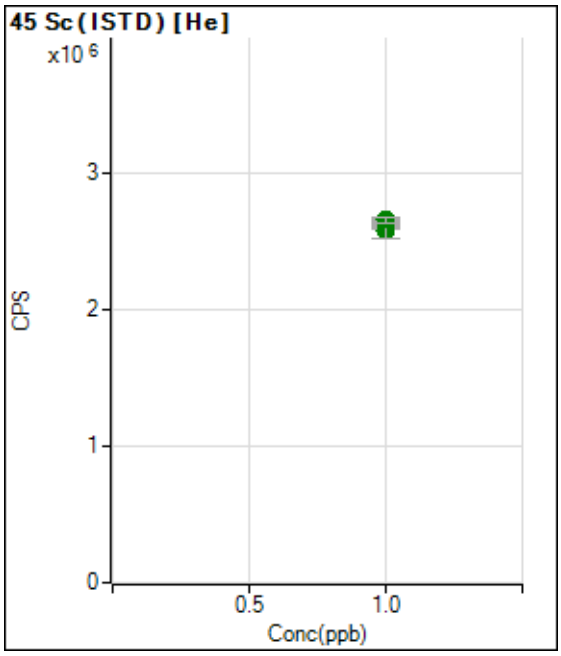
Calibration for 030_LCS.d

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DA Date-Time: 6/1/2015 3:00:01 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

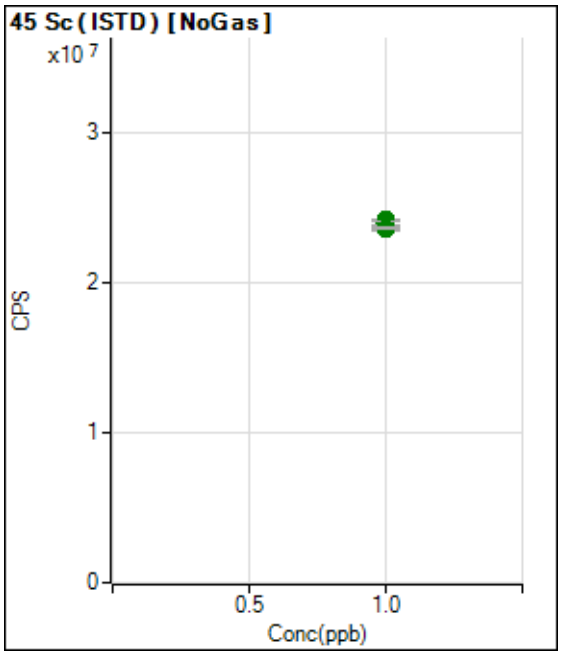
Level	Standard Data File	Sample Name	Acq. Date-Time
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2	003CALS.d	STD1-2012420	6/1/2015 11:43:16 AM
3	004CALS.d	STD2-2012431	6/1/2015 11:46:55 AM
4	005CALS.d	STD3-2012433	6/1/2015 11:50:33 AM
5	006CALS.d	STD4-2012443	6/1/2015 11:54:04 AM



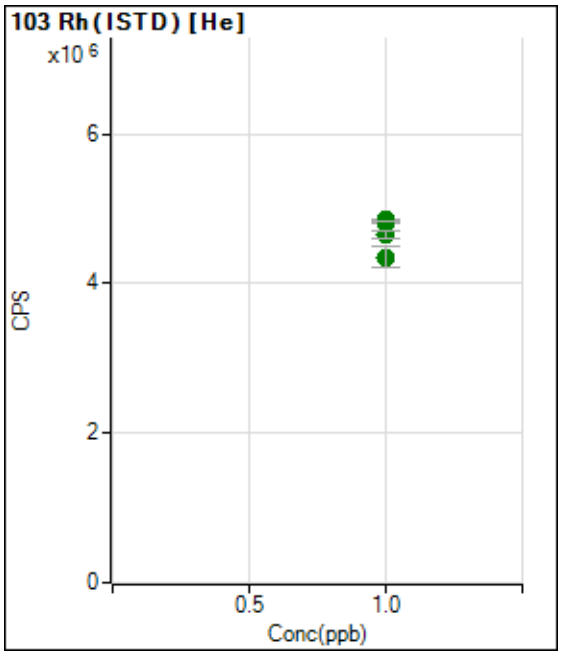
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2	☐	1.000		3410917.54		A	0.5
3	☐	1.000		3489749.69		A	1.9
4	☐	1.000		3381978.07		A	1.6
5	☐	1.000		3427422.59		A	1.8



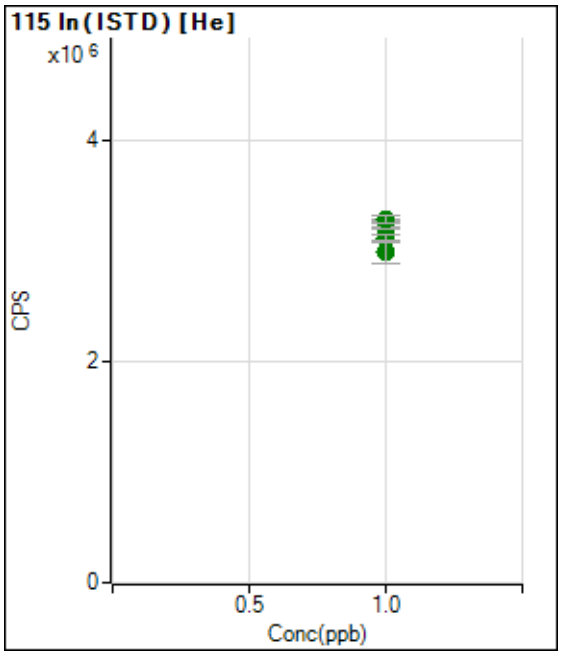
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2596879.81		A	0.5
2	☐	1.000		2628820.17		A	1.2
3	☐	1.000		2652215.07		A	0.5
4	☐	1.000		2580316.99		A	4.6
5	☐	1.000		2656359.13		A	1.4



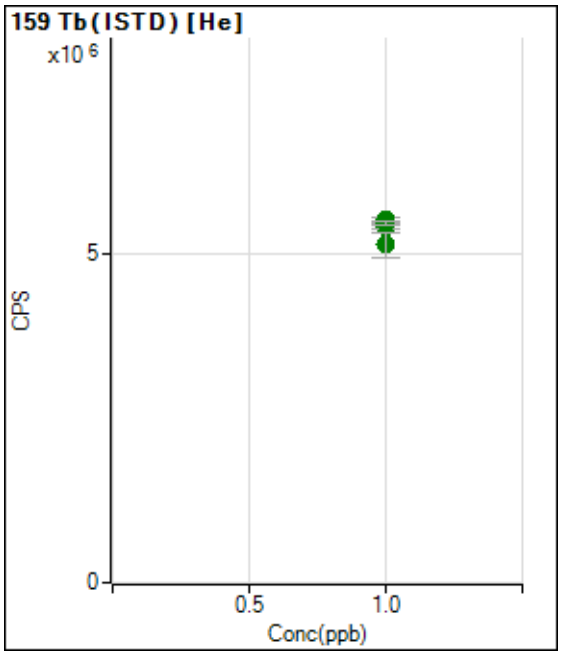
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2	☐	1.000		23695187.95		A	0.9
3	☐	1.000		24138376.82		A	0.4
4	☐	1.000		23885367.94		A	1.7
5	☐	1.000		23595504.62		A	1.0



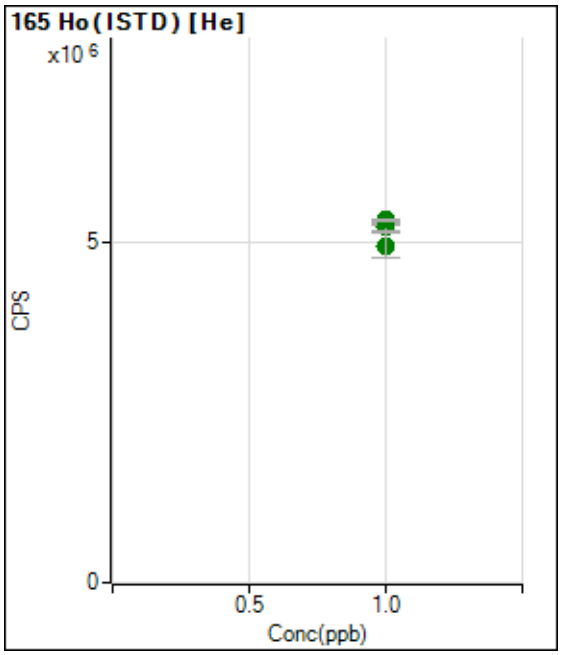
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2	☐	1.000		4817665.34		A	0.9
3	☐	1.000		4641954.82		A	2.2
4	☐	1.000		4352557.96		A	6.4
5	☐	1.000		4834340.24		A	0.3



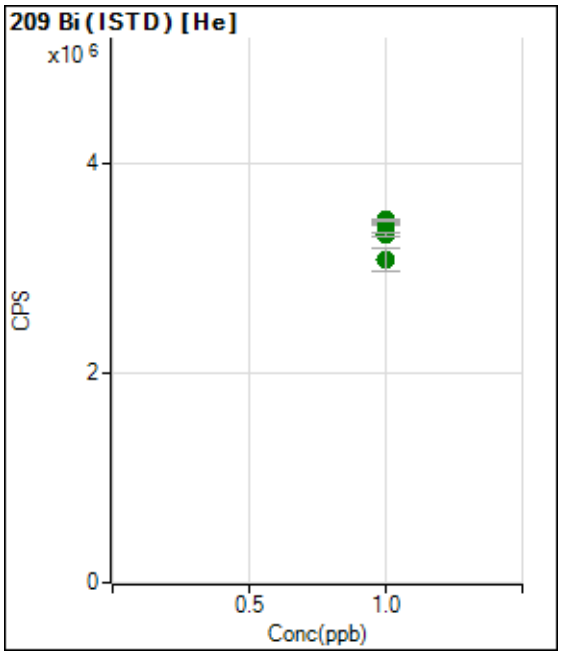
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1	☐	1.000		3270640.56		A	0.5
2	☐	1.000		3208307.69		A	1.0
3	☐	1.000		3118950.66		A	2.2
4	☐	1.000		2989137.95		A	7.1
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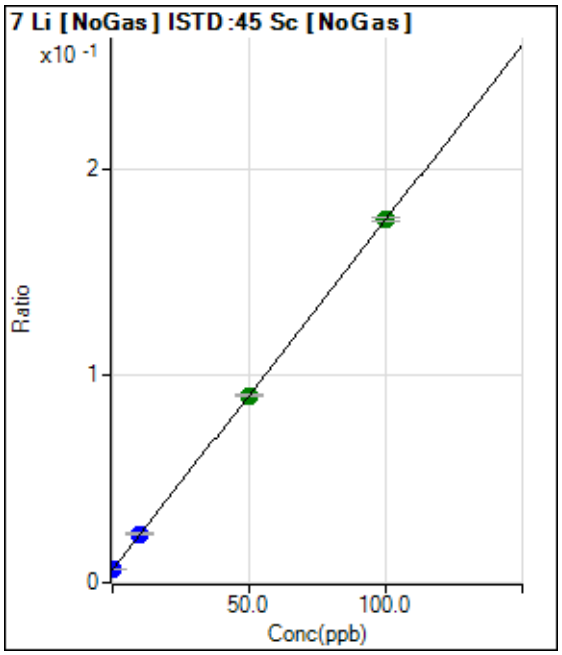
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2	☐	1.000		5499100.33		A	0.5
3	☐	1.000		5431308.67		A	2.1
4	☐	1.000		5142533.05		A	7.8
5	☐	1.000		5479807.00		A	1.3



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		5317614.09		A	1.4
2	☐	1.000		5301595.34		A	0.6
3	☐	1.000		5243544.20		A	1.9
4	☐	1.000		4969607.11		A	7.0
5	☐	1.000		5344139.92		A	0.3



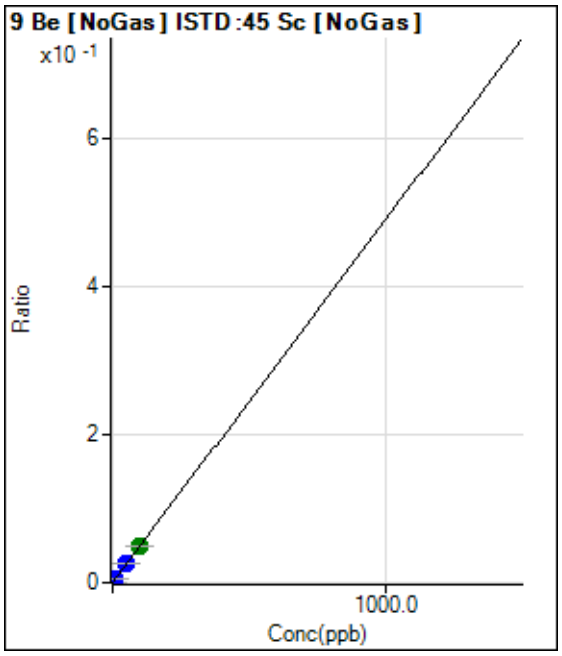
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1	☐	1.000		3415964.84		A	1.0
2	☐	1.000		3440658.07		A	0.1
3	☐	1.000		3311225.37		A	1.1
4	☐	1.000		3079140.48		A	7.5
5	☐	1.000		3456199.64		A	0.4



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	144937.29	0.0062	P	0.7
2	☐	10.000	10.368	561361.66	0.0237	P	1.5
3	☐	50.000	49.866	2184686.79	0.0905	A	1.1
4	☐			152691.62	0.0064	P	1.9
5	☐	100.000	100.030	4137623.03	0.1754	A	1.2

y = 0.0017 * x + 0.0062
R = 1.0000
DL = 0.07749
BEC = 3.638

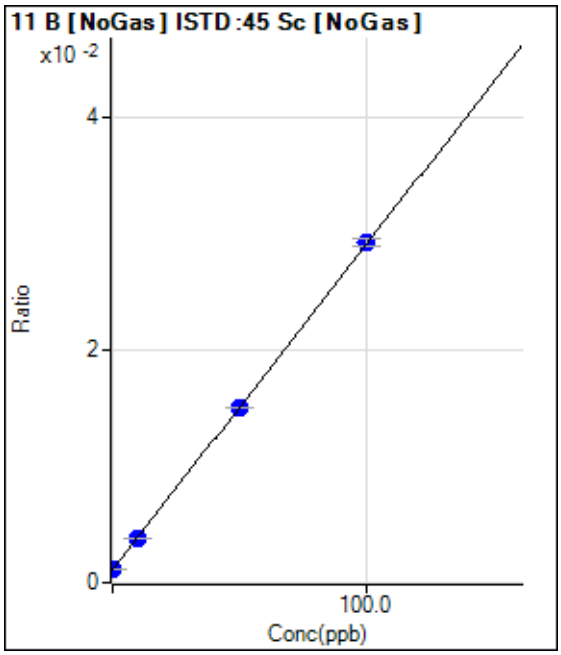
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1	☐	0.000	0.000	148.15	0.0000	P	62.1
2	☐	10.000	9.744	113181.40	0.0048	P	3.8
3	☐	50.000	51.458	608345.62	0.0252	P	0.8
4	☐	100.000	99.297	1161480.42	0.0486	A	0.6
5	☐			325.94	0.0000	P	9.2

y = 4.8963E-004 * x + 6.2727E-006
R = 0.9998
DL = 0.02388
BEC = 0.01281

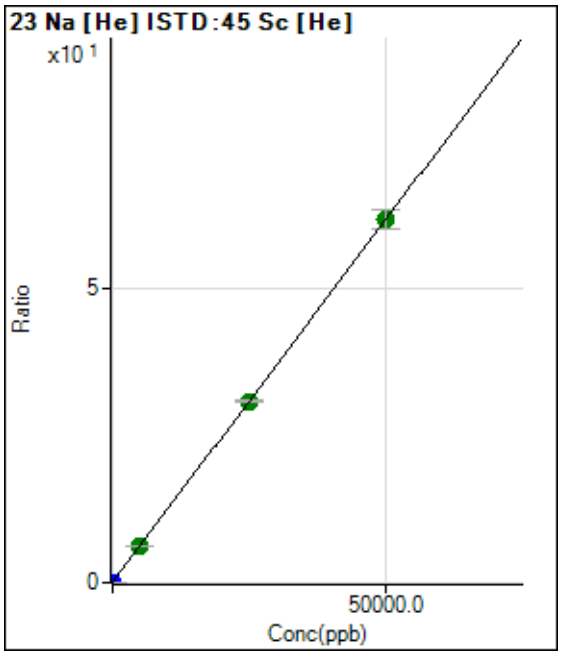
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1	☐	0.000	0.000	26104.38	0.0011	P	0.6
2	☐	10.000	9.690	90668.52	0.0038	P	2.8
3	☐	50.000	49.645	362956.21	0.0150	P	0.1
4	☐			29568.75	0.0012	P	1.3
5	☐	100.000	100.209	689425.19	0.0292	P	2.2

y = 2.8055E-004 * x + 0.0011
R = 1.0000
DL = 0.07142
BEC = 3.951

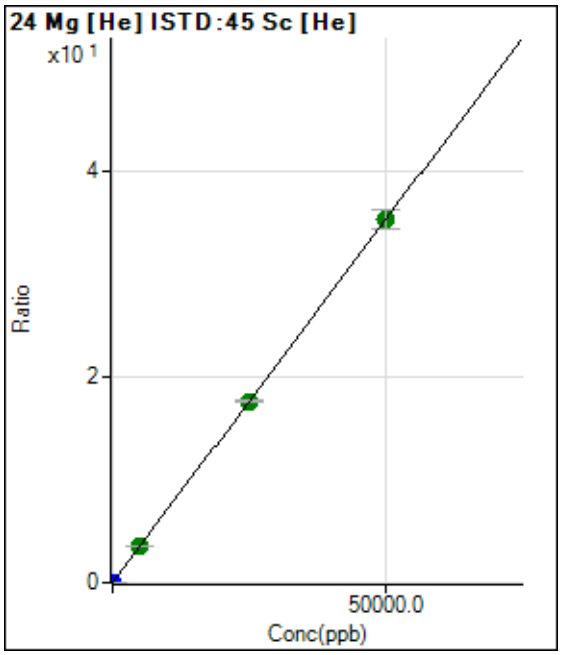
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Min Conc: <None>



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1	☐	0.000	0.000	128241.38	0.0494	P	0.6
2	☐	5000.000	5026.836	16389867.87	6.2356	A	1.8
3	☐	25000.000	24986.051	81681037.49	30.7982	A	0.9
4	☐	50000.000	50004.291	158660375.18	61.5867	A	5.2
5	☐			142189.12	0.0536	P	5.1

y = 0.0012 * x + 0.0494
R = 1.0000
DL = 0.7783
BEC = 40.13

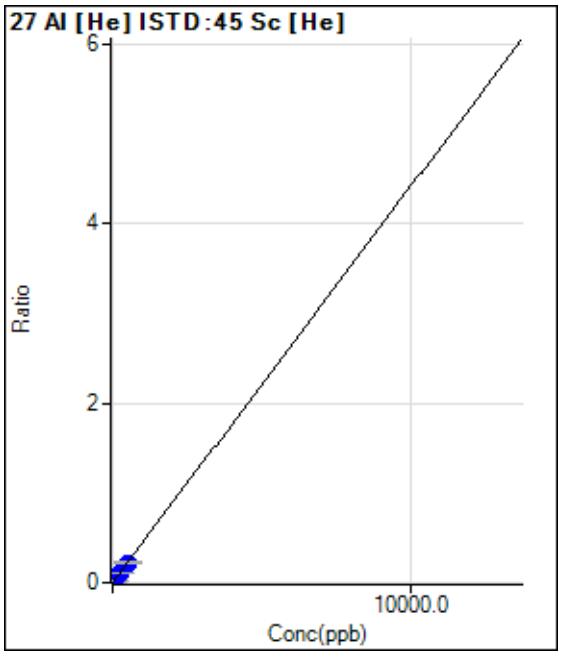
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Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
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2	☐	5000.000	5111.876	9460478.79	3.5993	A	1.9
3	☐	25000.000	24978.373	46640782.41	17.5856	A	0.6
4	☐	50000.000	49999.626	90689292.70	35.2009	A	5.2
5	☐			9165.65	0.0035	P	21.0

y = 7.0401E-004 * x + 4.9327E-004
R = 1.0000
DL = 0.5397
BEC = 0.7007

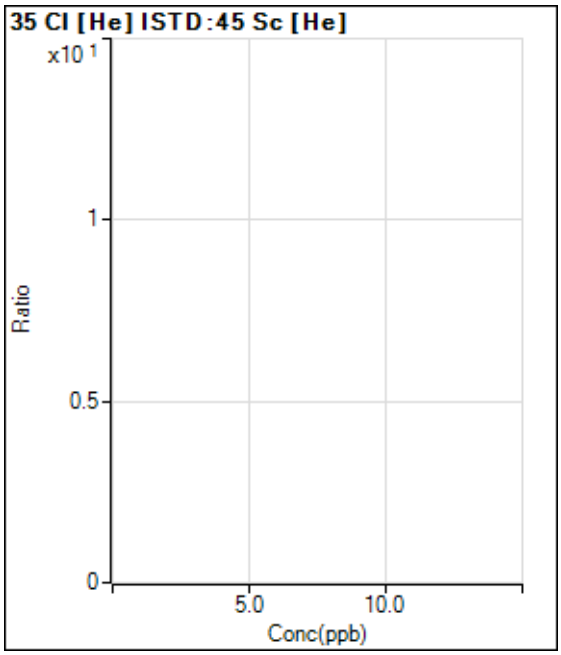
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Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1820.12	0.0007	P	8.8
2	☐	50.000	50.864	60695.54	0.0231	P	2.2
3	☐	250.000	248.458	291941.94	0.1101	P	0.9
4	☐	500.000	500.684	569685.58	0.2211	P	4.8
5	☐			1722.32	0.0006	P	11.8

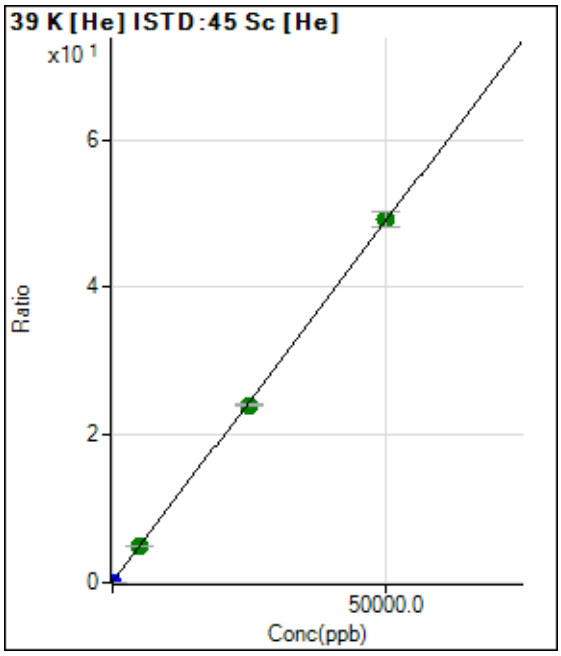
y = 4.4021E-004 * x + 7.0082E-004
R = 1.0000
DL = 0.4218
BEC = 1.592

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			48083405.50	18.5158	A	0.0
2	☐			49983612.83	19.0153	A	1.0
3	☐			50577431.32	19.0702	A	0.6
4	☐			48740033.25	18.9168	A	4.8
5	☐			52502327.54	19.7655	A	0.5

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	179016.76	0.0689	P	1.1
2	☐	5000.000	5022.745	13079527.72	4.9763	A	2.2
3	☐	25000.000	24550.281	63797923.39	24.0554	A	1.2
4	☐	50000.000	50222.585	126637583.86	49.1380	A	4.1
5	☐			189117.02	0.0712	P	5.0

y = 9.7703E-004 * x + 0.0689

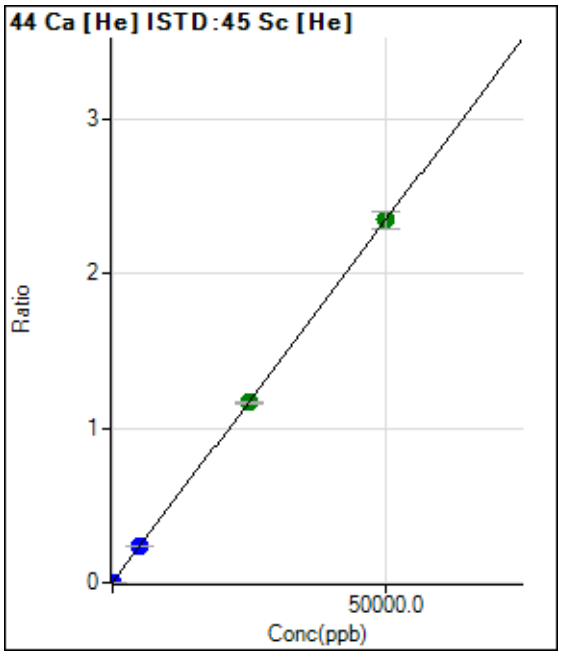
R = 0.9999

DL = 2.313

BEC = 70.56

Weight: <None>

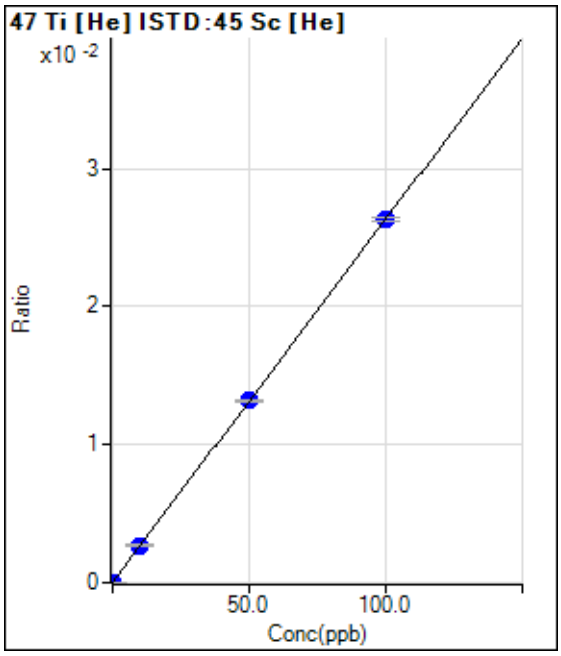
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4392.96	0.0017	P	2.2
2	☐	5000.000	4970.643	616248.67	0.2345	P	2.1
3	☐	25000.000	24875.428	3093983.17	1.1666	A	1.5
4	☐	50000.000	50065.222	6045424.98	2.3462	A	4.6
5	☐			2638.89	0.0010	P	7.9

y = 4.6829E-005 * x + 0.0017
R = 1.0000
DL = 2.404
BEC = 36.13

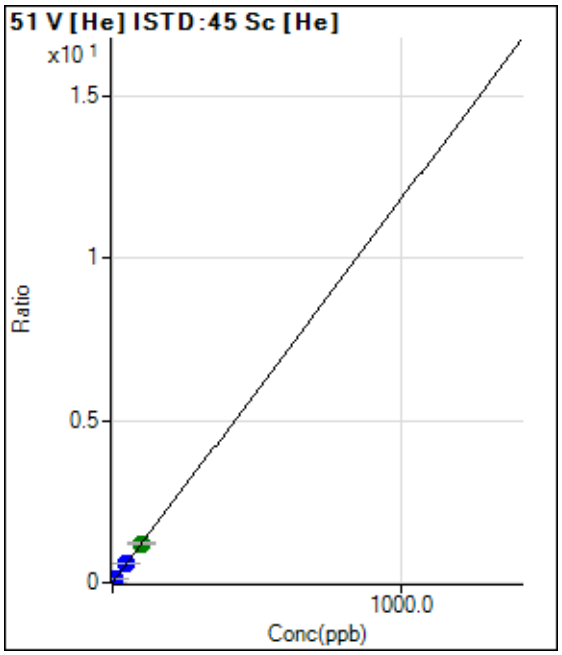
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	37.78	0.0000	P	35.5
2	☐	10.000	10.161	7060.34	0.0027	P	3.5
3	☐	50.000	50.121	34996.04	0.0132	P	1.3
4	☐			171.16	0.0001	P	73.5
5	☐	100.000	99.923	69831.78	0.0263	P	1.2

y = 2.6297E-004 * x + 1.4537E-005
R = 1.0000
DL = 0.05887
BEC = 0.05528

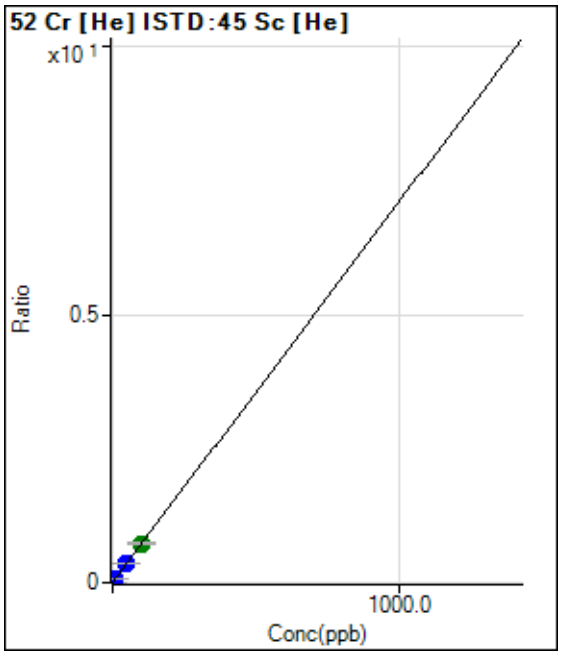
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8875.57	0.0034	P	8.6
2	☐	10.000	9.972	318092.00	0.1210	P	1.6
3	☐	50.000	48.037	1511437.63	0.5699	P	0.9
4	☐	100.000	100.984	3077045.25	1.1943	A	4.8
5	☐			10688.58	0.0040	P	3.8

y = 0.0118 * x + 0.0034
R = 0.9997
DL = 0.0748
BEC = 0.2898

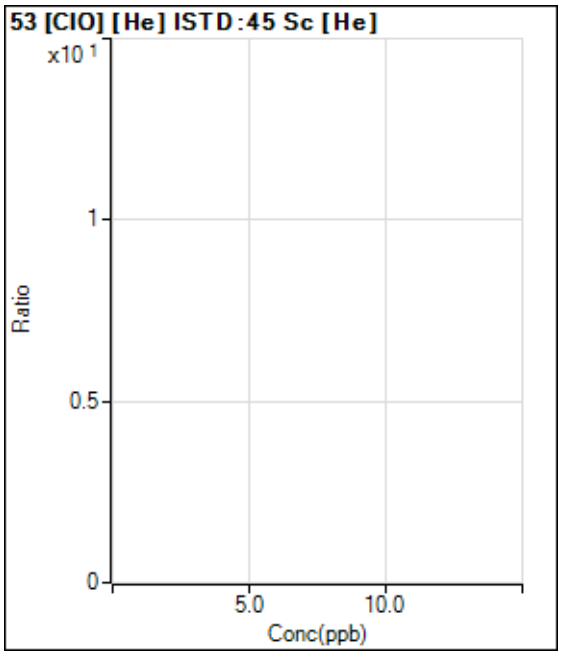
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	11268.05	0.0043	P	4.0
2	☐	10.000	9.890	196488.77	0.0748	P	2.2
3	☐	50.000	47.952	917018.65	0.3458	P	0.7
4	☐	100.000	101.035	1863992.91	0.7237	A	5.9
5	☐			12006.33	0.0045	P	1.1

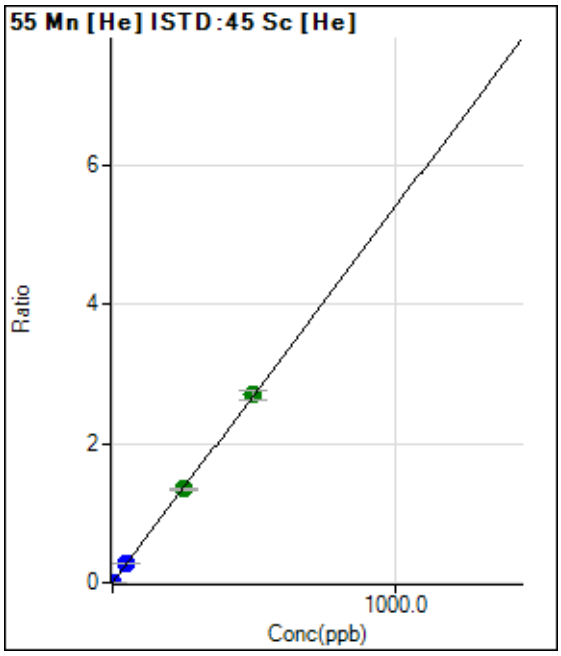
y = 0.0071 * x + 0.0043
R = 0.9996
DL = 0.07309
BEC = 0.6094

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			829.69	0.0003	P	23.1
2	☐			24106.18	0.0092	P	2.0
3	☐			110191.58	0.0415	P	0.9
4	☐			213981.75	0.0831	P	5.0
5	☐			1144.54	0.0004	P	10.6

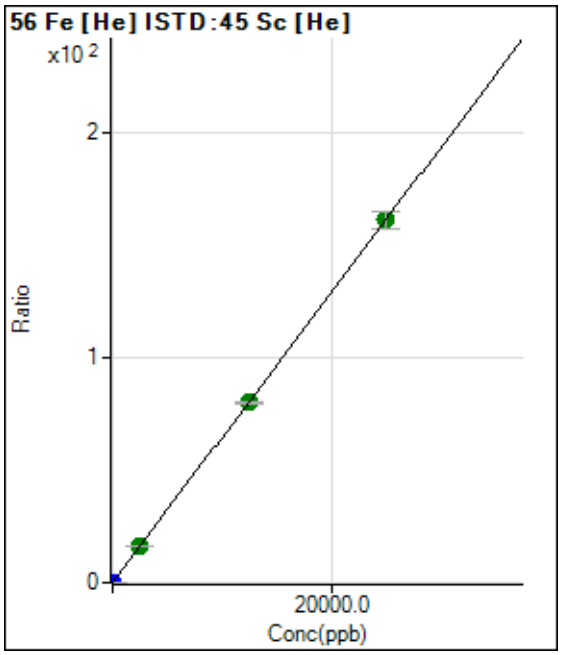
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4930.74	0.0019	P	2.0
2	☐	50.000	49.575	708612.61	0.2696	P	2.1
3	☐	250.000	248.488	3563822.77	1.3437	A	0.3
4	☐	500.000	500.798	6971144.03	2.7061	A	5.4
5	☐			1321.18	0.0005	P	13.1

y = 0.0054 * x + 0.0019
R = 1.0000
DL = 0.02124
BEC = 0.3516

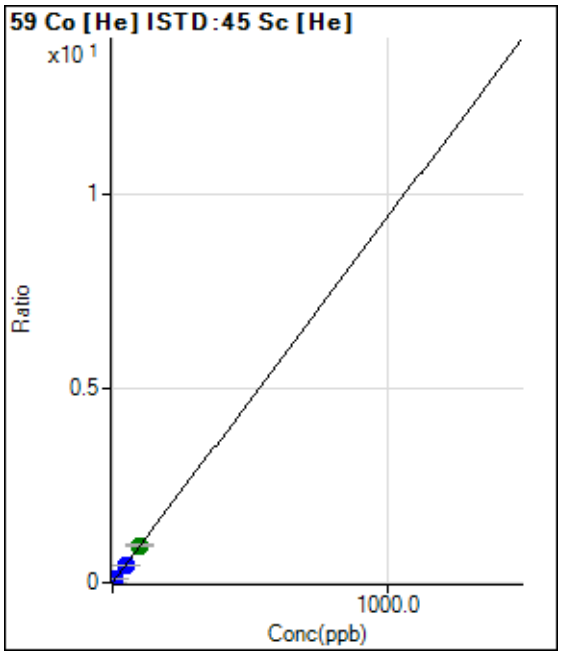
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	24437.84	0.0094	P	8.1
2	☐	2500.000	2533.118	42992643.85	16.3563	A	1.5
3	☐	12500.000	12418.293	212566791.55	80.1481	A	0.5
4	☐	25000.000	25037.542	416291512.35	161.5835	A	5.0
5	☐			360519.52	0.1356	P	7.5

y = 0.0065 * x + 0.0094
R = 1.0000
DL = 0.355
BEC = 1.458

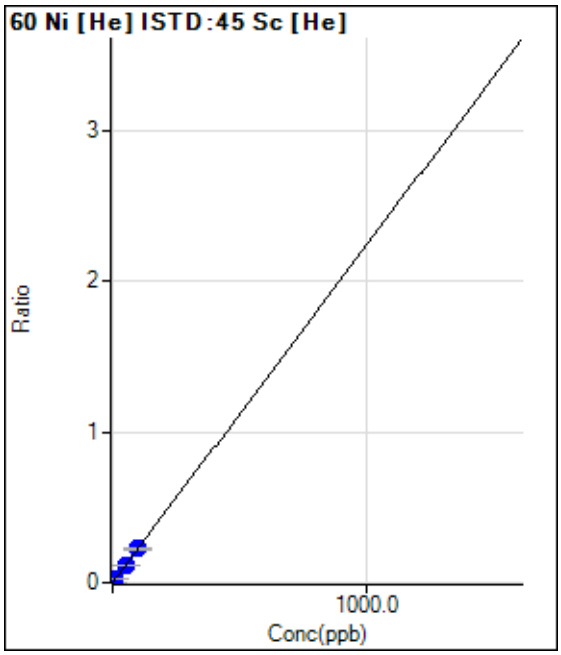
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	96.67	0.0000	P	23.8
2	☐	10.000	10.200	252118.18	0.0959	P	2.7
3	☐	50.000	48.140	1200360.33	0.4526	P	0.1
4	☐	100.000	100.910	2444351.78	0.9487	A	4.7
5	☐			404.46	0.0002	P	30.5

y = 0.0094 * x + 3.7207E-005
R = 0.9997
DL = 0.002825
BEC = 0.003958

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	148.89	0.0001	P	15.1
2	☐	10.000	10.739	63538.05	0.0242	P	2.1
3	☐	50.000	50.842	302968.19	0.1142	P	0.5
4	☐	100.000	99.505	575837.08	0.2235	P	5.1
5	☐			406.68	0.0002	P	3.4

y = 0.0022 * x + 5.7348E-005

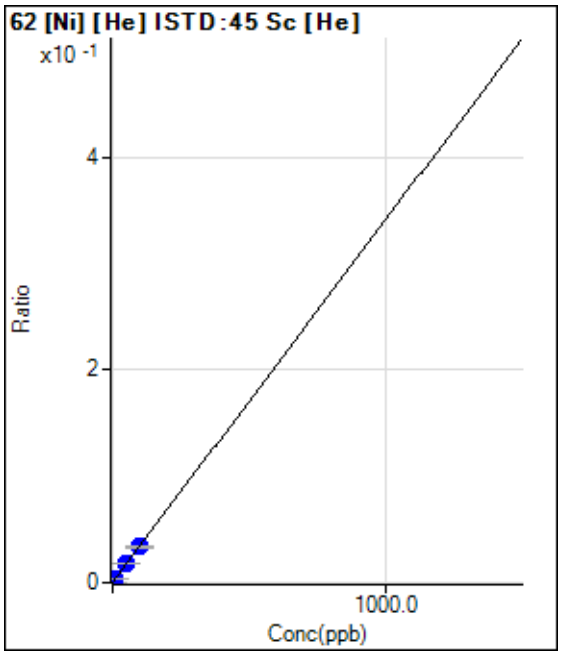
R = 0.9999

DL = 0.01156

BEC = 0.02554

Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	630.02	0.0002	P	9.6
2	☐	10.000	10.907	10403.11	0.0040	P	2.5
3	☐	50.000	50.418	46193.77	0.0174	P	0.6
4	☐	100.000	99.700	88132.72	0.0342	P	4.7
5	☐			716.69	0.0003	P	9.4

y = 3.4064E-004 * x + 2.4268E-004

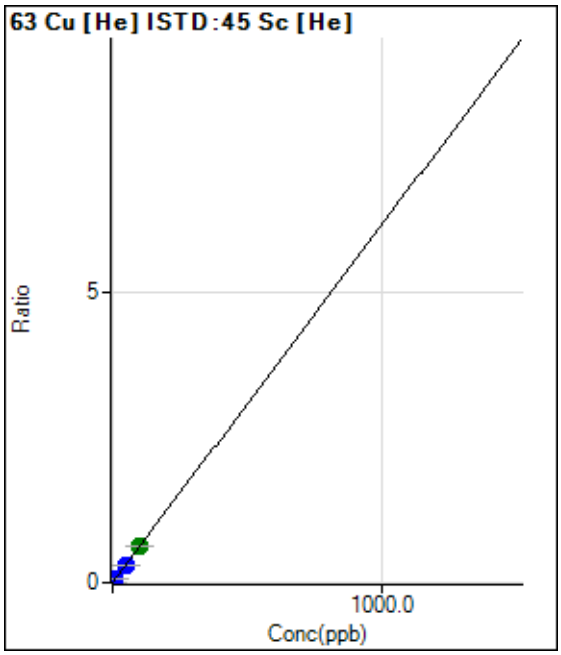
R = 1.0000

DL = 0.206

BEC = 0.7124

Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1583.43	0.0006	P	3.8
2	☐	10.000	10.039	164641.25	0.0626	P	2.5
3	☐	50.000	47.320	777102.16	0.2930	P	0.2
4	☐	100.000	101.336	1615185.77	0.6268	A	4.2
5	☐			2315.74	0.0009	P	4.2

y = 0.0062 * x + 6.0973E-004

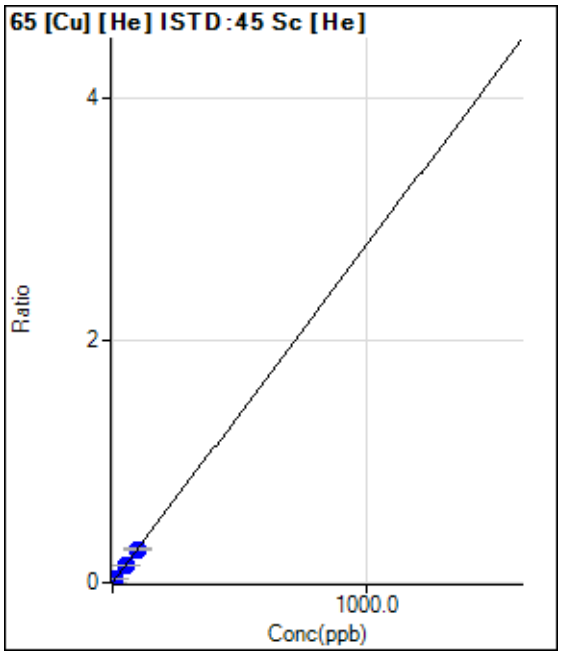
R = 0.9994

DL = 0.01113

BEC = 0.09868

Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	806.70	0.0003	P	16.4
2	☐	10.000	10.722	79194.37	0.0301	P	2.7
3	☐	50.000	50.507	373394.63	0.1408	P	0.3
4	☐	100.000	99.674	715054.43	0.2775	P	4.9
5	☐			1118.94	0.0004	P	4.8

y = 0.0028 * x + 3.1051E-004

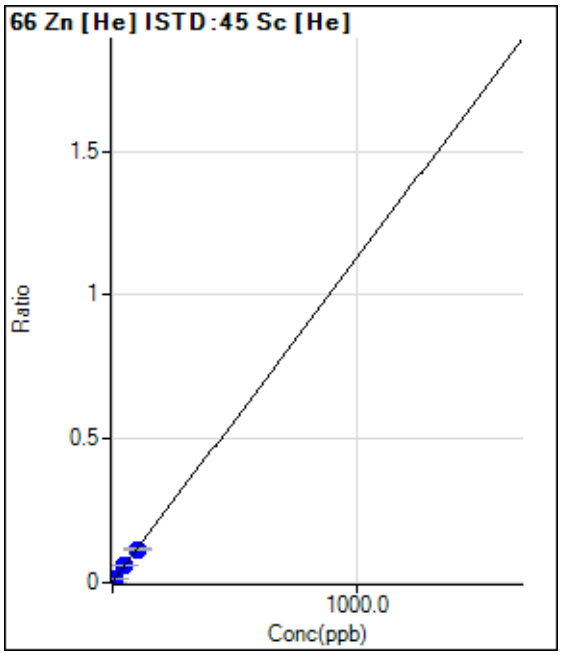
R = 1.0000

DL = 0.05476

BEC = 0.1116

Weight: <None>

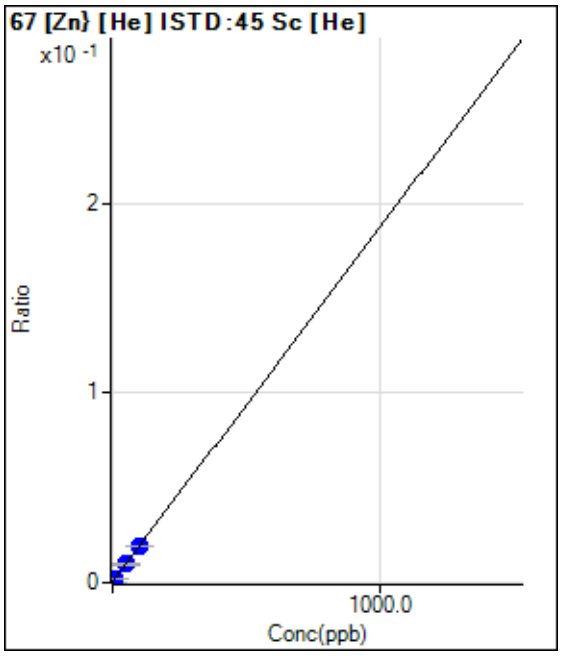
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7165.97	0.0028	P	0.9
2	☐	10.000	9.268	34778.23	0.0132	P	2.2
3	☐	50.000	49.754	156427.58	0.0590	P	0.7
4	☐	100.000	100.196	298914.67	0.1160	P	3.7
5	☐			2936.95	0.0011	P	4.7

y = 0.0011 * x + 0.0028
R = 1.0000
DL = 0.06623
BEC = 2.442

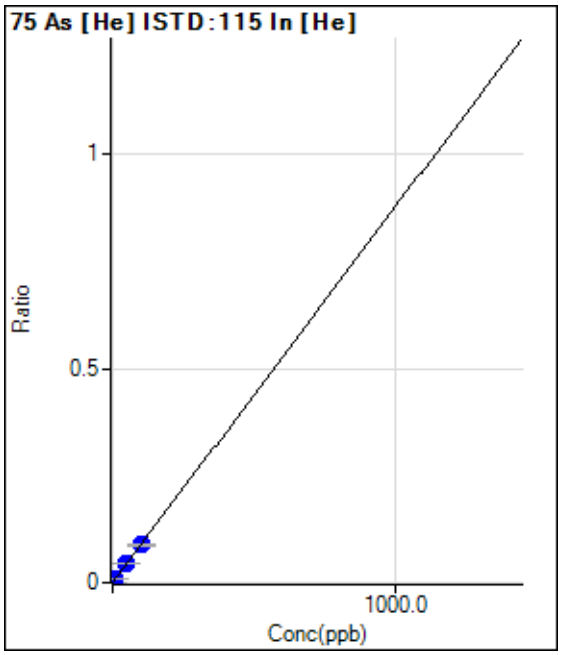
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1093.38	0.0004	P	6.9
2	☐	10.000	9.454	5759.89	0.0022	P	2.9
3	☐	50.000	49.638	25758.68	0.0097	P	1.9
4	☐	100.000	100.236	49435.89	0.0192	P	4.0
5	☐			428.90	0.0002	P	13.5

y = 1.8717E-004 * x + 4.2114E-004
R = 1.0000
DL = 0.4631
BEC = 2.25

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	648.64	0.0002	P	5.7
2	☐	10.000	9.921	28447.92	0.0089	P	1.3
3	☐	50.000	49.387	135174.77	0.0434	P	2.3
4	☐	100.000	100.314	261706.37	0.0879	P	7.3
5	☐			2454.78	0.0007	P	12.2

y = 8.7381E-004 * x + 1.9836E-004

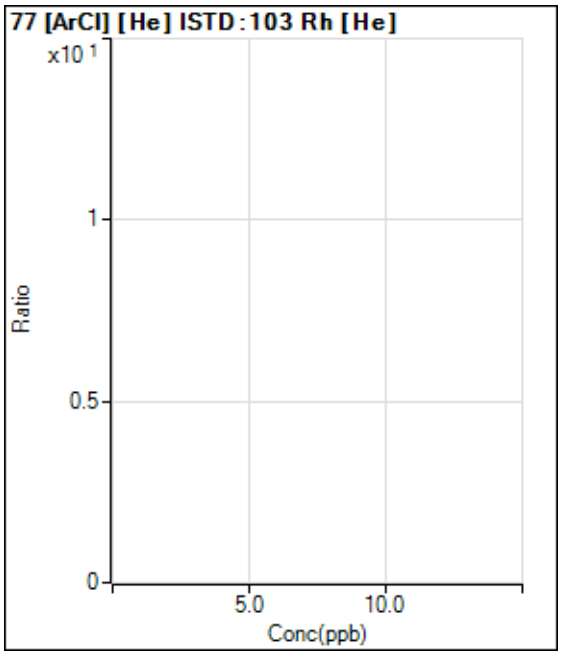
R = 1.0000

DL = 0.03867

BEC = 0.227

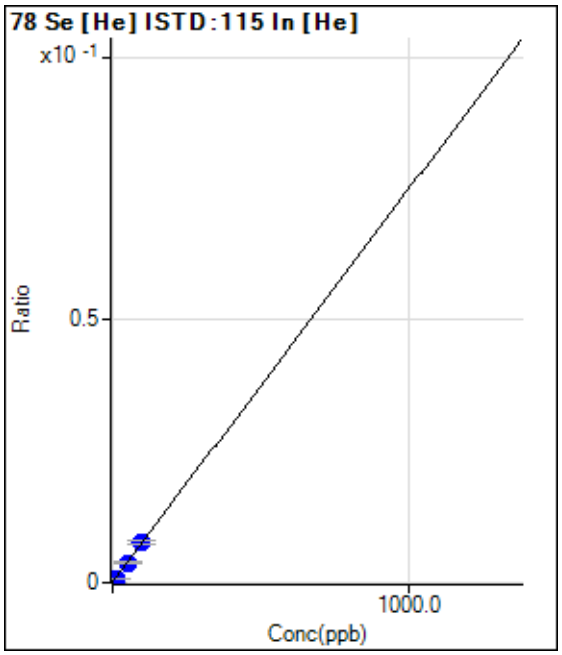
Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			55.56	0.0000	P	87.1
2	☐			1029.72	0.0002	P	6.2
3	☐			3356.02	0.0007	P	4.8
4	☐			6779.37	0.0016	P	4.2
5	☐			107.41	0.0000	P	31.7

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	379.27	0.0001	P	0.8
2	☐	10.000	10.103	2786.29	0.0009	P	2.9
3	☐	50.000	49.625	11885.87	0.0038	P	2.9
4	☐	100.000	100.177	22569.92	0.0076	P	7.6
5	☐			477.95	0.0001	P	5.1

y = 7.4488E-005 * x + 1.1596E-004

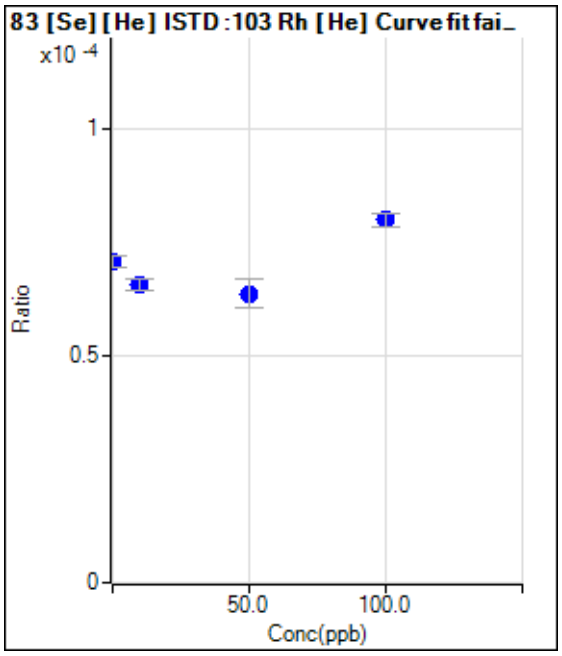
R = 1.0000

DL = 0.0367

BEC = 1.557

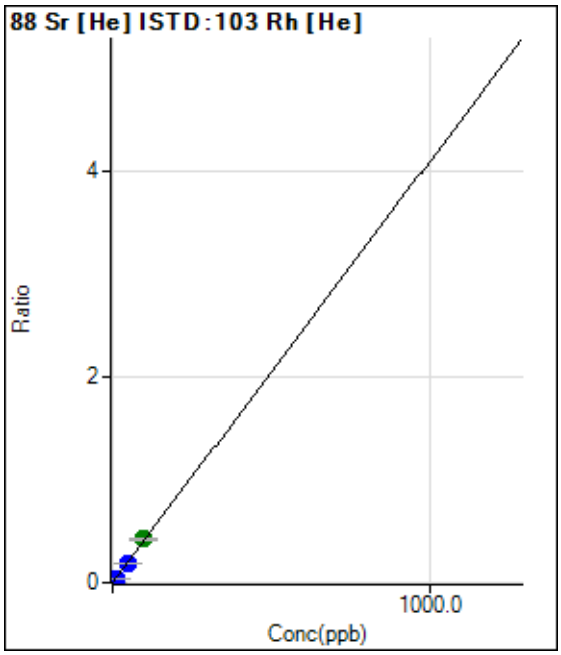
Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000		344.11	0.0001	P	3.8
2	☐	10.000		317.34	0.0001	P	4.0
3	☐	50.000		295.63	0.0001	P	10.3
4	☐	100.000		348.83	0.0001	P	3.4
5	☐			291.58	0.0001	P	4.0

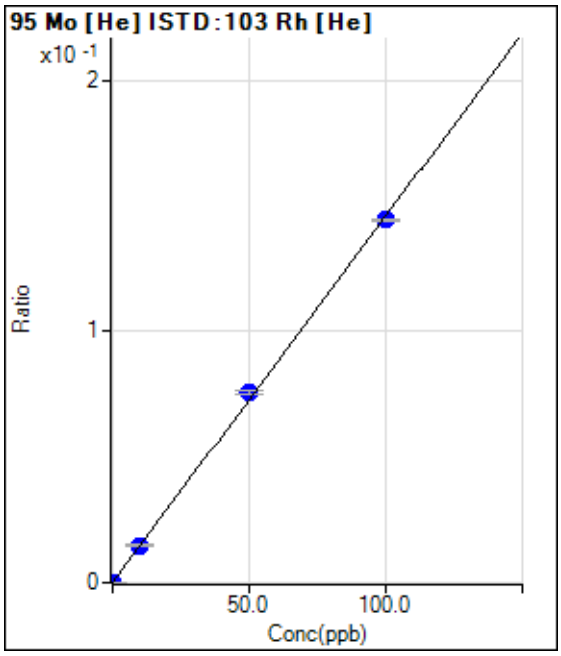
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	413.34	0.0001	P	18.9
2	☐	10.000	8.885	175935.88	0.0365	P	2.8
3	☐	50.000	44.574	848648.59	0.1829	P	2.5
4	☐	100.000	102.824	1830511.87	0.4218	A	6.7
5	☐			491.12	0.0001	P	5.9

y = 0.0041 * x + 8.5299E-005
R = 0.9976
DL = 0.0118
BEC = 0.0208

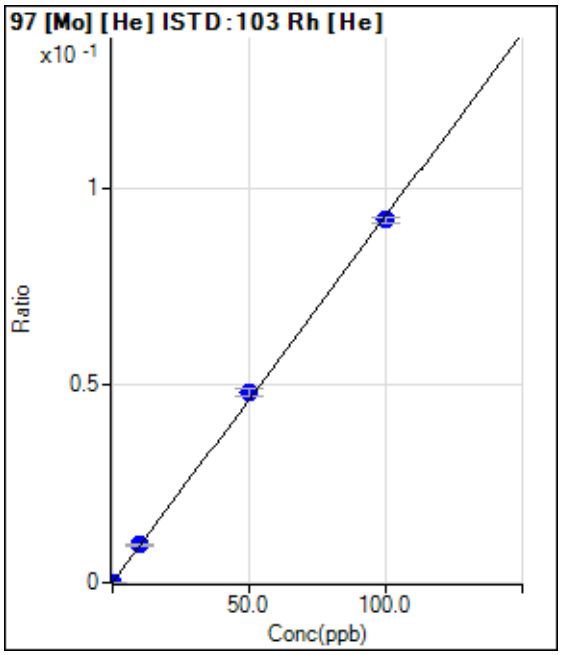
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	187.78	0.0000	P	41.5
2	☐	10.000	10.163	71606.67	0.0149	P	1.6
3	☐	50.000	51.847	351165.25	0.0757	P	2.4
4	☐			1952.36	0.0004	P	22.4
5	☐	100.000	99.060	698813.62	0.1446	P	0.5

y = 0.0015 * x + 3.8704E-005
R = 0.9997
DL = 0.03304
BEC = 0.02653

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	118.53	0.0000	P	34.9
2	☐	10.000	10.218	45843.44	0.0095	P	0.7
3	☐	50.000	51.956	224031.44	0.0483	P	4.0
4	☐			1607.56	0.0004	P	21.6
5	☐	100.000	99.000	444682.69	0.0920	P	1.5

y = 9.2891E-004 * x + 2.4409E-005

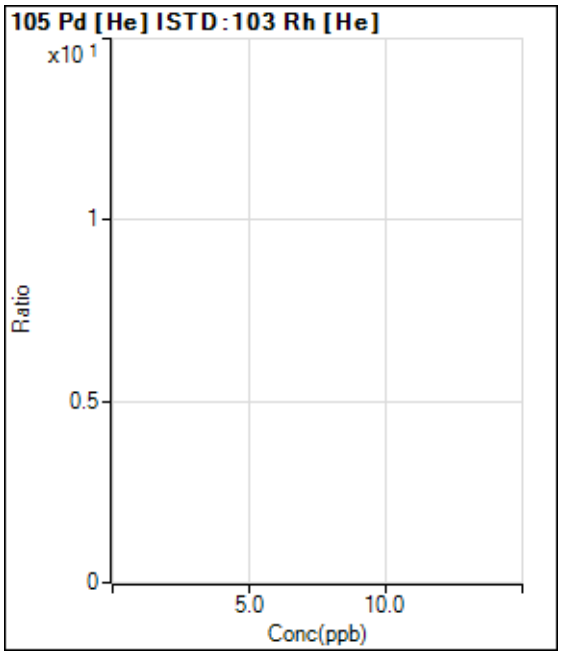
R = 0.9997

DL = 0.0275

BEC = 0.02628

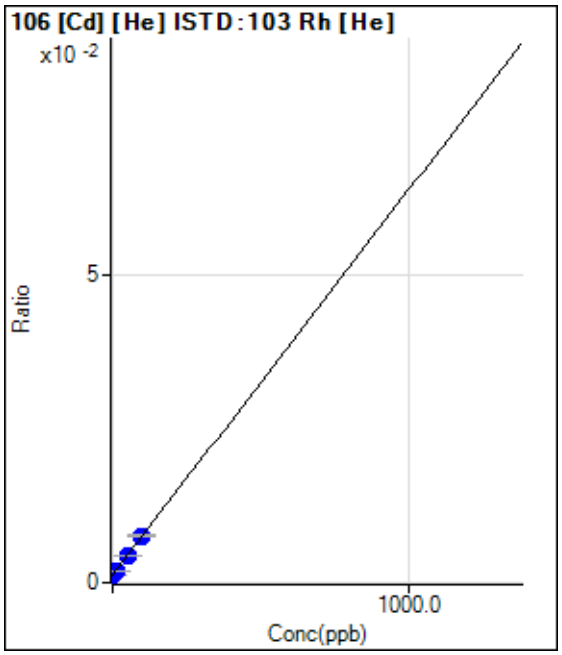
Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			4841.67	0.0010	P	1.2
2	☐			5063.92	0.0011	P	3.1
3	☐			5619.69	0.0012	P	3.9
4	☐			6030.95	0.0014	P	2.2
5	☐			4778.70	0.0010	P	6.8

