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ANALYTICAL REPORT

PREPARED FOR

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JOB DESCRIPTION

RVAAP FWGW

JOB NUMBER

280-182145-1

Eurofins Denver
4955 Yarrow Street
Arvada CO 80002

See page two for job notes and contact information.

my EOL

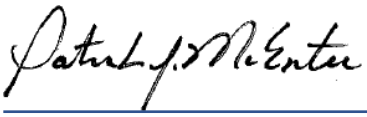
Eurofins Denver

Job Notes

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Authorization



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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.

HPLC/IC

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
M	Manual integrated compound.
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.

General Chemistry

Qualifier	Qualifier Description
J	Estimated: The analyte was positively identified; the quantitation is an estimation
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
U	Undetected at the Limit of Detection.

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
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
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)
TNTC	Too Numerous To Count

CASE NARRATIVE

Client: Leidos, Inc.

Project: RVAAP FWGW

Report Number: 280-182145-1

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.

REVISION 1, DECEMBER 5, 2023
The report and EDD were revised to correct the Gross Weight and Initial Amount on the 8330 batch worksheet for sample FWGmw-024-230901-GW (280-182145-11) and results for that sample recalculated.

RECEIPT
The samples were received on 9/29/2023 9:35 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.3º C.

Receipt Exceptions

The sample collection date and time was not recorded on the sample container labels for samples LL1mw-084-230901-R (280-182145-5), LL1mw-084-230901-R (280-182145-5[MS]) and LL1mw-084-230902-GW-R (280-182145-6). Logged per the COC.

A sample ID was logged as LL12MW-RB-246-2023 (280-182145-10) per the revised COC received via email on 09/29/2023.

Samples LL10mw-003-230901-GW (280-182145-13) and FWGTB-230901-TB003 (280-182145-14) were logged for 8260D carbon tetrachloride only per revised COC received via email on 09/29/2023.

VOLATILE ORGANIC COMPOUNDS (GC/MS)
Samples LL10mw-003-230901-GW (280-182145-13) and FWGTB-230901-TB003 (280-182145-14) were analyzed for volatile organic compounds (GC/MS) in accordance with SW-846 8260D. The samples were analyzed on 10/09/2023.

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

EXPLOSIVES (HPLC)
Samples FWGmw-021-230901-GW (280-182145-7), LL3mw-245-230901-GW (280-182145-8), FWGmw-024-230901-GW (280-182145-11) and FWGmw-023-230901-GW (280-182145-12) were analyzed for Explosives (HPLC) in accordance with 8330B. The samples were prepared on 10/03/2023 and 10/12/2023 and analyzed on 10/07/2023, 10/11/2023 and 10/14/2023.

MNX was detected in method blank MB 280-628171/1-A at a level that was below one half the LOQ.

Surrogate recovery for the following sample in preparation batch 280-628171 and analytical batch 280-629183 was outside the lower control limits: FWGmw-021-230901-GW (280-182145-7). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

The Laboratory Control Sample and/or Laboratory Control Sample Duplicate (LCS/LCSD) for preparation batch 280-628171 and analytical batch 280-628897 recovering outside control limits for the following analytes: 4-Amino-2,6-dinitrotoluene(76-125%R) at 74%R/58%R, p-Nitrotoluene(71-127%R) at 70%R/57%R, m-Nitrotoluene(71-127%R) at 72%R/57%R, 1,3-Dinitrobenzene(78-120%R) at 75%R, 2,4-Dinitrotoluene(78-120%R) at 70%R, 2,6-Dinitrotoluene(77-127%R) at 71%R, 2-Amino-4,6-dinitrotoluene (79-120%R)at 68%R,3,5-Dinitroaniline(71-117%R) at 64%R, o-Nitrotoluene(70-127%R) at 59%R, and 2,4-diamino-6-nitrotoluene(68-122%R) at 66%R . Surrogate recovered outside the control limit in the LCSD 83-119%R at 71%R. Surrogate recovered outside the control limit in the sample 280-182145-7 83-119%R at 72%R, sample 280-182145-8 83-119%R at 82%R and sample 280-182145-12 83-119%R at 77%R Samples were re-extracted in prep batch 280-629471: FWGmw-021-230901-GW (280-182145-7), LL3mw-245-230901-GW (280-182145-8), FWGmw-024-230901-GW (280-182145-11), FWGmw-023-230901-GW (280-182145-12), (LCS 280-628171/2-A), (LCS 280-628171/4-A), (LCSD 280-628171/3-A), (LCSD 280-628171/5-A) and (MB 280-628171/1-A).

In preparation batch 280-628171, the following samples required filtration to reduce matrix interferences: FWGmw-021-230901-GW (280-182145-7) and FWGmw-024-230901-GW (280-182145-11).

In preparation batch 280-628171, the following samples: FWGmw-021-230901-GW (280-182145-7) and LL3mw-245-230901-GW (280-182145-8) was decanted prior to preparation as sample bottles contained insufficient headspace for the addition of sodium chloride.

MNX was detected in method blank MB 280-629471/1-A at a level that was below one half the LOQ.

The Laboratory Control Sample and/or the Laboratory Control Sample Duplicate (LCS/LCSD) for preparation batch 280-629471 recovered outside control limits for the following analytes:m-Nitrotoluene(73-125%R) at 55%R/68%R, o-Nitrotoluene(70-127%R) at 58%R/58%R, p-Nitrotoluene(71-127%R) at 56%R/67%R, 2,4-Dinitrotoluene (78-120%R) at 72%, 2,6-Dinitrotoluene (77-127%R) at 74%R, 2-Amino-4,6-dinitrotoluene(79-120%R) at 73%R, 4-Amino-2,6-dinitrotoluene(76-125%R) at 71%R . Surrogate recovered outside the control limit in the LCS (83-119%R at 81%R. The associated samples are impacted: FWGmw-021-230901-GW (280-182145-7), LL3mw-245-230901-GW (280-182145-8), FWGmw-024-230901-GW (280-182145-11), FWGmw-023-230901-GW (280-182145-12), (LCS 280-629471/2-A), (LCS 280-629471/4-A), (LCSD 280-629471/3-A) and (LCSD 280-629471/5-A). Samples was not re-extracted a third time due to >2xHT.

The %RPD between the primary and confirmation column exceeded 40% for RDX for the following samples: FWGmw-021-230901-GW (280-182145-7) in preparation batch 280-629471 and analytical batch 280-629672. The results from both columns has been qualified and reported in accordance with the laboratory's QAS.

In preparation batch 280-629471, the following samples required filtration to reduce matrix interferences: FWGmw-021-230901-GW (280-182145-7) and FWGmw-024-230901-GW (280-182145-11).

In preparation batch 280-629471, the following samples were re-prepared outside of preparation holding time due to low LCS/LCSD recovery: FWGmw-021-230901-GW (280-182145-7), LL3mw-245-230901-GW (280-182145-8), FWGmw-024-230901-GW (280-182145-11) and FWGmw-023-230901-GW (280-182145-12).

In preparation batch 280-629471, the following sample: LL3mw-245-230901-GW (280-182145-8) was decanted prior preparation as sample bottles contained insufficient headspace for the addition of sodium chloride.

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

ALKALINITY

Samples LL1mw-080-230901-GW-R (280-182145-1), LL1mw-083-230901-GW-R (280-182145-4), LL1mw-084-230901-R (280-182145-5) and LL1mw-084-230902-GW-R (280-182145-6) were analyzed for Alkalinity in accordance with SM20 2320B. The samples were analyzed on 10/05/2023.

Alkalinity was detected in method blank MB 280-628623/5 at a level that was below one half the LOQ.

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

AMMONIA

Samples LL12mw-246-230901-GW (280-182145-9) and LL12MW-RB-246-2023 (280-182145-10) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 10/16/2023.

Ammonia as N was detected in method blank MB 280-630033/51 at a level that was below one half the LOQ.

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

ANIONS, ION CHROMATOGRAPHY

Samples LL1mw-080-230901-GW-R (280-182145-1), FWGmw-018-230901-GW (280-182145-2), FWGmw-020-230901-GW (280-182145-3), LL1mw-083-230901-GW-R (280-182145-4), LL1mw-084-230901-R (280-182145-5), LL1mw-084-230902-GW-R (280-182145-6), LL12mw-246-230901-GW (280-182145-9) and LL12MW-RB-246-2023 (280-182145-10) were analyzed for Anions, Ion Chromatography in accordance with 9056A (48 Hours). The samples were analyzed on 09/29/2023.

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

ANIONS (28 DAYS)

Samples LL1mw-080-230901-GW-R (280-182145-1), LL1mw-083-230901-GW-R (280-182145-4), LL1mw-084-230901-R (280-182145-5) and LL1mw-084-230902-GW-R (280-182145-6) were analyzed for anions (28 days) in accordance with 9056A (28 Days). The samples were analyzed on 09/29/2023.

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

Detection Summary

Client: Leidos, Inc.
Project/Site: RVAAP FWGW

Job ID: 280-182145-1

Client Sample ID: LL1mw-080-230901-GW-R — Lab Sample ID: 280-182145-1

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Nitrate as N	0.090	J	0.50	0.20	0.090	mg/L	1		9056	Total/NA
Sulfate	500	J1	5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Alkalinity	140		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: FWGmw-018-230901-GW — Lab Sample ID: 280-182145-2

No Detections.

Client Sample ID: FWGmw-020-230901-GW — Lab Sample ID: 280-182145-3

No Detections.

Client Sample ID: LL1mw-083-230901-GW-R — Lab Sample ID: 280-182145-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Nitrate as N	0.18	J	0.50	0.20	0.090	mg/L	1		9056	Total/NA
Sulfate	180		5.0	2.5	1.0	mg/L	1		9056A	Total/NA

Client Sample ID: LL1mw-084-230901-R — Lab Sample ID: 280-182145-5

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Nitrate as N	0.40	J	0.50	0.20	0.090	mg/L	1		9056	Total/NA
Sulfate	120		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Alkalinity	29		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: LL1mw-084-230902-GW-R — Lab Sample ID: 280-182145-6

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Nitrate as N	0.39	J	0.50	0.20	0.090	mg/L	1		9056	Total/NA
Sulfate	120		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Alkalinity	29		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: FWGmw-021-230901-GW — Lab Sample ID: 280-182145-7

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
2-Amino-4,6-dinitrotoluene	0.53	Q	0.11	0.10	0.051	ug/L	1		8330B	Total/NA
2-Nitrotoluene	0.15	J Q	0.21	0.20	0.087	ug/L	1		8330B	Total/NA
Nitrobenzene	0.14	J Q	0.21	0.20	0.092	ug/L	1		8330B	Total/NA
RDX	0.66	Q J1	0.21	0.20	0.052	ug/L	1		8330B	Total/NA
RDX	0.36	Q J1	0.21	0.20	0.052	ug/L	1		8330B	Total/NA
2-Amino-4,6-dinitrotoluene - RE	0.35	H M	0.11	0.10	0.052	ug/L	1		8330B	Total/NA
HMX - RE	0.11	J M H	0.22	0.21	0.090	ug/L	1		8330B	Total/NA
RDX - RE	0.22	M H	0.22	0.21	0.053	ug/L	1		8330B	Total/NA

Client Sample ID: LL3mw-245-230901-GW — Lab Sample ID: 280-182145-8

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
2,4,6-Trinitrotoluene - RE	0.33	H M	0.12	0.11	0.048	ug/L	1		8330B	Total/NA
2-Nitrotoluene - RE	0.11	J H Q	0.22	0.21	0.091	ug/L	1		8330B	Total/NA
HMX - RE	7.2	H	0.22	0.21	0.093	ug/L	1		8330B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Leidos, Inc.
Project/Site: RVAAP FWGW

Job ID: 280-182145-1

Client Sample ID: LL12mw-246-230901-GW — Lab Sample ID: 280-182145-9

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Ammonia as N	0.14		0.10	0.050	0.029	mg/L	1		350.1	Total/NA

Client Sample ID: LL12MW-RB-246-2023 — Lab Sample ID: 280-182145-10

No Detections.

Client Sample ID: FWGmw-024-230901-GW — Lab Sample ID: 280-182145-11

No Detections.

Client Sample ID: FWGmw-023-230901-GW — Lab Sample ID: 280-182145-12

No Detections.

Client Sample ID: LL10mw-003-230901-GW — Lab Sample ID: 280-182145-13

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon tetrachloride	1.8		1.0	0.80	0.57	ug/L	1		8260D	Total/NA

Client Sample ID: FWGTB-230901-TB003 — Lab Sample ID: 280-182145-14

No Detections.

This Detection Summary does not include radiochemical test results.

Method: SW846 8260D - Volatile Organic Compounds (GC/MS)

Client Sample ID: LL10mw-003-230901-GW
Date Collected: 09/28/23 14:50
Date Received: 09/29/23 09:35

Lab Sample ID: 280-182145-13
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon tetrachloride	**1.8**		1.0	0.80	0.57	ug/L		10/09/23 13:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*81 - 118*		*10/09/23 13:39*	*1*
4-Bromofluorobenzene (Surr)	*99*		*85 - 114*		*10/09/23 13:39*	*1*
Dibromofluoromethane (Surr)	*97*		*80 - 119*		*10/09/23 13:39*	*1*
Toluene-d8 (Surr)	*99*		*89 - 112*		*10/09/23 13:39*	*1*

Client Sample ID: FWGTB-230901-TB003
Date Collected: 09/28/23 14:45
Date Received: 09/29/23 09:35

Lab Sample ID: 280-182145-14
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon tetrachloride	0.80	U	1.0	0.80	0.57	ug/L		10/09/23 14:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*81 - 118*		*10/09/23 14:02*	*1*
4-Bromofluorobenzene (Surr)	*103*		*85 - 114*		*10/09/23 14:02*	*1*
Dibromofluoromethane (Surr)	*96*		*80 - 119*		*10/09/23 14:02*	*1*
Toluene-d8 (Surr)	*102*		*89 - 112*		*10/09/23 14:02*	*1*

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

Client Sample ID: FWGmw-021-230901-GW
Date Collected: 09/28/23 11:37
Date Received: 09/29/23 09:35

Lab Sample ID: 280-182145-7
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U Q	0.21	0.20	0.085	ug/L		10/07/23 21:52	1
1,3,5-Trinitrobenzene	0.20	U M Q	0.21	0.20	0.085	ug/L		10/11/23 07:20	1
1,3-Dinitrobenzene	0.10	U M Q	0.11	0.10	0.037	ug/L		10/07/23 21:52	1
1,3-Dinitrobenzene	0.10	U M Q	0.11	0.10	0.037	ug/L		10/11/23 07:20	1
2,4,6-Trinitrotoluene	0.10	U Q	0.11	0.10	0.046	ug/L		10/07/23 21:52	1
2,4,6-Trinitrotoluene	0.10	U Q	0.11	0.10	0.046	ug/L		10/11/23 07:20	1
2,4-Dinitrotoluene	0.081	U Q	0.10	0.081	0.028	ug/L		10/07/23 21:52	1
2,4-Dinitrotoluene	0.081	U Q	0.10	0.081	0.028	ug/L		10/11/23 07:20	1
2,6-Dinitrotoluene	0.081	U Q	0.10	0.081	0.041	ug/L		10/07/23 21:52	1
2,6-Dinitrotoluene	0.081	U M Q	0.10	0.081	0.041	ug/L		10/11/23 07:20	1
2-Amino-4,6-dinitrotoluene	0.10	U Q	0.11	0.10	0.051	ug/L		10/07/23 21:52	1
2-Amino-4,6-dinitrotoluene	**0.53**	**Q**	0.11	0.10	0.051	ug/L		10/11/23 07:20	1
2-Nitrotoluene	**0.15**	**J Q**	0.21	0.20	0.087	ug/L		10/07/23 21:52	1
2-Nitrotoluene	0.20	U M Q	0.21	0.20	0.087	ug/L		10/11/23 07:20	1
3-Nitrotoluene	0.35	U Q	0.41	0.35	0.20	ug/L		10/07/23 21:52	1
3-Nitrotoluene	0.35	U Q	0.41	0.35	0.20	ug/L		10/11/23 07:20	1
4-Amino-2,6-dinitrotoluene	0.12	U Q	0.15	0.12	0.058	ug/L		10/07/23 21:52	1
4-Amino-2,6-dinitrotoluene	0.12	U M Q	0.15	0.12	0.058	ug/L		10/11/23 07:20	1
4-Nitrotoluene	0.41	U Q	0.42	0.41	0.10	ug/L		10/07/23 21:52	1
4-Nitrotoluene	0.41	U Q	0.42	0.41	0.10	ug/L		10/11/23 07:20	1
HMX	0.20	U M Q	0.21	0.20	0.089	ug/L		10/07/23 21:52	1
HMX	0.20	U Q	0.21	0.20	0.089	ug/L		10/11/23 07:20	1
Nitrobenzene	0.20	U Q	0.21	0.20	0.092	ug/L		10/07/23 21:52	1
Nitrobenzene	**0.14**	**J Q**	0.21	0.20	0.092	ug/L		10/11/23 07:20	1
Nitroglycerin	2.0	U Q	2.1	2.0	0.93	ug/L		10/07/23 21:52	1

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

Client Sample ID: FWGmw-021-230901-GW
Date Collected: 09/28/23 11:37
Date Received: 09/29/23 09:35

Lab Sample ID: 280-182145-7
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitroglycerin	2.0	U Q	2.1	2.0	0.93	ug/L		10/11/23 07:20	1
PETN	1.0	U Q	1.1	1.0	0.45	ug/L		10/07/23 21:52	1
PETN	1.0	U Q	1.1	1.0	0.45	ug/L		10/11/23 07:20	1
RDX	**0.66**	**Q J1**	0.21	0.20	0.052	ug/L		10/07/23 21:52	1
RDX	**0.36**	**Q J1**	0.21	0.20	0.052	ug/L		10/11/23 07:20	1
Tetryl	0.10	U Q	0.11	0.10	0.032	ug/L		10/07/23 21:52	1
Tetryl	0.10	U Q	0.11	0.10	0.032	ug/L		10/11/23 07:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*72*	*M Q*	*83 - 119*	*10/03/23 13:12*	*10/07/23 21:52*	*1*
1,2-Dinitrobenzene	*68*	*Q*	*83 - 119*	*10/03/23 13:12*	*10/11/23 07:20*	*1*

Client Sample ID: LL3mw-245-230901-GW
Date Collected: 09/28/23 11:56
Date Received: 09/29/23 09:35

Lab Sample ID: 280-182145-8
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U Q	0.22	0.21	0.086	ug/L		10/07/23 22:15	1
1,3-Dinitrobenzene	0.10	U Q	0.11	0.10	0.038	ug/L		10/07/23 22:15	1
2,4,6-Trinitrotoluene	0.10	U Q	0.11	0.10	0.046	ug/L		10/07/23 22:15	1
2,4-diamino-6-nitrotoluene	0.92	U Q	1.0	0.92	0.45	ug/L		10/07/23 22:15	1
2,4-Dinitrotoluene	0.082	U Q	0.10	0.082	0.028	ug/L		10/07/23 22:15	1
2,6-diamino-4-nitrotoluene	0.92	U	1.0	0.92	0.23	ug/L		10/07/23 22:15	1
2,6-Dinitrotoluene	0.082	U Q	0.10	0.082	0.041	ug/L		10/07/23 22:15	1
2-Amino-4,6-dinitrotoluene	0.10	U Q	0.11	0.10	0.052	ug/L		10/07/23 22:15	1
2-Nitrotoluene	0.21	U Q	0.22	0.21	0.088	ug/L		10/07/23 22:15	1
3,5-Dinitroaniline	0.31	U Q	0.41	0.31	0.14	ug/L		10/07/23 22:15	1
3-Nitrotoluene	0.36	U Q	0.41	0.36	0.20	ug/L		10/07/23 22:15	1
4-Amino-2,6-dinitrotoluene	0.12	U Q	0.15	0.12	0.059	ug/L		10/07/23 22:15	1
4-Nitrotoluene	0.41	U Q	0.42	0.41	0.10	ug/L		10/07/23 22:15	1
DNX	0.26	U Q	0.51	0.26	0.10	ug/L		10/07/23 22:15	1
HMX	0.21	U Q	0.22	0.21	0.090	ug/L		10/07/23 22:15	1
MNX	0.30	U M Q	0.51	0.30	0.095	ug/L		10/07/23 22:15	1
Nitrobenzene	0.21	U Q	0.22	0.21	0.093	ug/L		10/07/23 22:15	1
Nitroglycerin	2.1	U Q	2.2	2.1	0.95	ug/L		10/07/23 22:15	1
PETN	1.0	U Q	1.1	1.0	0.46	ug/L		10/07/23 22:15	1
RDX	0.21	U Q	0.22	0.21	0.053	ug/L		10/07/23 22:15	1
Tetryl	0.10	U Q	0.11	0.10	0.033	ug/L		10/07/23 22:15	1
TNX	0.26	U M Q	0.51	0.26	0.081	ug/L		10/07/23 22:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*82*	*M Q*	*83 - 119*	*10/03/23 13:12*	*10/07/23 22:15*	*1*

Client Sample ID: FWGmw-024-230901-GW
Date Collected: 09/28/23 13:16
Date Received: 09/29/23 09:35

Lab Sample ID: 280-182145-11
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U M	0.22	0.21	0.087	ug/L		10/07/23 22:38	1
1,3-Dinitrobenzene	0.10	U M Q	0.11	0.10	0.038	ug/L		10/07/23 22:38	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.047	ug/L		10/07/23 22:38	1
2,4-Dinitrotoluene	0.083	U Q	0.10	0.083	0.028	ug/L		10/07/23 22:38	1

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

Client Sample ID: FWGmw-024-230901-GW
Date Collected: 09/28/23 13:16
Date Received: 09/29/23 09:35

Lab Sample ID: 280-182145-11
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2,6-Dinitrotoluene	0.083	U Q	0.10	0.083	0.042	ug/L		10/07/23 22:38	1
2-Amino-4,6-dinitrotoluene	0.10	U Q	0.11	0.10	0.053	ug/L		10/07/23 22:38	1
2-Nitrotoluene	0.21	U Q	0.22	0.21	0.089	ug/L		10/07/23 22:38	1
3-Nitrotoluene	0.36	U Q	0.42	0.36	0.20	ug/L		10/07/23 22:38	1
4-Amino-2,6-dinitrotoluene	0.12	U Q	0.16	0.12	0.060	ug/L		10/07/23 22:38	1
4-Nitrotoluene	0.42	U Q	0.43	0.42	0.10	ug/L		10/07/23 22:38	1
HMX	0.21	U M	0.22	0.21	0.091	ug/L		10/07/23 22:38	1
Nitrobenzene	0.21	U	0.22	0.21	0.095	ug/L		10/07/23 22:38	1
Nitroglycerin	2.1	U	2.2	2.1	0.96	ug/L		10/07/23 22:38	1
PETN	1.0	U	1.1	1.0	0.46	ug/L		10/07/23 22:38	1
RDX	0.21	U	0.22	0.21	0.053	ug/L		10/07/23 22:38	1
Tetryl	0.10	U	0.11	0.10	0.033	ug/L		10/07/23 22:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*83*	*M*	*83 - 119*	*10/03/23 13:12*	*10/07/23 22:38*	*1*

Client Sample ID: FWGmw-023-230901-GW
Date Collected: 09/28/23 14:05
Date Received: 09/29/23 09:35

Lab Sample ID: 280-182145-12
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U Q	0.22	0.21	0.087	ug/L		10/07/23 23:01	1
1,3-Dinitrobenzene	0.10	U Q	0.11	0.10	0.038	ug/L		10/07/23 23:01	1
2,4,6-Trinitrotoluene	0.10	U Q	0.11	0.10	0.047	ug/L		10/07/23 23:01	1
2,4-diamino-6-nitrotoluene	0.93	U Q	1.0	0.93	0.45	ug/L		10/07/23 23:01	1
2,4-Dinitrotoluene	0.083	U Q	0.10	0.083	0.028	ug/L		10/07/23 23:01	1
2,6-diamino-4-nitrotoluene	0.93	U	1.0	0.93	0.23	ug/L		10/07/23 23:01	1
2,6-Dinitrotoluene	0.083	U Q	0.10	0.083	0.042	ug/L		10/07/23 23:01	1
2-Amino-4,6-dinitrotoluene	0.10	U Q	0.11	0.10	0.053	ug/L		10/07/23 23:01	1
2-Nitrotoluene	0.21	U Q	0.22	0.21	0.089	ug/L		10/07/23 23:01	1
3,5-Dinitroaniline	0.31	U Q	0.42	0.31	0.14	ug/L		10/07/23 23:01	1
3-Nitrotoluene	0.36	U Q	0.42	0.36	0.20	ug/L		10/07/23 23:01	1
4-Amino-2,6-dinitrotoluene	0.12	U Q	0.16	0.12	0.060	ug/L		10/07/23 23:01	1
4-Nitrotoluene	0.42	U Q	0.43	0.42	0.10	ug/L		10/07/23 23:01	1
DNX	0.26	U Q	0.52	0.26	0.10	ug/L		10/07/23 23:01	1
HMX	0.21	U M Q	0.22	0.21	0.091	ug/L		10/07/23 23:01	1
MNX	0.30	U Q	0.52	0.30	0.096	ug/L		10/07/23 23:01	1
Nitrobenzene	0.21	U Q	0.22	0.21	0.094	ug/L		10/07/23 23:01	1
Nitroglycerin	2.1	U Q	2.2	2.1	0.96	ug/L		10/07/23 23:01	1
PETN	1.0	U Q	1.1	1.0	0.46	ug/L		10/07/23 23:01	1
RDX	0.21	U Q	0.22	0.21	0.053	ug/L		10/07/23 23:01	1
Tetryl	0.10	U Q	0.11	0.10	0.033	ug/L		10/07/23 23:01	1
TNX	0.26	U Q	0.52	0.26	0.082	ug/L		10/07/23 23:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*77*	*M Q*	*83 - 119*	*10/03/23 13:12*	*10/07/23 23:01*	*1*

Method: EPA 8330B - Nitroaromatics and Nitramines (HPLC) - RE

Client Sample ID: FWGmw-021-230901-GW
Date Collected: 09/28/23 11:37
Date Received: 09/29/23 09:35

Lab Sample ID: 280-182145-7
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U M H	0.22	0.21	0.087	ug/L		10/14/23 02:02	1
1,3,5-Trinitrobenzene	0.21	U H	0.22	0.21	0.087	ug/L		10/14/23 06:00	1
1,3-Dinitrobenzene	0.10	U M H	0.11	0.10	0.038	ug/L		10/14/23 02:02	1
1,3-Dinitrobenzene	0.10	U H M	0.11	0.10	0.038	ug/L		10/14/23 06:00	1
2,4,6-Trinitrotoluene	0.10	U H	0.11	0.10	0.046	ug/L		10/14/23 02:02	1
2,4,6-Trinitrotoluene	0.10	U H	0.11	0.10	0.046	ug/L		10/14/23 06:00	1
2,4-Dinitrotoluene	0.082	U H Q	0.10	0.082	0.028	ug/L		10/14/23 02:02	1
2,4-Dinitrotoluene	0.082	U H Q	0.10	0.082	0.028	ug/L		10/14/23 06:00	1
2,6-Dinitrotoluene	0.082	U H Q	0.10	0.082	0.041	ug/L		10/14/23 02:02	1
2,6-Dinitrotoluene	0.082	U H Q	0.10	0.082	0.041	ug/L		10/14/23 06:00	1
2-Amino-4,6-dinitrotoluene	0.10	U H Q	0.11	0.10	0.052	ug/L		10/14/23 02:02	1
2-Amino-4,6-dinitrotoluene	**0.35**	**H M**	0.11	0.10	0.052	ug/L		10/14/23 06:00	1
2-Nitrotoluene	0.21	U H Q	0.22	0.21	0.088	ug/L		10/14/23 02:02	1
2-Nitrotoluene	0.21	U H Q	0.22	0.21	0.088	ug/L		10/14/23 06:00	1
3-Nitrotoluene	0.36	U H Q	0.41	0.36	0.20	ug/L		10/14/23 02:02	1
3-Nitrotoluene	0.36	U H Q	0.41	0.36	0.20	ug/L		10/14/23 06:00	1
4-Amino-2,6-dinitrotoluene	0.12	U H Q	0.15	0.12	0.059	ug/L		10/14/23 02:02	1
4-Amino-2,6-dinitrotoluene	0.12	U H M	0.15	0.12	0.059	ug/L		10/14/23 06:00	1
4-Nitrotoluene	0.41	U H Q	0.42	0.41	0.10	ug/L		10/14/23 02:02	1
4-Nitrotoluene	0.41	U H Q M	0.42	0.41	0.10	ug/L		10/14/23 06:00	1
HMX	**0.11**	**J M H**	0.22	0.21	0.090	ug/L		10/14/23 02:02	1
HMX	0.21	U H	0.22	0.21	0.090	ug/L		10/14/23 06:00	1
Nitrobenzene	0.21	U H	0.22	0.21	0.094	ug/L		10/14/23 02:02	1
Nitrobenzene	0.21	U H	0.22	0.21	0.094	ug/L		10/14/23 06:00	1
Nitroglycerin	2.1	U H	2.2	2.1	0.95	ug/L		10/14/23 02:02	1
Nitroglycerin	2.1	U H	2.2	2.1	0.95	ug/L		10/14/23 06:00	1
PETN	1.0	U H	1.1	1.0	0.46	ug/L		10/14/23 02:02	1
PETN	1.0	U H	1.1	1.0	0.46	ug/L		10/14/23 06:00	1
RDX	**0.22**	**M H**	0.22	0.21	0.053	ug/L		10/14/23 02:02	1
RDX	0.21	U H M	0.22	0.21	0.053	ug/L		10/14/23 06:00	1
Tetryl	0.10	U H	0.11	0.10	0.033	ug/L		10/14/23 02:02	1
Tetryl	0.10	U H	0.11	0.10	0.033	ug/L		10/14/23 06:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*101*	*M*	*83 - 119*	*10/12/23 14:54*	*10/14/23 02:02*	*1*
1,2-Dinitrobenzene	*95*		*83 - 119*	*10/12/23 14:54*	*10/14/23 06:00*	*1*

Client Sample ID: LL3mw-245-230901-GW
Date Collected: 09/28/23 11:56
Date Received: 09/29/23 09:35

Lab Sample ID: 280-182145-8
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U H	0.22	0.21	0.089	ug/L		10/14/23 03:11	1
1,3,5-Trinitrobenzene	0.21	U H M	0.22	0.21	0.089	ug/L		10/14/23 06:36	1
1,3-Dinitrobenzene	0.11	U H	0.12	0.11	0.039	ug/L		10/14/23 03:11	1
1,3-Dinitrobenzene	0.11	U H	0.12	0.11	0.039	ug/L		10/14/23 06:36	1
2,4,6-Trinitrotoluene	0.11	U H	0.12	0.11	0.048	ug/L		10/14/23 03:11	1
2,4,6-Trinitrotoluene	**0.33**	**H M**	0.12	0.11	0.048	ug/L		10/14/23 06:36	1
2,4-diamino-6-nitrotoluene	0.95	U H Q	1.1	0.95	0.46	ug/L		10/14/23 03:11	1
2,4-diamino-6-nitrotoluene	0.95	U H Q	1.1	0.95	0.46	ug/L		10/14/23 06:36	1
2,4-Dinitrotoluene	0.085	U H Q	0.11	0.085	0.029	ug/L		10/14/23 03:11	1

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

Client Sample ID: LL3mw-245-230901-GW
Date Collected: 09/28/23 11:56
Date Received: 09/29/23 09:35

Lab Sample ID: 280-182145-8
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2,4-Dinitrotoluene	0.085	U H Q	0.11	0.085	0.029	ug/L		10/14/23 06:36	1
2,6-diamino-4-nitrotoluene	0.95	U H Q	1.1	0.95	0.23	ug/L		10/14/23 03:11	1
2,6-diamino-4-nitrotoluene	0.95	U Q H M	1.1	0.95	0.23	ug/L		10/14/23 06:36	1
2,6-Dinitrotoluene	0.085	U H Q	0.11	0.085	0.042	ug/L		10/14/23 03:11	1
2,6-Dinitrotoluene	0.085	U H Q	0.11	0.085	0.042	ug/L		10/14/23 06:36	1
2-Amino-4,6-dinitrotoluene	0.11	U H Q	0.12	0.11	0.054	ug/L		10/14/23 03:11	1
2-Amino-4,6-dinitrotoluene	0.11	U H	0.12	0.11	0.054	ug/L		10/14/23 06:36	1
2-Nitrotoluene	0.21	U H Q	0.22	0.21	0.091	ug/L		10/14/23 03:11	1
2-Nitrotoluene	**0.11**	**J H Q**	0.22	0.21	0.091	ug/L		10/14/23 06:36	1
3,5-Dinitroaniline	0.32	U H	0.42	0.32	0.14	ug/L		10/14/23 03:11	1
3,5-Dinitroaniline	0.32	U H	0.42	0.32	0.14	ug/L		10/14/23 06:36	1
3-Nitrotoluene	0.37	U H Q	0.42	0.37	0.21	ug/L		10/14/23 03:11	1
3-Nitrotoluene	0.37	U H Q	0.42	0.37	0.21	ug/L		10/14/23 06:36	1
4-Amino-2,6-dinitrotoluene	0.13	U H Q	0.16	0.13	0.061	ug/L		10/14/23 03:11	1
4-Amino-2,6-dinitrotoluene	0.13	U H	0.16	0.13	0.061	ug/L		10/14/23 06:36	1
4-Nitrotoluene	0.42	U H Q	0.43	0.42	0.11	ug/L		10/14/23 03:11	1
4-Nitrotoluene	0.42	U H Q	0.43	0.42	0.11	ug/L		10/14/23 06:36	1
DNX	0.26	U H	0.53	0.26	0.10	ug/L		10/14/23 03:11	1
DNX	0.26	U H	0.53	0.26	0.10	ug/L		10/14/23 06:36	1
HMX	**7.2**	**H**	0.22	0.21	0.093	ug/L		10/14/23 03:11	1
HMX	0.21	U H M	0.22	0.21	0.093	ug/L		10/14/23 06:36	1
MNX	0.31	U H	0.53	0.31	0.098	ug/L		10/14/23 03:11	1
MNX	0.31	U H	0.53	0.31	0.098	ug/L		10/14/23 06:36	1
Nitrobenzene	0.21	U H	0.22	0.21	0.096	ug/L		10/14/23 03:11	1
Nitrobenzene	0.21	U H	0.22	0.21	0.096	ug/L		10/14/23 06:36	1
Nitroglycerin	2.1	U H	2.2	2.1	0.98	ug/L		10/14/23 03:11	1
Nitroglycerin	2.1	U H	2.2	2.1	0.98	ug/L		10/14/23 06:36	1
PETN	1.1	U H	1.2	1.1	0.47	ug/L		10/14/23 03:11	1
PETN	1.1	U H	1.2	1.1	0.47	ug/L		10/14/23 06:36	1
RDX	0.21	U H	0.22	0.21	0.055	ug/L		10/14/23 03:11	1
RDX	0.21	U H	0.22	0.21	0.055	ug/L		10/14/23 06:36	1
Tetryl	0.11	U H	0.12	0.11	0.034	ug/L		10/14/23 03:11	1
Tetryl	0.11	U H	0.12	0.11	0.034	ug/L		10/14/23 06:36	1
TNX	0.26	U H	0.53	0.26	0.084	ug/L		10/14/23 03:11	1
TNX	0.26	U H	0.53	0.26	0.084	ug/L		10/14/23 06:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*100*		*83 - 119*	*10/12/23 14:54*	*10/14/23 03:11*	*1*
1,2-Dinitrobenzene	*94*		*83 - 119*	*10/12/23 14:54*	*10/14/23 06:36*	*1*

Client Sample ID: FWGmw-024-230901-GW
Date Collected: 09/28/23 13:16
Date Received: 09/29/23 09:35

Lab Sample ID: 280-182145-11
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U H	0.22	0.21	0.086	ug/L		10/14/23 03:34	1
1,3-Dinitrobenzene	0.10	U H	0.11	0.10	0.038	ug/L		10/14/23 03:34	1
2,4,6-Trinitrotoluene	0.10	U H	0.11	0.10	0.046	ug/L		10/14/23 03:34	1
2,4-Dinitrotoluene	0.082	U H Q	0.10	0.082	0.028	ug/L		10/14/23 03:34	1
2,6-Dinitrotoluene	0.082	U H Q	0.10	0.082	0.041	ug/L		10/14/23 03:34	1
2-Amino-4,6-dinitrotoluene	0.10	U H Q	0.11	0.10	0.052	ug/L		10/14/23 03:34	1

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

Client Sample ID: FWGmw-024-230901-GW
Date Collected: 09/28/23 13:16
Date Received: 09/29/23 09:35

Lab Sample ID: 280-182145-11
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Nitrotoluene	0.21	U H Q	0.22	0.21	0.088	ug/L		10/14/23 03:34	1
3-Nitrotoluene	0.36	U H Q	0.41	0.36	0.20	ug/L		10/14/23 03:34	1
4-Amino-2,6-dinitrotoluene	0.12	U H Q	0.15	0.12	0.059	ug/L		10/14/23 03:34	1
4-Nitrotoluene	0.41	U H Q	0.42	0.41	0.10	ug/L		10/14/23 03:34	1
HMX	0.21	U M H	0.22	0.21	0.090	ug/L		10/14/23 03:34	1
Nitrobenzene	0.21	U H	0.22	0.21	0.094	ug/L		10/14/23 03:34	1
Nitroglycerin	2.1	U H	2.2	2.1	0.95	ug/L		10/14/23 03:34	1
PETN	1.0	U H	1.1	1.0	0.46	ug/L		10/14/23 03:34	1
RDX	0.21	U H	0.22	0.21	0.053	ug/L		10/14/23 03:34	1
Tetryl	0.10	U H	0.11	0.10	0.033	ug/L		10/14/23 03:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*100*	*M*	*83 - 119*	*10/12/23 14:54*	*10/14/23 03:34*	*1*

Client Sample ID: FWGmw-023-230901-GW
Date Collected: 09/28/23 14:05
Date Received: 09/29/23 09:35

Lab Sample ID: 280-182145-12
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U H	0.21	0.20	0.086	ug/L		10/14/23 03:57	1
1,3-Dinitrobenzene	0.10	U H	0.11	0.10	0.038	ug/L		10/14/23 03:57	1
2,4,6-Trinitrotoluene	0.10	U H	0.11	0.10	0.046	ug/L		10/14/23 03:57	1
2,4-diamino-6-nitrotoluene	0.92	U H Q	1.0	0.92	0.44	ug/L		10/14/23 03:57	1
2,4-Dinitrotoluene	0.082	U H Q	0.10	0.082	0.028	ug/L		10/14/23 03:57	1
2,6-diamino-4-nitrotoluene	0.92	U H Q	1.0	0.92	0.23	ug/L		10/14/23 03:57	1
2,6-Dinitrotoluene	0.082	U H Q	0.10	0.082	0.041	ug/L		10/14/23 03:57	1
2-Amino-4,6-dinitrotoluene	0.10	U H Q	0.11	0.10	0.052	ug/L		10/14/23 03:57	1
2-Nitrotoluene	0.20	U H Q	0.21	0.20	0.087	ug/L		10/14/23 03:57	1
3,5-Dinitroaniline	0.31	U H	0.41	0.31	0.13	ug/L		10/14/23 03:57	1
3-Nitrotoluene	0.36	U H Q	0.41	0.36	0.20	ug/L		10/14/23 03:57	1
4-Amino-2,6-dinitrotoluene	0.12	U H Q	0.15	0.12	0.059	ug/L		10/14/23 03:57	1
4-Nitrotoluene	0.41	U H Q	0.42	0.41	0.10	ug/L		10/14/23 03:57	1
DNX	0.26	U H	0.51	0.26	0.099	ug/L		10/14/23 03:57	1
HMX	0.20	U M H	0.21	0.20	0.090	ug/L		10/14/23 03:57	1
MNX	0.30	U H	0.51	0.30	0.095	ug/L		10/14/23 03:57	1
Nitrobenzene	0.20	U H	0.21	0.20	0.093	ug/L		10/14/23 03:57	1
Nitroglycerin	2.0	U H	2.1	2.0	0.94	ug/L		10/14/23 03:57	1
PETN	1.0	U H	1.1	1.0	0.46	ug/L		10/14/23 03:57	1
RDX	0.20	U H	0.21	0.20	0.053	ug/L		10/14/23 03:57	1
Tetryl	0.10	U H	0.11	0.10	0.033	ug/L		10/14/23 03:57	1
TNX	0.26	U H	0.51	0.26	0.081	ug/L		10/14/23 03:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*97*		*83 - 119*	*10/12/23 14:54*	*10/14/23 03:57*	*1*

General Chemistry

Client Sample ID: LL1mw-080-230901-GW-R
Date Collected: 09/28/23 09:07
Date Received: 09/29/23 09:35

Lab Sample ID: 280-182145-1
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate as N (SW846 9056)	**0.090**	**J**	0.50	0.20	0.090	mg/L		09/29/23 14:10	1

General Chemistry (Continued)

Client Sample ID: LL1mw-080-230901-GW-R
Date Collected: 09/28/23 09:07
Date Received: 09/29/23 09:35

Lab Sample ID: 280-182145-1
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrite as N (SW846 9056)	0.10	U	0.50	0.10	0.049	mg/L		09/29/23 14:10	1
Sulfate (SW846 9056A)	**500**	**J1**	5.0	2.5	1.0	mg/L		09/29/23 14:10	1
Alkalinity (SM 2320B)	**140**		10	6.4	3.1	mg/L		10/05/23 00:38	1

Client Sample ID: FWGmw-018-230901-GW
Date Collected: 09/28/23 09:41
Date Received: 09/29/23 09:35

Lab Sample ID: 280-182145-2
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate as N (SW846 9056)	0.20	U	0.50	0.20	0.090	mg/L		09/29/23 14:25	1

Client Sample ID: FWGmw-020-230901-GW
Date Collected: 09/28/23 09:55
Date Received: 09/29/23 09:35

Lab Sample ID: 280-182145-3
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate as N (SW846 9056)	0.20	U	0.50	0.20	0.090	mg/L		09/29/23 14:40	1

Client Sample ID: LL1mw-083-230901-GW-R
Date Collected: 09/28/23 10:11
Date Received: 09/29/23 09:35

Lab Sample ID: 280-182145-4
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate as N (SW846 9056)	**0.18**	**J**	0.50	0.20	0.090	mg/L		09/29/23 14:55	1
Nitrite as N (SW846 9056)	0.10	U	0.50	0.10	0.049	mg/L		09/29/23 14:55	1
Sulfate (SW846 9056A)	**180**		5.0	2.5	1.0	mg/L		09/29/23 14:55	1
Alkalinity (SM 2320B)	6.4	U	10	6.4	3.1	mg/L		10/05/23 00:23	1

Client Sample ID: LL1mw-084-230901-R
Date Collected: 09/28/23 10:57
Date Received: 09/29/23 09:35

Lab Sample ID: 280-182145-5
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate as N (SW846 9056)	**0.40**	**J**	0.50	0.20	0.090	mg/L		09/29/23 15:10	1
Nitrite as N (SW846 9056)	0.10	U	0.50	0.10	0.049	mg/L		09/29/23 15:10	1
Sulfate (SW846 9056A)	**120**		5.0	2.5	1.0	mg/L		09/29/23 15:10	1
Alkalinity (SM 2320B)	**29**		10	6.4	3.1	mg/L		10/05/23 00:32	1

Client Sample ID: LL1mw-084-230902-GW-R
Date Collected: 09/28/23 10:57
Date Received: 09/29/23 09:35

Lab Sample ID: 280-182145-6
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate as N (SW846 9056)	**0.39**	**J**	0.50	0.20	0.090	mg/L		09/29/23 16:40	1
Nitrite as N (SW846 9056)	0.10	U	0.50	0.10	0.049	mg/L		09/29/23 16:40	1
Sulfate (SW846 9056A)	**120**		5.0	2.5	1.0	mg/L		09/29/23 16:40	1
Alkalinity (SM 2320B)	**29**		10	6.4	3.1	mg/L		10/05/23 00:27	1

Client Sample ID: LL12mw-246-230901-GW
Date Collected: 09/28/23 13:25
Date Received: 09/29/23 09:35

Lab Sample ID: 280-182145-9
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia as N (EPA 350.1)	**0.14**		0.10	0.050	0.029	mg/L		10/16/23 14:41	1
Nitrate as N (SW846 9056)	0.20	U	0.50	0.20	0.090	mg/L		09/29/23 18:56	1

General Chemistry

Client Sample ID: LL12MW-RB-246-2023
Lab Sample ID: 280-182145-10
Date Collected: 09/28/23 15:10
Matrix: Water
Date Received: 09/29/23 09:35

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia as N (EPA 350.1)	0.050	U	0.10	0.050	0.029	mg/L		10/16/23 14:50	1
Nitrate as N (SW846 9056)	0.20	U	0.50	0.20	0.090	mg/L		09/29/23 22:56	1

Default Detection Limits

Client: Leidos, Inc.
Project/Site: RVAAP FWGW

Job ID: 280-182145-1

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

Analyte	LOQ	DL	Units
Carbon tetrachloride	1.0	0.57	ug/L

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Prep: 3535

Analyte	LOQ	DL	Units
1,3,5-Trinitrobenzene	0.21	0.084	ug/L
1,3-Dinitrobenzene	0.11	0.037	ug/L
2,4,6-Trinitrotoluene	0.11	0.045	ug/L
2,4-diamino-6-nitrotoluene	1.0	0.43	ug/L
2,4-Dinitrotoluene	0.10	0.027	ug/L
2,6-diamino-4-nitrotoluene	1.0	0.22	ug/L
2,6-Dinitrotoluene	0.10	0.040	ug/L
2-Amino-4,6-dinitrotoluene	0.11	0.051	ug/L
2-Nitrotoluene	0.21	0.086	ug/L
3,5-Dinitroaniline	0.40	0.13	ug/L
3-Nitrotoluene	0.40	0.20	ug/L
4-Amino-2,6-dinitrotoluene	0.15	0.058	ug/L
4-Nitrotoluene	0.41	0.10	ug/L
DNX	0.50	0.097	ug/L
HMX	0.21	0.088	ug/L
MNX	0.50	0.093	ug/L
Nitrobenzene	0.21	0.091	ug/L
Nitroglycerin	2.1	0.92	ug/L
PETN	1.1	0.45	ug/L
RDX	0.21	0.052	ug/L
Tetryl	0.11	0.032	ug/L
TNX	0.50	0.079	ug/L

General Chemistry

Analyte	LOQ	DL	Units
Ammonia as N	0.10	0.029	mg/L
Nitrate as N	0.50	0.090	mg/L
Nitrite as N	0.50	0.049	mg/L
Sulfate	5.0	1.0	mg/L
Alkalinity	10	3.1	mg/L

Surrogate Summary

Client: Leidos, Inc.
Project/Site: RVAAP FWGW

Job ID: 280-182145-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(81-118)	(85-114)	(80-119)	(89-112)
280-182145-13	LL10mw-003-230901-GW	99	99	97	99
280-182145-14	FWGTB-230901-TB003	100	103	96	102
LCS 280-628977/4	Lab Control Sample	101	99	102	100
LCSD 280-628977/5	Lab Control Sample Dup	99	101	99	99
MB 280-628977/8	Method Blank	100	98	99	99

Surrogate Legend

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

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		12DNB1
Lab Sample ID	Client Sample ID	(83-119)
280-182145-7	FWGmw-021-230901-GW	72 M Q
280-182145-7 - RE	FWGmw-021-230901-GW	101 M
280-182145-8	LL3mw-245-230901-GW	82 M Q
280-182145-8 - RE	LL3mw-245-230901-GW	100
280-182145-11	FWGmw-024-230901-GW	83 M
280-182145-11 - RE	FWGmw-024-230901-GW	100 M
280-182145-12	FWGmw-023-230901-GW	77 M Q
280-182145-12 - RE	FWGmw-023-230901-GW	97
LCS 280-628171/2-A	Lab Control Sample	85
LCS 280-628171/4-A	Lab Control Sample	96
LCS 280-629471/2-A	Lab Control Sample	81 M Q
LCS 280-629471/4-A	Lab Control Sample	102
LCSD 280-628171/3-A	Lab Control Sample Dup	71 Q
LCSD 280-628171/5-A	Lab Control Sample Dup	86
LCSD 280-629471/3-A	Lab Control Sample Dup	91 M
LCSD 280-629471/5-A	Lab Control Sample Dup	104 M
MB 280-628171/1-A	Method Blank	85 M
MB 280-629471/1-A	Method Blank	99 M

Surrogate Legend

12DNB = 1,2-Dinitrobenzene

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		12DNB2
Lab Sample ID	Client Sample ID	(83-119)
280-182145-7	FWGmw-021-230901-GW	68 Q
280-182145-7 - RE	FWGmw-021-230901-GW	95
280-182145-8 - RE	LL3mw-245-230901-GW	94

Surrogate Legend

12DNB = 1,2-Dinitrobenzene

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

Lab Sample ID: MB 280-628977/8
Matrix: Water
Analysis Batch: 628977

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon tetrachloride	0.80	U	1.0	0.80	0.57	ug/L		10/09/23 12:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*81 - 118*		*10/09/23 12:09*	*1*
4-Bromofluorobenzene (Surr)	*98*		*85 - 114*		*10/09/23 12:09*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 119*		*10/09/23 12:09*	*1*
Toluene-d8 (Surr)	*99*		*89 - 112*		*10/09/23 12:09*	*1*

Lab Sample ID: LCS 280-628977/4
Matrix: Water
Analysis Batch: 628977

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Carbon tetrachloride			50.0	52.3		ug/L		105	72 - 136		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*81 - 118*
4-Bromofluorobenzene (Surr)	*99*		*85 - 114*
Dibromofluoromethane (Surr)	*102*		*80 - 119*
Toluene-d8 (Surr)	*100*		*89 - 112*

Lab Sample ID: LCSD 280-628977/5
Matrix: Water
Analysis Batch: 628977

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon tetrachloride			50.0	48.9		ug/L		98	72 - 136	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*81 - 118*
4-Bromofluorobenzene (Surr)	*101*		*85 - 114*
Dibromofluoromethane (Surr)	*99*		*80 - 119*
Toluene-d8 (Surr)	*99*		*89 - 112*

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Lab Sample ID: MB 280-628171/1-A
Matrix: Water
Analysis Batch: 628897

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 628171

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.084	ug/L		10/07/23 14:59	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		10/07/23 14:59	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		10/07/23 14:59	1
2,4-diamino-6-nitrotoluene	0.90	U	1.0	0.90	0.43	ug/L		10/07/23 14:59	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027	ug/L		10/07/23 14:59	1
2,6-diamino-4-nitrotoluene	0.90	U	1.0	0.90	0.22	ug/L		10/07/23 14:59	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		10/07/23 14:59	1

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

Lab Sample ID: MB 280-628171/1-A
Matrix: Water
Analysis Batch: 628897

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 628171

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		10/07/23 14:59	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.086	ug/L		10/07/23 14:59	1
3,5-Dinitroaniline	0.30	U	0.40	0.30	0.13	ug/L		10/07/23 14:59	1
3-Nitrotoluene	0.35	U	0.40	0.35	0.20	ug/L		10/07/23 14:59	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		10/07/23 14:59	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		10/07/23 14:59	1
DNX	0.25	U	0.50	0.25	0.097	ug/L		10/07/23 14:59	1
HMX	0.20	U	0.21	0.20	0.088	ug/L		10/07/23 14:59	1
MNX	0.138	J	0.50	0.29	0.093	ug/L		10/07/23 14:59	1
Nitrobenzene	0.20	U	0.21	0.20	0.091	ug/L		10/07/23 14:59	1
Nitroglycerin	2.0	U	2.1	2.0	0.92	ug/L		10/07/23 14:59	1
PETN	1.0	U	1.1	1.0	0.45	ug/L		10/07/23 14:59	1
RDX	0.20	U	0.21	0.20	0.052	ug/L		10/07/23 14:59	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		10/07/23 14:59	1
TNX	0.25	U	0.50	0.25	0.079	ug/L		10/07/23 14:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*85*	*M*	*83 - 119*	*10/03/23 13:12*	*10/07/23 14:59*	*1*

Lab Sample ID: LCS 280-628171/2-A
Matrix: Water
Analysis Batch: 628897

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 628171

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,3,5-Trinitrobenzene	2.00	1.88		ug/L		94	73 - 125
1,3-Dinitrobenzene	2.00	1.78		ug/L		89	78 - 120
2,4,6-Trinitrotoluene	2.00	1.71		ug/L		86	71 - 123
2,4-Dinitrotoluene	2.00	1.68		ug/L		84	78 - 120
2,6-Dinitrotoluene	2.00	1.66		ug/L		83	77 - 127
2-Amino-4,6-dinitrotoluene	2.00	1.66		ug/L		83	79 - 120
2-Nitrotoluene	2.00	1.46		ug/L		73	70 - 127
3,5-Dinitroaniline	2.00	1.53		ug/L		77	71 - 117
3-Nitrotoluene	2.00	1.45	Q	ug/L		72	73 - 125
4-Amino-2,6-dinitrotoluene	2.00	1.47	Q	ug/L		74	76 - 125
4-Nitrotoluene	2.00	1.40	Q	ug/L		70	71 - 127
DNX	2.01	2.14		ug/L		107	66 - 119
HMX	2.00	1.96		ug/L		98	65 - 135
MNX	2.34	2.27		ug/L		97	57 - 132
Nitrobenzene	2.00	1.62		ug/L		81	65 - 134
Nitroglycerin	20.0	18.4		ug/L		92	74 - 127
PETN	20.0	18.8		ug/L		94	73 - 127
RDX	2.00	1.74		ug/L		87	68 - 130
Tetryl	2.00	1.83		ug/L		92	64 - 128
TNX	2.00	1.97		ug/L		99	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dinitrobenzene	*85*		*83 - 119*

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

Lab Sample ID: LCS 280-628171/4-A
Matrix: Water
Analysis Batch: 628897

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 628171

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
2,4-diamino-6-nitrotoluene			2.00	1.33	Q	ug/L		66	68 - 122		
2,6-diamino-4-nitrotoluene			2.00	1.48		ug/L		74	72 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dinitrobenzene	*96*		*83 - 119*

Lab Sample ID: LCSD 280-628171/3-A
Matrix: Water
Analysis Batch: 628897

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 628171

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene			2.00	1.62	Q	ug/L		81	73 - 125	15	20
1,3-Dinitrobenzene			2.00	1.51	Q	ug/L		75	78 - 120	17	20
2,4,6-Trinitrotoluene			2.00	1.44	Q	ug/L		72	71 - 123	17	20
2,4-Dinitrotoluene			2.00	1.39	Q	ug/L		70	78 - 120	19	20
2,6-Dinitrotoluene			2.00	1.43	Q	ug/L		71	77 - 127	15	20
2-Amino-4,6-dinitrotoluene			2.00	1.36	Q	ug/L		68	79 - 120	20	20
2-Nitrotoluene			2.00	1.19	Q	ug/L		59	70 - 127	20	20
3,5-Dinitroaniline			2.00	1.28	Q	ug/L		64	71 - 117	18	20
3-Nitrotoluene			2.00	1.14	Q	ug/L		57	73 - 125	24	20
4-Amino-2,6-dinitrotoluene			2.00	1.17	Q	ug/L		58	76 - 125	23	20
4-Nitrotoluene			2.00	1.15	Q	ug/L		57	71 - 127	20	20
DNX			2.01	1.90	Q	ug/L		95	66 - 119	12	20
HMX			2.00	1.74	Q	ug/L		87	65 - 135	11	20
MNX			2.34	1.89	Q	ug/L		81	57 - 132	18	20
Nitrobenzene			2.00	1.33	Q	ug/L		67	65 - 134	19	20
Nitroglycerin			20.0	16.0	Q	ug/L		80	74 - 127	14	20
PETN			20.0	16.1	Q	ug/L		81	73 - 127	16	20
RDX			2.00	1.51	Q	ug/L		75	68 - 130	14	20
Tetryl			2.00	1.59	Q	ug/L		79	64 - 128	15	20
TNX			2.00	1.76	Q	ug/L		88	50 - 150	11	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dinitrobenzene	*71*	*Q*	*83 - 119*

Lab Sample ID: LCSD 280-628171/5-A
Matrix: Water
Analysis Batch: 628897

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 628171

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-diamino-6-nitrotoluene			2.00	1.48		ug/L		74	68 - 122	11	20
2,6-diamino-4-nitrotoluene			2.00	1.56		ug/L		78	72 - 122	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dinitrobenzene	*86*		*83 - 119*

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

Lab Sample ID: MB 280-629471/1-A
Matrix: Water
Analysis Batch: 629672

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 629471

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.084	ug/L		10/13/23 18:00	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		10/13/23 18:00	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		10/13/23 18:00	1
2,4-diamino-6-nitrotoluene	0.90	U	1.0	0.90	0.43	ug/L		10/13/23 18:00	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027	ug/L		10/13/23 18:00	1
2,6-diamino-4-nitrotoluene	0.90	U	1.0	0.90	0.22	ug/L		10/13/23 18:00	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		10/13/23 18:00	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		10/13/23 18:00	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.086	ug/L		10/13/23 18:00	1
3,5-Dinitroaniline	0.30	U	0.40	0.30	0.13	ug/L		10/13/23 18:00	1
3-Nitrotoluene	0.35	U	0.40	0.35	0.20	ug/L		10/13/23 18:00	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		10/13/23 18:00	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		10/13/23 18:00	1
DNX	0.25	U	0.50	0.25	0.097	ug/L		10/13/23 18:00	1
HMX	0.20	U	0.21	0.20	0.088	ug/L		10/13/23 18:00	1
MNX	0.154	J	0.50	0.29	0.093	ug/L		10/13/23 18:00	1
Nitrobenzene	0.20	U	0.21	0.20	0.091	ug/L		10/13/23 18:00	1
Nitroglycerin	2.0	U	2.1	2.0	0.92	ug/L		10/13/23 18:00	1
PETN	1.0	U	1.1	1.0	0.45	ug/L		10/13/23 18:00	1
RDX	0.20	U	0.21	0.20	0.052	ug/L		10/13/23 18:00	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		10/13/23 18:00	1
TNX	0.25	U	0.50	0.25	0.079	ug/L		10/13/23 18:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*99*	*M*	*83 - 119*	*10/12/23 14:54*	*10/13/23 18:00*	*1*

Lab Sample ID: LCS 280-629471/2-A
Matrix: Water
Analysis Batch: 629672

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 629471

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,3,5-Trinitrobenzene	2.00	1.81	M Q	ug/L		90	73 - 125
1,3-Dinitrobenzene	2.00	1.64	M Q	ug/L		82	78 - 120
2,4,6-Trinitrotoluene	2.00	1.56	Q	ug/L		78	71 - 123
2,4-Dinitrotoluene	2.00	1.45	Q	ug/L		72	78 - 120
2,6-Dinitrotoluene	2.00	1.48	Q	ug/L		74	77 - 127
2-Amino-4,6-dinitrotoluene	2.00	1.47	Q	ug/L		73	79 - 120
2-Nitrotoluene	2.00	1.15	Q	ug/L		58	70 - 127
3,5-Dinitroaniline	2.00	1.42	M Q	ug/L		71	71 - 117
3-Nitrotoluene	2.00	1.09	M Q	ug/L		55	73 - 125
4-Amino-2,6-dinitrotoluene	2.00	1.42	Q	ug/L		71	76 - 125
4-Nitrotoluene	2.00	1.12	Q	ug/L		56	71 - 127
DNX	2.01	1.77	M Q	ug/L		88	66 - 119
HMX	2.00	1.62	M Q	ug/L		81	65 - 135
MNX	2.34	2.06	Q	ug/L		88	57 - 132
Nitrobenzene	2.00	1.37	M Q	ug/L		68	65 - 134
Nitroglycerin	20.0	18.0	Q	ug/L		90	74 - 127
PETN	20.0	18.1	Q	ug/L		91	73 - 127

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

Lab Sample ID: LCS 280-629471/2-A
Matrix: Water
Analysis Batch: 629672

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 629471

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
RDX			2.00	1.81	Q	ug/L		90	68 - 130		
Tetryl			2.00	1.79	M Q	ug/L		89	64 - 128		
TNX			2.00	1.63	M Q	ug/L		81	50 - 150		

Surrogate		*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dinitrobenzene		*81*	*M Q*	*83 - 119*

Lab Sample ID: LCS 280-629471/4-A
Matrix: Water
Analysis Batch: 629672

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 629471

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
2,4-diamino-6-nitrotoluene			2.00	1.47	M	ug/L		74	68 - 122		
2,6-diamino-4-nitrotoluene			2.00	1.57		ug/L		78	72 - 122		

Surrogate		*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dinitrobenzene		*102*		*83 - 119*

Lab Sample ID: LCSD 280-629471/3-A
Matrix: Water
Analysis Batch: 629672

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 629471

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene			2.00	1.98	M	ug/L		99	73 - 125	9	20
1,3-Dinitrobenzene			2.00	1.82		ug/L		91	78 - 120	10	20
2,4,6-Trinitrotoluene			2.00	1.77		ug/L		88	71 - 123	12	20
2,4-Dinitrotoluene			2.00	1.68		ug/L		84	78 - 120	15	20
2,6-Dinitrotoluene			2.00	1.72		ug/L		86	77 - 127	15	20
2-Amino-4,6-dinitrotoluene			2.00	1.69		ug/L		84	79 - 120	14	20
2-Nitrotoluene			2.00	1.36	Q	ug/L		68	70 - 127	17	20
3,5-Dinitroaniline			2.00	1.57		ug/L		78	71 - 117	10	20
3-Nitrotoluene			2.00	1.36	Q	ug/L		68	73 - 125	22	20
4-Amino-2,6-dinitrotoluene			2.00	1.55		ug/L		78	76 - 125	9	20
4-Nitrotoluene			2.00	1.33	Q	ug/L		67	71 - 127	18	20
DNX			2.01	1.89	M	ug/L		94	66 - 119	7	20
HMX			2.00	1.74	M	ug/L		87	65 - 135	7	20
MNX			2.34	2.21		ug/L		94	57 - 132	7	20
Nitrobenzene			2.00	1.54		ug/L		77	65 - 134	12	20
Nitroglycerin			20.0	19.3		ug/L		97	74 - 127	7	20
PETN			20.0	19.6		ug/L		98	73 - 127	8	20
RDX			2.00	1.84		ug/L		92	68 - 130	2	20
Tetryl			2.00	1.89		ug/L		95	64 - 128	6	20
TNX			2.00	1.78	M	ug/L		89	50 - 150	9	20

Surrogate		*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dinitrobenzene		*91*	*M*	*83 - 119*

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

Lab Sample ID: LCSD 280-629471/5-A
Matrix: Water
Analysis Batch: 629672

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 629471

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-diamino-6-nitrotoluene			2.00	1.26	Q	ug/L		63	68 - 122	16	20
2,6-diamino-4-nitrotoluene			2.00	1.40	Q	ug/L		70	72 - 122	11	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dinitrobenzene	*104*	*M*	*83 - 119*

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-630033/51
Matrix: Water
Analysis Batch: 630033

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia as N	0.0440	J	0.10	0.050	0.029	mg/L		10/16/23 13:43	1

Lab Sample ID: LCS 280-630033/52
Matrix: Water
Analysis Batch: 630033

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Ammonia as N			2.50	2.58		mg/L		103	90 - 110		

Lab Sample ID: 280-182145-9 MS
Matrix: Water
Analysis Batch: 630033

Client Sample ID: LL12mw-246-230901-GW
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Ammonia as N	0.14		1.00	1.23		mg/L		109	90 - 110		

Lab Sample ID: 280-182145-9 MSD
Matrix: Water
Analysis Batch: 630033

Client Sample ID: LL12mw-246-230901-GW
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia as N	0.14		1.00	1.23		mg/L		110	90 - 110	1	10

Method: 9056 - Anions, Ion Chromatography

Lab Sample ID: MB 280-627894/39
Matrix: Water
Analysis Batch: 627894

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate as N	0.20	U	0.50	0.20	0.090	mg/L		09/29/23 21:41	1

Method: 9056 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 280-627894/6
Matrix: Water
Analysis Batch: 627894

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate as N	0.20	U	0.50	0.20	0.090	mg/L		09/29/23 13:25	1
Nitrite as N	0.10	U	0.50	0.10	0.049	mg/L		09/29/23 13:25	1

Lab Sample ID: LCS 280-627894/37
Matrix: Water
Analysis Batch: 627894

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrate as N			5.00	4.71		mg/L		94	88 - 111		

Lab Sample ID: LCS 280-627894/4
Matrix: Water
Analysis Batch: 627894

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrate as N			5.00	4.70		mg/L		94	88 - 111		
Nitrite as N			5.00	4.89		mg/L		98	87 - 111		

Lab Sample ID: LCSD 280-627894/38
Matrix: Water
Analysis Batch: 627894

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate as N			5.00	4.72		mg/L		94	88 - 111	0	10

Lab Sample ID: LCSD 280-627894/5
Matrix: Water
Analysis Batch: 627894

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate as N			5.00	4.70		mg/L		94	88 - 111	0	10
Nitrite as N			5.00	4.89		mg/L		98	87 - 111	0	10

Lab Sample ID: MRL 280-627894/3
Matrix: Water
Analysis Batch: 627894

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrate as N			0.500	0.411	J	mg/L		82	50 - 150		
Nitrite as N			0.500	0.447	J	mg/L		89	50 - 150		

Lab Sample ID: 280-182145-5 MS
Matrix: Water
Analysis Batch: 627894

Client Sample ID: LL1mw-084-230901-R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrate as N	0.40	J	5.00	5.88		mg/L		110	88 - 111		
Nitrite as N	0.10	U	5.00	4.53		mg/L		91	87 - 111		

Method: 9056 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 280-182145-5 MSD
Matrix: Water
Analysis Batch: 627894

Client Sample ID: LL1mw-084-230901-R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate as N	0.40	J	5.00	5.93		mg/L		111	88 - 111	1	10
Nitrite as N	0.10	U	5.00	4.57		mg/L		91	87 - 111	1	10

Lab Sample ID: 280-182145-5 DU
Matrix: Water
Analysis Batch: 627894

Client Sample ID: LL1mw-084-230901-R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate as N	0.40	J	0.404	J	mg/L		0.8	10
Nitrite as N	0.10	U	0.10	U	mg/L		NC	10

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 280-627895/6
Matrix: Water
Analysis Batch: 627895

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	2.5	U	5.0	2.5	1.0	mg/L		09/29/23 13:25	1

Lab Sample ID: LCS 280-627895/4
Matrix: Water
Analysis Batch: 627895

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	100	99.3		mg/L		99	87 - 112

Lab Sample ID: LCSD 280-627895/5
Matrix: Water
Analysis Batch: 627895

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	100	99.3		mg/L		99	87 - 112	0	10

Lab Sample ID: MRL 280-627895/3
Matrix: Water
Analysis Batch: 627895

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	5.00	5.66		mg/L		113	50 - 150

Lab Sample ID: 280-182145-5 MS
Matrix: Water
Analysis Batch: 627895

Client Sample ID: LL1mw-084-230901-R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	120		50.0	174		mg/L		109	87 - 112

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: 280-182145-5 MSD
Matrix: Water
Analysis Batch: 627895

Client Sample ID: LL1mw-084-230901-R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	120		50.0	174		mg/L		110	87 - 112	0	10

Lab Sample ID: 280-182145-5 DU
Matrix: Water
Analysis Batch: 627895

Client Sample ID: LL1mw-084-230901-R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Sulfate	120			120		mg/L				0.4	10

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-628623/5
Matrix: Water
Analysis Batch: 628623

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Alkalinity	3.44	J	10	6.4	3.1	mg/L		10/04/23 22:23	1

Lab Sample ID: LCS 280-628623/4
Matrix: Water
Analysis Batch: 628623

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Alkalinity			200	207		mg/L		103	89 - 110		

GC/MS VOA

Analysis Batch: 628977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-182145-13	LL10mw-003-230901-GW	Total/NA	Water	8260D	
280-182145-14	FWGTB-230901-TB003	Total/NA	Water	8260D	
MB 280-628977/8	Method Blank	Total/NA	Water	8260D	
LCS 280-628977/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 280-628977/5	Lab Control Sample Dup	Total/NA	Water	8260D	

HPLC/IC

Prep Batch: 628171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-182145-7	FWGmw-021-230901-GW	Total/NA	Water	3535	
280-182145-8	LL3mw-245-230901-GW	Total/NA	Water	3535	
280-182145-11	FWGmw-024-230901-GW	Total/NA	Water	3535	
280-182145-12	FWGmw-023-230901-GW	Total/NA	Water	3535	
MB 280-628171/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-628171/2-A	Lab Control Sample	Total/NA	Water	3535	
LCS 280-628171/4-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 280-628171/3-A	Lab Control Sample Dup	Total/NA	Water	3535	
LCSD 280-628171/5-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 628897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-182145-7	FWGmw-021-230901-GW	Total/NA	Water	8330B	628171
280-182145-8	LL3mw-245-230901-GW	Total/NA	Water	8330B	628171
280-182145-11	FWGmw-024-230901-GW	Total/NA	Water	8330B	628171
280-182145-12	FWGmw-023-230901-GW	Total/NA	Water	8330B	628171
MB 280-628171/1-A	Method Blank	Total/NA	Water	8330B	628171
LCS 280-628171/2-A	Lab Control Sample	Total/NA	Water	8330B	628171
LCS 280-628171/4-A	Lab Control Sample	Total/NA	Water	8330B	628171
LCSD 280-628171/3-A	Lab Control Sample Dup	Total/NA	Water	8330B	628171
LCSD 280-628171/5-A	Lab Control Sample Dup	Total/NA	Water	8330B	628171

Analysis Batch: 629183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-182145-7	FWGmw-021-230901-GW	Total/NA	Water	8330B	628171

Prep Batch: 629471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-182145-7 - RE	FWGmw-021-230901-GW	Total/NA	Water	3535	
280-182145-8 - RE	LL3mw-245-230901-GW	Total/NA	Water	3535	
280-182145-11 - RE	FWGmw-024-230901-GW	Total/NA	Water	3535	
280-182145-12 - RE	FWGmw-023-230901-GW	Total/NA	Water	3535	
MB 280-629471/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-629471/2-A	Lab Control Sample	Total/NA	Water	3535	
LCS 280-629471/4-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 280-629471/3-A	Lab Control Sample Dup	Total/NA	Water	3535	
LCSD 280-629471/5-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 629672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-182145-7 - RE	FWGmw-021-230901-GW	Total/NA	Water	8330B	629471

HPLC/IC (Continued)

Analysis Batch: 629672 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-182145-8 - RE	LL3mw-245-230901-GW	Total/NA	Water	8330B	629471
280-182145-11 - RE	FWGmw-024-230901-GW	Total/NA	Water	8330B	629471
280-182145-12 - RE	FWGmw-023-230901-GW	Total/NA	Water	8330B	629471
MB 280-629471/1-A	Method Blank	Total/NA	Water	8330B	629471
LCS 280-629471/2-A	Lab Control Sample	Total/NA	Water	8330B	629471
LCS 280-629471/4-A	Lab Control Sample	Total/NA	Water	8330B	629471
LCSD 280-629471/3-A	Lab Control Sample Dup	Total/NA	Water	8330B	629471
LCSD 280-629471/5-A	Lab Control Sample Dup	Total/NA	Water	8330B	629471

Analysis Batch: 629682

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-182145-7 - RE	FWGmw-021-230901-GW	Total/NA	Water	8330B	629471
280-182145-8 - RE	LL3mw-245-230901-GW	Total/NA	Water	8330B	629471

General Chemistry

Analysis Batch: 627894

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-182145-1	LL1mw-080-230901-GW-R	Total/NA	Water	9056	
280-182145-2	FWGmw-018-230901-GW	Total/NA	Water	9056	
280-182145-3	FWGmw-020-230901-GW	Total/NA	Water	9056	
280-182145-4	LL1mw-083-230901-GW-R	Total/NA	Water	9056	
280-182145-5	LL1mw-084-230901-R	Total/NA	Water	9056	
280-182145-6	LL1mw-084-230902-GW-R	Total/NA	Water	9056	
280-182145-9	LL12mw-246-230901-GW	Total/NA	Water	9056	
280-182145-10	LL12MW-RB-246-2023	Total/NA	Water	9056	
MB 280-627894/39	Method Blank	Total/NA	Water	9056	
MB 280-627894/6	Method Blank	Total/NA	Water	9056	
LCS 280-627894/37	Lab Control Sample	Total/NA	Water	9056	
LCS 280-627894/4	Lab Control Sample	Total/NA	Water	9056	
LCSD 280-627894/38	Lab Control Sample Dup	Total/NA	Water	9056	
LCSD 280-627894/5	Lab Control Sample Dup	Total/NA	Water	9056	
MRL 280-627894/3	Lab Control Sample	Total/NA	Water	9056	
280-182145-5 MS	LL1mw-084-230901-R	Total/NA	Water	9056	
280-182145-5 MSD	LL1mw-084-230901-R	Total/NA	Water	9056	
280-182145-5 DU	LL1mw-084-230901-R	Total/NA	Water	9056	

Analysis Batch: 627895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-182145-1	LL1mw-080-230901-GW-R	Total/NA	Water	9056A	
280-182145-4	LL1mw-083-230901-GW-R	Total/NA	Water	9056A	
280-182145-5	LL1mw-084-230901-R	Total/NA	Water	9056A	
280-182145-6	LL1mw-084-230902-GW-R	Total/NA	Water	9056A	
MB 280-627895/6	Method Blank	Total/NA	Water	9056A	
LCS 280-627895/4	Lab Control Sample	Total/NA	Water	9056A	
LCSD 280-627895/5	Lab Control Sample Dup	Total/NA	Water	9056A	
MRL 280-627895/3	Lab Control Sample	Total/NA	Water	9056A	
280-182145-5 MS	LL1mw-084-230901-R	Total/NA	Water	9056A	
280-182145-5 MSD	LL1mw-084-230901-R	Total/NA	Water	9056A	
280-182145-5 DU	LL1mw-084-230901-R	Total/NA	Water	9056A	

QC Association Summary

Client: Leidos, Inc.
Project/Site: RVAAP FWGW

Job ID: 280-182145-1

General Chemistry

Analysis Batch: 628623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-182145-1	LL1mw-080-230901-GW-R	Total/NA	Water	SM 2320B	
280-182145-4	LL1mw-083-230901-GW-R	Total/NA	Water	SM 2320B	
280-182145-5	LL1mw-084-230901-R	Total/NA	Water	SM 2320B	
280-182145-6	LL1mw-084-230902-GW-R	Total/NA	Water	SM 2320B	
MB 280-628623/5	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-628623/4	Lab Control Sample	Total/NA	Water	SM 2320B	

Analysis Batch: 630033

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-182145-9	LL12mw-246-230901-GW	Total/NA	Water	350.1	
280-182145-10	LL12MW-RB-246-2023	Total/NA	Water	350.1	
MB 280-630033/51	Method Blank	Total/NA	Water	350.1	
LCS 280-630033/52	Lab Control Sample	Total/NA	Water	350.1	
280-182145-9 MS	LL12mw-246-230901-GW	Total/NA	Water	350.1	
280-182145-9 MSD	LL12mw-246-230901-GW	Total/NA	Water	350.1	

Client Sample ID: LL1mw-080-230901-GW-R
Lab Sample ID: 280-182145-1
Date Collected: 09/28/23 09:07
Matrix: Water
Date Received: 09/29/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056		1	10 mL	10 mL	627894	09/29/23 14:10	EJS	EET DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	627895	09/29/23 14:10	EJS	EET DEN
Total/NA	Analysis	SM 2320B		1			628623	10/05/23 00:38	LL	EET DEN

Client Sample ID: FWGmw-018-230901-GW
Lab Sample ID: 280-182145-2
Date Collected: 09/28/23 09:41
Matrix: Water
Date Received: 09/29/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056		1	10 mL	10 mL	627894	09/29/23 14:25	EJS	EET DEN

Client Sample ID: FWGmw-020-230901-GW
Lab Sample ID: 280-182145-3
Date Collected: 09/28/23 09:55
Matrix: Water
Date Received: 09/29/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056		1	10 mL	10 mL	627894	09/29/23 14:40	EJS	EET DEN

Client Sample ID: LL1mw-083-230901-GW-R
Lab Sample ID: 280-182145-4
Date Collected: 09/28/23 10:11
Matrix: Water
Date Received: 09/29/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056		1	10 mL	10 mL	627894	09/29/23 14:55	EJS	EET DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	627895	09/29/23 14:55	EJS	EET DEN
Total/NA	Analysis	SM 2320B		1			628623	10/05/23 00:23	LL	EET DEN

Client Sample ID: LL1mw-084-230901-R
Lab Sample ID: 280-182145-5
Date Collected: 09/28/23 10:57
Matrix: Water
Date Received: 09/29/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056		1	10 mL	10 mL	627894	09/29/23 15:10	EJS	EET DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	627895	09/29/23 15:10	EJS	EET DEN
Total/NA	Analysis	SM 2320B		1			628623	10/05/23 00:32	LL	EET DEN

Client Sample ID: LL1mw-084-230902-GW-R
Lab Sample ID: 280-182145-6
Date Collected: 09/28/23 10:57
Matrix: Water
Date Received: 09/29/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056		1	10 mL	10 mL	627894	09/29/23 16:40	EJS	EET DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	627895	09/29/23 16:40	EJS	EET DEN
Total/NA	Analysis	SM 2320B		1			628623	10/05/23 00:27	LL	EET DEN

Lab Chronicle

Client: Leidos, Inc.
Project/Site: RVAAP FWGW

Job ID: 280-182145-1

Client Sample ID: FWGmw-021-230901-GW
Lab Sample ID: 280-182145-7
Date Collected: 09/28/23 11:37
Matrix: Water
Date Received: 09/29/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535	RE		485.6 mL	5 mL	629471	10/12/23 14:54	EH	EET DEN
Total/NA	Analysis	8330B	RE	1	1 mL	1 mL	629682	10/14/23 06:00	JPG	EET DEN
Total/NA	Prep	3535			493.8 mL	5 mL	628171	10/03/23 13:12	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	628897	10/07/23 21:52	JPG	EET DEN
Total/NA	Prep	3535	RE		485.6 mL	5 mL	629471	10/12/23 14:54	EH	EET DEN
Total/NA	Analysis	8330B	RE	1	1 mL	1 mL	629672	10/14/23 02:02	JPG	EET DEN
Total/NA	Prep	3535			493.8 mL	5 mL	628171	10/03/23 13:12	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	629183	10/11/23 07:20	JPG	EET DEN

Client Sample ID: LL3mw-245-230901-GW
Lab Sample ID: 280-182145-8
Date Collected: 09/28/23 11:56
Matrix: Water
Date Received: 09/29/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535	RE		472.1 mL	5 mL	629471	10/12/23 14:54	EH	EET DEN
Total/NA	Analysis	8330B	RE	1	1 mL	1 mL	629682	10/14/23 06:36	JPG	EET DEN
Total/NA	Prep	3535			486.8 mL	5 mL	628171	10/03/23 13:12	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	628897	10/07/23 22:15	JPG	EET DEN
Total/NA	Prep	3535	RE		472.1 mL	5 mL	629471	10/12/23 14:54	EH	EET DEN
Total/NA	Analysis	8330B	RE	1	1 mL	1 mL	629672	10/14/23 03:11	JPG	EET DEN

Client Sample ID: LL12mw-246-230901-GW
Lab Sample ID: 280-182145-9
Date Collected: 09/28/23 13:25
Matrix: Water
Date Received: 09/29/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	350.1		1	10 mL	10 mL	630033	10/16/23 14:41	MMP	EET DEN
Total/NA	Analysis	9056		1	10 mL	10 mL	627894	09/29/23 18:56	EJS	EET DEN

Client Sample ID: LL12MW-RB-246-2023
Lab Sample ID: 280-182145-10
Date Collected: 09/28/23 15:10
Matrix: Water
Date Received: 09/29/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	350.1		1	10 mL	10 mL	630033	10/16/23 14:50	MMP	EET DEN
Total/NA	Analysis	9056		1	10 mL	10 mL	627894	09/29/23 22:56	EJS	EET DEN

Client Sample ID: FWGmw-024-230901-GW
Lab Sample ID: 280-182145-11
Date Collected: 09/28/23 13:16
Matrix: Water
Date Received: 09/29/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			481.4 mL	5 mL	628171	10/03/23 13:12	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	628897	10/07/23 22:38	JPG	EET DEN

Lab Chronicle

Client: Leidos, Inc.
Project/Site: RVAAP FWGW

Job ID: 280-182145-1

Client Sample ID: FWGmw-024-230901-GW
Lab Sample ID: 280-182145-11
Date Collected: 09/28/23 13:16
Matrix: Water
Date Received: 09/29/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535	RE		486.6 mL	5 mL	629471	10/12/23 14:54	EH	EET DEN
Total/NA	Analysis	8330B	RE	1	1 mL	1 mL	629672	10/14/23 03:34	JPG	EET DEN

Client Sample ID: FWGmw-023-230901-GW
Lab Sample ID: 280-182145-12
Date Collected: 09/28/23 14:05
Matrix: Water
Date Received: 09/29/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			481.7 mL	5 mL	628171	10/03/23 13:12	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	628897	10/07/23 23:01	JPG	EET DEN
Total/NA	Prep	3535	RE		489 mL	5 mL	629471	10/12/23 14:54	EH	EET DEN
Total/NA	Analysis	8330B	RE	1	1 mL	1 mL	629672	10/14/23 03:57	JPG	EET DEN

Client Sample ID: LL10mw-003-230901-GW
Lab Sample ID: 280-182145-13
Date Collected: 09/28/23 14:50
Matrix: Water
Date Received: 09/29/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	628977	10/09/23 13:39	GPM	EET DEN

Client Sample ID: FWGTB-230901-TB003
Lab Sample ID: 280-182145-14
Date Collected: 09/28/23 14:45
Matrix: Water
Date Received: 09/29/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	628977	10/09/23 14:02	GPM	EET DEN

Laboratory References:
EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Accreditation/Certification Summary

Client: Leidos, Inc.
Project/Site: RVAAP FWGW

Job ID: 280-182145-1

Laboratory: Eurofins Denver

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	2907.01	10-31-23

Method Summary

Client: Leidos, Inc.
Project/Site: RVAAP FWGW

Job ID: 280-182145-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds (GC/MS)	SW846	EET DEN
8330B	Nitroaromatics and Nitramines (HPLC)	EPA	EET DEN
350.1	Nitrogen, Ammonia	EPA	EET DEN
9056	Anions, Ion Chromatography	SW846	EET DEN
9056A	Anions, Ion Chromatography	SW846	EET DEN
SM 2320B	Alkalinity	SM	EET DEN
3535	Solid-Phase Extraction (SPE)	SW846	EET DEN
5030B	Purge and Trap	SW846	EET DEN

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Sample Summary

Client: Leidos, Inc.
Job ID: 280-182145-1
Project/Site: RVAAP FWGW

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-182145-1	LL1mw-080-230901-GW-R	Water	09/28/23 09:07	09/29/23 09:35
280-182145-2	FWGmw-018-230901-GW	Water	09/28/23 09:41	09/29/23 09:35
280-182145-3	FWGmw-020-230901-GW	Water	09/28/23 09:55	09/29/23 09:35
280-182145-4	LL1mw-083-230901-GW-R	Water	09/28/23 10:11	09/29/23 09:35
280-182145-5	LL1mw-084-230901-R	Water	09/28/23 10:57	09/29/23 09:35
280-182145-6	LL1mw-084-230902-GW-R	Water	09/28/23 10:57	09/29/23 09:35
280-182145-7	FWGmw-021-230901-GW	Water	09/28/23 11:37	09/29/23 09:35
280-182145-8	LL3mw-245-230901-GW	Water	09/28/23 11:56	09/29/23 09:35
280-182145-9	LL12mw-246-230901-GW	Water	09/28/23 13:25	09/29/23 09:35
280-182145-10	LL12MW-RB-246-2023	Water	09/28/23 15:10	09/29/23 09:35
280-182145-11	FWGmw-024-230901-GW	Water	09/28/23 13:16	09/29/23 09:35
280-182145-12	FWGmw-023-230901-GW	Water	09/28/23 14:05	09/29/23 09:35
280-182145-13	LL10mw-003-230901-GW	Water	09/28/23 14:50	09/29/23 09:35
280-182145-14	FWGTB-230901-TB003	Water	09/28/23 14:45	09/29/23 09:35

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: VMS_MS13 Analysis Batch Number: 628923

Lab Sample ID: IC 280-628923/3 Client Sample ID:

Date Analyzed: 10/08/23 16:58 Lab File ID: MS13_006805.D GC Column: RXI-624SilMS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Vinyl chloride	2.00	Assign Peak	BMJ3	10/09/23 08:35

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 627290

Lab Sample ID: IC 280-627290/10 Client Sample ID:

Date Analyzed: 09/25/23 18:42 Lab File ID: 09250010.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Nitrotoluene	15.65	Baseline	LV5D	09/26/23 13:59
4-Nitrotoluene	15.73	Baseline	LV5D	09/26/23 13:59

Lab Sample ID: IC 280-627290/14 Client Sample ID:

Date Analyzed: 09/25/23 21:05 Lab File ID: 09250014.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	24.21	Baseline	LV5D	09/26/23 14:02

Lab Sample ID: IC 280-627290/15 Client Sample ID:

Date Analyzed: 09/25/23 21:42 Lab File ID: 09250015.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
DNX	6.13	Baseline	LV5D	09/26/23 14:00
HMX	6.77	Baseline	LV5D	09/26/23 14:00
MNX	7.62	Baseline	LV5D	09/26/23 14:00
Picric acid	8.65	Baseline	LV5D	09/26/23 14:00
RDX	9.00	Baseline	LV5D	09/26/23 14:00
PETN	24.23	Baseline	LV5D	09/26/23 14:02

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 627290

Lab Sample ID: IC 280-627290/16 Client Sample ID:

Date Analyzed: 09/25/23 22:18 Lab File ID: 09250016.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
DNX	6.14	Baseline	LV5D	09/26/23 14:00
HMX	6.78	Baseline	LV5D	09/26/23 14:00
MNX	7.63	Baseline	LV5D	09/26/23 14:00
Picric acid	8.69	Baseline	LV5D	09/26/23 14:00
RDX	9.02	Baseline	LV5D	09/26/23 14:00
PETN	24.22	Baseline	LV5D	09/26/23 14:02

Lab Sample ID: IC 280-627290/17 Client Sample ID:

Date Analyzed: 09/25/23 22:54 Lab File ID: 09250017.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.77	Baseline	LV5D	09/26/23 14:01
MNX	7.62	Baseline	LV5D	09/26/23 14:01
Picric acid	8.68	Baseline	LV5D	09/26/23 14:01
RDX	9.01	Baseline	LV5D	09/26/23 14:01
Nitrobenzene	11.55	Baseline	LV5D	09/26/23 14:01
1,2-Dinitrobenzene	12.48	Baseline	LV5D	09/26/23 14:01
3,5-Dinitroaniline	14.34	Baseline	LV5D	09/26/23 14:01
1,3-Dinitrobenzene	14.64	Baseline	LV5D	09/26/23 14:01
2-Nitrotoluene	15.68	Baseline	LV5D	09/26/23 14:02
4-Nitrotoluene	15.91	Unspecified		
4-Amino-2,6-dinitrotoluene	16.42	Baseline	LV5D	09/26/23 14:01
3-Nitrotoluene	16.74	Baseline	LV5D	09/26/23 14:01
2-Amino-4,6-dinitrotoluene	17.22	Baseline	LV5D	09/26/23 14:01
1,3,5-Trinitrobenzene	17.44	Baseline	LV5D	09/26/23 14:01
2,6-Dinitrotoluene	18.52	Baseline	LV5D	09/26/23 14:01
2,4-Dinitrotoluene	18.98	Baseline	LV5D	09/26/23 14:01
PETN	24.17	Baseline	LV5D	09/26/23 14:02

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 627290

Lab Sample ID: IC 280-627290/18 Client Sample ID:

Date Analyzed: 09/25/23 23:30 Lab File ID: 09250018.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.77	Baseline	LV5D	09/26/23 14:03
MNX	7.62	Baseline	LV5D	09/26/23 14:03
Picric acid	8.70	Baseline	LV5D	09/26/23 14:03
RDX	9.01	Baseline	LV5D	09/26/23 14:03
Nitrobenzene	11.55	Baseline	LV5D	09/26/23 14:03
1,2-Dinitrobenzene	12.49	Baseline	LV5D	09/26/23 14:03
3,5-Dinitroaniline	14.36	Baseline	LV5D	09/26/23 14:04
1,3-Dinitrobenzene	14.66	Baseline	LV5D	09/26/23 14:04
2-Nitrotoluene	15.70	Baseline	LV5D	09/26/23 14:04
4-Nitrotoluene	15.93	Baseline	LV5D	09/26/23 14:04
4-Amino-2,6-dinitrotoluene	16.44	Baseline	LV5D	09/26/23 14:04
3-Nitrotoluene	16.75	Baseline	LV5D	09/26/23 14:04
2-Amino-4,6-dinitrotoluene	17.24	Baseline	LV5D	09/26/23 14:04
1,3,5-Trinitrobenzene	17.45	Baseline	LV5D	09/26/23 14:04
2,6-Dinitrotoluene	18.56	Baseline	LV5D	09/26/23 14:04
2,4-Dinitrotoluene	19.02	Baseline	LV5D	09/26/23 14:04
PETN	24.18	Baseline	LV5D	09/26/23 14:02

Lab Sample ID: IC 280-627290/20 Client Sample ID:

Date Analyzed: 09/26/23 00:42 Lab File ID: 09250020.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	4.20	Peak assignment corrected	LV5D	09/26/23 14:14

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 627290

Lab Sample ID: IC 280-627290/21 Client Sample ID:

Date Analyzed: 09/26/23 01:18 Lab File ID: 09250021.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	4.21	Peak assignment corrected	LV5D	09/26/23 14:14

Lab Sample ID: IC 280-627290/22 Client Sample ID:

Date Analyzed: 09/26/23 01:54 Lab File ID: 09250022.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	4.22	Peak assignment corrected	LV5D	09/26/23 14:14

Lab Sample ID: IC 280-627290/23 Client Sample ID:

Date Analyzed: 09/26/23 02:30 Lab File ID: 09250023.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	4.23	Peak assignment corrected	LV5D	09/26/23 14:14

Lab Sample ID: IC 280-627290/24 Client Sample ID:

Date Analyzed: 09/26/23 03:06 Lab File ID: 09250024.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	4.22	Peak assignment corrected	LV5D	09/26/23 14:14

Lab Sample ID: IC 280-627290/25 Client Sample ID:

Date Analyzed: 09/26/23 03:42 Lab File ID: 09250025.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	4.23	Peak assignment corrected	LV5D	09/26/23 14:14

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 627290

Lab Sample ID: IC 280-627290/26 Client Sample ID:

Date Analyzed: 09/26/23 04:18 Lab File ID: 09250026.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	4.23	Peak assignment corrected	LV5D	09/26/23 14:14

Lab Sample ID: IC 280-627290/27 Client Sample ID:

Date Analyzed: 09/26/23 04:54 Lab File ID: 09250027.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	4.23	Peak assignment corrected	LV5D	09/26/23 14:14

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 629682

Lab Sample ID: CCV 280-629682/20 Client Sample ID:

Date Analyzed: 10/13/23 23:24 Lab File ID: 10130020.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Nitrotoluene	15.98	Baseline	K8YG	10/16/23 15:11
4-Nitrotoluene	16.21	Baseline	K8YG	10/16/23 15:11
2-Amino-4,6-dinitrotoluene	17.57	Baseline	K8YG	10/16/23 15:11
1,3,5-Trinitrobenzene	17.69	Baseline	K8YG	10/16/23 15:11

Lab Sample ID: CCV 280-629682/30 Client Sample ID:

Date Analyzed: 10/14/23 05:24 Lab File ID: 10130030.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	8.65	Baseline	K8YG	10/16/23 11:49
PETN	24.36	Baseline	K8YG	10/16/23 11:49

Lab Sample ID: 280-182145-7 RE Client Sample ID: FWGmw-021-230901-GW RE

Date Analyzed: 10/14/23 06:00 Lab File ID: 10130031.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Dinitrobenzene		Invalid Compound ID	K8YG	10/16/23 11:50
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	K8YG	10/16/23 11:50
4-Nitrotoluene		Invalid Compound ID	K8YG	10/16/23 11:50
RDX		Invalid Compound ID	K8YG	10/16/23 11:50
2-Amino-4,6-dinitrotoluene	17.39	Baseline	K8YG	10/16/23 11:50

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 629682

Lab Sample ID: 280-182145-8 RE Client Sample ID: LL3mw-245-230901-GW RE

Date Analyzed: 10/14/23 06:36 Lab File ID: 10130032.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.73	Baseline	K8YG	10/16/23 11:50
1,3,5-Trinitrobenzene		Invalid Compound ID	K8YG	10/16/23 11:51
2,6-diamino-4-nitrotoluene		Invalid Compound ID	K8YG	10/16/23 11:50
2,4,6-Trinitrotoluene	23.31	Baseline	K8YG	10/16/23 11:51

Lab Sample ID: CCV 280-629682/37 Client Sample ID:

Date Analyzed: 10/14/23 09:36 Lab File ID: 10130037.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3,5-Dinitroaniline	14.50	Baseline	K8YG	10/16/23 11:52
1,3-Dinitrobenzene	14.78	Baseline	K8YG	10/16/23 11:52
2-Nitrotoluene	15.88	Baseline	K8YG	10/16/23 11:52
4-Nitrotoluene	16.10	Baseline	K8YG	10/16/23 11:52
4-Amino-2,6-dinitrotoluene	16.63	Baseline	K8YG	10/16/23 11:52
3-Nitrotoluene	16.95	Baseline	K8YG	10/16/23 11:52
2-Amino-4,6-dinitrotoluene	17.44	Baseline	K8YG	10/16/23 11:52
1,3,5-Trinitrobenzene	17.60	Baseline	K8YG	10/16/23 11:52
2,6-Dinitrotoluene	18.76	Baseline	K8YG	10/16/23 11:52
2,4-Dinitrotoluene	19.20	Baseline	K8YG	10/16/23 11:52

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 617295

Lab Sample ID: IC 280-617295/11 Client Sample ID:

Date Analyzed: 06/23/23 17:53 Lab File ID: 06230011.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.46	Baseline	LV5D	06/23/23 18:20
HMX	6.59	Baseline	LV5D	06/23/23 18:20
DNX	6.80	Baseline	LV5D	06/23/23 18:19
MNX	7.22	Baseline	LV5D	06/23/23 18:20

Lab Sample ID: IC 280-617295/12 Client Sample ID:

Date Analyzed: 06/23/23 18:16 Lab File ID: 06230012.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.47	Baseline	LV5D	06/23/23 18:54
HMX	6.60	Baseline	LV5D	06/23/23 18:54
DNX	6.80	Baseline	LV5D	06/23/23 18:54

Lab Sample ID: IC 280-617295/13 Client Sample ID:

Date Analyzed: 06/23/23 18:39 Lab File ID: 06230013.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.47	Baseline	LV5D	06/23/23 19:10
HMX	6.59	Baseline	LV5D	06/23/23 19:10
DNX	6.80	Baseline	LV5D	06/23/23 19:10

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 617295

Lab Sample ID: IC 280-617295/14 Client Sample ID:

Date Analyzed: 06/23/23 19:02 Lab File ID: 06230014.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.47	Baseline	LV5D	06/23/23 19:38
HMX	6.60	Baseline	LV5D	06/23/23 19:38
DNX	6.81	Baseline	LV5D	06/23/23 19:38

Lab Sample ID: IC 280-617295/15 Client Sample ID:

Date Analyzed: 06/23/23 19:25 Lab File ID: 06230015.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	LV5D	06/23/23 20:05
HMX	6.60	Baseline	LV5D	06/23/23 20:05
DNX	6.81	Baseline	LV5D	06/23/23 20:05

Lab Sample ID: IC 280-617295/16 Client Sample ID:

Date Analyzed: 06/23/23 19:48 Lab File ID: 06230016.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.47	Baseline	LV5D	06/23/23 20:36
HMX	6.60	Baseline	LV5D	06/23/23 20:36
DNX	6.80	Baseline	LV5D	06/23/23 20:36

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 617295

Lab Sample ID: IC 280-617295/17 Client Sample ID:

Date Analyzed: 06/23/23 20:11 Lab File ID: 06230017.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.47	Baseline	LV5D	06/23/23 20:36
HMX	6.60	Baseline	LV5D	06/23/23 20:36
DNX	6.80	Baseline	LV5D	06/23/23 20:36
PETN	14.75	Baseline	LV5D	06/23/23 20:36

Lab Sample ID: IC 280-617295/18 Client Sample ID:

Date Analyzed: 06/23/23 20:34 Lab File ID: 06230018.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.47	Baseline	LV5D	06/23/23 21:02
HMX	6.59	Baseline	LV5D	06/23/23 21:02
DNX	6.80	Baseline	LV5D	06/23/23 21:02
PETN	14.72	Baseline	LV5D	06/23/23 21:02

Lab Sample ID: IC 280-617295/19 Client Sample ID:

Date Analyzed: 06/23/23 20:57 Lab File ID: 06230019.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.47	Baseline	LV5D	06/23/23 21:21
HMX	6.60	Baseline	LV5D	06/23/23 21:21
DNX	6.80	Baseline	LV5D	06/23/23 21:21
PETN	14.72	Unspecified		

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 617295

Lab Sample ID: ICV 280-617295/20 Client Sample ID:

Date Analyzed: 06/23/23 21:20 Lab File ID: 06230020.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.47	Baseline	LV5D	06/23/23 21:43
HMX	6.60	Baseline	LV5D	06/23/23 21:43
DNX	6.80	Baseline	LV5D	06/23/23 21:43

Lab Sample ID: IC 280-617295/21 Client Sample ID:

Date Analyzed: 06/23/23 21:43 Lab File ID: 06230021.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.47	Baseline	LV5D	06/24/23 10:41
2,4-diamino-6-nitrotoluene	6.66	Baseline	LV5D	06/24/23 10:41

Lab Sample ID: IC 280-617295/22 Client Sample ID:

Date Analyzed: 06/23/23 22:06 Lab File ID: 06230022.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.47	Baseline	LV5D	06/24/23 10:41
2,4-diamino-6-nitrotoluene	6.66	Baseline	LV5D	06/24/23 10:41

Lab Sample ID: IC 280-617295/23 Client Sample ID:

Date Analyzed: 06/23/23 22:29 Lab File ID: 06230023.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.47	Baseline	LV5D	06/24/23 10:42
2,4-diamino-6-nitrotoluene	6.67	Baseline	LV5D	06/24/23 10:42

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 617295

Lab Sample ID: IC 280-617295/24 Client Sample ID:

Date Analyzed: 06/23/23 22:52 Lab File ID: 06230024.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.47	Baseline	LV5D	06/24/23 10:42
2,4-diamino-6-nitrotoluene	6.67	Baseline	LV5D	06/24/23 10:42

Lab Sample ID: IC 280-617295/25 Client Sample ID:

Date Analyzed: 06/23/23 23:14 Lab File ID: 06230025.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.48	Baseline	LV5D	06/24/23 10:42
2,4-diamino-6-nitrotoluene	6.67	Baseline	LV5D	06/24/23 10:42

Lab Sample ID: IC 280-617295/26 Client Sample ID:

Date Analyzed: 06/23/23 23:37 Lab File ID: 06230026.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.47	Baseline	LV5D	06/24/23 10:42
2,4-diamino-6-nitrotoluene	6.66	Baseline	LV5D	06/24/23 10:42

Lab Sample ID: IC 280-617295/27 Client Sample ID:

Date Analyzed: 06/24/23 00:00 Lab File ID: 06230027.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.48	Baseline	LV5D	06/24/23 12:55
2,4-diamino-6-nitrotoluene	6.67	Baseline	LV5D	06/24/23 12:55

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 617295

Lab Sample ID: IC 280-617295/28 Client Sample ID:

Date Analyzed: 06/24/23 00:23 Lab File ID: 06230028.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.47	Baseline	LV5D	06/24/23 10:43
2,4-diamino-6-nitrotoluene	6.66	Baseline	LV5D	06/24/23 10:43

Lab Sample ID: ICV 280-617295/29 Client Sample ID:

Date Analyzed: 06/24/23 00:46 Lab File ID: 06230029.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.47	Baseline	LV5D	06/24/23 10:43
2,4-diamino-6-nitrotoluene	6.66	Baseline	LV5D	06/24/23 10:43

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 628897

Lab Sample ID: CCV 280-628897/8 Client Sample ID:

Date Analyzed: 10/07/23 14:13 Lab File ID: 10070008.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.45	Baseline	LV5D	10/07/23 14:42
HMX	6.57	Baseline	LV5D	10/07/23 14:42
DNX	6.78	Baseline	LV5D	10/07/23 14:42

Lab Sample ID: MB 280-628171/1-A Client Sample ID:

Date Analyzed: 10/07/23 14:59 Lab File ID: 10070011.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.51	Baseline	LV5D	10/07/23 15:25

Lab Sample ID: CCV 280-628897/21 Client Sample ID:

Date Analyzed: 10/07/23 18:48 Lab File ID: 10070021.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.45	Baseline	K8YG	10/09/23 10:47
HMX	6.58	Baseline	K8YG	10/09/23 10:46
DNX	6.77	Baseline	K8YG	10/09/23 10:47

Lab Sample ID: CCV 280-628897/22 Client Sample ID:

Date Analyzed: 10/07/23 19:11 Lab File ID: 10070022.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.44	Baseline	K8YG	10/09/23 10:47
2,4-diamino-6-nitrotoluene	6.63	Baseline	K8YG	10/09/23 10:47

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 628897

Lab Sample ID: 280-182145-7 Client Sample ID: FWGmw-021-230901-GW

Date Analyzed: 10/07/23 21:52 Lab File ID: 10070029.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.58	Baseline	K8YG	10/09/23 10:59
1,2-Dinitrobenzene	8.52	Baseline	K8YG	10/09/23 10:59
1,3-Dinitrobenzene		Invalid Compound ID	K8YG	10/09/23 10:59

Lab Sample ID: 280-182145-8 Client Sample ID: LL3mw-245-230901-GW

Date Analyzed: 10/07/23 22:15 Lab File ID: 10070030.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	K8YG	10/09/23 11:02
1,2-Dinitrobenzene	8.52	Baseline	K8YG	10/09/23 11:02
MNX		Invalid Compound ID	K8YG	10/09/23 11:02

Lab Sample ID: 280-182145-11 Client Sample ID: FWGmw-024-230901-GW

Date Analyzed: 10/07/23 22:38 Lab File ID: 10070031.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.51	Baseline	K8YG	10/09/23 11:02
1,3,5-Trinitrobenzene	8.62	Baseline	K8YG	10/09/23 11:03
1,3-Dinitrobenzene		Invalid Compound ID	K8YG	10/09/23 11:03
HMX		Invalid Compound ID	K8YG	10/09/23 11:02

Lab Sample ID: 280-182145-12 Client Sample ID: FWGmw-023-230901-GW

Date Analyzed: 10/07/23 23:01 Lab File ID: 10070032.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.58	Baseline	K8YG	10/09/23 11:03
1,2-Dinitrobenzene	8.52	Baseline	K8YG	10/09/23 11:03

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 628897

Lab Sample ID: CCV 280-628897/33 Client Sample ID:

Date Analyzed: 10/07/23 23:24 Lab File ID: 10070033.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.44	Baseline	K8YG	10/09/23 11:03
HMX	6.57	Baseline	K8YG	10/09/23 11:03
DNX	6.77	Baseline	K8YG	10/09/23 11:03
MNX	7.20	Baseline	K8YG	10/09/23 11:04

Lab Sample ID: CCV 280-628897/34 Client Sample ID:

Date Analyzed: 10/07/23 23:47 Lab File ID: 10070034.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.44	Baseline	K8YG	10/09/23 11:04
2,4-diamino-6-nitrotoluene	6.63	Baseline	K8YG	10/09/23 11:04

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 629672

Lab Sample ID: CCV 280-629672/16 Client Sample ID:

Date Analyzed: 10/13/23 17:15 Lab File ID: 10130016.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.45	Baseline	LV5D	10/13/23 18:54
HMX	6.57	Baseline	LV5D	10/13/23 18:54
DNX	6.77	Baseline	LV5D	10/13/23 18:54

Lab Sample ID: MB 280-629471/1-A Client Sample ID:

Date Analyzed: 10/13/23 18:00 Lab File ID: 10130018.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.53	Baseline	K8YG	10/16/23 10:03

Lab Sample ID: LCS 280-629471/2-A Client Sample ID:

Date Analyzed: 10/13/23 18:23 Lab File ID: 10130019.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.44	Baseline	K8YG	10/16/23 10:09
HMX	6.57	Baseline	K8YG	10/16/23 10:09
DNX	6.77	Baseline	K8YG	10/16/23 10:10
1,2-Dinitrobenzene	8.52	Baseline	K8YG	10/16/23 10:10
1,3,5-Trinitrobenzene	8.65	Baseline	K8YG	10/16/23 10:10
1,3-Dinitrobenzene	9.26	Baseline	K8YG	10/16/23 10:11
Nitrobenzene	9.63	Baseline	K8YG	10/16/23 10:10
3,5-Dinitroaniline	9.85	Baseline	K8YG	10/16/23 10:10
Tetryl	9.98	Baseline	K8YG	10/16/23 10:10
3-Nitrotoluene	13.39	Baseline	K8YG	10/16/23 10:11

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 629672

Lab Sample ID: LCSD 280-629471/3-A Client Sample ID:

Date Analyzed: 10/13/23 18:46 Lab File ID: 10130020.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.44	Baseline	LV5D	10/13/23 19:20
HMX	6.57	Baseline	LV5D	10/13/23 19:20
DNX	6.77	Baseline	LV5D	10/13/23 19:20
1,2-Dinitrobenzene	8.52	Baseline	K8YG	10/16/23 10:43
1,3,5-Trinitrobenzene	8.65	Baseline	K8YG	10/16/23 10:43

Lab Sample ID: LCS 280-629471/4-A Client Sample ID:

Date Analyzed: 10/13/23 19:09 Lab File ID: 10130021.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4-diamino-6-nitrotoluene	6.63	Baseline	K8YG	10/16/23 10:47

Lab Sample ID: LCSD 280-629471/5-A Client Sample ID:

Date Analyzed: 10/13/23 19:32 Lab File ID: 10130022.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.52	Baseline	K8YG	10/16/23 10:48

Lab Sample ID: CCV 280-629672/28 Client Sample ID:

Date Analyzed: 10/13/23 21:50 Lab File ID: 10130028.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.44	Baseline	K8YG	10/16/23 10:52
HMX	6.57	Baseline	K8YG	10/16/23 10:52
DNX	6.77	Baseline	K8YG	10/16/23 10:52
1,3,5-Trinitrobenzene	8.64	Baseline	K8YG	10/16/23 10:52

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 629672

Lab Sample ID: CCV 280-629672/29 Client Sample ID:

Date Analyzed: 10/13/23 22:13 Lab File ID: 10130029.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.44	Baseline	K8YG	10/16/23 10:53
2,4-diamino-6-nitrotoluene	6.63	Baseline	K8YG	10/16/23 10:53

Lab Sample ID: 280-182145-7 RE Client Sample ID: FWGmw-021-230901-GW RE

Date Analyzed: 10/14/23 02:02 Lab File ID: 10130039.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.56	Baseline	K8YG	10/16/23 10:57
RDX	7.60	Baseline	K8YG	10/16/23 10:57
1,2-Dinitrobenzene	8.52	Baseline	K8YG	10/16/23 10:58
1,3,5-Trinitrobenzene		Invalid Compound ID	K8YG	10/16/23 10:58
1,3-Dinitrobenzene		Invalid Compound ID	K8YG	10/16/23 10:58

Lab Sample ID: CCV 280-629672/40 Client Sample ID:

Date Analyzed: 10/14/23 02:25 Lab File ID: 10130040.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.44	Baseline	K8YG	10/16/23 10:58
HMX	6.57	Baseline	K8YG	10/16/23 10:58
DNX	6.76	Baseline	K8YG	10/16/23 10:58
1,2-Dinitrobenzene	8.51	Baseline	K8YG	10/16/23 10:59
1,3,5-Trinitrobenzene	8.64	Baseline	K8YG	10/16/23 10:59
2-Nitrotoluene	12.41	Baseline	K8YG	10/16/23 10:59
4-Nitrotoluene	12.82	Baseline	K8YG	10/16/23 10:59
3-Nitrotoluene	13.38	Baseline	K8YG	10/16/23 10:59

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 629672

Lab Sample ID: 280-182145-11 RE Client Sample ID: FWGmw-024-230901-GW RE

Date Analyzed: 10/14/23 03:34 Lab File ID: 10130043.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.51	Baseline	K8YG	10/16/23 11:00
HMX		Invalid Compound ID	K8YG	10/16/23 11:00

Lab Sample ID: 280-182145-12 RE Client Sample ID: FWGmw-023-230901-GW RE

Date Analyzed: 10/14/23 03:57 Lab File ID: 10130044.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.58	Baseline	K8YG	10/16/23 11:00

Lab Sample ID: CCV 280-629672/47 Client Sample ID:

Date Analyzed: 10/14/23 05:06 Lab File ID: 10130047.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.43	Baseline	K8YG	10/16/23 11:01
HMX	6.57	Baseline	K8YG	10/16/23 11:01
DNX	6.77	Baseline	K8YG	10/16/23 11:01
1,2-Dinitrobenzene	8.51	Baseline	K8YG	10/16/23 11:01
1,3,5-Trinitrobenzene	8.63	Baseline	K8YG	10/16/23 11:01
4-Nitrotoluene	12.81	Baseline	K8YG	10/16/23 11:02
3-Nitrotoluene	13.36	Baseline	K8YG	10/16/23 11:02

Lab Sample ID: CCV 280-629672/48 Client Sample ID:

Date Analyzed: 10/14/23 05:29 Lab File ID: 10130048.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.43	Baseline	K8YG	10/16/23 11:07
2,4-diamino-6-nitrotoluene	6.62	Baseline	K8YG	10/16/23 11:07

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 626878

Lab Sample ID: IC 280-626878/10 Client Sample ID:

Date Analyzed: 09/20/23 20:01 Lab File ID: 09200010.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	8.36	Peak assignment corrected	LV5D	09/21/23 11:52
3,5-Dinitroaniline	14.65	Baseline Smoothing	LV5D	09/21/23 11:52
1,3-Dinitrobenzene	14.80	Baseline Smoothing	LV5D	09/21/23 11:52
2-Nitrotoluene	16.01	Baseline Smoothing	LV5D	09/21/23 11:52
4-Nitrotoluene	16.09	Baseline Smoothing	LV5D	09/21/23 11:52
1,3,5-Trinitrobenzene	17.64	Baseline Smoothing	LV5D	09/21/23 11:52
2-Amino-4,6-dinitrotoluene	17.64	Baseline Smoothing	LV5D	09/21/23 11:52

Lab Sample ID: IC 280-626878/11 Client Sample ID:

Date Analyzed: 09/20/23 20:36 Lab File ID: 09200011.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	8.44	Baseline Smoothing	LV5D	09/21/23 11:53
2-Amino-4,6-dinitrotoluene	17.67	Baseline Smoothing	LV5D	09/21/23 11:52
1,3,5-Trinitrobenzene	17.68	Baseline Smoothing	LV5D	09/21/23 11:52
PETN	24.94	Baseline Smoothing	LV5D	09/21/23 16:04

Lab Sample ID: IC 280-626878/12 Client Sample ID:

Date Analyzed: 09/20/23 21:11 Lab File ID: 09200012.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	8.48	Baseline Smoothing	LV5D	09/21/23 11:53
2-Amino-4,6-dinitrotoluene	17.67	Baseline Smoothing	LV5D	09/21/23 11:53
1,3,5-Trinitrobenzene	17.70	Baseline Smoothing	LV5D	09/21/23 11:53
PETN	24.96	Baseline Smoothing	LV5D	09/21/23 16:04

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 626878

Lab Sample ID: IC 280-626878/13 Client Sample ID:

Date Analyzed: 09/20/23 21:45 Lab File ID: 09200013.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	8.53	Baseline Smoothing	LV5D	09/21/23 11:53
2-Amino-4,6-dinitrotoluene	17.67	Baseline Smoothing	LV5D	09/21/23 11:53
1,3,5-Trinitrobenzene	17.70	Baseline Smoothing	LV5D	09/21/23 11:53
PETN	24.96	Baseline Smoothing	LV5D	09/21/23 16:04

Lab Sample ID: IC 280-626878/14 Client Sample ID:

Date Analyzed: 09/20/23 22:20 Lab File ID: 09200014.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	8.55	Baseline Smoothing	LV5D	09/21/23 11:53
2-Amino-4,6-dinitrotoluene	17.69	Baseline Smoothing	LV5D	09/21/23 11:53
1,3,5-Trinitrobenzene	17.70	Baseline Smoothing	LV5D	09/21/23 11:53
PETN	24.96	Baseline Smoothing	LV5D	09/21/23 16:04

Lab Sample ID: IC 280-626878/15 Client Sample ID:

Date Analyzed: 09/20/23 22:55 Lab File ID: 09200015.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	17.71	Unspecified		
1,3,5-Trinitrobenzene	17.74	Baseline Smoothing	LV5D	09/21/23 11:53
PETN	24.97	Baseline Smoothing	LV5D	09/21/23 16:04

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 626878

Lab Sample ID: IC 280-626878/16 Client Sample ID:

Date Analyzed: 09/20/23 23:30 Lab File ID: 09200016.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	17.72	Unspecified		
1,3,5-Trinitrobenzene	17.73	Baseline Smoothing	LV5D	09/21/23 11:54
PETN	25.00	Baseline Smoothing	LV5D	09/21/23 16:04

Lab Sample ID: IC 280-626878/17 Client Sample ID:

Date Analyzed: 09/21/23 00:05 Lab File ID: 09200017.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	17.71	Unspecified		
1,3,5-Trinitrobenzene	17.73	Baseline Smoothing	LV5D	09/21/23 11:54
PETN	24.99	Baseline Smoothing	LV5D	09/21/23 16:04

Lab Sample ID: IC 280-626878/18 Client Sample ID:

Date Analyzed: 09/21/23 00:40 Lab File ID: 09200018.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	8.64	Baseline Smoothing	LV5D	09/21/23 11:54
2-Nitrotoluene	16.10	Baseline Smoothing	LV5D	09/21/23 11:54
4-Nitrotoluene	16.32	Unspecified		
2-Amino-4,6-dinitrotoluene	17.73	Unspecified		
1,3,5-Trinitrobenzene	17.74	Baseline Smoothing	LV5D	09/21/23 11:54
PETN	25.01	Baseline Smoothing	LV5D	09/21/23 16:04

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 626878

Lab Sample ID: ICV 280-626878/19 Client Sample ID:

Date Analyzed: 09/21/23 01:15 Lab File ID: 09200019.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	17.69	Baseline Smoothing	LV5D	09/21/23 11:54
1,3,5-Trinitrobenzene	17.70	Unspecified		
PETN	24.97	Baseline Smoothing	LV5D	09/21/23 16:04

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 629183

Lab Sample ID: CCV 280-629183/29 Client Sample ID:

Date Analyzed: 10/11/23 05:01 Lab File ID: 10100029.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	17.54	Split Peak	K8YG	10/11/23 11:22
1,3,5-Trinitrobenzene	17.57	Split Peak	K8YG	10/11/23 11:22

Lab Sample ID: 280-182145-7 Client Sample ID: FWGmw-021-230901-GW

Date Analyzed: 10/11/23 07:20 Lab File ID: 10100033.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3,5-Trinitrobenzene		Invalid Compound ID	K8YG	10/11/23 11:33
1,3-Dinitrobenzene		Invalid Compound ID	K8YG	10/11/23 11:32
2,6-Dinitrotoluene		Invalid Compound ID	K8YG	10/11/23 11:33
2-Nitrotoluene		Invalid Compound ID	K8YG	10/11/23 11:32
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	K8YG	10/11/23 11:32

Lab Sample ID: CCV 280-629183/35 Client Sample ID:

Date Analyzed: 10/11/23 08:30 Lab File ID: 10100035.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	17.51	Split Peak	K8YG	10/11/23 11:33
1,3,5-Trinitrobenzene	17.56	Split Peak	K8YG	10/11/23 11:33

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Batch Number: 623067

Lab Sample ID: STD1 280-623067/1 IC Client Sample ID:

Date Analyzed: 08/16/23 08:23 Lab File ID: Info 2_DENPC179_Anions_2 GC Column: Metrosepp A ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Orthophosphate as P	8.59	Baseline Smoothing	LVW8	08/16/23 10:42

Lab Sample ID: STD2 280-623067/2 IC Client Sample ID:

Date Analyzed: 08/16/23 08:38 Lab File ID: Info 2_DENPC179_Anions_2 GC Column: Metrosepp A ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Orthophosphate as P	8.58	Baseline Smoothing	LVW8	08/16/23 10:36

Lab Sample ID: STD3 280-623067/3 IC Client Sample ID:

Date Analyzed: 08/16/23 08:54 Lab File ID: Info 2_DENPC179_Anions_2 GC Column: Metrosepp A ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Orthophosphate as P	8.57	Baseline Smoothing	LVW8	08/16/23 10:27

Lab Sample ID: STD4 280-623067/4 IC Client Sample ID:

Date Analyzed: 08/16/23 09:09 Lab File ID: Info 2_DENPC179_Anions_2 GC Column: Metrosepp A ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Orthophosphate as P	8.54	Baseline Smoothing	LVW8	08/16/23 10:28

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Batch Number: 623068

Lab Sample ID: STD1 280-623068/1 IC Client Sample ID:

Date Analyzed: 08/16/23 08:23 Lab File ID: Info 2_DENPC179_Anions_2 GC Column: Metrosepp A ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.07	Baseline Smoothing	LVW8	08/16/23 10:30
Sulfate	9.64	Baseline Smoothing	LVW8	08/16/23 10:46

Lab Sample ID: STD2 280-623068/2 IC Client Sample ID:

Date Analyzed: 08/16/23 08:38 Lab File ID: Info 2_DENPC179_Anions_2 GC Column: Metrosepp A ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.08	Baseline Smoothing	LVW8	08/16/23 10:30
Sulfate	9.64	Baseline Smoothing	LVW8	08/16/23 10:36

Lab Sample ID: STD3 280-623068/3 IC Client Sample ID:

Date Analyzed: 08/16/23 08:54 Lab File ID: Info 2_DENPC179_Anions_2 GC Column: Metrosepp A ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.08	Baseline Smoothing	LVW8	08/16/23 10:30
Sulfate	9.64	Baseline Smoothing	LVW8	08/16/23 10:27

Lab Sample ID: STD4 280-623068/4 IC Client Sample ID:

Date Analyzed: 08/16/23 09:09 Lab File ID: Info 2_DENPC179_Anions_2 GC Column: Metrosepp A ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.08	Baseline Smoothing	LVW8	08/16/23 10:30
Sulfate	9.63	Baseline Smoothing	LVW8	08/16/23 10:28

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Batch Number: 623068

Lab Sample ID: STD5 280-623068/5 IC Client Sample ID:

Date Analyzed: 08/16/23 09:24 Lab File ID: Info 2_DENPC179_Anions_2 GC Column: Metrosepp A ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.09	Baseline Smoothing	LVW8	08/16/23 10:30

Lab Sample ID: STD6 280-623068/6 IC Client Sample ID:

Date Analyzed: 08/16/23 09:39 Lab File ID: Info 2_DENPC179_Anions_2 GC Column: Metrosepp A ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.09	Baseline Smoothing	LVW8	08/16/23 10:29

Lab Sample ID: ICV 280-623068/8 Client Sample ID:

Date Analyzed: 08/16/23 10:08 Lab File ID: Info 2_DENPC179_Anions_2 GC Column: Metrosepp A ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.08	Baseline Smoothing	LVW8	08/16/23 10:56

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
350.1 cal_00600	10/19/23	10/12/23	Di Water, Lot na	100 mL	NH3 CAL STD_00035	10 mL	Ammonia as N	100 mg/L
.NH3 CAL STD_00035	01/31/24		Ricca, Lot 4208D17		(Purchased Reagent)		Ammonia as N	1000 mg/L
350.1 ICV_00581	10/19/23	10/12/23	na, Lot na	100 mL	NH3 ICV STD_00034	10 mL	Ammonia as N	100.2 mg/L
.NH3 ICV STD_00034	01/25/25		Inorganic Ventures, Lot S2-NH700817		(Purchased Reagent)		Ammonia as N	1002 mg/L
8330 DMT_00013	08/24/23	02/24/23	Acetonitrile, Lot ACN_237	5 mL	MNX,TNX,DNX_00076	1 mL	DNX	20.02 ug/mL
							MNX	23.34 ug/mL
							TNX	20.06 ug/mL
.MNX,TNX,DNX_00076	02/29/24		Agilent, Lot 0006725091		(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.3 ug/mL
8330 DMT_00015	01/20/24	07/20/23	Acetonitrile, Lot 222063	5 mL	MNX,TNX,DNX_00080	1 mL	DNX	20.02 ug/mL
							MNX	23.34 ug/mL
							TNX	20.06 ug/mL
.MNX,TNX,DNX_00080	02/29/24		Agilent, Lot 0006725091		(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.3 ug/mL
8330 LCS_00127	11/30/23	05/31/23	Acetonitrile, Lot Acetonitrile_00079	100 mL	3,5-DNA Stock_00043	1 mL	3,5-Dinitroaniline	10 ug/mL
					8330_NG_Stk_00132	1 mL	Nitroglycerin	100 ug/mL
					8330_NG_Stk_00133	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN_Stk_00137	1 mL	PETN	100 ug/mL
					8330_PETN_Stk_00138	1 mL	PETN	100 ug/mL
					8330LCSMix1_00142	1 mL	1,3,5-Trinitrobenzene	10 ug/mL
							1,3-Dinitrobenzene	10 ug/mL
							2,4,6-Trinitrotoluene	10 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10 ug/mL
							RDX	10 ug/mL
					8330LCSmix2_00041	1 mL	2,6-Dinitrotoluene	10 ug/mL
							2-Amino-4,6-dinitrotoluene	10 ug/mL
							2-Nitrotoluene	10 ug/mL
							3-Nitrotoluene	10 ug/mL
							4-Amino-2,6-dinitrotoluene	10 ug/mL
							4-Nitrotoluene	10 ug/mL
							Tetryl	10 ug/mL
.3,5-DNA Stock_00043	08/31/27		Restek, Lot A0193965		(Purchased Reagent)		3,5-Dinitroaniline	1000 ug/mL
.8330_NG_Stk_00132	02/17/26		Restek, Lot A0194930		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_NG_Stk_00133	02/17/26		Restek, Lot A0194930		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00137	08/31/25		Restek, Lot A0188550		(Purchased Reagent)		PETN	5000 ug/mL
.8330_PETN_Stk_00138	08/31/25		Restek, Lot A0188550		(Purchased Reagent)		PETN	5000 ug/mL
.8330LCSMix1_00142	04/30/27		Restek, Lot A0183848		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL

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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
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
.8330LCSmix2_00041	12/31/27		Restek, Lot A0192237		(Purchased Reagent)		2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							Tetryl	1000 ug/mL
8330 LCS_00130	01/01/24	08/09/23	Acetonitrile, Lot Acetonitrile_00080	100 mL	3,5-DNA Stock_00046	1 mL	3,5-Dinitroaniline	10 ug/mL
					8330_NG_Stk_00137	1.2 mL	Nitroglycerin	100 ug/mL
					8330_NG_Stk_00138	0.8 mL	Nitroglycerin	100 ug/mL
					8330_PETN_Stk_00141	0.4 mL	PETN	100 ug/mL
					8330_PETN_Stk_00144	1.4 mL	PETN	100 ug/mL
					8330_PETN_Stk_00145	0.2 mL	PETN	100 ug/mL
					8330LCSMix1_00145	1 mL	1,3,5-Trinitrobenzene	10 ug/mL
							1,3-Dinitrobenzene	10 ug/mL
							2,4,6-Trinitrotoluene	10 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10 ug/mL
							RDX	10 ug/mL
					8330LCSmix2_00043	1 mL	2,6-Dinitrotoluene	10 ug/mL
							2-Amino-4,6-dinitrotoluene	10 ug/mL
							2-Nitrotoluene	10 ug/mL
							3-Nitrotoluene	10 ug/mL
							4-Amino-2,6-dinitrotoluene	10 ug/mL
							4-Nitrotoluene	10 ug/mL
							Tetryl	10 ug/mL
.3,5-DNA Stock_00046	08/09/24		Restek, Lot A0193965		(Purchased Reagent)		3,5-Dinitroaniline	1000 ug/mL
.8330_NG_Stk_00137	08/09/24		Restek, Lot A0194930		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_NG_Stk_00138	08/09/24		Restek, Lot A0194930		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00141	07/01/24		Restek, Lot A0197735		(Purchased Reagent)		PETN	5000 ug/mL
.8330_PETN_Stk_00144	08/09/24		Restek, Lot A0197735		(Purchased Reagent)		PETN	5000 ug/mL
.8330_PETN_Stk_00145	08/09/24		Restek, Lot A0198972		(Purchased Reagent)		PETN	5000 ug/mL
.8330LCSMix1_00145	08/09/24		Restek, Lot A0163590		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
.8330LCSmix2_00043	08/09/24		Restek, Lot A0192237		(Purchased Reagent)		2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							Tetryl	1000 ug/mL
8330 LCS_00131	03/22/24	09/22/23	Acetonitrile, Lot Acetonitrile_00080	100 mL	3,5-DNA Stock_00047	1 mL	3,5-Dinitroaniline	10 ug/mL
					8330_NG_Stk_00139	1 mL	Nitroglycerin	100 ug/mL
					8330_NG_Stk_00140	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN_Stk_00145	1 mL	PETN	100 ug/mL
					8330_PETN_Stk_00146	1 mL	PETN	100 ug/mL
					8330LCSMix1_00146	1 mL	1,3,5-Trinitrobenzene	10 ug/mL
							1,3-Dinitrobenzene	10 ug/mL
							2,4,6-Trinitrotoluene	10 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10 ug/mL
							RDX	10 ug/mL
					8330LCSmix2_00044	1 mL	2,6-Dinitrotoluene	10 ug/mL
							2-Amino-4,6-dinitrotoluene	10 ug/mL
							2-Nitrotoluene	10 ug/mL
							3-Nitrotoluene	10 ug/mL
							4-Amino-2,6-dinitrotoluene	10 ug/mL
							4-Nitrotoluene	10 ug/mL
							Tetryl	10 ug/mL
					PicricARestek_00119	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.3,5-DNA Stock_00047	09/22/24		Restek, Lot A0193965		(Purchased Reagent)		3,5-Dinitroaniline	1000 ug/mL
.8330_NG_Stk_00139	09/22/24		Restek, Lot A0194930		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_NG_Stk_00140	09/22/24		Restek, Lot A0200560		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00145	08/09/24		Restek, Lot A0198972		(Purchased Reagent)		PETN	5000 ug/mL
.8330_PETN_Stk_00146	09/22/24		Restek, Lot A0198972		(Purchased Reagent)		PETN	5000 ug/mL
.8330LCSMix1_00146	09/22/24		Restek, Lot A0163590		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
.8330LCSmix2_00044	09/22/24		Restek, Lot A0192237		(Purchased Reagent)		2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							Tetryl	1000 ug/mL
.PicricARestek_00119	09/22/24		Restek, Lot A0183202		(Purchased Reagent)		2,4,6-Trinitrophenol	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
8330_ADDs_00037	11/04/23	05/04/23	Acetonitrile, Lot ACN_237	5 mL	2,4Diamino6NT_00095	1 mL	2,4-diamino-6-nitrotoluene	20 ug/mL
					2,6Diamino4NT_00096	1 mL	2,6-diamino-4-nitrotoluene	20 ug/mL
.2,4Diamino6NT_00095	04/10/24	AccuStandard, Lot 220121267-01			(Purchased Reagent)		2,4-diamino-6-nitrotoluene	100 ug/mL
.2,6Diamino4NT_00096	05/04/24	AccuStandard, Lot 222051002			(Purchased Reagent)		2,6-diamino-4-nitrotoluene	100 ug/mL
8330_ADDs_00038	04/10/24	10/13/23	Acetonitrile, Lot 233272	5 mL	2,4Diamino6NT_00096	1 mL	2,4-diamino-6-nitrotoluene	20 ug/mL
					2,6Diamino4NT_00097	1 mL	2,6-diamino-4-nitrotoluene	20 ug/mL
.2,4Diamino6NT_00096	04/10/24	AccuStandard, Lot 220121267-01			(Purchased Reagent)		2,4-diamino-6-nitrotoluene	100 ug/mL
.2,6Diamino4NT_00097	06/03/24	AccuStandard, Lot 222051002			(Purchased Reagent)		2,6-diamino-4-nitrotoluene	100 ug/mL
8330_OP_DMT_00021	02/29/24	06/21/23	Acetonitrile, Lot Acetonitrile_00077	10 mL	MNX,TNX,DNX_00078	1 mL	DNX	10.01 ug/mL
							MNX	11.67 ug/mL
							TNX	10.03 ug/mL
.MNX,TNX,DNX_00078	02/29/24	Agilent, Lot 0006725091			(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.3 ug/mL
8330_OP_DMT_00022	03/31/24	08/31/23	Acetonitrile, Lot Acetonitrile_00080	10 mL	MNX,TNX,DNX_00081	1 mL	DNX	10.04 ug/mL
							MNX	11.71 ug/mL
							TNX	10.01 ug/mL
.MNX,TNX,DNX_00081	03/31/24	Agilent, Lot 0006731787			(Purchased Reagent)		DNX	100.4 ug/mL
							MNX	117.1 ug/mL
							TNX	100.1 ug/mL
8330_OP_DMT_00024	03/31/24	10/03/23	Acetonitrile, Lot Acetonitrile_00080	10 mL	MNX,TNX,DNX_00083	1 mL	DNX	10.04 ug/mL
							MNX	11.71 ug/mL
							TNX	10.01 ug/mL
.MNX,TNX,DNX_00083	03/31/24	Agilent, Lot 0006731787			(Purchased Reagent)		DNX	100.4 ug/mL
							MNX	117.1 ug/mL
							TNX	100.1 ug/mL
8330DiaminLCS_00058	04/10/24	06/08/23	Acetonitrile, Lot Acetonitrile_00077	25 mL	2,4Diamino6NT_00103	1 mL	2,4-diamino-6-nitrotoluene	10 ug/mL
					2,4Diamino6NT_00104	1 mL	2,4-diamino-6-nitrotoluene	10 ug/mL
					2,4Diamino6NT_00105	0.5 mL	2,4-diamino-6-nitrotoluene	10 ug/mL
					2,6Diamino4NT_00106	1 mL	2,6-diamino-4-nitrotoluene	10 ug/mL
					2,6Diamino4NT_00107	1 mL	2,6-diamino-4-nitrotoluene	10 ug/mL
					2,6Diamino4NT_00108	0.5 mL	2,6-diamino-4-nitrotoluene	10 ug/mL
.2,4Diamino6NT_00103	04/10/24	AccuStandard, Lot 220121267-01			(Purchased Reagent)		2,4-diamino-6-nitrotoluene	100 ug/mL
.2,4Diamino6NT_00104	04/10/24	AccuStandard, Lot 220121267-01			(Purchased Reagent)		2,4-diamino-6-nitrotoluene	100 ug/mL
.2,4Diamino6NT_00105	04/10/24	AccuStandard, Lot 220121267-01			(Purchased Reagent)		2,4-diamino-6-nitrotoluene	100 ug/mL
.2,6Diamino4NT_00106	06/03/24	AccuStandard, Lot 222051002			(Purchased Reagent)		2,6-diamino-4-nitrotoluene	100 ug/mL
.2,6Diamino4NT_00107	06/03/24	AccuStandard, Lot 222051002			(Purchased Reagent)		2,6-diamino-4-nitrotoluene	100 ug/mL
.2,6Diamino4NT_00108	06/03/24	AccuStandard, Lot 222051002			(Purchased Reagent)		2,6-diamino-4-nitrotoluene	100 ug/mL
8330DiaminLCS_00059	04/10/24	07/05/23	Acetonitrile, Lot Acetonitrile_00077	10 mL	2,4Diamino6NT_00106	1 mL	2,4-diamino-6-nitrotoluene	20 ug/mL

REAGENT TRACEABILITY SUMMARY

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					2,4Diamino6NT_00107	1 mL	2,4-diamino-6-nitrotoluene	20 ug/mL
					2,6Diamino4NT_00109	1 mL	2,6-diamino-4-nitrotoluene	20 ug/mL
					2,6Diamino4NT_00112	1 mL	2,6-diamino-4-nitrotoluene	20 ug/mL
.2,4Diamino6NT_00106	04/10/24	AccuStandard, Lot 220121267-01			(Purchased Reagent)		2,4-diamino-6-nitrotoluene	100 ug/mL
.2,4Diamino6NT_00107	04/10/24	AccuStandard, Lot 220121267-01			(Purchased Reagent)		2,4-diamino-6-nitrotoluene	100 ug/mL
.2,6Diamino4NT_00109	06/03/24	AccuStandard, Lot 222051002			(Purchased Reagent)		2,6-diamino-4-nitrotoluene	100 ug/mL
.2,6Diamino4NT_00112	06/03/24	AccuStandard, Lot 222051002			(Purchased Reagent)		2,6-diamino-4-nitrotoluene	100 ug/mL
8330DiaminLCS_00060	04/10/24	07/26/23	Acetonitrile, Lot Acetonitrile_00080	10 mL	2,4Diamino6NT_00110	1 mL	2,4-diamino-6-nitrotoluene	20 ug/mL
					2,4Diamino6NT_00111	1 mL	2,4-diamino-6-nitrotoluene	20 ug/mL
					2,6Diamino4NT_00113	1 mL	2,6-diamino-4-nitrotoluene	20 ug/mL
					2,6Diamino4NT_00114	1 mL	2,6-diamino-4-nitrotoluene	20 ug/mL
.2,4Diamino6NT_00110	04/10/24	AccuStandard, Lot 220121267-01			(Purchased Reagent)		2,4-diamino-6-nitrotoluene	100 ug/mL
.2,4Diamino6NT_00111	04/10/24	AccuStandard, Lot 220121267-01			(Purchased Reagent)		2,4-diamino-6-nitrotoluene	100 ug/mL
.2,6Diamino4NT_00113	06/03/24	AccuStandard, Lot 222051002			(Purchased Reagent)		2,6-diamino-4-nitrotoluene	100 ug/mL
.2,6Diamino4NT_00114	06/03/24	AccuStandard, Lot 222051002			(Purchased Reagent)		2,6-diamino-4-nitrotoluene	100 ug/mL
8330IntermStk_00077	10/06/23	06/22/23	Acetonitrile, Lot ACN_239	10 mL	8330_NG_AUX_00006	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN1000_00012	1 mL	PETN	100 ug/mL
					833035DNAStk_00055	1 mL	3,5-Dinitroaniline	10 ug/mL
					8330ICALStock_00034	1 mL	1,3,5-Trinitrobenzene	10 ug/mL
							1,3-Dinitrobenzene	10 ug/mL
							2,4,6-Trinitrotoluene	10 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							2,6-Dinitrotoluene	10 ug/mL
							2-Amino-4,6-dinitrotoluene	10 ug/mL
							2-Nitrotoluene	10 ug/mL
							3-Nitrotoluene	10 ug/mL
							4-Amino-2,6-dinitrotoluene	10 ug/mL
							4-Nitrotoluene	10 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10 ug/mL
							RDX	10 ug/mL
							Tetryl	10 ug/mL
							1,2-Dinitrobenzene	10 ug/mL
					8330PAStkPS_00072	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.8330_NG_AUX_00006	06/22/24	Restek, Lot A0192092			(Purchased Reagent)		Nitroglycerin	1000 ug/mL
.8330_PETN1000_00012	06/22/24	Restek, Lot A0194158			(Purchased Reagent)		PETN	1000 ug/mL
.833035DNAStk_00055	10/06/23	Accustandard, Lot 222011692-01			(Purchased Reagent)		3,5-Dinitroaniline	100 ug/mL
.8330ICALStock_00034	02/03/24	02/03/23	Acetonitrile, Lot ACN_238	10 mL	8330 Stock_TS_00023	1 mL	1,3,5-Trinitrobenzene	100 ug/mL
							1,3-Dinitrobenzene	100 ug/mL
							2,4,6-Trinitrotoluene	100 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dinitrotoluene	100 ug/mL
							2-Amino-4,6-dinitrotoluene	100 ug/mL
							2-Nitrotoluene	100 ug/mL

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							3-Nitrotoluene	100 ug/mL
							4-Amino-2,6-dinitrotoluene	100 ug/mL
							4-Nitrotoluene	100 ug/mL
							HMX	100 ug/mL
							Nitrobenzene	100 ug/mL
							RDX	100 ug/mL
							Tetryl	100 ug/mL
					8330SurrStock_00172	1 mL	1,2-Dinitrobenzene	100 ug/mL
..8330 Stock_TS_00023	02/03/24	Agilent, Lot 0006684308			(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
							Tetryl	1000 ug/mL
..8330SurrStock_00172	02/03/24	AccuStandard, Lot 219051500			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330PAStkPS_00072	06/22/24	AccuStandard, Lot 218031154-04			(Purchased Reagent)		2,4,6-Trinitrophenol	100 ug/mL
8330IntermStk_00078	02/03/24	09/20/23	Acetonitrile, Lot ACN_239	10 mL	8330_NG_AUX_00007	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN1000_00013	1 mL	PETN	100 ug/mL
					833035DNAStk_00056	1 mL	3,5-Dinitroaniline	10 ug/mL
					8330ICALStock_00034	1 mL	1,3,5-Trinitrobenzene	10 ug/mL
							1,3-Dinitrobenzene	10 ug/mL
							2,4,6-Trinitrotoluene	10 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							2,6-Dinitrotoluene	10 ug/mL
							2-Amino-4,6-dinitrotoluene	10 ug/mL
							2-Nitrotoluene	10 ug/mL
							3-Nitrotoluene	10 ug/mL
							4-Amino-2,6-dinitrotoluene	10 ug/mL
							4-Nitrotoluene	10 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10 ug/mL
							RDX	10 ug/mL
							Tetryl	10 ug/mL
							1,2-Dinitrobenzene	10 ug/mL
					8330PAStkPS_00073	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.8330_NG_AUX_00007	09/20/24	Restek, Lot A0192092			(Purchased Reagent)		Nitroglycerin	1000 ug/mL
.8330_PETN1000_00013	09/20/24	Restek, Lot A0194158			(Purchased Reagent)		PETN	1000 ug/mL
.833035DNAStk_00056	05/14/24	Accustandard, Lot 223041214			(Purchased Reagent)		3,5-Dinitroaniline	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.8330ICALStock_00034	02/03/24	02/03/23	Acetonitrile, Lot ACN_238	10 mL	8330 Stock_TS_00023	1 mL	1,3,5-Trinitrobenzene	100 ug/mL
							1,3-Dinitrobenzene	100 ug/mL
							2,4,6-Trinitrotoluene	100 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dinitrotoluene	100 ug/mL
							2-Amino-4,6-dinitrotoluene	100 ug/mL
							2-Nitrotoluene	100 ug/mL
							3-Nitrotoluene	100 ug/mL
							4-Amino-2,6-dinitrotoluene	100 ug/mL
							4-Nitrotoluene	100 ug/mL
							HMX	100 ug/mL
							Nitrobenzene	100 ug/mL
							RDX	100 ug/mL
							Tetryl	100 ug/mL
					8330SurrStock_00172	1 mL	1,2-Dinitrobenzene	100 ug/mL
..8330 Stock_TS_00023	02/03/24		Agilent, Lot 0006684308		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
							Tetryl	1000 ug/mL
..8330SurrStock_00172	02/03/24		AccuStandard, Lot 219051500		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330PAStkPS_00073	09/20/24		AccuStandard, Lot 223031306		(Purchased Reagent)		2,4,6-Trinitrophenol	100 ug/mL
8330Surrogate_00146	12/09/23	06/21/23	Acetonitrile, Lot Acetonitrile_00077	200 mL	8330SurrStkSS_00279	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00280	1 mL	1,2-Dinitrobenzene	10 ug/mL
.8330SurrStkSS_00279	06/21/24		Restek, Lot A0194831		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00280	06/21/24		Restek, Lot A0194831		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
8330Surrogate_00150	02/22/24	08/22/23	Acetonitrile, Lot Acetonitrile_00080	500 mL	8330SurrStkSS_00285	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00293	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00294	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00295	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00296	1 mL	1,2-Dinitrobenzene	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dinitrobenzene (Surr)	10 ug/mL
.8330SurrStkSS_00285	08/22/24		Restek, Lot A0197062		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00293	08/22/24		Restek, Lot A0198799		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00294	08/22/24		Restek, Lot A0198799		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00295	08/22/24		Restek, Lot A0198799		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00296	08/22/24		Restek, Lot A0198799		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
8330Surrogate_00151	04/05/24	10/05/23	Acetonitrile, Lot Acetonitrile_00082	500 mL	8330SurrStkSS_00292	0.5 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00297	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00298	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00299	1.5 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00300	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
.8330SurrStkSS_00292	08/09/24		Restek, Lot A0197062		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00297	10/05/24		Restek, Lot A0198799		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00298	10/05/24		Restek, Lot A0198799		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00299	10/05/24		Restek, Lot A0198799		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00300	10/05/24		Restek, Lot A0198799		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
Alk daily lcs_01109	10/09/23	10/02/23	Di Water, Lot na	1000 mL	Alk stk std_00023	4 mL	Alkalinity	200 mg/L
.Alk stk std_00023	10/30/23		SPEX, Lot 2-106BT		(Purchased Reagent)		Alkalinity	50 g/L
Cal Dil Std_00249	10/16/23	10/05/23	P&T Methanol, Lot ED137-US	100 uL	MV-Gas A_00167	2 uL	Bromomethane	5 ug/mL
							Chloroethane	5 ug/mL
							Chloromethane	5 ug/mL
							Dichlorodifluoromethane	5 ug/mL
							Dichlorofluoromethane	5 ug/mL
							Trichlorofluoromethane	5 ug/mL
							Vinyl chloride	5 ug/mL
							2-Chloroethyl vinyl ether	5 ug/mL
					MV-MegaMainA_00096	5 uL	Acrolein	49.375 ug/mL
							2-Butanone (MEK)	20 ug/mL
							2-Hexanone	20 ug/mL
							4-Methyl-2-pentanone (MIBK)	20 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acetone	20 ug/mL
							Vinyl acetate	10 ug/mL
							Cyclohexanone	150 ug/mL
							1,1,1,2-Tetrachloroethane	5 ug/mL
							1,1,1-Trichloroethane	5 ug/mL
							1,1,2,2-Tetrachloroethane	5 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	5 ug/mL
							1,1,2-Trichloroethane	5 ug/mL
							1,1-Dichloroethane	5 ug/mL
							1,1-Dichloroethene	5 ug/mL
							1,1-Dichloropropene	5 ug/mL
							1,2,3-Trichlorobenzene	5 ug/mL
							1,2,3-Trichloropropane	5 ug/mL
							1,2,4-Trichlorobenzene	5 ug/mL
							1,2,4-Trimethylbenzene	5 ug/mL
							1,2-Dibromo-3-Chloropropane	5 ug/mL
							1,2-Dichlorobenzene	5 ug/mL
							1,2-Dichloroethane	5 ug/mL
							1,2-Dichloropropane	5 ug/mL
							1,3,5-Trimethylbenzene	5 ug/mL
							1,3-Dichlorobenzene	5 ug/mL
							1,3-Dichloropropane	5 ug/mL
							1,4-Dichlorobenzene	5 ug/mL
							1,4-Dioxane	100 ug/mL
							2,2-Dichloropropane	5 ug/mL
							2-Chlorotoluene	5 ug/mL
							2-Methyl-2-propanol	50 ug/mL
							3-Chloro-1-propene	5 ug/mL
							4-Chlorotoluene	5 ug/mL
							4-Isopropyltoluene	5 ug/mL
							Acrylonitrile	50 ug/mL
							Benzene	5 ug/mL
							Bromobenzene	5 ug/mL
							Bromoform	5 ug/mL
							Carbon disulfide	5 ug/mL
							Carbon tetrachloride	5 ug/mL
							Chlorobenzene	5 ug/mL
							Chlorobromomethane	5 ug/mL
							Chlorodibromomethane	5 ug/mL
							Chloroform	5 ug/mL
							cis-1,2-Dichloroethene	5 ug/mL
							cis-1,3-Dichloropropene	5 ug/mL
							Cyclohexane	5 ug/mL
							Dibromomethane	5 ug/mL
							Dichlorobromomethane	5 ug/mL
							Ethyl ether	5 ug/mL
							Ethyl methacrylate	5 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethylbenzene	5 ug/mL
							Ethylene Dibromide	5 ug/mL
							Hexachlorobutadiene	5 ug/mL
							Hexane	5 ug/mL
							Iodomethane	5 ug/mL
							Isobutyl alcohol	125 ug/mL
							Isopropylbenzene	5 ug/mL
							m-Xylene & p-Xylene	5 ug/mL
							Methyl acetate	10 ug/mL
							Methyl tert-butyl ether	5 ug/mL
							Methylcyclohexane	5 ug/mL
							Methylene Chloride	5 ug/mL
							n-Butylbenzene	5 ug/mL
							n-Heptane	5 ug/mL
							N-Propylbenzene	5 ug/mL
							Naphthalene	5 ug/mL
							o-Xylene	5 ug/mL
							sec-Butylbenzene	5 ug/mL
							Styrene	5 ug/mL
							tert-Butylbenzene	5 ug/mL
							Tetrachloroethene	5 ug/mL
							Tetrahydrofuran	10 ug/mL
							Toluene	5 ug/mL
							trans-1,2-Dichloroethene	5 ug/mL
							trans-1,3-Dichloropropene	5 ug/mL
							trans-1,4-Dichloro-2-butene	5 ug/mL
							Trichloroethene	5 ug/mL
							1-Chlorohexane	4 ug/mL
							2-Pentanone	16 ug/mL
							sec-Butyl Alcohol	120 ug/mL
.MV-Gas A_00167	10/23/23	09/27/23	P&T Methanol, Lot 198123	12.5 mL	MV-569722_00022	1250 uL	Bromomethane	250 ug/mL
							Chloroethane	250 ug/mL
							Chloromethane	250 ug/mL
							Dichlorodifluoromethane	250 ug/mL
							Dichlorofluoromethane	250 ug/mL
							Trichlorofluoromethane	250 ug/mL
							Vinyl chloride	250 ug/mL
					MV-569723_00018	1250 uL	2-Chloroethyl vinyl ether	250 ug/mL
..MV-569722_00022	08/31/25	RESTEK, Lot A0189184			(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
..MV-569723_00018	01/31/26	RESTEK, Lot A0193735			(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MV-MegaMainA_00096	10/30/23	09/27/23	P&T Methanol, Lot 181124	25 mL	MV-568720_00046	1250 uL	Acrolein	987.5 ug/mL
					MV-569721_00015	800 uL	2-Butanone (MEK)	400 ug/mL
							2-Hexanone	400 ug/mL
							4-Methyl-2-pentanone (MIBK)	400 ug/mL
							Acetone	400 ug/mL
					MV-569724_00035	1000 uL	Vinyl acetate	200 ug/mL
					MV-569727_00024	3000 uL	Cyclohexanone	3000 ug/mL
					MV-571992_00015	1000 uL	1,1,1,2-Tetrachloroethane	100 ug/mL
							1,1,1-Trichloroethane	100 ug/mL
							1,1,2,2-Tetrachloroethane	100 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	100 ug/mL
							1,1,2-Trichloroethane	100 ug/mL
							1,1-Dichloroethane	100 ug/mL
							1,1-Dichloroethene	100 ug/mL
							1,1-Dichloropropene	100 ug/mL
							1,2,3-Trichlorobenzene	100 ug/mL
							1,2,3-Trichloropropane	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL
							1,2,4-Trimethylbenzene	100 ug/mL
							1,2-Dibromo-3-Chloropropane	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,2-Dichloroethane	100 ug/mL
							1,2-Dichloropropane	100 ug/mL
							1,3,5-Trimethylbenzene	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,3-Dichloropropane	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							1,4-Dioxane	2000 ug/mL
							2,2-Dichloropropane	100 ug/mL
							2-Chlorotoluene	100 ug/mL
							2-Methyl-2-propanol	1000 ug/mL
							3-Chloro-1-propene	100 ug/mL
							4-Chlorotoluene	100 ug/mL
							4-Isopropyltoluene	100 ug/mL
							Acrylonitrile	1000 ug/mL
							Benzene	100 ug/mL
							Bromobenzene	100 ug/mL
							Bromoform	100 ug/mL
							Carbon disulfide	100 ug/mL
							Carbon tetrachloride	100 ug/mL
							Chlorobenzene	100 ug/mL
							Chlorobromomethane	100 ug/mL
							Chlorodibromomethane	100 ug/mL
							Chloroform	100 ug/mL
							cis-1,2-Dichloroethene	100 ug/mL
							cis-1,3-Dichloropropene	100 ug/mL

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Cyclohexane	100 ug/mL
							Dibromomethane	100 ug/mL
							Dichlorobromomethane	100 ug/mL
							Ethyl ether	100 ug/mL
							Ethyl methacrylate	100 ug/mL
							Ethylbenzene	100 ug/mL
							Ethylene Dibromide	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexane	100 ug/mL
							Iodomethane	100 ug/mL
							Isobutyl alcohol	2500 ug/mL
							Isopropylbenzene	100 ug/mL
							m-Xylene & p-Xylene	100 ug/mL
							Methyl acetate	200 ug/mL
							Methyl tert-butyl ether	100 ug/mL
							Methylcyclohexane	100 ug/mL
							Methylene Chloride	100 ug/mL
							n-Butylbenzene	100 ug/mL
							n-Heptane	100 ug/mL
							N-Propylbenzene	100 ug/mL
							Naphthalene	100 ug/mL
							o-Xylene	100 ug/mL
							sec-Butylbenzene	100 ug/mL
							Styrene	100 ug/mL
							tert-Butylbenzene	100 ug/mL
							Tetrachloroethene	100 ug/mL
							Tetrahydrofuran	200 ug/mL
							Toluene	100 ug/mL
							trans-1,2-Dichloroethene	100 ug/mL
							trans-1,3-Dichloropropene	100 ug/mL
							trans-1,4-Dichloro-2-butene	100 ug/mL
							Trichloroethene	100 ug/mL
					MV-CUS17739.s_00011	2000 uL	1-Chlorohexane	80 ug/mL
							2-Pentanone	320 ug/mL
							sec-Butyl Alcohol	2400 ug/mL
..MV-568720_00046	07/31/24		RESTEK, Lot A0193730		(Purchased Reagent)		Acrolein	19750 ug/mL
..MV-569721_00015	01/31/26		RESTEK, Lot A0193494		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..MV-569724_00035	01/31/24		RESTEK, Lot A0187365		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..MV-569727_00024	04/30/26		RESTEK, Lot A0197009		(Purchased Reagent)		Cyclohexanone	25000 ug/mL
..MV-571992_00015	09/30/24		RESTEK, Lot A0183568		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
..MV-CUS17739.s_00011	05/31/24	Agilent, Lot 6676357.sec			(Purchased Reagent)		1-Chlorohexane	1000 ug/mL
							2-Pentanone	4000 ug/mL
							sec-Butyl Alcohol	30000 ug/mL
IC CAL cl/so4_00494	08/16/23	08/09/23	Di Water, Lot na	100 mL	IC CL cal_00076	25 mL	Chloride	250 mg/L
					IC SO4 Cal_00009	25 mL	Sulfate	250 mg/L
.IC CL cal_00076	11/30/23	SPEX CertiPrep, Lot 5-146CL-2X			(Purchased Reagent)		Chloride	1000 mg/L
.IC SO4 Cal_00009	08/30/23	SPEX CertiPrep, Lot 5-160SO4-2X			(Purchased Reagent)		Sulfate	1000 mg/L
IC CAL cl/so4_00501	10/04/23	09/27/23	Di Water, Lot na	100 mL	IC SO4 Cal_00010	25 mL	Sulfate	250 mg/L
.IC SO4 Cal_00010	11/30/23	SPEX CertiPrep, Lot 5-160SO4-2X			(Purchased Reagent)		Sulfate	1000 mg/L
IC Cal low_00722	08/16/23	08/09/23	Di Water, Lot NA	100 mL	IC BR ICV_00024	5 mL	Bromide	50 mg/L
					IC FL cal_00023	5 mL	Fluoride	50 mg/L
					IC N03 cal_00028	5 mL	Nitrate as N	50 mg/L
					IC P04 cal_00030	5 mL	Orthophosphate as P	50 mg/L
					NO2 ICV Std_00039	5 mL	Nitrite as N	50 mg/L
.IC BR ICV_00024	10/31/23	ricca, Lot 1204B86			(Purchased Reagent)		Bromide	1000 mg/L
.IC FL cal_00023	01/31/24	Ricca, Lot 2207H13			(Purchased Reagent)		Fluoride	1000 mg/L
.IC N03 cal_00028	11/30/23	Ricca, Lot 2205B73			(Purchased Reagent)		Nitrate as N	1000 mg/L
.IC P04 cal_00030	07/31/24	RICCA, Lot 4208152			(Purchased Reagent)		Orthophosphate as P	1000 mg/L
.NO2 ICV Std_00039	10/31/23	Ricca, Lot 4304L74			(Purchased Reagent)		Nitrite as N	1000 mg/L
IC Cal low_00731	10/04/23	09/27/23	Di Water, Lot NA	100 mL	IC N03 cal_00028	5 mL	Nitrate as N	50 mg/L
					NO2 ICV Std_00039	5 mL	Nitrite as N	50 mg/L
.IC N03 cal_00028	11/30/23	Ricca, Lot 2205B73			(Purchased Reagent)		Nitrate as N	1000 mg/L
.NO2 ICV Std_00039	10/31/23	Ricca, Lot 4304L74			(Purchased Reagent)		Nitrite as N	1000 mg/L
IC ICV 5_00413	08/16/23	08/09/23	Di Water, Lot na	100 mL	IC NO2 ICV_00022	5 mL	Nitrite as N	50 mg/L
					IC NO3 ICV_00019	5 mL	Nitrate as N	50 mg/L
.IC NO2 ICV_00022	12/14/23	ERA, Lot 261221m			(Purchased Reagent)		Nitrite as N	1000 mg/L
.IC NO3 ICV_00019	12/01/23	ERA, Lot 011221m			(Purchased Reagent)		Nitrate as N	1000 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
IC LCS_01980	10/04/23	09/27/23	Di Water, Lot 27	200 mL	IC Cal low_00731	20 mL	Nitrate as N	5 mg/L
							Nitrite as N	5 mg/L
					IC SO4 Cal_00010	20 mL	Sulfate	100 mg/L
.IC Cal low_00731	10/04/23	09/27/23	Di Water, Lot NA	100 mL	IC N03 cal_00028	5 mL	Nitrate as N	50 mg/L
					NO2 ICV Std_00039	5 mL	Nitrite as N	50 mg/L
..IC N03 cal_00028	11/30/23	Ricca, Lot 2205B73			(Purchased Reagent)		Nitrate as N	1000 mg/L
..NO2 ICV Std_00039	10/31/23	Ricca, Lot 4304L74			(Purchased Reagent)		Nitrite as N	1000 mg/L
.IC SO4 Cal_00010	11/30/23	SPEX CertiPrep, Lot 5-160SO4-2X			(Purchased Reagent)		Sulfate	1000 mg/L
IC SO4 ICV_00024	12/01/23	ERA, Lot 021221m			(Purchased Reagent)		Sulfate	1000 mg/L
ICMS/MSD WEEK_00838	10/04/23	09/27/23	Di Water, Lot NA	5 mL	IC SPK 6 ANIO_00028	2.5 mL	Nitrate as N	500.003 mg/L
							Sulfate	5000.51 mg/L
					IC SPK N02SOL_00021	2.5 mL	Nitrite as N	499.973 mg/L
.IC SPK 6 ANIO_00028	10/12/23	10/12/22	Di Water, Lot NA	1000 mL	IC MS/MSD N03_00006	6.068 g	Nitrate as N	1000.01 mg/L
					IC MS/MSD S04_00006	18.1408 g	Sulfate	10001 mg/L
..IC MS/MSD N03_00006	12/31/26	Spectrum, Lot 1LD0800			(Purchased Reagent)		Nitrate as N	0.1648 g/g
..IC MS/MSD S04_00006	09/29/23	FISHER, Lot 147276			(Purchased Reagent)		Sulfate	0.5513 g/g
.IC SPK N02SOL_00021	10/12/23	10/12/22	Di Water, Lot na	500 mL	IC MS/MSD N02_00005	2.4628 g	Nitrite as N	999.946 mg/L
..IC MS/MSD N02_00005	01/31/23	fisher, Lot 210979			(Purchased Reagent)		Nitrite as N	0.20301 g/g
mv-Cent BFB_00005							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Total BTEX	
							Trihalomethanes, Total	
							Xylenes, Total	
					mv-IS/SS Tune_00001	10 mL	BFB	50 ug/mL
.mv-IS/SS Tune_00001	11/30/23	Restek, Lot A0143593			(Purchased Reagent)		BFB	250 ug/mL
MV-Gas A_00167	10/23/23	09/27/23	P&T Methanol, Lot 198123	12.5 mL	MV-569722_00022	1250 uL	Bromomethane	250 ug/mL
							Chloroethane	250 ug/mL
							Chloromethane	250 ug/mL
							Dichlorodifluoromethane	250 ug/mL
							Dichlorofluoromethane	250 ug/mL
							Trichlorofluoromethane	250 ug/mL
							Vinyl chloride	250 ug/mL
					MV-569723_00018	1250 uL	2-Chloroethyl vinyl ether	250 ug/mL
.MV-569722_00022	08/31/25	RESTEK, Lot A0189184			(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.MV-569723_00018	01/31/26	RESTEK, Lot A0193735			(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
mv-IS_SS_00070	12/27/23	09/27/23	P&T Methanol, Lot 198123	50 mL	mv-30241_00012	1000 uL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
					MV-567650_00030	1000 uL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.mv-30241_00012	05/31/27	Restek, Lot A0185733			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5	2500 ug/mL
							Fluorobenzene	2500 ug/mL
.MV-567650_00030	05/31/26	Restek, Lot A0172587			(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
MV-MegaMain B_00092	10/31/23	09/27/23	P&T Methanol, Lot 181124	25 mL	MV-571992.sec_00010	1000 uL	Carbon tetrachloride	100 ug/mL
.MV-571992.sec_00010	08/31/25	RESTEK, Lot A0195252			(Purchased Reagent)		Carbon tetrachloride	2500 ug/mL
MV-MegaMainA_00096	10/30/23	09/27/23	P&T Methanol, Lot 181124	25 mL	MV-568720_00046	1250 uL	Acrolein	987.5 ug/mL
					MV-569721_00015	800 uL	2-Butanone (MEK)	400 ug/mL
							2-Hexanone	400 ug/mL
							4-Methyl-2-pentanone (MIBK)	400 ug/mL
							Acetone	400 ug/mL
					MV-569724_00035	1000 uL	Vinyl acetate	200 ug/mL
					MV-569727_00024	3000 uL	Cyclohexanone	3000 ug/mL
					MV-571992_00015	1000 uL	1,1,1,2-Tetrachloroethane	100 ug/mL
							1,1,1-Trichloroethane	100 ug/mL
							1,1,2,2-Tetrachloroethane	100 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	100 ug/mL
							1,1,2-Trichloroethane	100 ug/mL
							1,1-Dichloroethane	100 ug/mL
							1,1-Dichloroethene	100 ug/mL
							1,1-Dichloropropene	100 ug/mL
							1,2,3-Trichlorobenzene	100 ug/mL
							1,2,3-Trichloropropane	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL
							1,2,4-Trimethylbenzene	100 ug/mL
							1,2-Dibromo-3-Chloropropane	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,2-Dichloroethane	100 ug/mL
							1,2-Dichloropropane	100 ug/mL
							1,3,5-Trimethylbenzene	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,3-Dichloropropane	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dioxane	2000 ug/mL
							2,2-Dichloropropane	100 ug/mL
							2-Chlorotoluene	100 ug/mL
							2-Methyl-2-propanol	1000 ug/mL
							3-Chloro-1-propene	100 ug/mL
							4-Chlorotoluene	100 ug/mL
							4-Isopropyltoluene	100 ug/mL
							Acrylonitrile	1000 ug/mL
							Benzene	100 ug/mL
							Bromobenzene	100 ug/mL
							Bromoform	100 ug/mL
							Carbon disulfide	100 ug/mL
							Carbon tetrachloride	100 ug/mL
							Chlorobenzene	100 ug/mL
							Chlorobromomethane	100 ug/mL
							Chlorodibromomethane	100 ug/mL
							Chloroform	100 ug/mL
							cis-1,2-Dichloroethene	100 ug/mL
							cis-1,3-Dichloropropene	100 ug/mL
							Cyclohexane	100 ug/mL
							Dibromomethane	100 ug/mL
							Dichlorobromomethane	100 ug/mL
							Ethyl ether	100 ug/mL
							Ethyl methacrylate	100 ug/mL
							Ethylbenzene	100 ug/mL
							Ethylene Dibromide	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexane	100 ug/mL
							Iodomethane	100 ug/mL
							Isobutyl alcohol	2500 ug/mL
							Isopropylbenzene	100 ug/mL
							m-Xylene & p-Xylene	100 ug/mL
							Methyl acetate	200 ug/mL
							Methyl tert-butyl ether	100 ug/mL
							Methylcyclohexane	100 ug/mL
							Methylene Chloride	100 ug/mL
							n-Butylbenzene	100 ug/mL
							n-Heptane	100 ug/mL
							N-Propylbenzene	100 ug/mL
							Naphthalene	100 ug/mL
							o-Xylene	100 ug/mL
							sec-Butylbenzene	100 ug/mL
							Styrene	100 ug/mL
							tert-Butylbenzene	100 ug/mL
							Tetrachloroethene	100 ug/mL
							Tetrahydrofuran	200 ug/mL
							Toluene	100 ug/mL

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,2-Dichloroethene	100 ug/mL
							trans-1,3-Dichloropropene	100 ug/mL
							trans-1,4-Dichloro-2-butene	100 ug/mL
							Trichloroethene	100 ug/mL
					MV-CUS17739.s_00011	2000 uL	1-Chlorohexane	80 ug/mL
							2-Pentanone	320 ug/mL
							sec-Butyl Alcohol	2400 ug/mL
.MV-568720_00046	07/31/24		RESTEK, Lot A0193730		(Purchased Reagent)		Acrolein	19750 ug/mL
.MV-569721_00015	01/31/26		RESTEK, Lot A0193494		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
.MV-569724_00035	01/31/24		RESTEK, Lot A0187365		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
.MV-569727_00024	04/30/26		RESTEK, Lot A0197009		(Purchased Reagent)		Cyclohexanone	25000 ug/mL
.MV-571992_00015	09/30/24		RESTEK, Lot A0183568		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chlorobenzene	2500 ug/mL
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
.MV-CUS17739.s_00011	05/31/24	Agilent, Lot 6676357.sec			(Purchased Reagent)		1-Chlorohexane	1000 ug/mL
							2-Pentanone	4000 ug/mL
							sec-Butyl Alcohol	30000 ug/mL

Reagent

2,4Diamino6NT_00095

125 Market Street
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CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-12
Description: 2,4-Diamino-6-nitrotoluene
Lot: 220121267-01
Solvent: Acetonitrile
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Mar 10, 2022
Expiration: Apr 10, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (LCMS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
2,4-Diamino-6-nitrotoluene	6629-29-4	99.0	100.3	99.3

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[2] All weights are traceable through NIST, Test No. 684/289871-17

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

QR-ORG/INO-001
Rev. 7/20

Reagent

2,4Diamino6NT_00096

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CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-12
Description: 2,4-Diamino-6-nitrotoluene
Lot: 220121267-01
Solvent: Acetonitrile
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Mar 10, 2022
Expiration: Apr 10, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (LCMS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
2,4-Diamino-6-nitrotoluene	6629-29-4	99.0	100.3	99.3

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[2] All weights are traceable through NIST, Test No. 684/289871-17

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

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Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

QR-ORG/INO-001
Rev. 7/20

Reagent

2,4Diamino6NT_00103

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CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-12
Description: 2,4-Diamino-6-nitrotoluene
Lot: 220121267-01
Solvent: Acetonitrile
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Mar 10, 2022
Expiration: Apr 10, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (LCMS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
2,4-Diamino-6-nitrotoluene	6629-29-4	99.0	100.3	99.3

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[2] All weights are traceable through NIST, Test No. 684/289871-17

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

Reagent

2,4Diamino6NT_00104

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CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-12
Description: 2,4-Diamino-6-nitrotoluene
Lot: 220121267-01
Solvent: Acetonitrile
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Mar 10, 2022
Expiration: Apr 10, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (LCMS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
2,4-Diamino-6-nitrotoluene	6629-29-4	99.0	100.3	99.3

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[2] All weights are traceable through NIST, Test No. 684/289871-17

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

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The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

QR-ORG/INO-001
Rev. 7/20

Reagent

2,4Diamino6NT_00105

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

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Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-12
Description: 2,4-Diamino-6-nitrotoluene
Lot: 220121267-01
Solvent: Acetonitrile
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Mar 10, 2022
Expiration: Apr 10, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (LCMS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
2,4-Diamino-6-nitrotoluene	6629-29-4	99.0	100.3	99.3

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[2] All weights are traceable through NIST, Test No. 684/289871-17

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

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Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

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Reagent

2,4Diamino6NT_00106

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CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-12
Description: 2,4-Diamino-6-nitrotoluene
Lot: 220121267-01
Solvent: Acetonitrile
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Mar 10, 2022
Expiration: Apr 10, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (LCMS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
2,4-Diamino-6-nitrotoluene	6629-29-4	99.0	100.3	99.3

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[2] All weights are traceable through NIST, Test No. 684/289871-17

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

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Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

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Reagent

2,4Diamino6NT_00107

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CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-12
Description: 2,4-Diamino-6-nitrotoluene
Lot: 220121267-01
Solvent: Acetonitrile
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Mar 10, 2022
Expiration: Apr 10, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (LCMS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
2,4-Diamino-6-nitrotoluene	6629-29-4	99.0	100.3	99.3

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[2] All weights are traceable through NIST, Test No. 684/289871-17

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

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Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

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Reagent

2,4Diamino6NT_00110

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CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-12
Description: 2,4-Diamino-6-nitrotoluene
Lot: 220121267-01
Solvent: Acetonitrile
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Mar 10, 2022
Expiration: Apr 10, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (LCMS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
2,4-Diamino-6-nitrotoluene	6629-29-4	99.0	100.3	99.3

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

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Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

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Rev. 5/18

1. **Quality Standards:**

   ISO 17034:2016 – General Requirements for the Competence of Reference Material Producers

   ISO/IEC 17025:2017 – General Requirements for the Competence of Testing And Calibration Laboratories

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations

2. **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7.

3. **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards. Good Laboratory Practices have been used throughout the preparation of this Standard.

4. **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5. **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6. **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7. **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

Reagent

2,4Diamino6NT_00111

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USA

AccuStandard® Inc.

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www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-12
Description: 2,4-Diamino-6-nitrotoluene
Lot: 220121267-01
Solvent: Acetonitrile
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Mar 10, 2022
Expiration: Apr 10, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (LCMS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
2,4-Diamino-6-nitrotoluene	6629-29-4	99.0	100.3	99.3

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

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Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

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Rev. 5/18

1. **Quality Standards:**

   ISO 17034:2016 – General Requirements for the Competence of Reference Material Producers

   ISO/IEC 17025:2017 – General Requirements for the Competence of Testing And Calibration Laboratories

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations

2. **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7.

3. **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards. Good Laboratory Practices have been used throughout the preparation of this Standard.

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6. **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7. **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

Reagent

2,6Diamino4NT_00096

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USA

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Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-13
Description: 2,6-Diamino-4-nitrotoluene
Lot: 222051002
Solvent: Acetonitrile
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: May 3, 2022
Expiration: Jun 3, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ILAC-MRA

Component	CAS #	Purity % (GC/FID)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
2,6-Diamino-4-nitrotoluene	59229-75-3	99.7	101.0	100.7

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[2] All weights are traceable through NIST, Test No. 684/289871-17

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

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Hazard Information. Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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Reagent

2,6Diamino4NT_00106

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CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-13
Description: 2,6-Diamino-4-nitrotoluene
Lot: 222051002
Solvent: Acetonitrile
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: May 3, 2022
Expiration: Jun 3, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/FID)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
2,6-Diamino-4-nitrotoluene	59229-75-3	99.7	101.0	100.7

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[2] All weights are traceable through NIST, Test No. 684/289871-17

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

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Hazard Information. Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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AccuStandard

Reagent

2,6Diamino4NT_00107

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CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-13
Description: 2,6-Diamino-4-nitrotoluene
Lot: 222051002
Solvent: Acetonitrile
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: May 3, 2022
Expiration: Jun 3, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/FID)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
2,6-Diamino-4-nitrotoluene	59229-75-3	99.7	101.0	100.7

This Certified Reference Material was verified in accordance with ISO/IEC 17025

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Hazard Information. Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

Reagent

2,6Diamino4NT_00108

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www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-13
Description: 2,6-Diamino-4-nitrotoluene
Lot: 222051002
Solvent: Acetonitrile
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: May 3, 2022
Expiration: Jun 3, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/FID)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
2,6-Diamino-4-nitrotoluene	59229-75-3	99.7	101.0	100.7

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[1] Certified Analyte Concentration = Purity x Prepared Concentration.

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Hazard Information. Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

Reagent

2,6Diamino4NT_00109

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www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-13
Description: 2,6-Diamino-4-nitrotoluene
Lot: 222051002
Solvent: Acetonitrile
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: May 3, 2022
Expiration: Jun 3, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/FID)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
2,6-Diamino-4-nitrotoluene	59229-75-3	99.7	101.0	100.7

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

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[1] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

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Hazard Information. Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

Reagent

2,6Diamino4NT_00112

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www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-13
Description: 2,6-Diamino-4-nitrotoluene
Lot: 222051002
Solvent: Acetonitrile
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: May 3, 2022
Expiration: Jun 3, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/FID)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
2,6-Diamino-4-nitrotoluene	59229-75-3	99.7	101.0	100.7

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[2] All weights are traceable through NIST, Test No. 684/289871-17

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

QR-ORG/INO-001
Rev. 5/18

1. **Quality Standards:**

   ISO 17034:2016 – General Requirements for the Competence of Reference Material Producers

   ISO/IEC 17025:2017 – General Requirements for the Competence of Testing And Calibration Laboratories

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations

2. **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7.

3. **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards. Good Laboratory Practices have been used throughout the preparation of this Standard.

4. **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5. **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6. **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7. **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

Reagent

2,6Diamino4NT_00113

125 Market Street
New Haven, CT 06513
USA

AccuStandard® Inc.

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-13
Description: 2,6-Diamino-4-nitrotoluene
Lot: 222051002
Solvent: Acetonitrile
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: May 3, 2022
Expiration: Jun 3, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/FID)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
2,6-Diamino-4-nitrotoluene	59229-75-3	99.7	101.0	100.7

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

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Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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QR-ORG/INO-001
Rev. 5/18

1. **Quality Standards:**

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   ISO/IEC 17025:2017 – General Requirements for the Competence of Testing And Calibration Laboratories

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4. **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5. **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6. **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7. **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

Reagent

2,6Diamino4NT_00114

125 Market Street
New Haven, CT 06513
USA

AccuStandard® Inc.

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-13
Description: 2,6-Diamino-4-nitrotoluene
Lot: 222051002
Solvent: Acetonitrile
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: May 3, 2022
Expiration: Jun 3, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/FID)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
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This Certified Reference Material was verified in accordance with ISO/IEC 17025

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[1] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

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Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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QR-ORG/INO-001
Rev. 5/18

1. **Quality Standards:**

   ISO 17034:2016 – General Requirements for the Competence of Reference Material Producers

   ISO/IEC 17025:2017 – General Requirements for the Competence of Testing And Calibration Laboratories

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2. **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7.

3. **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards. Good Laboratory Practices have been used throughout the preparation of this Standard.

4. **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5. **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6. **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7. **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

Reagent

3,5-DNA Stock_00043

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ilac-MRA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA 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. : 31661 **Lot No.:** A0193965

Description : 3,5-Dinitroaniline Standard

3, 5-Dinitroaniline Std 1000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2027 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	3,5-Dinitroaniline	618-87-1	10311HS	99%	1,004.0 µg/mL	+/- 37.4502

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Acetonitrile
CAS # 75-05-8
Purity 99%

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 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

3,5-DNA Stock_00046

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA A2LA 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. : 31661 **Lot No.:** A0193965

Description : 3,5-Dinitroaniline Standard

3, 5-Dinitroaniline Std 1000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2027 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	3,5-Dinitroaniline	618-87-1	10311HS	99%	1,004.0 µg/mL	+/- 37.4502

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Acetonitrile

CAS # 75-05-8

Purity 99%

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.
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- Purity values are rounded to the nearest whole number.

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

3,5-DNA Stock_00047

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED
ISO 17034 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. : 31661 **Lot No.:** A0193965

Description : 3,5-Dinitroaniline Standard

3, 5-Dinitroaniline Std 1000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2027 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	3,5-Dinitroaniline	618-87-1	10311HS	99%	1,004.0 µg/mL	+/- 37.4502

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Acetonitrile
CAS # 75-05-8
Purity 99%

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:

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330 LCS_00127

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20230531-122014.b\05310006.D

Lims ID: C18column:B16162 Inj. Date: 31-May-2023 17:22:45

Worklist ID: 280-0122014-006 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535	Limits 2 0B_Sonc_
4 HMX	0.5000	0.4329	86.6	65-135	66-115
8 RDX	0.5000	0.4671	93.4	68-130	69-122
9 2,4,6-Trinitrophenol	0.5000	0.5329	106.6	80-120	63-135
11 1,3,5-Trinitrobenzene	0.5000	0.5033	100.7	73-125	62-127
12 1,3-Dinitrobenzene	0.5000	0.4985	99.7	78-120	59-131
13 Nitrobenzene	0.5000	0.5038	100.8	65-134	46-144
14 3,5-Dinitroaniline	0.5000	0.4774	95.5	71-117	
15 Tetryl	0.5000	0.5414	108.3	64-128	56-131
16 Nitroglycerin	5.00	5.05	101.0	74-127	70-125
17 2,4,6-Trinitrotoluene	0.5000	0.4730	94.6	71-123	46-139
18 4-Amino-2,6-dinitrotolu	0.5000	0.4839	96.8	76-125	43-120
19 2-Amino-4,6-dinitrotolu	0.5000	0.4728	94.6	79-120	46-124
20 2,6-Dinitrotoluene	0.5000	0.5046	100.9	77-127	51-130
21 2,4-Dinitrotoluene	0.5000	0.4810	96.2	78-120	53-127
22 o-Nitrotoluene	0.5000	0.4856	97.1	70-127	37-138
23 p-Nitrotoluene	0.5000	0.4749	95.0	71-127	41-137
24 m-Nitrotoluene	0.5000	0.4840	96.8	73-125	31-140
25 PETN	5.00	5.33	106.7	73-127	67-127

Samples for Limit Group: 1, Lims Prep Method: 3535

280-176937-A-4-A 280-176990-A-1-A 280-176990-A-2-A
280-176990-A-3-A 280-176990-A-4-A 280-176990-A-5-A
280-176990-A-6-A 280-176990-A-7-A 280-176990-A-8-A
280-176990-A-9-A 280-176990-A-10-A 280-176990-A-11-A
280-176990-A-12-A 280-176990-A-13-A

Samples for Limit Group: 2, Lims Prep Method: 8330B_Sonc_10g

860-49847-E-4-A 280-176985-G-1-A

Reagent

8330 LCS_00130

Preliminary Report

Eurofins Denver
LCS, Lab Control Sample Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230809-124337.b\08090005.D
Lims ID: CH3CHOOH=acetic acid 0145
Client ID:
Sample Type: LCS
Inject. Date: 09-Aug-2023 11:47:26 ALS Bottle#: 71 Worklist Smp#: 5
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 130
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230809-124337.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Aug-2023 12:27:15 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1654

Compound	Amount Added	Amount Recovered	%Rec
4 HMX	0.2500	0.2135	85.38
8 RDX	0.2500	0.2274	90.98
9 2,4,6-Trinitrophenol	0.2500	0.2458	98.32
11 1,3,5-Trinitrobenzene	0.2500	0.2537	101.48
12 1,3-Dinitrobenzene	0.2500	0.2513	100.51
13 Nitrobenzene	0.2500	0.2478	99.11
14 3,5-Dinitroaniline	0.2500	0.2394	95.77
15 Tetryl	0.2500	0.2615	104.58
16 Nitroglycerin	2.50	2.53	101.11
17 2,4,6-Trinitrotoluene	0.2500	0.2454	98.16
18 4-Amino-2,6-dinitrotoluene	0.2500	0.2490	99.59
19 2-Amino-4,6-dinitrotoluene	0.2500	0.2500	100.02
20 2,6-Dinitrotoluene	0.2500	0.2352	94.08
21 2,4-Dinitrotoluene	0.2500	0.2450	98.00
22 o-Nitrotoluene	0.2500	0.2446	97.84
23 p-Nitrotoluene	0.2500	0.2395	95.81
24 m-Nitrotoluene	0.2500	0.2452	98.08
25 PETN	2.50	2.57	102.99

Reagent

8330 LCS_00131

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20230923-125749.b\09230002.D

Lims ID: 8330AcidH2O_00003 Inj. Date: 23-Sep-2023 13:53:25

Worklist ID: 280-0125749-002 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_	Limits 2 3535	Limits 3 3535
4 HMX	0.5000	0.4292	85.8	66-115	65-135	
8 RDX	0.5000	0.4561	91.2	69-122	68-130	
9 2,4,6-Trinitrophenol	0.5000	0.5243	104.9	63-135	80-120	
11 1,3,5-Trinitrobenzene	0.5000	0.5169	103.4	62-127	73-125	
12 1,3-Dinitrobenzene	0.5000	0.5082	101.6	59-131	78-120	
13 Nitrobenzene	0.5000	0.5026	100.5	46-144	65-134	
14 3,5-Dinitroaniline	0.5000	0.4673	93.5	55-119	71-117	
15 Tetryl	0.5000	0.5859	117.2	56-131	64-128	
16 Nitroglycerin	5.00	5.08	101.5	70-125	74-127	
17 2,4,6-Trinitrotoluene	0.5000	0.4859	97.2	46-139	71-123	
18 4-Amino-2,6-dinitrotolu	0.5000	0.5082	101.6	43-120	76-125	
19 2-Amino-4,6-dinitrotolu	0.5000	0.4868	97.4	46-124	79-120	
20 2,6-Dinitrotoluene	0.5000	0.4973	99.5	51-130	77-127	
21 2,4-Dinitrotoluene	0.5000	0.5110	102.2	53-127	78-120	
22 o-Nitrotoluene	0.5000	0.4963	99.3	37-138	70-127	
23 p-Nitrotoluene	0.5000	0.4957	99.1	41-137	71-127	
24 m-Nitrotoluene	0.5000	0.5005	100.1	31-140	73-125	
25 PETN	5.00	5.13	102.6	67-127	73-127	

Samples for Limit Group: 1, Lims Prep Method: 8330B_Sonc_10g

380-63263-B-1-A	570-153096-S-1-A	570-153096-R-2-A
570-153096-S-3-A	570-153096-S-4-A	570-153096-S-5-A

Samples for Limit Group: 2, Lims Prep Method: 3535

380-63150-C-1-A	380-63150-C-4-A	380-63150-C-6-A
380-63178-C-1-A	380-63178-D-3-A	380-63226-C-1-A
380-63226-C-2-A	380-63227-D-1-A	380-63227-C-3-A
380-63227-D-5-A	380-63227-C-7-A	

Samples for Limit Group: 3, Lims Prep Method: 3535

280-181304-A-1-A	280-181304-A-2-A	280-181304-A-3-A

Reagent

8330 Stock_TS_00023

Agilent

Trusted Answers

ISO 17034

Reference Material Certificate

Product Information Sheet

Product Name: Stock Standard

Product Number: NAIM-833E-1

Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006684308

Lot Issue Date: 01-Jun-2022

Expiration Date: 30-Jun-2025

Component Name	CERTIFIED VALUES Concentration	Expanded Uncertainty	CAS#	Analyte Lot
HMX	1001	± 5 µg/mL	002691-41-0	RM06237
RDX	1001	± 5 µg/mL	000121-82-4	RM10915
1,3,5-trinitrobenzene	1001	± 5 µg/mL	000099-35-4	RM17843
m-dinitrobenzene	1002	± 5 µg/mL	000099-65-0	RM14290
nitrobenzene	1002	± 5 µg/mL	000098-95-3	RM11472
2,4,6-trinitrotoluene (TNT)	1001	± 5 µg/mL	000118-96-7	RM16204
2,4-dinitrotoluene	1002	± 5 µg/mL	000121-14-2	RM10279
tetryl	1003	± 5 µg/mL	000479-45-8	RM14651
2,6-dinitrotoluene	1003	± 5 µg/mL	000606-20-2	RM16636
2-nitrotoluene	1003	± 5 µg/mL	000088-72-2	NT01996
3-nitrotoluene	1002	± 5 µg/mL	000099-08-1	NT02212
4-nitrotoluene	1003	± 5 µg/mL	000099-99-0	NT02096
2-amino-4,6-dinitrotoluene	1003	± 5 µg/mL	035572-78-2	RM04232
4-amino-2,6-dinitrotoluene	1004	± 5 µg/mL	019406-51-0	RM04226

Matrix: acetonitrile

Description:

This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Reagent

8330_NG_AUX_00006

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED
ISO 17034 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. : 31498 **Lot No.:** A0192092

Description : Nitroglycerin Standard

Nitroglycerin Standard 1,000µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2027 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Nitroglycerin	55-63-0	200507JLM	99%	1,005.0 µg/mL	+/- 46.8850

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

Flow Rate:
1.0 ml/min.

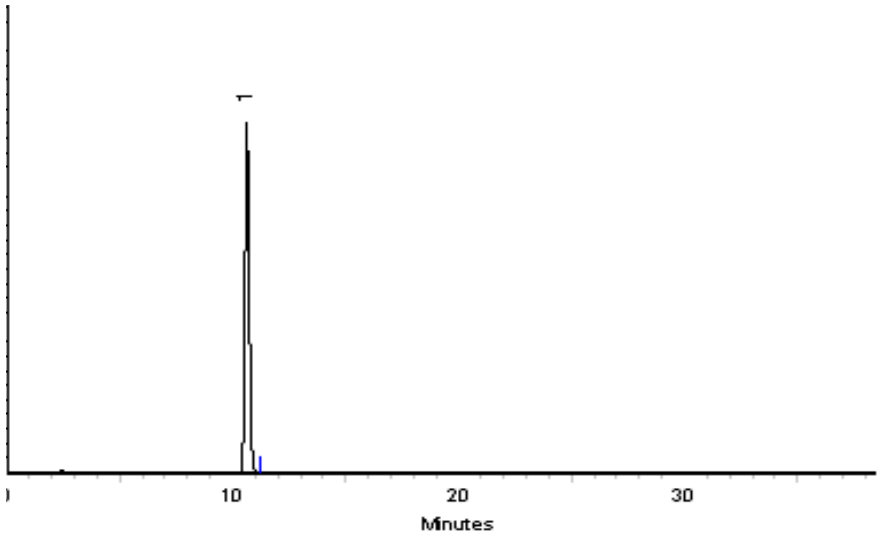
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2µl



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.

Brittany Federinko - Operations Tech I

Date Mixed: 30-Nov-2022 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 05-Dec-2022

Manufactured under Restek's ISO 9001:2015 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 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330_NG_AUX_00007

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED
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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. : 31498 **Lot No.:** A0192092

Description : Nitroglycerin Standard

Nitroglycerin Standard 1,000µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2027 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Nitroglycerin	55-63-0	200507JLM	99%	1,005.0 µg/mL	+/- 46.8850

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

Flow Rate:
1.0 ml/min.

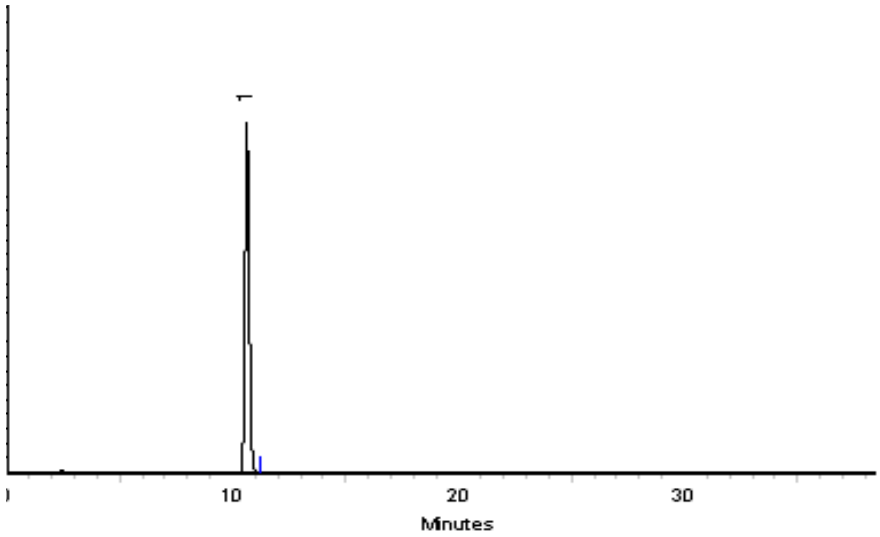
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2µl



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.

Brittany Federinko - Operations Tech I

Date Mixed: 30-Nov-2022 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 05-Dec-2022

Manufactured under Restek's ISO 9001:2015 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 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330_NG_Stk_00132

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3223.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3223.02

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. : 568871 **Lot No.:** A0194930

Description : Custom Nitroglycerin Standard

Custom Nitroglycerin Standard 5,000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L., K=2)
1	Nitroglycerin	55-63-0	200507JLM	99%	5,004.0 µg/mL	+/- 236.1755

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Acetonitrile
CAS # 75-05-8
Purity 99%

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 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330_NG_Stk_00133

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3223.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3223.02

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. : 568871 **Lot No.:** A0194930

Description : Custom Nitroglycerin Standard

Custom Nitroglycerin Standard 5,000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L., K=2)
1	Nitroglycerin	55-63-0	200507JLM	99%	5,004.0 µg/mL	+/- 236.1755

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Acetonitrile
CAS # 75-05-8
Purity 99%

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 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330_NG_Stk_00137

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3223.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3223.02

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. : 568871 **Lot No.:** A0194930

Description : Custom Nitroglycerin Standard

Custom Nitroglycerin Standard 5,000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L., K=2)
1	Nitroglycerin	55-63-0	200507JLM	99%	5,004.0 µg/mL	+/- 236.1755

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Acetonitrile
CAS # 75-05-8
Purity 99%

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 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330_NG_Stk_00138

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3223.01

ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3223.02

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. : 568871 **Lot No.:** A0194930

Description : Custom Nitroglycerin Standard

Custom Nitroglycerin Standard 5,000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Nitroglycerin	55-63-0	200507JLM	99%	5,004.0 µg/mL	+/- 236.1755

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Acetonitrile
CAS # 75-05-8
Purity 99%

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 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330_NG_Stk_00139

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3223.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3223.02

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. : 568871 **Lot No.:** A0194930

Description : Custom Nitroglycerin Standard

Custom Nitroglycerin Standard 5,000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Nitroglycerin	55-63-0	200507JLM	99%	5,004.0 µg/mL	+/- 236.1755

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Acetonitrile
CAS # 75-05-8
Purity 99%

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 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330_NG_Stk_00140

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Tel: 1-814-353-1300
Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

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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. : 568871 **Lot No.:** A0200560

Description : Custom Nitroglycerin Standard

Custom Nitroglycerin Standard 5,000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Nitroglycerin	55-63-0	200507JLM	99%	5,037.2 µg/mL	+/- 237.7424

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Acetonitrile
CAS # 75-05-8
Purity 99%

Quality Confirmation Test

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

Flow Rate:
1.0 ml/min.

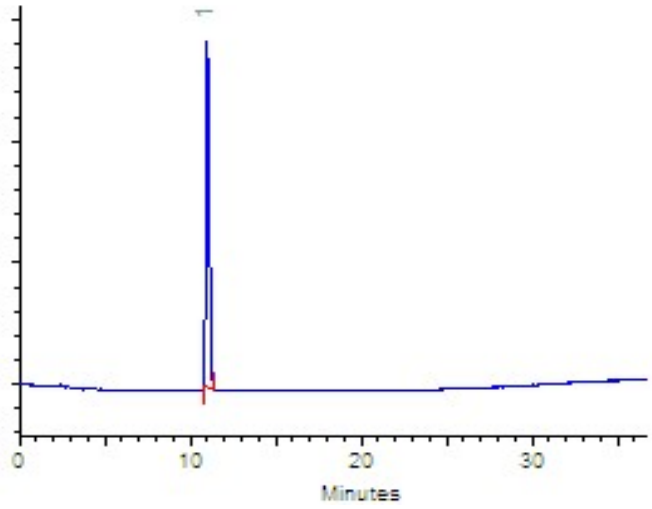
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2µl



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.

Bryan Snyder - Operations Tech I

Date Mixed: 02-Aug-2023 **Balance Serial #** B251644995

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 04-Aug-2023

REVIEWED

Manufactured under Restek's ISO 9001:2015 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 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330_OP_DMT_00021

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20230622-122822.b\06220012.D

Lims ID: OPDMT21 Inj. Date: 22-Jun-2023 18:40:06

Worklist ID: 280-0122822-012 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535	Limits 2 3535
3 TNX	0.5015	0.5101	101.7	50-150	
6 DNX	0.5005	0.5209	104.1	50-150	66-119
7 MNX	0.5835	0.6124	104.9	68-123	57-132

Samples for Limit Group: 1, Lims Prep Method: 3535

400-239200-B-1-A 400-239200-B-3-A 400-239200-B-6-A
400-239201-I-1-A 400-239201-H-2-A 400-239201-H-3-A
400-239201-H-4-A 400-239202-F-1-A 400-239202-F-2-A
400-239202-F-3-A 400-239202-F-4-A

Samples for Limit Group: 2, Lims Prep Method: 3535

280-178007-B-7-A 280-178007-B-8-A 280-178007-A-10-A
280-178007-B-11-A 280-178018-B-1-A 280-178018-A-2-A
280-178018-A-3-A 280-178018-B-4-A 280-178018-B-5-A
380-50652-K-1-A 380-50805-U-1-A

Reagent

8330_OP_DMT_00022

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20230901-125089.b\09010011.D

Lims ID: DMT LCS22 Inj. Date: 01-Sep-2023 14:17:47

Worklist ID: 280-0125089-011 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535
3 TNX	0.5005	0.4715	94.2	50-150
6 DNX	0.5020	0.4910	97.8	66-119
7 MNX	0.5855	0.5579	95.3	57-132

Samples for Limit Group: 1, Lims Prep Method: 3535

280-180213-A-1-A 280-180213-A-2-A 280-180213-A-3-A

280-180213-A-4-A 280-180213-A-5-A 280-180213-A-6-A

280-180213-A-7-A 280-180213-A-8-A 280-180213-A-9-A

280-180213-A-10-A 280-180213-A-11-A

Reagent

8330_OP_DMT_00024

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X5\20231004-126147.b\10040011.D

Lims ID: 8330 DMT 24 Inj. Date: 04-Oct-2023 16:40:24

Worklist ID: 280-0126147-011 Instrument: CHHPLC_X5

Method: 8330_X5_Luna

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_
3 TNX	0.5005	0.4734	94.6	50-150
4 DNX	0.5020	0.4894	97.5	50-150
6 MNX	0.5855	0.5686	97.1	50-150

Samples for Limit Group: 1, Lims Prep Method: 8330B_Sonc_10g

280-182112-A-2-D 280-182112-A-3-B 280-182112-A-4-B

280-182114-A-6-B

Reagent

8330_PETN_Stk_00137

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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. : 568872 **Lot No.:** A0188550

Description : Custom PETN Standard

Custom PETN Standard 5,000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2025 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	PETN		5,000.0	µg/mL	+/- 46.4973	µg/mL	Gravimetric
	CAS # 78-11-5	(Lot 051108JLM)			+/- 276.2417	µg/mL	Unstressed
	Purity 99%				+/- 321.4093	µg/mL	Stressed

Solvent: Acetonitrile
CAS # 75-05-8
Purity 99%

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

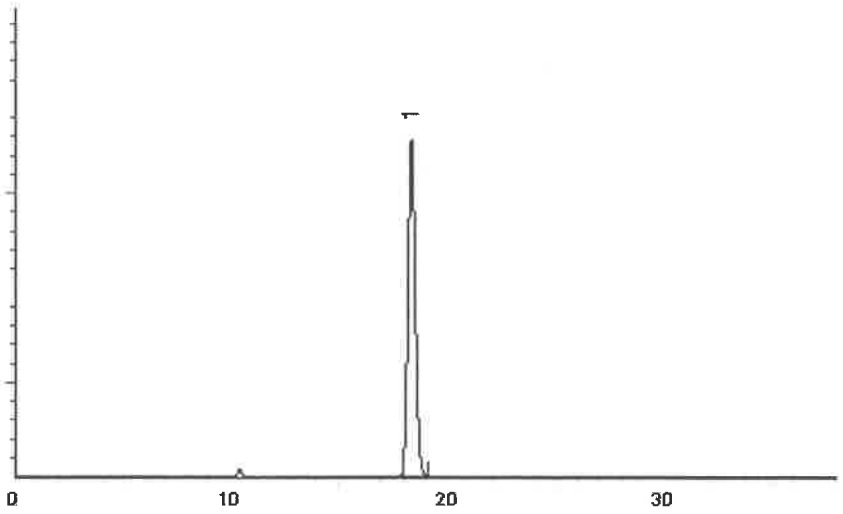
Flow Rate:
1.0 ml/min.

Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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.

Matt Fragassi - Mix Technician

Date Mixed: 15-Aug-2022 **Balance:** 1128353505

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 16-Aug-2022

Manufactured under Restek's ISO 9001:2015 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 17034 and Guide 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) -20°C or colder (Deep 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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Reagent

8330_PETN_Stk_00138

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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. : 568872 **Lot No.:** A0188550

Description : Custom PETN Standard

Custom PETN Standard 5,000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2025 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	PETN		5,000.0	µg/mL	+/- 46.4973	µg/mL	Gravimetric
	CAS # 78-11-5	(Lot 051108JLM)			+/- 276.2417	µg/mL	Unstressed
	Purity 99%				+/- 321.4093	µg/mL	Stressed

Solvent: Acetonitrile
CAS # 75-05-8
Purity 99%

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

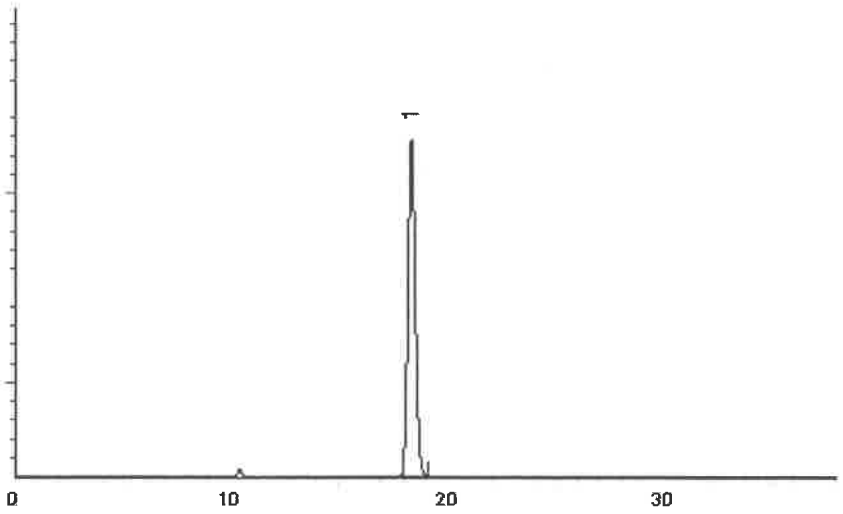
Flow Rate:
1.0 ml/min.

Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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.

Matt Fragassi - Mix Technician

Date Mixed: 15-Aug-2022 **Balance:** 1128353505

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 16-Aug-2022

Manufactured under Restek's ISO 9001:2015 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 17034 and Guide 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) -20°C or colder (Deep 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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Reagent

8330_PETN_Stk_00141

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

ACCREDITED ISO 17034 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. : 568872 **Lot No.:** A0197735

Description : Custom PETN Standard

Custom PETN Standard 5,000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	PETN	78-11-5	051108JLM	99%	5,020.0 µg/mL	+/- 236.9306

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Acetonitrile

CAS # 75-05-8

Purity 99%

Quality Confirmation Test

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

Flow Rate:
1.0 ml/min.

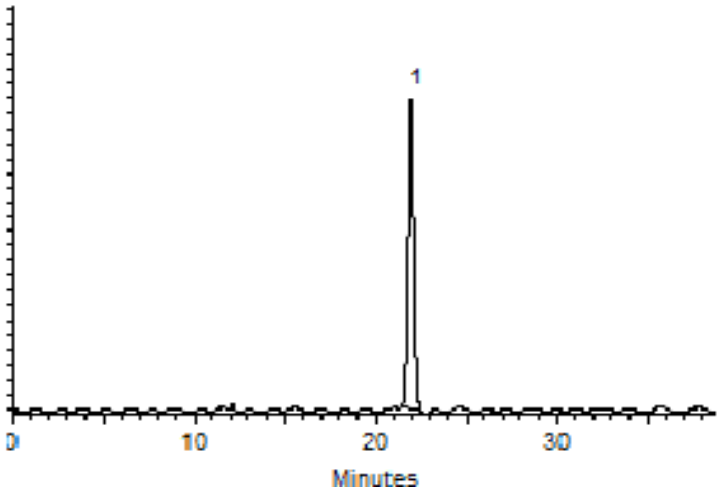
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
1µl



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.

John Friedline - Operations Technician I

Date Mixed: 04-May-2023 **Balance Serial #** 1127510105

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 10-May-2023

Manufactured under Restek's ISO 9001:2015 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 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330_PETN_Stk_00144

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

ACCREDITED ISO 17034 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. : 568872 **Lot No.:** A0197735

Description : Custom PETN Standard

Custom PETN Standard 5,000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	PETN	78-11-5	051108JLM	99%	5,020.0 µg/mL	+/- 236.9306

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Acetonitrile

CAS # 75-05-8

Purity 99%

Quality Confirmation Test

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

Flow Rate:
1.0 ml/min.

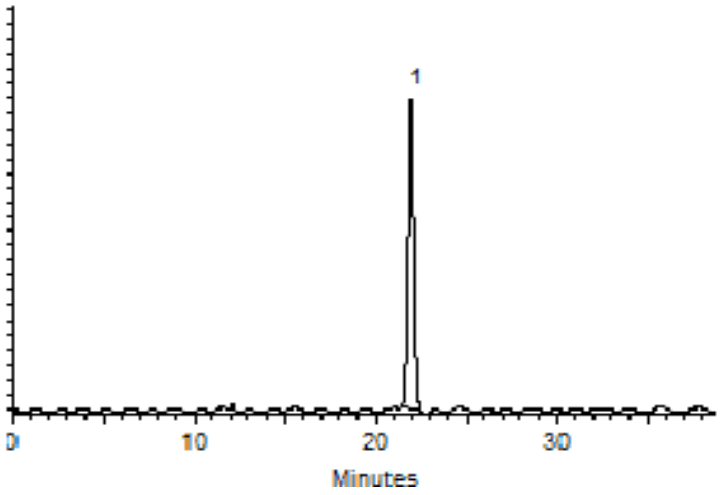
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
1µl



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John Friedline - Operations Technician I

Date Mixed: 04-May-2023 **Balance Serial #** 1127510105

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 10-May-2023

Manufactured under Restek's ISO 9001:2015 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 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330_PETN_Stk_00145

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

ACCREDITED ISO 17034 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. : 568872 **Lot No.:** A0198972

Description : Custom PETN Standard

Custom PETN Standard 5,000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	PETN	78-11-5	051108JLM	99%	5,012.0 µg/mL	+/- 236.5531

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Acetonitrile

CAS # 75-05-8

Purity 99%

Quality Confirmation Test

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

Flow Rate:
1.0 ml/min.

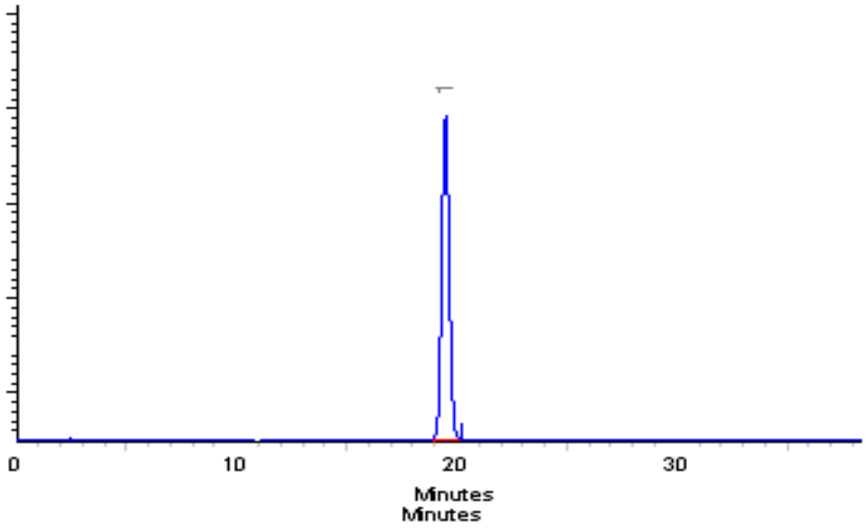
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
1µl



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.

Bryan Snyder - Operations Tech I

Date Mixed: 14-Jun-2023 **Balance Serial #** 1128342314

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 16-Jun-2023

Manufactured under Restek's ISO 9001:2015 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 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330_PETN_Stk_00146

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

ACCREDITED ISO 17034 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. : 568872 **Lot No.:** A0198972

Description : Custom PETN Standard

Custom PETN Standard 5,000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	PETN	78-11-5	051108JLM	99%	5,012.0 µg/mL	+/- 236.5531

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Acetonitrile

CAS # 75-05-8

Purity 99%

Quality Confirmation Test

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

Flow Rate:
1.0 ml/min.

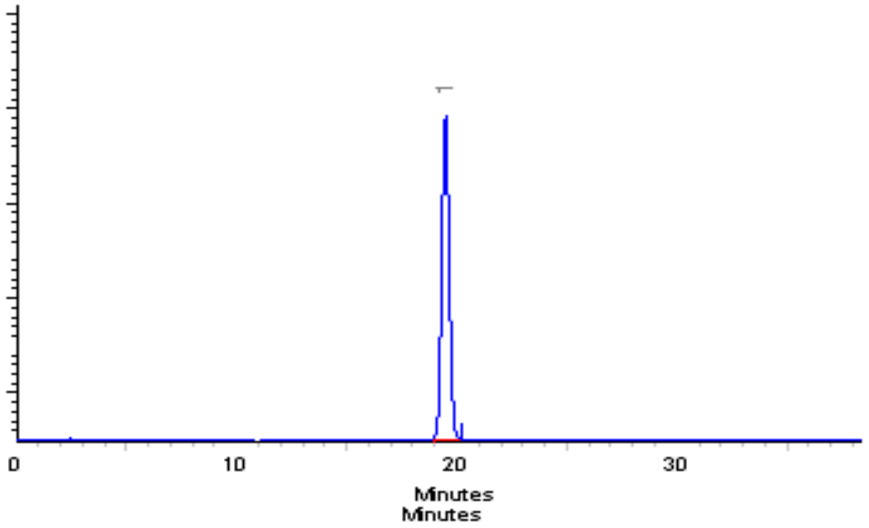
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
1µl



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.

Bryan Snyder - Operations Tech I

Date Mixed: 14-Jun-2023 **Balance Serial #** 1128342314

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 16-Jun-2023

Manufactured under Restek's ISO 9001:2015 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:

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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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:

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- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330_PETN1000_00012

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED
ISO 17034 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. : 31600 **Lot No.:** A0194158

Description : PETN Standard

PETN Standard 1000µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2028 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)
1	PETN	78-11-5	051108JLM	99%	1,009.0 µg/mL	+/- 47.0716

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methanol
CAS # 67-56-1
Purity 99%

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 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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:

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Reagent

8330_PETN1000_00013

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3223.01

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. : 31600 **Lot No.:** A0194158

Description : PETN Standard

PETN Standard 1000µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2028 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)
1	PETN	78-11-5	051108JLM	99%	1,009.0 µg/mL	+/- 47.0716

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methanol
CAS # 67-56-1
Purity 99%

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.
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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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Handling Notes:

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- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

833035DNAStk_00055

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-4
Description: 3,5-Dinitroaniline
Lot: 222011692-01
Solvent: Methanol (50%)
Acetonitrile (50%)
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Sep 6, 2022
Expiration: Oct 6, 2023
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
3,5-Dinitroaniline	618-87-1	100.0	100.6	100.6

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[2] All weights are traceable through NIST, Test No. 684/289871-17

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

QR-ORG/INO-001
Rev. 7/20

Reagent

833035DNAStk_00056

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-4
Description: 3,5-Dinitroaniline
Lot: 223041214
Solvent: Methanol (50%)
Acetonitrile (50%)
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Apr 14, 2023
Expiration: May 14, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity[3] %	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
3,5-Dinitroaniline	618-87-1	100.0	100.8	100.8

This Certified Reference Material was verified in accordance with ISO/IEC 17025 (AT-1339) and ISO 17034 (AR-1463)

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

[2] All weights are traceable through NIST, Test No. 684/291344-18 & 684/292805-19

[3] Purity/Identity determined by one or more of the following methods: GC/MS, LC/MS, NMR, FTIR, Melting Point.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

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Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

Reagent

8330DiaminLCS_00058

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20230608-122323.b\0608DIA58.D

Lims ID: DiaminoLCS58 Inj. Date: 08-Jun-2023 15:03:39

Worklist ID: 280-0122323-061 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_
2 2,6-diamino-4-nitrotolu	0.5000	0.4653	93.1	10-150
5 2,4-diamino-6-nitrotolu	0.5000	0.4588	91.8	10-150

Samples for Limit Group: 1, Lims Prep Method: 8330B_Sonc_10g

280-177189-A-2-B
280-177189-A-5-B
280-177189-A-8-B
280-177189-A-11-B
280-177191-A-1-B
280-177191-A-2-B
280-177191-A-3-B
280-177191-A-4-B
280-177191-A-5-B
280-177191-A-6-B
280-177191-A-7-B
280-177191-A-8-D
280-177191-A-9-B
280-177191-A-10-B
280-177191-A-11-B
280-177191-A-12-B
280-177191-A-13-B
280-177191-A-14-B
280-177191-A-15-C

Reagent

8330DiaminLCS_00059

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20230706-123269.b\07060004.D

Lims ID: CaCl2_Sol_00078 Inj. Date: 06-Jul-2023 11:53:27

Worklist ID: 280-0123269-004 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535
2 2,6-diamino-4-nitrotolu	0.5000	0.4704	94.1	72-122
5 2,4-diamino-6-nitrotolu	0.5000	0.4639	92.8	68-122

Samples for Limit Group: 1, Lims Prep Method: 3535

280-178330-B-1-A	280-178330-C-2-A	280-178330-B-3-A
280-178330-C-5-A	280-178330-B-6-A	280-178330-B-7-A
280-178330-C-8-A	280-178330-B-9-A	280-178330-B-10-A
280-178330-B-11-A	280-178330-C-12-A	280-178330-B-13-A
280-178330-B-14-A	280-178330-C-15-A	280-178330-C-16-A
280-178330-C-17-A	280-178330-B-18-A	

Reagent

8330DiaminLCS_00060

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20230728-123981.b\07280011.D

Lims ID: 8330DiaLCS60 Inj. Date: 28-Jul-2023 16:13:22

Worklist ID: 280-0123981-011 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_
2 2,6-diamino-4-nitrotolu	0.5000	0.4808	96.2	10-150
5 2,4-diamino-6-nitrotolu	0.5000	0.4712	94.2	10-150

Samples for Limit Group: 1, Lims Prep Method: 8330B_Sonc_10g

280-179122-A-3-F
680-237803-D-8-B
680-237803-G-9-B
680-237803-G-10-B
680-237803-G-11-B
680-237803-G-12-B
680-237803-G-13-B
680-237803-C-14-B
680-237803-F-15-B
680-237803-G-16-B
680-237803-G-17-B
680-237803-G-18-B
680-237803-G-19-B
680-237803-G-20-D
680-237803-C-21-B
680-237803-F-22-B
680-237803-F-23-B
680-237803-F-24-B
680-237803-F-25-B
680-237803-F-26-B
680-237803-F-27-B
680-237800-D-1-B
680-237800-G-2-B
680-237800-G-3-F
680-237800-G-4-B

Reagent

8330LCSMix1_00142

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CERTIFIED REFERENCE MATERIAL

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ilac-MRA

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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. : 31450 **Lot No.:** A0183848

Description : 8330 Calibration Mix #1

8330 Calibration Std #1 1000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2027 **Storage:** 10°C or colder

Ship: Ambient

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	HMX		1,008.0 µg/mL	+/- 5.9872 µg/mL		Gravimetric
	CAS # 2691-41-0	(Lot 210324JLM)		+/- 55.2213 µg/mL		Unstressed
	Purity 99%			+/- 64.3934 µg/mL		Stressed
2	RDX		1,007.0 µg/mL	+/- 5.9813 µg/mL		Gravimetric
	CAS # 121-82-4	(Lot 080228JLM)		+/- 55.1665 µg/mL		Unstressed
	Purity 99%			+/- 64.3295 µg/mL		Stressed
3	1,3,5-Trinitrobenzene		1,008.0 µg/mL	+/- 5.9872 µg/mL		Gravimetric
	CAS # 99-35-4	(Lot A6TDK)		+/- 55.2213 µg/mL		Unstressed
	Purity 99%			+/- 64.3934 µg/mL		Stressed
4	1,3-Dinitrobenzene		1,006.0 µg/mL	+/- 5.9753 µg/mL		Gravimetric
	CAS # 99-65-0	(Lot 1-DXX-24-1)		+/- 55.1117 µg/mL		Unstressed
	Purity 99%			+/- 64.2657 µg/mL		Stressed
5	Nitrobenzene		1,007.0 µg/mL	+/- 5.9813 µg/mL		Gravimetric
	CAS # 98-95-3	(Lot 10224044)		+/- 55.1665 µg/mL		Unstressed
	Purity 99%			+/- 64.3295 µg/mL		Stressed
6	2,4,6-Trinitrotoluene		1,002.0 µg/mL	+/- 5.9516 µg/mL		Gravimetric
	CAS # 118-96-7	(Lot D11836200)		+/- 54.8926 µg/mL		Unstressed
	Purity 99%			+/- 64.0101 µg/mL		Stressed
7	2,4-Dinitrotoluene		1,005.0 µg/mL	+/- 5.9694 µg/mL		Gravimetric
	CAS # 121-14-2	(Lot MKAA0690V)		+/- 55.0569 µg/mL		Unstressed
	Purity 99%			+/- 64.2018 µg/mL		Stressed

Solvent: Acetonitrile
CAS # 75-05-8
Purity 99%

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

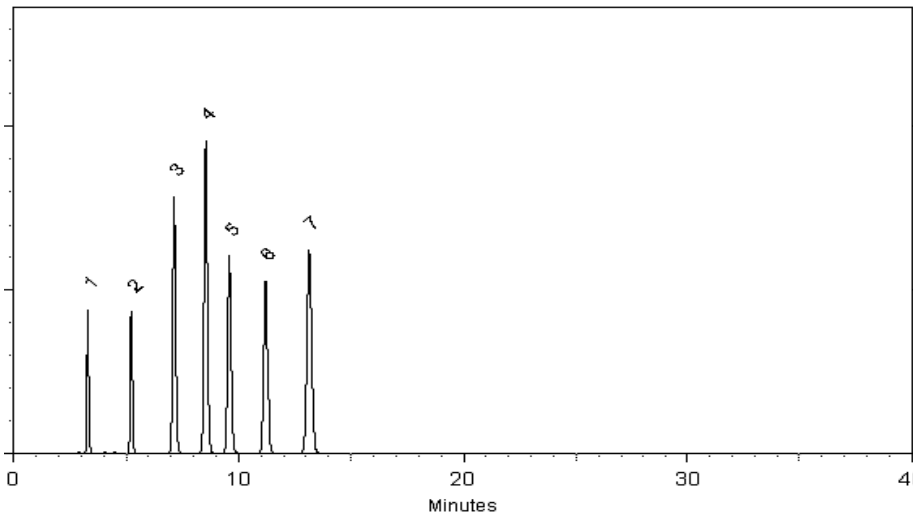
Flow Rate:
1.0 ml/min.

Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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.

Tom Suckar - Mix Technician

Date Mixed: 08-Apr-2022 **Balance:** B251644995

Fang-Yun Lo - QC Analyst

Date Passed: 13-Apr-2022

Manufactured under Restek's ISO 9001:2015 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 17034 and Guide 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) -20°C or colder (Deep 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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Reagent

8330LCSMix1_00145

4 vials Rec. 10/6/20
8330 Cali mix 1

RESTEK CERTIFIED REFERENCE MATERIAL

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Certificate of Analysis

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. : 31450 **Lot No.:** A0163590

Description : 8330 Calibration Mix #1

8330 Calibration Std #1 1000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2025 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	HMX **CAS #** 2691-41-0 **Purity** 98%	(Lot 191003JLM)	1,002.5 µg/mL	+/- 5.9548 µg/mL +/- 54.9222 µg/mL +/- 64.0446 µg/mL		Gravimetric Unstressed Stressed
2	RDX **CAS #** 121-82-4 **Purity** 99%	(Lot 080228JLM)	1,005.0 µg/mL	+/- 5.9694 µg/mL +/- 55.0569 µg/mL +/- 64.2018 µg/mL		Gravimetric Unstressed Stressed
3	1,3,5-Trinitrobenzene **CAS #** 99-35-4 **Purity** 99%	(Lot A6TDK)	1,005.0 µg/mL	+/- 5.9694 µg/mL +/- 55.0569 µg/mL +/- 64.2018 µg/mL		Gravimetric Unstressed Stressed
4	1,3-Dinitrobenzene **CAS #** 99-65-0 **Purity** 99%	(Lot BCBN4329V)	1,007.0 µg/mL	+/- 5.9813 µg/mL +/- 55.1665 µg/mL +/- 64.3295 µg/mL		Gravimetric Unstressed Stressed
5	Nitrobenzene **CAS #** 98-95-3 **Purity** 99%	(Lot SHBJ3622)	1,000.0 µg/mL	+/- 5.9397 µg/mL +/- 54.7830 µg/mL +/- 63.8824 µg/mL		Gravimetric Unstressed Stressed
6	2,4,6-Trinitrotoluene **CAS #** 118-96-7 **Purity** 99%	(Lot 5737200)	1,006.0 µg/mL	+/- 5.9753 µg/mL +/- 55.1117 µg/mL +/- 64.2657 µg/mL		Gravimetric Unstressed Stressed
7	2,4-Dinitrotoluene **CAS #** 121-14-2 **Purity** 99%	(Lot MKAA0690V)	1,009.0 µg/mL	+/- 5.9932 µg/mL +/- 55.2761 µg/mL +/- 64.4573 µg/mL		Gravimetric Unstressed Stressed

Solvent: Acetonitrile
CAS # 75-05-8
Purity 99%

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

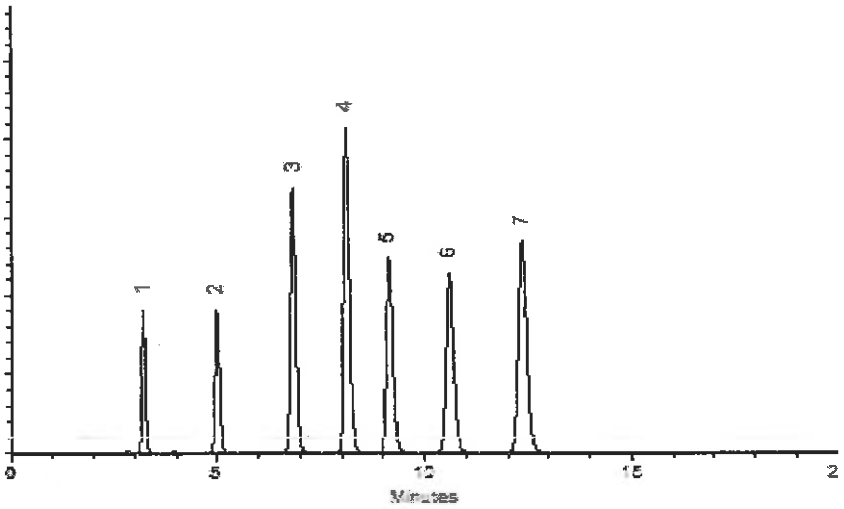
Flow Rate:
1.0 ml/min.

Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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.

Dalton Stover - Operations Technician I

Date Mixed: 17-Aug-2020 **Balance:** 1128353505

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 19-Aug-2020

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

8330LCSMix1_00146

4 vials Rec. 10/6/20
8330 Cali mix 1

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Certificate of Analysis

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. : 31450 **Lot No.:** A0163590

Description : 8330 Calibration Mix #1

8330 Calibration Std #1 1000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2025 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	HMX **CAS #** 2691-41-0 **Purity** 98%	(Lot 191003JLM)	1,002.5 µg/mL	+/- 5.9548 µg/mL +/- 54.9222 µg/mL +/- 64.0446 µg/mL		Gravimetric Unstressed Stressed
2	RDX **CAS #** 121-82-4 **Purity** 99%	(Lot 080228JLM)	1,005.0 µg/mL	+/- 5.9694 µg/mL +/- 55.0569 µg/mL +/- 64.2018 µg/mL		Gravimetric Unstressed Stressed
3	1,3,5-Trinitrobenzene **CAS #** 99-35-4 **Purity** 99%	(Lot A6TDK)	1,005.0 µg/mL	+/- 5.9694 µg/mL +/- 55.0569 µg/mL +/- 64.2018 µg/mL		Gravimetric Unstressed Stressed
4	1,3-Dinitrobenzene **CAS #** 99-65-0 **Purity** 99%	(Lot BCBN4329V)	1,007.0 µg/mL	+/- 5.9813 µg/mL +/- 55.1665 µg/mL +/- 64.3295 µg/mL		Gravimetric Unstressed Stressed
5	Nitrobenzene **CAS #** 98-95-3 **Purity** 99%	(Lot SHBJ3622)	1,000.0 µg/mL	+/- 5.9397 µg/mL +/- 54.7830 µg/mL +/- 63.8824 µg/mL		Gravimetric Unstressed Stressed
6	2,4,6-Trinitrotoluene **CAS #** 118-96-7 **Purity** 99%	(Lot 5737200)	1,006.0 µg/mL	+/- 5.9753 µg/mL +/- 55.1117 µg/mL +/- 64.2657 µg/mL		Gravimetric Unstressed Stressed
7	2,4-Dinitrotoluene **CAS #** 121-14-2 **Purity** 99%	(Lot MKAA0690V)	1,009.0 µg/mL	+/- 5.9932 µg/mL +/- 55.2761 µg/mL +/- 64.4573 µg/mL		Gravimetric Unstressed Stressed

Solvent: Acetonitrile
CAS # 75-05-8
Purity 99%

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

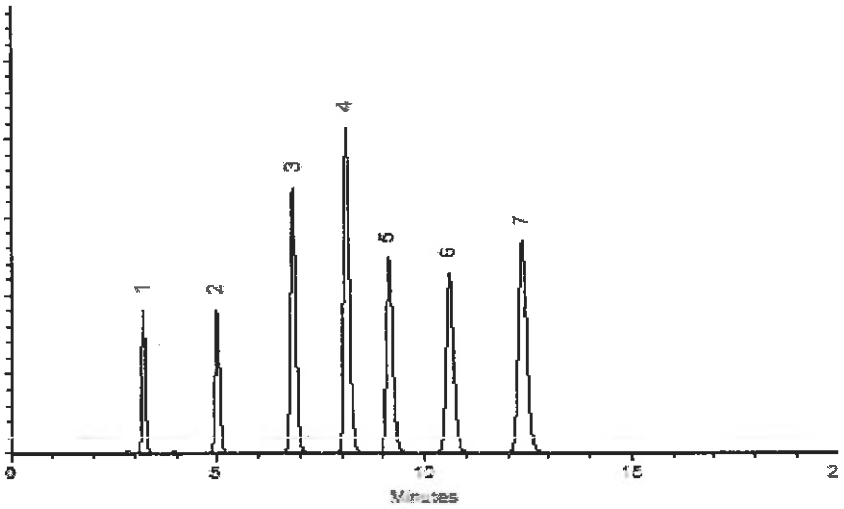
Flow Rate:
1.0 ml/min.

Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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.

Dalton Stover - Operations Technician I

Date Mixed: 17-Aug-2020 **Balance:** 1128353505

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 19-Aug-2020

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

8330LCSmix2_00041

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

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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. : 31451 **Lot No.:** A0192237

Description : 8330 Calibration Mix #2

8330 Calibration Std #2 1000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2027 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Tetryl	479-45-8	211028JLM	99%	1,006.0 µg/mL	+/- 46.9317
2	4-Amino-2,6-dinitrotoluene	19406-51-0	ER070908-01	99%	1,004.0 µg/mL	+/- 46.8384
3	2-Amino-4,6-dinitrotoluene	35572-78-2	A210503-001	99%	1,006.0 µg/mL	+/- 46.9317
4	2,6-Dinitrotoluene	606-20-2	BCCG1833	99%	1,004.0 µg/mL	+/- 46.8384
5	2-Nitrotoluene	88-72-2	BCBZ7826	99%	1,008.0 µg/mL	+/- 47.0250
6	4-Nitrotoluene	99-99-0	BCCB0171	99%	1,002.0 µg/mL	+/- 46.7451
7	3-Nitrotoluene	99-08-1	07329LG	99%	1,008.0 µg/mL	+/- 47.0250

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Acetonitrile
CAS # 75-05-8
Purity 99%

Quality Confirmation Test

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

Flow Rate:
1.0 ml/min.

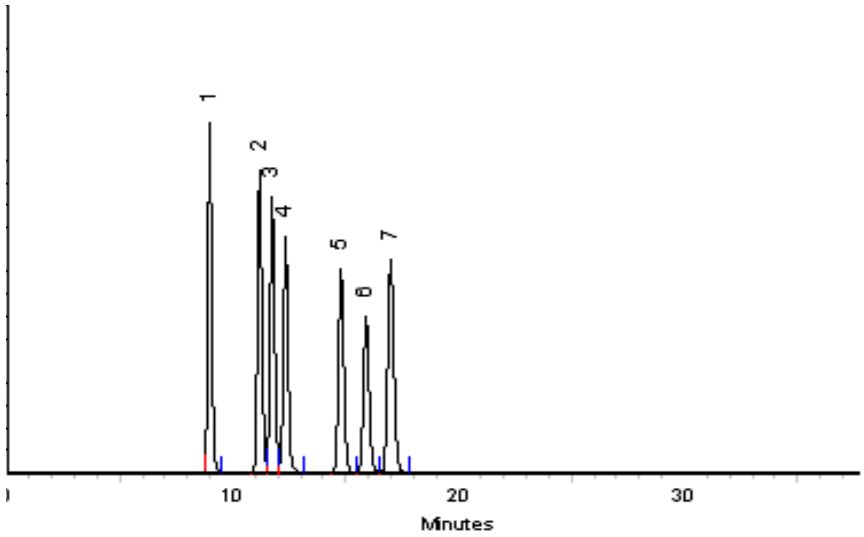
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
5µl



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.

John Friedline - Operations Technician I

Date Mixed: 05-Dec-2022 **Balance Serial #** 1128342314

Christie Mills - Operations Tech II - ARM QC

Date Passed: 07-Dec-2022

Manufactured under Restek's ISO 9001:2015 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 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330LCSmix2_00043

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

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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. : 31451 **Lot No.:** A0192237

Description : 8330 Calibration Mix #2

8330 Calibration Std #2 1000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2027 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Tetryl	479-45-8	211028JLM	99%	1,006.0 µg/mL	+/- 46.9317
2	4-Amino-2,6-dinitrotoluene	19406-51-0	ER070908-01	99%	1,004.0 µg/mL	+/- 46.8384
3	2-Amino-4,6-dinitrotoluene	35572-78-2	A210503-001	99%	1,006.0 µg/mL	+/- 46.9317
4	2,6-Dinitrotoluene	606-20-2	BCCG1833	99%	1,004.0 µg/mL	+/- 46.8384
5	2-Nitrotoluene	88-72-2	BCBZ7826	99%	1,008.0 µg/mL	+/- 47.0250
6	4-Nitrotoluene	99-99-0	BCCB0171	99%	1,002.0 µg/mL	+/- 46.7451
7	3-Nitrotoluene	99-08-1	07329LG	99%	1,008.0 µg/mL	+/- 47.0250

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Acetonitrile
CAS # 75-05-8
Purity 99%

Quality Confirmation Test

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

Flow Rate:
1.0 ml/min.

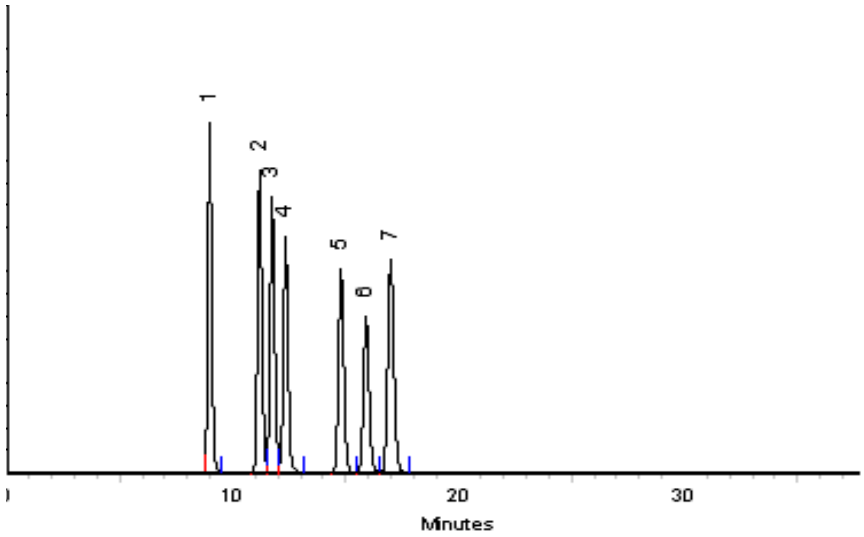
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
5µl



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.

John Friedline - Operations Technician I

Date Mixed: 05-Dec-2022 **Balance Serial #** 1128342314

Christie Mills - Operations Tech II - ARM QC

Date Passed: 07-Dec-2022

Manufactured under Restek's ISO 9001:2015 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 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330LCSmix2_00044

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED
ISO 17034 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. : 31451 **Lot No.:** A0192237

Description : 8330 Calibration Mix #2

8330 Calibration Std #2 1000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2027 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Tetryl	479-45-8	211028JLM	99%	1,006.0 µg/mL	+/- 46.9317
2	4-Amino-2,6-dinitrotoluene	19406-51-0	ER070908-01	99%	1,004.0 µg/mL	+/- 46.8384
3	2-Amino-4,6-dinitrotoluene	35572-78-2	A210503-001	99%	1,006.0 µg/mL	+/- 46.9317
4	2,6-Dinitrotoluene	606-20-2	BCCG1833	99%	1,004.0 µg/mL	+/- 46.8384
5	2-Nitrotoluene	88-72-2	BCBZ7826	99%	1,008.0 µg/mL	+/- 47.0250
6	4-Nitrotoluene	99-99-0	BCCB0171	99%	1,002.0 µg/mL	+/- 46.7451
7	3-Nitrotoluene	99-08-1	07329LG	99%	1,008.0 µg/mL	+/- 47.0250

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Acetonitrile
CAS # 75-05-8
Purity 99%

Quality Confirmation Test

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

Flow Rate:
1.0 ml/min.

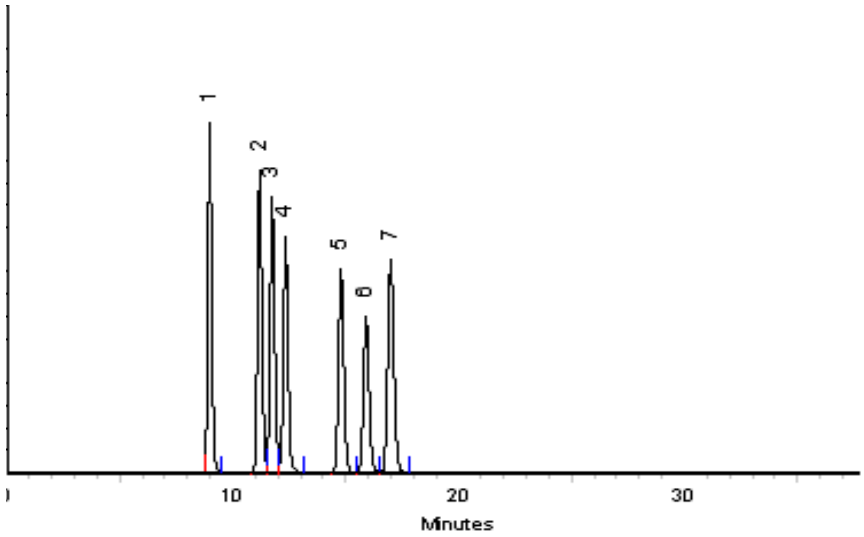
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
5µl



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.

John Friedline - Operations Technician I

Date Mixed: 05-Dec-2022 **Balance Serial #** 1128342314

Christie Mills - Operations Tech II - ARM QC

Date Passed: 07-Dec-2022

Manufactured under Restek's ISO 9001:2015 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 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330PAStkPS_00072

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-3
Description: Picric acid
Lot: 218031154-04
Solvent: Acetonitrile (50%)
Methanol (50%)
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Aug 30, 2022
Expiration: Sep 30, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (HPLC)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Picric acid	88-89-1	99.1	100.1	99.2

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 822-275872-11

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

QR-ORG/INO-001
Rev. 7/20

Reagent

8330PAStkPS_00073

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-3
Description: Picric acid
Lot: 223031306
Solvent: Acetonitrile (50%)
Methanol (50%)
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Mar 23, 2023
Expiration: Apr 23, 2025
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity[3] %	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
Picric acid	88-89-1	99.1	100.4	99.5

This Certified Reference Material was verified in accordance with ISO/IEC 17025 (AT-1339) and ISO 17034 (AR-1463)

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

[2] All weights are traceable through NIST, Test No. 684/291344-18 & 684/292805-19

[3] Purity/Identity determined by one or more of the following methods: GC/MS, LC/MS, NMR, FTIR, Melting Point.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Hazard information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

Reagent

8330Surrogate_00146

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20230622-122822.b\06220011.D

Lims ID: 8330Surr146 Inj. Date: 22-Jun-2023 18:17:12

Worklist ID: 280-0122822-011 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535	Limits 2 3535
$ 10 1,2-Dinitrobenzene	0.5000	0.5234	104.7	63-127	83-119

Samples for Limit Group: 1, Lims Prep Method: 3535

400-239200-B-1-A	400-239200-B-3-A	400-239200-B-6-A
400-239201-I-1-A	400-239201-H-2-A	400-239201-H-3-A
400-239201-H-4-A	400-239202-F-1-A	400-239202-F-2-A
400-239202-F-3-A	400-239202-F-4-A	

Samples for Limit Group: 2, Lims Prep Method: 3535

280-178007-B-7-A	280-178007-B-8-A	280-178007-A-10-A
280-178007-B-11-A	280-178018-B-1-A	280-178018-A-2-A
280-178018-A-3-A	280-178018-B-4-A	280-178018-B-5-A
380-50652-K-1-A	380-50805-U-1-A	

Reagent

8330Surrogate_00150

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20230822-124734.b\08220011.D

Lims ID: Surr150 Inj. Date: 22-Aug-2023 20:04:51

Worklist ID: 280-0124734-011 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_	Limits 2 0B_Sonc_
$ 10 1,2-Dinitrobenzene	0.2500	0.2372	94.9	78-119	83-122

Samples for Limit Group: 1, Lims Prep Method: 8330B_Sonc_10g

680-238231-F-10-B

Samples for Limit Group: 2, Lims Prep Method: 8330B_Sonc_10g

280-179677-A-20-B 280-179677-A-23-B

Reagent

8330Surrogate_00151

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20231005-126201.b\10050011.D

Lims ID: 8330 Surr 151 Inj. Date: 05-Oct-2023 18:02:26

Worklist ID: 280-0126201-011 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_
$ 10 1,2-Dinitrobenzene	0.5000	0.4986	99.7	63-127

Samples for Limit Group: 1, Lims Prep Method: 8330B_Sonc_10g

280-182103-B-6-A 280-182103-B-7-A 280-182103-A-10-A

280-182103-A-11-A 280-182103-B-12-A 280-182103-B-13-A

Reagent

8330SurrStkSS_00279

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

chromatographic plus

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. : 31453 **Lot No.:** A0194831

Description : 8330 Surrogate Mix

8330 Surrogate Mix 1000 µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 29, 2028 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dinitrobenzene	528-29-0	MKCH6067	99%	1,004.8 µg/mL	+/- 56.4585

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

Flow Rate:
1.0 ml/min.

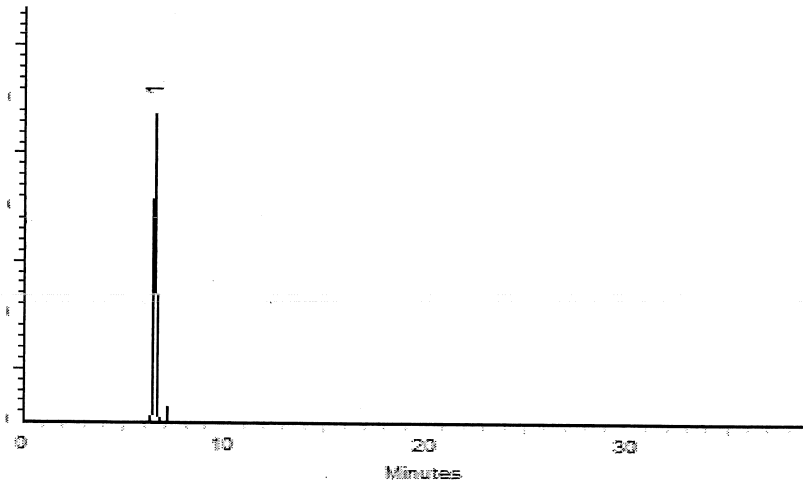
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2µl



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.

Stacey Wanner - Operations Technician I **Date Mixed:** 20-Feb-2023 **Balance Serial #** B442140311

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 21-Feb-2023

Manufactured under Restek's ISO 9001:2015 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 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330SurrStkSS_00280

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

chromatographic plus

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. : 31453 **Lot No.:** A0194831

Description : 8330 Surrogate Mix

8330 Surrogate Mix 1000 µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 29, 2028 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dinitrobenzene	528-29-0	MKCH6067	99%	1,004.8 µg/mL	+/- 56.4585

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

Flow Rate:
1.0 ml/min.

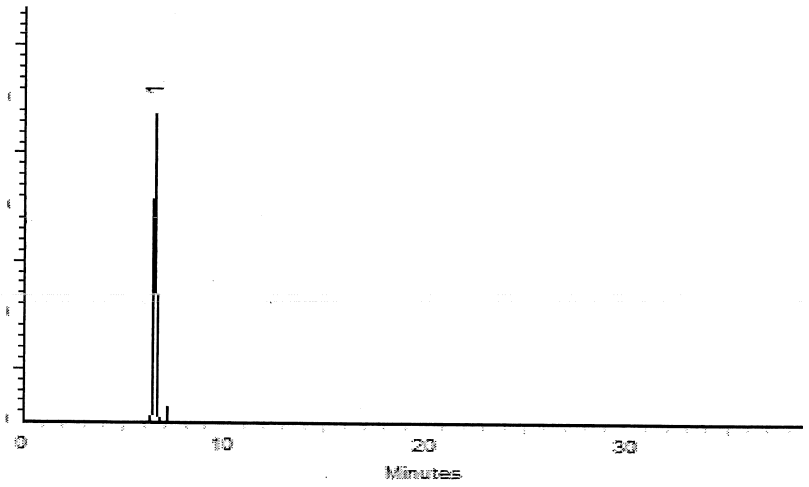
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2µl



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.

Stacey Wanner - Operations Technician I **Date Mixed:** 20-Feb-2023 **Balance Serial #** B442140311

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 21-Feb-2023

Manufactured under Restek's ISO 9001:2015 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 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330SurrStkSS_00285

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED
ISO 17034 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. : 31453 **Lot No.:** A0197062

Description : 8330 Surrogate Mix

8330 Surrogate Mix 1000 µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2028 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dinitrobenzene	528-29-0	STBK9056	99%	1,001.6 µg/mL	+/- 56.2801

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

Flow Rate:
1.0 ml/min.

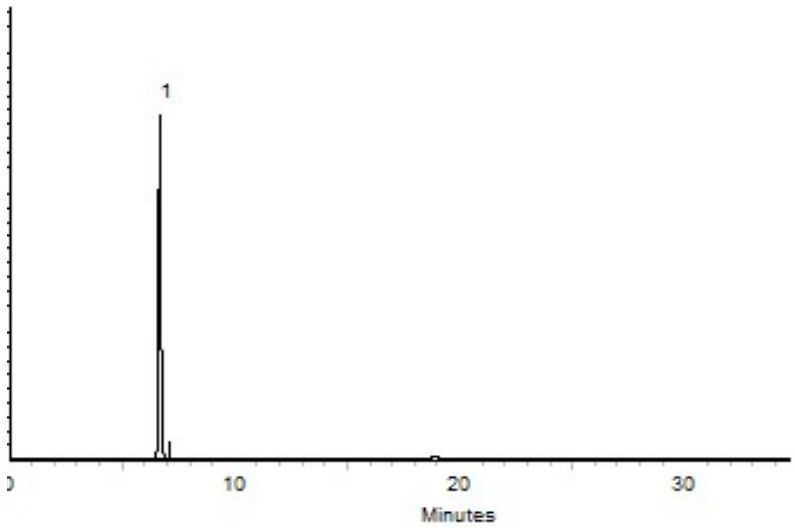
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2.0µl



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.

Penelope Riglin - Operations Tech I

Jennifer Pollino - Operations Tech III - ARM QC

Date Mixed: 17-Apr-2023 **Balance Serial #** 1128360905

Date Passed: 19-Apr-2023

Manufactured under Restek's ISO 9001:2015 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 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330SurrStkSS_00292

RESTEK
110 Benner Circle
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Fax: 1-814-353-1309

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Catalog No. : 31453 **Lot No.:** A0197062

Description : 8330 Surrogate Mix

8330 Surrogate Mix 1000 µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2028 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dinitrobenzene	528-29-0	STBK9056	99%	1,001.6 µg/mL	+/- 56.2801

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

Flow Rate:
1.0 ml/min.

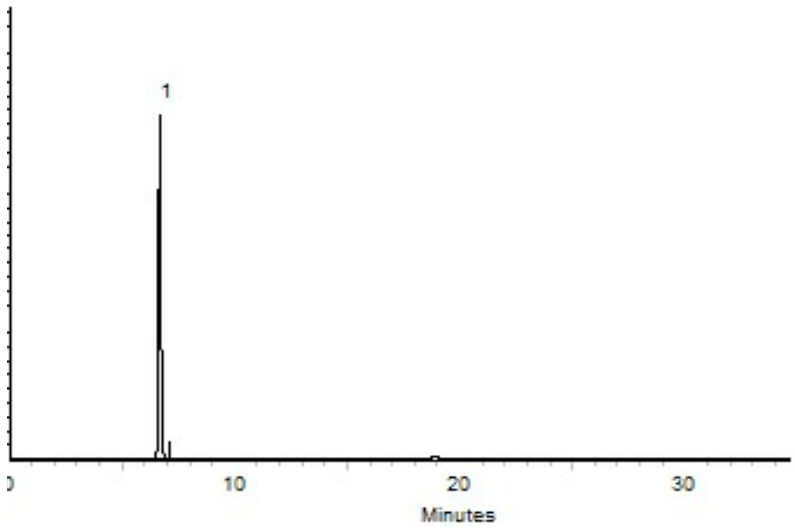
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2.0µl



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Penelope Riglin - Operations Tech I

Date Mixed: 17-Apr-2023 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 19-Apr-2023

Manufactured under Restek's ISO 9001:2015 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 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330SurrStkSS_00293

RESTEK
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Fax: 1-814-353-1309

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Certificate of Analysis

chromatographic plus

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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. : 31453 **Lot No.:** A0198799

Description : 8330 Surrogate Mix

8330 Surrogate Mix 1000 µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2028 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dinitrobenzene	528-29-0	RP230428	99%	1,002.0 µg/mL	+/- 56.3012

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methanol

CAS # 67-56-1

Purity 99%

Quality Confirmation Test

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

Flow Rate:
1.0 ml/min.

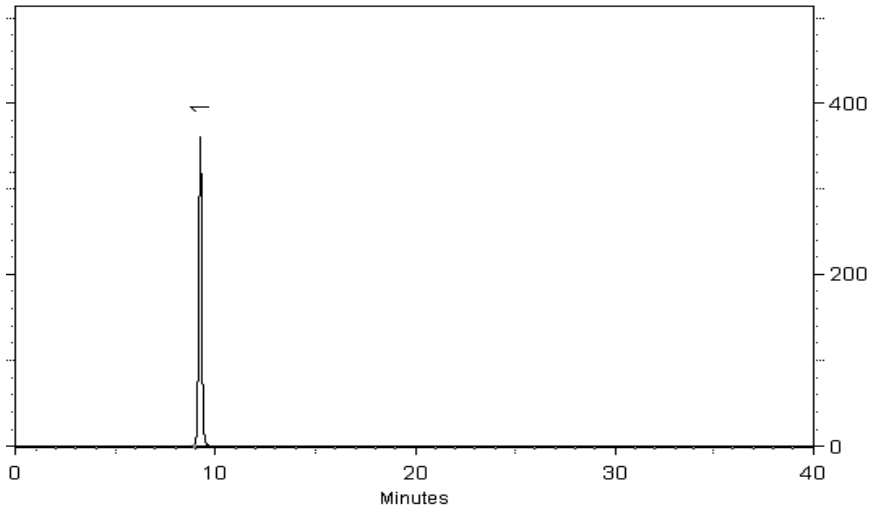
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2.0µl



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Laith Clemente - Operations Technician I

Date Mixed: 08-Jun-2023 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Jun-2023

Manufactured under Restek's ISO 9001:2015 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 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330SurrStkSS_00294

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED ISO 17034 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. : 31453 **Lot No.:** A0198799

Description : 8330 Surrogate Mix

8330 Surrogate Mix 1000 µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2028 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dinitrobenzene	528-29-0	RP230428	99%	1,002.0 µg/mL	+/- 56.3012

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methanol

CAS # 67-56-1

Purity 99%

Quality Confirmation Test

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

Flow Rate:
1.0 ml/min.

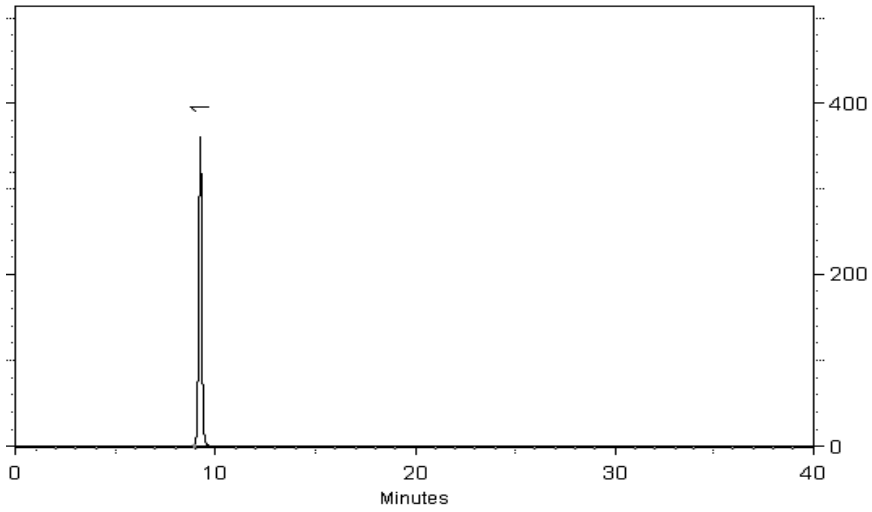
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2.0µl



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Laith Clemente - Operations Technician I

Date Mixed: 08-Jun-2023 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Jun-2023

Manufactured under Restek's ISO 9001:2015 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.
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- 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 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330SurrStkSS_00295

RESTEK
110 Benner Circle
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Tel: 1-814-353-1300
Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

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Catalog No. : 31453 **Lot No.:** A0198799

Description : 8330 Surrogate Mix

8330 Surrogate Mix 1000 µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2028 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dinitrobenzene	528-29-0	RP230428	99%	1,002.0 µg/mL	+/- 56.3012

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methanol

CAS # 67-56-1

Purity 99%

Quality Confirmation Test

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

Flow Rate:
1.0 ml/min.

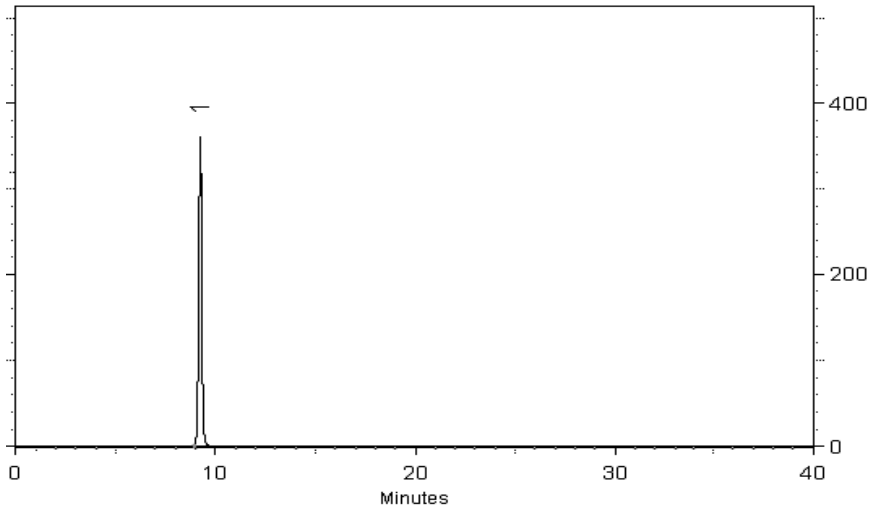
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2.0µl



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Laith Clemente - Operations Technician I

Date Mixed: 08-Jun-2023 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Jun-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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Manufacturing Notes:

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Handling Notes:

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- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330SurrStkSS_00296

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Catalog No. : 31453 **Lot No.:** A0198799

Description : 8330 Surrogate Mix

8330 Surrogate Mix 1000 µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2028 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
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* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

Flow Rate:
1.0 ml/min.

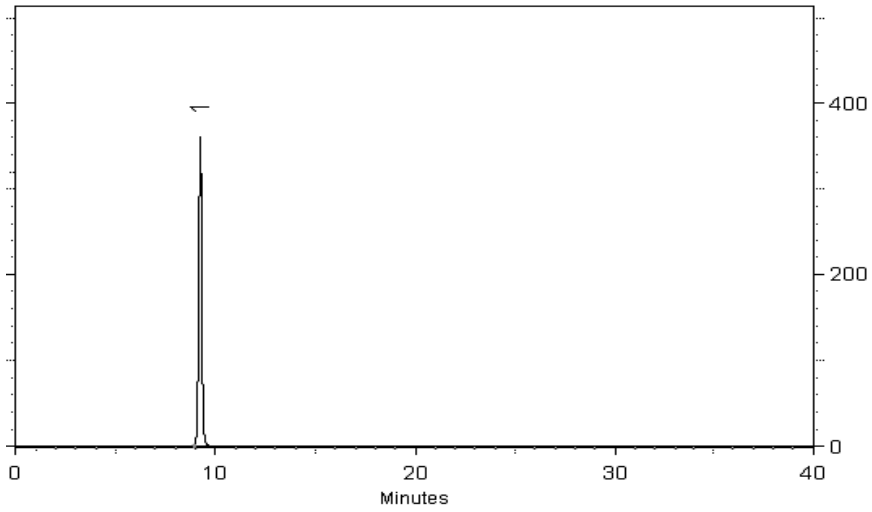
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2.0µl



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Laith Clemente - Operations Technician I

Date Mixed: 08-Jun-2023 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Jun-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
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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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330SurrStkSS_00297

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED ISO 17034 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. : 31453 **Lot No.:** A0198799

Description : 8330 Surrogate Mix

8330 Surrogate Mix 1000 µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2028 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dinitrobenzene	528-29-0	RP230428	99%	1,002.0 µg/mL	+/- 56.3012

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methanol

CAS # 67-56-1

Purity 99%

Quality Confirmation Test

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

Flow Rate:
1.0 ml/min.

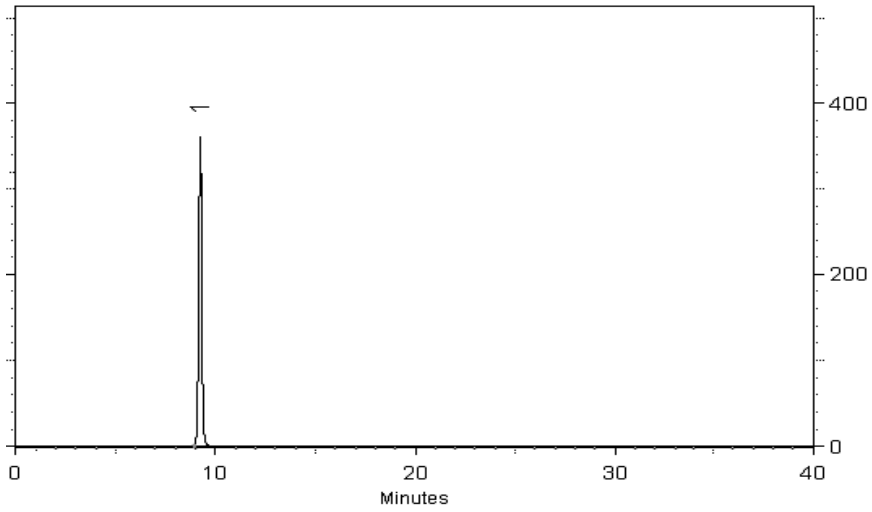
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2.0µl



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.

Laith Clemente - Operations Technician I

Date Mixed: 08-Jun-2023 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Jun-2023

Manufactured under Restek's ISO 9001:2015 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 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330SurrStkSS_00298

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED ISO 17034 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. : 31453 **Lot No.:** A0198799

Description : 8330 Surrogate Mix

8330 Surrogate Mix 1000 µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2028 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dinitrobenzene	528-29-0	RP230428	99%	1,002.0 µg/mL	+/- 56.3012

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methanol

CAS # 67-56-1

Purity 99%

Quality Confirmation Test

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

Flow Rate:
1.0 ml/min.

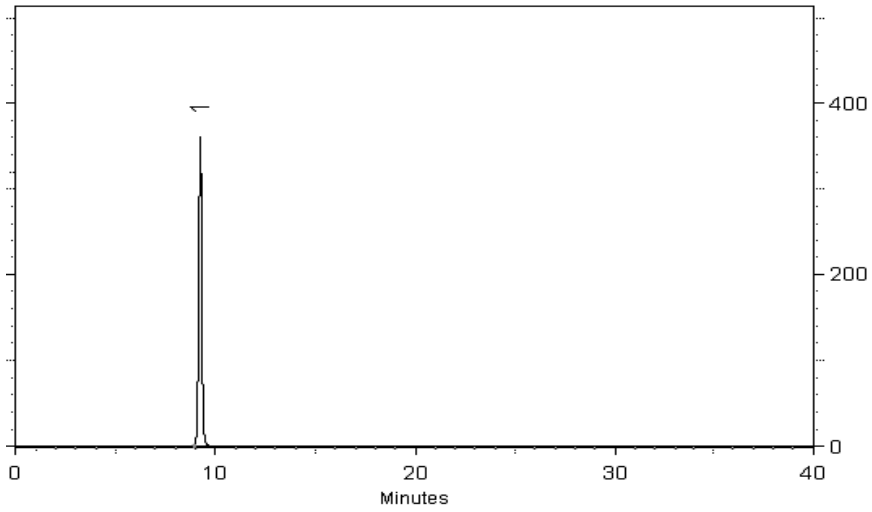
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2.0µl



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.

Laith Clemente - Operations Technician I

Date Mixed: 08-Jun-2023 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Jun-2023

Manufactured under Restek's ISO 9001:2015 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.
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- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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:

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- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330SurrStkSS_00299

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

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Description : 8330 Surrogate Mix

8330 Surrogate Mix 1000 µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2028 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dinitrobenzene	528-29-0	RP230428	99%	1,002.0 µg/mL	+/- 56.3012

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Solvent: Methanol

CAS # 67-56-1

Purity 99%

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Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

Flow Rate:
1.0 ml/min.

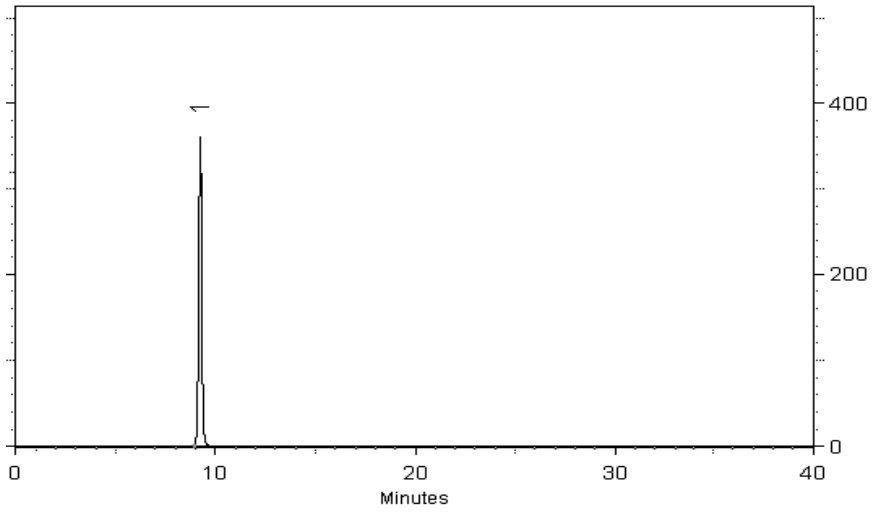
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2.0µl



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Laith Clemente - Operations Technician I

Date Mixed: 08-Jun-2023 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Jun-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

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Reagent

8330SurrStkSS_00300

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

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Solvent: Methanol

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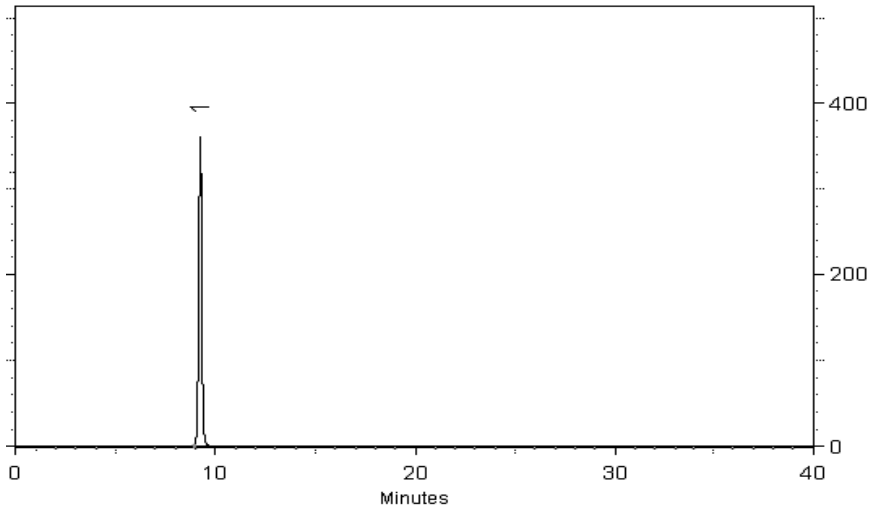
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2.0µl



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Laith Clemente - Operations Technician I

Date Mixed: 08-Jun-2023 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Jun-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

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Reagent

8330SurrStock_00172

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-SS
Description: 1,2-Dinitrobenzene
Lot: 219051500
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: May 22, 2019
Expiration: May 22, 2029
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/FID)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
1,2-Dinitrobenzene	528-29-0	100.0	1002	1002

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[2] All weights are traceable through NIST, Test No. 684/289871-17

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

QR-ORG/INO-001
Rev. 7/20

Reagent

Alk stk std_00023

spex certiprep

ACCREDITED
Reference Materials Producer
Cert# 2495.01

SPEXertificate®

Certificate of Reference Material

ilac-MRA ACCREDITED
Chemical Testing
Cert# 2495.02

Catalog Number: VTACO-3 **Lot No.:** 2-106BT

Description: Custom Standard

Matrix: H_2O

This Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for conductance meters and conductivity cells used in water purity measurements. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

The CRM is prepared gravimetrically using high purity sodium carbonate (Na_2CO_3) Lot# H04155 and ASTM Type I water, using Class A laboratory ware to give precise concentration.

Certified Value:

Analyte:	Na_2CO_3
Alkalinity:	50,000 µg/mL as $CaCO_3$
Uncertainty:	±500 µg/mL
Traceable to:	Standard made from NIST SRM # 351a

Balances are calibrated regularly with weight sets traceable to NIST#s 32856, 32867. This CRM is guaranteed stable to ±1% of the certified concentration inclusive of uncertainty of measurements and other components such as homogeneity, long and short-term stability for a period of one year from the date of certification. This guarantee is valid only when the material is kept tightly capped and stored under ambient laboratory conditions.

Date of Certification: OCT - - 2022

Certifying Officer: Katherine Cullinan

Katherine Cullinan, QC Manager

Page 1 of 2
Rev. 0

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Report of Certification

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001 (certified by DQS), ISO/IEC 17025 (accredited by A2LA) and ISO 17034 (accredited by A2LA) quality system consistent with the following guides:

- ISO 9001: Quality management systems – Requirements
- ISO/IEC 17025: General requirements for the competence of testing and calibration laboratories
- ISO 17034: General requirements for the competence of reference material producers
- ISO Guide 30: Reference Materials – Selected terms and definitions
- ISO Guide 31: Reference Materials – Contents of certificates, labels, and accompanying documentation
- ISO Guide 35: Reference Materials – Guidance for characterization and assessment of homogeneity and stability
- Guide to the Expression of Uncertainty in Measurement, 2008
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurement – Third Edition
- NIST Technical Note 1297

Material Source:
All analytes and matrix materials are obtained and verified by Spex CertiPrep from pre-qualified vendors as per ISO 9001, ISO/IEC 17025 and ISO 17034 guidelines. Vendor identifications are proprietary; however, sources of all materials used in the preparation and testing of Spex CertiPrep CRMs are tracked and documented. For further assistance, please contact Sales Support at USMet-CRMSales@antylia.com.

Instructions for Use:
Primary usage of this CRM is in neat form or diluted serially with matrix of a purity at or greater than the purity of the original matrix solution. If dilution is required, the diluent must be compatible with all certified analytes and contain stabilizers appropriate for the period of intended use. The CRM can also be used as a spike or with a spike, again with appropriate compatibility considerations. All solutions should be thoroughly mixed, by shaking, prior to use and never pipetted directly from the bottle. Do not return excess solution to the bottle. All surfaces that come in contact with the solution must be thoroughly cleaned and leached prior to use. Dilutions should be performed only with Class A volumetric glassware. See SDS for health and safety information.

Method of Preparation:
Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, analytical instrumentation and personnel have been qualified prior to use. The highest purity acids applicable, 18 megohm, double deionized water, acid-leached triple-rinsed bottles (where appropriate), and Class A/calibrated volumetrics have been used in all preparations.

Homogeneity:
The homogeneity of the CRM has been confirmed by procedures consistent with ISO/IEC 17025, ISO 17034, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4600-HOMOGEN-1A. Since the product is highly homogeneous, any sample size taken for analysis would be within the uncertainty budget. This is consistent with the intended use of the CRM.

Statistical Estimator and Confidence Limits:
The certified value 'X' listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X = certified value, U = expanded uncertainty, x = property value
- $U = ku_c$ where k = 2 is the coverage factor at the 95% confidence level
- u_c = combined standard uncertainty obtained by combining the individual element standard uncertainty components u_i and $u_c = \sqrt{\Sigma u_i^2}$

Certification Report:
All certified values reported were derived from the Certification Report, Spex CertiPrep's traceability documentation, identified by the lot number of this CRM. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further assistance, please contact Sales Support at USMet-CRMSales@antylia.com.

Legal Notice:
Spex CertiPrep reference materials are not for any cosmetic, drug or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against Spex CertiPrep, LLC. of any kind whatsoever, whether based on breach of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall Spex CertiPrep, LLC. be liable for any loss of profits or any incidental, special, or consequential damages.

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203 Norcross Avenue • Metuchen, NJ 08840
www.spex.com • Email: USMet-CRMSales@antylia.com
Phone: +1.800.LAB.SPEX • +1.732.549.7144 • Fax: +1.732.603.9647

Reagent

IC BR ICV_00024

RICCA CHEMICAL COMPANY®

448 West Fork Dr
Arlington, TX 76012
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

Bromide Standard, 1000 ppm Br^-

Lot Number: 1204B86 **Product Number:** 1180

Manufacture Date: APR 26, 2022

Expiration Date: OCT 2023

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Sodium Bromide	7647-15-6	High Purity

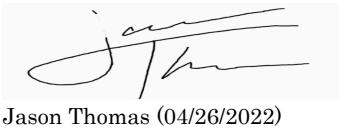
Test	Specification	Result
Appearance	Colorless liquid	Passed
Bromide (Br)	995-1005 ppm	1000 ppm

Specification	Reference
Bromide Solution, Standard (1 mL = 1 mg Br^-)	ASTM (D 3869 D)
Standard Bromide Solution, 1000 mg/L	APHA (4110 B)
Bromide Stock Solution (1.00 mL = 1.00 mg Br^-)	EPA (SW-846) (9056)
Sodium Bromide Standard Solution, 1000 mg/L	ASTM (D 1246)
Bromide Stock Solution (1.00 mL = 1.00 mg Br?)	ASTM (D 4327)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1180-16	500 mL natural poly	18 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)



Jason Thomas (04/26/2022)

Operations Manager

This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

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Reagent

IC CL cal_00076

spex certiprep

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Reference Materials Producer
Cert #2495.01

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Certificate of Reference Material

ilac-MRA ACCREDITED
Chemical Testing
Cert #2495.02

Catalog Number: AS-CL9-2X **Lot No.** 5-146CL-2X

Description: 1000 µg/mL Chloride

Matrix: H_2O

This **Ion Chromatography** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for ion chromatography instrumentation. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Value: 1000 µg/mL ±5 µg/mL

Certified Value is Traceable to: 3182*

* - indicates NIST SRM † - indicates SPEX CertiPrep CRM (when NIST SRM is not available) ‡ - prepared gravimetrically

The CRM is prepared gravimetrically using high purity Sodium Chloride, Lot# 09141H. The certified value listed is the average of values obtained by classical wet assay and ion chromatography analysis.

Refer to side 2 for details of measurement uncertainties.

Classical Wet Assay: 999 µg/mL

Method: Precipitation using Silver Nitrate. Filter, dry and weigh as AgCl.

Instrumental Analysis by Ion Chromatography: 1000 µg/mL

Uncertified Properties

Trace Ionic Impurities in the Actual Solution via IC Analysis:

Element	µg/mL	Element	µg/mL
Br^-	<0.01	NO_3^-	<0.06
F^-	<0.05	$PO4^{-3}$	<0.03
NO_2^-	<0.05	$SO4^{-2}$	<0.08

Balances are calibrated regularly with weight sets traceable to NIST #32856, #32867 and others. This CRM is guaranteed stable and accurate to +/- 0.5% of the certified value. This includes uncertainty components due to preparation, homogeneity by the most precise method, and short-term and long-term stability. This guarantee is valid for a period of one year from the date of certification only when the material is kept tightly capped and stored under ambient laboratory conditions.

Date of Certification: Nov--2022 Certifying Officer: Katherine Cullinan

Katherine Cullinan, QC Manager

Page 1 of 2
Rev. 0

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Report of Certification

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001 (certified by DQS), ISO/IEC 17025 (accredited by A2LA) and ISO 17034 (accredited by A2LA) quality system consistent with the following guides:

- ISO 9001: Quality management systems – Requirements
- ISO/IEC 17025: General requirements for the competence of testing and calibration laboratories
- ISO 17034: General requirements for the competence of reference material producers
- ISO Guide 30: Reference Materials – Selected terms and definitions
- ISO Guide 31: Reference Materials – Contents of certificates, labels, and accompanying documentation
- ISO Guide 35: Reference Materials – Guidance for characterization and assessment of homogeneity and stability
- Guide to the Expression of Uncertainty in Measurement, 2008
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurement – Third Edition
- NIST Technical Note 1297

Material Source:
All analytes and matrix materials are obtained and verified by Spex CertiPrep from pre-qualified vendors as per ISO 9001, ISO/IEC 17025 and ISO 17034 guidelines. Vendor identifications are proprietary; however, sources of all materials used in the preparation and testing of Spex CertiPrep CRMs are tracked and documented. For further assistance, please contact Sales Support at USMet-CRMSales@antylia.com.

Instructions for Use:
Primary usage of this CRM is in neat form or diluted serially with matrix of a purity at or greater than the purity of the original matrix solution. If dilution is required, the diluent must be compatible with all certified analytes and contain stabilizers appropriate for the period of intended use. The CRM can also be used as a spike or with a spike, again with appropriate compatibility considerations. All solutions should be thoroughly mixed, by shaking, prior to use and never pipetted directly from the bottle. Do not return excess solution to the bottle. All surfaces that come in contact with the solution must be thoroughly cleaned and leached prior to use. Dilutions should be performed only with Class A volumetric glassware. See SDS for health and safety information.

Method of Preparation:
Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, analytical instrumentation and personnel have been qualified prior to use. The highest purity acids applicable, 18 megohm, double deionized water, acid-leached triple-rinsed bottles (where appropriate), and Class A/calibrated volumetrics have been used in all preparations.

Homogeneity:
The homogeneity of the CRM has been confirmed by procedures consistent with ISO/IEC 17025, ISO 17034, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4600-HOMOGEN-1A. Since the product is highly homogeneous, any sample size taken for analysis would be within the uncertainty budget. This is consistent with the intended use of the CRM.

Statistical Estimator and Confidence Limits:
The certified value 'X' listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X = certified value, U = expanded uncertainty, x = property value
- $U = ku_c$ where k = 2 is the coverage factor at the 95% confidence level
- u_c = combined standard uncertainty obtained by combining the individual element standard uncertainty components u_i and $u_c = \sqrt{\Sigma u_i^2}$

Certification Report:
All certified values reported were derived from the Certification Report, Spex CertiPrep's traceability documentation, identified by the lot number of this CRM. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further assistance, please contact Sales Support at USMet-CRMSales@antylia.com.

Legal Notice:
Spex CertiPrep reference materials are not for any cosmetic, drug or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against Spex CertiPrep, LLC. of any kind whatsoever, whether based on breach of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall Spex CertiPrep, LLC. be liable for any loss of profits or any incidental, special, or consequential damages.

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Phone: +1.800.LABSPEX • +1.732.549.7144 • Fax: +1.732.603.9647

Accredited to 17025 & 17034 ISO Certified to 9001

Reagent

IC FL cal_00023

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Certificate of Analysis

Fluoride Standard, 1000 ppm F^-

Lot Number: 2207H13 **Product Number:** 3173

Manufacture Date: JUL 29, 2022
Expiration Date: JAN 2024

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.
The concentration is confirmed by Fluoride ISE and is certified traceable to NIST SRM 2203.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Sodium Fluoride	7681-49-4	High Purity

Test	Specification	Result
Appearance	Colorless liquid	Passed
Fluoride (F)	995-1005 ppm	1005 ppm

Specification	Reference
Fluoride Solution, Stock (1.00 mL = 1.00 mg F)	ASTM (D 5542)
Fluoride Stock Solution (1.00 mL = 1.00 mg F^-)	EPA (SW-846) (9056)
Fluoride Calibration Stock Solution (1,000 mg/L F^-)	EPA (SW-846) (9214)
Stock Solution, 1.0 mL = 1.0 mg F	EPA (340.3)
Fluoride Solution, Stock (1.00 mL = 1.00 mg F)	ASTM (D 5996)
Fluoride Stock Solution (1.00 mL = 1.00 mg F?)	ASTM (D 4327)
Fluoride Stock Standard Solution (1 mg of F in 1 mL)	ACS (N/A)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
3173-16	500 mL natural poly	18 months
3173-32	1 L natural poly	18 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)



Myrlande Gilles (07/29/2022)
Quality Control
This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

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Reagent

IC MS/MSD N02_00005

ThermoFisher SCIENTIFIC

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120632

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	S347	Quality Test / Release Date	03/26/2021
Lot Number	210979		
Description	SODIUM NITRITE, A.C.S.		
Country of Origin	India	Suggested Retest Date	Jan/2023
Chemical Origin	Inorganic-non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Yellow-white crystals
ASSAY	%	>= 97	100.9
CALCIUM	%	<= 0.01	<0.01
CHLORIDE	%	<= 0.005	<0.005
HEAVY METALS (as Pb)	%	<= 0.001	<0.001
IDENTIFICATION	PASS/FAIL	= PASS TEST	pass test
INSOLUBLE MATTER	%	<= 0.01	<0.01
IRON (Fe)	%	<= 0.001	<0.001
POTASSIUM (K)	%	<= 0.005	<0.005
SULFATE (SO4)	%	<= 0.01	<0.01



Julian Burton - Quality Control Manager – Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

Reagent

IC MS/MSD S04_00006

Fisher Scientific

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Certificate of Analysis

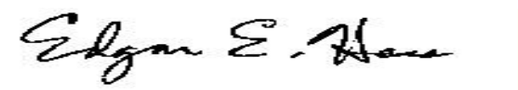
Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2008 standard by SAI Global Certificate Number CERT - 0064970

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Certain products (USP/FCC/NF/EP/BP/JP grades) are sold for use in food, drug, or medical device manufacturing. Fisher does not claim regulatory coverage under 21 CFR nor maintain DMF's with the FDA. The following are the actual analytical results obtained:

Catalog Number	**P304**	**Quality Test / Release Date 3/2/2015**	
Lot Number	**147276**		
Description	**POTASSIUM SULFATE, CRYSTAL, CERTIFIED, A.C.S.**		
Country of Origin	**India**	*** Suggested Retest Date**	**Feb-2020**
Chemical Origin	**Inorganic-non animal**		
BSE/TSE Comment	This product is not manufactured from, or with, any type of animal product, nor any derivative of an animal product. As such, this product should not be considered a vector for BSE or TSE.		

Result name	Units	Specifications	Test Value
APPEARANCE		REPORT	FINE WHITE CRYSTALS
ASSAY	%	>= 99	99.4
CALCIUM	%	<= 0.01	<0.010
CHLORIDE	%	<= 0.001	<0.0010
HEAVY METALS (as Pb)	ppm	<= 5	<5.0
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
INSOLUBLE MATTER	%	<= 0.01	<0.010
IRON (Fe)	ppm	<= 5	<5.0
MAGNESIUM	%	<= 0.005	<0.0050
NITROGEN COMPOUNDS	ppm	<= 5	<5
PH 5% SOLUTION @ 25 DEG C		Inclusive Between 5.5 - 8.5	5.5
SODIUM (Na)	%	<= 0.02	<0.020





Lab Manager Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as a extension of this catalog number listed above. If there are any questions with this certificate, please call Chemical Services at (800) 227-6701.
*Based on suggested storage condition.

Reagent

IC N03 cal_00028

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Certificate of Analysis

Nitrate Nitrogen Standard, 1000 ppm N (4427 ppm NO_3^-)

Lot Number: 2205B73 **Product Number:** 5459

Manufacture Date: MAY 11, 2022
Expiration Date: NOV 2023

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Potassium Nitrate	7757-79-1	High Purity
Chloroform	67-66-3	

Test	Specification	Result
Appearance	Colorless liquid	Passed
Nitrogen (N)	995-1005 ppm	1000 ppm

Specification	Reference
Nitrate Solution, Stock (1.0 mL = 1.0 mg NO3-N)	ASTM (D 3867 A)
Nitrate Solution, Stock (1.0 mL = 1.0 mg NO3-N)	ASTM (D 3867 B)
Stock Nitrate Solution: 1 mL = 1.0 mg NO3-N	EPA (353.2)
Stock Nitrate Solution: 1.0 mL = 1.00 mg NO3-N	EPA (353.3)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
5459-16	500 mL natural poly	18 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)

Myrlande Gilles (05/11/2022)
Quality Control

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Reagent

IC NO2 ICV_00022

ERA

A Waters Company

Certified Reference Material

▪ Certificate of Analysis ▪

Product:	1000 mg/L Nitrite as N (NO_2-N)
Catalog Number:	053-125mL, 990-500mL
Lot No.	261221m
Starting Material:	Sodium Nitrite ($NaNO_2$)
Matrix:	18 megohm deionized water
Density:	1.0022 ± 0.0005 g/mL 21.3 °C and 740 mm Hg
Verification Method:	Ion Chromatography
Certificate Issue Date:	December 21, 2021
Expiration Date:	December 14, 2023
Revision Number:	Original

CERTIFICATION

Parameter	Certified Value[1]	Uncertainty[2]	NIST Traceability	
	mg/L	%	SRM Number[3]	Recovery %
Nitrite as N (NO_2-N)	1000	0.948	-	-

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Certified Reference Material

▪ Certificate of Analysis ▪

1. The **Certified Value** is the actual gravimetric/volumetric "made-to" concentration confirmed by ERA analytical verification. The certified value is monitored and the purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** represents an expanded uncertainty and approximates a 95% confidence interval. The uncertainty is based on the characterization, homogeneity and stability characteristics of the product, multiplied by a coverage factor (k=2). The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product. The formula used to calculate the expanded uncertainty is:
$U_{expanded} = k * SQRT((U_{char}^2) + (U_{homogen}^2) + (U_{LTS}^2) + (U_{STS}^2) + (U_{RSS}^2))$

Where:

$U_{expanded}$ = Expanded uncertainty.
k = Coverage factor.
U_{char} = Combined standard uncertainty of the manufacturing and/or analytical verification assessment.
$U_{homogen}$ = Standard uncertainty of the homogeneity assessment.
U_{LTS} = Standard uncertainty associated with long-term stability.
U_{STS} = Standard uncertainty associated with short-term (transport) stability.
U_{RSS} = Standard uncertainty associated with repeated sampling of the product (where permitted by product use instructions).

3. Where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. **Analytical Traceability Recovery (%)** = [(% recovery ERA certified reference material)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing this ERA certified reference material and/or it's associated stock solution(s) against the applicable NIST SRMs.

4. **Metrological Traceability**. This certified reference material is metrologically traceable to NIST mass reference materials through an unbroken chain of comparisons.

5. **Storage**: 20-25°C

6. **Intended Use**: This standard is intended to be used to calibrate your analytical process and/or as a quality control check of the entire process for the analytes/matrix included in the standard.

7. **Minimum Sample Size**: ERA suggests that when subsampling this product prior to analysis, you use a minimum sample size of at least 1 mL. Using a smaller sample size may invalidate the assigned value and/or uncertainty shown.

8. **Repeat Sampling**: Repeated Sampling of this product is permitted, provided minimum sample sizes and storage instructions are adhered to.

9. **Safety**: ERA products may be hazardous and are intended for use by professional laboratory personnel trained in the competent handling of such materials. Responsibility for the safe use of these products rests entirely with the buyer and/or user. Safety Data Sheets (SDS) for all ERA products are available through our website: www.eraqc.com

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

Certifying Officer
Brian Miller

Brian Miller

Quality Officer
Matthew Seebeck

ISO 17034:2016
ACCREDITED
Reference Material Producer
CERT #1539.03

ISO/IEC 17025:2017
ACCREDITED
Chemical Testing Laboratory
CERT #1539.02

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Reagent

IC NO3 ICV_00019

ERA
A Waters Company

Certified Reference Material

▪ Certificate of Analysis ▪

Product:	1000 mg/L Nitrate as N (NO_3-N)
Catalog Number:	052-125mL, 991-500mL
Lot No.	011221m
Starting Material:	Potassium Nitrate (KNO_3)
Matrix:	18 megohm deionized water
Density:	1.0029 ± 0.0005 g/mL 20.2 °C and 749 mm Hg
Verification Method:	Ion Chromatography
Certificate Issue Date:	December 21, 2021
Expiration Date:	December 1, 2023
Revision Number:	Original

CERTIFICATION

Parameter	Certified Value[1]	Uncertainty[2]	NIST Traceability	
	mg/L	%	SRM Number[3]	Recovery %
Nitrate as N (NO_3-N)	1000	1.57	3185	101

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1. The **Certified Value** is the actual gravimetric/volumetric "made-to" concentration confirmed by ERA analytical verification. The certified value is monitored and the purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** represents an expanded uncertainty and approximates a 95% confidence interval. The uncertainty is based on the characterization, homogeneity and stability characteristics of the product, multiplied by a coverage factor (k=2). The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product. The formula used to calculate the expanded uncertainty is:
$U_{expanded} = k * SQRT((U_{char}^2) + (U_{homogen}^2) + (U_{LTS}^2) + (U_{STS}^2) + (U_{RSS}^2))$

Where:

Uexpanded = Expanded uncertainty.
k = Coverage factor.
Uchar = Combined standard uncertainty of the manufacturing and/or analytical verification assessment.
Uhomogen = Standard uncertainty of the homogeneity assessment.
ULTS = Standard uncertainty associated with long-term stability.
USTS = Standard uncertainty associated with short-term (transport) stability.
URSS = Standard uncertainty associated with repeated sampling of the product (where permitted by product use instructions).

3. Where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. **Analytical Traceability Recovery (%)** = [(% recovery ERA certified reference material)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing this ERA certified reference material and/or it's associated stock solution(s) against the applicable NIST SRMs.

4. **Metrological Traceability.** This certified reference material is metrologically traceable to NIST mass reference materials through an unbroken chain of comparisons.

5. **Storage**: 20-25°C

6. **Intended Use**: This standard is intended to be used to calibrate your analytical process and/or as a quality control check of the entire process for the analytes/matrix included in the standard.

7. **Minimum Sample Size**: ERA suggests that when subsampling this product prior to analysis, you use a minimum sample size of at least 1 mL. Using a smaller sample size may invalidate the assigned value and/or uncertainty shown.

8. **Repeat Sampling**: Repeated Sampling of this product is permitted, provided minimum sample sizes and storage instructions are adhered to.

9. **Safety**: ERA products may be hazardous and are intended for use by professional laboratory personnel trained in the competent handling of such materials. Responsibility for the safe use of these products rests entirely with the buyer and/or user. Safety Data Sheets (SDS) for all ERA products are available through our website: www.eraqc.com

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

Certifying Officer
Brian Miller

Brian Miller

Quality Officer
Matthew Seebeck

ISO 17034:2016 ACCREDITED Reference Material Producer CERT #1529.03

ISO/IEC 17025:2017 ACCREDITED Chemical Testing Laboratory CERT #1539.07

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Reagent

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Certificate of Analysis

Phosphorus AA Standard, 1000 ppm P in H_2O

Lot Number: 4208152 **Product Number:** AP1KW

Manufacture Date: AUG 02, 2022
Expiration Date: JUL 2024

This is a single element solution that was prepared volumetrically to contain the certified value reported. The uncertainty associated with the certified value is the sum of the estimated errors due to the purity of the raw material, the volumetric preparation of the solution, and transpiration of the solution through the container wall.
The final solution concentration is confirmed by AA, ICP, or ICP-MS, and is traceable to NIST Standard Reference Material 3139.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Ammonium Dihydrogen Phosphate	7722-76-1	High Purity

Test	Specification	Result	NIST SRM#
Appearance	Colorless liquid	Passed	
Phosphorus (P)	995-1005 ppm	1000 ppm	3139

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
AP1KW-500	500 mL natural poly	24 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)

Paul Brandon (08/02/2022)
Production Manager
This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

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Reagent

IC SO4 Cal_00009

spex certiprep

Reference Materials Producer
Cert #2495.01

Chemical Testing
Cert #2495.02

SPEXertificate®

Certificate of Reference Material

Lot No. 5-160SO4-2X

Catalog Number: AS-SO49-2X

Description: 1000 µg/mL Sulfate

Matrix: H_2O

This **Ion Chromatography** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for ion chromatography instrumentation. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Value: 1000 µg/mL ±5 µg/mL

Certified Value is Traceable to: 3181*

* - indicates NIST SRM † - indicates SPEX CertiPrep CRM (when NIST SRM is not available) ‡ - prepared gravimetrically

The CRM is prepared gravimetrically using high purity Potassium Sulfate, Lot# AN07201A. The certified value listed is the average of values obtained by classical wet assay and ion chromatography analysis.

Refer to side 2 for details of measurement uncertainties.

Classical Wet Assay: 999 µg/mL

Method: Precipitation using Barium Chloride. Filter, ignite, and weigh as BaSO4.

Instrumental Analysis by Ion Chromatography: 1000 µg/mL

Uncertified Properties

Trace Ionic Impurities in the Actual Solution via IC Analysis:

Element	µg/mL	Element	µg/mL
Br^-	<0.01	NO_2^-	<0.01
Cl^-	<0.03	NO_3^-	<0.02
F^-	<0.003	$PO4^{-3}$	<0.08

Balances are calibrated regularly with weight sets traceable to NIST #32856, #32867 and others. This CRM is guaranteed stable and accurate to +/- 0.5% of the certified value. This includes uncertainty components due to preparation, homogeneity by the most precise method, and short-term and long-term stability. This guarantee is valid for a period of one year from the date of certification only when the material is kept tightly capped and stored under ambient laboratory conditions.

Date of Certification: AUG -- 2022 Certifying Officer: Katherine Cullinan, QC Manager

Page 1 of 2
Rev. 0

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Report of Certification

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001 (certified by DQS), ISO/IEC 17025 (accredited by A2LA) and ISO 17034 (accredited by A2LA) quality system consistent with the following guides:

- ISO 9001: Quality management systems – Requirements
- ISO/IEC 17025: General requirements for the competence of testing and calibration laboratories
- ISO 17034: General requirements for the competence of reference material producers
- ISO Guide 30: Reference Materials – Selected terms and definitions
- ISO Guide 31: Reference Materials – Contents of certificates, labels, and accompanying documentation
- ISO Guide 35: Reference Materials – Guidance for characterization and assessment of homogeneity and stability
- Guide to the Expression of Uncertainty in Measurement, 2008
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurement – Third Edition
- NIST Technical Note 1297

Material Source:
All analytes and matrix materials are obtained and verified by Spex CertiPrep from pre-qualified vendors as per ISO 9001, ISO/IEC 17025 and ISO 17034 guidelines. Vendor identifications are proprietary; however, sources of all materials used in the preparation and testing of Spex CertiPrep CRMs are tracked and documented. For further assistance, please contact Sales Support at USMet-CRMSales@antylia.com.

Instructions for Use:
Primary usage of this CRM is in neat form or diluted serially with matrix of a purity at or greater than the purity of the original matrix solution. If dilution is required, the diluent must be compatible with all certified analytes and contain stabilizers appropriate for the period of intended use. The CRM can also be used as a spike or with a spike, again with appropriate compatibility considerations. All solutions should be thoroughly mixed, by shaking, prior to use and never pipetted directly from the bottle. Do not return excess solution to the bottle. All surfaces that come in contact with the solution must be thoroughly cleaned and leached prior to use. Dilutions should be performed only with Class A volumetric glassware. See SDS for health and safety information.

Method of Preparation:
Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, analytical instrumentation and personnel have been qualified prior to use. The highest purity acids applicable, 18 megohm, double deionized water, acid-leached triple-rinsed bottles (where appropriate), and Class A/calibrated volumetrics have been used in all preparations.

Homogeneity:
The homogeneity of the CRM has been confirmed by procedures consistent with ISO/IEC 17025, ISO 17034, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4600-HOMOGEN-1A. Since the product is highly homogeneous, any sample size taken for analysis would be within the uncertainty budget. This is consistent with the intended use of the CRM.

Statistical Estimator and Confidence Limits:
The certified value 'X' listed on the reverse of this document is at the 95% level of confidence and can be expressed as:
- $X = x \pm U$ where X = certified value, U = expanded uncertainty, x = property value
- $U = ku_c$ where k = 2 is the coverage factor at the 95% confidence level
- u_c = combined standard uncertainty obtained by combining the individual element standard uncertainty components u_i and $u_c = \sqrt{\Sigma u_i^2}$

Certification Report:
All certified values reported were derived from the Certification Report, Spex CertiPrep's traceability documentation, identified by the lot number of this CRM. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further assistance, please contact Sales Support at USMet-CRMSales@antylia.com.

Legal Notice:
Spex CertiPrep reference materials are not for any cosmetic, drug or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against Spex CertiPrep, LLC. of any kind whatsoever, whether based on breach of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall Spex CertiPrep, LLC. be liable for any loss of profits or any incidental, special, or consequential damages.

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Accredited to 17025 & 17034 ISO Certified to 9001

Reagent

IC SO4 Cal_00010

spex certiprep

Reference Materials Producer
Cert #2495.01

SPEXertificate®

Certificate of Reference Material

Chemical Testing
Cert #2495.02

Catalog Number: AS-SO49-2X **Lot No.** 5-160SO4-2X

Description: 1000 µg/mL Sulfate

Matrix: H_2O

This **Ion Chromatography** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for ion chromatography instrumentation. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Value: 1000 µg/mL ±5 µg/mL

Certified Value is Traceable to: 3181*

* - indicates NIST SRM † - indicates SPEX CertiPrep CRM (when NIST SRM is not available) ‡ - prepared gravimetrically

The CRM is prepared gravimetrically using high purity Potassium Sulfate, Lot# AN07201A. The certified value listed is the average of values obtained by classical wet assay and ion chromatography analysis.

Refer to side 2 for details of measurement uncertainties.

Classical Wet Assay: 999 µg/mL

Method: Precipitation using Barium Chloride. Filter, ignite, and weigh as BaSO4.

Instrumental Analysis by Ion Chromatography: 1000 µg/mL

Uncertified Properties

Trace Ionic Impurities in the Actual Solution via IC Analysis:

Element	µg/mL	Element	µg/mL
Br^-	<0.01	NO_2^-	<0.01
Cl^-	<0.03	NO_3^-	<0.02
F^-	<0.003	$PO4^{-3}$	<0.08

Balances are calibrated regularly with weight sets traceable to NIST #32856, #32867 and others. This CRM is guaranteed stable and accurate to +/- 0.5% of the certified value. This includes uncertainty components due to preparation, homogeneity by the most precise method, and short-term and long-term stability. This guarantee is valid for a period of one year from the date of certification only when the material is kept tightly capped and stored under ambient laboratory conditions.

Date of Certification: Nov--2022 Certifying Officer: Katherine Cullinan, QC Manager

Page 1 of 2
Rev. 0

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Report of Certification

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001 (certified by DQS), ISO/IEC 17025 (accredited by A2LA) and ISO 17034 (accredited by A2LA) quality system consistent with the following guides:

- ISO 9001: Quality management systems – Requirements
- ISO/IEC 17025: General requirements for the competence of testing and calibration laboratories
- ISO 17034: General requirements for the competence of reference material producers
- ISO Guide 30: Reference Materials – Selected terms and definitions
- ISO Guide 31: Reference Materials – Contents of certificates, labels, and accompanying documentation
- ISO Guide 35: Reference Materials – Guidance for characterization and assessment of homogeneity and stability
- Guide to the Expression of Uncertainty in Measurement, 2008
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurement – Third Edition
- NIST Technical Note 1297

Material Source:
All analytes and matrix materials are obtained and verified by Spex CertiPrep from pre-qualified vendors as per ISO 9001, ISO/IEC 17025 and ISO 17034 guidelines. Vendor identifications are proprietary; however, sources of all materials used in the preparation and testing of Spex CertiPrep CRMs are tracked and documented. For further assistance, please contact Sales Support at USMet-CRMSales@antylia.com.

Instructions for Use:
Primary usage of this CRM is in neat form or diluted serially with matrix of a purity at or greater than the purity of the original matrix solution. If dilution is required, the diluent must be compatible with all certified analytes and contain stabilizers appropriate for the period of intended use. The CRM can also be used as a spike or with a spike, again with appropriate compatibility considerations. All solutions should be thoroughly mixed, by shaking, prior to use and never pipetted directly from the bottle. Do not return excess solution to the bottle. All surfaces that come in contact with the solution must be thoroughly cleaned and leached prior to use. Dilutions should be performed only with Class A volumetric glassware. See SDS for health and safety information.

Method of Preparation:
Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, analytical instrumentation and personnel have been qualified prior to use. The highest purity acids applicable, 18 megohm, double deionized water, acid-leached triple-rinsed bottles (where appropriate), and Class A/calibrated volumetrics have been used in all preparations.

Homogeneity:
The homogeneity of the CRM has been confirmed by procedures consistent with ISO/IEC 17025, ISO 17034, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4600-HOMOGEN-1A. Since the product is highly homogeneous, any sample size taken for analysis would be within the uncertainty budget. This is consistent with the intended use of the CRM.

Statistical Estimator and Confidence Limits:
The certified value 'X' listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X = certified value, U = expanded uncertainty, x = property value
- $U = ku_c$ where k = 2 is the coverage factor at the 95% confidence level
- u_c = combined standard uncertainty obtained by combining the individual element standard uncertainty components u_i and $u_c = \sqrt{\Sigma u_i^2}$

Certification Report:
All certified values reported were derived from the Certification Report, Spex CertiPrep's traceability documentation, identified by the lot number of this CRM. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further assistance, please contact Sales Support at USMet-CRMSales@antylia.com.

Legal Notice:
Spex CertiPrep reference materials are not for any cosmetic, drug or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against Spex CertiPrep, LLC. of any kind whatsoever, whether based on breach of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall Spex CertiPrep, LLC. be liable for any loss of profits or any incidental, special, or consequential damages.

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Accredited to 17025 & 17034 ISO Certified to 9001

Reagent

IC SO4 ICV_00024

ERA
A Waters Company

Certified Reference Material

▪ Certificate of Analysis ▪

Product:	1000 mg/L Sulfate
Catalog Number:	062-125mL, 995-500mL
Lot No.	021221m
Starting Material:	Potassium Sulfate (K_2SO_4)
Matrix:	18 megohm deionized water
Density:	1.0002 ± 0.0005 g/mL 20.4 °C and 748 mm Hg
Verification Method:	Ion Chromatography
Certificate Issue Date:	December 22, 2021
Expiration Date:	December 1, 2023
Revision Number:	Original

CERTIFICATION

Parameter	Certified Value[1]	Uncertainty[2]	NIST Traceability	
	mg/L	%	SRM Number[3]	Recovery %
Sulfate	1000	0.994	3181	97.5

16341 Table Mountain Pkwy ▪ Golden, CO 80403 ▪ 800.372.0122 ▪ 303.431.8454 ▪ fax 303.421.0159 ▪ www.eraqc.com

1. The **Certified Value** is the actual gravimetric/volumetric "made-to" concentration confirmed by ERA analytical verification. The certified value is monitored and the purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** represents an expanded uncertainty and approximates a 95% confidence interval. The uncertainty is based on the characterization, homogeneity and stability characteristics of the product, multiplied by a coverage factor (k=2). The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product. The formula used to calculate the expanded uncertainty is:
$U_{expanded} = k * SQRT((U_{char}^2) + (U_{homogen}^2) + (U_{LTS}^2) + (U_{STS}^2) + (U_{RSS}^2))$

Where:

$U_{expanded}$ = Expanded uncertainty.
k = Coverage factor.
U_{char} = Combined standard uncertainty of the manufacturing and/or analytical verification assessment.
$U_{homogen}$ = Standard uncertainty of the homogeneity assessment.
U_{LTS} = Standard uncertainty associated with long-term stability.
U_{STS} = Standard uncertainty associated with short-term (transport) stability.
U_{RSS} = Standard uncertainty associated with repeated sampling of the product (where permitted by product use instructions).

3. Where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. **Analytical Traceability Recovery (%)** = [(% recovery ERA certified reference material)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing this ERA certified reference material and/or it's associated stock solution(s) against the applicable NIST SRMs.

4. **Metrological Traceability.** This certified reference material is metrologically traceable to NIST mass reference materials through an unbroken chain of comparisons.

5. **Storage**: 20-25°C

6. **Intended Use**: This standard is intended to be used to calibrate your analytical process and/or as a quality control check of the entire process for the analytes/matrix included in the standard.

7. **Minimum Sample Size**: ERA suggests that when subsampling this product prior to analysis, you use a minimum sample size of at least 1 mL. Using a smaller sample size may invalidate the assigned value and/or uncertainty shown.

8. **Repeat Sampling**: Repeated Sampling of this product is permitted, provided minimum sample sizes and storage instructions are adhered to.

9. **Safety**: ERA products may be hazardous and are intended for use by professional laboratory personnel trained in the competent handling of such materials. Responsibility for the safe use of these products rests entirely with the buyer and/or user. Safety Data Sheets (SDS) for all ERA products are available through our website: www.eraqc.com

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

Certifying Officer
Brian Miller

Brian Miller

Quality Officer
Matthew Seebeck

ISO 17034:2016 ACCREDITED Reference Material Producer CERT #539.03

ISO/IEC 17025:2017 ACCREDITED Chemical Testing Laboratory CERT #539.02

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Reagent

MNX,TNX,DNX_00076

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Trusted Answers

ISO 17034

Reference Material Certificate

Product Information Sheet

Product Name: Custom Standard

Product Number: CUS-23984

Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006725091

Lot Issue Date: 31-Jan-2023

Expiration Date: 29-Feb-2024

Component Name	Concentration		Uncertainty	CAS#	Analyte Lot
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	100.3	±	0.5 µg/mL	N/A	RM12426
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	100.1	±	0.5 µg/mL	N/A	RM12428
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	116.7	±	0.6 µg/mL	N/A	RM12428

Matrix: acetonitrile

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material (RM) standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above. Purity values are taken from approved vendor raw material certificates.

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This analytical reference (RM) standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Safety:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

Intended Use:
This analytical reference (RM) standard is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Expiration of Certification:

Reagent

MNX,TNX,DNX_00078

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Trusted Answers

ISO 17034

Reference Material Certificate

Product Information Sheet

Product Name: Custom Standard

Product Number: CUS-23984

Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006725091

Lot Issue Date: 31-Jan-2023

Expiration Date: 29-Feb-2024

Component Name	Concentration		Uncertainty	CAS#	Analyte Lot
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	100.3	±	0.5 µg/mL	N/A	RM12426
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	100.1	±	0.5 µg/mL	N/A	RM12428
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	116.7	±	0.6 µg/mL	N/A	RM12428

Matrix: acetonitrile

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material (RM) standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above. Purity values are taken from approved vendor raw material certificates.

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This analytical reference (RM) standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Safety:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

Intended Use:
This analytical reference (RM) standard is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Expiration of Certification:

Reagent

MNX,TNX,DNX_00080

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Trusted Answers

ISO 17034

Reference Material Certificate

Product Information Sheet

Product Name: Custom Standard

Product Number: CUS-23984

Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006725091

Lot Issue Date: 31-Jan-2023

Expiration Date: 29-Feb-2024

Component Name	Concentration		Uncertainty	CAS#	Analyte Lot
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	100.3	±	0.5 µg/mL	N/A	RM12426
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	100.1	±	0.5 µg/mL	N/A	RM12428
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	116.7	±	0.6 µg/mL	N/A	RM12428

Matrix: acetonitrile

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material (RM) standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above. Purity values are taken from approved vendor raw material certificates.

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This analytical reference (RM) standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Safety:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

Intended Use:
This analytical reference (RM) standard is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Expiration of Certification:

Reagent

MNX,TNX,DNX_00081

12/5/2023 8:25 AM

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Trusted Answers

ISO 17034

Reference Material Certificate

Product Information Sheet

Product Name: Custom Standard
Product Number: CUS-23984
Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006731787
Lot Issue Date: 28-Feb-2023
Expiration Date: 31-Mar-2024

Component Name	Concentration		Uncertainty	CAS#	Analyte Lot
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	100.1	±	0.5 µg/mL	N/A	RM12426
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	100.4	±	0.5 µg/mL	N/A	RM12428
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	117.1	±	0.6 µg/mL	N/A	RM12428

Matrix: acetonitrile

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material (RM) standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above. Purity values are taken from approved vendor raw material certificates.

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This analytical reference (RM) standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Safety:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

Intended Use:
This analytical reference (RM) standard is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Expiration of Certification:

Page 342 of 1585

Agilent
Trusted Answers

The certification of this analytical reference standard (RM) is valid until the expiration date specified above, provided the material is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the material is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

ANAB
ANSI National Accreditation Board
ACCREDITED
ISO 17034
REFERENCE MATERIAL PRODUCER

ISO 17034 Cert
No. AR-1936

RM was produced in accordance with the TUV/SUD registered ISO 9001:2015 Quality Management System. Cert# 951215321

www.agilent.com/quality/
CSD-QA-015.1

ISO 17025

Reagent

MNX,TNX,DNX_00083

12/5/2023 8:25 AM

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Trusted Answers

ISO 17034

Reference Material Certificate

Product Information Sheet

Product Name: Custom Standard
Product Number: CUS-23984
Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006731787
Lot Issue Date: 28-Feb-2023
Expiration Date: 31-Mar-2024

Component Name	Concentration		Uncertainty	CAS#	Analyte Lot
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	100.1	±	0.5 µg/mL	N/A	RM12426
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	100.4	±	0.5 µg/mL	N/A	RM12428
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	117.1	±	0.6 µg/mL	N/A	RM12428

Matrix: acetonitrile

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material (RM) standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above. Purity values are taken from approved vendor raw material certificates.

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This analytical reference (RM) standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Safety:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

Intended Use:
This analytical reference (RM) standard is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Expiration of Certification:

Page 345 of 1585

Agilent
Trusted Answers

The certification of this analytical reference standard (RM) is valid until the expiration date specified above, provided the material is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the material is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

ANAB
ANSI National Accreditation Board
ACCREDITED
ISO 17034
REFERENCE MATERIAL PRODUCER

ISO 17034 Cert
No. AR-1936

RM was produced in accordance with the TUV/SUD registered ISO 9001:2015 Quality Management System. Cert# 951215321

www.agilent.com/quality/
CSD-QA-015.1

ISO 17025

Reagent

mv-30241_00012

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 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. : 30241 **Lot No.:** A0185733

Description : 8260A Internal Standard Mix

8260A Internal Standard Mix 2,500 µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Fluorobenzene **CAS #** 462-06-6 (Lot BCBZ5549) **Purity** 99%	2,504.0 µg/mL	+/- 14.5585 µg/mL +/- 140.3968 µg/mL +/- 143.6819 µg/mL	Gravimetric Unstressed Stressed
2	Chlorobenzene-d5 **CAS #** 3114-55-4 (Lot PR-29571) **Purity** 99%	2,508.0 µg/mL	+/- 14.5817 µg/mL +/- 140.6211 µg/mL +/- 143.9114 µg/mL	Gravimetric Unstressed Stressed
3	1,4-Dichlorobenzene-d4 **CAS #** 3855-82-1 (Lot PR-30447) **Purity** 99%	2,500.6 µg/mL	+/- 14.5387 µg/mL +/- 140.2062 µg/mL +/- 143.4868 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Rcvd
8/11/22

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

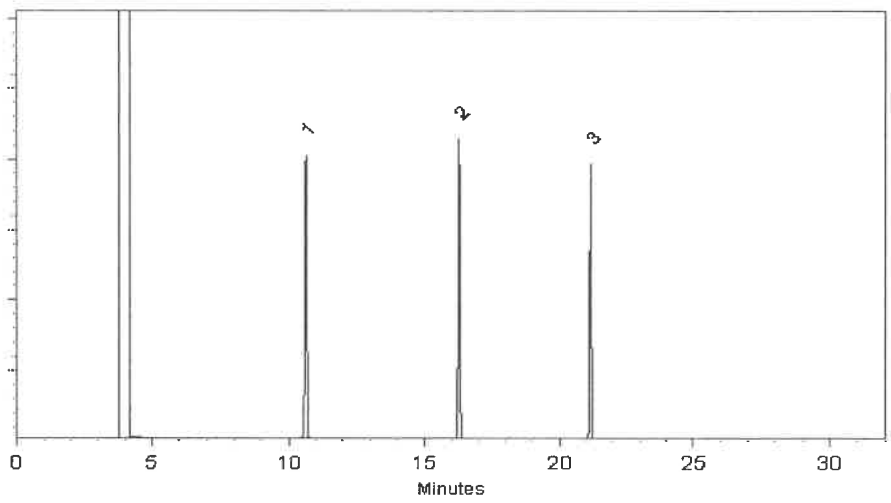
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°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.

Josh McCloskey - Operations Technician I

Date Mixed: 26-May-2022 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 31-May-2022

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Reagent

MV-567650_00030

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Catalog No. : 567650 **Lot No.:** A0172587

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500µg/mL, P&T Methanol, 5mL/ampul

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

Expiration Date : May 31, 2026 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dibromofluoromethane **CAS #** 1868-53-7 (Lot 012021) **Purity** 99%	2,510.9 µg/mL	+/- 14.5983 µg/mL +/- 140.7809 µg/mL +/- 144.0750 µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 (Lot PR-29377) **Purity** 99%	2,518.0 µg/mL	+/- 14.6399 µg/mL +/- 141.1818 µg/mL +/- 144.4852 µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 (Lot PR-31750) **Purity** 99%	2,500.4 µg/mL	+/- 14.5375 µg/mL +/- 140.1949 µg/mL +/- 143.4753 µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 (Lot 20401KO) **Purity** 99%	2,520.9 µg/mL	+/- 14.6567 µg/mL +/- 141.3444 µg/mL +/- 144.6516 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Rcvd 4/6/20

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

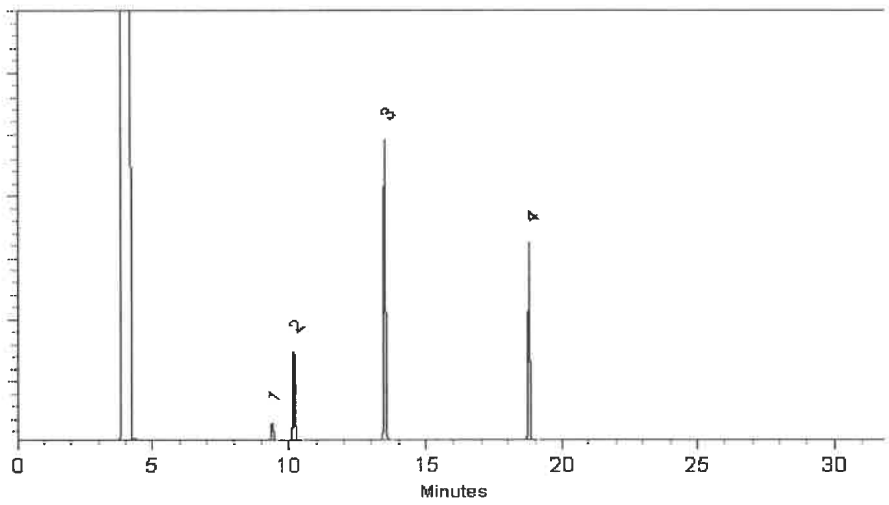
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°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.

Sam Moodler - Operations Tech I

Date Mixed: 19-May-2021 **Balance:** B707717271

Alexis Shelow - Operations Tech I

Date Passed: 21-May-2021

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Reagent

MV-568720_00046

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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. : 568720 **Lot No.:** A0193730

Description : 8260 List 1/Std #5 Acrolein High

8260 List 1/Std #5 Acrolein High 19,750µg/mL, Water, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2024 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acrolein	107-02-8	RD221019	99%	19,924.7 µg/mL	+/- 585.3463

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Water
CAS # 7732-18-5
Purity 99%

5/5/23

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

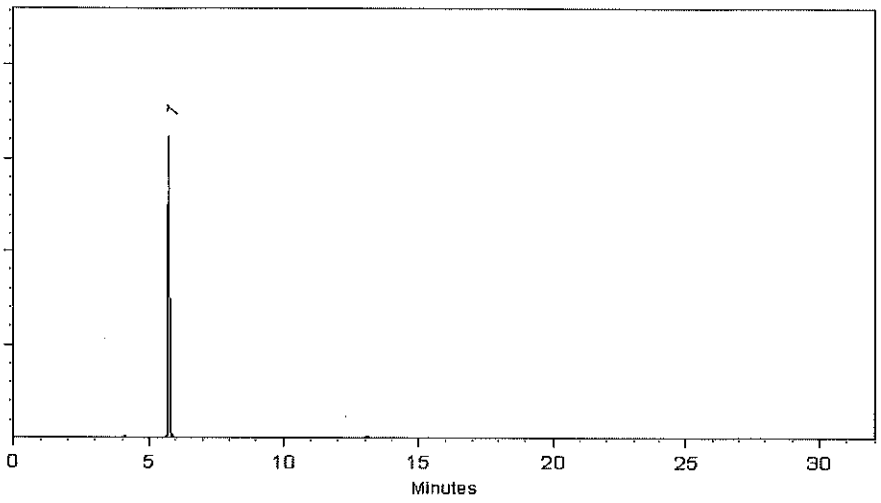
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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.

Brittany Federinko - Operations Tech I **Date Mixed:** 19-Jan-2023 **Balance Serial #** 1128360905

Christie Mills - Operations Tech II - ARM QC **Date Passed:** 20-Feb-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

MV-569721_00015

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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. : 569721 **Lot No.:** A0193494

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500µg/mL, P&T Methanol/Water (90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2026 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Acetone	67-64-1	SHBP8774	99%	12,581.8 µg/mL	+/- 434.7671
2	2-Butanone (MEK)	78-93-3	SHBL5543	99%	12,578.5 µg/mL	+/- 434.6548
3	4-Methyl-2-pentanone (MIBK)	108-10-1	SHBP4724	99%	12,602.3 µg/mL	+/- 435.4755
4	2-Hexanone	591-78-6	MKCQ6663	99%	12,587.5 µg/mL	+/- 434.9658

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

5/5/23

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

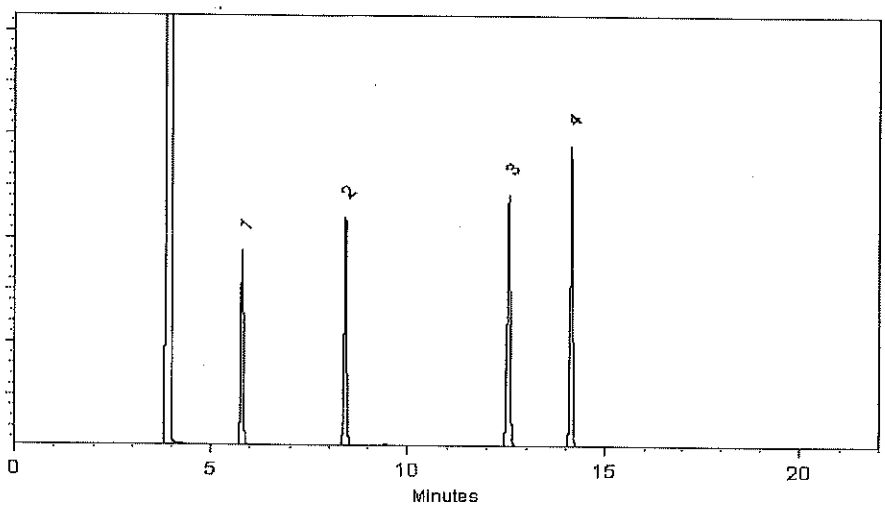
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
0.2µl



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.

Bethany Lowery - Operations Tech I

Date Mixed: 12-Jan-2023 **Balance Serial #** B251644995

Christie Mills - Operations Tech II - ARM QC

Date Passed: 16-Jan-2023

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Certificate #FM 80397

Reagent

MV-569722_00022

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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. : 569722 **Lot No.:** A0189184

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2025 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12)	2,500.3 µg/mL	+/- 18.6878 µg/mL	Gravimetric
	CAS # 75-71-8 (Lot 00012554)		+/- 140.6792 µg/mL	Unstressed
	Purity 99%		+/- 143.9483 µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,500.0 µg/mL	+/- 17.9318 µg/mL	Gravimetric
	CAS # 74-87-3 (Lot SHBK6571)		+/- 140.5648 µg/mL	Unstressed
	Purity 99%		+/- 143.8357 µg/mL	Stressed
3	Vinyl chloride	2,500.2 µg/mL	+/- 20.7208 µg/mL	Gravimetric
	CAS # 75-01-4 (Lot 00015559)		+/- 140.9576 µg/mL	Unstressed
	Purity 99%		+/- 144.2201 µg/mL	Stressed
4	1,3-Butadiene	2,499.9 µg/mL	+/- 18.9759 µg/mL	Gravimetric
	CAS # 106-99-0 (Lot 00019375)		+/- 140.6968 µg/mL	Unstressed
	Purity 99%		+/- 143.9645 µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,500.1 µg/mL	+/- 19.8264 µg/mL	Gravimetric
	CAS # 74-83-9 (Lot 101604)		+/- 140.8262 µg/mL	Unstressed
	Purity 99%		+/- 144.0915 µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,500.6 µg/mL	+/- 23.7833 µg/mL	Gravimetric
	CAS # 75-00-3 (Lot 107-401039114-1)		+/- 141.4639 µg/mL	Unstressed
	Purity 99%		+/- 144.7161 µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,500.0 µg/mL	+/- 14.5352 µg/mL	Gravimetric
	CAS # 75-43-4 (Lot 12841600)		+/- 140.1725 µg/mL	Unstressed
	Purity 99%		+/- 143.4524 µg/mL	Stressed

8	Trichlorofluoromethane (CFC-11)		2,500.3	µg/mL	+/-	18.9529	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot MKCL8411)			+/-	140.7175	µg/mL	Unstressed
	Purity 99%				+/-	143.9858	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

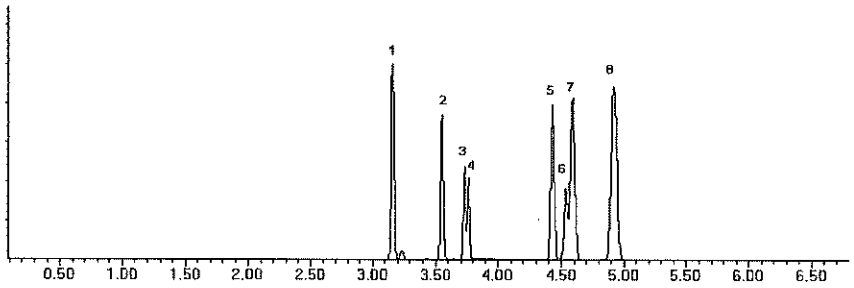
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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.

Cathleen Soltis - Mix Technician

Date Mixed: 31-Aug-2022 **Balance:** B251644995

Christie Mills - Operations Tech II - ARM QC

Date Passed: 14-Sep-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

MV-569723_00018

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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. : 569723 **Lot No.:** A0193735

Description : 8260 List 1 / Std #4 2-CEVE (2015)

8260 List 1 / Std #4 2-CEVE (2015) 2,500µg/mL, P&T Methanol, 1mL /ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2026 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2-Chloroethyl vinyl ether	110-75-8	MKCK6742	99%	2,500.0 µg/mL	+/- 31.1129

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

5/1/23 JW -00018

Tech Tips:
Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

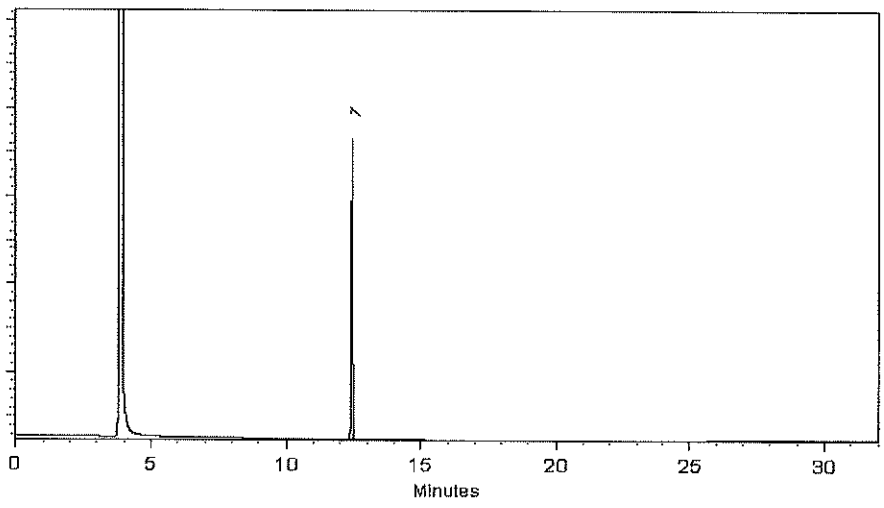
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
0.2µl



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.

Josh McCloskey - Operations Technician I

Date Mixed: 19-Jan-2023 **Balance Serial #** B707717271

Christie Mills - Operations Tech II - ARM QC

Date Passed: 23-Jan-2023

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Reagent

MV-569724_00035

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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. : 569724 **Lot No.:** A0187365

Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2024 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Vinyl acetate	5,022.0 µg/mL	+/- 29.4049 µg/mL	Gravimetric
	CAS # 108-05-4 (Lot RD220630)		+/- 303.0195 µg/mL	Unstressed
	Purity 99%		+/- 303.7388 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Rcvd 12/30/22

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

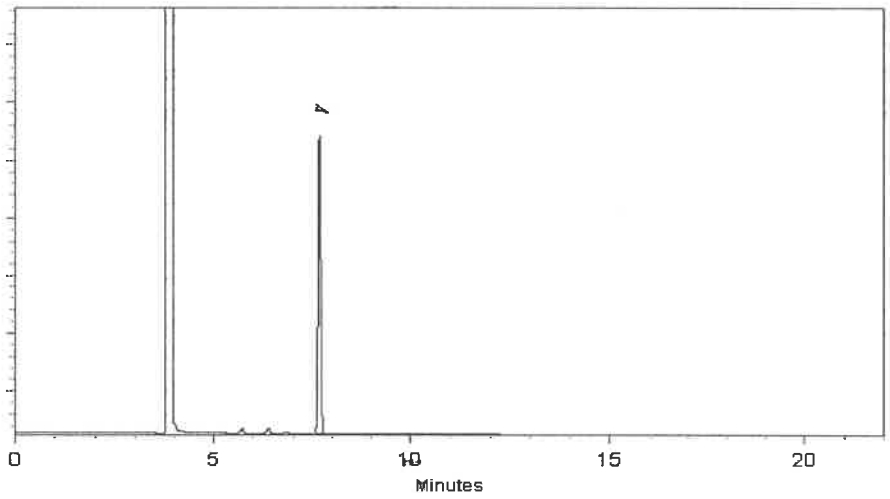
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°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.

Miranda Kline

Miranda Kline - Operations Technician I

Date Mixed: 15-Jul-2022 **Balance:** B707717271

Christie Mills

Christie Mills - Operations Tech II - ARM QC

Date Passed: 21-Jul-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

MV-569727_00024

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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. : 569727 **Lot No.:** A0197009

Description : 8260 List 2/ Std #3 Cyclohexanone (2015)

8260 List 2/ Std #3 Cyclohexanone (2015) 25,000µg/mL, Water, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Cyclohexanone	108-94-1	MKCC7732	99%	25,006.5 µg/mL	+/- 864.2827

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Water
CAS # 7732-18-5
Purity 99%

Rcvd 12/5/23

Quality Confirmation Test

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

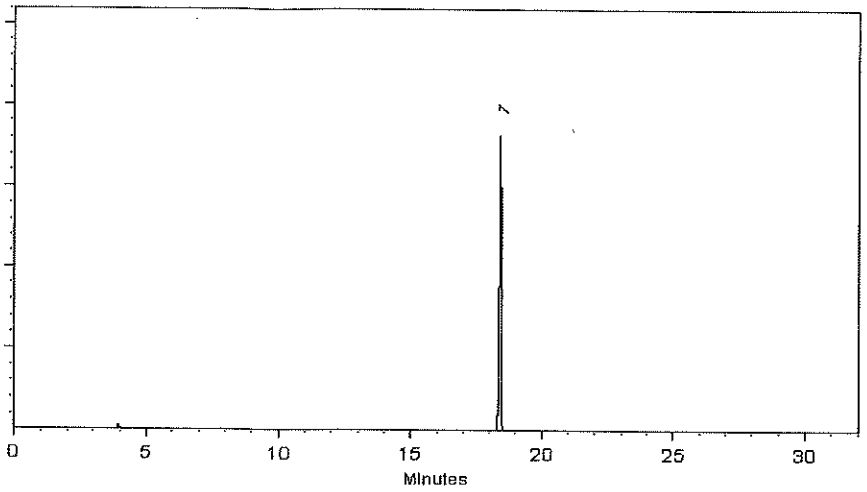
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID

Split Vent:
40 ml/min

Inj. Vol
1µl



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.

Russ Bookhamer - Operations Technician I

Date Mixed: 14-Apr-2023 **Balance Serial #** B251644995

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 18-Apr-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

MV-571992.sec_00010

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Certificate of Analysis

chromatographic plus

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. : 571992.SEC **Lot No.:** A0195252

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2025 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Diethyl ether (ethyl ether)	60-29-7.SEC	F23X068	99%	2,516.7 µg/mL	+/- 86.9644
2	1,1,2-Trichlorotrifluoroethane (CFC-113)	76-13-1.SEC	18342	99%	2,520.0 µg/mL	+/- 87.0795
3	1,1-Dichloroethene	75-35-4.SEC	13896500	99%	2,525.0 µg/mL	+/- 87.2523
4	tert-Butanol (TBA)	75-65-0.SEC	DI34O	99%	25,129.5 µg/mL	+/- 868.3580
5	Methyl acetate	79-20-9.SEC	UCNEL	99%	5,029.0 µg/mL	+/- 173.7790
6	Iodomethane (methyl iodide)	74-88-4.SEC	Y25A027	99%	2,521.7 µg/mL	+/- 87.1371
7	Allyl chloride (3-chloropropene)	107-05-1.SEC	RD210329	99%	2,518.2 µg/mL	+/- 87.0162
8	Methylene chloride (dichloromethane)	75-09-2.SEC	FGM02	99%	2,516.7 µg/mL	+/- 86.9644
9	Carbon disulfide	75-15-0.SEC	MKBL1376V	99%	2,511.7 µg/mL	+/- 86.7916
10	Acrylonitrile	107-13-1.SEC	V54AD	99%	25,200.3 µg/mL	+/- 870.8057
11	Methyl-tert-butyl ether (MTBE)	1634-04-4.SEC	CDCQG	99%	2,517.3 µg/mL	+/- 86.9874
12	cis-1,2-Dichloroethene	156-59-2.SEC	YZO5O	99%	2,515.3 µg/mL	+/- 86.9183
13	n-Hexane (C6)	110-54-3.SEC	10188491	99%	2,514.7 µg/mL	+/- 86.8953
14	1,1-Dichloroethane	75-34-3.SEC	1026.30-3	98%	2,512.6 µg/mL	+/- 86.8223
15	2,2-Dichloropropane	594-20-7.SEC	GI01	99%	2,521.5 µg/mL	+/- 87.1314
16	trans-1,2-Dichloroethene	156-60-5.SEC	L5QOH	99%	2,525.0 µg/mL	+/- 87.2523

17	Isobutanol (2-Methyl-1-propanol)	78-83-1.SEC PH2XK	99%	62,830.8	µg/mL	+/- 2,171.1398
18	Chloroform	67-66-3.SEC 1297547	99%	2,511.7	µg/mL	+/- 86.7916
19	Bromochloromethane	74-97-5 * 230206JLM	99%	2,515.7	µg/mL	+/- 86.9298
20	Tetrahydrofuran	109-99-9.SEC 3NYHE	99%	5,018.5	µg/mL	+/- 173.4162
21	1,1,1-Trichloroethane	71-55-6.SEC 13891800	99%	2,506.5	µg/mL	+/- 86.6130
22	Cyclohexane	110-82-7.SEC YADRA	99%	2,523.3	µg/mL	+/- 87.1947
23	1,1-Dichloropropene	563-58-6.SEC 556500	99%	2,520.5	µg/mL	+/- 87.0968
24	Carbon tetrachloride	56-23-5.SEC 11466	99%	2,520.5	µg/mL	+/- 87.0968
25	n-Heptane (C7)	142-82-5.SEC TFHUC	99%	2,516.5	µg/mL	+/- 86.9586
26	1,2-Dichloroethane	107-06-2.SEC 00016165	99%	2,519.8	µg/mL	+/- 87.0738
27	Benzene	71-43-2.SEC 101960P29K	99%	2,518.8	µg/mL	+/- 87.0392
28	Trichloroethene	79-01-6.SEC H04X050	99%	2,524.3	µg/mL	+/- 87.2293
29	Methylcyclohexane	108-87-2.SEC Q02QG	99%	2,515.8	µg/mL	+/- 86.9356
30	1,2-Dichloropropane	78-87-5.SEC ERRBI-RH	99%	2,516.8	µg/mL	+/- 86.9701
31	1,4-Dioxane	123-91-1.SEC QHRWO	99%	50,137.2	µg/mL	+/- 1,732.5061
32	Dibromomethane	74-95-3.SEC MOKKJ	99%	2,516.3	µg/mL	+/- 86.9528
33	cis-1,3-Dichloropropene	10061-01-5.SEC ZLXJ-TJ	99%	2,502.8	µg/mL	+/- 86.4863
34	Toluene	108-88-3.SEC YND2B-BD	99%	2,522.2	µg/mL	+/- 87.1544
35	Ethyl methacrylate	97-63-2.SEC AQSPO	99%	2,510.8	µg/mL	+/- 86.7628
36	trans-1,3-Dichloropropene	10061-02-6.SEC DMSL	98%	2,517.1	µg/mL	+/- 86.9804
37	1,1,2-Trichloroethane	79-00-5.SEC 9245400	99%	2,512.2	µg/mL	+/- 86.8089
38	1,3-Dichloropropane	142-28-9.SEC IQCON	99%	2,519.3	µg/mL	+/- 87.0565
39	Tetrachloroethene	127-18-4.SEC F09W014	99%	2,521.3	µg/mL	+/- 87.1256
40	Dibromochloromethane	124-48-1.SEC 10234064	99%	2,517.5	µg/mL	+/- 86.9932
41	1,2-Dibromoethane (EDB)	106-93-4.SEC 050675P15E	99%	2,518.3	µg/mL	+/- 87.0220
42	Chlorobenzene	108-90-7.SEC 1161936	99%	2,515.8	µg/mL	+/- 86.9356
43	m-Xylene	108-38-3.SEC 7ZV6F	99%	1,255.3	µg/mL	+/- 43.3814
44	p-Xylene	106-42-3.SEC D6UOA	99%	1,260.3	µg/mL	+/- 43.5541
45	Ethylbenzene	100-41-4.SEC PI4SE	99%	2,517.7	µg/mL	+/- 86.9989
46	1,1,1,2-Tetrachloroethane	630-20-6.SEC 13789800	99%	2,517.5	µg/mL	+/- 86.9932
47	o-Xylene	95-47-6.SEC UJ6RI	99%	2,515.8	µg/mL	+/- 86.9356
48	Styrene	100-42-5.SEC QGQ7F	99%	2,521.3	µg/mL	+/- 87.1256
49	Isopropylbenzene (cumene)	98-82-8.SEC 7P24L	99%	2,515.0	µg/mL	+/- 86.9068
50	Bromoform	75-25-2.SEC 13723500	99%	2,522.5	µg/mL	+/- 87.1659
51	Bromodichloromethane	75-27-4.SEC 28128	99%	2,524.2	µg/mL	+/- 87.2235
52	1,1,2,2-Tetrachloroethane	79-34-5.SEC BCCD5088	99%	2,523.7	µg/mL	+/- 87.2063

53	1,2,3-Trichloropropane	96-18-4.SEC 6V2ED	99%	2,522.2	µg/mL	+/- 87.1544
54	trans-1,4-Dichloro-2-butene	110-57-6.SEC RD230316RSR	96%	2,517.0	µg/mL	+/- 86.9745
55	n-Propylbenzene	103-65-1.SEC XCGEC	99%	2,518.8	µg/mL	+/- 87.0392
56	Bromobenzene	108-86-1.SEC 2FUHG-EM	99%	2,518.3	µg/mL	+/- 87.0220
57	1,3,5-Trimethylbenzene	108-67-8.SEC GI2SM	99%	2,514.3	µg/mL	+/- 86.8837
58	2-Chlorotoluene	95-49-8.SEC BRHPM	99%	2,515.7	µg/mL	+/- 86.9298
59	4-Chlorotoluene	106-43-4.SEC S5SKD	99%	2,518.8	µg/mL	+/- 87.0392
60	tert-Butylbenzene	98-06-6.SEC D6OHC	99%	2,522.0	µg/mL	+/- 87.1487
61	1,2,4-Trimethylbenzene	95-63-6.SEC JHZDD	99%	2,517.3	µg/mL	+/- 86.9874
62	sec-Butylbenzene	135-98-8.SEC O4HRF	99%	2,522.0	µg/mL	+/- 87.1487
63	4-Isopropyltoluene (p-cymene)	99-87-6.SEC 13889300	98%	2,518.1	µg/mL	+/- 87.0142
64	1,3-Dichlorobenzene	541-73-1.SEC ZA2ZI	99%	2,515.0	µg/mL	+/- 86.9068
65	1,4-Dichlorobenzene	106-46-7.SEC J5GVD	99%	2,522.5	µg/mL	+/- 87.1659
66	n-Butylbenzene	104-51-8.SEC MMPGA	99%	2,523.7	µg/mL	+/- 87.2063
67	1,2-Dichlorobenzene	95-50-1.SEC R6QDM	99%	2,512.0	µg/mL	+/- 86.8031
68	1,2-Dibromo-3-chloropropane	96-12-8.SEC Q135-105	99%	2,517.7	µg/mL	+/- 86.9989
69	1,2,4-Trichlorobenzene	120-82-1.SEC IGLFA	99%	2,515.7	µg/mL	+/- 86.9298
70	Hexachlorobutadiene	87-68-3.SEC 13889400	97%	2,520.4	µg/mL	+/- 87.0928
71	Naphthalene	91-20-3.SEC AM5NG	99%	2,520.0	µg/mL	+/- 87.0795
72	1,2,3-Trichlorobenzene	87-61-6.SEC A0043055	99%	2,517.8	µg/mL	+/- 87.0047

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: P&T Methanol
CAS # 67-56-1
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.**

Quality Confirmation Test

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:
hellum-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

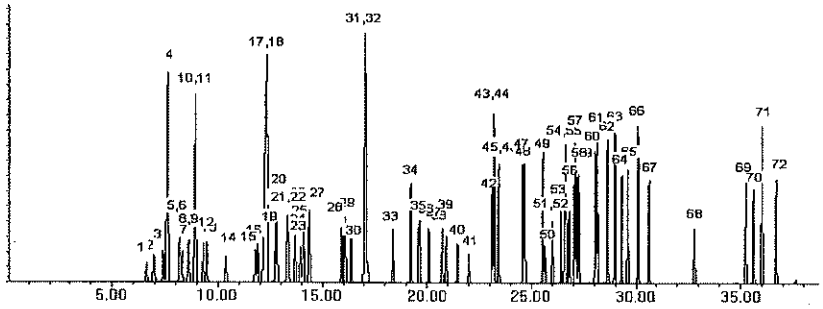
Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD

Split Vent:
20.0 ml/min.

Inj. Vol
0.2µl



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.

John Friedline - Operations Technician I — **Date Mixed:** 28-Feb-2023 — **Balance Serial #** 1127510105

Christie Mills - Operations Tech II - ARM QC — **Date Passed:** 22-Mar-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

MV-571992_00015

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 17034 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. : 571992 **Lot No.:** A0183568

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2024 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7 (Lot SHBN4280) **Purity** 99%	2,506.6 µg/mL	+/- 14.5737 µg/mL +/- 151.2358 µg/mL +/- 151.5949 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 (Lot 00016133) **Purity** 99%	2,514.5 µg/mL	+/- 14.6195 µg/mL +/- 151.7109 µg/mL +/- 152.0711 µg/mL	Gravimetric Unstressed Stressed
3	1,1-dichloroethene **CAS #** 75-35-4 (Lot SHBG8609V) **Purity** 99%	2,515.1 µg/mL	+/- 14.6232 µg/mL +/- 151.7486 µg/mL +/- 152.1089 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 (Lot 101619K21F-1) **Purity** 99%	25,080.8 µg/mL	+/- 145.8140 µg/mL +/- 1,513.2321 µg/mL +/- 1,516.8247 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9 (Lot SHBM1320) **Purity** 99%	5,026.6 µg/mL	+/- 29.2252 µg/mL +/- 303.2786 µg/mL +/- 303.9986 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4 (Lot RD220125) **Purity** 99%	2,505.3 µg/mL	+/- 14.5657 µg/mL +/- 151.1528 µg/mL +/- 151.5117 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 (Lot RD211021) **Purity** 99%	2,509.1 µg/mL	+/- 14.5883 µg/mL +/- 151.3866 µg/mL +/- 151.7460 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane)		2,513.3	µg/mL	+/-	14.6123	µg/mL	Gravimetric
	CAS # 75-09-2	(Lot SHBP1417)			+/-	151.6355	µg/mL	Unstressed
	Purity 99%				+/-	151.9955	µg/mL	Stressed
9	Carbon disulfide		2,510.1	µg/mL	+/-	14.5941	µg/mL	Gravimetric
	CAS # 75-15-0	(Lot N28F701)			+/-	151.4470	µg/mL	Unstressed
	Purity 99%				+/-	151.8065	µg/mL	Stressed
10	Acrylonitrile		25,102.9	µg/mL	+/-	145.9426	µg/mL	Gravimetric
	CAS # 107-13-1	(Lot SHBK4954)			+/-	1,514.5670	µg/mL	Unstressed
	Purity 99%				+/-	1,518.1628	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)		2,513.8	µg/mL	+/-	14.6152	µg/mL	Gravimetric
	CAS # 1634-04-4	(Lot SHBN6497)			+/-	151.6657	µg/mL	Unstressed
	Purity 99%				+/-	152.0258	µg/mL	Stressed
12	cis-1,2-Dichloroethene		2,515.1	µg/mL	+/-	14.6232	µg/mL	Gravimetric
	CAS # 156-59-2	(Lot MKCP7830)			+/-	151.7486	µg/mL	Unstressed
	Purity 99%				+/-	152.1089	µg/mL	Stressed
13	n-Hexane (C6)		2,515.5	µg/mL	+/-	14.6253	µg/mL	Gravimetric
	CAS # 110-54-3	(Lot SHBL9879)			+/-	151.7713	µg/mL	Unstressed
	Purity 99%				+/-	152.1316	µg/mL	Stressed
14	1,1-Dichloroethane		2,517.9	µg/mL	+/-	14.6391	µg/mL	Gravimetric
	CAS # 75-34-3	(Lot 760200)			+/-	151.9146	µg/mL	Unstressed
	Purity 99%				+/-	152.2752	µg/mL	Stressed
15	2,2-Dichloropropane		2,517.9	µg/mL	+/-	14.6391	µg/mL	Gravimetric
	CAS # 594-20-7	(Lot RD211103)			+/-	151.9146	µg/mL	Unstressed
	Purity 99%				+/-	152.2752	µg/mL	Stressed
16	trans-1,2-Dichloroethene		2,511.4	µg/mL	+/-	14.6014	µg/mL	Gravimetric
	CAS # 156-60-5	(Lot MKBH9850V)			+/-	151.5224	µg/mL	Unstressed
	Purity 99%				+/-	151.8821	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		62,633.1	µg/mL	+/-	364.1354	µg/mL	Gravimetric
	CAS # 78-83-1	(Lot 098794J01H)			+/-	3,778.9321	µg/mL	Unstressed
	Purity 99%				+/-	3,787.9040	µg/mL	Stressed
18	chloroform		2,510.9	µg/mL	+/-	14.5984	µg/mL	Gravimetric
	CAS # 67-66-3	(Lot SHBN8469)			+/-	151.4922	µg/mL	Unstressed
	Purity 99%				+/-	151.8519	µg/mL	Stressed
19	Bromochloromethane		2,517.0	µg/mL	+/-	14.6341	µg/mL	Gravimetric
	CAS # 74-97-5	(Lot 00008541)			+/-	151.8618	µg/mL	Unstressed
	Purity 99%				+/-	152.2223	µg/mL	Stressed
20	Tetrahydrofuran		5,036.1	µg/mL	+/-	29.2805	µg/mL	Gravimetric
	CAS # 109-99-9	(Lot SHBN3757)			+/-	303.8517	µg/mL	Unstressed
	Purity 99%				+/-	304.5731	µg/mL	Stressed
21	1,1,1-trichloroethane		2,509.6	µg/mL	+/-	14.5912	µg/mL	Gravimetric
	CAS # 71-55-6	(Lot RD220215)			+/-	151.4168	µg/mL	Unstressed
	Purity 99%				+/-	151.7763	µg/mL	Stressed
22	Cyclohexane		2,510.0	µg/mL	+/-	14.5934	µg/mL	Gravimetric
	CAS # 110-82-7	(Lot EA003-US)			+/-	151.4394	µg/mL	Unstressed
	Purity 99%				+/-	151.7990	µg/mL	Stressed
23	1,1-Dichloropropene		2,513.8	µg/mL	+/-	14.6152	µg/mL	Gravimetric
	CAS # 563-58-6	(Lot 220217JLM)			+/-	151.6657	µg/mL	Unstressed
	Purity 99%				+/-	152.0258	µg/mL	Stressed

24	carbon tetrachloride		2,513.5	µg/mL	+/-	14.6137	µg/mL	Gravimetric
	CAS # 56-23-5	(Lot SHBL8097)			+/-	151.6506	µg/mL	Unstressed
	Purity 99%				+/-	152.0106	µg/mL	Stressed
25	n-Heptane (C7)		2,511.4	µg/mL	+/-	14.6014	µg/mL	Gravimetric
	CAS # 142-82-5	(Lot SGBL9221)			+/-	151.5224	µg/mL	Unstressed
	Purity 99%				+/-	151.8821	µg/mL	Stressed
26	1,2-Dichloroethane		2,514.4	µg/mL	+/-	14.6188	µg/mL	Gravimetric
	CAS # 107-06-2	(Lot MKCN9758)			+/-	151.7034	µg/mL	Unstressed
	Purity 99%				+/-	152.0636	µg/mL	Stressed
27	Benzene		2,509.3	µg/mL	+/-	14.5890	µg/mL	Gravimetric
	CAS # 71-43-2	(Lot MKCM9242)			+/-	151.3942	µg/mL	Unstressed
	Purity 99%				+/-	151.7536	µg/mL	Stressed
28	Trichloroethene		2,507.5	µg/mL	+/-	14.5788	µg/mL	Gravimetric
	CAS # 79-01-6	(Lot SHBL5816)			+/-	151.2886	µg/mL	Unstressed
	Purity 99%				+/-	151.6478	µg/mL	Stressed
29	Methylcyclohexane		2,510.3	µg/mL	+/-	14.5948	µg/mL	Gravimetric
	CAS # 108-87-2	(Lot SHBL0078)			+/-	151.4545	µg/mL	Unstressed
	Purity 99%				+/-	151.8141	µg/mL	Stressed
30	1,2-Dichloropropane		2,510.9	µg/mL	+/-	14.5984	µg/mL	Gravimetric
	CAS # 78-87-5	(Lot BCBR0882V)			+/-	151.4922	µg/mL	Unstressed
	Purity 99%				+/-	151.8519	µg/mL	Stressed
31	1,4-Dioxane		50,187.5	µg/mL	+/-	291.7792	µg/mL	Gravimetric
	CAS # 123-91-1	(Lot SHBM9675)			+/-	3,028.0328	µg/mL	Unstressed
	Purity 99%				+/-	3,035.2219	µg/mL	Stressed
32	Dibromomethane		2,511.0	µg/mL	+/-	14.5992	µg/mL	Gravimetric
	CAS # 74-95-3	(Lot 10201030)			+/-	151.4998	µg/mL	Unstressed
	Purity 99%				+/-	151.8594	µg/mL	Stressed
33	cis-1,3-Dichloropropene		2,513.8	µg/mL	+/-	14.6152	µg/mL	Gravimetric
	CAS # 10061-01-5	(Lot RD220311)			+/-	151.6657	µg/mL	Unstressed
	Purity 99%				+/-	152.0258	µg/mL	Stressed
34	Toluene		2,518.4	µg/mL	+/-	14.6420	µg/mL	Gravimetric
	CAS # 108-88-3	(Lot MKCQ2779)			+/-	151.9447	µg/mL	Unstressed
	Purity 99%				+/-	152.3055	µg/mL	Stressed
35	Ethyl methacrylate		2,511.4	µg/mL	+/-	14.6014	µg/mL	Gravimetric
	CAS # 97-63-2	(Lot MKCL0907)			+/-	151.5224	µg/mL	Unstressed
	Purity 99%				+/-	151.8821	µg/mL	Stressed
36	trans-1,3-Dichloropropene		2,504.5	µg/mL	+/-	14.5615	µg/mL	Gravimetric
	CAS # 10061-02-6	(Lot RD211104)			+/-	151.1083	µg/mL	Unstressed
	Purity 98%				+/-	151.4671	µg/mL	Stressed
37	1,1,2-Trichloroethane		2,513.6	µg/mL	+/-	14.6144	µg/mL	Gravimetric
	CAS # 79-00-5	(Lot FGB01)			+/-	151.6581	µg/mL	Unstressed
	Purity 99%				+/-	152.0182	µg/mL	Stressed
38	1,3-Dichloropropane		2,513.6	µg/mL	+/-	14.6144	µg/mL	Gravimetric
	CAS # 142-28-9	(Lot BCBC6265)			+/-	151.6581	µg/mL	Unstressed
	Purity 99%				+/-	152.0182	µg/mL	Stressed
39	Tetrachloroethene		2,507.5	µg/mL	+/-	14.5788	µg/mL	Gravimetric
	CAS # 127-18-4	(Lot SHBJ7422)			+/-	151.2886	µg/mL	Unstressed
	Purity 99%				+/-	151.6478	µg/mL	Stressed

40	dibromochloromethane		2,514.8	µg/mL	+/-	14.6210	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKCM8659)			+/-	151.7260	µg/mL	Unstressed
	Purity 99%				+/-	152.0862	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,513.9	µg/mL	+/-	14.6159	µg/mL	Gravimetric
	CAS # 106-93-4	(Lot BCCF5058)			+/-	151.6732	µg/mL	Unstressed
	Purity 99%				+/-	152.0333	µg/mL	Stressed
42	Chlorobenzene		2,507.9	µg/mL	+/-	14.5810	µg/mL	Gravimetric
	CAS # 108-90-7	(Lot SHBL8110)			+/-	151.3112	µg/mL	Unstressed
	Purity 99%				+/-	151.6704	µg/mL	Stressed
43	m-Xylene		1,260.0	µg/mL	+/-	7.3257	µg/mL	Gravimetric
	CAS # 108-38-3	(Lot Q13G020)			+/-	76.0214	µg/mL	Unstressed
	Purity 99%				+/-	76.2019	µg/mL	Stressed
44	p-Xylene		1,258.6	µg/mL	+/-	7.3178	µg/mL	Gravimetric
	CAS # 106-42-3	(Lot 10234437)			+/-	75.9384	µg/mL	Unstressed
	Purity 99%				+/-	76.1187	µg/mL	Stressed
45	Ethylbenzene		2,516.0	µg/mL	+/-	14.6282	µg/mL	Gravimetric
	CAS # 100-41-4	(Lot SHBM4308)			+/-	151.8014	µg/mL	Unstressed
	Purity 99%				+/-	152.1618	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane		2,519.1	µg/mL	+/-	14.6464	µg/mL	Gravimetric
	CAS # 630-20-6	(Lot TMWGK)			+/-	151.9900	µg/mL	Unstressed
	Purity 99%				+/-	152.3508	µg/mL	Stressed
47	o-Xylene		2,513.5	µg/mL	+/-	14.6134	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBN5105)			+/-	151.6479	µg/mL	Unstressed
	Purity 98%				+/-	152.0079	µg/mL	Stressed
48	Styrene		2,509.1	µg/mL	+/-	14.5883	µg/mL	Gravimetric
	CAS # 100-42-5	(Lot MKCP3941)			+/-	151.3866	µg/mL	Unstressed
	Purity 99%				+/-	151.7460	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,518.5	µg/mL	+/-	14.6428	µg/mL	Gravimetric
	CAS # 98-82-8	(Lot Z20D022)			+/-	151.9523	µg/mL	Unstressed
	Purity 99%				+/-	152.3130	µg/mL	Stressed
50	bromoform		2,511.0	µg/mL	+/-	14.5992	µg/mL	Gravimetric
	CAS # 75-25-2	(Lot SHBK4455)			+/-	151.5001	µg/mL	Unstressed
	Purity 98%				+/-	151.8597	µg/mL	Stressed
51	bromodichloromethane		2,518.1	µg/mL	+/-	14.6406	µg/mL	Gravimetric
	CAS # 75-27-4	(Lot MKCM7156)			+/-	151.9296	µg/mL	Unstressed
	Purity 99%				+/-	152.2903	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane		2,515.5	µg/mL	+/-	14.6253	µg/mL	Gravimetric
	CAS # 79-34-5	(Lot CFA4D)			+/-	151.7713	µg/mL	Unstressed
	Purity 99%				+/-	152.1316	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,512.5	µg/mL	+/-	14.6079	µg/mL	Gravimetric
	CAS # 96-18-4	(Lot 332900)			+/-	151.5903	µg/mL	Unstressed
	Purity 99%				+/-	151.9502	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene		2,511.8	µg/mL	+/-	14.6038	µg/mL	Gravimetric
	CAS # 110-57-6	(Lot RD220405A)			+/-	151.5480	µg/mL	Unstressed
	Purity 95%				+/-	151.9078	µg/mL	Stressed
55	n-Propylbenzene		2,515.6	µg/mL	+/-	14.6261	µg/mL	Gravimetric
	CAS # 103-65-1	(Lot MKCN1126)			+/-	151.7788	µg/mL	Unstressed
	Purity 99%				+/-	152.1392	µg/mL	Stressed

56	Bromobenzene		2,516.9	µg/mL	+/-	14.6333	µg/mL	Gravimetric
	CAS # 108-86-1	(Lot MKBD4032V)			+/-	151.8542	µg/mL	Unstressed
	Purity 99%				+/-	152.2147	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,512.3	µg/mL	+/-	14.6064	µg/mL	Gravimetric
	CAS # 108-67-8	(Lot BCCD0427)			+/-	151.5752	µg/mL	Unstressed
	Purity 99%				+/-	151.9350	µg/mL	Stressed
58	2-Chlorotoluene		2,510.9	µg/mL	+/-	14.5984	µg/mL	Gravimetric
	CAS # 95-49-8	(Lot MKCF5243)			+/-	151.4922	µg/mL	Unstressed
	Purity 99%				+/-	151.8519	µg/mL	Stressed
59	4-Chlorotoluene		2,513.1	µg/mL	+/-	14.6115	µg/mL	Gravimetric
	CAS # 106-43-4	(Lot MKCC8496)			+/-	151.6280	µg/mL	Unstressed
	Purity 99%				+/-	151.9880	µg/mL	Stressed
60	tert-Butylbenzene		2,514.6	µg/mL	+/-	14.6202	µg/mL	Gravimetric
	CAS # 98-06-6	(Lot STBD6954V)			+/-	151.7185	µg/mL	Unstressed
	Purity 99%				+/-	152.0787	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,517.1	µg/mL	+/-	14.6348	µg/mL	Gravimetric
	CAS # 95-63-6	(Lot WXBC9428V)			+/-	151.8696	µg/mL	Unstressed
	Purity 98%				+/-	152.2302	µg/mL	Stressed
62	sec-Butylbenzene		2,519.3	µg/mL	+/-	14.6471	µg/mL	Gravimetric
	CAS # 135-98-8	(Lot MKCN2920)			+/-	151.9975	µg/mL	Unstressed
	Purity 99%				+/-	152.3584	µg/mL	Stressed
63	p-Isopropyltoluene (p-Cymene)		2,512.0	µg/mL	+/-	14.6050	µg/mL	Gravimetric
	CAS # 99-87-6	(Lot MKCP6638)			+/-	151.5601	µg/mL	Unstressed
	Purity 99%				+/-	151.9199	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,515.5	µg/mL	+/-	14.6253	µg/mL	Gravimetric
	CAS # 541-73-1	(Lot BCBZ7498)			+/-	151.7713	µg/mL	Unstressed
	Purity 99%				+/-	152.1316	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,513.4	µg/mL	+/-	14.6130	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBS4401V)			+/-	151.6431	µg/mL	Unstressed
	Purity 99%				+/-	152.0031	µg/mL	Stressed
66	n-Butylbenzene		2,511.0	µg/mL	+/-	14.5992	µg/mL	Gravimetric
	CAS # 104-51-8	(Lot 09418JJ)			+/-	151.4998	µg/mL	Unstressed
	Purity 99%				+/-	151.8594	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,511.4	µg/mL	+/-	14.6014	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot SHBN3835)			+/-	151.5224	µg/mL	Unstressed
	Purity 99%				+/-	151.8821	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,512.4	µg/mL	+/-	14.6074	µg/mL	Gravimetric
	CAS # 96-12-8	(Lot HBMVB)			+/-	151.5855	µg/mL	Unstressed
	Purity 97%				+/-	151.9454	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,510.4	µg/mL	+/-	14.5955	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot SHBM0526)			+/-	151.4620	µg/mL	Unstressed
	Purity 99%				+/-	151.8216	µg/mL	Stressed
70	Hexachlorobutadiene		2,509.3	µg/mL	+/-	14.5890	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot X05J)			+/-	151.3942	µg/mL	Unstressed
	Purity 99%				+/-	151.7536	µg/mL	Stressed
71	Naphthalene		2,520.6	µg/mL	+/-	14.6551	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKCH0219)			+/-	152.0805	µg/mL	Unstressed
	Purity 99%				+/-	152.4415	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,513.0	µg/mL	+/-	14.6108	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)			+/-	151.6204	µg/mL	Unstressed
	Purity 99%				+/-	151.9804	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

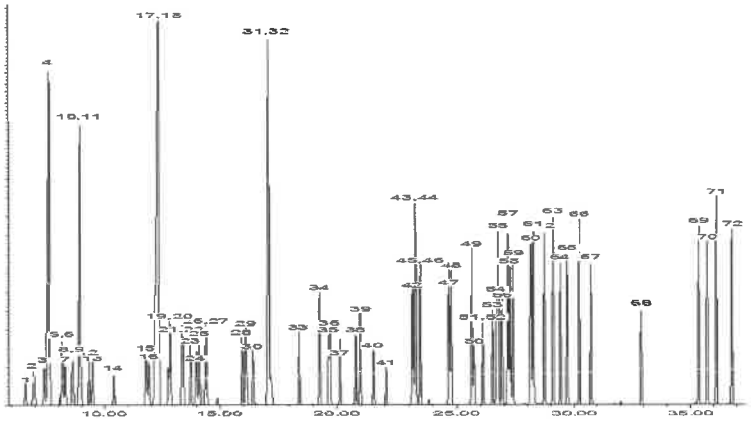
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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.

Tom Suckar - Mix Technician

Date Mixed: 31-Mar-2022 **Balance:** B707717271

Feng-Yun Lo - QC Analyst

Date Passed: 21-Apr-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

MV-CUS17739.s_00011

ISO 17034

Agilent
Trusted Answers

Reference Material Certificate

Product Name: Custom Standard
Product Number: CUS-17739
Storage Conditions: Store Frozen (-25° to -10°C).

Lot Number: 0006676357
Lot Issue Date: 15-Apr-2022
Expiration Date: 31-May-2024

Component Name	CERTIFIED VALUES Concentration		Expanded Uncertainty	CAS#	Analyte Lot
1-chlorohexane	1004	±	5 µg/mL	000544-10-5	RM15291
2-pentanone	4019	±	20 µg/mL	000107-87-9	RM13478
sec-butanol	30105	±	151 µg/mL	000078-92-2	RM01299

Matrix: methanol (purge & trap grade)

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Safety:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

Intended Use:
This analytical reference standard is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Expiration of Certification:

Rcvd 7/4/22

The certification of this analytical reference standard is valid until the expiration date specified above, provided the material is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the material is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

Reagent

mv-IS/SS Tune_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

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

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. : 570812 **Lot No.:** A0143593

Description : 8260 IS/Surrogate Mix (2016)

8260 IS/Surrogate Mix (2016) 250-5,000µg/mL, P&T Methanol, 5mL/ampul

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

Expiration Date : November 30, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	tert-Butyl-d9-alcohol		5,000.1 µg/mL	+/- 29.0694 µg/mL	Gravimetric
	CAS # 25725-11-5	(Lot CD-107)		+/- 107.0521 µg/mL	Unstressed
	Purity 98%			+/- 110.1643 µg/mL	Stressed
2	Dibromofluoromethane		250.2 µg/mL	+/- 1.4580 µg/mL	Gravimetric
	CAS # 1868-53-7	(Lot 0012017)		+/- 5.3577 µg/mL	Unstressed
	Purity 99%			+/- 5.5134 µg/mL	Stressed
3	1,2-Dichloroethane-d4		250.3 µg/mL	+/- 1.4584 µg/mL	Gravimetric
	CAS # 17060-07-0	(Lot PR-29377)		+/- 5.3592 µg/mL	Unstressed
	Purity 99%			+/- 5.5149 µg/mL	Stressed
4	1,4-Dioxane-d8		5,000.5 µg/mL	+/- 29.0716 µg/mL	Gravimetric
	CAS # 17647-74-4	(Lot I-19942)		+/- 107.0602 µg/mL	Unstressed
	Purity 99%			+/- 110.1726 µg/mL	Stressed
5	Fluorobenzene		250.1 µg/mL	+/- 1.4573 µg/mL	Gravimetric
	CAS # 462-06-6	(Lot BCBK8171V)		+/- 5.3549 µg/mL	Unstressed
	Purity 99%			+/- 5.5105 µg/mL	Stressed
6	Toluene-d8		250.1 µg/mL	+/- 1.4575 µg/mL	Gravimetric
	CAS # 2037-26-5	(Lot PR-27311)		+/- 5.3556 µg/mL	Unstressed
	Purity 99%			+/- 5.5112 µg/mL	Stressed
7	Chlorobenzene-d5		250.5 µg/mL	+/- 1.4600 µg/mL	Gravimetric
	CAS # 3114-55-4	(Lot PR-23926)		+/- 5.3649 µg/mL	Unstressed
	Purity 99%			+/- 5.5208 µg/mL	Stressed

8	1-Bromo-4-fluorobenzene (BFB)		250.1	µg/mL	+/-	1.4575	µg/mL	Gravimetric
	CAS # 460-00-4	(Lot 20401KO)			+/-	5.3556	µg/mL	Unstressed
	Purity 99%				+/-	5.5112	µg/mL	Stressed
9	1,4-Dichlorobenzene-d4		250.2	µg/mL	+/-	1.4580	µg/mL	Gravimetric
	CAS # 3855-82-1	(Lot PR-18488)			+/-	5.3577	µg/mL	Unstressed
	Purity 99%				+/-	5.5134	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

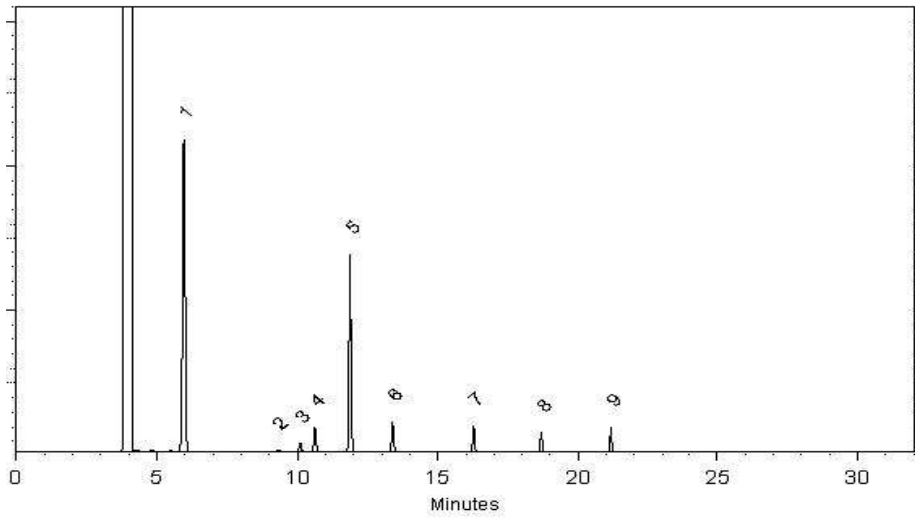
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°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: 29-Nov-2018 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 18-Dec-2018

Manufactured under Restek's ISO 9001:2015 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 17034 and Guide 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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

NH3 CAL STD_00035

RICCA CHEMICAL COMPANY®

1490 Lammers Pike
Batesville, IN 47006
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

Ammonia Nitrogen Standard, 1000 ppm N (1216 ppm NH_3)

Lot Number: 4208D17 **Product Number:** 5455

Manufacture Date: AUG 05, 2022
Expiration Date: JAN 2024

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Ammonium Chloride	12125-02-9	High Purity

Test	Specification	Result
Appearance	Colorless liquid	Passed
Nitrogen (N)	995-1005 ppm	1000 ppm

Specification	Reference
Ammonia Solution, Stock (1.0 mL = 1.0 mg ammonia nitrogen)	ASTM (D 3590 A)
Ammonia Solution, Stock (1.0 mL = 1.0 mg ammonium nitrogen)	ASTM (D 3590 B)
Stock Ammonium Chloride Solution	APHA (4500-CN- L)
Stock Ammonium Solution	APHA (4500-NH3 C)
Stock Ammonium chloride Solution	APHA (4500-NH3 D)
Stock Ammonium Solution	APHA (4500-NH3 F)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (351.2)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (350.2)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (350.3)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (351.4)
Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (350.1)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (351.3)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
5455-16	500 mL natural poly	18 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)



Paul Brandon (08/05/2022)

Production Manager

This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

Reagent

NH3 ICV STD_00034

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 17034, "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 (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Ion Chromatography Solution
Catalog Number:	ICNNH41
Lot Number:	S2-NH700817
Matrix:	H2O
Value / Analyte(s):	1 000 µg/mL ea: Ammonium as N
Starting Material:	Ammonium chloride
Starting Material Lot#:	1736
Starting Material Purity:	99.8500%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 999 ± 4 µg/mL

Density: 0.999 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **995 ± 4 µg/mL**
Fajans NIST SRM 999c Lot Number: 999c

Assay Method #2 **1002 ± 4 µg/mL**
IC Assay NIST SRM 194a Lot Number: 194a

- 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 or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

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:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

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.

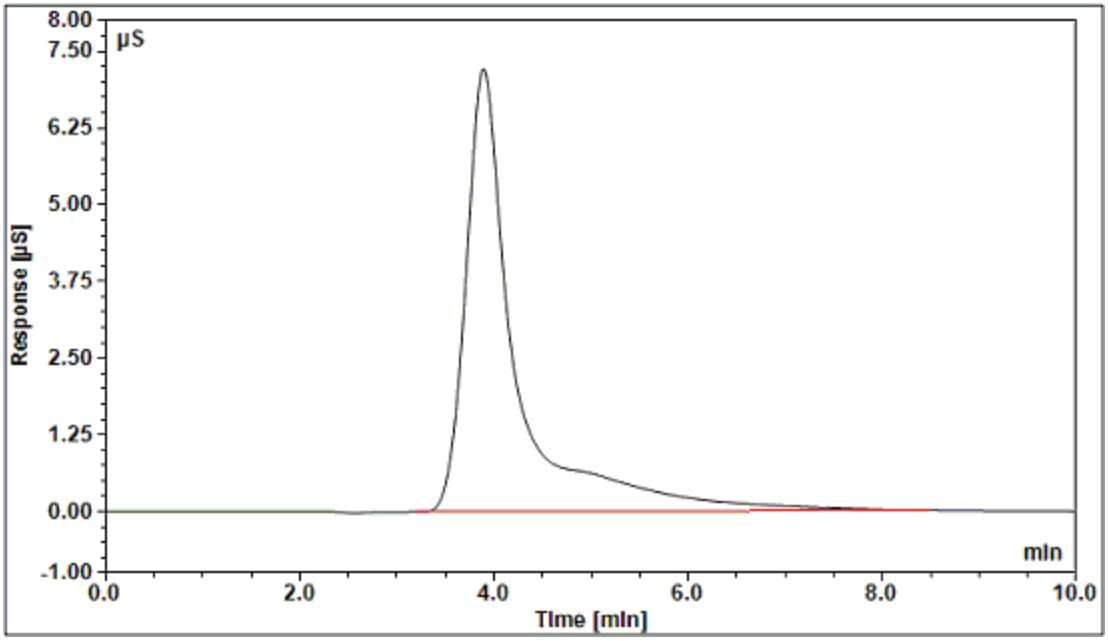
4.2 Balance Calibration

- 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 CHROMATOGRAM



Dionex ICS-2000 Ion Chromatograph

Analytical Column:	IonPac CS18 2 x 250 mm	**Eluent:**	10 mM MSA
Guard Column:	IonPac CG18 2 x 50 mm	**Eluent Flow Rate:**	0.25 mL/min
Anion Self Regen Suppressor/ Chemical Suppression:	N/A	**Column Temp:**	30°C
		Cell Temp:	35°C
		Scale X-Axis:	minutes
Cation Self Regen Suppressor/ Chemical Suppression:	CERS 500 2mm	**Scale Y-Axis:**	8 µS/cm
		Concentration:	10 µg/g
Suppressor Current/ Chemical Suppressant:	8 mA		

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 and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette 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 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 25, 2021

- 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 25, 2025**

- 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: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation



Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Reagent

NO2 ICV Std_00039

RICCA CHEMICAL COMPANY®

1490 Lammers Pike
Batesville, IN 47006
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

Nitrite Nitrogen Standard, 1000 ppm N (3285 ppm NO_2^-)

Lot Number: 4304L74 **Product Number:** 5461

Manufacture Date: APR 25, 2023
Expiration Date: OCT 2023

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Potassium Nitrite	7758-09-0	ACS
Chloroform	67-66-3	

Test	Specification	Result	NIST SRM#
Appearance	Colorless liquid	Passed	
Assay (vs. Potassium Permanganate)	995-1005 ppm N	1000 ppm N	8040

Specification	Reference
Nitrite Solution, Stock (1.0 mL = 1.0 mg NO2-N)	ASTM (D 3867 A)
Nitrite Solution, Stock (1.0 mL = 1.0 mg NO2-N)	ASTM (D 3867 B)
Stock Nitrite Solution: 1 mL = 1.0 mg NO2-N	EPA (353.2)
Stock Nitrite Solution: 1.0 mL = 1.00 mg NO2-N	EPA (353.3)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
5461-16	500 mL natural poly	6 months

Recommended Storage: 2°C - 8°C (36°F - 46°F)

Paul Brandon (04/25/2023)
Production Manager
This document is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

Reagent

PicricARestek_00119

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 17034 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. : 31499 **Lot No.:** A0183202

Description : Picric Acid Standard

Picric Acid Standard 1000µg/mL, Methanol, 1mL/1000µg/mL *PGI BOX REQUIRED* SHIP FED EX GROUND ONLY

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2027 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Picric Acid	1,004.0 µg/mL	+/- 5.9635	µg/mL	Gravimetric
	CAS # 88-89-1 (Lot 06130CU)		+/- 55.0021	µg/mL	Unstressed
	Purity 99%		+/- 64.1379	µg/mL	Stressed

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

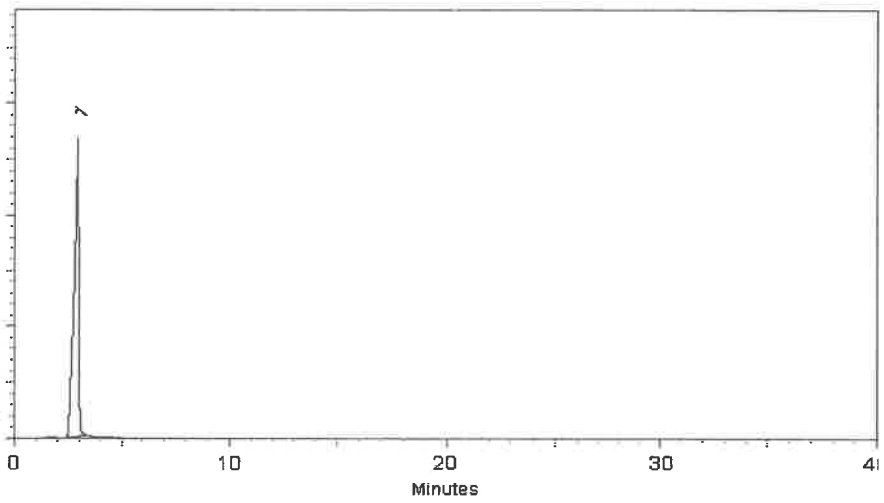
Flow Rate:
1.0 ml/min.

Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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: 23-Mar-2022 **Balance:** 1128360905

Amanda Miller - Operations Tech-ARM QC

Date Passed: 28-Mar-2022

Manufactured under Restek's ISO 9001:2015 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 17034 and Guide 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) -20°C or colder (Deep 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:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Method 8260D DOD

Volatile Organic Compounds by GC/MS by Method 8260D DOD

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RXI-624SilM ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
LL10mw-003-230901-GW	280-182145-13	97	99	99	99
FWGTB-230901-TB003	280-182145-14	96	100	102	103
	MB 280-628977/8	99	100	99	98
	LCS 280-628977/4	102	101	100	99
	LCSD 280-628977/5	99	99	99	101

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	80-119
DCA = 1,2-Dichloroethane-d4 (Surr)	81-118
TOL = Toluene-d8 (Surr)	89-112
BFB = 4-Bromofluorobenzene (Surr)	85-114

Column to be used to flag recovery values

FORM II 8260D

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Matrix: Water Level: Low Lab File ID: MS13_006836-LCS.D

Lab ID: LCS 280-628977/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Carbon tetrachloride	50.0	52.3	105	72-136	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Matrix: Water Level: Low Lab File ID: MS13_006838.D

Lab ID: LCSD 280-628977/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Carbon tetrachloride	50.0	48.9	98	7	20	72-136	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab File ID: MS13_006841.D Lab Sample ID: MB 280-628977/8

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: VMS_MS13 Date Analyzed: 10/09/2023 12:09

GC Column: RXI-624SilMS ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-628977/4	MS13_006836-LCS.D	10/09/2023 10:17
	LCSD 280-628977/5	MS13_006838.D	10/09/2023 11:02
LL10mw-003-230901-GW	280-182145-13	MS13_006845.D	10/09/2023 13:39
FWGTB-230901-TB003	280-182145-14	MS13_006846.D	10/09/2023 14:02

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab File ID: MS13_006803.D BFB Injection Date: 10/08/2023

Instrument ID: VMS_MS13 BFB Injection Time: 16:13

Analysis Batch No.: 628923

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.0	
75	30.0 - 60.0 % of mass 95	48.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.0	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	Greater than 50% of mass 95	81.2	
175	5.0 - 9.0 % of mass 174	6.8	(8.4) 1
176	95.0 - 101.0 % of mass 174	80.0	(98.5) 1
177	5.0 - 9.0 % of mass 176	5.0	(6.3) 2

1-Value is % mass 174 2-Value is % mass 176

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
	IC 280-628923/2	MS13_006804.D	10/08/2023	16:36
	IC 280-628923/3	MS13_006805.D	10/08/2023	16:58
	IC 280-628923/4	MS13_006806.D	10/08/2023	17:21
	IC 280-628923/5	MS13_006807.D	10/08/2023	17:43
	IC 280-628923/6	MS13_006808.D	10/08/2023	18:06
	ICIS 280-628923/7	MS13_006809.D	10/08/2023	18:28
	IC 280-628923/8	MS13_006810.D	10/08/2023	18:51
	IC 280-628923/9	MS13_006811.D	10/08/2023	19:14
	IC 280-628923/10	MS13_006812.D	10/08/2023	19:36
	ICV 280-628923/11	MS13_006814.D	10/08/2023	20:21
	ICV 280-628923/20	MS13_006823.D	10/08/2023	23:44

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab File ID: MS13_006835.D BFB Injection Date: 10/09/2023

Instrument ID: VMS_MS13 BFB Injection Time: 09:54

Analysis Batch No.: 628977

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.1	
75	30.0 - 60.0 % of mass 95	49.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	Greater than 50% of mass 95	84.0	
175	5.0 - 9.0 % of mass 174	6.6	(7.9) 1
176	95.0 - 101.0 % of mass 174	81.1	(96.6) 1
177	5.0 - 9.0 % of mass 176	5.5	(6.8) 2

1-Value is % mass 174 2-Value is % mass 176

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 280-628977/2	MS13_006836.D	10/09/2023	10:17
	LCS 280-628977/4	MS13_006836-L	10/09/2023	10:17
	LCSD 280-628977/5	MS13_006838.D	10/09/2023	11:02
	MB 280-628977/8	MS13_006841.D	10/09/2023	12:09
LL10mw-003-230901-GW	280-182145-13	MS13_006845.D	10/09/2023	13:39
FWGTB-230901-TB003	280-182145-14	MS13_006846.D	10/09/2023	14:02
	CCVC 280-628977/31	MS13_006864.D	10/09/2023	20:48

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Sample No.: ICIS 280-628923/7 Date Analyzed: 10/08/2023 18:28

Instrument ID: VMS_MS13 GC Column: RXI-624SilMS ID: 0.25(mm)

Lab File ID (Standard): MS13_006809.D Heated Purge: (Y/N) N

Calibration ID: 85602

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		2307671	5.17	691540	7.72	1171859	9.95
UPPER LIMIT		4615342	5.67	1383080	8.22	2343718	10.45
LOWER LIMIT		1153836	4.67	345770	7.22	585930	9.45
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-628923/11		2154373	5.17	636182	7.72	1075422	9.95
CCV 280-628977/2		2288646	5.18	662035	7.72	1154439	9.95
LCS 280-628977/4		2288646	5.18	662035	7.72	1154439	9.95
LCSD 280-628977/5		2406475	5.17	732604	7.72	1254987	9.95
MB 280-628977/8		2292129	5.17	667676	7.72	1167589	9.95
280-182145-13	LL10mw-003-230901-GW	2182502	5.18	653538	7.72	1119985	9.95
280-182145-14	FWGTB-230901-TB003	2267166	5.18	658695	7.72	1082663	9.95
CCVC 280-628977/31		2208770	5.17	639944	7.72	1056955	9.95

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

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 I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Client Sample ID: LL10mw-003-230901-GW | Lab Sample ID: 280-182145-13

Matrix: Water | Lab File ID: MS13_006845.D

Analysis Method: 8260D | Date Collected: 09/28/2023 14:50

Sample wt/vol: 5(mL) | Date Analyzed: 10/09/2023 13:39

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RXI-624SilMS ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 628977 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.8		1.0	0.80	0.57

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		81-118
460-00-4	4-Bromofluorobenzene (Surr)	99		85-114
1868-53-7	Dibromofluoromethane (Surr)	97		80-119
2037-26-5	Toluene-d8 (Surr)	99		89-112

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\MS13_006845.D
Lims ID: 280-182145-B-13
Client ID: LL10mw-003-230901-GW
Sample Type: Client
Inject. Date: 09-Oct-2023 13:39:51 ALS Bottle#: 0 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-182145-b-13
Operator ID: MEIERG Instrument ID: VMS_MS13

Method: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\AQ_VMS13_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 10-Oct-2023 14:12:22 Calib Date: 08-Oct-2023 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006822.D

Column 1 : Rxi-624Sil MS (0.25 mm) Det: MS Quad
Process Host: CTX1608

First Level Reviewer: BMJ3 Date: 10-Oct-2023 13:06:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.181	5.170	0.011	99	2182502	50.0	
* 2 Chlorobenzene-d5	119	7.720	7.720	0.000	86	653538	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.948	9.948	0.000	96	1119985	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.662	4.662	0.000	93	622482	48.5	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.932	4.932	0.000	96	799228	49.4	
$ 6 Toluene-d8 (Surr)	98	6.435	6.435	-0.001	94	2587169	49.4	
$ 7 4-Bromofluorobenzene (Surr)	95	8.818	8.818	0.000	90	963761	49.3	
$ 8 BFB	95	8.818	8.818	0.000	90	963761	NR	
9 Dichlorodifluoromethane	85		1.709				ND	
10 Chloromethane	50		1.896				ND	
11 Vinyl chloride	62		1.999				ND	
12 Bromomethane	94		2.300				ND	
13 Chloroethane	64		2.393				ND	
14 Dichlorofluoromethane	67		2.569				ND	
15 Trichlorofluoromethane	101		2.579				ND	
16 Ethanol	45		2.704				ND	
17 Propene oxide	58		2.738				ND	
18 Ethyl ether	59		2.797				ND	
19 Acrolein	56	2.921	2.911	0.010	96	2799	1.30	
20 1,1-Dichloroethene	96		2.994				ND	
21 Acetone	43		3.015				ND	7
22 1,1,2-Trichloro-1,2,2-trifluoroe	151		3.025				ND	
23 Isopropyl alcohol	45	3.108	3.098	0.010	98	6115	3.71	
24 Iodomethane	142		3.108				ND	
25 Carbon disulfide	76	3.180	3.170	0.010	98	3672	0.1126	
26 Acetonitrile	41		3.232				ND	U
27 Methyl acetate	43		3.243				ND	
28 3-Chloro-1-propene	41		3.263				ND	7
29 Methylene Chloride	84		3.357				ND	7
30 2-Methyl-2-propanol	59		3.409				ND	U
31 Acrylonitrile	53	3.543	3.533	0.010	96	2545	0.3328	
32 Methyl tert-butyl ether	73		3.554				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
33 trans-1,2-Dichloroethene	96		3.564				ND	
34 Hexane	57		3.761				ND	
35 Vinyl acetate	43		3.865				ND	7
37 1,1-Dichloroethane	63		3.885				ND	
36 Isopropyl ether	87		3.885				ND	
38 2-Chloro-1,3-butadiene	53		3.947				ND	
39 Tert-butyl ethyl ether	59		4.155				ND	
40 2-Butanone (MEK)	43		4.279				ND	
41 Ethyl acetate	43		4.289				ND	U
42 cis-1,2-Dichloroethene	96		4.310				ND	
43 2,2-Dichloropropane	77		4.320				ND	
44 Propionitrile	54		4.331				ND	
45 sec-Butyl Alcohol	45		4.393				ND	
46 Methacrylonitrile	41		4.445				ND	
47 Chlorobromomethane	128		4.486				ND	
48 Tetrahydrofuran	42		4.497				ND	
49 Chloroform	83	4.548	4.548	0.000	92	4725	0.2156	
50 1,1,1-Trichloroethane	97		4.694				ND	
51 Cyclohexane	56		4.745				ND	
53 Carbon tetrachloride	117	4.818	4.808	0.010	97	21812	1.78	
52 1,1-Dichloropropene	75		4.808				ND	
54 Isobutyl alcohol	41		4.818				ND	
56 Benzene	78		4.963				ND	
57 1,2-Dichloroethane	62		4.984				ND	
58 Tert-amyl methyl ether	73		5.025				ND	
55 n-Butanol	56		5.025				ND	
59 n-Heptane	43		5.150				ND	
60 Trichloroethene	95		5.450				ND	
61 2-Pentanone	43		5.554				ND	
62 Methylcyclohexane	55		5.647				ND	
64 1,2-Dichloropropane	63		5.657				ND	
63 Methyl methacrylate	100		5.657				ND	
65 1,4-Dioxane	88		5.709				ND	
66 Dibromomethane	93		5.730				ND	
67 Dichlorobromomethane	83		5.854				ND	
68 2-Nitropropane	41		6.030				ND	
69 2-Chloroethyl vinyl ether	63		6.062				ND	
70 cis-1,3-Dichloropropene	75		6.207				ND	
71 4-Methyl-2-pentanone (MIBK)	43		6.310				ND	
72 Toluene	91		6.497				ND	7
73 trans-1,3-Dichloropropene	75		6.673				ND	
74 Ethyl methacrylate	69		6.694				ND	
75 1,1,2-Trichloroethane	97		6.849				ND	
76 Tetrachloroethene	164		6.942				ND	
77 1,3-Dichloropropane	76		6.994				ND	
78 2-Hexanone	43		7.015				ND	
79 Chlorodibromomethane	129		7.191				ND	
80 Ethylene Dibromide	107		7.305				ND	
81 1-Chlorohexane	91		7.699				ND	U
82 Chlorobenzene	112		7.740				ND	
83 1,1,1,2-Tetrachloroethane	131		7.813				ND	
84 Ethylbenzene	106		7.823				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
85 m-Xylene & p-Xylene	106		7.937				ND	7
86 o-Xylene	106		8.300				ND	
87 Styrene	104		8.321				ND	
88 Bromoform	173		8.497				ND	
89 Isopropylbenzene	105		8.642				ND	7
90 cis-1,4-Dichloro-2-butene	53		8.694				ND	
91 Cyclohexanone	55		8.746				ND	U
92 1,1,2,2-Tetrachloroethane	83		8.932				ND	
93 Bromobenzene	156		8.963				ND	
94 trans-1,4-Dichloro-2-butene	53		8.963				ND	
95 1,2,3-Trichloropropane	110		8.994				ND	
96 N-Propylbenzene	120		9.046				ND	
97 2-Chlorotoluene	126		9.139				ND	
98 1,3,5-Trimethylbenzene	105		9.212				ND	
99 4-Chlorotoluene	126		9.253				ND	
100 Pentachloroethane	167		9.479				ND	
101 tert-Butylbenzene	119		9.523				ND	
102 1,2,4-Trimethylbenzene	105		9.585				ND	
103 sec-Butylbenzene	134		9.751				ND	
104 1,3-Dichlorobenzene	146		9.875				ND	7
105 4-Isopropyltoluene	119		9.896				ND	
106 1,4-Dichlorobenzene	146		9.968				ND	U
107 1,2,3-Trimethylbenzene	105		9.989				ND	
108 n-Butylbenzene	91		10.300				ND	7
109 1,2-Dichlorobenzene	146		10.331				ND	
110 1,2-Dibromo-3-Chloropropane	157		11.108				ND	
111 1,3,5-Trichlorobenzene	180		11.295				ND	7
112 1,2,4-Trichlorobenzene	180	11.937	11.937	0.000	91	2623	0.1513	
113 Hexachlorobutadiene	225		12.083				ND	
114 Naphthalene	128	12.207	12.207	0.000	95	6039	0.1107	
115 1,2,3-Trichlorobenzene	180	12.424	12.435	-0.011	88	1756	0.1139	
126 n-Butyl acetate	43		0.000				ND	
123 1,3-Dibromobenzene	1		0.000				ND	
116 Tetrahydrothiophene TIC	1		0.000				ND	
121 Benzyl chloride	126		0.000				ND	
125 t-Amyl alcohol	1		0.000				ND	
124 n-Nonyl Aldehyde	1		0.000				ND	
118 Ethylene oxide TIC	1		0.000				ND	
120 Ethyl acrylate	55		0.000				ND	
122 1-Chloro-1-fluoroethane TIC	1		0.000				ND	
119 1-Chlorohexane TIC	1		0.000				ND	
127 Butadiene	54		0.000				ND	
117 Isooctane	57		0.000				ND	
S 128 Xylenes, Total	106		0.000				ND	7
S 129 Trihalomethanes, Total	1				0		0.2156	
S 130 Total BTEX	1		0.000				ND	7
S 131 1,3-Dichloropropene, Total	1		0.000				ND	7
S 132 TAH	1				0		0	7
S 133 1,2-Dichloroethene, Total	1		0.000				ND	7
T 134 1,3-Butadiene TIC	39		1.782				ND	7
T 135 Cyclohexane TIC	1		4.565				ND	
T 136 Methyl cyclohexane TIC	1		5.311				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
T 137 2,3-Dichloro-1-propene TIC	75		5.797				ND	
T 138 4-Ethyltoluene TIC	105	9.212	9.222	-0.010	1	1410	0.1079	
T 142 Propene oxide TIC	58		0.000				ND	
T 143 2-Butoxyethanol TIC	1		0.000				ND	
T 144 Dichloroacetonitrile TIC	74		0.000				ND	
T 141 n-Nonane TIC	1		0.000				ND	
T 140 Propene TIC	41		0.000				ND	
T 139 Dicyclopentadiene TIC	66		0.000				ND	

QC Flag Legend

Processing Flags
- NR - Missing Quant Standard
- 7 - Failed Limit of Detection

Review Flags
- U - Marked Undetected

Reagents:

mv-IS_SS_00070 Amount Added: 5.00 Units: uL Run Reagent

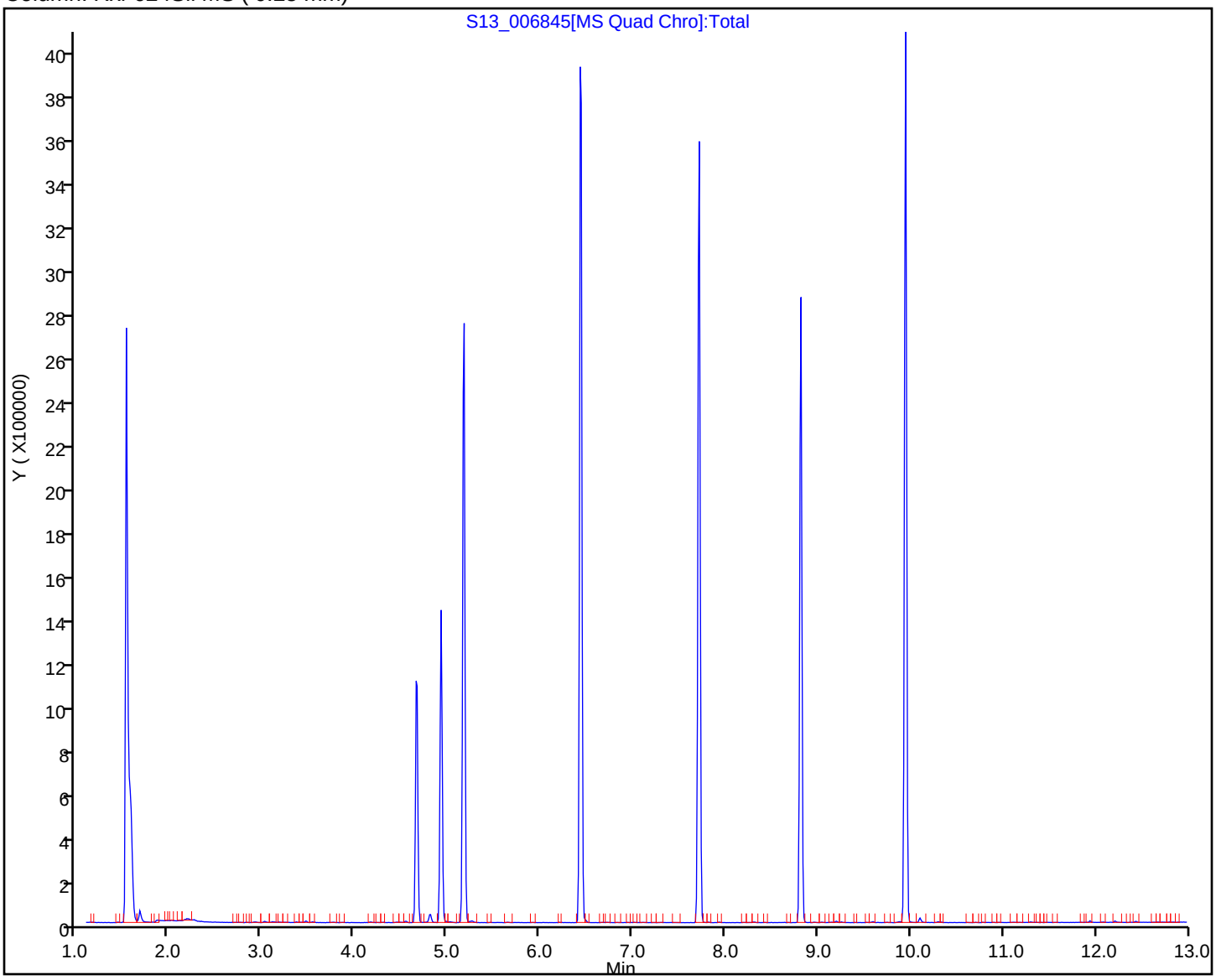
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Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\MS13_006845.D

Injection Date:	09-Oct-2023 13:39:51	Instrument ID:	VMS_MS13		
Lims ID:	280-182145-B-13	Lab Sample ID:	280-182145-13		
Client ID:	LL10mw-003-230901-GW				
Operator ID:	MEIERG	ALS Bottle#:	0	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMS13_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: Rxi-624Sil MS (0.25 mm)



12/5/2023 8:25 AM

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\MS13_006845.D
Lims ID: 280-182145-B-13
Client ID: LL10mw-003-230901-GW
Sample Type: Client
Inject. Date: 09-Oct-2023 13:39:51 ALS Bottle#: 0 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-182145-b-13
Operator ID: MEIERG Instrument ID: VMS_MS13

Method: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\AQ_VMS13_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 10-Oct-2023 14:12:22 Calib Date: 08-Oct-2023 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006822.D

Column 1 : Rxi-624Sil MS (0.25 mm) Det: MS Quad
Process Host: CTX1608

First Level Reviewer: BMJ3 Date: 10-Oct-2023 13:06:18

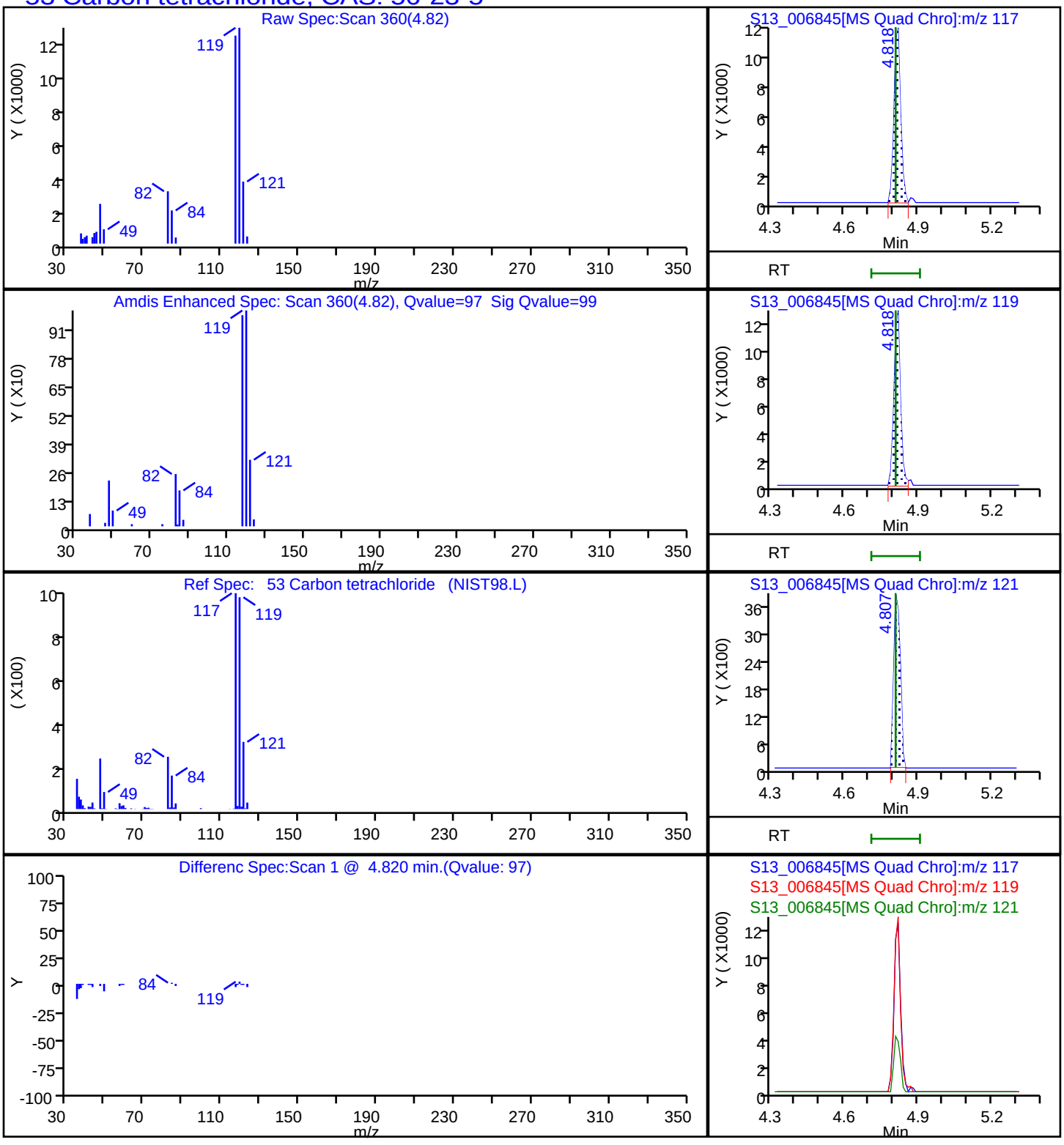
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	48.5	97.00
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	49.4	98.79
$ 6 Toluene-d8 (Surr)	50.0	49.4	98.72
$ 7 4-Bromofluorobenzene (Surr)	50.0	49.3	98.58

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\MS13_006845.D

Injection Date:	09-Oct-2023 13:39:51	Instrument ID:	VMS_MS13
Lims ID:	280-182145-B-13	Lab Sample ID:	280-182145-13
Client ID:	LL10mw-003-230901-GW		
Operator ID:	MEIERG	ALS Bottle#:	0 Worklist Smp#: 12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMS13_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	Rxi-624Sil MS (0.25 mm)	Detector	MS Quad

53 Carbon tetrachloride, CAS: 56-23-5



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Client Sample ID: FWGTB-230901-TB003 | Lab Sample ID: 280-182145-14

Matrix: Water | Lab File ID: MS13_006846.D

Analysis Method: 8260D | Date Collected: 09/28/2023 14:45

Sample wt/vol: 5(mL) | Date Analyzed: 10/09/2023 14:02

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RXI-624SilMS ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 628977 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	0.80	U	1.0	0.80	0.57

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		81-118
460-00-4	4-Bromofluorobenzene (Surr)	103		85-114
1868-53-7	Dibromofluoromethane (Surr)	96		80-119
2037-26-5	Toluene-d8 (Surr)	102		89-112

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\MS13_006846.D
Lims ID: 280-182145-B-14
Client ID: FWGTB-230901-TB003
Sample Type: Client
Inject. Date: 09-Oct-2023 14:02:28 ALS Bottle#: 0 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-182145-b-14
Operator ID: MEIERG Instrument ID: VMS_MS13

Method: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\AQ_VMS13_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 10-Oct-2023 14:12:22 Calib Date: 08-Oct-2023 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006822.D

Column 1 : Rxi-624Sil MS (0.25 mm) Det: MS Quad
Process Host: CTX1608

First Level Reviewer: BMJ3 Date: 10-Oct-2023 14:08:07

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.181	5.170	0.011	98	2267166	50.0	
*	2 Chlorobenzene-d5	119	7.720	7.720	0.000	86	658695	50.0	
*	3 1,4-Dichlorobenzene-d4	152	9.948	9.948	0.000	96	1082663	50.0	
$	4 Dibromofluoromethane (Surr)	111	4.663	4.662	0.001	93	642957	48.2	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.932	4.932	0.000	96	841007	50.0	
$	6 Toluene-d8 (Surr)	98	6.435	6.435	0.000	94	2695009	51.0	
$	7 4-Bromofluorobenzene (Surr)	95	8.818	8.818	0.000	89	975090	51.6	
$	8 BFB	95	8.818	8.818	0.000	89	975090	NR	
	9 Dichlorodifluoromethane	85		1.709				ND	
	10 Chloromethane	50		1.896				ND	
	11 Vinyl chloride	62		1.999				ND	
	12 Bromomethane	94		2.300				ND	
	13 Chloroethane	64		2.393				ND	
	14 Dichlorofluoromethane	67		2.569				ND	
	15 Trichlorofluoromethane	101		2.579				ND	
	16 Ethanol	45		2.704				ND	
	17 Propene oxide	58		2.738				ND	
	18 Ethyl ether	59		2.797				ND	
	19 Acrolein	56	2.922	2.911	0.011	95	1326	0.5931	
	20 1,1-Dichloroethene	96		2.994				ND	
	21 Acetone	43		3.015				ND	7
	22 1,1,2-Trichloro-1,2,2-trifluoroe	151		3.025				ND	
	23 Isopropyl alcohol	45		3.098				ND	
	24 Iodomethane	142		3.108				ND	
	25 Carbon disulfide	76	3.191	3.170	0.021	96	6184	0.1826	
	26 Acetonitrile	41		3.232				ND	U
	27 Methyl acetate	43		3.243				ND	
	28 3-Chloro-1-propene	41		3.263				ND	7
	29 Methylene Chloride	84		3.357				ND	7
	30 2-Methyl-2-propanol	59		3.409				ND	U
	31 Acrylonitrile	53	3.543	3.533	0.010	83	2334	0.2938	
	32 Methyl tert-butyl ether	73		3.554				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
33 trans-1,2-Dichloroethene	96		3.564				ND	
34 Hexane	57		3.761				ND	
35 Vinyl acetate	43		3.865				ND	7
37 1,1-Dichloroethane	63		3.885				ND	
36 Isopropyl ether	87		3.885				ND	
38 2-Chloro-1,3-butadiene	53		3.947				ND	
39 Tert-butyl ethyl ether	59		4.155				ND	
40 2-Butanone (MEK)	43		4.279				ND	
41 Ethyl acetate	43		4.289				ND	U
42 cis-1,2-Dichloroethene	96		4.310				ND	
43 2,2-Dichloropropane	77		4.320				ND	
44 Propionitrile	54		4.331				ND	
45 sec-Butyl Alcohol	45		4.393				ND	
46 Methacrylonitrile	41		4.445				ND	
47 Chlorobromomethane	128		4.486				ND	
48 Tetrahydrofuran	42	4.497	4.497	0.000	92	16270	1.99	
49 Chloroform	83		4.548				ND	
50 1,1,1-Trichloroethane	97		4.694				ND	
51 Cyclohexane	56		4.745				ND	
53 Carbon tetrachloride	117		4.808				ND	
52 1,1-Dichloropropene	75		4.808				ND	
54 Isobutyl alcohol	41		4.818				ND	
56 Benzene	78		4.963				ND	
57 1,2-Dichloroethane	62		4.984				ND	
58 Tert-amyl methyl ether	73		5.025				ND	
55 n-Butanol	56		5.025				ND	
59 n-Heptane	43		5.150				ND	
60 Trichloroethene	95		5.450				ND	
61 2-Pentanone	43		5.554				ND	
62 Methylcyclohexane	55		5.647				ND	
64 1,2-Dichloropropane	63		5.657				ND	
63 Methyl methacrylate	100		5.657				ND	
65 1,4-Dioxane	88		5.709				ND	
66 Dibromomethane	93		5.730				ND	
67 Dichlorobromomethane	83		5.854				ND	
68 2-Nitropropane	41		6.030				ND	
69 2-Chloroethyl vinyl ether	63		6.062				ND	
70 cis-1,3-Dichloropropene	75		6.207				ND	
71 4-Methyl-2-pentanone (MIBK)	43		6.310				ND	
72 Toluene	91		6.497				ND	7
73 trans-1,3-Dichloropropene	75		6.673				ND	
74 Ethyl methacrylate	69		6.694				ND	
75 1,1,2-Trichloroethane	97		6.849				ND	
76 Tetrachloroethene	164		6.942				ND	
77 1,3-Dichloropropane	76		6.994				ND	
78 2-Hexanone	43		7.015				ND	
79 Chlorodibromomethane	129		7.191				ND	
80 Ethylene Dibromide	107		7.305				ND	
81 1-Chlorohexane	91		7.699				ND	U
82 Chlorobenzene	112		7.740				ND	
83 1,1,1,2-Tetrachloroethane	131		7.813				ND	
84 Ethylbenzene	106		7.823				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
85 m-Xylene & p-Xylene	106		7.937				ND	
86 o-Xylene	106		8.300				ND	
87 Styrene	104		8.321				ND	
88 Bromoform	173		8.497				ND	
89 Isopropylbenzene	105		8.642				ND	
90 cis-1,4-Dichloro-2-butene	53		8.694				ND	
91 Cyclohexanone	55		8.746				ND	U
92 1,1,2,2-Tetrachloroethane	83		8.932				ND	
93 Bromobenzene	156		8.963				ND	
94 trans-1,4-Dichloro-2-butene	53		8.963				ND	
95 1,2,3-Trichloropropane	110		8.994				ND	
96 N-Propylbenzene	120		9.046				ND	
97 2-Chlorotoluene	126		9.139				ND	
98 1,3,5-Trimethylbenzene	105		9.212				ND	
99 4-Chlorotoluene	126		9.253				ND	
100 Pentachloroethane	167		9.479				ND	
101 tert-Butylbenzene	119		9.523				ND	
102 1,2,4-Trimethylbenzene	105		9.585				ND	
103 sec-Butylbenzene	134		9.751				ND	
104 1,3-Dichlorobenzene	146		9.875				ND	7
105 4-Isopropyltoluene	119		9.896				ND	
106 1,4-Dichlorobenzene	146		9.968				ND	7
107 1,2,3-Trimethylbenzene	105		9.989				ND	
108 n-Butylbenzene	91		10.300				ND	
109 1,2-Dichlorobenzene	146		10.331				ND	
110 1,2-Dibromo-3-Chloropropane	157		11.108				ND	
111 1,3,5-Trichlorobenzene	180		11.295				ND	
112 1,2,4-Trichlorobenzene	180	11.938	11.937	0.001	85	2321	0.1385	
113 Hexachlorobutadiene	225		12.083				ND	
114 Naphthalene	128		12.207				ND	7
115 1,2,3-Trichlorobenzene	180	12.435	12.435	0.000	90	2002	0.1343	
126 n-Butyl acetate	43		0.000				ND	
123 1,3-Dibromobenzene	1		0.000				ND	
116 Tetrahydrothiophene TIC	1		0.000				ND	
121 Benzyl chloride	126		0.000				ND	
125 t-Amyl alcohol	1		0.000				ND	
124 n-Nonyl Aldehyde	1		0.000				ND	
118 Ethylene oxide TIC	1		0.000				ND	
120 Ethyl acrylate	55		0.000				ND	
122 1-Chloro-1-fluoroethane TIC	1		0.000				ND	
119 1-Chlorohexane TIC	1		0.000				ND	
127 Butadiene	54		0.000				ND	
117 Isooctane	57		0.000				ND	
S 128 Xylenes, Total	106		0.000				ND	7
S 129 Trihalomethanes, Total	1		0.000				ND	7
S 130 Total BTEX	1		0.000				ND	7
S 131 1,3-Dichloropropene, Total	1		0.000				ND	7
S 132 TAH	1				0		0	7
S 133 1,2-Dichloroethene, Total	1		0.000				ND	7
T 134 1,3-Butadiene TIC	39		1.782				ND	7
T 135 Cyclohexane TIC	1		4.565				ND	
T 136 Methyl cyclohexane TIC	1		5.311				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
T 137 2,3-Dichloro-1-propene TIC	75		5.797				ND	
T 138 4-Ethyltoluene TIC	105	9.212	9.222	-0.010	1	801	0.0608	7
T 142 Propene oxide TIC	58		0.000				ND	
T 143 2-Butoxyethanol TIC	1		0.000				ND	
T 144 Dichloroacetonitrile TIC	74		0.000				ND	
T 141 n-Nonane TIC	1		0.000				ND	
T 140 Propene TIC	41		0.000				ND	
T 139 Dicyclopentadiene TIC	66		0.000				ND	

QC Flag Legend

Processing Flags
- NR - Missing Quant Standard
- 7 - Failed Limit of Detection

Review Flags
- U - Marked Undetected

Reagents:

mv-IS_SS_00070 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 10-Oct-2023 14:13:11 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\MS13_006846.D

Injection Date: 09-Oct-2023 14:02:28 Instrument ID: VMS_MS13

Lims ID: 280-182145-B-14 Lab Sample ID: 280-182145-14

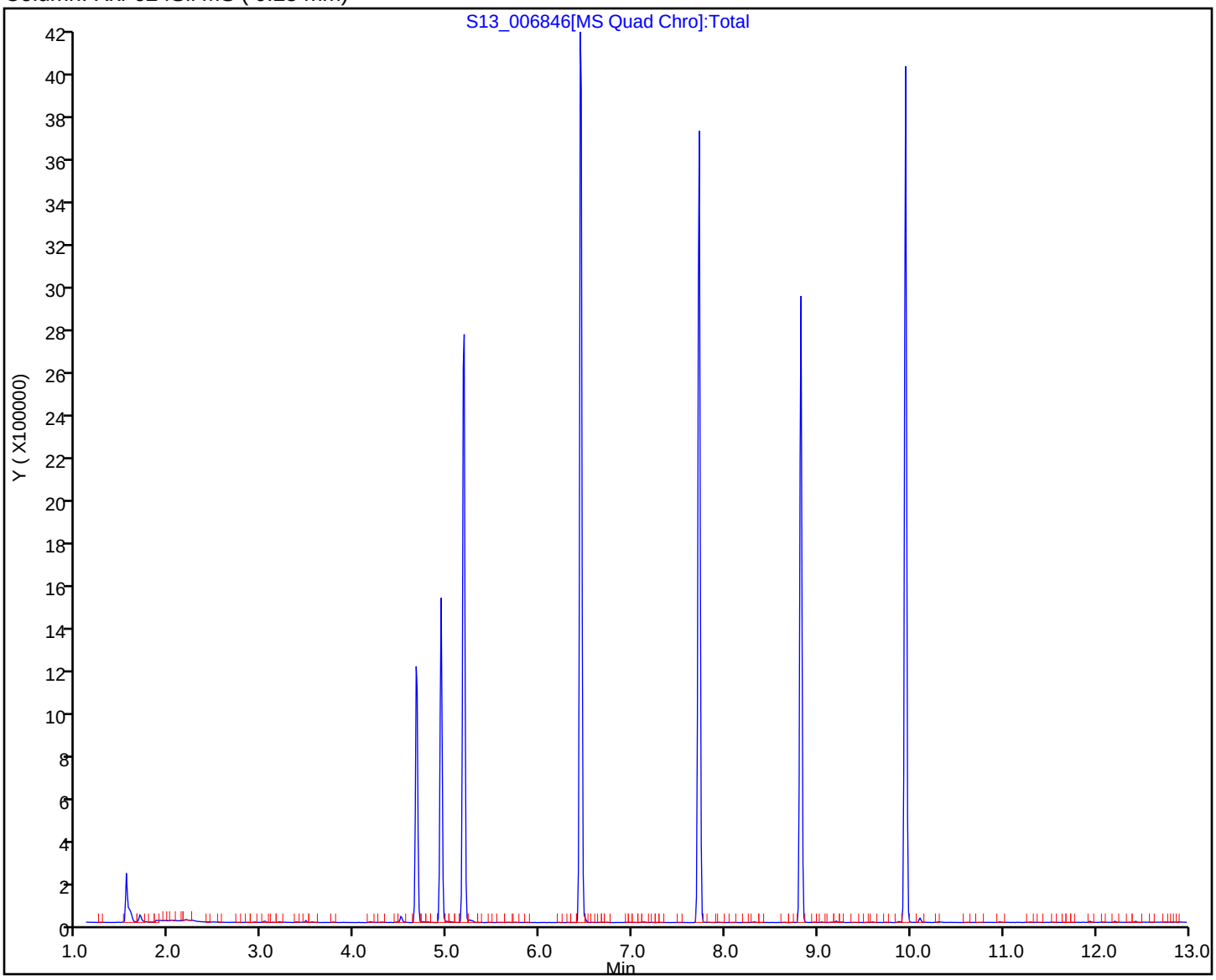
Client ID: FWGTB-230901-TB003

Operator ID: MEIERG ALS Bottle#: 0 Worklist Smp#: 13

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: AQ_VMS13_8260 Limit Group: MSV - 8260B Water and Solid

Column: Rxi-624Sil MS (0.25 mm)



12/5/2023 8:25 AM

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\MS13_006846.D
Lims ID: 280-182145-B-14
Client ID: FWGTB-230901-TB003
Sample Type: Client
Inject. Date: 09-Oct-2023 14:02:28 ALS Bottle#: 0 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-182145-b-14
Operator ID: MEIERG Instrument ID: VMS_MS13

Method: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\AQ_VMS13_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 10-Oct-2023 14:12:22 Calib Date: 08-Oct-2023 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006822.D

Column 1 : Rxi-624Sil MS (0.25 mm) Det: MS Quad
Process Host: CTX1608

First Level Reviewer: BMJ3 Date: 10-Oct-2023 14:08:07

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	48.2	96.45
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	50.0	100.07
$ 6 Toluene-d8 (Surr)	50.0	51.0	102.03
$ 7 4-Bromofluorobenzene (Surr)	50.0	51.6	103.18

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-182145-1 Analy Batch No.: 628923

SDG No.:

Instrument ID: VMS_MS13 GC Column: RXI-624SilM ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/08/2023 16:36 Calibration End Date: 10/08/2023 19:36 Calibration ID: 85602

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-628923/2	MS13_006804.D
Level 2	IC 280-628923/3	MS13_006805.D
Level 3	IC 280-628923/4	MS13_006806.D
Level 4	IC 280-628923/5	MS13_006807.D
Level 5	IC 280-628923/6	MS13_006808.D
Level 6	ICIS 280-628923/7	MS13_006809.D
Level 7	IC 280-628923/8	MS13_006810.D
Level 8	IC 280-628923/9	MS13_006811.D
Level 9	IC 280-628923/10	MS13_006812.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	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								
Dichlorodifluoromethane	+++++ 0.2827	+++++ 0.2988	0.1422 0.2828	0.1458 +++++	0.2785	Lin1	-0.390	0.2932							0.9970		0.9900
Chloromethane	+++++ 0.3356	0.2669 0.3515	0.2650 0.3438	0.2460 0.3324	0.3432	Lin1	-0.126	0.3397			0.1000				0.9990		0.9900
Vinyl chloride	+++++ 0.3054	0.2123 0.3212	0.2347 0.3156	0.2247 0.3042	0.3052	Lin2	-0.107	0.3026							0.9910		0.9900
Bromomethane	+++++ 0.1957	0.1828 0.2120	0.1805 0.2051	0.1566 0.1853	0.2083	Ave		0.1908				9.6		15.0			
Chloroethane	+++++ 0.2011	0.1615 0.2125	0.1730 0.2074	0.1659 0.1968	0.2092	Lin2	-0.047	0.2017							0.9950		0.9900
Dichlorofluoromethane	0.4356 0.5086	0.4452 0.5360	0.4624 0.5209	0.4254 0.5017	0.5206	Ave		0.4841				8.7		15.0			
Trichlorofluoromethane	+++++ 0.3975	+++++ 0.4164	0.3308 0.4015	0.3275 0.3909	0.3983	Ave		0.3804				9.4		15.0			
Ethyl ether	0.2652 0.2692	0.2585 0.2831	0.2569 0.2678	0.2533 0.2737	0.2885	Ave		0.2685				4.4		15.0			
Acrolein	+++++ 0.0493	+++++ 0.0506	0.0455 0.0512	0.0412 0.0573	0.0500	Ave		0.0493				10.1		15.0			
1,1-Dichloroethene	0.2110 0.2417	0.2232 0.2581	0.2230 0.2506	0.2171 0.2473	0.2485	Ave		0.2356				7.2		30.0			
Acetone	+++++ 0.1516	0.4160 0.1557	0.2632 0.1541	0.1932 0.1534	0.1841	Lin2	1.0343	0.1492							0.9960		0.9900
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++ 0.1672	0.1389 0.1744	0.1402 0.1721	0.1127 0.1699	0.1578	Ave		0.1542				14.1		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-182145-1 Analy Batch No.: 628923

SDG No.:

Instrument ID: VMS_MS13 GC Column: RXI-624SilM ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/08/2023 16:36 Calibration End Date: 10/08/2023 19:36 Calibration ID: 85602

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	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								
Iodomethane	0.3742 0.3922	0.3455 0.4117	0.2914 0.4087	0.3550 0.4078	0.4162	Ave		0.3781				11.0		15.0			
Carbon disulfide	0.7052 0.7823	0.6629 0.8389	0.6843 0.8306	0.6225 0.8216	0.7730	Ave		0.7468				10.7		15.0			
Methyl acetate	0.3796 0.3675	0.3567 0.3755	0.3807 0.3770	0.3441 0.3781	0.3830	Ave		0.3714				3.5		15.0			
3-Chloro-1-propene	+++++ 0.4633	0.5081 0.4724	0.4399 0.4717	0.3949 0.4718	0.4944	Ave		0.4646				7.5		15.0			
Methylene Chloride	+++++ 0.2922	0.3375 0.3017	0.2941 0.2932	0.2692 0.2950	0.3174	Ave		0.3000				6.7		15.0			
2-Methyl-2-propanol	0.0229 0.0625	0.0597 0.0651	0.0590 0.0664	0.0542 0.0667	0.0644	Lin2	-0.184	0.0657							0.9900		0.9900
Acrylonitrile	0.1469 0.1773	0.1764 0.1825	0.1831 0.1754	0.1714 0.1735	0.1903	Ave		0.1752				6.9		15.0			
Methyl tert-butyl ether	0.8096 0.8918	0.8418 0.9081	0.8275 0.8707	0.8288 0.8876	0.9346	Ave		0.8667				4.9		15.0			
trans-1,2-Dichloroethene	0.2500 0.2872	0.2636 0.3031	0.2765 0.2946	0.2602 0.2915	0.3081	Ave		0.2817				7.2		15.0			
Hexane	1.1919 1.5311	1.4617 1.6456	1.4579 1.5839	1.4076 1.5330	1.6209	Ave		1.4926				9.2		15.0			
Vinyl acetate	0.7590 0.7525	0.7174 0.7669	0.6962 0.7334	0.6588 0.7758	0.8222	Ave		0.7425				6.4		15.0			
1,1-Dichloroethane	0.5115 0.5458	0.4940 0.5730	0.4942 0.5536	0.5117 0.5508	0.5844	Ave		0.5354			0.1000	6.3		15.0			
2-Butanone (MEK)	0.2308 0.2696	0.2706 0.2766	0.2701 0.2734	0.2501 0.2707	0.2887	Ave		0.2667				6.3		15.0			
cis-1,2-Dichloroethene	0.3129 0.3202	0.3249 0.3330	0.3186 0.3236	0.3014 0.3240	0.3382	Ave		0.3219				3.3		15.0			
2,2-Dichloropropane	0.3157 0.3064	0.2803 0.3128	0.2960 0.3110	0.2793 0.2952	0.3164	Ave		0.3014				4.8		15.0			
sec-Butyl Alcohol	+++++ 0.0555	0.0471 0.0557	0.0459 0.0565	0.0445 0.0572	0.0540	Ave		0.0521				10.1		15.0			
Chlorobromomethane	0.1521 0.1502	0.1383 0.1542	0.1301 0.1496	0.1457 0.1535	0.1584	Ave		0.1480				6.0		15.0			
Tetrahydrofuran	0.1499 0.1799	0.1913 0.1837	0.1949 0.1807	0.1696 0.1877	0.1877	Ave		0.1806				7.6		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-182145-1 Analy Batch No.: 628923

SDG No.:

Instrument ID: VMS_MS13 GC Column: RXI-624SilM ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/08/2023 16:36 Calibration End Date: 10/08/2023 19:36 Calibration ID: 85602

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	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								
Chloroform	0.4589 0.5082	0.4749 0.5269	0.4889 0.5152	0.4859 0.5133	0.5466	Ave		0.5021				5.4		30.0			
1,1,1-Trichloroethane	0.3169 0.3950	0.3547 0.4195	0.3478 0.4105	0.3715 0.4103	0.4097	Ave		0.3818				9.4		15.0			
Cyclohexane	0.4494 0.4736	0.4358 0.4824	0.4478 0.4677	0.4309 0.4561	0.4750	Ave		0.4576				4.0		15.0			
Carbon tetrachloride	+++++ 0.3233	0.2546 0.3477	0.2765 0.3468	0.2649 0.3568	0.3100	Lin2	-0.091	0.3312							0.9930		0.9900
1,1-Dichloropropene	0.3894 0.4226	0.3861 0.4527	0.4117 0.4397	0.3978 0.4319	0.4425	Ave		0.4194				5.8		15.0			
Isobutyl alcohol	+++++ 0.0233	0.0207 0.0240	0.0212 0.0244	0.0200 0.0248	0.0232	Ave		0.0227				8.0		15.0			
Benzene	1.1900 1.1921	1.1670 1.2521	1.1842 1.2062	1.1584 1.1647	1.2922	Ave		1.2008				3.7		15.0			
1,2-Dichloroethane	+++++ 0.3978	0.4510 0.4095	0.4136 0.3931	0.3953 0.4078	0.4267	Ave		0.4119				4.7		15.0			
n-Heptane	+++++ 0.4547	+++++ 0.4821	0.4470 0.4695	0.4272 0.4590	0.4585	Ave		0.4568				3.8		15.0			
Trichloroethene	0.9851 1.0148	1.0045 1.0802	1.0046 1.0651	0.9929 1.0242	1.1061	Ave		1.0309				4.1		15.0			
2-Pentanone	0.3223 0.4204	0.3908 0.4343	0.4188 0.4259	0.3782 0.4108	0.4338	Ave		0.4039				8.9		15.0			
Methylcyclohexane	0.3376 0.4199	0.4011 0.4385	0.3950 0.4338	0.3862 0.4253	0.4237	Ave		0.4068				7.7		15.0			
1,2-Dichloropropane	0.2658 0.3187	0.2944 0.3290	0.3045 0.3249	0.2979 0.3293	0.3325	Ave		0.3108				7.1		30.0			
1,4-Dioxane	+++++ 0.0047	0.0053 0.0050	0.0054 0.0052	0.0045 0.0041	0.0049	Ave		0.0049				9.1		15.0			
Dibromomethane	0.1776 0.1899	0.1725 0.1927	0.2001 0.1861	0.1778 0.1938	0.1914	Ave		0.1869				4.9		15.0			
Dichlorobromomethane	0.2879 0.3634	0.3034 0.3847	0.3075 0.3770	0.3126 0.3881	0.3473	Lin2	-0.045	0.3606							0.9940		0.9900
2-Chloroethyl vinyl ether	+++++ 0.2539	+++++ 0.2638	0.2073 0.2530	0.2158 0.2587	0.2377	Ave		0.2415				9.1		15.0			
cis-1,3-Dichloropropene	1.3155 1.6385	1.2253 1.7576	1.3670 1.7387	1.3963 1.7279	1.6607	Lin2	-0.231	1.6353							0.9910		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-182145-1 Analy Batch No.: 628923

SDG No.:

Instrument ID: VMS_MS13 GC Column: RXI-624SilM ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/08/2023 16:36 Calibration End Date: 10/08/2023 19:36 Calibration ID: 85602

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	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								
4-Methyl-2-pentanone (MIBK)	+++++ 0.5158	0.4559 0.5209	0.4946 0.5062	0.4797 0.4473	0.5429	Ave		0.4954				6.6		15.0			
Toluene	1.1463 1.2443	1.2334 1.3079	1.2709 1.2616	1.2130 1.2133	1.3438	Ave		1.2483				4.6		30.0			
trans-1,3-Dichloropropene	+++++ 0.4470	0.3151 0.4768	0.3715 0.4708	0.3595 0.4883	0.4182	Lin2	-0.1566	0.4545							0.9940		0.9900
Ethyl methacrylate	+++++ 1.5675	1.3722 1.6838	1.4086 1.6532	1.3987 1.6402	1.5982	Ave		1.5403				8.3		15.0			
1,1,2-Trichloroethane	0.2172 0.2713	0.2358 0.2789	0.2572 0.2735	0.2523 0.2787	0.2768	Ave		0.2602				8.4		15.0			
Tetrachloroethene	0.7044 0.7929	0.7862 0.8533	0.7541 0.8355	0.7629 0.8083	0.8571	Ave		0.7950				6.3		15.0			
1,3-Dichloropropane	1.4620 1.6696	1.6502 1.7646	1.6911 1.7265	1.6221 1.6900	1.7963	Ave		1.6747				5.8		15.0			
2-Hexanone	1.0938 1.3197	1.1520 1.3644	1.2578 1.3486	1.2377 1.2291	1.4089	Ave		1.2680				8.1		15.0			
Chlorodibromomethane	+++++ 0.8435	0.5923 0.9300	0.6470 0.9354	0.6769 0.9580	0.8009	Lin2	-0.3444	0.8774							0.9900		0.9900
Ethylene Dibromide	0.9125 0.9631	0.8274 1.0391	0.9584 1.0060	0.9129 0.9988	1.0208	Ave		0.9599				7.0		15.0			
1-Chlorohexane	+++++ 1.4131	1.6031 1.5254	1.5344 1.5048	1.4191 1.4559	1.5360	Ave		1.4990				4.4		15.0			
Chlorobenzene	2.6408 2.6255	2.6197 2.8150	2.6453 2.7541	2.6348 2.6348	2.9164	Ave		2.6985			0.3000	3.9		15.0			
1,1,1,2-Tetrachloroethane	0.7105 0.8228	0.6468 0.8834	0.6727 0.8808	0.7152 0.8888	0.8216	Lin2	-0.0933	0.8223							0.9900		0.9900
Ethylbenzene	1.4064 1.4289	1.4389 1.5230	1.4550 1.4841	1.4066 1.4474	1.5702	Ave		1.4623				3.7		30.0			
m-Xylene & p-Xylene	1.6367 1.7735	1.6527 1.8973	1.7433 1.8464	1.7565 1.7903	1.9205	Ave		1.7797				5.5		15.0			
o-Xylene	1.6657 1.7360	1.6797 1.8422	1.6862 1.8001	1.6976 1.7354	1.8822	Ave		1.7472				4.4		15.0			
Styrene	2.6891 2.9503	2.5759 3.1358	2.7466 3.0726	2.7637 2.9273	3.1440	Ave		2.8895				7.1		15.0			
Bromoform	+++++ 0.5825	+++++ 0.6334	0.4233 0.6580	0.3995 +++++	0.4978	Lin1	-0.7644	0.6398			0.1000				0.9960		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-182145-1 Analy Batch No.: 628923

SDG No.:

Instrument ID: VMS_MS13 GC Column: RXI-624SilM ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/08/2023 16:36 Calibration End Date: 10/08/2023 19:36 Calibration ID: 85602

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	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								
Isopropylbenzene	2.4590 2.5808	2.3646 2.7959	2.5092 2.6554	2.5223 2.5587	2.7945	Ave		2.5823				5.6		15.0			
Cyclohexanone	0.0532 0.0968	0.0836 0.1019	0.0951 0.1086	0.0885 0.0860	0.1021	Lin2	-0.644	0.0998							0.9930		0.9900
1,1,2,2-Tetrachloroethane	0.8587 0.8586	0.7589 0.9084	0.8269 0.8777	0.7979 0.9095	0.8947	Ave		0.8546			0.3000	6.0		15.0			
Bromobenzene	0.6381 0.6507	0.6402 0.7015	0.6544 0.6709	0.6182 0.6801	0.7016	Ave		0.6618				4.4		15.0			
trans-1,4-Dichloro-2-butene	+++++ 0.2237	+++++ 0.2417	0.1169 0.2517	0.1299 +++++	0.1773	Qua	-0.318	0.2086	0.0004689						1.0000		0.9900
1,2,3-Trichloropropane	0.2379 0.2614	0.2466 0.2838	0.2861 0.2711	0.2554 0.2786	0.2865	Ave		0.2675				6.7		15.0			
N-Propylbenzene	0.7160 0.7219	0.6626 0.7752	0.7359 0.7454	0.6931 0.7421	0.7560	Ave		0.7276				4.7		15.0			
2-Chlorotoluene	0.5937 0.6139	0.5635 0.6703	0.6161 0.6378	0.6000 0.6350	0.6680	Ave		0.6220				5.6		15.0			
1,3,5-Trimethylbenzene	1.9751 2.1146	1.9006 2.2825	2.0307 2.1859	2.0603 2.0796	2.2864	Ave		2.1018				6.2		15.0			
4-Chlorotoluene	0.6055 0.6355	0.6231 0.6930	0.6363 0.6723	0.6306 0.6701	0.6908	Ave		0.6508				4.8		15.0			
tert-Butylbenzene	1.8167 1.8405	1.7767 1.9900	1.8223 1.8863	1.8059 1.8148	2.0100	Ave		1.8626				4.5		15.0			
1,2,4-Trimethylbenzene	2.0420 2.1937	2.0293 2.3528	2.1315 2.2496	2.1578 2.1450	2.3765	Ave		2.1865				5.6		15.0			
sec-Butylbenzene	0.4771 0.5411	0.5037 0.5799	0.5590 0.5605	0.5053 0.5451	0.5947	Ave		0.5407				7.1		15.0			
1,3-Dichlorobenzene	1.3202 1.2197	1.1713 1.3197	1.2045 1.2682	1.2158 1.2343	1.3243	Ave		1.2531				4.6		15.0			
4-Isopropyltoluene	2.1767 2.2781	2.0369 2.4690	2.2461 2.3759	2.2687 2.2221	2.5127	Ave		2.2874				6.4		15.0			
1,4-Dichlorobenzene	1.3934 1.2334	1.2972 1.3340	1.3176 1.2852	1.2516 1.2478	1.3718	Ave		1.3036				4.3		15.0			
n-Butylbenzene	2.0365 2.1631	2.0392 2.3558	2.1275 2.2602	2.1678 2.1247	2.3529	Ave		2.1809				5.5		15.0			
1,2-Dichlorobenzene	1.3064 1.1500	1.1464 1.2317	1.1593 1.1792	1.1602 1.1473	1.2396	Ave		1.1911				4.7		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-182145-1 Analy Batch No.: 628923

SDG No.:

Instrument ID: VMS_MS13 GC Column: RXI-624SilM ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/08/2023 16:36 Calibration End Date: 10/08/2023 19:36 Calibration ID: 85602

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	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								
1,2-Dibromo-3-Chloropropane	+++++ 0.2006	+++++ 0.2177	+++++ 0.2197	0.1557 0.2303	0.1791	Lin2	-0.346	0.2206							0.9980		0.9900
1,2,4-Trichlorobenzene	0.8715 0.7244	0.7373 0.7834	0.7628 0.7679	0.7384 0.7389	0.8406	Ave		0.7739				6.5		15.0			
Hexachlorobutadiene	0.3233 0.3033	0.3339 0.3251	0.3120 0.3143	0.3167 0.2904	0.3543	Ave		0.3193				5.7		15.0			
Naphthalene	2.4833 2.4132	2.3309 2.5413	2.3295 2.4812	2.3362 2.3624	2.6490	Ave		2.4363				4.6		15.0			
1,2,3-Trichlorobenzene	+++++ 0.6517	0.6765 0.7093	0.6993 0.6917	0.6687 0.6685	0.7414	Ave		0.6884				4.1		15.0			
Dibromofluoromethane (Surr)	0.2974 0.2965	0.2980 0.2921	0.2875 0.2948	0.2893 0.2999	0.2910	Ave		0.2940				1.5		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3787 0.3700	0.3847 0.3606	0.3720 0.3548	0.3755 0.3762	0.3637	Ave		0.3707				2.6		15.0			
Toluene-d8 (Surr)	4.0530 3.9696	3.9660 4.0219	3.9704 4.0280	4.0370 3.9782	4.0659	Ave		4.0100				1.0		15.0			
4-Bromofluorobenzene (Surr)	0.8641 0.8695	0.8511 0.8891	0.8713 0.8779	0.8632 0.9068	0.8630	Ave		0.8729				1.9		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver | Job No.: 280-182145-1 | Analy Batch No.: 628923

SDG No.:

Instrument ID: VMS_MS13 | GC Column: RXI-624Sil ID: 0.25(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 10/08/2023 16:36 | Calibration End Date: 10/08/2023 19:36 | Calibration ID: 85602

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-628923/2	MS13_006804.D
Level 2	IC 280-628923/3	MS13_006805.D
Level 3	IC 280-628923/4	MS13_006806.D
Level 4	IC 280-628923/5	MS13_006807.D
Level 5	IC 280-628923/6	MS13_006808.D
Level 6	ICIS 280-628923/7	MS13_006809.D
Level 7	IC 280-628923/8	MS13_006810.D
Level 8	IC 280-628923/9	MS13_006811.D
Level 9	IC 280-628923/10	MS13_006812.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			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
Dichlorodifluoromethane	FB	Lin1	+++++ 652476	+++++ 990383	12122 1279538	32177 +++++	122571	+++++ 50.0	+++++ 75.0	2.00 100	5.00 +++++	10.0
Chloromethane	FB	Lin1	+++++ 774567	11896 1165256	22587 1555542	54301 3025400	151020	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Vinyl chloride	FB	Lin2	+++++ 704774	9461 1064587	20001 1427915	49607 2768347	134304	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Bromomethane	FB	Ave	+++++ 451721	8147 702637	15380 927850	34563 1685999	91645	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Chloroethane	FB	Lin2	+++++ 464034	7199 704261	14742 938255	36620 1790584	92036	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Dichlorofluoromethane	FB	Ave	9060 1173599	19845 1776788	39407 2356900	93914 4565859	229082	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Trichlorofluoromethane	FB	Ave	+++++ 917403	+++++ 1380139	28188 1816664	72292 3557092	175265	+++++ 50.0	+++++ 75.0	2.00 100	5.00 200	10.0
Ethyl ether	FB	Ave	5515 621111	11523 938515	21892 1211909	55921 2491152	126964	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Acrolein	FB	Ave	+++++ 1124311	+++++ 1656997	38300 2286770	89863 5150574	217100	+++++ 494	+++++ 741	19.8 988	49.4 1975	98.8
1,1-Dichloroethene	FB	Ave	4388 557859	9950 855363	19003 1133684	47931 2250858	109337	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Acetone	FB	Lin2	+++++ 1399594	74165 2064160	89717 2789494	170641 5585169	324068	+++++ 200	4.00 300	8.00 400	20.0 800	40.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	+++++ 385768	6192 578069	11949 778821	24890 1546511	69423	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Iodomethane	FB	Ave	7783 905072	15398 1364503	24837 1849357	78364 3711249	183158	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Carbon disulfide	FB	Ave	14666 1805247	29547 2780549	58319 3758234	137416 7477332	340150	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver | Job No.: 280-182145-1 | Analy Batch No.: 628923

SDG No.:

Instrument ID: VMS_MS13 | GC Column: RXI-624Sil ID: 0.25(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 10/08/2023 16:36 | Calibration End Date: 10/08/2023 19:36 | Calibration ID: 85602

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			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
Methyl acetate	FB	Ave	15791 1696142	31801 2489240	64880 3411763	151908 6881930	337072	1.00 100	2.00 150	4.00 200	10.0 400	20.0
3-Chloro-1-propene	FB	Ave	+++++ 1069120	22649 1565895	37488 2134107	87179 4293523	217571	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Methylene Chloride	FB	Ave	+++++ 674315	15041 999987	25060 1326554	59433 2684416	139675	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Methyl-2-propanol	FB	Lin2	4764 1441547	26590 2157159	50279 3003220	119651 6067942	283372	5.00 500	10.0 750	20.0 1000	50.0 2000	100
Acrylonitrile	FB	Ave	30561 4090407	78635 6050259	156004 7936976	378428 15787046	837368	5.00 500	10.0 750	20.0 1000	50.0 2000	100
Methyl tert-butyl ether	FB	Ave	16837 2057907	37520 3010022	70518 3939500	182960 8077919	411245	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
trans-1,2-Dichloroethene	FB	Ave	5200 662803	11751 1004792	23563 1333005	57442 2652541	135564	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Hexane	CBNZd5	Ave	6861 1058790	19038 1609203	37077 2113394	90292 4199347	205989	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Vinyl acetate	FB	Ave	31572 3472929	63950 5084185	118662 6636725	290883 14120210	723586	1.00 100	2.00 150	4.00 200	10.0 400	20.0
1,1-Dichloroethane	FB	Ave	10638 1259426	22019 1899397	42115 2504692	112968 5012366	257134	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Butanone (MEK)	FB	Ave	19201 2488533	48245 3667615	92074 4948408	220872 9853543	508209	2.00 200	4.00 300	8.00 400	20.0 800	40.0
cis-1,2-Dichloroethene	FB	Ave	6508 738805	14482 1103738	27149 1464281	66547 2948963	148806	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2,2-Dichloropropane	FB	Ave	6565 707093	12495 1036825	25228 1407323	61649 2686147	139206	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
sec-Butyl Alcohol	FB	Ave	+++++ 3073548	50380 4431100	93919 6140373	236025 12484248	570391	+++++ 1200	24.0 1800	48.0 2400	120 4800	240
Chlorobromomethane	FB	Ave	3163 346723	6163 511209	11084 677112	32172 1397392	69717	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Tetrahydrofuran	FB	Ave	6233 830359	17053 1218046	33222 1635218	74887 3416208	165225	1.00 100	2.00 150	4.00 200	10.0 400	20.0
Chloroform	FB	Ave	9543 1172827	21166 1746545	41667 2331185	107277 4671641	240523	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,1,1-Trichloroethane	FB	Ave	6591 911604	15809 1390426	29637 1857545	82013 3733905	180269	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Cyclohexane	FB	Ave	9347 1093014	19425 1599005	38159 2116333	95125 4150690	209024	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Carbon tetrachloride	FB	Lin2	+++++ 746104	11349 1152434	23561 1569380	58490 3247311	136392	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver | Job No.: 280-182145-1 | Analy Batch No.: 628923

SDG No.:

Instrument ID: VMS_MS13 | GC Column: RXI-624Sil ID: 0.25(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 10/08/2023 16:36 | Calibration End Date: 10/08/2023 19:36 | Calibration ID: 85602

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			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
1,1-Dichloropropene	FB	Ave	8098 975268	17209 1500594	35085 1989632	87817 3930341	194694	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Isobutyl alcohol	FB	Ave	+++++ 1345218	23027 1985419	45128 2756822	110563 5644231	255766	+++++ 1250	25.0 1875	50.0 2500	125 5000	250
Benzene	FB	Ave	24749 2751022	52017 4150319	100919 5457549	255716 10599410	568629	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2-Dichloroethane	FB	Ave	+++++ 917971	20103 1357434	35244 1778550	87273 3711199	187764	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
n-Heptane	FB	Ave	+++++ 1049190	+++++ 1597957	38090 2124297	94312 4177079	201745	+++++ 50.0	+++++ 75.0	2.00 100	5.00 200	10.0
Trichloroethene	CBNZd5	Ave	5671 701780	13084 1056331	25549 1421156	63689 2805597	140573	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Pentanone	FB	Ave	21450 3104361	55744 4606881	114208 6166348	267154 11963944	610829	1.60 160	3.20 240	6.40 320	16.0 640	32.0
Methylcyclohexane	FB	Ave	7021 968886	17876 1453443	33661 1962599	85254 3870121	186449	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2-Dichloropropane	FB	Ave	5527 735439	13123 1090378	25952 1470280	65767 2996778	146298	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,4-Dioxane	FB	Ave	+++++ 216947	4732 331748	9184 471794	19677 746441	43002	+++++ 1000	20.0 1500	40.0 2000	100 4000	200
Dibromomethane	FB	Ave	3694 438190	7690 638868	17049 842210	39254 1763357	84239	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Dichlorobromomethane	FB	Lin2	5988 838606	13525 1275141	26203 1705594	69001 3532138	152812	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Chloroethyl vinyl ether	FB	Ave	+++++ 586004	+++++ 874369	17668 1144688	47645 2354003	104601	+++++ 50.0	+++++ 75.0	2.00 100	5.00 200	10.0
cis-1,3-Dichloropropene	CBNZd5	Lin2	7573 1133097	15959 1718704	34766 2319943	89568 4733150	211055	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	+++++ 4761009	81286 6906498	168584 9162126	423593 16284226	955550	+++++ 200	4.00 300	8.00 400	20.0 800	40.0
Toluene	FB	Ave	23839 2871353	54976 4335436	108304 5708510	267789 11042280	591307	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
trans-1,3-Dichloropropene	FB	Lin2	+++++ 1031490	14044 1580589	31660 2130022	79353 4444196	184037	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Ethyl methacrylate	CBNZd5	Ave	+++++ 1084014	17872 1646509	35823 2205840	89719 4492751	203113	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,1,2-Trichloroethane	FB	Ave	4518 626137	10509 924566	21916 1237298	55706 2535993	121816	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver | Job No.: 280-182145-1 | Analy Batch No.: 628923

SDG No.:

Instrument ID: VMS_MS13 | GC Column: RXI-624Sil ID: 0.25(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 10/08/2023 16:36 | Calibration End Date: 10/08/2023 19:36 | Calibration ID: 85602

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			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
Tetrachloroethene	CBNZd5	Ave	4055 548300	10240 834456	19177 1114808	48936 2214055	108920	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,3-Dichloropropane	CBNZd5	Ave	8416 1154591	21494 1725494	43008 2303617	104051 4629401	228289	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Hexanone	CBNZd5	Ave	25186 3650567	60019 5336629	127955 7197538	317559 13467320	716211	2.00 200	4.00 300	8.00 400	20.0 800	40.0
Chlorodibromomethane	CBNZd5	Lin2	+++++ 583333	7714 909378	16455 1248060	43422 2624218	101788	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Ethylene Dibromide	CBNZd5	Ave	5253 666023	10777 1016131	24375 1342256	58558 2736023	129734	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1-Chlorohexane	CBNZd5	Ave	+++++ 781789	16704 1193313	31218 1606252	72823 3190323	156168	+++++ 40.0	0.800 60.0	1.60 80.0	4.00 160	8.00
Chlorobenzene	CBNZd5	Ave	15202 1815616	34121 2752646	67276 3674722	169010 7217349	370630	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,1,1,2-Tetrachloroethane	CBNZd5	Lin2	4090 569033	8425 863803	17108 1175232	45875 2434501	104409	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Ethylbenzene	CBNZd5	Ave	8096 988176	18741 1489244	37003 1980172	90228 3964696	199552	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
m-Xylene & p-Xylene	CBNZd5	Ave	9422 1226416	21526 1855278	44335 2463698	112671 4904057	244065	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
o-Xylene	CBNZd5	Ave	9589 1200545	21878 1801373	42884 2401860	108891 4753772	239199	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Styrene	CBNZd5	Ave	15480 2040254	33550 3066343	69852 4099700	177278 8018480	399554	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Bromoform	CBNZd5	Lin1	+++++ 402808	+++++ 619355	10766 877938	25629 +++++	63258	+++++ 50.0	+++++ 75.0	2.00 100	5.00 +++++	10.0
Isopropylbenzene	DCBd4	Ave	23891 3024338	53453 4539868	109451 6036333	279111 11403079	614523	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Cyclohexanone	CBNZd5	Lin2	9190	32658	72548	170328	389085	15.0	30.0	60.0	150	300

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver | Job No.: 280-182145-1 | Analy Batch No.: 628923

SDG No.:

Instrument ID: VMS_MS13 | GC Column: RXI-624Sil ID: 0.25(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 10/08/2023 16:36 | Calibration End Date: 10/08/2023 19:36 | Calibration ID: 85602

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			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
			2008116	2990578	4345678	7064480		1500	2250	3000	6000	
1,1,2,2-Tetrachloroethane	DCBd4	Ave	8343 1006118	17156 1474935	36071 1995152	88296 4053205	196741	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Bromobenzene	DCBd4	Ave	6200 762543	14473 1138984	28547 1525060	68404 3030998	154286	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
trans-1,4-Dichloro-2-butene	DCBd4	Qua	+++++ 262178	+++++ 392480	5098 572164	14371 +++++	38985	+++++ 50.0	+++++ 75.0	2.00 100	5.00 +++++	10.0
1,2,3-Trichloropropane	DCBd4	Ave	2311 306365	5575 460856	12478 616236	28260 1241510	63008	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
N-Propylbenzene	DCBd4	Ave	6956 845996	14979 1258776	32100 1694372	76696 3307121	166244	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Chlorotoluene	DCBd4	Ave	5768 719461	12739 1088477	26873 1449825	66392 2829995	146905	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,3,5-Trimethylbenzene	DCBd4	Ave	19189 2478032	42964 3706198	88582 4969117	227991 9268014	502779	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
4-Chlorotoluene	DCBd4	Ave	5883 744744	14086 1125178	27756 1528240	69779 2986460	151907	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
tert-Butylbenzene	DCBd4	Ave	17650 2156815	40163 3231197	79490 4287944	199835 8087773	442005	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2,4-Trimethylbenzene	DCBd4	Ave	19839 2570653	45874 3820344	92978 5113955	238779 9559252	522600	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
sec-Butylbenzene	DCBd4	Ave	4635 634064	11386 941650	24385 1274075	55919 2429269	130785	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,3-Dichlorobenzene	DCBd4	Ave	12827 1429286	26477 2142869	52543 2882818	134532 5500915	291225	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
4-Isopropyltoluene	DCBd4	Ave	21148 2669616	46044 4009088	97975 5401011	251047 9902647	552565	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,4-Dichlorobenzene	DCBd4	Ave	13538 1445343	29324 2166157	57475 2921522	138499 5560932	301660	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
n-Butylbenzene	DCBd4	Ave	19786 2534840	46097 3825273	92804 5138066	239888 9468924	517423	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2-Dichlorobenzene	DCBd4	Ave	12693 1347604	25914 1999926	50569 2680693	128383 5113134	272603	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2-Dibromo-3-Chloropropane	DCBd4	Lin2	+++++ 235046	+++++ 353543	+++++ 499436	17231 1026234	39380	+++++ 50.0	+++++ 75.0	+++++ 100	5.00 200	10.0
1,2,4-Trichlorobenzene	DCBd4	Ave	8467 848934	16667 1272032	33272 1745711	81705 3293119	184861	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Hexachlorobutadiene	DCBd4	Ave	3141 355475	7548 527961	13611 714417	35050 1294151	77911	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Naphthalene	DCBd4	Ave	24127 2827931	52690 4126394	101613 5640275	258521 10528324	582538	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver | Job No.: 280-182145-1 | Analy Batch No.: 628923

SDG No.:

Instrument ID: VMS_MS13 | GC Column: RXI-624Sil ID: 0.25(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 10/08/2023 16:36 | Calibration End Date: 10/08/2023 19:36 | Calibration ID: 85602

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			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
1,2,3-Trichlorobenzene	DCBd4	Ave	+++++ 763720	15293 1151648	30502 1572408	73997 2978968	163028	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Dibromofluoromethane (Surr)	FB	Ave	618442 684146	664036 645456	612461 666851	638649 682291	640243	50.0 50.0	50.0 50.0	50.0 50.0	50.0 50.0	50.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	787490 853750	857377 796793	792491 802793	828914 855944	800213	50.0 50.0	50.0 50.0	50.0 50.0	50.0 50.0	50.0
Toluene-d8 (Surr)	CBNZd5	Ave	2333162 2745171	2582789 2621929	2524350 2687294	2589565 2724291	2583634	50.0 50.0	50.0 50.0	50.0 50.0	50.0 50.0	50.0
4-Bromofluorobenzene (Surr)	DCBd4	Ave	839492 1018905	961960 962451	950158 997795	955140 1010308	948877	50.0 50.0	50.0 50.0	50.0 50.0	50.0 50.0	50.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD
Qua = Quadratic ISTD

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006804.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 08-Oct-2023 16:36:25 ALS Bottle#: 0 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Operator ID: MEIERG Instrument ID: VMS_MS13
Sublist: chrom-AQ_VMS13_8260*sub3

Method: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\AQ_VMS13_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 09-Oct-2023 12:32:28 Calib Date: 08-Oct-2023 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006822.D

Column 1 : Rxi-624Sil MS (0.25 mm) Det: MS Quad
Process Host: CTX1667

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.170	5.170	0.000	98	2079729	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.720	7.720	0.000	87	575658	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.948	9.948	0.000	96	971565	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.663	4.662	0.000	93	618442	50.0	50.6	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.932	4.932	0.000	96	787490	50.0	51.1	
$ 6 Toluene-d8 (Surr)	98	6.435	6.435	0.000	94	2333162	50.0	50.5	
$ 7 4-Bromofluorobenzene (Surr)	95	8.818	8.818	0.000	89	839492	50.0	49.5	
9 Dichlorodifluoromethane	85		1.709				ND	ND	
10 Chloromethane	50	1.885	1.896	-0.011	95	5640	0.5000	0.7702	
11 Vinyl chloride	62		1.999				ND	ND	
12 Bromomethane	94	2.300	2.300	0.000	83	2822	0.5000	0.3556	
13 Chloroethane	64	2.383	2.393	-0.010	96	3443	0.5000	0.6421	
14 Dichlorofluoromethane	67	2.559	2.569	-0.010	95	9060	0.5000	0.4500	
15 Trichlorofluoromethane	101	2.600	2.579	0.021	92	6018	0.5000	0.3803	
18 Ethyl ether	59	2.797	2.797	0.000	96	5515	0.5000	0.4939	
19 Acrolein	56	2.911	2.911	0.000	96	7122	4.94	3.47	
20 1,1-Dichloroethene	96	2.994	2.994	0.000	94	4388	0.5000	0.4478	
21 Acetone	43	3.015	3.015	0.000	100	43123	2.00	0.0167	
22 1,1,2-Trichloro-1,2,2-trifluoroe	151	3.015	3.025	-0.010	42	2451	0.5000	0.3822	
24 Iodomethane	142	3.118	3.108	0.010	97	7783	0.5000	0.4949	
25 Carbon disulfide	76	3.181	3.170	0.011	99	14666	0.5000	0.4721	
27 Methyl acetate	43	3.243	3.243	0.000	99	15791	1.00	1.02	
28 3-Chloro-1-propene	41	3.263	3.263	0.000	92	12722	0.5000	0.6584	
29 Methylene Chloride	84	3.367	3.357	0.010	96	8256	0.5000	0.6616	
30 2-Methyl-2-propanol	59	3.409	3.409	0.000	95	4764	5.00	4.54	
31 Acrylonitrile	53	3.533	3.533	0.000	98	30561	5.00	4.19	
32 Methyl tert-butyl ether	73	3.554	3.554	0.000	96	16837	0.5000	0.4670	
33 trans-1,2-Dichloroethene	96	3.564	3.564	0.000	96	5200	0.5000	0.4439	
34 Hexane	57	3.761	3.761	0.000	92	6861	0.5000	0.3993	
35 Vinyl acetate	43	3.865	3.865	0.001	97	31572	1.00	1.02	
37 1,1-Dichloroethane	63	3.896	3.885	0.011	95	10638	0.5000	0.4777	
40 2-Butanone (MEK)	43	4.289	4.279	0.010	99	19201	2.00	1.73	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
42 cis-1,2-Dichloroethene	96	4.310	4.310	0.000	81	6508	0.5000	0.4861	
43 2,2-Dichloropropane	77	4.321	4.320	0.000	60	6565	0.5000	0.5236	
45 sec-Butyl Alcohol	45	4.393	4.393	0.000	99	17989	12.0	8.31	
47 Chlorobromomethane	128	4.486	4.486	0.000	96	3163	0.5000	0.5137	
48 Tetrahydrofuran	42	4.497	4.497	0.000	87	6233	1.00	0.8297	
49 Chloroform	83	4.549	4.548	0.000	95	9543	0.5000	0.4569	
50 1,1,1-Trichloroethane	97	4.694	4.694	0.000	93	6591	0.5000	0.4151	
51 Cyclohexane	56	4.756	4.745	0.011	82	9347	0.5000	0.4910	
52 1,1-Dichloropropene	75	4.808	4.808	0.000	92	8098	0.5000	0.4642	
53 Carbon tetrachloride	117	4.818	4.808	0.010	67	5511	0.5000	0.6762	
54 Isobutyl alcohol	41	4.818	4.818	0.000	68	8335	12.5	8.83	
56 Benzene	78	4.963	4.963	0.000	92	24749	0.5000	0.4955	
57 1,2-Dichloroethane	62		4.984				ND	ND	
59 n-Heptane	43		5.150				ND	ND	
60 Trichloroethene	95	5.450	5.450	0.000	93	5671	0.5000	0.4778	
61 2-Pentanone	43	5.554	5.554	0.000	99	21450	1.60	1.28	
62 Methylcyclohexane	55	5.647	5.647	0.000	88	7021	0.5000	0.4150	
64 1,2-Dichloropropane	63	5.657	5.657	0.000	89	5527	0.5000	0.4276	
65 1,4-Dioxane	88		5.709				ND	ND	
66 Dibromomethane	93	5.730	5.730	0.000	91	3694	0.5000	0.4752	
67 Dichlorobromomethane	83	5.854	5.854	0.000	98	5988	0.5000	0.5245	
69 2-Chloroethyl vinyl ether	63	6.062	6.062	0.000	91	3786	0.5000	0.3770	
70 cis-1,3-Dichloropropene	75	6.207	6.207	0.000	93	7573	0.5000	0.5436	
71 4-Methyl-2-pentanone (MIBK)	43	6.310	6.310	0.000	96	34856	2.00	1.69	
72 Toluene	91	6.497	6.497	0.000	97	23839	0.5000	0.4591	
73 trans-1,3-Dichloropropene	75	6.673	6.673	0.000	94	7297	0.5000	0.7294	
74 Ethyl methacrylate	69	6.694	6.694	0.000	88	6989	0.5000	0.3941	
75 1,1,2-Trichloroethane	97	6.849	6.849	0.000	90	4518	0.5000	0.4175	
76 Tetrachloroethene	164	6.942	6.942	0.000	90	4055	0.5000	0.4431	
77 1,3-Dichloropropane	76	6.994	6.994	0.000	89	8416	0.5000	0.4365	
78 2-Hexanone	43	7.015	7.015	0.000	96	25186	2.00	1.73	
79 Chlorodibromomethane	129	7.191	7.191	0.000	91	3763	0.5000	0.7643	
80 Ethylene Dibromide	107	7.305	7.305	0.000	94	5253	0.5000	0.4753	
81 1-Chlorohexane	91	7.699	7.699	0.000	33	9628	0.4000	0.5579	
82 Chlorobenzene	112	7.740	7.740	0.000	93	15202	0.5000	0.4893	
83 1,1,1,2-Tetrachloroethane	131	7.813	7.813	0.000	41	4090	0.5000	0.5453	
84 Ethylbenzene	106	7.823	7.823	0.000	98	8096	0.5000	0.4809	
85 m-Xylene & p-Xylene	106	7.937	7.937	0.000	98	9422	0.5000	0.4598	
86 o-Xylene	106	8.300	8.300	0.000	97	9589	0.5000	0.4767	
87 Styrene	104	8.321	8.321	0.000	93	15480	0.5000	0.4653	
88 Bromoform	173	8.497	8.497	0.000	92	2594	0.5000	1.55	
89 Isopropylbenzene	105	8.642	8.642	0.000	95	23891	0.5000	0.4761	
91 Cyclohexanone	55	8.746	8.746	0.000	91	9190	15.0	14.5	
92 1,1,2,2-Tetrachloroethane	83	8.932	8.932	0.000	93	8343	0.5000	0.5024	
93 Bromobenzene	156	8.963	8.963	0.000	97	6200	0.5000	0.4822	
94 trans-1,4-Dichloro-2-butene	53	8.963	8.963	0.000	40	1548	0.5000	1.90	
95 1,2,3-Trichloropropane	110	8.994	8.994	0.000	86	2311	0.5000	0.4446	
96 N-Propylbenzene	120	9.046	9.046	0.000	99	6956	0.5000	0.4920	
97 2-Chlorotoluene	126	9.139	9.139	0.000	96	5768	0.5000	0.4772	
98 1,3,5-Trimethylbenzene	105	9.212	9.212	0.000	94	19189	0.5000	0.4699	
99 4-Chlorotoluene	126	9.253	9.253	0.000	98	5883	0.5000	0.4652	
101 tert-Butylbenzene	119	9.523	9.523	0.000	91	17650	0.5000	0.4877	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
102 1,2,4-Trimethylbenzene	105	9.585	9.585	0.000	96	19839	0.5000	0.4670	
103 sec-Butylbenzene	134	9.740	9.751	-0.011	94	4635	0.5000	0.4411	
104 1,3-Dichlorobenzene	146	9.875	9.875	0.000	96	12827	0.5000	0.5268	
105 4-Isopropyltoluene	119	9.896	9.896	0.000	97	21148	0.5000	0.4758	
106 1,4-Dichlorobenzene	146	9.968	9.968	0.000	93	13538	0.5000	0.5345	
108 n-Butylbenzene	91	10.300	10.300	0.000	96	19786	0.5000	0.4669	
109 1,2-Dichlorobenzene	146	10.331	10.331	0.000	96	12693	0.5000	0.5484	
110 1,2-Dibromo-3-Chloropropane	157	11.108	11.108	0.000	79	1037	0.5000	1.81	
112 1,2,4-Trichlorobenzene	180	11.937	11.937	0.000	93	8467	0.5000	0.5630	
113 Hexachlorobutadiene	225	12.083	12.083	0.001	90	3141	0.5000	0.5063	
114 Naphthalene	128	12.207	12.207	0.000	97	24127	0.5000	0.5096	
115 1,2,3-Trichlorobenzene	180	12.435	12.435	0.000	93	7987	0.5000	0.5971	
127 Butadiene	54		0.000				ND	ND	
S 128 Xylenes, Total	106				0		1.00	0.9365	
S 129 Trihalomethanes, Total	1				0		2.00	3.29	
S 130 Total BTEX	1				0			2.37	
S 131 1,3-Dichloropropene, Total	1				0		1.00	1.27	
S 133 1,2-Dichloroethene, Total	1				0		1.00	0.9300	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

Cal Dil Std_00249	Amount Added:	5.00	Units: uL	
mv-IS_SS_00070	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 09-Oct-2023 12:32:29 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006804.D

Injection Date: 08-Oct-2023 16:36:25 Instrument ID: VMS_MS13

Lims ID: IC

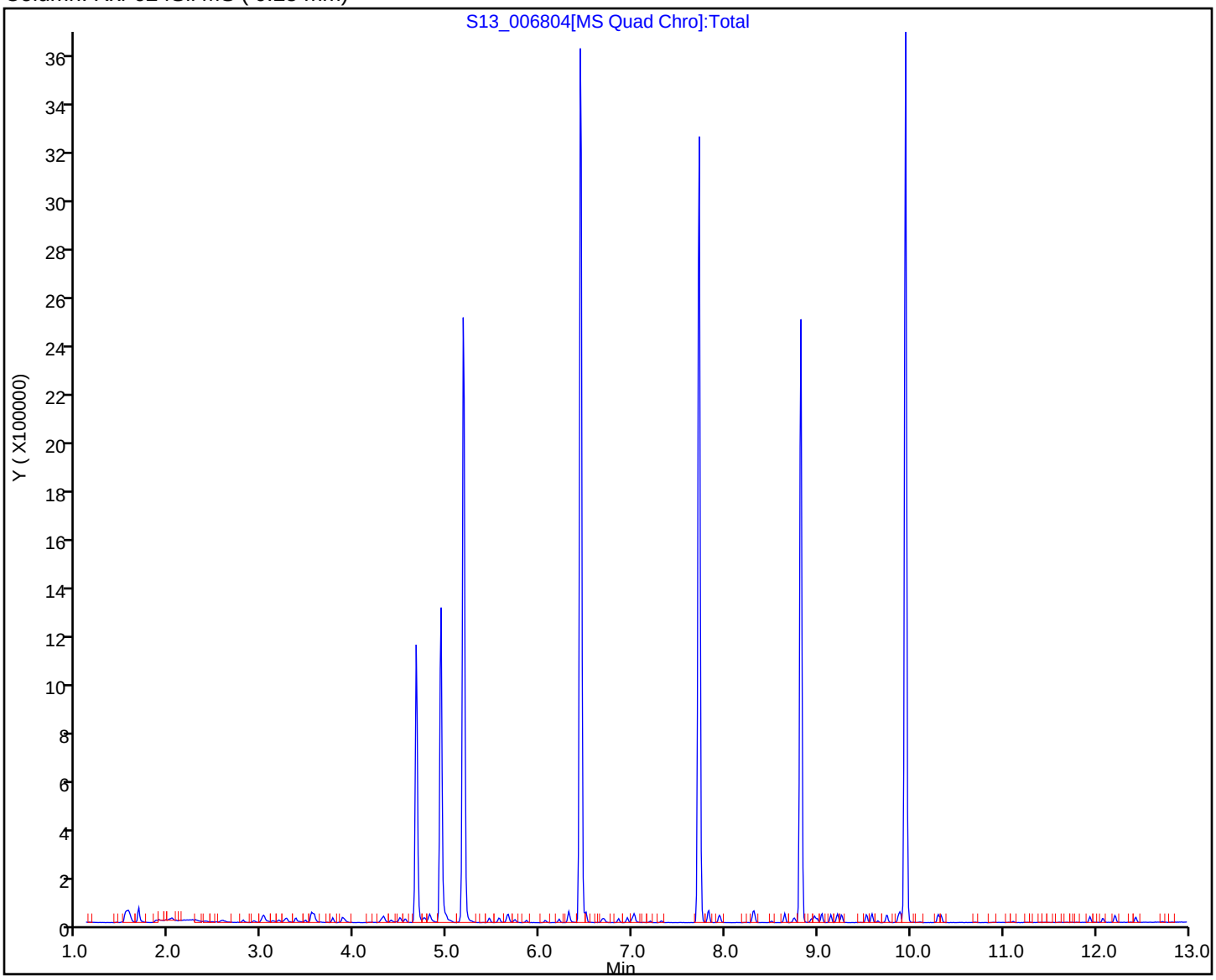
Client ID:

Operator ID: MEIERG ALS Bottle#: 0 Worklist Smp#: 2

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: AQ_VMS13_8260 Limit Group: MSV - 8260B Water and Solid

Column: Rxi-624Sil MS (0.25 mm)



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006805.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 08-Oct-2023 16:58:50 ALS Bottle#: 0 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Operator ID: MEIERG Instrument ID: VMS_MS13
Sublist: chrom-AQ_VMS13_8260*sub3

Method: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\AQ_VMS13_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 09-Oct-2023 12:32:34 Calib Date: 08-Oct-2023 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006822.D

Column 1 : Rxi-624Sil MS (0.25 mm) Det: MS Quad
Process Host: CTX1667

First Level Reviewer: BMJ3 Date: 09-Oct-2023 08:36:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.170	5.170	0.000	98	2228592	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.720	7.720	0.000	87	651240	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.948	9.948	0.000	96	1130271	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.662	4.662	0.000	93	664036	50.0	50.7	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.932	4.932	0.000	97	857377	50.0	51.9	
$ 6 Toluene-d8 (Surr)	98	6.434	6.435	-0.001	93	2582789	50.0	49.5	
$ 7 4-Bromofluorobenzene (Surr)	95	8.818	8.818	0.000	90	961960	50.0	48.8	
9 Dichlorodifluoromethane	85	1.709	1.709	0.000	95	6590	1.00	1.83	
10 Chloromethane	50	1.885	1.896	-0.011	98	11896	1.00	1.16	
11 Vinyl chloride	62	1.999	1.999	0.000	96	9461	1.00	1.06	a
12 Bromomethane	94	2.300	2.300	0.000	89	8147	1.00	0.9581	
13 Chloroethane	64	2.403	2.393	0.010	96	7199	1.00	1.03	
14 Dichlorofluoromethane	67	2.569	2.569	0.000	98	19845	1.00	0.9198	
15 Trichlorofluoromethane	101	2.600	2.579	0.021	96	12745	1.00	0.7517	
18 Ethyl ether	59	2.797	2.797	0.000	95	11523	1.00	0.9629	
19 Acrolein	56	2.911	2.911	0.000	99	16641	9.88	7.57	
20 1,1-Dichloroethene	96	2.994	2.994	0.000	97	9950	1.00	0.9475	
21 Acetone	43	3.015	3.015	0.000	100	74165	4.00	4.22	
22 1,1,2-Trichloro-1,2,2-trifluoroe	151	3.025	3.025	0.000	39	6192	1.00	0.9012	
24 Iodomethane	142	3.118	3.108	0.010	99	15398	1.00	0.9137	
25 Carbon disulfide	76	3.180	3.170	0.010	99	29547	1.00	0.8877	
27 Methyl acetate	43	3.243	3.243	0.000	99	31801	2.00	1.92	
28 3-Chloro-1-propene	41	3.263	3.263	0.000	93	22649	1.00	1.09	
29 Methylene Chloride	84	3.357	3.357	0.000	92	15041	1.00	1.12	
30 2-Methyl-2-propanol	59	3.408	3.409	-0.001	97	26590	10.0	11.9	
31 Acrylonitrile	53	3.533	3.533	0.000	97	78635	10.0	10.1	
32 Methyl tert-butyl ether	73	3.554	3.554	0.000	96	37520	1.00	0.9713	
33 trans-1,2-Dichloroethene	96	3.564	3.564	0.000	96	11751	1.00	0.9361	
34 Hexane	57	3.761	3.761	0.000	93	19038	1.00	0.9793	
35 Vinyl acetate	43	3.864	3.865	0.000	97	63950	2.00	1.93	
37 1,1-Dichloroethane	63	3.885	3.885	0.000	95	22019	1.00	0.9226	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 2-Butanone (MEK)	43	4.279	4.279	0.000	100	48245	4.00	4.06	
42 cis-1,2-Dichloroethene	96	4.310	4.310	0.000	83	14482	1.00	1.01	
43 2,2-Dichloropropane	77	4.320	4.320	0.000	91	12495	1.00	0.9300	
45 sec-Butyl Alcohol	45	4.393	4.393	0.000	99	50380	24.0	21.7	
47 Chlorobromomethane	128	4.486	4.486	0.000	93	6163	1.00	0.9341	
48 Tetrahydrofuran	42	4.497	4.497	0.000	94	17053	2.00	2.12	
49 Chloroform	83	4.548	4.548	0.000	93	21166	1.00	0.9458	
50 1,1,1-Trichloroethane	97	4.693	4.694	-0.001	98	15809	1.00	0.9291	
51 Cyclohexane	56	4.756	4.745	0.011	91	19425	1.00	0.9523	
52 1,1-Dichloropropene	75	4.807	4.808	-0.001	94	17209	1.00	0.9207	
53 Carbon tetrachloride	117	4.807	4.808	-0.001	75	11349	1.00	1.04	
54 Isobutyl alcohol	41	4.818	4.818	0.000	96	23027	25.0	22.8	
56 Benzene	78	4.963	4.963	0.000	93	52017	1.00	0.9719	
57 1,2-Dichloroethane	62	4.984	4.984	0.000	95	20103	1.00	1.10	
59 n-Heptane	43		5.150				ND	ND	
60 Trichloroethene	95	5.450	5.450	0.000	98	13084	1.00	0.9745	
61 2-Pentanone	43	5.554	5.554	0.000	98	55744	3.20	3.10	
62 Methylcyclohexane	55	5.647	5.647	0.000	94	17876	1.00	0.9860	
64 1,2-Dichloropropane	63	5.657	5.657	0.000	93	13123	1.00	0.9474	
65 1,4-Dioxane	88	5.699	5.709	-0.010	94	4732	20.0	21.7	
66 Dibromomethane	93	5.730	5.730	0.000	96	7690	1.00	0.9232	
67 Dichlorobromomethane	83	5.854	5.854	0.000	97	13525	1.00	0.9667	
69 2-Chloroethyl vinyl ether	63	6.051	6.062	-0.011	90	8949	1.00	0.8315	
70 cis-1,3-Dichloropropene	75	6.206	6.207	-0.001	94	15959	1.00	0.8907	
71 4-Methyl-2-pentanone (MIBK)	43	6.310	6.310	0.000	97	81286	4.00	3.68	
72 Toluene	91	6.497	6.497	0.000	98	54976	1.00	0.9881	
73 trans-1,3-Dichloropropene	75	6.673	6.673	0.000	95	14044	1.00	1.04	
74 Ethyl methacrylate	69	6.694	6.694	0.000	93	17872	1.00	0.8908	
75 1,1,2-Trichloroethane	97	6.849	6.849	0.000	92	10509	1.00	0.9062	
76 Tetrachloroethene	164	6.942	6.942	0.000	95	10240	1.00	0.9890	
77 1,3-Dichloropropane	76	6.994	6.994	0.000	91	21494	1.00	0.9854	
78 2-Hexanone	43	7.015	7.015	0.000	98	60019	4.00	3.63	
79 Chlorodibromomethane	129	7.191	7.191	0.000	91	7714	1.00	1.07	
80 Ethylene Dibromide	107	7.305	7.305	0.000	98	10777	1.00	0.8620	
81 1-Chlorohexane	91	7.699	7.699	0.000	89	16704	0.8000	0.8556	
82 Chlorobenzene	112	7.740	7.740	0.000	96	34121	1.00	0.9708	
83 1,1,1,2-Tetrachloroethane	131	7.813	7.813	0.000	89	8425	1.00	0.8999	
84 Ethylbenzene	106	7.823	7.823	0.000	98	18741	1.00	0.9840	
85 m-Xylene & p-Xylene	106	7.937	7.937	0.000	98	21526	1.00	0.9286	
86 o-Xylene	106	8.300	8.300	0.000	96	21878	1.00	0.9614	
87 Styrene	104	8.321	8.321	0.000	95	33550	1.00	0.8915	
88 Bromoform	173	8.497	8.497	0.000	96	5120	1.00	1.81	
89 Isopropylbenzene	105	8.642	8.642	0.000	95	53453	1.00	0.9157	
91 Cyclohexanone	55	8.745	8.746	-0.001	91	32658	30.0	31.6	
92 1,1,2,2-Tetrachloroethane	83	8.932	8.932	0.000	95	17156	1.00	0.8881	
93 Bromobenzene	156	8.963	8.963	0.000	94	14473	1.00	0.9675	
94 trans-1,4-Dichloro-2-butene	53	8.973	8.963	0.010	40	2145	1.00	1.97	
95 1,2,3-Trichloropropane	110	8.994	8.994	0.000	84	5575	1.00	0.9220	
96 N-Propylbenzene	120	9.046	9.046	0.000	99	14979	1.00	0.9107	
97 2-Chlorotoluene	126	9.139	9.139	0.000	95	12739	1.00	0.9059	
98 1,3,5-Trimethylbenzene	105	9.212	9.212	0.000	96	42964	1.00	0.9043	
99 4-Chlorotoluene	126	9.253	9.253	0.000	98	14086	1.00	0.9575	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
101 tert-Butylbenzene	119	9.523	9.523	0.000	94	40163	1.00	0.9539	
102 1,2,4-Trimethylbenzene	105	9.585	9.585	0.000	97	45874	1.00	0.9281	
103 sec-Butylbenzene	134	9.740	9.751	-0.011	94	11386	1.00	0.9315	
104 1,3-Dichlorobenzene	146	9.875	9.875	0.000	97	26477	1.00	0.9347	
105 4-Isopropyltoluene	119	9.896	9.896	0.000	97	46044	1.00	0.8905	
106 1,4-Dichlorobenzene	146	9.968	9.968	0.000	93	29324	1.00	1.00	
108 n-Butylbenzene	91	10.300	10.300	0.000	97	46097	1.00	0.9350	
109 1,2-Dichlorobenzene	146	10.331	10.331	0.000	97	25914	1.00	0.9624	
110 1,2-Dibromo-3-Chloropropane	157	11.108	11.108	0.000	75	2972	1.00	2.16	
112 1,2,4-Trichlorobenzene	180	11.937	11.937	0.000	94	16667	1.00	0.9527	
113 Hexachlorobutadiene	225	12.082	12.083	0.000	92	7548	1.00	1.05	
114 Naphthalene	128	12.207	12.207	0.000	97	52690	1.00	0.9567	
115 1,2,3-Trichlorobenzene	180	12.435	12.435	0.000	93	15293	1.00	0.9828	
127 Butadiene	54		0.000				ND	ND	
S 128 Xylenes, Total	106				0		2.00	1.89	
S 129 Trihalomethanes, Total	1				0		4.00	4.79	
S 130 Total BTEX	1				0			4.83	
S 131 1,3-Dichloropropene, Total	1				0		2.00	1.93	
S 133 1,2-Dichloroethene, Total	1				0		2.00	1.95	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

a - User Assigned ID

Reagents:

Cal Dil Std_00249	Amount Added:	10.00	Units: uL	
mv-IS_SS_00070	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 09-Oct-2023 12:32:34 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006805.D

Injection Date: 08-Oct-2023 16:58:50 Instrument ID: VMS_MS13

Lims ID: IC

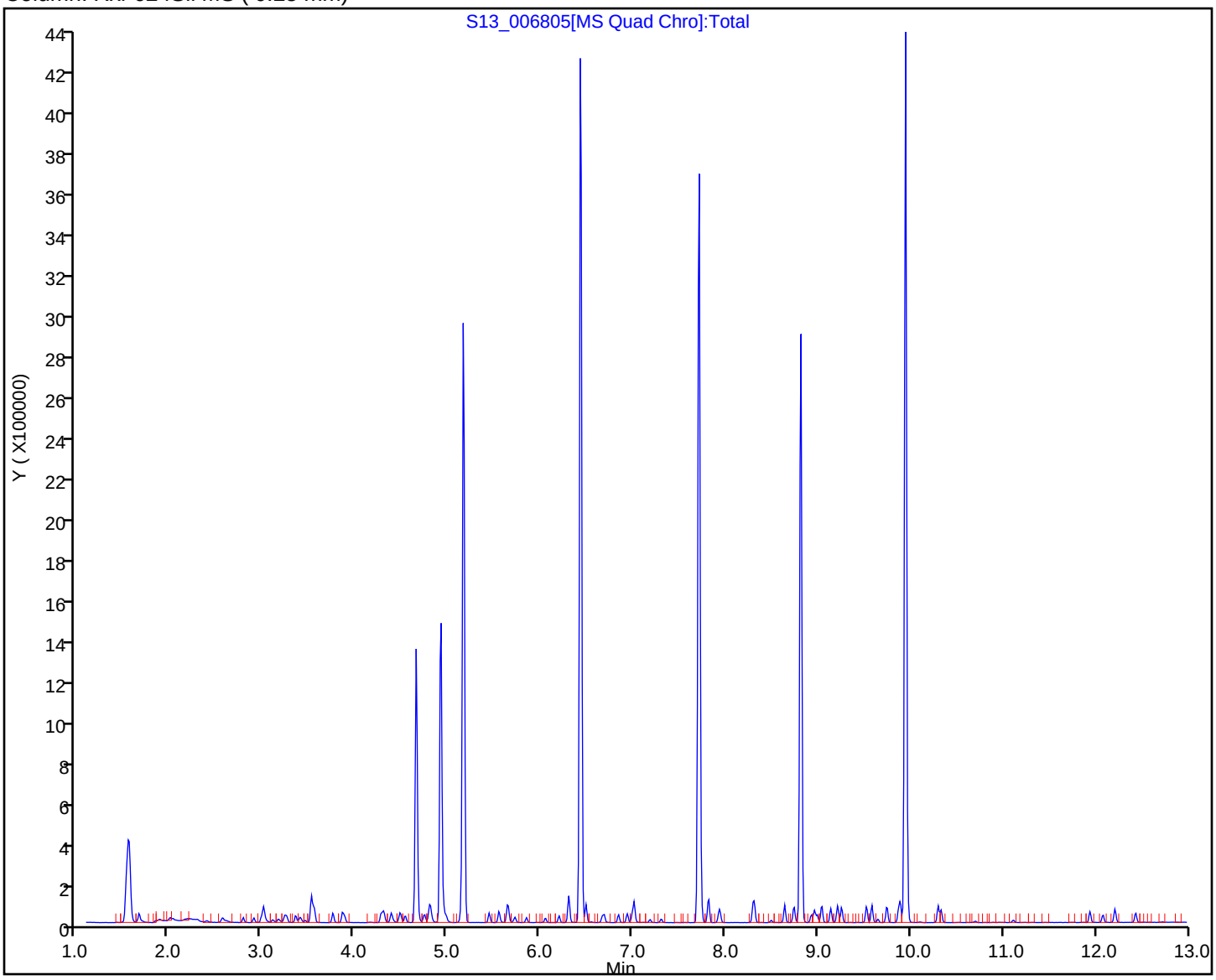
Client ID:

Operator ID: MEIERG ALS Bottle#: 0 Worklist Smp#: 3

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: AQ_VMS13_8260 Limit Group: MSV - 8260B Water and Solid

Column: Rxi-624Sil MS (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins Denver

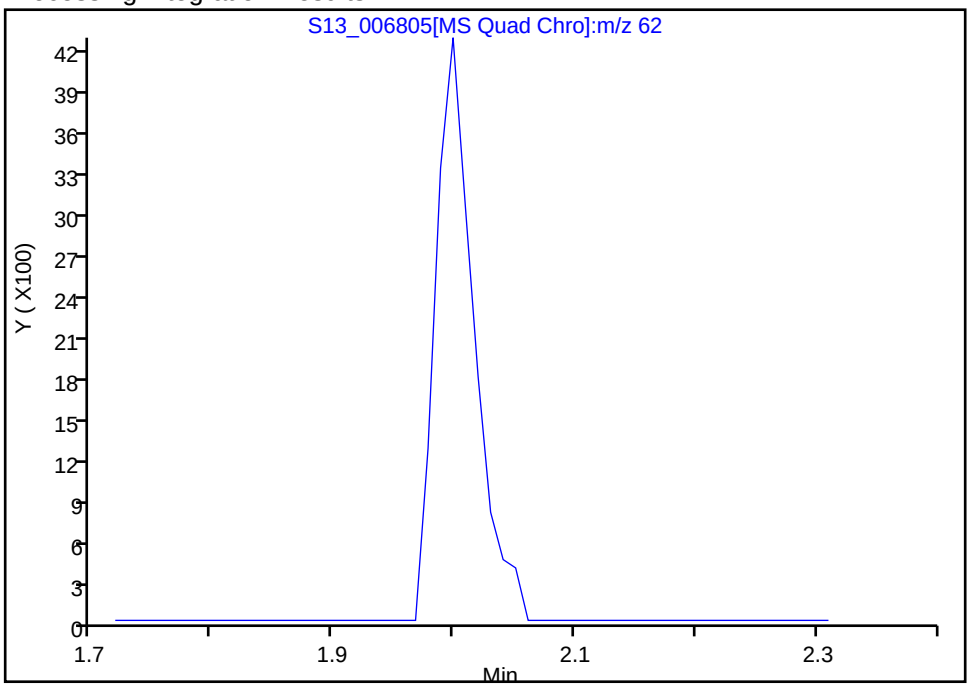
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Injection Date: 08-Oct-2023 16:58:50 Instrument ID: VMS_MS13
Lims ID: IC
Client ID:
Operator ID: MEIERG ALS Bottle#: 0 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS13_8260 Limit Group: MSV - 8260B Water and Solid
Column: Rxi-624Sil MS (0.25 mm) Detector MS Quad

11 Vinyl chloride, CAS: 75-01-4

Signal: 1

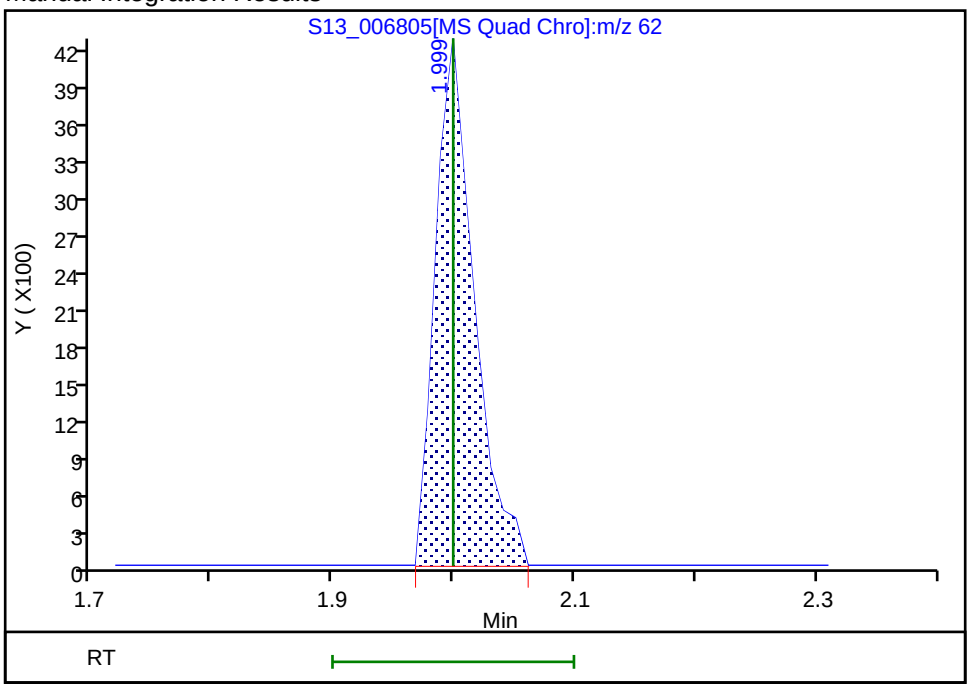
Not Detected
Expected RT: 2.00

Processing Integration Results



Manual Integration Results

RT: 2.00
Area: 9461
Amount: 1.055074
Amount Units: ug/l



Reviewer: BMJ3, 09-Oct-2023 08:35:48 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006806.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 08-Oct-2023 17:21:13 ALS Bottle#: 0 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Operator ID: MEIERG Instrument ID: VMS_MS13
Sublist: chrom-AQ_VMS13_8260*sub3

Method: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\AQ_VMS13_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 09-Oct-2023 12:32:39 Calib Date: 08-Oct-2023 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006822.D

Column 1 : Rxi-624Sil MS (0.25 mm) Det: MS Quad
Process Host: CTX1667

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.181	5.170	0.011	99	2130473	50.0	50.0	
*	2 Chlorobenzene-d5	119	7.720	7.720	0.000	87	635798	50.0	50.0	
*	3 1,4-Dichlorobenzene-d4	152	9.948	9.948	0.000	96	1090518	50.0	50.0	
$	4 Dibromofluoromethane (Surr)	111	4.662	4.662	0.000	93	612461	50.0	48.9	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.932	4.932	0.000	97	792491	50.0	50.2	
$	6 Toluene-d8 (Surr)	98	6.435	6.435	0.000	94	2524350	50.0	49.5	
$	7 4-Bromofluorobenzene (Surr)	95	8.818	8.818	0.000	89	950158	50.0	49.9	
	9 Dichlorodifluoromethane	85	1.719	1.709	0.010	62	12122	2.00	2.30	
	10 Chloromethane	50	1.906	1.896	0.010	98	22587	2.00	1.93	
	11 Vinyl chloride	62	1.999	1.999	0.000	64	20001	2.00	1.90	
	12 Bromomethane	94	2.310	2.300	0.010	91	15380	2.00	1.89	
	13 Chloroethane	64	2.414	2.393	0.021	99	14742	2.00	1.95	
	14 Dichlorofluoromethane	67	2.569	2.569	0.000	97	39407	2.00	1.91	
	15 Trichlorofluoromethane	101	2.590	2.579	0.011	94	28188	2.00	1.74	
	18 Ethyl ether	59	2.797	2.797	0.000	94	21892	2.00	1.91	
	19 Acrolein	56	2.911	2.911	0.000	98	38300	19.8	18.2	
	20 1,1-Dichloroethene	96	2.994	2.994	0.000	98	19003	2.00	1.89	
	21 Acetone	43	3.025	3.015	0.010	100	89717	8.00	7.18	
	22 1,1,2-Trichloro-1,2,2-trifluoroe	151	3.035	3.025	0.010	58	11949	2.00	1.82	
	24 Iodomethane	142	3.118	3.108	0.010	99	24837	2.00	1.54	
	25 Carbon disulfide	76	3.181	3.170	0.010	99	58319	2.00	1.83	
	27 Methyl acetate	43	3.253	3.243	0.010	99	64880	4.00	4.10	
	28 3-Chloro-1-propene	41	3.274	3.263	0.011	89	37488	2.00	1.89	
	29 Methylene Chloride	84	3.367	3.357	0.010	95	25060	2.00	1.96	
	30 2-Methyl-2-propanol	59	3.419	3.409	0.010	98	50279	20.0	20.8	
	31 Acrylonitrile	53	3.533	3.533	0.000	100	156004	20.0	20.9	
	32 Methyl tert-butyl ether	73	3.554	3.554	0.000	96	70518	2.00	1.91	
	33 trans-1,2-Dichloroethene	96	3.574	3.564	0.010	97	23563	2.00	1.96	
	34 Hexane	57	3.771	3.761	0.010	91	37077	2.00	1.95	
	35 Vinyl acetate	43	3.875	3.865	0.011	97	118662	4.00	3.75	
	37 1,1-Dichloroethane	63	3.896	3.885	0.011	96	42115	2.00	1.85	
	40 2-Butanone (MEK)	43	4.289	4.279	0.010	99	92074	8.00	8.10	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
42 cis-1,2-Dichloroethene	96	4.310	4.310	0.000	80	27149	2.00	1.98	
43 2,2-Dichloropropane	77	4.320	4.320	0.000	89	25228	2.00	1.96	
45 sec-Butyl Alcohol	45	4.393	4.393	0.000	99	93919	48.0	42.3	
47 Chlorobromomethane	128	4.486	4.486	0.000	97	11084	2.00	1.76	
48 Tetrahydrofuran	42	4.497	4.497	0.000	94	33222	4.00	4.32	
49 Chloroform	83	4.548	4.548	0.000	95	41667	2.00	1.95	
50 1,1,1-Trichloroethane	97	4.694	4.694	0.000	98	29637	2.00	1.82	
51 Cyclohexane	56	4.756	4.745	0.011	91	38159	2.00	1.96	
52 1,1-Dichloropropene	75	4.808	4.808	0.000	95	35085	2.00	1.96	
53 Carbon tetrachloride	117	4.808	4.808	0.000	93	23561	2.00	1.95	
54 Isobutyl alcohol	41	4.818	4.818	0.000	96	45128	50.0	46.7	
56 Benzene	78	4.963	4.963	0.000	94	100919	2.00	1.97	
57 1,2-Dichloroethane	62	4.994	4.984	0.010	95	35244	2.00	2.01	
59 n-Heptane	43	5.150	5.150	0.000	93	38090	2.00	1.96	
60 Trichloroethene	95	5.450	5.450	0.000	96	25549	2.00	1.95	
61 2-Pentanone	43	5.554	5.554	0.000	99	114208	6.40	6.64	
62 Methylcyclohexane	55	5.647	5.647	0.000	92	33661	2.00	1.94	
64 1,2-Dichloropropane	63	5.657	5.657	0.000	93	25952	2.00	1.96	
65 1,4-Dioxane	88	5.709	5.709	0.000	90	9184	40.0	44.1	
66 Dibromomethane	93	5.730	5.730	0.000	92	17049	2.00	2.14	
67 Dichlorobromomethane	83	5.854	5.854	0.000	98	26203	2.00	1.83	
69 2-Chloroethyl vinyl ether	63	6.061	6.062	-0.001	92	17668	2.00	1.72	
70 cis-1,3-Dichloropropene	75	6.207	6.207	0.000	95	34766	2.00	1.81	
71 4-Methyl-2-pentanone (MIBK)	43	6.310	6.310	0.000	98	168584	8.00	7.99	
72 Toluene	91	6.497	6.497	0.000	98	108304	2.00	2.04	
73 trans-1,3-Dichloropropene	75	6.673	6.673	0.000	94	31660	2.00	1.98	
74 Ethyl methacrylate	69	6.694	6.694	0.000	91	35823	2.00	1.83	
75 1,1,2-Trichloroethane	97	6.849	6.849	0.000	92	21916	2.00	1.98	
76 Tetrachloroethene	164	6.942	6.942	0.000	96	19177	2.00	1.90	
77 1,3-Dichloropropane	76	6.994	6.994	0.000	96	43008	2.00	2.02	
78 2-Hexanone	43	7.015	7.015	0.000	99	127955	8.00	7.94	
79 Chlorodibromomethane	129	7.191	7.191	0.000	90	16455	2.00	1.87	
80 Ethylene Dibromide	107	7.305	7.305	0.000	97	24375	2.00	2.00	
81 1-Chlorohexane	91	7.699	7.699	0.000	97	31218	1.60	1.64	
82 Chlorobenzene	112	7.740	7.740	0.000	97	67276	2.00	1.96	
83 1,1,1,2-Tetrachloroethane	131	7.813	7.813	0.000	93	17108	2.00	1.75	
84 Ethylbenzene	106	7.823	7.823	0.000	98	37003	2.00	1.99	
85 m-Xylene & p-Xylene	106	7.937	7.937	0.000	99	44335	2.00	1.96	
86 o-Xylene	106	8.300	8.300	0.000	96	42884	2.00	1.93	
87 Styrene	104	8.321	8.321	0.000	97	69852	2.00	1.90	
88 Bromoform	173	8.497	8.497	0.000	95	10766	2.00	2.52	
89 Isopropylbenzene	105	8.642	8.642	0.000	95	109451	2.00	1.94	
91 Cyclohexanone	55	8.746	8.746	0.000	93	72548	60.0	63.6	
92 1,1,2,2-Tetrachloroethane	83	8.932	8.932	0.000	95	36071	2.00	1.94	
93 Bromobenzene	156	8.963	8.963	0.000	96	28547	2.00	1.98	
94 trans-1,4-Dichloro-2-butene	53	8.963	8.963	0.000	41	5098	2.00	2.63	
95 1,2,3-Trichloropropane	110	8.994	8.994	0.000	85	12478	2.00	2.14	
96 N-Propylbenzene	120	9.046	9.046	0.000	99	32100	2.00	2.02	
97 2-Chlorotoluene	126	9.139	9.139	0.000	97	26873	2.00	1.98	
98 1,3,5-Trimethylbenzene	105	9.212	9.212	0.000	94	88582	2.00	1.93	
99 4-Chlorotoluene	126	9.253	9.253	0.000	98	27756	2.00	1.96	
101 tert-Butylbenzene	119	9.523	9.523	0.000	93	79490	2.00	1.96	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
102 1,2,4-Trimethylbenzene	105	9.585	9.585	0.000	97	92978	2.00	1.95	
103 sec-Butylbenzene	134	9.751	9.751	0.000	94	24385	2.00	2.07	
104 1,3-Dichlorobenzene	146	9.875	9.875	0.000	97	52543	2.00	1.92	
105 4-Isopropyltoluene	119	9.896	9.896	0.000	97	97975	2.00	1.96	
106 1,4-Dichlorobenzene	146	9.968	9.968	0.000	94	57475	2.00	2.02	
108 n-Butylbenzene	91	10.300	10.300	0.000	97	92804	2.00	1.95	
109 1,2-Dichlorobenzene	146	10.331	10.331	0.000	97	50569	2.00	1.95	
110 1,2-Dibromo-3-Chloropropane	157	11.108	11.108	0.000	82	7303	2.00	3.08	
112 1,2,4-Trichlorobenzene	180	11.937	11.937	0.000	94	33272	2.00	1.97	
113 Hexachlorobutadiene	225	12.082	12.083	0.000	95	13611	2.00	1.95	
114 Naphthalene	128	12.207	12.207	0.000	97	101613	2.00	1.91	
115 1,2,3-Trichlorobenzene	180	12.435	12.435	0.000	95	30502	2.00	2.03	
127 Butadiene	54		0.000				ND	ND	
S 128 Xylenes, Total	106				0		4.00	3.89	
S 129 Trihalomethanes, Total	1				0		8.00	8.16	
S 130 Total BTEX	1				0			9.89	
S 131 1,3-Dichloropropene, Total	1				0		4.00	3.79	
S 133 1,2-Dichloroethene, Total	1				0		4.00	3.94	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

Cal Dil Std_00249	Amount Added:	20.00	Units: uL	
mv-IS_SS_00070	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 09-Oct-2023 12:32:39 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006806.D

Injection Date: 08-Oct-2023 17:21:13 Instrument ID: VMS_MS13

Lims ID: IC

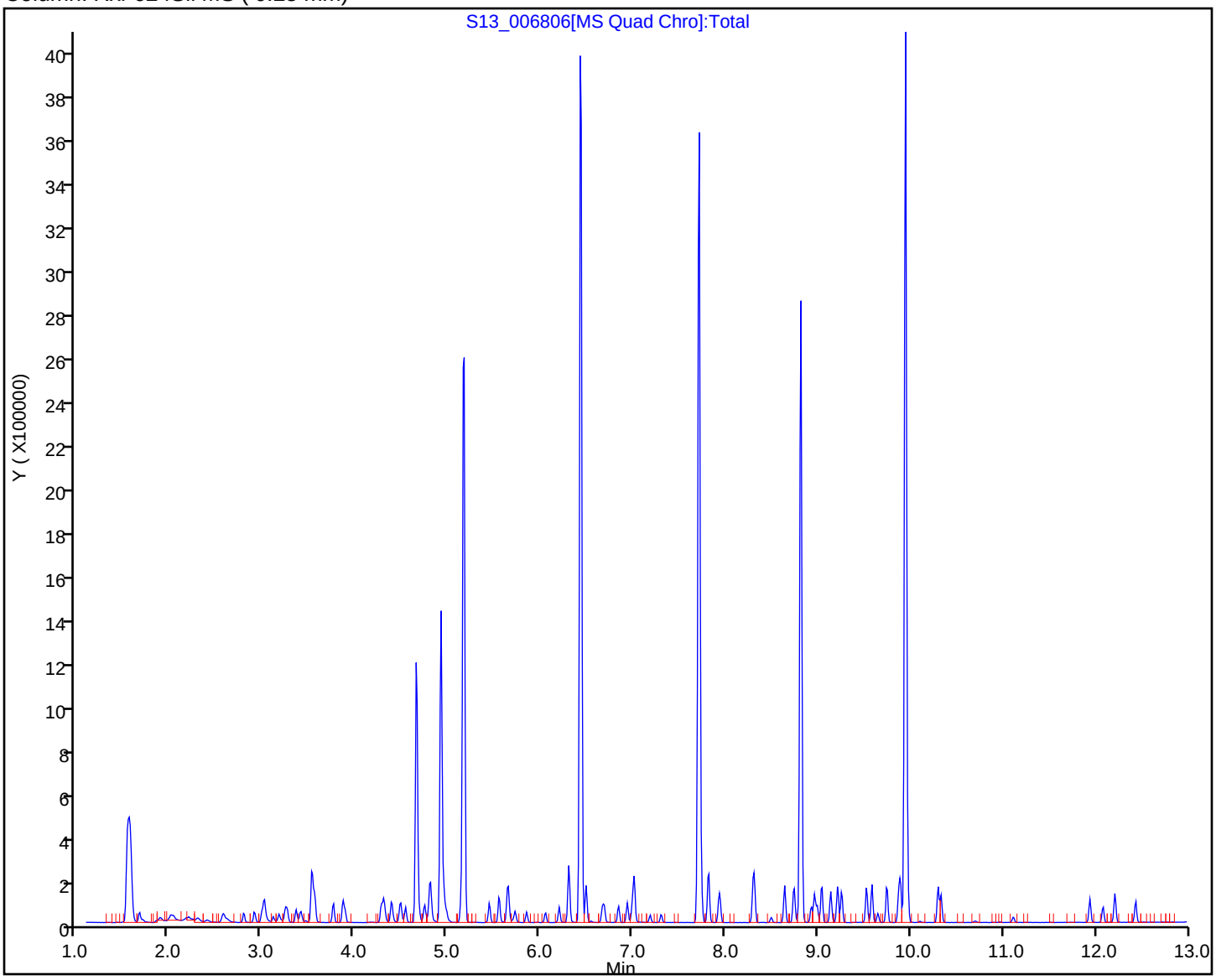
Client ID:

Operator ID: MEIERG ALS Bottle#: 0 Worklist Smp#: 4

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: AQ_VMS13_8260 Limit Group: MSV - 8260B Water and Solid

Column: Rxi-624Sil MS (0.25 mm)



12/5/2023 8:25 AM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006807.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 08-Oct-2023 17:43:40 ALS Bottle#: 0 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Operator ID: MEIERG Instrument ID: VMS_MS13
Sublist: chrom-AQ_VMS13_8260*sub3

Method: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\AQ_VMS13_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 09-Oct-2023 12:32:45 Calib Date: 08-Oct-2023 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006822.D

Column 1 : Rxi-624Sil MS (0.25 mm) Det: MS Quad
Process Host: CTX1667

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.170	5.170	0.000	99	2207588	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.719	7.720	-0.001	87	641455	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.947	9.948	-0.001	96	1106572	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.662	4.662	0.000	94	638649	50.0	49.2	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.932	4.932	0.000	98	828914	50.0	50.6	
$ 6 Toluene-d8 (Surr)	98	6.434	6.435	-0.001	94	2589565	50.0	50.3	
$ 7 4-Bromofluorobenzene (Surr)	95	8.818	8.818	0.000	89	955140	50.0	49.4	
9 Dichlorodifluoromethane	85	1.709	1.709	0.000	99	32177	5.00	3.81	
10 Chloromethane	50	1.895	1.896	-0.001	99	54301	5.00	3.99	
11 Vinyl chloride	62	1.999	1.999	0.000	98	49607	5.00	4.07	
12 Bromomethane	94	2.299	2.300	-0.001	90	34563	5.00	4.10	
13 Chloroethane	64	2.403	2.393	0.010	100	36620	5.00	4.34	
14 Dichlorofluoromethane	67	2.569	2.569	0.000	97	93914	5.00	4.39	
15 Trichlorofluoromethane	101	2.579	2.579	0.000	97	72292	5.00	4.30	
18 Ethyl ether	59	2.797	2.797	0.000	93	55921	5.00	4.72	
19 Acrolein	56	2.911	2.911	0.000	99	89863	49.4	41.3	
20 1,1-Dichloroethene	96	2.994	2.994	0.000	97	47931	5.00	4.61	
21 Acetone	43	3.015	3.015	-0.001	99	170641	20.0	19.0	
22 1,1,2-Trichloro-1,2,2-trifluoroe	151	3.015	3.025	-0.011	41	24890	5.00	3.66	
24 Iodomethane	142	3.118	3.108	0.010	98	78364	5.00	4.69	
25 Carbon disulfide	76	3.180	3.170	0.010	99	137416	5.00	4.17	
27 Methyl acetate	43	3.242	3.243	-0.001	98	151908	10.0	9.26	
28 3-Chloro-1-propene	41	3.263	3.263	0.000	91	87179	5.00	4.25	
29 Methylene Chloride	84	3.367	3.357	0.010	96	59433	5.00	4.49	
30 2-Methyl-2-propanol	59	3.419	3.409	0.010	98	119651	50.0	44.0	
31 Acrylonitrile	53	3.533	3.533	0.000	99	378428	50.0	48.9	
32 Methyl tert-butyl ether	73	3.553	3.554	-0.001	96	182960	5.00	4.78	
33 trans-1,2-Dichloroethene	96	3.564	3.564	0.000	97	57442	5.00	4.62	
34 Hexane	57	3.761	3.761	0.000	94	90292	5.00	4.72	
35 Vinyl acetate	43	3.864	3.865	0.000	97	290883	10.0	8.87	
37 1,1-Dichloroethane	63	3.895	3.885	0.010	96	112968	5.00	4.78	
40 2-Butanone (MEK)	43	4.279	4.279	0.000	100	220872	20.0	18.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
42 cis-1,2-Dichloroethene	96	4.310	4.310	0.000	82	66547	5.00	4.68	
43 2,2-Dichloropropane	77	4.320	4.320	0.000	91	61649	5.00	4.63	
45 sec-Butyl Alcohol	45	4.393	4.393	0.000	99	236025	120.0	102.7	
47 Chlorobromomethane	128	4.486	4.486	0.000	97	32172	5.00	4.92	
48 Tetrahydrofuran	42	4.496	4.497	-0.001	90	74887	10.0	9.39	
49 Chloroform	83	4.548	4.548	0.000	94	107277	5.00	4.84	
50 1,1,1-Trichloroethane	97	4.693	4.694	-0.001	98	82013	5.00	4.87	
51 Cyclohexane	56	4.756	4.745	0.011	91	95125	5.00	4.71	
52 1,1-Dichloropropene	75	4.807	4.808	-0.001	95	87817	5.00	4.74	
53 Carbon tetrachloride	117	4.807	4.808	-0.001	93	58490	5.00	4.28	
54 Isobutyl alcohol	41	4.818	4.818	0.000	98	110563	125.0	110.3	
56 Benzene	78	4.963	4.963	0.000	97	255716	5.00	4.82	
57 1,2-Dichloroethane	62	4.984	4.984	0.000	96	87273	5.00	4.80	
59 n-Heptane	43	5.149	5.150	-0.001	95	94312	5.00	4.68	
60 Trichloroethene	95	5.450	5.450	0.000	97	63689	5.00	4.82	
61 2-Pentanone	43	5.553	5.554	-0.001	99	267154	16.0	15.0	
62 Methylcyclohexane	55	5.647	5.647	0.000	92	85254	5.00	4.75	
64 1,2-Dichloropropane	63	5.657	5.657	0.000	94	65767	5.00	4.79	
65 1,4-Dioxane	88	5.709	5.709	0.000	97	19677	100.0	91.3	
66 Dibromomethane	93	5.730	5.730	0.000	96	39254	5.00	4.76	
67 Dichlorobromomethane	83	5.854	5.854	0.000	99	69001	5.00	4.46	
69 2-Chloroethyl vinyl ether	63	6.061	6.062	-0.001	91	47645	5.00	4.47	
70 cis-1,3-Dichloropropene	75	6.206	6.207	-0.001	95	89568	5.00	4.41	
71 4-Methyl-2-pentanone (MIBK)	43	6.310	6.310	0.000	97	423593	20.0	19.4	
72 Toluene	91	6.497	6.497	0.000	98	267789	5.00	4.86	
73 trans-1,3-Dichloropropene	75	6.673	6.673	0.000	93	79353	5.00	4.30	
74 Ethyl methacrylate	69	6.693	6.694	-0.001	92	89719	5.00	4.54	
75 1,1,2-Trichloroethane	97	6.849	6.849	0.000	92	55706	5.00	4.85	
76 Tetrachloroethene	164	6.942	6.942	0.000	97	48936	5.00	4.80	
77 1,3-Dichloropropane	76	6.994	6.994	0.000	96	104051	5.00	4.84	
78 2-Hexanone	43	7.015	7.015	0.000	98	317559	20.0	19.5	
79 Chlorodibromomethane	129	7.191	7.191	0.000	91	43422	5.00	4.25	
80 Ethylene Dibromide	107	7.305	7.305	0.000	99	58558	5.00	4.76	
81 1-Chlorohexane	91	7.699	7.699	0.000	98	72823	4.00	3.79	
82 Chlorobenzene	112	7.740	7.740	0.000	95	169010	5.00	4.88	
83 1,1,1,2-Tetrachloroethane	131	7.813	7.813	0.000	92	45875	5.00	4.46	
84 Ethylbenzene	106	7.823	7.823	0.000	99	90228	5.00	4.81	
85 m-Xylene & p-Xylene	106	7.937	7.937	0.000	99	112671	5.00	4.93	
86 o-Xylene	106	8.300	8.300	0.000	97	108891	5.00	4.86	
87 Styrene	104	8.320	8.321	-0.001	96	177278	5.00	4.78	
88 Bromoform	173	8.497	8.497	0.000	93	25629	5.00	4.32	
89 Isopropylbenzene	105	8.642	8.642	0.000	96	279111	5.00	4.88	
91 Cyclohexanone	55	8.745	8.746	-0.001	93	170328	150.0	139.5	
92 1,1,2,2-Tetrachloroethane	83	8.932	8.932	0.000	94	88296	5.00	4.67	
93 Bromobenzene	156	8.963	8.963	0.000	95	68404	5.00	4.67	
94 trans-1,4-Dichloro-2-butene	53	8.963	8.963	0.000	69	14371	5.00	4.59	
95 1,2,3-Trichloropropane	110	8.994	8.994	0.000	85	28260	5.00	4.77	
96 N-Propylbenzene	120	9.046	9.046	0.000	99	76696	5.00	4.76	
97 2-Chlorotoluene	126	9.139	9.139	0.000	96	66392	5.00	4.82	
98 1,3,5-Trimethylbenzene	105	9.212	9.212	0.000	94	227991	5.00	4.90	
99 4-Chlorotoluene	126	9.253	9.253	0.000	98	69779	5.00	4.84	
101 tert-Butylbenzene	119	9.523	9.523	0.000	94	199835	5.00	4.85	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
102 1,2,4-Trimethylbenzene	105	9.585	9.585	0.000	97	238779	5.00	4.93	
103 sec-Butylbenzene	134	9.751	9.751	0.000	94	55919	5.00	4.67	
104 1,3-Dichlorobenzene	146	9.875	9.875	0.000	98	134532	5.00	4.85	
105 4-Isopropyltoluene	119	9.896	9.896	0.000	97	251047	5.00	4.96	
106 1,4-Dichlorobenzene	146	9.968	9.968	0.000	93	138499	5.00	4.80	
108 n-Butylbenzene	91	10.300	10.300	0.000	98	239888	5.00	4.97	
109 1,2-Dichlorobenzene	146	10.331	10.331	0.000	98	128383	5.00	4.87	
110 1,2-Dibromo-3-Chloropropane	157	11.108	11.108	0.000	81	17231	5.00	5.10	
112 1,2,4-Trichlorobenzene	180	11.937	11.937	0.000	94	81705	5.00	4.77	
113 Hexachlorobutadiene	225	12.082	12.083	0.000	97	35050	5.00	4.96	
114 Naphthalene	128	12.207	12.207	0.000	97	258521	5.00	4.79	
115 1,2,3-Trichlorobenzene	180	12.435	12.435	0.000	95	73997	5.00	4.86	
127 Butadiene	54		0.000				ND	ND	
S 128 Xylenes, Total	106				0		10.0	9.79	
S 129 Trihalomethanes, Total	1				0		20.0	17.9	
S 130 Total BTEX	1				0			24.3	
S 131 1,3-Dichloropropene, Total	1				0		10.0	8.71	
S 133 1,2-Dichloroethene, Total	1				0		10.0	9.30	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

Cal Dil Std_00249	Amount Added: 50.00	Units: uL	
mv-IS_SS_00070	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 09-Oct-2023 12:32:45 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006807.D

Injection Date: 08-Oct-2023 17:43:40 Instrument ID: VMS_MS13

Lims ID: IC

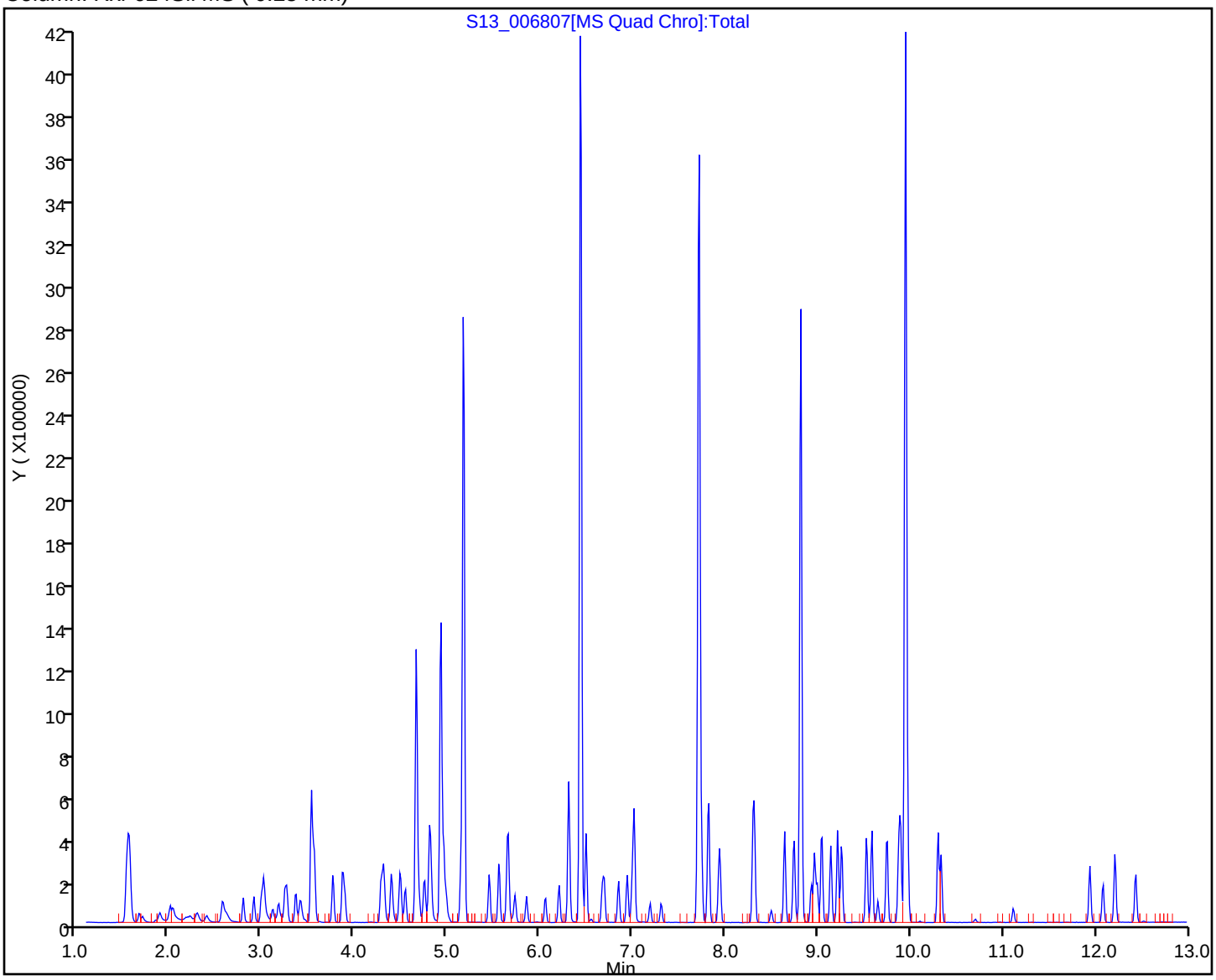
Client ID:

Operator ID: MEIERG ALS Bottle#: 0 Worklist Smp#: 5

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: AQ_VMS13_8260 Limit Group: MSV - 8260B Water and Solid

Column: Rxi-624Sil MS (0.25 mm)



12/5/2023 8:25 AM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006808.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 08-Oct-2023 18:06:19 ALS Bottle#: 0 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Operator ID: MEIERG Instrument ID: VMS_MS13
Sublist: chrom-AQ_VMS13_8260*sub3

Method: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\AQ_VMS13_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 09-Oct-2023 12:32:52 Calib Date: 08-Oct-2023 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006822.D

Column 1 : Rxi-624Sil MS (0.25 mm) Det: MS Quad
Process Host: CTX1667

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.170	5.170	0.000	99	2200166	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.720	7.720	0.000	87	635432	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.948	9.948	0.000	95	1099523	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.662	4.662	0.000	93	640243	50.0	49.5	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.932	4.932	0.000	97	800213	50.0	49.1	
$ 6 Toluene-d8 (Surr)	98	6.435	6.435	0.000	94	2583634	50.0	50.7	
$ 7 4-Bromofluorobenzene (Surr)	95	8.818	8.818	0.000	89	948877	50.0	49.4	
9 Dichlorodifluoromethane	85	1.709	1.709	0.000	99	122571	10.0	10.8	
10 Chloromethane	50	1.896	1.896	0.000	99	151020	10.0	10.5	
11 Vinyl chloride	62	1.999	1.999	0.000	97	134304	10.0	10.4	
12 Bromomethane	94	2.300	2.300	0.000	92	91645	10.0	10.9	
13 Chloroethane	64	2.403	2.403	0.000	99	92036	10.0	10.6	
14 Dichlorofluoromethane	67	2.569	2.569	0.000	97	229082	10.0	10.8	
15 Trichlorofluoromethane	101	2.579	2.579	0.000	98	175265	10.0	10.5	
18 Ethyl ether	59	2.797	2.797	0.000	94	126964	10.0	10.7	
19 Acrolein	56	2.911	2.911	0.000	99	217100	98.8	100.1	
20 1,1-Dichloroethene	96	2.994	2.994	0.000	97	109337	10.0	10.5	
21 Acetone	43	3.015	3.015	0.000	100	324068	40.0	42.4	
22 1,1,2-Trichloro-1,2,2-trifluoroe	151	3.025	3.025	0.000	95	69423	10.0	10.2	
24 Iodomethane	142	3.108	3.108	0.000	99	183158	10.0	11.0	
25 Carbon disulfide	76	3.181	3.181	0.000	99	340150	10.0	10.4	
27 Methyl acetate	43	3.243	3.243	0.000	98	337072	20.0	20.6	
28 3-Chloro-1-propene	41	3.263	3.263	0.000	91	217571	10.0	10.6	
29 Methylene Chloride	84	3.357	3.357	0.000	95	139675	10.0	10.6	
30 2-Methyl-2-propanol	59	3.409	3.409	0.000	99	283372	100.0	100.8	
31 Acrylonitrile	53	3.533	3.533	0.000	98	837368	100.0	108.6	
32 Methyl tert-butyl ether	73	3.554	3.554	0.000	95	411245	10.0	10.8	
33 trans-1,2-Dichloroethene	96	3.564	3.564	0.000	98	135564	10.0	10.9	
34 Hexane	57	3.761	3.761	0.000	94	205989	10.0	10.9	
35 Vinyl acetate	43	3.865	3.865	0.000	97	723586	20.0	22.1	
37 1,1-Dichloroethane	63	3.885	3.885	0.000	96	257134	10.0	10.9	
40 2-Butanone (MEK)	43	4.279	4.279	0.000	100	508209	40.0	43.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
42 cis-1,2-Dichloroethene	96	4.310	4.310	0.000	81	148806	10.0	10.5	
43 2,2-Dichloropropane	77	4.320	4.320	0.000	88	139206	10.0	10.5	
45 sec-Butyl Alcohol	45	4.393	4.393	0.000	100	570391	240.0	249.0	
47 Chlorobromomethane	128	4.486	4.486	0.000	98	69717	10.0	10.7	
48 Tetrahydrofuran	42	4.497	4.497	0.000	90	165225	20.0	20.8	
49 Chloroform	83	4.548	4.548	0.000	94	240523	10.0	10.9	
50 1,1,1-Trichloroethane	97	4.694	4.694	0.000	99	180269	10.0	10.7	
51 Cyclohexane	56	4.745	4.745	0.000	90	209024	10.0	10.4	
52 1,1-Dichloropropene	75	4.808	4.808	0.000	97	194694	10.0	10.6	
53 Carbon tetrachloride	117	4.808	4.808	0.000	96	136392	10.0	9.63	
54 Isobutyl alcohol	41	4.818	4.818	0.000	95	255766	250.0	256.1	
56 Benzene	78	4.963	4.963	0.000	96	568629	10.0	10.8	
57 1,2-Dichloroethane	62	4.984	4.984	0.000	97	187764	10.0	10.4	
59 n-Heptane	43	5.139	5.139	0.000	95	201745	10.0	10.0	
60 Trichloroethene	95	5.450	5.450	0.000	98	140573	10.0	10.7	
61 2-Pentanone	43	5.554	5.554	0.000	99	610829	32.0	34.4	
62 Methylcyclohexane	55	5.647	5.647	0.000	91	186449	10.0	10.4	
64 1,2-Dichloropropane	63	5.657	5.657	0.000	96	146298	10.0	10.7	
65 1,4-Dioxane	88	5.709	5.709	0.000	96	43002	200.0	200.2	
66 Dibromomethane	93	5.730	5.730	0.000	97	84239	10.0	10.2	
67 Dichlorobromomethane	83	5.854	5.854	0.000	99	152812	10.0	9.75	
69 2-Chloroethyl vinyl ether	63	6.062	6.062	0.000	91	104601	10.0	9.84	
70 cis-1,3-Dichloropropene	75	6.207	6.207	0.000	95	211055	10.0	10.3	
71 4-Methyl-2-pentanone (MIBK)	43	6.310	6.310	0.000	97	955550	40.0	43.8	
72 Toluene	91	6.497	6.497	0.000	98	591307	10.0	10.8	
73 trans-1,3-Dichloropropene	75	6.673	6.673	0.000	96	184037	10.0	9.55	
74 Ethyl methacrylate	69	6.694	6.694	0.000	90	203113	10.0	10.4	
75 1,1,2-Trichloroethane	97	6.849	6.849	0.000	92	121816	10.0	10.6	
76 Tetrachloroethene	164	6.942	6.942	0.000	98	108920	10.0	10.8	
77 1,3-Dichloropropane	76	6.994	6.994	0.000	97	228289	10.0	10.7	
78 2-Hexanone	43	7.015	7.015	0.000	98	716211	40.0	44.4	
79 Chlorodibromomethane	129	7.191	7.191	0.000	91	101788	10.0	9.52	
80 Ethylene Dibromide	107	7.305	7.305	0.000	99	129734	10.0	10.6	
81 1-Chlorohexane	91	7.699	7.699	0.000	99	156168	8.00	8.20	
82 Chlorobenzene	112	7.740	7.740	0.000	97	370630	10.0	10.8	
83 1,1,1,2-Tetrachloroethane	131	7.813	7.813	0.000	92	104409	10.0	10.1	
84 Ethylbenzene	106	7.823	7.823	0.000	99	199552	10.0	10.7	
85 m-Xylene & p-Xylene	106	7.937	7.937	0.000	99	244065	10.0	10.8	
86 o-Xylene	106	8.300	8.300	0.000	97	239199	10.0	10.8	
87 Styrene	104	8.321	8.321	0.000	96	399554	10.0	10.9	
88 Bromoform	173	8.497	8.497	0.000	96	63258	10.0	8.97	
89 Isopropylbenzene	105	8.642	8.642	0.000	96	614523	10.0	10.8	
91 Cyclohexanone	55	8.746	8.746	0.000	94	389085	300.0	313.2	
92 1,1,2,2-Tetrachloroethane	83	8.932	8.932	0.000	94	196741	10.0	10.5	
93 Bromobenzene	156	8.963	8.963	0.000	96	154286	10.0	10.6	
94 trans-1,4-Dichloro-2-butene	53	8.963	8.963	0.000	75	38985	10.0	9.81	
95 1,2,3-Trichloropropane	110	8.994	8.994	0.000	84	63008	10.0	10.7	
96 N-Propylbenzene	120	9.046	9.046	0.000	99	166244	10.0	10.4	
97 2-Chlorotoluene	126	9.139	9.139	0.000	96	146905	10.0	10.7	
98 1,3,5-Trimethylbenzene	105	9.212	9.212	0.000	94	502779	10.0	10.9	
99 4-Chlorotoluene	126	9.253	9.253	0.000	98	151907	10.0	10.6	
101 tert-Butylbenzene	119	9.523	9.523	0.000	94	442005	10.0	10.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
102 1,2,4-Trimethylbenzene	105	9.585	9.585	0.000	97	522600	10.0	10.9	
103 sec-Butylbenzene	134	9.751	9.751	0.000	94	130785	10.0	11.0	
104 1,3-Dichlorobenzene	146	9.875	9.875	0.000	98	291225	10.0	10.6	
105 4-Isopropyltoluene	119	9.896	9.896	0.000	97	552565	10.0	11.0	
106 1,4-Dichlorobenzene	146	9.968	9.968	0.000	94	301660	10.0	10.5	
108 n-Butylbenzene	91	10.300	10.300	0.000	98	517423	10.0	10.8	
109 1,2-Dichlorobenzene	146	10.331	10.331	0.000	97	272603	10.0	10.4	
110 1,2-Dibromo-3-Chloropropane	157	11.108	11.108	0.000	81	39380	10.0	9.69	
112 1,2,4-Trichlorobenzene	180	11.937	11.937	0.000	94	184861	10.0	10.9	
113 Hexachlorobutadiene	225	12.083	12.083	0.000	97	77911	10.0	11.1	
114 Naphthalene	128	12.207	12.207	0.000	97	582538	10.0	10.9	
115 1,2,3-Trichlorobenzene	180	12.435	12.435	0.000	95	163028	10.0	10.8	
127 Butadiene	54		0.000				ND	ND	
S 128 Xylenes, Total	106				0		20.0	21.6	
S 129 Trihalomethanes, Total	1				0		40.0	39.1	
S 130 Total BTEX	1				0			53.8	
S 131 1,3-Dichloropropene, Total	1				0		20.0	19.8	
S 133 1,2-Dichloroethene, Total	1				0		20.0	21.4	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-MegaMainA_00096	Amount Added:	5.00	Units: uL	
MV-Gas A_00167	Amount Added:	2.00	Units: uL	
mv-IS_SS_00070	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 09-Oct-2023 12:32:54 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006808.D

Injection Date: 08-Oct-2023 18:06:19 Instrument ID: VMS_MS13

Lims ID: IC

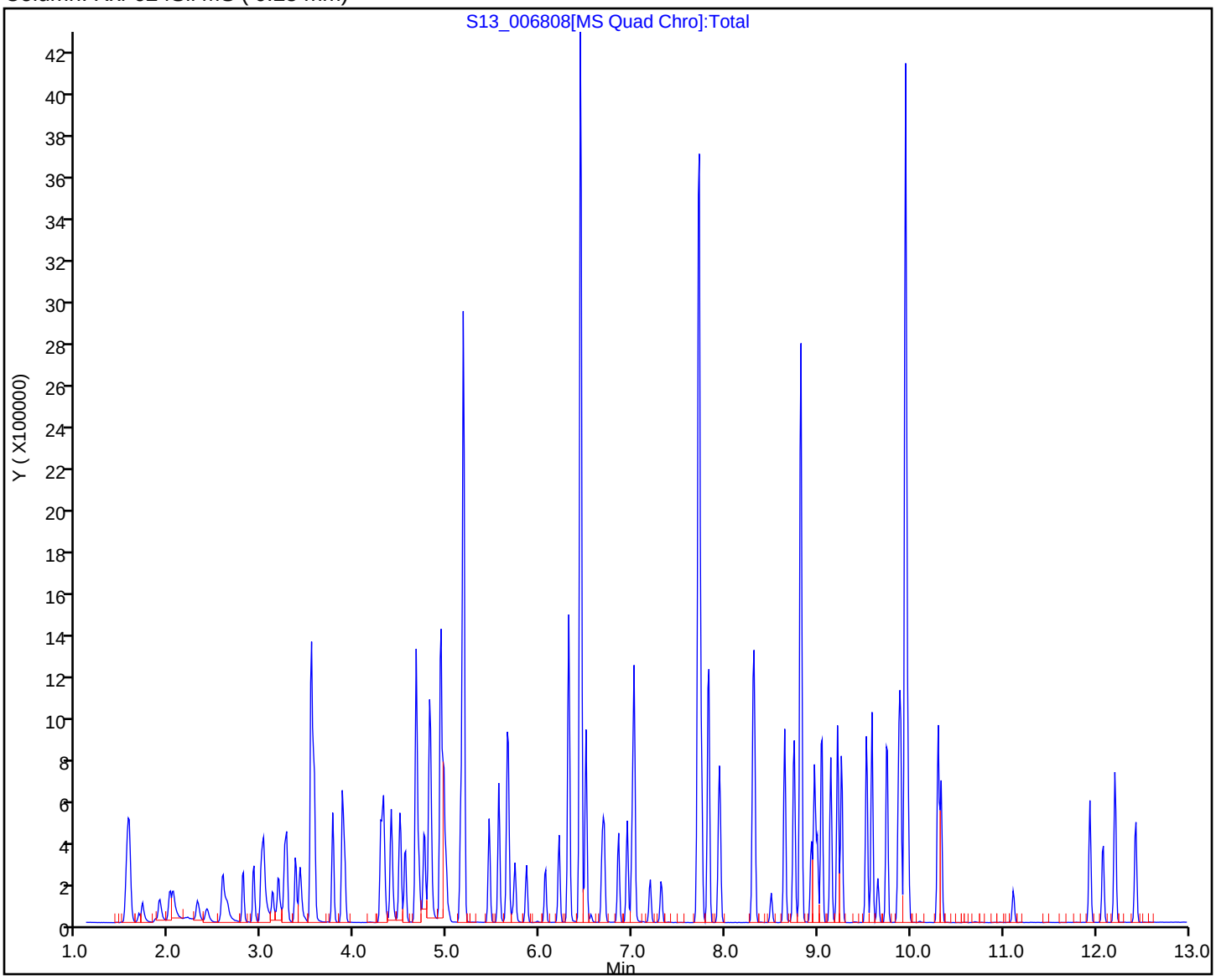
Client ID:

Operator ID: MEIERG ALS Bottle#: 0 Worklist Smp#: 6

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: AQ_VMS13_8260 Limit Group: MSV - 8260B Water and Solid

Column: Rxi-624Sil MS (0.25 mm)



12/5/2023 8:25 AM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006809.D
Lims ID: ICIS
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 08-Oct-2023 18:28:56 ALS Bottle#: 0 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICIS
Operator ID: MEIERG Instrument ID: VMS_MS13
Sublist: chrom-AQ_VMS13_8260*sub3

Method: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\AQ_VMS13_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 09-Oct-2023 12:33:00 Calib Date: 08-Oct-2023 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006822.D

Column 1 : Rxi-624Sil MS (0.25 mm) Det: MS Quad
Process Host: CTX1667

First Level Reviewer: BMJ3 Date: 09-Oct-2023 08:48:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.170	5.170	0.000	98	2307671	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.720	7.720	0.000	87	691540	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.948	9.948	0.000	95	1171859	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.662	4.662	0.000	94	684146	50.0	50.4	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.932	4.932	0.000	97	853750	50.0	49.9	
$ 6 Toluene-d8 (Surr)	98	6.435	6.435	0.000	94	2745171	50.0	49.5	
$ 7 4-Bromofluorobenzene (Surr)	95	8.818	8.818	0.000	89	1018905	50.0	49.8	
9 Dichlorodifluoromethane	85	1.709	1.709	0.000	99	652476	50.0	49.5	
10 Chloromethane	50	1.896	1.896	0.000	99	774567	50.0	49.8	
11 Vinyl chloride	62	1.999	1.999	0.000	98	704774	50.0	50.8	
12 Bromomethane	94	2.300	2.300	0.000	91	451721	50.0	51.3	
13 Chloroethane	64	2.393	2.393	0.000	100	464034	50.0	50.1	
14 Dichlorofluoromethane	67	2.569	2.569	0.000	98	1173599	50.0	52.5	
15 Trichlorofluoromethane	101	2.579	2.579	0.000	99	917403	50.0	52.3	
18 Ethyl ether	59	2.797	2.797	0.000	94	621111	50.0	50.1	
19 Acrolein	56	2.911	2.911	0.000	100	1124311	493.8	494.1	
20 1,1-Dichloroethene	96	2.994	2.994	0.000	98	557859	50.0	51.3	
21 Acetone	43	3.015	3.015	0.000	100	1399594	200.0	196.3	
22 1,1,2-Trichloro-1,2,2-trifluoroe	151	3.025	3.025	0.000	96	385768	50.0	54.2	
24 Iodomethane	142	3.108	3.108	0.000	99	905072	50.0	51.9	
25 Carbon disulfide	76	3.170	3.170	0.000	99	1805247	50.0	52.4	
27 Methyl acetate	43	3.243	3.243	0.000	99	1696142	100.0	99.0	
28 3-Chloro-1-propene	41	3.263	3.263	0.000	91	1069120	50.0	49.9	
29 Methylene Chloride	84	3.357	3.357	0.000	95	674315	50.0	48.7	
30 2-Methyl-2-propanol	59	3.409	3.409	0.000	99	1441547	500.0	477.9	
31 Acrylonitrile	53	3.533	3.533	0.000	99	4090407	500.0	505.9	
32 Methyl tert-butyl ether	73	3.554	3.554	0.000	96	2057907	50.0	51.4	
33 trans-1,2-Dichloroethene	96	3.564	3.564	0.000	98	662803	50.0	51.0	
34 Hexane	57	3.761	3.761	0.000	94	1058790	50.0	51.3	
35 Vinyl acetate	43	3.865	3.865	0.000	97	3472929	100.0	101.3	
37 1,1-Dichloroethane	63	3.885	3.885	0.000	96	1259426	50.0	51.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 2-Butanone (MEK)	43	4.279	4.279	0.000	100	2488533	200.0	202.1	
42 cis-1,2-Dichloroethene	96	4.310	4.310	0.000	82	738805	50.0	49.7	
43 2,2-Dichloropropane	77	4.320	4.320	0.000	88	707093	50.0	50.8	
45 sec-Butyl Alcohol	45	4.393	4.393	0.000	100	3073548	1200.0	1279.2	
47 Chlorobromomethane	128	4.486	4.486	0.000	98	346723	50.0	50.7	
48 Tetrahydrofuran	42	4.497	4.497	0.000	91	830359	100.0	99.6	
49 Chloroform	83	4.548	4.548	0.000	94	1172827	50.0	50.6	
50 1,1,1-Trichloroethane	97	4.694	4.694	0.000	99	911604	50.0	51.7	
51 Cyclohexane	56	4.745	4.745	0.000	91	1093014	50.0	51.7	
52 1,1-Dichloropropene	75	4.808	4.808	0.000	96	975268	50.0	50.4	
53 Carbon tetrachloride	117	4.808	4.808	0.000	95	746104	50.0	49.1	
54 Isobutyl alcohol	41	4.818	4.818	0.000	95	1345218	1250.0	1284.1	
56 Benzene	78	4.963	4.963	0.000	97	2751022	50.0	49.6	
57 1,2-Dichloroethane	62	4.984	4.984	0.000	97	917971	50.0	48.3	
59 n-Heptane	43	5.150	5.150	0.000	95	1049190	50.0	49.8	
60 Trichloroethene	95	5.450	5.450	0.000	98	701780	50.0	49.2	
61 2-Pentanone	43	5.554	5.554	0.000	99	3104361	160.0	166.5	
62 Methylcyclohexane	55	5.647	5.647	0.000	92	968886	50.0	51.6	
64 1,2-Dichloropropane	63	5.657	5.657	0.000	96	735439	50.0	51.3	
65 1,4-Dioxane	88	5.709	5.709	0.000	93	216947	1000.0	962.8	
66 Dibromomethane	93	5.730	5.730	0.000	97	438190	50.0	50.8	
67 Dichlorobromomethane	83	5.854	5.854	0.000	99	838606	50.0	50.5	
69 2-Chloroethyl vinyl ether	63	6.062	6.062	0.000	91	586004	50.0	52.6	
70 cis-1,3-Dichloropropene	75	6.207	6.207	0.000	95	1133097	50.0	50.2	
71 4-Methyl-2-pentanone (MIBK)	43	6.310	6.310	0.000	97	4761009	200.0	208.2	
72 Toluene	91	6.497	6.497	0.000	98	2871353	50.0	49.8	
73 trans-1,3-Dichloropropene	75	6.673	6.673	0.000	95	1031490	50.0	49.5	
74 Ethyl methacrylate	69	6.694	6.694	0.000	91	1084014	50.0	50.9	
75 1,1,2-Trichloroethane	97	6.849	6.849	0.000	91	626137	50.0	52.1	
76 Tetrachloroethene	164	6.942	6.942	0.000	98	548300	50.0	49.9	
77 1,3-Dichloropropane	76	6.994	6.994	0.000	98	1154591	50.0	49.8	
78 2-Hexanone	43	7.015	7.015	0.000	97	3650567	200.0	208.2	
79 Chlorodibromomethane	129	7.191	7.191	0.000	90	583333	50.0	48.5	
80 Ethylene Dibromide	107	7.305	7.305	0.000	98	666023	50.0	50.2	
81 1-Chlorohexane	91	7.699	7.699	0.000	98	781789	40.0	37.7	
82 Chlorobenzene	112	7.740	7.740	0.000	94	1815616	50.0	48.6	
83 1,1,1,2-Tetrachloroethane	131	7.813	7.813	0.000	94	569033	50.0	50.1	
84 Ethylbenzene	106	7.823	7.823	0.000	99	988176	50.0	48.9	
85 m-Xylene & p-Xylene	106	7.937	7.937	0.000	99	1226416	50.0	49.8	
86 o-Xylene	106	8.300	8.300	0.000	97	1200545	50.0	49.7	
87 Styrene	104	8.321	8.321	0.000	96	2040254	50.0	51.1	
88 Bromoform	173	8.497	8.497	0.000	97	402808	50.0	46.7	
89 Isopropylbenzene	105	8.642	8.642	0.000	96	3024338	50.0	50.0	
91 Cyclohexanone	55	8.746	8.746	0.000	94	2008116	1500.0	1461.0	
92 1,1,2,2-Tetrachloroethane	83	8.932	8.932	0.000	94	1006118	50.0	50.2	
93 Bromobenzene	156	8.963	8.963	0.000	97	762543	50.0	49.2	
94 trans-1,4-Dichloro-2-butene	53	8.963	8.963	0.000	86	262178	50.0	49.6	
95 1,2,3-Trichloropropane	110	8.994	8.994	0.000	84	306365	50.0	48.9	
96 N-Propylbenzene	120	9.046	9.046	0.000	99	845996	50.0	49.6	
97 2-Chlorotoluene	126	9.139	9.139	0.000	96	719461	50.0	49.3	
98 1,3,5-Trimethylbenzene	105	9.212	9.212	0.000	95	2478032	50.0	50.3	
99 4-Chlorotoluene	126	9.253	9.253	0.000	98	744744	50.0	48.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
101 tert-Butylbenzene	119	9.523	9.523	0.000	94	2156815	50.0	49.4	
102 1,2,4-Trimethylbenzene	105	9.585	9.585	0.000	97	2570653	50.0	50.2	
103 sec-Butylbenzene	134	9.751	9.751	0.000	94	634064	50.0	50.0	
104 1,3-Dichlorobenzene	146	9.875	9.875	0.000	98	1429286	50.0	48.7	
105 4-Isopropyltoluene	119	9.896	9.896	0.000	98	2669616	50.0	49.8	
106 1,4-Dichlorobenzene	146	9.968	9.968	0.000	96	1445343	50.0	47.3	
108 n-Butylbenzene	91	10.300	10.300	0.000	98	2534840	50.0	49.6	
109 1,2-Dichlorobenzene	146	10.331	10.331	0.000	97	1347604	50.0	48.3	
110 1,2-Dibromo-3-Chloropropane	157	11.108	11.108	0.000	85	235046	50.0	47.0	
112 1,2,4-Trichlorobenzene	180	11.937	11.937	0.000	94	848934	50.0	46.8	
113 Hexachlorobutadiene	225	12.083	12.083	0.000	97	355475	50.0	47.5	
114 Naphthalene	128	12.207	12.207	0.000	97	2827931	50.0	49.5	
115 1,2,3-Trichlorobenzene	180	12.435	12.435	0.000	95	763720	50.0	47.3	
127 Butadiene	54		0.000				ND	ND	
S 128 Xylenes, Total	106				0		100.0	99.5	
S 129 Trihalomethanes, Total	1				0		200.0	196.3	
S 131 1,3-Dichloropropene, Total	1				0		100.0	99.8	
S 133 1,2-Dichloroethene, Total	1				0		100.0	100.7	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-MegaMainA_00096	Amount Added:	25.00	Units: uL	
MV-Gas A_00167	Amount Added:	10.00	Units: uL	
mv-IS_SS_00070	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 09-Oct-2023 12:33:01 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006809.D

Injection Date: 08-Oct-2023 18:28:56 Instrument ID: VMS_MS13

Lims ID: ICIS

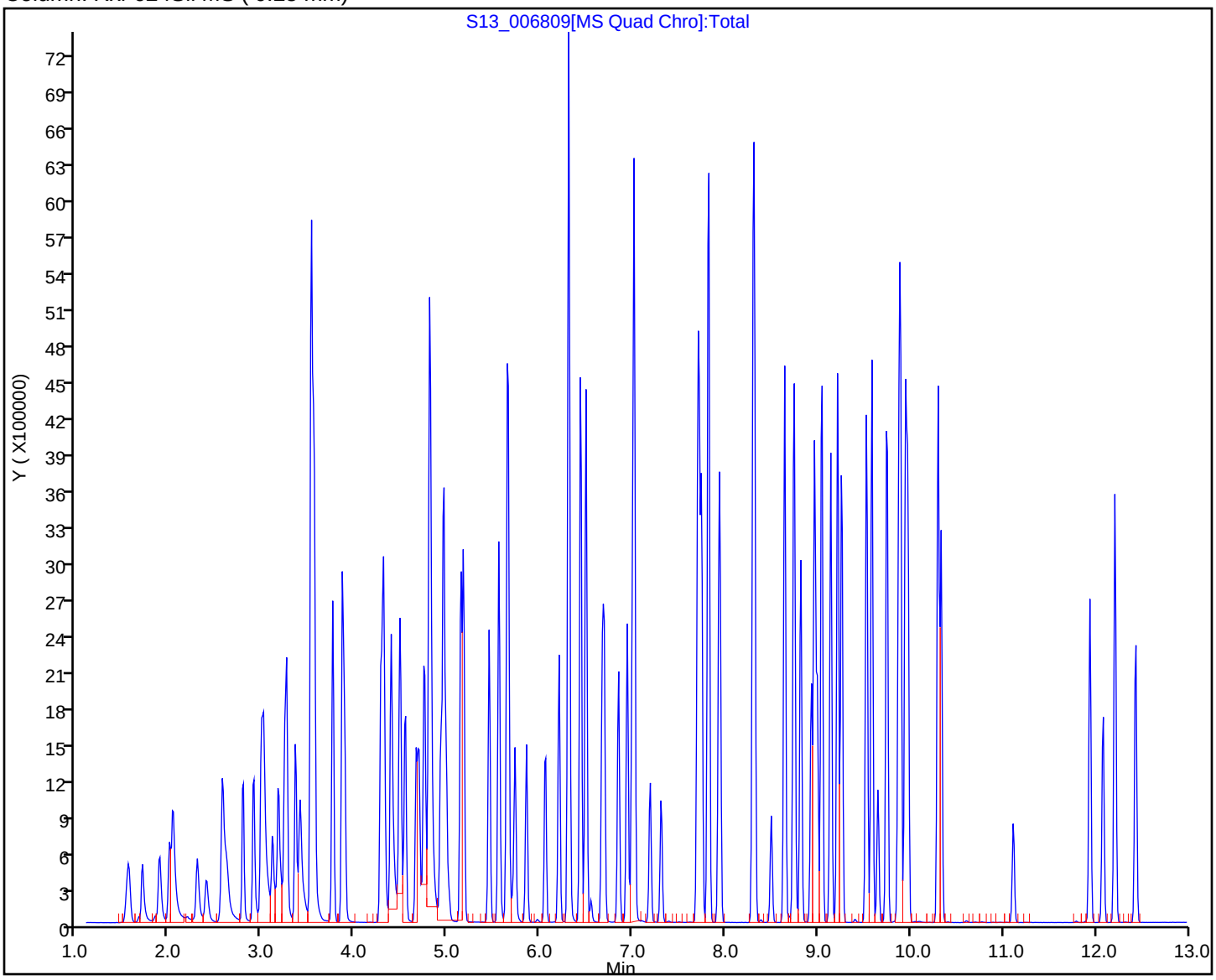
Client ID:

Operator ID: MEIERG ALS Bottle#: 0 Worklist Smp#: 7

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: AQ_VMS13_8260 Limit Group: MSV - 8260B Water and Solid

Column: Rxi-624Sil MS (0.25 mm)



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006810.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 08-Oct-2023 18:51:45 ALS Bottle#: 0 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Operator ID: MEIERG Instrument ID: VMS_MS13
Sublist: chrom-AQ_VMS13_8260*sub3

Method: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\AQ_VMS13_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 09-Oct-2023 12:33:05 Calib Date: 08-Oct-2023 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006822.D

Column 1 : Rxi-624Sil MS (0.25 mm) Det: MS Quad
Process Host: CTX1667

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.170	5.170	0.000	99	2209796	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.720	7.720	0.000	86	651907	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.948	9.948	0.000	95	1082500	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.662	4.662	0.000	93	645456	50.0	49.7	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.932	4.932	0.000	96	796793	50.0	48.6	
$ 6 Toluene-d8 (Surr)	98	6.434	6.435	-0.001	93	2621929	50.0	50.1	
$ 7 4-Bromofluorobenzene (Surr)	95	8.818	8.818	0.000	89	962451	50.0	50.9	
9 Dichlorodifluoromethane	85	1.709	1.709	0.000	99	990383	75.0	77.8	
10 Chloromethane	50	1.885	1.896	-0.011	99	1165256	75.0	78.0	
11 Vinyl chloride	62	1.999	1.999	0.000	98	1064587	75.0	79.9	
12 Bromomethane	94	2.300	2.300	0.000	91	702637	75.0	83.3	
13 Chloroethane	64	2.393	2.393	0.000	100	704261	75.0	79.2	
14 Dichlorofluoromethane	67	2.569	2.569	0.000	97	1776788	75.0	83.1	
15 Trichlorofluoromethane	101	2.579	2.579	0.000	97	1380139	75.0	82.1	
18 Ethyl ether	59	2.797	2.797	0.000	93	938515	75.0	79.1	
19 Acrolein	56	2.901	2.911	-0.010	100	1656997	740.6	760.4	
20 1,1-Dichloroethene	96	2.994	2.994	0.000	97	855363	75.0	82.1	
21 Acetone	43	3.015	3.015	0.000	100	2064160	300.0	306.1	
22 1,1,2-Trichloro-1,2,2-trifluoroe	151	3.025	3.025	0.000	95	578069	75.0	84.8	
24 Iodomethane	142	3.108	3.108	0.000	99	1364503	75.0	81.7	
25 Carbon disulfide	76	3.180	3.170	0.010	99	2780549	75.0	84.2	
27 Methyl acetate	43	3.243	3.243	0.000	98	2489240	150.0	151.7	
28 3-Chloro-1-propene	41	3.263	3.263	0.000	92	1565895	75.0	76.3	
29 Methylene Chloride	84	3.357	3.357	0.000	94	999987	75.0	75.4	
30 2-Methyl-2-propanol	59	3.408	3.409	-0.001	99	2157159	750.0	745.3	
31 Acrylonitrile	53	3.533	3.533	0.000	99	6050259	750.0	781.4	
32 Methyl tert-butyl ether	73	3.554	3.554	0.000	96	3010022	75.0	78.6	
33 trans-1,2-Dichloroethene	96	3.564	3.564	0.000	98	1004792	75.0	80.7	
34 Hexane	57	3.761	3.761	0.000	93	1609203	75.0	82.7	
35 Vinyl acetate	43	3.864	3.865	0.000	97	5084185	150.0	154.9	
37 1,1-Dichloroethane	63	3.885	3.885	0.000	96	1899397	75.0	80.3	
40 2-Butanone (MEK)	43	4.279	4.279	0.000	100	3667615	300.0	311.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
42 cis-1,2-Dichloroethene	96	4.310	4.310	0.000	82	1103738	75.0	77.6	
43 2,2-Dichloropropane	77	4.320	4.320	0.000	91	1036825	75.0	77.8	
45 sec-Butyl Alcohol	45	4.393	4.393	0.000	100	4431100	1800.0	1925.9	
47 Chlorobromomethane	128	4.486	4.486	0.000	98	511209	75.0	78.1	
48 Tetrahydrofuran	42	4.497	4.497	0.000	90	1218046	150.0	152.6	
49 Chloroform	83	4.548	4.548	0.000	94	1746545	75.0	78.7	
50 1,1,1-Trichloroethane	97	4.693	4.694	-0.001	99	1390426	75.0	82.4	
51 Cyclohexane	56	4.756	4.745	0.011	91	1599005	75.0	79.1	
52 1,1-Dichloropropene	75	4.807	4.808	-0.001	96	1500594	75.0	81.0	
53 Carbon tetrachloride	117	4.807	4.808	-0.001	95	1152434	75.0	79.0	
54 Isobutyl alcohol	41	4.818	4.818	0.000	96	1985419	1875.0	1979.1	
56 Benzene	78	4.963	4.963	0.000	96	4150319	75.0	78.2	
57 1,2-Dichloroethane	62	4.984	4.984	0.000	97	1357434	75.0	74.6	
59 n-Heptane	43	5.149	5.150	-0.001	95	1597957	75.0	79.1	
60 Trichloroethene	95	5.450	5.450	0.000	98	1056331	75.0	78.6	
61 2-Pentanone	43	5.554	5.554	0.000	99	4606881	240.0	258.1	
62 Methylcyclohexane	55	5.647	5.647	0.000	92	1453443	75.0	80.8	
64 1,2-Dichloropropane	63	5.657	5.657	0.000	96	1090378	75.0	79.4	
65 1,4-Dioxane	88	5.709	5.709	0.000	94	331748	1500.0	1537.4	
66 Dibromomethane	93	5.730	5.730	0.000	96	638868	75.0	77.3	
67 Dichlorobromomethane	83	5.854	5.854	0.000	99	1275141	75.0	80.1	
69 2-Chloroethyl vinyl ether	63	6.061	6.062	-0.001	91	874369	75.0	81.9	
70 cis-1,3-Dichloropropene	75	6.207	6.207	-0.001	95	1718704	75.0	80.8	
71 4-Methyl-2-pentanone (MIBK)	43	6.310	6.310	0.000	97	6906498	300.0	315.4	
72 Toluene	91	6.497	6.497	0.000	98	4335436	75.0	78.6	
73 trans-1,3-Dichloropropene	75	6.673	6.673	0.000	95	1580589	75.0	79.0	
74 Ethyl methacrylate	69	6.694	6.694	0.000	90	1646509	75.0	82.0	
75 1,1,2-Trichloroethane	97	6.849	6.849	0.000	91	924566	75.0	80.4	
76 Tetrachloroethene	164	6.942	6.942	0.000	98	834456	75.0	80.5	
77 1,3-Dichloropropane	76	6.994	6.994	0.000	96	1725494	75.0	79.0	
78 2-Hexanone	43	7.015	7.015	0.000	97	5336629	300.0	322.8	
79 Chlorodibromomethane	129	7.191	7.191	0.000	90	909378	75.0	79.9	
80 Ethylene Dibromide	107	7.305	7.305	0.000	98	1016131	75.0	81.2	
81 1-Chlorohexane	91	7.699	7.699	0.000	98	1193313	60.0	61.1	
82 Chlorobenzene	112	7.740	7.740	0.000	94	2752646	75.0	78.2	
83 1,1,1,2-Tetrachloroethane	131	7.813	7.813	0.000	95	863803	75.0	80.7	
84 Ethylbenzene	106	7.823	7.823	0.000	99	1489244	75.0	78.1	
85 m-Xylene & p-Xylene	106	7.937	7.937	0.000	99	1855278	75.0	80.0	
86 o-Xylene	106	8.300	8.300	0.000	97	1801373	75.0	79.1	
87 Styrene	104	8.321	8.321	0.000	96	3066343	75.0	81.4	
88 Bromoform	173	8.497	8.497	0.000	96	619355	75.0	75.4	
89 Isopropylbenzene	105	8.642	8.642	0.000	96	4539868	75.0	81.2	
91 Cyclohexanone	55	8.745	8.746	-0.001	93	2990578	2250.0	2304.3	
92 1,1,2,2-Tetrachloroethane	83	8.932	8.932	0.000	94	1474935	75.0	79.7	
93 Bromobenzene	156	8.963	8.963	0.000	97	1138984	75.0	79.5	
94 trans-1,4-Dichloro-2-butene	53	8.963	8.963	0.000	85	392480	75.0	75.6	
95 1,2,3-Trichloropropane	110	8.994	8.994	0.000	84	460856	75.0	79.6	
96 N-Propylbenzene	120	9.046	9.046	0.000	99	1258776	75.0	79.9	
97 2-Chlorotoluene	126	9.139	9.139	0.000	96	1088477	75.0	80.8	
98 1,3,5-Trimethylbenzene	105	9.212	9.212	0.000	95	3706198	75.0	81.4	
99 4-Chlorotoluene	126	9.253	9.253	0.000	98	1125178	75.0	79.9	
101 tert-Butylbenzene	119	9.523	9.523	0.000	94	3231197	75.0	80.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
102 1,2,4-Trimethylbenzene	105	9.585	9.585	0.000	97	3820344	75.0	80.7	
103 sec-Butylbenzene	134	9.751	9.751	0.000	94	941650	75.0	80.4	
104 1,3-Dichlorobenzene	146	9.875	9.875	0.000	98	2142869	75.0	79.0	
105 4-Isopropyltoluene	119	9.896	9.896	0.000	97	4009088	75.0	81.0	
106 1,4-Dichlorobenzene	146	9.968	9.968	0.000	94	2166157	75.0	76.8	
108 n-Butylbenzene	91	10.300	10.300	0.000	98	3825273	75.0	81.0	
109 1,2-Dichlorobenzene	146	10.331	10.331	0.000	98	1999926	75.0	77.6	
110 1,2-Dibromo-3-Chloropropane	157	11.108	11.108	0.000	84	353543	75.0	75.6	
112 1,2,4-Trichlorobenzene	180	11.937	11.937	0.000	94	1272032	75.0	75.9	
113 Hexachlorobutadiene	225	12.082	12.083	0.000	97	527961	75.0	76.4	
114 Naphthalene	128	12.207	12.207	0.000	98	4126394	75.0	78.2	
115 1,2,3-Trichlorobenzene	180	12.435	12.435	0.000	95	1151648	75.0	77.3	
127 Butadiene	54		0.000				ND	ND	
S 128 Xylenes, Total	106				0		150.0	159.0	
S 129 Trihalomethanes, Total	1				0		300.0	314.2	
S 130 Total BTEX	1				0			393.9	
S 131 1,3-Dichloropropene, Total	1				0		150.0	159.8	
S 133 1,2-Dichloroethene, Total	1				0		150.0	158.3	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-MegaMainA_00096	Amount Added: 37.50	Units: uL	
MV-Gas A_00167	Amount Added: 15.00	Units: uL	
mv-IS_SS_00070	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 09-Oct-2023 12:33:06 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006810.D

Injection Date: 08-Oct-2023 18:51:45 Instrument ID: VMS_MS13

Lims ID: IC

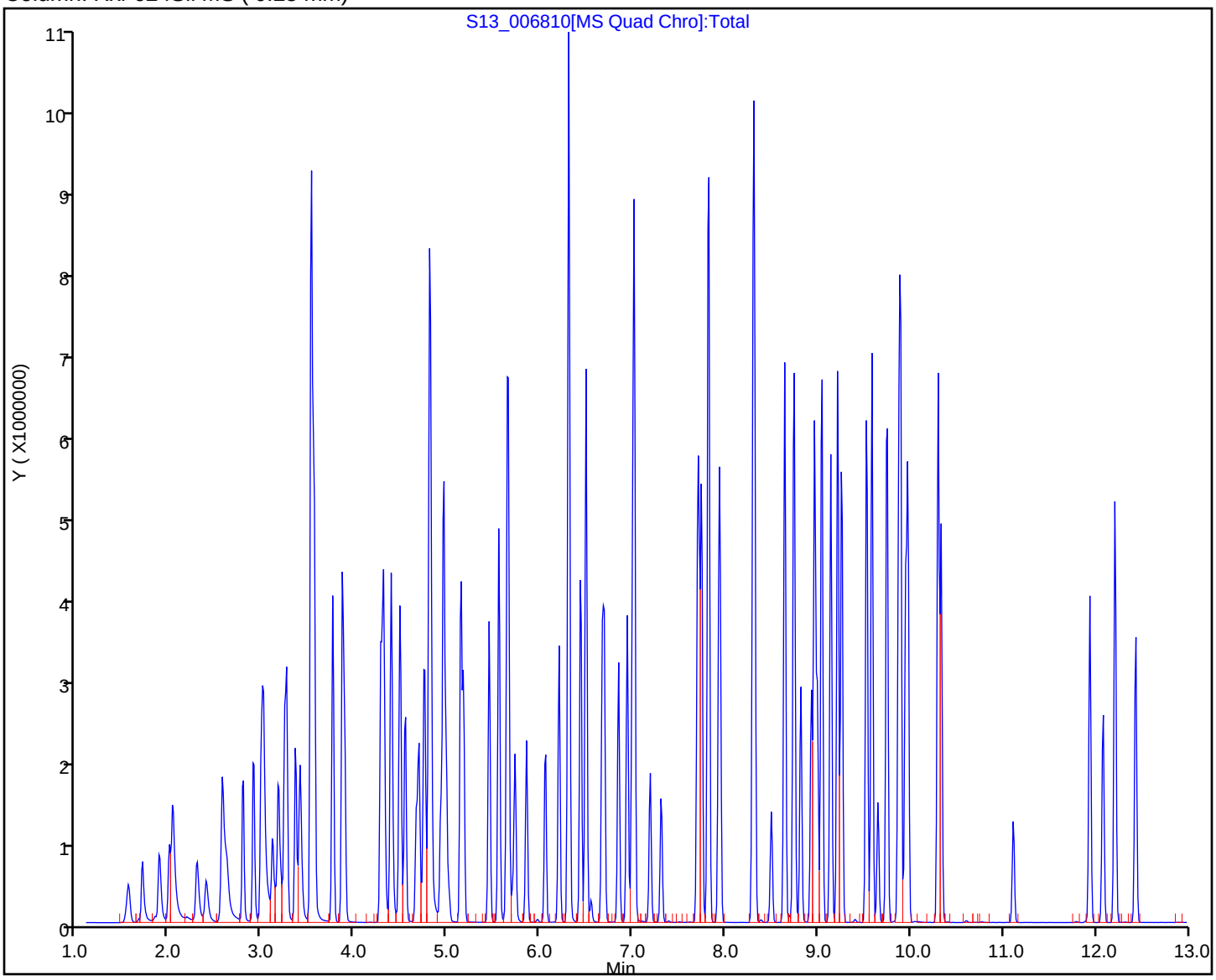
Client ID:

Operator ID: MEIERG ALS Bottle#: 0 Worklist Smp#: 8

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: AQ_VMS13_8260 Limit Group: MSV - 8260B Water and Solid

Column: Rxi-624Sil MS (0.25 mm)



12/5/2023 8:25 AM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006811.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 08-Oct-2023 19:14:22 ALS Bottle#: 0 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Operator ID: MEIERG Instrument ID: VMS_MS13
Sublist: chrom-AQ_VMS13_8260*sub3

Method: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\AQ_VMS13_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 09-Oct-2023 12:33:11 Calib Date: 08-Oct-2023 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006822.D

Column 1 : Rxi-624Sil MS (0.25 mm) Det: MS Quad
Process Host: CTX1667

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.170	5.170	0.000	99	2262350	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.720	7.720	0.000	85	667147	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.948	9.948	0.000	94	1136619	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.662	4.662	0.000	93	666851	50.0	50.1	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.932	4.932	0.000	97	802793	50.0	47.9	
$ 6 Toluene-d8 (Surr)	98	6.435	6.435	0.000	93	2687294	50.0	50.2	
$ 7 4-Bromofluorobenzene (Surr)	95	8.818	8.818	0.000	89	997795	50.0	50.3	
9 Dichlorodifluoromethane	85	1.709	1.709	0.000	99	1279538	100.0	97.8	
10 Chloromethane	50	1.895	1.896	-0.001	99	1555542	100.0	101.6	
11 Vinyl chloride	62	1.999	1.999	0.000	98	1427915	100.0	104.6	
12 Bromomethane	94	2.300	2.300	0.000	91	927850	100.0	107.5	
13 Chloroethane	64	2.403	2.393	0.010	100	938255	100.0	103.0	
14 Dichlorofluoromethane	67	2.569	2.569	0.000	97	2356900	100.0	107.6	
15 Trichlorofluoromethane	101	2.579	2.579	0.000	98	1816664	100.0	105.5	
18 Ethyl ether	59	2.797	2.797	0.000	93	1211909	100.0	99.8	
19 Acrolein	56	2.911	2.911	0.000	100	2286770	987.5	1025.0	
20 1,1-Dichloroethene	96	2.994	2.994	0.000	97	1133684	100.0	106.3	
21 Acetone	43	3.015	3.015	0.000	100	2789494	400.0	406.3	
22 1,1,2-Trichloro-1,2,2-trifluoroe	151	3.025	3.025	0.000	94	778821	100.0	111.7	
24 Iodomethane	142	3.108	3.108	0.000	99	1849357	100.0	108.1	
25 Carbon disulfide	76	3.170	3.170	0.000	99	3758234	100.0	111.2	
27 Methyl acetate	43	3.243	3.243	0.000	98	3411763	200.0	203.0	
28 3-Chloro-1-propene	41	3.263	3.263	0.000	91	2134107	100.0	101.5	
29 Methylene Chloride	84	3.357	3.357	0.000	94	1326554	100.0	97.7	
30 2-Methyl-2-propanol	59	3.409	3.409	-0.001	99	3003220	1000.0	1012.5	
31 Acrylonitrile	53	3.533	3.533	0.000	98	7936976	1000.0	1001.2	
32 Methyl tert-butyl ether	73	3.554	3.554	0.000	96	3939500	100.0	100.5	
33 trans-1,2-Dichloroethene	96	3.564	3.564	0.000	98	1333005	100.0	104.6	
34 Hexane	57	3.761	3.761	0.000	94	2113394	100.0	106.1	
35 Vinyl acetate	43	3.864	3.865	0.000	97	6636725	200.0	197.6	
37 1,1-Dichloroethane	63	3.885	3.885	0.000	96	2504692	100.0	103.4	
40 2-Butanone (MEK)	43	4.279	4.279	0.000	100	4948408	400.0	410.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
42 cis-1,2-Dichloroethene	96	4.310	4.310	0.000	82	1464281	100.0	100.5	
43 2,2-Dichloropropane	77	4.320	4.320	0.000	91	1407323	100.0	103.2	
45 sec-Butyl Alcohol	45	4.393	4.393	0.000	99	6140373	2400.0	2606.8	
47 Chlorobromomethane	128	4.486	4.486	0.000	98	677112	100.0	101.1	
48 Tetrahydrofuran	42	4.497	4.497	0.000	91	1635218	200.0	200.1	
49 Chloroform	83	4.548	4.548	0.000	94	2331185	100.0	102.6	
50 1,1,1-Trichloroethane	97	4.694	4.694	0.000	98	1857545	100.0	107.5	
51 Cyclohexane	56	4.745	4.745	0.000	91	2116333	100.0	102.2	
52 1,1-Dichloropropene	75	4.808	4.808	0.000	96	1989632	100.0	104.9	
53 Carbon tetrachloride	117	4.808	4.808	0.000	95	1569380	100.0	105.0	
54 Isobutyl alcohol	41	4.818	4.818	0.000	96	2756822	2500.0	2684.3	
56 Benzene	78	4.963	4.963	0.000	97	5457549	100.0	100.4	
57 1,2-Dichloroethane	62	4.984	4.984	0.000	97	1778550	100.0	95.4	
59 n-Heptane	43	5.150	5.150	0.000	95	2124297	100.0	102.8	
60 Trichloroethene	95	5.450	5.450	0.000	98	1421156	100.0	103.3	
61 2-Pentanone	43	5.554	5.554	0.000	99	6166348	320.0	337.4	
62 Methylcyclohexane	55	5.647	5.647	0.000	92	1962599	100.0	106.6	
64 1,2-Dichloropropane	63	5.657	5.657	0.000	96	1470280	100.0	104.6	
65 1,4-Dioxane	88	5.699	5.709	-0.010	96	471794	2000.0	2135.7	
66 Dibromomethane	93	5.730	5.730	0.000	97	842210	100.0	99.6	
67 Dichlorobromomethane	83	5.854	5.854	0.000	99	1705594	100.0	104.7	
69 2-Chloroethyl vinyl ether	63	6.061	6.062	-0.001	92	1144688	100.0	104.8	
70 cis-1,3-Dichloropropene	75	6.207	6.207	0.000	95	2319943	100.0	106.5	
71 4-Methyl-2-pentanone (MIBK)	43	6.310	6.310	0.000	97	9162126	400.0	408.7	
72 Toluene	91	6.497	6.497	0.000	98	5708510	100.0	101.1	
73 trans-1,3-Dichloropropene	75	6.673	6.673	0.000	95	2130022	100.0	103.9	
74 Ethyl methacrylate	69	6.694	6.694	0.000	91	2205840	100.0	107.3	
75 1,1,2-Trichloroethane	97	6.849	6.849	0.000	91	1237298	100.0	105.1	
76 Tetrachloroethene	164	6.942	6.942	0.000	98	1114808	100.0	105.1	
77 1,3-Dichloropropane	76	6.994	6.994	0.000	97	2303617	100.0	103.1	
78 2-Hexanone	43	7.015	7.015	0.000	97	7197538	400.0	425.4	
79 Chlorodibromomethane	129	7.191	7.191	0.000	90	1248060	100.0	107.0	
80 Ethylene Dibromide	107	7.305	7.305	0.000	98	1342256	100.0	104.8	
81 1-Chlorohexane	91	7.699	7.699	0.000	99	1606252	80.0	80.3	
82 Chlorobenzene	112	7.740	7.740	0.000	94	3674722	100.0	102.1	
83 1,1,1,2-Tetrachloroethane	131	7.813	7.813	0.000	95	1175232	100.0	107.2	
84 Ethylbenzene	106	7.823	7.823	0.000	99	1980172	100.0	101.5	
85 m-Xylene & p-Xylene	106	7.937	7.937	0.000	99	2463698	100.0	103.8	
86 o-Xylene	106	8.300	8.300	0.000	96	2401860	100.0	103.0	
87 Styrene	104	8.321	8.321	0.000	96	4099700	100.0	106.3	
88 Bromoform	173	8.497	8.497	0.000	97	877938	100.0	104.0	
89 Isopropylbenzene	105	8.642	8.642	0.000	96	6036333	100.0	102.8	
91 Cyclohexanone	55	8.746	8.746	0.000	93	4345678	3000.0	3269.2	
92 1,1,2,2-Tetrachloroethane	83	8.932	8.932	0.000	94	1995152	100.0	102.7	
93 Bromobenzene	156	8.963	8.963	0.000	96	1525060	100.0	101.4	
94 trans-1,4-Dichloro-2-butene	53	8.963	8.963	0.000	86	572164	100.0	99.8	
95 1,2,3-Trichloropropane	110	8.994	8.994	0.000	85	616236	100.0	101.3	
96 N-Propylbenzene	120	9.046	9.046	0.000	99	1694372	100.0	102.4	
97 2-Chlorotoluene	126	9.139	9.139	0.000	96	1449825	100.0	102.5	
98 1,3,5-Trimethylbenzene	105	9.212	9.212	0.000	94	4969117	100.0	104.0	
99 4-Chlorotoluene	126	9.253	9.253	0.000	98	1528240	100.0	103.3	
101 tert-Butylbenzene	119	9.523	9.523	0.000	94	4287944	100.0	101.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
102 1,2,4-Trimethylbenzene	105	9.585	9.585	0.000	97	5113955	100.0	102.9	
103 sec-Butylbenzene	134	9.751	9.751	0.000	94	1274075	100.0	103.7	
104 1,3-Dichlorobenzene	146	9.875	9.875	0.000	98	2882818	100.0	101.2	
105 4-Isopropyltoluene	119	9.896	9.896	0.000	97	5401011	100.0	103.9	
106 1,4-Dichlorobenzene	146	9.968	9.968	0.000	94	2921522	100.0	98.6	
108 n-Butylbenzene	91	10.300	10.300	0.000	98	5138066	100.0	103.6	
109 1,2-Dichlorobenzene	146	10.331	10.331	0.000	97	2680693	100.0	99.0	
110 1,2-Dibromo-3-Chloropropane	157	11.108	11.108	0.000	85	499436	100.0	101.2	
112 1,2,4-Trichlorobenzene	180	11.937	11.937	0.000	94	1745711	100.0	99.2	
113 Hexachlorobutadiene	225	12.082	12.083	0.000	98	714417	100.0	98.4	
114 Naphthalene	128	12.207	12.207	0.000	97	5640275	100.0	101.8	
115 1,2,3-Trichlorobenzene	180	12.435	12.435	0.000	95	1572408	100.0	100.5	
127 Butadiene	54		0.000				ND	ND	
S 128 Xylenes, Total	106				0		200.0	206.8	
S 129 Trihalomethanes, Total	1				0		400.0	418.3	
S 130 Total BTEX	1				0			509.8	
S 131 1,3-Dichloropropene, Total	1				0		200.0	210.4	
S 133 1,2-Dichloroethene, Total	1				0		200.0	205.1	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-MegaMainA_00096	Amount Added:	50.00	Units: uL	
MV-Gas A_00167	Amount Added:	20.00	Units: uL	
mv-IS_SS_00070	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 09-Oct-2023 12:33:11 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006811.D

Injection Date: 08-Oct-2023 19:14:22 Instrument ID: VMS_MS13

Lims ID: IC

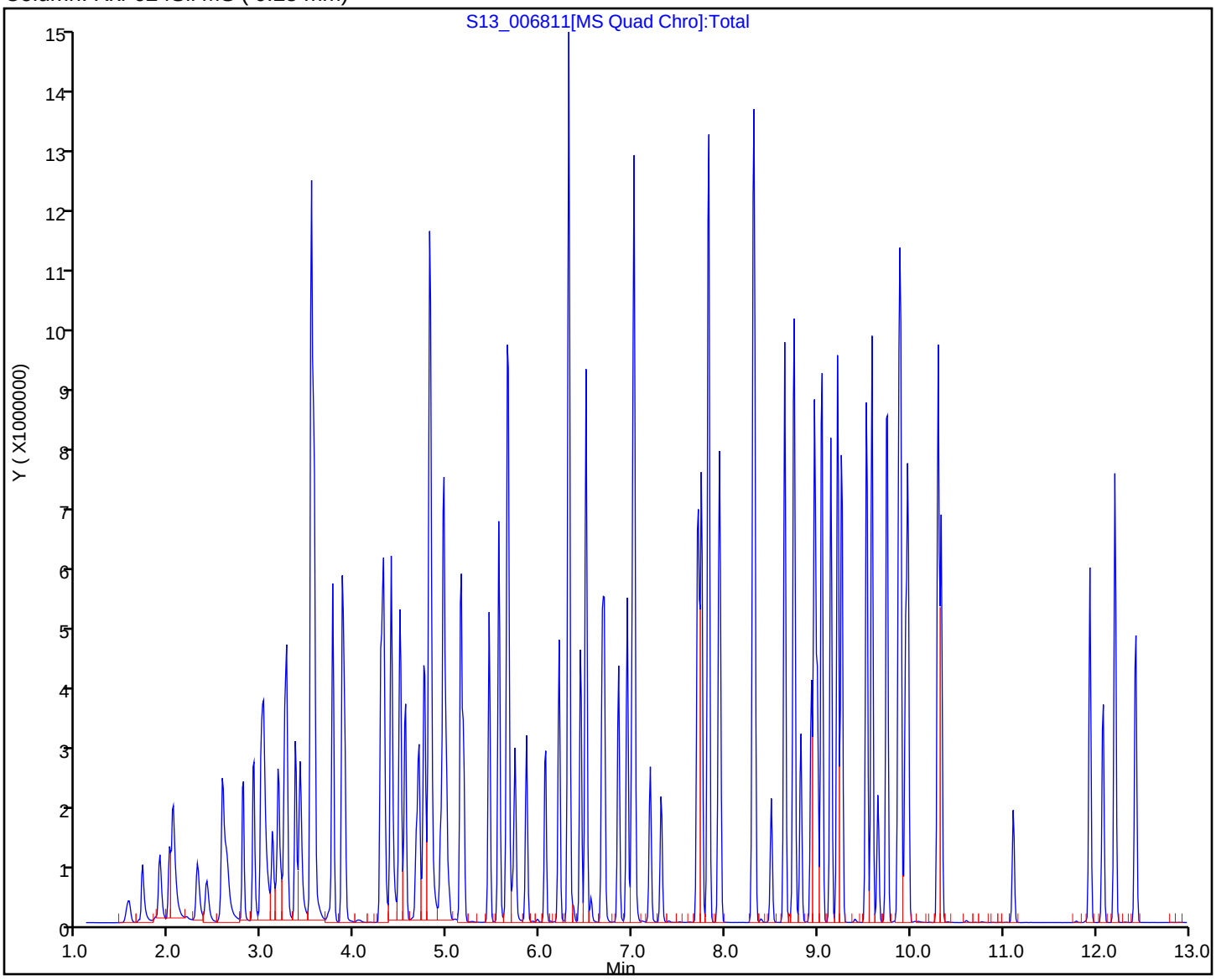
Client ID:

Operator ID: MEIERG ALS Bottle#: 0 Worklist Smp#: 9

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: AQ_VMS13_8260 Limit Group: MSV - 8260B Water and Solid

Column: Rxi-624Sil MS (0.25 mm)



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006812.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 08-Oct-2023 19:36:39 ALS Bottle#: 0 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Operator ID: MEIERG Instrument ID: VMS_MS13
Sublist: chrom-AQ_VMS13_8260*sub3

Method: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\AQ_VMS13_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 09-Oct-2023 12:33:17 Calib Date: 08-Oct-2023 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006822.D

Column 1 : Rxi-624Sil MS (0.25 mm) Det: MS Quad
Process Host: CTX1667

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.170	5.170	0.000	99	2275189	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.720	7.720	0.000	87	684806	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.948	9.948	0.000	94	1114132	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.663	4.662	0.000	94	682291	50.0	51.0	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.932	4.932	0.000	97	855944	50.0	50.7	
$ 6 Toluene-d8 (Surr)	98	6.435	6.435	0.000	93	2724291	50.0	49.6	
$ 7 4-Bromofluorobenzene (Surr)	95	8.818	8.818	0.000	89	1010308	50.0	51.9	
9 Dichlorodifluoromethane	85	1.709	1.709	0.000	99	2537516	200.0	191.5	
10 Chloromethane	50	1.885	1.896	-0.011	99	3025400	200.0	196.1	
11 Vinyl chloride	62	1.999	1.999	0.000	98	2768347	200.0	201.4	
12 Bromomethane	94	2.300	2.300	0.000	91	1685999	200.0	194.2	
13 Chloroethane	64	2.393	2.393	0.000	100	1790584	200.0	195.3	
14 Dichlorofluoromethane	67	2.569	2.569	0.000	97	4565859	200.0	207.3	
15 Trichlorofluoromethane	101	2.580	2.579	0.001	98	3557092	200.0	205.5	
18 Ethyl ether	59	2.797	2.797	0.000	94	2491152	200.0	203.9	
19 Acrolein	56	2.911	2.911	0.000	100	5150574	1975.0	2295.6	
20 1,1-Dichloroethene	96	2.984	2.994	-0.010	97	2250858	200.0	209.9	
21 Acetone	43	3.015	3.015	0.000	100	5585169	800.0	815.8	
22 1,1,2-Trichloro-1,2,2-trifluoroe	151	3.025	3.025	0.000	96	1546511	200.0	220.5	
24 Iodomethane	142	3.108	3.108	0.000	99	3711249	200.0	215.7	
25 Carbon disulfide	76	3.170	3.170	0.000	99	7477332	200.0	220.0	
27 Methyl acetate	43	3.243	3.243	0.000	98	6881930	400.0	407.3	
28 3-Chloro-1-propene	41	3.263	3.263	0.000	92	4293523	200.0	203.1	
29 Methylene Chloride	84	3.357	3.357	0.000	94	2684416	200.0	196.6	
30 2-Methyl-2-propanol	59	3.419	3.409	0.010	99	6067942	2000.0	2031.4	
31 Acrylonitrile	53	3.533	3.533	0.000	99	15787046	2000.0	1980.2	
32 Methyl tert-butyl ether	73	3.554	3.554	0.000	97	8077919	200.0	204.8	
33 trans-1,2-Dichloroethene	96	3.564	3.564	0.000	98	2652541	200.0	207.0	
34 Hexane	57	3.761	3.761	0.000	94	4199347	200.0	205.4	
35 Vinyl acetate	43	3.865	3.865	0.001	97	14120210	400.0	417.9	e
37 1,1-Dichloroethane	63	3.885	3.885	0.000	96	5012366	200.0	205.7	
40 2-Butanone (MEK)	43	4.279	4.279	0.000	100	9853543	800.0	811.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
42 cis-1,2-Dichloroethene	96	4.310	4.310	0.000	82	2948963	200.0	201.3	
43 2,2-Dichloropropane	77	4.321	4.320	0.001	91	2686147	200.0	195.8	
45 sec-Butyl Alcohol	45	4.393	4.393	0.000	99	12484248	4800.0	5270.1	
47 Chlorobromomethane	128	4.486	4.486	0.000	98	1397392	200.0	207.5	
48 Tetrahydrofuran	42	4.497	4.497	0.000	90	3416208	400.0	415.7	
49 Chloroform	83	4.549	4.548	0.000	94	4671641	200.0	204.5	
50 1,1,1-Trichloroethane	97	4.694	4.694	0.000	98	3733905	200.0	214.9	
51 Cyclohexane	56	4.745	4.745	0.000	91	4150690	200.0	199.3	
52 1,1-Dichloropropene	75	4.808	4.808	0.000	97	3930341	200.0	206.0	
53 Carbon tetrachloride	117	4.808	4.808	0.000	95	3247311	200.0	215.7	
54 Isobutyl alcohol	41	4.818	4.818	0.000	95	5644231	5000.0	5464.7	
56 Benzene	78	4.963	4.963	0.000	98	10599410	200.0	194.0	
57 1,2-Dichloroethane	62	4.984	4.984	0.000	97	3711199	200.0	198.0	
59 n-Heptane	43	5.150	5.150	0.000	95	4177079	200.0	200.9	
60 Trichloroethene	95	5.450	5.450	0.000	98	2805597	200.0	198.7	
61 2-Pentanone	43	5.554	5.554	0.000	99	11963944	640.0	650.9	
62 Methylcyclohexane	55	5.647	5.647	0.000	92	3870121	200.0	209.1	
64 1,2-Dichloropropane	63	5.657	5.657	0.000	96	2996778	200.0	211.9	
65 1,4-Dioxane	88	5.709	5.709	0.000	94	746441	4000.0	3359.8	
66 Dibromomethane	93	5.730	5.730	0.000	97	1763357	200.0	207.4	
67 Dichlorobromomethane	83	5.854	5.854	0.000	99	3532138	200.0	215.4	
69 2-Chloroethyl vinyl ether	63	6.062	6.062	0.000	91	2354003	200.0	214.2	
70 cis-1,3-Dichloropropene	75	6.207	6.207	0.000	95	4733150	200.0	211.5	
71 4-Methyl-2-pentanone (MIBK)	43	6.310	6.310	0.000	92	16284226	800.0	722.4	e
72 Toluene	91	6.497	6.497	0.000	98	11042280	200.0	194.4	
73 trans-1,3-Dichloropropene	75	6.673	6.673	0.000	95	4444196	200.0	215.3	
74 Ethyl methacrylate	69	6.694	6.694	0.000	91	4492751	200.0	213.0	
75 1,1,2-Trichloroethane	97	6.849	6.849	0.000	91	2535993	200.0	214.2	
76 Tetrachloroethene	164	6.942	6.942	0.000	98	2214055	200.0	203.4	
77 1,3-Dichloropropane	76	6.994	6.994	0.000	99	4629401	200.0	201.8	
78 2-Hexanone	43	7.015	7.015	0.000	95	13467320	800.0	775.5	
79 Chlorodibromomethane	129	7.191	7.191	0.000	90	2624218	200.0	218.8	
80 Ethylene Dibromide	107	7.305	7.305	0.000	99	2736023	200.0	208.1	
81 1-Chlorohexane	91	7.699	7.699	0.000	99	3190323	160.0	155.4	
82 Chlorobenzene	112	7.740	7.740	0.000	93	7217349	200.0	195.3	
83 1,1,1,2-Tetrachloroethane	131	7.813	7.813	0.000	95	2434501	200.0	216.3	
84 Ethylbenzene	106	7.823	7.823	0.000	98	3964696	200.0	198.0	
85 m-Xylene & p-Xylene	106	7.937	7.937	0.000	99	4904057	200.0	201.2	
86 o-Xylene	106	8.300	8.300	0.000	96	4753772	200.0	198.6	
87 Styrene	104	8.321	8.321	0.000	95	8018480	200.0	202.6	
88 Bromoform	173	8.497	8.497	0.000	97	1932201	200.0	221.7	
89 Isopropylbenzene	105	8.642	8.642	0.000	97	11403079	200.0	198.2	
91 Cyclohexanone	55	8.746	8.746	0.000	94	7064480	6000.0	5173.7	
92 1,1,2,2-Tetrachloroethane	83	8.932	8.932	0.000	94	4053205	200.0	212.9	
93 Bromobenzene	156	8.963	8.963	0.000	97	3030998	200.0	205.6	
94 trans-1,4-Dichloro-2-butene	53	8.963	8.963	0.000	86	1248604	200.0	189.4	
95 1,2,3-Trichloropropane	110	8.994	8.994	0.000	85	1241510	200.0	208.3	
96 N-Propylbenzene	120	9.046	9.046	0.000	98	3307121	200.0	204.0	
97 2-Chlorotoluene	126	9.139	9.139	0.000	96	2829995	200.0	204.2	
98 1,3,5-Trimethylbenzene	105	9.212	9.212	0.000	95	9268014	200.0	197.9	
99 4-Chlorotoluene	126	9.253	9.253	0.000	97	2986460	200.0	205.9	
101 tert-Butylbenzene	119	9.523	9.523	0.000	94	8087773	200.0	194.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
102 1,2,4-Trimethylbenzene	105	9.585	9.585	0.000	97	9559252	200.0	196.2	
103 sec-Butylbenzene	134	9.751	9.751	0.000	95	2429269	200.0	201.6	
104 1,3-Dichlorobenzene	146	9.875	9.875	0.000	98	5500915	200.0	197.0	
105 4-Isopropyltoluene	119	9.896	9.896	0.000	97	9902647	200.0	194.3	
106 1,4-Dichlorobenzene	146	9.968	9.968	0.000	93	5560932	200.0	191.4	
108 n-Butylbenzene	91	10.300	10.300	0.000	97	9468924	200.0	194.9	
109 1,2-Dichlorobenzene	146	10.331	10.331	0.000	97	5113134	200.0	192.6	
110 1,2-Dibromo-3-Chloropropane	157	11.108	11.108	0.000	85	1026234	200.0	210.4	
112 1,2,4-Trichlorobenzene	180	11.937	11.937	0.000	94	3293119	200.0	191.0	
113 Hexachlorobutadiene	225	12.083	12.083	0.001	98	1294151	200.0	181.9	
114 Naphthalene	128	12.207	12.207	0.000	98	10528324	200.0	193.9	
115 1,2,3-Trichlorobenzene	180	12.435	12.435	0.000	95	2978968	200.0	194.2	
127 Butadiene	54		0.000				ND	ND	
S 128 Xylenes, Total	106				0		400.0	399.8	
S 129 Trihalomethanes, Total	1				0		800.0	860.3	
S 130 Total BTEX	1				0			986.2	
S 131 1,3-Dichloropropene, Total	1				0		400.0	426.7	
S 133 1,2-Dichloroethene, Total	1				0		400.0	408.3	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

e - Potential Peak Saturated

Reagents:

MV-MegaMainA_00096	Amount Added: 100.00	Units: uL	
MV-Gas A_00167	Amount Added: 40.00	Units: uL	
mv-IS_SS_00070	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 09-Oct-2023 12:33:18 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006812.D

Injection Date: 08-Oct-2023 19:36:39 Instrument ID: VMS_MS13

Lims ID: IC

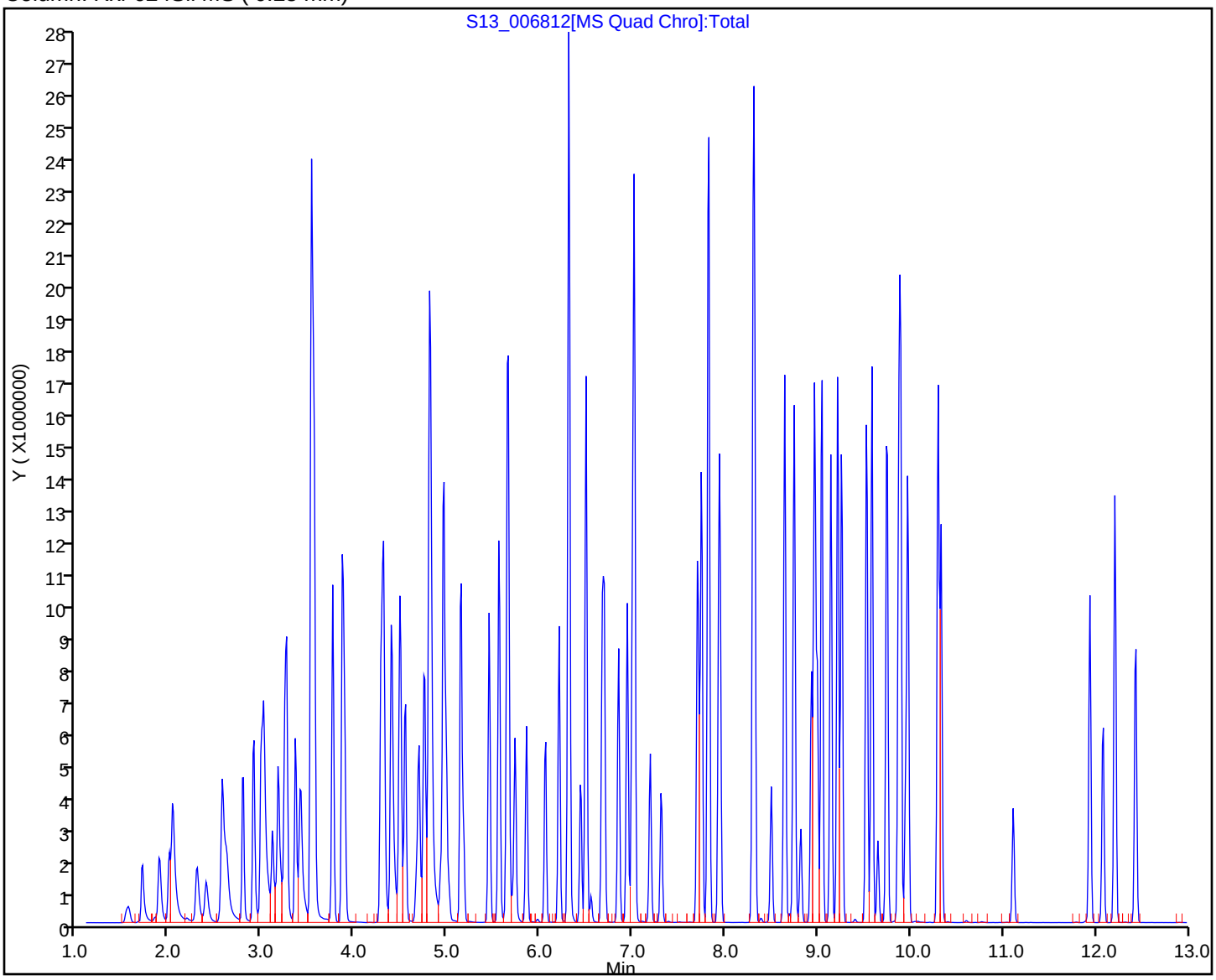
Client ID:

Operator ID: MEIERG ALS Bottle#: 0 Worklist Smp#: 10

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: AQ_VMS13_8260 Limit Group: MSV - 8260B Water and Solid

Column: Rxi-624Sil MS (0.25 mm)



12/5/2023 8:25 AM

Calibration / Dichlorodifluoromethane

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

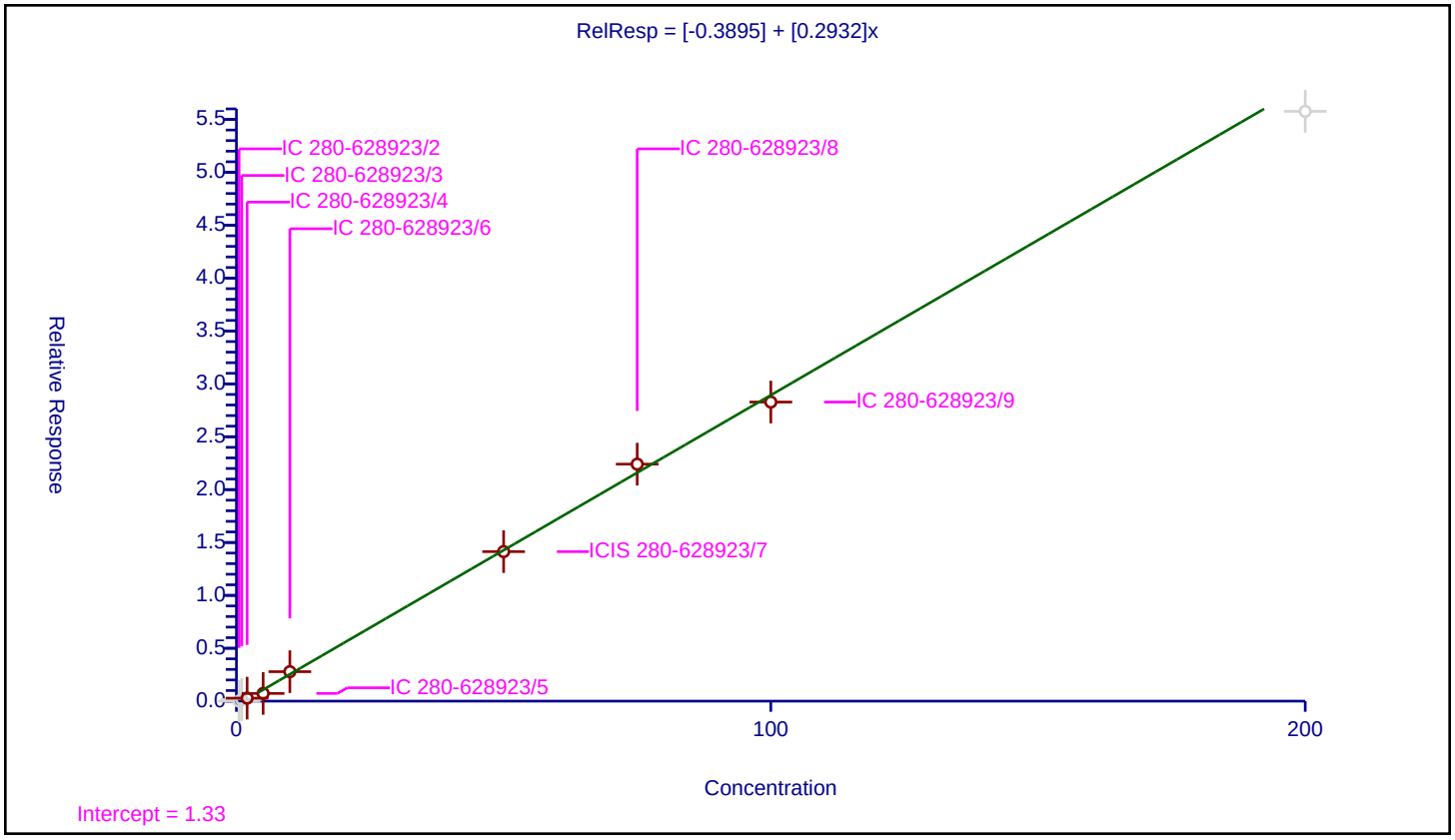
Curve Coefficients

Intercept:	-0.3895
Slope:	0.2932

Error Coefficients

Standard Error:	875000
Relative Standard Error:	14.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.0	50.0	2079729.0	0.0	N
2	IC 280-628923/3	1.0	0.147851	50.0	2228592.0	0.147851	N
3	IC 280-628923/4	2.0	0.284491	50.0	2130473.0	0.142245	Y
4	IC 280-628923/5	5.0	0.728782	50.0	2207588.0	0.145756	Y
5	IC 280-628923/6	10.0	2.785494	50.0	2200166.0	0.278549	Y
6	ICIS 280-628923/7	50.0	14.137111	50.0	2307671.0	0.282742	Y
7	IC 280-628923/8	75.0	22.408924	50.0	2209796.0	0.298786	Y
8	IC 280-628923/9	100.0	28.278958	50.0	2262350.0	0.28279	Y
9	IC 280-628923/10	200.0	55.76495	50.0	2275189.0	0.278825	N



Calibration / Chloromethane

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

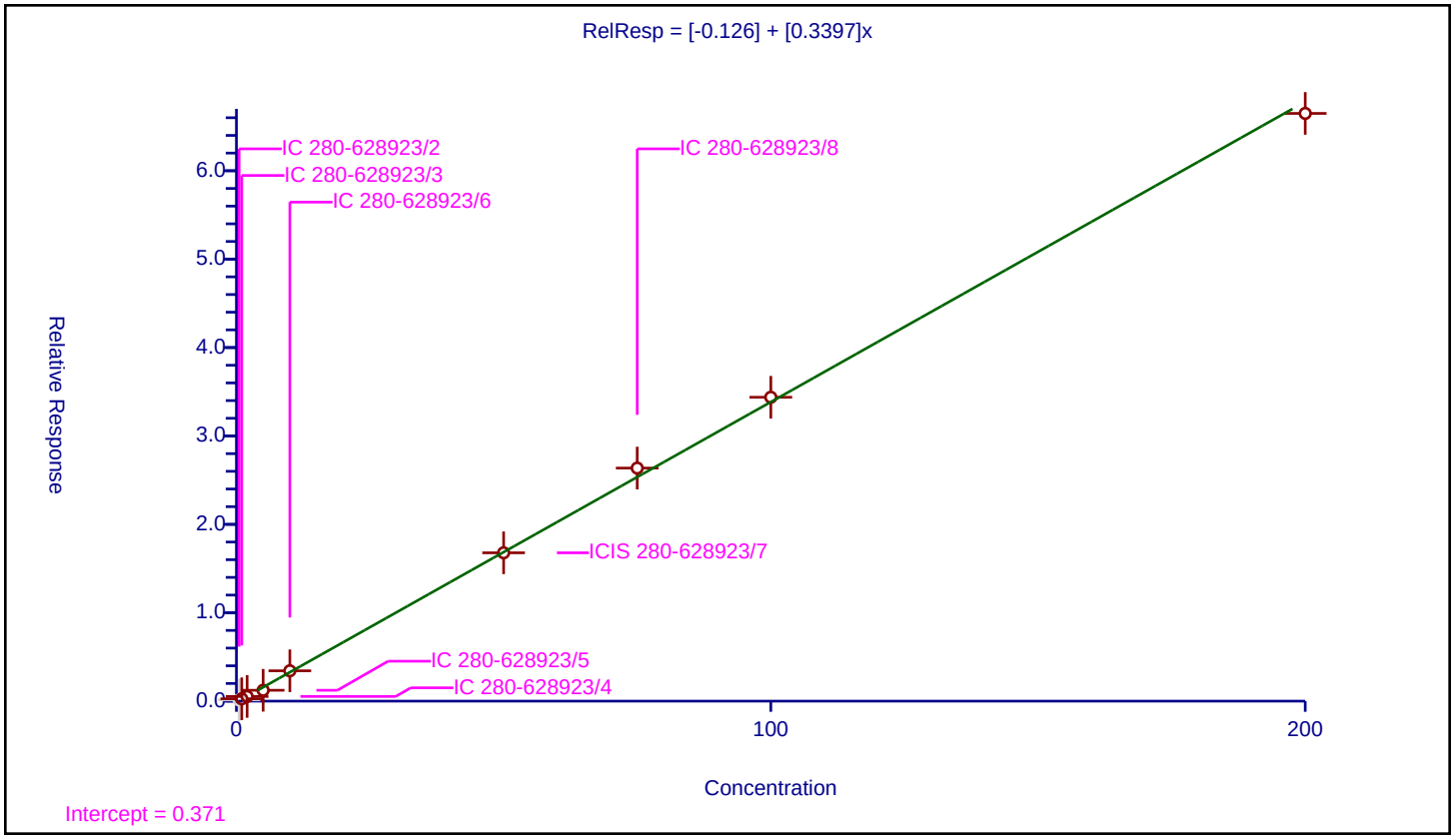
Curve Coefficients

Intercept:	-0.126
Slope:	0.3397

Error Coefficients

Standard Error:	1500000
Relative Standard Error:	10.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.135595	50.0	2079729.0	0.271189	N
2	IC 280-628923/3	1.0	0.266895	50.0	2228592.0	0.266895	Y
3	IC 280-628923/4	2.0	0.530094	50.0	2130473.0	0.265047	Y
4	IC 280-628923/5	5.0	1.229872	50.0	2207588.0	0.245974	Y
5	IC 280-628923/6	10.0	3.432014	50.0	2200166.0	0.343201	Y
6	ICIS 280-628923/7	50.0	16.78244	50.0	2307671.0	0.335649	Y
7	IC 280-628923/8	75.0	26.365692	50.0	2209796.0	0.351543	Y
8	IC 280-628923/9	100.0	34.378898	50.0	2262350.0	0.343789	Y
9	IC 280-628923/10	200.0	66.486784	50.0	2275189.0	0.332434	Y



Calibration / Vinyl chloride

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

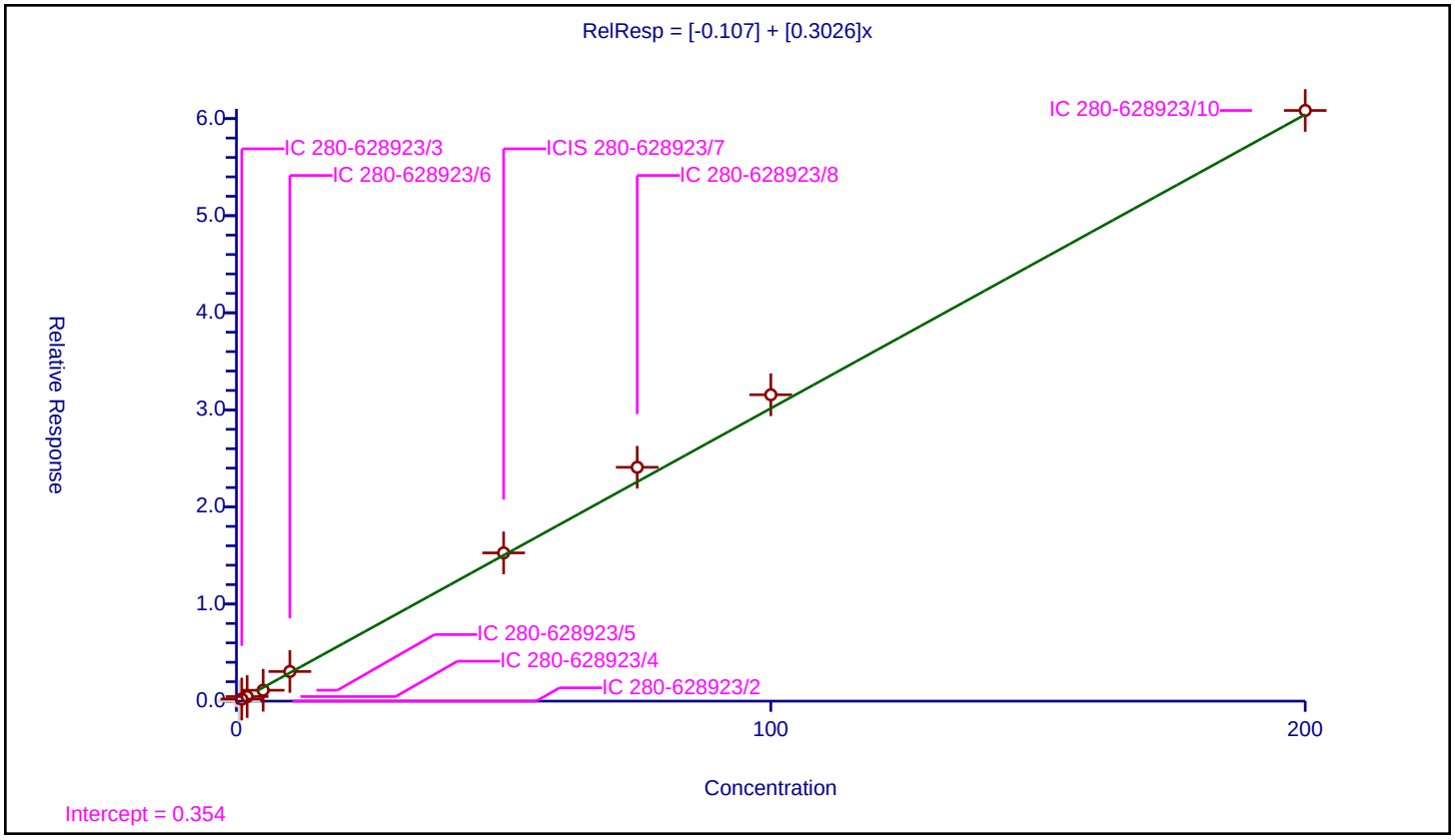
Curve Coefficients

Intercept:	-0.107
Slope:	0.3026

Error Coefficients

Standard Error:	1380000
Relative Standard Error:	9.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.0	50.0	2079729.0	0.0	N
2	IC 280-628923/3	1.0	0.212264	50.0	2228592.0	0.212264	Y
3	IC 280-628923/4	2.0	0.469403	50.0	2130473.0	0.234701	Y
4	IC 280-628923/5	5.0	1.123557	50.0	2207588.0	0.224711	Y
5	IC 280-628923/6	10.0	3.052133	50.0	2200166.0	0.305213	Y
6	ICIS 280-628923/7	50.0	15.270244	50.0	2307671.0	0.305405	Y
7	IC 280-628923/8	75.0	24.087902	50.0	2209796.0	0.321172	Y
8	IC 280-628923/9	100.0	31.558225	50.0	2262350.0	0.315582	Y
9	IC 280-628923/10	200.0	60.837737	50.0	2275189.0	0.304189	Y



Calibration / Bromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

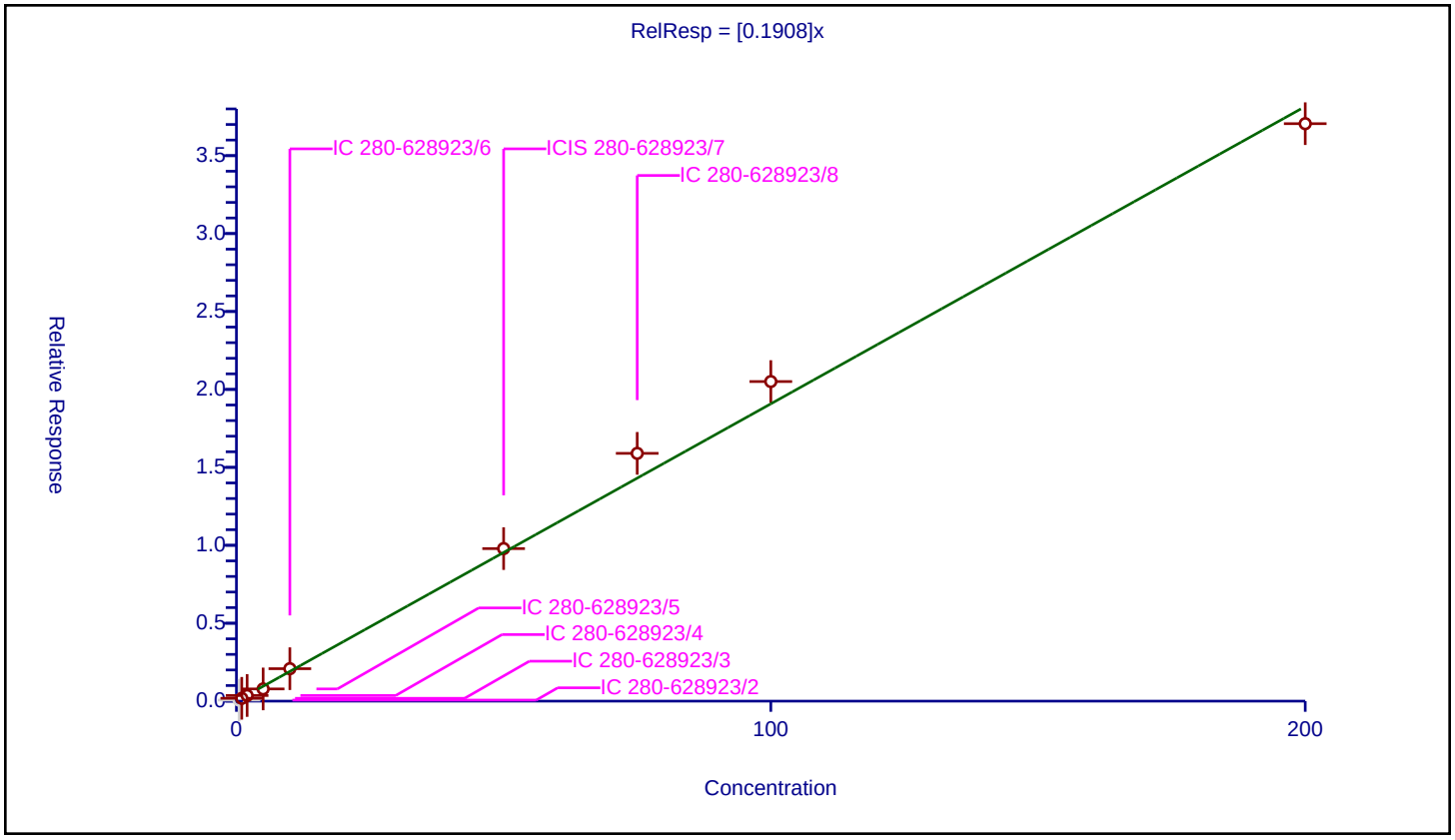
Curve Coefficients

Intercept:	0
Slope:	0.1908

Error Coefficients

Standard Error:	794000
Relative Standard Error:	9.6
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.067845	50.0	2079729.0	0.135691	N
2	IC 280-628923/3	1.0	0.182784	50.0	2228592.0	0.182784	Y
3	IC 280-628923/4	2.0	0.360953	50.0	2130473.0	0.180476	Y
4	IC 280-628923/5	5.0	0.782823	50.0	2207588.0	0.156565	Y
5	IC 280-628923/6	10.0	2.082684	50.0	2200166.0	0.208268	Y
6	ICIS 280-628923/7	50.0	9.787379	50.0	2307671.0	0.195748	Y
7	IC 280-628923/8	75.0	15.898232	50.0	2209796.0	0.211976	Y
8	IC 280-628923/9	100.0	20.506332	50.0	2262350.0	0.205063	Y
9	IC 280-628923/10	200.0	37.051845	50.0	2275189.0	0.185259	Y



Calibration / Chloroethane

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

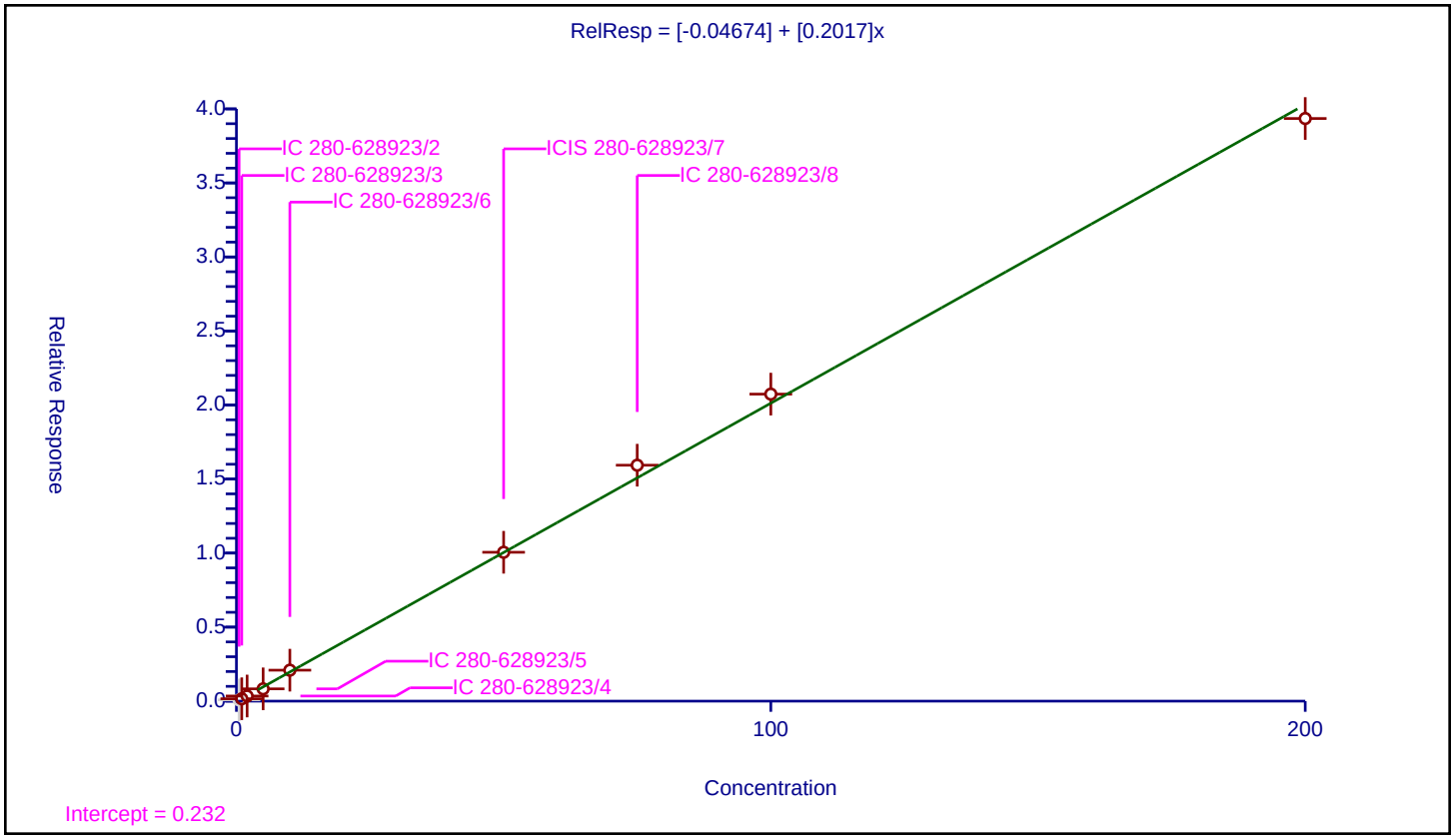
Curve Coefficients

Intercept:	-0.04674
Slope:	0.2017

Error Coefficients

Standard Error:	895000
Relative Standard Error:	6.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.082775	50.0	2079729.0	0.16555	N
2	IC 280-628923/3	1.0	0.161515	50.0	2228592.0	0.161515	Y
3	IC 280-628923/4	2.0	0.34598	50.0	2130473.0	0.17299	Y
4	IC 280-628923/5	5.0	0.829412	50.0	2207588.0	0.165882	Y
5	IC 280-628923/6	10.0	2.091569	50.0	2200166.0	0.209157	Y
6	ICIS 280-628923/7	50.0	10.054163	50.0	2307671.0	0.201083	Y
7	IC 280-628923/8	75.0	15.934978	50.0	2209796.0	0.212466	Y
8	IC 280-628923/9	100.0	20.736292	50.0	2262350.0	0.207363	Y
9	IC 280-628923/10	200.0	39.350225	50.0	2275189.0	0.196751	Y



Calibration / Dichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

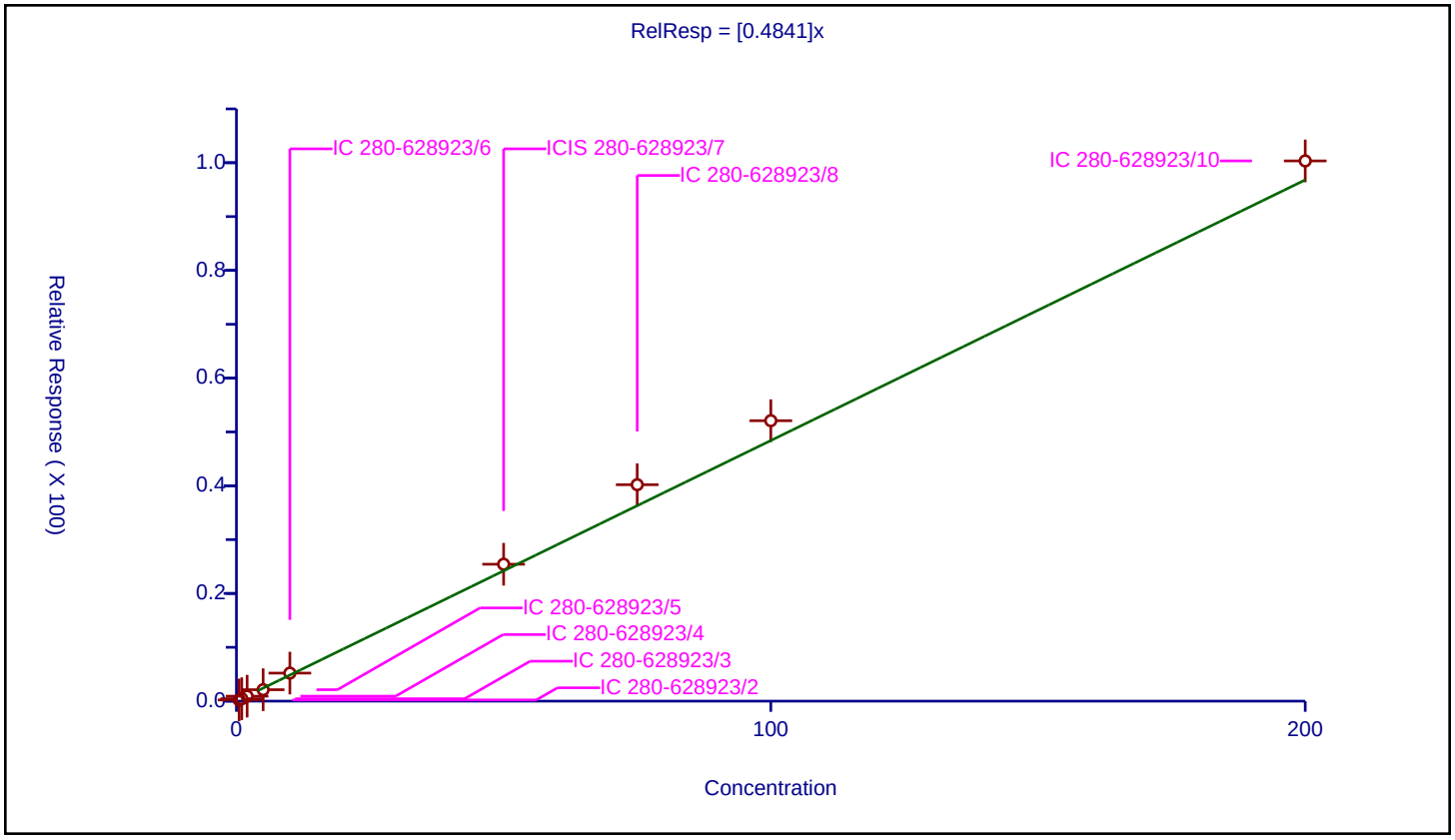
Curve Coefficients

Intercept:	0
Slope:	0.4841

Error Coefficients

Standard Error:	1970000
Relative Standard Error:	8.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.217817	50.0	2079729.0	0.435634	Y
2	IC 280-628923/3	1.0	0.445236	50.0	2228592.0	0.445236	Y
3	IC 280-628923/4	2.0	0.924842	50.0	2130473.0	0.462421	Y
4	IC 280-628923/5	5.0	2.127073	50.0	2207588.0	0.425415	Y
5	IC 280-628923/6	10.0	5.206016	50.0	2200166.0	0.520602	Y
6	ICIS 280-628923/7	50.0	25.428213	50.0	2307671.0	0.508564	Y
7	IC 280-628923/8	75.0	40.202535	50.0	2209796.0	0.536034	Y
8	IC 280-628923/9	100.0	52.089641	50.0	2262350.0	0.520896	Y
9	IC 280-628923/10	200.0	100.340213	50.0	2275189.0	0.501701	Y



Calibration / Trichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

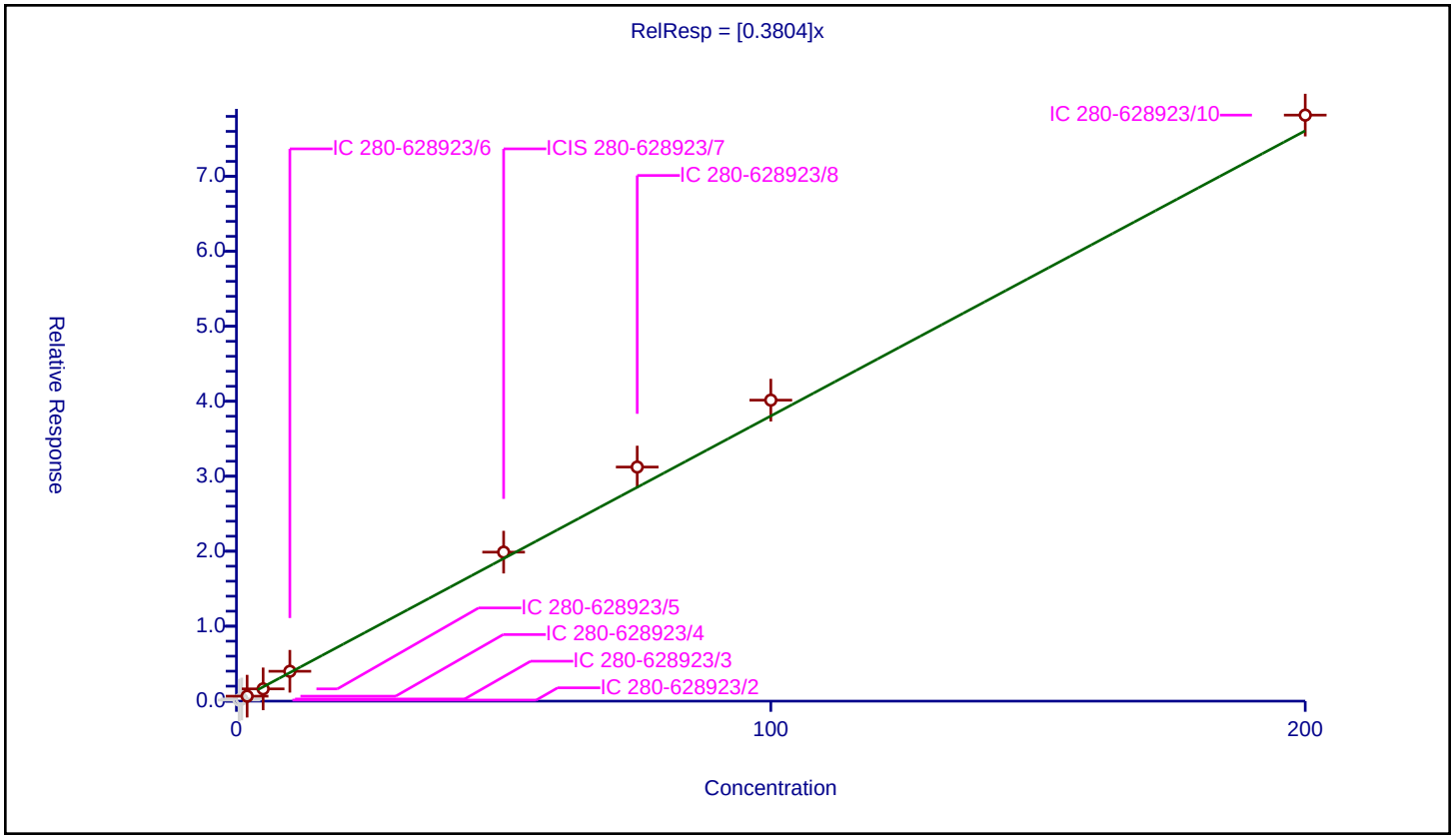
Curve Coefficients

Intercept:	0
Slope:	0.3804

Error Coefficients

Standard Error:	1770000
Relative Standard Error:	9.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.144682	50.0	2079729.0	0.289365	N
2	IC 280-628923/3	1.0	0.285943	50.0	2228592.0	0.285943	N
3	IC 280-628923/4	2.0	0.661543	50.0	2130473.0	0.330772	Y
4	IC 280-628923/5	5.0	1.637353	50.0	2207588.0	0.327471	Y
5	IC 280-628923/6	10.0	3.982995	50.0	2200166.0	0.398299	Y
6	ICIS 280-628923/7	50.0	19.877249	50.0	2307671.0	0.397545	Y
7	IC 280-628923/8	75.0	31.227747	50.0	2209796.0	0.41637	Y
8	IC 280-628923/9	100.0	40.149933	50.0	2262350.0	0.401499	Y
9	IC 280-628923/10	200.0	78.171352	50.0	2275189.0	0.390857	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

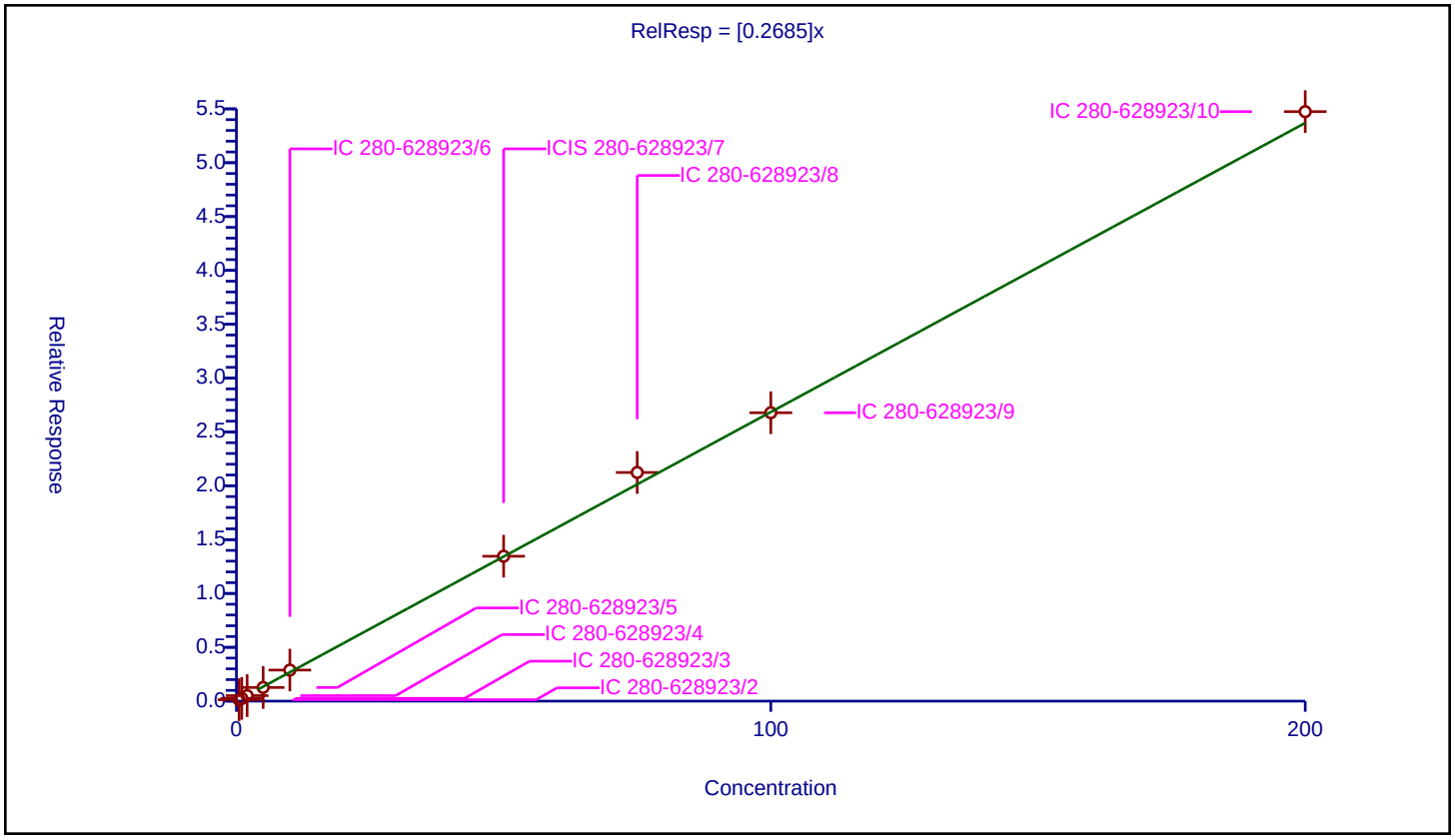
Curve Coefficients

Intercept:	0
Slope:	0.2685

Error Coefficients

Standard Error:	1060000
Relative Standard Error:	4.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.132589	50.0	2079729.0	0.265179	Y
2	IC 280-628923/3	1.0	0.258526	50.0	2228592.0	0.258526	Y
3	IC 280-628923/4	2.0	0.513783	50.0	2130473.0	0.256891	Y
4	IC 280-628923/5	5.0	1.266563	50.0	2207588.0	0.253313	Y
5	IC 280-628923/6	10.0	2.885328	50.0	2200166.0	0.288533	Y
6	ICIS 280-628923/7	50.0	13.457529	50.0	2307671.0	0.269151	Y
7	IC 280-628923/8	75.0	21.235331	50.0	2209796.0	0.283138	Y
8	IC 280-628923/9	100.0	26.784295	50.0	2262350.0	0.267843	Y
9	IC 280-628923/10	200.0	54.746045	50.0	2275189.0	0.27373	Y



Calibration / Acrolein

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

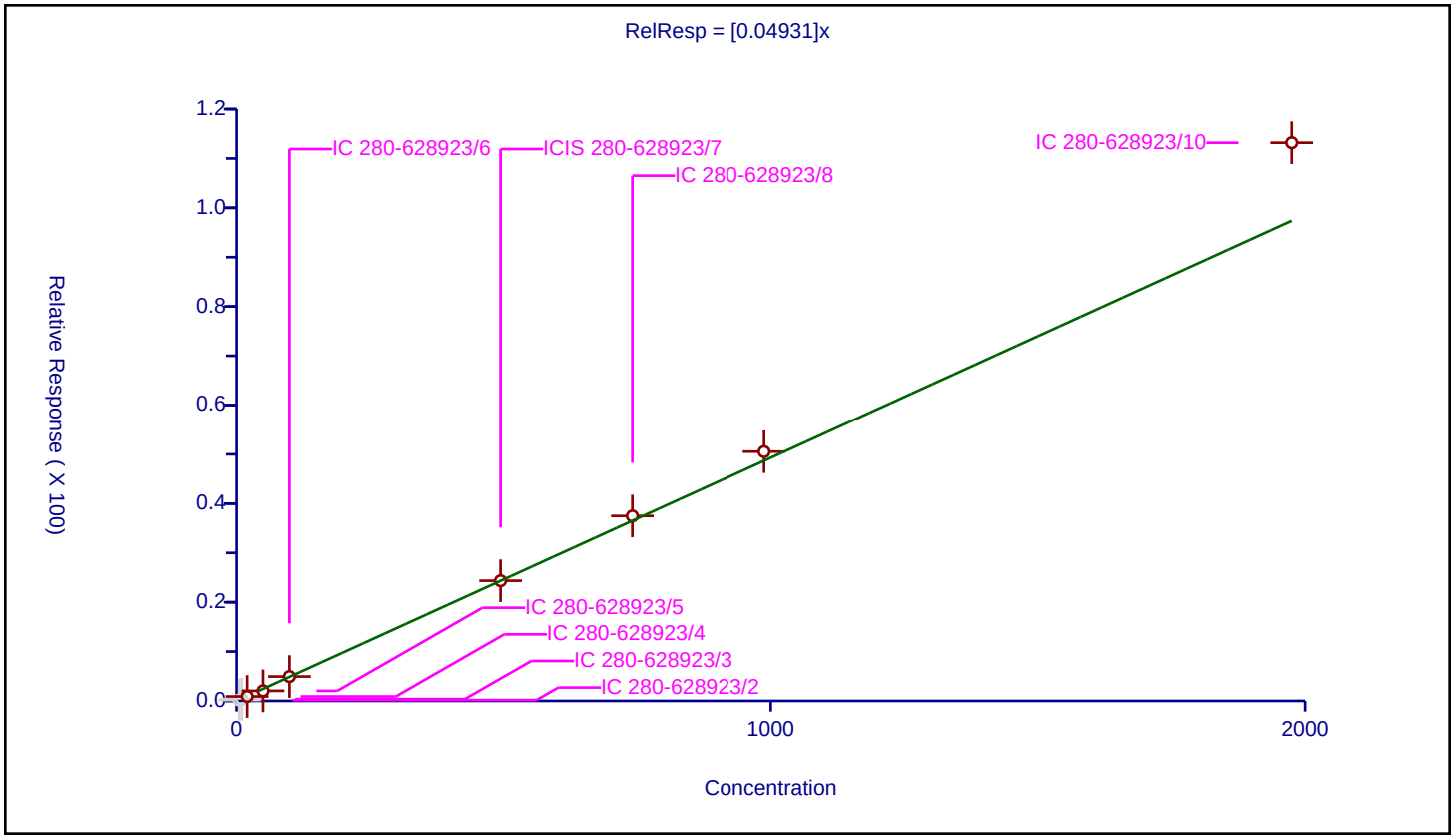
Curve Coefficients

Intercept:	0
Slope:	0.04931

Error Coefficients

Standard Error:	2440000
Relative Standard Error:	10.1
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	4.9375	0.171224	50.0	2079729.0	0.034678	N
2	IC 280-628923/3	9.875	0.373352	50.0	2228592.0	0.037808	N
3	IC 280-628923/4	19.75	0.898861	50.0	2130473.0	0.045512	Y
4	IC 280-628923/5	49.375	2.035321	50.0	2207588.0	0.041222	Y
5	IC 280-628923/6	98.75	4.933719	50.0	2200166.0	0.049962	Y
6	ICIS 280-628923/7	493.75	24.360297	50.0	2307671.0	0.049337	Y
7	IC 280-628923/8	740.625	37.492081	50.0	2209796.0	0.050622	Y
8	IC 280-628923/9	987.5	50.539704	50.0	2262350.0	0.051179	Y
9	IC 280-628923/10	1975.0	113.190025	50.0	2275189.0	0.057311	Y



Calibration / 1,1-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

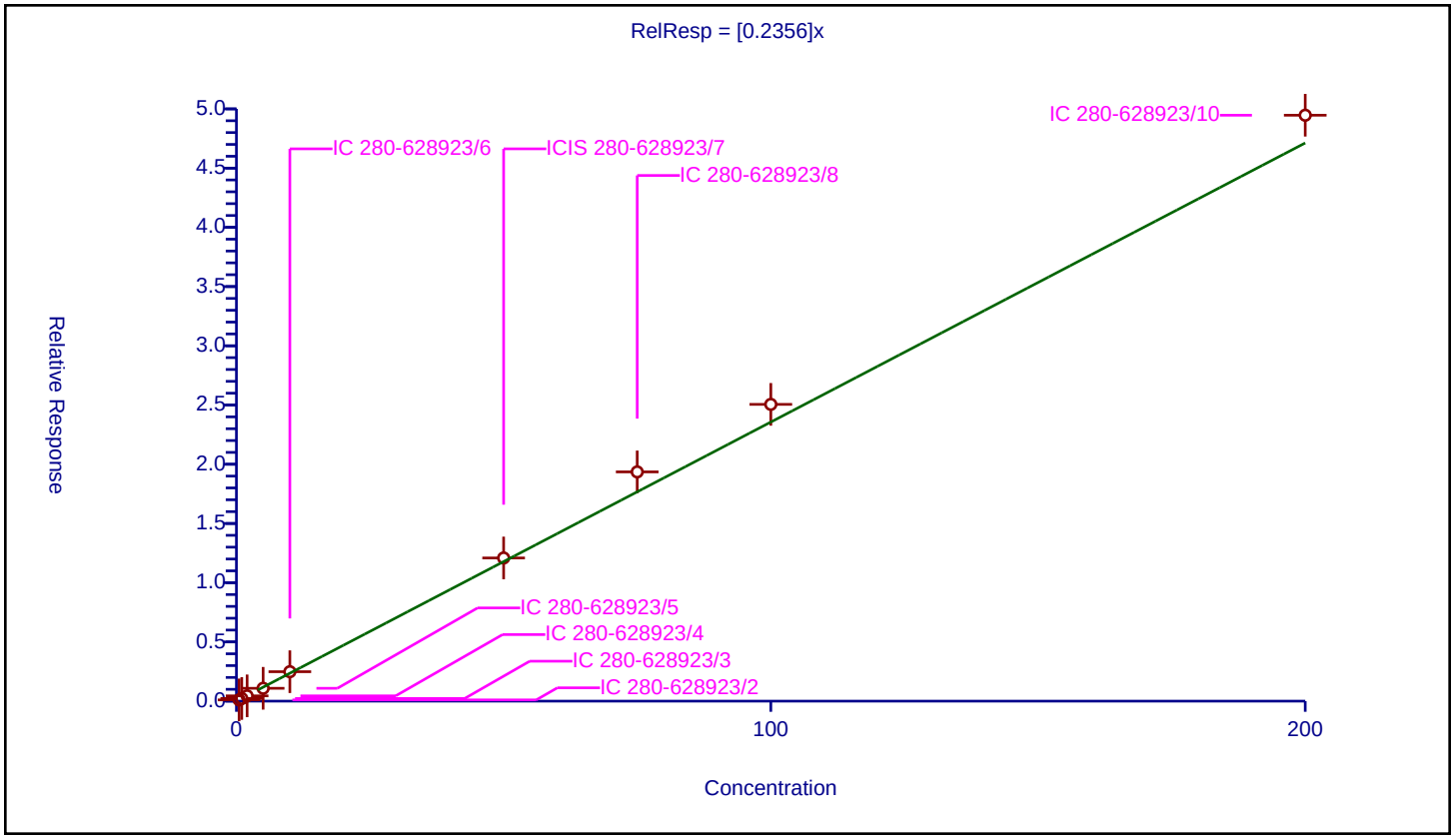
Curve Coefficients

Intercept:	0
Slope:	0.2356

Error Coefficients

Standard Error:	962000
Relative Standard Error:	7.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.105495	50.0	2079729.0	0.210989	Y
2	IC 280-628923/3	1.0	0.223235	50.0	2228592.0	0.223235	Y
3	IC 280-628923/4	2.0	0.445981	50.0	2130473.0	0.22299	Y
4	IC 280-628923/5	5.0	1.085597	50.0	2207588.0	0.217119	Y
5	IC 280-628923/6	10.0	2.484744	50.0	2200166.0	0.248474	Y
6	ICIS 280-628923/7	50.0	12.087057	50.0	2307671.0	0.241741	Y
7	IC 280-628923/8	75.0	19.353891	50.0	2209796.0	0.258052	Y
8	IC 280-628923/9	100.0	25.055451	50.0	2262350.0	0.250555	Y
9	IC 280-628923/10	200.0	49.465297	50.0	2275189.0	0.247326	Y



Calibration / 1,1,2-Trichloro-1,2,2-trifluoroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

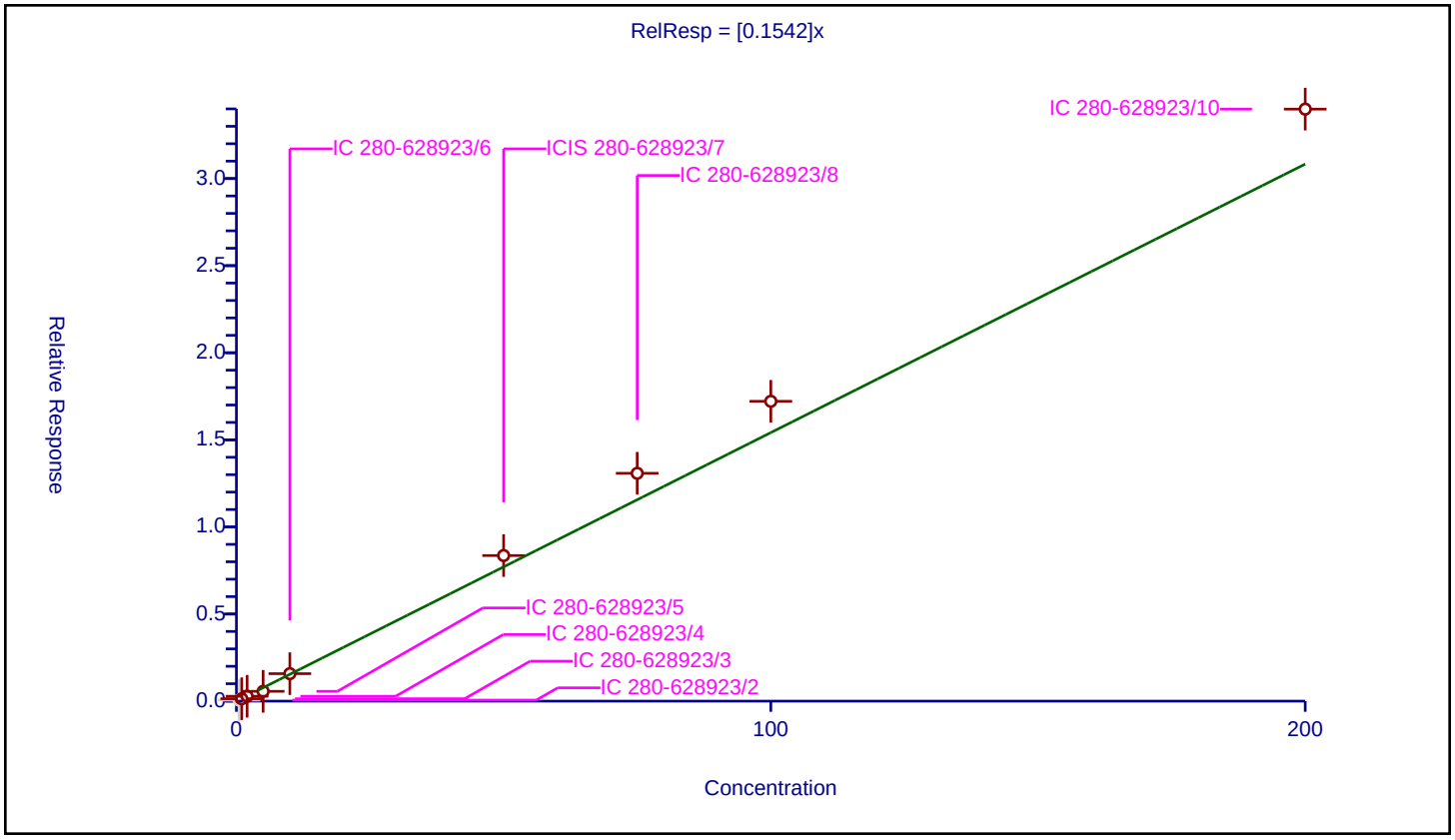
Curve Coefficients

Intercept:	0
Slope:	0.1542

Error Coefficients

Standard Error:	706000
Relative Standard Error:	14.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.977

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.058926	50.0	2079729.0	0.117852	N
2	IC 280-628923/3	1.0	0.138922	50.0	2228592.0	0.138922	Y
3	IC 280-628923/4	2.0	0.280431	50.0	2130473.0	0.140215	Y
4	IC 280-628923/5	5.0	0.563737	50.0	2207588.0	0.112747	Y
5	IC 280-628923/6	10.0	1.577676	50.0	2200166.0	0.157768	Y
6	ICIS 280-628923/7	50.0	8.358384	50.0	2307671.0	0.167168	Y
7	IC 280-628923/8	75.0	13.079692	50.0	2209796.0	0.174396	Y
8	IC 280-628923/9	100.0	17.212655	50.0	2262350.0	0.172127	Y
9	IC 280-628923/10	200.0	33.986429	50.0	2275189.0	0.169932	Y



Calibration / Acetone

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

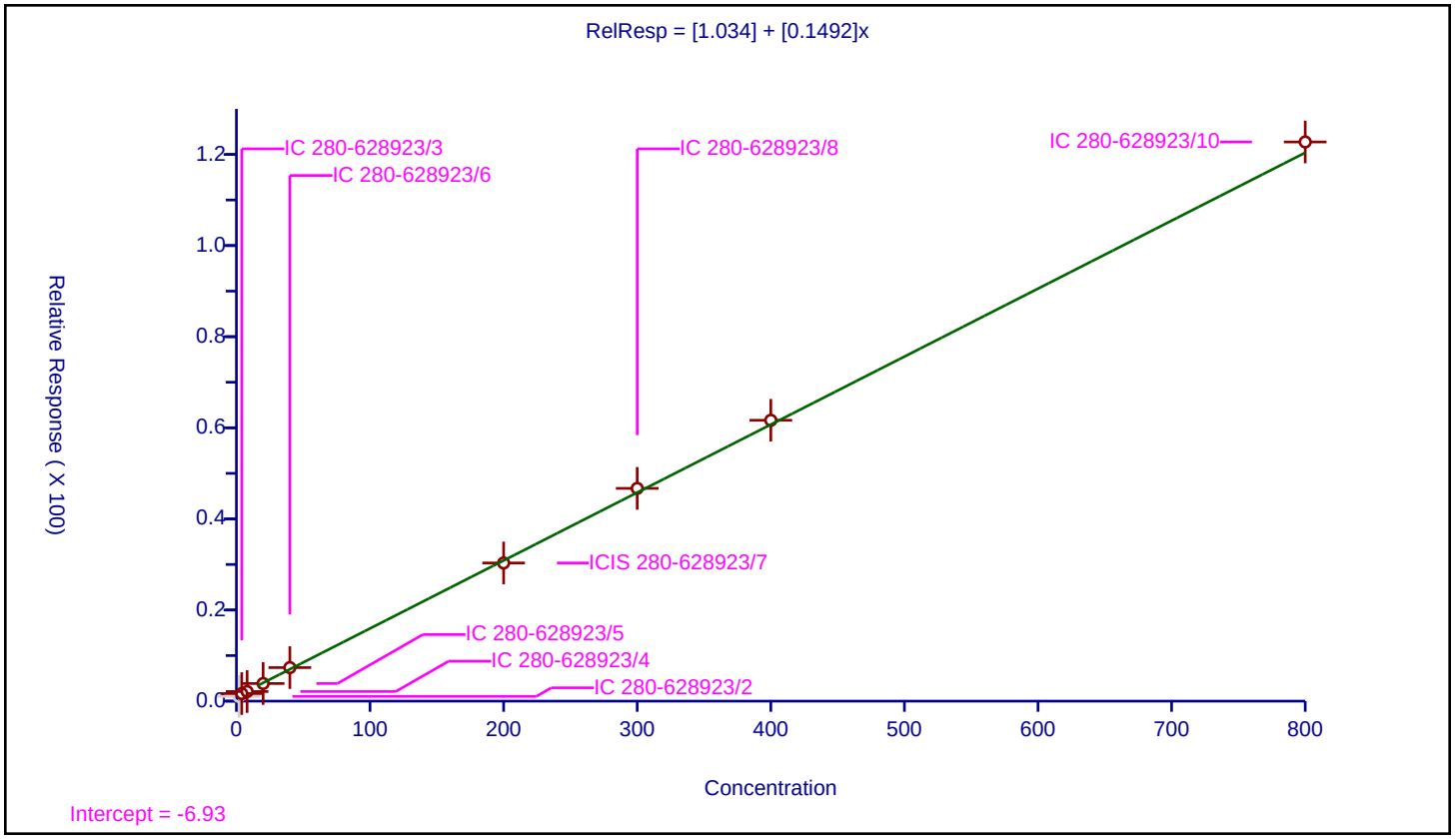
Curve Coefficients

Intercept:	1.034
Slope:	0.1492

Error Coefficients

Standard Error:	2750000
Relative Standard Error:	6.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	2.0	1.036746	50.0	2079729.0	0.518373	N
2	IC 280-628923/3	4.0	1.663943	50.0	2228592.0	0.415986	Y
3	IC 280-628923/4	8.0	2.105565	50.0	2130473.0	0.263196	Y
4	IC 280-628923/5	20.0	3.864874	50.0	2207588.0	0.193244	Y
5	IC 280-628923/6	40.0	7.364626	50.0	2200166.0	0.184116	Y
6	ICIS 280-628923/7	200.0	30.324817	50.0	2307671.0	0.151624	Y
7	IC 280-628923/8	300.0	46.704764	50.0	2209796.0	0.155683	Y
8	IC 280-628923/9	400.0	61.650364	50.0	2262350.0	0.154126	Y
9	IC 280-628923/10	800.0	122.74077	50.0	2275189.0	0.153426	Y



Calibration / Iodomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

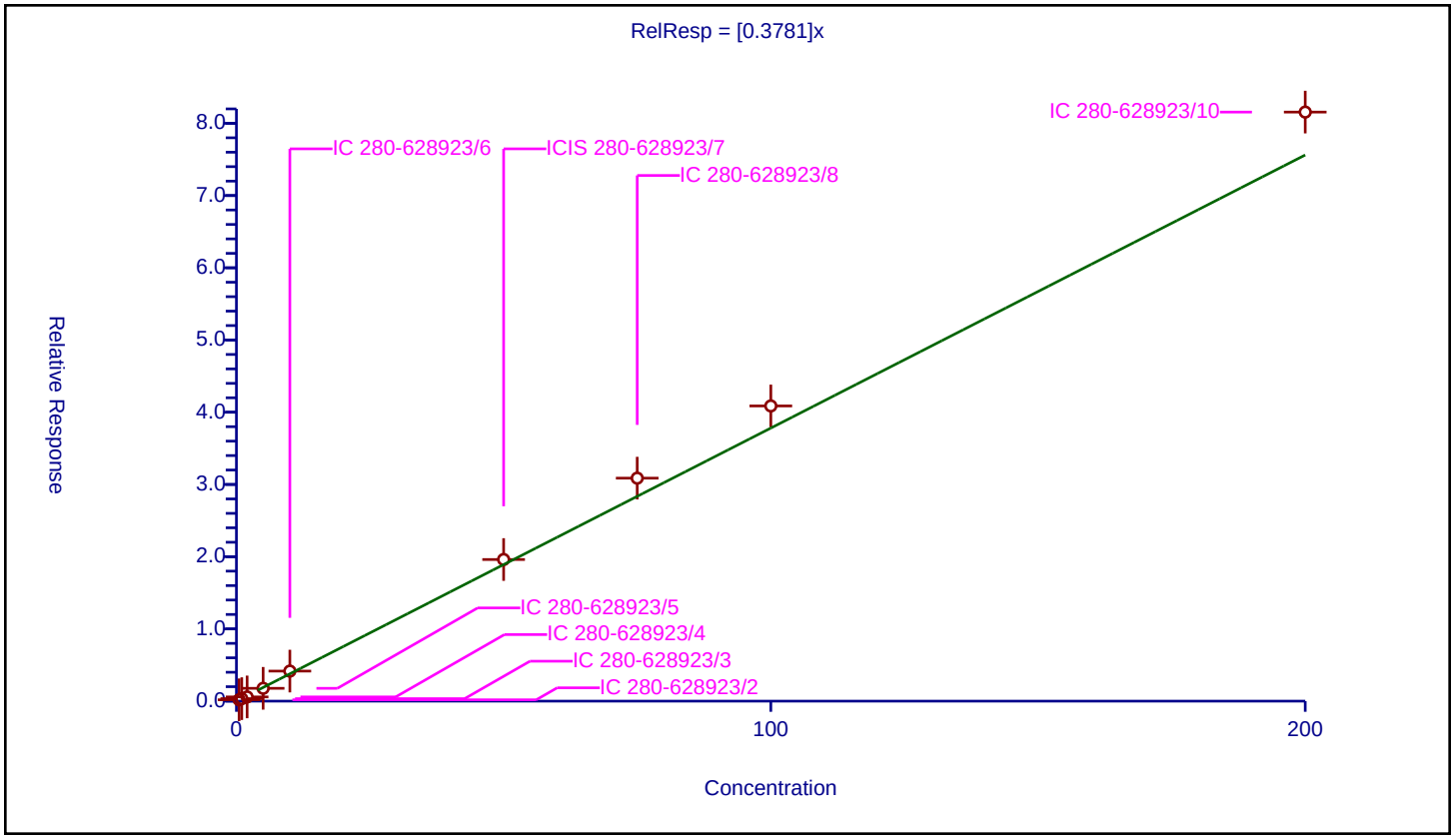
Curve Coefficients

Intercept:	0
Slope:	0.3781

Error Coefficients

Standard Error:	1580000
Relative Standard Error:	11.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.187116	50.0	2079729.0	0.374231	Y
2	IC 280-628923/3	1.0	0.345465	50.0	2228592.0	0.345465	Y
3	IC 280-628923/4	2.0	0.582899	50.0	2130473.0	0.291449	Y
4	IC 280-628923/5	5.0	1.774878	50.0	2207588.0	0.354976	Y
5	IC 280-628923/6	10.0	4.162368	50.0	2200166.0	0.416237	Y
6	ICIS 280-628923/7	50.0	19.610074	50.0	2307671.0	0.392201	Y
7	IC 280-628923/8	75.0	30.873959	50.0	2209796.0	0.411653	Y
8	IC 280-628923/9	100.0	40.872478	50.0	2262350.0	0.408725	Y
9	IC 280-628923/10	200.0	81.559136	50.0	2275189.0	0.407796	Y



Calibration / Carbon disulfide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

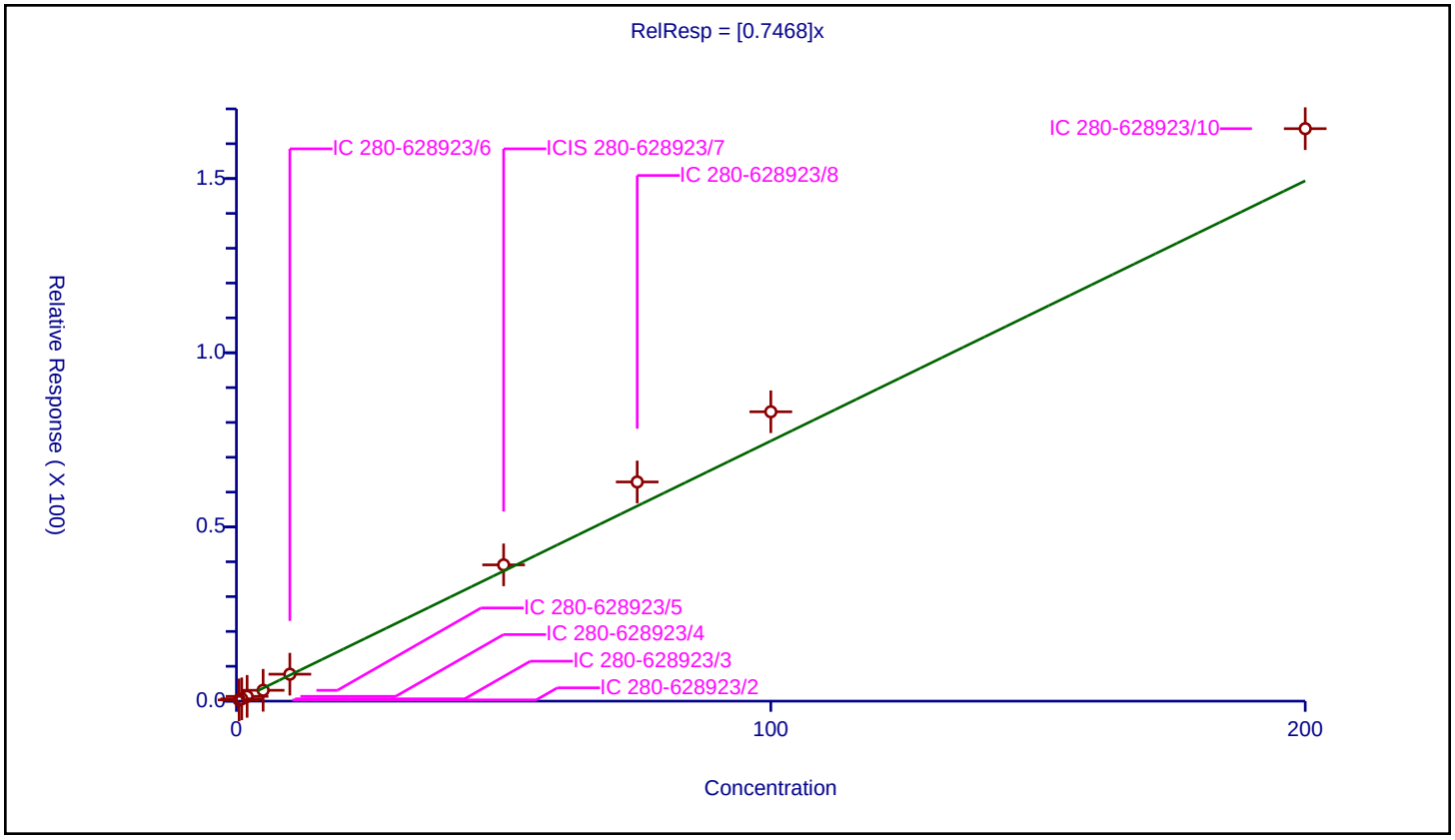
Curve Coefficients

Intercept:	0
Slope:	0.7468

Error Coefficients

Standard Error:	3190000
Relative Standard Error:	10.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.352594	50.0	2079729.0	0.705188	Y
2	IC 280-628923/3	1.0	0.662907	50.0	2228592.0	0.662907	Y
3	IC 280-628923/4	2.0	1.368687	50.0	2130473.0	0.684343	Y
4	IC 280-628923/5	5.0	3.112356	50.0	2207588.0	0.622471	Y
5	IC 280-628923/6	10.0	7.730099	50.0	2200166.0	0.77301	Y
6	ICIS 280-628923/7	50.0	39.114046	50.0	2307671.0	0.782281	Y
7	IC 280-628923/8	75.0	62.914156	50.0	2209796.0	0.838855	Y
8	IC 280-628923/9	100.0	83.060402	50.0	2262350.0	0.830604	Y
9	IC 280-628923/10	200.0	164.323316	50.0	2275189.0	0.821617	Y



Calibration / Methyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

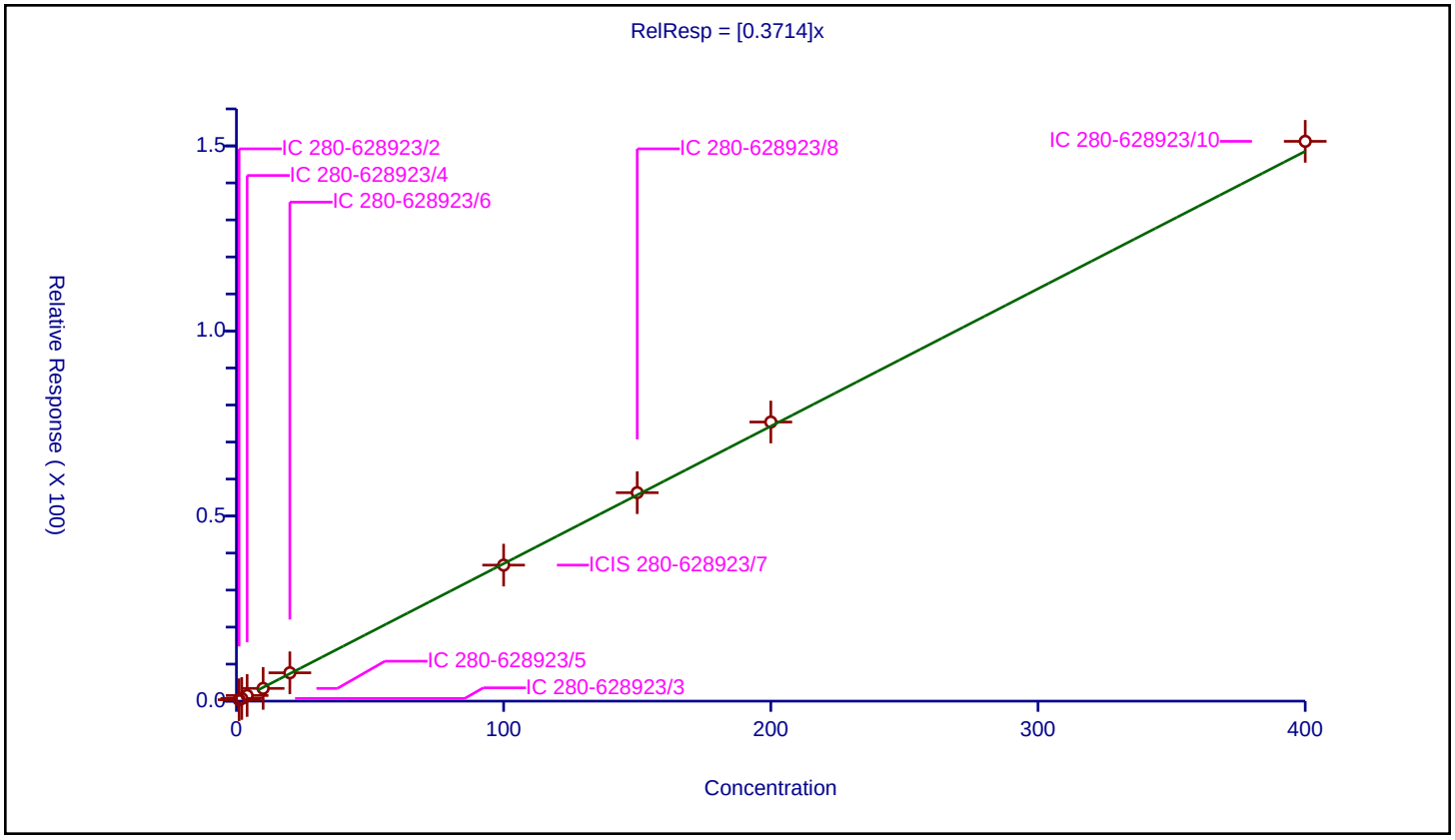
Curve Coefficients

Intercept:	0
Slope:	0.3714

Error Coefficients

Standard Error:	2920000
Relative Standard Error:	3.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	1.0	0.379641	50.0	2079729.0	0.379641	Y
2	IC 280-628923/3	2.0	0.713477	50.0	2228592.0	0.356739	Y
3	IC 280-628923/4	4.0	1.522667	50.0	2130473.0	0.380667	Y
4	IC 280-628923/5	10.0	3.440588	50.0	2207588.0	0.344059	Y
5	IC 280-628923/6	20.0	7.660149	50.0	2200166.0	0.383007	Y
6	ICIS 280-628923/7	100.0	36.750083	50.0	2307671.0	0.367501	Y
7	IC 280-628923/8	150.0	56.322846	50.0	2209796.0	0.375486	Y
8	IC 280-628923/9	200.0	75.403076	50.0	2262350.0	0.377015	Y
9	IC 280-628923/10	400.0	151.238644	50.0	2275189.0	0.378097	Y



Calibration / 3-Chloro-1-propene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

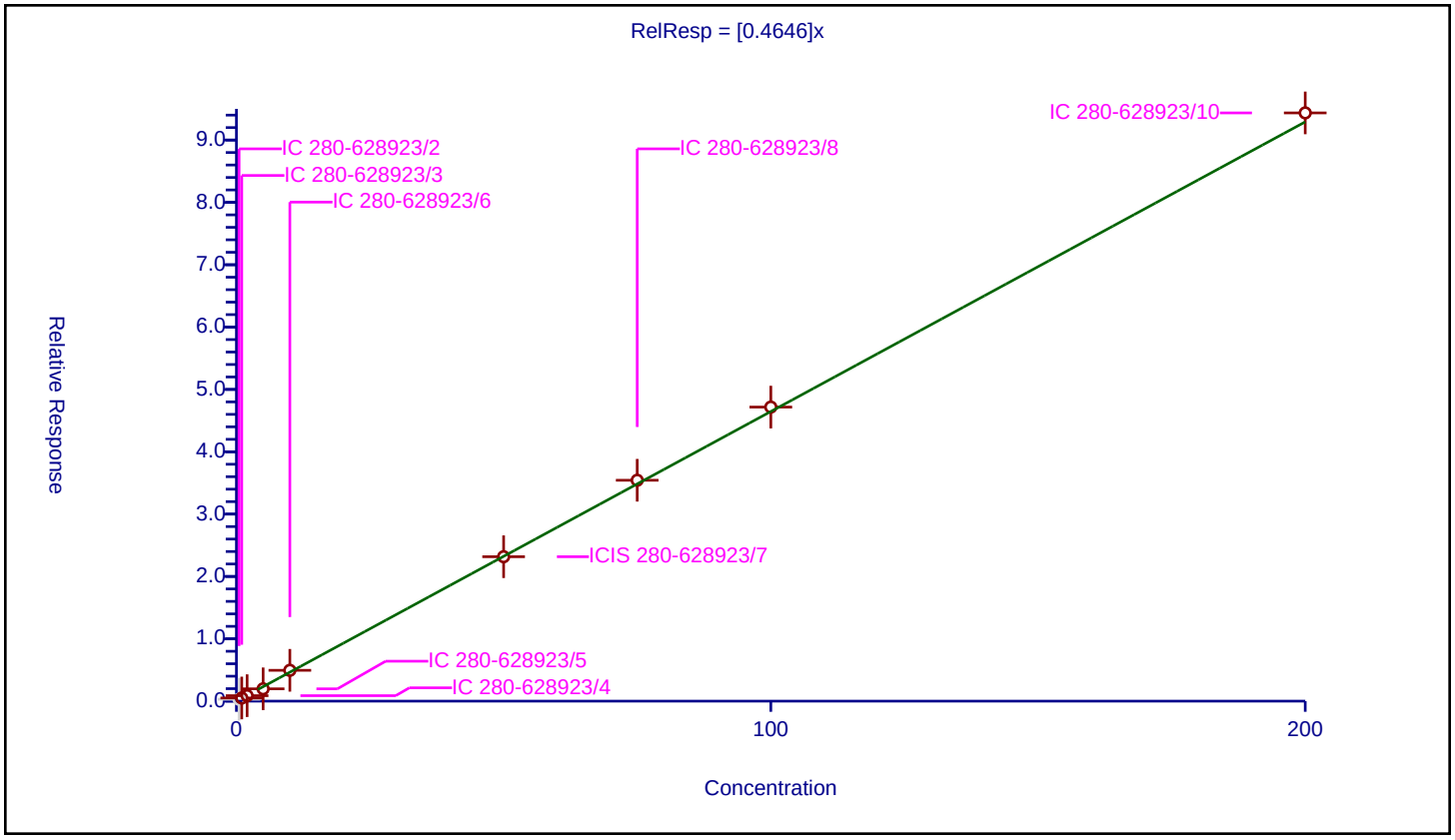
Curve Coefficients

Intercept:	0
Slope:	0.4646

Error Coefficients

Standard Error:	1950000
Relative Standard Error:	7.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.305857	50.0	2079729.0	0.611714	N
2	IC 280-628923/3	1.0	0.508146	50.0	2228592.0	0.508146	Y
3	IC 280-628923/4	2.0	0.879805	50.0	2130473.0	0.439902	Y
4	IC 280-628923/5	5.0	1.974531	50.0	2207588.0	0.394906	Y
5	IC 280-628923/6	10.0	4.944422	50.0	2200166.0	0.494442	Y
6	ICIS 280-628923/7	50.0	23.164481	50.0	2307671.0	0.46329	Y
7	IC 280-628923/8	75.0	35.430759	50.0	2209796.0	0.47241	Y
8	IC 280-628923/9	100.0	47.165713	50.0	2262350.0	0.471657	Y
9	IC 280-628923/10	200.0	94.355304	50.0	2275189.0	0.471777	Y



Calibration / Methylene Chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

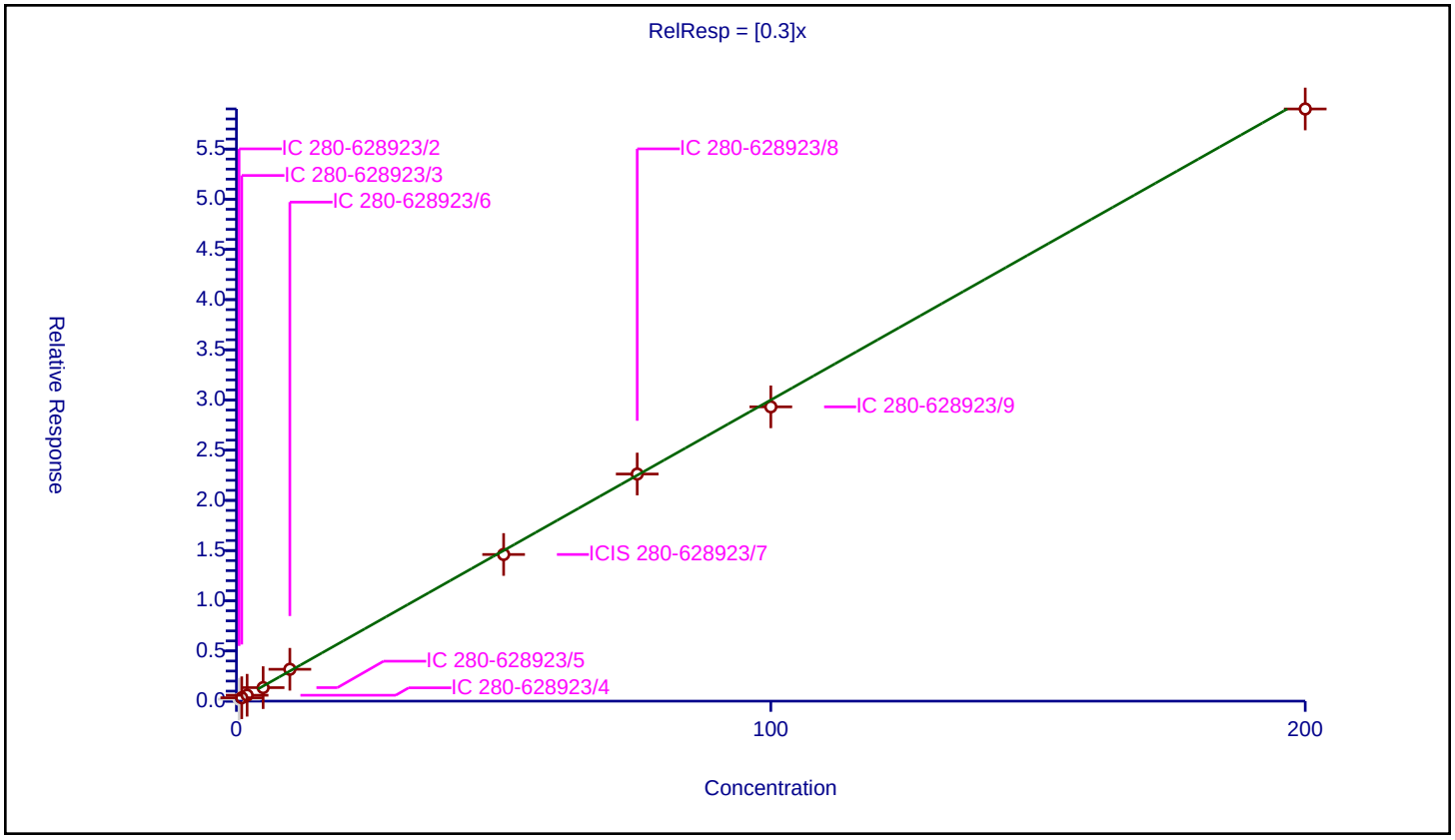
Curve Coefficients

Intercept:	0
Slope:	0.3

Error Coefficients

Standard Error:	1220000
Relative Standard Error:	6.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.198487	50.0	2079729.0	0.396975	N
2	IC 280-628923/3	1.0	0.337455	50.0	2228592.0	0.337455	Y
3	IC 280-628923/4	2.0	0.588132	50.0	2130473.0	0.294066	Y
4	IC 280-628923/5	5.0	1.346107	50.0	2207588.0	0.269221	Y
5	IC 280-628923/6	10.0	3.174192	50.0	2200166.0	0.317419	Y
6	ICIS 280-628923/7	50.0	14.610293	50.0	2307671.0	0.292206	Y
7	IC 280-628923/8	75.0	22.626229	50.0	2209796.0	0.301683	Y
8	IC 280-628923/9	100.0	29.318054	50.0	2262350.0	0.293181	Y
9	IC 280-628923/10	200.0	58.993253	50.0	2275189.0	0.294966	Y



Calibration / 2-Methyl-2-propanol

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

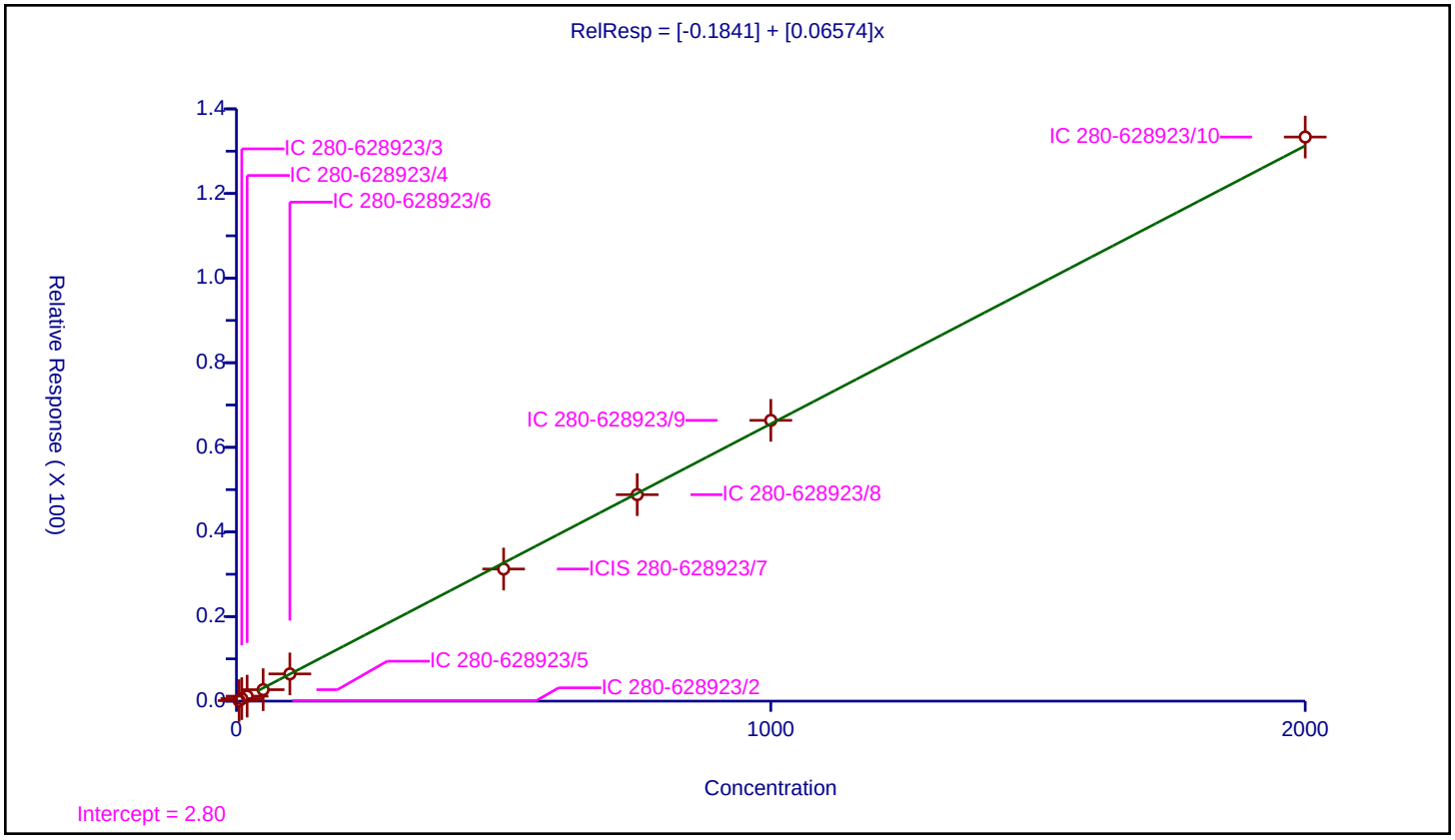
Curve Coefficients

Intercept:	-0.1841
Slope:	0.06574

Error Coefficients

Standard Error:	2740000
Relative Standard Error:	9.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	5.0	0.114534	50.0	2079729.0	0.022907	Y
2	IC 280-628923/3	10.0	0.596565	50.0	2228592.0	0.059657	Y
3	IC 280-628923/4	20.0	1.179996	50.0	2130473.0	0.059	Y
4	IC 280-628923/5	50.0	2.709994	50.0	2207588.0	0.0542	Y
5	IC 280-628923/6	100.0	6.439787	50.0	2200166.0	0.064398	Y
6	ICIS 280-628923/7	500.0	31.233807	50.0	2307671.0	0.062468	Y
7	IC 280-628923/8	750.0	48.809008	50.0	2209796.0	0.065079	Y
8	IC 280-628923/9	1000.0	66.373903	50.0	2262350.0	0.066374	Y
9	IC 280-628923/10	2000.0	133.350284	50.0	2275189.0	0.066675	Y



Calibration / Acrylonitrile

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

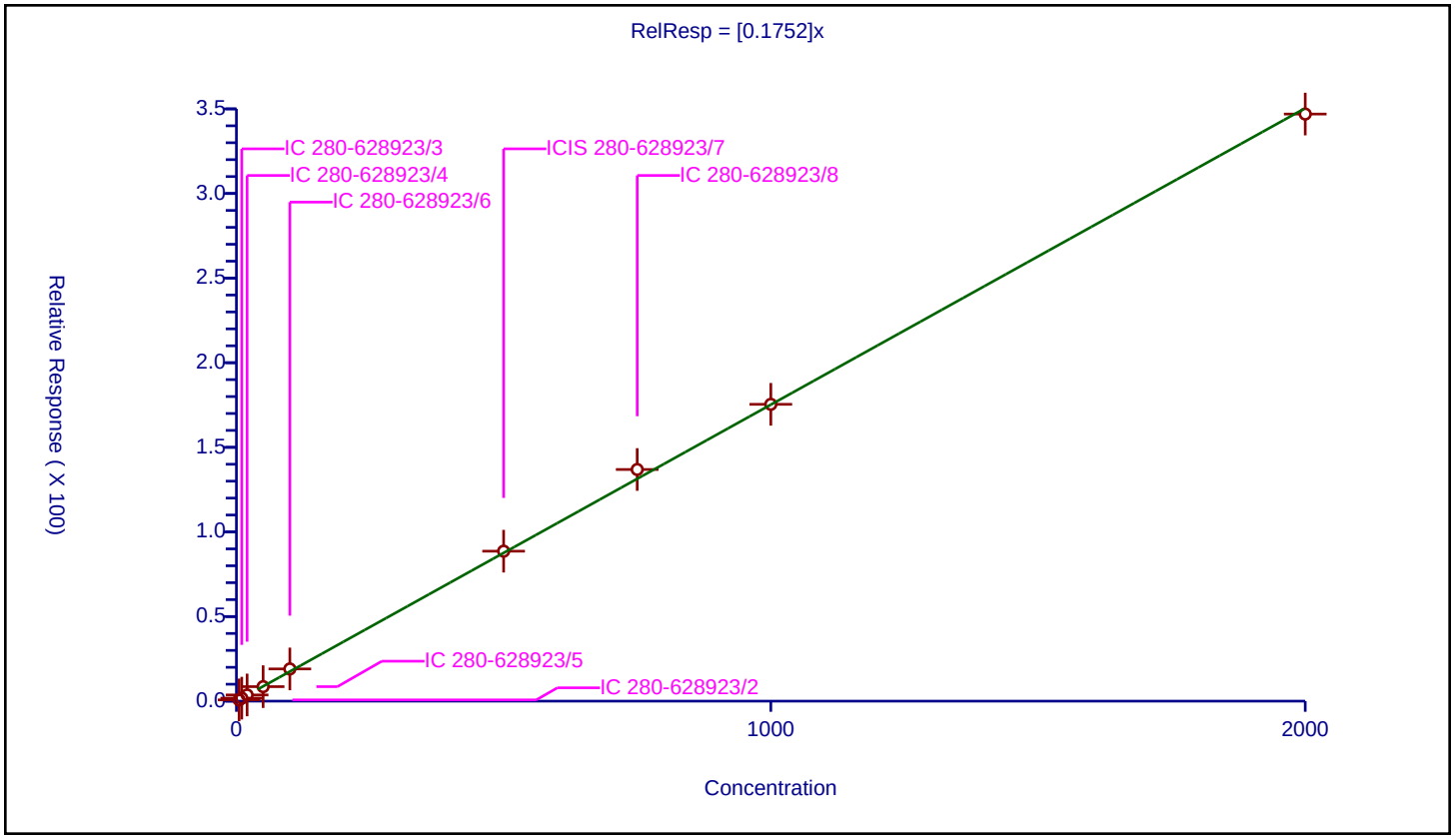
Curve Coefficients

Intercept:	0
Slope:	0.1752

Error Coefficients

Standard Error:	6770000
Relative Standard Error:	6.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	5.0	0.734735	50.0	2079729.0	0.146947	Y
2	IC 280-628923/3	10.0	1.764231	50.0	2228592.0	0.176423	Y
3	IC 280-628923/4	20.0	3.661253	50.0	2130473.0	0.183063	Y
4	IC 280-628923/5	50.0	8.571074	50.0	2207588.0	0.171421	Y
5	IC 280-628923/6	100.0	19.029655	50.0	2200166.0	0.190297	Y
6	ICIS 280-628923/7	500.0	88.626303	50.0	2307671.0	0.177253	Y
7	IC 280-628923/8	750.0	136.896324	50.0	2209796.0	0.182528	Y
8	IC 280-628923/9	1000.0	175.414414	50.0	2262350.0	0.175414	Y
9	IC 280-628923/10	2000.0	346.939221	50.0	2275189.0	0.17347	Y



Calibration / Methyl tert-butyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

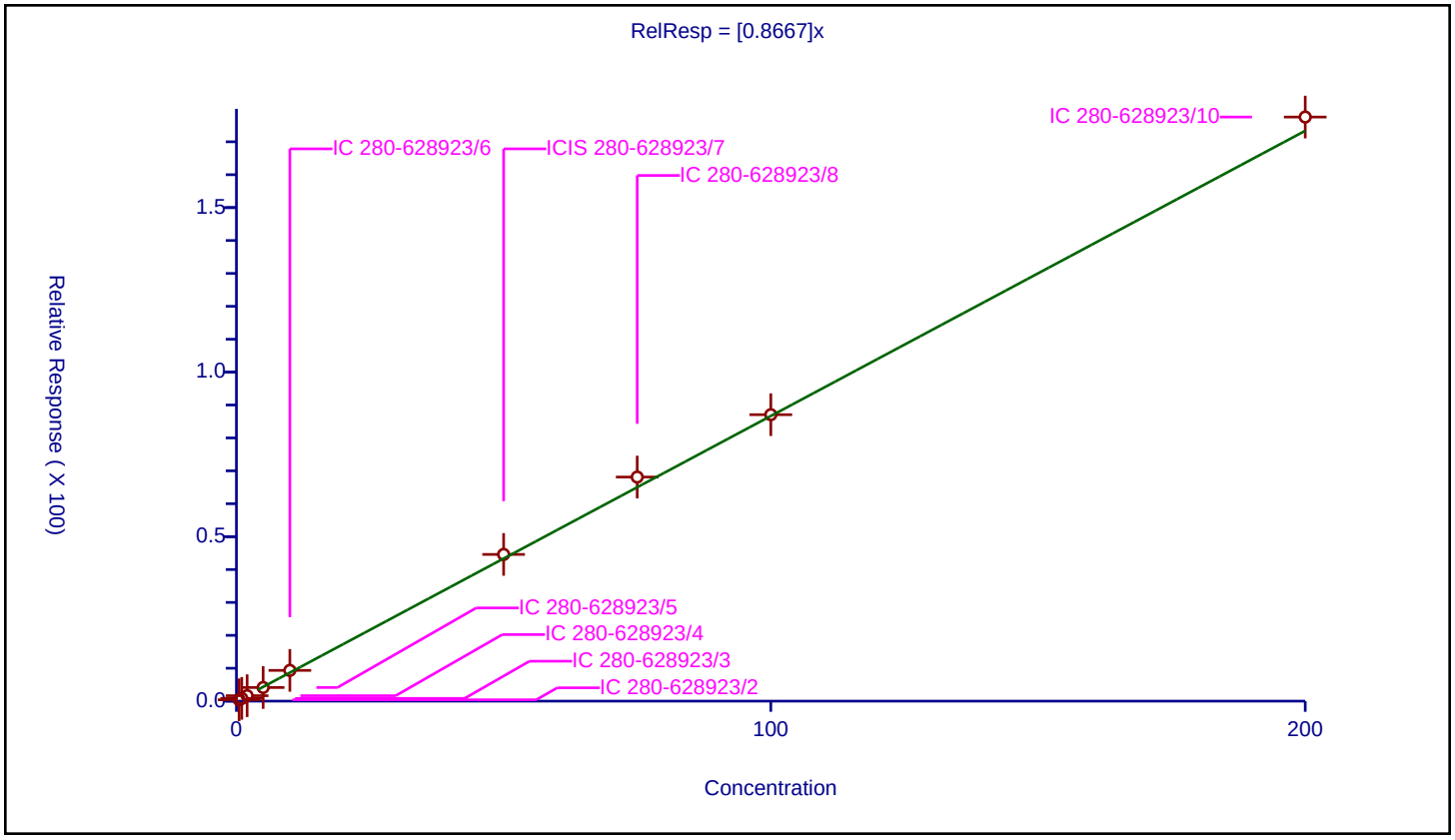
Curve Coefficients

Intercept:	0
Slope:	0.8667

Error Coefficients

Standard Error:	3430000
Relative Standard Error:	4.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.404788	50.0	2079729.0	0.809577	Y
2	IC 280-628923/3	1.0	0.841787	50.0	2228592.0	0.841787	Y
3	IC 280-628923/4	2.0	1.654985	50.0	2130473.0	0.827492	Y
4	IC 280-628923/5	5.0	4.143889	50.0	2207588.0	0.828778	Y
5	IC 280-628923/6	10.0	9.345772	50.0	2200166.0	0.934577	Y
6	ICIS 280-628923/7	50.0	44.588397	50.0	2307671.0	0.891768	Y
7	IC 280-628923/8	75.0	68.106332	50.0	2209796.0	0.908084	Y
8	IC 280-628923/9	100.0	87.066546	50.0	2262350.0	0.870665	Y
9	IC 280-628923/10	200.0	177.521933	50.0	2275189.0	0.88761	Y



Calibration / trans-1,2-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

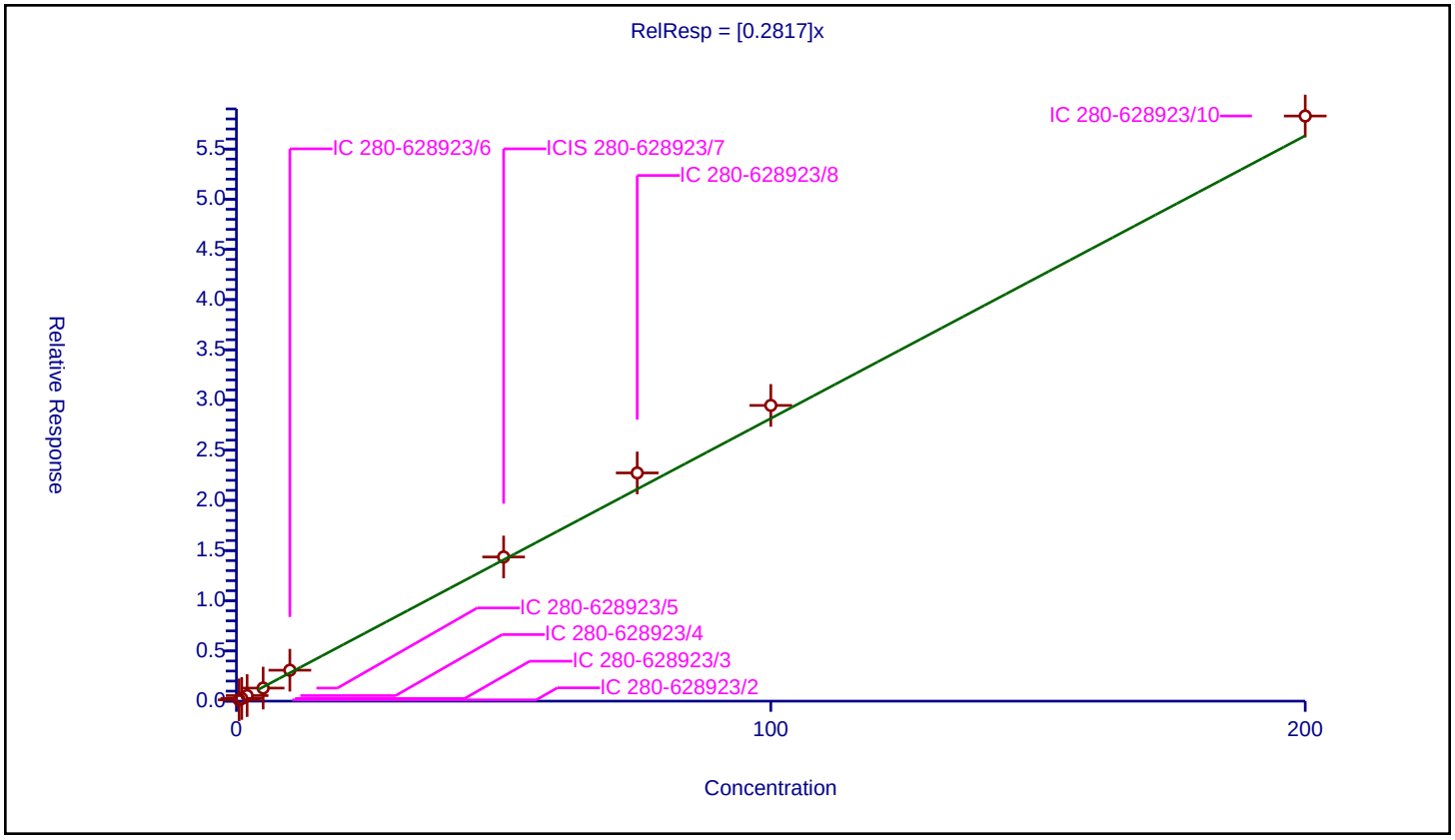
Curve Coefficients

Intercept:	0
Slope:	0.2817

Error Coefficients

Standard Error:	1130000
Relative Standard Error:	7.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.125016	50.0	2079729.0	0.250033	Y
2	IC 280-628923/3	1.0	0.263642	50.0	2228592.0	0.263642	Y
3	IC 280-628923/4	2.0	0.552999	50.0	2130473.0	0.2765	Y
4	IC 280-628923/5	5.0	1.301013	50.0	2207588.0	0.260203	Y
5	IC 280-628923/6	10.0	3.080768	50.0	2200166.0	0.308077	Y
6	ICIS 280-628923/7	50.0	14.360864	50.0	2307671.0	0.287217	Y
7	IC 280-628923/8	75.0	22.734949	50.0	2209796.0	0.303133	Y
8	IC 280-628923/9	100.0	29.460627	50.0	2262350.0	0.294606	Y
9	IC 280-628923/10	200.0	58.292762	50.0	2275189.0	0.291464	Y



Calibration / Hexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

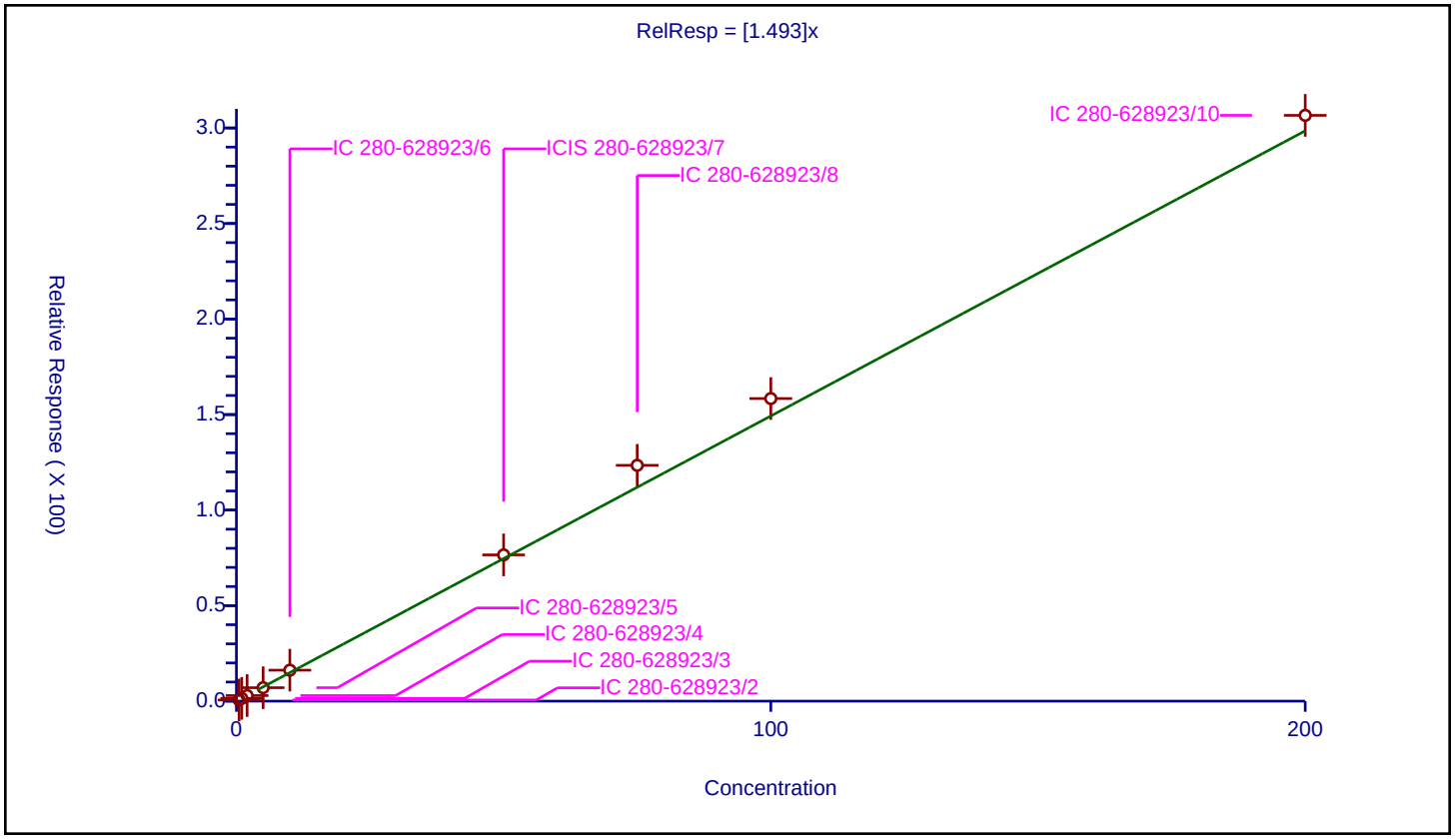
Curve Coefficients

Intercept:	0
Slope:	1.493

Error Coefficients

Standard Error:	1800000
Relative Standard Error:	9.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.595927	50.0	575658.0	1.191853	Y
2	IC 280-628923/3	1.0	1.461673	50.0	651240.0	1.461673	Y
3	IC 280-628923/4	2.0	2.915785	50.0	635798.0	1.457892	Y
4	IC 280-628923/5	5.0	7.038062	50.0	641455.0	1.407612	Y
5	IC 280-628923/6	10.0	16.208579	50.0	635432.0	1.620858	Y
6	ICIS 280-628923/7	50.0	76.553055	50.0	691540.0	1.531061	Y
7	IC 280-628923/8	75.0	123.422743	50.0	651907.0	1.645637	Y
8	IC 280-628923/9	100.0	158.39043	50.0	667147.0	1.583904	Y
9	IC 280-628923/10	200.0	306.608514	50.0	684806.0	1.533043	Y



Calibration / Vinyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

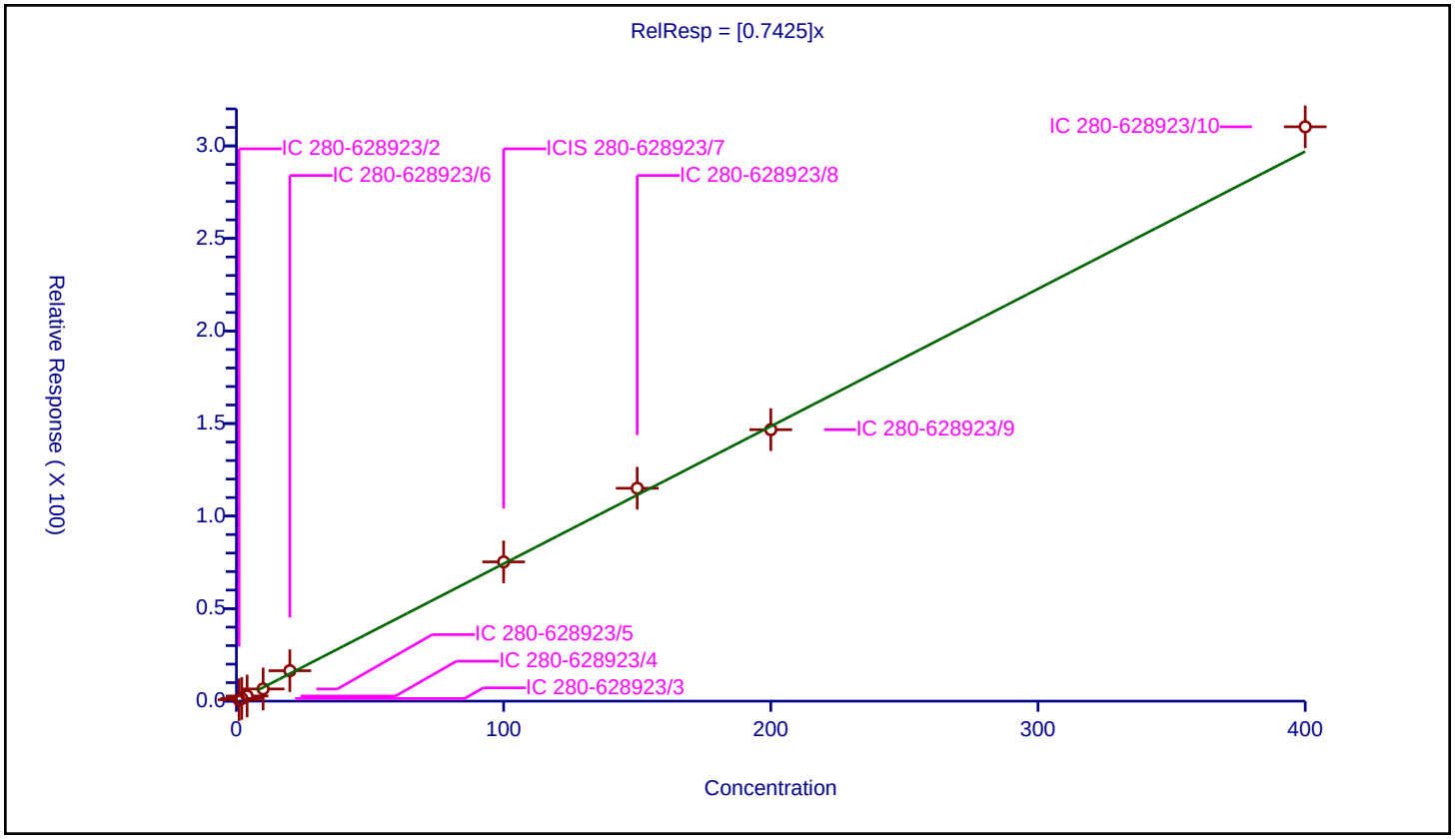
Curve Coefficients

Intercept:	0
Slope:	0.7425

Error Coefficients

Standard Error:	5940000
Relative Standard Error:	6.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	1.0	0.759041	50.0	2079729.0	0.759041	Y
2	IC 280-628923/3	2.0	1.434762	50.0	2228592.0	0.717381	Y
3	IC 280-628923/4	4.0	2.784875	50.0	2130473.0	0.696219	Y
4	IC 280-628923/5	10.0	6.588254	50.0	2207588.0	0.658825	Y
5	IC 280-628923/6	20.0	16.443896	50.0	2200166.0	0.822195	Y
6	ICIS 280-628923/7	100.0	75.24749	50.0	2307671.0	0.752475	Y
7	IC 280-628923/8	150.0	115.037429	50.0	2209796.0	0.766916	Y
8	IC 280-628923/9	200.0	146.67768	50.0	2262350.0	0.733388	Y
9	IC 280-628923/10	400.0	310.308506	50.0	2275189.0	0.775771	Y



Calibration / 1,1-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

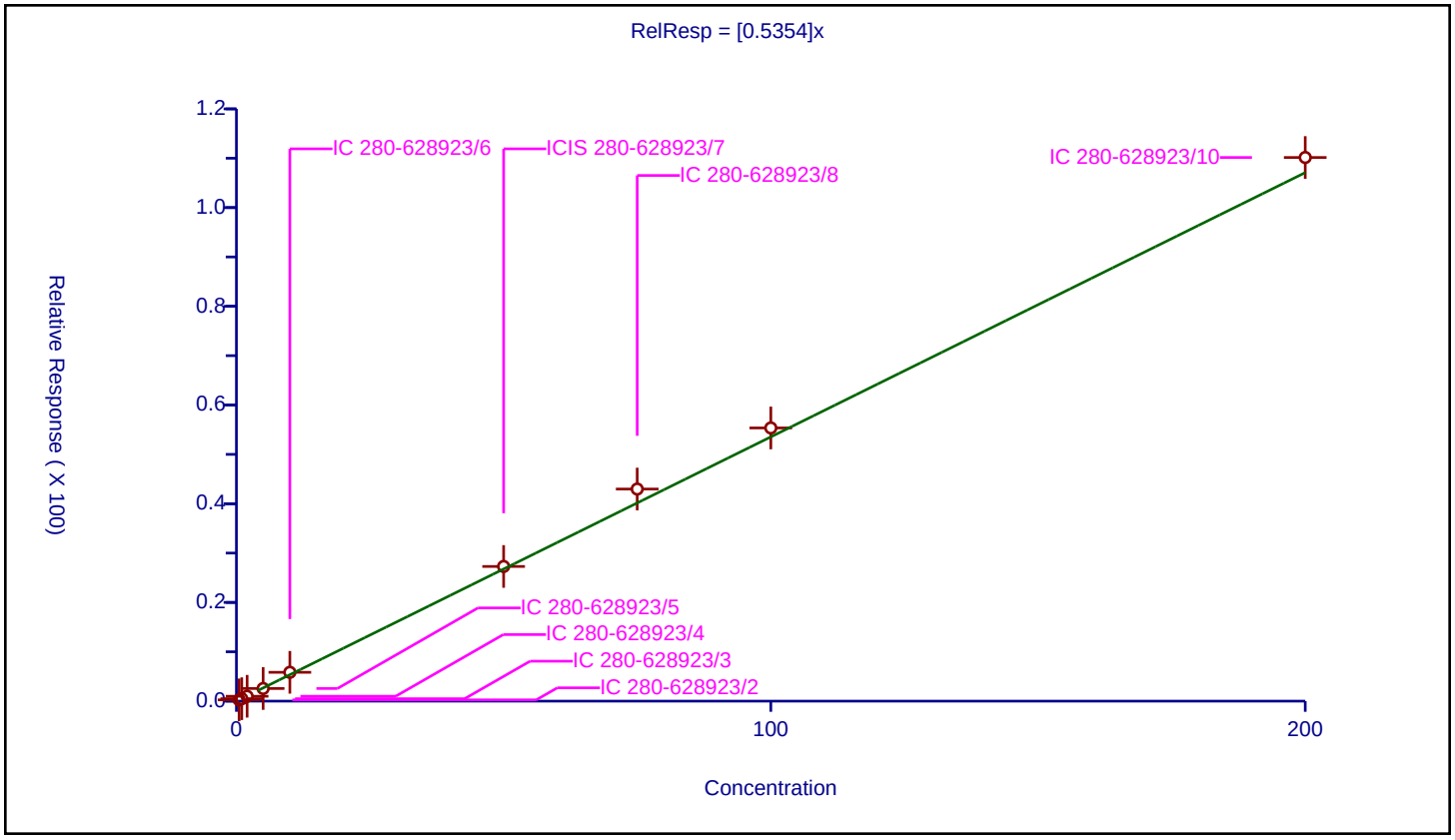
Curve Coefficients

Intercept:	0
Slope:	0.5354

Error Coefficients

Standard Error:	2140000
Relative Standard Error:	6.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.255754	50.0	2079729.0	0.511509	Y
2	IC 280-628923/3	1.0	0.494011	50.0	2228592.0	0.494011	Y
3	IC 280-628923/4	2.0	0.988396	50.0	2130473.0	0.494198	Y
4	IC 280-628923/5	5.0	2.55863	50.0	2207588.0	0.511726	Y
5	IC 280-628923/6	10.0	5.843514	50.0	2200166.0	0.584351	Y
6	ICIS 280-628923/7	50.0	27.287815	50.0	2307671.0	0.545756	Y
7	IC 280-628923/8	75.0	42.97675	50.0	2209796.0	0.573023	Y
8	IC 280-628923/9	100.0	55.355979	50.0	2262350.0	0.55356	Y
9	IC 280-628923/10	200.0	110.152739	50.0	2275189.0	0.550764	Y



Calibration / 2-Butanone (MEK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

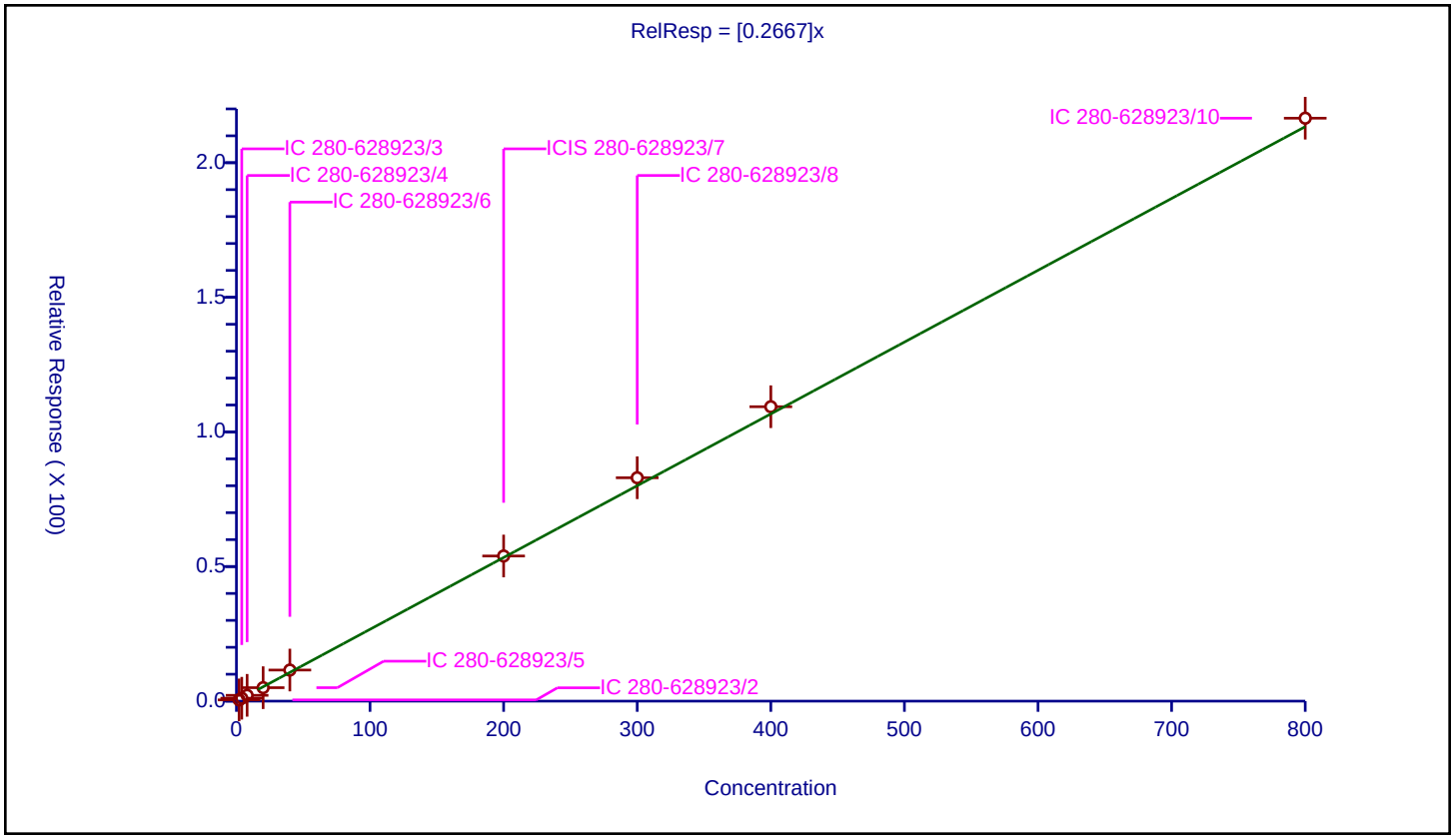
Curve Coefficients

Intercept:	0
Slope:	0.2667

Error Coefficients

Standard Error:	4210000
Relative Standard Error:	6.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	2.0	0.461623	50.0	2079729.0	0.230811	Y
2	IC 280-628923/3	4.0	1.08241	50.0	2228592.0	0.270602	Y
3	IC 280-628923/4	8.0	2.160882	50.0	2130473.0	0.27011	Y
4	IC 280-628923/5	20.0	5.002564	50.0	2207588.0	0.250128	Y
5	IC 280-628923/6	40.0	11.549333	50.0	2200166.0	0.288733	Y
6	ICIS 280-628923/7	200.0	53.918713	50.0	2307671.0	0.269594	Y
7	IC 280-628923/8	300.0	82.985375	50.0	2209796.0	0.276618	Y
8	IC 280-628923/9	400.0	109.364334	50.0	2262350.0	0.273411	Y
9	IC 280-628923/10	800.0	216.543395	50.0	2275189.0	0.270679	Y



Calibration / cis-1,2-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

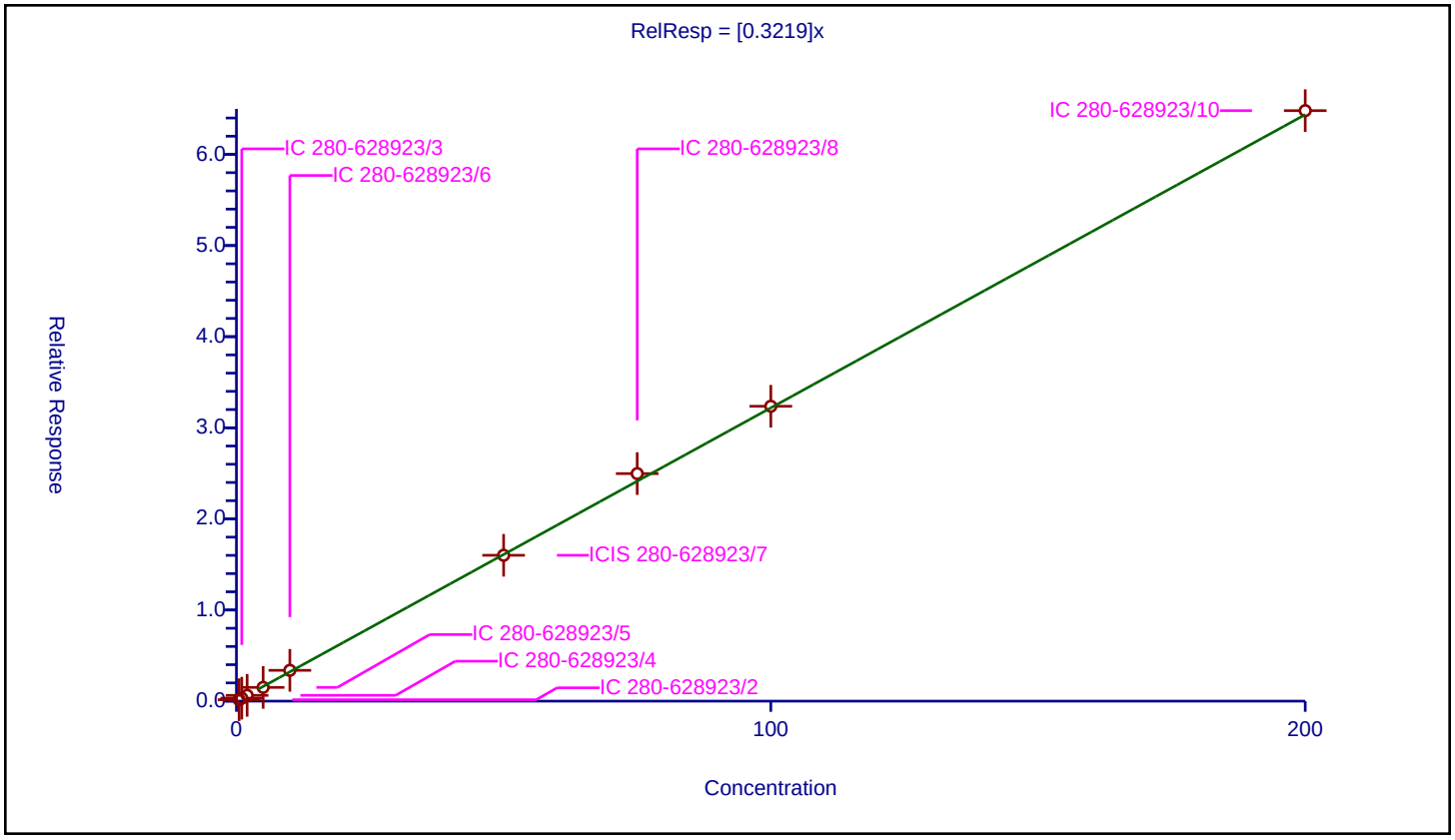
Curve Coefficients

Intercept:	0
Slope:	0.3219

Error Coefficients

Standard Error:	1260000
Relative Standard Error:	3.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.156463	50.0	2079729.0	0.312925	Y
2	IC 280-628923/3	1.0	0.324914	50.0	2228592.0	0.324914	Y
3	IC 280-628923/4	2.0	0.637159	50.0	2130473.0	0.318579	Y
4	IC 280-628923/5	5.0	1.507233	50.0	2207588.0	0.301447	Y
5	IC 280-628923/6	10.0	3.381699	50.0	2200166.0	0.33817	Y
6	ICIS 280-628923/7	50.0	16.007589	50.0	2307671.0	0.320152	Y
7	IC 280-628923/8	75.0	24.973753	50.0	2209796.0	0.332983	Y
8	IC 280-628923/9	100.0	32.361947	50.0	2262350.0	0.323619	Y
9	IC 280-628923/10	200.0	64.80699	50.0	2275189.0	0.324035	Y



Calibration / 2,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

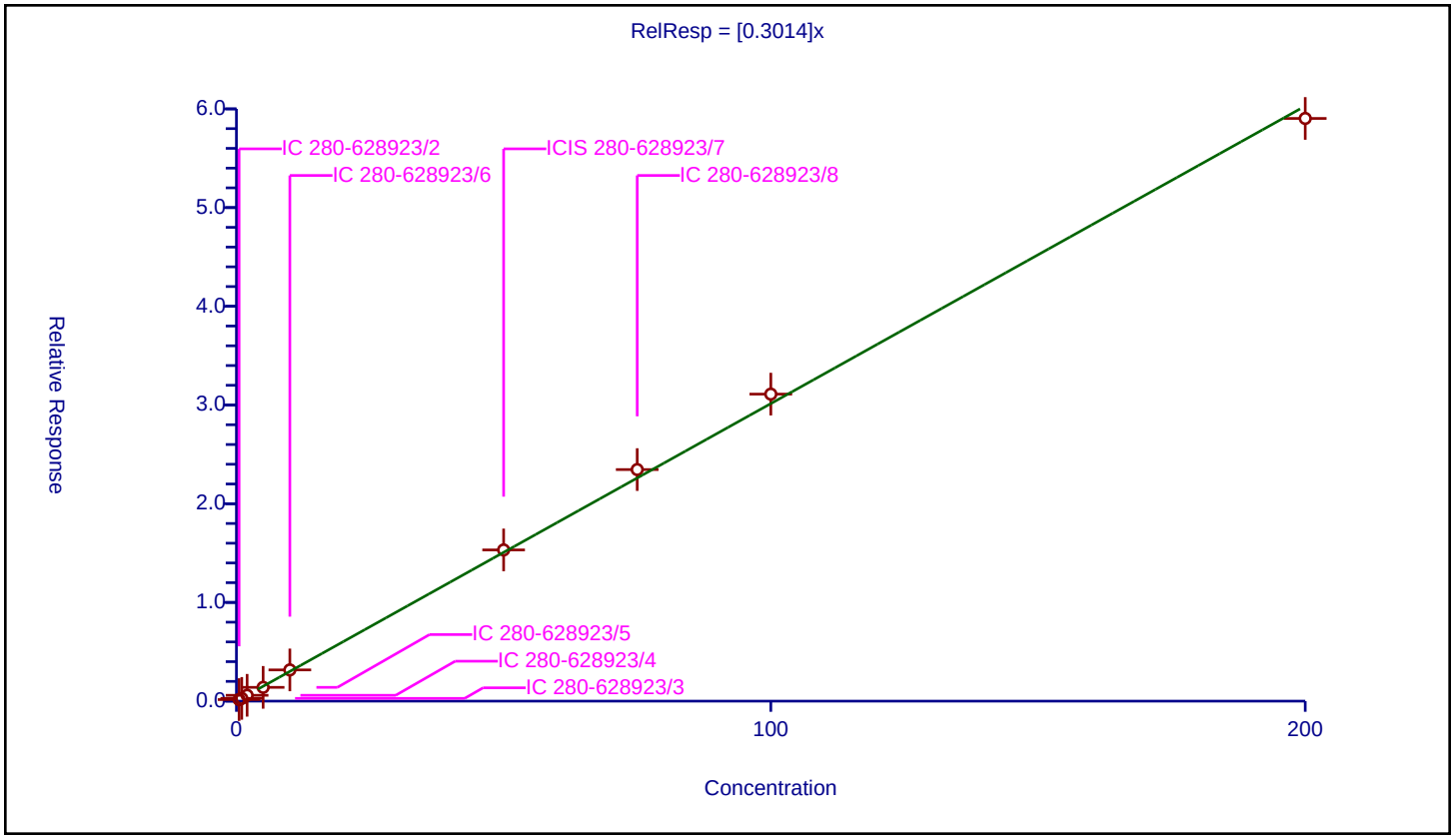
Curve Coefficients

Intercept:	0
Slope:	0.3014

Error Coefficients

Standard Error:	1160000
Relative Standard Error:	4.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.157833	50.0	2079729.0	0.315666	Y
2	IC 280-628923/3	1.0	0.280334	50.0	2228592.0	0.280334	Y
3	IC 280-628923/4	2.0	0.592075	50.0	2130473.0	0.296038	Y
4	IC 280-628923/5	5.0	1.396298	50.0	2207588.0	0.27926	Y
5	IC 280-628923/6	10.0	3.163534	50.0	2200166.0	0.316353	Y
6	ICIS 280-628923/7	50.0	15.32049	50.0	2307671.0	0.30641	Y
7	IC 280-628923/8	75.0	23.459745	50.0	2209796.0	0.312797	Y
8	IC 280-628923/9	100.0	31.103123	50.0	2262350.0	0.311031	Y
9	IC 280-628923/10	200.0	59.031294	50.0	2275189.0	0.295156	Y



Calibration / sec-Butyl Alcohol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

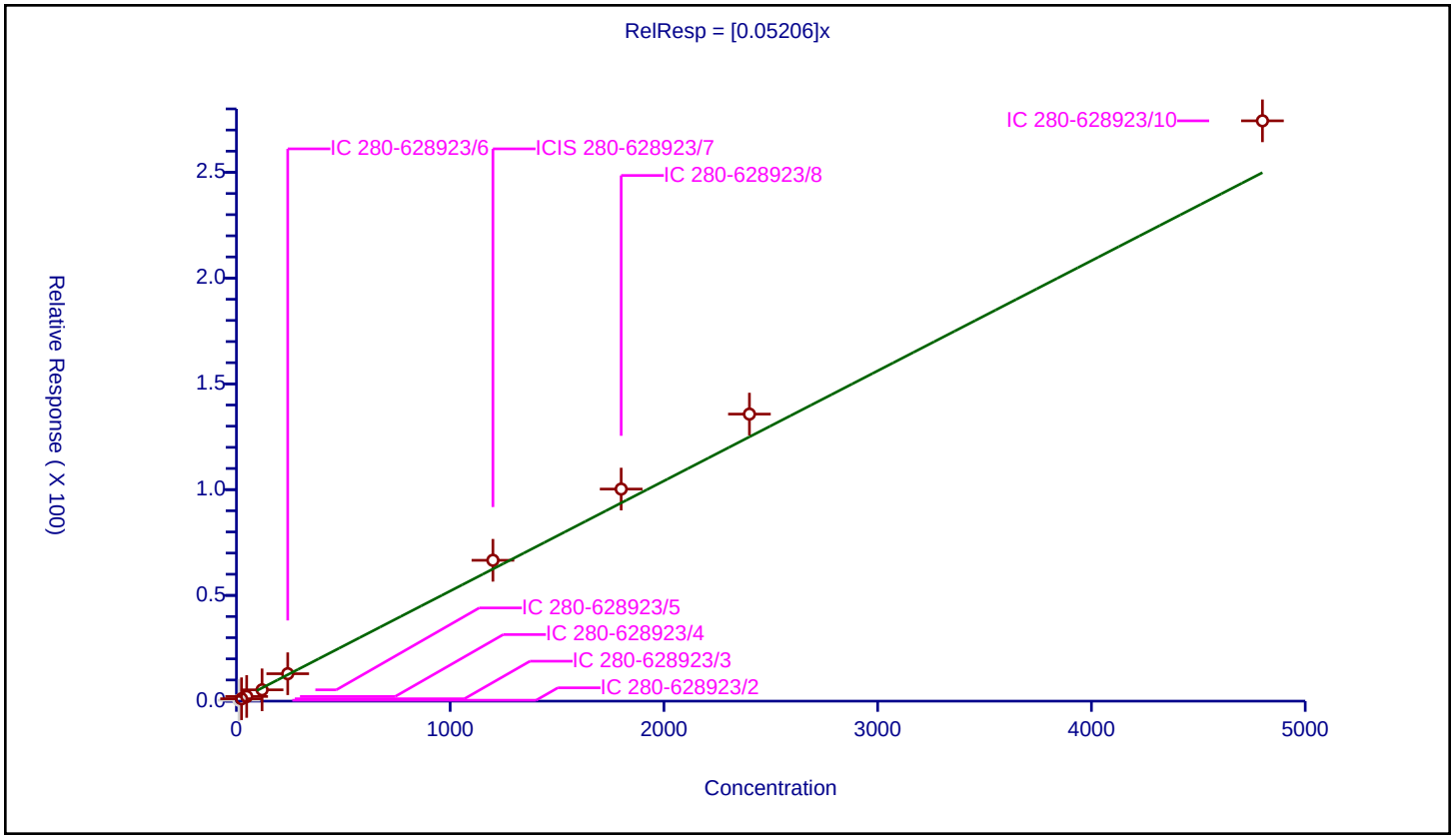
Curve Coefficients

Intercept:	0
Slope:	0.05206

Error Coefficients

Standard Error:	5640000
Relative Standard Error:	10.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	12.0	0.432484	50.0	2079729.0	0.03604	N
2	IC 280-628923/3	24.0	1.13031	50.0	2228592.0	0.047096	Y
3	IC 280-628923/4	48.0	2.204182	50.0	2130473.0	0.04592	Y
4	IC 280-628923/5	120.0	5.345767	50.0	2207588.0	0.044548	Y
5	IC 280-628923/6	240.0	12.962454	50.0	2200166.0	0.05401	Y
6	ICIS 280-628923/7	1200.0	66.594155	50.0	2307671.0	0.055495	Y
7	IC 280-628923/8	1800.0	100.260386	50.0	2209796.0	0.0557	Y
8	IC 280-628923/9	2400.0	135.707848	50.0	2262350.0	0.056545	Y
9	IC 280-628923/10	4800.0	274.356284	50.0	2275189.0	0.057158	Y



Calibration / Chlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

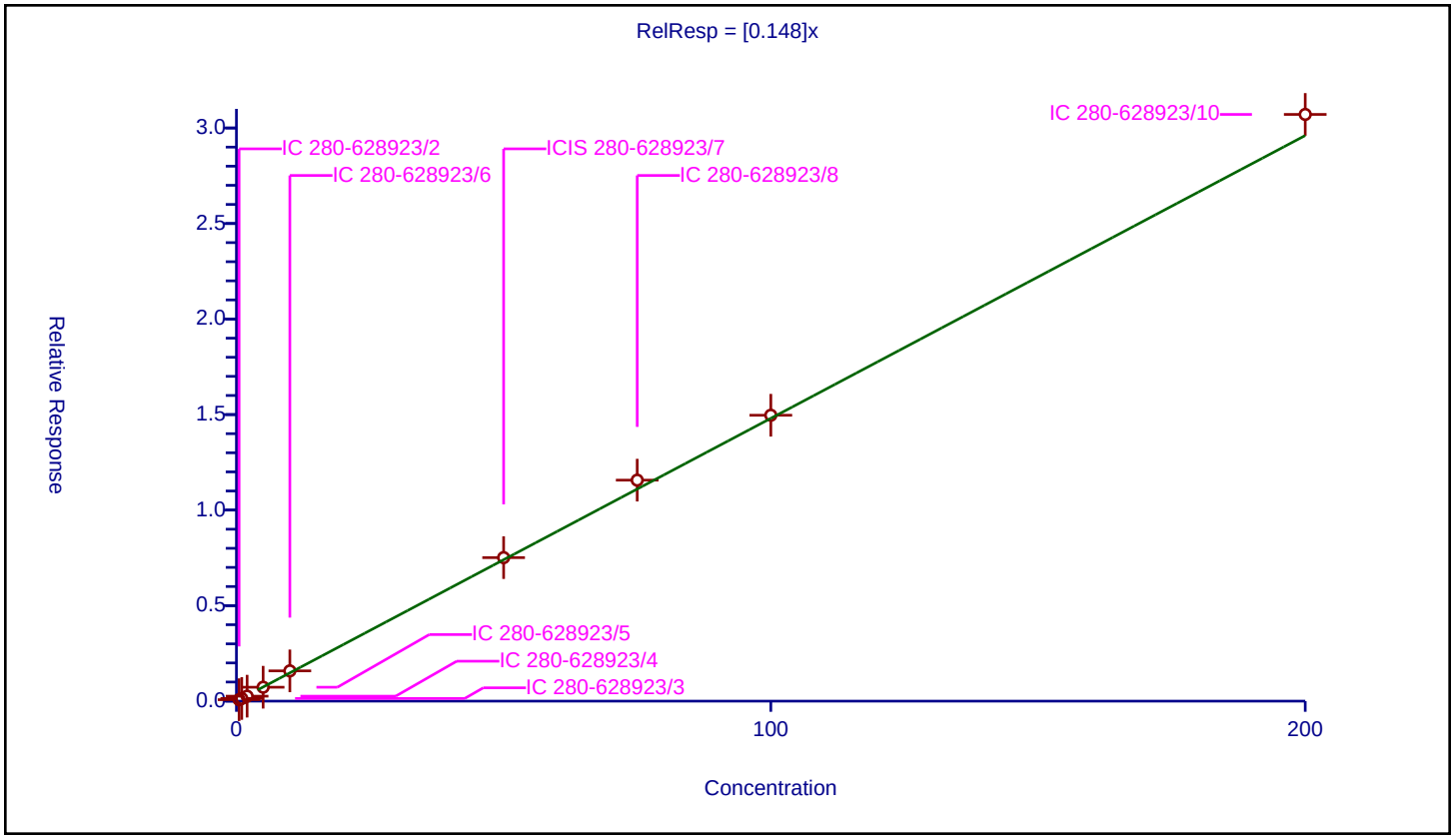
Curve Coefficients

Intercept:	0
Slope:	0.148

Error Coefficients

Standard Error:	591000
Relative Standard Error:	6.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.076044	50.0	2079729.0	0.152087	Y
2	IC 280-628923/3	1.0	0.138271	50.0	2228592.0	0.138271	Y
3	IC 280-628923/4	2.0	0.26013	50.0	2130473.0	0.130065	Y
4	IC 280-628923/5	5.0	0.728669	50.0	2207588.0	0.145734	Y
5	IC 280-628923/6	10.0	1.584358	50.0	2200166.0	0.158436	Y
6	ICIS 280-628923/7	50.0	7.512401	50.0	2307671.0	0.150248	Y
7	IC 280-628923/8	75.0	11.566882	50.0	2209796.0	0.154225	Y
8	IC 280-628923/9	100.0	14.964793	50.0	2262350.0	0.149648	Y
9	IC 280-628923/10	200.0	30.709361	50.0	2275189.0	0.153547	Y



Calibration / Tetrahydrofuran

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

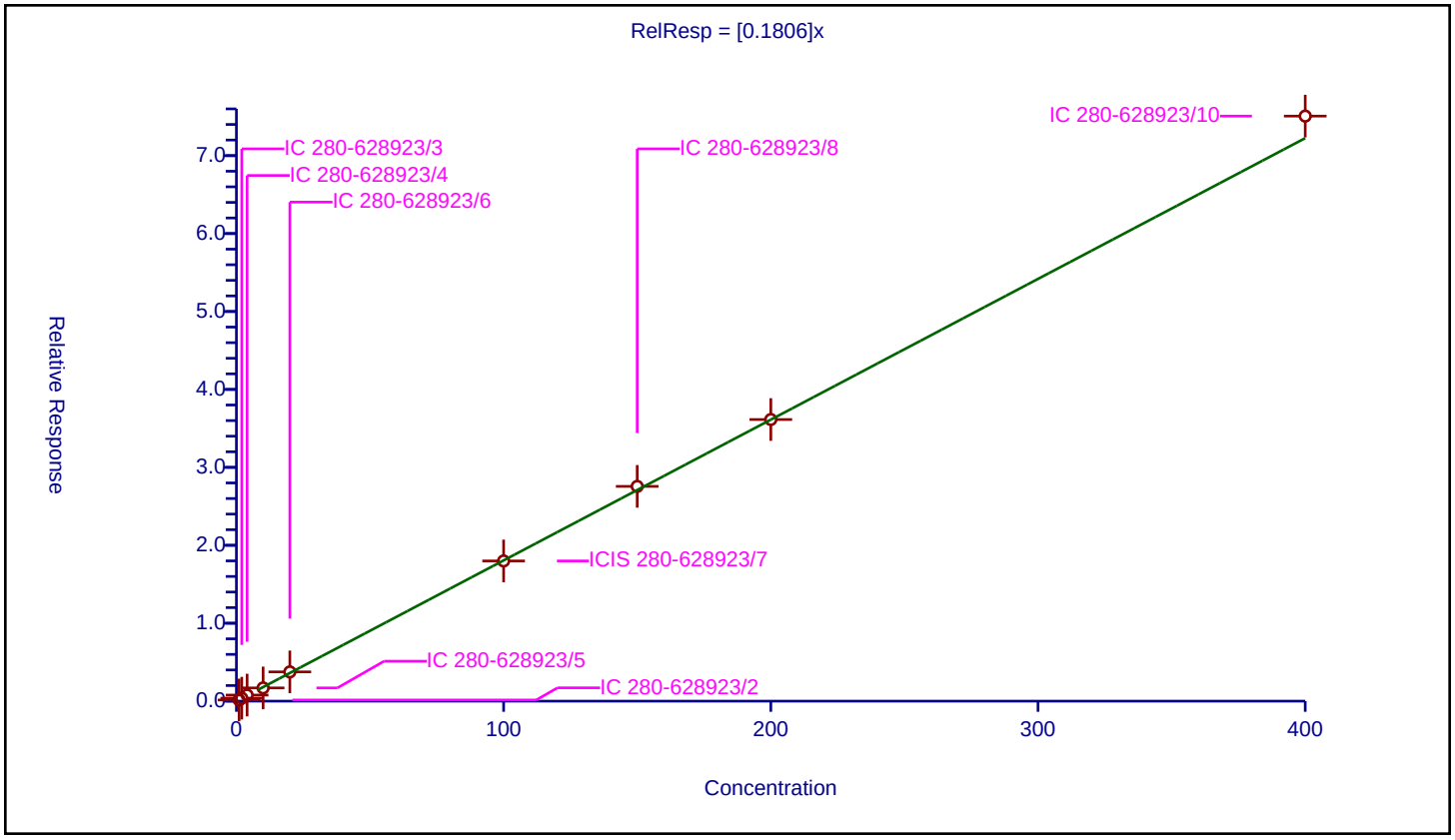
Curve Coefficients

Intercept:	0
Slope:	0.1806

Error Coefficients

Standard Error:	1440000
Relative Standard Error:	7.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	1.0	0.149851	50.0	2079729.0	0.149851	Y
2	IC 280-628923/3	2.0	0.382596	50.0	2228592.0	0.191298	Y
3	IC 280-628923/4	4.0	0.779686	50.0	2130473.0	0.194922	Y
4	IC 280-628923/5	10.0	1.696127	50.0	2207588.0	0.169613	Y
5	IC 280-628923/6	20.0	3.75483	50.0	2200166.0	0.187742	Y
6	ICIS 280-628923/7	100.0	17.991278	50.0	2307671.0	0.179913	Y
7	IC 280-628923/8	150.0	27.560146	50.0	2209796.0	0.183734	Y
8	IC 280-628923/9	200.0	36.13981	50.0	2262350.0	0.180699	Y
9	IC 280-628923/10	400.0	75.075257	50.0	2275189.0	0.187688	Y



Calibration / Chloroform

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

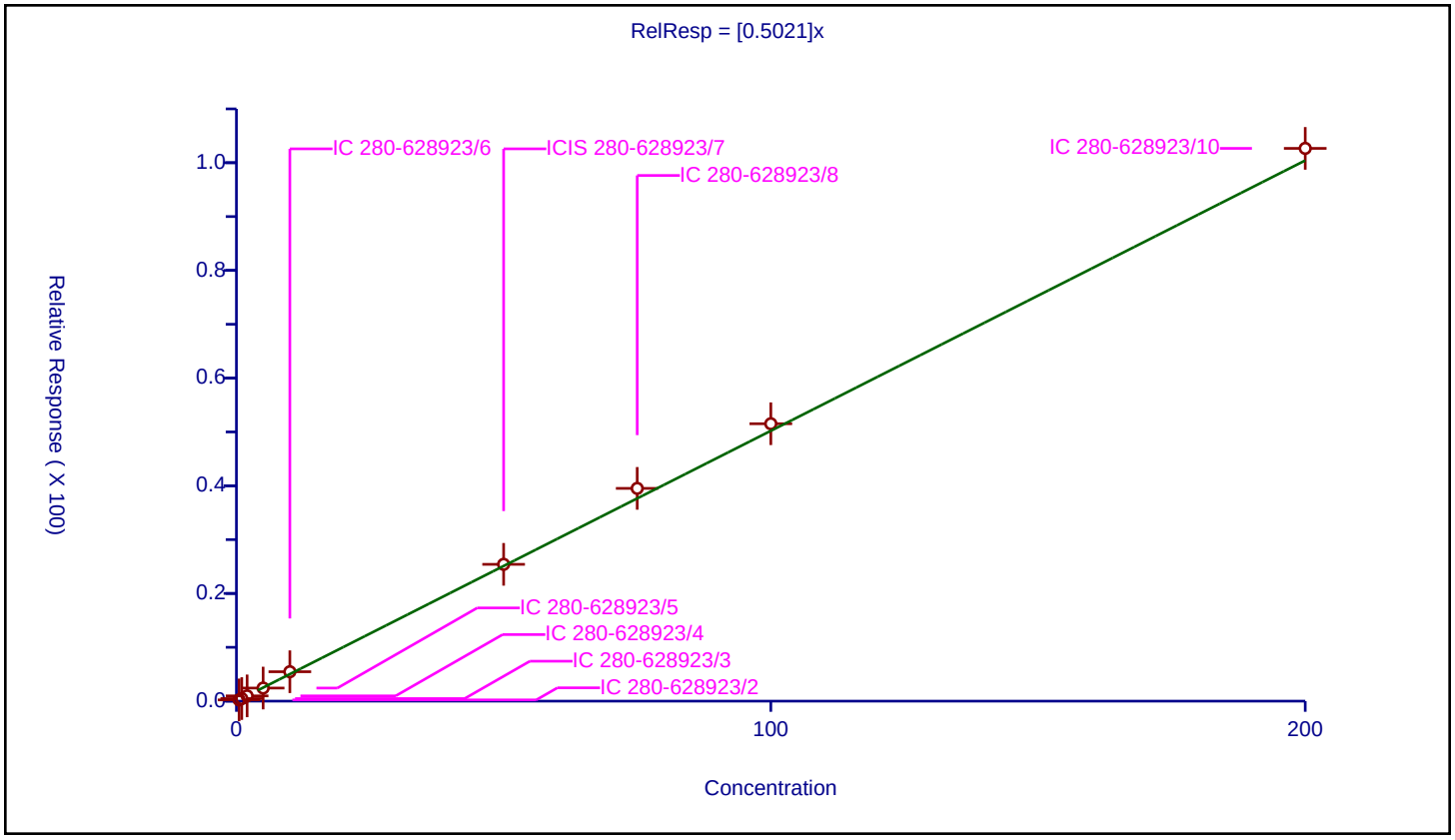
Curve Coefficients

Intercept:	0
Slope:	0.5021

Error Coefficients

Standard Error:	1990000
Relative Standard Error:	5.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.229429	50.0	2079729.0	0.458858	Y
2	IC 280-628923/3	1.0	0.474874	50.0	2228592.0	0.474874	Y
3	IC 280-628923/4	2.0	0.977881	50.0	2130473.0	0.488941	Y
4	IC 280-628923/5	5.0	2.429733	50.0	2207588.0	0.485947	Y
5	IC 280-628923/6	10.0	5.466019	50.0	2200166.0	0.546602	Y
6	ICIS 280-628923/7	50.0	25.411486	50.0	2307671.0	0.50823	Y
7	IC 280-628923/8	75.0	39.518241	50.0	2209796.0	0.52691	Y
8	IC 280-628923/9	100.0	51.521316	50.0	2262350.0	0.515213	Y
9	IC 280-628923/10	200.0	102.664899	50.0	2275189.0	0.513324	Y



Calibration / Dibromofluoromethane (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