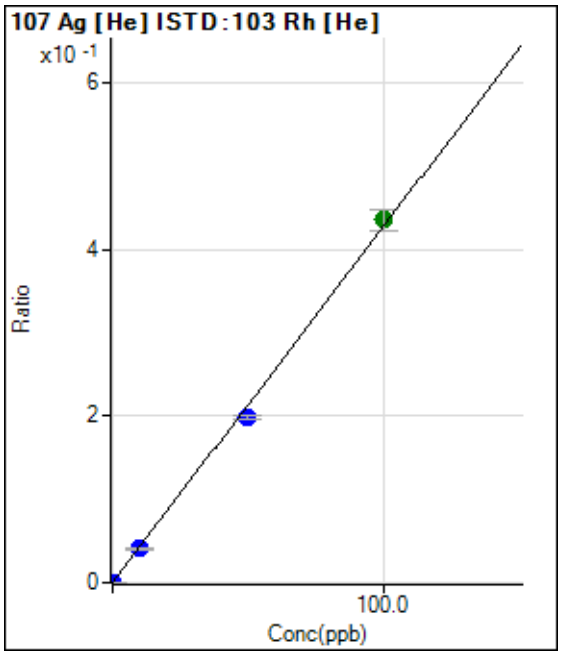
Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6156.66	0.0013	P	1.5
2	☐	10.000	9.935	9101.38	0.0019	P	0.6
3	☐	50.000	48.962	20061.03	0.0043	P	2.5
4	☐	100.000	100.526	32753.23	0.0075	P	4.4
5	☐			6211.56	0.0013	P	2.7

y = 6.2370E-005 * x + 0.0013
R = 0.9999
DL = 0.8961
BEC = 20.35

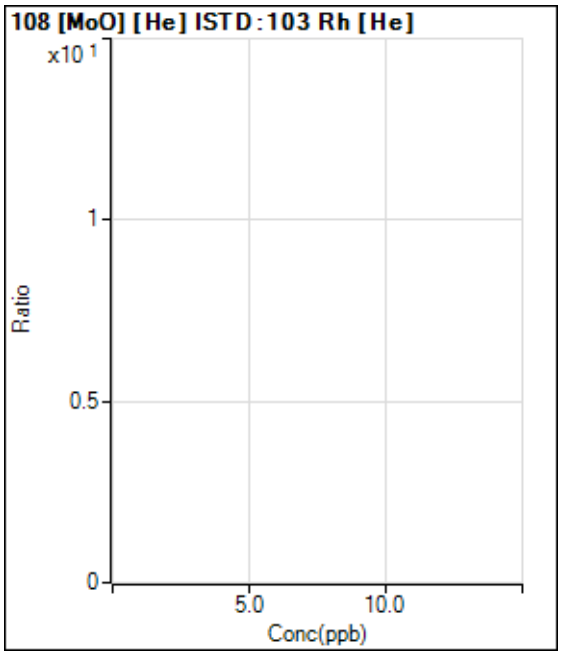
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	52.22	0.0000	P	8.0
2	☐	10.000	9.483	195304.32	0.0405	P	1.3
3	☐	50.000	46.409	920490.38	0.1984	P	2.0
4	☐	100.000	101.847	1890083.67	0.4353	A	5.6
5	☐			276.67	0.0001	P	44.6

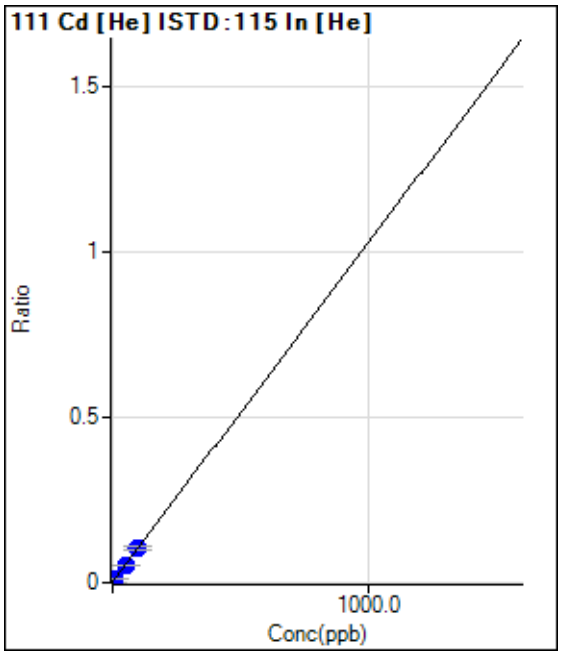
y = 0.0043 * x + 1.0772E-005
R = 0.9989
DL = 0.0006029
BEC = 0.00252

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			33.34	0.0000	P	67.1
2	☐			2248.40	0.0005	P	20.3
3	☐			10688.94	0.0023	P	5.5
4	☐			20657.59	0.0048	P	8.5
5	☐			103.71	0.0000	P	30.8

Excluded



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4692.84	0.0014	P	1.7
2	☐	10.000	10.182	38270.49	0.0119	P	0.8
3	☐	50.000	49.793	164472.71	0.0527	P	1.8
4	☐	100.000	100.085	311548.11	0.1046	P	7.0
5	☐			4893.28	0.0015	P	4.5

y = 0.0010 * x + 0.0014

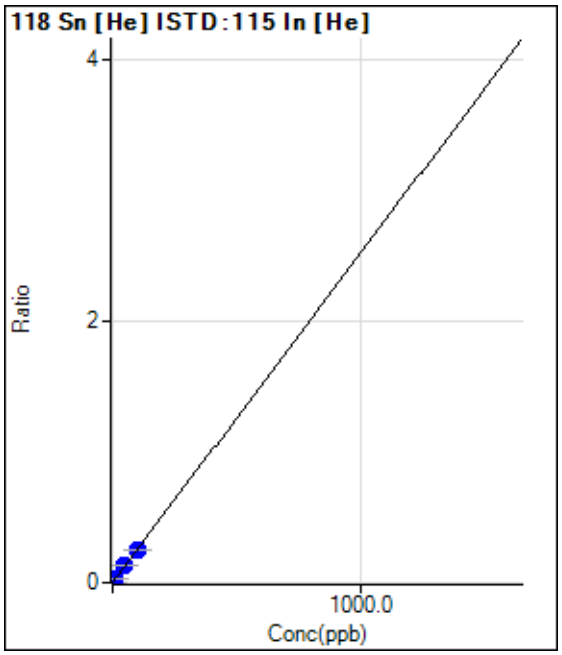
R = 1.0000

DL = 0.07269

BEC = 1.392

Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2155.80	0.0007	P	6.8
2	☐	10.000	10.019	82875.39	0.0258	P	1.6
3	☐	50.000	50.506	397787.64	0.1276	P	1.5
4	☐			4493.40	0.0015	P	7.2
5	☐	100.000	99.745	824353.84	0.2513	P	1.6

y = 0.0025 * x + 6.5929E-004

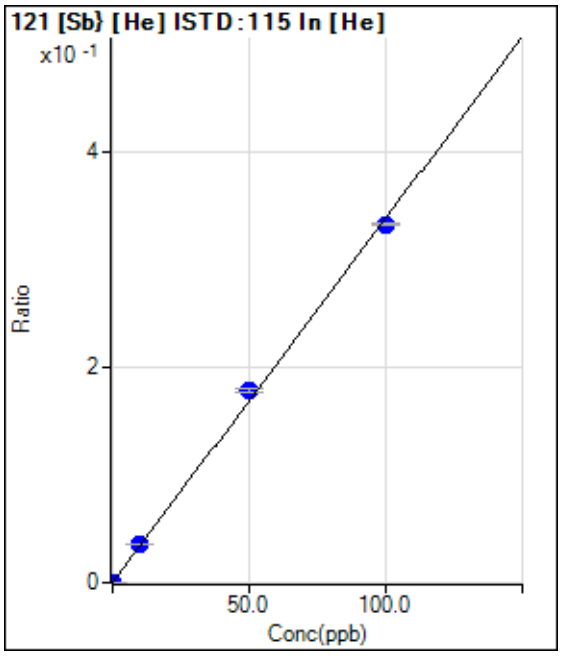
R = 1.0000

DL = 0.05321

BEC = 0.2624

Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	371.12	0.0001	P	20.1
2	☐	10.000	10.627	115372.44	0.0360	P	1.6
3	☐	50.000	53.006	557927.60	0.1789	P	1.7
4	☐			1956.81	0.0007	P	6.9
5	☐	100.000	98.434	1089795.97	0.3322	P	0.9

y = 0.0034 * x + 1.1352E-004

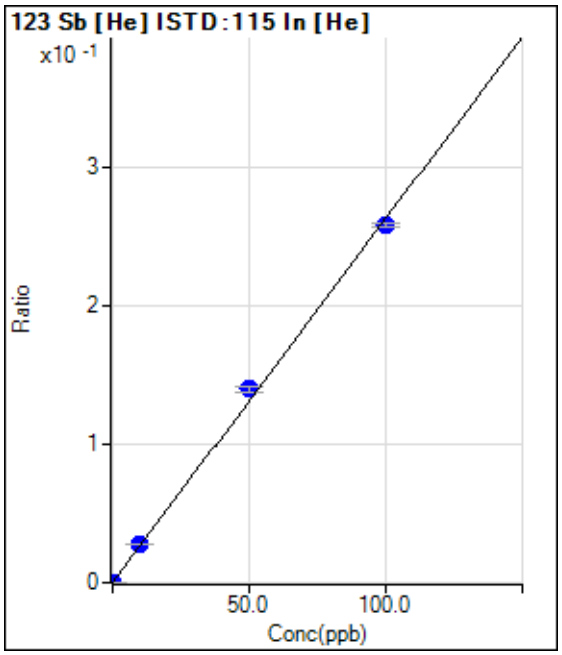
R = 0.9992

DL = 0.02026

BEC = 0.03365

Weight: <None>

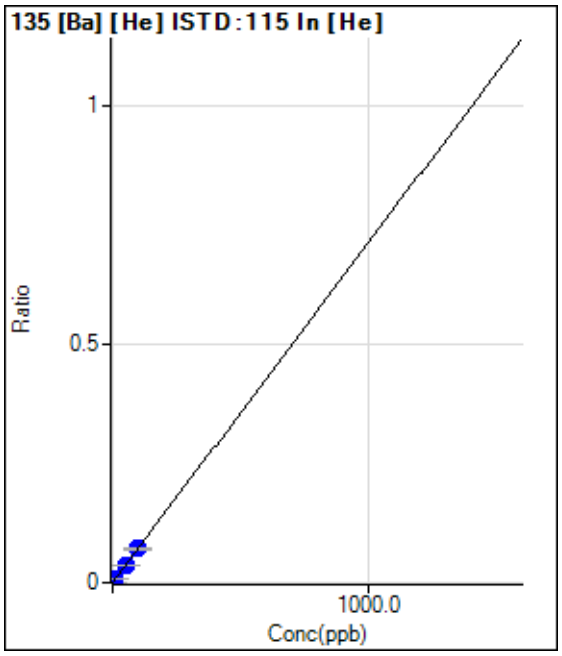
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1		0.000	0.000	278.89	0.0001	P	9.6
2		10.000	10.608	89575.58	0.0279	P	0.8
3		50.000	53.112	434808.69	0.1394	P	2.0
4				1415.63	0.0005	P	7.9
5		100.000	98.383	847227.57	0.2582	P	1.0

y = 0.0026 * x + 8.5249E-005
R = 0.9991
DL = 0.00939
BEC = 0.03249

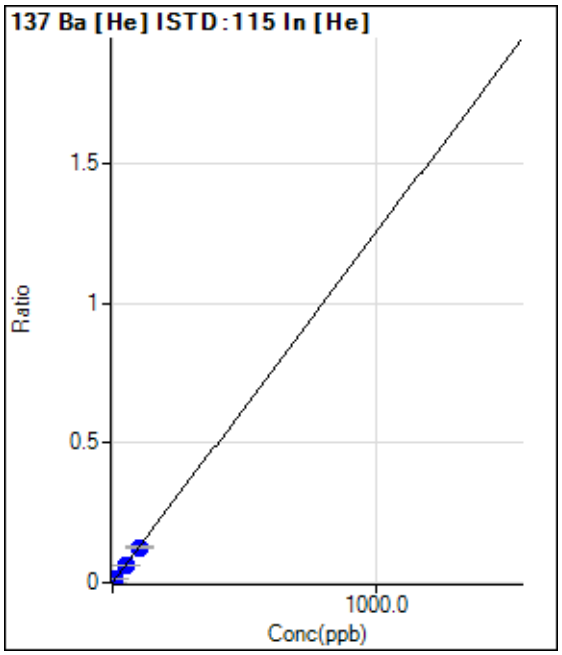
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1		0.000	0.000	75.56	0.0000	P	16.9
2		10.000	10.043	23006.86	0.0072	P	2.3
3		50.000	49.169	109189.05	0.0350	P	2.8
4		100.000	100.411	212944.51	0.0715	P	7.6
5				130.01	0.0000	P	3.2

y = 7.1181E-004 * x + 2.3106E-005
R = 0.9999
DL = 0.01642
BEC = 0.03246

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	104.45	0.0000	P	27.3
2	☐	10.000	9.878	39615.22	0.0123	P	1.6
3	☐	50.000	49.108	191013.86	0.0613	P	2.2
4	☐	100.000	100.458	373259.94	0.1253	P	7.0
5	☐			322.23	0.0001	P	13.5

y = 0.0012 * x + 3.1904E-005

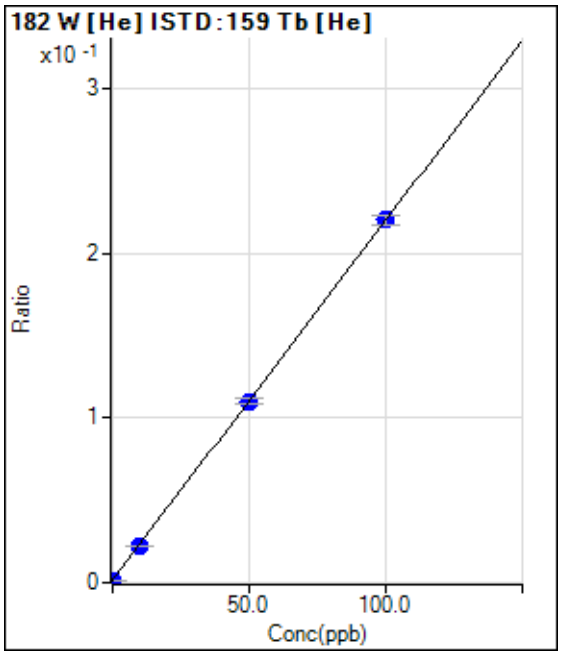
R = 0.9999

DL = 0.02099

BEC = 0.02559

Weight: <None>

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8183.90	0.0015	P	3.0
2	☐	10.000	9.656	124067.96	0.0226	P	0.8
3	☐	50.000	49.717	597359.92	0.1100	P	2.6
4	☐			15230.12	0.0030	P	1.6
5	☐	100.000	100.176	1206334.07	0.2202	P	2.4

y = 0.0022 * x + 0.0015

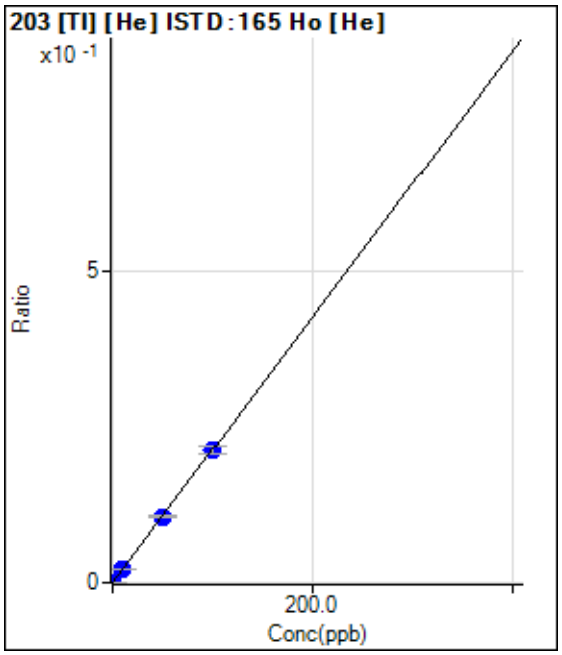
R = 1.0000

DL = 0.06188

BEC = 0.6784

Weight: <None>

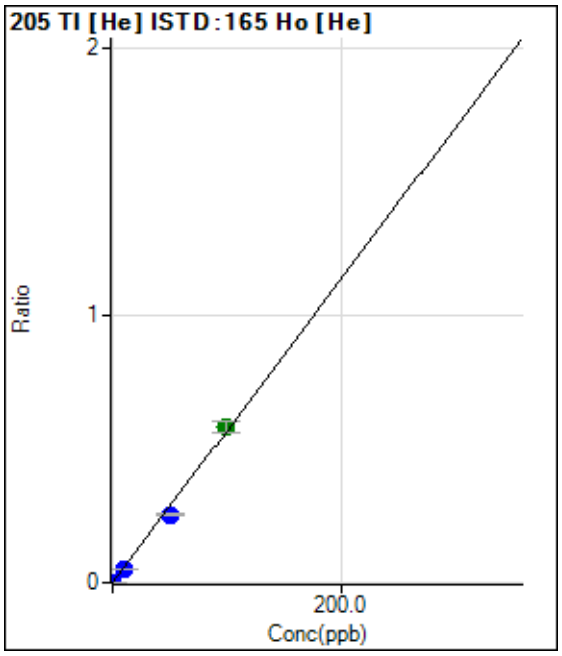
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1		0.000	0.000	51.86	0.0000	P	25.0
2		10.000	10.240	115469.36	0.0218	P	2.0
3		50.000	49.657	553528.86	0.1056	P	2.1
4		100.000	100.148	1054939.54	0.2129	P	6.7
5				2007.64	0.0004	P	6.2

y = 0.0021 * x + 9.7559E-006
R = 1.0000
DL = 0.003435
BEC = 0.004588

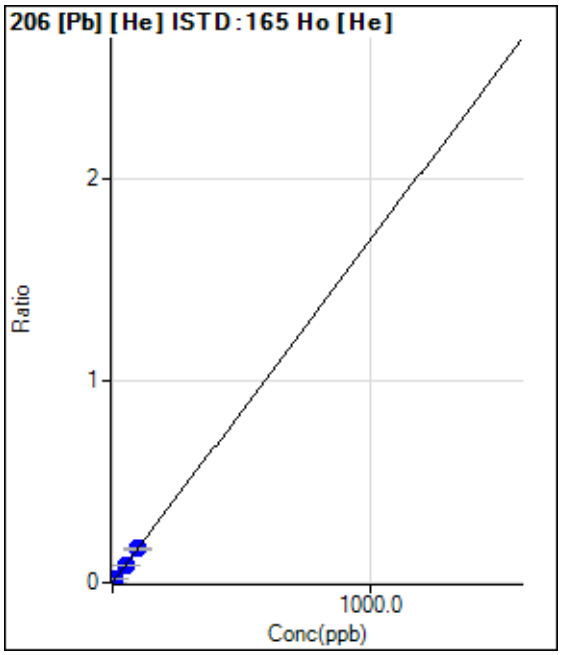
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1		0.000	0.000	112.22	0.0000	P	14.0
2		10.000	9.269	279086.08	0.0526	P	1.5
3		50.000	44.642	1328802.65	0.2535	P	1.9
4		100.000	102.752	2889452.59	0.5834	A	7.3
5				2821.40	0.0005	P	11.5

y = 0.0057 * x + 2.1104E-005
R = 0.9976
DL = 0.001565
BEC = 0.003717

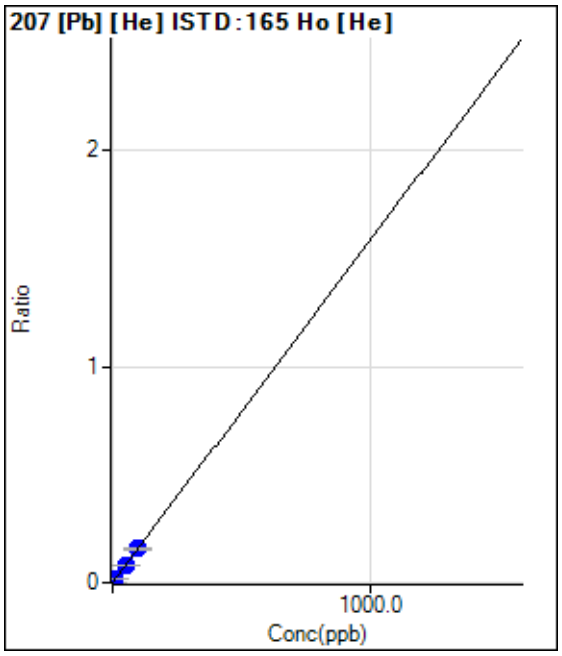
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	236.67	0.0000	P	18.4
2	☐	10.000	10.396	94050.69	0.0177	P	1.1
3	☐	50.000	50.281	448927.55	0.0856	P	2.3
4	☐	100.000	99.820	841990.38	0.1700	P	6.8
5	☐			462.24	0.0001	P	13.8

y = 0.0017 * x + 4.4579E-005
R = 1.0000
DL = 0.01445
BEC = 0.02619

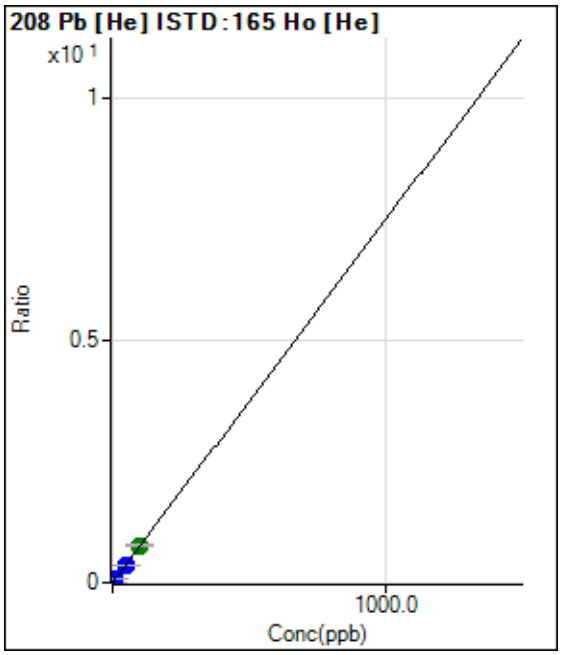
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	188.89	0.0000	P	14.9
2	☐	10.000	10.317	86563.72	0.0163	P	1.1
3	☐	50.000	49.863	412970.46	0.0788	P	2.4
4	☐	100.000	100.037	782693.89	0.1580	P	7.1
5	☐			407.79	0.0001	P	12.3

y = 0.0016 * x + 3.5547E-005
R = 1.0000
DL = 0.01008
BEC = 0.02251

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	992.25	0.0002	P	11.7
2	☐	10.000	9.737	387815.26	0.0732	P	0.9
3	☐	50.000	47.000	1847350.83	0.3524	P	1.9
4	☐	100.000	101.526	3769934.53	0.7610	A	6.8
5	☐			1787.85	0.0003	P	15.0

y = 0.0075 * x + 1.8669E-004

R = 0.9992

DL = 0.008764

BEC = 0.02491

Weight: <None>

Min Conc: <None>

Calibration Blank Report

Sample Table

Sample Name	Blank
Data File Name	001CALB.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T11:35:56-04:00
Sample Type	CalBlk
Level	
Dilution	1
Comment	6020/200.8

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	45	2	NoGas	145873	0.00
Be	9	45	2	NoGas	156	20.01
B	11	45	2	NoGas	25689	0.00
Na	23	45	1	He	130094	0.00
Mg	24	45	1	He	1222	0.65
Al	27	45	1	He	1932	0.15
K	39	45	1	He	180043	0.00
Ca	44	45	1	He	4485	0.05
Ti	47	45	1	He	62	50.45
V	51	45	1	He	9209	0.05
Cr	52	45	1	He	11277	0.03
Mn	55	45	1	He	5066	0.10
Fe	56	45	1	He	28656	0.05
Co	59	45	1	He	96	18.73
Ni	60	45	1	He	152	8.79
Cu	63	45	1	He	1551	0.31
Zn	66	45	1	He	7594	0.16
As	75	115	1	He	669	0.97
Se	78	115	1	He	358	0.48
Sr	88	103	1	He	438	1.46
Mo	95	103	1	He	308	9.95
Ag	107	103	1	He	57	90.51
Cd	111	115	1	He	4746	0.02
Sn	118	115	1	He	2297	0.35
Sb	123	115	1	He	368	8.26
Ba	137	115	1	He	102	6.64
W	182	159	1	He	9366	0.09
Tl	205	165	1	He	187	5.06
Pb	208	165	1	He	1039	1.11

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	2	NoGas	3419199	1.51
Sc	45	1	He	2651172	0.46
Sc	45	2	NoGas	23702715	0.79
Rh	103	1	He	4870447	0.88
In	115	1	He	3283921	0.60
Tb	159	1	He	5535208	0.63
Ho	165	1	He	5338953	0.61
Bi	209	1	He	3444093	0.99

Calibration Blank Report

Sample Table

Sample Name	ICIS
Data File Name	002CALB.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T11:39:36-04:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	45	2	NoGas	144937	0.00
Be	9	45	2	NoGas	148	42.46
B	11	45	2	NoGas	26104	0.00
Na	23	45	1	He	128241	0.00
Mg	24	45	1	He	1282	2.03
Al	27	45	1	He	1820	0.49
K	39	45	1	He	179017	0.00
Ca	44	45	1	He	4393	0.04
Ti	47	45	1	He	38	94.41
V	51	45	1	He	8876	0.10
Cr	52	45	1	He	11268	0.04
Mn	55	45	1	He	4931	0.03
Fe	56	45	1	He	24438	0.03
Co	59	45	1	He	97	24.97
Ni	60	45	1	He	149	10.01
Cu	63	45	1	He	1583	0.24
Zn	66	45	1	He	7166	0.02
As	75	115	1	He	649	0.80
Se	78	115	1	He	379	0.33
Sr	88	103	1	He	413	4.42
Mo	95	103	1	He	188	22.16
Ag	107	103	1	He	52	14.12
Cd	111	115	1	He	4693	0.03
Sn	118	115	1	He	2156	0.29
Sb	123	115	1	He	279	3.59
Ba	137	115	1	He	104	26.70
W	182	159	1	He	8184	0.05
Tl	205	165	1	He	112	12.51
Pb	208	165	1	He	992	1.12

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	2	NoGas	3363927	0.40
Sc	45	1	He	2596880	0.54
Sc	45	2	NoGas	23550524	0.70
Rh	103	1	He	4849688	0.63
In	115	1	He	3270641	0.52
Tb	159	1	He	5524253	1.07
Ho	165	1	He	5317614	1.37
Bi	209	1	He	3415965	1.01

Calibration Standard Report

Sample Table

Sample Name	STD1-2012420
Data File Name	003CALS.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T11:43:16-04:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	2	NoGas	561362	0.00
Be	9	2	NoGas	113181	0.00
B	11	2	NoGas	90669	0.00
Na	23	1	He	16389868	0.00
Mg	24	1	He	9460479	0.00
Al	27	1	He	60696	0.00
K	39	1	He	13079528	0.00
Ca	44	1	He	616249	0.00
Ti	47	1	He	7060	0.03
V	51	1	He	318092	0.00
Cr	52	1	He	196489	0.00
Mn	55	1	He	708613	0.00
Fe	56	1	He	42992644	0.00
Co	59	1	He	252118	0.00
Ni	60	1	He	63538	0.00
Cu	63	1	He	164641	0.00
Zn	66	1	He	34778	0.00
As	75	1	He	28448	0.00
Se	78	1	He	2786	0.11
Sr	88	1	He	175936	0.00
Mo	95	1	He	71607	0.00
Ag	107	1	He	195304	0.00
Cd	111	1	He	38270	0.00
Sn	118	1	He	82875	0.00
Sb	123	1	He	89576	0.00
Ba	137	1	He	39615	0.00
W	182	1	He	124068	0.00
Tl	205	1	He	279086	0.00
Pb	208	1	He	387815	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3410918	0.55	3363927	101.40	70	120	
Sc	45	1	He	2628820	1.24	2596880	101.23	70	120	
Sc	45	2	NoGas	23695188	0.89	23550524	100.61	70	120	
Rh	103	1	He	4817665	0.92	4849688	99.34	70	120	
In	115	1	He	3208308	0.97	3270641	98.09	70	120	
Tb	159	1	He	5499100	0.48	5524253	99.54	70	120	
Ho	165	1	He	5301595	0.64	5317614	99.70	70	120	
Bi	209	1	He	3440658	0.06	3415965	100.72	70	120	

Calibration Standard Report

Sample Table

Sample Name	STD2-2012431
Data File Name	004CALS.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T11:46:55-04:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	2	NoGas	2184687	0.00
Be	9	2	NoGas	608346	0.00
B	11	2	NoGas	362956	0.00
Na	23	1	He	81681037	0.00
Mg	24	1	He	46640782	0.00
Al	27	1	He	291942	0.00
K	39	1	He	63797923	0.00
Ca	44	1	He	3093983	0.00
Ti	47	1	He	34996	0.00
V	51	1	He	1511438	0.00
Cr	52	1	He	917019	0.00
Mn	55	1	He	3563823	0.00
Fe	56	1	He	212566792	0.00
Co	59	1	He	1200360	0.00
Ni	60	1	He	302968	0.00
Cu	63	1	He	777102	0.00
Zn	66	1	He	156428	0.00
As	75	1	He	135175	0.00
Se	78	1	He	11886	0.01
Sr	88	1	He	848649	0.00
Mo	95	1	He	351165	0.00
Ag	107	1	He	920490	0.00
Cd	111	1	He	164473	0.00
Sn	118	1	He	397788	0.00
Sb	123	1	He	434809	0.00
Ba	137	1	He	191014	0.00
W	182	1	He	597360	0.00
Tl	205	1	He	1328803	0.00
Pb	208	1	He	1847351	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3489750	1.89	3363927	103.74	70	120	
Sc	45	1	He	2652215	0.53	2596880	102.13	70	120	
Sc	45	2	NoGas	24138377	0.42	23550524	102.50	70	120	
Rh	103	1	He	4641955	2.20	4849688	95.72	70	120	
In	115	1	He	3118951	2.17	3270641	95.36	70	120	
Tb	159	1	He	5431309	2.11	5524253	98.32	70	120	
Ho	165	1	He	5243544	1.87	5317614	98.61	70	120	
Bi	209	1	He	3311225	1.09	3415965	96.93	70	120	

Calibration Standard Report

Sample Table

Sample Name	STD3-2012433
Data File Name	005CALS.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T11:50:33-04:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	2	NoGas	152692	0.00
Be	9	2	NoGas	1161480	0.00
B	11	2	NoGas	29569	0.01
Na	23	1	He	158660375	0.00
Mg	24	1	He	90689293	0.00
Al	27	1	He	569686	0.00
K	39	1	He	126637584	0.00
Ca	44	1	He	6045425	0.00
Ti	47	1	He	171	44.10
V	51	1	He	3077045	0.00
Cr	52	1	He	1863993	0.00
Mn	55	1	He	6971144	0.00
Fe	56	1	He	416291512	0.00
Co	59	1	He	2444352	0.00
Ni	60	1	He	575837	0.00
Cu	63	1	He	1615186	0.00
Zn	66	1	He	298915	0.00
As	75	1	He	261706	0.00
Se	78	1	He	22570	0.00
Sr	88	1	He	1830512	0.00
Mo	95	1	He	1952	1.39
Ag	107	1	He	1890084	0.00
Cd	111	1	He	311548	0.00
Sn	118	1	He	4493	0.13
Sb	123	1	He	1416	0.65
Ba	137	1	He	373260	0.00
W	182	1	He	15230	0.04
Tl	205	1	He	2889453	0.00
Pb	208	1	He	3769935	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3381978	1.60	3363927	100.54	70	120	
Sc	45	1	He	2580317	4.61	2596880	99.36	70	120	
Sc	45	2	NoGas	23885368	1.73	23550524	101.42	70	120	
Rh	103	1	He	4352558	6.40	4849688	89.75	70	120	
In	115	1	He	2989138	7.10	3270641	91.39	70	120	
Tb	159	1	He	5142533	7.81	5524253	93.09	70	120	
Ho	165	1	He	4969607	6.96	5317614	93.46	70	120	
Bi	209	1	He	3079140	7.46	3415965	90.14	70	120	

Calibration Standard Report

Sample Table

Sample Name	STD4-2012443
Data File Name	006CALS.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T11:54:04-04:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	2	NoGas	4137623	0.00
Be	9	2	NoGas	326	2.63
B	11	2	NoGas	689425	0.00
Na	23	1	He	142189	0.00
Mg	24	1	He	9166	0.22
Al	27	1	He	1722	0.65
K	39	1	He	189117	0.00
Ca	44	1	He	2639	0.25
Ti	47	1	He	69832	0.00
V	51	1	He	10689	0.02
Cr	52	1	He	12006	0.02
Mn	55	1	He	1321	0.90
Fe	56	1	He	360520	0.00
Co	59	1	He	404	7.36
Ni	60	1	He	407	0.88
Cu	63	1	He	2316	0.14
Zn	66	1	He	2937	0.17
As	75	1	He	2455	0.52
Se	78	1	He	478	1.17
Sr	88	1	He	491	1.24
Mo	95	1	He	698814	0.00
Ag	107	1	He	277	16.25
Cd	111	1	He	4893	0.05
Sn	118	1	He	824354	0.00
Sb	123	1	He	847228	0.00
Ba	137	1	He	322	3.86
W	182	1	He	1206334	0.00
Tl	205	1	He	2821	0.41
Pb	208	1	He	1788	0.85

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3427423	1.80	3363927	101.89	70	120	
Sc	45	1	He	2656359	1.43	2596880	102.29	70	120	
Sc	45	2	NoGas	23595505	0.99	23550524	100.19	70	120	
Rh	103	1	He	4834340	0.30	4849688	99.68	70	120	
In	115	1	He	3281096	2.07	3270641	100.32	70	120	
Tb	159	1	He	5479807	1.28	5524253	99.20	70	120	
Ho	165	1	He	5344140	0.25	5317614	100.50	70	120	
Bi	209	1	He	3456200	0.41	3415965	101.18	70	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV-2012491
Data File Name	007_ICV.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T11:57:44-04:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	45	NoGas	41.277	2.619	1771730	2.11	40	103.2	89.5	110.5	
Be	9	45	NoGas	41.669	0.040	475939	0.56	40	104.2	89.5	110.5	
B	11	45	NoGas	43.622	1.687	311242	1.28	40	109.1	89.5	110.5	
Na	23	45	He	20271.725	1.230	62680888	0.36	20000	101.4	89.5	110.5	
Mg	24	45	He	20439.727	1.604	36084345	0.87	20000	102.2	89.5	110.5	
Al	27	45	He	201.411	1.700	224083	0.84	200	100.7	89.5	110.5	
K	39	45	He	20374.305	1.702	50095007	2.18	20000	101.9	89.5	110.5	
Ca	44	45	He	20399.701	1.402	2399670	0.33	20000	102.0	89.5	110.5	
Ti	47	45	He	41.312	2.017	27276	0.70	40	103.3	89.5	110.5	
V	51	45	He	39.999	1.201	1191402	1.25	40	100.0	89.5	110.5	
Cr	52	45	He	40.201	1.723	728628	1.26	40	100.5	89.5	110.5	
Mn	55	45	He	207.620	3.411	2815937	2.97	200	103.8	89.5	110.5	
Fe	56	45	He	10239.604	2.027	165723198	1.72	10000	102.4	89.5	110.5	
Co	59	45	He	39.789	1.534	938041	0.88	40	99.5	89.5	110.5	
Ni	60	45	He	42.509	0.723	239538	0.67	40	106.3	89.5	110.5	
Cu	63	45	He	39.585	0.890	614895	0.50	40	99.0	89.5	110.5	
Zn	66	45	He	41.384	1.262	124178	0.19	40	103.5	89.5	110.5	
As	75	115	He	39.127	0.725	106168	0.66	40	97.8	89.5	110.5	
Se	78	115	He	38.246	1.475	9153	0.57	40	95.6	89.5	110.5	
Sr	88	103	He	35.855	0.781	673996	0.45	40	89.6	89.5	110.5	
Mo	95	103	He	42.698	0.838	285555	1.68	40	106.7	89.5	110.5	
Ag	107	103	He	37.365	0.494	731635	0.80	40	93.4	89.5	110.5	
Cd	111	115	He	39.600	0.741	130418	0.34	40	99.0	89.5	110.5	
Sn	118	115	He	42.014	0.149	327966	0.96	40	105.0	89.5	110.5	
Sb	123	115	He	43.140	0.467	349746	0.56	40	107.8	89.5	110.5	
Ba	137	115	He	39.495	0.607	152137	1.02	40	98.7	89.5	110.5	
W	182	159	He	41.199	1.734	493472	1.65	40	103.0	89.5	110.5	
Tl	205	165	He	36.141	1.329	1078184	1.00	40	90.4	89.5	110.5	
Pb	208	165	He	37.755	1.276	1487465	0.97	40	94.4	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	NoGas	3389658	1.52	3363927	100.76	70	120	
Sc	45	He	2507852	1.39	2596880	96.57	70	120	
Sc	45	NoGas	23320424	0.54	23550524	99.02	70	120	
Rh	103	He	4581284	1.14	4849688	94.47	70	120	
In	115	He	3087468	0.98	3270641	94.40	70	120	
Tb	159	He	5397543	0.26	5524253	97.71	70	120	
Ho	165	He	5254799	1.79	5317614	98.82	70	120	
Bi	209	He	3353481	1.46	3415965	98.17	70	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB-2010135
Data File Name	008_ICB.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T12:01:21-04:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Ti	47	1	He	0.050	57.9	72	27.0	20	
W	182	1	He	0.642	9.0	15964	4.3	10	
Ca	44	1	He	-9.104	-20.8	3318	7.4	1000	
Na	23	1	He	0.723	70.4	131799	1.5	1000	
Mg	24	1	He	0.846	46.7	2856	25.9	1000	
K	39	1	He	-0.911	-93.1	178397	1.0	1000	
V	51	1	He	0.036	59.8	10064	6.8	2	
Cr	52	1	He	-0.018	-135.1	11042	4.4	2	
Mn	55	1	He	-0.038	-16.8	4442	1.8	2	
Fe	56	1	He	6.134	12.4	128410	9.7	50	
Co	59	1	He	0.002	84.7	144	27.3	1	
Ni	60	1	He	0.001	1660.9	154	42.9	2	
Cu	63	1	He	0.037	11.0	2205	2.7	2	
Zn	66	1	He	-0.753	-6.4	5004	3.1	20	
As	75	1	He	0.075	23.9	868	6.5	2	
Se	78	1	He	-0.066	-12.0	366	1.1	2	
Sr	88	1	He	0.001	98.2	446	6.1	10	
Mo	95	1	He	0.202	33.3	1635	29.1	2	
Ag	107	1	He	0.004	75.2	131	44.5	0.2	
Cd	111	1	He	0.026	84.2	4813	1.2	0.2	
Ba	137	1	He	0.001	450.9	109	15.4	5	
Sn	118	1	He	0.192	5.4	3760	2.2	10	
Tl	205	1	He	0.030	2.4	1044	1.8	0.5	
Pb	208	1	He	0.012	11.1	1487	3.1	1	
Al	27	1	He	-0.394	-17.8	1382	5.6	50	
Sb	123	1	He	0.241	1.9	2366	2.3	2	
B	11	2	NoGas	1.613	4.9	36804	2.1	20	
Be	9	2	NoGas	0.002	467.2	167	52.9	1	
Li	7	2	NoGas	0.124	47.9	150029	0.8	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3437708	0.90	3363927	102.19	70	120	
Sc	45	1	He	2621700	0.38	2596880	100.96	70	120	
Sc	45	2	NoGas	23578242	0.75	23550524	100.12	70	120	
Rh	103	1	He	4917139	0.38	4849688	101.39	70	120	
In	115	1	He	3293840	0.64	3270641	100.71	70	120	

Tb	159	1	He	5539621	0.06	5524253	100.28	70	120	
Ho	165	1	He	5391551	1.16	5317614	101.39	70	120	
Bi	209	1	He	3453266	1.49	3415965	101.09	70	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV-2012491
Data File Name	009_ICV.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T12:05:01-04:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	45	NoGas	41.483	0.264	1767375	0.80	40	103.7	89.5	110.5	
Be	9	45	NoGas	43.400	1.142	492181	0.88	40	108.5	89.5	110.5	
B	11	45	NoGas	43.075	1.347	305498	1.40	40	107.7	89.5	110.5	
Na	23	45	He	20269.176	0.924	63680212	1.06	20000	101.3	89.5	110.5	
Mg	24	45	He	20317.220	0.494	36444830	0.60	20000	101.6	89.5	110.5	
Al	27	45	He	199.425	0.534	225461	0.57	200	99.7	89.5	110.5	
K	39	45	He	20069.941	0.200	50136498	0.29	20000	100.3	89.5	110.5	
Ca	44	45	He	20283.074	1.241	2424364	1.38	20000	101.4	89.5	110.5	
Ti	47	45	He	42.506	1.588	28516	1.47	40	106.3	89.5	110.5	
V	51	45	He	40.071	0.439	1212651	0.35	40	100.2	89.5	110.5	
Cr	52	45	He	40.219	0.472	740651	0.44	40	100.5	89.5	110.5	
Mn	55	45	He	207.693	0.861	2862276	0.73	200	103.8	89.5	110.5	
Fe	56	45	He	10259.493	1.509	168708602	1.40	10000	102.6	89.5	110.5	
Co	59	45	He	39.711	0.879	951221	0.76	40	99.3	89.5	110.5	
Ni	60	45	He	42.760	0.617	244807	0.66	40	106.9	89.5	110.5	
Cu	63	45	He	39.551	0.817	624212	0.83	40	98.9	89.5	110.5	
Zn	66	45	He	41.214	1.531	125684	1.34	40	103.0	89.5	110.5	
As	75	115	He	39.047	0.968	107244	0.30	40	97.6	89.5	110.5	
Se	78	115	He	38.529	0.688	9332	1.31	40	96.3	89.5	110.5	
Sr	88	103	He	35.371	0.257	678469	0.38	40	88.4	89.5	110.5	ICV Failed
Mo	95	103	He	42.484	0.715	289891	0.41	40	106.2	89.5	110.5	
Ag	107	103	He	37.488	0.352	748991	0.14	40	93.7	89.5	110.5	
Cd	111	115	He	39.755	1.603	132501	0.65	40	99.4	89.5	110.5	
Sn	118	115	He	42.184	1.657	333262	0.46	40	105.5	89.5	110.5	
Sb	123	115	He	42.693	1.976	350325	1.15	40	106.7	89.5	110.5	
Ba	137	115	He	40.050	1.637	156142	0.44	40	100.1	89.5	110.5	
W	182	159	He	40.812	0.527	494357	0.89	40	102.0	89.5	110.5	
Tl	205	165	He	36.877	2.288	1103653	1.56	40	92.2	89.5	110.5	
Pb	208	165	He	38.545	1.550	1523510	1.00	40	96.4	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	NoGas	3375421	1.25	3363927	100.34	70	120	
Sc	45	He	2547853	0.14	2596880	98.11	70	120	
Sc	45	NoGas	23155406	0.67	23550524	98.32	70	120	
Rh	103	He	4674480	0.32	4849688	96.39	70	120	
In	115	He	3125215	1.19	3270641	95.55	70	120	
Tb	159	He	5457722	1.26	5524253	98.80	70	120	
Ho	165	He	5272009	1.88	5317614	99.14	70	120	
Bi	209	He	3385638	0.86	3415965	99.11	70	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB-2010135
Data File Name	010_ICB.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T12:08:38-04:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Ti	47	1	He	0.045	95.6	69	41.7	20	
W	182	1	He	0.450	17.4	13610	7.1	10	
Ca	44	1	He	-9.147	-5.8	3317	1.5	1000	
Na	23	1	He	0.125	712.6	130056	1.5	1000	
Mg	24	1	He	0.929	23.6	3012	13.1	1000	
K	39	1	He	-1.480	-50.5	177209	0.0	1000	
V	51	1	He	0.032	73.8	9963	6.3	2	
Cr	52	1	He	-0.009	-87.9	11224	2.4	2	
Mn	55	1	He	-0.037	-30.2	4464	2.9	2	
Fe	56	1	He	5.661	10.9	120662	9.2	50	
Co	59	1	He	0.001	99.1	123	20.4	1	
Ni	60	1	He	0.000	4676.5	151	22.3	2	
Cu	63	1	He	0.032	10.0	2112	1.4	2	
Zn	66	1	He	-0.679	-2.9	5232	1.8	20	
As	75	1	He	0.088	17.3	902	5.4	2	
Se	78	1	He	0.051	268.8	392	9.8	2	
Sr	88	1	He	-0.001	-165.9	394	9.1	10	
Mo	95	1	He	0.140	22.9	1193	20.0	2	
Ag	107	1	He	0.003	29.8	123	16.9	0.2	
Cd	111	1	He	-0.027	-82.7	4605	0.5	0.2	
Ba	137	1	He	-0.002	-243.7	94	25.5	5	
Sn	118	1	He	0.115	3.7	3108	1.3	10	
Tl	205	1	He	0.029	15.9	998	13.8	0.5	
Pb	208	1	He	0.012	33.2	1473	10.1	1	
Al	27	1	He	-0.419	-21.5	1357	8.5	50	
Sb	123	1	He	0.150	7.9	1568	7.0	2	
B	11	2	NoGas	0.494	31.8	29484	3.4	20	
Be	9	2	NoGas	-0.002	-189.7	122	39.6	1	
Li	7	2	NoGas	0.074	28.6	148470	0.1	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3466219	0.85	3363927	103.04	70	120	
Sc	45	1	He	2625844	1.08	2596880	101.12	70	120	
Sc	45	2	NoGas	23642501	0.58	23550524	100.39	70	120	
Rh	103	1	He	4907779	0.99	4849688	101.20	70	120	
In	115	1	He	3273299	1.21	3270641	100.08	70	120	