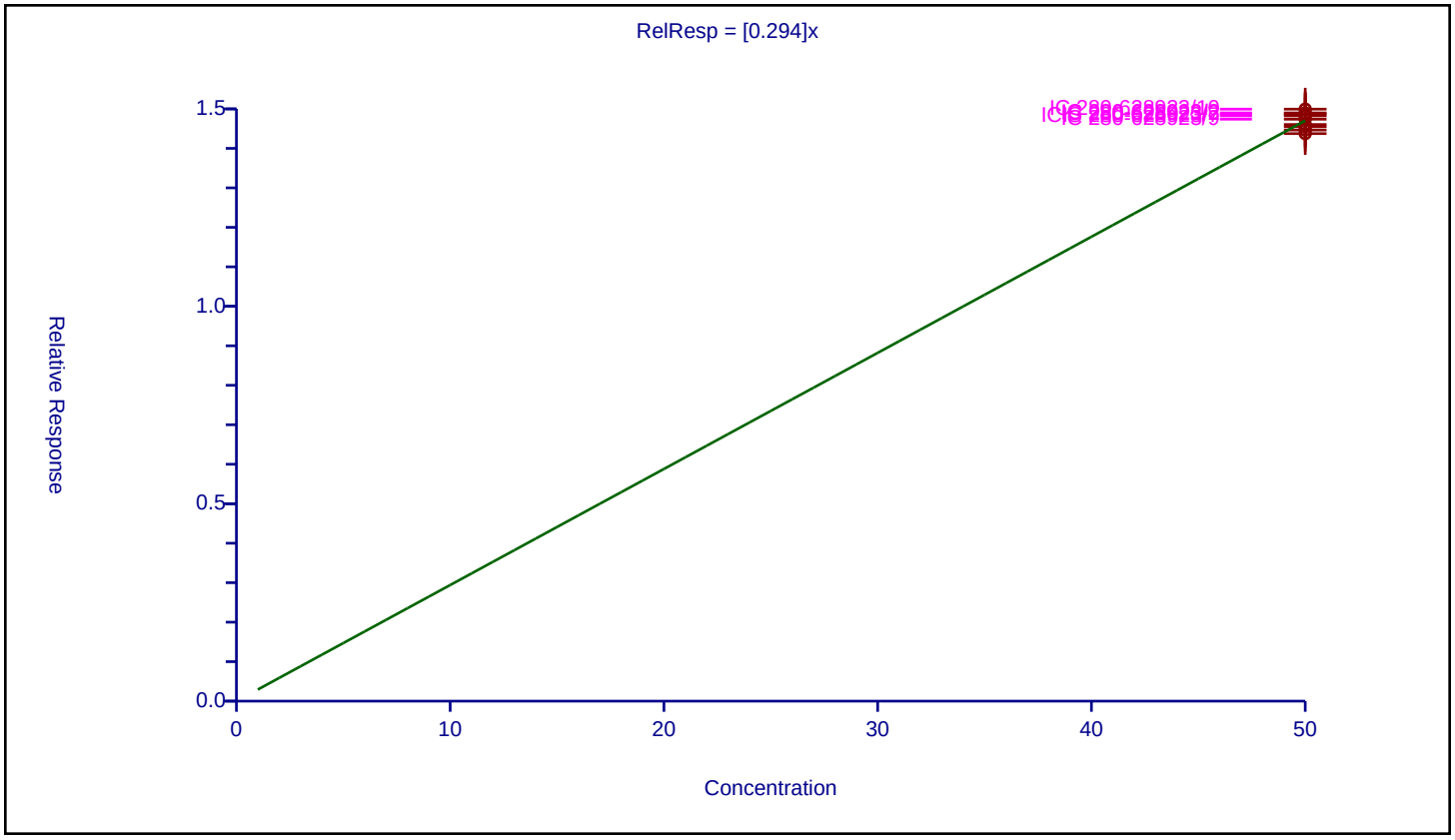
Curve Coefficients

Intercept:	0
Slope:	0.294

Error Coefficients

Standard Error:	690000
Relative Standard Error:	1.5
Correlation Coefficient:	0.00000000000000000000
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	50.0	14.868331	50.0	2079729.0	0.297367	Y
2	IC 280-628923/3	50.0	14.898106	50.0	2228592.0	0.297962	Y
3	IC 280-628923/4	50.0	14.373827	50.0	2130473.0	0.287477	Y
4	IC 280-628923/5	50.0	14.464859	50.0	2207588.0	0.289297	Y
5	IC 280-628923/6	50.0	14.549879	50.0	2200166.0	0.290998	Y
6	ICIS 280-628923/7	50.0	14.8233	50.0	2307671.0	0.296466	Y
7	IC 280-628923/8	50.0	14.604425	50.0	2209796.0	0.292089	Y
8	IC 280-628923/9	50.0	14.738016	50.0	2262350.0	0.29476	Y
9	IC 280-628923/10	50.0	14.994161	50.0	2275189.0	0.299883	Y



Calibration / 1,1,1-Trichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

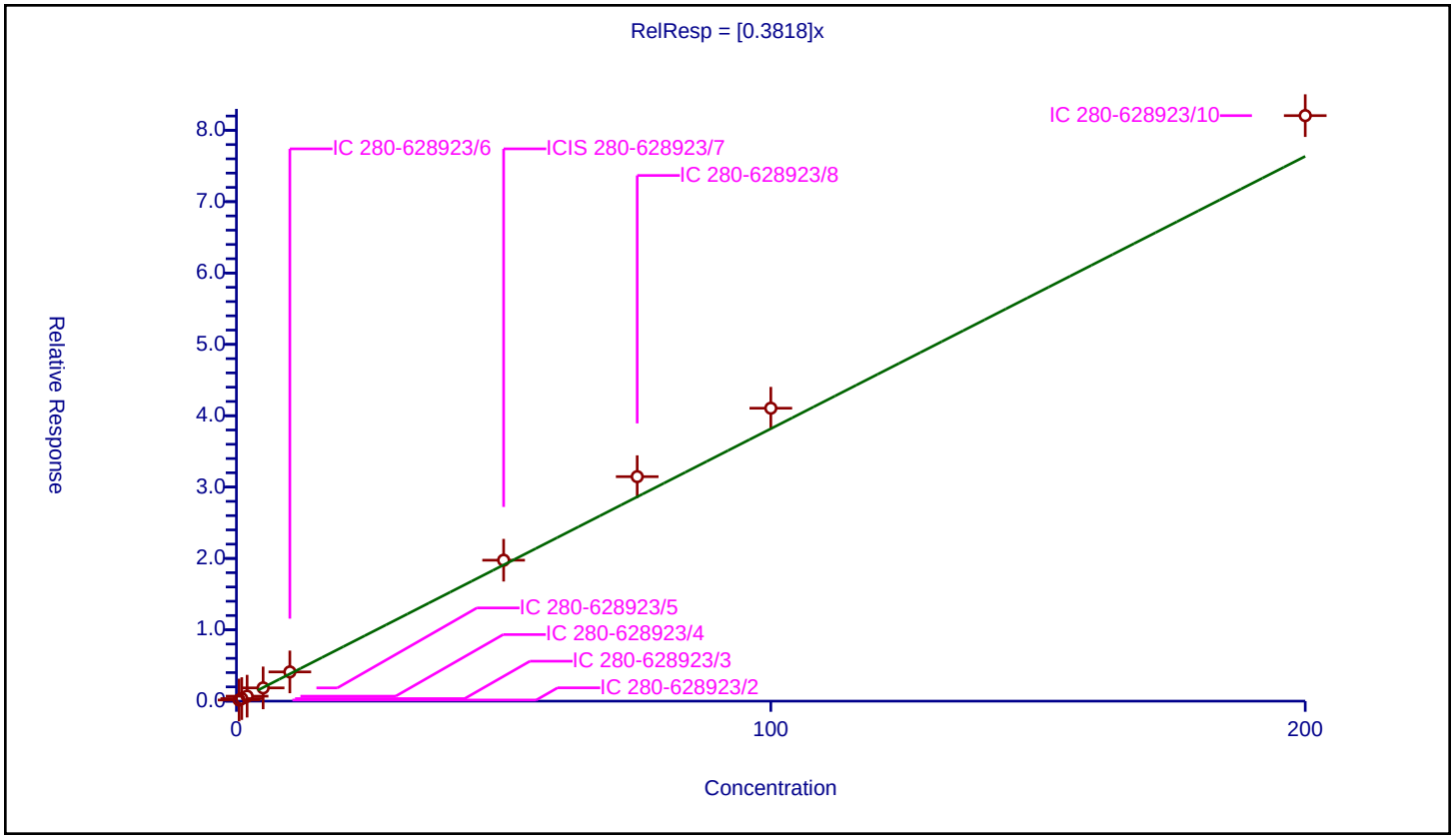
Curve Coefficients

Intercept:	0
Slope:	0.3818

Error Coefficients

Standard Error:	1590000
Relative Standard Error:	9.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.158458	50.0	2079729.0	0.316916	Y
2	IC 280-628923/3	1.0	0.354686	50.0	2228592.0	0.354686	Y
3	IC 280-628923/4	2.0	0.69555	50.0	2130473.0	0.347775	Y
4	IC 280-628923/5	5.0	1.857525	50.0	2207588.0	0.371505	Y
5	IC 280-628923/6	10.0	4.096714	50.0	2200166.0	0.409671	Y
6	ICIS 280-628923/7	50.0	19.751602	50.0	2307671.0	0.395032	Y
7	IC 280-628923/8	75.0	31.460506	50.0	2209796.0	0.419473	Y
8	IC 280-628923/9	100.0	41.05344	50.0	2262350.0	0.410534	Y
9	IC 280-628923/10	200.0	82.057029	50.0	2275189.0	0.410285	Y



Calibration / Cyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

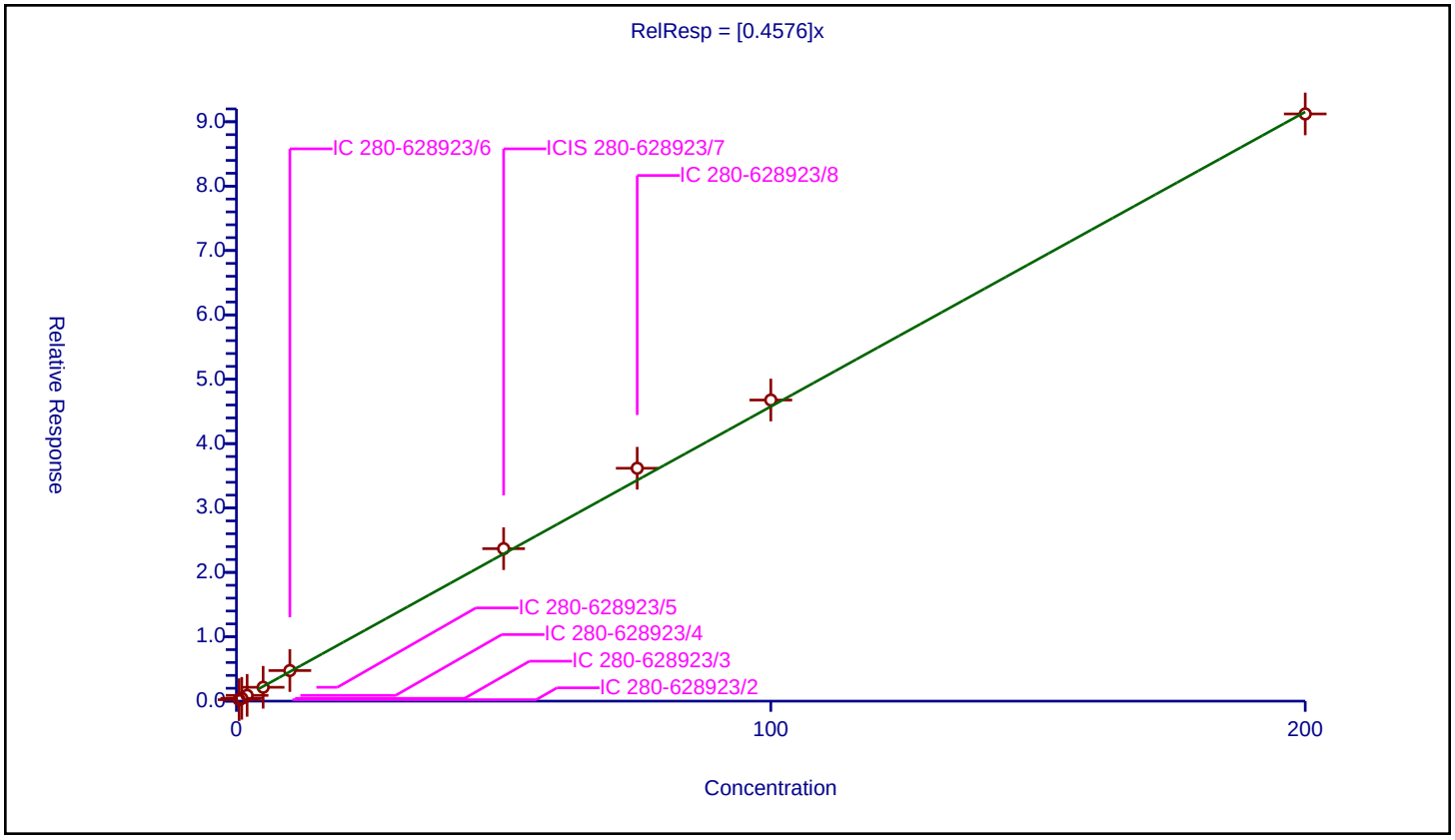
Curve Coefficients

Intercept:	0
Slope:	0.4576

Error Coefficients

Standard Error:	1790000
Relative Standard Error:	4.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.224717	50.0	2079729.0	0.449434	Y
2	IC 280-628923/3	1.0	0.435813	50.0	2228592.0	0.435813	Y
3	IC 280-628923/4	2.0	0.895552	50.0	2130473.0	0.447776	Y
4	IC 280-628923/5	5.0	2.154501	50.0	2207588.0	0.4309	Y
5	IC 280-628923/6	10.0	4.750187	50.0	2200166.0	0.475019	Y
6	ICIS 280-628923/7	50.0	23.682189	50.0	2307671.0	0.473644	Y
7	IC 280-628923/8	75.0	36.179923	50.0	2209796.0	0.482399	Y
8	IC 280-628923/9	100.0	46.772891	50.0	2262350.0	0.467729	Y
9	IC 280-628923/10	200.0	91.216378	50.0	2275189.0	0.456082	Y



Calibration / 1,1-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

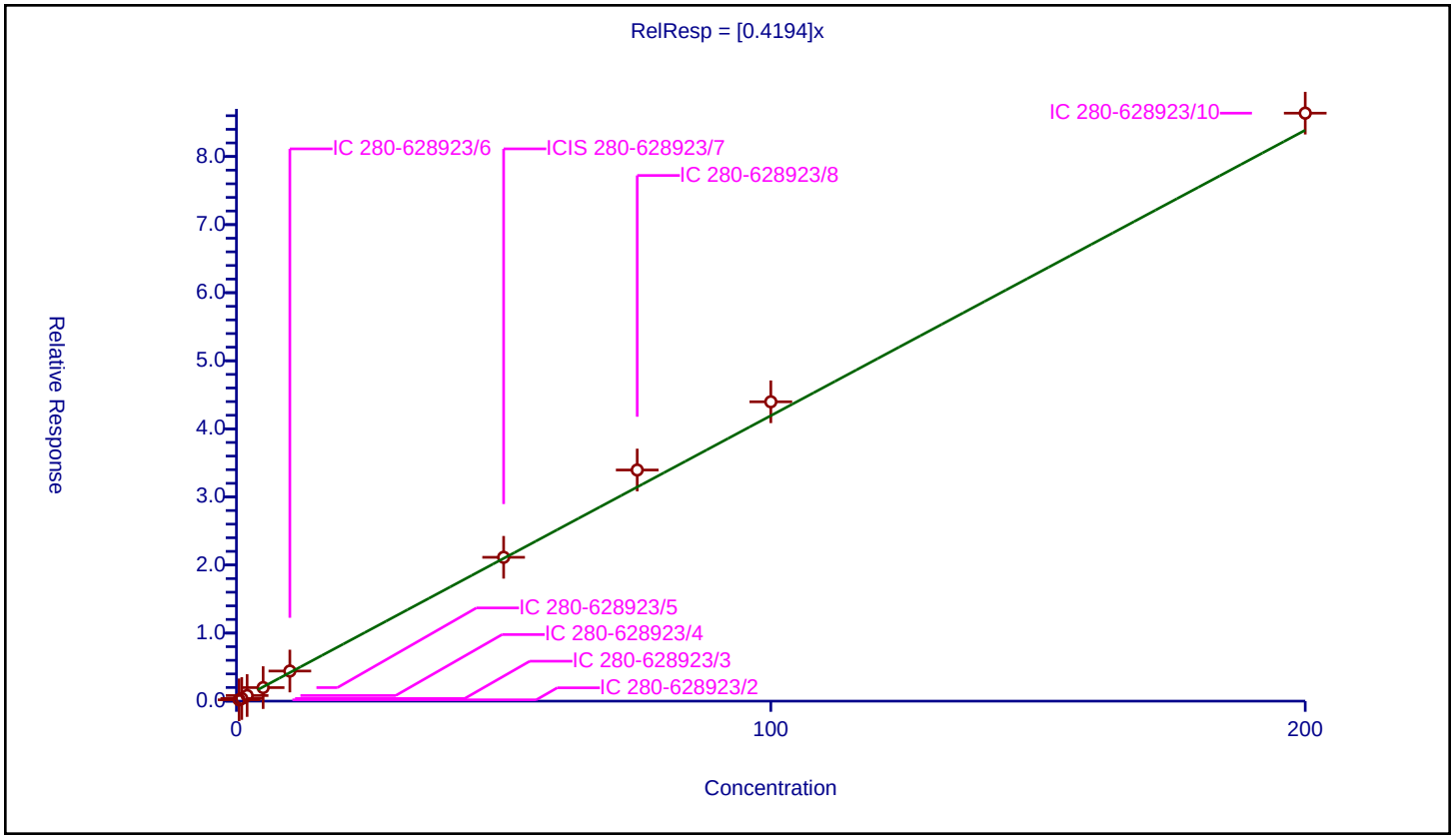
Curve Coefficients

Intercept:	0
Slope:	0.4194

Error Coefficients

Standard Error:	1680000
Relative Standard Error:	5.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.194689	50.0	2079729.0	0.389378	Y
2	IC 280-628923/3	1.0	0.386096	50.0	2228592.0	0.386096	Y
3	IC 280-628923/4	2.0	0.823409	50.0	2130473.0	0.411704	Y
4	IC 280-628923/5	5.0	1.988981	50.0	2207588.0	0.397796	Y
5	IC 280-628923/6	10.0	4.42453	50.0	2200166.0	0.442453	Y
6	ICIS 280-628923/7	50.0	21.131002	50.0	2307671.0	0.42262	Y
7	IC 280-628923/8	75.0	33.953225	50.0	2209796.0	0.45271	Y
8	IC 280-628923/9	100.0	43.972683	50.0	2262350.0	0.439727	Y
9	IC 280-628923/10	200.0	86.373945	50.0	2275189.0	0.43187	Y



Calibration / Carbon tetrachloride

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

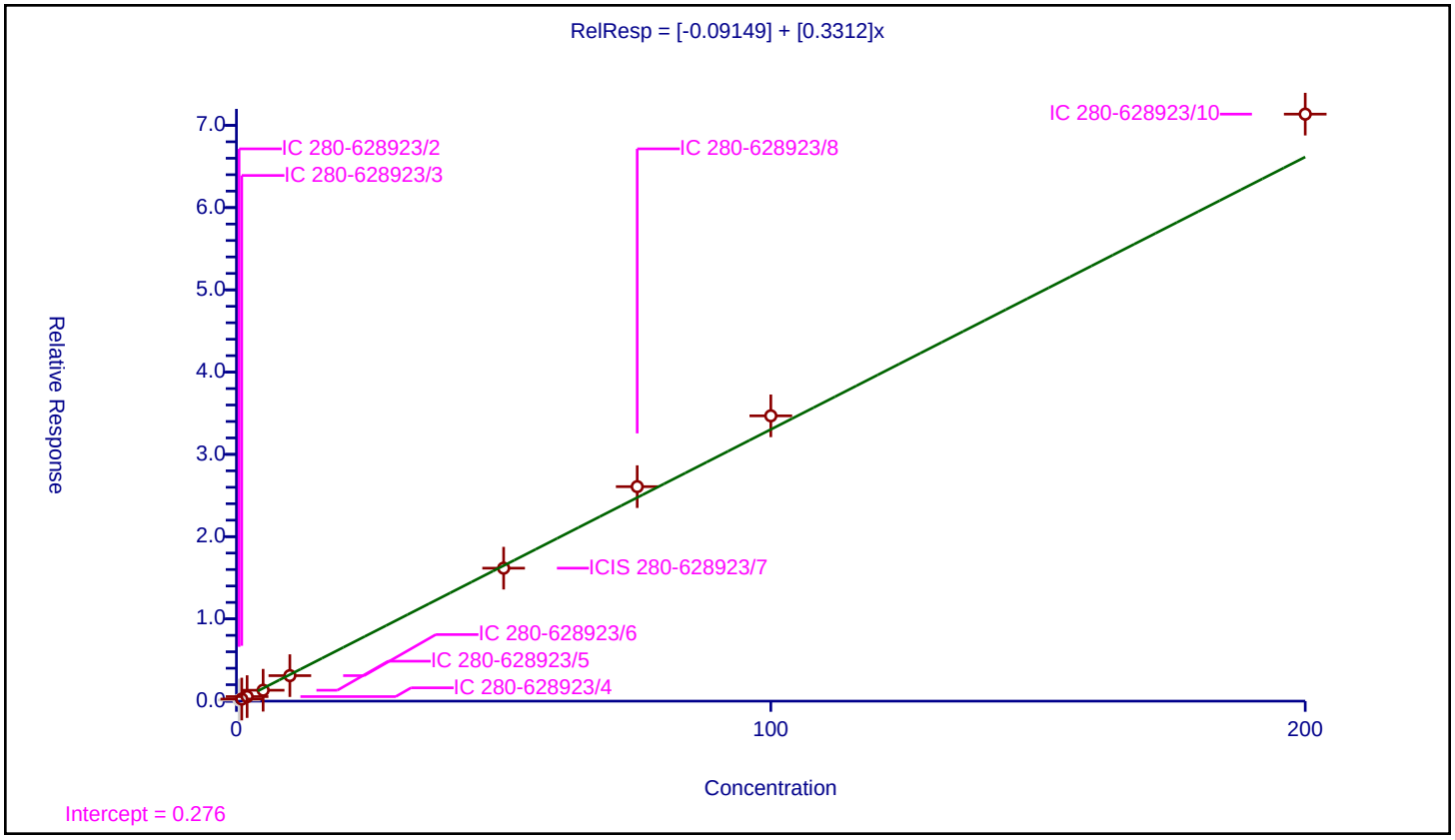
Curve Coefficients

Intercept:	-0.09149
Slope:	0.3312

Error Coefficients

Standard Error:	1580000
Relative Standard Error:	7.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.132493	50.0	2079729.0	0.264986	N
2	IC 280-628923/3	1.0	0.254623	50.0	2228592.0	0.254623	Y
3	IC 280-628923/4	2.0	0.552952	50.0	2130473.0	0.276476	Y
4	IC 280-628923/5	5.0	1.324749	50.0	2207588.0	0.26495	Y
5	IC 280-628923/6	10.0	3.099584	50.0	2200166.0	0.309958	Y
6	ICIS 280-628923/7	50.0	16.165736	50.0	2307671.0	0.323315	Y
7	IC 280-628923/8	75.0	26.075574	50.0	2209796.0	0.347674	Y
8	IC 280-628923/9	100.0	34.68473	50.0	2262350.0	0.346847	Y
9	IC 280-628923/10	200.0	71.363544	50.0	2275189.0	0.356818	Y



Calibration / Isobutyl alcohol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

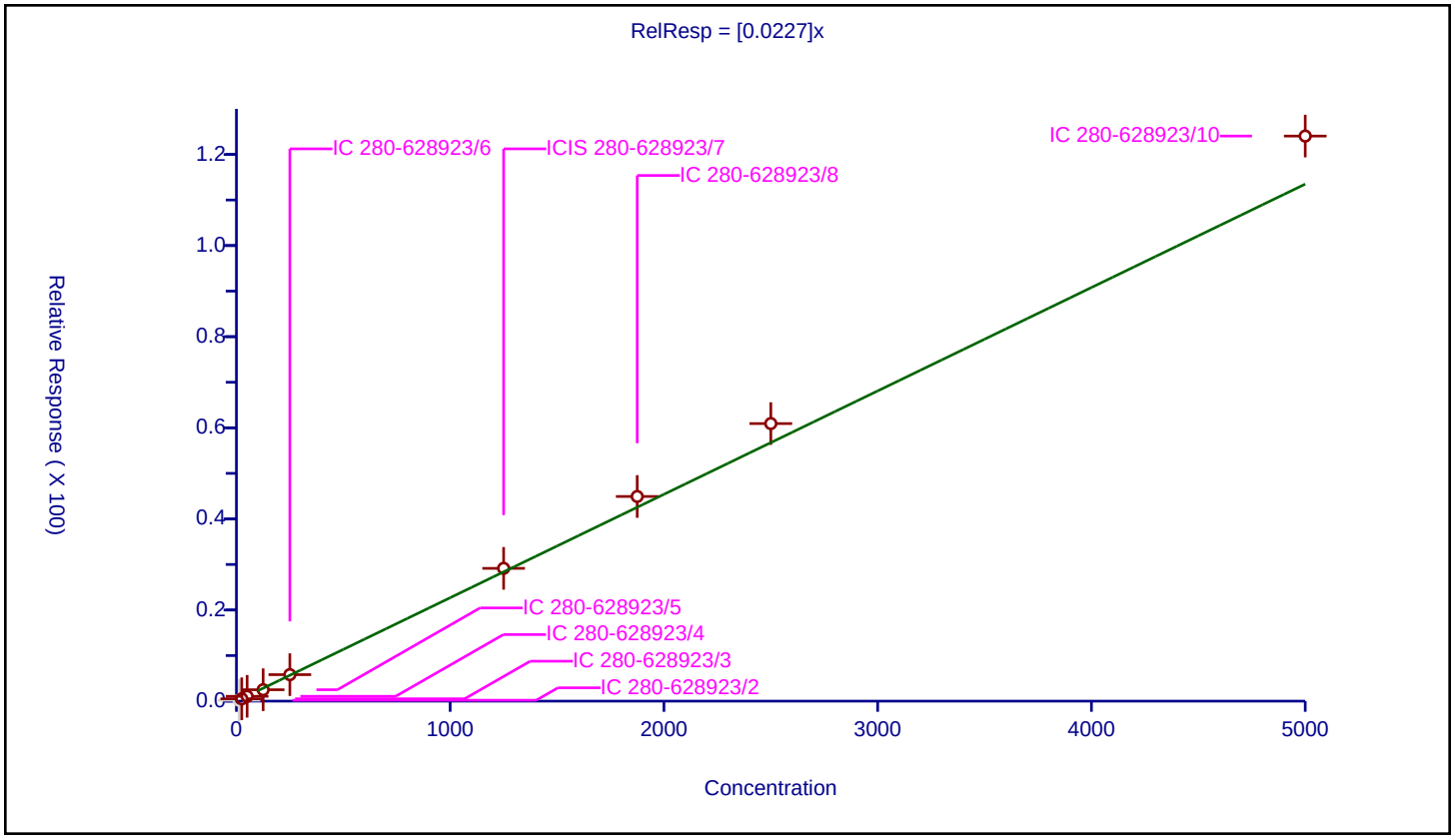
Curve Coefficients

Intercept:	0
Slope:	0.0227

Error Coefficients

Standard Error:	2540000
Relative Standard Error:	8.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	12.5	0.200387	50.0	2079729.0	0.016031	N
2	IC 280-628923/3	25.0	0.516627	50.0	2228592.0	0.020665	Y
3	IC 280-628923/4	50.0	1.059108	50.0	2130473.0	0.021182	Y
4	IC 280-628923/5	125.0	2.504158	50.0	2207588.0	0.020033	Y
5	IC 280-628923/6	250.0	5.812425	50.0	2200166.0	0.02325	Y
6	ICIS 280-628923/7	1250.0	29.146659	50.0	2307671.0	0.023317	Y
7	IC 280-628923/8	1875.0	44.923129	50.0	2209796.0	0.023959	Y
8	IC 280-628923/9	2500.0	60.928283	50.0	2262350.0	0.024371	Y
9	IC 280-628923/10	5000.0	124.038728	50.0	2275189.0	0.024808	Y



Calibration / 1,2-Dichloroethane-d4 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

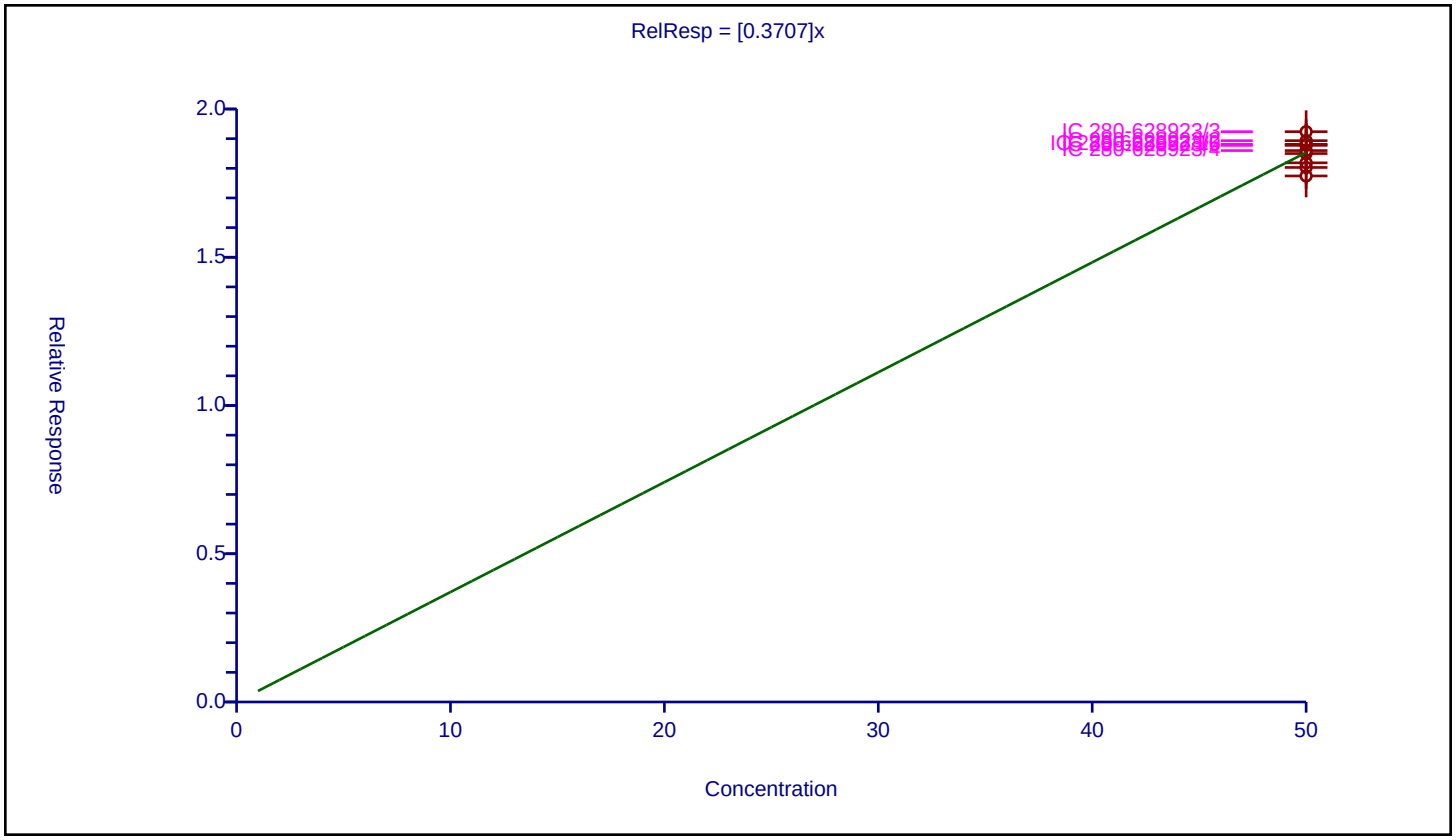
Curve Coefficients

Intercept:	0
Slope:	0.3707

Error Coefficients

Standard Error:	870000
Relative Standard Error:	2.6
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	50.0	18.932515	50.0	2079729.0	0.37865	Y
2	IC 280-628923/3	50.0	19.235845	50.0	2228592.0	0.384717	Y
3	IC 280-628923/4	50.0	18.598945	50.0	2130473.0	0.371979	Y
4	IC 280-628923/5	50.0	18.774201	50.0	2207588.0	0.375484	Y
5	IC 280-628923/6	50.0	18.185287	50.0	2200166.0	0.363706	Y
6	ICIS 280-628923/7	50.0	18.498087	50.0	2307671.0	0.369962	Y
7	IC 280-628923/8	50.0	18.028655	50.0	2209796.0	0.360573	Y
8	IC 280-628923/9	50.0	17.742458	50.0	2262350.0	0.354849	Y
9	IC 280-628923/10	50.0	18.810393	50.0	2275189.0	0.376208	Y



Calibration / Benzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

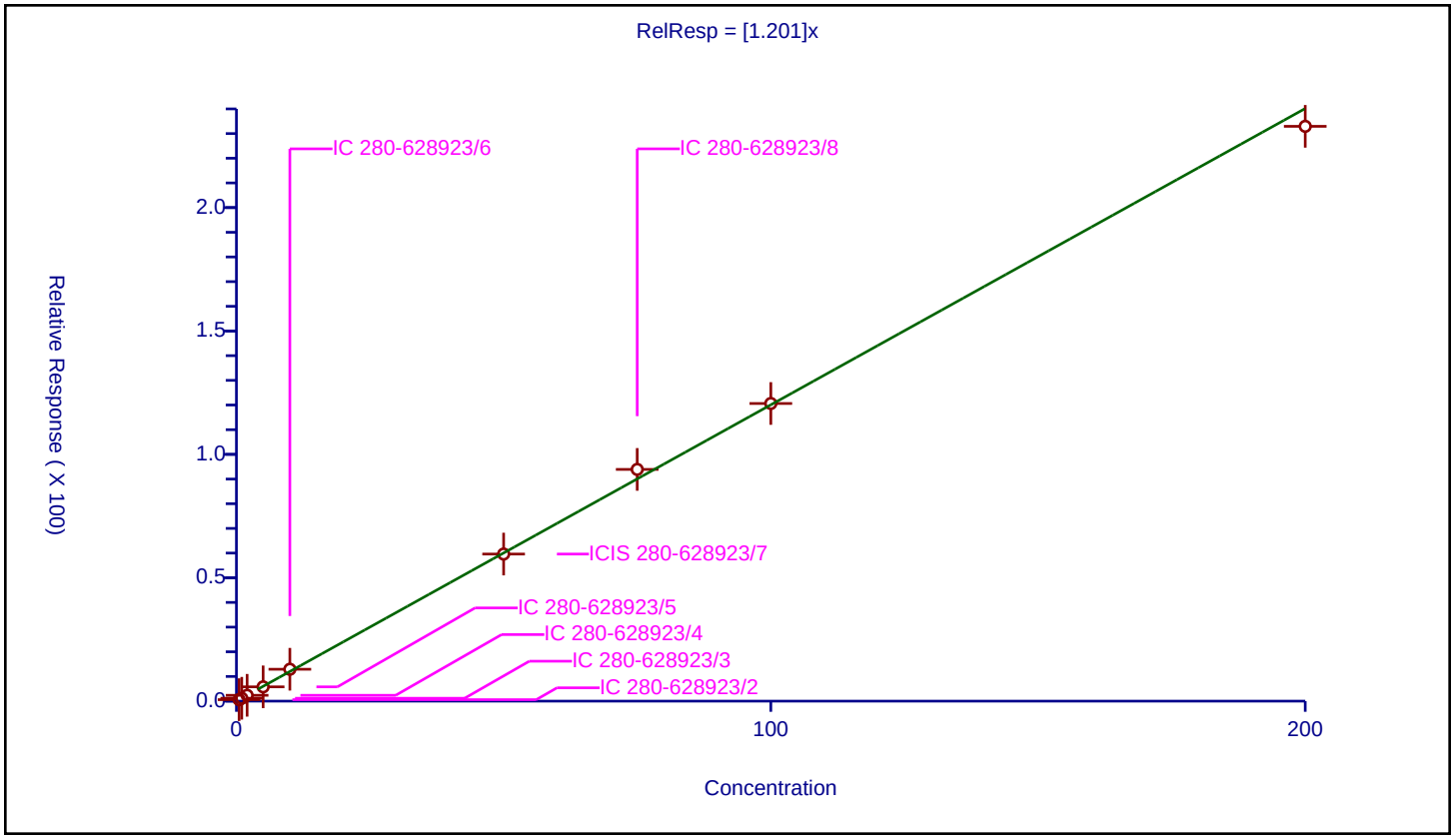
Curve Coefficients

Intercept:	0
Slope:	1.201

Error Coefficients

Standard Error:	4570000
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.595005	50.0	2079729.0	1.190011	Y
2	IC 280-628923/3	1.0	1.167037	50.0	2228592.0	1.167037	Y
3	IC 280-628923/4	2.0	2.368465	50.0	2130473.0	1.184232	Y
4	IC 280-628923/5	5.0	5.791751	50.0	2207588.0	1.15835	Y
5	IC 280-628923/6	10.0	12.922411	50.0	2200166.0	1.292241	Y
6	ICIS 280-628923/7	50.0	59.606027	50.0	2307671.0	1.192121	Y
7	IC 280-628923/8	75.0	93.907288	50.0	2209796.0	1.252097	Y
8	IC 280-628923/9	100.0	120.616814	50.0	2262350.0	1.206168	Y
9	IC 280-628923/10	200.0	232.934714	50.0	2275189.0	1.164674	Y



Calibration / 1,2-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

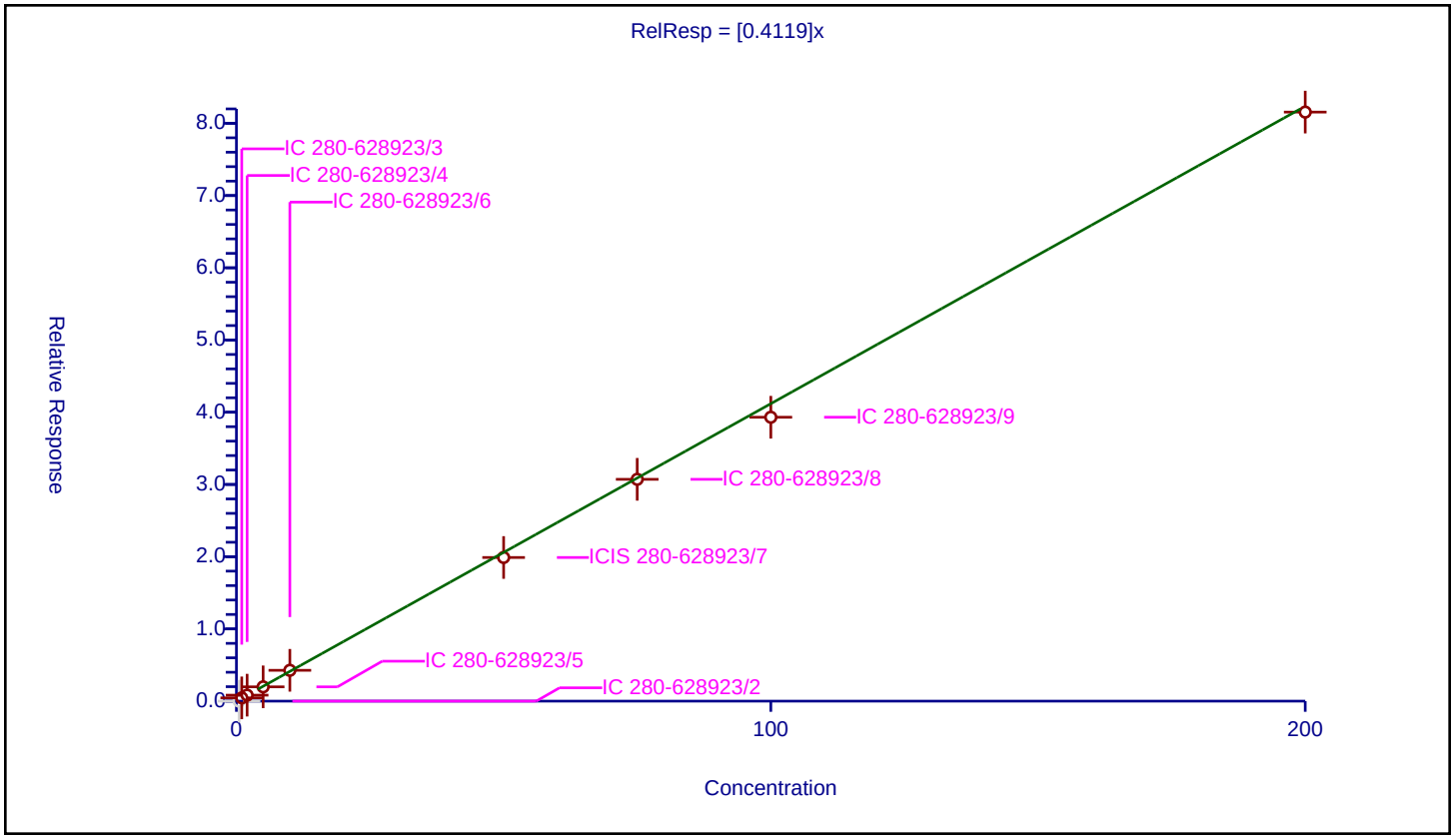
Curve Coefficients

Intercept:	0
Slope:	0.4119

Error Coefficients

Standard Error:	1680000
Relative Standard Error:	4.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.0	50.0	2079729.0	0.0	N
2	IC 280-628923/3	1.0	0.451025	50.0	2228592.0	0.451025	Y
3	IC 280-628923/4	2.0	0.82714	50.0	2130473.0	0.41357	Y
4	IC 280-628923/5	5.0	1.97666	50.0	2207588.0	0.395332	Y
5	IC 280-628923/6	10.0	4.267042	50.0	2200166.0	0.426704	Y
6	ICIS 280-628923/7	50.0	19.889555	50.0	2307671.0	0.397791	Y
7	IC 280-628923/8	75.0	30.714012	50.0	2209796.0	0.40952	Y
8	IC 280-628923/9	100.0	39.307578	50.0	2262350.0	0.393076	Y
9	IC 280-628923/10	200.0	81.558038	50.0	2275189.0	0.40779	Y



Calibration / n-Heptane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

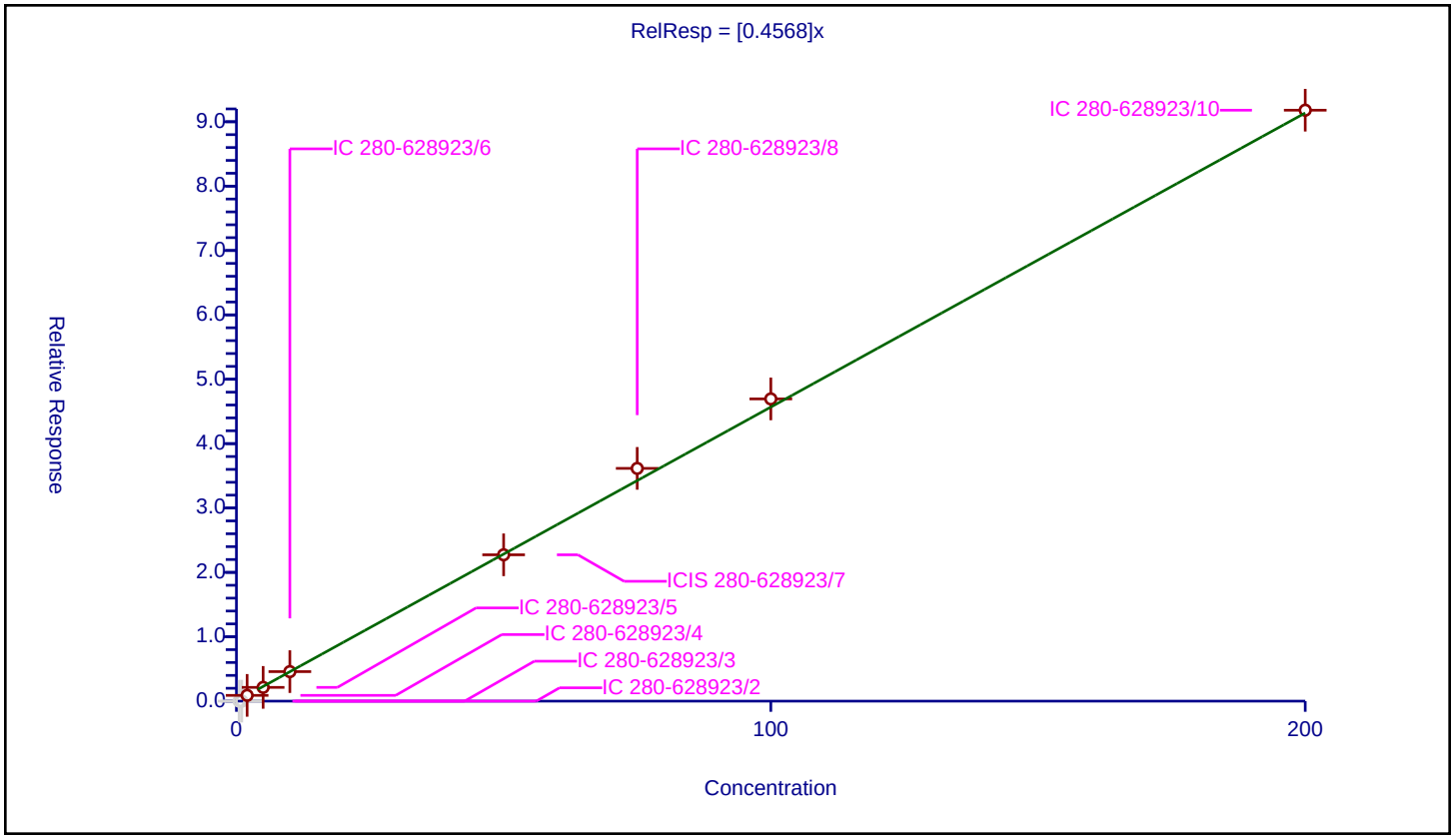
Curve Coefficients

Intercept:	0
Slope:	0.4568

Error Coefficients

Standard Error:	2070000
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.0	50.0	2079729.0	0.0	N
2	IC 280-628923/3	1.0	0.0	50.0	2228592.0	0.0	N
3	IC 280-628923/4	2.0	0.893933	50.0	2130473.0	0.446966	Y
4	IC 280-628923/5	5.0	2.136087	50.0	2207588.0	0.427217	Y
5	IC 280-628923/6	10.0	4.584768	50.0	2200166.0	0.458477	Y
6	ICIS 280-628923/7	50.0	22.73266	50.0	2307671.0	0.454653	Y
7	IC 280-628923/8	75.0	36.156211	50.0	2209796.0	0.482083	Y
8	IC 280-628923/9	100.0	46.948903	50.0	2262350.0	0.469489	Y
9	IC 280-628923/10	200.0	91.796308	50.0	2275189.0	0.458982	Y



Calibration / Trichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

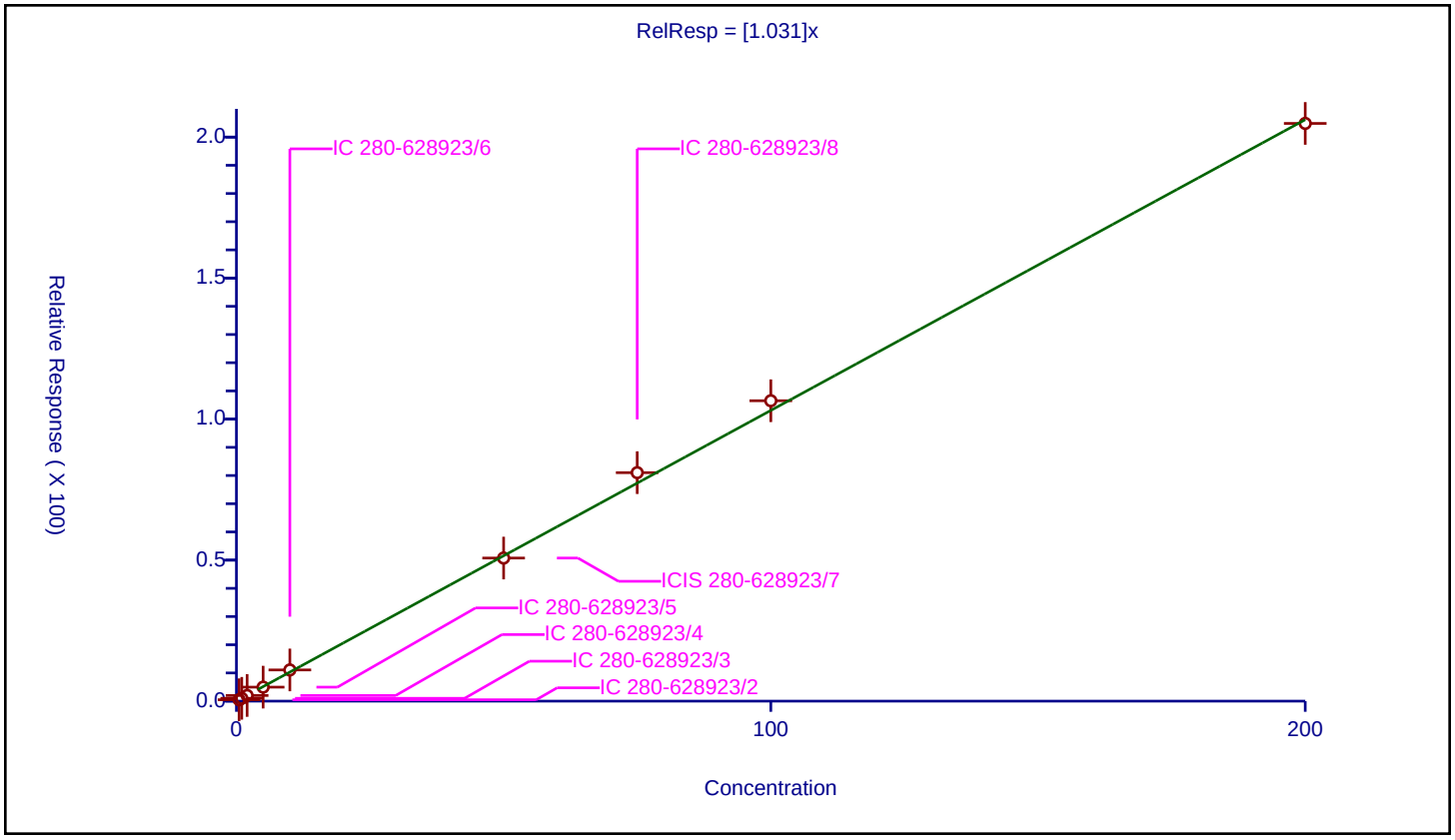
Curve Coefficients

Intercept:	0
Slope:	1.031

Error Coefficients

Standard Error:	1200000
Relative Standard Error:	4.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.492567	50.0	575658.0	0.985134	Y
2	IC 280-628923/3	1.0	1.004545	50.0	651240.0	1.004545	Y
3	IC 280-628923/4	2.0	2.009207	50.0	635798.0	1.004604	Y
4	IC 280-628923/5	5.0	4.964417	50.0	641455.0	0.992883	Y
5	IC 280-628923/6	10.0	11.061215	50.0	635432.0	1.106122	Y
6	ICIS 280-628923/7	50.0	50.740377	50.0	691540.0	1.014808	Y
7	IC 280-628923/8	75.0	81.018535	50.0	651907.0	1.080247	Y
8	IC 280-628923/9	100.0	106.50996	50.0	667147.0	1.0651	Y
9	IC 280-628923/10	200.0	204.846117	50.0	684806.0	1.024231	Y



Calibration / 2-Pentanone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

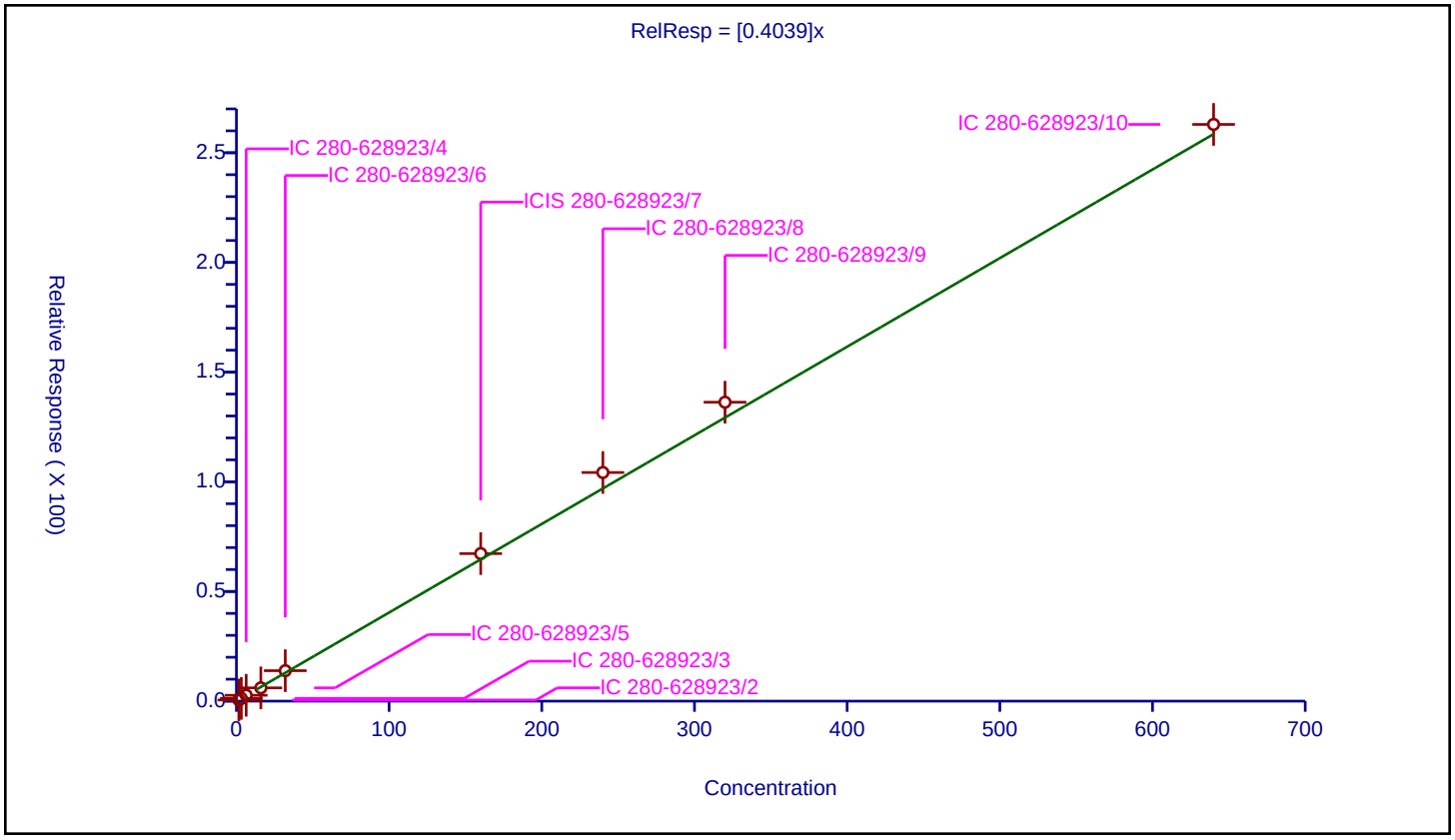
Curve Coefficients

Intercept:	0
Slope:	0.4039

Error Coefficients

Standard Error:	5150000
Relative Standard Error:	8.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	1.6	0.515692	50.0	2079729.0	0.322308	Y
2	IC 280-628923/3	3.2	1.250655	50.0	2228592.0	0.39083	Y
3	IC 280-628923/4	6.4	2.680344	50.0	2130473.0	0.418804	Y
4	IC 280-628923/5	16.0	6.050812	50.0	2207588.0	0.378176	Y
5	IC 280-628923/6	32.0	13.88143	50.0	2200166.0	0.433795	Y
6	ICIS 280-628923/7	160.0	67.261776	50.0	2307671.0	0.420386	Y
7	IC 280-628923/8	240.0	104.237699	50.0	2209796.0	0.434324	Y
8	IC 280-628923/9	320.0	136.281919	50.0	2262350.0	0.425881	Y
9	IC 280-628923/10	640.0	262.921981	50.0	2275189.0	0.410816	Y



Calibration / Methylcyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

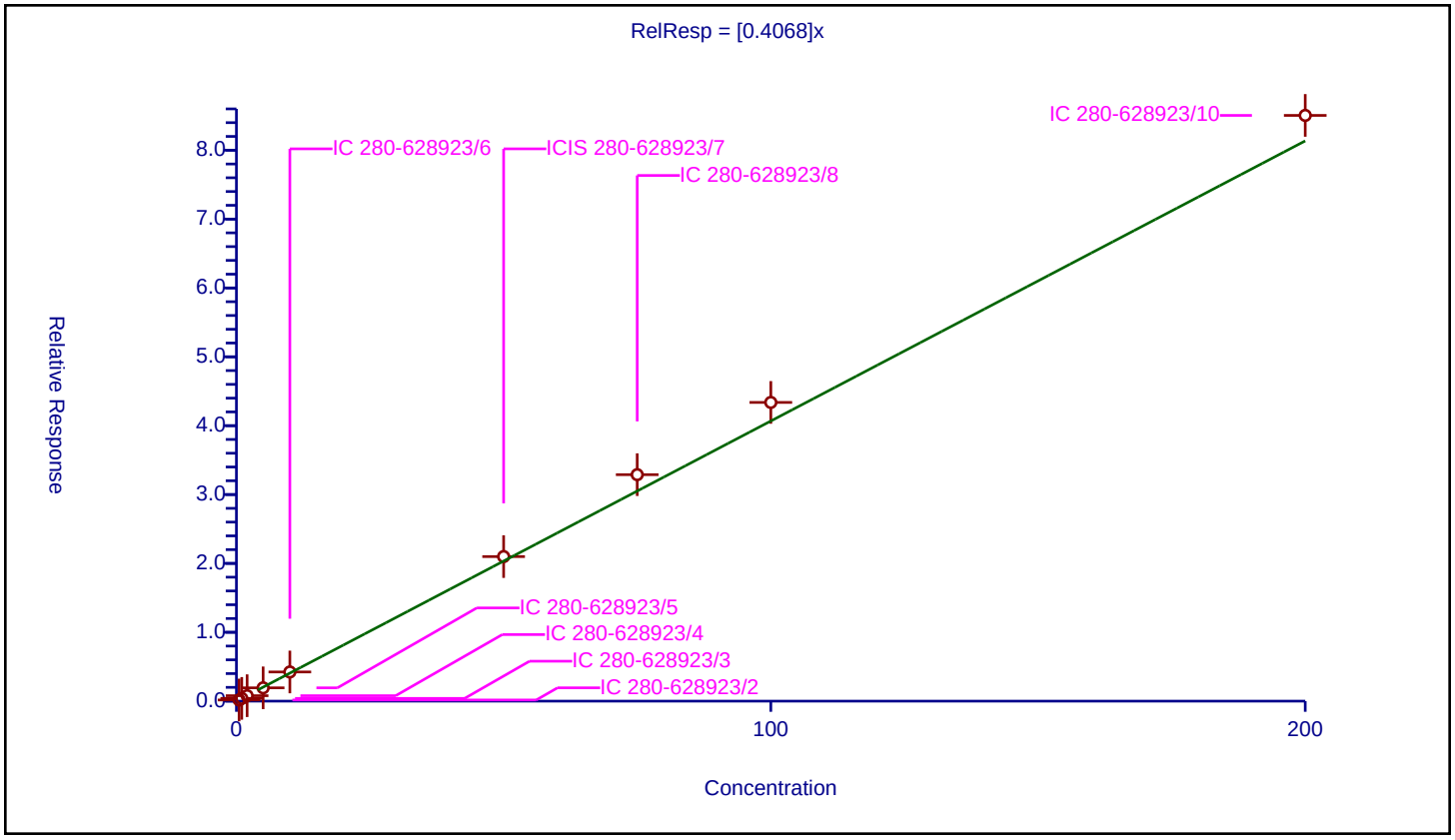
Curve Coefficients

Intercept:	0
Slope:	0.4068

Error Coefficients

Standard Error:	1660000
Relative Standard Error:	7.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.168796	50.0	2079729.0	0.337592	Y
2	IC 280-628923/3	1.0	0.40106	50.0	2228592.0	0.40106	Y
3	IC 280-628923/4	2.0	0.789989	50.0	2130473.0	0.394994	Y
4	IC 280-628923/5	5.0	1.930931	50.0	2207588.0	0.386186	Y
5	IC 280-628923/6	10.0	4.237158	50.0	2200166.0	0.423716	Y
6	ICIS 280-628923/7	50.0	20.992724	50.0	2307671.0	0.419854	Y
7	IC 280-628923/8	75.0	32.886361	50.0	2209796.0	0.438485	Y
8	IC 280-628923/9	100.0	43.375229	50.0	2262350.0	0.433752	Y
9	IC 280-628923/10	200.0	85.050539	50.0	2275189.0	0.425253	Y



Calibration / 1,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

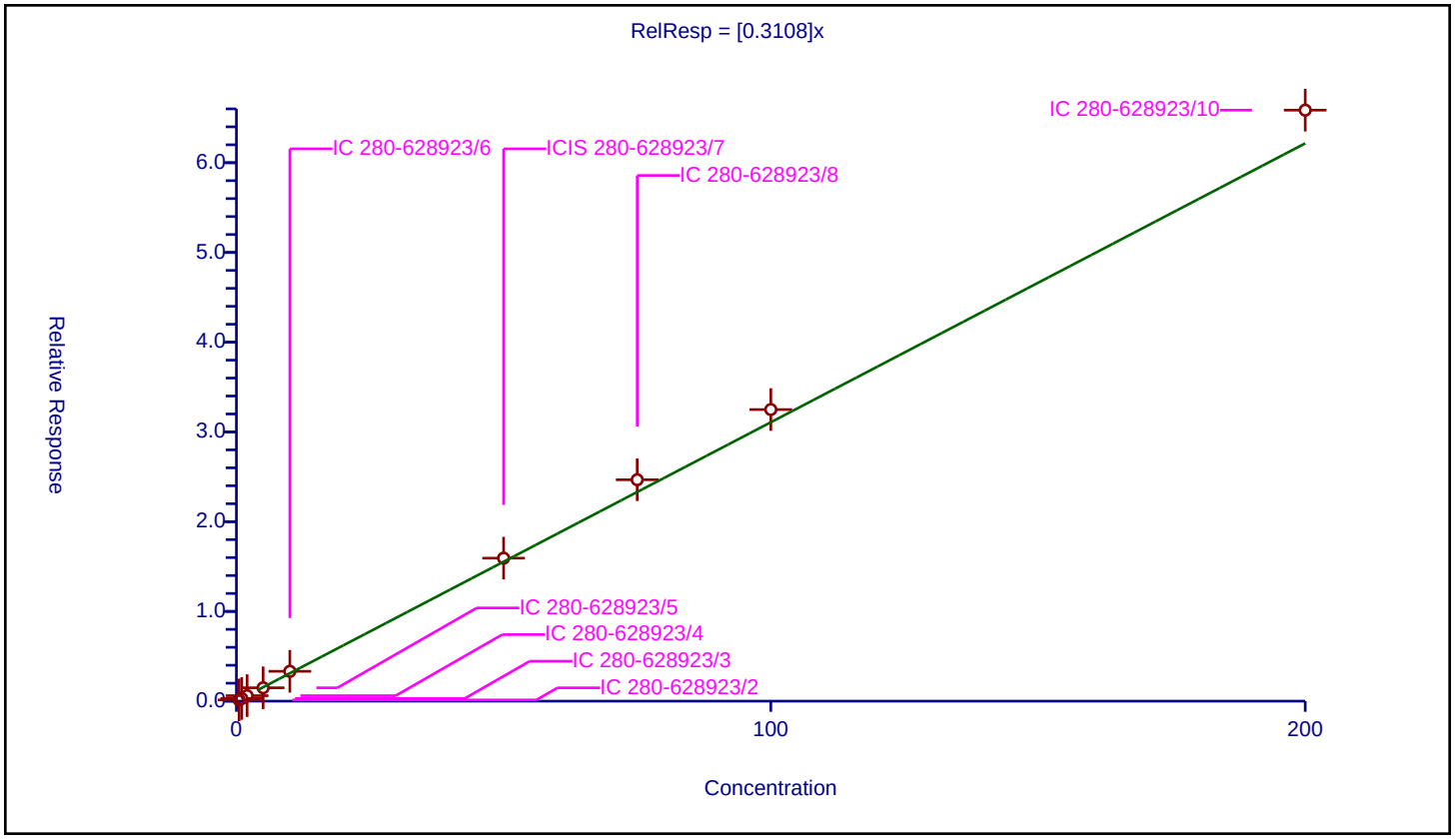
Curve Coefficients

Intercept:	0
Slope:	0.3108

Error Coefficients

Standard Error:	1270000
Relative Standard Error:	7.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.132878	50.0	2079729.0	0.265756	Y
2	IC 280-628923/3	1.0	0.294424	50.0	2228592.0	0.294424	Y
3	IC 280-628923/4	2.0	0.609067	50.0	2130473.0	0.304533	Y
4	IC 280-628923/5	5.0	1.489567	50.0	2207588.0	0.297913	Y
5	IC 280-628923/6	10.0	3.324704	50.0	2200166.0	0.33247	Y
6	ICIS 280-628923/7	50.0	15.934659	50.0	2307671.0	0.318693	Y
7	IC 280-628923/8	75.0	24.671463	50.0	2209796.0	0.328953	Y
8	IC 280-628923/9	100.0	32.49453	50.0	2262350.0	0.324945	Y
9	IC 280-628923/10	200.0	65.857781	50.0	2275189.0	0.329289	Y



Calibration / 1,4-Dioxane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

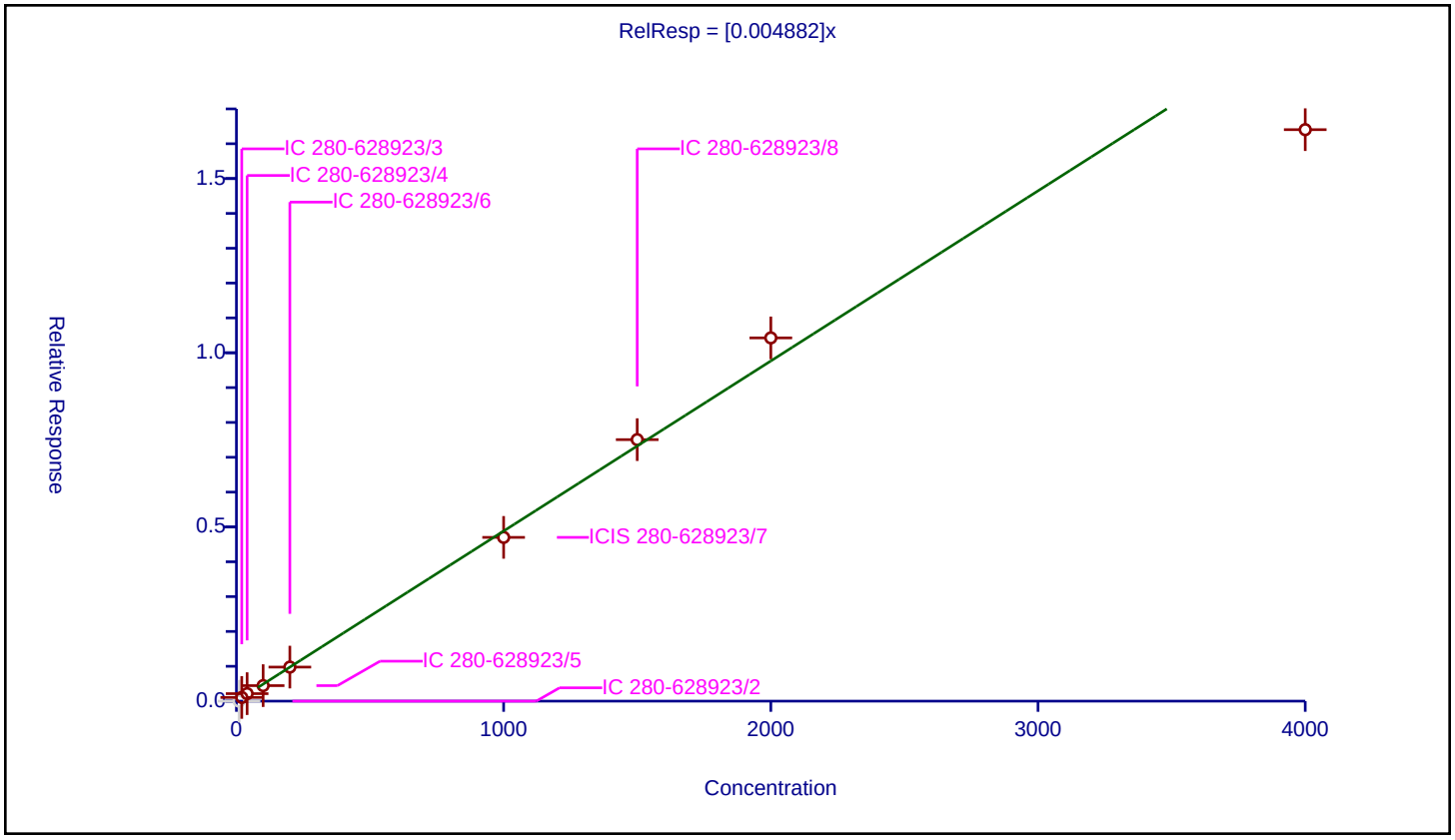
Curve Coefficients

Intercept:	0
Slope:	0.004882

Error Coefficients

Standard Error:	366000
Relative Standard Error:	9.1
Correlation Coefficient:	0.984
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	10.0	0.0	50.0	2079729.0	0.0	N
2	IC 280-628923/3	20.0	0.106166	50.0	2228592.0	0.005308	Y
3	IC 280-628923/4	40.0	0.215539	50.0	2130473.0	0.005388	Y
4	IC 280-628923/5	100.0	0.445667	50.0	2207588.0	0.004457	Y
5	IC 280-628923/6	200.0	0.977244	50.0	2200166.0	0.004886	Y
6	ICIS 280-628923/7	1000.0	4.700562	50.0	2307671.0	0.004701	Y
7	IC 280-628923/8	1500.0	7.506304	50.0	2209796.0	0.005004	Y
8	IC 280-628923/9	2000.0	10.427078	50.0	2262350.0	0.005214	Y
9	IC 280-628923/10	4000.0	16.403934	50.0	2275189.0	0.004101	Y



Calibration / Dibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

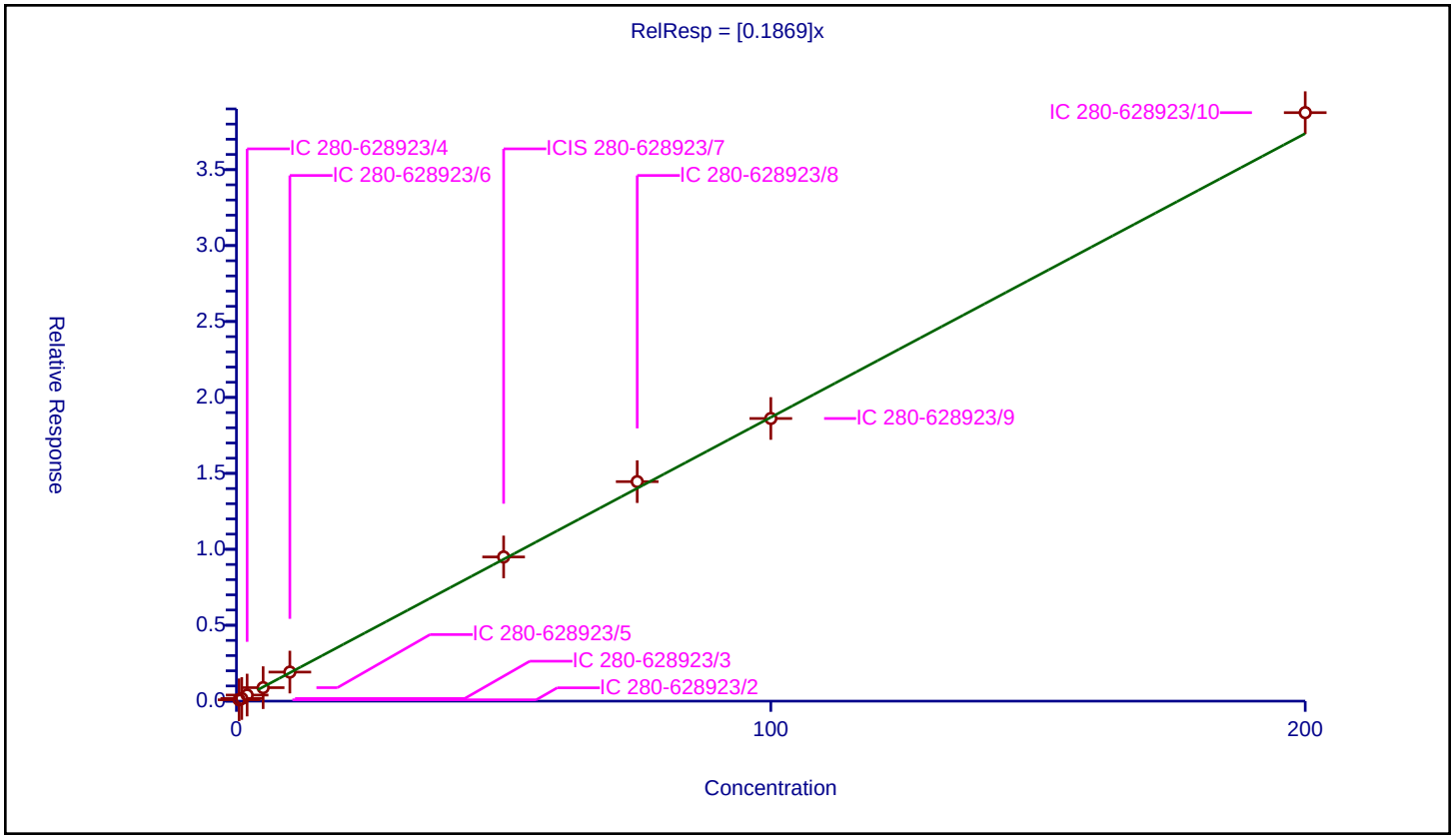
Curve Coefficients

Intercept:	0
Slope:	0.1869

Error Coefficients

Standard Error:	744000
Relative Standard Error:	4.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.08881	50.0	2079729.0	0.177619	Y
2	IC 280-628923/3	1.0	0.17253	50.0	2228592.0	0.17253	Y
3	IC 280-628923/4	2.0	0.400122	50.0	2130473.0	0.200061	Y
4	IC 280-628923/5	5.0	0.88907	50.0	2207588.0	0.177814	Y
5	IC 280-628923/6	10.0	1.914378	50.0	2200166.0	0.191438	Y
6	ICIS 280-628923/7	50.0	9.494204	50.0	2307671.0	0.189884	Y
7	IC 280-628923/8	75.0	14.455361	50.0	2209796.0	0.192738	Y
8	IC 280-628923/9	100.0	18.61361	50.0	2262350.0	0.186136	Y
9	IC 280-628923/10	200.0	38.75188	50.0	2275189.0	0.193759	Y



Calibration / Dichlorobromomethane

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

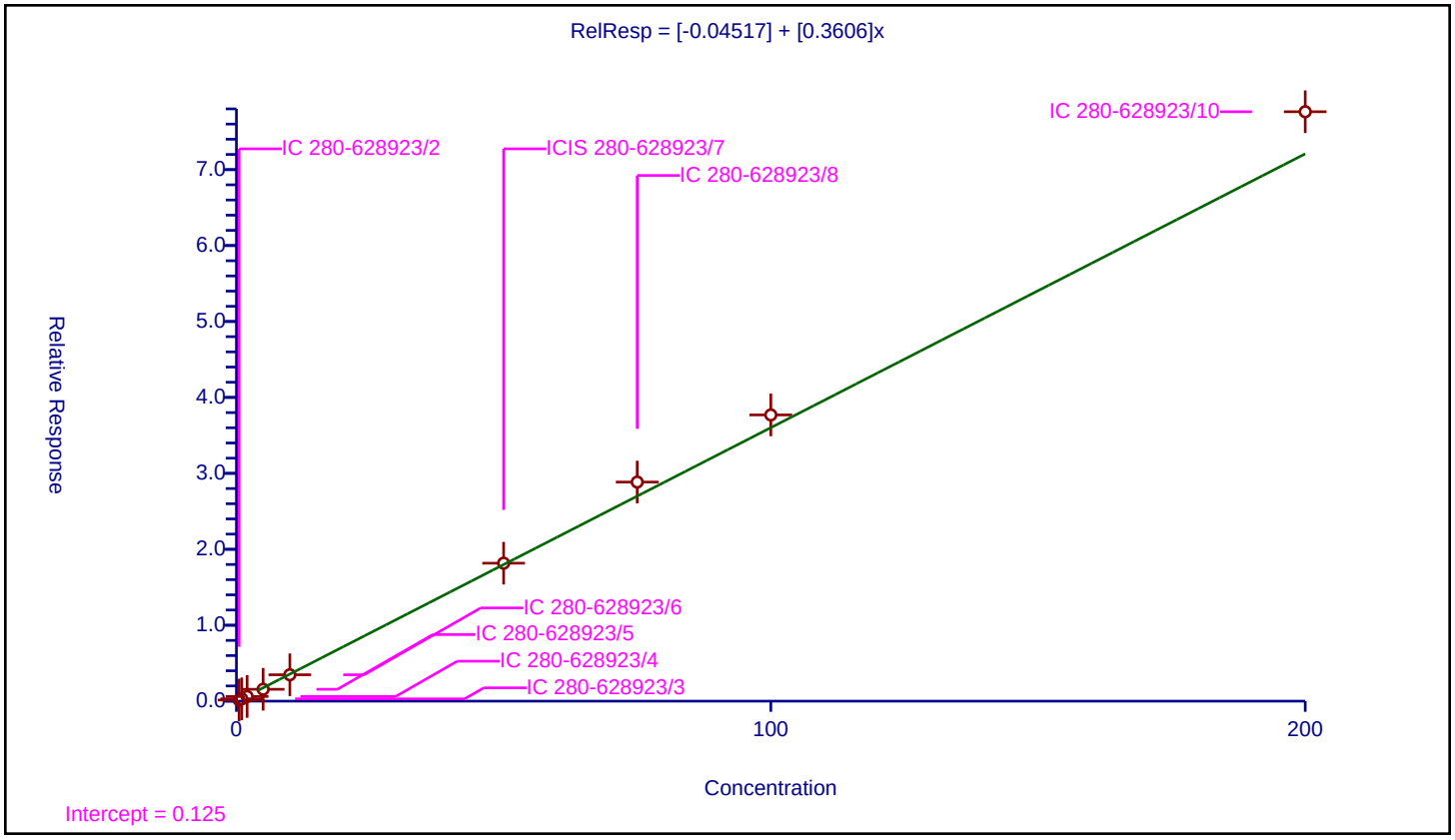
Curve Coefficients

Intercept:	-0.04517
Slope:	0.3606

Error Coefficients

Standard Error:	1590000
Relative Standard Error:	7.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.143961	50.0	2079729.0	0.287922	Y
2	IC 280-628923/3	1.0	0.303443	50.0	2228592.0	0.303443	Y
3	IC 280-628923/4	2.0	0.614957	50.0	2130473.0	0.307479	Y
4	IC 280-628923/5	5.0	1.562814	50.0	2207588.0	0.312563	Y
5	IC 280-628923/6	10.0	3.472738	50.0	2200166.0	0.347274	Y
6	ICIS 280-628923/7	50.0	18.169964	50.0	2307671.0	0.363399	Y
7	IC 280-628923/8	75.0	28.852007	50.0	2209796.0	0.384693	Y
8	IC 280-628923/9	100.0	37.695184	50.0	2262350.0	0.376952	Y
9	IC 280-628923/10	200.0	77.622958	50.0	2275189.0	0.388115	Y



Calibration / 2-Chloroethyl vinyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

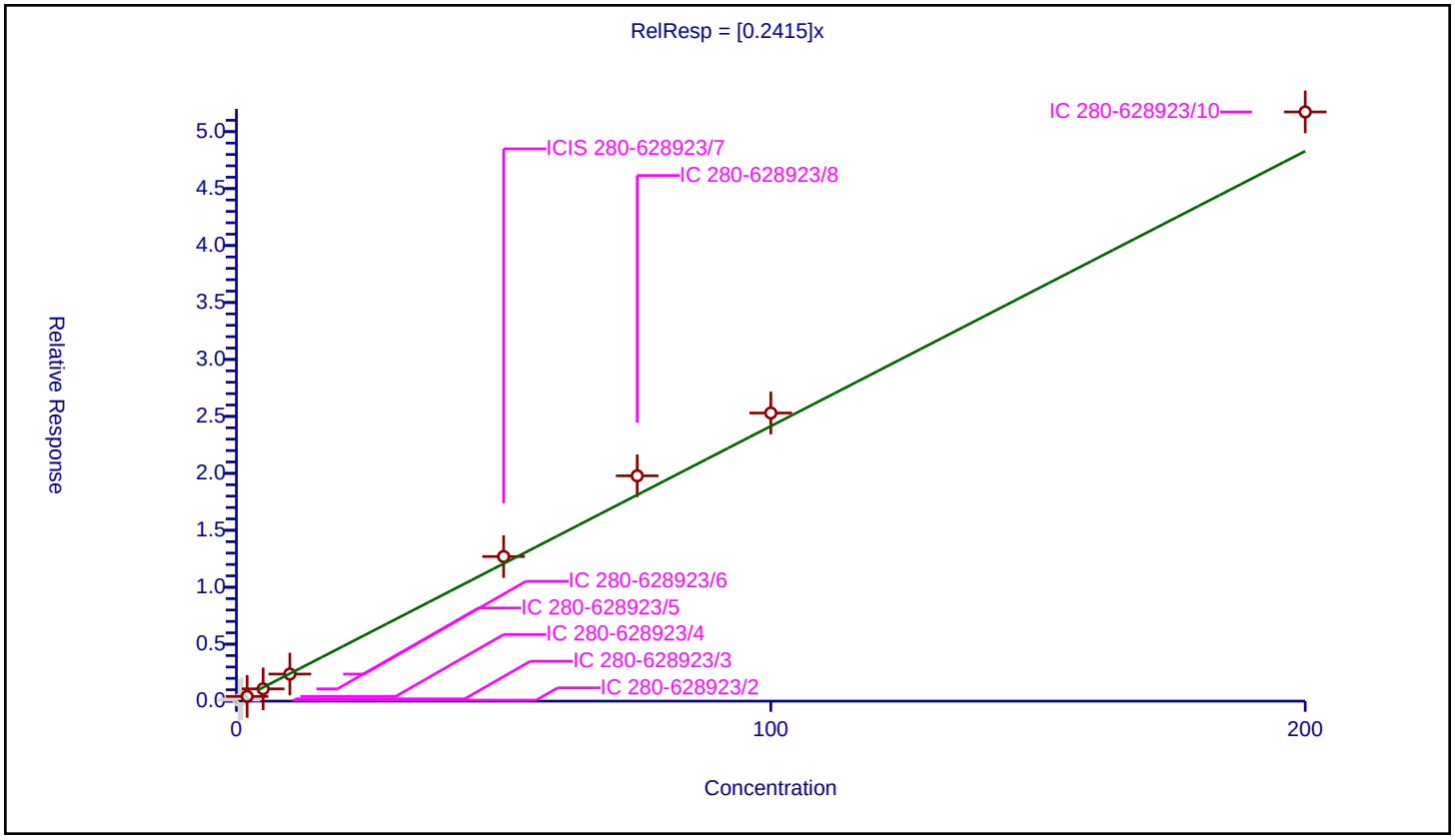
Curve Coefficients

Intercept:	0
Slope:	0.2415

Error Coefficients

Standard Error:	1150000
Relative Standard Error:	9.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.091021	50.0	2079729.0	0.182043	N
2	IC 280-628923/3	1.0	0.200777	50.0	2228592.0	0.200777	N
3	IC 280-628923/4	2.0	0.41465	50.0	2130473.0	0.207325	Y
4	IC 280-628923/5	5.0	1.079119	50.0	2207588.0	0.215824	Y
5	IC 280-628923/6	10.0	2.377116	50.0	2200166.0	0.237712	Y
6	ICIS 280-628923/7	50.0	12.696871	50.0	2307671.0	0.253937	Y
7	IC 280-628923/8	75.0	19.78393	50.0	2209796.0	0.263786	Y
8	IC 280-628923/9	100.0	25.29865	50.0	2262350.0	0.252986	Y
9	IC 280-628923/10	200.0	51.732032	50.0	2275189.0	0.25866	Y



Calibration / cis-1,3-Dichloropropene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

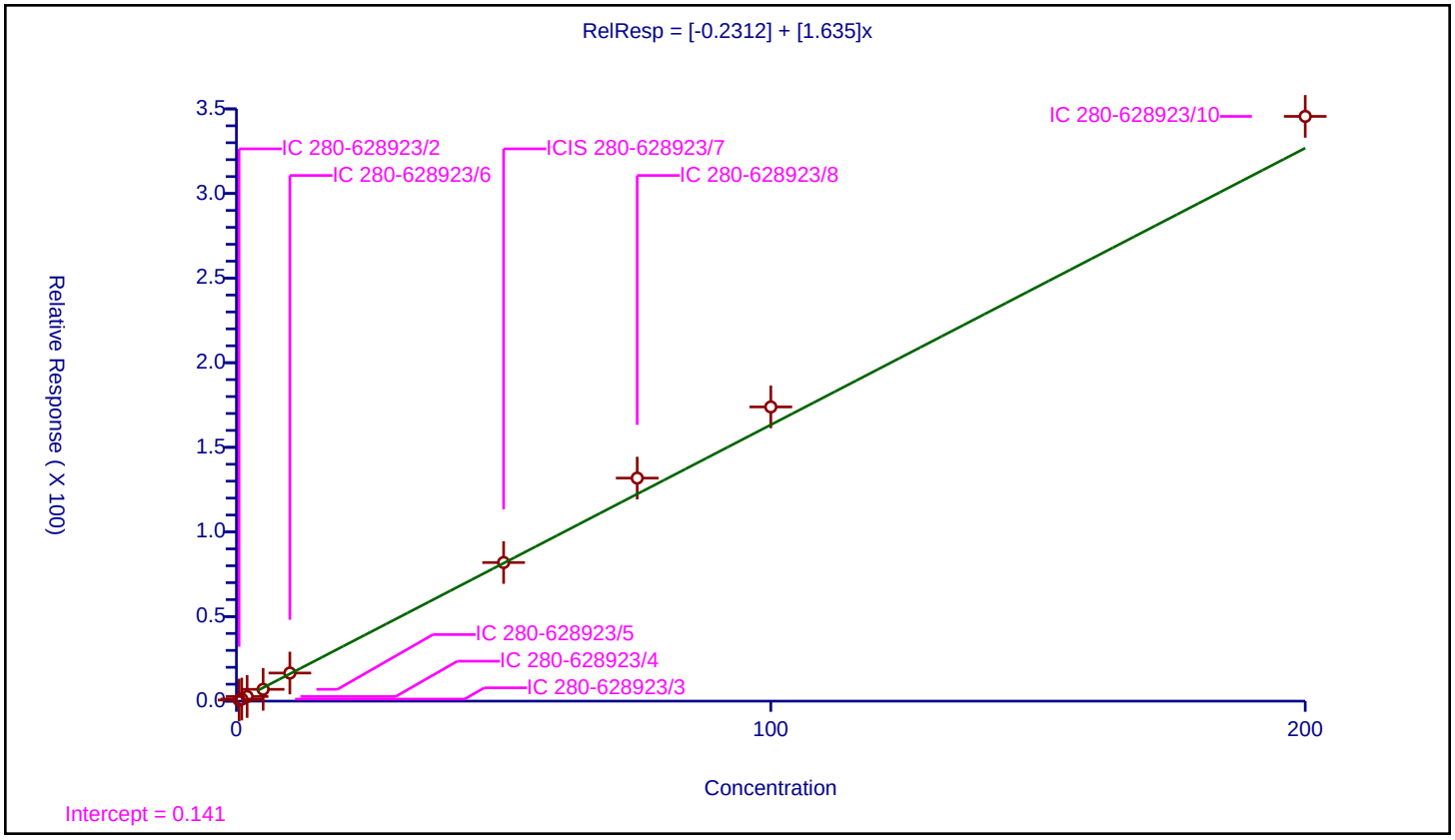
Curve Coefficients

Intercept:	-0.2312
Slope:	1.635

Error Coefficients

Standard Error:	2140000
Relative Standard Error:	9.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.657769	50.0	575658.0	1.315538	Y
2	IC 280-628923/3	1.0	1.225278	50.0	651240.0	1.225278	Y
3	IC 280-628923/4	2.0	2.734044	50.0	635798.0	1.367022	Y
4	IC 280-628923/5	5.0	6.981628	50.0	641455.0	1.396326	Y
5	IC 280-628923/6	10.0	16.607206	50.0	635432.0	1.660721	Y
6	ICIS 280-628923/7	50.0	81.92563	50.0	691540.0	1.638513	Y
7	IC 280-628923/8	75.0	131.821257	50.0	651907.0	1.757617	Y
8	IC 280-628923/9	100.0	173.870451	50.0	667147.0	1.738705	Y
9	IC 280-628923/10	200.0	345.583275	50.0	684806.0	1.727916	Y



Calibration / 4-Methyl-2-pentanone (MIBK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

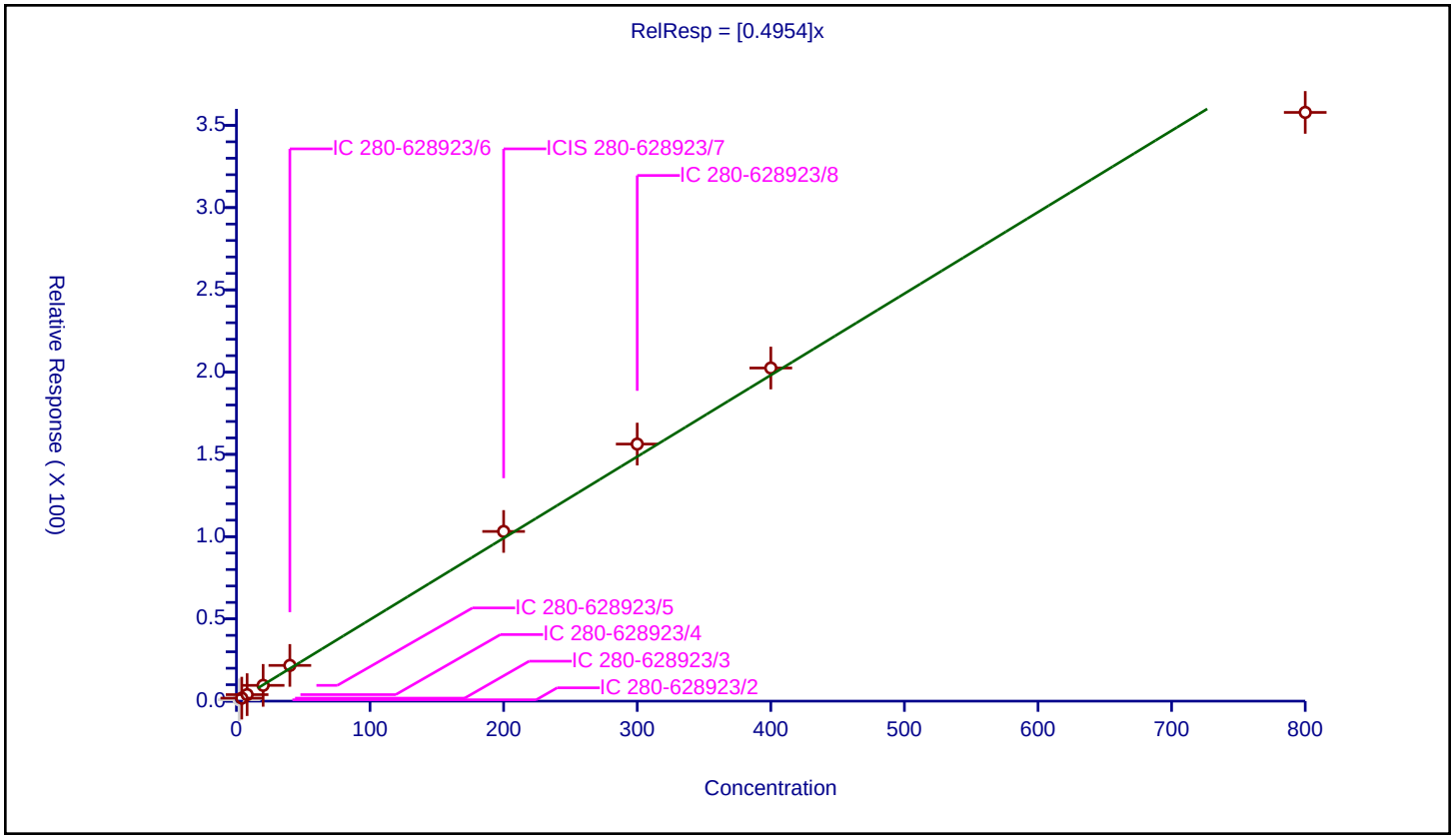
Curve Coefficients

Intercept:	0
Slope:	0.4954

Error Coefficients

Standard Error:	7750000
Relative Standard Error:	6.6
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	2.0	0.837994	50.0	2079729.0	0.418997	N
2	IC 280-628923/3	4.0	1.823708	50.0	2228592.0	0.455927	Y
3	IC 280-628923/4	8.0	3.956492	50.0	2130473.0	0.494562	Y
4	IC 280-628923/5	20.0	9.594023	50.0	2207588.0	0.479701	Y
5	IC 280-628923/6	40.0	21.715407	50.0	2200166.0	0.542885	Y
6	ICIS 280-628923/7	200.0	103.156147	50.0	2307671.0	0.515781	Y
7	IC 280-628923/8	300.0	156.270036	50.0	2209796.0	0.5209	Y
8	IC 280-628923/9	400.0	202.491347	50.0	2262350.0	0.506228	Y
9	IC 280-628923/10	800.0	357.865347	50.0	2275189.0	0.447332	Y



Calibration / Toluene-d8 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

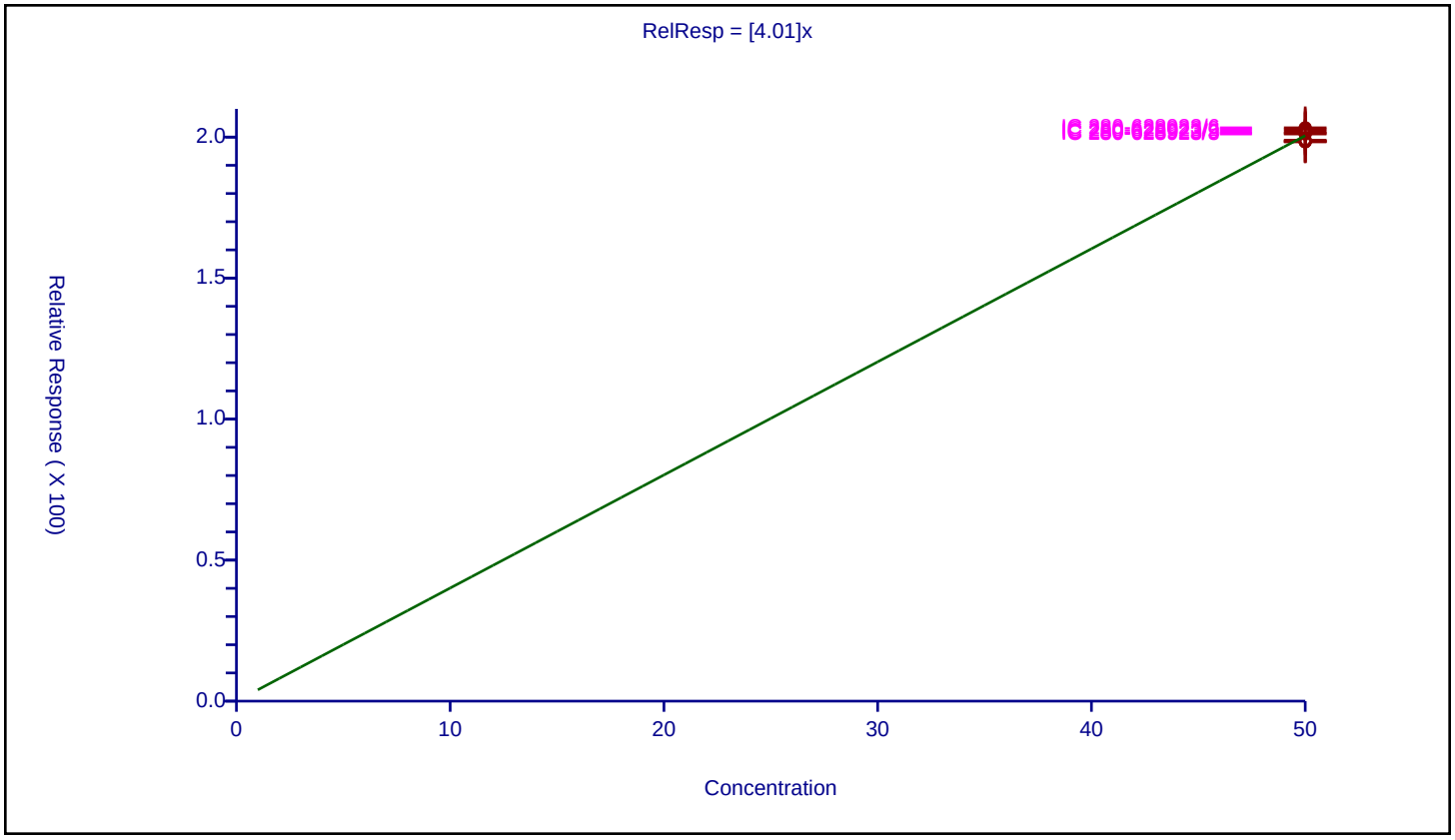
Curve Coefficients

Intercept:	0
Slope:	4.01

Error Coefficients

Standard Error:	2760000
Relative Standard Error:	1.0
Correlation Coefficient:	0.00000000000000000000
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	50.0	202.651748	50.0	575658.0	4.053035	Y
2	IC 280-628923/3	50.0	198.297786	50.0	651240.0	3.965956	Y
3	IC 280-628923/4	50.0	198.51824	50.0	635798.0	3.970365	Y
4	IC 280-628923/5	50.0	201.85087	50.0	641455.0	4.037017	Y
5	IC 280-628923/6	50.0	203.297442	50.0	635432.0	4.065949	Y
6	ICIS 280-628923/7	50.0	198.482445	50.0	691540.0	3.969649	Y
7	IC 280-628923/8	50.0	201.096859	50.0	651907.0	4.021937	Y
8	IC 280-628923/9	50.0	201.40194	50.0	667147.0	4.028039	Y
9	IC 280-628923/10	50.0	198.909691	50.0	684806.0	3.978194	Y



Calibration / Toluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

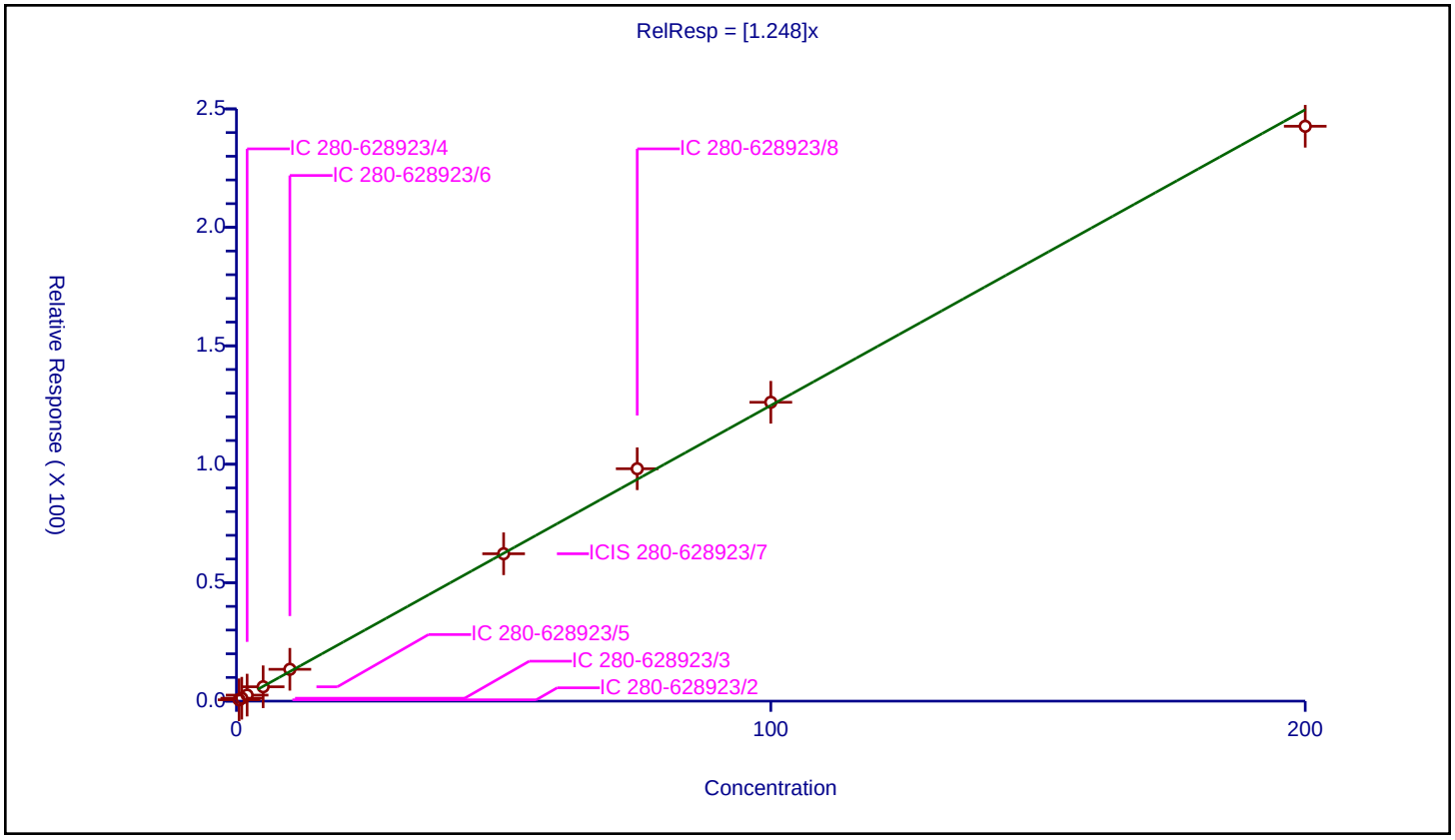
Curve Coefficients

Intercept:	0
Slope:	1.248

Error Coefficients

Standard Error:	4770000
Relative Standard Error:	4.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.573128	50.0	2079729.0	1.146255	Y
2	IC 280-628923/3	1.0	1.233425	50.0	2228592.0	1.233425	Y
3	IC 280-628923/4	2.0	2.541783	50.0	2130473.0	1.270891	Y
4	IC 280-628923/5	5.0	6.065194	50.0	2207588.0	1.213039	Y
5	IC 280-628923/6	10.0	13.437782	50.0	2200166.0	1.343778	Y
6	ICIS 280-628923/7	50.0	62.213223	50.0	2307671.0	1.244264	Y
7	IC 280-628923/8	75.0	98.095842	50.0	2209796.0	1.307945	Y
8	IC 280-628923/9	100.0	126.163282	50.0	2262350.0	1.261633	Y
9	IC 280-628923/10	200.0	242.667312	50.0	2275189.0	1.213337	Y



Calibration / trans-1,3-Dichloropropene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

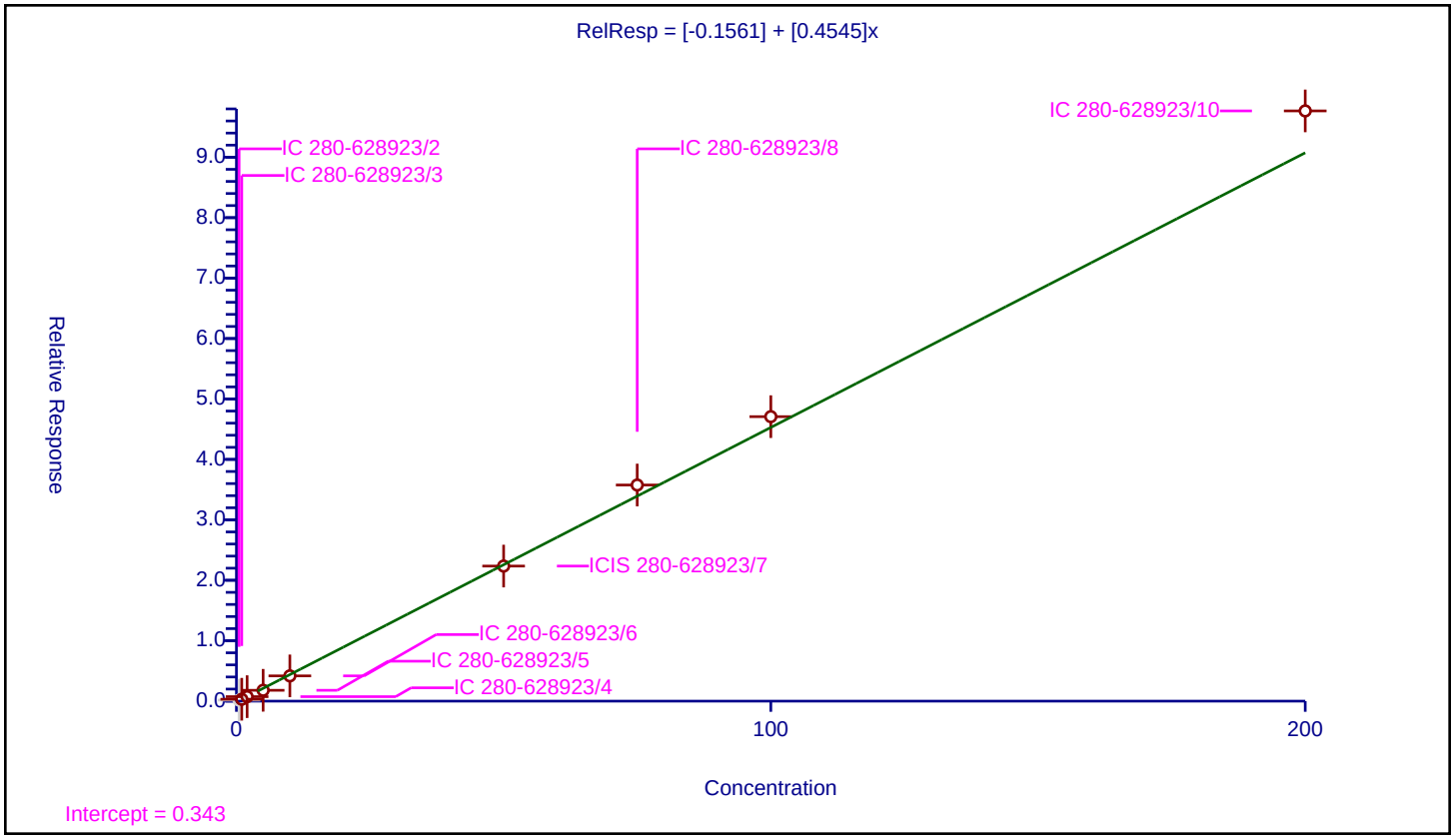
Curve Coefficients

Intercept:	-0.1561
Slope:	0.4545

Error Coefficients

Standard Error:	2160000
Relative Standard Error:	7.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.175432	50.0	2079729.0	0.350863	N
2	IC 280-628923/3	1.0	0.315087	50.0	2228592.0	0.315087	Y
3	IC 280-628923/4	2.0	0.743027	50.0	2130473.0	0.371514	Y
4	IC 280-628923/5	5.0	1.797278	50.0	2207588.0	0.359456	Y
5	IC 280-628923/6	10.0	4.182344	50.0	2200166.0	0.418234	Y
6	ICIS 280-628923/7	50.0	22.349156	50.0	2307671.0	0.446983	Y
7	IC 280-628923/8	75.0	35.763233	50.0	2209796.0	0.476843	Y
8	IC 280-628923/9	100.0	47.07543	50.0	2262350.0	0.470754	Y
9	IC 280-628923/10	200.0	97.666524	50.0	2275189.0	0.488333	Y



Calibration / Ethyl methacrylate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

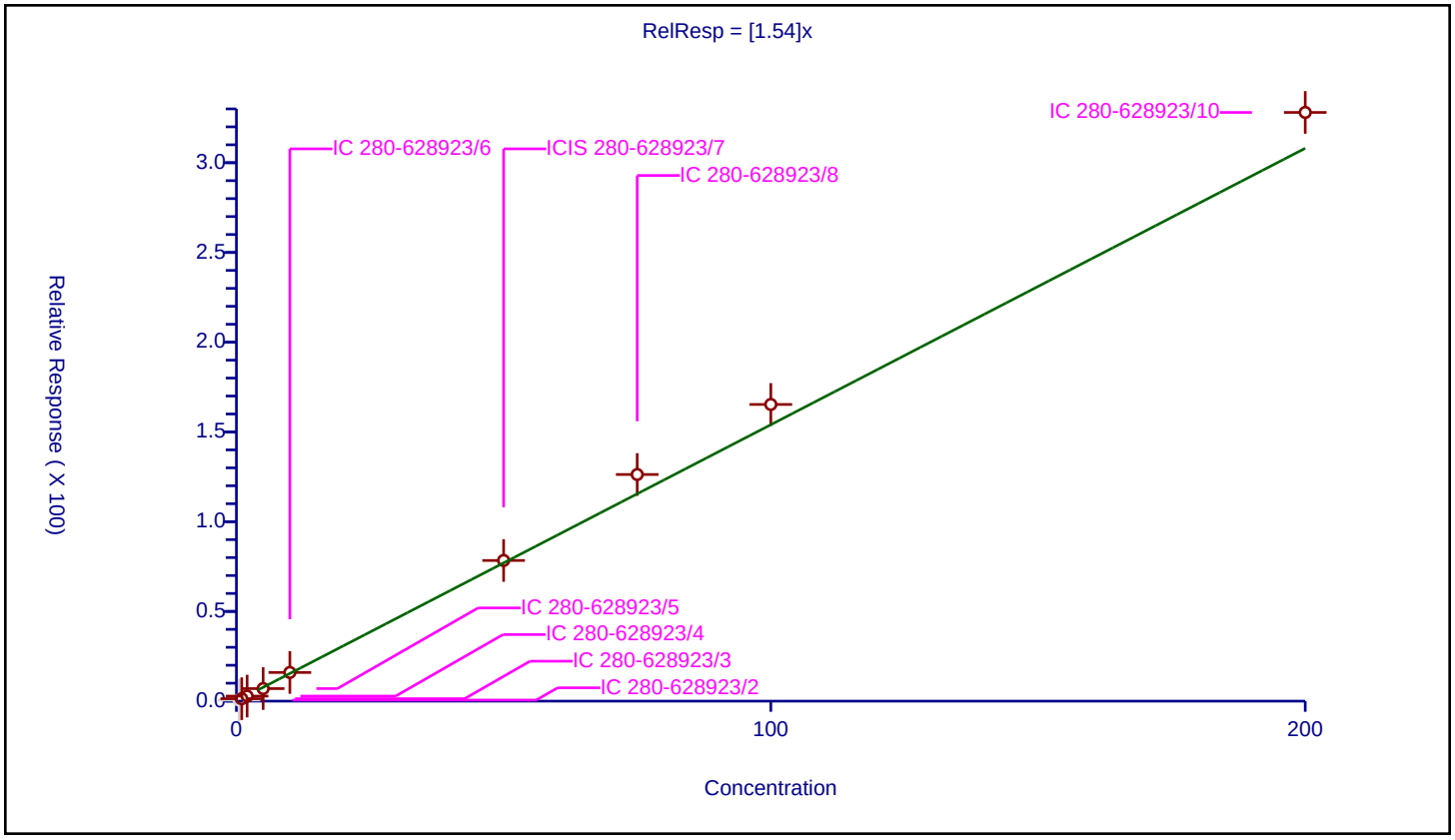
Curve Coefficients

Intercept:	0
Slope:	1.54

Error Coefficients

Standard Error:	2030000
Relative Standard Error:	8.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.607044	50.0	575658.0	1.214089	N
2	IC 280-628923/3	1.0	1.372152	50.0	651240.0	1.372152	Y
3	IC 280-628923/4	2.0	2.817168	50.0	635798.0	1.408584	Y
4	IC 280-628923/5	5.0	6.993398	50.0	641455.0	1.39868	Y
5	IC 280-628923/6	10.0	15.982277	50.0	635432.0	1.598228	Y
6	ICIS 280-628923/7	50.0	78.376811	50.0	691540.0	1.567536	Y
7	IC 280-628923/8	75.0	126.284041	50.0	651907.0	1.683787	Y
8	IC 280-628923/9	100.0	165.318888	50.0	667147.0	1.653189	Y
9	IC 280-628923/10	200.0	328.030931	50.0	684806.0	1.640155	Y



Calibration / 1,1,2-Trichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

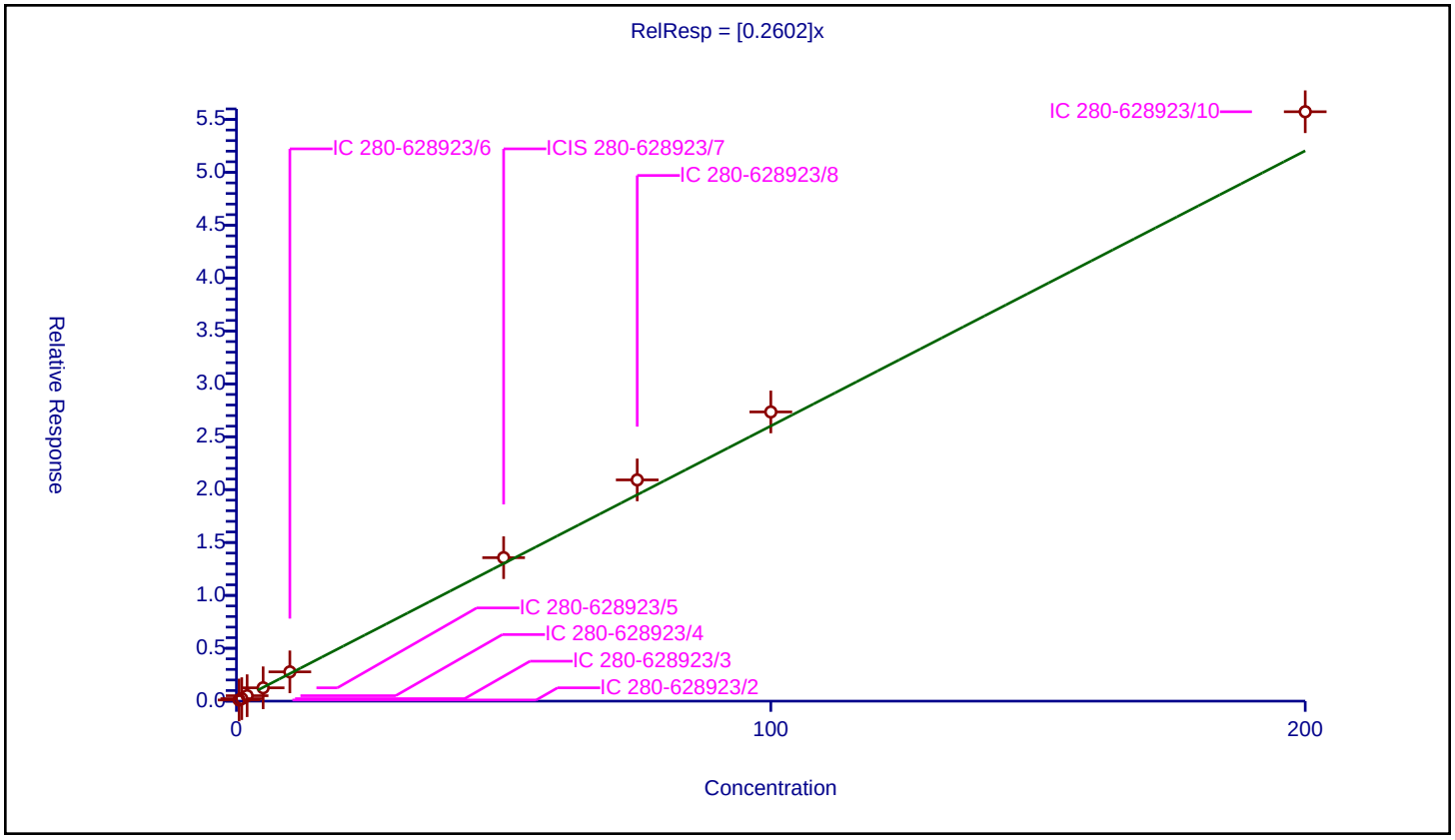
Curve Coefficients

Intercept:	0
Slope:	0.2602

Error Coefficients

Standard Error:	1070000
Relative Standard Error:	8.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.10862	50.0	2079729.0	0.21724	Y
2	IC 280-628923/3	1.0	0.235777	50.0	2228592.0	0.235777	Y
3	IC 280-628923/4	2.0	0.514346	50.0	2130473.0	0.257173	Y
4	IC 280-628923/5	5.0	1.261694	50.0	2207588.0	0.252339	Y
5	IC 280-628923/6	10.0	2.768337	50.0	2200166.0	0.276834	Y
6	ICIS 280-628923/7	50.0	13.566427	50.0	2307671.0	0.271329	Y
7	IC 280-628923/8	75.0	20.919714	50.0	2209796.0	0.27893	Y
8	IC 280-628923/9	100.0	27.345415	50.0	2262350.0	0.273454	Y
9	IC 280-628923/10	200.0	55.73148	50.0	2275189.0	0.278657	Y



Calibration / Tetrachloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

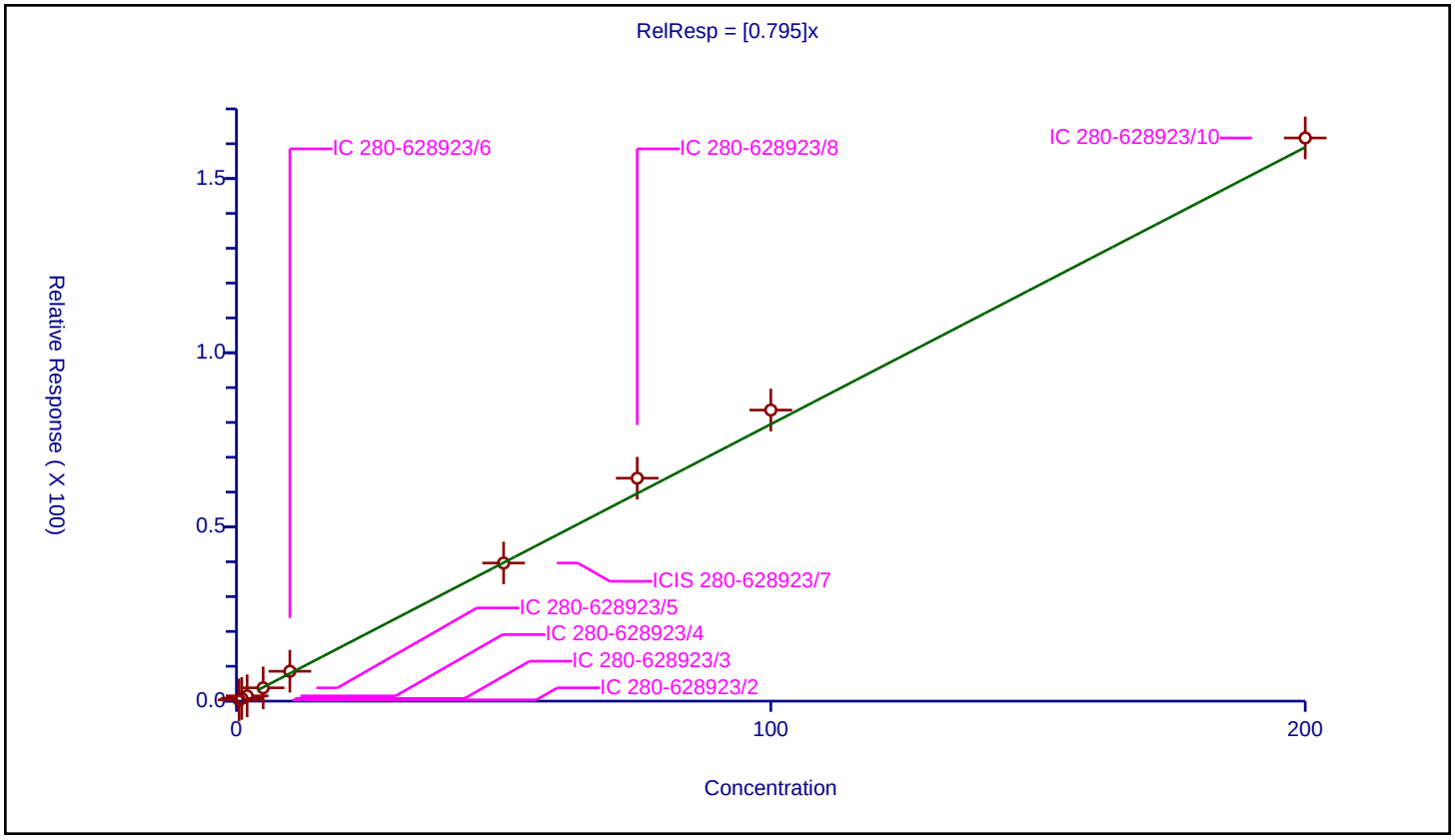
Curve Coefficients

Intercept:	0
Slope:	0.795

Error Coefficients

Standard Error:	946000
Relative Standard Error:	6.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.352206	50.0	575658.0	0.704411	Y
2	IC 280-628923/3	1.0	0.786192	50.0	651240.0	0.786192	Y
3	IC 280-628923/4	2.0	1.508105	50.0	635798.0	0.754052	Y
4	IC 280-628923/5	5.0	3.814453	50.0	641455.0	0.762891	Y
5	IC 280-628923/6	10.0	8.570547	50.0	635432.0	0.857055	Y
6	ICIS 280-628923/7	50.0	39.643405	50.0	691540.0	0.792868	Y
7	IC 280-628923/8	75.0	64.001154	50.0	651907.0	0.853349	Y
8	IC 280-628923/9	100.0	83.550402	50.0	667147.0	0.835504	Y
9	IC 280-628923/10	200.0	161.655637	50.0	684806.0	0.808278	Y



Calibration / 1,3-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

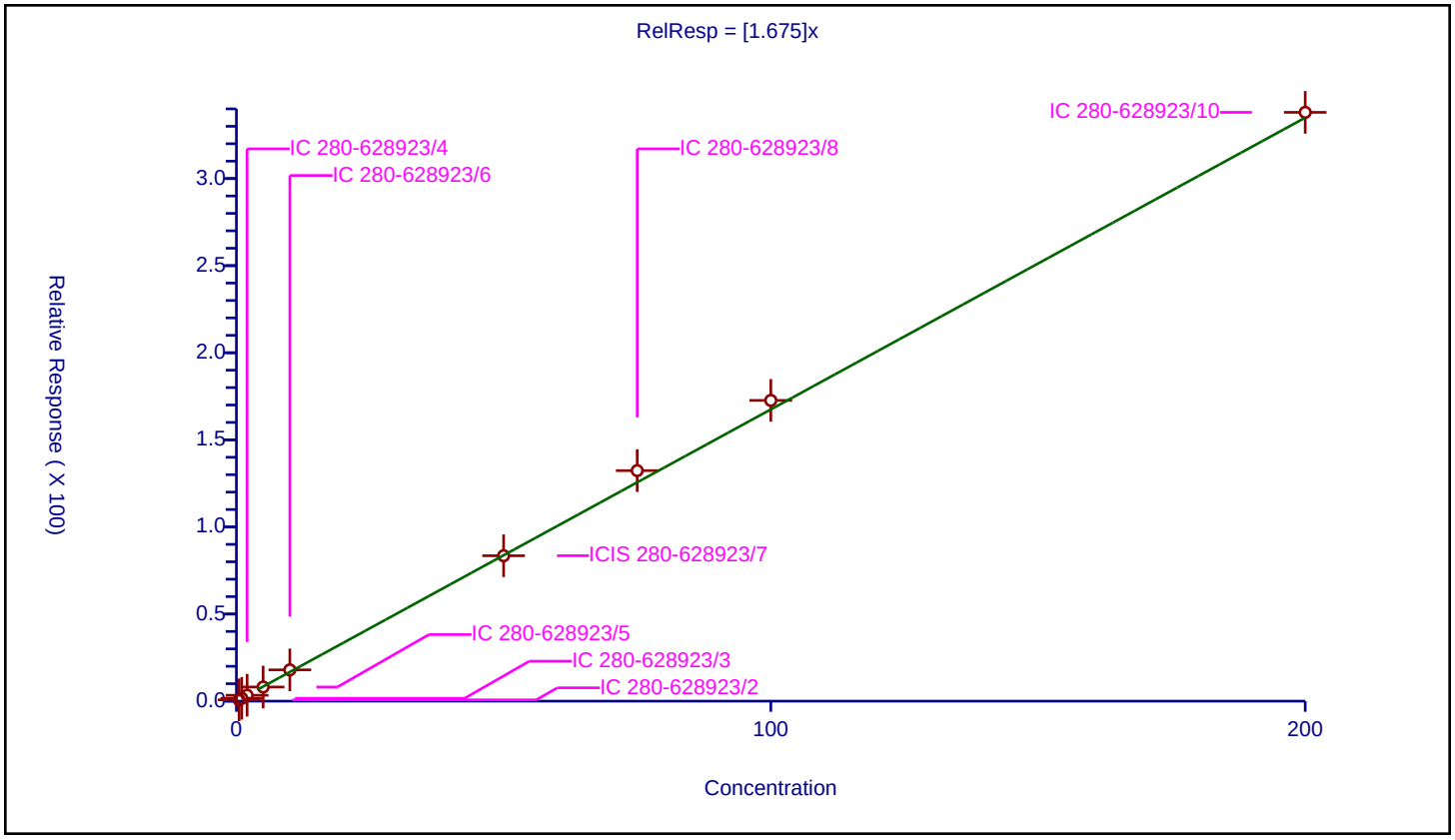
Curve Coefficients

Intercept:	0
Slope:	1.675

Error Coefficients

Standard Error:	1970000
Relative Standard Error:	5.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.73099	50.0	575658.0	1.461979	Y
2	IC 280-628923/3	1.0	1.650236	50.0	651240.0	1.650236	Y
3	IC 280-628923/4	2.0	3.382206	50.0	635798.0	1.691103	Y
4	IC 280-628923/5	5.0	8.110546	50.0	641455.0	1.622109	Y
5	IC 280-628923/6	10.0	17.963291	50.0	635432.0	1.796329	Y
6	ICIS 280-628923/7	50.0	83.479697	50.0	691540.0	1.669594	Y
7	IC 280-628923/8	75.0	132.342037	50.0	651907.0	1.76456	Y
8	IC 280-628923/9	100.0	172.646883	50.0	667147.0	1.726469	Y
9	IC 280-628923/10	200.0	338.00821	50.0	684806.0	1.690041	Y



Calibration / 2-Hexanone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

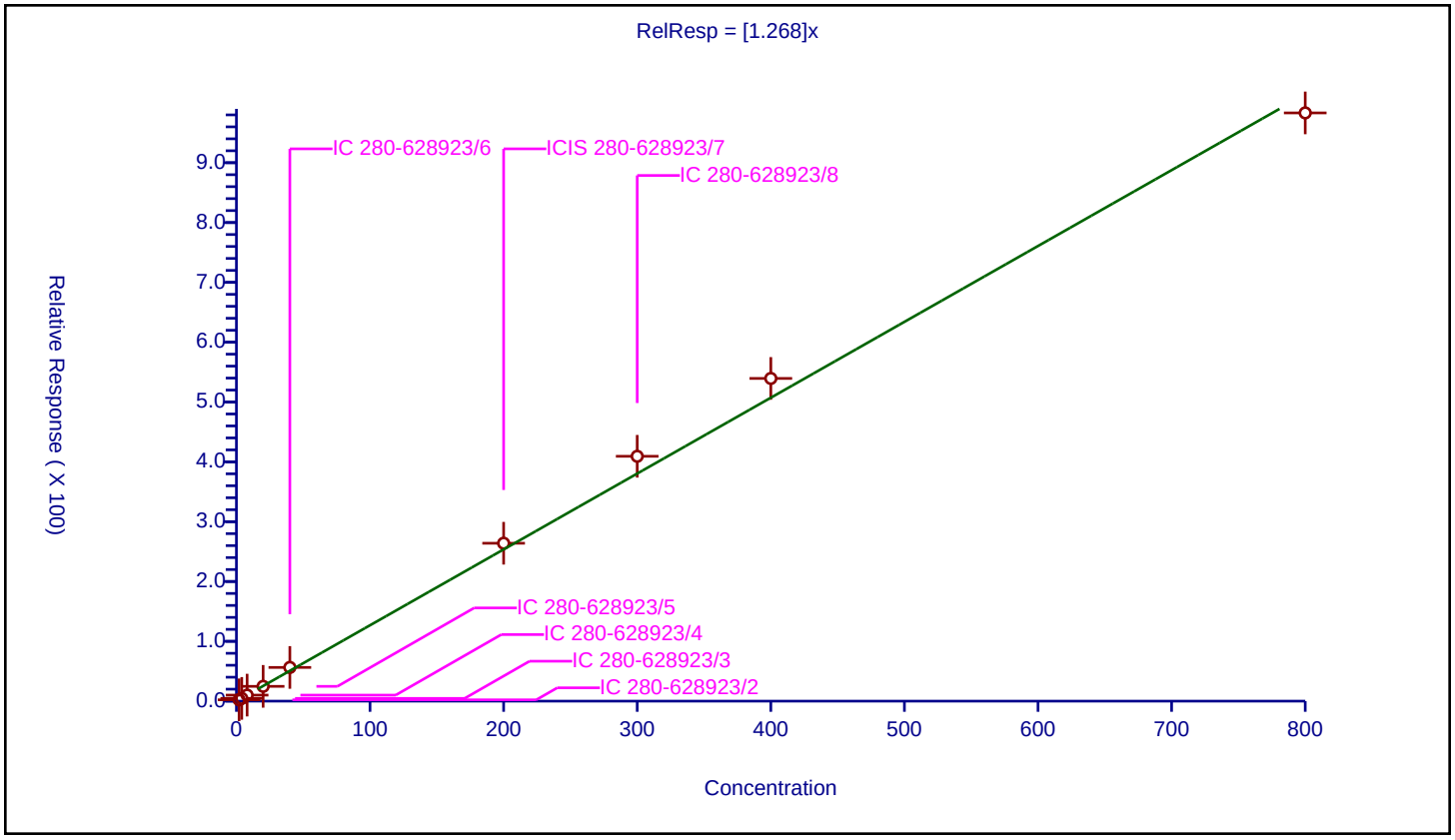
Curve Coefficients

Intercept:	0
Slope:	1.268

Error Coefficients

Standard Error:	5870000
Relative Standard Error:	8.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	2.0	2.187584	50.0	575658.0	1.093792	Y
2	IC 280-628923/3	4.0	4.608055	50.0	651240.0	1.152014	Y
3	IC 280-628923/4	8.0	10.062551	50.0	635798.0	1.257819	Y
4	IC 280-628923/5	20.0	24.753022	50.0	641455.0	1.237651	Y
5	IC 280-628923/6	40.0	56.356227	50.0	635432.0	1.408906	Y
6	ICIS 280-628923/7	200.0	263.944747	50.0	691540.0	1.319724	Y
7	IC 280-628923/8	300.0	409.309073	50.0	651907.0	1.364364	Y
8	IC 280-628923/9	400.0	539.426693	50.0	667147.0	1.348567	Y
9	IC 280-628923/10	800.0	983.294539	50.0	684806.0	1.229118	Y



Calibration / Chlorodibromomethane

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

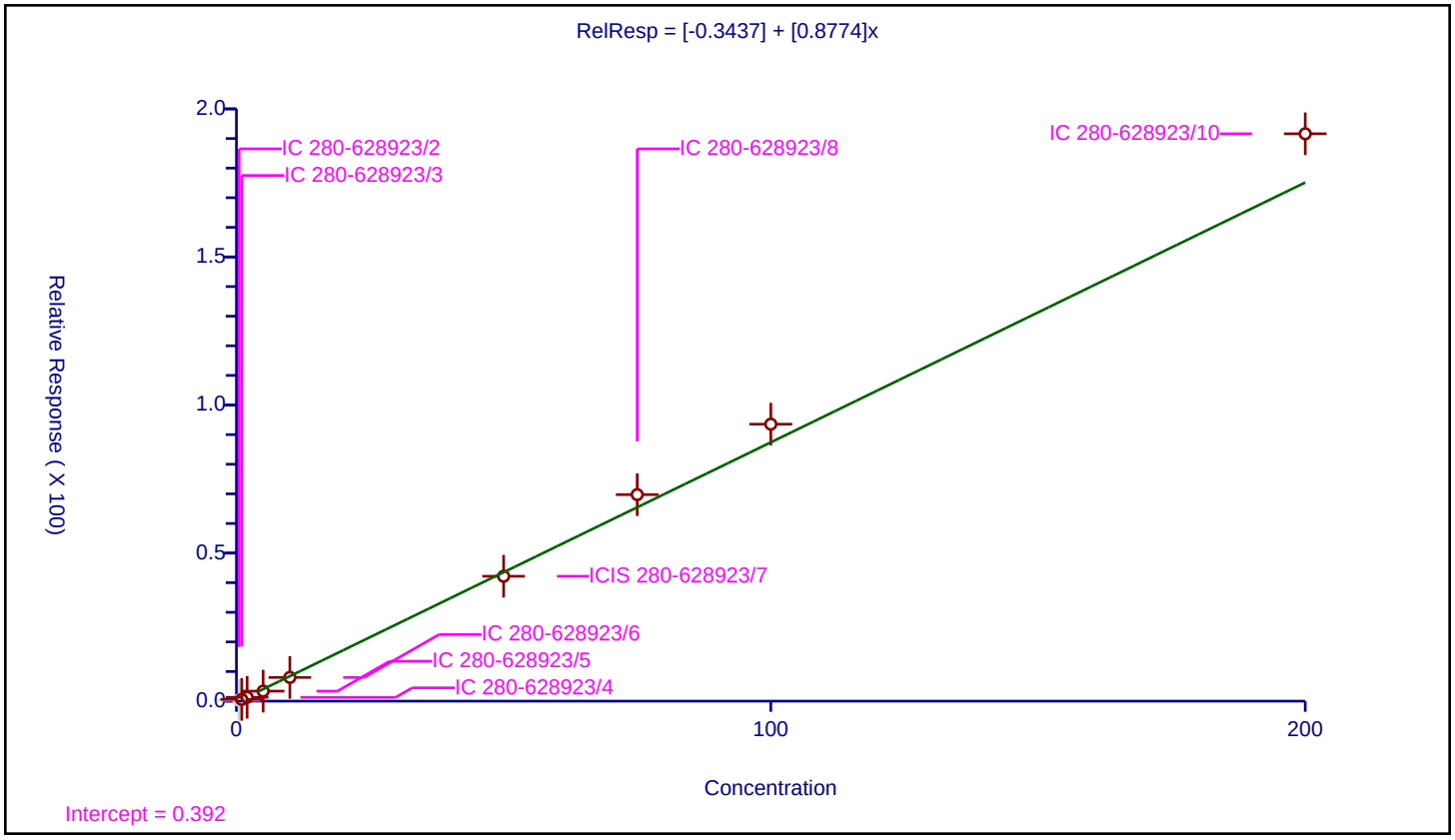
Curve Coefficients

Intercept:	-0.3437
Slope:	0.8774

Error Coefficients

Standard Error:	1270000
Relative Standard Error:	9.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.326843	50.0	575658.0	0.653687	N
2	IC 280-628923/3	1.0	0.592255	50.0	651240.0	0.592255	Y
3	IC 280-628923/4	2.0	1.294043	50.0	635798.0	0.647022	Y
4	IC 280-628923/5	5.0	3.384649	50.0	641455.0	0.67693	Y
5	IC 280-628923/6	10.0	8.009354	50.0	635432.0	0.800935	Y
6	ICIS 280-628923/7	50.0	42.176374	50.0	691540.0	0.843527	Y
7	IC 280-628923/8	75.0	69.747525	50.0	651907.0	0.929967	Y
8	IC 280-628923/9	100.0	93.537107	50.0	667147.0	0.935371	Y
9	IC 280-628923/10	200.0	191.603023	50.0	684806.0	0.958015	Y



Calibration / Ethylene Dibromide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

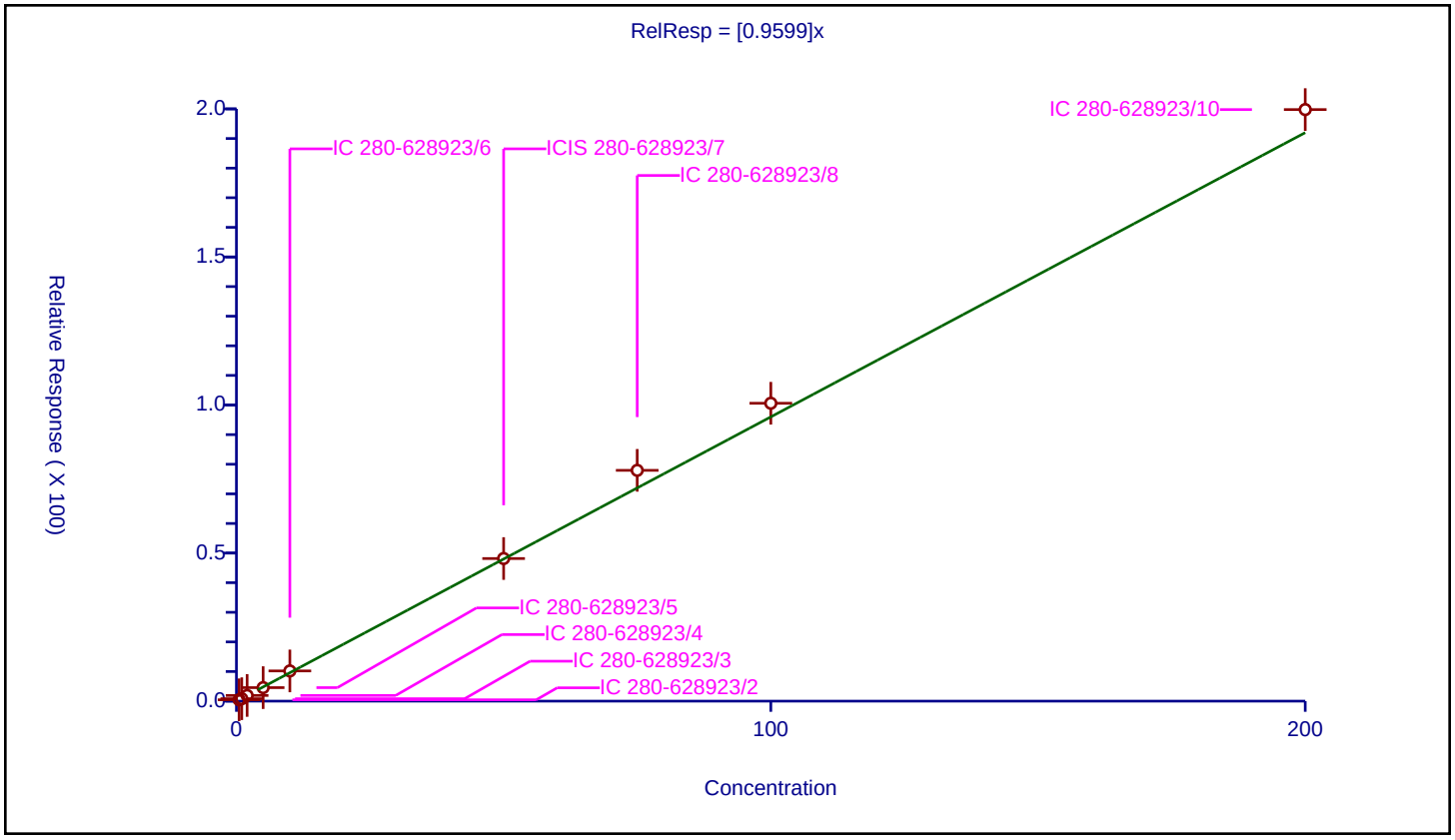
Curve Coefficients

Intercept:	0
Slope:	0.9599

Error Coefficients

Standard Error:	1160000
Relative Standard Error:	7.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.45626	50.0	575658.0	0.912521	Y
2	IC 280-628923/3	1.0	0.827422	50.0	651240.0	0.827422	Y
3	IC 280-628923/4	2.0	1.916882	50.0	635798.0	0.958441	Y
4	IC 280-628923/5	5.0	4.564467	50.0	641455.0	0.912893	Y
5	IC 280-628923/6	10.0	10.208331	50.0	635432.0	1.020833	Y
6	ICIS 280-628923/7	50.0	48.15506	50.0	691540.0	0.963101	Y
7	IC 280-628923/8	75.0	77.935273	50.0	651907.0	1.039137	Y
8	IC 280-628923/9	100.0	100.59672	50.0	667147.0	1.005967	Y
9	IC 280-628923/10	200.0	199.766284	50.0	684806.0	0.998831	Y



Calibration / 1-Chlorohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

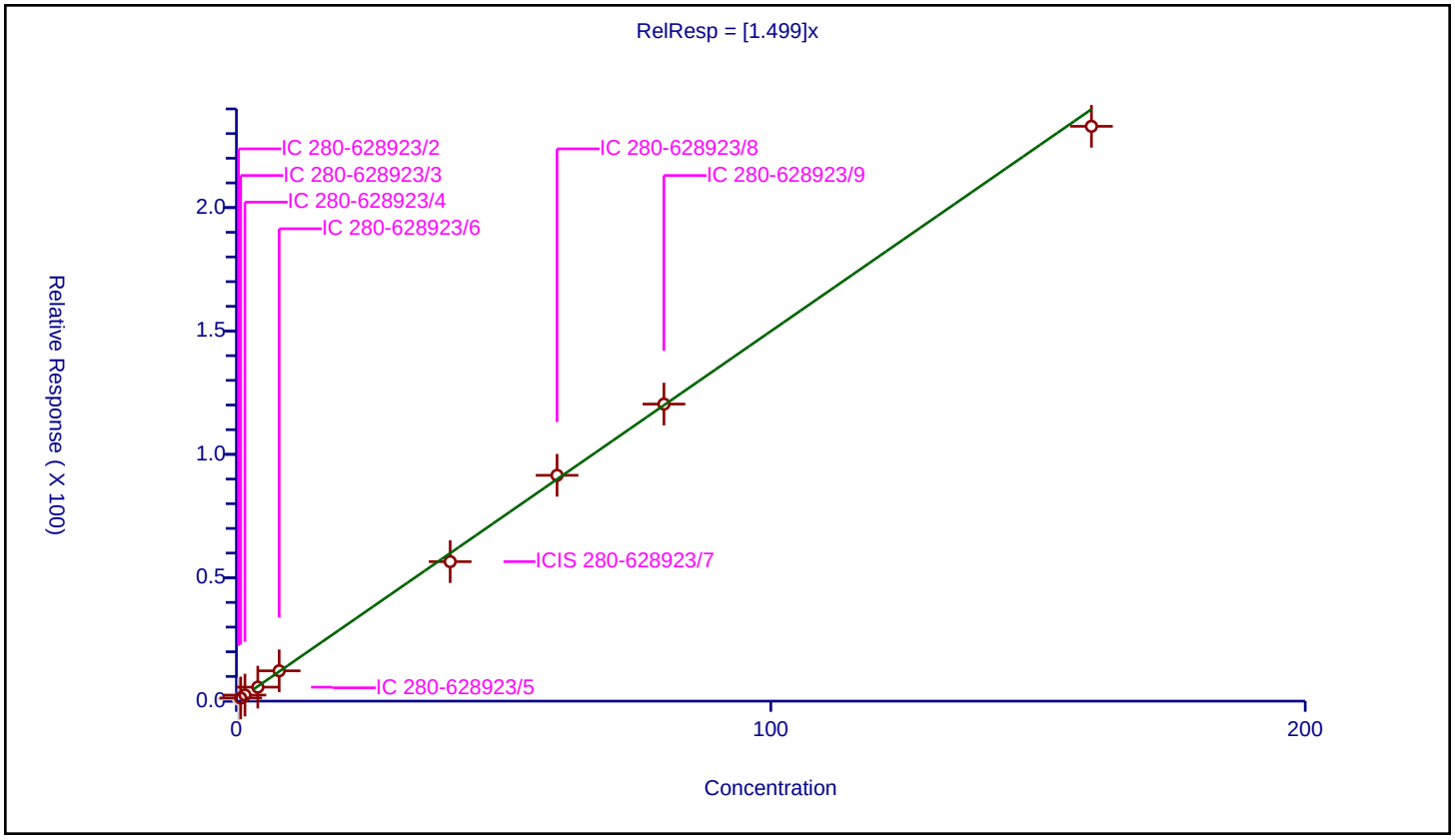
Curve Coefficients

Intercept:	0
Slope:	1.499

Error Coefficients

Standard Error:	1460000
Relative Standard Error:	4.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.4	0.83626	50.0	575658.0	2.090651	N
2	IC 280-628923/3	0.8	1.282477	50.0	651240.0	1.603096	Y
3	IC 280-628923/4	1.6	2.455025	50.0	635798.0	1.534391	Y
4	IC 280-628923/5	4.0	5.676392	50.0	641455.0	1.419098	Y
5	IC 280-628923/6	8.0	12.288333	50.0	635432.0	1.536042	Y
6	ICIS 280-628923/7	40.0	56.525219	50.0	691540.0	1.41313	Y
7	IC 280-628923/8	60.0	91.524788	50.0	651907.0	1.525413	Y
8	IC 280-628923/9	80.0	120.382165	50.0	667147.0	1.504777	Y
9	IC 280-628923/10	160.0	232.936262	50.0	684806.0	1.455852	Y



Calibration / Chlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

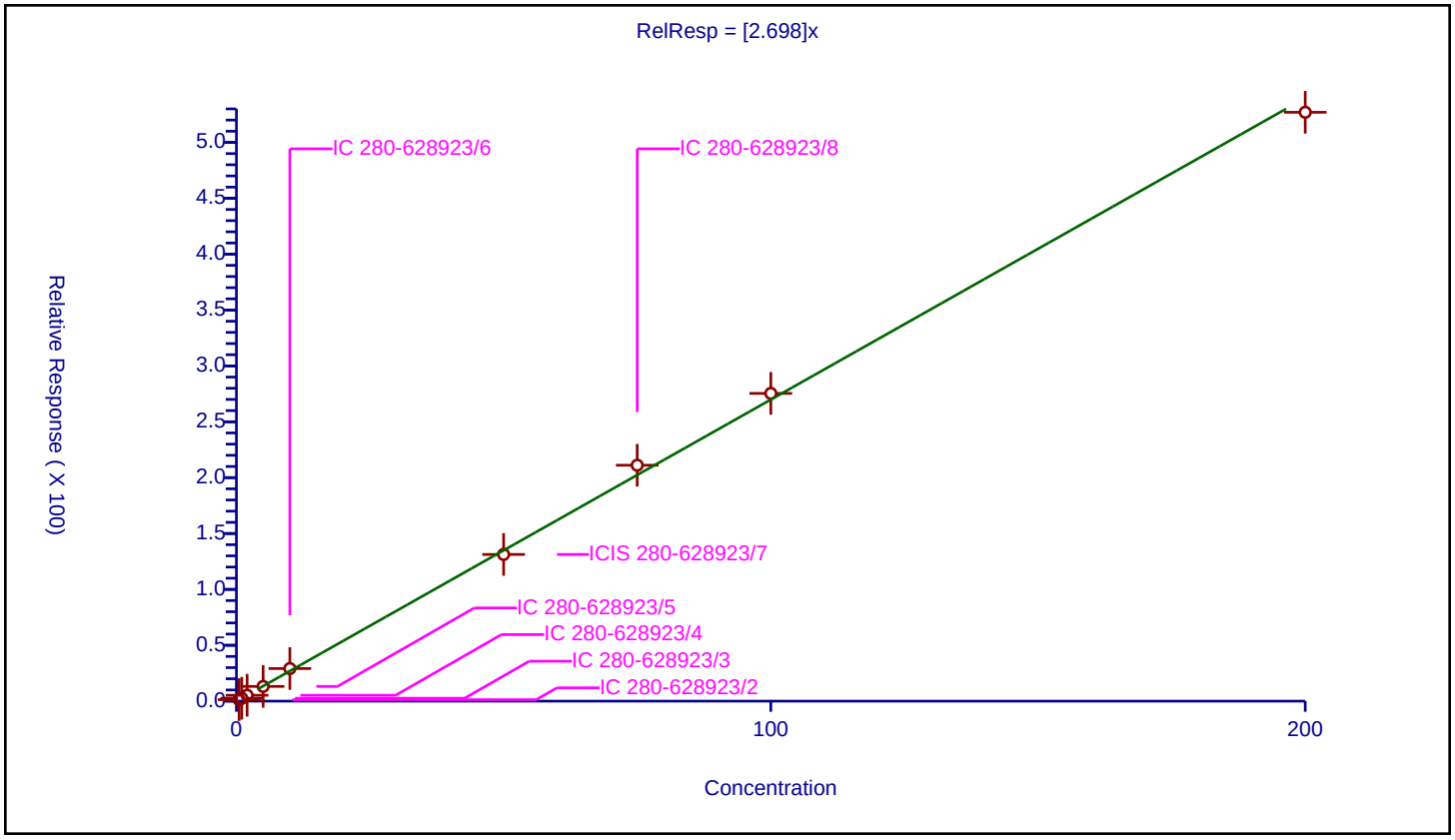
Curve Coefficients

Intercept:	0
Slope:	2.698

Error Coefficients

Standard Error:	3090000
Relative Standard Error:	3.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	1.320402	50.0	575658.0	2.640804	Y
2	IC 280-628923/3	1.0	2.619695	50.0	651240.0	2.619695	Y
3	IC 280-628923/4	2.0	5.290674	50.0	635798.0	2.645337	Y
4	IC 280-628923/5	5.0	13.173956	50.0	641455.0	2.634791	Y
5	IC 280-628923/6	10.0	29.163624	50.0	635432.0	2.916362	Y
6	ICIS 280-628923/7	50.0	131.27339	50.0	691540.0	2.625468	Y
7	IC 280-628923/8	75.0	211.122599	50.0	651907.0	2.814968	Y
8	IC 280-628923/9	100.0	275.40572	50.0	667147.0	2.754057	Y
9	IC 280-628923/10	200.0	526.963038	50.0	684806.0	2.634815	Y



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Calibration / 1,1,1,2-Tetrachloroethane

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

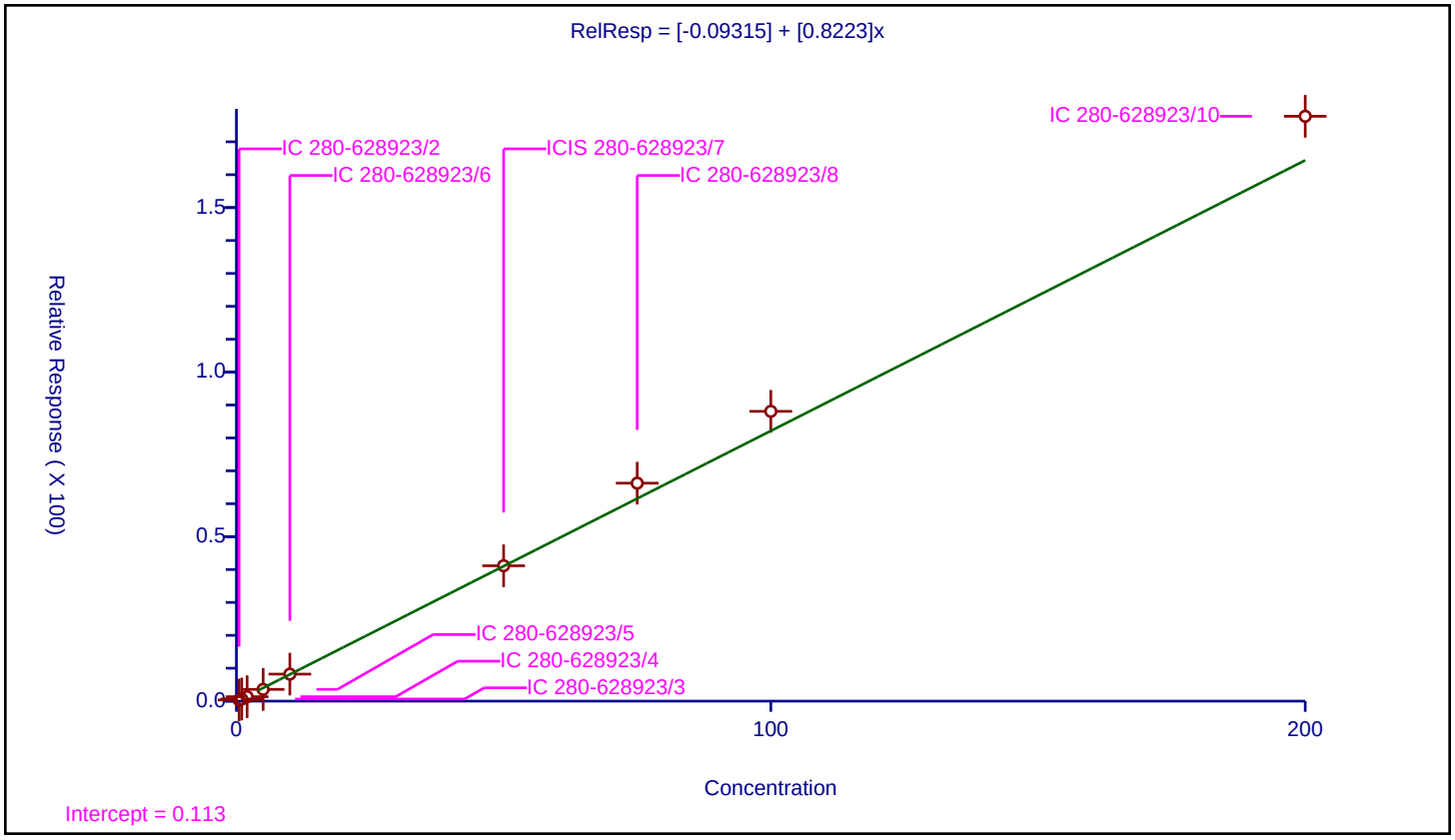
Curve Coefficients

Intercept:	-0.09315
Slope:	0.8223

Error Coefficients

Standard Error:	1090000
Relative Standard Error:	9.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.355246	50.0	575658.0	0.710491	Y
2	IC 280-628923/3	1.0	0.646843	50.0	651240.0	0.646843	Y
3	IC 280-628923/4	2.0	1.345396	50.0	635798.0	0.672698	Y
4	IC 280-628923/5	5.0	3.575855	50.0	641455.0	0.715171	Y
5	IC 280-628923/6	10.0	8.215592	50.0	635432.0	0.821559	Y
6	ICIS 280-628923/7	50.0	41.14245	50.0	691540.0	0.822849	Y
7	IC 280-628923/8	75.0	66.252011	50.0	651907.0	0.88336	Y
8	IC 280-628923/9	100.0	88.078939	50.0	667147.0	0.880789	Y
9	IC 280-628923/10	200.0	177.751144	50.0	684806.0	0.888756	Y



Calibration / Ethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

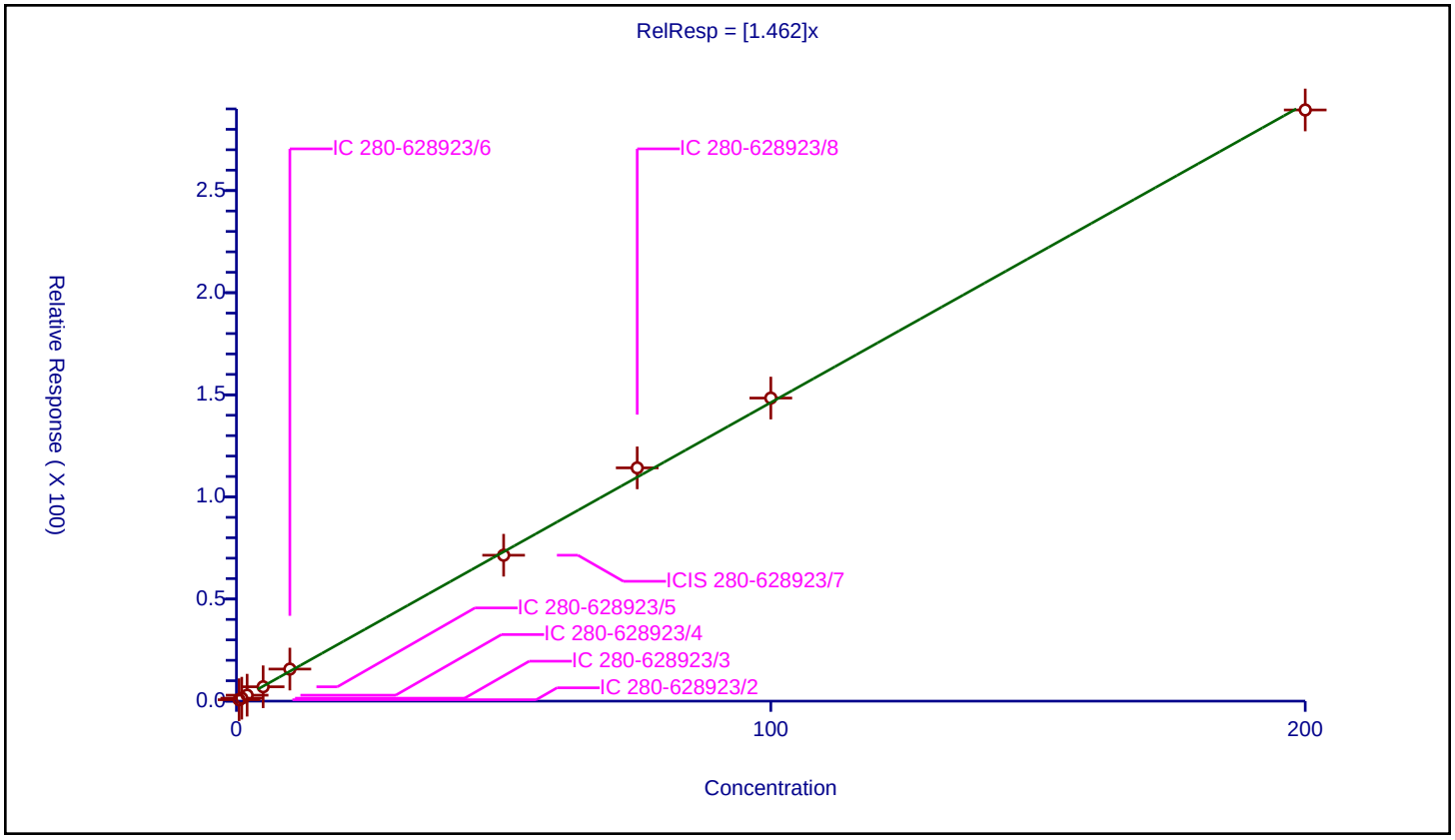
Curve Coefficients

Intercept:	0
Slope:	1.462

Error Coefficients

Standard Error:	1690000
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.703195	50.0	575658.0	1.406391	Y
2	IC 280-628923/3	1.0	1.43887	50.0	651240.0	1.43887	Y
3	IC 280-628923/4	2.0	2.909965	50.0	635798.0	1.454983	Y
4	IC 280-628923/5	5.0	7.033073	50.0	641455.0	1.406615	Y
5	IC 280-628923/6	10.0	15.702074	50.0	635432.0	1.570207	Y
6	ICIS 280-628923/7	50.0	71.447494	50.0	691540.0	1.42895	Y
7	IC 280-628923/8	75.0	114.222121	50.0	651907.0	1.522962	Y
8	IC 280-628923/9	100.0	148.405973	50.0	667147.0	1.48406	Y
9	IC 280-628923/10	200.0	289.475852	50.0	684806.0	1.447379	Y



Calibration / m-Xylene & p-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

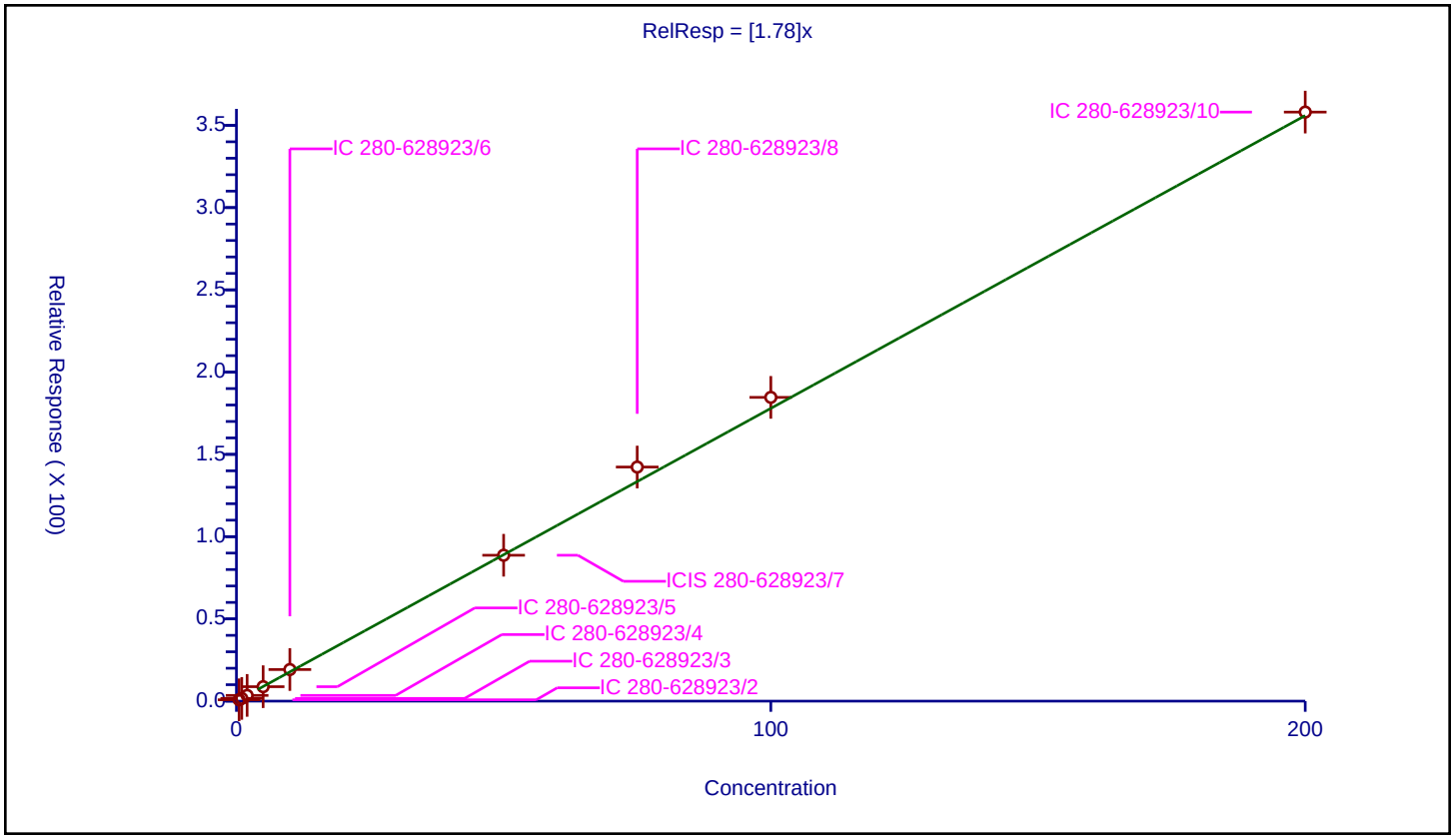
Curve Coefficients

Intercept:	0
Slope:	1.78

Error Coefficients

Standard Error:	2100000
Relative Standard Error:	5.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.818368	50.0	575658.0	1.636736	Y
2	IC 280-628923/3	1.0	1.652693	50.0	651240.0	1.652693	Y
3	IC 280-628923/4	2.0	3.486563	50.0	635798.0	1.743282	Y
4	IC 280-628923/5	5.0	8.782456	50.0	641455.0	1.756491	Y
5	IC 280-628923/6	10.0	19.204651	50.0	635432.0	1.920465	Y
6	ICIS 280-628923/7	50.0	88.672817	50.0	691540.0	1.773456	Y
7	IC 280-628923/8	75.0	142.296217	50.0	651907.0	1.897283	Y
8	IC 280-628923/9	100.0	184.644314	50.0	667147.0	1.846443	Y
9	IC 280-628923/10	200.0	358.061772	50.0	684806.0	1.790309	Y



Calibration / o-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

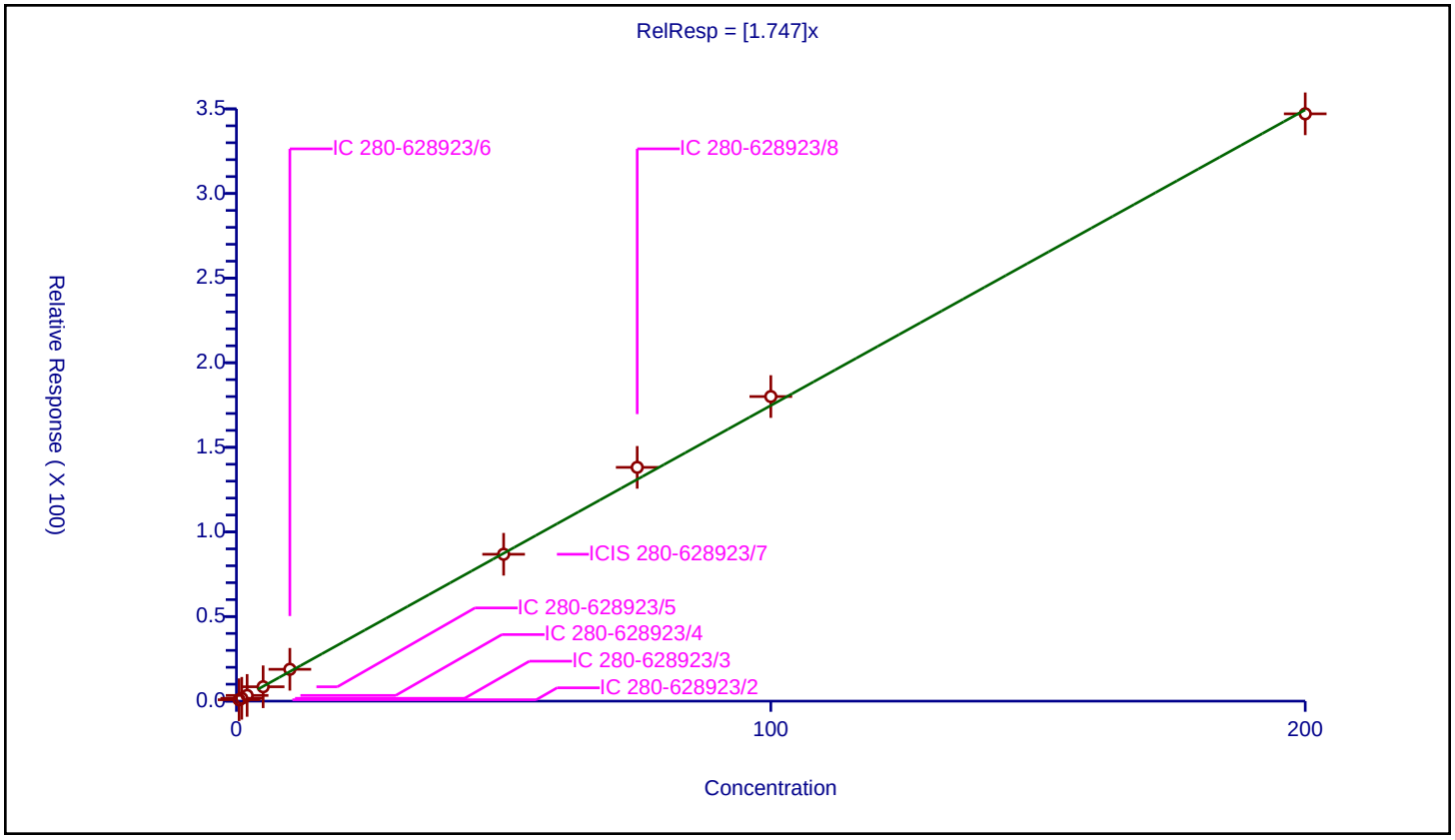
Curve Coefficients

Intercept:	0
Slope:	1.747

Error Coefficients

Standard Error:	2030000
Relative Standard Error:	4.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.832873	50.0	575658.0	1.665746	Y
2	IC 280-628923/3	1.0	1.679719	50.0	651240.0	1.679719	Y
3	IC 280-628923/4	2.0	3.372455	50.0	635798.0	1.686227	Y
4	IC 280-628923/5	5.0	8.487813	50.0	641455.0	1.697563	Y
5	IC 280-628923/6	10.0	18.821762	50.0	635432.0	1.882176	Y
6	ICIS 280-628923/7	50.0	86.802282	50.0	691540.0	1.736046	Y
7	IC 280-628923/8	75.0	138.161808	50.0	651907.0	1.842157	Y
8	IC 280-628923/9	100.0	180.009803	50.0	667147.0	1.800098	Y
9	IC 280-628923/10	200.0	347.088957	50.0	684806.0	1.735445	Y



Calibration / Styrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

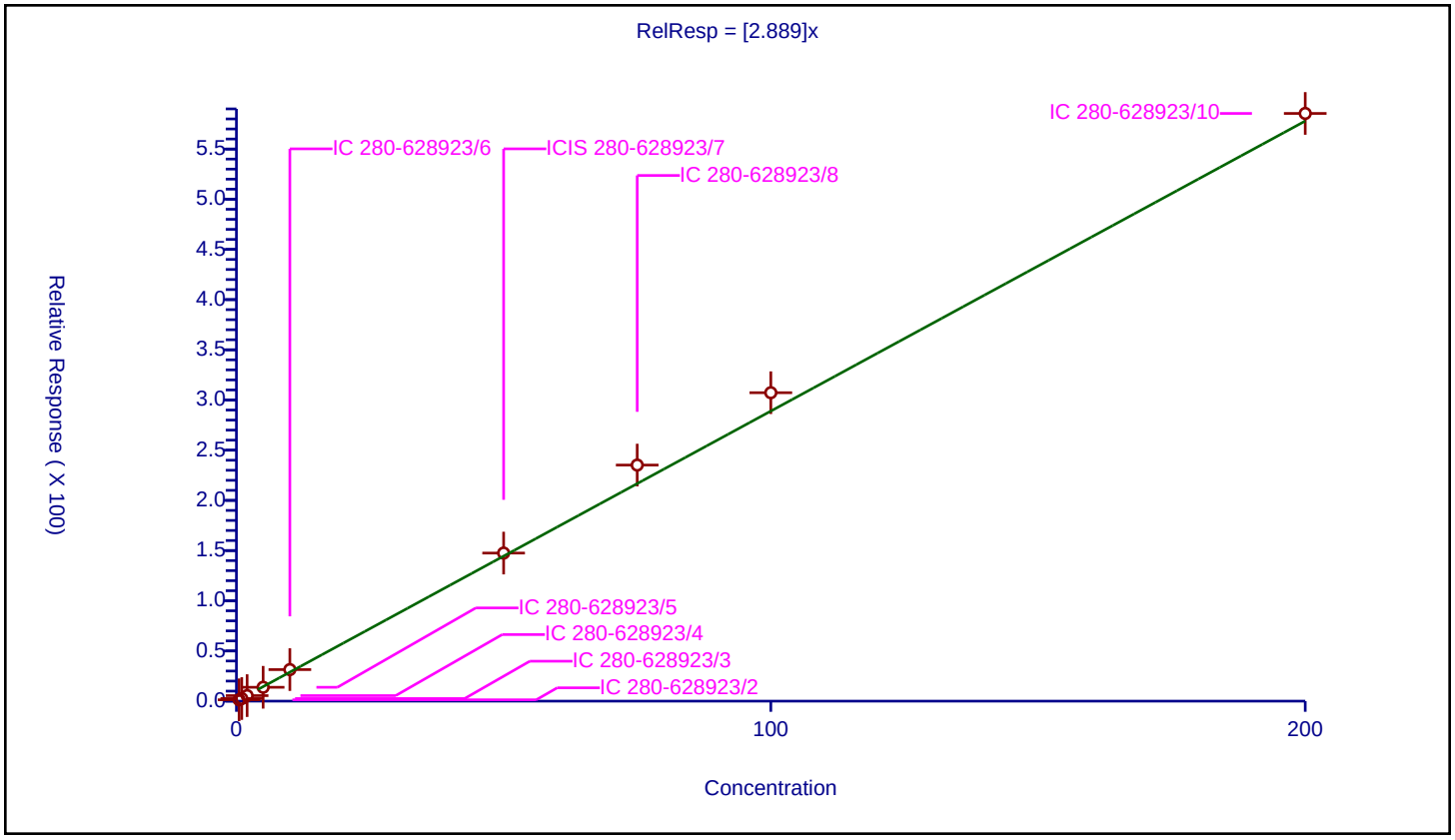
Curve Coefficients

Intercept:	0
Slope:	2.889

Error Coefficients

Standard Error:	3440000
Relative Standard Error:	7.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	1.344548	50.0	575658.0	2.689097	Y
2	IC 280-628923/3	1.0	2.575855	50.0	651240.0	2.575855	Y
3	IC 280-628923/4	2.0	5.493254	50.0	635798.0	2.746627	Y
4	IC 280-628923/5	5.0	13.818428	50.0	641455.0	2.763686	Y
5	IC 280-628923/6	10.0	31.439556	50.0	635432.0	3.143956	Y
6	ICIS 280-628923/7	50.0	147.515256	50.0	691540.0	2.950305	Y
7	IC 280-628923/8	75.0	235.182549	50.0	651907.0	3.135767	Y
8	IC 280-628923/9	100.0	307.256122	50.0	667147.0	3.072561	Y
9	IC 280-628923/10	200.0	585.456319	50.0	684806.0	2.927282	Y



Calibration / Bromoform

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

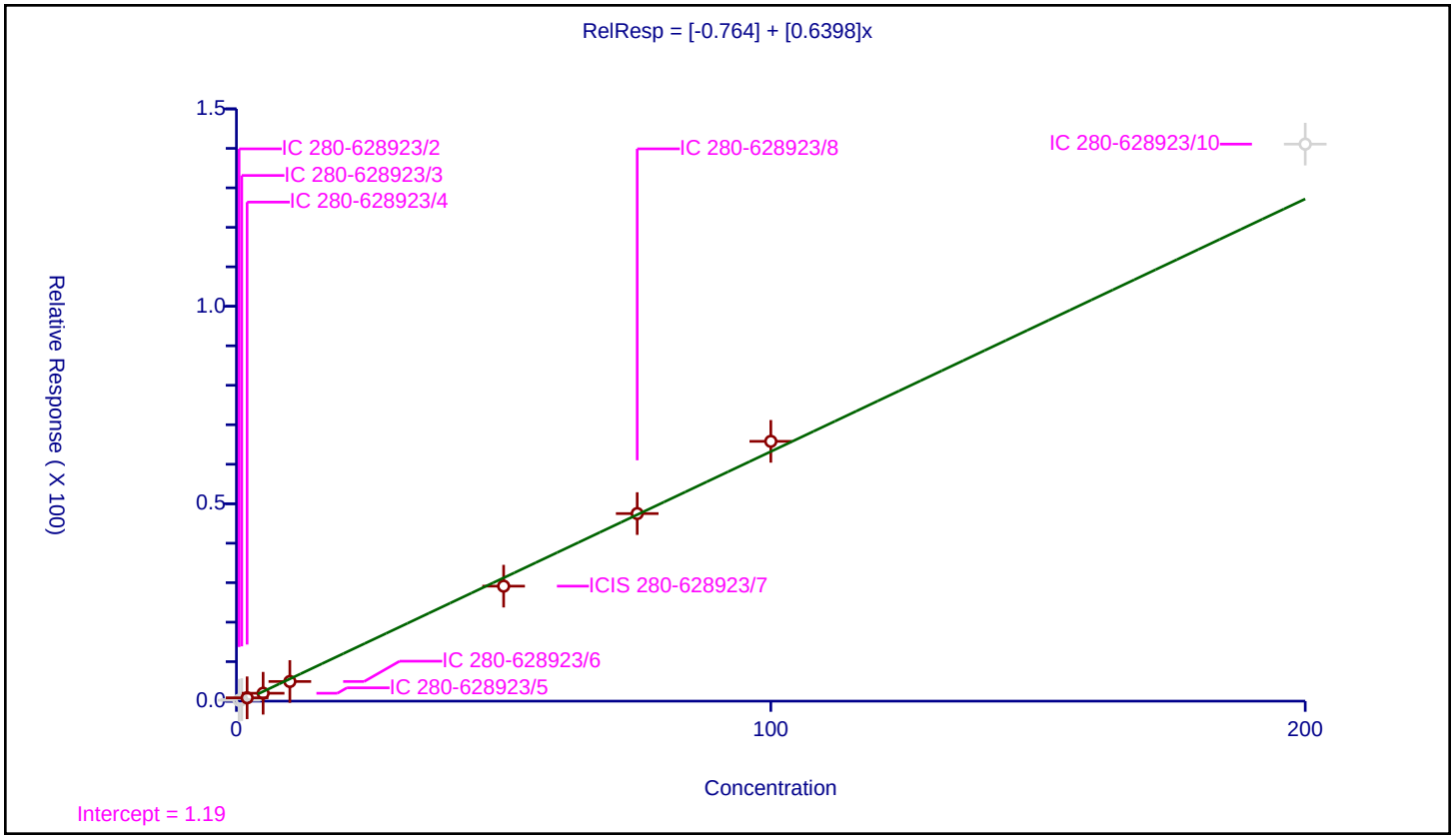
Curve Coefficients

Intercept:	-0.764
Slope:	0.6398

Error Coefficients

Standard Error:	575000
Relative Standard Error:	16.0
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.225307	50.0	575658.0	0.450615	N
2	IC 280-628923/3	1.0	0.393096	50.0	651240.0	0.393096	N
3	IC 280-628923/4	2.0	0.846653	50.0	635798.0	0.423326	Y
4	IC 280-628923/5	5.0	1.997724	50.0	641455.0	0.399545	Y
5	IC 280-628923/6	10.0	4.977559	50.0	635432.0	0.497756	Y
6	ICIS 280-628923/7	50.0	29.123984	50.0	691540.0	0.58248	Y
7	IC 280-628923/8	75.0	47.503325	50.0	651907.0	0.633378	Y
8	IC 280-628923/9	100.0	65.797943	50.0	667147.0	0.657979	Y
9	IC 280-628923/10	200.0	141.076524	50.0	684806.0	0.705383	N



Calibration / Isopropylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

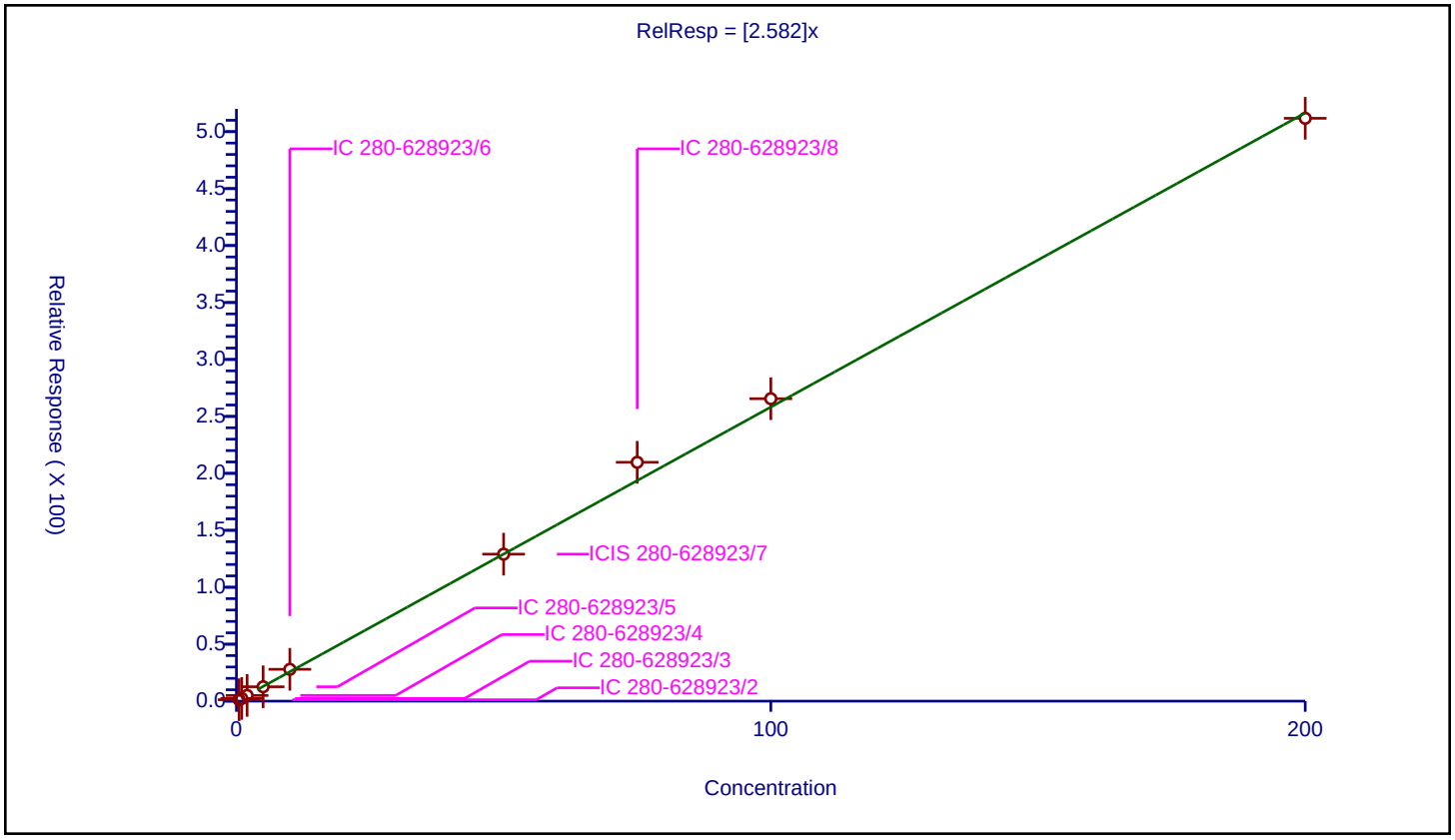
Curve Coefficients

Intercept:	0
Slope:	2.582

Error Coefficients

Standard Error:	4960000
Relative Standard Error:	5.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	1.229511	50.0	971565.0	2.459022	Y
2	IC 280-628923/3	1.0	2.36461	50.0	1130271.0	2.36461	Y
3	IC 280-628923/4	2.0	5.018303	50.0	1090518.0	2.509152	Y
4	IC 280-628923/5	5.0	12.611516	50.0	1106572.0	2.522303	Y
5	IC 280-628923/6	10.0	27.944982	50.0	1099523.0	2.794498	Y
6	ICIS 280-628923/7	50.0	129.040183	50.0	1171859.0	2.580804	Y
7	IC 280-628923/8	75.0	209.693672	50.0	1082500.0	2.795916	Y
8	IC 280-628923/9	100.0	265.53898	50.0	1136619.0	2.65539	Y
9	IC 280-628923/10	200.0	511.747217	50.0	1114132.0	2.558736	Y



Calibration / Cyclohexanone

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

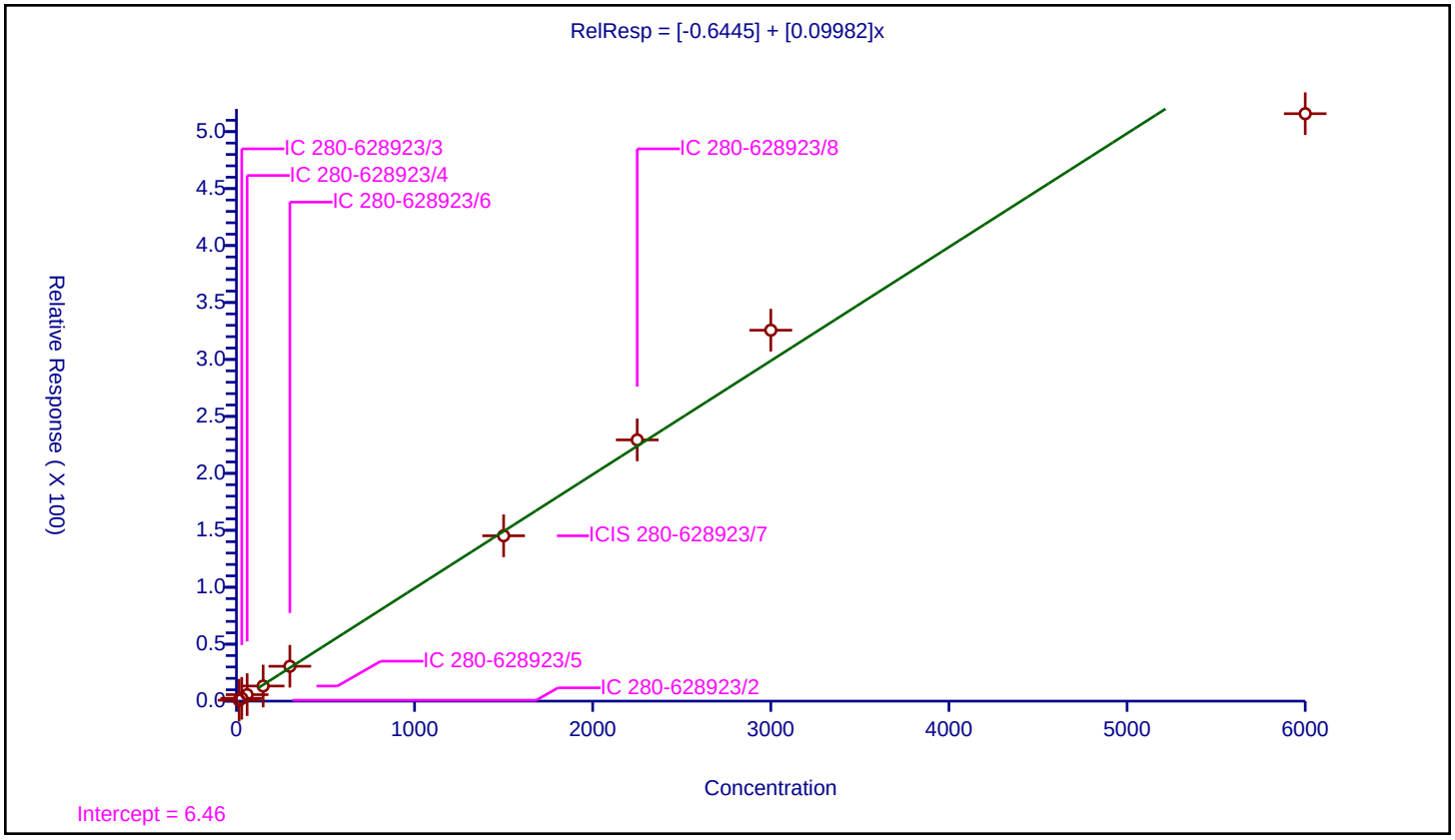
Curve Coefficients

Intercept:	-0.6445
Slope:	0.09982

Error Coefficients

Standard Error:	3420000
Relative Standard Error:	7.8
Correlation Coefficient:	0.989
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	15.0	0.798217	50.0	575658.0	0.053214	Y
2	IC 280-628923/3	30.0	2.507371	50.0	651240.0	0.083579	Y
3	IC 280-628923/4	60.0	5.705271	50.0	635798.0	0.095088	Y
4	IC 280-628923/5	150.0	13.276691	50.0	641455.0	0.088511	Y
5	IC 280-628923/6	300.0	30.615786	50.0	635432.0	0.102053	Y
6	ICIS 280-628923/7	1500.0	145.191601	50.0	691540.0	0.096794	Y
7	IC 280-628923/8	2250.0	229.371521	50.0	651907.0	0.101943	Y
8	IC 280-628923/9	3000.0	325.691189	50.0	667147.0	0.108564	Y
9	IC 280-628923/10	6000.0	515.801555	50.0	684806.0	0.085967	Y



Calibration / 4-Bromofluorobenzene (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

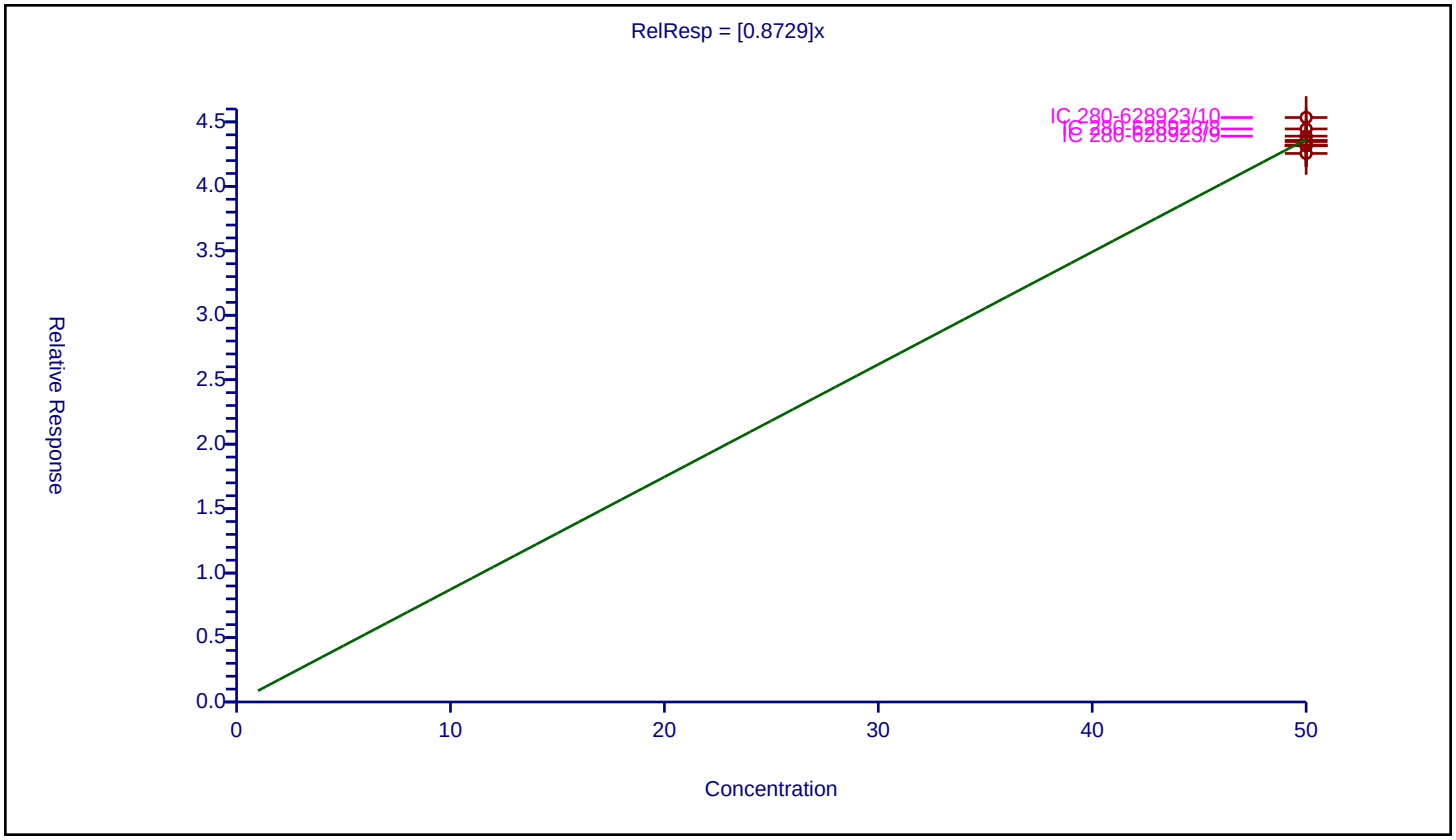
Curve Coefficients

Intercept:	0
Slope:	0.8729

Error Coefficients

Standard Error:	1020000
Relative Standard Error:	1.9
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	50.0	43.20308	50.0	971565.0	0.864062	Y
2	IC 280-628923/3	50.0	42.554396	50.0	1130271.0	0.851088	Y
3	IC 280-628923/4	50.0	43.564526	50.0	1090518.0	0.871291	Y
4	IC 280-628923/5	50.0	43.157607	50.0	1106572.0	0.863152	Y
5	IC 280-628923/6	50.0	43.149484	50.0	1099523.0	0.86299	Y
6	ICIS 280-628923/7	50.0	43.473874	50.0	1171859.0	0.869477	Y
7	IC 280-628923/8	50.0	44.455012	50.0	1082500.0	0.8891	Y
8	IC 280-628923/9	50.0	43.893116	50.0	1136619.0	0.877862	Y
9	IC 280-628923/10	50.0	45.340588	50.0	1114132.0	0.906812	Y



Calibration / 1,1,2,2-Tetrachloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

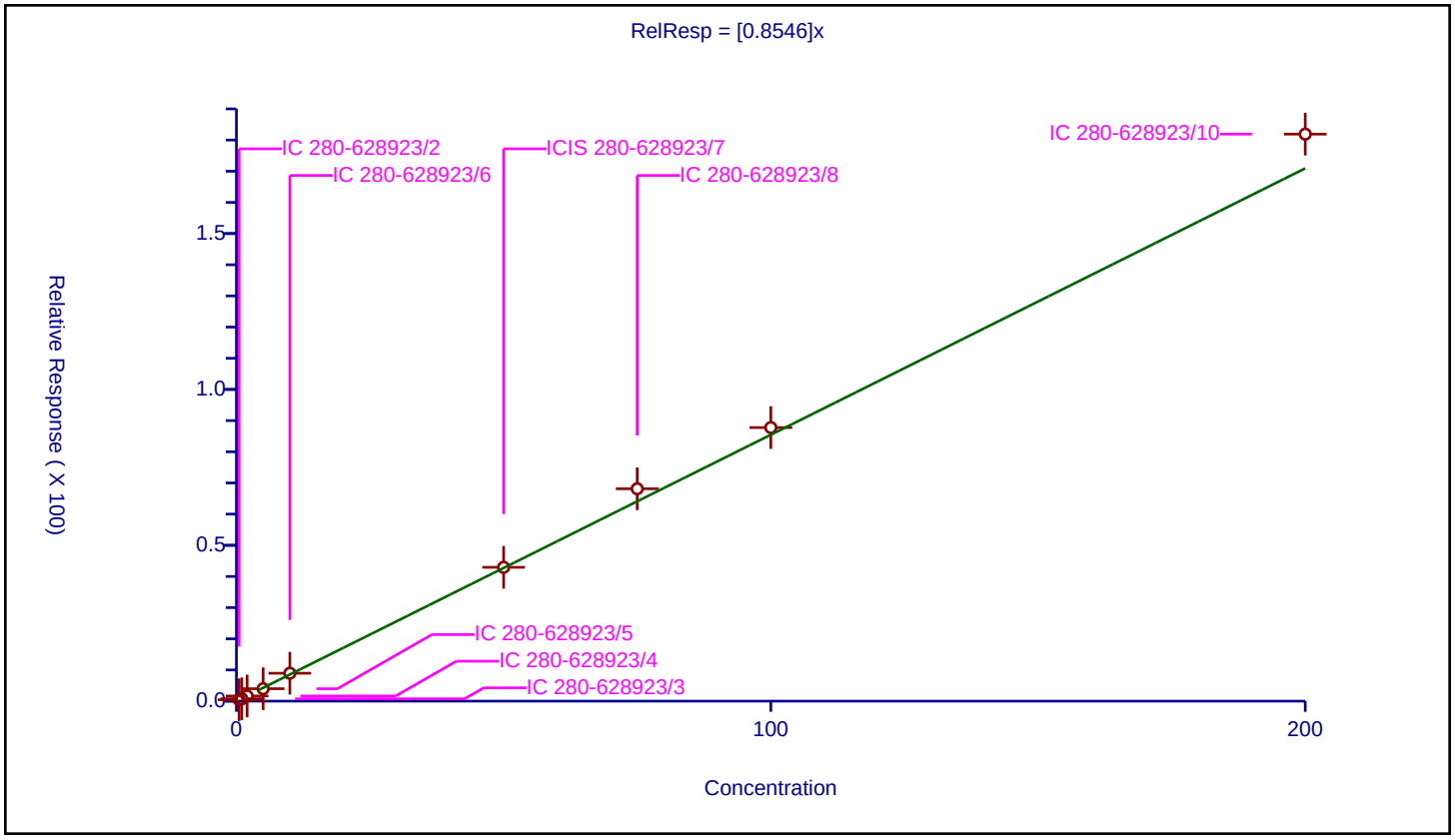
Curve Coefficients

Intercept:	0
Slope:	0.8546

Error Coefficients

Standard Error:	1720000
Relative Standard Error:	6.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.429359	50.0	971565.0	0.858718	Y
2	IC 280-628923/3	1.0	0.758933	50.0	1130271.0	0.758933	Y
3	IC 280-628923/4	2.0	1.653847	50.0	1090518.0	0.826924	Y
4	IC 280-628923/5	5.0	3.989618	50.0	1106572.0	0.797924	Y
5	IC 280-628923/6	10.0	8.946652	50.0	1099523.0	0.894665	Y
6	ICIS 280-628923/7	50.0	42.928287	50.0	1171859.0	0.858566	Y
7	IC 280-628923/8	75.0	68.126328	50.0	1082500.0	0.908351	Y
8	IC 280-628923/9	100.0	87.766965	50.0	1136619.0	0.87767	Y
9	IC 280-628923/10	200.0	181.899676	50.0	1114132.0	0.909498	Y



Calibration / Bromobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

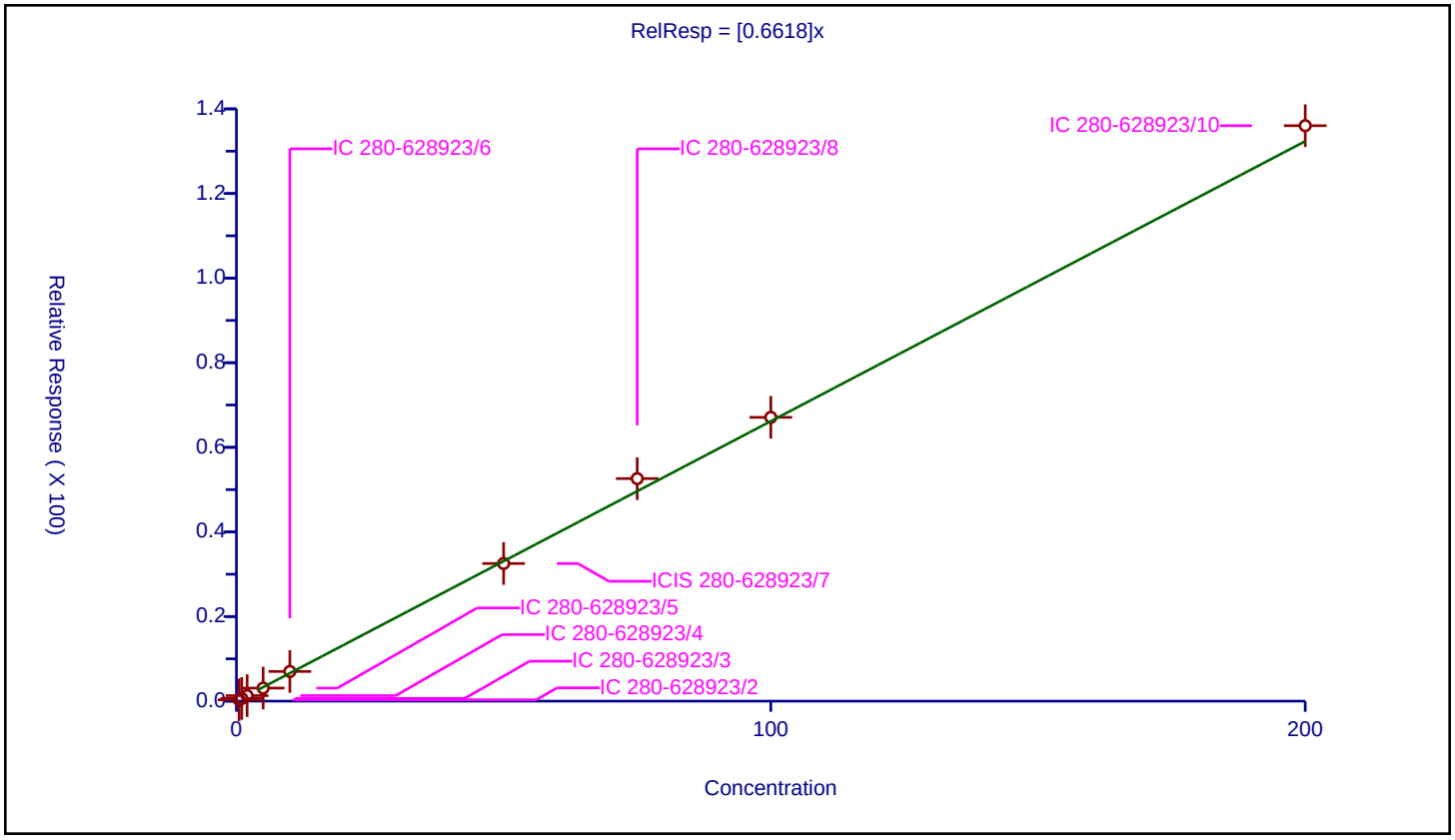
Curve Coefficients

Intercept:	0
Slope:	0.6618

Error Coefficients

Standard Error:	1300000
Relative Standard Error:	4.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.319073	50.0	971565.0	0.638146	Y
2	IC 280-628923/3	1.0	0.640245	50.0	1130271.0	0.640245	Y
3	IC 280-628923/4	2.0	1.308873	50.0	1090518.0	0.654437	Y
4	IC 280-628923/5	5.0	3.090807	50.0	1106572.0	0.618161	Y
5	IC 280-628923/6	10.0	7.016042	50.0	1099523.0	0.701604	Y
6	ICIS 280-628923/7	50.0	32.535612	50.0	1171859.0	0.650712	Y
7	IC 280-628923/8	75.0	52.608961	50.0	1082500.0	0.701453	Y
8	IC 280-628923/9	100.0	67.087564	50.0	1136619.0	0.670876	Y
9	IC 280-628923/10	200.0	136.025085	50.0	1114132.0	0.680125	Y



Calibration / trans-1,4-Dichloro-2-butene

Curve Type:	Quadratic
Weighting:	None
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

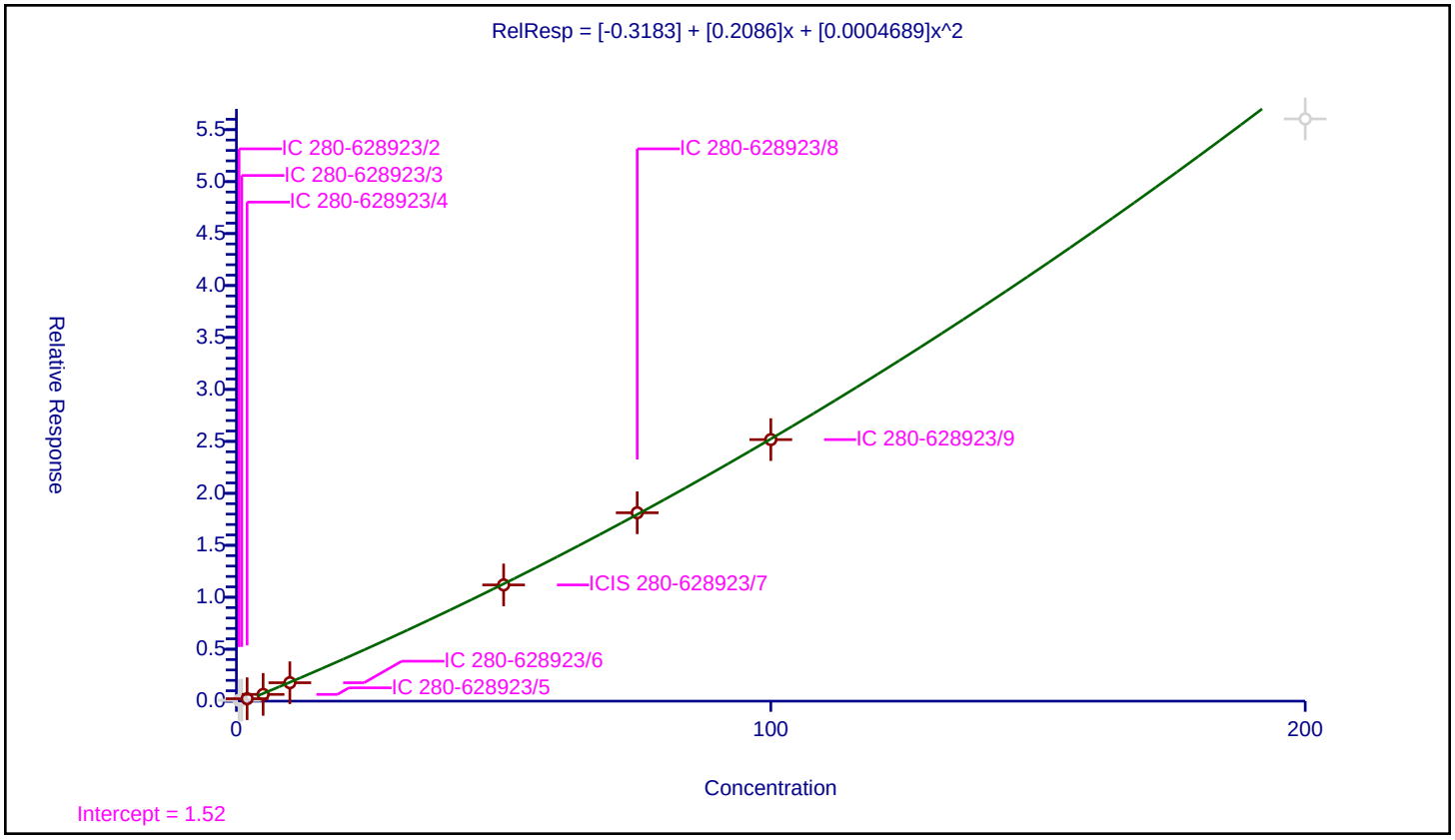
Curve Coefficients

Intercept:	-0.3183
Slope:	0.2086
Second Order:	0.0004689

Error Coefficients

Standard Error:	429000
Relative Standard Error:	18.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.079665	50.0	971565.0	0.159331	N
2	IC 280-628923/3	1.0	0.094889	50.0	1130271.0	0.094889	N
3	IC 280-628923/4	2.0	0.233742	50.0	1090518.0	0.116871	Y
4	IC 280-628923/5	5.0	0.649348	50.0	1106572.0	0.12987	Y
5	IC 280-628923/6	10.0	1.772814	50.0	1099523.0	0.177281	Y
6	ICIS 280-628923/7	50.0	11.186414	50.0	1171859.0	0.223728	Y
7	IC 280-628923/8	75.0	18.128406	50.0	1082500.0	0.241712	Y
8	IC 280-628923/9	100.0	25.16956	50.0	1136619.0	0.251696	Y
9	IC 280-628923/10	200.0	56.034832	50.0	1114132.0	0.280174	N



Calibration / 1,2,3-Trichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

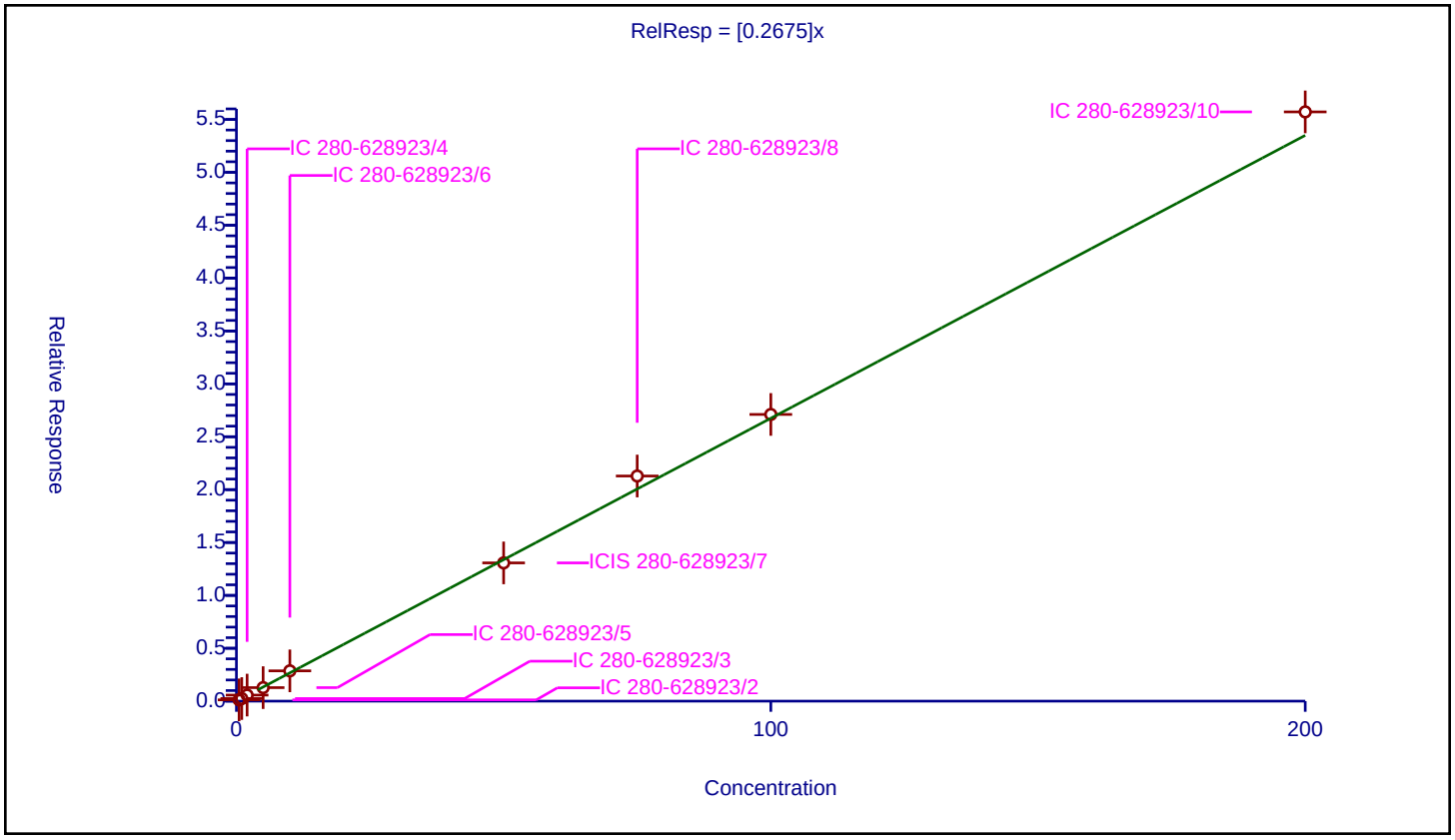
Curve Coefficients

Intercept:	0
Slope:	0.2675

Error Coefficients

Standard Error:	528000
Relative Standard Error:	6.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.118932	50.0	971565.0	0.237864	Y
2	IC 280-628923/3	1.0	0.246622	50.0	1130271.0	0.246622	Y
3	IC 280-628923/4	2.0	0.572113	50.0	1090518.0	0.286057	Y
4	IC 280-628923/5	5.0	1.276916	50.0	1106572.0	0.255383	Y
5	IC 280-628923/6	10.0	2.865242	50.0	1099523.0	0.286524	Y
6	ICIS 280-628923/7	50.0	13.071752	50.0	1171859.0	0.261435	Y
7	IC 280-628923/8	75.0	21.286651	50.0	1082500.0	0.283822	Y
8	IC 280-628923/9	100.0	27.108292	50.0	1136619.0	0.271083	Y
9	IC 280-628923/10	200.0	55.716468	50.0	1114132.0	0.278582	Y



Calibration / N-Propylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

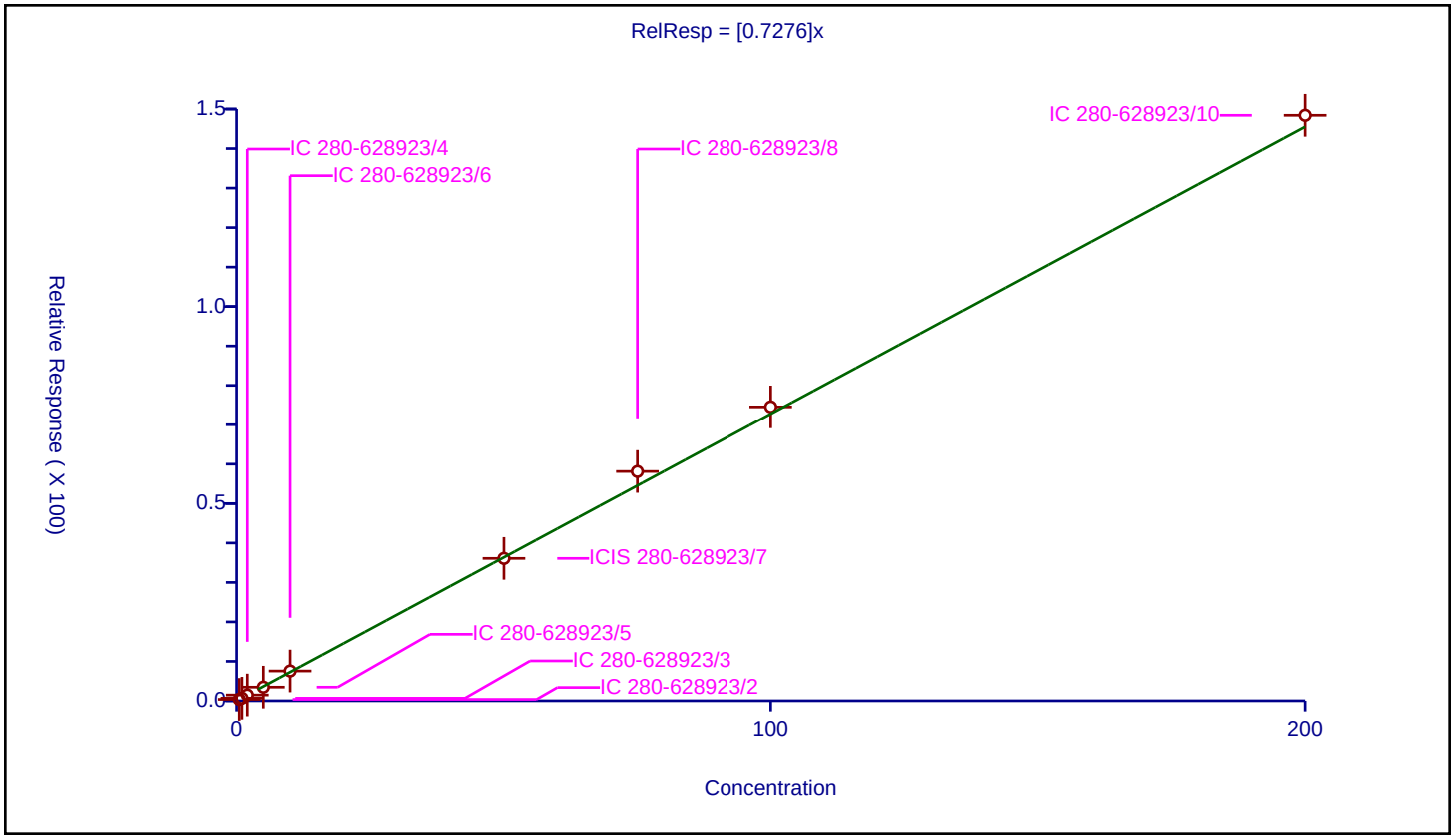
Curve Coefficients

Intercept:	0
Slope:	0.7276

Error Coefficients

Standard Error:	1420000
Relative Standard Error:	4.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.357979	50.0	971565.0	0.715958	Y
2	IC 280-628923/3	1.0	0.662629	50.0	1130271.0	0.662629	Y
3	IC 280-628923/4	2.0	1.471778	50.0	1090518.0	0.735889	Y
4	IC 280-628923/5	5.0	3.465477	50.0	1106572.0	0.693095	Y
5	IC 280-628923/6	10.0	7.559824	50.0	1099523.0	0.755982	Y
6	ICIS 280-628923/7	50.0	36.096322	50.0	1171859.0	0.721926	Y
7	IC 280-628923/8	75.0	58.142079	50.0	1082500.0	0.775228	Y
8	IC 280-628923/9	100.0	74.535618	50.0	1136619.0	0.745356	Y
9	IC 280-628923/10	200.0	148.416929	50.0	1114132.0	0.742085	Y



Calibration / 2-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

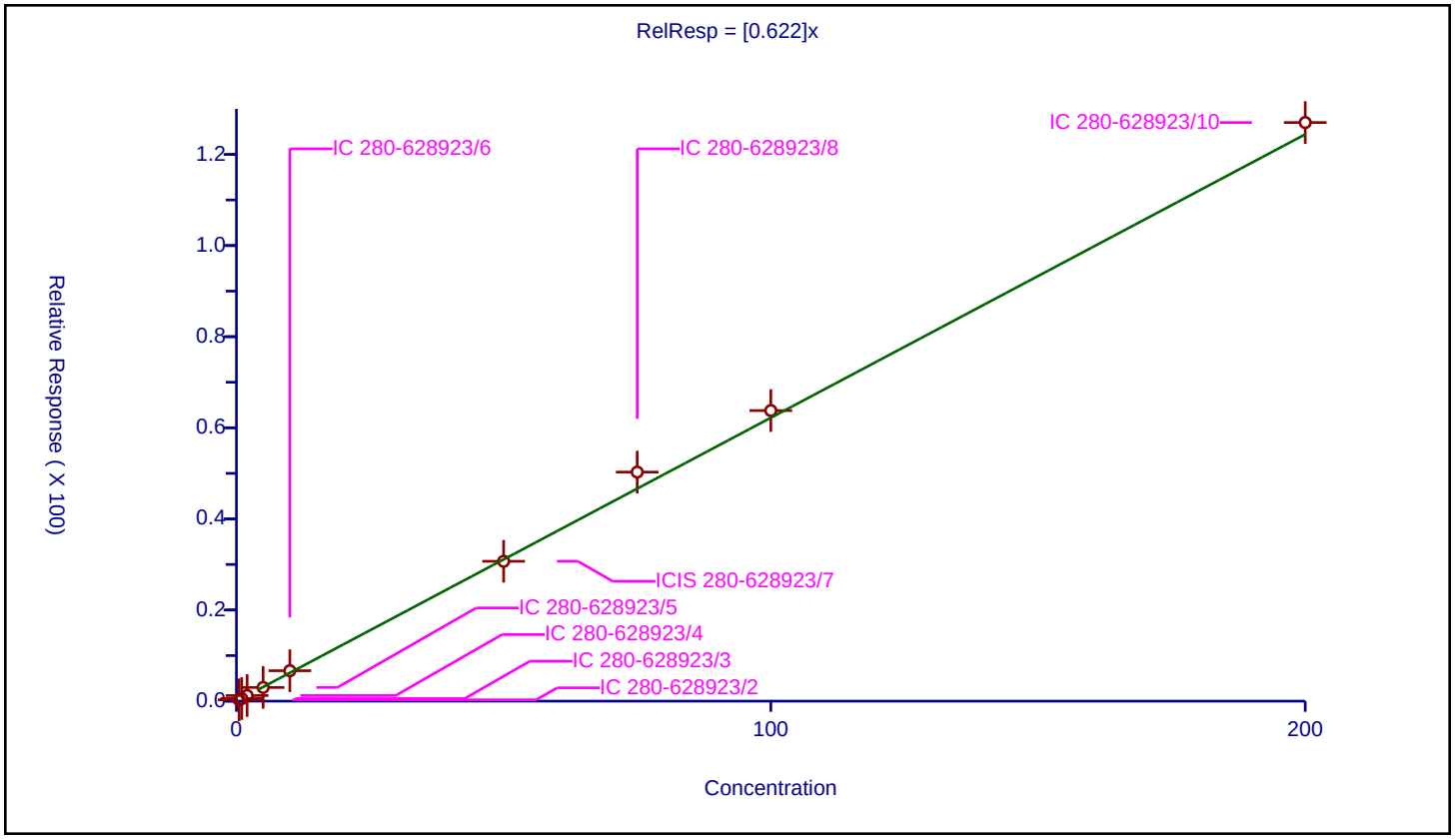
Curve Coefficients

Intercept:	0
Slope:	0.622

Error Coefficients

Standard Error:	1220000
Relative Standard Error:	5.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.296841	50.0	971565.0	0.593681	Y
2	IC 280-628923/3	1.0	0.563537	50.0	1130271.0	0.563537	Y
3	IC 280-628923/4	2.0	1.232121	50.0	1090518.0	0.61606	Y
4	IC 280-628923/5	5.0	2.999895	50.0	1106572.0	0.599979	Y
5	IC 280-628923/6	10.0	6.680397	50.0	1099523.0	0.66804	Y
6	ICIS 280-628923/7	50.0	30.697422	50.0	1171859.0	0.613948	Y
7	IC 280-628923/8	75.0	50.276074	50.0	1082500.0	0.670348	Y
8	IC 280-628923/9	100.0	63.777968	50.0	1136619.0	0.63778	Y
9	IC 280-628923/10	200.0	127.004475	50.0	1114132.0	0.635022	Y



Calibration / 1,3,5-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

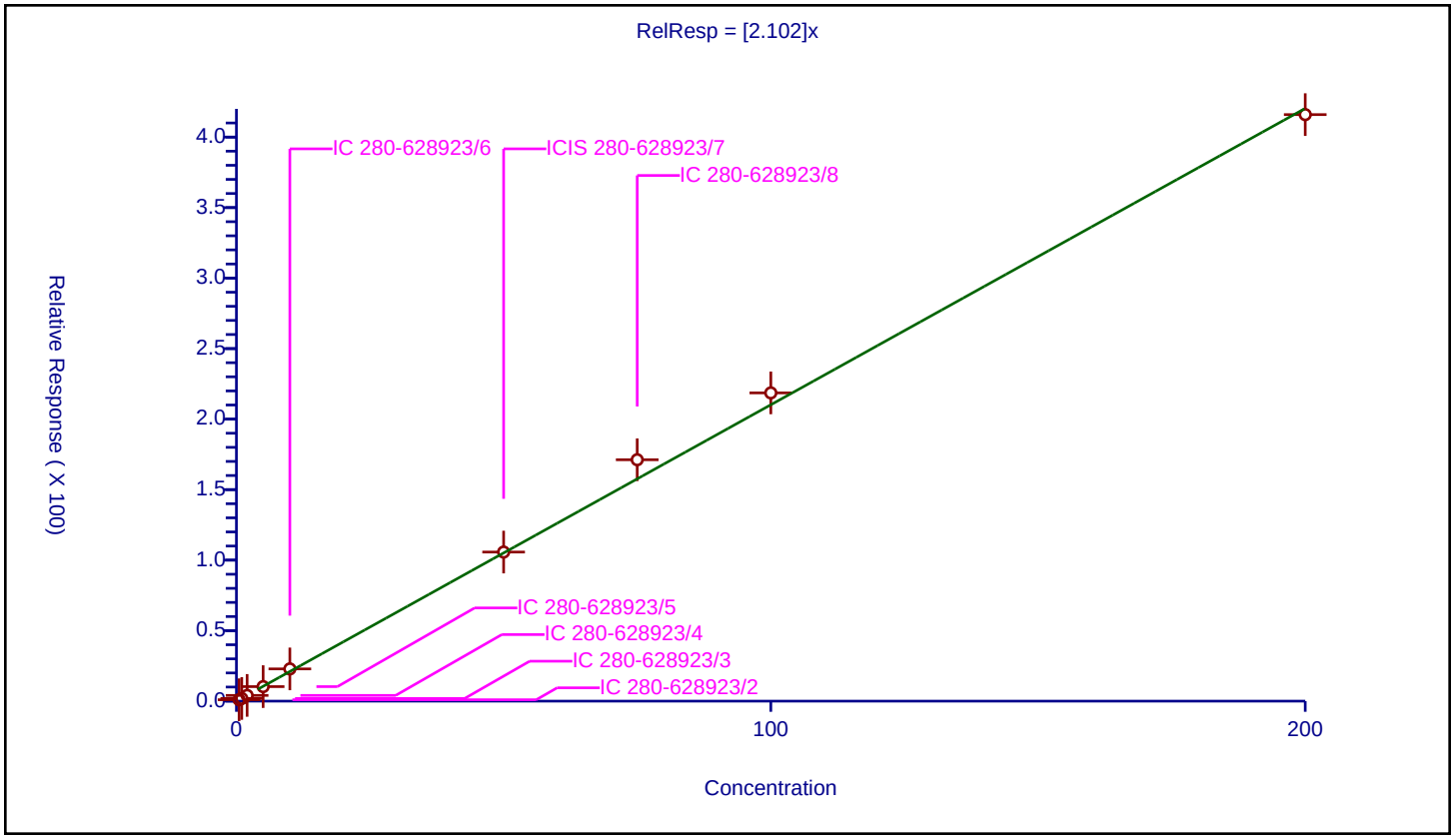
Curve Coefficients

Intercept:	0
Slope:	2.102

Error Coefficients

Standard Error:	4040000
Relative Standard Error:	6.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.98753	50.0	971565.0	1.975061	Y
2	IC 280-628923/3	1.0	1.900606	50.0	1130271.0	1.900606	Y
3	IC 280-628923/4	2.0	4.061464	50.0	1090518.0	2.030732	Y
4	IC 280-628923/5	5.0	10.301679	50.0	1106572.0	2.060336	Y
5	IC 280-628923/6	10.0	22.863505	50.0	1099523.0	2.286351	Y
6	ICIS 280-628923/7	50.0	105.730809	50.0	1171859.0	2.114616	Y
7	IC 280-628923/8	75.0	171.186975	50.0	1082500.0	2.282493	Y
8	IC 280-628923/9	100.0	218.592026	50.0	1136619.0	2.18592	Y
9	IC 280-628923/10	200.0	415.9298	50.0	1114132.0	2.079649	Y



Calibration / 4-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

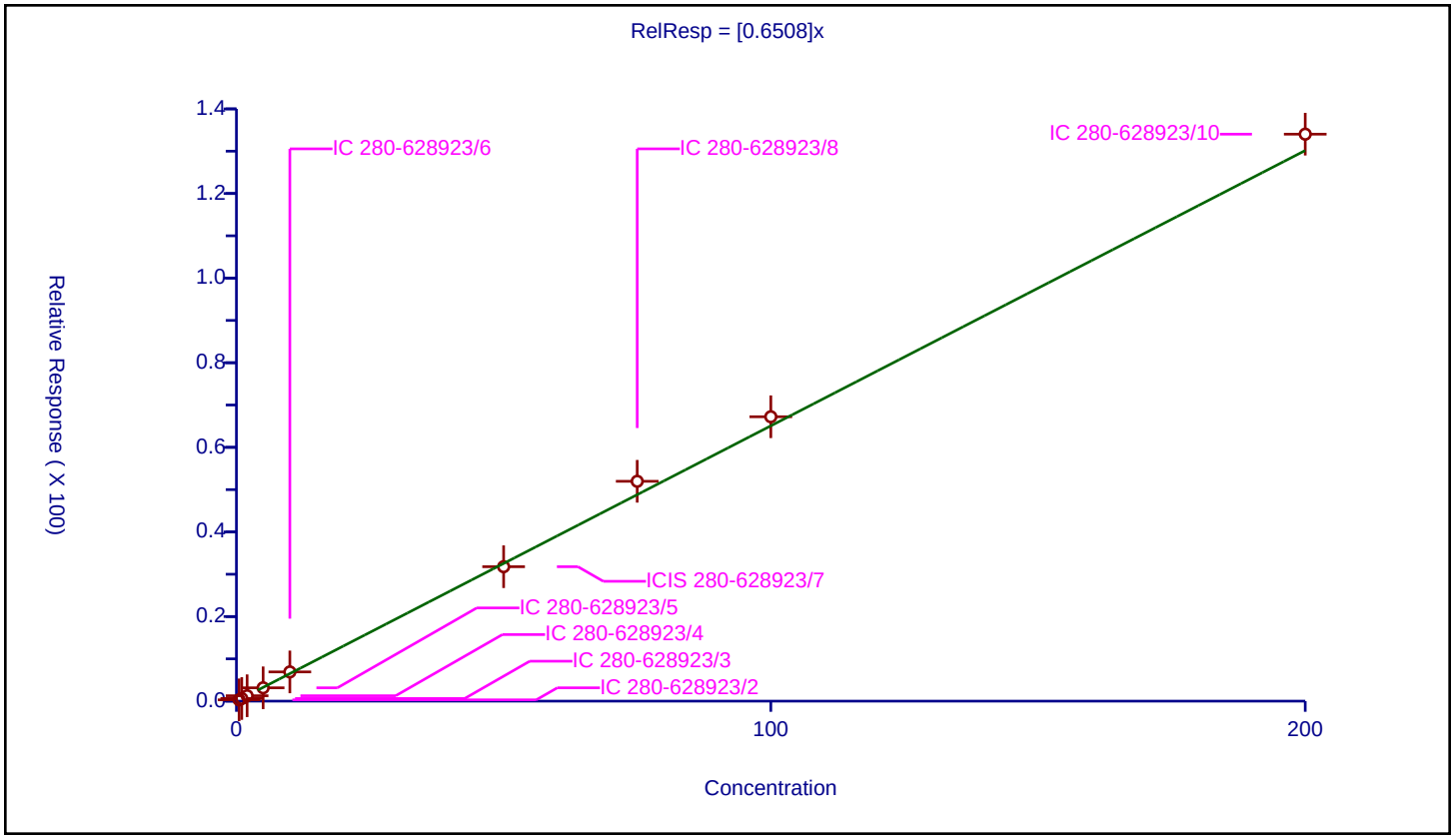
Curve Coefficients

Intercept:	0
Slope:	0.6508

Error Coefficients

Standard Error:	1280000
Relative Standard Error:	4.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.302759	50.0	971565.0	0.605518	Y
2	IC 280-628923/3	1.0	0.623125	50.0	1130271.0	0.623125	Y
3	IC 280-628923/4	2.0	1.272606	50.0	1090518.0	0.636303	Y
4	IC 280-628923/5	5.0	3.152935	50.0	1106572.0	0.630587	Y
5	IC 280-628923/6	10.0	6.907859	50.0	1099523.0	0.690786	Y
6	ICIS 280-628923/7	50.0	31.776178	50.0	1171859.0	0.635524	Y
7	IC 280-628923/8	75.0	51.97127	50.0	1082500.0	0.69295	Y
8	IC 280-628923/9	100.0	67.227453	50.0	1136619.0	0.672275	Y
9	IC 280-628923/10	200.0	134.026309	50.0	1114132.0	0.670132	Y



Calibration / tert-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

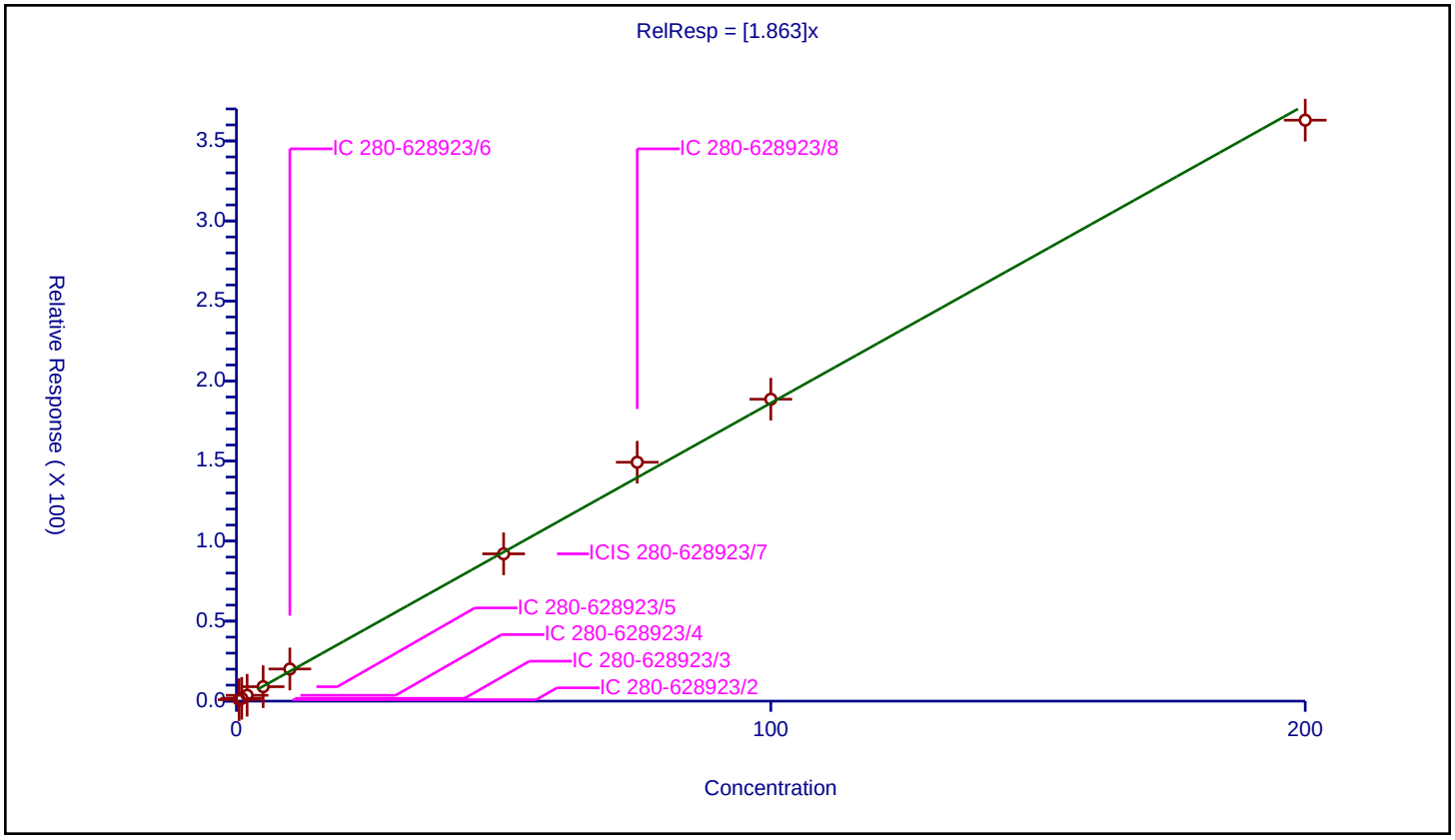
Curve Coefficients

Intercept:	0
Slope:	1.863

Error Coefficients

Standard Error:	3520000
Relative Standard Error:	4.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.908328	50.0	971565.0	1.816657	Y
2	IC 280-628923/3	1.0	1.776698	50.0	1130271.0	1.776698	Y
3	IC 280-628923/4	2.0	3.644598	50.0	1090518.0	1.822299	Y
4	IC 280-628923/5	5.0	9.029462	50.0	1106572.0	1.805892	Y
5	IC 280-628923/6	10.0	20.099852	50.0	1099523.0	2.009985	Y
6	ICIS 280-628923/7	50.0	92.025363	50.0	1171859.0	1.840507	Y
7	IC 280-628923/8	75.0	149.246975	50.0	1082500.0	1.98996	Y
8	IC 280-628923/9	100.0	188.627148	50.0	1136619.0	1.886271	Y
9	IC 280-628923/10	200.0	362.962961	50.0	1114132.0	1.814815	Y



Calibration / 1,2,4-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

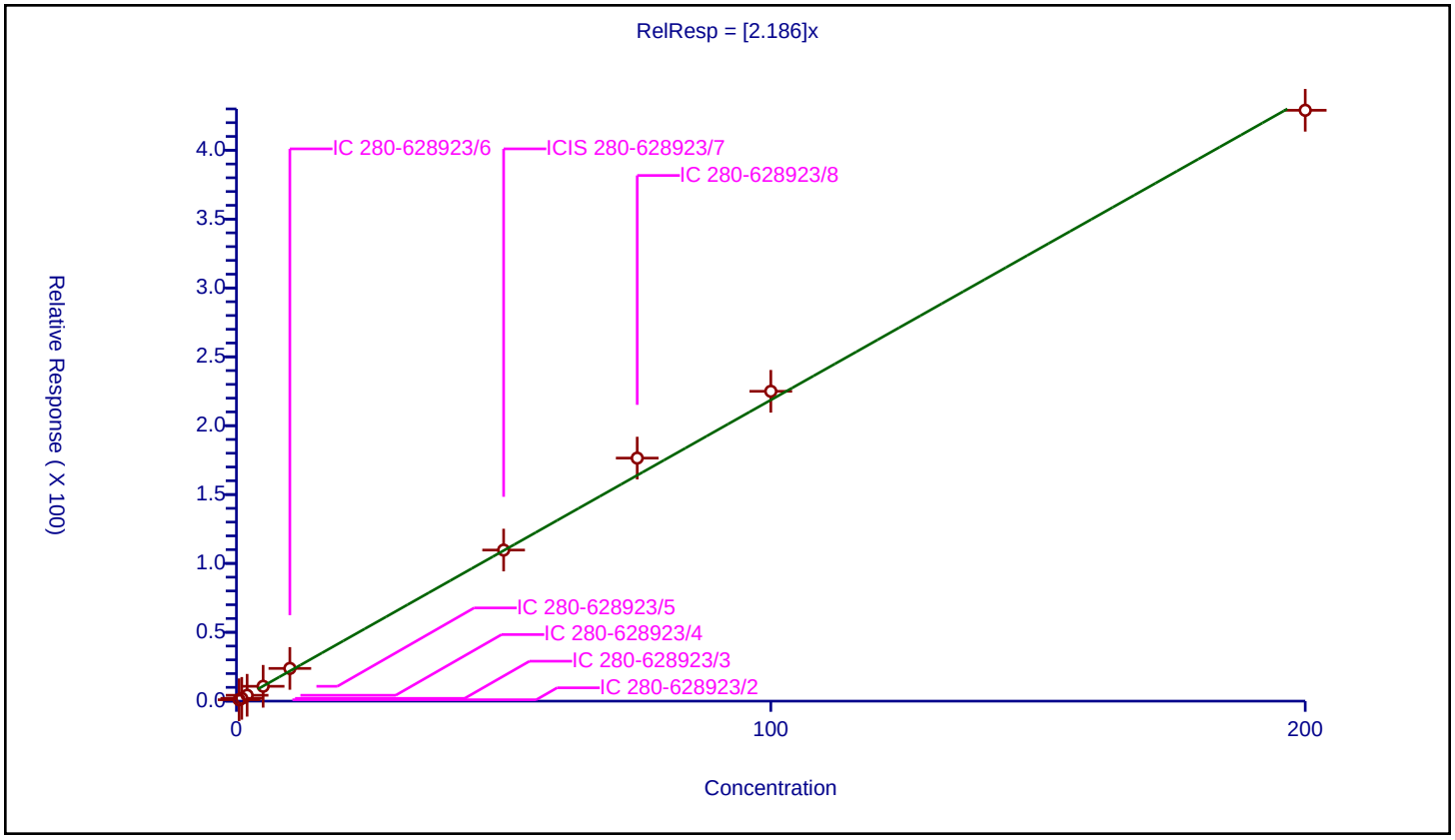
Curve Coefficients

Intercept:	0
Slope:	2.186

Error Coefficients

Standard Error:	4170000
Relative Standard Error:	5.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	1.020982	50.0	971565.0	2.041963	Y
2	IC 280-628923/3	1.0	2.029336	50.0	1130271.0	2.029336	Y
3	IC 280-628923/4	2.0	4.26302	50.0	1090518.0	2.13151	Y
4	IC 280-628923/5	5.0	10.789131	50.0	1106572.0	2.157826	Y
5	IC 280-628923/6	10.0	23.764851	50.0	1099523.0	2.376485	Y
6	ICIS 280-628923/7	50.0	109.682692	50.0	1171859.0	2.193654	Y
7	IC 280-628923/8	75.0	176.459307	50.0	1082500.0	2.352791	Y
8	IC 280-628923/9	100.0	224.963466	50.0	1136619.0	2.249635	Y
9	IC 280-628923/10	200.0	428.999975	50.0	1114132.0	2.145	Y



Calibration / sec-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

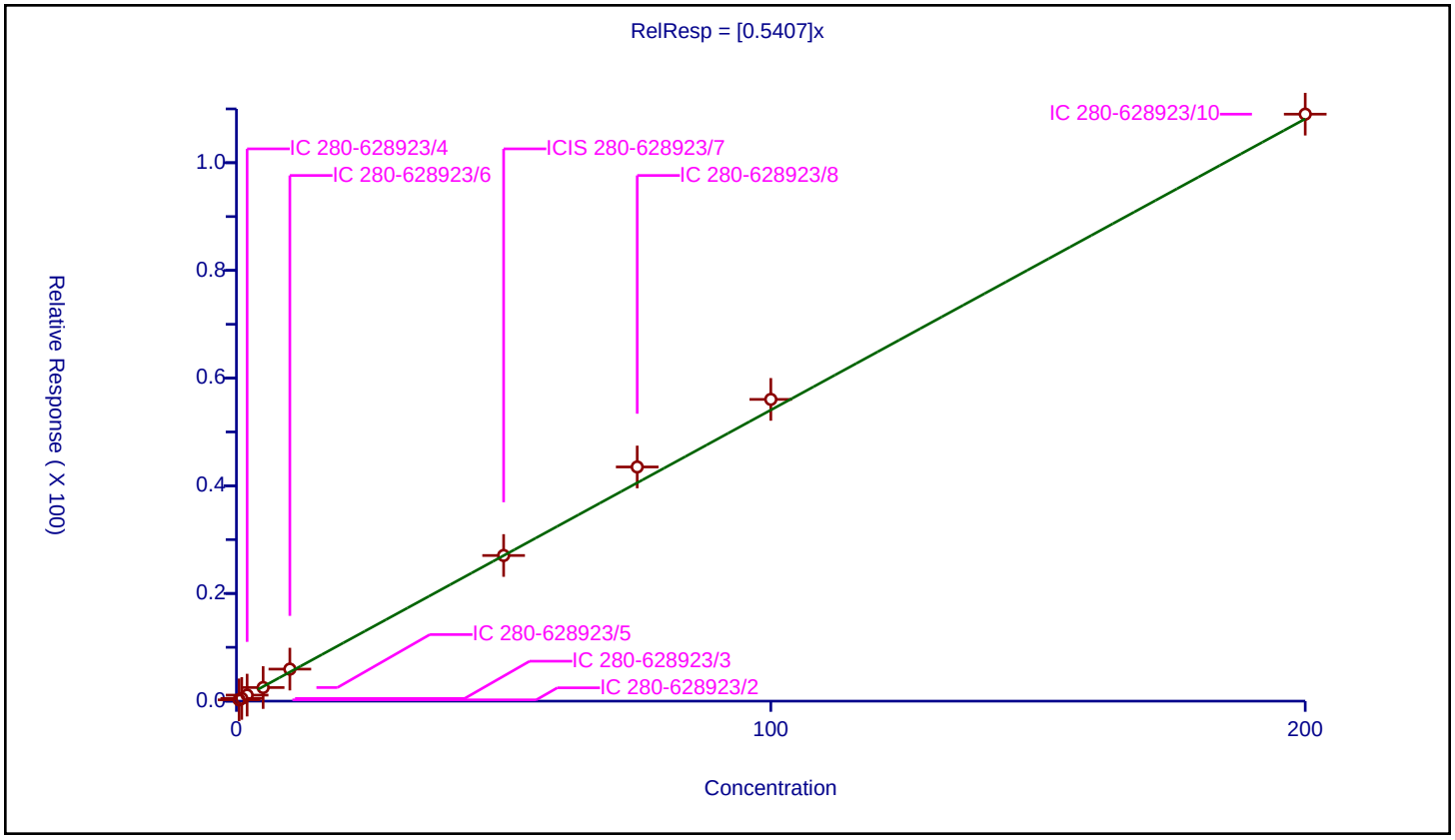
Curve Coefficients

Intercept:	0
Slope:	0.5407

Error Coefficients

Standard Error:	1050000
Relative Standard Error:	7.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.238533	50.0	971565.0	0.477065	Y
2	IC 280-628923/3	1.0	0.503685	50.0	1130271.0	0.503685	Y
3	IC 280-628923/4	2.0	1.118047	50.0	1090518.0	0.559023	Y
4	IC 280-628923/5	5.0	2.526677	50.0	1106572.0	0.505335	Y
5	IC 280-628923/6	10.0	5.947352	50.0	1099523.0	0.594735	Y
6	ICIS 280-628923/7	50.0	27.053767	50.0	1171859.0	0.541075	Y
7	IC 280-628923/8	75.0	43.494226	50.0	1082500.0	0.579923	Y
8	IC 280-628923/9	100.0	56.046705	50.0	1136619.0	0.560467	Y
9	IC 280-628923/10	200.0	109.0207	50.0	1114132.0	0.545103	Y



Calibration / 1,3-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

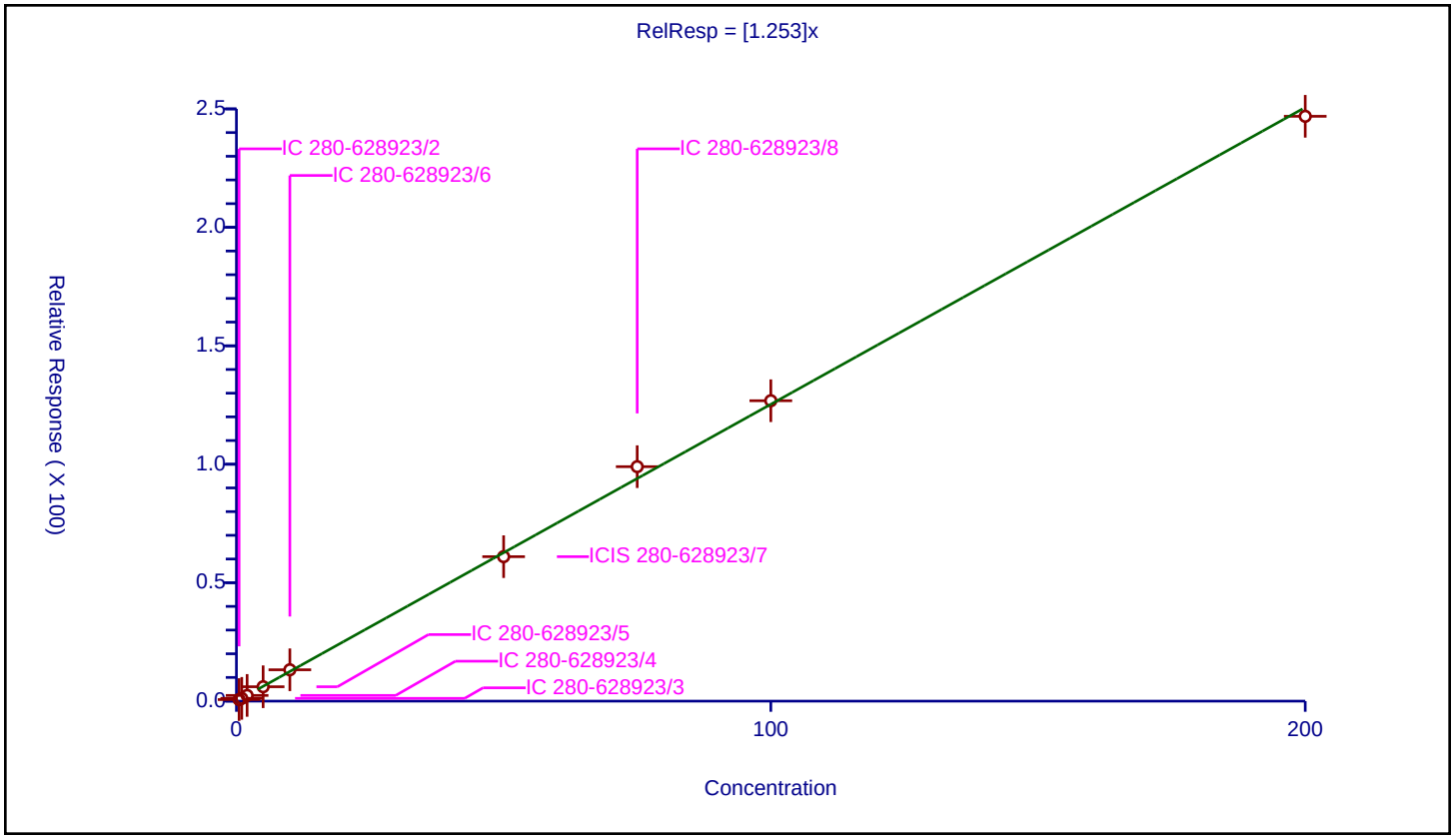
Curve Coefficients

Intercept:	0
Slope:	1.253

Error Coefficients

Standard Error:	2380000
Relative Standard Error:	4.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.660121	50.0	971565.0	1.320241	Y
2	IC 280-628923/3	1.0	1.171268	50.0	1130271.0	1.171268	Y
3	IC 280-628923/4	2.0	2.409084	50.0	1090518.0	1.204542	Y
4	IC 280-628923/5	5.0	6.078773	50.0	1106572.0	1.215755	Y
5	IC 280-628923/6	10.0	13.243243	50.0	1099523.0	1.324324	Y
6	ICIS 280-628923/7	50.0	60.983702	50.0	1171859.0	1.219674	Y
7	IC 280-628923/8	75.0	98.977783	50.0	1082500.0	1.319704	Y
8	IC 280-628923/9	100.0	126.815494	50.0	1136619.0	1.268155	Y
9	IC 280-628923/10	200.0	246.869985	50.0	1114132.0	1.23435	Y



Calibration / 4-Isopropyltoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

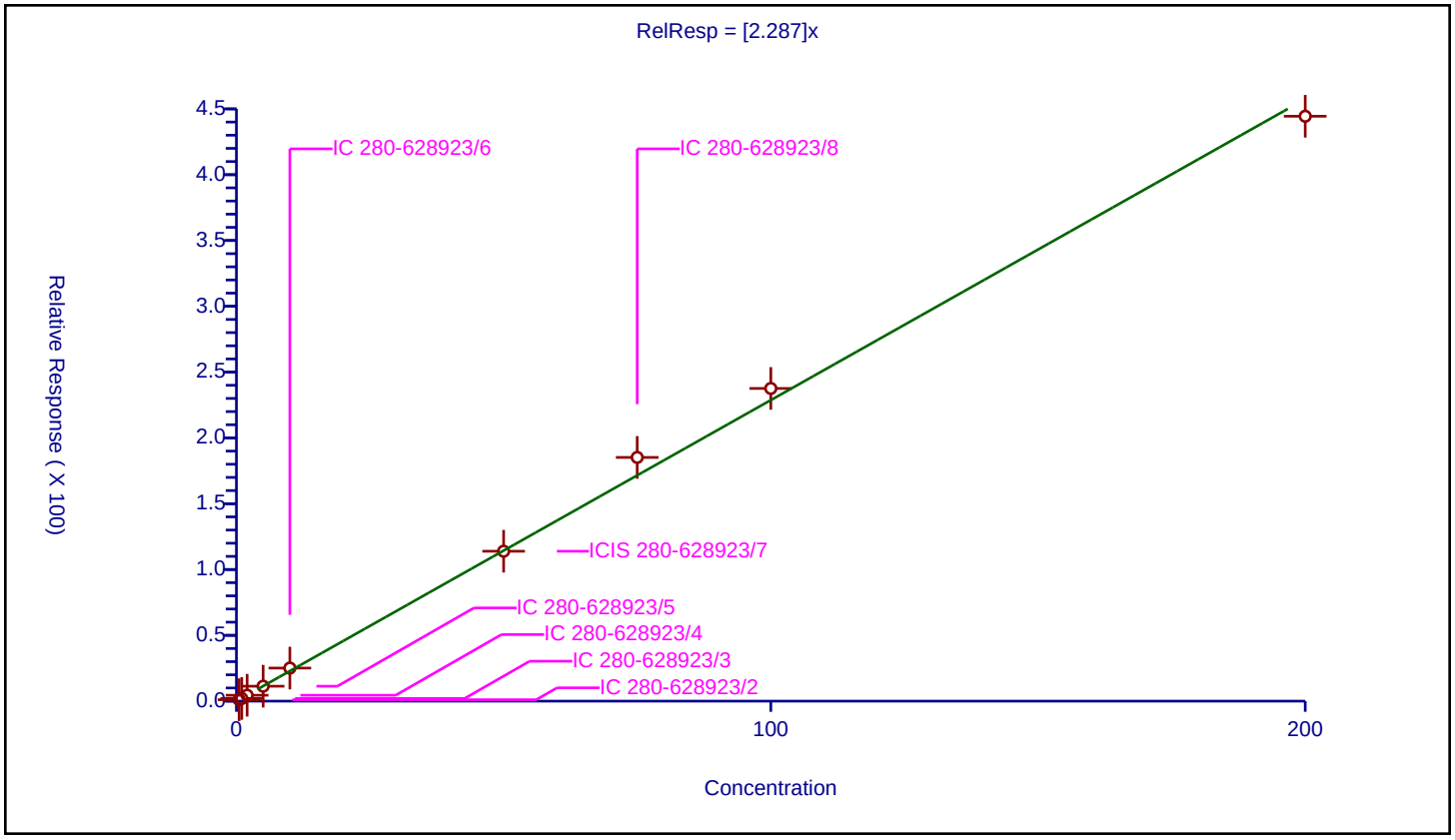
Curve Coefficients

Intercept:	0
Slope:	2.287

Error Coefficients

Standard Error:	4340000
Relative Standard Error:	6.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	1.088347	50.0	971565.0	2.176694	Y
2	IC 280-628923/3	1.0	2.036857	50.0	1130271.0	2.036857	Y
3	IC 280-628923/4	2.0	4.492131	50.0	1090518.0	2.246066	Y
4	IC 280-628923/5	5.0	11.343455	50.0	1106572.0	2.268691	Y
5	IC 280-628923/6	10.0	25.127487	50.0	1099523.0	2.512749	Y
6	ICIS 280-628923/7	50.0	113.905171	50.0	1171859.0	2.278103	Y
7	IC 280-628923/8	75.0	185.177275	50.0	1082500.0	2.46903	Y
8	IC 280-628923/9	100.0	237.591093	50.0	1136619.0	2.375911	Y
9	IC 280-628923/10	200.0	444.410851	50.0	1114132.0	2.222054	Y



Calibration / 1,4-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

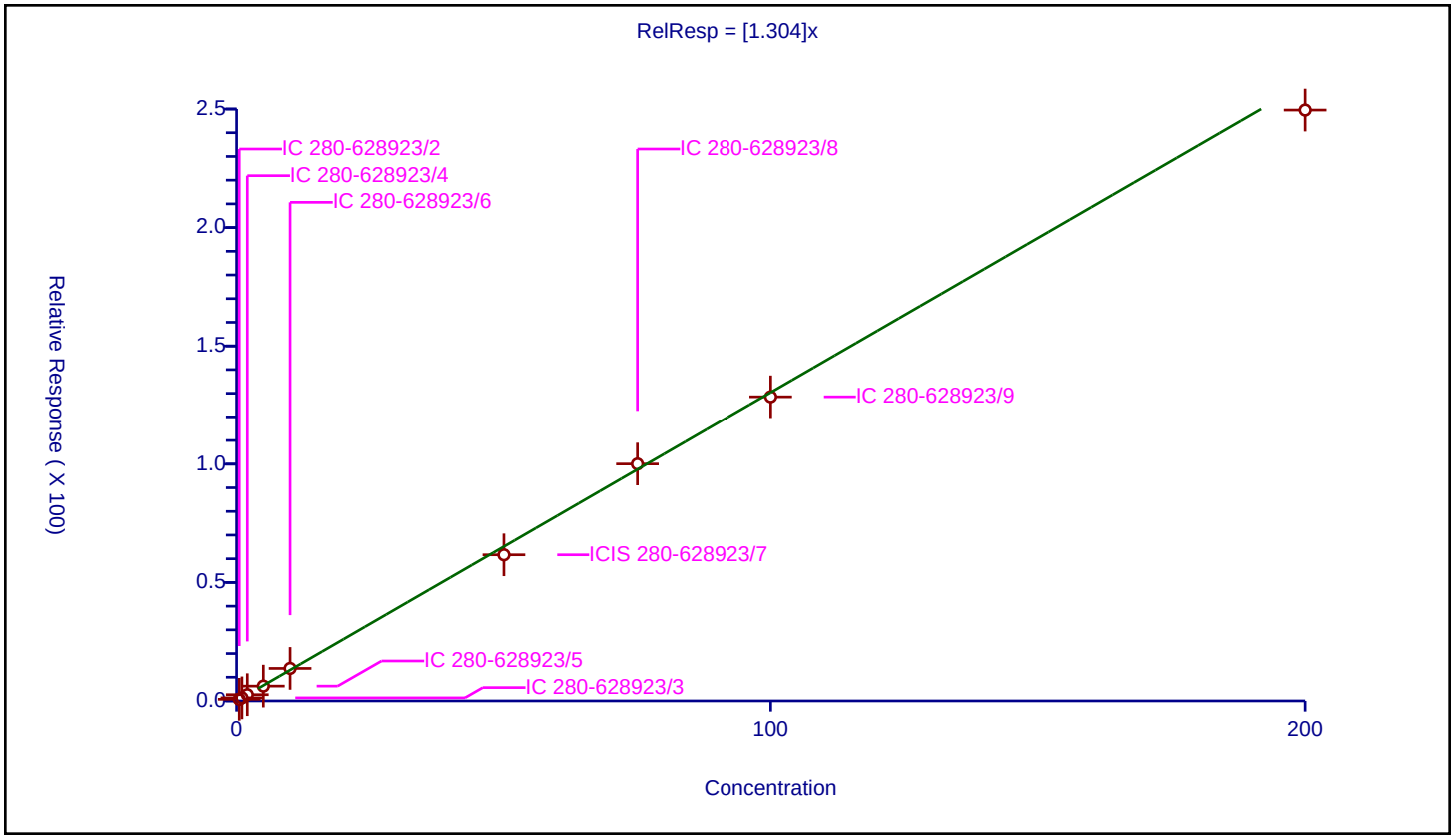
Curve Coefficients

Intercept:	0
Slope:	1.304

Error Coefficients

Standard Error:	2410000
Relative Standard Error:	4.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.696711	50.0	971565.0	1.393422	Y
2	IC 280-628923/3	1.0	1.297211	50.0	1130271.0	1.297211	Y
3	IC 280-628923/4	2.0	2.635216	50.0	1090518.0	1.317608	Y
4	IC 280-628923/5	5.0	6.25802	50.0	1106572.0	1.251604	Y
5	IC 280-628923/6	10.0	13.717767	50.0	1099523.0	1.371777	Y
6	ICIS 280-628923/7	50.0	61.66881	50.0	1171859.0	1.233376	Y
7	IC 280-628923/8	75.0	100.053441	50.0	1082500.0	1.334046	Y
8	IC 280-628923/9	100.0	128.518087	50.0	1136619.0	1.285181	Y
9	IC 280-628923/10	200.0	249.563427	50.0	1114132.0	1.247817	Y



Calibration / n-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

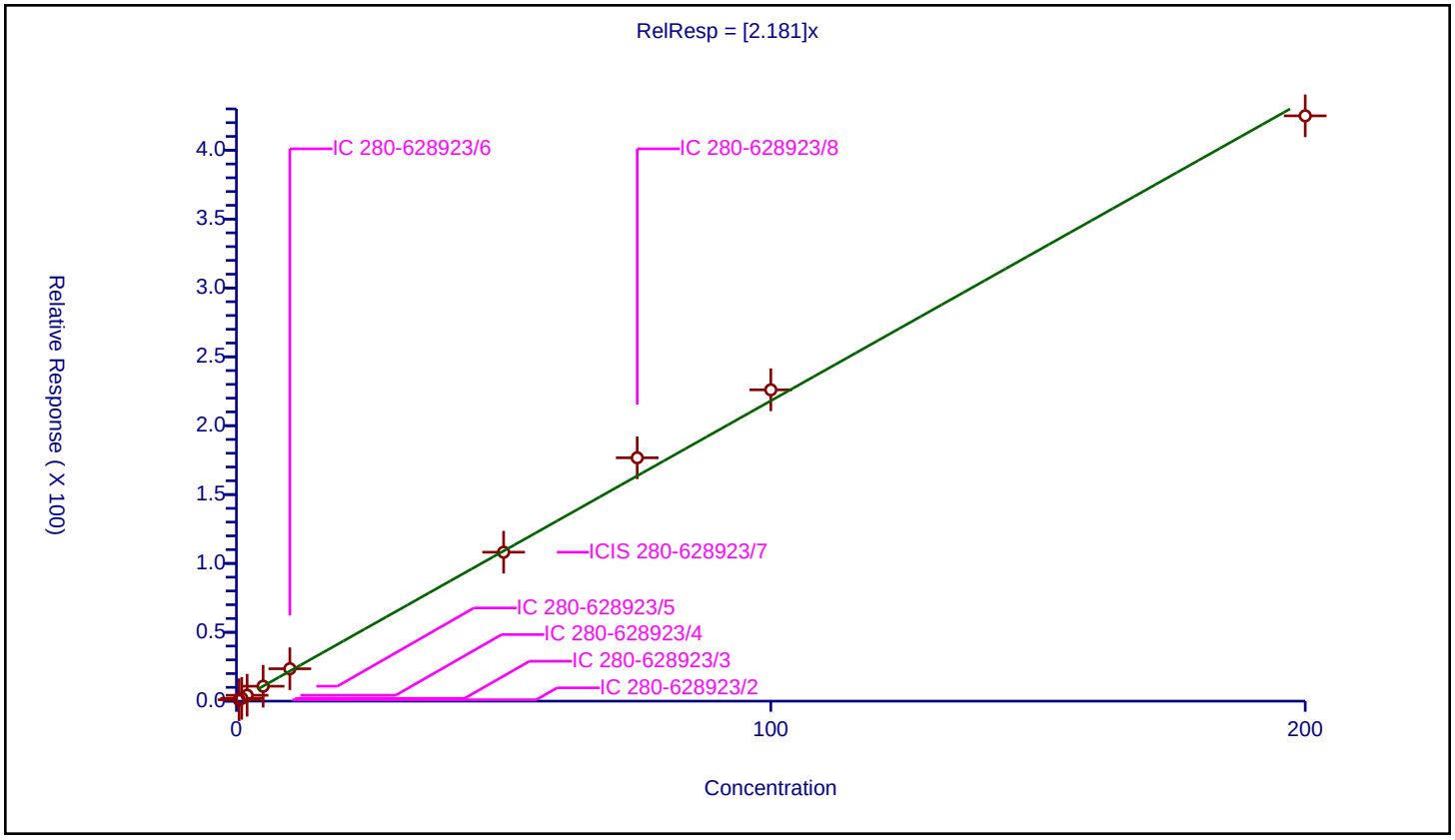
Curve Coefficients

Intercept:	0
Slope:	2.181

Error Coefficients

Standard Error:	4140000
Relative Standard Error:	5.5
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	1.018254	50.0	971565.0	2.036508	Y
2	IC 280-628923/3	1.0	2.039201	50.0	1130271.0	2.039201	Y
3	IC 280-628923/4	2.0	4.255042	50.0	1090518.0	2.127521	Y
4	IC 280-628923/5	5.0	10.83924	50.0	1106572.0	2.167848	Y
5	IC 280-628923/6	10.0	23.52943	50.0	1099523.0	2.352943	Y
6	ICIS 280-628923/7	50.0	108.15465	50.0	1171859.0	2.163093	Y
7	IC 280-628923/8	75.0	176.686975	50.0	1082500.0	2.355826	Y
8	IC 280-628923/9	100.0	226.024112	50.0	1136619.0	2.260241	Y
9	IC 280-628923/10	200.0	424.946236	50.0	1114132.0	2.124731	Y



Calibration / 1,2-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

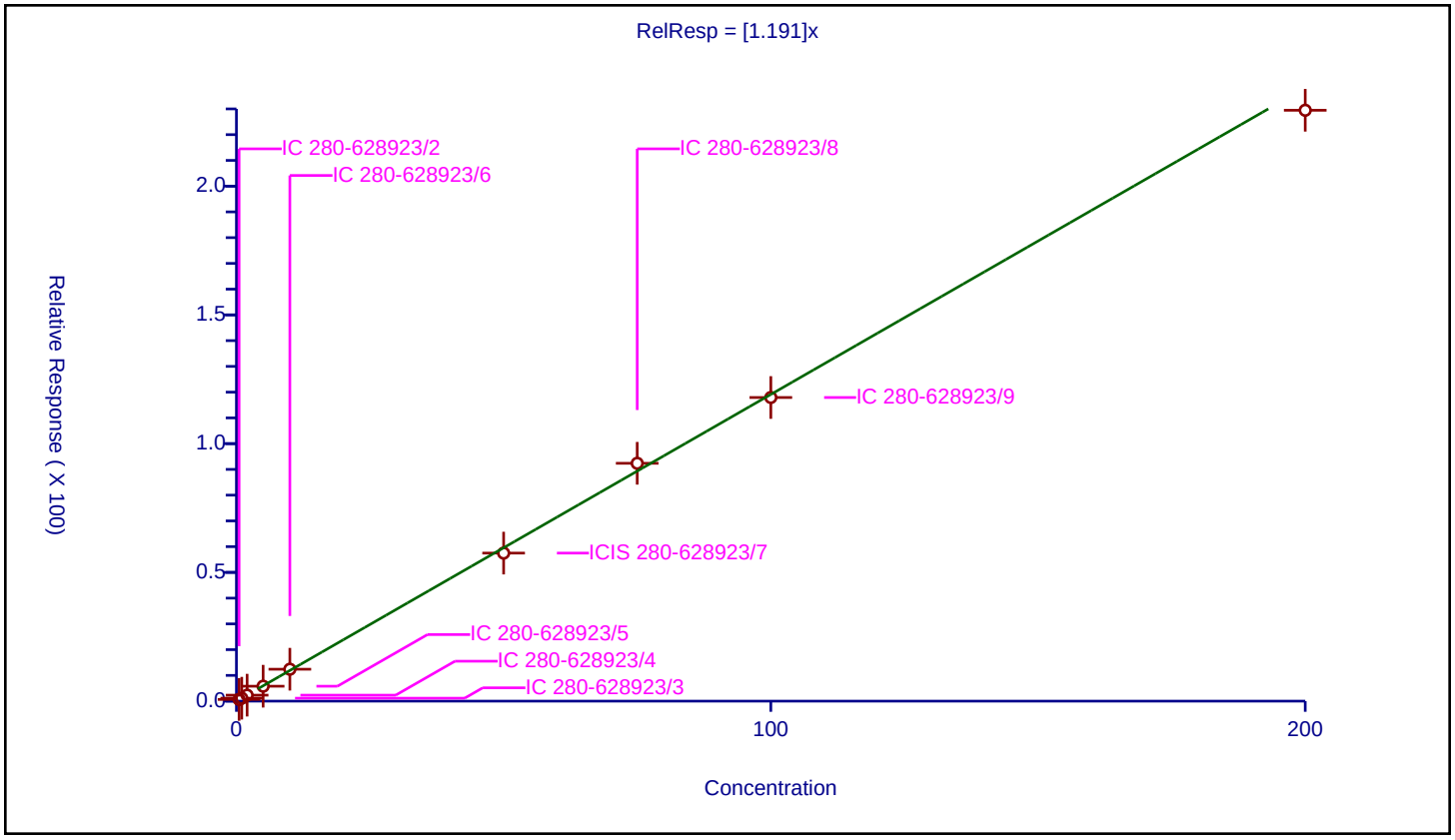
Curve Coefficients

Intercept:	0
Slope:	1.191

Error Coefficients

Standard Error:	2210000
Relative Standard Error:	4.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.653224	50.0	971565.0	1.306449	Y
2	IC 280-628923/3	1.0	1.146362	50.0	1130271.0	1.146362	Y
3	IC 280-628923/4	2.0	2.318577	50.0	1090518.0	1.159289	Y
4	IC 280-628923/5	5.0	5.800933	50.0	1106572.0	1.160187	Y
5	IC 280-628923/6	10.0	12.396421	50.0	1099523.0	1.239642	Y
6	ICIS 280-628923/7	50.0	57.498556	50.0	1171859.0	1.149971	Y
7	IC 280-628923/8	75.0	92.375335	50.0	1082500.0	1.231671	Y
8	IC 280-628923/9	100.0	117.923992	50.0	1136619.0	1.17924	Y
9	IC 280-628923/10	200.0	229.467155	50.0	1114132.0	1.147336	Y



Calibration / 1,2-Dibromo-3-Chloropropane

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

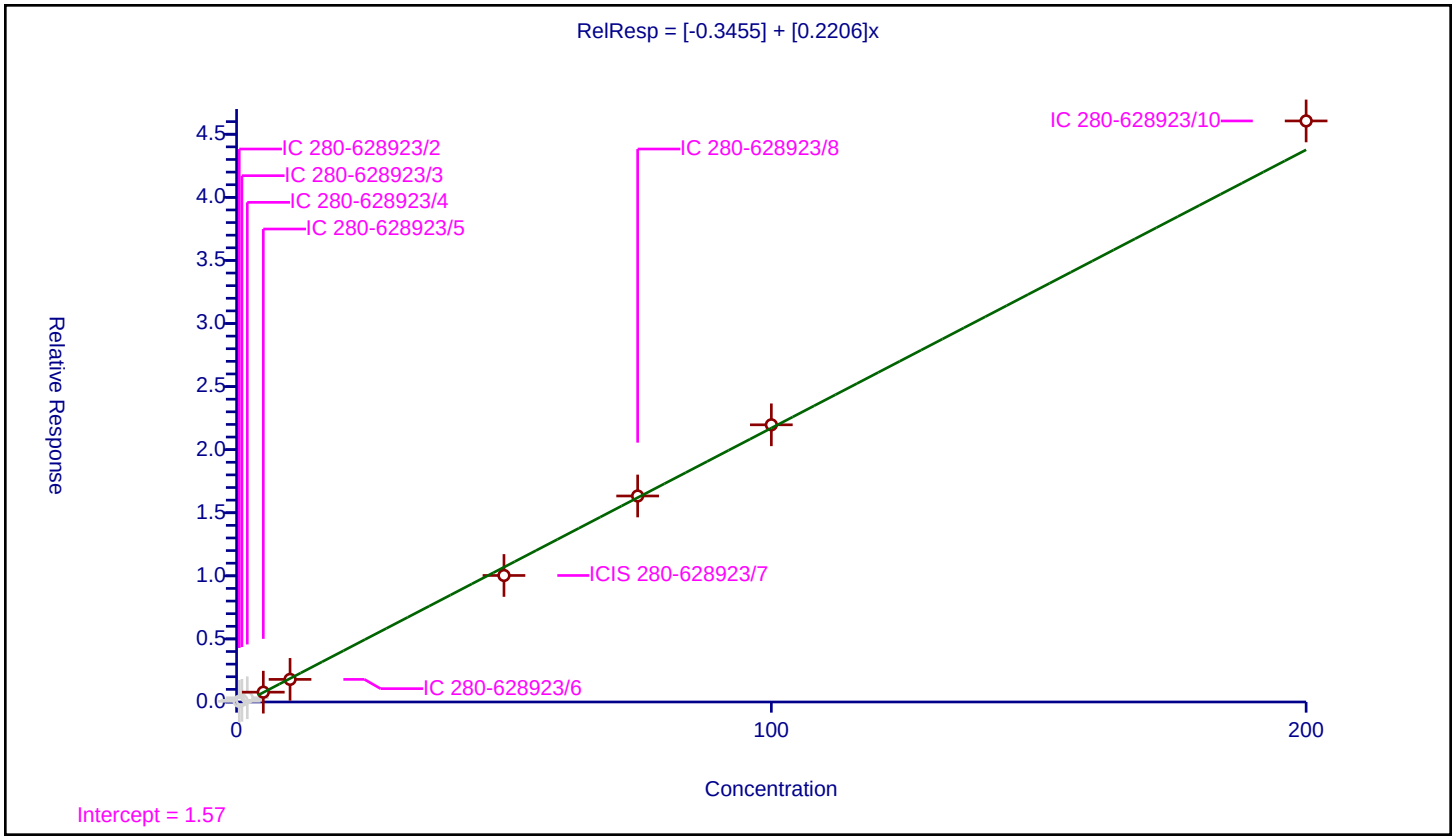
Curve Coefficients

Intercept:	-0.3455
Slope:	0.2206

Error Coefficients

Standard Error:	609000
Relative Standard Error:	4.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.053368	50.0	971565.0	0.106735	N
2	IC 280-628923/3	1.0	0.131473	50.0	1130271.0	0.131473	N
3	IC 280-628923/4	2.0	0.334841	50.0	1090518.0	0.16742	N
4	IC 280-628923/5	5.0	0.778576	50.0	1106572.0	0.155715	Y
5	IC 280-628923/6	10.0	1.790777	50.0	1099523.0	0.179078	Y
6	ICIS 280-628923/7	50.0	10.028766	50.0	1171859.0	0.200575	Y
7	IC 280-628923/8	75.0	16.329931	50.0	1082500.0	0.217732	Y
8	IC 280-628923/9	100.0	21.970247	50.0	1136619.0	0.219702	Y
9	IC 280-628923/10	200.0	46.055315	50.0	1114132.0	0.230277	Y



Calibration / 1,2,4-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

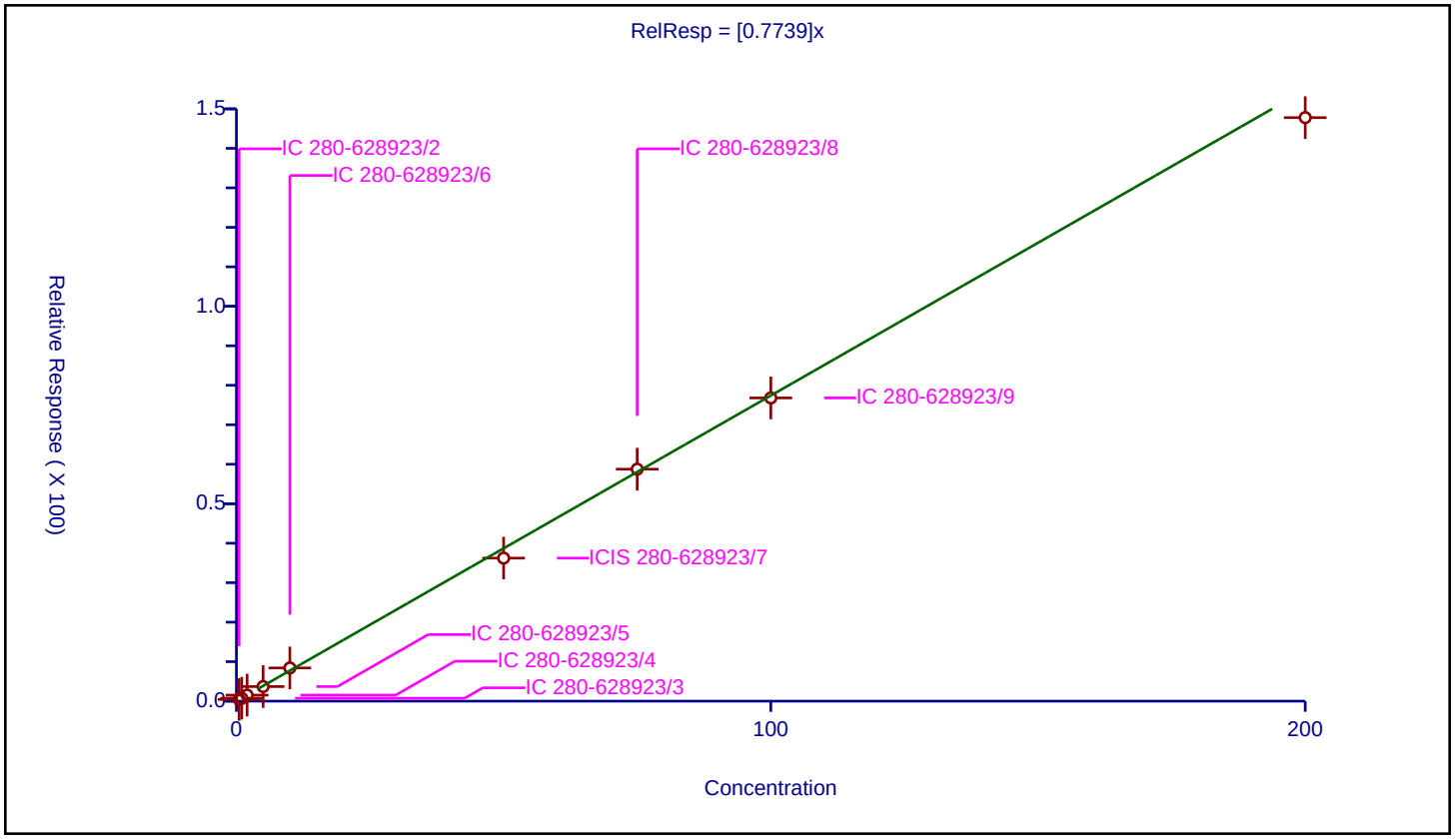
Curve Coefficients

Intercept:	0
Slope:	0.7739

Error Coefficients

Standard Error:	1430000
Relative Standard Error:	6.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.43574	50.0	971565.0	0.871481	Y
2	IC 280-628923/3	1.0	0.737301	50.0	1130271.0	0.737301	Y
3	IC 280-628923/4	2.0	1.525514	50.0	1090518.0	0.762757	Y
4	IC 280-628923/5	5.0	3.691807	50.0	1106572.0	0.738361	Y
5	IC 280-628923/6	10.0	8.406418	50.0	1099523.0	0.840642	Y
6	ICIS 280-628923/7	50.0	36.221679	50.0	1171859.0	0.724434	Y
7	IC 280-628923/8	75.0	58.754365	50.0	1082500.0	0.783392	Y
8	IC 280-628923/9	100.0	76.794027	50.0	1136619.0	0.76794	Y
9	IC 280-628923/10	200.0	147.788547	50.0	1114132.0	0.738943	Y



Calibration / Hexachlorobutadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

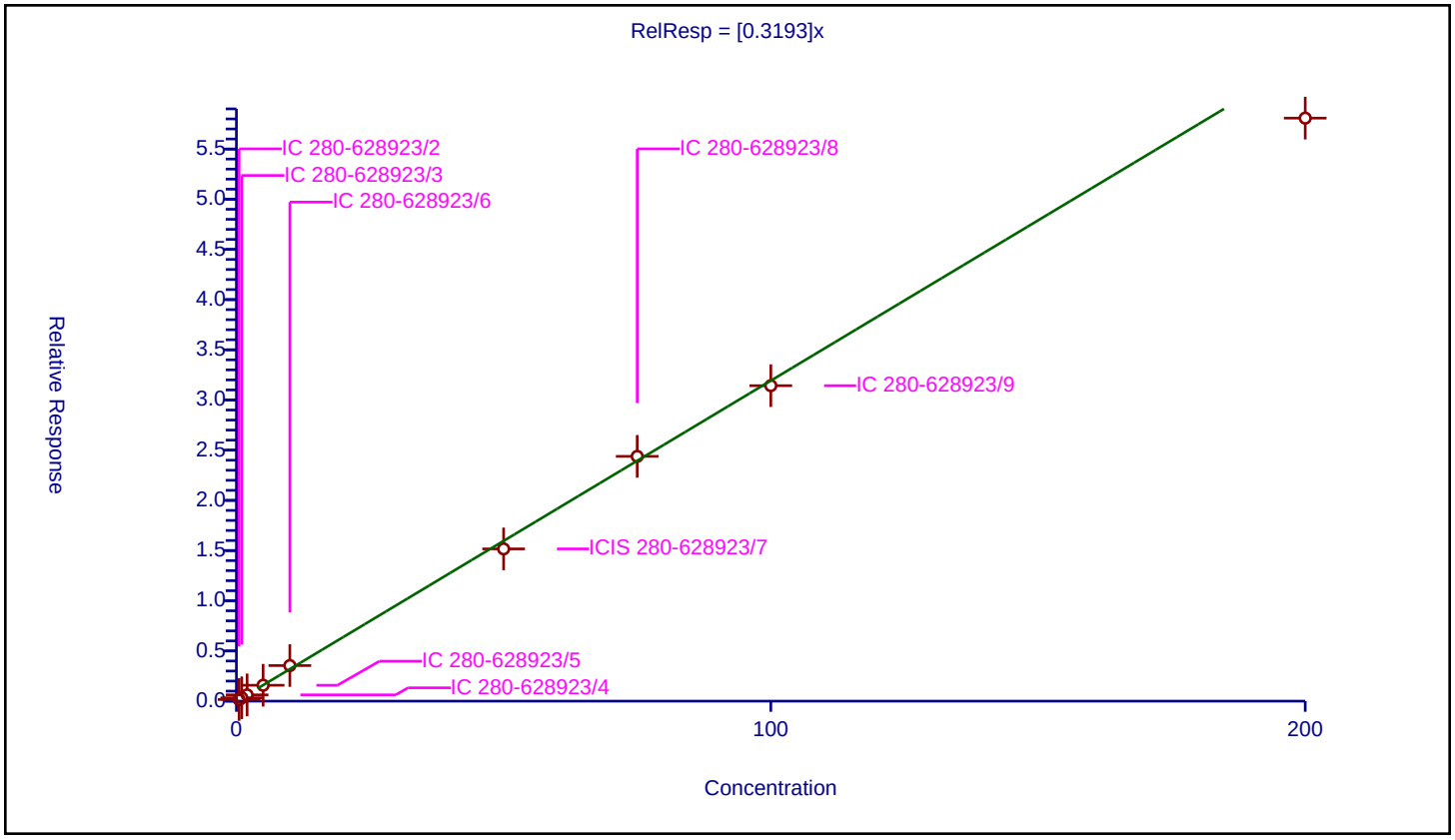
Curve Coefficients

Intercept:	0
Slope:	0.3193

Error Coefficients

Standard Error:	570000
Relative Standard Error:	5.7
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.161646	50.0	971565.0	0.323293	Y
2	IC 280-628923/3	1.0	0.333902	50.0	1130271.0	0.333902	Y
3	IC 280-628923/4	2.0	0.624061	50.0	1090518.0	0.312031	Y
4	IC 280-628923/5	5.0	1.58372	50.0	1106572.0	0.316744	Y
5	IC 280-628923/6	10.0	3.542945	50.0	1099523.0	0.354295	Y
6	ICIS 280-628923/7	50.0	15.16714	50.0	1171859.0	0.303343	Y
7	IC 280-628923/8	75.0	24.386189	50.0	1082500.0	0.325149	Y
8	IC 280-628923/9	100.0	31.427286	50.0	1136619.0	0.314273	Y
9	IC 280-628923/10	200.0	58.07889	50.0	1114132.0	0.290394	Y



Calibration / Naphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

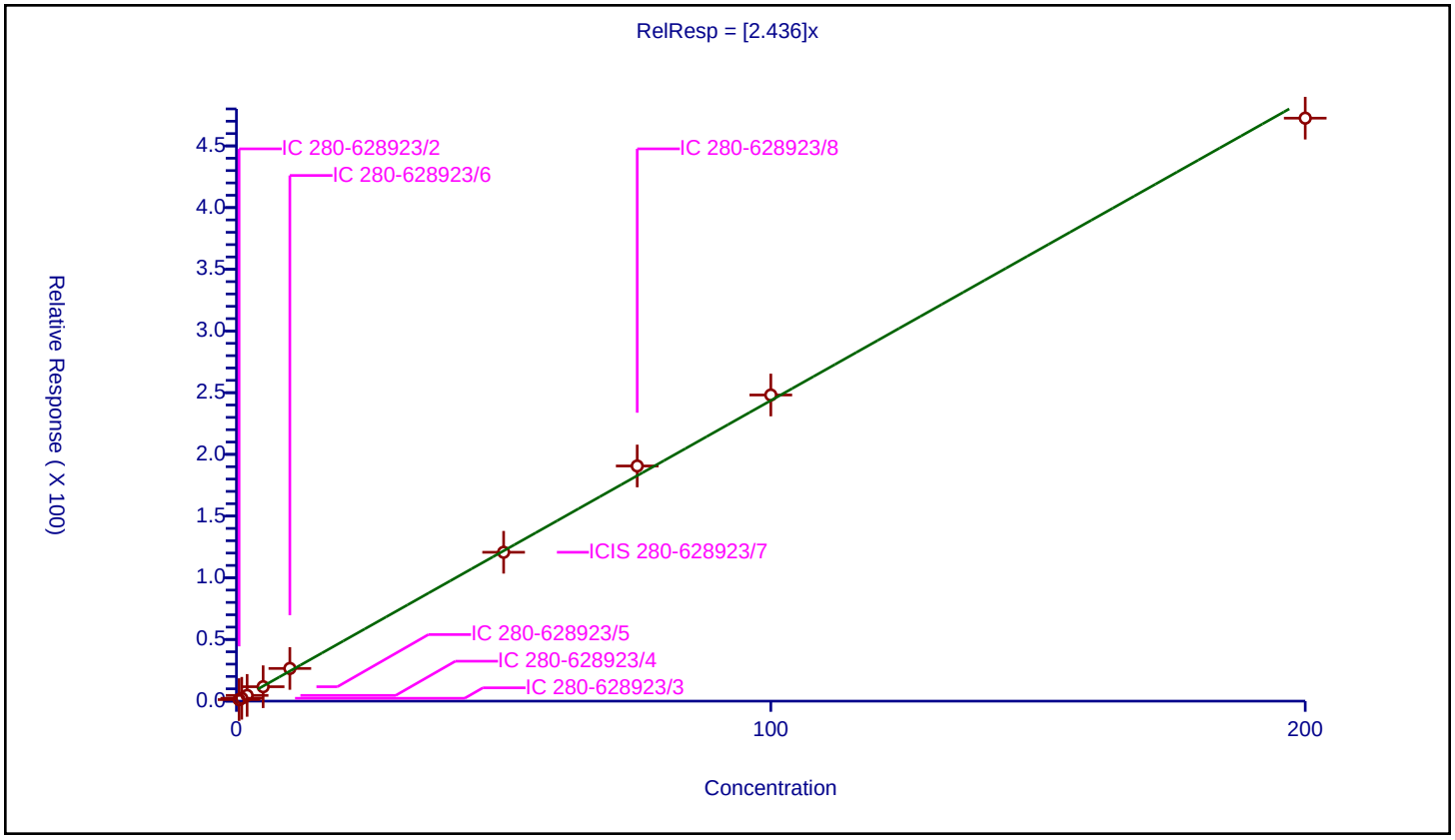
Curve Coefficients

Intercept:	0
Slope:	2.436

Error Coefficients

Standard Error:	4580000
Relative Standard Error:	4.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	1.241657	50.0	971565.0	2.483313	Y
2	IC 280-628923/3	1.0	2.330857	50.0	1130271.0	2.330857	Y
3	IC 280-628923/4	2.0	4.658933	50.0	1090518.0	2.329466	Y
4	IC 280-628923/5	5.0	11.681165	50.0	1106572.0	2.336233	Y
5	IC 280-628923/6	10.0	26.490487	50.0	1099523.0	2.649049	Y
6	ICIS 280-628923/7	50.0	120.660037	50.0	1171859.0	2.413201	Y
7	IC 280-628923/8	75.0	190.595566	50.0	1082500.0	2.541274	Y
8	IC 280-628923/9	100.0	248.116343	50.0	1136619.0	2.481163	Y
9	IC 280-628923/10	200.0	472.489974	50.0	1114132.0	2.36245	Y



Calibration / 1,2,3-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

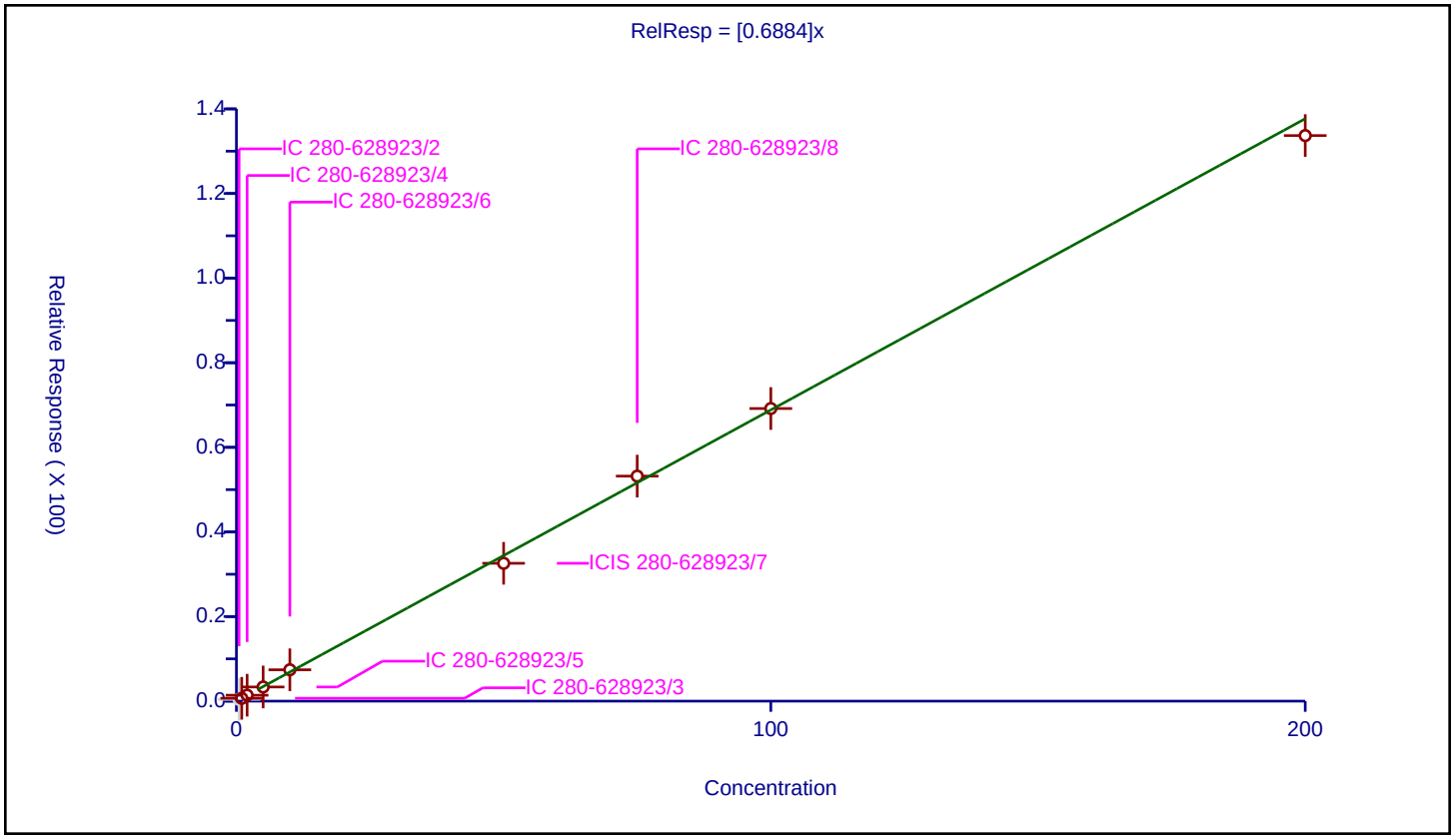
Curve Coefficients

Intercept:	0
Slope:	0.6884

Error Coefficients

Standard Error:	1380000
Relative Standard Error:	4.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-628923/2	0.5	0.411038	50.0	971565.0	0.822076	N
2	IC 280-628923/3	1.0	0.676519	50.0	1130271.0	0.676519	Y
3	IC 280-628923/4	2.0	1.39851	50.0	1090518.0	0.699255	Y
4	IC 280-628923/5	5.0	3.343524	50.0	1106572.0	0.668705	Y
5	IC 280-628923/6	10.0	7.413578	50.0	1099523.0	0.741358	Y
6	ICIS 280-628923/7	50.0	32.585832	50.0	1171859.0	0.651717	Y
7	IC 280-628923/8	75.0	53.193903	50.0	1082500.0	0.709252	Y
8	IC 280-628923/9	100.0	69.170408	50.0	1136619.0	0.691704	Y
9	IC 280-628923/10	200.0	133.690083	50.0	1114132.0	0.66845	Y



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: ICV 280-628923/11 Calibration Date: 10/08/2023 20:21

Instrument ID: VMS_MS13 Calib Start Date: 10/08/2023 16:36

GC Column: RXI-624SilMS ID: 0.25(mm) Calib End Date: 10/08/2023 19:36

Lab File ID: MS13_006814.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Lin1		0.3385	0.1000	59.0	50.0	18.1	20.0
Chloromethane	Lin1		0.3862	0.1000	57.2	50.0	14.4	20.0
Vinyl chloride	Lin2		0.3491	0.0100	58.0	50.0	16.1	20.0
Bromomethane	Ave	0.1908	0.2226	0.0100	58.3	50.0	16.7	20.0
Chloroethane	Lin2		0.2322	0.0100	57.8	50.0	15.6	20.0
Dichlorofluoromethane	Ave	0.4841	0.5489	0.0100	56.7	50.0	13.4	20.0
Trichlorofluoromethane	Ave	0.3804	0.4318	0.0100	56.8	50.0	13.5	20.0
Ethyl ether	Ave	0.2685	0.2854	0.0100	53.1	50.0	6.3	20.0
Acrolein	Ave	0.0493	0.0473	0.0010	474	494	-4.1	20.0
1,1-Dichloroethene	Ave	0.2356	0.2717	0.0600	57.7	50.0	15.3	20.0
Acetone	Lin2		0.1544	0.0100	200	200	0.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1542	0.1763	0.0500	57.2	50.0	14.4	20.0
Iodomethane	Ave	0.3781	0.4378	0.0100	57.9	50.0	15.8	20.0
Carbon disulfide	Ave	0.7468	0.8574	0.1000	57.4	50.0	14.8	20.0
Methyl acetate	Ave	0.3714	0.3893	0.0100	105	100	4.8	20.0
3-Chloro-1-propene	Ave	0.4646	0.4470	0.0100	48.1	50.0	-3.8	20.0
Methylene Chloride	Ave	0.3000	0.3138	0.0100	52.3	50.0	4.6	20.0
2-Methyl-2-propanol	Lin2		0.0626	0.0010	479	500	-4.2	20.0
Acrylonitrile	Ave	0.1752	0.1820	0.0100	519	500	3.9	20.0
Methyl tert-butyl ether	Ave	0.8667	0.9168	0.1000	52.9	50.0	5.8	20.0
trans-1,2-Dichloroethene	Ave	0.2817	0.3101	0.1000	55.1	50.0	10.1	20.0
Hexane	Ave	1.493	1.570	0.0100	52.6	50.0	5.2	20.0
Vinyl acetate	Ave	0.7425	0.7002	0.0100	94.3	100	-5.7	20.0
1,1-Dichloroethane	Ave	0.5354	0.5847	0.1000	54.6	50.0	9.2	20.0
2-Butanone (MEK)	Ave	0.2667	0.2725	0.0100	204	200	2.1	20.0
cis-1,2-Dichloroethene	Ave	0.3219	0.3436	0.1000	53.4	50.0	6.7	20.0
2,2-Dichloropropane	Ave	0.3014	0.3180	0.0100	52.8	50.0	5.5	20.0
sec-Butyl Alcohol	Ave	0.0521	0.0540	0.0100	1240	1200	3.7	20.0
Chlorobromomethane	Ave	0.1480	0.1532	0.0500	51.8	50.0	3.5	20.0
Tetrahydrofuran	Ave	0.1806	0.1800	0.0010	99.6	100	-0.4	20.0
Chloroform	Ave	0.5021	0.5384	0.2000	53.6	50.0	7.2	20.0
1,1,1-Trichloroethane	Ave	0.3818	0.4298	0.0500	56.3	50.0	12.6	20.0
Cyclohexane	Ave	0.4576	0.4976	0.0100	54.4	50.0	8.7	20.0
1,1-Dichloropropene	Ave	0.4194	0.4513	0.0100	53.8	50.0	7.6	20.0
Carbon tetrachloride	Lin2		0.3553	0.1000	53.9	50.0	7.8	20.0
Isobutyl alcohol	Ave	0.0227	0.0243	0.0010	1340	1250	7.0	20.0
Benzene	Ave	1.201	1.284	0.2000	53.4	50.0	6.9	20.0
1,2-Dichloroethane	Ave	0.4119	0.4200	0.0700	51.0	50.0	2.0	20.0
n-Heptane	Ave	0.4568	0.4878		53.4	50.0	6.8	
Trichloroethene	Ave	1.031	1.129	0.2000	54.8	50.0	9.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: ICV 280-628923/11 Calibration Date: 10/08/2023 20:21

Instrument ID: VMS_MS13 Calib Start Date: 10/08/2023 16:36

GC Column: RXI-624SilMS ID: 0.25(mm) Calib End Date: 10/08/2023 19:36

Lab File ID: MS13_006814.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Pentanone	Ave	0.4039	0.4328	0.0010	171	160	7.2	20.0
Methylcyclohexane	Ave	0.4068	0.4402	0.0500	54.1	50.0	8.2	20.0
1,2-Dichloropropane	Ave	0.3108	0.3441	0.1000	55.4	50.0	10.7	20.0
1,4-Dioxane	Ave	0.0049	0.0048	0.0010	980	1000	-2.0	20.0
Dibromomethane	Ave	0.1869	0.2056	0.0100	55.0	50.0	10.0	20.0
Dichlorobromomethane	Lin2		0.3859	0.2000	53.6	50.0	7.3	20.0
2-Chloroethyl vinyl ether	Ave	0.2415	0.2682	0.0100	55.5	50.0	11.1	20.0
cis-1,3-Dichloropropene	Lin2		1.690	0.2000	51.8	50.0	3.6	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.4954	0.5442	0.0300	220	200	9.8	20.0
Toluene	Ave	1.248	1.327	0.3000	53.1	50.0	6.3	20.0
trans-1,3-Dichloropropene	Lin2		0.4844	0.2000	53.6	50.0	7.3	20.0
Ethyl methacrylate	Ave	1.540	1.708	0.0100	55.4	50.0	10.9	20.0
1,1,2-Trichloroethane	Ave	0.2602	0.2902	0.1000	55.8	50.0	11.5	20.0
Tetrachloroethene	Ave	0.7950	0.8654	0.1000	54.4	50.0	8.9	20.0
1,3-Dichloropropane	Ave	1.675	1.804	0.0100	53.9	50.0	7.7	20.0
2-Hexanone	Ave	1.268	1.395	0.0100	220	200	10.0	20.0
Chlorodibromomethane	Lin2		0.9301	0.1000	53.4	50.0	6.8	20.0
Ethylene Dibromide	Ave	0.9599	1.050	0.1000	54.7	50.0	9.3	20.0
1-Chlorohexane	Ave	1.499	1.542	0.0100	41.2	40.0	2.9	20.0
Chlorobenzene	Ave	2.698	2.920	0.3000	54.1	50.0	8.2	20.0
1,1,1,2-Tetrachloroethane	Lin2		0.9212	0.0100	56.1	50.0	12.2	20.0
Ethylbenzene	Ave	1.462	1.536	0.3000	52.5	50.0	5.0	20.0
m-Xylene & p-Xylene	Ave	1.780	1.944	0.1000	54.6	50.0	9.2	20.0
o-Xylene	Ave	1.747	1.876	0.2000	53.7	50.0	7.4	20.0
Styrene	Ave	2.889	3.253	0.2000	56.3	50.0	12.6	20.0
Bromoform	Lin1		0.6170	0.1000	49.4	50.0	-1.2	20.0
Isopropylbenzene	Ave	2.582	2.842	0.3000	55.0	50.0	10.1	20.0
Cyclohexanone	Lin2		0.1028	0.0010	1550	1500	3.5	20.0
1,1,2,2-Tetrachloroethane	Ave	0.8546	0.9247	0.3000	54.1	50.0	8.2	20.0
Bromobenzene	Ave	0.6618	0.7081	0.0100	53.5	50.0	7.0	20.0
trans-1,4-Dichloro-2-butene	Qua		0.2415	0.0100	53.1	50.0	6.1	20.0
1,2,3-Trichloropropane	Ave	0.2675	0.2954	0.0100	55.2	50.0	10.4	20.0
N-Propylbenzene	Ave	0.7276	0.7885	0.0100	54.2	50.0	8.4	20.0
2-Chlorotoluene	Ave	0.6220	0.6801	0.0100	54.7	50.0	9.3	20.0
1,3,5-Trimethylbenzene	Ave	2.102	2.314	0.0100	55.1	50.0	10.1	20.0
4-Chlorotoluene	Ave	0.6508	0.7069	0.0100	54.3	50.0	8.6	20.0
tert-Butylbenzene	Ave	1.863	2.016	0.0100	54.1	50.0	8.3	20.0
1,2,4-Trimethylbenzene	Ave	2.186	2.355	0.3000	53.8	50.0	7.7	20.0
sec-Butylbenzene	Ave	0.5407	0.5881	0.0100	54.4	50.0	8.8	20.0
1,3-Dichlorobenzene	Ave	1.253	1.347	0.5000	53.8	50.0	7.5	20.0
4-Isopropyltoluene	Ave	2.287	2.476	0.0100	54.1	50.0	8.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: ICV 280-628923/11 Calibration Date: 10/08/2023 20:21

Instrument ID: VMS_MS13 Calib Start Date: 10/08/2023 16:36

GC Column: RXI-624SilMS ID: 0.25(mm) Calib End Date: 10/08/2023 19:36

Lab File ID: MS13_006814.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dichlorobenzene	Ave	1.304	1.372	0.5000	52.6	50.0	5.2	20.0
n-Butylbenzene	Ave	2.181	2.399	0.0100	55.0	50.0	10.0	20.0
1,2-Dichlorobenzene	Ave	1.191	1.265	0.5000	53.1	50.0	6.2	20.0
1,2-Dibromo-3-Chloropropane	Lin2		0.2118	0.0100	49.6	50.0	-0.9	20.0
1,2,4-Trichlorobenzene	Ave	0.7739	0.8160	0.2000	52.7	50.0	5.4	20.0
Hexachlorobutadiene	Ave	0.3193	0.3428	0.0100	53.7	50.0	7.4	20.0
Naphthalene	Ave	2.436	2.644	0.0100	54.3	50.0	8.5	20.0
1,2,3-Trichlorobenzene	Ave	0.6884	0.7408	0.3000	53.8	50.0	7.6	20.0
Dibromofluoromethane (Surr)	Ave	0.2940	0.2931	0.0100	49.8	50.0	-0.3	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3707	0.3624	0.0100	48.9	50.0	-2.2	20.0
Toluene-d8 (Surr)	Ave	4.010	4.018	0.0100	50.1	50.0	0.2	20.0
4-Bromofluorobenzene (Surr)	Ave	0.8729	0.8799	0.0100	50.4	50.0	0.8	20.0

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006814.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 08-Oct-2023 20:21:30 ALS Bottle#: 0 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICV
Operator ID: MEIERG Instrument ID: VMS_MS13
Sublist:

Method: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\AQ_VMS13_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 09-Oct-2023 12:34:31 Calib Date: 08-Oct-2023 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006822.D

Column 1 : Rxi-624Sil MS (0.25 mm) Det: MS Quad
Process Host: CTX1667

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.170	5.170	0.000	98	2154373	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.720	7.720	0.000	87	636182	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.948	9.948	0.000	95	1075422	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.663	4.662	0.001	93	631482	50.0	49.8	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.932	4.932	0.000	96	780650	50.0	48.9	
$ 6 Toluene-d8 (Surr)	98	6.435	6.435	0.000	94	2555985	50.0	50.1	
$ 7 4-Bromofluorobenzene (Surr)	95	8.818	8.818	0.000	89	946239	50.0	50.4	
9 Dichlorodifluoromethane	85	1.709	1.709	0.000	99	729189	50.0	59.0	
10 Chloromethane	50	1.896	1.896	0.000	99	832101	50.0	57.2	
11 Vinyl chloride	62	1.999	1.999	0.000	98	752101	50.0	58.0	
12 Bromomethane	94	2.310	2.300	0.010	91	479480	50.0	58.3	
13 Chloroethane	64	2.403	2.393	0.010	100	500287	50.0	57.8	
14 Dichlorofluoromethane	67	2.569	2.569	0.000	97	1182525	50.0	56.7	
15 Trichlorofluoromethane	101	2.580	2.579	0.001	99	930231	50.0	56.8	
18 Ethyl ether	59	2.797	2.797	0.000	93	614761	50.0	53.1	
19 Acrolein	56	2.911	2.911	0.000	100	1005957	493.8	473.5	
20 1,1-Dichloroethene	96	2.994	2.994	0.000	97	585312	50.0	57.7	
21 Acetone	43	3.015	3.015	0.000	100	1330257	200.0	200.0	
22 1,1,2-Trichloro-1,2,2-trifluoroe	151	3.025	3.025	0.000	95	379896	50.0	57.2	
24 Iodomethane	142	3.118	3.108	0.010	99	943265	50.0	57.9	
25 Carbon disulfide	76	3.181	3.170	0.011	99	1847109	50.0	57.4	
27 Methyl acetate	43	3.243	3.243	0.000	98	1677217	100.0	104.8	
28 3-Chloro-1-propene	41	3.264	3.263	0.001	91	962964	50.0	48.1	
29 Methylene Chloride	84	3.367	3.357	0.010	95	676001	50.0	52.3	
30 2-Methyl-2-propanol	59	3.409	3.409	0.000	99	1348913	500.0	479.0	
31 Acrylonitrile	53	3.533	3.533	0.000	99	3921249	500.0	519.4	
32 Methyl tert-butyl ether	73	3.554	3.554	0.000	96	1975030	50.0	52.9	
33 trans-1,2-Dichloroethene	96	3.564	3.564	0.000	98	668101	50.0	55.1	
34 Hexane	57	3.761	3.761	0.000	94	998820	50.0	52.6	
35 Vinyl acetate	43	3.865	3.865	0.001	97	3017033	100.0	94.3	
37 1,1-Dichloroethane	63	3.896	3.885	0.011	96	1259757	50.0	54.6	
40 2-Butanone (MEK)	43	4.279	4.279	0.000	100	2347901	200.0	204.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
42 cis-1,2-Dichloroethene	96	4.310	4.310	0.000	82	740143	50.0	53.4	
43 2,2-Dichloropropane	77	4.321	4.320	0.001	91	685194	50.0	52.8	
45 sec-Butyl Alcohol	45	4.393	4.393	0.000	100	2791798	1200.0	1244.6	
47 Chlorobromomethane	128	4.486	4.486	0.000	98	330149	50.0	51.8	
48 Tetrahydrofuran	42	4.497	4.497	0.000	91	775454	100.0	99.6	
49 Chloroform	83	4.549	4.548	0.001	94	1159883	50.0	53.6	
50 1,1,1-Trichloroethane	97	4.694	4.694	0.000	99	925933	50.0	56.3	
51 Cyclohexane	56	4.756	4.745	0.011	92	1072057	50.0	54.4	
52 1,1-Dichloropropene	75	4.808	4.808	0.000	96	972296	50.0	53.8	
53 Carbon tetrachloride	117	4.808	4.808	0.000	94	765486	50.0	53.9	
54 Isobutyl alcohol	41	4.818	4.818	0.000	95	1308540	1250.0	1338.0	
56 Benzene	78	4.963	4.963	0.000	95	2765149	50.0	53.4	
57 1,2-Dichloroethane	62	4.984	4.984	0.000	97	904894	50.0	51.0	
59 n-Heptane	43	5.150	5.150	0.000	95	1050877	50.0	53.4	
60 Trichloroethene	95	5.450	5.450	0.000	98	718484	50.0	54.8	
61 2-Pentanone	43	5.554	5.554	0.000	99	2983760	160.0	171.4	
62 Methylcyclohexane	55	5.647	5.647	0.000	92	948367	50.0	54.1	
64 1,2-Dichloropropane	63	5.657	5.657	0.000	96	741290	50.0	55.4	
65 1,4-Dioxane	88	5.699	5.709	-0.010	95	206240	1000.0	980.4	
66 Dibromomethane	93	5.730	5.730	0.000	97	442915	50.0	55.0	
67 Dichlorobromomethane	83	5.854	5.854	0.000	99	831406	50.0	53.6	
69 2-Chloroethyl vinyl ether	63	6.062	6.062	0.000	91	577774	50.0	55.5	
70 cis-1,3-Dichloropropene	75	6.207	6.207	0.000	95	1075061	50.0	51.8	
71 4-Methyl-2-pentanone (MIBK)	43	6.310	6.310	0.000	97	4689647	200.0	219.7	
72 Toluene	91	6.497	6.497	0.000	98	2857990	50.0	53.1	
73 trans-1,3-Dichloropropene	75	6.673	6.673	0.000	95	1043683	50.0	53.6	
74 Ethyl methacrylate	69	6.694	6.694	0.000	91	1086436	50.0	55.4	
75 1,1,2-Trichloroethane	97	6.849	6.849	0.000	91	625230	50.0	55.8	
76 Tetrachloroethene	164	6.942	6.942	0.000	98	550575	50.0	54.4	
77 1,3-Dichloropropane	76	6.994	6.994	0.000	97	1147537	50.0	53.9	
78 2-Hexanone	43	7.015	7.015	0.000	97	3549925	200.0	220.0	
79 Chlorodibromomethane	129	7.191	7.191	0.000	90	591689	50.0	53.4	
80 Ethylene Dibromide	107	7.305	7.305	0.000	99	667736	50.0	54.7	
81 1-Chlorohexane	91	7.699	7.699	0.000	98	784967	40.0	41.2	
82 Chlorobenzene	112	7.740	7.740	0.000	94	1857484	50.0	54.1	
83 1,1,1,2-Tetrachloroethane	131	7.813	7.813	0.000	95	586023	50.0	56.1	
84 Ethylbenzene	106	7.823	7.823	0.000	99	977073	50.0	52.5	
85 m-Xylene & p-Xylene	106	7.937	7.937	0.000	99	1236424	50.0	54.6	
86 o-Xylene	106	8.300	8.300	0.000	97	1193613	50.0	53.7	
87 Styrene	104	8.321	8.321	0.000	96	2069434	50.0	56.3	
88 Bromoform	173	8.497	8.497	0.000	97	392526	50.0	49.4	
89 Isopropylbenzene	105	8.642	8.642	0.000	96	3056593	50.0	55.0	
91 Cyclohexanone	55	8.746	8.746	0.000	94	1962906	1500.0	1552.0	
92 1,1,2,2-Tetrachloroethane	83	8.932	8.932	0.000	94	994426	50.0	54.1	
93 Bromobenzene	156	8.963	8.963	0.000	96	761558	50.0	53.5	
94 trans-1,4-Dichloro-2-butene	53	8.963	8.963	0.000	84	259681	50.0	53.1	
95 1,2,3-Trichloropropane	110	8.994	8.994	0.000	84	317708	50.0	55.2	
96 N-Propylbenzene	120	9.046	9.046	0.000	99	847992	50.0	54.2	
97 2-Chlorotoluene	126	9.139	9.139	0.000	96	731411	50.0	54.7	
98 1,3,5-Trimethylbenzene	105	9.212	9.212	0.000	95	2488964	50.0	55.1	
99 4-Chlorotoluene	126	9.253	9.253	0.000	98	760238	50.0	54.3	
101 tert-Butylbenzene	119	9.523	9.523	0.000	94	2168332	50.0	54.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
102 1,2,4-Trimethylbenzene	105	9.585	9.585	0.000	97	2532369	50.0	53.8	
103 sec-Butylbenzene	134	9.751	9.751	0.000	94	632411	50.0	54.4	
104 1,3-Dichlorobenzene	146	9.875	9.875	0.000	98	1448938	50.0	53.8	
105 4-Isopropyltoluene	119	9.896	9.896	0.000	98	2662470	50.0	54.1	
106 1,4-Dichlorobenzene	146	9.969	9.968	0.001	94	1475431	50.0	52.6	
108 n-Butylbenzene	91	10.300	10.300	0.000	98	2579532	50.0	55.0	
109 1,2-Dichlorobenzene	146	10.331	10.331	0.000	97	1360072	50.0	53.1	
110 1,2-Dibromo-3-Chloropropane	157	11.108	11.108	0.000	84	227752	50.0	49.6	
112 1,2,4-Trichlorobenzene	180	11.938	11.937	0.001	94	877543	50.0	52.7	
113 Hexachlorobutadiene	225	12.083	12.083	0.001	98	368678	50.0	53.7	
114 Naphthalene	128	12.207	12.207	0.000	97	2843442	50.0	54.3	
115 1,2,3-Trichlorobenzene	180	12.435	12.435	0.000	95	796722	50.0	53.8	
127 Butadiene	54		0.000				ND	ND	
S 128 Xylenes, Total	106				0		100.0	108.3	
S 129 Trihalomethanes, Total	1				0		200.0	210.0	
S 131 1,3-Dichloropropene, Total	1				0		100.0	105.5	
S 133 1,2-Dichloroethene, Total	1				0		100.0	108.4	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-MegaMain B_00092	Amount Added:	25.00	Units: uL	
MV-Gas B_00147	Amount Added:	10.00	Units: uL	
mv-IS_SS_00070	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 09-Oct-2023 12:34:33 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006814.D

Injection Date: 08-Oct-2023 20:21:30 Instrument ID: VMS_MS13

Lims ID: ICV

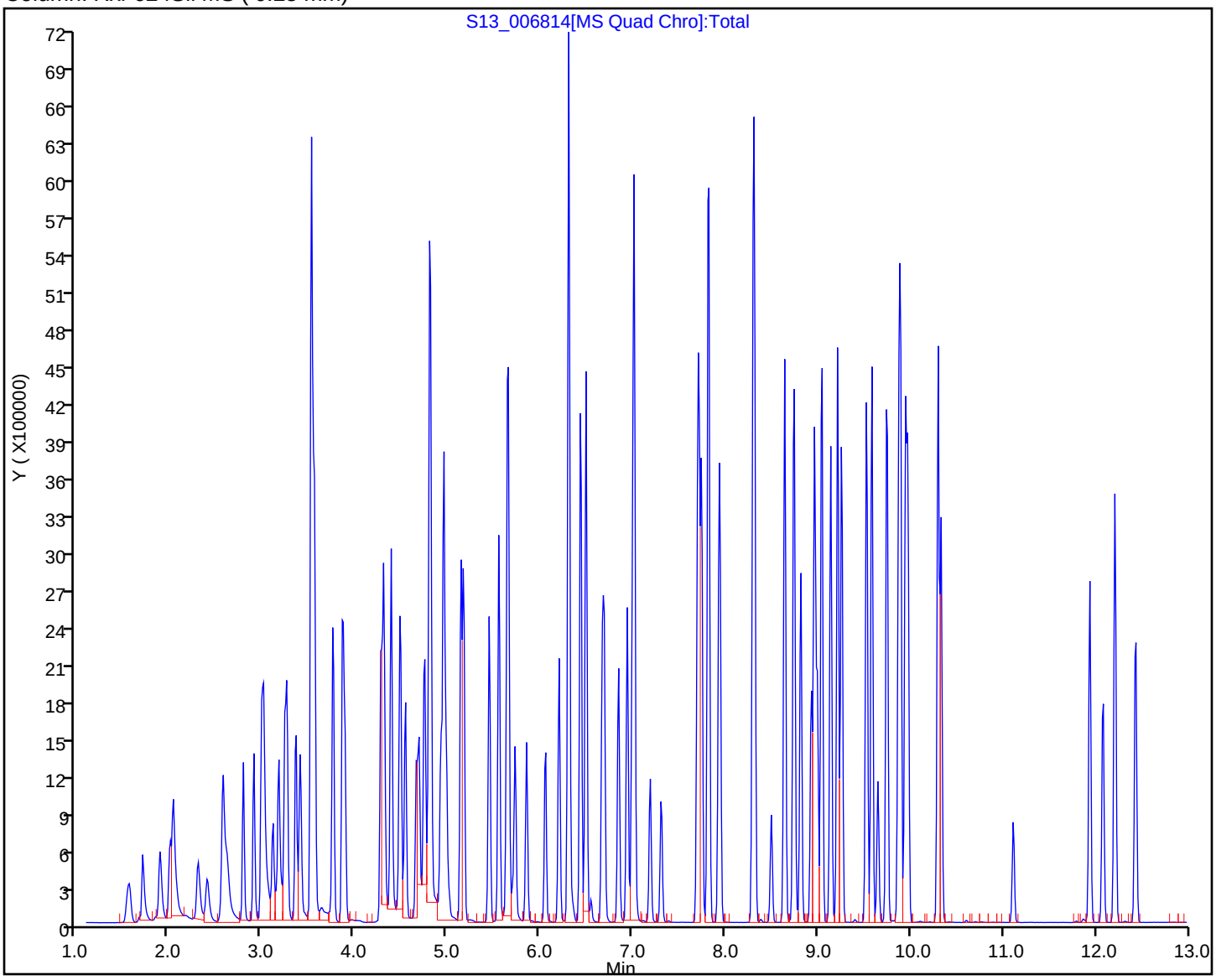
Client ID:

Operator ID: MEIERG ALS Bottle#: 0 Worklist Smp#: 11

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: AQ_VMS13_8260 Limit Group: MSV - 8260B Water and Solid

Column: Rxi-624Sil MS (0.25 mm)



12/5/2023 8:25 AM

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-628977/2 Calibration Date: 10/09/2023 10:17

Instrument ID: VMS_MS13 Calib Start Date: 10/08/2023 16:36

GC Column: RXI-624SilMS ID: 0.25(mm) Calib End Date: 10/08/2023 19:36

Lab File ID: MS13_006836.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Lin1		0.2816	0.1000	49.4	50.0	-1.3	20.0
Chloromethane	Lin1		0.3389	0.1000	50.2	50.0	0.5	20.0
Vinyl chloride	Lin2		0.3084	0.0100	51.3	50.0	2.6	20.0
Bromomethane	Ave	0.1908	0.2114	0.0100	55.4	50.0	10.8	20.0
Chloroethane	Lin2		0.2109	0.0100	52.5	50.0	5.0	20.0
Dichlorofluoromethane	Ave	0.4841	0.5310	0.0100	54.8	50.0	9.7	20.0
Trichlorofluoromethane	Ave	0.3804	0.4089	0.0100	53.7	50.0	7.5	20.0
Ethyl ether	Ave	0.2685	0.2866	0.0100	53.4	50.0	6.8	20.0
Acrolein	Ave	0.0493	0.0506	0.0010	507	494	2.6	20.0
1,1-Dichloroethene	Ave	0.2356	0.2541	0.0600	53.9	50.0	7.8	20.0
Acetone	Lin2		0.1615	0.0100	210	200	4.8	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1542	0.1707	0.0500	55.4	50.0	10.8	20.0
Iodomethane	Ave	0.3781	0.4104	0.0100	54.3	50.0	8.5	20.0
Carbon disulfide	Ave	0.7468	0.7963	0.1000	53.3	50.0	6.6	20.0
Methyl acetate	Ave	0.3714	0.3837	0.0100	103	100	3.3	20.0
3-Chloro-1-propene	Ave	0.4646	0.5058	0.0100	54.4	50.0	8.9	20.0
Methylene Chloride	Ave	0.3000	0.3098	0.0100	51.6	50.0	3.3	20.0
2-Methyl-2-propanol	Lin2		0.0656	0.0010	502	500	0.4	20.0
Acrylonitrile	Ave	0.1752	0.1886	0.0100	538	500	7.6	20.0
Methyl tert-butyl ether	Ave	0.8667	0.9279	0.1000	53.5	50.0	7.1	20.0
trans-1,2-Dichloroethene	Ave	0.2817	0.3034	0.1000	53.9	50.0	7.7	20.0
Hexane	Ave	1.493	1.658	0.0100	55.5	50.0	11.1	20.0
Vinyl acetate	Ave	0.7425	0.8427	0.0100	113	100	13.5	20.0
1,1-Dichloroethane	Ave	0.5354	0.5734	0.1000	53.5	50.0	7.1	20.0
2-Butanone (MEK)	Ave	0.2667	0.2756	0.0100	207	200	3.3	20.0
cis-1,2-Dichloroethene	Ave	0.3219	0.3398	0.1000	52.8	50.0	5.6	20.0
2,2-Dichloropropane	Ave	0.3014	0.3247	0.0100	53.8	50.0	7.7	20.0
sec-Butyl Alcohol	Ave	0.0521	0.0548	0.0100	1260	1200	5.3	20.0
Chlorobromomethane	Ave	0.1480	0.1608	0.0500	54.3	50.0	8.6	20.0
Tetrahydrofuran	Ave	0.1806	0.1849	0.0010	102	100	2.4	20.0
Chloroform	Ave	0.5021	0.5418	0.2000	54.0	50.0	7.9	20.0
1,1,1-Trichloroethane	Ave	0.3818	0.4142	0.0500	54.3	50.0	8.5	20.0
Cyclohexane	Ave	0.4576	0.4791	0.0100	52.3	50.0	4.7	20.0
1,1-Dichloropropene	Ave	0.4194	0.4512	0.0100	53.8	50.0	7.6	20.0
Carbon tetrachloride	Lin2		0.3449	0.1000	52.3	50.0	4.7	20.0
Isobutyl alcohol	Ave	0.0227	0.0239	0.0010	1310	1250	5.1	20.0
Benzene	Ave	1.201	1.265	0.2000	52.7	50.0	5.3	20.0
1,2-Dichloroethane	Ave	0.4119	0.4200	0.0700	51.0	50.0	2.0	20.0
n-Heptane	Ave	0.4568	0.4854		53.1	50.0	6.3	
Trichloroethene	Ave	1.031	1.100	0.2000	53.4	50.0	6.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-628977/2 Calibration Date: 10/09/2023 10:17

Instrument ID: VMS_MS13 Calib Start Date: 10/08/2023 16:36

GC Column: RXI-624SilMS ID: 0.25(mm) Calib End Date: 10/08/2023 19:36

Lab File ID: MS13_006836.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Pentanone	Ave	0.4039	0.4147	0.0010	164	160	2.7	20.0
Methylcyclohexane	Ave	0.4068	0.4429	0.0500	54.4	50.0	8.9	20.0
1,2-Dichloropropane	Ave	0.3108	0.3337	0.1000	53.7	50.0	7.4	20.0
1,4-Dioxane	Ave	0.0049	0.0051	0.0010	1050	1000	4.9	20.0
Dibromomethane	Ave	0.1869	0.1961	0.0100	52.5	50.0	4.9	20.0
Dichlorobromomethane	Lin2		0.3793	0.2000	52.7	50.0	5.4	20.0
2-Chloroethyl vinyl ether	Ave	0.2415	0.2482	0.0100	51.4	50.0	2.8	20.0
cis-1,3-Dichloropropene	Lin2		1.726	0.2000	52.9	50.0	5.8	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.4954	0.5191	0.0300	210	200	4.8	20.0
Toluene	Ave	1.248	1.293	0.3000	51.8	50.0	3.6	20.0
trans-1,3-Dichloropropene	Lin2		0.4515	0.2000	50.0	50.0	0.0	20.0
Ethyl methacrylate	Ave	1.540	1.648	0.0100	53.5	50.0	7.0	20.0
1,1,2-Trichloroethane	Ave	0.2602	0.2743	0.1000	52.7	50.0	5.4	20.0
Tetrachloroethene	Ave	0.7950	0.8453	0.1000	53.2	50.0	6.3	20.0
1,3-Dichloropropane	Ave	1.675	1.735	0.0100	51.8	50.0	3.6	20.0
2-Hexanone	Ave	1.268	1.329	0.0100	210	200	4.8	20.0
Chlorodibromomethane	Lin2		0.9141	0.1000	52.5	50.0	5.0	20.0
Ethylene Dibromide	Ave	0.9599	1.016	0.1000	52.9	50.0	5.8	20.0
1-Chlorohexane	Ave	1.499	1.507	0.0100	40.2	40.0	0.5	20.0
Chlorobenzene	Ave	2.698	2.820	0.3000	52.3	50.0	4.5	20.0
1,1,1,2-Tetrachloroethane	Lin2		0.9103	0.0100	55.5	50.0	10.9	20.0
Ethylbenzene	Ave	1.462	1.541	0.3000	52.7	50.0	5.4	20.0
m-Xylene & p-Xylene	Ave	1.780	1.890	0.1000	53.1	50.0	6.2	20.0
o-Xylene	Ave	1.747	1.879	0.2000	53.8	50.0	7.5	20.0
Styrene	Ave	2.889	3.149	0.2000	54.5	50.0	9.0	20.0
Bromoform	Lin1		0.6165	0.1000	49.4	50.0	-1.2	20.0
Isopropylbenzene	Ave	2.582	2.730	0.3000	52.9	50.0	5.7	20.0
Cyclohexanone	Lin2		0.0968	0.0010	1460	1500	-2.6	20.0
1,1,2,2-Tetrachloroethane	Ave	0.8546	0.8961	0.3000	52.4	50.0	4.9	20.0
Bromobenzene	Ave	0.6618	0.6803	0.0100	51.4	50.0	2.8	20.0
trans-1,4-Dichloro-2-butene	Qua		0.2206	0.0100	49.0	50.0	-2.0	20.0
1,2,3-Trichloropropane	Ave	0.2675	0.2750	0.0100	51.4	50.0	2.8	20.0
N-Propylbenzene	Ave	0.7276	0.7499	0.0100	51.5	50.0	3.1	20.0
2-Chlorotoluene	Ave	0.6220	0.6494	0.0100	52.2	50.0	4.4	20.0
1,3,5-Trimethylbenzene	Ave	2.102	2.245	0.0100	53.4	50.0	6.8	20.0
4-Chlorotoluene	Ave	0.6508	0.6715	0.0100	51.6	50.0	3.2	20.0
tert-Butylbenzene	Ave	1.863	1.972	0.0100	52.9	50.0	5.9	20.0
1,2,4-Trimethylbenzene	Ave	2.186	2.314	0.3000	52.9	50.0	5.8	20.0
sec-Butylbenzene	Ave	0.5407	0.5780	0.0100	53.4	50.0	6.9	20.0
1,3-Dichlorobenzene	Ave	1.253	1.287	0.5000	51.3	50.0	2.7	20.0
4-Isopropyltoluene	Ave	2.287	2.468	0.0100	54.0	50.0	7.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-628977/2 Calibration Date: 10/09/2023 10:17

Instrument ID: VMS_MS13 Calib Start Date: 10/08/2023 16:36

GC Column: RXI-624SilMS ID: 0.25(mm) Calib End Date: 10/08/2023 19:36

Lab File ID: MS13_006836.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dichlorobenzene	Ave	1.304	1.303	0.5000	50.0	50.0	-0.0	20.0
n-Butylbenzene	Ave	2.181	2.313	0.0100	53.0	50.0	6.1	20.0
1,2-Dichlorobenzene	Ave	1.191	1.219	0.5000	51.2	50.0	2.3	20.0
1,2-Dibromo-3-Chloropropane	Lin2		0.2085	0.0100	48.8	50.0	-2.3	20.0
1,2,4-Trichlorobenzene	Ave	0.7739	0.7780	0.2000	50.3	50.0	0.5	20.0
Hexachlorobutadiene	Ave	0.3193	0.3242	0.0100	50.8	50.0	1.5	20.0
Naphthalene	Ave	2.436	2.489	0.0100	51.1	50.0	2.2	20.0
1,2,3-Trichlorobenzene	Ave	0.6884	0.6843	0.3000	49.7	50.0	-0.6	20.0
Dibromofluoromethane (Surr)	Ave	0.2940	0.3009	0.0100	51.2	50.0	2.3	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3707	0.3749	0.0100	50.6	50.0	1.1	20.0
Toluene-d8 (Surr)	Ave	4.010	4.027	0.0100	50.2	50.0	0.4	20.0
4-Bromofluorobenzene (Surr)	Ave	0.8729	0.8653	0.0100	49.6	50.0	-0.9	20.0

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\MS13_006836.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 09-Oct-2023 10:17:29 ALS Bottle#: 0 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: MEIERG Instrument ID: VMS_MS13
Sublist: chrom-AQ_VMS13_8260*sub3

Method: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\AQ_VMS13_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 09-Oct-2023 13:38:27 Calib Date: 08-Oct-2023 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006822.D

Column 1 : Rxi-624Sil MS (0.25 mm) Det: MS Quad
Process Host: CTX1618

First Level Reviewer: BMJ3 Date: 09-Oct-2023 11:04:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.181	5.181	0.000	99	2288646	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.720	7.720	0.000	87	662035	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.948	9.948	0.000	95	1154439	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.663	4.663	0.000	93	688570	50.0	51.2	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.932	4.932	0.000	97	858080	50.0	50.6	
$ 6 Toluene-d8 (Surr)	98	6.435	6.435	0.000	94	2665727	50.0	50.2	
$ 7 4-Bromofluorobenzene (Surr)	95	8.818	8.818	0.000	89	998943	50.0	49.6	
9 Dichlorodifluoromethane	85	1.719	1.719	0.000	99	644587	50.0	49.4	
10 Chloromethane	50	1.896	1.896	0.000	99	775520	50.0	50.2	
11 Vinyl chloride	62	2.010	2.010	0.000	98	705897	50.0	51.3	
12 Bromomethane	94	2.310	2.310	0.000	91	483789	50.0	55.4	
13 Chloroethane	64	2.403	2.403	0.000	100	482718	50.0	52.5	
14 Dichlorofluoromethane	67	2.580	2.580	0.000	98	1215258	50.0	54.8	
15 Trichlorofluoromethane	101	2.590	2.590	0.000	98	935887	50.0	53.7	
18 Ethyl ether	59	2.797	2.797	0.000	93	656023	50.0	53.4	
19 Acrolein	56	2.911	2.911	0.000	100	1143811	493.8	506.8	
20 1,1-Dichloroethene	96	2.994	2.994	0.000	96	581529	50.0	53.9	
21 Acetone	43	3.015	3.015	0.000	100	1478514	200.0	209.6	
22 1,1,2-Trichloro-1,2,2-trifluoroe	151	3.025	3.025	0.000	95	390774	50.0	55.4	
24 Iodomethane	142	3.119	3.119	0.000	99	939177	50.0	54.3	
25 Carbon disulfide	76	3.181	3.181	0.000	99	1822417	50.0	53.3	
27 Methyl acetate	43	3.253	3.253	0.000	98	1756246	100.0	103.3	
28 3-Chloro-1-propene	41	3.274	3.274	0.000	91	1157532	50.0	54.4	
29 Methylene Chloride	84	3.367	3.367	0.000	95	708978	50.0	51.6	
30 2-Methyl-2-propanol	59	3.419	3.419	0.000	99	1501671	500.0	501.9	
31 Acrylonitrile	53	3.533	3.533	0.000	98	4316181	500.0	538.2	
32 Methyl tert-butyl ether	73	3.554	3.554	0.000	96	2123733	50.0	53.5	
33 trans-1,2-Dichloroethene	96	3.574	3.574	0.000	97	694385	50.0	53.9	
34 Hexane	57	3.771	3.771	0.000	94	1097775	50.0	55.5	
35 Vinyl acetate	43	3.875	3.875	0.000	97	3857283	100.0	113.5	
37 1,1-Dichloroethane	63	3.896	3.896	0.000	96	1312346	50.0	53.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 2-Butanone (MEK)	43	4.290	4.290	0.000	100	2523308	200.0	206.7	
42 cis-1,2-Dichloroethene	96	4.310	4.310	0.000	82	777685	50.0	52.8	
43 2,2-Dichloropropane	77	4.321	4.321	0.000	88	743009	50.0	53.8	
45 sec-Butyl Alcohol	45	4.393	4.393	0.000	100	3012416	1200.0	1264.2	
47 Chlorobromomethane	128	4.486	4.486	0.000	97	367907	50.0	54.3	
48 Tetrahydrofuran	42	4.497	4.497	0.000	91	846432	100.0	102.4	
49 Chloroform	83	4.549	4.549	0.000	94	1239962	50.0	54.0	
50 1,1,1-Trichloroethane	97	4.694	4.694	0.000	99	948062	50.0	54.3	
51 Cyclohexane	56	4.756	4.756	0.000	92	1096459	50.0	52.3	
52 1,1-Dichloropropene	75	4.808	4.808	0.000	96	1032622	50.0	53.8	
53 Carbon tetrachloride	117	4.808	4.808	0.000	95	789460	50.0	52.3	
54 Isobutyl alcohol	41	4.818	4.818	0.000	96	1364913	1250.0	1313.7	
56 Benzene	78	4.963	4.963	0.000	96	2895074	50.0	52.7	
57 1,2-Dichloroethane	62	4.984	4.984	0.000	97	961117	50.0	51.0	
59 n-Heptane	43	5.150	5.150	0.000	95	1110953	50.0	53.1	
60 Trichloroethene	95	5.450	5.450	0.000	98	728512	50.0	53.4	
61 2-Pentanone	43	5.554	5.554	0.000	99	3037343	160.0	164.3	
62 Methylcyclohexane	55	5.647	5.647	0.000	92	1013613	50.0	54.4	
64 1,2-Dichloropropane	63	5.657	5.657	0.000	96	763717	50.0	53.7	
65 1,4-Dioxane	88	5.709	5.709	0.000	95	234365	1000.0	1048.7	
66 Dibromomethane	93	5.730	5.730	0.000	96	448793	50.0	52.5	
67 Dichlorobromomethane	83	5.854	5.854	0.000	99	868192	50.0	52.7	
69 2-Chloroethyl vinyl ether	63	6.062	6.062	0.000	91	568127	50.0	51.4	
70 cis-1,3-Dichloropropene	75	6.207	6.207	0.000	95	1142519	50.0	52.9	
71 4-Methyl-2-pentanone (MIBK)	43	6.310	6.310	0.000	97	4752104	200.0	209.6	
72 Toluene	91	6.497	6.497	0.000	98	2960280	50.0	51.8	
73 trans-1,3-Dichloropropene	75	6.673	6.673	0.000	95	1033360	50.0	50.0	
74 Ethyl methacrylate	69	6.694	6.694	0.000	91	1091113	50.0	53.5	
75 1,1,2-Trichloroethane	97	6.849	6.849	0.000	91	627703	50.0	52.7	
76 Tetrachloroethene	164	6.943	6.943	0.000	98	559610	50.0	53.2	
77 1,3-Dichloropropane	76	6.994	6.994	0.000	96	1148892	50.0	51.8	
78 2-Hexanone	43	7.015	7.015	0.000	97	3518656	200.0	209.6	
79 Chlorodibromomethane	129	7.191	7.191	0.000	90	605154	50.0	52.5	
80 Ethylene Dibromide	107	7.305	7.305	0.000	98	672589	50.0	52.9	
81 1-Chlorohexane	91	7.699	7.699	0.000	98	798065	40.0	40.2	
82 Chlorobenzene	112	7.740	7.740	0.000	94	1867163	50.0	52.3	
83 1,1,1,2-Tetrachloroethane	131	7.813	7.813	0.000	94	602641	50.0	55.5	
84 Ethylbenzene	106	7.823	7.823	0.000	99	1019934	50.0	52.7	
85 m-Xylene & p-Xylene	106	7.937	7.937	0.000	99	1251116	50.0	53.1	
86 o-Xylene	106	8.300	8.300	0.000	97	1244051	50.0	53.8	
87 Styrene	104	8.321	8.321	0.000	96	2084767	50.0	54.5	
88 Bromoform	173	8.497	8.497	0.000	97	408174	50.0	49.4	
89 Isopropylbenzene	105	8.642	8.642	0.000	96	3151981	50.0	52.9	
91 Cyclohexanone	55	8.746	8.746	0.000	93	1922653	1500.0	1461.1	
92 1,1,2,2-Tetrachloroethane	83	8.932	8.932	0.000	94	1034537	50.0	52.4	
93 Bromobenzene	156	8.963	8.963	0.000	96	785377	50.0	51.4	
94 trans-1,4-Dichloro-2-butene	53	8.963	8.963	0.000	86	254624	50.0	49.0	
95 1,2,3-Trichloropropane	110	8.994	8.994	0.000	84	317466	50.0	51.4	
96 N-Propylbenzene	120	9.046	9.046	0.000	99	865671	50.0	51.5	
97 2-Chlorotoluene	126	9.140	9.140	0.000	96	749671	50.0	52.2	
98 1,3,5-Trimethylbenzene	105	9.212	9.212	0.000	94	2591576	50.0	53.4	
99 4-Chlorotoluene	126	9.254	9.254	0.000	97	775252	50.0	51.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
101 tert-Butylbenzene	119	9.523	9.523	0.000	94	2276774	50.0	52.9	
102 1,2,4-Trimethylbenzene	105	9.585	9.585	0.000	97	2670910	50.0	52.9	
103 sec-Butylbenzene	134	9.751	9.751	0.000	94	667275	50.0	53.4	
104 1,3-Dichlorobenzene	146	9.875	9.875	0.000	98	1485603	50.0	51.3	
105 4-Isopropyltoluene	119	9.896	9.896	0.000	97	2849609	50.0	54.0	
106 1,4-Dichlorobenzene	146	9.969	9.969	0.000	94	1504536	50.0	50.0	
108 n-Butylbenzene	91	10.300	10.300	0.000	98	2670228	50.0	53.0	
109 1,2-Dichlorobenzene	146	10.331	10.331	0.000	98	1407330	50.0	51.2	
110 1,2-Dibromo-3-Chloropropane	157	11.109	11.109	0.000	85	240734	50.0	48.8	
112 1,2,4-Trichlorobenzene	180	11.938	11.938	0.000	94	898099	50.0	50.3	
113 Hexachlorobutadiene	225	12.083	12.083	0.000	98	374234	50.0	50.8	
114 Naphthalene	128	12.207	12.207	0.000	97	2873271	50.0	51.1	
115 1,2,3-Trichlorobenzene	180	12.435	12.435	0.000	96	790033	50.0	49.7	
127 Butadiene	54		0.000				ND	ND	
S 128 Xylenes, Total	106				0		100.0	106.9	
S 129 Trihalomethanes, Total	1				0		200.0	208.5	
S 131 1,3-Dichloropropene, Total	1				0		100.0	102.9	
S 133 1,2-Dichloroethene, Total	1				0		100.0	106.6	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-MegaMainA_00096	Amount Added:	25.00	Units: uL	
MV-Gas A_00167	Amount Added:	10.00	Units: uL	
mv-IS_SS_00070	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 09-Oct-2023 13:38:28 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\MS13_006836.D

Injection Date: 09-Oct-2023 10:17:29 Instrument ID: VMS_MS13

Lims ID: CCV

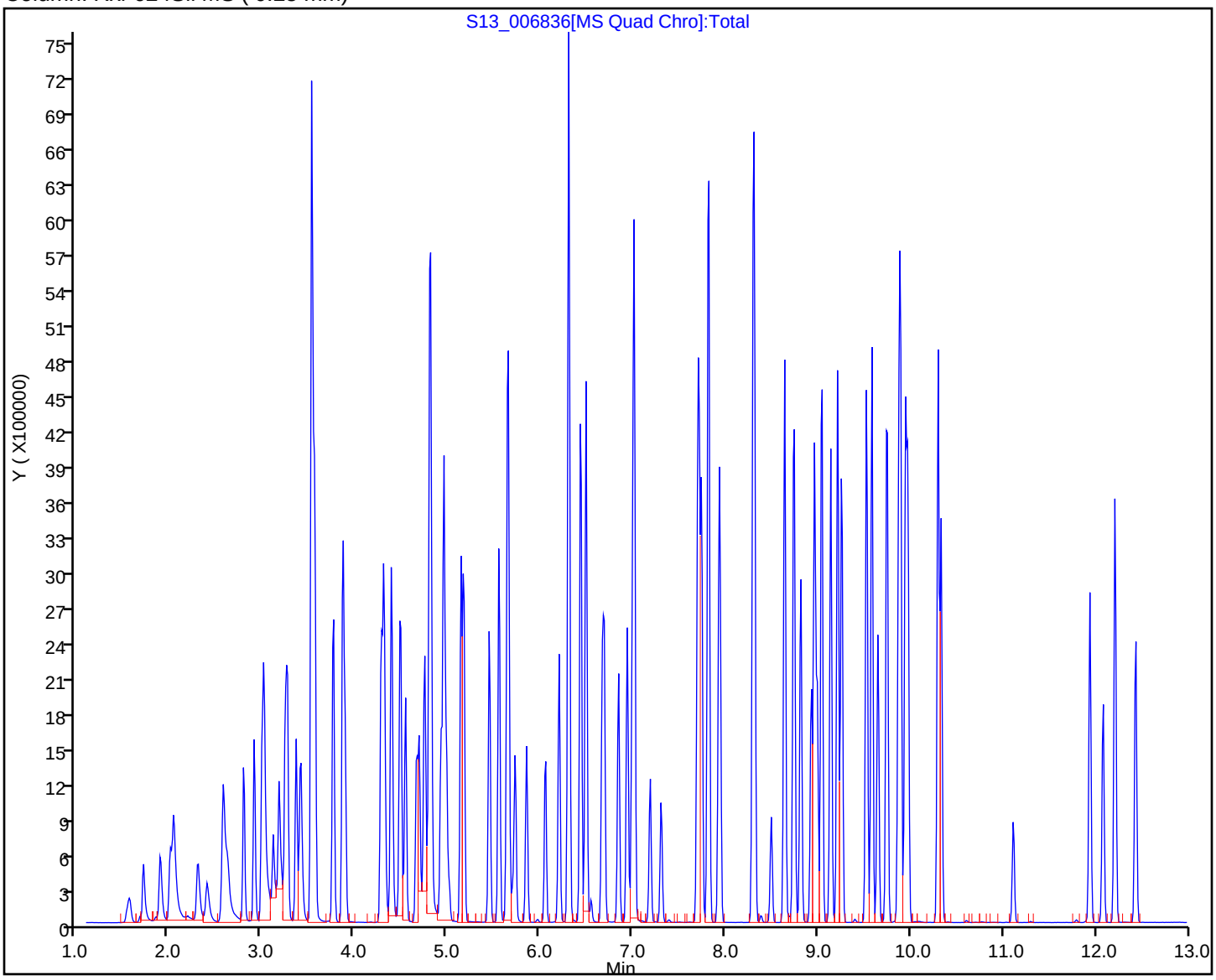
Client ID:

Operator ID: MEIERG ALS Bottle#: 0 Worklist Smp#: 2

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: AQ_VMS13_8260 Limit Group: MSV - 8260B Water and Solid

Column: Rxi-624Sil MS (0.25 mm)



12/5/2023 8:25 AM

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCVC 280-628977/31 Calibration Date: 10/09/2023 20:48

Instrument ID: VMS_MS13 Calib Start Date: 10/08/2023 16:36

GC Column: RXI-624SilMS ID: 0.25(mm) Calib End Date: 10/08/2023 19:36

Lab File ID: MS13_006864.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Lin1		0.2752	0.1000	48.3	50.0	-3.5	50.0
Chloromethane	Lin1		0.3420	0.1000	50.7	50.0	1.4	50.0
Vinyl chloride	Lin2		0.3105	0.0100	51.6	50.0	3.3	50.0
Bromomethane	Ave	0.1908	0.2057	0.0100	53.9	50.0	7.9	50.0
Chloroethane	Lin2		0.2086	0.0100	51.9	50.0	3.9	50.0
Dichlorofluoromethane	Ave	0.4841	0.5299	0.0100	54.7	50.0	9.5	50.0
Trichlorofluoromethane	Ave	0.3804	0.4079	0.0100	53.6	50.0	7.2	50.0
Ethyl ether	Ave	0.2685	0.2768	0.0100	51.5	50.0	3.1	50.0
Acrolein	Ave	0.0493	0.0480	0.0010	481	494	-2.6	50.0
1,1-Dichloroethene	Ave	0.2356	0.2484	0.0600	52.7	50.0	5.4	50.0
Acetone	Lin2		0.1429	0.0100	185	200	-7.7	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1542	0.1623	0.0500	52.6	50.0	5.3	50.0
Iodomethane	Ave	0.3781	0.4080	0.0100	54.0	50.0	7.9	50.0
Carbon disulfide	Ave	0.7468	0.7953	0.1000	53.2	50.0	6.5	50.0
Methyl acetate	Ave	0.3714	0.3702	0.0100	99.7	100	-0.3	50.0
3-Chloro-1-propene	Ave	0.4646	0.4049	0.0100	43.6	50.0	-12.8	50.0
Methylene Chloride	Ave	0.3000	0.2989	0.0100	49.8	50.0	-0.4	50.0
2-Methyl-2-propanol	Lin2		0.0561	0.0010	430	500	-14.1	50.0
Acrylonitrile	Ave	0.1752	0.1844	0.0100	526	500	5.3	50.0
Methyl tert-butyl ether	Ave	0.8667	0.9021	0.1000	52.0	50.0	4.1	50.0
trans-1,2-Dichloroethene	Ave	0.2817	0.2980	0.1000	52.9	50.0	5.8	50.0
Hexane	Ave	1.493	1.397	0.0100	46.8	50.0	-6.4	50.0
Vinyl acetate	Ave	0.7425	0.3599	0.0100	48.5	100	-51.5*	50.0
1,1-Dichloroethane	Ave	0.5354	0.5609	0.1000	52.4	50.0	4.8	50.0
2-Butanone (MEK)	Ave	0.2667	0.2712	0.0100	203	200	1.7	50.0
cis-1,2-Dichloroethene	Ave	0.3219	0.3324	0.1000	51.6	50.0	3.3	50.0
2,2-Dichloropropane	Ave	0.3014	0.2675	0.0100	44.4	50.0	-11.3	50.0
sec-Butyl Alcohol	Ave	0.0521	0.0508	0.0100	1170	1200	-2.4	50.0
Chlorobromomethane	Ave	0.1480	0.1553	0.0500	52.4	50.0	4.9	50.0
Tetrahydrofuran	Ave	0.1806	0.1885	0.0010	104	100	4.4	50.0
Chloroform	Ave	0.5021	0.5252	0.2000	52.3	50.0	4.6	50.0
1,1,1-Trichloroethane	Ave	0.3818	0.4133	0.0500	54.1	50.0	8.3	50.0
Cyclohexane	Ave	0.4576	0.4575	0.0100	50.0	50.0	-0.0	50.0
1,1-Dichloropropene	Ave	0.4194	0.4314	0.0100	51.4	50.0	2.9	50.0
Carbon tetrachloride	Lin2		0.3370	0.1000	51.1	50.0	2.3	50.0
Isobutyl alcohol	Ave	0.0227	0.0218	0.0010	1200	1250	-3.8	50.0
Benzene	Ave	1.201	1.215	0.2000	50.6	50.0	1.2	50.0
1,2-Dichloroethane	Ave	0.4119	0.4084	0.0700	49.6	50.0	-0.8	50.0
n-Heptane	Ave	0.4568	0.3913		42.8	50.0	-14.3	
Trichloroethene	Ave	1.031	1.167	0.2000	56.6	50.0	13.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCVC 280-628977/31 Calibration Date: 10/09/2023 20:48

Instrument ID: VMS_MS13 Calib Start Date: 10/08/2023 16:36

GC Column: RXI-624SilMS ID: 0.25(mm) Calib End Date: 10/08/2023 19:36

Lab File ID: MS13_006864.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Pentanone	Ave	0.4039	0.4346	0.0010	172	160	7.6	50.0
Methylcyclohexane	Ave	0.4068	0.4097	0.0500	50.4	50.0	0.7	50.0
1,2-Dichloropropane	Ave	0.3108	0.3241	0.1000	52.2	50.0	4.3	50.0
1,4-Dioxane	Ave	0.0049	0.0033	0.0010	685	1000	-31.5	50.0
Dibromomethane	Ave	0.1869	0.1917	0.0100	51.3	50.0	2.6	50.0
Dichlorobromomethane	Lin2		0.3662	0.2000	50.9	50.0	1.8	50.0
2-Chloroethyl vinyl ether	Ave	0.2415	0.2588	0.0100	53.6	50.0	7.2	50.0
cis-1,3-Dichloropropene	Lin2		1.675	0.2000	51.4	50.0	2.7	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.4954	0.5337	0.0300	215	200	7.7	50.0
Toluene	Ave	1.248	1.277	0.3000	51.1	50.0	2.3	50.0
trans-1,3-Dichloropropene	Lin2		0.4398	0.2000	48.7	50.0	-2.5	50.0
Ethyl methacrylate	Ave	1.540	1.664	0.0100	54.0	50.0	8.1	50.0
1,1,2-Trichloroethane	Ave	0.2602	0.2732	0.1000	52.5	50.0	5.0	50.0
Tetrachloroethene	Ave	0.7950	0.8285	0.1000	52.1	50.0	4.2	50.0
1,3-Dichloropropane	Ave	1.675	1.764	0.0100	52.7	50.0	5.3	50.0
2-Hexanone	Ave	1.268	1.409	0.0100	222	200	11.1	50.0
Chlorodibromomethane	Lin2		0.8825	0.1000	50.7	50.0	1.4	50.0
Ethylene Dibromide	Ave	0.9599	1.028	0.1000	53.5	50.0	7.1	50.0
1-Chlorohexane	Ave	1.499	1.450	0.0100	38.7	40.0	-3.3	50.0
Chlorobenzene	Ave	2.698	2.780	0.3000	51.5	50.0	3.0	50.0
1,1,1,2-Tetrachloroethane	Lin2		0.8823	0.0100	53.8	50.0	7.5	50.0
Ethylbenzene	Ave	1.462	1.510	0.3000	51.6	50.0	3.3	50.0
m-Xylene & p-Xylene	Ave	1.780	1.866	0.1000	52.4	50.0	4.8	50.0
o-Xylene	Ave	1.747	1.830	0.2000	52.4	50.0	4.7	50.0
Styrene	Ave	2.889	3.068	0.2000	53.1	50.0	6.2	50.0
Bromoform	Lin1		0.5832	0.1000	46.8	50.0	-6.5	50.0
Isopropylbenzene	Ave	2.582	2.737	0.3000	53.0	50.0	6.0	50.0
Cyclohexanone	Lin2		0.0516	0.0010	781	1500	-47.9	50.0
1,1,2,2-Tetrachloroethane	Ave	0.8546	0.8195	0.3000	47.9	50.0	-4.1	50.0
Bromobenzene	Ave	0.6618	0.6937	0.0100	52.4	50.0	4.8	50.0
trans-1,4-Dichloro-2-butene	Qua		0.2142	0.0100	47.7	50.0	-4.5	50.0
1,2,3-Trichloropropane	Ave	0.2675	0.2873	0.0100	53.7	50.0	7.4	50.0
N-Propylbenzene	Ave	0.7276	0.7434	0.0100	51.1	50.0	2.2	50.0
2-Chlorotoluene	Ave	0.6220	0.6478	0.0100	52.1	50.0	4.1	50.0
1,3,5-Trimethylbenzene	Ave	2.102	2.210	0.0100	52.6	50.0	5.2	50.0
4-Chlorotoluene	Ave	0.6508	0.6780	0.0100	52.1	50.0	4.2	50.0
tert-Butylbenzene	Ave	1.863	1.957	0.0100	52.5	50.0	5.0	50.0
1,2,4-Trimethylbenzene	Ave	2.186	2.265	0.3000	51.8	50.0	3.6	50.0
sec-Butylbenzene	Ave	0.5407	0.5648	0.0100	52.2	50.0	4.4	50.0
1,3-Dichlorobenzene	Ave	1.253	1.270	0.5000	50.7	50.0	1.3	50.0
4-Isopropyltoluene	Ave	2.287	2.350	0.0100	51.4	50.0	2.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCVC 280-628977/31 Calibration Date: 10/09/2023 20:48

Instrument ID: VMS_MS13 Calib Start Date: 10/08/2023 16:36

GC Column: RXI-624SilMS ID: 0.25(mm) Calib End Date: 10/08/2023 19:36

Lab File ID: MS13_006864.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dichlorobenzene	Ave	1.304	1.279	0.5000	49.1	50.0	-1.9	50.0
n-Butylbenzene	Ave	2.181	2.114	0.0100	48.5	50.0	-3.1	50.0
1,2-Dichlorobenzene	Ave	1.191	1.176	0.5000	49.4	50.0	-1.2	50.0
1,2-Dibromo-3-Chloropropane	Lin2		0.1986	0.0100	46.6	50.0	-6.8	50.0
1,2,4-Trichlorobenzene	Ave	0.7739	0.6944	0.2000	44.9	50.0	-10.3	50.0
Hexachlorobutadiene	Ave	0.3193	0.2900	0.0100	45.4	50.0	-9.2	50.0
Naphthalene	Ave	2.436	2.368	0.0100	48.6	50.0	-2.8	50.0
1,2,3-Trichlorobenzene	Ave	0.6884	0.6357	0.3000	46.2	50.0	-7.6	50.0
Dibromofluoromethane (Surr)	Ave	0.2940	0.2969	0.0100	50.5	50.0	1.0	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3707	0.3646	0.0100	49.2	50.0	-1.6	50.0
Toluene-d8 (Surr)	Ave	4.010	4.077	0.0100	50.8	50.0	1.7	50.0
4-Bromofluorobenzene (Surr)	Ave	0.8729	0.9092	0.0100	52.1	50.0	4.2	50.0

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\MS13_006864.D
Lims ID: CCVC
Client ID:
Sample Type: CCVC
Inject. Date: 09-Oct-2023 20:48:37 ALS Bottle#: 0 Worklist Smp#: 31
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ccvc
Operator ID: MEIERG Instrument ID: VMS_MS13
Sublist: chrom-AQ_VMS13_8260*sub3

Method: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\AQ_VMS13_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 10-Oct-2023 14:13:59 Calib Date: 08-Oct-2023 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006822.D

Column 1 : Rxi-624Sil MS (0.25 mm) Det: MS Quad
Process Host: CTX1608

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.170	5.170	0.000	98	2208770	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.720	7.720	0.000	88	639944	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.948	9.948	0.000	95	1056955	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.662	4.662	0.000	94	655691	50.0	50.5	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.932	4.932	0.000	96	805285	50.0	49.2	
$ 6 Toluene-d8 (Surr)	98	6.435	6.435	0.000	94	2609178	50.0	50.8	
$ 7 4-Bromofluorobenzene (Surr)	95	8.818	8.818	0.000	89	961023	50.0	52.1	
9 Dichlorodifluoromethane	85	1.709	1.709	0.000	99	607954	50.0	48.3	
10 Chloromethane	50	1.895	1.896	-0.001	99	755360	50.0	50.7	
11 Vinyl chloride	62	1.999	1.999	0.000	98	685748	50.0	51.6	
12 Bromomethane	94	2.300	2.300	0.000	91	454448	50.0	53.9	
13 Chloroethane	64	2.403	2.393	0.010	100	460799	50.0	51.9	
14 Dichlorofluoromethane	67	2.569	2.569	0.000	97	1170492	50.0	54.7	
15 Trichlorofluoromethane	101	2.579	2.579	0.000	99	900852	50.0	53.6	
18 Ethyl ether	59	2.797	2.797	0.000	93	611377	50.0	51.5	
19 Acrolein	56	2.911	2.911	0.000	99	1047021	493.8	480.7	
20 1,1-Dichloroethene	96	2.994	2.994	0.000	97	548564	50.0	52.7	
21 Acetone	43	3.015	3.015	0.000	100	1262113	200.0	184.6	
22 1,1,2-Trichloro-1,2,2-trifluoroe	151	3.025	3.025	0.000	95	358390	50.0	52.6	
24 Iodomethane	142	3.118	3.108	0.010	99	901110	50.0	54.0	
25 Carbon disulfide	76	3.181	3.170	0.011	99	1756554	50.0	53.2	
27 Methyl acetate	43	3.243	3.243	0.000	99	1635584	100.0	99.7	
28 3-Chloro-1-propene	41	3.263	3.263	0.000	92	894312	50.0	43.6	
29 Methylene Chloride	84	3.367	3.357	0.010	95	660210	50.0	49.8	
30 2-Methyl-2-propanol	59	3.409	3.409	0.000	99	1239375	500.0	429.6	
31 Acrylonitrile	53	3.533	3.533	0.000	99	4073757	500.0	526.4	
32 Methyl tert-butyl ether	73	3.554	3.554	0.000	96	1992464	50.0	52.0	
33 trans-1,2-Dichloroethene	96	3.564	3.564	0.000	98	658247	50.0	52.9	
34 Hexane	57	3.761	3.761	0.000	93	894097	50.0	46.8	
35 Vinyl acetate	43	3.864	3.865	0.000	97	1589921	100.0	48.5	
37 1,1-Dichloroethane	63	3.896	3.885	0.011	96	1238967	50.0	52.4	
40 2-Butanone (MEK)	43	4.279	4.279	0.000	100	2396046	200.0	203.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
42 cis-1,2-Dichloroethene	96	4.310	4.310	0.000	81	734165	50.0	51.6	
43 2,2-Dichloropropane	77	4.320	4.320	0.000	87	590853	50.0	44.4	
45 sec-Butyl Alcohol	45	4.393	4.393	0.000	100	2694817	1200.0	1171.8	
47 Chlorobromomethane	128	4.486	4.486	0.000	98	342971	50.0	52.4	
48 Tetrahydrofuran	42	4.497	4.497	0.000	91	832903	100.0	104.4	
49 Chloroform	83	4.548	4.548	0.000	93	1160038	50.0	52.3	
50 1,1,1-Trichloroethane	97	4.694	4.694	0.000	98	912860	50.0	54.1	
51 Cyclohexane	56	4.756	4.745	0.011	92	1010590	50.0	50.0	
53 Carbon tetrachloride	117	4.808	4.808	0.000	95	744247	50.0	51.1	
52 1,1-Dichloropropene	75	4.808	4.808	0.000	96	952899	50.0	51.4	
54 Isobutyl alcohol	41	4.818	4.818	0.000	96	1205471	1250.0	1202.2	
56 Benzene	78	4.963	4.963	0.000	96	2682912	50.0	50.6	
57 1,2-Dichloroethane	62	4.984	4.984	0.000	97	902159	50.0	49.6	
59 n-Heptane	43	5.150	5.150	0.000	95	864270	50.0	42.8	
60 Trichloroethene	95	5.450	5.450	0.000	98	747111	50.0	56.6	
61 2-Pentanone	43	5.554	5.554	0.000	99	3071461	160.0	172.1	
62 Methylcyclohexane	55	5.647	5.647	0.000	91	904945	50.0	50.4	
64 1,2-Dichloropropane	63	5.657	5.657	0.000	95	715970	50.0	52.2	
65 1,4-Dioxane	88	5.709	5.709	0.000	94	147815	1000.0	685.3	
66 Dibromomethane	93	5.730	5.730	0.000	97	423499	50.0	51.3	
67 Dichlorobromomethane	83	5.854	5.854	0.000	99	808957	50.0	50.9	
69 2-Chloroethyl vinyl ether	63	6.061	6.062	-0.001	91	571619	50.0	53.6	
70 cis-1,3-Dichloropropene	75	6.207	6.207	0.000	95	1071819	50.0	51.4	
71 4-Methyl-2-pentanone (MIBK)	43	6.310	6.310	0.000	97	4715400	200.0	215.5	
72 Toluene	91	6.497	6.497	0.000	98	2820252	50.0	51.1	
73 trans-1,3-Dichloropropene	75	6.673	6.673	0.000	95	971426	50.0	48.7	
74 Ethyl methacrylate	69	6.694	6.694	0.000	91	1065159	50.0	54.0	
75 1,1,2-Trichloroethane	97	6.849	6.849	0.000	91	603518	50.0	52.5	
76 Tetrachloroethene	164	6.942	6.942	0.000	98	530176	50.0	52.1	
77 1,3-Dichloropropane	76	6.994	6.994	0.000	96	1128652	50.0	52.7	
78 2-Hexanone	43	7.015	7.015	0.000	98	3606220	200.0	222.2	
79 Chlorodibromomethane	129	7.191	7.191	0.000	91	564720	50.0	50.7	
80 Ethylene Dibromide	107	7.305	7.305	0.000	98	657827	50.0	53.5	
81 1-Chlorohexane	91	7.699	7.699	0.000	98	742434	40.0	38.7	
82 Chlorobenzene	112	7.740	7.740	0.000	96	1778855	50.0	51.5	
83 1,1,1,2-Tetrachloroethane	131	7.813	7.813	0.000	95	564611	50.0	53.8	
84 Ethylbenzene	106	7.823	7.823	0.000	99	966211	50.0	51.6	
85 m-Xylene & p-Xylene	106	7.937	7.937	0.000	99	1194063	50.0	52.4	
86 o-Xylene	106	8.300	8.300	0.000	96	1170941	50.0	52.4	
87 Styrene	104	8.321	8.321	0.000	96	1963102	50.0	53.1	
88 Bromoform	173	8.497	8.497	0.000	97	373221	50.0	46.8	
89 Isopropylbenzene	105	8.642	8.642	0.000	96	2892516	50.0	53.0	
91 Cyclohexanone	55	8.746	8.746	0.000	93	989947	1500.0	781.3	
92 1,1,2,2-Tetrachloroethane	83	8.932	8.932	0.000	94	866207	50.0	47.9	
93 Bromobenzene	156	8.963	8.963	0.000	96	733197	50.0	52.4	
94 trans-1,4-Dichloro-2-butene	53	8.963	8.963	0.000	82	226377	50.0	47.7	
95 1,2,3-Trichloropropane	110	8.994	8.994	0.000	85	303691	50.0	53.7	
96 N-Propylbenzene	120	9.046	9.046	0.000	99	785734	50.0	51.1	
97 2-Chlorotoluene	126	9.139	9.139	0.000	96	684716	50.0	52.1	
98 1,3,5-Trimethylbenzene	105	9.212	9.212	0.000	95	2335937	50.0	52.6	
99 4-Chlorotoluene	126	9.253	9.253	0.000	98	716616	50.0	52.1	
101 tert-Butylbenzene	119	9.523	9.523	0.000	94	2068045	50.0	52.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
102 1,2,4-Trimethylbenzene	105	9.585	9.585	0.000	97	2393627	50.0	51.8	
103 sec-Butylbenzene	134	9.751	9.751	0.000	94	596923	50.0	52.2	
104 1,3-Dichlorobenzene	146	9.875	9.875	0.000	98	1342080	50.0	50.7	
105 4-Isopropyltoluene	119	9.896	9.896	0.000	97	2483483	50.0	51.4	
106 1,4-Dichlorobenzene	146	9.968	9.968	0.000	94	1352099	50.0	49.1	
108 n-Butylbenzene	91	10.300	10.300	0.000	98	2234696	50.0	48.5	
109 1,2-Dichlorobenzene	146	10.331	10.331	0.000	98	1243284	50.0	49.4	
110 1,2-Dibromo-3-Chloropropane	157	11.108	11.108	0.000	83	209937	50.0	46.6	
112 1,2,4-Trichlorobenzene	180	11.937	11.937	0.000	94	733978	50.0	44.9	
113 Hexachlorobutadiene	225	12.082	12.083	0.000	97	306546	50.0	45.4	
114 Naphthalene	128	12.207	12.207	0.000	97	2502780	50.0	48.6	
115 1,2,3-Trichlorobenzene	180	12.435	12.435	0.000	95	671927	50.0	46.2	
127 Butadiene	54		0.000				ND	ND	
S 128 Xylenes, Total	106				0		100.0	104.8	
S 129 Trihalomethanes, Total	1				0		200.0	200.7	
S 130 Total BTEX	1				0			258.1	
S 131 1,3-Dichloropropene, Total	1				0		100.0	100.1	
S 133 1,2-Dichloroethene, Total	1				0		100.0	104.5	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-MegaMainA_00096	Amount Added:	25.00	Units: uL	
MV-Gas A_00167	Amount Added:	10.00	Units: uL	
mv-IS_SS_00070	Amount Added:	5.00	Units: uL	Run Reagent

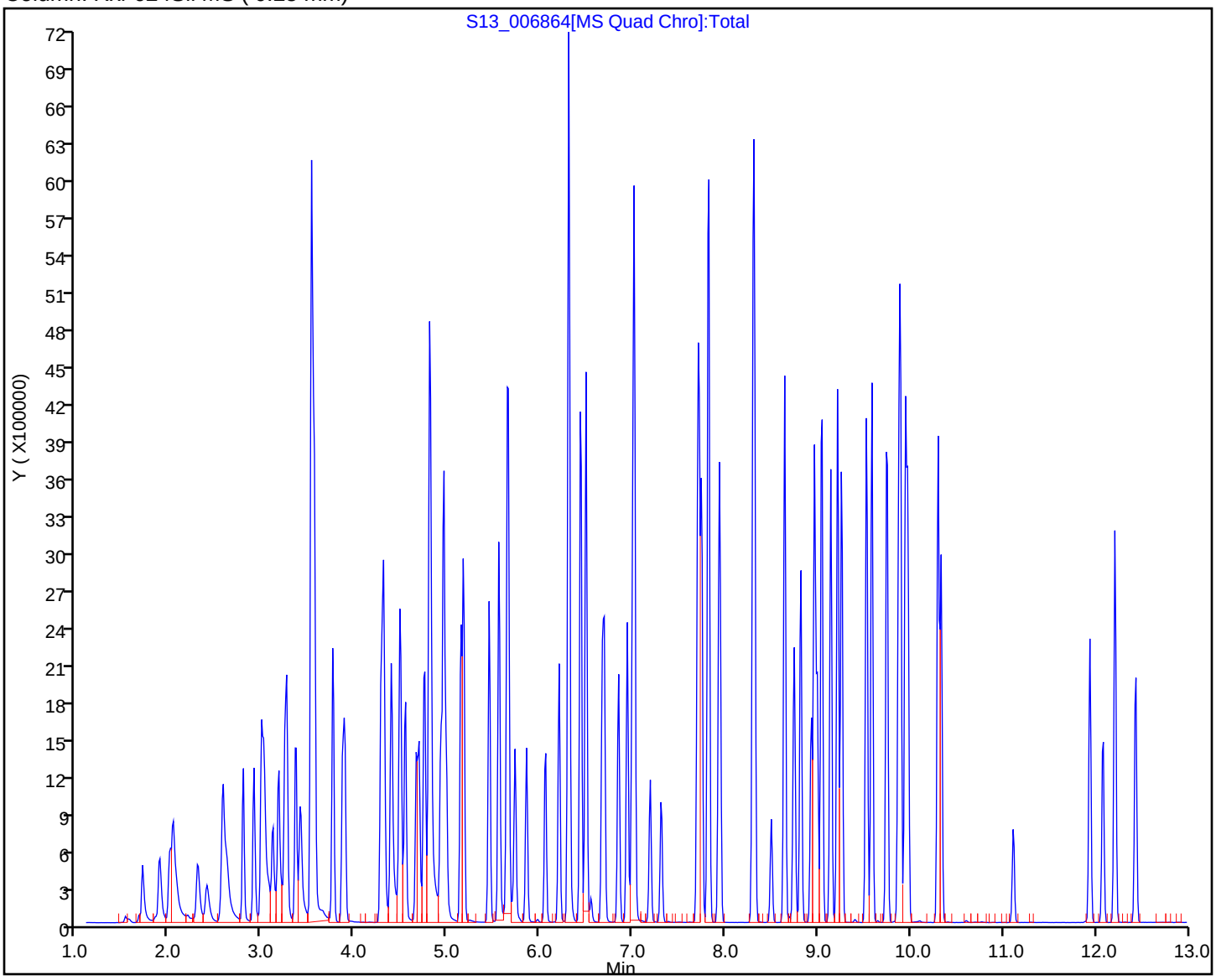
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Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\MS13_006864.D

Injection Date:	09-Oct-2023 20:48:37	Instrument ID:	VMS_MS13		
Lims ID:	CCVC				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	0	Worklist Smp#:	31
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMS13_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: Rxi-624Sil MS (0.25 mm)



12/5/2023 8:25 AM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006803.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 08-Oct-2023 16:13:52 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Operator ID: MEIERG Instrument ID: VMS_MS13

Method: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\AQ_VMS13_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 09-Oct-2023 12:34:31 Calib Date: 08-Oct-2023 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006822.D

Column 1 : Rxi-624Sil MS (0.25 mm) Det: MS Quad
Process Host: CTX1667

First Level Reviewer: BMJ3 Date: 09-Oct-2023 12:32:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	8.818	8.818	0.000	89	926743	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

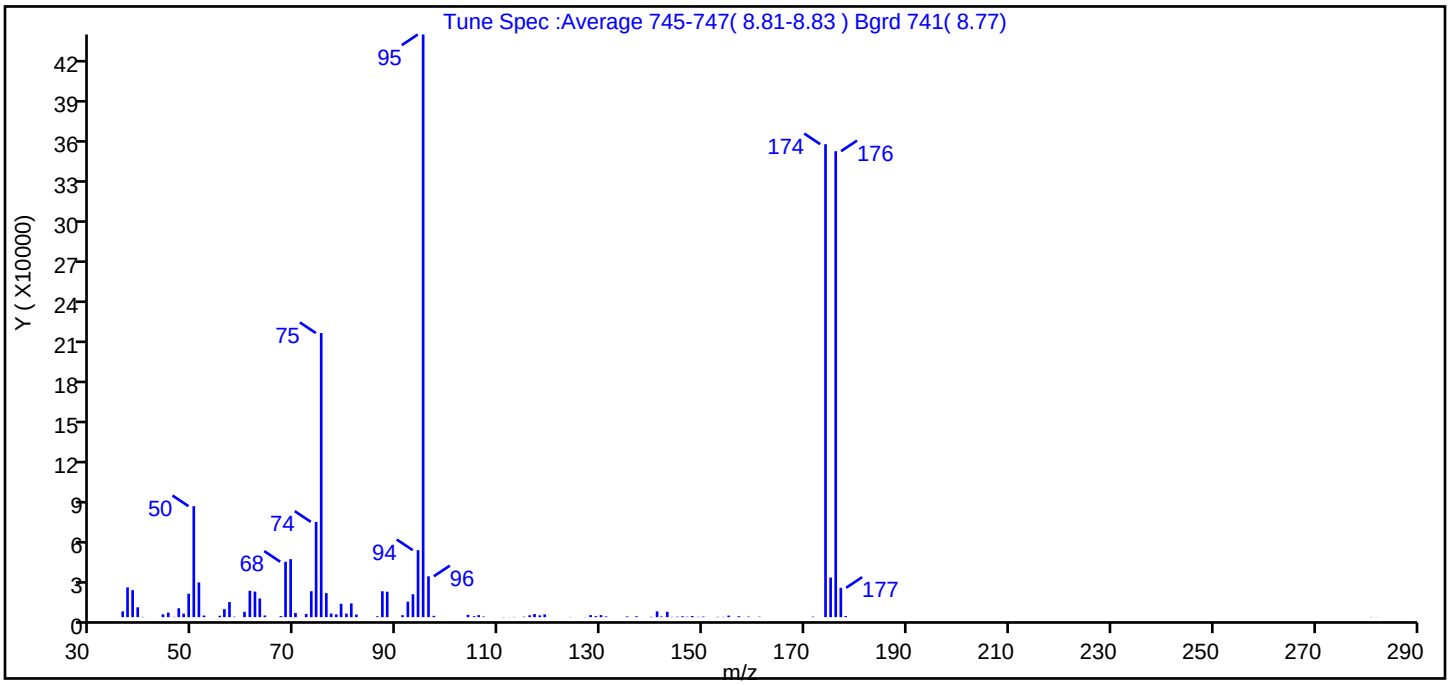
mv-Cent BFB_00005 Amount Added: 5.00 Units: uL

MS Tune Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006803.D
Injection Date: 08-Oct-2023 16:13:52 Instrument ID: VMS_MS13
Lims ID: BFB
Client ID:
Operator ID: MEIERG ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: AQ_VMS13_8260 Limit Group: MSV - 8260B Water and Solid
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	19.0
75	30 to 60% of m/z 95	48.8
96	5 to 9% of m/z 95	7.0
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	81.2
175	5 to 9% of m/z 174	6.8 (8.4)
176	Greater than 95% but less than 101% of m/z 174	80.0 (98.5)
177	5 to 9% of m/z 176	5.0 (6.3)

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006803.D\AQ_VMS13_8260.rslt\sp
Injection Date: 08-Oct-2023 16:13:52
Spectrum: Tune Spec :Average 745-747(8.81-8.83) Bgrd 741(8.77)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 95

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	4280	68.00	40976	104.00	1735	142.00	495
37.00	21984	69.00	42896	105.00	699	143.00	3976
38.00	19968	70.00	3104	106.00	1480	144.00	201
39.00	7266	72.00	2370	107.00	438	145.00	342
40.00	202	73.00	19160	111.00	86	146.00	626
44.00	2112	74.00	70496	111.00	93	147.00	303
45.00	3340	75.00	210112	112.00	86	148.00	842
46.00	191	76.00	17760	113.00	181	149.00	229
47.00	6563	77.00	2673	115.00	336	150.00	433
48.00	2604	78.00	2027	116.00	1364	153.00	239
49.00	17344	79.00	9901	117.00	2305	154.00	196
50.00	82088	80.00	2607	118.00	1301	155.00	1137
51.00	25672	81.00	10145	119.00	2012	157.00	707
52.00	1220	82.00	1914	124.00	148	159.00	420
55.00	1029	86.00	624	127.00	94	161.00	305
56.00	5926	87.00	19144	128.00	1487	171.00	375
57.00	11153	88.00	18824	129.00	761	174.00	349824
58.00	324	91.00	1422	130.00	1501	175.00	29272
60.00	3915	92.00	11406	131.00	536	176.00	344640
61.00	19552	93.00	16936	135.00	534	177.00	21704
62.00	18904	94.00	49552	137.00	633	178.00	786
63.00	13802	95.00	430976	140.00	202	281.00	164
64.00	1233	96.00	30216	140.00	164	282.00	96
67.00	785	97.00	956	141.00	4284		

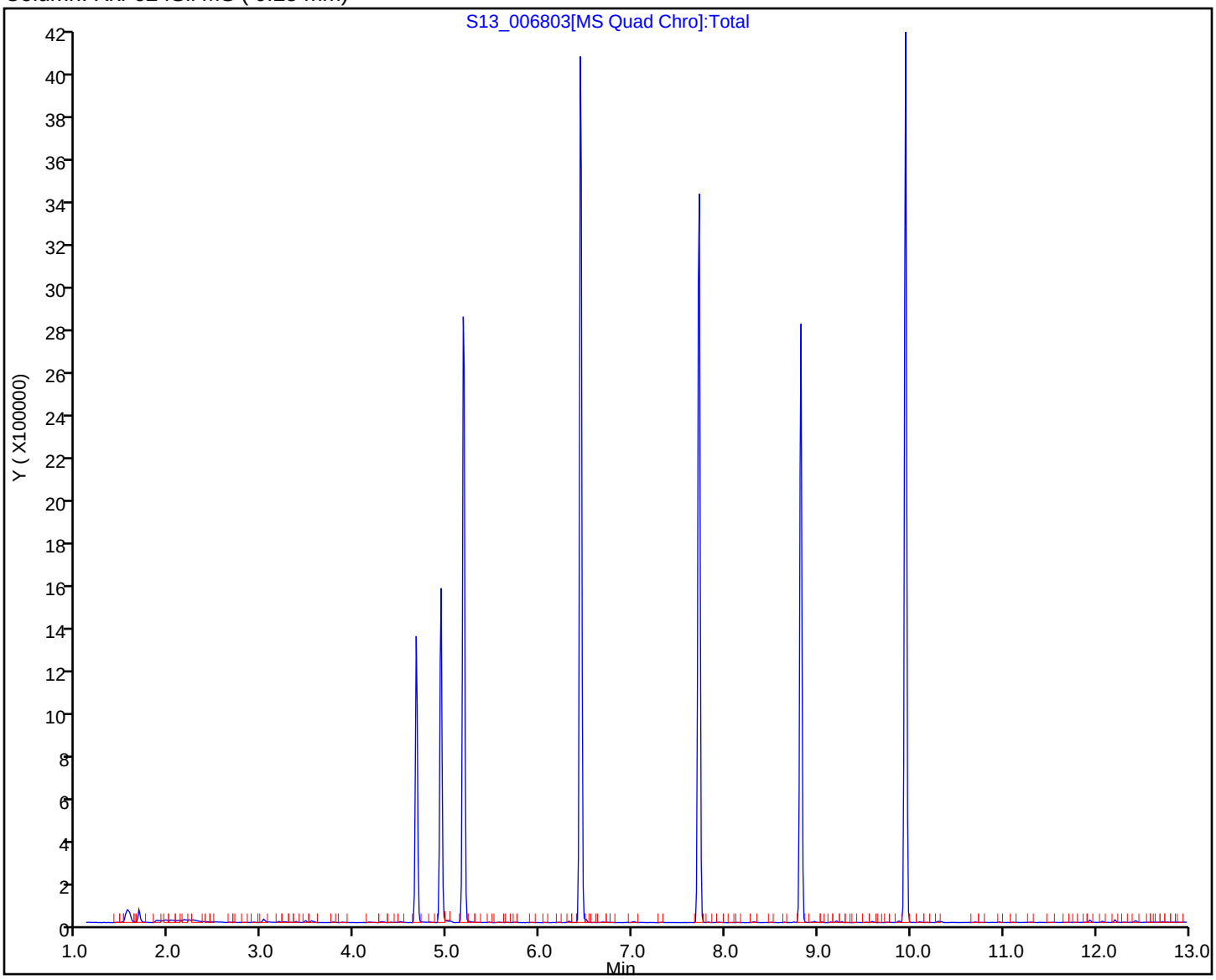
Report Date: 09-Oct-2023 12:34:31 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006803.D

Injection Date:	08-Oct-2023 16:13:52	Instrument ID:	VMS_MS13		
Lims ID:	BFB				
Client ID:					
Operator ID:	MEIERG	ALS Bottle#:	0	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Method:	AQ_VMS13_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: Rxi-624Sil MS (0.25 mm)



12/5/2023 8:25 AM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\MS13_006835.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 09-Oct-2023 09:54:55 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Operator ID: MEIERG Instrument ID: VMS_MS13

Method: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\AQ_VMS13_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 09-Oct-2023 13:42:25 Calib Date: 08-Oct-2023 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006822.D

Column 1 : Rxi-624Sil MS (0.25 mm) Det: MS Quad
Process Host: CTX1618

First Level Reviewer: BMJ3 Date: 09-Oct-2023 13:42:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	8.818	8.818	0.000	90	1204301	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

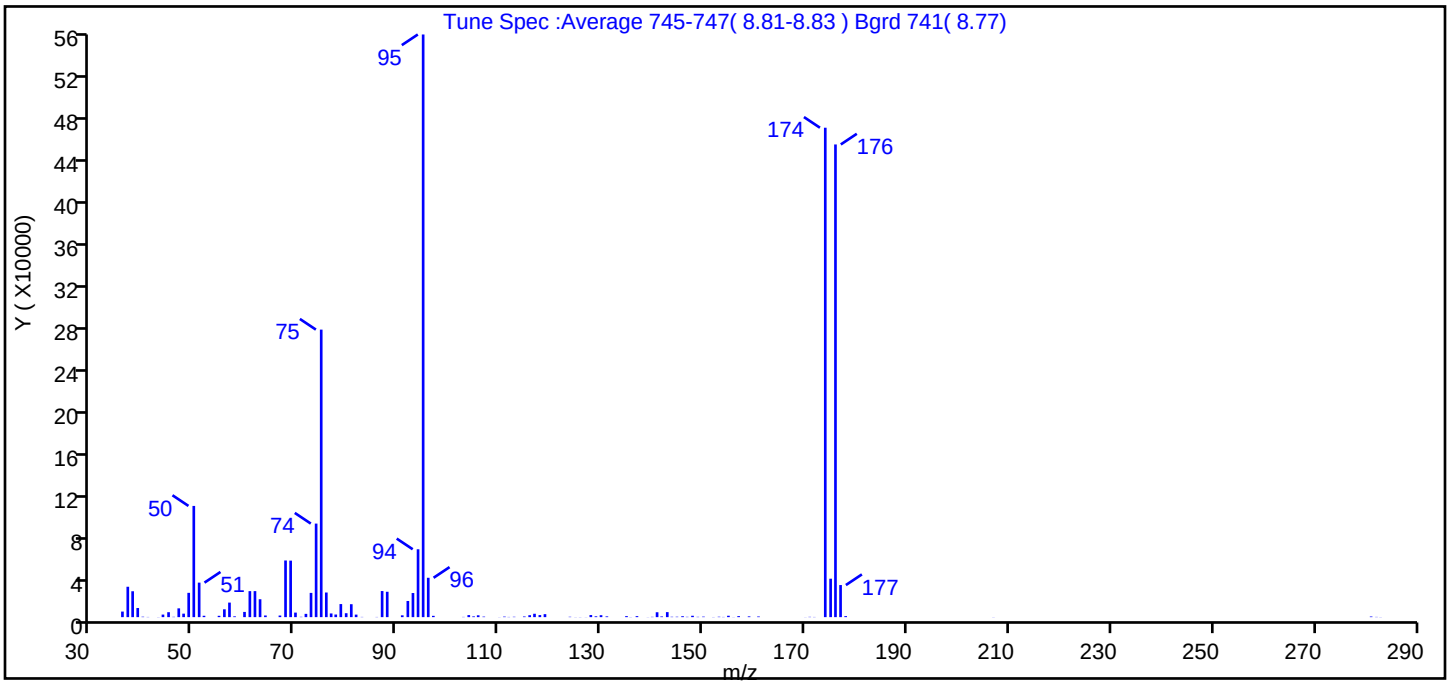
mv-Cent BFB_00005 Amount Added: 5.00 Units: uL

MS Tune Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\MS13_006835.D
Injection Date: 09-Oct-2023 09:54:55 Instrument ID: VMS_MS13
Lims ID: BFB
Client ID:
Operator ID: MEIERG ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: AQ_VMS13_8260 Limit Group: MSV - 8260B Water and Solid
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	19.1
75	30 to 60% of m/z 95	49.3
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	84.0
175	5 to 9% of m/z 174	6.6 (7.9)
176	Greater than 95% but less than 101% of m/z 174	81.1 (96.6)
177	5 to 9% of m/z 176	5.5 (6.8)

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\MS13_006835.D\AQ_VMS13_8260.rslt\sp
Injection Date: 09-Oct-2023 09:54:55
Spectrum: Tune Spec :Average 745-747(8.81-8.83) Bgrd 741(8.77)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 109

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	5359	70.00	4359	107.00	507	146.00	874
37.00	29184	71.00	313	110.00	98	147.00	308
38.00	24864	72.00	3158	111.00	512	148.00	1323
39.00	8774	73.00	23280	112.00	198	149.00	299
40.00	415	74.00	89840	113.00	357	150.00	493
41.00	187	75.00	276096	115.00	634	152.00	145
43.00	125	76.00	23656	116.00	1864	153.00	395
44.00	2462	77.00	3549	117.00	3244	154.00	193
45.00	4737	78.00	2524	118.00	1982	155.00	1340
46.00	302	79.00	12555	119.00	2875	156.00	107
47.00	8446	80.00	3776	124.00	356	157.00	961
48.00	3354	81.00	12425	125.00	108	159.00	727
49.00	23336	82.00	2433	126.00	127	161.00	626
50.00	106792	83.00	215	127.00	92	170.00	94
51.00	33144	86.00	184	128.00	2013	171.00	284
52.00	1316	87.00	25056	129.00	788	172.00	182
55.00	1284	88.00	24360	130.00	1866	174.00	469952
56.00	7538	91.00	1739	131.00	723	175.00	36912
57.00	13968	92.00	15516	135.00	982	176.00	453888
58.00	769	93.00	23160	136.00	125	177.00	30816
60.00	5010	94.00	65176	137.00	968	178.00	974
61.00	24976	95.00	559488	139.00	95	207.00	105
62.00	24992	96.00	37800	140.00	298	281.00	604
63.00	17192	97.00	1254	141.00	4699	282.00	225
64.00	1595	103.00	219	142.00	667	283.00	121
67.00	1536	104.00	1963	143.00	4823		
68.00	54408	105.00	724	144.00	367		
69.00	54256	106.00	1779	145.00	404		

Report Date: 09-Oct-2023 13:42:25 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\MS13_006835.D

Injection Date: 09-Oct-2023 09:54:55 Instrument ID: VMS_MS13

Lims ID: BFB

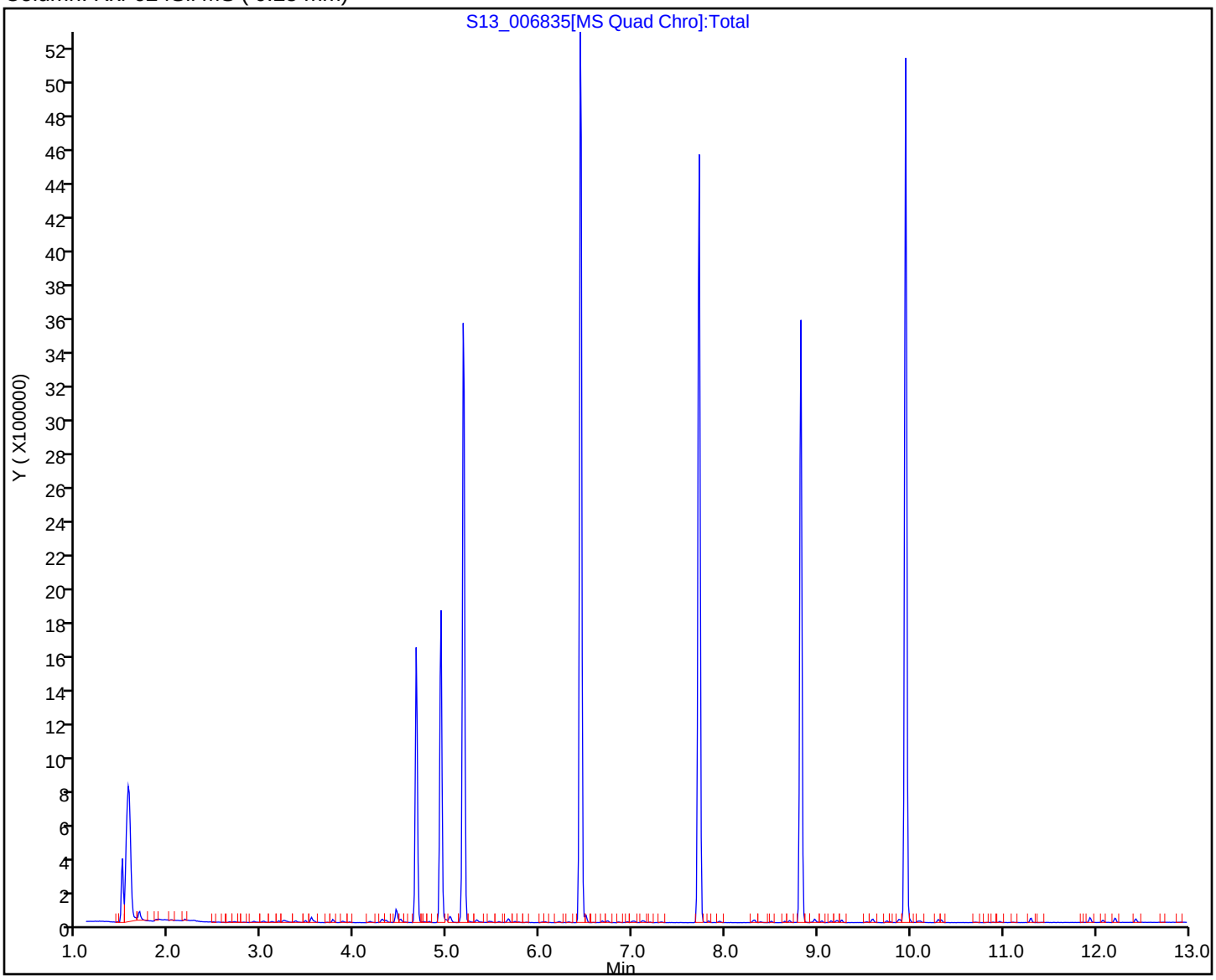
Client ID:

Operator ID: MEIERG ALS Bottle#: 0 Worklist Smp#: 1

Injection Vol: 5.0 mL Dil. Factor: 1.0000

Method: AQ_VMS13_8260 Limit Group: MSV - 8260B Water and Solid

Column: Rxi-624Sil MS (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-628977/8

Matrix: Water | Lab File ID: MS13_006841.D

Analysis Method: 8260D | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/09/2023 12:09

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RXI-624SilMS ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 628977 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	0.80	U	1.0	0.80	0.57

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		81-118
460-00-4	4-Bromofluorobenzene (Surr)	98		85-114
1868-53-7	Dibromofluoromethane (Surr)	99		80-119
2037-26-5	Toluene-d8 (Surr)	99		89-112

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\MS13_006841.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 09-Oct-2023 12:09:55 ALS Bottle#: 0 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Operator ID: MEIERG Instrument ID: VMS_MS13

Method: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\AQ_VMS13_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 09-Oct-2023 12:44:02 Calib Date: 08-Oct-2023 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006822.D

Column 1 : Rxi-624Sil MS (0.25 mm) Det: MS Quad
Process Host: CTX1667

First Level Reviewer: BMJ3 Date: 09-Oct-2023 12:31:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.170	5.170	0.000	98	2292129	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.720	7.720	0.000	87	667676	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.948	9.948	0.000	96	1167589	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.663	4.662	0.001	94	667651	50.0	49.5	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.932	4.932	0.000	96	848270	50.0	49.9	
$ 6 Toluene-d8 (Surr)	98	6.435	6.435	0.000	94	2657120	50.0	49.6	
$ 7 4-Bromofluorobenzene (Surr)	95	8.818	8.818	0.000	89	995054	50.0	48.8	
$ 8 BFB	95	8.818	8.818	0.000	89	995054		NR	
9 Dichlorodifluoromethane	85		1.709					ND	
10 Chloromethane	50		1.896					ND	
11 Vinyl chloride	62		1.999					ND	
12 Bromomethane	94		2.300					ND	
13 Chloroethane	64		2.393					ND	
14 Dichlorofluoromethane	67		2.569					ND	
15 Trichlorofluoromethane	101		2.579					ND	
16 Ethanol	45		2.704					ND	
17 Propene oxide	58		2.738					ND	
18 Ethyl ether	59		2.797					ND	
19 Acrolein	56	2.922	2.911	0.011	83	2326		1.03	
20 1,1-Dichloroethene	96		2.994					ND	
21 Acetone	43		3.015					ND	7
22 1,1,2-Trichloro-1,2,2-trifluoroe	151		3.025					ND	
23 Isopropyl alcohol	45		3.098					ND	
24 Iodomethane	142		3.108					ND	
25 Carbon disulfide	76	3.170	3.170	0.000	94	4740		0.1385	
26 Acetonitrile	41	3.232	3.232	0.000	98	8199		2.40	
27 Methyl acetate	43		3.243					ND	
28 3-Chloro-1-propene	41		3.263					ND	
29 Methylene Chloride	84	3.357	3.357	0.000	91	2271		0.1651	
30 2-Methyl-2-propanol	59		3.409					ND	
31 Acrylonitrile	53	3.533	3.533	0.000	98	6198		0.7717	
32 Methyl tert-butyl ether	73		3.554					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 trans-1,2-Dichloroethene	96		3.564					ND	
34 Hexane	57		3.761					ND	7
35 Vinyl acetate	43		3.865					ND	7
37 1,1-Dichloroethane	63		3.885					ND	
36 Isopropyl ether	87		3.885					ND	
38 2-Chloro-1,3-butadiene	53		3.947					ND	
39 Tert-butyl ethyl ether	59		4.155					ND	
40 2-Butanone (MEK)	43		4.279					ND	
41 Ethyl acetate	43		4.289					ND	U
42 cis-1,2-Dichloroethene	96		4.310					ND	
43 2,2-Dichloropropane	77		4.320					ND	
44 Propionitrile	54		4.331					ND	U
45 sec-Butyl Alcohol	45		4.393					ND	
46 Methacrylonitrile	41	4.445	4.445	0.000	88	5119		0.3576	
47 Chlorobromomethane	128		4.486					ND	
48 Tetrahydrofuran	42		4.497					ND	
49 Chloroform	83		4.548					ND	
50 1,1,1-Trichloroethane	97		4.694					ND	
51 Cyclohexane	56		4.745					ND	
52 1,1-Dichloropropene	75		4.808					ND	
53 Carbon tetrachloride	117		4.808					ND	
54 Isobutyl alcohol	41		4.818					ND	U
56 Benzene	78		4.963					ND	7
57 1,2-Dichloroethane	62		4.984					ND	
55 n-Butanol	56		5.025					ND	U
58 Tert-amyl methyl ether	73		5.025					ND	
59 n-Heptane	43		5.150					ND	
60 Trichloroethene	95		5.450					ND	
61 2-Pentanone	43		5.554					ND	
62 Methylcyclohexane	55		5.647					ND	
64 1,2-Dichloropropane	63		5.657					ND	
63 Methyl methacrylate	100		5.657					ND	
65 1,4-Dioxane	88		5.709					ND	
66 Dibromomethane	93		5.730					ND	
67 Dichlorobromomethane	83		5.854					ND	
68 2-Nitropropane	41		6.030					ND	
69 2-Chloroethyl vinyl ether	63		6.062					ND	
70 cis-1,3-Dichloropropene	75		6.207					ND	
71 4-Methyl-2-pentanone (MIBK)	43		6.310					ND	
72 Toluene	91		6.497					ND	7
73 trans-1,3-Dichloropropene	75		6.673					ND	
74 Ethyl methacrylate	69		6.694					ND	
75 1,1,2-Trichloroethane	97		6.849					ND	
76 Tetrachloroethene	164		6.942					ND	
77 1,3-Dichloropropane	76		6.994					ND	
78 2-Hexanone	43		7.015					ND	U
79 Chlorodibromomethane	129		7.191					ND	
80 Ethylene Dibromide	107		7.305					ND	
81 1-Chlorohexane	91		7.699					ND	U
82 Chlorobenzene	112		7.740					ND	7
83 1,1,1,2-Tetrachloroethane	131		7.813					ND	
84 Ethylbenzene	106		7.823					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 m-Xylene & p-Xylene	106		7.937					ND	7
86 o-Xylene	106		8.300					ND	
87 Styrene	104		8.321					ND	7
88 Bromoform	173		8.497					ND	
89 Isopropylbenzene	105		8.642					ND	7
90 cis-1,4-Dichloro-2-butene	53		8.694					ND	
91 Cyclohexanone	55		8.746					ND	U
92 1,1,2,2-Tetrachloroethane	83		8.932					ND	
93 Bromobenzene	156		8.963					ND	
94 trans-1,4-Dichloro-2-butene	53		8.963					ND	
95 1,2,3-Trichloropropane	110		8.994					ND	
96 N-Propylbenzene	120		9.046					ND	
97 2-Chlorotoluene	126		9.139					ND	
98 1,3,5-Trimethylbenzene	105		9.212					ND	7
99 4-Chlorotoluene	126		9.253					ND	7
100 Pentachloroethane	167		9.479					ND	
101 tert-Butylbenzene	119		9.523					ND	
102 1,2,4-Trimethylbenzene	105		9.585					ND	7
103 sec-Butylbenzene	134		9.751					ND	
104 1,3-Dichlorobenzene	146	9.875	9.875	0.000	94	3546		0.1212	
105 4-Isopropyltoluene	119		9.896					ND	
106 1,4-Dichlorobenzene	146		9.968					ND	U
107 1,2,3-Trimethylbenzene	105		9.989					ND	7
108 n-Butylbenzene	91	10.300	10.300	0.000	96	5717		0.1123	
109 1,2-Dichlorobenzene	146	10.331	10.331	0.000	90	2852		0.1025	
110 1,2-Dibromo-3-Chloropropane	157		11.108					ND	
111 1,3,5-Trichlorobenzene	180	11.295	11.295	0.000	95	3865		0.1806	
112 1,2,4-Trichlorobenzene	180	11.938	11.937	0.001	92	5485		0.3035	
113 Hexachlorobutadiene	225		12.083					ND	
114 Naphthalene	128	12.207	12.207	0.000	97	14824		0.2606	
115 1,2,3-Trichlorobenzene	180	12.435	12.435	0.000	92	5776		0.3593	
117 Isooctane	57		0.000					ND	
119 1-Chlorohexane TIC	1		0.000					ND	
122 1-Chloro-1-fluoroethane TIC	1		0.000					ND	
120 Ethyl acrylate	55		0.000					ND	
118 Ethylene oxide TIC	1		0.000					ND	
124 n-Nonyl Aldehyde	1		0.000					ND	
125 t-Amyl alcohol	1		0.000					ND	
121 Benzyl chloride	126		0.000					ND	
116 Tetrahydrothiophene TIC	1		0.000					ND	
123 1,3-Dibromobenzene	1		0.000					ND	
126 n-Butyl acetate	43		0.000					ND	
127 Butadiene	54		0.000					ND	
S 128 Xylenes, Total	106		0.000					ND	7
S 129 Trihalomethanes, Total	1		0.000					ND	7
S 130 Total BTEX	1		0.000					ND	7
S 131 1,3-Dichloropropene, Total	1		0.000					ND	7
S 132 TAH	1				0			0	7
S 133 1,2-Dichloroethene, Total	1		0.000					ND	7

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

mv-IS_SS_00070 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 09-Oct-2023 12:44:20 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\MS13_006841.D

Injection Date: 09-Oct-2023 12:09:55 Instrument ID: VMS_MS13

Lims ID: MB

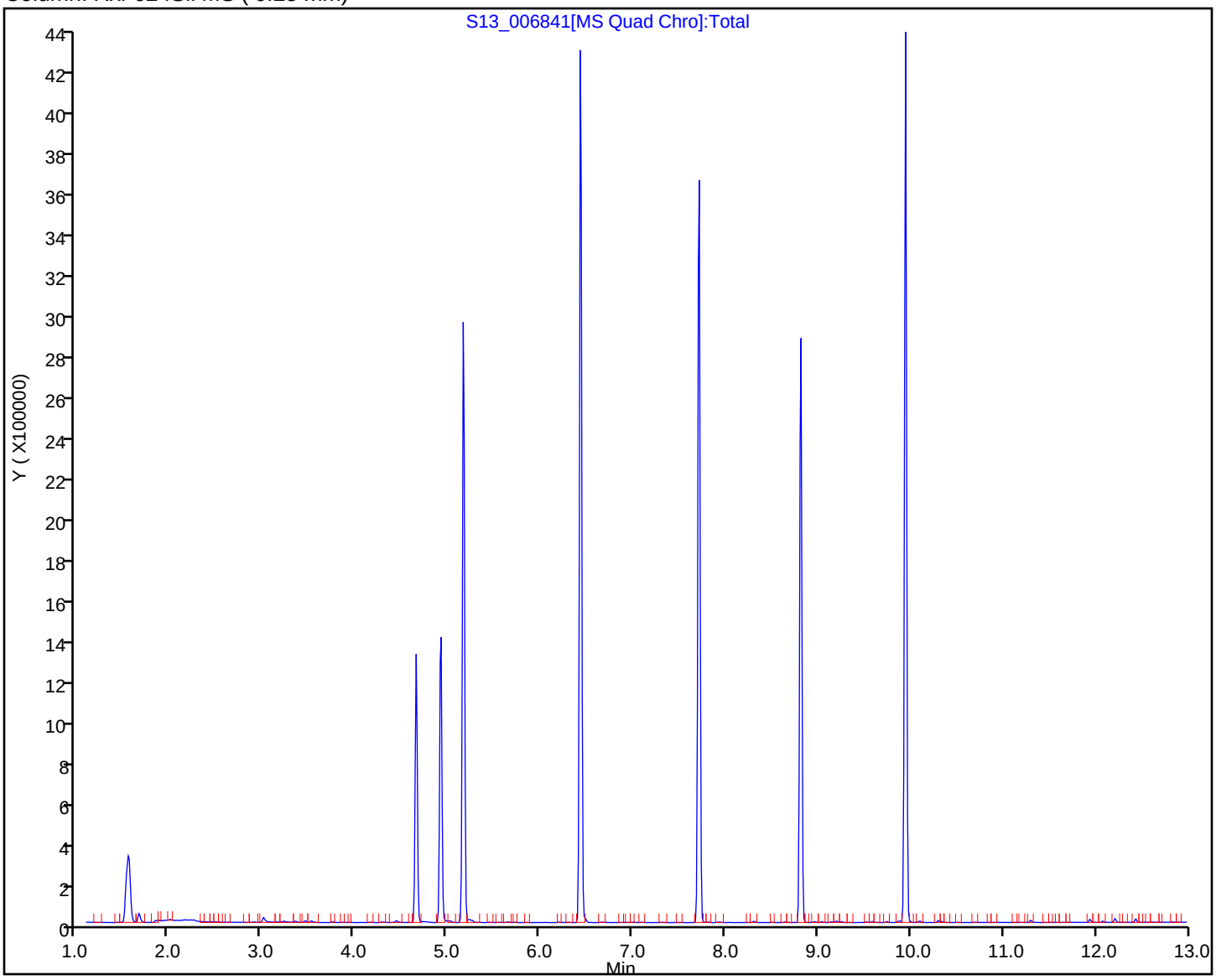
Client ID:

Operator ID: MEIERG ALS Bottle#: 0 Worklist Smp#: 8

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: AQ_VMS13_8260 Limit Group: MSV - 8260B Water and Solid

Column: Rxi-624Sil MS (0.25 mm)



12/5/2023 8:25 AM

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\MS13_006841.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 09-Oct-2023 12:09:55 ALS Bottle#: 0 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Operator ID: MEIERG Instrument ID: VMS_MS13

Method: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\AQ_VMS13_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 09-Oct-2023 12:44:02 Calib Date: 08-Oct-2023 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006822.D

Column 1 : Rxi-624Sil MS (0.25 mm) Det: MS Quad
Process Host: CTX1667

First Level Reviewer: BMJ3 Date: 09-Oct-2023 12:31:49

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	49.5	99.06
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	49.9	99.84
$ 6 Toluene-d8 (Surr)	50.0	49.6	99.24
$ 7 4-Bromofluorobenzene (Surr)	50.0	48.8	97.64

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-628977/4

Matrix: Water | Lab File ID: MS13_006836-LCS.D

Analysis Method: 8260D | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/09/2023 10:17

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RXI-624SilMS ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 628977 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	52.3		1.0	0.80	0.57

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		81-118
460-00-4	4-Bromofluorobenzene (Surr)	99		85-114
1868-53-7	Dibromofluoromethane (Surr)	102		80-119
2037-26-5	Toluene-d8 (Surr)	100		89-112

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\MS13_006836-LCS.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 09-Oct-2023 10:17:29 ALS Bottle#: 0 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: MEIERG Instrument ID: VMS_MS13

Method: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\AQ_VMS13_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 09-Oct-2023 12:44:02 Calib Date: 08-Oct-2023 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006822.D

Column 1 : Rxi-624Sil MS (0.25 mm) Det: MS Quad
Process Host: CTX1667

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.181	5.170	0.011	99	2288646	50.0	50.0	
*	2 Chlorobenzene-d5	119	7.720	7.720	0.000	87	662035	50.0	50.0	
*	3 1,4-Dichlorobenzene-d4	152	9.948	9.948	0.000	95	1154439	50.0	50.0	
$	4 Dibromofluoromethane (Surr)	111	4.663	4.662	0.001	93	688570	50.0	51.2	
$	5 1,2-Dichloroethane-d4 (Surr)	65	4.932	4.932	0.000	97	858080	50.0	50.6	
$	6 Toluene-d8 (Surr)	98	6.435	6.435	0.000	94	2665727	50.0	50.2	
$	7 4-Bromofluorobenzene (Surr)	95	8.818	8.818	0.000	89	998943	50.0	49.6	
	9 Dichlorodifluoromethane	85	1.719	1.709	0.010	99	644587	50.0	49.4	
	10 Chloromethane	50	1.896	1.896	0.000	99	775520	50.0	50.2	
	11 Vinyl chloride	62	2.010	1.999	0.011	98	705897	50.0	51.3	
	12 Bromomethane	94	2.310	2.300	0.010	91	483789	50.0	55.4	
	13 Chloroethane	64	2.403	2.393	0.010	100	482718	50.0	52.5	
	14 Dichlorofluoromethane	67	2.580	2.569	0.011	98	1215258	50.0	54.8	
	15 Trichlorofluoromethane	101	2.590	2.579	0.011	98	935887	50.0	53.7	
	18 Ethyl ether	59	2.797	2.797	0.000	93	656023	50.0	53.4	
	19 Acrolein	56	2.911	2.911	0.000	100	1143811	493.8	506.8	
	20 1,1-Dichloroethene	96	2.994	2.994	0.000	96	581529	50.0	53.9	
	21 Acetone	43	3.015	3.015	0.000	100	1478514	200.0	209.6	
	22 1,1,2-Trichloro-1,2,2-trifluoroe	151	3.025	3.025	0.000	95	390774	50.0	55.4	
	24 Iodomethane	142	3.119	3.108	0.010	99	939177	50.0	54.3	
	25 Carbon disulfide	76	3.181	3.170	0.011	99	1822417	50.0	53.3	
	27 Methyl acetate	43	3.253	3.243	0.010	98	1756246	100.0	103.3	
	28 3-Chloro-1-propene	41	3.274	3.263	0.011	91	1157532	50.0	54.4	
	29 Methylene Chloride	84	3.367	3.357	0.010	95	708978	50.0	51.6	
	30 2-Methyl-2-propanol	59	3.419	3.409	0.010	99	1501671	500.0	501.9	
	31 Acrylonitrile	53	3.533	3.533	0.000	98	4316181	500.0	538.2	
	32 Methyl tert-butyl ether	73	3.554	3.554	0.000	96	2123733	50.0	53.5	
	33 trans-1,2-Dichloroethene	96	3.574	3.564	0.010	97	694385	50.0	53.9	
	34 Hexane	57	3.771	3.761	0.010	94	1097775	50.0	55.5	
	35 Vinyl acetate	43	3.875	3.865	0.011	97	3857283	100.0	113.5	
	37 1,1-Dichloroethane	63	3.896	3.885	0.011	96	1312346	50.0	53.5	
	40 2-Butanone (MEK)	43	4.290	4.279	0.011	100	2523308	200.0	206.7	
	42 cis-1,2-Dichloroethene	96	4.310	4.310	0.000	82	777685	50.0	52.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
43 2,2-Dichloropropane	77	4.321	4.320	0.001	88	743009	50.0	53.8	
45 sec-Butyl Alcohol	45	4.393	4.393	0.000	100	3012416	1200.0	1264.2	
47 Chlorobromomethane	128	4.486	4.486	0.000	97	367907	50.0	54.3	
48 Tetrahydrofuran	42	4.497	4.497	0.000	91	846432	100.0	102.4	
49 Chloroform	83	4.549	4.548	0.001	94	1239962	50.0	54.0	
50 1,1,1-Trichloroethane	97	4.694	4.694	0.000	99	948062	50.0	54.3	
51 Cyclohexane	56	4.756	4.745	0.011	92	1096459	50.0	52.3	
52 1,1-Dichloropropene	75	4.808	4.808	0.000	96	1032622	50.0	53.8	
53 Carbon tetrachloride	117	4.808	4.808	0.000	95	789460	50.0	52.3	
54 Isobutyl alcohol	41	4.818	4.818	0.000	96	1364913	1250.0	1313.7	
56 Benzene	78	4.963	4.963	0.000	96	2895074	50.0	52.7	
57 1,2-Dichloroethane	62	4.984	4.984	0.000	97	961117	50.0	51.0	
59 n-Heptane	43	5.150	5.150	0.000	95	1110953	50.0	53.1	
60 Trichloroethene	95	5.450	5.450	0.000	98	728512	50.0	53.4	
61 2-Pentanone	43	5.554	5.554	0.000	99	3037343	160.0	164.3	
62 Methylcyclohexane	55	5.647	5.647	0.000	92	1013613	50.0	54.4	
64 1,2-Dichloropropane	63	5.657	5.657	0.000	96	763717	50.0	53.7	
65 1,4-Dioxane	88	5.709	5.709	0.000	95	234365	1000.0	1048.7	
66 Dibromomethane	93	5.730	5.730	0.000	96	448793	50.0	52.5	
67 Dichlorobromomethane	83	5.854	5.854	0.000	99	868192	50.0	52.7	
69 2-Chloroethyl vinyl ether	63	6.062	6.062	0.000	91	568127	50.0	51.4	
70 cis-1,3-Dichloropropene	75	6.207	6.207	0.000	95	1142519	50.0	52.9	
71 4-Methyl-2-pentanone (MIBK)	43	6.310	6.310	0.000	97	4752104	200.0	209.6	
72 Toluene	91	6.497	6.497	0.000	98	2960280	50.0	51.8	
73 trans-1,3-Dichloropropene	75	6.673	6.673	0.000	95	1033360	50.0	50.0	
74 Ethyl methacrylate	69	6.694	6.694	0.000	91	1091113	50.0	53.5	
75 1,1,2-Trichloroethane	97	6.849	6.849	0.000	91	627703	50.0	52.7	
76 Tetrachloroethene	164	6.943	6.942	0.000	98	559610	50.0	53.2	
77 1,3-Dichloropropane	76	6.994	6.994	0.000	96	1148892	50.0	51.8	
78 2-Hexanone	43	7.015	7.015	0.000	97	3518656	200.0	209.6	
79 Chlorodibromomethane	129	7.191	7.191	0.000	90	605154	50.0	52.5	
80 Ethylene Dibromide	107	7.305	7.305	0.000	98	672589	50.0	52.9	
81 1-Chlorohexane	91	7.699	7.699	0.000	98	798065	40.0	40.2	
82 Chlorobenzene	112	7.740	7.740	0.000	94	1867163	50.0	52.3	
83 1,1,1,2-Tetrachloroethane	131	7.813	7.813	0.000	94	602641	50.0	55.5	
84 Ethylbenzene	106	7.823	7.823	0.000	99	1019934	50.0	52.7	
85 m-Xylene & p-Xylene	106	7.937	7.937	0.000	99	1251116	50.0	53.1	
86 o-Xylene	106	8.300	8.300	0.000	97	1244051	50.0	53.8	
87 Styrene	104	8.321	8.321	0.000	96	2084767	50.0	54.5	
88 Bromoform	173	8.497	8.497	0.000	97	408174	50.0	49.4	
89 Isopropylbenzene	105	8.642	8.642	0.000	96	3151981	50.0	52.9	
91 Cyclohexanone	55	8.746	8.746	0.000	93	1922653	1500.0	1461.1	
92 1,1,2,2-Tetrachloroethane	83	8.932	8.932	0.000	94	1034537	50.0	52.4	
93 Bromobenzene	156	8.963	8.963	0.000	96	785377	50.0	51.4	
94 trans-1,4-Dichloro-2-butene	53	8.963	8.963	0.000	86	254624	50.0	49.0	
95 1,2,3-Trichloropropane	110	8.994	8.994	0.000	84	317466	50.0	51.4	
96 N-Propylbenzene	120	9.046	9.046	0.000	99	865671	50.0	51.5	
97 2-Chlorotoluene	126	9.140	9.139	0.001	96	749671	50.0	52.2	
98 1,3,5-Trimethylbenzene	105	9.212	9.212	0.000	94	2591576	50.0	53.4	
99 4-Chlorotoluene	126	9.254	9.253	0.001	97	775252	50.0	51.6	
101 tert-Butylbenzene	119	9.523	9.523	0.000	94	2276774	50.0	52.9	
102 1,2,4-Trimethylbenzene	105	9.585	9.585	0.000	97	2670910	50.0	52.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
103 sec-Butylbenzene	134	9.751	9.751	0.000	94	667275	50.0	53.4	
104 1,3-Dichlorobenzene	146	9.875	9.875	0.000	98	1485603	50.0	51.3	
105 4-Isopropyltoluene	119	9.896	9.896	0.000	97	2849609	50.0	54.0	
106 1,4-Dichlorobenzene	146	9.969	9.968	0.001	94	1504536	50.0	50.0	
108 n-Butylbenzene	91	10.300	10.300	0.000	98	2670228	50.0	53.0	
109 1,2-Dichlorobenzene	146	10.331	10.331	0.000	98	1407330	50.0	51.2	
110 1,2-Dibromo-3-Chloropropane	157	11.109	11.108	0.000	85	240734	50.0	48.8	
112 1,2,4-Trichlorobenzene	180	11.938	11.937	0.001	94	898099	50.0	50.3	
113 Hexachlorobutadiene	225	12.083	12.083	0.001	98	374234	50.0	50.8	
114 Naphthalene	128	12.207	12.207	0.000	97	2873271	50.0	51.1	
115 1,2,3-Trichlorobenzene	180	12.435	12.435	0.000	96	790033	50.0	49.7	
127 Butadiene	54		0.000				ND	ND	
S 128 Xylenes, Total	106				0		100.0	106.9	
S 129 Trihalomethanes, Total	1				0		200.0	208.5	
S 131 1,3-Dichloropropene, Total	1				0		100.0	102.9	
S 133 1,2-Dichloroethene, Total	1				0		100.0	106.6	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

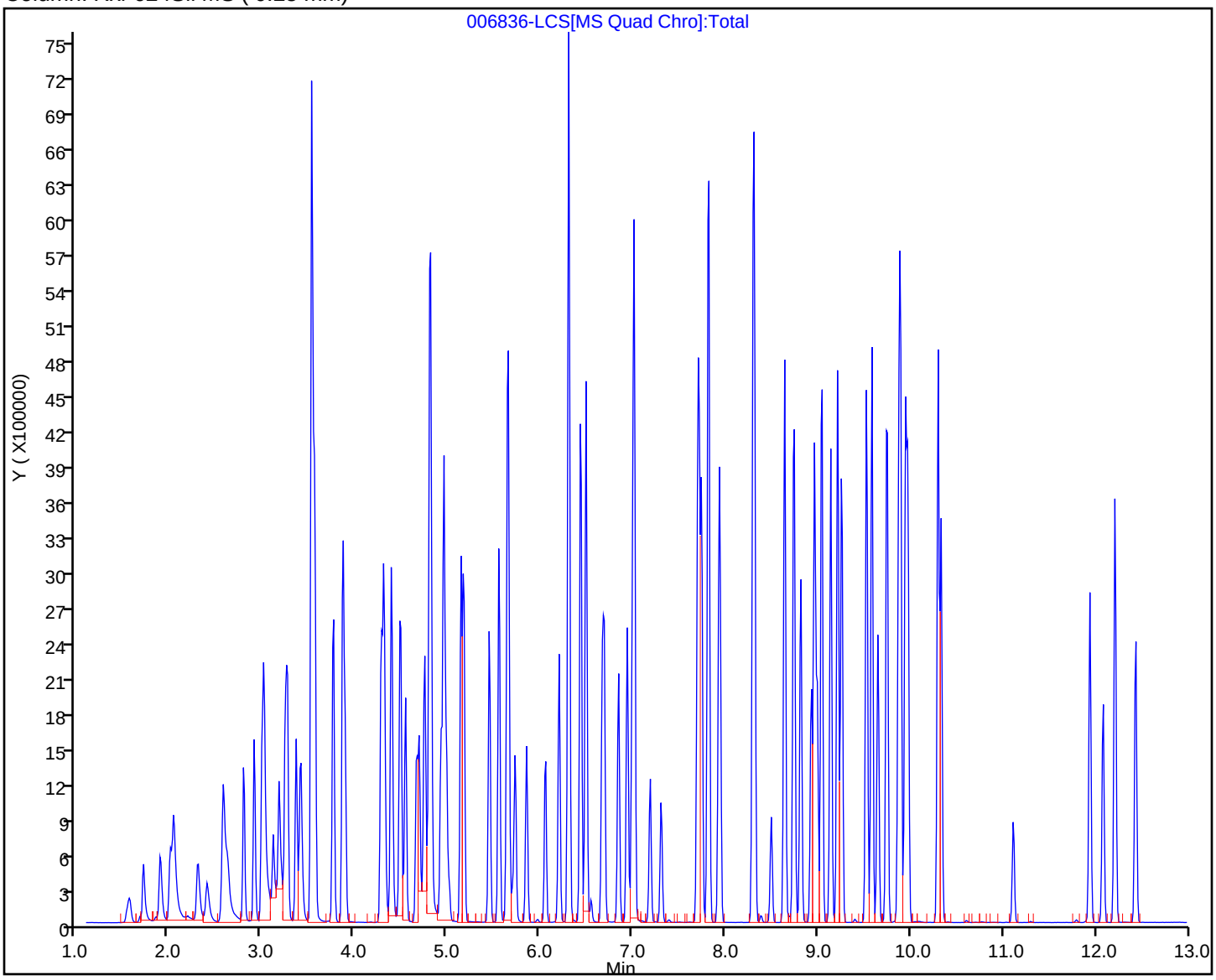
Reagents:

MV-MegaMainA_00096	Amount Added: 25.00	Units: uL	
MV-Gas A_00167	Amount Added: 10.00	Units: uL	
mv-IS_SS_00070	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 09-Oct-2023 12:44:05 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\MS13_006836-LCS.D
Injection Date: 09-Oct-2023 10:17:29 Instrument ID: VMS_MS13
Lims ID: LCS
Client ID:
Operator ID: MEIERG ALS Bottle#: 0 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS13_8260 Limit Group: MSV - 8260B Water and Solid
Column: Rxi-624Sil MS (0.25 mm)



12/5/2023 8:25 AM

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\MS13_006836-LCS.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 09-Oct-2023 10:17:29 ALS Bottle#: 0 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: MEIERG Instrument ID: VMS_MS13

Method: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\AQ_VMS13_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 09-Oct-2023 12:44:02 Calib Date: 08-Oct-2023 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006822.D

Column 1 : Rxi-624Sil MS (0.25 mm) Det: MS Quad
Process Host: CTX1667

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	51.2	102.32
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	50.6	101.15
$ 6 Toluene-d8 (Surr)	50.0	50.2	100.41
$ 7 4-Bromofluorobenzene (Surr)	50.0	49.6	99.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 280-628977/5

Matrix: Water | Lab File ID: MS13_006838.D

Analysis Method: 8260D | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/09/2023 11:02

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RXI-624SilMS ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 628977 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	48.9		1.0	0.80	0.57

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		81-118
460-00-4	4-Bromofluorobenzene (Surr)	101		85-114
1868-53-7	Dibromofluoromethane (Surr)	99		80-119
2037-26-5	Toluene-d8 (Surr)	99		89-112

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\MS13_006838.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 09-Oct-2023 11:02:33 ALS Bottle#: 0 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Operator ID: MEIERG Instrument ID: VMS_MS13

Method: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\AQ_VMS13_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 09-Oct-2023 12:44:02 Calib Date: 08-Oct-2023 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006822.D

Column 1 : Rxi-624Sil MS (0.25 mm) Det: MS Quad
Process Host: CTX1667

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.170	5.170	0.000	98	2406475	50.0	50.0	
* 2 Chlorobenzene-d5	119	7.720	7.720	0.000	87	732604	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.948	9.948	0.000	95	1254987	50.0	50.0	
$ 4 Dibromofluoromethane (Surr)	111	4.663	4.662	0.001	93	702964	50.0	49.7	
$ 5 1,2-Dichloroethane-d4 (Surr)	65	4.932	4.932	0.000	96	887077	50.0	49.7	
$ 6 Toluene-d8 (Surr)	98	6.435	6.435	0.000	94	2907590	50.0	49.5	
$ 7 4-Bromofluorobenzene (Surr)	95	8.818	8.818	0.000	89	1110072	50.0	50.7	
9 Dichlorodifluoromethane	85	1.709	1.709	0.000	99	611253	50.0	44.6	
10 Chloromethane	50	1.896	1.896	0.000	99	749196	50.0	46.2	
11 Vinyl chloride	62	1.999	1.999	0.000	98	679384	50.0	47.0	
12 Bromomethane	94	2.300	2.300	0.000	91	460633	50.0	50.2	
13 Chloroethane	64	2.403	2.393	0.010	100	467318	50.0	48.4	
14 Dichlorofluoromethane	67	2.569	2.569	0.000	98	1178355	50.0	50.6	
15 Trichlorofluoromethane	101	2.580	2.579	0.001	99	897690	50.0	49.0	
18 Ethyl ether	59	2.797	2.797	0.000	93	628999	50.0	48.7	
19 Acrolein	56	2.911	2.911	0.000	99	1177985	493.8	496.4	
20 1,1-Dichloroethene	96	2.994	2.994	0.000	97	551035	50.0	48.6	
21 Acetone	43	3.015	3.015	0.000	100	1405887	200.0	188.9	
22 1,1,2-Trichloro-1,2,2-trifluoroe	151	3.025	3.025	0.000	95	366361	50.0	49.4	
24 Iodomethane	142	3.118	3.108	0.010	99	865278	50.0	47.6	
25 Carbon disulfide	76	3.181	3.170	0.011	99	1679874	50.0	46.7	
27 Methyl acetate	43	3.243	3.243	0.000	98	1693426	100.0	94.7	
28 3-Chloro-1-propene	41	3.264	3.263	0.001	91	1114815	50.0	49.9	
29 Methylene Chloride	84	3.367	3.357	0.010	95	667487	50.0	46.2	
30 2-Methyl-2-propanol	59	3.419	3.409	0.010	99	1414846	500.0	450.0	
31 Acrylonitrile	53	3.533	3.533	0.000	99	4163913	500.0	493.8	
32 Methyl tert-butyl ether	73	3.554	3.554	0.000	96	2049496	50.0	49.1	
33 trans-1,2-Dichloroethene	96	3.564	3.564	0.000	98	671503	50.0	49.5	
34 Hexane	57	3.761	3.761	0.000	94	1096470	50.0	50.1	
35 Vinyl acetate	43	3.865	3.865	0.001	97	3797181	100.0	106.3	
37 1,1-Dichloroethane	63	3.896	3.885	0.011	96	1273044	50.0	49.4	
40 2-Butanone (MEK)	43	4.289	4.279	0.010	100	2586326	200.0	201.5	
42 cis-1,2-Dichloroethene	96	4.310	4.310	0.000	83	755541	50.0	48.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
43 2,2-Dichloropropane	77	4.321	4.320	0.001	92	709140	50.0	48.9	
45 sec-Butyl Alcohol	45	4.393	4.393	0.000	100	2947821	1200.0	1176.5	
47 Chlorobromomethane	128	4.486	4.486	0.000	98	351946	50.0	49.4	
48 Tetrahydrofuran	42	4.497	4.497	0.000	91	832225	100.0	95.7	
49 Chloroform	83	4.549	4.548	0.001	94	1195530	50.0	49.5	
50 1,1,1-Trichloroethane	97	4.694	4.694	0.000	99	931780	50.0	50.7	
51 Cyclohexane	56	4.756	4.745	0.011	92	1016965	50.0	46.2	
52 1,1-Dichloropropene	75	4.808	4.808	0.000	96	1000703	50.0	49.6	
53 Carbon tetrachloride	117	4.808	4.808	0.000	94	775143	50.0	48.9	
54 Isobutyl alcohol	41	4.818	4.818	0.000	92	1346849	1250.0	1232.9	
56 Benzene	78	4.963	4.963	0.000	96	2813335	50.0	48.7	
57 1,2-Dichloroethane	62	4.984	4.984	0.000	97	937069	50.0	47.3	
59 n-Heptane	43	5.150	5.150	0.000	95	1129757	50.0	51.4	
60 Trichloroethene	95	5.450	5.450	0.000	98	709658	50.0	47.0	
61 2-Pentanone	43	5.554	5.554	0.000	99	3244806	160.0	166.9	
62 Methylcyclohexane	55	5.647	5.647	0.000	92	972059	50.0	49.7	
64 1,2-Dichloropropane	63	5.657	5.657	0.000	96	761790	50.0	50.9	
65 1,4-Dioxane	88	5.709	5.709	0.000	95	203197	1000.0	864.7	
66 Dibromomethane	93	5.730	5.730	0.000	97	444672	50.0	49.4	
67 Dichlorobromomethane	83	5.854	5.854	0.000	99	857337	50.0	49.5	
69 2-Chloroethyl vinyl ether	63	6.062	6.062	0.000	91	644069	50.0	55.4	
70 cis-1,3-Dichloropropene	75	6.207	6.207	0.000	95	1181771	50.0	49.5	
71 4-Methyl-2-pentanone (MIBK)	43	6.310	6.310	0.000	97	4893047	200.0	205.2	
72 Toluene	91	6.497	6.497	0.000	98	3017209	50.0	50.2	
73 trans-1,3-Dichloropropene	75	6.673	6.673	0.000	95	1101949	50.0	50.7	
74 Ethyl methacrylate	69	6.694	6.694	0.000	91	1171678	50.0	51.9	
75 1,1,2-Trichloroethane	97	6.849	6.849	0.000	91	658195	50.0	52.6	
76 Tetrachloroethene	164	6.942	6.942	0.000	98	574465	50.0	49.3	
77 1,3-Dichloropropane	76	6.994	6.994	0.000	96	1217144	50.0	49.6	
78 2-Hexanone	43	7.015	7.015	0.000	97	3803300	200.0	204.7	
79 Chlorodibromomethane	129	7.191	7.191	0.000	91	620837	50.0	48.7	
80 Ethylene Dibromide	107	7.305	7.305	0.000	99	709284	50.0	50.4	
81 1-Chlorohexane	91	7.699	7.699	0.000	98	839398	40.0	38.2	
82 Chlorobenzene	112	7.740	7.740	0.000	96	1914015	50.0	48.4	
83 1,1,1,2-Tetrachloroethane	131	7.813	7.813	0.000	95	605592	50.0	50.4	
84 Ethylbenzene	106	7.823	7.823	0.000	99	1037079	50.0	48.4	
85 m-Xylene & p-Xylene	106	7.937	7.937	0.000	99	1298991	50.0	49.8	
86 o-Xylene	106	8.300	8.300	0.000	95	1255632	50.0	49.0	
87 Styrene	104	8.321	8.321	0.000	96	2151201	50.0	50.8	
88 Bromoform	173	8.497	8.497	0.000	97	421811	50.0	46.2	
89 Isopropylbenzene	105	8.642	8.642	0.000	96	3135848	50.0	48.4	
91 Cyclohexanone	55	8.746	8.746	0.000	94	1891883	1500.0	1300.0	
92 1,1,2,2-Tetrachloroethane	83	8.932	8.932	0.000	94	1047296	50.0	48.8	
93 Bromobenzene	156	8.963	8.963	0.000	96	798793	50.0	48.1	
94 trans-1,4-Dichloro-2-butene	53	8.963	8.963	0.000	83	274271	50.0	48.6	
95 1,2,3-Trichloropropane	110	8.994	8.994	0.000	85	327535	50.0	48.8	
96 N-Propylbenzene	120	9.046	9.046	0.000	99	870120	50.0	47.6	
97 2-Chlorotoluene	126	9.139	9.139	0.000	96	753429	50.0	48.3	
98 1,3,5-Trimethylbenzene	105	9.212	9.212	0.000	94	2564802	50.0	48.6	
99 4-Chlorotoluene	126	9.253	9.253	0.000	98	780432	50.0	47.8	
101 tert-Butylbenzene	119	9.523	9.523	0.000	94	2228037	50.0	47.7	
102 1,2,4-Trimethylbenzene	105	9.585	9.585	0.000	97	2647806	50.0	48.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
103 sec-Butylbenzene	134	9.741	9.751	-0.010	95	646617	50.0	47.6	
104 1,3-Dichlorobenzene	146	9.875	9.875	0.000	98	1491920	50.0	47.4	
105 4-Isopropyltoluene	119	9.896	9.896	0.000	97	2779867	50.0	48.4	
106 1,4-Dichlorobenzene	146	9.969	9.968	0.001	94	1517929	50.0	46.4	
108 n-Butylbenzene	91	10.300	10.300	0.000	98	2583271	50.0	47.2	
109 1,2-Dichlorobenzene	146	10.331	10.331	0.000	98	1377702	50.0	46.1	
110 1,2-Dibromo-3-Chloropropane	157	11.108	11.108	0.000	84	232318	50.0	43.5	
112 1,2,4-Trichlorobenzene	180	11.938	11.937	0.001	94	849279	50.0	43.7	
113 Hexachlorobutadiene	225	12.083	12.083	0.001	97	358123	50.0	44.7	
114 Naphthalene	128	12.207	12.207	0.000	97	2751320	50.0	45.0	
115 1,2,3-Trichlorobenzene	180	12.435	12.435	0.000	95	748879	50.0	43.3	
127 Butadiene	54		0.000				ND	ND	
S 128 Xylenes, Total	106				0		100.0	98.9	
S 129 Trihalomethanes, Total	1				0		200.0	193.9	
S 131 1,3-Dichloropropene, Total	1				0		100.0	100.2	
S 133 1,2-Dichloroethene, Total	1				0		100.0	98.3	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-MegaMainA_00096	Amount Added:	25.00	Units: uL	
MV-Gas A_00167	Amount Added:	10.00	Units: uL	
mv-IS_SS_00070	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 09-Oct-2023 12:44:11 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\MS13_006838.D

Injection Date: 09-Oct-2023 11:02:33 Instrument ID: VMS_MS13

Lims ID: LCSD

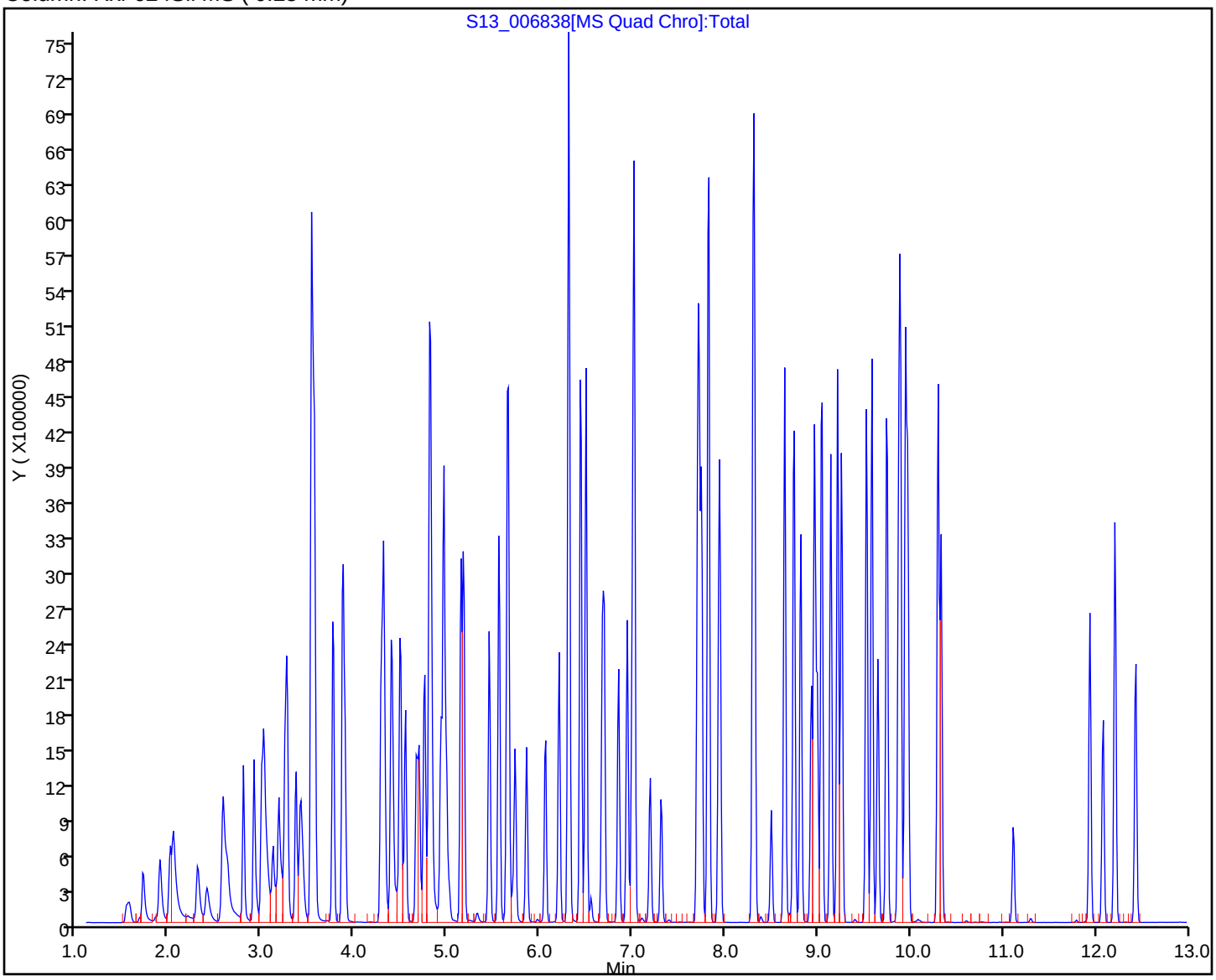
Client ID:

Operator ID: MEIERG ALS Bottle#: 0 Worklist Smp#: 5

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: AQ_VMS13_8260 Limit Group: MSV - 8260B Water and Solid

Column: Rxi-624Sil MS (0.25 mm)



12/5/2023 8:25 AM

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\MS13_006838.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 09-Oct-2023 11:02:33 ALS Bottle#: 0 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Operator ID: MEIERG Instrument ID: VMS_MS13

Method: \\chromfs\Denver\ChromData\VMS_MS13\20231009-126311.b\AQ_VMS13_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 09-Oct-2023 12:44:02 Calib Date: 08-Oct-2023 23:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS13\20231008-126291.b\MS13_006822.D

Column 1 : Rxi-624Sil MS (0.25 mm) Det: MS Quad
Process Host: CTX1667

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	50.0	49.7	99.35
$ 5 1,2-Dichloroethane-d4 (Surr)	50.0	49.7	99.44
$ 6 Toluene-d8 (Surr)	50.0	49.5	98.97
$ 7 4-Bromofluorobenzene (Surr)	50.0	50.7	101.34

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: VMS_MS13 Start Date: 10/08/2023 16:13

Analysis Batch Number: 628923 End Date: 10/09/2023 03:53

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-628923/1		10/08/2023 16:13	1	MS13_006803.D	RXI-624SilMS 0.25(mm)
IC 280-628923/2		10/08/2023 16:36	1	MS13_006804.D	RXI-624SilMS 0.25(mm)
IC 280-628923/3		10/08/2023 16:58	1	MS13_006805.D	RXI-624SilMS 0.25(mm)
IC 280-628923/4		10/08/2023 17:21	1	MS13_006806.D	RXI-624SilMS 0.25(mm)
IC 280-628923/5		10/08/2023 17:43	1	MS13_006807.D	RXI-624SilMS 0.25(mm)
IC 280-628923/6		10/08/2023 18:06	1	MS13_006808.D	RXI-624SilMS 0.25(mm)
ICIS 280-628923/7		10/08/2023 18:28	1	MS13_006809.D	RXI-624SilMS 0.25(mm)
IC 280-628923/8		10/08/2023 18:51	1	MS13_006810.D	RXI-624SilMS 0.25(mm)
IC 280-628923/9		10/08/2023 19:14	1	MS13_006811.D	RXI-624SilMS 0.25(mm)
IC 280-628923/10		10/08/2023 19:36	1	MS13_006812.D	RXI-624SilMS 0.25(mm)
ICV 280-628923/11		10/08/2023 20:21	1	MS13_006814.D	RXI-624SilMS 0.25(mm)
IC 280-628923/12		10/08/2023 20:44	1		RXI-624SilMS 0.25(mm)
IC 280-628923/13		10/08/2023 21:06	1		RXI-624SilMS 0.25(mm)
IC 280-628923/14		10/08/2023 21:29	1		RXI-624SilMS 0.25(mm)
IC 280-628923/15		10/08/2023 21:51	1		RXI-624SilMS 0.25(mm)
IC 280-628923/16		10/08/2023 22:14	1		RXI-624SilMS 0.25(mm)
IC 280-628923/17		10/08/2023 22:37	1		RXI-624SilMS 0.25(mm)
IC 280-628923/18		10/08/2023 22:59	1		RXI-624SilMS 0.25(mm)
IC 280-628923/19		10/08/2023 23:22	1		RXI-624SilMS 0.25(mm)
ICV 280-628923/20		10/08/2023 23:44	1	MS13_006823.D	RXI-624SilMS 0.25(mm)
ZZZZZ		10/09/2023 00:30	1		RXI-624SilMS 0.25(mm)
ZZZZZ		10/09/2023 00:53	1		RXI-624SilMS 0.25(mm)
ZZZZZ		10/09/2023 01:15	1		RXI-624SilMS 0.25(mm)
ZZZZZ		10/09/2023 01:38	1		RXI-624SilMS 0.25(mm)
ZZZZZ		10/09/2023 02:00	1		RXI-624SilMS 0.25(mm)
ZZZZZ		10/09/2023 02:23	1		RXI-624SilMS 0.25(mm)
ZZZZZ		10/09/2023 02:45	1		RXI-624SilMS 0.25(mm)
ZZZZZ		10/09/2023 03:08	1		RXI-624SilMS 0.25(mm)
ZZZZZ		10/09/2023 03:30	1		RXI-624SilMS 0.25(mm)
ZZZZZ		10/09/2023 03:53	1		RXI-624SilMS 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: VMS_MS13 Start Date: 10/09/2023 09:54

Analysis Batch Number: 628977 End Date: 10/09/2023 21:11

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-628977/1		10/09/2023 09:54	1	MS13_006835.D	RXI-624SilMS 0.25(mm)
CCV 280-628977/2		10/09/2023 10:17	1	MS13_006836.D	RXI-624SilMS 0.25(mm)
LCS 280-628977/4		10/09/2023 10:17	1	MS13_006836-LCS .D	RXI-624SilMS 0.25(mm)
CCV 280-628977/3		10/09/2023 10:40	1		RXI-624SilMS 0.25(mm)
ZZZZZ		10/09/2023 10:40	1		RXI-624SilMS 0.25(mm)
LCSD 280-628977/5		10/09/2023 11:02	1	MS13_006838.D	RXI-624SilMS 0.25(mm)
ZZZZZ		10/09/2023 11:24	1		RXI-624SilMS 0.25(mm)
MB 280-628977/8		10/09/2023 12:09	1	MS13_006841.D	RXI-624SilMS 0.25(mm)
ZZZZZ		10/09/2023 12:32	1		RXI-624SilMS 0.25(mm)
ZZZZZ		10/09/2023 12:54	1		RXI-624SilMS 0.25(mm)
ZZZZZ		10/09/2023 13:17	1		RXI-624SilMS 0.25(mm)
280-182145-13	LL10mw-003-230901-GW	10/09/2023 13:39	1	MS13_006845.D	RXI-624SilMS 0.25(mm)
280-182145-14	FWGTB-230901-TB003	10/09/2023 14:02	1	MS13_006846.D	RXI-624SilMS 0.25(mm)
ZZZZZ		10/09/2023 14:25	1		RXI-624SilMS 0.25(mm)
ZZZZZ		10/09/2023 14:47	1		RXI-624SilMS 0.25(mm)
ZZZZZ		10/09/2023 15:10	1		RXI-624SilMS 0.25(mm)
ZZZZZ		10/09/2023 15:32	1		RXI-624SilMS 0.25(mm)
ZZZZZ		10/09/2023 15:55	1		RXI-624SilMS 0.25(mm)
ZZZZZ		10/09/2023 16:18	1		RXI-624SilMS 0.25(mm)
ZZZZZ		10/09/2023 16:40	1		RXI-624SilMS 0.25(mm)
ZZZZZ		10/09/2023 17:02	1		RXI-624SilMS 0.25(mm)
ZZZZZ		10/09/2023 17:25	1		RXI-624SilMS 0.25(mm)
ZZZZZ		10/09/2023 17:48	1		RXI-624SilMS 0.25(mm)
ZZZZZ		10/09/2023 18:10	1		RXI-624SilMS 0.25(mm)
ZZZZZ		10/09/2023 18:32	1		RXI-624SilMS 0.25(mm)
ZZZZZ		10/09/2023 18:55	10		RXI-624SilMS 0.25(mm)
ZZZZZ		10/09/2023 19:18	50		RXI-624SilMS 0.25(mm)
ZZZZZ		10/09/2023 19:40	20		RXI-624SilMS 0.25(mm)
ZZZZZ		10/09/2023 20:03	20		RXI-624SilMS 0.25(mm)
ZZZZZ		10/09/2023 20:26	20		RXI-624SilMS 0.25(mm)
CCVC 280-628977/31		10/09/2023 20:48	1	MS13_006864.D	RXI-624SilMS 0.25(mm)
CCVC 280-628977/32		10/09/2023 21:11	1		RXI-624SilMS 0.25(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Batch Number: 628923 Batch Start Date: 10/08/23 16:13 Batch Analyst: Meier, Greg P

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Cal Dil Std 00249	mv-Cent BFB 00005	mv-Cent IS 00008	MV-Gas A 00167
BFB 280-628923/1		8260D		5 mL	5 mL		5 uL		
IC 280-628923/2		8260D		5 mL	5 mL	5 uL			
IC 280-628923/3		8260D		5 mL	5 mL	10 uL			
IC 280-628923/4		8260D		5 mL	5 mL	20 uL			
IC 280-628923/5		8260D		5 mL	5 mL	50 uL			
IC 280-628923/6		8260D		5 mL	5 mL				2 uL
ICIS 280-628923/7		8260D		5 mL	5 mL				10 uL
IC 280-628923/8		8260D		5 mL	5 mL				15 uL
IC 280-628923/9		8260D		5 mL	5 mL				20 uL
IC 280-628923/10		8260D		5 mL	5 mL				40 uL
ICV 280-628923/11		8260D		5 mL	5 mL				
ICV 280-628923/20		8260D		5 mL	5 mL			5 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-Gas B 00147	mv-IS_SS 00070	MV-MegaMain B 00092	MV-MegaMainA 00096	MV-Supp B 00066	
BFB 280-628923/1		8260D							
IC 280-628923/2		8260D			5 uL				
IC 280-628923/3		8260D			5 uL				
IC 280-628923/4		8260D			5 uL				
IC 280-628923/5		8260D			5 uL				
IC 280-628923/6		8260D			5 uL		5 uL		
ICIS 280-628923/7		8260D			5 uL		25 uL		
IC 280-628923/8		8260D			5 uL		37.5 uL		
IC 280-628923/9		8260D			5 uL		50 uL		
IC 280-628923/10		8260D			5 uL		100 uL		
ICV 280-628923/11		8260D		10 uL	5 uL	25 uL			

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 VOA BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Batch Number: 628923 Batch Start Date: 10/08/23 16:13 Batch Analyst: Meier, Greg P

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-Gas B 00147	mv-IS_SS 00070	MV-MegaMain B 00092	MV-MegaMainA 00096	MV-Supp B 00066	
ICV 280-628923/20		8260D						25 uL	

Batch Notes	

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.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Batch Number: 628977 Batch Start Date: 10/09/23 09:54 Batch Analyst: Meier, Greg P

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	Headspace	mv-Cent BFB 00005	MV-Gas A 00167
BFB 280-628977/1		8260D		5 mL	5 mL			5 uL	
CCV 280-628977/2		8260D		5 mL	5 mL				10 uL
LCS 280-628977/4		8260D		5 mL	5 mL				10 uL
LCSD 280-628977/5		8260D		5 mL	5 mL				10 uL
MB 280-628977/8		8260D		5 mL	5 mL				
280-182145-B-13	LL10mw-003-230901-GW	8260D	T	5 mL	5 mL	<2 SU	No		
280-182145-B-14	FWGTB-230901-TB003	8260D	T	5 mL	5 mL	<2 SU	No		
CCVC 280-628977/31		8260D		5 mL	5 mL				10 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	mv-IS_SS 00070	MV-MegaMainA 00096				
BFB 280-628977/1		8260D							
CCV 280-628977/2		8260D		5 uL	25 uL				
LCS 280-628977/4		8260D		5 uL	25 uL				
LCSD 280-628977/5		8260D		5 uL	25 uL				
MB 280-628977/8		8260D		5 uL					
280-182145-B-13	LL10mw-003-230901-GW	8260D	T	5 uL					
280-182145-B-14	FWGTB-230901-TB003	8260D	T	5 uL					
CCVC 280-628977/31		8260D		5 uL	25 uL				

Batch Notes	

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 VOA BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Batch Number: 628977 Batch Start Date: 10/09/23 09:54 Batch Analyst: Meier, Greg P

Batch Method: 8260D Batch End Date:

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.

8330B_DOD5

Nitroaromatics and Nitramines (HPLC)

FORM II
HPLC/IC SURROGATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): UltraCarb5u ID: 4.6 (mm) GC Column (2): Luna-phenyl 4.6 (mm)

Client Sample ID	Lab Sample ID	12DNB1 #	12DNB2 #
FWGmw-021-230901-GW	280-182145-7	72 M Q	
FWGmw-021-230901-GW	280-182145-7		68 Q
FWGmw-021-230901-GW RE	280-182145-7 RE		95
FWGmw-021-230901-GW RE	280-182145-7 RE	101 M	
LL3mw-245-230901-GW	280-182145-8	82 M Q	
LL3mw-245-230901-GW RE	280-182145-8 RE		94
LL3mw-245-230901-GW RE	280-182145-8 RE	100	
FWGmw-024-230901-GW	280-182145-11	83 M	
FWGmw-024-230901-GW RE	280-182145-11 RE	100 M	
FWGmw-023-230901-GW	280-182145-12	77 M Q	
FWGmw-023-230901-GW RE	280-182145-12 RE	97	
	MB 280-628171/1-A	85 M	
	MB 280-629471/1-A	99 M	
	LCS 280-628171/2-A	85	
	LCS 280-628171/4-A	96	
	LCS 280-629471/2-A	81 M Q	
	LCS 280-629471/4-A	102	
	LCSD 280-628171/3-A	71 Q	
	LCSD 280-628171/5-A	86	
	LCSD 280-629471/3-A	91 M	
	LCSD 280-629471/5-A	104 M	

	QC LIMITS
12DNB = 1,2-Dinitrobenzene	83-119

Column to be used to flag recovery values

FORM II 8330B

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10070012.D

Lab ID: LCS 280-628171/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	1.88	94	73-125	
1,3-Dinitrobenzene	2.00	1.78	89	78-120	
2,4,6-Trinitrotoluene	2.00	1.71	86	71-123	
2,4-Dinitrotoluene	2.00	1.68	84	78-120	
2,6-Dinitrotoluene	2.00	1.66	83	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.66	83	79-120	
2-Nitrotoluene	2.00	1.46	73	70-127	
3,5-Dinitroaniline	2.00	1.53	77	71-117	
3-Nitrotoluene	2.00	1.45	72	73-125	Q
4-Amino-2,6-dinitrotoluene	2.00	1.47	74	76-125	Q
4-Nitrotoluene	2.00	1.40	70	71-127	Q
DNX	2.01	2.14	107	66-119	
HMX	2.00	1.96	98	65-135	
MNX	2.34	2.27	97	57-132	
Nitrobenzene	2.00	1.62	81	65-134	
Nitroglycerin	20.0	18.4	92	74-127	
PETN	20.0	18.8	94	73-127	
RDX	2.00	1.74	87	68-130	
Tetryl	2.00	1.83	92	64-128	
TNX	2.00	1.97	99	50-150	

Column to be used to flag recovery and RPD values

FORM III 8330B

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10070014.D

Lab ID: LCS 280-628171/4-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
2,4-diamino-6-nitrotoluene	2.00	1.33	66	68-122	Q
2,6-diamino-4-nitrotoluene	2.00	1.48	74	72-122	

Column to be used to flag recovery and RPD values

FORM III 8330B

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10130019.D

Lab ID: LCS 280-629471/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	1.81	90	73-125	M Q
1,3-Dinitrobenzene	2.00	1.64	82	78-120	M Q
2,4,6-Trinitrotoluene	2.00	1.56	78	71-123	Q
2,4-Dinitrotoluene	2.00	1.45	72	78-120	Q
2,6-Dinitrotoluene	2.00	1.48	74	77-127	Q
2-Amino-4,6-dinitrotoluene	2.00	1.47	73	79-120	Q
2-Nitrotoluene	2.00	1.15	58	70-127	Q
3,5-Dinitroaniline	2.00	1.42	71	71-117	M Q
3-Nitrotoluene	2.00	1.09	55	73-125	M Q
4-Amino-2,6-dinitrotoluene	2.00	1.42	71	76-125	Q
4-Nitrotoluene	2.00	1.12	56	71-127	Q
DNX	2.01	1.77	88	66-119	M Q
HMX	2.00	1.62	81	65-135	M Q
MNX	2.34	2.06	88	57-132	Q
Nitrobenzene	2.00	1.37	68	65-134	M Q
Nitroglycerin	20.0	18.0	90	74-127	Q
PETN	20.0	18.1	91	73-127	Q
RDX	2.00	1.81	90	68-130	Q
Tetryl	2.00	1.79	89	64-128	M Q
TNX	2.00	1.63	81	50-150	M Q

Column to be used to flag recovery and RPD values

FORM III 8330B

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10130021.D

Lab ID: LCS 280-629471/4-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
2,4-diamino-6-nitrotoluene	2.00	1.47	74	68-122	M
2,6-diamino-4-nitrotoluene	2.00	1.57	78	72-122	

Column to be used to flag recovery and RPD values

FORM III 8330B

FORM III
HPLC/IC LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10070013.D

Lab ID: LCSD 280-628171/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	1.62	81	15	20	73-125	Q
1,3-Dinitrobenzene	2.00	1.51	75	17	20	78-120	Q
2,4,6-Trinitrotoluene	2.00	1.44	72	17	20	71-123	Q
2,4-Dinitrotoluene	2.00	1.39	70	19	20	78-120	Q
2,6-Dinitrotoluene	2.00	1.43	71	15	20	77-127	Q
2-Amino-4,6-dinitrotoluene	2.00	1.36	68	20	20	79-120	Q
2-Nitrotoluene	2.00	1.19	59	20	20	70-127	Q
3,5-Dinitroaniline	2.00	1.28	64	18	20	71-117	Q
3-Nitrotoluene	2.00	1.14	57	24	20	73-125	Q
4-Amino-2,6-dinitrotoluene	2.00	1.17	58	23	20	76-125	Q
4-Nitrotoluene	2.00	1.15	57	20	20	71-127	Q
DNX	2.01	1.90	95	12	20	66-119	Q
HMX	2.00	1.74	87	11	20	65-135	Q
MNX	2.34	1.89	81	18	20	57-132	Q
Nitrobenzene	2.00	1.33	67	19	20	65-134	Q
Nitroglycerin	20.0	16.0	80	14	20	74-127	Q
PETN	20.0	16.1	81	16	20	73-127	Q
RDX	2.00	1.51	75	14	20	68-130	Q
Tetryl	2.00	1.59	79	15	20	64-128	Q
TNX	2.00	1.76	88	11	20	50-150	Q

Column to be used to flag recovery and RPD values

FORM III 8330B

FORM III
HPLC/IC LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10070015.D

Lab ID: LCSD 280-628171/5-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
2,4-diamino-6-nitrotoluene	2.00	1.48	74	11	20	68-122	
2,6-diamino-4-nitrotoluene	2.00	1.56	78	5	20	72-122	

Column to be used to flag recovery and RPD values

FORM III 8330B

FORM III
HPLC/IC LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10130020.D

Lab ID: LCSD 280-629471/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	1.98	99	9	20	73-125	M
1,3-Dinitrobenzene	2.00	1.82	91	10	20	78-120	
2,4,6-Trinitrotoluene	2.00	1.77	88	12	20	71-123	
2,4-Dinitrotoluene	2.00	1.68	84	15	20	78-120	
2,6-Dinitrotoluene	2.00	1.72	86	15	20	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.69	84	14	20	79-120	
2-Nitrotoluene	2.00	1.36	68	17	20	70-127	Q
3,5-Dinitroaniline	2.00	1.57	78	10	20	71-117	
3-Nitrotoluene	2.00	1.36	68	22	20	73-125	Q
4-Amino-2,6-dinitrotoluene	2.00	1.55	78	9	20	76-125	
4-Nitrotoluene	2.00	1.33	67	18	20	71-127	Q
DNX	2.01	1.89	94	7	20	66-119	M
HMX	2.00	1.74	87	7	20	65-135	M
MNX	2.34	2.21	94	7	20	57-132	
Nitrobenzene	2.00	1.54	77	12	20	65-134	
Nitroglycerin	20.0	19.3	97	7	20	74-127	
PETN	20.0	19.6	98	8	20	73-127	
RDX	2.00	1.84	92	2	20	68-130	
Tetryl	2.00	1.89	95	6	20	64-128	
TNX	2.00	1.78	89	9	20	50-150	M

Column to be used to flag recovery and RPD values

FORM III 8330B

FORM III
HPLC/IC LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10130022.D

Lab ID: LCSD 280-629471/5-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
2,4-diamino-6-nitrotoluene	2.00	1.26	63	16	20	68-122	Q
2,6-diamino-4-nitrotoluene	2.00	1.40	70	11	20	72-122	Q

Column to be used to flag recovery and RPD values

FORM III 8330B

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: MB 280-628171/1-A

Matrix: Water Date Extracted: 10/03/2023 13:12

Lab File ID:(1) 10070011.D Lab File ID:(2)

Date Analyzed:(1) 10/07/2023 14:59 Date Analyzed:(2)

Instrument ID:(1) CHHPLC_X3 Instrument ID:(2) CHHPLC_X5

GC Column:(1) UltraCarb5uO ID: 4.6(mm) GC Column:(2) Luna-phenylh ID: 4.6(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 280-628171/2-A	10/07/2023 15:22	
	LCSD 280-628171/3-A	10/07/2023 15:45	
	LCS 280-628171/4-A	10/07/2023 16:08	
	LCSD 280-628171/5-A	10/07/2023 16:31	
FWGmw-021-230901-GW	280-182145-7	10/07/2023 21:52	10/11/2023 07:20
LL3mw-245-230901-GW	280-182145-8	10/07/2023 22:15	
FWGmw-024-230901-GW	280-182145-11	10/07/2023 22:38	
FWGmw-023-230901-GW	280-182145-12	10/07/2023 23:01	

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: MB 280-629471/1-A

Matrix: Water Date Extracted: 10/12/2023 14:54

Lab File ID:(1) 10130018.D Lab File ID:(2)

Date Analyzed:(1) 10/13/2023 18:00 Date Analyzed:(2)

Instrument ID:(1) CHHPLC_X3 Instrument ID:(2) CHHPLC_G2_LUNA

GC Column:(1) UltraCarb5uO ID: 4.6(mm) GC Column:(2) Luna-phenylh ID: 4.6(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 280-629471/2-A	10/13/2023 18:23	
	LCSD 280-629471/3-A	10/13/2023 18:46	
	LCS 280-629471/4-A	10/13/2023 19:09	
	LCSD 280-629471/5-A	10/13/2023 19:32	
FWGmw-021-230901-GW RE	280-182145-7 RE	10/14/2023 02:02	10/14/2023 06:00
LL3mw-245-230901-GW RE	280-182145-8 RE	10/14/2023 03:11	10/14/2023 06:36
FWGmw-024-230901-GW RE	280-182145-11 RE	10/14/2023 03:34	
FWGmw-023-230901-GW RE	280-182145-12 RE	10/14/2023 03:57	

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Client Sample ID: FWGmw-021-230901-GW Lab Sample ID: 280-182145-7

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 10/07/2023 21:52 Date Analyzed (2): 10/11/2023 07:20

GC Column (1): UltraCarb5uODS ID: 4.6(mm) GC Column (2): Luna-phenylh ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
RDX	1		7.60	7.43	7.73	0.66		57.6
	2		9.21	8.96	9.26	0.36		

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Client Sample ID: FWGmw-021-230901-GW | Lab Sample ID: 280-182145-7

Matrix: Water | Lab File ID: 10070029.D

Analysis Method: 8330B | Date Collected: 09/28/2023 11:37

Extraction Method: 3535 | Date Extracted: 10/03/2023 13:12

Sample wt/vol: 493.8(mL) | Date Analyzed: 10/07/2023 21:52

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 628897 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U Q	0.21	0.20	0.085
99-65-0	1,3-Dinitrobenzene	0.10	U M Q	0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	0.10	U Q	0.11	0.10	0.046
121-14-2	2,4-Dinitrotoluene	0.081	U Q	0.10	0.081	0.028
606-20-2	2,6-Dinitrotoluene	0.081	U Q	0.10	0.081	0.041
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U Q	0.11	0.10	0.051
88-72-2	*2-Nitrotoluene*	*0.15*	*J Q*	*0.21*	0.20	*0.087*
99-08-1	3-Nitrotoluene	0.35	U Q	0.41	0.35	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U Q	0.15	0.12	0.058
99-99-0	4-Nitrotoluene	0.41	U Q	0.42	0.41	0.10
2691-41-0	HMX	0.20	U M Q	0.21	0.20	0.089
98-95-3	Nitrobenzene	0.20	U Q	0.21	0.20	0.092
55-63-0	Nitroglycerin	2.0	U Q	2.1	2.0	0.93
78-11-5	PETN	1.0	U Q	1.1	1.0	0.45
121-82-4	RDX	0.66	Q J1	0.21	0.20	0.052
479-45-8	Tetryl	0.10	U Q	0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	72	M Q	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\10070029.D
Lims ID: 280-182145-B-7-A
Client ID: FWGmw-021-230901-GW
Sample Type: Client
Inject. Date: 07-Oct-2023 21:52:27 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182145-B-7-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2023 11:16:57 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1602

First Level Reviewer: K8YG Date: 09-Oct-2023 10:59:57

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.582	6.570	0.012	605	0.006419	M
8 RDX	1	7.602	7.576	0.026	7171	0.0649	
$ 10 1,2-Dinitrobenzene	1	8.522	8.516	0.006	17866	0.1442	M
11 1,3,5-Trinitrobenzene	1		8.643			ND	
12 1,3-Dinitrobenzene	1		9.250			ND	U
13 Nitrobenzene	1		9.616			ND	
15 Tetryl	1		9.956			ND	
16 Nitroglycerin	2		10.410			ND	
17 2,4,6-Trinitrotoluene	1		10.843			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.010			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.256			ND	
20 2,6-Dinitrotoluene	1		11.423			ND	
21 2,4-Dinitrotoluene	1		11.590			ND	
22 o-Nitrotoluene	1	12.402	12.390	0.012	1807	0.0143	
23 p-Nitrotoluene	1		12.796			ND	
24 m-Nitrotoluene	1		13.356			ND	
25 PETN	2		14.470			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

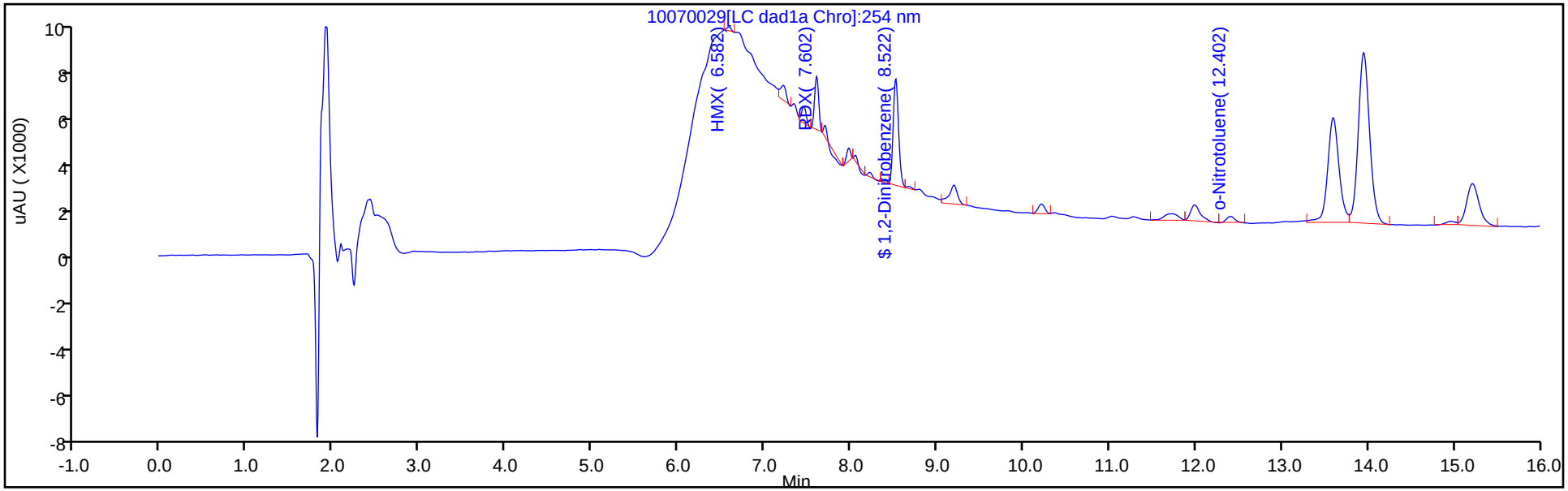
Report Date: 09-Oct-2023 11:17:02 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

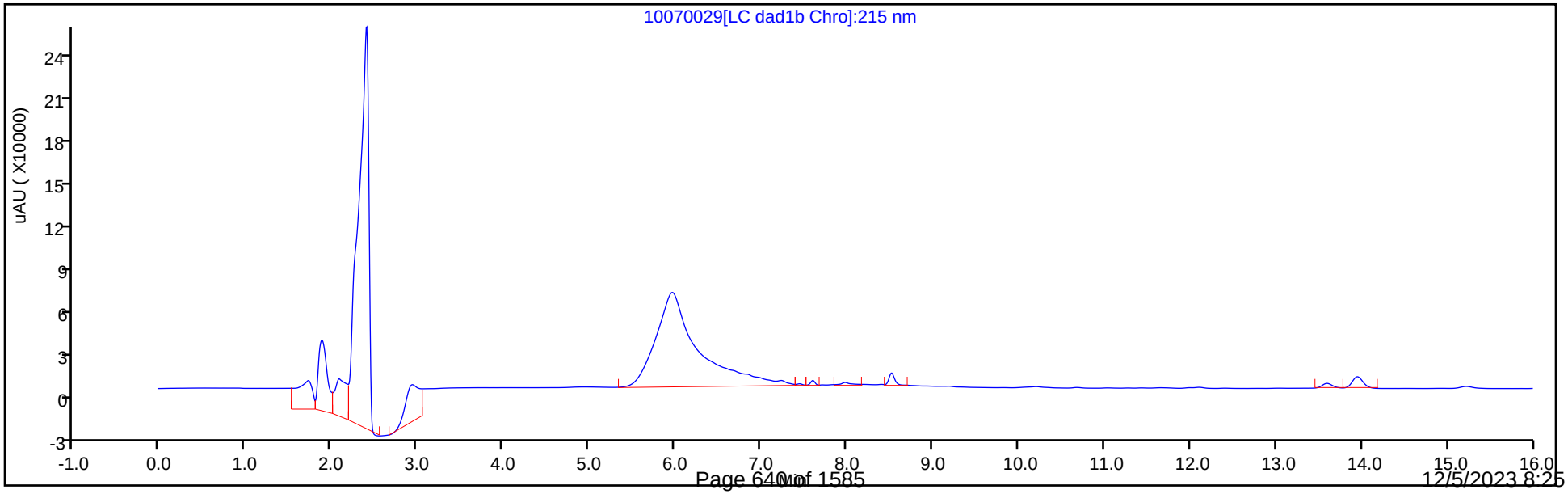
Data File: \\chromfs\denver\chromdata\chhplc_x\20231007-126276.b\10070029.d

Injection Date:	07-Oct-2023 21:52:27	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-182145-B-7-A	Lab Sample ID:	280-182145-7	Worklist Smp#:	29
Client ID:	FWGmw-021-230901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\10070029.D				
Lims ID:	280-182145-B-7-A				
Client ID:	FWGmw-021-230901-GW				
Sample Type:	Client				
Inject. Date:	07-Oct-2023 21:52:27	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-182145-B-7-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	09-Oct-2023 11:16:57	Calib Date:	24-Jun-2023 00:23:49		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1602				

First Level Reviewer: K8YG Date: 09-Oct-2023 10:59:57

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1442	72.09

Manual Integration/User Assign Peak Report

Eurofins Denver

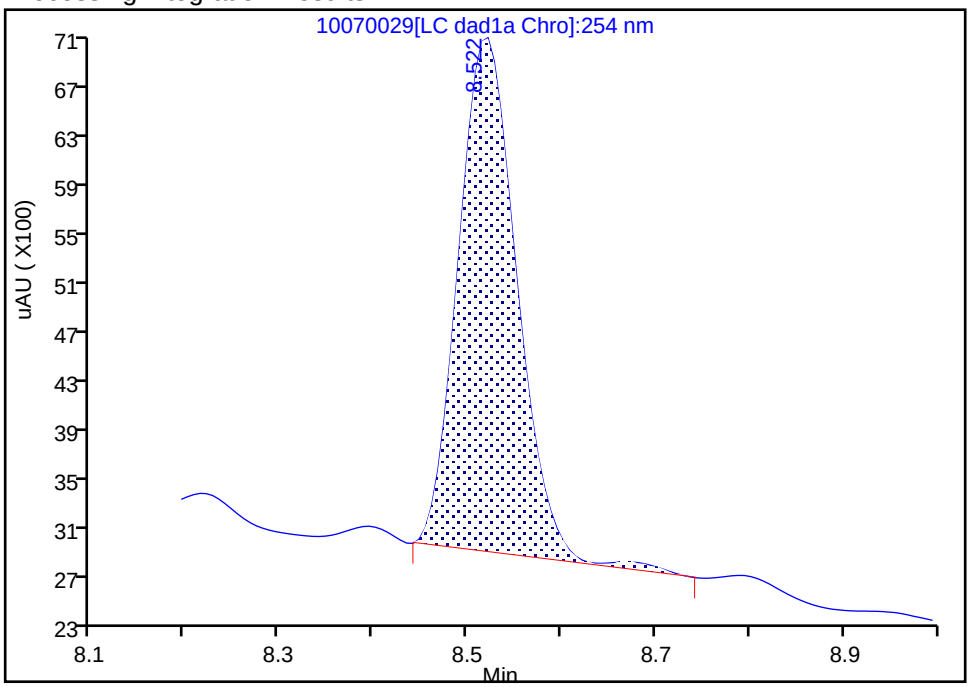
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Injection Date:	07-Oct-2023 21:52:27	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182145-B-7-A	Lab Sample ID:	280-182145-7		
Client ID:	FWGmw-021-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

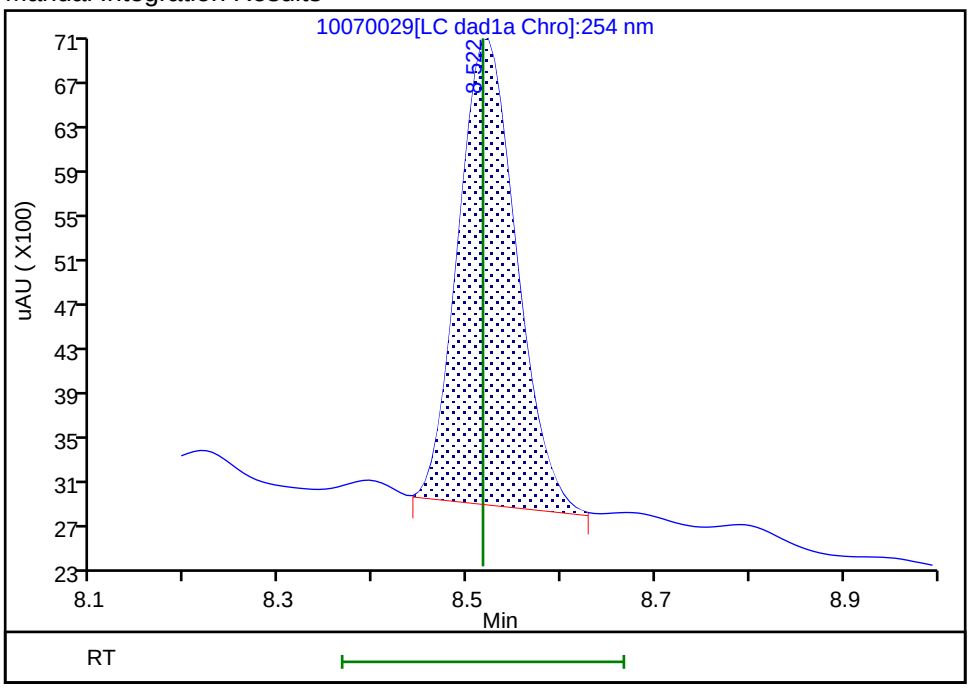
Processing Integration Results

RT: 8.52
Area: 18118
Amount: 0.146218
Amount Units: ug/mL



Manual Integration Results

RT: 8.52
Area: 17866
Amount: 0.144184
Amount Units: ug/mL



Reviewer: K8YG, 09-Oct-2023 10:59:33 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

User Disabled Compound Report

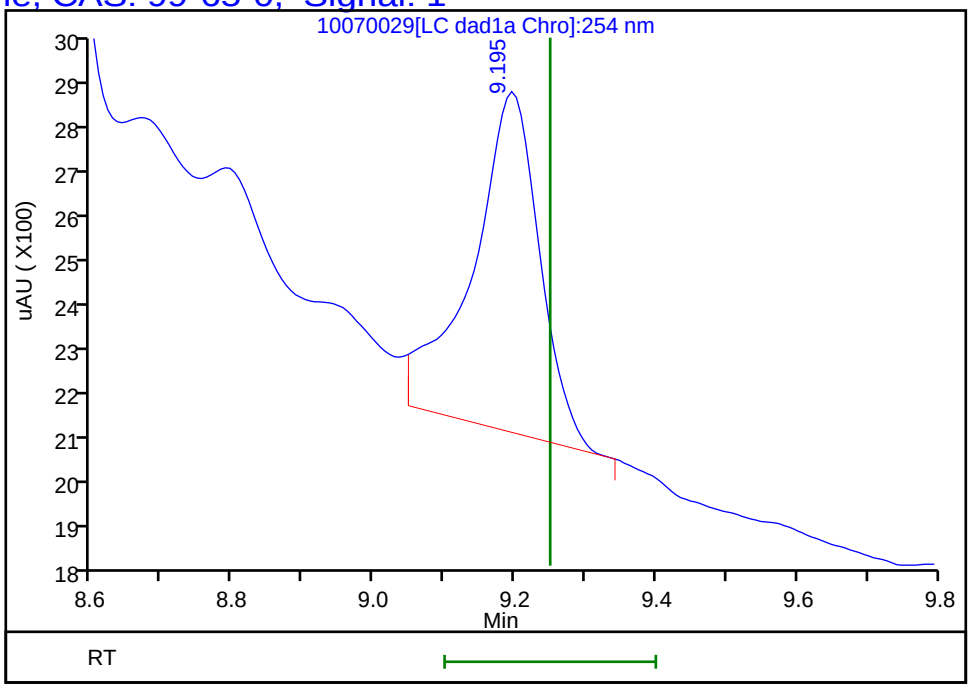
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20231007-126276.b\10070029.d
Injection Date: 07-Oct-2023 21:52:27 Instrument ID: CHHPLC_X3
Lims ID: 280-182145-B-7-A Lab Sample ID: 280-182145-7
Client ID: FWGmw-021-230901-GW
Operator ID: JZ/JG ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

12 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.20
Response: 4888
Amount: 0.016663



Reviewer: K8YG, 09-Oct-2023 10:59:57
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

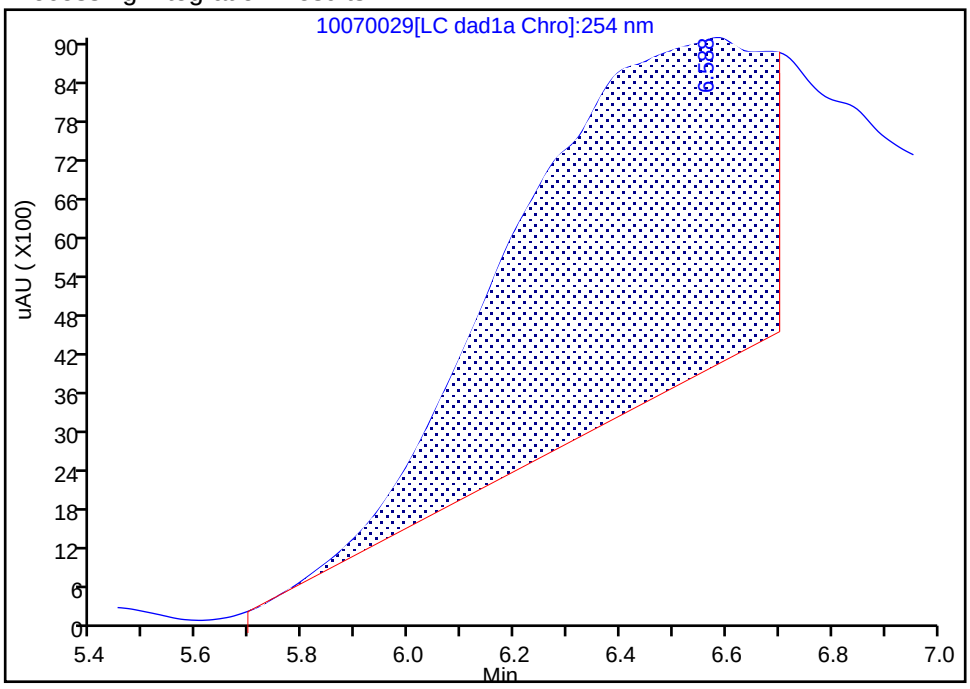
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Injection Date:	07-Oct-2023 21:52:27	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182145-B-7-A	Lab Sample ID:	280-182145-7		
Client ID:	FWGmw-021-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

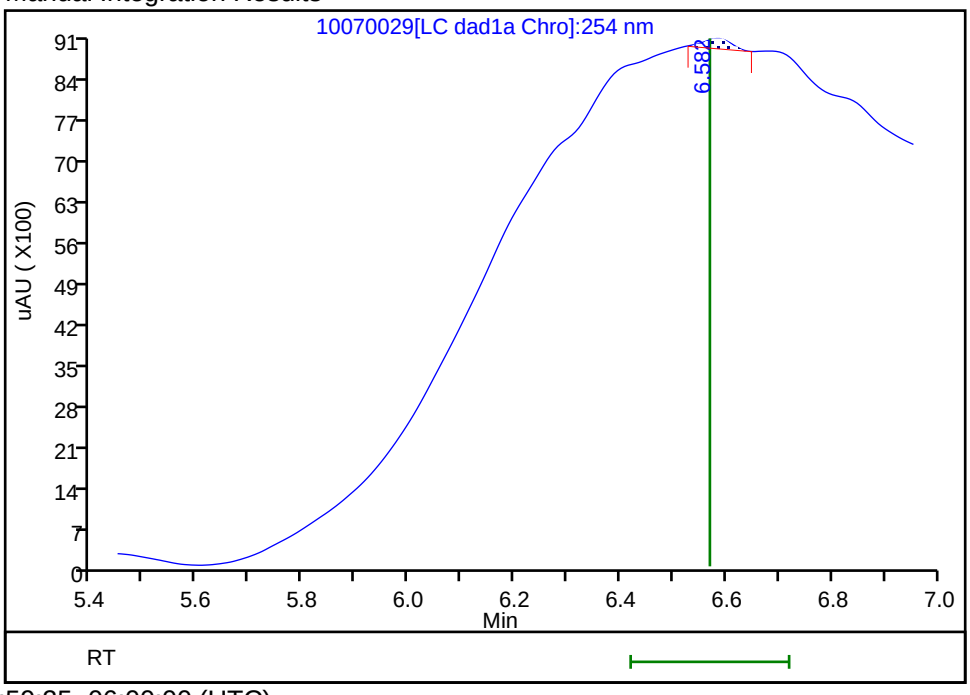
Processing Integration Results

RT: 6.59
Area: 178959
Amount: 1.898661
Amount Units: ug/mL



Manual Integration Results

RT: 6.58
Area: 605
Amount: 0.006419
Amount Units: ug/mL



Reviewer: K8YG, 09-Oct-2023 10:59:25 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Client Sample ID: FWGmw-021-230901-GW | Lab Sample ID: 280-182145-7

Matrix: Water | Lab File ID: 10100033.D

Analysis Method: 8330B | Date Collected: 09/28/2023 11:37

Extraction Method: 3535 | Date Extracted: 10/03/2023 13:12

Sample wt/vol: 493.8(mL) | Date Analyzed: 10/11/2023 07:20

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 629183 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	*1,3,5-Trinitrobenzene*	*0.20*	*U M Q*	*0.21*	0.20	*0.085*
99-65-0	*1,3-Dinitrobenzene*	*0.10*	*U M Q*	*0.11*	0.10	*0.037*
118-96-7	*2,4,6-Trinitrotoluene*	*0.10*	*U Q*	*0.11*	0.10	*0.046*
121-14-2	*2,4-Dinitrotoluene*	*0.081*	*U Q*	*0.10*	0.081	*0.028*
606-20-2	*2,6-Dinitrotoluene*	*0.081*	*U M Q*	*0.10*	0.081	*0.041*
35572-78-2	*2-Amino-4,6-dinitrotoluene*	*0.53*	*Q*	*0.11*	0.10	*0.051*
88-72-2	2-Nitrotoluene	0.20	U M Q	0.21	0.20	0.087
99-08-1	*3-Nitrotoluene*	*0.35*	*U Q*	*0.41*	0.35	*0.20*
19406-51-0	*4-Amino-2,6-dinitrotoluene*	*0.12*	*U M Q*	*0.15*	0.12	*0.058*
99-99-0	*4-Nitrotoluene*	*0.41*	*U Q*	*0.42*	0.41	*0.10*
2691-41-0	*HMX*	*0.20*	*U Q*	*0.21*	0.20	*0.089*
98-95-3	*Nitrobenzene*	*0.14*	*J Q*	*0.21*	0.20	*0.092*
55-63-0	*Nitroglycerin*	*2.0*	*U Q*	*2.1*	2.0	*0.93*
78-11-5	*PETN*	*1.0*	*U Q*	*1.1*	1.0	*0.45*
121-82-4	*RDX*	*0.36*	*Q J1*	*0.21*	0.20	*0.052*
479-45-8	*Tetryl*	*0.10*	*U Q*	*0.11*	0.10	*0.032*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	68	*Q*	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20231010-126365.b\10100033.D
Lims ID: 280-182145-B-7-A
Client ID: FWGmw-021-230901-GW
Sample Type: Client
Inject. Date: 11-Oct-2023 07:20:59 ALS Bottle#: 33 Worklist Smp#: 33
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182145-B-7-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20231010-126365.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 11-Oct-2023 11:34:21 Calib Date: 21-Sep-2023 05:55:36
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1656

First Level Reviewer: K8YG Date: 11-Oct-2023 11:33:11

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
5 HMX	1		6.813			ND	
8 RDX	1	9.207	9.107	0.100	7907	0.0359	
9 Nitrobenzene	1	11.747	11.680	0.067	5373	0.0140	
$ 10 1,2-Dinitrobenzene	1	12.660	12.653	0.007	36125	0.1354	
12 1,3-Dinitrobenzene	1		14.773			ND	U
13 Nitroglycerin	2		15.326			ND	
14 o-Nitrotoluene	1		15.913			ND	U
16 p-Nitrotoluene	1		16.140			ND	
17 4-Amino-2,6-dinitrotoluene	1		16.660			ND	U
18 m-Nitrotoluene	1		16.993			ND	
19 2-Amino-4,6-dinitrotoluene	1	17.447	17.500	-0.053	20398	0.0521	
20 1,3,5-Trinitrobenzene	1		17.560			ND	U
21 2,6-Dinitrotoluene	1		18.800			ND	U
22 2,4-Dinitrotoluene	1		19.253			ND	
23 Tetryl	1		22.593			ND	
24 2,4,6-Trinitrotoluene	1		23.420			ND	
25 PETN	2		24.727			ND	

QC Flag Legend

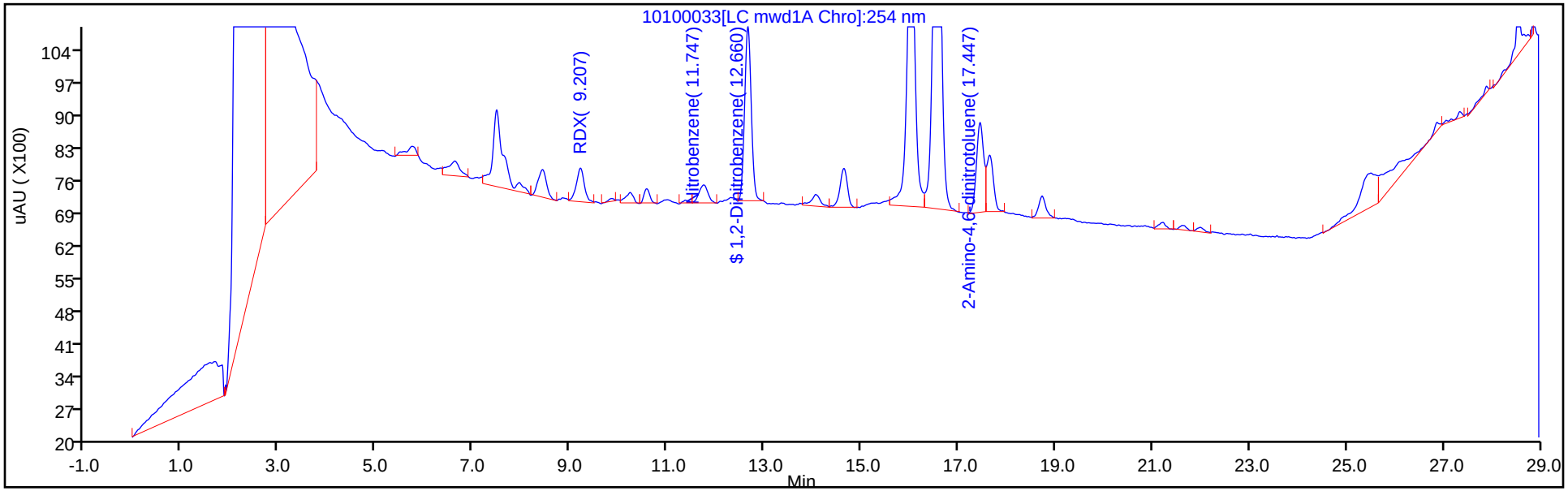
Processing Flags
Review Flags
U - Marked Undetected

Report Date: 11-Oct-2023 11:34:24 Chrom Revision: 2.3 22-Sep-2023 11:33:50

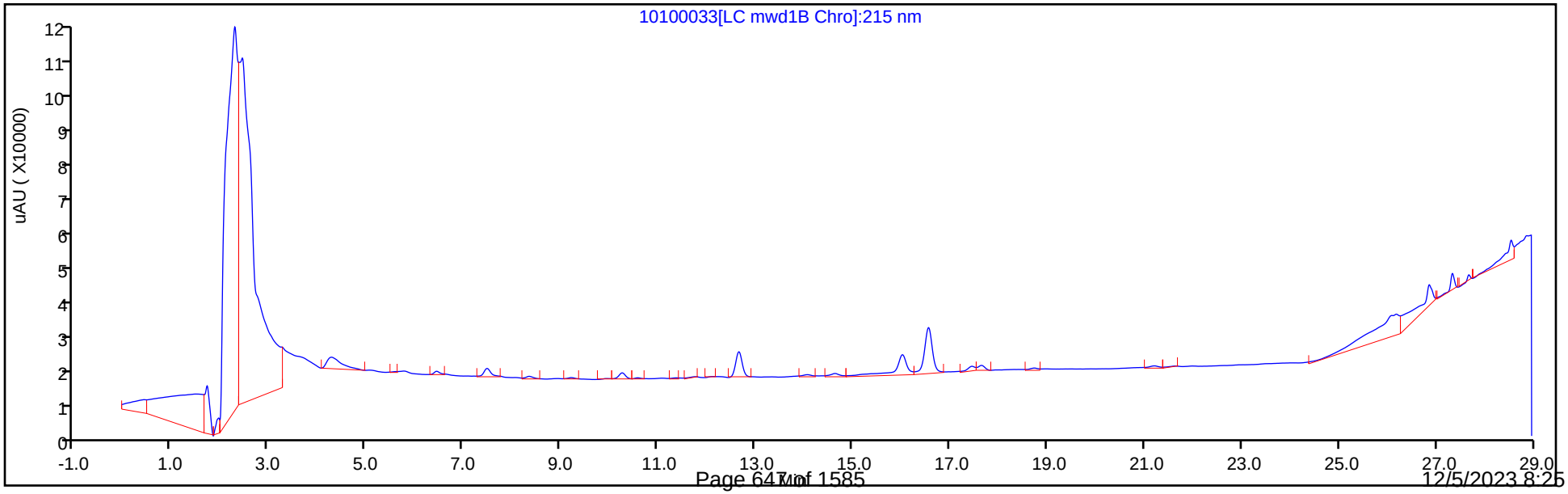
Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20231010-126365.b\10100033.D				
Injection Date:	11-Oct-2023 07:20:59	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	280-182145-B-7-A	Lab Sample ID:	280-182145-7	Worklist Smp#:	33
Client ID:	FWGmw-021-230901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	33
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20231010-126365.b\10100033.D				
Lims ID:	280-182145-B-7-A				
Client ID:	FWGmw-021-230901-GW				
Sample Type:	Client				
Inject. Date:	11-Oct-2023 07:20:59	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-182145-B-7-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20231010-126365.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	11-Oct-2023 11:34:21	Calib Date:	21-Sep-2023 05:55:36		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1656				

First Level Reviewer: K8YG Date: 11-Oct-2023 11:33:11

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1354	67.72

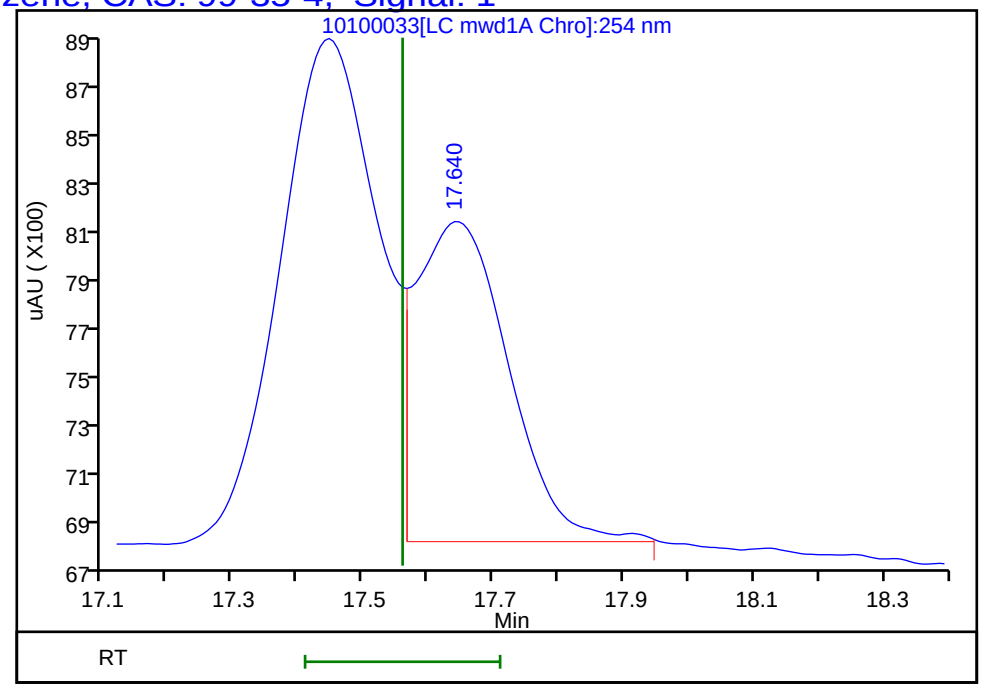
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20231010-126365.b\10100033.D				
Injection Date:	11-Oct-2023 07:20:59	Instrument ID:	CHHPLC_X5		
Lims ID:	280-182145-B-7-A	Lab Sample ID:	280-182145-7		
Client ID:	FWGmw-021-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4, Signal: 1

RT: 17.64
Response: 12029
Amount: 0.030164



Reviewer: K8YG, 11-Oct-2023 11:33:11
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

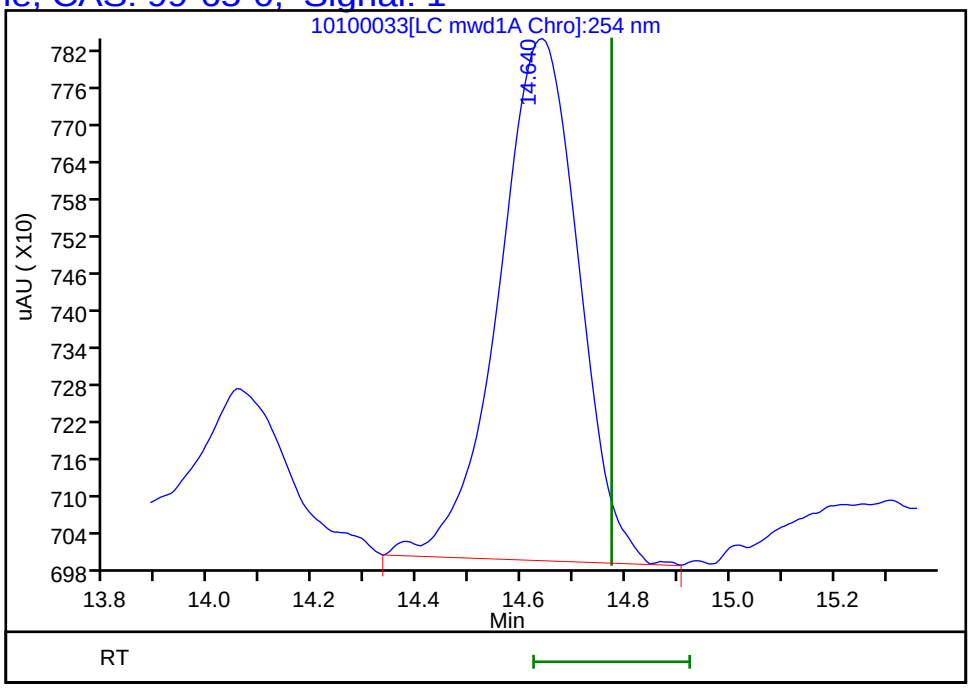
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20231010-126365.b\10100033.D				
Injection Date:	11-Oct-2023 07:20:59	Instrument ID:	CHHPLC_X5		
Lims ID:	280-182145-B-7-A	Lab Sample ID:	280-182145-7		
Client ID:	FWGmw-021-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 14.64
Response: 8937
Amount: 0.015265



Reviewer: K8YG, 11-Oct-2023 11:33:11
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

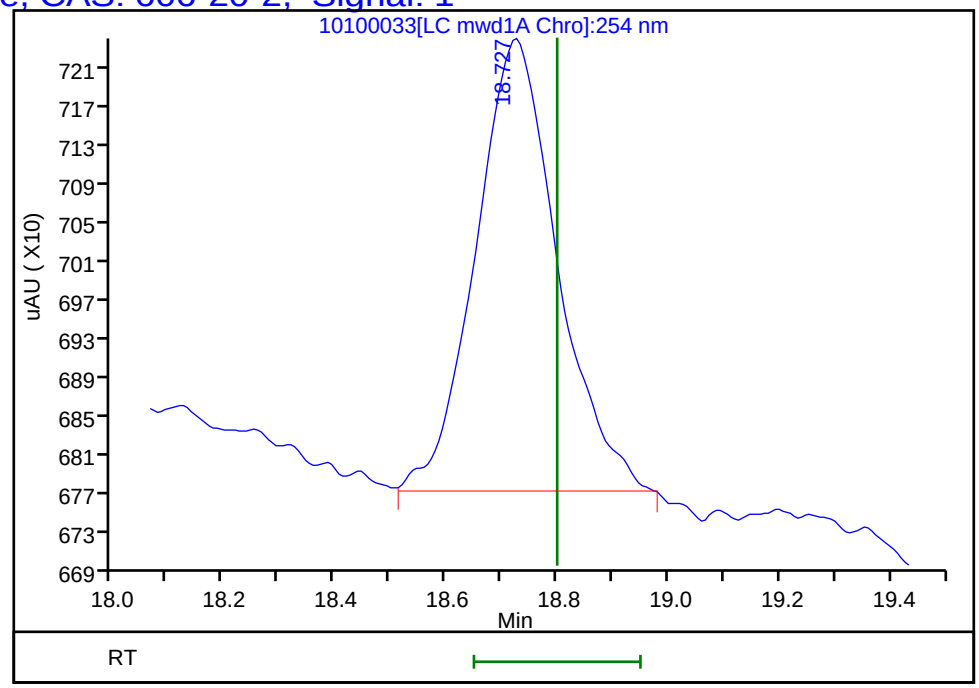
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20231010-126365.b\10100033.D				
Injection Date:	11-Oct-2023 07:20:59	Instrument ID:	CHHPLC_X5		
Lims ID:	280-182145-B-7-A	Lab Sample ID:	280-182145-7		
Client ID:	FWGmw-021-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

21 2,6-Dinitrotoluene, CAS: 606-20-2, Signal: 1

RT: 18.73
Response: 4716
Amount: 0.017195



Reviewer: K8YG, 11-Oct-2023 11:33:11
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

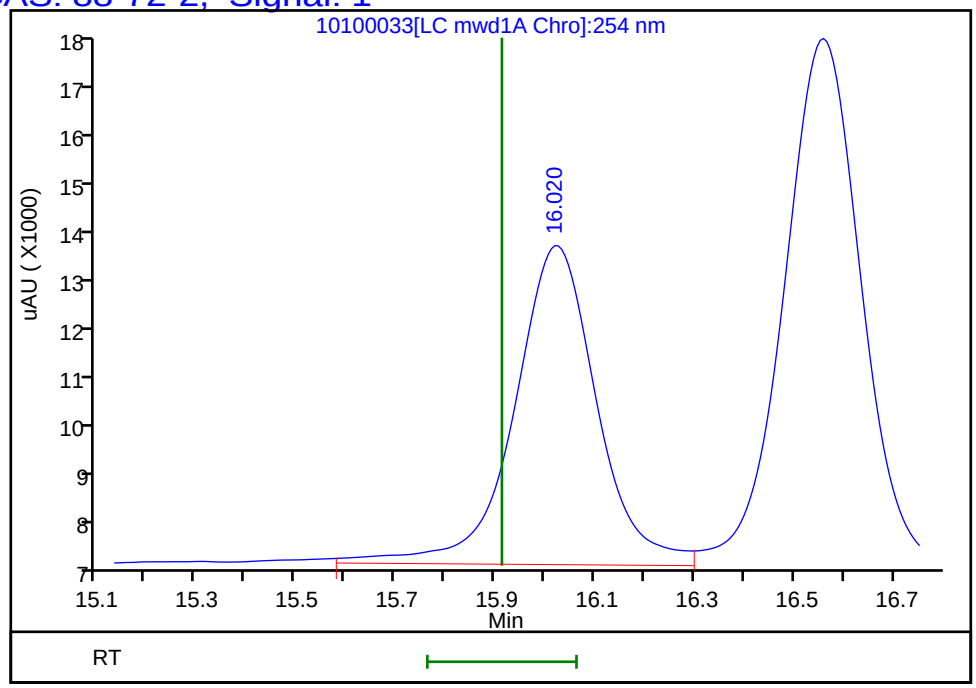
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20231010-126365.b\10100033.D				
Injection Date:	11-Oct-2023 07:20:59	Instrument ID:	CHHPLC_X5		
Lims ID:	280-182145-B-7-A	Lab Sample ID:	280-182145-7		
Client ID:	FWGmw-021-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 16.02
Response: 73341
Amount: 0.308680



Reviewer: K8YG, 11-Oct-2023 11:33:11
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

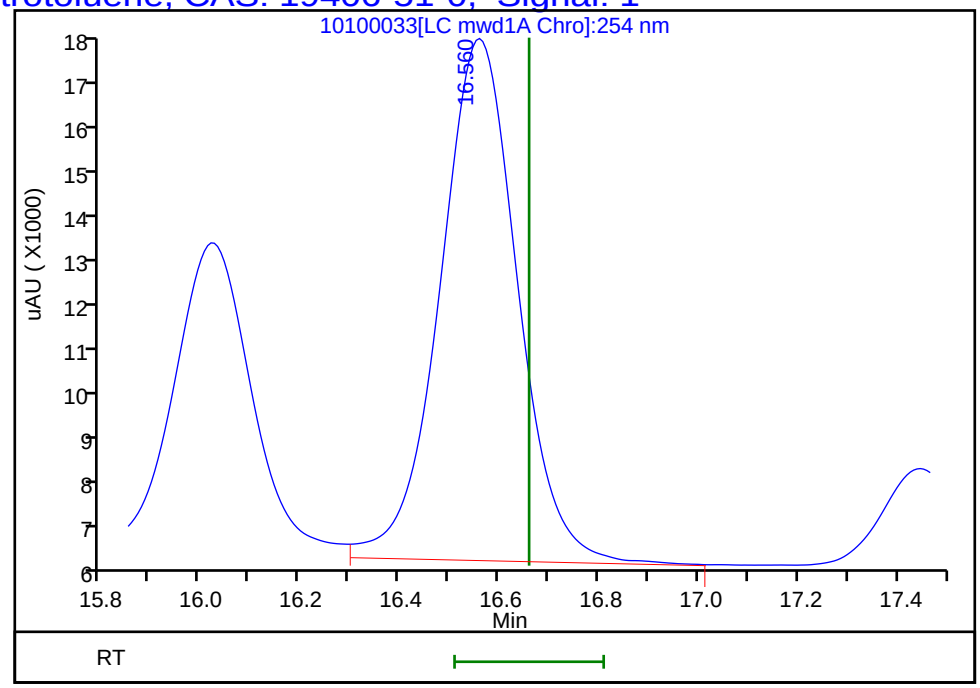
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20231010-126365.b\10100033.D				
Injection Date:	11-Oct-2023 07:20:59	Instrument ID:	CHHPLC_X5		
Lims ID:	280-182145-B-7-A	Lab Sample ID:	280-182145-7		
Client ID:	FWGmw-021-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 16.56
Response: 113932
Amount: 0.418813



Reviewer: K8YG, 11-Oct-2023 11:33:11
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Client Sample ID: FWGmw-021-230901-GW RE | Lab Sample ID: 280-182145-7 RE

Matrix: Water | Lab File ID: 10130039.D

Analysis Method: 8330B | Date Collected: 09/28/2023 11:37

Extraction Method: 3535 | Date Extracted: 10/12/2023 14:54

Sample wt/vol: 485.6(mL) | Date Analyzed: 10/14/2023 02:02

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 629672 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	*1,3,5-Trinitrobenzene*	*0.21*	*U M H*	*0.22*	0.21	*0.087*
99-65-0	*1,3-Dinitrobenzene*	*0.10*	*U M H*	*0.11*	0.10	*0.038*
118-96-7	*2,4,6-Trinitrotoluene*	*0.10*	*U H*	*0.11*	0.10	*0.046*
121-14-2	*2,4-Dinitrotoluene*	*0.082*	*U H Q*	*0.10*	0.082	*0.028*
606-20-2	*2,6-Dinitrotoluene*	*0.082*	*U H Q*	*0.10*	0.082	*0.041*
35572-78-2	*2-Amino-4,6-dinitrotoluene*	*0.10*	*U H Q*	*0.11*	0.10	*0.052*
88-72-2	*2-Nitrotoluene*	*0.21*	*U H Q*	*0.22*	0.21	*0.088*
99-08-1	*3-Nitrotoluene*	*0.36*	*U H Q*	*0.41*	0.36	*0.20*
19406-51-0	*4-Amino-2,6-dinitrotoluene*	*0.12*	*U H Q*	*0.15*	0.12	*0.059*
99-99-0	*4-Nitrotoluene*	*0.41*	*U H Q*	*0.42*	0.41	*0.10*
2691-41-0	*HMX*	*0.11*	*J M H*	*0.22*	0.21	*0.090*
98-95-3	*Nitrobenzene*	*0.21*	*U H*	*0.22*	0.21	*0.094*
55-63-0	*Nitroglycerin*	*2.1*	*U H*	*2.2*	2.1	*0.95*
78-11-5	*PETN*	*1.0*	*U H*	*1.1*	1.0	*0.46*
121-82-4	*RDX*	*0.22*	*M H*	*0.22*	0.21	*0.053*
479-45-8	*Tetryl*	*0.10*	*U H*	*0.11*	0.10	*0.033*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	101	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\10130039.D
Lims ID: 280-182145-A-7-A
Client ID: FWGmw-021-230901-GW
Sample Type: Client
Inject. Date: 14-Oct-2023 02:02:57 ALS Bottle#: 39 Worklist Smp#: 39
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182145-A-7-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-Oct-2023 11:08:50 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1675

First Level Reviewer: K8YG Date: 16-Oct-2023 10:58:19

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.564	6.577	-0.013	1050	0.0111	M
8 RDX	1	7.598	7.584	0.014	2360	0.0214	M
$ 10 1,2-Dinitrobenzene	1	8.518	8.524	-0.006	24907	0.2010	M
11 1,3,5-Trinitrobenzene	1		8.650			ND	U
12 1,3-Dinitrobenzene	1		9.264			ND	U
13 Nitrobenzene	1		9.630			ND	
15 Tetryl	1		9.984			ND	
16 Nitroglycerin	2		10.430			ND	
17 2,4,6-Trinitrotoluene	1		10.870			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.044			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.297			ND	7
20 2,6-Dinitrotoluene	1		11.457			ND	
21 2,4-Dinitrotoluene	1		11.624			ND	
22 o-Nitrotoluene	1		12.430			ND	7
23 p-Nitrotoluene	1		12.844			ND	
24 m-Nitrotoluene	1		13.404			ND	
25 PETN	2		14.537			ND	

QC Flag Legend

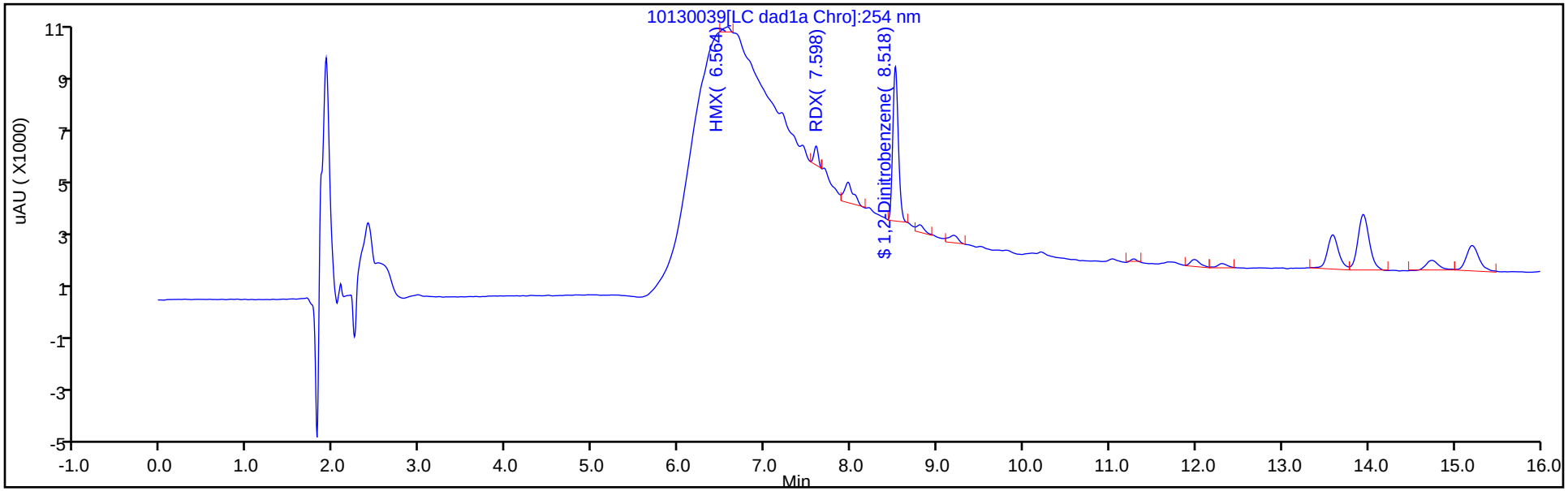
Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 16-Oct-2023 11:09:17 Chrom Revision: 2.3 22-Sep-2023 11:33:50

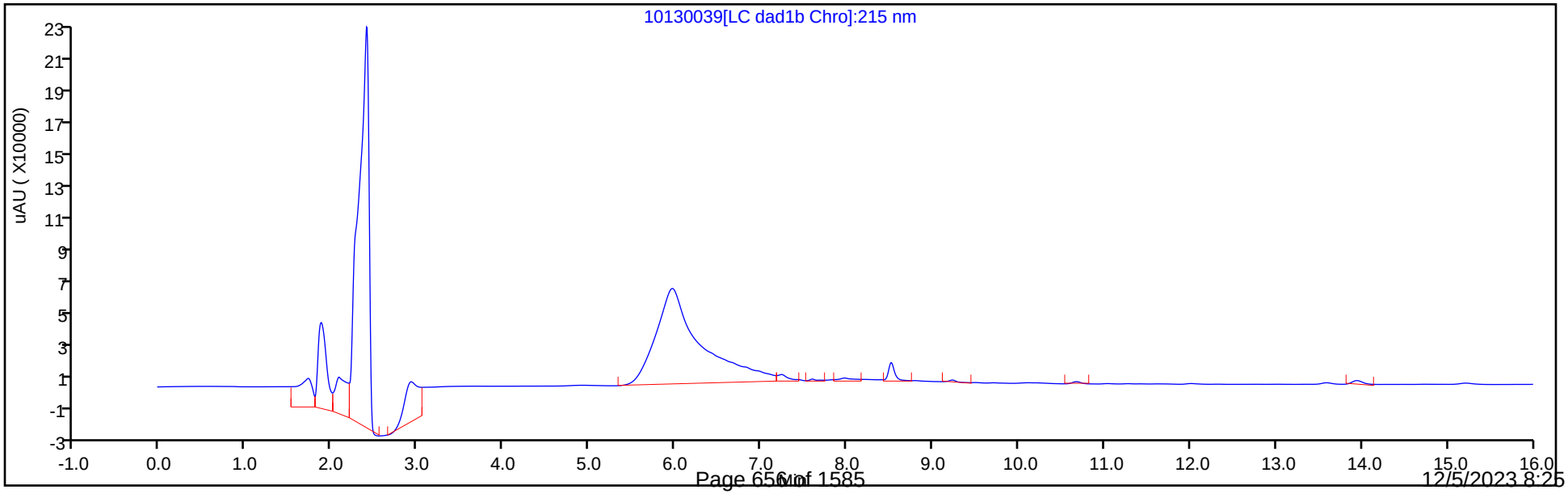
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20231013-126501.b\10130039.d				
Injection Date:	14-Oct-2023 02:02:57	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-182145-A-7-A	Lab Sample ID:	280-182145-7	Worklist Smp#:	39
Client ID:	FWGmw-021-230901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	39
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\10130039.D				
Lims ID:	280-182145-A-7-A				
Client ID:	FWGmw-021-230901-GW				
Sample Type:	Client				
Inject. Date:	14-Oct-2023 02:02:57	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-182145-A-7-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-Oct-2023 11:08:50	Calib Date:	24-Jun-2023 00:23:49		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1675				

First Level Reviewer: K8YG Date: 16-Oct-2023 10:58:19

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2010	100.50

Manual Integration/User Assign Peak Report

Eurofins Denver

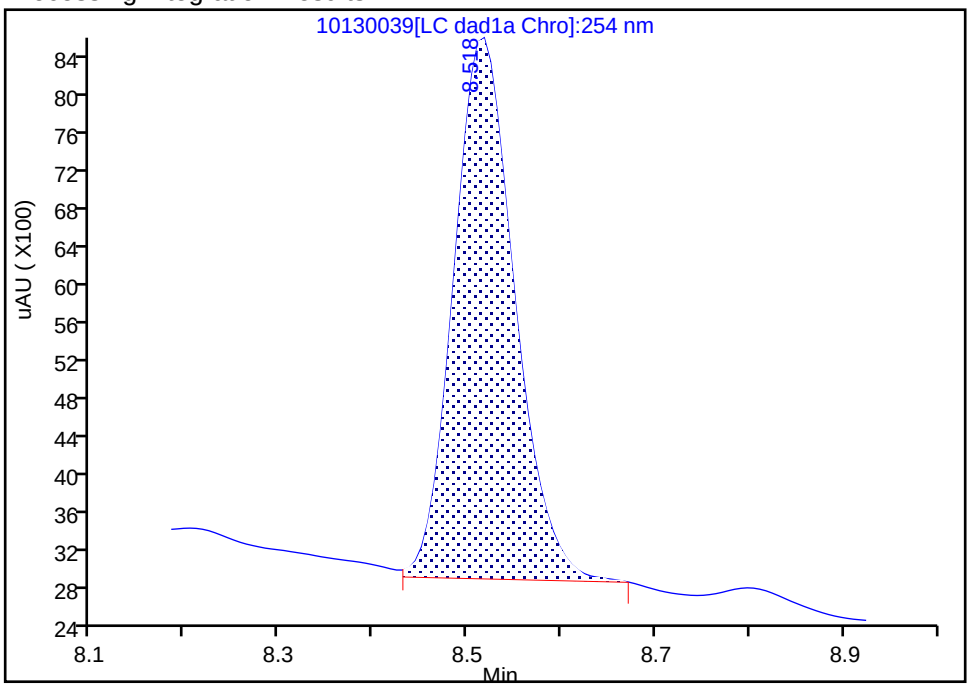
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231013-126501.b\10130039.d				
Injection Date:	14-Oct-2023 02:02:57	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182145-A-7-A	Lab Sample ID:	280-182145-7		
Client ID:	FWGmw-021-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

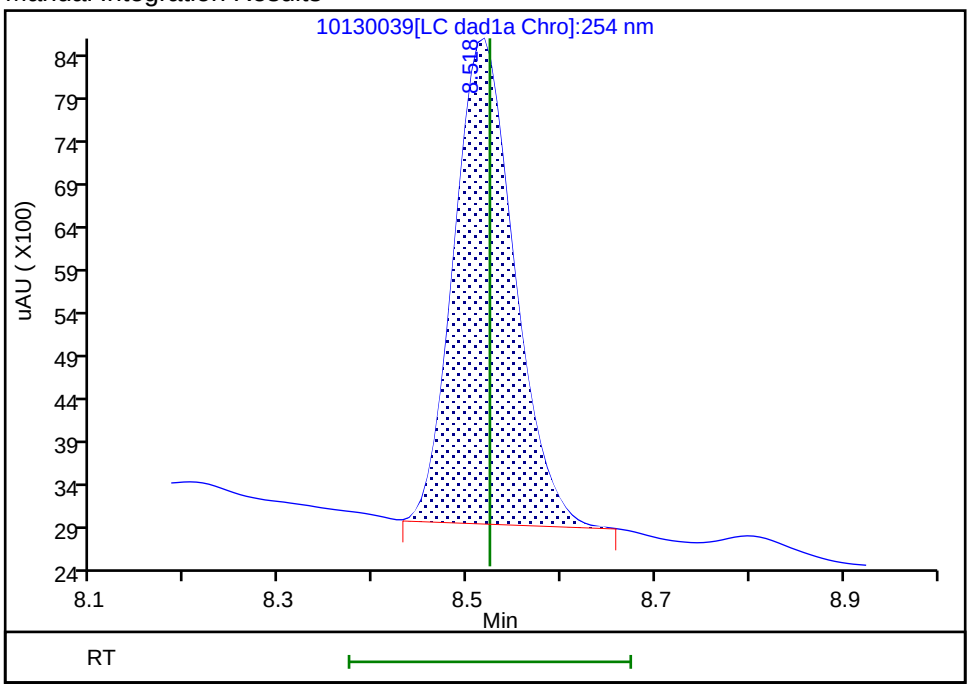
Processing Integration Results

RT: 8.52
Area: 25477
Amount: 0.205607
Amount Units: ug/mL



Manual Integration Results

RT: 8.52
Area: 24907
Amount: 0.201007
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 10:58:11 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

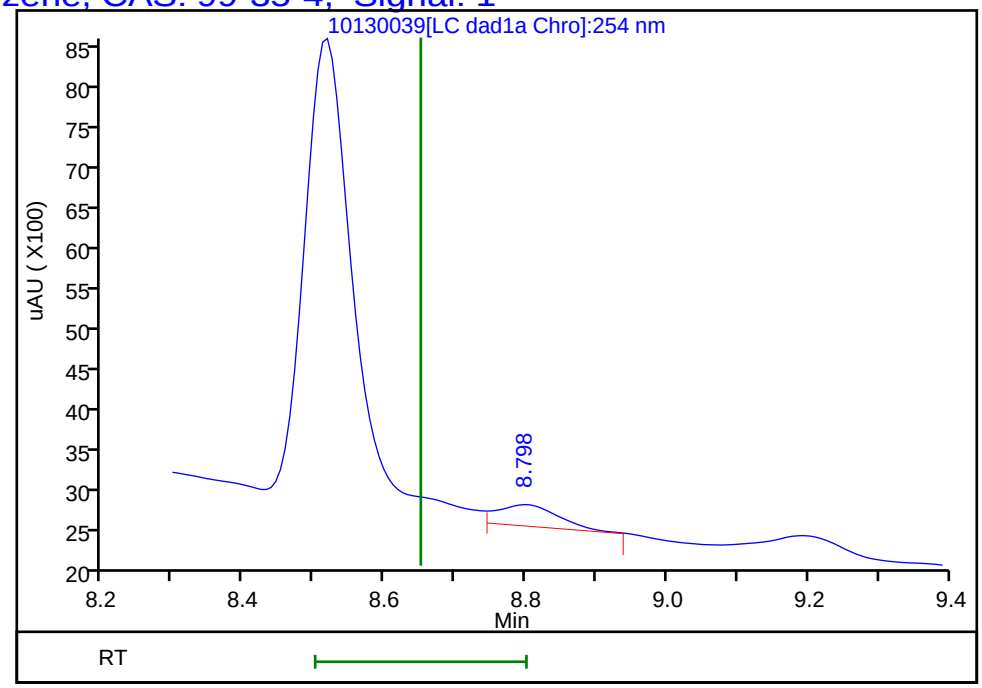
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20231013-126501.b\10130039.d				
Injection Date:	14-Oct-2023 02:02:57	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182145-A-7-A	Lab Sample ID:	280-182145-7		
Client ID:	FWGmw-021-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3,5-Trinitrobenzene, CAS: 99-35-4, Signal: 1

RT: 8.80
Response: 1456
Amount: 0.006738



Reviewer: K8YG, 16-Oct-2023 10:58:19
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

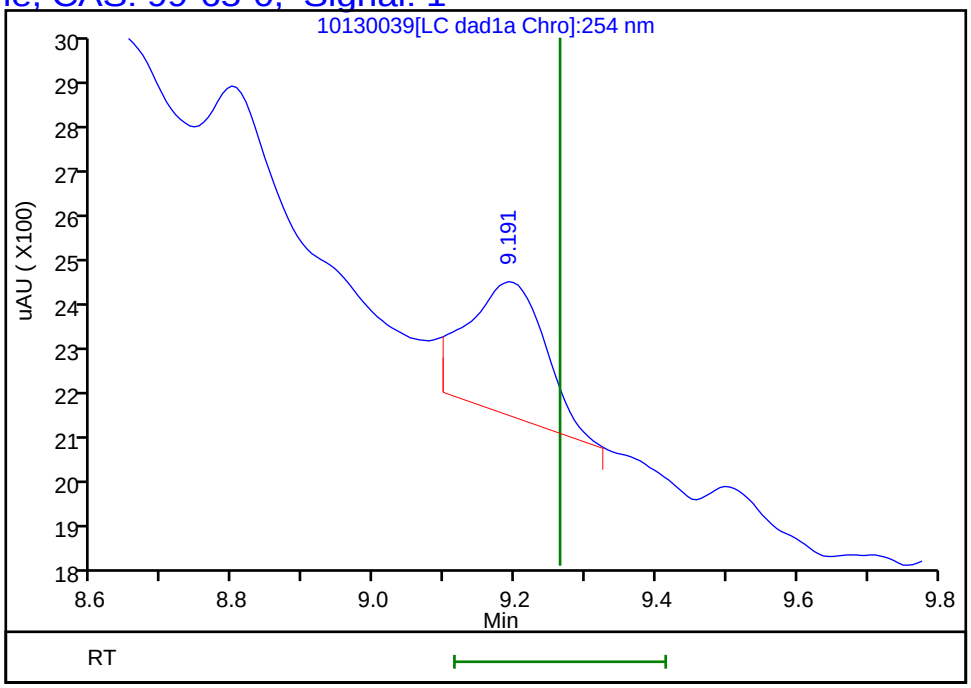
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20231013-126501.b\10130039.d
Injection Date: 14-Oct-2023 02:02:57 Instrument ID: CHHPLC_X3
Lims ID: 280-182145-A-7-A Lab Sample ID: 280-182145-7
Client ID: FWGmw-021-230901-GW
Operator ID: JZ/JG ALS Bottle#: 39 Worklist Smp#: 39
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

12 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.19
Response: 1970
Amount: 0.006716



Reviewer: K8YG, 16-Oct-2023 10:58:19
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

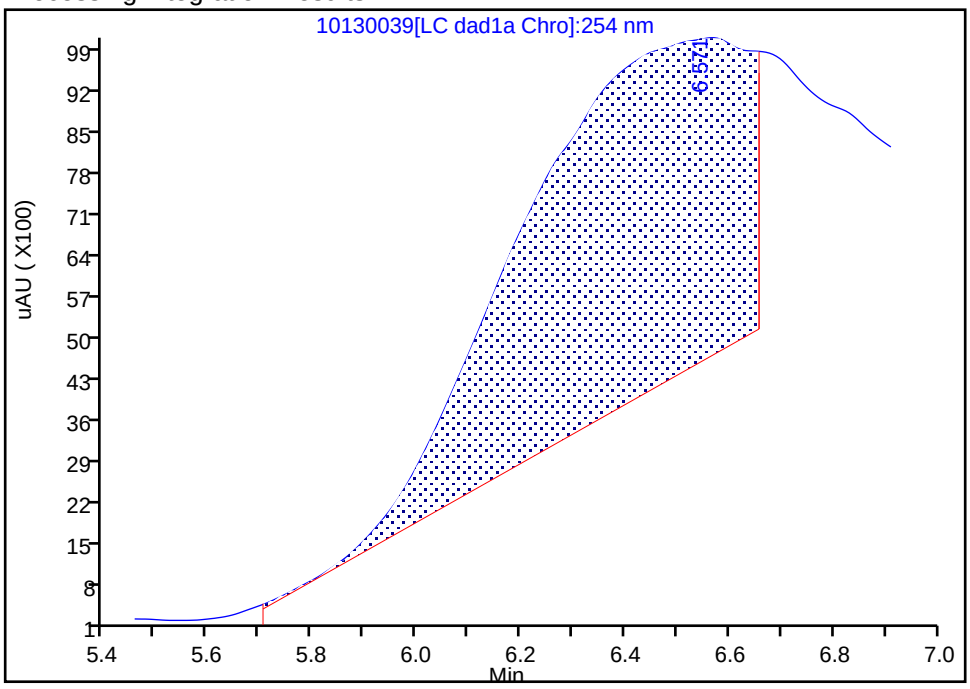
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231013-126501.b\10130039.d				
Injection Date:	14-Oct-2023 02:02:57	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182145-A-7-A	Lab Sample ID:	280-182145-7		
Client ID:	FWGmw-021-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

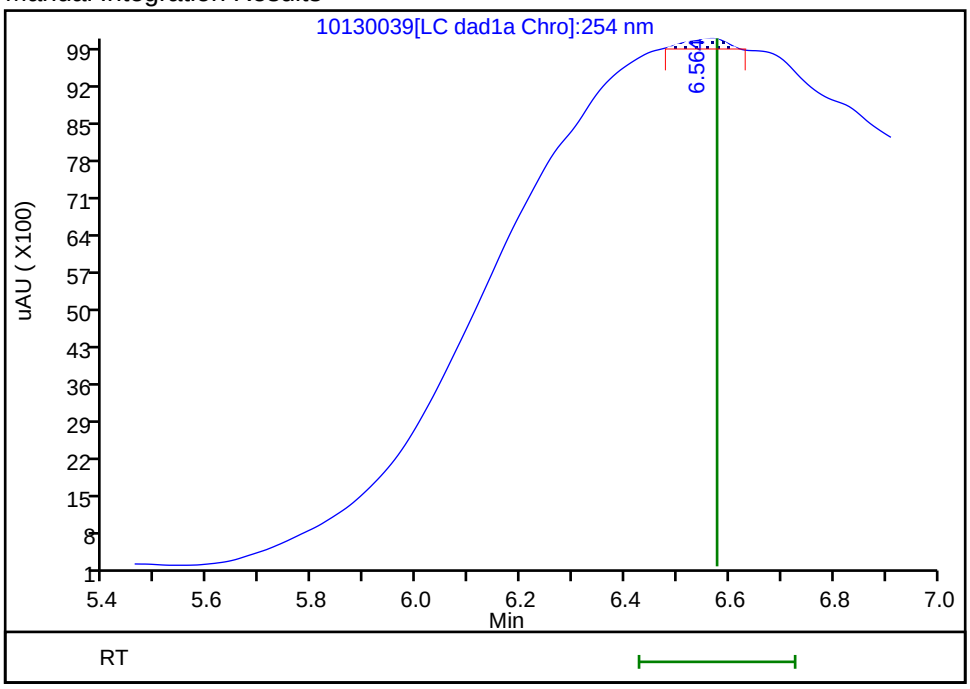
Processing Integration Results

RT: 6.57
Area: 175121
Amount: 1.857942
Amount Units: ug/mL



Manual Integration Results

RT: 6.56
Area: 1050
Amount: 0.011140
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 10:57:28 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

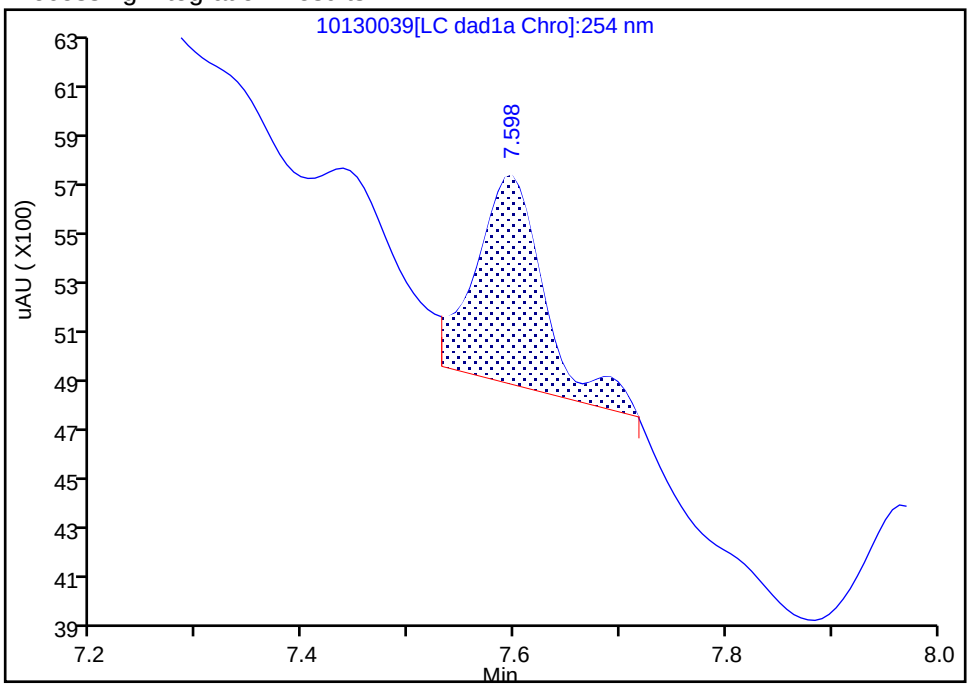
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231013-126501.b\10130039.d				
Injection Date:	14-Oct-2023 02:02:57	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182145-A-7-A	Lab Sample ID:	280-182145-7		
Client ID:	FWGmw-021-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

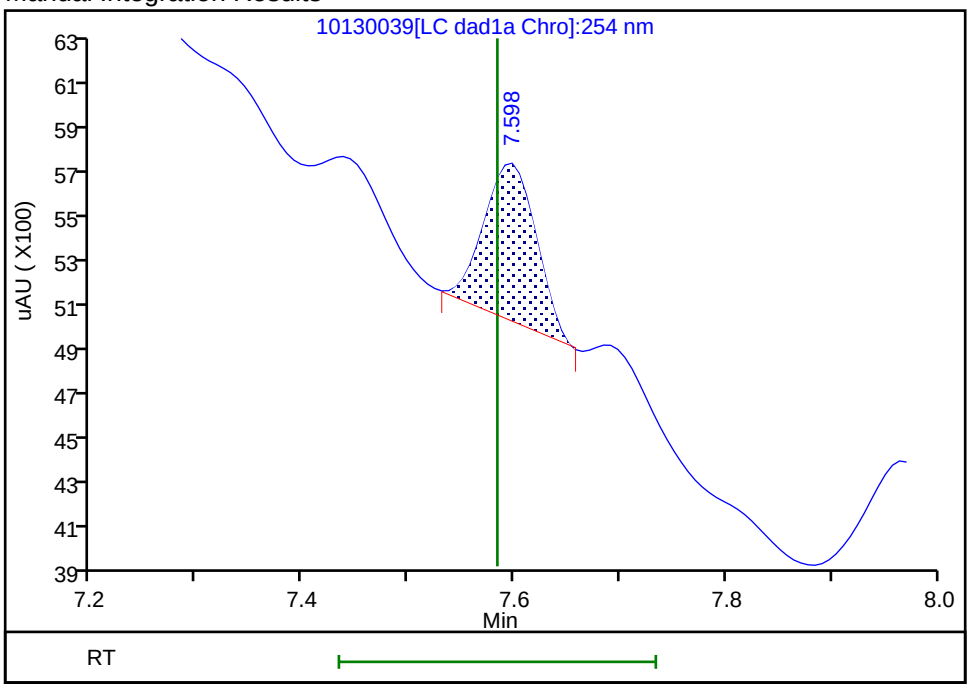
Processing Integration Results

RT: 7.60
Area: 3812
Amount: 0.034500
Amount Units: ug/mL



Manual Integration Results

RT: 7.60
Area: 2360
Amount: 0.021359
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 10:57:48 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Client Sample ID: FWGmw-021-230901-GW RE | Lab Sample ID: 280-182145-7 RE

Matrix: Water | Lab File ID: 10130031.D

Analysis Method: 8330B | Date Collected: 09/28/2023 11:37

Extraction Method: 3535 | Date Extracted: 10/12/2023 14:54

Sample wt/vol: 485.6(mL) | Date Analyzed: 10/14/2023 06:00

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 629682 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	*1,3,5-Trinitrobenzene*	*0.21*	*U H*	*0.22*	0.21	*0.087*
99-65-0	*1,3-Dinitrobenzene*	*0.10*	*U H M*	*0.11*	0.10	*0.038*
118-96-7	*2,4,6-Trinitrotoluene*	*0.10*	*U H*	*0.11*	0.10	*0.046*
121-14-2	*2,4-Dinitrotoluene*	*0.082*	*U H Q*	*0.10*	0.082	*0.028*
606-20-2	*2,6-Dinitrotoluene*	*0.082*	*U H Q*	*0.10*	0.082	*0.041*
35572-78-2	*2-Amino-4,6-dinitrotoluene*	*0.35*	*H M*	*0.11*	0.10	*0.052*
88-72-2	*2-Nitrotoluene*	*0.21*	*U H Q*	*0.22*	0.21	*0.088*
99-08-1	*3-Nitrotoluene*	*0.36*	*U H Q*	*0.41*	0.36	*0.20*
19406-51-0	*4-Amino-2,6-dinitrotoluene*	*0.12*	*U H M*	*0.15*	0.12	*0.059*
99-99-0	*4-Nitrotoluene*	*0.41*	*U H Q M*	*0.42*	0.41	*0.10*
2691-41-0	*HMX*	*0.21*	*U H*	*0.22*	0.21	*0.090*
98-95-3	*Nitrobenzene*	*0.21*	*U H*	*0.22*	0.21	*0.094*
55-63-0	*Nitroglycerin*	*2.1*	*U H*	*2.2*	2.1	*0.95*
78-11-5	*PETN*	*1.0*	*U H*	*1.1*	1.0	*0.46*
121-82-4	*RDX*	*0.21*	*U H M*	*0.22*	0.21	*0.053*
479-45-8	*Tetryl*	*0.10*	*U H*	*0.11*	0.10	*0.033*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	95		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20231013-126503.b\10130031.D
Lims ID: 280-182145-A-7-A
Client ID: FWGmw-021-230901-GW
Sample Type: Client
Inject. Date: 14-Oct-2023 06:00:26 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182145-A-7-A
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20231013-126503.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 16-Oct-2023 11:53:19 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1675

First Level Reviewer: K8YG Date: 16-Oct-2023 11:50:33

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1		6.830			ND	
8 RDX	1		9.077			ND	U
9 Nitrobenzene	1		11.650			ND	7
$ 10 1,2-Dinitrobenzene	1	12.646	12.617	0.029	48679	0.1896	
12 1,3-Dinitrobenzene	1		14.757			ND	U
13 Nitroglycerin	2		15.223			ND	
14 o-Nitrotoluene	1		15.850			ND	
15 p-Nitrotoluene	1		16.077			ND	U
16 4-Amino-2,6-dinitrotoluene	1		16.603			ND	U
17 m-Nitrotoluene	1		16.923			ND	
18 2-Amino-4,6-dinitrotoluene	1	17.393	17.423	-0.030	14141	0.0338	M
19 1,3,5-Trinitrobenzene	1		17.583			ND	
20 2,6-Dinitrotoluene	1		18.743			ND	7
21 2,4-Dinitrotoluene	1		19.197			ND	
22 Tetryl	1		22.477			ND	
23 2,4,6-Trinitrotoluene	1		23.330			ND	
24 PETN	2		24.517			ND	

QC Flag Legend

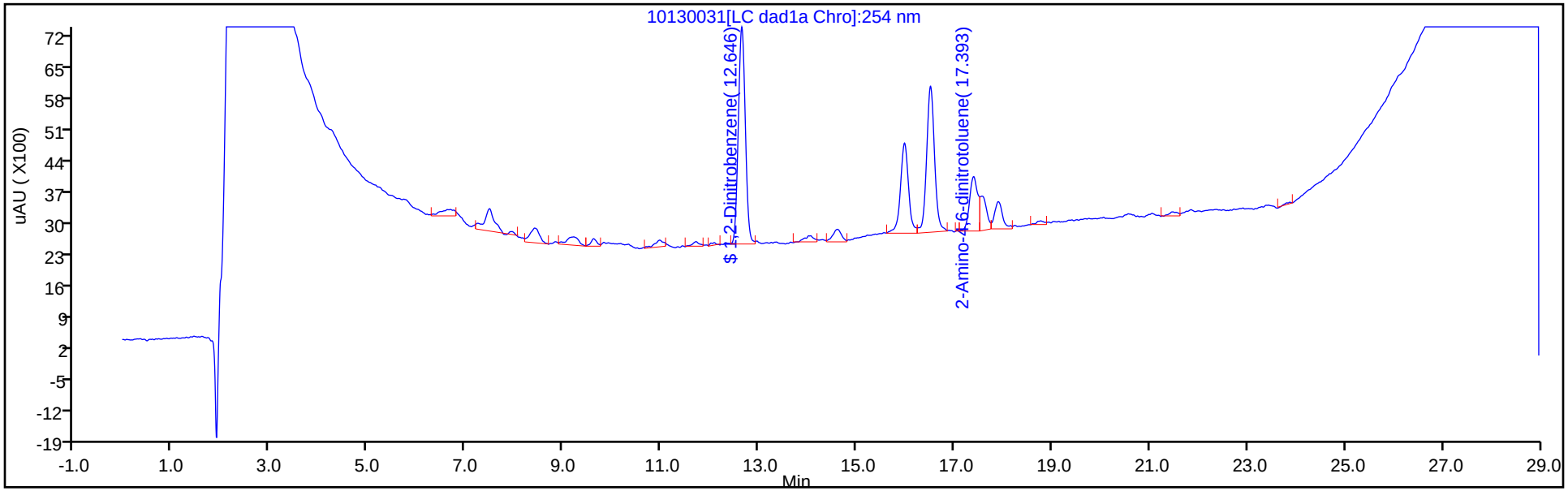
Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 16-Oct-2023 11:53:20 Chrom Revision: 2.3 22-Sep-2023 11:33:50

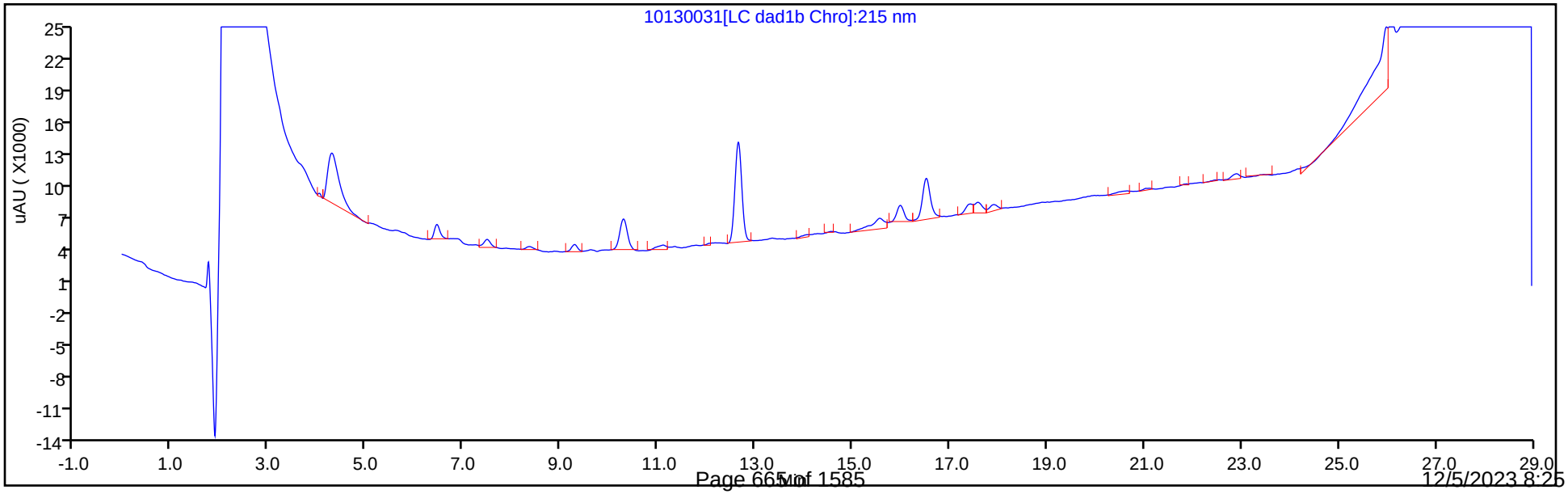
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20231013-126503.b\10130031.d				
Injection Date:	14-Oct-2023 06:00:26	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	280-182145-A-7-A	Lab Sample ID:	280-182145-7	Worklist Smp#:	31
Client ID:	FWGmw-021-230901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20231013-126503.b\10130031.D
Lims ID: 280-182145-A-7-A
Client ID: FWGmw-021-230901-GW
Sample Type: Client
Inject. Date: 14-Oct-2023 06:00:26 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182145-A-7-A
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20231013-126503.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 16-Oct-2023 11:53:19 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1675

First Level Reviewer: K8YG Date: 16-Oct-2023 11:50:33

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1896	94.79

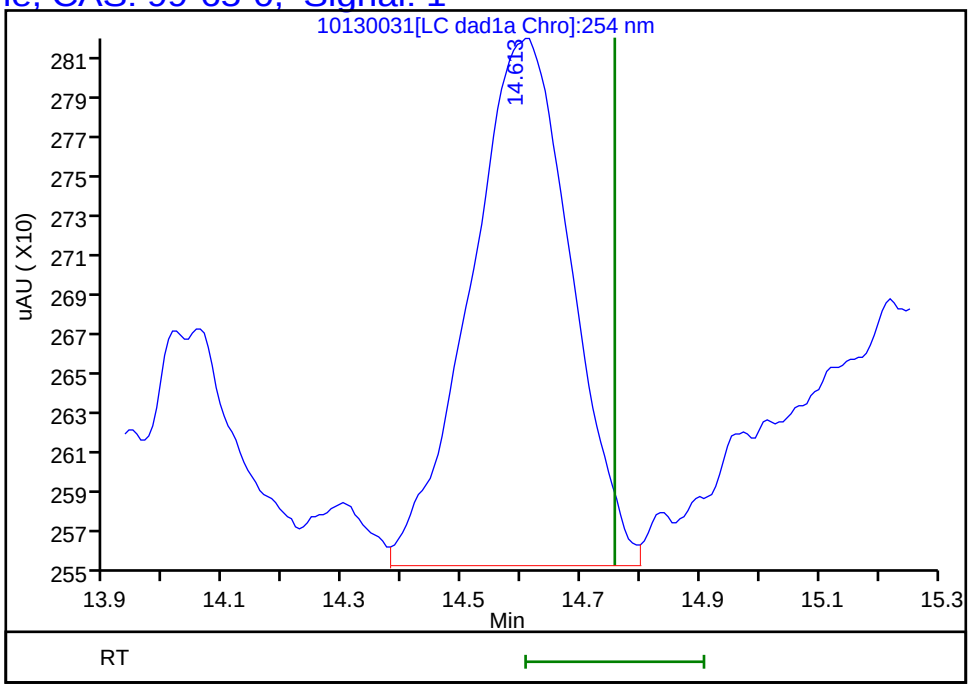
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20231013-126503.b\10130031.d				
Injection Date:	14-Oct-2023 06:00:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182145-A-7-A	Lab Sample ID:	280-182145-7		
Client ID:	FWGmw-021-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 14.61
Response: 3070
Amount: 0.005297



Reviewer: K8YG, 16-Oct-2023 11:50:33
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

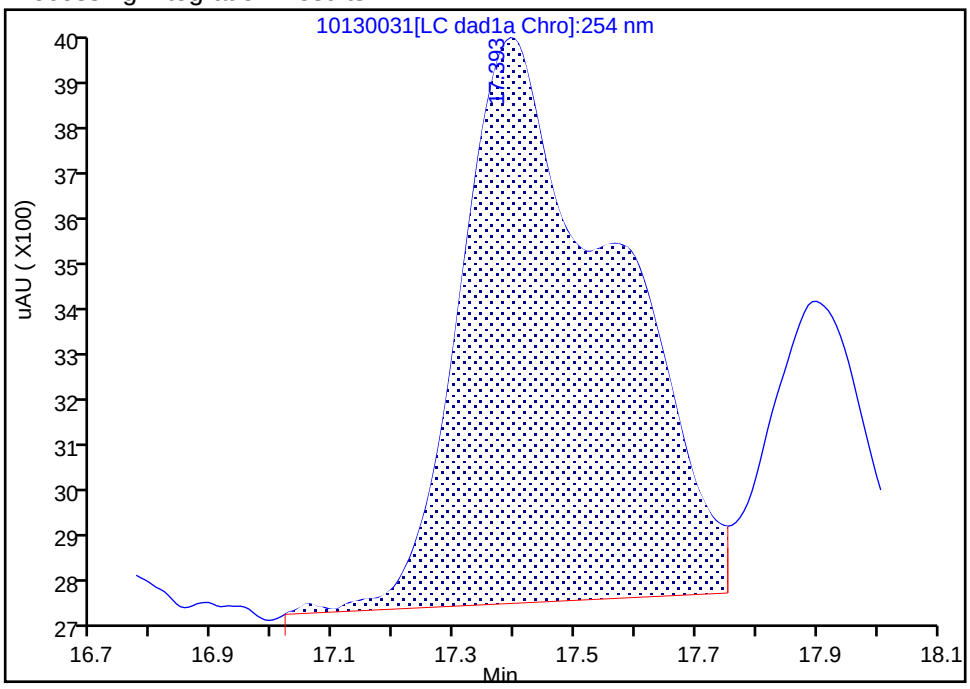
Data File:	\\chromfs\denver\chromdata\g2_luna\20231013-126503.b\10130031.d				
Injection Date:	14-Oct-2023 06:00:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182145-A-7-A	Lab Sample ID:	280-182145-7		
Client ID:	FWGmw-021-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

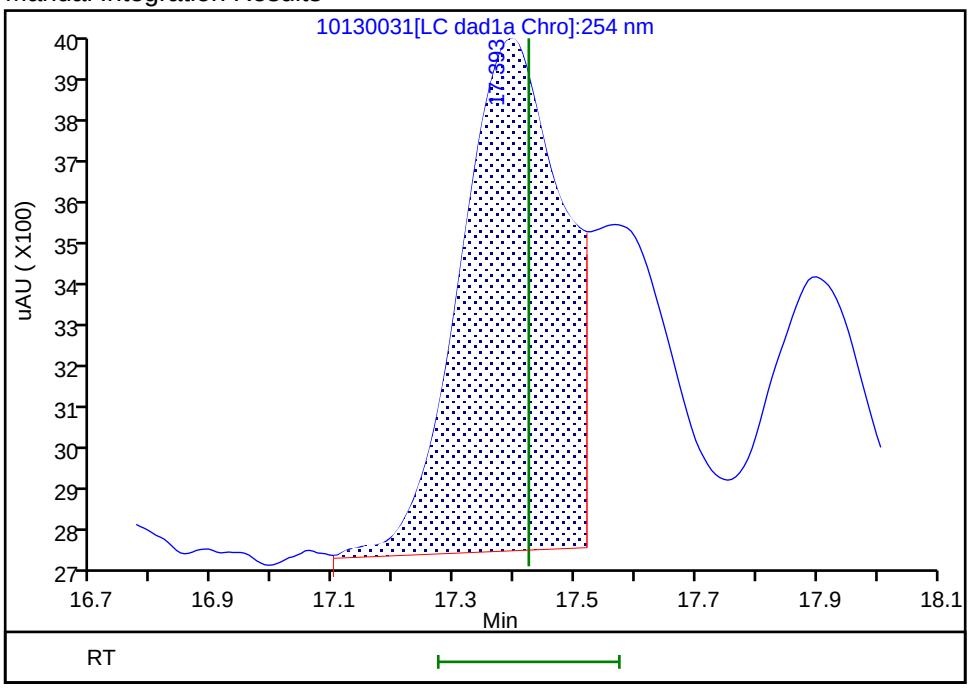
Processing Integration Results

RT: 17.39
Area: 21277
Amount: 0.052764
Amount Units: ug/ml



Manual Integration Results

RT: 17.39
Area: 14141
Amount: 0.033800
Amount Units: ug/ml



Reviewer: K8YG, 16-Oct-2023 11:50:27 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

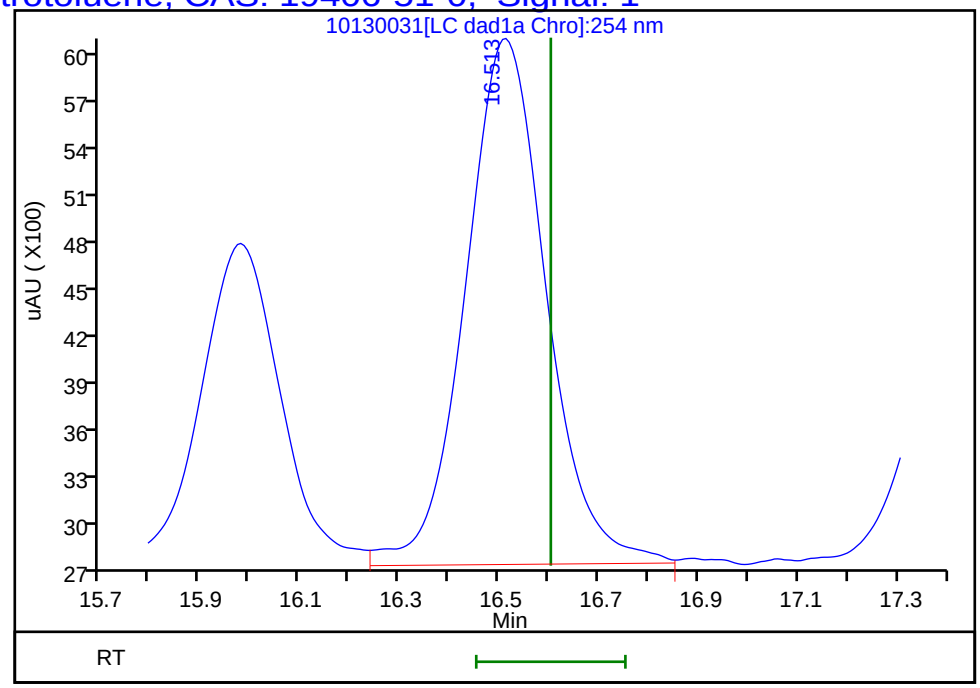
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20231013-126503.b\10130031.d				
Injection Date:	14-Oct-2023 06:00:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182145-A-7-A	Lab Sample ID:	280-182145-7		
Client ID:	FWGmw-021-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 16.51
Response: 36806
Amount: 0.131617



Reviewer: K8YG, 16-Oct-2023 11:50:33
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

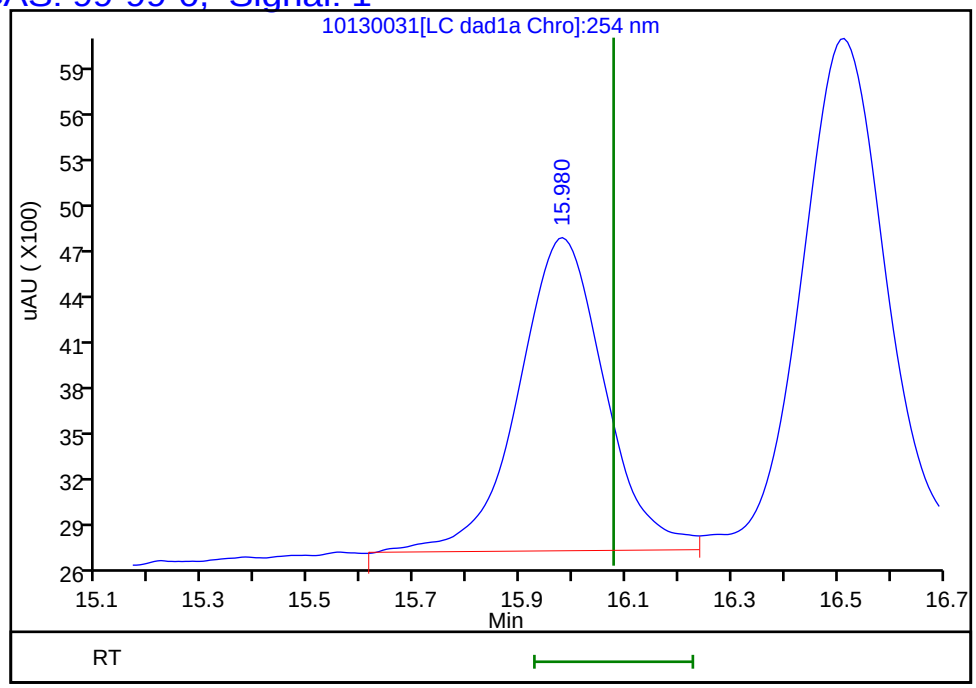
Eurofins Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20231013-126503.b\10130031.d
Injection Date: 14-Oct-2023 06:00:26 Instrument ID: CHHPLC_G2_LUNA
Lims ID: 280-182145-A-7-A Lab Sample ID: 280-182145-7
Client ID: FWGmw-021-230901-GW
Operator ID: JZ/JG ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

15 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 15.98
Response: 22832
Amount: 0.101943



Reviewer: K8YG, 16-Oct-2023 11:50:33
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

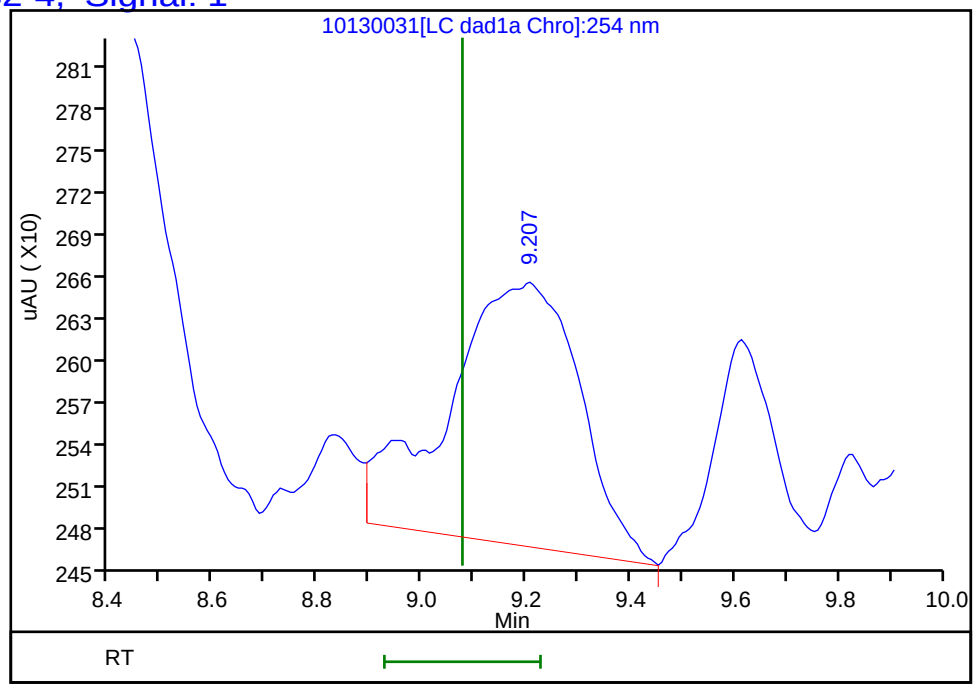
Eurofins Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20231013-126503.b\10130031.d
Injection Date: 14-Oct-2023 06:00:26 Instrument ID: CHHPLC_G2_LUNA
Lims ID: 280-182145-A-7-A Lab Sample ID: 280-182145-7
Client ID: FWGmw-021-230901-GW
Operator ID: JZ/JG ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

8 RDX, CAS: 121-82-4, Signal: 1

RT: 9.21
Response: 3290
Amount: 0.015849



Reviewer: K8YG, 16-Oct-2023 11:50:33
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Client Sample ID: LL3mw-245-230901-GW | Lab Sample ID: 280-182145-8

Matrix: Water | Lab File ID: 10070030.D

Analysis Method: 8330B | Date Collected: 09/28/2023 11:56

Extraction Method: 3535 | Date Extracted: 10/03/2023 13:12

Sample wt/vol: 486.8(mL) | Date Analyzed: 10/07/2023 22:15

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 628897 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U Q	0.22	0.21	0.086
99-65-0	1,3-Dinitrobenzene	0.10	U Q	0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	0.10	U Q	0.11	0.10	0.046
6629-29-4	2,4-diamino-6-nitrotoluene	0.92	U Q	1.0	0.92	0.45
121-14-2	2,4-Dinitrotoluene	0.082	U Q	0.10	0.082	0.028
59229-75-3	2,6-diamino-4-nitrotoluene	0.92	U	1.0	0.92	0.23
606-20-2	2,6-Dinitrotoluene	0.082	U Q	0.10	0.082	0.041
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U Q	0.11	0.10	0.052
88-72-2	2-Nitrotoluene	0.21	U Q	0.22	0.21	0.088
618-87-1	3,5-Dinitroaniline	0.31	U Q	0.41	0.31	0.14
99-08-1	3-Nitrotoluene	0.36	U Q	0.41	0.36	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U Q	0.15	0.12	0.059
99-99-0	4-Nitrotoluene	0.41	U Q	0.42	0.41	0.10
80251-29-2	DNX	0.26	U Q	0.51	0.26	0.10
2691-41-0	HMX	0.21	U Q	0.22	0.21	0.090
5755-27-1	MNX	0.30	U M Q	0.51	0.30	0.095
98-95-3	Nitrobenzene	0.21	U Q	0.22	0.21	0.093
55-63-0	Nitroglycerin	2.1	U Q	2.2	2.1	0.95
78-11-5	PETN	1.0	U Q	1.1	1.0	0.46
121-82-4	RDX	0.21	U Q	0.22	0.21	0.053
479-45-8	Tetryl	0.10	U Q	0.11	0.10	0.033
13980-04-6	TNX	0.26	U M Q	0.51	0.26	0.081

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	82	M Q	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\10070030.D
Lims ID: 280-182145-B-8-A
Client ID: LL3mw-245-230901-GW
Sample Type: Client
Inject. Date: 07-Oct-2023 22:15:29 ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182145-B-8-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2023 11:16:57 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1602

First Level Reviewer: K8YG Date: 09-Oct-2023 08:55:11

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1		6.438			ND	
3 TNX	1	6.481	6.450	0.031	116	0.000578	M
4 HMX	1		6.570			ND	
5 2,4-diamino-6-nitrotoluene	1		6.625			ND	
6 DNX	1		6.776			ND	
7 MNX	1		7.196			ND	U
8 RDX	1		7.576			ND	
$ 10 1,2-Dinitrobenzene	1	8.521	8.516	0.005	20300	0.1638	M
11 1,3,5-Trinitrobenzene	1		8.643			ND	
12 1,3-Dinitrobenzene	1		9.250			ND	
13 Nitrobenzene	1		9.616			ND	
14 3,5-Dinitroaniline	1		9.830			ND	
15 Tetryl	1		9.956			ND	
16 Nitroglycerin	2		10.410			ND	
17 2,4,6-Trinitrotoluene	1		10.843			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.010			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.256			ND	
20 2,6-Dinitrotoluene	1		11.423			ND	
21 2,4-Dinitrotoluene	1		11.590			ND	
22 o-Nitrotoluene	1		12.390			ND	
23 p-Nitrotoluene	1		12.796			ND	
24 m-Nitrotoluene	1		13.356			ND	
25 PETN	2		14.470			ND	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
U - Marked Undetected

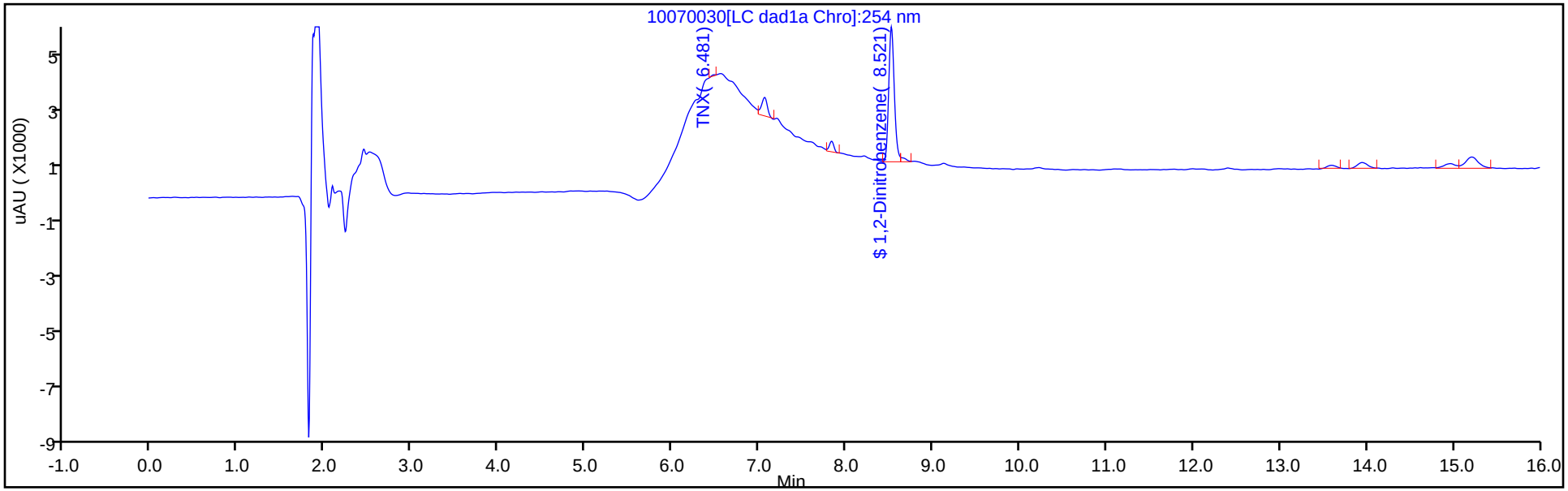
Report Date: 09-Oct-2023 11:17:03 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

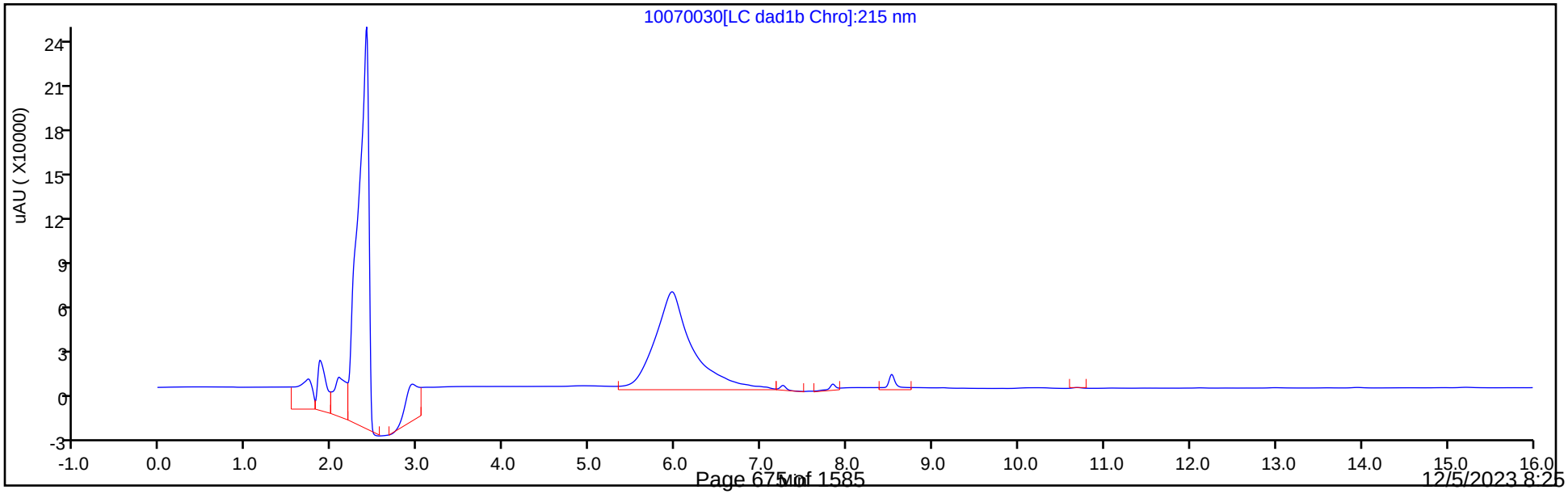
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Injection Date:	07-Oct-2023 22:15:29	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-182145-B-8-A	Lab Sample ID:	280-182145-8	Worklist Smp#:	30
Client ID:	LL3mw-245-230901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\10070030.D				
Lims ID:	280-182145-B-8-A				
Client ID:	LL3mw-245-230901-GW				
Sample Type:	Client				
Inject. Date:	07-Oct-2023 22:15:29	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-182145-B-8-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	09-Oct-2023 11:16:57	Calib Date:	24-Jun-2023 00:23:49		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1602				

First Level Reviewer: K8YG Date: 09-Oct-2023 08:55:11

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1638	81.91

Manual Integration/User Assign Peak Report

Eurofins Denver

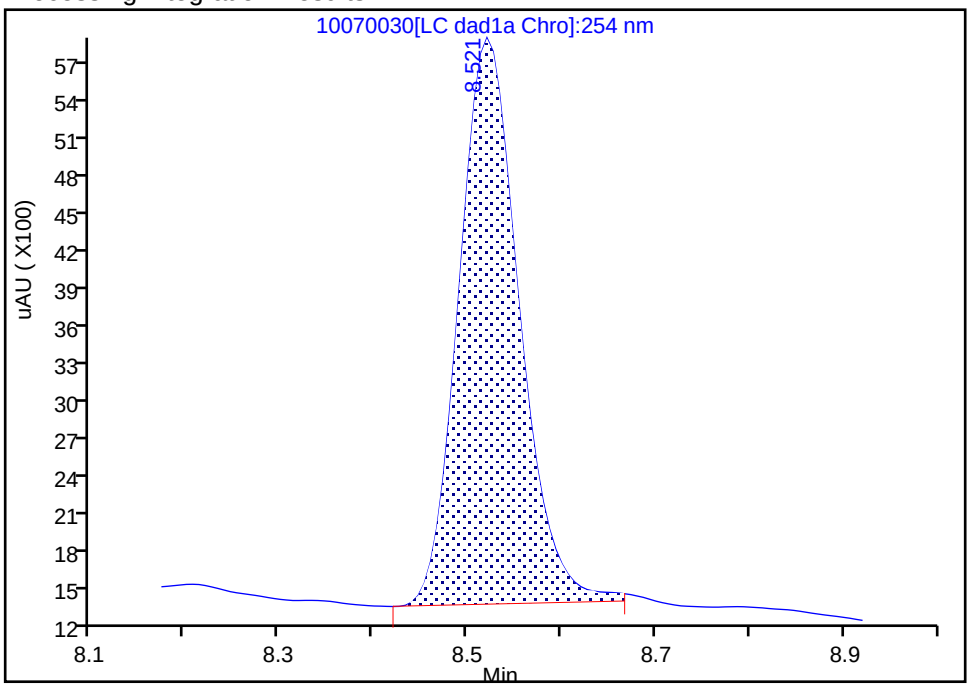
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Injection Date:	07-Oct-2023 22:15:29	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182145-B-8-A	Lab Sample ID:	280-182145-8		
Client ID:	LL3mw-245-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

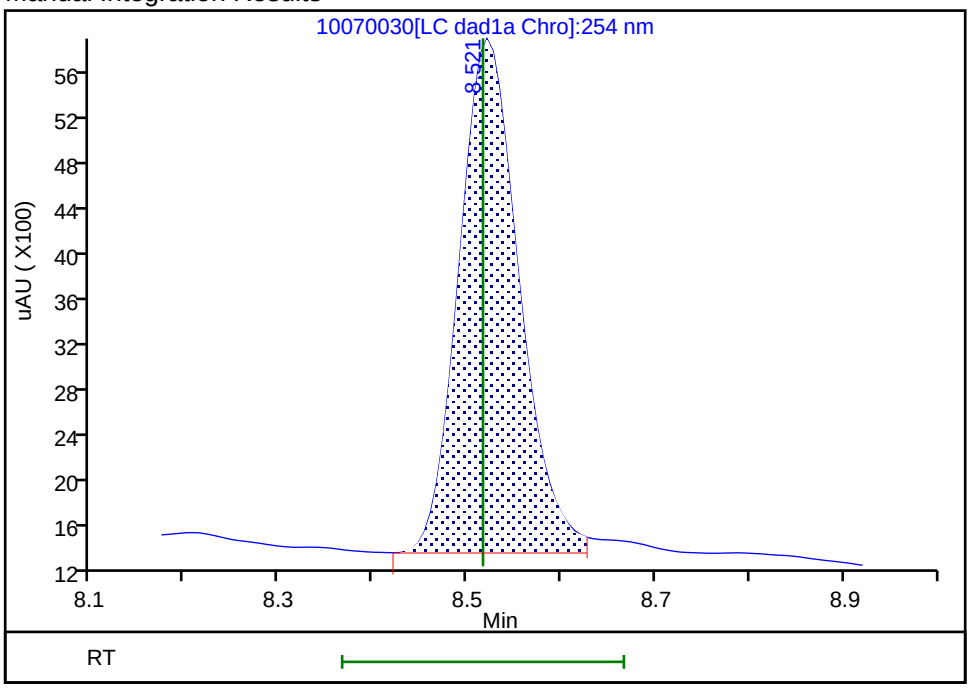
Processing Integration Results

RT: 8.52
Area: 20194
Amount: 0.162972
Amount Units: ug/mL



Manual Integration Results

RT: 8.52
Area: 20300
Amount: 0.163827
Amount Units: ug/mL



Reviewer: K8YG, 09-Oct-2023 11:02:30 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

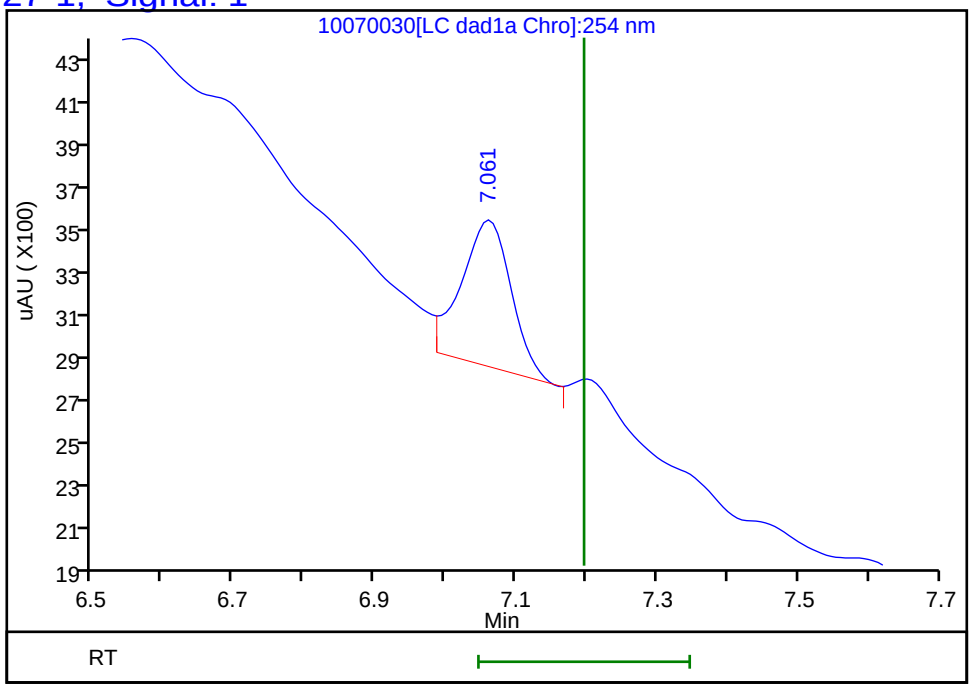
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20231007-126276.b\10070030.d				
Injection Date:	07-Oct-2023 22:15:29	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182145-B-8-A	Lab Sample ID:	280-182145-8		
Client ID:	LL3mw-245-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.06
Response: 3153
Amount: 0.022734



Reviewer: K8YG, 09-Oct-2023 11:02:32
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

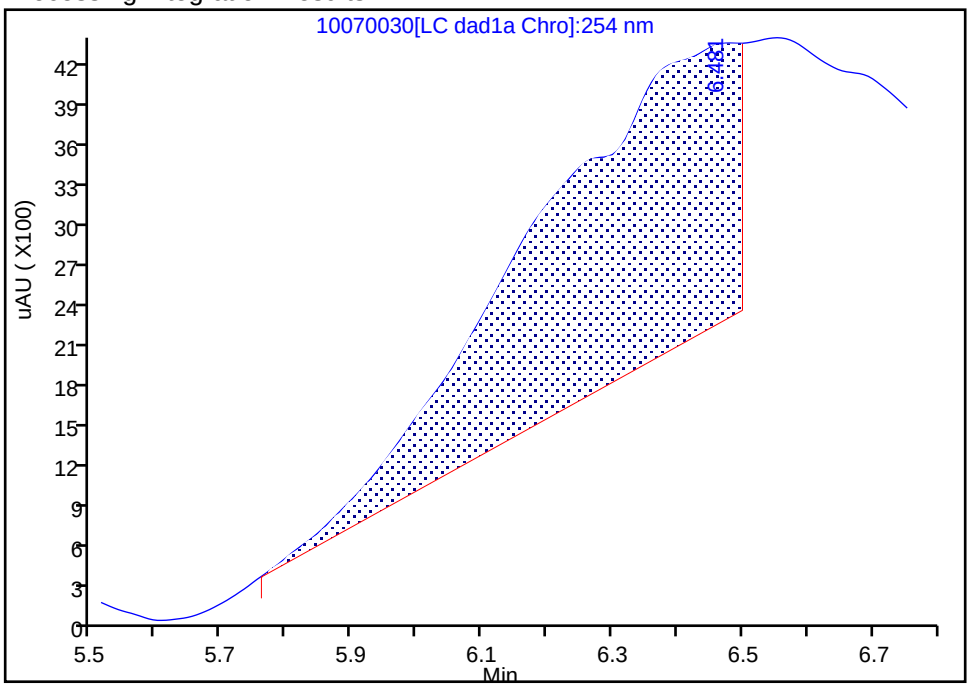
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231007-126276.b\10070030.d				
Injection Date:	07-Oct-2023 22:15:29	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182145-B-8-A	Lab Sample ID:	280-182145-8		
Client ID:	LL3mw-245-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

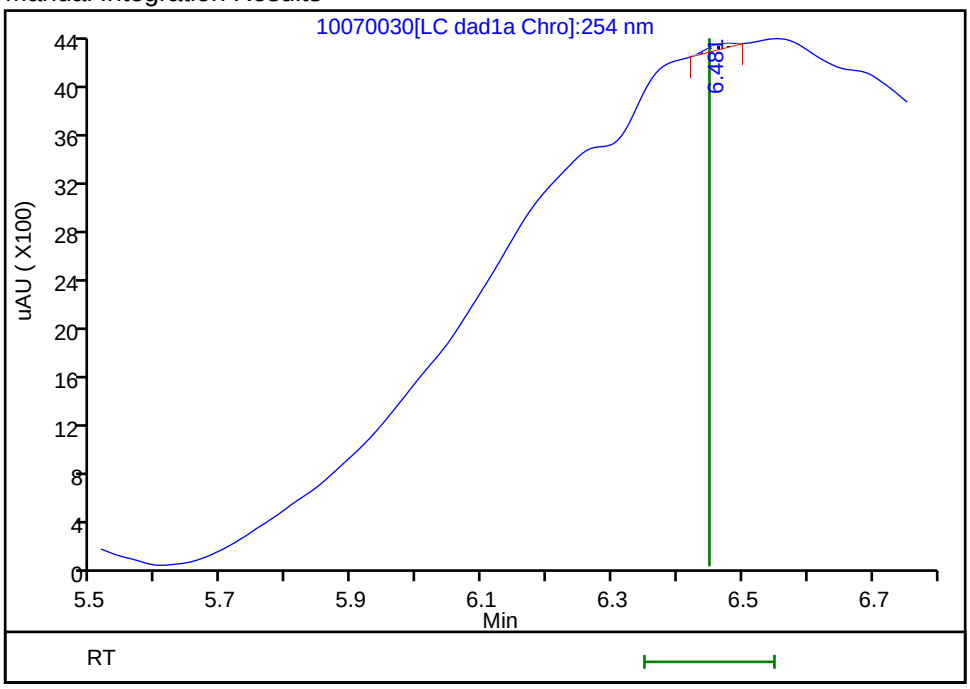
Processing Integration Results

RT: 6.48
Area: 49219
Amount: 0.245162
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 116
Amount: 0.000578
Amount Units: ug/mL



Reviewer: K8YG, 09-Oct-2023 11:02:14 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Client Sample ID: LL3mw-245-230901-GW RE | Lab Sample ID: 280-182145-8 RE

Matrix: Water | Lab File ID: 10130042.D

Analysis Method: 8330B | Date Collected: 09/28/2023 11:56

Extraction Method: 3535 | Date Extracted: 10/12/2023 14:54

Sample wt/vol: 472.1(mL) | Date Analyzed: 10/14/2023 03:11

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 629672 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	*1,3,5-Trinitrobenzene*	*0.21*	*U H*	*0.22*	0.21	*0.089*
99-65-0	*1,3-Dinitrobenzene*	*0.11*	*U H*	*0.12*	0.11	*0.039*
118-96-7	*2,4,6-Trinitrotoluene*	*0.11*	*U H*	*0.12*	0.11	*0.048*
6629-29-4	*2,4-diamino-6-nitrotoluene*	*0.95*	*U H Q*	*1.1*	0.95	*0.46*
121-14-2	*2,4-Dinitrotoluene*	*0.085*	*U H Q*	*0.11*	0.085	*0.029*
59229-75-3	*2,6-diamino-4-nitrotoluene*	*0.95*	*U H Q*	*1.1*	0.95	*0.23*
606-20-2	*2,6-Dinitrotoluene*	*0.085*	*U H Q*	*0.11*	0.085	*0.042*
35572-78-2	*2-Amino-4,6-dinitrotoluene*	*0.11*	*U H Q*	*0.12*	0.11	*0.054*
88-72-2	*2-Nitrotoluene*	*0.21*	*U H Q*	*0.22*	0.21	*0.091*
618-87-1	*3,5-Dinitroaniline*	*0.32*	*U H*	*0.42*	0.32	*0.14*
99-08-1	*3-Nitrotoluene*	*0.37*	*U H Q*	*0.42*	0.37	*0.21*
19406-51-0	*4-Amino-2,6-dinitrotoluene*	*0.13*	*U H Q*	*0.16*	0.13	*0.061*
99-99-0	*4-Nitrotoluene*	*0.42*	*U H Q*	*0.43*	0.42	*0.11*
80251-29-2	*DNX*	*0.26*	*U H*	*0.53*	0.26	*0.10*
2691-41-0	*HMX*	*7.2*	*H*	*0.22*	0.21	*0.093*
5755-27-1	*MNX*	*0.31*	*U H*	*0.53*	0.31	*0.098*
98-95-3	*Nitrobenzene*	*0.21*	*U H*	*0.22*	0.21	*0.096*
55-63-0	*Nitroglycerin*	*2.1*	*U H*	*2.2*	2.1	*0.98*
78-11-5	*PETN*	*1.1*	*U H*	*1.2*	1.1	*0.47*
121-82-4	*RDX*	*0.21*	*U H*	*0.22*	0.21	*0.055*
479-45-8	*Tetryl*	*0.11*	*U H*	*0.12*	0.11	*0.034*
13980-04-6	*TNX*	*0.26*	*U H*	*0.53*	0.26	*0.084*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	100		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\10130042.D
Lims ID: 280-182145-A-8-A
Client ID: LL3mw-245-230901-GW
Sample Type: Client
Inject. Date: 14-Oct-2023 03:11:54 ALS Bottle#: 42 Worklist Smp#: 42
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182145-A-8-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-Oct-2023 11:09:19 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1675

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	2 2,6-diamino-4-nitrotoluene	1		6.443			ND	
	3 TNX	1		6.444			ND	
	4 HMX	1	6.552	6.577	-0.025	63971	0.6787	
	5 2,4-diamino-6-nitrotoluene	1		6.630			ND	
	6 DNX	1		6.777			ND	
	7 MNX	1		7.204			ND	
	8 RDX	1		7.584			ND	
$	10 1,2-Dinitrobenzene	1	8.512	8.524	-0.012	24799	0.2001	
	11 1,3,5-Trinitrobenzene	1		8.650			ND	
	12 1,3-Dinitrobenzene	1		9.264			ND	
	13 Nitrobenzene	1		9.630			ND	
	14 3,5-Dinitroaniline	1		9.850			ND	
	15 Tetryl	1		9.984			ND	
	16 Nitroglycerin	2		10.430			ND	
	17 2,4,6-Trinitrotoluene	1		10.870			ND	
	18 4-Amino-2,6-dinitrotoluene	1		11.044			ND	
	19 2-Amino-4,6-dinitrotoluene	1		11.297			ND	
	20 2,6-Dinitrotoluene	1		11.457			ND	
	21 2,4-Dinitrotoluene	1		11.624			ND	
	22 o-Nitrotoluene	1		12.430			ND	
	23 p-Nitrotoluene	1		12.844			ND	
	24 m-Nitrotoluene	1		13.404			ND	
	25 PETN	2		14.537			ND	

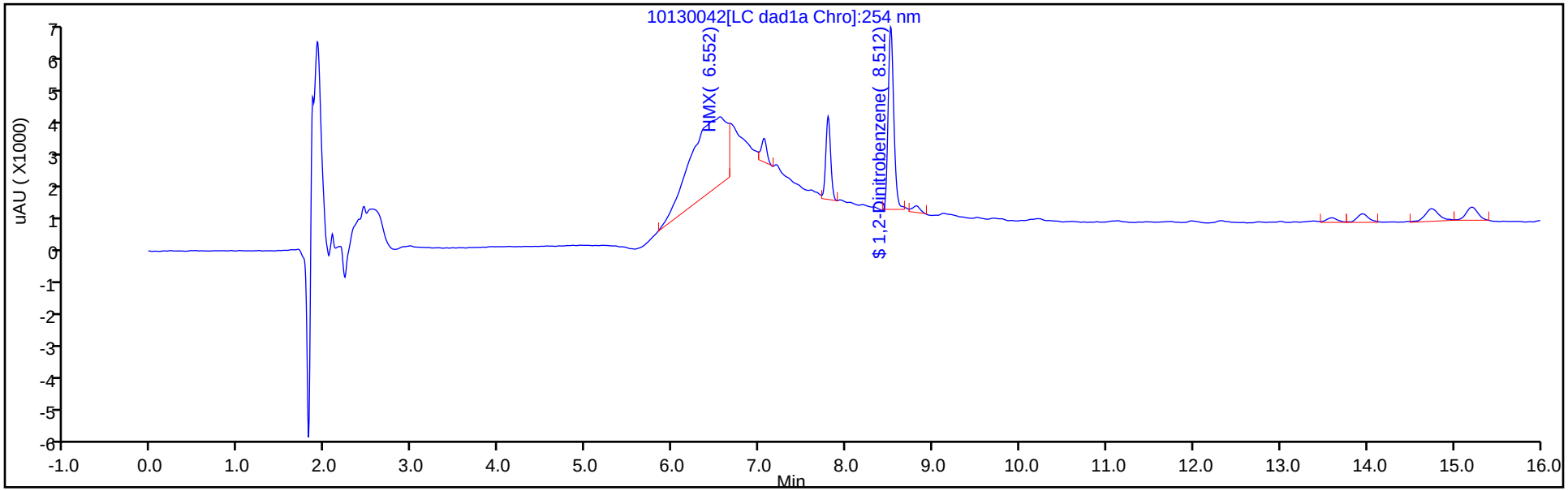
Report Date: 16-Oct-2023 11:09:19 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

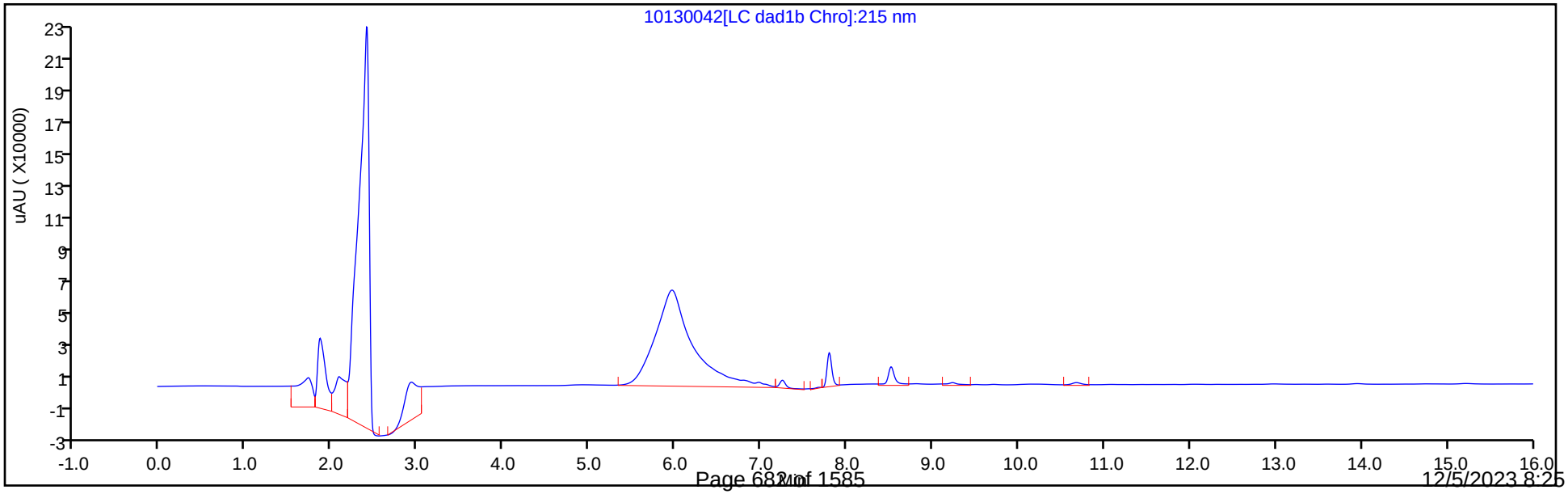
Data File: \\chromfs\denver\chromdata\chhplc_x\20231013-126501.b\10130042.d

Injection Date:	14-Oct-2023 03:11:54	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-182145-A-8-A	Lab Sample ID:	280-182145-8	Worklist Smp#:	42
Client ID:	LL3mw-245-230901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	42
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\10130042.D
Lims ID: 280-182145-A-8-A
Client ID: LL3mw-245-230901-GW
Sample Type: Client
Inject. Date: 14-Oct-2023 03:11:54 ALS Bottle#: 42 Worklist Smp#: 42
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182145-A-8-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-Oct-2023 11:09:19 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1675

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2001	100.07

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Client Sample ID: LL3mw-245-230901-GW RE | Lab Sample ID: 280-182145-8 RE

Matrix: Water | Lab File ID: 10130032.D

Analysis Method: 8330B | Date Collected: 09/28/2023 11:56

Extraction Method: 3535 | Date Extracted: 10/12/2023 14:54

Sample wt/vol: 472.1(mL) | Date Analyzed: 10/14/2023 06:36

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 629682 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	*1,3,5-Trinitrobenzene*	*0.21*	*U H M*	*0.22*	0.21	*0.089*
99-65-0	*1,3-Dinitrobenzene*	*0.11*	*U H*	*0.12*	0.11	*0.039*
118-96-7	*2,4,6-Trinitrotoluene*	*0.33*	*H M*	*0.12*	0.11	*0.048*
6629-29-4	*2,4-diamino-6-nitrotoluene*	*0.95*	*U H Q*	*1.1*	0.95	*0.46*
121-14-2	*2,4-Dinitrotoluene*	*0.085*	*U H Q*	*0.11*	0.085	*0.029*
59229-75-3	*2,6-diamino-4-nitrotoluene*	*0.95*	*U Q H M*	*1.1*	0.95	*0.23*
606-20-2	*2,6-Dinitrotoluene*	*0.085*	*U H Q*	*0.11*	0.085	*0.042*
35572-78-2	*2-Amino-4,6-dinitrotoluene*	*0.11*	*U H*	*0.12*	0.11	*0.054*
88-72-2	*2-Nitrotoluene*	*0.11*	*J H Q*	*0.22*	0.21	*0.091*
618-87-1	*3,5-Dinitroaniline*	*0.32*	*U H*	*0.42*	0.32	*0.14*
99-08-1	*3-Nitrotoluene*	*0.37*	*U H Q*	*0.42*	0.37	*0.21*
19406-51-0	*4-Amino-2,6-dinitrotoluene*	*0.13*	*U H*	*0.16*	0.13	*0.061*
99-99-0	*4-Nitrotoluene*	*0.42*	*U H Q*	*0.43*	0.42	*0.11*
80251-29-2	*DNX*	*0.26*	*U H*	*0.53*	0.26	*0.10*
2691-41-0	*HMX*	*0.21*	*U H M*	*0.22*	0.21	*0.093*
5755-27-1	*MNX*	*0.31*	*U H*	*0.53*	0.31	*0.098*
98-95-3	*Nitrobenzene*	*0.21*	*U H*	*0.22*	0.21	*0.096*
55-63-0	*Nitroglycerin*	*2.1*	*U H*	*2.2*	2.1	*0.98*
78-11-5	*PETN*	*1.1*	*U H*	*1.2*	1.1	*0.47*
121-82-4	*RDX*	*0.21*	*U H*	*0.22*	0.21	*0.055*
479-45-8	*Tetryl*	*0.11*	*U H*	*0.12*	0.11	*0.034*
13980-04-6	*TNX*	*0.26*	*U H*	*0.53*	0.26	*0.084*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	94		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20231013-126503.b\10130032.D
Lims ID: 280-182145-A-8-A
Client ID: LL3mw-245-230901-GW
Sample Type: Client
Inject. Date: 14-Oct-2023 06:36:22 ALS Bottle#: 32 Worklist Smp#: 32
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182145-A-8-A
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20231013-126503.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 16-Oct-2023 11:53:19 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1675

First Level Reviewer: K8YG Date: 16-Oct-2023 11:51:47

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1	2,6-diamino-4-nitrotoluene	1		4.244			ND	U
2	2,4-diamino-6-nitrotoluene	1		4.857			ND	
3	TNX	1		5.310			ND	
4	DNX	1		6.170			ND	
6	HMX	1	6.734	6.830	-0.096	1331	0.007673	M
7	MNX	1		7.684			ND	
8	RDX	1		9.077			ND	7
9	Nitrobenzene	1		11.650			ND	
$ 10	1,2-Dinitrobenzene	1	12.560	12.617	-0.057	48419	0.1886	
11	3,5-Dinitroaniline	1		14.477			ND	
12	1,3-Dinitrobenzene	1		14.757			ND	
13	Nitroglycerin	2		15.223			ND	7
14	o-Nitrotoluene	1	15.854	15.850	0.004	2645	0.0107	
15	p-Nitrotoluene	1		16.077			ND	
16	4-Amino-2,6-dinitrotoluene	1		16.603			ND	
17	m-Nitrotoluene	1		16.923			ND	
18	2-Amino-4,6-dinitrotoluene	1		17.423			ND	
19	1,3,5-Trinitrobenzene	1		17.583			ND	U
20	2,6-Dinitrotoluene	1		18.743			ND	7
21	2,4-Dinitrotoluene	1		19.197			ND	7
22	Tetryl	1		22.477			ND	
23	2,4,6-Trinitrotoluene	1	23.314	23.330	-0.016	11936	0.0310	M
24	PETN	2		24.517			ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Review Flags
M - Manually Integrated
U - Marked Undetected

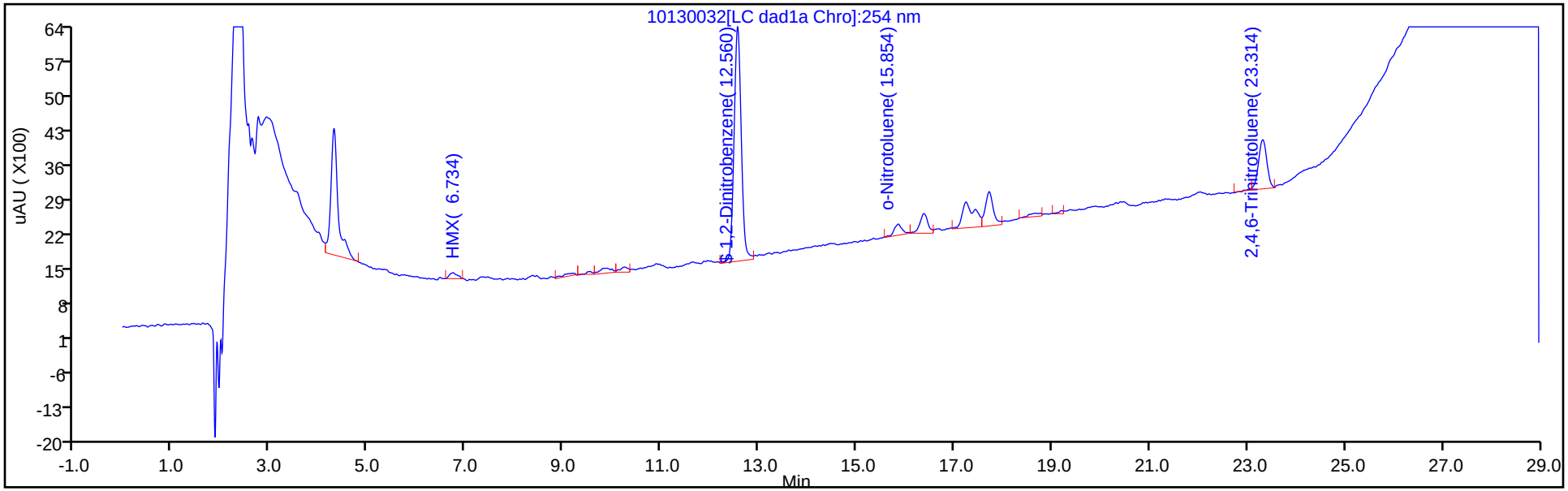
Report Date: 16-Oct-2023 11:53:21 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

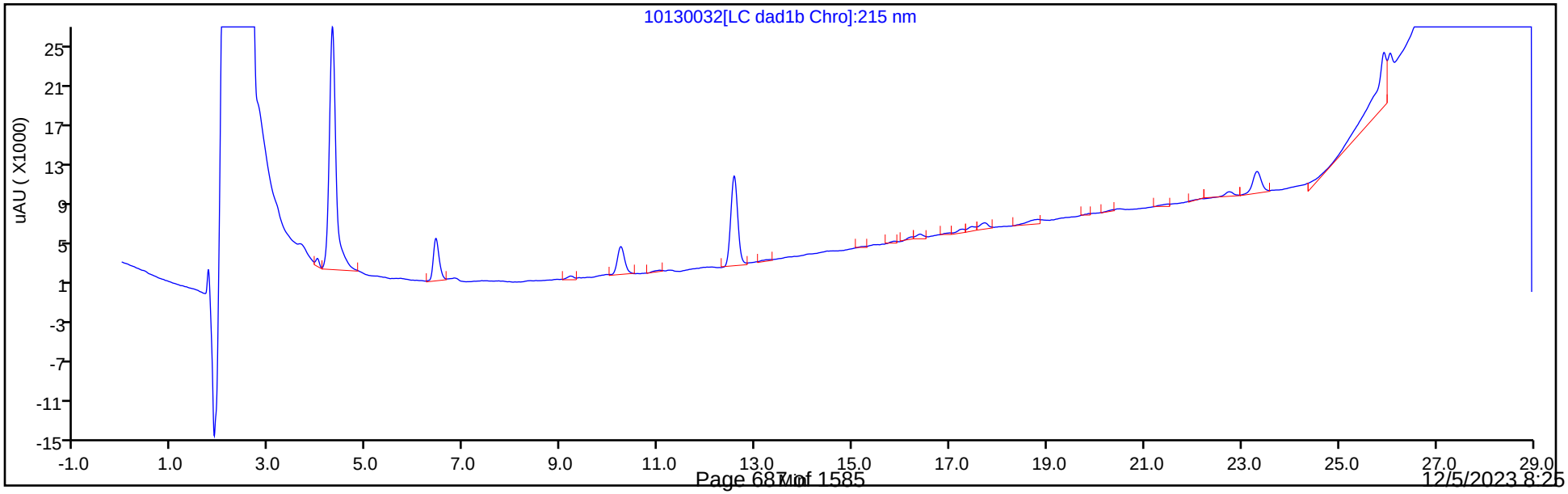
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Injection Date:	14-Oct-2023 06:36:22	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	280-182145-A-8-A	Lab Sample ID:	280-182145-8	Worklist Smp#:	32
Client ID:	LL3mw-245-230901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20231013-126503.b\10130032.D
Lims ID: 280-182145-A-8-A
Client ID: LL3mw-245-230901-GW
Sample Type: Client
Inject. Date: 14-Oct-2023 06:36:22 ALS Bottle#: 32 Worklist Smp#: 32
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182145-A-8-A
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20231013-126503.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 16-Oct-2023 11:53:19 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1675

First Level Reviewer: K8YG Date: 16-Oct-2023 11:51:47

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1886	94.28

User Disabled Compound Report

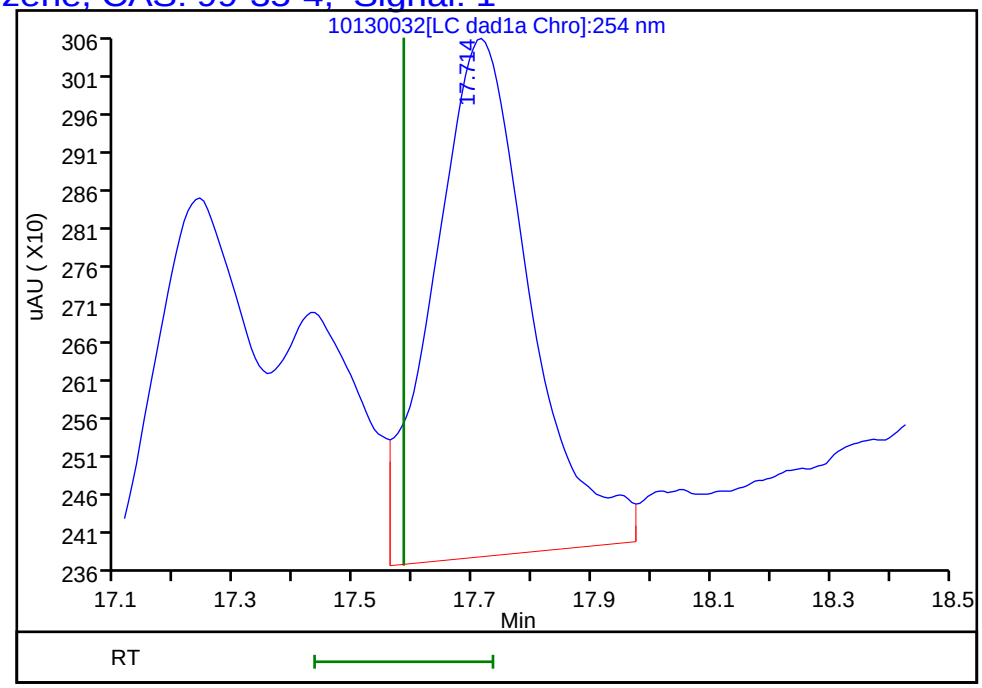
Eurofins Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20231013-126503.b\10130032.d
Injection Date: 14-Oct-2023 06:36:22 Instrument ID: CHHPLC_G2_LUNA
Lims ID: 280-182145-A-8-A Lab Sample ID: 280-182145-8
Client ID: LL3mw-245-230901-GW
Operator ID: JZ/JG ALS Bottle#: 32 Worklist Smp#: 32
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

19 1,3,5-Trinitrobenzene, CAS: 99-35-4, Signal: 1

RT: 17.71
Response: 7634
Amount: 0.018546



Reviewer: K8YG, 16-Oct-2023 11:51:47
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

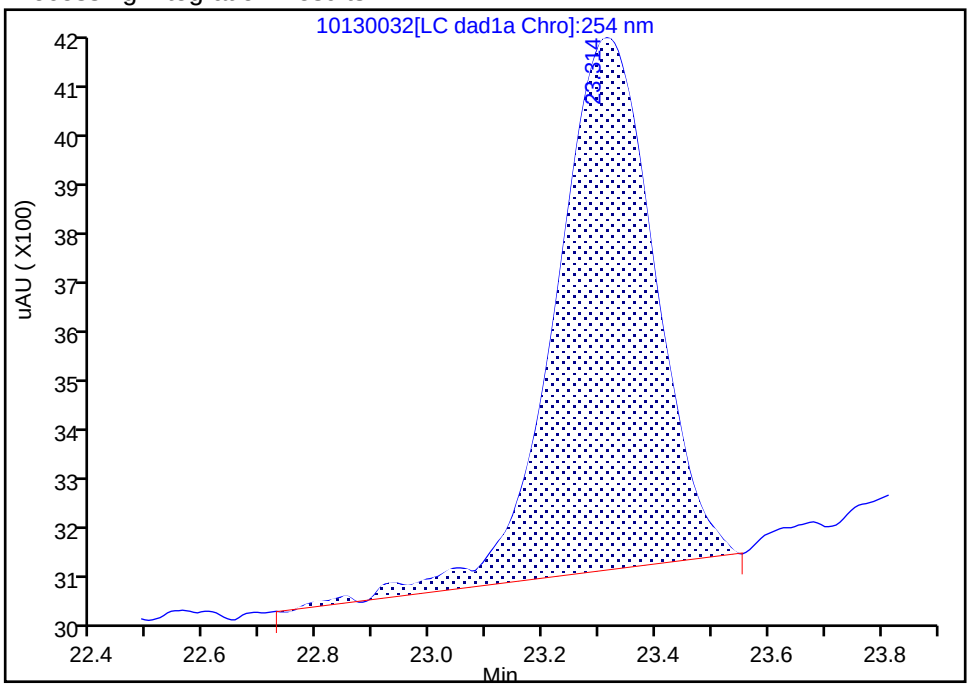
Data File:	\\chromfs\denver\chromdata\g2_luna\20231013-126503.b\10130032.d				
Injection Date:	14-Oct-2023 06:36:22	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182145-A-8-A	Lab Sample ID:	280-182145-8		
Client ID:	LL3mw-245-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

23 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

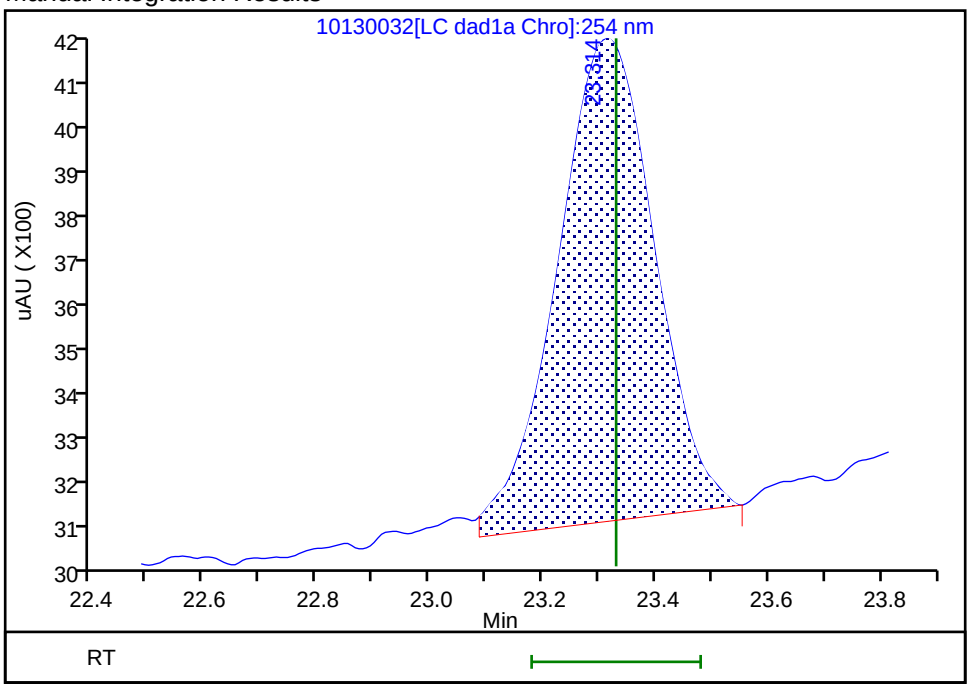
Processing Integration Results

RT: 23.31
Area: 12323
Amount: 0.032009
Amount Units: ug/ml



Manual Integration Results

RT: 23.31
Area: 11936
Amount: 0.031004
Amount Units: ug/ml



Reviewer: K8YG, 16-Oct-2023 11:51:32 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

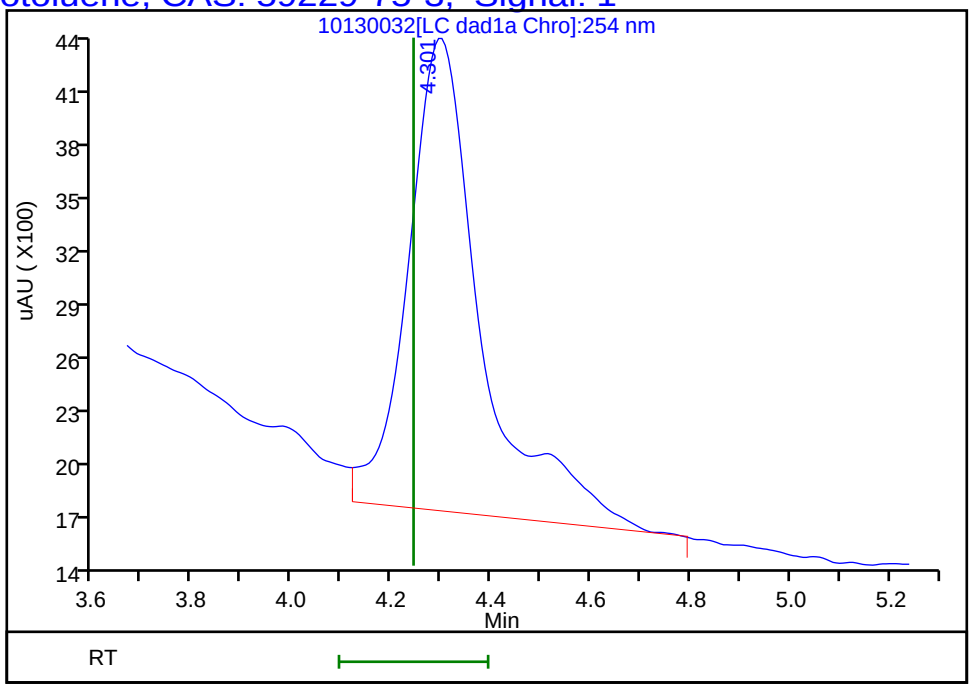
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20231013-126503.b\10130032.d				
Injection Date:	14-Oct-2023 06:36:22	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182145-A-8-A	Lab Sample ID:	280-182145-8		
Client ID:	LL3mw-245-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

1 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3, Signal: 1

RT: 4.30
Response: 26430
Amount: 0.068181



Reviewer: K8YG, 16-Oct-2023 11:51:47
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

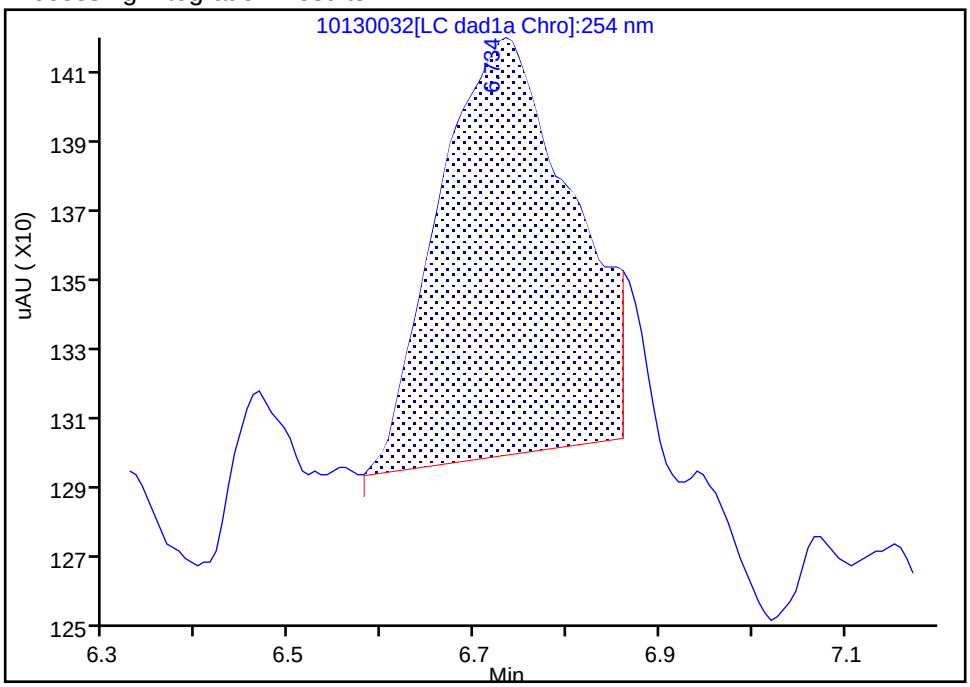
Data File:	\\chromfs\denver\chromdata\g2_luna\20231013-126503.b\10130032.d				
Injection Date:	14-Oct-2023 06:36:22	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182145-A-8-A	Lab Sample ID:	280-182145-8		
Client ID:	LL3mw-245-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

6 HMX, CAS: 2691-41-0

Signal: 1

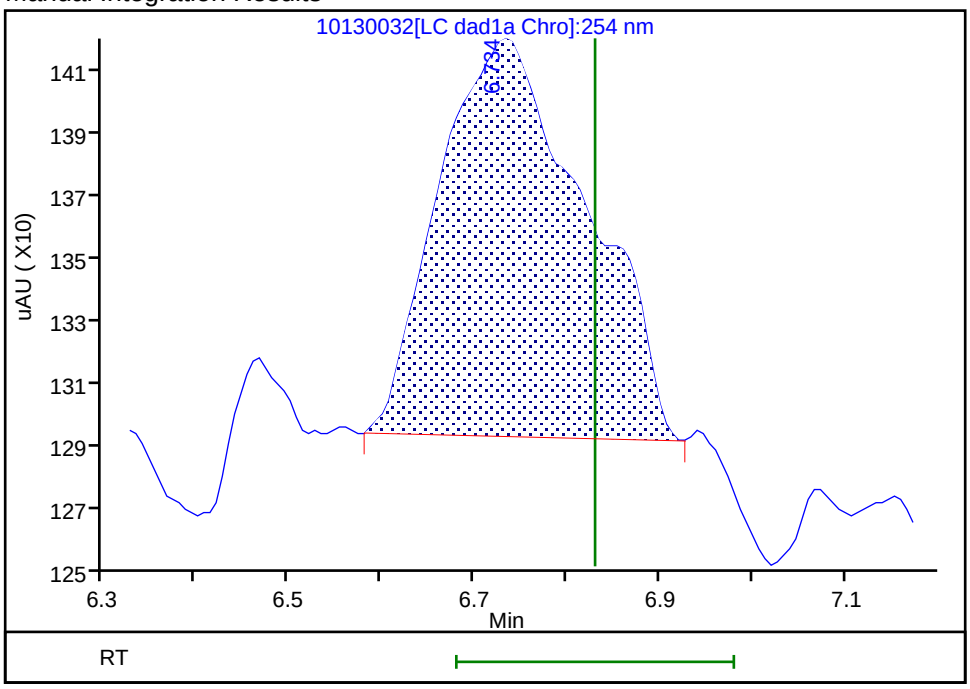
Processing Integration Results

RT: 6.73
Area: 1137
Amount: 0.006554
Amount Units: ug/ml



Manual Integration Results

RT: 6.73
Area: 1331
Amount: 0.007673
Amount Units: ug/ml



Reviewer: K8YG, 16-Oct-2023 11:50:49 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Client Sample ID: FWGmw-024-230901-GW | Lab Sample ID: 280-182145-11

Matrix: Water | Lab File ID: 10070031.D

Analysis Method: 8330B | Date Collected: 09/28/2023 13:16

Extraction Method: 3535 | Date Extracted: 10/03/2023 13:12

Sample wt/vol: 481.4(mL) | Date Analyzed: 10/07/2023 22:38

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 628897 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U M	0.22	0.21	0.087
99-65-0	1,3-Dinitrobenzene	0.10	U M Q	0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.047
121-14-2	2,4-Dinitrotoluene	0.083	U Q	0.10	0.083	0.028
606-20-2	2,6-Dinitrotoluene	0.083	U Q	0.10	0.083	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U Q	0.11	0.10	0.053
88-72-2	2-Nitrotoluene	0.21	U Q	0.22	0.21	0.089
99-08-1	3-Nitrotoluene	0.36	U Q	0.42	0.36	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U Q	0.16	0.12	0.060
99-99-0	4-Nitrotoluene	0.42	U Q	0.43	0.42	0.10
2691-41-0	HMX	0.21	U M	0.22	0.21	0.091
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.095
55-63-0	Nitroglycerin	2.1	U	2.2	2.1	0.96
78-11-5	PETN	1.0	U	1.1	1.0	0.46
121-82-4	RDX	0.21	U	0.22	0.21	0.053
479-45-8	Tetryl	0.10	U	0.11	0.10	0.033

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	83	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\10070031.D
Lims ID: 280-182145-A-11-A
Client ID: FWGmw-024-230901-GW
Sample Type: Client
Inject. Date: 07-Oct-2023 22:38:26 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182145-A-11-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2023 11:16:57 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1602

First Level Reviewer: K8YG Date: 09-Oct-2023 11:03:12

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	4 HMX	1		6.570			ND	U
	8 RDX	1		7.576			ND	
$	10 1,2-Dinitrobenzene	1	8.514	8.516	-0.002	20508	0.1655	M
	11 1,3,5-Trinitrobenzene	1	8.620	8.643	-0.023	273	0.001263	7Ma
	12 1,3-Dinitrobenzene	1		9.250			ND	U
	13 Nitrobenzene	1		9.616			ND	
	15 Tetryl	1		9.956			ND	
	16 Nitroglycerin	2		10.410			ND	
	17 2,4,6-Trinitrotoluene	1		10.843			ND	
	18 4-Amino-2,6-dinitrotoluene	1		11.010			ND	
	19 2-Amino-4,6-dinitrotoluene	1		11.256			ND	
	20 2,6-Dinitrotoluene	1		11.423			ND	
	21 2,4-Dinitrotoluene	1		11.590			ND	
	22 o-Nitrotoluene	1		12.390			ND	7
	23 p-Nitrotoluene	1		12.796			ND	
	24 m-Nitrotoluene	1		13.356			ND	
	25 PETN	2		14.470			ND	

QC Flag Legend

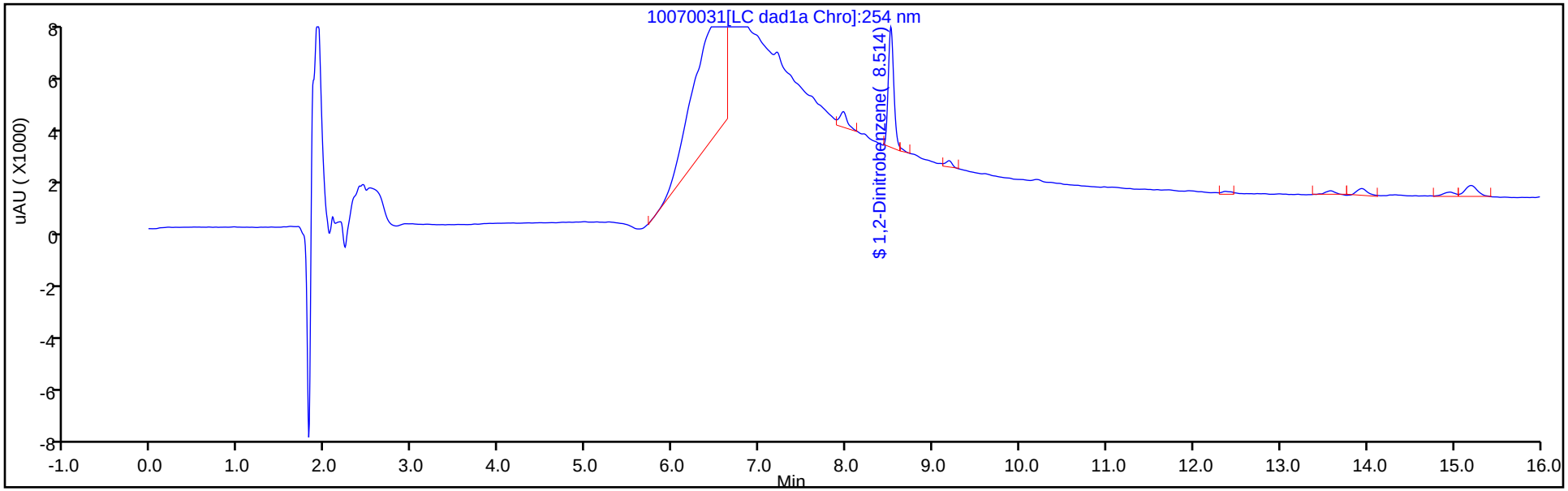
Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected
a - User Assigned ID

Report Date: 09-Oct-2023 11:17:04 Chrom Revision: 2.3 22-Sep-2023 11:33:50

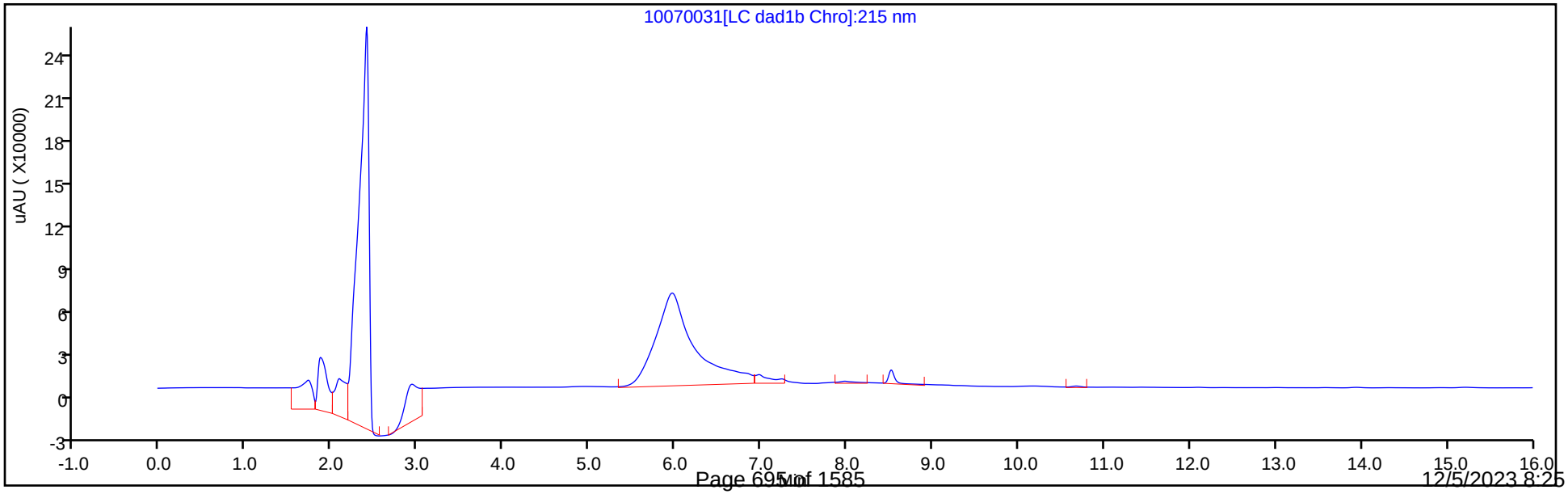
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20231007-126276.b\10070031.d				
Injection Date:	07-Oct-2023 22:38:26	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-182145-A-11-A	Lab Sample ID:	280-182145-11	Worklist Smp#:	31
Client ID:	FWGmw-024-230901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\10070031.D				
Lims ID:	280-182145-A-11-A				
Client ID:	FWGmw-024-230901-GW				
Sample Type:	Client				
Inject. Date:	07-Oct-2023 22:38:26	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-182145-A-11-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	09-Oct-2023 11:16:57	Calib Date:	24-Jun-2023 00:23:49		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1602				

First Level Reviewer: K8YG Date: 09-Oct-2023 11:03:12

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1655	82.75

Manual Integration/User Assign Peak Report

Eurofins Denver

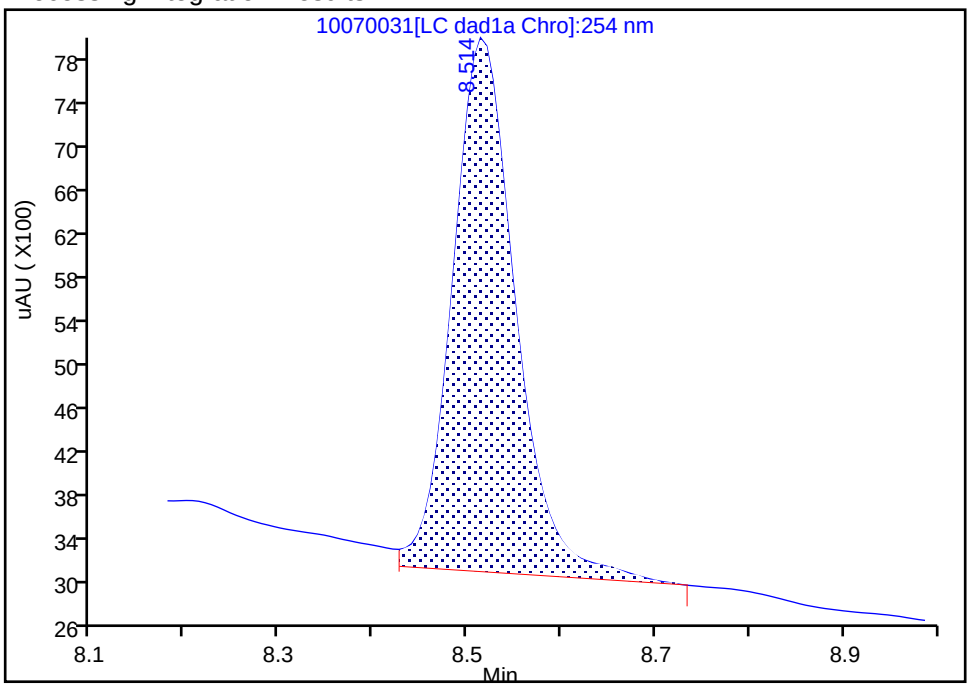
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Injection Date:	07-Oct-2023 22:38:26	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182145-A-11-A	Lab Sample ID:	280-182145-11		
Client ID:	FWGmw-024-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

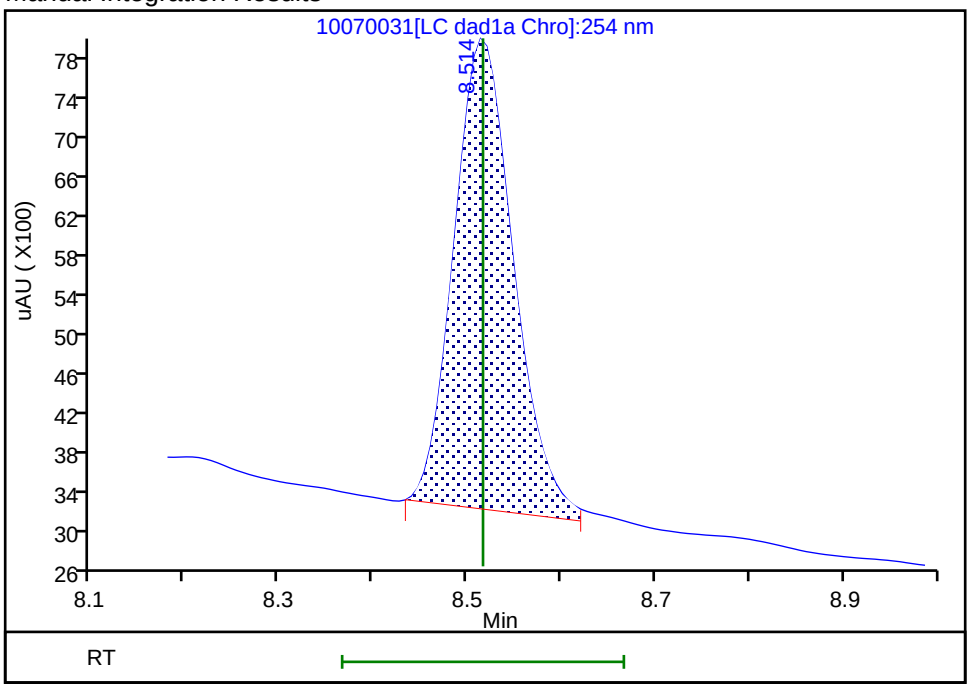
Processing Integration Results

RT: 8.51
Area: 22442
Amount: 0.181114
Amount Units: ug/mL



Manual Integration Results

RT: 8.51
Area: 20508
Amount: 0.165506
Amount Units: ug/mL



Reviewer: K8YG, 09-Oct-2023 11:02:57 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

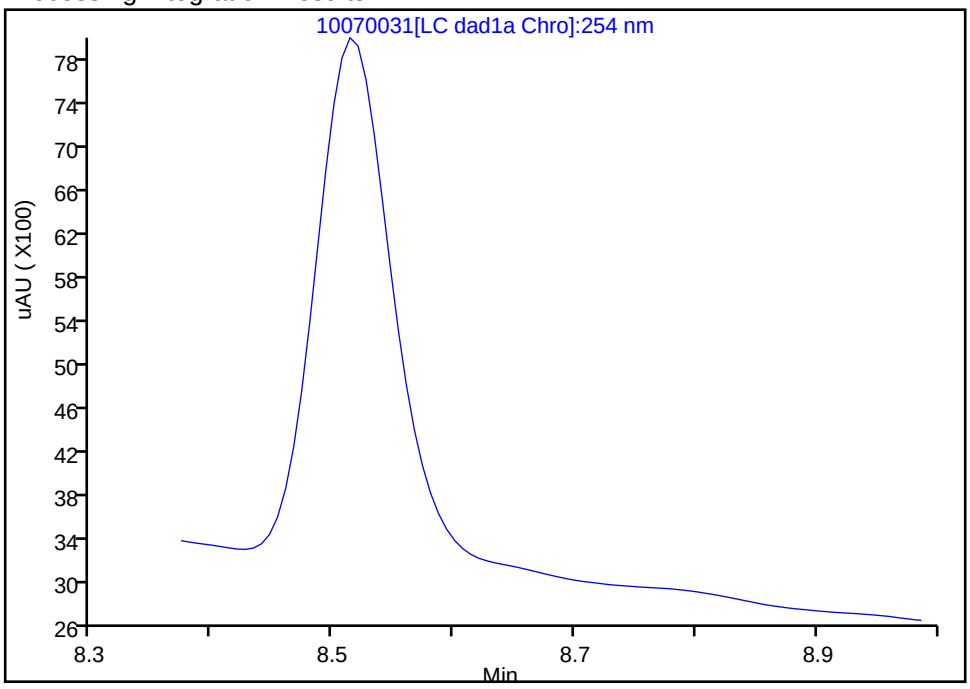
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231007-126276.b\10070031.d				
Injection Date:	07-Oct-2023 22:38:26	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182145-A-11-A	Lab Sample ID:	280-182145-11		
Client ID:	FWGmw-024-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

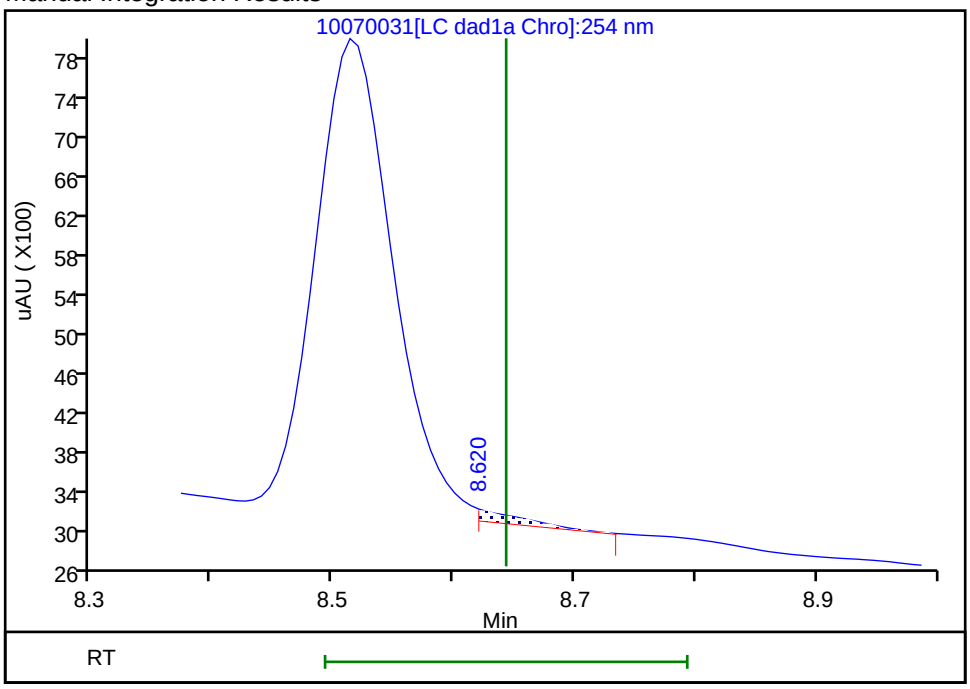
Not Detected
Expected RT: 8.64

Processing Integration Results



Manual Integration Results

RT: 8.62
Area: 273
Amount: 0.001263
Amount Units: ug/mL



Reviewer: K8YG, 09-Oct-2023 11:03:06 -06:00:00 (UTC)
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline

User Disabled Compound Report

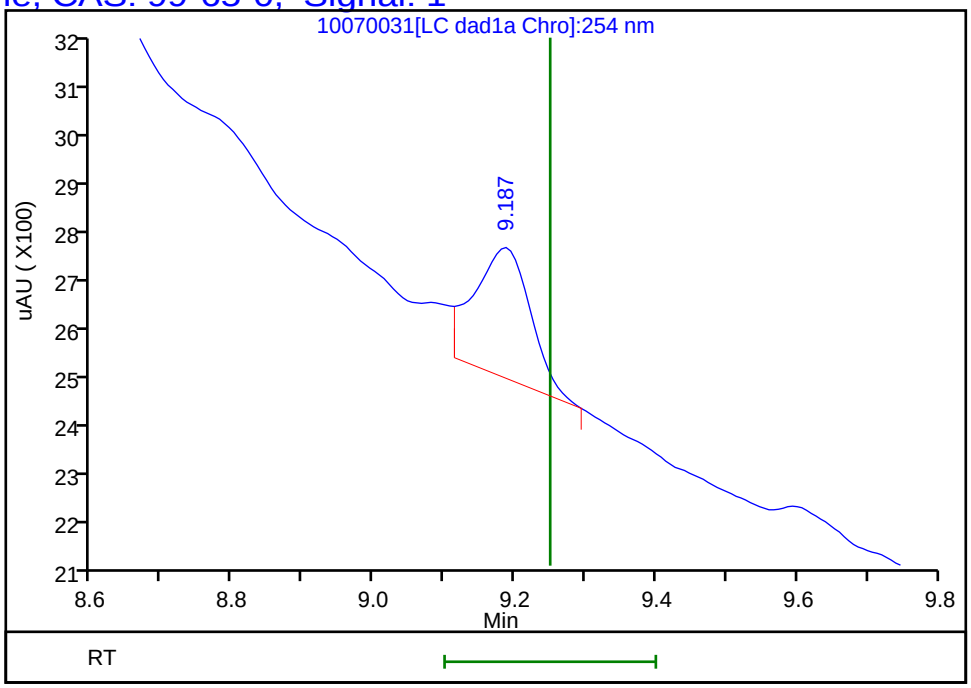
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20231007-126276.b\10070031.d
Injection Date: 07-Oct-2023 22:38:26 Instrument ID: CHHPLC_X3
Lims ID: 280-182145-A-11-A Lab Sample ID: 280-182145-11
Client ID: FWGmw-024-230901-GW
Operator ID: JZ/JG ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

12 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.19
Response: 1380
Amount: 0.004704



Reviewer: K8YG, 09-Oct-2023 11:03:12
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

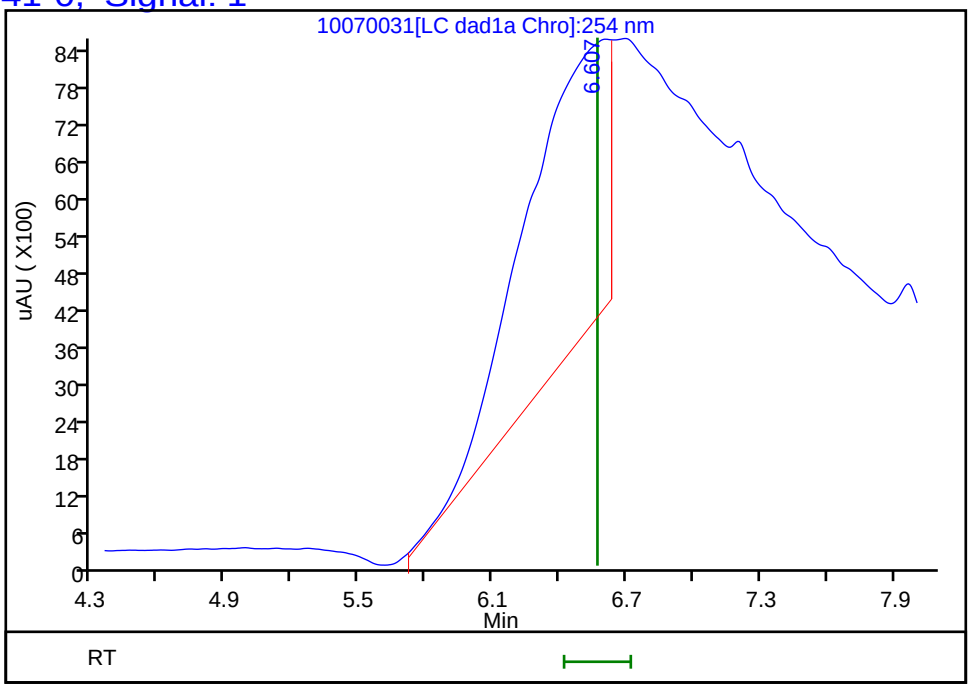
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20231007-126276.b\10070031.d
Injection Date: 07-Oct-2023 22:38:26 Instrument ID: CHHPLC_X3
Lims ID: 280-182145-A-11-A Lab Sample ID: 280-182145-11
Client ID: FWGmw-024-230901-GW
Operator ID: JZ/JG ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

4 HMX, CAS: 2691-41-0, Signal: 1

RT: 6.61
Response: 123156
Amount: 1.306621



Reviewer: K8YG, 09-Oct-2023 11:03:12
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Client Sample ID: FWGmw-024-230901-GW RE | Lab Sample ID: 280-182145-11 RE

Matrix: Water | Lab File ID: 10130043.D

Analysis Method: 8330B | Date Collected: 09/28/2023 13:16

Extraction Method: 3535 | Date Extracted: 10/12/2023 14:54

Sample wt/vol: 486.6(mL) | Date Analyzed: 10/14/2023 03:34

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 629672 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	*1,3,5-Trinitrobenzene*	*0.21*	*U H*	*0.22*	0.21	*0.086*
99-65-0	*1,3-Dinitrobenzene*	*0.10*	*U H*	*0.11*	0.10	*0.038*
118-96-7	*2,4,6-Trinitrotoluene*	*0.10*	*U H*	*0.11*	0.10	*0.046*
121-14-2	*2,4-Dinitrotoluene*	*0.082*	*U H Q*	*0.10*	0.082	*0.028*
606-20-2	*2,6-Dinitrotoluene*	*0.082*	*U H Q*	*0.10*	0.082	*0.041*
35572-78-2	*2-Amino-4,6-dinitrotoluene*	*0.10*	*U H Q*	*0.11*	0.10	*0.052*
88-72-2	*2-Nitrotoluene*	*0.21*	*U H Q*	*0.22*	0.21	*0.088*
99-08-1	*3-Nitrotoluene*	*0.36*	*U H Q*	*0.41*	0.36	*0.20*
19406-51-0	*4-Amino-2,6-dinitrotoluene*	*0.12*	*U H Q*	*0.15*	0.12	*0.059*
99-99-0	*4-Nitrotoluene*	*0.41*	*U H Q*	*0.42*	0.41	*0.10*
2691-41-0	*HMX*	*0.21*	*U M H*	*0.22*	0.21	*0.090*
98-95-3	*Nitrobenzene*	*0.21*	*U H*	*0.22*	0.21	*0.094*
55-63-0	*Nitroglycerin*	*2.1*	*U H*	*2.2*	2.1	*0.95*
78-11-5	*PETN*	*1.0*	*U H*	*1.1*	1.0	*0.46*
121-82-4	*RDX*	*0.21*	*U H*	*0.22*	0.21	*0.053*
479-45-8	*Tetryl*	*0.10*	*U H*	*0.11*	0.10	*0.033*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	100	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\10130043.D
Lims ID: 280-182145-B-11-A
Client ID: FWGmw-024-230901-GW
Sample Type: Client
Inject. Date: 14-Oct-2023 03:34:51 ALS Bottle#: 43 Worklist Smp#: 43
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182145-B-11-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-Oct-2023 11:09:19 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1675

First Level Reviewer: K8YG Date: 16-Oct-2023 11:00:43

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	4 HMX	1		6.577			ND	U
	8 RDX	1		7.584			ND	
$	10 1,2-Dinitrobenzene	1	8.512	8.524	-0.012	24785	0.2000	M
	11 1,3,5-Trinitrobenzene	1		8.650			ND	
	12 1,3-Dinitrobenzene	1		9.264			ND	
	13 Nitrobenzene	1		9.630			ND	
	15 Tetryl	1		9.984			ND	
	16 Nitroglycerin	2		10.430			ND	
	17 2,4,6-Trinitrotoluene	1		10.870			ND	
	18 4-Amino-2,6-dinitrotoluene	1		11.044			ND	
	19 2-Amino-4,6-dinitrotoluene	1		11.297			ND	
	20 2,6-Dinitrotoluene	1		11.457			ND	
	21 2,4-Dinitrotoluene	1		11.624			ND	
	22 o-Nitrotoluene	1		12.430			ND	
	23 p-Nitrotoluene	1		12.844			ND	
	24 m-Nitrotoluene	1		13.404			ND	
	25 PETN	2		14.537			ND	

QC Flag Legend

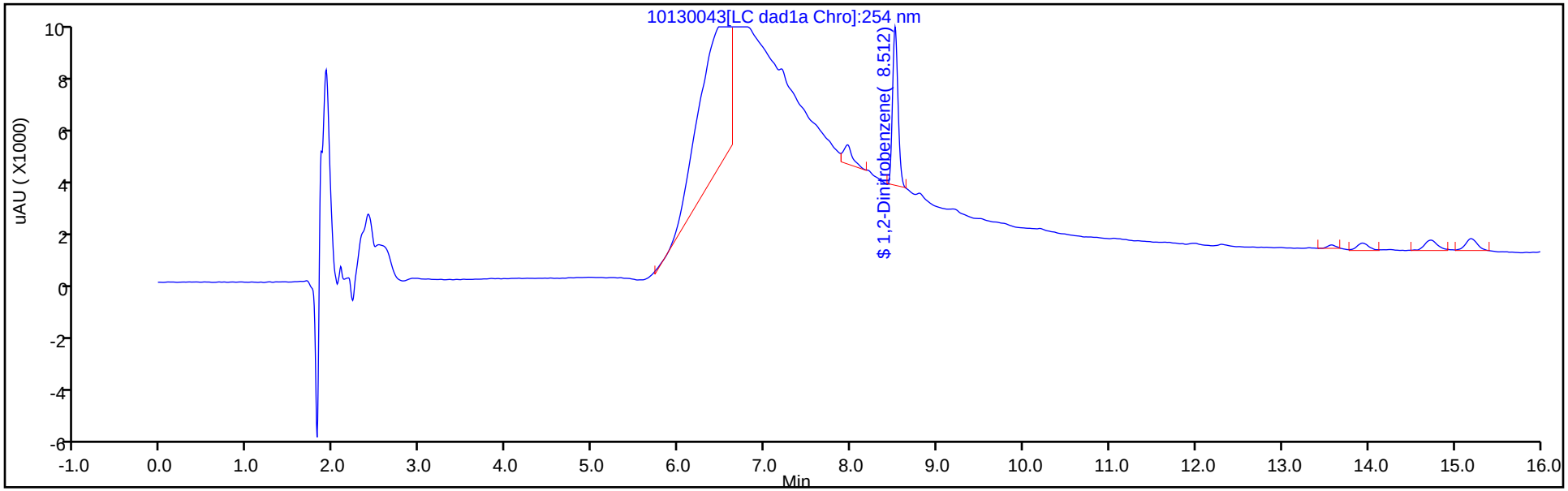
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 16-Oct-2023 11:09:20 Chrom Revision: 2.3 22-Sep-2023 11:33:50

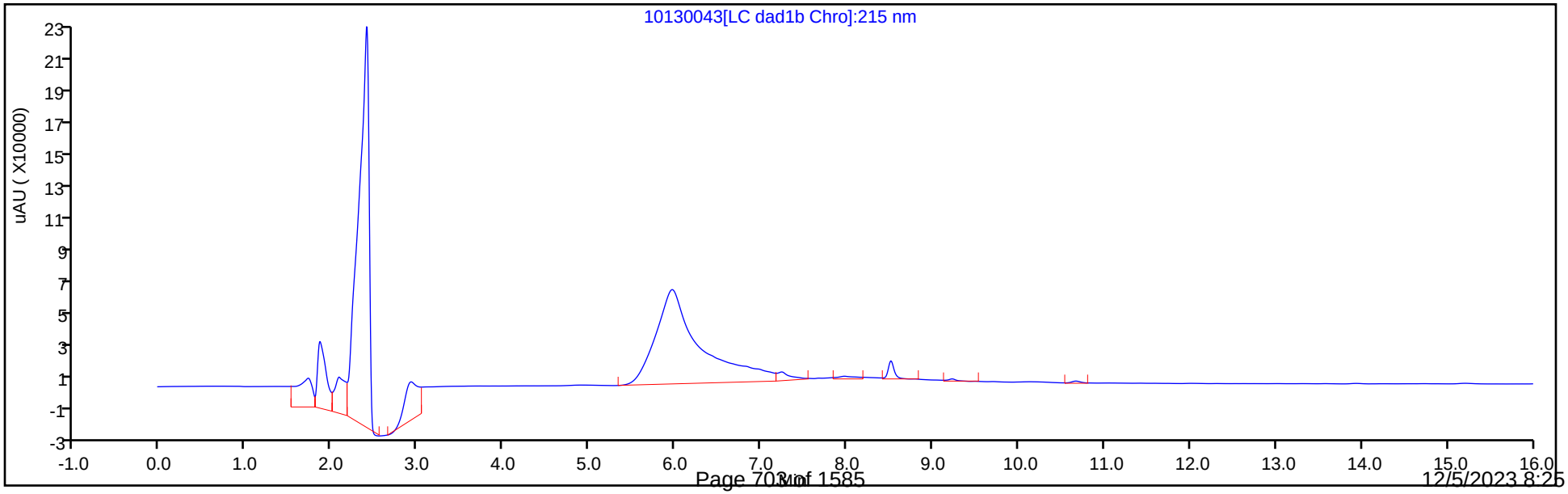
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20231013-126501.b\10130043.d				
Injection Date:	14-Oct-2023 03:34:51	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-182145-B-11-A	Lab Sample ID:	280-182145-11	Worklist Smp#:	43
Client ID:	FWGmw-024-230901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	43
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\10130043.D				
Lims ID:	280-182145-B-11-A				
Client ID:	FWGmw-024-230901-GW				
Sample Type:	Client				
Inject. Date:	14-Oct-2023 03:34:51	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-182145-B-11-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-Oct-2023 11:09:19	Calib Date:	24-Jun-2023 00:23:49		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1675				

First Level Reviewer: K8YG Date: 16-Oct-2023 11:00:43

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2000	100.01

Manual Integration/User Assign Peak Report

Eurofins Denver

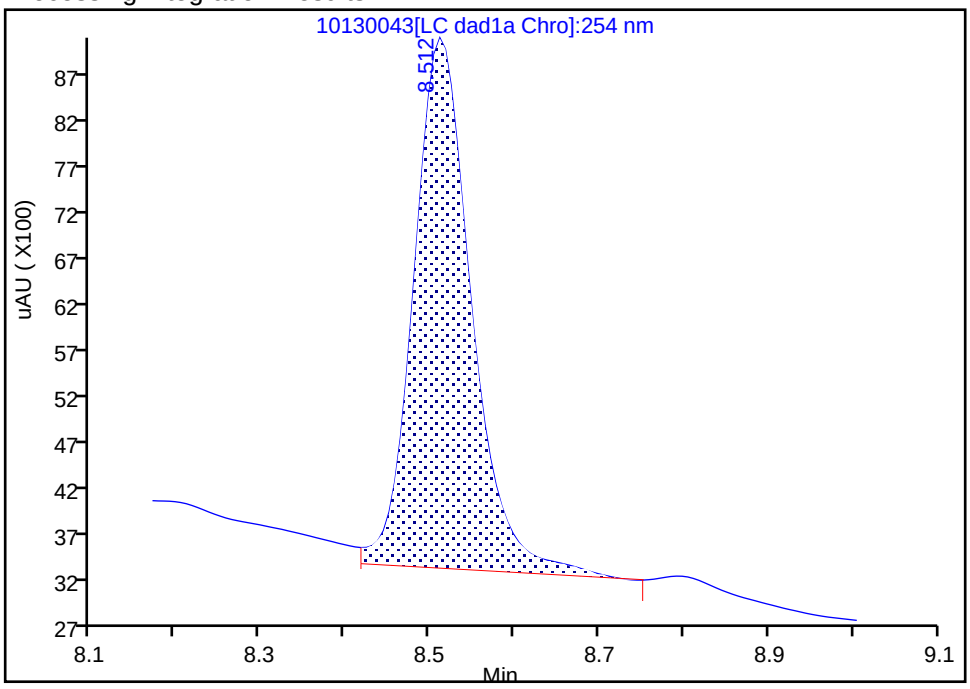
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231013-126501.b\10130043.d				
Injection Date:	14-Oct-2023 03:34:51	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182145-B-11-A	Lab Sample ID:	280-182145-11		
Client ID:	FWGmw-024-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

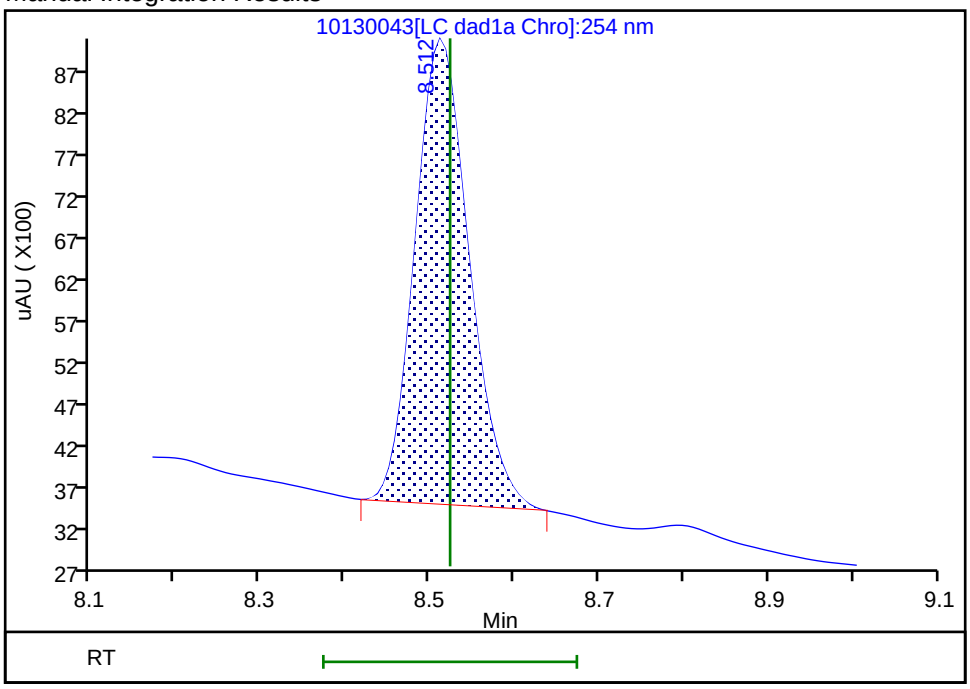
Processing Integration Results

RT: 8.51
Area: 27429
Amount: 0.221361
Amount Units: ug/mL



Manual Integration Results

RT: 8.51
Area: 24785
Amount: 0.200023
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 11:00:40 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

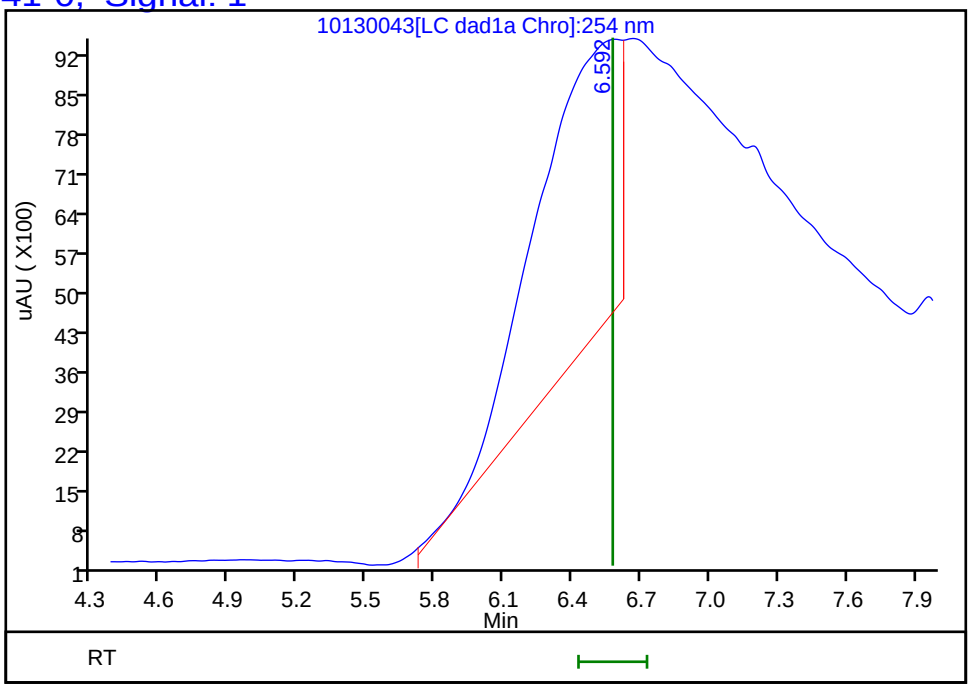
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20231013-126501.b\10130043.d				
Injection Date:	14-Oct-2023 03:34:51	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182145-B-11-A	Lab Sample ID:	280-182145-11		
Client ID:	FWGmw-024-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0, Signal: 1

RT: 6.59
Response: 133746
Amount: 1.418975



Reviewer: K8YG, 16-Oct-2023 11:00:43
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Client Sample ID: FWGmw-023-230901-GW | Lab Sample ID: 280-182145-12

Matrix: Water | Lab File ID: 10070032.D

Analysis Method: 8330B | Date Collected: 09/28/2023 14:05

Extraction Method: 3535 | Date Extracted: 10/03/2023 13:12

Sample wt/vol: 481.7(mL) | Date Analyzed: 10/07/2023 23:01

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 628897 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U Q	0.22	0.21	0.087
99-65-0	1,3-Dinitrobenzene	0.10	U Q	0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	0.10	U Q	0.11	0.10	0.047
6629-29-4	2,4-diamino-6-nitrotoluene	0.93	U Q	1.0	0.93	0.45
121-14-2	2,4-Dinitrotoluene	0.083	U Q	0.10	0.083	0.028
59229-75-3	2,6-diamino-4-nitrotoluene	0.93	U	1.0	0.93	0.23
606-20-2	2,6-Dinitrotoluene	0.083	U Q	0.10	0.083	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U Q	0.11	0.10	0.053
88-72-2	2-Nitrotoluene	0.21	U Q	0.22	0.21	0.089
618-87-1	3,5-Dinitroaniline	0.31	U Q	0.42	0.31	0.14
99-08-1	3-Nitrotoluene	0.36	U Q	0.42	0.36	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U Q	0.16	0.12	0.060
99-99-0	4-Nitrotoluene	0.42	U Q	0.43	0.42	0.10
80251-29-2	DNX	0.26	U Q	0.52	0.26	0.10
2691-41-0	HMX	0.21	U M Q	0.22	0.21	0.091
5755-27-1	MNX	0.30	U Q	0.52	0.30	0.096
98-95-3	Nitrobenzene	0.21	U Q	0.22	0.21	0.094
55-63-0	Nitroglycerin	2.1	U Q	2.2	2.1	0.96
78-11-5	PETN	1.0	U Q	1.1	1.0	0.46
121-82-4	RDX	0.21	U Q	0.22	0.21	0.053
479-45-8	Tetryl	0.10	U Q	0.11	0.10	0.033
13980-04-6	TNX	0.26	U Q	0.52	0.26	0.082

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	77	M Q	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\10070032.D
Lims ID: 280-182145-A-12-A
Client ID: FWGmw-023-230901-GW
Sample Type: Client
Inject. Date: 07-Oct-2023 23:01:19 ALS Bottle#: 32 Worklist Smp#: 32
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182145-A-12-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2023 11:16:57 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1602

First Level Reviewer: K8YG Date: 09-Oct-2023 08:55:17

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1		6.438			ND	
3 TNX	1		6.450			ND	
4 HMX	1	6.577	6.570	0.007	531	0.005634	7M
5 2,4-diamino-6-nitrotoluene	1		6.625			ND	
6 DNX	1		6.776			ND	
7 MNX	1		7.196			ND	
8 RDX	1		7.576			ND	
$ 10 1,2-Dinitrobenzene	1	8.517	8.516	0.001	18970	0.1531	M
11 1,3,5-Trinitrobenzene	1		8.643			ND	
12 1,3-Dinitrobenzene	1		9.250			ND	
13 Nitrobenzene	1		9.616			ND	
14 3,5-Dinitroaniline	1		9.830			ND	
15 Tetryl	1		9.956			ND	
16 Nitroglycerin	2		10.410			ND	
17 2,4,6-Trinitrotoluene	1		10.843			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.010			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.256			ND	
20 2,6-Dinitrotoluene	1		11.423			ND	
21 2,4-Dinitrotoluene	1		11.590			ND	
22 o-Nitrotoluene	1		12.390			ND	
23 p-Nitrotoluene	1		12.796			ND	
24 m-Nitrotoluene	1		13.356			ND	
25 PETN	2		14.470			ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated

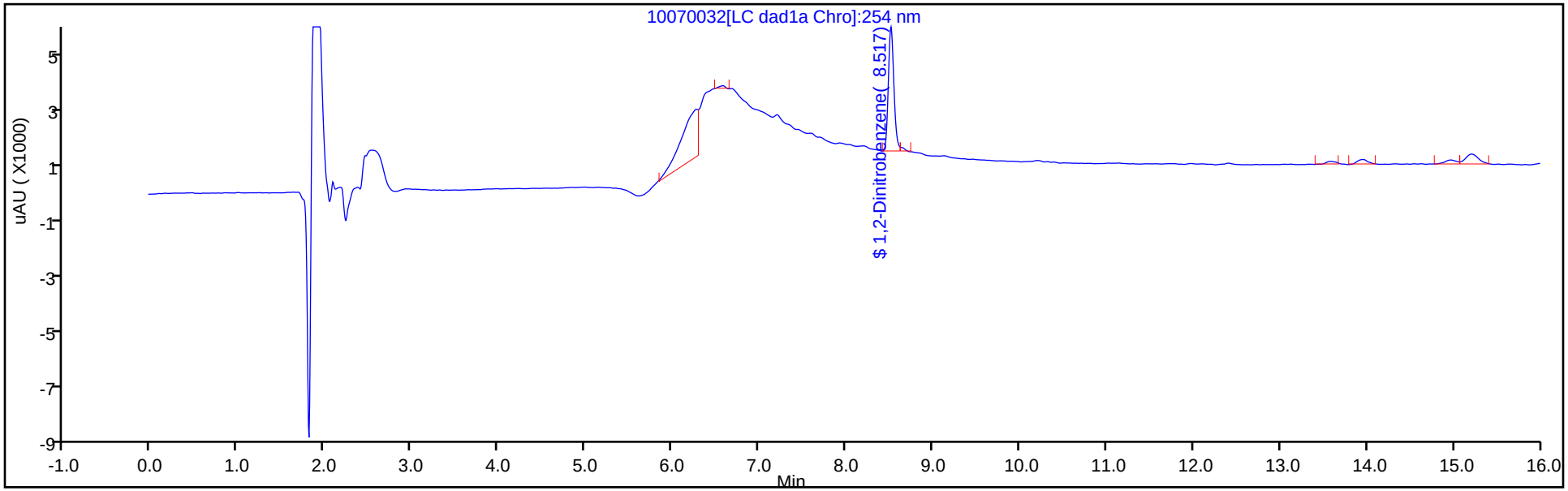
Report Date: 09-Oct-2023 11:17:04 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

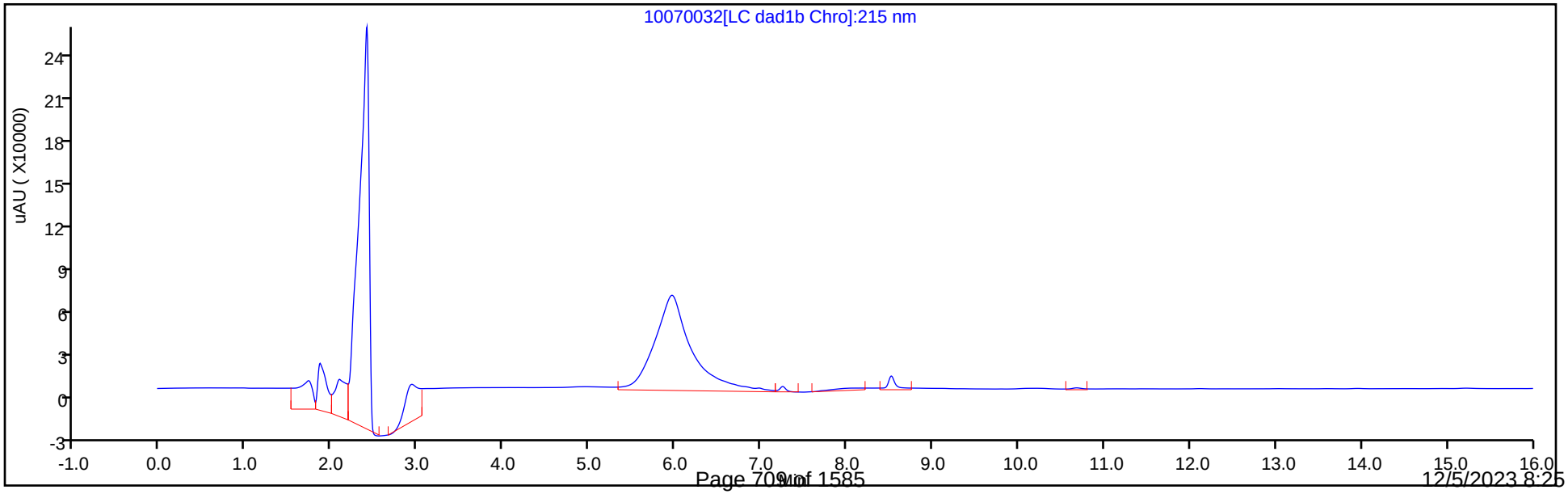
Data File: \\chromfs\denver\chromdata\chhplc_x\20231007-126276.b\10070032.d

Injection Date:	07-Oct-2023 23:01:19	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-182145-A-12-A	Lab Sample ID:	280-182145-12	Worklist Smp#:	32
Client ID:	FWGmw-023-230901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\10070032.D				
Lims ID:	280-182145-A-12-A				
Client ID:	FWGmw-023-230901-GW				
Sample Type:	Client				
Inject. Date:	07-Oct-2023 23:01:19	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-182145-A-12-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	09-Oct-2023 11:16:57	Calib Date:	24-Jun-2023 00:23:49		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1602				

First Level Reviewer: K8YG Date: 09-Oct-2023 08:55:17

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1531	76.55

Manual Integration/User Assign Peak Report

Eurofins Denver

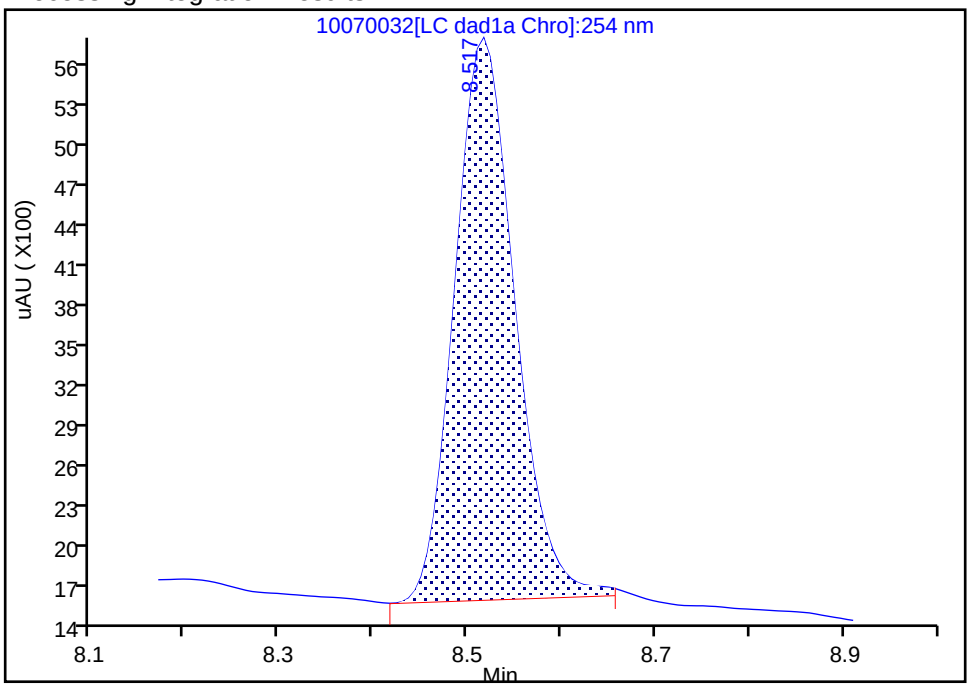
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231007-126276.b\10070032.d				
Injection Date:	07-Oct-2023 23:01:19	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182145-A-12-A	Lab Sample ID:	280-182145-12		
Client ID:	FWGmw-023-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

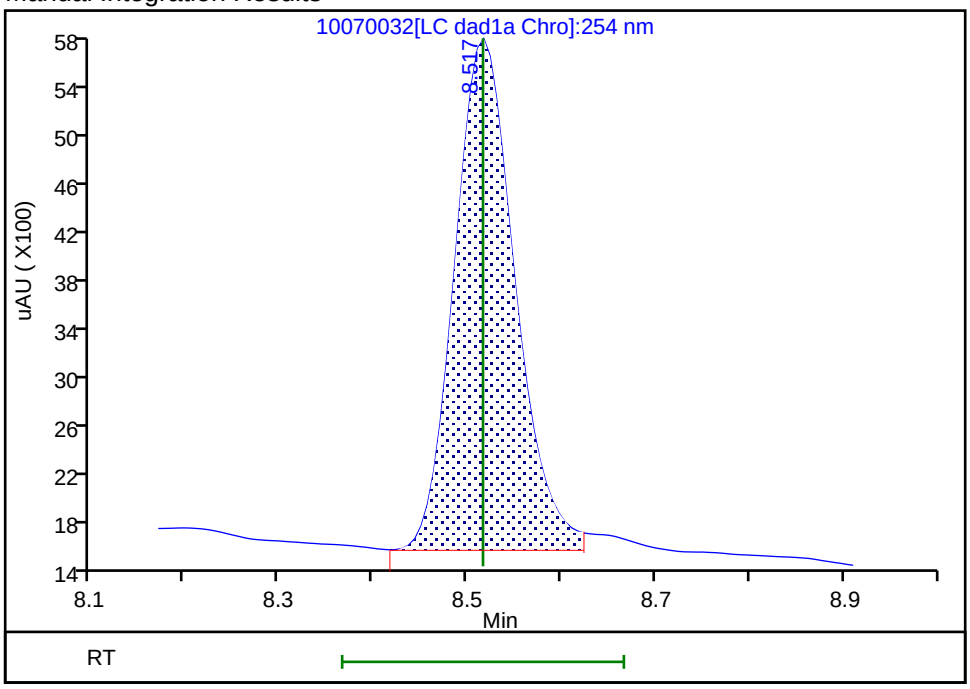
Processing Integration Results

RT: 8.52
Area: 18757
Amount: 0.151375
Amount Units: ug/mL



Manual Integration Results

RT: 8.52
Area: 18970
Amount: 0.153094
Amount Units: ug/mL



Reviewer: K8YG, 09-Oct-2023 11:03:24 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

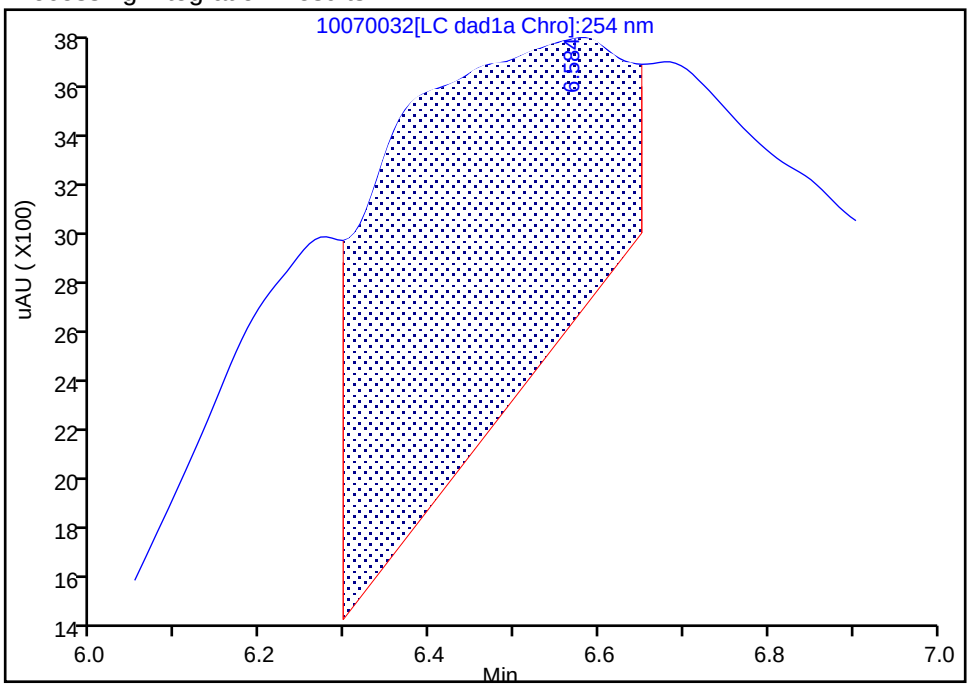
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231007-126276.b\10070032.d				
Injection Date:	07-Oct-2023 23:01:19	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182145-A-12-A	Lab Sample ID:	280-182145-12		
Client ID:	FWGmw-023-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

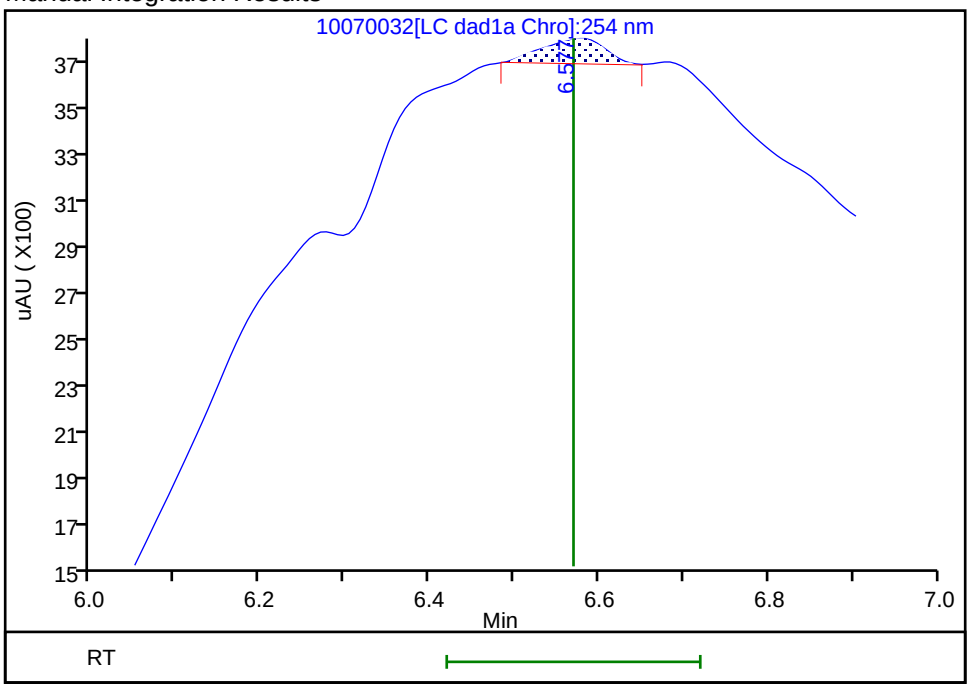
Processing Integration Results

RT: 6.58
Area: 28929
Amount: 0.306922
Amount Units: ug/mL



Manual Integration Results

RT: 6.58
Area: 531
Amount: 0.005634
Amount Units: ug/mL



Reviewer: K8YG, 09-Oct-2023 11:03:33 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Client Sample ID: FWGmw-023-230901-GW RE | Lab Sample ID: 280-182145-12 RE

Matrix: Water | Lab File ID: 10130044.D

Analysis Method: 8330B | Date Collected: 09/28/2023 14:05

Extraction Method: 3535 | Date Extracted: 10/12/2023 14:54

Sample wt/vol: 489(mL) | Date Analyzed: 10/14/2023 03:57

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 629672 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	*1,3,5-Trinitrobenzene*	*0.20*	*U H*	*0.21*	0.20	*0.086*
99-65-0	*1,3-Dinitrobenzene*	*0.10*	*U H*	*0.11*	0.10	*0.038*
118-96-7	*2,4,6-Trinitrotoluene*	*0.10*	*U H*	*0.11*	0.10	*0.046*
6629-29-4	*2,4-diamino-6-nitrotoluene*	*0.92*	*U H Q*	*1.0*	0.92	*0.44*
121-14-2	*2,4-Dinitrotoluene*	*0.082*	*U H Q*	*0.10*	0.082	*0.028*
59229-75-3	*2,6-diamino-4-nitrotoluene*	*0.92*	*U H Q*	*1.0*	0.92	*0.23*
606-20-2	*2,6-Dinitrotoluene*	*0.082*	*U H Q*	*0.10*	0.082	*0.041*
35572-78-2	*2-Amino-4,6-dinitrotoluene*	*0.10*	*U H Q*	*0.11*	0.10	*0.052*
88-72-2	*2-Nitrotoluene*	*0.20*	*U H Q*	*0.21*	0.20	*0.087*
618-87-1	*3,5-Dinitroaniline*	*0.31*	*U H*	*0.41*	0.31	*0.13*
99-08-1	*3-Nitrotoluene*	*0.36*	*U H Q*	*0.41*	0.36	*0.20*
19406-51-0	*4-Amino-2,6-dinitrotoluene*	*0.12*	*U H Q*	*0.15*	0.12	*0.059*
99-99-0	*4-Nitrotoluene*	*0.41*	*U H Q*	*0.42*	0.41	*0.10*
80251-29-2	*DNX*	*0.26*	*U H*	*0.51*	0.26	*0.099*
2691-41-0	*HMX*	*0.20*	*U M H*	*0.21*	0.20	*0.090*
5755-27-1	*MNX*	*0.30*	*U H*	*0.51*	0.30	*0.095*
98-95-3	*Nitrobenzene*	*0.20*	*U H*	*0.21*	0.20	*0.093*
55-63-0	*Nitroglycerin*	*2.0*	*U H*	*2.1*	2.0	*0.94*
78-11-5	*PETN*	*1.0*	*U H*	*1.1*	1.0	*0.46*
121-82-4	*RDX*	*0.20*	*U H*	*0.21*	0.20	*0.053*
479-45-8	*Tetryl*	*0.10*	*U H*	*0.11*	0.10	*0.033*
13980-04-6	*TNX*	*0.26*	*U H*	*0.51*	0.26	*0.081*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	97		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\10130044.D
Lims ID: 280-182145-B-12-A
Client ID: FWGmw-023-230901-GW
Sample Type: Client
Inject. Date: 14-Oct-2023 03:57:46 ALS Bottle#: 44 Worklist Smp#: 44
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182145-B-12-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-Oct-2023 11:09:19 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1675

First Level Reviewer: K8YG Date: 16-Oct-2023 11:00:58

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1		6.443			ND	
3 TNX	1		6.444			ND	
4 HMX	1	6.575	6.577	-0.002	249	0.002642	7M
5 2,4-diamino-6-nitrotoluene	1		6.630			ND	
6 DNX	1		6.777			ND	
7 MNX	1		7.204			ND	
8 RDX	1		7.584			ND	
$ 10 1,2-Dinitrobenzene	1	8.509	8.524	-0.015	24102	0.1945	
11 1,3,5-Trinitrobenzene	1		8.650			ND	
12 1,3-Dinitrobenzene	1		9.264			ND	
13 Nitrobenzene	1		9.630			ND	
14 3,5-Dinitroaniline	1		9.850			ND	
15 Tetryl	1		9.984			ND	
16 Nitroglycerin	2		10.430			ND	
17 2,4,6-Trinitrotoluene	1		10.870			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.044			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.297			ND	
20 2,6-Dinitrotoluene	1		11.457			ND	
21 2,4-Dinitrotoluene	1		11.624			ND	
22 o-Nitrotoluene	1		12.430			ND	
23 p-Nitrotoluene	1		12.844			ND	
24 m-Nitrotoluene	1		13.404			ND	
25 PETN	2		14.537			ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated

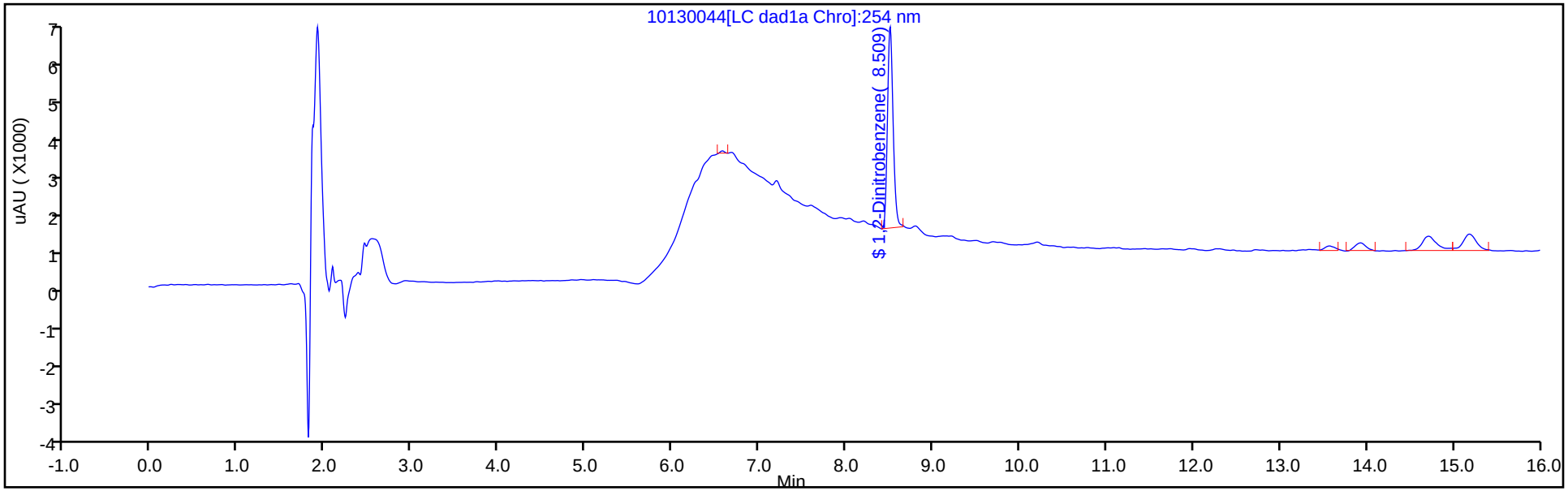
Report Date: 16-Oct-2023 11:09:21 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

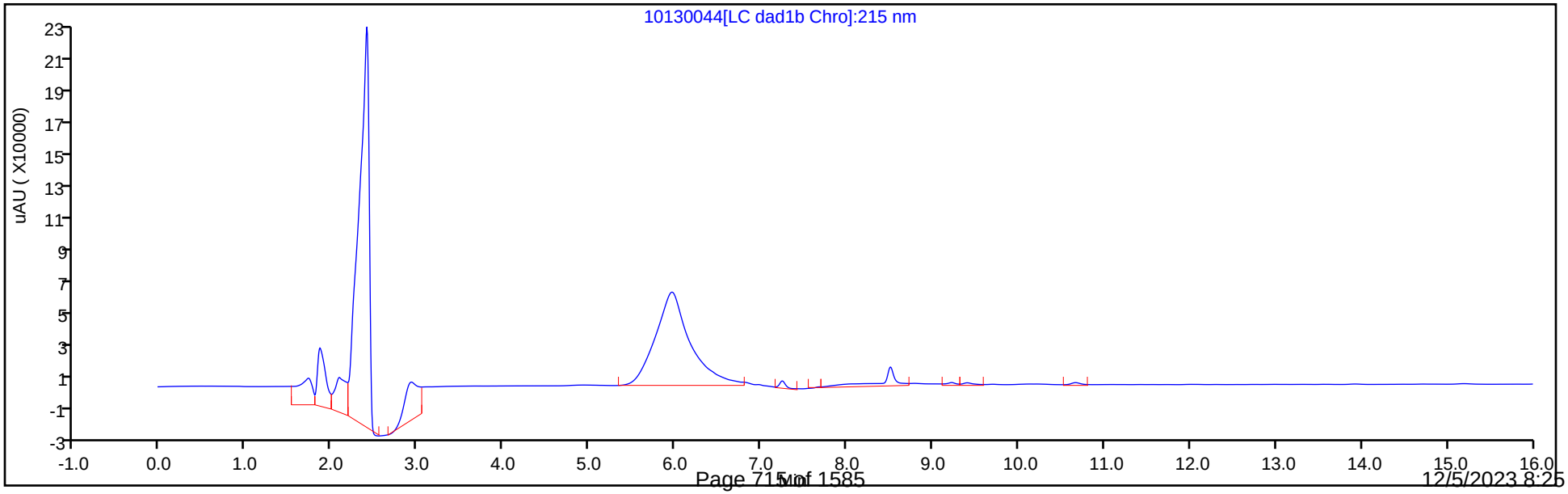
Data File: \\chromfs\denver\chromdata\chhplc_x\20231013-126501.b\10130044.d

Injection Date:	14-Oct-2023 03:57:46	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-182145-B-12-A	Lab Sample ID:	280-182145-12	Worklist Smp#:	44
Client ID:	FWGmw-023-230901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	44
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\10130044.D				
Lims ID:	280-182145-B-12-A				
Client ID:	FWGmw-023-230901-GW				
Sample Type:	Client				
Inject. Date:	14-Oct-2023 03:57:46	ALS Bottle#:	44	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-182145-B-12-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-Oct-2023 11:09:19	Calib Date:	24-Jun-2023 00:23:49		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1675				

First Level Reviewer: K8YG Date: 16-Oct-2023 11:00:58

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1945	97.26

Manual Integration/User Assign Peak Report

Eurofins Denver

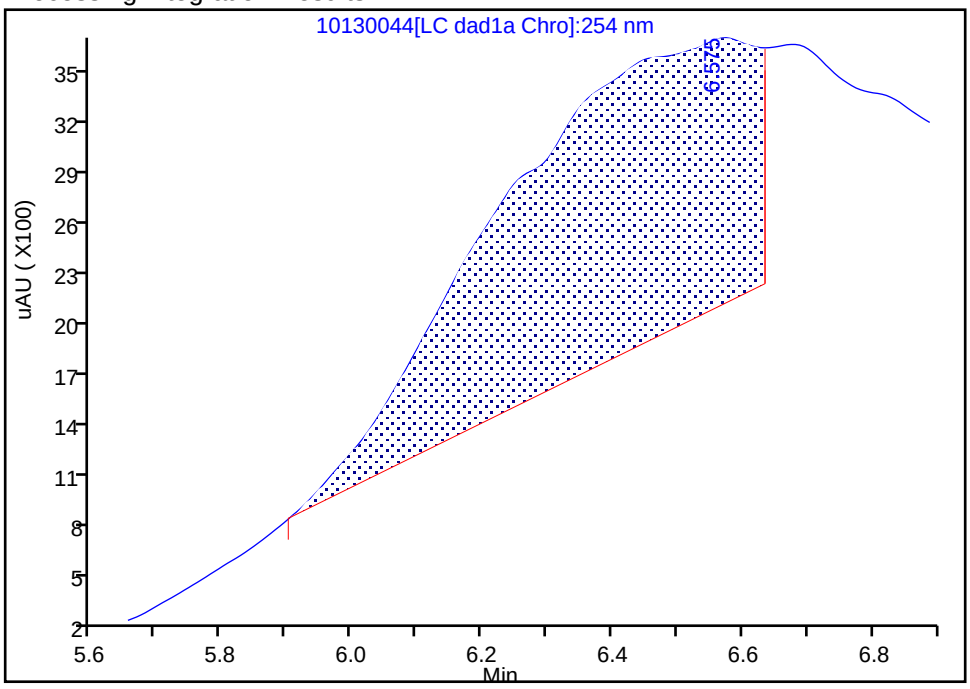
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231013-126501.b\10130044.d				
Injection Date:	14-Oct-2023 03:57:46	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182145-B-12-A	Lab Sample ID:	280-182145-12		
Client ID:	FWGmw-023-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	44	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

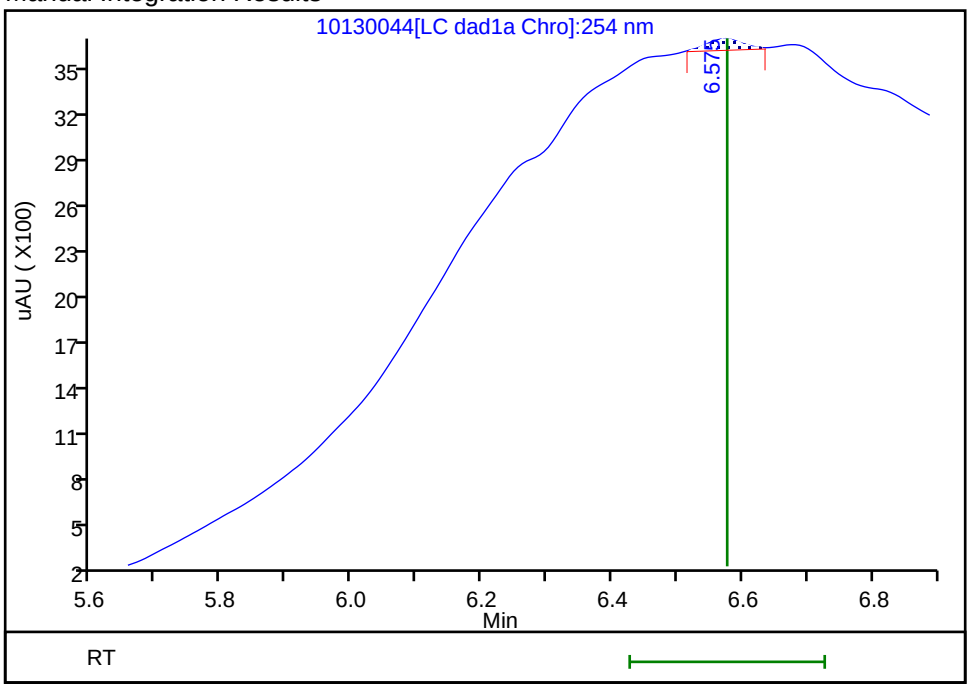
Processing Integration Results

RT: 6.58
Area: 47802
Amount: 0.507154
Amount Units: ug/mL



Manual Integration Results

RT: 6.58
Area: 249
Amount: 0.002642
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 11:00:54 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver | Job No.: 280-182145-1 | Analy Batch No.: 627290

SDG No.:

Instrument ID: CHHPLC_G2_LUNA | GC Column: Luna-phenyl ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 09/25/2023 18:42 | Calibration End Date: 09/25/2023 23:30 | Calibration ID: 84932

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-627290/18	09250018.D
Level 2	IC 280-627290/17	09250017.D
Level 3	IC 280-627290/16	09250016.D
Level 4	IC 280-627290/15	09250015.D
Level 5	IC 280-627290/14	09250014.D
Level 6	IC 280-627290/13	09250013.D
Level 7	IC 280-627290/12	09250012.D
Level 8	IC 280-627290/11	09250011.D
Level 9	IC 280-627290/10	09250010.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	LVL 9		RT WINDOW	AVG RT
TNX	5.278	5.285	5.289	5.281	5.291	5.285	5.261	5.260	5.185		5.141 - 5.441	5.268
DNX	6.124	6.131	6.135	6.127	6.144	6.131	6.108	6.107	6.025		5.994 - 6.294	6.115
HMX	6.771	6.771	6.782	6.767	6.791	6.778	6.761	6.760	6.698		6.641 - 6.941	6.764
MNX	7.624	7.618	7.629	7.621	7.644	7.625	7.608	7.600	7.525		7.494 - 7.794	7.610
Picric acid	+++++	8.678	8.689	8.654	8.664	8.618	8.568	8.540	8.458		8.514 - 8.814	8.609
RDX	9.011	9.005	9.022	9.001	9.038	9.011	8.988	8.987	8.911		8.888 - 9.188	8.997
Nitrobenzene	11.551	11.551	11.575	11.567	11.598	11.564	11.541	11.540	11.458		11.448 - 11.748	11.549
3,5-Dinitroaniline	14.364	14.338	14.375	14.367	14.378	14.351	14.321	14.327	14.278		14.228 - 14.528	14.344
1,3-Dinitrobenzene	14.664	14.638	14.669	14.661	14.671	14.651	14.614	14.627	14.558		14.521 - 14.821	14.639
Nitroglycerin	15.091	15.064	15.115	15.107	15.111	15.098	15.054	15.074	15.031		14.961 - 15.261	15.083
2-Nitrotoluene	15.697	15.684	15.742	15.721	15.738	15.718	15.667	15.687	15.645		15.588 - 15.888	15.700
4-Nitrotoluene	15.931	15.911	15.969	15.941	15.958	15.938	15.887	15.907	15.731		15.808 - 16.108	15.908
4-Amino-2,6-dinitrotoluene	16.437	16.424	16.475	16.461	16.478	16.451	16.394	16.420	16.365		16.328 - 16.628	16.434
3-Nitrotoluene	16.751	16.744	16.802	16.781	16.804	16.778	16.721	16.747	16.691		16.654 - 16.954	16.758
2-Amino-4,6-dinitrotoluene	17.237	17.224	17.282	17.254	17.284	17.251	17.201	17.220	17.191		17.134 - 17.434	17.238
1,3,5-Trinitrobenzene	17.451	17.444	17.489	17.467	17.498	17.471	17.427	17.447	17.385		17.348 - 17.648	17.453
2,6-Dinitrotoluene	18.557	18.524	18.589	18.567	18.598	18.564	18.514	18.534	18.485		18.448 - 18.748	18.548
2,4-Dinitrotoluene	19.017	18.984	19.042	19.021	19.051	19.018	18.974	18.987	18.938		18.901 - 19.201	19.004
Tetryl	22.224	22.191	22.235	22.247	22.244	22.211	22.181	22.207	22.171		22.094 - 22.394	22.212
2,4,6-Trinitrotoluene	23.091	23.045	23.089	23.107	23.104	23.071	23.041	23.074	23.031		22.954 - 23.254	23.073
PETN	24.184	24.171	24.215	24.227	24.211	24.205	24.174	24.200	24.165		24.061 - 24.361	24.195
1,2-Dinitrobenzene	12.491	12.484	12.522	12.514	12.538	12.504	12.481	12.487	12.418		12.388 - 12.688	12.493

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-182145-1 Analy Batch No.: 627290

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/25/2023 18:42 Calibration End Date: 09/25/2023 23:30 Calibration ID: 84932

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-627290/18	09250018.D
Level 2	IC 280-627290/17	09250017.D
Level 3	IC 280-627290/16	09250016.D
Level 4	IC 280-627290/15	09250015.D
Level 5	IC 280-627290/14	09250014.D
Level 6	IC 280-627290/13	09250013.D
Level 7	IC 280-627290/12	09250012.D
Level 8	IC 280-627290/11	09250011.D
Level 9	IC 280-627290/10	09250010.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
TNX	461815 386971 363369	439232 373382	395174 367864	375773 388097	Lin2	957.197858	374554.929							0.9990		0.9900
DNX	321079 286981 266689	310490 276766	295504 272356	279421 284871	Ave		288239.568				6.2		20.0			
HMX	187300 179432 168868	156250 172885	177940 173956	169980 174631	Ave		173471.302				4.9		20.0			
MNX	264010 265964 244927	269623 255820	281988 250402	258920 264764	Ave		261824.305				4.2		20.0			
Picric acid	+++++ 142912 136394	148000 140230	145400 143551	144480 146441	Ave		143426.054				2.6		20.0			
RDX	236600 208856 200608	202700 202463	207060 204396	201330 204269	Ave		207586.757				5.4		20.0			
Nitrobenzene	381000 376684 370304	344350 367558	371820 376931	379810 374071	Ave		371391.992				3.0		20.0			
3,5-Dinitroaniline	462200 427448 367838	403550 420503	409760 426466	420280 426959	Lin2	391.186606	410104.490							0.9970		0.9900

Note: The M1 coefficient is the same as Ave CF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-182145-1 Analy Batch No.: 627290

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/25/2023 18:42 Calibration End Date: 09/25/2023 23:30 Calibration ID: 84932

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
1,3-Dinitrobenzene	667900 570764 609314	558000 556443	550320 568996	563490 570540	Ave		579529.535				6.4		20.0			
Nitroglycerin	133480 123608 118790	129650 119635	122900 122194	125699 121979	Ave		124214.981				3.8		20.0			
2-Nitrotoluene	275300 244024 223277	270800 237488	255000 241927	237780 237729	Ave		247036.094				6.8		20.0			
4-Nitrotoluene	286200 214680 224139	258900 213293	233340 216681	224490 217115	Lin2	723.584713	216871.385							0.9990		0.9900
4-Amino-2,6-dinitrotoluene	398000 273612 265643	349200 268898	302300 273259	276790 272622	Lin2	1351.95034	269373.383							0.9990		0.9900
3-Nitrotoluene	385300 273744 266326	333950 269443	291580 272884	285160 271165	Lin2	1184.33387	269480.350							1.0000		0.9900
2-Amino-4,6-dinitrotoluene	534900 393220 341806	409450 389805	413320 393520	391220 388664	Lin2	1423.09870	376274.684							0.9960		0.9900
1,3,5-Trinitrobenzene	415900 402060 432159	439000 393045	417600 396387	407530 400996	Ave		411630.771				3.9		20.0			
2,6-Dinitrotoluene	336000 266056 260065	335800 260443	254960 265649	265940 265199	Lin2	863.540612	260735.329							0.9960		0.9900
2,4-Dinitrotoluene	575300 543600 530117	562050 531333	546420 539851	537340 539776	Ave		545087.414				2.7		20.0			
Tetryl	361500 307496 296672	300850 298368	308000 304430	292480 305263	Ave		308339.878				6.7		20.0			
2,4,6-Trinitrotoluene	371200 396660 387636	326400 389068	405940 393427	397150 397391	Ave		384985.783				6.2		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-182145-1 Analy Batch No.: 627290

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/25/2023 18:42 Calibration End Date: 09/25/2023 23:30 Calibration ID: 84932

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
PETN	115960 128038 128625	105375 128664	115184 130621	123328 131308	Ave		123011.399				7.3		20.0			
1,2-Dinitrobenzene	305200 258584 251560	220950 251193	256740 255347	255720 255664	Ave		256773.116				8.4		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver | Job No.: 280-182145-1 | Analy Batch No.: 627290

SDG No.:

Instrument ID: CHHPLC_G2_LUNA | GC Column: Luna-pheny ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 09/25/2023 18:42 | Calibration End Date: 09/25/2023 23:30 | Calibration ID: 84932

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-627290/18	09250018.D
Level 2	IC 280-627290/17	09250017.D
Level 3	IC 280-627290/16	09250016.D
Level 4	IC 280-627290/15	09250015.D
Level 5	IC 280-627290/14	09250014.D
Level 6	IC 280-627290/13	09250013.D
Level 7	IC 280-627290/12	09250012.D
Level 8	IC 280-627290/11	09250011.D
Level 9	IC 280-627290/10	09250010.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		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
TNX	Lin2	4632 149801	8811 258277	19818 389261	37690 911149	97033	0.0100 0.401	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251
DNX	Ave	3214 110817	6216 190840	14790 285156	27970 667388	71817	0.0100 0.400	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250
HMX	Ave	1873 69154	3125 121769	8897 174631	16998 422170	44858	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
MNX	Ave	3081 119417	6293 204553	16454 308980	30216 714574	77595	0.0117 0.467	0.0233 0.817	0.0584 1.17	0.117 2.92	0.292
Picric acid	Ave	+++++ 56092	2960 100486	7270 146441	14448 340985	35728	+++++ 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
RDX	Ave	2366 80985	4054 143077	10353 204269	20133 501519	52214	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Nitrobenzene	Ave	3810 147023	6887 263852	18591 374071	37981 925760	94171	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
3,5-Dinitroaniline	Lin2	4622 168201	8071 298526	20488 426959	42028 919595	106862	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
1,3-Dinitrobenzene	Ave	6679 222577	11160 398297	27516 570540	56349 1523284	142691	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Nitroglycerin	Ave	13348 478538	25930 855360	61450 1219790	125699 2969741	309021	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
2-Nitrotoluene	Ave	2753 94995	5416 169349	12750 237729	23778 558193	61006	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
4-Nitrotoluene	Lin2	2862 85317	5178 151677	11667 217115	22449 560347	53670	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
4-Amino-2,6-dinitrotoluene	Lin2	3980 107559	6984 191281	15115 272622	27679 664108	68403	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
3-Nitrotoluene	Lin2	3853 107777	6679 191019	14579 271165	28516 665814	68436	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2-Amino-4,6-dinitrotoluene	Lin2	5349	8189	20666	39122	98305	0.0100	0.0200	0.0500	0.100	0.250

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver | Job No.: 280-182145-1 | Analy Batch No.: 627290

SDG No.:

Instrument ID: CHHPLC_G2_LUNA | GC Column: Luna-pheny ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 09/25/2023 18:42 | Calibration End Date: 09/25/2023 23:30 | Calibration ID: 84932

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		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
		155922	275464	388664	854516		0.400	0.700	1.00	2.50	
1,3,5-Trinitrobenzene	Ave	4159 157218	8780 277471	20880 400996	40753 1080397	100515	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2,6-Dinitrotoluene	Lin2	3360 104177	6716 185954	12748 265199	26594 650162	66514	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2,4-Dinitrotoluene	Ave	5753 212533	11241 377896	27321 539776	53734 1325292	135900	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Tetryl	Ave	3615 119347	6017 213101	15400 305263	29248 741681	76874	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2,4,6-Trinitrotoluene	Ave	3712 155627	6528 275399	20297 397391	39715 969091	99165	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
PETN	Ave	11596 514656	21075 914344	57592 1313083	123328 3215628	320094	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
1,2-Dinitrobenzene	Ave	3052 100477	4419 178743	12837 255664	25572 628901	64646	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250

Curve Type Legend:
Ave = Average
Lin2 = Linear 1/conc^2

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250010.D
Lims ID: IC INT 9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 25-Sep-2023 18:42:00 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 9
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub18

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:25:33 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 13:59:14

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.185	5.291	-0.106	911149	2.51	2.43	
4 DNX	1	6.025	6.144	-0.119	667388	2.50	2.32	
6 HMX	1	6.698	6.791	-0.093	422170	2.50	2.43	
7 MNX	1	7.525	7.644	-0.119	714574	2.92	2.73	
5 2,4,6-Trinitrophenol	1	8.458	8.664	-0.206	340985	2.50	2.38	
8 RDX	1	8.911	9.038	-0.127	501519	2.50	2.42	
9 Nitrobenzene	1	11.458	11.598	-0.140	925760	2.50	2.49	
$ 10 1,2-Dinitrobenzene	1	12.418	12.538	-0.120	628901	2.50	2.45	
11 3,5-Dinitroaniline	1	14.278	14.378	-0.100	919595	2.50	2.24	
12 1,3-Dinitrobenzene	1	14.558	14.671	-0.113	1523284	2.50	2.63	
13 Nitroglycerin	2	15.031	15.111	-0.080	2969741	25.0	23.9	
14 o-Nitrotoluene	1	15.645	15.738	-0.093	558193	2.50	2.26	M
15 p-Nitrotoluene	1	15.731	15.958	-0.227	560347	2.50	2.58	Ma
16 4-Amino-2,6-dinitrotoluene	1	16.365	16.478	-0.113	664108	2.50	2.46	
17 m-Nitrotoluene	1	16.691	16.804	-0.113	665814	2.50	2.47	
18 2-Amino-4,6-dinitrotoluene	1	17.191	17.284	-0.093	854516	2.50	2.27	
19 1,3,5-Trinitrobenzene	1	17.385	17.498	-0.113	1080397	2.50	2.62	
20 2,6-Dinitrotoluene	1	18.485	18.598	-0.113	650162	2.50	2.49	
21 2,4-Dinitrotoluene	1	18.938	19.051	-0.113	1325292	2.50	2.43	
22 Tetryl	1	22.171	22.244	-0.073	741681	2.50	2.41	
23 2,4,6-Trinitrotoluene	1	23.031	23.104	-0.073	969091	2.50	2.52	
24 PETN	2	24.165	24.211	-0.046	3215628	25.0	26.1	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00078	Amount Added: 250.00	Units: uL
8330 DMT_00015	Amount Added: 125.00	Units: uL

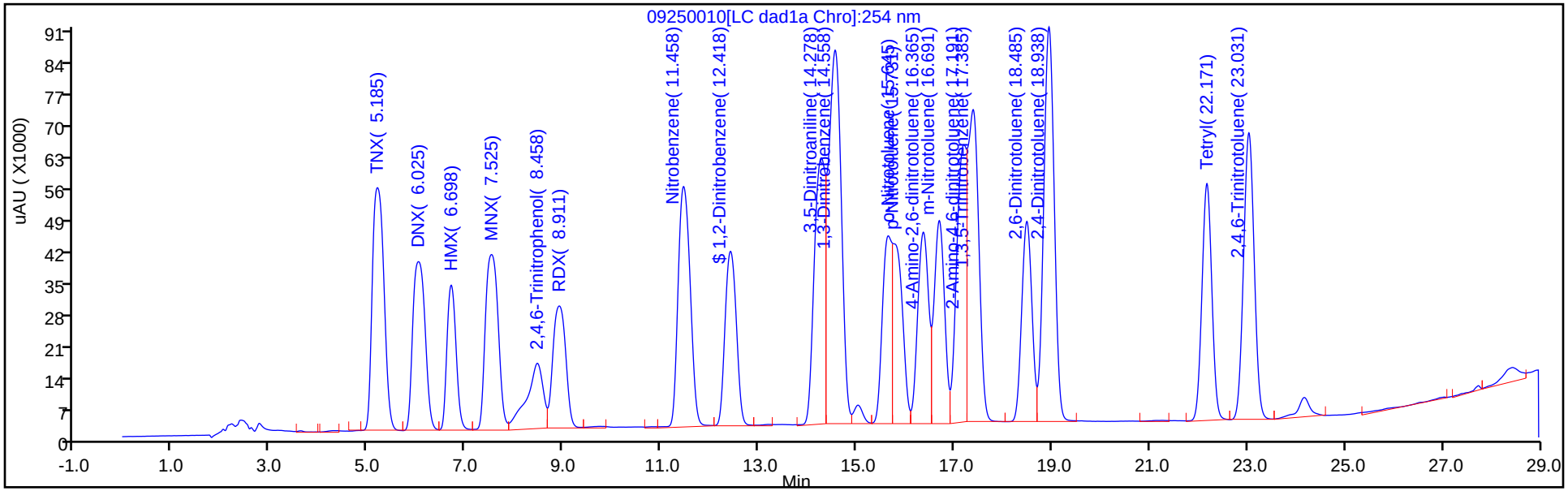
Report Date: 26-Sep-2023 15:25:33 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

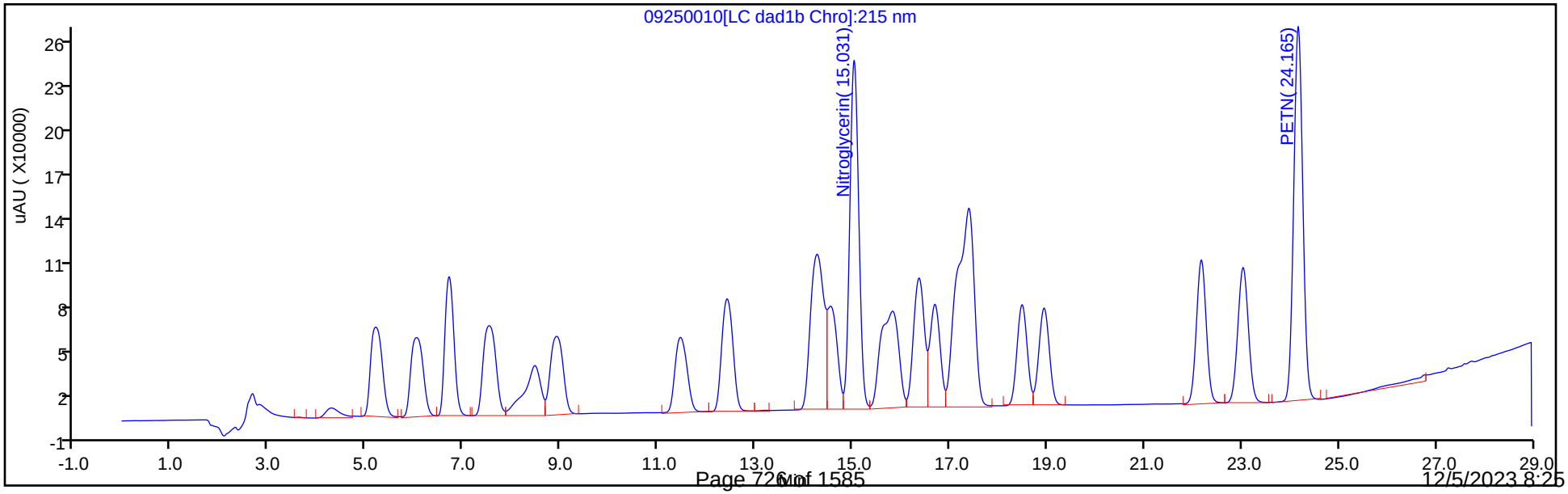
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250010.d

Injection Date:	25-Sep-2023 18:42:00	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	IC INT 9			Worklist Smp#:	10
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

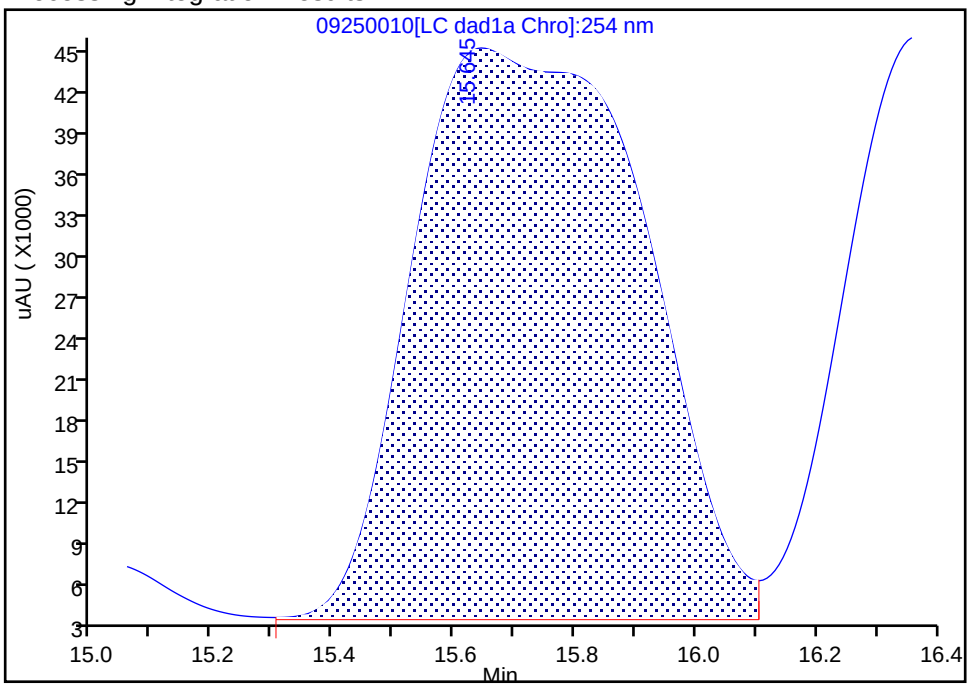
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Injection Date: 25-Sep-2023 18:42:00 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 9
Client ID:
Operator ID: JZ/JG ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

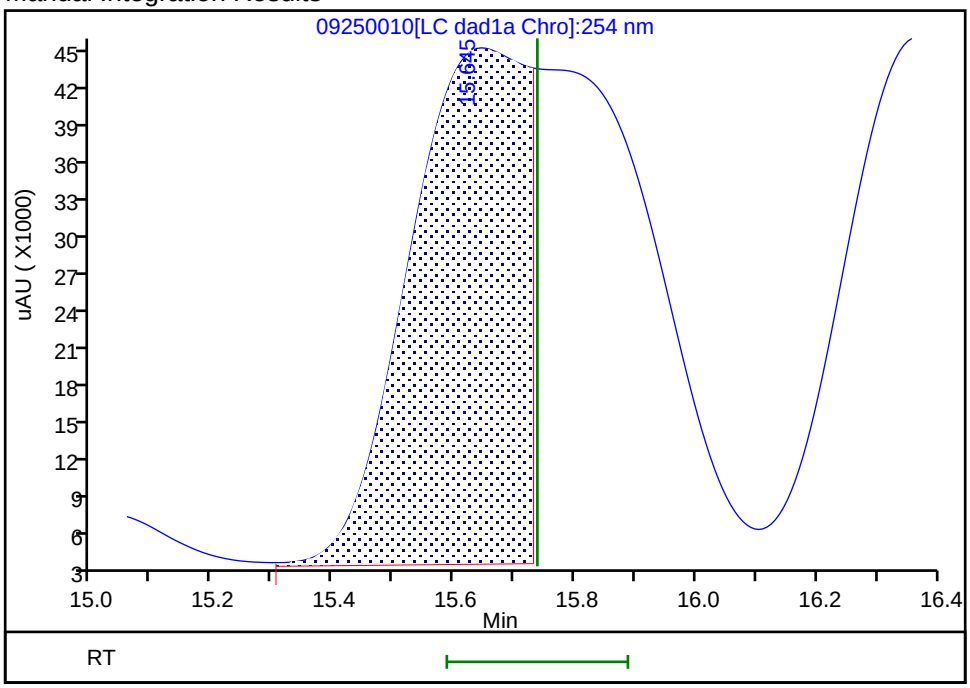
Processing Integration Results

RT: 15.64
Area: 1118542
Amount: 3.449139
Amount Units: ug/ml



Manual Integration Results

RT: 15.64
Area: 558193
Amount: 2.259561
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 13:59:00 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

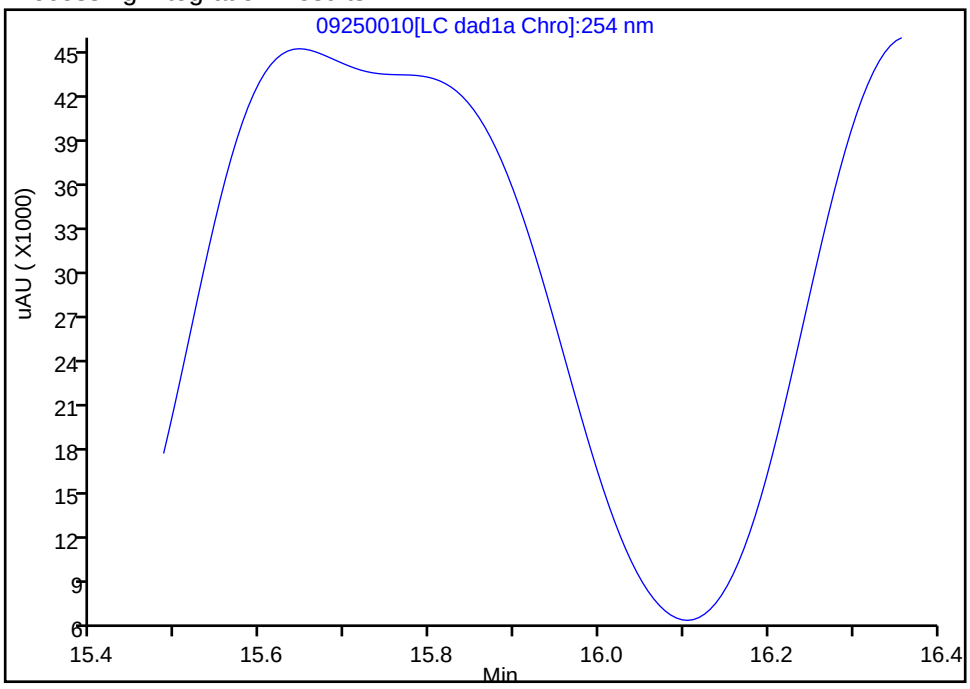
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250010.d				
Injection Date:	25-Sep-2023 18:42:00	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

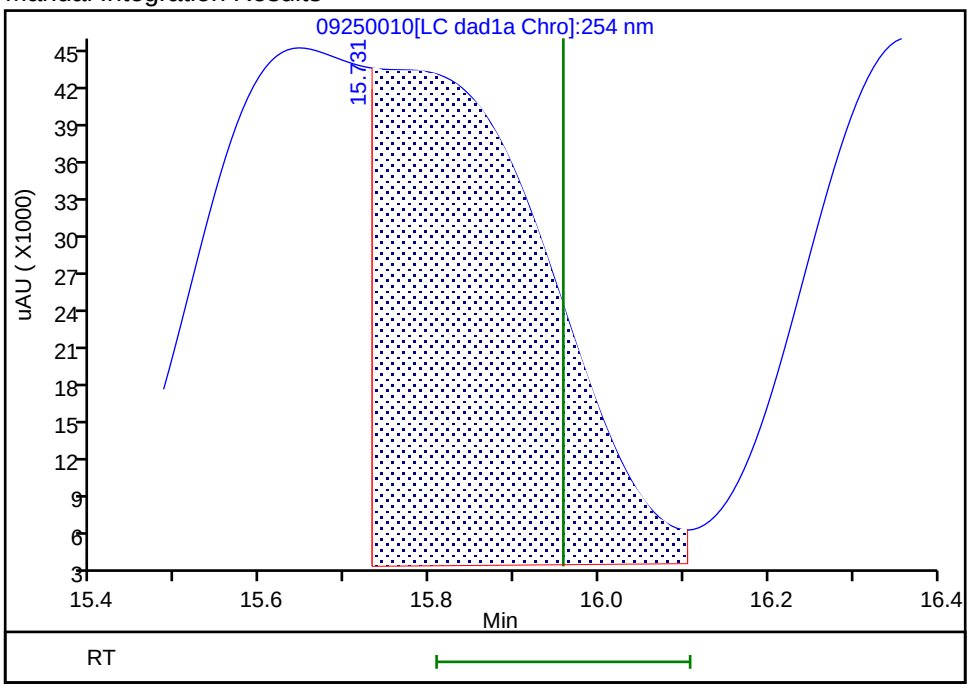
Not Detected
Expected RT: 15.96

Processing Integration Results



Manual Integration Results

RT: 15.73
Area: 560347
Amount: 2.580439
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 13:59:04 -06:00:00 (UTC)
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250011.D
Lims ID: IC INT 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 25-Sep-2023 19:17:58 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 8
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub18

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:25:34 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 13:59:25

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.260	5.291	-0.031	389261	1.00	1.04	
4 DNX	1	6.107	6.144	-0.037	285156	1.00	0.9893	
6 HMX	1	6.760	6.791	-0.031	174631	1.00	1.01	
7 MNX	1	7.600	7.644	-0.044	308980	1.17	1.18	
5 2,4,6-Trinitrophenol	1	8.540	8.664	-0.124	146441	1.00	1.02	
8 RDX	1	8.987	9.038	-0.051	204269	1.00	0.9840	
9 Nitrobenzene	1	11.540	11.598	-0.058	374071	1.00	1.01	
$ 10 1,2-Dinitrobenzene	1	12.487	12.538	-0.051	255664	1.00	1.00	
11 3,5-Dinitroaniline	1	14.327	14.378	-0.051	426959	1.00	1.04	
12 1,3-Dinitrobenzene	1	14.627	14.671	-0.044	570540	1.00	0.9845	
13 Nitroglycerin	2	15.074	15.111	-0.037	1219790	10.0	9.82	
14 o-Nitrotoluene	1	15.687	15.738	-0.051	237729	1.00	0.9623	
15 p-Nitrotoluene	1	15.907	15.958	-0.051	217115	1.00	1.00	
16 4-Amino-2,6-dinitrotoluene	1	16.420	16.478	-0.058	272622	1.00	1.01	
17 m-Nitrotoluene	1	16.747	16.804	-0.057	271165	1.00	1.00	
18 2-Amino-4,6-dinitrotoluene	1	17.220	17.284	-0.064	388664	1.00	1.03	
19 1,3,5-Trinitrobenzene	1	17.447	17.498	-0.051	400996	1.00	0.9742	
20 2,6-Dinitrotoluene	1	18.534	18.598	-0.064	265199	1.00	1.01	
21 2,4-Dinitrotoluene	1	18.987	19.051	-0.064	539776	1.00	0.99	
22 Tetryl	1	22.207	22.244	-0.037	305263	1.00	0.99	
23 2,4,6-Trinitrotoluene	1	23.074	23.104	-0.030	397391	1.00	1.03	
24 PETN	2	24.200	24.211	-0.011	1313083	10.0	10.7	

QC Flag Legend
Processing Flags

Reagents:

8330IntermStk_00078	Amount Added: 100.00	Units: uL
8330 DMT_00015	Amount Added: 50.00	Units: uL

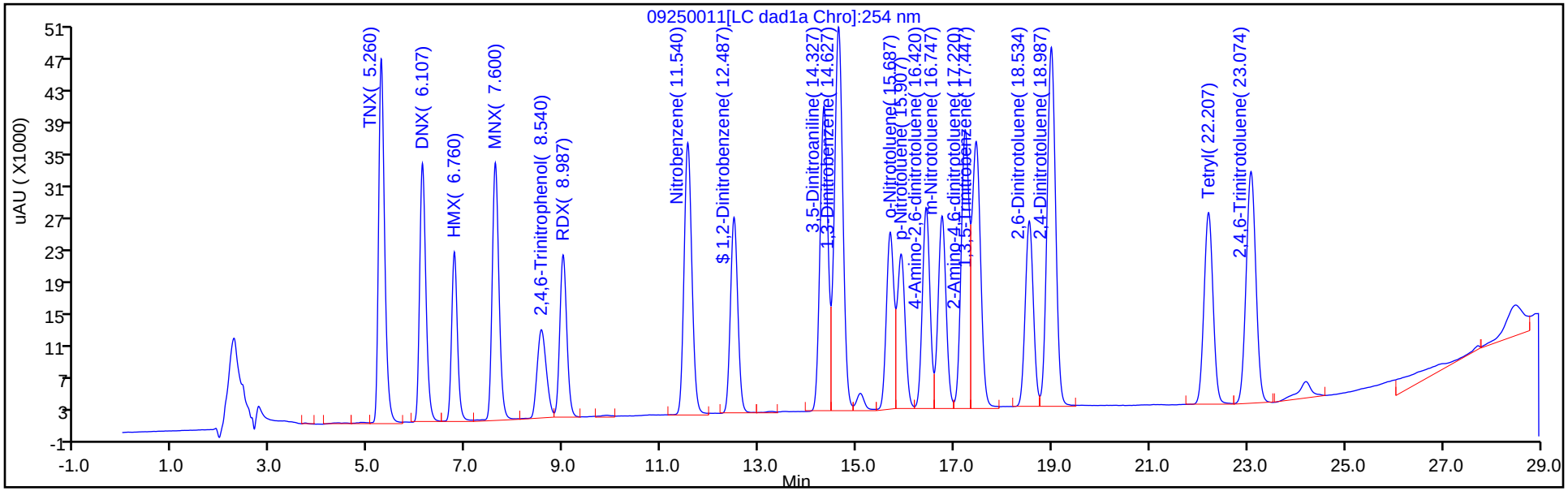
Report Date: 26-Sep-2023 15:25:34 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

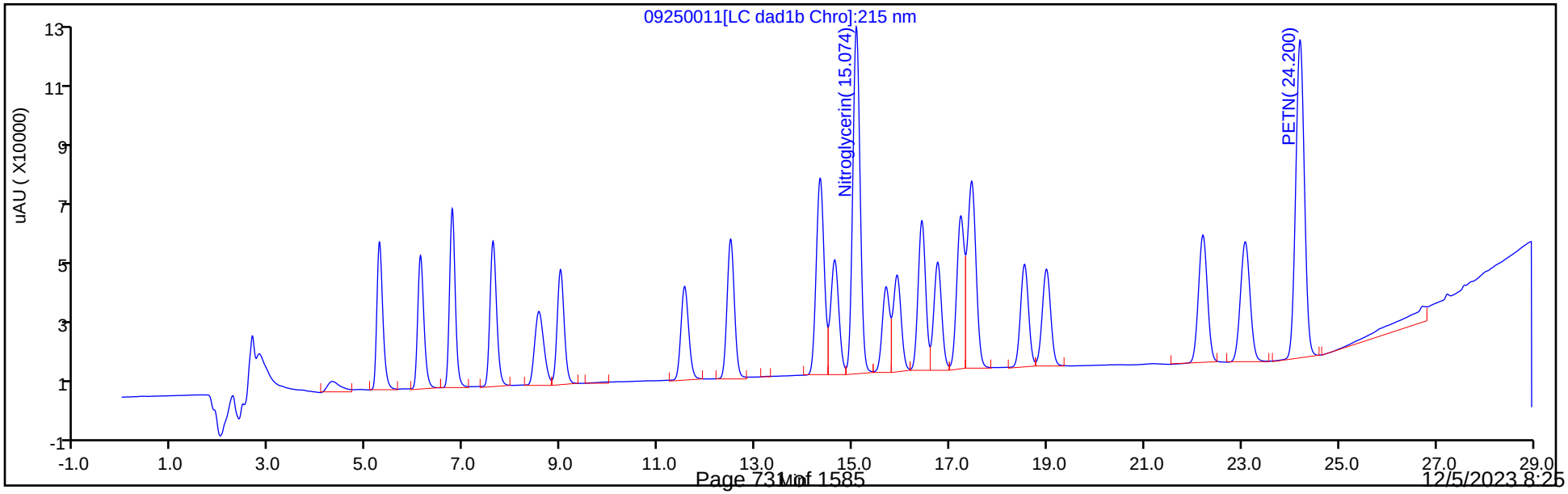
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Injection Date:	25-Sep-2023 19:17:58	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	IC INT 8			Worklist Smp#:	11
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250012.D
Lims ID: IC INT 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 25-Sep-2023 19:53:55 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 7
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub18

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:25:34 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 13:59:35

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.261	5.291	-0.030	258277	0.7021	0.6870	
4 DNX	1	6.108	6.144	-0.036	190840	0.7007	0.6621	
6 HMX	1	6.761	6.791	-0.030	121769	0.7000	0.7020	
7 MNX	1	7.608	7.644	-0.036	204553	0.8169	0.7813	
5 2,4,6-Trinitrophenol	1	8.568	8.664	-0.096	100486	0.7000	0.7006	
8 RDX	1	8.988	9.038	-0.050	143077	0.7000	0.6892	
9 Nitrobenzene	1	11.541	11.598	-0.057	263852	0.7000	0.7104	
$ 10 1,2-Dinitrobenzene	1	12.481	12.538	-0.057	178743	0.7000	0.6961	
11 3,5-Dinitroaniline	1	14.321	14.378	-0.057	298526	0.7000	0.7270	
12 1,3-Dinitrobenzene	1	14.614	14.671	-0.057	398297	0.7000	0.6873	
13 Nitroglycerin	2	15.054	15.111	-0.057	855360	7.00	6.89	
14 o-Nitrotoluene	1	15.667	15.738	-0.071	169349	0.7000	0.6855	
15 p-Nitrotoluene	1	15.887	15.958	-0.071	151677	0.7000	0.6961	
16 4-Amino-2,6-dinitrotoluene	1	16.394	16.478	-0.084	191281	0.7000	0.7051	
17 m-Nitrotoluene	1	16.721	16.804	-0.083	191019	0.7000	0.7044	
18 2-Amino-4,6-dinitrotoluene	1	17.201	17.284	-0.083	275464	0.7000	0.7283	
19 1,3,5-Trinitrobenzene	1	17.427	17.498	-0.071	277471	0.7000	0.6741	
20 2,6-Dinitrotoluene	1	18.514	18.598	-0.084	185954	0.7000	0.7099	
21 2,4-Dinitrotoluene	1	18.974	19.051	-0.077	377896	0.7000	0.6933	
22 Tetryl	1	22.181	22.244	-0.063	213101	0.7000	0.6911	
23 2,4,6-Trinitrotoluene	1	23.041	23.104	-0.063	275399	0.7000	0.7153	
24 PETN	2	24.174	24.211	-0.037	914344	7.00	7.43	

QC Flag Legend
Processing Flags

Reagents:

8330IntermStk_00078	Amount Added:	70.00	Units: uL
8330 DMT_00015	Amount Added:	35.00	Units: uL

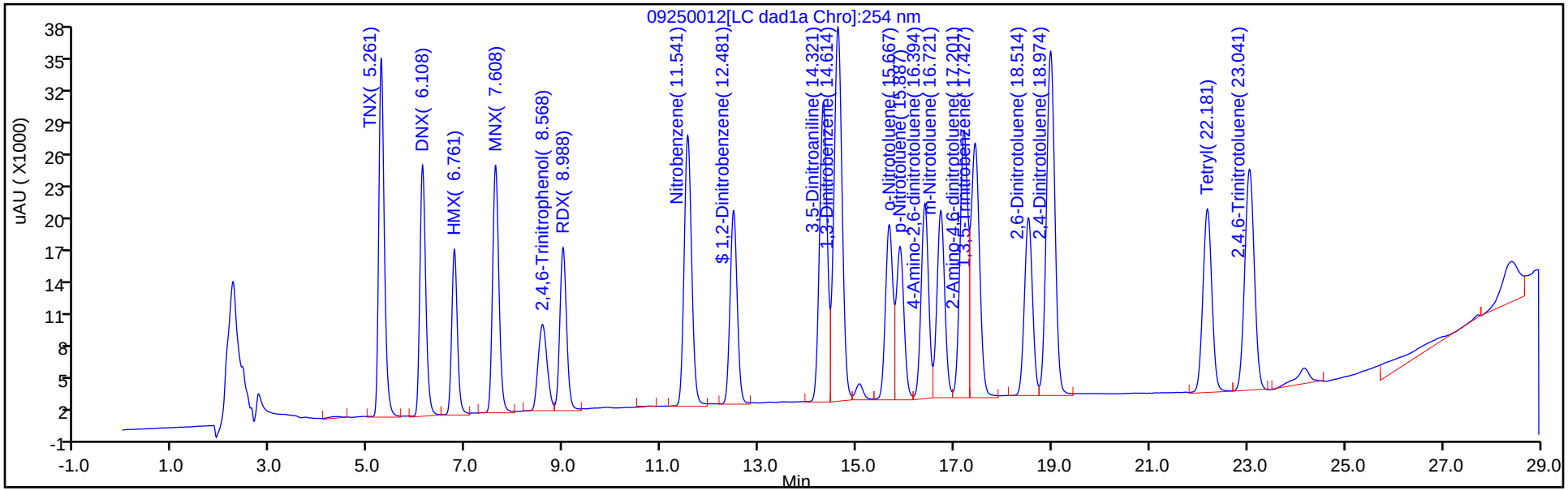
Report Date: 26-Sep-2023 15:25:35 Chrom Revision: 2.3 22-Sep-2023 11:33:50