Tb	159	1	He	5524295	0.24	5524253	100.00	70	120	
Ho	165	1	He	5364614	0.55	5317614	100.88	70	120	
Bi	209	1	He	3456016	0.63	3415965	101.17	70	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-2012498
Data File Name	011CRI.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T12:12:31-04:00
Sample Type	CRI
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	2	NoGas	8.419	8.419	1.956	477864	1.24	8	105.2	49.5	150.5	
Be	9	2	NoGas	1.020	1.020	0.271	11845	2.09	1	102.0	49.5	150.5	
B	11	2	NoGas	19.469	19.469	1.891	153988	3.06	20	97.3	49.5	150.5	
Na	23	1	He	1025.041	1025.041	0.992	3369131	0.38	1000	102.5	49.5	150.5	
Mg	24	1	He	1054.715	1054.715	0.640	1909765	0.38	1000	105.5	49.5	150.5	
Al	27	1	He	49.738	49.738	2.597	58074	2.00	50	99.5	49.5	150.5	
K	39	1	He	1041.759	1041.759	1.514	2793201	1.00	1000	104.2	49.5	150.5	
Ca	44	1	He	1005.330	1005.330	0.990	125351	0.69	1000	100.5	49.5	150.5	
Ti	47	1	He	10.512	10.512	0.698	7143	1.11	10	105.1	49.5	150.5	
V	51	1	He	3.644	3.644	0.869	119241	0.53	5	72.9	49.5	150.5	
Cr	52	1	He	2.016	2.016	2.389	48048	1.26	2	100.8	49.5	150.5	
Mn	55	1	He	4.715	4.715	1.937	70310	1.26	5	94.3	49.5	150.5	
Fe	56	1	He	106.427	106.427	2.475	1789310	1.86	100	106.4	49.5	150.5	
Co	59	1	He	1.029	1.029	1.009	24959	0.49	1	102.9	49.5	150.5	
Ni	60	1	He	2.192	2.192	3.916	12796	3.45	2	109.6	49.5	150.5	
Cu	63	1	He	2.020	2.020	2.345	33649	1.83	2	101.0	49.5	150.5	
Zn	66	1	He	20.445	20.445	2.558	66465	1.71	20	102.2	49.5	150.5	
As	75	1	He	4.835	4.835	1.061	14363	0.88	5	96.7	49.5	150.5	
Se	78	1	He	4.885	4.885	2.988	1558	2.41	5	97.7	49.5	150.5	
Sr	88	1	He	8.649	8.649	0.618	171624	0.74	10	86.5	49.5	150.5	
Mo	95	1	He	10.088	10.088	0.499	71223	0.60	10	100.9	49.5	150.5	
Ag	107	1	He	0.954	0.954	2.162	19740	2.24	1	95.4	49.5	150.5	
Cd	111	1	He	1.018	1.018	1.328	8067	0.05	1	101.8	49.5	150.5	
Sn	118	1	He	9.725	9.725	2.269	81499	2.70	10	97.2	49.5	150.5	
Sb	123	1	He	2.104	2.104	3.092	18209	2.99	2	105.2	49.5	150.5	
Ba	137	1	He	4.840	4.840	0.349	19701	0.91	5	96.8	49.5	150.5	
W	182	1	He	9.687	9.687	0.651	125145	1.00	10	96.9	49.5	150.5	
Tl	205	1	He	1.794	1.794	0.370	54643	1.17	2	89.7	49.5	150.5	
Pb	208	1	He	0.969	0.969	1.562	39863	0.59	1	96.9	49.5	150.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3380106	0.65	3363927	100.48	70	120	
Sc	45	1	He	2570303	0.58	2596880	98.98	70	120	
Sc	45	2	NoGas	23433262	1.83	23550524	99.50	70	120	
Rh	103	1	He	4826736	0.24	4849688	99.53	70	120	
In	115	1	He	3247480	0.56	3270641	99.29	70	120	
Tb	159	1	He	5530308	1.05	5524253	100.11	70	120	
Ho	165	1	He	5354299	1.17	5317614	100.69	70	120	
Bi	209	1	He	3472827	0.98	3415965	101.66	70	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA-2012514
Data File Name	012ICSA.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T12:16:10-04:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	0.123	25.3	148734	1.2	4	
Be	9	45	2	NoGas	0.002	100.5	167	11.5	2	
B	11	45	2	NoGas	0.790	20.0	31097	3.8	20	
Na	23	45	1	He	47617.760	0.8	152530405	0.5	75200	
Mg	24	45	1	He	47740.160	1.1	87409074	0.8	75200	
Al	27	45	1	He	46734.125	1.4	53507070	1.5	75200	
K	39	45	1	He	47979.107	1.0	122100854	1.6	75200	
Ca	44	45	1	He	48159.039	0.8	5869849	1.3	75200	
Ti	47	45	1	He	981.380	1.3	671249	1.9	1505	
V	51	45	1	He	0.339	6.8	19296	4.2	4	
Cr	52	45	1	He	0.670	0.4	23689	1.5	4	
Mn	55	45	1	He	-0.015	-8.6	4725	1.7	4	
Fe	56	45	1	He	47215.779	1.1	792472662	1.4	75200	
Co	59	45	1	He	0.041	9.1	1100	7.1	2	
Ni	60	45	1	He	0.096	9.8	711	7.3	4	
Cu	63	45	1	He	0.279	0.5	6063	1.7	4	
Zn	66	45	1	He	-1.622	-0.7	2411	2.6	20	
As	75	115	1	He	0.166	21.9	1041	7.6	4	
Se	78	115	1	He	0.123	94.8	380	5.6	4	
Sr	88	103	1	He	0.295	3.5	5774	3.0	20	
Mo	95	103	1	He	1079.437	1.4	7025791	1.5	1505	
Ag	107	103	1	He	0.011	17.2	264	13.9	1	
Cd	111	115	1	He	0.129	34.6	4761	1.4	1	
Sn	118	115	1	He	0.127	25.4	2971	6.7	20	
Sb	123	115	1	He	0.081	34.6	906	23.2	4	
Ba	137	115	1	He	0.036	46.5	234	28.6	2	
W	182	159	1	He	0.605	2.5	14978	2.0	20	
Tl	205	165	1	He	0.025	14.4	843	13.0	2	
Pb	208	165	1	He	0.093	0.9	4560	0.1	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3273198	0.08	3363927	97.30	70	120	
Sc	45	1	He	2600869	1.29	2596880	100.15	70	120	
Sc	45	2	NoGas	23379740	0.67	23550524	99.27	70	120	
Rh	103	1	He	4461412	0.25	4849688	91.99	70	120	
In	115	1	He	3037729	1.66	3270641	92.88	70	120	
Tb	159	1	He	5346745	0.82	5524253	96.79	70	120	
Ho	165	1	He	5159470	0.56	5317614	97.03	70	120	
Bi	209	1	He	3217046	0.37	3415965	94.18	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB-2012515
Data File Name	013ICAB.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T12:19:47-04:00
Sample Type	ICSAB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTDMass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	45	2	NoGas	89.189	0.651	3696523	0.32	100	89.2	49.5	150.5	
Be	9	45	2	NoGas	102.800	1.861	1185221	2.59	100	102.8	49.5	150.5	
B	11	45	2	NoGas	102.908	0.786	705803	1.51	100	102.9	49.5	150.5	
Na	23	45	1	He	46316.000	1.424	153080231	0.53	50000	92.6	49.5	150.5	
Mg	24	45	1	He	46637.849	1.742	88102652	0.30	50000	93.3	49.5	150.5	
Al	27	45	1	He	45285.806	0.412	53502206	1.37	50000	90.6	49.5	150.5	
K	39	45	1	He	46348.792	0.805	121707406	0.93	50000	92.7	49.5	150.5	
Ca	44	45	1	He	46998.883	2.093	5909871	0.43	50000	94.0	49.5	150.5	
Ti	47	45	1	He	1047.072	1.070	738926	0.94	1100	95.2	49.5	150.5	
V	51	45	1	He	95.241	1.085	3023011	0.66	100	95.2	49.5	150.5	
Cr	52	45	1	He	97.251	1.224	1869702	0.58	100	97.3	49.5	150.5	
Mn	55	45	1	He	95.154	1.458	1383913	1.20	100	95.2	49.5	150.5	
Fe	56	45	1	He	46767.859	0.306	809978439	1.39	50000	93.5	49.5	150.5	
Co	59	45	1	He	99.370	1.663	2506674	0.33	100	99.4	49.5	150.5	
Ni	60	45	1	He	96.505	0.882	581744	1.14	100	96.5	49.5	150.5	
Cu	63	45	1	He	98.104	0.590	1628483	1.67	100	98.1	49.5	150.5	
Zn	66	45	1	He	98.092	0.247	304870	1.47	100	98.1	49.5	150.5	
As	75	115	1	He	98.106	1.473	266836	0.80	100	98.1	49.5	150.5	
Se	78	115	1	He	98.127	1.452	23059	0.63	100	98.1	49.5	150.5	
Sr	88	103	1	He	97.947	1.288	1832633	1.26	100	97.9	49.5	150.5	
Mo	95	103	1	He	1192.502	0.387	7936089	1.38	1100	108.4	49.5	150.5	
Ag	107	103	1	He	99.419	0.752	1938235	0.81	100	99.4	49.5	150.5	
Cd	111	115	1	He	97.288	0.695	315831	1.50	100	97.3	49.5	150.5	
Sn	118	115	1	He	101.252	0.830	792160	1.20	100	101.3	49.5	150.5	
Sb	123	115	1	He	104.162	1.496	849050	0.89	100	104.2	49.5	150.5	
Ba	137	115	1	He	97.411	1.856	377263	0.83	100	97.4	49.5	150.5	
W	182	159	1	He	97.995	1.179	1185032	0.92	100	98.0	49.5	150.5	
Tl	205	165	1	He	97.138	0.433	2948282	0.45	100	97.1	49.5	150.5	
Pb	208	165	1	He	97.081	0.695	3889958	0.63	100	97.1	49.5	150.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3306699	0.48	3363927	98.30	70	120	
Sc	45	1	He	2683778	1.68	2596880	103.35	70	120	
Sc	45	2	NoGas	23541847	0.79	23550524	99.96	70	120	
Rh	103	1	He	4561562	1.00	4849688	94.06	70	120	
In	115	1	He	3106033	1.97	3270641	94.97	70	120	
Tb	159	1	He	5501362	1.38	5524253	99.59	70	120	
Ho	165	1	He	5345892	0.75	5317614	100.53	70	120	
Bi	209	1	He	3329662	1.11	3415965	97.47	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2012431
Data File Name	014_CCV.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T12:23:15-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	49.738	1.851	2151892	1.02	50	99.5	89.5	110.5	
Be	9	45	2	NoGas	50.995	0.898	595268	0.39	50	102.0	89.5	110.5	
B	11	45	2	NoGas	50.311	0.855	362841	0.54	50	100.6	89.5	110.5	
Na	23	45	1	He	24177.324	2.134	77570277	1.19	25000	96.7	89.5	110.5	
Mg	24	45	1	He	24247.479	2.472	44431358	1.61	25000	97.0	89.5	110.5	
Al	27	45	1	He	247.021	1.635	284865	0.76	250	98.8	89.5	110.5	
K	39	45	1	He	24133.474	1.179	61554399	0.36	25000	96.5	89.5	110.5	
Ca	44	45	1	He	24810.352	1.724	3028518	1.05	25000	99.2	89.5	110.5	
Ti	47	45	1	He	52.752	1.783	36145	1.17	50	105.5	89.5	110.5	
V	51	45	1	He	48.154	1.740	1486916	0.78	50	96.3	89.5	110.5	
Cr	52	45	1	He	48.216	1.785	904836	0.83	50	96.4	89.5	110.5	
Mn	55	45	1	He	252.695	2.325	3556487	1.54	250	101.1	89.5	110.5	
Fe	56	45	1	He	12535.714	2.386	210576809	1.50	12500	100.3	89.5	110.5	
Co	59	45	1	He	48.406	2.107	1184476	1.14	50	96.8	89.5	110.5	
Ni	60	45	1	He	50.768	2.559	296890	1.69	50	101.5	89.5	110.5	
Cu	63	45	1	He	47.708	1.561	768884	0.61	50	95.4	89.5	110.5	
Zn	66	45	1	He	50.307	1.154	155147	0.14	50	100.6	89.5	110.5	
As	75	115	1	He	48.299	0.742	134491	0.71	50	96.6	89.5	110.5	
Se	78	115	1	He	48.106	0.315	11733	0.19	50	96.2	89.5	110.5	
Sr	88	103	1	He	43.409	1.031	838664	0.58	50	86.8	89.5	110.5	CCV Failed
Mo	95	103	1	He	55.971	2.469	384695	2.67	50	111.9	89.5	110.5	CCV Failed
Ag	107	103	1	He	45.757	0.719	920916	0.65	50	91.5	89.5	110.5	
Cd	111	115	1	He	48.935	0.426	164495	0.31	50	97.9	89.5	110.5	
Sn	118	115	1	He	49.878	1.430	399576	1.22	50	99.8	89.5	110.5	
Sb	123	115	1	He	51.947	0.763	432604	0.76	50	103.9	89.5	110.5	
Ba	137	115	1	He	48.538	0.357	192052	0.27	50	97.1	89.5	110.5	
W	182	159	1	He	50.308	1.086	621868	0.56	50	100.6	89.5	110.5	
Tl	205	165	1	He	44.180	0.887	1353371	1.10	50	88.4	89.5	110.5	CCV Failed
Pb	208	165	1	He	46.206	0.308	1869073	0.35	50	92.4	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3433119	0.76	3363927	102.06	70	120	
Sc	45	1	He	2603128	1.02	2596880	100.24	70	120	
Sc	45	2	NoGas	23835415	0.85	23550524	101.21	70	120	
Rh	103	1	He	4709005	0.87	4849688	97.10	70	120	
In	115	1	He	3171740	0.23	3270641	96.98	70	120	
Tb	159	1	He	5587208	1.62	5524253	101.14	70	120	
Ho	165	1	He	5395162	0.46	5317614	101.46	70	120	
Bi	209	1	He	3424498	0.72	3415965	100.25	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	015_CCB.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T12:26:54-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	0.021	257.2	147004	0.5	2	
Be	9	45	2	NoGas	0.006	45.6	222	13.2	1	
B	11	45	2	NoGas	0.786	10.9	31565	2.5	20	
Na	23	45	1	He	3.183	2.8	136808	1.6	1000	
Mg	24	45	1	He	2.535	32.2	5842	24.6	1000	
Al	27	45	1	He	0.688	16.6	2575	3.6	50	
K	39	45	1	He	0.397	212.1	177922	0.3	1000	
Ca	44	45	1	He	0.995	216.3	4459	4.4	1000	
Ti	47	45	1	He	0.335	24.5	263	20.9	20	
V	51	45	1	He	0.039	41.1	9939	3.7	2	
Cr	52	45	1	He	-0.027	-62.3	10638	3.7	2	
Mn	55	45	1	He	0.021	76.7	5160	4.0	2	
Fe	56	45	1	He	13.993	12.0	255875	10.6	50	
Co	59	45	1	He	0.006	25.5	241	14.8	1	
Ni	60	45	1	He	0.007	15.9	188	3.7	2	
Cu	63	45	1	He	0.054	4.4	2424	1.7	2	
Zn	66	45	1	He	-0.009	-530.4	7054	0.6	20	
As	75	115	1	He	0.070	29.3	838	6.6	2	
Se	78	115	1	He	0.000	-11557.5	375	1.6	2	
Sr	88	103	1	He	0.003	32.0	477	5.3	10	
Mo	95	103	1	He	1.005	37.3	7316	35.3	2	
Ag	107	103	1	He	0.006	57.4	183	41.1	0.2	
Cd	111	115	1	He	0.002	740.5	4650	1.1	0.2	
Sn	118	115	1	He	0.290	14.0	4493	7.5	10	
Sb	123	115	1	He	0.098	17.5	1108	12.9	2	
Ba	137	115	1	He	0.005	131.5	123	21.1	5	
W	182	159	1	He	0.689	12.3	16635	5.7	10	
Tl	205	165	1	He	0.070	12.0	2285	11.5	0.5	
Pb	208	165	1	He	0.015	8.4	1623	2.9	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3417681	0.89	3363927	101.60	70	120	
Sc	45	1	He	2566765	1.50	2596880	98.84	70	120	
Sc	45	2	NoGas	23752365	2.04	23550524	100.86	70	120	
Rh	103	1	He	4872024	1.27	4849688	100.46	70	120	
In	115	1	He	3235424	0.43	3270641	98.92	70	120	
Tb	159	1	He	5575246	0.50	5524253	100.92	70	120	
Ho	165	1	He	5448213	0.33	5317614	102.46	70	120	
Bi	209	1	He	3469676	0.24	3415965	101.57	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2012431
Data File Name	016_CCV.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T12:31:30-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	49.402	1.160	2084611	0.65	50	98.8	89.5	110.5	
Be	9	45	2	NoGas	51.540	0.866	586529	1.59	50	103.1	89.5	110.5	
B	11	45	2	NoGas	49.358	0.384	347511	0.95	50	98.7	89.5	110.5	
Na	23	45	1	He	24118.110	1.215	77244251	0.89	25000	96.5	89.5	110.5	
Mg	24	45	1	He	24234.790	0.904	44332020	1.09	25000	96.9	89.5	110.5	
Al	27	45	1	He	241.039	0.694	277537	1.62	250	96.4	89.5	110.5	
K	39	45	1	He	24310.886	1.815	61887488	0.41	25000	97.2	89.5	110.5	
Ca	44	45	1	He	24842.806	1.660	3026876	0.89	25000	99.4	89.5	110.5	
Ti	47	45	1	He	49.436	0.869	33816	1.17	50	98.9	89.5	110.5	
V	51	45	1	He	47.256	0.800	1456790	0.98	50	94.5	89.5	110.5	
Cr	52	45	1	He	47.178	0.948	884024	0.82	50	94.4	89.5	110.5	
Mn	55	45	1	He	245.624	0.342	3451311	1.48	250	98.2	89.5	110.5	
Fe	56	45	1	He	12099.204	0.136	202917010	1.85	12500	96.8	89.5	110.5	
Co	59	45	1	He	47.672	1.012	1164491	1.00	50	95.3	89.5	110.5	
Ni	60	45	1	He	50.291	0.973	293590	0.84	50	100.6	89.5	110.5	
Cu	63	45	1	He	46.789	1.314	752723	0.57	50	93.6	89.5	110.5	
Zn	66	45	1	He	49.871	0.741	153595	1.42	50	99.7	89.5	110.5	
As	75	115	1	He	48.521	0.590	133151	1.00	50	97.0	89.5	110.5	
Se	78	115	1	He	48.038	0.297	11548	1.36	50	96.1	89.5	110.5	
Sr	88	103	1	He	43.835	0.414	829194	0.87	50	87.7	89.5	110.5	CCV Failed
Mo	95	103	1	He	51.170	0.465	344341	0.93	50	102.3	89.5	110.5	
Ag	107	103	1	He	45.415	0.491	894911	0.78	50	90.8	89.5	110.5	
Cd	111	115	1	He	48.472	1.085	160631	1.85	50	96.9	89.5	110.5	
Sn	118	115	1	He	49.508	0.884	390901	1.36	50	99.0	89.5	110.5	
Sb	123	115	1	He	51.787	0.287	425042	1.33	50	103.6	89.5	110.5	
Ba	137	115	1	He	48.384	0.902	188665	0.57	50	96.8	89.5	110.5	
W	182	159	1	He	49.567	0.417	591860	0.42	50	99.1	89.5	110.5	
Tl	205	165	1	He	43.643	0.261	1306533	0.70	50	87.3	89.5	110.5	CCV Failed
Pb	208	165	1	He	45.908	0.269	1814817	0.54	50	91.8	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3337968	0.32	3363927	99.23	70	120	
Sc	45	1	He	2598507	1.75	2596880	100.06	70	120	
Sc	45	2	NoGas	23235614	0.98	23550524	98.66	70	120	
Rh	103	1	He	4610361	0.75	4849688	95.07	70	120	
In	115	1	He	3125986	1.46	3270641	95.58	70	120	
Tb	159	1	He	5395418	0.32	5524253	97.67	70	120	
Ho	165	1	He	5272580	0.71	5317614	99.15	70	120	
Bi	209	1	He	3298639	1.19	3415965	96.57	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	017_CCB.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T12:35:08-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	0.044	149.3	147246	0.4	2	
Be	9	45	2	NoGas	0.012	31.9	293	17.1	1	
B	11	45	2	NoGas	0.907	7.1	32225	2.2	20	
Na	23	45	1	He	2.939	76.3	134209	3.1	1000	
Mg	24	45	1	He	2.446	39.2	5590	28.1	1000	
Al	27	45	1	He	0.336	67.6	2148	9.9	50	
K	39	45	1	He	3.733	52.7	183874	0.6	1000	
Ca	44	45	1	He	-0.208	-758.1	4263	5.1	1000	
Ti	47	45	1	He	0.159	19.4	143	16.3	20	
V	51	45	1	He	0.032	29.3	9619	3.2	2	
Cr	52	45	1	He	-0.020	-51.1	10634	0.7	2	
Mn	55	45	1	He	0.033	34.3	5263	0.9	2	
Fe	56	45	1	He	13.305	9.7	241656	10.4	50	
Co	59	45	1	He	0.006	55.6	228	30.7	1	
Ni	60	45	1	He	0.006	37.0	178	8.5	2	
Cu	63	45	1	He	0.048	13.0	2292	2.1	2	
Zn	66	45	1	He	0.047	122.2	7128	2.9	20	
As	75	115	1	He	0.076	23.3	851	5.6	2	
Se	78	115	1	He	-0.001	-12108.8	373	5.5	2	
Sr	88	103	1	He	0.003	41.0	474	6.4	10	
Mo	95	103	1	He	0.482	37.9	3575	36.3	2	
Ag	107	103	1	He	0.008	31.7	209	22.9	0.2	
Cd	111	115	1	He	-0.035	-105.7	4498	2.8	0.2	
Sn	118	115	1	He	0.309	17.8	4616	9.3	10	
Sb	123	115	1	He	0.093	21.2	1054	15.4	2	
Ba	137	115	1	He	0.004	281.9	118	36.5	5	
W	182	159	1	He	0.649	6.0	15931	5.0	10	
Tl	205	165	1	He	0.068	13.9	2157	11.7	0.5	
Pb	208	165	1	He	0.015	37.7	1608	13.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3411335	0.21	3363927	101.41	70	120	
Sc	45	1	He	2534150	2.10	2596880	97.58	70	120	
Sc	45	2	NoGas	23644443	1.43	23550524	100.40	70	120	
Rh	103	1	He	4812945	0.89	4849688	99.24	70	120	
In	115	1	He	3214578	0.35	3270641	98.29	70	120	
Tb	159	1	He	5493120	2.26	5524253	99.44	70	120	
Ho	165	1	He	5316114	1.46	5317614	99.97	70	120	
Bi	209	1	He	3448200	0.59	3415965	100.94	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	B-1
Data File Name	018_Blk.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T12:38:49-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	0.161	38.1	147697	0.9	2	
Be	9	45	2	NoGas	0.001	126.1	159	10.7	1	
B	11	45	2	NoGas	1.542	4.4	35416	1.8	20	
Na	23	45	1	He	2.242	20.3	128136	0.4	1000	
Mg	24	45	1	He	1.811	3.0	4345	1.7	1000	
Al	27	45	1	He	4.844	0.7	6962	0.2	50	
K	39	45	1	He	9.385	112.5	191847	12.5	1000	
Ca	44	45	1	He	4.917	30.3	4724	3.9	1000	
Ti	47	45	1	He	0.125	41.9	117	28.6	20	
V	51	45	1	He	0.381	5.6	19434	3.7	2	
Cr	52	45	1	He	0.739	3.3	23597	1.5	2	
Mn	55	45	1	He	-0.254	-2.1	1292	5.5	2	
Fe	56	45	1	He	7.359	8.7	139820	7.0	50	
Co	59	45	1	He	0.009	12.2	292	8.7	1	
Ni	60	45	1	He	0.031	45.0	310	24.4	2	
Cu	63	45	1	He	0.200	15.5	4527	9.8	2	
Zn	66	45	1	He	-0.391	-11.8	5694	1.7	20	
As	75	115	1	He	0.084	18.5	851	5.1	2	
Se	78	115	1	He	-0.037	-253.6	355	6.2	2	
Sr	88	103	1	He	0.060	4.0	1587	3.8	10	
Mo	95	103	1	He	0.227	36.1	1763	32.6	2	
Ag	107	103	1	He	0.006	15.6	180	11.3	0.2	
Cd	111	115	1	He	0.003	1356.6	4511	2.8	0.2	
Sn	118	115	1	He	0.360	10.3	4905	6.0	10	
Sb	123	115	1	He	0.054	36.6	713	22.9	2	
Ba	137	115	1	He	0.017	50.9	168	20.7	5	
W	182	159	1	He	0.222	31.5	10715	7.2	10	
Tl	205	165	1	He	0.044	12.5	1442	9.9	0.5	
Pb	208	165	1	He	0.035	1.5	2381	1.1	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3376743	0.85	3363927	100.38	70	120	
Sc	45	1	He	2457623	0.70	2596880	94.64	70	120	
Sc	45	2	NoGas	22985039	1.84	23550524	97.60	70	120	
Rh	103	1	He	4759400	0.96	4849688	98.14	70	120	
In	115	1	He	3136888	0.14	3270641	95.91	70	120	
Tb	159	1	He	5449998	0.57	5524253	98.66	70	120	
Ho	165	1	He	5344076	1.66	5317614	100.50	70	120	
Bi	209	1	He	3540677	1.36	3415965	103.65	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	B-2
Data File Name	019_Blk.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T12:42:31-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	0.085	50.0	145552	1.2	2	
Be	9	45	2	NoGas	0.000	992.9	148	21.7	1	
B	11	45	2	NoGas	0.402	14.4	28222	0.7	20	
Na	23	45	1	He	0.700	46.4	125865	0.7	1000	
Mg	24	45	1	He	0.763	5.5	2582	3.3	1000	
Al	27	45	1	He	3.362	4.4	5463	3.2	50	
K	39	45	1	He	-0.141	-394.5	172351	0.5	1000	
Ca	44	45	1	He	-11.582	-22.3	2880	10.9	1000	
Ti	47	45	1	He	0.080	39.3	89	22.9	20	
V	51	45	1	He	0.266	7.8	16433	4.0	2	
Cr	52	45	1	He	0.443	9.8	18773	3.8	2	
Mn	55	45	1	He	-0.134	-6.2	2948	3.4	2	
Fe	56	45	1	He	1.466	16.9	47264	8.1	50	
Co	59	45	1	He	0.004	50.6	184	25.3	1	
Ni	60	45	1	He	0.035	17.3	341	10.0	2	
Cu	63	45	1	He	0.125	4.1	3467	2.2	2	
Zn	66	45	1	He	-0.257	-3.9	6184	0.8	20	
As	75	115	1	He	0.044	3.7	759	1.5	2	
Se	78	115	1	He	-0.098	-34.5	349	1.7	2	
Sr	88	103	1	He	0.047	4.9	1363	3.3	10	
Mo	95	103	1	He	0.103	36.5	924	28.7	2	
Ag	107	103	1	He	0.002	20.8	102	10.0	0.2	
Cd	111	115	1	He	-0.038	-110.5	4478	2.5	0.2	
Sn	118	115	1	He	0.085	54.9	2800	14.2	10	
Sb	123	115	1	He	0.016	38.7	410	13.6	2	
Ba	137	115	1	He	0.027	29.3	210	14.1	5	
W	182	159	1	He	0.081	69.7	9181	7.6	10	
Tl	205	165	1	He	0.013	12.3	494	9.8	0.5	
Pb	208	165	1	He	0.025	11.5	2011	5.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3440386	1.50	3363927	102.27	70	120	
Sc	45	1	He	2505164	0.40	2596880	96.47	70	120	
Sc	45	2	NoGas	23109075	0.85	23550524	98.13	70	120	
Rh	103	1	He	4886949	0.35	4849688	100.77	70	120	
In	115	1	He	3209516	0.97	3270641	98.13	70	120	
Tb	159	1	He	5538222	0.15	5524253	100.25	70	120	
Ho	165	1	He	5355661	0.71	5317614	100.72	70	120	
Bi	209	1	He	3502034	0.68	3415965	102.52	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	B-3
Data File Name	020_Blk.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T12:46:12-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	0.096	29.2	143990	0.9	2	
Be	9	45	2	NoGas	0.000	1216.2	148	43.3	1	
B	11	45	2	NoGas	0.314	44.0	27277	3.6	20	
Na	23	45	1	He	-2.740	-36.4	114447	0.7	1000	
Mg	24	45	1	He	0.091	73.8	1385	7.0	1000	
Al	27	45	1	He	2.656	6.4	4651	1.8	50	
K	39	45	1	He	0.022	9829.0	171528	1.3	1000	
Ca	44	45	1	He	-17.683	-9.5	2146	6.8	1000	
Ti	47	45	1	He	0.057	34.3	73	15.7	20	
V	51	45	1	He	0.324	9.2	17995	2.7	2	
Cr	52	45	1	He	0.554	4.9	20605	0.4	2	
Mn	55	45	1	He	-0.300	-1.9	693	10.9	2	
Fe	56	45	1	He	0.788	38.8	36005	11.6	50	
Co	59	45	1	He	0.001	41.2	124	10.1	1	
Ni	60	45	1	He	0.006	20.6	177	5.0	2	
Cu	63	45	1	He	0.146	12.9	3766	5.8	2	
Zn	66	45	1	He	-0.997	-7.6	4061	3.0	20	
As	75	115	1	He	0.054	14.0	778	2.9	2	
Se	78	115	1	He	-0.127	-84.9	338	7.9	2	
Sr	88	103	1	He	0.043	10.9	1229	6.9	10	
Mo	95	103	1	He	0.073	38.1	687	27.4	2	
Ag	107	103	1	He	0.002	13.2	99	5.1	0.2	
Cd	111	115	1	He	-0.047	-15.8	4395	1.9	0.2	
Sn	118	115	1	He	0.074	17.9	2678	2.6	10	
Sb	123	115	1	He	0.005	92.4	313	12.5	2	
Ba	137	115	1	He	0.008	28.2	131	5.3	5	
W	182	159	1	He	0.022	107.9	8391	4.1	10	
Tl	205	165	1	He	0.008	25.1	347	18.3	0.5	
Pb	208	165	1	He	0.007	15.4	1270	3.2	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3332238	1.41	3363927	99.06	70	120	
Sc	45	1	He	2488502	2.38	2596880	95.83	70	120	
Sc	45	2	NoGas	22793500	0.35	23550524	96.79	70	120	
Rh	103	1	He	4728849	1.42	4849688	97.51	70	120	
In	115	1	He	3168883	1.36	3270641	96.89	70	120	
Tb	159	1	He	5487626	0.87	5524253	99.34	70	120	
Ho	165	1	He	5319190	1.47	5317614	100.03	70	120	
Bi	209	1	He	3471329	2.15	3415965	101.62	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	B-4
Data File Name	021_Blk.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T12:49:56-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	0.047	15.3	143596	1.3	2	
Be	9	45	2	NoGas	0.001	856.7	152	40.3	1	
B	11	45	2	NoGas	-0.077	-202.7	25036	4.6	20	
Na	23	45	1	He	-2.376	-89.7	116016	1.2	1000	
Mg	24	45	1	He	0.066	156.6	1345	8.9	1000	
Al	27	45	1	He	1.945	9.4	3889	2.6	50	
K	39	45	1	He	0.166	1877.5	172620	0.6	1000	
Ca	44	45	1	He	-16.416	-8.3	2304	3.0	1000	
Ti	47	45	1	He	0.028	107.1	54	33.7	20	
V	51	45	1	He	0.212	18.4	14768	3.3	2	
Cr	52	45	1	He	0.357	13.7	17188	0.7	2	
Mn	55	45	1	He	-0.008	-403.9	4631	4.7	2	
Fe	56	45	1	He	0.385	41.8	29679	4.8	50	
Co	59	45	1	He	0.001	3.1	117	4.9	1	
Ni	60	45	1	He	0.011	26.3	203	6.6	2	
Cu	63	45	1	He	0.081	12.9	2768	1.3	2	
Zn	66	45	1	He	-0.913	-10.5	4314	2.6	20	
As	75	115	1	He	0.030	46.1	706	1.6	2	
Se	78	115	1	He	-0.010	-230.6	363	2.9	2	
Sr	88	103	1	He	0.028	6.6	937	7.1	10	
Mo	95	103	1	He	0.050	62.7	524	37.3	2	
Ag	107	103	1	He	0.003	52.9	114	33.1	0.2	
Cd	111	115	1	He	0.002	874.4	4533	3.4	0.2	
Sn	118	115	1	He	-0.034	-51.6	1811	3.7	10	
Sb	123	115	1	He	0.001	630.7	279	22.2	2	
Ba	137	115	1	He	0.018	12.7	172	7.3	5	
W	182	159	1	He	0.028	32.6	8366	6.3	10	
Tl	205	165	1	He	0.004	13.8	230	10.1	0.5	
Pb	208	165	1	He	0.012	25.2	1473	5.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3278833	1.65	3363927	97.47	70	120	
Sc	45	1	He	2501303	4.34	2596880	96.32	70	120	
Sc	45	2	NoGas	23034659	1.28	23550524	97.81	70	120	
Rh	103	1	He	4721814	4.71	4849688	97.36	70	120	
In	115	1	He	3155405	3.68	3270641	96.48	70	120	
Tb	159	1	He	5422584	5.23	5524253	98.16	70	120	
Ho	165	1	He	5266251	3.94	5317614	99.03	70	120	
Bi	209	1	He	3382198	3.90	3415965	99.01	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	B-5
Data File Name	022_Blk.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T12:53:36-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	0.031	110.8	142870	0.6	2	
Be	9	45	2	NoGas	0.003	37.2	178	6.3	1	
B	11	45	2	NoGas	0.195	12.7	26772	0.8	20	
Na	23	45	1	He	-0.730	-155.4	121164	1.7	1000	
Mg	24	45	1	He	0.164	62.0	1522	12.1	1000	
Al	27	45	1	He	6.350	3.2	8741	3.6	50	
K	39	45	1	He	1.551	45.7	176097	1.0	1000	
Ca	44	45	1	He	-14.628	-10.6	2515	6.0	1000	
Ti	47	45	1	He	0.058	126.3	74	65.2	20	
V	51	45	1	He	0.284	3.8	16911	1.5	2	
Cr	52	45	1	He	0.473	6.7	19256	2.3	2	
Mn	55	45	1	He	-0.194	-1.4	2128	2.4	2	
Fe	56	45	1	He	0.564	36.5	32634	11.2	50	
Co	59	45	1	He	0.002	56.2	132	16.8	1	
Ni	60	45	1	He	0.008	25.3	189	7.1	2	
Cu	63	45	1	He	0.095	2.9	2996	1.7	2	
Zn	66	45	1	He	-0.401	-7.7	5765	2.5	20	
As	75	115	1	He	0.047	27.4	749	4.7	2	
Se	78	115	1	He	-0.054	-187.0	351	7.5	2	
Sr	88	103	1	He	0.033	4.1	1032	2.1	10	
Mo	95	103	1	He	0.054	51.5	556	34.2	2	
Ag	107	103	1	He	0.003	17.5	112	9.1	0.2	
Cd	111	115	1	He	0.017	194.8	4547	1.4	0.2	
Sn	118	115	1	He	0.021	36.8	2226	1.8	10	
Sb	123	115	1	He	0.004	218.4	303	26.7	2	
Ba	137	115	1	He	0.011	65.7	141	19.8	5	
W	182	159	1	He	-0.012	-396.1	7976	8.2	10	
Tl	205	165	1	He	0.004	27.5	218	13.7	0.5	
Pb	208	165	1	He	0.013	8.2	1492	2.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3328830	0.40	3363927	98.96	70	120	
Sc	45	1	He	2499633	1.21	2596880	96.26	70	120	
Sc	45	2	NoGas	23018605	0.79	23550524	97.74	70	120	
Rh	103	1	He	4717576	0.82	4849688	97.28	70	120	
In	115	1	He	3131647	1.03	3270641	95.75	70	120	
Tb	159	1	He	5482276	0.95	5524253	99.24	70	120	
Ho	165	1	He	5306136	0.43	5317614	99.78	70	120	
Bi	209	1	He	3482819	1.38	3415965	101.96	70	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-182576/3-a
Data File Name	023_LCS.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T12:57:14-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	2	NoGas	0.152	0.152	16.452	144775	0.77	1000	0.0	84.5	115.5	LCS Failed
Be	9	2	NoGas	1019.456	1019.456	0.575	11272048	0.53	1000	101.9	84.5	115.5	
B	11	2	NoGas	112.432	112.432	0.653	737359	1.24	100	112.4	84.5	115.5	
Na	23	1	He	9926.688	9926.688	2.216	29870831	1.02	10000	99.3	84.5	115.5	
Mg	24	1	He	9932.939	9932.939	2.367	17030357	0.30	10000	99.3	84.5	115.5	
Al	27	1	He	9553.184	9553.184	3.080	10241931	1.20	10000	95.5	84.5	115.5	
K	39	1	He	9746.063	9746.063	3.785	23352349	1.88	10000	97.5	84.5	115.5	
Ca	44	1	He	12699.351	12699.351	3.802	1452030	1.75	10000	127.0	84.5	115.5	LCS Failed
Ti	47	1	He	99.180	99.180	3.354	63539	1.31	100	99.2	84.5	115.5	
V	51	1	He	980.563	980.563	2.863	28164945	0.83	1000	98.1	84.5	115.5	
Cr	52	1	He	983.647	983.647	3.611	17062655	1.64	1000	98.4	84.5	115.5	
Mn	55	1	He	991.852	991.852	3.638	13044921	1.58	1000	99.2	84.5	115.5	
Fe	56	1	He	10179.400	10179.400	2.140	159997411	0.11	10000	101.8	84.5	115.5	
Co	59	1	He	1028.065	1028.065	2.550	23534828	0.76	1000	102.8	84.5	115.5	
Ni	60	1	He	1094.556	1094.556	2.311	5986191	0.82	1000	109.5	84.5	115.5	
Cu	63	1	He	1022.325	1022.325	3.932	15381231	1.88	1000	102.2	84.5	115.5	
Zn	66	1	He	1109.021	1109.021	3.061	3058136	1.15	1000	110.9	84.5	115.5	
As	75	1	He	1004.004	1004.004	0.498	2638438	0.45	1000	100.4	84.5	115.5	
Se	78	1	He	938.372	938.372	0.468	210514	0.72	1000	93.8	84.5	115.5	
Sr	88	1	He	903.836	903.836	0.679	16893142	0.51	1000	90.4	84.5	115.5	
Mo	95	1	He	103.788	103.788	1.316	690218	1.22	100	103.8	84.5	115.5	
Ag	107	1	He	102.858	102.858	0.646	2003500	0.49	100	102.9	84.5	115.5	
Cd	111	1	He	1095.872	1095.872	1.317	3399807	1.32	1000	109.6	84.5	115.5	
Sn	118	1	He	1155.680	1155.680	2.144	8733142	2.36	1000	115.6	84.5	115.5	LCS Failed
Sb	123	1	He	104.282	104.282	0.983	823021	1.38	100	104.3	84.5	115.5	
Ba	137	1	He	1091.441	1091.441	0.437	4091901	0.82	1000	109.1	84.5	115.5	
W	182	1	He	103.082	103.082	0.820	1228725	2.23	100	103.1	84.5	115.5	
Tl	205	1	He	251.631	251.631	1.358	7601627	0.36	250	100.7	84.5	115.5	
Pb	208	1	He	1044.479	1044.479	1.031	41651297	1.52	1000	104.4	84.5	115.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3283544	1.34	3363927	97.61	70	120	
Sc	45	1	He	2436006	2.10	2596880	93.81	70	120	
Sc	45	2	NoGas	22582526	1.02	23550524	95.89	70	120	
Rh	103	1	He	4557548	0.96	4849688	93.98	70	120	
In	115	1	He	3006757	0.49	3270641	91.93	70	120	
Tb	159	1	He	5423765	1.55	5524253	98.18	70	120	
Ho	165	1	He	5321439	1.15	5317614	100.07	70	120	
Bi	209	1	He	4171592	10.14	3415965	122.12	70	120	ISTD Failed

Sample Report

Sample Table

Sample Name	240-50308-b-5-e ms@5
Data File Name	024SMPL.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T13:00:28-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	58.880	58.880	2.54	2474559	0.00	10000	
Be	9	45	2	NoGas	3.670	3.670	2.87	42189	0.01	10000	
B	11	45	2	NoGas	17.837	17.837	3.58	143020	0.01	300	
Na	23	45	1	He	202.963	202.963	3.31	746873	0.03	500000	
Mg	24	45	1	He	9577.400	9577.400	2.88	16835235	0.06	500000	
Al	27	45	1	He	51423.473	51423.473	2.63	56518462	0.09	200000	
K	39	45	1	He	3061.367	3061.367	1.00	7641703	0.04	500000	
Ca	44	45	1	He	18263.058	18263.058	3.28	2139197	0.85	500000	
Ti	47	45	1	He	500.285	500.285	2.79	328477	0.15	2500	
V	51	45	1	He	99.791	99.791	3.45	2946115	0.00	10000	
Cr	52	45	1	He	90.135	90.135	2.06	1613208	0.01	10000	
Mn	55	45	1	He	5047.479	5047.479	2.80	68050057	0.01	10000	
Fe	56	45	1	He	107871.985	107871.985	3.33	1737775078	0.01	200000	
Co	59	45	1	He	45.571	45.571	2.42	1069666	0.00	10000	
Ni	60	45	1	He	104.210	104.210	2.85	584390	0.02	10000	
Cu	63	45	1	He	63.015	63.015	3.30	973515	0.01	10000	
Zn	66	45	1	He	349.540	349.540	3.00	992905	0.04	10000	
As	75	115	1	He	61.511	61.511	0.54	164785	0.04	10000	
Se	78	115	1	He	6.334	6.334	1.45	1796	0.35	10000	
Sr	88	103	1	He	63.808	63.808	0.48	1186748	0.01	10000	
Mo	95	103	1	He	8.491	8.491	2.75	56345	0.02	2000	
Ag	107	103	1	He	0.283	0.283	1.81	5524	0.01	300	
Cd	111	115	1	He	1.440	1.440	5.15	8913	0.02	4000	
Sn	118	115	1	He	14.587	14.587	2.84	113941	0.01	2000	
Sb	123	115	1	He	1.209	1.209	3.35	9950	0.01	200	
Ba	137	115	1	He	457.597	457.597	1.66	1742676	0.03	10000	
W	182	159	1	He	1.301	1.301	7.92	24163	0.01	2500	
Tl	205	165	1	He	1.023	1.023	1.96	31491	0.00	5000	
Pb	208	165	1	He	149.239	149.239	0.93	6042317	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3359354	1.32	3363927	99.86	70	120	
Sc	45	1	He	2497696	2.51	2596880	96.18	70	120	
Sc	45	2	NoGas	23405417	1.78	23550524	99.38	70	120	
Rh	103	1	He	4533782	1.13	4849688	93.49	70	120	
In	115	1	He	3054692	1.51	3270641	93.40	70	120	
Tb	159	1	He	5591457	0.49	5524253	101.22	70	120	
Ho	165	1	He	5402245	0.67	5317614	101.59	70	120	
Bi	209	1	He	3514030	0.85	3415965	102.87	70	120	

Sample Report

Sample Table

Sample Name	240-50308-b-5-f msd@5
Data File Name	025SMPL.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T13:04:01-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	12.678	12.678	1.56	648913	0.00	10000	
Be	9	45	2	NoGas	0.770	0.770	2.94	9010	0.01	10000	
B	11	45	2	NoGas	3.201	3.201	7.41	47172	0.01	300	
Na	23	45	1	He	38.435	38.435	2.70	244362	0.02	500000	
Mg	24	45	1	He	2032.366	2032.366	1.38	3617518	0.06	500000	
Al	27	45	1	He	10932.921	10932.921	2.10	12165198	0.09	200000	
K	39	45	1	He	663.278	663.278	0.69	1812203	0.04	500000	
Ca	44	45	1	He	3666.787	3666.787	1.65	438254	0.84	500000	
Ti	47	45	1	He	104.155	104.155	1.12	69262	0.15	2500	
V	51	45	1	He	19.990	19.990	1.25	604413	0.00	10000	
Cr	52	45	1	He	17.859	17.859	1.75	332325	0.01	10000	
Mn	55	45	1	He	1063.065	1063.065	1.75	14512889	0.01	10000	
Fe	56	45	1	He	22624.333	22624.333	1.56	369028545	0.01	200000	
Co	59	45	1	He	9.579	9.579	1.30	227682	0.00	10000	
Ni	60	45	1	He	22.145	22.145	1.49	125837	0.02	10000	
Cu	63	45	1	He	13.397	13.397	1.36	210765	0.01	10000	
Zn	66	45	1	He	74.989	74.989	1.80	221129	0.03	10000	
As	75	115	1	He	12.408	12.408	1.67	35705	0.03	10000	
Se	78	115	1	He	1.023	1.023	6.99	622	0.16	10000	
Sr	88	103	1	He	12.706	12.706	1.61	252736	0.01	10000	
Mo	95	103	1	He	1.647	1.647	3.00	11829	0.01	2000	
Ag	107	103	1	He	0.055	0.055	7.85	1188	0.00	300	
Cd	111	115	1	He	0.294	0.294	2.92	5622	0.01	4000	
Sn	118	115	1	He	2.592	2.592	1.96	23198	0.01	2000	
Sb	123	115	1	He	0.248	0.248	0.81	2380	0.01	200	
Ba	137	115	1	He	80.808	80.808	1.59	325940	0.02	10000	
W	182	159	1	He	0.170	0.170	50.33	10482	0.00	2500	
Tl	205	165	1	He	0.189	0.189	3.98	6099	0.00	5000	
Pb	208	165	1	He	28.179	28.179	0.43	1178844	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3368010	0.72	3363927	100.12	70	120	
Sc	45	1	He	2527644	1.00	2596880	97.33	70	120	
Sc	45	2	NoGas	23511887	0.60	23550524	99.84	70	120	
Rh	103	1	He	4843476	2.11	4849688	99.87	70	120	
In	115	1	He	3234447	1.41	3270641	98.89	70	120	
Tb	159	1	He	5658803	0.70	5524253	102.44	70	120	
Ho	165	1	He	5577781	0.85	5317614	104.89	70	120	
Bi	209	1	He	3572367	1.77	3415965	104.58	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2012431
Data File Name	026_CCV.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T13:07:39-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	49.569	0.996	2083814	0.08	50	99.1	89.5	110.5	
Be	9	45	2	NoGas	51.637	0.556	585533	0.39	50	103.3	89.5	110.5	
B	11	45	2	NoGas	48.437	0.815	340293	0.46	50	96.9	89.5	110.5	
Na	23	45	1	He	25506.932	6.817	74890458	0.70	25000	102.0	89.5	110.5	
Mg	24	45	1	He	25657.296	7.421	43017367	1.29	25000	102.6	89.5	110.5	
Al	27	45	1	He	255.544	7.637	269549	1.40	250	102.2	89.5	110.5	
K	39	45	1	He	25366.859	7.818	59177551	1.60	25000	101.5	89.5	110.5	
Ca	44	45	1	He	26048.452	7.839	2908486	1.84	25000	104.2	89.5	110.5	
Ti	47	45	1	He	52.323	6.466	32814	0.33	50	104.6	89.5	110.5	
V	51	45	1	He	50.387	7.952	1422866	1.72	50	100.8	89.5	110.5	
Cr	52	45	1	He	50.678	8.104	869424	1.84	50	101.4	89.5	110.5	
Mn	55	45	1	He	265.860	8.473	3421893	2.35	250	106.3	89.5	110.5	
Fe	56	45	1	He	13088.945	8.616	201078023	2.58	12500	104.7	89.5	110.5	
Co	59	45	1	He	50.850	7.626	1138385	1.50	50	101.7	89.5	110.5	
Ni	60	45	1	He	53.130	7.466	284284	1.42	50	106.3	89.5	110.5	
Cu	63	45	1	He	49.859	7.648	735066	1.45	50	99.7	89.5	110.5	
Zn	66	45	1	He	52.585	8.480	148035	1.90	50	105.2	89.5	110.5	
As	75	115	1	He	50.522	4.846	130090	1.54	50	101.0	89.5	110.5	
Se	78	115	1	He	49.961	4.760	11258	1.71	50	99.9	89.5	110.5	
Sr	88	103	1	He	45.350	6.549	810664	1.40	50	90.7	89.5	110.5	
Mo	95	103	1	He	52.907	5.669	336547	0.88	50	105.8	89.5	110.5	
Ag	107	103	1	He	47.410	6.396	882900	1.10	50	94.8	89.5	110.5	
Cd	111	115	1	He	50.672	4.527	157406	1.12	50	101.3	89.5	110.5	
Sn	118	115	1	He	51.741	5.115	383290	1.81	50	103.5	89.5	110.5	
Sb	123	115	1	He	54.655	4.845	420965	1.57	50	109.3	89.5	110.5	
Ba	137	115	1	He	50.336	4.589	184218	1.33	50	100.7	89.5	110.5	
W	182	159	1	He	51.758	6.432	586726	0.91	50	103.5	89.5	110.5	
Tl	205	165	1	He	46.218	6.666	1307331	0.84	50	92.4	89.5	110.5	
Pb	208	165	1	He	48.577	7.016	1814161	1.05	50	97.2	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3306862	0.91	3363927	98.30	70	120	
Sc	45	1	He	2388663	6.11	2596880	91.98	70	120	
Sc	45	2	NoGas	23153840	0.86	23550524	98.32	70	120	
Rh	103	1	He	4366562	5.12	4849688	90.04	70	120	
In	115	1	He	2936604	3.21	3270641	89.79	70	120	
Tb	159	1	He	5137029	5.47	5524253	92.99	70	120	
Ho	165	1	He	4995000	5.95	5317614	93.93	70	120	
Bi	209	1	He	3201975	4.02	3415965	93.74	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	027_CCB.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T13:11:14-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	0.024	99.5	144343	0.7	2	
Be	9	45	2	NoGas	0.025	16.3	430	9.8	1	
B	11	45	2	NoGas	0.694	16.3	30366	2.3	20	
Na	23	45	1	He	-1.149	-34.7	122103	1.9	1000	
Mg	24	45	1	He	1.959	46.8	4775	35.2	1000	
Al	27	45	1	He	0.312	8.2	2133	1.3	50	
K	39	45	1	He	-0.284	-331.8	174754	1.1	1000	
Ca	44	45	1	He	1.616	129.2	4498	5.0	1000	
Ti	47	45	1	He	0.121	30.5	118	20.1	20	
V	51	45	1	He	0.041	59.0	9920	7.3	2	
Cr	52	45	1	He	-0.009	-67.6	10879	0.5	2	
Mn	55	45	1	He	0.086	19.2	6018	4.2	2	
Fe	56	45	1	He	15.532	12.1	278877	10.1	50	
Co	59	45	1	He	0.010	16.5	339	11.1	1	
Ni	60	45	1	He	0.007	66.6	183	13.7	2	
Cu	63	45	1	He	0.045	14.2	2254	5.0	2	
Zn	66	45	1	He	0.232	51.1	7688	3.6	20	
As	75	115	1	He	0.096	22.9	916	8.1	2	
Se	78	115	1	He	-0.017	-440.2	371	4.6	2	
Sr	88	103	1	He	0.008	32.9	576	11.0	10	
Mo	95	103	1	He	0.279	31.4	2175	30.4	2	
Ag	107	103	1	He	0.005	22.1	164	14.9	0.2	
Cd	111	115	1	He	0.035	13.4	4766	1.1	0.2	
Sn	118	115	1	He	0.232	16.3	4027	8.9	10	
Sb	123	115	1	He	0.079	4.3	947	4.0	2	
Ba	137	115	1	He	0.012	54.6	151	16.8	5	
W	182	159	1	He	0.612	13.0	15682	5.8	10	
Tl	205	165	1	He	0.069	8.5	2221	6.7	0.5	
Pb	208	165	1	He	0.025	19.0	2007	7.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3374259	1.87	3363927	100.31	70	120	
Sc	45	1	He	2545345	0.94	2596880	98.02	70	120	
Sc	45	2	NoGas	23301361	0.99	23550524	98.94	70	120	
Rh	103	1	He	4859291	1.94	4849688	100.20	70	120	
In	115	1	He	3240288	1.39	3270641	99.07	70	120	
Tb	159	1	He	5568312	0.96	5524253	100.80	70	120	
Ho	165	1	He	5408483	1.83	5317614	101.71	70	120	
Bi	209	1	He	3488608	1.65	3415965	102.13	70	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-2012498
Data File Name	028CRI.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T13:14:54-04:00
Sample Type	CRI
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	2	NoGas	8.503	8.503	2.615	485152	0.91	8	106.3	49.5	150.5	
Be	9	2	NoGas	1.028	1.028	8.737	12034	8.50	1	102.8	49.5	150.5	
B	11	2	NoGas	19.315	19.315	2.065	154195	0.97	20	96.6	49.5	150.5	
Na	23	1	He	1003.731	1003.731	0.336	3319278	0.60	1000	100.4	49.5	150.5	
Mg	24	1	He	1043.911	1043.911	0.954	1900239	1.13	1000	104.4	49.5	150.5	
Al	27	1	He	49.256	49.256	0.749	57837	0.97	50	98.5	49.5	150.5	
K	39	1	He	1023.471	1023.471	0.161	2761896	0.43	1000	102.3	49.5	150.5	
Ca	44	1	He	989.348	989.348	0.619	124082	0.88	1000	98.9	49.5	150.5	
Ti	47	1	He	10.620	10.620	2.114	7254	2.35	10	106.2	49.5	150.5	
V	51	1	He	3.656	3.656	1.471	120213	1.61	5	73.1	49.5	150.5	
Cr	52	1	He	2.019	2.019	1.666	48346	1.51	2	100.9	49.5	150.5	
Mn	55	1	He	4.728	4.728	1.063	70879	1.27	5	94.6	49.5	150.5	
Fe	56	1	He	109.741	109.741	1.821	1854222	2.04	100	109.7	49.5	150.5	
Co	59	1	He	1.037	1.037	2.469	25281	2.73	1	103.7	49.5	150.5	
Ni	60	1	He	2.188	2.188	1.267	12842	1.52	2	109.4	49.5	150.5	
Cu	63	1	He	2.068	2.068	2.076	34594	2.03	2	103.4	49.5	150.5	
Zn	66	1	He	20.184	20.184	2.056	66062	2.05	20	100.9	49.5	150.5	
As	75	1	He	4.840	4.840	1.846	14485	2.01	5	96.8	49.5	150.5	
Se	78	1	He	4.788	4.788	0.125	1546	0.42	5	95.8	49.5	150.5	
Sr	88	1	He	8.650	8.650	0.582	172529	0.97	10	86.5	49.5	150.5	
Mo	95	1	He	10.145	10.145	1.436	71997	1.23	10	101.5	49.5	150.5	
Ag	107	1	He	0.931	0.931	0.433	19358	0.45	1	93.1	49.5	150.5	
Cd	111	1	He	1.007	1.007	4.230	8089	2.19	1	100.7	49.5	150.5	
Sn	118	1	He	9.899	9.899	1.154	83530	1.48	10	99.0	49.5	150.5	
Sb	123	1	He	2.063	2.063	1.232	17985	1.65	2	103.1	49.5	150.5	
Ba	137	1	He	4.912	4.912	3.320	20138	2.90	5	98.2	49.5	150.5	
W	182	1	He	9.887	9.887	1.572	128456	1.70	10	98.9	49.5	150.5	
Tl	205	1	He	1.808	1.808	0.957	55793	0.90	2	90.4	49.5	150.5	
Pb	208	1	He	0.988	0.988	0.979	41174	0.76	1	98.8	49.5	150.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3432006	1.28	3363927	102.02	70	120	
Sc	45	1	He	2583856	0.28	2596880	99.50	70	120	
Sc	45	2	NoGas	23627524	1.76	23550524	100.33	70	120	
Rh	103	1	He	4851961	0.39	4849688	100.05	70	120	
In	115	1	He	3271574	0.51	3270641	100.03	70	120	
Tb	159	1	He	5568847	0.36	5524253	100.81	70	120	
Ho	165	1	He	5424556	0.95	5317614	102.01	70	120	
Bi	209	1	He	3500186	0.39	3415965	102.47	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-182295/1-a
Data File Name	029_Blk.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T13:18:36-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	0.205	13.2	143299	0.5	2	
Be	9	45	2	NoGas	0.025	32.9	407	22.2	1	
B	11	45	2	NoGas	3.280	1.7	44718	1.5	20	
Na	23	45	1	He	101.570	0.1	415705	0.7	1000	
Mg	24	45	1	He	49.707	1.9	84594	1.4	1000	
Al	27	45	1	He	3.494	6.2	5336	3.7	50	
K	39	45	1	He	22.052	1.6	215705	0.7	1000	
Ca	44	45	1	He	203.740	2.1	26776	1.2	1000	
Ti	47	45	1	He	0.200	14.1	160	10.4	20	
V	51	45	1	He	0.903	2.5	33540	1.7	2	
Cr	52	45	1	He	1.681	1.8	38873	1.2	2	
Mn	55	45	1	He	0.146	11.0	6411	3.1	2	
Fe	56	45	1	He	18.844	5.5	312258	4.5	50	
Co	59	45	1	He	0.021	22.5	560	19.2	1	
Ni	60	45	1	He	0.176	7.2	1080	5.6	2	
Cu	63	45	1	He	0.825	3.9	13607	3.6	2	
Zn	66	45	1	He	11.923	0.7	38696	0.8	20	
As	75	115	1	He	0.203	2.5	1175	2.4	2	
Se	78	115	1	He	-0.160	-53.8	325	4.5	2	
Sr	88	103	1	He	0.342	2.5	7017	1.8	10	
Mo	95	103	1	He	0.116	41.4	981	35.0	2	
Ag	107	103	1	He	0.004	42.7	141	26.9	0.2	
Cd	111	115	1	He	-0.036	-75.4	4366	0.3	0.2	
Sn	118	115	1	He	0.686	5.5	7443	2.9	10	
Sb	123	115	1	He	0.070	12.8	842	10.1	2	
Ba	137	115	1	He	0.755	3.7	3039	4.4	5	
W	182	159	1	He	0.276	15.4	11438	6.0	10	
Tl	205	165	1	He	0.043	13.5	1427	12.5	0.5	
Pb	208	165	1	He	0.108	4.4	5307	3.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3238983	0.34	3363927	96.29	70	120	
Sc	45	1	He	2383925	0.63	2596880	91.80	70	120	
Sc	45	2	NoGas	22040892	0.82	23550524	93.59	70	120	
Rh	103	1	He	4713909	1.60	4849688	97.20	70	120	
In	115	1	He	3123690	1.79	3270641	95.51	70	120	
Tb	159	1	He	5489300	1.53	5524253	99.37	70	120	
Ho	165	1	He	5343360	0.58	5317614	100.48	70	120	
Bi	209	1	He	3624971	0.16	3415965	106.12	70	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-182295/3-a
Data File Name	030_LCS.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T13:22:16-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	2	NoGas	0.197	0.197	22.158	142336	1.09	1000	0.0	84.5	115.5	LCS Failed
Be	9	2	NoGas	998.840	998.840	1.131	10731078	2.06	1000	99.9	84.5	115.5	
B	11	2	NoGas	107.189	107.189	0.375	684172	1.92	100	107.2	84.5	115.5	
Na	23	1	He	9588.653	9588.653	2.021	28189696	0.64	10000	95.9	84.5	115.5	
Mg	24	1	He	9566.787	9566.787	1.752	16024255	0.48	10000	95.7	84.5	115.5	
Al	27	1	He	9178.979	9178.979	1.413	9614912	0.04	10000	91.8	84.5	115.5	
K	39	1	He	9343.681	9343.681	1.771	21882270	0.41	10000	93.4	84.5	115.5	
Ca	44	1	He	11953.717	11953.717	1.898	1335751	0.88	10000	119.5	84.5	115.5	LCS Failed
Ti	47	1	He	95.525	95.525	5.174	59777	3.79	100	95.5	84.5	115.5	
V	51	1	He	947.581	947.581	3.146	26589262	2.05	1000	94.8	84.5	115.5	
Cr	52	1	He	949.969	949.969	2.939	16100595	2.12	1000	95.0	84.5	115.5	
Mn	55	1	He	966.784	966.784	2.505	12424109	1.78	1000	96.7	84.5	115.5	
Fe	56	1	He	9735.792	9735.792	2.922	149476487	1.66	10000	97.4	84.5	115.5	
Co	59	1	He	995.804	995.804	2.641	22269237	1.45	1000	99.6	84.5	115.5	
Ni	60	1	He	1071.824	1071.824	2.583	5726087	1.33	1000	107.2	84.5	115.5	
Cu	63	1	He	1011.163	1011.163	3.545	14863311	2.24	1000	101.1	84.5	115.5	
Zn	66	1	He	1114.034	1114.034	2.289	3001173	0.93	1000	111.4	84.5	115.5	
As	75	1	He	968.449	968.449	0.188	2515371	0.14	1000	96.8	84.5	115.5	
Se	78	1	He	925.020	925.020	0.398	205104	0.52	1000	92.5	84.5	115.5	
Sr	88	1	He	861.841	861.841	0.994	15965402	0.87	1000	86.2	84.5	115.5	
Mo	95	1	He	97.328	97.328	1.373	641526	1.28	100	97.3	84.5	115.5	
Ag	107	1	He	100.736	100.736	0.292	1944778	0.30	100	100.7	84.5	115.5	
Cd	111	1	He	1065.025	1065.025	0.723	3265721	0.69	1000	106.5	84.5	115.5	
Sn	118	1	He	1103.155	1103.155	1.397	8238999	1.51	1000	110.3	84.5	115.5	
Sb	123	1	He	99.727	99.727	1.921	777899	2.01	100	99.7	84.5	115.5	
Ba	137	1	He	1040.086	1040.086	1.445	3853901	1.52	1000	104.0	84.5	115.5	
W	182	1	He	96.519	96.519	1.464	1146863	1.90	100	96.5	84.5	115.5	
Tl	205	1	He	239.393	239.393	1.460	7155178	1.80	250	95.8	84.5	115.5	
Pb	208	1	He	999.228	999.228	0.728	39422338	1.85	1000	99.9	84.5	115.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3220784	1.49	3363927	95.74	70	120	
Sc	45	1	He	2379399	1.37	2596880	91.63	70	120	
Sc	45	2	NoGas	21941810	1.76	23550524	93.17	70	120	
Rh	103	1	He	4517006	0.19	4849688	93.14	70	120	
In	115	1	He	2971699	0.13	3270641	90.86	70	120	
Tb	159	1	He	5404361	0.47	5524253	97.83	70	120	
Ho	165	1	He	5264681	1.60	5317614	99.00	70	120	
Bi	209	1	He	3353715	1.00	3415965	98.18	70	120	