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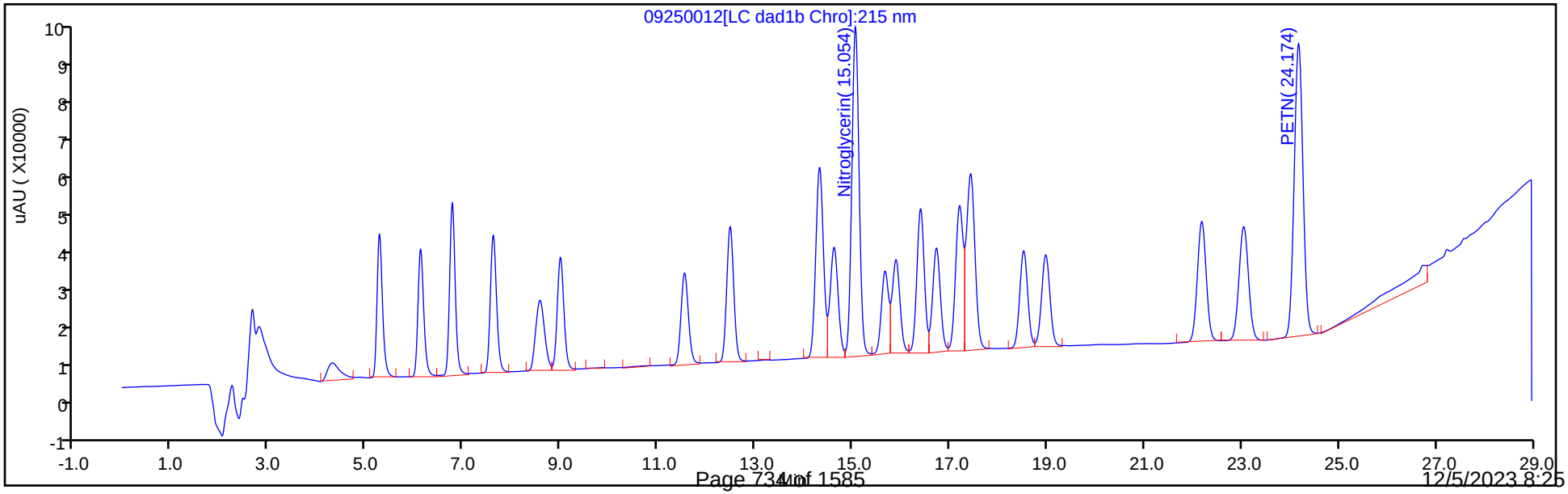
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Injection Date:	25-Sep-2023 19:53:55	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	IC INT 7			Worklist Smp#:	12
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250013.D
Lims ID: IC INT 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 25-Sep-2023 20:29:56 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 6
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub18

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:25:35 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 13:59:46

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.285	5.291	-0.006	149801	0.4012	0.3974	
4 DNX	1	6.131	6.144	-0.013	110817	0.4004	0.3845	
6 HMX	1	6.778	6.791	-0.013	69154	0.4000	0.3986	
7 MNX	1	7.625	7.644	-0.019	119417	0.4668	0.4561	
5 2,4,6-Trinitrophenol	1	8.618	8.664	-0.046	56092	0.4000	0.3911	
8 RDX	1	9.011	9.038	-0.027	80985	0.4000	0.3901	
9 Nitrobenzene	1	11.564	11.598	-0.034	147023	0.4000	0.3959	
$ 10 1,2-Dinitrobenzene	1	12.504	12.538	-0.034	100477	0.4000	0.3913	
11 3,5-Dinitroaniline	1	14.351	14.378	-0.027	168201	0.4000	0.4092	
12 1,3-Dinitrobenzene	1	14.651	14.671	-0.020	222577	0.4000	0.3841	
13 Nitroglycerin	2	15.098	15.111	-0.013	478538	4.00	3.85	
14 o-Nitrotoluene	1	15.718	15.738	-0.020	94995	0.4000	0.3845	
15 p-Nitrotoluene	1	15.938	15.958	-0.020	85317	0.4000	0.3901	
16 4-Amino-2,6-dinitrotoluene	1	16.451	16.478	-0.027	107559	0.4000	0.3943	
17 m-Nitrotoluene	1	16.778	16.804	-0.026	107777	0.4000	0.3955	
18 2-Amino-4,6-dinitrotoluene	1	17.251	17.284	-0.033	155922	0.4000	0.4106	
19 1,3,5-Trinitrobenzene	1	17.471	17.498	-0.027	157218	0.4000	0.3819	
20 2,6-Dinitrotoluene	1	18.564	18.598	-0.034	104177	0.4000	0.3962	
21 2,4-Dinitrotoluene	1	19.018	19.051	-0.033	212533	0.4000	0.3899	
22 Tetryl	1	22.211	22.244	-0.033	119347	0.4000	0.3871	
23 2,4,6-Trinitrotoluene	1	23.071	23.104	-0.033	155627	0.4000	0.4042	
24 PETN	2	24.205	24.211	-0.006	514656	4.00	4.18	

QC Flag Legend
Processing Flags

Reagents:

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8330 DMT_00015	Amount Added:	20.00	Units: uL

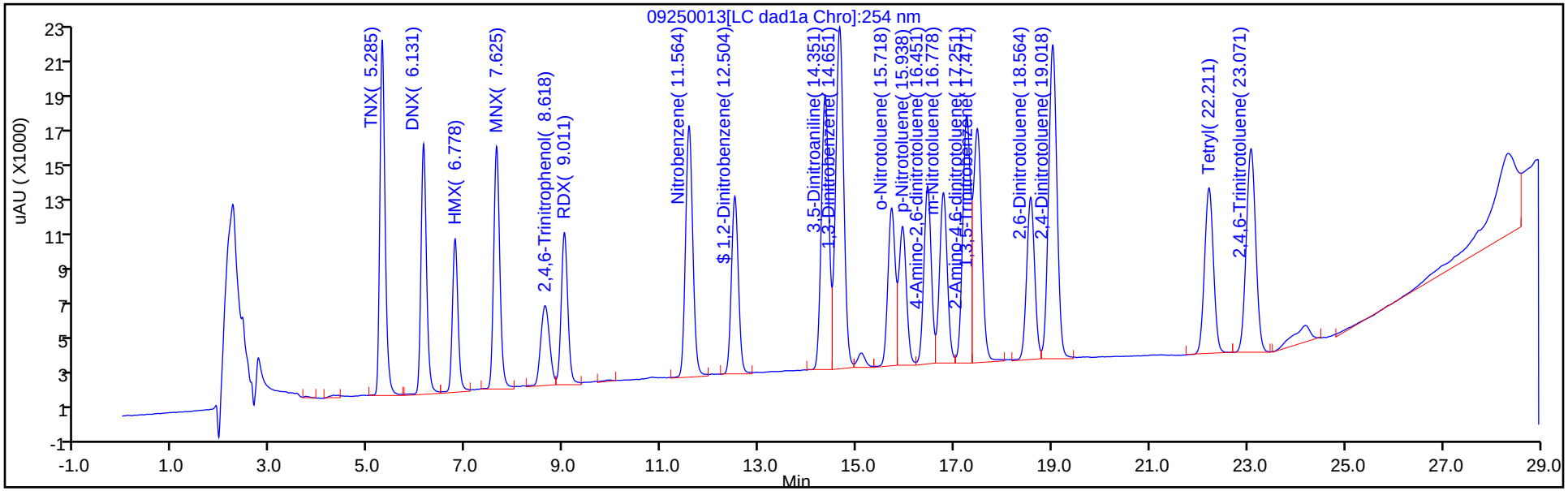
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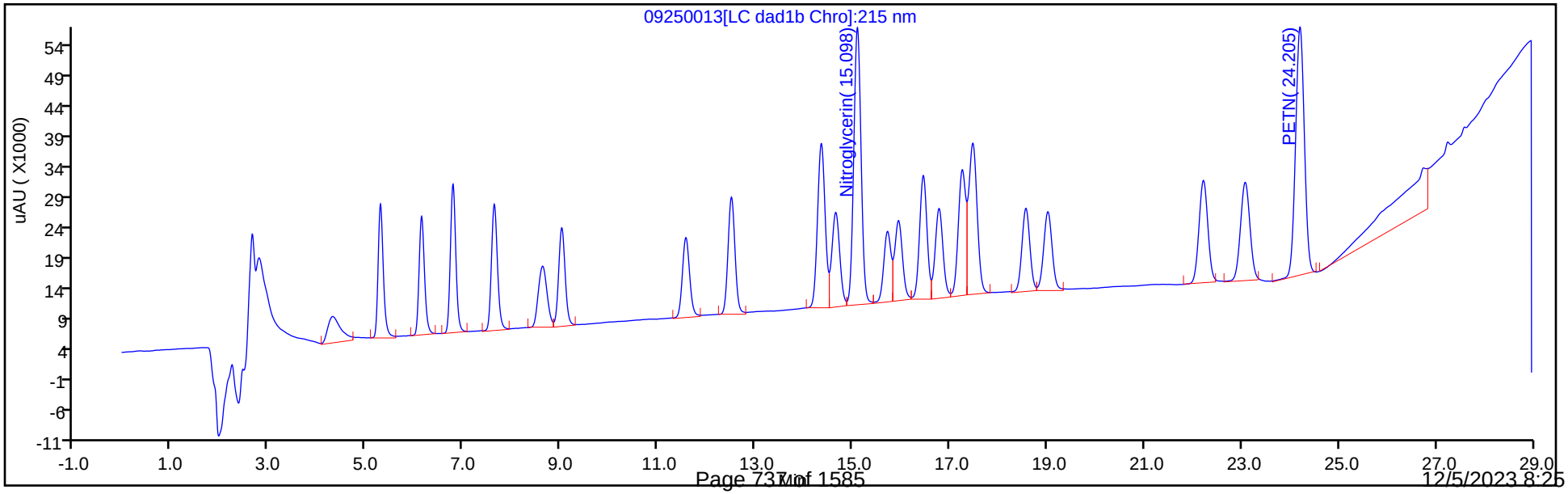
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Injection Date:	25-Sep-2023 20:29:56	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	IC INT 6			Worklist Smp#:	13
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250014.D
Lims ID: IC INT 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 25-Sep-2023 21:05:56 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 5
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub18

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:25:36 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 14:00:00

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.291	5.291	0.000	97033	0.2508	0.2565	
4 DNX	1	6.144	6.144	0.000	71817	0.2503	0.2492	
6 HMX	1	6.791	6.791	0.000	44858	0.2500	0.2586	
7 MNX	1	7.644	7.644	0.000	77595	0.2918	0.2964	
5 2,4,6-Trinitrophenol	1	8.664	8.664	0.000	35728	0.2500	0.2491	
8 RDX	1	9.038	9.038	0.000	52214	0.2500	0.2515	
9 Nitrobenzene	1	11.598	11.598	0.000	94171	0.2500	0.2536	
$ 10 1,2-Dinitrobenzene	1	12.538	12.538	0.000	64646	0.2500	0.2518	
11 3,5-Dinitroaniline	1	14.378	14.378	0.000	106862	0.2500	0.2596	
12 1,3-Dinitrobenzene	1	14.671	14.671	0.000	142691	0.2500	0.2462	
13 Nitroglycerin	2	15.111	15.111	0.000	309021	2.50	2.49	
14 o-Nitrotoluene	1	15.738	15.738	0.000	61006	0.2500	0.2470	
15 p-Nitrotoluene	1	15.958	15.958	0.000	53670	0.2500	0.2441	
16 4-Amino-2,6-dinitrotoluene	1	16.478	16.478	0.000	68403	0.2500	0.2489	
17 m-Nitrotoluene	1	16.804	16.804	0.000	68436	0.2500	0.2496	
18 2-Amino-4,6-dinitrotoluene	1	17.284	17.284	0.000	98305	0.2500	0.2575	
19 1,3,5-Trinitrobenzene	1	17.498	17.498	0.000	100515	0.2500	0.2442	
20 2,6-Dinitrotoluene	1	18.598	18.598	0.000	66514	0.2500	0.2518	
21 2,4-Dinitrotoluene	1	19.051	19.051	0.000	135900	0.2500	0.2493	
22 Tetryl	1	22.244	22.244	0.000	76874	0.2500	0.2493	
23 2,4,6-Trinitrotoluene	1	23.104	23.104	0.000	99165	0.2500	0.2576	
24 PETN	2	24.211	24.211	0.000	320094	2.50	2.60	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00078	Amount Added:	25.00	Units: uL
8330 DMT_00015	Amount Added:	12.50	Units: uL

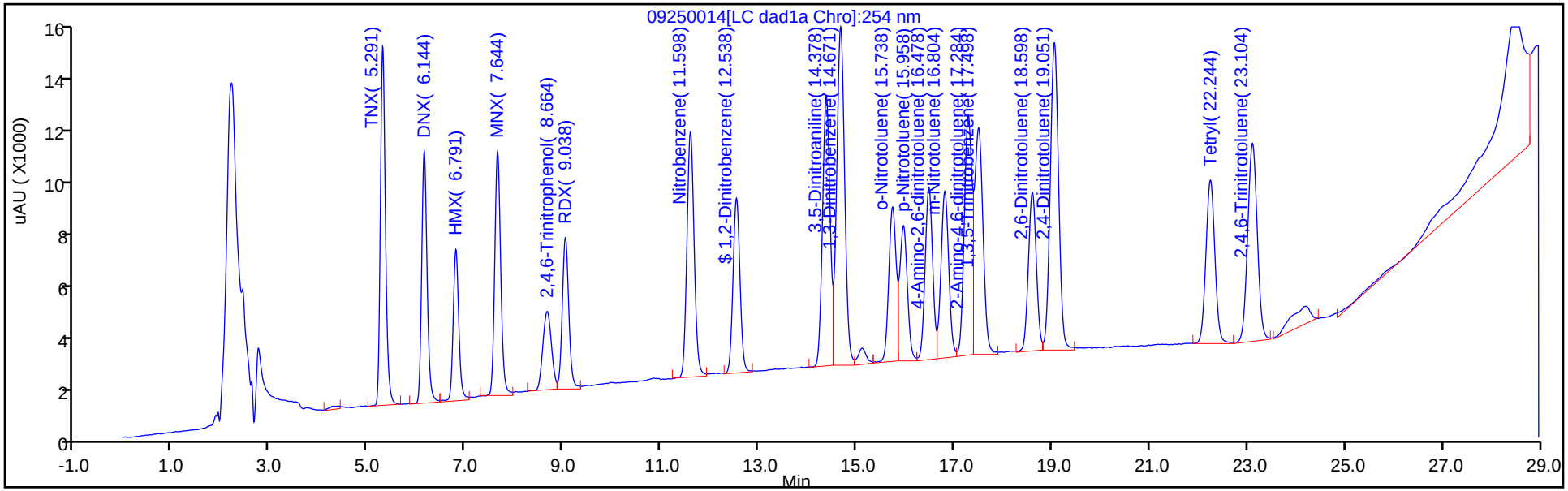
Report Date: 26-Sep-2023 15:25:36 Chrom Revision: 2.3 22-Sep-2023 11:33:50

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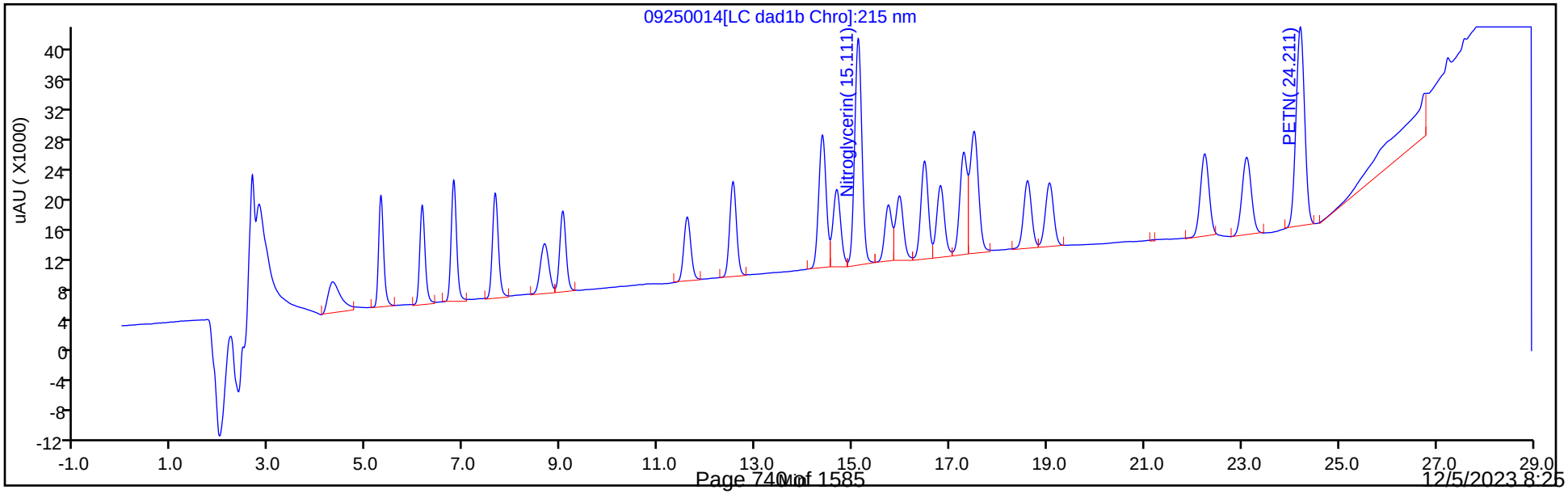
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Injection Date:	25-Sep-2023 21:05:56	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	IC INT 5			Worklist Smp#:	14
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



12/5/2023 8:25 AM

Manual Integration/User Assign Peak Report

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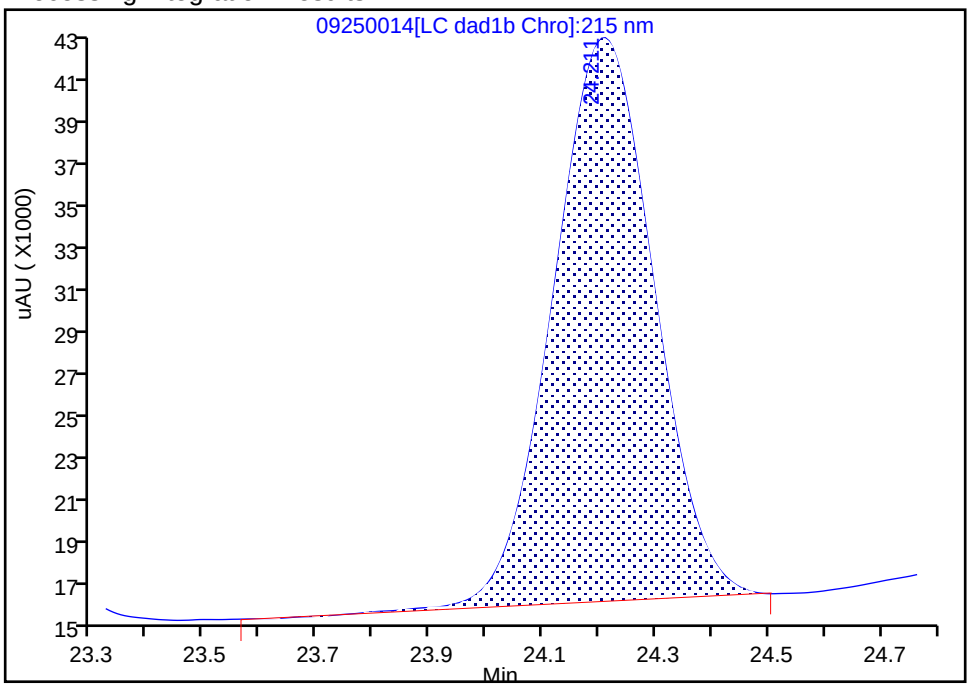
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Injection Date: 25-Sep-2023 21:05:56 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 5
Client ID:
Operator ID: JZ/JG ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

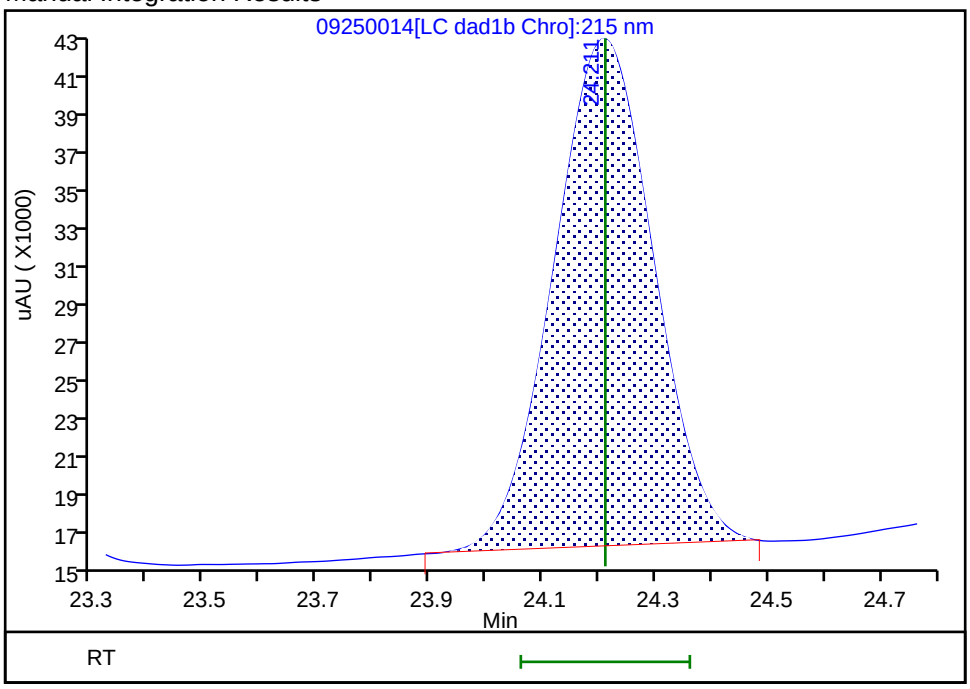
Processing Integration Results

RT: 24.21
Area: 325069
Amount: 2.564843
Amount Units: ug/ml



Manual Integration Results

RT: 24.21
Area: 320094
Amount: 2.602149
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:02:38 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250015.D
Lims ID: IC INT 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 25-Sep-2023 21:42:00 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 4
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub18

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:25:36 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 14:00:39

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.281	5.291	-0.010	37690	0.1003	0.0981	
4 DNX	1	6.127	6.144	-0.017	27970	0.1001	0.0970	M
6 HMX	1	6.767	6.791	-0.024	16998	0.1000	0.0980	M
7 MNX	1	7.621	7.644	-0.023	30216	0.1167	0.1154	M
5 2,4,6-Trinitrophenol	1	8.654	8.664	-0.010	14448	0.1000	0.1007	M
8 RDX	1	9.001	9.038	-0.037	20133	0.1000	0.0970	M
9 Nitrobenzene	1	11.567	11.598	-0.031	37981	0.1000	0.1023	
$ 10 1,2-Dinitrobenzene	1	12.514	12.538	-0.024	25572	0.1000	0.0996	
11 3,5-Dinitroaniline	1	14.367	14.378	-0.011	42028	0.1000	0.1015	
12 1,3-Dinitrobenzene	1	14.661	14.671	-0.010	56349	0.1000	0.0972	
13 Nitroglycerin	2	15.107	15.111	-0.004	125699	1.00	1.01	
14 o-Nitrotoluene	1	15.721	15.738	-0.017	23778	0.1000	0.0963	
15 p-Nitrotoluene	1	15.941	15.958	-0.017	22449	0.1000	0.1002	
16 4-Amino-2,6-dinitrotoluene	1	16.461	16.478	-0.017	27679	0.1000	0.0977	
17 m-Nitrotoluene	1	16.781	16.804	-0.023	28516	0.1000	0.1014	
18 2-Amino-4,6-dinitrotoluene	1	17.254	17.284	-0.030	39122	0.1000	0.1002	
19 1,3,5-Trinitrobenzene	1	17.467	17.498	-0.031	40753	0.1000	0.0990	
20 2,6-Dinitrotoluene	1	18.567	18.598	-0.031	26594	0.1000	0.0987	
21 2,4-Dinitrotoluene	1	19.021	19.051	-0.030	53734	0.1000	0.0986	
22 Tetryl	1	22.247	22.244	0.003	29248	0.1000	0.0949	
23 2,4,6-Trinitrotoluene	1	23.107	23.104	0.003	39715	0.1000	0.1032	
24 PETN	2	24.227	24.211	0.016	123328	1.00	1.00	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

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8330 DMT_00015	Amount Added:	5.00	Units: uL

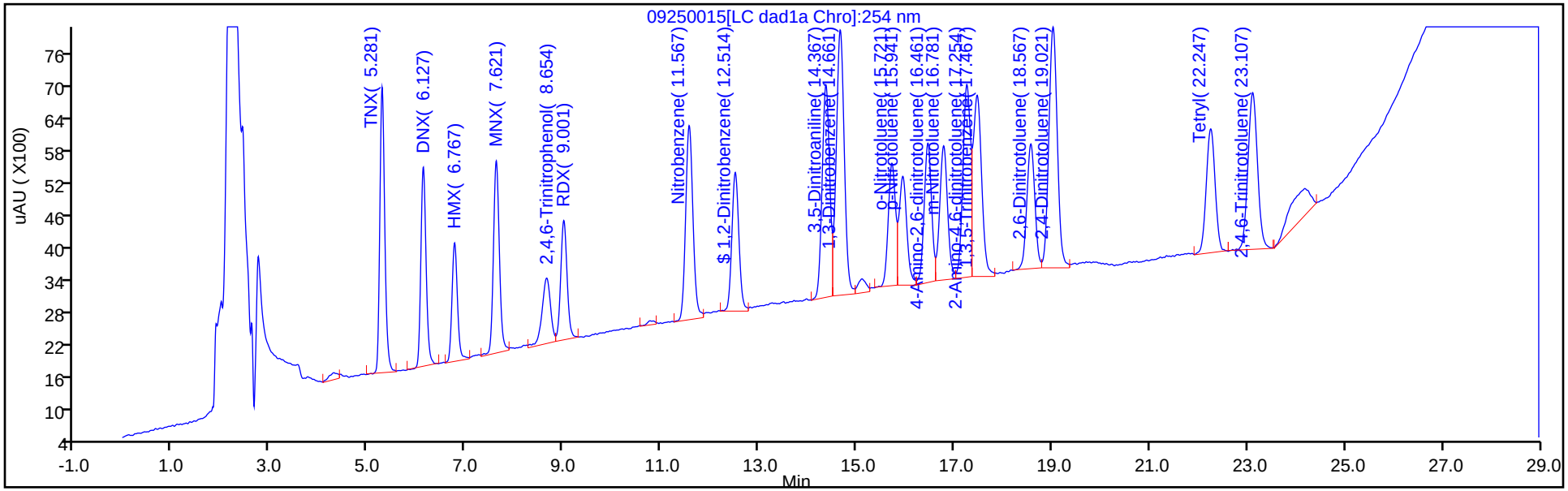
Report Date: 26-Sep-2023 15:25:37 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

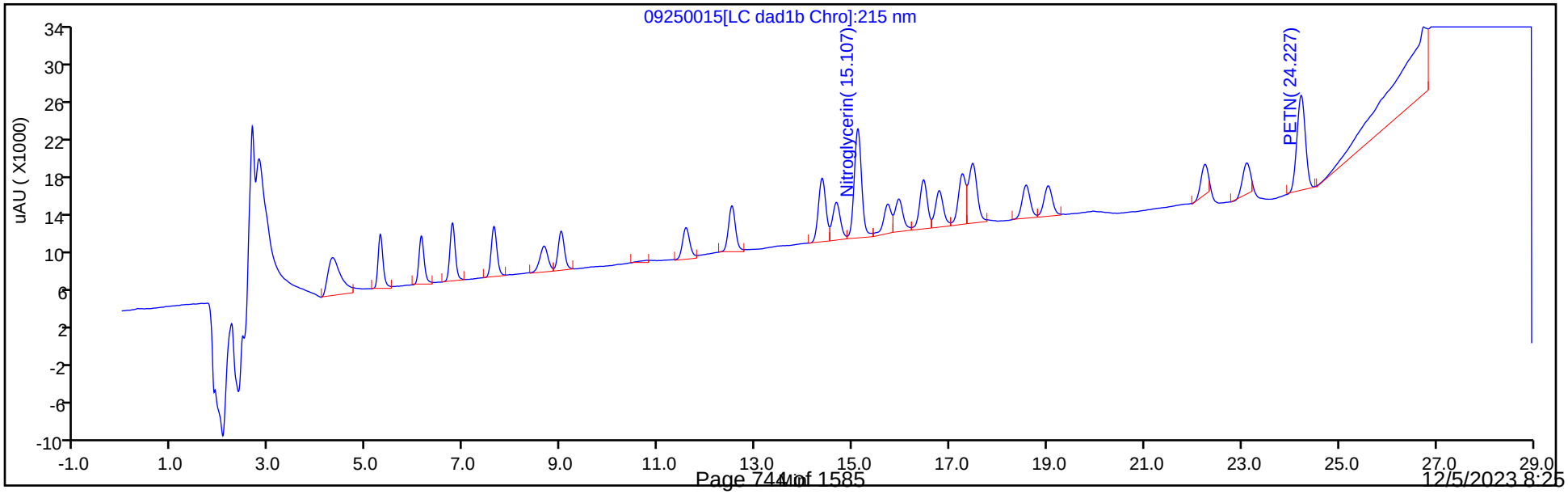
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250015.d

Injection Date:	25-Sep-2023 21:42:00	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	IC INT 4			Worklist Smp#:	15
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

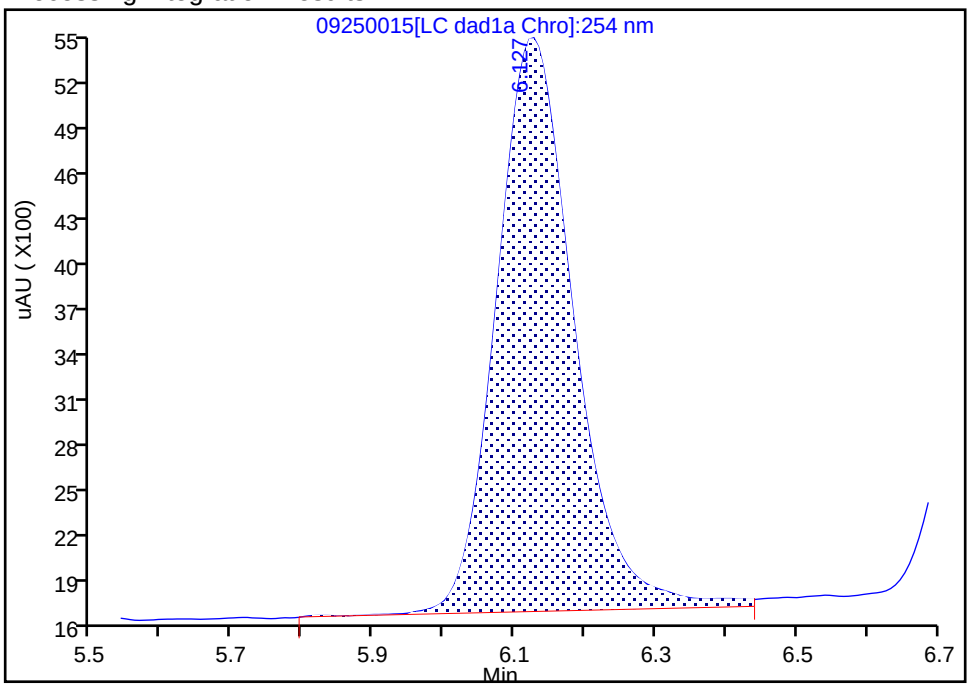
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Injection Date:	25-Sep-2023 21:42:00	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

4 DNX, CAS: 80251-29-2

Signal: 1

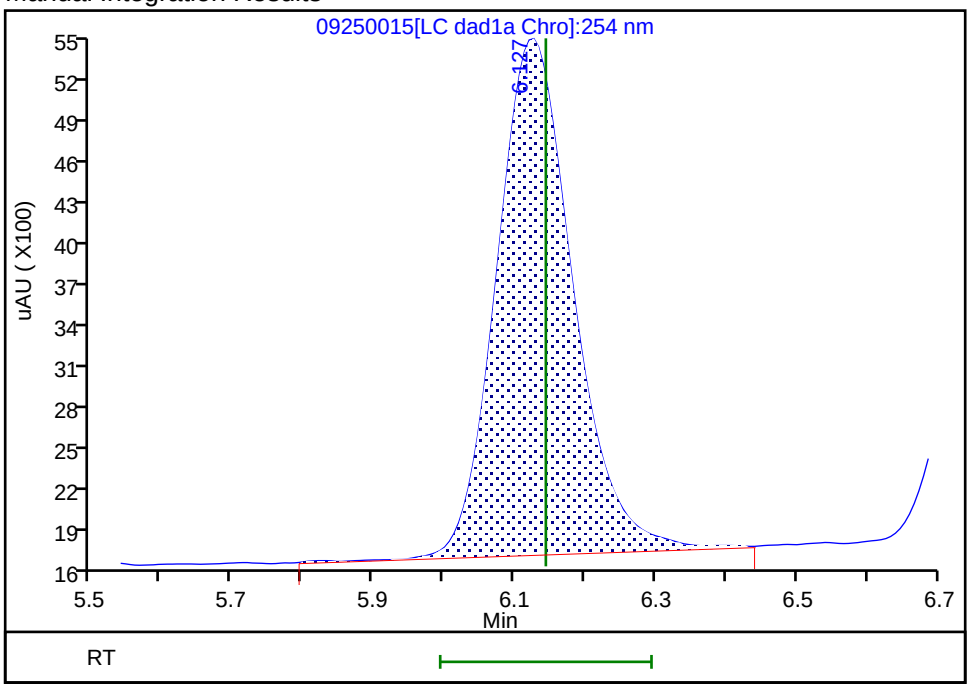
Processing Integration Results

RT: 6.13
Area: 28494
Amount: 0.098487
Amount Units: ug/ml



Manual Integration Results

RT: 6.13
Area: 27970
Amount: 0.097037
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:00:29 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

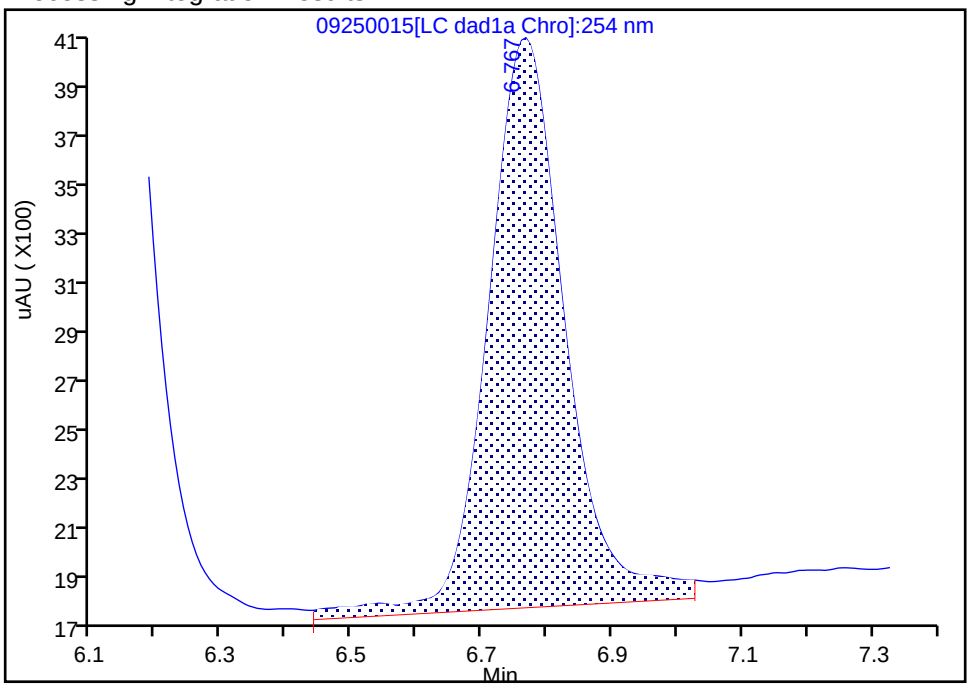
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Injection Date:	25-Sep-2023 21:42:00	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

6 HMX, CAS: 2691-41-0

Signal: 1

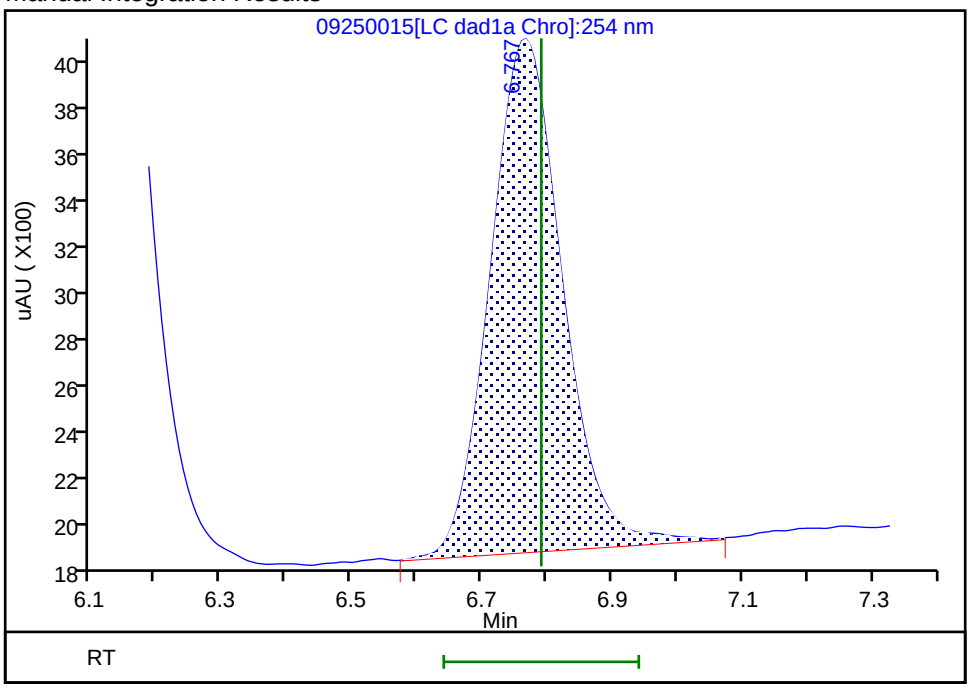
Processing Integration Results

RT: 6.77
Area: 18519
Amount: 0.096909
Amount Units: ug/ml



Manual Integration Results

RT: 6.77
Area: 16998
Amount: 0.097987
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:00:29 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

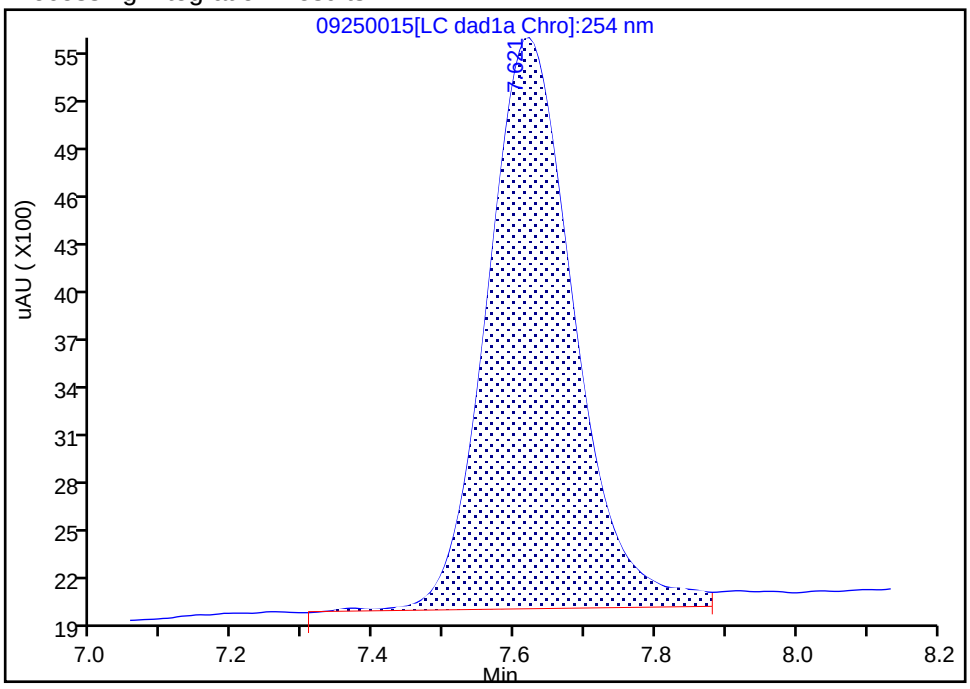
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Injection Date: 25-Sep-2023 21:42:00 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 4
Client ID:
Operator ID: JZ/JG ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

7 MNX, CAS: 5755-27-1

Signal: 1

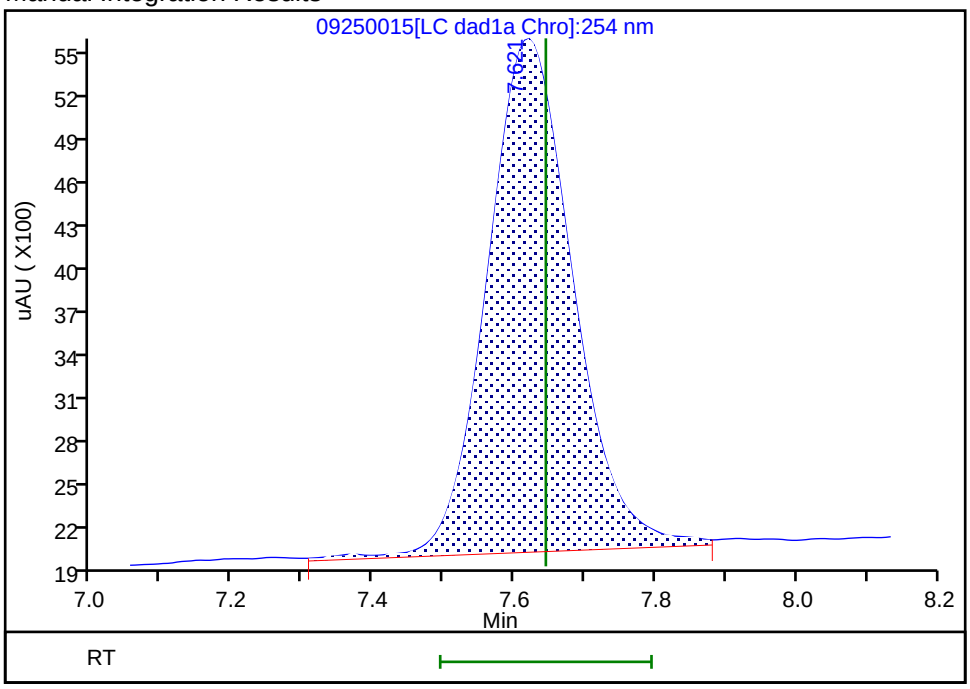
Processing Integration Results

RT: 7.62
Area: 30801
Amount: 0.109447
Amount Units: ug/ml



Manual Integration Results

RT: 7.62
Area: 30216
Amount: 0.115406
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:00:29 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

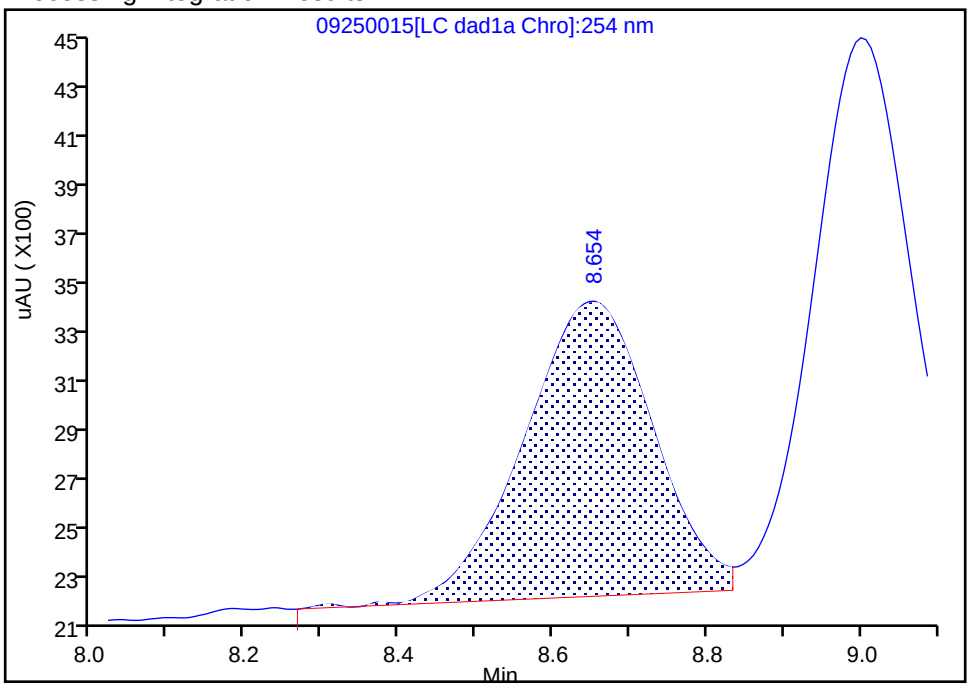
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Injection Date: 25-Sep-2023 21:42:00 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 4
Client ID:
Operator ID: JZ/JG ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

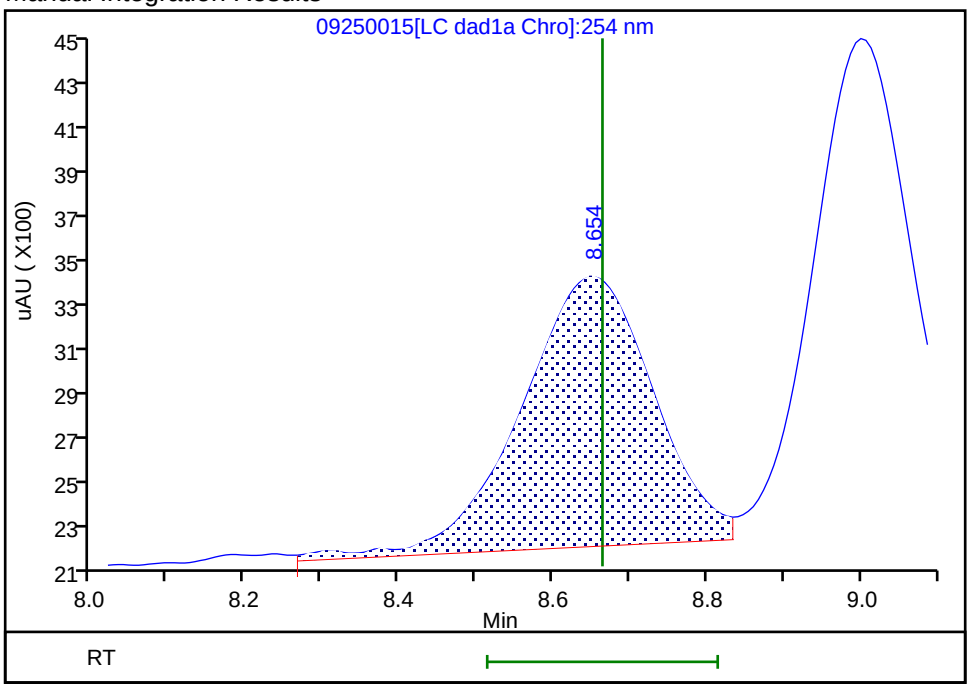
Processing Integration Results

RT: 8.65
Area: 13989
Amount: 0.094739
Amount Units: ug/ml



Manual Integration Results

RT: 8.65
Area: 14448
Amount: 0.100735
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:00:29 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

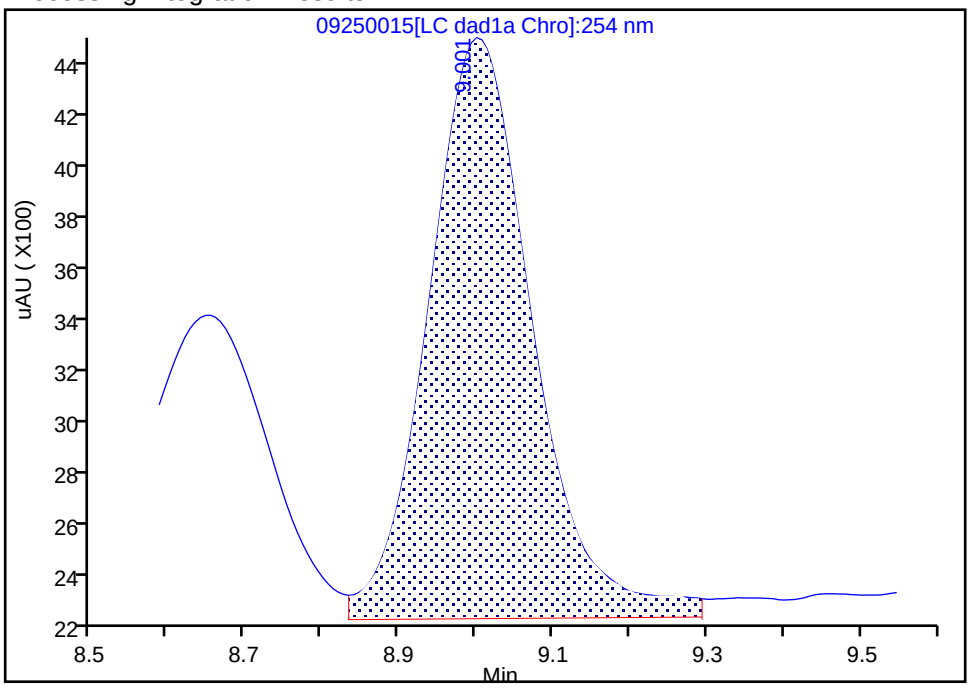
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Lims ID: IC INT 4
Client ID:
Operator ID: JZ/JG ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

8 RDX, CAS: 121-82-4

Signal: 1

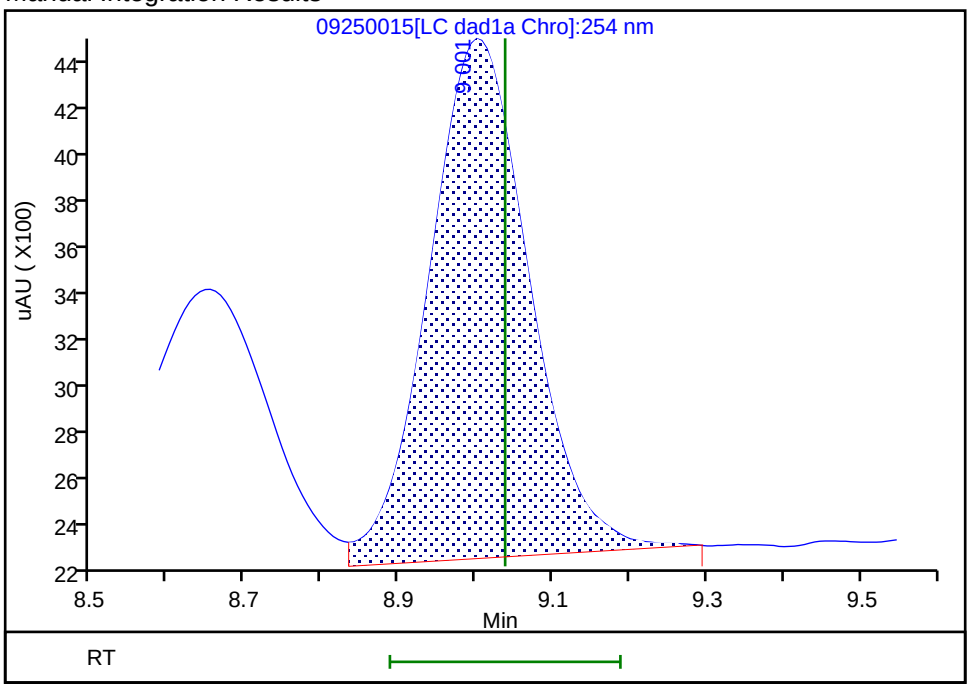
Processing Integration Results

RT: 9.00
Area: 21030
Amount: 0.094840
Amount Units: ug/ml



Manual Integration Results

RT: 9.00
Area: 20133
Amount: 0.096986
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:00:29 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

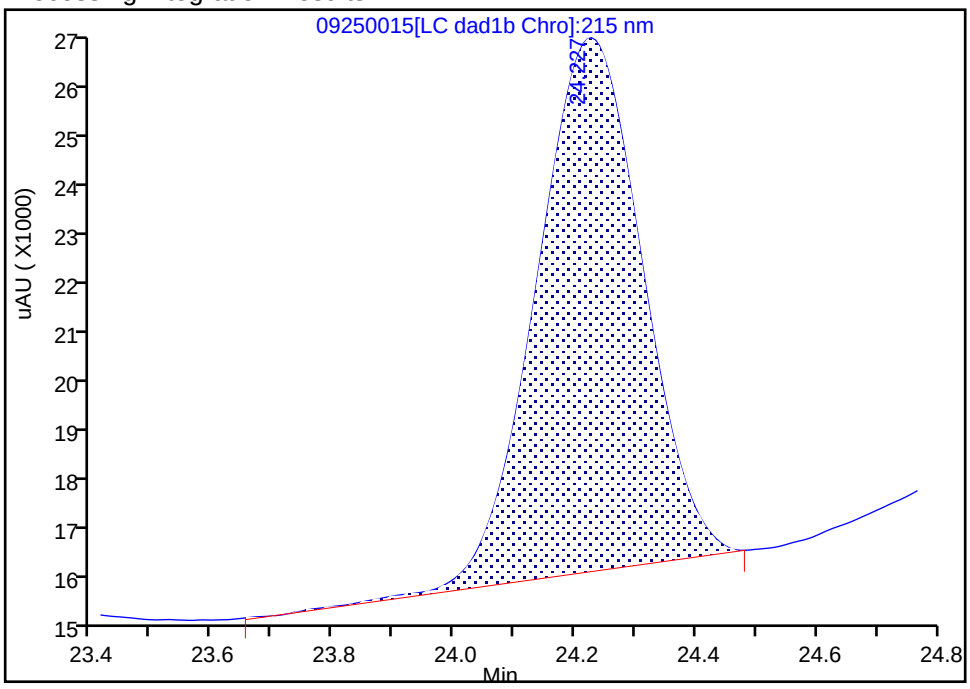
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Injection Date: 25-Sep-2023 21:42:00 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 4
Client ID:
Operator ID: JZ/JG ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

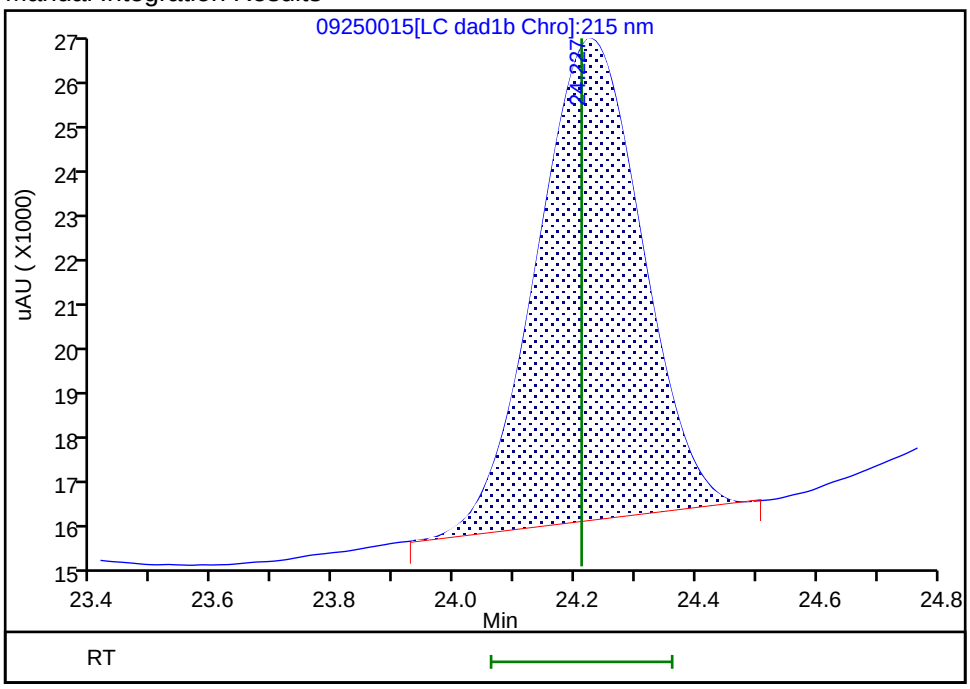
Processing Integration Results

RT: 24.23
Area: 124775
Amount: 0.983246
Amount Units: ug/ml



Manual Integration Results

RT: 24.23
Area: 123328
Amount: 1.002574
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:02:31 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250016.D
Lims ID: IC INT 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 25-Sep-2023 22:18:06 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 3
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub18

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:25:37 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 14:01:01

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.289	5.291	-0.002	19818	0.0502	0.0504	
4 DNX	1	6.135	6.144	-0.009	14790	0.0501	0.0513	M
6 HMX	1	6.782	6.791	-0.009	8897	0.0500	0.0513	M
7 MNX	1	7.629	7.644	-0.015	16454	0.0584	0.0628	M
5 2,4,6-Trinitrophenol	1	8.689	8.664	0.025	7270	0.0500	0.0507	M
8 RDX	1	9.022	9.038	-0.016	10353	0.0500	0.0499	M
9 Nitrobenzene	1	11.575	11.598	-0.023	18591	0.0500	0.0501	
$ 10 1,2-Dinitrobenzene	1	12.522	12.538	-0.016	12837	0.0500	0.0500	
11 3,5-Dinitroaniline	1	14.375	14.378	-0.003	20488	0.0500	0.0490	
12 1,3-Dinitrobenzene	1	14.669	14.671	-0.002	27516	0.0500	0.0475	
13 Nitroglycerin	2	15.115	15.111	0.004	61450	0.5000	0.4947	
14 o-Nitrotoluene	1	15.742	15.738	0.004	12750	0.0500	0.0516	
15 p-Nitrotoluene	1	15.969	15.958	0.011	11667	0.0500	0.0505	
16 4-Amino-2,6-dinitrotoluene	1	16.475	16.478	-0.003	15115	0.0500	0.0511	
17 m-Nitrotoluene	1	16.802	16.804	-0.002	14579	0.0500	0.0497	
18 2-Amino-4,6-dinitrotoluene	1	17.282	17.284	-0.002	20666	0.0500	0.0511	
19 1,3,5-Trinitrobenzene	1	17.489	17.498	-0.009	20880	0.0500	0.0507	
20 2,6-Dinitrotoluene	1	18.589	18.598	-0.009	12748	0.0500	0.0456	
21 2,4-Dinitrotoluene	1	19.042	19.051	-0.009	27321	0.0500	0.0501	
22 Tetryl	1	22.235	22.244	-0.009	15400	0.0500	0.0499	
23 2,4,6-Trinitrotoluene	1	23.089	23.104	-0.015	20297	0.0500	0.0527	
24 PETN	2	24.215	24.211	0.004	57592	0.5000	0.4682	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00078	Amount Added:	5.00	Units: uL
8330 DMT_00015	Amount Added:	2.50	Units: uL

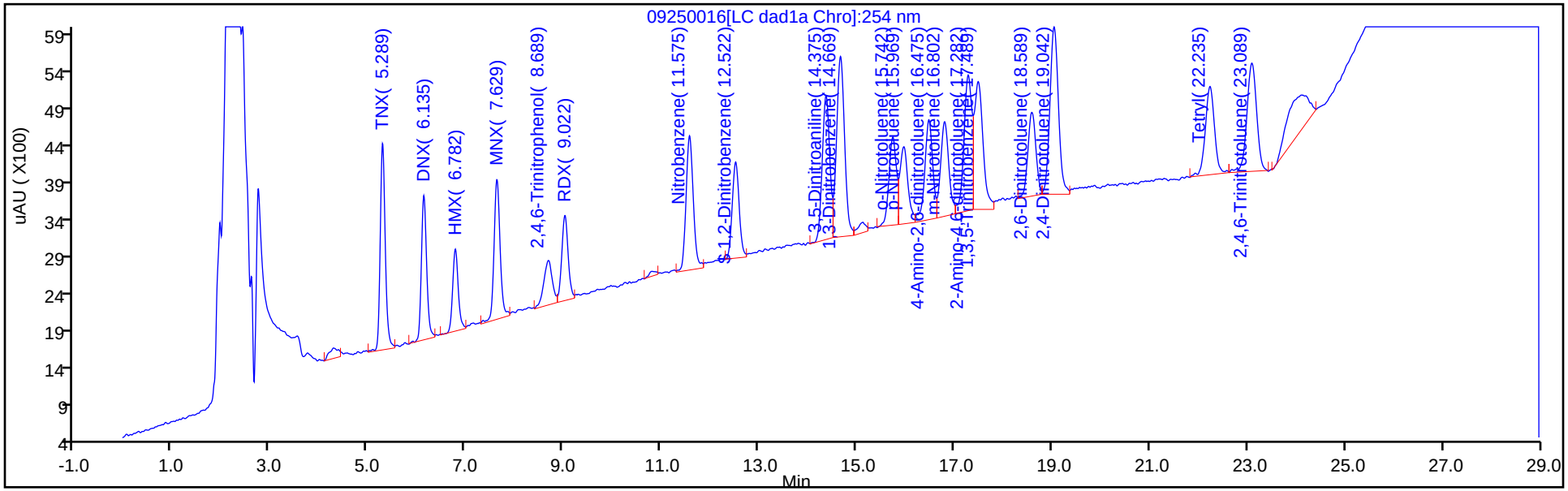
Report Date: 26-Sep-2023 15:25:37 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

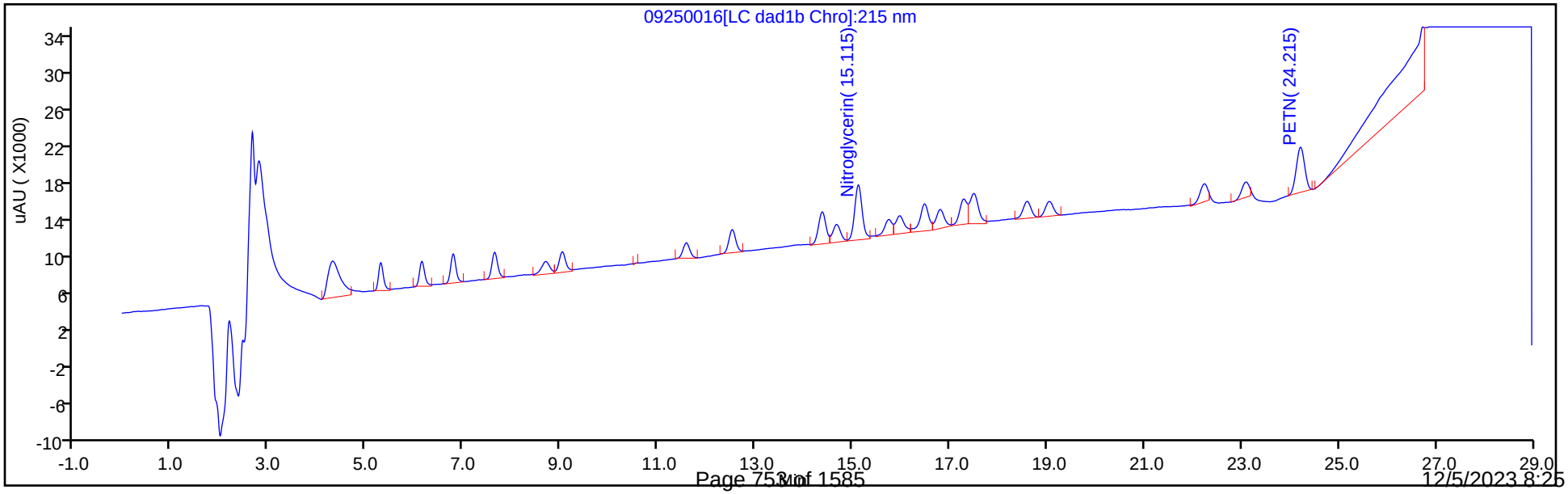
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Injection Date:	25-Sep-2023 22:18:06	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	IC INT 3			Worklist Smp#:	16
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

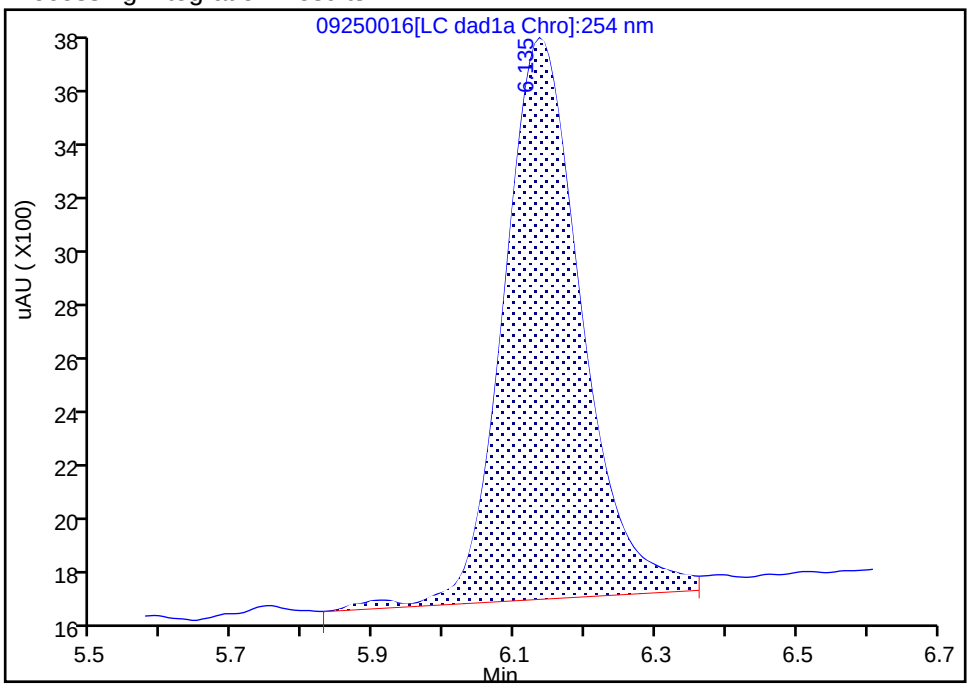
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250016.d
Injection Date: 25-Sep-2023 22:18:06 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 3
Client ID:
Operator ID: JZ/JG ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

4 DNX, CAS: 80251-29-2

Signal: 1

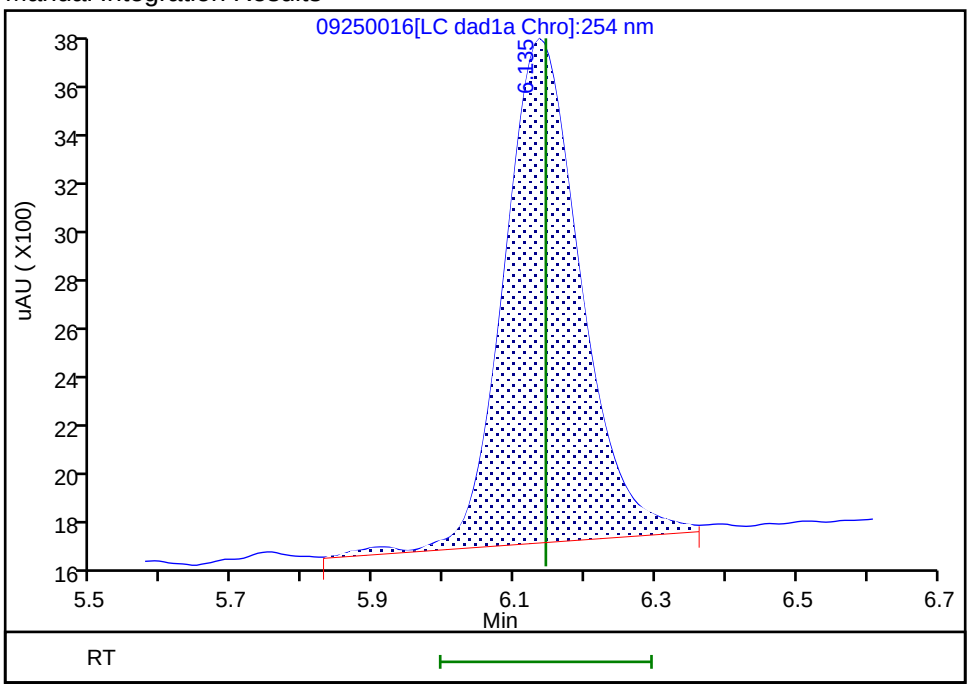
Processing Integration Results

RT: 6.14
Area: 15014
Amount: 0.051999
Amount Units: ug/ml



Manual Integration Results

RT: 6.14
Area: 14790
Amount: 0.051311
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:00:47 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

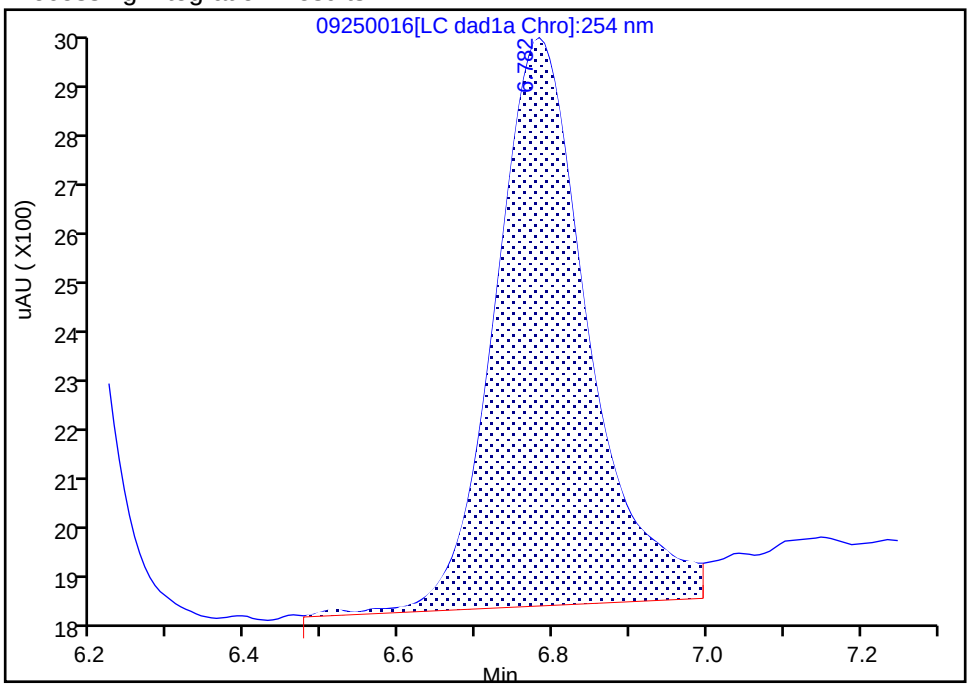
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Injection Date:	25-Sep-2023 22:18:06	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

6 HMX, CAS: 2691-41-0

Signal: 1

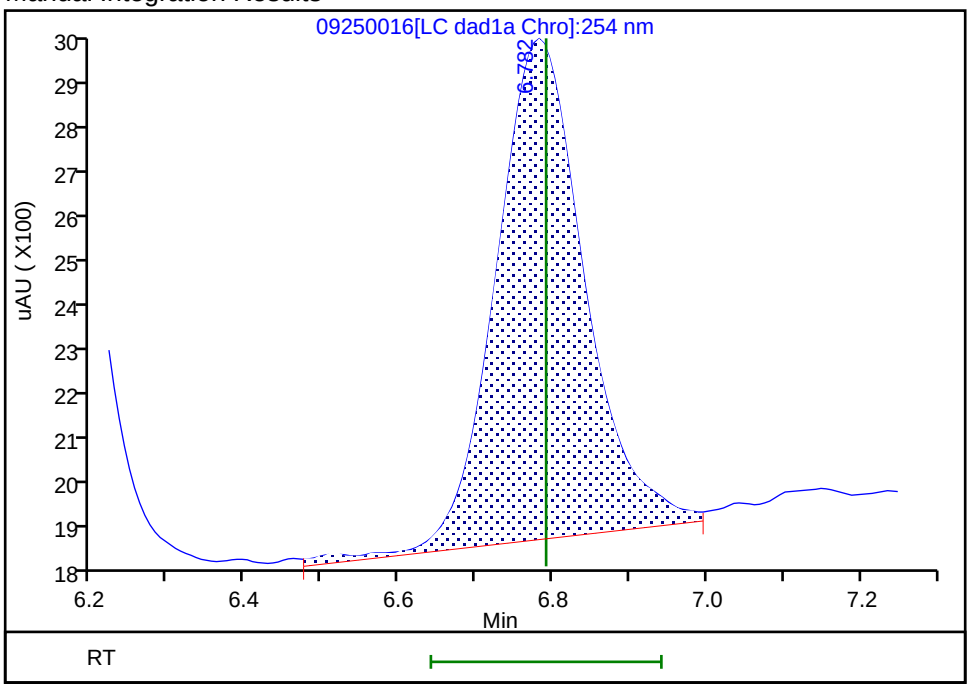
Processing Integration Results

RT: 6.78
Area: 9443
Amount: 0.049856
Amount Units: ug/ml



Manual Integration Results

RT: 6.78
Area: 8897
Amount: 0.051288
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:00:47 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

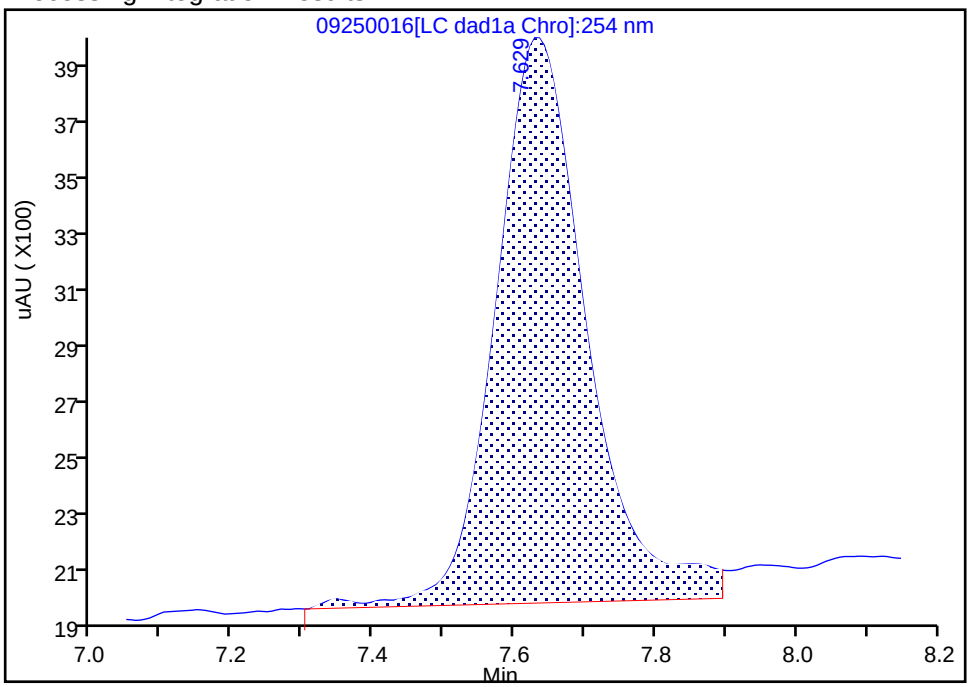
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250016.d				
Injection Date:	25-Sep-2023 22:18:06	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

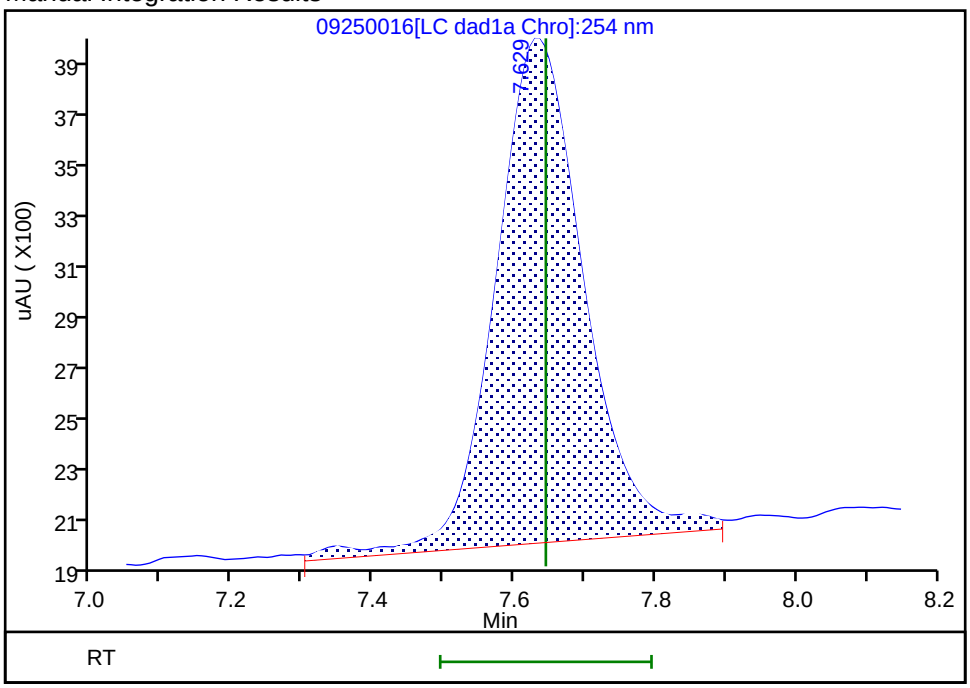
Processing Integration Results

RT: 7.63
Area: 17112
Amount: 0.060926
Amount Units: ug/ml



Manual Integration Results

RT: 7.63
Area: 16454
Amount: 0.062844
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:00:47 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

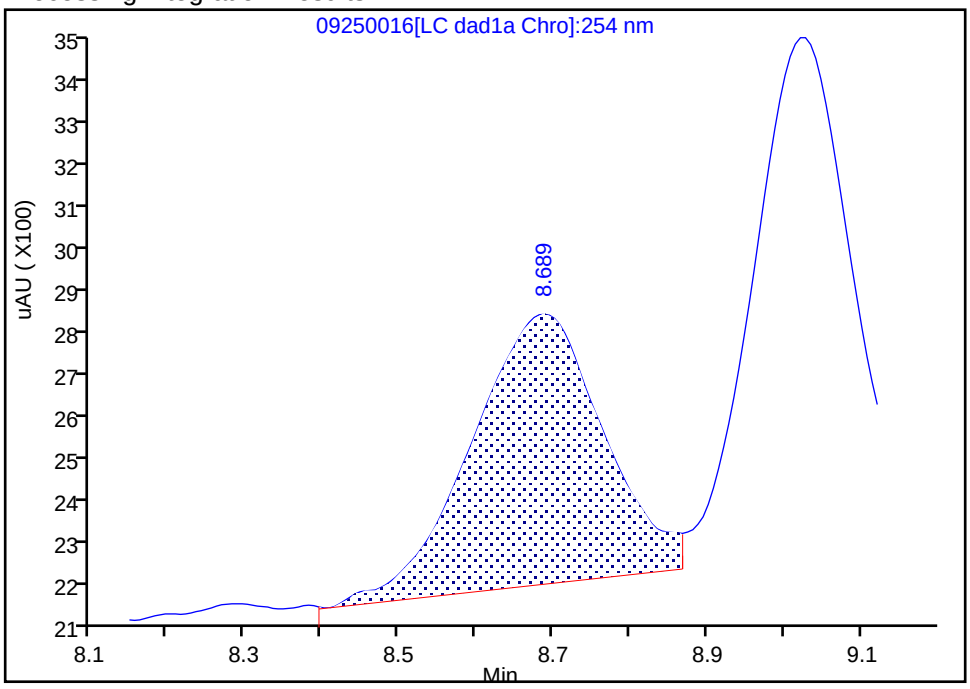
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250016.d
Injection Date: 25-Sep-2023 22:18:06 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 3
Client ID:
Operator ID: JZ/JG ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

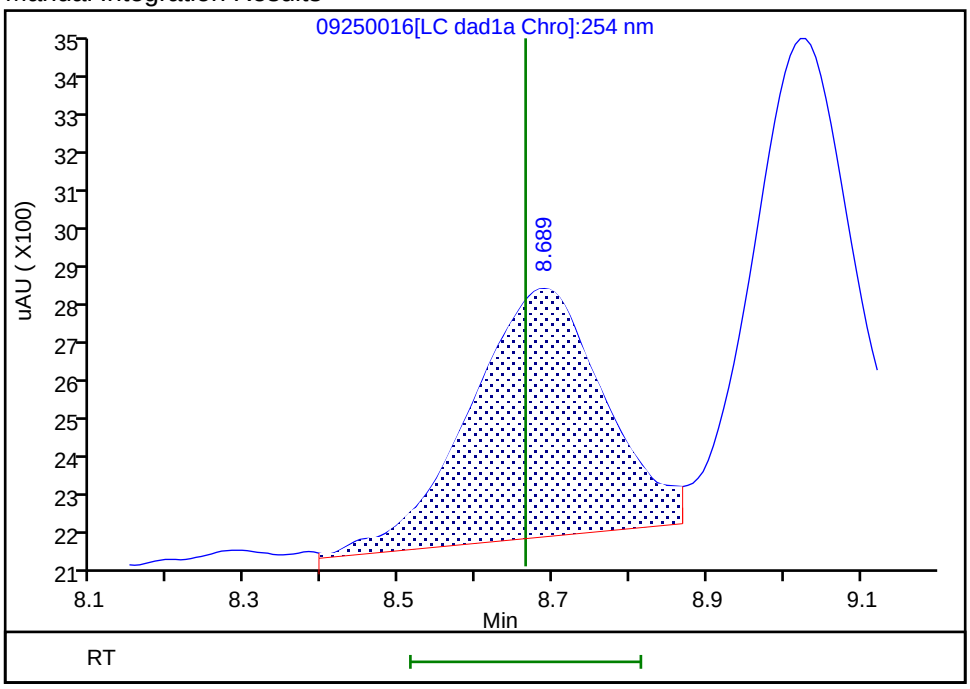
Processing Integration Results

RT: 8.69
Area: 7028
Amount: 0.047432
Amount Units: ug/ml



Manual Integration Results

RT: 8.69
Area: 7270
Amount: 0.050688
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:00:47 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

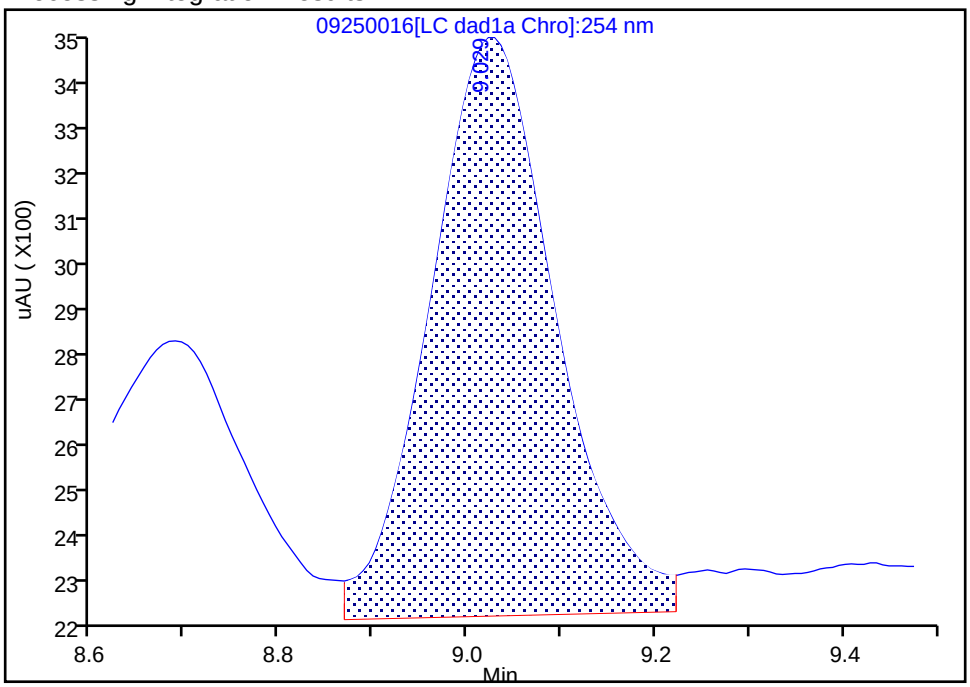
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250016.d				
Injection Date:	25-Sep-2023 22:18:06	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

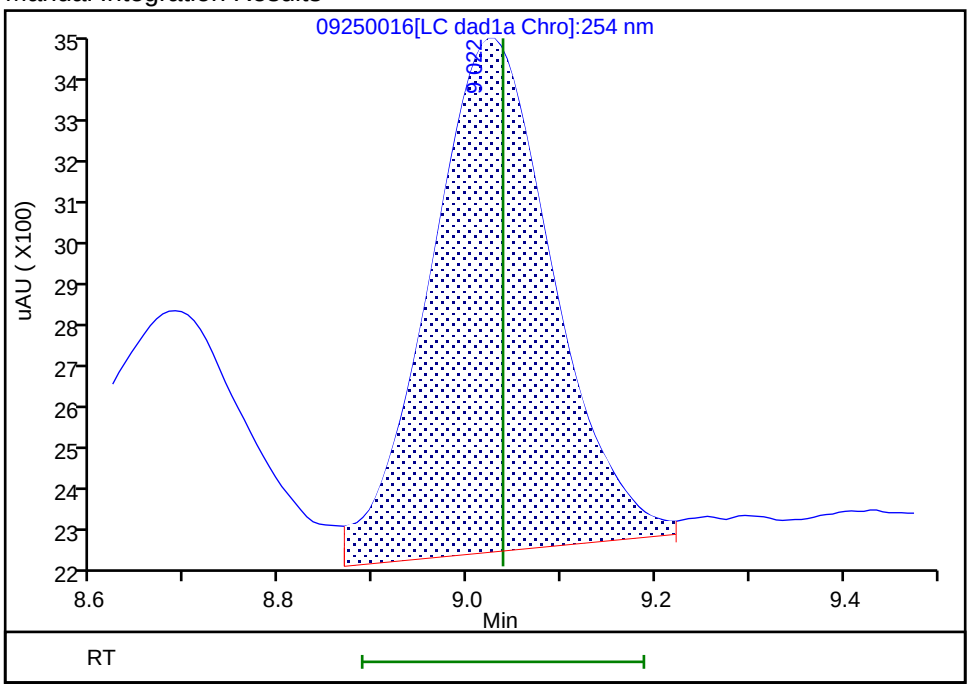
Processing Integration Results

RT: 9.03
Area: 10724
Amount: 0.048581
Amount Units: ug/ml



Manual Integration Results

RT: 9.02
Area: 10353
Amount: 0.049873
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:00:47 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

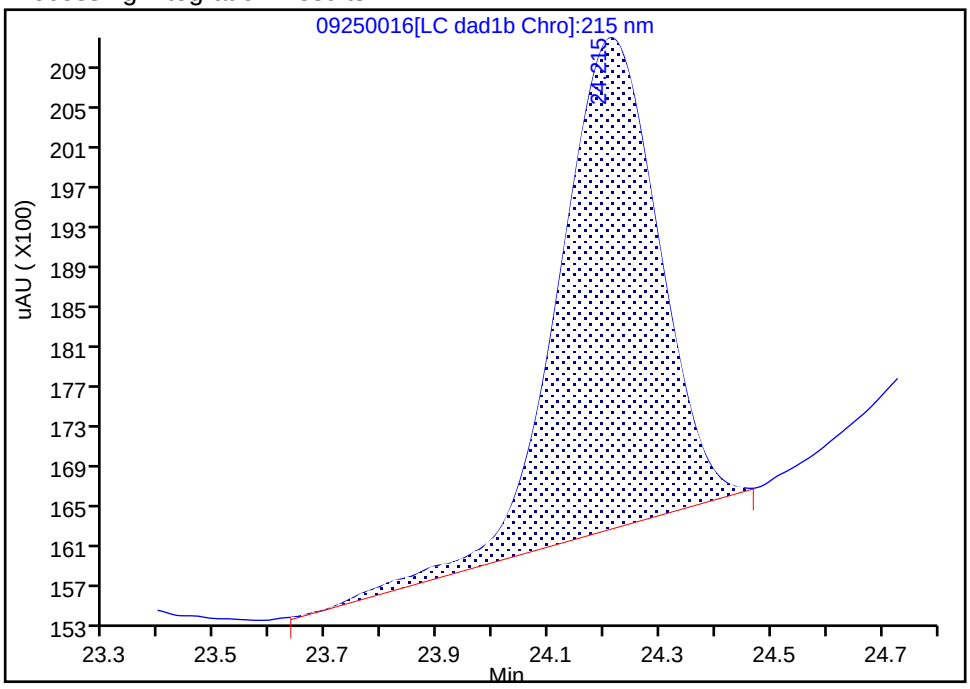
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250016.d
Injection Date: 25-Sep-2023 22:18:06 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 3
Client ID:
Operator ID: JZ/JG ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

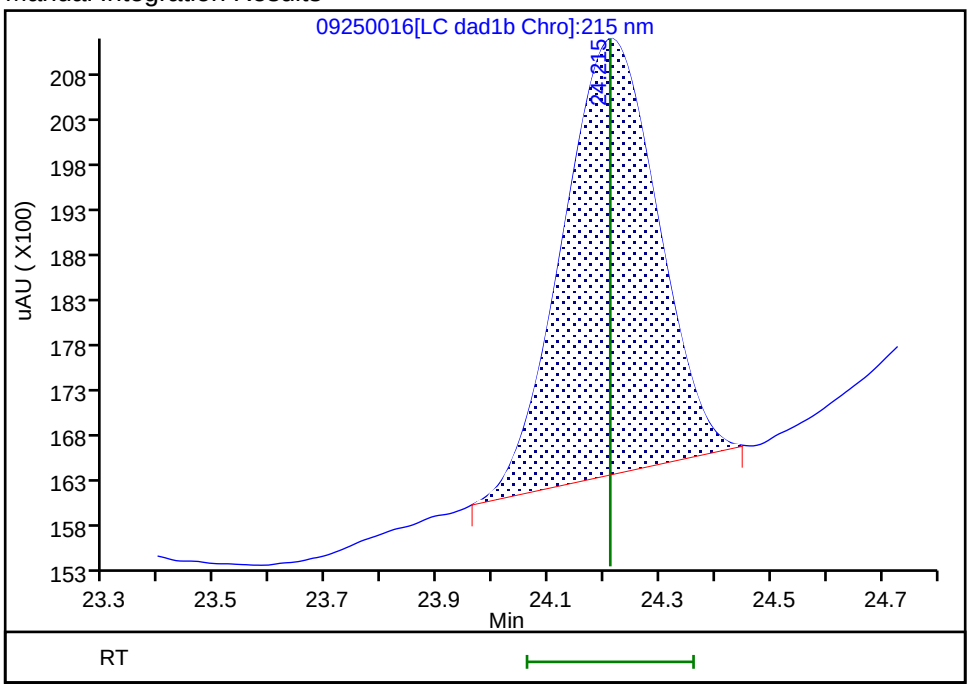
Processing Integration Results

RT: 24.22
Area: 61882
Amount: 0.484004
Amount Units: ug/ml



Manual Integration Results

RT: 24.22
Area: 57592
Amount: 0.468184
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:02:25 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250017.D
Lims ID: IC INT 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 25-Sep-2023 22:54:10 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 2
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub18

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:25:38 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 15:24:47

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.285	5.291	-0.006	8811	0.0201	0.0210	
4 DNX	1	6.131	6.144	-0.013	6216	0.0200	0.0216	
6 HMX	1	6.771	6.791	-0.020	3125	0.0200	0.0180	M
7 MNX	1	7.618	7.644	-0.026	6293	0.0233	0.0240	M
5 2,4,6-Trinitrophenol	1	8.678	8.664	0.014	2960	0.0200	0.0206	M
8 RDX	1	9.005	9.038	-0.033	4054	0.0200	0.0195	M
9 Nitrobenzene	1	11.551	11.598	-0.047	6887	0.0200	0.0185	M
$ 10 1,2-Dinitrobenzene	1	12.484	12.538	-0.054	4419	0.0200	0.0172	M
11 3,5-Dinitroaniline	1	14.338	14.378	-0.040	8071	0.0200	0.0187	M
12 1,3-Dinitrobenzene	1	14.638	14.671	-0.033	11160	0.0200	0.0193	M
13 Nitroglycerin	2	15.064	15.111	-0.047	25930	0.2000	0.2088	
14 o-Nitrotoluene	1	15.684	15.738	-0.054	5416	0.0200	0.0219	M
15 p-Nitrotoluene	1	15.911	15.958	-0.047	5178	0.0200	0.0205	M
16 4-Amino-2,6-dinitrotoluene	1	16.424	16.478	-0.054	6984	0.0200	0.0209	M
17 m-Nitrotoluene	1	16.744	16.804	-0.060	6679	0.0200	0.0204	M
18 2-Amino-4,6-dinitrotoluene	1	17.224	17.284	-0.060	8189	0.0200	0.0180	M
19 1,3,5-Trinitrobenzene	1	17.444	17.498	-0.054	8780	0.0200	0.0213	M
20 2,6-Dinitrotoluene	1	18.524	18.598	-0.074	6716	0.0200	0.0224	M
21 2,4-Dinitrotoluene	1	18.984	19.051	-0.067	11241	0.0200	0.0206	M
22 Tetryl	1	22.191	22.244	-0.053	6017	0.0200	0.0195	
23 2,4,6-Trinitrotoluene	1	23.045	23.104	-0.059	6528	0.0200	0.0170	
24 PETN	2	24.171	24.211	-0.040	21075	0.2000	0.1713	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00078	Amount Added:	2.00	Units: uL
8330 DMT_00015	Amount Added:	1.00	Units: uL

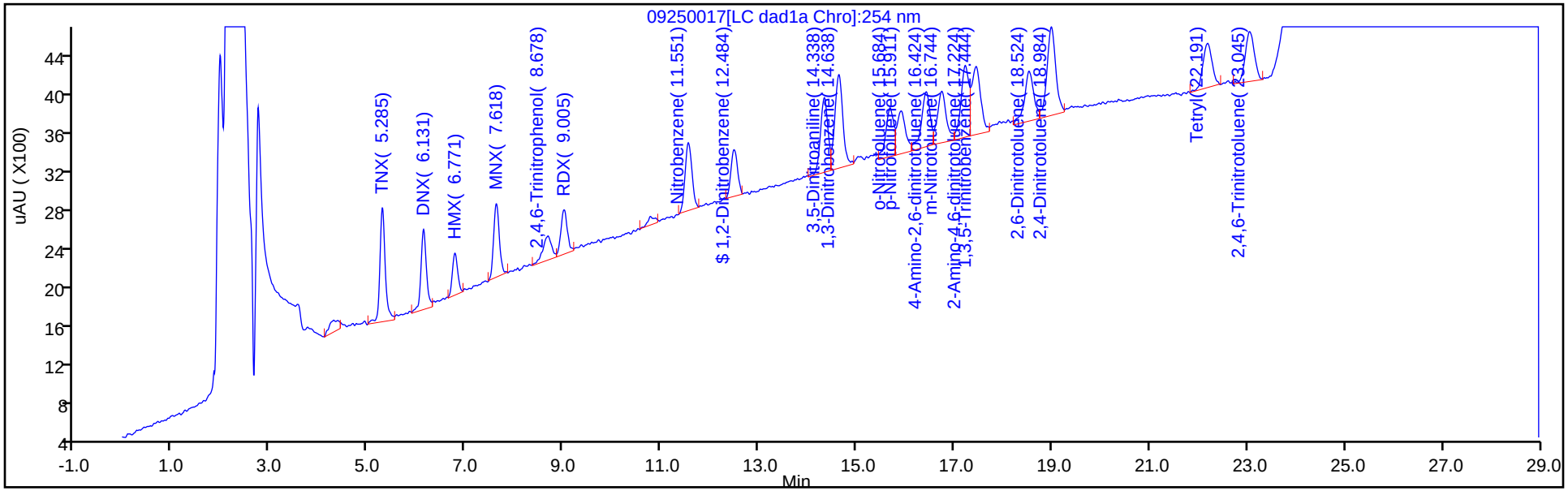
Report Date: 26-Sep-2023 15:25:38 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

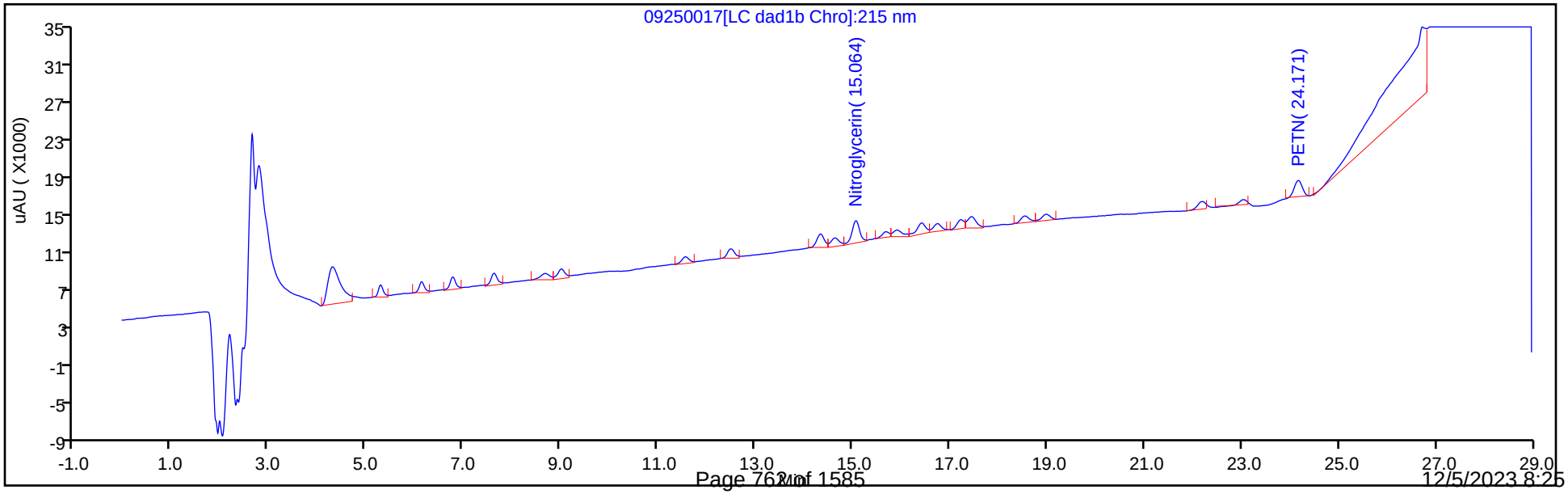
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250017.d

Injection Date:	25-Sep-2023 22:54:10	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	IC INT 2			Worklist Smp#:	17
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

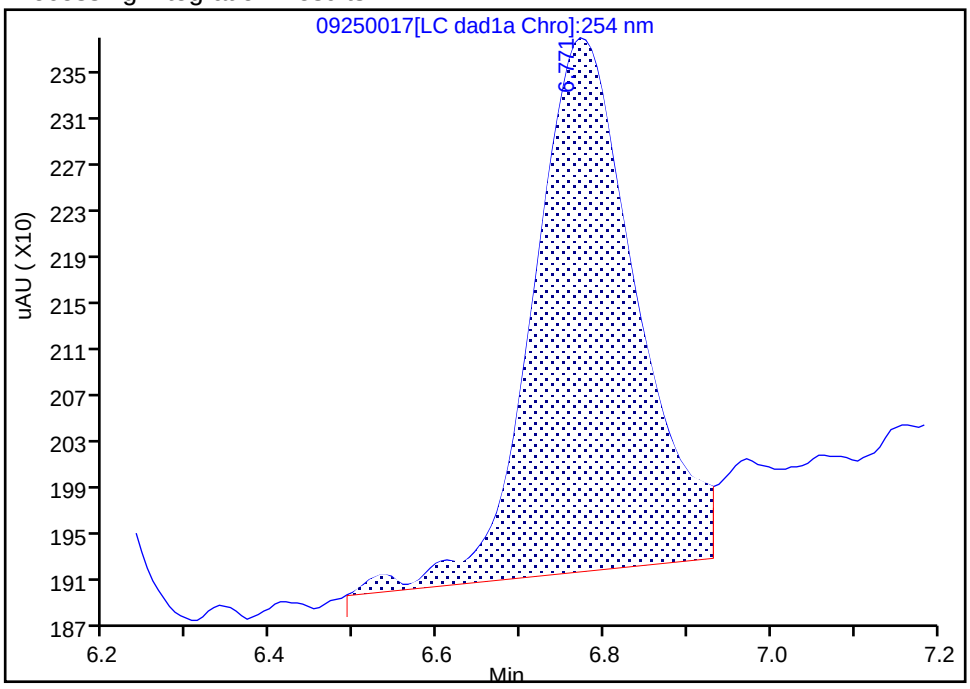
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250017.d				
Injection Date:	25-Sep-2023 22:54:10	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

6 HMX, CAS: 2691-41-0

Signal: 1

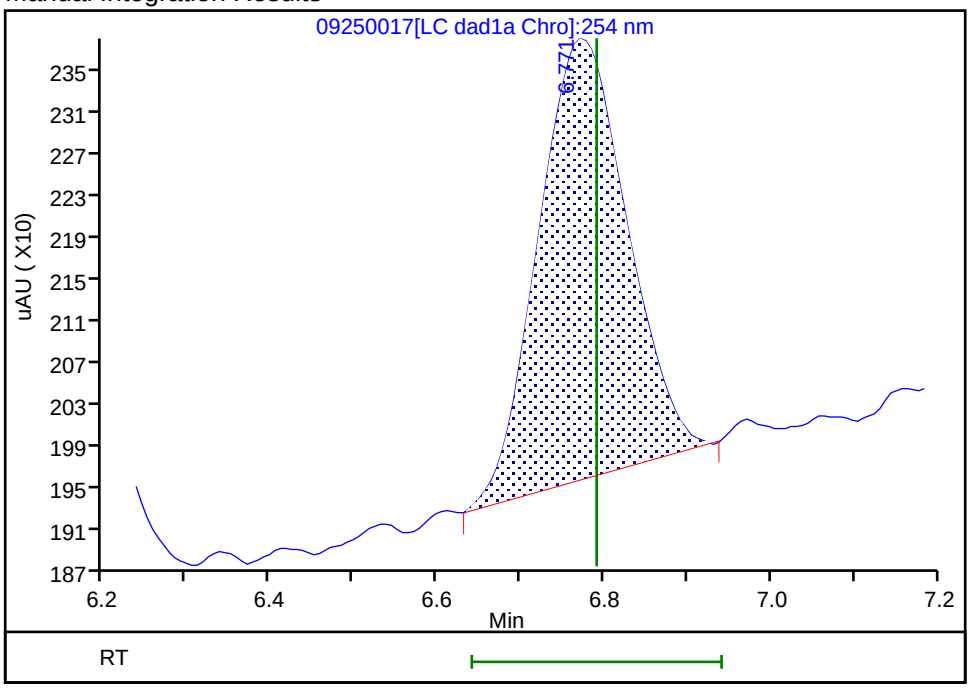
Processing Integration Results

RT: 6.77
Area: 3947
Amount: 0.020973
Amount Units: ug/ml



Manual Integration Results

RT: 6.77
Area: 3125
Amount: 0.018015
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:01:19 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

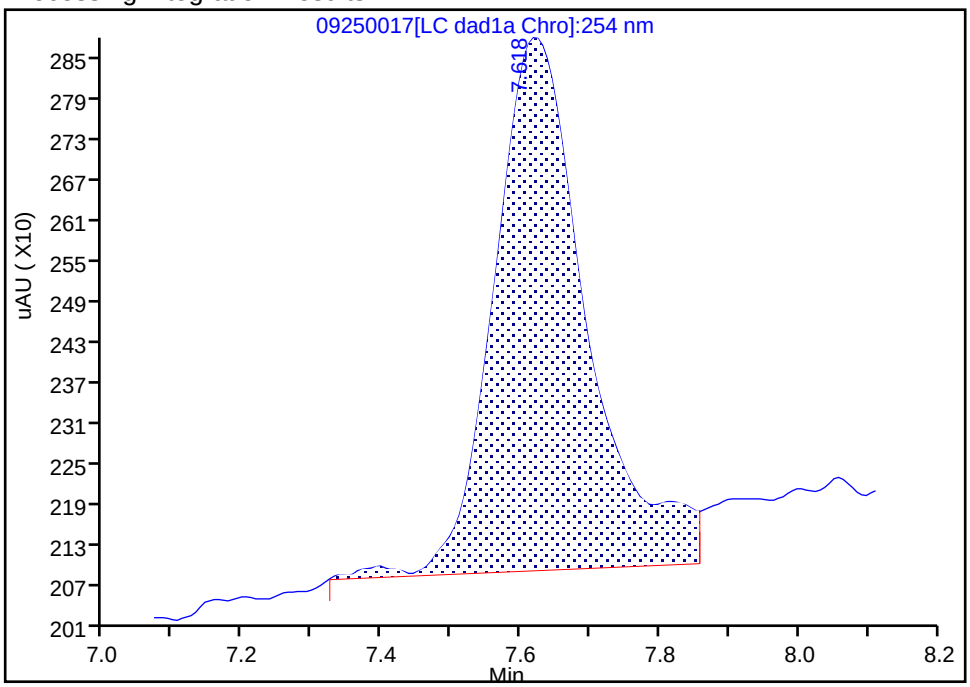
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250017.d				
Injection Date:	25-Sep-2023 22:54:10	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

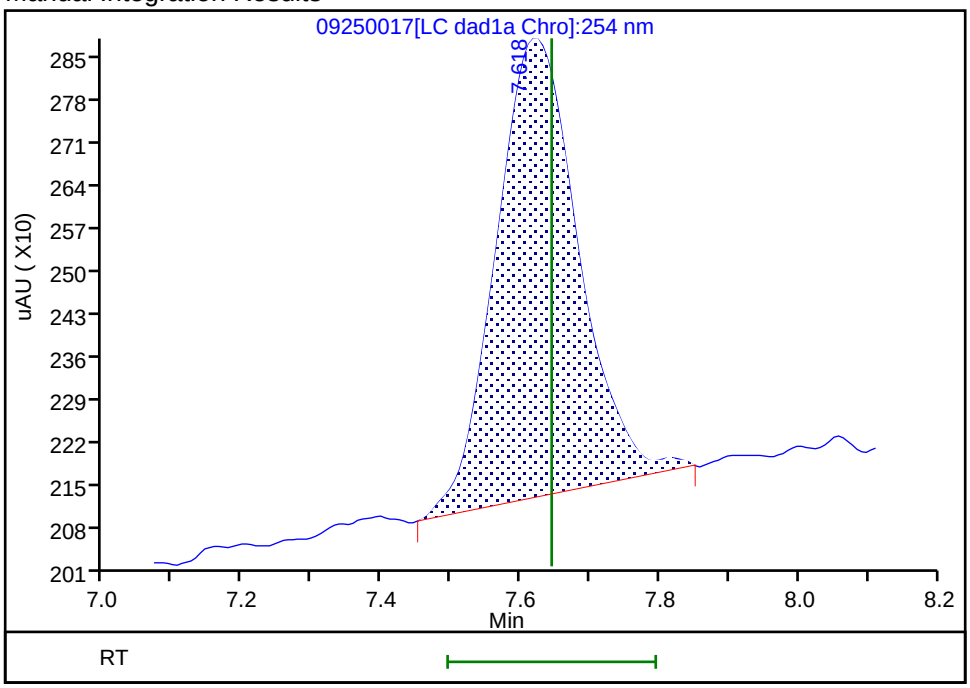
Processing Integration Results

RT: 7.62
Area: 7438
Amount: 0.026601
Amount Units: ug/ml



Manual Integration Results

RT: 7.62
Area: 6293
Amount: 0.024035
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:01:27 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

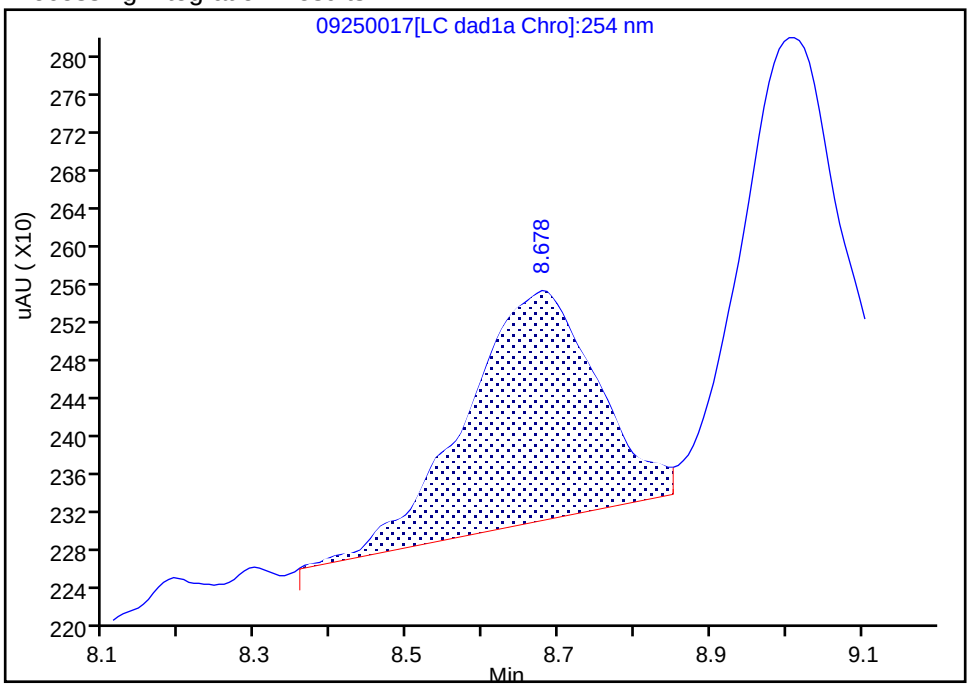
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Injection Date:	25-Sep-2023 22:54:10	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

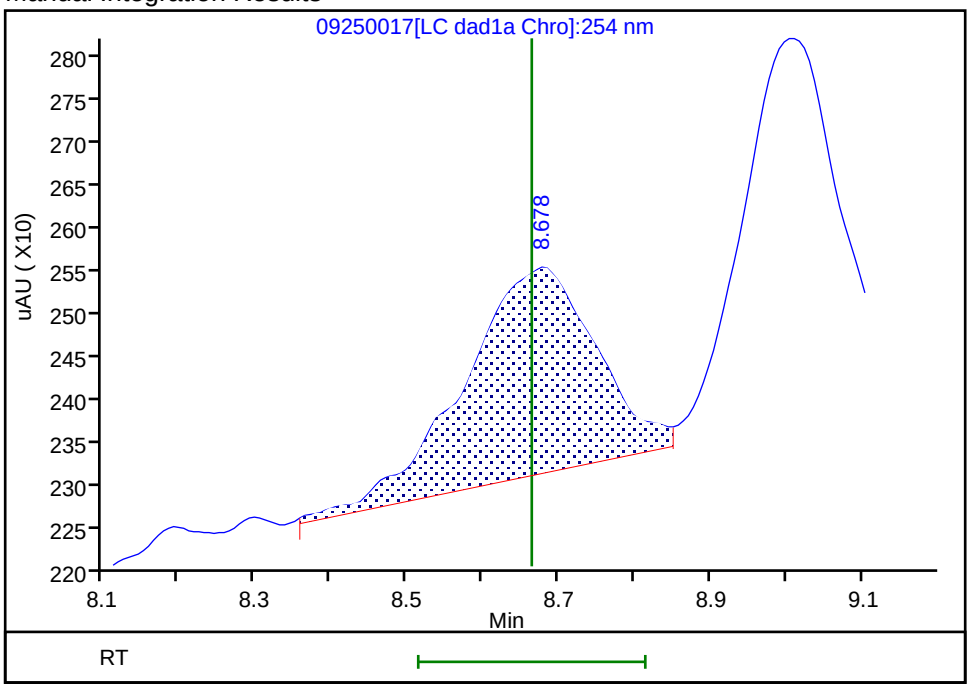
Processing Integration Results

RT: 8.68
Area: 2901
Amount: 0.019508
Amount Units: ug/ml



Manual Integration Results

RT: 8.68
Area: 2960
Amount: 0.020638
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:01:34 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

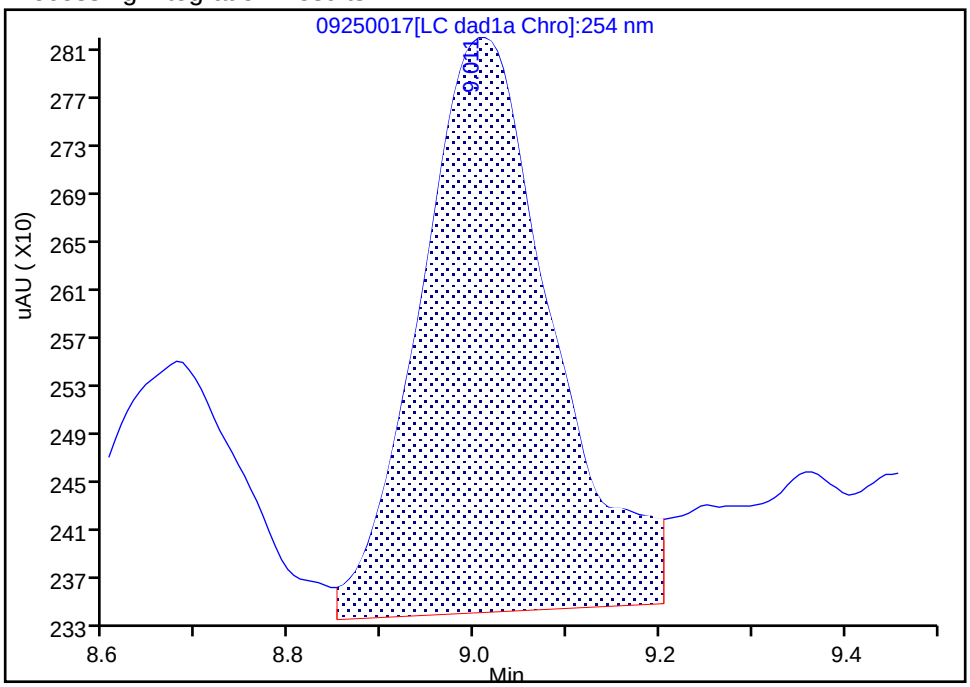
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250017.d				
Injection Date:	25-Sep-2023 22:54:10	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

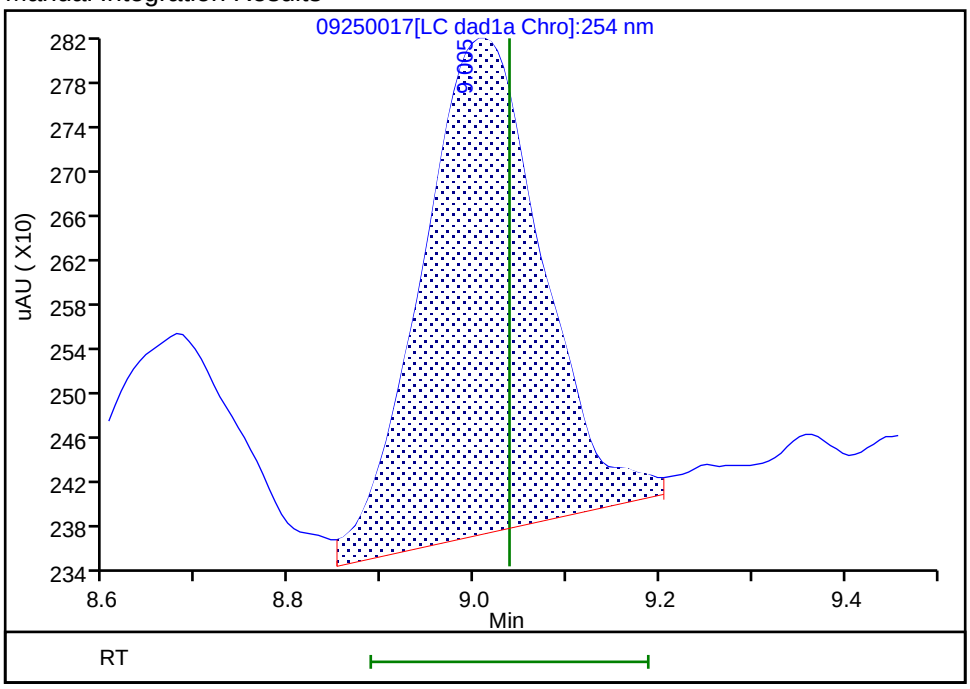
Processing Integration Results

RT: 9.01
Area: 4690
Amount: 0.021326
Amount Units: ug/ml



Manual Integration Results

RT: 9.00
Area: 4054
Amount: 0.019529
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:01:34 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

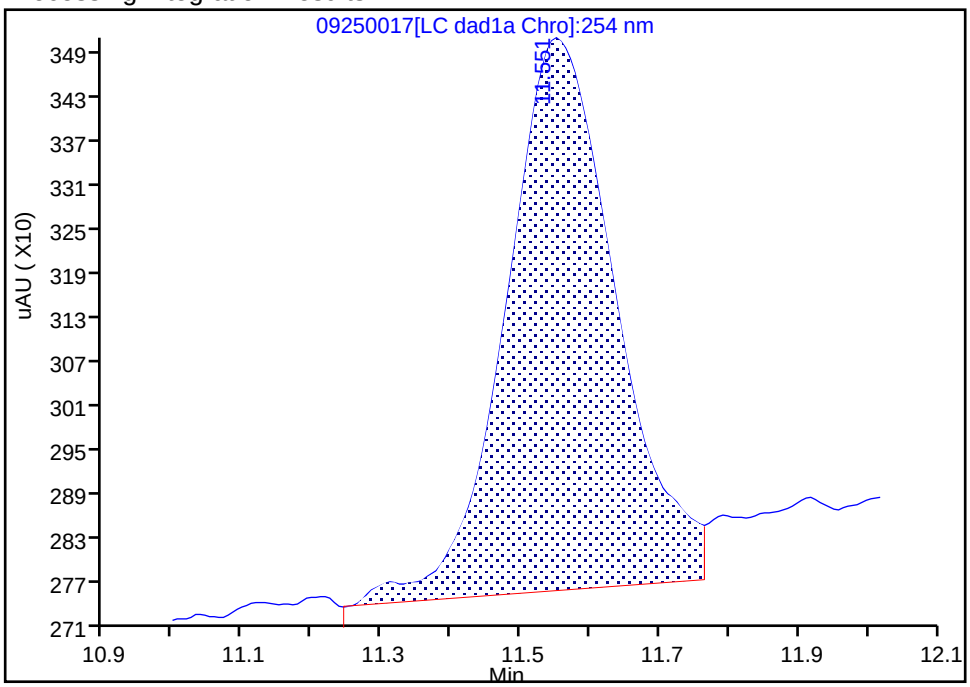
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Injection Date: 25-Sep-2023 22:54:10 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 2
Client ID:
Operator ID: JZ/JG ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

9 Nitrobenzene, CAS: 98-95-3

Signal: 1

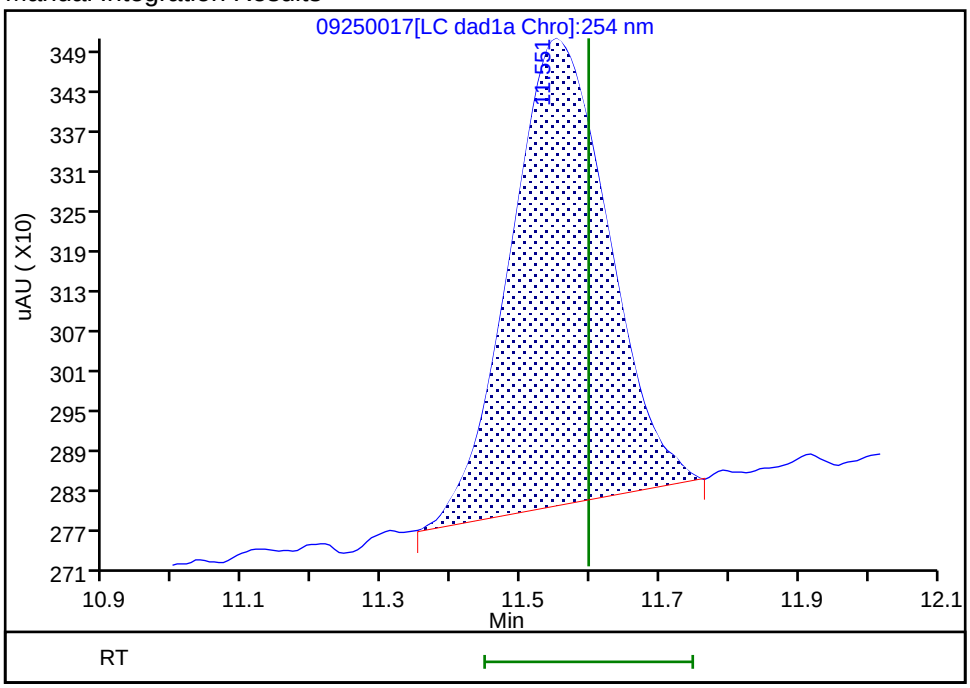
Processing Integration Results

RT: 11.55
Area: 8238
Amount: 0.021302
Amount Units: ug/ml



Manual Integration Results

RT: 11.55
Area: 6887
Amount: 0.018544
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:01:44 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

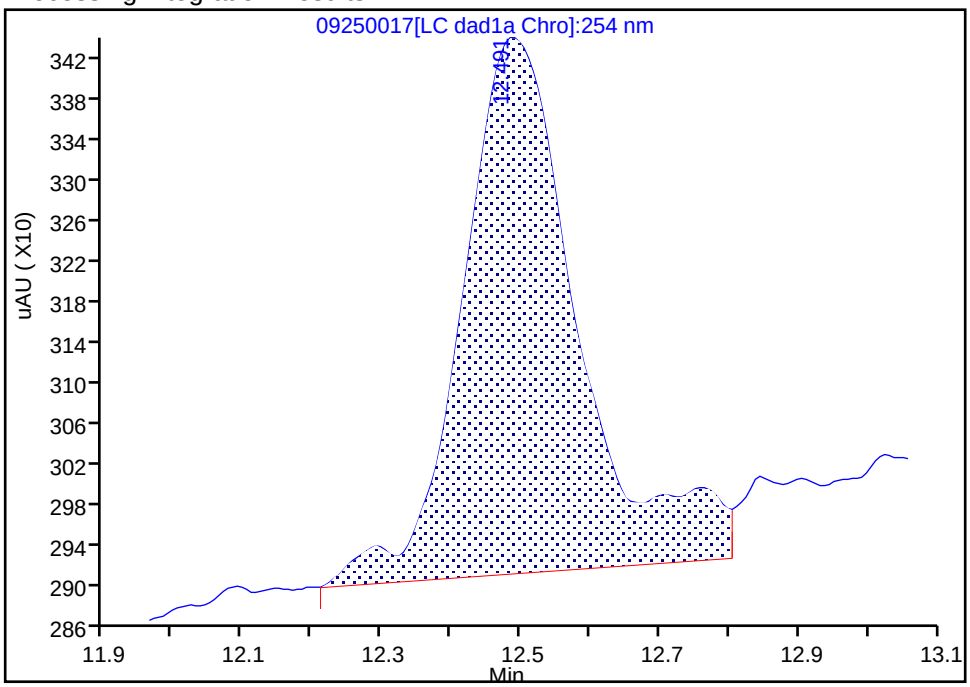
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250017.d				
Injection Date:	25-Sep-2023 22:54:10	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

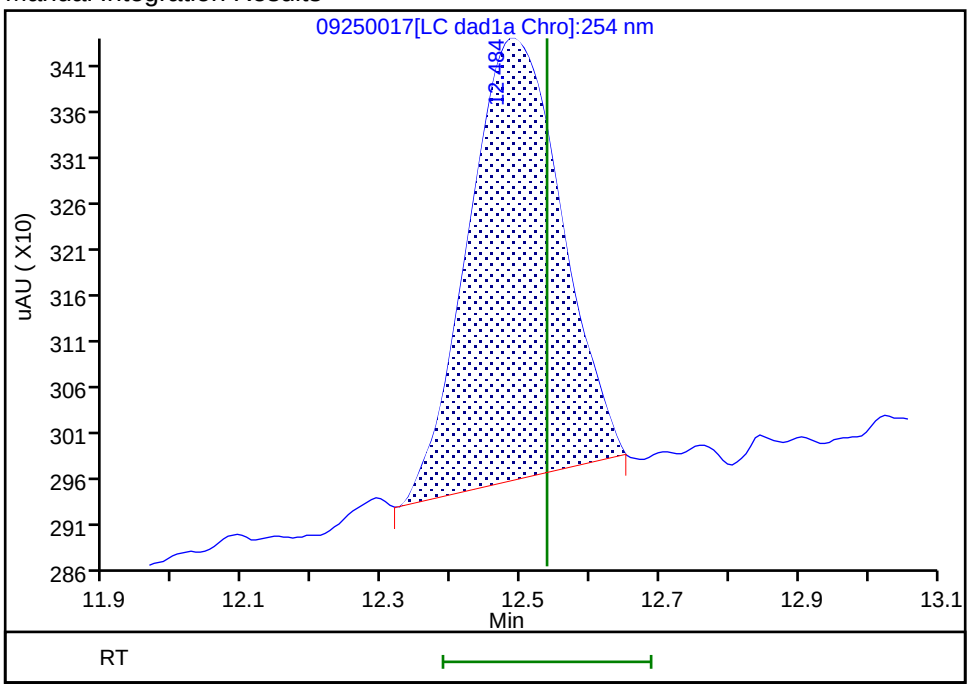
Processing Integration Results

RT: 12.49
Area: 6053
Amount: 0.022429
Amount Units: ug/ml



Manual Integration Results

RT: 12.48
Area: 4419
Amount: 0.017210
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:01:49 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

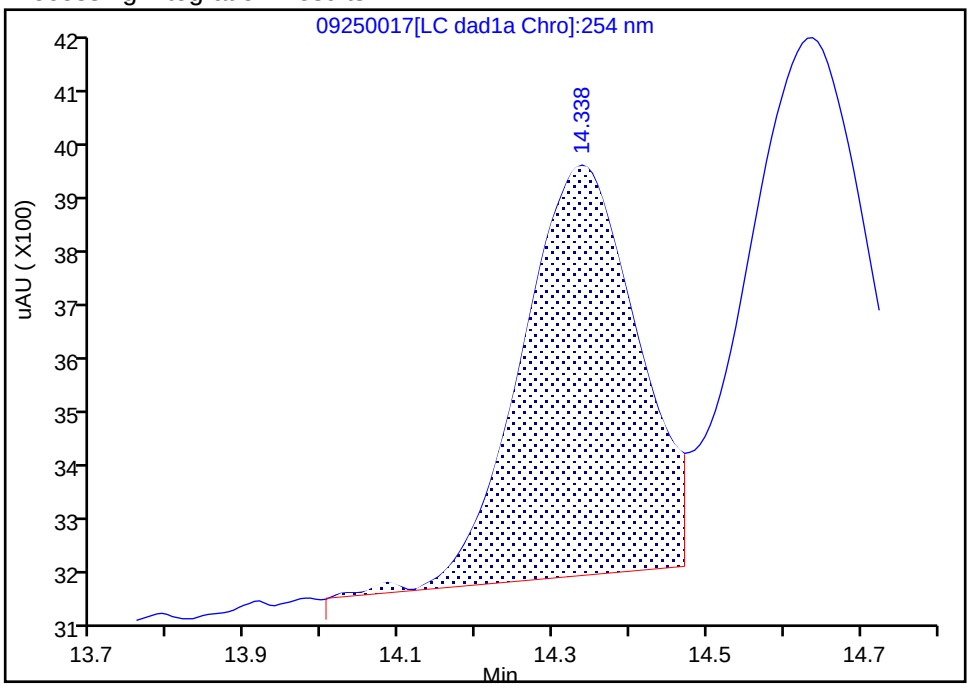
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250017.d				
Injection Date:	25-Sep-2023 22:54:10	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

11 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

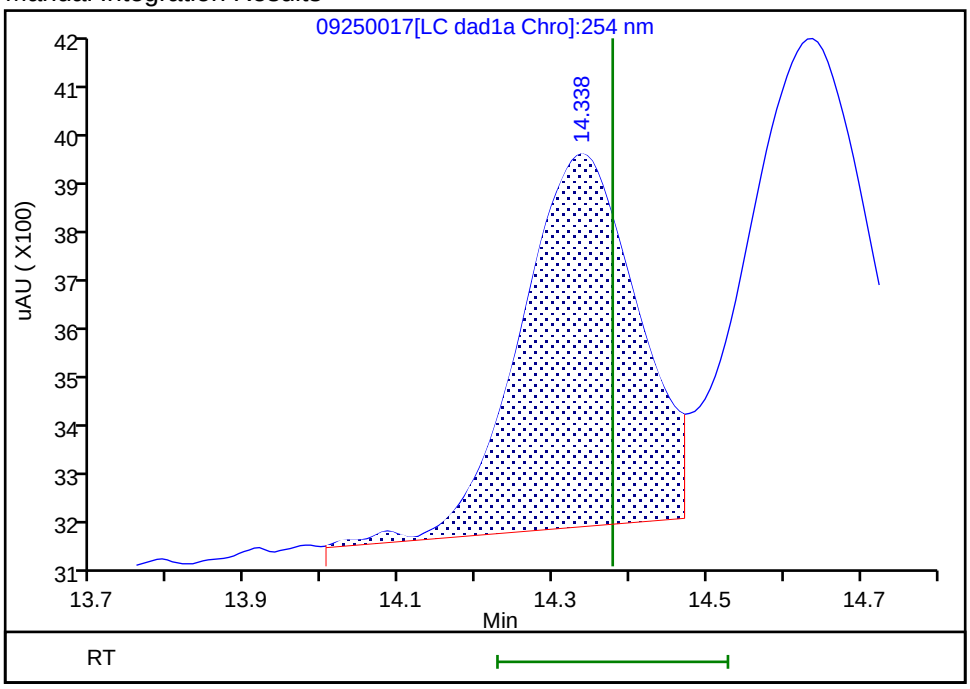
Processing Integration Results

RT: 14.34
Area: 7945
Amount: 0.018887
Amount Units: ug/ml



Manual Integration Results

RT: 14.34
Area: 8071
Amount: 0.018726
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:01:57 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

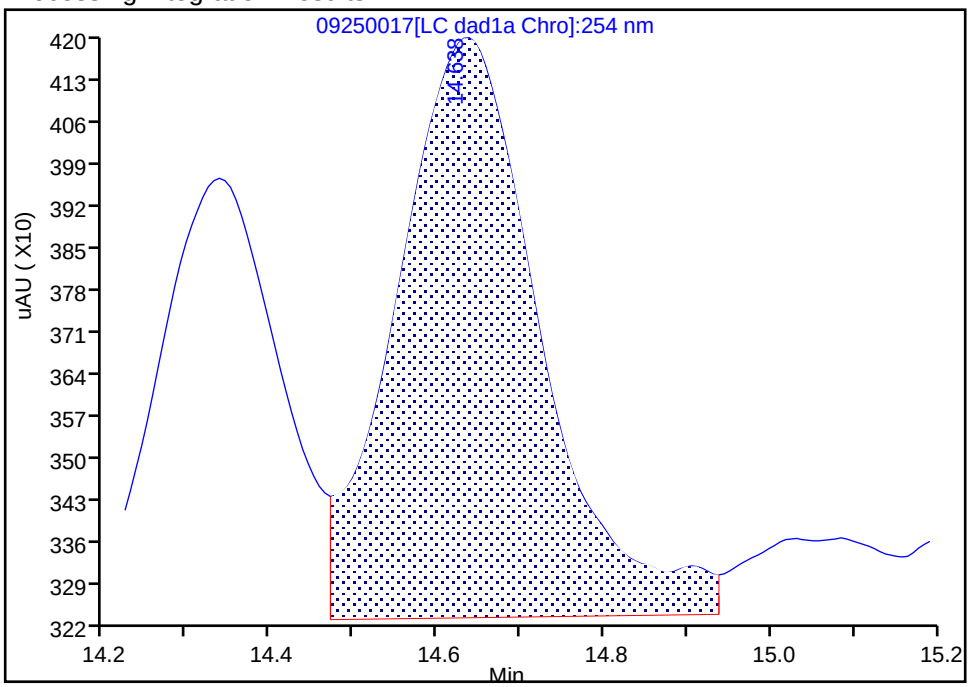
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250017.d				
Injection Date:	25-Sep-2023 22:54:10	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

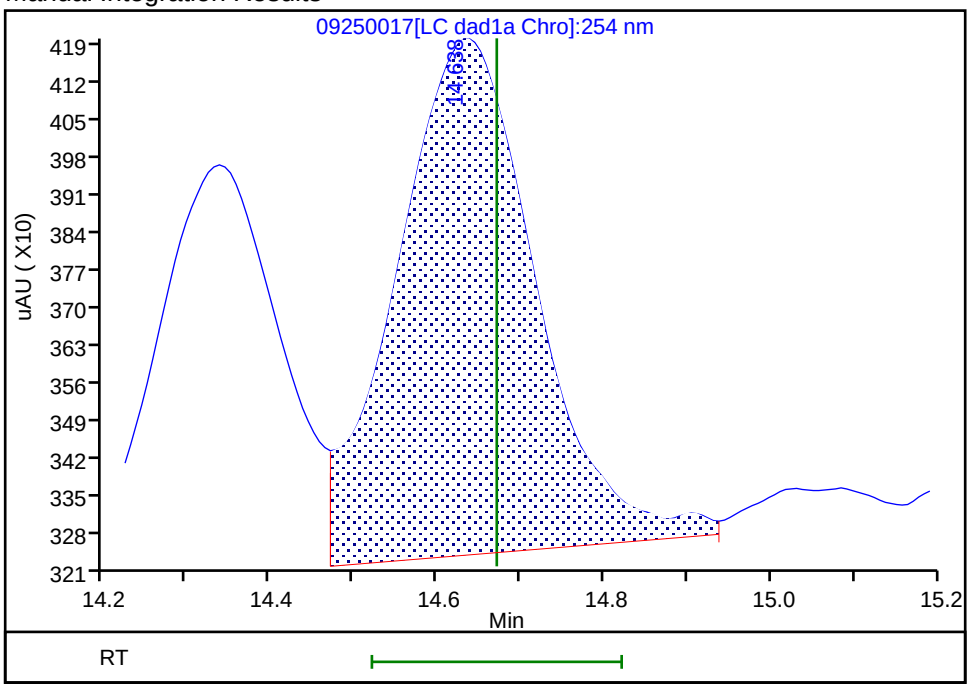
Processing Integration Results

RT: 14.64
Area: 11664
Amount: 0.019906
Amount Units: ug/ml



Manual Integration Results

RT: 14.64
Area: 11160
Amount: 0.019257
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:01:57 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

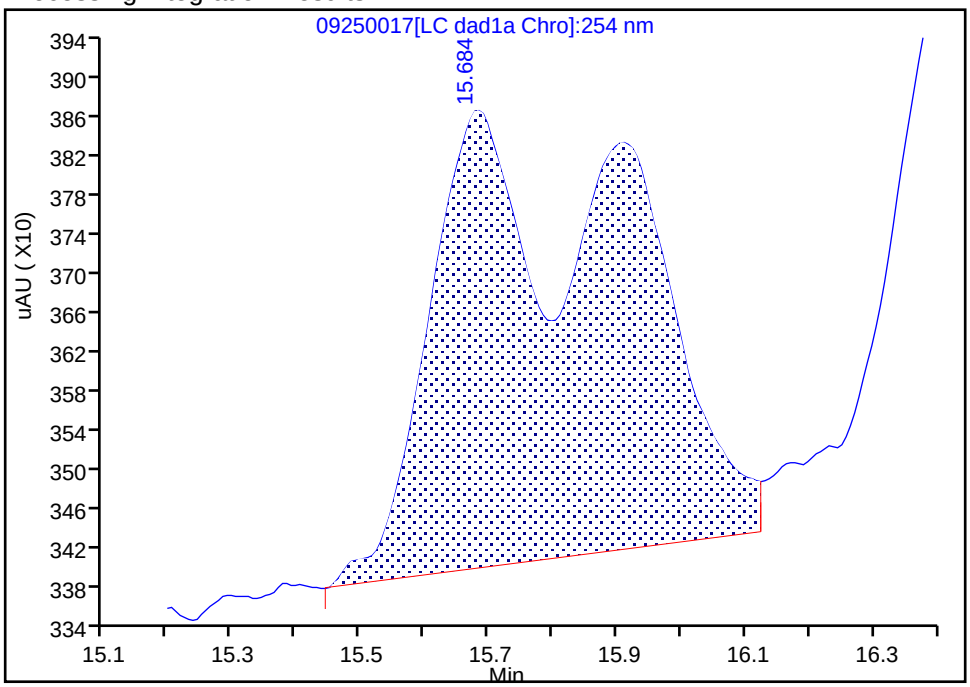
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250017.d				
Injection Date:	25-Sep-2023 22:54:10	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

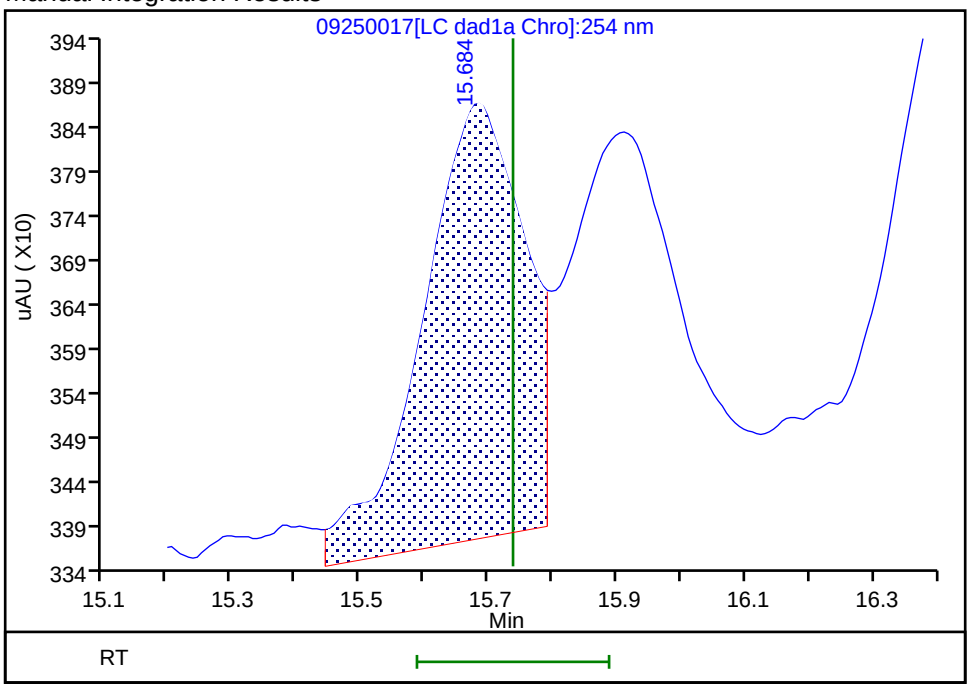
Processing Integration Results

RT: 15.68
Area: 9578
Amount: 0.027034
Amount Units: ug/ml



Manual Integration Results

RT: 15.68
Area: 5416
Amount: 0.021924
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:02:03 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

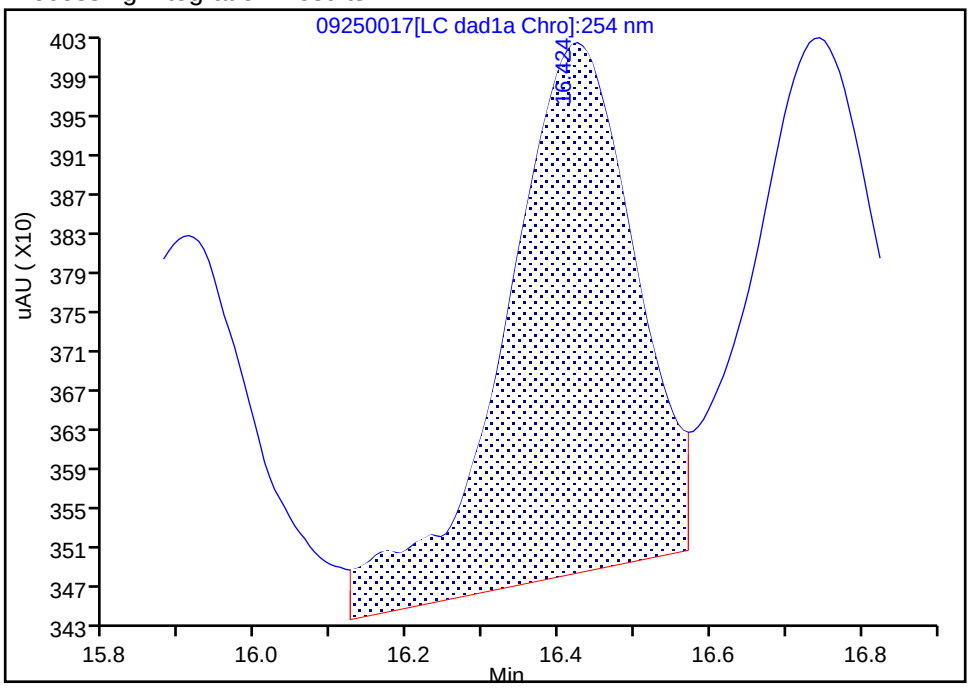
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250017.d				
Injection Date:	25-Sep-2023 22:54:10	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

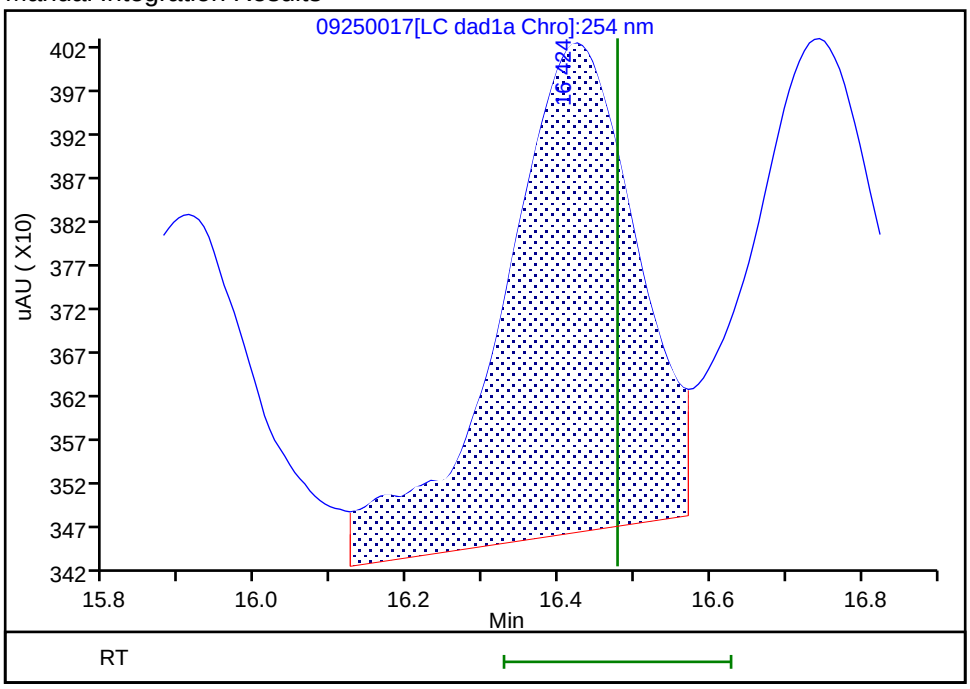
Processing Integration Results

RT: 16.42
Area: 6515
Amount: 0.022799
Amount Units: ug/ml



Manual Integration Results

RT: 16.42
Area: 6984
Amount: 0.020908
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:01:57 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

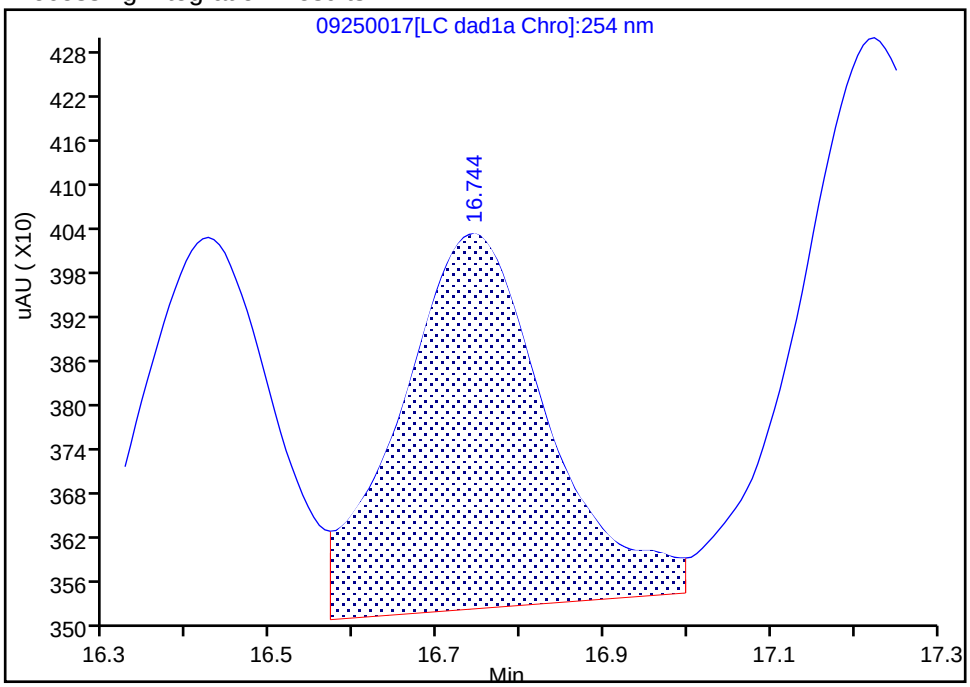
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250017.d				
Injection Date:	25-Sep-2023 22:54:10	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

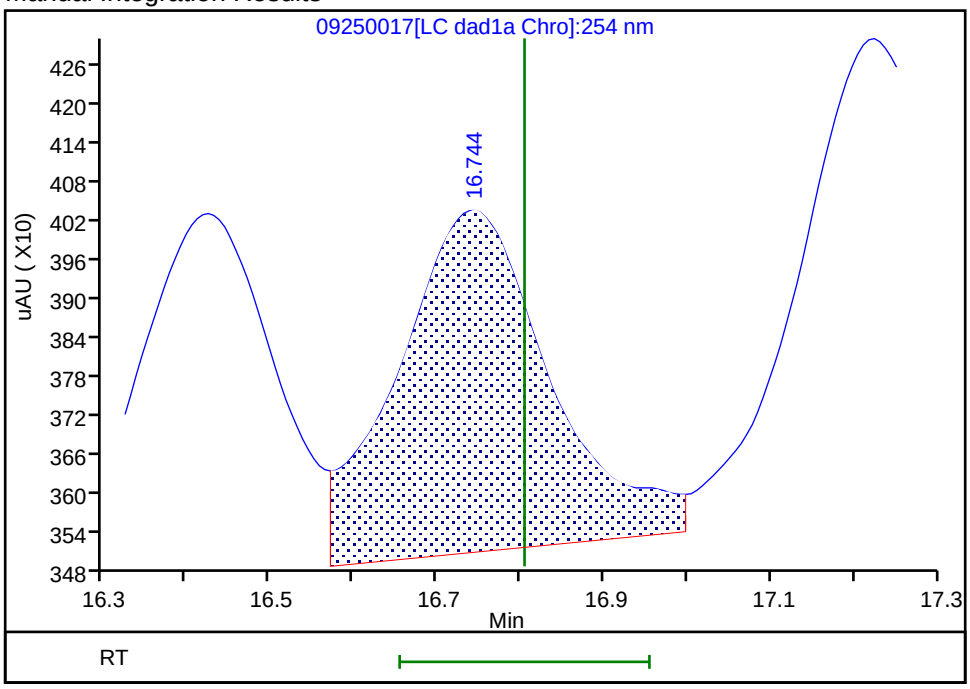
Processing Integration Results

RT: 16.74
Area: 6231
Amount: 0.022324
Amount Units: ug/ml



Manual Integration Results

RT: 16.74
Area: 6679
Amount: 0.020390
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:01:57 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

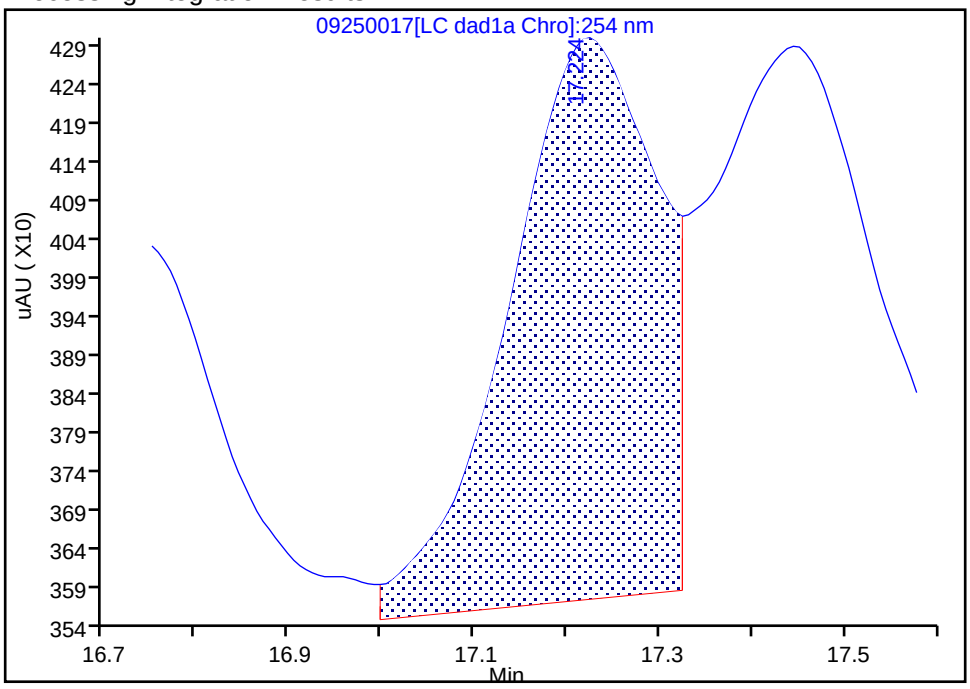
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250017.d
Injection Date: 25-Sep-2023 22:54:10 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 2
Client ID:
Operator ID: JZ/JG ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

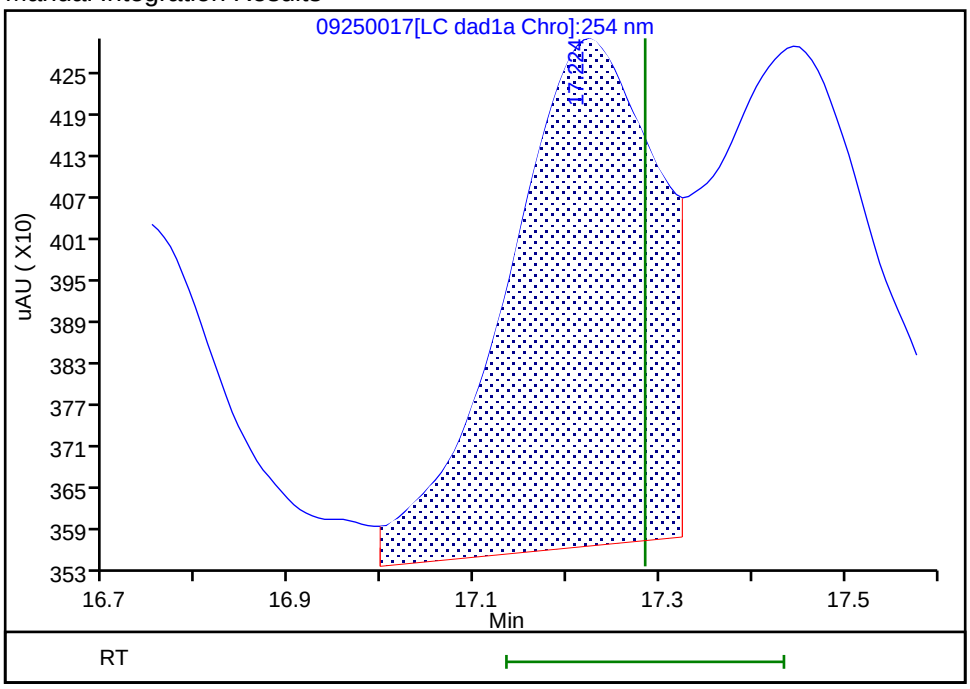
Processing Integration Results

RT: 17.22
Area: 8032
Amount: 0.012641
Amount Units: ug/ml



Manual Integration Results

RT: 17.22
Area: 8189
Amount: 0.017981
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:01:57 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

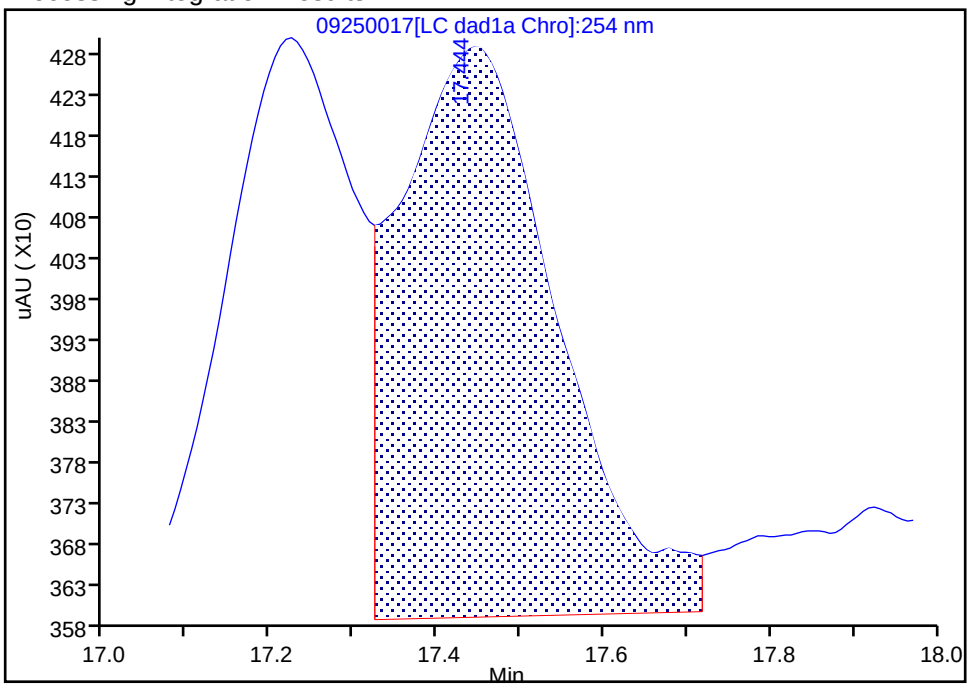
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250017.d
Injection Date: 25-Sep-2023 22:54:10 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 2
Client ID:
Operator ID: JZ/JG ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

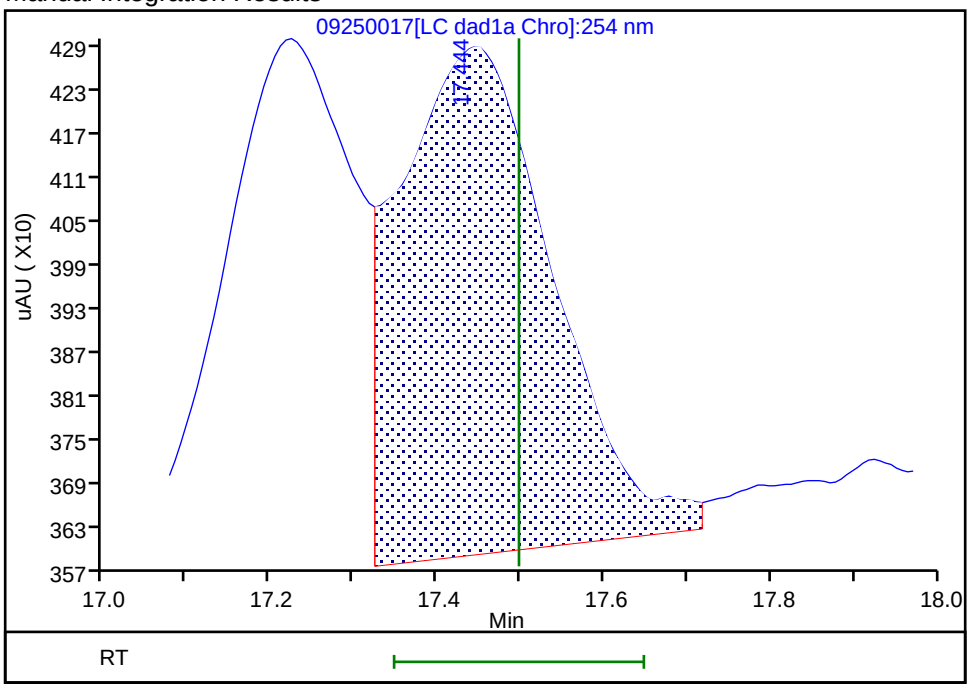
Processing Integration Results

RT: 17.44
Area: 9098
Amount: 0.022025
Amount Units: ug/ml



Manual Integration Results

RT: 17.44
Area: 8780
Amount: 0.021330
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:01:57 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

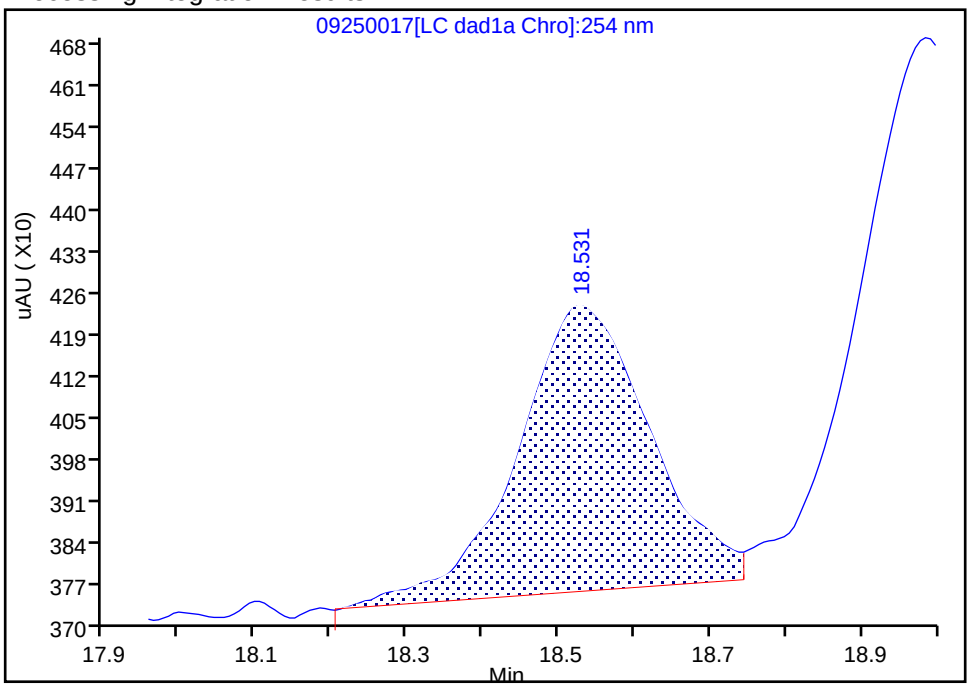
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250017.d				
Injection Date:	25-Sep-2023 22:54:10	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

20 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

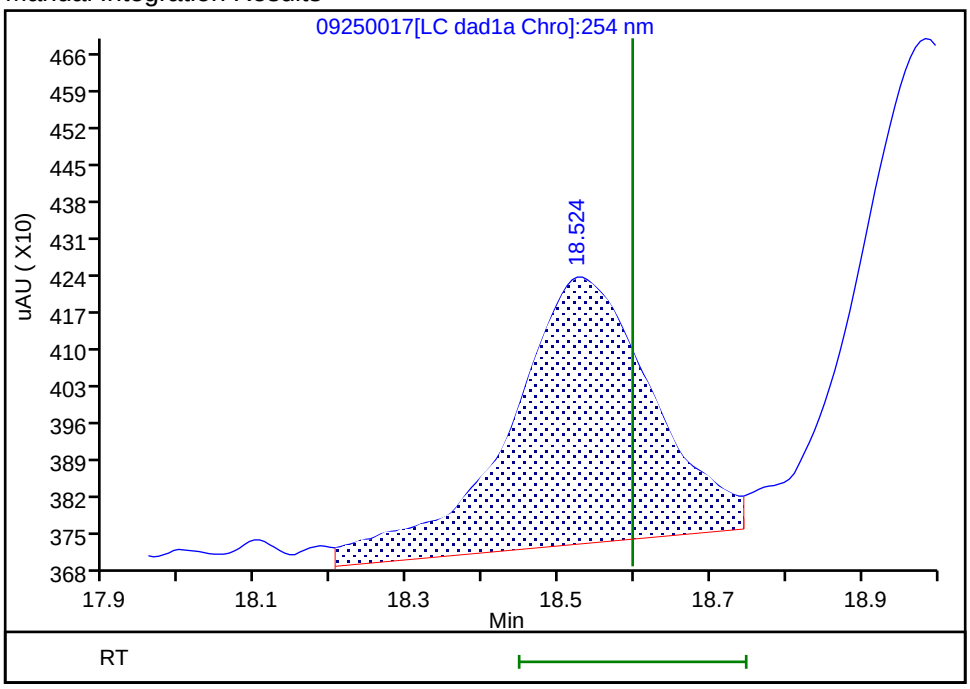
Processing Integration Results

RT: 18.53
Area: 5922
Amount: 0.021510
Amount Units: ug/ml



Manual Integration Results

RT: 18.52
Area: 6716
Amount: 0.022446
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:01:57 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

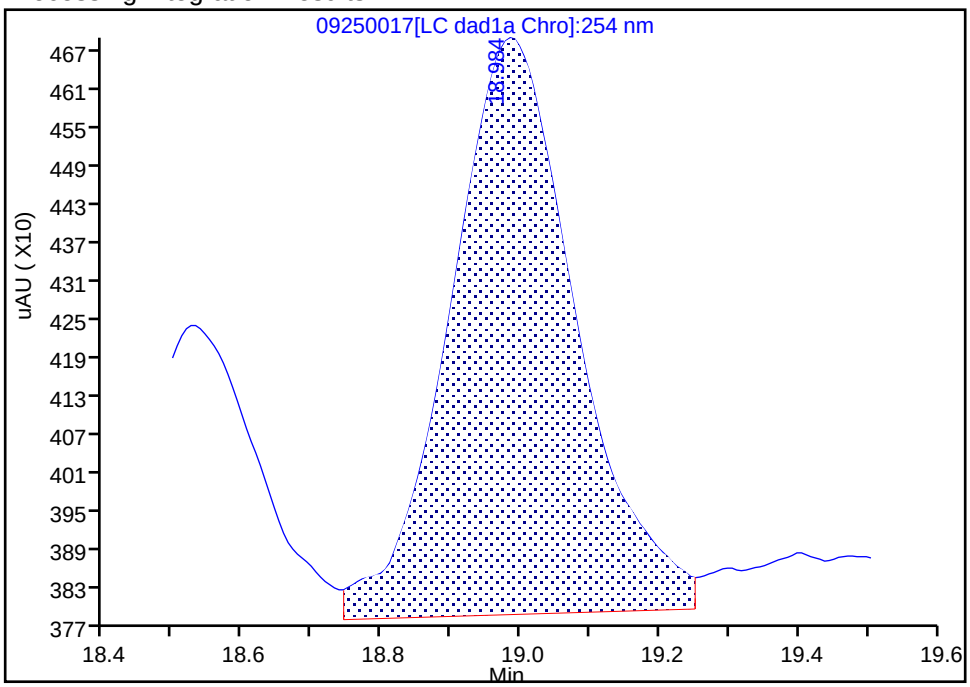
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250017.d
Injection Date: 25-Sep-2023 22:54:10 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 2
Client ID:
Operator ID: JZ/JG ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

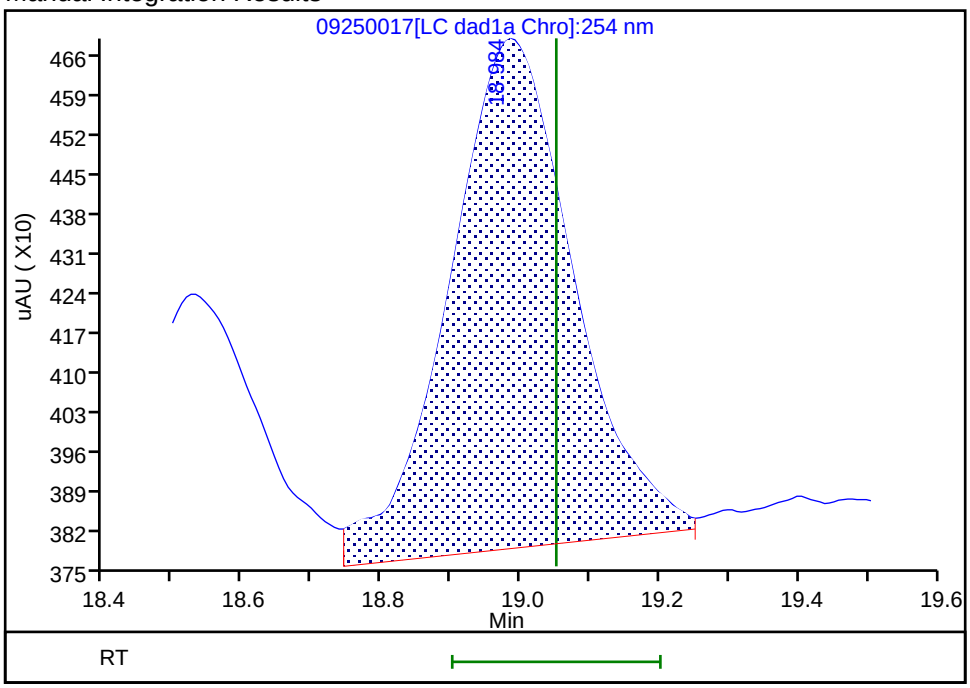
Processing Integration Results

RT: 18.98
Area: 11484
Amount: 0.020690
Amount Units: ug/ml



Manual Integration Results

RT: 18.98
Area: 11241
Amount: 0.020622
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:01:57 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

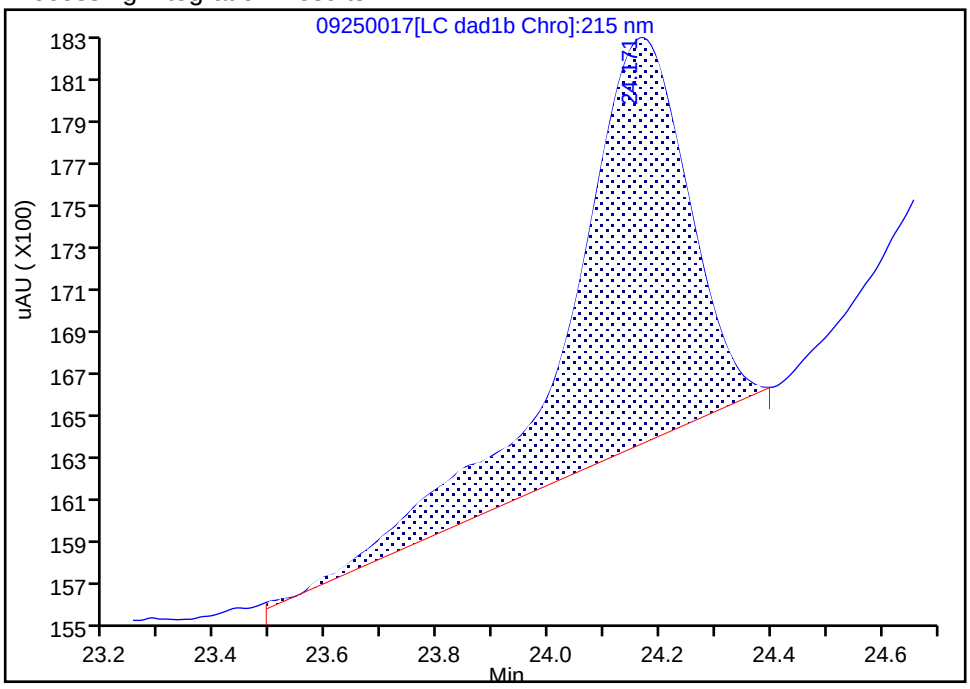
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250017.d
Injection Date: 25-Sep-2023 22:54:10 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 2
Client ID:
Operator ID: JZ/JG ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

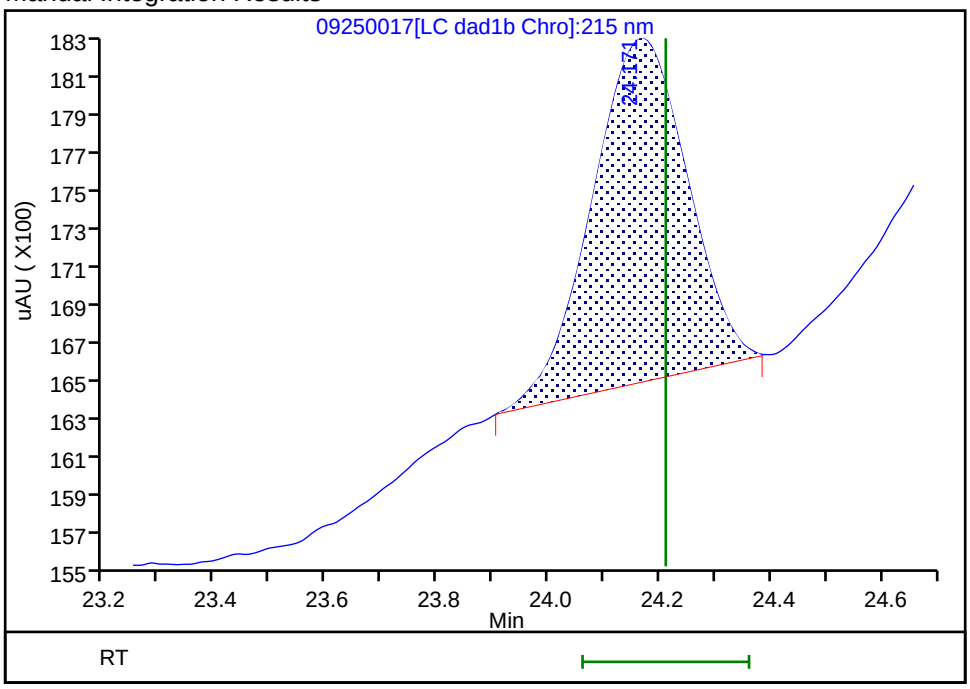
Processing Integration Results

RT: 24.17
Area: 27964
Amount: 0.212361
Amount Units: ug/ml



Manual Integration Results

RT: 24.17
Area: 21075
Amount: 0.171326
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:02:17 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250018.D
Lims ID: IC INT 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 25-Sep-2023 23:30:18 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 1
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub18

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:25:39 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 15:25:08

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.278	5.291	-0.013	4632	0.0100	0.009811	
4 DNX	1	6.124	6.144	-0.020	3214	0.0100	0.0112	
6 HMX	1	6.771	6.791	-0.020	1873	0.0100	0.0108	M
7 MNX	1	7.624	7.644	-0.020	3081	0.0117	0.0118	M
5 2,4,6-Trinitrophenol	1	8.698	8.664	0.034	1867	0.0100	0.0130	M
8 RDX	1	9.011	9.038	-0.027	2366	0.0100	0.0114	M
9 Nitrobenzene	1	11.551	11.598	-0.047	3810	0.0100	0.0103	M
$ 10 1,2-Dinitrobenzene	1	12.491	12.538	-0.047	3052	0.0100	0.0119	M
11 3,5-Dinitroaniline	1	14.364	14.378	-0.014	4622	0.0100	0.0103	M
12 1,3-Dinitrobenzene	1	14.664	14.671	-0.007	6679	0.0100	0.0115	M
13 Nitroglycerin	2	15.091	15.111	-0.020	13348	0.1000	0.1075	
14 o-Nitrotoluene	1	15.697	15.738	-0.041	2753	0.0100	0.0111	M
15 p-Nitrotoluene	1	15.931	15.958	-0.027	2862	0.0100	0.009860	M
16 4-Amino-2,6-dinitrotoluene	1	16.437	16.478	-0.041	3980	0.0100	0.009756	M
17 m-Nitrotoluene	1	16.751	16.804	-0.053	3853	0.0100	0.0099	M
18 2-Amino-4,6-dinitrotoluene	1	17.237	17.284	-0.047	5349	0.0100	0.0104	M
19 1,3,5-Trinitrobenzene	1	17.451	17.498	-0.047	4159	0.0100	0.0101	M
20 2,6-Dinitrotoluene	1	18.557	18.598	-0.041	3360	0.0100	0.009575	M
21 2,4-Dinitrotoluene	1	19.017	19.051	-0.034	5753	0.0100	0.0106	M
22 Tetryl	1	22.224	22.244	-0.020	3615	0.0100	0.0117	
23 2,4,6-Trinitrotoluene	1	23.091	23.104	-0.013	3712	0.0100	0.009642	
24 PETN	2	24.184	24.211	-0.027	11596	0.1000	0.0943	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00078	Amount Added:	1.00	Units: uL
8330 DMT_00015	Amount Added:	0.50	Units: uL

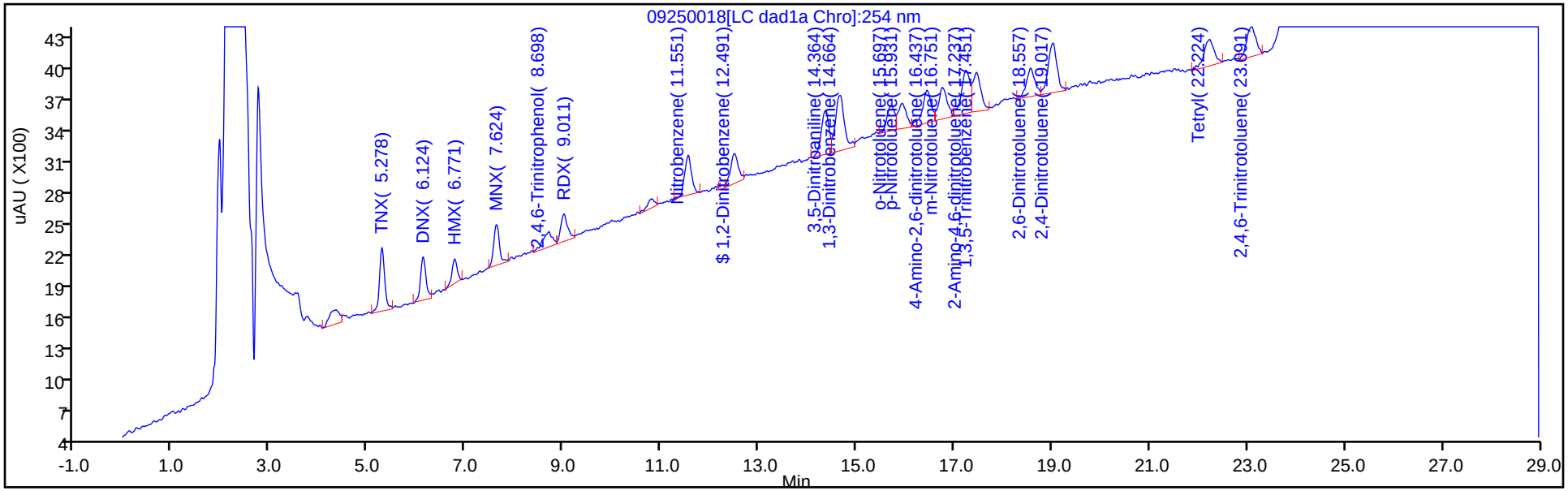
Report Date: 26-Sep-2023 15:25:39 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

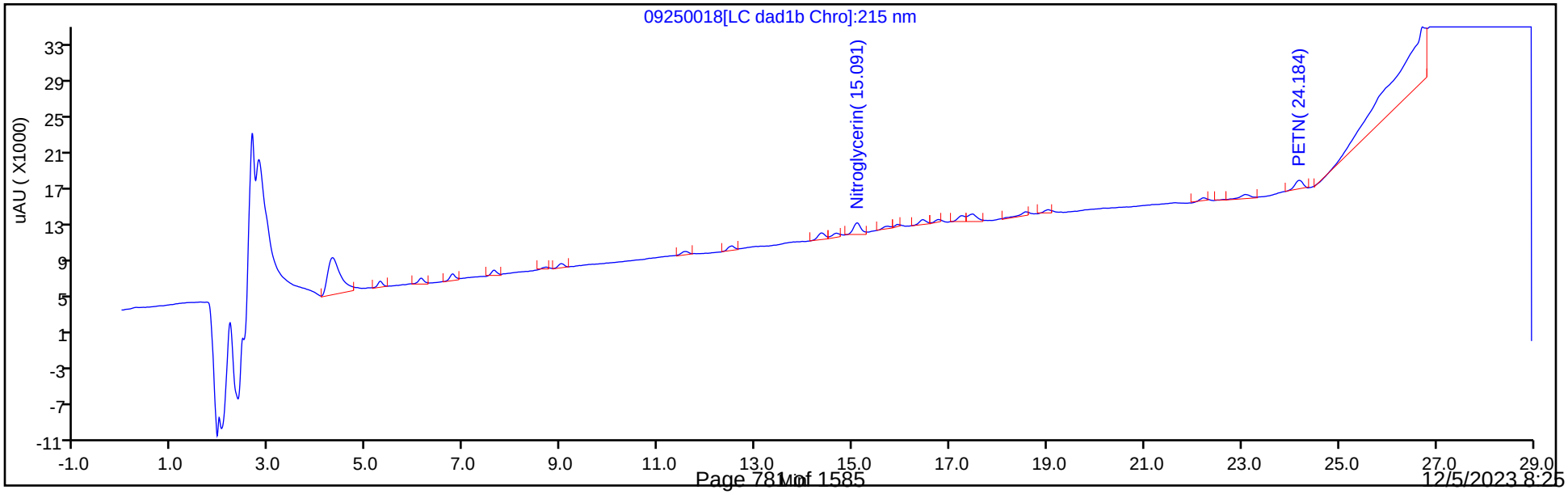
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250018.d

Injection Date:	25-Sep-2023 23:30:18	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	IC INT 1			Worklist Smp#:	18
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

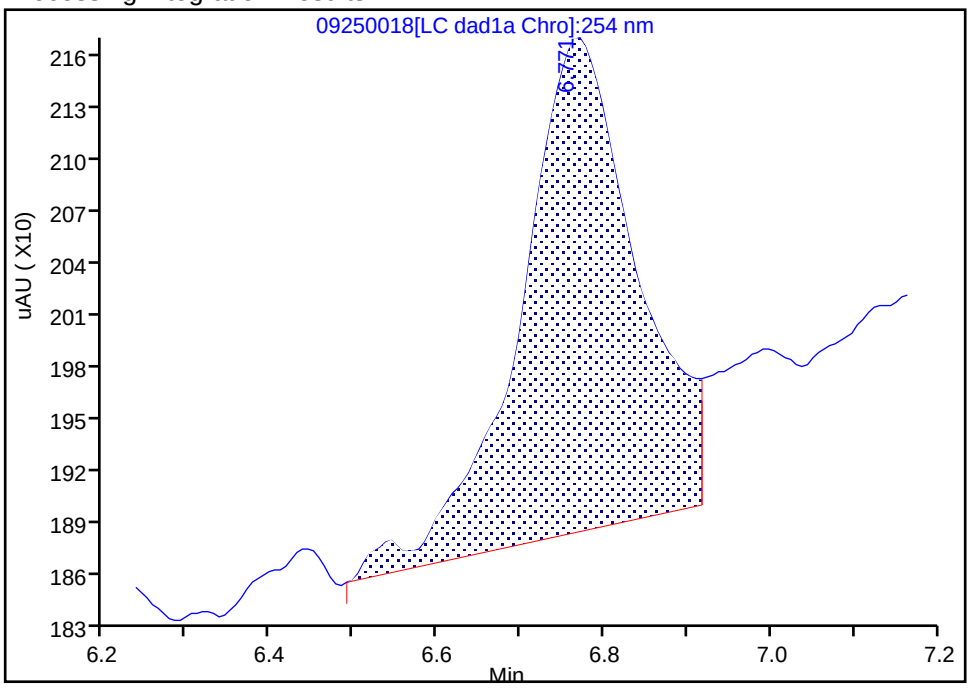
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250018.d
Injection Date: 25-Sep-2023 23:30:18 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 1
Client ID:
Operator ID: JZ/JG ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

6 HMX, CAS: 2691-41-0

Signal: 1

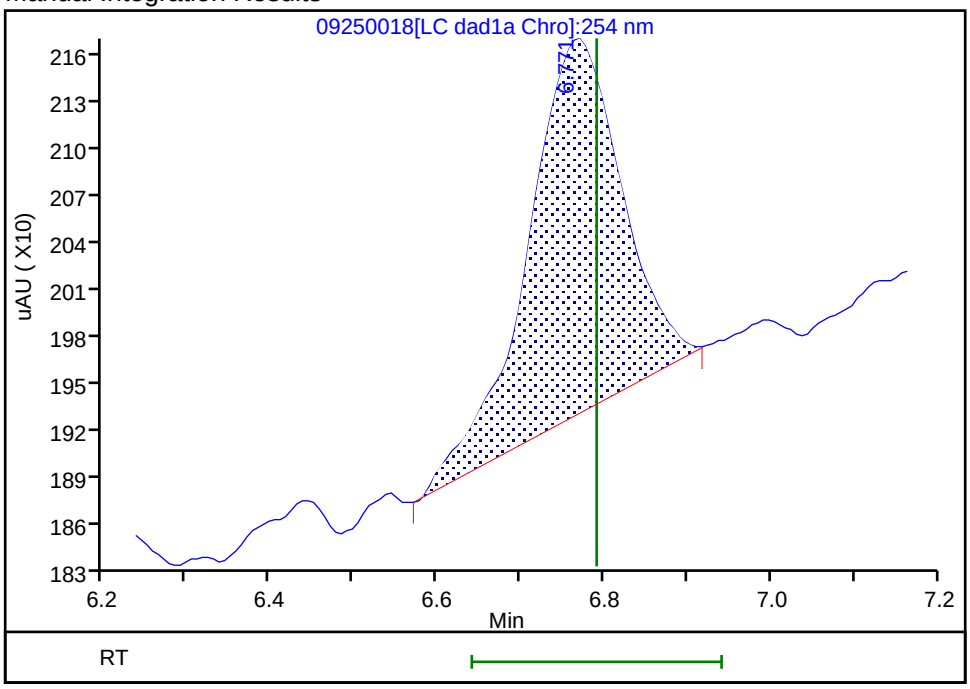
Processing Integration Results

RT: 6.77
Area: 2787
Amount: 0.015178
Amount Units: ug/ml



Manual Integration Results

RT: 6.77
Area: 1873
Amount: 0.010797
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:03:16 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

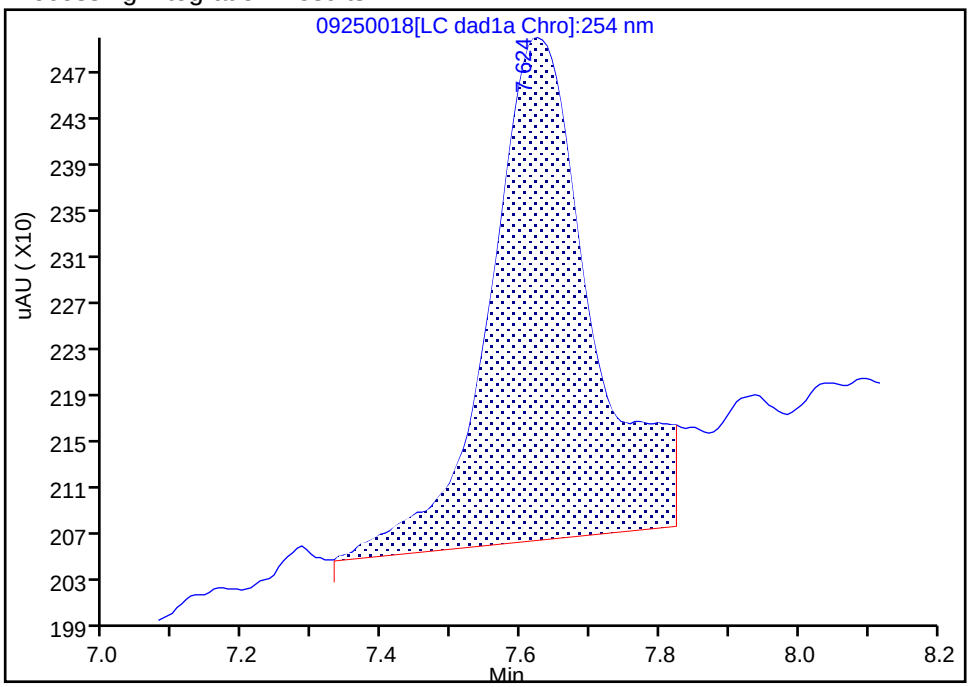
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250018.d
Injection Date: 25-Sep-2023 23:30:18 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 1
Client ID:
Operator ID: JZ/JG ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

7 MNX, CAS: 5755-27-1

Signal: 1

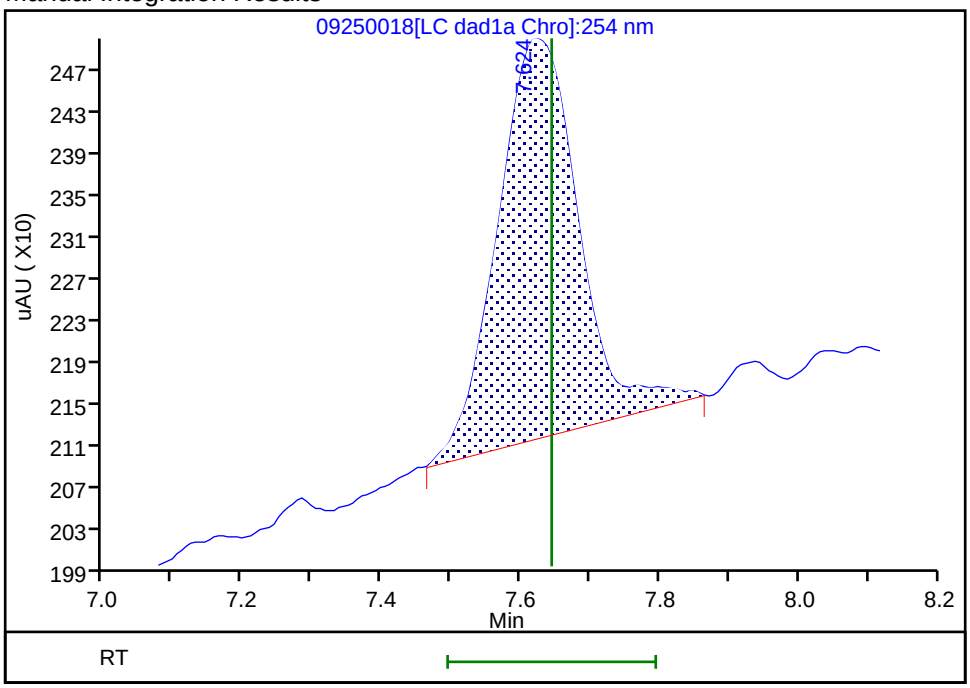
Processing Integration Results

RT: 7.62
Area: 4377
Amount: 0.015965
Amount Units: ug/ml



Manual Integration Results

RT: 7.62
Area: 3081
Amount: 0.011767
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:03:21 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

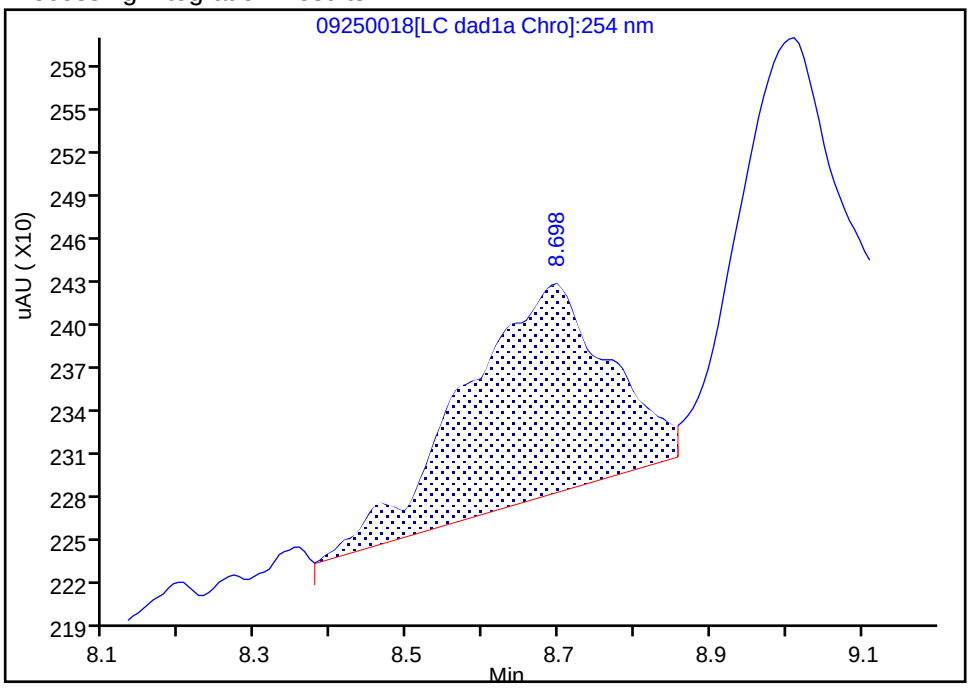
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250018.d				
Injection Date:	25-Sep-2023 23:30:18	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

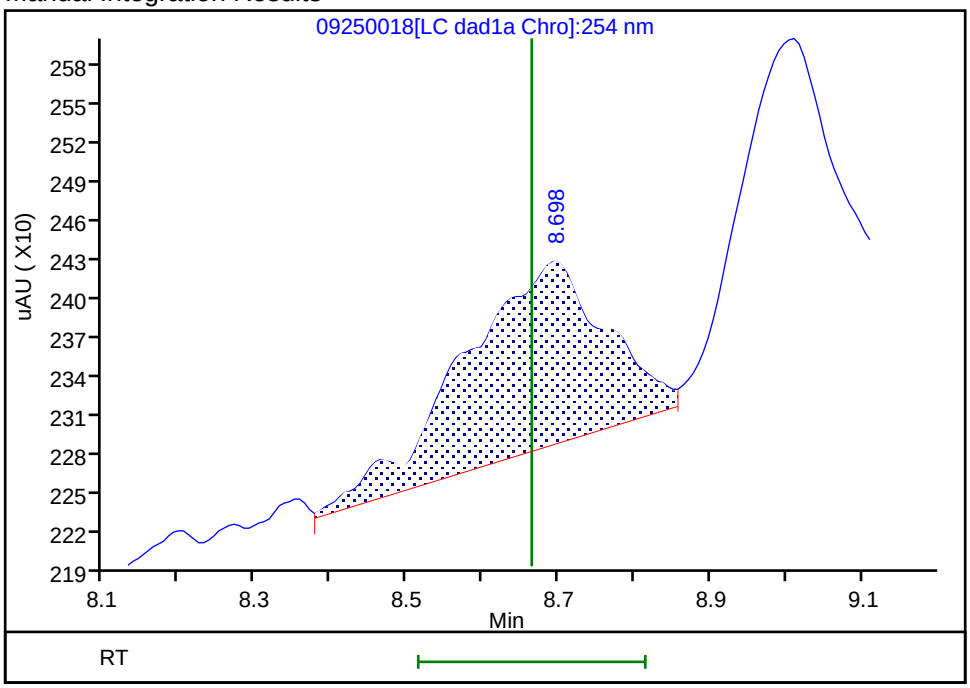
Processing Integration Results

RT: 8.70
Area: 1939
Amount: 0.013010
Amount Units: ug/ml



Manual Integration Results

RT: 8.70
Area: 1867
Amount: 0.013017
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:03:29 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

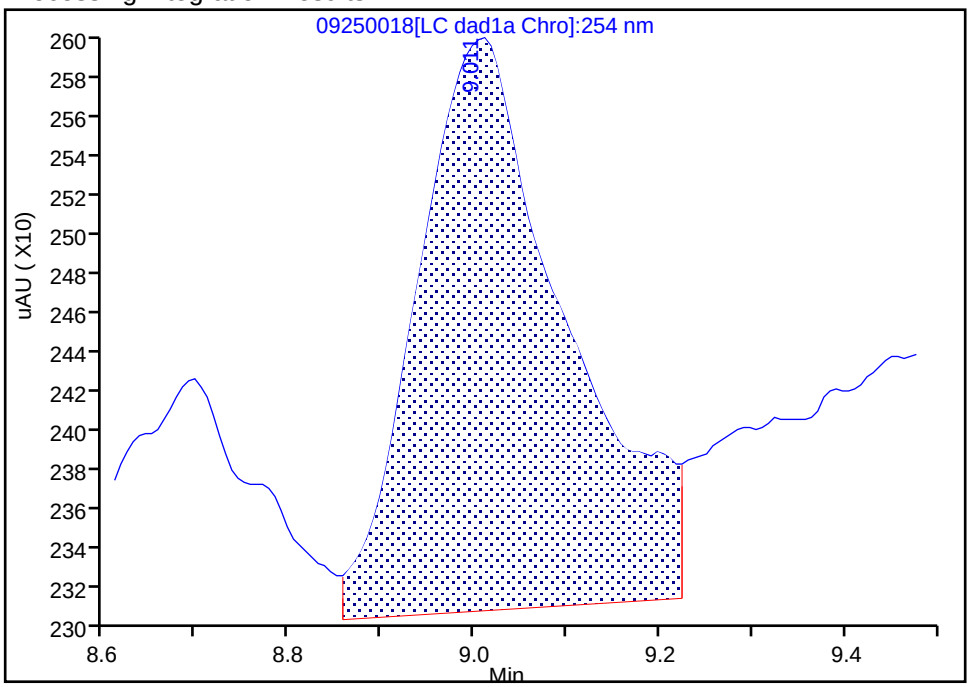
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250018.d
Injection Date: 25-Sep-2023 23:30:18 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 1
Client ID:
Operator ID: JZ/JG ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

8 RDX, CAS: 121-82-4

Signal: 1

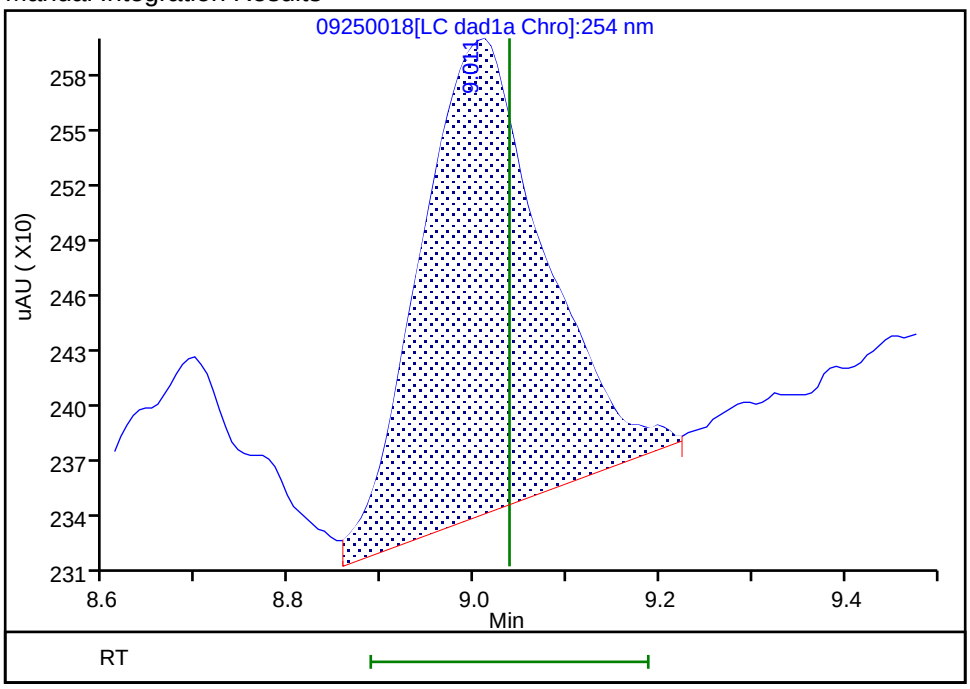
Processing Integration Results

RT: 9.01
Area: 3158
Amount: 0.014594
Amount Units: ug/ml



Manual Integration Results

RT: 9.01
Area: 2366
Amount: 0.011398
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:03:29 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

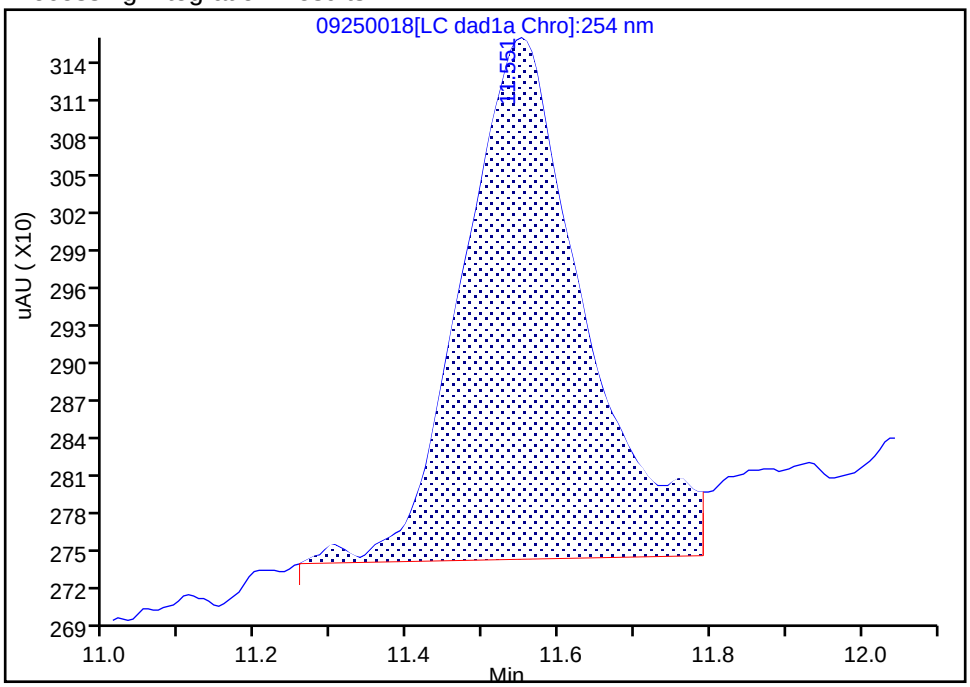
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250018.d
Injection Date: 25-Sep-2023 23:30:18 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 1
Client ID:
Operator ID: JZ/JG ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

9 Nitrobenzene, CAS: 98-95-3

Signal: 1

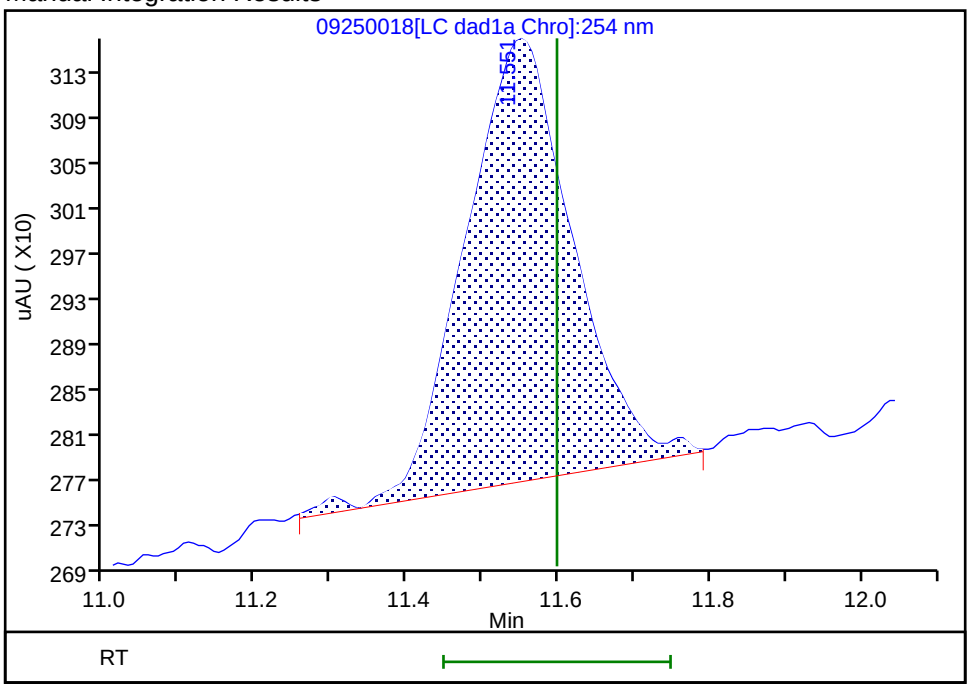
Processing Integration Results

RT: 11.55
Area: 4514
Amount: 0.011904
Amount Units: ug/ml



Manual Integration Results

RT: 11.55
Area: 3810
Amount: 0.010259
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:03:35 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

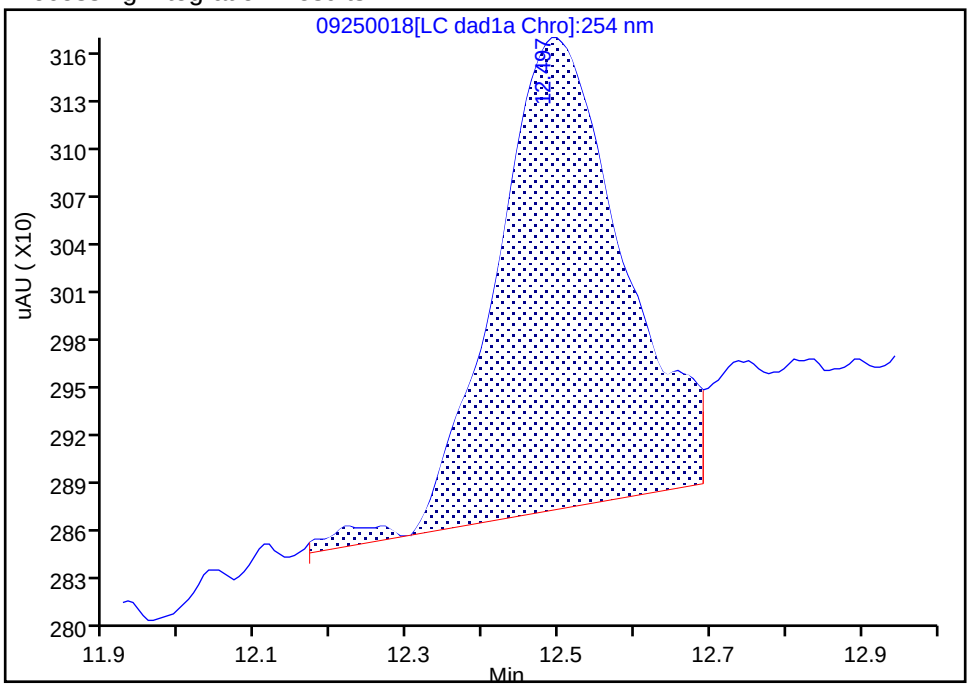
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250018.d				
Injection Date:	25-Sep-2023 23:30:18	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

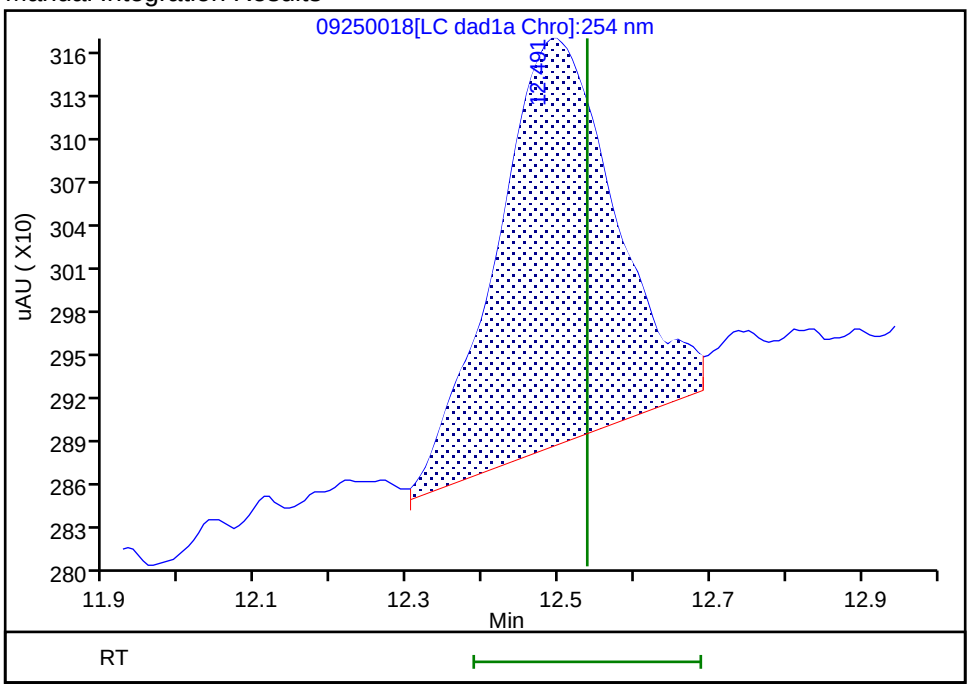
Processing Integration Results

RT: 12.50
Area: 3414
Amount: 0.013091
Amount Units: ug/ml



Manual Integration Results

RT: 12.49
Area: 3052
Amount: 0.011886
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:03:40 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

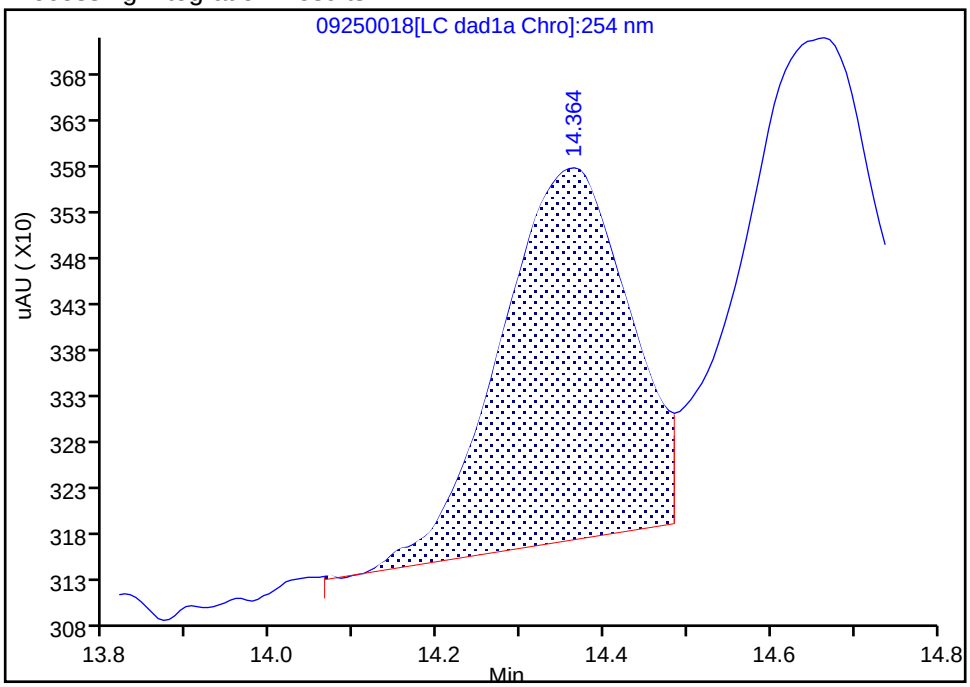
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250018.d
Injection Date: 25-Sep-2023 23:30:18 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 1
Client ID:
Operator ID: JZ/JG ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

11 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

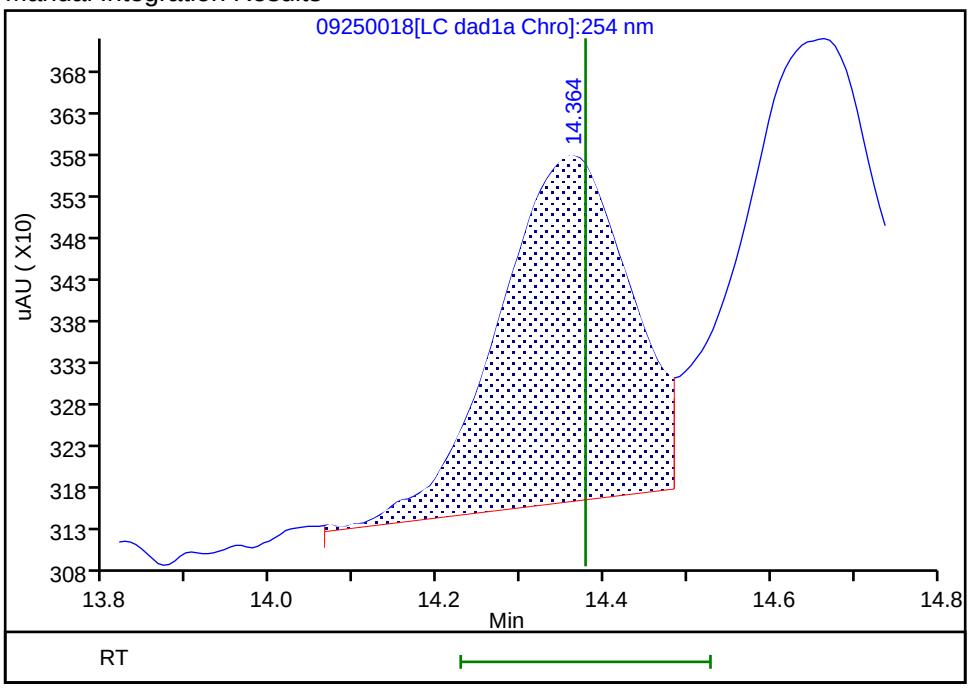
Processing Integration Results

RT: 14.36
Area: 4396
Amount: 0.010206
Amount Units: ug/ml



Manual Integration Results

RT: 14.36
Area: 4622
Amount: 0.010316
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:04:15 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

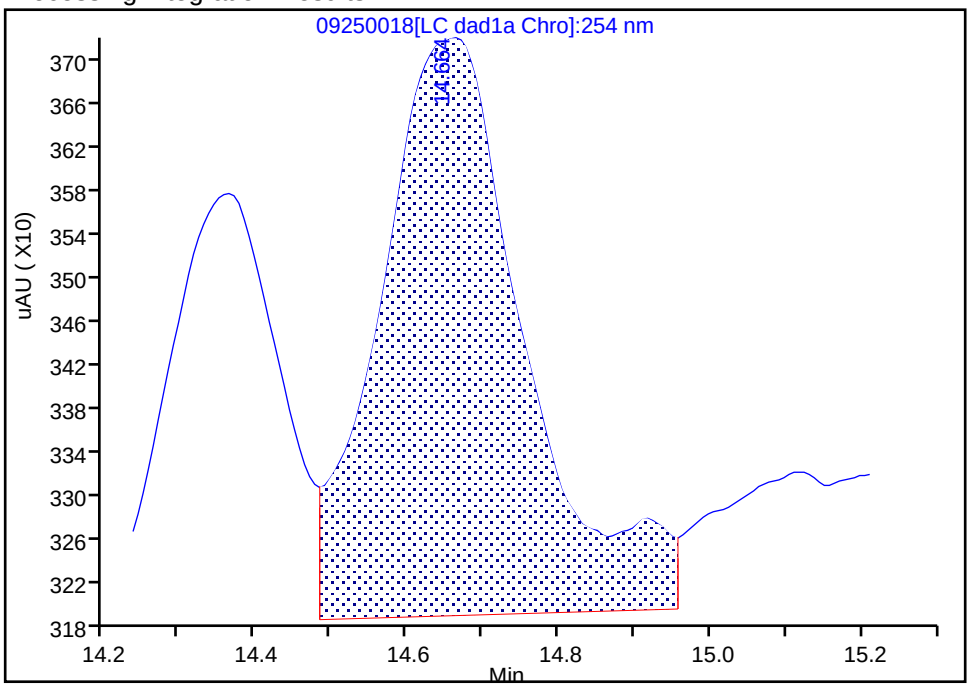
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250018.d
Injection Date: 25-Sep-2023 23:30:18 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 1
Client ID:
Operator ID: JZ/JG ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

12 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

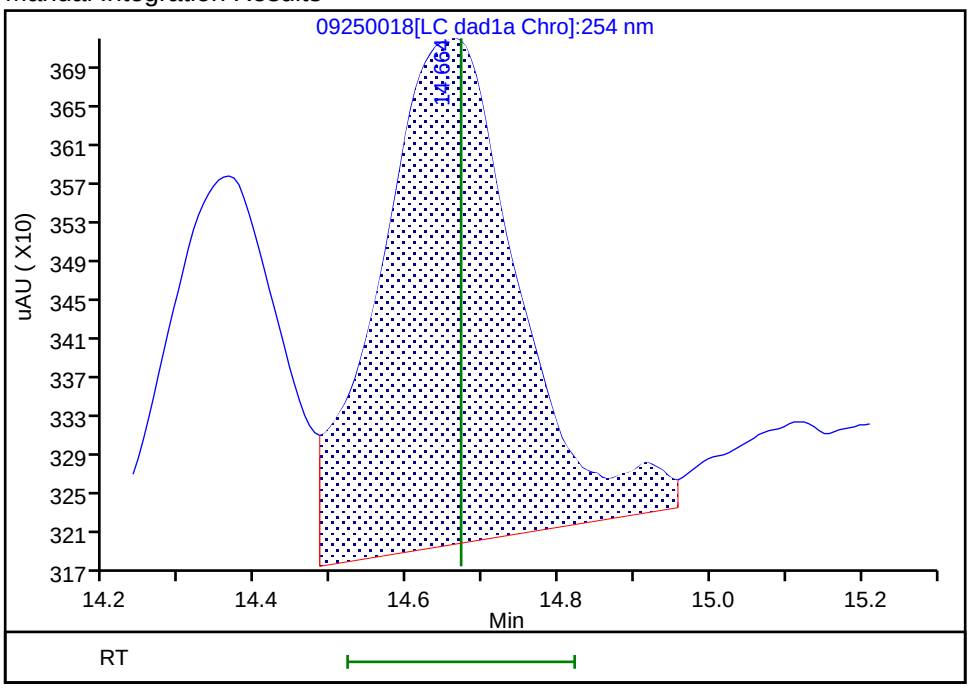
Processing Integration Results

RT: 14.66
Area: 7005
Amount: 0.012012
Amount Units: ug/ml



Manual Integration Results

RT: 14.66
Area: 6679
Amount: 0.011525
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:04:15 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

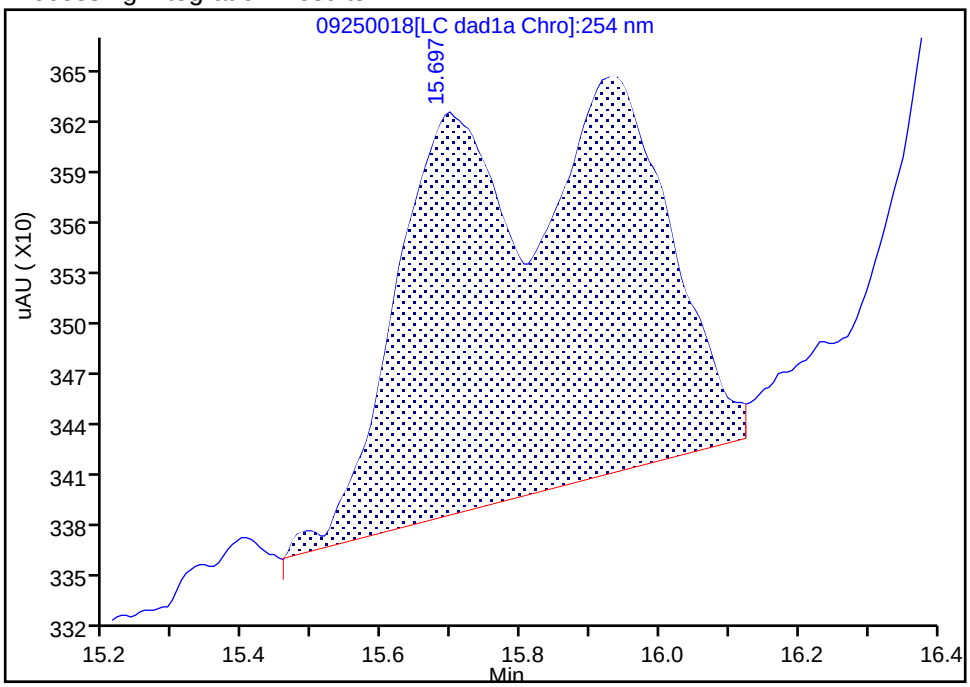
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250018.d
Injection Date: 25-Sep-2023 23:30:18 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 1
Client ID:
Operator ID: JZ/JG ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

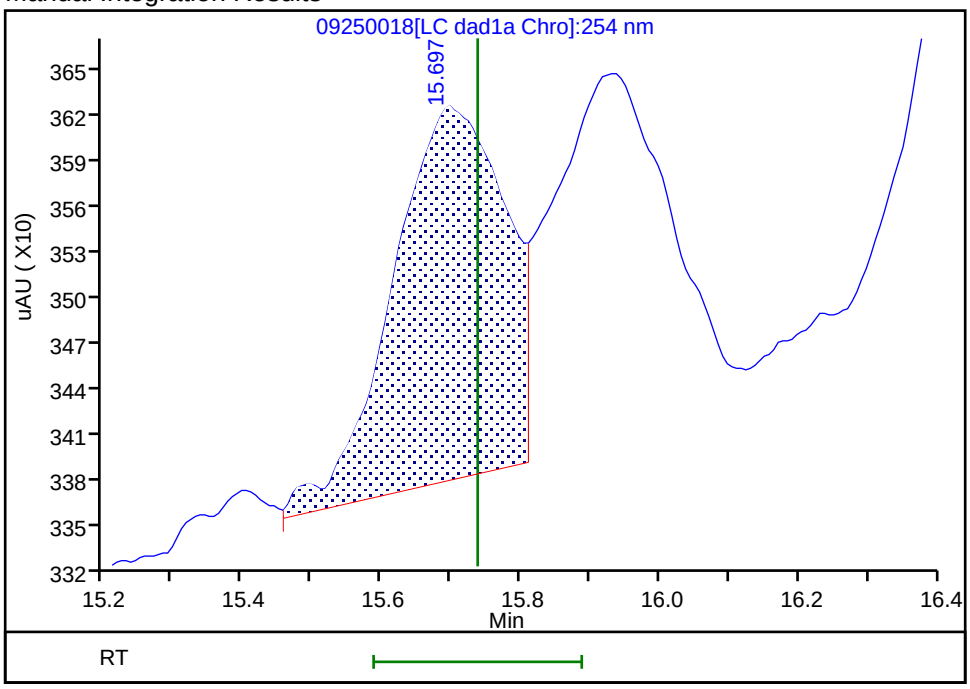
Processing Integration Results

RT: 15.70
Area: 5384
Amount: 0.013586
Amount Units: ug/ml



Manual Integration Results

RT: 15.70
Area: 2753
Amount: 0.011144
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:04:21 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

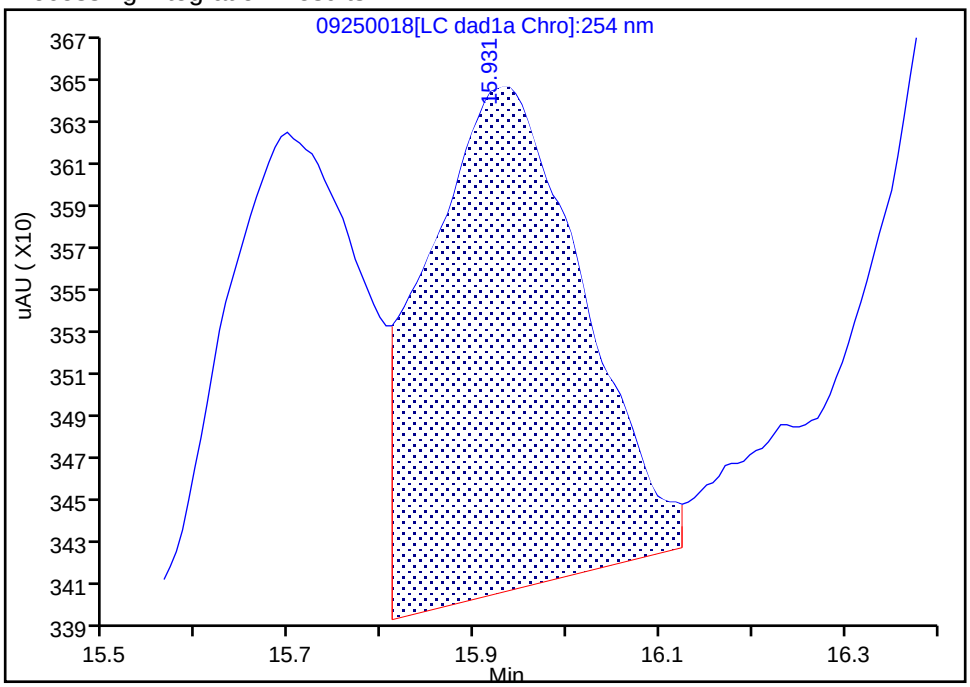
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250018.d				
Injection Date:	25-Sep-2023 23:30:18	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

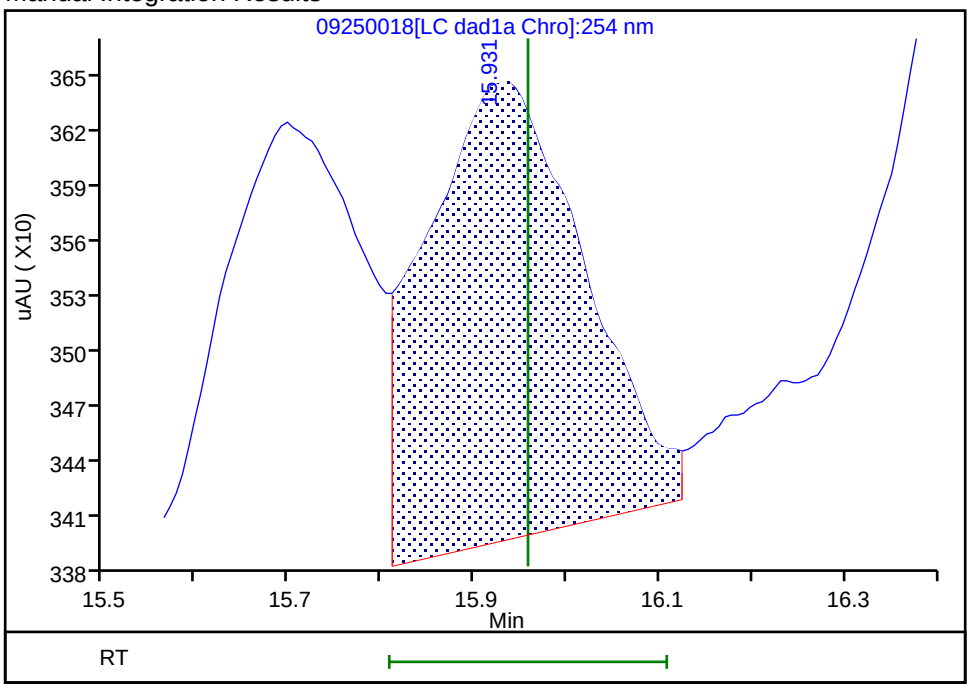
Processing Integration Results

RT: 15.93
Area: 2750
Amount: 0.011913
Amount Units: ug/ml



Manual Integration Results

RT: 15.93
Area: 2862
Amount: 0.009860
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:04:21 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

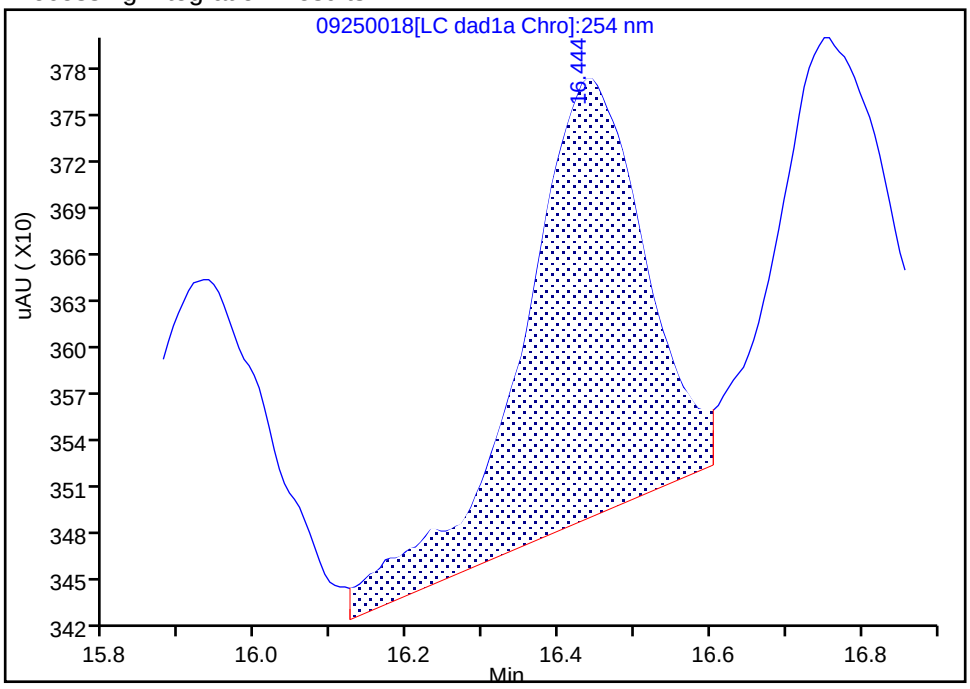
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250018.d
Injection Date: 25-Sep-2023 23:30:18 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 1
Client ID:
Operator ID: JZ/JG ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

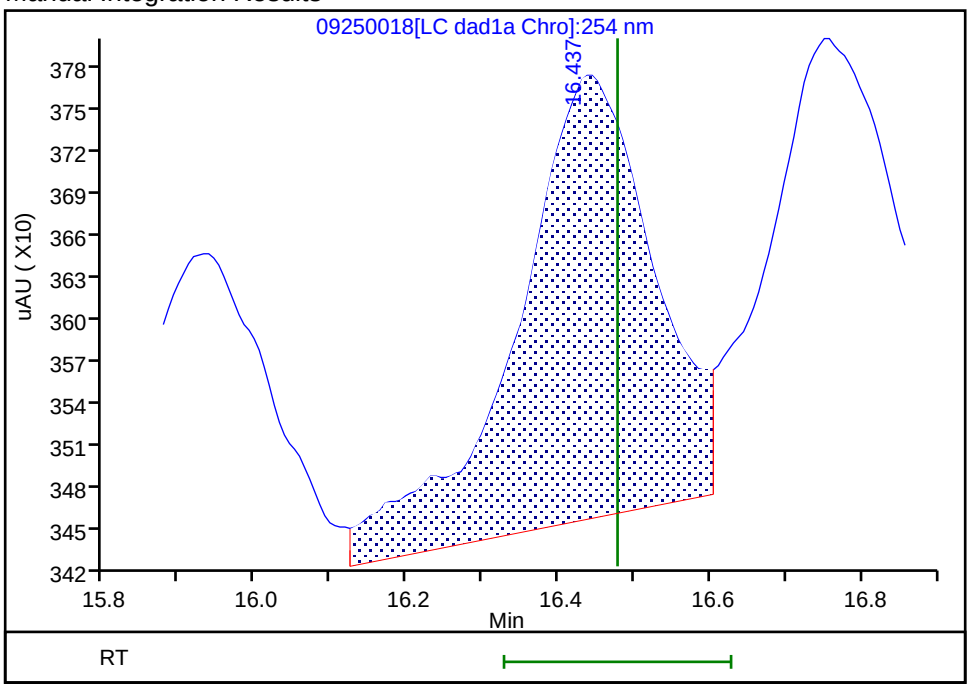
Processing Integration Results

RT: 16.44
Area: 3130
Amount: 0.010854
Amount Units: ug/ml



Manual Integration Results

RT: 16.44
Area: 3980
Amount: 0.009756
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:04:21 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

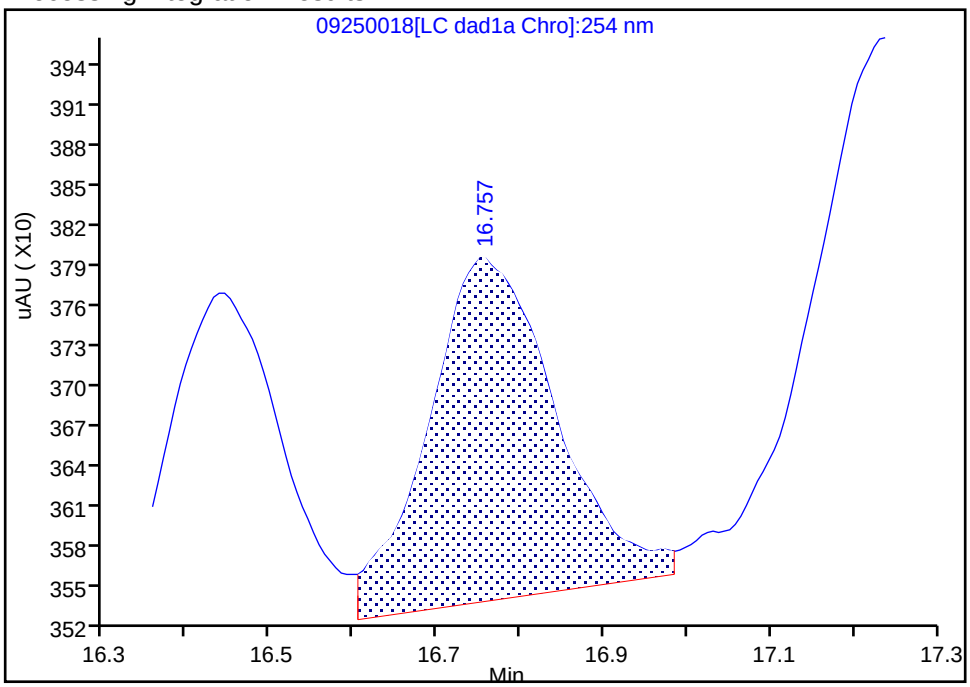
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250018.d
Injection Date: 25-Sep-2023 23:30:18 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 1
Client ID:
Operator ID: JZ/JG ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

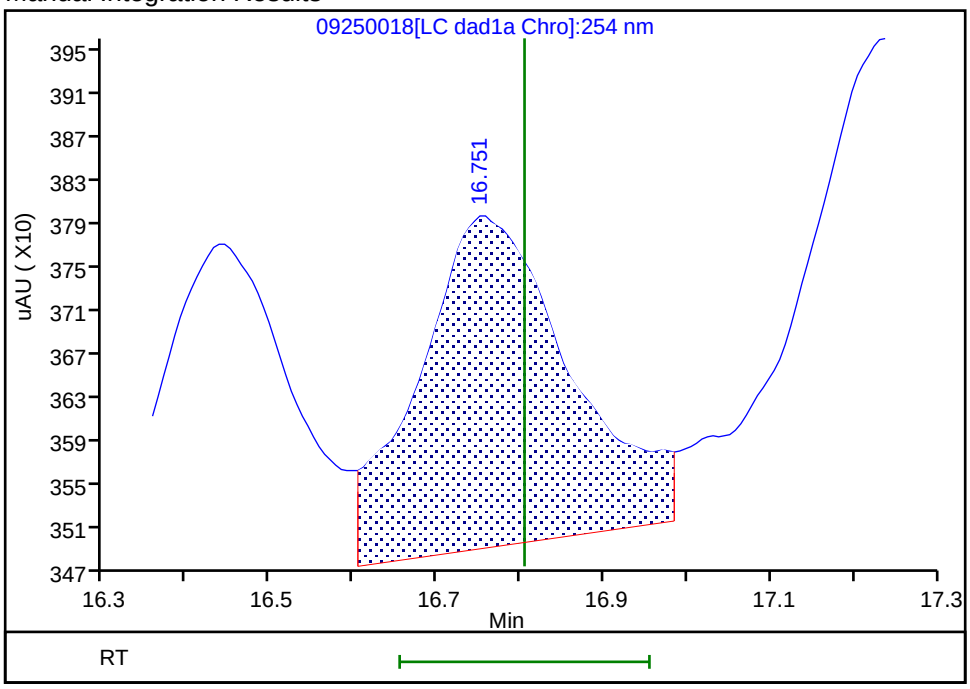
Processing Integration Results

RT: 16.76
Area: 2702
Amount: 0.009595
Amount Units: ug/ml



Manual Integration Results

RT: 16.75
Area: 3853
Amount: 0.009903
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:04:21 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

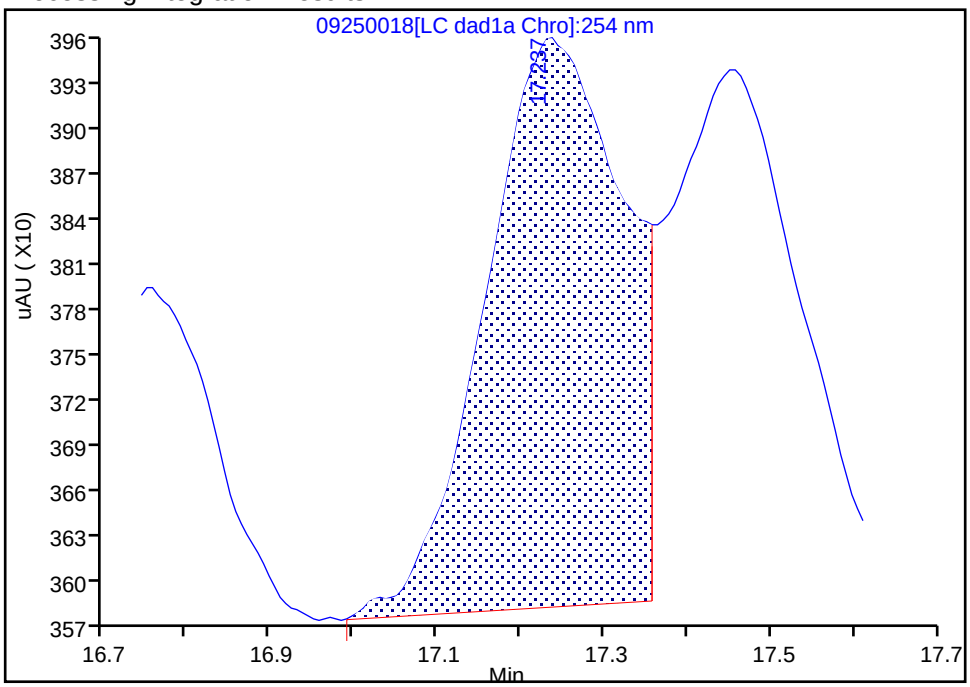
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250018.d
Injection Date: 25-Sep-2023 23:30:18 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 1
Client ID:
Operator ID: JZ/JG ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

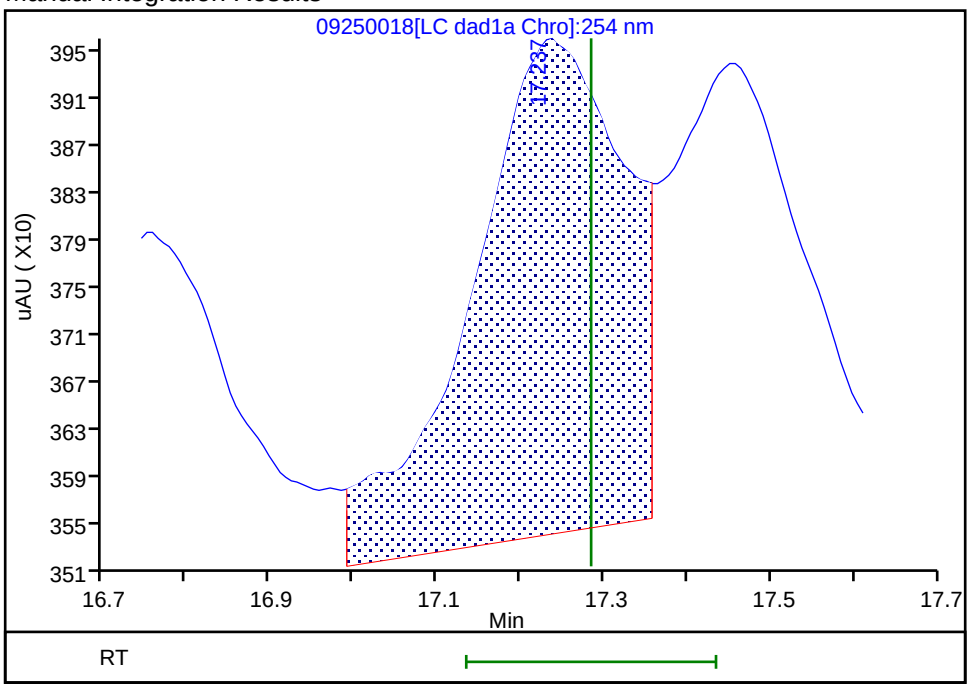
Processing Integration Results

RT: 17.24
Area: 4249
Amount: 0.010785
Amount Units: ug/ml



Manual Integration Results

RT: 17.24
Area: 5349
Amount: 0.010434
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:04:21 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

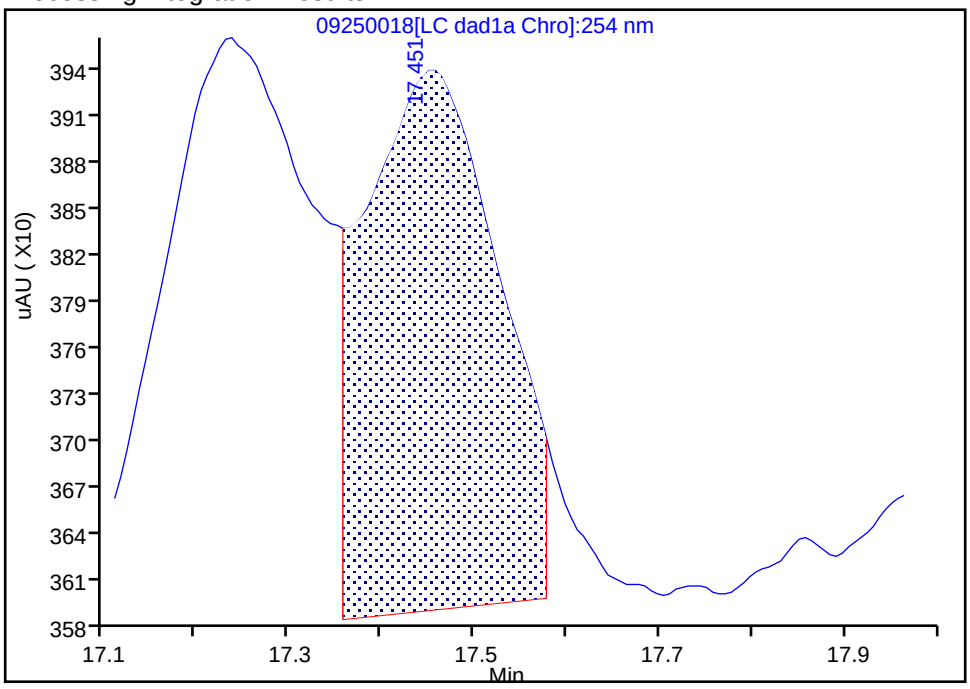
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250018.d				
Injection Date:	25-Sep-2023 23:30:18	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

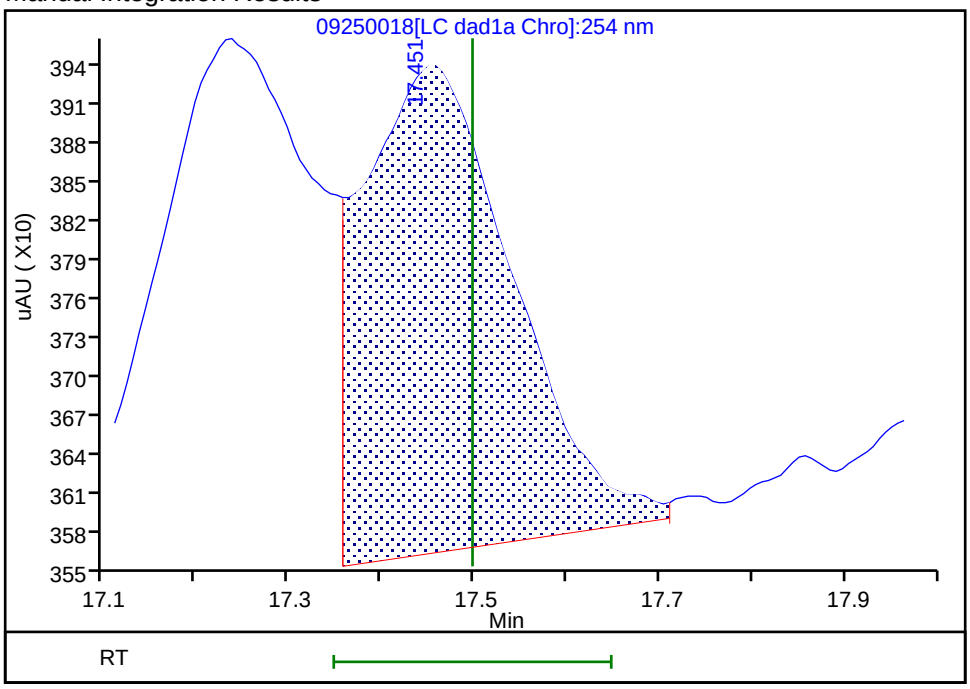
Processing Integration Results

RT: 17.45
Area: 3459
Amount: 0.008565
Amount Units: ug/ml



Manual Integration Results

RT: 17.45
Area: 4159
Amount: 0.010104
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:04:21 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

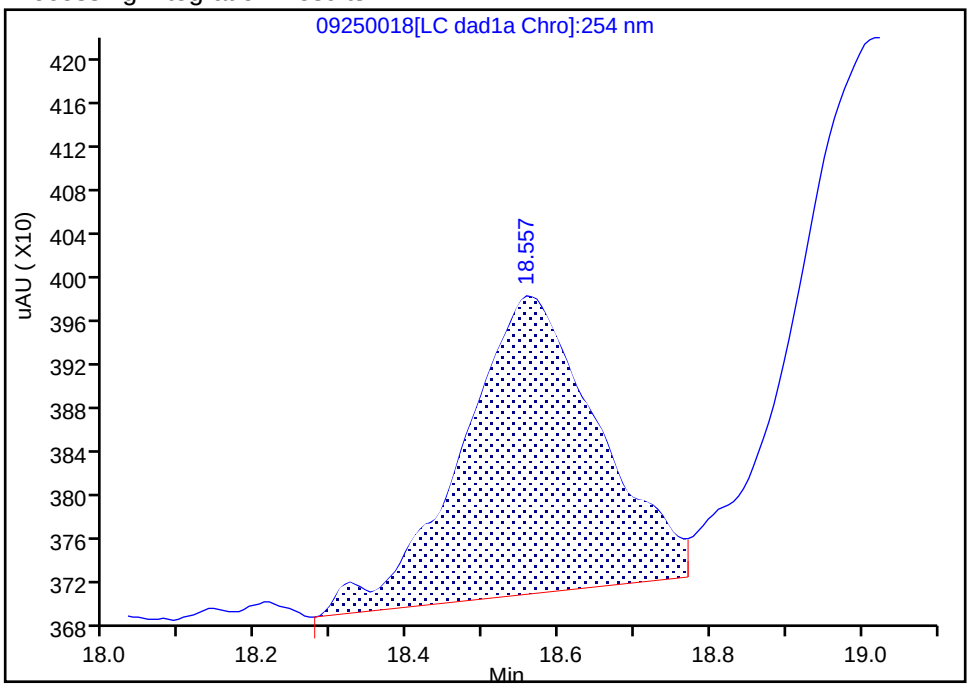
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250018.d
Injection Date: 25-Sep-2023 23:30:18 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 1
Client ID:
Operator ID: JZ/JG ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

20 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

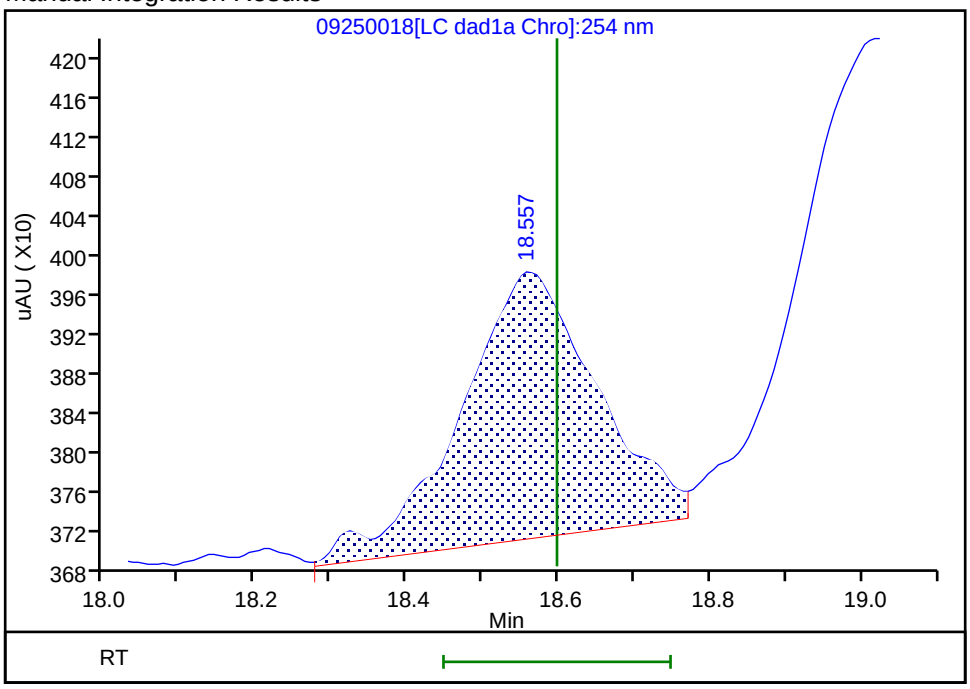
Processing Integration Results

RT: 18.56
Area: 3434
Amount: 0.012276
Amount Units: ug/ml



Manual Integration Results

RT: 18.56
Area: 3360
Amount: 0.009575
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:04:27 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

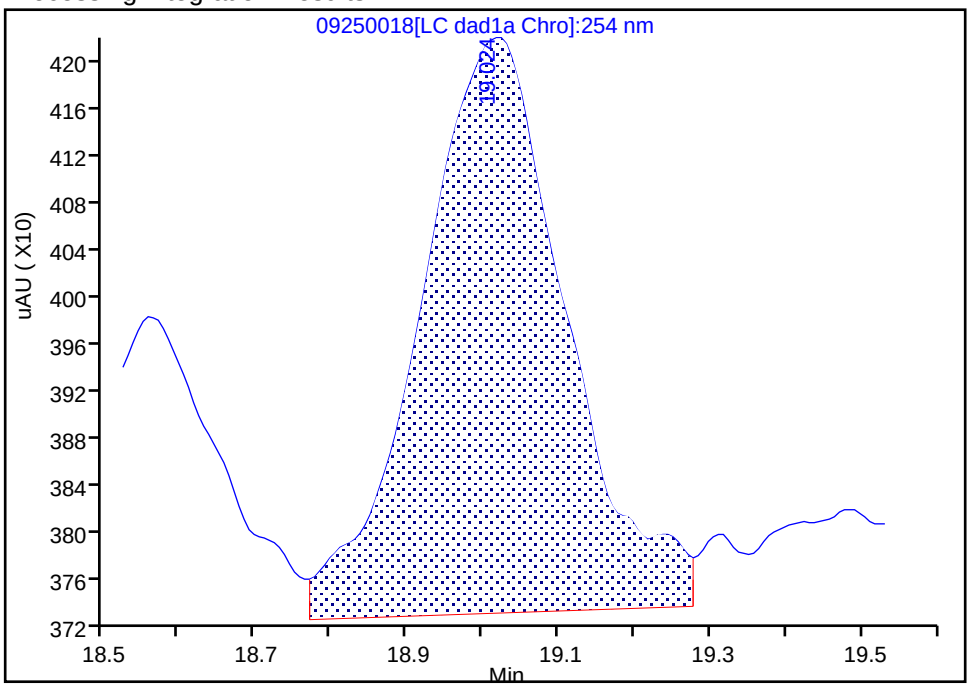
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250018.d				
Injection Date:	25-Sep-2023 23:30:18	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

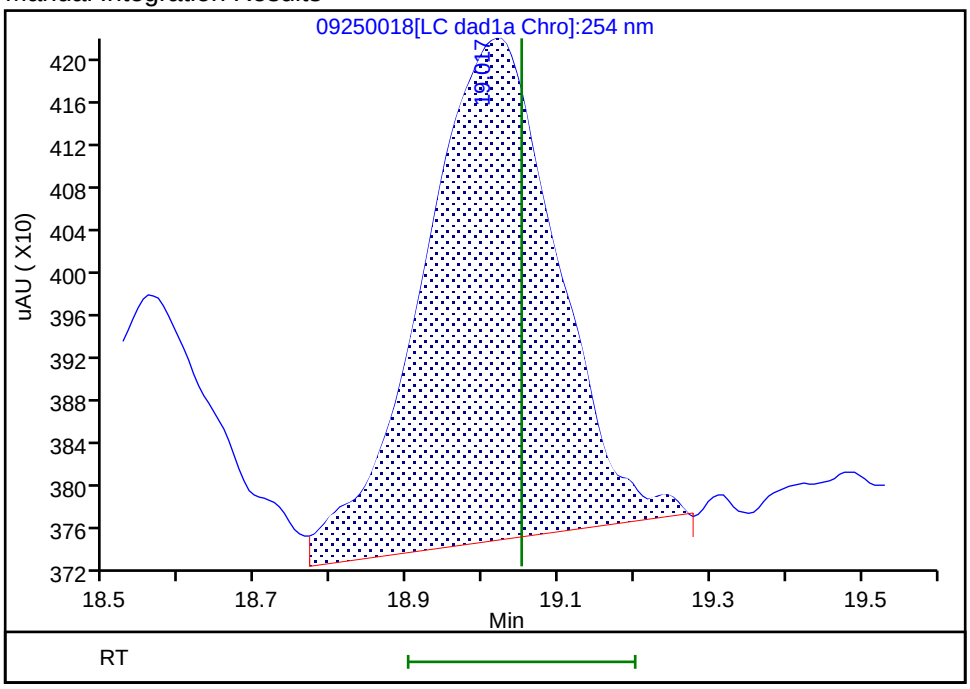
Processing Integration Results

RT: 19.02
Area: 6528
Amount: 0.011790
Amount Units: ug/ml



Manual Integration Results

RT: 19.02
Area: 5753
Amount: 0.010554
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:04:27 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

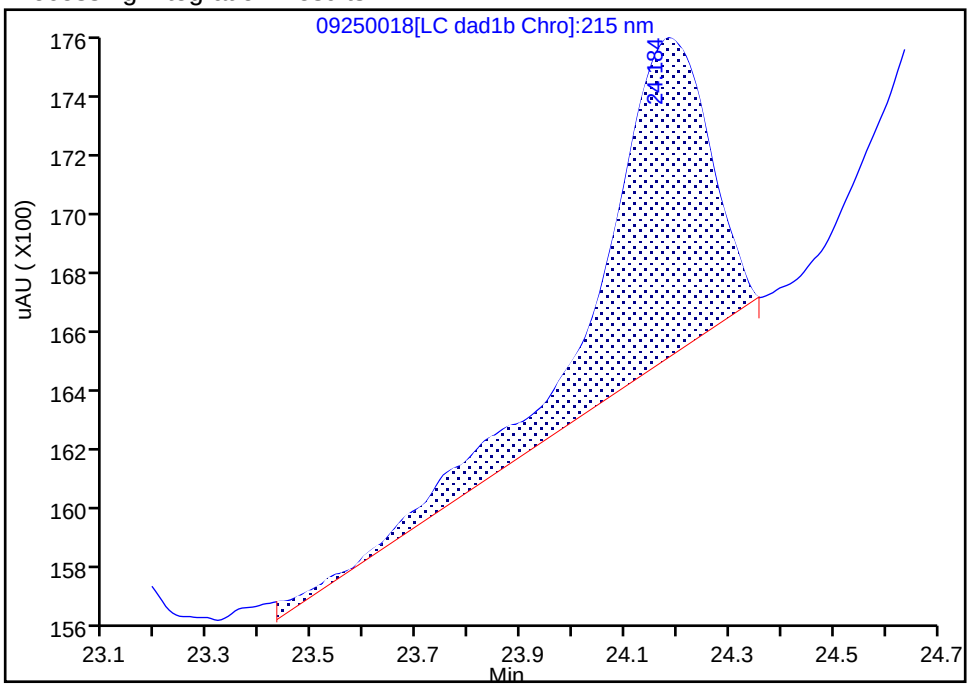
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250018.d
Injection Date: 25-Sep-2023 23:30:18 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 1
Client ID:
Operator ID: JZ/JG ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

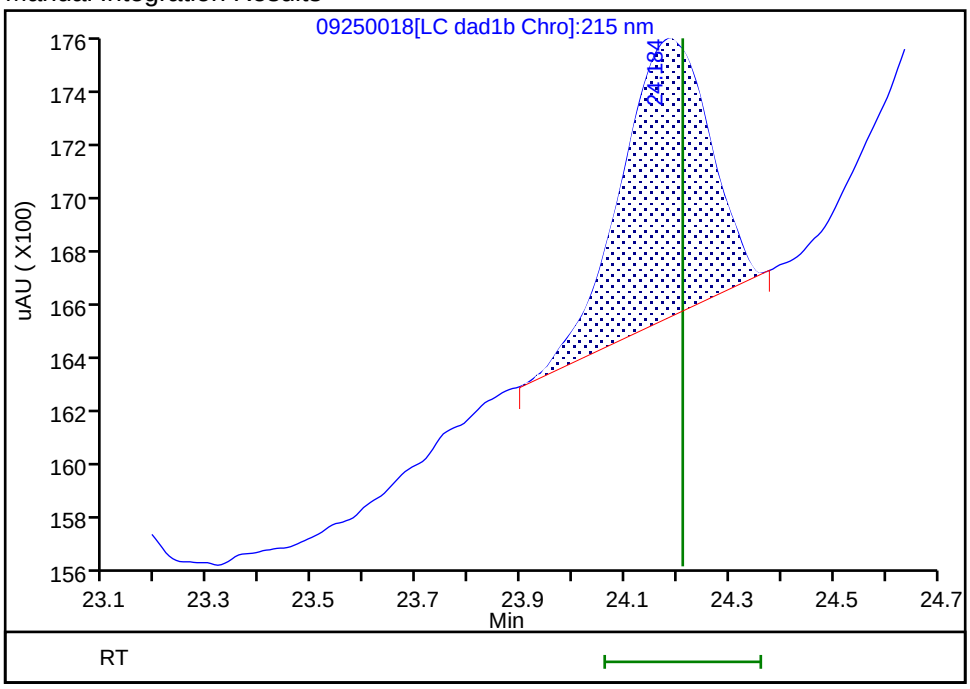
Processing Integration Results

RT: 24.18
Area: 14753
Amount: 0.116607
Amount Units: ug/ml



Manual Integration Results

RT: 24.18
Area: 11596
Amount: 0.094268
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:02:47 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Calibration / TNX

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

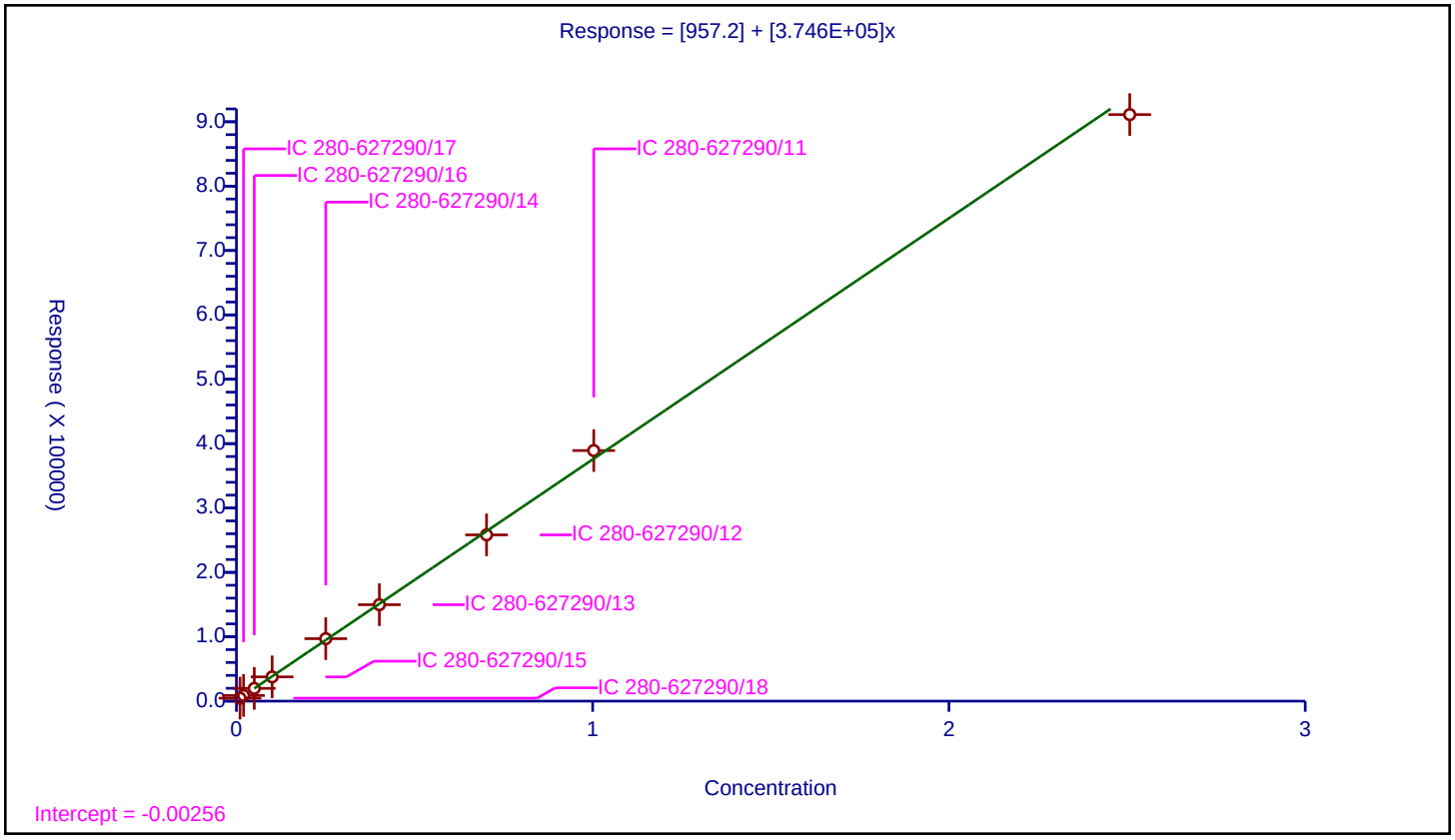
Curve Coefficients

Intercept:	957.2
Slope:	3.746E+05

Error Coefficients

Standard Error:	12200
Relative Standard Error:	3.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.01003	4632.0			461814.556331	Y
2	IC 280-627290/17	0.02006	8811.0			439232.303091	Y
3	IC 280-627290/16	0.05015	19818.0			395174.47657	Y
4	IC 280-627290/15	0.1003	37690.0			375772.681954	Y
5	IC 280-627290/14	0.25075	97033.0			386971.08674	Y
6	IC 280-627290/13	0.4012	149801.0			373382.352941	Y
7	IC 280-627290/12	0.7021	258277.0			367863.552201	Y
8	IC 280-627290/11	1.003	389261.0			388096.70987	Y
9	IC 280-627290/10	2.5075	911149.0			363369.491525	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

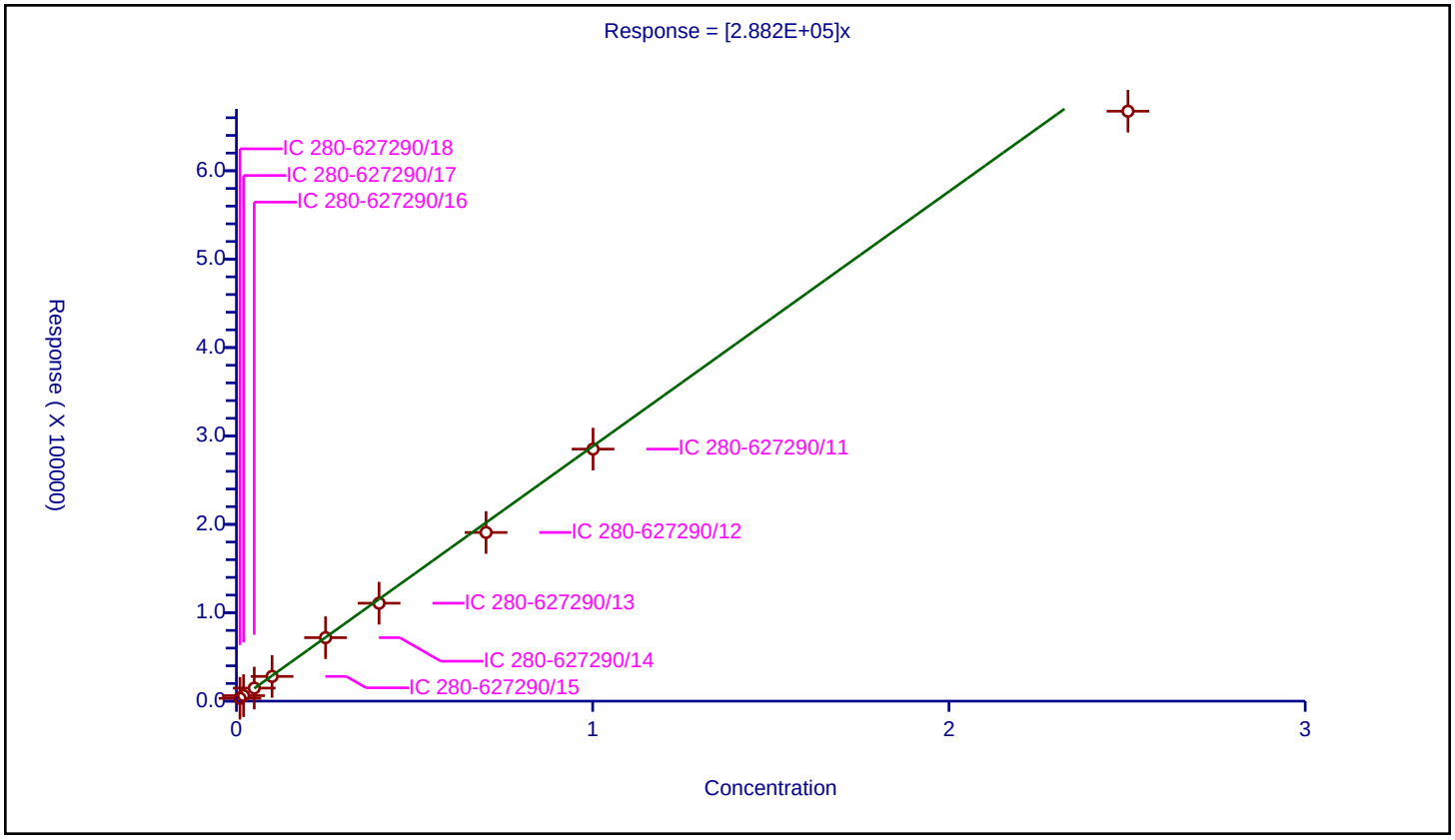
Curve Coefficients

Intercept:	0
Slope:	2.882E+05

Error Coefficients

Standard Error:	19600
Relative Standard Error:	6.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.01001	3214.0			321078.921079	Y
2	IC 280-627290/17	0.02002	6216.0			310489.51049	Y
3	IC 280-627290/16	0.05005	14790.0			295504.495504	Y
4	IC 280-627290/15	0.1001	27970.0			279420.579421	Y
5	IC 280-627290/14	0.25025	71817.0			286981.018981	Y
6	IC 280-627290/13	0.4004	110817.0			276765.734266	Y
7	IC 280-627290/12	0.7007	190840.0			272356.215213	Y
8	IC 280-627290/11	1.001	285156.0			284871.128871	Y
9	IC 280-627290/10	2.5025	667388.0			266688.511489	Y



Calibration / HMX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

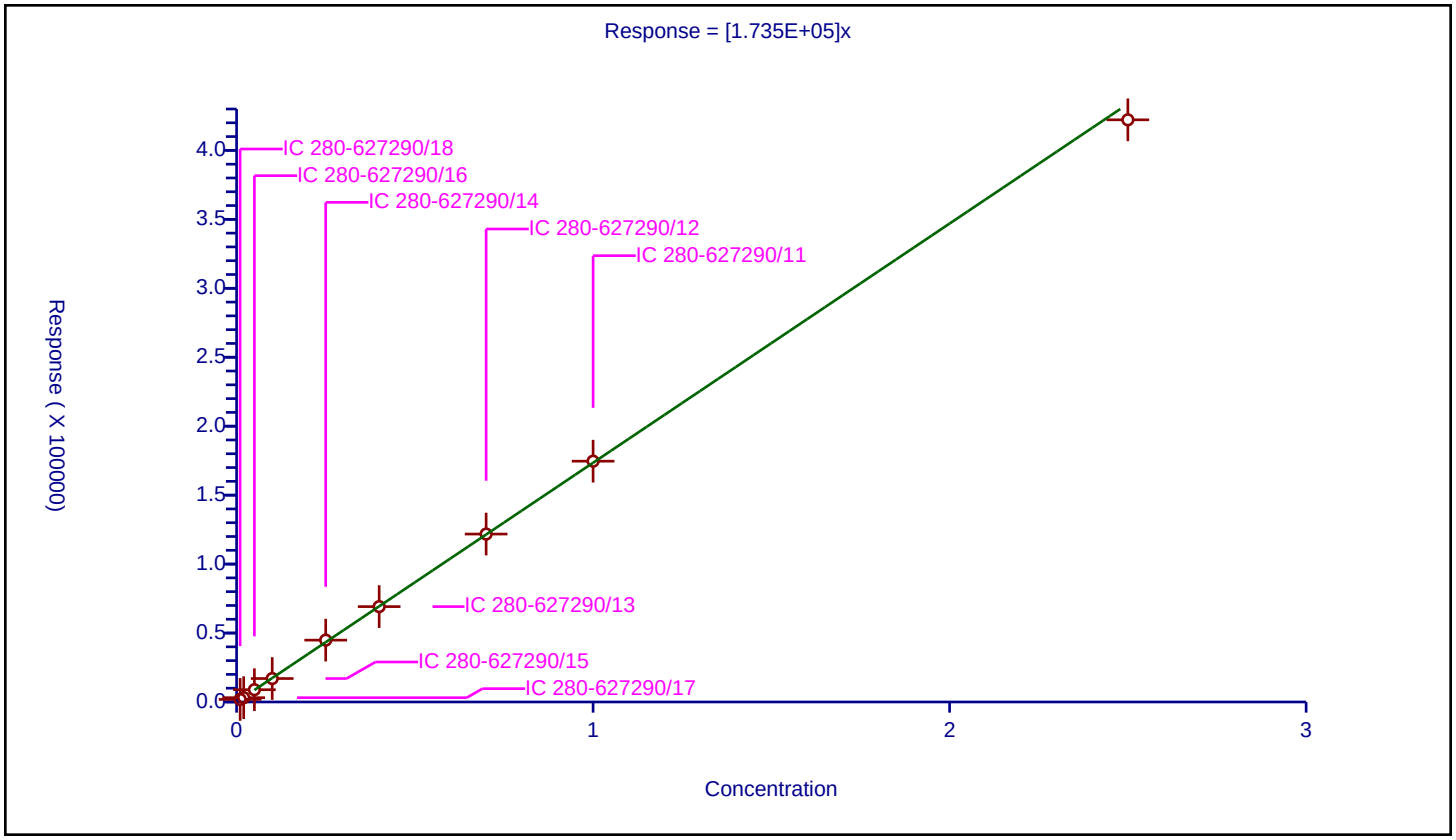
Curve Coefficients

Intercept:	0
Slope:	1.735E+05

Error Coefficients

Standard Error:	4130
Relative Standard Error:	4.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.01	1873.0			187300.0	Y
2	IC 280-627290/17	0.02	3125.0			156250.0	Y
3	IC 280-627290/16	0.05	8897.0			177940.0	Y
4	IC 280-627290/15	0.1	16998.0			169980.0	Y
5	IC 280-627290/14	0.25	44858.0			179432.0	Y
6	IC 280-627290/13	0.4	69154.0			172885.0	Y
7	IC 280-627290/12	0.7	121769.0			173955.714286	Y
8	IC 280-627290/11	1.0	174631.0			174631.0	Y
9	IC 280-627290/10	2.5	422170.0			168868.0	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

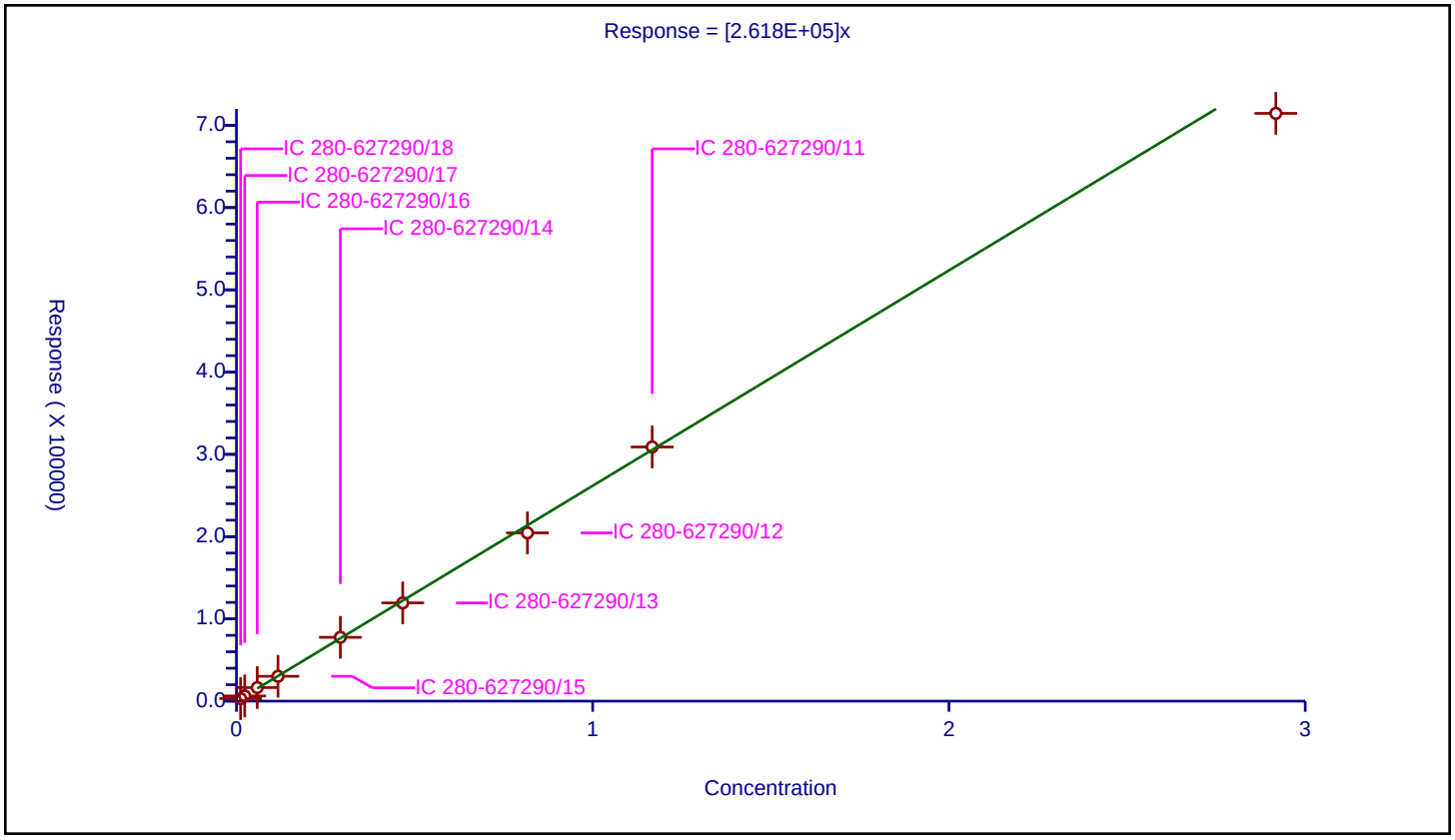
Curve Coefficients

Intercept:	0
Slope:	2.618E+05

Error Coefficients

Standard Error:	17800
Relative Standard Error:	4.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.01167	3081.0			264010.282776	Y
2	IC 280-627290/17	0.02334	6293.0			269622.964867	Y
3	IC 280-627290/16	0.05835	16454.0			281988.003428	Y
4	IC 280-627290/15	0.1167	30216.0			258920.308483	Y
5	IC 280-627290/14	0.29175	77595.0			265964.010283	Y
6	IC 280-627290/13	0.4668	119417.0			255820.479863	Y
7	IC 280-627290/12	0.8169	204553.0			250401.517934	Y
8	IC 280-627290/11	1.167	308980.0			264764.353042	Y
9	IC 280-627290/10	2.9175	714574.0			244926.820908	Y



Calibration / 2,4,6-Trinitrophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

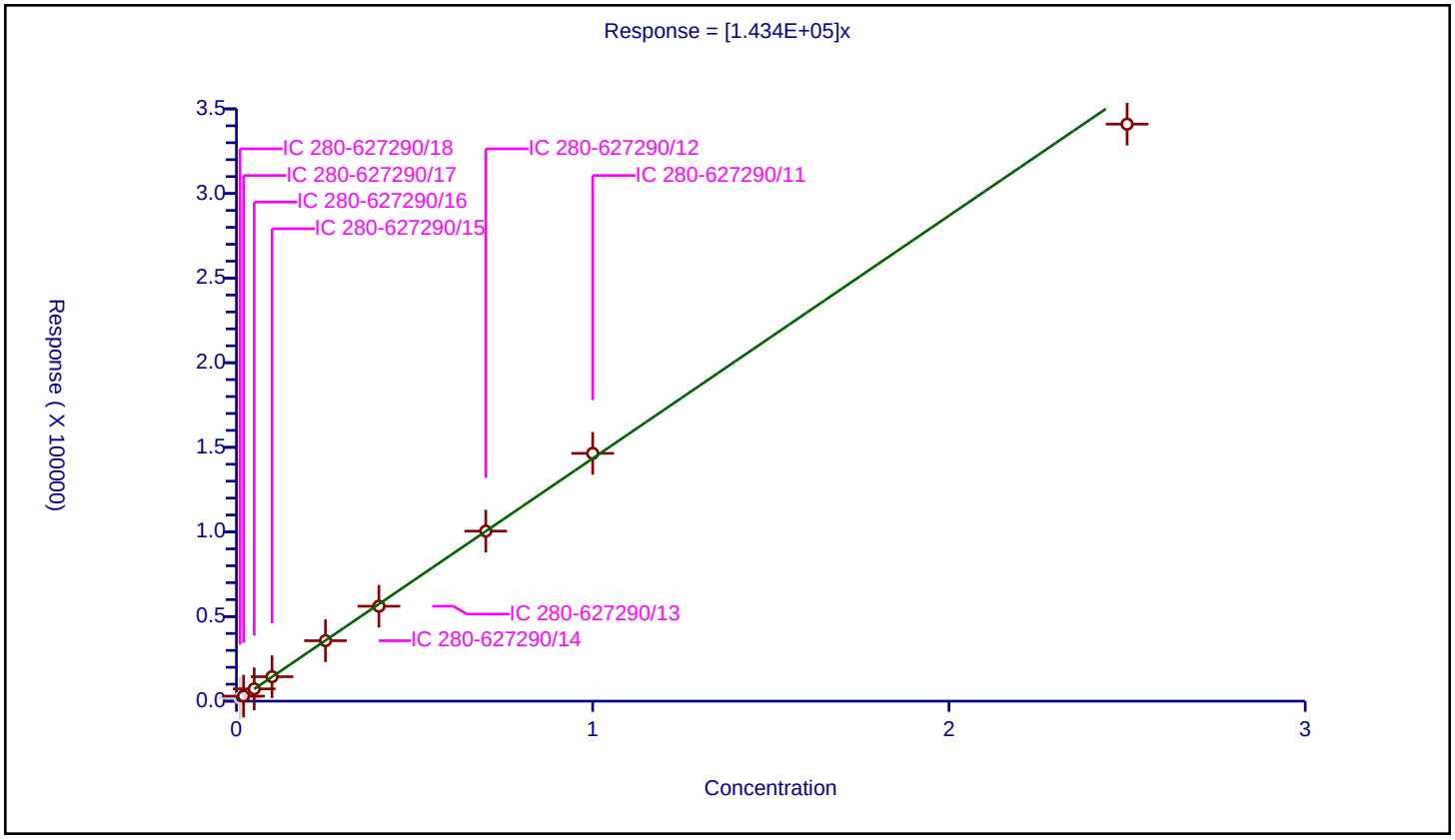
Curve Coefficients

Intercept:	0
Slope:	1.434E+05

Error Coefficients

Standard Error:	6760
Relative Standard Error:	2.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.01	1867.0			186700.0	N
2	IC 280-627290/17	0.02	2960.0			148000.0	Y
3	IC 280-627290/16	0.05	7270.0			145400.0	Y
4	IC 280-627290/15	0.1	14448.0			144480.0	Y
5	IC 280-627290/14	0.25	35728.0			142912.0	Y
6	IC 280-627290/13	0.4	56092.0			140230.0	Y
7	IC 280-627290/12	0.7	100486.0			143551.428571	Y
8	IC 280-627290/11	1.0	146441.0			146441.0	Y
9	IC 280-627290/10	2.5	340985.0			136394.0	Y



Calibration / RDX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

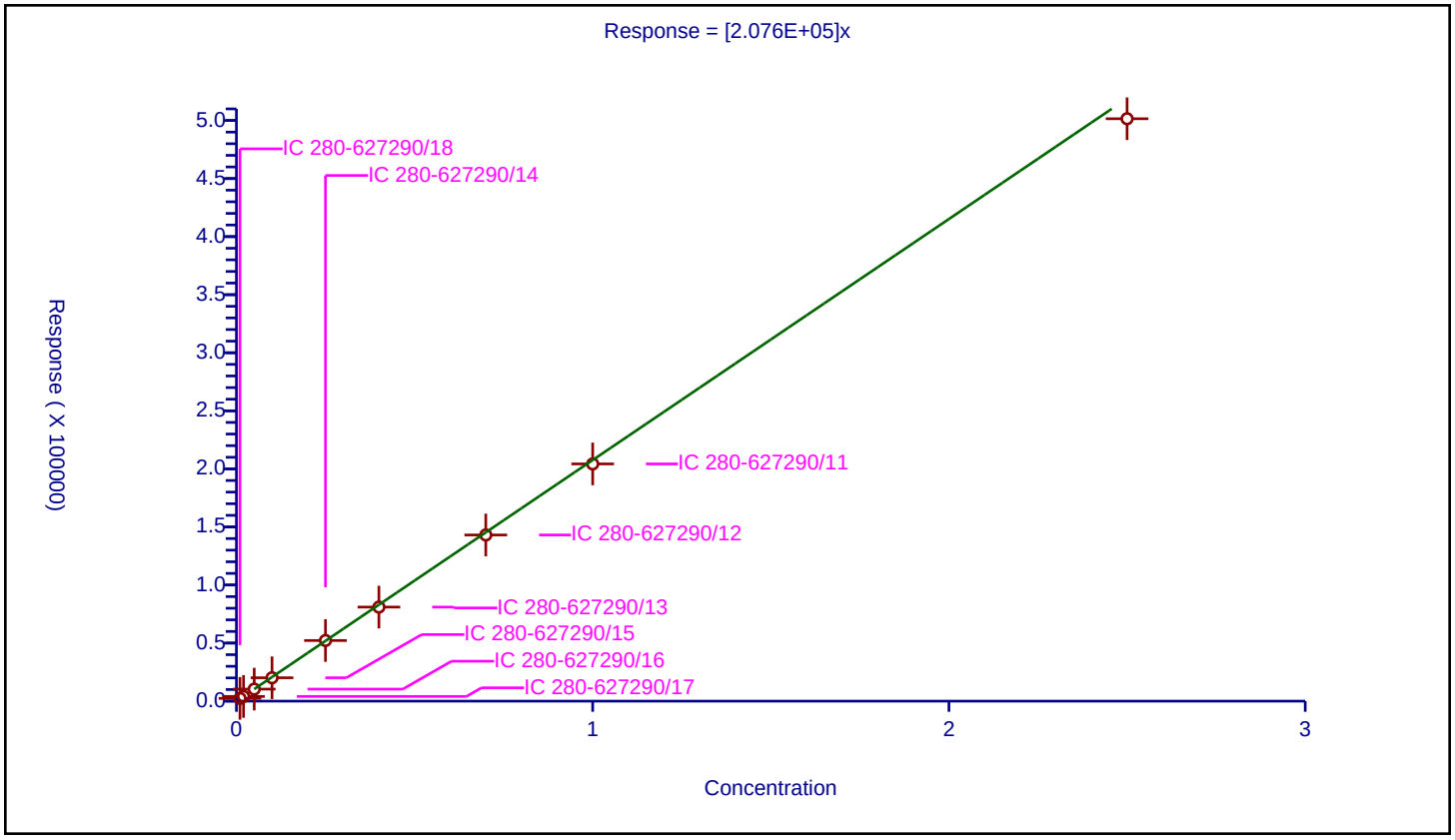
Curve Coefficients

Intercept:	0
Slope:	2.076E+05

Error Coefficients

Standard Error:	6380
Relative Standard Error:	5.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.01	2366.0			236600.0	Y
2	IC 280-627290/17	0.02	4054.0			202700.0	Y
3	IC 280-627290/16	0.05	10353.0			207060.0	Y
4	IC 280-627290/15	0.1	20133.0			201330.0	Y
5	IC 280-627290/14	0.25	52214.0			208856.0	Y
6	IC 280-627290/13	0.4	80985.0			202462.5	Y
7	IC 280-627290/12	0.7	143077.0			204395.714286	Y
8	IC 280-627290/11	1.0	204269.0			204269.0	Y
9	IC 280-627290/10	2.5	501519.0			200607.6	Y



Calibration / Nitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

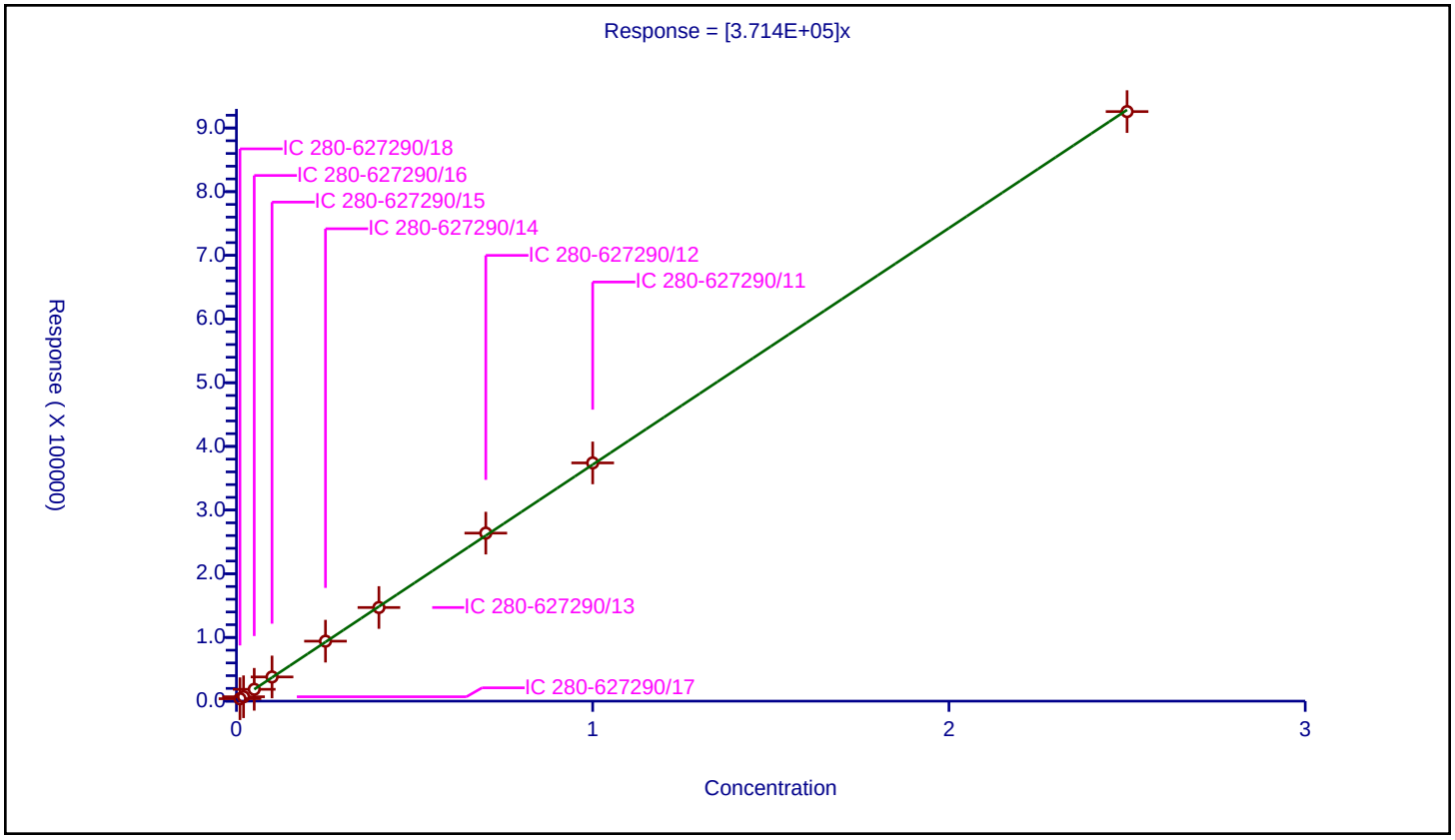
Curve Coefficients

Intercept:	0
Slope:	3.714E+05

Error Coefficients

Standard Error:	2080
Relative Standard Error:	3.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.01	3810.0			381000.0	Y
2	IC 280-627290/17	0.02	6887.0			344350.0	Y
3	IC 280-627290/16	0.05	18591.0			371820.0	Y
4	IC 280-627290/15	0.1	37981.0			379810.0	Y
5	IC 280-627290/14	0.25	94171.0			376684.0	Y
6	IC 280-627290/13	0.4	147023.0			367557.5	Y
7	IC 280-627290/12	0.7	263852.0			376931.428571	Y
8	IC 280-627290/11	1.0	374071.0			374071.0	Y
9	IC 280-627290/10	2.5	925760.0			370304.0	Y



Calibration / 1,2-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

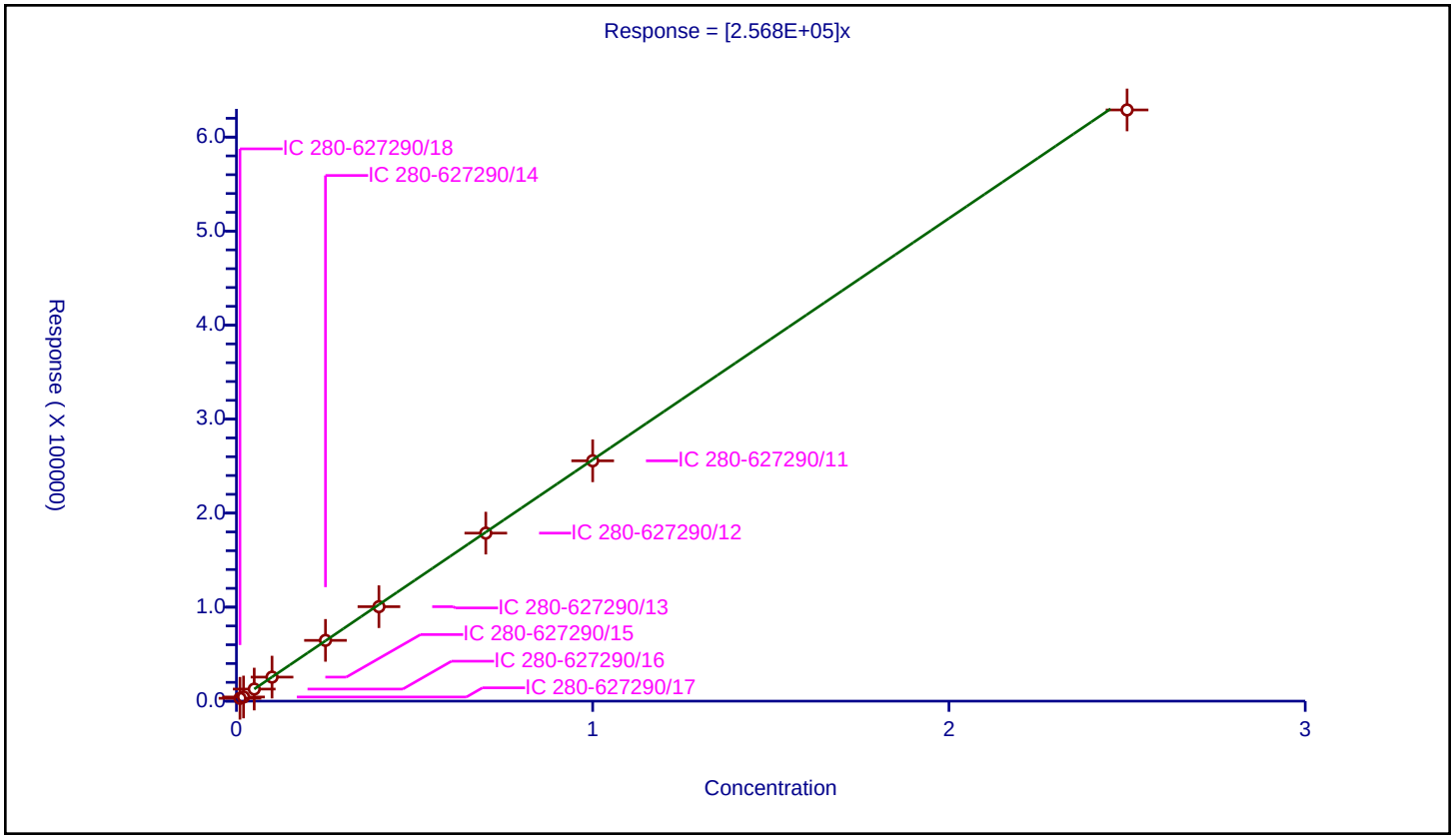
Curve Coefficients

Intercept:	0
Slope:	2.568E+05

Error Coefficients

Standard Error:	4720
Relative Standard Error:	8.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.01	3052.0			305200.0	Y
2	IC 280-627290/17	0.02	4419.0			220950.0	Y
3	IC 280-627290/16	0.05	12837.0			256740.0	Y
4	IC 280-627290/15	0.1	25572.0			255720.0	Y
5	IC 280-627290/14	0.25	64646.0			258584.0	Y
6	IC 280-627290/13	0.4	100477.0			251192.5	Y
7	IC 280-627290/12	0.7	178743.0			255347.142857	Y
8	IC 280-627290/11	1.0	255664.0			255664.0	Y
9	IC 280-627290/10	2.5	628901.0			251560.4	Y



Calibration / 3,5-Dinitroaniline

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

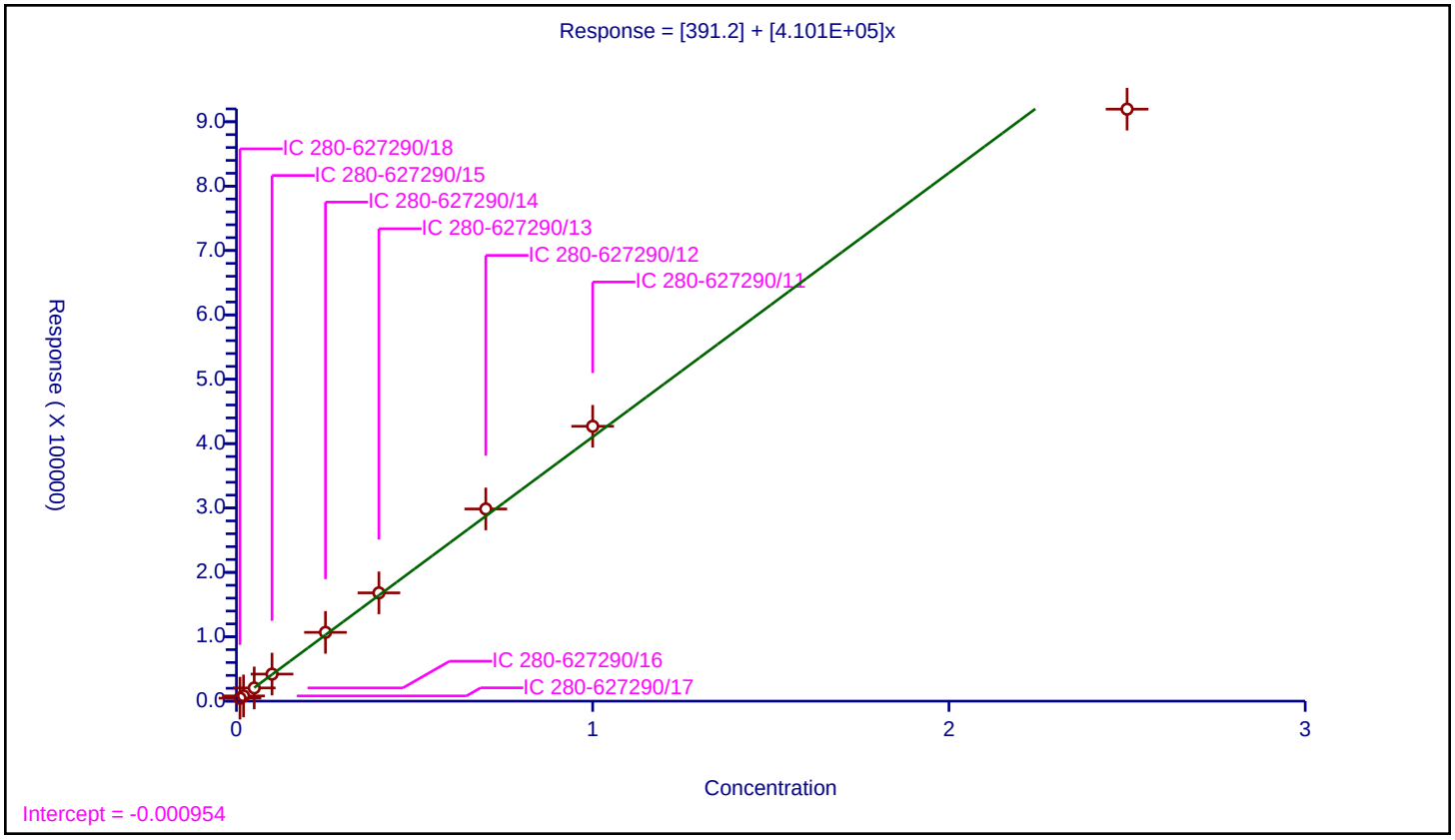
Curve Coefficients

Intercept:	391.2
Slope:	4.101E+05

Error Coefficients

Standard Error:	40800
Relative Standard Error:	5.5
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.01	4622.0			462200.0	Y
2	IC 280-627290/17	0.02	8071.0			403550.0	Y
3	IC 280-627290/16	0.05	20488.0			409760.0	Y
4	IC 280-627290/15	0.1	42028.0			420280.0	Y
5	IC 280-627290/14	0.25	106862.0			427448.0	Y
6	IC 280-627290/13	0.4	168201.0			420502.5	Y
7	IC 280-627290/12	0.7	298526.0			426465.714286	Y
8	IC 280-627290/11	1.0	426959.0			426959.0	Y
9	IC 280-627290/10	2.5	919595.0			367838.0	Y



Calibration / 1,3-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

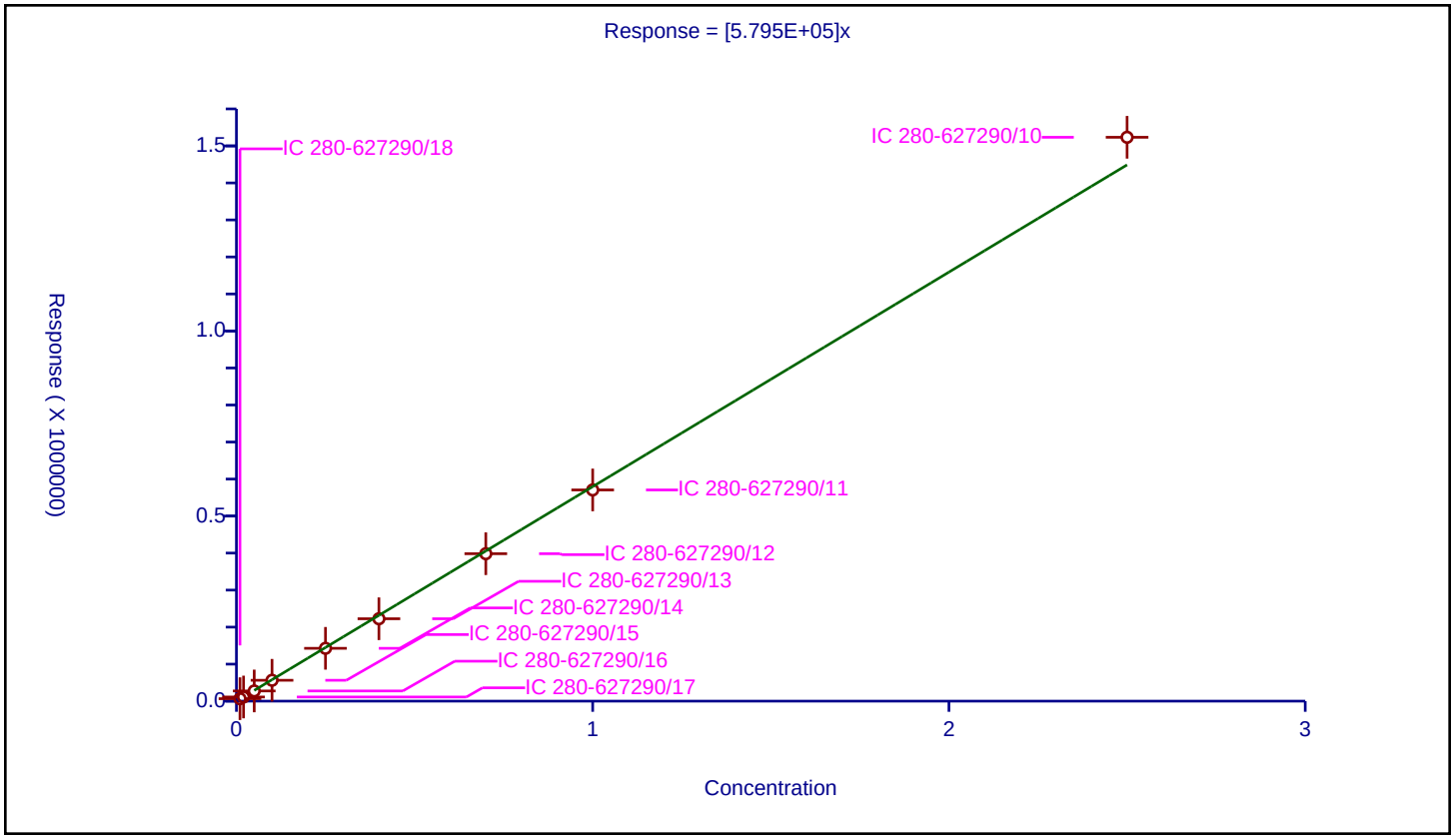
Curve Coefficients

Intercept:	0
Slope:	5.795E+05

Error Coefficients

Standard Error:	26900
Relative Standard Error:	6.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.01	6679.0			667900.0	Y
2	IC 280-627290/17	0.02	11160.0			558000.0	Y
3	IC 280-627290/16	0.05	27516.0			550320.0	Y
4	IC 280-627290/15	0.1	56349.0			563490.0	Y
5	IC 280-627290/14	0.25	142691.0			570764.0	Y
6	IC 280-627290/13	0.4	222577.0			556442.5	Y
7	IC 280-627290/12	0.7	398297.0			568995.714286	Y
8	IC 280-627290/11	1.0	570540.0			570540.0	Y
9	IC 280-627290/10	2.5	1523284.0			609313.6	Y



Calibration / Nitroglycerin

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

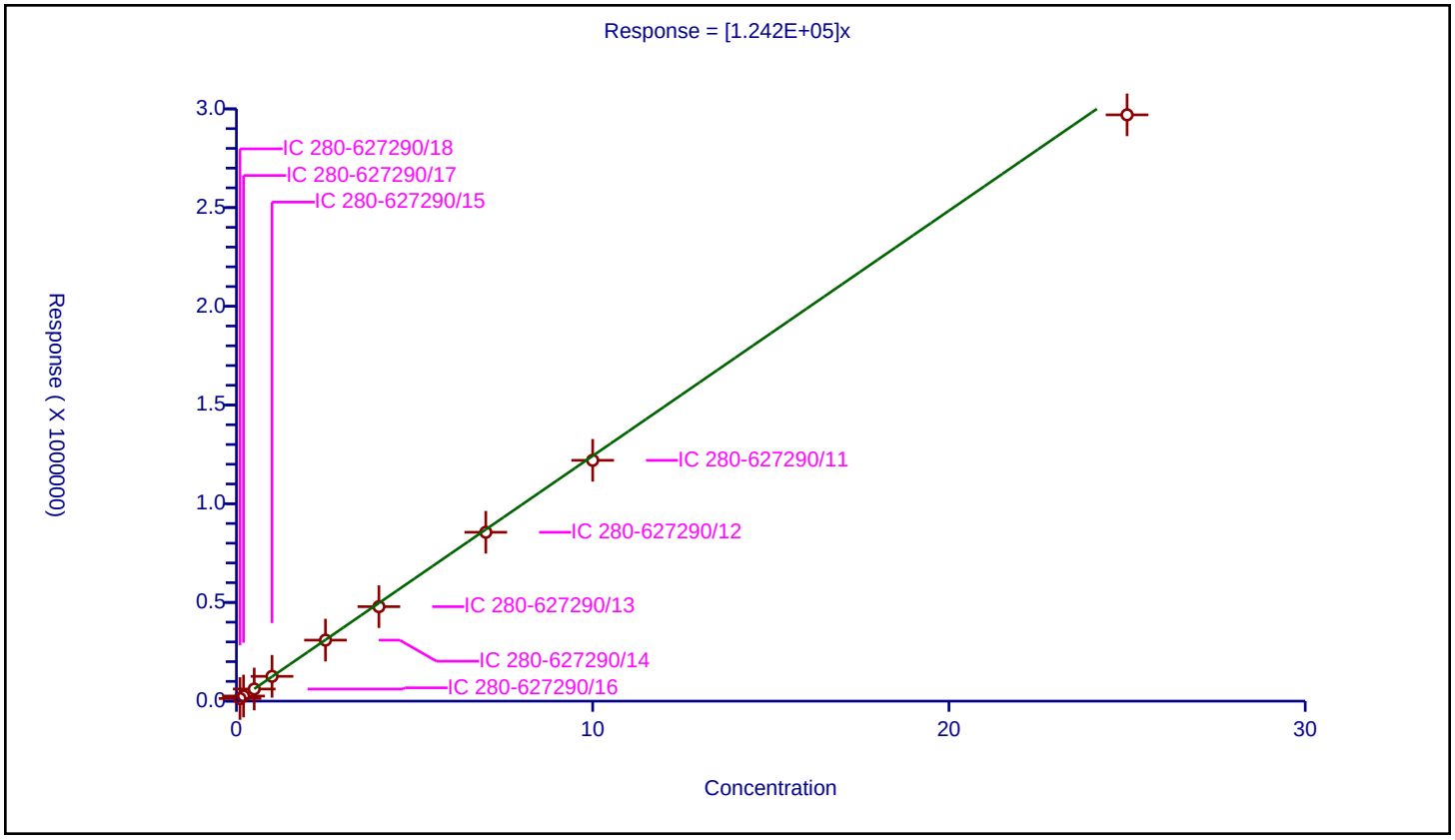
Curve Coefficients

Intercept:	0
Slope:	1.242E+05

Error Coefficients

Standard Error:	49300
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.1	13348.0			133480.0	Y
2	IC 280-627290/17	0.2	25930.0			129650.0	Y
3	IC 280-627290/16	0.5	61450.0			122900.0	Y
4	IC 280-627290/15	1.0	125699.0			125699.0	Y
5	IC 280-627290/14	2.5	309021.0			123608.4	Y
6	IC 280-627290/13	4.0	478538.0			119634.5	Y
7	IC 280-627290/12	7.0	855360.0			122194.285714	Y
8	IC 280-627290/11	10.0	1219790.0			121979.0	Y
9	IC 280-627290/10	25.0	2969741.0			118789.64	Y



Calibration / o-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

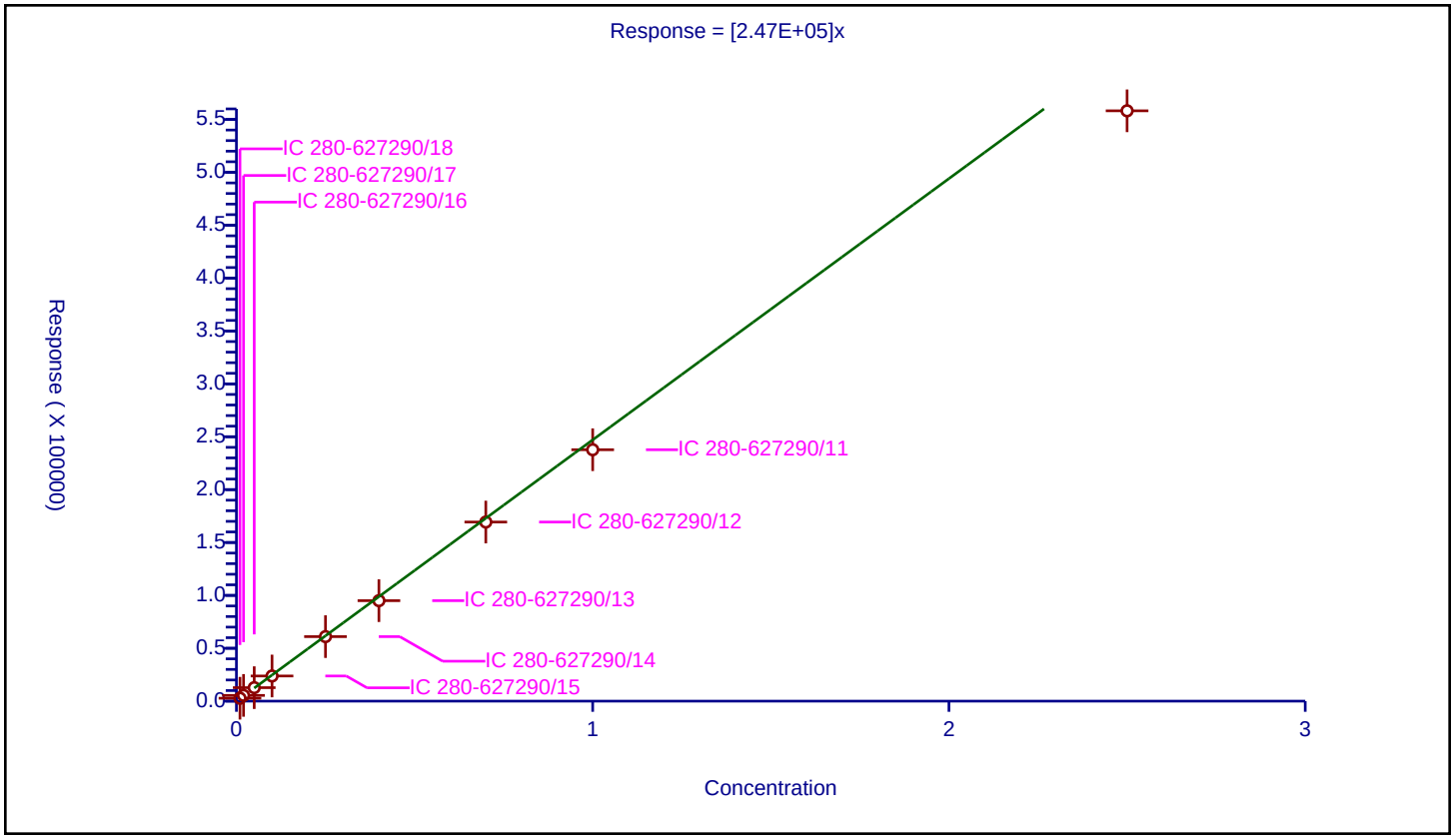
Curve Coefficients

Intercept:	0
Slope:	2.47E+05

Error Coefficients

Standard Error:	21300
Relative Standard Error:	6.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.01	2753.0			275300.0	Y
2	IC 280-627290/17	0.02	5416.0			270800.0	Y
3	IC 280-627290/16	0.05	12750.0			255000.0	Y
4	IC 280-627290/15	0.1	23778.0			237780.0	Y
5	IC 280-627290/14	0.25	61006.0			244024.0	Y
6	IC 280-627290/13	0.4	94995.0			237487.5	Y
7	IC 280-627290/12	0.7	169349.0			241927.142857	Y
8	IC 280-627290/11	1.0	237729.0			237729.0	Y
9	IC 280-627290/10	2.5	558193.0			223277.2	Y



Calibration / p-Nitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

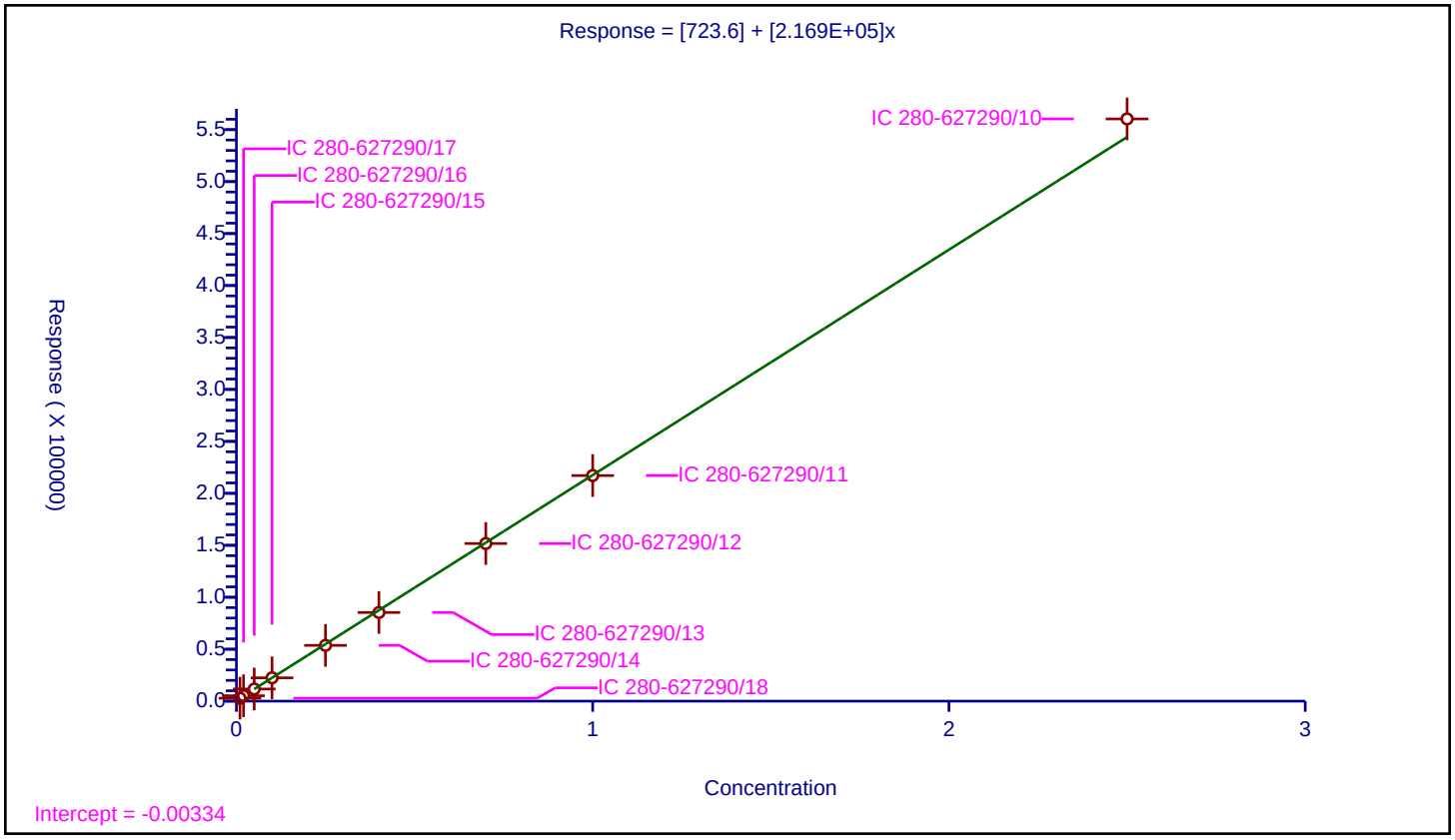
Curve Coefficients

Intercept:	723.6
Slope:	2.169E+05

Error Coefficients

Standard Error:	6670
Relative Standard Error:	2.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.01	2862.0			286200.0	Y
2	IC 280-627290/17	0.02	5178.0			258900.0	Y
3	IC 280-627290/16	0.05	11667.0			233340.0	Y
4	IC 280-627290/15	0.1	22449.0			224490.0	Y
5	IC 280-627290/14	0.25	53670.0			214680.0	Y
6	IC 280-627290/13	0.4	85317.0			213292.5	Y
7	IC 280-627290/12	0.7	151677.0			216681.428571	Y
8	IC 280-627290/11	1.0	217115.0			217115.0	Y
9	IC 280-627290/10	2.5	560347.0			224138.8	Y



Calibration / 4-Amino-2,6-dinitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

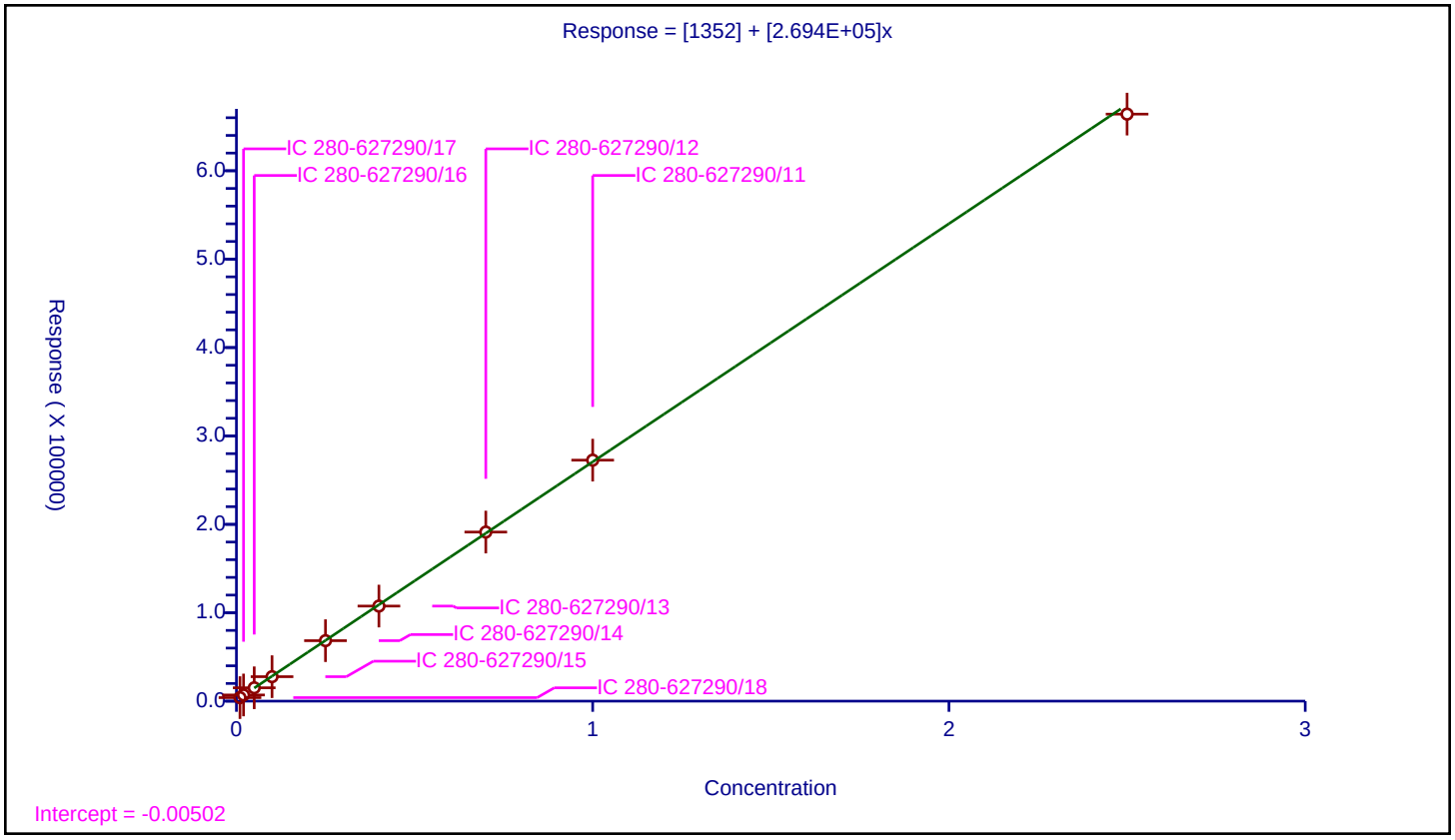
Curve Coefficients

Intercept:	1352
Slope:	2.694E+05

Error Coefficients

Standard Error:	4180
Relative Standard Error:	2.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.01	3980.0			398000.0	Y
2	IC 280-627290/17	0.02	6984.0			349200.0	Y
3	IC 280-627290/16	0.05	15115.0			302300.0	Y
4	IC 280-627290/15	0.1	27679.0			276790.0	Y
5	IC 280-627290/14	0.25	68403.0			273612.0	Y
6	IC 280-627290/13	0.4	107559.0			268897.5	Y
7	IC 280-627290/12	0.7	191281.0			273258.571429	Y
8	IC 280-627290/11	1.0	272622.0			272622.0	Y
9	IC 280-627290/10	2.5	664108.0			265643.2	Y



Calibration / m-Nitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

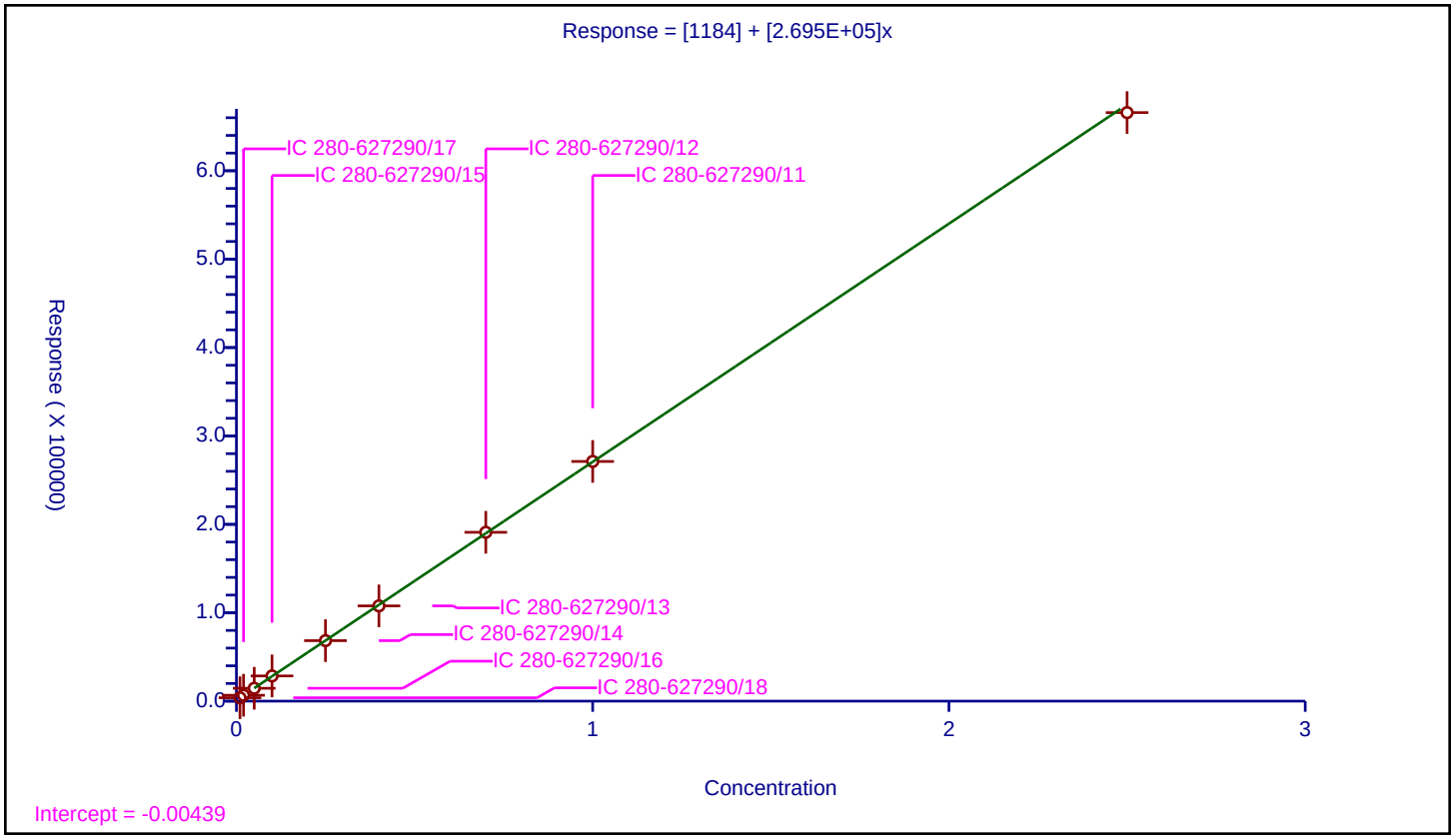
Curve Coefficients

Intercept:	1184
Slope:	2.695E+05

Error Coefficients

Standard Error:	3500
Relative Standard Error:	1.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.01	3853.0			385300.0	Y
2	IC 280-627290/17	0.02	6679.0			333950.0	Y
3	IC 280-627290/16	0.05	14579.0			291580.0	Y
4	IC 280-627290/15	0.1	28516.0			285160.0	Y
5	IC 280-627290/14	0.25	68436.0			273744.0	Y
6	IC 280-627290/13	0.4	107777.0			269442.5	Y
7	IC 280-627290/12	0.7	191019.0			272884.285714	Y
8	IC 280-627290/11	1.0	271165.0			271165.0	Y
9	IC 280-627290/10	2.5	665814.0			266325.6	Y



Calibration / 2-Amino-4,6-dinitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

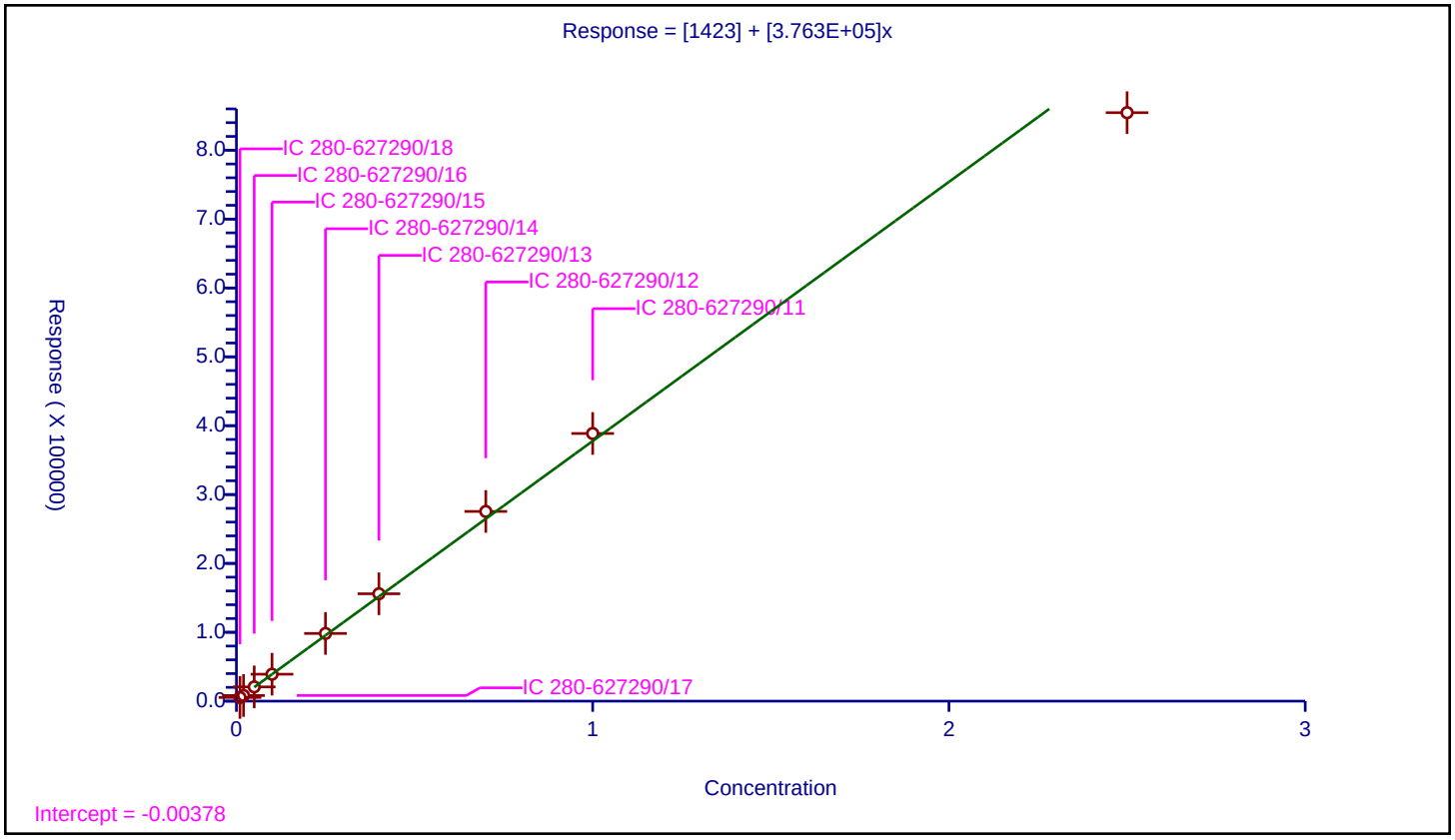
Curve Coefficients

Intercept:	1423
Slope:	3.763E+05

Error Coefficients

Standard Error:	33700
Relative Standard Error:	6.0
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.01	5349.0			534900.0	Y
2	IC 280-627290/17	0.02	8189.0			409450.0	Y
3	IC 280-627290/16	0.05	20666.0			413320.0	Y
4	IC 280-627290/15	0.1	39122.0			391220.0	Y
5	IC 280-627290/14	0.25	98305.0			393220.0	Y
6	IC 280-627290/13	0.4	155922.0			389805.0	Y
7	IC 280-627290/12	0.7	275464.0			393520.0	Y
8	IC 280-627290/11	1.0	388664.0			388664.0	Y
9	IC 280-627290/10	2.5	854516.0			341806.4	Y



Calibration / 1,3,5-Trinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

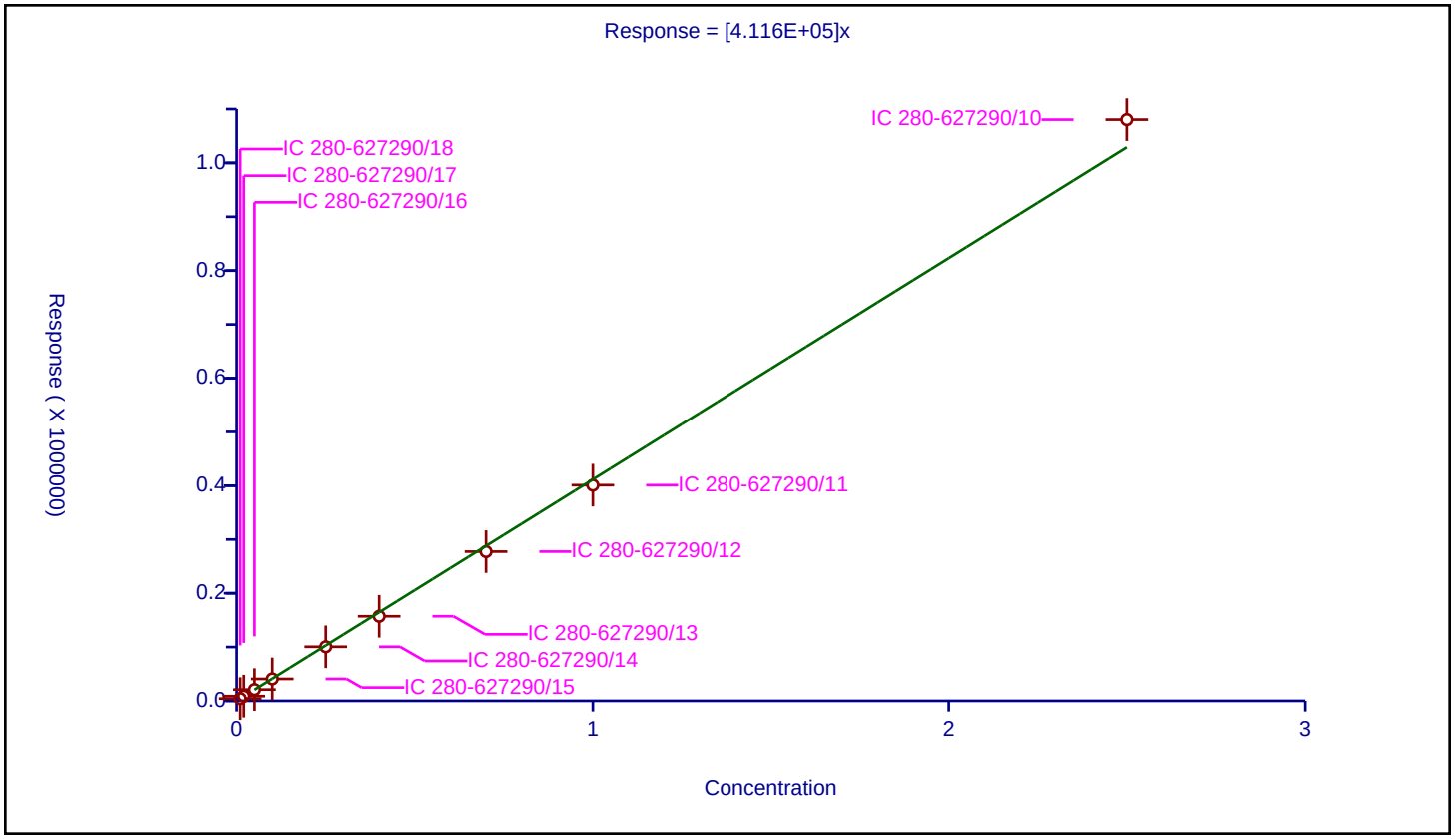
Curve Coefficients

Intercept:	0
Slope:	4.116E+05

Error Coefficients

Standard Error:	19100
Relative Standard Error:	3.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.01	4159.0			415900.0	Y
2	IC 280-627290/17	0.02	8780.0			439000.0	Y
3	IC 280-627290/16	0.05	20880.0			417600.0	Y
4	IC 280-627290/15	0.1	40753.0			407530.0	Y
5	IC 280-627290/14	0.25	100515.0			402060.0	Y
6	IC 280-627290/13	0.4	157218.0			393045.0	Y
7	IC 280-627290/12	0.7	277471.0			396387.142857	Y
8	IC 280-627290/11	1.0	400996.0			400996.0	Y
9	IC 280-627290/10	2.5	1080397.0			432158.8	Y



Calibration / 2,6-Dinitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

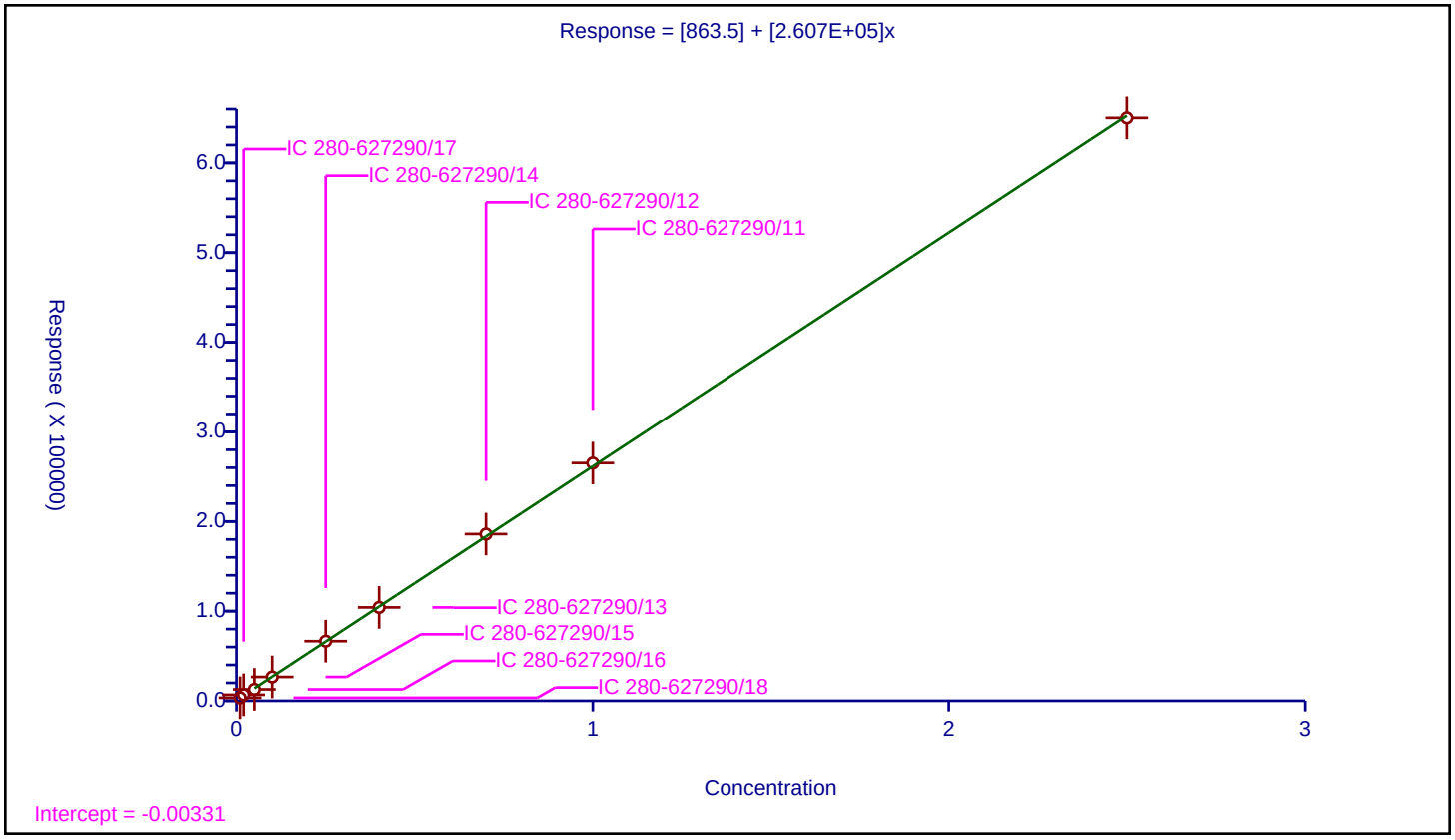
Curve Coefficients

Intercept:	863.5
Slope:	2.607E+05

Error Coefficients

Standard Error:	2040
Relative Standard Error:	6.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.01	3360.0			336000.0	Y
2	IC 280-627290/17	0.02	6716.0			335800.0	Y
3	IC 280-627290/16	0.05	12748.0			254960.0	Y
4	IC 280-627290/15	0.1	26594.0			265940.0	Y
5	IC 280-627290/14	0.25	66514.0			266056.0	Y
6	IC 280-627290/13	0.4	104177.0			260442.5	Y
7	IC 280-627290/12	0.7	185954.0			265648.571429	Y
8	IC 280-627290/11	1.0	265199.0			265199.0	Y
9	IC 280-627290/10	2.5	650162.0			260064.8	Y



Calibration / 2,4-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

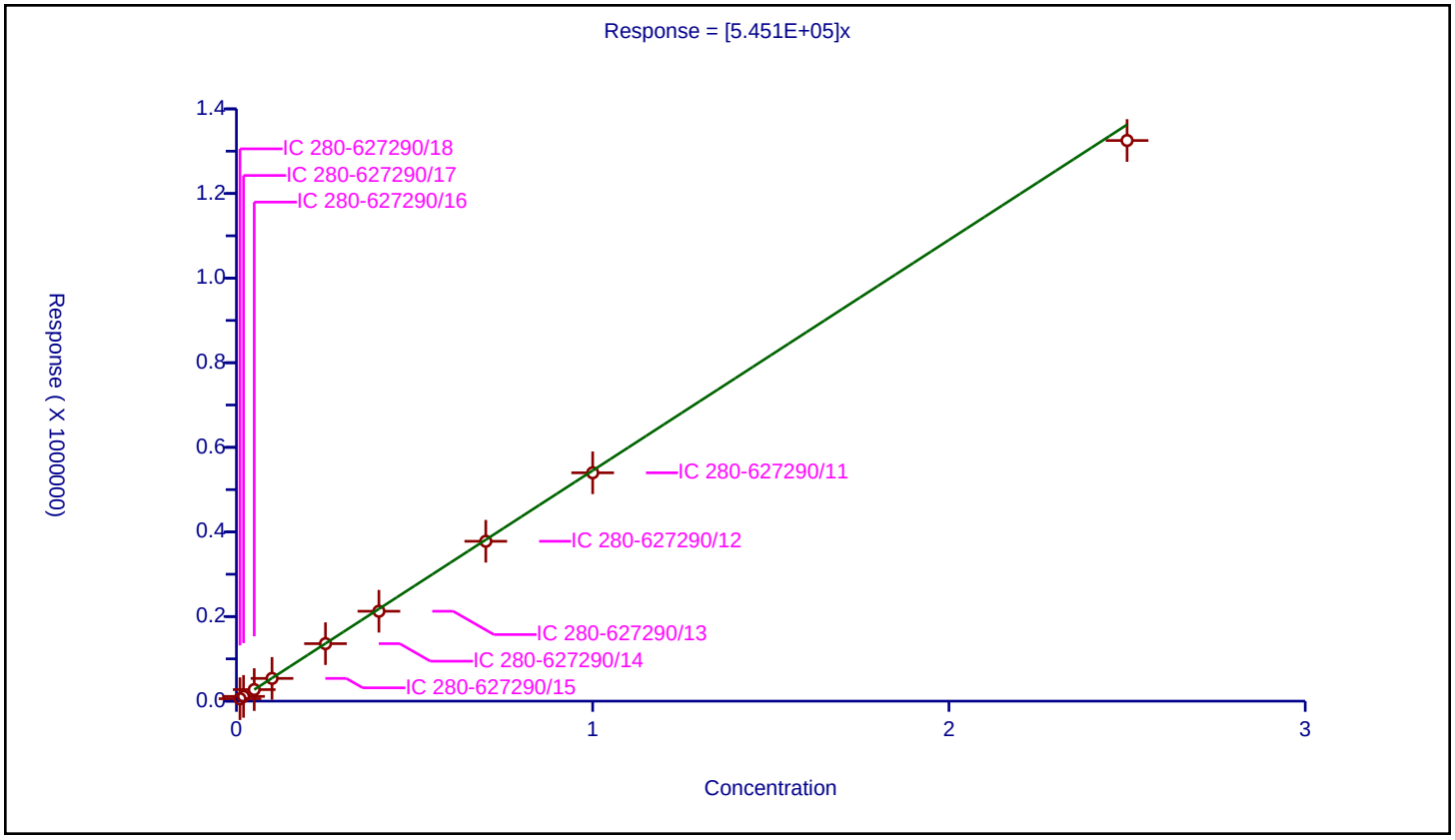
Curve Coefficients

Intercept:	0
Slope:	5.451E+05

Error Coefficients

Standard Error:	13600
Relative Standard Error:	2.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.01	5753.0			575300.0	Y
2	IC 280-627290/17	0.02	11241.0			562050.0	Y
3	IC 280-627290/16	0.05	27321.0			546420.0	Y
4	IC 280-627290/15	0.1	53734.0			537340.0	Y
5	IC 280-627290/14	0.25	135900.0			543600.0	Y
6	IC 280-627290/13	0.4	212533.0			531332.5	Y
7	IC 280-627290/12	0.7	377896.0			539851.428571	Y
8	IC 280-627290/11	1.0	539776.0			539776.0	Y
9	IC 280-627290/10	2.5	1325292.0			530116.8	Y



Calibration / Tetryl

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

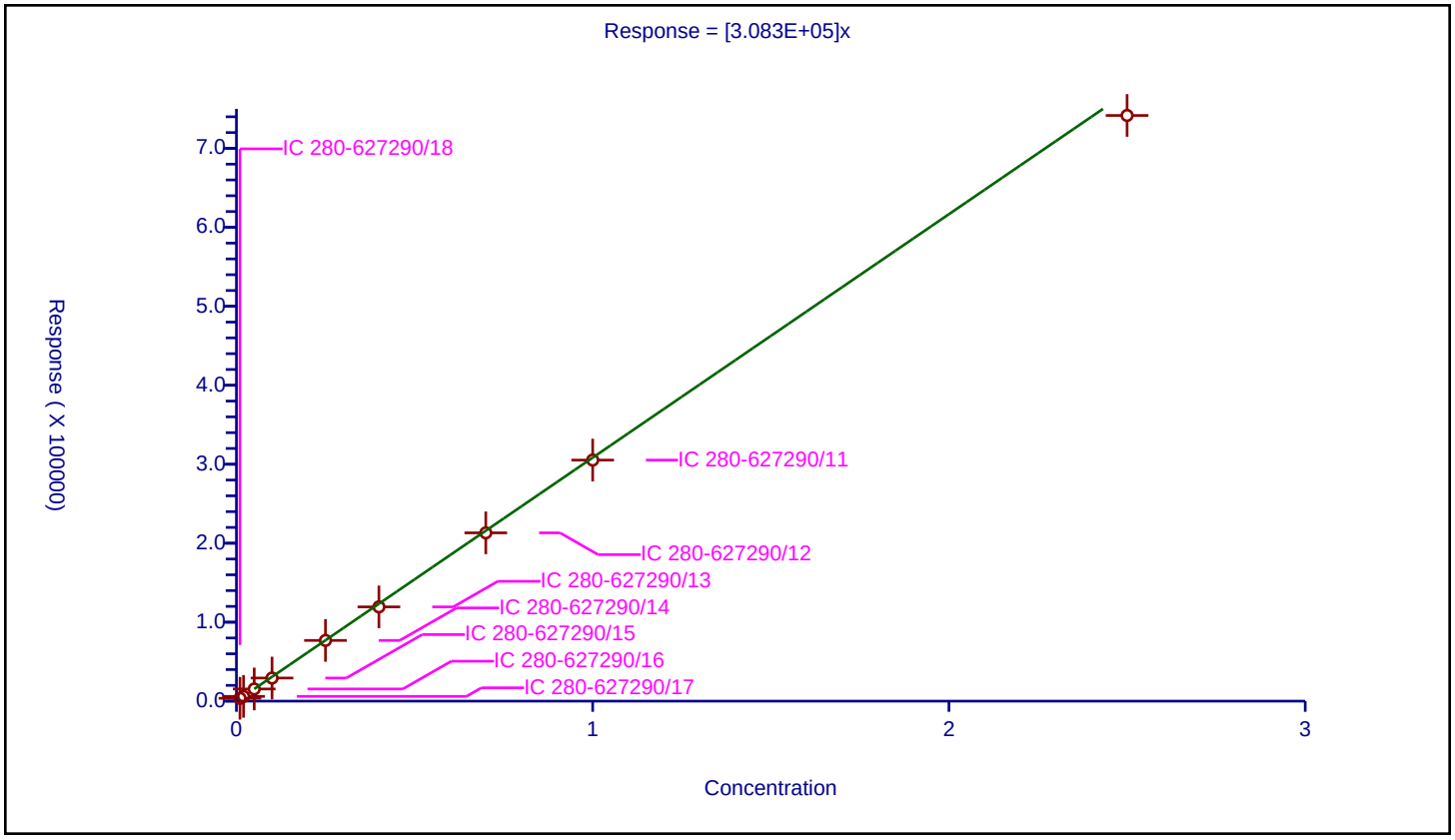
Curve Coefficients

Intercept:	0
Slope:	3.083E+05

Error Coefficients

Standard Error:	10500
Relative Standard Error:	6.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.01	3615.0			361500.0	Y
2	IC 280-627290/17	0.02	6017.0			300850.0	Y
3	IC 280-627290/16	0.05	15400.0			308000.0	Y
4	IC 280-627290/15	0.1	29248.0			292480.0	Y
5	IC 280-627290/14	0.25	76874.0			307496.0	Y
6	IC 280-627290/13	0.4	119347.0			298367.5	Y
7	IC 280-627290/12	0.7	213101.0			304430.0	Y
8	IC 280-627290/11	1.0	305263.0			305263.0	Y
9	IC 280-627290/10	2.5	741681.0			296672.4	Y



Calibration / 2,4,6-Trinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

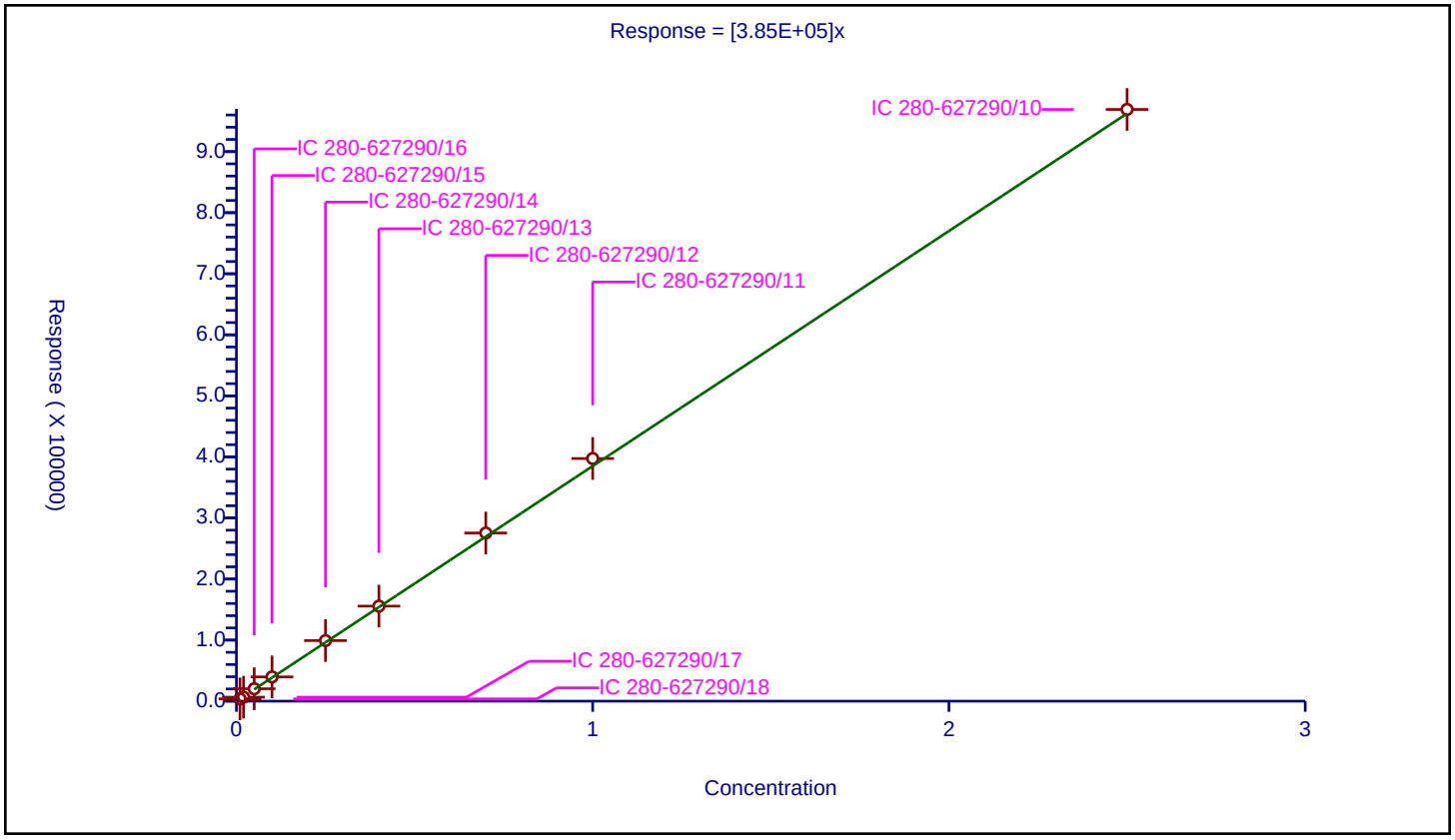
Curve Coefficients

Intercept:	0
Slope:	3.85E+05

Error Coefficients

Standard Error:	5570
Relative Standard Error:	6.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.01	3712.0			371200.0	Y
2	IC 280-627290/17	0.02	6528.0			326400.0	Y
3	IC 280-627290/16	0.05	20297.0			405940.0	Y
4	IC 280-627290/15	0.1	39715.0			397150.0	Y
5	IC 280-627290/14	0.25	99165.0			396660.0	Y
6	IC 280-627290/13	0.4	155627.0			389067.5	Y
7	IC 280-627290/12	0.7	275399.0			393427.142857	Y
8	IC 280-627290/11	1.0	397391.0			397391.0	Y
9	IC 280-627290/10	2.5	969091.0			387636.4	Y



Calibration / PETN

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

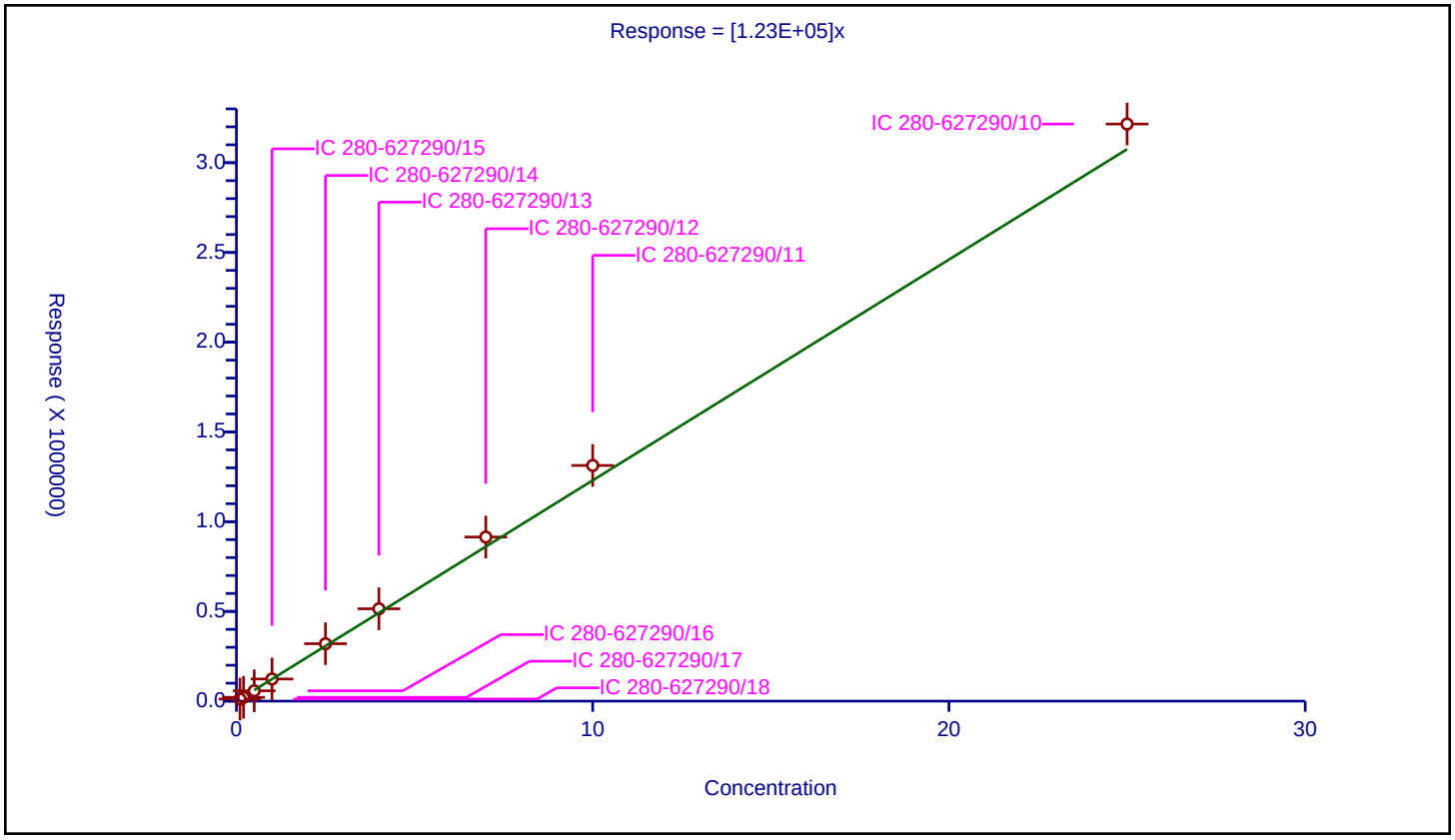
Curve Coefficients

Intercept:	0
Slope:	1.23E+05

Error Coefficients

Standard Error:	61400
Relative Standard Error:	7.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.1	11596.0			115960.0	Y
2	IC 280-627290/17	0.2	21075.0			105375.0	Y
3	IC 280-627290/16	0.5	57592.0			115184.0	Y
4	IC 280-627290/15	1.0	123328.0			123328.0	Y
5	IC 280-627290/14	2.5	320094.0			128037.6	Y
6	IC 280-627290/13	4.0	514656.0			128664.0	Y
7	IC 280-627290/12	7.0	914344.0			130620.571429	Y
8	IC 280-627290/11	10.0	1313083.0			131308.3	Y
9	IC 280-627290/10	25.0	3215628.0			128625.12	Y



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver | Job No.: 280-182145-1 | Analy Batch No.: 627290

SDG No.:

Instrument ID: CHHPLC_G2_LUNA | GC Column: Luna-phenyl ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 09/26/2023 00:42 | Calibration End Date: 09/26/2023 04:54 | Calibration ID: 84933

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-627290/27	09250027.D
Level 2	IC 280-627290/26	09250026.D
Level 3	IC 280-627290/25	09250025.D
Level 4	IC 280-627290/24	09250024.D
Level 5	IC 280-627290/23	09250023.D
Level 6	IC 280-627290/22	09250022.D
Level 7	IC 280-627290/21	09250021.D
Level 8	IC 280-627290/20	09250020.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
2,6-diamino-4-nitrotoluene	+++++	+++++	4.227	4.223	4.230	4.219	4.214	4.200			4.080 - 4.380	4.219
2,4-diamino-6-nitrotoluene	+++++	+++++	4.807	4.803	4.810	4.813	4.814	4.847			4.660 - 4.960	4.816

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-182145-1 Analy Batch No.: 627290

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/26/2023 00:42 Calibration End Date: 09/26/2023 04:54 Calibration ID: 84933

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-627290/27	09250027.D
Level 2	IC 280-627290/26	09250026.D
Level 3	IC 280-627290/25	09250025.D
Level 4	IC 280-627290/24	09250024.D
Level 5	IC 280-627290/23	09250023.D
Level 6	IC 280-627290/22	09250022.D
Level 7	IC 280-627290/21	09250021.D
Level 8	IC 280-627290/20	09250020.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
2,6-diamino-4-nitrotoluene	+++++ 387758	+++++ 369949	381960 389304	391204 405683	Ave		387642.812				3.0		20.0			
2,4-diamino-6-nitrotoluene	+++++ 237655	+++++ 227633	239310 240760	238144 220192	Ave		233948.976				3.5		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver | Job No.: 280-182145-1 | Analy Batch No.: 627290

SDG No.:

Instrument ID: CHHPLC_G2_LUNA | GC Column: Luna-pheny ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 09/26/2023 00:42 | Calibration End Date: 09/26/2023 04:54 | Calibration ID: 84933

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-627290/27	09250027.D
Level 2	IC 280-627290/26	09250026.D
Level 3	IC 280-627290/25	09250025.D
Level 4	IC 280-627290/24	09250024.D
Level 5	IC 280-627290/23	09250023.D
Level 6	IC 280-627290/22	09250022.D
Level 7	IC 280-627290/21	09250021.D
Level 8	IC 280-627290/20	09250020.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
2,6-diamino-4-nitrotoluene	Ave	+++++ 258964	+++++ 389304	38196 1014207	97801	155103	+++++ 0.700	+++++ 1.00	0.100 2.50	0.250	0.400
2,4-diamino-6-nitrotoluene	Ave	+++++ 159343	+++++ 240760	23931 550480	59536	95062	+++++ 0.700	+++++ 1.00	0.100 2.50	0.250	0.400

Curve Type Legend:
Ave = Average

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250020.D
Lims ID: IC ADD 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 26-Sep-2023 00:42:39 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC ADD 8
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub19

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:25:40 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 14:14:16

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.200	4.230	-0.030	1014207	2.50	2.62	a
2 2,4-diamino-6-nitrotoluene	1	4.847	4.810	0.037	550480	2.50	2.35	

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

8330_ADDs_00037 Amount Added: 125.00 Units: uL

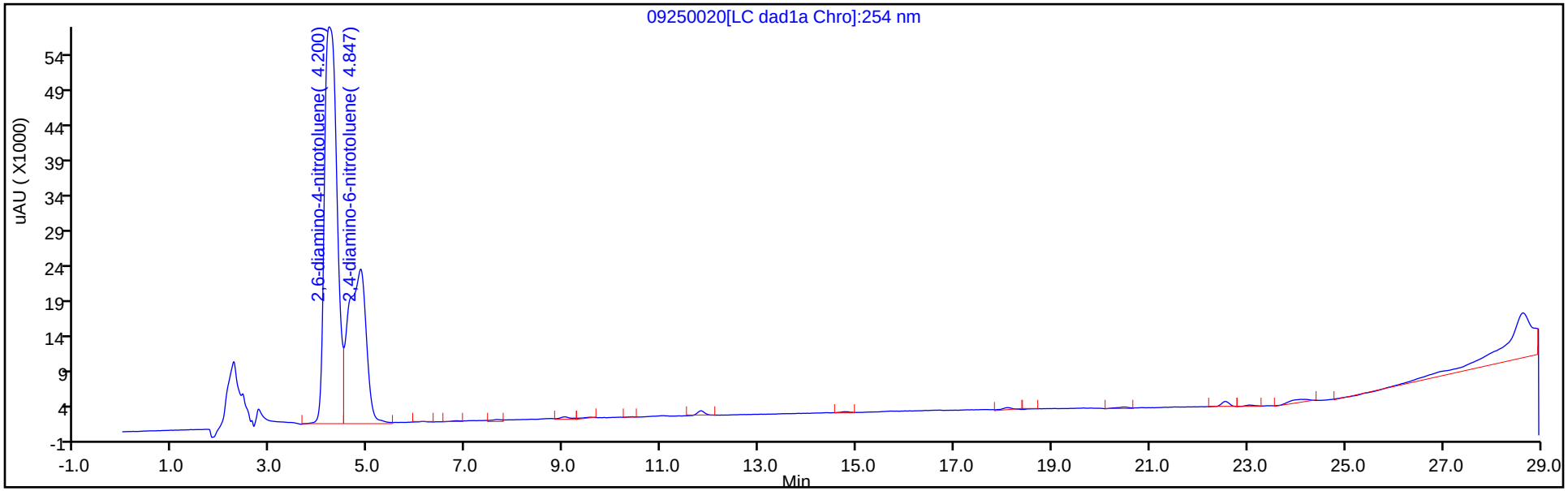
Report Date: 26-Sep-2023 15:25:40 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

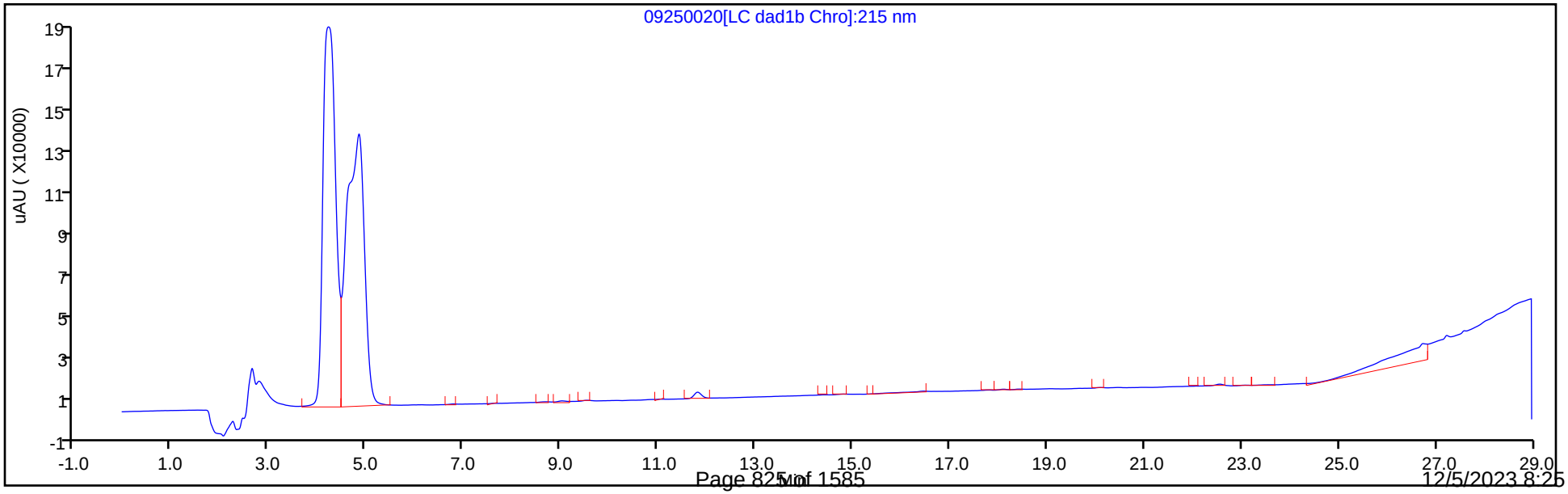
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250020.d

Injection Date:	26-Sep-2023 00:42:39	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	IC ADD 8			Worklist Smp#:	20
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

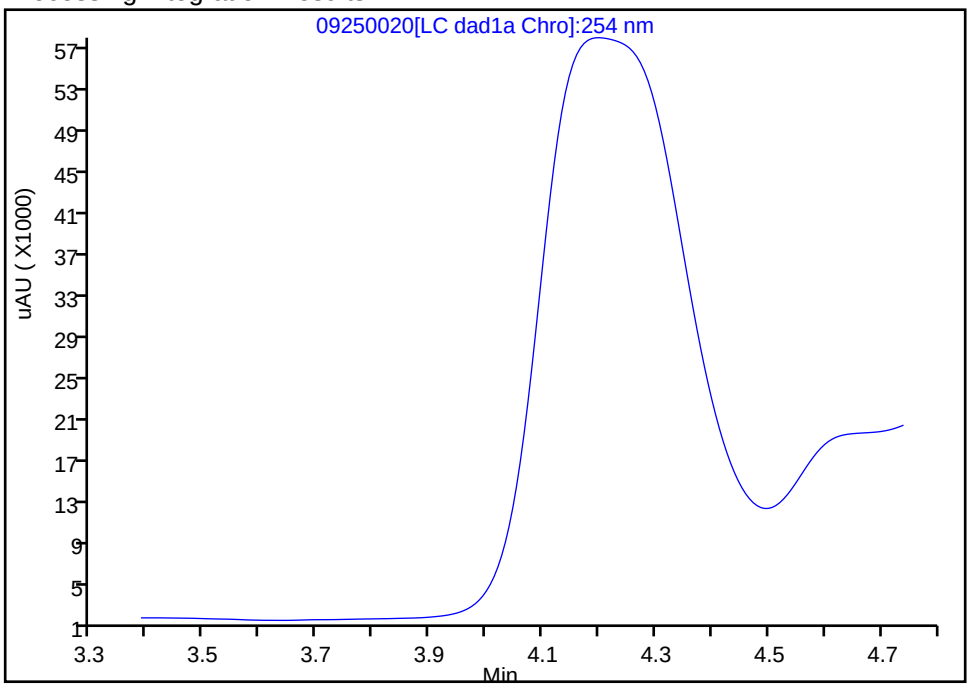
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250020.d				
Injection Date:	26-Sep-2023 00:42:39	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC ADD 8				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

1 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

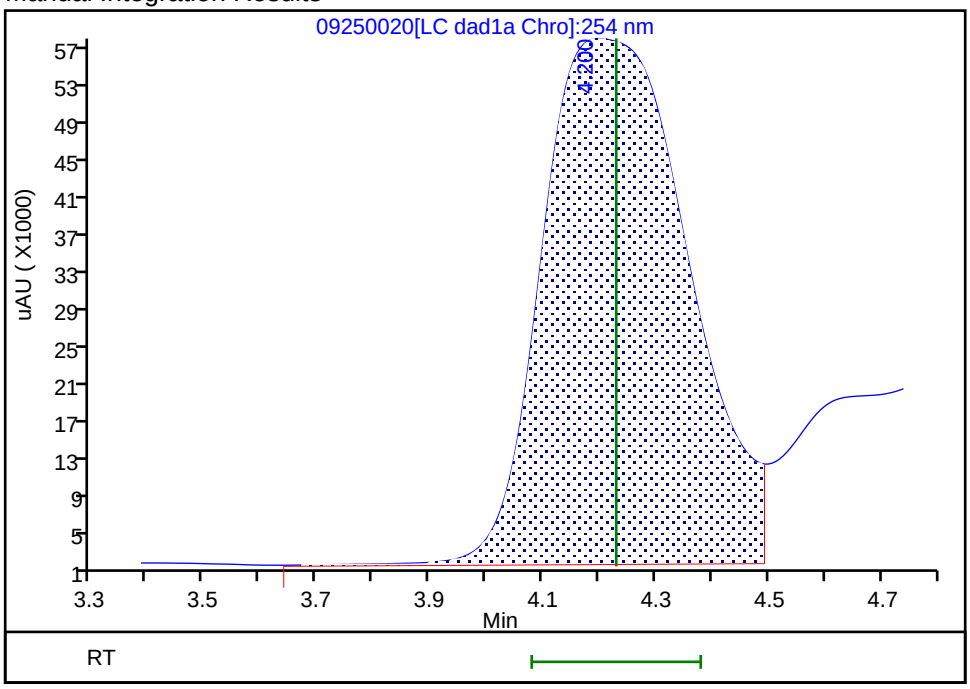
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.20
Area: 1014207
Amount: 2.616344
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:14:14 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250021.D
Lims ID: IC ADD 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 26-Sep-2023 01:18:41 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC ADD 7
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub19

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:25:41 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 14:14:19

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.214	4.230	-0.016	389304	1.00	1.00	a
2 2,4-diamino-6-nitrotoluene	1	4.814	4.810	0.004	240760	1.00	1.03	

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

8330_ADDs_00037 Amount Added: 50.00 Units: uL

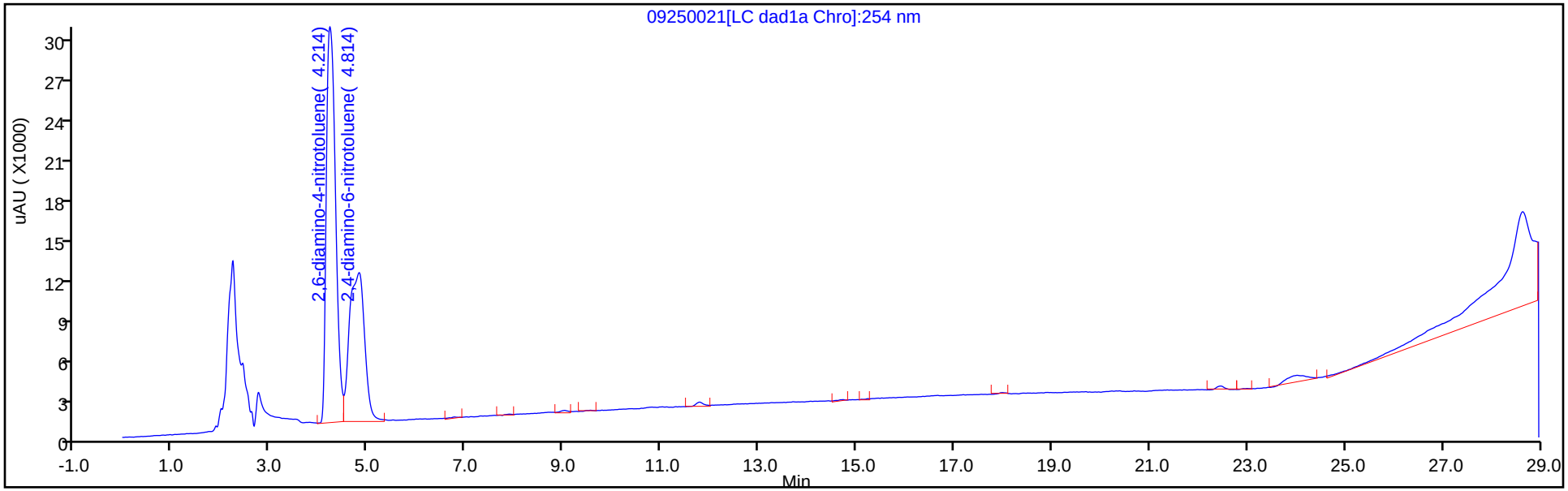
Report Date: 26-Sep-2023 15:25:41 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

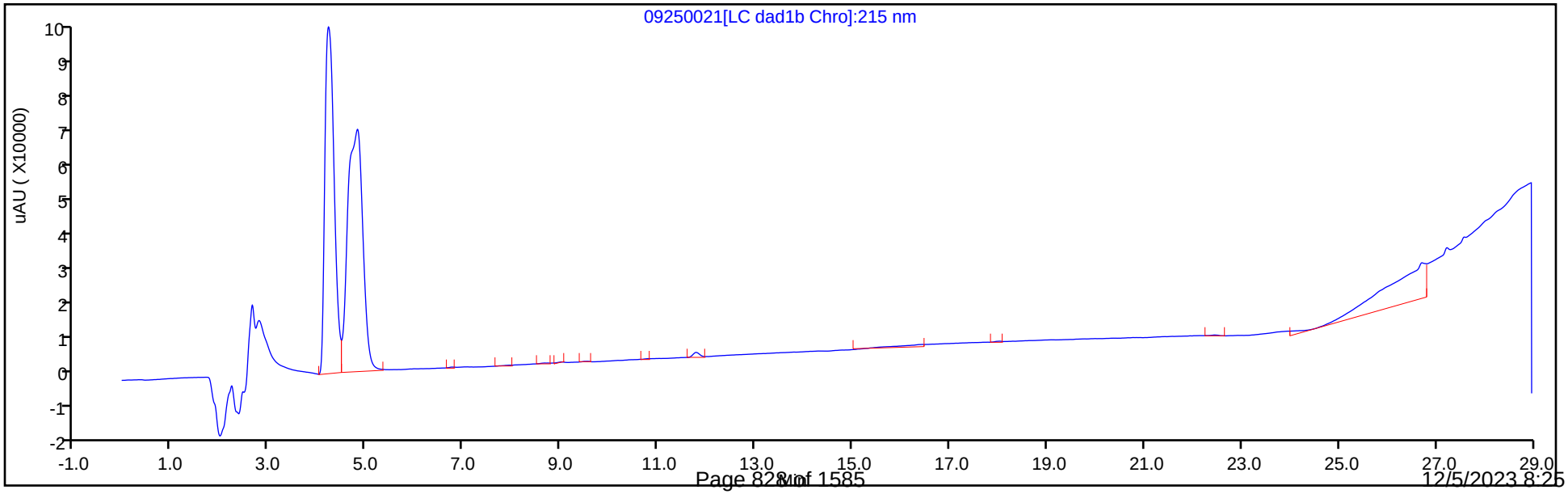
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250021.d

Injection Date:	26-Sep-2023 01:18:41	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	IC ADD 7			Worklist Smp#:	21
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

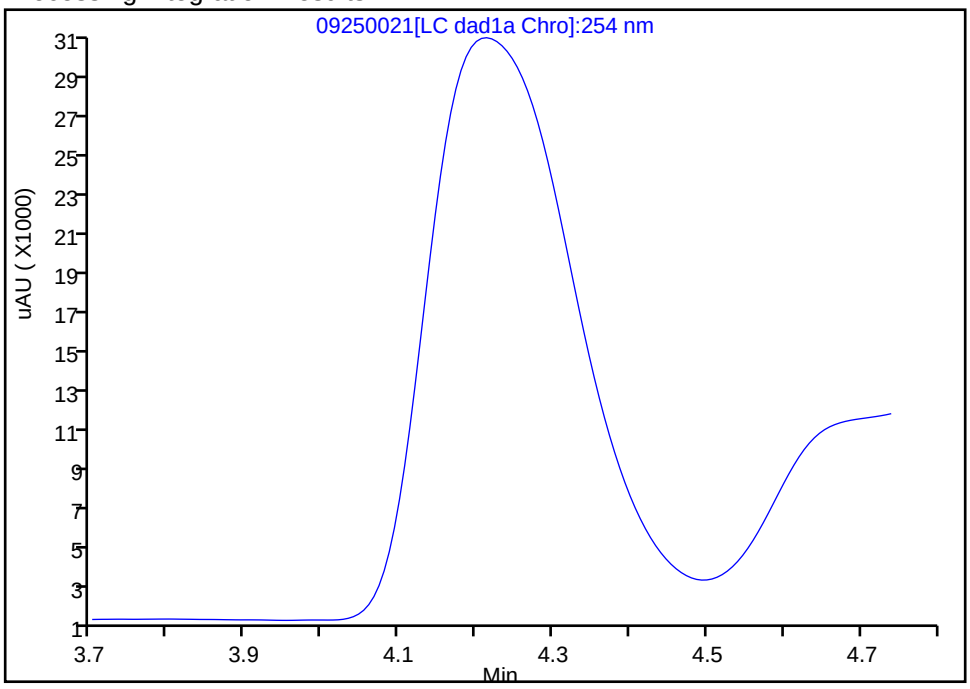
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250021.d				
Injection Date:	26-Sep-2023 01:18:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC ADD 7				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

1 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

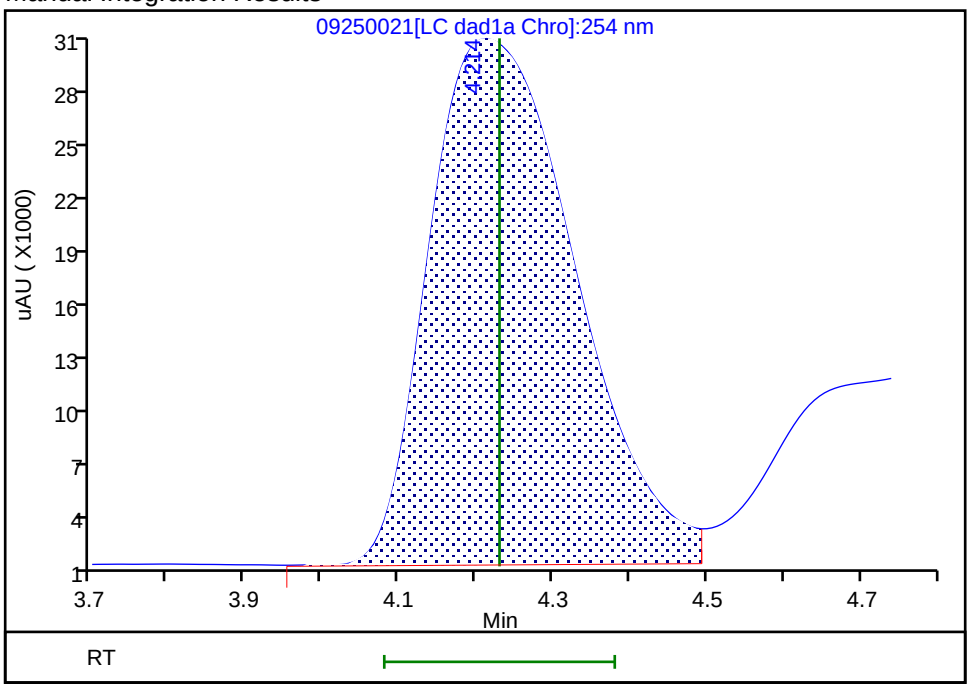
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.21
Area: 389304
Amount: 1.004285
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:14:18 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250022.D
Lims ID: IC ADD 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 26-Sep-2023 01:54:36 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC ADD 6
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub19

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:25:41 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 14:14:22

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.219	4.230	-0.011	258964	0.7000	0.6680	a
2 2,4-diamino-6-nitrotoluene	1	4.813	4.810	0.003	159343	0.7000	0.6811	

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

8330_ADDs_00037 Amount Added: 35.00 Units: uL

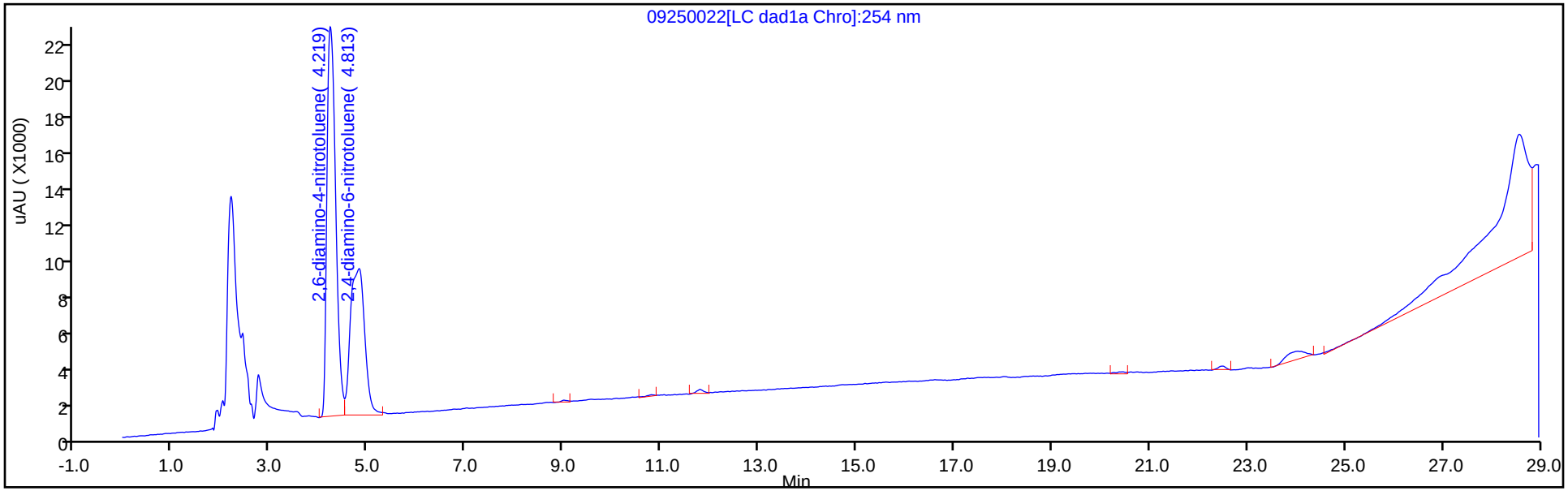
Report Date: 26-Sep-2023 15:25:41 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

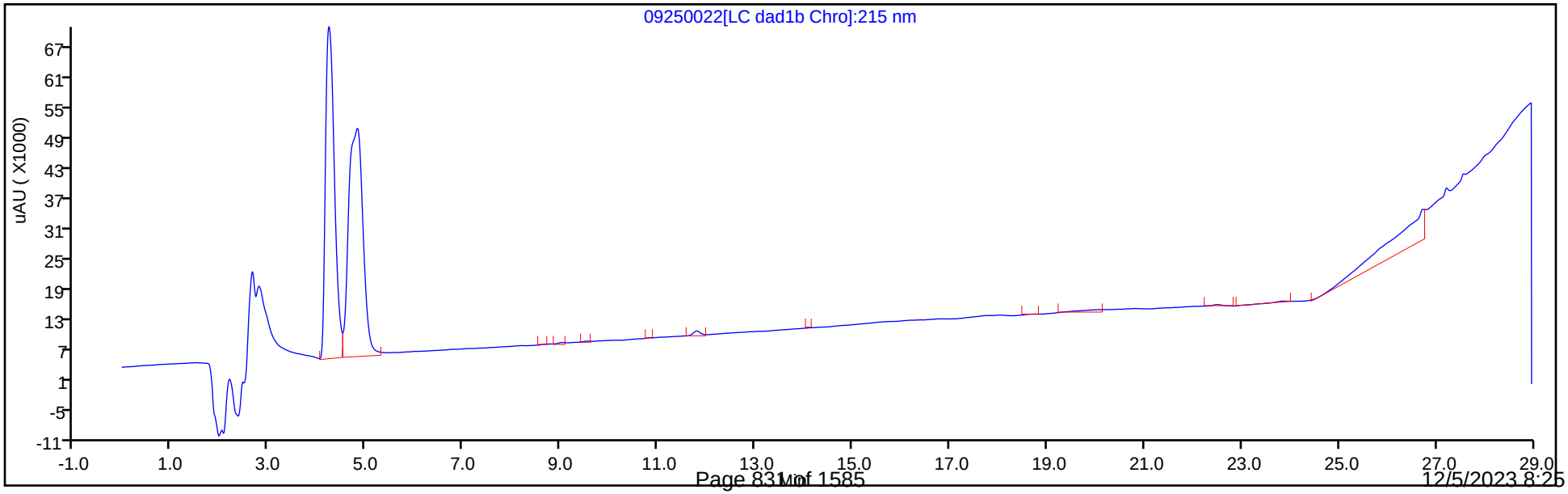
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250022.d

Injection Date:	26-Sep-2023 01:54:36	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	IC ADD 6			Worklist Smp#:	22
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

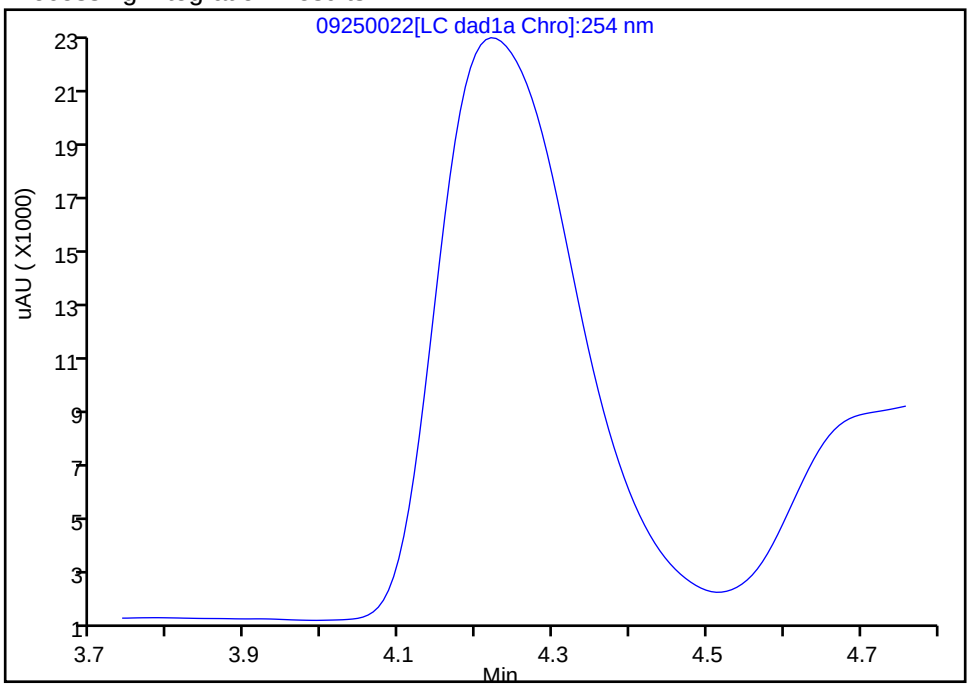
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250022.d				
Injection Date:	26-Sep-2023 01:54:36	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC ADD 6				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

1 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

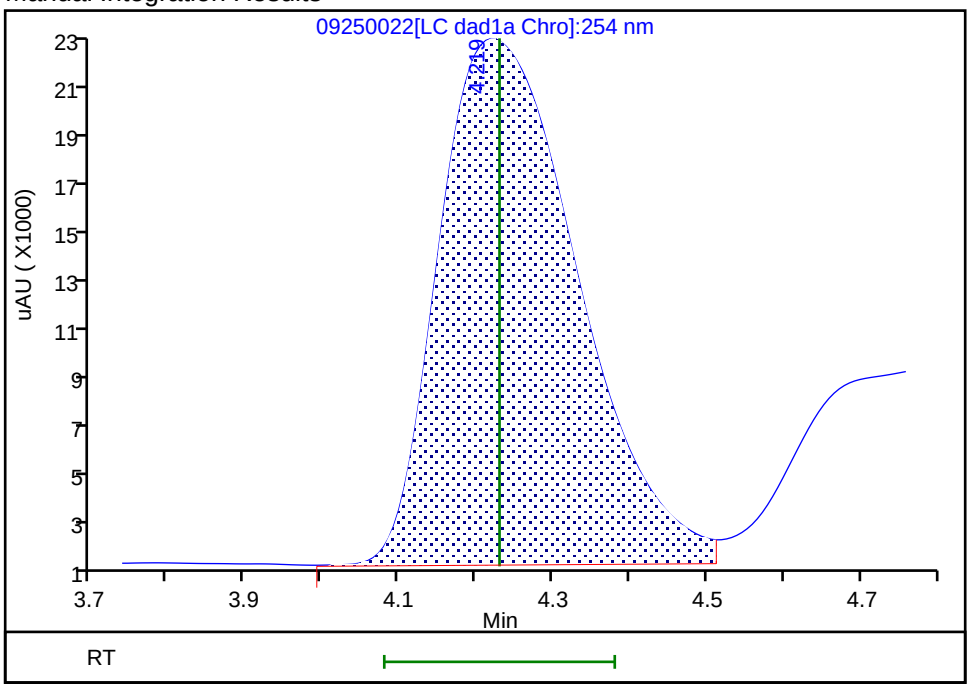
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.22
Area: 258964
Amount: 0.668048
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:14:21 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250023.D
Lims ID: IC ADD 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 26-Sep-2023 02:30:35 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC ADD 5
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub19

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:25:42 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 14:14:25

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.230	4.230	0.000	155103	0.4000	0.4001	a
2 2,4-diamino-6-nitrotoluene	1	4.810	4.810	0.000	95062	0.4000	0.4063	

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

8330_ADDs_00037 Amount Added: 20.00 Units: uL

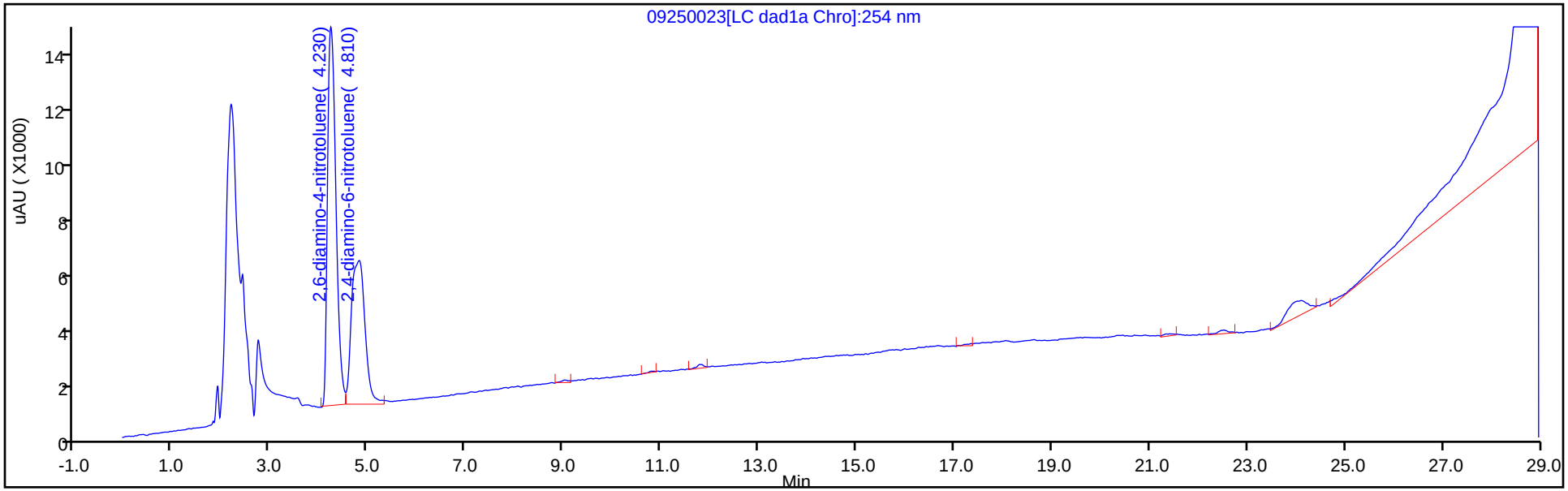
Report Date: 26-Sep-2023 15:25:42 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

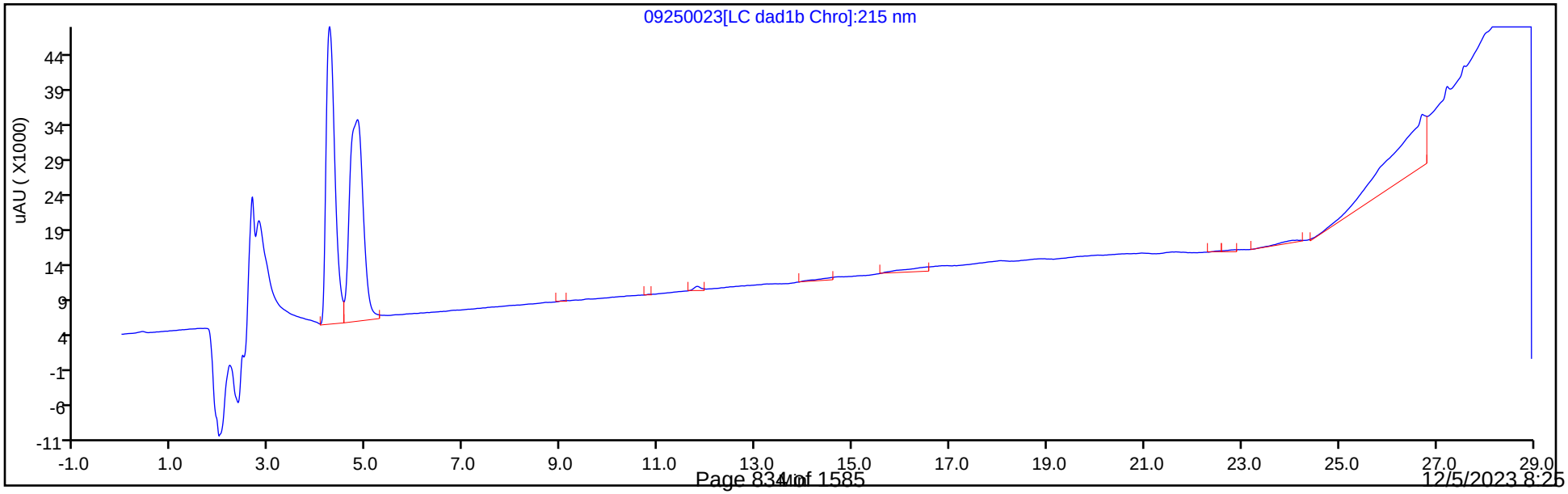
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250023.d

Injection Date:	26-Sep-2023 02:30:35	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	IC ADD 5			Worklist Smp#:	23
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

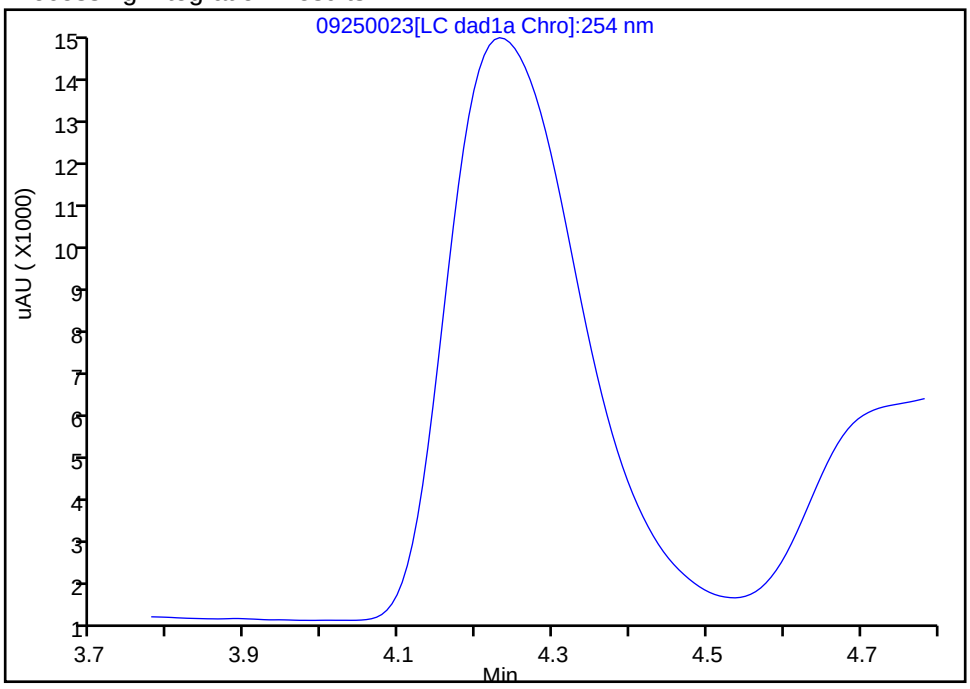
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250023.d
Injection Date: 26-Sep-2023 02:30:35 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC ADD 5
Client ID:
Operator ID: JZ/JG ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

1 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

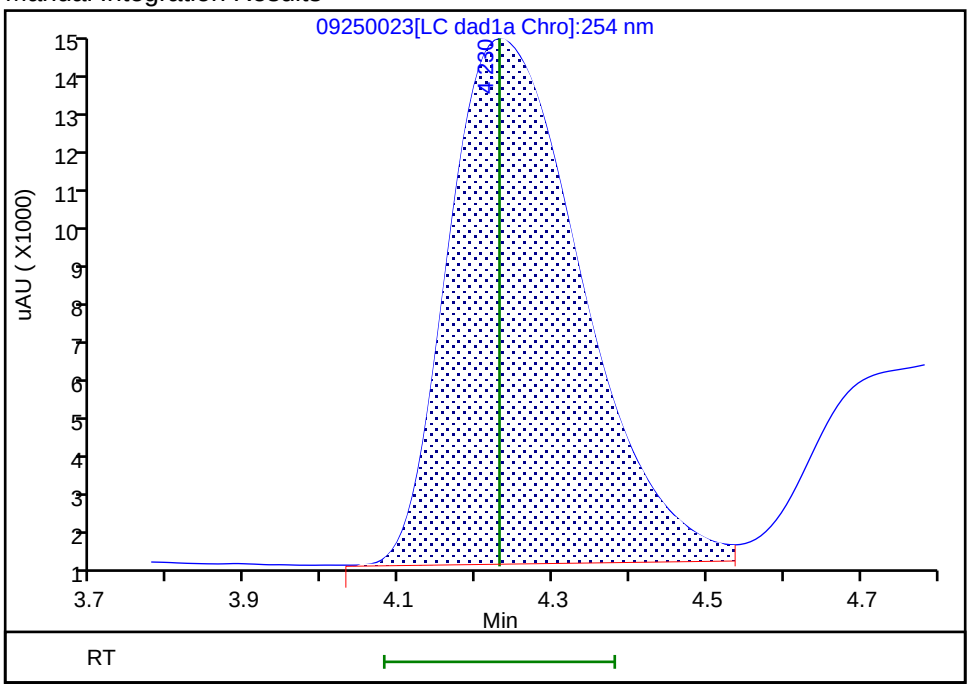
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.23
Area: 155103
Amount: 0.400118
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:14:23 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250024.D
Lims ID: IC ADD 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 26-Sep-2023 03:06:33 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC ADD 4
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub19

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:25:42 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 14:14:28

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.223	4.230	-0.007	97801	0.2500	0.2523	a
2 2,4-diamino-6-nitrotoluene	1	4.803	4.810	-0.007	59536	0.2500	0.2545	

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

8330_ADDs_00037 Amount Added: 12.50 Units: uL

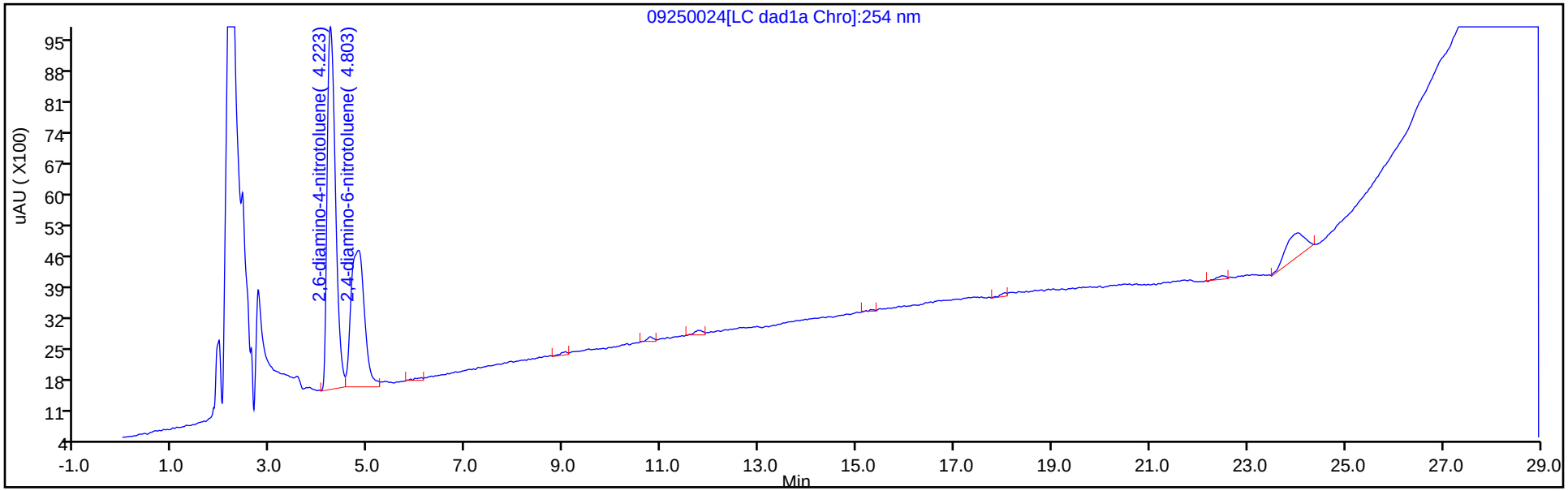
Report Date: 26-Sep-2023 15:25:42 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

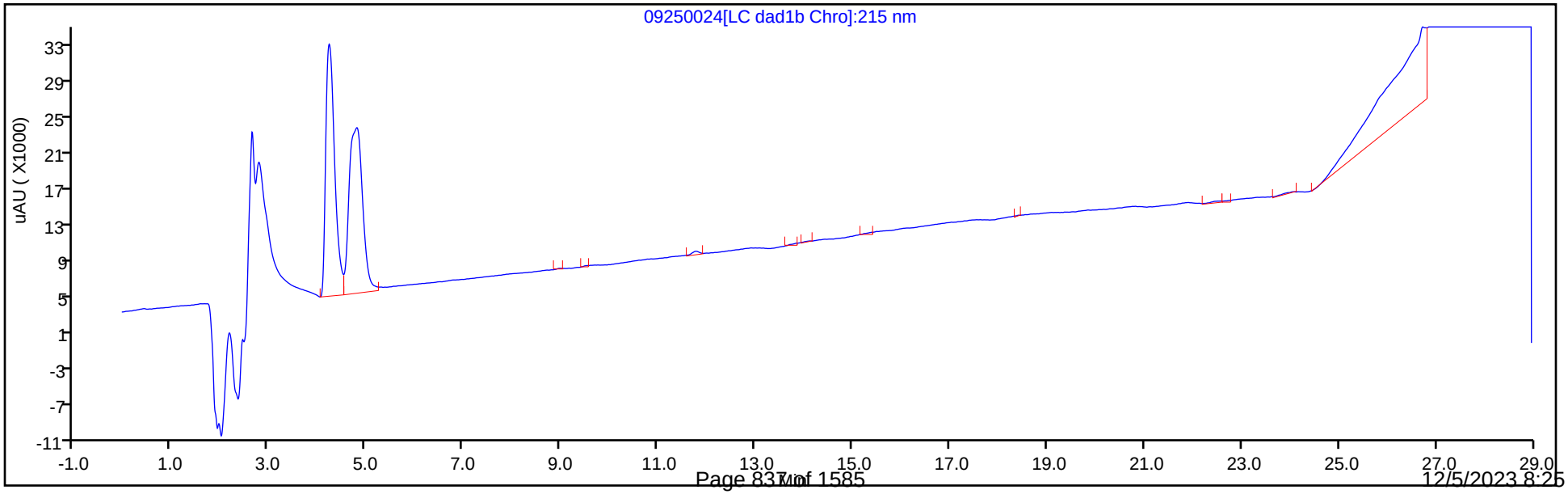
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250024.d

Injection Date:	26-Sep-2023 03:06:33	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	IC ADD 4			Worklist Smp#:	24
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

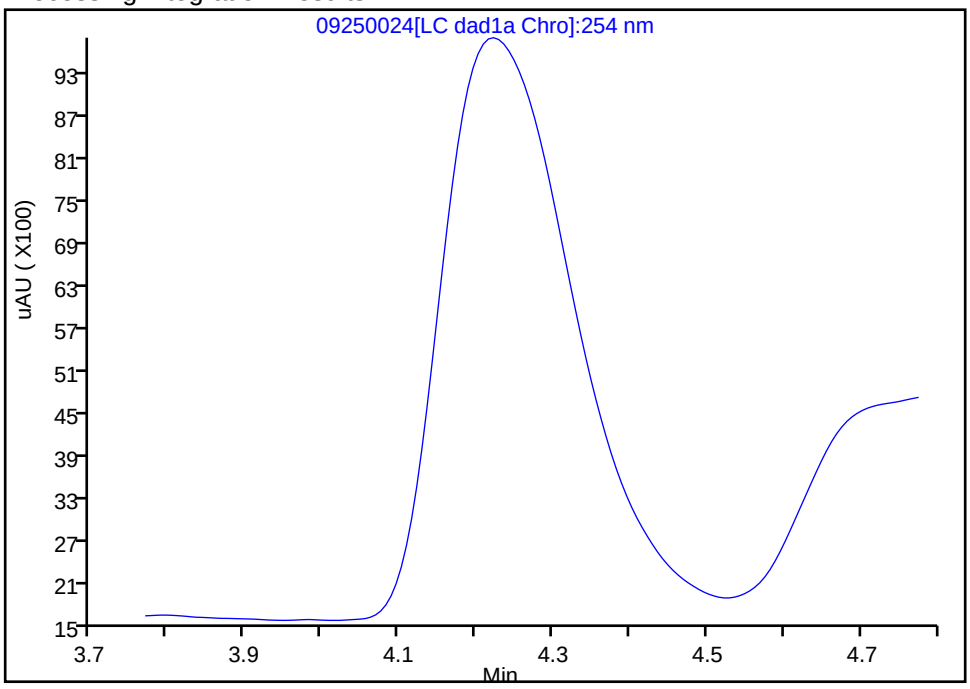
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250024.d				
Injection Date:	26-Sep-2023 03:06:33	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC ADD 4				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

1 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

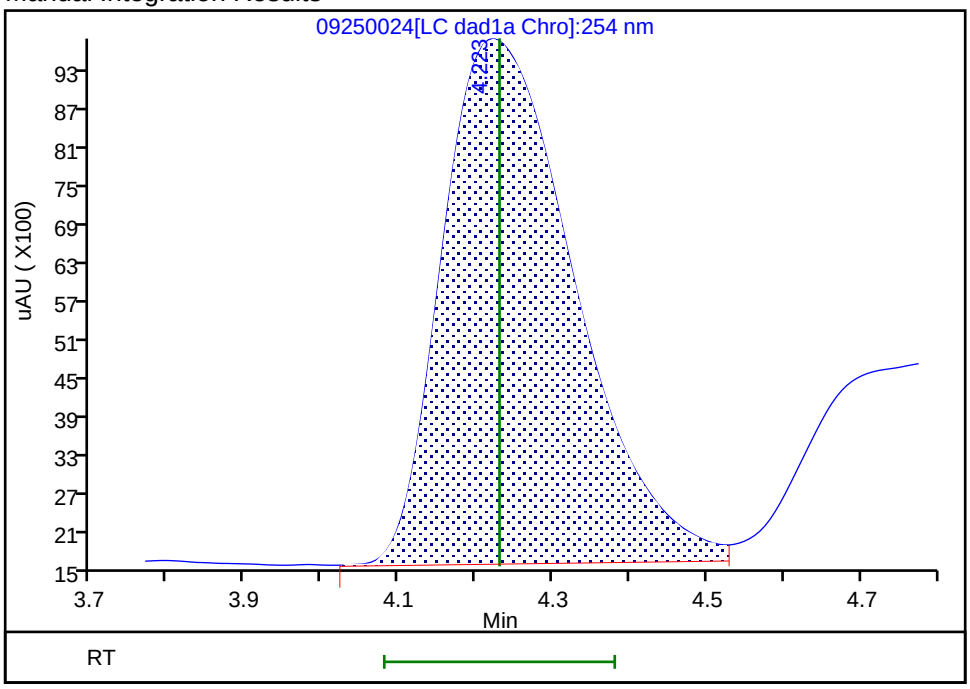
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.22
Area: 97801
Amount: 0.252297
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:14:27 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250025.D
Lims ID: IC ADD 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 26-Sep-2023 03:42:27 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC ADD 3
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub19

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:25:43 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 14:14:32

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.227	4.230	-0.003	38196	0.1000	0.0985	a
2 2,4-diamino-6-nitrotoluene	1	4.807	4.810	-0.003	23931	0.1000	0.1023	

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

8330_ADDs_00037 Amount Added: 5.00 Units: uL

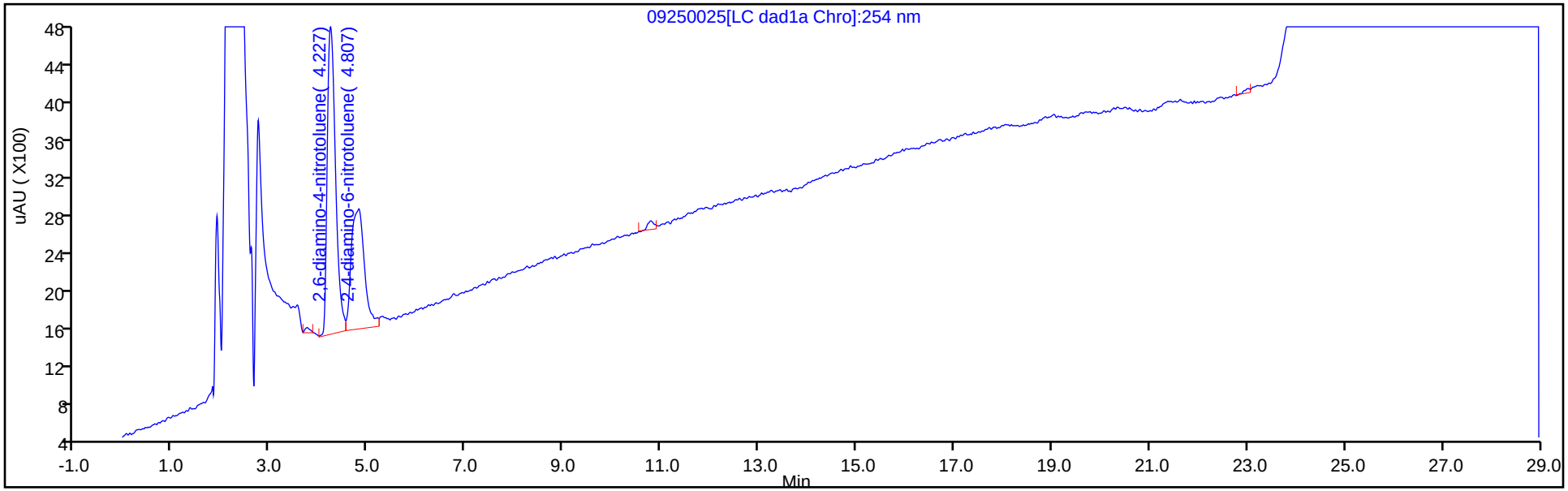
Report Date: 26-Sep-2023 15:25:43 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

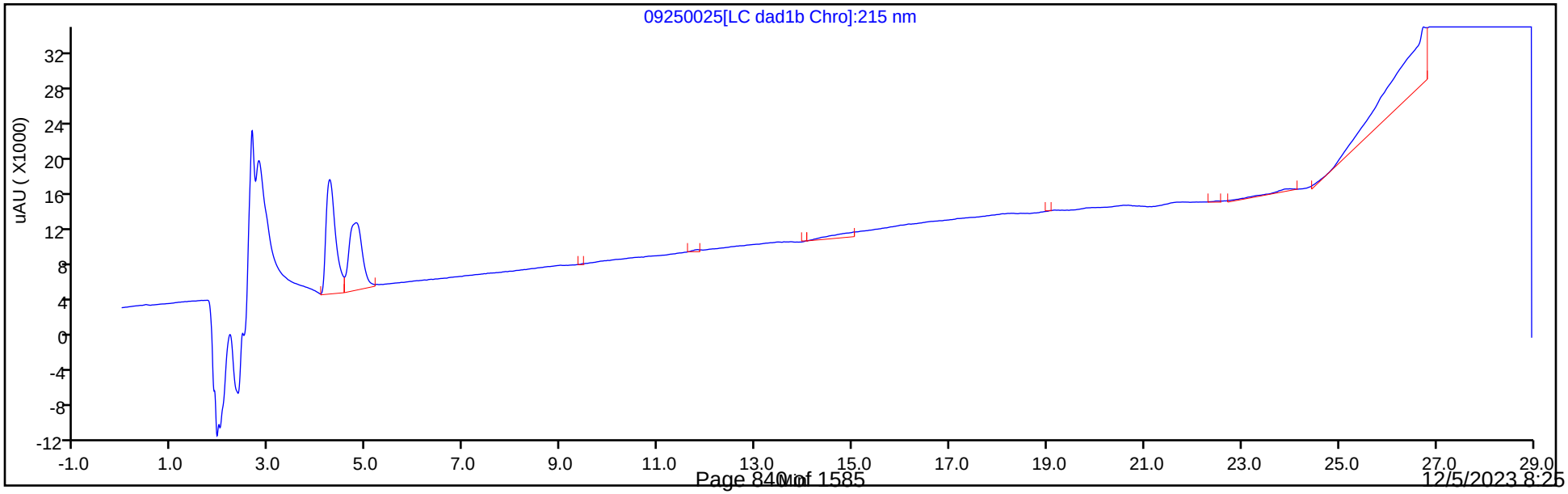
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250025.d

Injection Date:	26-Sep-2023 03:42:27	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	IC ADD 3			Worklist Smp#:	25
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

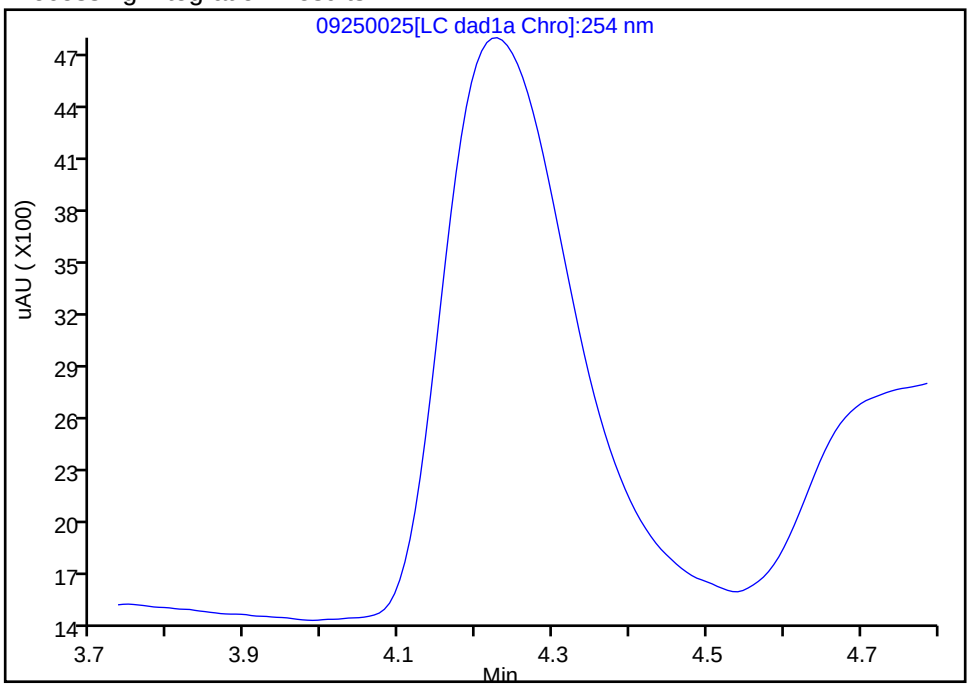
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250025.d
Injection Date: 26-Sep-2023 03:42:27 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC ADD 3
Client ID:
Operator ID: JZ/JG ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

1 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

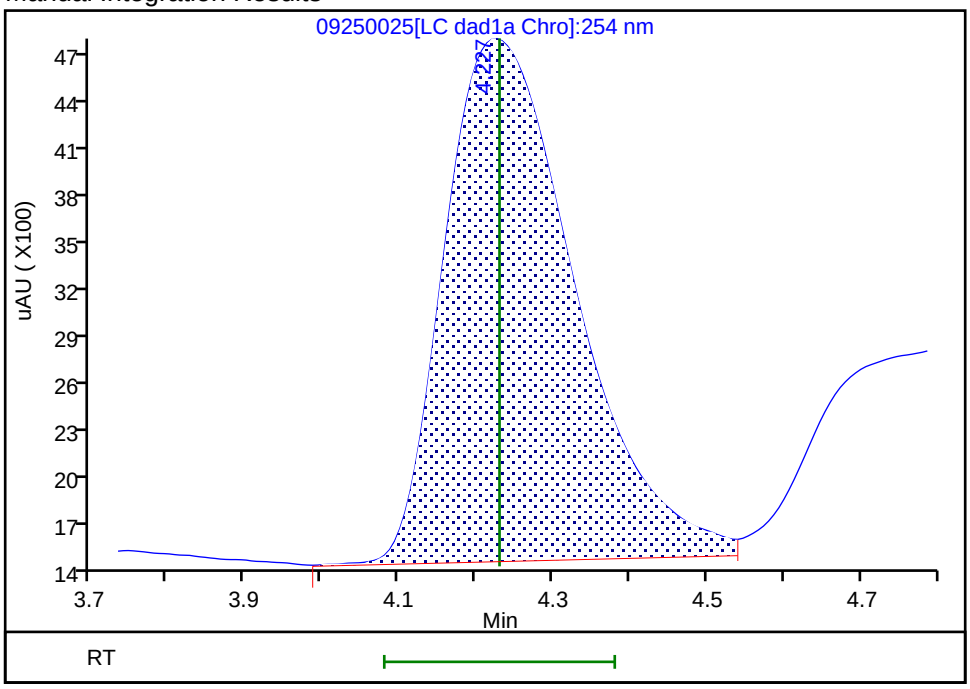
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.23
Area: 38196
Amount: 0.098534
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:14:30 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250026.D
Lims ID: IC ADD 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 26-Sep-2023 04:18:35 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC ADD 2
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub19

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:25:43 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 14:14:35

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.225	4.230	-0.005	22868	0.0400	0.0590	a
2 2,4-diamino-6-nitrotoluene	1	4.792	4.810	-0.018	14140	0.0400	0.0604	

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

8330_ADDs_00037 Amount Added: 2.00 Units: uL

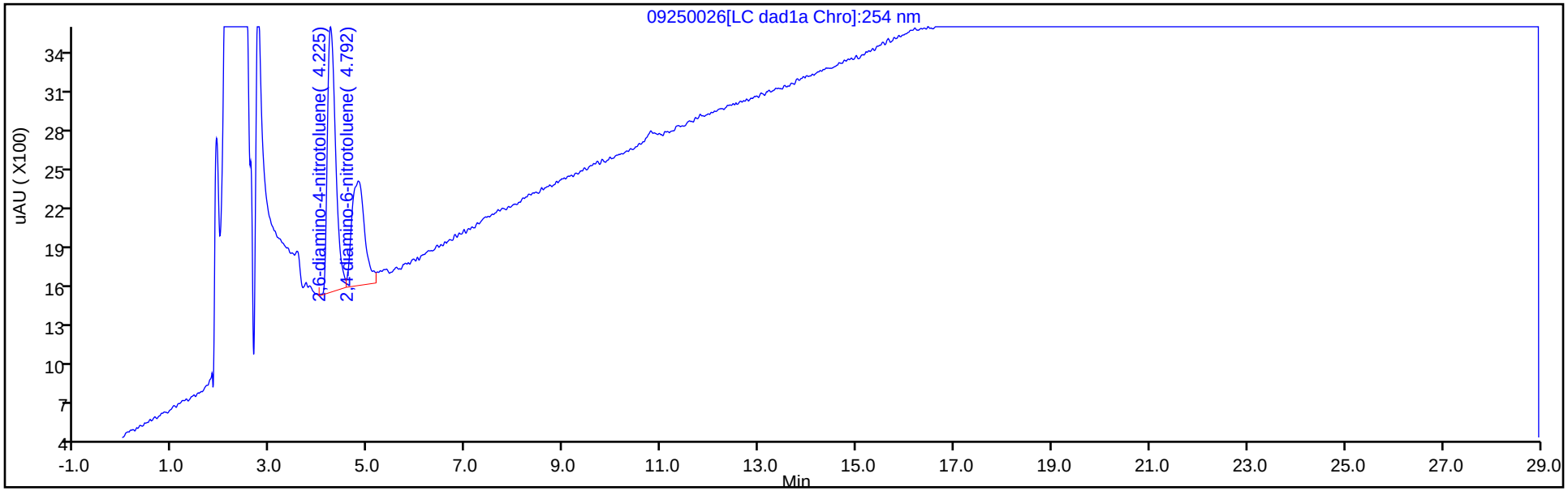
Report Date: 26-Sep-2023 15:25:44 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

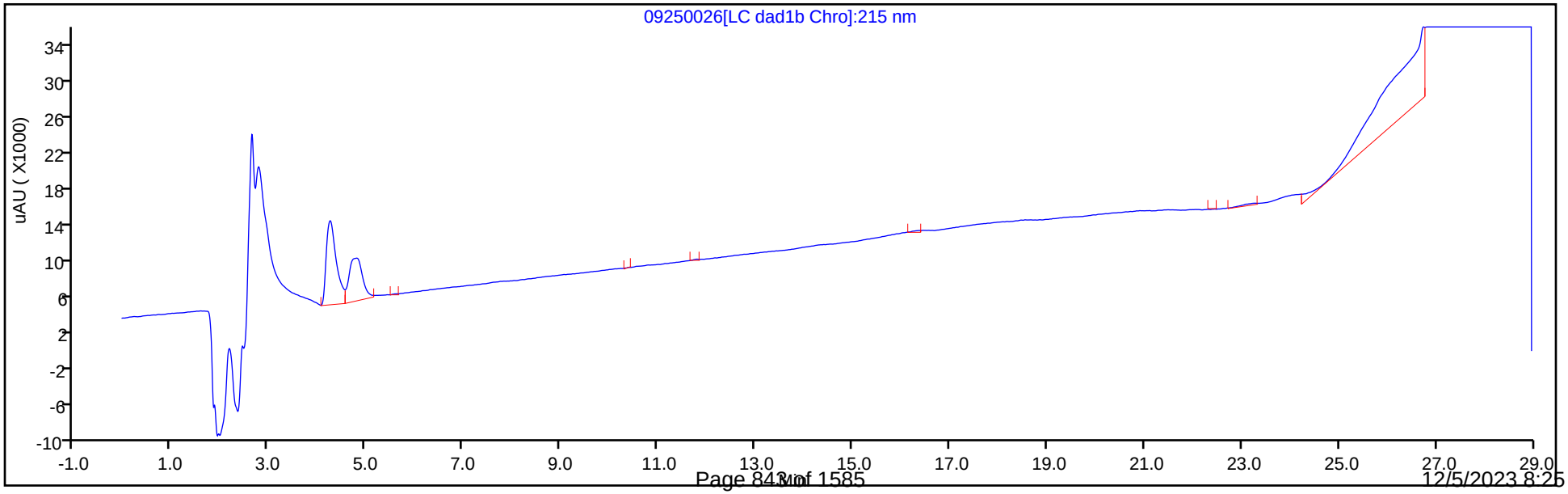
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250026.d

Injection Date:	26-Sep-2023 04:18:35	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	IC ADD 2			Worklist Smp#:	26
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

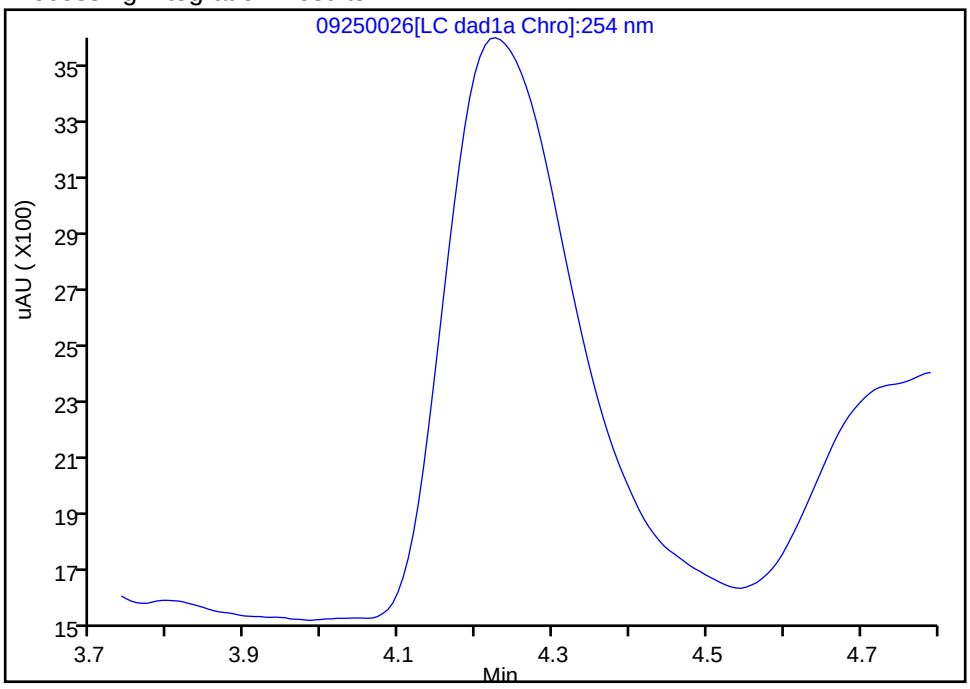
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250026.d				
Injection Date:	26-Sep-2023 04:18:35	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC ADD 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

1 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

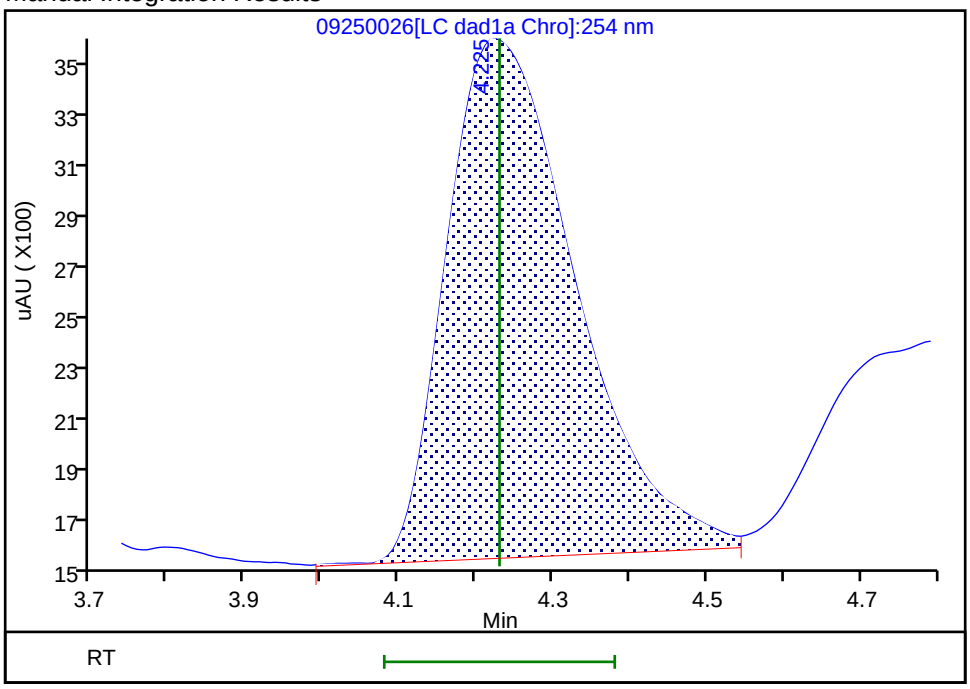
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.22
Area: 22868
Amount: 0.058992
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:14:33 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D
Lims ID: IC ADD 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 26-Sep-2023 04:54:46 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC ADD 1
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub19

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:25:44 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 14:15:01

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.230	4.230	0.000	19367	0.0200	0.0500	a
2 2,4-diamino-6-nitrotoluene	1	4.803	4.810	-0.007	12993	0.0200	0.0555	

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

8330_ADDs_00037 Amount Added: 1.00 Units: uL

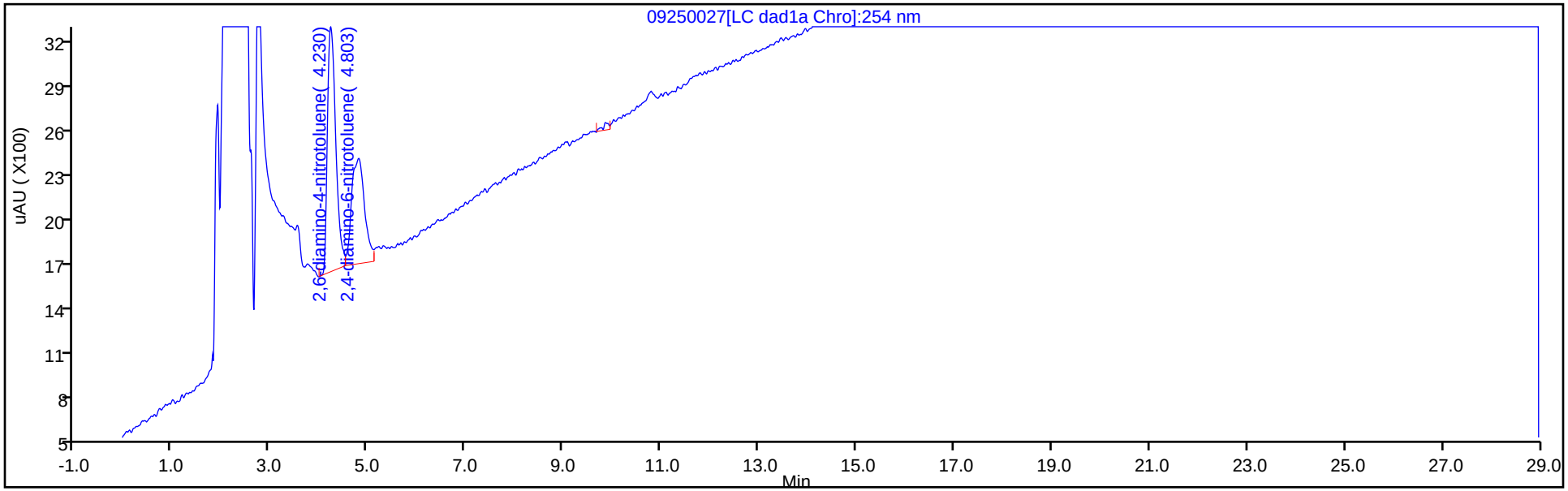
Report Date: 26-Sep-2023 15:25:44 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

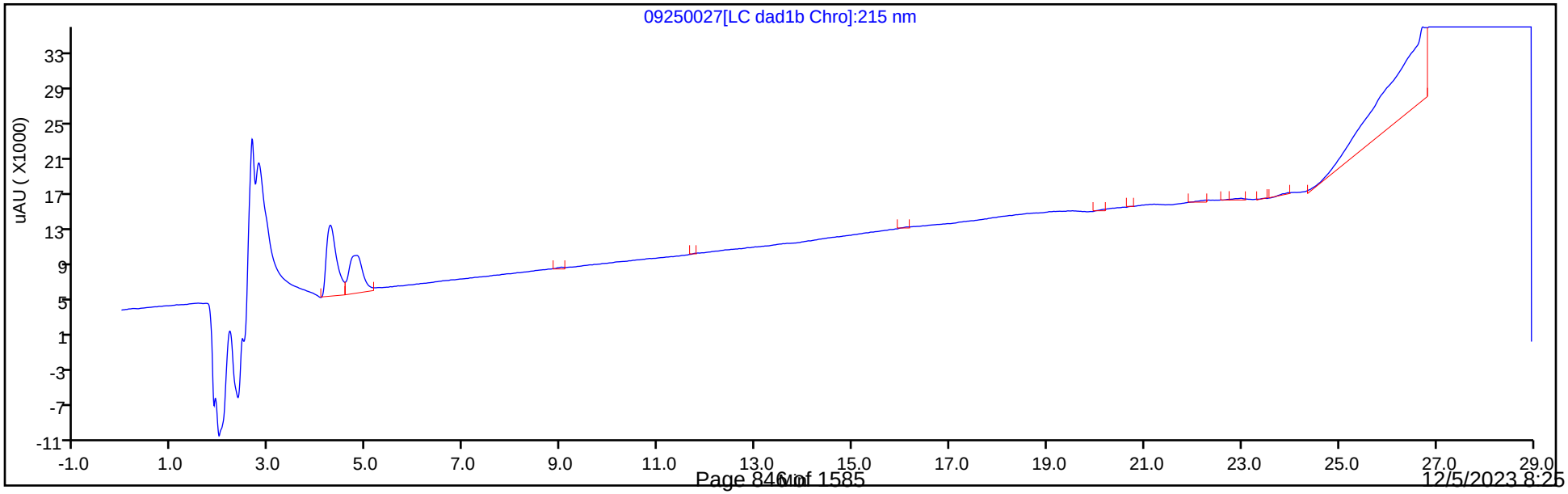
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250027.d

Injection Date:	26-Sep-2023 04:54:46	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	IC ADD 1			Worklist Smp#:	27
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

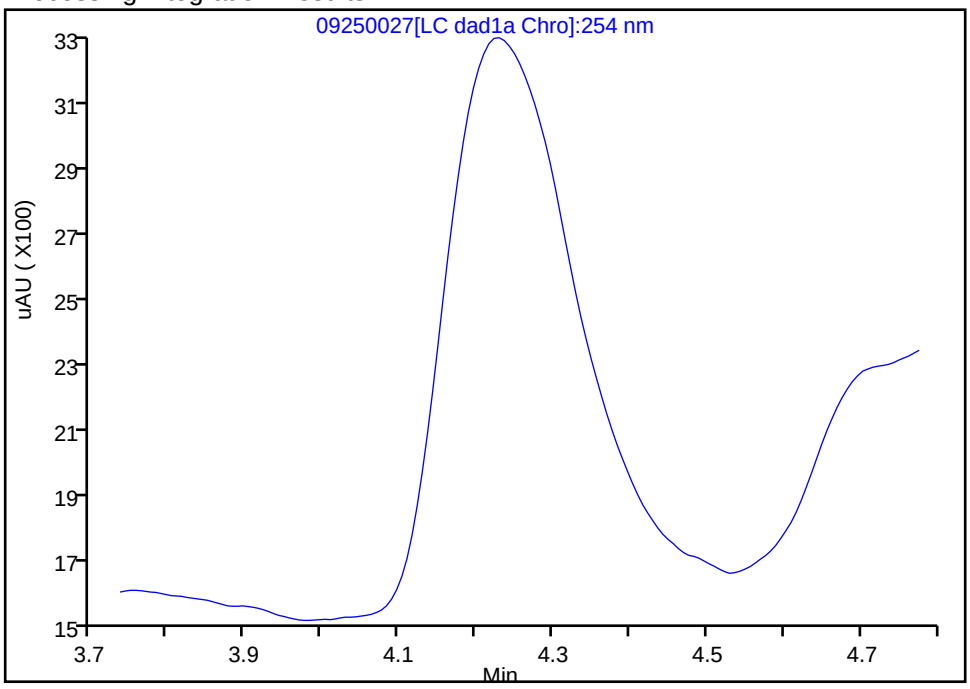
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250027.d
Injection Date: 26-Sep-2023 04:54:46 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC ADD 1
Client ID:
Operator ID: JZ/JG ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

1 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

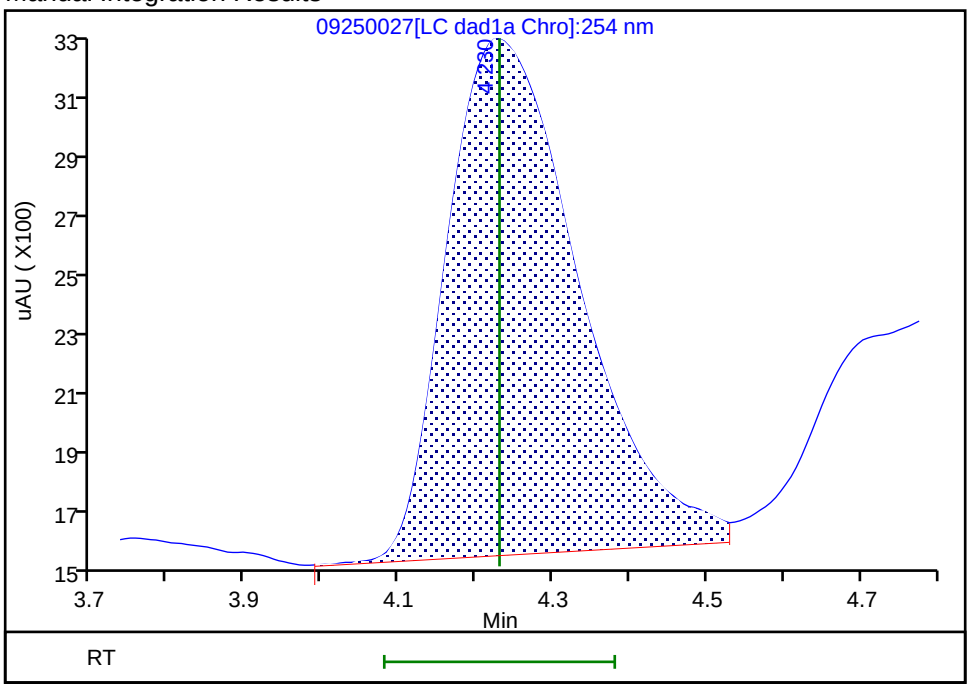
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.23
Area: 19367
Amount: 0.049961
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:14:37 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Calibration / 2,6-diamino-4-nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

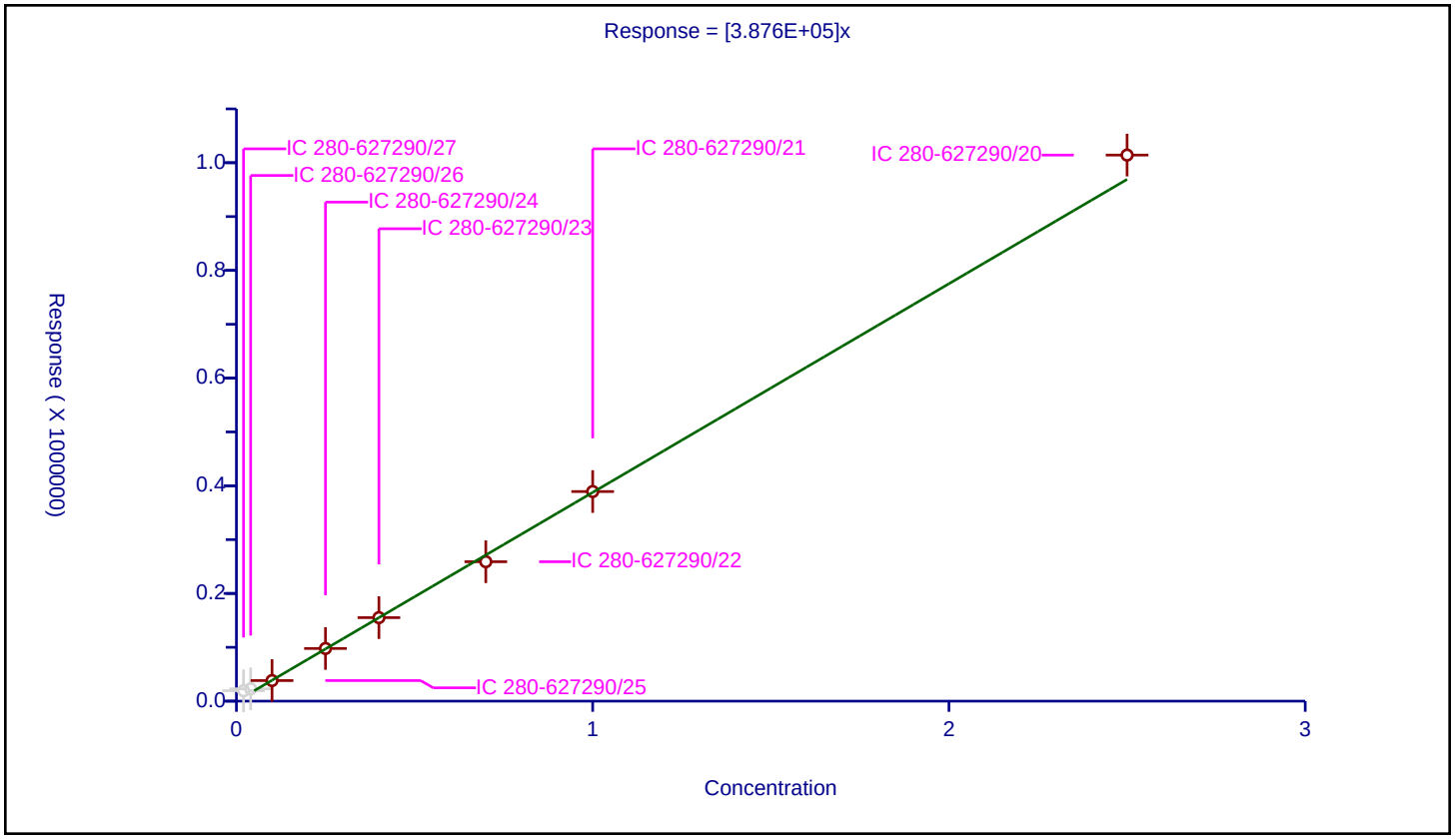
Curve Coefficients

Intercept:	0
Slope:	3.876E+05

Error Coefficients

Standard Error:	20900
Relative Standard Error:	3.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/27	0.02	19367.0			968350.0	N
2	IC 280-627290/26	0.04	22868.0			571700.0	N
3	IC 280-627290/25	0.1	38196.0			381960.0	Y
4	IC 280-627290/24	0.25	97801.0			391204.0	Y
5	IC 280-627290/23	0.4	155103.0			387757.5	Y
6	IC 280-627290/22	0.7	258964.0			369948.571429	Y
7	IC 280-627290/21	1.0	389304.0			389304.0	Y
8	IC 280-627290/20	2.5	1014207.0			405682.8	Y



Calibration / 2,4-diamino-6-nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

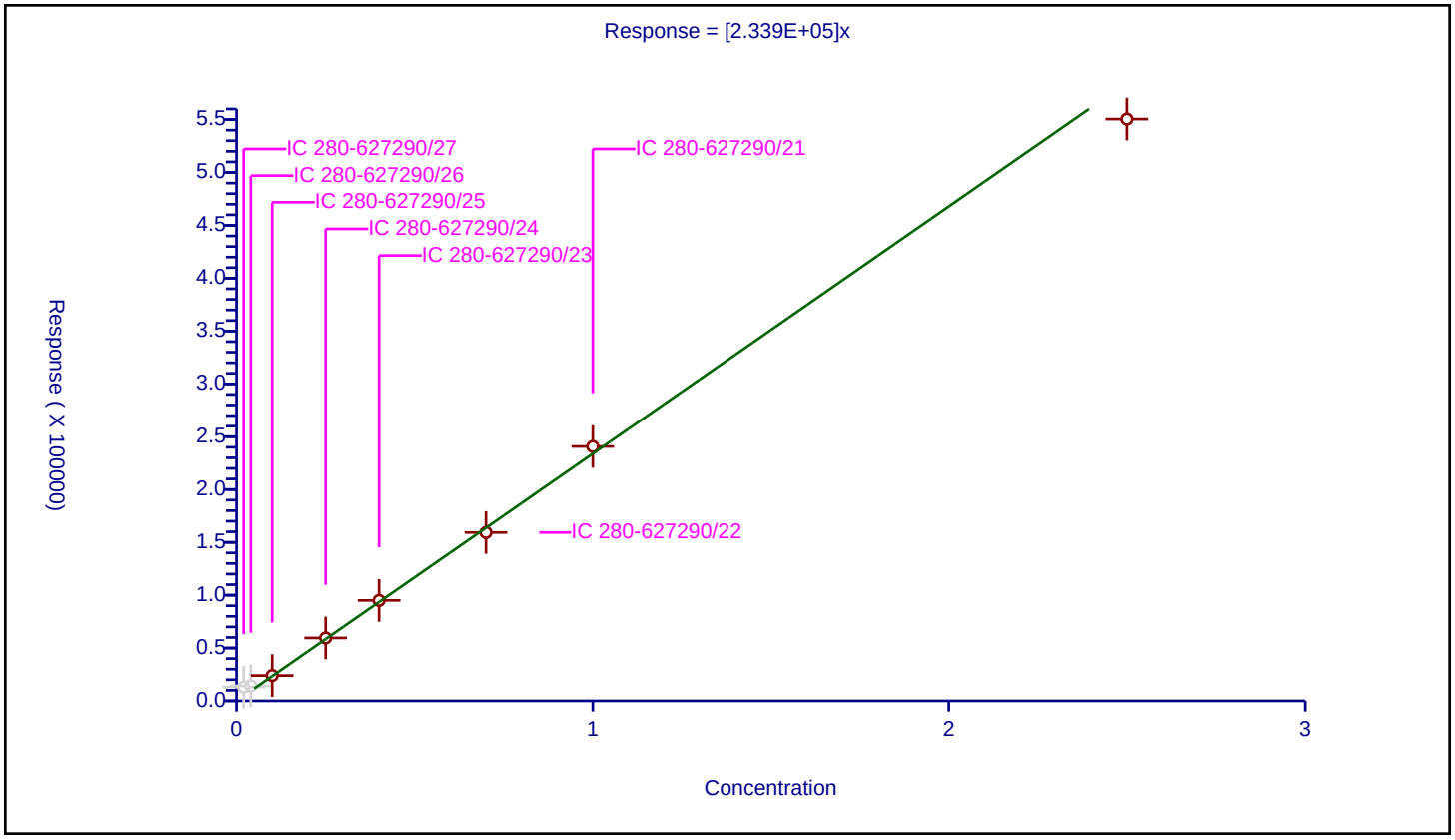
Curve Coefficients

Intercept:	0
Slope:	2.339E+05

Error Coefficients

Standard Error:	15800
Relative Standard Error:	3.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/27	0.02	12993.0			649650.0	N
2	IC 280-627290/26	0.04	14140.0			353500.0	N
3	IC 280-627290/25	0.1	23931.0			239310.0	Y
4	IC 280-627290/24	0.25	59536.0			238144.0	Y
5	IC 280-627290/23	0.4	95062.0			237655.0	Y
6	IC 280-627290/22	0.7	159343.0			227632.857143	Y
7	IC 280-627290/21	1.0	240760.0			240760.0	Y
8	IC 280-627290/20	2.5	550480.0			220192.0	Y



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver | Job No.: 280-182145-1 | Analy Batch No.: 617295

SDG No.:

Instrument ID: CHHPLC_X3 | GC Column: UltraCarb5u ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 06/23/2023 17:53 | Calibration End Date: 06/23/2023 20:57 | Calibration ID: 81926

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-617295/19	06230019.D
Level 2	IC 280-617295/18	06230018.D
Level 3	IC 280-617295/17	06230017.D
Level 4	IC 280-617295/16	06230016.D
Level 5	IC 280-617295/15	06230015.D
Level 6	IC 280-617295/14	06230014.D
Level 7	IC 280-617295/13	06230013.D
Level 8	IC 280-617295/12	06230012.D
Level 9	IC 280-617295/11	06230011.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	LVL 9		RT WINDOW	AVG RT
TNX	6.474	6.473	6.472	6.470	6.478	6.474	6.466	6.470	6.463		6.370 - 6.570	6.471
HMX	6.601	6.593	6.598	6.597	6.598	6.600	6.593	6.597	6.590		6.447 - 6.747	6.596
DNX	6.801	6.799	6.798	6.803	6.805	6.807	6.800	6.797	6.797		6.703 - 6.903	6.801
MNX	7.241	7.233	7.232	7.237	7.238	7.240	7.233	7.230	7.223		7.087 - 7.387	7.234
RDX	7.627	7.619	7.625	7.623	7.625	7.627	7.626	7.623	7.617		7.473 - 7.773	7.624
Picric acid	8.041	8.026	8.032	8.030	8.025	8.020	8.006	7.997	7.957		7.880 - 8.180	8.015
1,3,5-Trinitrobenzene	8.714	8.699	8.712	8.710	8.711	8.714	8.713	8.710	8.703		8.560 - 8.860	8.710
1,3-Dinitrobenzene	9.334	9.326	9.338	9.336	9.338	9.340	9.340	9.343	9.330		9.186 - 9.486	9.336
Nitrobenzene	9.714	9.699	9.711	9.710	9.711	9.713	9.713	9.716	9.703		9.560 - 9.860	9.710
3,5-Dinitroaniline	9.941	9.932	9.945	9.943	9.945	9.947	9.953	9.950	9.936		9.793 - 10.093	9.944
Tetryl	10.081	10.066	10.085	10.083	10.085	10.087	10.093	10.096	10.083		9.933 - 10.233	10.084
Nitroglycerin	10.534	10.526	10.538	10.536	10.545	10.540	10.546	10.550	10.530		10.386 - 10.686	10.538
2,4,6-Trinitrotoluene	10.974	10.959	10.978	10.976	10.985	10.980	10.986	10.990	10.976		10.876 - 11.076	10.978
4-Amino-2,6-dinitrotoluene	11.174	11.159	11.178	11.170	11.178	11.180	11.180	11.190	11.170		11.070 - 11.270	11.175
2-Amino-4,6-dinitrotoluene	11.421	11.412	11.431	11.423	11.431	11.433	11.433	11.443	11.423		11.323 - 11.523	11.428
2,6-Dinitrotoluene	11.574	11.566	11.585	11.576	11.585	11.587	11.586	11.603	11.576		11.476 - 11.676	11.582
2,4-Dinitrotoluene	11.741	11.732	11.751	11.743	11.758	11.753	11.753	11.770	11.750		11.643 - 11.843	11.750
2-Nitrotoluene	12.567	12.559	12.585	12.570	12.585	12.587	12.580	12.603	12.576		12.420 - 12.720	12.579
4-Nitrotoluene	12.994	12.979	13.005	12.983	13.011	13.007	13.000	13.023	12.996		12.833 - 13.133	13.000
3-Nitrotoluene	13.554	13.552	13.578	13.556	13.585	13.580	13.573	13.603	13.576		13.406 - 13.706	13.573
PETN	14.721	14.719	14.751	14.723	14.765	14.760	14.746	14.790	14.763		14.573 - 14.873	14.749
1,2-Dinitrobenzene	8.594	8.579	8.585	8.590	8.591	8.594	8.593	8.590	8.583		8.440 - 8.740	8.589

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-182145-1 Analy Batch No.: 617295

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/23/2023 17:53 Calibration End Date: 06/23/2023 20:57 Calibration ID: 81926

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-617295/19	06230019.D
Level 2	IC 280-617295/18	06230018.D
Level 3	IC 280-617295/17	06230017.D
Level 4	IC 280-617295/16	06230016.D
Level 5	IC 280-617295/15	06230015.D
Level 6	IC 280-617295/14	06230014.D
Level 7	IC 280-617295/13	06230013.D
Level 8	IC 280-617295/12	06230012.D
Level 9	IC 280-617295/11	06230011.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
TNX	218345 199282 202810	194267 190950	198903 201995	199432 200863	Ave		200760.909				3.8		20.0			
HMX	104800 93284 93922	98000 89623	89920 93704	92010 93035	Ave		94255.3540				4.9		20.0			
DNX	141059 145443 150089	130869 142877	145834 149216	147113 147935	Ave		144492.787				4.1		20.0			
MNX	155184 135373 135234	135176 133762	139692 138336	138586 136855	Ave		138688.620				4.7		20.0			
RDX	122500 108156 107283	111700 106285	109440 107483	114570 107019	Ave		110492.851				4.7		20.0			
Picric acid	75600 77048 79416	72350 78670	79580 79549	79510 79045	Ave		77863.1079				3.2		20.0			
1,3,5-Trinitrobenzene	201900 220552 221605	204150 222658	216100 222134	216840 218769	Ave		216078.621				3.6		20.0			
1,3-Dinitrobenzene	290100 293424 298160	279950 295148	293680 295721	298900 295042	Ave		293347.214				1.9		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-182145-1 Analy Batch No.: 617295

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/23/2023 17:53 Calibration End Date: 06/23/2023 20:57 Calibration ID: 81926

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
Nitrobenzene	202000 190284 194953	186550 191388	191220 192774	193090 192007	Ave		192696.176				2.2		20.0			
3,5-Dinitroaniline	215100 223884 228641	213100 226128	223360 223811	224860 223593	Lin2	-127.03053	225169.737							1.0000		0.9900
Tetryl	154600 168428 171425	162400 169073	164640 172947	169610 172187	Ave		167256.605				3.5		20.0			
Nitroglycerin	60470 64467 66333	63410 67620	62508 65912	65270 65866	Ave		64650.6462				3.4		20.0			
2,4,6-Trinitrotoluene	191800 206336 208465	199050 207430	205380 208274	209070 208313	Ave		204902.054				2.8		20.0			
4-Amino-2,6-dinitrotoluene	146400 147684 149596	155550 149973	148620 149269	150580 148367	Ave		149559.741				1.7		20.0			
2-Amino-4,6-dinitrotoluene	195000 192472 199138	193150 192890	192080 191494	193020 194204	Ave		193716.432				1.2		20.0			
2,6-Dinitrotoluene	137300 142012 139214	145800 143420	143200 144666	144950 143182	Ave		142638.190				1.9		20.0			
2,4-Dinitrotoluene	294100 292196 301304	291450 296063	296000 297416	298110 294715	Ave		295705.957				1.0		20.0			
2-Nitrotoluene	129100 123032 125800	127800 124178	128060 124377	129120 123644	Ave		126123.360				1.9		20.0			
4-Nitrotoluene	116500 104936 107763	120200 106565	110860 107116	110570 106286	Ave		110088.390				4.7		20.0			
3-Nitrotoluene	187000 135416 138231	167050 136003	145640 136367	140010 135553	Lin2	535.002088	135553.140							1.0000		0.9900

Note: The M1 coefficient is the same as Ave CF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-182145-1 Analy Batch No.: 617295

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/23/2023 17:53 Calibration End Date: 06/23/2023 20:57 Calibration ID: 81926

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
PETN	73280 71671 73155	68185 72517	71842 72738	72200 72573	Ave		72017.9754				2.1		20.0			
1,2-Dinitrobenzene	117200 124272 124483	118950 125155	125000 125046	127830 127262	Ave		123910.879				2.9		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver | Job No.: 280-182145-1 | Analy Batch No.: 617295

SDG No.:

Instrument ID: CHHPLC_X3 | GC Column: UltraCarb5 ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 06/23/2023 17:53 | Calibration End Date: 06/23/2023 20:57 | Calibration ID: 81926

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-617295/19	06230019.D
Level 2	IC 280-617295/18	06230018.D
Level 3	IC 280-617295/17	06230017.D
Level 4	IC 280-617295/16	06230016.D
Level 5	IC 280-617295/15	06230015.D
Level 6	IC 280-617295/14	06230014.D
Level 7	IC 280-617295/13	06230013.D
Level 8	IC 280-617295/12	06230012.D
Level 9	IC 280-617295/11	06230011.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		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
TNX	Ave	2190 76609	3897 141821	9975 201466	20003 508547	49970	0.0100 0.401	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251
HMX	Ave	1048 35849	1960 65593	4496 93035	9201 234806	23321	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
DNX	Ave	1412 57208	2620 104556	7299 148083	14726 375597	36397	0.0100 0.400	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250
MNX	Ave	1811 62440	3155 113007	8151 159710	16173 394545	39495	0.0117 0.467	0.0233 0.817	0.0584 1.17	0.117 2.92	0.292
RDX	Ave	1225 42514	2234 75238	5472 107019	11457 268207	27039	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Picric acid	Ave	756 31468	1447 55684	3979 79045	7951 198541	19262	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
1,3,5-Trinitrobenzene	Ave	2019 89063	4083 155494	10805 218769	21684 554012	55138	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
1,3-Dinitrobenzene	Ave	2901 118059	5599 207005	14684 295042	29890 745400	73356	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Nitrobenzene	Ave	2020 76555	3731 134942	9561 192007	19309 487382	47571	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
3,5-Dinitroaniline	Lin2	2151 90451	4262 156668	11168 223593	22486 571603	55971	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Tetryl	Ave	1546 67629	3248 121063	8232 172187	16961 428562	42107	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Nitroglycerin	Ave	6047 270481	12682 461386	31254 658658	65270 1658317	161167	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
2,4,6-Trinitrotoluene	Ave	1918 82972	3981 145792	10269 208313	20907 521163	51584	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
4-Amino-2,6-dinitrotoluene	Ave	1464 59989	3111 104488	7431 148367	15058 373989	36921	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2-Amino-4,6-dinitrotoluene	Ave	1950	3863	9604	19302	48118	0.0100	0.0200	0.0500	0.100	0.250

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-182145-1 Analy Batch No.: 617295

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5 ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/23/2023 17:53 Calibration End Date: 06/23/2023 20:57 Calibration ID: 81926

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		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
		77156	134046	194204	497844		0.400	0.700	1.00	2.50	
2,6-Dinitrotoluene	Ave	1373 57368	2916 101266	7160 143182	14495 348035	35503	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2,4-Dinitrotoluene	Ave	2941 118425	5829 208191	14800 294715	29811 753261	73049	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2-Nitrotoluene	Ave	1291 49671	2556 87064	6403 123644	12912 314499	30758	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
4-Nitrotoluene	Ave	1165 42626	2404 74981	5543 106286	11057 269407	26234	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
3-Nitrotoluene	Lin2	1870 54401	3341 95457	7282 135553	14001 345577	33854	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
PETN	Ave	7328 290067	13637 509169	35921 725734	72200 1828875	179178	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
1,2-Dinitrobenzene	Ave	1172 50062	2379 87532	6250 127262	12783 311208	31068	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250

Curve Type Legend:
Ave = Average
Lin2 = Linear 1/conc^2

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230011.D
Lims ID: IC INT/DMT 9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 23-Jun-2023 17:53:55 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/DMT 9
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2023 12:55:47 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1681

First Level Reviewer: LV5D Date: 23-Jun-2023 18:20:21

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.463	6.470	-0.007	508547	2.51	2.53	Ma
4 HMX	1	6.590	6.597	-0.007	234806	2.50	2.49	M
6 DNX	1	6.797	6.803	-0.006	375597	2.50	2.60	M
7 MNX	1	7.223	7.237	-0.014	394545	2.92	2.84	M
8 RDX	1	7.617	7.623	-0.006	268207	2.50	2.43	
9 2,4,6-Trinitrophenol	1	7.957	8.030	-0.073	198541	2.50	2.55	
$ 10 1,2-Dinitrobenzene	1	8.583	8.590	-0.007	311208	2.50	2.51	
11 1,3,5-Trinitrobenzene	1	8.703	8.710	-0.007	554012	2.50	2.56	
12 1,3-Dinitrobenzene	1	9.330	9.336	-0.006	745400	2.50	2.54	
13 Nitrobenzene	1	9.703	9.710	-0.007	487382	2.50	2.53	
14 3,5-Dinitroaniline	1	9.936	9.943	-0.007	571603	2.50	2.54	
15 Tetryl	1	10.083	10.083	0.000	428562	2.50	2.56	
16 Nitroglycerin	2	10.530	10.536	-0.006	1658317	25.0	25.7	
17 2,4,6-Trinitrotoluene	1	10.976	10.976	0.000	521163	2.50	2.54	
18 4-Amino-2,6-dinitrotoluene	1	11.170	11.170	0.000	373989	2.50	2.50	
19 2-Amino-4,6-dinitrotoluene	1	11.423	11.423	0.000	497844	2.50	2.57	
20 2,6-Dinitrotoluene	1	11.576	11.576	0.000	348035	2.50	2.44	
21 2,4-Dinitrotoluene	1	11.750	11.743	0.007	753261	2.50	2.55	
22 o-Nitrotoluene	1	12.576	12.570	0.006	314499	2.50	2.49	
23 p-Nitrotoluene	1	12.996	12.983	0.013	269407	2.50	2.45	
24 m-Nitrotoluene	1	13.576	13.556	0.020	345577	2.50	2.55	
25 PETN	2	14.763	14.723	0.040	1828875	25.0	25.4	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00077	Amount Added: 250.00	Units: uL
8330 DMT_00013	Amount Added: 125.00	Units: uL

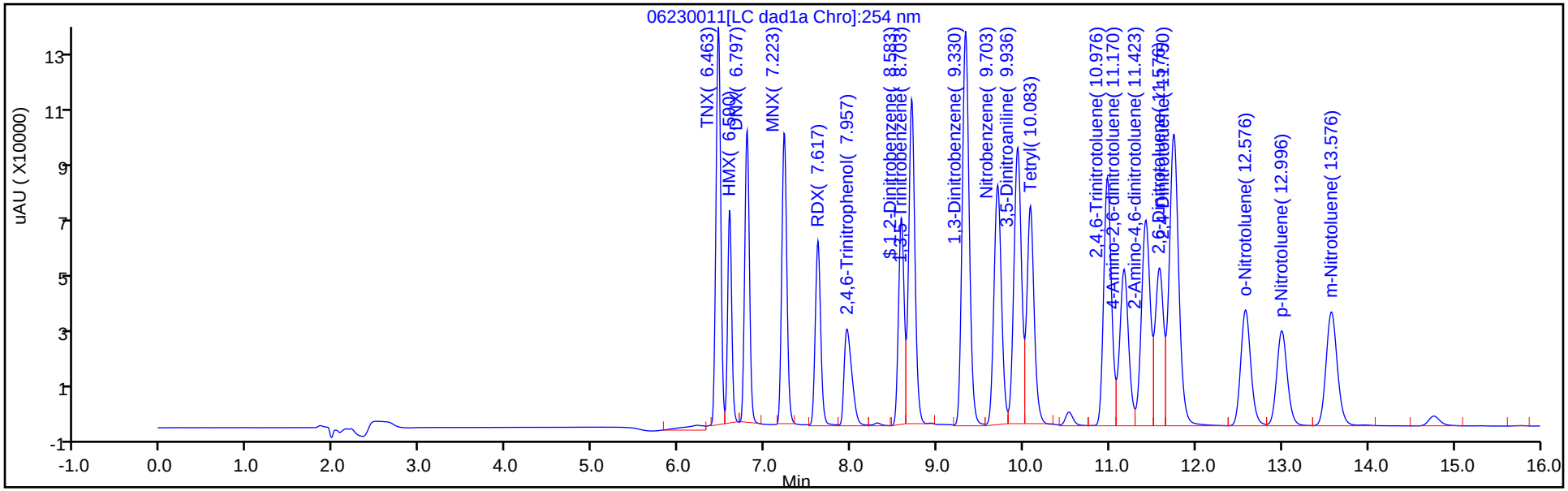
Report Date: 24-Jun-2023 12:55:47 Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Denver

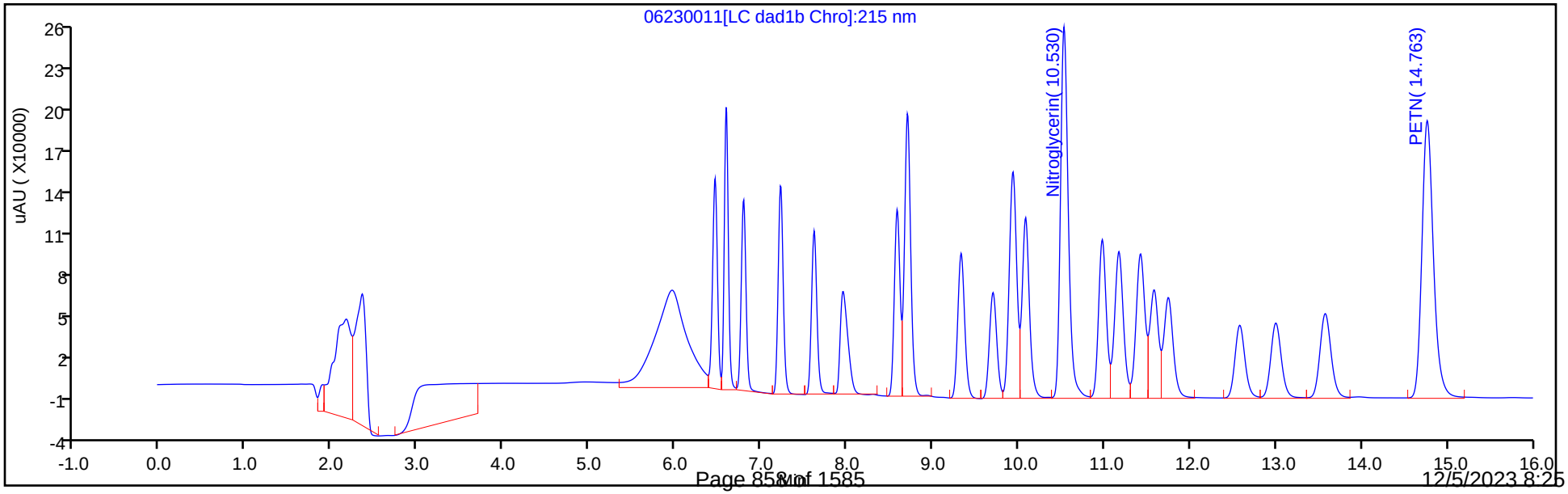
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230011.d

Injection Date:	23-Jun-2023 17:53:55	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	IC INT/DMT 9			Worklist Smp#:	11
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

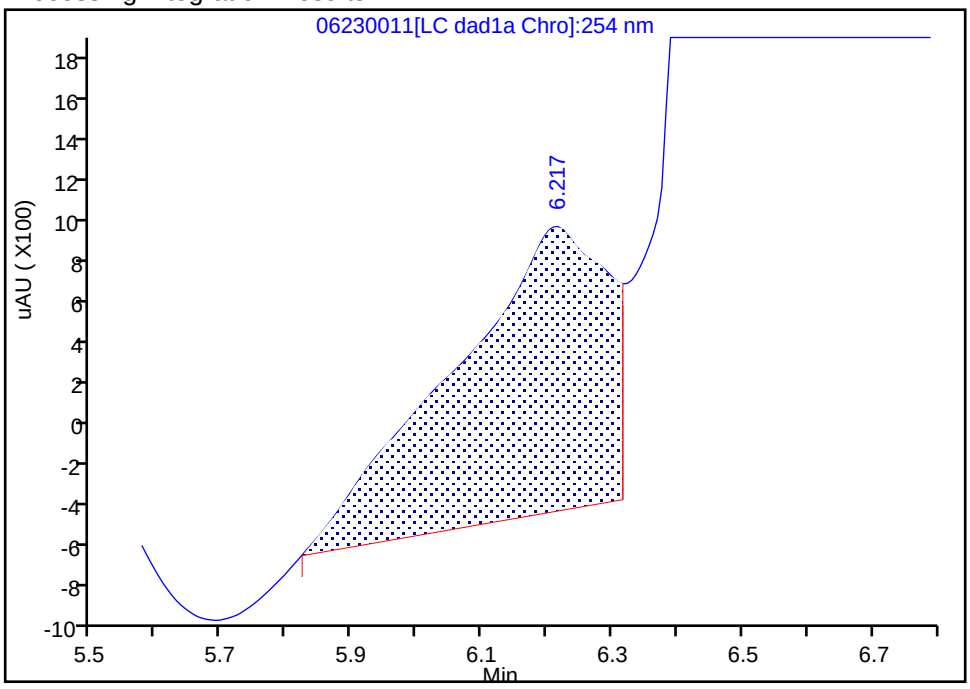
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Injection Date:	23-Jun-2023 17:53:55	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

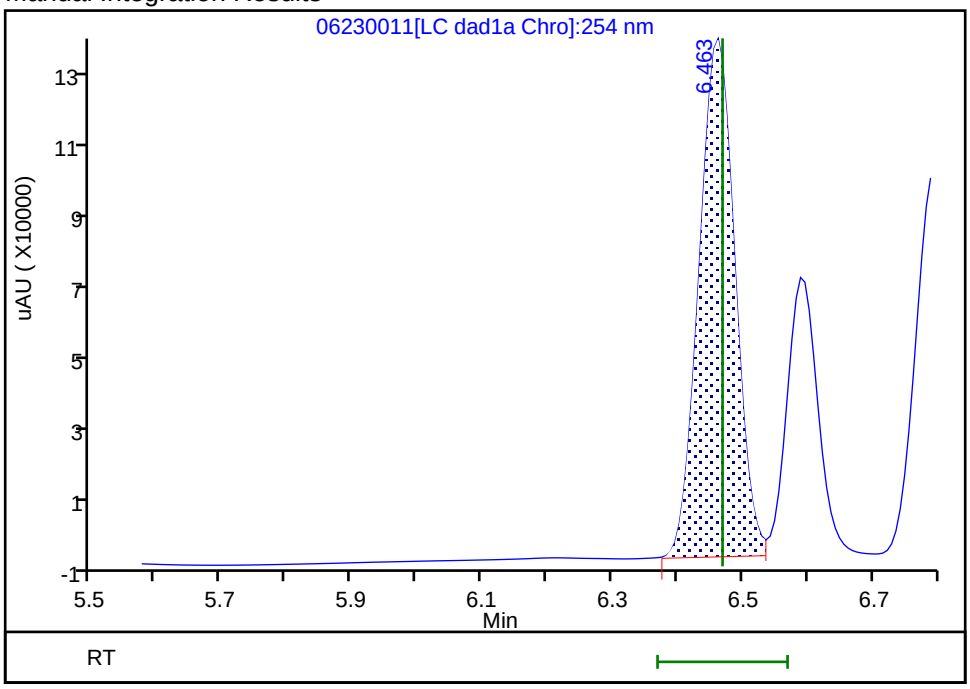
Processing Integration Results

RT: 6.22
Area: 22780
Amount: 0.128896
Amount Units: ug/mL



Manual Integration Results

RT: 6.46
Area: 508547
Amount: 2.533098
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 18:20:12 -06:00:00 (UTC)

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

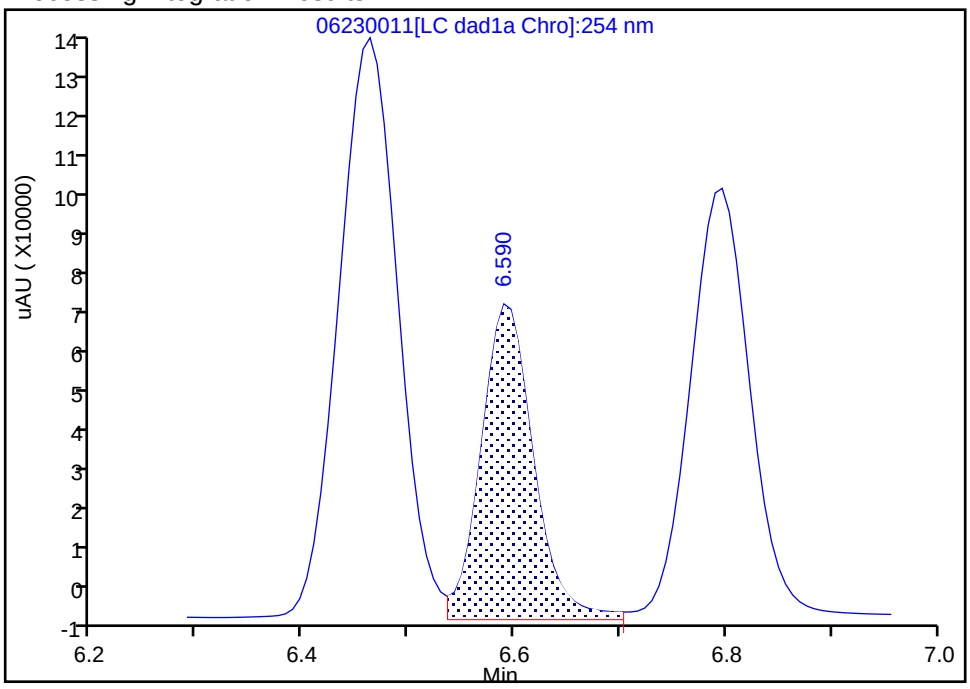
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Injection Date: 23-Jun-2023 17:53:55 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 9
Client ID:
Operator ID: JZ/JG ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

4 HMX, CAS: 2691-41-0

Signal: 1

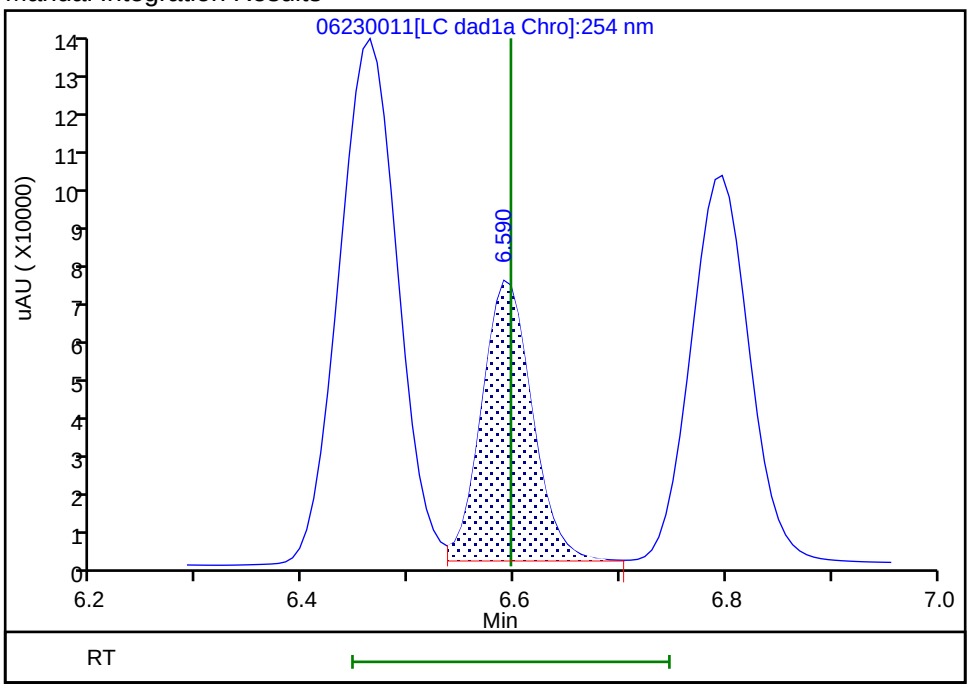
Processing Integration Results

RT: 6.59
Area: 250801
Amount: 2.654489
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 234806
Amount: 2.491169
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 18:20:04 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

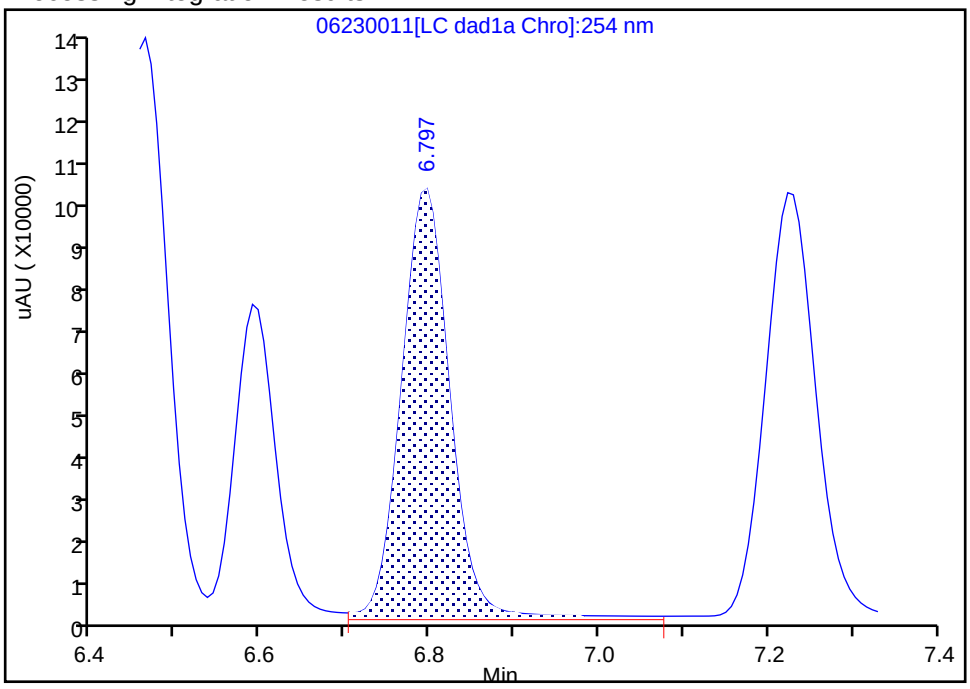
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Injection Date:	23-Jun-2023 17:53:55	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

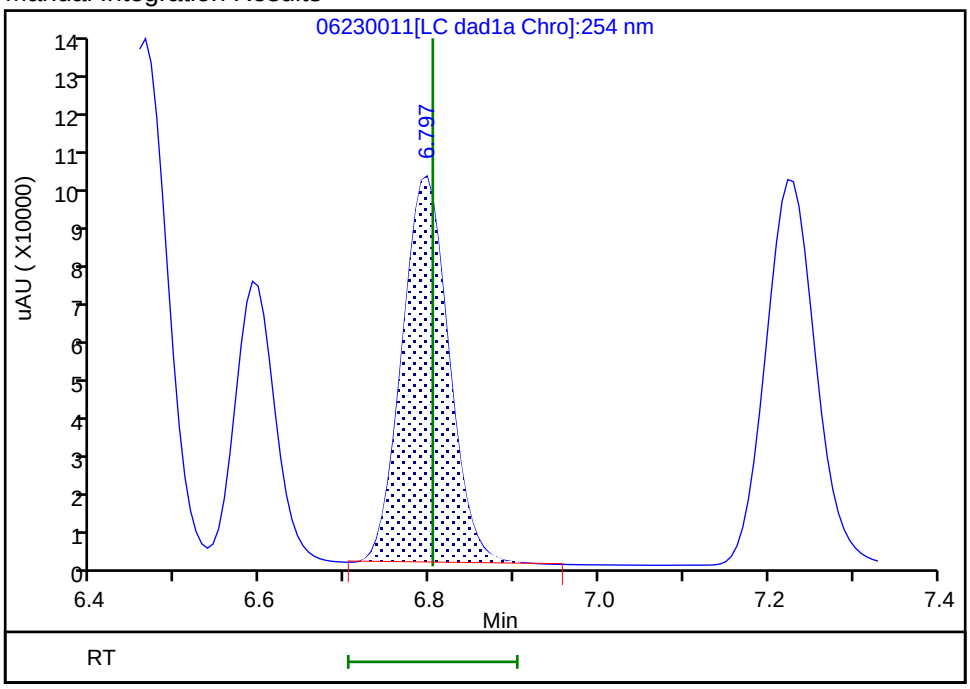
Processing Integration Results

RT: 6.80
Area: 401390
Amount: 2.744869
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 375597
Amount: 2.599417
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 18:19:56 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

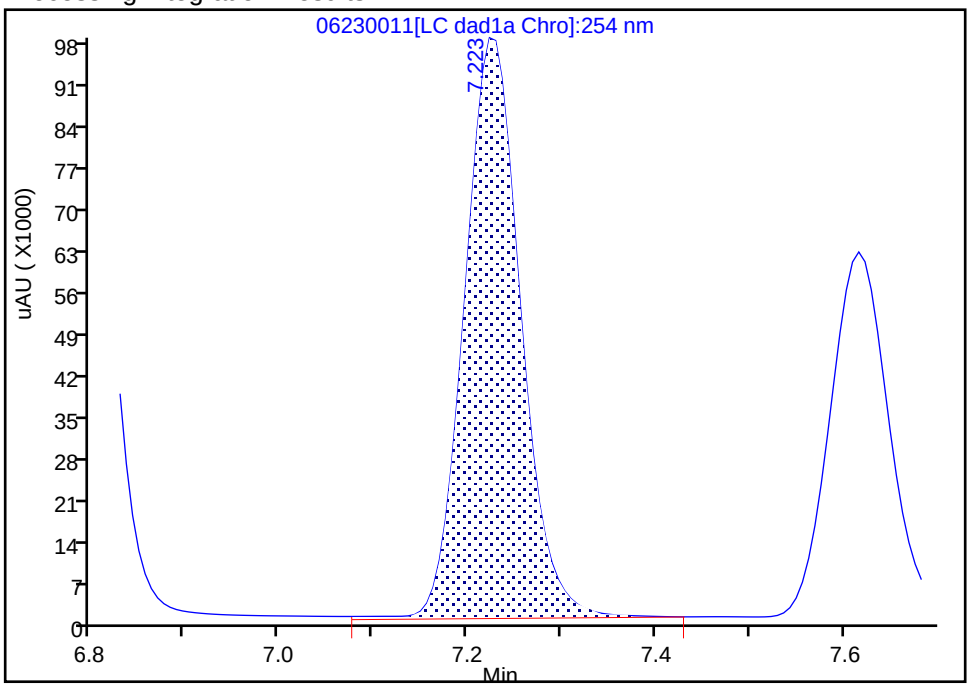
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230011.d				
Injection Date:	23-Jun-2023 17:53:55	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

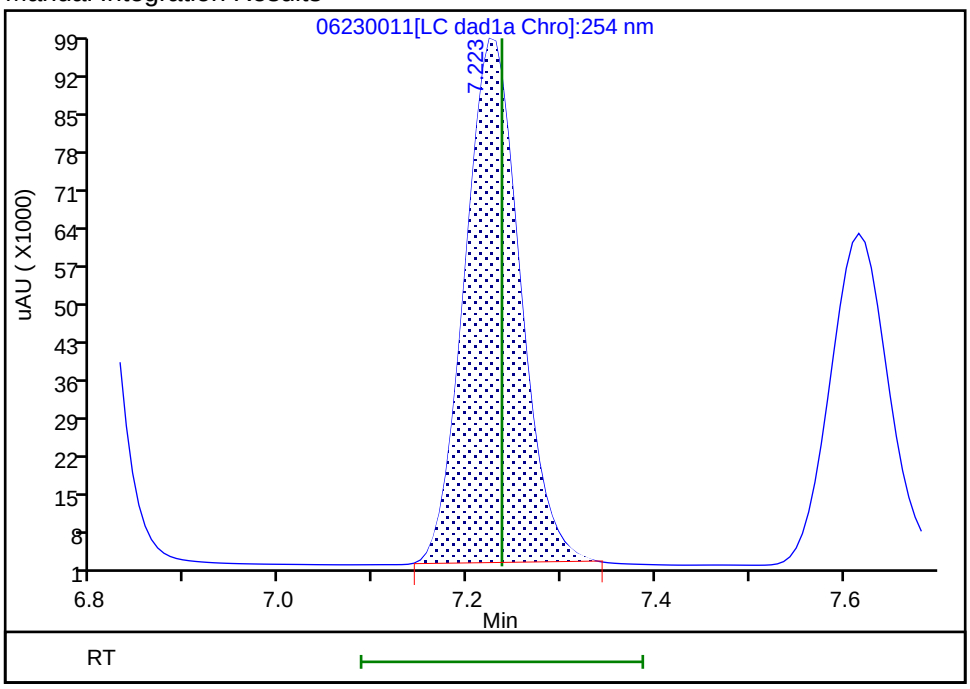
Processing Integration Results

RT: 7.22
Area: 409944
Amount: 3.100717
Amount Units: ug/mL



Manual Integration Results

RT: 7.22
Area: 394545
Amount: 2.844826
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 18:20:19 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230012.D
Lims ID: IC INT/DMT 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 23-Jun-2023 18:16:50 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/DMT 8
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2023 12:55:48 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1681

First Level Reviewer: LV5D Date: 23-Jun-2023 18:54:16

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.470	6.470	0.000	201466	1.00	1.00	M
4 HMX	1	6.597	6.597	0.000	93035	1.00	0.9871	M
6 DNX	1	6.797	6.803	-0.006	148083	1.00	1.02	M
7 MNX	1	7.230	7.237	-0.007	159710	1.17	1.15	
8 RDX	1	7.623	7.623	0.000	107019	1.00	0.9686	
9 2,4,6-Trinitrophenol	1	7.997	8.030	-0.033	79045	1.00	1.02	
$ 10 1,2-Dinitrobenzene	1	8.590	8.590	0.000	127262	1.00	1.03	
11 1,3,5-Trinitrobenzene	1	8.710	8.710	0.000	218769	1.00	1.01	
12 1,3-Dinitrobenzene	1	9.343	9.336	0.007	295042	1.00	1.01	
13 Nitrobenzene	1	9.716	9.710	0.006	192007	1.00	1.00	
14 3,5-Dinitroaniline	1	9.950	9.943	0.007	223593	1.00	0.99	
15 Tetryl	1	10.096	10.083	0.013	172187	1.00	1.03	
16 Nitroglycerin	2	10.550	10.536	0.014	658658	10.0	10.2	
17 2,4,6-Trinitrotoluene	1	10.990	10.976	0.014	208313	1.00	1.02	
18 4-Amino-2,6-dinitrotoluene	1	11.190	11.170	0.020	148367	1.00	0.99	
19 2-Amino-4,6-dinitrotoluene	1	11.443	11.423	0.020	194204	1.00	1.00	
20 2,6-Dinitrotoluene	1	11.603	11.576	0.027	143182	1.00	1.00	
21 2,4-Dinitrotoluene	1	11.770	11.743	0.027	294715	1.00	1.00	
22 o-Nitrotoluene	1	12.603	12.570	0.033	123644	1.00	0.9803	
23 p-Nitrotoluene	1	13.023	12.983	0.040	106286	1.00	0.9655	
24 m-Nitrotoluene	1	13.603	13.556	0.047	135553	1.00	1.00	
25 PETN	2	14.790	14.723	0.067	725734	10.0	10.1	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00013	Amount Added: 50.00	Units: uL
8330IntermStk_00077	Amount Added: 100.00	Units: uL

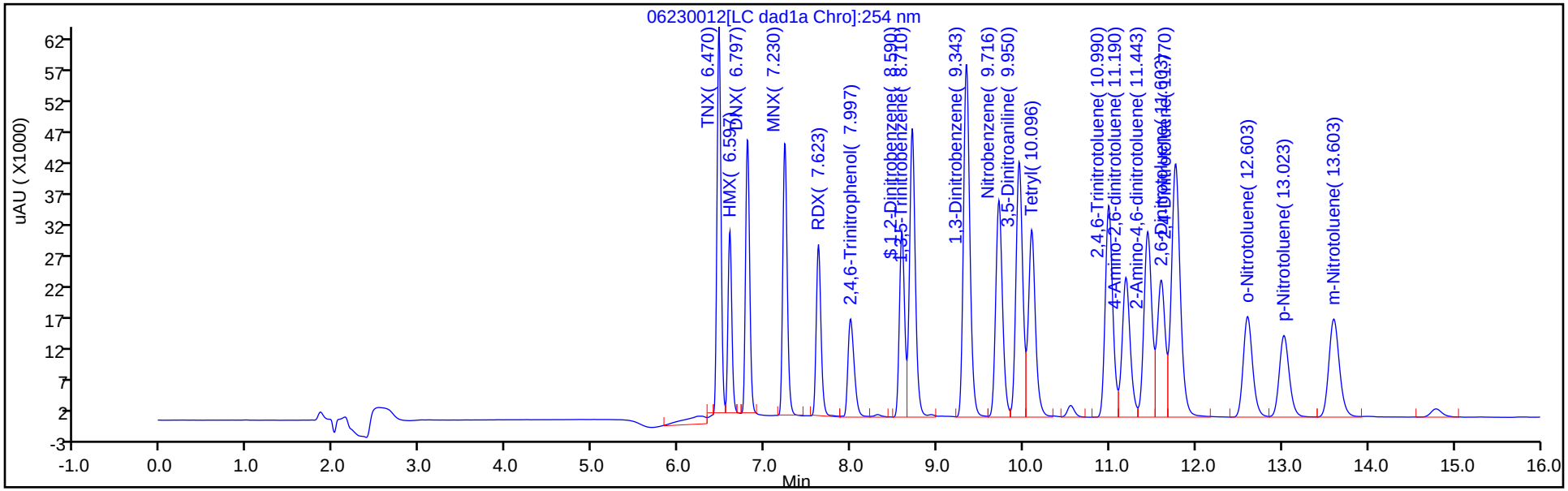
Report Date: 24-Jun-2023 12:55:48 Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Denver

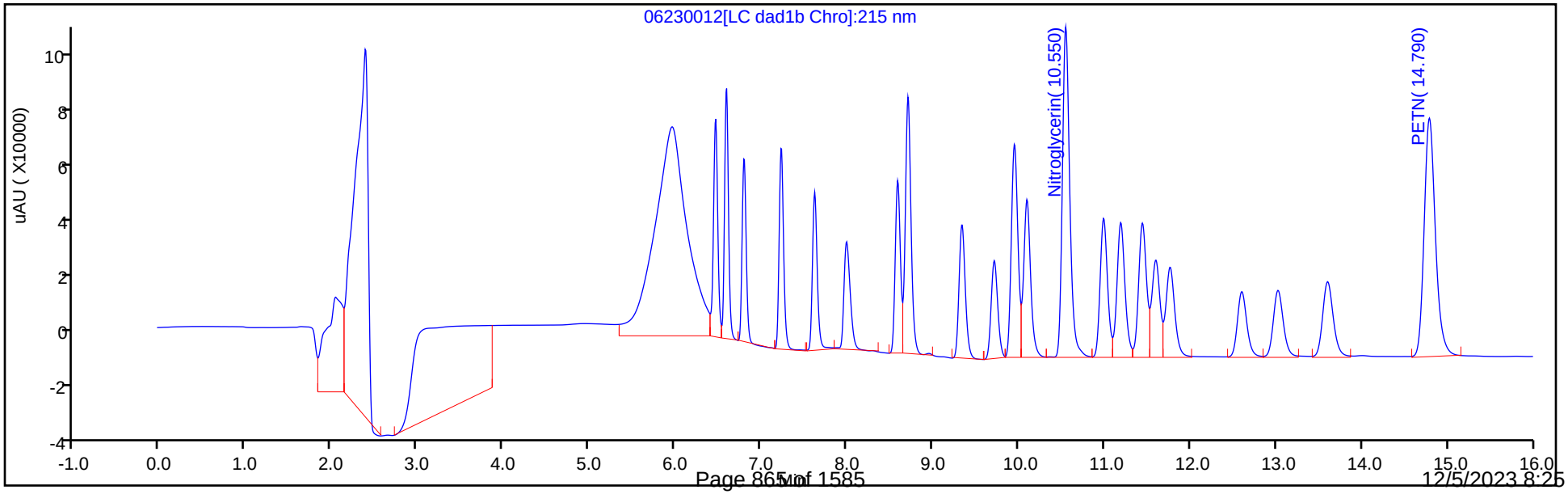
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230012.d

Injection Date:	23-Jun-2023 18:16:50	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	IC INT/DMT 8			Worklist Smp#:	12
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

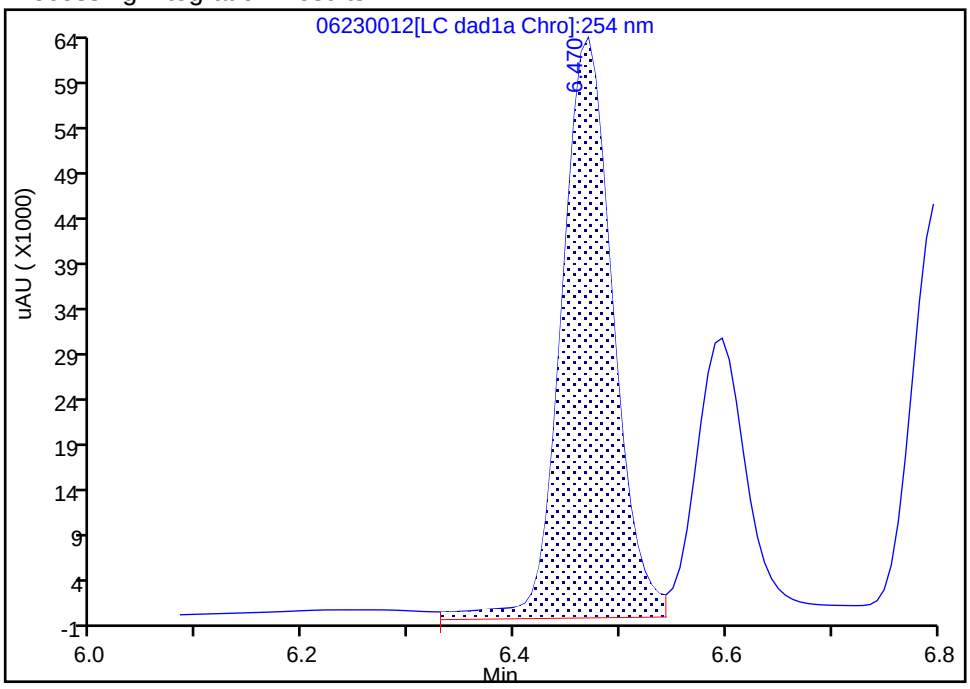
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Injection Date:	23-Jun-2023 18:16:50	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 8				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

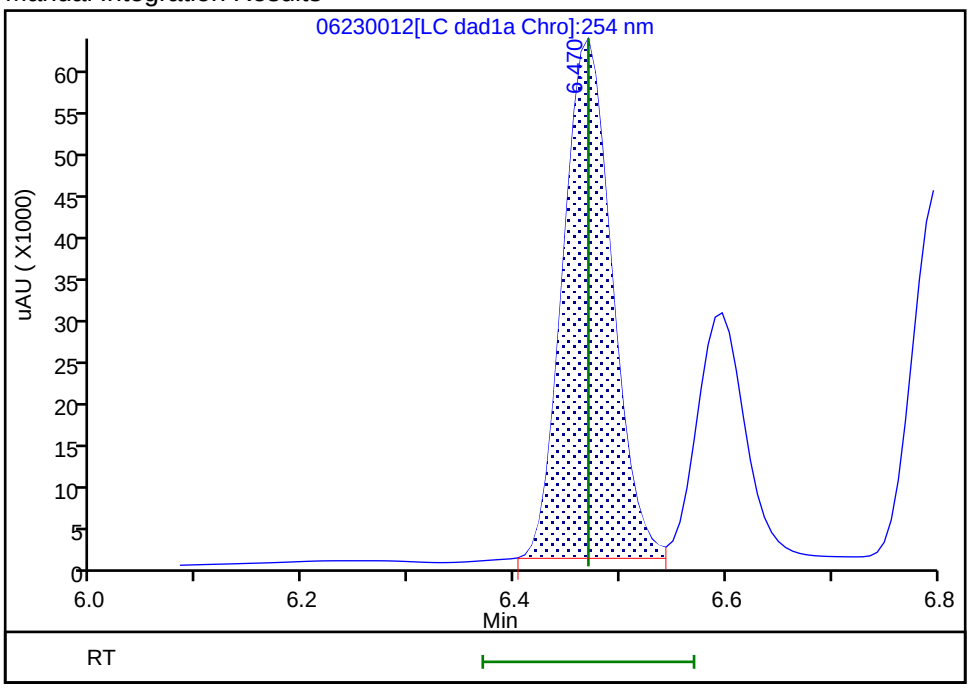
Processing Integration Results

RT: 6.47
Area: 216616
Amount: 1.084797
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 201466
Amount: 1.003512
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 18:54:07 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

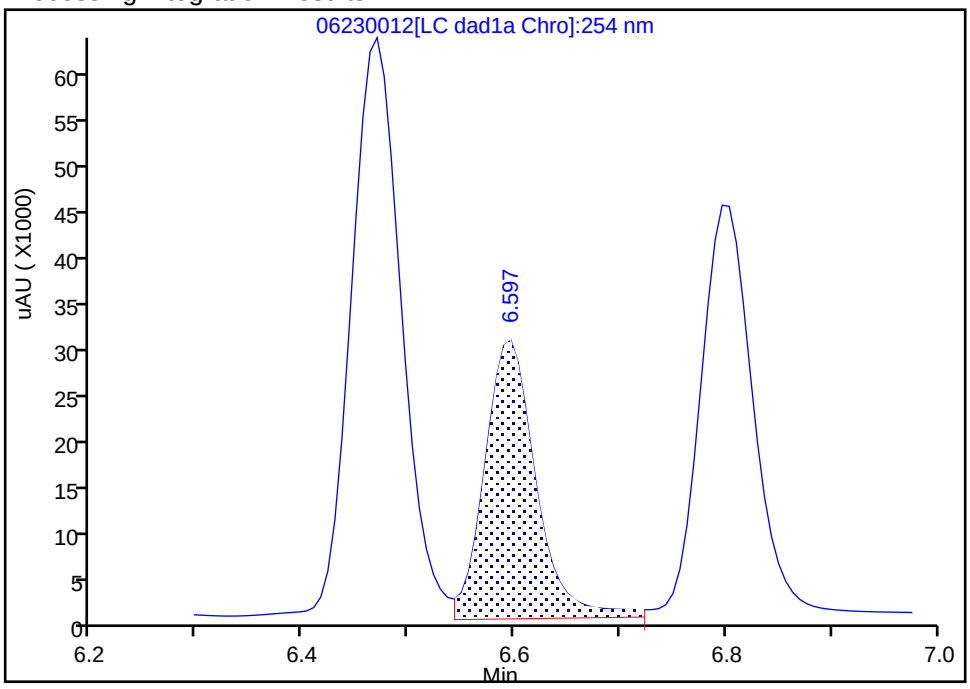
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230012.d				
Injection Date:	23-Jun-2023 18:16:50	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 8				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

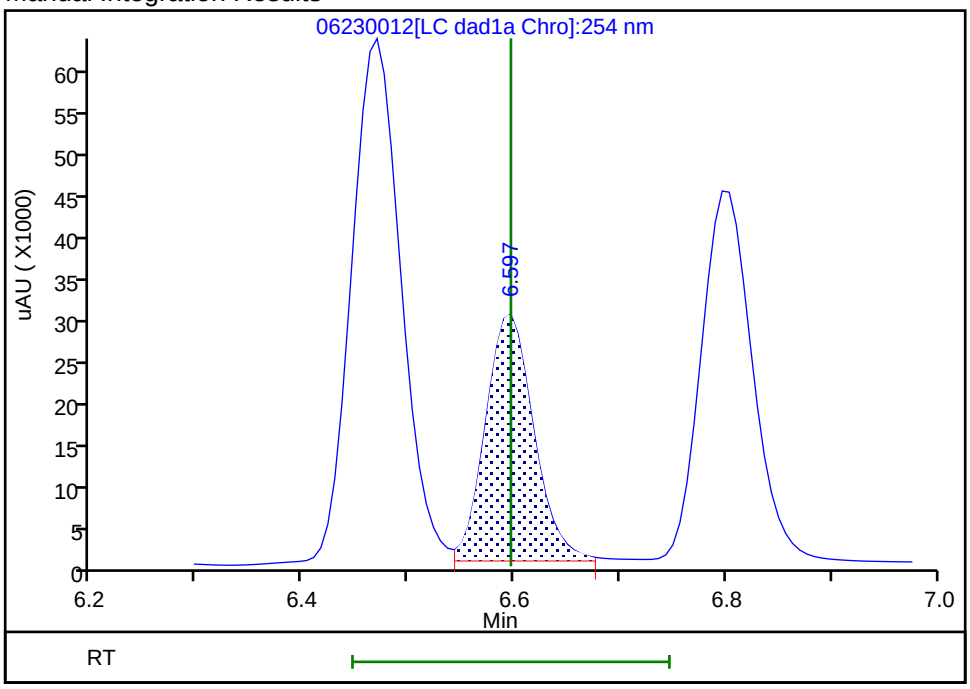
Processing Integration Results

RT: 6.60
Area: 103827
Amount: 1.091337
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 93035
Amount: 0.987053
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 18:54:08 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

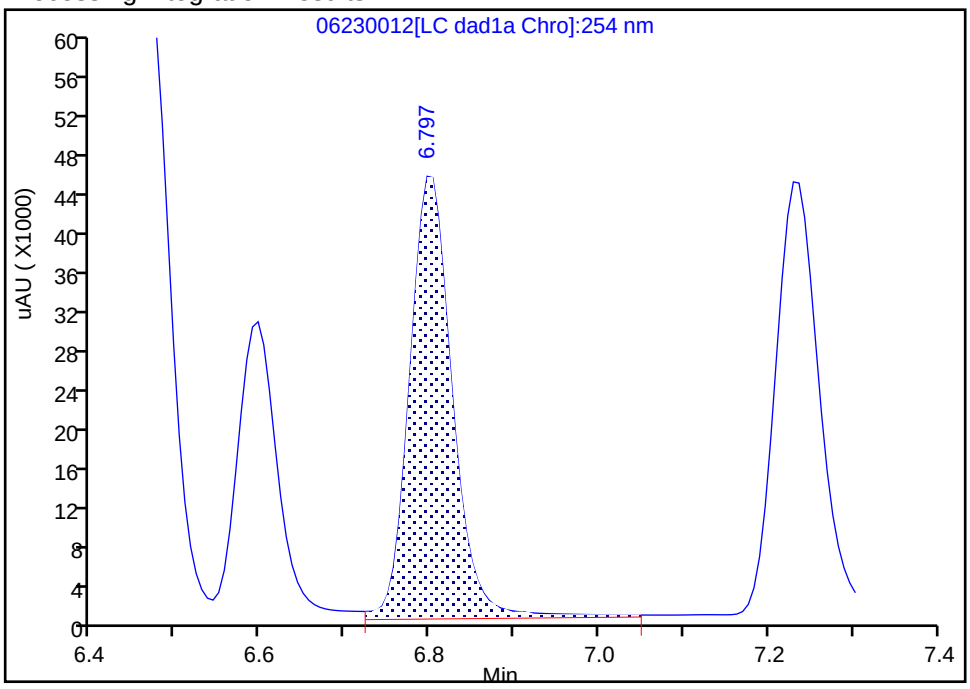
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230012.d
Injection Date: 23-Jun-2023 18:16:50 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 8
Client ID:
Operator ID: JZ/JG ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 DNX, CAS: 80251-29-2

Signal: 1

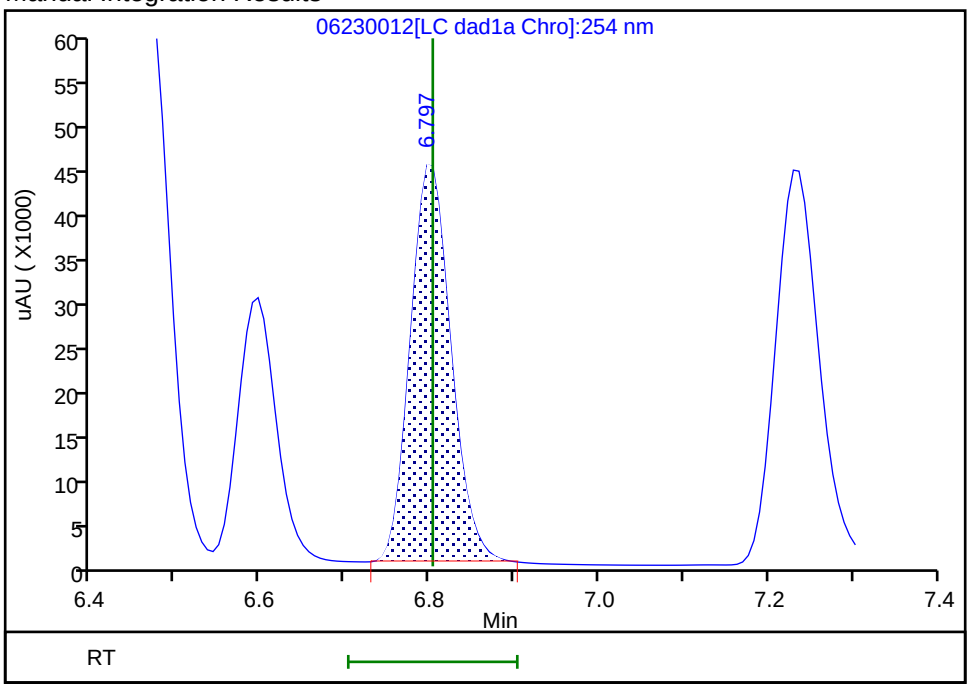
Processing Integration Results

RT: 6.80
Area: 160299
Amount: 1.093419
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 148083
Amount: 1.024847
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 18:54:10 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230013.D
Lims ID: IC INT/DMT 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 23-Jun-2023 18:39:49 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/DMT 7
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2023 12:55:48 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1681

First Level Reviewer: LV5D Date: 23-Jun-2023 19:10:47

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.466	6.470	-0.004	141821	0.7021	0.7064	M
4 HMX	1	6.593	6.597	-0.004	65593	0.7000	0.6959	M
6 DNX	1	6.800	6.803	-0.003	104556	0.7007	0.7236	M
7 MNX	1	7.233	7.237	-0.004	113007	0.8169	0.8148	
8 RDX	1	7.626	7.623	0.003	75238	0.7000	0.6809	
9 2,4,6-Trinitrophenol	1	8.006	8.030	-0.024	55684	0.7000	0.7152	
$ 10 1,2-Dinitrobenzene	1	8.593	8.590	0.003	87532	0.7000	0.7064	
11 1,3,5-Trinitrobenzene	1	8.713	8.710	0.003	155494	0.7000	0.7196	
12 1,3-Dinitrobenzene	1	9.340	9.336	0.004	207005	0.7000	0.7057	
13 Nitrobenzene	1	9.713	9.710	0.003	134942	0.7000	0.7003	
14 3,5-Dinitroaniline	1	9.953	9.943	0.010	156668	0.7000	0.6963	
15 Tetryl	1	10.093	10.083	0.010	121063	0.7000	0.7238	
16 Nitroglycerin	2	10.546	10.536	0.010	461386	7.00	7.14	
17 2,4,6-Trinitrotoluene	1	10.986	10.976	0.010	145792	0.7000	0.7115	
18 4-Amino-2,6-dinitrotoluene	1	11.180	11.170	0.010	104488	0.7000	0.6986	
19 2-Amino-4,6-dinitrotoluene	1	11.433	11.423	0.010	134046	0.7000	0.6920	
20 2,6-Dinitrotoluene	1	11.586	11.576	0.010	101266	0.7000	0.7100	
21 2,4-Dinitrotoluene	1	11.753	11.743	0.010	208191	0.7000	0.7040	
22 o-Nitrotoluene	1	12.580	12.570	0.010	87064	0.7000	0.6903	
23 p-Nitrotoluene	1	13.000	12.983	0.017	74981	0.7000	0.6811	
24 m-Nitrotoluene	1	13.573	13.556	0.017	95457	0.7000	0.7003	
25 PETN	2	14.746	14.723	0.023	509169	7.00	7.07	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00013	Amount Added:	35.00	Units: uL
8330IntermStk_00077	Amount Added:	70.00	Units: uL

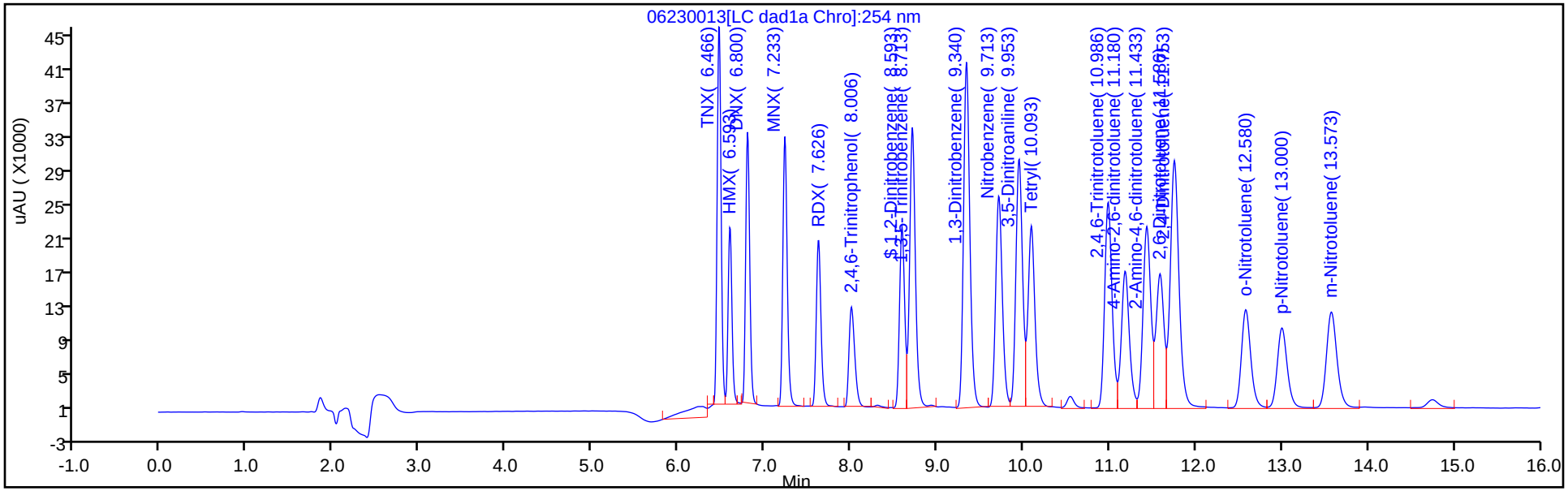
Report Date: 24-Jun-2023 12:55:48 Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Denver

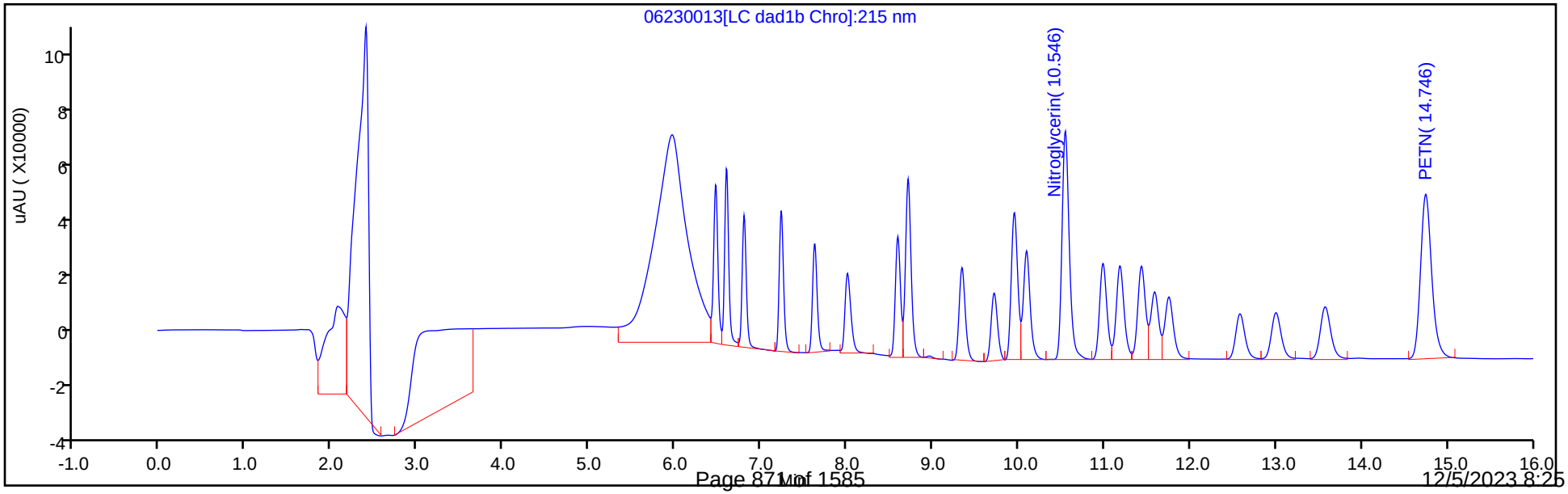
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230013.d

Injection Date:	23-Jun-2023 18:39:49	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	IC INT/DMT 7			Worklist Smp#:	13
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

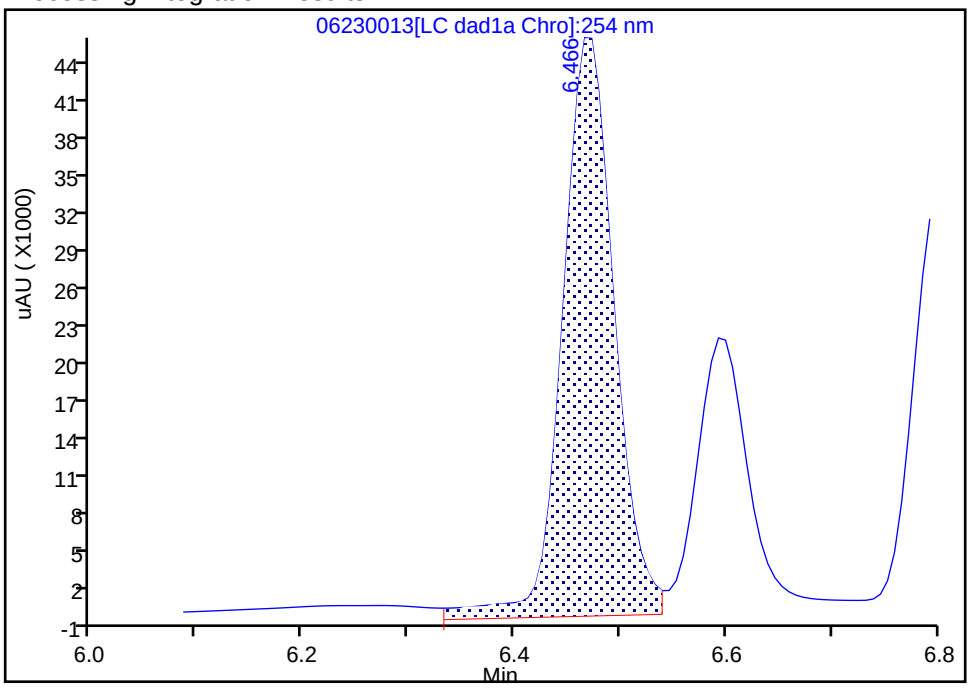
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230013.d				
Injection Date:	23-Jun-2023 18:39:49	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 7				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

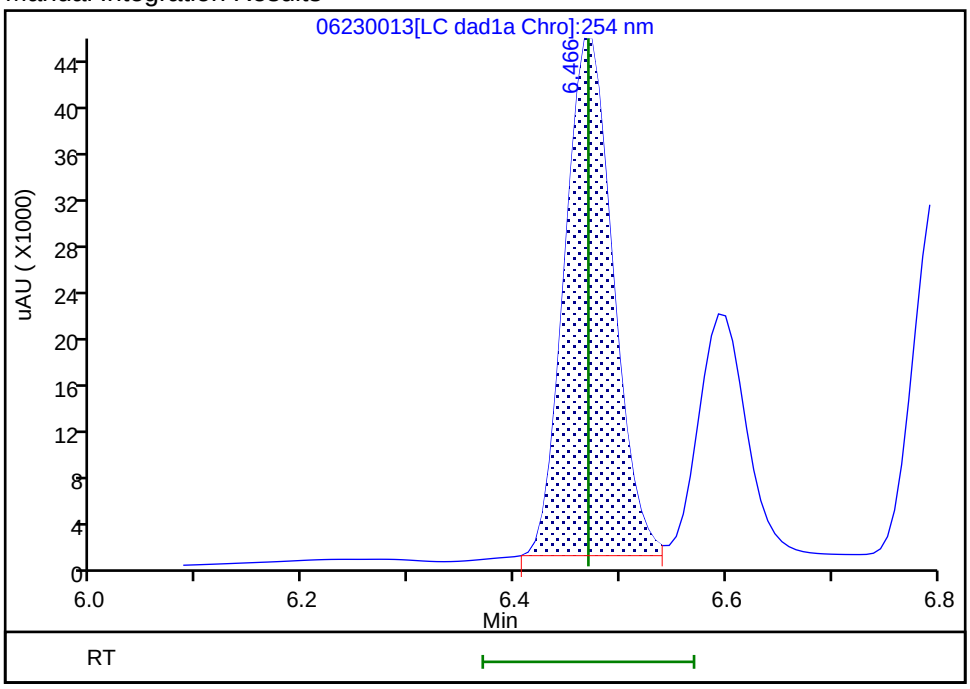
Processing Integration Results

RT: 6.47
Area: 155955
Amount: 0.779468
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 141821
Amount: 0.706417
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 19:10:12 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

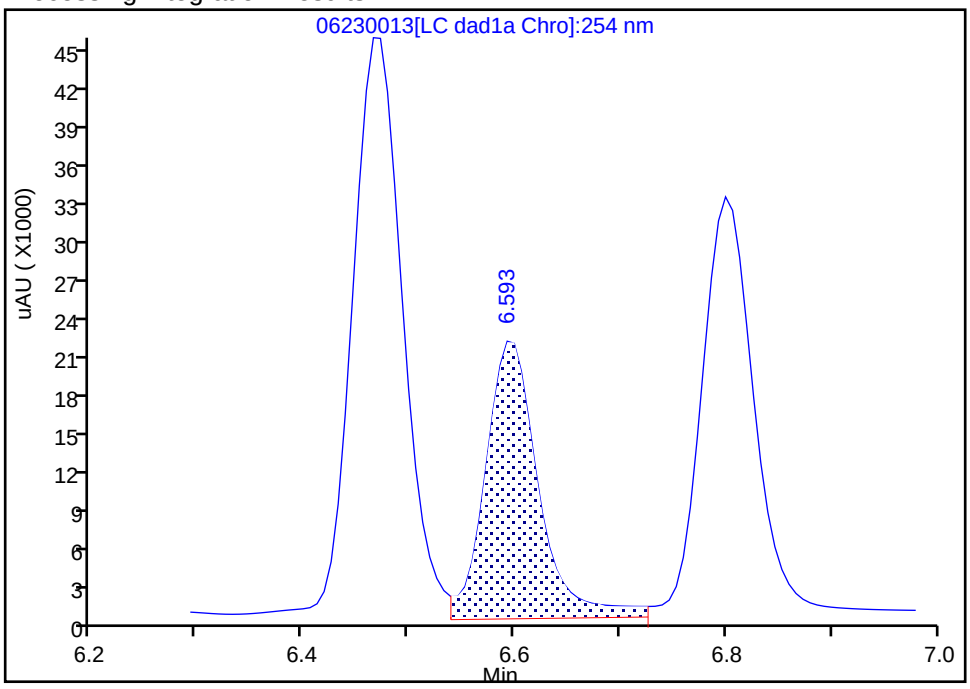
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230013.d				
Injection Date:	23-Jun-2023 18:39:49	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 7				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

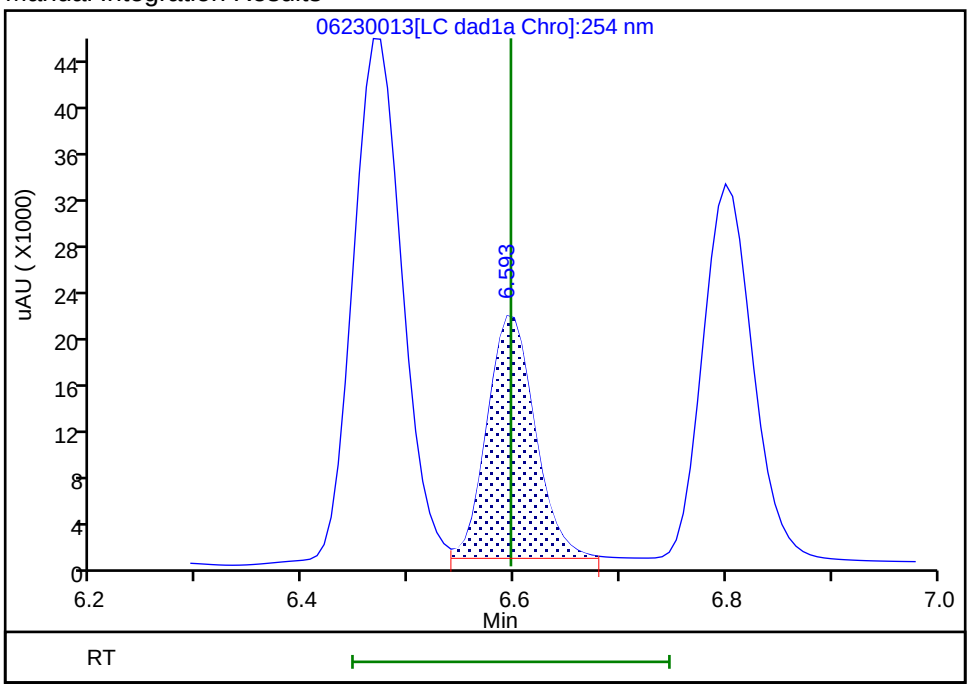
Processing Integration Results

RT: 6.59
Area: 75772
Amount: 0.790781
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 65593
Amount: 0.695907
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 19:10:13 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

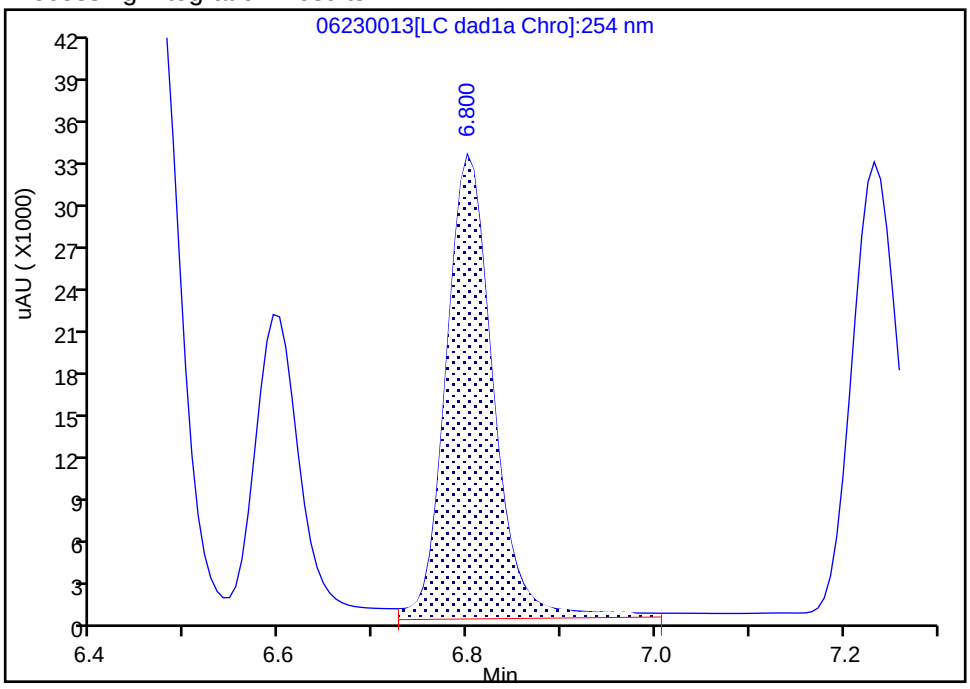
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230013.d				
Injection Date:	23-Jun-2023 18:39:49	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 7				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

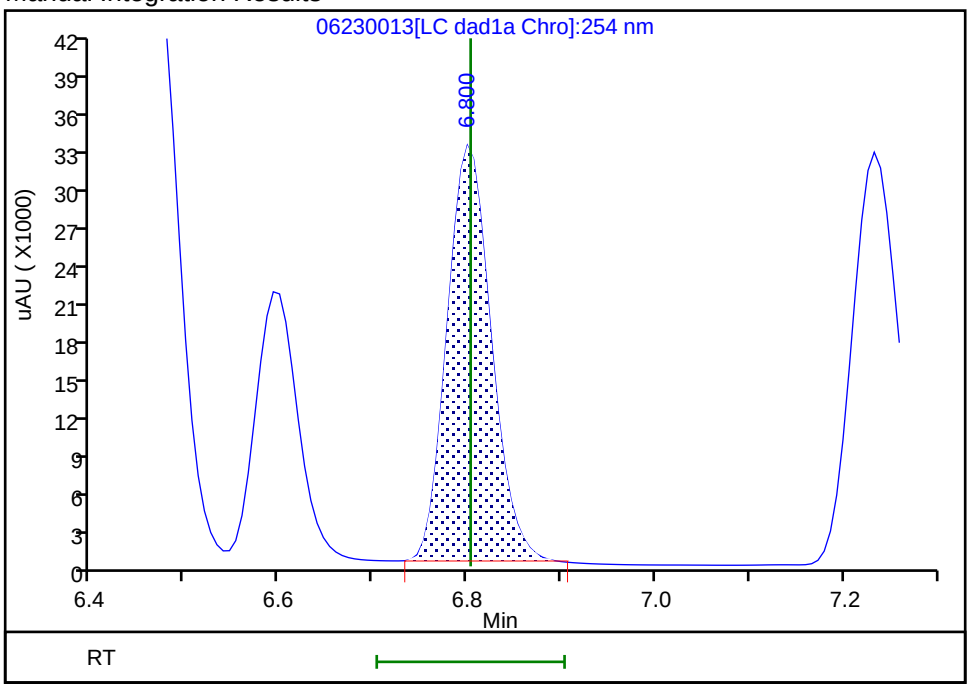
Processing Integration Results

RT: 6.80
Area: 113702
Amount: 0.773362
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 104556
Amount: 0.723607
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 19:10:15 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230014.D
Lims ID: IC INT/DMT 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 23-Jun-2023 19:02:45 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/DMT 6
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2023 12:55:49 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1681

First Level Reviewer: LV5D Date: 23-Jun-2023 19:38:20

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.474	6.470	0.004	76609	0.4012	0.3816	M
4 HMX	1	6.600	6.597	0.003	35849	0.4000	0.3803	M
6 DNX	1	6.807	6.803	0.004	57208	0.4004	0.3959	M
7 MNX	1	7.240	7.237	0.003	62440	0.4668	0.4502	
8 RDX	1	7.627	7.623	0.004	42514	0.4000	0.3848	
9 2,4,6-Trinitrophenol	1	8.020	8.030	-0.010	31468	0.4000	0.4041	
$ 10 1,2-Dinitrobenzene	1	8.594	8.590	0.004	50062	0.4000	0.4040	
11 1,3,5-Trinitrobenzene	1	8.714	8.710	0.004	89063	0.4000	0.4122	
12 1,3-Dinitrobenzene	1	9.340	9.336	0.004	118059	0.4000	0.4025	
13 Nitrobenzene	1	9.713	9.710	0.003	76555	0.4000	0.3973	
14 3,5-Dinitroaniline	1	9.947	9.943	0.004	90451	0.4000	0.4023	
15 Tetryl	1	10.087	10.083	0.004	67629	0.4000	0.4043	
16 Nitroglycerin	2	10.540	10.536	0.004	270481	4.00	4.18	
17 2,4,6-Trinitrotoluene	1	10.980	10.976	0.004	82972	0.4000	0.4049	
18 4-Amino-2,6-dinitrotoluene	1	11.180	11.170	0.010	59989	0.4000	0.4011	
19 2-Amino-4,6-dinitrotoluene	1	11.433	11.423	0.010	77156	0.4000	0.3983	
20 2,6-Dinitrotoluene	1	11.587	11.576	0.011	57368	0.4000	0.4022	
21 2,4-Dinitrotoluene	1	11.753	11.743	0.010	118425	0.4000	0.4005	
22 o-Nitrotoluene	1	12.587	12.570	0.017	49671	0.4000	0.3938	
23 p-Nitrotoluene	1	13.007	12.983	0.024	42626	0.4000	0.3872	
24 m-Nitrotoluene	1	13.580	13.556	0.024	54401	0.4000	0.3974	
25 PETN	2	14.760	14.723	0.037	290067	4.00	4.03	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00077	Amount Added:	40.00	Units: uL
8330 DMT_00013	Amount Added:	20.00	Units: uL

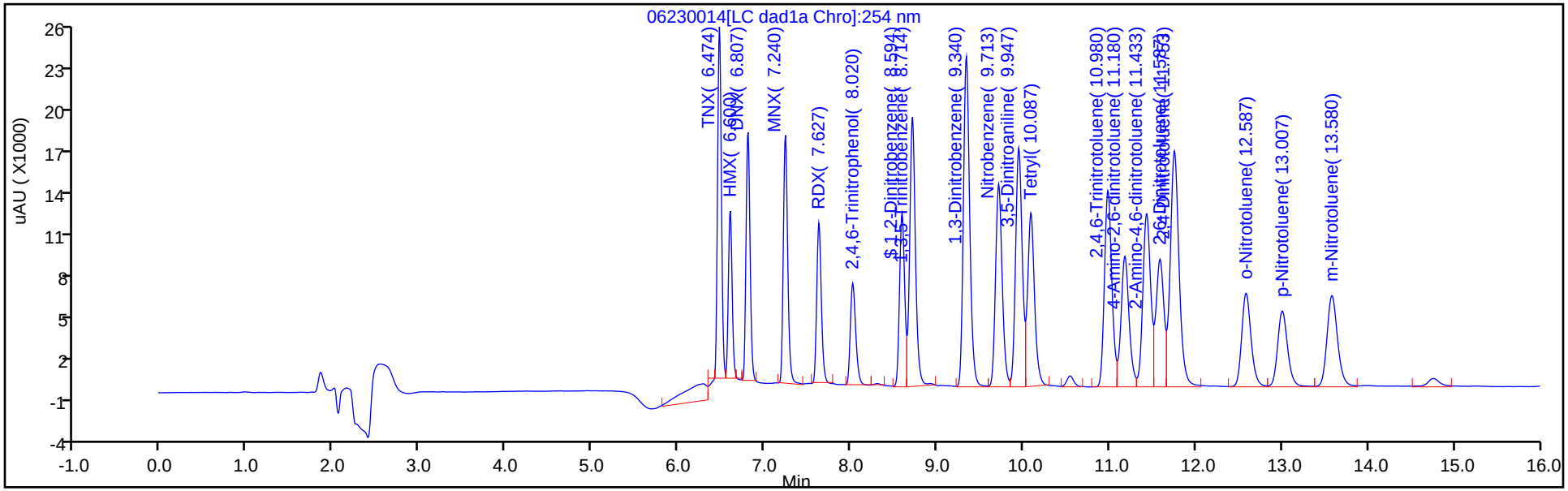
Report Date: 24-Jun-2023 12:55:49 Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Denver

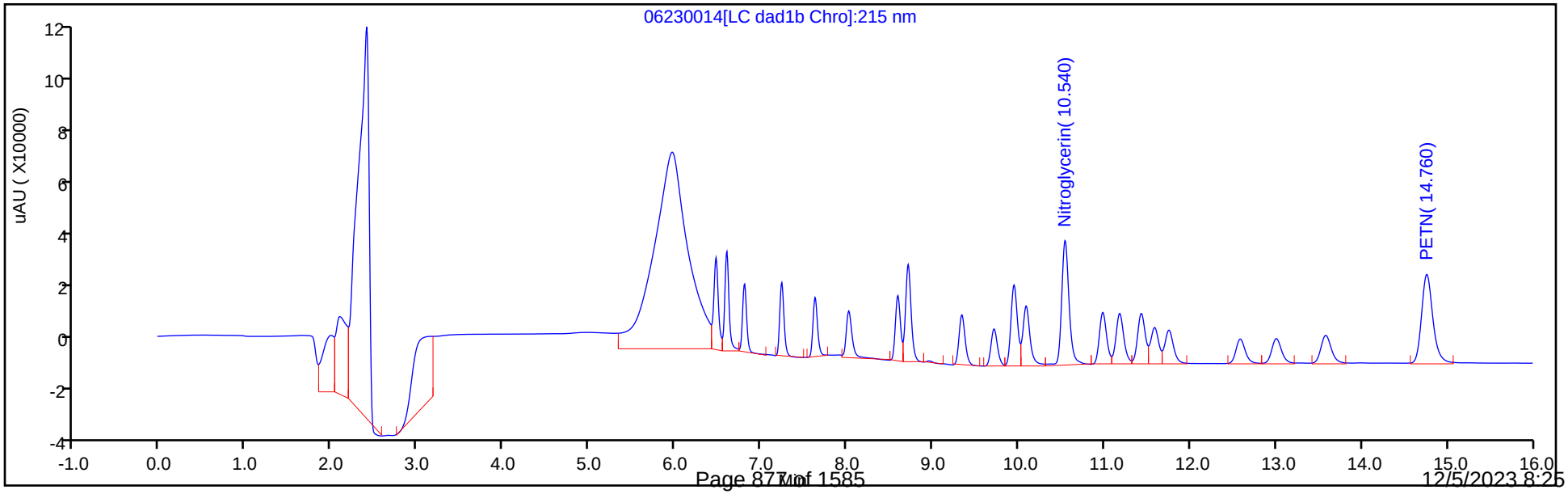
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230014.d

Injection Date:	23-Jun-2023 19:02:45	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	IC INT/DMT 6			Worklist Smp#:	14
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

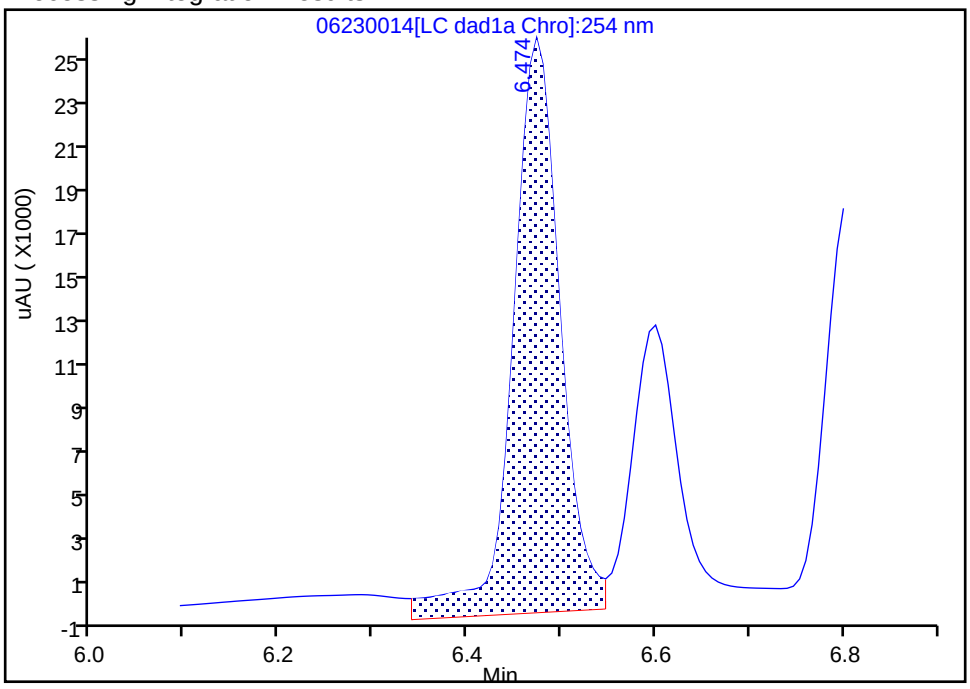
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230014.d				
Injection Date:	23-Jun-2023 19:02:45	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 6				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

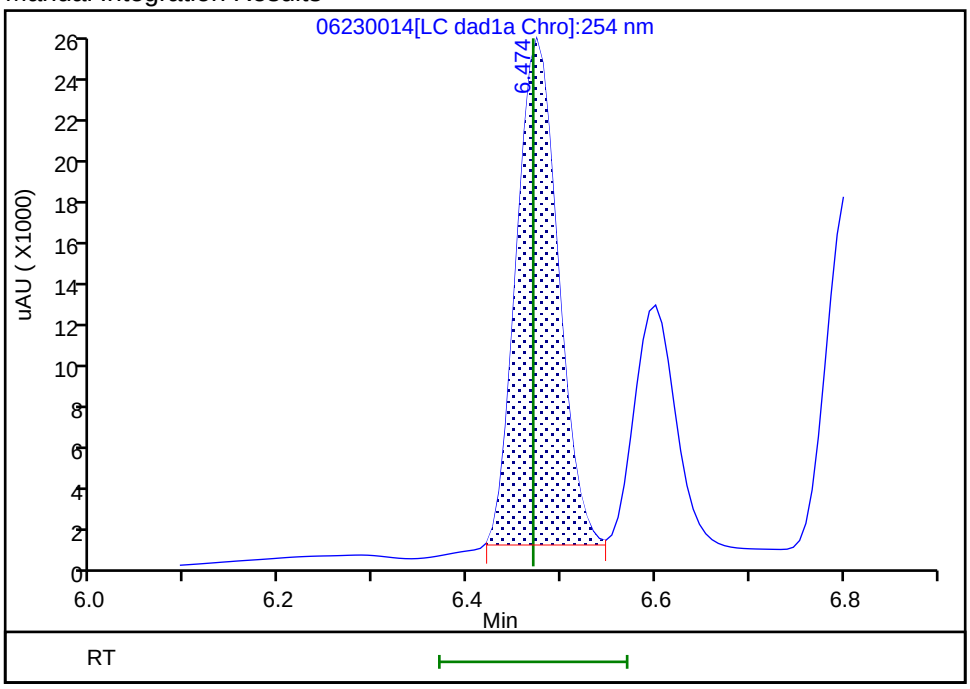
Processing Integration Results

RT: 6.47
Area: 91599
Amount: 0.456417
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 76609
Amount: 0.381593
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 19:38:09 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

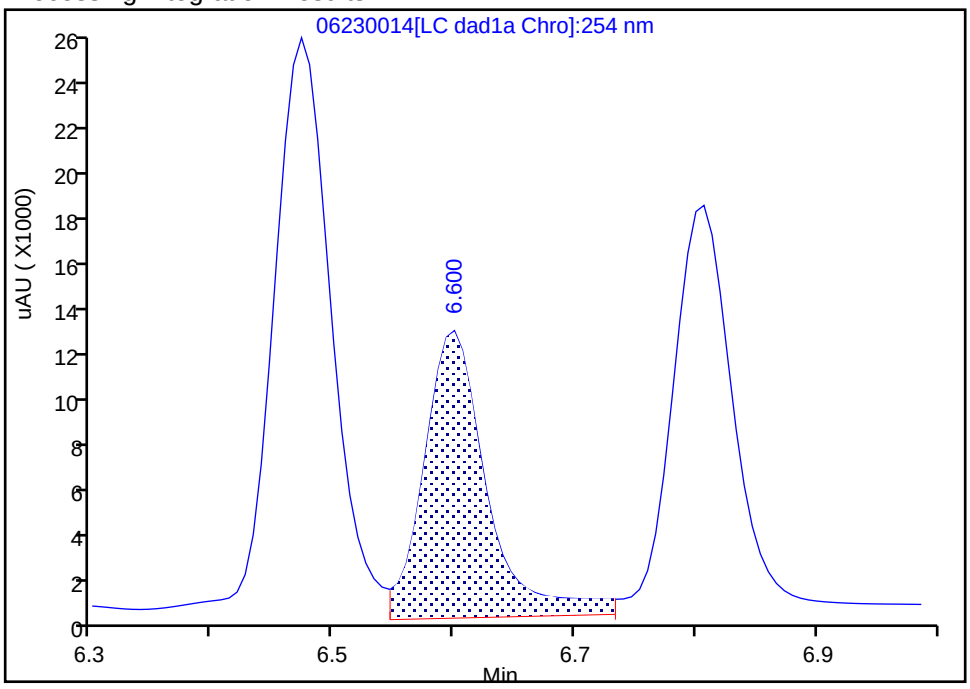
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230014.d				
Injection Date:	23-Jun-2023 19:02:45	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 6				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

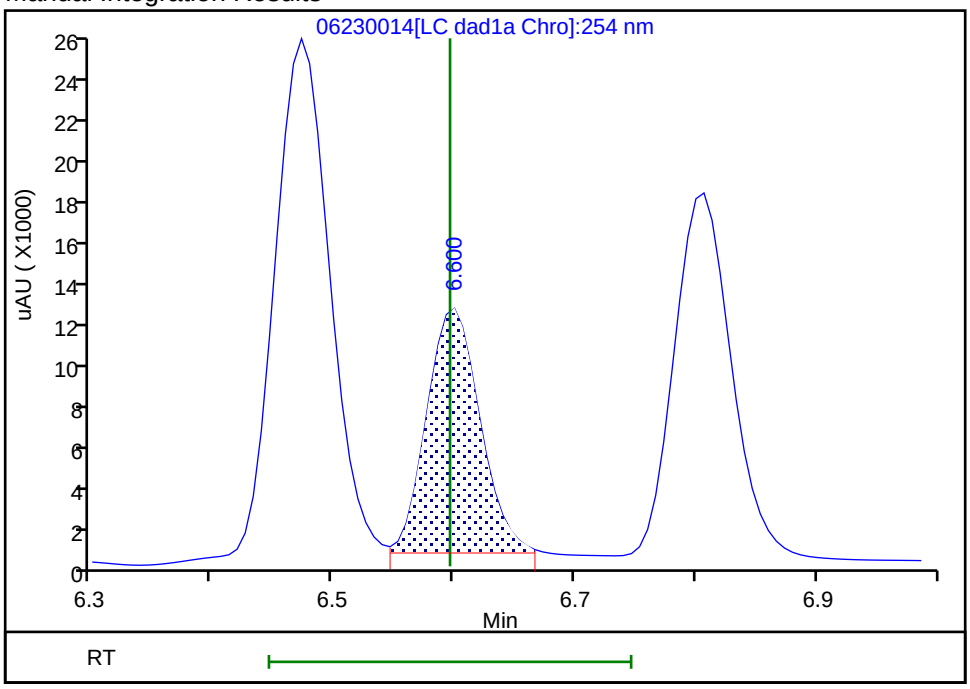
Processing Integration Results

RT: 6.60
Area: 46317
Amount: 0.478320
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 35849
Amount: 0.380339
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 19:38:10 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

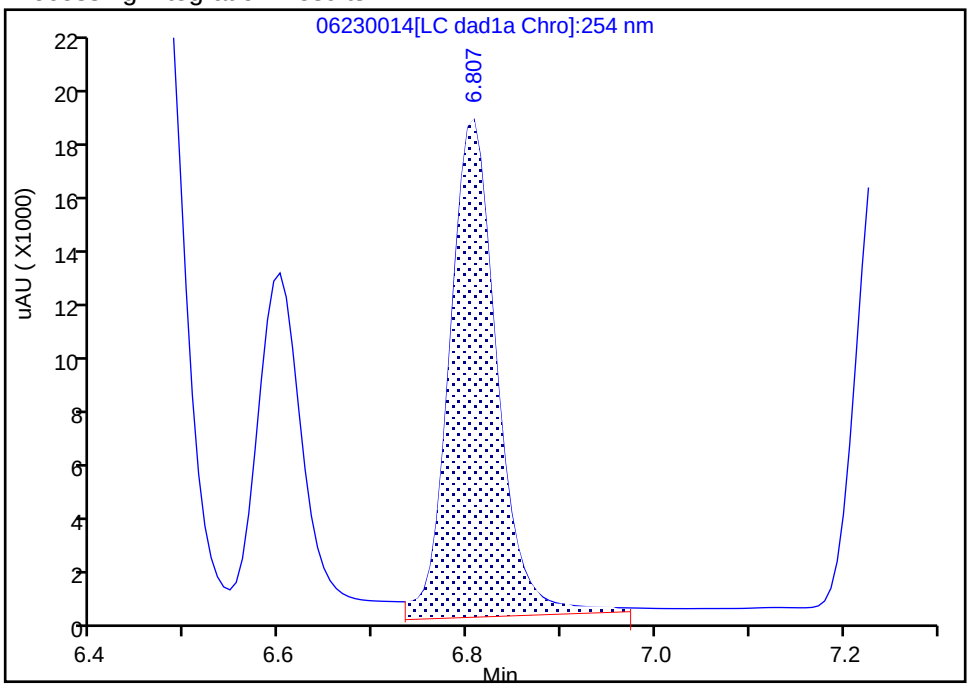
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230014.d				
Injection Date:	23-Jun-2023 19:02:45	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 6				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

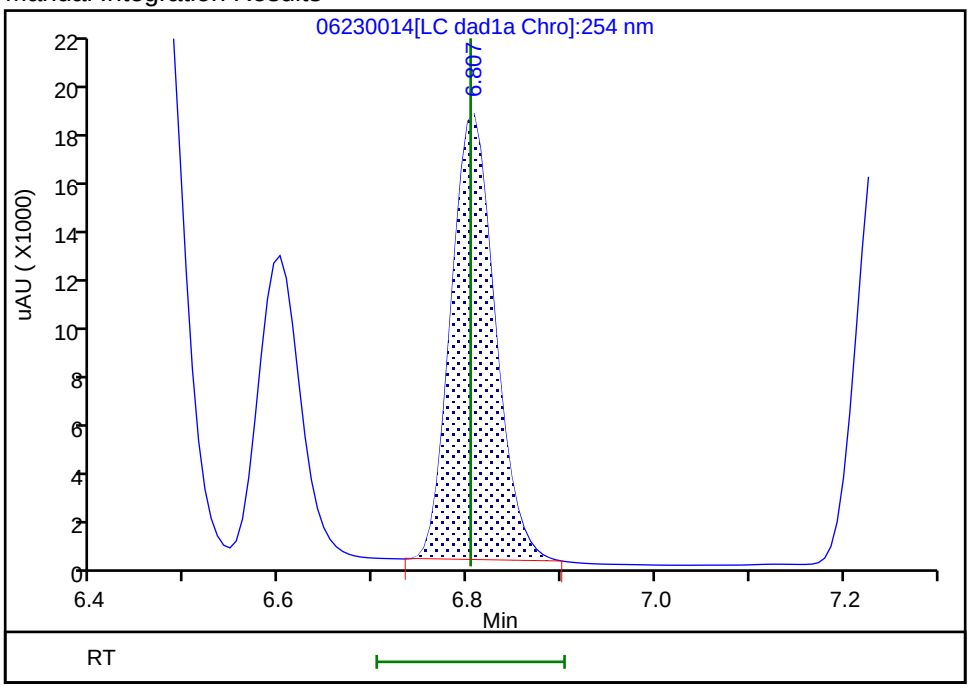
Processing Integration Results

RT: 6.81
Area: 63610
Amount: 0.433034
Amount Units: ug/mL



Manual Integration Results

RT: 6.81
Area: 57208
Amount: 0.395923
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 19:38:16 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230015.D
Lims ID: IC INT/DMT 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 23-Jun-2023 19:25:40 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/DMT 5
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2023 12:55:49 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1681

First Level Reviewer: LV5D Date: 23-Jun-2023 20:05:56

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.478	6.470	0.008	49970	0.2508	0.2489	M
4 HMX	1	6.598	6.597	0.001	23321	0.2500	0.2474	M
6 DNX	1	6.805	6.803	0.002	36397	0.2503	0.2519	M
7 MNX	1	7.238	7.237	0.001	39495	0.2918	0.2848	
8 RDX	1	7.625	7.623	0.002	27039	0.2500	0.2447	
9 2,4,6-Trinitrophenol	1	8.025	8.030	-0.005	19262	0.2500	0.2474	
$ 10 1,2-Dinitrobenzene	1	8.591	8.590	0.001	31068	0.2500	0.2507	
11 1,3,5-Trinitrobenzene	1	8.711	8.710	0.001	55138	0.2500	0.2552	
12 1,3-Dinitrobenzene	1	9.338	9.336	0.002	73356	0.2500	0.2501	
13 Nitrobenzene	1	9.711	9.710	0.001	47571	0.2500	0.2469	
14 3,5-Dinitroaniline	1	9.945	9.943	0.002	55971	0.2500	0.2491	
15 Tetryl	1	10.085	10.083	0.002	42107	0.2500	0.2518	
16 Nitroglycerin	2	10.545	10.536	0.009	161167	2.50	2.49	
17 2,4,6-Trinitrotoluene	1	10.985	10.976	0.009	51584	0.2500	0.2517	
18 4-Amino-2,6-dinitrotoluene	1	11.178	11.170	0.008	36921	0.2500	0.2469	
19 2-Amino-4,6-dinitrotoluene	1	11.431	11.423	0.008	48118	0.2500	0.2484	
20 2,6-Dinitrotoluene	1	11.585	11.576	0.009	35503	0.2500	0.2489	
21 2,4-Dinitrotoluene	1	11.758	11.743	0.015	73049	0.2500	0.2470	
22 o-Nitrotoluene	1	12.585	12.570	0.015	30758	0.2500	0.2439	
23 p-Nitrotoluene	1	13.011	12.983	0.028	26234	0.2500	0.2383	
24 m-Nitrotoluene	1	13.585	13.556	0.029	33854	0.2500	0.2458	
25 PETN	2	14.765	14.723	0.042	179178	2.50	2.49	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

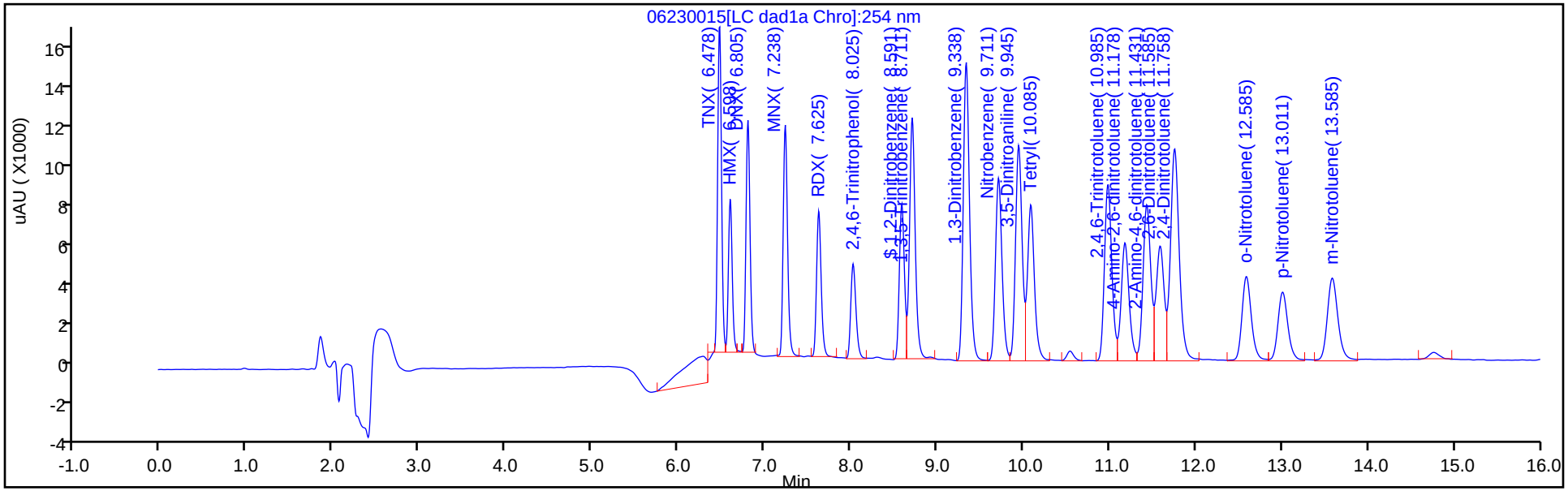
8330IntermStk_00077	Amount Added:	25.00	Units: uL
8330 DMT_00013	Amount Added:	12.50	Units: uL

Report Date: 24-Jun-2023 12:55:49 Chrom Revision: 2.3 05-Jun-2023 19:02:10

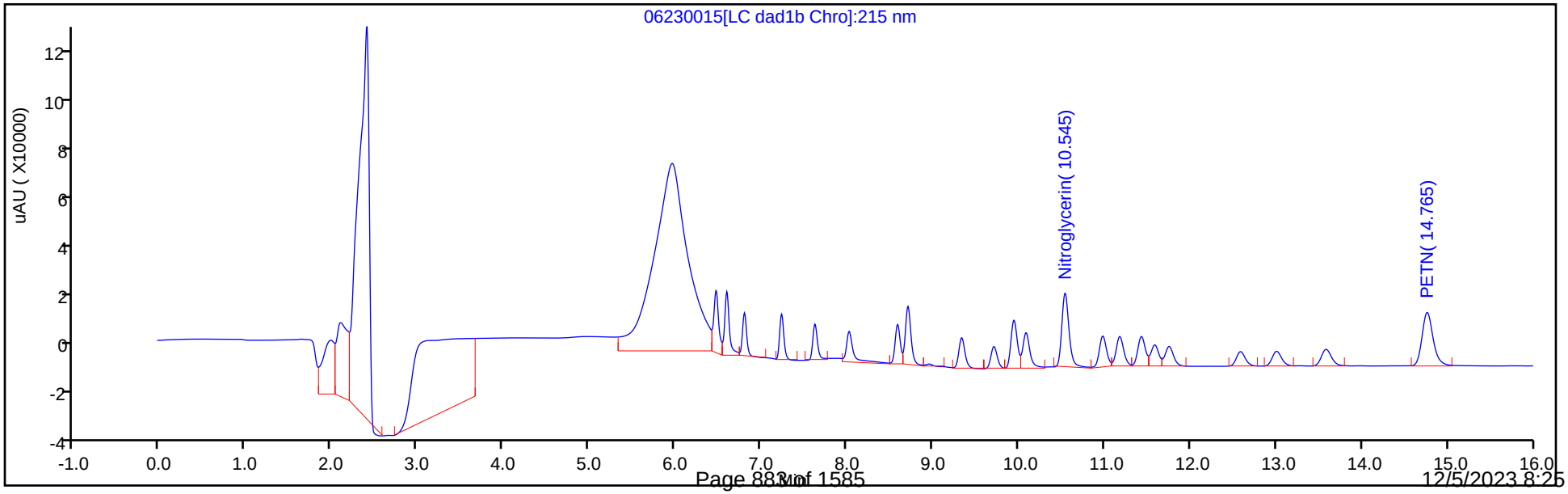
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230015.d				
Injection Date:	23-Jun-2023 19:25:40	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	IC INT/DMT 5			Worklist Smp#:	15
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

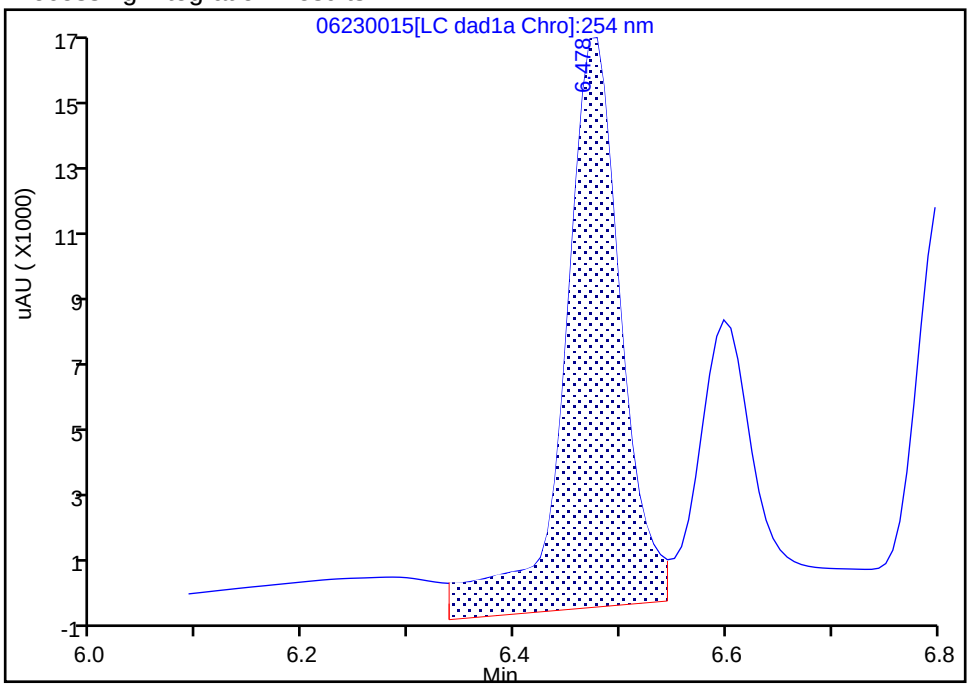
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230015.d				
Injection Date:	23-Jun-2023 19:25:40	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 5				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

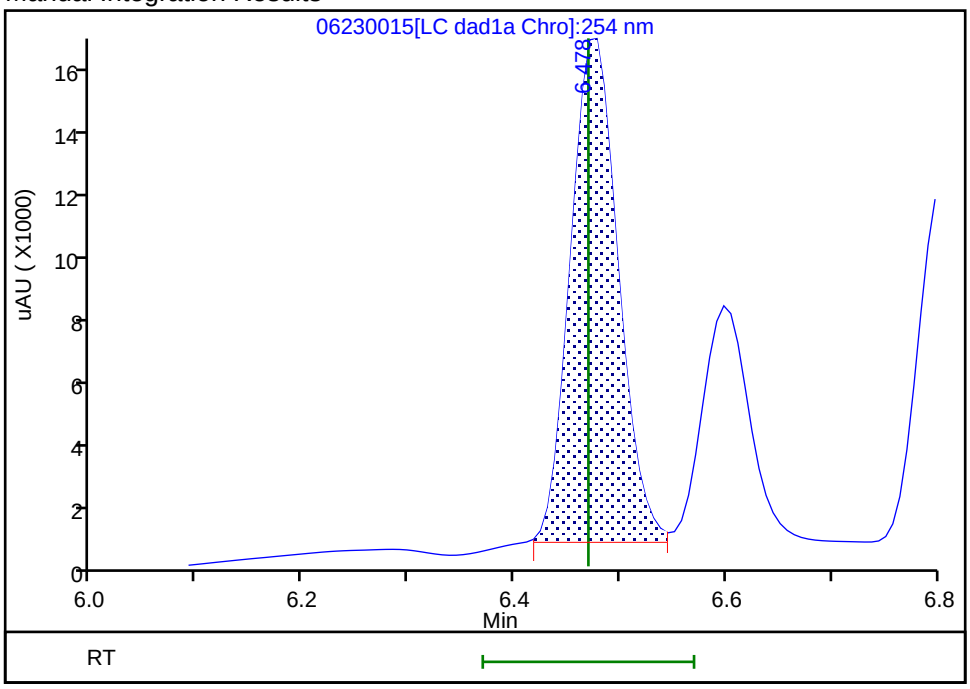
Processing Integration Results

RT: 6.48
Area: 64305
Amount: 0.315734
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 49970
Amount: 0.248903
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 20:05:50 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

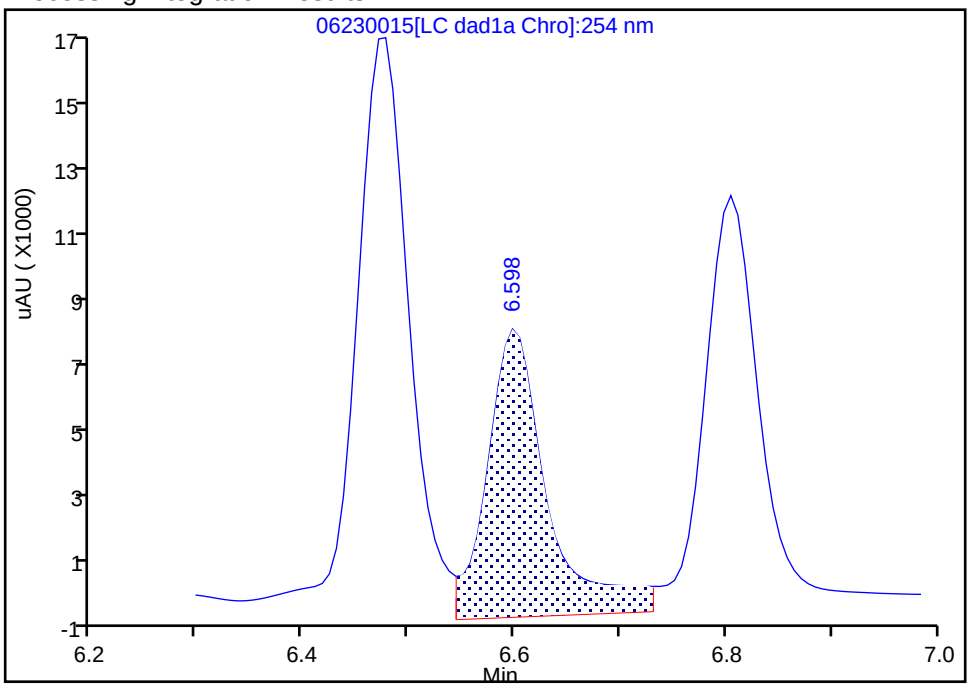
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230015.d				
Injection Date:	23-Jun-2023 19:25:40	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 5				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

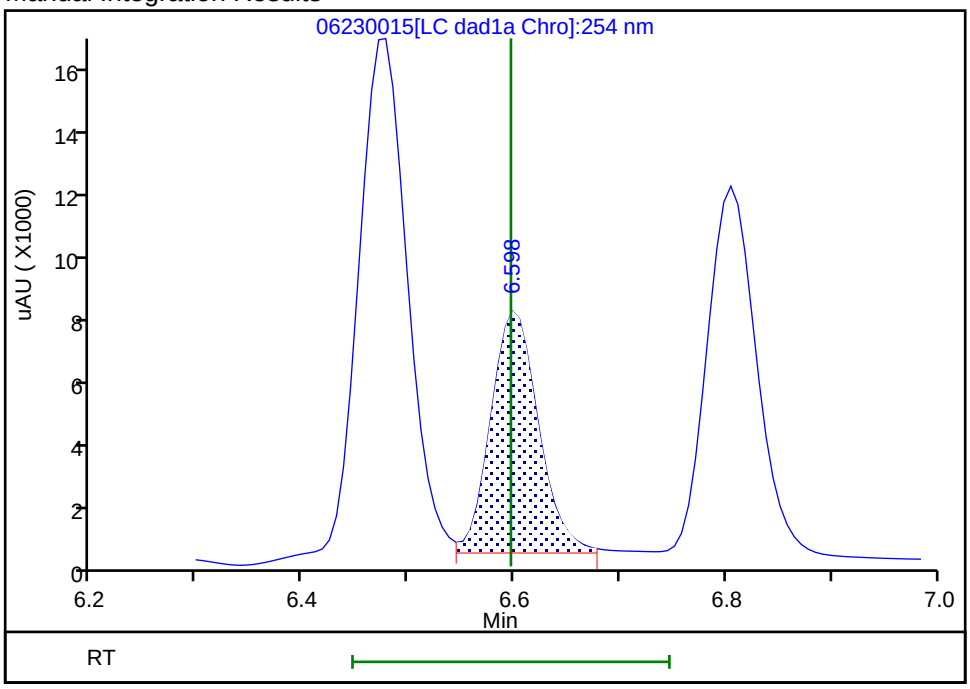
Processing Integration Results

RT: 6.60
Area: 32748
Amount: 0.334028
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 23321
Amount: 0.247424
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 20:05:51 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

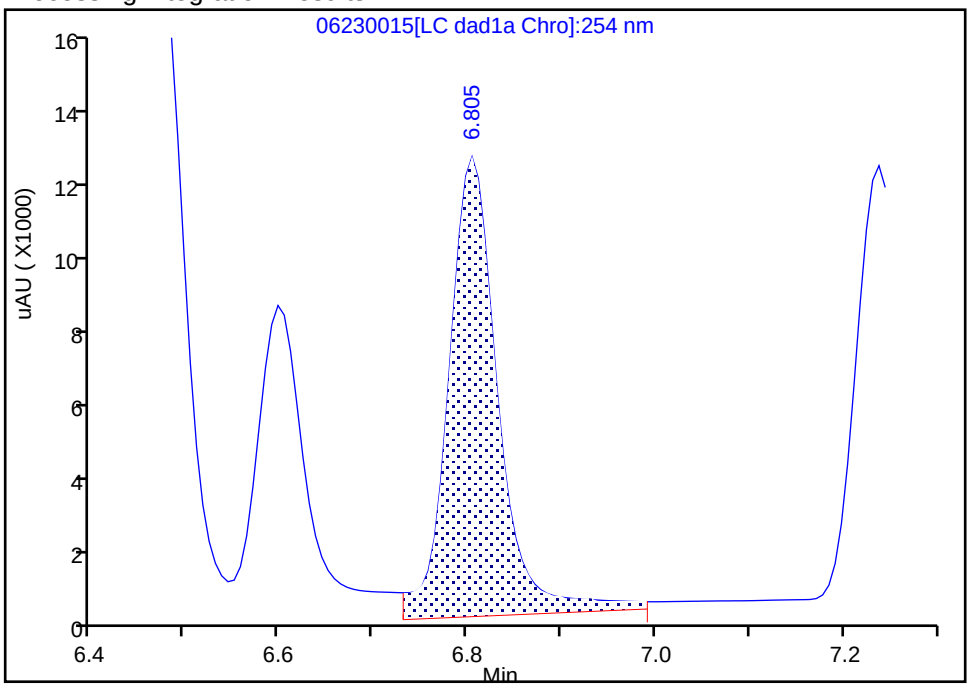
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230015.d				
Injection Date:	23-Jun-2023 19:25:40	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 5				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

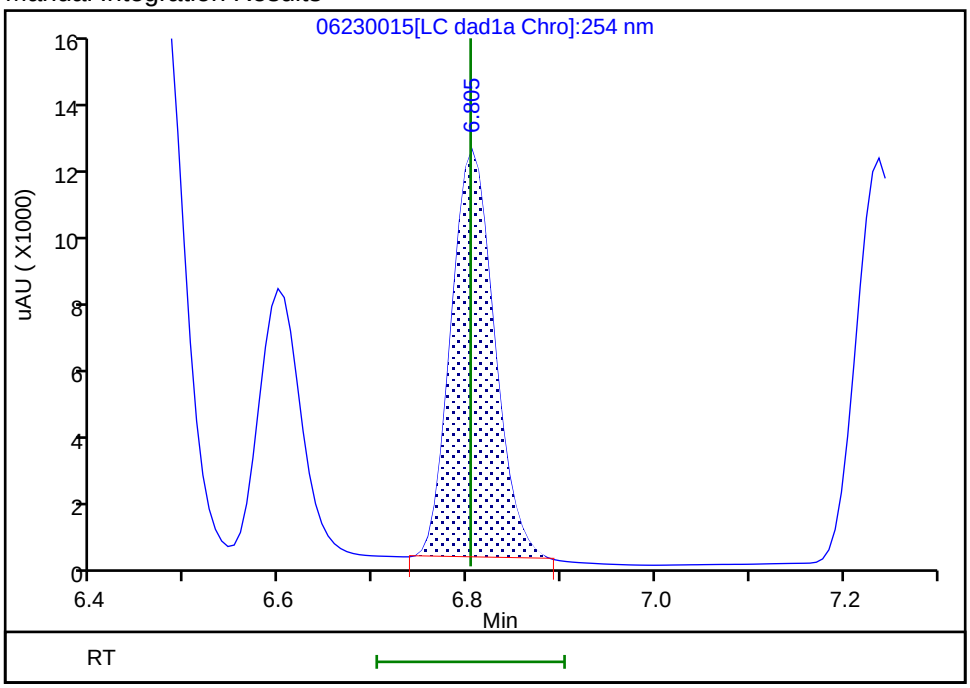
Processing Integration Results

RT: 6.80
Area: 43745
Amount: 0.293331
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 36397
Amount: 0.251895
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 20:05:53 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230016.D
Lims ID: IC INT/DMT 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 23-Jun-2023 19:48:35 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/DMT 4
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2023 12:55:50 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1681

First Level Reviewer: LV5D Date: 23-Jun-2023 20:36:30

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.470	6.470	0.000	20003	0.1003	0.0996	M
4 HMX	1	6.597	6.597	0.000	9201	0.1000	0.0976	M
6 DNX	1	6.803	6.803	0.000	14726	0.1001	0.1019	M
7 MNX	1	7.237	7.237	0.000	16173	0.1167	0.1166	
8 RDX	1	7.623	7.623	0.000	11457	0.1000	0.1037	
9 2,4,6-Trinitrophenol	1	8.030	8.030	0.000	7951	0.1000	0.1021	
$ 10 1,2-Dinitrobenzene	1	8.590	8.590	0.000	12783	0.1000	0.1032	
11 1,3,5-Trinitrobenzene	1	8.710	8.710	0.000	21684	0.1000	0.1004	
12 1,3-Dinitrobenzene	1	9.336	9.336	0.000	29890	0.1000	0.1019	
13 Nitrobenzene	1	9.710	9.710	0.000	19309	0.1000	0.1002	
14 3,5-Dinitroaniline	1	9.943	9.943	0.000	22486	0.1000	0.1004	
15 Tetryl	1	10.083	10.083	0.000	16961	0.1000	0.1014	
16 Nitroglycerin	2	10.536	10.536	0.000	65270	1.00	1.01	
17 2,4,6-Trinitrotoluene	1	10.976	10.976	0.000	20907	0.1000	0.1020	
18 4-Amino-2,6-dinitrotoluene	1	11.170	11.170	0.000	15058	0.1000	0.1007	
19 2-Amino-4,6-dinitrotoluene	1	11.423	11.423	0.000	19302	0.1000	0.0996	
20 2,6-Dinitrotoluene	1	11.576	11.576	0.000	14495	0.1000	0.1016	
21 2,4-Dinitrotoluene	1	11.743	11.743	0.000	29811	0.1000	0.1008	
22 o-Nitrotoluene	1	12.570	12.570	0.000	12912	0.1000	0.1024	
23 p-Nitrotoluene	1	12.983	12.983	0.000	11057	0.1000	0.1004	
24 m-Nitrotoluene	1	13.556	13.556	0.000	14001	0.1000	0.0993	
25 PETN	2	14.723	14.723	0.000	72200	1.00	1.00	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00077	Amount Added: 10.00	Units: uL
8330 DMT_00013	Amount Added: 5.00	Units: uL

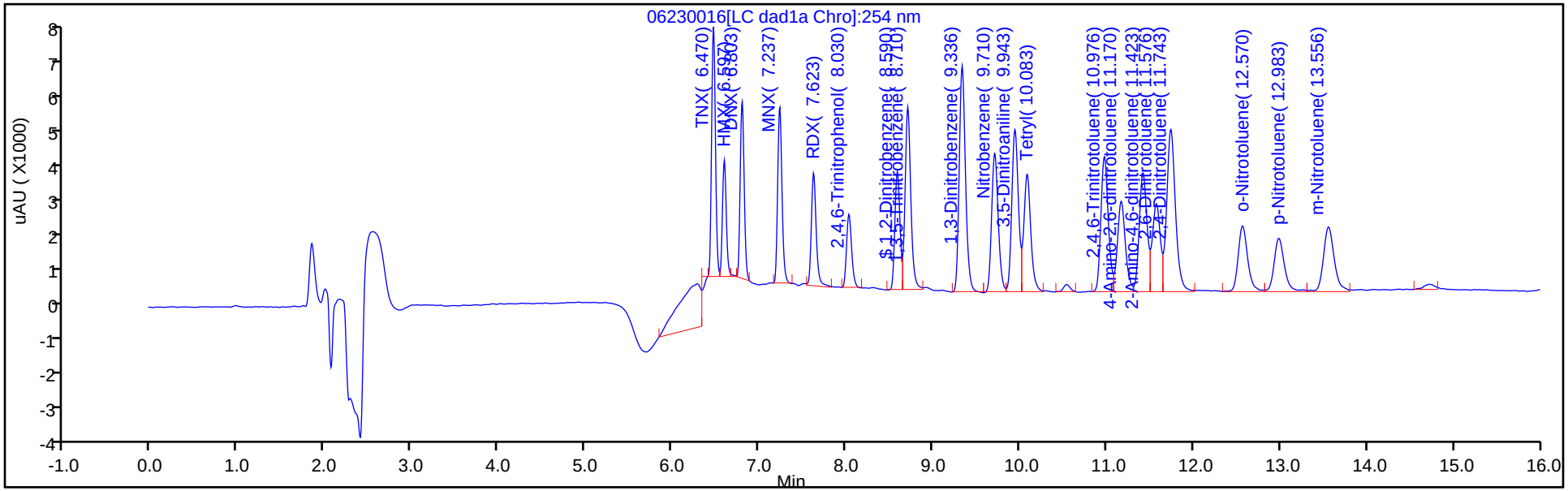
Report Date: 24-Jun-2023 12:55:50 Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Denver

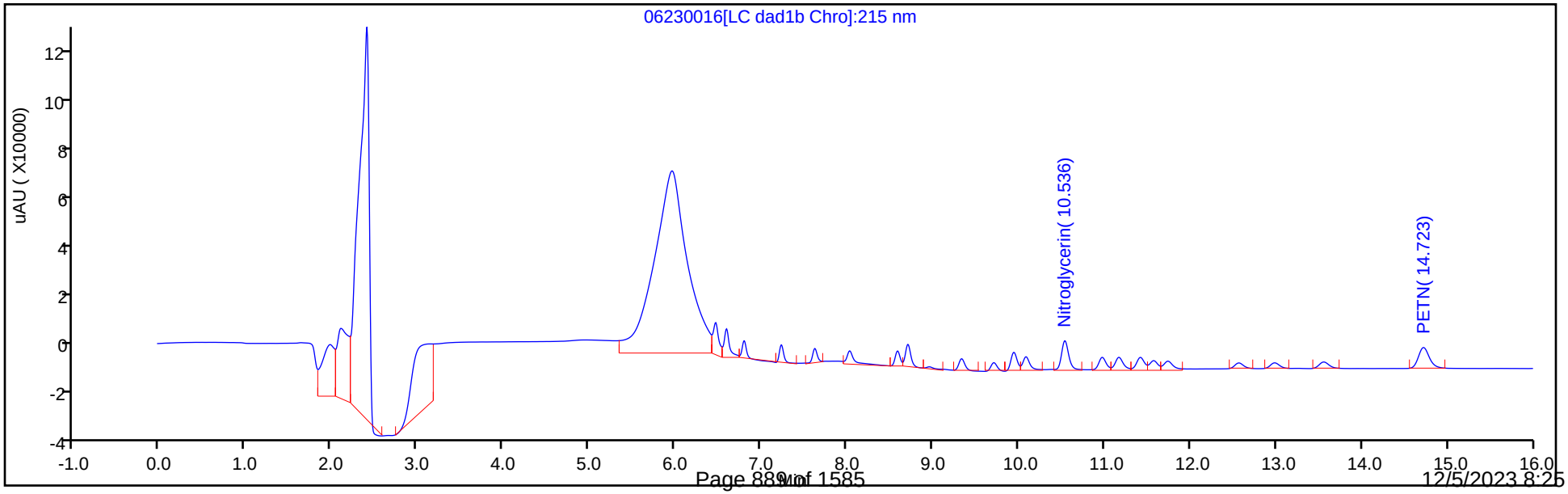
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230016.d

Injection Date:	23-Jun-2023 19:48:35	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	IC INT/DMT 4			Worklist Smp#:	16
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

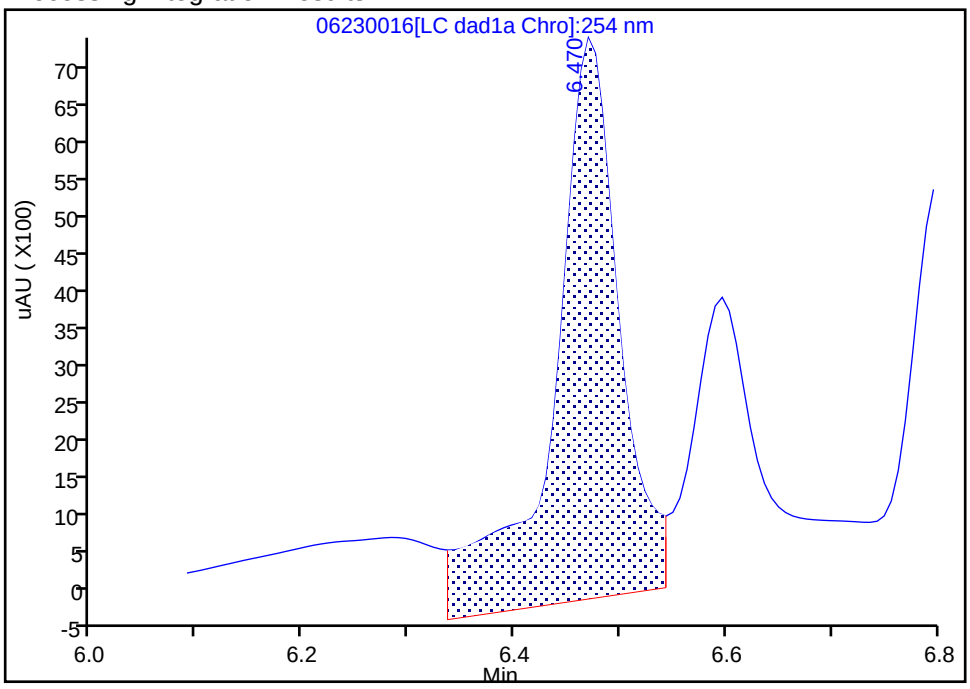
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Injection Date:	23-Jun-2023 19:48:35	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 4				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

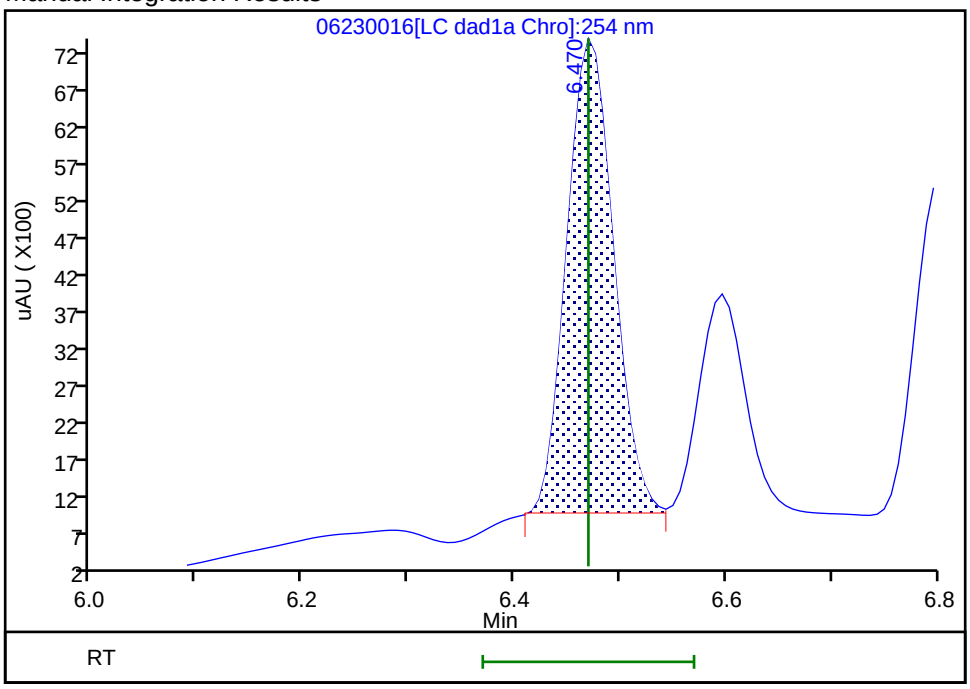
Processing Integration Results

RT: 6.47
Area: 32992
Amount: 0.149030
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 20003
Amount: 0.099636
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 20:36:24 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

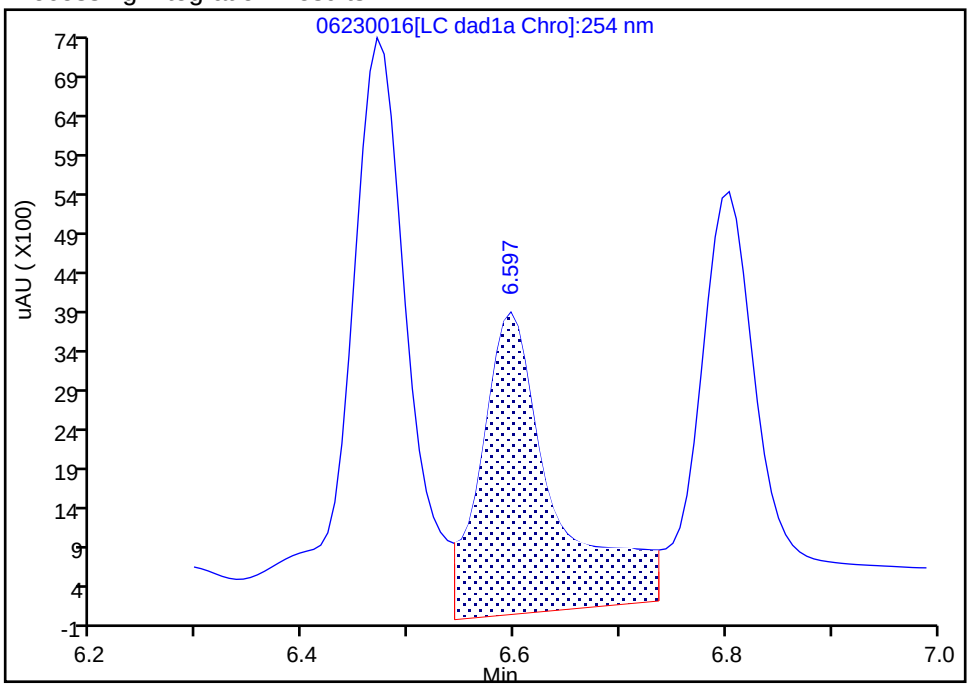
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Injection Date:	23-Jun-2023 19:48:35	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 4				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

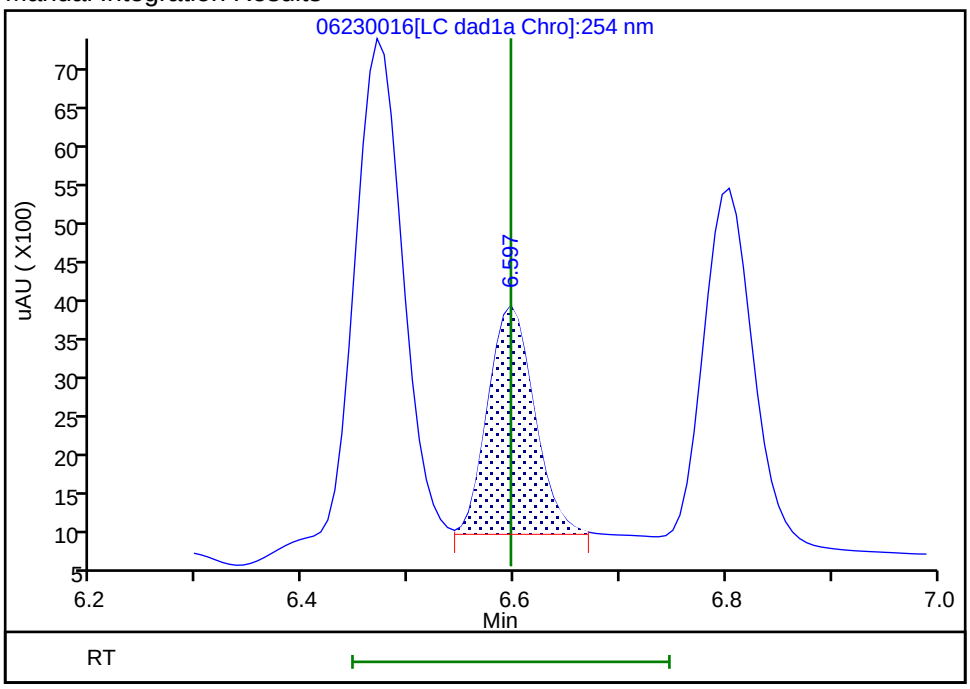
Processing Integration Results

RT: 6.60
Area: 18398
Amount: 0.150991
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 9201
Amount: 0.097618
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 20:36:25 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

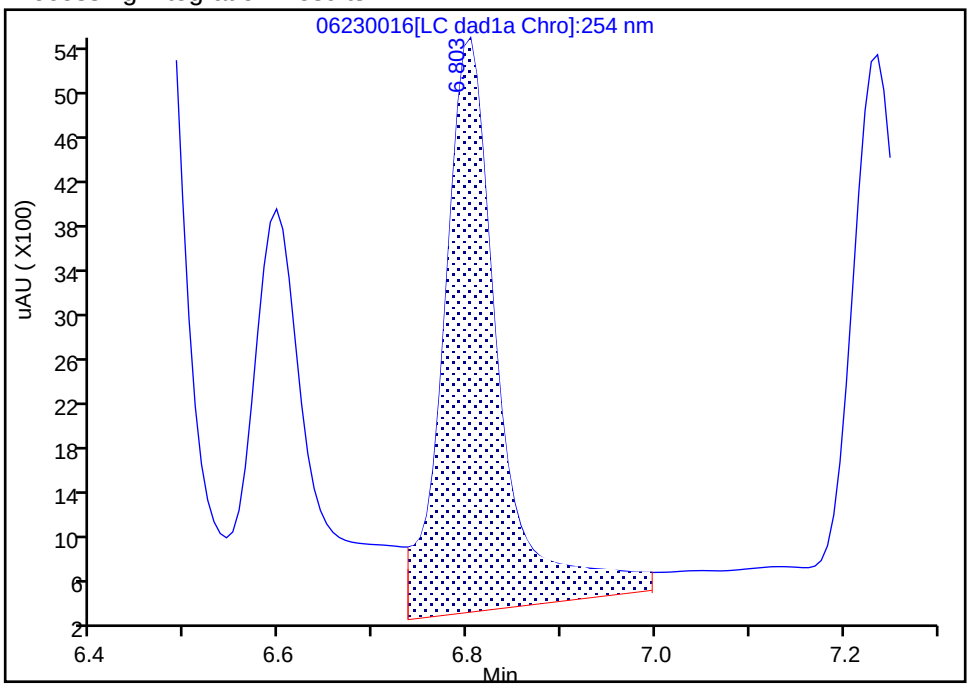
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Injection Date:	23-Jun-2023 19:48:35	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 4				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

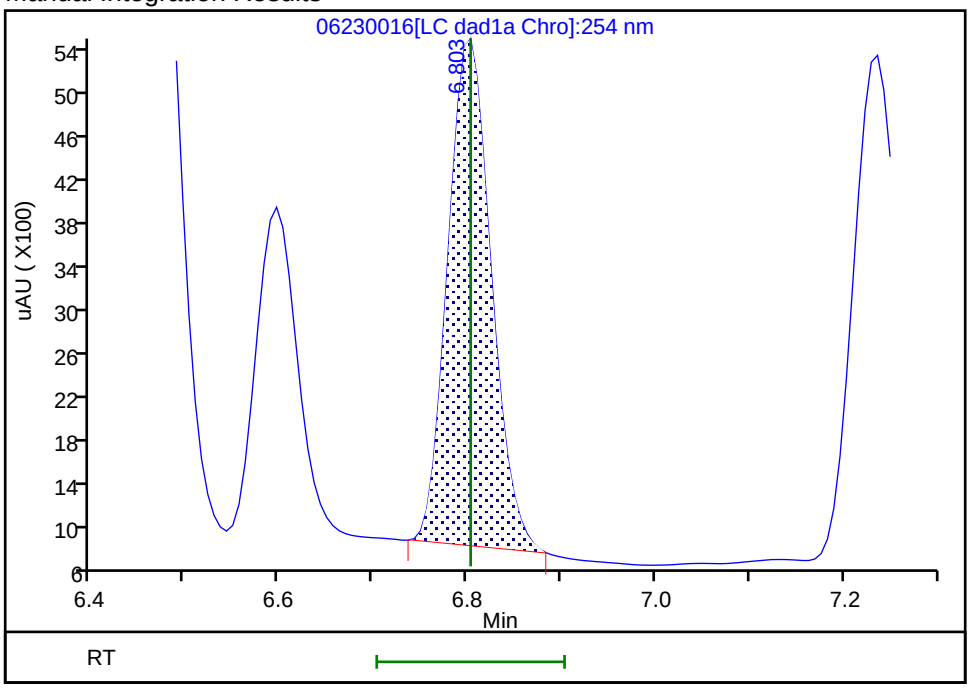
Processing Integration Results

RT: 6.80
Area: 21037
Amount: 0.133837
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 14726
Amount: 0.101915
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 20:36:28 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230017.D
Lims ID: IC INT/DMT 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 23-Jun-2023 20:11:32 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/DMT 3
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2023 12:55:50 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1681

First Level Reviewer: LV5D Date: 23-Jun-2023 20:36:49

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.472	6.470	0.002	9975	0.0502	0.0497	M
4 HMX	1	6.598	6.597	0.001	4496	0.0500	0.0477	M
6 DNX	1	6.798	6.803	-0.005	7299	0.0501	0.0505	M
7 MNX	1	7.232	7.237	-0.005	8151	0.0584	0.0588	
8 RDX	1	7.625	7.623	0.002	5472	0.0500	0.0495	
9 2,4,6-Trinitrophenol	1	8.032	8.030	0.002	3979	0.0500	0.0511	
$ 10 1,2-Dinitrobenzene	1	8.585	8.590	-0.005	6250	0.0500	0.0504	
11 1,3,5-Trinitrobenzene	1	8.712	8.710	0.002	10805	0.0500	0.0500	
12 1,3-Dinitrobenzene	1	9.338	9.336	0.002	14684	0.0500	0.0501	
13 Nitrobenzene	1	9.711	9.710	0.001	9561	0.0500	0.0496	
14 3,5-Dinitroaniline	1	9.945	9.943	0.002	11168	0.0500	0.0502	
15 Tetryl	1	10.085	10.083	0.002	8232	0.0500	0.0492	
16 Nitroglycerin	2	10.538	10.536	0.002	31254	0.5000	0.4834	
17 2,4,6-Trinitrotoluene	1	10.978	10.976	0.002	10269	0.0500	0.0501	
18 4-Amino-2,6-dinitrotoluene	1	11.178	11.170	0.008	7431	0.0500	0.0497	
19 2-Amino-4,6-dinitrotoluene	1	11.431	11.423	0.008	9604	0.0500	0.0496	
20 2,6-Dinitrotoluene	1	11.585	11.576	0.009	7160	0.0500	0.0502	
21 2,4-Dinitrotoluene	1	11.751	11.743	0.008	14800	0.0500	0.0500	
22 o-Nitrotoluene	1	12.585	12.570	0.015	6403	0.0500	0.0508	
23 p-Nitrotoluene	1	13.005	12.983	0.022	5543	0.0500	0.0504	
24 m-Nitrotoluene	1	13.578	13.556	0.022	7282	0.0500	0.0498	
25 PETN	2	14.751	14.723	0.028	35921	0.5000	0.4988	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00077	Amount Added:	5.00	Units: uL
8330 DMT_00013	Amount Added:	2.50	Units: uL

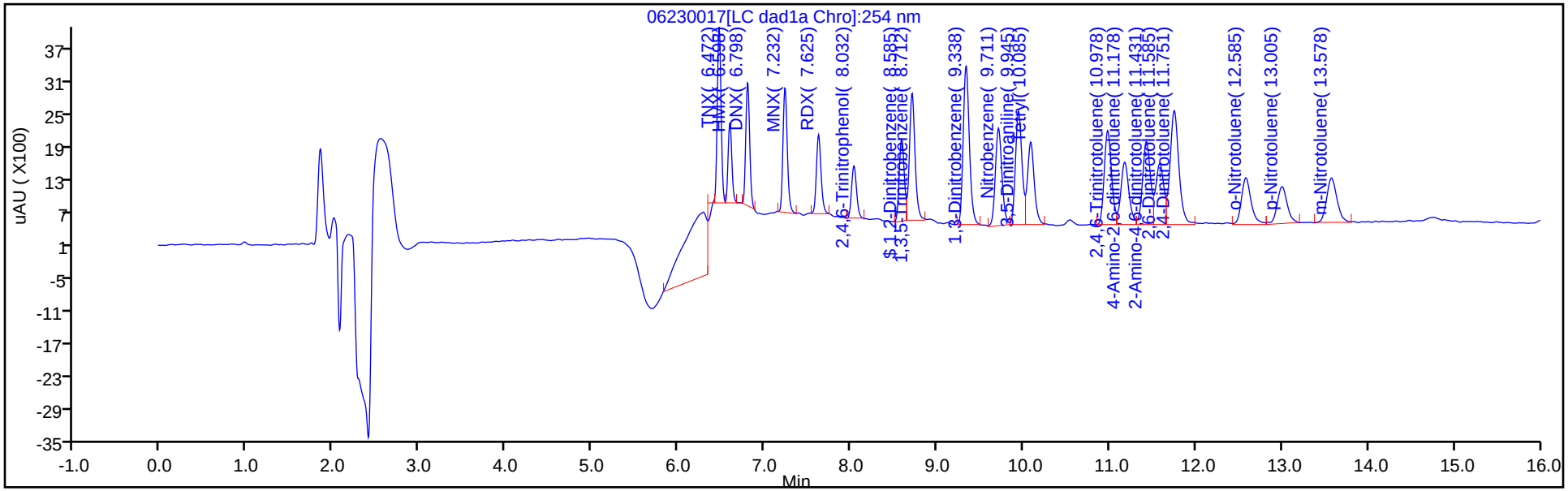
Report Date: 24-Jun-2023 12:55:50 Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Denver

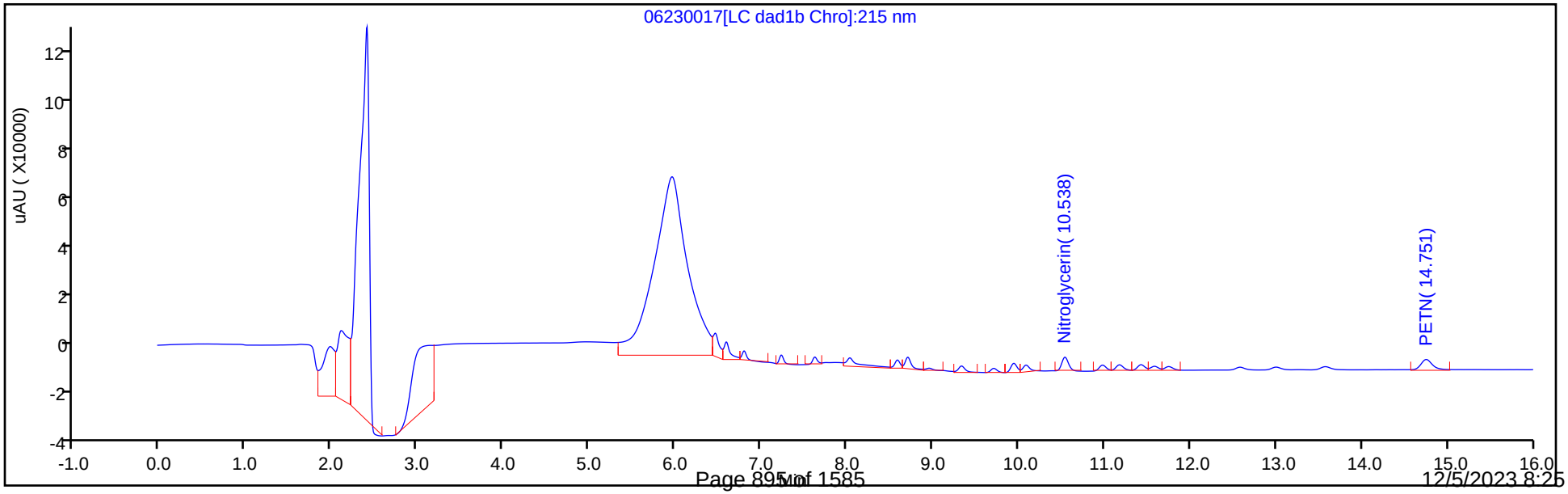
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230017.d

Injection Date:	23-Jun-2023 20:11:32	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	IC INT/DMT 3			Worklist Smp#:	17
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

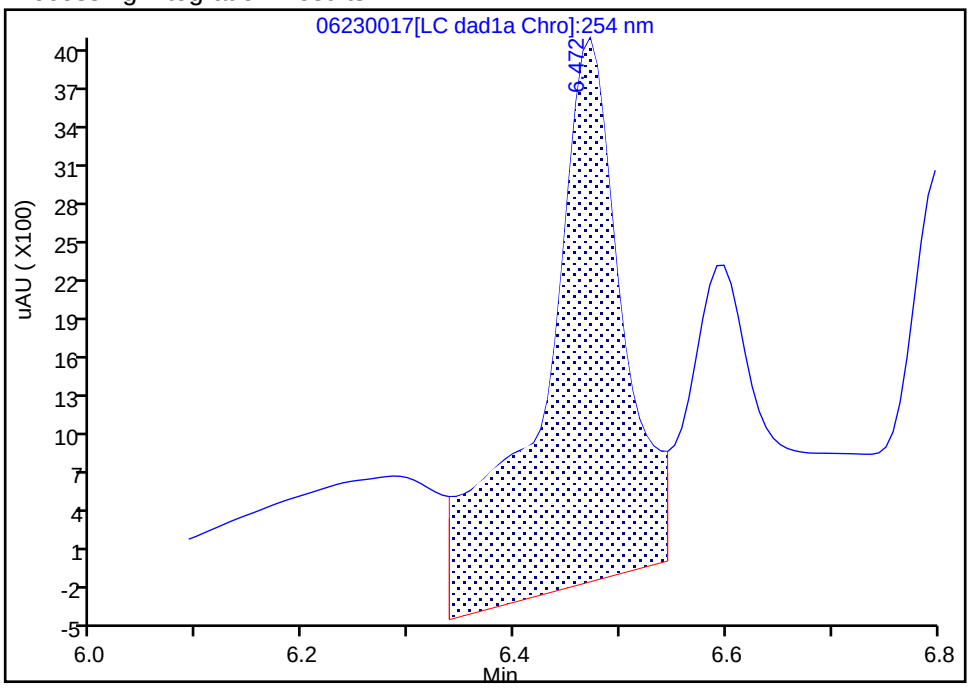
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230017.d
Injection Date: 23-Jun-2023 20:11:32 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 3
Client ID:
Operator ID: JZ/JG ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

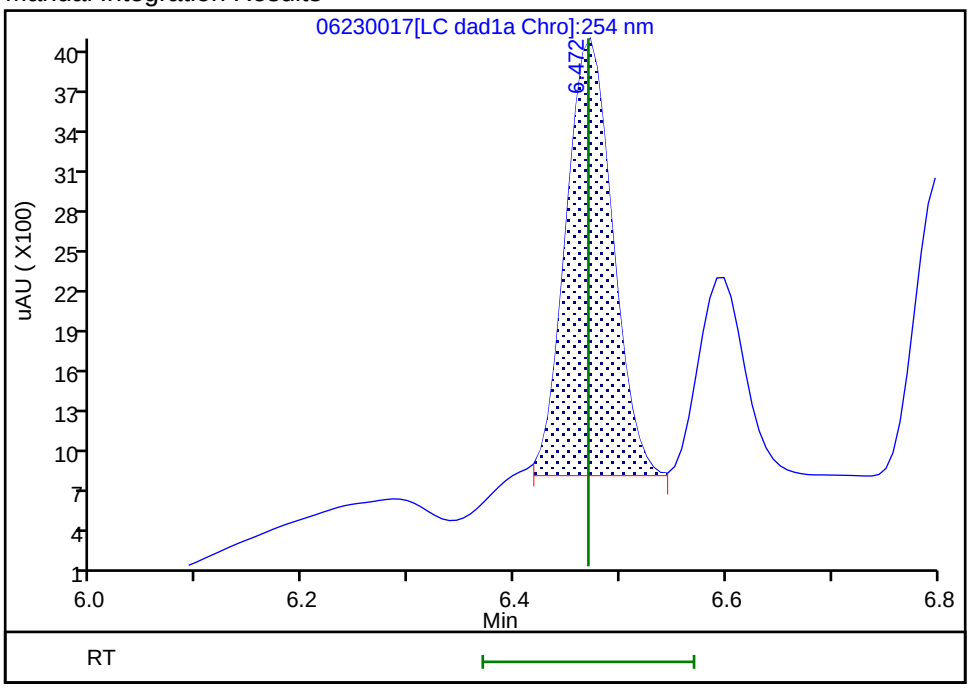
Processing Integration Results

RT: 6.47
Area: 22565
Amount: 0.100036
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 9975
Amount: 0.049686
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 20:36:36 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

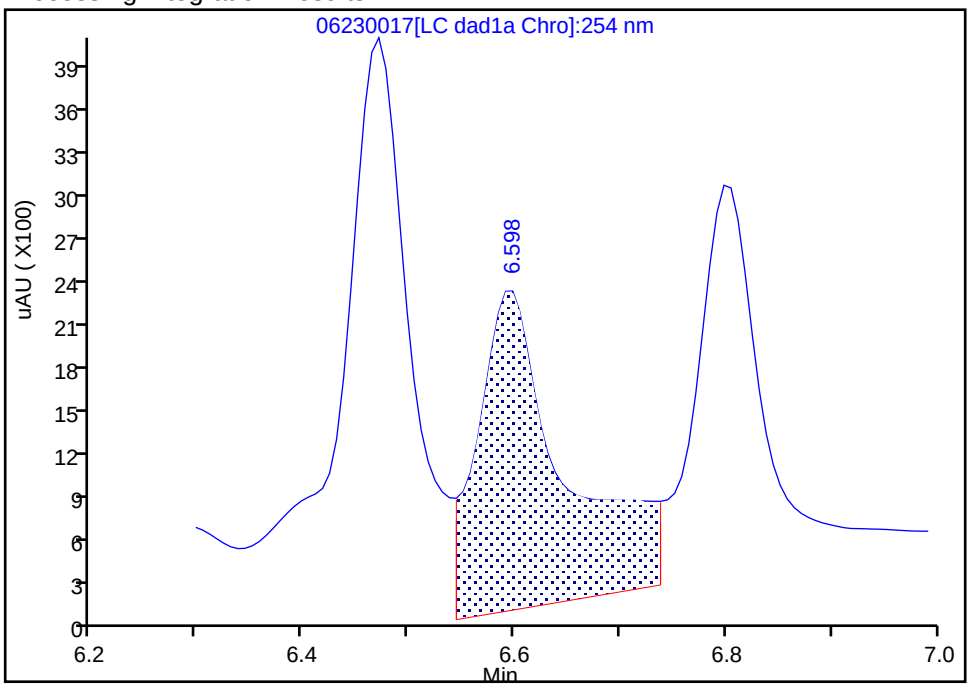
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Injection Date:	23-Jun-2023 20:11:32	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 3				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

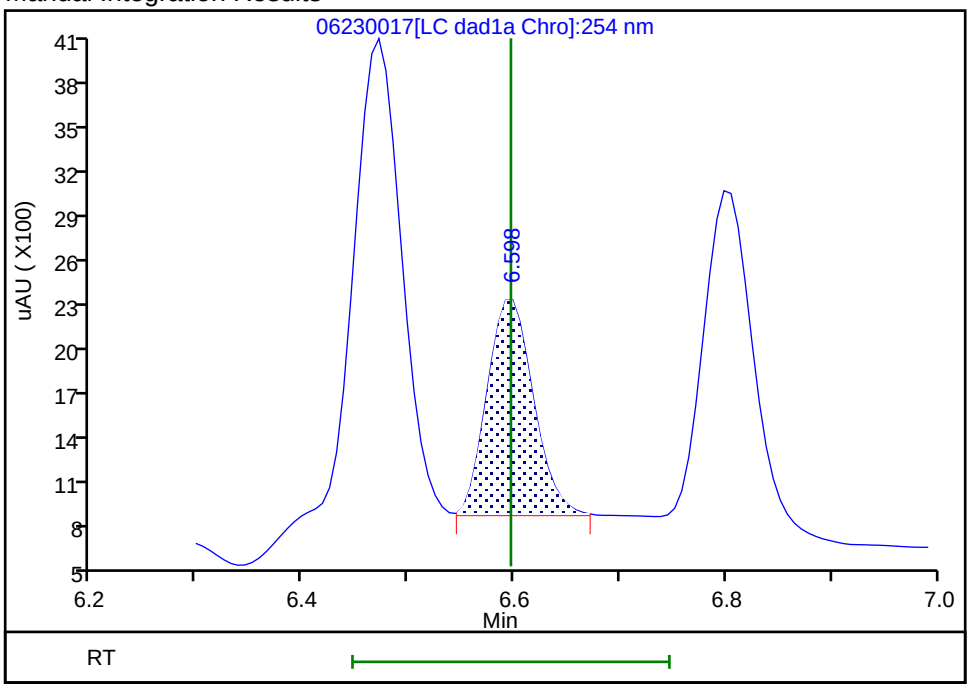
Processing Integration Results

RT: 6.60
Area: 12742
Amount: 0.114145
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 4496
Amount: 0.047700
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 20:36:38 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver

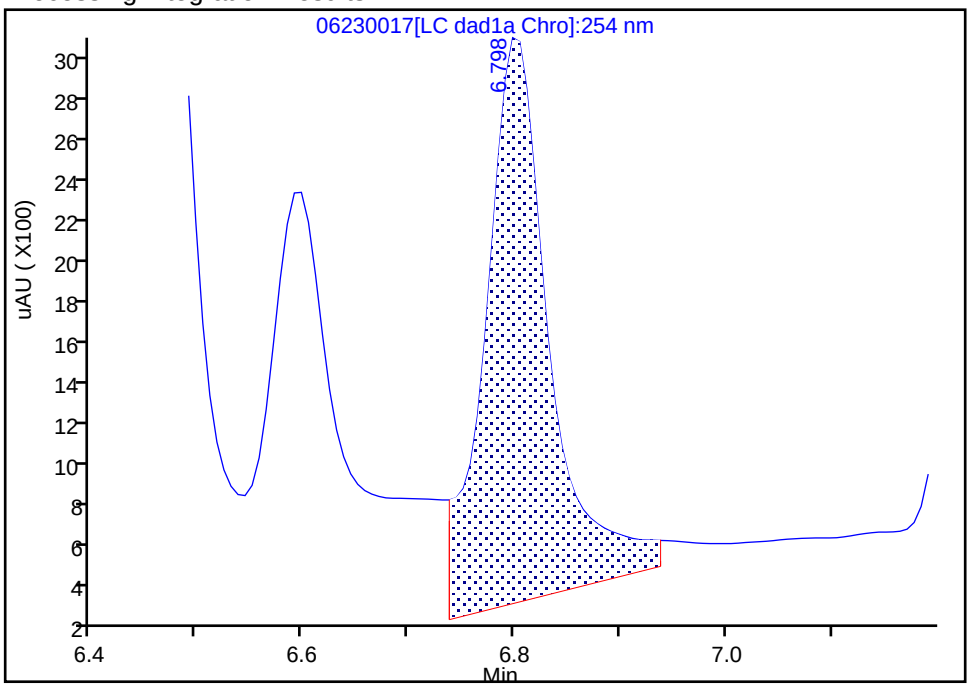
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230017.d				
Injection Date:	23-Jun-2023 20:11:32	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 3				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

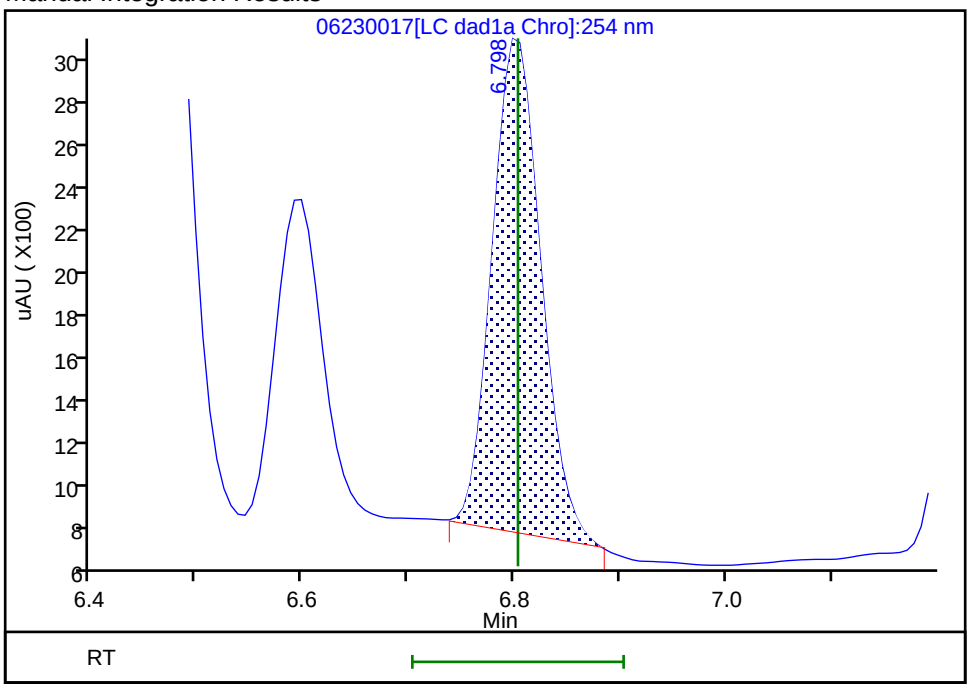
Processing Integration Results

RT: 6.80
Area: 11546
Amount: 0.074238
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 7299
Amount: 0.050515
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 20:36:41 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

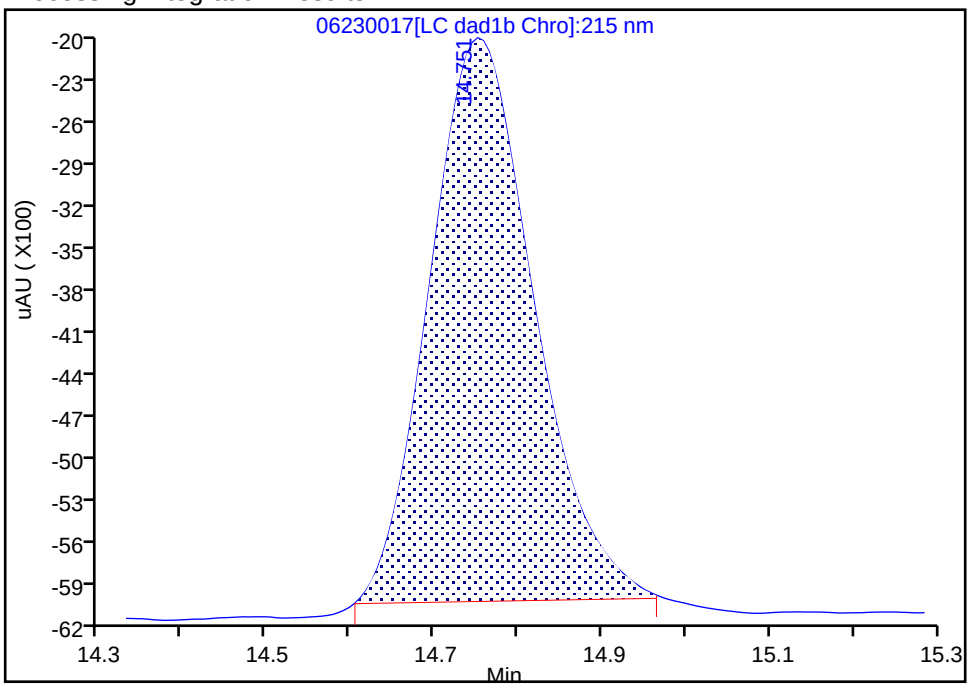
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230017.d				
Injection Date:	23-Jun-2023 20:11:32	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 3				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1C, 215 nm		

25 PETN, CAS: 78-11-5

Signal: 1

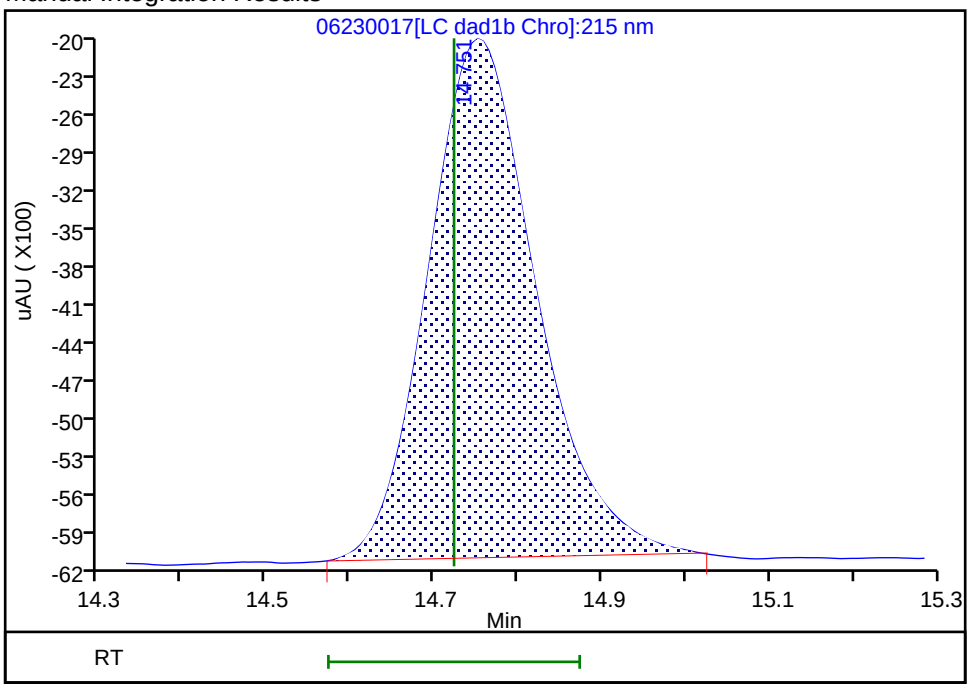
Processing Integration Results

RT: 14.75
Area: 34085
Amount: 0.477036
Amount Units: ug/mL



Manual Integration Results

RT: 14.75
Area: 35921
Amount: 0.498778
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 20:36:48 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230018.D
Lims ID: IC INT/DMT 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 23-Jun-2023 20:34:25 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/DMT 2
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2023 12:55:51 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1681

First Level Reviewer: LV5D Date: 23-Jun-2023 21:02:22

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.473	6.470	0.003	3897	0.0201	0.0194	M
4 HMX	1	6.593	6.597	-0.004	1960	0.0200	0.0208	M
6 DNX	1	6.799	6.803	-0.004	2620	0.0200	0.0181	M
7 MNX	1	7.233	7.237	-0.004	3155	0.0233	0.0227	
8 RDX	1	7.619	7.623	-0.004	2234	0.0200	0.0202	
9 2,4,6-Trinitrophenol	1	8.026	8.030	-0.004	1447	0.0200	0.0186	
$ 10 1,2-Dinitrobenzene	1	8.579	8.590	-0.011	2379	0.0200	0.0192	
11 1,3,5-Trinitrobenzene	1	8.699	8.710	-0.011	4083	0.0200	0.0189	
12 1,3-Dinitrobenzene	1	9.326	9.336	-0.010	5599	0.0200	0.0191	
13 Nitrobenzene	1	9.699	9.710	-0.011	3731	0.0200	0.0194	
14 3,5-Dinitroaniline	1	9.932	9.943	-0.011	4262	0.0200	0.0195	
15 Tetryl	1	10.066	10.083	-0.017	3248	0.0200	0.0194	
16 Nitroglycerin	2	10.526	10.536	-0.010	12682	0.2000	0.1962	
17 2,4,6-Trinitrotoluene	1	10.959	10.976	-0.017	3981	0.0200	0.0194	
18 4-Amino-2,6-dinitrotoluene	1	11.159	11.170	-0.011	3111	0.0200	0.0208	
19 2-Amino-4,6-dinitrotoluene	1	11.412	11.423	-0.011	3863	0.0200	0.0199	
20 2,6-Dinitrotoluene	1	11.566	11.576	-0.010	2916	0.0200	0.0204	
21 2,4-Dinitrotoluene	1	11.732	11.743	-0.011	5829	0.0200	0.0197	
22 o-Nitrotoluene	1	12.559	12.570	-0.011	2556	0.0200	0.0203	
23 p-Nitrotoluene	1	12.979	12.983	-0.004	2404	0.0200	0.0218	
24 m-Nitrotoluene	1	13.552	13.556	-0.004	3341	0.0200	0.0207	
25 PETN	2	14.719	14.723	-0.004	13637	0.2000	0.1894	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00077	Amount Added:	2.00	Units: uL
8330 DMT_00013	Amount Added:	1.00	Units: uL

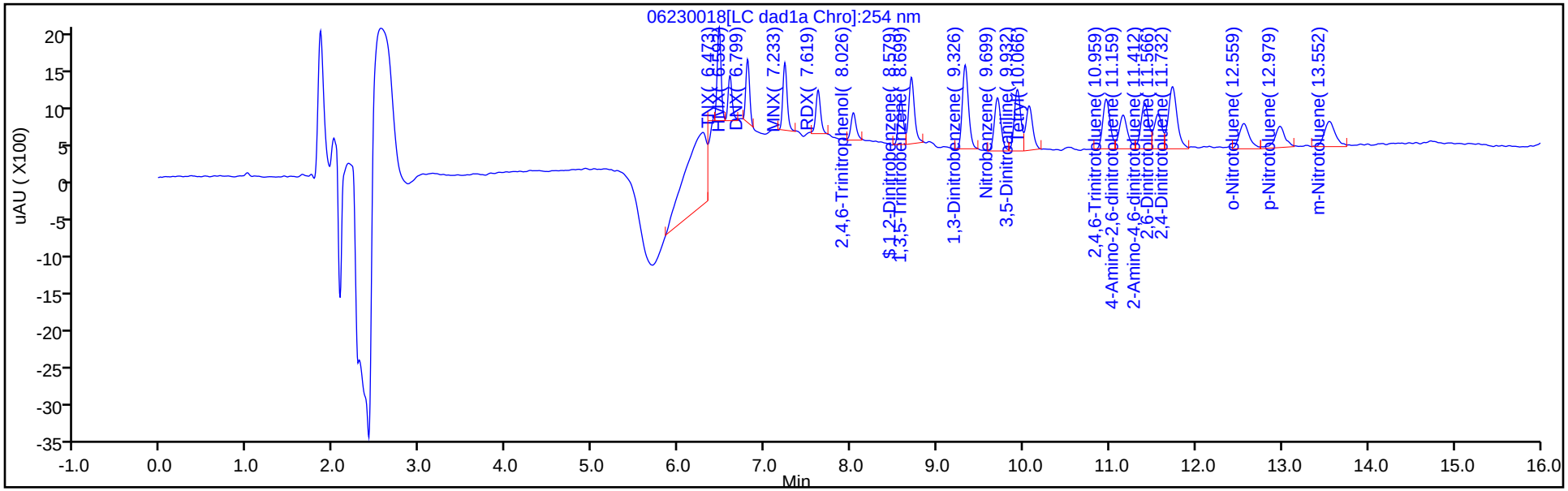
Report Date: 24-Jun-2023 12:55:51 Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Denver

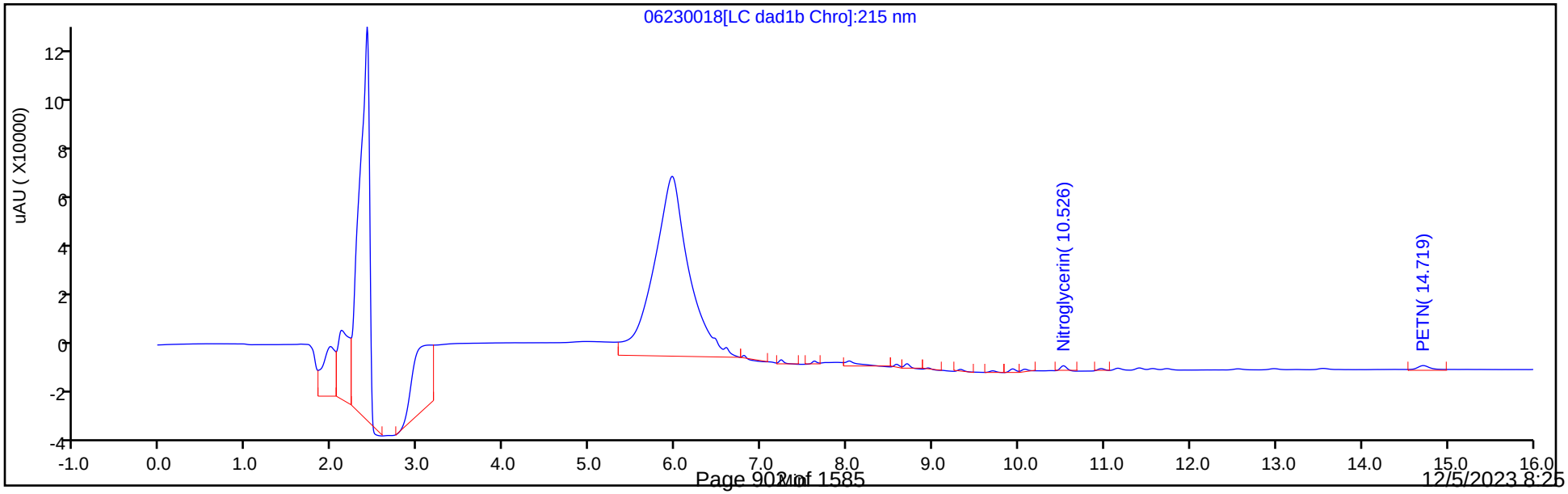
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230018.d

Injection Date:	23-Jun-2023 20:34:25	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	IC INT/DMT 2			Worklist Smp#:	18
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



12/5/2023 8:25 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

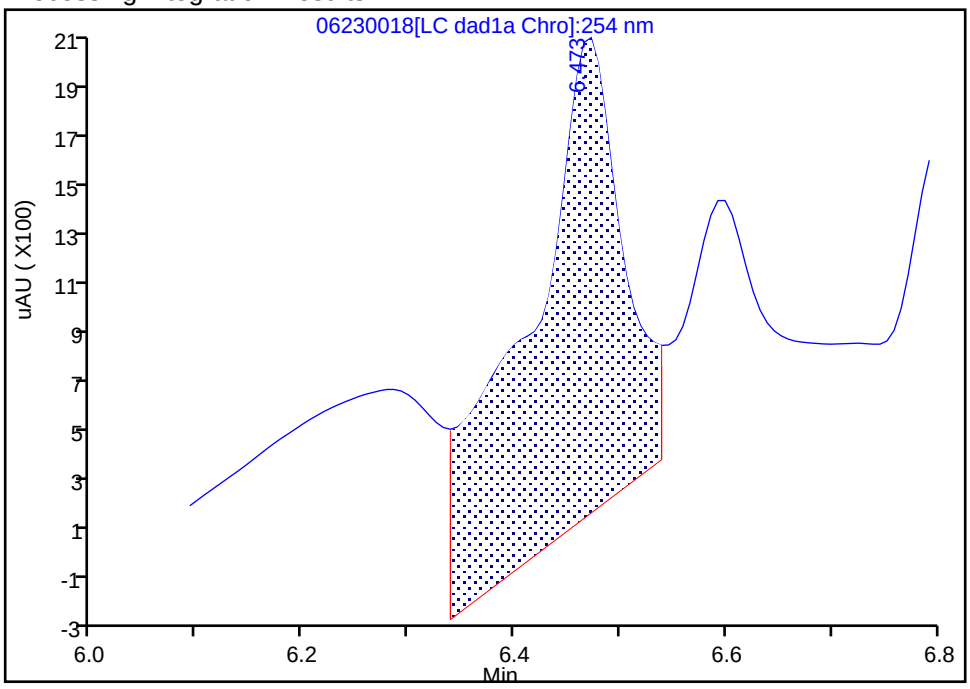
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Injection Date:	23-Jun-2023 20:34:25	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

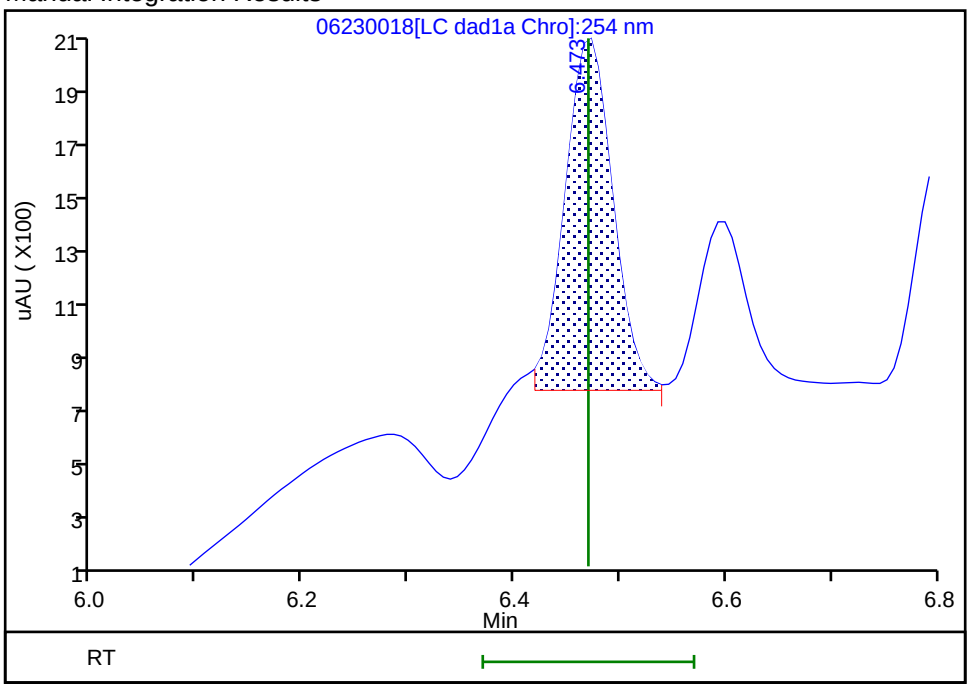
Processing Integration Results

RT: 6.47
Area: 12448
Amount: 0.050881
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 3897
Amount: 0.019411
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 21:02:09 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

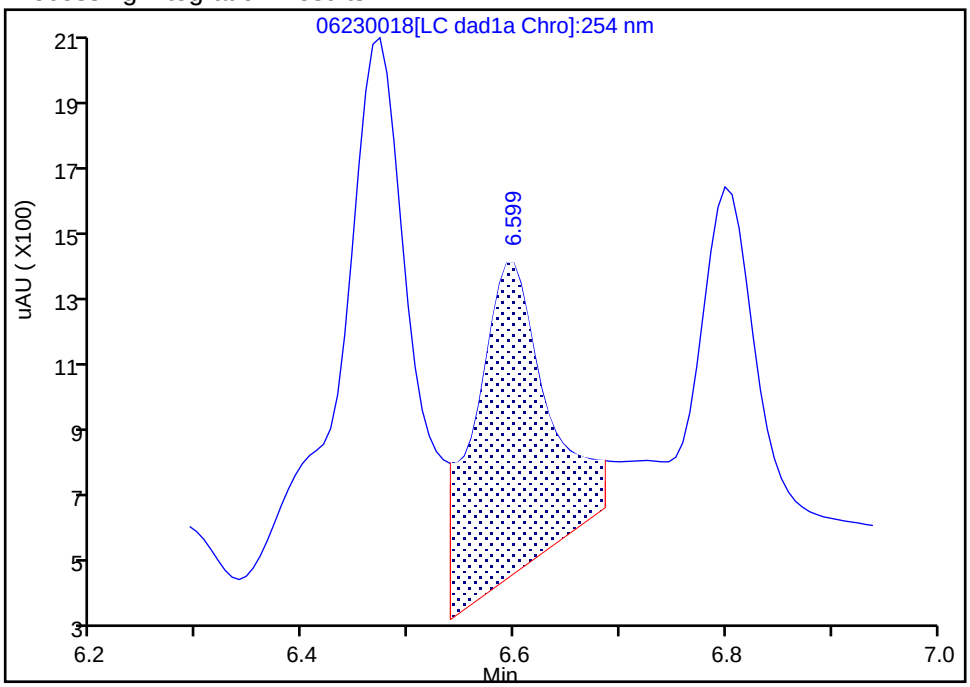
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Injection Date:	23-Jun-2023 20:34:25	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

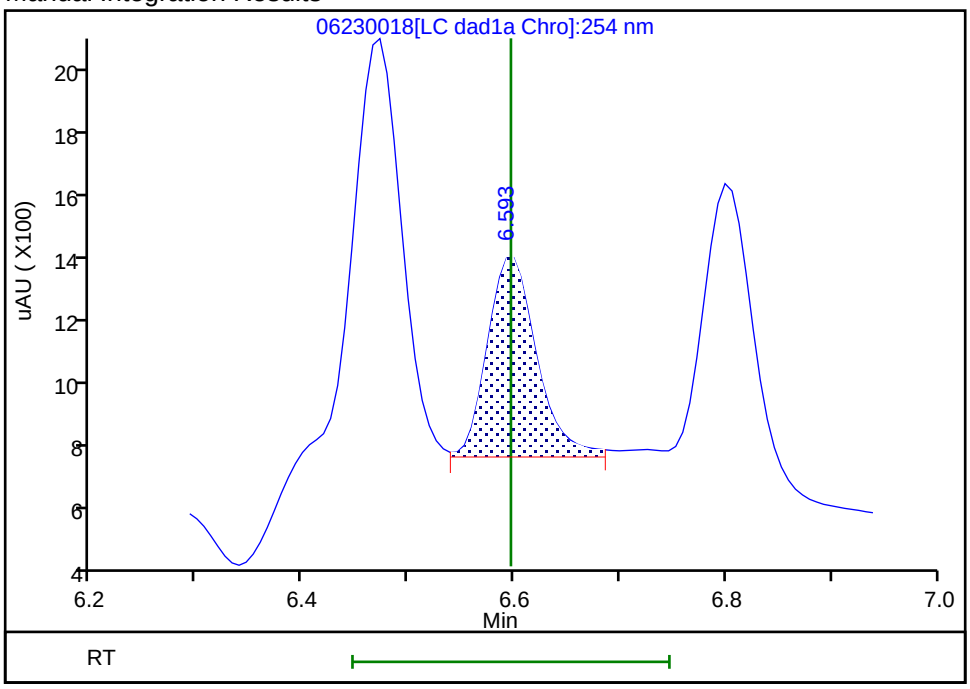
Processing Integration Results

RT: 6.60
Area: 4371
Amount: 0.039965
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 1960
Amount: 0.020795
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 21:02:06 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

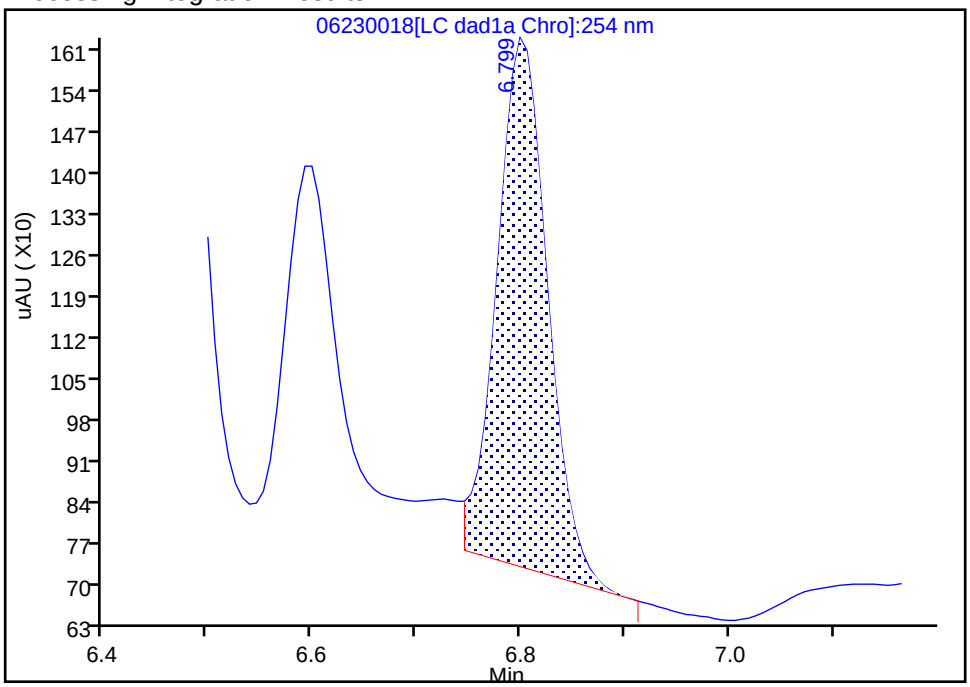
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Injection Date:	23-Jun-2023 20:34:25	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

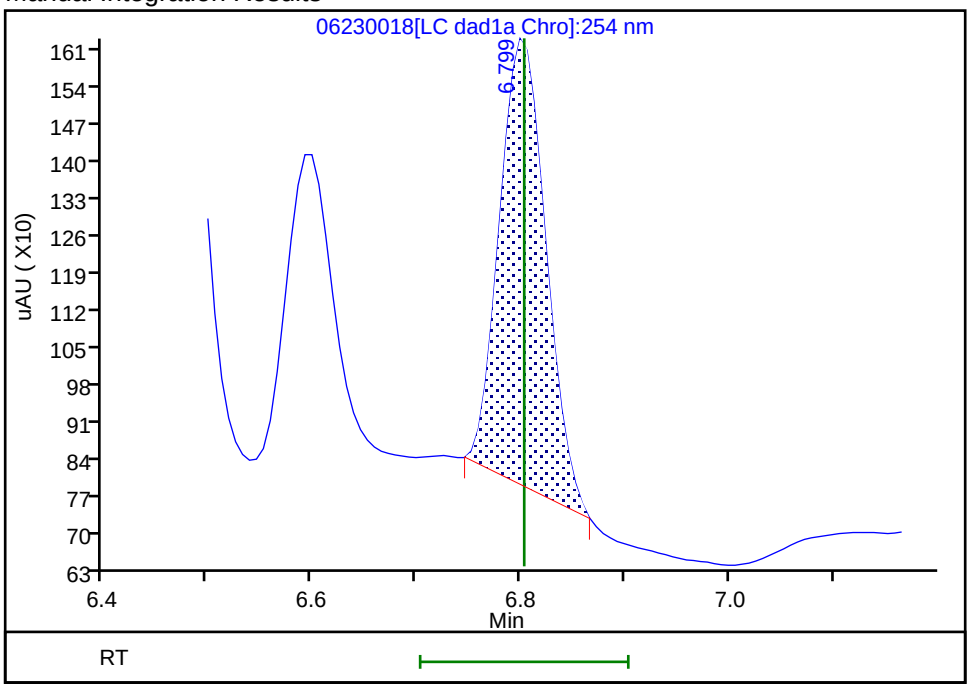
Processing Integration Results

RT: 6.80
Area: 3071
Amount: 0.020912
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 2620
Amount: 0.018132
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 21:02:11 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

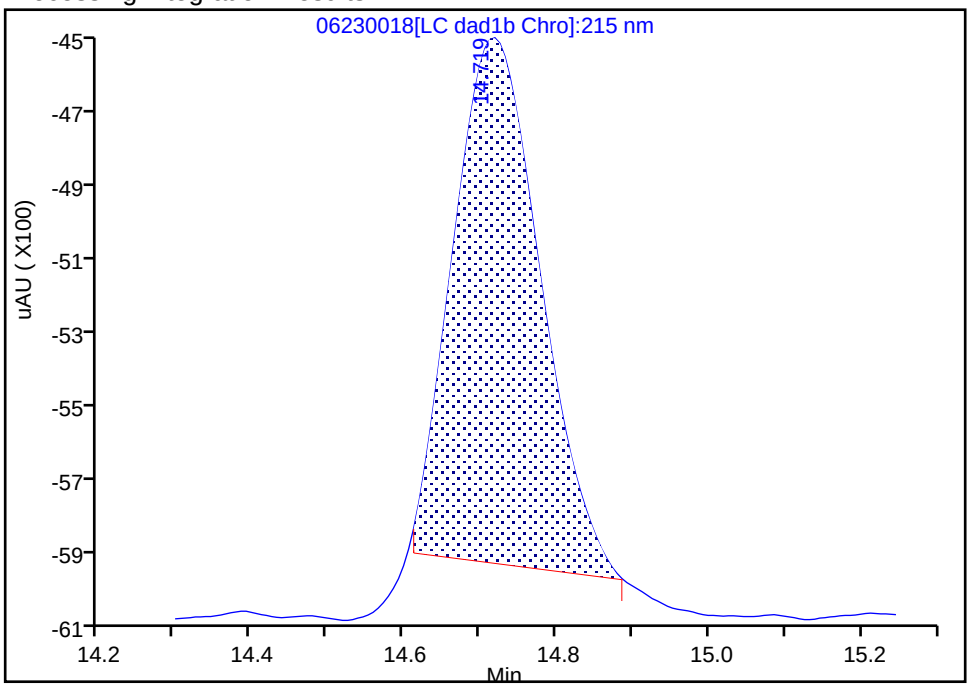
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230018.d				
Injection Date:	23-Jun-2023 20:34:25	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1C, 215 nm		

25 PETN, CAS: 78-11-5

Signal: 1

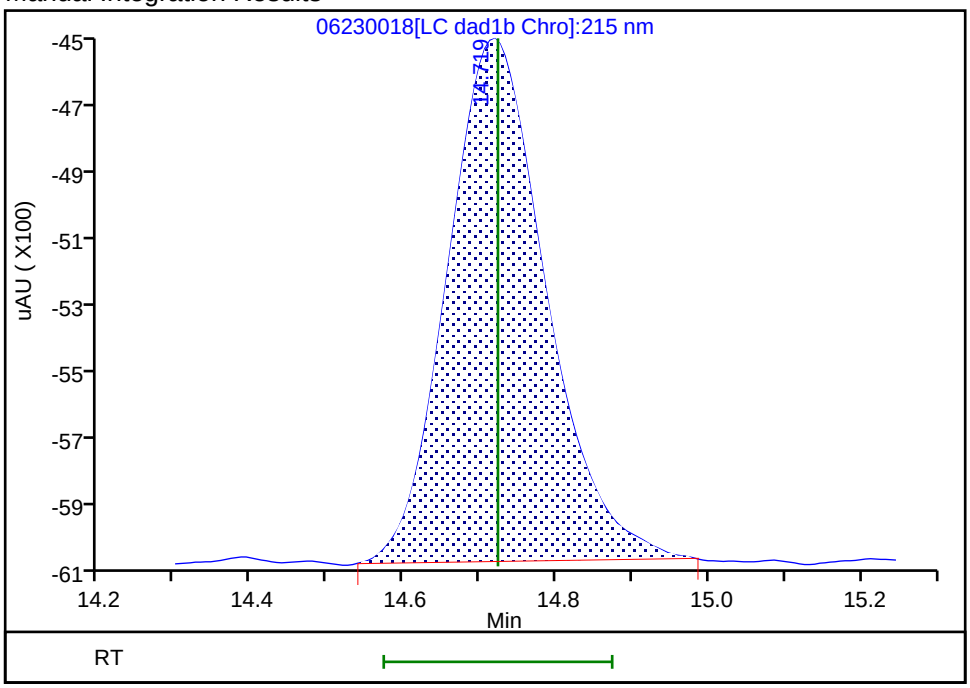
Processing Integration Results

RT: 14.72
Area: 10960
Amount: 0.155528
Amount Units: ug/mL



Manual Integration Results

RT: 14.72
Area: 13637
Amount: 0.189356
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 21:02:17 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230019.D
Lims ID: IC INT/DMT 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 23-Jun-2023 20:57:20 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/DMT 1
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2023 12:55:51 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1681

First Level Reviewer: LV5D Date: 23-Jun-2023 21:21:44

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.474	6.470	0.004	2190	0.0100	0.0109	M
4 HMX	1	6.601	6.597	0.004	1048	0.0100	0.0111	M
6 DNX	1	6.801	6.803	-0.002	1412	0.0100	0.009772	M
7 MNX	1	7.241	7.237	0.004	1811	0.0117	0.0131	
8 RDX	1	7.627	7.623	0.004	1225	0.0100	0.0111	
9 2,4,6-Trinitrophenol	1	8.041	8.030	0.011	756	0.0100	0.009709	
$ 10 1,2-Dinitrobenzene	1	8.594	8.590	0.004	1172	0.0100	0.009458	
11 1,3,5-Trinitrobenzene	1	8.714	8.710	0.004	2019	0.0100	0.009344	
12 1,3-Dinitrobenzene	1	9.334	9.336	-0.002	2901	0.0100	0.009889	
13 Nitrobenzene	1	9.714	9.710	0.004	2020	0.0100	0.0105	
14 3,5-Dinitroaniline	1	9.941	9.943	-0.002	2151	0.0100	0.0101	
15 Tetryl	1	10.081	10.083	-0.002	1546	0.0100	0.009243	
16 Nitroglycerin	2	10.534	10.536	-0.002	6047	0.1000	0.0935	
17 2,4,6-Trinitrotoluene	1	10.974	10.976	-0.002	1918	0.0100	0.009361	
18 4-Amino-2,6-dinitrotoluene	1	11.174	11.170	0.004	1464	0.0100	0.009789	
19 2-Amino-4,6-dinitrotoluene	1	11.421	11.423	-0.002	1950	0.0100	0.0101	
20 2,6-Dinitrotoluene	1	11.574	11.576	-0.002	1373	0.0100	0.009626	
21 2,4-Dinitrotoluene	1	11.741	11.743	-0.002	2941	0.0100	0.0099	
22 o-Nitrotoluene	1	12.567	12.570	-0.003	1291	0.0100	0.0102	
23 p-Nitrotoluene	1	12.994	12.983	0.011	1165	0.0100	0.0106	
24 m-Nitrotoluene	1	13.554	13.556	-0.002	1870	0.0100	0.009849	
25 PETN	2	14.721	14.723	-0.002	7328	0.1000	0.1018	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00077	Amount Added:	1.00	Units: uL
8330 DMT_00013	Amount Added:	0.50	Units: uL

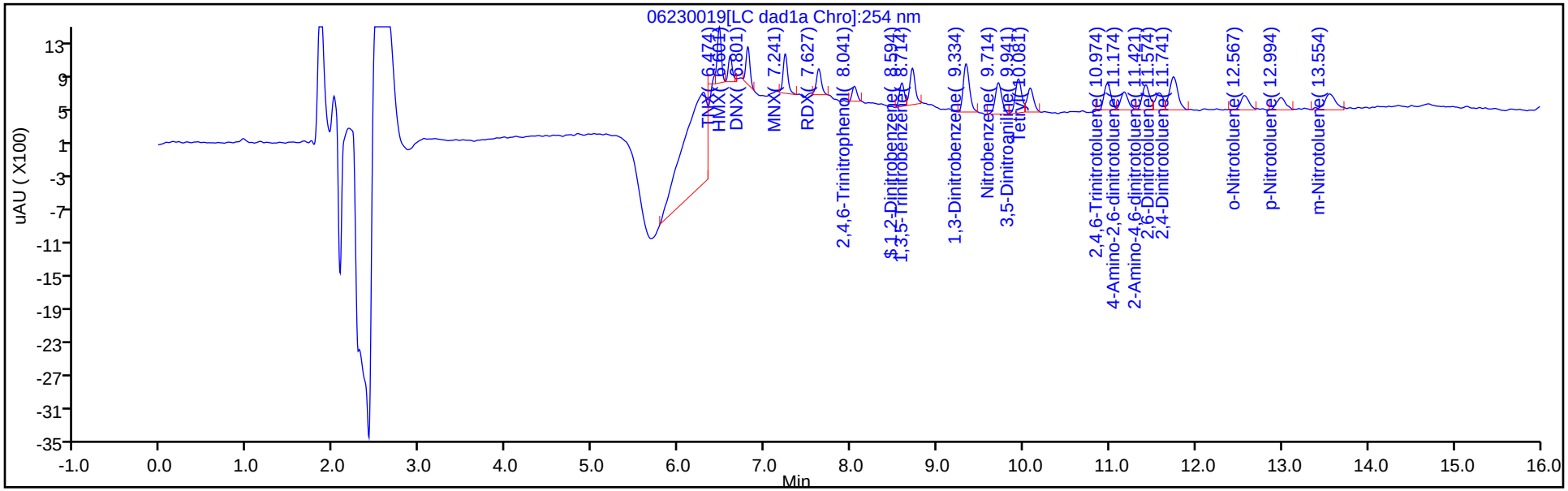
Report Date: 24-Jun-2023 12:55:52 Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Denver

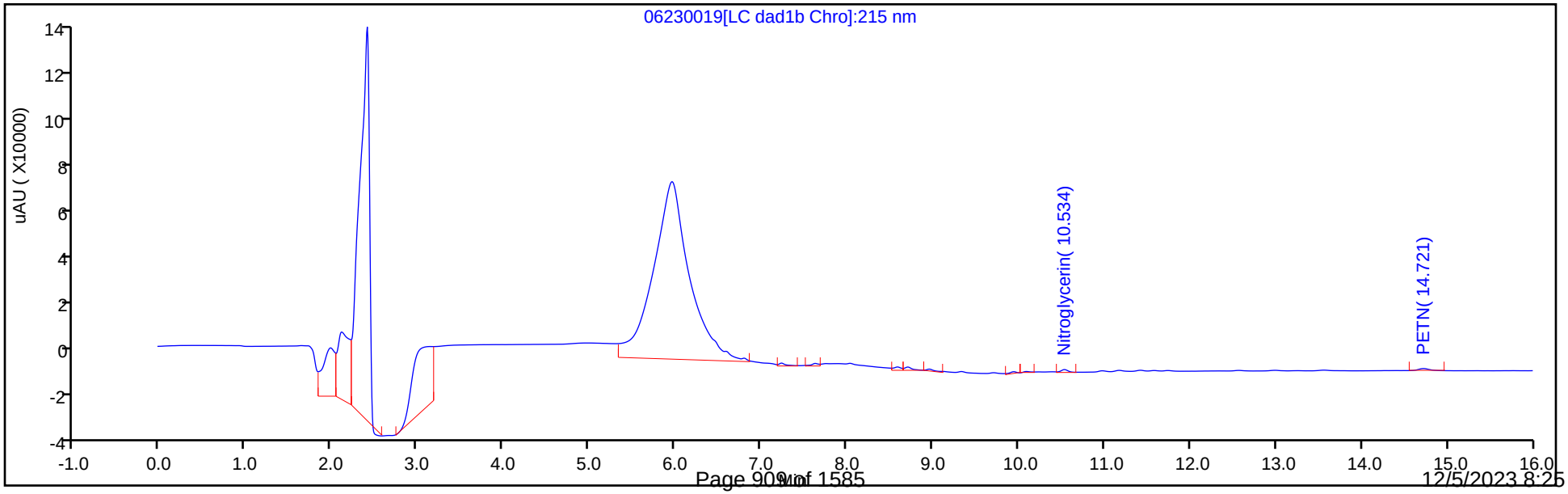
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230019.d

Injection Date:	23-Jun-2023 20:57:20	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	IC INT/DMT 1			Worklist Smp#:	19
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



12/5/2023 8:25 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

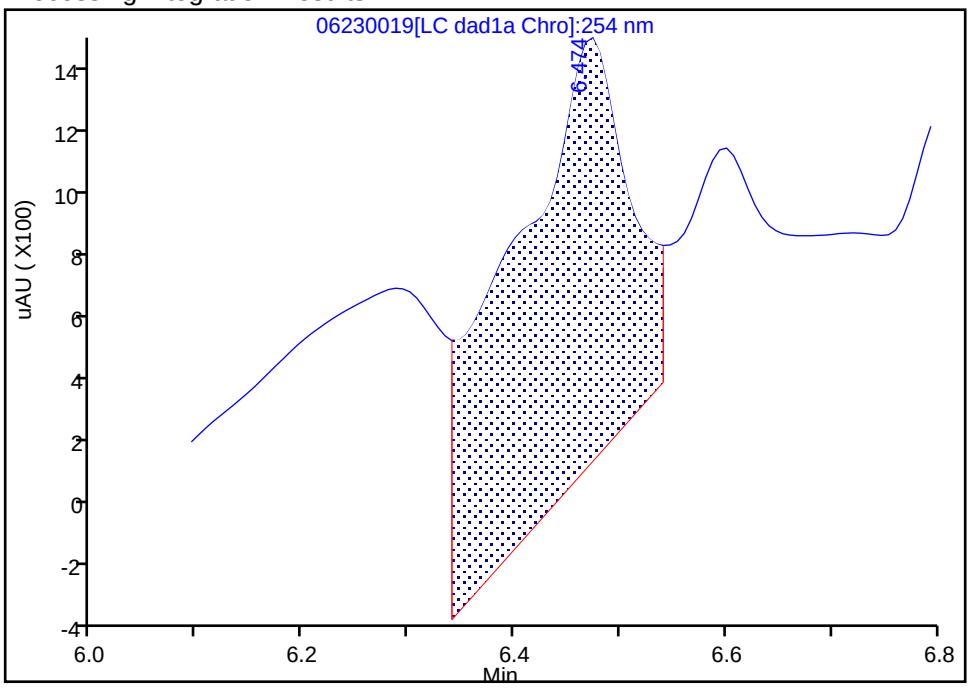
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Injection Date:	23-Jun-2023 20:57:20	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

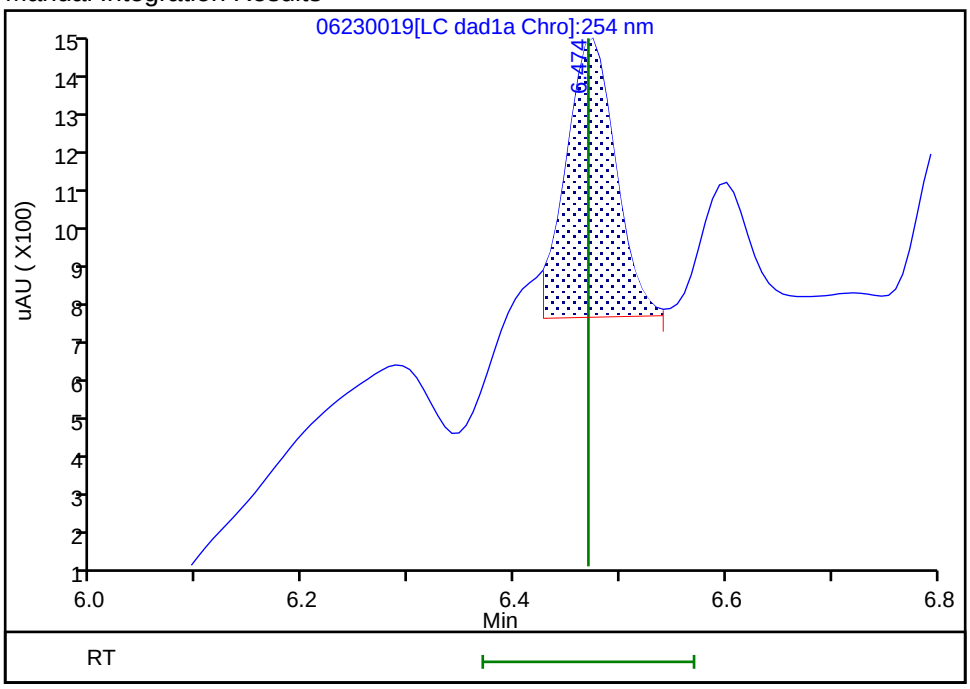
Processing Integration Results

RT: 6.47
Area: 11267
Amount: 0.037393
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 2190
Amount: 0.010908
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 21:21:33 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

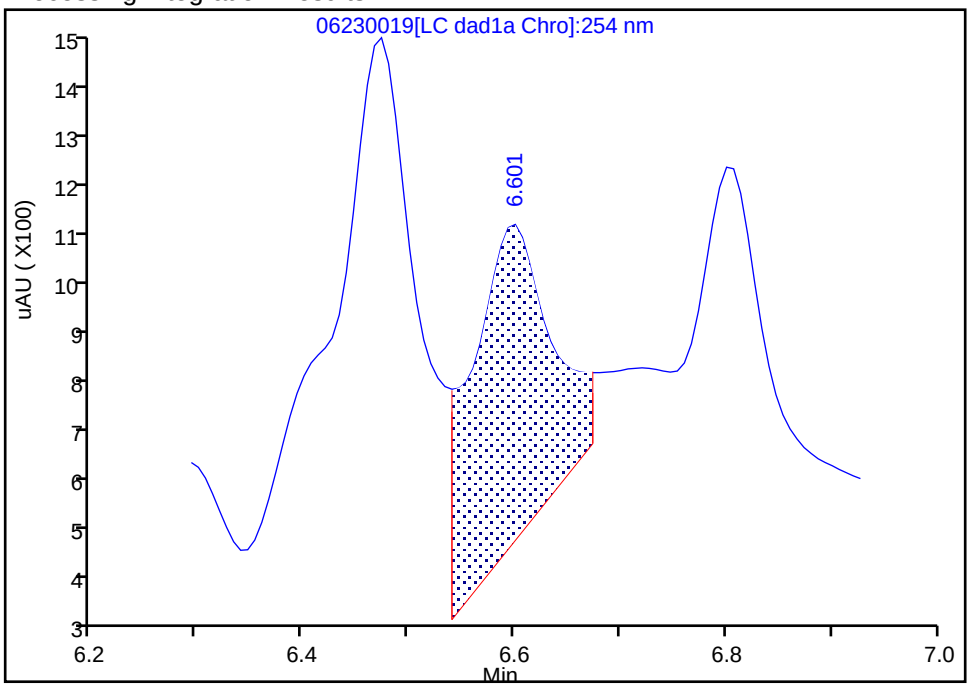
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230019.d
Injection Date: 23-Jun-2023 20:57:20 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 1
Client ID:
Operator ID: JZ/JG ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

4 HMX, CAS: 2691-41-0

Signal: 1

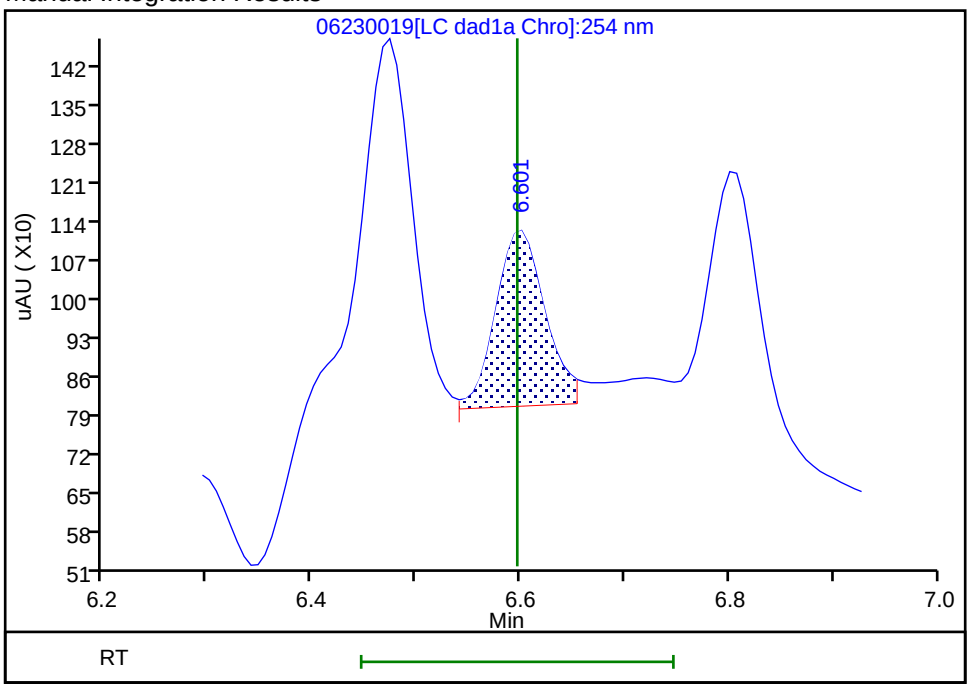
Processing Integration Results

RT: 6.60
Area: 3145
Amount: 0.026753
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 1048
Amount: 0.011119
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 21:21:35 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

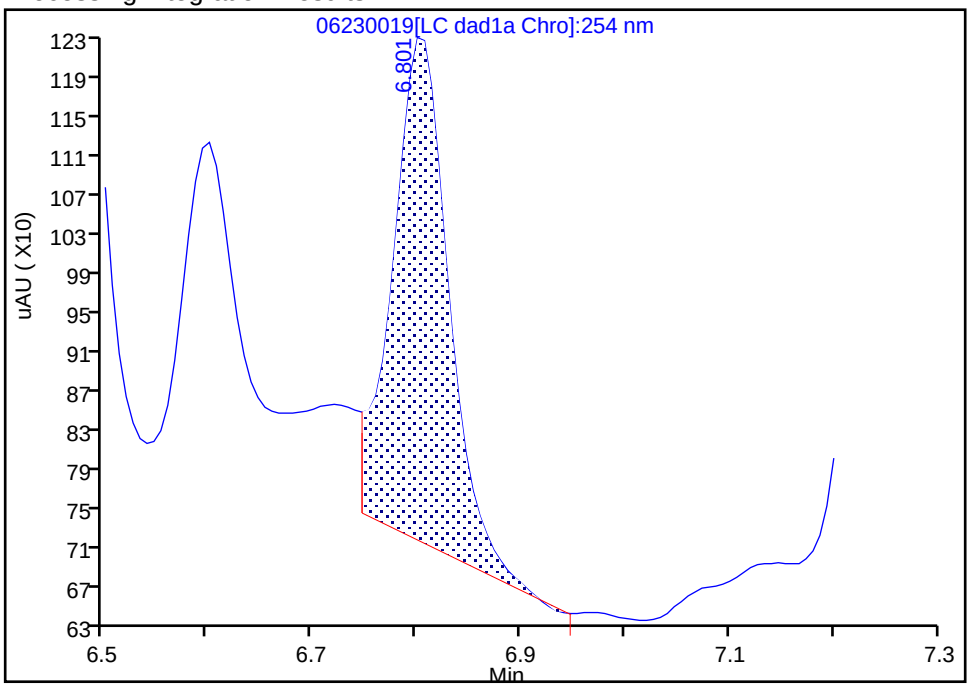
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230019.d				
Injection Date:	23-Jun-2023 20:57:20	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

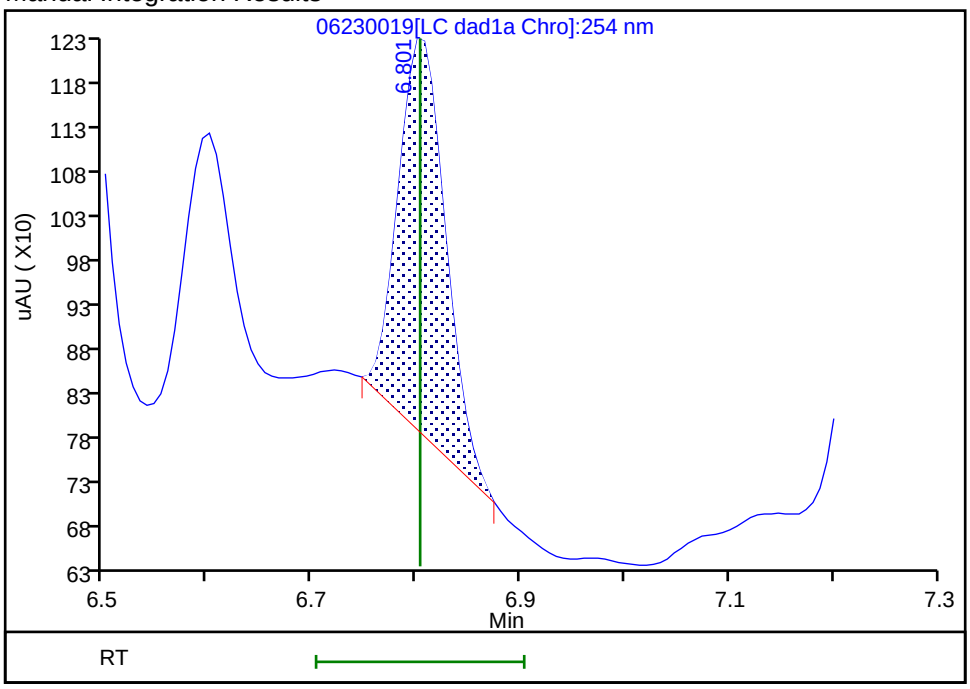
Processing Integration Results

RT: 6.80
Area: 1950
Amount: 0.012960
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 1412
Amount: 0.009772
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 21:21:40 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

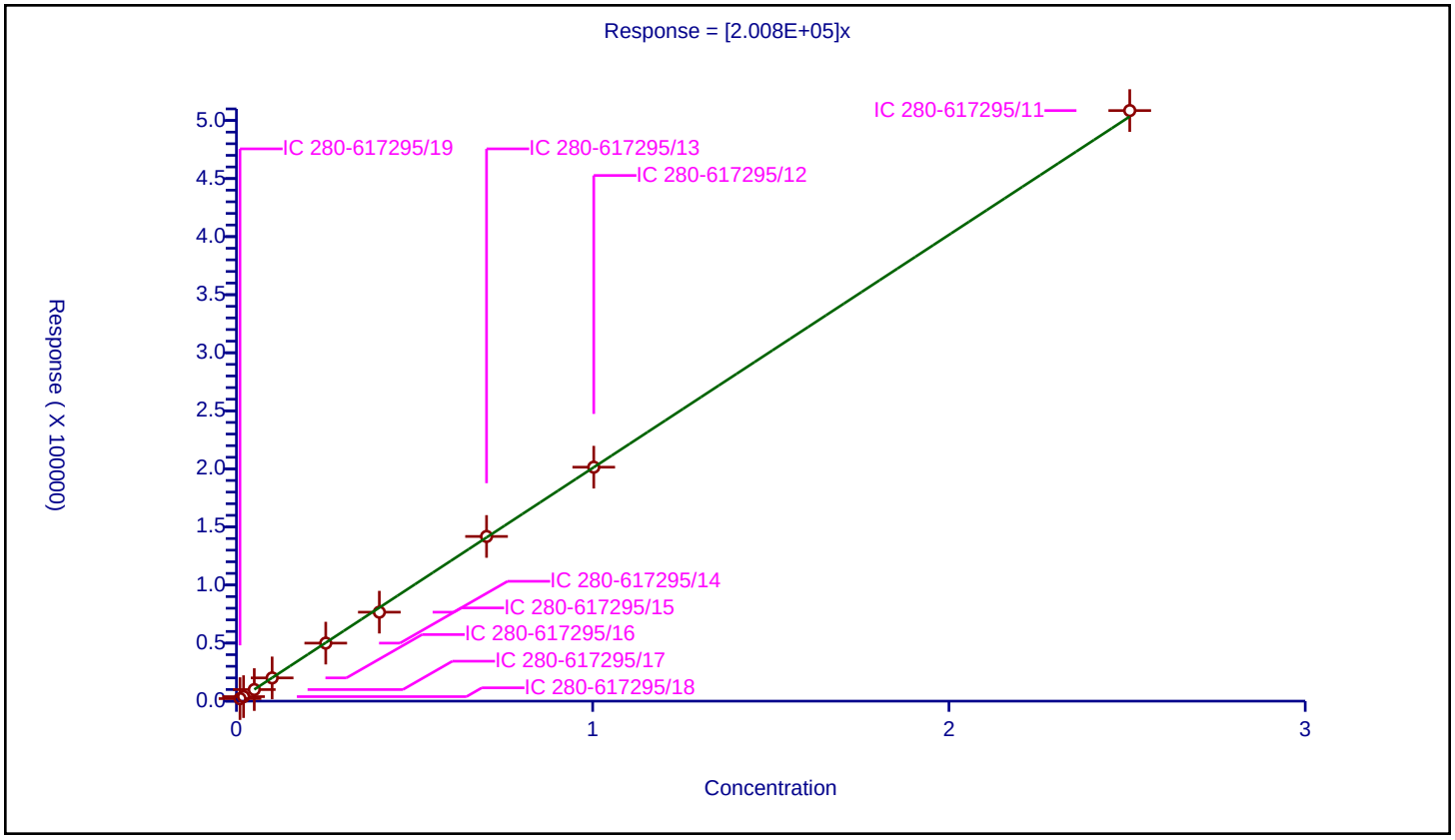
Curve Coefficients

Intercept:	0
Slope:	2.008E+05

Error Coefficients

Standard Error:	2320
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.01003	2190.0			218344.965105	Y
2	IC 280-617295/18	0.02006	3897.0			194267.198405	Y
3	IC 280-617295/17	0.05015	9975.0			198903.29013	Y
4	IC 280-617295/16	0.1003	20003.0			199431.704885	Y
5	IC 280-617295/15	0.25075	49970.0			199282.153539	Y
6	IC 280-617295/14	0.4012	76609.0			190949.651047	Y
7	IC 280-617295/13	0.7021	141821.0			201995.442245	Y
8	IC 280-617295/12	1.003	201466.0			200863.409771	Y
9	IC 280-617295/11	2.5075	508547.0			202810.368893	Y



Calibration / HMX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

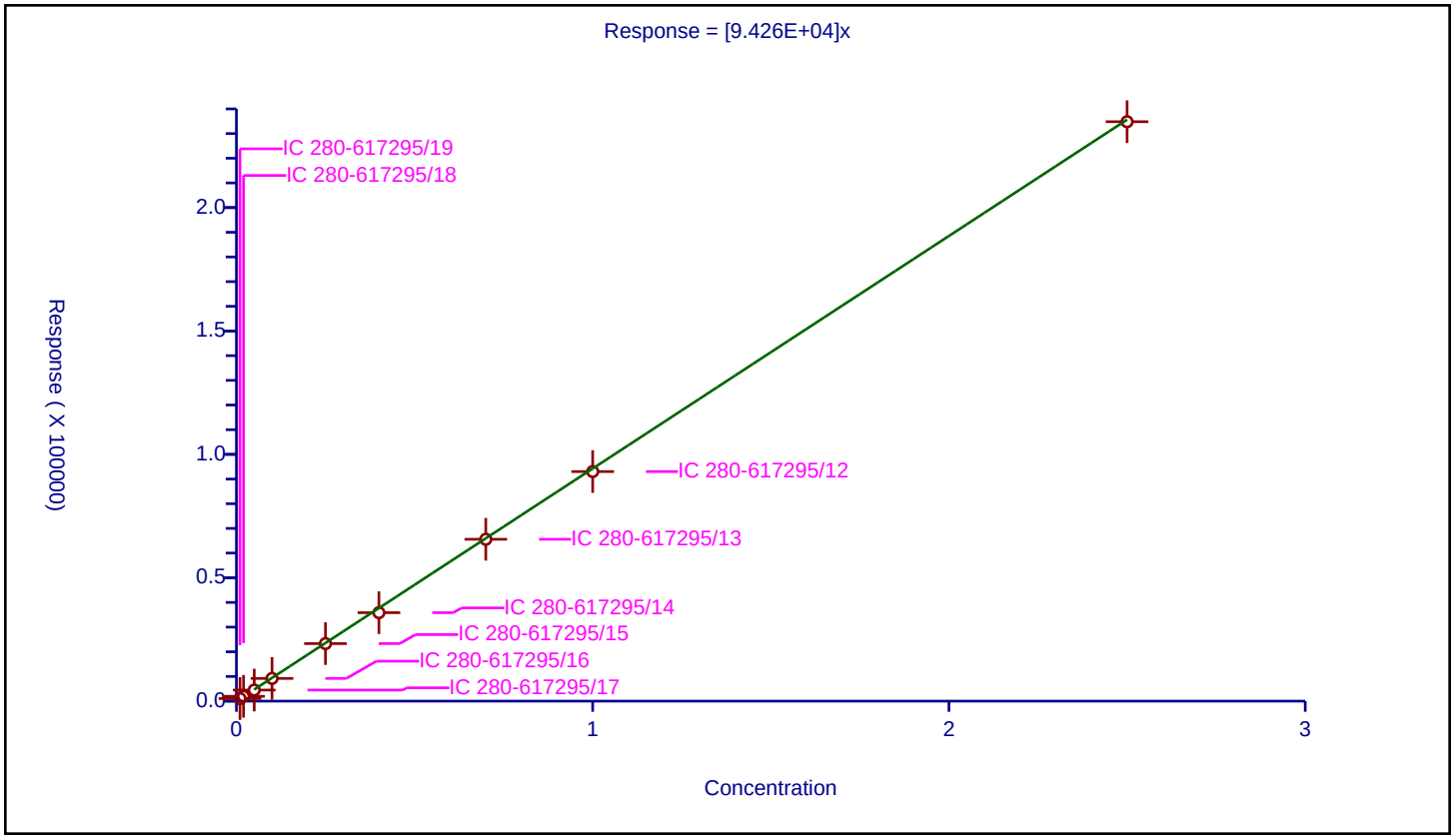
Curve Coefficients

Intercept:	0
Slope:	9.426E+04

Error Coefficients

Standard Error:	862
Relative Standard Error:	4.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.01	1048.0			104800.0	Y
2	IC 280-617295/18	0.02	1960.0			98000.0	Y
3	IC 280-617295/17	0.05	4496.0			89920.0	Y
4	IC 280-617295/16	0.1	9201.0			92010.0	Y
5	IC 280-617295/15	0.25	23321.0			93284.0	Y
6	IC 280-617295/14	0.4	35849.0			89622.5	Y
7	IC 280-617295/13	0.7	65593.0			93704.285714	Y
8	IC 280-617295/12	1.0	93035.0			93035.0	Y
9	IC 280-617295/11	2.5	234806.0			93922.4	Y



Calibration / DNX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

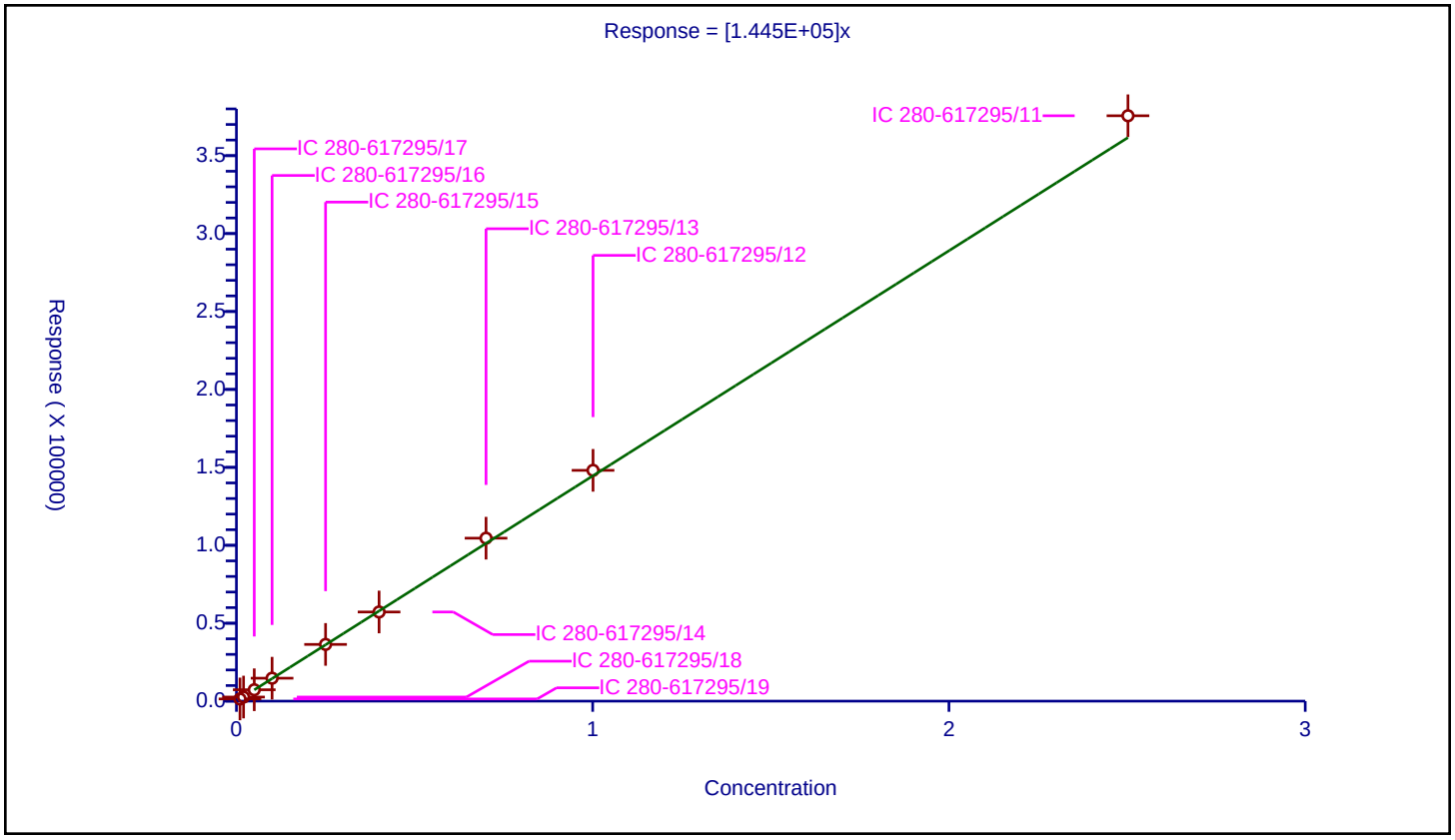
Curve Coefficients

Intercept:	0
Slope:	1.445E+05

Error Coefficients

Standard Error:	5240
Relative Standard Error:	4.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.01001	1412.0			141058.941059	Y
2	IC 280-617295/18	0.02002	2620.0			130869.130869	Y
3	IC 280-617295/17	0.05005	7299.0			145834.165834	Y
4	IC 280-617295/16	0.1001	14726.0			147112.887113	Y
5	IC 280-617295/15	0.25025	36397.0			145442.557443	Y
6	IC 280-617295/14	0.4004	57208.0			142877.122877	Y
7	IC 280-617295/13	0.7007	104556.0			149216.497788	Y
8	IC 280-617295/12	1.001	148083.0			147935.064935	Y
9	IC 280-617295/11	2.5025	375597.0			150088.711289	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

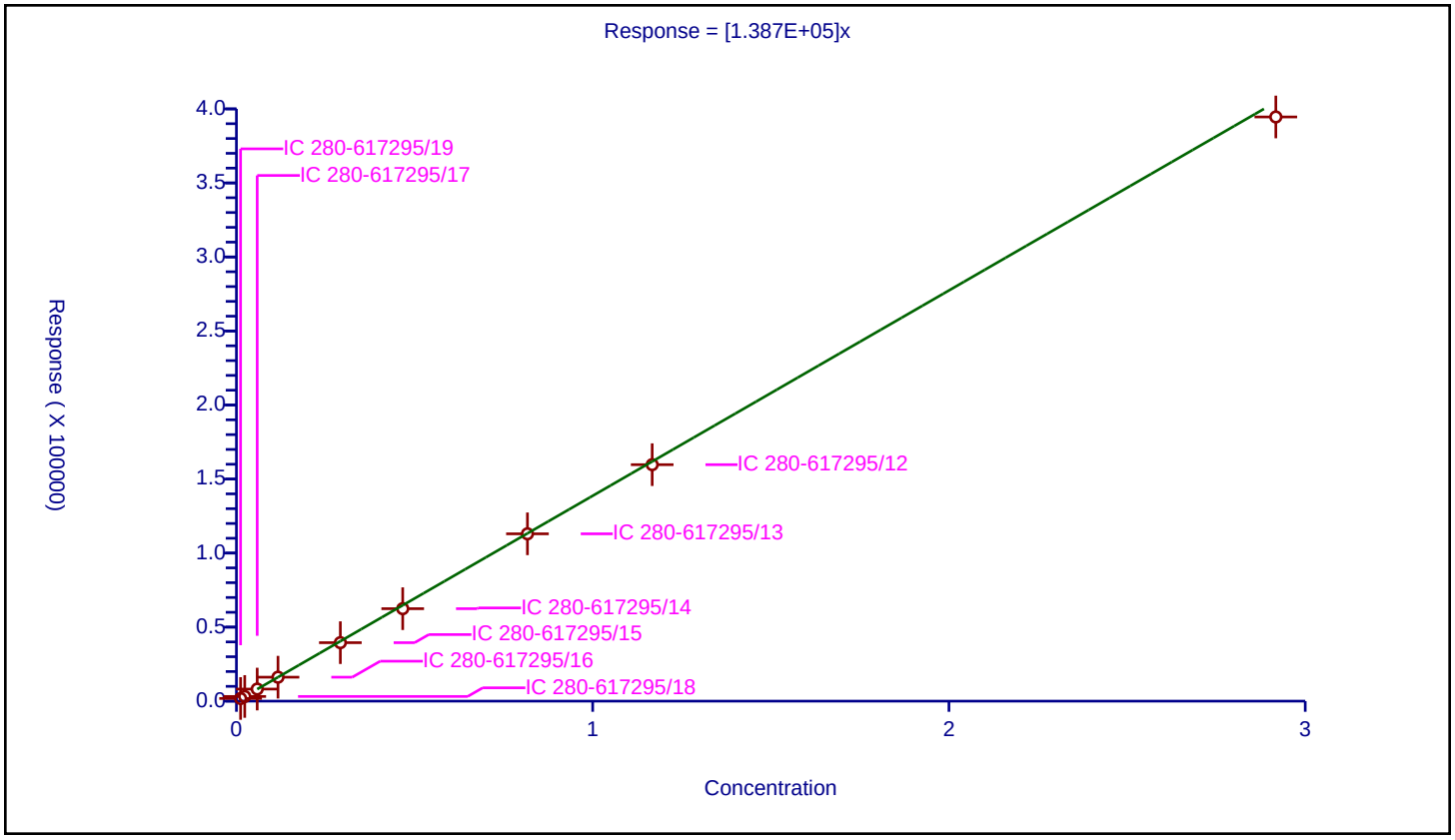
Curve Coefficients

Intercept:	0
Slope:	1.387E+05

Error Coefficients

Standard Error:	3750
Relative Standard Error:	4.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.01167	1811.0			155184.233076	Y
2	IC 280-617295/18	0.02334	3155.0			135175.664096	Y
3	IC 280-617295/17	0.05835	8151.0			139691.51671	Y
4	IC 280-617295/16	0.1167	16173.0			138586.118252	Y
5	IC 280-617295/15	0.29175	39495.0			135372.750643	Y
6	IC 280-617295/14	0.4668	62440.0			133761.782348	Y
7	IC 280-617295/13	0.8169	113007.0			138336.393683	Y
8	IC 280-617295/12	1.167	159710.0			136855.184233	Y
9	IC 280-617295/11	2.9175	394545.0			135233.933162	Y



Calibration / RDX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

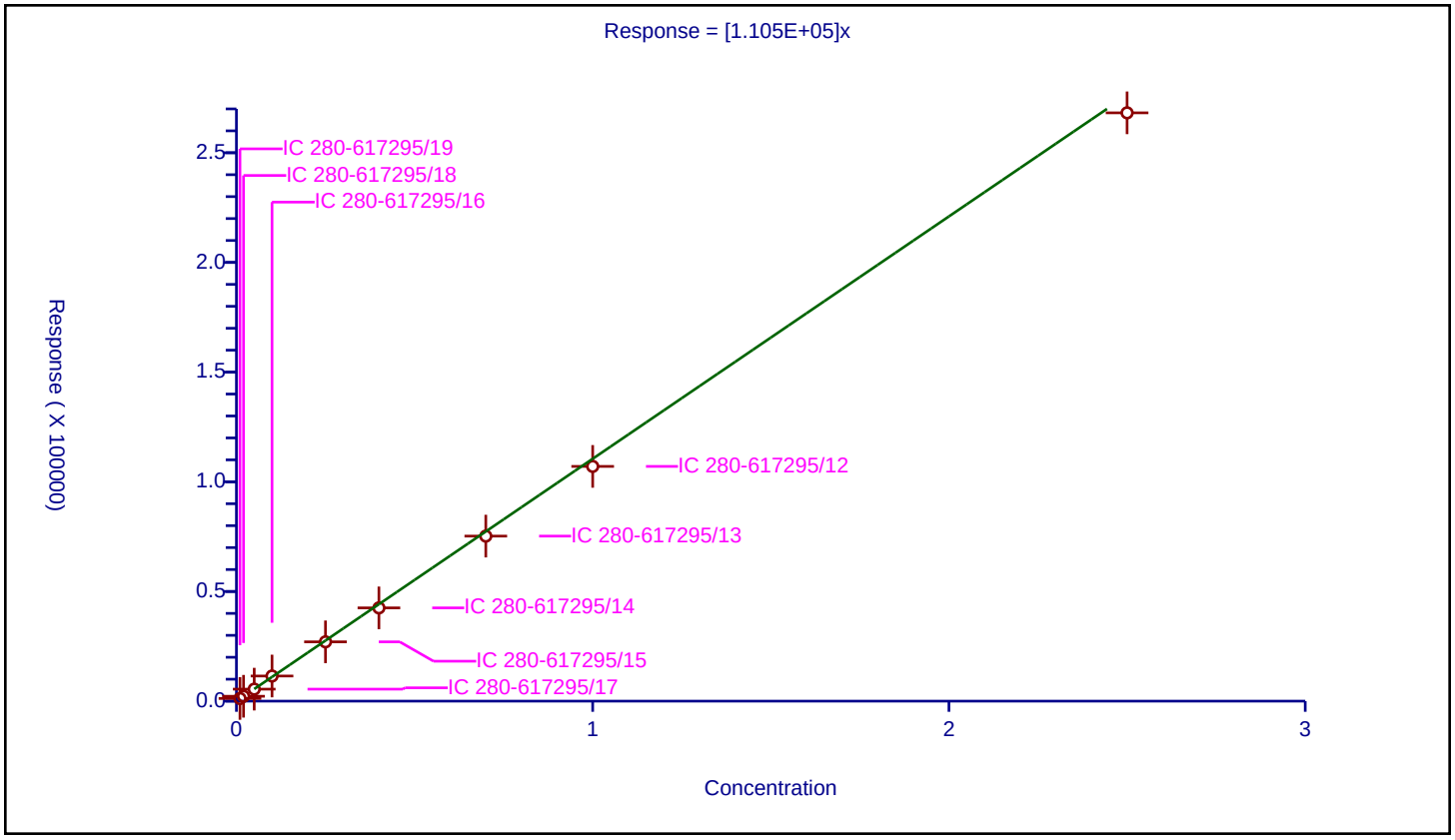
Curve Coefficients

Intercept:	0
Slope:	1.105E+05

Error Coefficients

Standard Error:	3250
Relative Standard Error:	4.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.01	1225.0			122500.0	Y
2	IC 280-617295/18	0.02	2234.0			111700.0	Y
3	IC 280-617295/17	0.05	5472.0			109440.0	Y
4	IC 280-617295/16	0.1	11457.0			114570.0	Y
5	IC 280-617295/15	0.25	27039.0			108156.0	Y
6	IC 280-617295/14	0.4	42514.0			106285.0	Y
7	IC 280-617295/13	0.7	75238.0			107482.857143	Y
8	IC 280-617295/12	1.0	107019.0			107019.0	Y
9	IC 280-617295/11	2.5	268207.0			107282.8	Y



Calibration / 2,4,6-Trinitrophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

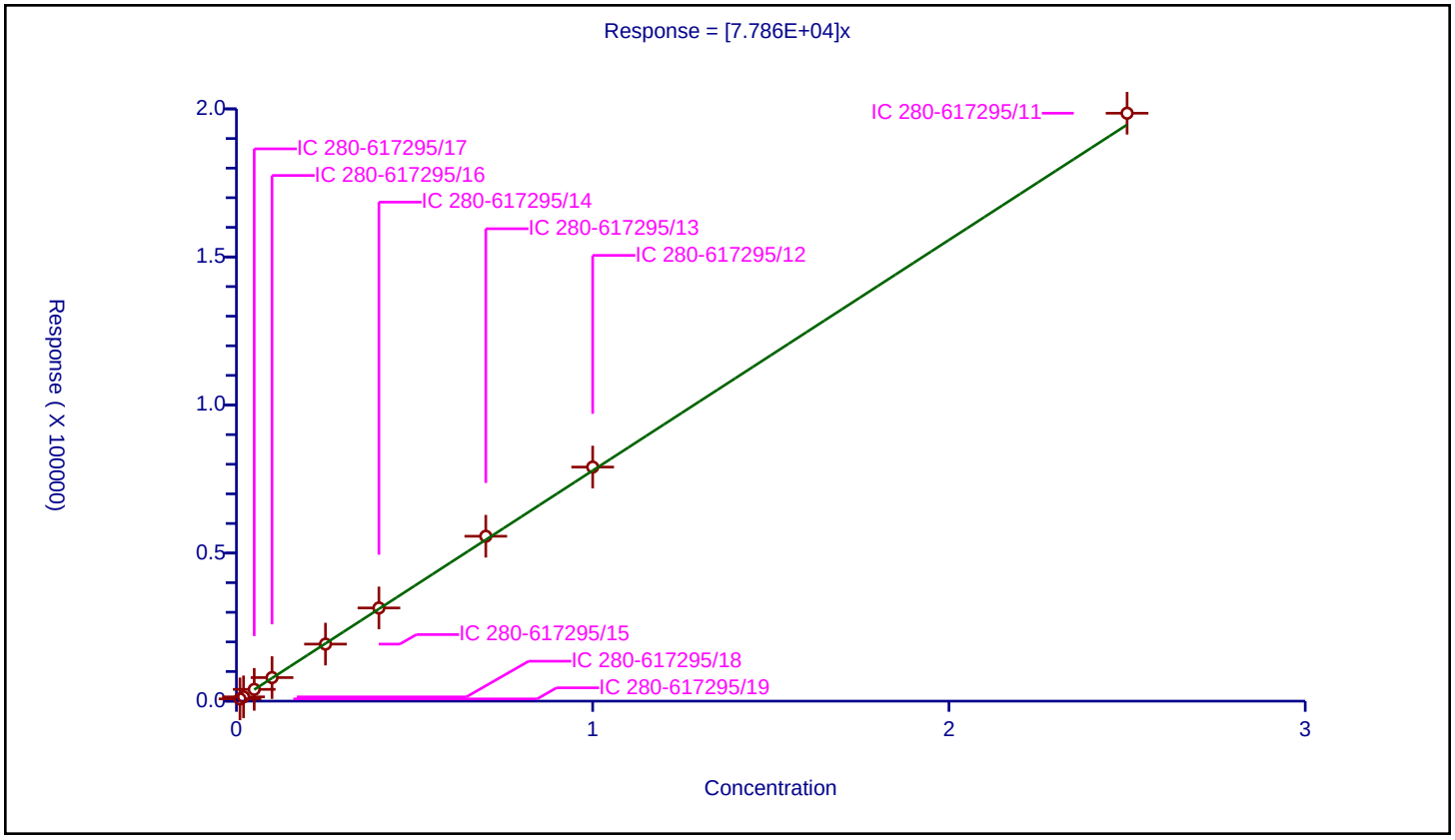
Curve Coefficients

Intercept:	0
Slope:	7.786E+04

Error Coefficients

Standard Error:	1500
Relative Standard Error:	3.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.01	756.0			75600.0	Y
2	IC 280-617295/18	0.02	1447.0			72350.0	Y
3	IC 280-617295/17	0.05	3979.0			79580.0	Y
4	IC 280-617295/16	0.1	7951.0			79510.0	Y
5	IC 280-617295/15	0.25	19262.0			77048.0	Y
6	IC 280-617295/14	0.4	31468.0			78670.0	Y
7	IC 280-617295/13	0.7	55684.0			79548.571429	Y
8	IC 280-617295/12	1.0	79045.0			79045.0	Y
9	IC 280-617295/11	2.5	198541.0			79416.4	Y



Calibration / 1,2-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

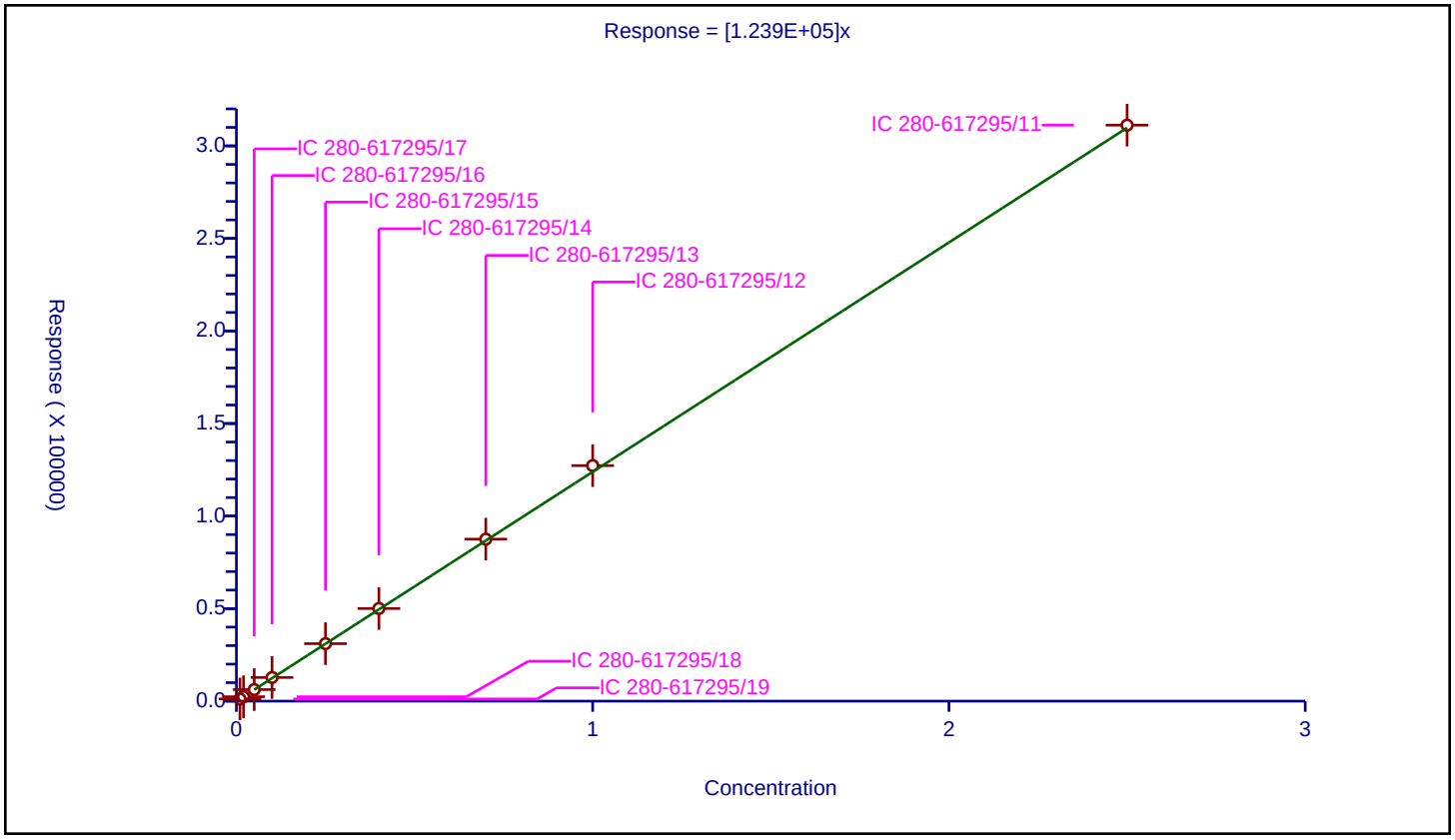
Curve Coefficients

Intercept:	0
Slope:	1.239E+05

Error Coefficients

Standard Error:	1340
Relative Standard Error:	2.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.01	1172.0			117200.0	Y
2	IC 280-617295/18	0.02	2379.0			118950.0	Y
3	IC 280-617295/17	0.05	6250.0			125000.0	Y
4	IC 280-617295/16	0.1	12783.0			127830.0	Y
5	IC 280-617295/15	0.25	31068.0			124272.0	Y
6	IC 280-617295/14	0.4	50062.0			125155.0	Y
7	IC 280-617295/13	0.7	87532.0			125045.714286	Y
8	IC 280-617295/12	1.0	127262.0			127262.0	Y
9	IC 280-617295/11	2.5	311208.0			124483.2	Y



Calibration / 1,3,5-Trinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

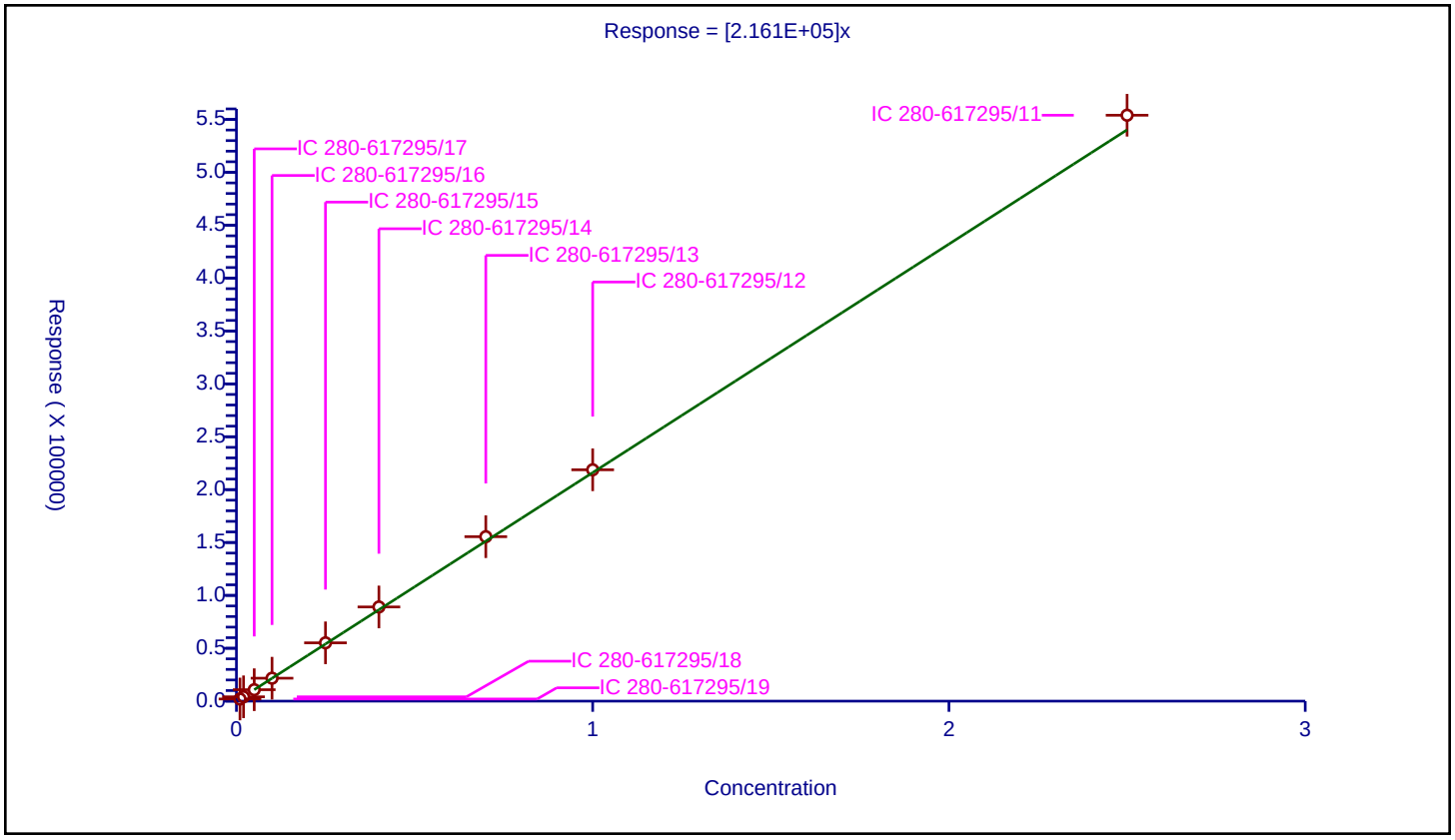
Curve Coefficients

Intercept:	0
Slope:	2.161E+05

Error Coefficients

Standard Error:	5300
Relative Standard Error:	3.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.01	2019.0			201900.0	Y
2	IC 280-617295/18	0.02	4083.0			204150.0	Y
3	IC 280-617295/17	0.05	10805.0			216100.0	Y
4	IC 280-617295/16	0.1	21684.0			216840.0	Y
5	IC 280-617295/15	0.25	55138.0			220552.0	Y
6	IC 280-617295/14	0.4	89063.0			222657.5	Y
7	IC 280-617295/13	0.7	155494.0			222134.285714	Y
8	IC 280-617295/12	1.0	218769.0			218769.0	Y
9	IC 280-617295/11	2.5	554012.0			221604.8	Y



Calibration / 1,3-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

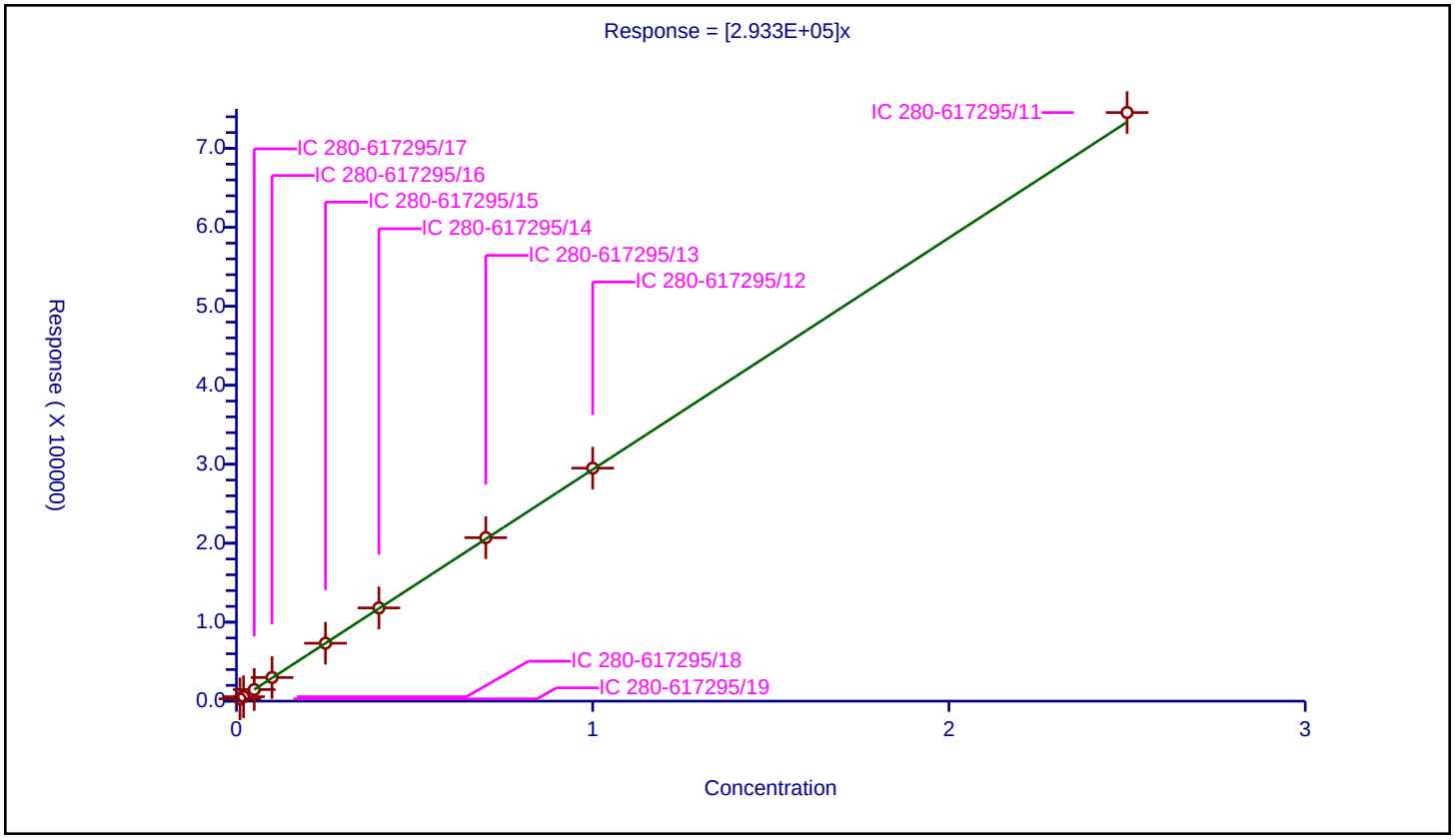
Curve Coefficients

Intercept:	0
Slope:	2.933E+05

Error Coefficients

Standard Error:	4350
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.01	2901.0			290100.0	Y
2	IC 280-617295/18	0.02	5599.0			279950.0	Y
3	IC 280-617295/17	0.05	14684.0			293680.0	Y
4	IC 280-617295/16	0.1	29890.0			298900.0	Y
5	IC 280-617295/15	0.25	73356.0			293424.0	Y
6	IC 280-617295/14	0.4	118059.0			295147.5	Y
7	IC 280-617295/13	0.7	207005.0			295721.428571	Y
8	IC 280-617295/12	1.0	295042.0			295042.0	Y
9	IC 280-617295/11	2.5	745400.0			298160.0	Y



Calibration / Nitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

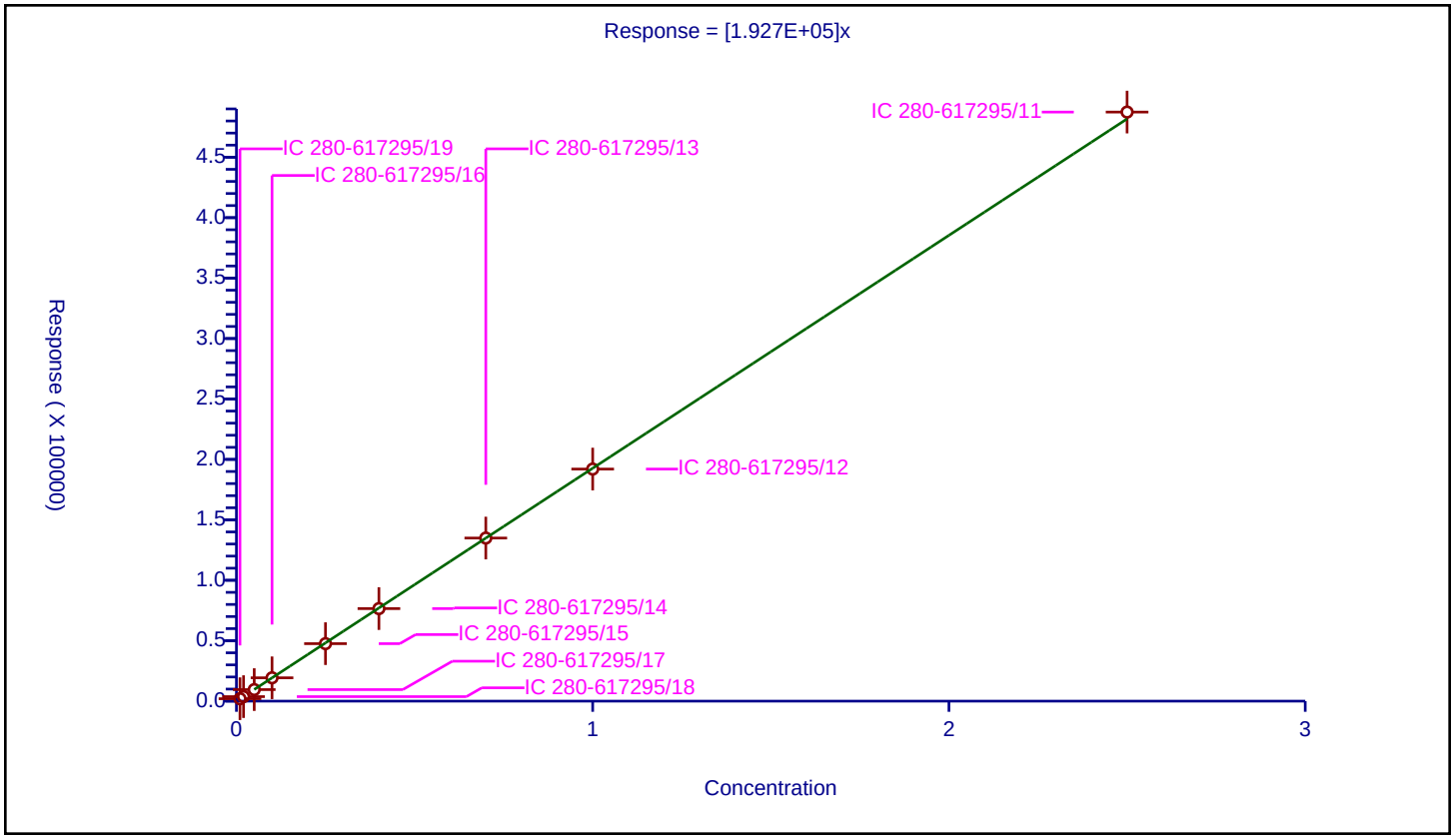
Curve Coefficients

Intercept:	0
Slope:	1.927E+05

Error Coefficients

Standard Error:	2030
Relative Standard Error:	2.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.01	2020.0			202000.0	Y
2	IC 280-617295/18	0.02	3731.0			186550.0	Y
3	IC 280-617295/17	0.05	9561.0			191220.0	Y
4	IC 280-617295/16	0.1	19309.0			193090.0	Y
5	IC 280-617295/15	0.25	47571.0			190284.0	Y
6	IC 280-617295/14	0.4	76555.0			191387.5	Y
7	IC 280-617295/13	0.7	134942.0			192774.285714	Y
8	IC 280-617295/12	1.0	192007.0			192007.0	Y
9	IC 280-617295/11	2.5	487382.0			194952.8	Y



Calibration / 3,5-Dinitroaniline

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

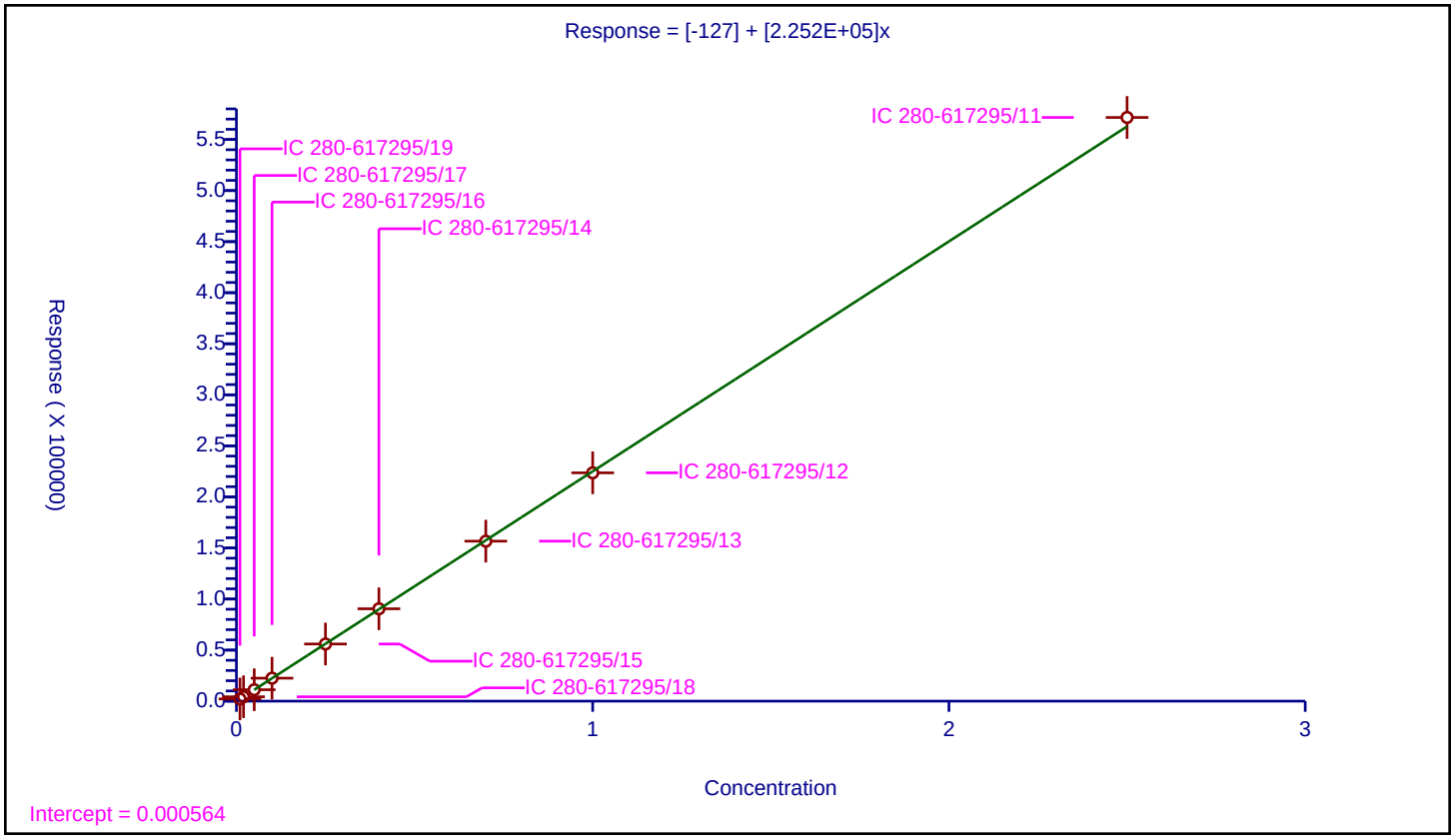
Curve Coefficients

Intercept:	-127
Slope:	2.252E+05

Error Coefficients

Standard Error:	3390
Relative Standard Error:	1.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.01	2151.0			215100.0	Y
2	IC 280-617295/18	0.02	4262.0			213100.0	Y
3	IC 280-617295/17	0.05	11168.0			223360.0	Y
4	IC 280-617295/16	0.1	22486.0			224860.0	Y
5	IC 280-617295/15	0.25	55971.0			223884.0	Y
6	IC 280-617295/14	0.4	90451.0			226127.5	Y
7	IC 280-617295/13	0.7	156668.0			223811.428571	Y
8	IC 280-617295/12	1.0	223593.0			223593.0	Y
9	IC 280-617295/11	2.5	571603.0			228641.2	Y



Calibration / Tetryl

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

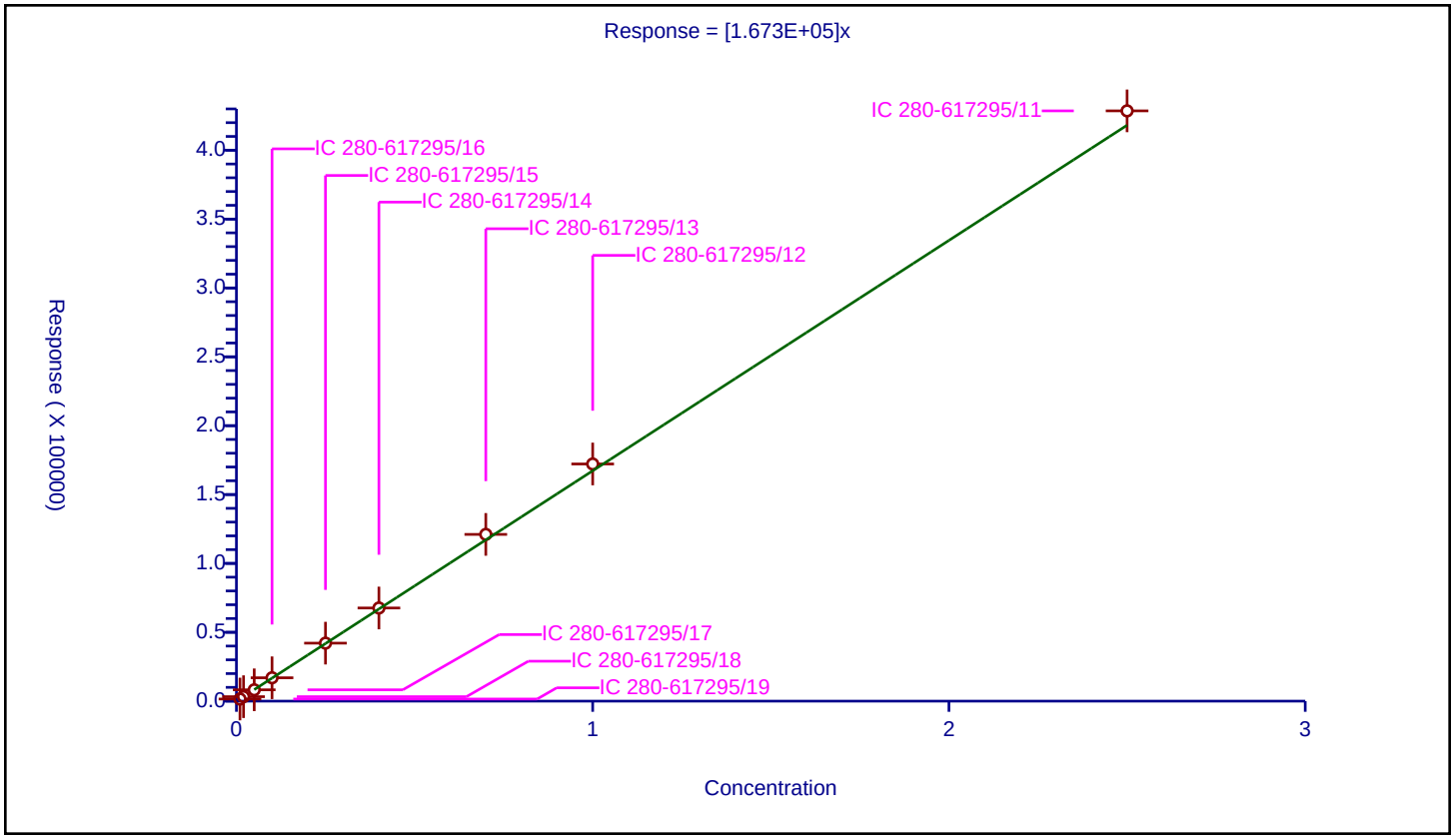
Curve Coefficients

Intercept:	0
Slope:	1.673E+05

Error Coefficients

Standard Error:	4320
Relative Standard Error:	3.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.01	1546.0			154600.0	Y
2	IC 280-617295/18	0.02	3248.0			162400.0	Y
3	IC 280-617295/17	0.05	8232.0			164640.0	Y
4	IC 280-617295/16	0.1	16961.0			169610.0	Y
5	IC 280-617295/15	0.25	42107.0			168428.0	Y
6	IC 280-617295/14	0.4	67629.0			169072.5	Y
7	IC 280-617295/13	0.7	121063.0			172947.142857	Y
8	IC 280-617295/12	1.0	172187.0			172187.0	Y
9	IC 280-617295/11	2.5	428562.0			171424.8	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

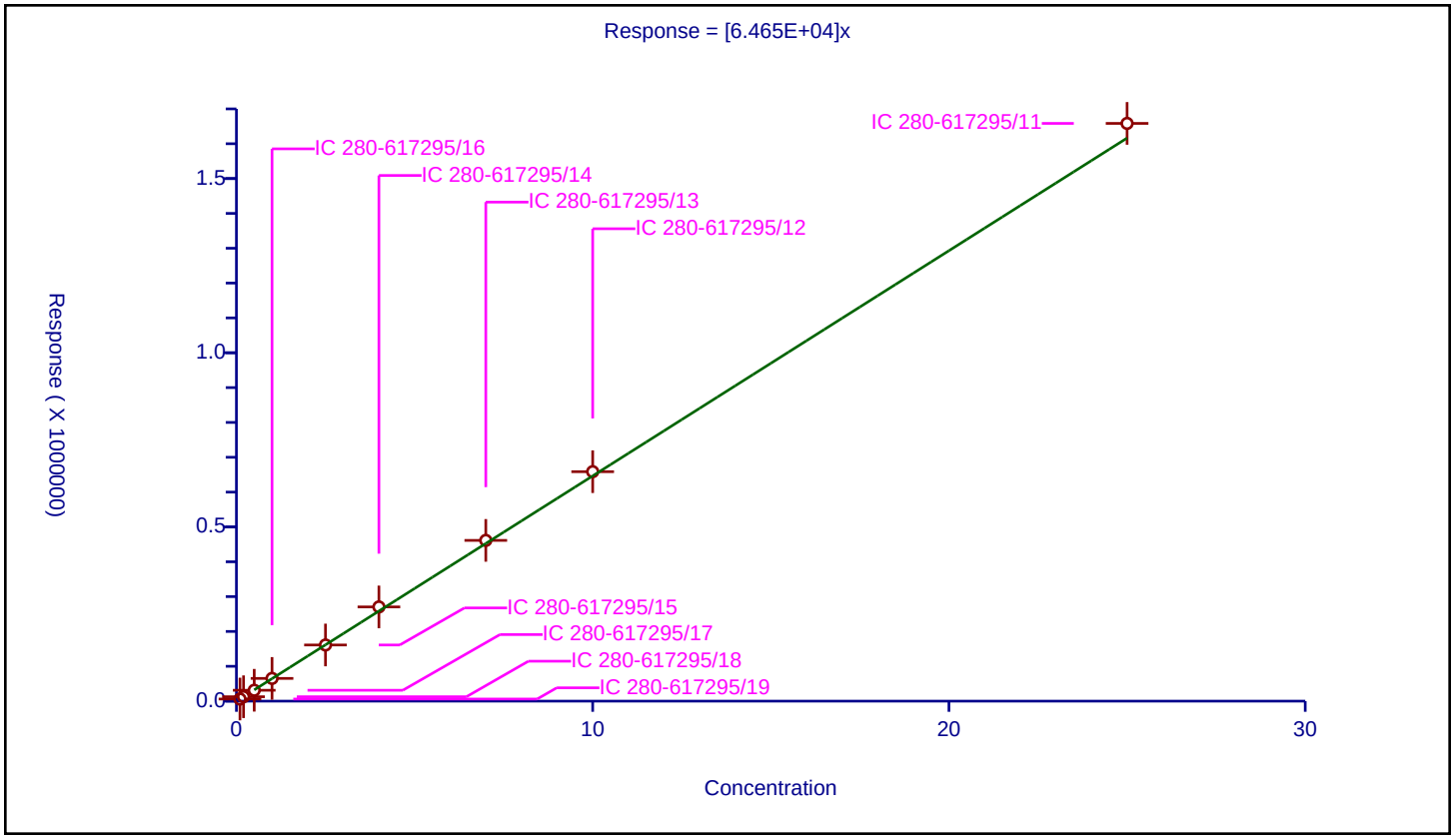
Curve Coefficients

Intercept:	0
Slope:	6.465E+04

Error Coefficients

Standard Error:	16300
Relative Standard Error:	3.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.1	6047.0			60470.0	Y
2	IC 280-617295/18	0.2	12682.0			63410.0	Y
3	IC 280-617295/17	0.5	31254.0			62508.0	Y
4	IC 280-617295/16	1.0	65270.0			65270.0	Y
5	IC 280-617295/15	2.5	161167.0			64466.8	Y
6	IC 280-617295/14	4.0	270481.0			67620.25	Y
7	IC 280-617295/13	7.0	461386.0			65912.285714	Y
8	IC 280-617295/12	10.0	658658.0			65865.8	Y
9	IC 280-617295/11	25.0	1658317.0			66332.68	Y