Sample Report

Sample Table

Sample Name	240-51072-h-1-a
Data File Name	031SMPL.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T13:25:30-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	7.287	7.287	0.70	414628	0.00	10000	
Be	9	45	2	NoGas	0.102	0.102	9.39	1263	0.01	10000	
B	11	45	2	NoGas	68.546	68.546	1.04	456294	0.02	300	
Na	23	45	1	He	31149.290	31149.290	0.51	92247944	0.03	500000	
Mg	24	45	1	He	22114.467	22114.467	1.56	37420775	0.06	500000	
Al	27	45	1	He	45.189	45.189	1.35	49497	0.09	200000	
K	39	45	1	He	1787.129	1787.129	1.13	4361984	0.04	500000	
Ca	44	45	1	He	113056.689	113056.689	2.40	12726461	0.89	500000	
Ti	47	45	1	He	0.592	0.592	6.30	409	0.14	2500	
V	51	45	1	He	1.170	1.170	3.41	41376	0.00	10000	
Cr	52	45	1	He	1.702	1.702	2.70	39543	0.00	10000	
Mn	55	45	1	He	14.353	14.353	1.58	190820	0.01	10000	
Fe	56	45	1	He	64.474	64.474	2.13	1022439	0.01	200000	
Co	59	45	1	He	0.230	0.230	4.18	5298	0.00	10000	
Ni	60	45	1	He	0.815	0.815	4.85	4536	0.02	10000	
Cu	63	45	1	He	0.837	0.837	2.15	13891	0.01	10000	
Zn	66	45	1	He	0.030	0.030	498.95	6716	0.00	10000	
As	75	115	1	He	1.850	1.850	10.69	5421	0.03	10000	
Se	78	115	1	He	0.950	0.950	22.84	558	0.17	10000	
Sr	88	103	1	He	403.924	403.924	1.59	7320544	0.01	10000	
Mo	95	103	1	He	0.523	0.523	13.86	3545	0.01	2000	
Ag	107	103	1	He	0.021	0.021	15.59	443	0.00	300	
Cd	111	115	1	He	0.220	0.220	10.26	4968	0.00	4000	
Sn	118	115	1	He	1.425	1.425	7.04	12676	0.01	2000	
Sb	123	115	1	He	0.291	0.291	2.88	2535	0.01	200	
Ba	137	115	1	He	17.997	17.997	2.18	67162	0.03	10000	
W	182	159	1	He	0.841	0.841	14.05	18037	0.00	2500	
Tl	205	165	1	He	0.165	0.165	16.85	4998	0.00	5000	
Pb	208	165	1	He	0.126	0.126	11.68	5905	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3200845	0.54	3363927	95.15	70	120	
Sc	45	1	He	2403451	1.20	2596880	92.55	70	120	
Sc	45	2	NoGas	22433971	1.65	23550524	95.26	70	120	
Rh	103	1	He	4418977	0.78	4849688	91.12	70	120	
In	115	1	He	2989398	1.24	3270641	91.40	70	120	
Tb	159	1	He	5437634	2.56	5524253	98.43	70	120	
Ho	165	1	He	5232071	1.53	5317614	98.39	70	120	
Bi	209	1	He	3291965	1.01	3415965	96.37	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2012431
Data File Name	032_CCV.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T13:29:07-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	49.160	1.183	2072002	0.23	50	98.3	89.5	110.5	
Be	9	45	2	NoGas	51.649	0.889	586851	0.62	50	103.3	89.5	110.5	
B	11	45	2	NoGas	49.839	0.922	350136	1.64	50	99.7	89.5	110.5	
Na	23	45	1	He	24740.668	2.219	75204966	0.91	25000	99.0	89.5	110.5	
Mg	24	45	1	He	25035.220	1.343	43470343	1.04	25000	100.1	89.5	110.5	
Al	27	45	1	He	247.137	1.998	270023	0.76	250	98.9	89.5	110.5	
K	39	45	1	He	24768.160	2.340	59844029	0.35	25000	99.1	89.5	110.5	
Ca	44	45	1	He	25301.437	2.553	2926015	1.57	25000	101.2	89.5	110.5	
Ti	47	45	1	He	51.473	3.008	33411	0.97	50	102.9	89.5	110.5	
V	51	45	1	He	49.261	1.616	1441047	0.56	50	98.5	89.5	110.5	
Cr	52	45	1	He	49.011	1.242	871337	0.83	50	98.0	89.5	110.5	
Mn	55	45	1	He	258.167	2.374	3442355	0.34	250	103.3	89.5	110.5	
Fe	56	45	1	He	12599.164	0.430	200569748	1.59	12500	100.8	89.5	110.5	
Co	59	45	1	He	49.792	2.296	1154365	0.58	50	99.6	89.5	110.5	
Ni	60	45	1	He	52.254	2.144	289527	0.66	50	104.5	89.5	110.5	
Cu	63	45	1	He	49.068	1.893	749210	0.31	50	98.1	89.5	110.5	
Zn	66	45	1	He	51.373	1.859	149979	1.86	50	102.7	89.5	110.5	
As	75	115	1	He	48.977	3.357	132194	0.07	50	98.0	89.5	110.5	
Se	78	115	1	He	48.700	3.034	11511	1.04	50	97.4	89.5	110.5	
Sr	88	103	1	He	43.883	2.054	818707	0.88	50	87.8	89.5	110.5	CCV Failed
Mo	95	103	1	He	51.155	3.007	339486	1.69	50	102.3	89.5	110.5	
Ag	107	103	1	He	45.929	2.935	892462	0.09	50	91.9	89.5	110.5	
Cd	111	115	1	He	49.281	3.530	160552	0.37	50	98.6	89.5	110.5	
Sn	118	115	1	He	50.232	1.701	390235	1.74	50	100.5	89.5	110.5	
Sb	123	115	1	He	53.201	2.782	429523	0.64	50	106.4	89.5	110.5	
Ba	137	115	1	He	49.003	2.367	187997	1.11	50	98.0	89.5	110.5	
W	182	159	1	He	50.537	3.264	596217	1.07	50	101.1	89.5	110.5	
Tl	205	165	1	He	45.360	1.835	1334931	0.84	50	90.7	89.5	110.5	
Pb	208	165	1	He	47.371	1.902	1840840	0.06	50	94.7	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3280496	2.29	3363927	97.52	70	120	
Sc	45	1	He	2466709	2.01	2596880	94.99	70	120	
Sc	45	2	NoGas	23201339	1.12	23550524	98.52	70	120	
Rh	103	1	He	4548860	2.88	4849688	93.80	70	120	
In	115	1	He	3076941	3.39	3270641	94.08	70	120	
Tb	159	1	He	5335917	3.36	5524253	96.59	70	120	
Ho	165	1	He	5184243	1.87	5317614	97.49	70	120	
Bi	209	1	He	3293106	3.68	3415965	96.40	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	033_CCB.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T13:32:44-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	0.058	73.0	145006	0.9	2	
Be	9	45	2	NoGas	0.036	22.6	556	15.1	1	
B	11	45	2	NoGas	1.452	6.1	35153	2.2	20	
Na	23	45	1	He	-0.057	-4347.1	123564	1.5	1000	
Mg	24	45	1	He	1.414	29.6	3715	15.0	1000	
Al	27	45	1	He	0.103	75.1	1871	3.7	50	
K	39	45	1	He	1.296	284.3	175970	0.7	1000	
Ca	44	45	1	He	4.195	73.6	4729	3.1	1000	
Ti	47	45	1	He	0.080	32.5	89	15.6	20	
V	51	45	1	He	0.043	77.0	9837	6.7	2	
Cr	52	45	1	He	0.015	211.8	11146	1.2	2	
Mn	55	45	1	He	0.067	48.0	5667	3.1	2	
Fe	56	45	1	He	12.311	11.3	223564	13.7	50	
Co	59	45	1	He	0.014	12.2	429	12.6	1	
Ni	60	45	1	He	0.018	63.4	247	24.8	2	
Cu	63	45	1	He	0.056	8.1	2405	6.0	2	
Zn	66	45	1	He	0.202	60.5	7491	1.8	20	
As	75	115	1	He	0.148	16.6	1038	8.7	2	
Se	78	115	1	He	0.141	7.5	400	1.9	2	
Sr	88	103	1	He	0.015	3.6	699	1.2	10	
Mo	95	103	1	He	0.276	27.4	2113	26.9	2	
Ag	107	103	1	He	0.004	9.4	142	6.8	0.2	
Cd	111	115	1	He	0.015	256.0	4594	4.6	0.2	
Sn	118	115	1	He	0.338	4.2	4775	4.6	10	
Sb	123	115	1	He	0.085	11.0	976	10.1	2	
Ba	137	115	1	He	0.015	58.4	161	19.7	5	
W	182	159	1	He	0.673	9.7	16268	7.9	10	
Tl	205	165	1	He	0.065	11.7	2062	7.1	0.5	
Pb	208	165	1	He	0.031	27.6	2189	12.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3408451	0.65	3363927	101.32	70	120	
Sc	45	1	He	2510437	4.56	2596880	96.67	70	120	
Sc	45	2	NoGas	23192706	1.67	23550524	98.48	70	120	
Rh	103	1	He	4776691	2.46	4849688	98.49	70	120	
In	115	1	He	3166478	2.29	3270641	96.82	70	120	
Tb	159	1	He	5508318	3.42	5524253	99.71	70	120	
Ho	165	1	He	5270166	3.83	5317614	99.11	70	120	
Bi	209	1	He	3462729	3.51	3415965	101.37	70	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-2012498
Data File Name	034CRI.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T13:36:26-04:00
Sample Type	CRI
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	2	NoGas	8.622	8.622	1.918	477026	0.95	8	107.8	49.5	150.5	
Be	9	2	NoGas	1.054	1.054	6.295	12015	5.69	1	105.4	49.5	150.5	
B	11	2	NoGas	19.347	19.347	1.175	150346	0.78	20	96.7	49.5	150.5	
Na	23	1	He	1008.968	1008.968	0.993	3258668	1.01	1000	100.9	49.5	150.5	
Mg	24	1	He	1052.141	1052.141	1.499	1870800	1.27	1000	105.2	49.5	150.5	
Al	27	1	He	49.357	49.357	1.903	56606	1.19	50	98.7	49.5	150.5	
K	39	1	He	1020.252	1020.252	0.836	2690103	1.37	1000	102.0	49.5	150.5	
Ca	44	1	He	999.279	999.279	1.466	122377	1.04	1000	99.9	49.5	150.5	
Ti	47	1	He	10.036	10.036	6.420	6697	6.12	10	100.4	49.5	150.5	
V	51	1	He	3.686	3.686	0.609	118328	0.37	5	73.7	49.5	150.5	
Cr	52	1	He	1.978	1.978	1.125	46503	0.79	2	98.9	49.5	150.5	
Mn	55	1	He	4.751	4.751	1.387	69545	0.65	5	95.0	49.5	150.5	
Fe	56	1	He	108.226	108.226	1.487	1786511	1.15	100	108.2	49.5	150.5	
Co	59	1	He	1.041	1.041	2.496	24786	1.96	1	104.1	49.5	150.5	
Ni	60	1	He	2.242	2.242	2.391	12854	1.97	2	112.1	49.5	150.5	
Cu	63	1	He	2.096	2.096	1.005	34236	0.99	2	104.8	49.5	150.5	
Zn	66	1	He	20.483	20.483	1.295	65382	1.01	20	102.4	49.5	150.5	
As	75	1	He	4.831	4.831	1.658	14337	1.27	5	96.6	49.5	150.5	
Se	78	1	He	4.816	4.816	5.221	1540	3.44	5	96.3	49.5	150.5	
Sr	88	1	He	8.573	8.573	1.150	169160	0.79	10	85.7	49.5	150.5	
Mo	95	1	He	10.189	10.189	1.766	71527	0.47	10	101.9	49.5	150.5	
Ag	107	1	He	0.955	0.955	1.437	19635	0.13	1	95.5	49.5	150.5	
Cd	111	1	He	0.965	0.965	4.387	7881	1.31	1	96.5	49.5	150.5	
Sn	118	1	He	10.081	10.081	0.561	84301	0.53	10	100.8	49.5	150.5	
Sb	123	1	He	2.090	2.090	0.820	18066	0.29	2	104.5	49.5	150.5	
Ba	137	1	He	4.858	4.858	1.029	19753	0.50	5	97.2	49.5	150.5	
W	182	1	He	9.845	9.845	2.163	126523	2.17	10	98.4	49.5	150.5	
Tl	205	1	He	1.826	1.826	1.279	55651	0.45	2	91.3	49.5	150.5	
Pb	208	1	He	0.992	0.992	0.955	40807	0.97	1	99.2	49.5	150.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3387882	1.59	3363927	100.71	70	120	
Sc	45	1	He	2524054	0.66	2596880	97.20	70	120	
Sc	45	2	NoGas	23002772	1.03	23550524	97.67	70	120	
Rh	103	1	He	4800370	1.31	4849688	98.98	70	120	
In	115	1	He	3243819	0.52	3270641	99.18	70	120	
Tb	159	1	He	5507190	1.04	5524253	99.69	70	120	
Ho	165	1	He	5356409	0.99	5317614	100.73	70	120	
Bi	209	1	He	3456951	0.42	3415965	101.20	70	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-182340/2-a@10
Data File Name	035_LCS.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T13:40:05-04:00
Sample Type	LCSW
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	2	NoGas	99.234	99.234	0.697	3957319	1.31	1000	9.9	84.5	115.5	LCS Failed
Be	9	2	NoGas	5.366	5.366	3.024	59882	2.68	1000	0.5	84.5	115.5	LCS Failed
B	11	2	NoGas	101.850	101.850	1.241	675027	1.72	100	101.9	84.5	115.5	
Na	23	1	He	5028.737	5028.737	0.300	15344545	0.44	10000	50.3	84.5	115.5	LCS Failed
Mg	24	1	He	5086.560	5086.560	1.144	8809678	0.51	10000	50.9	84.5	115.5	LCS Failed
Al	27	1	He	207.918	207.918	1.845	226869	1.77	10000	2.1	84.5	115.5	LCS Failed
K	39	1	He	5065.433	5065.433	0.862	12343427	0.41	10000	50.7	84.5	115.5	LCS Failed
Ca	44	1	He	5078.858	5078.858	0.318	589207	0.45	10000	50.8	84.5	115.5	LCS Failed
Ti	47	1	He	102.637	102.637	1.305	66426	0.91	100	102.6	84.5	115.5	
V	51	1	He	36.036	36.036	0.282	1053723	0.44	1000	3.6	84.5	115.5	LCS Failed
Cr	52	1	He	19.852	19.852	0.618	358364	0.13	1000	2.0	84.5	115.5	LCS Failed
Mn	55	1	He	49.756	49.756	1.038	665569	0.75	1000	5.0	84.5	115.5	LCS Failed
Fe	56	1	He	108.250	108.250	0.862	1741597	1.41	10000	1.1	84.5	115.5	LCS Failed
Co	59	1	He	50.781	50.781	0.816	1174346	0.47	1000	5.1	84.5	115.5	LCS Failed
Ni	60	1	He	54.220	54.220	0.772	299659	0.42	1000	5.4	84.5	115.5	LCS Failed
Cu	63	1	He	25.337	25.337	0.796	386628	1.52	1000	2.5	84.5	115.5	LCS Failed
Zn	66	1	He	53.951	53.951	0.750	156743	0.16	1000	5.4	84.5	115.5	LCS Failed
As	75	1	He	188.129	188.129	0.863	523726	0.37	1000	18.8	84.5	115.5	LCS Failed
Se	78	1	He	190.139	190.139	1.327	45435	0.68	1000	19.0	84.5	115.5	LCS Failed
Sr	88	1	He	95.735	95.735	0.351	1830211	0.42	1000	9.6	84.5	115.5	LCS Failed
Mo	95	1	He	100.305	100.305	0.529	682164	0.46	100	100.3	84.5	115.5	
Ag	107	1	He	4.726	4.726	0.705	94179	0.64	100	4.7	84.5	115.5	LCS Failed
Cd	111	1	He	4.861	4.861	1.547	20505	0.32	1000	0.5	84.5	115.5	LCS Failed
Sn	118	1	He	224.091	224.091	0.685	1793866	1.36	1000	22.4	84.5	115.5	LCS Failed
Sb	123	1	He	50.945	50.945	0.938	425640	0.17	100	50.9	84.5	115.5	LCS Failed
Ba	137	1	He	188.338	188.338	0.604	747363	0.96	1000	18.8	84.5	115.5	LCS Failed
W	182	1	He	0.303	0.303	36.398	11649	10.66	100	0.3	84.5	115.5	LCS Failed
Tl	205	1	He	203.131	203.131	1.300	6094476	0.62	250	81.3	84.5	115.5	LCS Failed
Pb	208	1	He	47.804	47.804	1.238	1893997	0.26	1000	4.8	84.5	115.5	LCS Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3335860	0.75	3363927	99.17	70	120	
Sc	45	1	He	2459903	0.73	2596880	94.73	70	120	
Sc	45	2	NoGas	22740471	0.65	23550524	96.56	70	120	
Rh	103	1	He	4660558	0.10	4849688	96.10	70	120	
In	115	1	He	3182188	0.93	3270641	97.30	70	120	
Tb	159	1	He	5437459	0.90	5524253	98.43	70	120	
Ho	165	1	He	5284898	1.04	5317614	99.38	70	120	
Bi	209	1	He	3427560	0.57	3415965	100.34	70	120	

Sample Report

Sample Table

Sample Name	240-50354-b-3-d
Data File Name	036SMPL.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T13:43:43-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	11.170	11.170	2.34	542838	0.00	10000	
Be	9	45	2	NoGas	0.028	0.028	15.53	433	0.01	10000	
B	11	45	2	NoGas	49.041	49.041	1.32	322204	0.02	300	
Na	23	45	1	He	120954.025	120954.025	2.02	338905268	0.04	500000	
Mg	24	45	1	He	16049.678	16049.678	2.08	25718005	0.06	500000	
Al	27	45	1	He	1.704	1.704	5.13	3304	0.05	200000	
K	39	45	1	He	2893.468	2893.468	1.08	6591972	0.04	500000	
Ca	44	45	1	He	38022.692	38022.692	1.13	4056791	0.94	500000	
Ti	47	45	1	He	0.469	0.469	14.35	314	0.15	2500	
V	51	45	1	He	1.273	1.273	3.44	41952	0.00	10000	
Cr	52	45	1	He	1.961	1.961	3.12	41658	0.00	10000	
Mn	55	45	1	He	0.265	0.265	11.45	7578	0.00	10000	
Fe	56	45	1	He	15.893	15.893	6.50	254798	0.01	200000	
Co	59	45	1	He	0.060	0.060	2.19	1375	0.00	10000	
Ni	60	45	1	He	1.456	1.456	5.53	7569	0.02	10000	
Cu	63	45	1	He	13.633	13.633	2.98	193108	0.01	10000	
Zn	66	45	1	He	71.033	71.033	2.54	188953	0.04	10000	
As	75	115	1	He	1.704	1.704	7.78	4885	0.03	10000	
Se	78	115	1	He	0.552	0.552	30.59	455	0.12	10000	
Sr	88	103	1	He	108.739	108.739	2.61	1899479	0.01	10000	
Mo	95	103	1	He	1.516	1.516	13.02	9585	0.02	2000	
Ag	107	103	1	He	0.017	0.017	22.86	349	0.00	300	
Cd	111	115	1	He	0.025	0.025	38.54	4229	0.00	4000	
Sn	118	115	1	He	2.868	2.868	7.33	22772	0.01	2000	
Sb	123	115	1	He	0.312	0.312	11.71	2616	0.01	200	
Ba	137	115	1	He	20.349	20.349	2.57	73557	0.03	10000	
W	182	159	1	He	0.094	0.094	79.07	8740	0.00	2500	
Tl	205	165	1	He	0.226	0.226	12.02	6566	0.00	5000	
Pb	208	165	1	He	0.507	0.507	2.29	20099	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3113348	0.95	3363927	92.55	70	120	
Sc	45	1	He	2276531	1.78	2596880	87.66	70	120	
Sc	45	2	NoGas	21674785	1.61	23550524	92.04	70	120	
Rh	103	1	He	4259321	1.12	4849688	87.83	70	120	
In	115	1	He	2895913	0.98	3270641	88.54	70	120	
Tb	159	1	He	5184728	0.93	5524253	93.85	70	120	
Ho	165	1	He	5044804	0.15	5317614	94.87	70	120	
Bi	209	1	He	3260927	0.30	3415965	95.46	70	120	

Sample Report

Sample Table

Sample Name	240-50354-b-4-d
Data File Name	037SMPL.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T13:47:23-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	10.843	10.843	1.07	524942	0.00	10000	
Be	9	45	2	NoGas	0.018	0.018	50.86	326	0.01	10000	
B	11	45	2	NoGas	44.423	44.423	1.00	290840	0.02	300	
Na	23	45	1	He	115144.692	115144.692	0.36	322860609	0.04	500000	
Mg	24	45	1	He	15684.677	15684.677	0.69	25151440	0.06	500000	
Al	27	45	1	He	0.939	0.939	11.54	2538	0.04	200000	
K	39	45	1	He	2792.981	2792.981	0.99	6372427	0.04	500000	
Ca	44	45	1	He	36703.390	36703.390	1.45	3918597	0.94	500000	
Ti	47	45	1	He	0.271	0.271	31.92	196	0.14	2500	
V	51	45	1	He	1.264	1.264	3.81	41735	0.00	10000	
Cr	52	45	1	He	1.936	1.936	0.90	41273	0.00	10000	
Mn	55	45	1	He	0.212	0.212	8.32	6930	0.00	10000	
Fe	56	45	1	He	14.296	14.296	4.15	231553	0.01	200000	
Co	59	45	1	He	0.049	0.049	6.37	1140	0.00	10000	
Ni	60	45	1	He	2.192	2.192	1.46	11344	0.02	10000	
Cu	63	45	1	He	20.976	20.976	1.80	296598	0.01	10000	
Zn	66	45	1	He	26.796	26.796	1.10	75249	0.04	10000	
As	75	115	1	He	1.298	1.298	1.69	3864	0.03	10000	
Se	78	115	1	He	0.051	0.051	111.98	347	0.01	10000	
Sr	88	103	1	He	105.122	105.122	1.65	1840785	0.01	10000	
Mo	95	103	1	He	1.014	1.014	3.07	6481	0.02	2000	
Ag	107	103	1	He	0.011	0.011	5.96	243	0.00	300	
Cd	111	115	1	He	-0.020	-0.020	-79.88	4103	0.00	4000	
Sn	118	115	1	He	1.118	1.118	1.05	10055	0.01	2000	
Sb	123	115	1	He	0.248	0.248	7.78	2137	0.01	200	
Ba	137	115	1	He	19.755	19.755	1.44	71515	0.03	10000	
W	182	159	1	He	0.025	0.025	230.32	8113	0.00	2500	
Tl	205	165	1	He	0.041	0.041	2.84	1299	0.00	5000	
Pb	208	165	1	He	3.665	3.665	0.32	141151	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3083378	0.88	3363927	91.66	70	120	
Sc	45	1	He	2277665	0.15	2596880	87.71	70	120	
Sc	45	2	NoGas	21430941	1.08	23550524	91.00	70	120	
Rh	103	1	He	4269357	0.73	4849688	88.03	70	120	
In	115	1	He	2899915	1.20	3270641	88.67	70	120	
Tb	159	1	He	5277444	1.20	5524253	95.53	70	120	
Ho	165	1	He	5105067	0.89	5317614	96.00	70	120	
Bi	209	1	He	3217552	1.24	3415965	94.19	70	120	

Sample Report

Sample Table

Sample Name	240-50354-b-5-d
Data File Name	038SMPL.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T13:51:02-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	0.161	0.161	20.18	140652	0.00	10000	
Be	9	45	2	NoGas	0.010	0.010	46.34	244	0.00	10000	
B	11	45	2	NoGas	2.749	2.749	7.95	41143	0.01	300	
Na	23	45	1	He	21.134	21.134	21.12	171827	0.01	500000	
Mg	24	45	1	He	1.691	1.691	32.16	3834	0.04	500000	
Al	27	45	1	He	1.795	1.795	5.67	3400	0.05	200000	
K	39	45	1	He	0.455	0.455	343.19	158203	0.00	500000	
Ca	44	45	1	He	-13.427	-13.427	-2.44	2424	-0.55	500000	
Ti	47	45	1	He	0.157	0.157	44.13	128	0.12	2500	
V	51	45	1	He	1.136	1.136	2.78	38334	0.00	10000	
Cr	52	45	1	He	1.993	1.993	0.52	42250	0.00	10000	
Mn	55	45	1	He	-0.167	-0.167	-3.24	2274	-0.01	10000	
Fe	56	45	1	He	4.289	4.289	4.70	84605	0.01	200000	
Co	59	45	1	He	0.017	0.017	15.31	447	0.00	10000	
Ni	60	45	1	He	0.208	0.208	6.22	1196	0.02	10000	
Cu	63	45	1	He	0.664	0.664	3.21	10749	0.01	10000	
Zn	66	45	1	He	0.291	0.291	47.77	7040	0.00	10000	
As	75	115	1	He	0.240	0.240	9.10	1245	0.02	10000	
Se	78	115	1	He	-0.123	-0.123	-38.33	326	-0.04	10000	
Sr	88	103	1	He	0.043	0.043	15.24	1199	0.00	10000	
Mo	95	103	1	He	0.071	0.071	39.05	656	0.01	2000	
Ag	107	103	1	He	0.004	0.004	28.73	127	0.00	300	
Cd	111	115	1	He	-0.052	-0.052	-52.27	4216	0.00	4000	
Sn	118	115	1	He	0.633	0.633	14.28	6865	0.01	2000	
Sb	123	115	1	He	0.054	0.054	17.43	692	0.01	200	
Ba	137	115	1	He	0.075	0.075	10.33	383	0.02	10000	
W	182	159	1	He	0.011	0.011	295.04	8051	0.00	2500	
Tl	205	165	1	He	0.030	0.030	7.89	988	0.00	5000	
Pb	208	165	1	He	0.044	0.044	8.75	2683	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3208806	1.41	3363927	95.39	70	120	
Sc	45	1	He	2280594	1.31	2596880	87.82	70	120	
Sc	45	2	NoGas	21884489	0.75	23550524	92.93	70	120	
Rh	103	1	He	4587907	0.57	4849688	94.60	70	120	
In	115	1	He	3051856	0.60	3270641	93.31	70	120	
Tb	159	1	He	5346873	0.85	5524253	96.79	70	120	
Ho	165	1	He	5170735	1.34	5317614	97.24	70	120	
Bi	209	1	He	3552334	1.51	3415965	103.99	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	mb 240-182339/1-a@2
Data File Name	039_Blk.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T13:54:44-04:00
Sample Type	Blank
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	0.196	22.3	140792	0.9	2	
Be	9	45	2	NoGas	0.012	22.5	263	10.6	1	
B	11	45	2	NoGas	1.037	14.7	30378	2.2	20	
Na	23	45	1	He	38.378	2.0	225614	0.4	1000	
Mg	24	45	1	He	19.728	5.2	33587	5.0	1000	
Al	27	45	1	He	3.804	3.5	5548	3.1	50	
K	39	45	1	He	17.498	4.0	200922	1.2	1000	
Ca	44	45	1	He	57.394	2.7	10227	1.5	1000	
Ti	47	45	1	He	0.149	30.5	126	22.9	20	
V	51	45	1	He	0.989	0.9	35216	1.2	2	
Cr	52	45	1	He	1.705	1.6	38484	0.8	2	
Mn	55	45	1	He	0.270	10.7	7836	4.7	2	
Fe	56	45	1	He	11.333	3.2	192749	2.4	50	
Co	59	45	1	He	0.019	11.9	504	9.6	1	
Ni	60	45	1	He	0.204	6.4	1206	5.4	2	
Cu	63	45	1	He	0.537	5.6	9178	4.4	2	
Zn	66	45	1	He	2.724	2.6	13632	0.9	20	
As	75	115	1	He	0.193	16.8	1121	7.8	2	
Se	78	115	1	He	-0.111	-40.4	329	2.8	2	
Sr	88	103	1	He	0.145	2.2	3153	2.2	10	
Mo	95	103	1	He	0.080	25.6	721	20.2	2	
Ag	107	103	1	He	0.003	38.5	119	21.4	0.2	
Cd	111	115	1	He	-0.068	-22.5	4172	2.3	0.2	
Sn	118	115	1	He	19.648	2.6	152888	2.0	10	Blank Failed
Sb	123	115	1	He	0.043	16.6	602	9.5	2	
Ba	137	115	1	He	0.384	6.7	1563	7.5	5	
W	182	159	1	He	0.017	429.5	8325	9.9	10	
Tl	205	165	1	He	0.022	4.3	756	4.0	0.5	
Pb	208	165	1	He	0.101	12.0	4977	9.4	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3272443	1.12	3363927	97.28	70	120	
Sc	45	1	He	2335354	0.63	2596880	89.93	70	120	
Sc	45	2	NoGas	21710419	0.96	23550524	92.19	70	120	
Rh	103	1	He	4628912	1.22	4849688	95.45	70	120	
In	115	1	He	3056471	1.21	3270641	93.45	70	120	
Tb	159	1	He	5485820	0.77	5524253	99.30	70	120	
Ho	165	1	He	5264285	0.38	5317614	99.00	70	120	
Bi	209	1	He	3798602	3.84	3415965	111.20	70	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	lcs 240-182339/2-a@2
Data File Name	040LCSS.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T13:58:24-04:00
Sample Type	LCSS
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	2	NoGas	0.157	0.157	17.931	137226	1.48	500	0.0	79.5	120.5	LCSS Failed
Be	9	2	NoGas	482.713	482.713	0.835	5052333	0.25	500	96.5	78.6	110.5	
B	11	2	NoGas	52.572	52.572	1.291	338970	0.77	50	105.1	79.5	120.5	
Na	23	1	He	4796.947	4796.947	1.714	13475251	0.48	5000	95.9	79.5	120.5	
Mg	24	1	He	4807.110	4807.110	2.689	7661652	1.61	5000	96.1	79.5	120.5	
Al	27	1	He	4650.151	4650.151	1.664	4635581	0.47	5000	93.0	79.5	120.5	
K	39	1	He	4683.512	4683.512	2.098	10514793	1.35	5000	93.7	79.5	120.5	
Ca	44	1	He	5545.730	5545.730	1.530	591732	0.66	5000	110.9	79.5	120.5	
Ti	47	1	He	48.462	48.462	1.097	28884	1.08	50	96.9	79.5	120.5	
V	51	1	He	470.714	470.714	1.689	12573317	0.63	500	94.1	71.5	110.5	
Cr	52	1	He	478.787	478.787	1.353	7727007	0.66	500	95.8	69.5	110.5	
Mn	55	1	He	490.573	490.573	2.359	6000653	1.17	500	98.1	79.5	120.5	
Fe	56	1	He	4983.856	4983.856	2.101	72825037	0.87	5000	99.7	79.5	120.5	
Co	59	1	He	504.665	504.665	2.619	10738851	1.43	500	100.9	73.9	110.5	
Ni	60	1	He	550.378	550.378	0.953	2798265	0.52	500	110.1	74.9	110.5	
Cu	63	1	He	511.234	511.234	1.903	7152229	0.76	500	102.2	72.6	110.5	
Zn	66	1	He	498.737	498.737	1.881	1281957	0.66	500	99.7	71.5	113.4	
As	75	1	He	425.272	425.272	1.389	1096156	0.93	500	85.1	73.4	110.5	
Se	78	1	He	423.313	423.313	1.174	93304	0.74	500	84.7	64.6	110.5	
Sr	88	1	He	418.804	418.804	2.299	7679804	0.67	500	83.8	79.5	120.5	
Mo	95	1	He	47.349	47.349	1.693	309040	0.04	50	94.7	29.5	140.5	
Ag	107	1	He	43.899	43.899	1.803	838970	0.09	50	87.8	59.5	114.5	
Cd	111	1	He	457.764	457.764	1.531	1394956	1.06	500	91.6	73.5	110.5	
Sn	118	1	He	569.092	569.092	1.714	4217527	1.26	50	1138.2	79.5	120.5	LCSS Failed
Sb	123	1	He	48.005	48.005	1.712	371613	1.25	50	96.0	67.5	113.4	
Ba	137	1	He	518.857	518.857	1.795	1907379	1.50	500	103.8	69.5	110.5	
W	182	1	He	47.935	47.935	1.057	570557	0.94	50	95.9	74.6	125.4	
Tl	205	1	He	121.936	121.936	0.670	3602664	0.54	125	97.5	70.6	110.5	
Pb	208	1	He	511.449	511.449	0.787	19945203	0.49	500	102.3	74.6	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3179030	0.88	3363927	94.50	70	120	
Sc	45	1	He	2264040	1.25	2596880	87.18	70	120	
Sc	45	2	NoGas	21376612	0.83	23550524	90.77	70	120	
Rh	103	1	He	4472338	1.71	4849688	92.22	70	120	
In	115	1	He	2948311	0.49	3270641	90.14	70	120	
Tb	159	1	He	5375897	0.21	5524253	97.31	70	120	
Ho	165	1	He	5204103	1.02	5317614	97.87	70	120	
Bi	209	1	He	3471591	1.44	3415965	101.63	70	120	

Sample Report

Sample Table

Sample Name	240-50650-a-1-b@2
Data File Name	041SMPL.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T14:01:52-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	59.464	59.464	0.69	2366109	0.00	10000	
Be	9	45	2	NoGas	3.625	3.625	3.09	39487	0.01	10000	
B	11	45	2	NoGas	16.865	16.865	2.45	129441	0.01	300	
Na	23	45	1	He	200.310	200.310	3.88	696548	0.03	500000	
Mg	24	45	1	He	9606.299	9606.299	3.70	15920299	0.06	500000	
Al	27	45	1	He	51652.139	51652.139	2.26	53536530	0.10	200000	
K	39	45	1	He	3053.160	3053.160	1.64	7186545	0.04	500000	
Ca	44	45	1	He	18141.954	18141.954	1.18	2004575	0.91	500000	
Ti	47	45	1	He	495.813	495.813	2.40	307001	0.16	2500	
V	51	45	1	He	98.826	98.826	3.10	2751594	0.00	10000	
Cr	52	45	1	He	91.044	91.044	3.70	1536059	0.01	10000	
Mn	55	45	1	He	5063.551	5063.551	3.26	64369717	0.01	10000	
Fe	56	45	1	He	108104.887	108104.887	2.96	1642359188	0.01	200000	
Co	59	45	1	He	45.435	45.435	3.37	1005522	0.00	10000	
Ni	60	45	1	He	104.192	104.192	3.29	550943	0.02	10000	
Cu	63	45	1	He	62.686	62.686	2.98	913290	0.01	10000	
Zn	66	45	1	He	352.234	352.234	3.25	943442	0.04	10000	
As	75	115	1	He	59.985	59.985	0.58	154429	0.04	10000	
Se	78	115	1	He	5.849	5.849	3.42	1619	0.36	10000	
Sr	88	103	1	He	62.763	62.763	0.64	1128983	0.01	10000	
Mo	95	103	1	He	8.133	8.133	0.85	52193	0.02	2000	
Ag	107	103	1	He	0.279	0.279	3.45	5273	0.01	300	
Cd	111	115	1	He	1.376	1.376	2.25	8372	0.02	4000	
Sn	118	115	1	He	14.048	14.048	1.23	105540	0.01	2000	
Sb	123	115	1	He	1.163	1.163	4.10	9209	0.01	200	
Ba	137	115	1	He	454.623	454.623	0.38	1663852	0.03	10000	
W	182	159	1	He	0.923	0.923	5.37	18804	0.00	2500	
Tl	205	165	1	He	0.941	0.941	3.11	28400	0.00	5000	
Pb	208	165	1	He	148.690	148.690	1.33	5899540	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3164948	0.16	3363927	94.08	70	120	
Sc	45	1	He	2355283	2.43	2596880	90.70	70	120	
Sc	45	2	NoGas	22166703	0.67	23550524	94.12	70	120	
Rh	103	1	He	4384976	1.11	4849688	90.42	70	120	
In	115	1	He	2935120	0.21	3270641	89.74	70	120	
Tb	159	1	He	5378350	1.00	5524253	97.36	70	120	
Ho	165	1	He	5294833	2.11	5317614	99.57	70	120	
Bi	209	1	He	3422389	1.21	3415965	100.19	70	120	

Sample Report

Sample Table

Sample Name	SD 240-50650-a-1-b@10
Data File Name	042SMPL.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T14:05:26-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	12.426	12.426	1.47	672853	0.00	10000	
Be	9	45	2	NoGas	0.766	0.766	2.03	9440	0.01	10000	
B	11	45	2	NoGas	3.446	3.446	4.76	51390	0.01	300	
Na	23	45	1	He	37.593	37.593	2.62	231764	0.02	500000	
Mg	24	45	1	He	1998.064	1998.064	0.98	3409820	0.06	500000	
Al	27	45	1	He	10777.544	10777.544	2.07	11498088	0.09	200000	
K	39	45	1	He	646.211	646.211	1.75	1696911	0.04	500000	
Ca	44	45	1	He	3547.986	3547.986	1.23	406698	0.87	500000	
Ti	47	45	1	He	102.382	102.382	0.59	65281	0.16	2500	
V	51	45	1	He	19.863	19.863	1.10	575855	0.00	10000	
Cr	52	45	1	He	17.717	17.717	1.11	316175	0.01	10000	
Mn	55	45	1	He	1036.613	1036.613	1.18	13568352	0.01	10000	
Fe	56	45	1	He	22237.872	22237.872	1.67	347766671	0.01	200000	
Co	59	45	1	He	9.401	9.401	0.37	214247	0.00	10000	
Ni	60	45	1	He	21.947	21.947	0.95	119568	0.02	10000	
Cu	63	45	1	He	13.256	13.256	0.73	199959	0.01	10000	
Zn	66	45	1	He	74.427	74.427	0.97	210475	0.04	10000	
As	75	115	1	He	12.119	12.119	1.08	33833	0.04	10000	
Se	78	115	1	He	0.948	0.948	12.00	585	0.16	10000	
Sr	88	103	1	He	12.283	12.283	1.32	240179	0.01	10000	
Mo	95	103	1	He	1.548	1.548	2.96	10932	0.01	2000	
Ag	107	103	1	He	0.053	0.053	6.07	1127	0.00	300	
Cd	111	115	1	He	0.256	0.256	7.96	5327	0.00	4000	
Sn	118	115	1	He	2.495	2.495	2.84	21733	0.01	2000	
Sb	123	115	1	He	0.226	0.226	1.98	2126	0.01	200	
Ba	137	115	1	He	80.502	80.502	1.16	314875	0.03	10000	
W	182	159	1	He	0.120	0.120	56.66	9811	0.00	2500	
Tl	205	165	1	He	0.198	0.198	5.81	6280	0.00	5000	
Pb	208	165	1	He	28.330	28.330	0.50	1165963	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3565278	0.81	3363927	105.99	70	120	
Sc	45	1	He	2423342	1.04	2596880	93.32	70	120	
Sc	45	2	NoGas	24762304	0.62	23550524	105.15	70	120	
Rh	103	1	He	4760581	1.51	4849688	98.16	70	120	
In	115	1	He	3136239	0.94	3270641	95.89	70	120	
Tb	159	1	He	5630462	0.78	5524253	101.92	70	120	
Ho	165	1	He	5487430	0.59	5317614	103.19	70	120	
Bi	209	1	He	3620813	1.61	3415965	106.00	70	120	

Sample Report

Sample Table

Sample Name	PDS 240-50650-a-1-b@2
Data File Name	043SMPL.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T14:09:04-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	53.330	53.330	2.00	2502446	0.00	10000	
Be	9	45	2	NoGas	900.093	900.093	1.32	11445366	0.01	10000	
B	11	45	2	NoGas	113.874	113.874	1.35	858476	0.01	300	
Na	23	45	1	He	9679.551	9679.551	0.22	33591756	0.03	500000	
Mg	24	45	1	He	19000.820	19000.820	0.84	37569665	0.05	500000	
Al	27	45	1	He	60665.159	60665.159	0.55	75000279	0.08	200000	
K	39	45	1	He	12654.561	12654.561	0.53	34915149	0.04	500000	
Ca	44	45	1	He	29334.657	29334.657	0.87	3862368	0.76	500000	
Ti	47	45	1	He	580.741	580.741	0.70	428949	0.14	2500	
V	51	45	1	He	1001.405	1001.405	0.25	33173600	0.00	10000	
Cr	52	45	1	He	992.920	992.920	0.23	19866398	0.00	10000	
Mn	55	45	1	He	5735.938	5735.938	0.43	86993150	0.01	10000	
Fe	56	45	1	He	109590.191	109590.191	0.45	1986227548	0.01	200000	
Co	59	45	1	He	965.921	965.921	0.82	25502640	0.00	10000	
Ni	60	45	1	He	1079.316	1079.316	0.69	6807476	0.02	10000	
Cu	63	45	1	He	965.448	965.448	0.96	16753887	0.01	10000	
Zn	66	45	1	He	1317.768	1317.768	0.75	4189626	0.03	10000	
As	75	115	1	He	1077.183	1077.183	1.50	2943955	0.04	10000	
Se	78	115	1	He	947.913	947.913	1.23	221157	0.43	10000	
Sr	88	103	1	He	1036.464	1036.464	0.99	19268724	0.01	10000	
Mo	95	103	1	He	112.947	112.947	0.85	747099	0.02	2000	
Ag	107	103	1	He	101.803	101.803	1.43	1972479	0.01	300	
Cd	111	115	1	He	1038.940	1038.940	1.72	3352444	0.03	4000	
Sn	118	115	1	He	1129.803	1129.803	1.53	8879186	0.01	2000	
Sb	123	115	1	He	99.836	99.836	1.44	819427	0.01	200	
Ba	137	115	1	He	1469.682	1469.682	1.88	5729940	0.03	10000	
W	182	159	1	He	95.294	95.294	0.59	1120433	0.01	2500	
Tl	205	165	1	He	235.662	235.662	0.87	6890256	0.00	5000	
Pb	208	165	1	He	1126.822	1126.822	0.06	43488847	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3395786	0.68	3363927	100.95	70	120	
Sc	45	1	He	2808387	1.31	2596880	108.14	70	120	
Sc	45	2	NoGas	25973031	1.58	23550524	110.29	70	120	
Rh	103	1	He	4532714	1.43	4849688	93.46	70	120	
In	115	1	He	3127180	1.11	3270641	95.61	70	120	
Tb	159	1	He	5347477	1.92	5524253	96.80	70	120	
Ho	165	1	He	5150213	1.70	5317614	96.85	70	120	
Bi	209	1	He	3215270	0.94	3415965	94.12	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2012431
Data File Name	044_CCV.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T14:12:18-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	49.073	1.902	2217501	1.58	50	98.1	89.5	110.5	
Be	9	45	2	NoGas	50.464	0.872	614662	0.78	50	100.9	89.5	110.5	
B	11	45	2	NoGas	49.868	0.957	375524	1.15	50	99.7	89.5	110.5	
Na	23	45	1	He	24756.793	0.670	84341932	1.29	25000	99.0	89.5	110.5	
Mg	24	45	1	He	24790.854	0.111	48238063	0.78	25000	99.2	89.5	110.5	
Al	27	45	1	He	245.892	0.472	301115	1.35	250	98.4	89.5	110.5	
K	39	45	1	He	24929.184	0.888	67509918	1.61	25000	99.7	89.5	110.5	
Ca	44	45	1	He	25008.059	1.149	3241575	2.02	25000	100.0	89.5	110.5	
Ti	47	45	1	He	50.066	1.633	36427	1.53	50	100.1	89.5	110.5	
V	51	45	1	He	47.290	0.433	1550689	0.53	50	94.6	89.5	110.5	
Cr	52	45	1	He	47.034	0.155	937532	0.76	50	94.1	89.5	110.5	
Mn	55	45	1	He	248.161	0.588	3708758	0.60	250	99.3	89.5	110.5	
Fe	56	45	1	He	12350.393	2.328	220272733	1.44	12500	98.8	89.5	110.5	
Co	59	45	1	He	47.141	0.667	1224867	0.62	50	94.3	89.5	110.5	
Ni	60	45	1	He	49.584	1.075	307906	1.09	50	99.2	89.5	110.5	
Cu	63	45	1	He	46.451	0.398	794955	0.96	50	92.9	89.5	110.5	
Zn	66	45	1	He	48.662	0.281	159597	0.79	50	97.3	89.5	110.5	
As	75	115	1	He	49.206	1.380	141261	0.44	50	98.4	89.5	110.5	
Se	78	115	1	He	49.206	0.981	12366	0.51	50	98.4	89.5	110.5	
Sr	88	103	1	He	43.958	0.685	874266	0.38	50	87.9	89.5	110.5	CCV Failed
Mo	95	103	1	He	50.466	0.963	357066	0.95	50	100.9	89.5	110.5	
Ag	107	103	1	He	44.717	0.741	926478	0.82	50	89.4	89.5	110.5	CCV Failed
Cd	111	115	1	He	48.170	1.372	167030	0.77	50	96.3	89.5	110.5	
Sn	118	115	1	He	49.697	1.060	410518	0.38	50	99.4	89.5	110.5	
Sb	123	115	1	He	51.343	1.629	440851	0.58	50	102.7	89.5	110.5	
Ba	137	115	1	He	47.810	2.056	195040	1.03	50	95.6	89.5	110.5	
W	182	159	1	He	49.062	0.992	604373	0.81	50	98.1	89.5	110.5	
Tl	205	165	1	He	43.330	0.679	1326937	0.57	50	86.7	89.5	110.5	CCV Failed
Pb	208	165	1	He	45.535	0.625	1841389	0.44	50	91.1	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3514528	1.51	3363927	104.48	70	120	
Sc	45	1	He	2763809	0.88	2596880	106.43	70	120	
Sc	45	2	NoGas	24870372	0.49	23550524	105.60	70	120	
Rh	103	1	He	4847480	0.48	4849688	99.95	70	120	
In	115	1	He	3270574	1.05	3270641	100.00	70	120	
Tb	159	1	He	5565546	0.70	5524253	100.75	70	120	
Ho	165	1	He	5393538	0.44	5317614	101.43	70	120	
Bi	209	1	He	3355512	0.69	3415965	98.23	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	045_CCB.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T14:15:54-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.009	-590.4	148003	1.0	2	
Be	9	45	2	NoGas	0.062	15.3	882	12.6	1	
B	11	45	2	NoGas	0.495	40.5	30063	4.1	20	
Na	23	45	1	He	3.261	22.3	139225	1.5	1000	
Mg	24	45	1	He	1.110	25.2	3323	15.0	1000	
Al	27	45	1	He	0.946	8.7	2912	2.3	50	
K	39	45	1	He	0.316	111.5	180563	0.7	1000	
Ca	44	45	1	He	11.840	5.2	5857	0.4	1000	
Ti	47	45	1	He	0.150	28.9	141	21.9	20	
V	51	45	1	He	0.045	53.9	10291	8.0	2	
Cr	52	45	1	He	-0.005	-105.8	11217	0.5	2	
Mn	55	45	1	He	0.142	15.0	6946	3.9	2	
Fe	56	45	1	He	15.794	12.1	290374	11.5	50	
Co	59	45	1	He	0.016	11.5	490	8.5	1	
Ni	60	45	1	He	0.032	25.2	334	13.0	2	
Cu	63	45	1	He	0.096	9.4	3138	4.3	2	
Zn	66	45	1	He	0.208	37.0	7808	2.6	20	
As	75	115	1	He	0.177	21.0	1150	9.1	2	
Se	78	115	1	He	0.168	33.5	418	2.2	2	
Sr	88	103	1	He	0.011	11.4	637	4.7	10	
Mo	95	103	1	He	0.266	37.6	2059	33.6	2	
Ag	107	103	1	He	0.005	66.3	147	43.5	0.2	
Cd	111	115	1	He	0.080	24.6	4942	1.7	0.2	
Sn	118	115	1	He	0.348	16.3	4994	9.0	10	
Sb	123	115	1	He	0.082	12.5	979	9.2	2	
Ba	137	115	1	He	0.032	41.4	232	23.0	5	
W	182	159	1	He	0.629	11.4	15627	5.6	10	
Tl	205	165	1	He	0.091	7.6	2831	6.7	0.5	
Pb	208	165	1	He	0.033	11.8	2275	6.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3430347	1.64	3363927	101.97	70	120	
Sc	45	1	He	2607594	0.99	2596880	100.41	70	120	
Sc	45	2	NoGas	24106075	0.46	23550524	102.36	70	120	
Rh	103	1	He	4839208	0.80	4849688	99.78	70	120	
In	115	1	He	3257104	1.04	3270641	99.59	70	120	
Tb	159	1	He	5475612	1.46	5524253	99.12	70	120	
Ho	165	1	He	5269573	0.69	5317614	99.10	70	120	
Bi	209	1	He	3416004	1.08	3415965	100.00	70	120	

Sample Report

Sample Table

Sample Name	240-50650-a-1-c du@2
Data File Name	046SMPL.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T14:19:37-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	55.423	55.423	1.35	2372917	0.00	10000	
Be	9	45	2	NoGas	3.526	3.526	1.55	41150	0.01	10000	
B	11	45	2	NoGas	14.287	14.287	4.45	121509	0.01	300	
Na	23	45	1	He	192.908	192.908	1.07	734076	0.03	500000	
Mg	24	45	1	He	9230.344	9230.344	0.92	16635262	0.06	500000	
Al	27	45	1	He	50022.959	50022.959	1.20	56369676	0.09	200000	
K	39	45	1	He	2927.046	2927.046	1.21	7496963	0.04	500000	
Ca	44	45	1	He	15220.376	15220.376	1.70	1828848	0.83	500000	
Ti	47	45	1	He	464.610	464.610	0.59	312782	0.15	2500	
V	51	45	1	He	92.299	92.299	0.23	2794837	0.00	10000	
Cr	52	45	1	He	81.733	81.733	0.79	1500704	0.01	10000	
Mn	55	45	1	He	5007.727	5007.727	0.96	69223395	0.01	10000	
Fe	56	45	1	He	99322.778	99322.778	0.63	1640718833	0.01	200000	
Co	59	45	1	He	43.142	43.142	0.55	1038216	0.00	10000	
Ni	60	45	1	He	99.183	99.183	0.40	570299	0.02	10000	
Cu	63	45	1	He	61.450	61.450	0.32	973493	0.01	10000	
Zn	66	45	1	He	345.208	345.208	0.39	1005557	0.03	10000	
As	75	115	1	He	58.454	58.454	1.32	155741	0.04	10000	
Se	78	115	1	He	5.632	5.632	2.58	1626	0.35	10000	
Sr	88	103	1	He	69.742	69.742	0.81	1268376	0.01	10000	
Mo	95	103	1	He	8.488	8.488	0.97	55071	0.02	2000	
Ag	107	103	1	He	0.285	0.285	4.70	5450	0.01	300	
Cd	111	115	1	He	1.395	1.395	5.14	8725	0.02	4000	
Sn	118	115	1	He	13.944	13.944	1.25	108418	0.01	2000	
Sb	123	115	1	He	1.053	1.053	3.67	8648	0.01	200	
Ba	137	115	1	He	458.398	458.398	2.04	1736073	0.03	10000	
W	182	159	1	He	0.761	0.761	6.35	17006	0.00	2500	
Tl	205	165	1	He	0.919	0.919	0.74	27447	0.00	5000	
Pb	208	165	1	He	148.645	148.645	0.97	5835817	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3334153	1.28	3363927	99.11	70	120	
Sc	45	1	He	2559748	0.45	2596880	98.57	70	120	
Sc	45	2	NoGas	23754837	1.75	23550524	100.87	70	120	
Rh	103	1	He	4433581	1.07	4849688	91.42	70	120	
In	115	1	He	3037537	0.95	3270641	92.87	70	120	
Tb	159	1	He	5412736	2.00	5524253	97.98	70	120	
Ho	165	1	He	5238902	2.09	5317614	98.52	70	120	
Bi	209	1	He	3361697	1.16	3415965	98.41	70	120	

Sample Report

Sample Table

Sample Name	240-50650-a-1-d ms@2
Data File Name	047SMPL.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T14:23:10-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	65.517	65.517	1.49	2791227	0.00	10000	
Be	9	45	2	NoGas	49.577	49.577	0.18	579335	0.01	10000	
B	11	45	2	NoGas	54.195	54.195	0.52	389216	0.01	300	
Na	23	45	1	He	4562.948	4562.948	1.03	14455314	0.03	500000	
Mg	24	45	1	He	14435.027	14435.027	1.28	25933816	0.06	500000	
Al	27	45	1	He	62596.208	62596.208	1.36	70319448	0.09	200000	
K	39	45	1	He	7642.441	7642.441	1.10	19230308	0.04	500000	
Ca	44	45	1	He	21732.243	21732.243	1.74	2601183	0.84	500000	
Ti	47	45	1	He	544.597	544.597	1.76	365470	0.15	2500	
V	51	45	1	He	147.086	147.086	1.69	4434762	0.00	10000	
Cr	52	45	1	He	139.625	139.625	1.13	2547869	0.01	10000	
Mn	55	45	1	He	5389.402	5389.402	1.56	74266233	0.01	10000	
Fe	56	45	1	He	103280.367	103280.367	1.67	1700750759	0.01	200000	
Co	59	45	1	He	97.478	97.478	2.21	2338370	0.00	10000	
Ni	60	45	1	He	148.320	148.320	1.89	850083	0.02	10000	
Cu	63	45	1	He	111.330	111.330	2.52	1756867	0.01	10000	
Zn	66	45	1	He	418.137	418.137	1.91	1212676	0.03	10000	
As	75	115	1	He	100.768	100.768	0.90	266538	0.04	10000	
Se	78	115	1	He	47.291	47.291	0.89	10989	0.43	10000	
Sr	88	103	1	He	125.262	125.262	0.41	2264043	0.01	10000	
Mo	95	103	1	He	54.122	54.122	0.95	348090	0.02	2000	
Ag	107	103	1	He	42.521	42.521	0.85	800855	0.01	300	
Cd	111	115	1	He	45.377	45.377	0.97	145565	0.03	4000	
Sn	118	115	1	He	52.157	52.157	0.96	397813	0.01	2000	
Sb	123	115	1	He	16.160	16.160	0.91	128320	0.01	200	
Ba	137	115	1	He	522.670	522.670	1.61	1968288	0.03	10000	
W	182	159	1	He	34.205	34.205	0.46	414229	0.01	2500	
Tl	205	165	1	He	40.539	40.539	0.81	1194040	0.00	5000	
Pb	208	165	1	He	206.211	206.211	1.03	8017067	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3356474	2.05	3363927	99.78	70	120	
Sc	45	1	He	2551919	0.68	2596880	98.27	70	120	
Sc	45	2	NoGas	23859516	0.42	23550524	101.31	70	120	
Rh	103	1	He	4406601	0.70	4849688	90.86	70	120	
In	115	1	He	3020260	0.61	3270641	92.34	70	120	
Tb	159	1	He	5438911	1.63	5524253	98.46	70	120	
Ho	165	1	He	5187496	0.22	5317614	97.55	70	120	
Bi	209	1	He	3258260	0.29	3415965	95.38	70	120	

Sample Report

Sample Table

Sample Name	240-50650-a-3-b@2
Data File Name	048SMPL.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T14:26:39-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	76.925	76.925	0.71	3188019	0.00	10000	
Be	9	45	2	NoGas	2.833	2.833	1.26	32604	0.01	10000	
B	11	45	2	NoGas	10.019	10.019	1.96	91685	0.01	300	
Na	23	45	1	He	144.176	144.176	0.75	561601	0.03	500000	
Mg	24	45	1	He	10008.801	10008.801	1.06	17448214	0.06	500000	
Al	27	45	1	He	61087.750	61087.750	0.89	66586477	0.09	200000	
K	39	45	1	He	3511.688	3511.688	1.45	8665617	0.04	500000	
Ca	44	45	1	He	1298.087	1298.087	0.49	154700	0.84	500000	
Ti	47	45	1	He	417.177	417.177	1.31	271647	0.15	2500	
V	51	45	1	He	105.872	105.872	1.72	3099589	0.00	10000	
Cr	52	45	1	He	86.990	86.990	2.23	1544303	0.01	10000	
Mn	55	45	1	He	5489.122	5489.122	1.40	73391364	0.01	10000	
Fe	56	45	1	He	116117.336	116117.336	1.54	1855442273	0.01	200000	
Co	59	45	1	He	45.389	45.389	0.22	1056627	0.00	10000	
Ni	60	45	1	He	96.419	96.419	0.90	536252	0.02	10000	
Cu	63	45	1	He	46.196	46.196	1.06	708284	0.01	10000	
Zn	66	45	1	He	290.589	290.589	1.09	819801	0.04	10000	
As	75	115	1	He	49.491	49.491	1.11	131260	0.04	10000	
Se	78	115	1	He	4.893	4.893	6.65	1451	0.34	10000	
Sr	88	103	1	He	15.532	15.532	0.86	286253	0.01	10000	
Mo	95	103	1	He	7.037	7.037	2.27	46251	0.02	2000	
Ag	107	103	1	He	0.294	0.294	4.88	5685	0.01	300	
Cd	111	115	1	He	0.894	0.894	7.20	7120	0.01	4000	
Sn	118	115	1	He	11.160	11.160	2.03	86705	0.01	2000	
Sb	123	115	1	He	0.656	0.656	5.27	5456	0.01	200	
Ba	137	115	1	He	480.364	480.364	1.82	1809593	0.03	10000	
W	182	159	1	He	0.542	0.542	11.25	14529	0.00	2500	
Tl	205	165	1	He	0.878	0.878	1.18	26508	0.00	5000	
Pb	208	165	1	He	86.945	86.945	0.70	3451414	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3266805	2.04	3363927	97.11	70	120	
Sc	45	1	He	2476084	1.13	2596880	95.35	70	120	
Sc	45	2	NoGas	23393867	0.54	23550524	99.33	70	120	
Rh	103	1	He	4487996	1.30	4849688	92.54	70	120	
In	115	1	He	3021517	0.97	3270641	92.38	70	120	
Tb	159	1	He	5453781	0.63	5524253	98.72	70	120	
Ho	165	1	He	5295693	0.85	5317614	99.59	70	120	
Bi	209	1	He	3322414	1.62	3415965	97.26	70	120	

Sample Report

Sample Table

Sample Name	240-50650-a-4-b@2
Data File Name	049SMPL.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T14:30:14-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	75.899	75.899	1.04	3202368	0.00	10000	
Be	9	45	2	NoGas	3.040	3.040	3.02	35564	0.01	10000	
B	11	45	2	NoGas	14.624	14.624	2.59	124010	0.01	300	
Na	23	45	1	He	150.087	150.087	1.23	582145	0.03	500000	
Mg	24	45	1	He	11827.446	11827.446	2.34	20708087	0.06	500000	
Al	27	45	1	He	59103.768	59103.768	1.02	64706297	0.09	200000	
K	39	45	1	He	4465.711	4465.711	0.96	11022134	0.04	500000	
Ca	44	45	1	He	4216.581	4216.581	0.62	495278	0.85	500000	
Ti	47	45	1	He	480.445	480.445	0.58	314256	0.15	2500	
V	51	45	1	He	103.031	103.031	0.76	3030298	0.00	10000	
Cr	52	45	1	He	90.769	90.769	0.78	1618098	0.01	10000	
Mn	55	45	1	He	4601.862	4601.862	0.80	61807613	0.01	10000	
Fe	56	45	1	He	113090.332	113090.332	0.81	1815074097	0.01	200000	
Co	59	45	1	He	45.219	45.219	0.49	1057320	0.00	10000	
Ni	60	45	1	He	110.657	110.657	0.53	618170	0.02	10000	
Cu	63	45	1	He	68.413	68.413	0.88	1052834	0.01	10000	
Zn	66	45	1	He	309.449	309.449	0.73	876486	0.04	10000	
As	75	115	1	He	51.838	51.838	0.74	136061	0.04	10000	
Se	78	115	1	He	5.037	5.037	2.08	1469	0.34	10000	
Sr	88	103	1	He	26.508	26.508	0.33	486549	0.01	10000	
Mo	95	103	1	He	7.241	7.241	1.23	47412	0.02	2000	
Ag	107	103	1	He	0.224	0.224	3.50	4335	0.01	300	
Cd	111	115	1	He	1.155	1.155	3.95	7851	0.01	4000	
Sn	118	115	1	He	11.866	11.866	3.44	91165	0.01	2000	
Sb	123	115	1	He	0.756	0.756	1.43	6185	0.01	200	
Ba	137	115	1	He	442.380	442.380	1.21	1649601	0.03	10000	
W	182	159	1	He	0.544	0.544	6.11	14659	0.00	2500	
Tl	205	165	1	He	0.899	0.899	1.57	27077	0.00	5000	
Pb	208	165	1	He	92.991	92.991	1.27	3680357	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3260038	1.27	3363927	96.91	70	120	
Sc	45	1	He	2487017	0.79	2596880	95.77	70	120	
Sc	45	2	NoGas	23800429	1.19	23550524	101.06	70	120	
Rh	103	1	He	4472160	1.36	4849688	92.22	70	120	
In	115	1	He	2990800	1.22	3270641	91.44	70	120	
Tb	159	1	He	5489899	0.79	5524253	99.38	70	120	
Ho	165	1	He	5280187	1.04	5317614	99.30	70	120	
Bi	209	1	He	3378391	0.27	3415965	98.90	70	120	

Sample Report

Sample Table

Sample Name	240-50650-a-5-b@2
Data File Name	050SMPL.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T14:33:48-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	57.397	57.397	1.63	2437312	0.00	10000	
Be	9	45	2	NoGas	3.171	3.171	2.29	36797	0.01	10000	
B	11	45	2	NoGas	8.293	8.293	3.31	81088	0.01	300	
Na	23	45	1	He	123.108	123.108	1.91	496971	0.02	500000	
Mg	24	45	1	He	8524.858	8524.858	1.66	14849088	0.06	500000	
Al	27	45	1	He	56795.124	56795.124	1.80	61853333	0.09	200000	
K	39	45	1	He	2624.370	2624.370	1.16	6514138	0.04	500000	
Ca	44	45	1	He	628.734	628.734	1.79	77025	0.82	500000	
Ti	47	45	1	He	543.325	543.325	0.95	353514	0.15	2500	
V	51	45	1	He	97.778	97.778	2.03	2860842	0.00	10000	
Cr	52	45	1	He	70.606	70.606	1.28	1254415	0.01	10000	
Mn	55	45	1	He	5262.452	5262.452	1.37	70305991	0.01	10000	
Fe	56	45	1	He	95807.164	95807.164	2.03	1529515708	0.01	200000	
Co	59	45	1	He	49.828	49.828	1.40	1158914	0.00	10000	
Ni	60	45	1	He	82.808	82.808	1.91	460193	0.02	10000	
Cu	63	45	1	He	53.840	53.840	1.93	824522	0.01	10000	
Zn	66	45	1	He	267.870	267.870	1.82	755625	0.04	10000	
As	75	115	1	He	44.794	44.794	1.21	119491	0.04	10000	
Se	78	115	1	He	5.365	5.365	5.60	1566	0.34	10000	
Sr	88	103	1	He	13.076	13.076	0.48	242923	0.01	10000	
Mo	95	103	1	He	7.644	7.644	0.64	50611	0.02	2000	
Ag	107	103	1	He	0.308	0.308	4.65	6007	0.01	300	
Cd	111	115	1	He	0.751	0.751	3.02	6711	0.01	4000	
Sn	118	115	1	He	10.384	10.384	0.46	81260	0.01	2000	
Sb	123	115	1	He	0.719	0.719	0.71	5989	0.01	200	
Ba	137	115	1	He	439.841	439.841	0.13	1665983	0.03	10000	
W	182	159	1	He	0.316	0.316	9.09	12068	0.00	2500	
Tl	205	165	1	He	0.826	0.826	2.91	25246	0.00	5000	
Pb	208	165	1	He	90.305	90.305	2.22	3626182	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3322759	0.21	3363927	98.78	70	120	
Sc	45	1	He	2474203	1.20	2596880	95.28	70	120	
Sc	45	2	NoGas	23606479	0.12	23550524	100.24	70	120	
Rh	103	1	He	4522948	0.55	4849688	93.26	70	120	
In	115	1	He	3037659	1.39	3270641	92.88	70	120	
Tb	159	1	He	5557812	1.54	5524253	100.61	70	120	
Ho	165	1	He	5358690	2.06	5317614	100.77	70	120	
Bi	209	1	He	3380679	1.15	3415965	98.97	70	120	

Sample Report

Sample Table

Sample Name	240-50650-a-6-b@2
Data File Name	051SMPL.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T14:37:24-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	120.107	120.107	1.26	4885488	0.00	10000	
Be	9	45	2	NoGas	4.543	4.543	2.31	52063	0.01	10000	
B	11	45	2	NoGas	19.004	19.004	1.28	150310	0.01	300	
Na	23	45	1	He	236.570	236.570	1.26	853526	0.03	500000	
Mg	24	45	1	He	19737.901	19737.901	0.99	34832065	0.06	500000	
Al	27	45	1	He	73984.524	73984.524	0.97	81639366	0.09	200000	
K	39	45	1	He	6098.779	6098.779	0.27	15109046	0.04	500000	
Ca	44	45	1	He	15543.088	15543.088	1.25	1828728	0.85	500000	
Ti	47	45	1	He	473.997	473.997	0.35	312473	0.15	2500	
V	51	45	1	He	132.235	132.235	0.95	3917224	0.00	10000	
Cr	52	45	1	He	124.501	124.501	1.54	2232783	0.01	10000	
Mn	55	45	1	He	4319.927	4319.927	0.47	58476371	0.01	10000	
Fe	56	45	1	He	173030.535	173030.535	1.05	2798897240	0.01	200000	
Co	59	45	1	He	80.152	80.152	2.00	1888805	0.00	10000	
Ni	60	45	1	He	164.874	164.874	1.09	928229	0.02	10000	
Cu	63	45	1	He	110.417	110.417	1.39	1711681	0.01	10000	
Zn	66	45	1	He	391.129	391.129	0.72	1114730	0.04	10000	
As	75	115	1	He	85.228	85.228	1.42	220464	0.04	10000	
Se	78	115	1	He	7.028	7.028	2.62	1888	0.37	10000	
Sr	88	103	1	He	47.942	47.942	0.73	858121	0.01	10000	
Mo	95	103	1	He	8.303	8.303	0.49	53018	0.02	2000	
Ag	107	103	1	He	0.183	0.183	2.76	3450	0.01	300	
Cd	111	115	1	He	1.380	1.380	3.64	8434	0.02	4000	
Sn	118	115	1	He	10.463	10.463	0.34	79570	0.01	2000	
Sb	123	115	1	He	0.771	0.771	3.69	6229	0.01	200	
Ba	137	115	1	He	561.168	561.168	1.76	2065904	0.03	10000	
W	182	159	1	He	0.128	0.128	43.65	9766	0.00	2500	
Tl	205	165	1	He	0.988	0.988	0.60	29958	0.00	5000	
Pb	208	165	1	He	99.178	99.178	1.17	3953968	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3265987	1.28	3363927	97.09	70	120	
Sc	45	1	He	2506615	0.25	2596880	96.52	70	120	
Sc	45	2	NoGas	23339580	0.31	23550524	99.10	70	120	
Rh	103	1	He	4362823	0.95	4849688	89.96	70	120	
In	115	1	He	2952851	1.52	3270641	90.28	70	120	
Tb	159	1	He	5547149	1.79	5524253	100.41	70	120	
Ho	165	1	He	5319494	1.52	5317614	100.04	70	120	
Bi	209	1	He	3334054	1.08	3415965	97.60	70	120	

Sample Report

Sample Table

Sample Name	240-50650-a-7-b@2
Data File Name	052SMPL.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T14:40:56-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	73.898	73.898	1.08	3047229	0.00	10000	
Be	9	45	2	NoGas	3.238	3.238	1.71	36975	0.01	10000	
B	11	45	2	NoGas	10.020	10.020	1.91	91051	0.01	300	
Na	23	45	1	He	149.513	149.513	1.10	576204	0.03	500000	
Mg	24	45	1	He	11062.444	11062.444	1.84	19229217	0.06	500000	
Al	27	45	1	He	62935.749	62935.749	1.68	68402177	0.09	200000	
K	39	45	1	He	3347.591	3347.591	1.81	8244983	0.04	500000	
Ca	44	45	1	He	2178.172	2178.172	1.93	256007	0.85	500000	
Ti	47	45	1	He	454.219	454.219	1.85	294922	0.15	2500	
V	51	45	1	He	107.728	107.728	1.69	3144762	0.00	10000	
Cr	52	45	1	He	86.512	86.512	2.04	1531390	0.01	10000	
Mn	55	45	1	He	7527.209	7527.209	2.46	100347832	0.01	10000	
Fe	56	45	1	He	116582.788	116582.788	1.59	1857443908	0.01	200000	
Co	59	45	1	He	63.159	63.159	2.86	1465856	0.00	10000	
Ni	60	45	1	He	111.504	111.504	2.29	618330	0.02	10000	
Cu	63	45	1	He	65.782	65.782	1.08	1005057	0.01	10000	
Zn	66	45	1	He	338.948	338.948	1.71	952400	0.04	10000	
As	75	115	1	He	54.311	54.311	0.70	142693	0.04	10000	
Se	78	115	1	He	6.037	6.037	1.36	1694	0.36	10000	
Sr	88	103	1	He	22.989	22.989	2.35	425394	0.01	10000	
Mo	95	103	1	He	8.455	8.455	2.12	55785	0.02	2000	
Ag	107	103	1	He	0.253	0.253	3.76	4916	0.01	300	
Cd	111	115	1	He	1.086	1.086	4.89	7646	0.01	4000	
Sn	118	115	1	He	11.309	11.309	1.58	87059	0.01	2000	
Sb	123	115	1	He	0.901	0.901	1.71	7337	0.01	200	
Ba	137	115	1	He	585.786	585.786	1.16	2187033	0.03	10000	
W	182	159	1	He	0.427	0.427	6.28	13384	0.00	2500	
Tl	205	165	1	He	0.983	0.983	1.17	30124	0.00	5000	
Pb	208	165	1	He	119.475	119.475	2.24	4814007	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3245984	1.61	3363927	96.49	70	120	
Sc	45	1	He	2469097	0.95	2596880	95.08	70	120	
Sc	45	2	NoGas	23232685	1.32	23550524	98.65	70	120	
Rh	103	1	He	4509198	1.84	4849688	92.98	70	120	
In	115	1	He	2994206	0.16	3270641	91.55	70	120	
Tb	159	1	He	5544134	1.88	5524253	100.36	70	120	
Ho	165	1	He	5377348	1.99	5317614	101.12	70	120	
Bi	209	1	He	3370253	0.54	3415965	98.66	70	120	

Sample Report

Sample Table

Sample Name	HIGH STD
Data File Name	053SMPL.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T14:44:26-04:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	45	2	NoGas	-0.102	-0.102	-181.09	127895	0.00	10000	
Be	9	45	2	NoGas	2117.626	2117.626	26.21	21336098	0.01	10000	
B	11	45	2	NoGas	214.215	214.215	26.11	1260708	0.02	300	
Na	23	45	1	He	18674.172	18674.172	1.58	57678540	0.03	500000	
Mg	24	45	1	He	18982.561	18982.561	0.58	33472378	0.06	500000	
Al	27	45	1	He	18418.919	18418.919	2.02	20308140	0.09	200000	
K	39	45	1	He	18958.454	18958.454	1.46	46562785	0.04	500000	
Ca	44	45	1	He	23907.117	23907.117	2.89	2807956	0.85	500000	
Ti	47	45	1	He	194.869	194.869	1.65	128374	0.15	2500	
V	51	45	1	He	1903.378	1903.378	1.17	56222815	0.00	10000	
Cr	52	45	1	He	1894.770	1894.770	1.82	33798521	0.01	10000	
Mn	55	45	1	He	1937.892	1937.892	2.38	26211333	0.01	10000	
Fe	56	45	1	He	19733.620	19733.620	1.94	318955161	0.01	200000	
Co	59	45	1	He	1956.639	1956.639	1.66	46066235	0.00	10000	
Ni	60	45	1	He	2099.347	2099.347	2.08	11807275	0.02	10000	
Cu	63	45	1	He	1970.358	1970.358	2.20	30492635	0.01	10000	
Zn	66	45	1	He	2159.586	2159.586	1.70	6118378	0.04	10000	
As	75	115	1	He	1960.434	1960.434	1.63	5302952	0.04	10000	
Se	78	115	1	He	1833.578	1833.578	1.17	423113	0.43	10000	
Sr	88	103	1	He	1795.419	1795.419	1.40	34252350	0.01	10000	
Mo	95	103	1	He	204.017	204.017	3.44	1385251	0.01	2000	
Ag	107	103	1	He	194.315	194.315	1.33	3863226	0.01	300	
Cd	111	115	1	He	2069.231	2069.231	1.20	6604640	0.03	4000	
Sn	118	115	1	He	2228.086	2228.086	1.66	17330810	0.01	2000	>LDR
Sb	123	115	1	He	225.847	225.847	1.93	1834627	0.01	200	>LDR
Ba	137	115	1	He	2110.048	2110.048	1.40	8143487	0.03	10000	
W	182	159	1	He	221.011	221.011	1.39	2719984	0.01	2500	
Tl	205	165	1	He	481.700	481.700	0.90	14945621	0.00	5000	
Pb	208	165	1	He	2006.026	2006.026	1.34	82150058	0.00	4000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	2845088	22.34	3363927	84.58	70	120	
Sc	45	1	He	2504610	0.68	2596880	96.45	70	120	
Sc	45	2	NoGas	21558146	26.07	23550524	91.54	70	120	
Rh	103	1	He	4652230	1.32	4849688	95.93	70	120	
In	115	1	He	3095345	0.33	3270641	94.64	70	120	
Tb	159	1	He	5619830	0.95	5524253	101.73	70	120	
Ho	165	1	He	5465199	0.89	5317614	102.78	70	120	
Bi	209	1	He	3432058	1.28	3415965	100.47	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV-2012431
Data File Name	054_CCV.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T14:47:38-04:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	45	2	NoGas	46.941	1.745	2120752	1.20	50	93.9	89.5	110.5	
Be	9	45	2	NoGas	48.975	0.480	594569	0.04	50	98.0	89.5	110.5	
B	11	45	2	NoGas	48.321	1.992	363505	1.57	50	96.6	89.5	110.5	
Na	23	45	1	He	23567.600	1.025	71899475	1.62	25000	94.3	89.5	110.5	
Mg	24	45	1	He	23745.022	1.302	41370779	1.54	25000	95.0	89.5	110.5	
Al	27	45	1	He	243.189	0.757	266671	1.30	250	97.3	89.5	110.5	
K	39	45	1	He	24136.945	2.112	58526624	1.69	25000	96.5	89.5	110.5	
Ca	44	45	1	He	24532.527	2.467	2847094	2.33	25000	98.1	89.5	110.5	
Ti	47	45	1	He	49.858	1.249	32482	1.58	50	99.7	89.5	110.5	
V	51	45	1	He	47.881	1.008	1405744	1.17	50	95.8	89.5	110.5	
Cr	52	45	1	He	47.879	0.819	854350	1.08	50	95.8	89.5	110.5	
Mn	55	45	1	He	252.513	0.537	3379091	1.03	250	101.0	89.5	110.5	
Fe	56	45	1	He	12385.806	0.599	197823534	0.83	12500	99.1	89.5	110.5	
Co	59	45	1	He	48.568	0.148	1129987	0.67	50	97.1	89.5	110.5	
Ni	60	45	1	He	50.942	1.025	283258	1.41	50	101.9	89.5	110.5	
Cu	63	45	1	He	47.832	0.286	732911	0.41	50	95.7	89.5	110.5	
Zn	66	45	1	He	51.091	0.768	149695	0.84	50	102.2	89.5	110.5	
As	75	115	1	He	48.140	0.405	132190	0.88	50	96.3	89.5	110.5	
Se	78	115	1	He	47.496	1.369	11429	1.86	50	95.0	89.5	110.5	
Sr	88	103	1	He	42.575	0.831	811035	1.19	50	85.1	89.5	110.5	CCV Failed
Mo	95	103	1	He	51.026	0.950	345792	1.35	50	102.1	89.5	110.5	
Ag	107	103	1	He	44.724	0.479	887506	0.88	50	89.4	89.5	110.5	CCV Failed
Cd	111	115	1	He	47.853	0.389	158724	0.64	50	95.7	89.5	110.5	
Sn	118	115	1	He	56.177	1.605	443561	2.03	50	112.4	89.5	110.5	CCV Failed
Sb	123	115	1	He	52.562	0.218	431650	0.76	50	105.1	89.5	110.5	
Ba	137	115	1	He	48.565	0.231	189500	1.05	50	97.1	89.5	110.5	
W	182	159	1	He	50.990	1.963	627295	1.45	50	102.0	89.5	110.5	
Tl	205	165	1	He	44.004	0.939	1356346	0.98	50	88.0	89.5	110.5	CCV Failed
Pb	208	165	1	He	45.794	1.349	1863831	0.86	50	91.6	89.5	110.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3372563	0.93	3363927	100.26	70	120	
Sc	45	1	He	2474705	0.64	2596880	95.30	70	120	
Sc	45	2	NoGas	24788214	0.48	23550524	105.26	70	120	
Rh	103	1	He	4642723	0.42	4849688	95.73	70	120	
In	115	1	He	3127786	0.90	3270641	95.63	70	120	
Tb	159	1	He	5561346	0.54	5524253	100.67	70	120	
Ho	165	1	He	5428824	1.08	5317614	102.09	70	120	
Bi	209	1	He	3405283	1.80	3415965	99.69	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	055_CCB.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T14:51:15-04:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	ISTD Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	45	2	NoGas	-0.062	-39.5	153577	1.5	2	
Be	9	45	2	NoGas	0.119	14.5	1641	13.9	1	
B	11	45	2	NoGas	0.875	7.0	34370	2.2	20	
Na	23	45	1	He	4.475	24.8	150799	1.0	1000	
Mg	24	45	1	He	1.303	24.8	3875	15.5	1000	
Al	27	45	1	He	0.930	23.9	3054	10.3	50	
K	39	45	1	He	4.668	36.3	201933	0.8	1000	
Ca	44	45	1	He	22.432	1.6	7536	1.8	1000	
Ti	47	45	1	He	0.183	24.0	172	19.5	20	
V	51	45	1	He	0.016	47.7	9917	2.3	2	
Cr	52	45	1	He	-0.025	-98.8	11436	2.7	2	
Mn	55	45	1	He	0.480	2.8	12344	2.4	2	
Fe	56	45	1	He	16.406	12.4	317086	12.7	50	
Co	59	45	1	He	0.074	8.8	2017	7.1	1	
Ni	60	45	1	He	0.161	9.4	1150	7.0	2	
Cu	63	45	1	He	0.618	5.1	12172	3.1	2	
Zn	66	45	1	He	0.421	25.4	8889	2.6	20	
As	75	115	1	He	0.296	23.0	1539	14.2	2	
Se	78	115	1	He	0.445	21.4	502	5.6	2	
Sr	88	103	1	He	0.025	15.4	927	8.6	10	
Mo	95	103	1	He	0.351	33.9	2707	31.4	2	
Ag	107	103	1	He	0.009	5.7	238	4.3	0.2	
Cd	111	115	1	He	0.055	33.8	5022	0.4	0.2	
Sn	118	115	1	He	1.701	17.6	16627	16.4	10	
Sb	123	115	1	He	0.204	3.3	2093	3.5	2	
Ba	137	115	1	He	0.035	37.2	253	20.3	5	
W	182	159	1	He	0.777	21.9	18070	12.3	10	
Tl	205	165	1	He	0.138	9.3	4412	8.4	0.5	
Pb	208	165	1	He	0.086	9.2	4568	6.5	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3523714	1.02	3363927	104.75	70	120	
Sc	45	1	He	2748049	1.49	2596880	105.82	70	120	
Sc	45	2	NoGas	25385950	1.03	23550524	107.79	70	120	
Rh	103	1	He	4917388	0.17	4849688	101.40	70	120	
In	115	1	He	3366369	1.27	3270641	102.93	70	120	
Tb	159	1	He	5682955	0.63	5524253	102.87	70	120	
Ho	165	1	He	5491020	0.61	5317614	103.26	70	120	
Bi	209	1	He	3445595	1.31	3415965	100.87	70	120	

Quality Control Sample (QCS) Report

Sample Table

Sample Name	CRI-2012498
Data File Name	056CRI.d
Data Path Name	D:\Analytical Runs\I10060115E_LITHIUM .b
Acq Date Time	2015-06-01T14:54:56-04:00
Sample Type	CRI
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

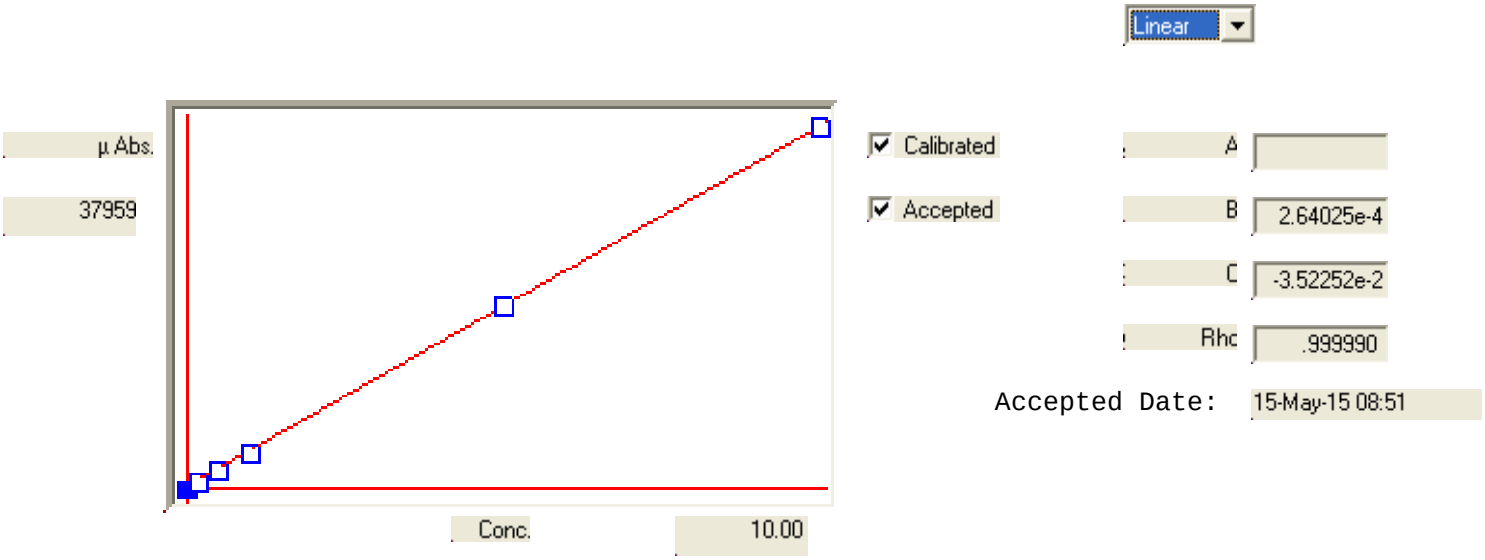
QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	2	NoGas	7.821	7.821	1.369	489308	0.93	8	97.8	49.5	150.5	
Be	9	2	NoGas	1.024	1.024	4.751	12812	4.61	1	102.4	49.5	150.5	
B	11	2	NoGas	18.538	18.538	1.687	159257	1.35	20	92.7	49.5	150.5	
Na	23	1	He	1014.003	1014.003	1.234	3631962	0.55	1000	101.4	49.5	150.5	
Mg	24	1	He	1040.619	1040.619	2.968	2052150	1.68	1000	104.1	49.5	150.5	
Al	27	1	He	50.948	50.948	1.946	64750	0.50	50	101.9	49.5	150.5	
K	39	1	He	1045.158	1045.158	1.456	3051908	0.54	1000	104.5	49.5	150.5	
Ca	44	1	He	1012.373	1012.373	1.363	137464	0.53	1000	101.2	49.5	150.5	
Ti	47	1	He	10.262	10.262	3.285	7595	2.66	10	102.6	49.5	150.5	
V	51	1	He	3.514	3.514	1.902	125588	0.27	5	70.3	49.5	150.5	
Cr	52	1	He	1.898	1.898	2.278	49980	1.21	2	94.9	49.5	150.5	
Mn	55	1	He	4.985	4.985	1.161	80683	0.55	5	99.7	49.5	150.5	
Fe	56	1	He	110.055	110.055	2.840	2014520	1.83	100	110.1	49.5	150.5	
Co	59	1	He	1.040	1.040	3.752	27473	2.65	1	104.0	49.5	150.5	
Ni	60	1	He	2.244	2.244	2.914	14270	1.62	2	112.2	49.5	150.5	
Cu	63	1	He	2.398	2.398	2.808	43189	1.80	2	119.9	49.5	150.5	
Zn	66	1	He	19.399	19.399	2.543	69089	1.01	20	97.0	49.5	150.5	
As	75	1	He	4.908	4.908	2.057	15346	1.20	5	98.2	49.5	150.5	
Se	78	1	He	4.930	4.930	3.936	1653	3.06	5	98.6	49.5	150.5	
Sr	88	1	He	8.814	8.814	1.719	181177	1.12	10	88.1	49.5	150.5	
Mo	95	1	He	10.034	10.034	0.854	73393	0.21	10	100.3	49.5	150.5	
Ag	107	1	He	0.922	0.922	2.563	19756	2.04	1	92.2	49.5	150.5	
Cd	111	1	He	0.919	0.919	4.562	8147	0.81	1	91.9	49.5	150.5	
Sn	118	1	He	10.364	10.364	2.089	91314	1.27	10	103.6	49.5	150.5	
Sb	123	1	He	2.055	2.055	2.804	18733	2.66	2	102.7	49.5	150.5	
Ba	137	1	He	4.844	4.844	1.938	20763	0.93	5	96.9	49.5	150.5	
W	182	1	He	9.549	9.549	1.471	123710	2.86	10	95.5	49.5	150.5	
Tl	205	1	He	1.787	1.787	1.930	54764	0.54	2	89.3	49.5	150.5	
Pb	208	1	He	0.989	0.989	0.756	40959	0.72	1	98.9	49.5	150.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	2	NoGas	3473880	0.68	3363927	103.27	70	120	
Sc	45	1	He	2800039	1.50	2596880	107.82	70	120	
Sc	45	2	NoGas	25242122	0.14	23550524	107.18	70	120	
Rh	103	1	He	5000823	1.00	4849688	103.12	70	120	
In	115	1	He	3420436	1.00	3270641	104.58	70	120	
Tb	159	1	He	5539875	1.55	5524253	100.28	70	120	
Ho	165	1	He	5388603	1.39	5317614	101.33	70	120	
Bi	209	1	He	3424476	0.36	3415965	100.25	70	120	

Protocol: Hg7470A



S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
01	.00000	.0044	.0044	150	0	150				
02	.20000	.1998	-.0002	891	0%	890				
03	.50000	.5000	-.0000	2027	0%	2027				
04	1.0000	.9789	-.0211	3842	0%	3841				
05	5.0000	5.030	.0301	19186	0%	19185				
06	10.000	9.987	-.0131	37960	0%	37959				
07										
08										
09										
10										

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
--------------------------------------------------------------------------------

*** Standard: 1 Rep: 1              Seq:  1       08:43:03 15 May 15   HG

Hg    .0000   ppb      150

*** Standard: 2 Rep: 1              Seq:  2       08:44:49 15 May 15   HG

Hg    .2000   ppb      890

*** Standard: 3 Rep: 1              Seq:  3       08:46:51 15 May 15   HG

Hg    .5000   ppb      2027

*** Standard: 4 Rep: 1              Seq:  4       08:48:26 15 May 15   HG

Hg    1.000   ppb      3841

*** Standard: 5 Rep: 1              Seq:  5       08:49:49 15 May 15   HG

Hg    5.000   ppb      19185

*** Standard: 6 Rep: 1              Seq:  6       08:51:14 15 May 15   HG

Hg    10.00   ppb      37959

*** Check Standard: 2  Ck2ICV       Seq:  7       08:53:11 15 May 15   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          96.00    4.800   5.000  ppb        .0000

*** Check Standard: 3  Ck3ICB       Seq:  8       08:54:52 15 May 15   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          ^^^^^^  -.0120   .0000  ppb        .0000

*** Check Standard: 4  Ck4CRA\MRL   Seq:  9       08:56:28 15 May 15   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          96.31    .1926   .2000  ppb        .0000

*** Check Standard: 6  Ck6CCV       Seq:  10      09:01:25 15 May 15   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          100.2    5.012   5.000  ppb        .0000

*** Check Standard: 1  Ck1CCB       Seq:  11      09:02:55 15 May 15   HG
Line  Flag  Found Range(+/-) Units      SD/RSD
Hg         -.0294    .2000    ppb        .0000

*** Sample ID:                      Seq:  12     09:04:36 15 May 15   HG
                          lb 240-180717/1-c
Hg   -.0059   ppb       .0000    -.0059

*** Sample ID:                      Seq:  13     09:06:19 15 May 15   HG
                          mb 240-180786/2-a
Hg   -.0049   ppb       .0000    -.0049

*** Sample ID:                      Seq:  14     09:07:39 15 May 15   HG
                          lcs 240-180786/3-a
Hg    4.957   ppb       .0000     4.957

*** Sample ID:                      Seq:  15     09:09:21 15 May 15   HG
                          240-50573-a-1-e
Hg   -.0030   ppb       .0000    -.0030