Calibration / 2,4,6-Trinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

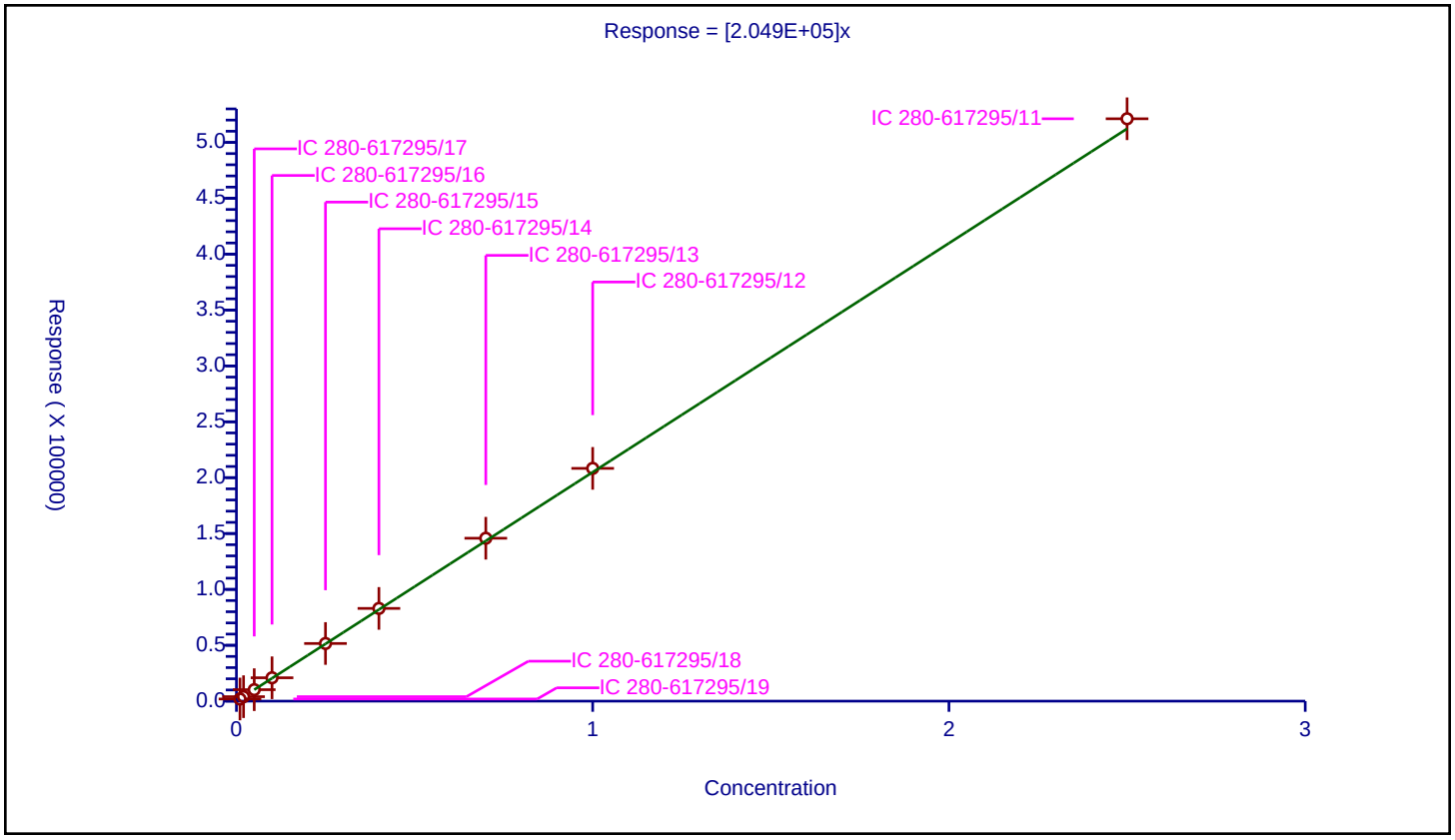
Curve Coefficients

Intercept:	0
Slope:	2.049E+05

Error Coefficients

Standard Error:	3500
Relative Standard Error:	2.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.01	1918.0			191800.0	Y
2	IC 280-617295/18	0.02	3981.0			199050.0	Y
3	IC 280-617295/17	0.05	10269.0			205380.0	Y
4	IC 280-617295/16	0.1	20907.0			209070.0	Y
5	IC 280-617295/15	0.25	51584.0			206336.0	Y
6	IC 280-617295/14	0.4	82972.0			207430.0	Y
7	IC 280-617295/13	0.7	145792.0			208274.285714	Y
8	IC 280-617295/12	1.0	208313.0			208313.0	Y
9	IC 280-617295/11	2.5	521163.0			208465.2	Y



Calibration / 4-Amino-2,6-dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

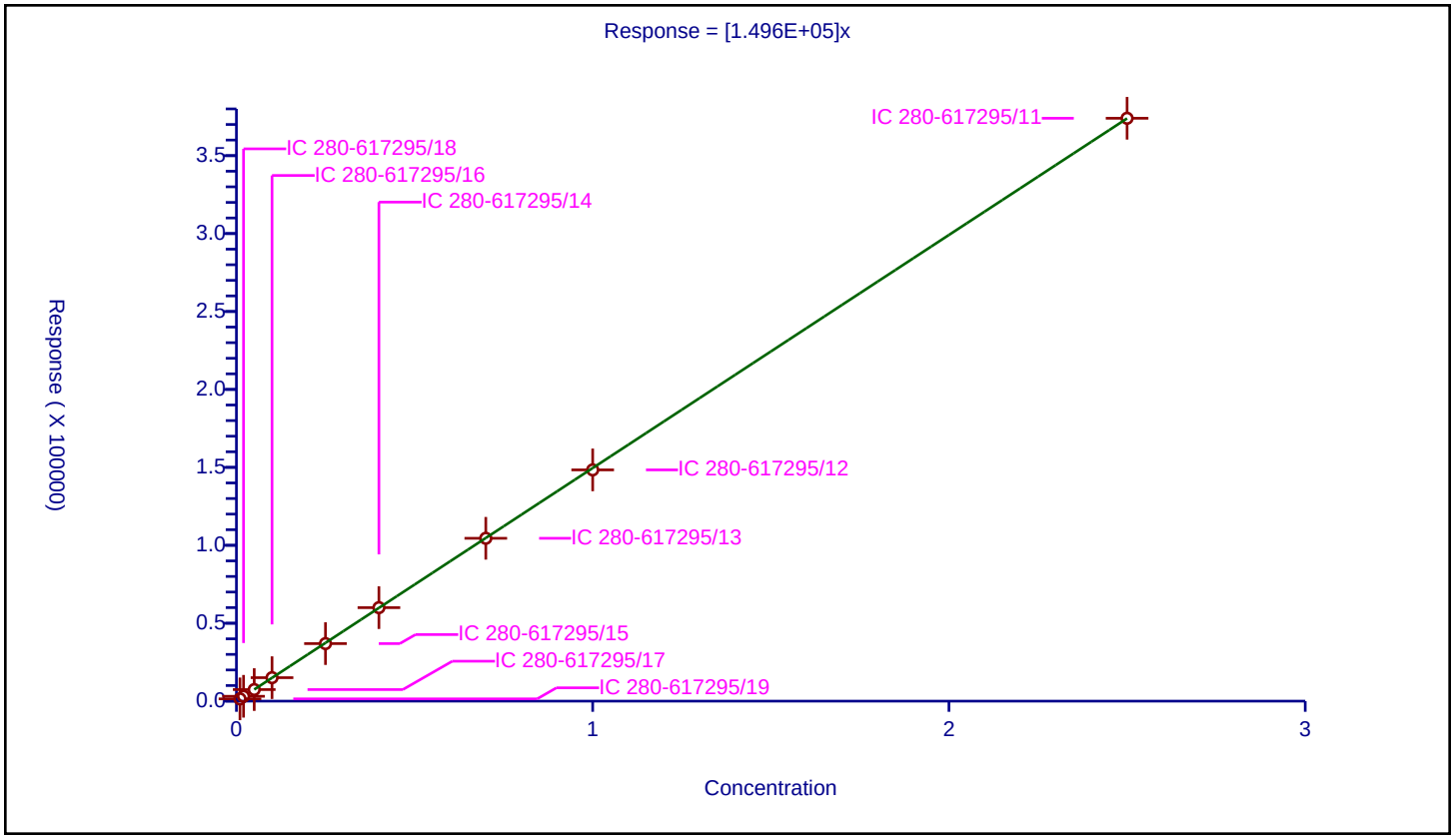
Curve Coefficients

Intercept:	0
Slope:	1.496E+05

Error Coefficients

Standard Error:	467
Relative Standard Error:	1.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.01	1464.0			146400.0	Y
2	IC 280-617295/18	0.02	3111.0			155550.0	Y
3	IC 280-617295/17	0.05	7431.0			148620.0	Y
4	IC 280-617295/16	0.1	15058.0			150580.0	Y
5	IC 280-617295/15	0.25	36921.0			147684.0	Y
6	IC 280-617295/14	0.4	59989.0			149972.5	Y
7	IC 280-617295/13	0.7	104488.0			149268.571429	Y
8	IC 280-617295/12	1.0	148367.0			148367.0	Y
9	IC 280-617295/11	2.5	373989.0			149595.6	Y



Calibration / 2-Amino-4,6-dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

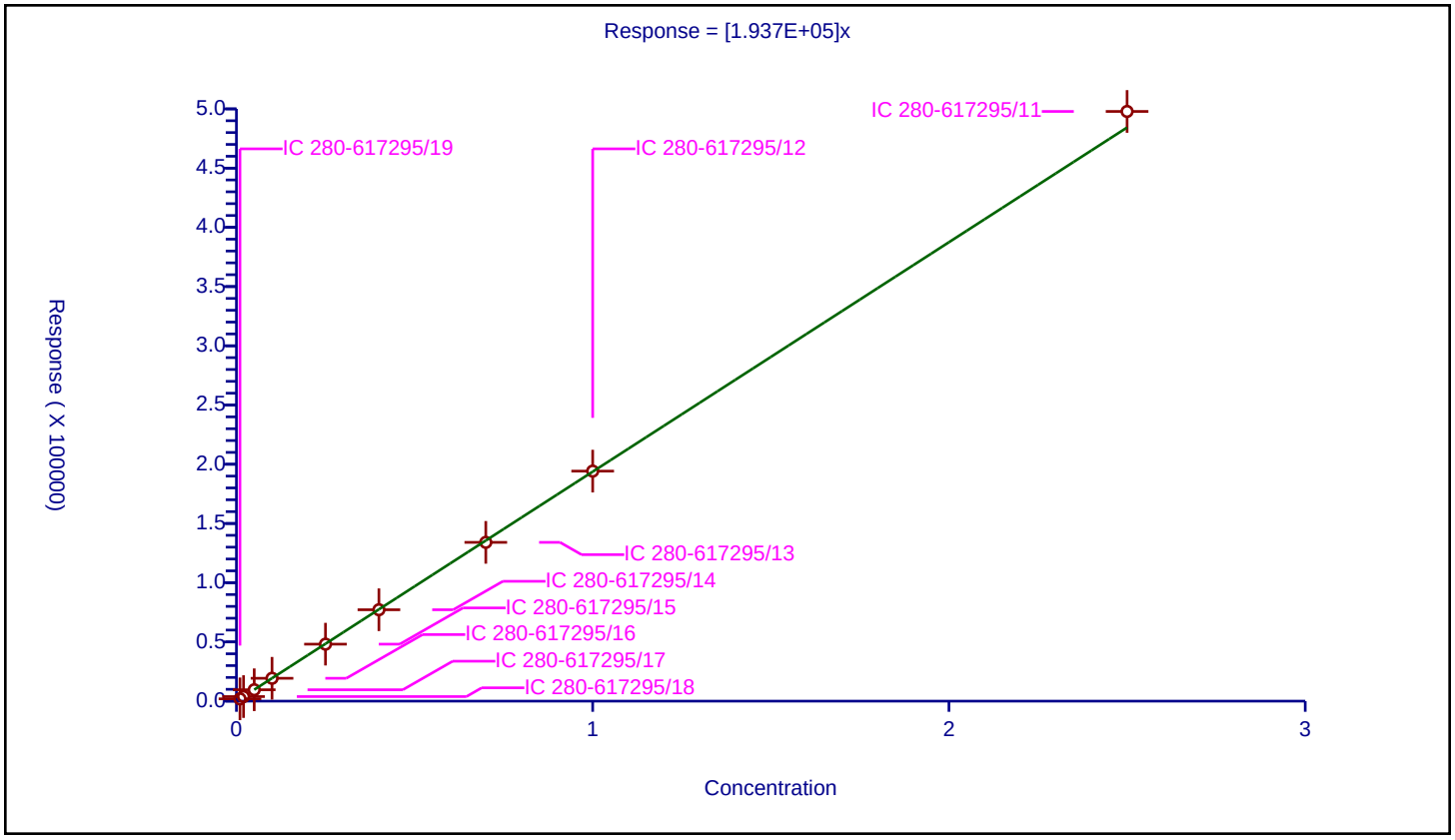
Curve Coefficients

Intercept:	0
Slope:	1.937E+05

Error Coefficients

Standard Error:	4830
Relative Standard Error:	1.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.01	1950.0			195000.0	Y
2	IC 280-617295/18	0.02	3863.0			193150.0	Y
3	IC 280-617295/17	0.05	9604.0			192080.0	Y
4	IC 280-617295/16	0.1	19302.0			193020.0	Y
5	IC 280-617295/15	0.25	48118.0			192472.0	Y
6	IC 280-617295/14	0.4	77156.0			192890.0	Y
7	IC 280-617295/13	0.7	134046.0			191494.285714	Y
8	IC 280-617295/12	1.0	194204.0			194204.0	Y
9	IC 280-617295/11	2.5	497844.0			199137.6	Y



Calibration / 2,6-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

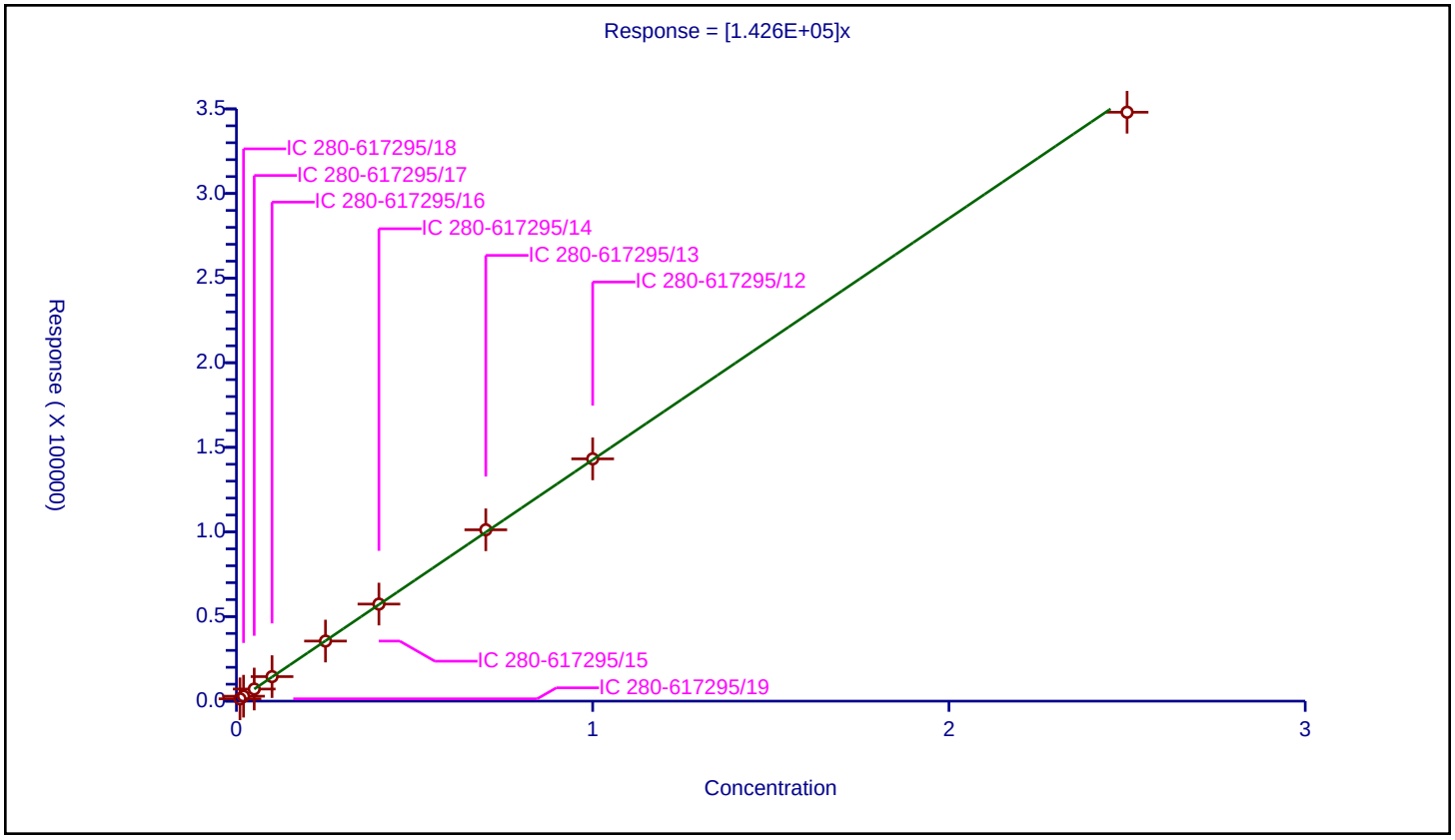
Curve Coefficients

Intercept:	0
Slope:	1.426E+05

Error Coefficients

Standard Error:	3080
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.01	1373.0			137300.0	Y
2	IC 280-617295/18	0.02	2916.0			145800.0	Y
3	IC 280-617295/17	0.05	7160.0			143200.0	Y
4	IC 280-617295/16	0.1	14495.0			144950.0	Y
5	IC 280-617295/15	0.25	35503.0			142012.0	Y
6	IC 280-617295/14	0.4	57368.0			143420.0	Y
7	IC 280-617295/13	0.7	101266.0			144665.714286	Y
8	IC 280-617295/12	1.0	143182.0			143182.0	Y
9	IC 280-617295/11	2.5	348035.0			139214.0	Y



Calibration / 2,4-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

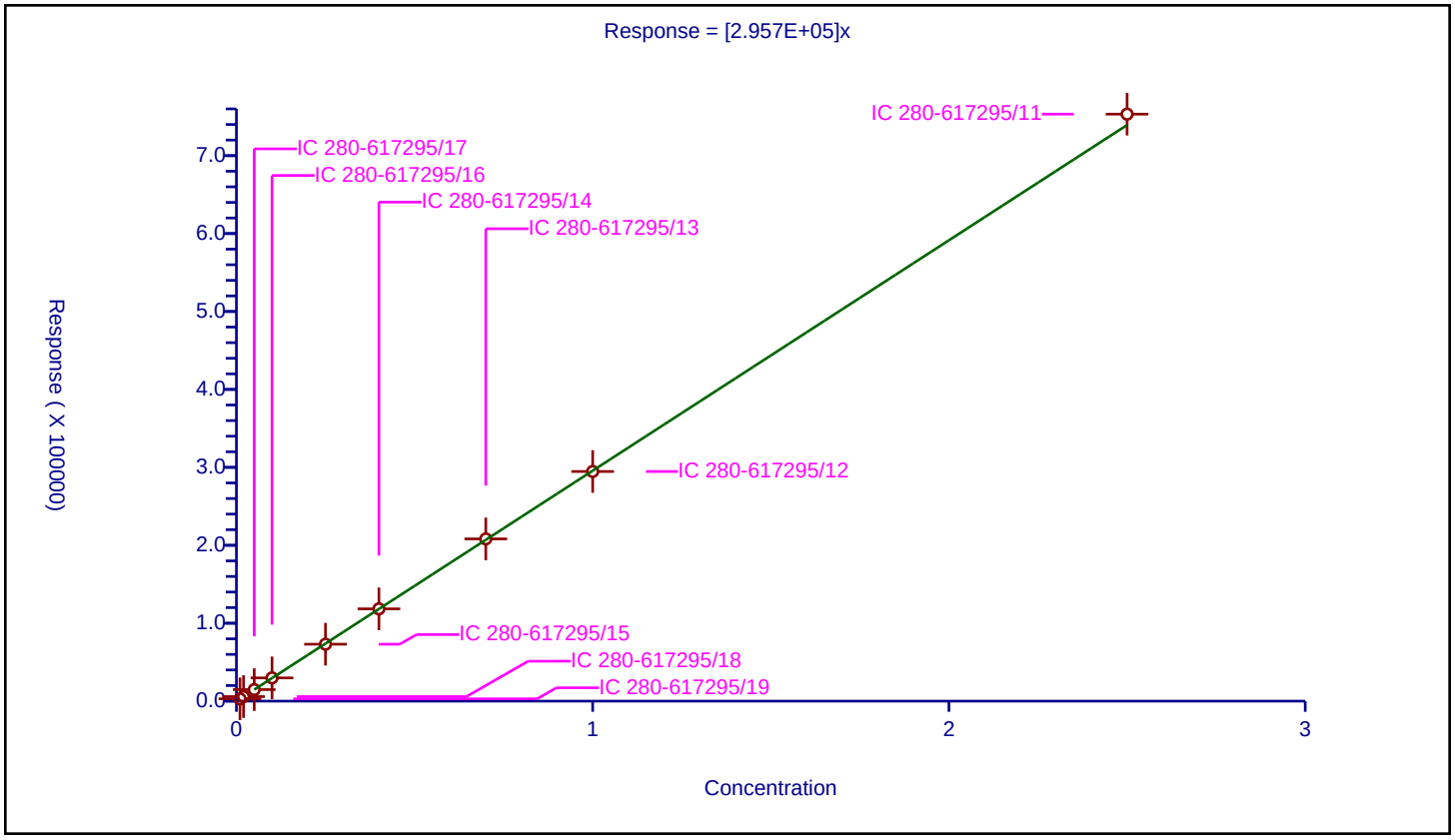
Curve Coefficients

Intercept:	0
Slope:	2.957E+05

Error Coefficients

Standard Error:	4990
Relative Standard Error:	1.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.01	2941.0			294100.0	Y
2	IC 280-617295/18	0.02	5829.0			291450.0	Y
3	IC 280-617295/17	0.05	14800.0			296000.0	Y
4	IC 280-617295/16	0.1	29811.0			298110.0	Y
5	IC 280-617295/15	0.25	73049.0			292196.0	Y
6	IC 280-617295/14	0.4	118425.0			296062.5	Y
7	IC 280-617295/13	0.7	208191.0			297415.714286	Y
8	IC 280-617295/12	1.0	294715.0			294715.0	Y
9	IC 280-617295/11	2.5	753261.0			301304.4	Y



Calibration / o-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

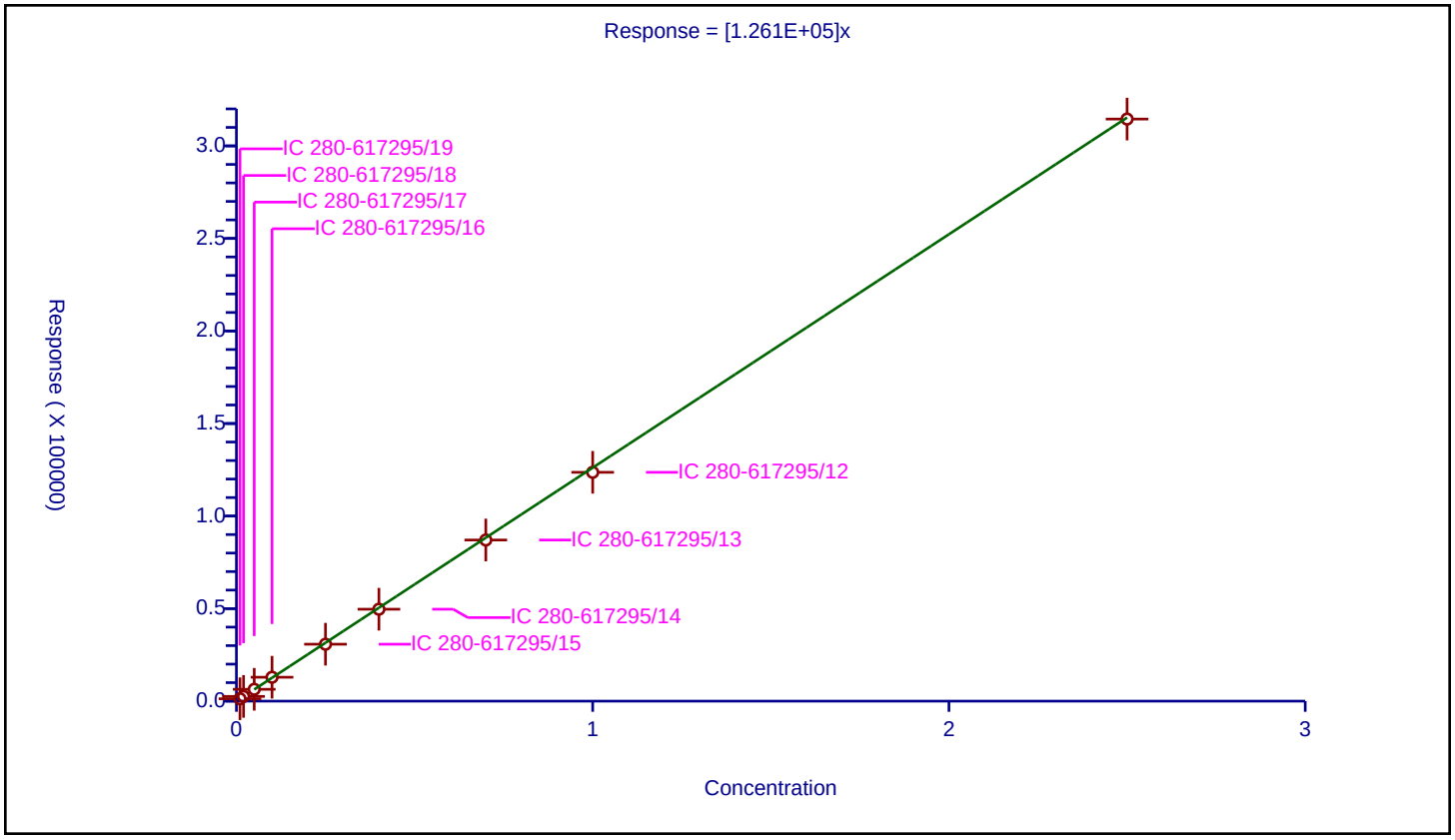
Curve Coefficients

Intercept:	0
Slope:	1.261E+05

Error Coefficients

Standard Error:	1100
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.01	1291.0			129100.0	Y
2	IC 280-617295/18	0.02	2556.0			127800.0	Y
3	IC 280-617295/17	0.05	6403.0			128060.0	Y
4	IC 280-617295/16	0.1	12912.0			129120.0	Y
5	IC 280-617295/15	0.25	30758.0			123032.0	Y
6	IC 280-617295/14	0.4	49671.0			124177.5	Y
7	IC 280-617295/13	0.7	87064.0			124377.142857	Y
8	IC 280-617295/12	1.0	123644.0			123644.0	Y
9	IC 280-617295/11	2.5	314499.0			125799.6	Y



Calibration / p-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

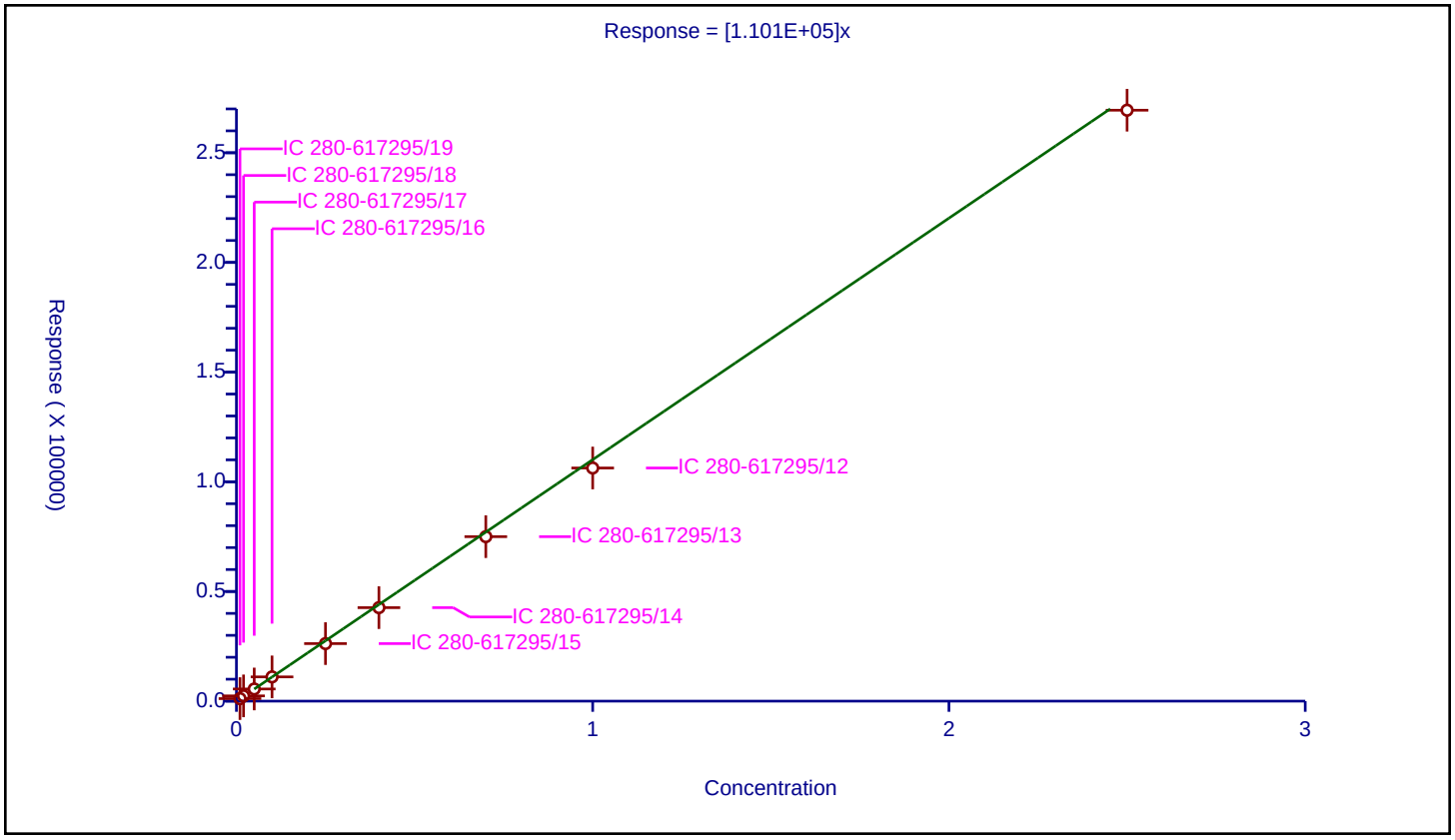
Curve Coefficients

Intercept:	0
Slope:	1.101E+05

Error Coefficients

Standard Error:	2650
Relative Standard Error:	4.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.01	1165.0			116500.0	Y
2	IC 280-617295/18	0.02	2404.0			120200.0	Y
3	IC 280-617295/17	0.05	5543.0			110860.0	Y
4	IC 280-617295/16	0.1	11057.0			110570.0	Y
5	IC 280-617295/15	0.25	26234.0			104936.0	Y
6	IC 280-617295/14	0.4	42626.0			106565.0	Y
7	IC 280-617295/13	0.7	74981.0			107115.714286	Y
8	IC 280-617295/12	1.0	106286.0			106286.0	Y
9	IC 280-617295/11	2.5	269407.0			107762.8	Y



Calibration / m-Nitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

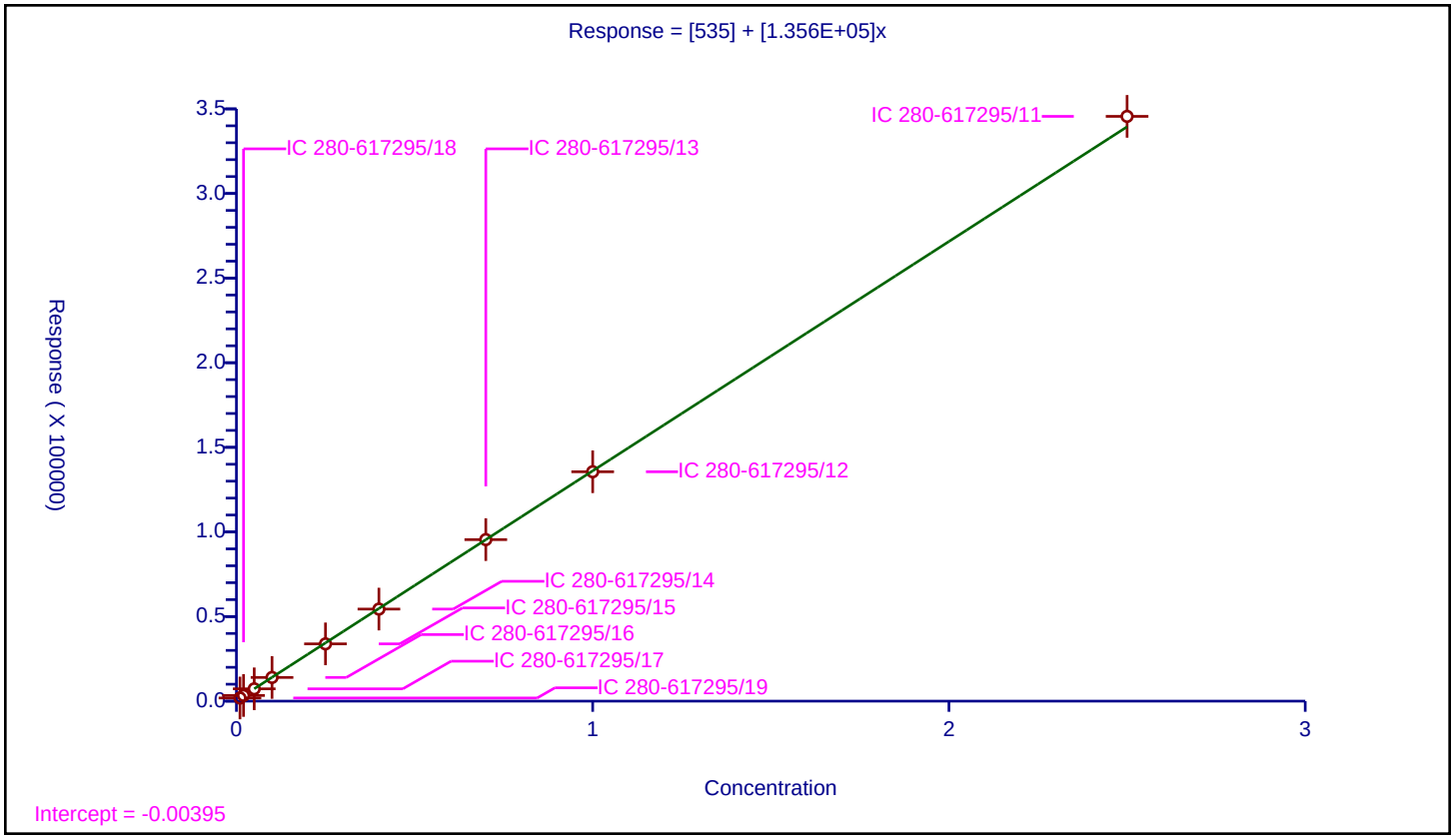
Curve Coefficients

Intercept:	535
Slope:	1.356E+05

Error Coefficients

Standard Error:	2350
Relative Standard Error:	1.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.01	1870.0			187000.0	Y
2	IC 280-617295/18	0.02	3341.0			167050.0	Y
3	IC 280-617295/17	0.05	7282.0			145640.0	Y
4	IC 280-617295/16	0.1	14001.0			140010.0	Y
5	IC 280-617295/15	0.25	33854.0			135416.0	Y
6	IC 280-617295/14	0.4	54401.0			136002.5	Y
7	IC 280-617295/13	0.7	95457.0			136367.142857	Y
8	IC 280-617295/12	1.0	135553.0			135553.0	Y
9	IC 280-617295/11	2.5	345577.0			138230.8	Y



Calibration / PETN

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

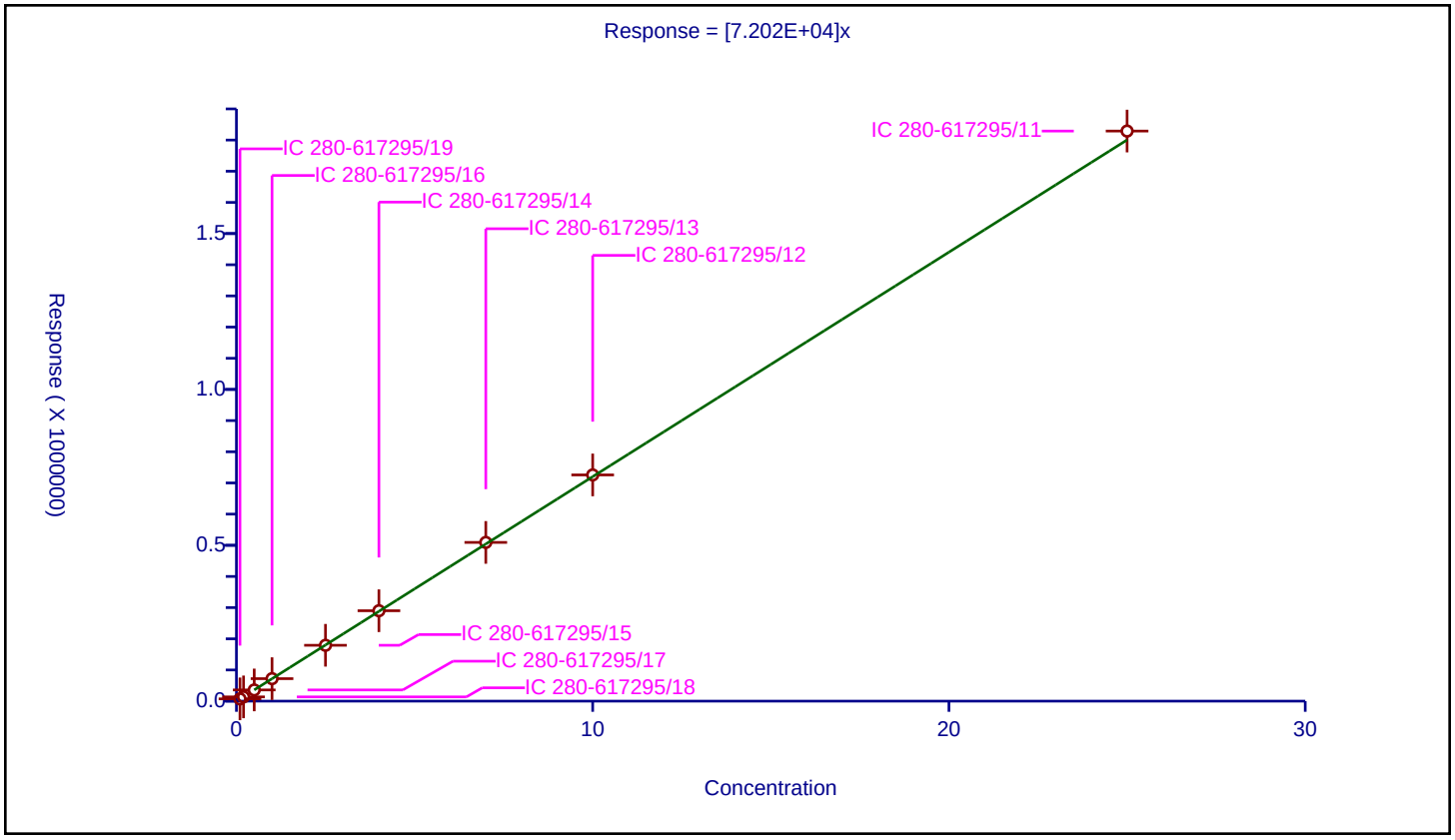
Curve Coefficients

Intercept:	0
Slope:	7.202E+04

Error Coefficients

Standard Error:	10400
Relative Standard Error:	2.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.1	7328.0			73280.0	Y
2	IC 280-617295/18	0.2	13637.0			68185.0	Y
3	IC 280-617295/17	0.5	35921.0			71842.0	Y
4	IC 280-617295/16	1.0	72200.0			72200.0	Y
5	IC 280-617295/15	2.5	179178.0			71671.2	Y
6	IC 280-617295/14	4.0	290067.0			72516.75	Y
7	IC 280-617295/13	7.0	509169.0			72738.428571	Y
8	IC 280-617295/12	10.0	725734.0			72573.4	Y
9	IC 280-617295/11	25.0	1828875.0			73155.0	Y



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver | Job No.: 280-182145-1 | Analy Batch No.: 617295

SDG No.:

Instrument ID: CHHPLC_X3 | GC Column: UltraCarb5u ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 06/23/2023 21:43 | Calibration End Date: 06/24/2023 00:23 | Calibration ID: 81927

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-617295/28	06230028.D
Level 2	IC 280-617295/27	06230027.D
Level 3	IC 280-617295/26	06230026.D
Level 4	IC 280-617295/25	06230025.D
Level 5	IC 280-617295/24	06230024.D
Level 6	IC 280-617295/23	06230023.D
Level 7	IC 280-617295/22	06230022.D
Level 8	IC 280-617295/21	06230021.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
2,6-diamino-4-nitrotoluene	6.470	6.478	6.471	6.475	6.474	6.474	6.467	6.467			6.325 - 6.625	6.472
2,4-diamino-6-nitrotoluene	6.663	6.672	6.664	6.669	6.668	6.668	6.660	6.661			6.519 - 6.819	6.666

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-182145-1 Analy Batch No.: 617295

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/23/2023 21:43 Calibration End Date: 06/24/2023 00:23 Calibration ID: 81927

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-617295/28	06230028.D
Level 2	IC 280-617295/27	06230027.D
Level 3	IC 280-617295/26	06230026.D
Level 4	IC 280-617295/25	06230025.D
Level 5	IC 280-617295/24	06230024.D
Level 6	IC 280-617295/23	06230023.D
Level 7	IC 280-617295/22	06230022.D
Level 8	IC 280-617295/21	06230021.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
2,6-diamino-4-nitrotoluene	220600 213353	263000 220126	226520 222122	225404 213398	Ave		225565.227				7.0		20.0			
2,4-diamino-6-nitrotoluene	156550 131303	165000 137551	144420 139337	140720 131729	Ave		143326.266				8.3		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver | Job No.: 280-182145-1 | Analy Batch No.: 617295

SDG No.:

Instrument ID: CHHPLC_X3 | GC Column: UltraCarb5 ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 06/23/2023 21:43 | Calibration End Date: 06/24/2023 00:23 | Calibration ID: 81927

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-617295/28	06230028.D
Level 2	IC 280-617295/27	06230027.D
Level 3	IC 280-617295/26	06230026.D
Level 4	IC 280-617295/25	06230025.D
Level 5	IC 280-617295/24	06230024.D
Level 6	IC 280-617295/23	06230023.D
Level 7	IC 280-617295/22	06230022.D
Level 8	IC 280-617295/21	06230021.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
2,6-diamino-4-nitrotoluene	Ave	4412 154088	10520 222122	22652 533494	56351	85341	0.0200 0.700	0.0400 1.00	0.100 2.50	0.250	0.400
2,4-diamino-6-nitrotoluene	Ave	3131 96286	6600 139337	14442 329323	35180	52521	0.0200 0.700	0.0400 1.00	0.100 2.50	0.250	0.400

Curve Type Legend:
Ave = Average

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230021.D
Lims ID: IC ADD 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 23-Jun-2023 21:43:15 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC ADD 8
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub28

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2023 12:55:52 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1681

First Level Reviewer: LV5D Date: 24-Jun-2023 10:41:47

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1	6.467	6.475	-0.008	533494	2.50	2.37	M
5 2,4-diamino-6-nitrotoluene	1	6.661	6.669	-0.008	329323	2.50	2.30	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00037 Amount Added: 125.00 Units: uL

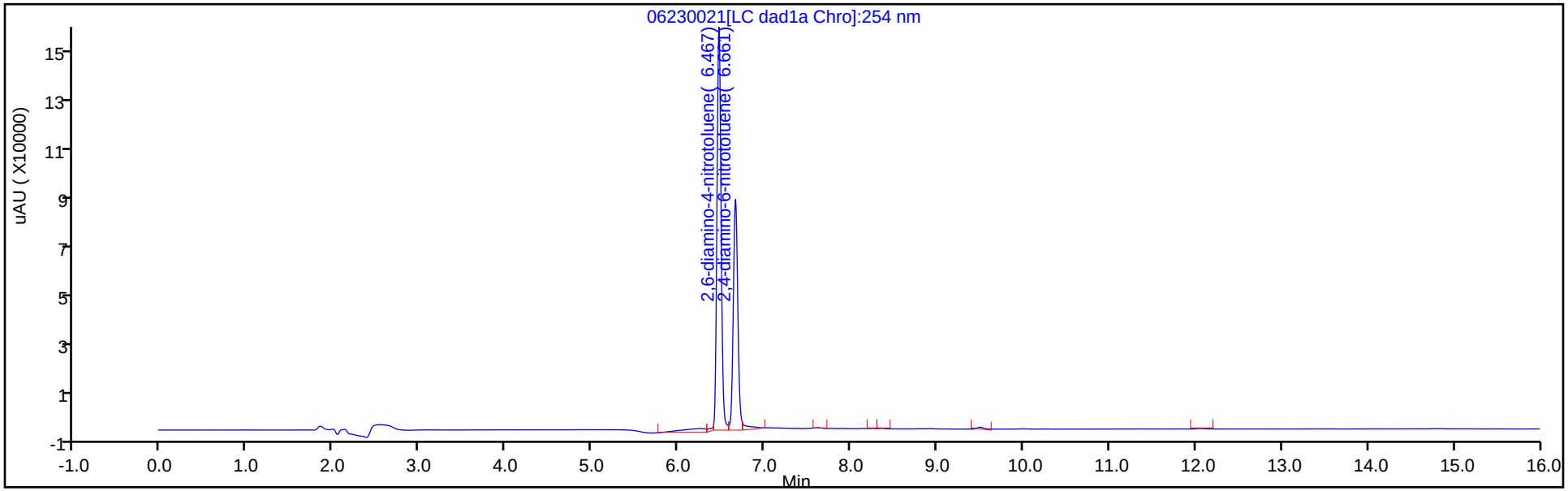
Report Date: 24-Jun-2023 12:55:52 Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Denver

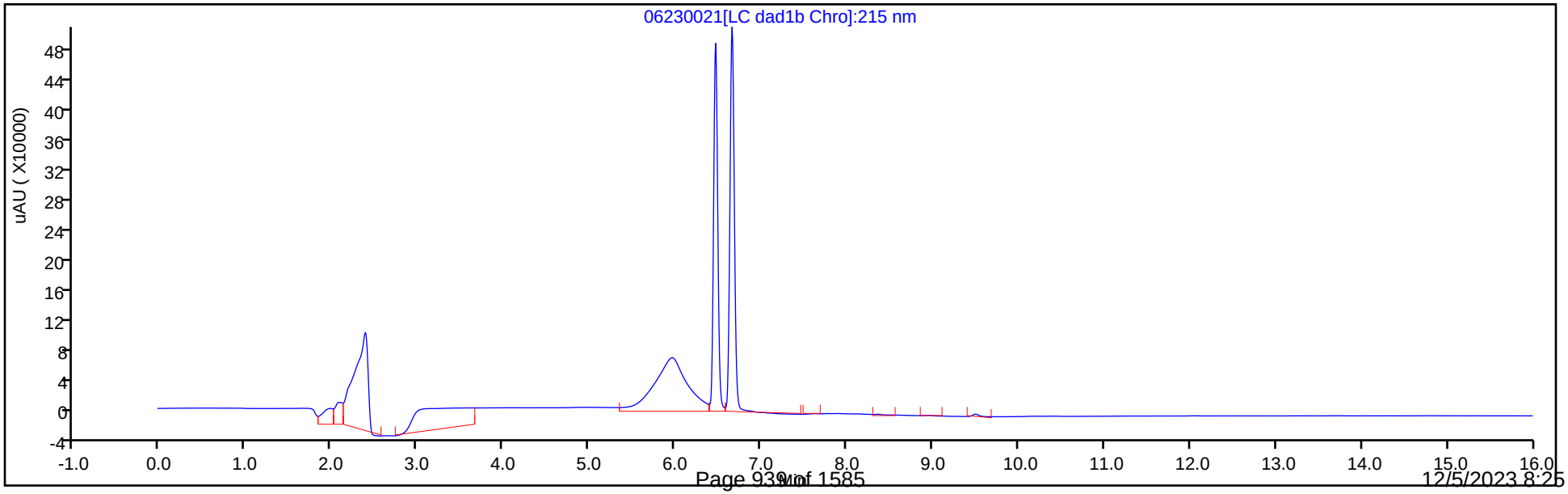
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Injection Date:	23-Jun-2023 21:43:15	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	IC ADD 8			Worklist Smp#:	21
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

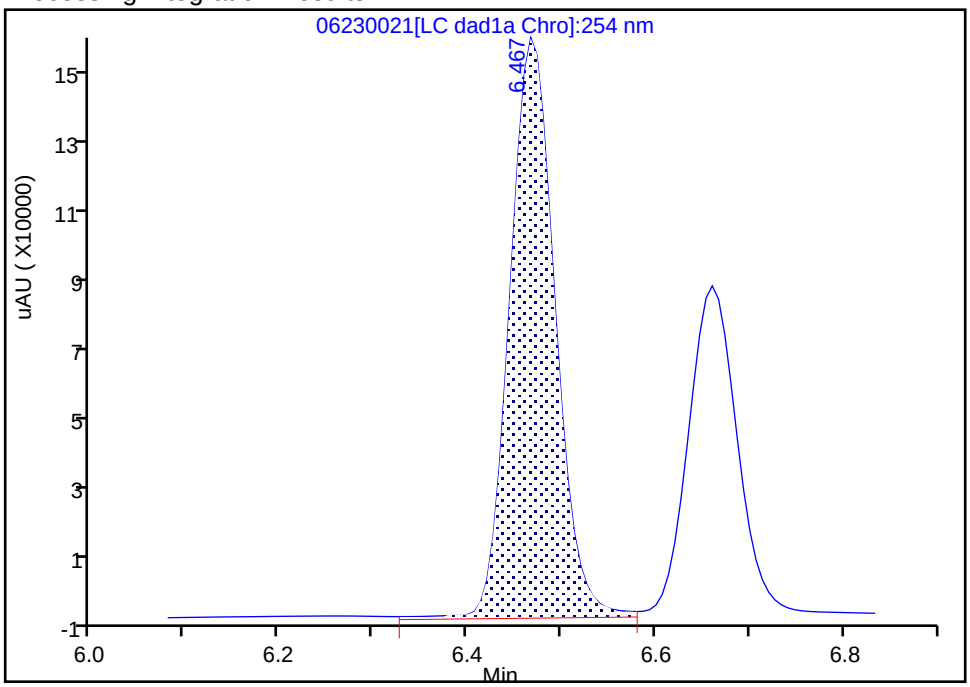
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Injection Date:	23-Jun-2023 21:43:15	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 8				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

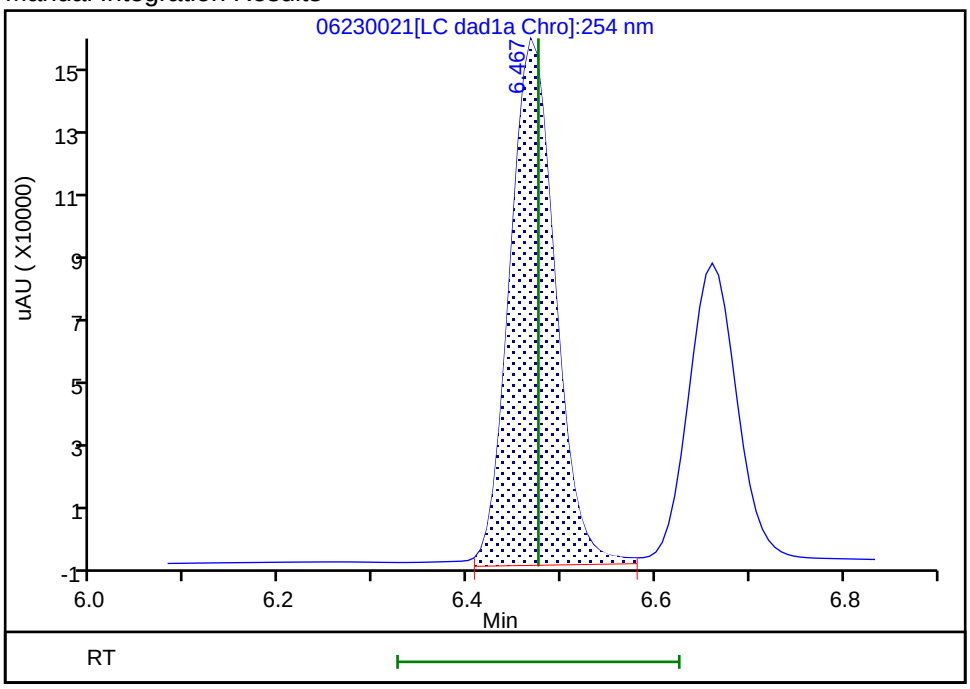
Processing Integration Results

RT: 6.47
Area: 539094
Amount: 2.445370
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 533494
Amount: 2.365143
Amount Units: ug/mL



Reviewer: LV5D, 24-Jun-2023 10:41:42 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

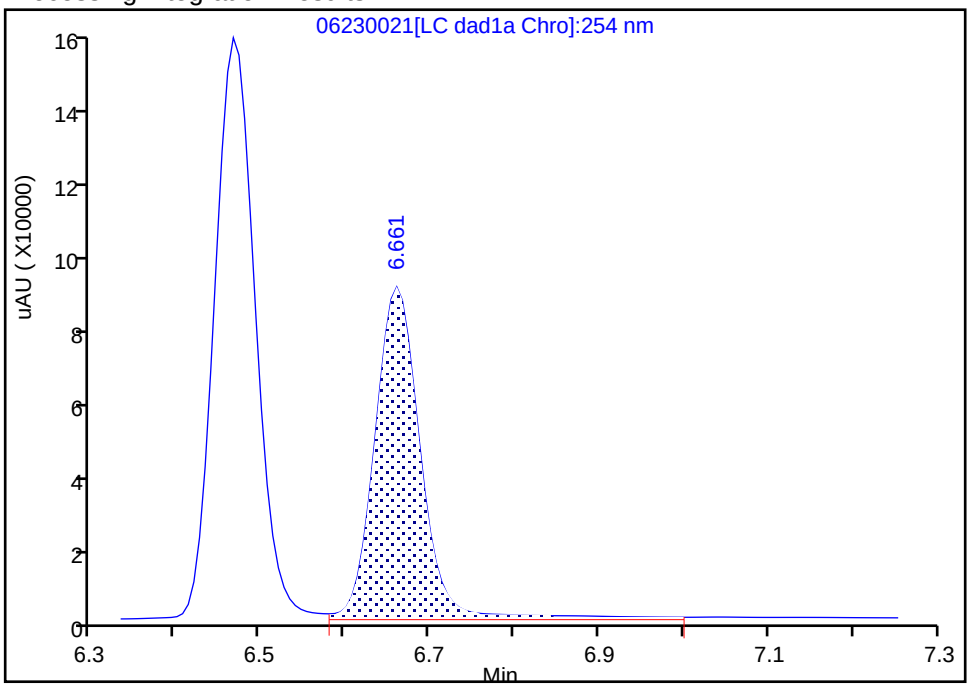
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230021.d				
Injection Date:	23-Jun-2023 21:43:15	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 8				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

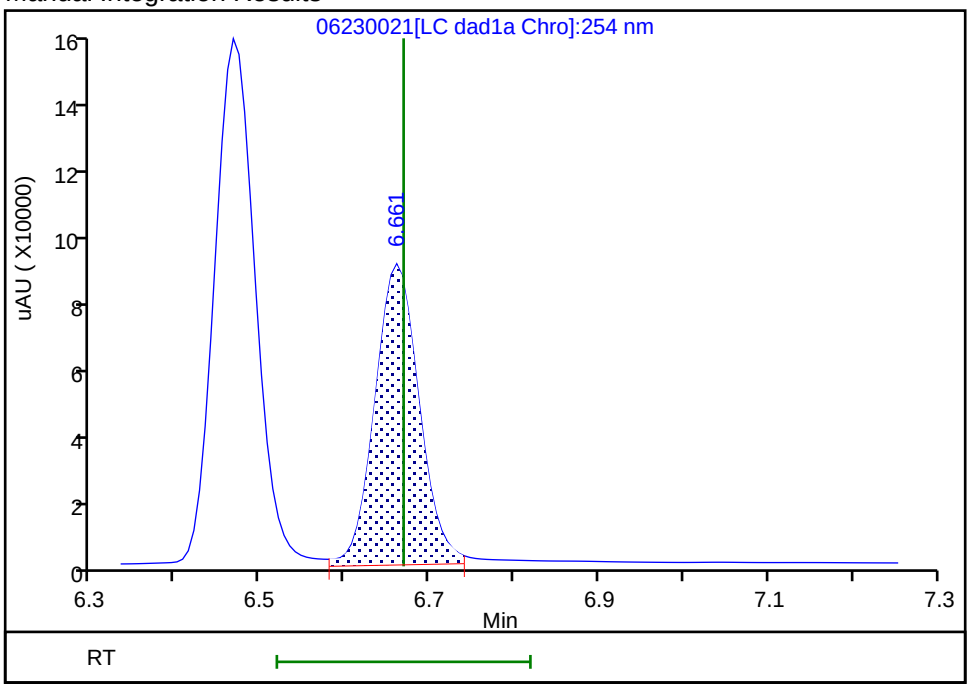
Processing Integration Results

RT: 6.66
Area: 343766
Amount: 2.533529
Amount Units: ug/mL



Manual Integration Results

RT: 6.66
Area: 329323
Amount: 2.297716
Amount Units: ug/mL



Reviewer: LV5D, 24-Jun-2023 10:41:43 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230022.D
Lims ID: IC ADD 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 23-Jun-2023 22:06:06 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC ADD 7
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub28

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2023 12:55:52 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1681

First Level Reviewer: LV5D Date: 24-Jun-2023 10:41:59

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1	6.467	6.475	-0.008	222122	1.00	0.9847	M
5 2,4-diamino-6-nitrotoluene	1	6.660	6.669	-0.009	139337	1.00	0.9722	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00037 Amount Added: 50.00 Units: uL

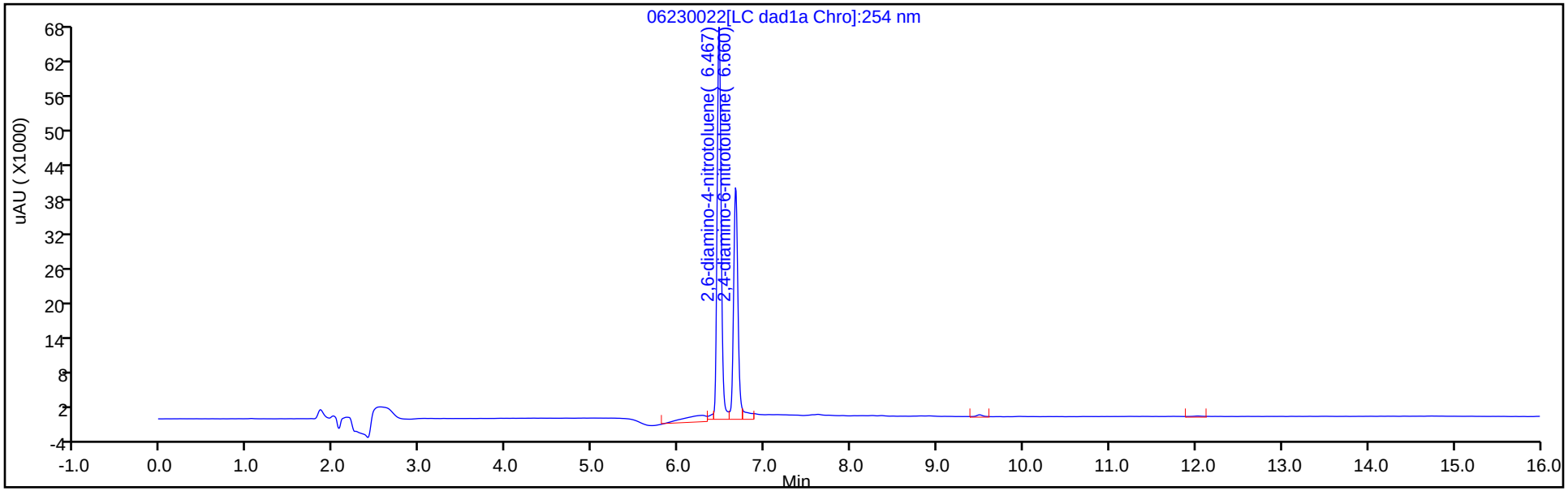
Report Date: 24-Jun-2023 12:55:53 Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Denver

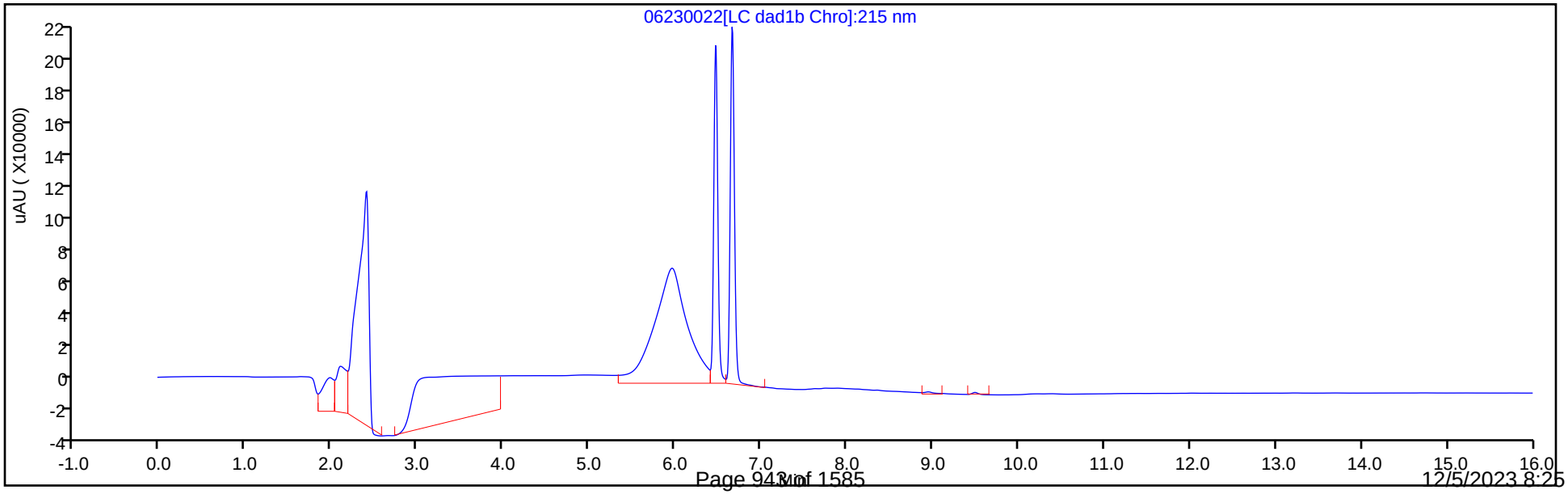
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230022.d

Injection Date:	23-Jun-2023 22:06:06	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	IC ADD 7			Worklist Smp#:	22
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

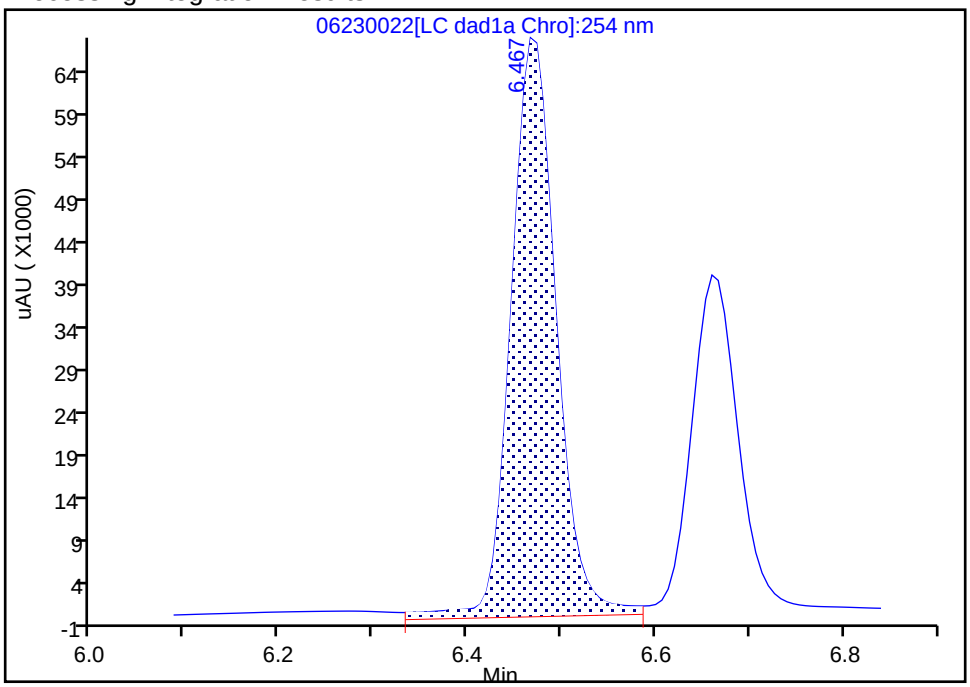
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230022.d				
Injection Date:	23-Jun-2023 22:06:06	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 7				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

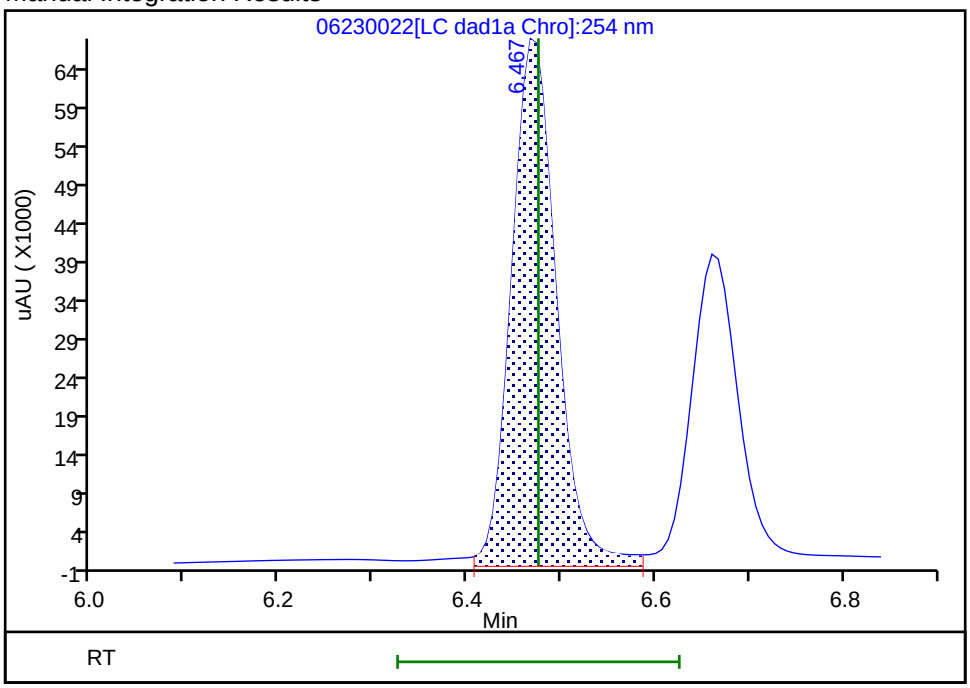
Processing Integration Results

RT: 6.47
Area: 225519
Amount: 0.988383
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 222122
Amount: 0.984735
Amount Units: ug/mL



Reviewer: LV5D, 24-Jun-2023 10:41:56 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

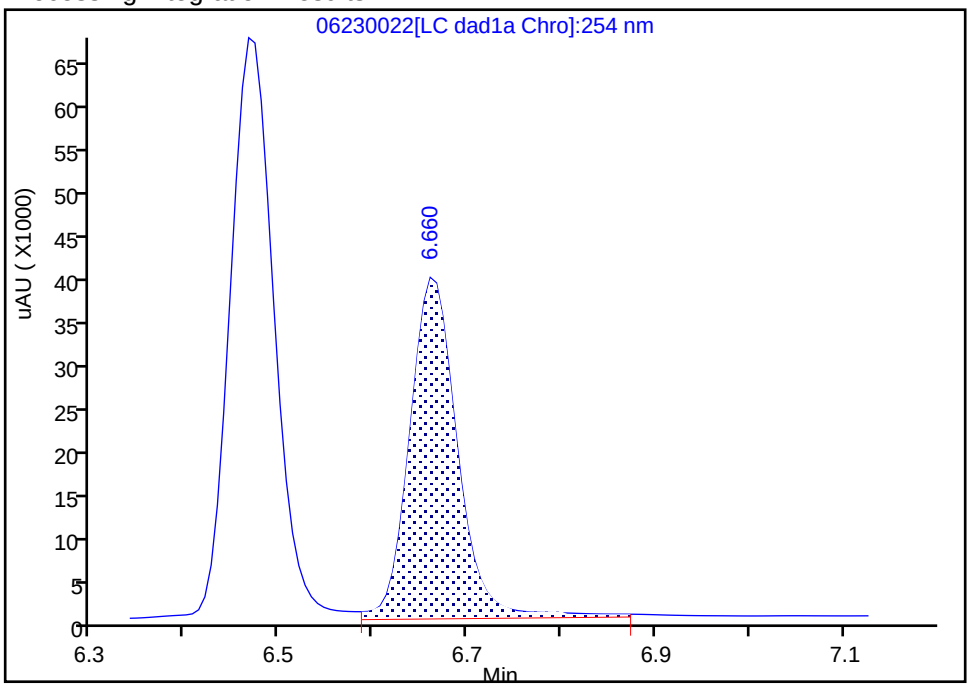
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230022.d				
Injection Date:	23-Jun-2023 22:06:06	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 7				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

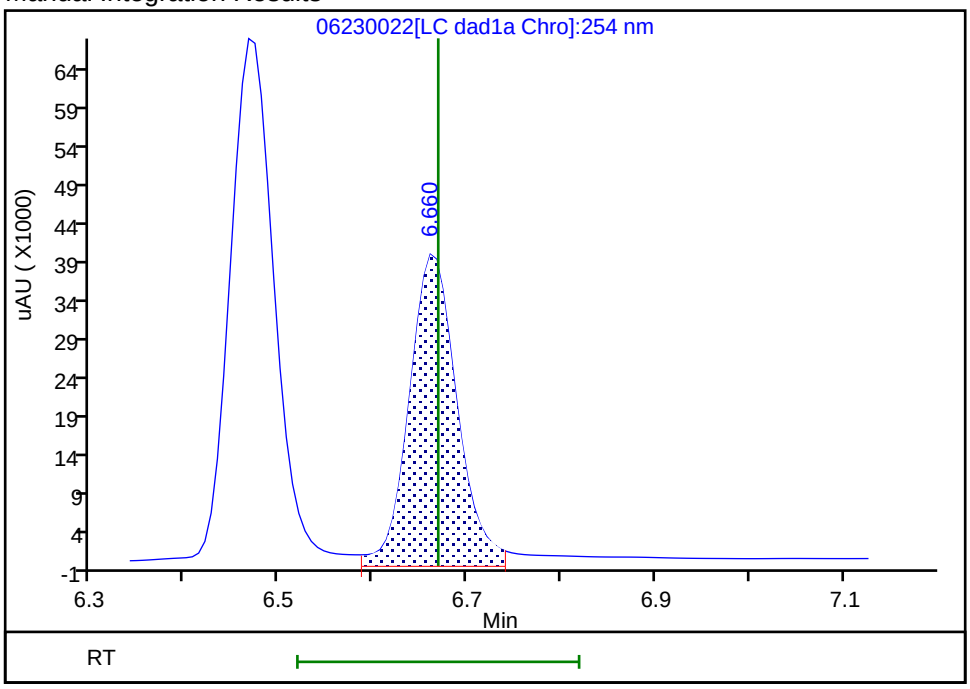
Processing Integration Results

RT: 6.66
Area: 139316
Amount: 0.997706
Amount Units: ug/mL



Manual Integration Results

RT: 6.66
Area: 139337
Amount: 0.972167
Amount Units: ug/mL



Reviewer: LV5D, 24-Jun-2023 10:41:57 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230023.D
Lims ID: IC ADD 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 23-Jun-2023 22:29:01 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC ADD 6
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub28

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2023 12:55:53 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1681

First Level Reviewer: LV5D Date: 24-Jun-2023 10:42:08

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1	6.474	6.475	-0.001	154088	0.7000	0.6831	M
5 2,4-diamino-6-nitrotoluene	1	6.668	6.669	-0.001	96286	0.7000	0.6718	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

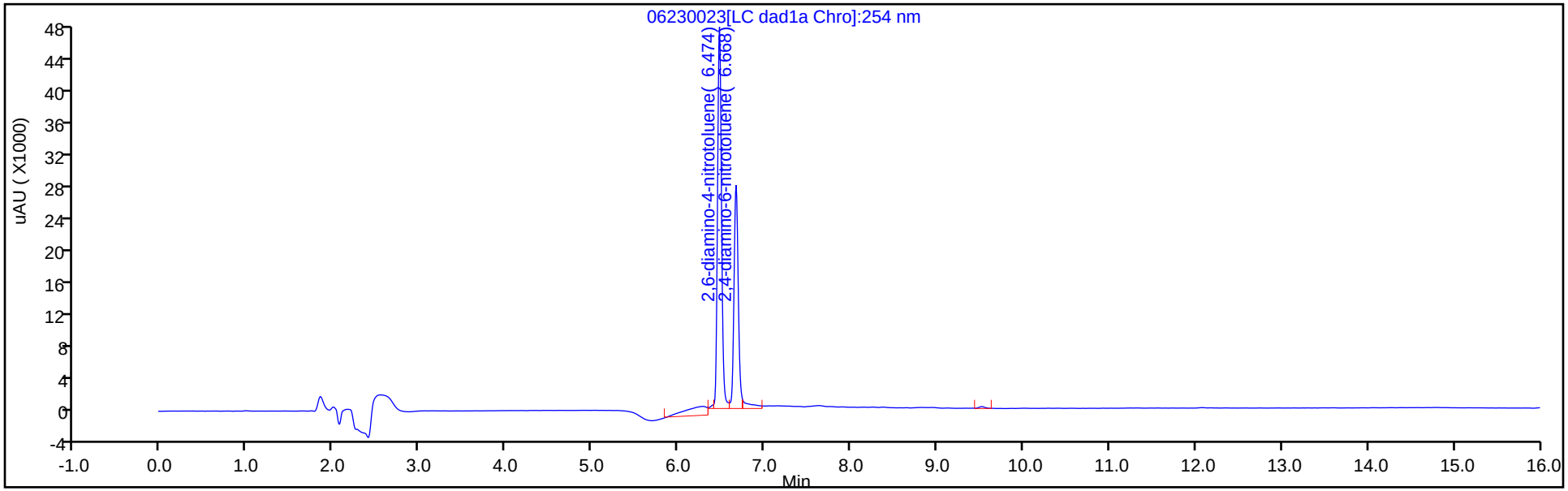
8330_ADDs_00037 Amount Added: 35.00 Units: uL

Report Date: 24-Jun-2023 12:55:53 Chrom Revision: 2.3 05-Jun-2023 19:02:10

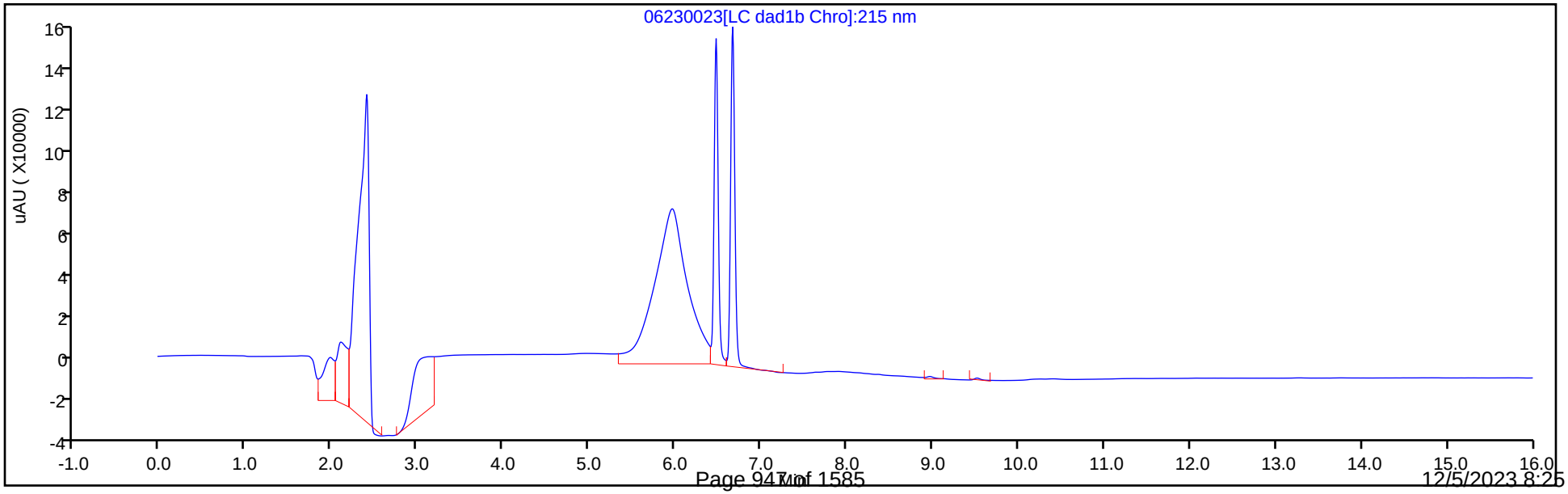
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230023.d				
Injection Date:	23-Jun-2023 22:29:01	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	IC ADD 6			Worklist Smp#:	23
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

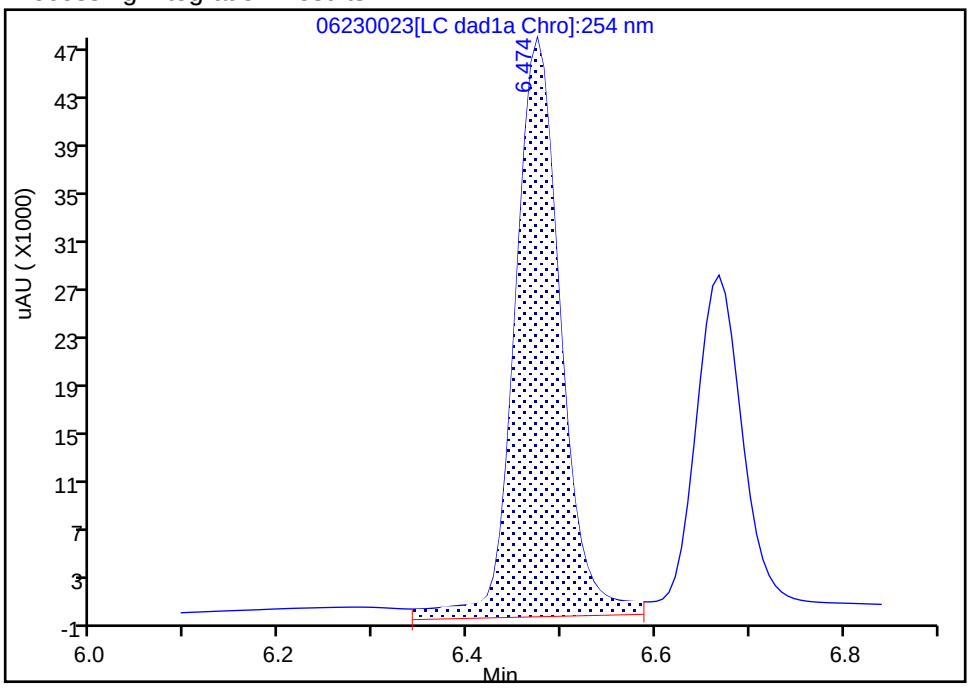
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230023.d
Injection Date: 23-Jun-2023 22:29:01 Instrument ID: CHHPLC_X3
Lims ID: IC ADD 6
Client ID:
Operator ID: JZ/JG ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

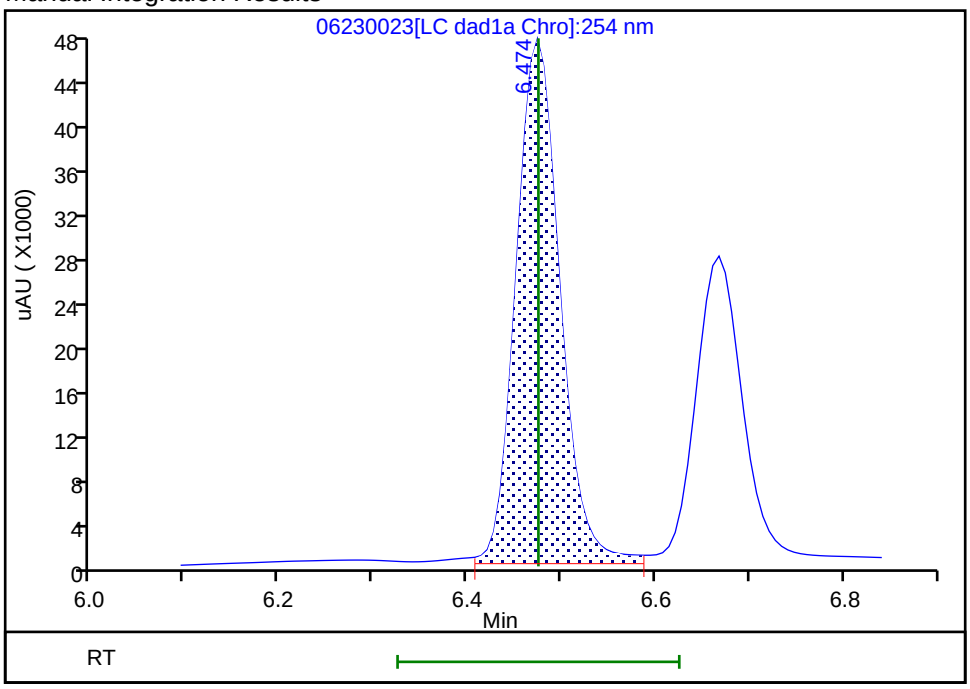
Processing Integration Results

RT: 6.47
Area: 162603
Amount: 0.697057
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 154088
Amount: 0.683119
Amount Units: ug/mL



Reviewer: LV5D, 24-Jun-2023 10:42:06 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

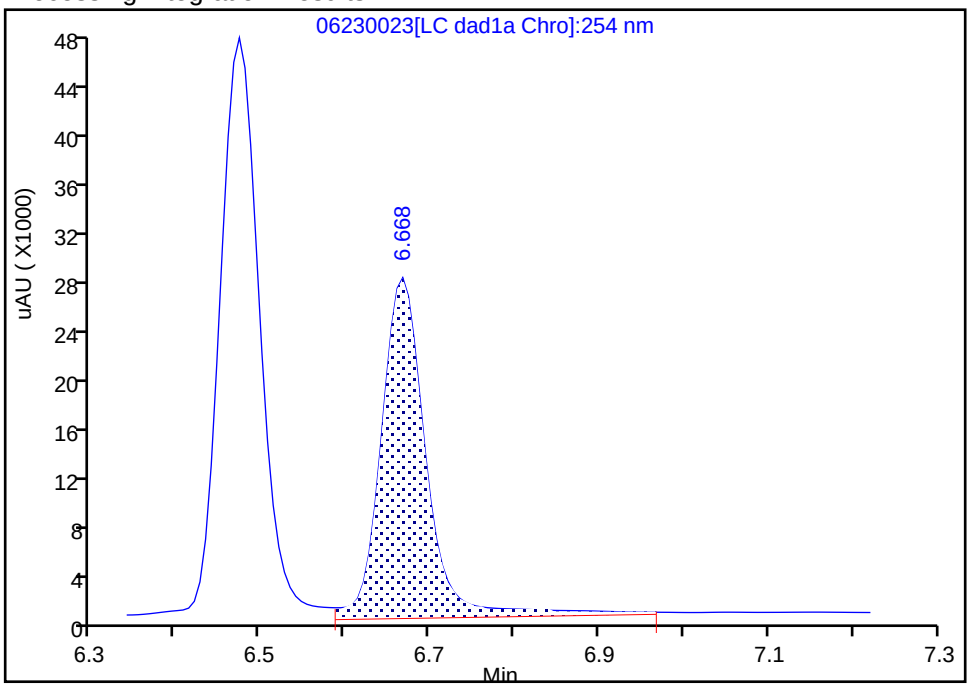
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230023.d				
Injection Date:	23-Jun-2023 22:29:01	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 6				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

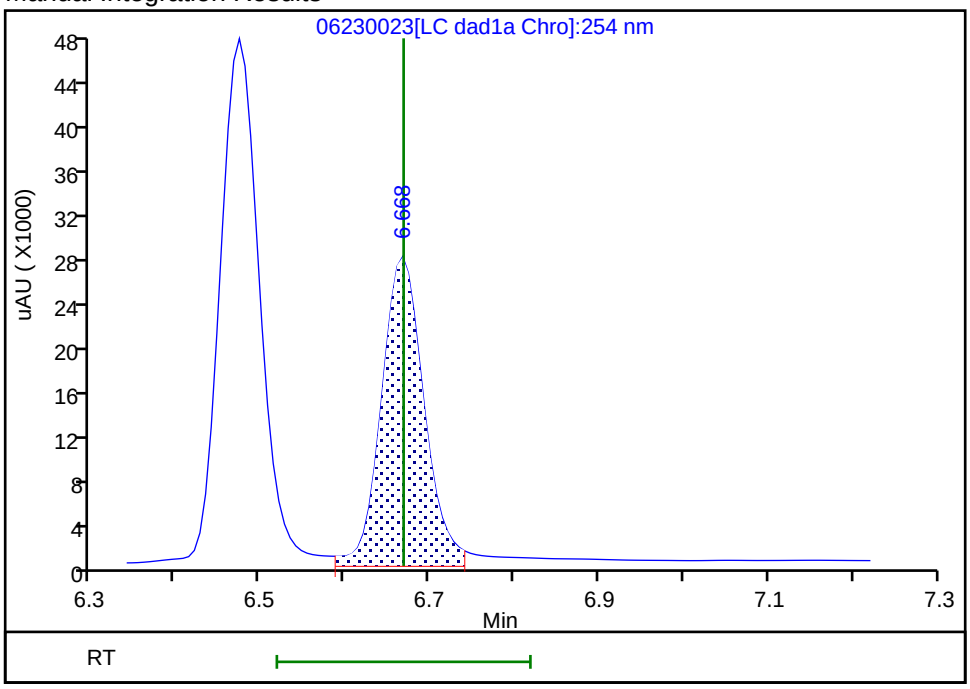
Processing Integration Results

RT: 6.67
Area: 105227
Amount: 0.731247
Amount Units: ug/mL



Manual Integration Results

RT: 6.67
Area: 96286
Amount: 0.671796
Amount Units: ug/mL



Reviewer: LV5D, 24-Jun-2023 10:42:07 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230024.D
Lims ID: IC ADD 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 23-Jun-2023 22:52:03 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC ADD 5
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub28

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2023 12:55:53 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1681

First Level Reviewer: LV5D Date: 24-Jun-2023 10:42:22

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1	6.474	6.475	-0.001	85341	0.4000	0.3783	M
5 2,4-diamino-6-nitrotoluene	1	6.668	6.669	-0.001	52521	0.4000	0.3664	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00037 Amount Added: 20.00 Units: uL

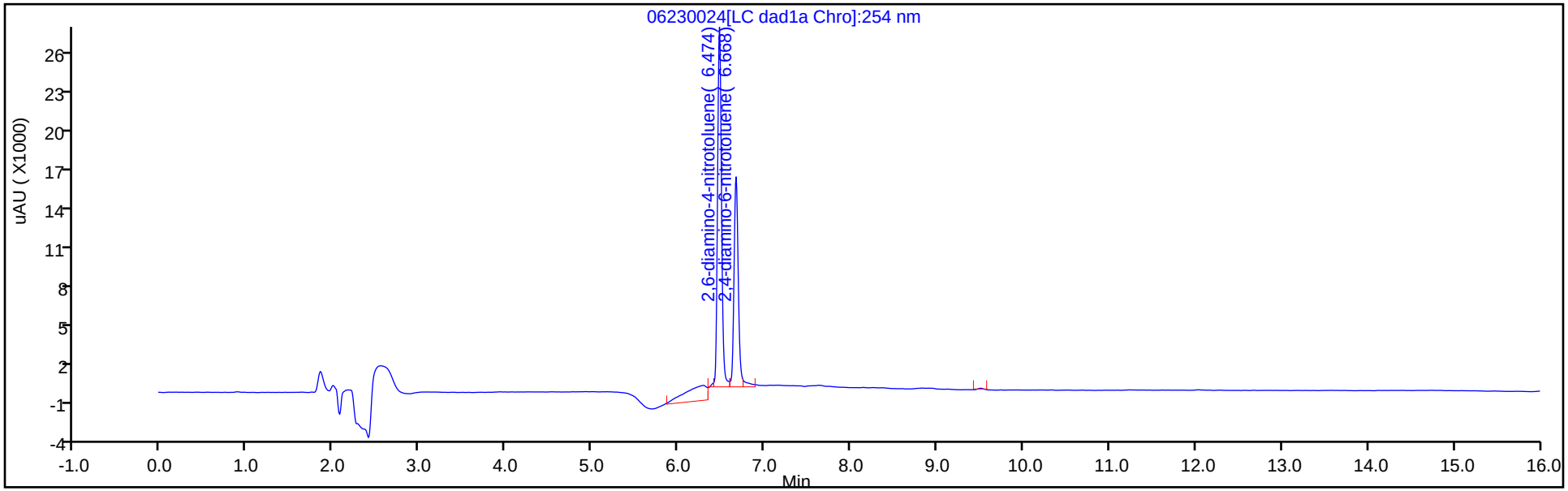
Report Date: 24-Jun-2023 12:55:53 Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Denver

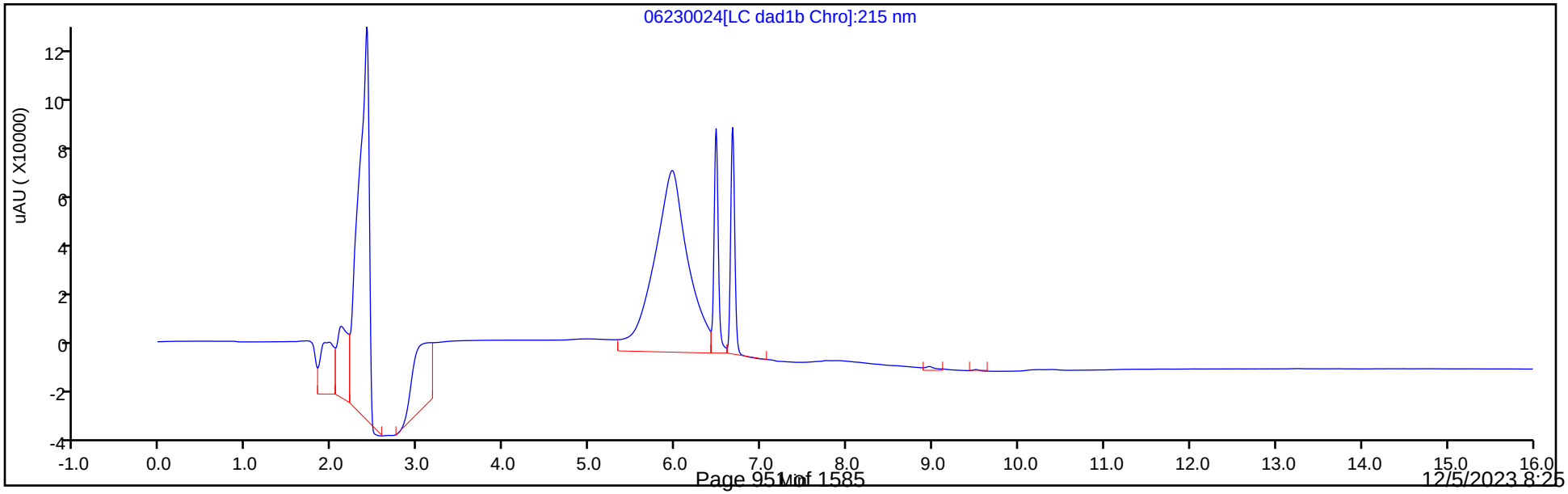
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230024.d

Injection Date:	23-Jun-2023 22:52:03	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	IC ADD 5			Worklist Smp#:	24
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

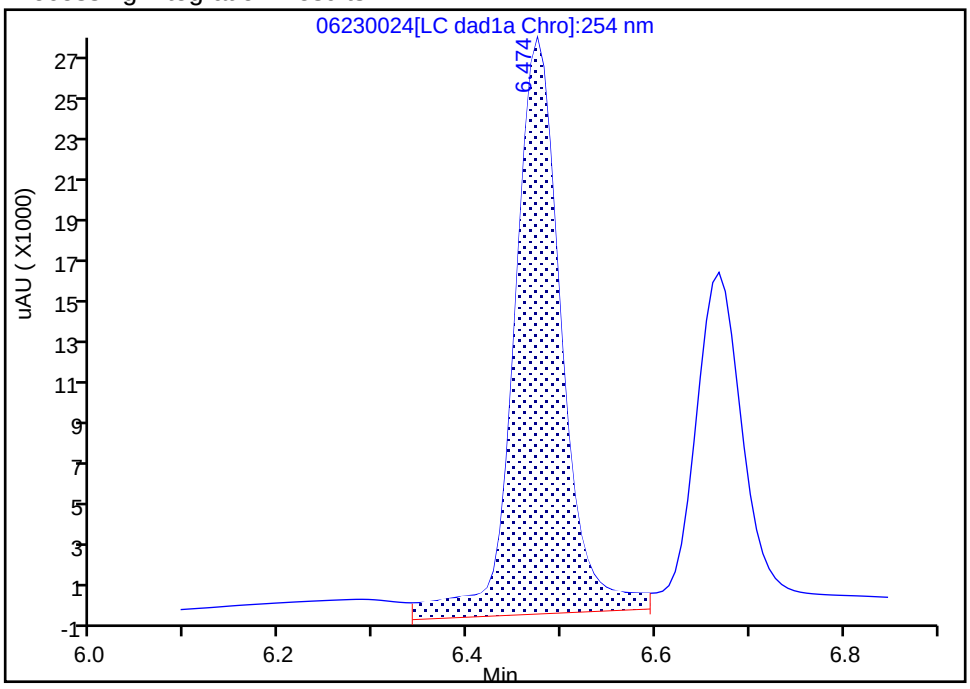
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230024.d				
Injection Date:	23-Jun-2023 22:52:03	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 5				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

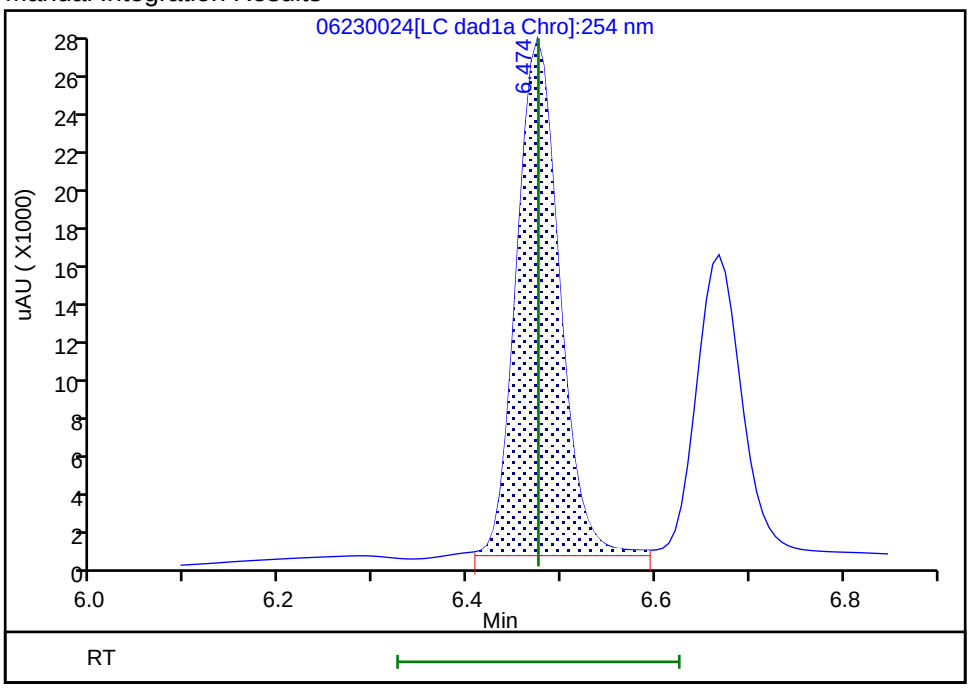
Processing Integration Results

RT: 6.47
Area: 96404
Amount: 0.391345
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 85341
Amount: 0.378343
Amount Units: ug/mL



Reviewer: LV5D, 24-Jun-2023 10:42:20 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

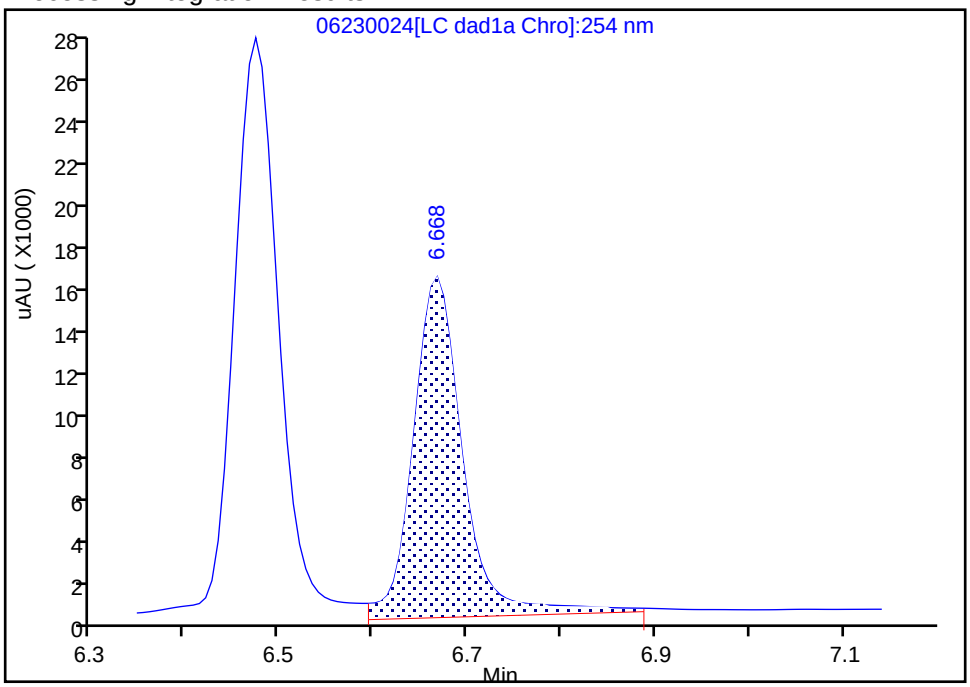
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230024.d				
Injection Date:	23-Jun-2023 22:52:03	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 5				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

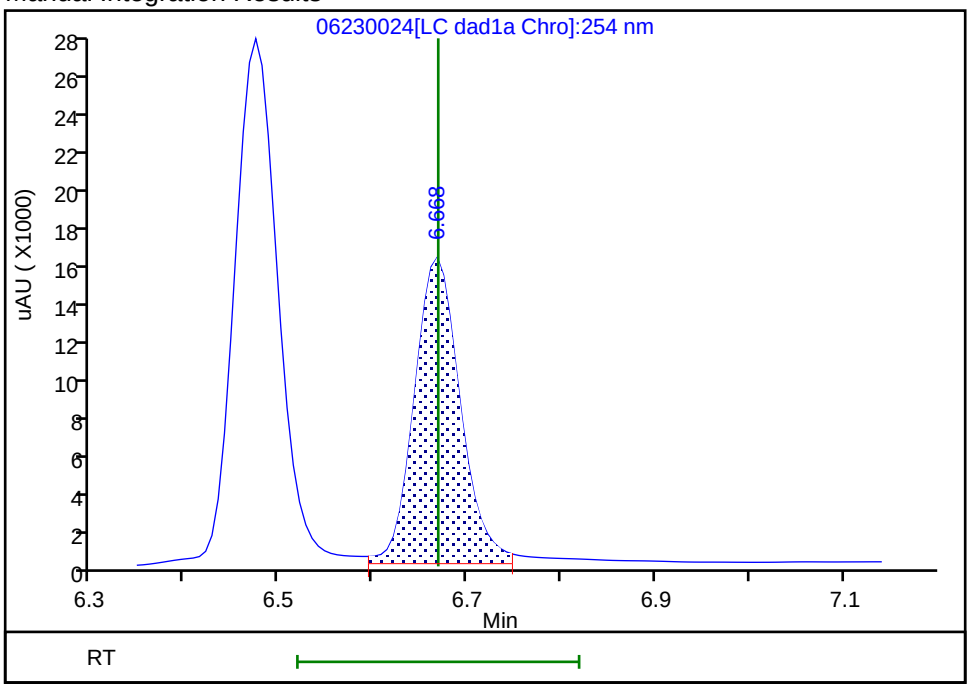
Processing Integration Results

RT: 6.67
Area: 59274
Amount: 0.377302
Amount Units: ug/mL



Manual Integration Results

RT: 6.67
Area: 52521
Amount: 0.366444
Amount Units: ug/mL



Reviewer: LV5D, 24-Jun-2023 10:42:21 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230025.D
Lims ID: IC ADD 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 23-Jun-2023 23:14:58 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC ADD 4
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub28

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2023 12:55:54 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1681

First Level Reviewer: LV5D Date: 24-Jun-2023 10:42:36

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1	6.475	6.475	0.000	56351	0.2500	0.2498	M
5 2,4-diamino-6-nitrotoluene	1	6.669	6.669	0.000	35180	0.2500	0.2455	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00037 Amount Added: 12.50 Units: uL

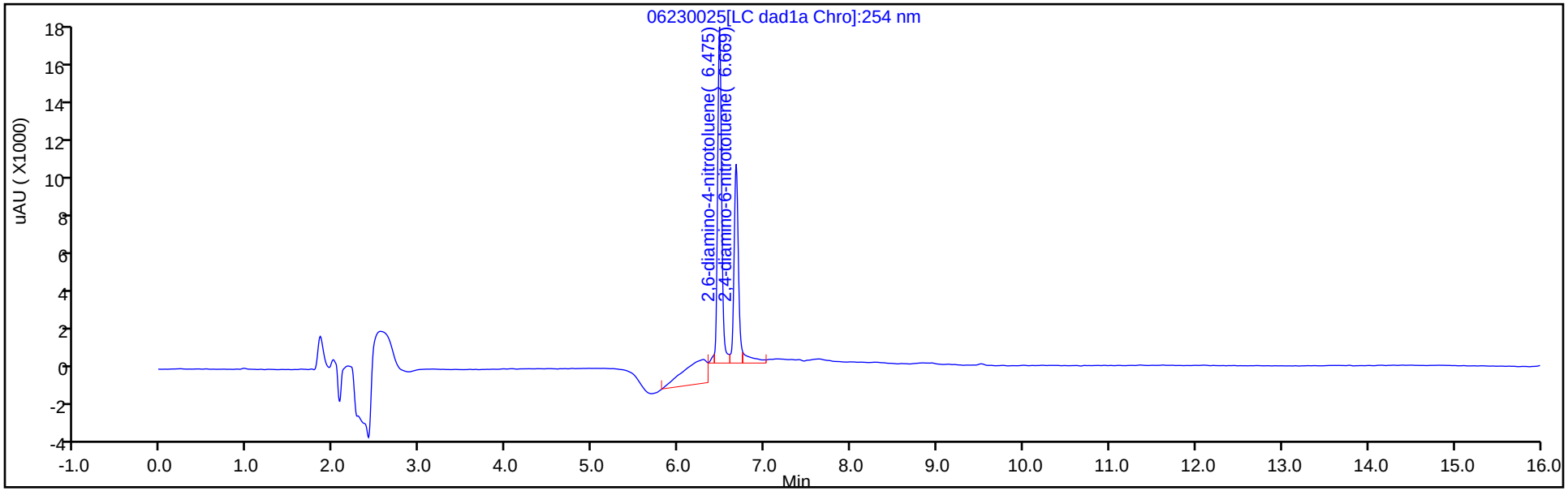
Report Date: 24-Jun-2023 12:55:54 Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Denver

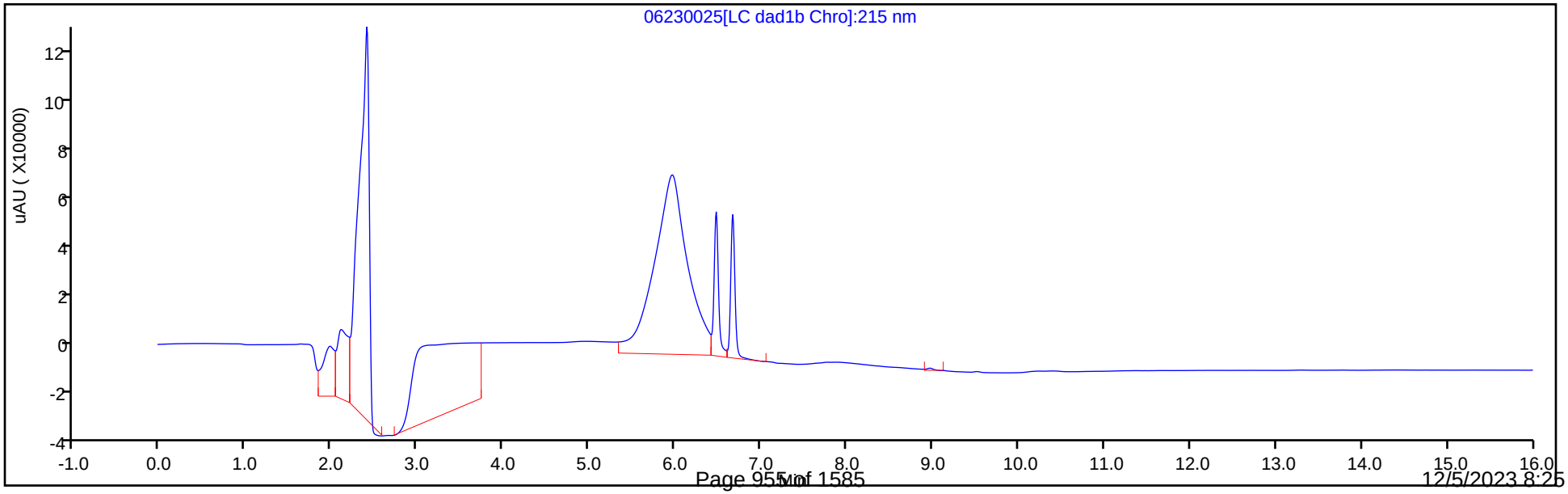
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230025.d

Injection Date:	23-Jun-2023 23:14:58	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	IC ADD 4			Worklist Smp#:	25
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

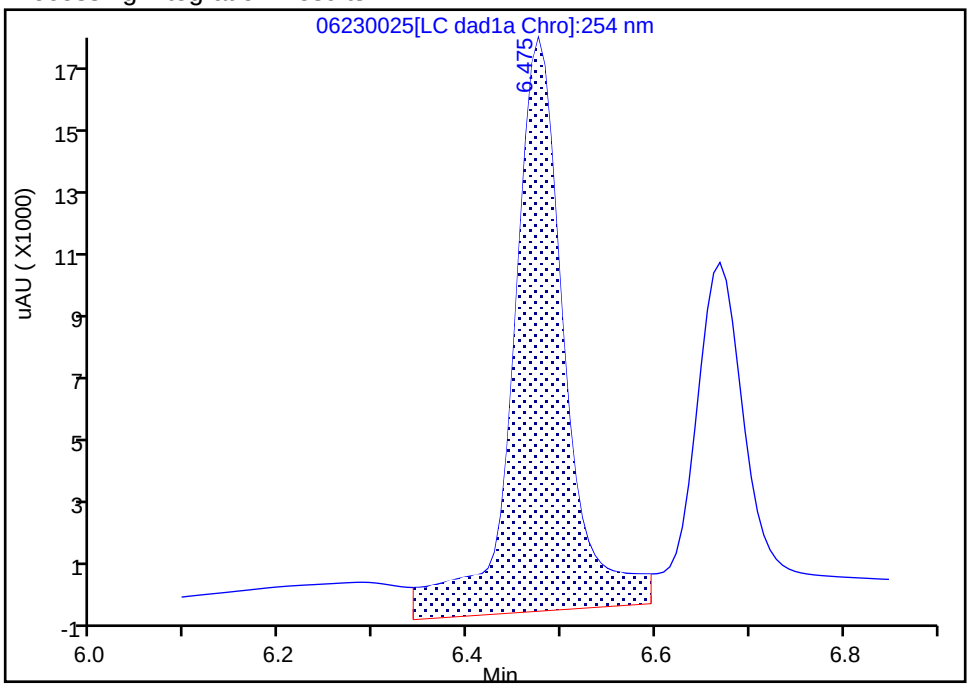
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230025.d				
Injection Date:	23-Jun-2023 23:14:58	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 4				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

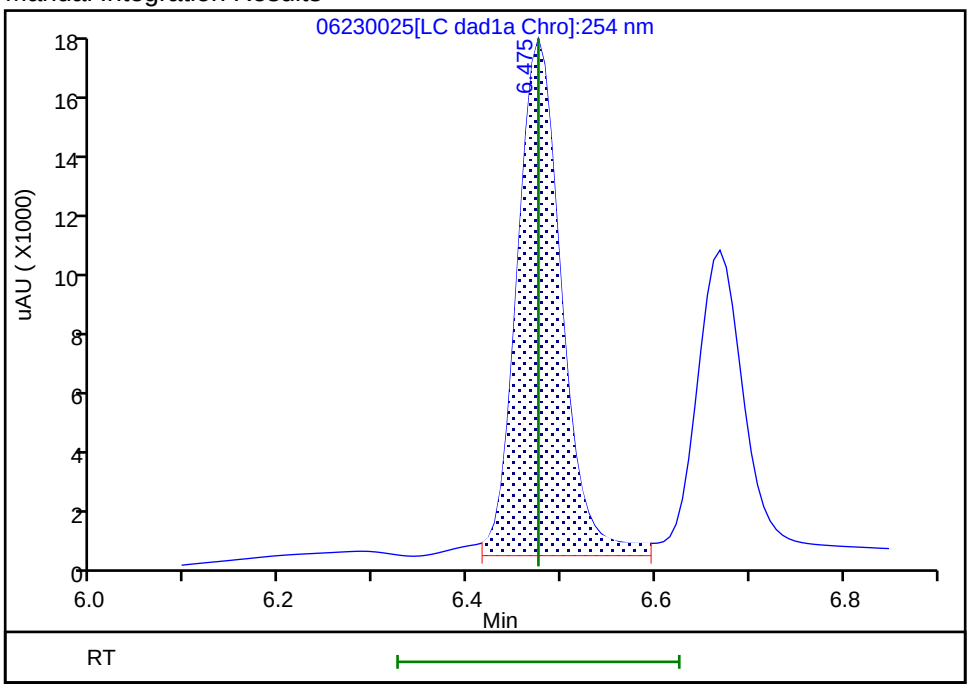
Processing Integration Results

RT: 6.48
Area: 69279
Amount: 0.268827
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 56351
Amount: 0.249821
Amount Units: ug/mL



Reviewer: LV5D, 24-Jun-2023 10:42:34 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

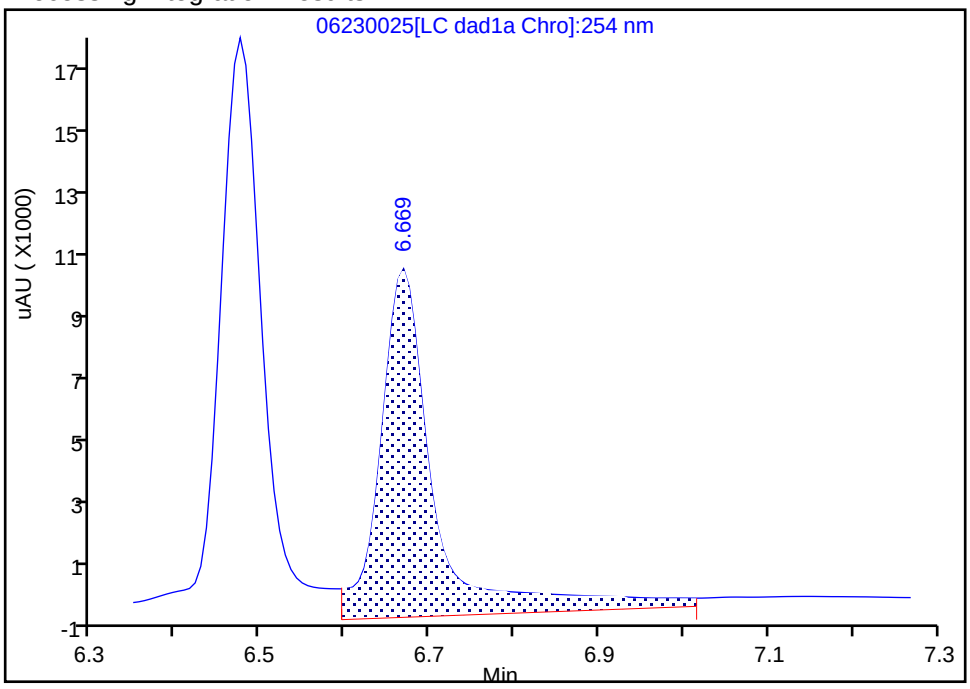
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230025.d				
Injection Date:	23-Jun-2023 23:14:58	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 4				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

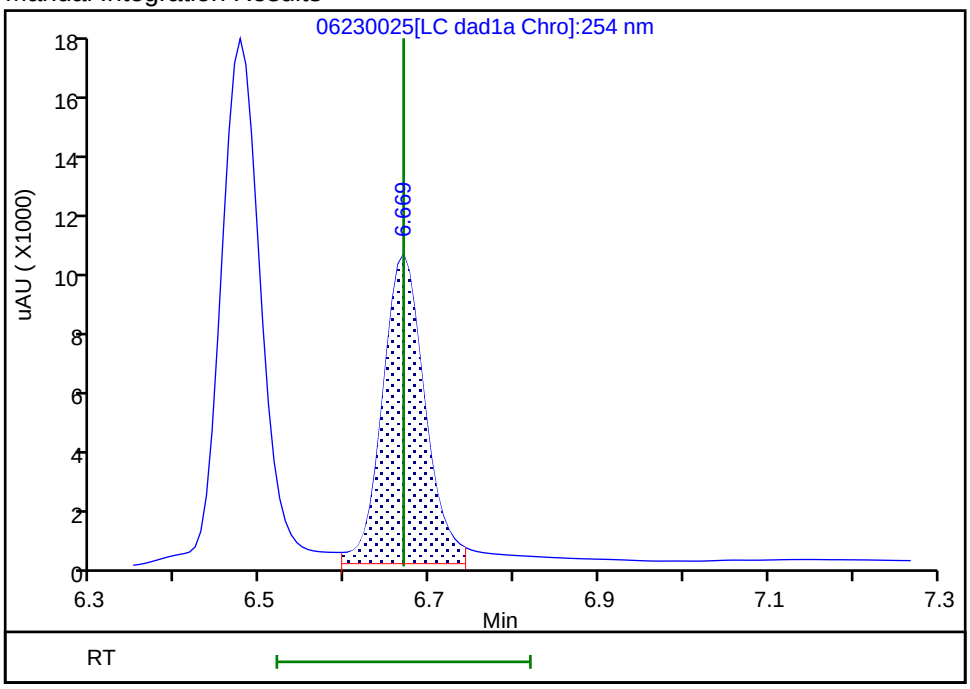
Processing Integration Results

RT: 6.67
Area: 47664
Amount: 0.288662
Amount Units: ug/mL



Manual Integration Results

RT: 6.67
Area: 35180
Amount: 0.245454
Amount Units: ug/mL



Reviewer: LV5D, 24-Jun-2023 10:42:35 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230026.D
Lims ID: IC ADD 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 23-Jun-2023 23:37:56 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC ADD 3
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub28

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2023 12:55:54 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1681

First Level Reviewer: LV5D Date: 24-Jun-2023 10:42:44

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1	6.471	6.475	-0.004	22652	0.1000	0.1004	M
5 2,4-diamino-6-nitrotoluene	1	6.664	6.669	-0.005	14442	0.1000	0.1008	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00037 Amount Added: 5.00 Units: uL

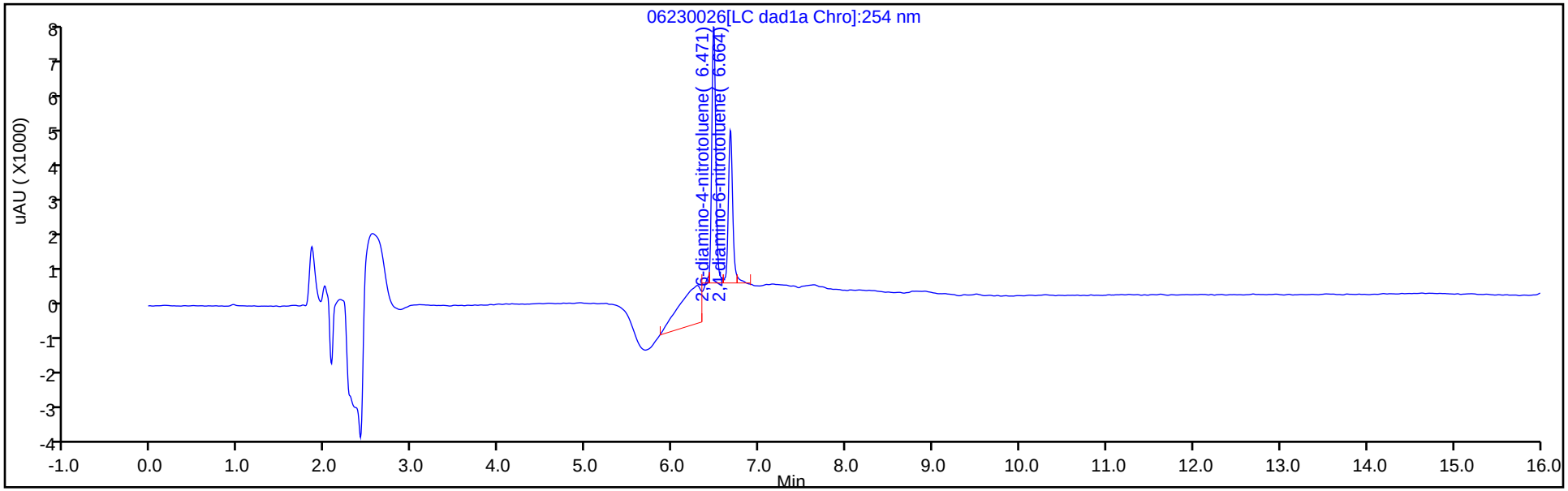
Report Date: 24-Jun-2023 12:55:54 Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Denver

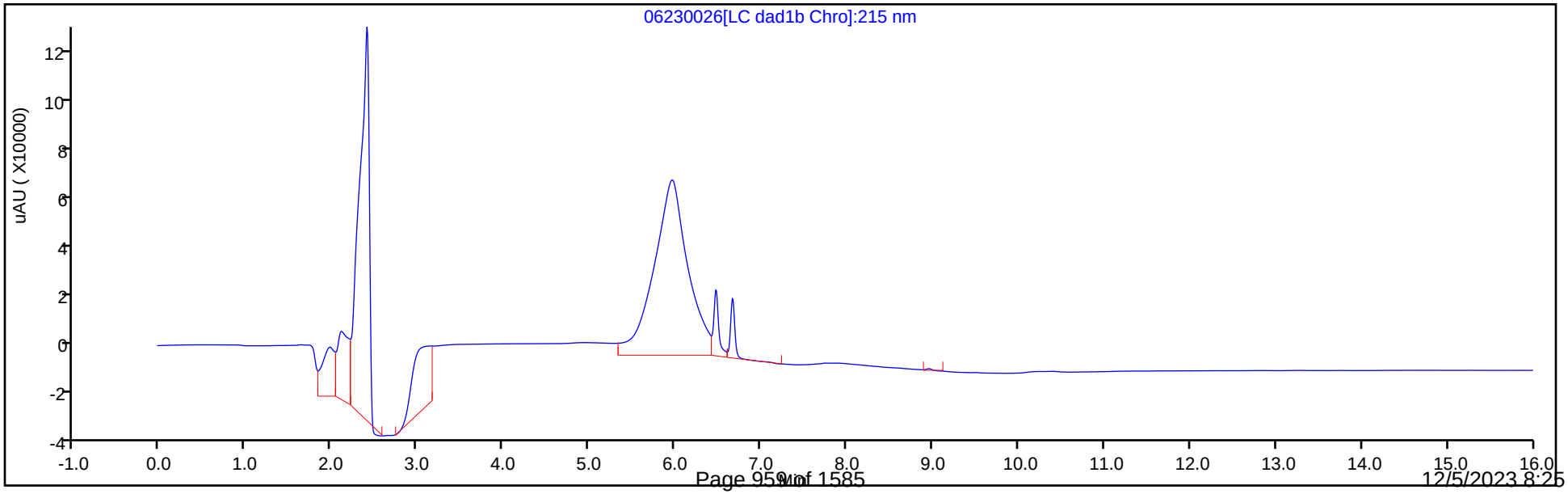
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230026.d

Injection Date:	23-Jun-2023 23:37:56	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	IC ADD 3			Worklist Smp#:	26
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

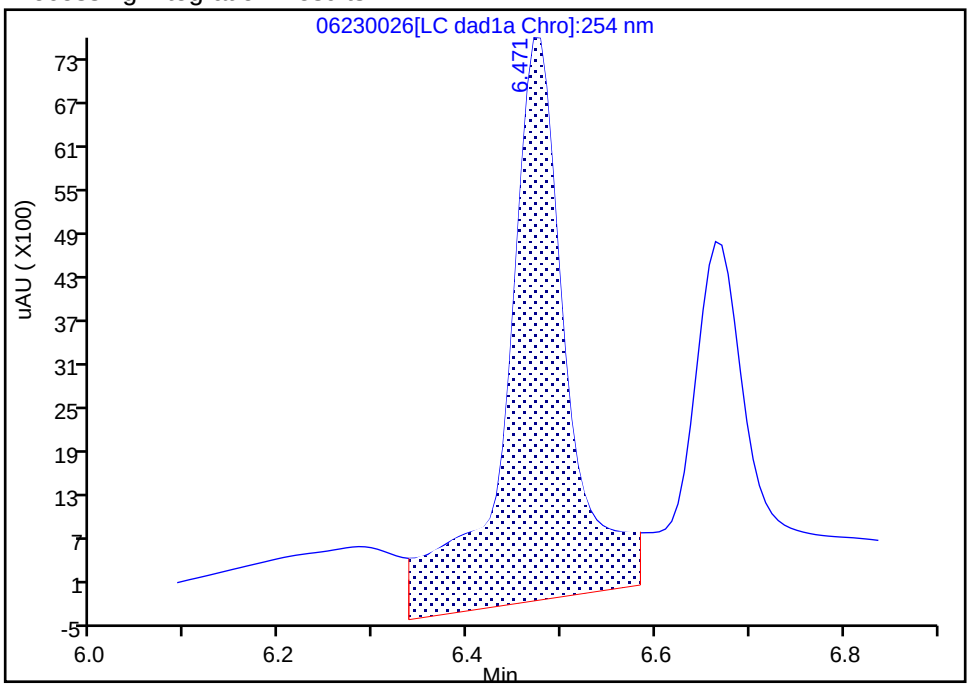
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230026.d				
Injection Date:	23-Jun-2023 23:37:56	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 3				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

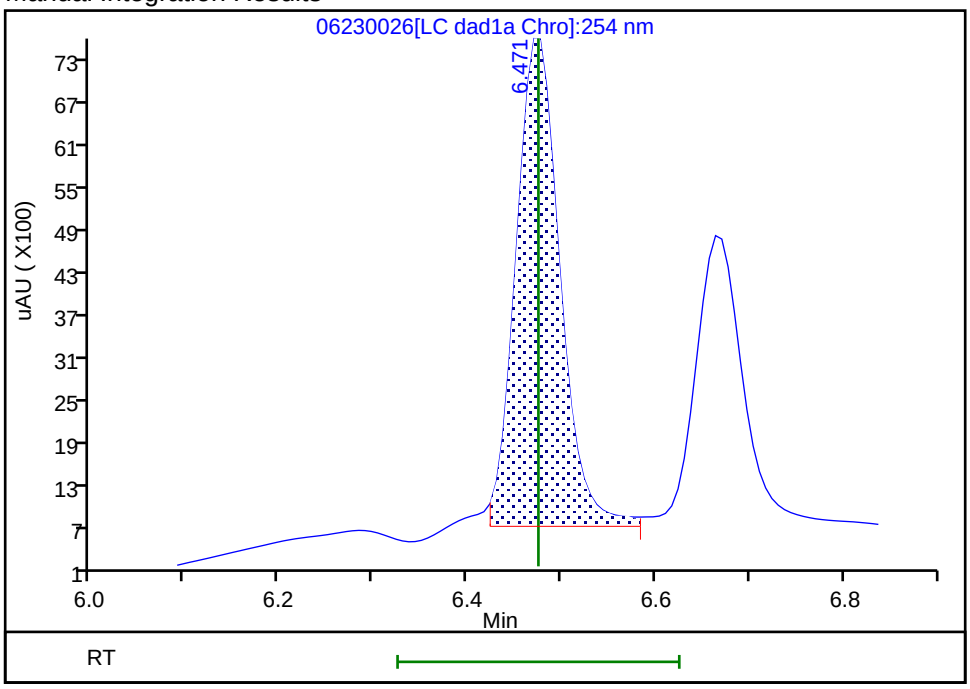
Processing Integration Results

RT: 6.47
Area: 34869
Amount: 0.105424
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 22652
Amount: 0.100423
Amount Units: ug/mL



Reviewer: LV5D, 24-Jun-2023 10:42:42 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

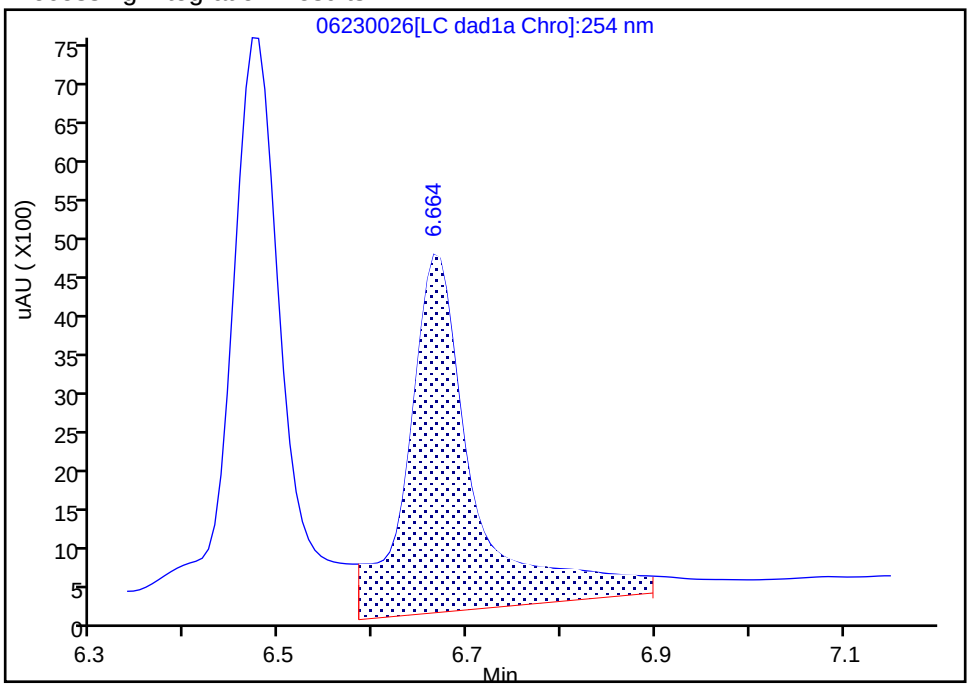
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230026.d				
Injection Date:	23-Jun-2023 23:37:56	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 3				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

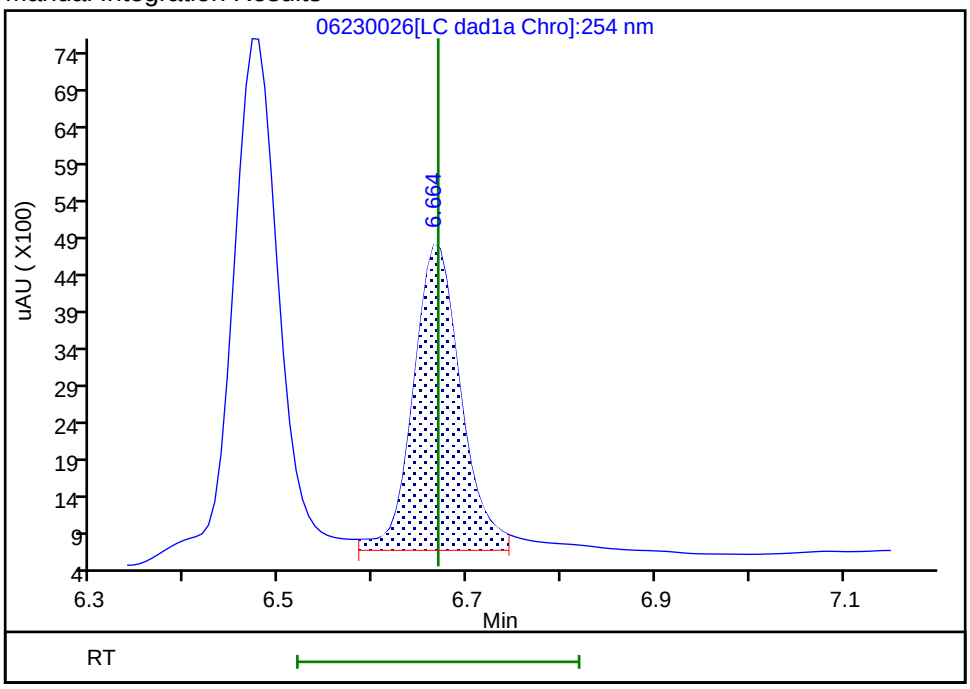
Processing Integration Results

RT: 6.66
Area: 22563
Amount: 0.092053
Amount Units: ug/mL



Manual Integration Results

RT: 6.66
Area: 14442
Amount: 0.100763
Amount Units: ug/mL



Reviewer: LV5D, 24-Jun-2023 10:42:43 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230027.D
Lims ID: IC ADD 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 24-Jun-2023 00:00:54 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC ADD 2
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub28

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2023 12:55:55 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1681

First Level Reviewer: LV5D Date: 24-Jun-2023 10:42:52

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1	6.478	6.475	0.003	10520	0.0400	0.0466	M
5 2,4-diamino-6-nitrotoluene	1	6.672	6.669	0.003	6600	0.0400	0.0460	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00037 Amount Added: 2.00 Units: uL

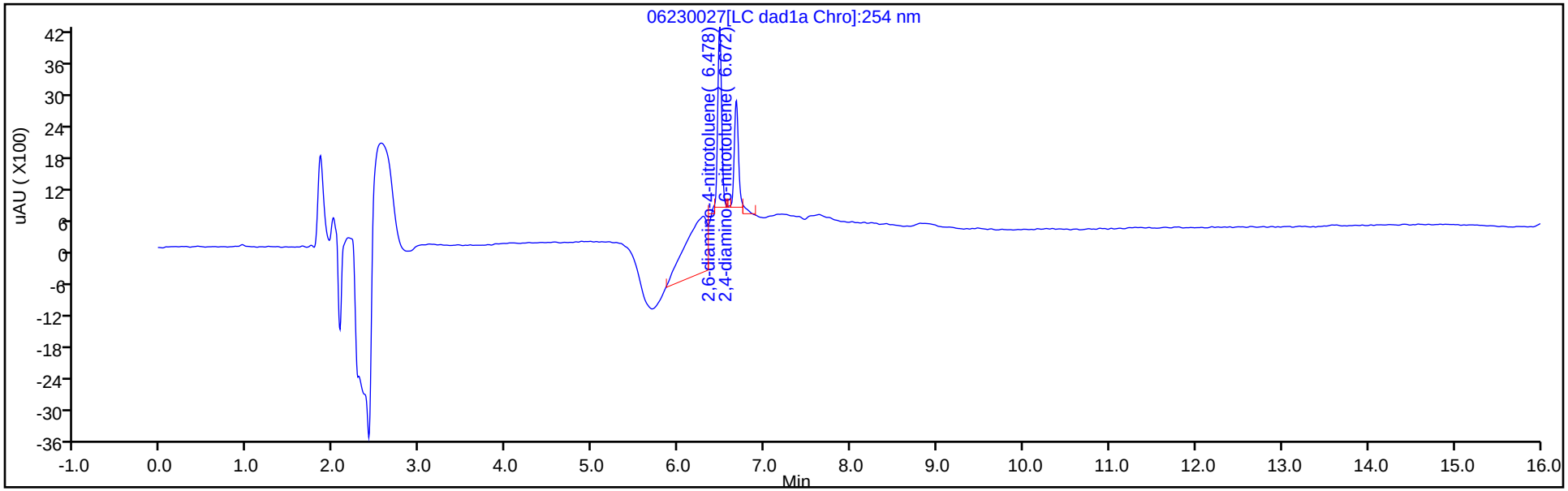
Report Date: 24-Jun-2023 12:55:55 Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Denver

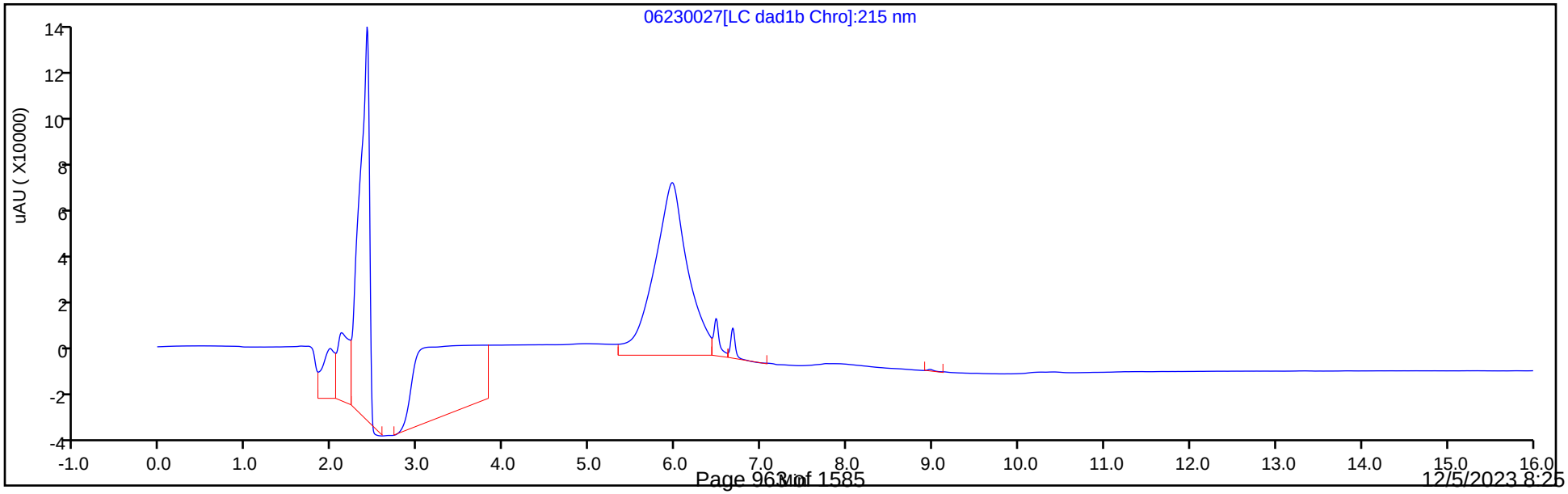
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230027.d

Injection Date:	24-Jun-2023 00:00:54	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	IC ADD 2			Worklist Smp#:	27
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

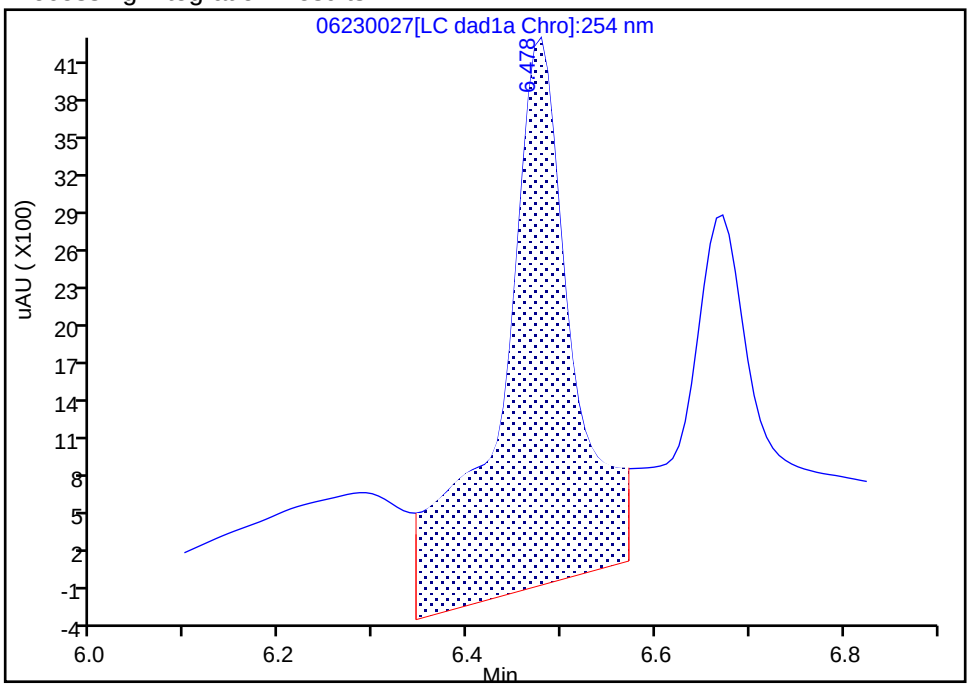
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230027.d				
Injection Date:	24-Jun-2023 00:00:54	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

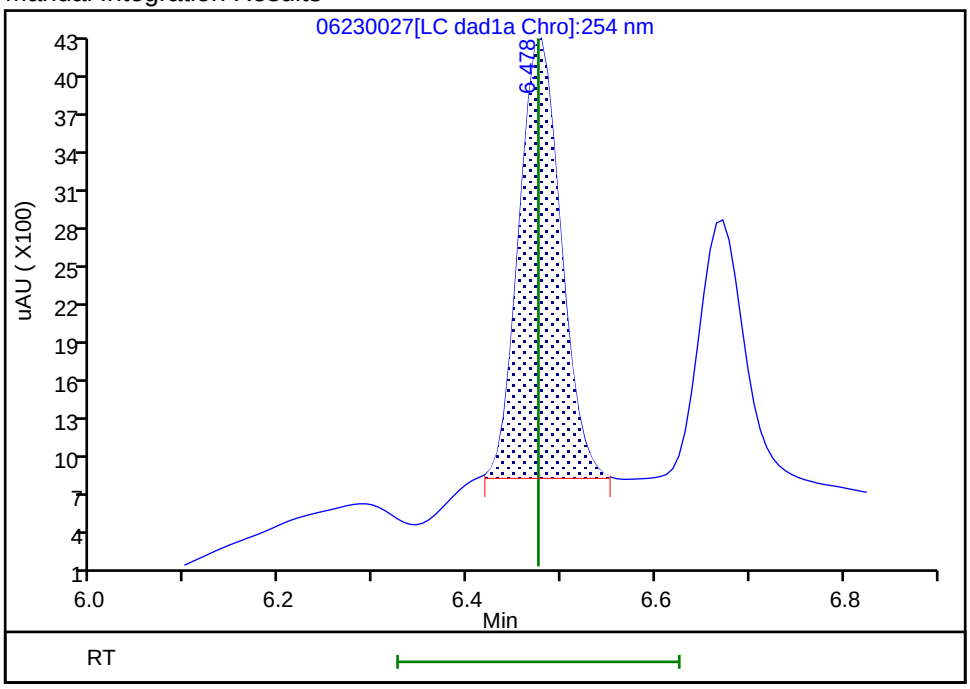
Processing Integration Results

RT: 6.48
Area: 22857
Amount: 0.065981
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 10520
Amount: 0.046638
Amount Units: ug/mL



Reviewer: LV5D, 24-Jun-2023 12:55:06 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

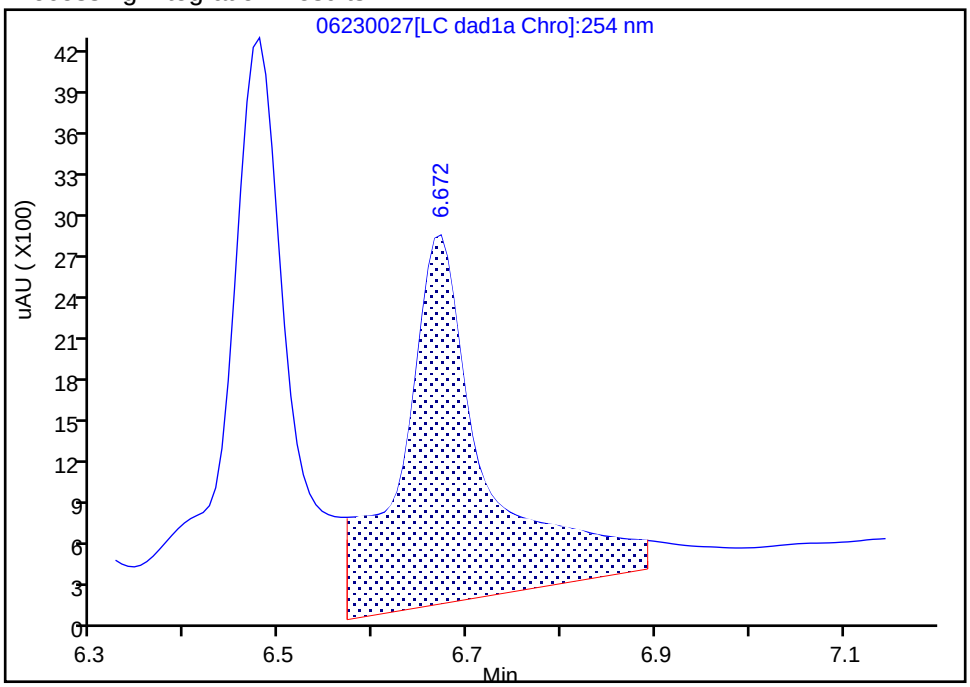
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230027.d				
Injection Date:	24-Jun-2023 00:00:54	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

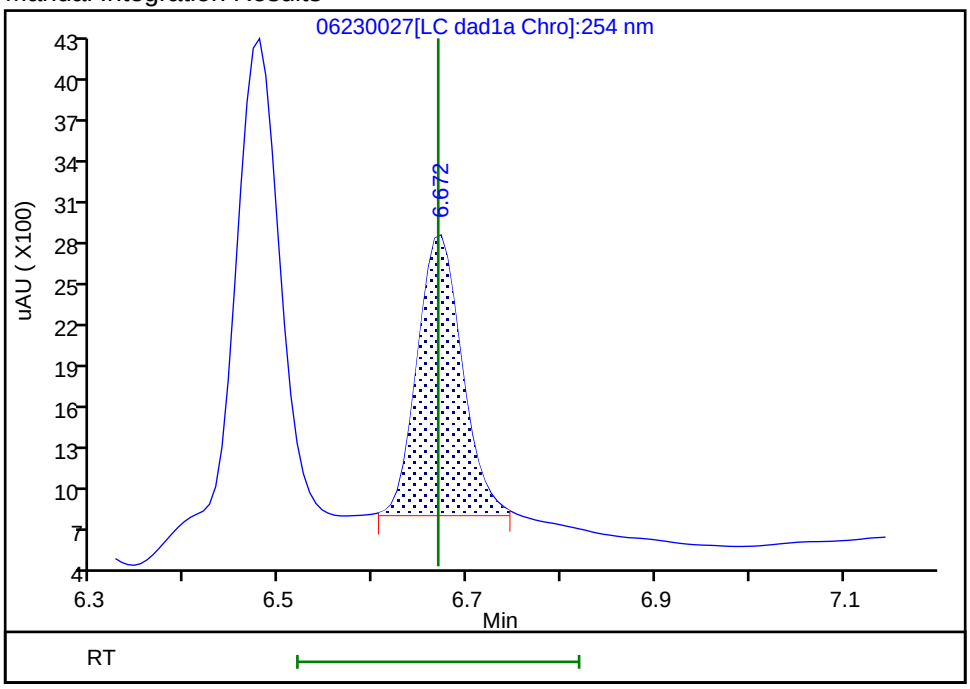
Processing Integration Results

RT: 6.67
Area: 16387
Amount: 0.066781
Amount Units: ug/mL



Manual Integration Results

RT: 6.67
Area: 6600
Amount: 0.046049
Amount Units: ug/mL



Reviewer: LV5D, 24-Jun-2023 12:55:07 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D
Lims ID: IC ADD 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 24-Jun-2023 00:23:49 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC ADD 1
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub28

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2023 12:55:55 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1681

First Level Reviewer: LV5D Date: 24-Jun-2023 10:43:02

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1	6.470	6.475	-0.005	4412	0.0200	0.0196	M
5 2,4-diamino-6-nitrotoluene	1	6.663	6.669	-0.006	3131	0.0200	0.0218	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00037 Amount Added: 1.00 Units: uL

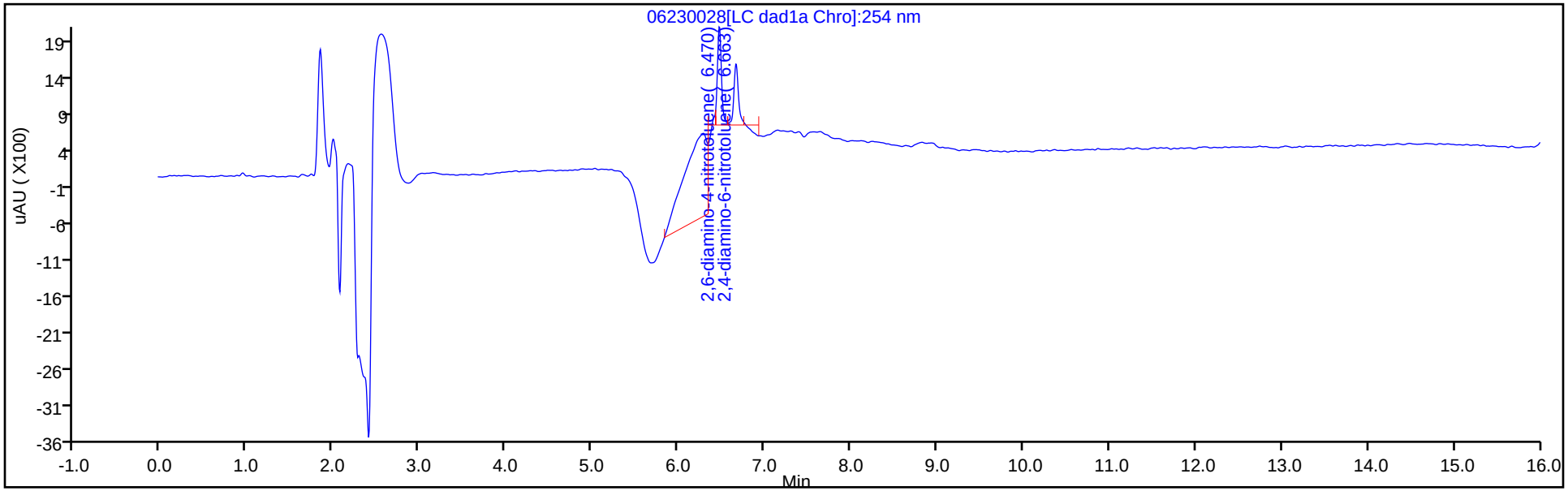
Report Date: 24-Jun-2023 12:55:55 Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Denver

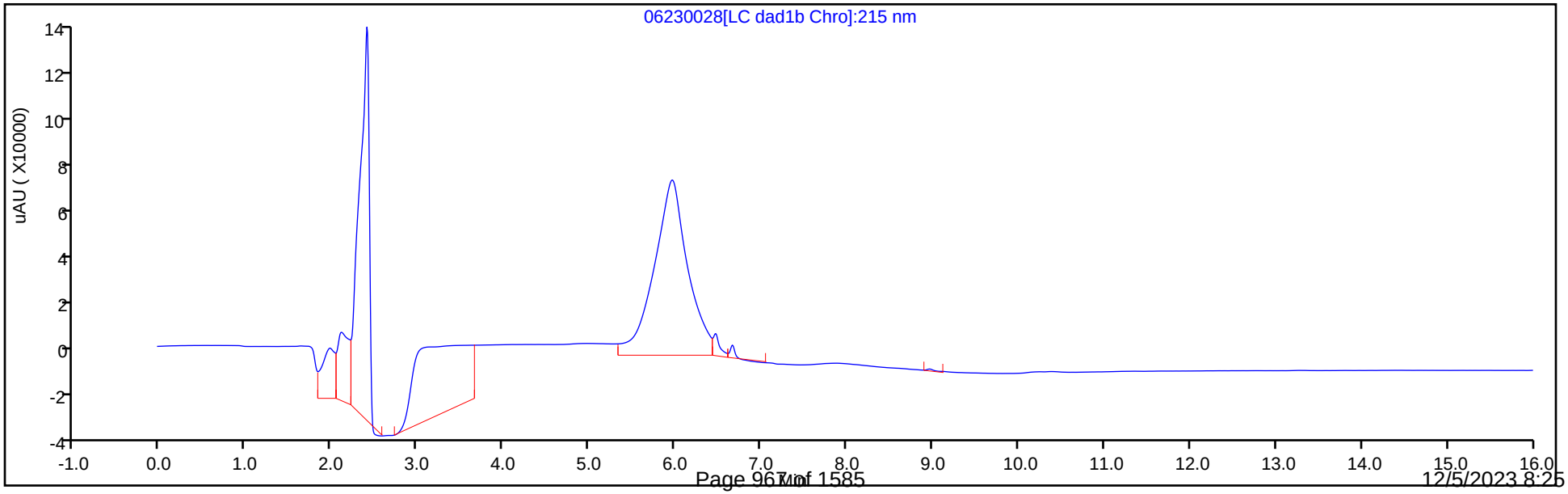
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230028.d

Injection Date:	24-Jun-2023 00:23:49	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	IC ADD 1			Worklist Smp#:	28
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

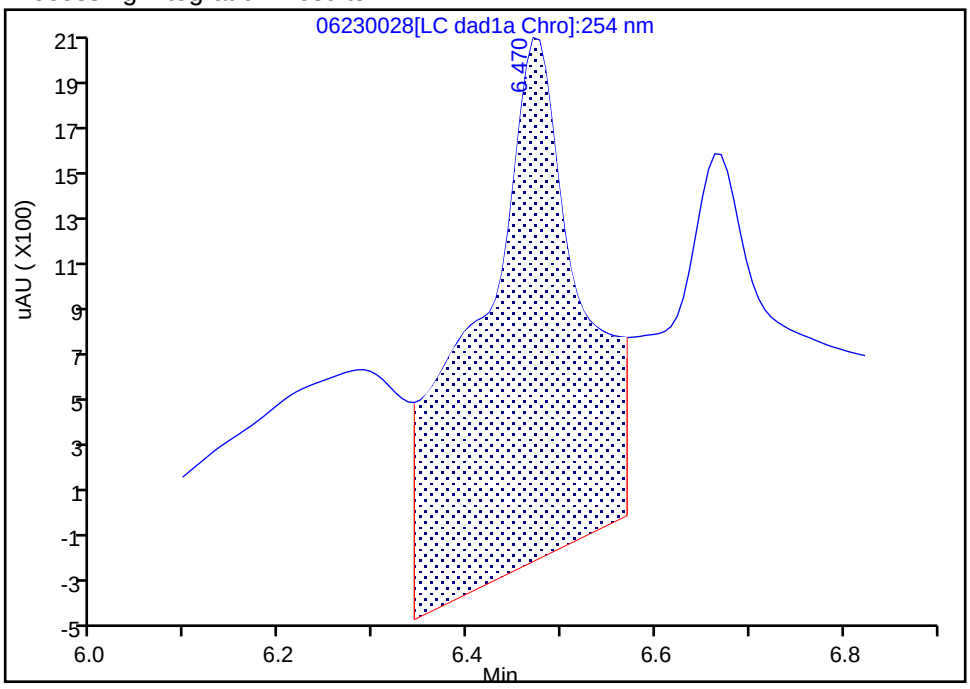
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230028.d
Injection Date: 24-Jun-2023 00:23:49 Instrument ID: CHHPLC_X3
Lims ID: IC ADD 1
Client ID:
Operator ID: JZ/JG ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

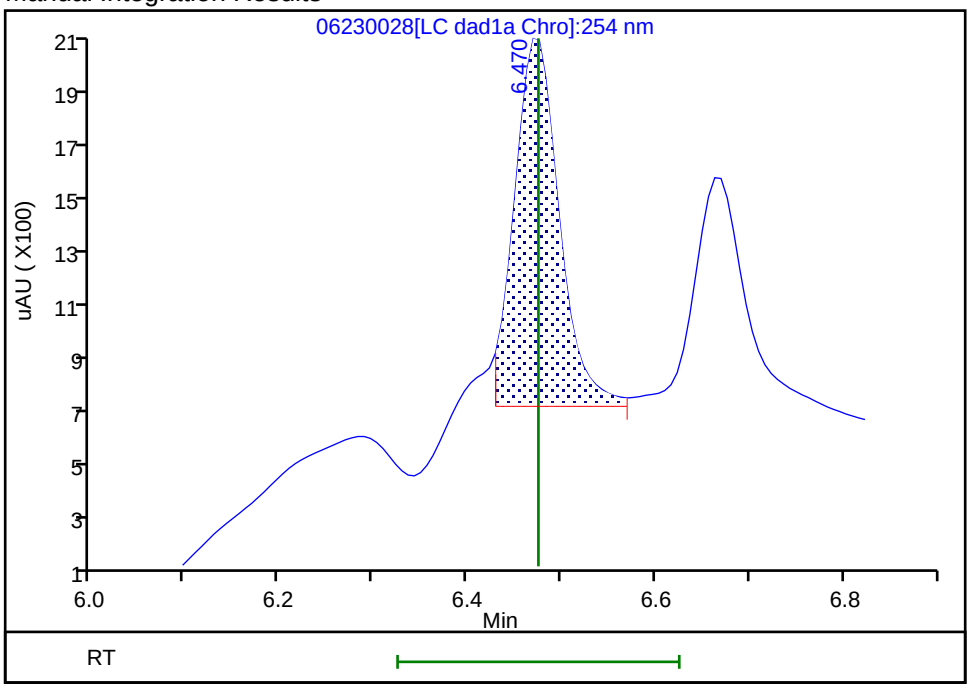
Processing Integration Results

RT: 6.47
Area: 17580
Amount: 0.056430
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 4412
Amount: 0.019560
Amount Units: ug/mL



Reviewer: LV5D, 24-Jun-2023 10:43:00 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

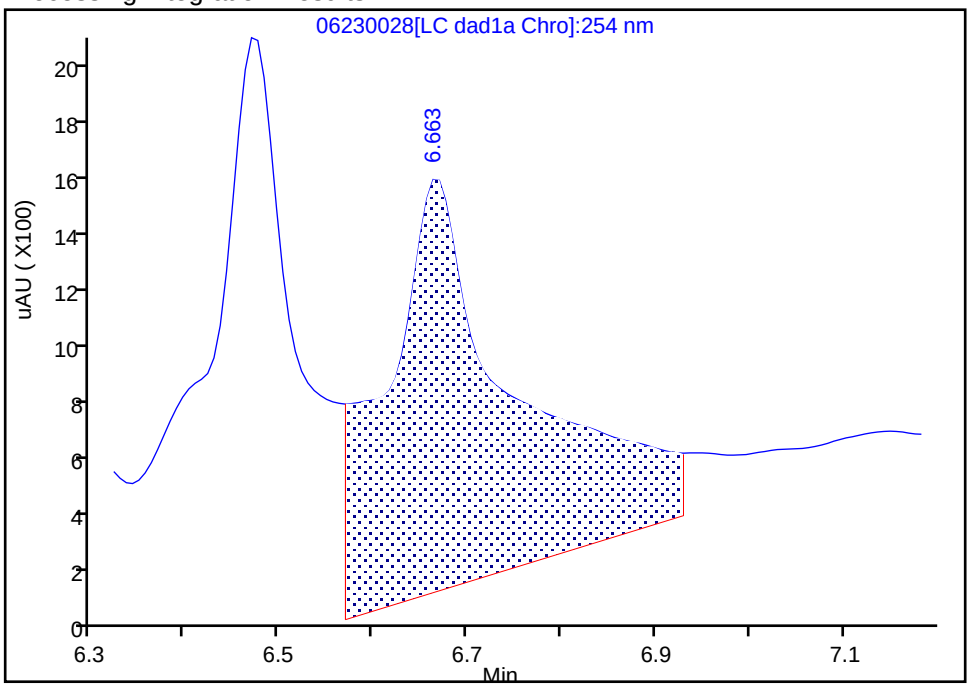
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230028.d
Injection Date: 24-Jun-2023 00:23:49 Instrument ID: CHHPLC_X3
Lims ID: IC ADD 1
Client ID:
Operator ID: JZ/JG ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

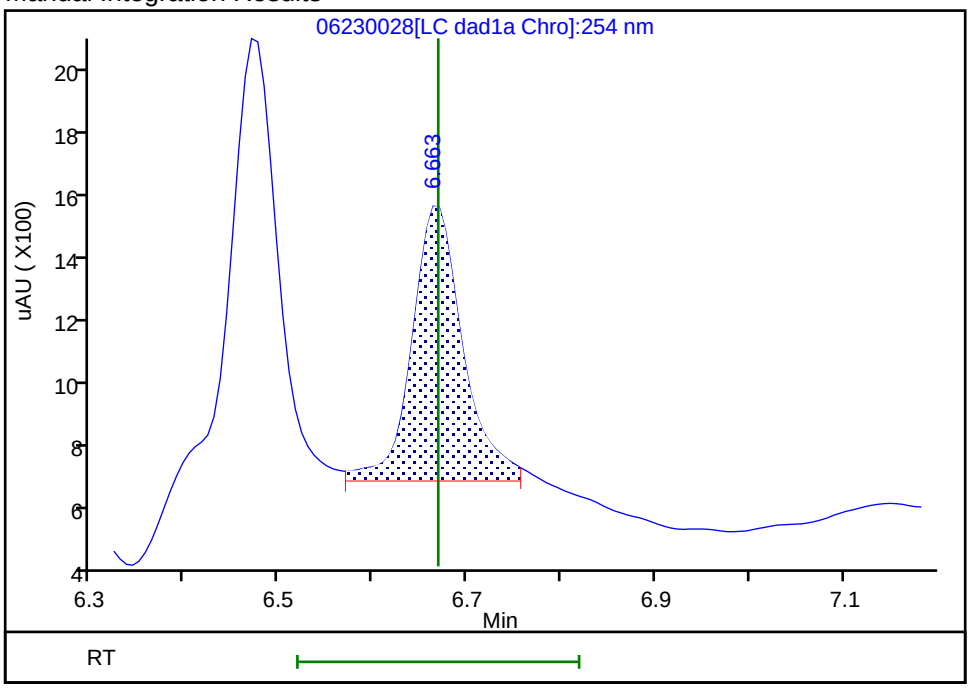
Processing Integration Results

RT: 6.66
Area: 14567
Amount: 0.066524
Amount Units: ug/mL



Manual Integration Results

RT: 6.66
Area: 3131
Amount: 0.021845
Amount Units: ug/mL



Reviewer: LV5D, 24-Jun-2023 10:43:01 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Calibration / 2,6-diamino-4-nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

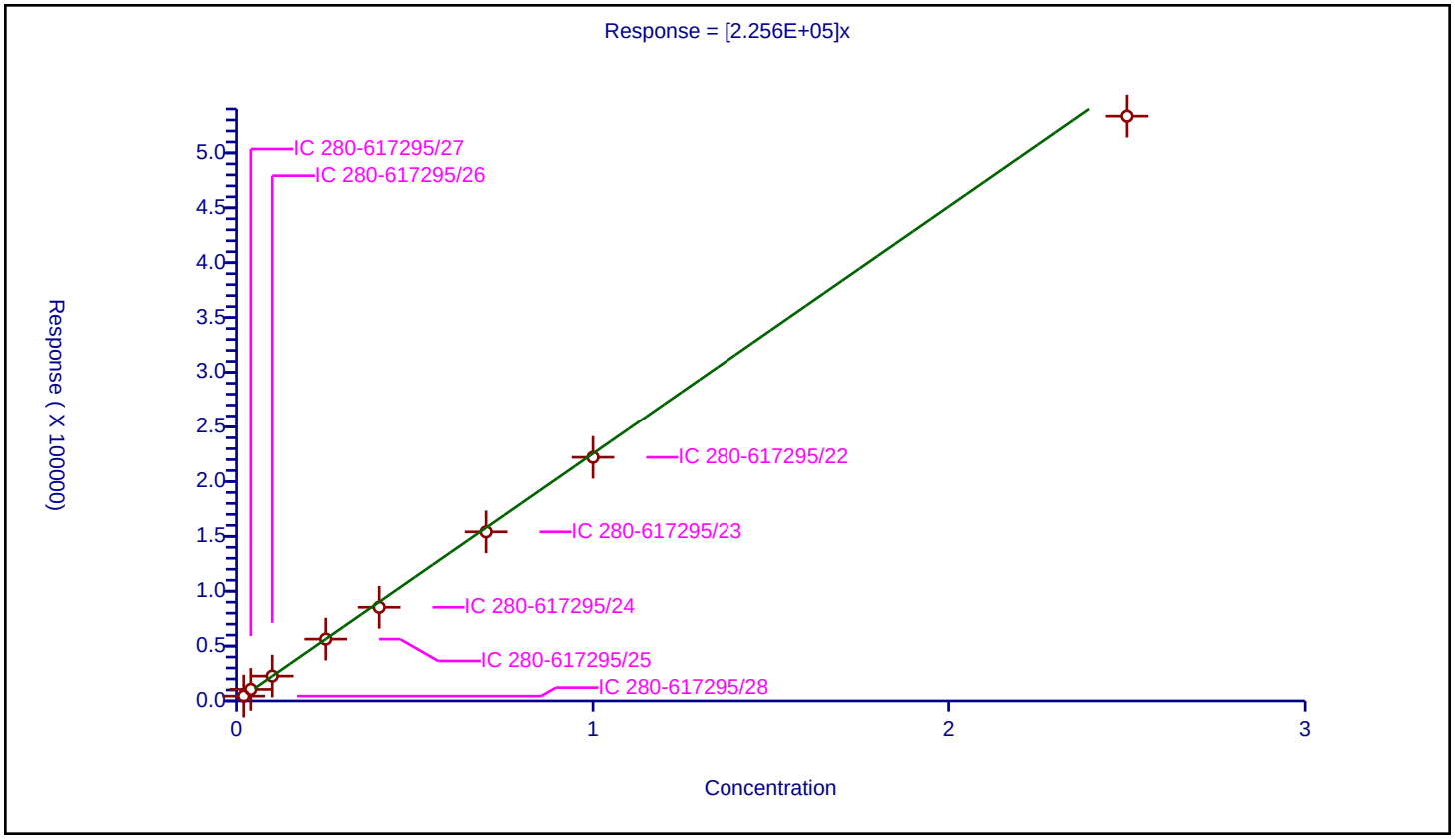
Curve Coefficients

Intercept:	0
Slope:	2.256E+05

Error Coefficients

Standard Error:	11800
Relative Standard Error:	7.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/28	0.02	4412.0			220600.0	Y
2	IC 280-617295/27	0.04	10520.0			263000.0	Y
3	IC 280-617295/26	0.1	22652.0			226520.0	Y
4	IC 280-617295/25	0.25	56351.0			225404.0	Y
5	IC 280-617295/24	0.4	85341.0			213352.5	Y
6	IC 280-617295/23	0.7	154088.0			220125.714286	Y
7	IC 280-617295/22	1.0	222122.0			222122.0	Y
8	IC 280-617295/21	2.5	533494.0			213397.6	Y



Calibration / 2,4-diamino-6-nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

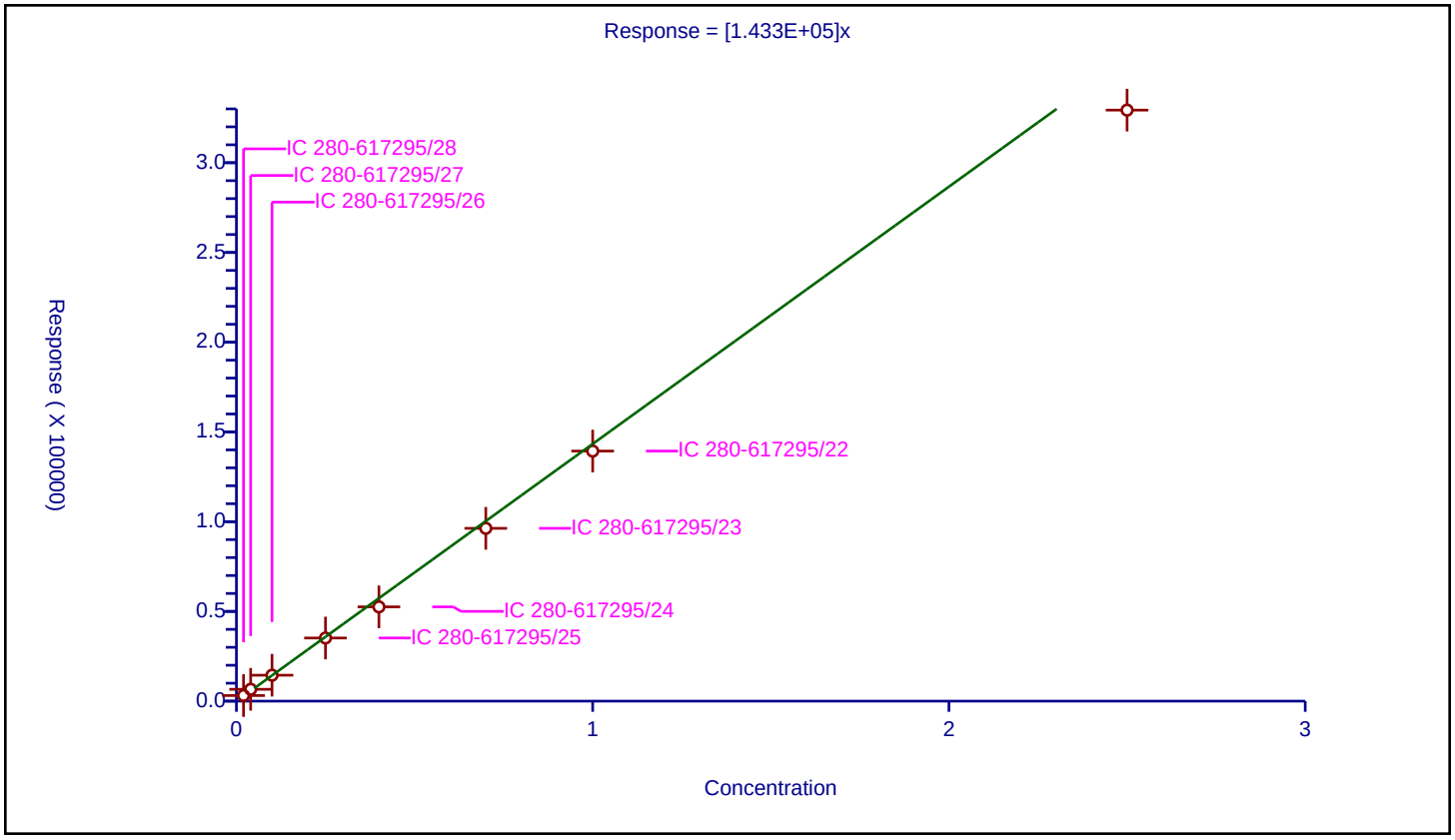
Curve Coefficients

Intercept:	0
Slope:	1.433E+05

Error Coefficients

Standard Error:	11300
Relative Standard Error:	8.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/28	0.02	3131.0			156550.0	Y
2	IC 280-617295/27	0.04	6600.0			165000.0	Y
3	IC 280-617295/26	0.1	14442.0			144420.0	Y
4	IC 280-617295/25	0.25	35180.0			140720.0	Y
5	IC 280-617295/24	0.4	52521.0			131302.5	Y
6	IC 280-617295/23	0.7	96286.0			137551.428571	Y
7	IC 280-617295/22	1.0	139337.0			139337.0	Y
8	IC 280-617295/21	2.5	329323.0			131729.2	Y



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver | Job No.: 280-182145-1 | Analy Batch No.: 626878

SDG No.:

Instrument ID: CHHPLC_X5 | GC Column: Luna-phenyl ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 09/20/2023 20:01 | Calibration End Date: 09/21/2023 00:40 | Calibration ID: 84766

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-626878/18	09200018.D
Level 2	IC 280-626878/17	09200017.D
Level 3	IC 280-626878/16	09200016.D
Level 4	IC 280-626878/15	09200015.D
Level 5	IC 280-626878/14	09200014.D
Level 6	IC 280-626878/13	09200013.D
Level 7	IC 280-626878/12	09200012.D
Level 8	IC 280-626878/11	09200011.D
Level 9	IC 280-626878/10	09200010.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	LVL 9		RT WINDOW	AVG RT
TNX	5.337	5.332	5.337	5.332	5.324	5.315	5.310	5.293	5.230		5.174 - 5.474	5.312
DNX	6.224	6.225	6.224	6.225	6.211	6.201	6.190	6.179	6.116		6.061 - 6.361	6.199
HMX	6.890	6.899	6.897	6.899	6.877	6.875	6.863	6.859	6.803		6.727 - 7.027	6.874
MNX	7.777	7.779	7.777	7.772	7.751	7.748	7.736	7.726	7.656		7.601 - 7.901	7.747
Picric acid	8.644	8.645	8.630	8.599	8.551	8.528	8.483	8.439	+++++		8.401 - 8.701	8.565
RDX	9.217	9.212	9.210	9.205	9.184	9.188	9.170	9.159	9.096		9.034 - 9.334	9.182
Nitrobenzene	11.817	11.812	11.810	11.805	11.790	11.788	11.783	11.766	11.683		11.640 - 11.940	11.784
3,5-Dinitroaniline	14.650	14.665	14.670	14.665	14.644	14.634	14.623	14.619	14.649		14.494 - 14.794	14.647
1,3-Dinitrobenzene	14.923	14.925	14.930	14.925	14.904	14.901	14.889	14.886	14.796		14.754 - 15.054	14.898
Nitroglycerin	15.497	15.505	15.503	15.505	15.484	15.481	15.469	15.473	15.409		15.334 - 15.634	15.481
2-Nitrotoluene	16.097	16.085	16.097	16.092	16.070	16.061	16.056	16.053	16.009		15.920 - 16.220	16.069
4-Nitrotoluene	16.323	16.325	16.323	16.325	16.297	16.294	16.289	16.279	16.089		16.147 - 16.447	16.283
4-Amino-2,6-dinitrotoluene	16.857	16.852	16.857	16.852	16.830	16.814	16.816	16.806	16.736		16.680 - 16.980	16.824
3-Nitrotoluene	17.177	17.179	17.190	17.185	17.164	17.148	17.149	17.139	17.069		17.014 - 17.314	17.156
2-Amino-4,6-dinitrotoluene	17.730	17.712	17.717	17.712	17.690	17.674	17.669	17.666	17.636		17.540 - 17.840	17.690
1,3,5-Trinitrobenzene	17.737	17.732	17.730	17.738	17.704	17.701	17.703	17.679	17.643		17.554 - 17.854	17.707
2,6-Dinitrotoluene	19.023	19.019	19.023	19.012	18.990	18.974	18.976	18.966	18.903		18.840 - 19.140	18.987
2,4-Dinitrotoluene	19.463	19.465	19.477	19.458	19.444	19.428	19.423	19.419	19.356		19.294 - 19.594	19.437
Tetryl	22.884	22.879	22.890	22.859	22.837	22.828	22.830	22.819	22.770		22.687 - 22.987	22.844
2,4,6-Trinitrotoluene	23.684	23.685	23.697	23.672	23.657	23.641	23.650	23.633	23.590		23.507 - 23.807	23.657
PETN	25.010	24.992	24.997	24.972	24.957	24.955	24.956	24.939	24.916		24.807 - 25.107	24.966
1,2-Dinitrobenzene	12.797	12.812	12.803	12.805	12.784	12.781	12.776	12.766	12.689		12.634 - 12.934	12.779

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-182145-1 Analy Batch No.: 626878

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/20/2023 20:01 Calibration End Date: 09/21/2023 00:40 Calibration ID: 84766

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-626878/18	09200018.D
Level 2	IC 280-626878/17	09200017.D
Level 3	IC 280-626878/16	09200016.D
Level 4	IC 280-626878/15	09200015.D
Level 5	IC 280-626878/14	09200014.D
Level 6	IC 280-626878/13	09200013.D
Level 7	IC 280-626878/12	09200012.D
Level 8	IC 280-626878/11	09200011.D
Level 9	IC 280-626878/10	09200010.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
TNX	426122 385910 388275	407079 379070	390608 387153	386969 384720	Ave		392878.452				3.7		20.0			
DNX	318182 286689 285630	278571 280957	285934 285305	290460 284330	Ave		288450.783				4.0		20.0			
HMX	235400 177584 172745	201050 179383	202440 176034	190280 175985	Ave		190100.065				10.7		20.0			
MNX	274636 262554 269767	269237 257031	268243 260122	265210 258751	Ave		265061.302				2.2		20.0			
Picric acid	119800 145460 +++++	157350 147085	157140 145669	152330 145890	Lin2	-213.78437	151389.193							0.9950		0.9900
RDX	278400 204308 200182	239350 206243	233380 203574	215160 203760	Ave		220484.087				11.7		20.0			
Nitrobenzene	437400 364488 371998	393250 382385	380460 372626	380210 373244	Ave		384006.746				5.6		20.0			
3,5-Dinitroaniline	415500 412436 390037	423450 419573	420600 417741	419900 418073	Lin2	64.4823579	413900.153							0.9990		0.9900

Note: The M1 coefficient is the same as Ave CF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-182145-1 Analy Batch No.: 626878

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/20/2023 20:01 Calibration End Date: 09/21/2023 00:40 Calibration ID: 84766

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
1,3-Dinitrobenzene	595800 576616 602271	575850 579778	588620 581440	585790 582877	Ave		585449.078				1.5		20.0			
Nitroglycerin	130160 125216 124281	126080 125674	140174 126313	132632 125626	Ave		128461.817				4.0		20.0			
2-Nitrotoluene	244200 231140 223425	249800 234030	244680 235174	240280 235634	Ave		237595.943				3.4		20.0			
4-Nitrotoluene	180200 209496 225581	217450 215010	227960 215733	218050 214152	Ave		213736.851				6.5		20.0			
4-Amino-2,6-dinitrotoluene	284400 265300 269003	277200 267965	271420 269809	273710 269511	Ave		272035.308				2.1		20.0			
3-Nitrotoluene	275800 264028 269186	263400 269978	274740 271586	274840 271734	Ave		270587.868				1.7		20.0			
2-Amino-4,6-dinitrotoluene	389900 369576 419998	376850 405623	369100 413330	415480 366541	Ave		391821.900				5.6		20.0			
1,3,5-Trinitrobenzene	411800 410060 371075	401300 383195	424300 378994	380990 427317	Ave		398781.276				5.2		20.0			
2,6-Dinitrotoluene	309100 264264 263539	287950 267358	270000 266386	272510 267331	Ave		274270.779				5.5		20.0			
2,4-Dinitrotoluene	560200 533832 541816	560250 543593	530260 542664	541730 544526	Ave		544318.932				1.9		20.0			
Tetryl	319900 301696 302711	311900 306023	313200 304153	306400 305669	Ave		307961.284				1.9		20.0			
2,4,6-Trinitrotoluene	381400 393500 394885	394000 397820	396420 396150	401930 398106	Ave		394912.356				1.4		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-182145-1 Analy Batch No.: 626878

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/20/2023 20:01 Calibration End Date: 09/21/2023 00:40 Calibration ID: 84766

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
PETN	108320 131057 134771	117620 132432	128544 132587	131058 132703	Lin2	-2595.585 0	133137.09 2							1.0000		0.9900
1,2-Dinitrobenzene	310000 251840 252936	304350 256813	257380 254446	257650 255258	Ave		266741.40 2				8.6		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver | Job No.: 280-182145-1 | Analy Batch No.: 626878

SDG No.:

Instrument ID: CHHPLC_X5 | GC Column: Luna-pheny ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 09/20/2023 20:01 | Calibration End Date: 09/21/2023 00:40 | Calibration ID: 84766

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-626878/18	09200018.D
Level 2	IC 280-626878/17	09200017.D
Level 3	IC 280-626878/16	09200016.D
Level 4	IC 280-626878/15	09200015.D
Level 5	IC 280-626878/14	09200014.D
Level 6	IC 280-626878/13	09200013.D
Level 7	IC 280-626878/12	09200012.D
Level 8	IC 280-626878/11	09200011.D
Level 9	IC 280-626878/10	09200010.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		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
TNX	Ave	4274 152083	8166 271820	19589 385874	38813 973600	96767	0.0100 0.401	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251
DNX	Ave	3185 112495	5577 199913	14311 284614	29075 714789	71744	0.0100 0.400	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250
HMX	Ave	2354 71753	4021 123224	10122 175985	19028 431862	44396	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
MNX	Ave	3205 119982	6284 212494	15652 301963	30950 787045	76600	0.0117 0.467	0.0233 0.817	0.0584 1.17	0.117 2.92	0.292
Picric acid	Lin2	1198 58834	3147 101968	7857 145890	15233 +++++	36365	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 +++++	0.250
RDX	Ave	2784 82497	4787 142502	11669 203760	21516 500455	51077	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Nitrobenzene	Ave	4374 152954	7865 260838	19023 373244	38021 929995	91122	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
3,5-Dinitroaniline	Lin2	4155 167829	8469 292419	21030 418073	41990 975092	103109	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
1,3-Dinitrobenzene	Ave	5958 231911	11517 407008	29431 582877	58579 1505678	144154	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Nitroglycerin	Ave	13016 502697	25216 884192	70087 1256262	132632 3107019	313040	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
2-Nitrotoluene	Ave	2442 93612	4996 164622	12234 235634	24028 558563	57785	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
4-Nitrotoluene	Ave	1802 86004	4349 151013	11398 214152	21805 563952	52374	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
4-Amino-2,6-dinitrotoluene	Ave	2844 107186	5544 188866	13571 269511	27371 672508	66325	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
3-Nitrotoluene	Ave	2758 107991	5268 190110	13737 271734	27484 672964	66007	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2-Amino-4,6-dinitrotoluene	Ave	3899	7537	18455	41548	92394	0.0100	0.0200	0.0500	0.100	0.250

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver | Job No.: 280-182145-1 | Analy Batch No.: 626878

SDG No.:

Instrument ID: CHHPLC_X5 | GC Column: Luna-pheny ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 09/20/2023 20:01 | Calibration End Date: 09/21/2023 00:40 | Calibration ID: 84766

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		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
		162249	289331	366541	1049994		0.400	0.700	1.00	2.50	
1,3,5-Trinitrobenzene	Ave	4118 153278	8026 265296	21215 427317	38099 927688	102515	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2,6-Dinitrotoluene	Ave	3091 106943	5759 186470	13500 267331	27251 658847	66066	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2,4-Dinitrotoluene	Ave	5602 217437	11205 379865	26513 544526	54173 1354539	133458	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Tetryl	Ave	3199 122409	6238 212907	15660 305669	30640 756778	75424	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2,4,6-Trinitrotoluene	Ave	3814 159128	7880 277305	19821 398106	40193 987213	98375	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
PETN	Lin2	10832 529728	23524 928111	64272 1327029	131058 3369275	327642	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
1,2-Dinitrobenzene	Ave	3100 102725	6087 178112	12869 255258	25765 632341	62960	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250

Curve Type Legend:

Ave = Average
Lin2 = Linear 1/conc^2

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200010.D
Lims ID: IC INT 9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 20-Sep-2023 20:01:08 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 9
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub6

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 21-Sep-2023 16:09:12 Calib Date: 21-Sep-2023 05:55:36
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1611

First Level Reviewer: LV5D Date: 21-Sep-2023 11:52:50

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.230	5.324	-0.094	973600	2.51	2.48	
4 DNX	1	6.116	6.211	-0.095	714789	2.50	2.48	
5 HMX	1	6.803	6.877	-0.074	431862	2.50	2.27	
6 MNX	1	7.656	7.751	-0.095	787045	2.92	2.97	
7 2,4,6-Trinitrophenol	1	8.356	8.551	-0.195	324534	2.50	2.15	a
8 RDX	1	9.096	9.184	-0.088	500455	2.50	2.27	
9 Nitrobenzene	1	11.683	11.790	-0.107	929995	2.50	2.42	
$ 10 1,2-Dinitrobenzene	1	12.689	12.784	-0.095	632341	2.50	2.37	
11 3,5-Dinitroaniline	1	14.649	14.644	0.005	975092	2.50	2.36	Ma
12 1,3-Dinitrobenzene	1	14.796	14.904	-0.108	1505678	2.50	2.57	M
13 Nitroglycerin	2	15.409	15.484	-0.075	3107019	25.0	24.2	
14 o-Nitrotoluene	1	16.009	16.070	-0.061	558563	2.50	2.35	M
16 p-Nitrotoluene	1	16.089	16.297	-0.208	563952	2.50	2.64	Ma
17 4-Amino-2,6-dinitrotoluene	1	16.736	16.830	-0.094	672508	2.50	2.47	
18 m-Nitrotoluene	1	17.069	17.164	-0.095	672964	2.50	2.49	
19 2-Amino-4,6-dinitrotoluene	1	17.636	17.690	-0.054	1049994	2.50	2.68	M
20 1,3,5-Trinitrobenzene	1	17.643	17.704	-0.061	927688	2.50	2.33	Ma
21 2,6-Dinitrotoluene	1	18.903	18.990	-0.087	658847	2.50	2.40	
22 2,4-Dinitrotoluene	1	19.356	19.444	-0.088	1354539	2.50	2.49	
23 Tetryl	1	22.770	22.837	-0.067	756778	2.50	2.46	
24 2,4,6-Trinitrotoluene	1	23.590	23.657	-0.067	987213	2.50	2.50	
25 PETN	2	24.916	24.957	-0.041	3369275	25.0	25.3	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00078	Amount Added: 250.00	Units: uL
8330 DMT_00015	Amount Added: 125.00	Units: uL

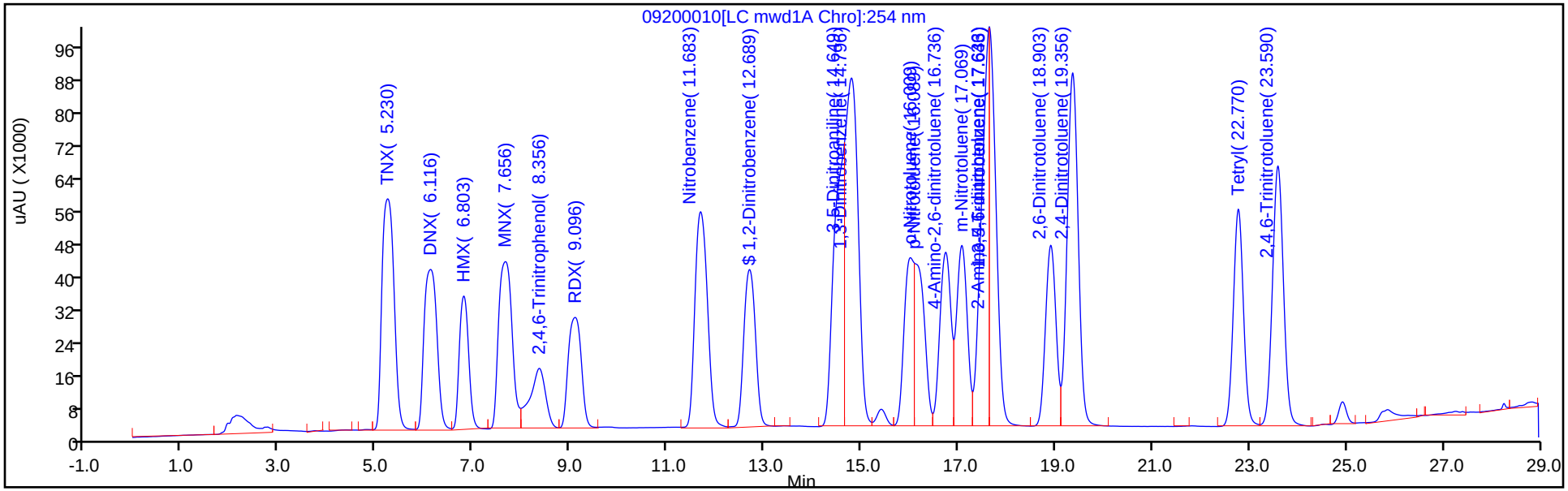
Report Date: 21-Sep-2023 16:09:12 Chrom Revision: 2.3 21-Aug-2023 17:14:06

Eurofins Denver

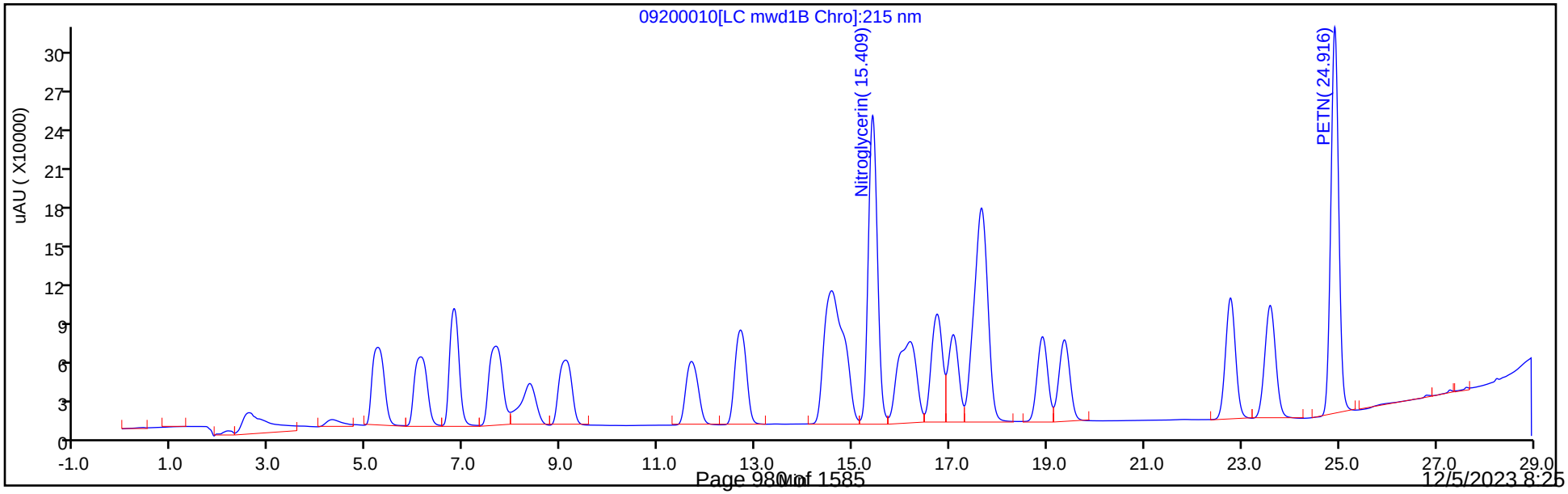
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200010.D

Injection Date:	20-Sep-2023 20:01:08	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC INT 9			Worklist Smp#:	10
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



12/5/2023 8:25 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

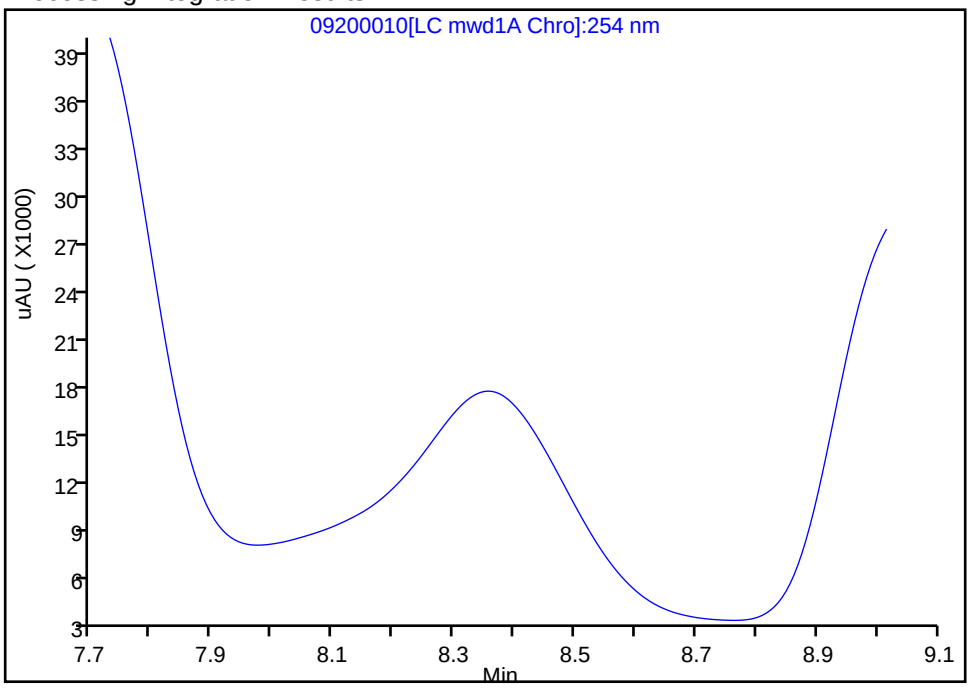
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Injection Date:	20-Sep-2023 20:01:08	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

7 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

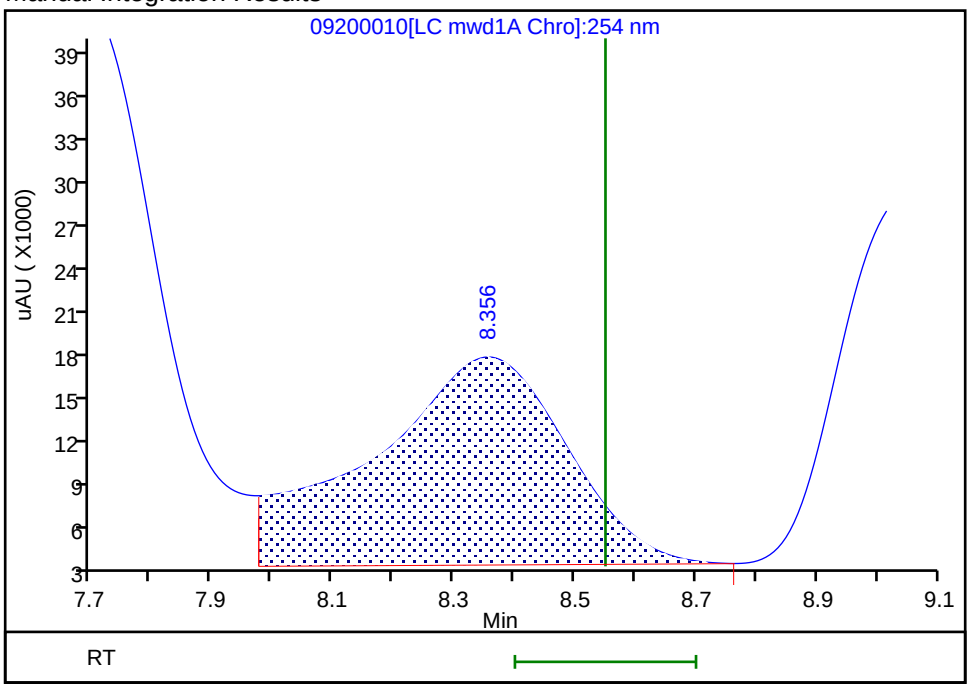
Not Detected
Expected RT: 8.55

Processing Integration Results



Manual Integration Results

RT: 8.36
Area: 324534
Amount: 2.145119
Amount Units: ug/ml



Reviewer: LV5D, 21-Sep-2023 11:52:20 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Denver

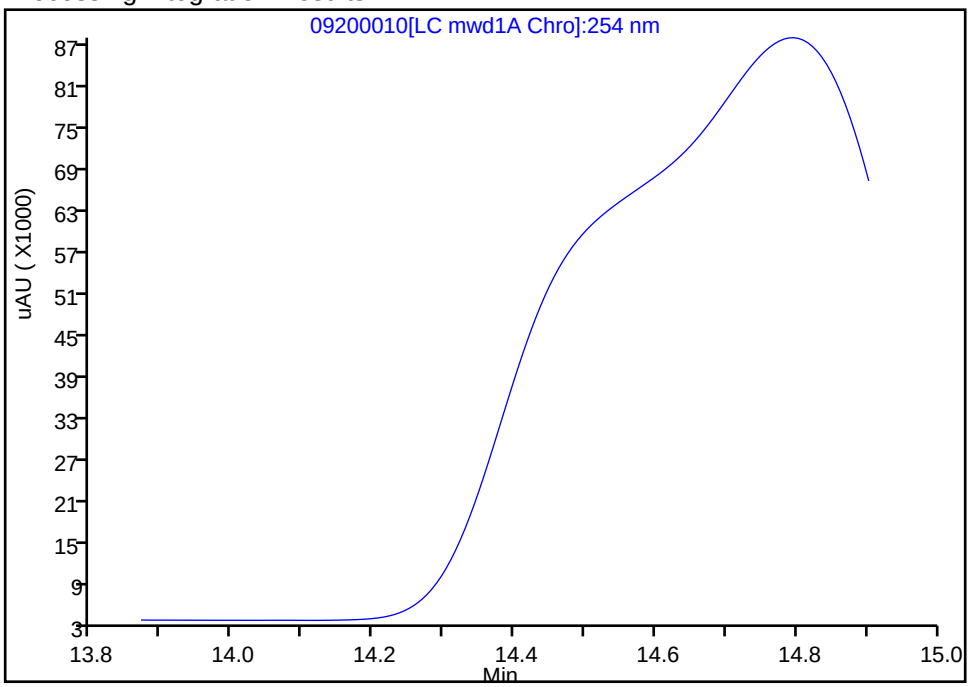
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200010.D				
Injection Date:	20-Sep-2023 20:01:08	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

11 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

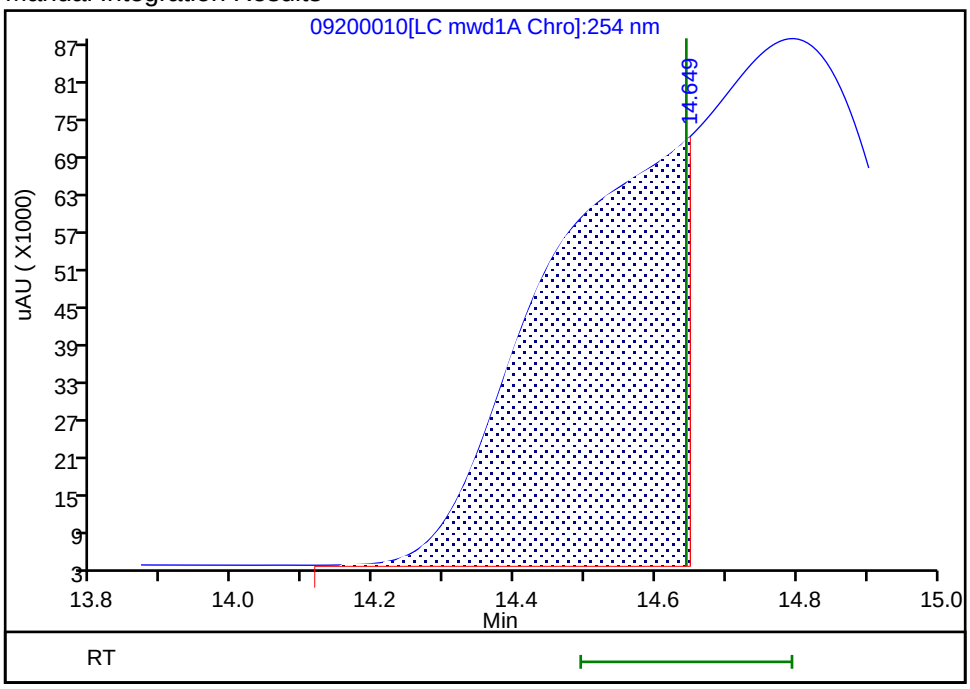
Not Detected
Expected RT: 14.64

Processing Integration Results



Manual Integration Results

RT: 14.65
Area: 975092
Amount: 2.355707
Amount Units: ug/ml



Reviewer: LV5D, 21-Sep-2023 11:52:30 -06:00:00 (UTC)
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

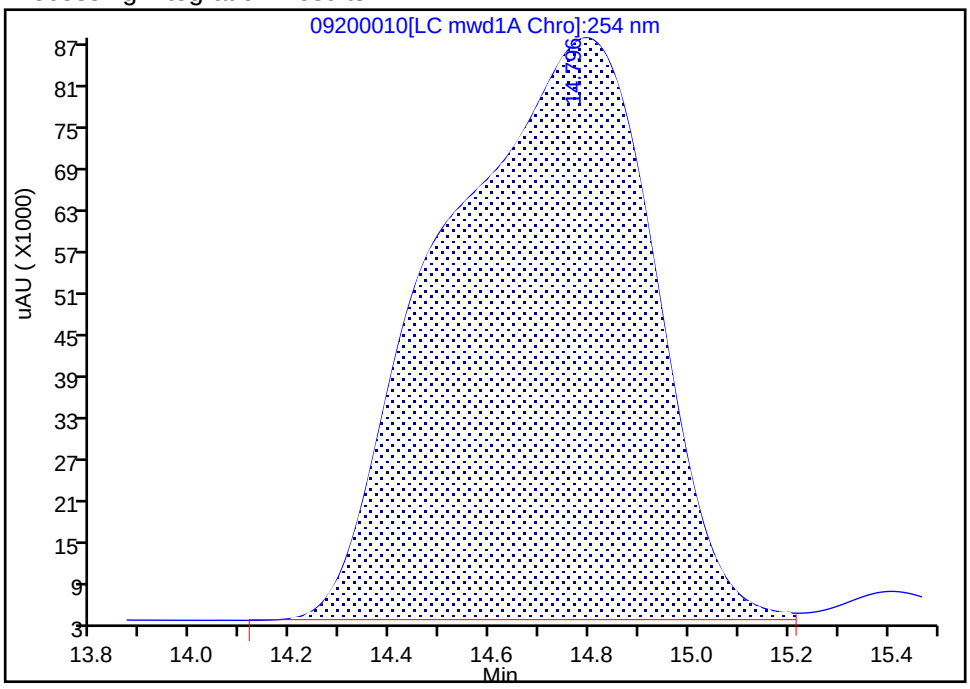
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200010.D				
Injection Date:	20-Sep-2023 20:01:08	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

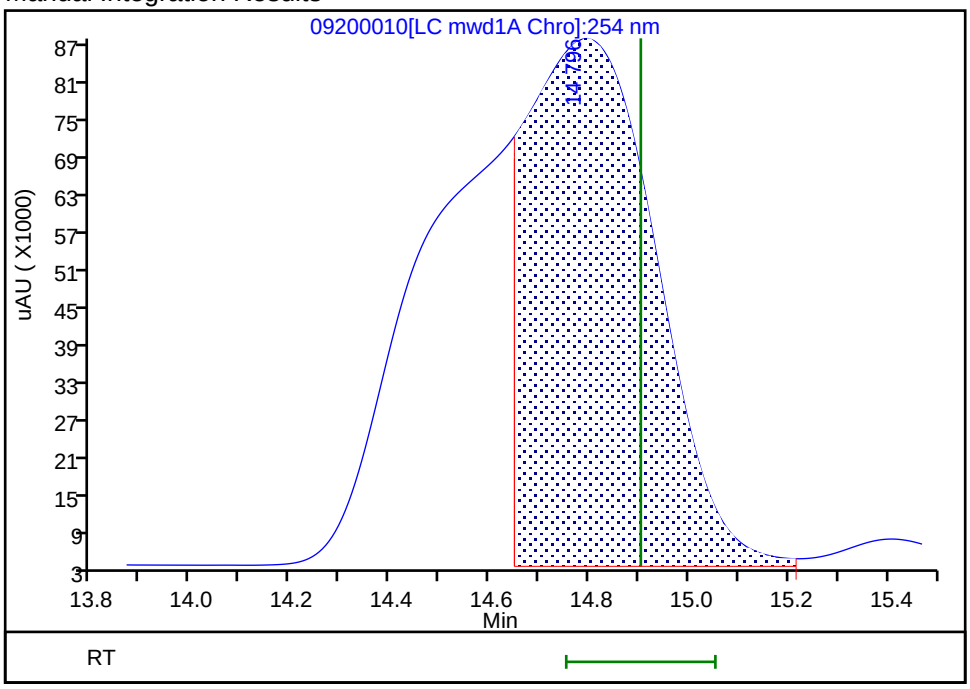
Processing Integration Results

RT: 14.80
Area: 2480748
Amount: 3.945301
Amount Units: ug/ml



Manual Integration Results

RT: 14.80
Area: 1505678
Amount: 2.571834
Amount Units: ug/ml



Reviewer: LV5D, 21-Sep-2023 11:52:27 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

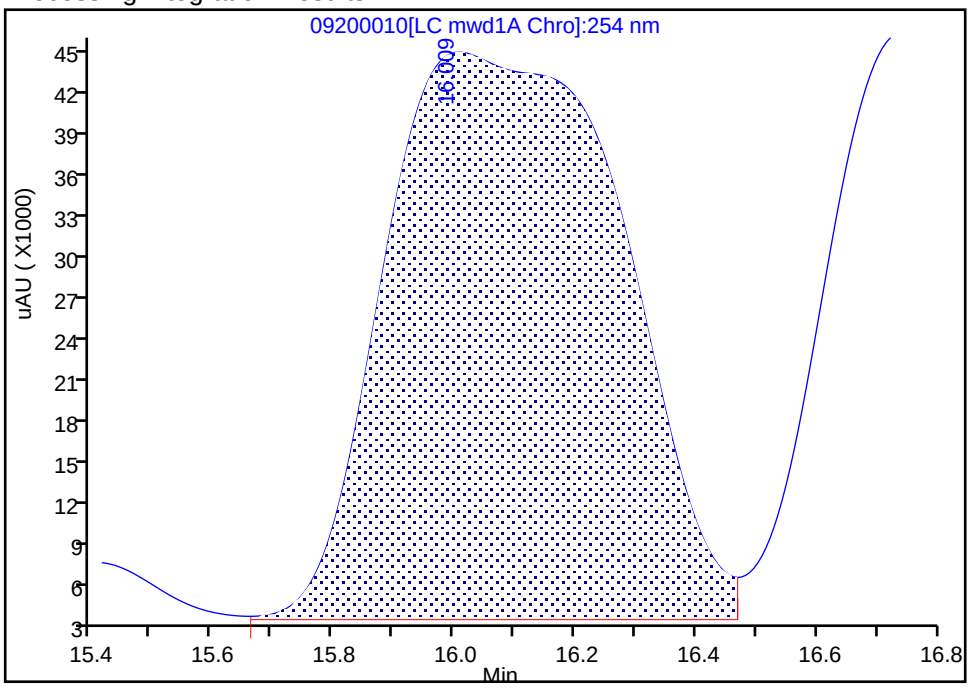
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200010.D				
Injection Date:	20-Sep-2023 20:01:08	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

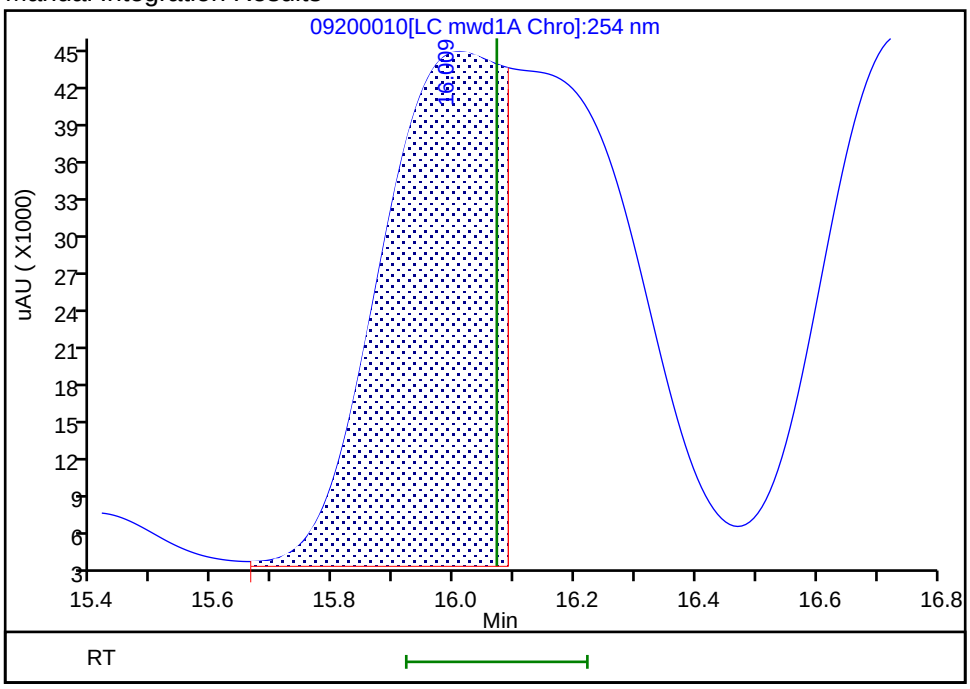
Processing Integration Results

RT: 16.01
Area: 1122493
Amount: 3.972434
Amount Units: ug/ml



Manual Integration Results

RT: 16.01
Area: 558563
Amount: 2.350895
Amount Units: ug/ml



Reviewer: LV5D, 21-Sep-2023 11:52:37 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

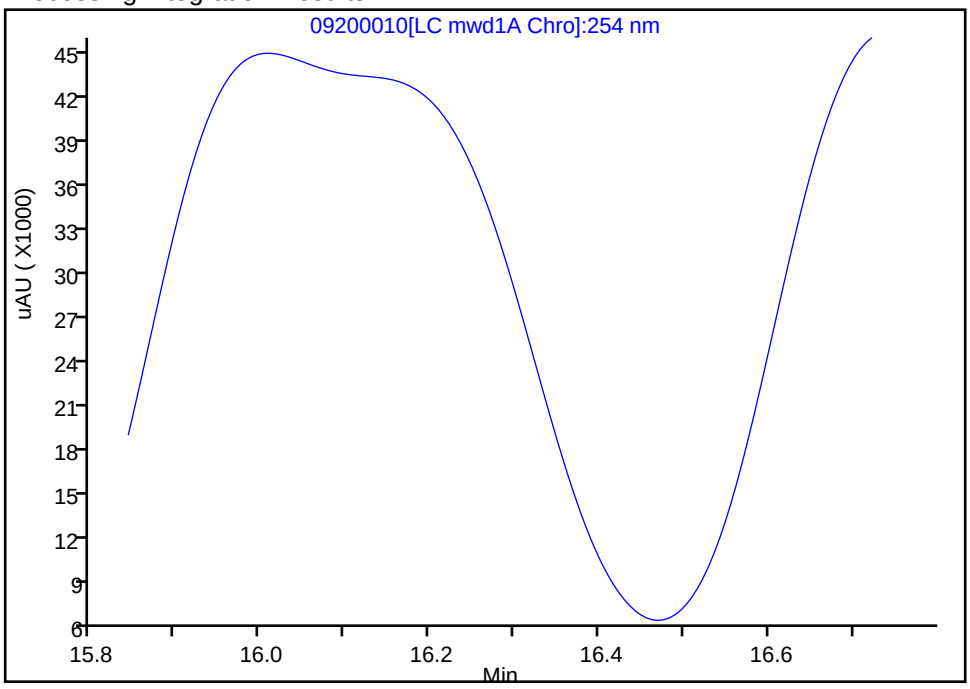
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200010.D				
Injection Date:	20-Sep-2023 20:01:08	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

16 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

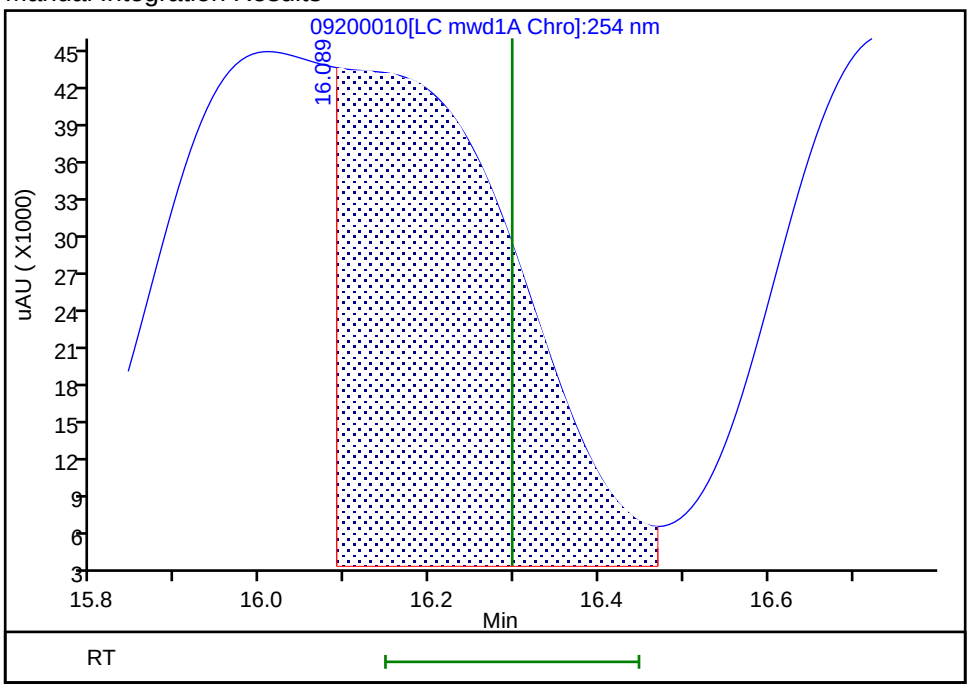
Not Detected
Expected RT: 16.30

Processing Integration Results



Manual Integration Results

RT: 16.09
Area: 563952
Amount: 2.638534
Amount Units: ug/ml



Reviewer: LV5D, 21-Sep-2023 11:52:39 -06:00:00 (UTC)
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

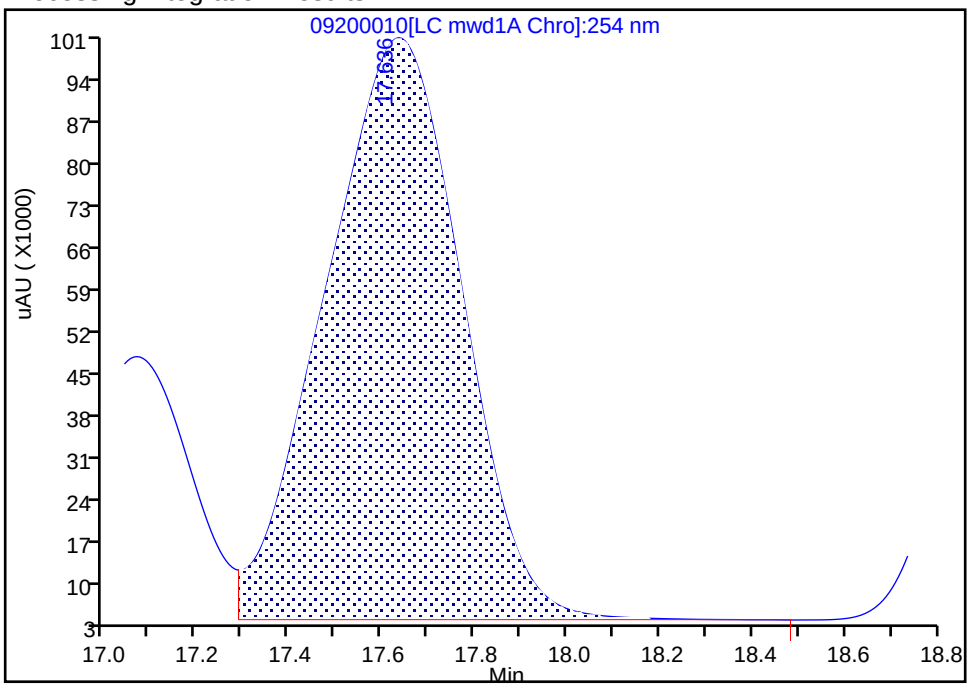
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200010.D				
Injection Date:	20-Sep-2023 20:01:08	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

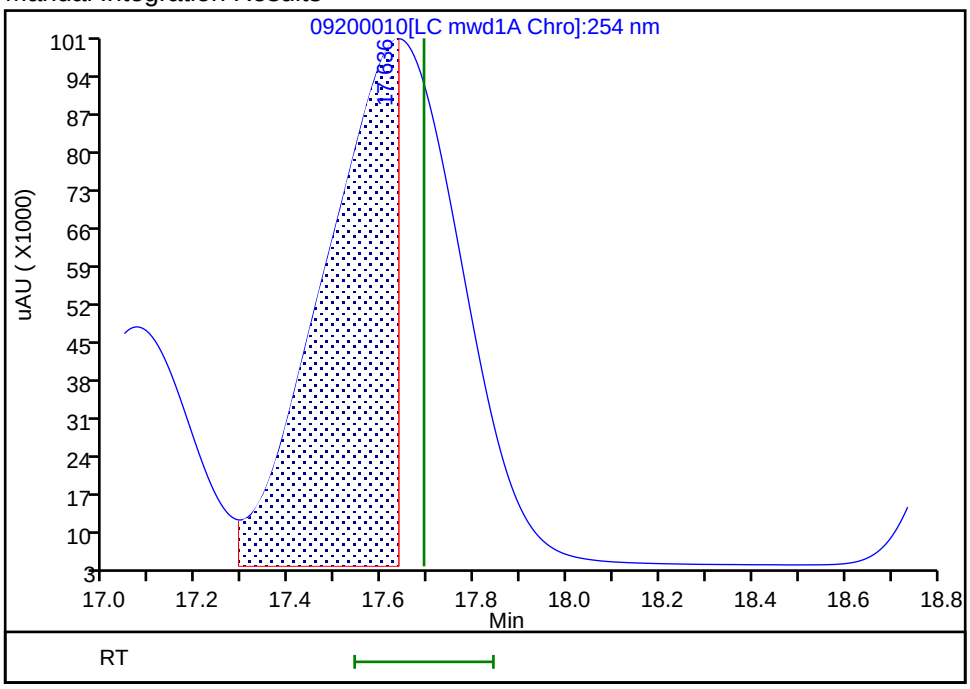
Processing Integration Results

RT: 17.64
Area: 1977654
Amount: 2.500000
Amount Units: ug/ml



Manual Integration Results

RT: 17.64
Area: 1049994
Amount: 2.679774
Amount Units: ug/ml



Reviewer: LV5D, 21-Sep-2023 11:52:44 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

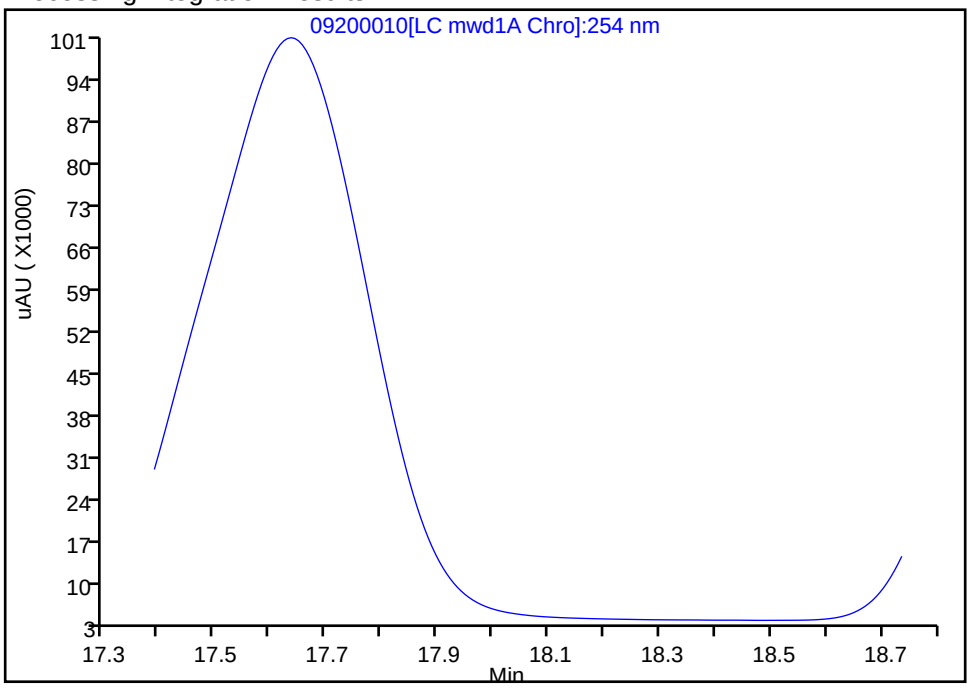
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200010.D				
Injection Date:	20-Sep-2023 20:01:08	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

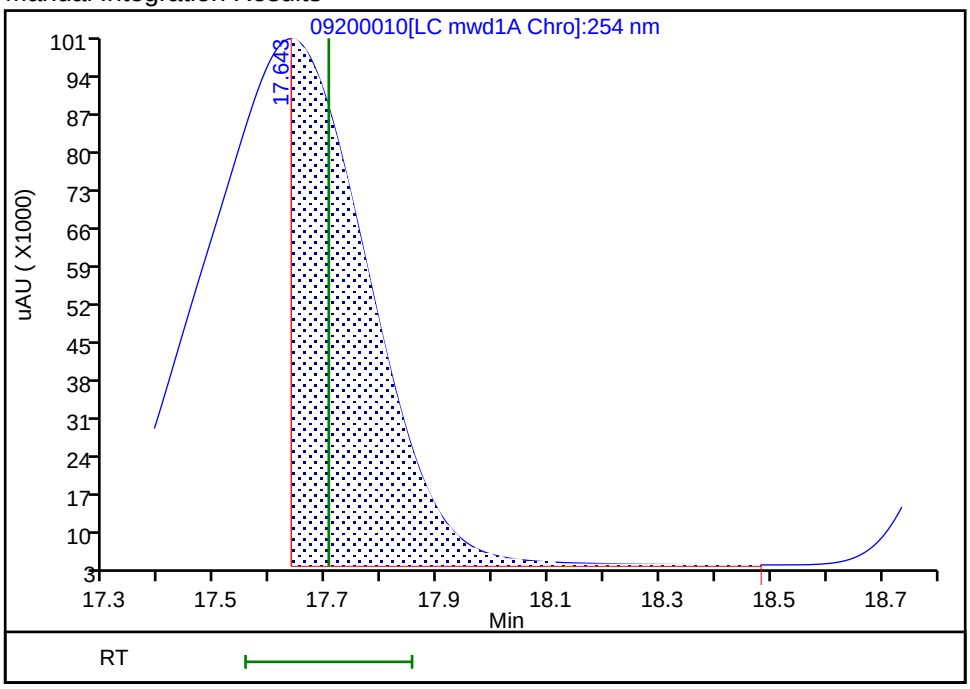
Not Detected
Expected RT: 17.70

Processing Integration Results



Manual Integration Results

RT: 17.64
Area: 927688
Amount: 2.326308
Amount Units: ug/ml



Reviewer: LV5D, 21-Sep-2023 11:52:46 -06:00:00 (UTC)
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200011.D
Lims ID: IC INT 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 20-Sep-2023 20:36:05 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 8
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub6

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 21-Sep-2023 16:09:13 Calib Date: 21-Sep-2023 05:55:36
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1611

First Level Reviewer: LV5D Date: 21-Sep-2023 11:53:03

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.293	5.324	-0.031	385874	1.00	0.9822	
4 DNX	1	6.179	6.211	-0.032	284614	1.00	0.9867	
5 HMX	1	6.859	6.877	-0.018	175985	1.00	0.9257	
6 MNX	1	7.726	7.751	-0.025	301963	1.17	1.14	
7 2,4,6-Trinitrophenol	1	8.439	8.551	-0.112	145890	1.00	0.9651	a
8 RDX	1	9.159	9.184	-0.025	203760	1.00	0.9241	
9 Nitrobenzene	1	11.766	11.790	-0.024	373244	1.00	0.9720	
$ 10 1,2-Dinitrobenzene	1	12.766	12.784	-0.018	255258	1.00	0.9569	
11 3,5-Dinitroaniline	1	14.619	14.644	-0.025	418073	1.00	1.01	
12 1,3-Dinitrobenzene	1	14.886	14.904	-0.018	582877	1.00	1.00	
13 Nitroglycerin	2	15.473	15.484	-0.011	1256262	10.0	9.78	
14 o-Nitrotoluene	1	16.053	16.070	-0.017	235634	1.00	0.99	
16 p-Nitrotoluene	1	16.279	16.297	-0.018	214152	1.00	1.00	
17 4-Amino-2,6-dinitrotoluene	1	16.806	16.830	-0.024	269511	1.00	0.99	
18 m-Nitrotoluene	1	17.139	17.164	-0.025	271734	1.00	1.00	
19 2-Amino-4,6-dinitrotoluene	1	17.666	17.690	-0.024	366541	1.00	0.9355	Ma
20 1,3,5-Trinitrobenzene	1	17.679	17.704	-0.025	427317	1.00	1.07	M
21 2,6-Dinitrotoluene	1	18.966	18.990	-0.024	267331	1.00	0.9747	
22 2,4-Dinitrotoluene	1	19.419	19.444	-0.025	544526	1.00	1.00	
23 Tetryl	1	22.819	22.837	-0.018	305669	1.00	0.99	
24 2,4,6-Trinitrotoluene	1	23.633	23.657	-0.024	398106	1.00	1.01	
25 PETN	2	24.939	24.957	-0.018	1327029	10.0	9.99	M

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00078	Amount Added: 100.00	Units: uL
8330 DMT_00015	Amount Added: 50.00	Units: uL

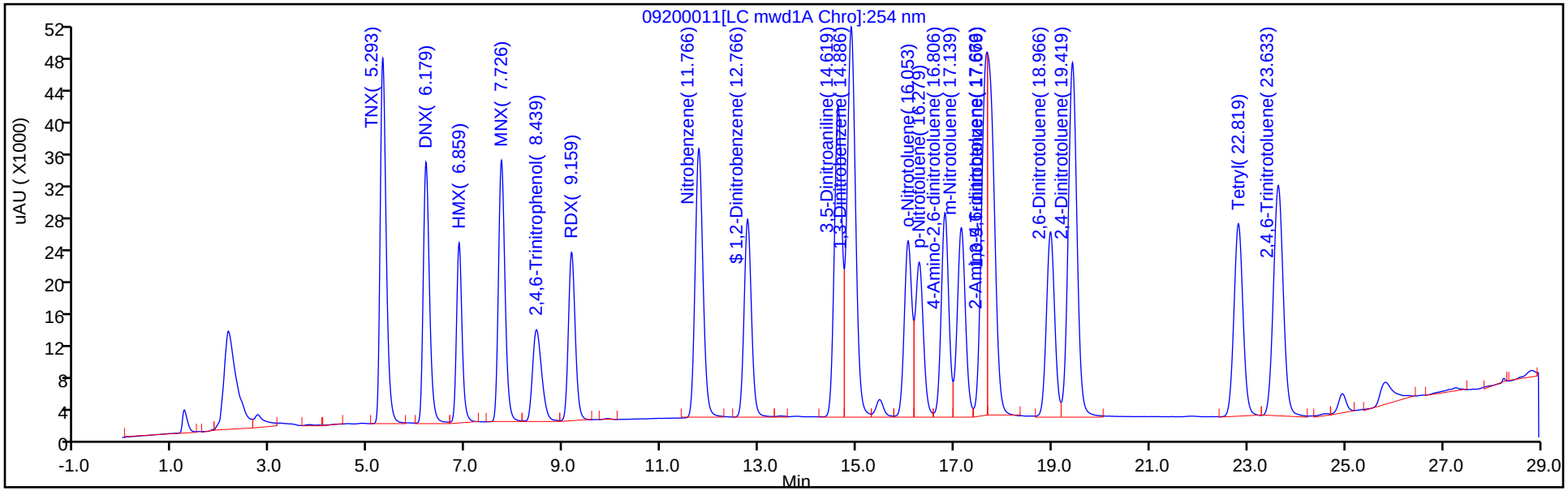
Report Date: 21-Sep-2023 16:09:13 Chrom Revision: 2.3 21-Aug-2023 17:14:06

Eurofins Denver

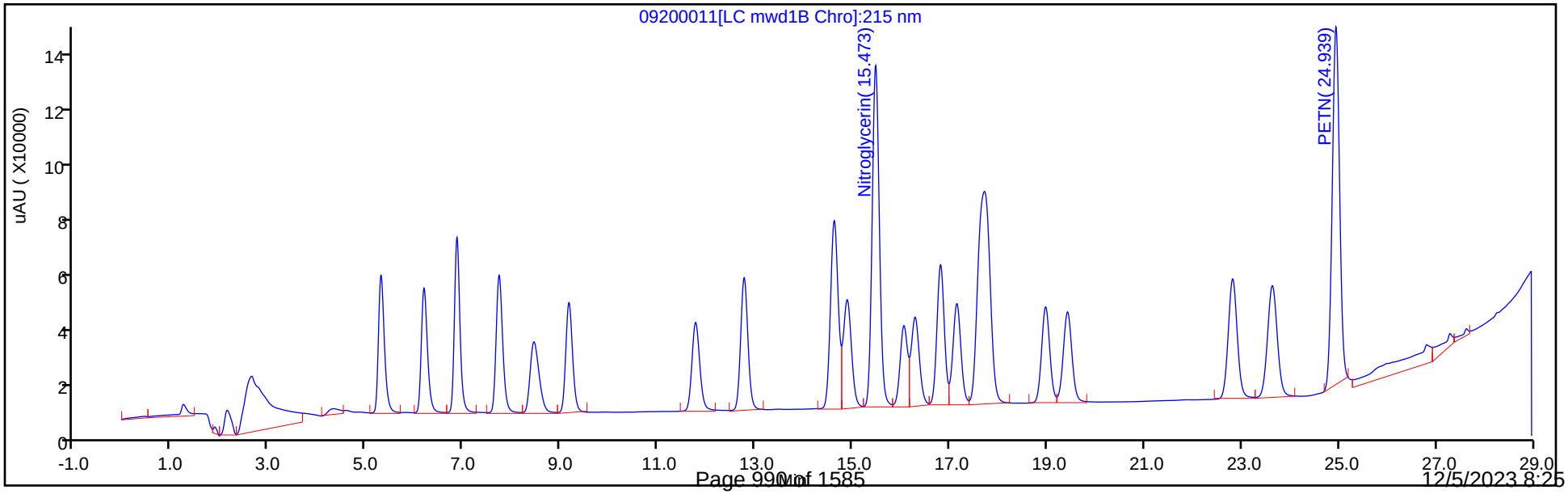
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200011.D

Injection Date:	20-Sep-2023 20:36:05	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC INT 8			Worklist Smp#:	11
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

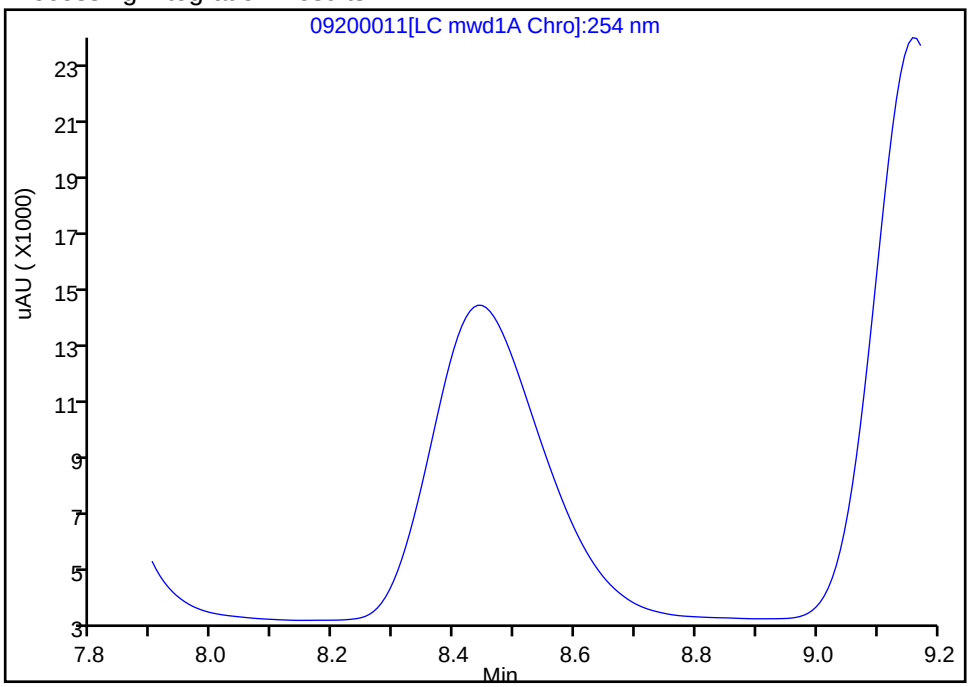
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200011.D				
Injection Date:	20-Sep-2023 20:36:05	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 8				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

7 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

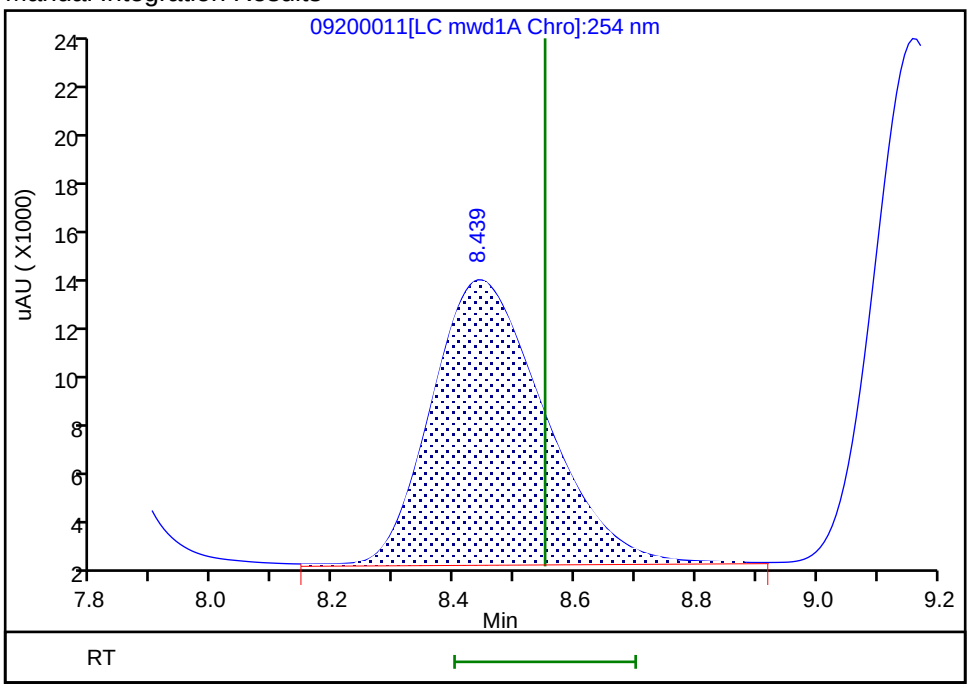
Not Detected
Expected RT: 8.55

Processing Integration Results



Manual Integration Results

RT: 8.44
Area: 145890
Amount: 0.965087
Amount Units: ug/ml



Reviewer: LV5D, 21-Sep-2023 11:53:01 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

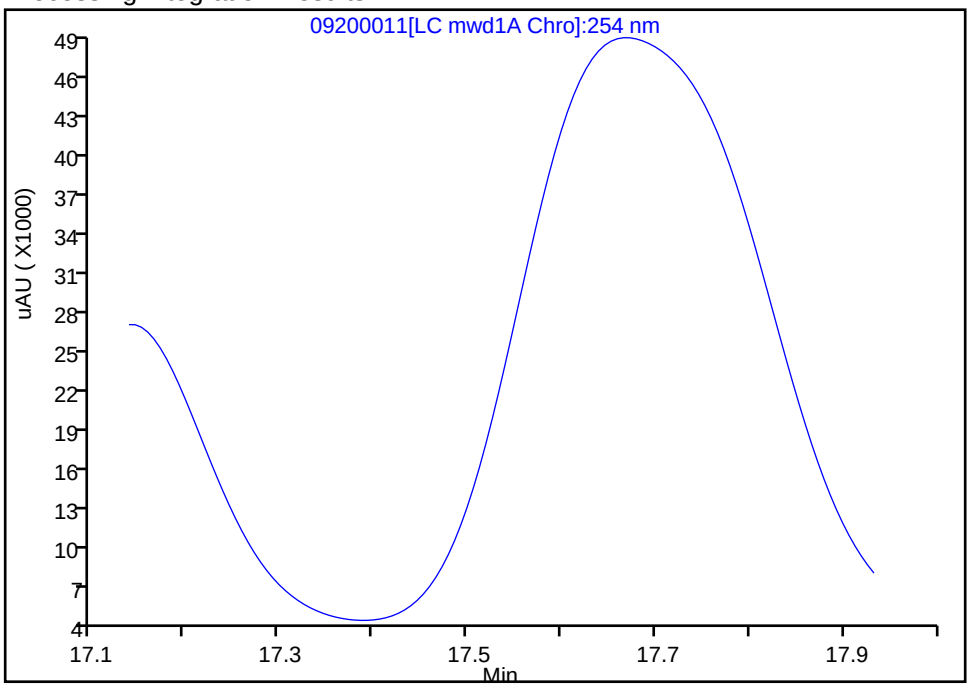
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200011.D				
Injection Date:	20-Sep-2023 20:36:05	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 8				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

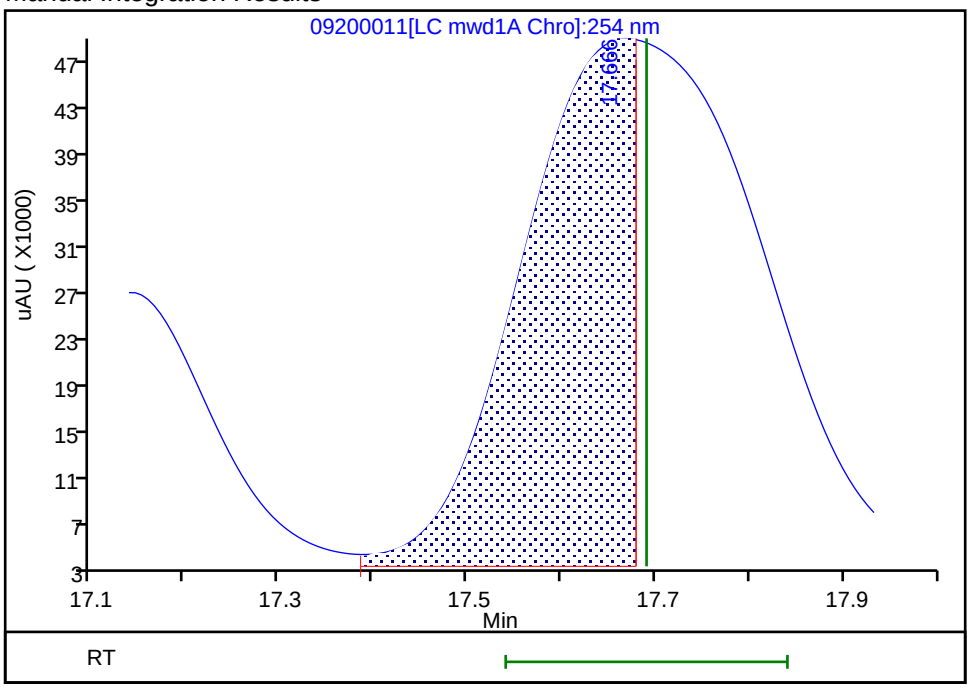
Not Detected
Expected RT: 17.69

Processing Integration Results



Manual Integration Results

RT: 17.67
Area: 366541
Amount: 0.935479
Amount Units: ug/ml



Reviewer: LV5D, 21-Sep-2023 11:52:59 -06:00:00 (UTC)
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

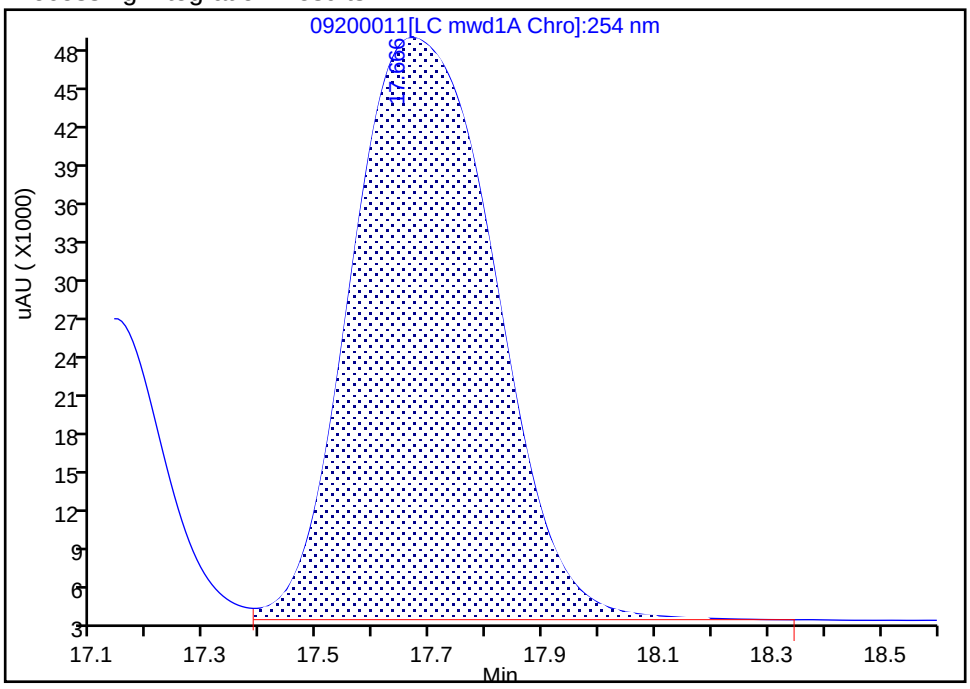
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200011.D				
Injection Date:	20-Sep-2023 20:36:05	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 8				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

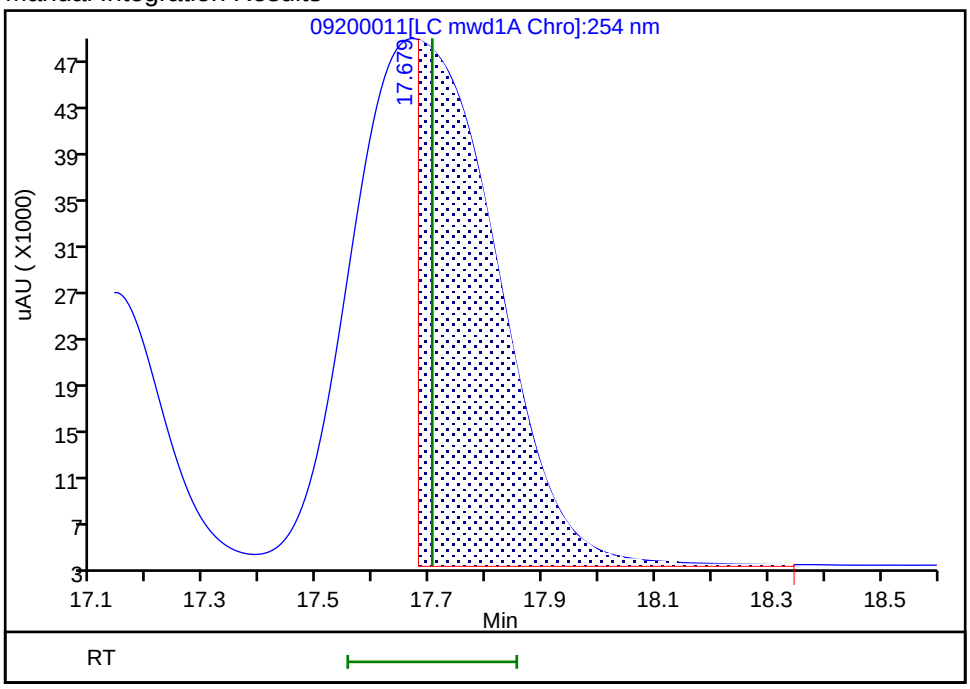
Processing Integration Results

RT: 17.67
Area: 793830
Amount: 1.067154
Amount Units: ug/ml



Manual Integration Results

RT: 17.68
Area: 427317
Amount: 1.071557
Amount Units: ug/ml



Reviewer: LV5D, 21-Sep-2023 11:52:57 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

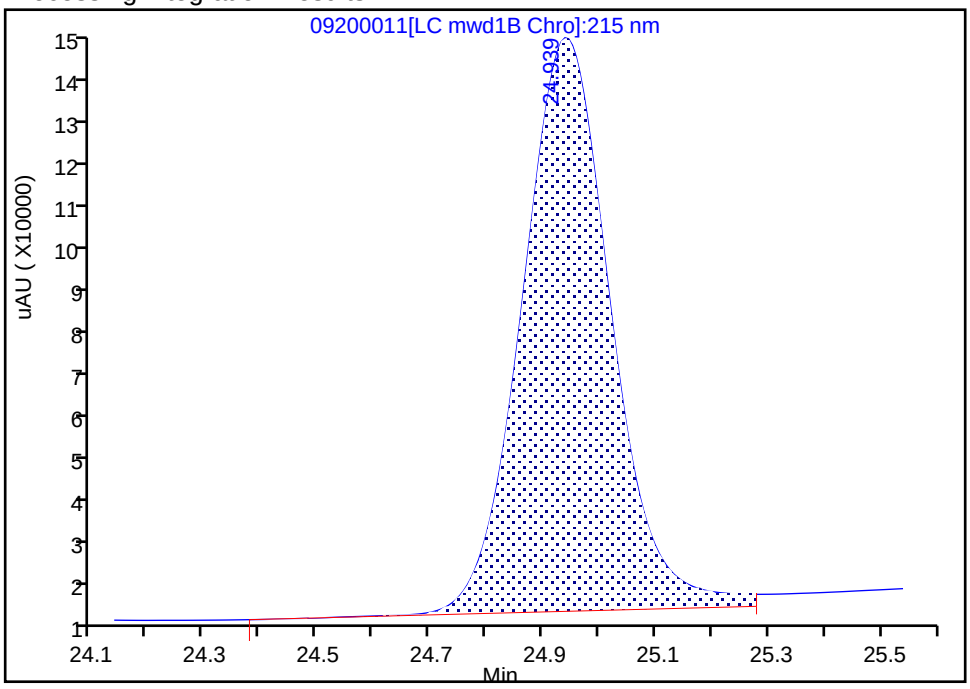
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200011.D				
Injection Date:	20-Sep-2023 20:36:05	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 8				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1B, 215 nm		

25 PETN, CAS: 78-11-5

Signal: 1

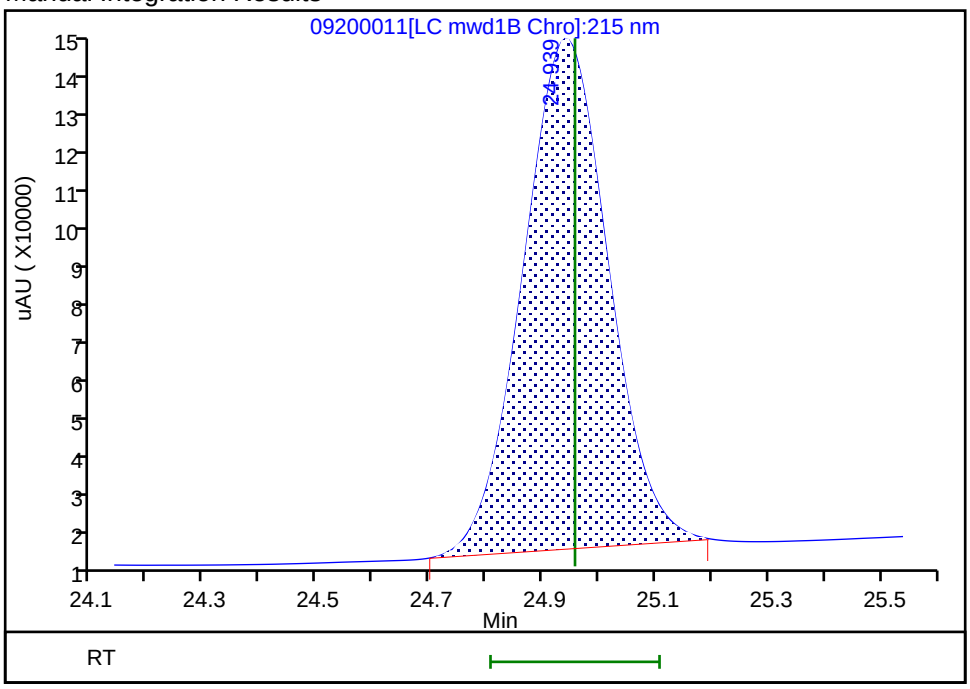
Processing Integration Results

RT: 24.94
Area: 1406045
Amount: 10.937316
Amount Units: ug/ml



Manual Integration Results

RT: 24.94
Area: 1327029
Amount: 9.986883
Amount Units: ug/ml



Reviewer: LV5D, 21-Sep-2023 16:04:40 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200012.D
Lims ID: IC INT 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 20-Sep-2023 21:11:00 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 7
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub6

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 21-Sep-2023 16:09:13 Calib Date: 21-Sep-2023 05:55:36
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1611

First Level Reviewer: LV5D Date: 21-Sep-2023 11:53:14

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.310	5.324	-0.014	271820	0.7021	0.6919	
4 DNX	1	6.190	6.211	-0.021	199913	0.7007	0.6931	
5 HMX	1	6.863	6.877	-0.014	123224	0.7000	0.6482	
6 MNX	1	7.736	7.751	-0.015	212494	0.8169	0.8017	
7 2,4,6-Trinitrophenol	1	8.483	8.551	-0.068	101968	0.7000	0.6750	a
8 RDX	1	9.170	9.184	-0.014	142502	0.7000	0.6463	
9 Nitrobenzene	1	11.783	11.790	-0.007	260838	0.7000	0.6793	
$ 10 1,2-Dinitrobenzene	1	12.776	12.784	-0.008	178112	0.7000	0.6677	
11 3,5-Dinitroaniline	1	14.623	14.644	-0.021	292419	0.7000	0.7063	
12 1,3-Dinitrobenzene	1	14.889	14.904	-0.015	407008	0.7000	0.6952	
13 Nitroglycerin	2	15.469	15.484	-0.015	884192	7.00	6.88	
14 o-Nitrotoluene	1	16.056	16.070	-0.014	164622	0.7000	0.6929	
16 p-Nitrotoluene	1	16.289	16.297	-0.008	151013	0.7000	0.7065	
17 4-Amino-2,6-dinitrotoluene	1	16.816	16.830	-0.014	188866	0.7000	0.6943	
18 m-Nitrotoluene	1	17.149	17.164	-0.015	190110	0.7000	0.7026	
19 2-Amino-4,6-dinitrotoluene	1	17.669	17.690	-0.021	289331	0.7000	0.7384	Ma
20 1,3,5-Trinitrobenzene	1	17.703	17.704	-0.001	265296	0.7000	0.6653	M
21 2,6-Dinitrotoluene	1	18.976	18.990	-0.014	186470	0.7000	0.6799	
22 2,4-Dinitrotoluene	1	19.423	19.444	-0.021	379865	0.7000	0.6979	
23 Tetryl	1	22.830	22.837	-0.007	212907	0.7000	0.6913	
24 2,4,6-Trinitrotoluene	1	23.650	23.657	-0.007	277305	0.7000	0.7022	
25 PETN	2	24.956	24.957	-0.001	928111	7.00	6.99	M

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00078	Amount Added:	70.00	Units: uL
8330 DMT_00015	Amount Added:	35.00	Units: uL

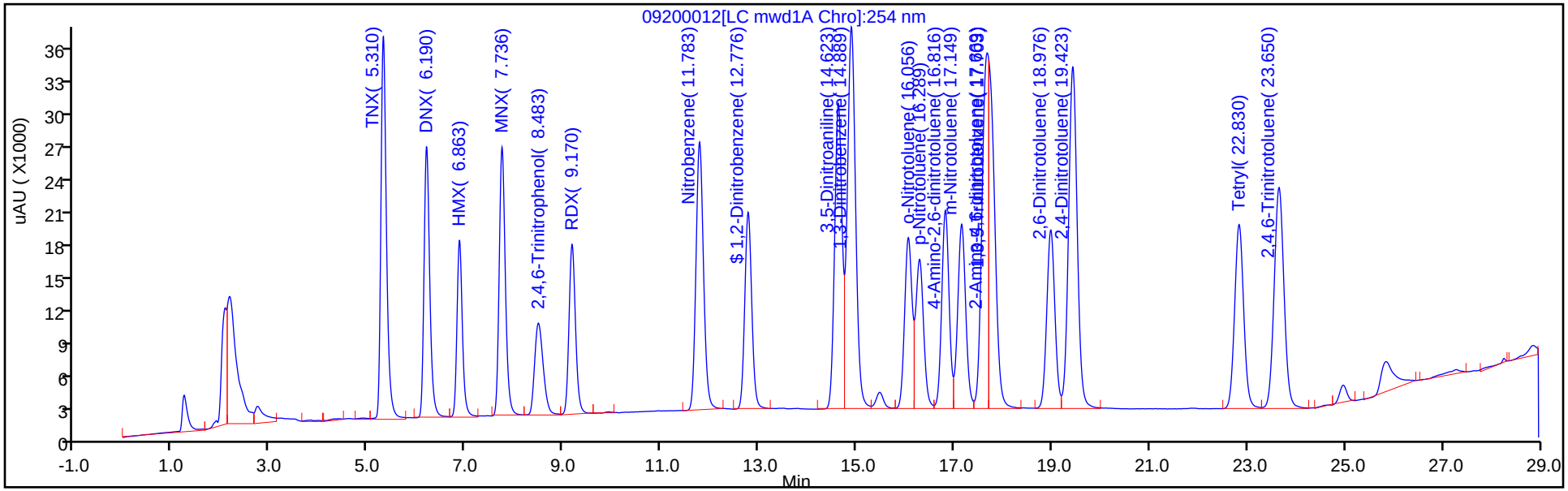
Report Date: 21-Sep-2023 16:09:13 Chrom Revision: 2.3 21-Aug-2023 17:14:06

Eurofins Denver

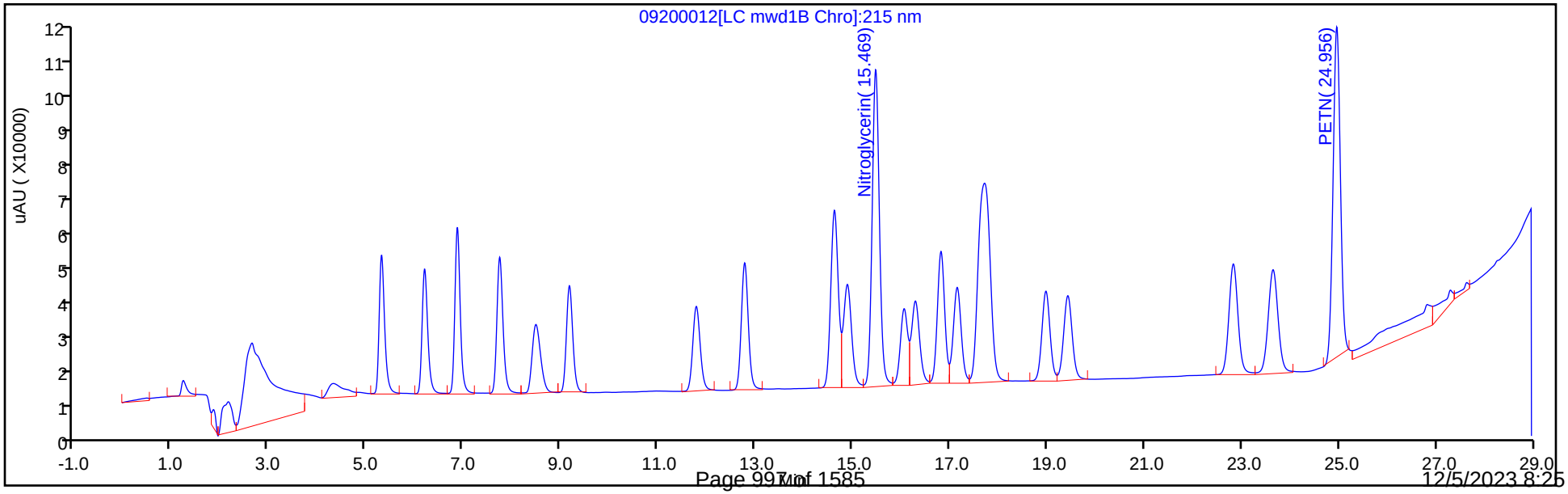
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200012.D

Injection Date:	20-Sep-2023 21:11:00	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC INT 7			Worklist Smp#:	12
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



12/5/2023 8:25 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

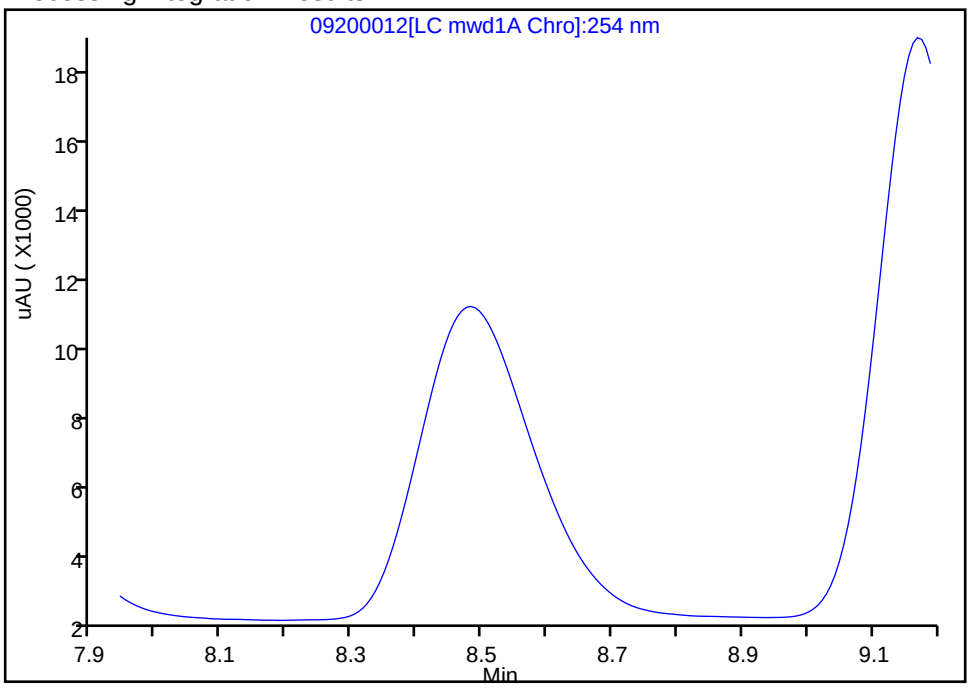
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200012.D				
Injection Date:	20-Sep-2023 21:11:00	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 7				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

7 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

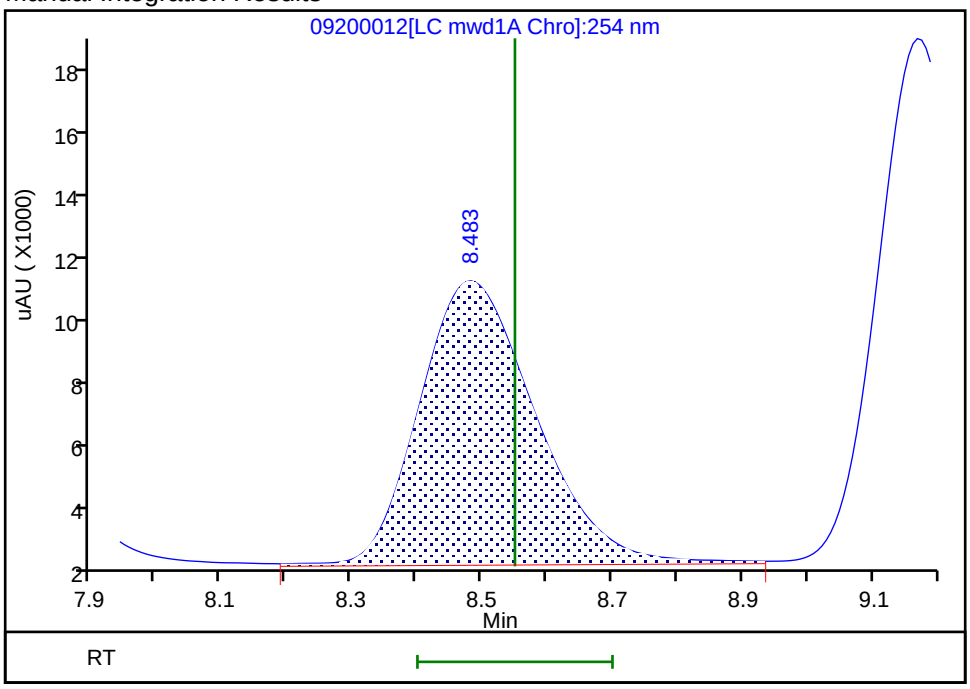
Not Detected
Expected RT: 8.55

Processing Integration Results



Manual Integration Results

RT: 8.48
Area: 101968
Amount: 0.674961
Amount Units: ug/ml



Reviewer: LV5D, 21-Sep-2023 11:53:05 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

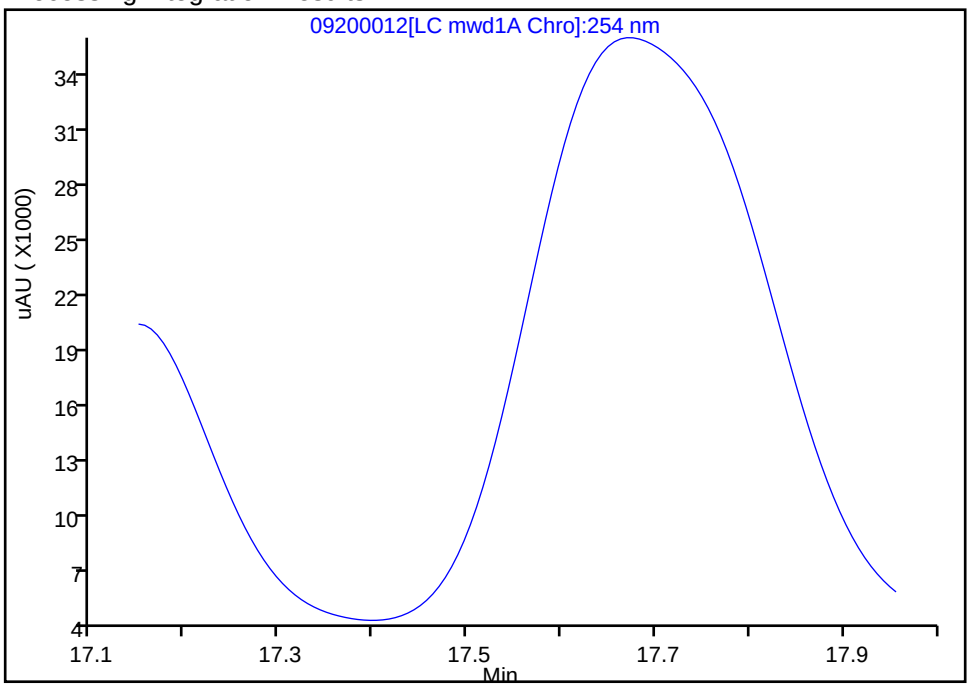
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200012.D				
Injection Date:	20-Sep-2023 21:11:00	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 7				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

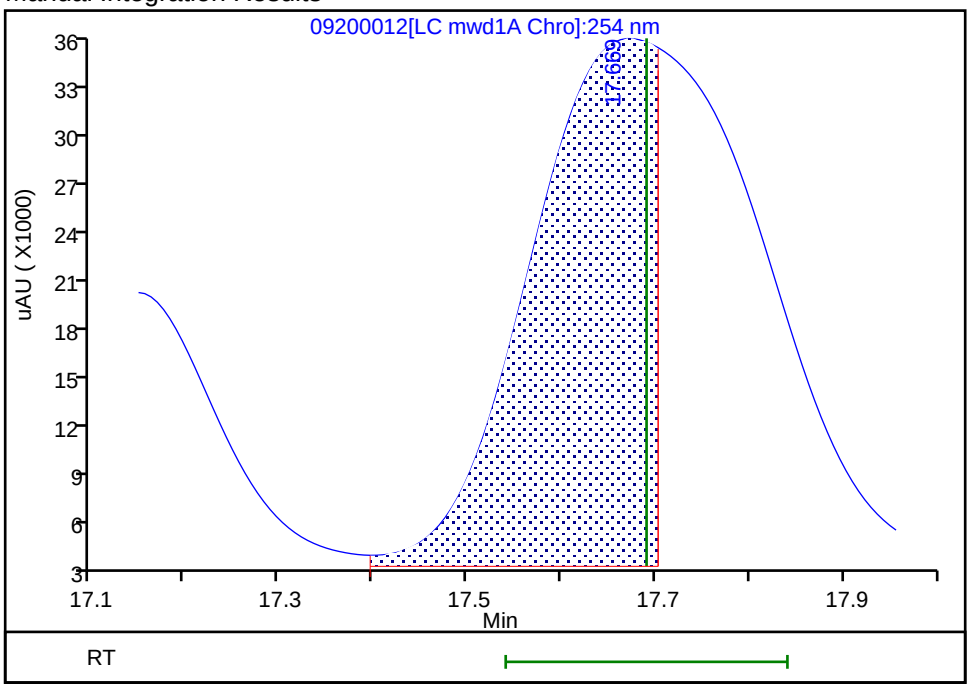
Not Detected
Expected RT: 17.69

Processing Integration Results



Manual Integration Results

RT: 17.67
Area: 289331
Amount: 0.738425
Amount Units: ug/ml



Reviewer: LV5D, 21-Sep-2023 11:53:12 -06:00:00 (UTC)
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

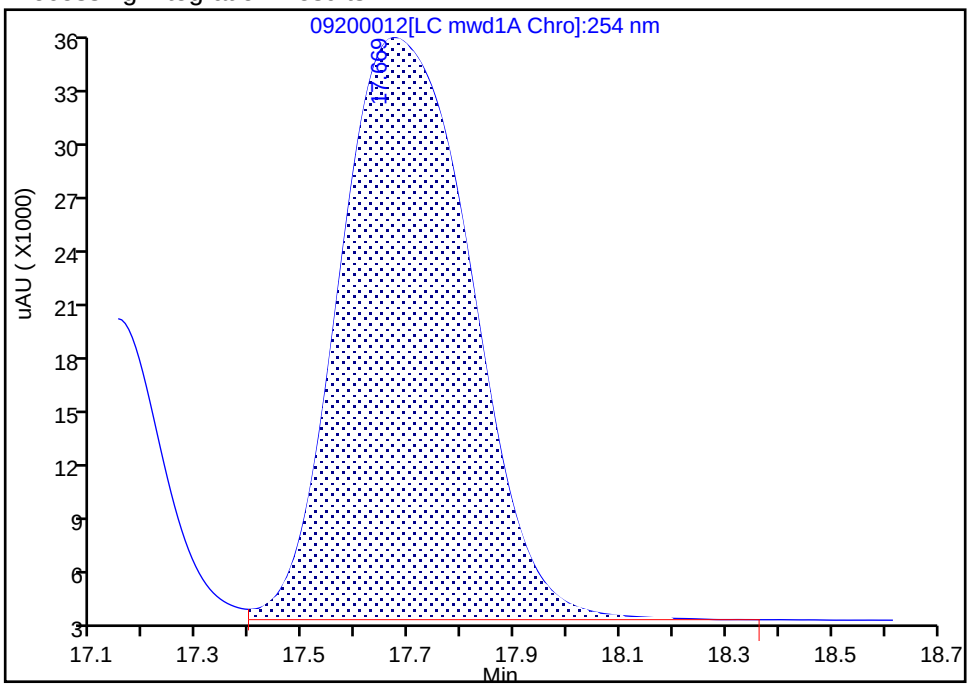
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200012.D				
Injection Date:	20-Sep-2023 21:11:00	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 7				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

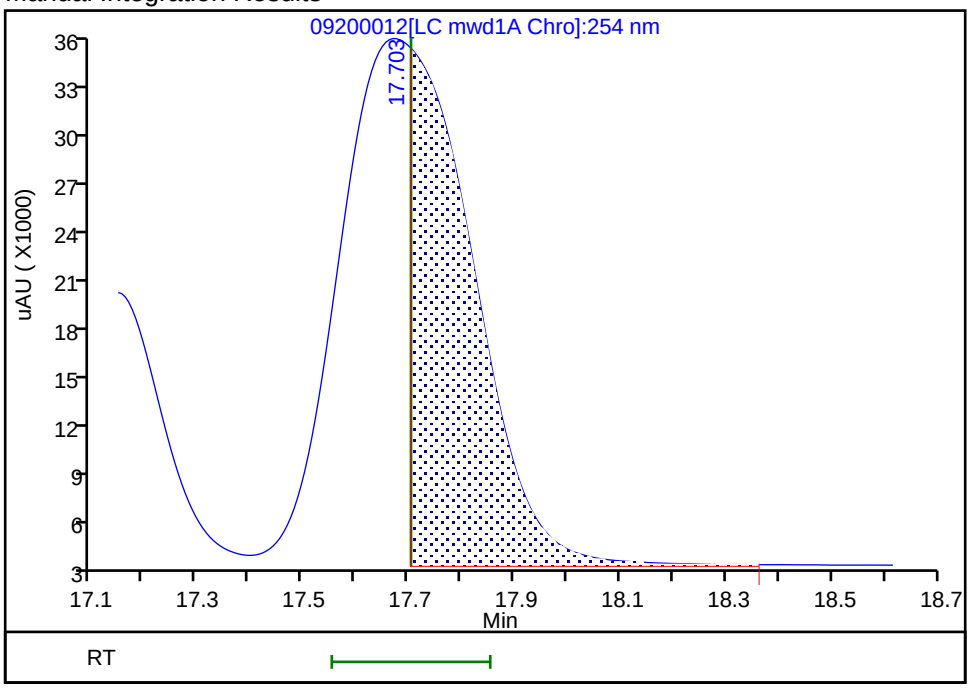
Processing Integration Results

RT: 17.67
Area: 554614
Amount: 0.788754
Amount Units: ug/ml



Manual Integration Results

RT: 17.70
Area: 265296
Amount: 0.665267
Amount Units: ug/ml



Reviewer: LV5D, 21-Sep-2023 11:53:09 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

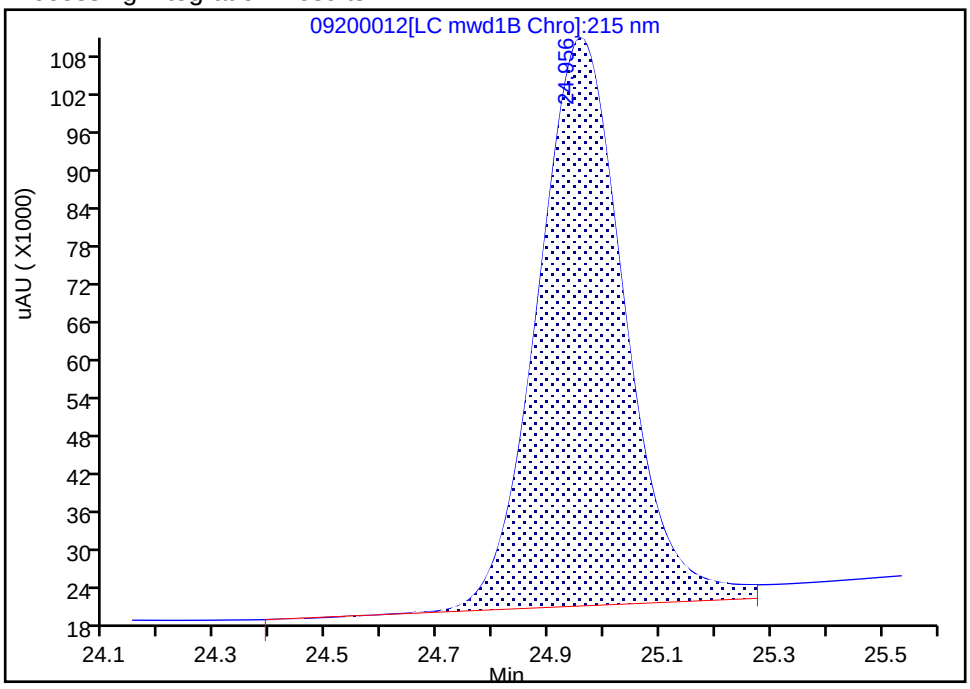
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Injection Date:	20-Sep-2023 21:11:00	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 7				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1B, 215 nm		

25 PETN, CAS: 78-11-5

Signal: 1

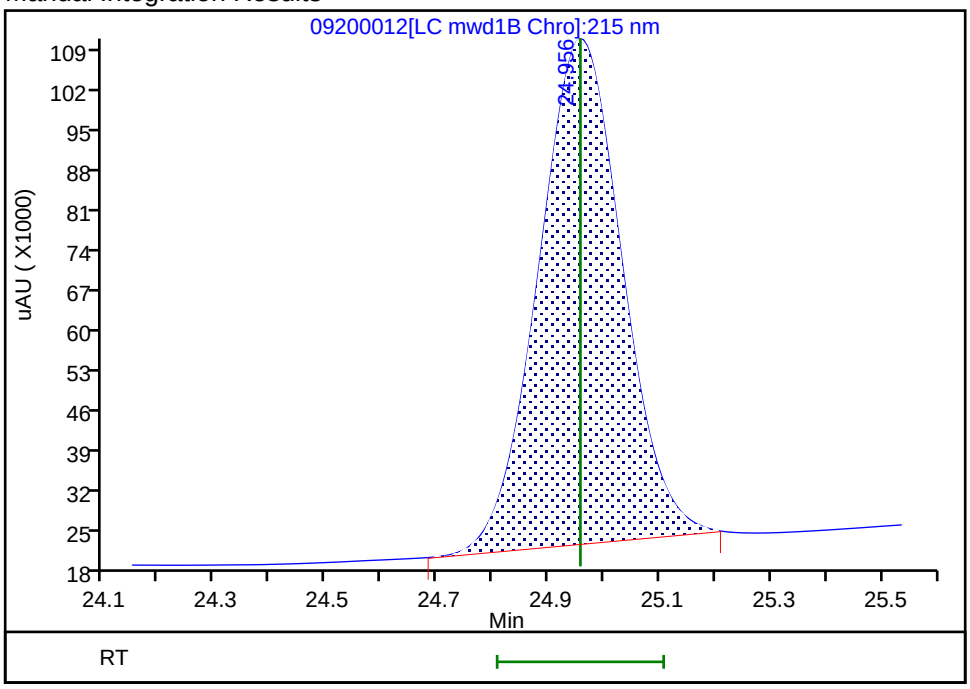
Processing Integration Results

RT: 24.96
Area: 987884
Amount: 7.628235
Amount Units: ug/ml



Manual Integration Results

RT: 24.96
Area: 928111
Amount: 6.990588
Amount Units: ug/ml



Reviewer: LV5D, 21-Sep-2023 16:04:36 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200013.D
Lims ID: IC INT 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 20-Sep-2023 21:45:55 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 6
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub6

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 21-Sep-2023 16:09:14 Calib Date: 21-Sep-2023 05:55:36
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1611

First Level Reviewer: LV5D Date: 21-Sep-2023 11:53:26

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.315	5.324	-0.009	152083	0.4012	0.3871	
4 DNX	1	6.201	6.211	-0.010	112495	0.4004	0.3900	
5 HMX	1	6.875	6.877	-0.002	71753	0.4000	0.3774	
6 MNX	1	7.748	7.751	-0.003	119982	0.4668	0.4527	
7 2,4,6-Trinitrophenol	1	8.528	8.551	-0.023	58834	0.4000	0.3900	a
8 RDX	1	9.188	9.184	0.004	82497	0.4000	0.3742	
9 Nitrobenzene	1	11.788	11.790	-0.002	152954	0.4000	0.3983	
$ 10 1,2-Dinitrobenzene	1	12.781	12.784	-0.003	102725	0.4000	0.3851	
11 3,5-Dinitroaniline	1	14.634	14.644	-0.010	167829	0.4000	0.4053	
12 1,3-Dinitrobenzene	1	14.901	14.904	-0.003	231911	0.4000	0.3961	
13 Nitroglycerin	2	15.481	15.484	-0.003	502697	4.00	3.91	
14 o-Nitrotoluene	1	16.061	16.070	-0.009	93612	0.4000	0.3940	
16 p-Nitrotoluene	1	16.294	16.297	-0.003	86004	0.4000	0.4024	
17 4-Amino-2,6-dinitrotoluene	1	16.814	16.830	-0.016	107186	0.4000	0.3940	
18 m-Nitrotoluene	1	17.148	17.164	-0.016	107991	0.4000	0.3991	
19 2-Amino-4,6-dinitrotoluene	1	17.674	17.690	-0.016	162249	0.4000	0.4141	Ma
20 1,3,5-Trinitrobenzene	1	17.701	17.704	-0.003	153278	0.4000	0.3844	M
21 2,6-Dinitrotoluene	1	18.974	18.990	-0.016	106943	0.4000	0.3899	
22 2,4-Dinitrotoluene	1	19.428	19.444	-0.016	217437	0.4000	0.3995	
23 Tetryl	1	22.828	22.837	-0.009	122409	0.4000	0.3975	
24 2,4,6-Trinitrotoluene	1	23.641	23.657	-0.016	159128	0.4000	0.4029	
25 PETN	2	24.955	24.957	-0.002	529728	4.00	4.00	M

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00078	Amount Added:	40.00	Units: uL
8330 DMT_00015	Amount Added:	20.00	Units: uL

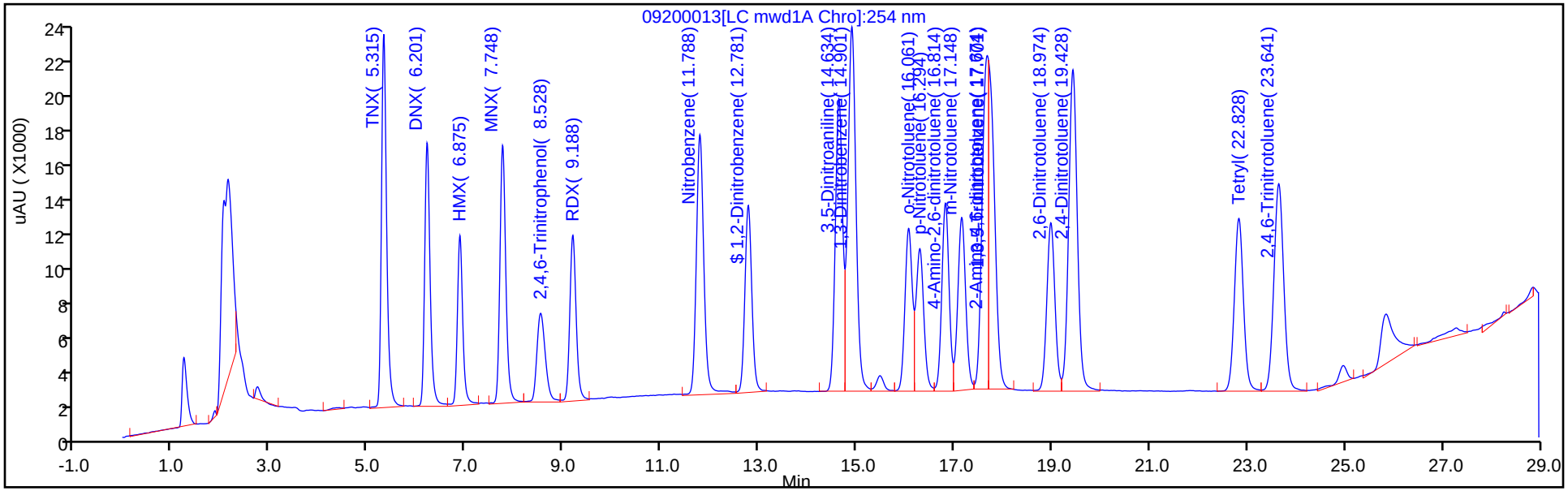
Report Date: 21-Sep-2023 16:09:14 Chrom Revision: 2.3 21-Aug-2023 17:14:06

Eurofins Denver

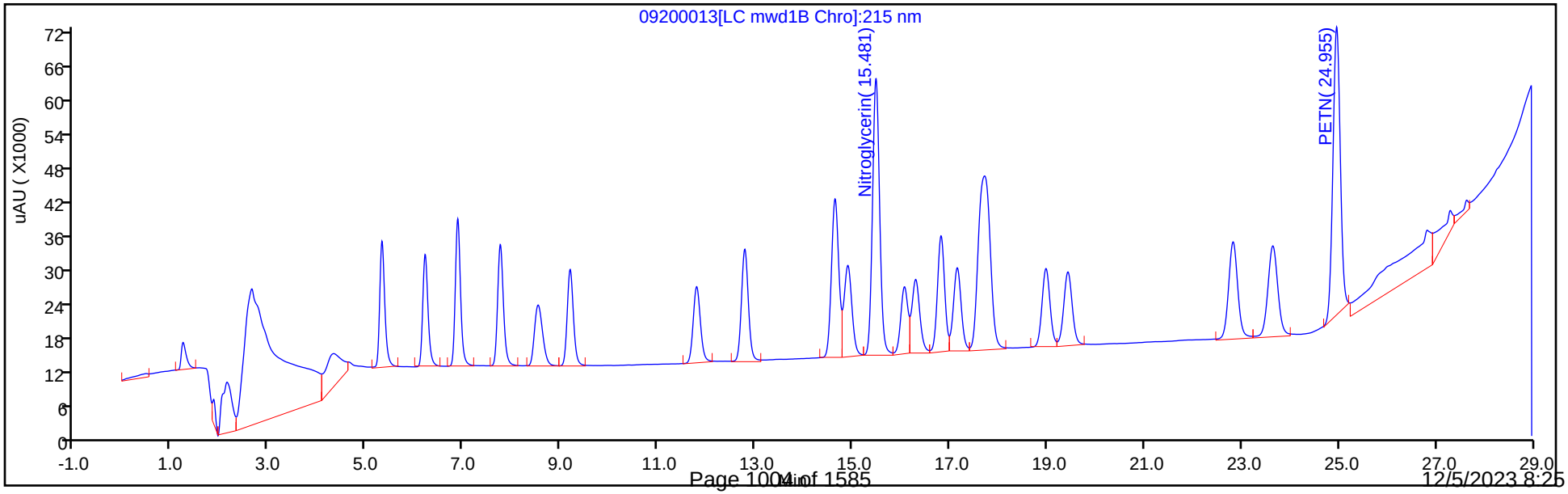
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200013.D

Injection Date:	20-Sep-2023 21:45:55	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC INT 6			Worklist Smp#:	13
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



12/5/2023 8:25 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

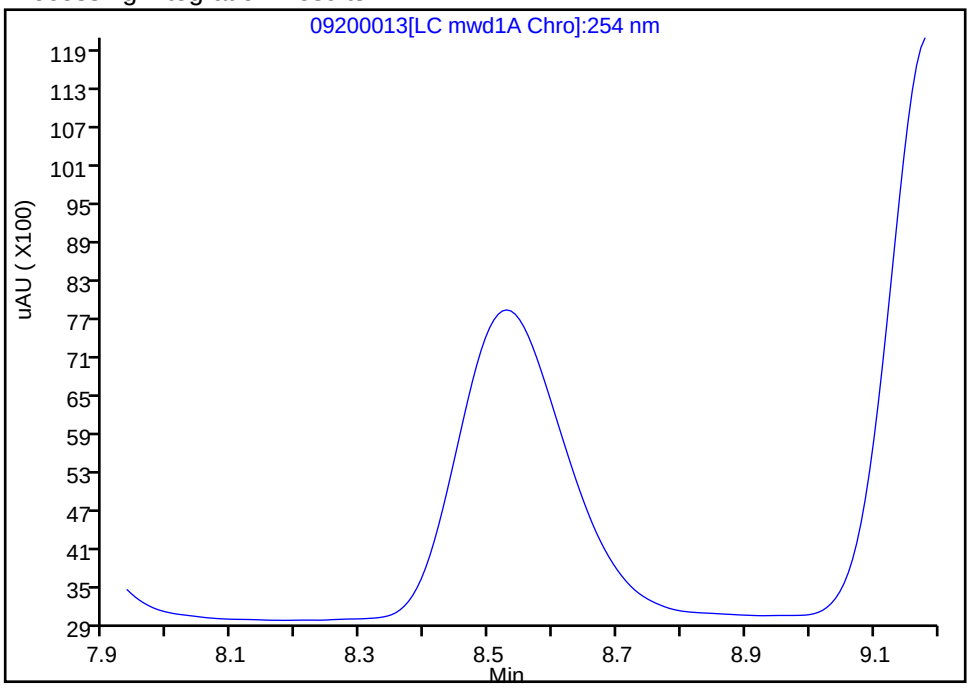
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Injection Date:	20-Sep-2023 21:45:55	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 6				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

7 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

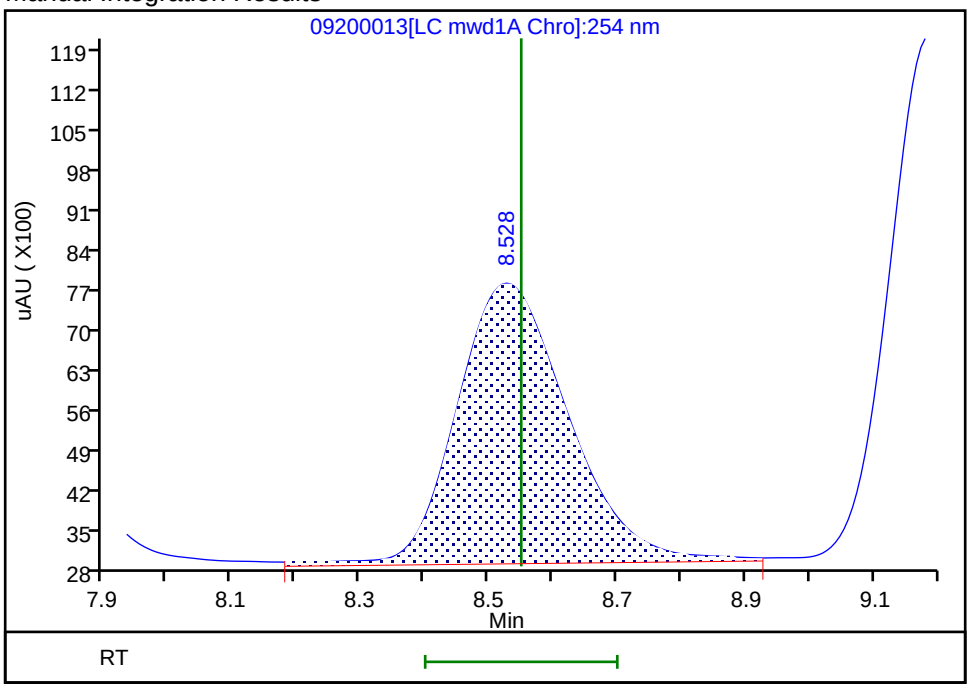
Not Detected
Expected RT: 8.55

Processing Integration Results



Manual Integration Results

RT: 8.53
Area: 58834
Amount: 0.390040
Amount Units: ug/ml



Reviewer: LV5D, 21-Sep-2023 11:53:17 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

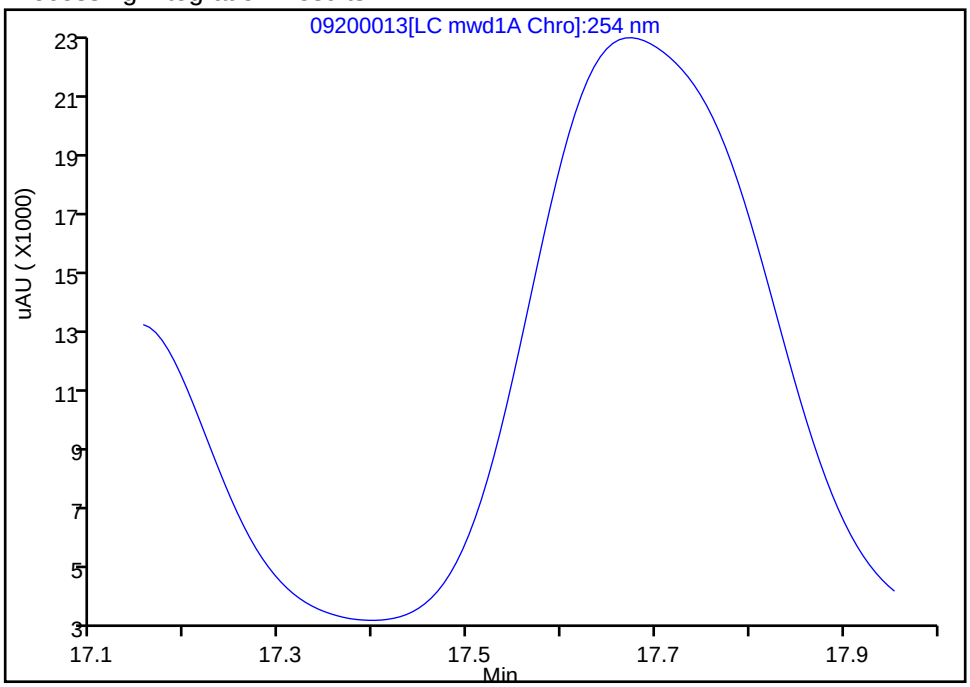
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200013.D				
Injection Date:	20-Sep-2023 21:45:55	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 6				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

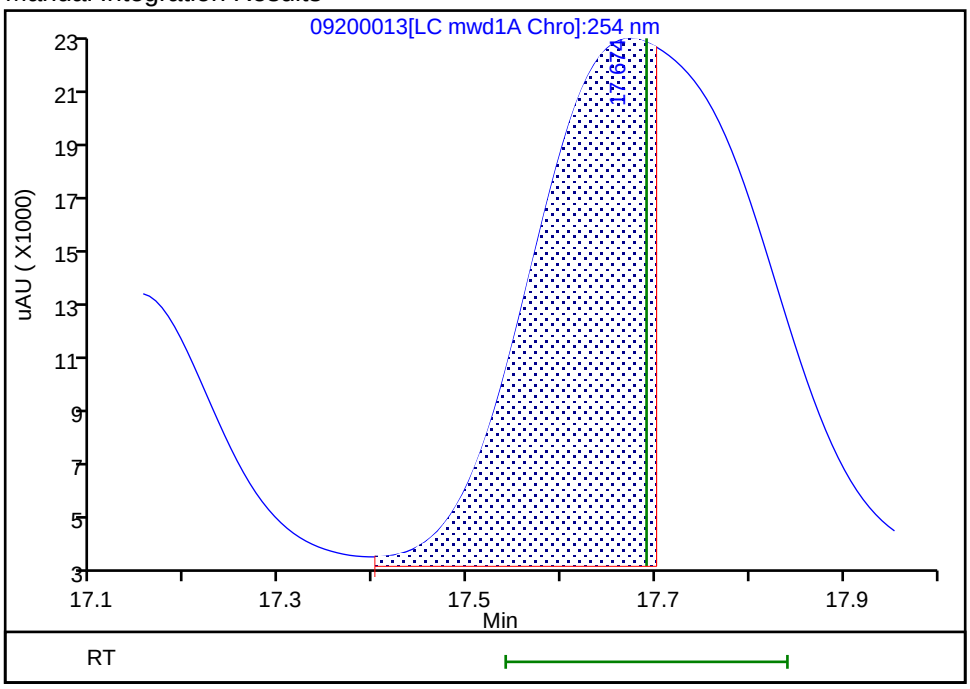
Not Detected
Expected RT: 17.69

Processing Integration Results



Manual Integration Results

RT: 17.67
Area: 162249
Amount: 0.414089
Amount Units: ug/ml



Reviewer: LV5D, 21-Sep-2023 11:53:23 -06:00:00 (UTC)
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

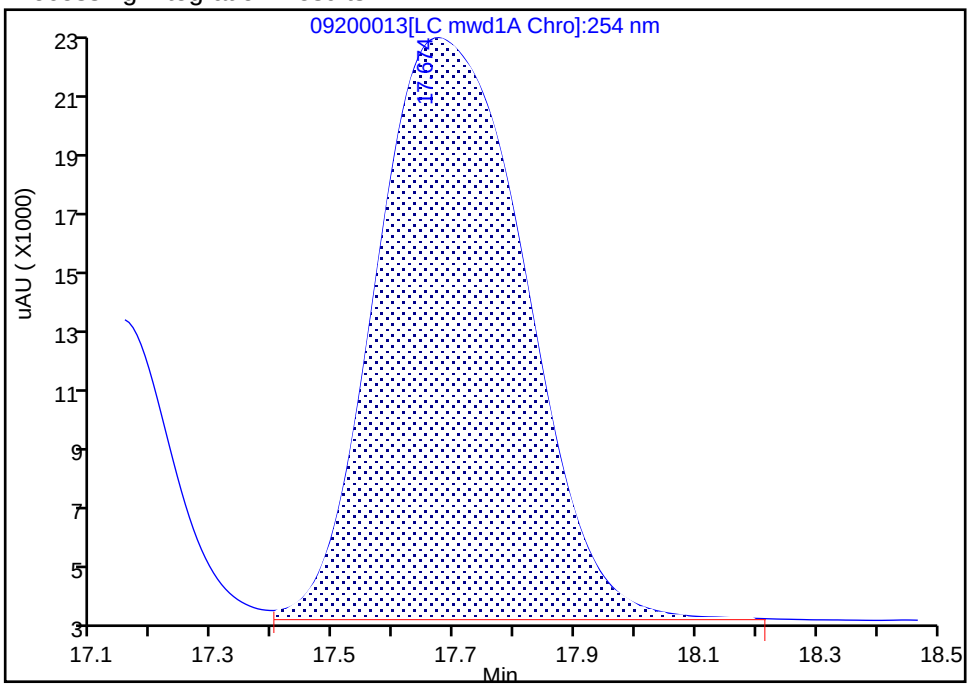
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200013.D				
Injection Date:	20-Sep-2023 21:45:55	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 6				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

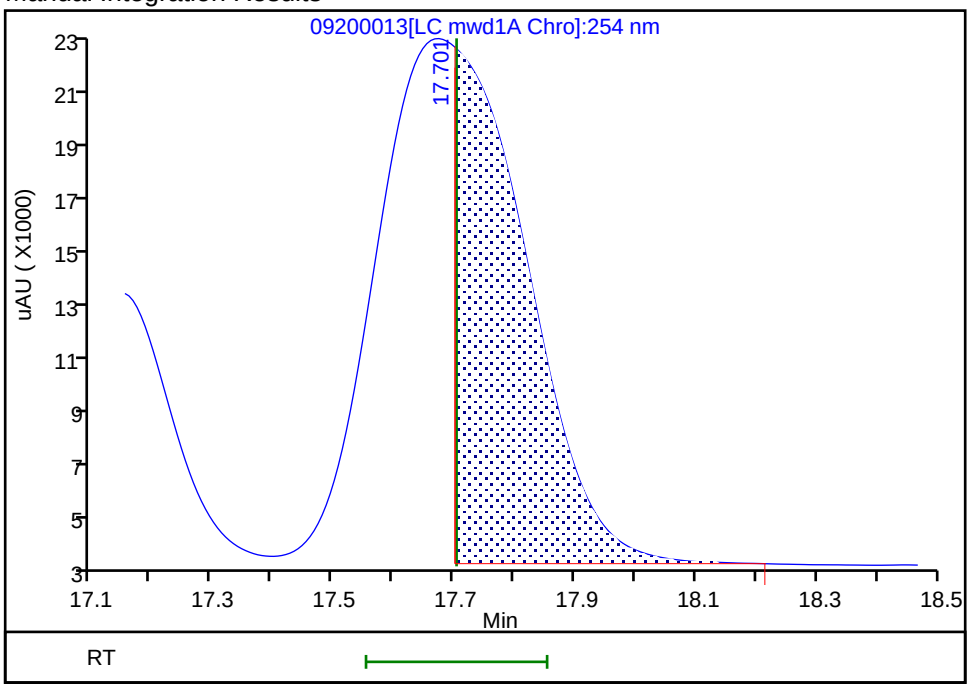
Processing Integration Results

RT: 17.67
Area: 315526
Amount: 0.480086
Amount Units: ug/ml



Manual Integration Results

RT: 17.70
Area: 153278
Amount: 0.384366
Amount Units: ug/ml



Reviewer: LV5D, 21-Sep-2023 11:53:21 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

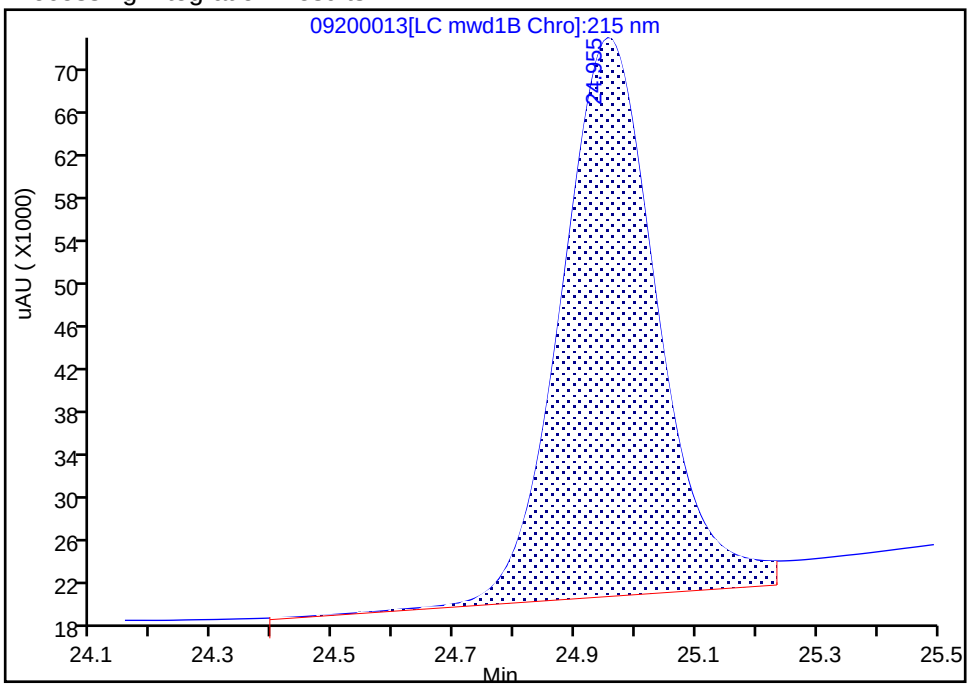
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200013.D				
Injection Date:	20-Sep-2023 21:45:55	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 6				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1B, 215 nm		

25 PETN, CAS: 78-11-5

Signal: 1

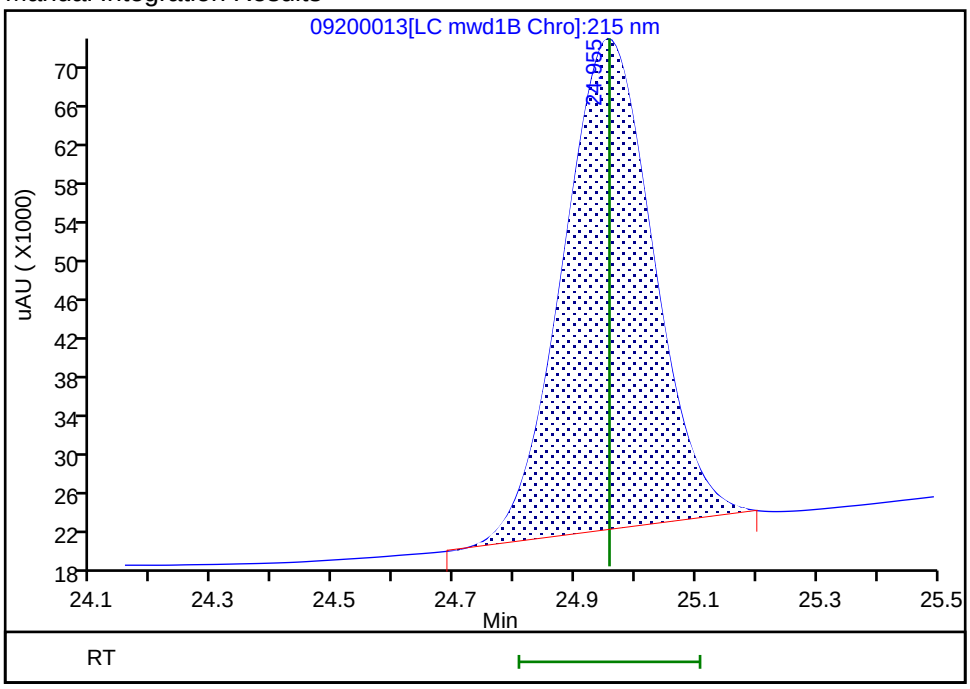
Processing Integration Results

RT: 24.95
Area: 578130
Amount: 4.418329
Amount Units: ug/ml



Manual Integration Results

RT: 24.95
Area: 529728
Amount: 3.998312
Amount Units: ug/ml



Reviewer: LV5D, 21-Sep-2023 16:04:32 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200014.D
Lims ID: IC INT 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 20-Sep-2023 22:20:51 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 5
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub6

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 21-Sep-2023 16:09:15 Calib Date: 21-Sep-2023 05:55:36
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1611

First Level Reviewer: LV5D Date: 21-Sep-2023 11:53:48

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.324	5.324	0.000	96767	0.2508	0.2463	
4 DNX	1	6.211	6.211	0.000	71744	0.2503	0.2487	
5 HMX	1	6.877	6.877	0.000	44396	0.2500	0.2335	
6 MNX	1	7.751	7.751	0.000	76600	0.2918	0.2890	
7 2,4,6-Trinitrophenol	1	8.551	8.551	0.000	36365	0.2500	0.2416	a
8 RDX	1	9.184	9.184	0.000	51077	0.2500	0.2317	
9 Nitrobenzene	1	11.790	11.790	0.000	91122	0.2500	0.2373	
$ 10 1,2-Dinitrobenzene	1	12.784	12.784	0.000	62960	0.2500	0.2360	
11 3,5-Dinitroaniline	1	14.644	14.644	0.000	103109	0.2500	0.2490	
12 1,3-Dinitrobenzene	1	14.904	14.904	0.000	144154	0.2500	0.2462	
13 Nitroglycerin	2	15.484	15.484	0.000	313040	2.50	2.44	
14 o-Nitrotoluene	1	16.070	16.070	0.000	57785	0.2500	0.2432	
16 p-Nitrotoluene	1	16.297	16.297	0.000	52374	0.2500	0.2450	
17 4-Amino-2,6-dinitrotoluene	1	16.830	16.830	0.000	66325	0.2500	0.2438	
18 m-Nitrotoluene	1	17.164	17.164	0.000	66007	0.2500	0.2439	
19 2-Amino-4,6-dinitrotoluene	1	17.690	17.690	0.000	92394	0.2500	0.2358	Ma
20 1,3,5-Trinitrobenzene	1	17.704	17.704	0.000	102515	0.2500	0.2571	M
21 2,6-Dinitrotoluene	1	18.990	18.990	0.000	66066	0.2500	0.2409	
22 2,4-Dinitrotoluene	1	19.444	19.444	0.000	133458	0.2500	0.2452	
23 Tetryl	1	22.837	22.837	0.000	75424	0.2500	0.2449	
24 2,4,6-Trinitrotoluene	1	23.657	23.657	0.000	98375	0.2500	0.2491	
25 PETN	2	24.957	24.957	0.000	327642	2.50	2.48	M

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00078	Amount Added:	25.00	Units: uL
8330 DMT_00015	Amount Added:	12.50	Units: uL

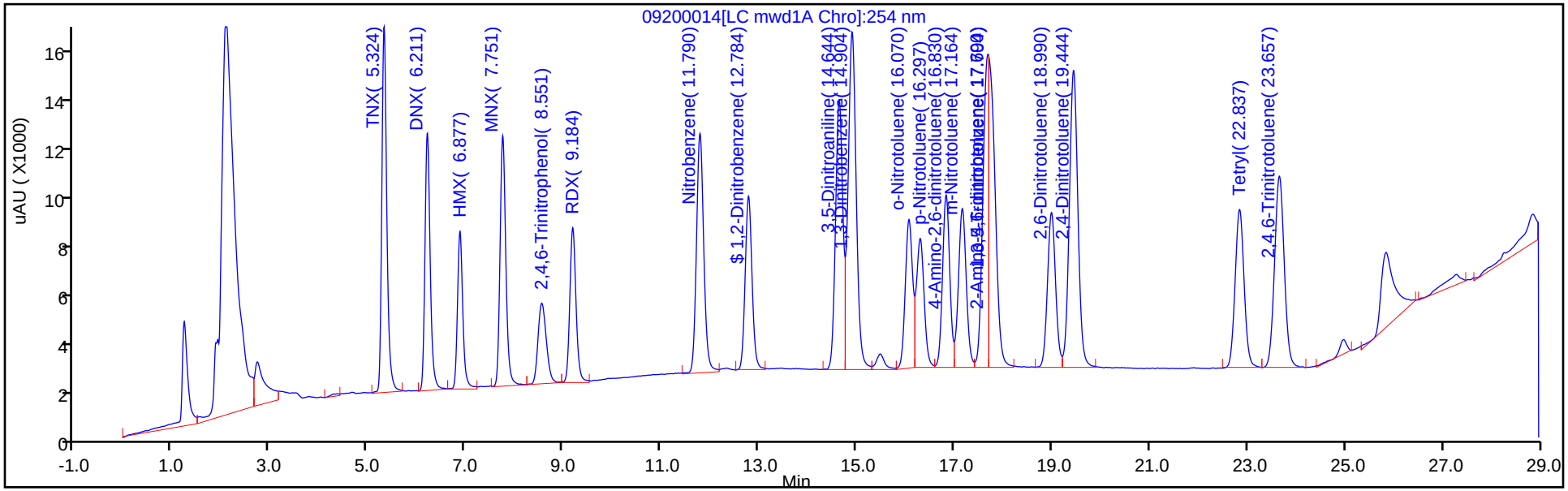
Report Date: 21-Sep-2023 16:09:15 Chrom Revision: 2.3 21-Aug-2023 17:14:06

Eurofins Denver

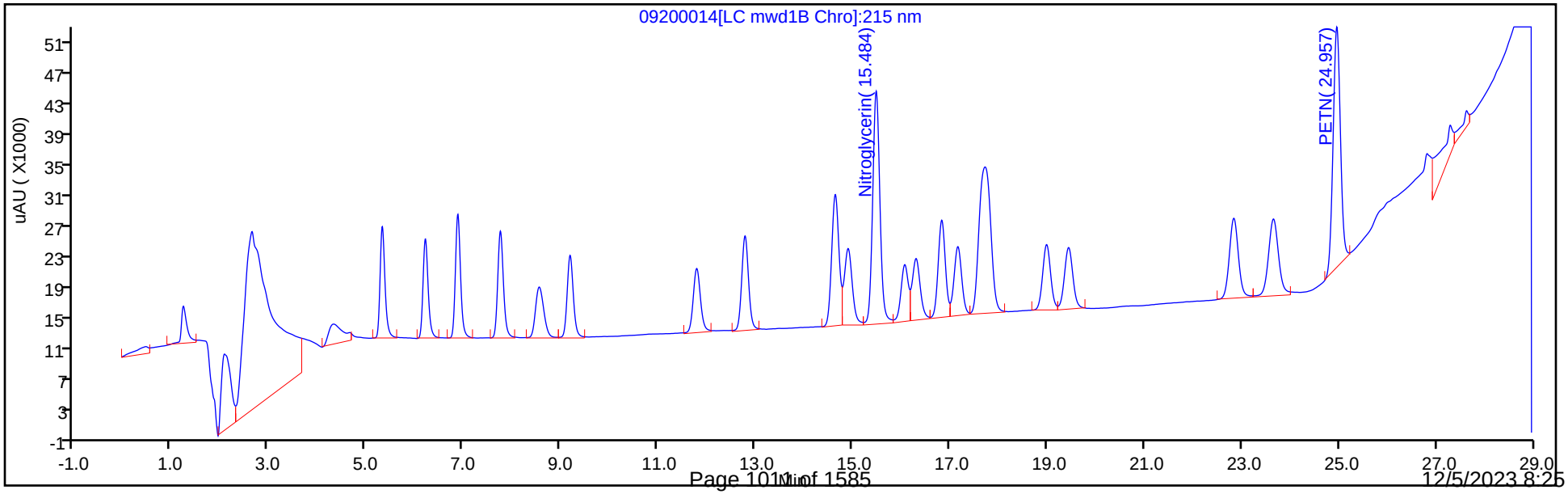
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200014.D

Injection Date:	20-Sep-2023 22:20:51	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC INT 5			Worklist Smp#:	14
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

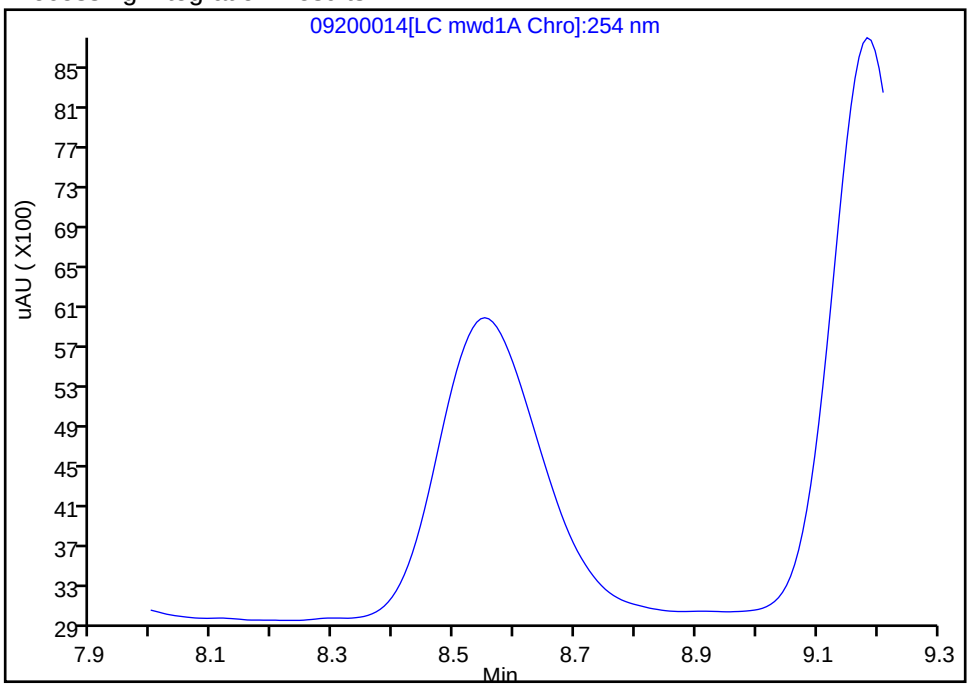
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200014.D				
Injection Date:	20-Sep-2023 22:20:51	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 5				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

7 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

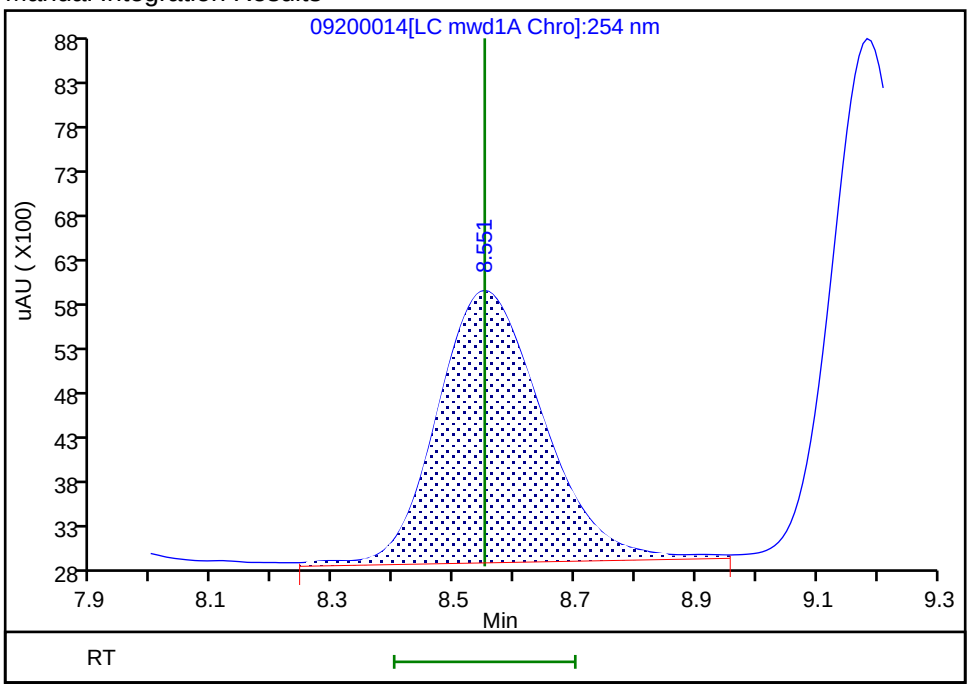
Not Detected
Expected RT: 8.55

Processing Integration Results



Manual Integration Results

RT: 8.55
Area: 36365
Amount: 0.241621
Amount Units: ug/ml



Reviewer: LV5D, 21-Sep-2023 11:53:34 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

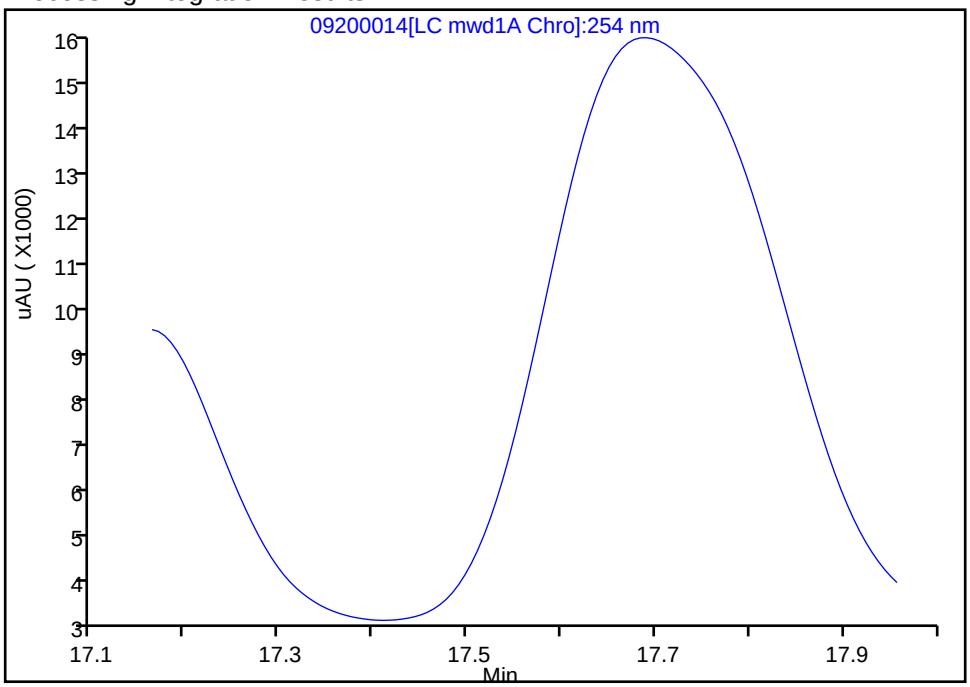
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200014.D				
Injection Date:	20-Sep-2023 22:20:51	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 5				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

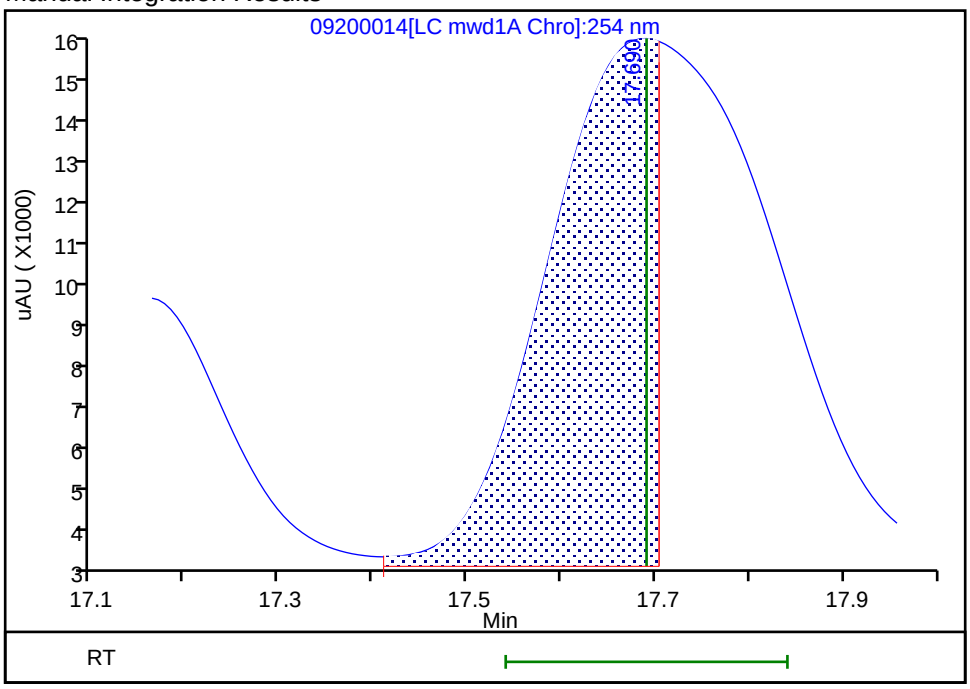
Not Detected
Expected RT: 17.69

Processing Integration Results



Manual Integration Results

RT: 17.69
Area: 92394
Amount: 0.235806
Amount Units: ug/ml



Reviewer: LV5D, 21-Sep-2023 11:53:43 -06:00:00 (UTC)
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

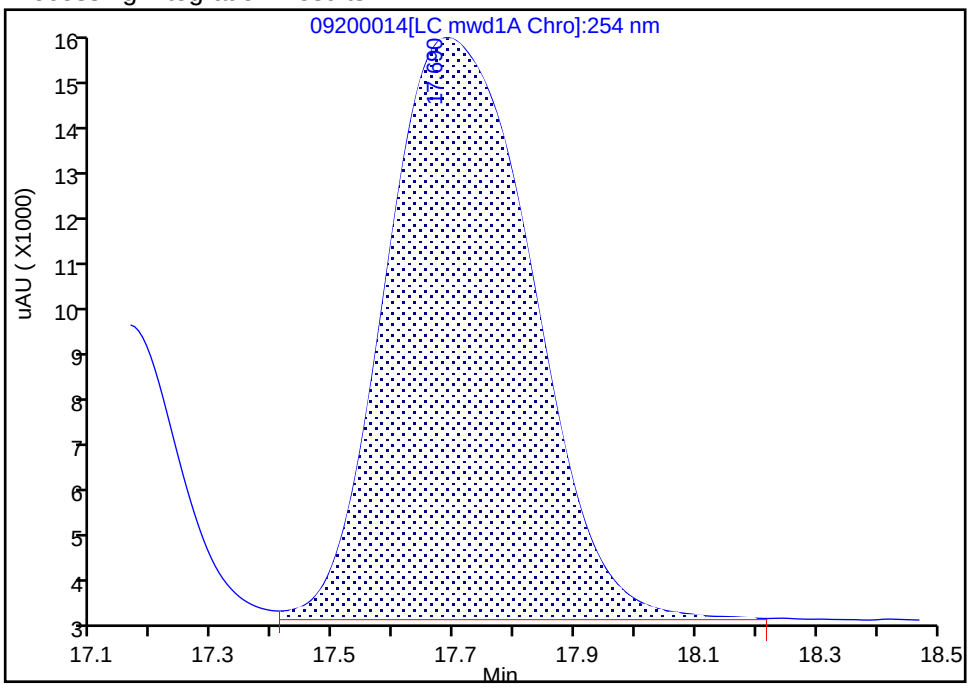
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200014.D				
Injection Date:	20-Sep-2023 22:20:51	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 5				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

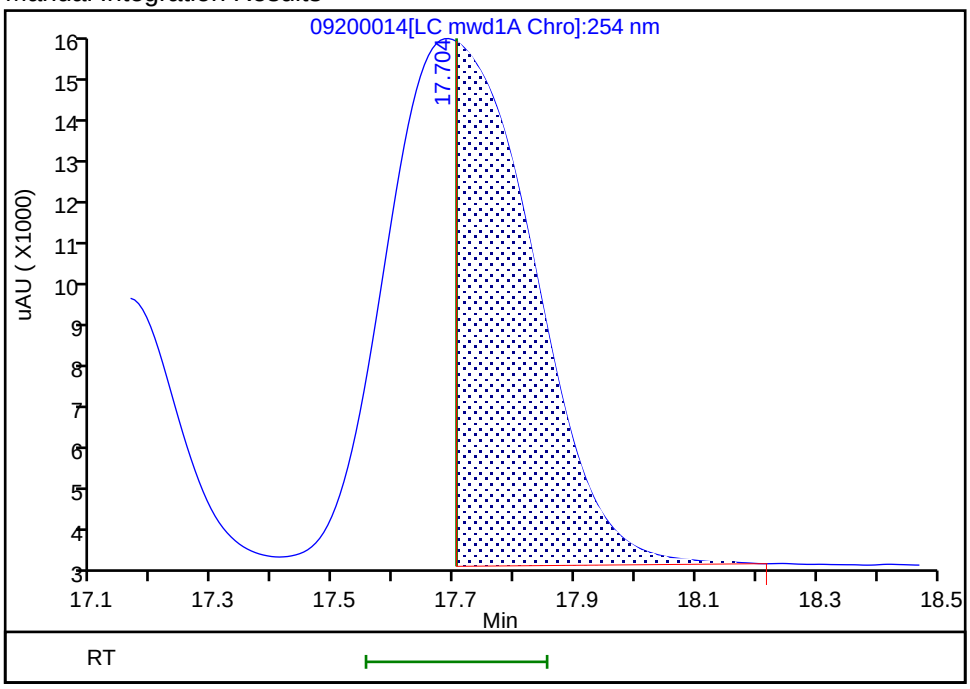
Processing Integration Results

RT: 17.69
Area: 194909
Amount: 0.318396
Amount Units: ug/ml



Manual Integration Results

RT: 17.70
Area: 102515
Amount: 0.257071
Amount Units: ug/ml



Reviewer: LV5D, 21-Sep-2023 11:53:40 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

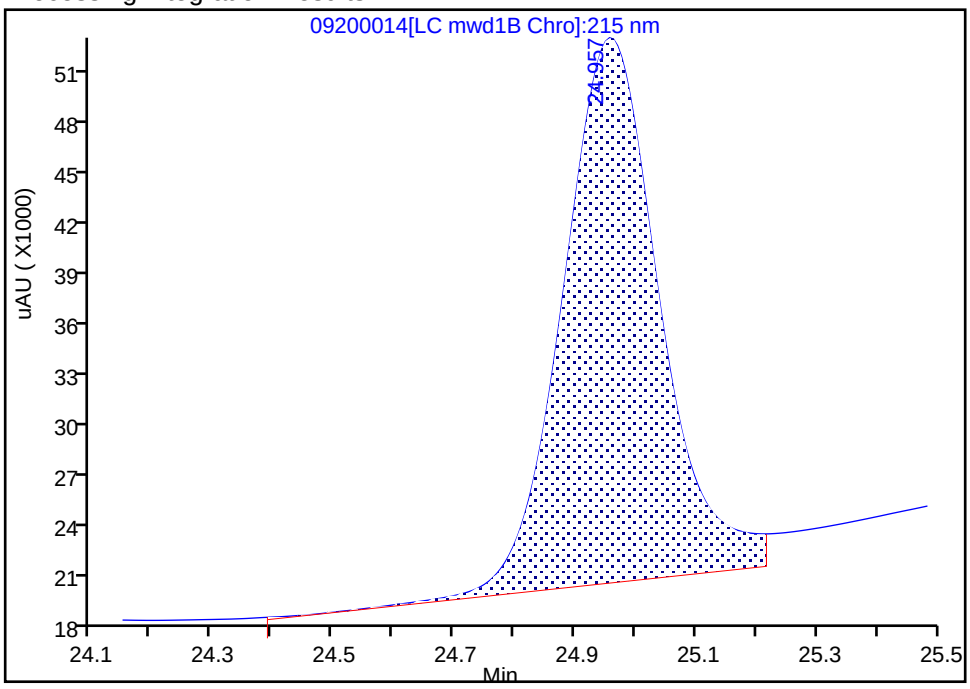
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200014.D
Injection Date: 20-Sep-2023 22:20:51 Instrument ID: CHHPLC_X5
Lims ID: IC INT 5
Client ID:
Operator ID: JZ/JG ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC mwd1B, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

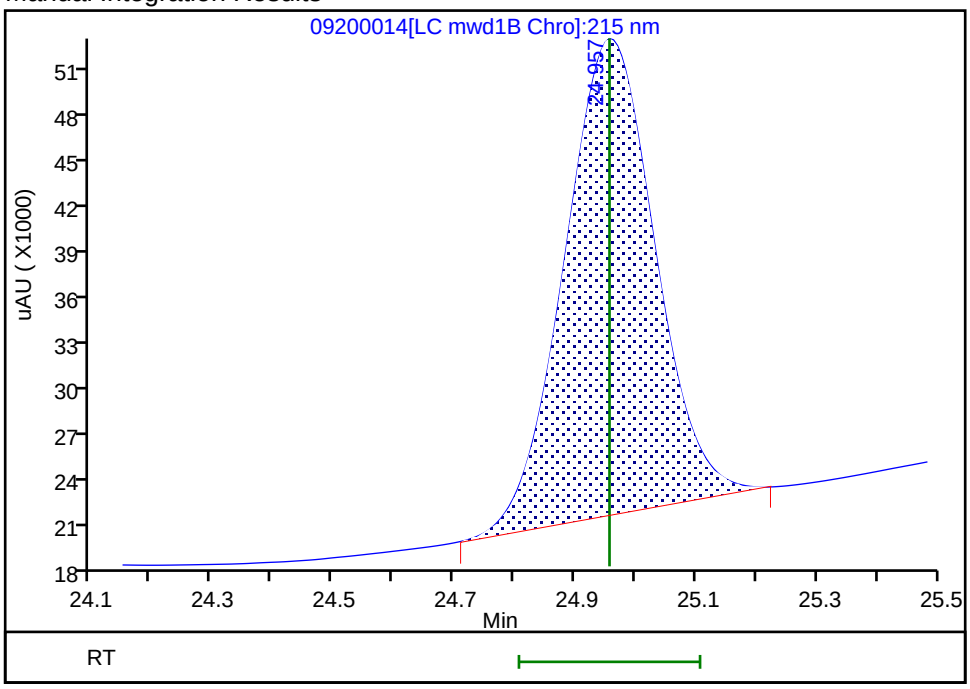
Processing Integration Results

RT: 24.96
Area: 362875
Amount: 2.740457
Amount Units: ug/ml



Manual Integration Results

RT: 24.96
Area: 327642
Amount: 2.480433
Amount Units: ug/ml



Reviewer: LV5D, 21-Sep-2023 16:04:28 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200015.D
Lims ID: IC INT 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 20-Sep-2023 22:55:45 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 4
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub6

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 21-Sep-2023 16:09:15 Calib Date: 21-Sep-2023 05:55:36
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1611

First Level Reviewer: LV5D Date: 21-Sep-2023 11:53:57

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.332	5.324	0.008	38813	0.1003	0.0988	
4 DNX	1	6.225	6.211	0.014	29075	0.1001	0.1008	
5 HMX	1	6.899	6.877	0.022	19028	0.1000	0.1001	
6 MNX	1	7.772	7.751	0.021	30950	0.1167	0.1168	
7 2,4,6-Trinitrophenol	1	8.599	8.551	0.048	15233	0.1000	0.1020	
8 RDX	1	9.205	9.184	0.021	21516	0.1000	0.0976	
9 Nitrobenzene	1	11.805	11.790	0.015	38021	0.1000	0.0990	
$ 10 1,2-Dinitrobenzene	1	12.805	12.784	0.021	25765	0.1000	0.0966	
11 3,5-Dinitroaniline	1	14.665	14.644	0.021	41990	0.1000	0.1013	
12 1,3-Dinitrobenzene	1	14.925	14.904	0.021	58579	0.1000	0.1001	
13 Nitroglycerin	2	15.505	15.484	0.021	132632	1.00	1.03	
14 o-Nitrotoluene	1	16.092	16.070	0.022	24028	0.1000	0.1011	
16 p-Nitrotoluene	1	16.325	16.297	0.028	21805	0.1000	0.1020	
17 4-Amino-2,6-dinitrotoluene	1	16.852	16.830	0.022	27371	0.1000	0.1006	
18 m-Nitrotoluene	1	17.185	17.164	0.021	27484	0.1000	0.1016	
19 2-Amino-4,6-dinitrotoluene	1	17.712	17.690	0.022	41548	0.1000	0.1060	M
20 1,3,5-Trinitrobenzene	1	17.738	17.704	0.034	38099	0.1000	0.0955	M
21 2,6-Dinitrotoluene	1	19.012	18.990	0.022	27251	0.1000	0.0994	
22 2,4-Dinitrotoluene	1	19.458	19.444	0.014	54173	0.1000	0.0995	
23 Tetryl	1	22.859	22.837	0.022	30640	0.1000	0.0995	
24 2,4,6-Trinitrotoluene	1	23.672	23.657	0.015	40193	0.1000	0.1018	
25 PETN	2	24.972	24.957	0.015	131058	1.00	1.00	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00078	Amount Added:	10.00	Units: uL
8330 DMT_00015	Amount Added:	5.00	Units: uL

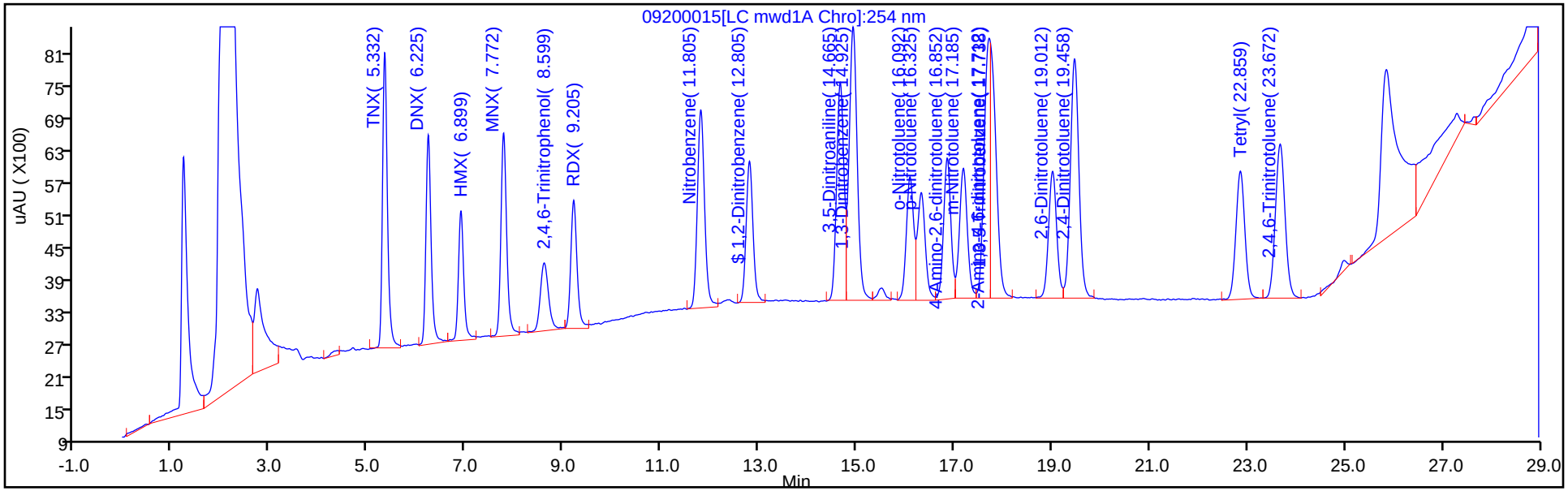
Report Date: 21-Sep-2023 16:09:16 Chrom Revision: 2.3 21-Aug-2023 17:14:06

Eurofins Denver

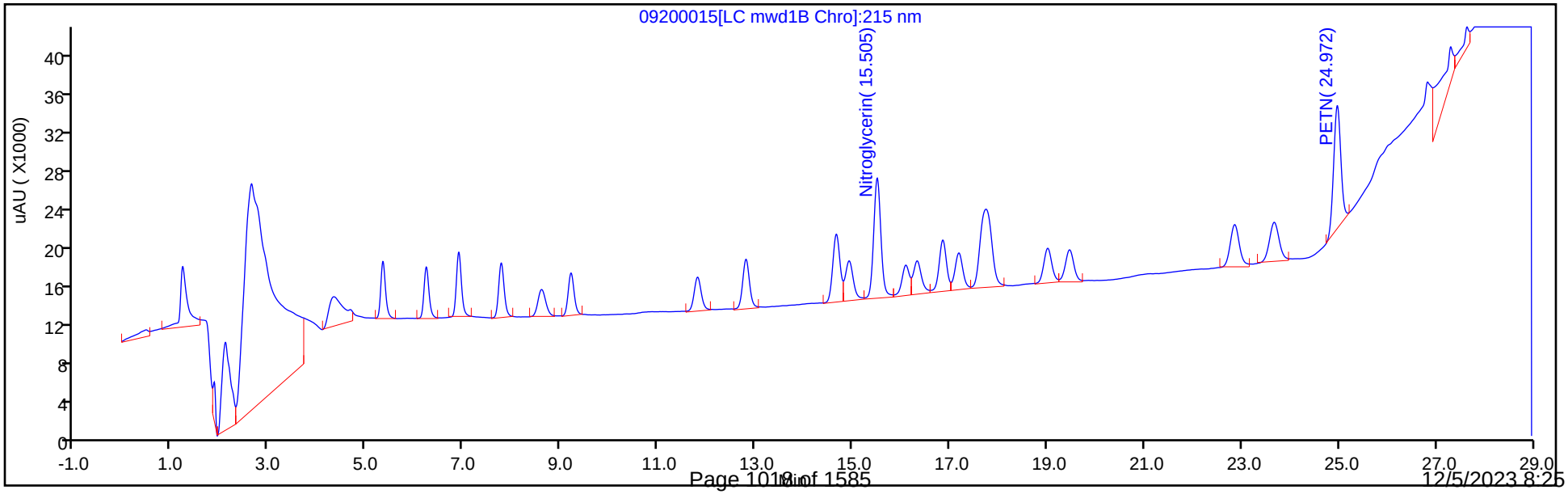
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200015.D

Injection Date:	20-Sep-2023 22:55:45	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC INT 4			Worklist Smp#:	15
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



12/5/2023 8:25 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

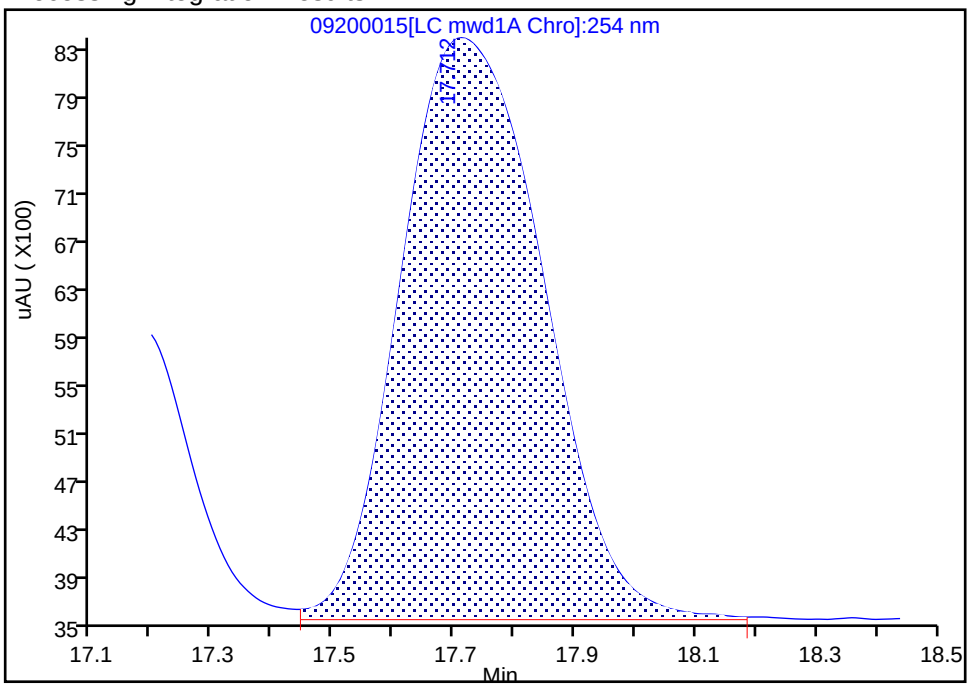
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200015.D				
Injection Date:	20-Sep-2023 22:55:45	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

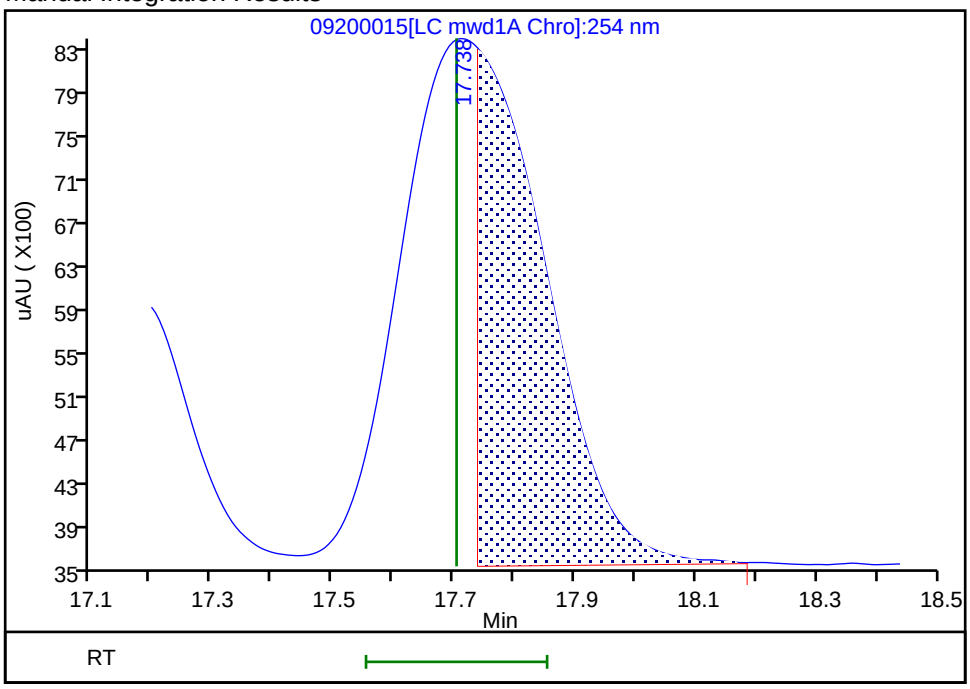
Processing Integration Results

RT: 17.71
Area: 79644
Amount: 0.139458
Amount Units: ug/ml



Manual Integration Results

RT: 17.74
Area: 38099
Amount: 0.095539
Amount Units: ug/ml



Reviewer: LV5D, 21-Sep-2023 11:53:54 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

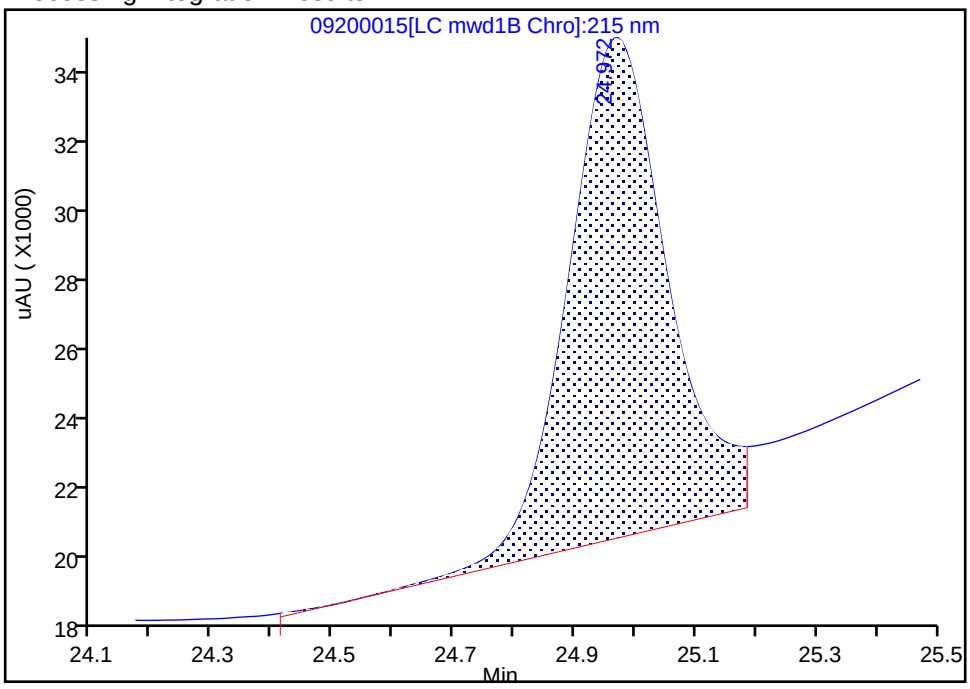
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200015.D				
Injection Date:	20-Sep-2023 22:55:45	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1B, 215 nm		

25 PETN, CAS: 78-11-5

Signal: 1

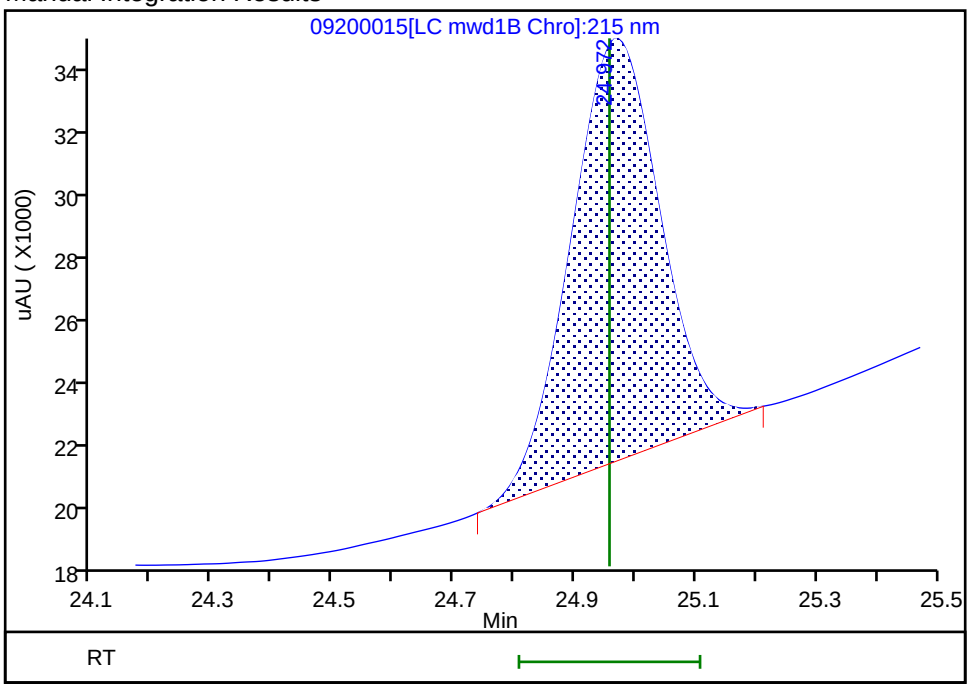
Processing Integration Results

RT: 24.97
Area: 156547
Amount: 1.157497
Amount Units: ug/ml



Manual Integration Results

RT: 24.97
Area: 131058
Amount: 1.003879
Amount Units: ug/ml



Reviewer: LV5D, 21-Sep-2023 16:04:24 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200016.D
Lims ID: IC INT 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 20-Sep-2023 23:30:44 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 3
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub6

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 21-Sep-2023 16:09:16 Calib Date: 21-Sep-2023 05:55:36
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1611

First Level Reviewer: LV5D Date: 21-Sep-2023 11:54:10

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.337	5.324	0.013	19589	0.0502	0.0499	
4 DNX	1	6.224	6.211	0.013	14311	0.0501	0.0496	
5 HMX	1	6.897	6.877	0.020	10122	0.0500	0.0532	
6 MNX	1	7.777	7.751	0.026	15652	0.0584	0.0591	
7 2,4,6-Trinitrophenol	1	8.630	8.551	0.079	7857	0.0500	0.0533	
8 RDX	1	9.210	9.184	0.026	11669	0.0500	0.0529	
9 Nitrobenzene	1	11.810	11.790	0.020	19023	0.0500	0.0495	
$ 10 1,2-Dinitrobenzene	1	12.803	12.784	0.019	12869	0.0500	0.0482	
11 3,5-Dinitroaniline	1	14.670	14.644	0.026	21030	0.0500	0.0507	
12 1,3-Dinitrobenzene	1	14.930	14.904	0.026	29431	0.0500	0.0503	
13 Nitroglycerin	2	15.503	15.484	0.019	70087	0.5000	0.5456	
14 o-Nitrotoluene	1	16.097	16.070	0.027	12234	0.0500	0.0515	
16 p-Nitrotoluene	1	16.323	16.297	0.026	11398	0.0500	0.0533	
17 4-Amino-2,6-dinitrotoluene	1	16.857	16.830	0.027	13571	0.0500	0.0499	
18 m-Nitrotoluene	1	17.190	17.164	0.026	13737	0.0500	0.0508	
19 2-Amino-4,6-dinitrotoluene	1	17.717	17.690	0.027	18455	0.0500	0.0471	M
20 1,3,5-Trinitrobenzene	1	17.730	17.704	0.026	21215	0.0500	0.0532	M
21 2,6-Dinitrotoluene	1	19.023	18.990	0.033	13500	0.0500	0.0492	
22 2,4-Dinitrotoluene	1	19.477	19.444	0.033	26513	0.0500	0.0487	
23 Tetryl	1	22.890	22.837	0.053	15660	0.0500	0.0509	
24 2,4,6-Trinitrotoluene	1	23.697	23.657	0.040	19821	0.0500	0.0502	
25 PETN	2	24.997	24.957	0.040	64272	0.5000	0.5022	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00078	Amount Added:	5.00	Units: uL
8330 DMT_00015	Amount Added:	2.50	Units: uL

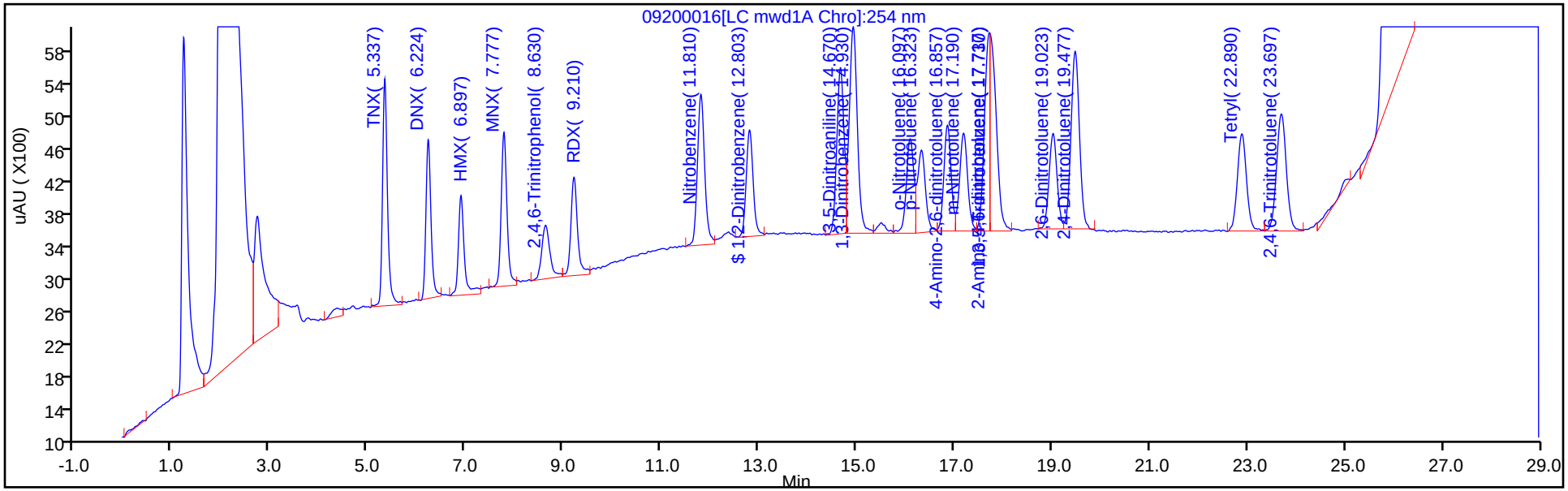
Report Date: 21-Sep-2023 16:09:16 Chrom Revision: 2.3 21-Aug-2023 17:14:06

Eurofins Denver

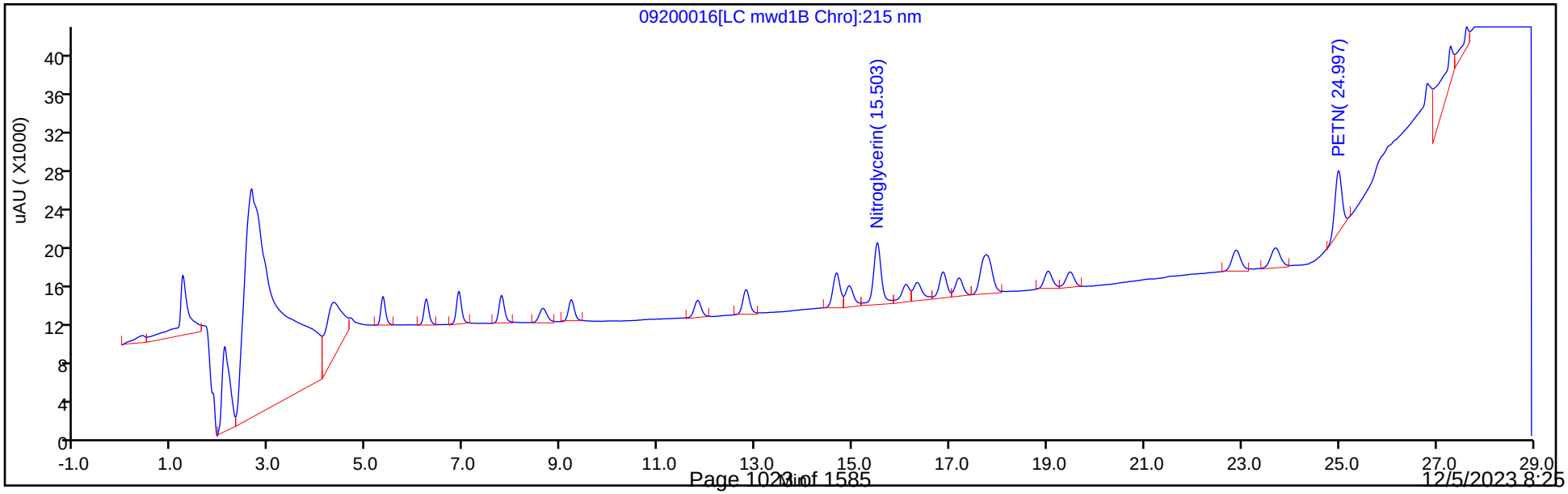
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200016.D

Injection Date:	20-Sep-2023 23:30:44	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC INT 3			Worklist Smp#:	16
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



12/5/2023 8:25 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

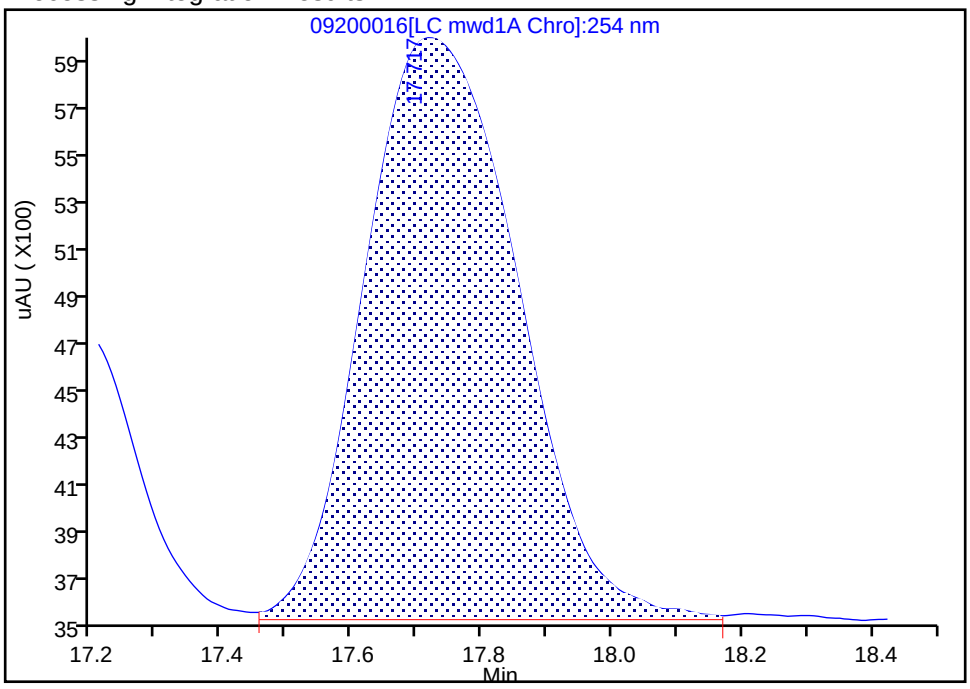
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200016.D				
Injection Date:	20-Sep-2023 23:30:44	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

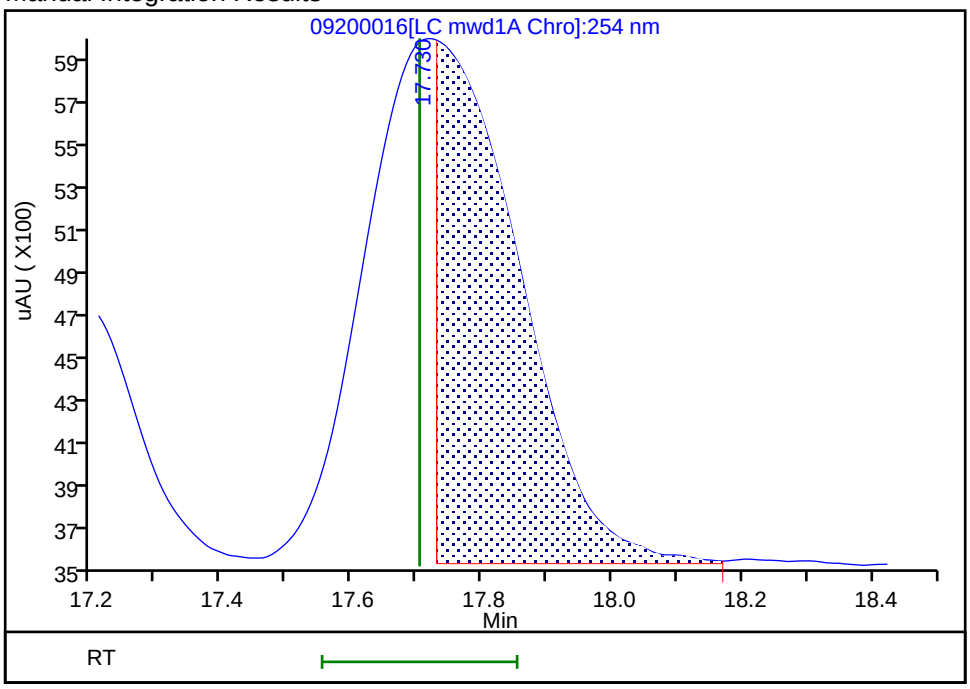
Processing Integration Results

RT: 17.72
Area: 39664
Amount: 0.075560
Amount Units: ug/ml



Manual Integration Results

RT: 17.73
Area: 21215
Amount: 0.053200
Amount Units: ug/ml



Reviewer: LV5D, 21-Sep-2023 11:54:06 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

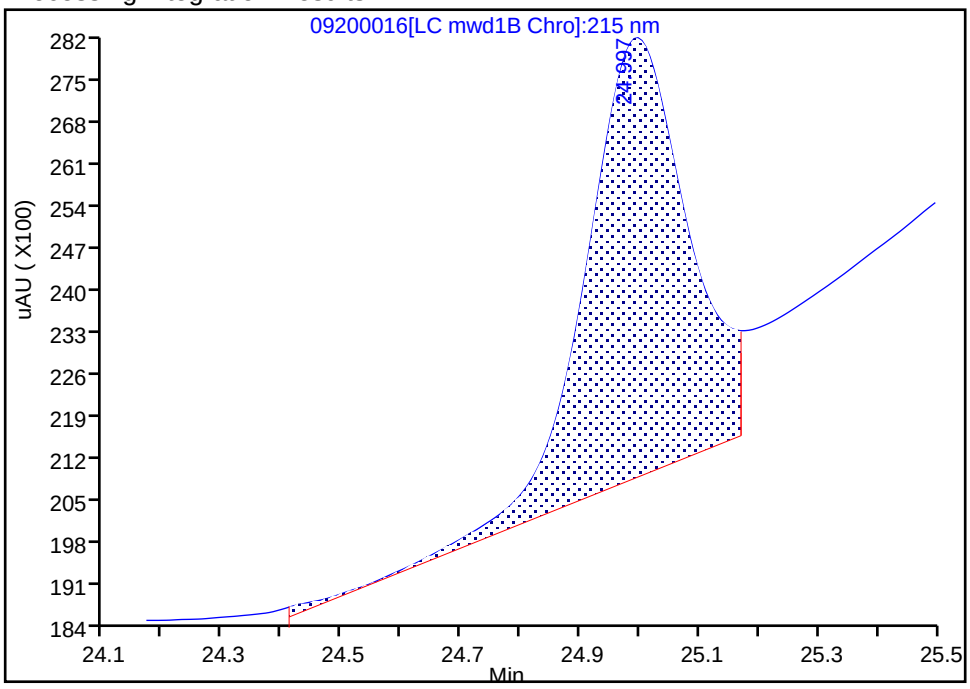
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200016.D				
Injection Date:	20-Sep-2023 23:30:44	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1B, 215 nm		

25 PETN, CAS: 78-11-5

Signal: 1

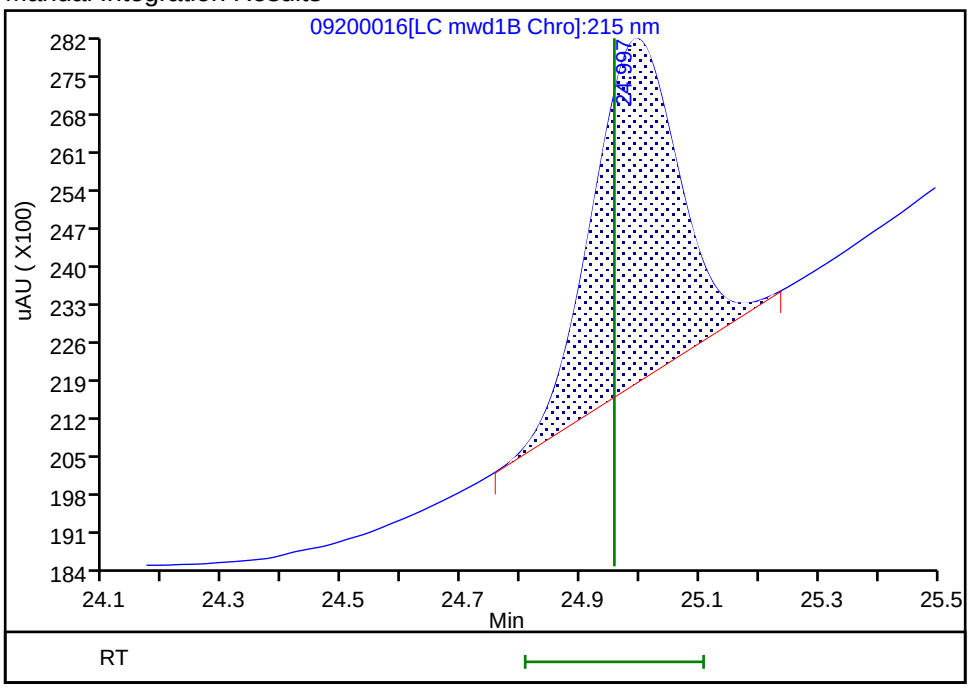
Processing Integration Results

RT: 25.00
Area: 87469
Amount: 0.622994
Amount Units: ug/ml



Manual Integration Results

RT: 25.00
Area: 64272
Amount: 0.502246
Amount Units: ug/ml



Reviewer: LV5D, 21-Sep-2023 16:04:20 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200017.D
Lims ID: IC INT 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 21-Sep-2023 00:05:41 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 2
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub6

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 21-Sep-2023 16:09:17 Calib Date: 21-Sep-2023 05:55:36
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1611