*** Sample ID:                      Seq:  16     09:10:56 15 May 15   HG
                          240-50573-a-1-f ms
Hg    4.990   ppb       .0000     4.990
```

POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: Seq: 17 09:12:17 15 May 15 HG
240-50573-a-1-g msd
Hg 4.966 ppb .0000 4.966

*** Sample ID: Seq: 18 09:14:56 15 May 15 HG
240-50390-a-1-g
Hg -.0072 ppb .0000 -.0072

*** Sample ID: Seq: 19 09:16:20 15 May 15 HG
240-50390-a-3-h
Hg .3460 ppb .0000 .3460

*** Sample ID: Seq: 20 09:17:45 15 May 15 HG
240-50553-a-1-c
Hg -.0292 ppb .0000 -.0292

*** Sample ID: Seq: 21 09:19:07 15 May 15 HG
240-50390-a-2-j
Hg .0107 ppb .0000 .0107

*** Check Standard: 6 Ck6CCV Seq: 22 09:21:00 15 May 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		99.57	4.979	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 23 09:23:13 15 May 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0247	.2000	ppb	.0000

*** Sample ID: Seq: 24 09:25:36 15 May 15 HG
240-50488-a-1-g
Hg -.0033 ppb .0000 -.0033

*** Sample ID: Seq: 25 09:27:27 15 May 15 HG
240-50489-a-1-f
Hg .0239 ppb .0000 .0239

*** Sample ID: Seq: 26 09:28:48 15 May 15 HG
240-50489-a-2-f
Hg -.0062 ppb .0000 -.0062

*** Check Standard: 6 Ck6CCV Seq: 27 09:30:28 15 May 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		99.44	4.972	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 28 09:31:52 15 May 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0410	.2000	ppb	.0000

*** Check Standard: 6 Ck6CCV Seq: 29 10:00:00 15 May 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		99.59	4.979	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 30 10:01:35 15 May 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0284	.2000	ppb	.0000

*** Sample ID: Seq: 31 10:03:08 15 May 15 HG
mb 240-180761/1-a
Hg -.0175 ppb .0000 -.0175

*** Sample ID: Seq: 32 10:04:30 15 May 15 HG
lcs 240-180761/2-a
Hg 4.905 ppb .0000 4.905

POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: Seq: 33 10:05:53 15 May 15 HG
240-50653-b-1-d
Hg -.0389 ppb .0000 -.0389

*** Sample ID: Seq: 34 10:07:15 15 May 15 HG
240-50653-b-1-e ms
Hg .9264 ppb .0000 .9264

*** Sample ID: Seq: 35 10:08:49 15 May 15 HG
240-50653-b-1-f msd
Hg .9858 ppb .0000 .9858

*** Sample ID: Seq: 36 10:10:22 15 May 15 HG
240-50653-b-2-b
Hg -.0233 ppb .0000 -.0233

*** Sample ID: Seq: 37 10:11:46 15 May 15 HG
240-50653-b-3-b
Hg -.0162 ppb .0000 -.0162

*** Sample ID: Seq: 38 10:13:26 15 May 15 HG
240-50653-b-4-b
Hg -.0218 ppb .0000 -.0218

*** Sample ID: Seq: 39 10:15:00 15 May 15 HG
240-50653-b-5-b
Hg -.0226 ppb .0000 -.0226

*** Sample ID: Seq: 40 10:17:31 15 May 15 HG
240-50653-b-6-b
Hg -.0160 ppb .0000 -.0160

*** Check Standard: 6 Ck6CCV Seq: 41 10:18:54 15 May 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		99.26	4.963	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 42 10:20:16 15 May 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0402	.2000	ppb	.0000

*** Sample ID: Seq: 43 10:21:39 15 May 15 HG
240-50653-b-7-b
Hg -.0270 ppb .0000 -.0270

*** Sample ID: Seq: 44 10:23:30 15 May 15 HG
240-50653-b-8-b
Hg -.0220 ppb .0000 -.0220

*** Sample ID: Seq: 45 10:25:43 15 May 15 HG
240-50653-b-9-b
Hg -.0165 ppb .0000 -.0165

*** Sample ID: Seq: 46 10:27:26 15 May 15 HG
240-50653-b-10-b
Hg -.0183 ppb .0000 -.0183

*** Sample ID: Seq: 47 10:29:13 15 May 15 HG
240-50653-b-11-b
Hg -.0191 ppb .0000 -.0191

*** Sample ID: Seq: 48 10:31:04 15 May 15 HG
240-50653-b-12-b
Hg -.0115 ppb .0000 -.0115

POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID:				Seq: 49	10:32:31 15 May 15	HG		
				240-50653-b-13-b				
Hg	-.0265	ppb	.0000	-.0265				
*** Sample ID:				Seq: 50	10:33:59 15 May 15	HG		
				240-50653-b-14-b				
Hg	-.0241	ppb	.0000	-.0241				
*** Sample ID:				Seq: 51	10:35:33 15 May 15	HG		
				240-50653-b-15-b				
Hg	-.0196	ppb	.0000	-.0196				
*** Sample ID:				Seq: 52	10:36:59 15 May 15	HG		
				mb 240-180771/1-a				
Hg	-.0220	ppb	.0000	-.0220				

*** Check Standard: 6 Ck6CCV Seq: 53 10:38:22 15 May 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		99.39	4.969	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 54 10:39:55 15 May 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0299	.2000	ppb	.0000

*** Sample ID:				Seq: 55	10:41:18 15 May 15	HG		
				lcs 240-180771/2-a				
Hg	4.886	ppb	.0000	4.886				
*** Sample ID:				Seq: 56	10:42:38 15 May 15	HG		
				240-50609-a-1-d				
Hg	-.0474	ppb	.0000	-.0474				
*** Sample ID:				Seq: 57	10:44:00 15 May 15	HG		
				240-50609-a-1-f msd				
Hg	.9448	ppb	.0000	.9448				
*** Sample ID:				Seq: 58	10:45:23 15 May 15	HG		
				240-50609-a-1-e ms				
Hg	.9702	ppb	.0000	.9702				
*** Sample ID:				Seq: 59	10:46:46 15 May 15	HG		
				190-7253-c-1-b				
Hg	-.0426	ppb	.0000	-.0426				
*** Sample ID:				Seq: 60	10:48:18 15 May 15	HG		
				190-7253-c-1-c ms				
Hg	.9699	ppb	.0000	.9699				
*** Sample ID:				Seq: 61	10:50:03 15 May 15	HG		
				190-7253-c-1-d msd				
Hg	.9411	ppb	.0000	.9411				
*** Sample ID:				Seq: 62	10:51:37 15 May 15	HG		
				lb 240-180719/1-c				
Hg	-.0189	ppb	.0000	-.0189				
*** Sample ID:				Seq: 63	10:53:01 15 May 15	HG		
				mb 240-180790/2-a				
Hg	-.0083	ppb	.0000	-.0083				
*** Sample ID:				Seq: 64	10:54:24 15 May 15	HG		
				lcs 240-180790/3-a				
Hg	4.970	ppb	.0000	4.970				

POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Check Standard: 6 Ck6CCV Seq: 65 10:55:48 15 May 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		98.84	4.942	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 66 10:57:43 15 May 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0405	.2000	ppb	.0000

*** Sample ID: Seq: 67 10:59:34 15 May 15 HG
240-50577-a-1-e

Hg	-.0033	ppb	.0000	-.0033

*** Sample ID: Seq: 68 11:01:08 15 May 15 HG
240-50577-a-1-f ms

Hg	.2800	ppb	.0000	.2800

*** Sample ID: Seq: 69 11:02:40 15 May 15 HG
240-50577-a-1-g msd

Hg	.2317	ppb	.0000	.2317

*** Sample ID: Seq: 70 11:04:42 15 May 15 HG
240-50572-a-1-l

Hg	-.0490	ppb	.0000	-.0490

*** Sample ID: Seq: 71 11:06:23 15 May 15 HG
240-50572-a-3-h

Hg	.0105	ppb	.0000	.0105

*** Sample ID: Seq: 72 11:07:46 15 May 15 HG
240-50487-a-1-i

Hg	-.0043	ppb	.0000	-.0043

*** Sample ID: Seq: 73 11:10:07 15 May 15 HG
240-50566-b-1-f

Hg	.5562	ppb	.0000	.5562

*** Sample ID: Seq: 74 11:11:29 15 May 15 HG
240-50479-d-2-j

Hg	-.0474	ppb	.0000	-.0474

*** Sample ID: Seq: 75 11:12:51 15 May 15 HG
240-50427-a-1-i

Hg	-.0281	ppb	.0000	-.0281

*** Sample ID: Seq: 76 11:14:23 15 May 15 HG
240-50442-d-1-q

Hg	-.0064	ppb	.0000	-.0064

*** Check Standard: 6 Ck6CCV Seq: 77 11:16:18 15 May 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		98.61	4.931	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 78 11:17:39 15 May 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0334	.2000	ppb	.0000

*** Sample ID: Seq: 79 11:19:30 15 May 15 HG
mb 240-180745/1-a

Hg	-.0265	ppb	.0000	-.0265

*** Sample ID: Seq: 80 11:21:45 15 May 15 HG
lcs 240-180745/2-a

Hg	4.859	ppb	.0000	4.859

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: Seq: 81 11:23:10 15 May 15 HG
240-50587-b-1-d
Hg -.0133 ppb .0000 -.0133

*** Sample ID: Seq: 82 11:25:02 15 May 15 HG
240-50587-b-1-e ms
Hg .9636 ppb .0000 .9636

*** Sample ID: Seq: 83 11:26:54 15 May 15 HG
240-50587-b-1-f msd
Hg .9256 ppb .0000 .9256

*** Sample ID: Seq: 84 11:28:46 15 May 15 HG
240-50587-b-2-b
Hg -.0323 ppb .0000 -.0323

*** Sample ID: Seq: 85 11:30:37 15 May 15 HG
240-50587-b-3-b
Hg .0025 ppb .0000 .0025

*** Sample ID: Seq: 86 11:32:09 15 May 15 HG
240-50587-b-4-b
Hg .0012 ppb .0000 .0012

*** Sample ID: Seq: 87 11:33:53 15 May 15 HG
240-50587-b-5-b
Hg .0258 ppb .0000 .0258

*** Sample ID: Seq: 88 11:35:16 15 May 15 HG
240-50587-b-6-b
Hg .0070 ppb .0000 .0070

*** Check Standard: 6 Ck6CCV Seq: 89 11:36:50 15 May 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		99.15	4.957	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 90 11:38:12 15 May 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0479	.2000	ppb	.0000

*** Sample ID: Seq: 91 11:39:44 15 May 15 HG
240-50587-b-7-b
Hg -.0268 ppb .0000 -.0268

*** Sample ID: Seq: 92 11:41:17 15 May 15 HG
240-50587-b-8-b
Hg -.0083 ppb .0000 -.0083

*** Sample ID: Seq: 93 11:42:50 15 May 15 HG
240-50587-b-9-b
Hg .0044 ppb .0000 .0044

*** Sample ID: Seq: 94 11:44:47 15 May 15 HG
240-50587-b-10-b
Hg .0017 ppb .0000 .0017

*** Sample ID: Seq: 95 11:46:13 15 May 15 HG
240-50587-b-11-b
Hg .0004 ppb .0000 .0004

*** Sample ID: Seq: 96 11:47:36 15 May 15 HG
240-50587-b-12-b
Hg .0052 ppb .0000 .0052

Protocol: Hg7470A
POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: Seq: 97 11:49:00 15 May 15 HG
240-50650-a-8-a

Hg	-.0001	ppb	.0000	-.0001				

*** Sample ID: Seq: 98 11:50:55 15 May 15 HG
190-7254-c-1-a

Hg	-.0125	ppb	.0000	-.0125				

*** Check Standard: 4 Ck4CRA\MRL Seq: 99 11:52:31 15 May 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		85.09	.1702	.2000	ppb	.0000

*** Check Standard: 6 Ck6CCV Seq: 100 11:53:57 15 May 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		98.93	4.946	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 101 11:55:30 15 May 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0373	.2000	ppb	.0000

TestAmerica North Canton Hg Data Review Checklist

Run/Project Information:

Circle Methods used: (7470A / 245.1) 7471 Batch: 18029

Run Date: 5/15/15 Analyst: B. Walpole Instrument: 41

Review Items				
A. Calibration/Instrument Run QC	Yes	No	N/A	2nd Level
1. Instrument calibrated per manufacturer's instructions and at SOP specified levels?	✓			✓
2. ICV/CCV analyzed at appropriate frequency and within control limits?	✓			✓
3. ICB/CCB analyzed at appropriate frequency and within +/- RL?	✓			✓
4. CRA run?	✓			✓
B. Sample Results				
1. Were samples with concentrations > high calibration standard diluted and reanalyzed?			✓	
2. All reported results bracketed by in control QC?	✓			✓
3. Sample analyses done within holding time?	✓			✓
C. Preparation/ Matrix QC				
1. LCS done per prep batch and within QC limits?	✓			✓
2. Method blank done per prep batch and < RL?	✓			✓
3. MS run at required frequency and within limits?		✓		✓
4. MSD or DU run at required frequency and RPD within SOP limits?		✓		✓
D. Other				
1. Are all nonconformances documented appropriately?			✓	
2. Current IDL/MDL data on file?	✓			✓
3. Calculations and Transcription checked for error?	✓			✓
4. All client/project specific requirements met?	✓			✓
5. Date of analysis verified as correct?	✓			✓

Level I

Analyst: B. Walpole Date/Time: 5/15/15 Reviewed from 8:43 to 11:55

Analyst: _____ Date/Time: _____ Reviewed from _____ to _____

Comments: _____

Level II

Reviewer: Karen L Crute Date/Time: 5/15/15 Reviewed from 8:43 to 11:55

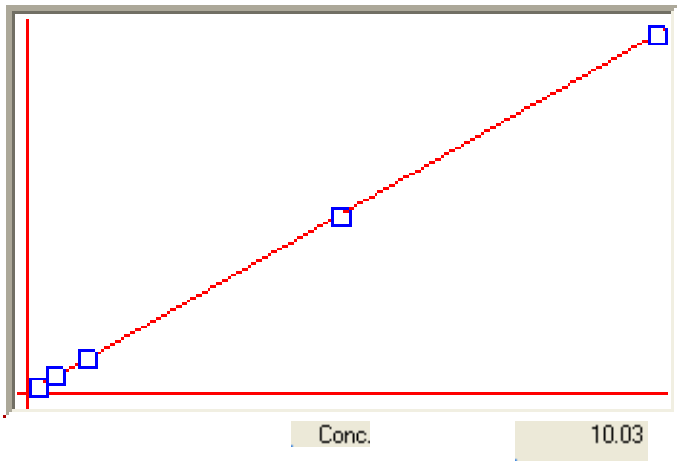
Reviewer: _____ Date/Time: _____ Reviewed from _____ to _____

Comments _____

Curve Date 5/14/15 Curve Time 10:31-12:31 DILUTION H20 NA

Revised 11/29/2012

Protocol: Hg-7471A



Linear

Calibrated

Accepted

A

B 2.09114e-4

C 2.43850e-2

Rhc .999966

Accepted Date: 28-May-15 10:27

S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
01	.00000	.0018	.0018	-109	1	-108				
02	.20000	.2115	.0115	896	0%	895				
03	.50000	.5099	.0099	2322	0%	2322				
04	1.0000	1.011	.0114	4721	0%	4720				
05	5.0000	4.935	-.0646	23486	0%	23485				
06	10.000	10.03	.0299	47847	0%	47847				
07										
08										
09										
10										

POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Standard: 1 Rep: 1 Seq: 1 10:16:24 28 May 15 HG

Hg .0000 ppb -108

*** Standard: 2 Rep: 1 Seq: 2 10:18:11 28 May 15 HG

Hg .2000 ppb 895

*** Standard: 3 Rep: 1 Seq: 3 10:20:24 28 May 15 HG

Hg .5000 ppb 2322

*** Standard: 4 Rep: 1 Seq: 4 10:22:31 28 May 15 HG

Hg 1.000 ppb 4720

*** Standard: 5 Rep: 1 Seq: 5 10:24:23 28 May 15 HG

Hg 5.000 ppb 23485

*** Standard: 6 Rep: 1 Seq: 6 10:27:41 28 May 15 HG

Hg 10.00 ppb 47847

*** Check Standard: 2 Ck2ICV Seq: 7 10:29:49 28 May 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		94.43	4.721	5.000	ppb	.0000

*** Check Standard: 3 Ck3ICB Seq: 8 10:31:47 28 May 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		^^^^^^	-.0248	.0000	ppb	.0000

*** Check Standard: 4 Ck4CRA\MRL Seq: 9 10:33:44 28 May 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		116.2	.2325	.2000	ppb	.0000

*** Check Standard: 6 Ck6CCV Seq: 10 10:54:51 28 May 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		94.37	4.719	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 11 10:56:48 28 May 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0402	.2400	ppb	.0000

*** Sample ID: Seq: 12 10:58:53 28 May 15 HG
mb 240-182343/1-a
Hg .0221 ppb .0000 .0221

*** Sample ID: Seq: 13 11:00:59 28 May 15 HG
lcs 240-182343/2-a
Hg 4.809 ppb .0000 4.809

*** Sample ID: Seq: 14 11:03:05 28 May 15 HG
240-50650-a-1-e
Hg .3761 ppb .0000 .3761

*** Sample ID: Seq: 15 11:05:01 28 May 15 HG
240-50650-a-1-f du
Hg .3960 ppb .0000 .3960

*** Sample ID: Seq: 16 11:06:52 28 May 15 HG
240-50650-a-1-g ms
Hg 1.428 ppb .0000 1.428

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: Seq: 17 11:08:40 28 May 15 HG
240-50650-a-3-c
Hg .3065 ppb .0000 .3065

*** Sample ID: Seq: 18 11:10:32 28 May 15 HG
240-50650-a-4-c
Hg .3433 ppb .0000 .3433

*** Sample ID: Seq: 19 11:12:33 28 May 15 HG
240-50650-a-5-c
Hg .3843 ppb .0000 .3843

*** Sample ID: Seq: 20 11:14:21 28 May 15 HG
240-50650-a-6-c
Hg .1526 ppb .0000 .1526

*** Sample ID: Seq: 21 11:16:13 28 May 15 HG
240-50650-a-7-c
Hg .3393 ppb .0000 .3393

*** Check Standard: 4 Ck4CRA\MRL Seq: 22 11:18:09 28 May 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		115.8	.2316	.2000	ppb	.0000

*** Check Standard: 6 Ck6CCV Seq: 23 11:20:00 28 May 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		97.69	4.884	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 24 11:21:57 28 May 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0379	.2400	ppb	.0000

*** Check Standard: 6 Ck6CCV Seq: 25 13:07:48 28 May 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		95.03	4.751	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 26 13:09:40 28 May 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0887	.2400	ppb	.0000

*** Sample ID: Seq: 27 13:11:49 28 May 15 HG
mb 240-182575/1-a
Hg .0478 ppb .0000 .0478

*** Sample ID: Seq: 28 13:13:45 28 May 15 HG
lcs 240-182575/2-a
Hg 4.960 ppb .0000 4.960

*** Sample ID: Seq: 29 13:15:54 28 May 15 HG
240-50986-b-11-b
Hg .3489 ppb .0000 .3489

*** Sample ID: Seq: 30 13:17:42 28 May 15 HG
240-50986-b-11-c ms
Hg 1.178 ppb .0000 1.178

*** Sample ID: Seq: 31 13:19:40 28 May 15 HG
240-50986-b-11-d msd
Hg 1.262 ppb .0000 1.262

*** Sample ID: Seq: 32 13:21:46 28 May 15 HG
240-50986-b-12-b
Hg .0932 ppb .0000 .0932

POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: Seq: 33 13:23:32 28 May 15 HG
240-50987-b-5-b
Hg .5325 ppb .0000 .5325

*** Sample ID: Seq: 34 13:25:19 28 May 15 HG
240-50987-b-6-b
Hg .3100 ppb .0000 .3100

*** Sample ID: Seq: 35 13:27:10 28 May 15 HG
240-50987-b-7-b
Hg 1.001 ppb .0000 1.001

*** Sample ID: Seq: 36 13:28:58 28 May 15 HG
240-50987-b-8-b
Hg .2262 ppb .0000 .2262

*** Check Standard: 6 Ck6CCV Seq: 37 13:31:14 28 May 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		98.96	4.948	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 38 13:33:13 28 May 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0814	.2400	ppb	.0000

*** Sample ID: Seq: 39 13:35:05 28 May 15 HG
240-50987-b-9-b
Hg .6325 ppb .0000 .6325

*** Sample ID: Seq: 40 13:37:03 28 May 15 HG
240-50987-b-10-b
Hg .2440 ppb .0000 .2440

*** Sample ID: Seq: 41 13:38:50 28 May 15 HG
240-50987-b-11-b
Hg .5689 ppb .0000 .5689

*** Sample ID: Seq: 42 13:40:48 28 May 15 HG
240-50987-b-12-b
Hg .1304 ppb .0000 .1304

*** Sample ID: Seq: 43 13:42:36 28 May 15 HG
240-50748-b-4-a
Hg 1.421 ppb .0000 1.421

*** Sample ID: Seq: 44 13:44:53 28 May 15 HG
mb 240-182552/1-a
Hg .0244 ppb .0000 .0244

*** Sample ID: Seq: 45 13:46:59 28 May 15 HG
lcs 240-182552/2-a
Hg 4.930 ppb .0000 4.930

*** Sample ID: Seq: 46 13:48:58 28 May 15 HG
240-51106-m-1-h
Hg .1135 ppb .0000 .1135

*** Sample ID: Seq: 47 13:50:57 28 May 15 HG
240-51106-m-1-i ms
Hg 1.165 ppb .0000 1.165

*** Sample ID: Seq: 48 13:52:48 28 May 15 HG
240-51106-m-1-j msd
Hg 1.123 ppb .0000 1.123

POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Check Standard: 6 Ck6CCV Seq: 49 13:54:36 28 May 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		99.26	4.963	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 50 13:56:35 28 May 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0126	.2400	ppb	.0000

*** Sample ID: Seq: 51 13:58:52 28 May 15 HG
240-50910-f-1-b

Hg	.1622	ppb	.0000	.1622

*** Sample ID: Seq: 52 14:00:39 28 May 15 HG
240-50910-f-2-b

Hg	.1896	ppb	.0000	.1896

*** Sample ID: Seq: 53 14:02:27 28 May 15 HG
240-50988-b-1-b

Hg	.8600	ppb	.0000	.8600

*** Sample ID: Seq: 54 14:04:27 28 May 15 HG
240-50988-b-2-b

Hg	.7969	ppb	.0000	.7969

*** Sample ID: Seq: 55 14:06:15 28 May 15 HG
240-50988-b-3-b

Hg	.1051	ppb	.0000	.1051

*** Sample ID: Seq: 56 14:08:12 28 May 15 HG
190-7366-b-1-f

Hg	1.653	ppb	.0000	1.653

*** Sample ID: Seq: 57 14:10:12 28 May 15 HG
240-51157-g-1-b

Hg	.1967	ppb	.0000	.1967

*** Sample ID: Seq: 58 14:12:02 28 May 15 HG
240-50018-b-8-b

Hg	2.980	ppb	.0000	2.980

*** Sample ID: Seq: 59 14:14:09 28 May 15 HG
240-50018-b-9-b

Hg	4.553	ppb	.0000	4.553

*** Sample ID: Seq: 60 14:16:07 28 May 15 HG
240-50018-b-12-b

Hg	4.191	ppb	.0000	4.191

*** Check Standard: 6 Ck6CCV Seq: 61 14:18:35 28 May 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		98.25	4.912	5.000	ppb	.0000

*** Check Standard: 1 Ck1CCB Seq: 62 14:20:26 28 May 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.1013	.2400	ppb	.0000

*** Sample ID: Seq: 63 14:22:14 28 May 15 HG
240-50018-b-13-b

Hg	5.202	ppb	.0000	5.202

*** Check Standard: 6 Ck6CCV Seq: 64 14:24:24 28 May 15 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		98.24	4.912	5.000	ppb	.0000

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Check Standard: 1 Ck1CCB Seq: 65 14:26:21 28 May 15 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0321	.2400	ppb	.0000

TestAmerica North Canton Hg Data Review Checklist

Run/Project Information:

Circle Methods used: 7470A / 245.1 (7471) Batch: 182771

Run Date: 5/28/15 Analyst: BWaepole Instrument: H4

Review Items				
A. Calibration/Instrument Run QC	Yes	No	N/A	2nd Level
1. Instrument calibrated per manufacturer's instructions and at SOP specified levels?	✓			✓
2. ICV/CCV analyzed at appropriate frequency and within control limits?	✓			✓
3. ICB/CCB analyzed at appropriate frequency and within +/- RL?	✓			✓
4. CRA run?	✓			✓
B. Sample Results				
1. Were samples with concentrations > high calibration standard diluted and reanalyzed?			✓	✓
2. All reported results bracketed by in control QC?	✓			✓
3. Sample analyses done within holding time?	✓			✓
C. Preparation/ Matrix QC				
1. LCS done per prep batch and within QC limits?	✓			✓
2. Method blank done per prep batch and < RL?	✓			✓
3. MS run at required frequency and within limits?	✓			✓
4. MSD or DU run at required frequency and RPD within SOP limits?	✓			✓
D. Other				
1. Are all nonconformances documented appropriately?			✓	✓
2. Current IDL/MDL data on file?	✓			✓
3. Calculations and Transcription checked for error?	✓			✓
4. All client/project specific requirements met?	✓			✓
5. Date of analysis verified as correct?	✓			✓

Level I

Analyst: BWaepole Date/Time: 5/28/15 Reviewed from 10:16 to 14:26

Analyst: _____ Date/Time: _____ Reviewed from _____ to _____

Comments: _____

Level II

Reviewer: Jmanati Date/Time: 5/29/15 Reviewed from 10:16 to 14:26

Reviewer: _____ Date/Time: _____ Reviewed from _____ to _____

Comments _____

Curve Date 5/28/15 Curve Time 8:31-9:01 DILUTION H20 NA

Revised 11/29/2012

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Batch Number: 180747 Batch Start Date: 05/14/15 09:26 Batch Analyst: Lecorchick, Willis A

Batch Method: 3005A Batch End Date: 05/14/15 17:26

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTICPMS2 00021	MTICPMSA 00023	MTICPMSB 00023	MTTMHCL 00066
MB 240-180747/1		3005A, 6020		50 mL	50 mL				2.5 mL
LCS 240-180747/2		3005A, 6020		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	2.5 mL
240-50650-A-8	079SS-0407-0001-RB	3005A, 6020	R	50 mL	50 mL				2.5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTTMHNO3 00056					
MB 240-180747/1		3005A, 6020		1 mL					
LCS 240-180747/2		3005A, 6020		1 mL					
240-50650-A-8	079SS-0407-0001-RB	3005A, 6020	R	1 mL					

Batch Notes	
Filter Paper Lot Number	9627499
Hot Block ID number	HB4
Pipette ID	383363
Digestion Tube/Cup Lot #	1408268

Basis	Basis Description
R	Total Recoverable

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Batch Number: 182339 Batch Start Date: 05/26/15 10:39 Batch Analyst: Elshaw, Dale

Batch Method: 3050B Batch End Date: 05/26/15 17:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	InitialAmount	FinalAmount	MT1TO1HN03 00980	MTH202 00044	MTICPMS2 00021
MB 240-182339/1		3050B, 6020		CALC NOT SET TO RUN	1.00 g	100 mL	10 mL	10 mL	
LCS 240-182339/2		3050B, 6020		CALC NOT SET TO RUN	1.00 g	100 mL	10 mL	10 mL	1 mL
240-50650-A-1-A	079SS-0400M-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.11 g	100 mL	10 mL	10 mL	
240-50650-A-1-A DU	079SS-0400M-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.11 g	100 mL	10 mL	10 mL	
240-50650-A-1-A MS	079SS-0400M-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.11 g	100 mL	10 mL	10 mL	1 mL
240-50650-A-3-A	079SS-0402M-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.13 g	100 mL	10 mL	10 mL	
240-50650-A-4-A	079SS-0403M-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.01 g	100 mL	10 mL	10 mL	
240-50650-A-5-A	079SS-0404M-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.04 g	100 mL	10 mL	10 mL	
240-50650-A-6-A	079SS-0405M-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.43 g	100 mL	10 mL	10 mL	
240-50650-A-7-A	079SS-0406M-0001-SO	3050B, 6020	T	CALC NOT SET TO RUN	1.33 g	100 mL	10 mL	10 mL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTICPMSA 00021	MTICPMSA 00023	MTICPMSB 00021	MTICPMSB 00023	MTTMHCL 00066	MTTMHNO3 00057
MB 240-182339/1		3050B, 6020						10 mL	5 mL
LCS 240-182339/2		3050B, 6020			1 mL		1 mL	10 mL	5 mL
240-50650-A-1-A	079SS-0400M-0001-SO	3050B, 6020	T					10 mL	5 mL
240-50650-A-1-A DU	079SS-0400M-0001-SO	3050B, 6020	T					10 mL	5 mL
240-50650-A-1-A MS	079SS-0400M-0001-SO	3050B, 6020	T	1 mL		1 mL		10 mL	5 mL
240-50650-A-3-A	079SS-0402M-0001-SO	3050B, 6020	T					10 mL	5 mL
240-50650-A-4-A	079SS-0403M-0001-SO	3050B, 6020	T					10 mL	5 mL
240-50650-A-5-A	079SS-0404M-0001-SO	3050B, 6020	T					10 mL	5 mL
240-50650-A-6-A	079SS-0405M-0001-SO	3050B, 6020	T					10 mL	5 mL
240-50650-A-7-A	079SS-0406M-0001-SO	3050B, 6020	T					10 mL	5 mL

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Batch Number: 182339 Batch Start Date: 05/26/15 10:39 Batch Analyst: Elshaw, Dale

Batch Method: 3050B Batch End Date: 05/26/15 17:30

Batch Notes	
Balance ID	b039
Blank Soil Lot Number	K565-4i009
Filter Paper Lot Number	9627499
Hot Block ID number	a1 c3
Pipette ID	64-66
Digestion Tube/Cup Lot #	150402

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Batch Number: 180745 Batch Start Date: 05/14/15 14:00 Batch Analyst: Lecorchick, Willis A

Batch Method: 7470A Batch End Date: 05/14/15 16:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	K2S2O8 00022	MTH2S04 00021	MTHGCALW 00904	MTKMN04W 00083
MB 240-180745/1		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		7.5 mL
LCS 240-180745/2		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL	2.5 mL	7.5 mL
240-50650-A-8	079SS-0407-0001-RB	7470A, 7470A	T	50 mL	50 mL	4 mL	2.5 mL		7.5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTTMHNO3 00056	AnalysisComment				
MB 240-180745/1		7470A, 7470A		1.25 mL					
LCS 240-180745/2		7470A, 7470A		1.25 mL					
240-50650-A-8	079SS-0407-0001-RB	7470A, 7470A	T	1.25 mL	DOD				

Batch Notes	
Hot Block ID number	B1
Pipette ID	383363-383366, 59L-64
Digestion Tube/Cup Lot #	1408268

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Batch Number: 180787 Batch Start Date: 05/14/15 10:31 Batch Analyst: Walpole, Barbara

Batch Method: 7470A Batch End Date: 05/14/15 12:31

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	K2S2O8 00022	MTH2S04 00021	MTHGCALW 00904	MTHgStd 00016
ICV 240-180787/7		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		0.25 mL
ICB 240-180787/8		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		
CRA 240-180787/9		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL	0.1 mL	
CCV 240-180787/10		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL	2.5 mL	
CCB 240-180787/11		7470A, 7470A		50 mL	50 mL	4 mL	2.5 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTKMN04W 00083	MTTMHNO3 00056				
ICV 240-180787/7		7470A, 7470A		7.5 mL	1.25 mL				
ICB 240-180787/8		7470A, 7470A		7.5 mL	1.25 mL				
CRA 240-180787/9		7470A, 7470A		7.5 mL	1.25 mL				
CCV 240-180787/10		7470A, 7470A		7.5 mL	1.25 mL				
CCB 240-180787/11		7470A, 7470A		7.5 mL	1.25 mL				

Batch Notes	
Hot Block ID number	B1
Pipette ID	59L-64
Digestion Tube/Cup Lot #	1501179

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Batch Number: 182343 Batch Start Date: 05/26/15 15:15 Batch Analyst: Elshaw, Dale

Batch Method: 7471A Batch End Date: 05/26/15 15:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTAQUAREGIA 01043	MTHGCALW 00914	MTKMN04W 00085	
MB 240-182343/1		7471A, 7471A		0.60 g	100 mL	5 mL		15 mL	
LCS 240-182343/2		7471A, 7471A		0.60 g	100 mL	5 mL	5 mL	15 mL	
240-50650-A-1-A	079SS-0400M-0001-SO	7471A, 7471A	T	0.69 g	100 mL	5 mL		15 mL	
240-50650-A-1-A DU	079SS-0400M-0001-SO	7471A, 7471A	T	0.69 g	100 mL	5 mL		15 mL	
240-50650-A-1-A MS	079SS-0400M-0001-SO	7471A, 7471A	T	0.69 g	100 mL	5 mL	1 mL	15 mL	
240-50650-A-3-A	079SS-0402M-0001-SO	7471A, 7471A	T	0.58 g	100 mL	5 mL		15 mL	
240-50650-A-4-A	079SS-0403M-0001-SO	7471A, 7471A	T	0.66 g	100 mL	5 mL		15 mL	
240-50650-A-5-A	079SS-0404M-0001-SO	7471A, 7471A	T	0.69 g	100 mL	5 mL		15 mL	
240-50650-A-6-A	079SS-0405M-0001-SO	7471A, 7471A	T	0.58 g	100 mL	5 mL		15 mL	
240-50650-A-7-A	079SS-0406M-0001-SO	7471A, 7471A	T	0.69 g	100 mL	5 mL		15 mL	

Batch Notes	
Balance ID	b039
Blank Soil Lot Number	K565-4i009
Hot Block ID number	b1
Pipette ID	59L-64-66
Digestion Tube/Cup Lot #	1501179

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Batch Number: 182695 Batch Start Date: 05/28/15 08:31 Batch Analyst: Walpole, Barbara

Batch Method: 7471A Batch End Date: 05/28/15 09:01

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTAQUAREGIA 01047	MTHGCALW 00917	MTHgStd 00016	MTKMN04W 00085
ICV 240-182695/7		7471A, 7471A		100 mL	100 mL	5 mL		0.5 mL	15 mL
ICB 240-182695/8		7471A, 7471A		100 mL	100 mL	5 mL			15 mL
CRA 240-182695/9		7471A, 7471A		100 mL	100 mL	5 mL	0.2 mL		15 mL
CCV 240-182695/10		7471A, 7471A		100 mL	100 mL	5 mL	5 mL		15 mL
CCB 240-182695/11		7471A, 7471A		100 mL	100 mL	5 mL			15 mL

Batch Notes	
Hot Block ID number	B1
Pipette ID	59L-64-66
Digestion Tube/Cup Lot #	1501179

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-50650-1

SDG No.:

Project: RVAAP - ECC

Client Sample ID	Lab Sample ID
079SS-0400M-0001-SO	240-50650-1
079SS-0402M-0001-SO	240-50650-3
079SS-0403M-0001-SO	240-50650-4
079SS-0404M-0001-SO	240-50650-5
079SS-0405M-0001-SO	240-50650-6
079SS-0406M-0001-SO	240-50650-7

Comments:

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-50650-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture LOQ Date: 01/28/2010 09:24

ISM Prep Method: Increment, Prep

Analyte	Wavelength/ Mass	LOQ (%)	
Percent Moisture		0.1	
Percent Solids		0.1	

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-50650-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture XRL Date: 01/28/2010 09:24

Analyte	Wavelength/ Mass	XRL (mg/L)	
Percent Moisture		10	
Percent Solids		10	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 05/21/2015 09:51 End Date: 05/21/2015 18:33

Lab Sample Id	D/F	Type	Time	Analytes																									
				% Sol	Moist																								
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240-50650-5	1	T	09:51	X	X																								
240-50650-6	1	T	09:51	X	X																								
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FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 05/21/2015 09:51 End Date: 05/21/2015 18:33

Lab Sample Id	D/F	Type	Time	Analytes																									
				% Sol	Moist																								
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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 05/21/2015 09:51 End Date: 05/21/2015 18:33

Lab Sample Id	D/F	Type	Time	Analytes																										
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FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 05/21/2015 09:51 End Date: 05/21/2015 18:33

Lab Sample Id	D/F	Type	Time	Analytes																										
				% Sol	Moist																									
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FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 05/21/2015 09:51 End Date: 05/21/2015 18:33

Lab Sample Id	D/F	Type	Time	Analytes																										
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Prep Types:
T = Total/NA

FORM XIII-IN

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-50650-1

SDG No.:

Batch Number: 181834 Batch Start Date: 05/21/15 09:51 Batch Analyst: Harshman, Tom

Batch Method: Moisture Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	DishWeight	SampleMassWet	SampleMassDry			
240-50650-A-1-A	079SS-0400M-0001-SO	Moisture	T	4.2418 g	16.4268 g	16.0800 g			
240-50650-A-3-A	079SS-0402M-0001-SO	Moisture	T	4.2418 g	15.5278 g	15.2291 g			
240-50650-A-4-A	079SS-0403M-0001-SO	Moisture	T	4.2418 g	19.8724 g	19.4349 g			
240-50650-A-5-A	079SS-0404M-0001-SO	Moisture	T	4.2418 g	18.0351 g	17.6408 g			
240-50650-A-6-A	079SS-0405M-0001-SO	Moisture	T	4.2418 g	17.9892 g	17.7047 g			
240-50650-A-7-A DU	079SS-0406M-0001-SO	Moisture	T	4.2418 g	11.5355 g	11.3511 g			
240-50650-A-7-A	079SS-0406M-0001-SO	Moisture	T	4.2418 g	12.9005 g	12.6742 g			

Batch Notes	
Balance ID	B047 No Unit
Date samples were placed in the oven	5/21/15
Oven Temp when samples are put in oven	103.6 Degrees C
Time samples were place in the oven	17:40
Oven ID	002
ID number of the thermometer	Tempguard Box C #6

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS


240-50650 Chain of Custody

4101 Shuffel Street, N.W. North Canton, OH 44720 **tel** 330.497.9396 **fax** 330.497.0772 **www.testamericainc.com**

TestAmerica Canton
4101 Shuffel Street, N. W.
North Canton, OH 44720
Phone: 330 497 9396 Fax: 330 497 ?

8.0/C5.5

Chain of Custody Record

103374

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: PAM FOTI	Site Contact: J. DONOVAN	Date: 5-13-15	COC No: 103374
Company Name: ECC	Tel/Fax:	Lab Contact: MARK LOEB	Carrier: TA COURIER	1 of 1 COCs
Address: 33 BOSTON POST RD WEST	Analysis Turnaround Time			Sampler:
City/State/Zip: MARLBORO MA 01752	☒ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 508-229 8270	TAT if different from Below NORMAL			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: RAVENNA	☐ 1 week			
Site: CC79 MSA FRT 80	☐ 2 days			Job / SDG No.:
PO # 5461.004	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TAL METALS	MERCURY	Sample Specific Notes:
07955-0400M-0001-SO	5-13-15	0840	ISM	SO	1	N	M	X	X	
07955-0401M-0001-SO	5-13-15	0940			1			X	X	HOLD ANALYSIS
07955-0402M-0001-SO	5-12-15	1720			1			X	X	
07955-0403M-0001-SO		1755			1			X	X	
07955-0404M-0001-SO		1650			1			X	X	
07955-0405M-0001-SO		1415			1			X	X	
07955-0406M-0001-SO	↓	1540	↓	↓	1			X	X	
07955-0407-0001-RB	5-13-15	1100	G	DI	1	↓	↓	X	X	RINSATE BLANK

Page 1096 of 1097

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

1 1

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

4/4

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:
"M" = ISM SAMPLE HOLD ANALYZING 07955-0401M-0001-SO UNTIL RESULTS FROM 07955-0400M-0001-SO ARE IN

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ | Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	ECC	5-13-15 1155			5-13-2015 1155
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TA	5/13/15 1244		TA Can	5/13/15 1244
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 50050**
Canton Facility

Client ECC Site Name Ravenna

Cooler unpacked by: Gerry Burns

Cooler Received on 5/13/15 Opened on 5/13/15

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off ~~TestAmerica Courier~~ Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # CT Foam Box Client Cooler Box Other

Packing material used: ~~Bubble Wrap~~ Foam Plastic Bag None Other

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

~~IR GUN# A (CF +4.0 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C~~

IR GUN# 4 (CF +0.5 °C) Observed Cooler Temp. 5.0 °C Corrected Cooler Temp. 5.5 °C ☐ See Multiple Cooler Form

~~IR GUN# 5 (CF +0.4 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C~~

IR GUN# 8 (CF -1.2 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity Yes (No)
   -Were custody seals on the outside of the cooler(s) signed & dated? Yes No (NA)
   -Were custody seals on the bottle(s)? Yes (No)
3. Shippers' packing slip attached to the cooler(s)? Yes (No)
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Was/were the sampler(s) clearly identified on the COC? Yes (No)
7. Did all bottles arrive in good condition (Unbroken)? (Yes) No
8. Could all bottle labels be reconciled with the COC? (Yes) No
9. Were correct bottle(s) used for the test(s) indicated? (Yes) No
10. Sufficient quantity received to perform indicated analyses? (Yes) No
11. Were sample(s) at the correct pH upon receipt? (Yes) No ~~NA~~ TB pH Strip Lot# HC432654
12. Were VOAs on the COC? Yes (No)
13. Were air bubbles >6 mm in any VOA vials? Yes No ~~NA~~
14. Was a trip blank present in the cooler(s)? Trip Blank Lot # Yes (No)

Contacted PM Date by via Verbal Voice Mail Other
Concerning

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

15. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.
Sample(s) were received in a broken container.
Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory.
Time preserved: Preservative(s) added/Lot number(s):

TestAmerica Canton
4101 Shuffel Street, N. W.
North Canton, OH 44720
Phone: 330.497.9396 Fax: 330.497.0772

Chain of Custody Record

031443

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other: TestAmerica Prof. # 24009157

TAL-8210 (0713)

Client Contact	Project Manager: AL EASTERDAY	Site Contact: J. DONAHUE	Date: 4-7-15	COC No:
Company Name: ECC	Tel/Fax: 508-229-2270	Lab Contact: MARK LORD	Carrier: LAB PICK UP	1 of 1 COCs
Address: 33 BOSTON POST RD WEST	Analysis Turnaround Time			Sampler:
City/State/Zip: MARLBORO MA 01252	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 508 229 2270	TAT if different from Below _____			Walk-in Client:
Fax: 508-229-7737	☒ 2 weeks			Lab Sampling:
Project Name: RAYTHEON AAP	☐ 1 week			
Site: CC 79 AREA 8	☐ 2 days			Job / SDG No.:
P O # 5161.004	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TAL METALS	VOC	SVOC	PCB's	PESTICIDES	EXPLOSIVES	PROPELLANTS	Sample Specific Notes:
07955-0342M-0001-SO	4-6-15	1630	15M	SO	10			X	X	X	X	X	X	X	FULL SUITE
07955-0342M-0002-SO	↓	1630	↓	↓	1	X	X								MS/MSD
07955-0343M-0001-SO		1400			1		X								
07955-0344M-0001-SO	↓	0000	↓	↓	1		X								
07955-0379-0001-TB	4-6-15	0800	LAB SUPPLIED	DI	2				X						TRIP BLANK

Page 229 of 2751

Preservation Used: 1= Ice, 2= HCl, 3= H2SO4, 4=HNO3, 5=NaOH, 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ | Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
J. Donahue JEFF DONOVAN	ECC	4-7-15 1655	[signature]	TestAm	4-7-15 1655
Relinquished by: [signature]	Company: ECC	Date/Time: 4/7/15 1705	Received by: [signature]	Company: TA Can	Date/Time: 4/8/15 0700
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TestAmerica Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Test America Project #: 24009157

Regulatory Program: ☐DW ☐NPDES ☐RCRA ☐Other:

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Al Easterday	Site Contact: Jeff Donovan	4/9/2015	COC No: 003
Environmental Chemical Corp.	Tel/Fax: 508-229-2270 Ext 22109	Lab Contact: Mark Loeb	Carrier: Lab Pick up	__1__ of __1__ COCs
33 Boston Post Rd. W	**Analysis Turnaround Time**			For Lab Use Only:
Marlborough, MA, 01752	☑ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
508-229-2270	TAT if different from Below = 3 weeks			Lab Sampling:
508-229-7737 (fax)	☐ 2 weeks			
Project Name: Ravenna Army Ammunition Plant	☑ 1 week			Job / SDG No.:
Site: CC RVAAP-79 Load Line 3	☐ 2 days			
P O # 5141.004	☐ 1 day			Sampler: KP - FR

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	SW8260B / 5035	SW8270C / SVOC	SW6020 / TAL Metals	SW8082 / PCB	SW8081A / Pesticides	SW8330B / Explosives	SW8330 - Nitroguanidine	Propellant - Nitrocellulose	SW71471A/ Mercury	Sample Specific Notes:
079SS-0369M-0001-SO	8-Apr-15	1020	ISM	SO	1	N	N			X						X	
079SS-0370M-0001-SO	8-Apr-15	1240	ISM	SO	1	N	N			X						X	
079SS-0371M-0001-SO	8-Apr-15	1150	ISM	SO	1	N	N			X						X	
079SS-0372M-0001-SO	8-Apr-15	1100	ISM	SO	1	N	N			X						X	
079SS-0373M-0001-SO	8-Apr-15	1340	ISM	SO	1	N	N			X						X	
079SS-0374M-0001-SO	8-Apr-15	1420	ISM	SO	1	N	N			X						X	
079SB-0375M-0001-SO	7-Apr-15	1400	ISM	SO	1	N	N			X						X	
079SB-0376M-0001-SO	7-Apr-15	1540	ISM	SO	1	N	N			X						X	
079SB-0377M-0001-SO	7-Apr-15	1600	ISM	SO	1	N	N			X						X	
079SB-0378M-0001-SO	7-Apr-15	1610	ISM	SO	1	N	N			X						X	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= MeOH; 7=DI Water								1,6,7	1	1	1	1	1	1	1	1	

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

☐Return to Client ☑Disposal by Lab ☐Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☒ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ | Therm ID No.:_____

Relinquished by:	Company:	Date/Time: 4-9-15 1243	Received by:	Company: TestAm	Date/Time: 4-9-15 1243
Relinquished by:	Company:	Date/Time: 1450	Received by:	Company: TA	Date/Time: 4-9-15 1451
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 4.1, dated 02/20/2013

TestAmerica Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Test America Project #: 24009157

Regulatory Program: ☐DW ☐NPDES ☐RCRA ☐Other:

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Al Easterday	Site Contact: Jeff Donovan	4/8/2015	COC No: 002
Environmental Chemical Corp.	Tel/Fax: 508-229-2270 Ext 22109	Lab Contact: Mark Loeb	Carrier: Lab Pick up	1 of 1 COCs
33 Boston Post Rd. W	Analysis Turnaround Time			For Lab Use Only:
Marlborough, MA, 01752	☑CALENDAR DAYS ☐WORKING DAYS			Walk-in Client:
508-229-2270	TAT if different from Below = 3 weeks			Lab Sampling:
508-229-7737 (fax)	☐ 2 weeks			
Project Name: Ravenna Army Ammunition Plant	☐ 1 week			Job / SDG No.:
Site: CC RVAAP-79 Rt 80 Tank Farm	☐ 2 days			
P O # 5141.004	☐ 1 day			Sampler: KP - FR

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	SW8260B / 5035	SW8270C / SVOC	SW6020 / TAL Metals	SW8082 / PCB	SW8081A / Pesticides	SW8330B / Explosives	SW8330 - Nitroguanidine	Propellant - Nitrocellulose	SW71471A/ Mercury	Sample Specific Notes:
079SS-0347M-0001-SO	6-Apr-15	1710	ISM	SO	1	N	N			X						X	
079SS-0348M-0001-SO	7-Apr-15	1510	ISM	SO	1	N	N			X						X	
079SS-0349M-0001-SO	7-Apr-15	0000	ISM	SO	1	N	N			X						X	
079SS-0350M-0001-SO	7-Apr-15	1205	ISM	SO	1	N	N			X						X	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= MeOH; 7=DI Water								1,6,7	1	1	1	1	1	1	1	1	

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

☐Return to Client ☑Disposal by Lab ☐Archive for_____ Months

Special Instructions/QC Requirements & Comments: Samples with "M" denote ISM samples.

Custody Seals Intact: ☑Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company: ECC	Date/Time: 4/9/15 1243	Received by: R. Rodan	Company: TestAm	Date/Time: 4-9-15 1243
Relinquished by:	Company: TestAm 4/9/15	Date/Time: 1625	Received by:	Company: TA	Date/Time: 4-9-15 1451
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 4.1, dated 02/20/2013

TestAmerica Canton
4101 Shuffel Street, N. W.
North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

Test America Project #: 24009157

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐DW ☐NPDES ☐RCRA ☐Other:

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Al Easterday	Site Contact: Jeff Donovan	4/10/2015	COC No: 006
Environmental Chemical Corp.	Tel/Fax: 508-229-2270 Ext 22109	Lab Contact: Mark Loeb	Carrier: Lab Pick up	1 of 1 COCs
33 Boston Post Rd. W	**Analysis Turnaround Time**			**For Lab Use Only:**
Marlborough, MA, 01752	☑CALENDAR DAYS ☐WORKING DAYS			Walk-in Client:
508-229-2270	TAT if different from Below = 3 weeks			Lab Sampling:
508-229-7737 (fax)	☐ 2 weeks			
Project Name: Ravenna Army Ammunition Plant	☐ 1 week			Job / SDG No.:
Site: CC RVAAP-79 Main Storage Area	☐ 2 days			
P O # 5141.004	☐ 1 day			Sampler:MG -AW

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	SW8260B / 5035	SW8270C / SVOC	SW6020 / TAL Metals	SW8082 / PCB	SW8081A / Pesticides	SW8330B / Explosives	SW8330 - Nitroguanidine	Propellant - Nitrocellulose	SW71471A/ Mercury	SW8260B/5030	Full TCLP	Corrosivity	Flashpoint	Total Cyanide/Reactivity	Total Sulfide/Reactivity	Total Cyanide/Reactivity	Total Sulfide/Reactivity			Sample Specific Notes:
079SB-0383-0001-IDW	10-Apr-15	0800	G	SO	2	N	N											X	X	X	X	X					IDW - Soils
079SB-0384-0001-IDW	10-Apr-15	0830	G	W	8	N	N											X	X	X			X	X			IDW - Liquids
079SB-0385-0001-SW	10-Apr-15	0845	G	W	13	N	N		X	X	X	X	X	X	X	X											Source Water
079SB-0386-0001-RB	10-Apr-15	0850	G	W	1	N	N			X						X											Rnsate Blank - CC79
069SB-0387-0001-RB	10-Apr-15	0900	G	W	2	N	N										X										Rinsate Blank - CC69
079SB-0388-0001-TB	10-Apr-15	0730	Lab Supplied	DI	2	N	N										X										Trip Blank
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= MeOH; 7=DI Water								1,6,7	1	1	1	1	1	1	1	1	1,2	1	1	1	1	1	1.5	1,8			

Possible Hazard Identification: 8 = Zn Acetate

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

☐Return to Client ☑Disposal by Lab ☐Archive for_____ Months

Special Instructions/QC Requirements & Comments: Full TCLP = VOC, SVOC, Metals, Pesticides, Herbicides

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TCC	4-10-15		TestAm	4-10-2015 1338
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TestAm 4-10-15	1421		TA	4-10-15 1421
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 4.1, dated 02/20/2013

TestAmerica Canton
4101 Shuffel Street, N. W.
North Canton, OH 44720
Phone: 330 497 9396 Fax: 330 497 ?

8.0/C5.5

Chain of Custody Record

103374

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: PAM FOTI	Site Contact: J. DONOVAN	Date: 5-13-15	COC No: 103374
Company Name: ECC	Tel/Fax:	Lab Contact: MARK LOEB	Carrier: TA COURIER	1 of 1 COCs
Address: 33 BOSTON POST RD WEST	Analysis Turnaround Time			Sampler:
City/State/Zip: MARLBORO MA 01752	☒ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 508-229 8270	TAT if different from Below NORMAL			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: RAVENNA	☐ 1 week			
Site: CC79 MSA FRT 80	☐ 2 days			Job / SDG No.:
PO # 5461.004	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TAL METALS	MERCURY	Sample Specific Notes:
07955-0400M-0001-SO	5-13-15	0840	ISM	SO	1	N	M	X	X	
07955-0401M-0001-SO	5-13-15	0940			1			X	X	HOLD ANALYSIS
07955-0402M-0001-SO	5-12-15	1720			1			X	X	
07955-0403M-0001-SO		1755			1			X	X	
07955-0404M-0001-SO		1650			1			X	X	
07955-0405M-0001-SO		1415			1			X	X	
07955-0406M-0001-SO	↓	1540	↓	↓	1			X	X	
07955-0407-0001-RB	5-13-15	1100	G	DI	1	↓	↓	X	X	RINSATE BLANK

Page 108 of 107

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

1 1

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

4/4

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:
"M" = ISM SAMPLE HOLD ANALYZING 07955-0401M-0001-SO UNTIL RESULTS FROM 07955-0400M-0001-SO ARE IN

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ | Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	ECC	5-13-15 1155			5-13-2015 1155
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TA	5/13/15 1244		TA Can	5/13/15 1244
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact			
Company Name: ECC	Client Project Manager: A. EASTERDAY	Site Contact: J. DONOVAN	Lab Contact: MARK LORD
Address: 33 BOSTON POST RD WEST #420	Telephone:	Telephone: 508 5091784	Telephone:
City/State/Zip: MARLBORO MA 01752	Email:	Analysis Turnaround Time (in BUS days)	Analyses
Phone:		TAT if different from below STAND-RD ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day	
Project Name: RAVENNA	Method of Shipment/Carrier: LAB PICK UP		
Project Number:	Shipping/Tracking No:		

COC No: 048791
1 of 3 COCs

For lab use only
Walk-in client ☐
Lab pickup ☐
Lab sampling ☐
Job/SDG No:

PO #			Matrix					Containers & Preservatives							Filtered Sample (Y / N)	Composite C / Grab G	TAL METALS		Sample Specific Notes / Special Instructions:
Sample Identification	Sample Date	Sample Time	Air	Aqueous	Sediment	Solid	Other:	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other:					
07955-0182M-0001-SO	3-18-13	1007				X							X				X		
~~07955-0183M-0001-SO~~		~~1010~~																	
07955-0184M-0001-SO	3-18-13	1040																	
07955-0185M-0001-SO		1415																	
07955-0186M-0001-SO		1100																	
07955-0187M-0001-SO		1130																	
07955-0188M-0001-SO		1405																	
07955-0189M-0001-SO		1225																	
07955-0190M-0001-SO		1230																	
07955-0191M-0001-SO		1430																	

240-22141 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
"M" SAMPLES ARE 15M

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	ECC	3/19/13 1600	[signature]	TAL-NC	3-19-13 1630
Relinquished by: [signature]	Company: TAL-NC	Date/Time: 3-19-13-1716	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: [signature]	Company: TAL	Date/Time: 3/19/13 1716

Page 670 of 675

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: ECC	Client Project Manager: A. EASTMAN	Site Contact: JT DONOVAN	Lab Contact: MARK COEP	COC No: 048792
Address: 33 BOSTON POST RD WEST #420	Telephone:	Telephone: 508 309 1784	Telephone:	2 of 3 COCs
City/State/Zip: MARLBORO MA 01852	Email:	Analysis Turnaround Time (in BUS days)	Analyses	For lab use only
Phone:		TAT if different from below: STANDARD		Walk-in client ☐ Lab pickup ☐ Lab sampling ☐
Project Name: RAYTHEON	Method of Shipment/Carrier: LAB PICK UP	☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Job/SDG No:
Project Number:	Shipping/Tracking No:			
PO #				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite=C / Grab=G	TAL METALS	Sample Specific Notes / Special Instructions:
07955-0192M-0001-SO	3-18-13	1318				X							X				X	
07955-0193M-0001-SO		1530																
07955-0195M-0001-SO		1446																
07955-0196M-0001-SO		1447																
07955-0197M-0001-SO		1425																
07955-0198M-0001-SO		1340																
07955-0199M-0001-SO		1233																
07955-0200M-0001-SO		1143																
07955-0201M-0001-SO		1255																
07955-0202~~SB~~-0001-SO		1253																DISCRETE

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
07955 ~~07955~~-0202-0001-SO IS DISCRETE - NOT ISM - DO NOT ORV ALL "M" SAMPLES ARE ISM
TAL-NC

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	ECC	3/19/13 1630		3-19-13	3-19-13 1630
Relinquished by: RC Gibson	Company: TAL NC	Date/Time: 3-19-13 1716	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TAL	Date/Time: 3/19/13 1716

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TAL 0018- 1 (04/10)

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: K2 CC	Client Project Manager: A. EASTERBROOK	Site Contact: J. DONOVAN	Lab Contact: MARK GOEB	COC No: 048793
Address: 33 BOSTON POST RD WEST #420	Telephone:	Telephone: 508 309 1784	Telephone:	3 of 3 COCs
City/State/Zip: MARLBORO MA	Email:	Analysis Turnaround Time (in BUS days)	Analyses	For lab use only
Phone:		TAT if different from below ____ STANDARD ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Walk-in client ☐ Lab pickup ☐ Lab sampling ☐
Project Name:	Method of Shipment/Carrier: LAB PICK UP			
Project Number:	Shipping/Tracking No:			Job/SDG No:

PO #			Matrix					Containers & Preservatives							Filtered Sample (Y/N)	Composite=C / Grab=G	TAL METALS										Sample Specific Notes / Special Instructions:
07955	Sample Identification	Sample Date	Sample Time	Air	Aqueous	Sediment	Solid	Other:	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other:													
~~07955~~	-0203-0001-SO	3-18-13	1255				X							X				X										DISCRETE
0795B	-0204M-0001-SO		1908																									
0795B	-0206M-0001-SO		1810																									-0206M-0001-SO
0795B	-0207M-0001-SO		1556																									
0795B	-0208M-0001-SO		1610																									
0795B	-0209M-0001-SO		1805																									
0795B	-0210M-0001-SO		1815																									
0795B	-0211M-0001-SO		1600																									
0795B	-0212 -0001-SO		1640																									DISCRETE
07955	-0213-0001-SO		1642																									DISCRETE

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
07955-0212-0001-SO + -0213 ARE DISCRETE, ALL ISM DO NOT ORM ALL "M" ARE ISM
↓ -0203-0001-SO

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	K2 CC	3/19/13 1630	[signature]	TAL NC	3-19-13-1630
[signature]	TAL-NC	3-19-13-1716			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
			[signature]	TAL	3/19/13 1716

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TAL 0018- 1 (04/10)

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** 22141

Client CCC Site Name _____ By: _____

Cooler Received on 3-19-13 Opened on _____ (Signature)

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off ~~TestAmerica Courier~~ Other _____

~~TestAmerica Cooler #~~ AB#: 5/1679 Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# 1	(CF –2 °C) Observed Sample Temp._____°C	Corrected Sample Temp._____°C	☑ Multiple on Back
IR GUN# 4G	(CF 0 °C) Observed Sample Temp._____°C	Corrected Sample Temp._____°C	
IR GUN# 5G	(CF 0 °C) Observed Sample Temp._____°C	Corrected Sample Temp._____°C	
IR GUN# 8	(CF 0 °C) Observed Sample Temp._____°C	Corrected Sample Temp._____°C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity_____	Yes No	
-Were custody seals on the outside of the cooler(s) signed & dated?	Yes No	NA
-Were custody seals on the bottle(s)?	Yes No	
3. Shippers' packing slip attached to the cooler(s)?	Yes No	
4. Did custody papers accompany the sample(s)?	Yes No	
5. Were the custody papers relinquished & signed in the appropriate place?	Yes No	
6. Did all bottles arrive in good condition (Unbroken)?	Yes No	
7. Could all bottle labels be reconciled with the COC?	Yes No	
8. Were correct bottle(s) used for the test(s) indicated?	Yes No	
9. Sufficient quantity received to perform indicated analyses?	Yes No	
10. Were sample(s) at the correct pH upon receipt?	Yes No	NA
11. Were VOAs on the COC?	Yes No	
12. Were air bubbles >6 mm in any VOA vials?	Yes No	NA
13. Was a trip blank present in the cooler(s)?	Yes No	

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Received 1 liter each

*07955-0317M-0001-50 3-18-13 at 1700

*07955-0318M-0001-50 3-18-13 at 1705

Will log for metals per test marked on sample labels

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: ECC	Project Manager: A. KASTERAVE	Date: 3-20-13	Chain of Custody Number: 002579
Address: 33 BOSTON POST RD WEST #420	Telephone Number (Area Code)/Fax Number	Lab Number	Page 1 of 3
City: MARLBORO / State: MA / Zip Code: 01752	Site Contact: J. DONOVAN	Lab Contact: MARK LORD	
Project Name and Location (State): RAVENNA	Carrier/Waybill Number		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Meth	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOC	SVOC	PCBS	EXPLOSIVES	PROPULSANT	TAL METAL	PESTICIDES	% Solids	Special Instructions/ Conditions of Receipt
07950-0194-0001-TB	3-20-13	0800		X							X			X								TRIP BLK
07950-0309-0001-SD	↓	1130			X		X	X			X			X	X	X	X	X	X	X	X	FULL SUITE
07950-0305-0001-SD	3-19-13	1400																	X			
07950-0305-0002-SD		1400																	X			MS/MSD
07950-0306-0001-SD		1410																	X			
07950-0307-0001-SD		1410																	X			
07950-0310-0001-SD		1435																	X			
07950-0287M-0001-SB		1623																	X			
07950-0288M-0001-SB		1632																	X			
07950-0289M-0001-SB		1424																	X			
07950-0290M-0001-SB		1616																	X			
07950-0291M-0001-SB	↓	1635																	X			

240-22274 Chain of Custody

Page 2379 of 2386

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other STANDARD

QC Requirements (Specify)

1. Relinquished By	Date: 3/20/13	Time: 1630	1. Received By	Date: 3-20-13	Time: 1630
2. Relinquished By	Date: 3-20-13	Time: 1727	2. Received By	Date: 3-20-13	Time: 1727
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments: ALL "M" SAMPLES ARE ISM

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
ECC	A. EASTERDAY	3-20-13	002580
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 2 of 3**
33 BOSTON POST RD WEST #420			
City	**State** / **Zip Code**	**Site Contact**	**Lab Contact**
MARLBORO	MA / 01752	J. DONOVAN	MARK LORD
Project Name and Location (State)	**Carrier/Waybill Number**		
RAVENNA			
Contract/Purchase Order/Quote No.			

Analysis (Attach list if more space is needed)

Special Instructions/ Conditions of Receipt

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H_2SO_4	HNO_3	HCl	NaOH	ZnAc/ NaOH	TAL METALS	Special Instructions/ Conditions of Receipt
0795B-0292M-0001-SO	3-19-13	1526				X	X						X	
0795B-0293M-0001-SO		1521												
0795S-0294M-0001-SO		1502												0795S - DISCARD
0795S-0295M-0001-SO		1505												DISCARD
0795B-0256M-0001-SO		1206												
0795B-0257M-0001-SO		1207												
0795B-0260M-0001-SO		1053												
0795B-0261M-0001-SO		1129												
0795B-0262M-0001-SO		1205												
0795B-0263M-0001-SO		1142												
0795B-0264M-0001-SO		1058												
0795S-0265-0001-SO		1056												DISCARD

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Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other STANDARD

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	3-20-13	1630	1. Received By: [signature]	3-20-13	1630
2. Relinquished By: RC [signature]	3-20-13	1727	2. Received By: [signature]	3-20-13	1727
3. Relinquished By			3. Received By		

Comments
ALL "M" SAMPLES ARE ISM

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
ECC	A. BASTRONA	3-20-13	002581
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 3 of 3**
33 BOSTON POST RD WEST #420			
City	**State** / **Zip Code**	**Site Contact**	**Lab Contact**
MARLBORO	MA / 01752	JOANNA	MARK LOEB
Project Name and Location (State)	**Carrier/Waybill Number**		
RAVENNA			
Contract/Purchase Order/Quote No.			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	TAL METALS	Special Instructions/ Conditions of Receipt
07955-0266-0001-SO	3-19-13	~~1405~~ 1405				X	X						X	DISCRETE
07958-0224M-0001-SO		1027												
07958-0225M-0001-SO		1028												
07958-0227M-0001-SO		0910												
07958-0228M-0001-SO		0940												
07958-0229M-0001-SO		0958												
07958-0230M-0001-SO		1018												
07958-0231M-0001-SO		0925												
07955-0232-0001-SO		0926												DISCRETE
07955-0233-0001-SO		0922												↓
07955-0320M-0001-SO		0950												
07955-0321M-0001-SO	↓	1220				↓	↓						↓	

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Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other STANDARD

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	3/20/13	1630	1. Received By	3-20-13	1630
2. Relinquished By	3-20-13	1727	2. Received By	3-20-13	1727
3. Relinquished By			3. Received By		

Comments: ALL "M" SAMPLES ARE ISM

DISTRIBUTION: *WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy*

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: Fcc	Project Manager: A. EASTERDAY	Date: 3/21/13	Chain of Custody Number: 002582
Address: 33 BOSTON POST RD WEST #420	Telephone Number (Area Code)/Fax Number	Lab Number	Page 1 of 5
City / State / Zip Code	Site Contact: J. DONOVAN	Lab Contact: MARK LOKEN	
Project Name and Location (State): RAVENNA	Carrier/Waybill Number		
Contract/Purchase Order/Quote No.			

Analysis (Attach list if more space is needed): TAL METALS

Special Instructions/ Conditions of Receipt

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	TAL METALS
0795B-0245M-0001-SO	3-20-13	1819				X	X						X
0795B-0246M-0001-SO		1828											
0795B-0324M-0001-SO		1816											
0795B-0247M-0001-SO		1817											
0795B-0248M-0001-SO		1820											
0795B-0325M-0001-SO		1818											
0795B-0249M-0001-SO		1749											
0795B-0250M-0001-SO		1807											
0795B-0251M-0001-SO		1658											
0795B-0252M-0001-SO		1822											
0795B-0253M-0001-SO		1723											

240-22281 Chain of Custody

Page 638 of 647

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By:	3-21-13	1630	1. Received By: TC / TOBIN	3-21-13	1630
2. Relinquished By: TC TOBIN	3-21-13	1724	2. Received By:	3-21-13	1724
3. Relinquished By:	Date	Time	3. Received By:	Date	Time

Comments: M = 1SM SAMPLE

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
ECC	A. FASTERDAY	3/21/13	002583
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 2 of 5**
33 BOSTON POST RD WEST			
City	**State**	**Zip Code**	**Site Contact**	**Lab Contact**
MARLBORO	MA	01752	J. DONOVAN	MARK LOEB
Project Name and Location (State)	**Carrier/Waybill Number**
RAVENNA	LAB PICK UP
Contract/Purchase Order/Quote No.	

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	TAL METALS	Special Instructions/ Conditions of Receipt
07955-0254-0001-SO	3-20-13	1720				X	X						X	DISCRETE
07955-0255-0001-SO		1726				X	X						X	
07955-0276-0001-SO		1104				X	X						X	
07955-0277-0001-SO		1105				X	X						X	
07955-0285-0001-SO		1554				X	X						X	
07955-0286-0001-SO		1555				X	X						X	
07955-0303-0001-SO		1212				X	X						X	
07955-0304-0001-SO		1215				X	X						X	

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Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other_____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	3/21/13	1630	1. Received By	3-21-13	1630
2. Relinquished By	3-21-13	1724	2. Received By	3-21-13	1724
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: *WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy*

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
FCC	A. EASTERDAY		002584
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 3 **of** 5
33 BOSTON POST RD WEST #420			
City	**State**	**Zip Code**	**Site Contact** / **Lab Contact**
MARLBORO	MA	01752	J. DONOVAN / MARK LORD
Project Name and Location (State)	**Carrier/Waybill Number**		
RAVENNA	LAB PICK UP		
Contract/Purchase Order/Quote No.			

Analysis (Attach list if more space is needed)

Special Instructions/ Conditions of Receipt

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	TAL METALS
0795B-~~0268~~0267M-0001-SO	3-20-13	1153				X	X						X
0795B-0268M-0001-SO		1159											
0795B-0269M-0001-SO		1152											
0795B-0322M-0001-SO		1155											
0795B-0270M-0001-SO		1156											
0795B-0271M-0001-SO		0952											
0795B-0272M-0001-SO		1049											
0795B-0273M-0001-SO		1203											
0795B-0323M-0001-SO		1154											
0795B-0274M-0001-SO		1137											
0795B-0275M-0001-SO		1118											

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Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	3-21-13	1630	1. Received By	3-21-13	1630
2. Relinquished By	3-21-13	1724	2. Received By	3-21-13	1724
3. Relinquished By			3. Received By		

Comments "M" = ISM SAMPLE

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
ECC	A. EASTERIAN	3/21/13	002585
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 4 of 5**
33 BOSTON POST ROAD WEST #420			
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
MARLBORO / MA / 01752	J. DONOVAN	MARK LOEB	
Project Name and Location (State)	**Carrier/Waybill Number**		
RAVENNA	LAB PICK UP		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Analysis: TAL METALS	Special Instructions/ Conditions of Receipt
0795B-0278M-0001-SO	3-20-13	1626				X	X						X	
0795B-0279M-0001-SO		1629				X	X						X	
0795B-0280M-0001-SO		1538				X	X						X	
0795B-0281M-0001-SO		1523				X	X						X	
0795B-0282M-0001-SO		1622				X	X						X	
0795B-0283M-0001-SO		1632				X	X						X	
0795B-0284M-0001-SO		1603				X	X						X	
0795B-0296M-0001-SO		1436				X	X						X	
0795B-0297M-0001-SO		1440				X	X						X	
0795B-0298M-0001-SO		1238				X	X						X	
0795B-0299M-0001-SO		1441				X	X						X	
0795B-0300M-0001-SO		1435				X	X						X	

Page 641 of 647

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: J. Donovan	3/21/13		1. Received By: TC Tobin	3-21-13	1630
2. Relinquished By: TC Tobin	3-21-13	1724	2. Received By:	3-21-13	1724
3. Relinquished By:	Date	Time	3. Received By:	Date	Time

Comments: ALL "A" SAMPLES ISM

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
ECC	A. KASTERIAN	3/21/13	002586
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 5 of 5**
33 BOSTON POST RAD WEST #420			
City	**State**	**Zip Code**	**Site Contact**	**Lab Contact**
MARLBORO	MA	01752	J. DONOVAN	MARK LOEB
Project Name and Location (State)	**Carrier/Waybill Number**
RAVENNA	LAB PICK UP
Contract/Purchase Order/Quote No.	

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Analysis (Attach list if more space is needed): TAL METALS	Special Instructions/ Conditions of Receipt
0795B-0301M-0001-SO	3-20-13	1448				X	X						X	
0795B-0302M-0001-SO	"	1219				X	X						X	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	3/21/13	1630	1. Received By RC Tobison	3-21-13	1630
2. Relinquished By RC Tobison	3-21-13	1724	2. Received By	3-21-13	1724
3. Relinquished By			3. Received By		

Comments: ALL "D" SAMPLES ISM

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

TestAmerica Canton Sample Receipt Form/Narrative Login # : 22281

Client CCC Site Name _____ By: _____

Cooler Received on 3-21-13 Opened on 3-22-13 (Signature)

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # Not Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# 1	(CF –2 °C)	Observed Sample Temp._____°C	Corrected Sample Temp._____°C	☑ Multiple on Back
IR GUN# 4G	(CF 0 °C)	Observed Sample Temp._____°C	Corrected Sample Temp._____°C	
IR GUN# 5G	(CF 0 °C)	Observed Sample Temp._____°C	Corrected Sample Temp._____°C	
IR GUN# 8	(CF 0 °C)	Observed Sample Temp._____°C	Corrected Sample Temp._____°C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 0	Yes	No
-Were custody seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were custody seals on the bottle(s)?	Yes	No
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Did all bottles arrive in good condition (Unbroken)?	Yes	No
7. Could all bottle labels be reconciled with the COC?	Yes	No
8. Were correct bottle(s) used for the test(s) indicated?	Yes	No
9. Sufficient quantity received to perform indicated analyses?	Yes	No
10. Were sample(s) at the correct pH upon receipt?	Yes	No NA
11. Were VOAs on the COC?	Yes	No
12. Were air bubbles >6 mm in any VOA vials?	Yes	No NA
13. Was a trip blank present in the cooler(s)?	Yes	No

Contacted PM MJL Date 3/22/13 by CSL via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Did not receive 0246M, 0248M, 0268M, and 0270M.

PER PHONE CONVERSATION WITH JEFF DONOVAN, 3-22-2013 @ 09:30, THESE SAMPLES WERE SENT TO THE QA LAB MJL 3-22-2013

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
ECC	A. FASTERDAL	3/22/13	002587
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 1 of 6
33 BOSTON POST RD WEST #420			
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
MARLBORO / MA / 01752	J. DONOVAN	MARK LOEB	
Project Name and Location (State)	**Carrier/Waybill Number**		
RAVENNA	LAB PICK UP		
Contract/Purchase Order/Quote No.			

Analysis (Attach list if more space is needed)

Special Instructions/ Conditions of Receipt

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Water	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	01	TAL METALS	VOC	SVOC	PCB	PESTICIDES	EXPLOSIVES	PROPELLANTS	% SOLID	Special Instructions/ Conditions of Receipt
0795B-0151M-0001-SO	3-21-13	1451				X		X							X								
0795B-0152M-0001-SO		1502													X								
0795B-0153M-0001-SO		1339					X							X	X	X	X	X	X	X	X	X	FULL SUITE
0795B-0154M-0001-SO		1355													X								
0795B-0155M-0001-SO		1416													X								
0795B-0156M-0001-SO		1505					X							X	X	X	X	X	X	X	X	X	FULL SUITE
0795B-0157M-0001-SO		1503													X								
0795B-0158M-0001-SO		1703																					
0795B-0159M-0001-SO		1702																					
0795B-0160M-0001-SO		1706																					
0795B-0161M-0001-SO		1645																					
0795B-0162M-0001-SO	↓	1634				↓		↓							↓								

240-22381 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other STANDARD

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	3-22-13	1630	1. Received By	3-22-13	1630
2. Relinquished By	3-22-13	1729	2. Received By	3-22-13	1729
3. Relinquished By			3. Received By		

Comments
ME ISM

DISTRIBUTION: *WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy*

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
ECC	A. EASTERDAY	3-22-13	002589
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 2 of 26
33 BOSTON POST RD WEST #420			
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
MARLBORO / MA / 01752	J. DONOVAN	MARK LOEB	
Project Name and Location (State)	**Carrier/Waybill Number**		
RAVENNA	LAB PICK UP		
Contract/Purchase Order/Quote No.			

Analysis (Attach list if more space is needed)

Special Instructions/ Conditions of Receipt

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Matrix: Other	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Other	TAL METALS	VOC	SVOC	PESTICIDE	PCB	EXPLOSIVES	PROPELLANTS	% SOLID					Special Instructions/ Conditions of Receipt
0795B-0163M-0001-SO	3/21/13	1693				X		X							X												
0795B-0164M-0001-SO		1556													X												
0795B-0149-0001-TB		0800		X							X					X											TRIP BLK.
0795B-0214M-0001-SO		1158													X												
0795B-0215M-0001-SO		1154																									
0795B-0216M-0001-SO		1113																									
0795B-0217M-0001-SO		1201																									
0795B ~~2nd 19.4~~ -0319M-0001-SO		1201																									
0795B-0219-0001-SO		1141																									
0795B-0220M-0001-SO		1168																									
0795B-0221M-0001-SO		1128																									
0795B-0168M-0001-SO	3-22-13	1234				X		X				HCl		X	X	X	X	X	X	X	X	X					FULL SUITE

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other STANDARD

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	3-22-13	1630	1. Received By	3-22-13	1630
2. Relinquished By	3-22-13	1729	2. Received By	3-22-13	1729
3. Relinquished By			3. Received By		

Comments
M = 15M

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
ECC	A. EASTERDAY	3-22-13	002590
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 3 of 6**
33 BOSTON POST RD WEST #420			
City	**State**	**Zip Code**	**Site Contact**	**Lab Contact**
MARLBORO	MA	01752	J. DONOVAN	MARK LOEB
Project Name and Location (State)	**Carrier/Waybill Number**
RAVENNA	LAB PICK UP
Contract/Purchase Order/Quote No.	

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Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Analysis (Attach list if more space is needed): TAL METALS	Special Instructions/ Conditions of Receipt
~~0795-0222-0001-SO~~	~~3-21-13~~	~~1125~~				X	X						X	~~DISCARD~~
JN 0795-0223-0001-SO	3-21-13	~~1124~~				X	X						X	JN ~~DISCARD~~
0795B-0234M-0001-SO		1045												
0795B-0150M-0001-SO		1045												
0795B-0236M-0001-SO		1048												
0795B-0165M-0001-SO		1048												
0795B-0238M-0001-SO		1034												
0795B-0239M-0001-SO		1046												
0795B-0240M-0001-SO		0944												
0795B-0241M-0001-SO		0957												
0795B-0242M-0001-SO		1015												

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other STANDARD

QC Requirements (Specify)

	Relinquished By	Date	Time	Received By	Date	Time
1.	JN Donovan	3-22-13	1630	TC Tobin	3-22-13	1630
2.	JN TC Tobin	3-22-13	1729		3-22-13	1729
3.						

Comments
M = ISM

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
ECC	A. EASTERDAY	3-22-13	002591
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
33 BOSTON POST RD WEST #420			

City	State	Zip Code	Site Contact	Lab Contact
MARLBORO	MA	01752	J. DONOVAN	MARK LOEB

Project Name and Location (State)	Carrier/Waybill Number
RAVENNA	LAB PICK UP

Contract/Purchase Order/Quote No.

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Analysis: TAL METALS	Special Instructions/ Conditions of Receipt
07955-0222-0001-SO	3-21-13	1125				X	X						X	DISCRETE
07955-0223-0001-SO	↓	1124				↓	↓						X	↓
07955-0243-0001-SO		1007											X	
07955-0244-0001-SO		1008											X	

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Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other STANDARD

QC Requirements (Specify)

		Date	Time
1. Relinquished By	1. Received By	3-22-13	1630
2. Relinquished By	2. Received By	3-22-13	1729
3. Relinquished By	3. Received By		

Comments

DISTRIBUTION: *WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy*

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
FCC	A. EASTERDAY	3-22-13	002592
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 5 of 6**
33 BOSTON POST RD WEST #420			
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
MARLBORO / MA / 01752	TJ DONOVAN	MARK LOEB	
Project Name and Location (State)	**Carrier/Waybill Number**		
RAVENNA	LAB PICK UP		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): TAL METALS	Special Instructions/ Conditions of Receipt
0795B-0166M-0001-SO	3-22-13	1227				X	X						X	
0795B-0167M-0001-SO		1228				X	X						X	
0795B-0169M-0001-SO		1204				X	X						X	
0795B-0170M-0001-SO		1141				X	X						X	-0170M-
0795B-0171M-0001-SO		1105				X	X						X	
0795B-0172M-0001-SO		1043				X	X						X	
0795B-0173M-0001-SO		1046				X	X						X	
0795B-0175M-0001-SO		0959				X	X						X	
0795B-0176M-0001-SO		0958				X	X						X	
0795B-0177M-0001-SO		0918				X	X						X	
0795B-0178M-0001-SO		0901				X	X						X	
0795B-0179M-0001-SO		0934				X	X						X	

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Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other STANDARD

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	3-22-13	1630	1. Received By	3-22-13	1630
2. Relinquished By	3-22-13	1729	2. Received By	3-22-13	1729
3. Relinquished By			3. Received By		

Comments
M = ISM

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
FW	A. EASTERDAY	3-22-13	002593
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 6 of 6**
33 BOSTON POST RD WEST			
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
MARLBORO / MA / 01752	J. DONOVAN	MARK LORIS	
Project Name and Location (State)	**Carrier/Waybill Number**		
RAYTHEON	LAB PICK UP		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Analysis: TAL METALS	Special Instructions/ Conditions of Receipt
~~SB9~~ 9B						X	X							
0795B-0180M-0001-SO	3-22-13	0944				X	X						X	
0795B-0181M-0001-SO	↓	1004				X	X						X	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other STANDARD

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	3-22-13	1630	1. Received By	~~3-22-13~~ 3-22-13	1630
2. Relinquished By	3-22-13	1729	2. Received By	3-22-13	1729
3. Relinquished By			3. Received By		

Comments
m = 15m

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
KCC	A. EASTMAN	4-1-13	008875
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 1 of 1
33 BOSTON POST RD WEST			
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
MARLBORO / MA / 01752	J. DONOVAN	MARK LOEB	
Project Name and Location (State)	**Carrier/Waybill Number**		
RIVERWALK	LAB PICKUP		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: TAL METALS	VOC	SVOC	PCB	PESTICIDES	EXPLOSIVES	PDOMETHANE	Special Instructions/ Conditions of Receipt
0795W-0311-0001-SW	4-1-13	1430		X			X		X	X			X	X	X	X	X	X	X	FULL SUITE
-0311-0002-SW		1430											X							MS/MSD
-0312-0001-SW		1430											X							
-0313-0001-SW		1500											X							
-0315-0001-SW		1515											X							
-0316-0001-SW		1530											X							
0795W-0014-0001-TB		0800								X			X	X						TRIP BLANK

Page 1594 of 1598

240-22662 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other_____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	4-1-13	1711	1. Received By: [signature]	4-1-13	1711
2. Relinquished By: [signature]	4-1-13	1824	2. Received By: [signature]	4-2-13	0800
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: *WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy*

TestAmerica Canton Sample Receipt Form/Narrative Login # : 22662

Client ECC Site Name _____ By: _____

Cooler Received on 4-1-13 Opened on 4-1-13 (Signature)

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# 1 (CF -2 °C) Observed Sample Temp._____°C Corrected Sample Temp._____°C

IR GUN# 4G (CF 0 °C) Observed Sample Temp._____°C Corrected Sample Temp._____°C ☐ Multiple on Back

IR GUN# 5G (CF 0 °C) Observed Sample Temp._____°C Corrected Sample Temp._____°C

IR GUN# 8 (+1) (CF ~~0~~ °C) Observed Sample Temp._____°C Corrected Sample Temp._____°C

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity_____ Yes (No)
   -Were custody seals on the outside of the cooler(s) signed & dated? Yes No (NA)
   -Were custody seals on the bottle(s)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Did all bottles arrive in good condition (Unbroken)? Yes No
7. Could all bottle labels be reconciled with the COC? Yes No
8. Were correct bottle(s) used for the test(s) indicated? Yes No
9. Sufficient quantity received to perform indicated analyses? Yes No
10. Were sample(s) at the correct pH upon receipt? Yes No NA
11. Were VOAs on the COC? Yes No
12. Were air bubbles >6 mm in any VOA vials? Yes No NA
13. Was a trip blank present in the cooler(s)? Yes No

Contacted PM MSL Date 4/2/13 by CSL via Verbal Voice Mail Other

Concerning

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Did not rec'v TB (0795w-0014-0001-TB) listed on COC 8875.

15. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.

Sample(s) were received in a broken container.

Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

Chain of Custody Record

4-2-13

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: ECL	Client Project Manager: A. FASTERDAY	Site Contact: J. DONOVAN	Lab Contact: MARK LOEB	COC No: 049135
Address: 33 BOSTON POST RD	Telephone:	Telephone:	Telephone:	2 of 2 COCs
City/State/Zip: MARLBORO MA	Email:	Analysis Turnaround Time (in BUS days)	Analyses	For lab use only
Phone:		TAT if different from below: STANDARD		Walk-in client ☐
Project Name: RAVENNA	Method of Shipment/Carrier: LAB PICK UP	☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Lab pickup ☐ Lab sampling ☐
Project Number:	Shipping/Tracking No:			Job/SDG No:
P O #				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite C / Grab G	TAL METALS	SVOCS	TPH/DRO	VOC								Sample Specific Notes / Special Instructions:
0795D-0308-0001-50	4-2-13	1000			X								X				X											DISCARD
[redacted]																												

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	ECL	4-2-13	[signature] I.D.: —	TAL-NC	4-3-13-1635
[signature] IR (I.D.: —)	TAL-NC	4-2-13-1731	[signature]	TA	4-3-13 814
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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TAL 0018- 1 (04/10)

5/9/2013

TestAmerica Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

Test America Project #: 24009157

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐DW ☐NPDES ☐RCRA ☐Other:

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Al Easterday	Site Contact: Jeff Donovan	4/9/2015	COC No: 004
Environmental Chemical Corp.	Tel/Fax: 508-229-2270 Ext 22109	Lab Contact: Mark Loeb	Carrier: Lab Pick up	1 of 2 COCs
33 Boston Post Rd. W	**Analysis Turnaround Time**			For Lab Use Only:
Marlborough, MA, 01752	☑ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
508-229-2270	TAT if different from Below = 3 weeks			Lab Sampling:
508-229-7737 (fax)	☐ 2 weeks			
Project Name: Ravenna Army Ammunition Plant	☑ 1 week			Job / SDG No.:
Site: CC RVAAP-79 Main Storage Area	☐ 2 days			
P O # 5141.004	☐ 1 day			Sampler:MG -AW

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	SW8260B / 5035	SW8270C / SVOC	SW6020 / TAL Metals	SW8082 / PCB	SW8081A / Pesticides	SW8330B / Explosives	SW8330 - Nitroguanidine	Propellant - Nitrocellulose	SW71471A/ Mercury	SW8260B/5030	Sample Specific Notes:
079SB-0339M-0001-SO	8-Apr-15	1106	ISM	SO	1	N	N			X						X		
079SB-0339M-0002-SO	8-Apr-15	1106	ISM	SO	2	N	Y			X						X		MS/MSD
079SB-0340M-0001-SO	8-Apr-15	0000	ISM	SO	1	N	N			X						X		
079SB-0341M-0001-SO	8-Apr-15	1130	ISM	SO	1	N	N			X						X		
079SB-0341M-0002-SO	8-Apr-15	1130	ISM	SO	1	N	Y			X						X		MS/MSD
079SB-0351M-0001-SO	8-Apr-15	0000	ISM	SO	1	N	N			X						X		
079SB-0352M-0001-SO	8-Apr-15	1027	ISM	SO	5	N	N	X	X	X	X	X	X	X	X	X		Full Suite
079SB-0353M-0001-SO	8-Apr-15	0957	ISM	SO	5	N	N	X	X	X	X	X	X	X	X	X		Full Suite
079SB-0354M-0001-SO	8-Apr-15	1130	ISM	SO	5	N	N	X	X	X	X	X	X	X	X	X		Full Suite
079SB-0357M-0001-SO	8-Apr-15	0912	ISM	SO	1	N	N			X						X		
079SB-0380-0001-TB	8-Apr-15	0800	Lab Supplied	DI	2	N	N										X	Trip Blank
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= MeOH; 7=DI Water								1,6,7	1	1	1	1	1	1	1	1	1,2	

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

☐Return to Client ☑Disposal by Lab ☐Archive for_____ Months

Special Instructions/QC Requirements & Comments: ISM preparation required for samples with "M" in sample name.

Custody Seals Intact: ☒Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____		
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Bel	4-9-15	R. Tobin	TestAm.	4-9-15 1116
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
R Tobin	TestAm 4/9/15	1935		TA	4-9-15 1451
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TestAmerica Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

Test America Project #: 24009157

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐DW ☐NPDES ☐RCRA ☐Other:

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Al Easterday	Site Contact: Jeff Donovan	4/9/2015	COC No: 004
Environmental Chemical Corp.	Tel/Fax: 508-229-2270 Ext 22109	Lab Contact: Mark Loeb	Carrier: Lab Pick up	2 of 2 COCs
33 Boston Post Rd. W	Analysis Turnaround Time			For Lab Use Only:
Marlborough, MA, 01752	☑ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
508-229-2270	TAT if different from Below = 3 weeks			Lab Sampling:
508-229-7737 (fax)	☐ 2 weeks			
Project Name: Ravenna Army Ammunition Plant	☐ 1 week			Job / SDG No.:
Site: CC RVAAP-79 Main Storage Area	☐ 2 days			
P O # 5141.004	☐ 1 day			Sampler:MG -AW

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	SW8260B / 5035	SW8270C / SVOC	SW6020 / TAL Metals	SW8082 / PCB	SW8081A / Pesticides	SW8330B / Explosives	SW8330 - Nitroguanidine	Propellant - Nitrocellulose	SW71471A/ Mercury	Sample Specific Notes:
079SB-0355M-0001-SO	8-Apr-15	1330	ISM	SO	1	N	N			X						X	
079SB-0356M-0001-SO	8-Apr-15	1310	ISM	SO	1	N	N			X						X	
079SB-0358M-0001-SO	8-Apr-15	1441	ISM	SO	1	N	N			X						X	
079SB-0359M-0001-SO	8-Apr-15	1500	ISM	SO	1	N	N			X						X	
079SB-0360M-0001-SO	8-Apr-15	1628	ISM	SO	1	N	N			X						X	
079SB-0361M-0001-SO	8-Apr-15	1641	ISM	SO	1	N	N			X						X	
079SB-0362-0001-SO	8-Apr-15	1653	C	SO	1	N	N			X						X	composite do not dry
079SB-0363M-0001-SO	8-Apr-15	1537	ISM	SO	1	N	N			X						X	
079SB-0364M-0001-SO	8-Apr-15	0000	ISM	SO	1	N	N			X						X	
Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6=MeOH, 7=DI Water								1	6	7	1	1	1	1	1	1	

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

☐ Return to Client ☑ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments: ISM preparation required for samples with "M" in sample name. Sample 079SB-0362-0001-SO is a composite sample, not ISM, do not dry.

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TestAmerica Canton
4101 Shuffel Street, N. W.
North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

Test America Project #: 24009157

Regulatory Program: ☐DW ☐NPDES ☐RCRA ☐Other:

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Al Easterday	Site Contact: Jeff Donovan	4/10/2015	COC No: 005
Environmental Chemical Corp.	Tel/Fax: 508-229-2270 Ext 22109	Lab Contact: Mark Loeb	Carrier: Lab Pick up	1 of 2 COCs
33 Boston Post Rd. W	Analysis Turnaround Time			For Lab Use Only:
Marlborough, MA, 01752	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-In Client:
508-229-2270	TAT if different from Below = 3 weeks			Lab Sampling:
508-229-7737 (fax)	☐ 2 weeks			
Project Name: Ravenna Army Ammunition Plant	☐ 1 week			Job / SDG No.:
Site: CC RVAAP-79 Main Storage Area	☐ 2 days			
P O # 5141.004	☐ 1 day			Sampler:MG -AW

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	SW8260B / 5035	SW8270C / SVOC	SW6020 / TAL Metals	SW8082 / PCB	SW8081A / Pesticides	SW8330B / Explosives	SW8330 - Nitroguanidine	Propellant - Nitrocellulose	SW71471A/ Mercury	SW8260B/5030	Sample Specific Notes:
079SS-0326M-0001-SO	9-Apr-15	1000	ISM	SO	1	N	N			X						X		
079SS-0326M-0002-SO	9-Apr-15	1000	ISM	SO	1	N	Y			X						X		MS/MSD
079SS-0327M-0001-SO	9-Apr-15	1145	ISM	SO	1	N	N			X						X		
079SS-0328M-0001-SO	9-Apr-15	1355	ISM	SO	5	N	N	X	X	X	X	X	X	X	X	X		Full Suite
079SS-0329M-0001-SO	9-Apr-15	1435	ISM	SO	5	N	N	X	X	X	X	X	X	X	X	X		Full Suite
079SS-0330M-0001-SO	9-Apr-15	1500	ISM	SO	5	N	N	X	X	X	X	X	X	X	X	X		Full Suite
079SS-0331M-0001-SO	9-Apr-15	1100	ISM	SO	1	N	N			X						X		
079SS-0332M-0001-SO	9-Apr-15	1130	ISM	SO	1	N	N			X						X		
079SS-0333M-0001-SO	9-Apr-15	1430	ISM	SO	1	N	N			X						X		
079SS-0334M-0001-SO	9-Apr-15	1215	ISM	SO	1	N	N			X						X		
079SS-0335M-0001-SO	9-Apr-15	1102	ISM	SO	1	N	N			X						X		
079SB-0382-0001-TB	9-Apr-15	800	Lab Supplied	DI	2	N	N										X	Trip Blank
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= MeOH; 7=DI Water								1,6,7	1	1	1	1	1	1	1	1	1,2	

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

☐Return to Client ☑Disposal by Lab ☐Archive for_____ Months

Special Instructions/QC Requirements & Comments: ISM preparation required for samples with "M" in sample name.

Custody Seals Intact: ☑ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ | Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	TCL	4-10-15	[signature]	TestAm	4-10-2015-1330
Relinquished by: [signature]	Company: TestAm 4-10-15	Date/Time: 1421	Received by: [signature]	Company: TA	Date/Time: 4-10-15 1421
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 4.1, dated 02/20/2013

TestAmerica Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

Test America Project #: 24009157

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐DW ☐NPDES ☐RCRA ☐Other:

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Al Easterday	Site Contact: Jeff Donovan	4/10/2015	COC No: 005
Environmental Chemical Corp.	Tel/Fax: 508-229-2270 Ext 22109	Lab Contact: Mark Loeb	Carrier: Lab Pick up	2 of 2 COCs
33 Boston Post Rd. W	**Analysis Turnaround Time**			For Lab Use Only:
Marlborough, MA, 01752	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
508-229-2270	TAT if different from Below = 3 weeks			Lab Sampling:
508-229-7737 (fax)	☐ 2 weeks			
Project Name: Ravenna Army Ammunition Plant	☐ 1 week			Job / SDG No.:
Site: CC RVAAP-79 Main Storage Area	☑ 2 days			
P O # 5141.004	☐ 1 day			Sampler:MG -AW

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	SW8260B / 5035	SW8270C / SVOC	SW6020 / TAL Metals	SW8082 / PCB	SW8081A / Pesticides	SW8330B / Explosives	SW8330 - Nitroguanidine	Propellant - Nitrocellulose	SW7471A/ Mercury	Sample Specific Notes:
079SS-0336M-0001-SO	9-Apr-15	0916	ISM	SO	1	N	N			X						X	
079SS-0381M-0001-SO	9-Apr-15	1020	ISM	SO	1	N	N			X						X	
079SS-0337M-0001-SO	9-Apr-15	0950	ISM	SO	1	N	N			X						X	
079SS-0338M-0001-SO	9-Apr-15	0920	ISM	SO	1	N	N			X						X	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= MeOH; 7=DI Water								1,6,7	1	1	1	1	1	1	1	1	

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

☐Return to Client ☑Disposal by Lab ☐Archive for_____ Months

Special Instructions/QC Requirements & Comments: ISM preparation required for samples with "M" in sample name.

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	RCC	4-10-15	[signature]	TestAm	4-10-2015 1338
Relinquished by: [signature]	Company: TestAm 4-10-15	Date/Time: 1425	Received by: [signature]	Company: TA	Date/Time: 4-10-15 1421
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 4.1, dated 02/20/2013

TestAmerica Canton

4101 Shuffel Street, N. W.
North Canton, OH 44720
Phone: 330 497 9396 Fax: 330 497 [illegible]

4.8/C5.3 2.6/C3.1

TA PROJECT # 24009157

Chain of Custody Record

103000

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: A. EASTERDAY	Site Contact: J. DONOVAN	Date: 4-30-15	COC No: 103000
Company Name: ECC	Tel/Fax:	Lab Contact: MARK LOEB	Carrier: TA COURIER	1 of 1 COCs
Address: 33 BOSTON POST ROAD WEST #320	Analysis Turnaround Time			Sampler: TD, FR, DC
City/State/Zip: MARLBORO MA 01752	☒ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 508-229-2270	TAT if different from Below			Walk-in Client:
Fax:	☒ ~~2 weeks~~ 3 WEEKS			Lab Sampling:
Project Name: RAYRAMA	☐ 1 week			
Site: CC 79 DU05	☐ 4-30-15 2 days			Job / SDG No.:
PO # 5141.004	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	SVOC 8270	Sample Specific Notes:
07955-0389M-0001-SO	4-28-15	1600	ISM	SO	1	N	N	X	
0795B-0390M-0001-SO	4-29-15	1655						X	
0795B-0391M-0001-SO		1658						X	
0795B-0392M-0001-SO		1523						X	
0795B-0393M-0001-SO		0000						X	
0795B-0394M-0001-SO		1530						X	
0795B-0395M-0001-SO		1550						X	
0795B-0395M-0002-SO MS/MSD		1550			~~D1~~ 2 4-30-15			X	MS/MSD
0795B-0396M-0001-SO		1620						X	
0795B-0397M-0001-SO		1705	↓					X	
0795B-0398-0001-SO	↓	1640	COMP	↓	↓			X	COMPOSITE DO NOT DRY
0795B-0394-0001-RB	4-30-15	0805	G	DI	2	↓	↓	X	RINSATE BLK

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

"M" = ISM SAMPLE TYPE

~~DJA 4-30-15~~

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____ Corr'd: _____		Therm ID No.: _____
Relinquished by:	Company: ECC	Date/Time: 4-30-15 1140	Received by:	Company: TestAmerica	Date/Time: 4-30-15 1140
Relinquished by:	Company: TestAm 4/30/15	Date/Time: 1240	Received by:	Company: TA Can	Date/Time: 4/30/15 1240
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TestAmerica Canton
4101 Shuffel Street, N. W.
North Canton, OH 44720
Phone: 330 497 9396 Fax: 330 497 ?

8.0/C5.5

Chain of Custody Record

103374

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: PAM FOTI	Site Contact: J. DONOVAN	Date: 5-13-15	COC No: 103374
Company Name: ECC	Tel/Fax:	Lab Contact: MARK LOEB	Carrier: TA COURIER	1 of 1 COCs
Address: 33 BOSTON POST RD WEST	Analysis Turnaround Time			Sampler:
City/State/Zip: MARLBORO MA 01752	☒ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 508-229 8270	TAT if different from Below NORMAL			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: RAVENNA	☐ 1 week			
Site: CC79 MSA FRT 80	☐ 2 days			Job / SDG No.:
PO # 5461.004	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TAL METALS	MERCURY	Sample Specific Notes:
07955-0400M-0001-SO	5-13-15	0840	ISM	SO	1	N	M	X	X	
07955-0401M-0001-SO	5-13-15	0940			1			X	X	HOLD ANALYSIS
07955-0402M-0001-SO	5-12-15	1720			1			X	X	
07955-0403M-0001-SO		1755			1			X	X	
07955-0404M-0001-SO		1650			1			X	X	
07955-0405M-0001-SO		1415			1			X	X	
07955-0406M-0001-SO	↓	1540	↓	↓	1			X	X	
07955-0407-0001-RB	5-13-15	1100	G	DI	1	↓	↓	X	X	RINSATE BLANK

Page 108 of 107

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

1 1

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

4/4

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:
"M" = ISM SAMPLE HOLD ANALYZING 07955-0401M-0001-SO UNTIL RESULTS FROM 07955-0400M-0001-SO ARE IN

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ | Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	ECC	5-13-15 1155			5-13-2015 1155
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TA	5/13/15 1244		TA Can	5/13/15 1244
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: ECC	Client Project Manager: A. EASTBROOK	Site Contact: J. DONOVAN	Lab Contact: M. LOEB	COC No: 050743
Address: 33 BOSTON POST RD	Telephone:	Telephone:	Telephone: REACTIVITY, CORROSIVITY, IGNITIBILITY	1 of 3 COCs
City/State/Zip: MARLBORO MA	Email:	Analysis Turnaround Time (in BUS days)	Analyses	For lab use only
Phone:		TAT if different from below: ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Walk-in client: ☐ Lab pickup: ☐ Lab sampling: ☐ Job/SDG No:
Project Name:	Method of Shipment/Carrier: DEL. TO LAB			
Project Number:	Shipping/Tracking No:			

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite C / Grab G	VOC (MTBE)	GRO	DRO (TOTAL MEANS)	PEST / PCB	HERBICIDES	EXPLOSIVES	PROPELLANTS	O/G (SOLID)	SVOC (PAH)	TCLP METALS (INC. MERCURY)	Sample Specific Notes / Special Instructions:
[redacted]																										
070SB-0055-0001-TB		0800		X					X				X			X										TRIP BLK
[redacted]																										
070-0057-0001-SOURCE WATER		1315		X				X	X			X				X	X	X	X	X	X	X		X		SOURCE WATER ECC
[redacted]																										
070-0060-0001-TB	↓	0800																								TRIP BLK

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
ANY QUES ON TCLP ANALYSIS CALL JACKSON KIKER AT ECC

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	ECC	12-12-12 1702			12-12-12
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: [signature]	Company: TAL	Date/Time: 12/12/12 1702

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TAL 0018- 1 (04/10)

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: ECC	Client Project Manager: A. EASTERDAY	Site Contact: J. DONOVAN	Lab Contact: MARK LOEB	COC No: 048788
Address: 39 BOSTON POST RD WEST #420	Telephone:	Telephone: 508-509-1784	Telephone:	1 of 1 COCs
City/State/Zip: MARLBORO, MA 01752	Email:	Analysis Turnaround Time (in BUS days)	Analyses	For lab use only
Phone:		TAT if different from below ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☒ ~~2 days~~ 5 DAY ☐ 1 day		Walk-in client ☐ Lab pickup ☐ Lab sampling ☐
Project Name: RAVENNA	Method of Shipment/Carrier: LAB PICK UP			Job/SDG No:
Project Number:	Shipping/Tracking No:			

PO #			Matrix					Containers & Preservatives															Sample Specific Notes / Special Instructions:
Sample Identification	Sample Date	Sample Time	Air	Aqueous	Sediment	Solid	Other:	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite C / Grab G	TAL METALS	EXPLOSIVES	PAH/PLANTS	HERBICIDE	PCB / PESTICIDES	SVOC	TPH/DRO	TPH/GRO	HEX CHROM	VOC	
079-0007-0001-SOURCE WATER	3/14/13	1200		X					4	X			X				X	X	X	X	X	X	X	X	X	X	
079-0008-0001-TB TRIP BLANK	↓	0800		X						X																X	
079-0009-0001-TB TRIP BLANK	↓	0800		X						X														X			

240-21987 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	ECC	3/14/13 1530	[signature]	TAL	3/14/13 1530
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by: [signature]	Company: TAL	Date/Time: 3/14/13 1620	Received in Laboratory by: [signature]	Company: TA/Canton	Date/Time: 3/14/13 1620

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TAL 0018- 1 (04/10)

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: ECC	Client Project Manager:	Site Contact: J. Donahue	Lab Contact:	COC No: 049555
Address: 33 Boston Post Rd	Telephone:	Telephone:	Telephone: 4-3-13	3 of 3 COCs
City/State/Zip: Marlboro	Email:	Analysis Turnaround Time (in BUS days)	Analyses	For lab use only
Phone:		TAT if different from below _____ ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Walk-in client ☐ Lab pickup ☐ Lab sampling ☐
Project Name:	Method of Shipment/Carrier: LAB PICK UP			
Project Number:	Shipping/Tracking No:			Job/SDG No:

P O #			Matrix					Containers & Preservatives																			Sample Specific Notes / Special Instructions:
Sample Identification	Sample Date	Sample Time	Air	Aqueous	Sediment	Solid	Other:	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite C/ Grab G	TAL MEM/	PCB	PEST/ CLP	SVOC	VOC	BYPASSIVE S	PAH/PELLET S	TPH/DRO			
079RW-0317-0001-AW	4/3/13	1500		X					X				X				X	X	X	X	X	X	X	X			RUSH TAT
079-0318-0001-TB	↓	0800		X						X											X						SHIP BOX

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	ECC	4-3-13-1500	[signature]	TALME	4-3-13-1500
[signature]	TALME	4-3-13-1702	[signature]	TA	4-4-13 800
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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TestAmerica Canton
4101 Shuffel Street, N. W.
North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

Test America Project #: 24009157

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐DW ☐NPDES ☐RCRA ☐Other:

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Al Easterday	Site Contact: Jeff Donovan	4/10/2015	COC No: 006
Environmental Chemical Corp.	Tel/Fax: 508-229-2270 Ext 22109	Lab Contact: Mark Loeb	Carrier: Lab Pick up	1 of 1 COCs
33 Boston Post Rd. W	**Analysis Turnaround Time**			**For Lab Use Only:**
Marlborough, MA, 01752	☑CALENDAR DAYS ☐WORKING DAYS			Walk-in Client:
508-229-2270	TAT if different from Below = 3 weeks			Lab Sampling:
508-229-7737 (fax)	☐ 2 weeks			
Project Name: Ravenna Army Ammunition Plant	☐ 1 week			Job / SDG No.:
Site: CC RVAAP-79 Main Storage Area	☐ 2 days			
P O # 5141.004	☐ 1 day			Sampler:MG -AW

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	SW8260B / 5035	SW8270C / SVOC	SW6020 / TAL Metals	SW8082 / PCB	SW8081A / Pesticides	SW8330B / Explosives	SW8330 - Nitroguanidine	Propellant - Nitrocellulose	SW71471A/ Mercury	SW8260B/5030	Full TCLP	Corrosivity	Flashpoint	Total Cyanide/Reactivity	Total Sulfide/Reactivity	Total Cyanide/Reactivity	Total Sulfide/Reactivity			Sample Specific Notes:
079SB-0383-0001-IDW	10-Apr-15	0800	G	SO	2	N	N											X	X	X	X	X					IDW - Soils
079SB-0384-0001-IDW	10-Apr-15	0830	G	W	8	N	N											X	X	X			X	X			IDW - Liquids
079SB-0385-0001-SW	10-Apr-15	0845	G	W	13	N	N		X	X	X	X	X	X	X	X											Source Water
079SB-0386-0001-RB	10-Apr-15	0850	G	W	1	N	N			X						X											Rnsate Blank - CC79
069SB-0387-0001-RB	10-Apr-15	0900	G	W	2	N	N										X										Rinsate Blank - CC69
079SB-0388-0001-TB	10-Apr-15	0730	Lab Supplied	DI	2	N	N										X										Trip Blank
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= MeOH; 7=DI Water								1,6,7	1	1	1	1	1	1	1	1	1,2	1	1	1	1	1	1.5	1,8			

Possible Hazard Identification: 8 = Zn Acetate

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

☐Return to Client ☑Disposal by Lab ☐Archive for_____ Months

Special Instructions/QC Requirements & Comments: Full TCLP = VOC, SVOC, Metals, Pesticides, Herbicides

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TCC	4-10-15		TestAm	4-10-2015 1338
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TestAm 4-10-15	1421		TA	4-10-15 1421
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 4.1, dated 02/20/2013

COC No. A 34608

158 Starlite Drive
Marietta, OH 45750

Microbac

CHAIN-OF-CUSTODY RECORD

Phone: 740-373-4071
Fax: 740-373-4835

Company Name: ECC

Project Contact: Jackson Kiker | Contact Phone #: 505-229-2270

Turn Around Requirements: Standard | Location: Ravenna OH

Project ID: Ravenna

Sampler (print): Tom Hernandez | Signature:

Program: ☐ CWA ☐ RCRA ☐ DOD ☐ AFCEE ☐ Other _____

ADDITIONAL REQUIREMENTS

Sample I.D. No.	Comp	Grab	Date	Time	Matrix*	NUMBER OF CONTAINERS	Hold	Metals TAL	SVOC	PCB's	PESTICIDES	VOC	EXPLOSIVES	PROPELLANTS	TOTAL # (LAB USE)
[redacted]															
079SB-0235M-0001-SO			3/21/13	1050	S	1		X							
079SB-0237M-0001-SO			3/21/13	1051	S	1		X							
079SB-0218M-0001-SO			3/21/13	1203	S	1		X							
[redacted]															

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
[signature]	3-28-13	1800	FED EX				

Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)	Date	Time	Remarks:

*Water (W), Soil (S), Solid Waste (SD), Unknown (X)

COC No. A 34393

158 Starlite Drive
Marietta, OH 45750

Microbac

CHAIN-OF-CUSTODY RECORD

Phone: 740-373-4071
Fax: 740-373-4835

Company Name: FLC

Project Contact: Jeff Donovan | Contact Phone #: 509-509-1784

Turn Around Requirements: Standard | Location: Ravinna-OH

Project ID: Ravenna

Sampler (print): Jason Scott | Signature:

Program: ☐ CWA ☐ RCRA ☐ DOD ☐ AFCEE ☐ Other _____

ADDITIONAL REQUIREMENTS

Sample I.D. No.	Comp	Grab	Date	Time	Matrix*	NUMBER OF CONTAINERS	Hold	SVOC	METALS TAL	PCB	VOC	TPH DRO	PESTICIDES	EXPLOSIVES	PAH'S/LIGHTS								TOTAL # (LAB USE)
[redacted]																							
0719SW-03B-0001-SW			4/1/13	1500	W				X														
[redacted]																							

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
Jeff Donovan	4-4-13	1800	FED EX				

Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)	Date	Time	Remarks:

*Water (W), Soil (S), Solid Waste (SD), Unknown (X)

Page _____ of _____

COC No. A 34415

158 Starlite Drive
Marietta, OH 45750

Microbac

CHAIN-OF-CUSTODY RECORD

Phone: 740-373-4071
Fax: 740-373-4835

Company Name: ECC

Project Contact: JACKSON KIKER | Contact Phone #: X 22124 508-229-2270

Turn Around Requirements: STANDARD | Location:

Project ID: RAVENNA

Sampler (print): JEFF DONOVAN | Signature: Jeff Donovan

Program: ☐ CWA ☐ RCRA ☐ DOD ☐ AFCEE ☐ Other _____

ADDITIONAL REQUIREMENTS

Sample I.D. No. #183M	Comp	Grab	Date	Time	Matrix*	NUMBER OF CONTAINERS	Hold	TAL METALS	TOTAL # (LAB USE)
07955-0183M-0001-SO		X	3-18-13	1010	SOIL	1		X	
07958-0205M-0001-SO		X	↓	1809					
07958-0226M-0001-SO		X	3-19-13	1029					
07958-0246M-0001-SO		X		1828					
07958-0248M-0001-SO		X		1820					
07958-0257M-0001-SO		X		1208					
07958-0259M-0001-SO		X	↓	1200					
07958-0268M-0001-SO		X	3-20-13	1159					
07958-0270M-0001-SO		X	↓	1156					
07950-0307-0001-SO		X	3-19-13	1400	↓	↓		↓	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
Jeff Donovan	3-21-13	1400	FEDEX OVER MIGHT				

Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)	Date	Time	Remarks:

*Water (W), Soil (S), Solid Waste (SD), Unknown (X)

CHAIN OF CUSTODY FORMS

Field Samples

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Canton, Ohio
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: ECC	Client Project Manager: AL Easterday	Site Contact: Jeff Donavon	Lab Contact: Mark Loeb	COC No: 048527
Address: 33 Boston Post Road West Suite 420	Telephone: 508-229-2270	Telephone: 508-509-1784	Telephone:	1 of 4 COCs
City/State/Zip: Marlboro, MA 01752	Email:	Analysis Turnaround Time (in BUS days)	Analyses	For lab use only
Phone: 508-229-2270		TAT if different from below STD		Walk-in client ☐ Lab pickup ☐ Lab sampling ☐
Project Name: Ravenna	Method of Shipment/Carrier: Lab courier	☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Job/SDG No:
Project Number:	Shipping/Tracking No:			
PO#				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: Hexane/MeOH	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other: Weight	Filtered Sample (Y/N)	Composite=C / Grab=G	VOC/NA-TBE-TM	SVOC	TAL Metals	PCB	Pesticide	Explosives	Propellants				Sample Specific Notes / Special Instructions:
07655-0002M-0001-SO	6/6/2012	0840				X		X					X	X			X	X	X	X							ZCMJ1
07655-0001M-0001-SO		0923				X		X					X	X			X	X	X	X							ZCMJ1
07655-0005M-0001-SO		1830				X		X					X	X			X	X	X								ZCMJ1
07655-0006M-0001-SO		1800				X		X					X	X			X	X	X								ZCMJ1
06855-0001M-0001-SO		1240				X		X					X			SW	X	X	X								
06855-0002M-0001-SO		1210				X		X					X				X	X	X								
06855-0003M-0001-SO		1200				X		X					X	X			X	X	X	X	X	X	X				
06855-0003M-0002-SO MS/MSD		1200				X		X					X	X			X	X	X	X	X	X	X				MS/MSD
06855-0004M-0001-SO		1200				X							X	X			X	X	X	X	X	X	X				
07655-0004M-0001-SO		1000				X		X					X	X			X	X	X								

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	ECC	11-7-12 1630	[signature]	IAL-NC	11-7-12 - 1630
Relinquished by: [signature]	Company: IAL-NC	Date/Time: 11-7-12 - 1730	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: [signature]	Company: TA	Date/Time: 11/7/12 1730

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Chain of Custody Record

TestAmerica Laboratory location: Canton, MA

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: ECC	Client Project Manager: Al Easterday	Site Contact: Jeff Donovan	Lab Contact: Mark Lucb	COC No: 048538
Address: 33 Boston Post Road W Suite 320	Telephone: 508-229-2290	Telephone: 508-509-1784	Telephone:	2 of 4 COCs
City/State/Zip: Marlboro, MA 01752	Email:	Analysis Turnaround Time (in BUS days)	Analyses	For lab use only
Phone: 508-229-2290		TAT if different from below 5 (D)		Walk-in client: ☐
Project Name: Revere	Method of Shipment/Carrier: Lab courier	☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Lab pickup: ☐ Lab sampling: ☐
Project Number:	Shipping/Tracking No:			Job/SDG No:
PO#				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: Hasen Buffered	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other: MeOH	Filtered Sample (Y/N)	Composite (C) / Grab (G)	VOC	SVOC	TAL metals	TPH-GRO	PCB					Sample Specific Notes / Special Instructions:
07655-0003M-0001-SO	6 NOV 2012	0920				X		X					X	X			+	+	+							
07055-0006M-0001-SO	7 NOV 2012	0850				X		X					X	X						X						
07055-0006M-0002-SO (MS/MSD)	7 NOV 2012	0850				X		X					X	X						X						MS/MSD extra
07055-0009M-0001-SO	7 NOV 2012	0850				X		X					X	X						X						
07055-0002M-0001-SO	/	0910				X		X					X	X						X						To replace Broken sample
06855-~~0004M~~ 0005M -0001-SO	6 NOV 2012	1350				X							X					X	X		X					
06855-0006M-0001-SO	/	1545				X							X					X	X		X					
06855-0007M-0001-SO	/	1615				X							X					X	X		X					
06855-0008M-0001-SO	/	1510				X							X					X	X		X					

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Jeff Donovan	ECC	11-7-12 1630	RC Eaton	TALNC	11-7-12 1630
RC Eaton	TALNC	11-7-12 1730			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
			Terry Burns	TA	11/7/12 1730

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: ECC	Client Project Manager: Al Easterday	Site Contact: Jeff Donovan	Lab Contact: Mark Loeb	COC No: 048643
Address: 33 Boston Post Road West suite 420	Telephone:	Telephone: 508-509-1784	Telephone:	3 of 4 COCs
City/State/Zip: Marlboro, MA 01752	Email:	Analysis Turnaround Time (in BUS days)	Analyses	For lab use only
Phone: 508-229-2270		TAT if different from below ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Walk-in client ☐ Lab pickup ☐ Lab sampling ☐
Project Name: Ravenna	Method of Shipment/Carrier: COURIER pick up			Job/SDG No:
Project Number:	Shipping/Tracking No:			
PO#				Sample Specific Notes / Special Instructions:

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite (C) / Grab (G)	SVOC	metals 7AL	Explosives	Propellants	PCB					
07650-0008-0001-SD	6 NOV 2012	1810			X								X				X	X	X	X	X					
07650-0009-0001-SD		1815			X								X				X	X	X	X	X					
07650-0009-0002-SD MS/MSD		1815			X								X				X	X	X	X	X					MS/MSD
07650-0010-0001-SD		1815			X								X				X	X	X	X	X					
07650-0011-0001-SD		1825			X								X				X	X	X	X	X					
07650-0012-0001-SD	↓	1830			X								X				X	X	X	X	X					
07955-0002M-0001-SD	7 NOV 2012	1325				X												X								
07955-0001M-0001-SD	7 NOV 2012	1230				X												X								

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	ECC	11-7-12 1630	[signature]	TAL-KC	11-7-12 1630
Relinquished by: [signature]	Company: TAL-KC	Date/Time: 11-7-12 1730	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: [signature]	Company: TA	Date/Time: 11/7/12 1730

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Canton, OH
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: ECC	Client Project Manager: AL Easterday	Site Contact: Jeff Dunavan	Lab Contact: M. Lueb	COC No: 048638
Address: 33 Boston Post Roadwest Suite 420	Telephone: 508-229-2220	Telephone: 508-509 1784	Telephone:	4 of 4 COCs
City/State/Zip: Marlboro, MA	Email: AEasterday@ecc.net JTO	Analysis Turnaround Time (in BUS days)	Analyses	For lab use only
Phone: 508-229-2220		TAT if different from below _____ ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Walk-in client ☐ Lab pickup ☐ Lab sampling ☐ Job/SDG No:
Project Name: Ravenna	Method of Shipment/Carrier:			
Project Number:	Shipping/Tracking No:			

PO#			Matrix					Containers & Preservatives							Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Analyses												Sample Specific Notes / Special Instructions:
Sample Identification	Sample Date	Sample Time	Air	Aqueous	Sediment	Solid	Other:	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other:			VOC	TPH-GRO											
07655-0027-0001-TB	9 NOV 2012	08W		X						X							XX												Trip Blank
									SM																				

Page 4864 of 4868

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	ECC	11-7-12 1630	[signature]	TALNC	11-7-12 1630
[signature]	TALNC	11-7-12 1730			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
			[signature]	TA	11/7/12 1730

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: ECC	Client Project Manager: AL EASTERDAY	Site Contact: JEFF DONOVAN	Lab Contact: MARK LOEB	COC No: 048641
Address: 33 BOSTON POST RD W. #420	Telephone:	Telephone: 508-509-1284	Telephone:	1 of 1 COCs
City/State/Zip: MARLBORO MA 01752	Email:	Analysis Turnaround Time (In BUS days)	Analyses	For lab use only
Phone:		TAT if different from below STANDARD		Walk-in client ☐ Lab pickup ☐ Lab sampling ☐
Project Name: RAVENNA	Method of Shipment/Carrier: LAB PICK UP	☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Job/SDG No:
Project Number:	Shipping/Tracking No:			
PO #				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other: DI	Containers & Preservatives: Plastic	HNO3	HCl	NaOH	ZnAcet/NaOH	Unpres	Other: DI	Filtered Sample (Y / N)	Composite = C; Grab = G	SVOC	PCB	TAL METALS	VOC	PESTICIDE	EXPLOSIVES	PROPELLANTS	Sample Specific Notes / Special Instructions:
0685W-0013-0001-SW	11-8-12	1400		X					X				X				X	X	X					
0685W-0014-0001-SW		1325		X					X				X				X	X	X					
0685W-0015-0001-SW		1340		X					X				X				X	X	X					
0685W-0016-0001-SW		1325		X					X				X				X	X	X					
0685W-0016-0002-SW		1325		X					X				X				X	X	X					MS/MSD
07955-0003M-0001-SO	11-9-12	1210				X													X					
07955-0004M-0001-SO		1110				X			X				X	X			X	X	X	X	X	X	X	
07955-0004M-0002-SO		1110				X			X				X	X			X	X	X	X	X	X	X	MS/MSD
07955-0005M-0001-SO		1110				X			X				X	X			X	X	X	X	X	X	X	
07955-0606-0001-TB		0800					X			X										X				TRIP BLANK

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Jeff Donovan	ECC	11-9-12-1410		TAL-NC	11-9-12-1410
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TAL-NC	11-9-12-1700			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
				TA	11/9/12-1700

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
ECC	A. EASTMAN	3-25-13	008857
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 2**
33 BOSTON POST RD WEST #420			
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
MARLBORO / MA / 01752	J. DONOVAN		
Project Name and Location (State)	**Carrier/Waybill Number**		
RAVENNA	LAB PICK UP		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	MeOH	Analysis: VOC	SVOC	TAL METALS	PESTICIDES	PCB	EXPLOSIVES	PROPELLANTS	% SOLID	Special Instructions/ Conditions of Receipt
0795B-0174-0001-TB	3-25-13	0800		X						X				X								TRIP BLANK
0795B-0097M-0001-SO	3-23-13	0936				X	X									X						
0795B-0098M-0001-SO	↓	0826				↓	↓									X						
0795B-0099M-0001-SO		0947														X						
0795B-0100M-0001-SO		0938														X						
0795B-0101M-0001-SO		0938														X						
0795B-0102M-0001-SO	↓	1428														X						
0795B-0103M-0001-SO	3-25-13	0844						X					X	X	X	X	X	X	X	X	X	FULL SUITE
0795B-0104M-0001-SO	3-23-13	1606														X						
0795B-0105M-0001-SO	↓	1527														X						
0795B-0106M-0001-SO	↓	1456														X						
0795B-0124M-0001-SO	3-25-13	1110				↓	↓	X					X	X	X	X	X	X	X	X	X	FULL SUITE

240-22392 Chain of Custody

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Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other STANDARD

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	3-25-13	1642	1. Received By	3-25-13	1642
2. Relinquished By	3-25-13	1736	2. Received By	3/26/13	900
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: *WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy*

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
ECL	A. KASTRADAV	3-25-13	008858
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 2 of 2**
33 BOSTON POST RD WEST #420			
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
MARLBORO / MA / 01752	T. DONOVAN	MARK LOEB	
Project Name and Location (State)	**Carrier/Waybill Number**		
RAVENNA	LAB PICK UP		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H_2SO_4	HNO_3	HCl	NaOH	ZnAc/NaOH	Analysis: TAL METALS	Special Instructions/ Conditions of Receipt
0795B-0118M-0001-SO	3-25-13	1108				X	X						X	
0795B-0119M-0001-SO		1112												
0795B-0120M-0001-SO		1112												
0795B-0121M-0001-SO		1613												
0795B-0122M-0001-SO		0958												
0795B-0123M-0001-SO		1015												
0795B-0125M-0001-SO		1053												

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Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other STANDARD

QC Requirements (Specify)

	Relinquished By	Date	Time	Received By	Date	Time
1.		3-25-13	1642		3-25-13	1642
2.		3-25-13	1736		3/26/13	900
3.						

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

TestAmerica Canton Sample Receipt Form/Narrative Login # : 22392

Client ECC Site Name _____ By: _____

Cooler Received on 3/26/13 Opened on 3/26/13 (Signature)

FedEx: 1st Grd Exp UPS FAS Stetson ~~Client Drop-Off~~ TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: ~~Bubble Wrap~~ Foam Plastic Bag None Other _____

COOLANT: ~~Wet Ice~~ Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# 1	(CF –2 °C) Observed Sample Temp._____°C	Corrected Sample Temp._____°C	☐ Multiple on Back
IR GUN# 4G	(CF 0 °C) Observed Sample Temp._____°C	Corrected Sample Temp._____°C	
IR GUN# 5G	(CF 0 °C) Observed Sample Temp._____°C	Corrected Sample Temp._____°C	
IR GUN# 8	(CF 0 °C) Observed Sample Temp._____°C	Corrected Sample Temp._____°C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity_____		Yes (No)
-Were custody seals on the outside of the cooler(s) signed & dated?		Yes No (NA)
-Were custody seals on the bottle(s)?		Yes (No)
3. Shippers' packing slip attached to the cooler(s)?		Yes (No)
4. Did custody papers accompany the sample(s)?		(Yes) No
5. Were the custody papers relinquished & signed in the appropriate place?		(Yes) No
6. Did all bottles arrive in good condition (Unbroken)?		(Yes) No
7. Could all bottle labels be reconciled with the COC?		(Yes) No
8. Were correct bottle(s) used for the test(s) indicated?		(Yes) No
9. Sufficient quantity received to perform indicated analyses?	CSL 3/26/13	~~Yes~~ (No)
10. Were sample(s) at the correct pH upon receipt?		Yes No (NA)
11. Were VOAs on the COC?		(Yes) No
12. Were air bubbles >6 mm in any VOA vials?		Yes (No) NA
13. Was a trip blank present in the cooler(s)?		(Yes) No

Contacted PM MJL Date 3/26/13 by CSL via (Verbal) Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

079SB-0099M-0001-SO on coc did not receive.

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
FCL		3-26-13	002596
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 3**
City / State / Zip Code	**Site Contact** J. DONOVAN	**Lab Contact** M. LOEB	
Project Name and Location (State)	**Carrier/Waybill Number**		
Contract/Purchase Order/Quote No.			

Analysis (Attach list if more space is needed)

Special Instructions/ Conditions of Receipt

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H_2SO_4	HNO_3	HCl	NaOH	ZnAc/ NaOH	TAL Metals	VOC	SVOC	Explosives	Pharmaceuticals	PCB	Pesticide	O/G Solids							
07958-0105m-0001-SO	3-22-13	1527											X														
↓ -0106m- ↓	3-23-13	1456																									
07958-0118m-0001-SO	3-25-13	1108																									
-0119m-		1112																									
-0120m-		1112																									
-0121m-		1613																									
-0122m-		0958																									
-0123m-		1015																									
-0124m-		1110											X	X	X	X	X	X	X	X							FULL SUITE
-0125m-		1053																									
-0126m-		1128																									
↓ -0127m- ↓	↓	1128											↓														

240-22488 Chain of Custody

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Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	3-26-13	1725	1. Received By	3-26-13	1725
2. Relinquished By	3-26-13	1816	2. Received By	3-26-13	1816
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: *WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy*

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
FCC		3-26-13	002597
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 2 of 3**
City / State / Zip Code	**Site Contact** J. DONOVAN	**Lab Contact** M. LOEB	
Project Name and Location (State)	**Carrier/Waybill Number**		
Contract/Purchase Order/Quote No.			

Page 2601 of 2607

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	TAL Ammonia	VOC	SVOC	Explosives	Organochlorine Pesticides	PCB	Oil & Grease	Special Instructions/ Conditions of Receipt
679SB-0128M-0001-SO	3-25-13	1720											X							
-0129M-		1725																		
-0130M-		1735												X	X	X	X	X	X	FULL SUITE
-0131M-		1658																		
-0132M-		1652												X	X	X	X	X	X	FULL SUITE
-0133M-		1710																		
-0134M		1630																		
-0135M		1632																		
-0136M		1631												X	X	X	X	X	X	FULL SUITE
-0137M-		1601																		
-0138M-		1545																		
-0139M-		1529																		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By Jeff DW	3-26-13	1725	1. Received By TC	3-26-13	1725
2. Relinquished By TC	3-26-13	1816	2. Received By	3-26-13	1816
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: *WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy*

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
FCL		3-26-13	002598
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 53 of 3**
City / **State** / **Zip Code**	**Site Contact**: J-DONOVAN **Lab Contact**: M. LOEB		
Project Name and Location (State)	**Carrier/Waybill Number**		
Contract/Purchase Order/Quote No.			

Analysis (Attach list if more space is needed)

Special Instructions/ Conditions of Receipt

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Volatiles	VOC	SVOC	PCB	Pesticides	Pesticides/ PCB	Propellants	% Solid					
0795B-0141M-0001-10	3-25-13	1512											X												
-0142M-		1430																							
-0143M-		1430																							
-0144M-		1437												X	X	X	X	X	X	X					FULL SUITE
-0145M-		1415																							
-0146M-		1130																							
-0147M-		1145																							
-0148M-		1210																							

Page 2602 of 2607

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: RC (FedEx)	3-26-13	1725	1. Received By: RC (FedEx)	3-26-13	1725
2. Relinquished By: RC (FedEx)	3-26-13	1816	2. Received By:	3-26-13	1816
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: *WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy*

TestAmerica Canton Sample Receipt Form/Narrative Login # : 22498

Client ECC Site Name _____ By: _____

Cooler Received on 3.26.13 Opened on 3.26.13 (Signature)

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off ~~TestAmerica Courier~~ Other _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box (Other) _____

Packing material used: ~~Bubble Wrap~~ Foam Plastic Bag None Other _____

COOLANT: ~~Wet Ice~~ Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# 1	(CF –2 °C) Observed Sample Temp._____°C	Corrected Sample Temp._____°C	
IR GUN# 4G	(CF 0 °C) Observed Sample Temp._____°C	Corrected Sample Temp._____°C	☐ Multiple on Back
IR GUN# 5G	(CF 0 °C) Observed Sample Temp._____°C	Corrected Sample Temp._____°C	
IR GUN# 8	(CF 0 °C) Observed Sample Temp._____°C	Corrected Sample Temp._____°C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity_____	Yes	~~No~~
-Were custody seals on the outside of the cooler(s) signed & dated?	Yes No	~~NA~~
-Were custody seals on the bottle(s)?	Yes	~~No~~
3. Shippers' packing slip attached to the cooler(s)?	Yes	~~No~~
4. Did custody papers accompany the sample(s)?	~~Yes~~	No
5. Were the custody papers relinquished & signed in the appropriate place?	(Yes)	No
6. Did all bottles arrive in good condition (Unbroken)?	~~Yes~~	No
7. Could all bottle labels be reconciled with the COC?	~~Yes~~	No
8. Were correct bottle(s) used for the test(s) indicated?	~~Yes~~	No
9. Sufficient quantity received to perform indicated analyses?	~~Yes~~	No
10. Were sample(s) at the correct pH upon receipt?	Yes No	~~NA~~
11. Were VOAs on the COC?	~~Yes~~	No
12. Were air bubbles >6 mm in any VOA vials?	Yes	~~No~~ NA
13. Was a trip blank present in the cooler(s)?	~~Yes~~	No

Contacted PM MJL Date 3/28/13 by CSL ~~via Verbal~~ Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Rec'd 2x40 ml H20 trip blanks not on COC

Rec'd 1xL and 3x40mesh 07955-0053M-0001-SO 1645

Rec'd 1xL 07955-0054M-0001-SO 1508

not on COC

Did not rec'v the first 10 samples listed on COC 1of3 (002596)

15. SAMPLE CONDITION

Sample(s)	were received after the recommended holding time had expired.
Sample(s)	were received in a broken container.
Sample(s)	were received with bubble >6 mm in diameter. (Notify PM)

TestAmerica Laboratory location: ____
Regulatory program: ____

240-22562 Chain of Custody

her ____

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: ECC	Client Project Manager: A. PASTRONE	Site Contact: J. DONAHUE	Lab Contact: MARK LOKE	COC No: 048789
Address: 33 BOSTON POST RD WEST	Telephone:	Telephone: 3-28-13	Telephone:	1 of 4 COCs
City/State/Zip: MARLBORO MA	Email:	Analysis Turnaround Time (in BUS days)	Analyses	For lab use only
Phone:		TAT if different from below ____		Walk-in client ☐ Lab pickup ☐ Lab sampling ☐
Project Name: RAVENNA	Method of Shipment/Carrier: LAB PICK UP	☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Job/SDG No:
Project Number:	Shipping/Tracking No:			

PO#			Matrix					Containers & Preservatives							Filtered Sample (Y/N)	Composite=C / Grab=G									
Sample Identification	Sample Date	Sample Time	Air	Aqueous	Sediment	Solid	Other:	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other: MeOH			TAL METALS	SVOC'S	PCB'S	PESTICIDES	EXPLOSIVES	PROPELLANTS	VOC'S	%o SOLID		Sample Specific Notes / Special Instructions:
0735B-0025M-0001-SO	3-27-13	1532				X							X				X	X							
-0026M-		1531																							
-0027M-		1427																							
-0028M-		1422																							
-0029M-		1417																							
-0030M-		1533																							
-0031M-		1525						X						X			X	X	X	X	X	X	X	X	FULL SUITE
-0032M-		1503																							
-0033-		1510																							DISCRETE
-0034-0001-TB	3-28-13	0800		X						X													X		TRIP BLK

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal By Lab ☐ Archive For ____ Months

Special Instructions/QC Requirements & Comments:
DO NOT ORF -0033-

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	ECC	3-28-13-1735		TAL NE	3-28-13 1735
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TAL NE	3-28-13-1826		TA	3-28-13 1826
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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TAL 0018- 1 (04/10)

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: RCC	Client Project Manager: A. FASTRADAY	Site Contact: T. DONOVAN	Lab Contact: MARK LORD	COC No: 048790
Address: 33 BOSTON POST RD WEST	Telephone:	Telephone: 3-28-13	Telephone:	2 of 4 COCs
City/State/Zip: MARLBORO	Email:	Analysis Turnaround Time (in BUS days)	Analyses	For lab use only
Phone:		TAT if different from below: STANDARD ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Walk-in client ☐ Lab pickup ☐ Lab sampling ☐
Project Name:	Method of Shipment/Carrier: LAB PICK UP			
Project Number:	Shipping/Tracking No:			Job/SDG No:

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Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other: MeOH	Filtered Sample (Y/N)	Composite=C / Grab=G	TAL METALS	SVOC	VOC	PESTICIDES	PCB	EXPLOSIVES	PHENOLICS	% SOLID			Sample Specific Notes / Special Instructions:
07350-0052-0001-SO	3-26-13	1000				X							X				X	X									DISCRETE
07350-0054-0001-SO		0930				X																					
07350-0055-0001-SO		0915				X																					
0735W-0063-0001-SW		1005		X																							
0735W-0064-0001-SW		0935		X																							
0735W-0066-0001-SW		0920		X													X	X									
078TP-0039-0001-TP	3-27-13	1211				X			X					X			X	X	X	X	X	X	X	X			DISCRETE FULL SUITE
0795B-0042M-0001-SO		1144				X											X										
0795B-0044M-0001-SO		1150				X																					
0795B-0046M-0001-SO		1146				X																					

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

n= 15M

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	RCC	3-27-13 1735	[signature]	TALEC	3-28-13 1735
Relinquished by: [signature]	Company: TAL-NE	Date/Time: 3-28-13 1826	Received by: [signature]	Company: TA	Date/Time: 3-28-13 1826
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
ECL	A. EASTMAN	3-28-13	002600
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 3 of 4**
33 BOSTON POST RD WEST			
City	**State**	**Zip Code**	**Site Contact**	**Lab Contact**
MARLBORO	MA	01752	J. DONOVAN	MARK LOEB
Project Name and Location (State)	**Carrier/Waybill Number**
RAYTHEON	
Contract/Purchase Order/Quote No.	

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	MEOH	Analysis: VOC	SVOC	TAL METALS	PCB	PESTICIDE	EXPLOSIVE	BNA/FLAMS	Special Instructions/ Conditions of Receipt
078TP-0046-0001-TP	3-27-13	1332				X	X							X	X	X	X	X	X	X	DISCRETE FULL SUITE
0795B-0047M-0001-SO		1133														X					
0795B-0047M-0002-SO		1133														X					MS/MSD
0795B-0048M-0001-SO		1112														X					
0795B-0050M-0001-SO		1100						X					X	X	X	X	X	X	X	X	FULL SUITE
0795B-0051M-0001-SO		1041														X					
0795B-0052-0001-SO		1041														X					DISCRETE
0795B-0033M-0001-SO		1242														X					
0795B-0035M-0001-SO		1244														X					
0795B-0037M-0001-SO		1210						X					X	X	X	X	X	X	X	X	FULL SUITE
0795B-0038M-0001-SO		1200														X					
0795B-0038M-0002-SO		1200														X					MS/MSD

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Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other STANDARD

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	3-28-13	1735	1. ~~Received~~ By: [signature]	3-28-13	1735
2. Relinquished By: [signature]	3-28-13	1826	2. Received By: [signature]	3-28-13	1826
3. Relinquished By			3. Received By		

Comments MC ISM

DISTRIBUTION: *WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy*

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: RCC	Client Project Manager: A. RABINOWITZ	Site Contact: J. DONOVAN	Lab Contact: MARK CURRY	COC No: 55032
Address: 33 BOSTON POST RD WEST	Telephone:	Telephone: 3-28-13	Telephone:	4 of 4 COCs
City/State/Zip: MARLBORO	Email:	Analysis Turnaround Time (in BUS days)	Analyses	For lab use only
Phone:		TAT if different from below ☐ STANDARD 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Walk-in client ☐ Lab pickup ☐ Lab sampling ☐
Project Name:	Method of Shipment/Carrier: LAB PICK UP			Job/SDG No:
Project Number:	Shipping/Tracking No:			
PO#				

Sample Identification	Sample Date	SampleTime	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: Total #	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other: MeOH	Filtered Sample (Y/N)	Composite=C / Grab=G	TAL METALS	VOC	SVOC	PCB	PESTICIDES	EXPLOSIVES	PROPELLANTS	%o SOLID	Sample Specific Notes / Special Instructions:
0795B-0039M-0001-SO	3-27-13	1229				X							X				X								
0795B-0039M-0002-SO	↓	1229				↓							↓				X								MS/MSD
0795B-0040M-0001-SO		1238															X								
0795B-0041M-0001-SO		1247						X						X			X	X	X	X	X	X	X	X	FULL SUITE

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

NO ISM

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	RCC	3/27/13 -1735	[signature]	TALNC	3-28-13-1735
[signature]	TALNC	3-28-13-1826	[signature]	TA	3-28-13 1826
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: ECC	Project Manager: A. KASTENOW		Date: 3-29-13	Chain of Custody Number: 008862
Address: 33 BOSTON POST ROAD WEST #420	Telephone Number (Area Code)/Fax Number:		Lab Number:	Page 1 of 6
City: MARLBORO	State: MA	Zip Code: 01752	Site Contact: J. DONOVAN	Lab Contact: MARK LORD
Project Name and Location (State): RAVENNA			Carrier/Waybill Number: LAB PICK UP	
Contract/Purchase Order/Quote No.				

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Analysis: SVOC	TAL METALS	Special Instructions/ Conditions of Receipt
07350-0016M-0001-SO	3-28-13	1108			X	X	X						X	X	
-0017M-		1108													
-0019M-		1110													
-0020M-		0952													
-0021M-		1003													
-0022M-		1054													
-0023M-		1112													
-0024M-		1007													
-0067M-		1134													DISCRETE
07350-0045-0001-SO		1400			X										MS/MSD
07350-0045-0002-SO		1400			X										DISCRETE
07350-0047-0001-SO		1325			X										

240-22648 Chain of Custody

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Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other STANDARD

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By:	3-29-13	1630	1. Received By:	3/29/13	1630
2. Relinquished By:			2. Received By:		
3. Relinquished By:	3/29/13	1730	3. Received By:	3-29-13	1731

Comments
N = 15M

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
ECC		3-29-13	008864
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 2 of 6**
33 BOSTON POST ROAD WEST			
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
MARLBORO		MARK LORD	
Project Name and Location (State)	**Carrier/Waybill Number**		
DANBURY	LAB PICK UP		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Analysis: SVOC	TAL METALS	PCB	PESTICIDE	VOC	EXPLOSIVES	PROPELLANTS	% SOLID	Special Instructions/ Conditions of Receipt
07350-0048-0001-SD	3-28-13	1325			X		X						X	X							
07350-0050-0001-SD		1305			X								X	X	X	X	X	X	X	X	FULL SUITE
07350-0046-0001-SD		1345			X								X	X							
0735W-0056-0001-SW		1355		X																	
0735W-0056-0002-SW		1355																			MS/MSD
0735W-0058-0001-SW		1330																			
0735W-0059-0001-SW		1330																			
0735W-0061-0001-SW		1300																			
0735W-0063-0001-SW		1350																			
0735W-0057-0001-TB	3-29-13	0800		X						X							X				TRIP BLANK
0735W-0067-0001-SW	3-28-13	1350		X			X														

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Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other STANDARD

QC Requirements (Specify)

1. Relinquished By	Date	Time	1. Received By	Date	Time
	3-29-13	1630		3/29/13	1630
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time
	3/29/13	1720		3.29.13	1730

Comments: ALL SAMPLES ON THIS COC ARE DISCARTE

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
ECC	A. Easterday	3-29-13	008867
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 3 of 6
33 Boston Post Road West #420			
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Marlborough / MA / 01752	J. Donovan	Mark Lorb	
Project Name and Location (State)	**Carrier/Waybill Number**		
Ravenna	LAB PICK UP		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H_2SO_4	HNO_3	HCl	NaOH	Zn Ac/NaOH	MeOH	Analysis (Attach list if more space is needed): TAL Metals	VOC	SVOC	PCB	Pesticide	Explosive	Propellant	% Solid	Special Instructions/ Conditions of Receipt
0795B-0055M-0001-SD	3-28-13	1522			X		X							X								
0795B-0057M-0001-SO		1522																				
0795B-0058M-0001-SO		1527																				
-0059M-		1527																				
-0060M-		1525																				
-0061M-		1512																				
0795B-0061M-0002-SO		1512																				MS/MSD
0795B-0062M-0001-SO		1450																				
-0063M-		1437								X			X	X	X	X	X	X	X	X	X	FULL SUITE
-0064M-		1400								X			X	X	X	X	X	X	X	X	X	FULL SUITE
-0075-		1421												X								DISCRETE
-0065M-		1711												X								

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Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other STANDARD

QC Requirements (Specify)

1. Relinquished By	Date	Time	1. Received By	Date	Time
	3-29-13	1630		3/29/13	1630
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time
	3/29/13	1730		3-29-13	1730

Comments
M = ISM

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
ECC	A. EASTMAN	3-29-13	008865
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 4 of 6**
33 BOSTON POST RD			
City	**State**	**Zip Code**	**Site Contact**	**Lab Contact**
MARLBORO	MA	01752	J. DONOVAN	MARK LOEB
Project Name and Location (State)	**Carrier/Waybill Number**
NEWMA	LAB PICK UP
Contract/Purchase Order/Quote No.	

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	~~H2SO4~~	HNO3	HCl	NaOH	ZnAc/ NaOH	MeOH	Analysis: TAL METALS	VOC	SVOC	PCB	PESTICIDE	EXPLOSIVE	PHARMACEUTICAL	% SOLID	Special Instructions/ Conditions of Receipt
0795B-0066M-0001-SO	3-28-13	1711				X	X							X								
-0067M-		1712												X								
-0068M-		1712												X								
-0069M-		1615						X					X	X	X	X	X	X	X	X	X	FULL SUITE
-0070M-		1630												X								
-0070M-0002-SO		1630												X								MS/MSD
-0071M-0001-SO		1634						X					X	X	X	X	X	X	X	X	X	FULL SUITE
-0072M-		1653												X								
-0072M-0002-SO		1653												X								MS/MSD
-0074M-0001-SO		1720						X					X	X	X	X	X	X	X	X	X	FULL SUITE

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Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other STANDARD

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	3-29-13	1630	1. Received By	3/29/13	1630
2. Relinquished By			2. Received By		
3. Relinquished By	3/29/13	1730	3. Received By	3-29-13	1730

Comments
n = 15M

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
ECC	A. Easterday	3-29-13	008868
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 5 **of** 6
33 Boston Post Rd W. #420			
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Marlborough / MA / 01752	J. Donovan	Mark Loeb	
Project Name and Location (State)	**Carrier/Waybill Number**		
Ravenna	LAB PICK UP		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	MeOH	Analysis: TAL METALS	PCB	SVOC	Perchlorate	VOC	Pesticide	Explosive	Propellants	% Solid	Special Instructions/ Conditions of Receipt
06SB-0044M-0001-SO	3/29/13	1024				X	X							X	X	X							
-0045M-		1023												X	X	X							
-0046M-		0937						X					X	X	X	X			X	X	X	X	FULL SUITE
-0047M-		1025												X	X	X							
-0048M-		1007												X	X	X							
06SB-0033M-0001-SO	3/29/13	0915												X	X	X							
-0034M-		0919												X	X	X							
-0035M-		0826												X	X	X							
-0038M-		0920												X	X	X							
-0036M-		0826												X	X	X							
-0039M-		0852												X	X	X							
-0040M-		0859												X	X	X							

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Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other STANDARD

QC Requirements (Specify)

1. Relinquished By	Date	Time	1. Received By	Date	Time
	3-29-13	1630		3/29/13	1630
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time
	3/29/13	1730		3-29-13	1730

Comments

DISTRIBUTION: *WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy*

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
ECC	Al Easterday	3-29-13	008866
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 6 of 6**
33 Boston Post Rd West #420			
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Marlborough / MA / 01752	J. Donovan	Mark Locb	
Project Name and Location (State)	**Carrier/Waybill Number**		
Ravenna	CAB pick up		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	HCl	HNO3	HCl	NaOH	ZnAc/ NaOH	Other	Analysis: TAL METALS	SVOC	PCB	VOC	PESTICIDE	EXPLOSIVE	PHENOLICS	% SOLID	Special Instructions/ Conditions of Receipt
068SB-0041M-0001-SO	3/29/13	0912				X	X	X					X	X	X	X	X	X	X	X	X	FULL SUITE
068SB-0042M-0001-SO		0833																				
-0050M-		1157																				
-0051M-		1158																				
-0052M-		1200																				
-0053M-		1118																				
-0054M-		1118																				
-0056M-		1135																				
-0057M-		1126																				
-0059M-		1147																				

Page 5347 of 5354

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other STANDARD

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: Jeff Dean	3-29-13	1630	1. Received By: B Carlell	3/29/13	1630
2. Relinquished By:			2. Received By:		
3. Relinquished By: B Carlell	3/29/13	1730	3. Received By:	3-29-13	1730

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
ECC	A. BARTHOLOMAY	4-1-13	008869
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 3**
33 BOSTON POST ROAD WEST			
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
MARLBORO / MA / 01752	J. DONOVAN		
Project Name and Location (State)	**Carrier/Waybill Number**		
ROVENNA	LAB PICK UP		
Contract/Purchase Order/Quote No.			

Analysis (Attach list if more space is needed): TAL Metals

Special Instructions/ Conditions of Receipt

240-22660 Chain of Custody

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H_2SO_4	HNO_3	HCl	NaOH	ZnAc/ NaOH	TAL Metals	Special Instructions
0795B-0076M-0001-SO	3-22-13	1637				X	X						X	
-0077M-		1637												
-0079M-		1642												
-0080M-		1642												
-0081M		1550												
-0082M		1559												
-0082M-0002-SO		1559												MS/MSD
-0083M-0001-SO		1633												
-0084M-		1645												
-0085M-		1622												

Page 674 of 679

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other STANDARD

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	4-1-13	1711	1. Received By: RC Edison	4-1-13	1711
2. Relinquished By: RC Edison	4-1-13	1824	2. Received By: [signature]	4/2/13	800
3. Relinquished By			3. Received By		800

Comments: B = ISM THIS COC COVERS SAMPLES PICKED UP ON 3-29-13 W/NO COC

DISTRIBUTION: *WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy*

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
RCC	B. FASTNACHT	4-1-13	008871
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 2 of 3**
33 BOSTON POST RD WEST			
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
MARLBORO / MA	J. DONOVAN	MARK LOEB	
Project Name and Location (State)	**Carrier/Waybill Number**		
	LAB PICK UP		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H_2SO_4	HNO_3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): TAL METALS	Special Instructions/ Conditions of Receipt
0795B-0086M-0001-SO	3-23-13	1400				X	X						X	
-0087M-		1400												
-0088M-		1409												
-0089M-		1409												
-0090M-		1334												
-0091M-		1319												
-0091M-0002-SO		1319												MS/MSD
-0092M-0001-SO		1356												
-0093M-		1406												
-0095M-		1256												
-0096M-		1335												DISCRETE

Page 675 of 679

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	4-1-13	1711	1. Received By: [signature] FEDEX	4-1-13	1711
2. Relinquished By: [signature] FEDEX	4-1-13	1826	2. Received By: [signature]	4/2/13	800
3. Relinquished By			3. Received By		800

Comments: MS ISM -0096-0001-SO IS DISCRETE THIS COC COVERS SAMPLES PICKED UP ON 3-29-13 W/ NO COC

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
ECC	A. BASTENDAV	4-1-13	008870
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 3 of 3
33 BOSTON POST RD #420 ON EST			
City	**State** / **Zip Code**	**Site Contact**	**Lab Contact**
MARLBORO	MA / 01752	VIDONOVAN	MARK COBB
Project Name and Location (State)	**Carrier/Waybill Number**		
	LAB PICK UP		

Contract/Purchase Order/Quote No.

Analysis (Attach list if more space is needed)

Special Instructions/ Conditions of Receipt

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H_2SO_4	HNO_3	HCl	NaOH	ZnAc/ NaOH	TAL METALS
07958-0107M-0001-SO	3-23-13	1120				X	X						X
-0108M-		1120											
-0110M-		1137											
-0111M-		1137											
-0112M-		0856											
-0113M-		0925											
-0114M-		1031											
-0116M-		1055											
-0117M-		1116											

Page 676 of 679

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	4-1-13	1711	1. Received By	4-1-13	1711
2. Relinquished By	4-1-13	1824	2. Received By	4/2/13	800
3. Relinquished By			3. Received By		

Comments
MS/MSD THIS COC COVERS SAMPLES PICKED UP ON 3-29-13 W/ NO COC

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
ELC	A. Easterday	4/1/13	008879
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 5**
35 Boston Post Rd W. #320	(508) 229-2210		
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Marlborough / MA / 01752	J. Donovan	Mark Lobb	
Project Name and Location (State)	**Carrier/Waybill Number**		
Ravenna - OH	CAB pick up		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: Metals SPLP Full Suite	Pesticides 8081	VOC 8260	SVOC 8270	Explosives 8330	Phenolics 9065	PCB	Special Instructions/ Conditions of Receipt
079SB-0010M-0001-SD	4/1/13	1007			X		X						X							
-0011M-0001-SD		1007											X							
-0013M-0001-SD		1009											X							
-0014M-0001-SD		1012											X	X	X	X	X	X	X	Full Suite
-0015M-0001-SD		1001											X							
-0015M-0002-SD		1001											X							MS/MSD
-0016M-0001-SD		0915											X							
-0017M-0001-SD		0924												X						
-0020M-0001-SD		0924											X							
-0019M-0001-SD		0945											X							
070SB-0046M-0001-SB	4-1-13	1500												X						

240-22663 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	4-1-13	1711	1. Received By	4-1-13	1711
2. Relinquished By	4-1-13	1824	2. Received By	4-2-13	0800
3. Relinquished By			3. Received By		

Comments
MS/MSD

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Page 3497 of 3505

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
ELC	A. Easterday	4/1/13	008877
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 2 of 5**
33 Boston Post Rd W. #420	(508) 229-2270		
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Marlborough / MA / 01752	J. Donovan	Mark Locb	
Project Name and Location (State)	**Carrier/Waybill Number**		
Ravenna - OH			
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Analysis: Metals	Full Suite	VOC	SVOC	Pesticide	PCB	Herbicide	Phenol	% Solid				Special Instructions/ Conditions of Receipt
073SS-0035M-0001-SO	4/1/13	1420				X	X						X												
073SB-0036M-0001-SO		1345											X												
-0037M-0001-SO		1350											X												
-0038M-0001-SO		1240											X												
-0039M-0001-SO		1240											X												
-0040M-0001-SO		1253											X												
-0041M-0001-SO		1303											X	X	X	X	X	X	X	X	X				FULL SUITE
-0042M-0001-SO		1351											X												
-0043M-0001-SO		1324											X												
-0044-0001-SO		1329											X												DISCRETE MS/MSD
-0040M-0002-SO		1253					4						X												

Page 3498 of 3505

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	4-1-13	1711	1. Received By	4-1-13	1711
2. Relinquished By	4-1-13	1524	2. Received By	4-2-13	0800
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: *WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy*

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
EW	A. Easterday	4/1/13	008878
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 3 of 5**
55 Boston Post Rd W. #420	(508) 229-2270		
City / State / Zip Code	**Site Contact**	**Lab Contact**	
Marlborough / MA / 01752	J. Donovan	Mark Laub.	
Project Name and Location (State)	**Carrier/Waybill Number**		
Kavanna - OH			
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Other	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	MeOH	Analysis: Metals	Full Suite VOC	SVOC	PCB	Pesticides	Explosives	Propellants	% Solids	Special Instructions/ Conditions of Receipt
079SB-0021M-0001-SO	4/1/13	1121				X		X							X								
-0022M-0001-SO		1124													X								
-0023M-0001-SO		1124													X								
-0024M-0001-SO		1129													X								
-0024M-0002-SO		1129													X								MS/MSD
-0025M-0001-SO		1023													X								
-0026M-0001-SO		1037							X					X	X	X	X	X	X	X	X	X	Full Suite
-0027M-0001-SO		1112													X								
-0028M-0001-SO		1043							X					X	X	X	X	X	X	X	X	X	Full Suite
-0029-0001-SO		1055													X								Dissolved
068SB-0026-0001-TB		0800		X												X							TRIP BLK

Page 3499 of 3505

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Relinquished By	Date	Time	Received By	Date	Time
1.	[signature]	4-1-13	1711	[signature]	4-1-13	1711
2.	[signature]	4-1-13	1824	[signature]	4-2-13	0800
3.						

Comments

DISTRIBUTION: *WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy*

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
ECC	A. Easterday	4/1/13	008876
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 4 of 5**
33 Boston Post Rd W. #420	(508) 229-2270		
City / State / Zip Code	**Site Contact**	**Lab Contact**	
Marlborough / MA / 01752	J. Donovan	Mark Laub	
Project Name and Location (State)	**Carrier/Waybill Number**		
Ravenna - OH	Lab pick up		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Analysis: Metals TAL	PCB	SVOC	Special Instructions/ Conditions of Receipt
0608B-0017M-0001-SO	3/29/13	1542				X	X						X	X	X	
0608B-0018M-0001-SO		1543											X	X	X	
0608B-0019M-0001-SO		1521											X	X	X	
0608B-0022M-0001-SO		1521											X	X	X	
0608B-0020M-0001-SO		1550											X	X	X	
0608B-0023M-0001-SO		1440											X	X	X	
0608B-0024M-0001-SO		1420											X	X	X	
0608B-0025M-0001-SO		1445											X	X	X	
0608B-0032-0001-SO		1530											X	X	X	Discrete

Page 3500 of 3505

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	4-1-13	1711	1. Received By	4-1-13	1711
2. Relinquished By	4-1-13	1824	2. Received By	4-2-13	0800
3. Relinquished By			3. Received By		

Comments
-0032- IS A DISCRETE SAMPLE

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client	Project Manager	Date	Chain of Custody Number
ECC	A. Easterday	4/1/13	008872
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 5 of 5**
33 Boston Post Rd W #420	(508) 229-2270		
City / State / Zip Code	**Site Contact**	**Lab Contact**	
Marlborough / MA / 01752	J. Donovan	Mark Lobb	
Project Name and Location (State)	**Carrier/Waybill Number**		
Ravenna - DH	LAB pick up		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Analysis: Metals TAL	PCB	SVOC	Special Instructions/ Conditions of Receipt
06SB-0027M-0001-SO	3/29/13	1400				X	X						X	X	X	
06SB-0028M-0001-SO		1402											X	X	X	
06SB-0029M-0001-SO		1753											X	X	X	
06SB-0030M-0001-SO		1405											X	X	X	
06SB-0031M-0001-SO		1344											X	X	X	

Page 3501 of 3505

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other STANDARD

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	4-1-13	1711	1. Received By	4-1-13	1711
2. Relinquished By	4-1-13	1824	2. Received By	4-2-13	0800
3. Relinquished By			3. Received By		

Comments
MC 15m

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

TestAmerica Canton

4101 Shuffel Street, N. W.
North Canton, OH 44720
Phone: 330.497.9396 Fax: 330.497.0772

Chain of Custody Record

031443

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other: Test America Prod. # 24009157

Client Contact	Project Manager: AL KASPERSKY	Site Contact: J. DONAHUE	Date: 4-7-15	COC No:
Company Name: ECC	Tel/Fax: 508-229-2270	Lab Contact: MARK LORD	Carrier: LAB PICK UP	1 of 1 COCs
Address: 23 BOSTON POST RD WEST	Analysis Turnaround Time			Sampler:
City/State/Zip: MARLBORO MA 01252	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 508 229 2270	TAT if different from Below _____			Walk-in Client:
Fax: 508-229-7737	☒ 2 weeks			Lab Sampling:
Project Name: BARNARD AAP	☐ 1 week			
Site: CC 79 AREA B	☐ 2 days			Job / SDG No.:
PO # 5161.004	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TAL METALS	VOC	SVOC	PCB's PESTICIDES	EXPLOSIVES	ROPELLANTS	Sample Specific Notes:
07955-0342M-0001-SO	4-6-15	1630	15M	SO	10			X	X	X	X	X	X	FULL SUITE
07955-0342M-0002-SO	↓	1630	↓	↓	1		X	X						MS/MSD
07955-0343M-0001-SO		1400			1			X						
07955-0344M-0001-SO	↓	0000	↓	↓	1			X						
07955-0379-0001-TB	4-6-15	0800	LAB SUPPLIED	DI	2				X					TRIP BLANK

Preservation Used: 1= Ice, 2= HCl, 3= H2SO4, 4=HNO3, 5=NaOH, 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ | Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
J. Donahue	ECC	4-7-15 1655			4-7-15 1655
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
R. Lobo	ECC 4/7/15	1825	Terry Burns	TA Can	4/8/15 0700
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TestAmerica Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Test America Project #: 24009157

Regulatory Program: ☐DW ☐NPDES ☐RCRA ☐Other:

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Al Easterday	Site Contact: Jeff Donovan	4/9/2015	COC No: 003
Environmental Chemical Corp.	Tel/Fax: 508-229-2270 Ext 22109	Lab Contact: Mark Loeb	Carrier: Lab Pick up	__1__ of __1__ COCs
33 Boston Post Rd. W	**Analysis Turnaround Time**			For Lab Use Only:
Marlborough, MA, 01752	☑CALENDAR DAYS ☐WORKING DAYS			Walk-in Client:
508-229-2270	TAT if different from Below = 3 weeks			Lab Sampling:
508-229-7737 (fax)	☐ 2 weeks			
Project Name: Ravenna Army Ammunition Plant	☑ 1 week			Job / SDG No.:
Site: CC RVAAP-79 Load Line 3	☐ 2 days			
P O # 5141.004	☐ 1 day			Sampler: KP - FR

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	SW6260B / 5035	SW8270C / SVOC	SW6020 / TAL Metals	SW8082 / PCB	SW8081A / Pesticides	SW8330B / Explosives	SW8330 - Nitroguanidine	Propellant - Nitrocellulose	SW71471A/ Mercury	Sample Specific Notes:
079SS-0369M-0001-SO	8-Apr-15	1020	ISM	SO	1	N	N			X						X	
079SS-0370M-0001-SO	8-Apr-15	1240	ISM	SO	1	N	N			X						X	
079SS-0371M-0001-SO	8-Apr-15	1150	ISM	SO	1	N	N			X						X	
079SS-0372M-0001-SO	8-Apr-15	1100	ISM	SO	1	N	N			X						X	
079SS-0373M-0001-SO	8-Apr-15	1340	ISM	SO	1	N	N			X						X	
079SS-0374M-0001-SO	8-Apr-15	1420	ISM	SO	1	N	N			X						X	
079SB-0375M-0001-SO	7-Apr-15	1400	ISM	SO	1	N	N			X						X	
079SB-0376M-0001-SO	7-Apr-15	1540	ISM	SO	1	N	N			X						X	
079SB-0377M-0001-SO	7-Apr-15	1600	ISM	SO	1	N	N			X						X	
079SB-0378M-0001-SO	7-Apr-15	1610	ISM	SO	1	N	N			X						X	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= MeOH; 7=DI Water								1,6,7	1	1	1	1	1	1	1	1	

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

☐Return to Client ☑Disposal by Lab ☐Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☑ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ | Therm ID No.:_____

	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:		4-9-15 1243			
Relinquished by:	Company:	Date/Time: 1456	Received by:	Company: TA	Date/Time: 4-9-15 1451
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TestAmerica Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

Test America Project #: 24009157

Regulatory Program: ☐DW ☐NPDES ☐RCRA ☐Other:

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Al Easterday	Site Contact: Jeff Donovan	4/8/2015	COC No: 002
Environmental Chemical Corp.	Tel/Fax: 508-229-2270 Ext 22109	Lab Contact: Mark Loeb	Carrier: Lab Pick up	1 of 1 COCs
33 Boston Post Rd. W	Analysis Turnaround Time			For Lab Use Only:
Marlborough, MA, 01752	☑CALENDAR DAYS ☐WORKING DAYS			Walk-in Client:
508-229-2270	TAT if different from Below = 3 weeks			Lab Sampling:
508-229-7737 (fax)	☐ 2 weeks			
Project Name: Ravenna Army Ammunition Plant	☐ 1 week			Job / SDG No.:
Site: CC RVAAP-79 Rt 80 Tank Farm	☐ 2 days			
P O # 5141.004	☐ 1 day			Sampler: KP - FR

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	SW8260B / 5035	SW8270C / SVOC	SW6020 / TAL Metals	SW8082 / PCB	SW8081A / Pesticides	SW8330B / Explosives	SW8330 - Nitroguanidine	Propellant - Nitrocellulose	SW71471A/ Mercury	Sample Specific Notes:
079SS-0347M-0001-SO	6-Apr-15	1710	ISM	SO	1	N	N			X						X	
079SS-0348M-0001-SO	7-Apr-15	1510	ISM	SO	1	N	N			X						X	
079SS-0349M-0001-SO	7-Apr-15	0000	ISM	SO	1	N	N			X						X	
079SS-0350M-0001-SO	7-Apr-15	1205	ISM	SO	1	N	N			X						X	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= MeOH; 7=DI Water								1,6,7	1	1	1	1	1	1	1	1	

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

☐Return to Client ☑Disposal by Lab ☐Archive for_____ Months

Special Instructions/QC Requirements & Comments: Samples with "M" denote ISM samples.

Custody Seals Intact: ☑Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company: ECC	Date/Time: 4/9/15 1243	Received by: R. Rolan	Company: TestAm	Date/Time: 4-9-15 / 243
Relinquished by:	Company: TestAm 4/9/15	Date/Time: 1637	Received by:	Company: TA	Date/Time: 4-9-15 1457
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

CHAIN OF CUSTODY FORMS

Quality Assurance Samples

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COC No. A 34608

158 Starlite Drive
Marietta, OH 45750

Microbac

CHAIN-OF-CUSTODY RECORD

Phone: 740-373-4071
Fax: 740-373-4835

Company Name: ECC

Project Contact: Jackson Kiker | Contact Phone #: 505-229-2270

Turn Around Requirements: Standard | Location: Ravenna OH

Project ID: Ravenna

Sampler (print): Tom Hernandez | Signature:

Program: ☐ CWA ☐ RCRA ☐ DOD ☐ AFCEE ☐ Other _____

ADDITIONAL REQUIREMENTS

Sample I.D. No.	Comp	Grab	Date	Time	Matrix*	NUMBER OF CONTAINERS	Hold	Metals TAL	SVOC	PCB's	PESTICIDES	VOC	EXPLOSIVES	PROPELLANTS								TOTAL # (LAB USE)	ADDITIONAL REQUIREMENTS
079SB-0115M-0001		1	SO 3/23/13	1052	S	1		X															
079SB-0099M-0001		1	SO 3/23/13	0947	S	1		X															
079SB-0049M-0001		1	SO 3/27/13	1144	S	1		X															
079SB-0019M-0001		1	SO 3/26/13	1656	S	1		X															
079SB-0140M-0001		1	SO 3/25/13	1531	S	1		X															
079SB-0109M-0001		1	SO 3/23/13	1117	S	1		X															
079SB-0078M-0001		1	SO 3/22/13	1610	S	1		X															
078SB-0010M-0001		1	SO 3/26/13	1006	S	1		X															
079SB-0235M-0001		1	SO 3/21/13	1050	S	1		X															
079SB-0237M-0001		1	SO 3/21/13	1051	S	1		X															
079SB-0218M-0001		1	SO 3/21/13	1203	S	1		X															
079SB-0094M-0001		1	SO 3/23/13	1404	S	1		X															
073SW-0065-0001		1	SW 3/27/13	0900	W	3		X	X														
073SD-0053-0001		1	SD 3/27/13	1000	S	1		X	X														
073SD-0049-0001		1	SD 3/28/13	1325	S	1		X															
073SW-0060-0001		1	SW 3/28/13	1330	W	1		X															
073SW-0062-0001		1	SW 3/28/13	1300	W	1/4	20	X	X	X	X	X	X	X									FULL SUITE
073-0066-0001		1	TB 3/28/13	0800	W		2					X											TRIP BLK
073SD-0051-0001		1	SD 3/28/13	1205	S		5	X	X	X	X	X	X	X									FULL SUITE

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
[signature]	3-28-13	1800	FEDEX				

Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)	Date	Time	Remarks:

*Water (W), Soil (S), Solid Waste (SD), Unknown (X)

COC No. A 34421

158 Starlite Drive
Marietta, OH 45750

Microbac

CHAIN-OF-CUSTODY RECORD

Phone: 740-373-4071
Fax: 740-373-4835

Company Name: ECC

Project Contact: JACKSON MIKAL

Contact Phone #:

Turn Around Requirements: STANDARD

Location:

Project ID: RAVENNA

Sampler (print): FRED RICHIE/ROXANN WILLIAMS

Signature:

Program: ☐ CWA ☐ RCRA ☐ DOD ☐ AFCEE ☐ Other _____

Sample I.D. No.	Comp	Grab	Date	Time	Matrix*	NUMBER OF CONTAINERS	Hold	TAL METALS	SVOC	VOC	PCB	PESTICIDE	EXPLOSIVES	PHARMACEUTICALS	% SOLID								TOTAL # (LAB USE)	ADDITIONAL REQUIREMENTS
079SB-005M-001-SO			~~3-28-13~~ 4-1-13	1521	SOIL			X																
079SB-007M-001-SO			3-28-13	1653				X																
079SB-012M-001-SO			4-1-13	1007				X																
079SB-018M-001-SO				0924				X	X	X	X	X	X	X	X									FULL SUITE
068SB-003M-001-SO			3-29-13	0826				X	X		X													
068SB-005M-001-SO			↓	1118				X	X		X													
068SB-002M-001-SO			↓	1550	↓			X	X		X													
068SB-005S-001-W			4-1-13	0800	W					X														TRIP BLANK

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
[signature]	4-1-13	1800	FLOREX				

Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)	Date	Time	Remarks:

*Water (W), Soil (S), Solid Waste (SD), Unknown (X)

CHAIN OF CUSTODY FORMS

Programmatic Quality Control Samples

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: ECC	Client Project Manager: A. CASTRONOVO	Site Contact: J. DONOVAN	Lab Contact: M. LOEB	COC No: 050743
Address: 33 BOSTON POST RD	Telephone:	Telephone:	Telephone: REACTIVITY, CORROSIVITY, IGNITIBILITY	1 of 3 COCs
City/State/Zip: MARLBORO MA	Email:	Analysis Turnaround Time (in BUS days)	Analyses	For lab use only
Phone:		TAT if different from below: ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Walk-in client: ☐ Lab pickup: ☐ Lab sampling: ☐ Job/SDG No:
Project Name:	Method of Shipment/Carrier: DEL. TO LAB			
Project Number:	Shipping/Tracking No:			
PO #				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: Unpres	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other: 01	Filtered Sample (Y/N)	Composite C / Grab G	VOC (MTBE)	GRO	DRO (TAL METALS)	PEST / PCB	HERBICIDES	EXPLOSIVES	PRODUCTANTS	o/o SOLID	SVOC (PAH)	TCLP (VOC)	TCLP (SVOC)	Sample Specific Notes / Special Instructions:
070SB-0042M-0001-SO	12-12-12	1030				X		X					X	X				X						X				
070SB-0042M-0002-SO		1030				X		X					X	X				X						X				MS/MSD
070SB-0055-0001-TB		0800		X						X				X				X										TRIP BLK
070-0056-0001-SOURCE WATER		1300		X				X		X			X				X	X	X	X	X	X	X		X			SOURCE WATER DRILLER
070-0057-0001-SOURCE WATER		1315		X				X		X			X				X	X	X	X	X	X	X		X			SOURCE WATER ECC
070-0058-0001-IDW		1330				X		X																	X		X	IDW TCLP SOLID
070-0059-0001-IDW		1330		X						X	X						X										X	IDW TCLP LIQUIDS
070-0060-0001-TB	↓	0800																										TRIP BLK

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
ANY QUES ON TCLP ANALYSIS CALL JACKSON KIKER AT ECC

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	ECC	12-12-12 1702			12-12-12
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: [signature]	Company: TAL	Date/Time: 12/12/12 1702

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: ECC	Client Project Manager: A. EASTERDAY	Site Contact: J. DONOVAN	Lab Contact: MARK LOEB	COC No: 048788
Address: 39 BOSTON POST RD WEST #420	Telephone:	Telephone: 508-509-1784	Telephone:	1 of 1 COCs
City/State/Zip: MARLBORO, MA 01752	Email:	Analysis Turnaround Time (in BUS days)	Analyses	For lab use only
Phone:		TAT if different from below ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☒ ~~2 days~~ 5 DAY ☐ 1 day		Walk-in client ☐ Lab pickup ☐ Lab sampling ☐
Project Name: RAVENNA	Method of Shipment/Carrier: LAB PICK UP			Job/SDG No:
Project Number:	Shipping/Tracking No:			

PO #			Matrix					Containers & Preservatives															Sample Specific Notes / Special Instructions:
Sample Identification	Sample Date	Sample Time	Air	Aqueous	Sediment	Solid	Other:	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite C / Grab G	TAL METALS	EXPLOSIVES	PAH/PLANTS	HERBICIDE	PCB / PESTICIDES	SVOC	TPH/DRO	TPH/GRO	HEX CHROM	VOC	
079-0007-0001-SOURCE WATER	3/14/13	1200		X					4	X			X				X	X	X	X	X	X	X	X	X	X	
079-0008-0001-TB TRIP BLANK	↓	0800		X						X																X	
079-0009-0001-TB TRIP BLANK	↓	0800		X						X														X			

240-21987 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	ECC	3/14/13 1530	[signature]	TAL	3/14/13 1530
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by: [signature]	Company: TAL	Date/Time: 3/14/13 1620	Received in Laboratory by: [signature]	Company: TA/Canton	Date/Time: 3/14/13 1620

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TAL 0018- 1 (04/10)

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: ECC	Client Project Manager: BL EASTBURN	Site Contact: J DONOVAN	Lab Contact: ANNA LOEB	COC No: 048707
Address: 33 BOSTON POST. RD. #420 MARLBORO	Telephone:	Telephone:	Telephone:	3 of 5 COCs
City/State/Zip: MARLBORO	Email:	Analysis Turnaround Time (in BUS days)	Analyses	For lab use only
Phone:		TAT if different from below: STANDARD		Walk-in client ☐ Lab pickup ☐ Lab sampling ☐
Project Name:	Method of Shipment/Carrier: UPS PICK UP	☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Job/SDG No:
Project Number:	Shipping/Tracking No:			
PO #				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other: BT	Filtered Sample (Y/N)	Composite (C) / Grab (G)	EXPLOSIVES	PAH/PETROLEUM	PCB	VOC	TPH GRO	PERT	HYDROCLOSE	TAL METALS	SVOC	Sample Specific Notes / Special Instructions:
076SW-0013-0001-SW	11-15-12	1400		X									X				X	X	X							
076SW-0013-0002-SW/MSD		1400		X									X				X	X	X							MS/MSD
076SW-0014-0001-SW		1500		X									X				X	X	X							
076SW-0015-0001-SW		1530		X									X				X	X	X							
076-0067-0001-ER		1300							X	X			X	X			X	X	X	X	X	X	X	X	X	EQUIP RINSATE
076-0068-0001-TB	↓	0700		X						X				X						X						TRIP BLANK

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
SAMPLES TO HAVE MS FOR MISSING VOL, CALL AT 0-20 ON 11-8-12

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	ECC	11-16-12 1740	[signature]	TAL-NC	11-16-12 1740
[signature]	TAL-NC	11-16-12 1842			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
			[signature]	TA	11/16/12 1842

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: ECC	Client Project Manager:	Site Contact: J. Donahue	Lab Contact:	COC No: 049555
Address: 33 Boston Post Rd	Telephone:	Telephone:	Telephone: 4-3-13	3 of 3 COCs
City/State/Zip: Marlboro	Email:	Analysis Turnaround Time (in BUS days)	Analyses	For lab use only
Phone:		TAT if different from below _____ ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Walk-in client ☐ Lab pickup ☐ Lab sampling ☐
Project Name:	Method of Shipment/Carrier: LAB PICK UP			
Project Number:	Shipping/Tracking No:			Job/SDG No:

P O #			Matrix					Containers & Preservatives																			Sample Specific Notes / Special Instructions:
Sample Identification	Sample Date	Sample Time	Air	Aqueous	Sediment	Solid	Other:	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite C/ Grab G	TAL MEM/	PCB	PEST/ CLP	SVOC	VOC	BYPASSIVE S	PAH/PELLET S	TPH/DRO			
079RW-0317-0001-AW	4/3/13	1500		X					X				X				X	X	X	X	X	X	X	X			RUSH TAT
079-0318-0001-TB	↓	0800		X						X											X						SHIP BOX

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	ECC	4-3-13-1500	[signature]	TALME	4-3-13-1500
[signature]	TALME	4-3-13-1702	[signature]	TA	4-4-13 800
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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TestAmerica Canton
4101 Shuffel Street, N. W.
North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

Test America Project #: 24009157

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐DW ☐NPDES ☐RCRA ☐Other:

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Al Easterday	Site Contact: Jeff Donovan	4/10/2015	COC No: 006
Environmental Chemical Corp.	Tel/Fax: 508-229-2270 Ext 22109	Lab Contact: Mark Loeb	Carrier: Lab Pick up	1 of 1 COCs
33 Boston Post Rd. W	**Analysis Turnaround Time**			**For Lab Use Only:**
Marlborough, MA, 01752	☑CALENDAR DAYS ☐WORKING DAYS			Walk-in Client:
508-229-2270	TAT if different from Below = 3 weeks			Lab Sampling:
508-229-7737 (fax)	☐ 2 weeks			
Project Name: Ravenna Army Ammunition Plant	☐ 1 week			Job / SDG No.:
Site: CC RVAAP-79 Main Storage Area	☐ 2 days			
P O # 5141.004	☐ 1 day			Sampler:MG -AW

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	SW8260B / 5035	SW8270C / SVOC	SW6020 / TAL Metals	SW8082 / PCB	SW8081A / Pesticides	SW8330B / Explosives	SW8330 - Nitroguanidine	Propellant - Nitrocellulose	SW71471A/ Mercury	SW8260B/5030	Full TCLP	Corrosivity	Flashpoint	Total Cyanide/Reactivity	Total Sulfide/Reactivity	Total Cyanide/Reactivity	Total Sulfide/Reactivity		Sample Specific Notes:
079SB-0383-0001-IDW	10-Apr-15	0800	G	SO	2	N	N											X	X	X	X	X				IDW - Soils
079SB-0384-0001-IDW	10-Apr-15	0830	G	W	8	N	N											X	X	X			X	X		IDW - Liquids
079SB-0385-0001-SW	10-Apr-15	0845	G	W	13	N	N		X	X	X	X	X	X	X	X										Source Water
079SB-0386-0001-RB	10-Apr-15	0850	G	W	1	N	N			X						X										Rnsate Blank - CC79
069SB-0387-0001-RB	10-Apr-15	0900	G	W	2	N	N										X									Rinsate Blank - CC69
079SB-0388-0001-TB	10-Apr-15	0730	Lab Supplied	DI	2	N	N										X									Trip Blank
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= MeOH; 7=DI Water								1,6,7	1	1	1	1	1	1	1	1	1,2	1	1	1	1	1	1.5	1,8		

Possible Hazard Identification: 8 = Zn Acetate

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

☐Return to Client ☑Disposal by Lab ☐Archive for_____ Months

Special Instructions/QC Requirements & Comments: Full TCLP = VOC, SVOC, Metals, Pesticides, Herbicides

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	TEC	4-10-15	[signature]	TestAm	4-10-2015 1338
Relinquished by: [signature]	Company: TestAm 4-10-15	Date/Time: 1421	Received by: [signature]	Company: TA	Date/Time: 4-10-15 1421
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 4.1, dated 02/20/2013

TestAmerica Canton Sample Receipt Form/Narrative Login # : 49236
Canton Facility

Client ECC Site Name

Cooler Received on 4-10-15 Opened on 4-10-15

Cooler unpacked by:

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off ~~TestAmerica Courier~~ Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # Foam Box Client Cooler Box ~~Other~~

Packing material used: ~~Bubble Wrap~~ Foam Plastic Bag None Other

COOLANT: ~~Wet Ice~~ Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt
   - ~~IR GUN# A (CF +4.0 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C~~
   - IR GUN# 4 (CF +0.5 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C
   - ~~IR GUN# 5 (CF +0.4 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C~~
   - IR GUN# 8 (CF -1.2 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

   ☑ See Multiple Cooler Form

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 8 Yes No
   - -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   - -Were custody seals on the bottle(s)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the sampler(s) clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC425511
12. Were VOAs on the COC? Yes ~~No~~ AM 4/14/15
13. Were air bubbles >6 mm in any VOA vials? Yes No NA
14. Was a trip blank present in the cooler(s)? Trip Blank Lot # Yes No

Contacted PM Date by via Verbal Voice Mail Other

Concerning

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by: AM

Sample 0795B-0385-0001-SW rec'd 3x40 for VOCs, not on COC! OK to log VOCs per client. gal 4-14-15

15. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.

Sample(s) were received in a broken container.

Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) were further preserved in the laboratory.

Time preserved: Preservative(s) added/Lot number(s):

Rev. 3/2006

Chain of Custody

Page 1 of 1

Company: [illegible]
Project Contact: [illegible]
Telephone: [illegible]
Project Name: [illegible]
Project Number:
Project Location: [illegible]
Sampled By:

Regulatory Program:
UST RCRA SDWA NPDES
Solid Waste Other [illegible]

CT LABORATORIES
delivering more than data from your environmental analyses

1230 Lange Court, Baraboo, WI 53913
608-356-2760 Fax 608-356-2766
www.ctlaboratories.com

Turnaround Time
Normal RUSH*
Date Needed _____

*Notify Lab prior to sending in RUSH samples. Surcharges:
24 hr 200% 2-3 days 100% 4-9 days 50%,
subject to change without notice.

Lab Use Only
Place Header Sticker Here.

Mail Report To:
Company:
Address:
City/State/Zip:

Invoice To:
Company:
Address:
City/State/Zip:

PO No.

Client Special Instructions:

Landfill License Number:

Collection Date	Collection Time	Grab/ Comp	Sample ID Description	Filt? Y/N	WDNR Well ID #	**Matrix:	[illegible]	[illegible]						Total # of Containers	Preservation*	Lab ID #
							Fill in Spaces with Bottles per Test									
[illegible]	1600	Grab	GLASS-016-0001-50			SO	X	X								
[illegible]	1620		GLASS-029-0001-50				X	X								
[illegible]	0910		GLASS-007-0001-50				X	X								
[illegible]	1000		GLASS-016-0001-50				X	X								
[illegible]	1541		GLASS-025-0001-50				X	X								

Preservation Code
A=None B=HCL
C=H2SO4 D=HNO3
E=Encore F=Methanol
G=NaOH
O=Other _____

Relinquished By:	Date/Time	Relinquished By:	Date/Time
[illegible]	1/10 @ 1600		
Received by:	Date/Time	Received for Laboratory by:	Date/Time
[illegible]	[illegible]		

Ice Present Yes No
Temperature _____
Cooler # _____

**Matrix
S-Soil **A**-Air **Sl**-Sludge **M**-Misc Waste
GW-Groundwater **SW**-Surface Water
WW-Wastewater **DW**-Drinking Water

Rev. 3/2006

Chain of Custody

Page _____ of _____

Company: USACE
Project Contact: Derek Kinder
Telephone: 507-315-6303
Project Name: Dr. Pilot
Project Number:
Project Location: Rochester MN
Sampled By:

Regulatory Program:
UST RCRA SDWA NPDES
Solid Waste Other CERCLA

CT LABORATORIES
delivering more than data from your environmental analyses

1230 Lange Court, Baraboo, WI 53913
608-356-2760 Fax 608-356-2766
www.ctlaboratories.com

Turnaround Time
Normal RUSH*
Date Needed _____

*Notify Lab prior to sending in RUSH samples. Surcharges:
24 hr 200% 2-3 days 100% 4-9 days 50%,
subject to change without notice.

Lab Use Only
Place Header Sticker Here:

Mail Report To:
Company:
Address:
City/State/Zip:

Invoice To:
Company:
Address:
City/State/Zip:

PO No.

Client Special Instructions:

Landfill License Number:

Collection Date	Collection Time	Grab/ Comp	Sample ID Description	WDNR Well ID #	**Matrix:	Filt? Y/N								Total # of Containers	Preservation*	Lab ID #

Fill in Spaces with Bottles per Test

*** Preservation Code**
A=None B=HCL
C=H2SO4 D=HNO3
E=Encore F=Methanol
G=NaOH
O=Other _____

Relinquished By:	Date/Time	Relinquished By:	Date/Time
Received by:	**Date/Time**	**Received for Laboratory by:**	**Date/Time**

Ice Present Yes No
Temperature _____
Cooler # _____

****Matrix**
S-Soil **A**-Air **Sl**-Sludge **M**-Misc Waste
GW-Groundwater **SW**-Surface Water
WW-Wastewater **DW**-Drinking Water

CHAIN OF CUSTODY RECORD

PAGE: 1 OF: 1

RTI LABORATORIES, INC.

A2LA Cert #570.01/02 | NELAC Cert #000973 | MBE Cert #R-8150-2-424 | 8(a) / SDB

MAIN LAB
RTI LABORATORIES, INC.
31628 Glendale Street
Livonia, MI 48150-1827
Phone (734) 422-8000
Fax (734) 422-5342
www.rtilab.com

Please Include Email Address of Report Recipient !!!

SUBMITTING COMPANY: USACE

PROJECT NAME: Ore Piles | PROJECT #: | QUOTE #:

SAMPLING LOCATION (STATE or COUNTRY): Fairmont, OH

SPECIAL INSTRUCTIONS / COMMENTS: Must include Cr VI + Mercury

REPORT TO:
COMPANY:
ADDRESS:
CITY, STATE, ZIP
PHONE: | EMAIL (OR FAX IF NO EMAIL AVAILABLE):

BILL TO:
P.O. #
COMPANY:
ADDRESS:
CITY, STATE, ZIP

SAMPLER'S PRINTED NAME: Derek Kinder
SAMPLER'S SIGNATURE:

ITEM NUMBER	SAMPLE I.D.	DATE SAMPLED		MATRIX CODE (see codes below)	NBR OF BOTTLES	NBR OF CONTAINERS AND PRESERVATIVES: NONE	HCl	HNO_3	H_2SO_4	NaOH	Methanol	OTHER	ANALYTICAL PARAMETERS: Cr VI + Hg (Aqueous)	Hg (Total)	SVOC	ICE	Hg (Leachate)	Cr VI (Leachate)	VOC	pH Acceptable? Y N N/A	COMMENTS: Methanol Preserved Weights, HOT Sample Notation, Additional Sample Description, Air Volume, etc.
1	DLAss-014-0002-SO	11/10/10	1[illegible]	So	1								X	X	X	X	X	X			
2	DLAss-022-0002-SO	11/10/10	[illegible]	Soil	1								X	X	X	X	X	X			
3	DLAss-002-0002-SO	11/10/10	1424	Soil	1								X	X	X	X	X	X			
4	DLAss-003-0003-SO	11/10/10	1447	Soil	1														X		
5																					
6																					
7																					
8																					
9																					
10																					

Relinquished By:	Date	Time	Received By:	Date	Time
Derek Kinder	11/10/10	1800	Fedex	11/10/10	1800
Relinquished By:	Date	Time	Received By:	Date	Time
Relinquished By:	Date	Time	Received By:	Date	Time

REPORT TRANSMITTAL DESIRED:

☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE

ALL REPORTING IS VIA THE RTI "FLASHPOINT" ONLINE SYSTEM UNLESS OTHERWISE SPECIFIED

FOR LAB USE ONLY

Temp of samples _____ °C On Wet Ice ? _____

Comments: _____

TURNAROUND DESIRED: Standard ☑

RUSH: Next BD ☐ 2nd BD ☐ 3rd BD ☐

Note: RUSH requests will incur surcharges!

Distribution: White - Lab; Pink - Field

See reverse side for Laboratory Terms and Conditions of Service

MATRIX CODES: A = AIR; SD = SOLID; DW = DRINKING WATER; SL = SLUDGE; GW = GROUNDWATER; SV = SOLVENT WASTE; L = LIQUID; W = WATER; O = OIL; WP = WIPE; WW = WASTE WATER; SW = SURFACE WATER; S = SOIL

CHAIN OF CUSTODY RECORD

PAGE:	OF:

RTI LABORATORIES, INC.

A2LA Cert #570.01/02

NELAC Cert #000973

MBE Cert #R-8150-2-424

8(a) / SDB

MAIN LAB

RTI LABORATORIES, INC.
31628 Glendale Street
Livonia, MI 48150-1827
Phone (734) 422-8000
Fax (734) 422-5342
www.rtilab.com

Please Include Email Address of Report Recipient !!!

SUBMITTING COMPANY:	REPORT TO:	BILL TO: P.O. #
PROJECT NAME: / PROJECT #: / QUOTE #:	COMPANY:	COMPANY:
SAMPLING LOCATION (STATE or COUNTRY):	ADDRESS:	ADDRESS:
SPECIAL INSTRUCTIONS / COMMENTS:	CITY, STATE, ZIP	CITY, STATE, ZIP
	PHONE:	EMAIL (OR FAX IF NO EMAIL AVAILABLE):

SAMPLER'S PRINTED NAME:

SAMPLER'S SIGNATURE:

ITEM NUMBER	SAMPLE I.D.	DATE SAMPLED	TIME	MATRIX CODE (see codes below)	NBR OF BOTTLES	NBR OF CONTAINERS AND PRESERVATIVES: NONE	HCL	HNO_3	H_2SO_4	NaOH	Methanol	OTHER	ANALYTICAL PARAMETERS	pH Acceptable? Y N N/A	COMMENTS (Methanol Preserved Weights, HOT Sample Notation, Additional Sample Description, Air Volume, etc.)
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															

Relinquished By:	Date	Time	Received By:	Date	Time
Relinquished By:	Date	Time	Received By:	Date	Time
Relinquished By:	Date	Time	Received By:	Date	Time

REPORT TRANSMITTAL DESIRED:

☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE

ALL REPORTING IS VIA THE RTI "FLASHPOINT" ONLINE SYSTEM UNLESS OTHERWISE SPECIFIED

FOR LAB USE ONLY

Temp of samples _____ °C On Wet Ice ? _____

Comments: _____

TURNAROUND DESIRED: Standard ☐ **RUSH:** Next BD ☐ 2nd BD ☐ 3rd BD ☐

Note: RUSH requests will incur surcharges!

Distribution: White - Lab; Pink - Field

See reverse side for Laboratory Terms and Conditions of Service

MATRIX CODES: A = AIR; SD = SOLID; DW = DRINKING WATER; SL = SLUDGE; GW = GROUNDWATER; SV = SOLVENT WASTE; L = LIQUID; W = WATER; O = OIL; WP = WIPE; WW = WASTE WATER; SW = SURFACE WATER; S = SOIL

Rev. 3/2006

Chain of Custody

Page _____ of _____

Company: USACE
Project Contact: DEREK KINDER
Telephone: 920-356-6313
Project Name: OAE FILE
Project Number:
Project Location: WISCONSIN MAP
Sampled By:

Regulatory Program:
UST RCRA SDWA NPDES
Solid Waste Other CERCLA

CT LABORATORIES
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1230 Lange Court, Baraboo, WI 53913
608-356-2760 Fax 608-356-2766
www.ctlaboratories.com

Turnaround Time
Normal RUSH*
Date Needed _____

*Notify Lab prior to sending in RUSH samples. Surcharges:
24 hr 200% 2-3 days 100% 4-9 days 50%,
subject to change without notice.

Lab Use Only
Place Header Sticker Here:

Mail Report To:
Company:
Address:
City/State/Zip:

Invoice To:
Company:
Address:
City/State/Zip:

PO No.

Client Special Instructions:

Landfill License Number:

Collection Date	Collection Time	Grab/ Comp	Sample ID Description	WDNR Well ID #	**Matrix:	Filt? Y/N								Total # of Containers	Preservation*	Lab ID #
							Fill in Spaces with Bottles per Test									
		MI					X							1	A	
		MI					X							1	A	
		MI					X							1	A	
		MI					X							1	A	
							X							1	A	

*** Preservation Code**
A=None B=HCL
C=H2SO4 D=HNO3
E=Encore F=Methanol
G=NaOH
O=Other _____

Relinquished By:	Date/Time	Relinquished By:	Date/Time
Derek Kinder	11/19/10 1900		
Received by:	**Date/Time**	**Received for Laboratory by:**	**Date/Time**

Ice Present Yes No
Temperature _____
Cooler # _____

****Matrix**
S-Soil **A**-Air **SI**-Sludge **M**-Misc Waste
GW-Groundwater **SW**-Surface Water
WW-Wastewater **DW**-Drinking Water

Rev. 3/2006

Chain of Custody

Page _____ of _____

Company: USACE
Project Contact: Derek Kinder
Telephone: 502-315-6593
Project Name: Ore Piles
Project Number:
Project Location: Ravenna AAP
Sampled By:

Regulatory Program:
UST RCRA SDWA NPDES
Solid Waste Other CERCLA

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Turnaround Time
Normal RUSH*
Date Needed _____

*Notify Lab prior to sending in RUSH samples. Surcharges:
24 hr 200% 2-3 days 100% 4-9 days 50%,
subject to change without notice.

Lab Use Only
Place Header Sticker Here:

Mail Report To:
Company:
Address:
City/State/Zip:

Invoice To:
Company:
Address:
City/State/Zip:

PO No.

Client Special Instructions:

Landfill License Number:

Collection Date	Collection Time	Grab/ Comp	Sample ID Description	WDNR Well ID #	**Matrix:	Filt? Y/N								Total # of Containers	Preservation*	Lab ID #

Fill in Spaces with Bottles per Test

*** Preservation Code**
A=None B=HCL
C=H2SO4 D=HNO3
E=Encore F=Methanol
G=NaOH
O=Other _____

Relinquished By:	Date/Time	Relinquished By:	Date/Time
Derek Kinder	1100		
Received by:	**Date/Time**	**Received for Laboratory by:**	**Date/Time**

Ice Present Yes No
Temperature _____
Cooler # _____

****Matrix**
S-Soil **A**-Air **Sl**-Sludge **M**-Misc Waste
GW-Groundwater **SW**-Surface Water
WW-Wastewater **DW**-Drinking Water

Tray 4

Rev. 3/2006

Chain of Custody

Page _____ of _____

Company: USACE
Project Contact: DEREK KINDER
Telephone: 502-315-6393
Project Name: ORC PILES
Project Number:
Project Location: RAVENNA AAP
Sampled By:

Regulatory Program:
UST RCRA SDWA NPDES
Solid Waste Other CERCLA

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www.ctlaboratories.com

Turnaround Time
(Normal) RUSH*
Date Needed _____

*Notify Lab prior to sending in RUSH samples. Surcharges:
24 hr 200% 2-3 days 100% 4-9 days 50%,
subject to change without notice.

Lab Use Only
Place Header Sticker Here.

Mail Report To:
Company:
Address:
City/State/Zip:

Invoice To:
Company:
Address:
City/State/Zip:

PO No.

Client Special Instructions:

Landfill License Number:

Collection Date	Collection Time	Grab/ Comp	Sample ID Description	Filt? Y/N	WDNR Well ID #	**Matrix:								Total # of Containers	Preservation*	Lab ID #
							X							1	A	
							X							1	A	
							X							1	A	
							X	X	X	X	X			1	A	
							X	X	X	X	X			1	A	

Fill in Spaces with Bottles per Test

* **Preservation Code**
A=None B=HCL
C=H2SO4 D=HNO3
E=Encore F=Methanol
G=NaOH
O=Other _____

Relinquished By:	Date/Time	Relinquished By:	Date/Time
Derek Kinder	1/11/10 1800		
Received by:	**Date/Time**	**Received for Laboratory by:**	**Date/Time**

Ice Present Yes No
Temperature _____
Cooler # _____

**Matrix
S-Soil **A**-Air **Sl**-Sludge **M**-Misc Waste
GW-Groundwater **SW**-Surface Water
WW-Wastewater **DW**-Drinking Water

Rev. 3/2006

Chain of Custody

Page ___ of ___

Company:
Project Contact:
Telephone:
Project Name:
Project Number:
Project Location:
Sampled By:

Regulatory Program:
UST RCRA SDWA NPDES
Solid Waste Other _____

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www.ctlaboratories.com

Turnaround Time
Normal RUSH*
Date Needed _____

*Notify Lab prior to sending in RUSH samples. Surcharges:
24 hr 200% 2-3 days 100% 4-9 days 50%,
subject to change without notice.

Lab Use Only
Place Header Sticker Here.

Mail Report To:
Company:
Address:
City/State/Zip:

Invoice To:
Company:
Address:
City/State/Zip:

PO No.

Client Special Instructions:

Landfill License Number:

Collection Date	Collection Time	Grab/ Comp	Sample ID Description	Filt? Y/N	WDNR Well ID #	**Matrix:								Total # of Containers	Preservation*	Lab ID #

Fill in Spaces with Bottles per Test

*** Preservation Code**
A=None B=HCL
C=H2SO4 D=HNO3
E=Encore F=Methanol
G=NaOH
O=Other _____

Relinquished By:	Date/Time	Relinquished By:	Date/Time
Received by:	Date/Time	Received for Laboratory by:	Date/Time

Ice Present Yes No
Temperature _____
Cooler # _____

****Matrix**
S-Soil **A**-Air **Sl**-Sludge **M**-Misc Waste
GW-Groundwater **SW**-Surface Water
WW-Wastewater **DW**-Drinking Water

Rev. 3/2006

Chain of Custody

Page _____ of _____

Company:
Project Contact:
Telephone:
Project Name:
Project Number:
Project Location:
Sampled By:

Regulatory Program:
UST RCRA SDWA NPDES
Solid Waste Other

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Turnaround Time
Normal RUSH*
Date Needed _____

*Notify Lab prior to sending in RUSH samples. Surcharges:
24 hr 200% 2-3 days 100% 4-9 days 50%, subject to change without notice.

Lab Use Only
Place Header Sticker Here:

Mail Report To:
Company:
Address:
City/State/Zip:

Invoice To:
Company:
Address:
City/State/Zip:

PO No.

Client Special Instructions:

Landfill License Number:

Collection Date	Collection Time	Grab/ Comp	Sample ID Description	Filt? Y/N	WDNR Well ID #	**Matrix:								Total # of Containers	Preservation*	Lab ID #
							X									
							X									
							X	MS	MSD							
							X									
							X									
							X									

Fill in Spaces with Bottles per Test

Preservation Code
A=None B=HCL
C=H2SO4 D=HNO3
E=Encore F=Methanol
G=NaOH
O=Other _____

Relinquished By:	Date/Time	Relinquished By:	Date/Time
Received by:	Date/Time	Received for Laboratory by:	Date/Time

Ice Present Yes No
Temperature _____
Cooler # _____

**Matrix
S-Soil **A**-Air **Sl**-Sludge **M**-Misc Waste
GW-Groundwater **SW**-Surface Water
WW-Wastewater **DW**-Drinking Water

Rev. 3/2006

Chain of Custody

Page 1 of 1

Company: USACE
Project Contact: DEREK KINNER
Telephone: 502 315 6393
Project Name: OPE PILES
Project Number: ----
Project Location: PUEBLO AAP
Sampled By:

Regulatory Program:
UST RCRA SDWA NPDES
Solid Waste Other CERCLA

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www.ctlaboratories.com

Turnaround Time
(Normal) RUSH*
Date Needed _____

*Notify Lab prior to sending in RUSH samples. Surcharges:
24 hr 200% 2-3 days 100% 4-9 days 50%,
subject to change without notice.

Lab Use Only
Place Header Sticker Here:

Mail Report To:
Company:
Address:
City/State/Zip:

Invoice To:
Company:
Address:
City/State/Zip:

PO No.

Client Special Instructions:
[illegible]

Landfill License Number:

Collection Date	Collection Time	Grab/ Comp	Sample ID Description	Filt? Y/N	WDNR Well ID #	**Matrix:	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Total # of Containers	Preservation*	Lab ID #

Fill in Spaces with Bottles per Test

* Preservation Code
A=None B=HCL
C=H2SO4 D=HNO3
E=Encore F=Methanol
G=NaOH
O=Other _____

Relinquished By:	Date/Time	Relinquished By:	Date/Time
[illegible]	[illegible]		
Received by:	Date/Time	Received for Laboratory by:	Date/Time

Ice Present Yes No
Temperature _____
Cooler # _____

**Matrix
S-Soil **A**-Air **Sl**-Sludge **M**-Misc Waste
GW-Groundwater **SW**-Surface Water
WW-Wastewater **DW**-Drinking Water

Rev. 3/2006

Chain of Custody

Page 1 of 1

Company: SCS
Project Contact: Derek Kinder
Telephone: 502 315 6393
Project Name: NRL Parts
Project Number: —
Project Location: Beaver Dam
Sampled By:

Regulatory Program:
UST RCRA SDWA NPDES
Solid Waste Other CERCLA

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608-356-2760 Fax 608-356-2766
www.ctlaboratories.com

Turnaround Time
(Normal) RUSH*
Date Needed _____

*Notify Lab prior to sending in RUSH samples. Surcharges:
24 hr 200% 2-3 days 100% 4-9 days 50%,
subject to change without notice.

Lab Use Only
Place Header Sticker Here:

Mail Report To:
Company:
Address:
City/State/Zip:

Invoice To:
Company:
Address:
City/State/Zip:

PO No.

Client Special Instructions:

Landfill License Number:

Collection Date	Collection Time	Grab/ Comp	Sample ID Description	WDNR Well ID #	**Matrix:	Filt? Y/N								Total # of Containers	Preservation*	Lab ID #
11/9/10	1120	MI	DUMP-022-0001-SO		SO		X	X	X	X						
11/9/10	1130	MI	DUMP-022-0003-SO		SO		X	X	X	X						
11/9/10	1140	MI	DUMP-022-0005-SO		SO			X		X						
11/9/10	1150	MI	DUMP-022-0001-D		SO			X		X						

Fill in Spaces with Bottles per Test

Relinquished By:	Date/Time	Relinquished By:	Date/Time
Derek Kinder	11/10/10 1500		
Received by:	**Date/Time**	**Received for Laboratory by:**	**Date/Time**
	11/10/10 1630		

Ice Present Yes No
Temperature _____
Cooler # _____

****Matrix**
S-Soil **A**-Air **Sl**-Sludge **M**-Misc Waste
GW-Groundwater **SW**-Surface Water
WW-Wastewater **DW**-Drinking Water

*** Preservation Code**
A=None B=HCL
C=H2SO4 D=HNO3
E=Encore F=Methanol
G=NaOH
O=Other _____

Rev. 3/2006

Chain of Custody

Page 1 of 1

Company: USACE
Project Contact: DEREK KINDER
Telephone: 502-315-6393
Project Name: DLA PLES
Project Number:
Project Location: PARKING APP
Sampled By:

Regulatory Program:
UST RCRA SDWA NPDES
Solid Waste Other CERCLA

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608-356-2760 Fax 608-356-2766
www.ctlaboratories.com

Turnaround Time
Normal RUSH*
Date Needed _____

*Notify Lab prior to sending in RUSH samples. Surcharges:
24 hr 200% 2-3 days 100% 4-9 days 50%,
subject to change without notice.

Lab Use Only
Place Header Sticker Here:

Mail Report To:
Company:
Address:
City/State/Zip:

Invoice To:
Company:
Address:
City/State/Zip:

PO No.

Client Special Instructions:

Landfill License Number:

Collection Date	Collection Time	Grab/ Comp	Sample ID Description	Filt? Y/N	WDNR Well ID #	**Matrix:	TAL Metals + Mercury + C-VI	Asbestos						Total # of Containers	Preservation*	Lab ID #
							Fill in Spaces with Bottles per Test									
11/9/10	1100	MI	DLAss-010-0001-SO			Soil	X	X						1		
11/9/10	1027	MI	DLAss-019-0001-SO			Soil	X	X						1		
11/9/10	1155	MI	DLAss-009-0001-SO			Soil	X	X						1		
11/9/10	1235	MI	DLAss-027-0001-SO			Soil	X	X						1		
11/9/10	1026	MI	DLAss-004-0001-SO			Soil	X	X						1		

* **Preservation Code**
A=None B=HCL
C=H2SO4 D=HNO3
E=Encore F=Methanol
G=NaOH
O=Other _____

Relinquished By:	Date/Time	Relinquished By:	Date/Time
Derek Kinder	11/9/10 1600		
Received by:	**Date/Time**	**Received for Laboratory by:**	**Date/Time**
Fed Ex	11/9/10 1600		

Ice Present Yes No
Temperature _____
Cooler # _____

****Matrix**
S-Soil **A**-Air **Sl**-Sludge **M**-Misc Waste
GW-Groundwater **SW**-Surface Water
WW-Wastewater **DW**-Drinking Water