First Level Reviewer: LV5D Date: 21-Sep-2023 11:54:19

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.332	5.324	0.008	8166	0.0201	0.0208	
4 DNX	1	6.225	6.211	0.014	5577	0.0200	0.0193	
5 HMX	1	6.899	6.877	0.022	4021	0.0200	0.0212	
6 MNX	1	7.779	7.751	0.028	6284	0.0233	0.0237	
7 2,4,6-Trinitrophenol	1	8.645	8.551	0.094	3147	0.0200	0.0222	
8 RDX	1	9.212	9.184	0.028	4787	0.0200	0.0217	
9 Nitrobenzene	1	11.812	11.790	0.022	7865	0.0200	0.0205	
$ 10 1,2-Dinitrobenzene	1	12.812	12.784	0.028	6087	0.0200	0.0228	
11 3,5-Dinitroaniline	1	14.665	14.644	0.021	8469	0.0200	0.0203	
12 1,3-Dinitrobenzene	1	14.925	14.904	0.021	11517	0.0200	0.0197	
13 Nitroglycerin	2	15.505	15.484	0.021	25216	0.2000	0.1963	
14 o-Nitrotoluene	1	16.085	16.070	0.015	4996	0.0200	0.0210	
16 p-Nitrotoluene	1	16.325	16.297	0.028	4349	0.0200	0.0203	
17 4-Amino-2,6-dinitrotoluene	1	16.852	16.830	0.022	5544	0.0200	0.0204	
18 m-Nitrotoluene	1	17.179	17.164	0.015	5268	0.0200	0.0195	
19 2-Amino-4,6-dinitrotoluene	1	17.712	17.690	0.022	7537	0.0200	0.0192	M
20 1,3,5-Trinitrobenzene	1	17.732	17.704	0.028	8026	0.0200	0.0201	M
21 2,6-Dinitrotoluene	1	19.019	18.990	0.029	5759	0.0200	0.0210	
22 2,4-Dinitrotoluene	1	19.465	19.444	0.021	11205	0.0200	0.0206	
23 Tetryl	1	22.879	22.837	0.042	6238	0.0200	0.0203	
24 2,4,6-Trinitrotoluene	1	23.685	23.657	0.028	7880	0.0200	0.0200	
25 PETN	2	24.992	24.957	0.035	23524	0.2000	0.1962	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00078	Amount Added:	2.00	Units: uL
8330 DMT_00015	Amount Added:	1.00	Units: uL

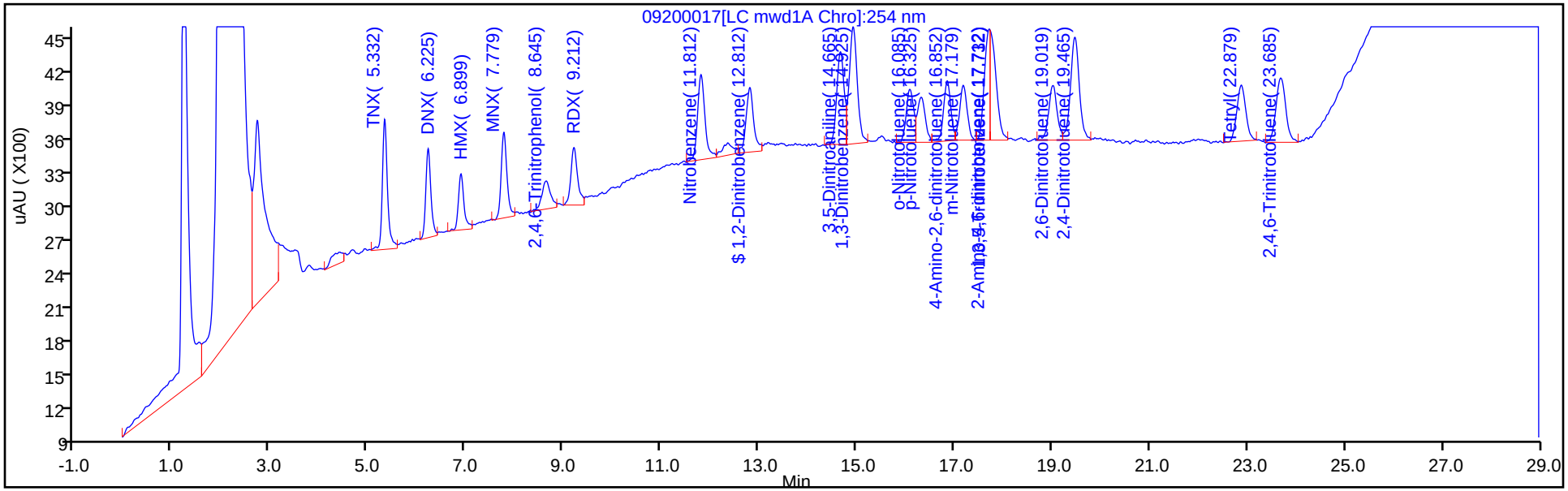
Report Date: 21-Sep-2023 16:09:17 Chrom Revision: 2.3 21-Aug-2023 17:14:06

Eurofins Denver

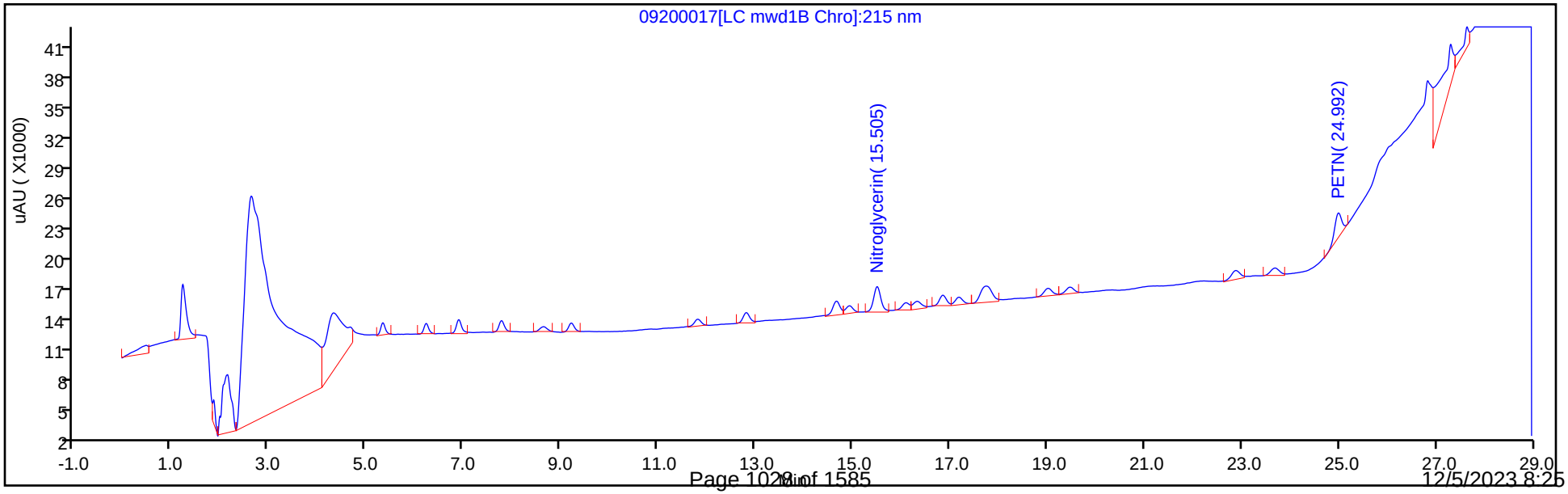
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200017.D

Injection Date:	21-Sep-2023 00:05:41	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC INT 2			Worklist Smp#:	17
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



12/5/2023 8:25 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

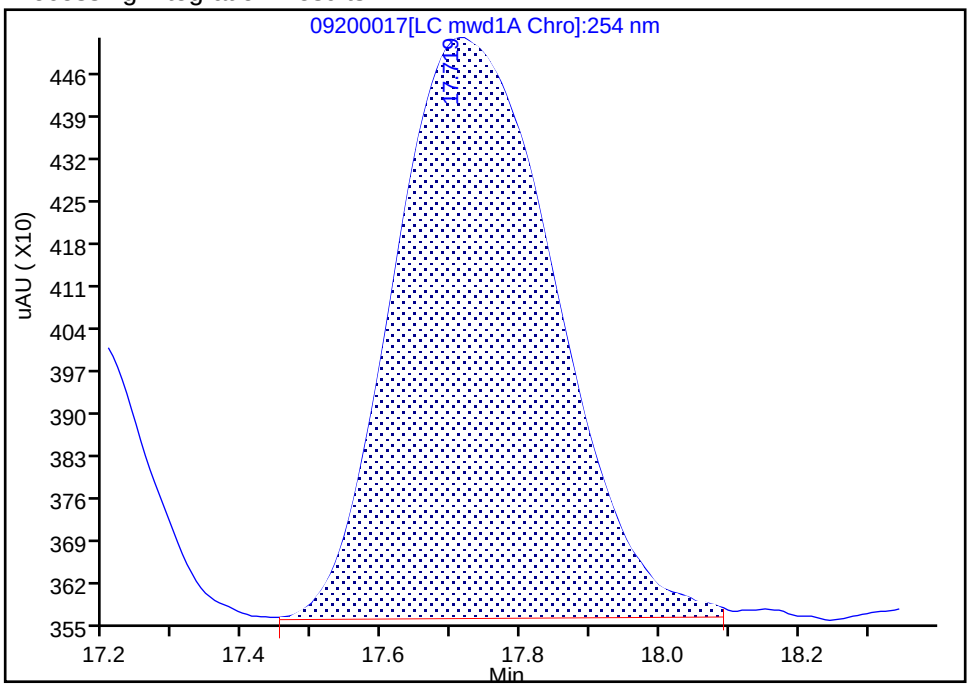
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200017.D				
Injection Date:	21-Sep-2023 00:05:41	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

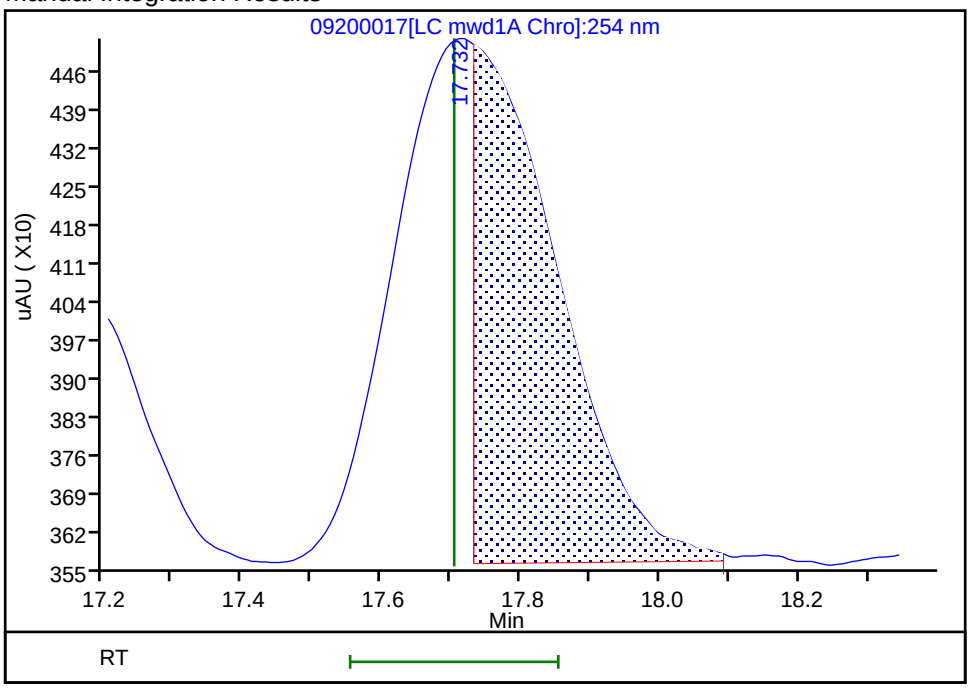
Processing Integration Results

RT: 17.72
Area: 15562
Amount: 0.027985
Amount Units: ug/ml



Manual Integration Results

RT: 17.73
Area: 8026
Amount: 0.020126
Amount Units: ug/ml



Reviewer: LV5D, 21-Sep-2023 11:54:17 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

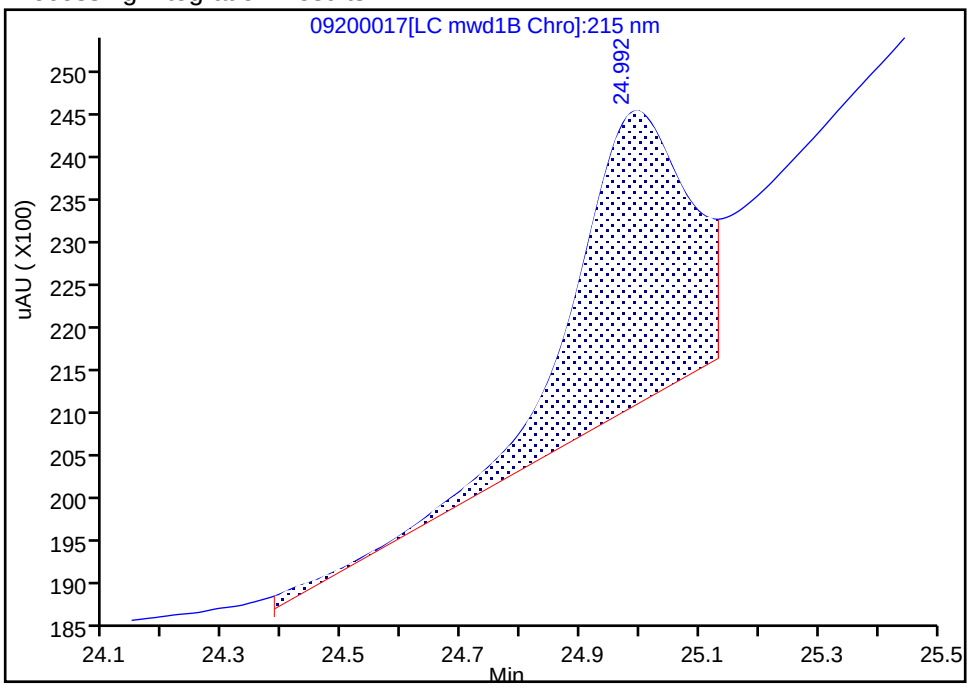
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200017.D				
Injection Date:	21-Sep-2023 00:05:41	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1B, 215 nm		

25 PETN, CAS: 78-11-5

Signal: 1

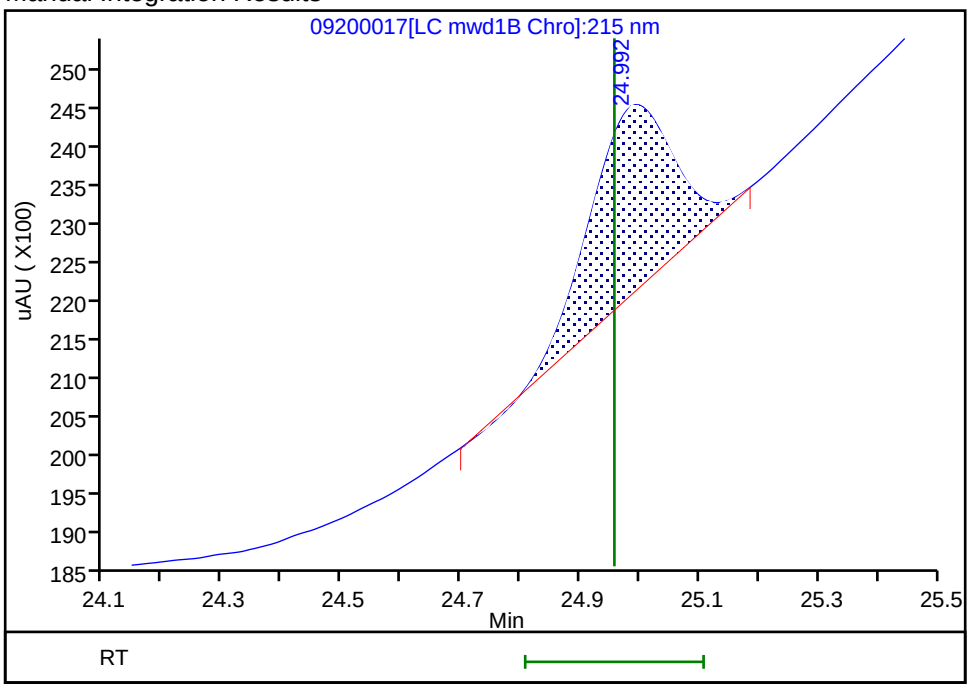
Processing Integration Results

RT: 24.99
Area: 44965
Amount: 0.276574
Amount Units: ug/ml



Manual Integration Results

RT: 24.99
Area: 23524
Amount: 0.196186
Amount Units: ug/ml



Reviewer: LV5D, 21-Sep-2023 16:04:16 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200018.D
Lims ID: IC INT 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 21-Sep-2023 00:40:35 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 1
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub6

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 21-Sep-2023 16:09:17 Calib Date: 21-Sep-2023 05:55:36
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1611

First Level Reviewer: LV5D Date: 21-Sep-2023 11:54:48

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.337	5.324	0.013	4274	0.0100	0.0109	
4 DNX	1	6.224	6.211	0.013	3185	0.0100	0.0110	
5 HMX	1	6.890	6.877	0.013	2354	0.0100	0.0124	
6 MNX	1	7.777	7.751	0.026	3205	0.0117	0.0121	
7 2,4,6-Trinitrophenol	1	8.644	8.551	0.093	1198	0.0100	0.009326	M
8 RDX	1	9.217	9.184	0.033	2784	0.0100	0.0126	
9 Nitrobenzene	1	11.817	11.790	0.027	4374	0.0100	0.0114	
$ 10 1,2-Dinitrobenzene	1	12.797	12.784	0.013	3100	0.0100	0.0116	
11 3,5-Dinitroaniline	1	14.650	14.644	0.006	4155	0.0100	0.009883	
12 1,3-Dinitrobenzene	1	14.923	14.904	0.019	5958	0.0100	0.0102	
13 Nitroglycerin	2	15.497	15.484	0.013	13016	0.1000	0.1013	
14 o-Nitrotoluene	1	16.097	16.070	0.027	2442	0.0100	0.0103	M
16 p-Nitrotoluene	1	16.323	16.297	0.026	1802	0.0100	0.008431	M
17 4-Amino-2,6-dinitrotoluene	1	16.857	16.830	0.027	2844	0.0100	0.0105	
18 m-Nitrotoluene	1	17.177	17.164	0.013	2758	0.0100	0.0102	
19 2-Amino-4,6-dinitrotoluene	1	17.730	17.690	0.040	3899	0.0100	0.0100	M
20 1,3,5-Trinitrobenzene	1	17.737	17.704	0.033	4118	0.0100	0.0103	M
21 2,6-Dinitrotoluene	1	19.023	18.990	0.033	3091	0.0100	0.0113	
22 2,4-Dinitrotoluene	1	19.463	19.444	0.019	5602	0.0100	0.0103	
23 Tetryl	1	22.884	22.837	0.047	3199	0.0100	0.0104	
24 2,4,6-Trinitrotoluene	1	23.684	23.657	0.027	3814	0.0100	0.009658	
25 PETN	2	25.010	24.957	0.053	10832	0.1000	0.1009	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00078	Amount Added:	1.00	Units: uL
8330 DMT_00015	Amount Added:	0.50	Units: uL

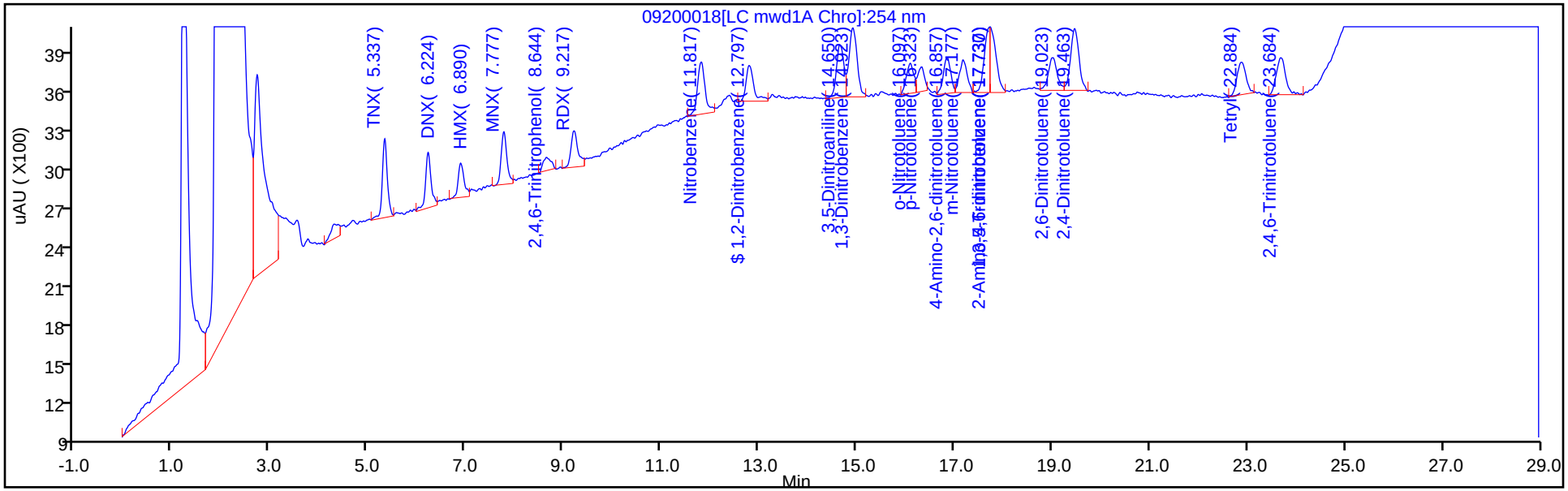
Report Date: 21-Sep-2023 16:09:17 Chrom Revision: 2.3 21-Aug-2023 17:14:06

Eurofins Denver

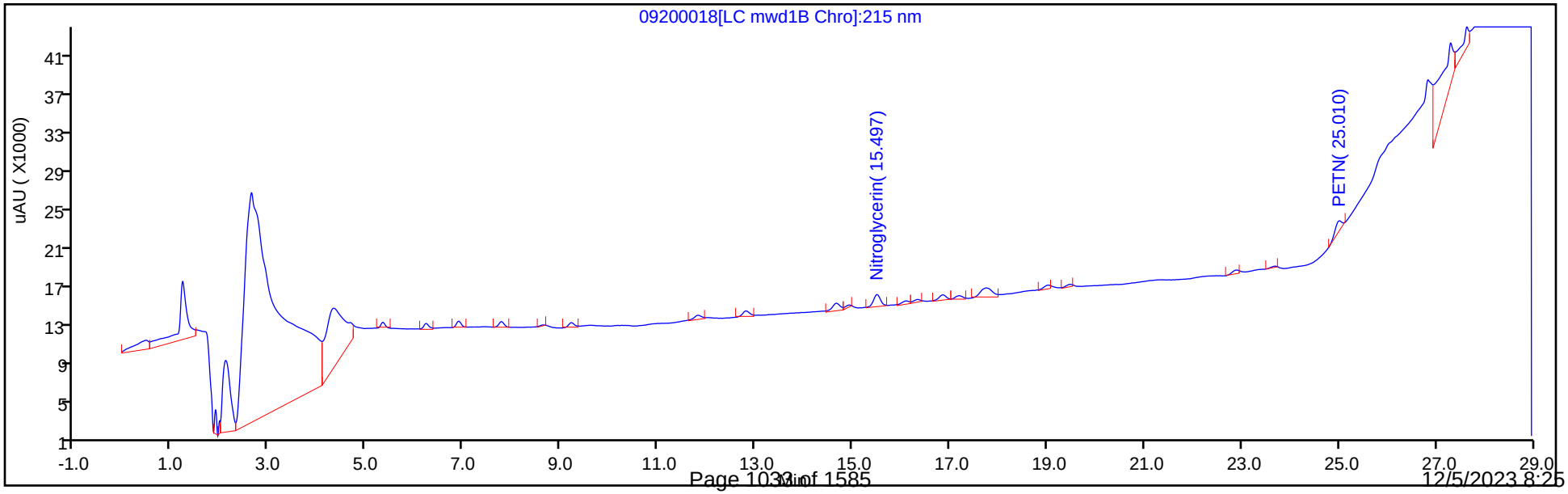
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200018.D

Injection Date:	21-Sep-2023 00:40:35	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC INT 1			Worklist Smp#:	18
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



12/5/2023 8:25 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

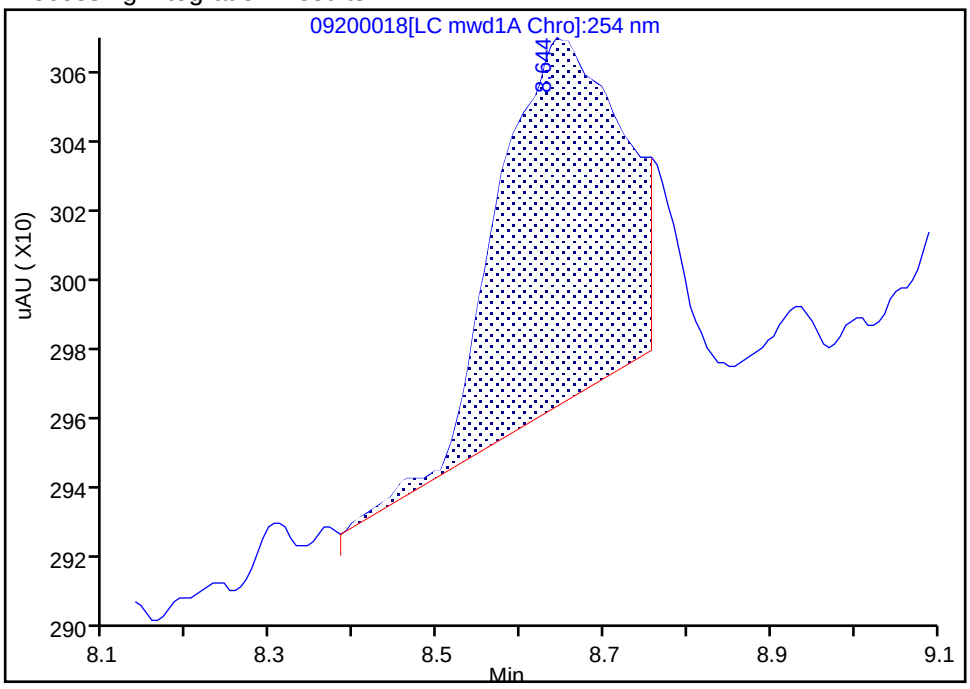
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Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

7 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

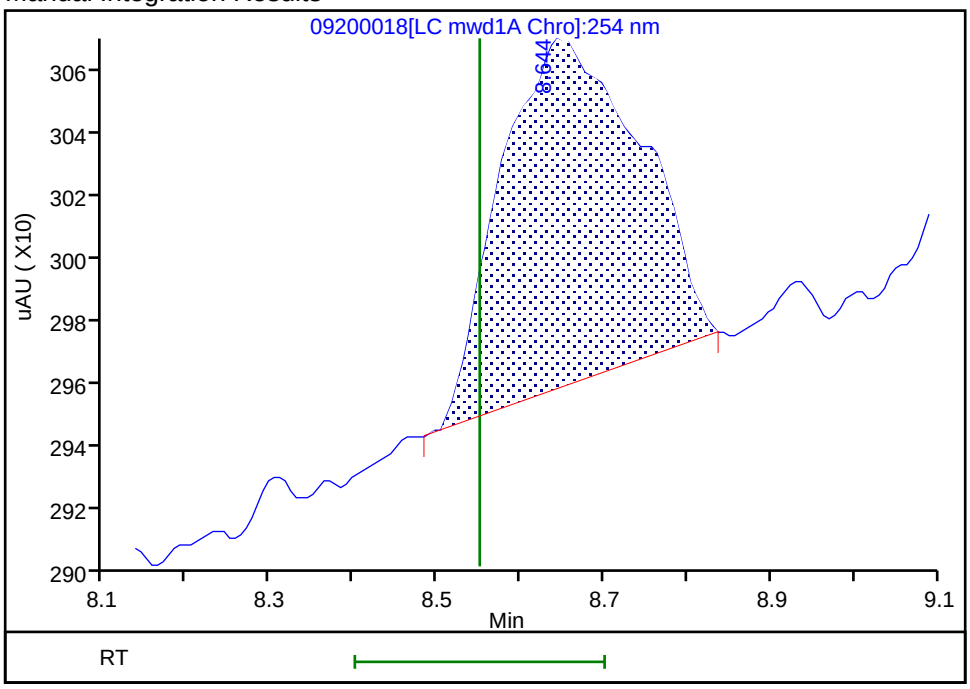
Processing Integration Results

RT: 8.64
Area: 1007
Amount: 0.007073
Amount Units: ug/ml



Manual Integration Results

RT: 8.64
Area: 1198
Amount: 0.009326
Amount Units: ug/ml



Reviewer: LV5D, 21-Sep-2023 11:54:47 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

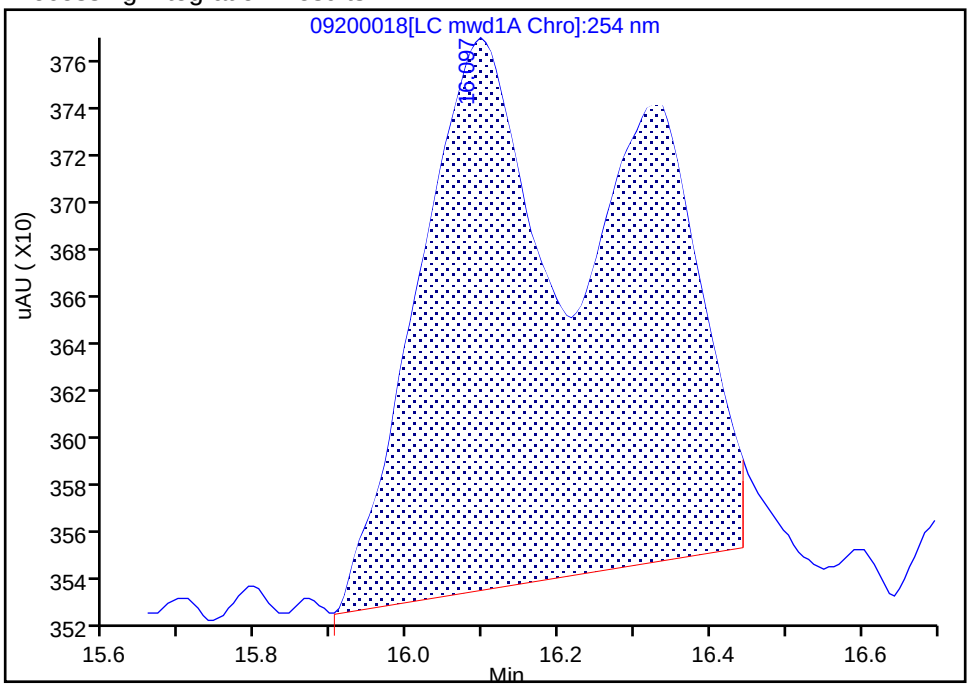
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Injection Date:	21-Sep-2023 00:40:35	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

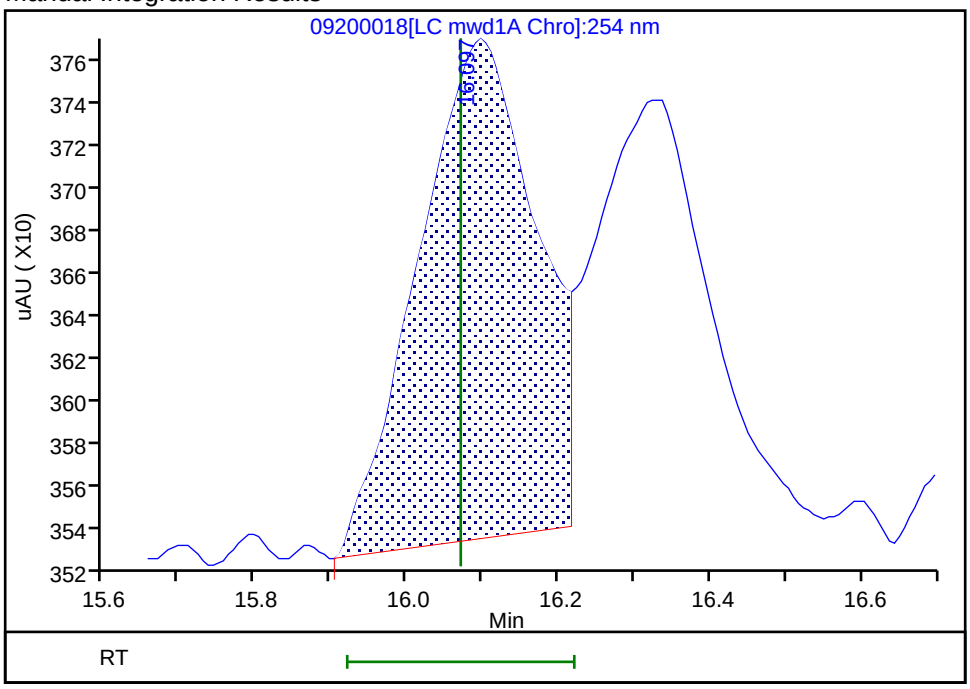
Processing Integration Results

RT: 16.10
Area: 4234
Amount: 0.012292
Amount Units: ug/ml



Manual Integration Results

RT: 16.10
Area: 2442
Amount: 0.010278
Amount Units: ug/ml



Reviewer: LV5D, 21-Sep-2023 11:54:40 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

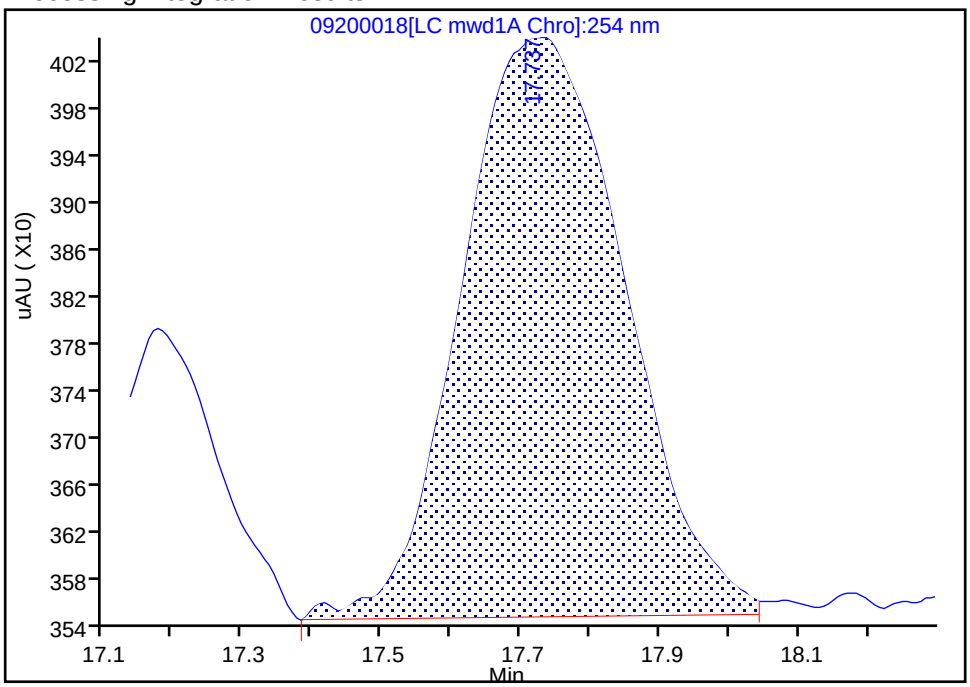
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Injection Date:	21-Sep-2023 00:40:35	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

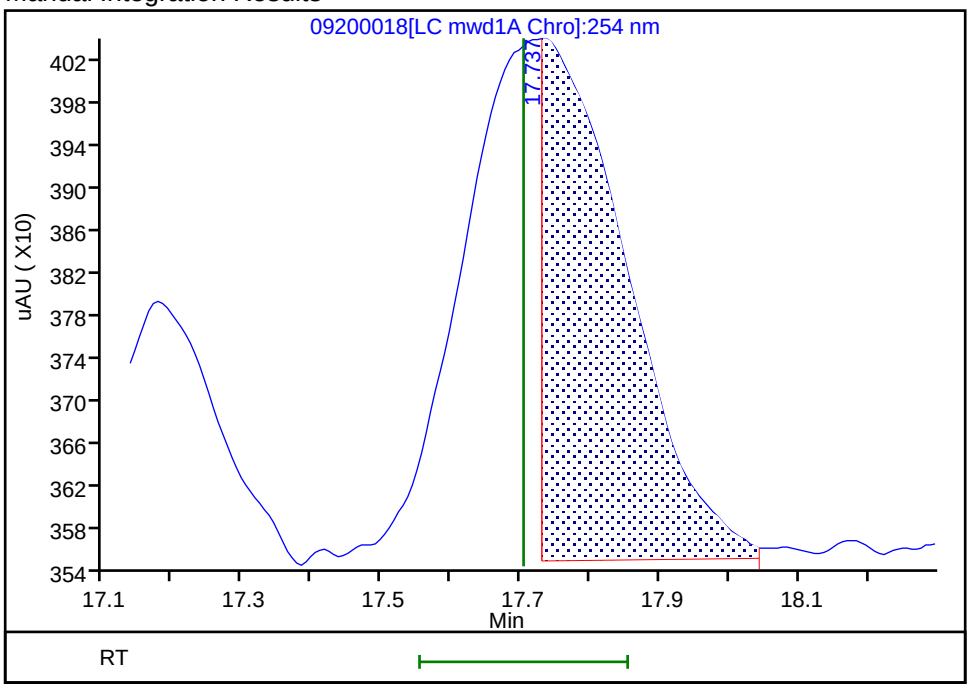
Processing Integration Results

RT: 17.74
Area: 8014
Amount: 0.013587
Amount Units: ug/ml



Manual Integration Results

RT: 17.74
Area: 4118
Amount: 0.010326
Amount Units: ug/ml



Reviewer: LV5D, 21-Sep-2023 11:54:30 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

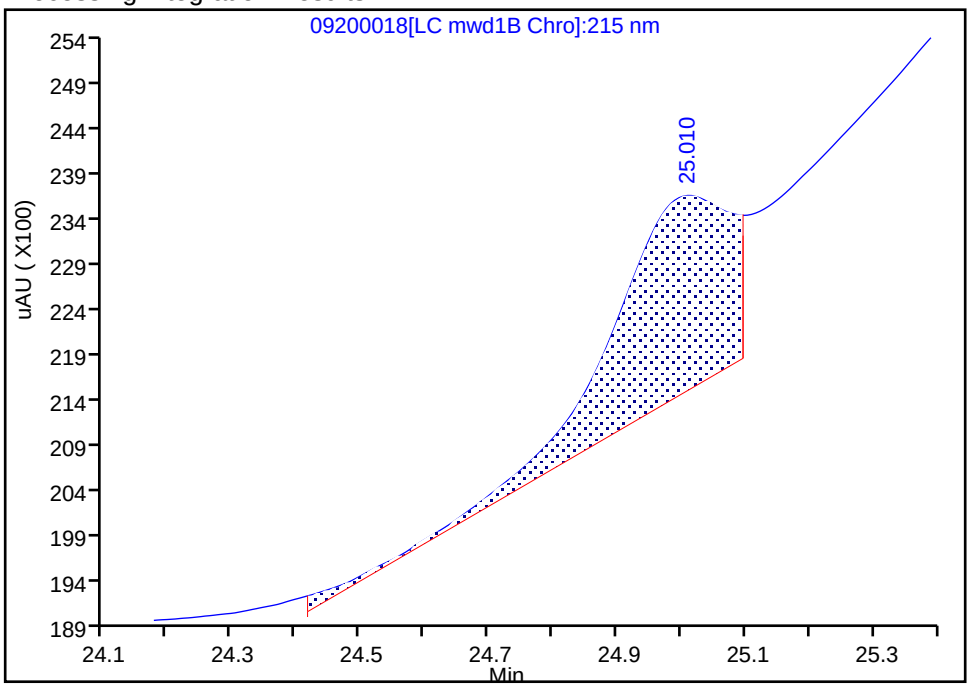
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Injection Date:	21-Sep-2023 00:40:35	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1B, 215 nm		

25 PETN, CAS: 78-11-5

Signal: 1

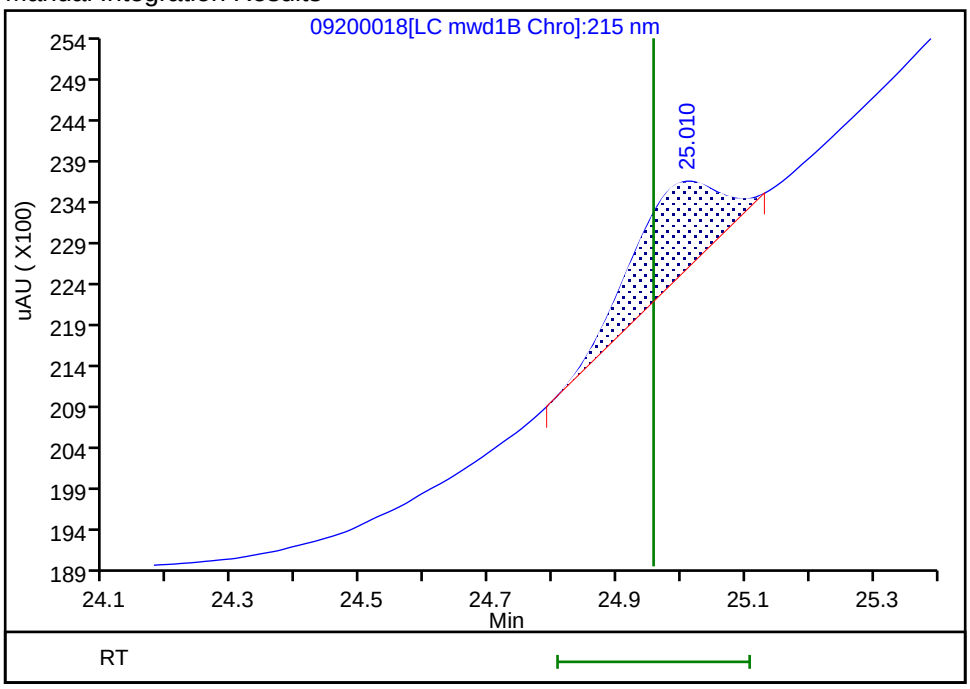
Processing Integration Results

RT: 25.01
Area: 28300
Amount: 0.095720
Amount Units: ug/ml



Manual Integration Results

RT: 25.01
Area: 10832
Amount: 0.100855
Amount Units: ug/ml



Reviewer: LV5D, 21-Sep-2023 16:04:12 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Lab Sample ID: ICV 280-627290/19 | Calibration Date: 09/26/2023 00:06

Instrument ID: CHHPLC_G2_LUNA | Calib Start Date: 09/25/2023 18:42

GC Column: Luna-phenylhex ID: 4.60(mm) | Calib End Date: 09/25/2023 23:30

Lab File ID: 09250019.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Lin2		354446		234	250	-6.4	20.0
DNX	Ave	288240	264076		230	251	-8.4	20.0
HMX	Ave	173471	179932		259	250	3.7	20.0
MNX	Ave	261824	242753		271	293	-7.3	20.0
Picric acid	Ave	143426	142924		249	250	-0.4	20.0
RDX	Ave	207587	205284		247	250	-1.1	20.0
Nitrobenzene	Ave	371392	372800		251	250	0.4	20.0
3,5-Dinitroaniline	Lin2		422768		257	250	2.7	20.0
1,3-Dinitrobenzene	Ave	579530	571728		247	250	-1.3	20.0
Nitroglycerin	Ave	124215	124510		2510	2500	0.2	20.0
2-Nitrotoluene	Ave	247036	244804		248	250	-0.9	20.0
4-Nitrotoluene	Lin2		216100		246	250	-1.7	20.0
4-Amino-2,6-dinitrotoluene	Lin2		276988		252	250	0.8	20.0
3-Nitrotoluene	Lin2		273212		249	250	-0.4	20.0
2-Amino-4,6-dinitrotoluene	Lin2		392380		257	250	2.8	20.0
1,3,5-Trinitrobenzene	Ave	411631	399928		243	250	-2.8	20.0
2,6-Dinitrotoluene	Lin2		266240		252	250	0.8	20.0
2,4-Dinitrotoluene	Ave	545087	541828		249	250	-0.6	20.0
Tetryl	Ave	308340	304404		247	250	-1.3	20.0
2,4,6-Trinitrotoluene	Ave	384986	396652		258	250	3.0	20.0
PETN	Ave	123011	129159		2620	2500	5.0	20.0
1,2-Dinitrobenzene	Ave	256773	258484		252	250	0.7	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: ICV 280-627290/19 Calibration Date: 09/26/2023 00:06

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 09/25/2023 18:42

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 09/25/2023 23:30

Lab File ID: 09250019.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.29	5.14	5.44
DNX	6.13	5.99	6.29
HMX	6.78	6.64	6.94
MNX	7.63	7.49	7.79
Picric acid	8.65	8.51	8.81
RDX	9.02	8.89	9.19
Nitrobenzene	11.57	11.45	11.75
3,5-Dinitroaniline	14.37	14.23	14.53
1,3-Dinitrobenzene	14.67	14.52	14.82
Nitroglycerin	15.11	14.96	15.26
2-Nitrotoluene	15.72	15.59	15.89
4-Nitrotoluene	15.95	15.81	16.11
4-Amino-2,6-dinitrotoluene	16.46	16.33	16.63
3-Nitrotoluene	16.78	16.65	16.95
2-Amino-4,6-dinitrotoluene	17.26	17.13	17.43
1,3,5-Trinitrobenzene	17.47	17.35	17.65
2,6-Dinitrotoluene	18.57	18.45	18.75
2,4-Dinitrotoluene	19.02	18.90	19.20
Tetryl	22.23	22.09	22.39
2,4,6-Trinitrotoluene	23.09	22.95	23.25
PETN	24.21	24.06	24.36
1,2-Dinitrobenzene	12.51	12.39	12.69

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250019.D
Lims ID: ICV INT
Client ID:
Sample Type: ICV
Inject. Date: 26-Sep-2023 00:06:31 ALS Bottle#: 7 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV INT
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist:

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:30:47 Calib Date: 25-Sep-2023 23:30:18
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250018.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 14:05:06

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.286	5.291	-0.005	88700	0.2503	0.2343	
4 DNX	1	6.132	6.144	-0.012	66283	0.2510	0.2300	
6 HMX	1	6.779	6.791	-0.012	44983	0.2500	0.2593	
7 MNX	1	7.632	7.644	-0.012	71066	0.2928	0.2714	
5 2,4,6-Trinitrophenol	1	8.646	8.664	-0.018	35731	0.2500	0.2491	
8 RDX	1	9.019	9.038	-0.019	51321	0.2500	0.2472	
9 Nitrobenzene	1	11.566	11.598	-0.032	93200	0.2500	0.2509	
$ 10 1,2-Dinitrobenzene	1	12.512	12.538	-0.026	64621	0.2500	0.2517	
11 3,5-Dinitroaniline	1	14.366	14.378	-0.012	105692	0.2500	0.2568	
12 1,3-Dinitrobenzene	1	14.666	14.671	-0.005	142932	0.2500	0.2466	
13 Nitroglycerin	2	15.106	15.111	-0.005	311274	2.50	2.51	
14 o-Nitrotoluene	1	15.719	15.738	-0.019	61201	0.2500	0.2477	
15 p-Nitrotoluene	1	15.946	15.958	-0.012	54025	0.2500	0.2458	
16 4-Amino-2,6-dinitrotoluene	1	16.459	16.478	-0.019	69247	0.2500	0.2520	
17 m-Nitrotoluene	1	16.779	16.804	-0.025	68303	0.2500	0.2491	
18 2-Amino-4,6-dinitrotoluene	1	17.259	17.284	-0.025	98095	0.2500	0.2569	
19 1,3,5-Trinitrobenzene	1	17.472	17.498	-0.026	99982	0.2500	0.2429	
20 2,6-Dinitrotoluene	1	18.566	18.598	-0.032	66560	0.2500	0.2520	
21 2,4-Dinitrotoluene	1	19.019	19.051	-0.032	135457	0.2500	0.2485	
22 Tetryl	1	22.232	22.244	-0.012	76101	0.2500	0.2468	
23 2,4,6-Trinitrotoluene	1	23.092	23.104	-0.012	99163	0.2500	0.2576	
24 PETN	2	24.206	24.211	-0.005	322898	2.50	2.62	

QC Flag Legend
Processing Flags

Reagents:

8330Surrogate_00150	Amount Added:	25.00	Units: uL
8330_OP_DMT_00022	Amount Added:	25.00	Units: uL
8330 LCS_00130	Amount Added:	25.00	Units: uL

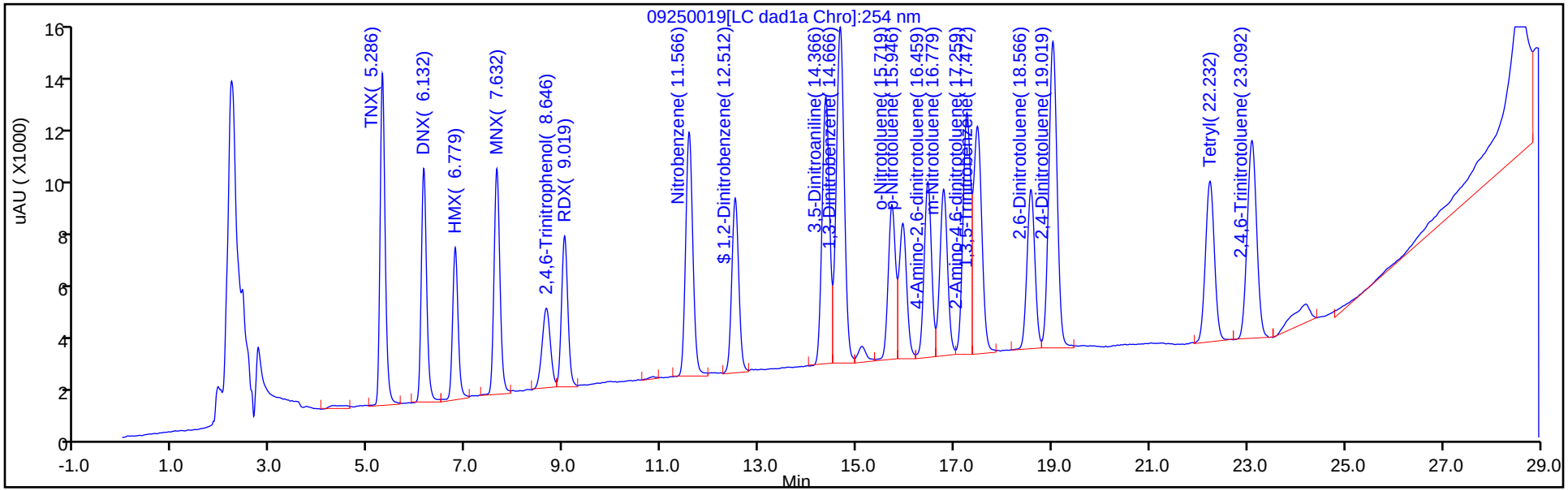
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Eurofins Denver

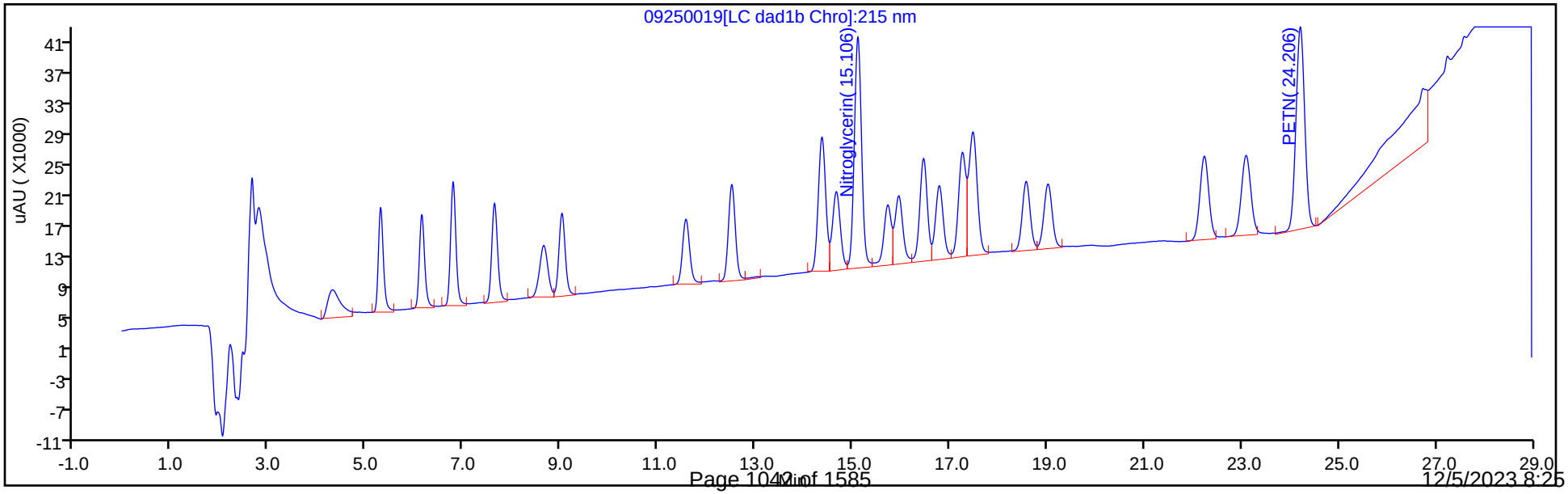
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Injection Date:	26-Sep-2023 00:06:31	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	ICV INT			Worklist Smp#:	19
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: ICV 280-627290/28 Calibration Date: 09/26/2023 05:31

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 09/26/2023 00:42

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 09/26/2023 04:54

Lab File ID: 09250028.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,6-diamino-4-nitrotoluene	Ave	387643	365704		236	250	-5.7	20.0
2,4-diamino-6-nitrotoluene	Ave	233949	220120		235	250	-5.9	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: ICV 280-627290/28 Calibration Date: 09/26/2023 05:31

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 09/26/2023 00:42

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 09/26/2023 04:54

Lab File ID: 09250028.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	4.22	4.08	4.38
2,4-diamino-6-nitrotoluene	4.79	4.66	4.96

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250028.D
Lims ID: ICV ADD
Client ID:
Sample Type: ICV
Inject. Date: 26-Sep-2023 05:31:02 ALS Bottle#: 8 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist:

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:30:47 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 14:15:24

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.224	4.230	-0.006	91426	0.2500	0.2359	
2 2,4-diamino-6-nitrotoluene	1	4.790	4.810	-0.020	55030	0.2500	0.2352	

QC Flag Legend
Processing Flags

Reagents:
8330DiaminLCS_00060 Amount Added: 12.50 Units: uL

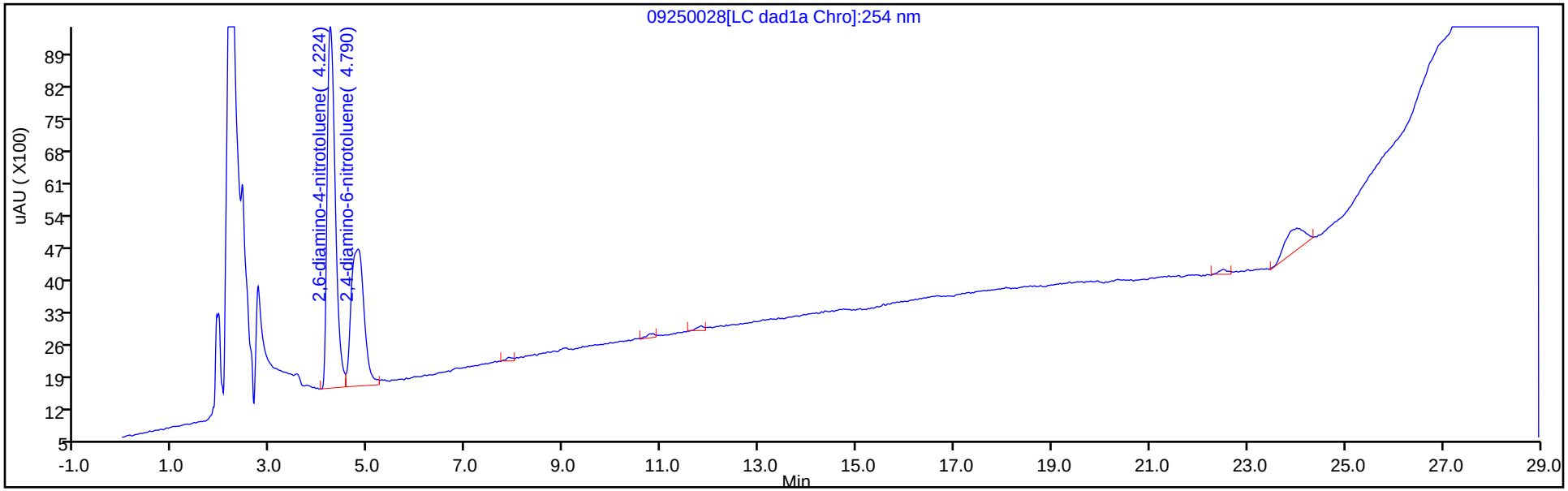
Report Date: 26-Sep-2023 15:31:32 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

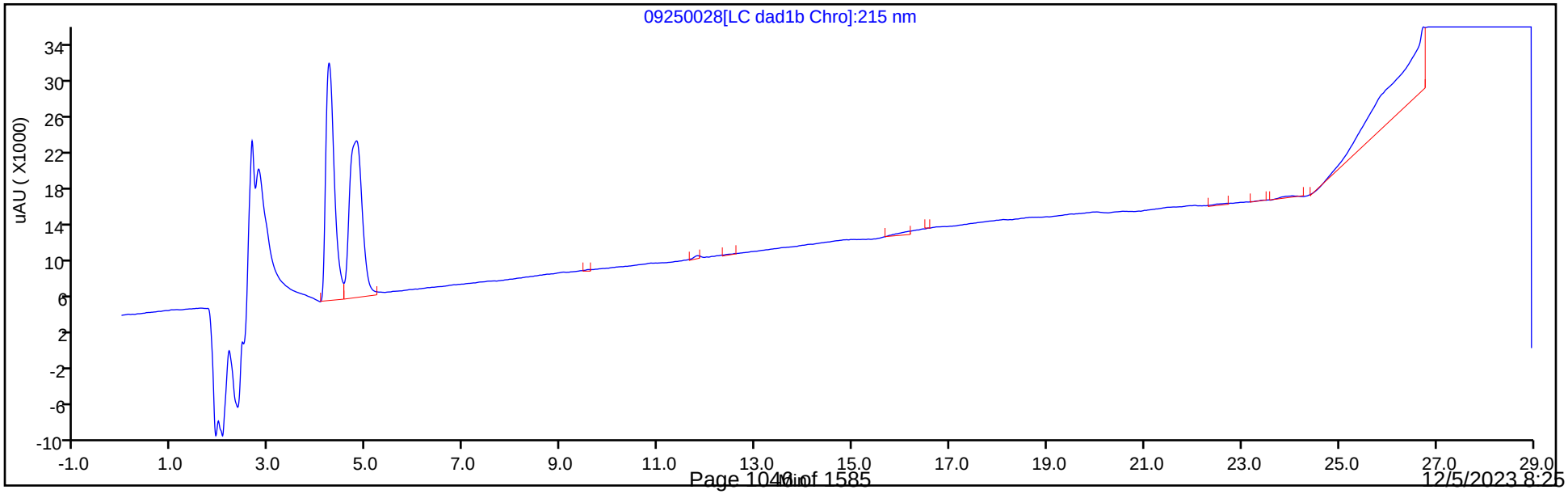
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250028.d

Injection Date:	26-Sep-2023 05:31:02	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	ICV ADD			Worklist Smp#:	28
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-629682/20 | Calibration Date: 10/13/2023 23:24

Instrument ID: CHHPLC_G2_LUNA | Calib Start Date: 09/25/2023 18:42

GC Column: Luna-phenylhex ID: 4.60(mm) | Calib End Date: 09/25/2023 23:30

Lab File ID: 10130020.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Lin2		386776		256	251	2.2	20.0
DNX	Ave	288240	285550		248	250	-0.9	20.0
HMX	Ave	173471	180468		260	250	4.0	20.0
MNX	Ave	261824	265498		296	292	1.4	20.0
Picric acid	Ave	143426	141096		246	250	-1.6	20.0
RDX	Ave	207587	214096		258	250	3.1	20.0
Nitrobenzene	Ave	371392	378808		255	250	2.0	20.0
3,5-Dinitroaniline	Lin2		432932		263	250	5.2	20.0
1,3-Dinitrobenzene	Ave	579530	579472		250	250	-0.0	20.0
Nitroglycerin	Ave	124215	124439		2500	2500	0.2	20.0
2-Nitrotoluene	Ave	247036	239004		242	250	-3.3	20.0
4-Nitrotoluene	Lin2		214608		244	250	-2.4	20.0
4-Amino-2,6-dinitrotoluene	Lin2		278336		253	250	1.3	20.0
3-Nitrotoluene	Lin2		273976		250	250	-0.0	20.0
2-Amino-4,6-dinitrotoluene	Lin2		438500		288	250	15.0	20.0
1,3,5-Trinitrobenzene	Ave	411631	389540		237	250	-5.4	20.0
2,6-Dinitrotoluene	Lin2		270288		256	250	2.3	20.0
2,4-Dinitrotoluene	Ave	545087	551224		253	250	1.1	20.0
Tetryl	Ave	308340	308644		250	250	0.1	20.0
2,4,6-Trinitrotoluene	Ave	384986	403648		262	250	4.8	20.0
PETN	Ave	123011	128908		2620	2500	4.8	20.0
1,2-Dinitrobenzene	Ave	256773	258772		252	250	0.8	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-629682/20 Calibration Date: 10/13/2023 23:24

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 09/25/2023 18:42

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 09/25/2023 23:30

Lab File ID: 10130020.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.33	5.16	5.46
DNX	6.20	6.02	6.32
HMX	6.86	6.68	6.98
MNX	7.71	7.53	7.83
Picric acid	8.80	8.71	9.01
RDX	9.12	8.93	9.23
Nitrobenzene	11.73	11.50	11.80
3,5-Dinitroaniline	14.58	14.33	14.63
1,3-Dinitrobenzene	14.86	14.61	14.91
Nitroglycerin	15.34	15.07	15.37
2-Nitrotoluene	15.98	15.70	16.00
4-Nitrotoluene	16.21	15.93	16.23
4-Amino-2,6-dinitrotoluene	16.75	16.45	16.75
3-Nitrotoluene	17.06	16.77	17.07
2-Amino-4,6-dinitrotoluene	17.57	17.27	17.57
1,3,5-Trinitrobenzene	17.69	17.43	17.73
2,6-Dinitrotoluene	18.86	18.59	18.89
2,4-Dinitrotoluene	19.31	19.05	19.35
Tetryl	22.55	22.33	22.63
2,4,6-Trinitrotoluene	23.39	23.18	23.48
PETN	24.54	24.37	24.67
1,2-Dinitrobenzene	12.71	12.47	12.77

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20231013-126503.b\10130020.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 13-Oct-2023 23:24:47 ALS Bottle#: 7 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub12

Method: \\chromfs\Denver\ChromData\G2_LUNA\20231013-126503.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 16-Oct-2023 15:11:52 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1636

First Level Reviewer: K8YG Date: 16-Oct-2023 15:11:52

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.262	4.244	0.018	102486	0.2500	0.2644	
2 2,4-diamino-6-nitrotoluene	1	4.875	4.857	0.018	61728	0.2500	0.2639	
3 TNX	1	5.329	5.310	0.019	96984	0.2508	0.2564	
4 DNX	1	6.195	6.170	0.025	71459	0.2503	0.2479	
6 HMX	1	6.862	6.830	0.032	45117	0.2500	0.2601	
7 MNX	1	7.709	7.684	0.025	77459	0.2918	0.2958	
5 2,4,6-Trinitrophenol	1	8.802	8.864	-0.062	35274	0.2500	0.2459	
8 RDX	1	9.122	9.077	0.045	53524	0.2500	0.2578	
9 Nitrobenzene	1	11.729	11.650	0.079	94702	0.2500	0.2550	
$ 10 1,2-Dinitrobenzene	1	12.709	12.617	0.092	64693	0.2500	0.2519	
11 3,5-Dinitroaniline	1	14.582	14.477	0.105	108233	0.2500	0.2630	
12 1,3-Dinitrobenzene	1	14.862	14.757	0.105	144868	0.2500	0.2500	
13 Nitroglycerin	2	15.342	15.223	0.119	311098	2.50	2.50	
14 o-Nitrotoluene	1	15.975	15.850	0.125	59751	0.2500	0.2419	a
15 p-Nitrotoluene	1	16.209	16.077	0.132	53652	0.2500	0.2441	a
16 4-Amino-2,6-dinitrotoluene	1	16.749	16.603	0.146	69584	0.2500	0.2533	
17 m-Nitrotoluene	1	17.062	16.923	0.139	68494	0.2500	0.2498	
18 2-Amino-4,6-dinitrotoluene	1	17.569	17.423	0.146	109625	0.2500	0.2876	Ma
19 1,3,5-Trinitrobenzene	1	17.689	17.583	0.106	97385	0.2500	0.2366	M
20 2,6-Dinitrotoluene	1	18.862	18.743	0.119	67572	0.2500	0.2558	
21 2,4-Dinitrotoluene	1	19.309	19.197	0.112	137806	0.2500	0.2528	
22 Tetryl	1	22.549	22.477	0.072	77161	0.2500	0.2502	
23 2,4,6-Trinitrotoluene	1	23.389	23.330	0.059	100912	0.2500	0.2621	
24 PETN	2	24.535	24.517	0.018	322269	2.50	2.62	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330 DMT_00015	Amount Added:	12.50	Units: uL
8330IntermStk_00078	Amount Added:	25.00	Units: uL
8330_ADDs_00037	Amount Added:	12.50	Units: uL

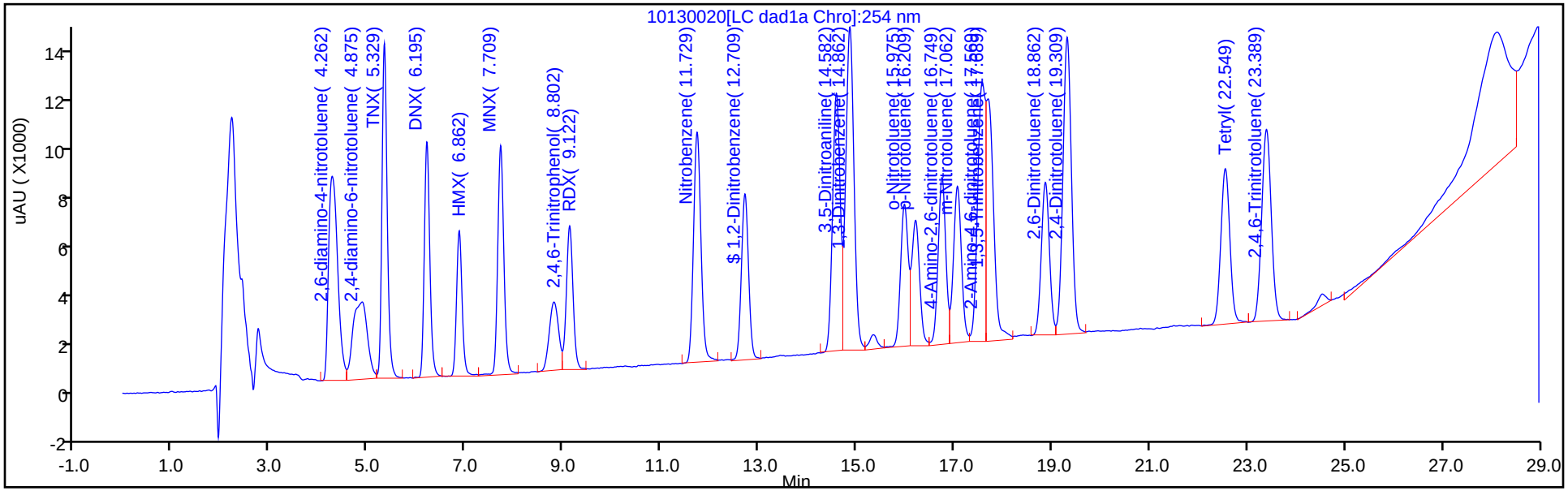
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Eurofins Denver

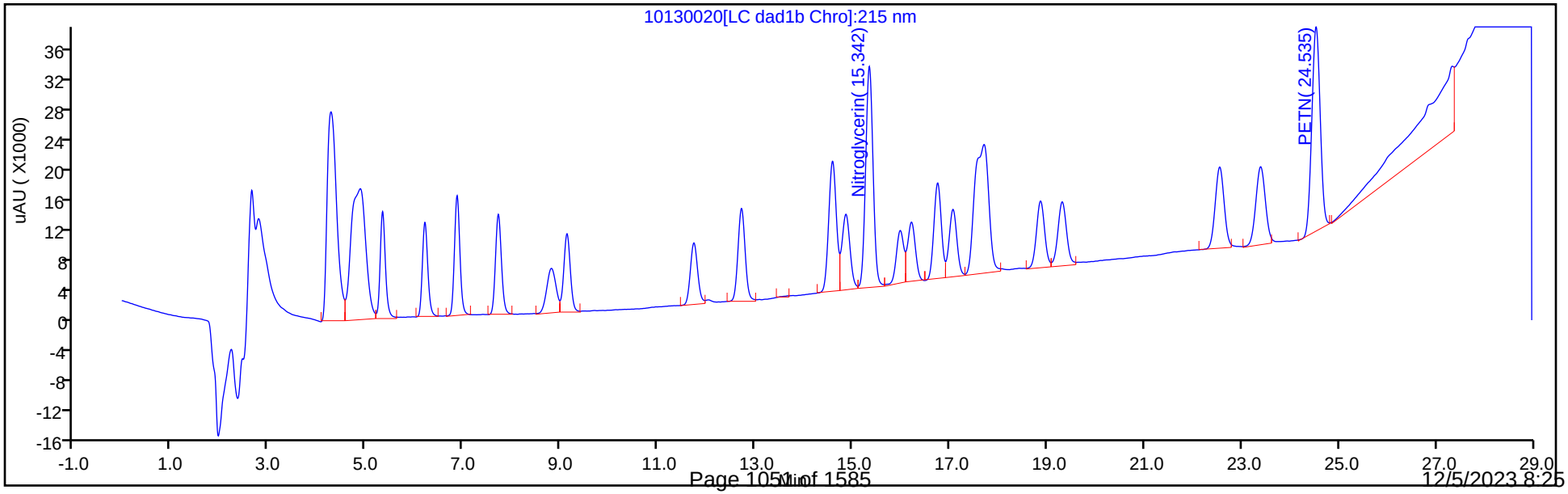
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Injection Date:	13-Oct-2023 23:24:47	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	20
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



12/5/2023 8:25 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

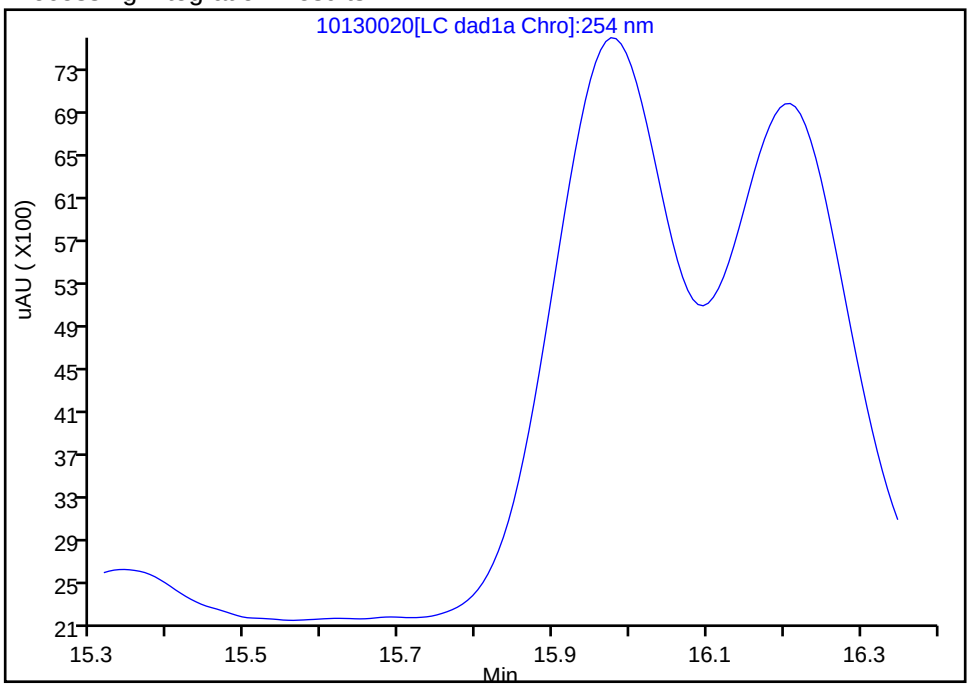
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Injection Date:	13-Oct-2023 23:24:47	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

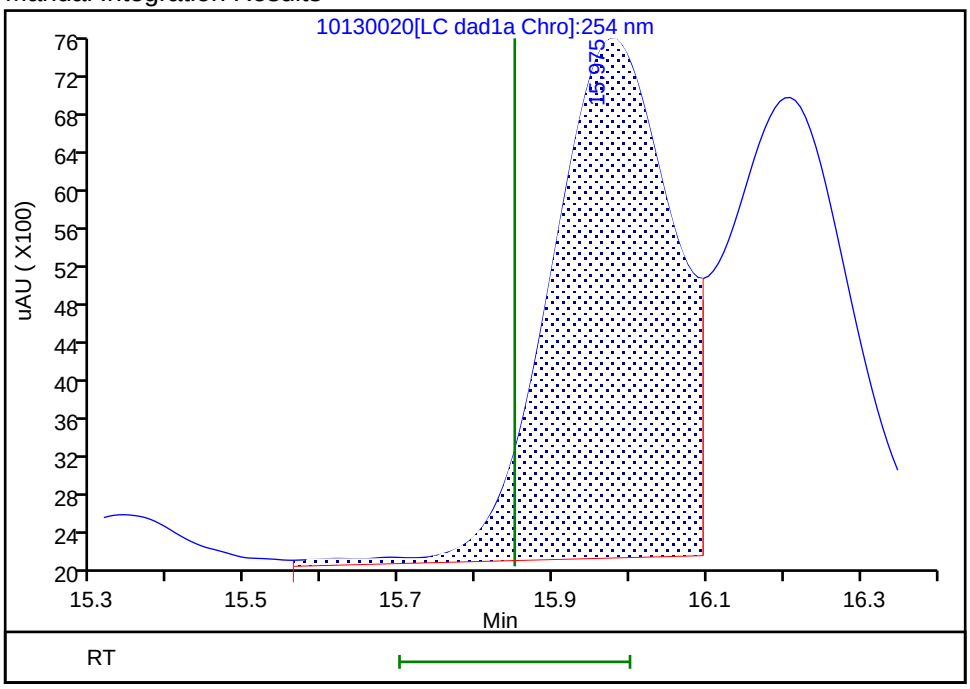
Not Detected
Expected RT: 15.85

Processing Integration Results



Manual Integration Results

RT: 15.98
Area: 59751
Amount: 0.241872
Amount Units: ug/ml



Reviewer: K8YG, 16-Oct-2023 15:11:43 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

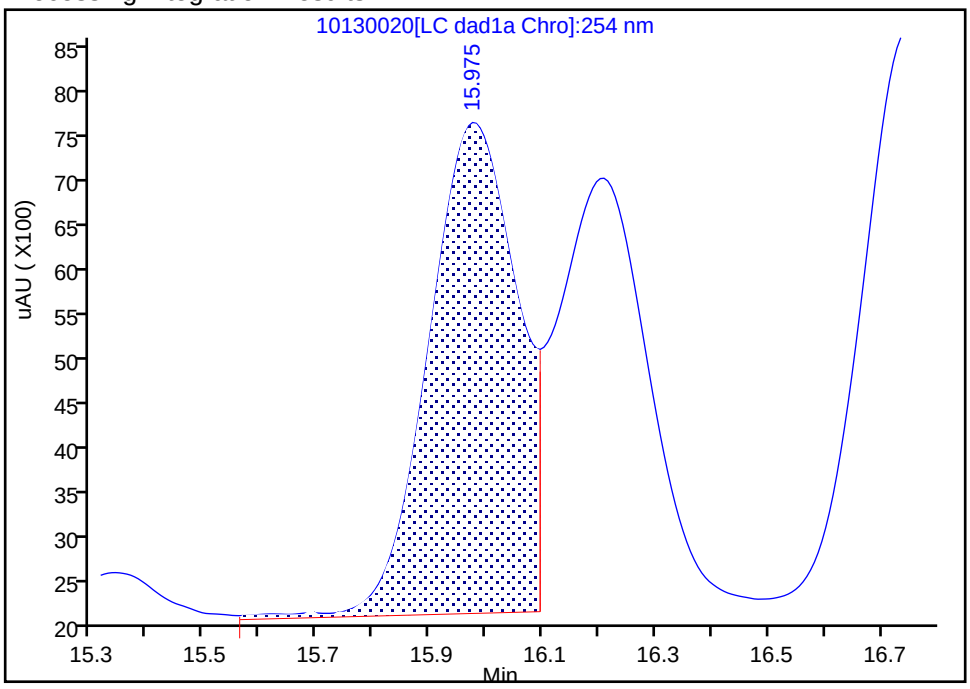
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Injection Date:	13-Oct-2023 23:24:47	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

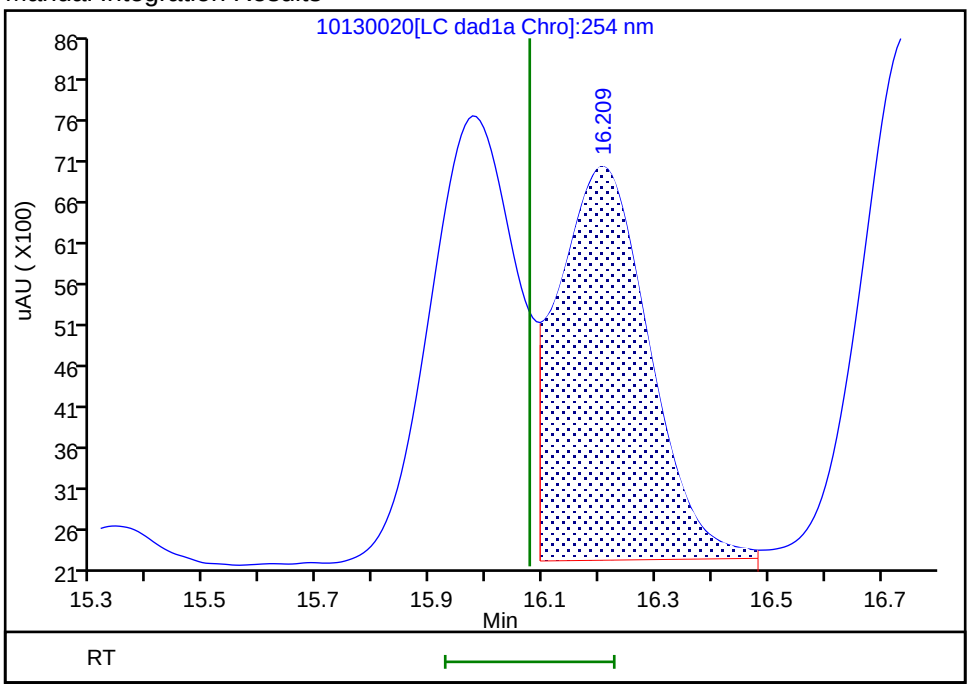
Processing Integration Results

RT: 15.98
Area: 59751
Amount: 0.272177
Amount Units: ug/ml



Manual Integration Results

RT: 16.21
Area: 53652
Amount: 0.244054
Amount Units: ug/ml



Reviewer: K8YG, 16-Oct-2023 15:11:39 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

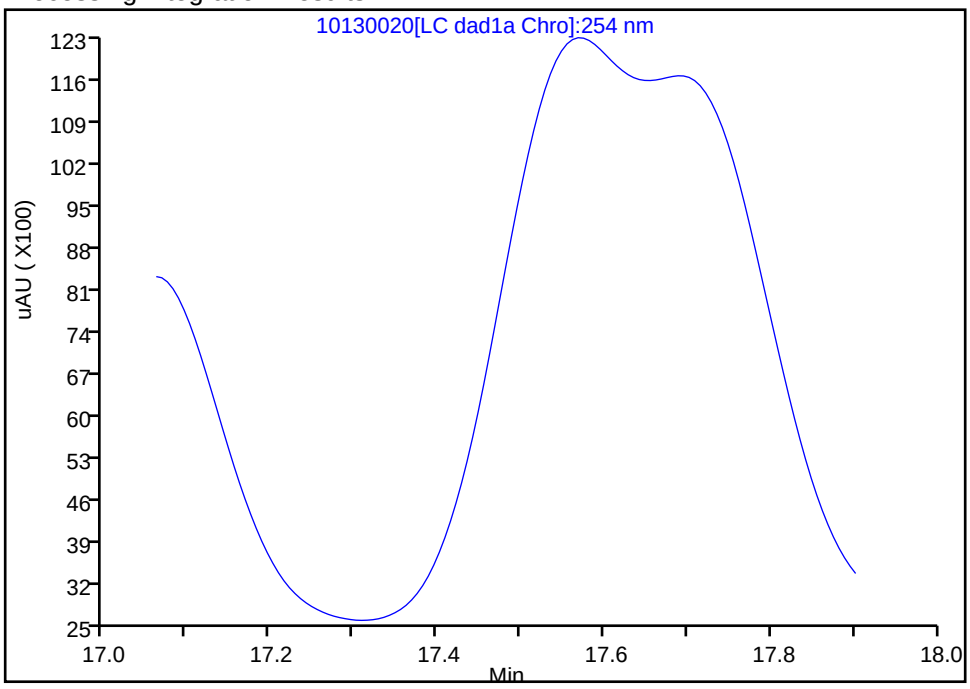
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Injection Date:	13-Oct-2023 23:24:47	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

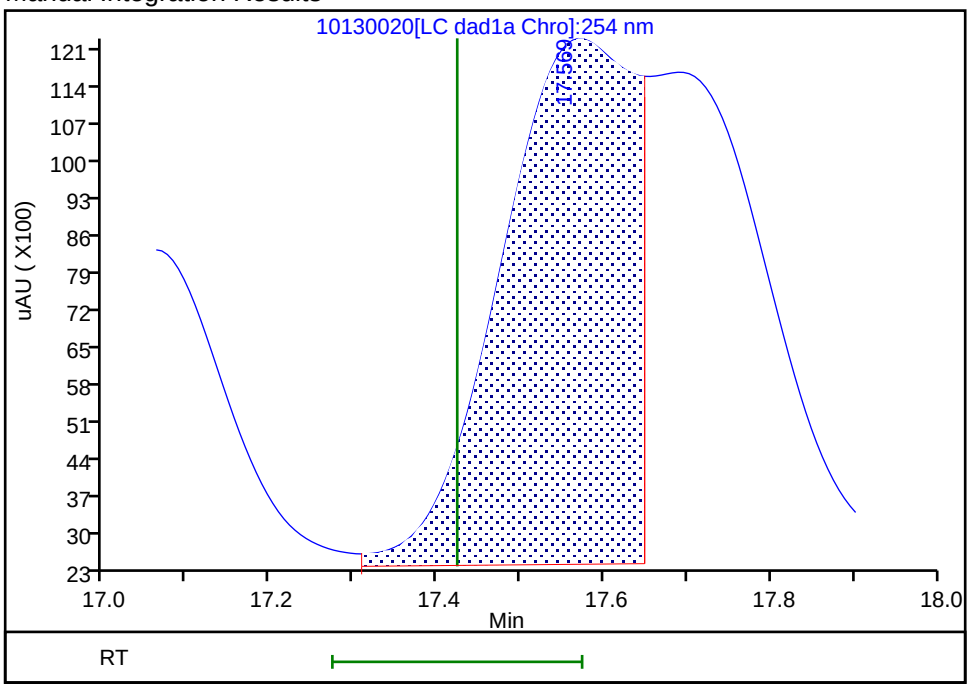
Not Detected
Expected RT: 17.42

Processing Integration Results



Manual Integration Results

RT: 17.57
Area: 109625
Amount: 0.287561
Amount Units: ug/ml



Reviewer: K8YG, 16-Oct-2023 15:11:49 -06:00:00 (UTC)
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

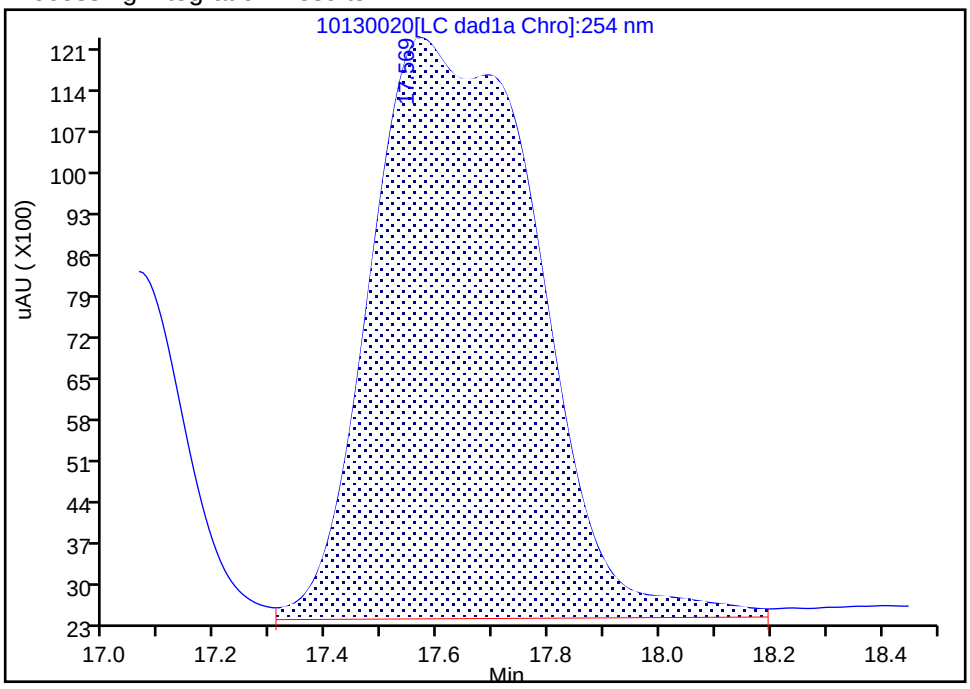
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Injection Date: 13-Oct-2023 23:24:47 Instrument ID: CHHPLC_G2_LUNA
Lims ID: CCV ADD
Client ID:
Operator ID: JZ/JG ALS Bottle#: 7 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

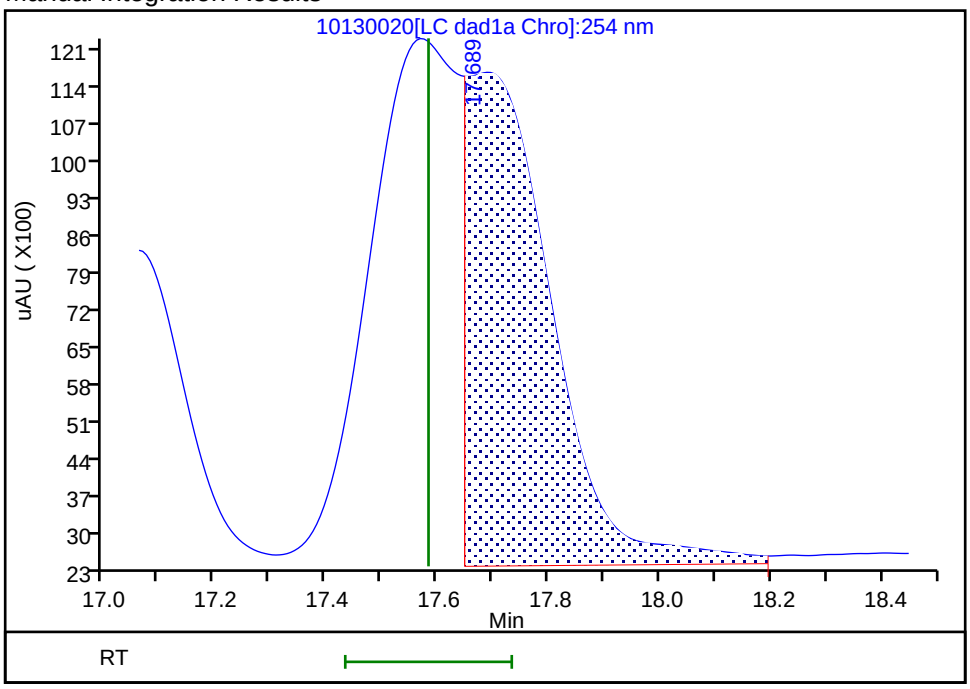
Processing Integration Results

RT: 17.57
Area: 206987
Amount: 0.502846
Amount Units: ug/ml



Manual Integration Results

RT: 17.69
Area: 97385
Amount: 0.236583
Amount Units: ug/ml



Reviewer: K8YG, 16-Oct-2023 15:11:47 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-629682/20 Calibration Date: 10/13/2023 23:24

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 09/26/2023 00:42

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 09/26/2023 04:54

Lab File ID: 10130020.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,6-diamino-4-nitrotoluene	Ave	387643	409944		264	250	5.8	20.0
2,4-diamino-6-nitrotoluene	Ave	233949	246912		264	250	5.5	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-629682/20 Calibration Date: 10/13/2023 23:24

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 09/26/2023 00:42

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 09/26/2023 04:54

Lab File ID: 10130020.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	4.26	4.09	4.39
2,4-diamino-6-nitrotoluene	4.88	4.71	5.01

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20231013-126503.b\10130020.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 13-Oct-2023 23:24:47 ALS Bottle#: 7 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub12

Method: \\chromfs\Denver\ChromData\G2_LUNA\20231013-126503.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 16-Oct-2023 15:11:52 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1636

First Level Reviewer: K8YG Date: 16-Oct-2023 15:11:52

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.262	4.244	0.018	102486	0.2500	0.2644	
2 2,4-diamino-6-nitrotoluene	1	4.875	4.857	0.018	61728	0.2500	0.2639	
3 TNX	1	5.329	5.310	0.019	96984	0.2508	0.2564	
4 DNX	1	6.195	6.170	0.025	71459	0.2503	0.2479	
6 HMX	1	6.862	6.830	0.032	45117	0.2500	0.2601	
7 MNX	1	7.709	7.684	0.025	77459	0.2918	0.2958	
5 2,4,6-Trinitrophenol	1	8.802	8.864	-0.062	35274	0.2500	0.2459	
8 RDX	1	9.122	9.077	0.045	53524	0.2500	0.2578	
9 Nitrobenzene	1	11.729	11.650	0.079	94702	0.2500	0.2550	
$ 10 1,2-Dinitrobenzene	1	12.709	12.617	0.092	64693	0.2500	0.2519	
11 3,5-Dinitroaniline	1	14.582	14.477	0.105	108233	0.2500	0.2630	
12 1,3-Dinitrobenzene	1	14.862	14.757	0.105	144868	0.2500	0.2500	
13 Nitroglycerin	2	15.342	15.223	0.119	311098	2.50	2.50	
14 o-Nitrotoluene	1	15.975	15.850	0.125	59751	0.2500	0.2419	a
15 p-Nitrotoluene	1	16.209	16.077	0.132	53652	0.2500	0.2441	a
16 4-Amino-2,6-dinitrotoluene	1	16.749	16.603	0.146	69584	0.2500	0.2533	
17 m-Nitrotoluene	1	17.062	16.923	0.139	68494	0.2500	0.2498	
18 2-Amino-4,6-dinitrotoluene	1	17.569	17.423	0.146	109625	0.2500	0.2876	Ma
19 1,3,5-Trinitrobenzene	1	17.689	17.583	0.106	97385	0.2500	0.2366	M
20 2,6-Dinitrotoluene	1	18.862	18.743	0.119	67572	0.2500	0.2558	
21 2,4-Dinitrotoluene	1	19.309	19.197	0.112	137806	0.2500	0.2528	
22 Tetryl	1	22.549	22.477	0.072	77161	0.2500	0.2502	
23 2,4,6-Trinitrotoluene	1	23.389	23.330	0.059	100912	0.2500	0.2621	
24 PETN	2	24.535	24.517	0.018	322269	2.50	2.62	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330 DMT_00015	Amount Added:	12.50	Units: uL
8330IntermStk_00078	Amount Added:	25.00	Units: uL
8330_ADDs_00037	Amount Added:	12.50	Units: uL

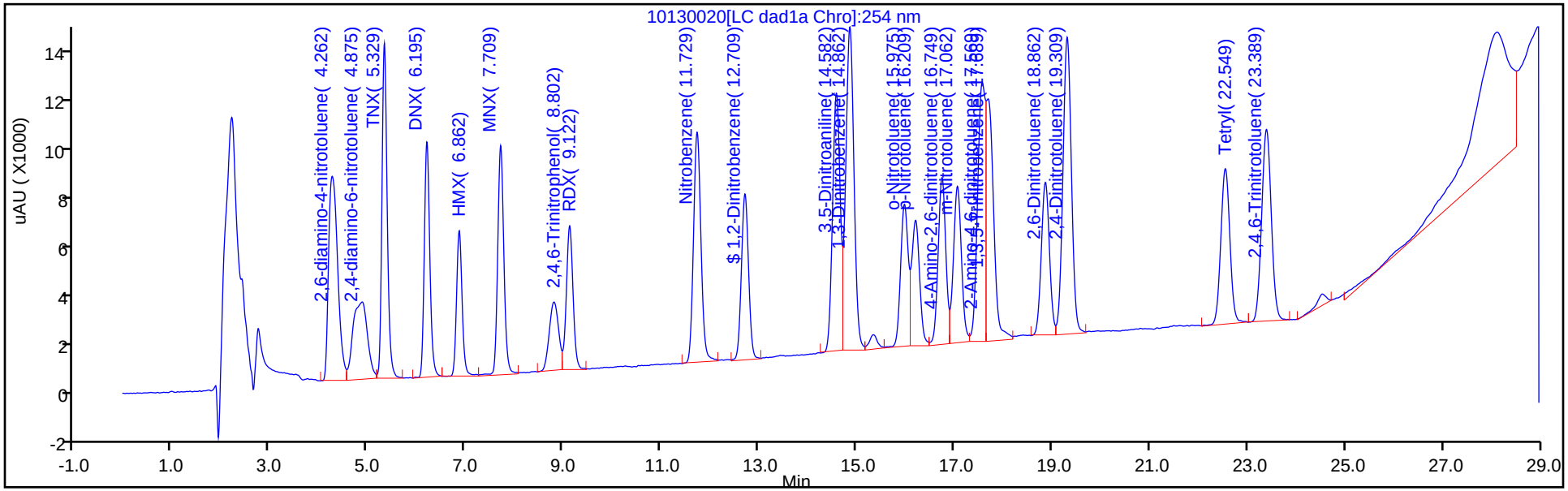
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Eurofins Denver

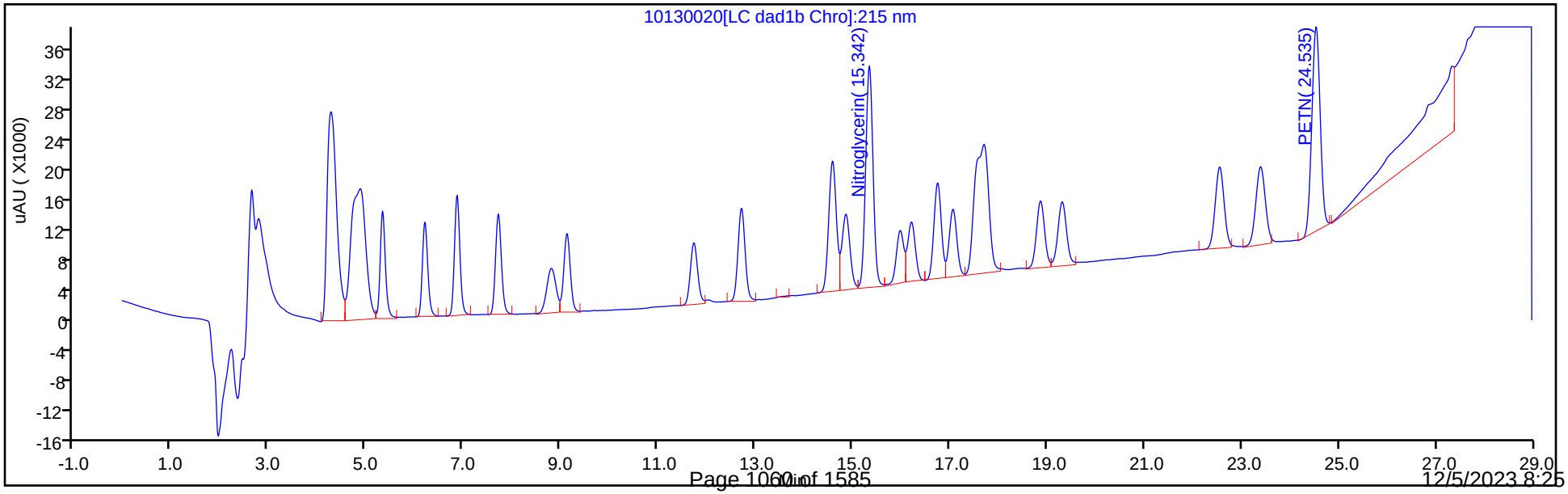
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Injection Date:	13-Oct-2023 23:24:47	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	20
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



12/5/2023 8:25 AM

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-629682/30 | Calibration Date: 10/14/2023 05:24

Instrument ID: CHHPLC_G2_LUNA | Calib Start Date: 09/25/2023 18:42

GC Column: Luna-phenylhex ID: 4.60(mm) | Calib End Date: 09/25/2023 23:30

Lab File ID: 10130030.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Lin2		390516		259	251	3.2	20.0
DNX	Ave	288240	285946		248	250	-0.8	20.0
HMX	Ave	173471	178460		257	250	2.9	20.0
MNX	Ave	261824	263195		293	292	0.5	20.0
Picric acid	Ave	143426	145120		253	250	1.2	20.0
RDX	Ave	207587	211956		255	250	2.1	20.0
Nitrobenzene	Ave	371392	372020		250	250	0.2	20.0
3,5-Dinitroaniline	Lin2		434060		264	250	5.5	20.0
1,3-Dinitrobenzene	Ave	579530	578628		250	250	-0.2	20.0
Nitroglycerin	Ave	124215	125975		2540	2500	1.4	20.0
2-Nitrotoluene	Ave	247036	238384		241	250	-3.5	20.0
4-Nitrotoluene	Lin2		213348		243	250	-3.0	20.0
4-Amino-2,6-dinitrotoluene	Lin2		279256		254	250	1.7	20.0
3-Nitrotoluene	Lin2		270964		247	250	-1.2	20.0
2-Amino-4,6-dinitrotoluene	Lin2		406972		267	250	6.6	20.0
1,3,5-Trinitrobenzene	Ave	411631	405924		247	250	-1.4	20.0
2,6-Dinitrotoluene	Lin2		268052		254	250	1.5	20.0
2,4-Dinitrotoluene	Ave	545087	545816		250	250	0.1	20.0
Tetryl	Ave	308340	316424		257	250	2.6	20.0
2,4,6-Trinitrotoluene	Ave	384986	405708		263	250	5.4	20.0
PETN	Ave	123011	129188		2630	2500	5.0	20.0
1,2-Dinitrobenzene	Ave	256773	262716		256	250	2.3	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-629682/30 Calibration Date: 10/14/2023 05:24

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 09/25/2023 18:42

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 09/25/2023 23:30

Lab File ID: 10130030.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.28	5.16	5.46
DNX	6.14	6.02	6.32
HMX	6.79	6.68	6.98
MNX	7.64	7.53	7.83
Picric acid	8.65	8.71	9.01
RDX	9.03	8.93	9.23
Nitrobenzene	11.60	11.50	11.80
3,5-Dinitroaniline	14.40	14.33	14.63
1,3-Dinitrobenzene	14.68	14.61	14.91
Nitroglycerin	15.14	15.07	15.37
2-Nitrotoluene	15.78	15.70	16.00
4-Nitrotoluene	16.00	15.93	16.23
4-Amino-2,6-dinitrotoluene	16.52	16.45	16.75
3-Nitrotoluene	16.84	16.77	17.07
2-Amino-4,6-dinitrotoluene	17.33	17.27	17.57
1,3,5-Trinitrobenzene	17.52	17.43	17.73
2,6-Dinitrotoluene	18.65	18.59	18.89
2,4-Dinitrotoluene	19.10	19.05	19.35
Tetryl	22.34	22.33	22.63
2,4,6-Trinitrotoluene	23.20	23.18	23.48
PETN	24.36	24.37	24.67
1,2-Dinitrobenzene	12.56	12.47	12.77

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20231013-126503.b\10130030.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 14-Oct-2023 05:24:28 ALS Bottle#: 7 Worklist Smp#: 30
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub12

Method: \\chromfs\Denver\ChromData\G2_LUNA\20231013-126503.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 16-Oct-2023 11:53:10 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1675

First Level Reviewer: K8YG Date: 16-Oct-2023 11:50:00

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.231	4.244	-0.013	102228	0.2500	0.2637	
2 2,4-diamino-6-nitrotoluene	1	4.831	4.857	-0.026	61683	0.2500	0.2637	
3 TNX	1	5.284	5.310	-0.026	97922	0.2508	0.2589	
4 DNX	1	6.137	6.170	-0.033	71558	0.2503	0.2483	
6 HMX	1	6.791	6.830	-0.039	44615	0.2500	0.2572	
7 MNX	1	7.637	7.684	-0.047	76787	0.2918	0.2933	
5 2,4,6-Trinitrophenol	1	8.651	8.864	-0.213	36280	0.2500	0.2530	a
8 RDX	1	9.031	9.077	-0.046	52989	0.2500	0.2553	
9 Nitrobenzene	1	11.604	11.650	-0.046	93005	0.2500	0.2504	
$ 10 1,2-Dinitrobenzene	1	12.557	12.617	-0.060	65679	0.2500	0.2558	
11 3,5-Dinitroaniline	1	14.397	14.477	-0.080	108515	0.2500	0.2636	
12 1,3-Dinitrobenzene	1	14.684	14.757	-0.073	144657	0.2500	0.2496	
13 Nitroglycerin	2	15.137	15.223	-0.086	314938	2.50	2.54	
14 o-Nitrotoluene	1	15.777	15.850	-0.073	59596	0.2500	0.2412	
15 p-Nitrotoluene	1	15.997	16.077	-0.080	53337	0.2500	0.2426	
16 4-Amino-2,6-dinitrotoluene	1	16.524	16.603	-0.079	69814	0.2500	0.2542	
17 m-Nitrotoluene	1	16.844	16.923	-0.079	67741	0.2500	0.2470	
18 2-Amino-4,6-dinitrotoluene	1	17.331	17.423	-0.092	101743	0.2500	0.2666	
19 1,3,5-Trinitrobenzene	1	17.517	17.583	-0.066	101481	0.2500	0.2465	
20 2,6-Dinitrotoluene	1	18.651	18.743	-0.092	67013	0.2500	0.2537	
21 2,4-Dinitrotoluene	1	19.097	19.197	-0.100	136454	0.2500	0.2503	
22 Tetryl	1	22.344	22.477	-0.133	79106	0.2500	0.2566	
23 2,4,6-Trinitrotoluene	1	23.204	23.330	-0.126	101427	0.2500	0.2635	
24 PETN	2	24.357	24.517	-0.160	322970	2.50	2.63	a

QC Flag Legend
Processing Flags

Review Flags
a - User Assigned ID

Reagents:

8330 DMT_00015	Amount Added:	12.50	Units: uL
8330IntermStk_00078	Amount Added:	25.00	Units: uL
8330_ADDs_00037	Amount Added:	12.50	Units: uL

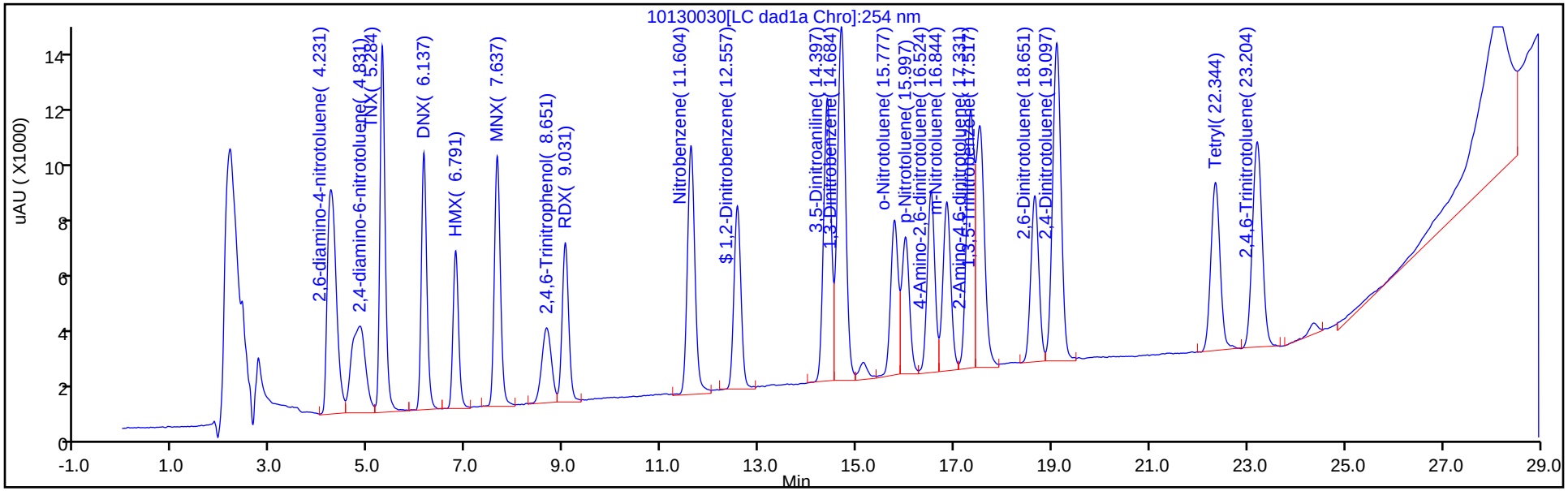
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Eurofins Denver

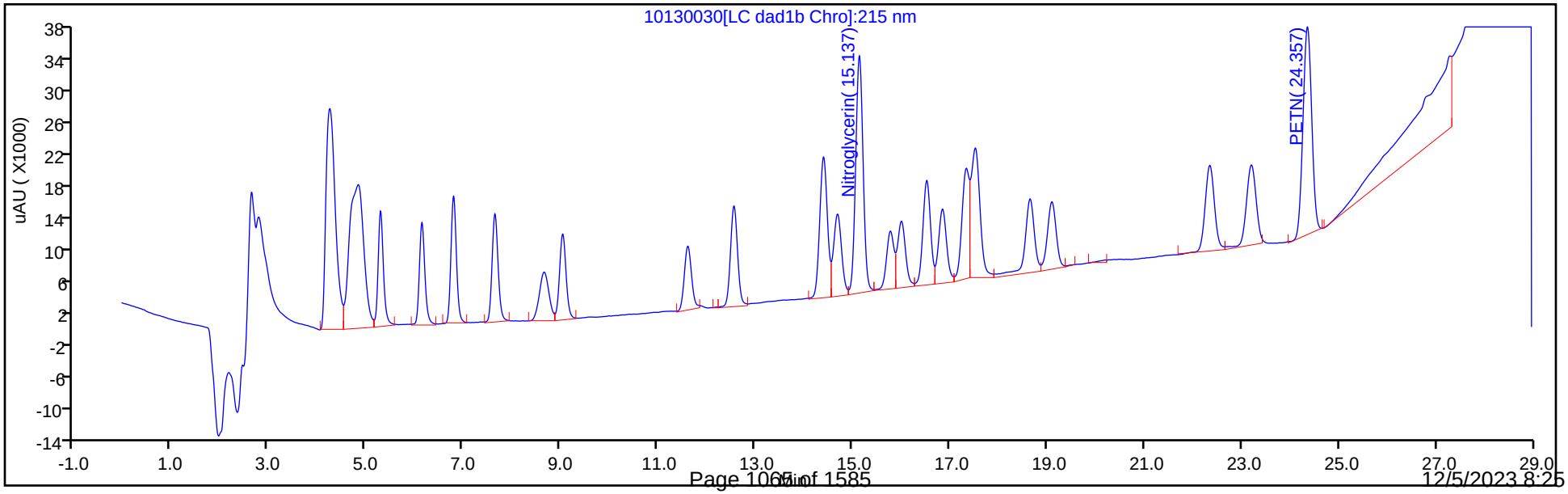
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Injection Date:	14-Oct-2023 05:24:28	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	30
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



12/5/2023 8:25 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

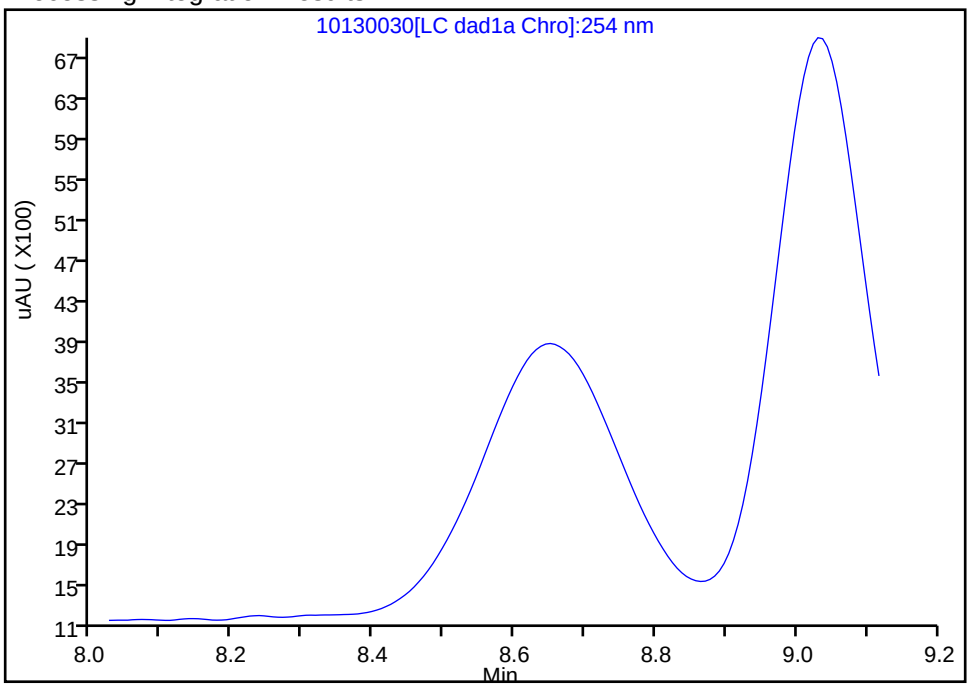
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Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

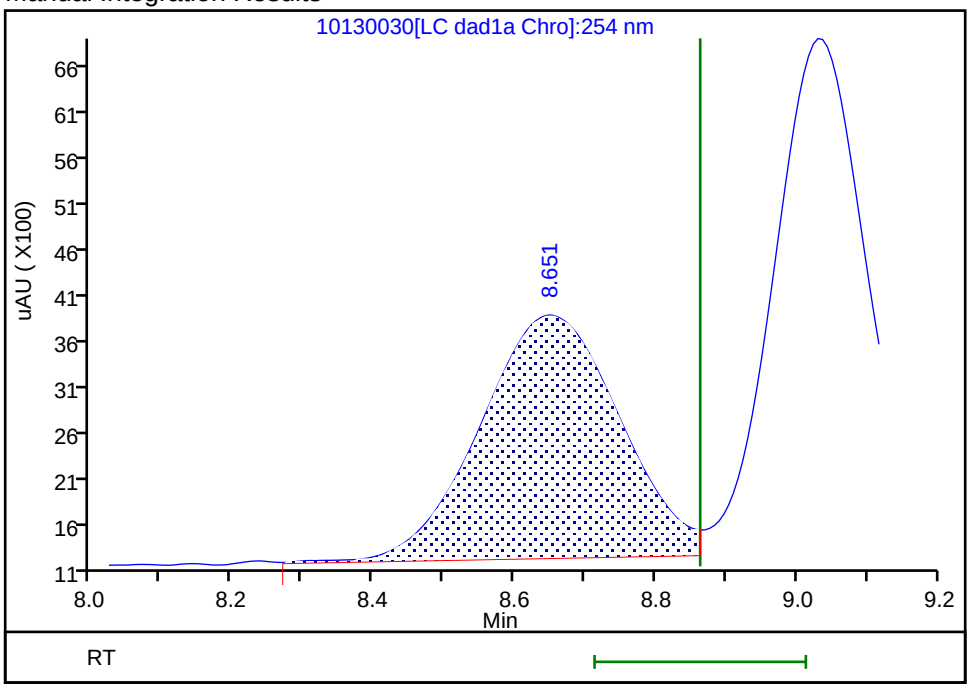
Not Detected
Expected RT: 8.86

Processing Integration Results



Manual Integration Results

RT: 8.65
Area: 36280
Amount: 0.252953
Amount Units: ug/ml



Reviewer: K8YG, 16-Oct-2023 11:49:41 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

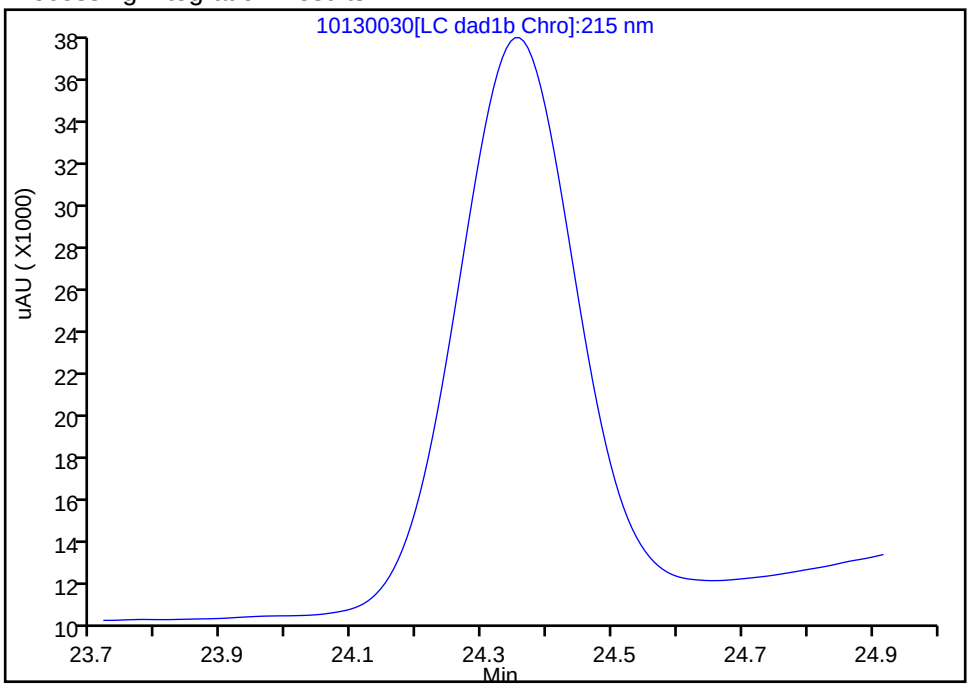
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Injection Date:	14-Oct-2023 05:24:28	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1B, 215 nm		

24 PETN, CAS: 78-11-5

Signal: 1

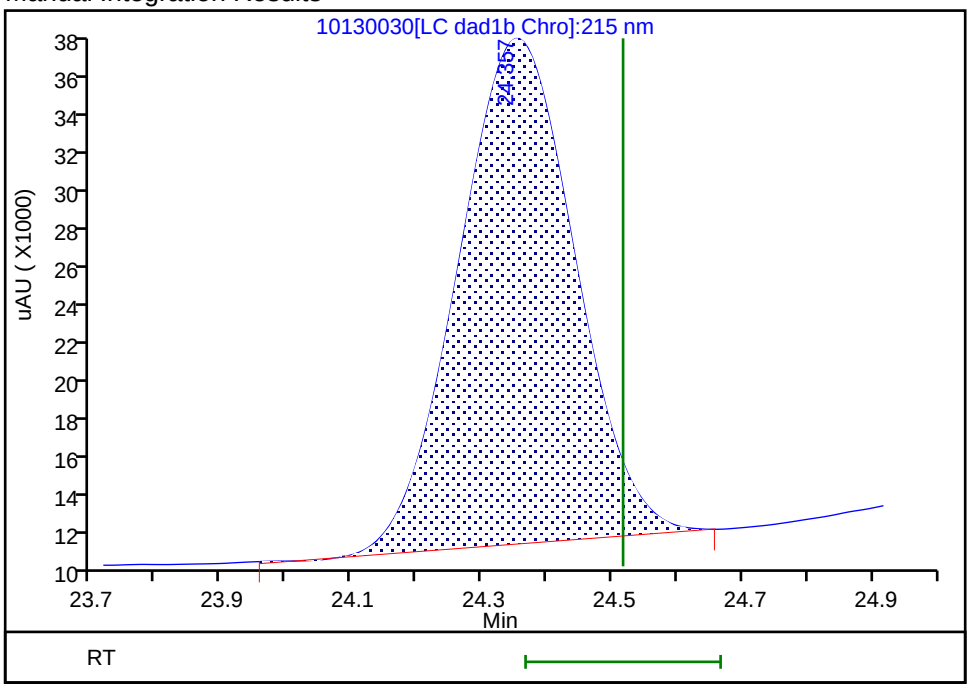
Not Detected
Expected RT: 24.52

Processing Integration Results



Manual Integration Results

RT: 24.36
Area: 322970
Amount: 2.625529
Amount Units: ug/ml



Reviewer: K8YG, 16-Oct-2023 11:49:57 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-629682/30 Calibration Date: 10/14/2023 05:24

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 09/26/2023 00:42

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 09/26/2023 04:54

Lab File ID: 10130030.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,6-diamino-4-nitrotoluene	Ave	387643	408912		264	250	5.5	20.0
2,4-diamino-6-nitrotoluene	Ave	233949	246732		264	250	5.5	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-629682/30 Calibration Date: 10/14/2023 05:24

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 09/26/2023 00:42

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 09/26/2023 04:54

Lab File ID: 10130030.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	4.23	4.09	4.39
2,4-diamino-6-nitrotoluene	4.83	4.71	5.01

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20231013-126503.b\10130030.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 14-Oct-2023 05:24:28 ALS Bottle#: 7 Worklist Smp#: 30
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub12

Method: \\chromfs\Denver\ChromData\G2_LUNA\20231013-126503.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 16-Oct-2023 11:53:10 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1675

First Level Reviewer: K8YG Date: 16-Oct-2023 11:50:00

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.231	4.244	-0.013	102228	0.2500	0.2637	
2 2,4-diamino-6-nitrotoluene	1	4.831	4.857	-0.026	61683	0.2500	0.2637	
3 TNX	1	5.284	5.310	-0.026	97922	0.2508	0.2589	
4 DNX	1	6.137	6.170	-0.033	71558	0.2503	0.2483	
6 HMX	1	6.791	6.830	-0.039	44615	0.2500	0.2572	
7 MNX	1	7.637	7.684	-0.047	76787	0.2918	0.2933	
5 2,4,6-Trinitrophenol	1	8.651	8.864	-0.213	36280	0.2500	0.2530	a
8 RDX	1	9.031	9.077	-0.046	52989	0.2500	0.2553	
9 Nitrobenzene	1	11.604	11.650	-0.046	93005	0.2500	0.2504	
$ 10 1,2-Dinitrobenzene	1	12.557	12.617	-0.060	65679	0.2500	0.2558	
11 3,5-Dinitroaniline	1	14.397	14.477	-0.080	108515	0.2500	0.2636	
12 1,3-Dinitrobenzene	1	14.684	14.757	-0.073	144657	0.2500	0.2496	
13 Nitroglycerin	2	15.137	15.223	-0.086	314938	2.50	2.54	
14 o-Nitrotoluene	1	15.777	15.850	-0.073	59596	0.2500	0.2412	
15 p-Nitrotoluene	1	15.997	16.077	-0.080	53337	0.2500	0.2426	
16 4-Amino-2,6-dinitrotoluene	1	16.524	16.603	-0.079	69814	0.2500	0.2542	
17 m-Nitrotoluene	1	16.844	16.923	-0.079	67741	0.2500	0.2470	
18 2-Amino-4,6-dinitrotoluene	1	17.331	17.423	-0.092	101743	0.2500	0.2666	
19 1,3,5-Trinitrobenzene	1	17.517	17.583	-0.066	101481	0.2500	0.2465	
20 2,6-Dinitrotoluene	1	18.651	18.743	-0.092	67013	0.2500	0.2537	
21 2,4-Dinitrotoluene	1	19.097	19.197	-0.100	136454	0.2500	0.2503	
22 Tetryl	1	22.344	22.477	-0.133	79106	0.2500	0.2566	
23 2,4,6-Trinitrotoluene	1	23.204	23.330	-0.126	101427	0.2500	0.2635	
24 PETN	2	24.357	24.517	-0.160	322970	2.50	2.63	a

QC Flag Legend
Processing Flags

Review Flags
a - User Assigned ID

Reagents:

8330 DMT_00015	Amount Added:	12.50	Units: uL
8330IntermStk_00078	Amount Added:	25.00	Units: uL
8330_ADDs_00037	Amount Added:	12.50	Units: uL

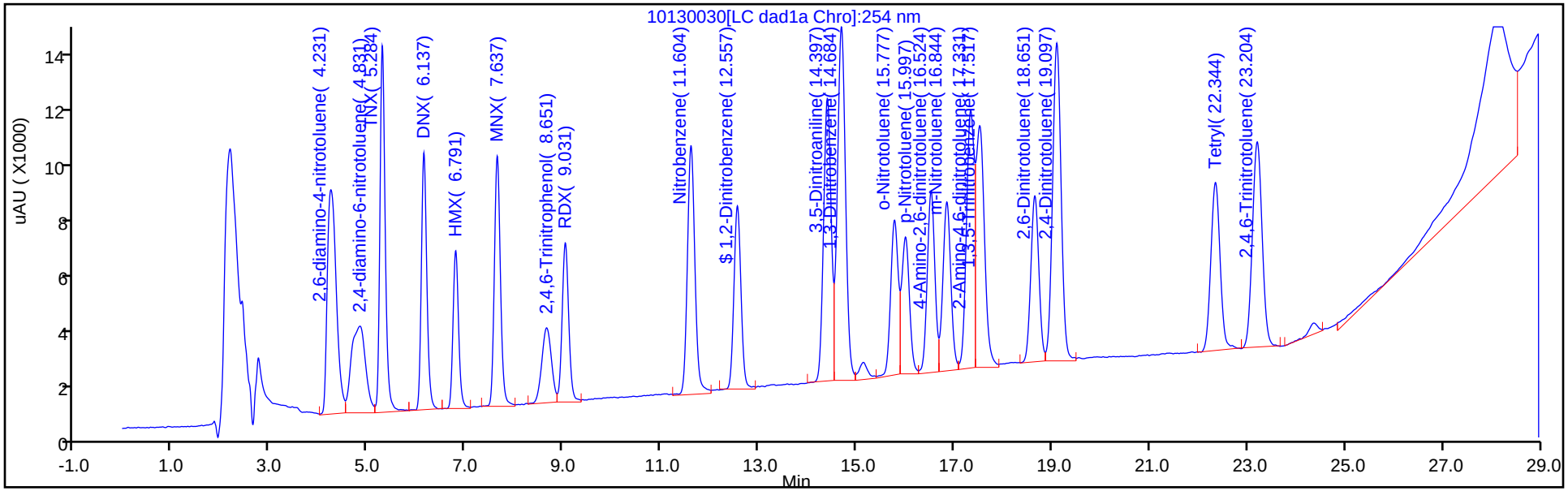
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Eurofins Denver

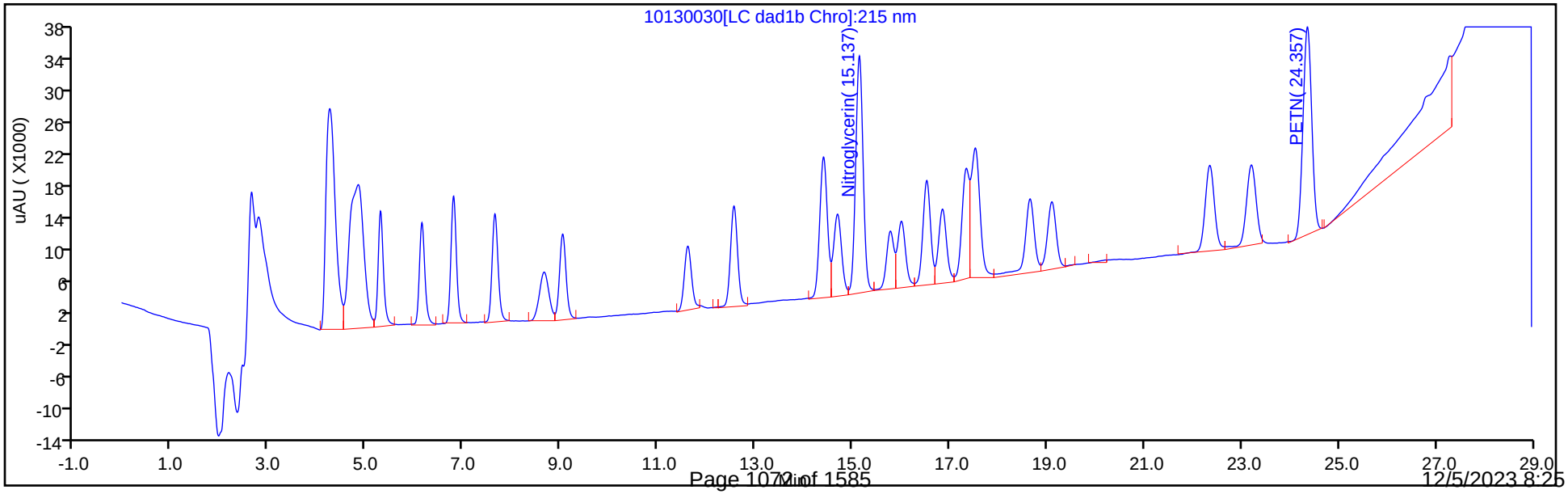
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Injection Date:	14-Oct-2023 05:24:28	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	30
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



12/5/2023 8:25 AM

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-629682/37 | Calibration Date: 10/14/2023 09:36

Instrument ID: CHHPLC_G2_LUNA | Calib Start Date: 09/25/2023 18:42

GC Column: Luna-phenylhex ID: 4.60(mm) | Calib End Date: 09/25/2023 23:30

Lab File ID: 10130037.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Lin2		386154		256	251	2.1	20.0
DNX	Ave	288240	284911		247	250	-1.2	20.0
HMX	Ave	173471	178052		257	250	2.6	20.0
MNX	Ave	261824	261542		291	292	-0.1	20.0
Picric acid	Ave	143426	144392		252	250	0.7	20.0
RDX	Ave	207587	212440		256	250	2.3	20.0
Nitrobenzene	Ave	371392	364076		245	250	-2.0	20.0
3,5-Dinitroaniline	Lin2		432904		263	250	5.2	20.0
1,3-Dinitrobenzene	Ave	579530	582424		251	250	0.5	20.0
Nitroglycerin	Ave	124215	126709		2550	2500	2.0	20.0
2-Nitrotoluene	Ave	247036	232560		235	250	-5.9	20.0
4-Nitrotoluene	Lin2		213556		243	250	-2.9	20.0
4-Amino-2,6-dinitrotoluene	Lin2		280344		255	250	2.1	20.0
3-Nitrotoluene	Lin2		267000		243	250	-2.7	20.0
2-Amino-4,6-dinitrotoluene	Lin2		416376		273	250	9.1	20.0
1,3,5-Trinitrobenzene	Ave	411631	393968		239	250	-4.3	20.0
2,6-Dinitrotoluene	Lin2		271828		257	250	2.9	20.0
2,4-Dinitrotoluene	Ave	545087	546612		251	250	0.3	20.0
Tetryl	Ave	308340	312196		253	250	1.3	20.0
2,4,6-Trinitrotoluene	Ave	384986	404664		263	250	5.1	20.0
PETN	Ave	123011	128871		2620	2500	4.8	20.0
1,2-Dinitrobenzene	Ave	256773	260064		253	250	1.3	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-629682/37 Calibration Date: 10/14/2023 09:36

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 09/25/2023 18:42

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 09/25/2023 23:30

Lab File ID: 10130037.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.32	5.16	5.46
DNX	6.18	6.02	6.32
HMX	6.85	6.68	6.98
MNX	7.70	7.53	7.83
Picric acid	8.72	8.71	9.01
RDX	9.11	8.93	9.23
Nitrobenzene	11.69	11.50	11.80
3,5-Dinitroaniline	14.50	14.33	14.63
1,3-Dinitrobenzene	14.78	14.61	14.91
Nitroglycerin	15.25	15.07	15.37
2-Nitrotoluene	15.88	15.70	16.00
4-Nitrotoluene	16.10	15.93	16.23
4-Amino-2,6-dinitrotoluene	16.63	16.45	16.75
3-Nitrotoluene	16.95	16.77	17.07
2-Amino-4,6-dinitrotoluene	17.44	17.27	17.57
1,3,5-Trinitrobenzene	17.60	17.43	17.73
2,6-Dinitrotoluene	18.76	18.59	18.89
2,4-Dinitrotoluene	19.20	19.05	19.35
Tetryl	22.43	22.33	22.63
2,4,6-Trinitrotoluene	23.28	23.18	23.48
PETN	24.41	24.37	24.67
1,2-Dinitrobenzene	12.66	12.47	12.77

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20231013-126503.b\10130037.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 14-Oct-2023 09:36:05 ALS Bottle#: 7 Worklist Smp#: 37
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub12

Method: \\chromfs\Denver\ChromData\G2_LUNA\20231013-126503.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 16-Oct-2023 11:53:22 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1675

First Level Reviewer: K8YG Date: 16-Oct-2023 11:52:35

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.256	4.244	0.012	102388	0.2500	0.2641	
2 2,4-diamino-6-nitrotoluene	1	4.863	4.857	0.006	61556	0.2500	0.2631	
3 TNX	1	5.316	5.310	0.006	96828	0.2508	0.2560	
4 DNX	1	6.183	6.170	0.013	71299	0.2503	0.2474	
6 HMX	1	6.850	6.830	0.020	44513	0.2500	0.2566	
7 MNX	1	7.703	7.684	0.019	76305	0.2918	0.2914	
5 2,4,6-Trinitrophenol	1	8.723	8.864	-0.141	36098	0.2500	0.2517	
8 RDX	1	9.110	9.077	0.033	53110	0.2500	0.2558	
9 Nitrobenzene	1	11.689	11.650	0.039	91019	0.2500	0.2451	
$ 10 1,2-Dinitrobenzene	1	12.656	12.617	0.039	65016	0.2500	0.2532	
11 3,5-Dinitroaniline	1	14.503	14.477	0.026	108226	0.2500	0.2629	M
12 1,3-Dinitrobenzene	1	14.783	14.757	0.026	145606	0.2500	0.2512	M
13 Nitroglycerin	2	15.249	15.223	0.026	316773	2.50	2.55	
14 o-Nitrotoluene	1	15.883	15.850	0.033	58140	0.2500	0.2354	M
15 p-Nitrotoluene	1	16.103	16.077	0.026	53389	0.2500	0.2428	M
16 4-Amino-2,6-dinitrotoluene	1	16.629	16.603	0.026	70086	0.2500	0.2552	M
17 m-Nitrotoluene	1	16.949	16.923	0.026	66750	0.2500	0.2433	M
18 2-Amino-4,6-dinitrotoluene	1	17.436	17.423	0.013	104094	0.2500	0.2729	M
19 1,3,5-Trinitrobenzene	1	17.603	17.583	0.020	98492	0.2500	0.2393	Ma
20 2,6-Dinitrotoluene	1	18.756	18.743	0.013	67957	0.2500	0.2573	M
21 2,4-Dinitrotoluene	1	19.196	19.197	-0.001	136653	0.2500	0.2507	M
22 Tetryl	1	22.430	22.477	-0.047	78049	0.2500	0.2531	
23 2,4,6-Trinitrotoluene	1	23.276	23.330	-0.054	101166	0.2500	0.2628	
24 PETN	2	24.410	24.517	-0.107	322178	2.50	2.62	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330 DMT_00015	Amount Added:	12.50	Units: uL
8330IntermStk_00078	Amount Added:	25.00	Units: uL
8330_ADDs_00037	Amount Added:	12.50	Units: uL

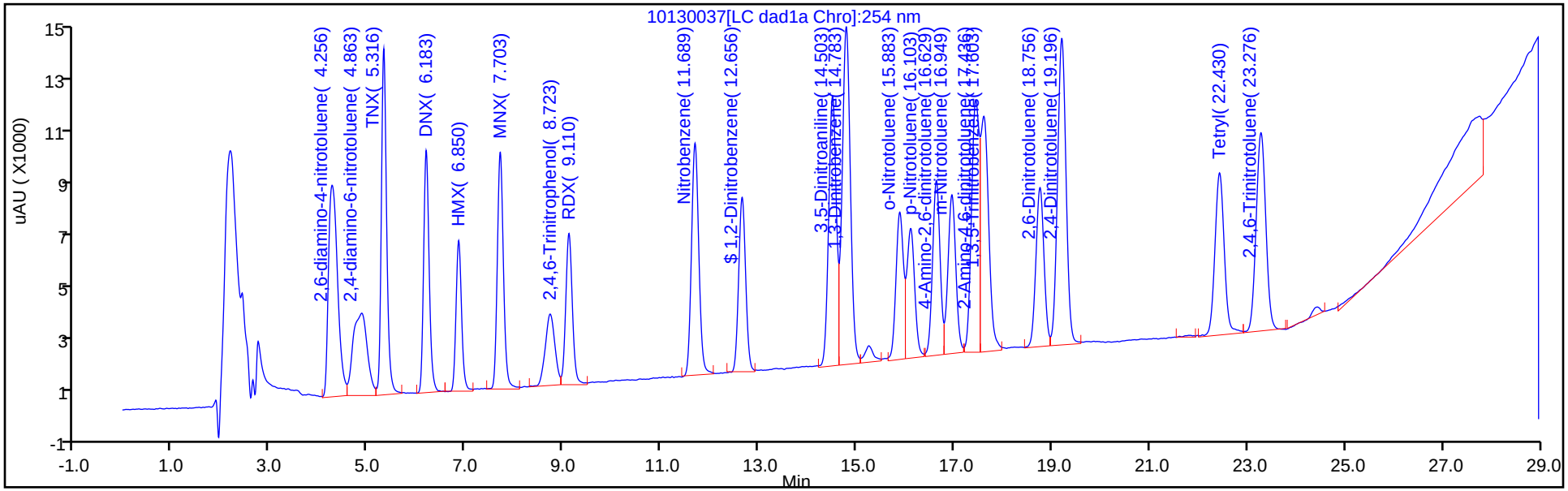
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Eurofins Denver

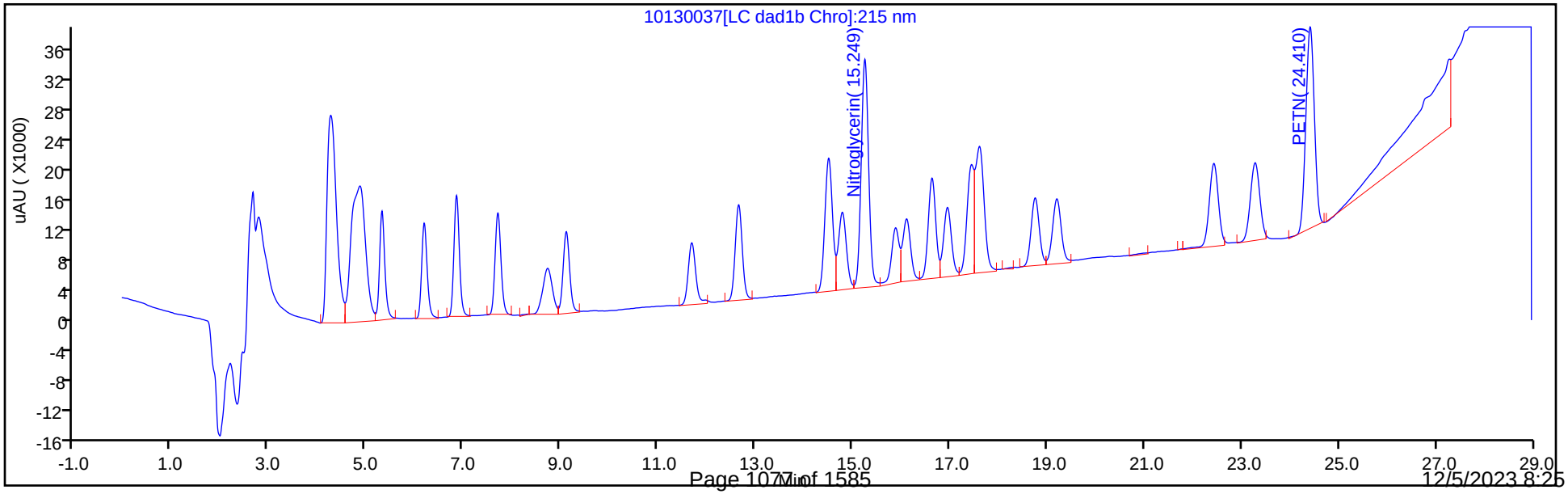
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Injection Date:	14-Oct-2023 09:36:05	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	37
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



12/5/2023 8:25 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

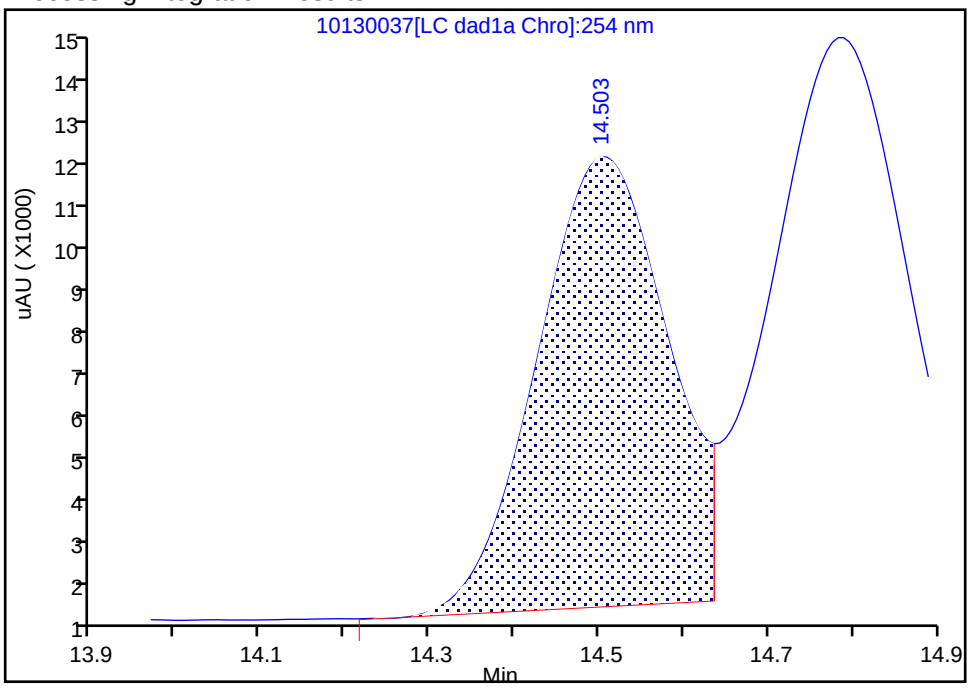
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Injection Date: 14-Oct-2023 09:36:05 Instrument ID: CHHPLC_G2_LUNA
Lims ID: CCV ADD
Client ID:
Operator ID: JZ/JG ALS Bottle#: 7 Worklist Smp#: 37
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

11 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

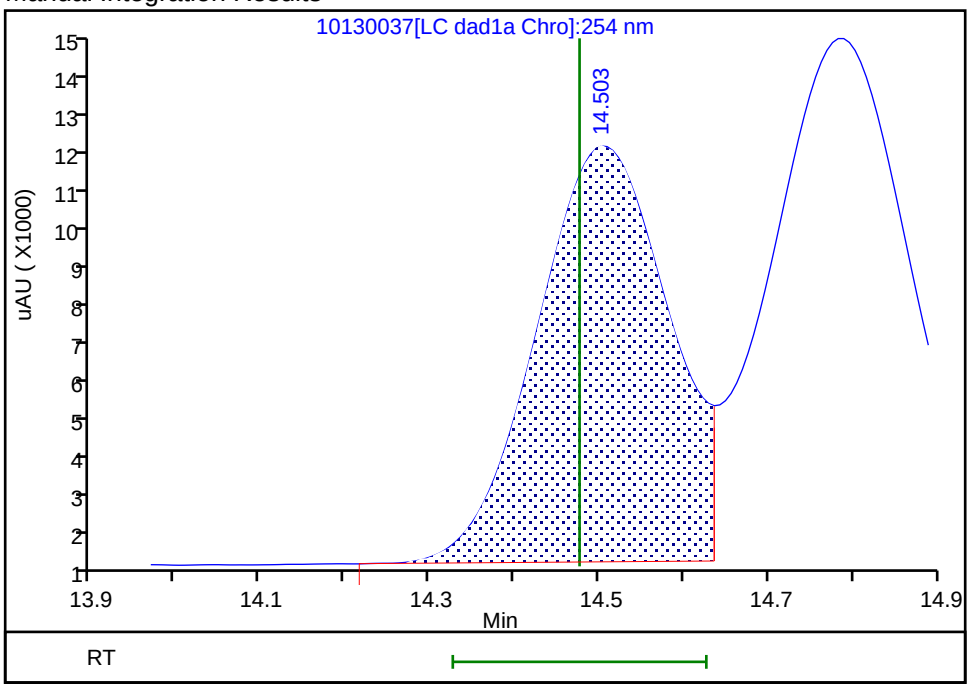
Processing Integration Results

RT: 14.50
Area: 104232
Amount: 0.253206
Amount Units: ug/ml



Manual Integration Results

RT: 14.50
Area: 108226
Amount: 0.262945
Amount Units: ug/ml



Reviewer: K8YG, 16-Oct-2023 11:52:27 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

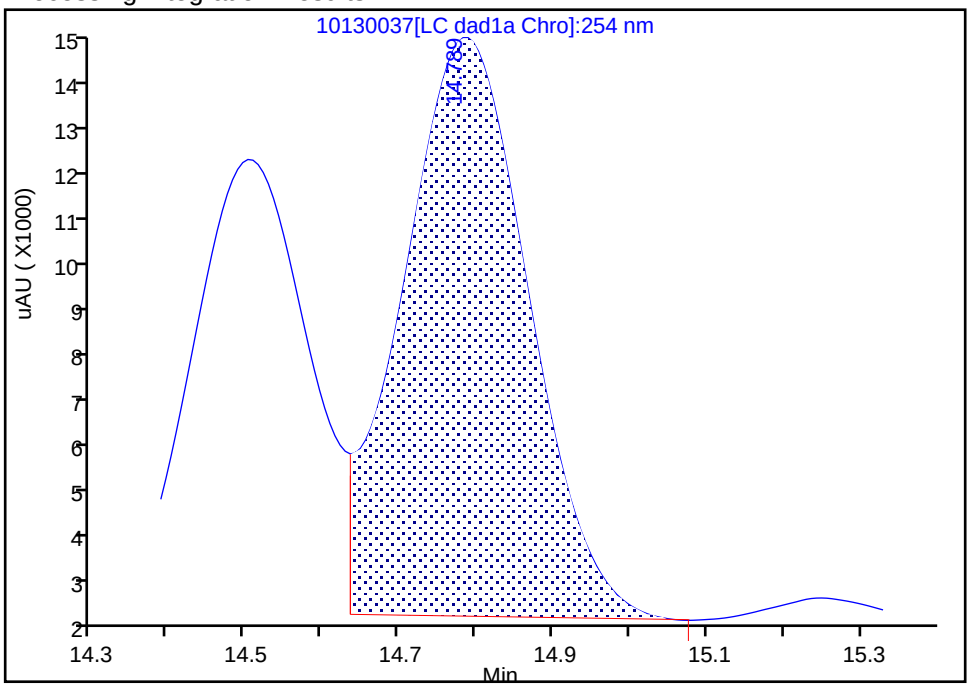
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Lims ID: CCV ADD
Client ID:
Operator ID: JZ/JG ALS Bottle#: 7 Worklist Smp#: 37
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

12 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

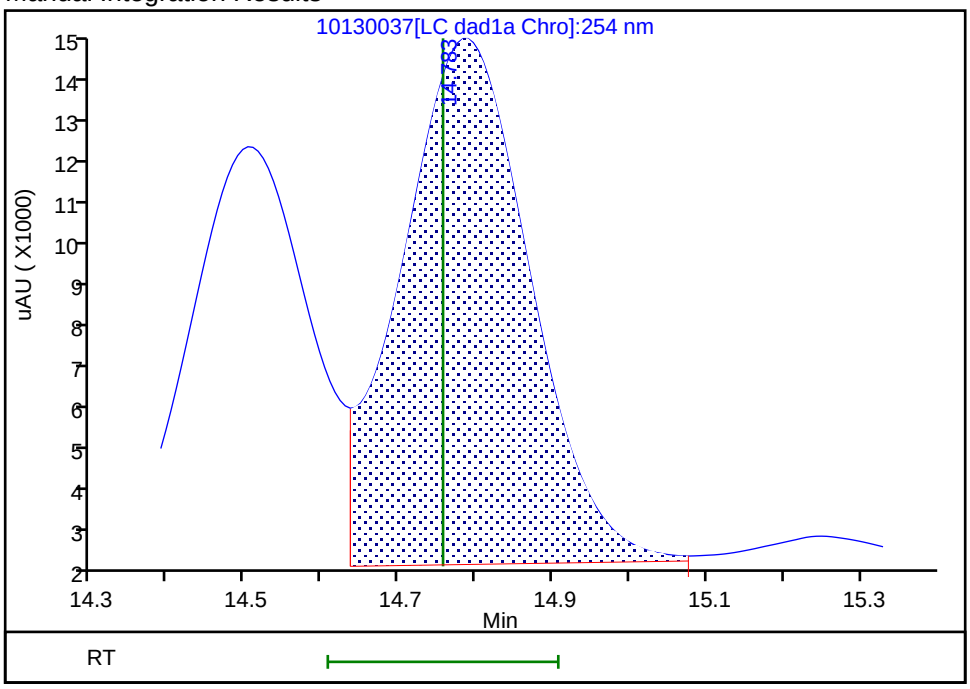
Processing Integration Results

RT: 14.79
Area: 139416
Amount: 0.240568
Amount Units: ug/ml



Manual Integration Results

RT: 14.78
Area: 145606
Amount: 0.251249
Amount Units: ug/ml



Reviewer: K8YG, 16-Oct-2023 11:52:27 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

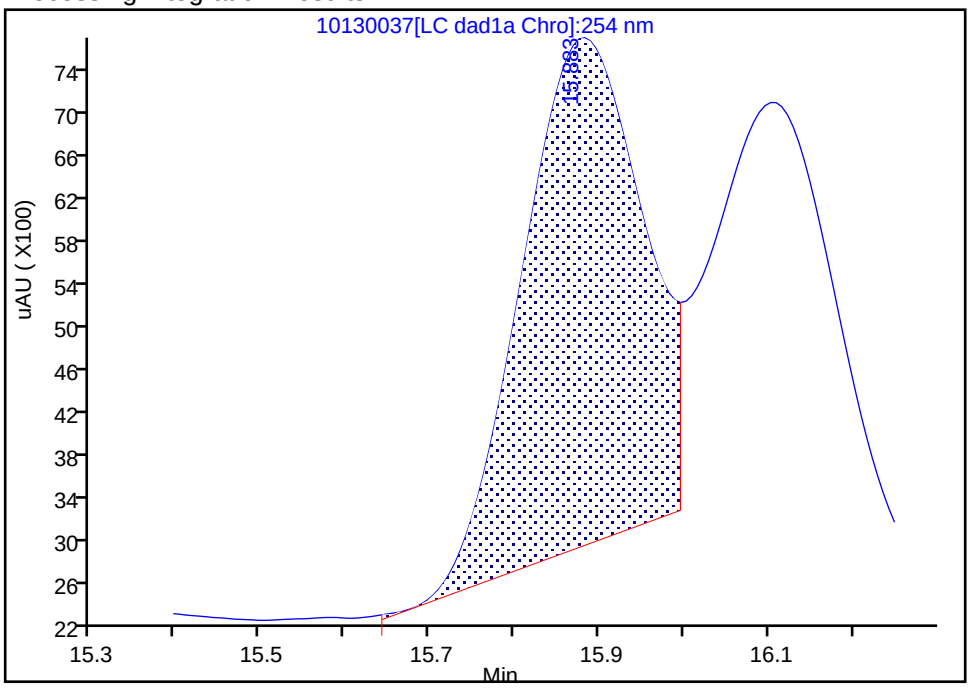
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Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

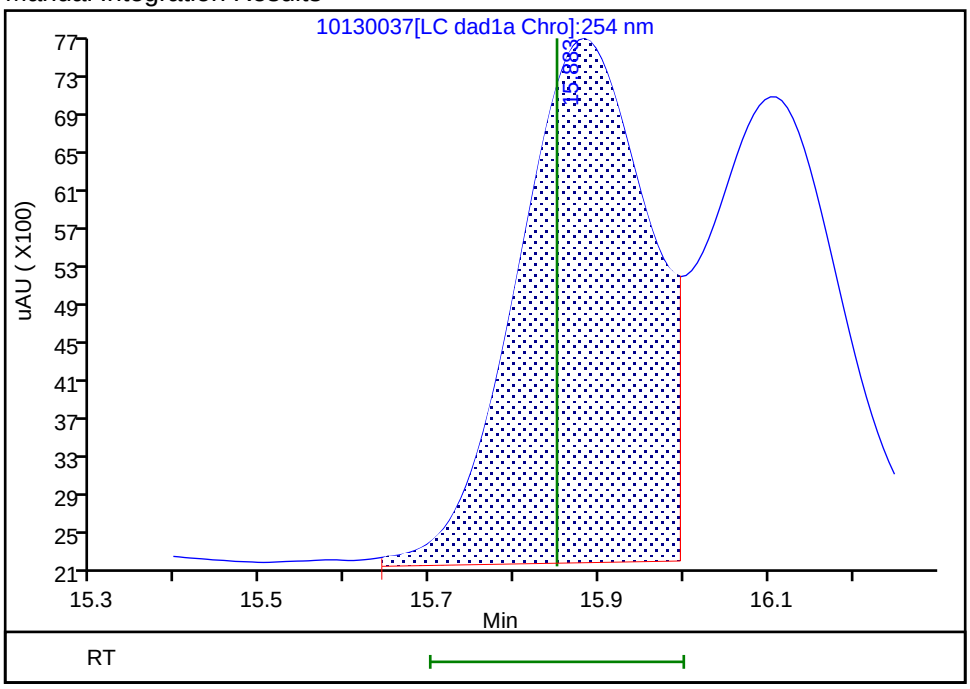
Processing Integration Results

RT: 15.88
Area: 47159
Amount: 0.190899
Amount Units: ug/ml



Manual Integration Results

RT: 15.88
Area: 58140
Amount: 0.235350
Amount Units: ug/ml



Reviewer: K8YG, 16-Oct-2023 11:52:27 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

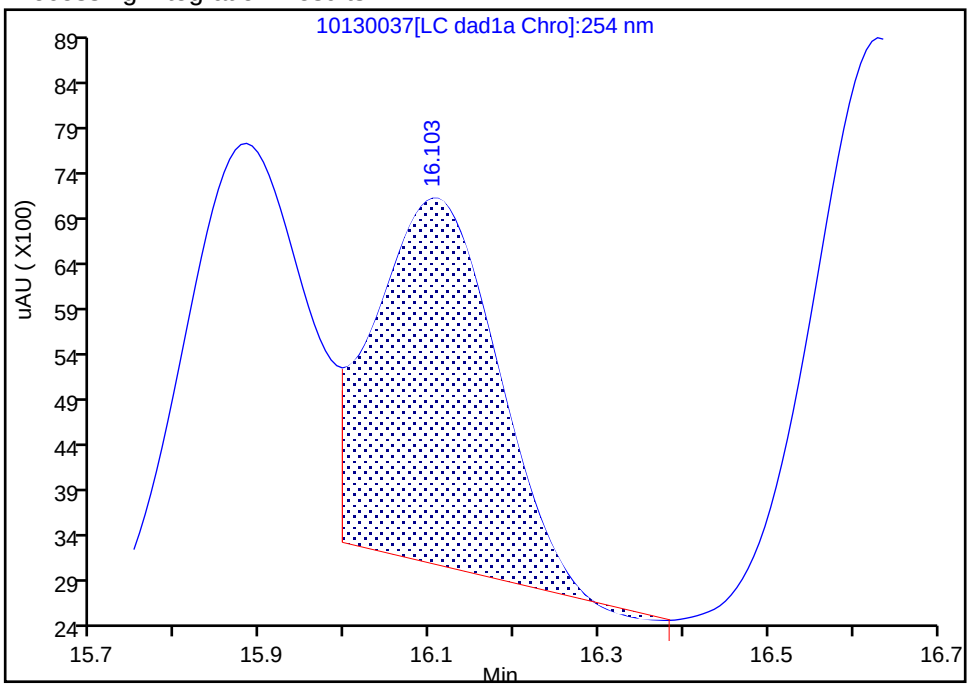
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Injection Date: 14-Oct-2023 09:36:05 Instrument ID: CHHPLC_G2_LUNA
Lims ID: CCV ADD
Client ID:
Operator ID: JZ/JG ALS Bottle#: 7 Worklist Smp#: 37
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

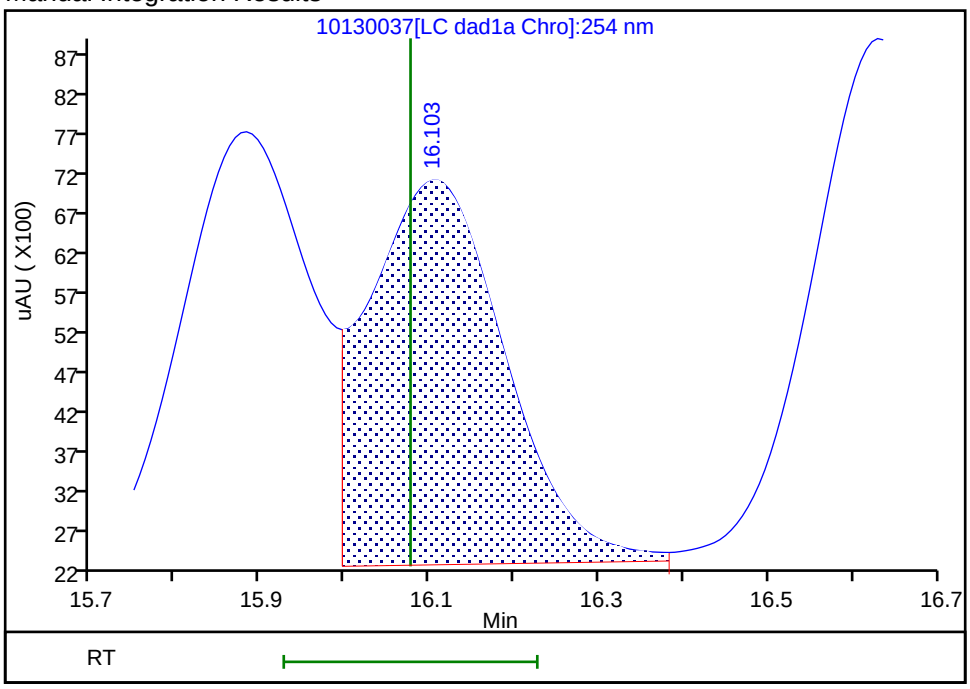
Processing Integration Results

RT: 16.10
Area: 41440
Amount: 0.187745
Amount Units: ug/ml



Manual Integration Results

RT: 16.10
Area: 53389
Amount: 0.242842
Amount Units: ug/ml



Reviewer: K8YG, 16-Oct-2023 11:52:27 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

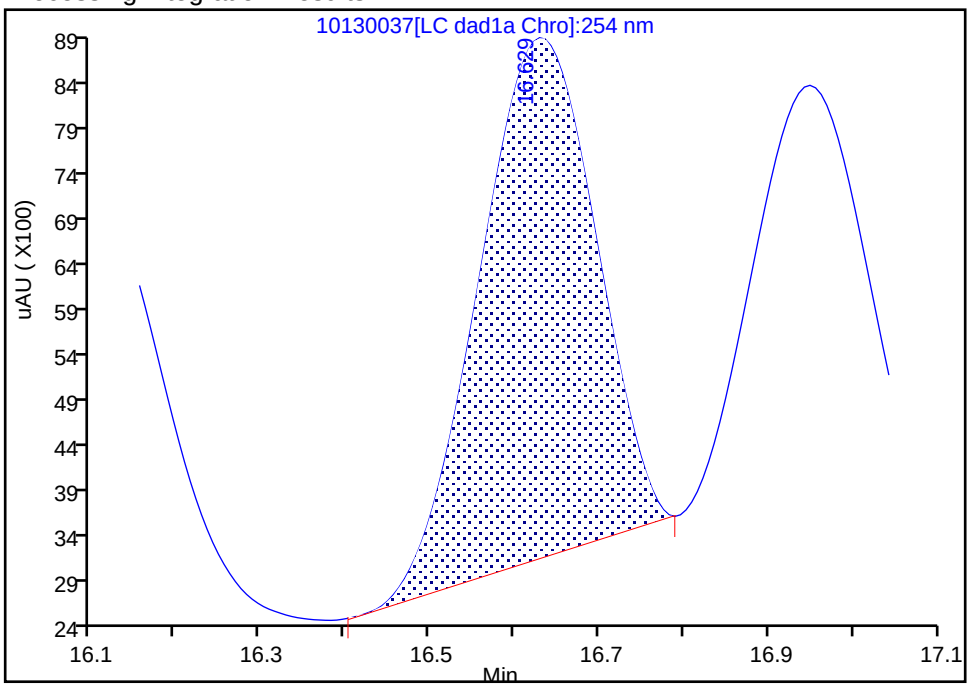
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Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

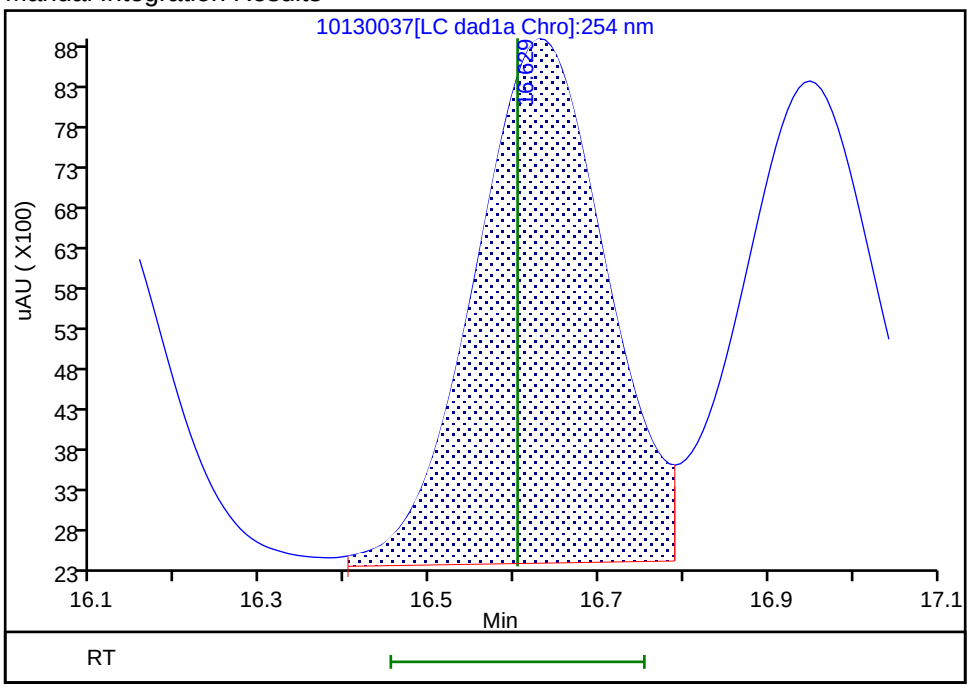
Processing Integration Results

RT: 16.63
Area: 55412
Amount: 0.200688
Amount Units: ug/ml



Manual Integration Results

RT: 16.63
Area: 70086
Amount: 0.255163
Amount Units: ug/ml



Reviewer: K8YG, 16-Oct-2023 11:52:27 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

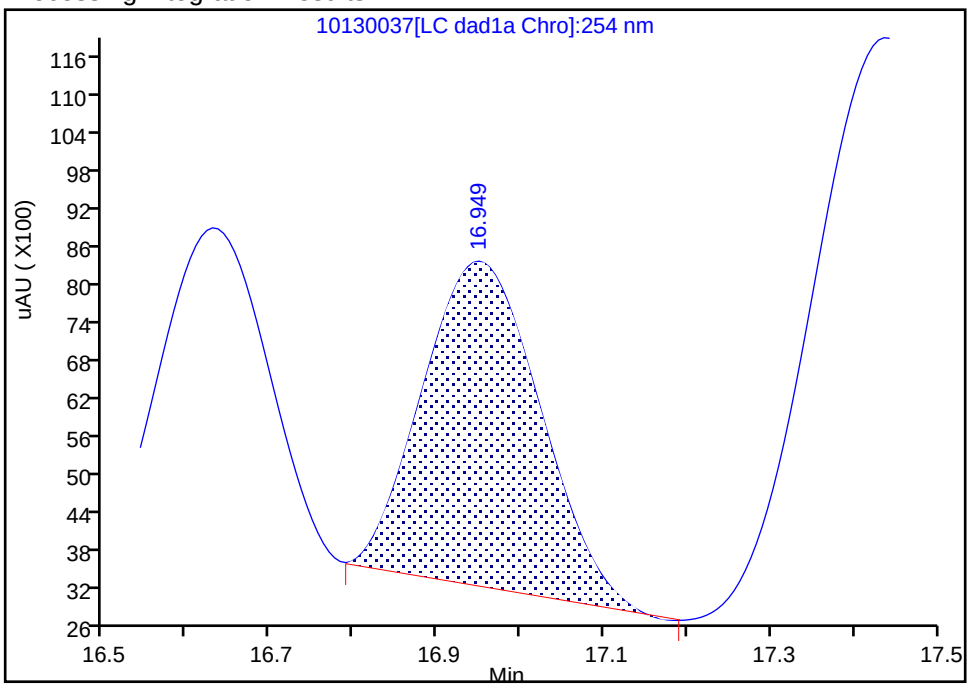
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Injection Date:	14-Oct-2023 09:36:05	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

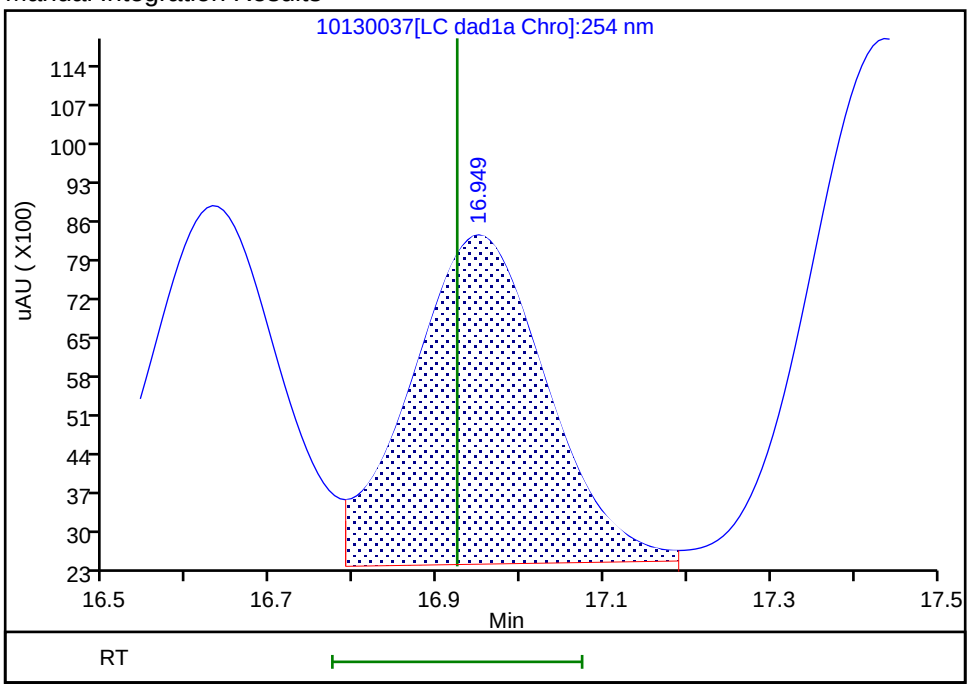
Processing Integration Results

RT: 16.95
Area: 50660
Amount: 0.183597
Amount Units: ug/ml



Manual Integration Results

RT: 16.95
Area: 66750
Amount: 0.243304
Amount Units: ug/ml



Reviewer: K8YG, 16-Oct-2023 11:52:27 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

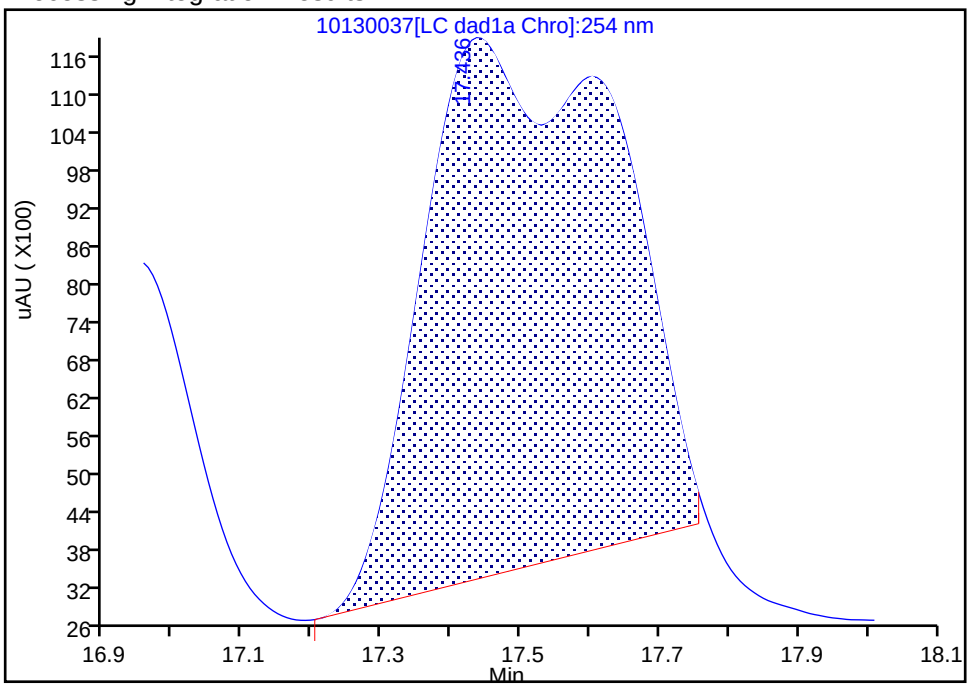
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Injection Date:	14-Oct-2023 09:36:05	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

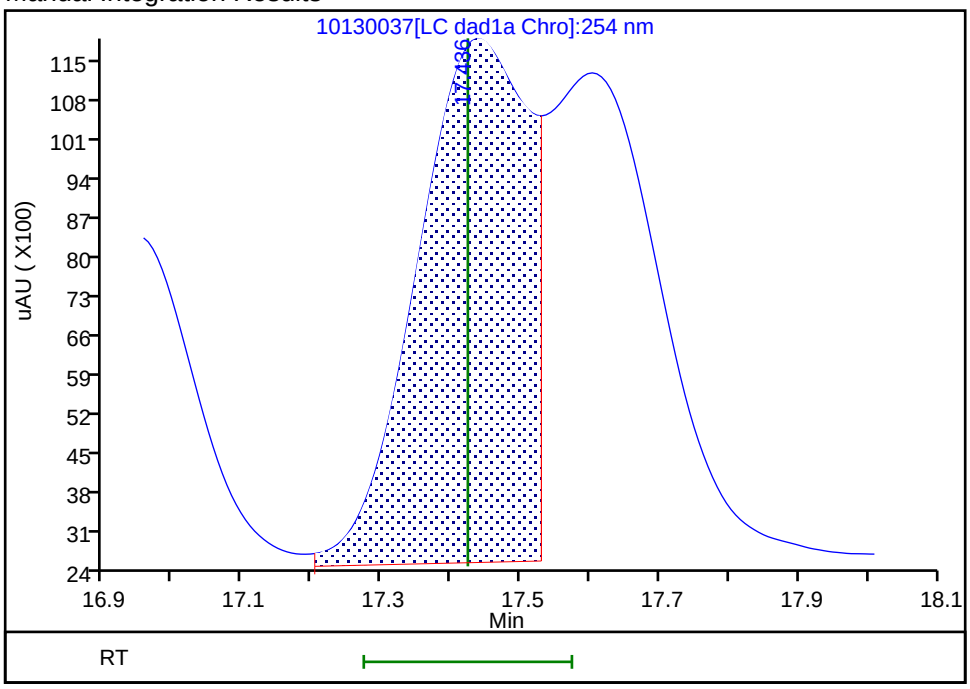
Processing Integration Results

RT: 17.44
Area: 164919
Amount: 0.434512
Amount Units: ug/ml



Manual Integration Results

RT: 17.44
Area: 104094
Amount: 0.272862
Amount Units: ug/ml



Reviewer: K8YG, 16-Oct-2023 11:52:27 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

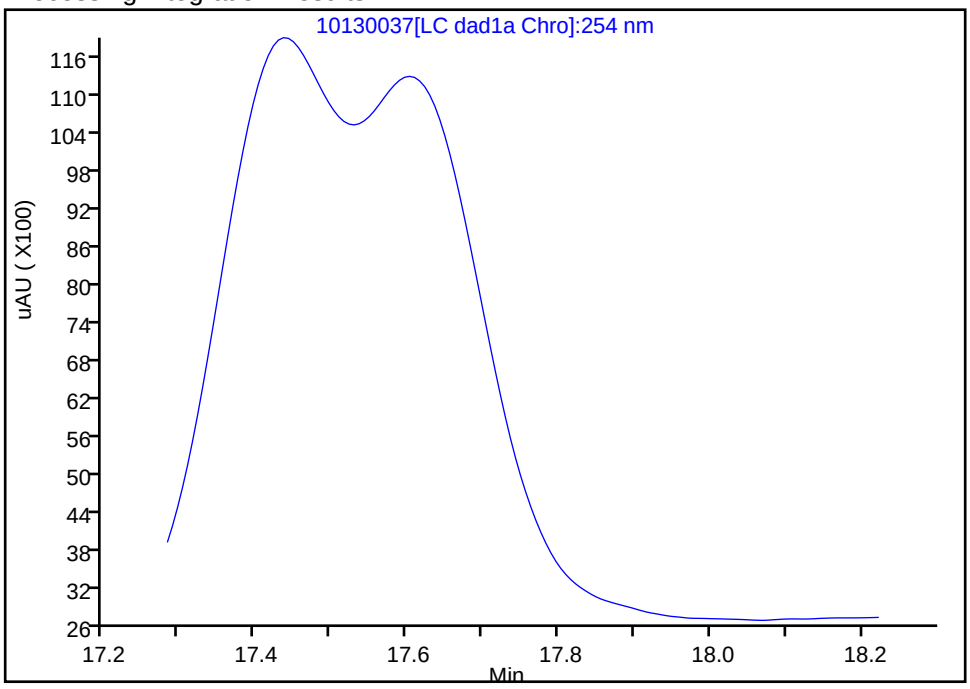
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Injection Date:	14-Oct-2023 09:36:05	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

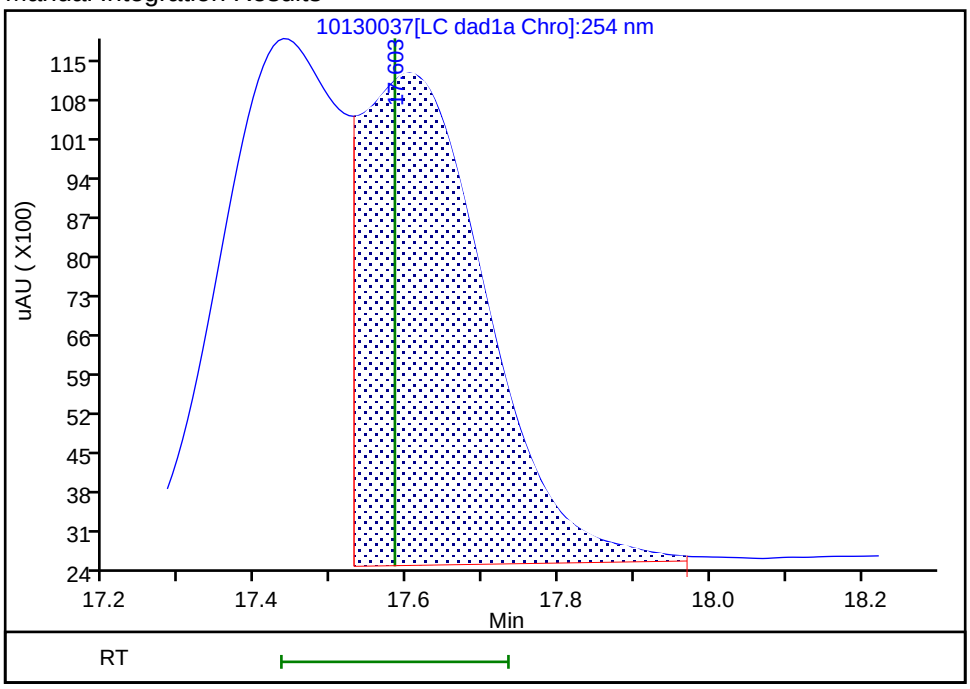
Not Detected
Expected RT: 17.58

Processing Integration Results



Manual Integration Results

RT: 17.60
Area: 98492
Amount: 0.239273
Amount Units: ug/ml



Reviewer: K8YG, 16-Oct-2023 11:52:27 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

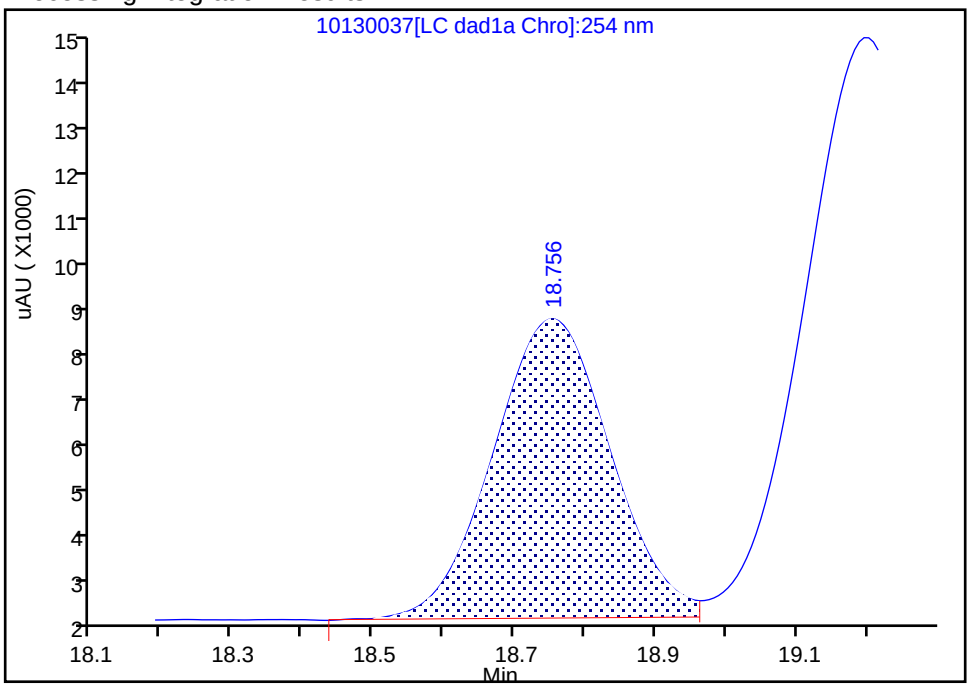
Data File:	\\chromfs\denver\chromdata\g2_luna\20231013-126503.b\10130037.d				
Injection Date:	14-Oct-2023 09:36:05	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

20 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

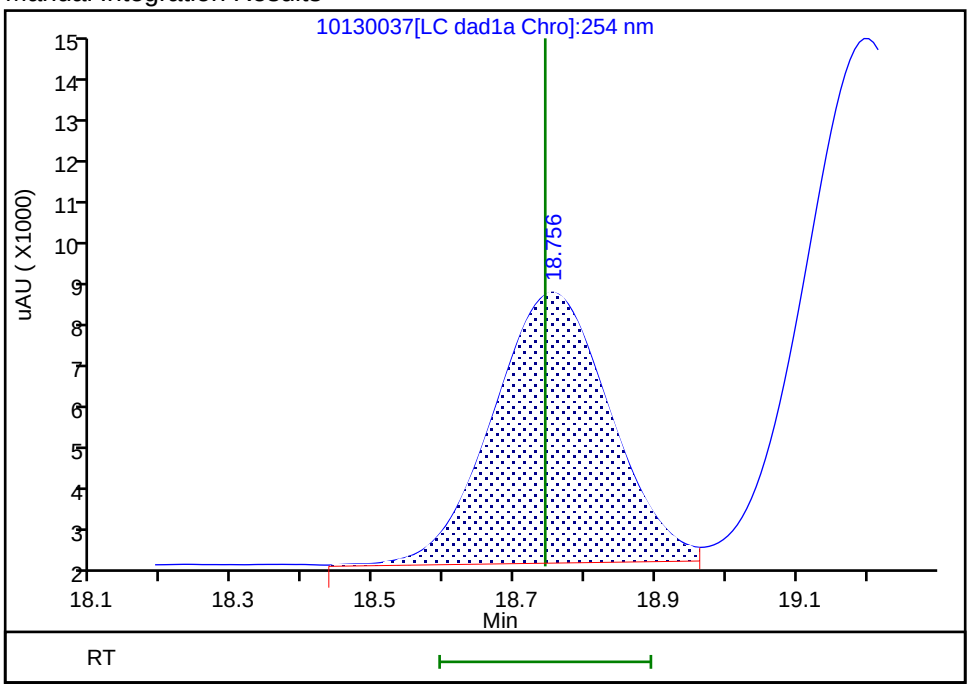
Processing Integration Results

RT: 18.76
Area: 67957
Amount: 0.257324
Amount Units: ug/ml



Manual Integration Results

RT: 18.76
Area: 67957
Amount: 0.257324
Amount Units: ug/ml



Reviewer: K8YG, 16-Oct-2023 11:52:27 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

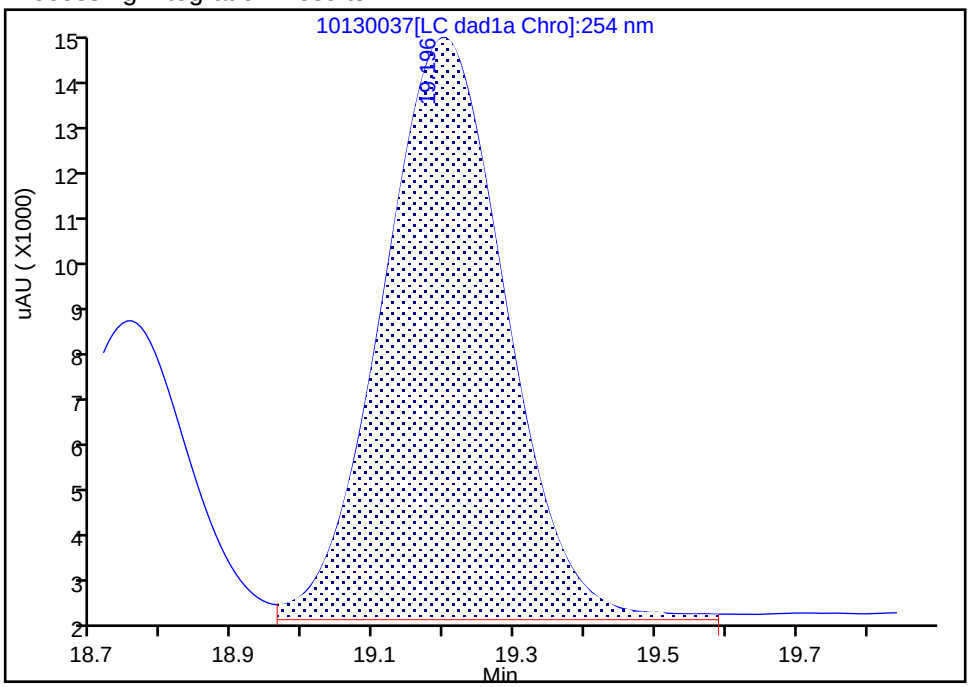
Data File: \\chromfs\denver\chromdata\g2_luna\20231013-126503.b\10130037.d
Injection Date: 14-Oct-2023 09:36:05 Instrument ID: CHHPLC_G2_LUNA
Lims ID: CCV ADD
Client ID:
Operator ID: JZ/JG ALS Bottle#: 7 Worklist Smp#: 37
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

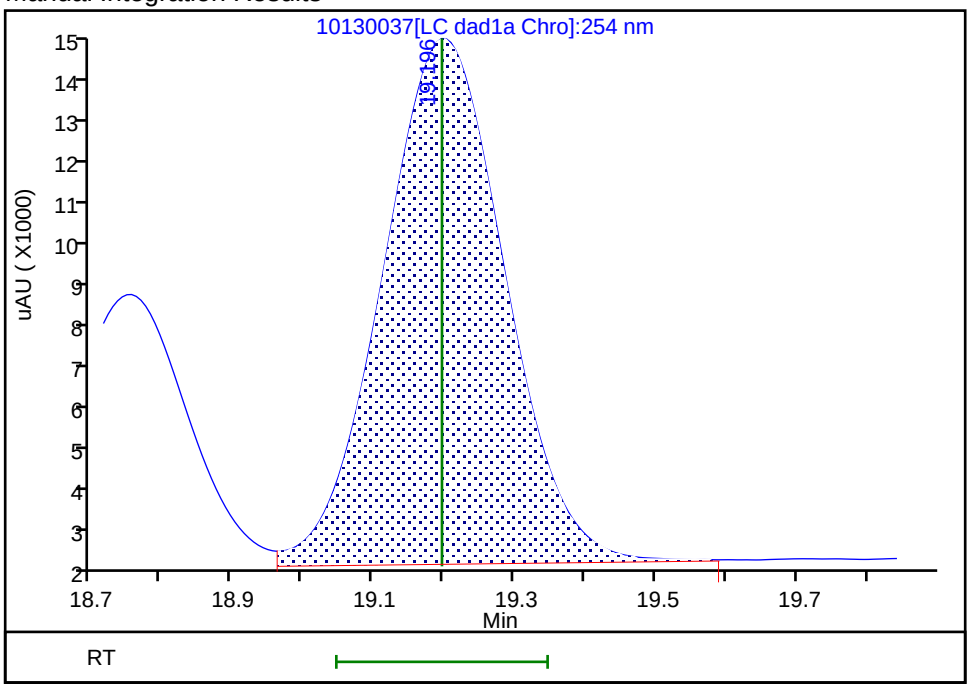
Processing Integration Results

RT: 19.20
Area: 138176
Amount: 0.253493
Amount Units: ug/ml



Manual Integration Results

RT: 19.20
Area: 136653
Amount: 0.250699
Amount Units: ug/ml



Reviewer: K8YG, 16-Oct-2023 11:52:27 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-629682/37 | Calibration Date: 10/14/2023 09:36

Instrument ID: CHHPLC_G2_LUNA | Calib Start Date: 09/26/2023 00:42

GC Column: Luna-phenylhex ID: 4.60(mm) | Calib End Date: 09/26/2023 04:54

Lab File ID: 10130037.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,6-diamino-4-nitrotoluene	Ave	387643	409552		264	250	5.7	20.0
2,4-diamino-6-nitrotoluene	Ave	233949	246224		263	250	5.2	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-629682/37 Calibration Date: 10/14/2023 09:36

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 09/26/2023 00:42

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 09/26/2023 04:54

Lab File ID: 10130037.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	4.26	4.09	4.39
2,4-diamino-6-nitrotoluene	4.86	4.71	5.01

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20231013-126503.b\10130037.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 14-Oct-2023 09:36:05 ALS Bottle#: 7 Worklist Smp#: 37
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub12

Method: \\chromfs\Denver\ChromData\G2_LUNA\20231013-126503.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 16-Oct-2023 11:53:22 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1675

First Level Reviewer: K8YG Date: 16-Oct-2023 11:52:35

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1	4.256	4.244	0.012	102388	0.2500	0.2641	
	2 2,4-diamino-6-nitrotoluene	1	4.863	4.857	0.006	61556	0.2500	0.2631	
	3 TNX	1	5.316	5.310	0.006	96828	0.2508	0.2560	
	4 DNX	1	6.183	6.170	0.013	71299	0.2503	0.2474	
	6 HMX	1	6.850	6.830	0.020	44513	0.2500	0.2566	
	7 MNX	1	7.703	7.684	0.019	76305	0.2918	0.2914	
	5 2,4,6-Trinitrophenol	1	8.723	8.864	-0.141	36098	0.2500	0.2517	
	8 RDX	1	9.110	9.077	0.033	53110	0.2500	0.2558	
	9 Nitrobenzene	1	11.689	11.650	0.039	91019	0.2500	0.2451	
$	10 1,2-Dinitrobenzene	1	12.656	12.617	0.039	65016	0.2500	0.2532	
	11 3,5-Dinitroaniline	1	14.503	14.477	0.026	108226	0.2500	0.2629	M
	12 1,3-Dinitrobenzene	1	14.783	14.757	0.026	145606	0.2500	0.2512	M
	13 Nitroglycerin	2	15.249	15.223	0.026	316773	2.50	2.55	
	14 o-Nitrotoluene	1	15.883	15.850	0.033	58140	0.2500	0.2354	M
	15 p-Nitrotoluene	1	16.103	16.077	0.026	53389	0.2500	0.2428	M
	16 4-Amino-2,6-dinitrotoluene	1	16.629	16.603	0.026	70086	0.2500	0.2552	M
	17 m-Nitrotoluene	1	16.949	16.923	0.026	66750	0.2500	0.2433	M
	18 2-Amino-4,6-dinitrotoluene	1	17.436	17.423	0.013	104094	0.2500	0.2729	M
	19 1,3,5-Trinitrobenzene	1	17.603	17.583	0.020	98492	0.2500	0.2393	Ma
	20 2,6-Dinitrotoluene	1	18.756	18.743	0.013	67957	0.2500	0.2573	M
	21 2,4-Dinitrotoluene	1	19.196	19.197	-0.001	136653	0.2500	0.2507	M
	22 Tetryl	1	22.430	22.477	-0.047	78049	0.2500	0.2531	
	23 2,4,6-Trinitrotoluene	1	23.276	23.330	-0.054	101166	0.2500	0.2628	
	24 PETN	2	24.410	24.517	-0.107	322178	2.50	2.62	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330 DMT_00015	Amount Added:	12.50	Units: uL
8330IntermStk_00078	Amount Added:	25.00	Units: uL
8330_ADDs_00037	Amount Added:	12.50	Units: uL

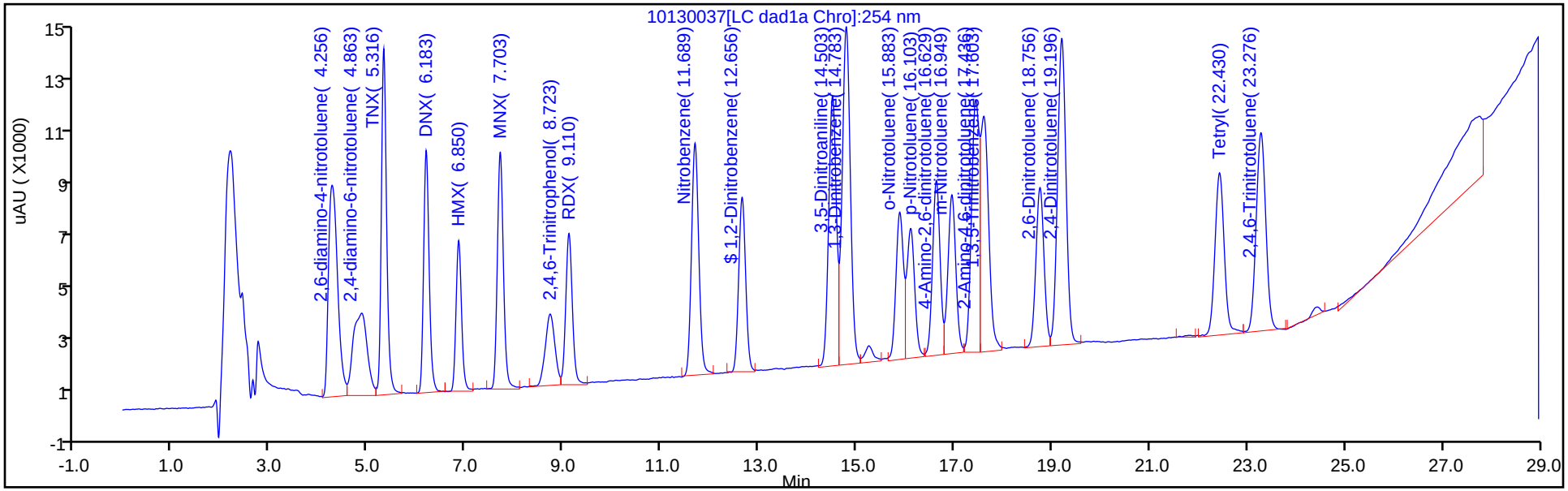
Report Date: 16-Oct-2023 11:53:22 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

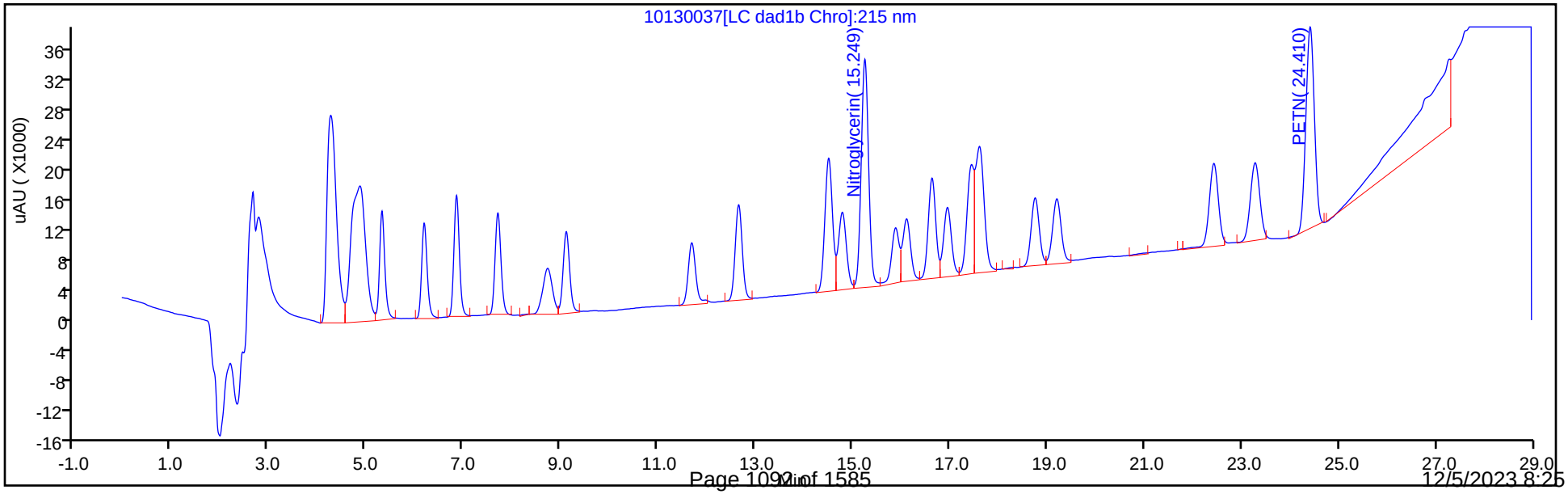
Data File: \\chromfs\denver\chromdata\g2_luna\20231013-126503.b\10130037.d

Injection Date:	14-Oct-2023 09:36:05	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	37
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



12/5/2023 8:25 AM

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Lab Sample ID: ICV 280-617295/20 | Calibration Date: 06/23/2023 21:20

Instrument ID: CHHPLC_X3 | Calib Start Date: 06/23/2023 17:53

GC Column: UltraCarb5uODS ID: 4.60(mm) | Calib End Date: 06/23/2023 20:57

Lab File ID: 06230020.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	200761	199627		499	502	-0.6	20.0
HMX	Ave	94255	83092		441	500	-11.8	20.0
DNX	Ave	144493	149728		519	501	3.6	20.0
MNX	Ave	138689	138972		585	584	0.2	20.0
RDX	Ave	110493	105934		479	500	-4.1	20.0
Picric acid	Ave	77863	85034		546	500	9.2	20.0
1,3,5-Trinitrobenzene	Ave	216079	236762		548	500	9.6	20.0
1,3-Dinitrobenzene	Ave	293347	307830		525	500	4.9	20.0
Nitrobenzene	Ave	192696	199368		517	500	3.5	20.0
3,5-Dinitroaniline	Lin2		225728		502	500	0.4	20.0
Tetryl	Ave	167257	189110		565	500	13.1	20.0
Nitroglycerin	Ave	64651	68558		5300	5000	6.0	20.0
2,4,6-Trinitrotoluene	Ave	204902	210316		513	500	2.6	20.0
4-Amino-2,6-dinitrotoluene	Ave	149560	156178		522	500	4.4	20.0
2-Amino-4,6-dinitrotoluene	Ave	193716	201626		520	500	4.1	20.0
2,6-Dinitrotoluene	Ave	142638	147100		516	500	3.1	20.0
2,4-Dinitrotoluene	Ave	295706	300582		508	500	1.6	20.0
2-Nitrotoluene	Ave	126123	126932		503	500	0.6	20.0
4-Nitrotoluene	Ave	110088	109714		498	500	-0.3	20.0
3-Nitrotoluene	Lin2		139916		512	500	2.4	20.0
PETN	Ave	72018	77398		5370	5000	7.5	20.0
1,2-Dinitrobenzene	Ave	123911	127840		516	500	3.2	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: ICV 280-617295/20 Calibration Date: 06/23/2023 21:20

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 17:53

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/23/2023 20:57

Lab File ID: 06230020.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.47	6.37	6.57
HMX	6.60	6.45	6.75
DNX	6.80	6.70	6.90
MNX	7.23	7.09	7.39
RDX	7.63	7.47	7.77
Picric acid	8.01	7.88	8.18
1,3,5-Trinitrobenzene	8.71	8.56	8.86
1,3-Dinitrobenzene	9.33	9.19	9.49
Nitrobenzene	9.69	9.56	9.86
3,5-Dinitroaniline	9.93	9.79	10.09
Tetryl	10.07	9.93	10.23
Nitroglycerin	10.52	10.39	10.69
2,4,6-Trinitrotoluene	10.96	10.88	11.08
4-Amino-2,6-dinitrotoluene	11.15	11.07	11.27
2-Amino-4,6-dinitrotoluene	11.40	11.32	11.52
2,6-Dinitrotoluene	11.56	11.48	11.68
2,4-Dinitrotoluene	11.73	11.64	11.84
2-Nitrotoluene	12.55	12.42	12.72
4-Nitrotoluene	12.97	12.83	13.13
3-Nitrotoluene	13.54	13.41	13.71
PETN	14.71	14.57	14.87
1,2-Dinitrobenzene	8.58	8.44	8.74

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230020.D
Lims ID: ICV INT/DMT
Client ID:
Sample Type: ICV
Inject. Date: 23-Jun-2023 21:20:20 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV INT/DMT
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist:

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2023 12:56:19 Calib Date: 23-Jun-2023 20:57:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1681

First Level Reviewer: LV5D Date: 23-Jun-2023 21:43:56

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.471	6.470	0.001	100113	0.5015	0.4987	M
4 HMX	1	6.598	6.597	0.001	41546	0.5000	0.4408	M
6 DNX	1	6.798	6.803	-0.005	74939	0.5005	0.5186	M
7 MNX	1	7.231	7.237	-0.006	81090	0.5835	0.5847	
8 RDX	1	7.625	7.623	0.002	52967	0.5000	0.4794	
9 2,4,6-Trinitrophenol	1	8.005	8.030	-0.025	42517	0.5000	0.5460	
$ 10 1,2-Dinitrobenzene	1	8.578	8.590	-0.012	63920	0.5000	0.5159	
11 1,3,5-Trinitrobenzene	1	8.705	8.710	-0.005	118381	0.5000	0.5479	
12 1,3-Dinitrobenzene	1	9.325	9.336	-0.011	153915	0.5000	0.5247	
13 Nitrobenzene	1	9.691	9.710	-0.019	99684	0.5000	0.5173	
14 3,5-Dinitroaniline	1	9.925	9.943	-0.018	112864	0.5000	0.5018	
15 Tetryl	1	10.065	10.083	-0.018	94555	0.5000	0.5653	
16 Nitroglycerin	2	10.518	10.536	-0.018	342788	5.00	5.30	
17 2,4,6-Trinitrotoluene	1	10.958	10.976	-0.018	105158	0.5000	0.5132	
18 4-Amino-2,6-dinitrotoluene	1	11.151	11.170	-0.019	78089	0.5000	0.5221	
19 2-Amino-4,6-dinitrotoluene	1	11.398	11.423	-0.025	100813	0.5000	0.5204	
20 2,6-Dinitrotoluene	1	11.558	11.576	-0.018	73550	0.5000	0.5156	
21 2,4-Dinitrotoluene	1	11.725	11.743	-0.018	150291	0.5000	0.5082	
22 o-Nitrotoluene	1	12.545	12.570	-0.025	63466	0.5000	0.5032	
23 p-Nitrotoluene	1	12.965	12.983	-0.018	54857	0.5000	0.4983	
24 m-Nitrotoluene	1	13.538	13.556	-0.018	69958	0.5000	0.5121	
25 PETN	2	14.711	14.723	-0.012	386990	5.00	5.37	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330Surrogate_00146	Amount Added:	50.00	Units: uL
8330 LCS_00127	Amount Added:	50.00	Units: uL
8330_OP_DMT_00021	Amount Added:	50.00	Units: uL

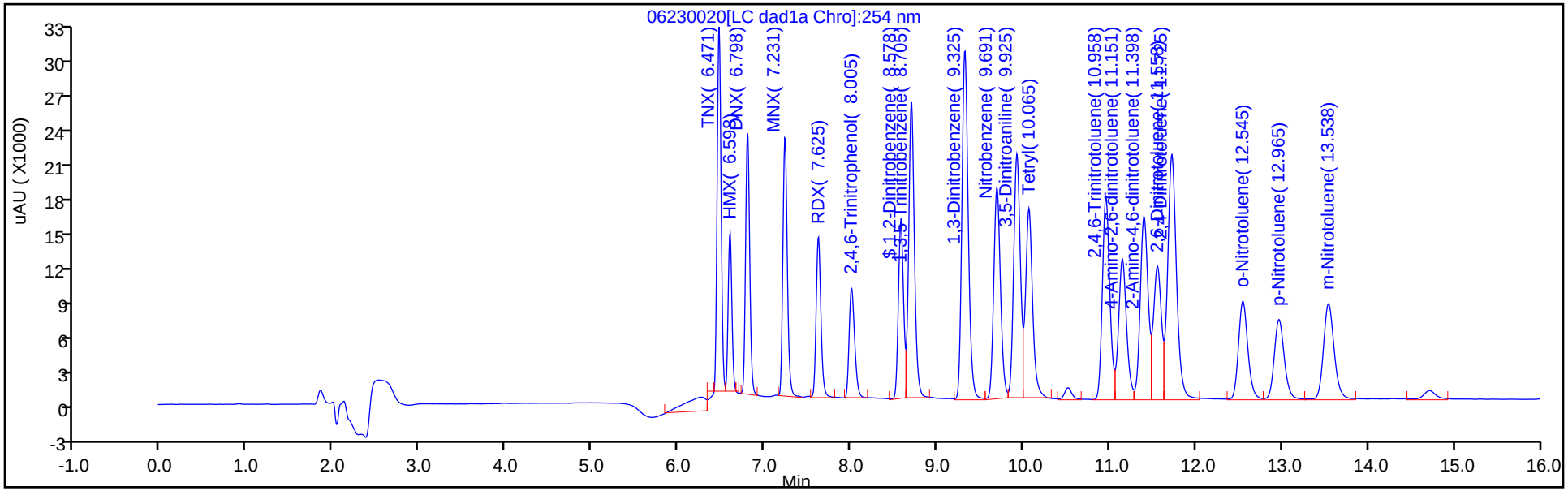
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Eurofins Denver

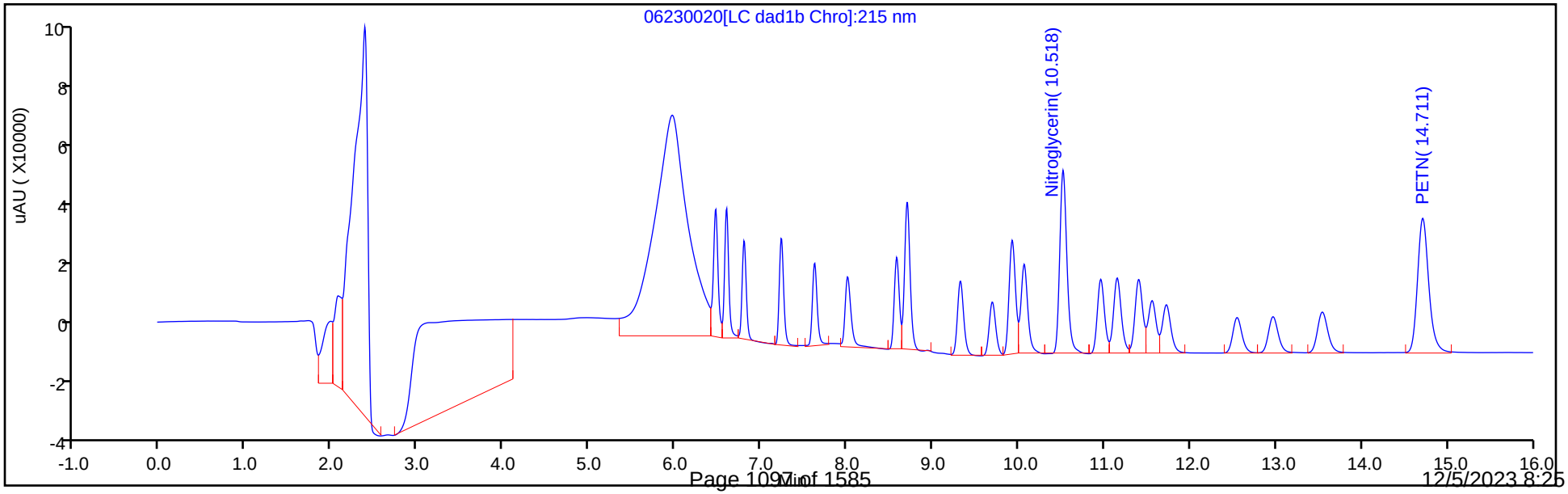
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Injection Date:	23-Jun-2023 21:20:20	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	ICV INT/DMT			Worklist Smp#:	20
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



12/5/2023 8:25 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

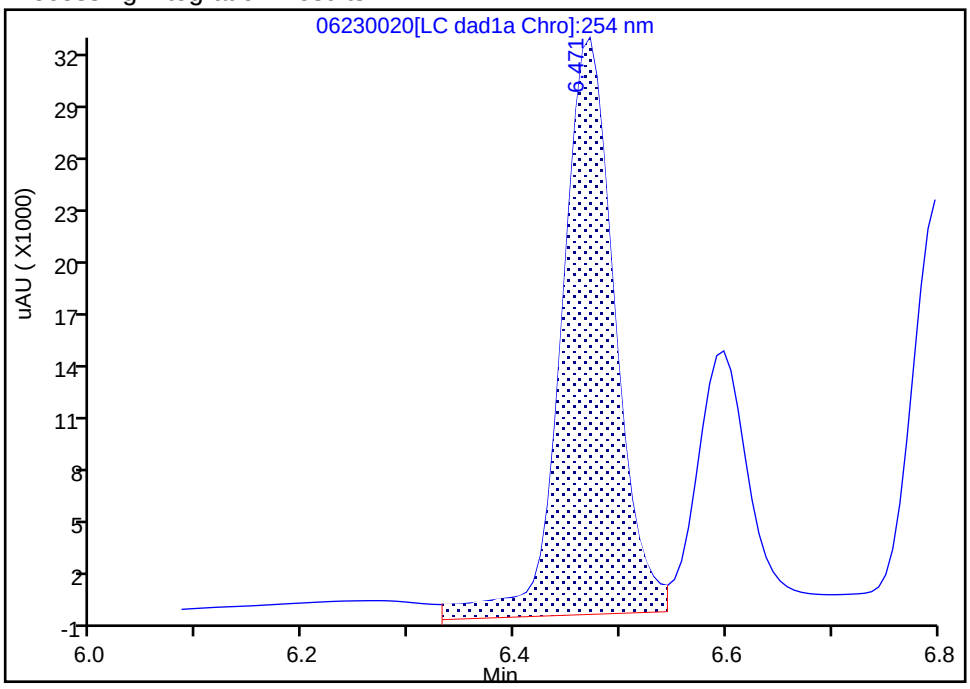
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Injection Date:	23-Jun-2023 21:20:20	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV INT/DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

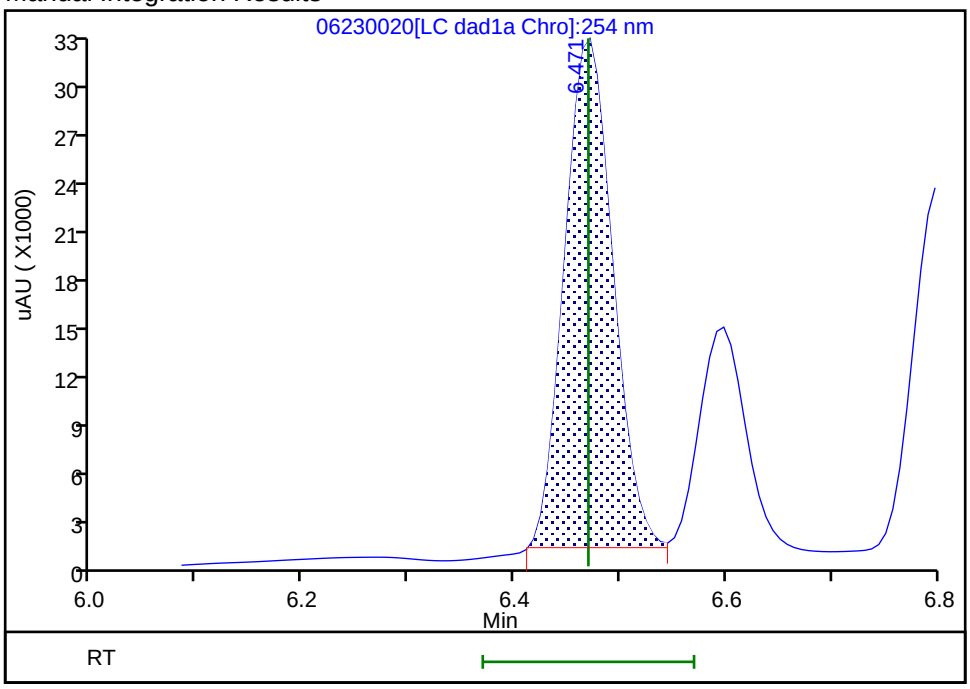
Processing Integration Results

RT: 6.47
Area: 115764
Amount: 0.576626
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 100113
Amount: 0.498668
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 21:43:50 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

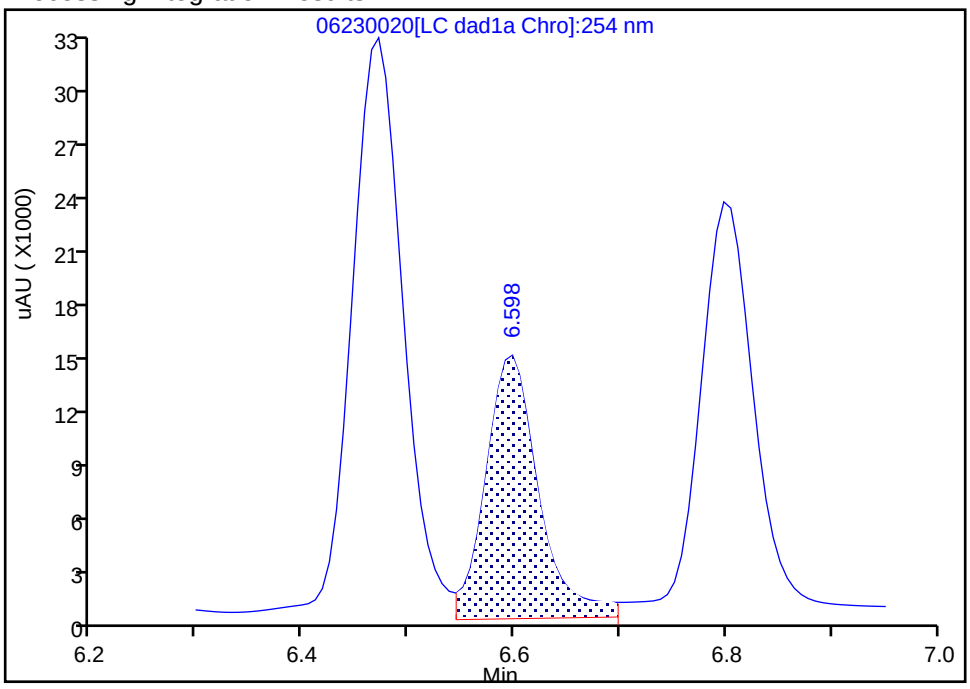
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Injection Date:	23-Jun-2023 21:20:20	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV INT/DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

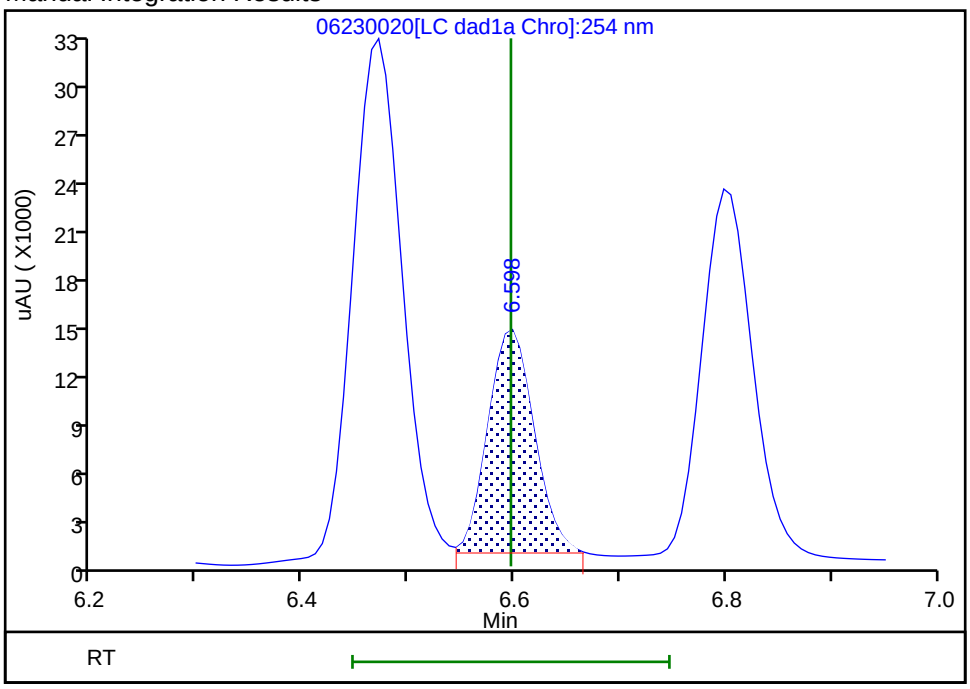
Processing Integration Results

RT: 6.60
Area: 51262
Amount: 0.543863
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 41546
Amount: 0.440781
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 21:43:51 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

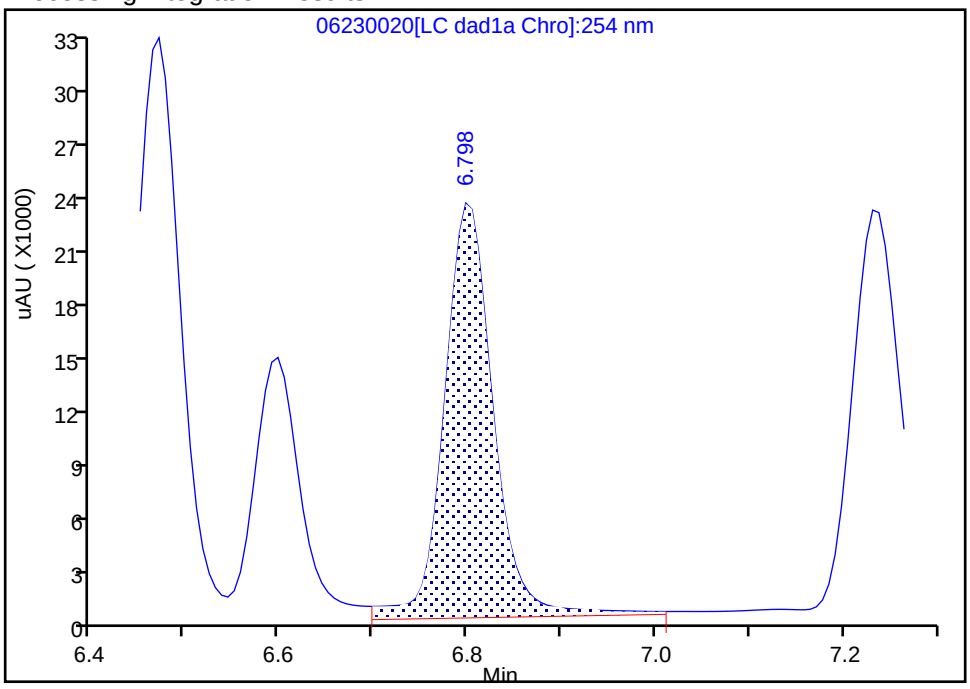
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Injection Date:	23-Jun-2023 21:20:20	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV INT/DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

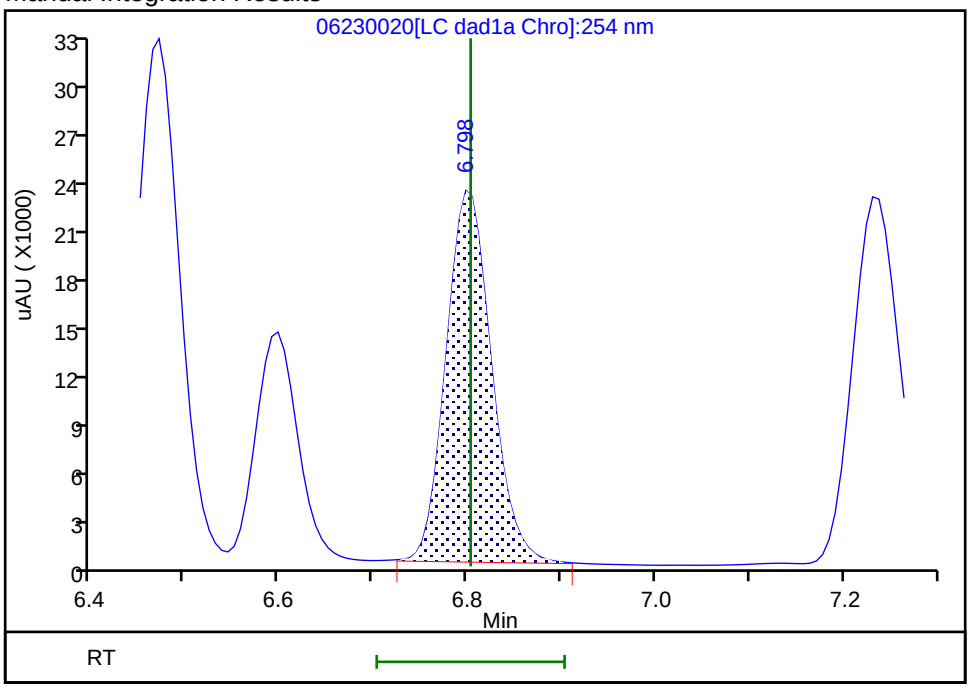
Processing Integration Results

RT: 6.80
Area: 84885
Amount: 0.587469
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 74939
Amount: 0.518635
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 21:43:54 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: ICV 280-617295/29 Calibration Date: 06/24/2023 00:46

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 21:43

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/24/2023 00:23

Lab File ID: 06230029.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,6-diamino-4-nitrotoluene	Ave	225565	222918		494	500	-1.2	20.0
2,4-diamino-6-nitrotoluene	Ave	143326	140752		491	500	-1.8	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: ICV 280-617295/29 Calibration Date: 06/24/2023 00:46

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 21:43

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/24/2023 00:23

Lab File ID: 06230029.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	6.47	6.33	6.63
2,4-diamino-6-nitrotoluene	6.66	6.52	6.82

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230029.D
Lims ID: ICV ADD
Client ID:
Sample Type: ICV
Inject. Date: 24-Jun-2023 00:46:42 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist:

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2023 12:55:55 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1681

First Level Reviewer: LV5D Date: 24-Jun-2023 10:43:11

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1	6.469	6.475	-0.006	111459	0.5000	0.4941	M
5 2,4-diamino-6-nitrotoluene	1	6.663	6.669	-0.006	70376	0.5000	0.4910	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330DiaminLCS_00058 Amount Added: 50.00 Units: uL

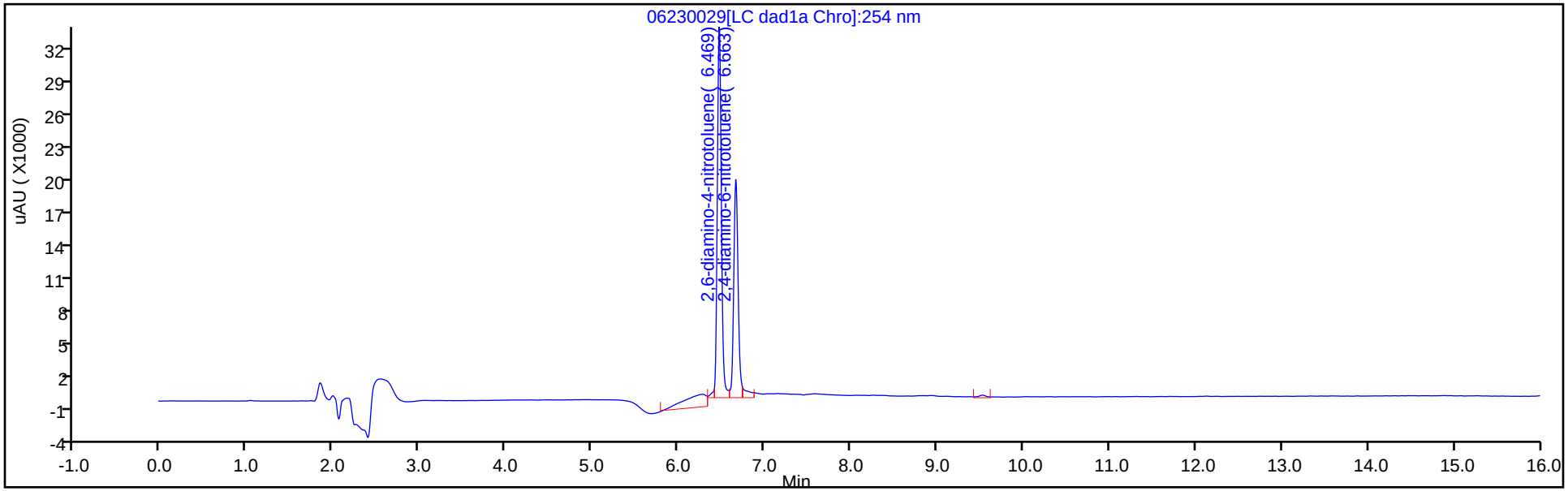
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Eurofins Denver

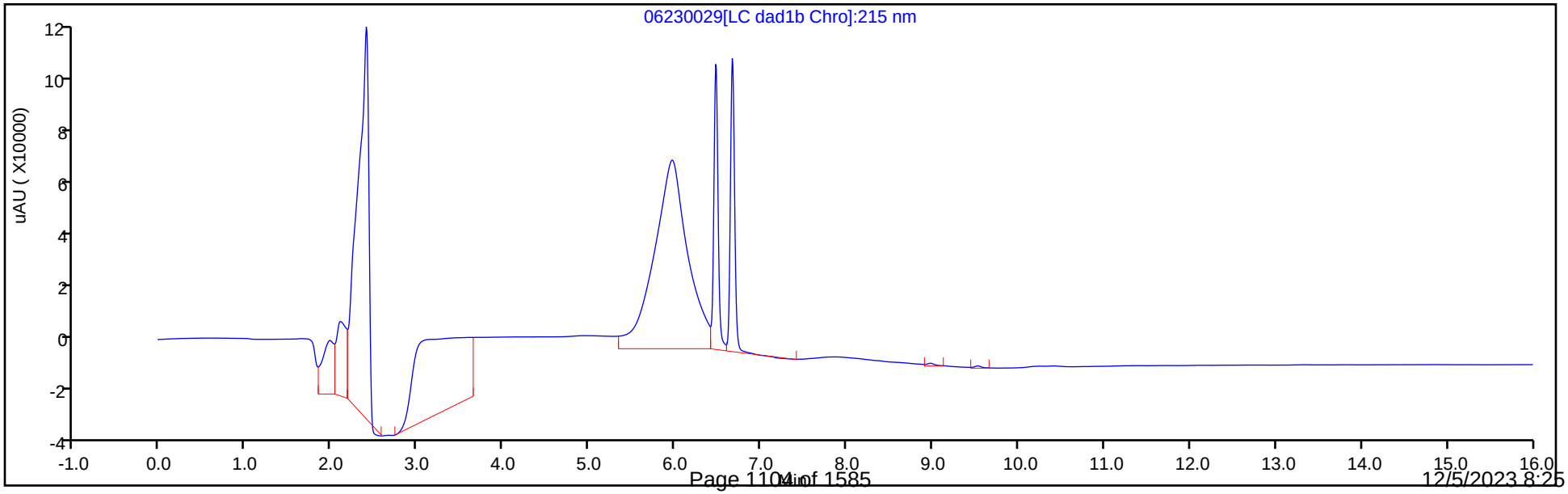
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230029.d

Injection Date:	24-Jun-2023 00:46:42	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	ICV ADD			Worklist Smp#:	29
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

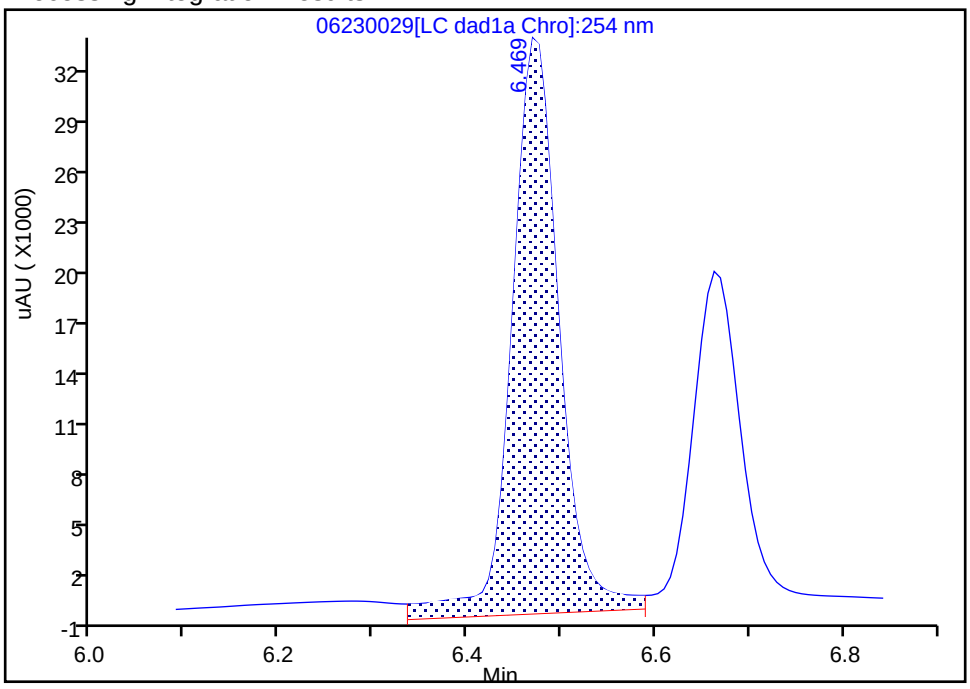
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Injection Date:	24-Jun-2023 00:46:42	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

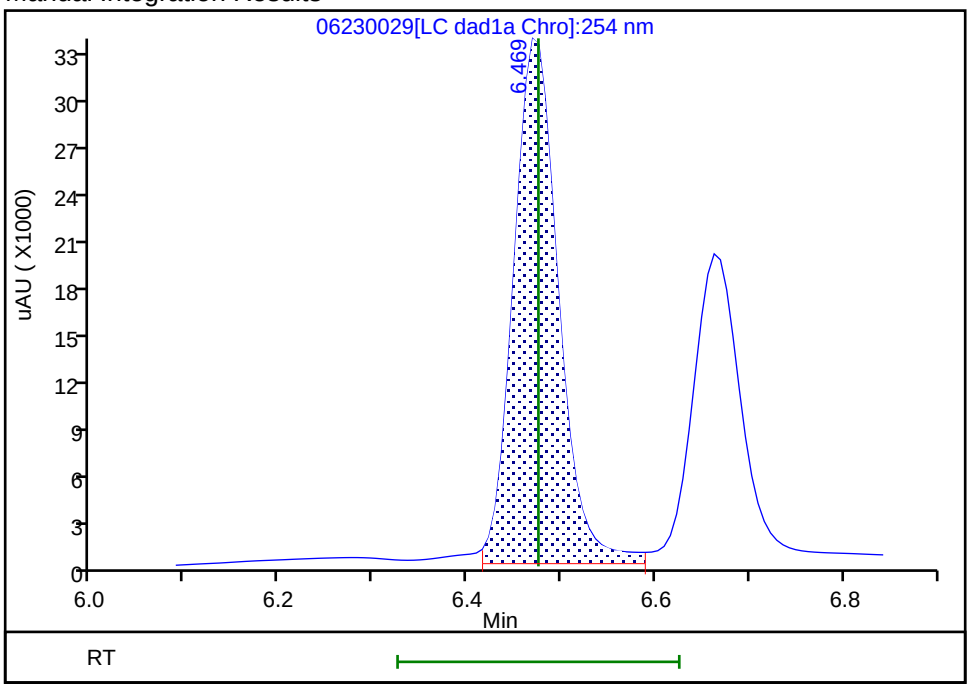
Processing Integration Results

RT: 6.47
Area: 120408
Amount: 0.525262
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 111459
Amount: 0.494132
Amount Units: ug/mL



Reviewer: LV5D, 24-Jun-2023 10:43:09 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

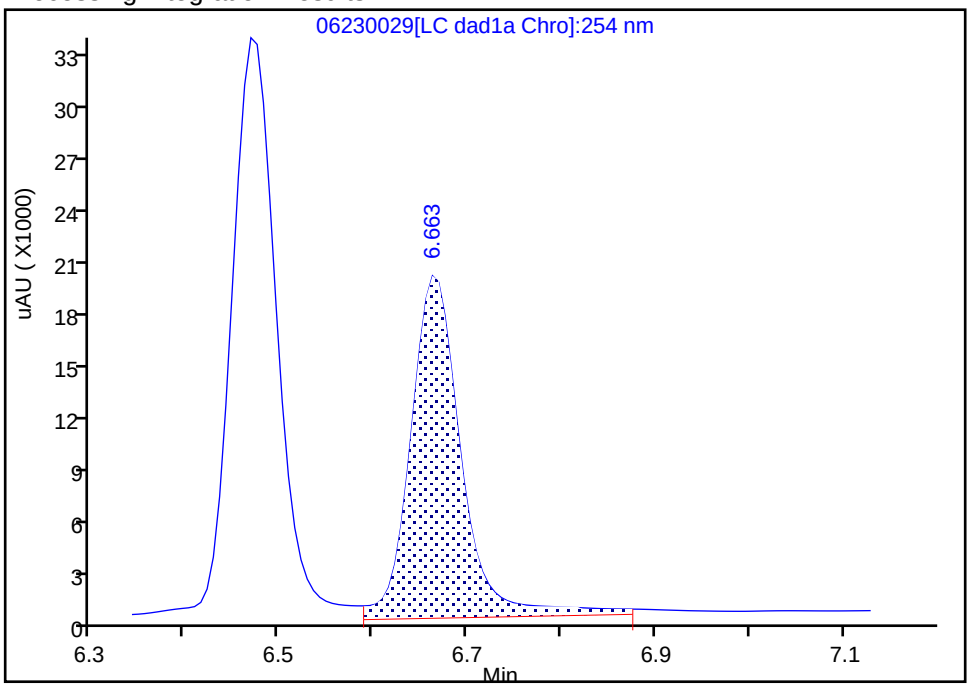
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230029.d				
Injection Date:	24-Jun-2023 00:46:42	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

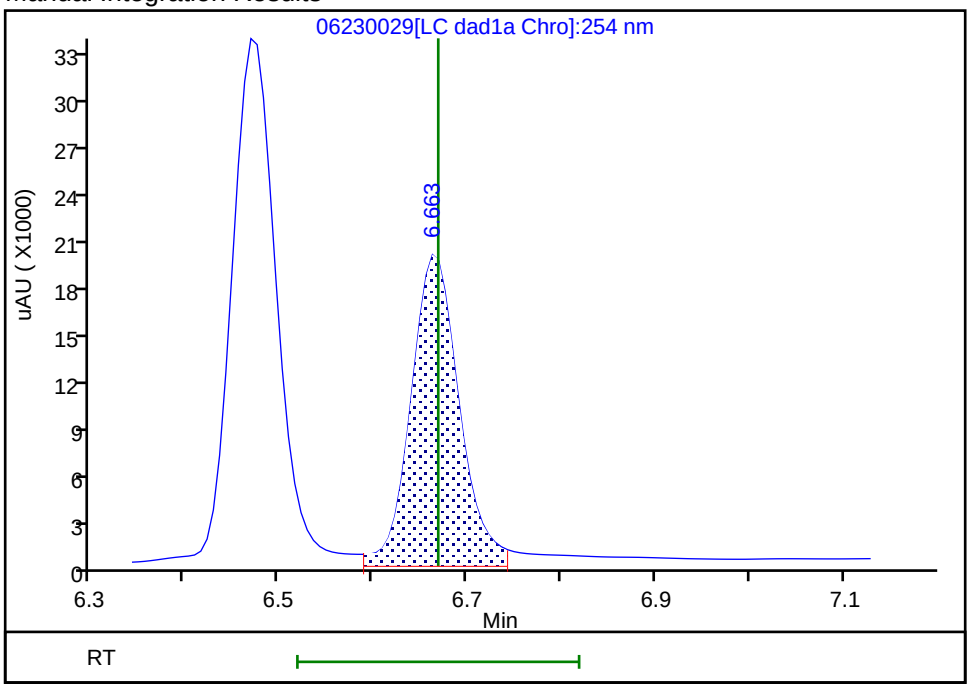
Processing Integration Results

RT: 6.66
Area: 74254
Amount: 0.503423
Amount Units: ug/mL



Manual Integration Results

RT: 6.66
Area: 70376
Amount: 0.491020
Amount Units: ug/mL



Reviewer: LV5D, 24-Jun-2023 10:43:10 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-628897/8 | Calibration Date: 10/07/2023 14:13

Instrument ID: CHHPLC_X3 | Calib Start Date: 06/23/2023 17:53

GC Column: UltraCarb5uODS ID: 4.60(mm) | Calib End Date: 06/23/2023 20:57

Lab File ID: 10070008.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	200761	209866		262	251	4.5	20.0
HMX	Ave	94255	96524		256	250	2.4	20.0
DNX	Ave	144493	151217		262	250	4.7	20.0
MNX	Ave	138689	141104		297	292	1.7	20.0
RDX	Ave	110493	110948		251	250	0.4	20.0
Picric acid	Ave	77863	77432		249	250	-0.6	20.0
1,3,5-Trinitrobenzene	Ave	216079	224784		260	250	4.0	20.0
1,3-Dinitrobenzene	Ave	293347	298120		254	250	1.6	20.0
Nitrobenzene	Ave	192696	194712		253	250	1.0	20.0
3,5-Dinitroaniline	Lin2		217128		242	250	-3.3	20.0
Tetryl	Ave	167257	177292		265	250	6.0	20.0
Nitroglycerin	Ave	64651	68626		2650	2500	6.1	20.0
2,4,6-Trinitrotoluene	Ave	204902	205076		250	250	0.0	20.0
4-Amino-2,6-dinitrotoluene	Ave	149560	155980		261	250	4.3	20.0
2-Amino-4,6-dinitrotoluene	Ave	193716	194752		251	250	0.5	20.0
2,6-Dinitrotoluene	Ave	142638	146836		257	250	2.9	20.0
2,4-Dinitrotoluene	Ave	295706	297736		252	250	0.7	20.0
2-Nitrotoluene	Ave	126123	126032		250	250	-0.0	20.0
4-Nitrotoluene	Ave	110088	108076		245	250	-1.8	20.0
3-Nitrotoluene	Lin2		137220		249	250	-0.3	20.0
PETN	Ave	72018	74874		2600	2500	4.0	20.0
1,2-Dinitrobenzene	Ave	123911	130560		263	250	5.4	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-628897/8 Calibration Date: 10/07/2023 14:13

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 17:53

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/23/2023 20:57

Lab File ID: 10070008.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.45	6.35	6.55
HMX	6.57	6.42	6.72
DNX	6.78	6.68	6.88
MNX	7.20	7.05	7.35
RDX	7.58	7.43	7.73
Picric acid	7.94	7.79	8.09
1,3,5-Trinitrobenzene	8.64	8.49	8.79
1,3-Dinitrobenzene	9.25	9.10	9.40
Nitrobenzene	9.62	9.47	9.77
3,5-Dinitroaniline	9.83	9.68	9.98
Tetryl	9.96	9.81	10.11
Nitroglycerin	10.41	10.26	10.56
2,4,6-Trinitrotoluene	10.84	10.74	10.94
4-Amino-2,6-dinitrotoluene	11.01	10.91	11.11
2-Amino-4,6-dinitrotoluene	11.26	11.16	11.36
2,6-Dinitrotoluene	11.42	11.32	11.52
2,4-Dinitrotoluene	11.59	11.49	11.69
2-Nitrotoluene	12.39	12.24	12.54
4-Nitrotoluene	12.80	12.65	12.95
3-Nitrotoluene	13.36	13.21	13.51
PETN	14.47	14.32	14.62
1,2-Dinitrobenzene	8.52	8.37	8.67

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\10070008.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 07-Oct-2023 14:13:32 ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2023 11:17:27 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1602

First Level Reviewer: LV5D Date: 07-Oct-2023 14:42:50

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3	TNX	1	6.450	6.450	0.000	52624	0.2508	0.2621	M
4	HMX	1	6.570	6.570	0.000	24131	0.2500	0.2560	M
6	DNX	1	6.776	6.776	0.000	37842	0.2503	0.2619	M
7	MNX	1	7.196	7.196	0.000	41167	0.2918	0.2968	
8	RDX	1	7.576	7.576	0.000	27737	0.2500	0.2510	
9	2,4,6-Trinitrophenol	1	7.943	7.943	0.000	19358	0.2500	0.2486	
$ 10	1,2-Dinitrobenzene	1	8.516	8.516	0.000	32640	0.2500	0.2634	
11	1,3,5-Trinitrobenzene	1	8.643	8.643	0.000	56196	0.2500	0.2601	
12	1,3-Dinitrobenzene	1	9.250	9.250	0.000	74530	0.2500	0.2541	
13	Nitrobenzene	1	9.616	9.616	0.000	48678	0.2500	0.2526	
14	3,5-Dinitroaniline	1	9.830	9.830	0.000	54282	0.2500	0.2416	
15	Tetryl	1	9.956	9.956	0.000	44323	0.2500	0.2650	
16	Nitroglycerin	2	10.410	10.410	0.000	171564	2.50	2.65	
17	2,4,6-Trinitrotoluene	1	10.843	10.843	0.000	51269	0.2500	0.2502	
18	4-Amino-2,6-dinitrotoluene	1	11.010	11.010	0.000	38995	0.2500	0.2607	
19	2-Amino-4,6-dinitrotoluene	1	11.256	11.256	0.000	48688	0.2500	0.2513	
20	2,6-Dinitrotoluene	1	11.423	11.423	0.000	36709	0.2500	0.2574	
21	2,4-Dinitrotoluene	1	11.590	11.590	0.000	74434	0.2500	0.2517	
22	o-Nitrotoluene	1	12.390	12.390	0.000	31508	0.2500	0.2498	
23	p-Nitrotoluene	1	12.796	12.796	0.000	27019	0.2500	0.2454	
24	m-Nitrotoluene	1	13.356	13.356	0.000	34305	0.2500	0.2491	
25	PETN	2	14.470	14.470	0.000	187186	2.50	2.60	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00015	Amount Added:	12.50	Units: uL
8330IntermStk_00078	Amount Added:	25.00	Units: uL

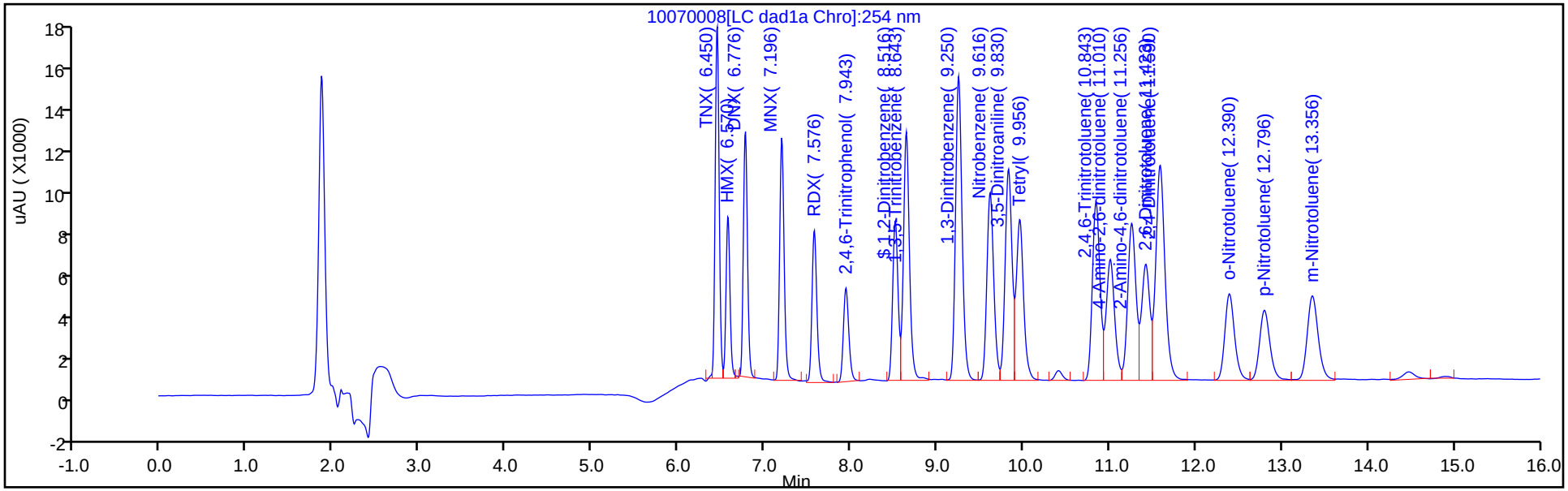
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Eurofins Denver

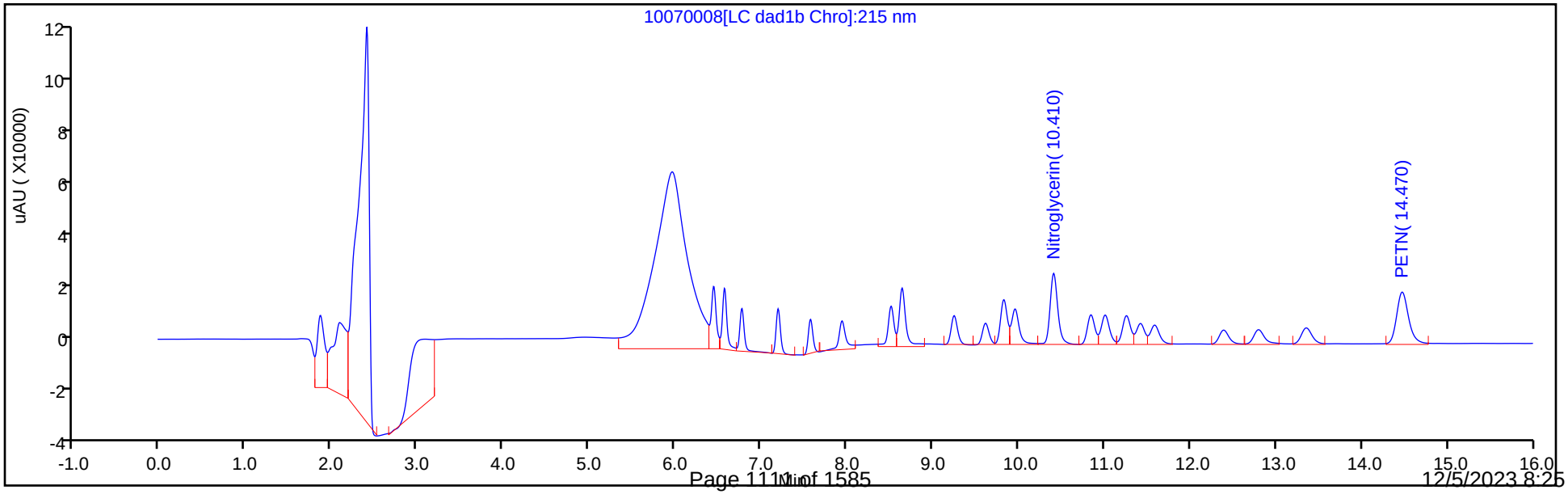
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Injection Date:	07-Oct-2023 14:13:32	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	8
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

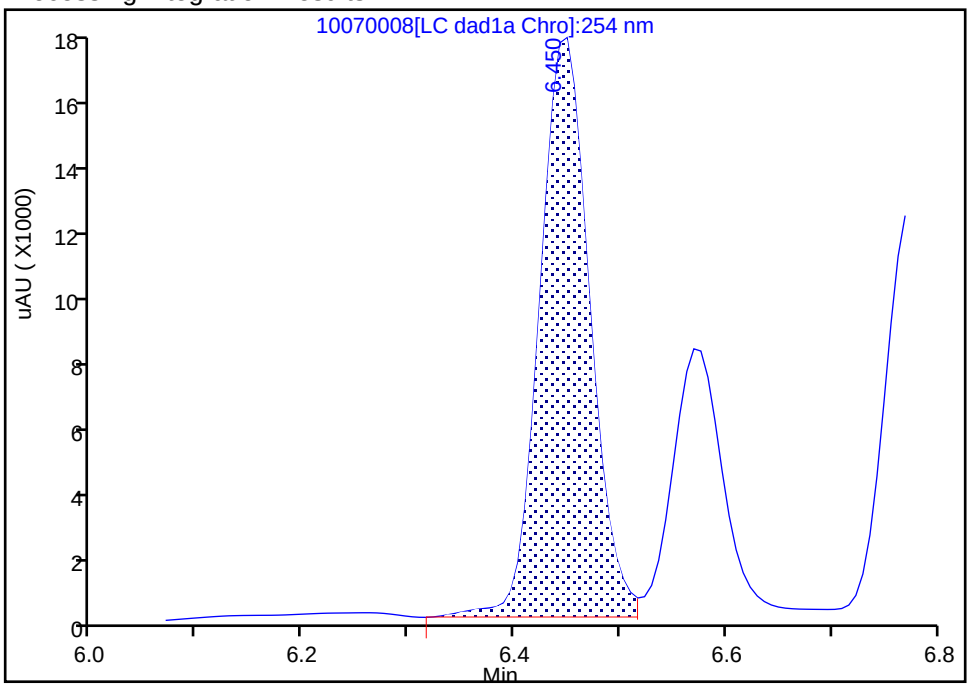
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Injection Date:	07-Oct-2023 14:13:32	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	8
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

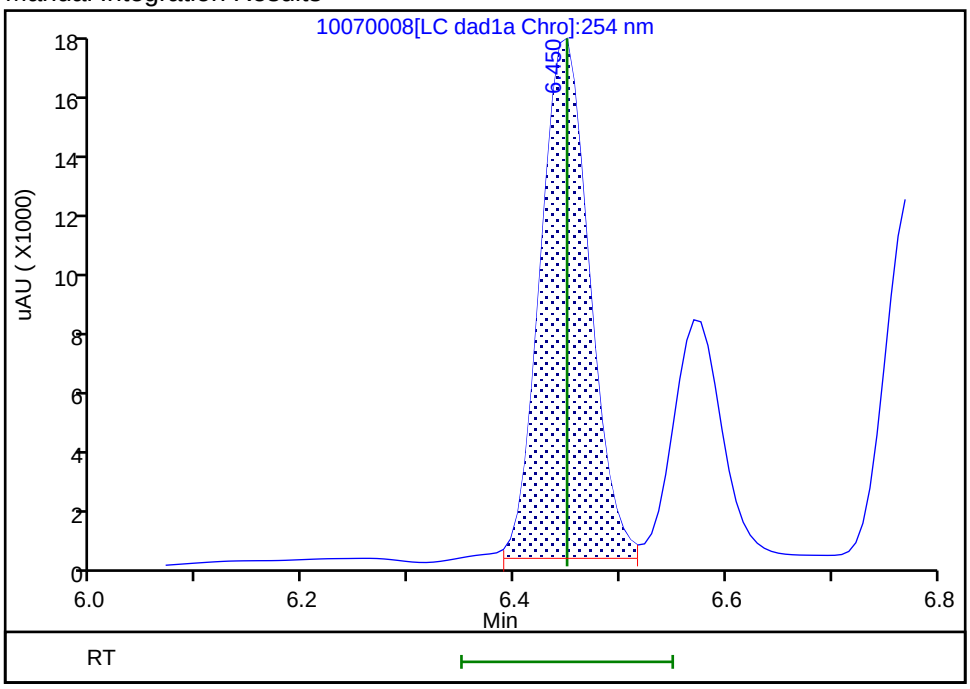
Processing Integration Results

RT: 6.45
Area: 54420
Amount: 0.271069
Amount Units: ug/mL



Manual Integration Results

RT: 6.45
Area: 52624
Amount: 0.262123
Amount Units: ug/mL



Reviewer: LV5D, 07-Oct-2023 14:42:37 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

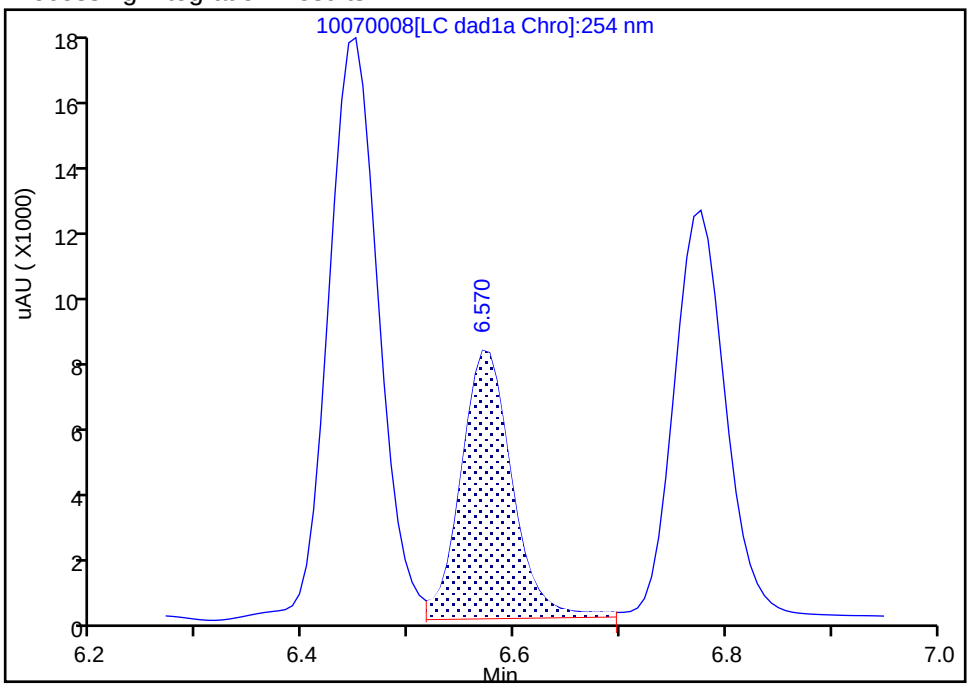
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Injection Date:	07-Oct-2023 14:13:32	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	8
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

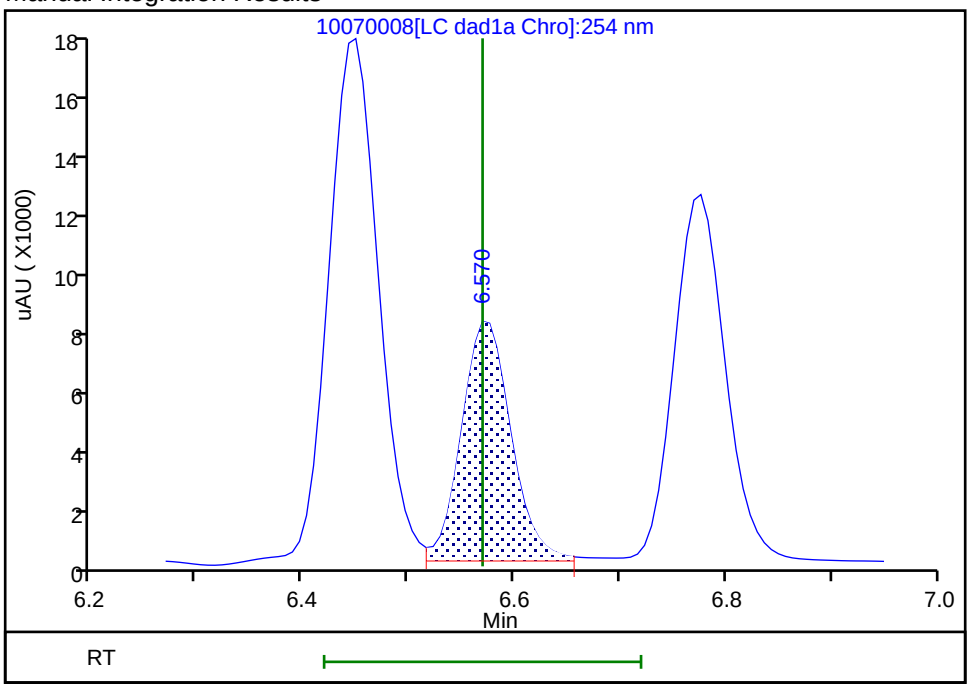
Processing Integration Results

RT: 6.57
Area: 25637
Amount: 0.271995
Amount Units: ug/mL



Manual Integration Results

RT: 6.57
Area: 24131
Amount: 0.256017
Amount Units: ug/mL



Reviewer: LV5D, 07-Oct-2023 14:42:37 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

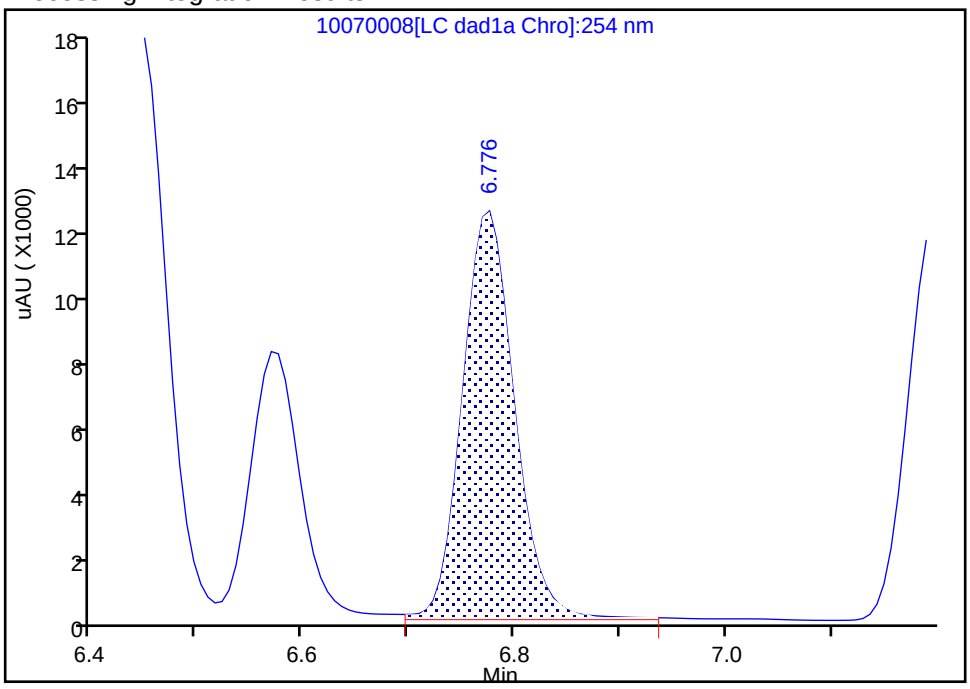
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231007-126276.b\10070008.d				
Injection Date:	07-Oct-2023 14:13:32	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	8
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

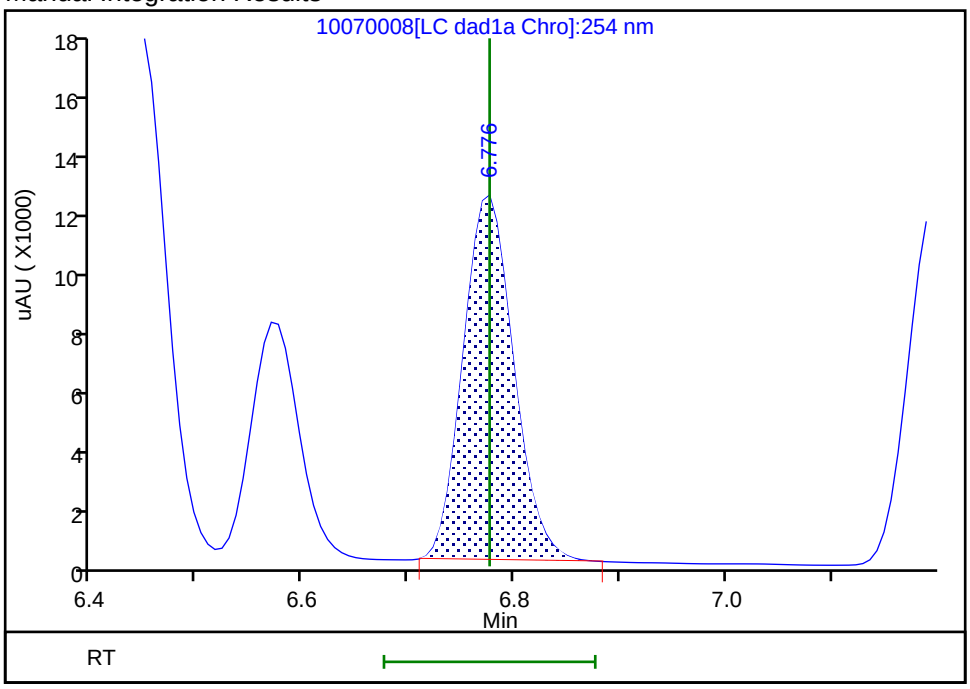
Processing Integration Results

RT: 6.78
Area: 39512
Amount: 0.273453
Amount Units: ug/mL



Manual Integration Results

RT: 6.78
Area: 37842
Amount: 0.261895
Amount Units: ug/mL



Reviewer: LV5D, 07-Oct-2023 14:42:32 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-628897/21 Calibration Date: 10/07/2023 18:48

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 17:53

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/23/2023 20:57

Lab File ID: 10070021.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	200761	207254		259	251	3.2	20.0
HMX	Ave	94255	95576		254	250	1.4	20.0
DNX	Ave	144493	153031		265	250	5.9	20.0
MNX	Ave	138689	141940		299	292	2.3	20.0
RDX	Ave	110493	110024		249	250	-0.4	20.0
Picric acid	Ave	77863	77640		249	250	-0.3	20.0
1,3,5-Trinitrobenzene	Ave	216079	225548		261	250	4.4	20.0
1,3-Dinitrobenzene	Ave	293347	300600		256	250	2.5	20.0
Nitrobenzene	Ave	192696	192324		250	250	-0.2	20.0
3,5-Dinitroaniline	Lin2		221936		247	250	-1.2	20.0
Tetryl	Ave	167257	173516		259	250	3.7	20.0
Nitroglycerin	Ave	64651	68771		2660	2500	6.4	20.0
2,4,6-Trinitrotoluene	Ave	204902	208120		254	250	1.6	20.0
4-Amino-2,6-dinitrotoluene	Ave	149560	155520		260	250	4.0	20.0
2-Amino-4,6-dinitrotoluene	Ave	193716	196008		253	250	1.2	20.0
2,6-Dinitrotoluene	Ave	142638	144212		253	250	1.1	20.0
2,4-Dinitrotoluene	Ave	295706	303856		257	250	2.8	20.0
2-Nitrotoluene	Ave	126123	125288		248	250	-0.7	20.0
4-Nitrotoluene	Ave	110088	108856		247	250	-1.1	20.0
3-Nitrotoluene	Lin2		138232		251	250	0.4	20.0
PETN	Ave	72018	75926		2640	2500	5.4	20.0
1,2-Dinitrobenzene	Ave	123911	131520		265	250	6.1	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-628897/21 Calibration Date: 10/07/2023 18:48

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 17:53

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/23/2023 20:57

Lab File ID: 10070021.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.45	6.35	6.55
HMX	6.58	6.42	6.72
DNX	6.77	6.68	6.88
MNX	7.20	7.05	7.35
RDX	7.58	7.43	7.73
Picric acid	7.94	7.79	8.09
1,3,5-Trinitrobenzene	8.64	8.49	8.79
1,3-Dinitrobenzene	9.25	9.10	9.40
Nitrobenzene	9.62	9.47	9.77
3,5-Dinitroaniline	9.83	9.68	9.98
Tetryl	9.96	9.81	10.11
Nitroglycerin	10.41	10.26	10.56
2,4,6-Trinitrotoluene	10.85	10.74	10.94
4-Amino-2,6-dinitrotoluene	11.02	10.91	11.11
2-Amino-4,6-dinitrotoluene	11.26	11.16	11.36
2,6-Dinitrotoluene	11.42	11.32	11.52
2,4-Dinitrotoluene	11.59	11.49	11.69
2-Nitrotoluene	12.40	12.24	12.54
4-Nitrotoluene	12.80	12.65	12.95
3-Nitrotoluene	13.36	13.21	13.51
PETN	14.48	14.32	14.62
1,2-Dinitrobenzene	8.52	8.37	8.67

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\10070021.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 07-Oct-2023 18:48:46 ALS Bottle#: 7 Worklist Smp#: 21
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2023 11:16:56 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1602

First Level Reviewer: K8YG Date: 09-Oct-2023 08:51:59

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3	TNX	1	6.448	6.450	-0.002	51969	0.2508	0.2589	M
4	HMX	1	6.575	6.570	0.005	23894	0.2500	0.2535	M
6	DNX	1	6.768	6.776	-0.008	38296	0.2503	0.2650	M
7	MNX	1	7.195	7.196	-0.001	41411	0.2918	0.2986	
8	RDX	1	7.575	7.576	-0.001	27506	0.2500	0.2489	
9	2,4,6-Trinitrophenol	1	7.942	7.943	-0.001	19410	0.2500	0.2493	
$ 10	1,2-Dinitrobenzene	1	8.515	8.516	-0.001	32880	0.2500	0.2654	
11	1,3,5-Trinitrobenzene	1	8.642	8.643	-0.001	56387	0.2500	0.2610	
12	1,3-Dinitrobenzene	1	9.248	9.250	-0.002	75150	0.2500	0.2562	
13	Nitrobenzene	1	9.615	9.616	-0.001	48081	0.2500	0.2495	
14	3,5-Dinitroaniline	1	9.828	9.830	-0.002	55484	0.2500	0.2470	
15	Tetryl	1	9.962	9.956	0.006	43379	0.2500	0.2594	
16	Nitroglycerin	2	10.408	10.410	-0.002	171927	2.50	2.66	
17	2,4,6-Trinitrotoluene	1	10.848	10.843	0.005	52030	0.2500	0.2539	
18	4-Amino-2,6-dinitrotoluene	1	11.015	11.010	0.005	38880	0.2500	0.2600	
19	2-Amino-4,6-dinitrotoluene	1	11.262	11.256	0.006	49002	0.2500	0.2530	
20	2,6-Dinitrotoluene	1	11.422	11.423	-0.001	36053	0.2500	0.2528	
21	2,4-Dinitrotoluene	1	11.588	11.590	-0.002	75964	0.2500	0.2569	
22	o-Nitrotoluene	1	12.395	12.390	0.005	31322	0.2500	0.2483	
23	p-Nitrotoluene	1	12.802	12.796	0.006	27214	0.2500	0.2472	
24	m-Nitrotoluene	1	13.362	13.356	0.006	34558	0.2500	0.2510	
25	PETN	2	14.482	14.470	0.012	189816	2.50	2.64	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00015	Amount Added:	12.50	Units: uL
8330IntermStk_00078	Amount Added:	25.00	Units: uL

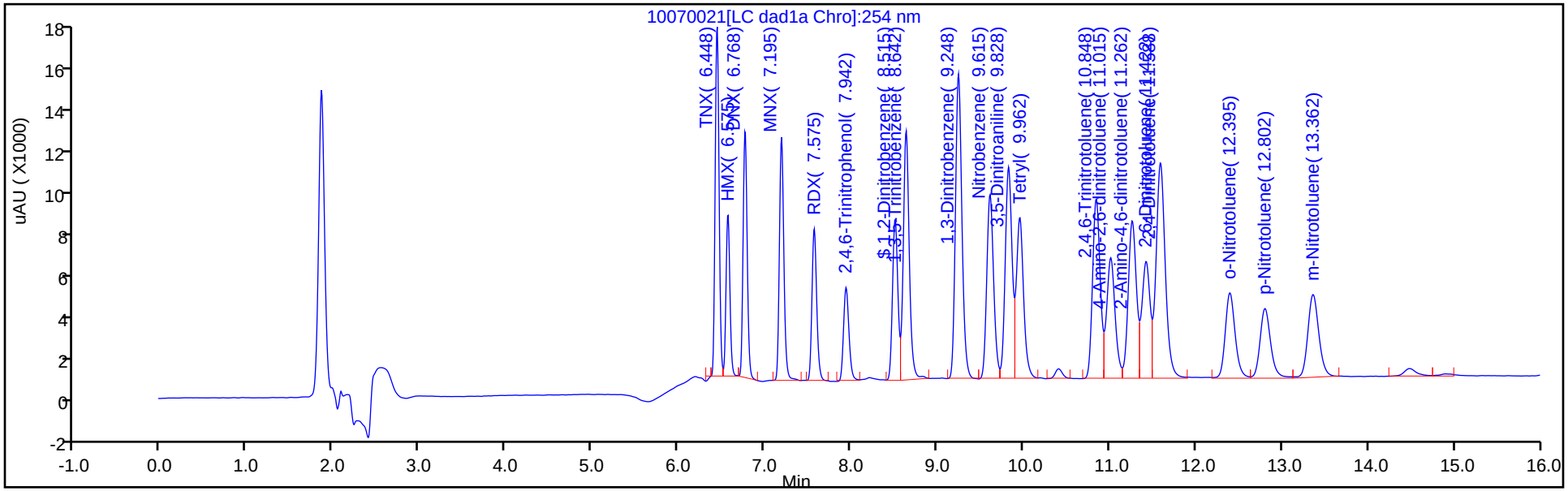
Report Date: 09-Oct-2023 11:16:56 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

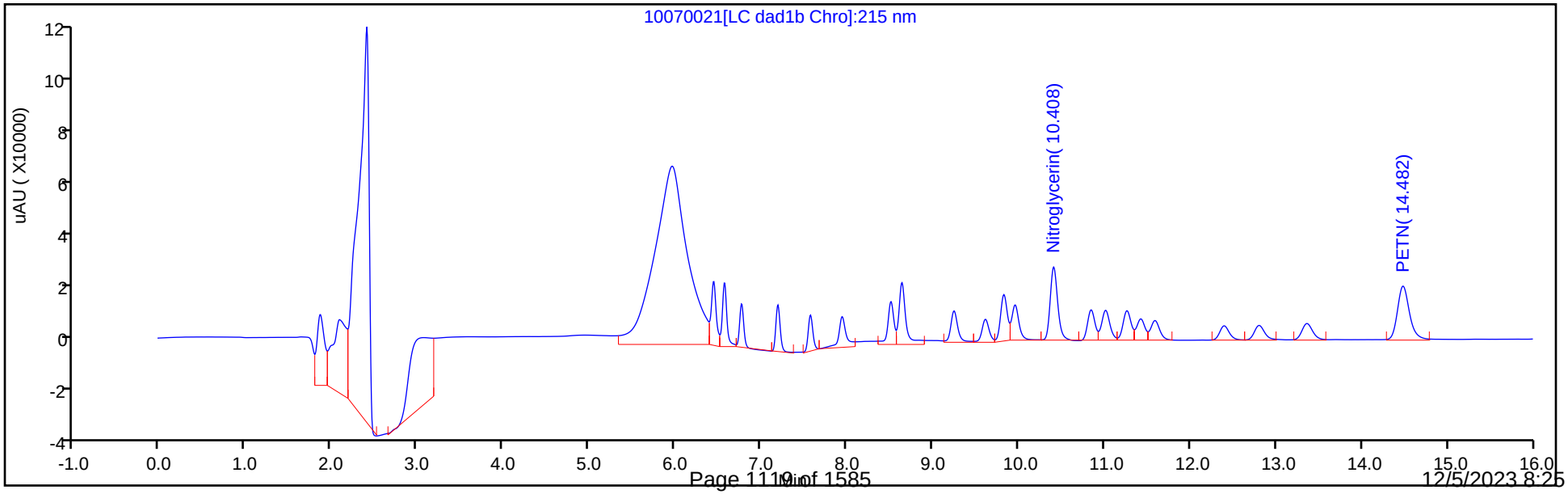
Data File: \\chromfs\denver\chromdata\chhplc_x\20231007-126276.b\10070021.d

Injection Date:	07-Oct-2023 18:48:46	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	21
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



12/5/2023 8:25 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

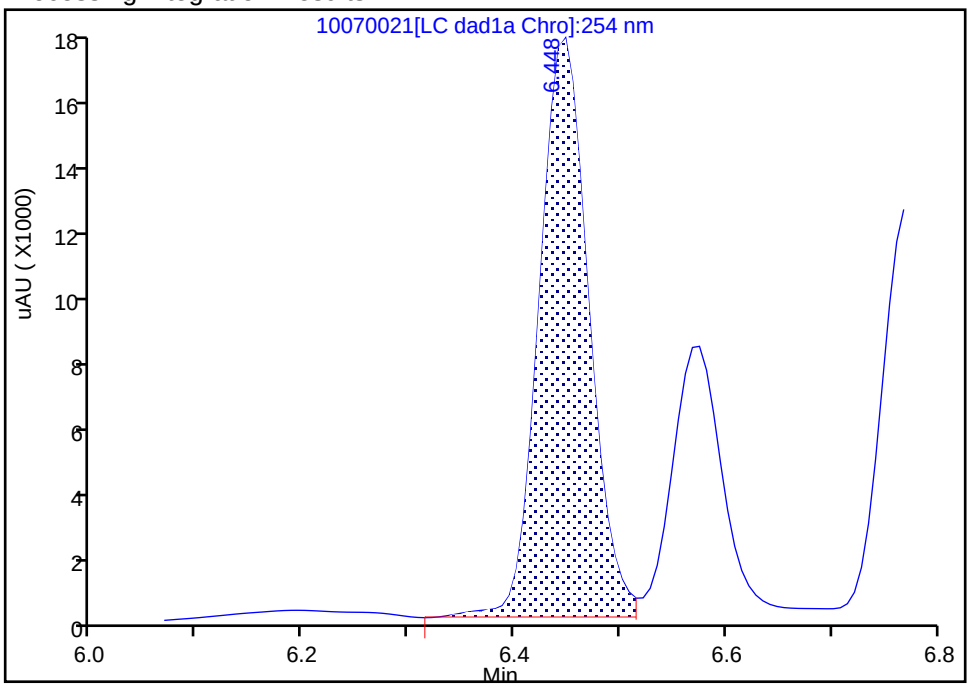
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Injection Date:	07-Oct-2023 18:48:46	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

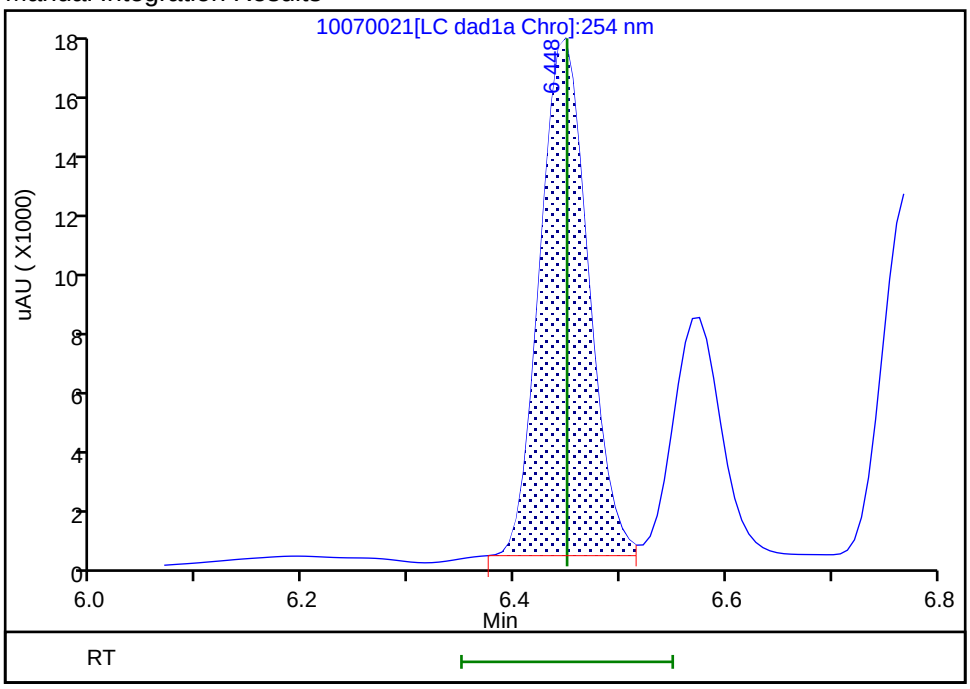
Processing Integration Results

RT: 6.45
Area: 54424
Amount: 0.271089
Amount Units: ug/mL



Manual Integration Results

RT: 6.45
Area: 51969
Amount: 0.258860
Amount Units: ug/mL



Reviewer: K8YG, 09-Oct-2023 10:47:03 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

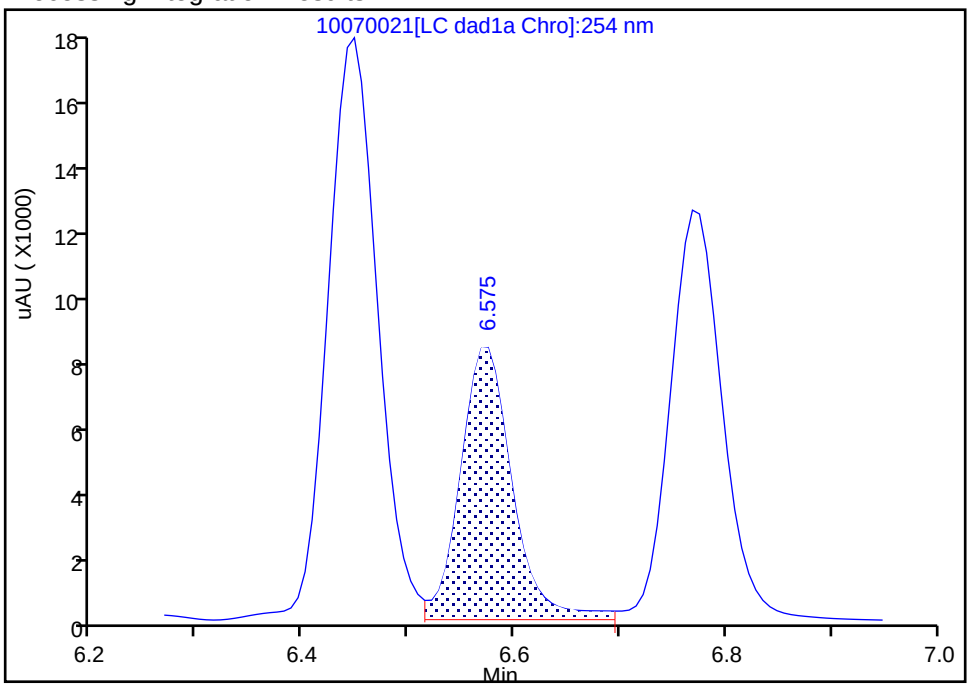
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Injection Date:	07-Oct-2023 18:48:46	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

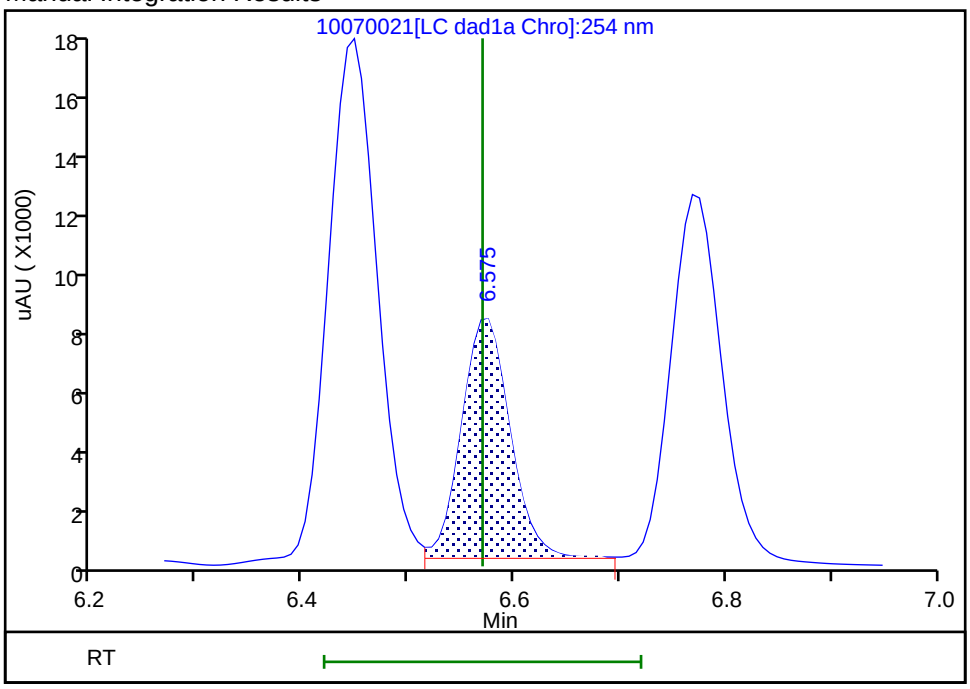
Processing Integration Results

RT: 6.58
Area: 26675
Amount: 0.283008
Amount Units: ug/mL



Manual Integration Results

RT: 6.58
Area: 23894
Amount: 0.253503
Amount Units: ug/mL



Reviewer: K8YG, 09-Oct-2023 10:46:59 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

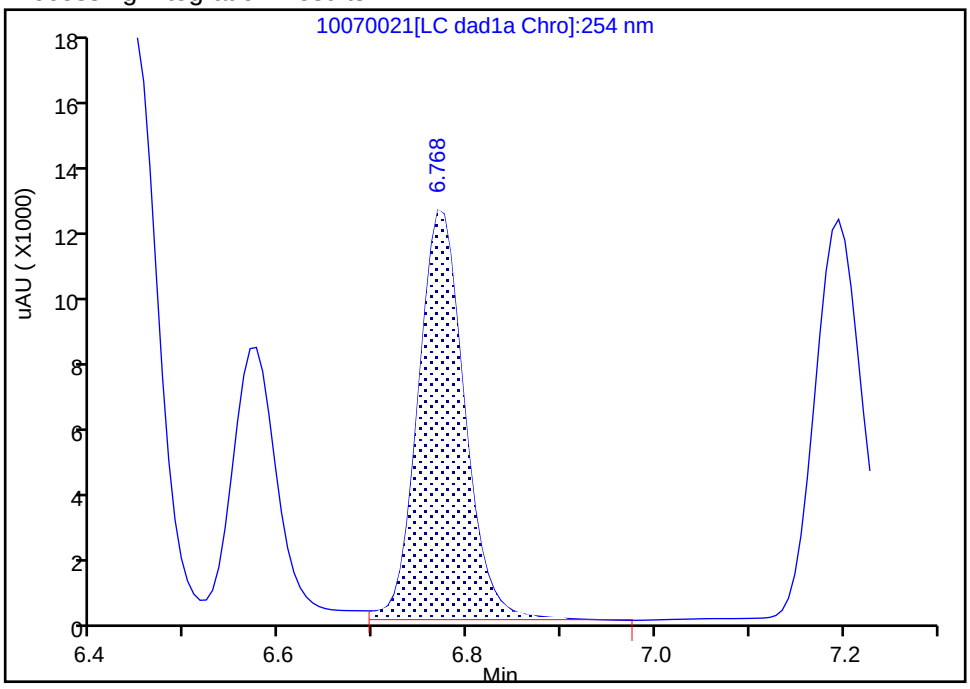
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Injection Date:	07-Oct-2023 18:48:46	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

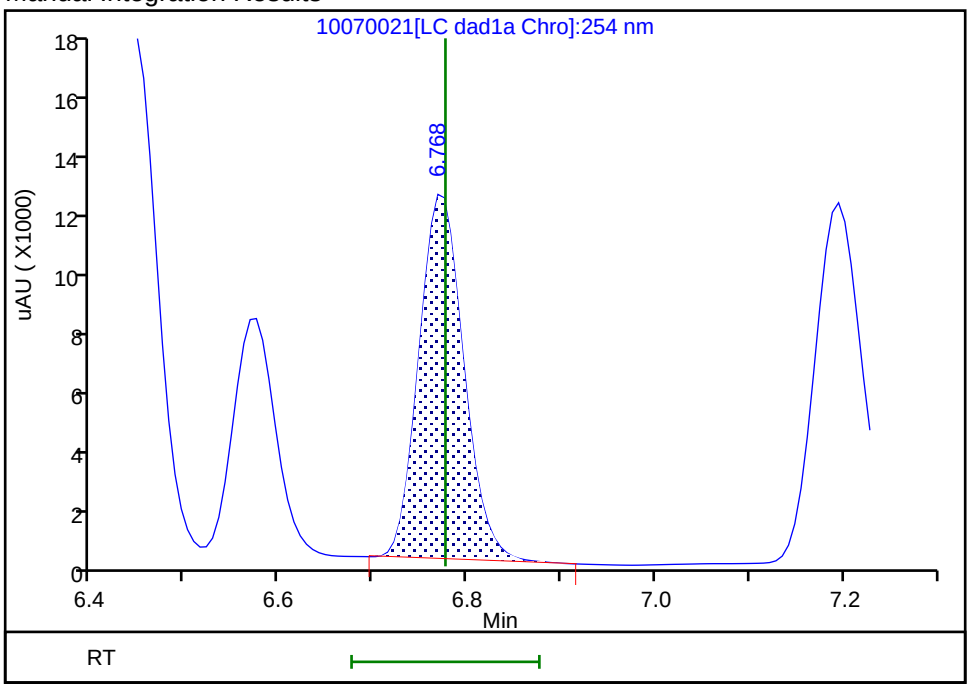
Processing Integration Results

RT: 6.77
Area: 40374
Amount: 0.279419
Amount Units: ug/mL



Manual Integration Results

RT: 6.77
Area: 38296
Amount: 0.265037
Amount Units: ug/mL



Reviewer: K8YG, 09-Oct-2023 10:47:07 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-628897/22 Calibration Date: 10/07/2023 19:11

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 21:43

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/24/2023 00:23

Lab File ID: 10070022.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,6-diamino-4-nitrotoluene	Ave	225565	213188		236	250	-5.5	20.0
2,4-diamino-6-nitrotoluene	Ave	143326	128908		225	250	-10.1	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-628897/22 Calibration Date: 10/07/2023 19:11

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 21:43

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/24/2023 00:23

Lab File ID: 10070022.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	6.44	6.29	6.59
2,4-diamino-6-nitrotoluene	6.63	6.48	6.78

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\10070022.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 07-Oct-2023 19:11:45 ALS Bottle#: 8 Worklist Smp#: 22
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub28

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2023 11:16:57 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1602

First Level Reviewer: K8YG Date: 09-Oct-2023 08:46:45

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1	6.439	6.438	0.001	53297	0.2500	0.2363	M
5 2,4-diamino-6-nitrotoluene	1	6.632	6.625	0.007	32227	0.2500	0.2249	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00037 Amount Added: 12.50 Units: uL

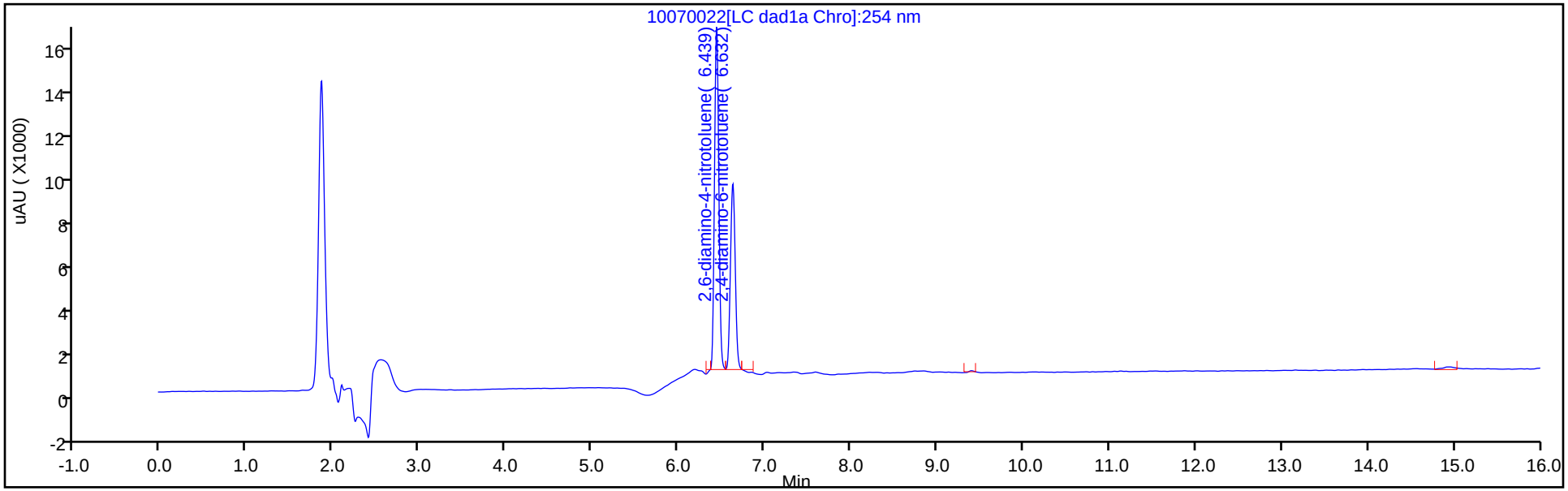
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Eurofins Denver

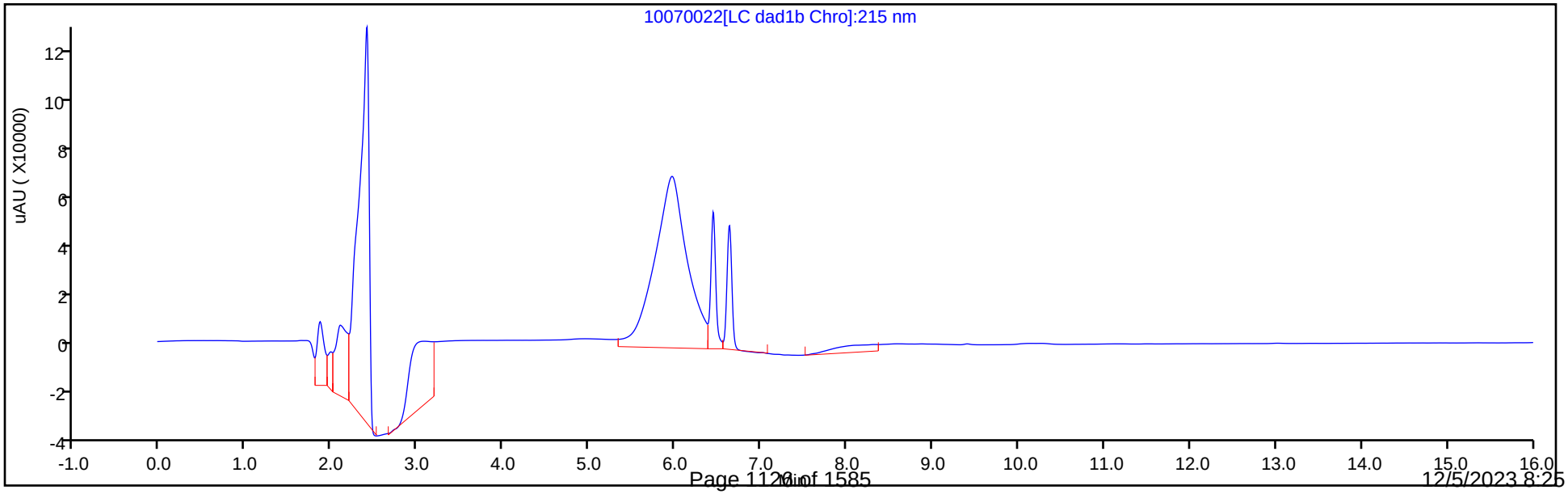
Data File: \\chromfs\denver\chromdata\chhplc_x\20231007-126276.b\10070022.d

Injection Date:	07-Oct-2023 19:11:45	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	22
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

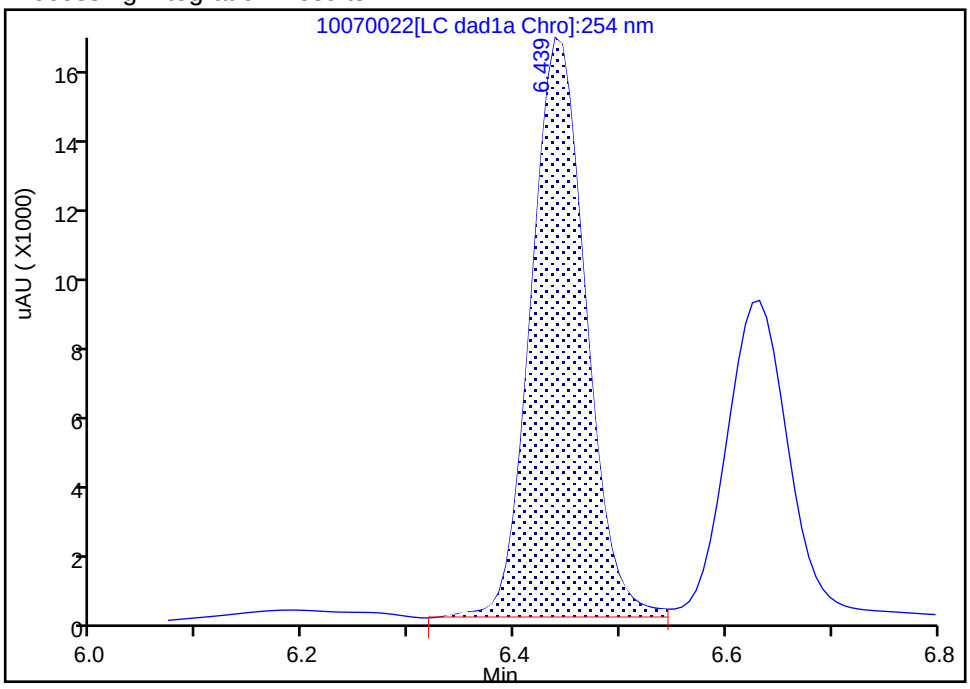
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Injection Date: 07-Oct-2023 19:11:45 Instrument ID: CHHPLC_X3
Lims ID: CCV ADD
Client ID:
Operator ID: JZ/JG ALS Bottle#: 8 Worklist Smp#: 22
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

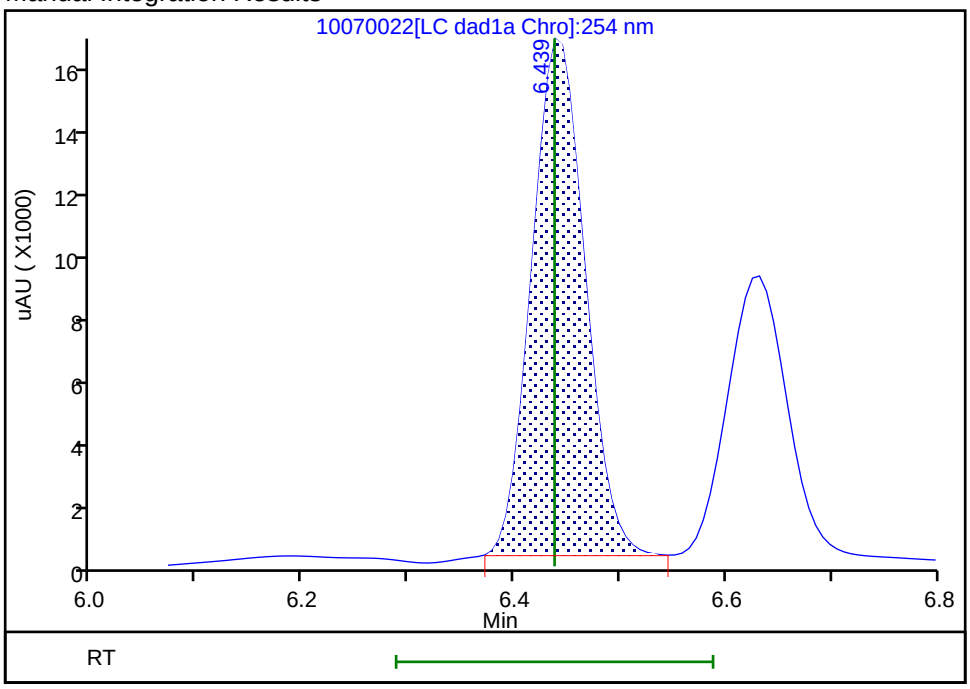
Processing Integration Results

RT: 6.44
Area: 55879
Amount: 0.247729
Amount Units: ug/mL



Manual Integration Results

RT: 6.44
Area: 53297
Amount: 0.236282
Amount Units: ug/mL



Reviewer: K8YG, 09-Oct-2023 10:47:31 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

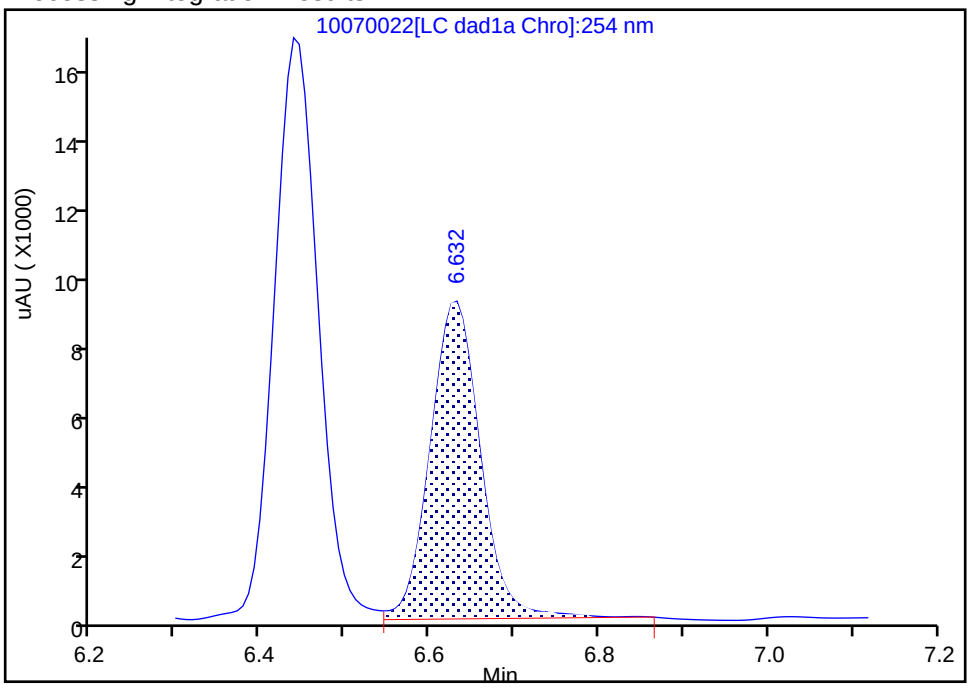
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Injection Date:	07-Oct-2023 19:11:45	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

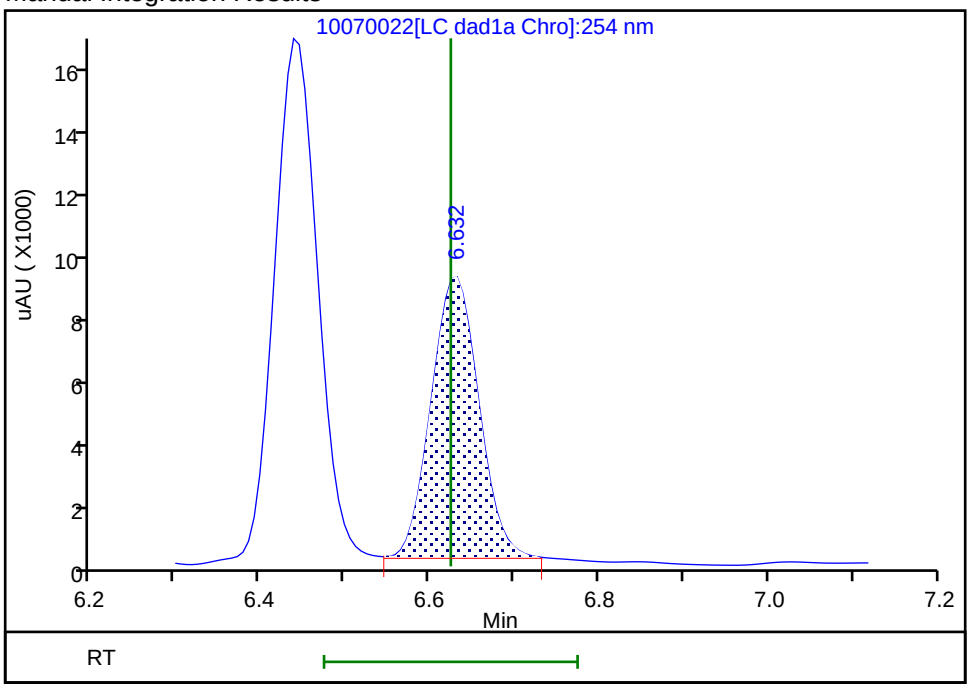
Processing Integration Results

RT: 6.63
Area: 34937
Amount: 0.243759
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 32227
Amount: 0.224851
Amount Units: ug/mL



Reviewer: K8YG, 09-Oct-2023 10:47:34 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-628897/33 Calibration Date: 10/07/2023 23:24

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 17:53

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/23/2023 20:57

Lab File ID: 10070033.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	200761	206054		257	251	2.6	20.0
HMX	Ave	94255	95760		254	250	1.6	20.0
DNX	Ave	144493	152887		265	250	5.8	20.0
MNX	Ave	138689	141292		297	292	1.9	20.0
RDX	Ave	110493	109816		248	250	-0.6	20.0
Picric acid	Ave	77863	78940		253	250	1.4	20.0
1,3,5-Trinitrobenzene	Ave	216079	226180		262	250	4.7	20.0
1,3-Dinitrobenzene	Ave	293347	301572		257	250	2.8	20.0
Nitrobenzene	Ave	192696	190304		247	250	-1.2	20.0
3,5-Dinitroaniline	Lin2		221124		246	250	-1.6	20.0
Tetryl	Ave	167257	175284		262	250	4.8	20.0
Nitroglycerin	Ave	64651	70186		2710	2500	8.6	20.0
2,4,6-Trinitrotoluene	Ave	204902	210092		256	250	2.5	20.0
4-Amino-2,6-dinitrotoluene	Ave	149560	152476		255	250	1.9	20.0
2-Amino-4,6-dinitrotoluene	Ave	193716	196056		253	250	1.2	20.0
2,6-Dinitrotoluene	Ave	142638	145864		256	250	2.3	20.0
2,4-Dinitrotoluene	Ave	295706	303044		256	250	2.5	20.0
2-Nitrotoluene	Ave	126123	123296		244	250	-2.2	20.0
4-Nitrotoluene	Ave	110088	106472		242	250	-3.3	20.0
3-Nitrotoluene	Lin2		135236		245	250	-1.8	20.0
PETN	Ave	72018	75590		2620	2500	5.0	20.0
1,2-Dinitrobenzene	Ave	123911	130200		263	250	5.1	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-628897/33 Calibration Date: 10/07/2023 23:24

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 17:53

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/23/2023 20:57

Lab File ID: 10070033.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.44	6.35	6.55
HMX	6.57	6.42	6.72
DNX	6.77	6.68	6.88
MNX	7.20	7.05	7.35
RDX	7.58	7.43	7.73
Picric acid	7.96	7.79	8.09
1,3,5-Trinitrobenzene	8.65	8.49	8.79
1,3-Dinitrobenzene	9.26	9.10	9.40
Nitrobenzene	9.63	9.47	9.77
3,5-Dinitroaniline	9.85	9.68	9.98
Tetryl	9.98	9.81	10.11
Nitroglycerin	10.43	10.26	10.56
2,4,6-Trinitrotoluene	10.87	10.74	10.94
4-Amino-2,6-dinitrotoluene	11.04	10.91	11.11
2-Amino-4,6-dinitrotoluene	11.29	11.16	11.36
2,6-Dinitrotoluene	11.45	11.32	11.52
2,4-Dinitrotoluene	11.62	11.49	11.69
2-Nitrotoluene	12.42	12.24	12.54
4-Nitrotoluene	12.84	12.65	12.95
3-Nitrotoluene	13.40	13.21	13.51
PETN	14.52	14.32	14.62
1,2-Dinitrobenzene	8.52	8.37	8.67

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\10070033.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 07-Oct-2023 23:24:19 ALS Bottle#: 7 Worklist Smp#: 33
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2023 11:17:05 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1602

First Level Reviewer: K8YG Date: 09-Oct-2023 11:03:59

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.441	6.450	-0.009	51668	0.2508	0.2574	M
4 HMX	1	6.568	6.570	-0.002	23940	0.2500	0.2540	M
6 DNX	1	6.768	6.776	-0.008	38260	0.2503	0.2648	M
7 MNX	1	7.195	7.196	-0.001	41222	0.2918	0.2972	M
8 RDX	1	7.575	7.576	-0.001	27454	0.2500	0.2485	
9 2,4,6-Trinitrophenol	1	7.955	7.943	0.012	19735	0.2500	0.2535	
$ 10 1,2-Dinitrobenzene	1	8.521	8.516	0.005	32550	0.2500	0.2627	
11 1,3,5-Trinitrobenzene	1	8.648	8.643	0.005	56545	0.2500	0.2617	
12 1,3-Dinitrobenzene	1	9.261	9.250	0.011	75393	0.2500	0.2570	
13 Nitrobenzene	1	9.628	9.616	0.012	47576	0.2500	0.2469	
14 3,5-Dinitroaniline	1	9.848	9.830	0.018	55281	0.2500	0.2461	
15 Tetryl	1	9.981	9.956	0.025	43821	0.2500	0.2620	
16 Nitroglycerin	2	10.428	10.410	0.018	175466	2.50	2.71	
17 2,4,6-Trinitrotoluene	1	10.868	10.843	0.025	52523	0.2500	0.2563	
18 4-Amino-2,6-dinitrotoluene	1	11.041	11.010	0.031	38119	0.2500	0.2549	
19 2-Amino-4,6-dinitrotoluene	1	11.288	11.256	0.032	49014	0.2500	0.2530	
20 2,6-Dinitrotoluene	1	11.448	11.423	0.025	36466	0.2500	0.2557	
21 2,4-Dinitrotoluene	1	11.615	11.590	0.025	75761	0.2500	0.2562	
22 o-Nitrotoluene	1	12.421	12.390	0.031	30824	0.2500	0.2444	
23 p-Nitrotoluene	1	12.835	12.796	0.039	26618	0.2500	0.2418	
24 m-Nitrotoluene	1	13.395	13.356	0.039	33809	0.2500	0.2455	
25 PETN	2	14.521	14.470	0.051	188976	2.50	2.62	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00015	Amount Added:	12.50	Units: uL
8330IntermStk_00078	Amount Added:	25.00	Units: uL

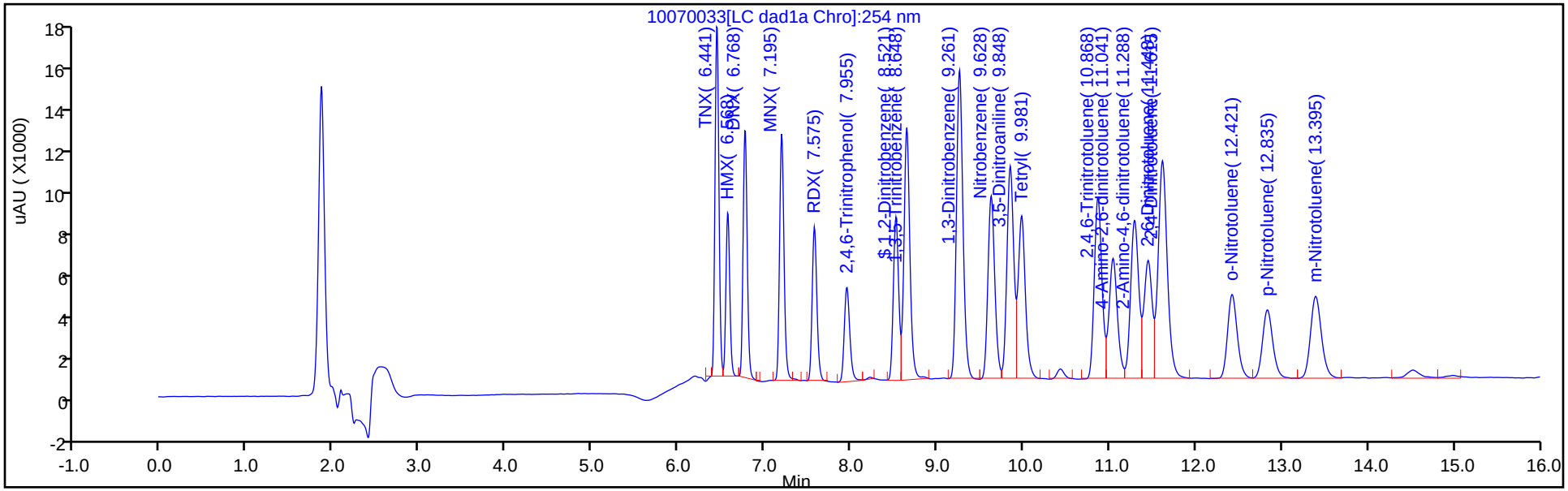
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Eurofins Denver

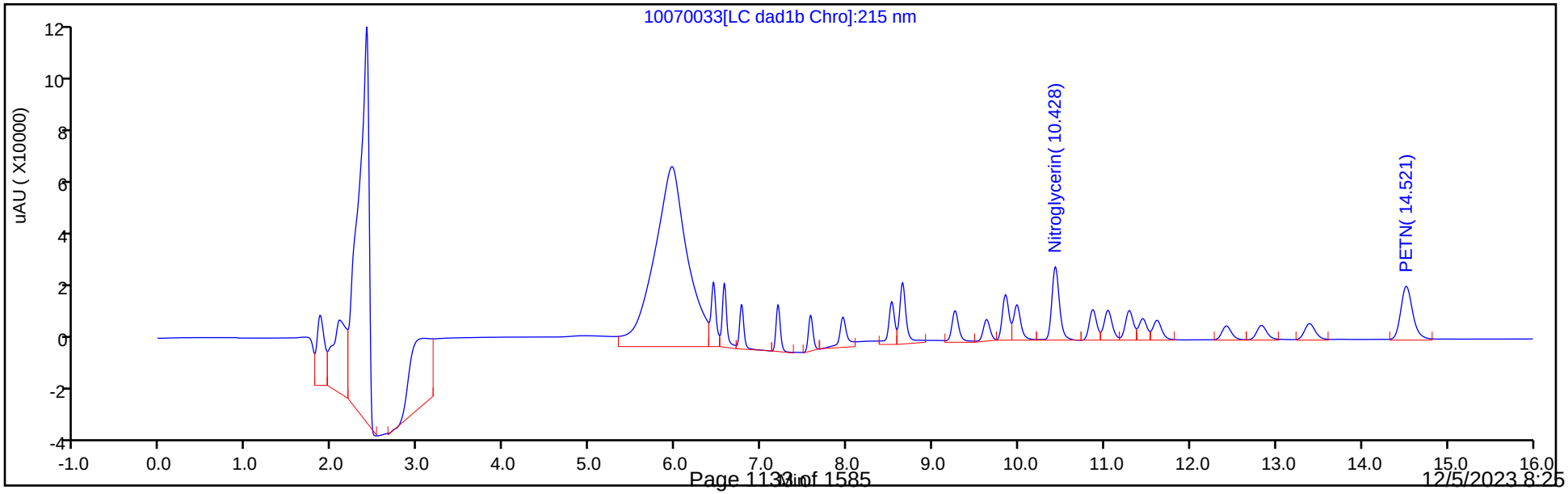
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Injection Date:	07-Oct-2023 23:24:19	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	33
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

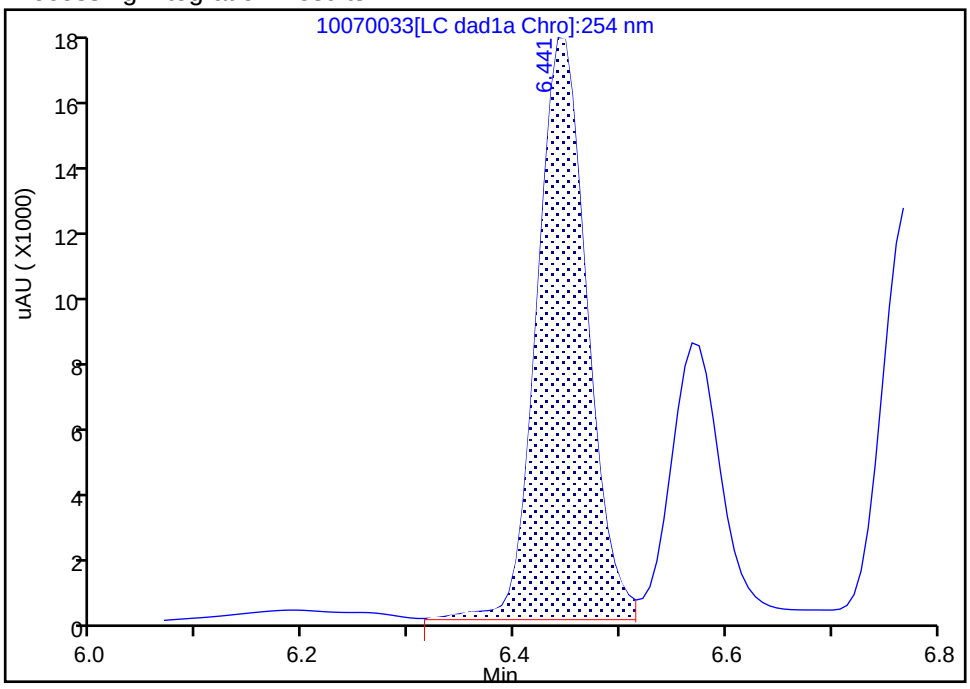
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Injection Date:	07-Oct-2023 23:24:19	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

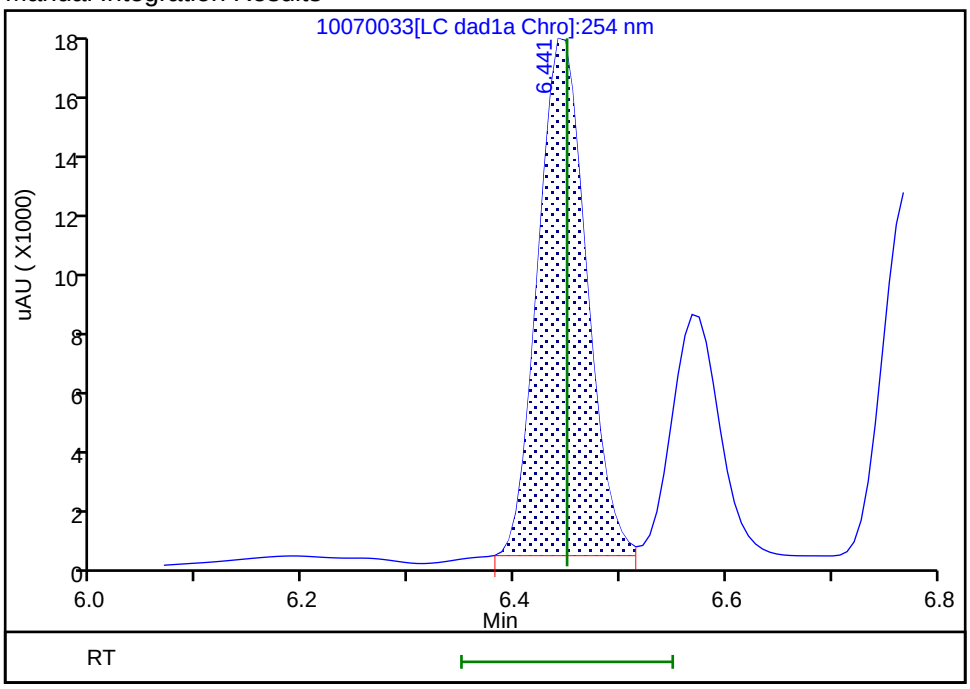
Processing Integration Results

RT: 6.44
Area: 54066
Amount: 0.269305
Amount Units: ug/mL



Manual Integration Results

RT: 6.44
Area: 51668
Amount: 0.257361
Amount Units: ug/mL



Reviewer: K8YG, 09-Oct-2023 11:03:48 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

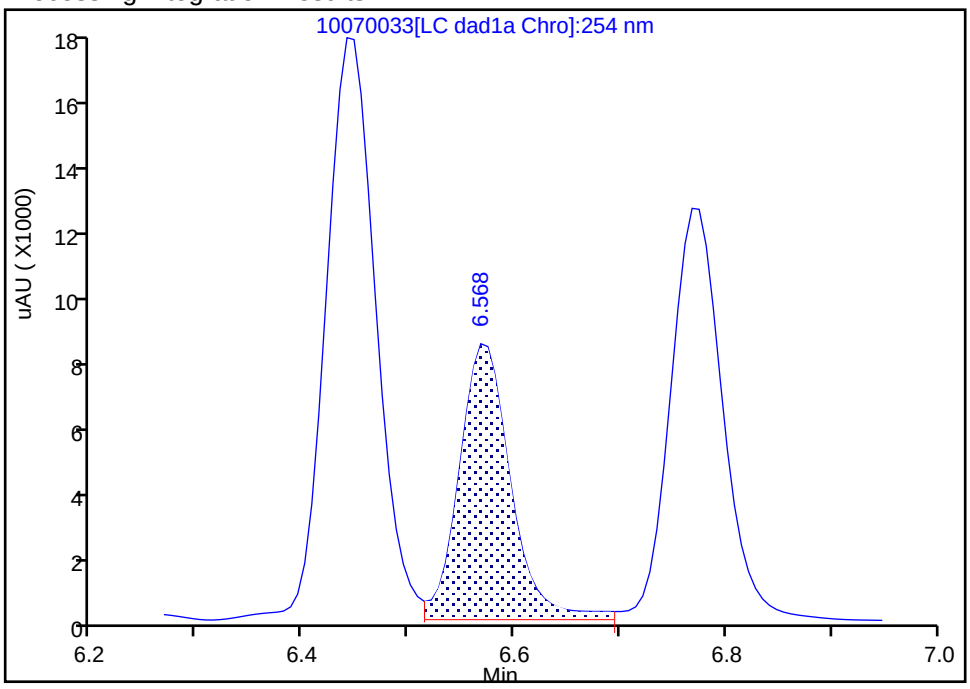
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Injection Date:	07-Oct-2023 23:24:19	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

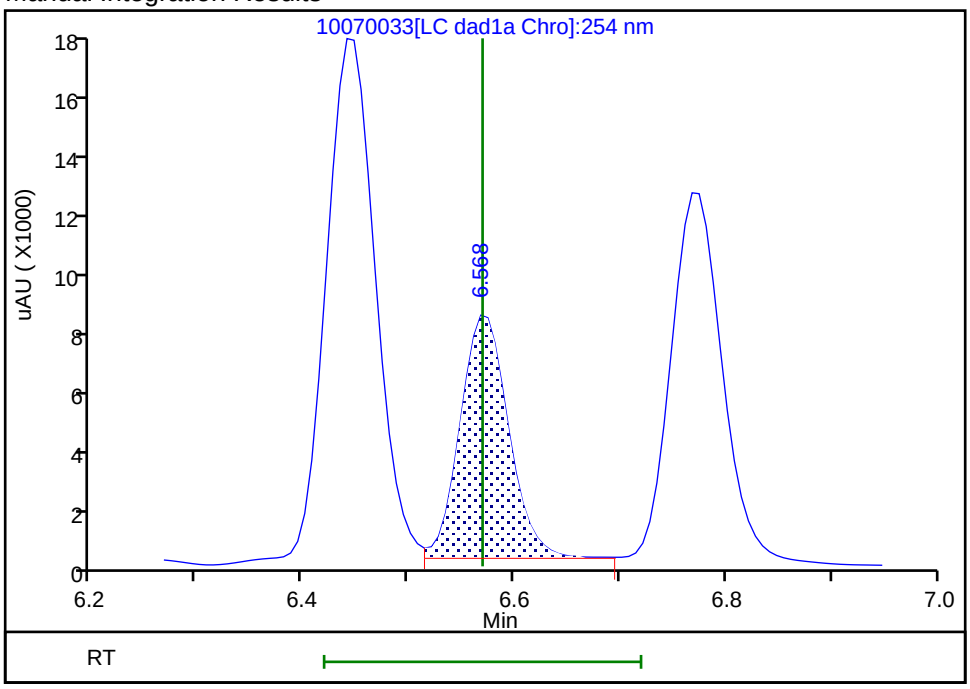
Processing Integration Results

RT: 6.57
Area: 26511
Amount: 0.281268
Amount Units: ug/mL



Manual Integration Results

RT: 6.57
Area: 23940
Amount: 0.253991
Amount Units: ug/mL



Reviewer: K8YG, 09-Oct-2023 11:03:44 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

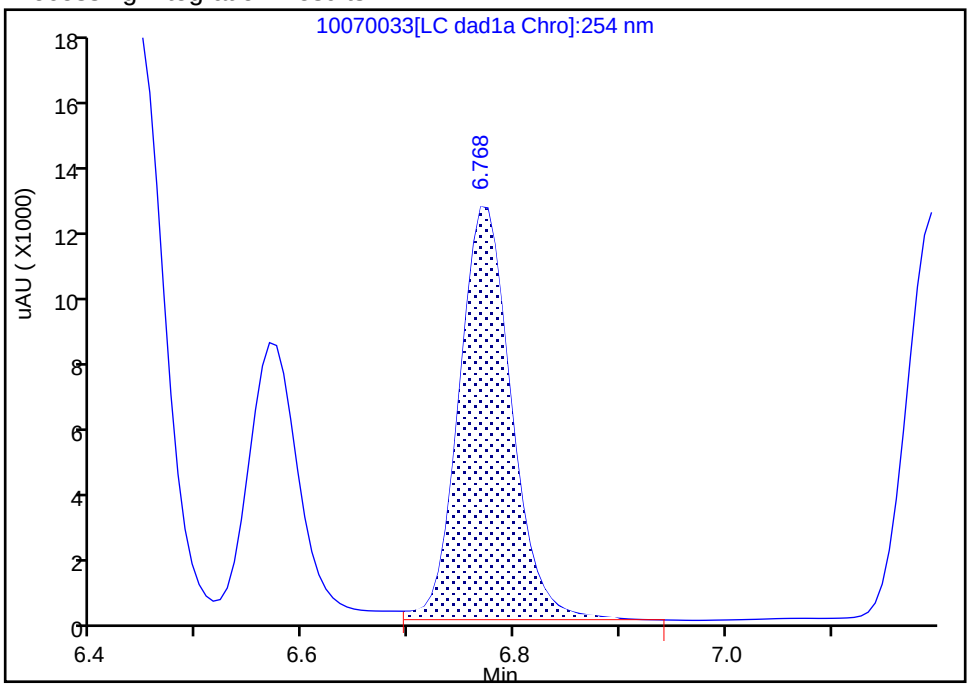
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Injection Date:	07-Oct-2023 23:24:19	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

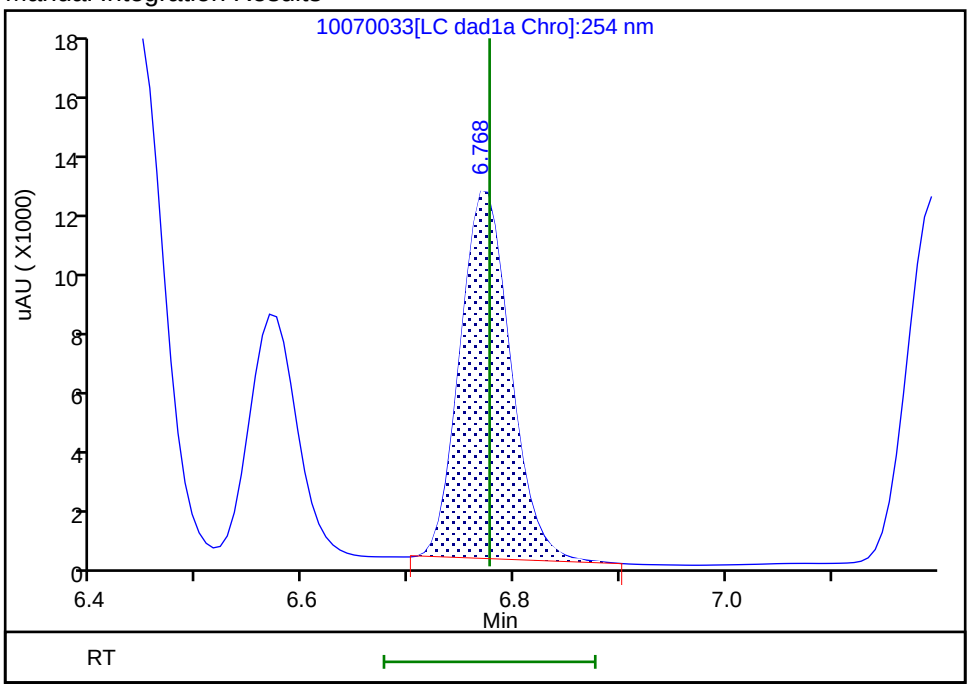
Processing Integration Results

RT: 6.77
Area: 40113
Amount: 0.277612
Amount Units: ug/mL



Manual Integration Results

RT: 6.77
Area: 38260
Amount: 0.264788
Amount Units: ug/mL



Reviewer: K8YG, 09-Oct-2023 11:03:57 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

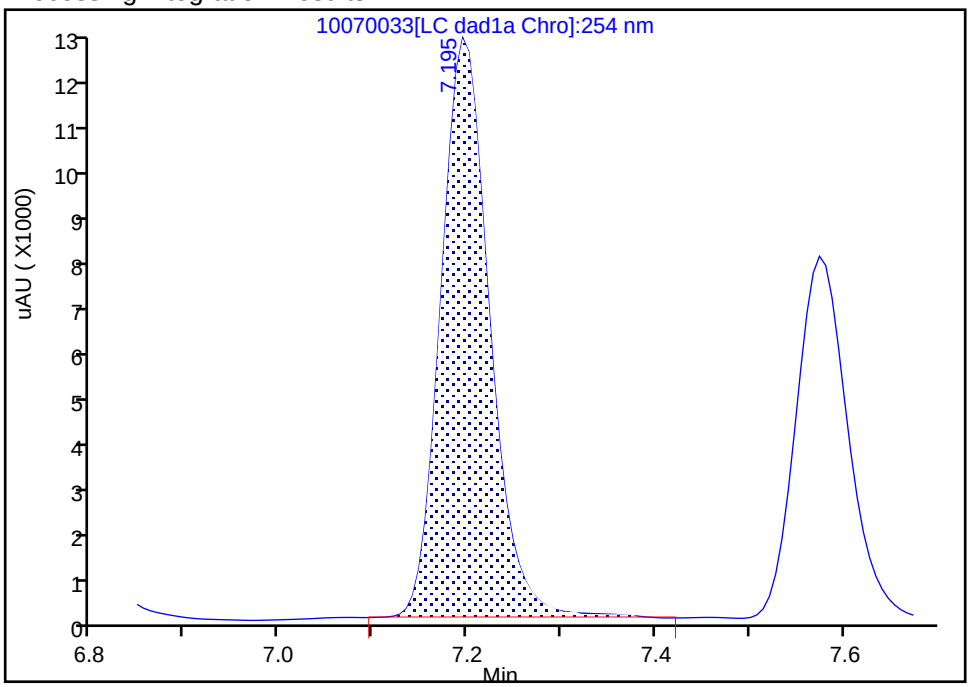
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Injection Date:	07-Oct-2023 23:24:19	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

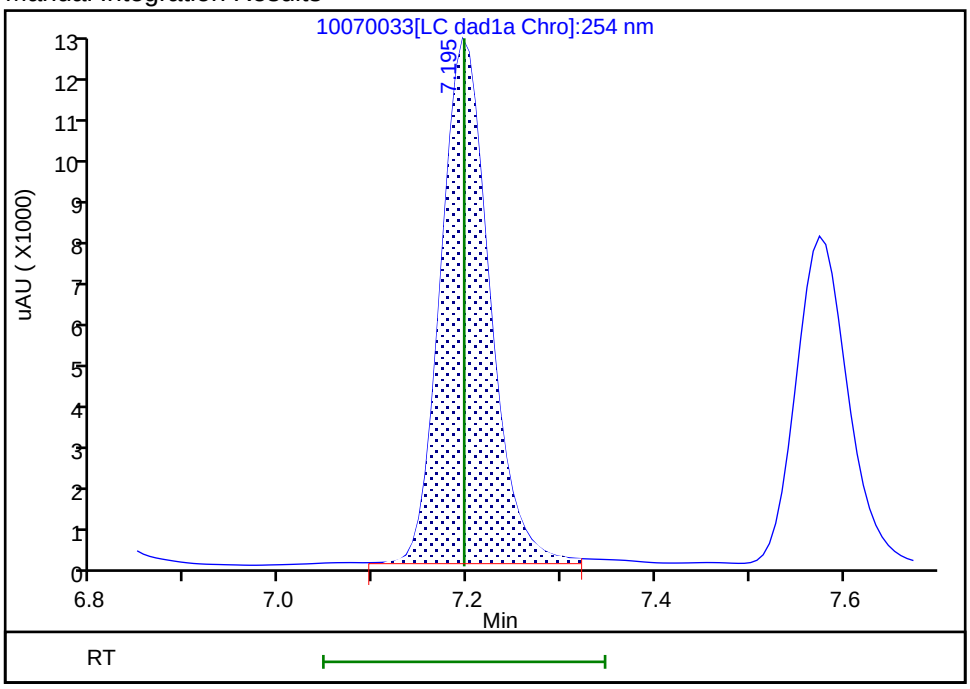
Processing Integration Results

RT: 7.19
Area: 41502
Amount: 0.299246
Amount Units: ug/mL



Manual Integration Results

RT: 7.19
Area: 41222
Amount: 0.297227
Amount Units: ug/mL



Reviewer: K8YG, 09-Oct-2023 11:04:10 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-628897/34 | Calibration Date: 10/07/2023 23:47

Instrument ID: CHHPLC_X3 | Calib Start Date: 06/23/2023 21:43

GC Column: UltraCarb5uODS ID: 4.60(mm) | Calib End Date: 06/24/2023 00:23

Lab File ID: 10070034.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,6-diamino-4-nitrotoluene	Ave	225565	209976		233	250	-6.9	20.0
2,4-diamino-6-nitrotoluene	Ave	143326	126268		220	250	-11.9	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-628897/34 Calibration Date: 10/07/2023 23:47

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 21:43

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/24/2023 00:23

Lab File ID: 10070034.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	6.44	6.29	6.59
2,4-diamino-6-nitrotoluene	6.63	6.48	6.78

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\10070034.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 07-Oct-2023 23:47:16 ALS Bottle#: 8 Worklist Smp#: 34
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub28

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2023 11:17:06 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1602

First Level Reviewer: K8YG Date: 09-Oct-2023 08:55:20

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1	6.441	6.438	0.003	52494	0.2500	0.2327	M
5 2,4-diamino-6-nitrotoluene	1	6.627	6.625	0.002	31567	0.2500	0.2202	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00037 Amount Added: 12.50 Units: uL

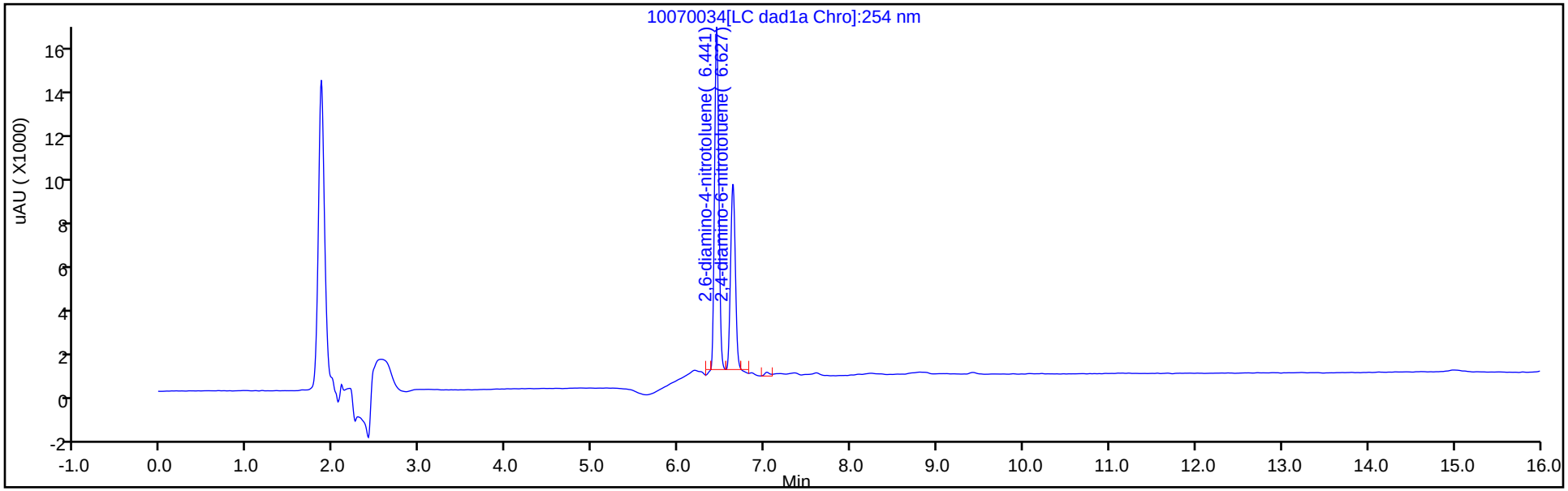
Report Date: 09-Oct-2023 11:17:06 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

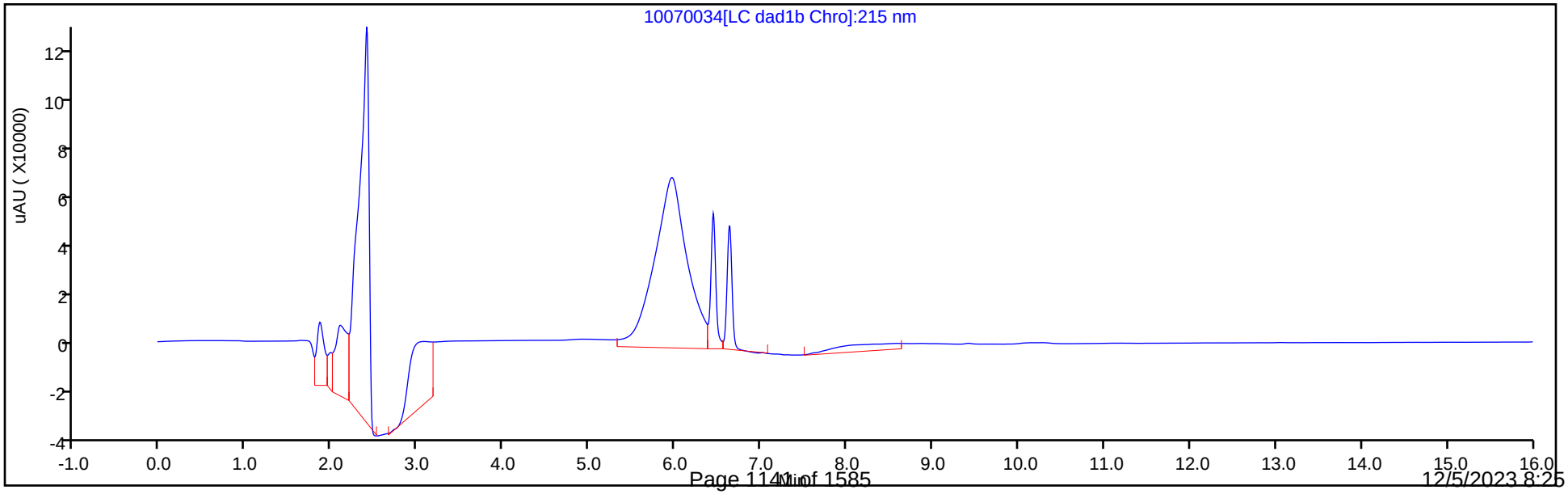
Data File: \\chromfs\denver\chromdata\chhplc_x\20231007-126276.b\10070034.d

Injection Date:	07-Oct-2023 23:47:16	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	34
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

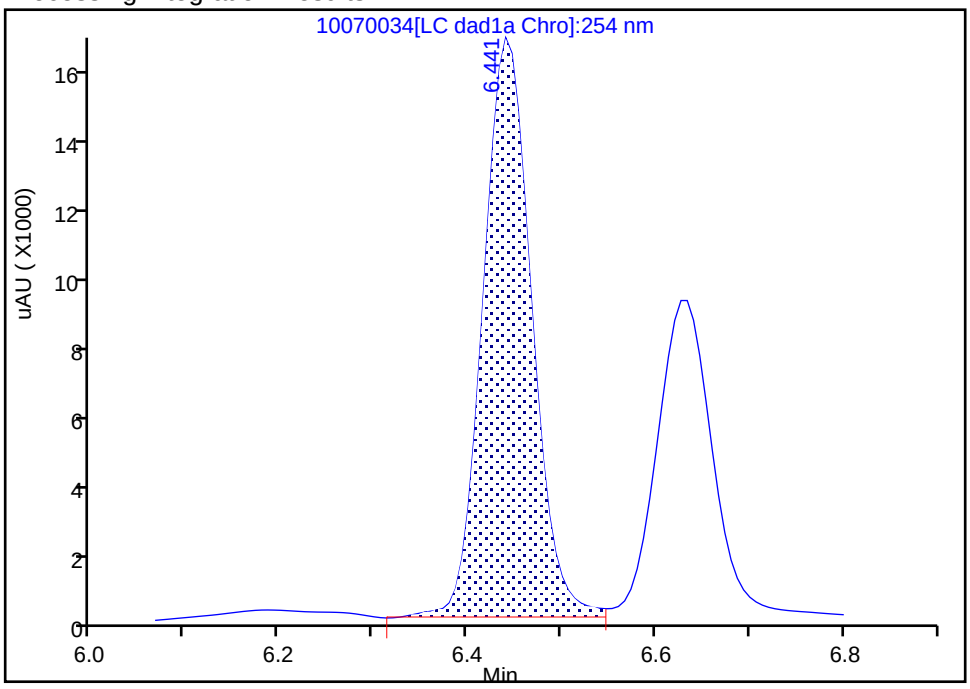
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Injection Date:	07-Oct-2023 23:47:16	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

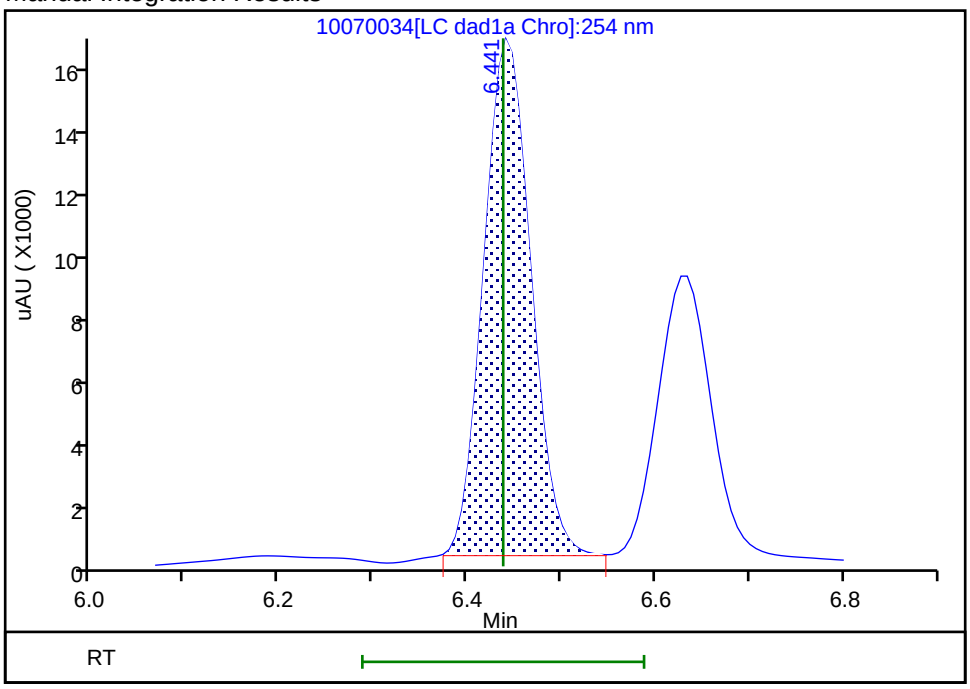
Processing Integration Results

RT: 6.44
Area: 55245
Amount: 0.244918
Amount Units: ug/mL



Manual Integration Results

RT: 6.44
Area: 52494
Amount: 0.232722
Amount Units: ug/mL



Reviewer: K8YG, 09-Oct-2023 11:04:39 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

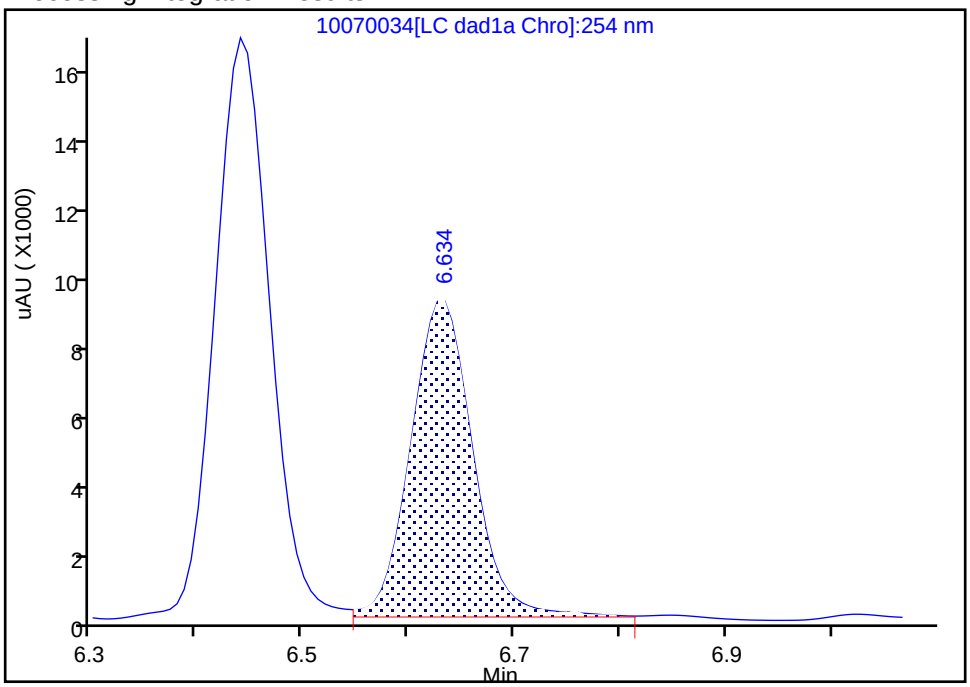
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231007-126276.b\10070034.d				
Injection Date:	07-Oct-2023 23:47:16	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

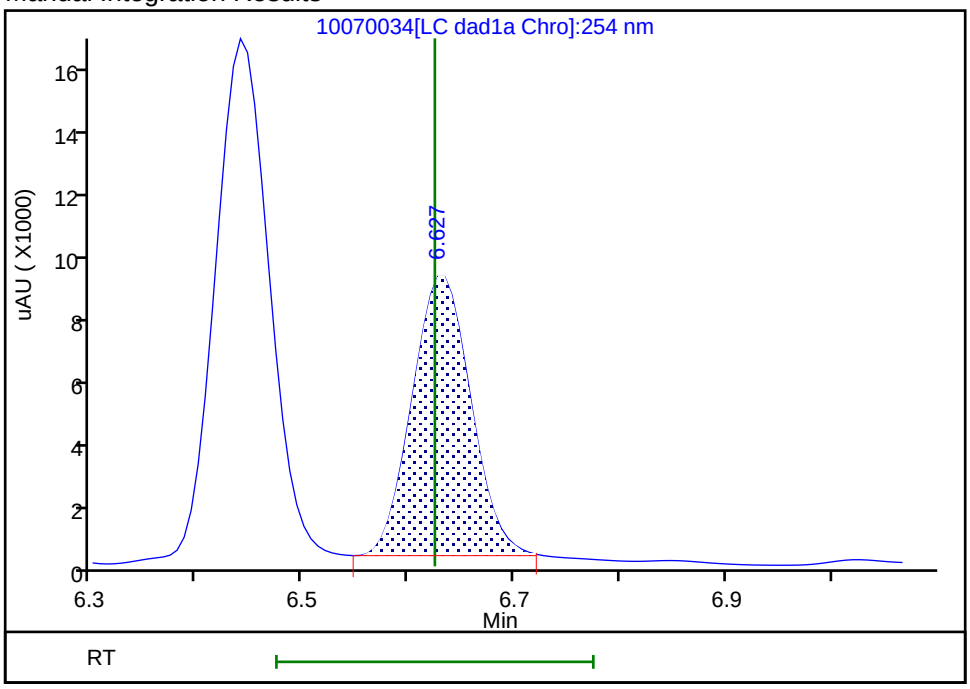
Processing Integration Results

RT: 6.63
Area: 34335
Amount: 0.239558
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 31567
Amount: 0.220246
Amount Units: ug/mL



Reviewer: K8YG, 09-Oct-2023 11:04:41 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-629672/16 Calibration Date: 10/13/2023 17:15

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 17:53

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/23/2023 20:57

Lab File ID: 10130016.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	200761	199553		249	251	-0.6	20.0
HMX	Ave	94255	89568		238	250	-5.0	20.0
DNX	Ave	144493	146426		254	250	1.3	20.0
MNX	Ave	138689	137313		289	292	-1.0	20.0
RDX	Ave	110493	104404		236	250	-5.5	20.0
Picric acid	Ave	77863	74148		238	250	-4.8	20.0
1,3,5-Trinitrobenzene	Ave	216079	216636		251	250	0.3	20.0
1,3-Dinitrobenzene	Ave	293347	286280		244	250	-2.4	20.0
Nitrobenzene	Ave	192696	183692		238	250	-4.7	20.0
3,5-Dinitroaniline	Lin2		206112		229	250	-8.2	20.0
Tetryl	Ave	167257	169944		254	250	1.6	20.0
Nitroglycerin	Ave	64651	66046		2550	2500	2.2	20.0
2,4,6-Trinitrotoluene	Ave	204902	197736		241	250	-3.5	20.0
4-Amino-2,6-dinitrotoluene	Ave	149560	148848		249	250	-0.5	20.0
2-Amino-4,6-dinitrotoluene	Ave	193716	188156		243	250	-2.9	20.0
2,6-Dinitrotoluene	Ave	142638	139016		244	250	-2.5	20.0
2,4-Dinitrotoluene	Ave	295706	285676		242	250	-3.4	20.0
2-Nitrotoluene	Ave	126123	119580		237	250	-5.2	20.0
4-Nitrotoluene	Ave	110088	102572		233	250	-6.8	20.0
3-Nitrotoluene	Lin2		131180		238	250	-4.8	20.0
PETN	Ave	72018	72238		2510	2500	0.3	20.0
1,2-Dinitrobenzene	Ave	123911	122808		248	250	-0.9	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-629672/16 Calibration Date: 10/13/2023 17:15

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 17:53

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/23/2023 20:57

Lab File ID: 10130016.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.45	6.34	6.54
HMX	6.57	6.43	6.73
DNX	6.77	6.68	6.88
MNX	7.20	7.05	7.35
RDX	7.58	7.43	7.73
Picric acid	7.95	7.81	8.11
1,3,5-Trinitrobenzene	8.65	8.50	8.80
1,3-Dinitrobenzene	9.26	9.11	9.41
Nitrobenzene	9.63	9.48	9.78
3,5-Dinitroaniline	9.85	9.70	10.00
Tetryl	9.97	9.83	10.13
Nitroglycerin	10.42	10.28	10.58
2,4,6-Trinitrotoluene	10.86	10.77	10.97
4-Amino-2,6-dinitrotoluene	11.03	10.94	11.14
2-Amino-4,6-dinitrotoluene	11.29	11.20	11.40
2,6-Dinitrotoluene	11.44	11.36	11.56
2,4-Dinitrotoluene	11.61	11.52	11.72
2-Nitrotoluene	12.42	12.28	12.58
4-Nitrotoluene	12.83	12.69	12.99
3-Nitrotoluene	13.39	13.25	13.55
PETN	14.51	14.39	14.69
1,2-Dinitrobenzene	8.52	8.37	8.67

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\10130016.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 13-Oct-2023 17:15:03 ALS Bottle#: 7 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 14-Oct-2023 13:59:13 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1649

First Level Reviewer: LV5D Date: 13-Oct-2023 18:54:23

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.446	6.444	0.002	50038	0.2508	0.2492	M
4 HMX	1	6.572	6.577	-0.005	22392	0.2500	0.2376	M
6 DNX	1	6.772	6.777	-0.005	36643	0.2503	0.2536	M
7 MNX	1	7.199	7.204	-0.005	40061	0.2918	0.2889	
8 RDX	1	7.579	7.584	-0.005	26101	0.2500	0.2362	
9 2,4,6-Trinitrophenol	1	7.952	7.957	-0.005	18537	0.2500	0.2381	
$ 10 1,2-Dinitrobenzene	1	8.519	8.524	-0.005	30702	0.2500	0.2478	
11 1,3,5-Trinitrobenzene	1	8.646	8.650	-0.004	54159	0.2500	0.2506	
12 1,3-Dinitrobenzene	1	9.259	9.264	-0.005	71570	0.2500	0.2440	
13 Nitrobenzene	1	9.626	9.630	-0.004	45923	0.2500	0.2383	
14 3,5-Dinitroaniline	1	9.846	9.850	-0.004	51528	0.2500	0.2294	
15 Tetryl	1	9.972	9.984	-0.012	42486	0.2500	0.2540	
16 Nitroglycerin	2	10.419	10.430	-0.011	165116	2.50	2.55	
17 2,4,6-Trinitrotoluene	1	10.859	10.870	-0.011	49434	0.2500	0.2413	
18 4-Amino-2,6-dinitrotoluene	1	11.032	11.044	-0.012	37212	0.2500	0.2488	
19 2-Amino-4,6-dinitrotoluene	1	11.286	11.297	-0.011	47039	0.2500	0.2428	
20 2,6-Dinitrotoluene	1	11.439	11.457	-0.018	34754	0.2500	0.2437	
21 2,4-Dinitrotoluene	1	11.612	11.624	-0.012	71419	0.2500	0.2415	
22 o-Nitrotoluene	1	12.419	12.430	-0.011	29895	0.2500	0.2370	
23 p-Nitrotoluene	1	12.826	12.844	-0.018	25643	0.2500	0.2329	
24 m-Nitrotoluene	1	13.386	13.404	-0.018	32795	0.2500	0.2380	
25 PETN	2	14.512	14.537	-0.025	180596	2.50	2.51	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00015	Amount Added:	12.50	Units: uL
8330IntermStk_00078	Amount Added:	25.00	Units: uL

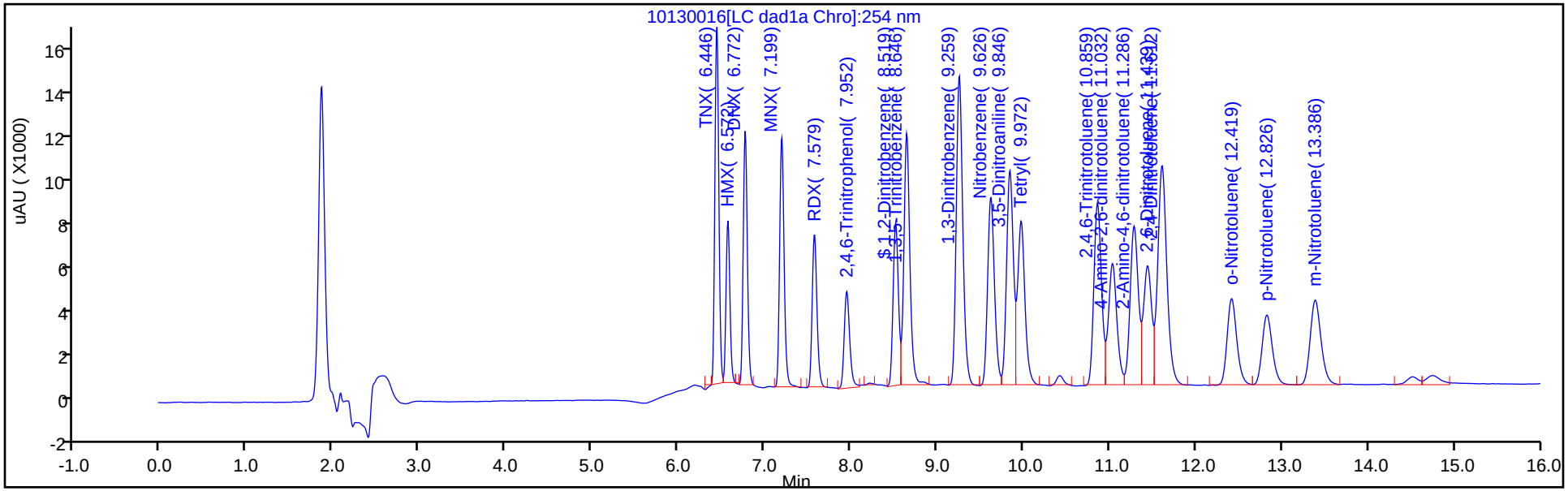
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Eurofins Denver

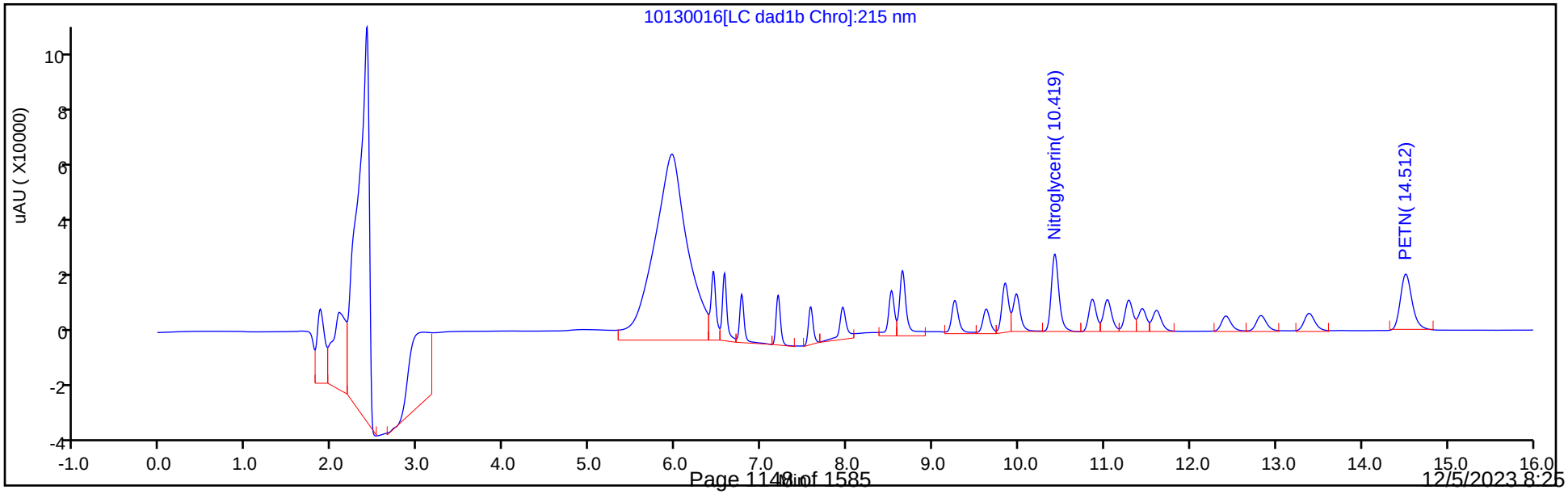
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Injection Date:	13-Oct-2023 17:15:03	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	16
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



12/5/2023 8:25 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

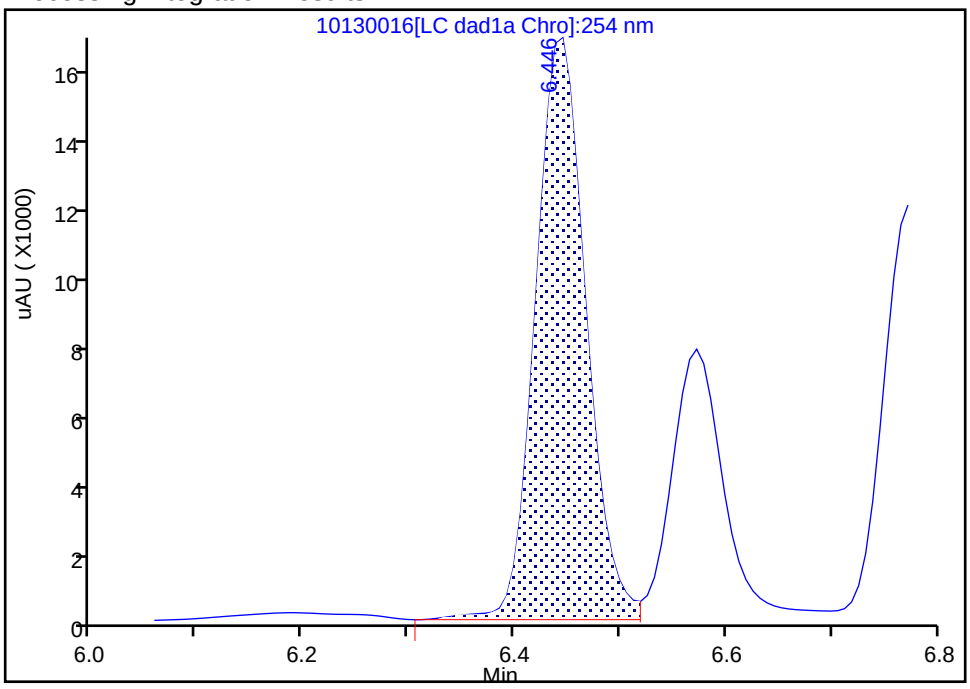
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Injection Date:	13-Oct-2023 17:15:03	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

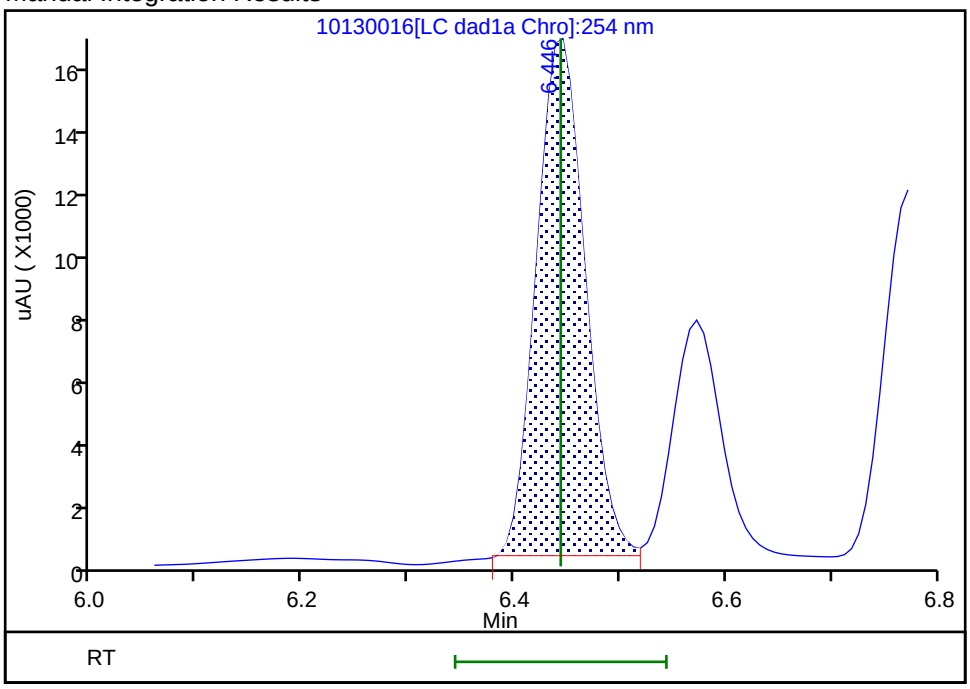
Processing Integration Results

RT: 6.45
Area: 52508
Amount: 0.261545
Amount Units: ug/mL



Manual Integration Results

RT: 6.45
Area: 50038
Amount: 0.249242
Amount Units: ug/mL



Reviewer: LV5D, 13-Oct-2023 18:54:19 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

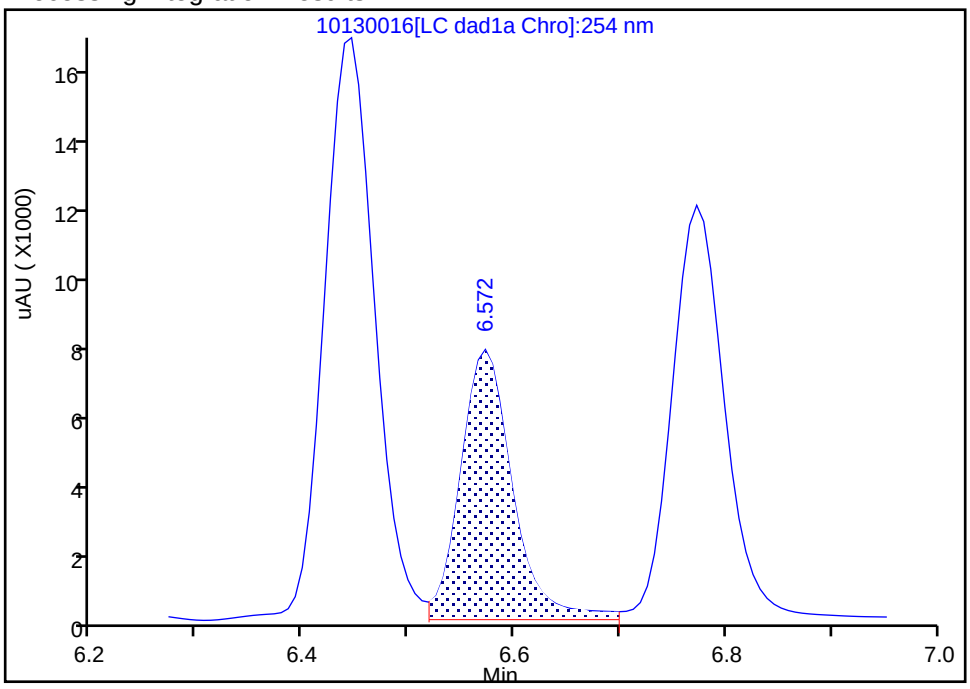
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Injection Date:	13-Oct-2023 17:15:03	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

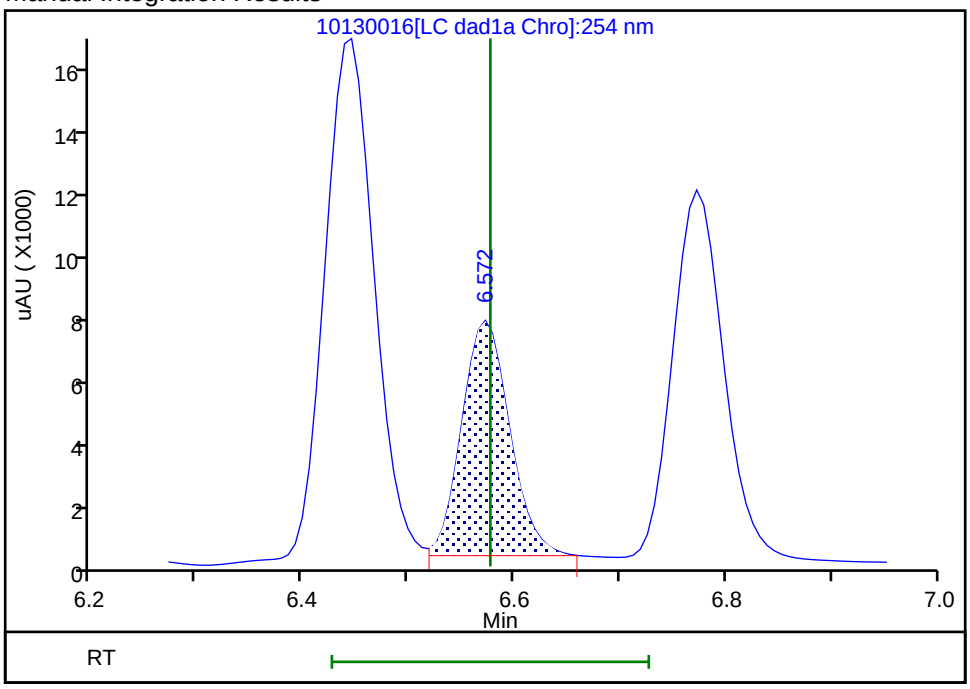
Processing Integration Results

RT: 6.57
Area: 24983
Amount: 0.265057
Amount Units: ug/mL



Manual Integration Results

RT: 6.57
Area: 22392
Amount: 0.237567
Amount Units: ug/mL



Reviewer: LV5D, 13-Oct-2023 18:54:19 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

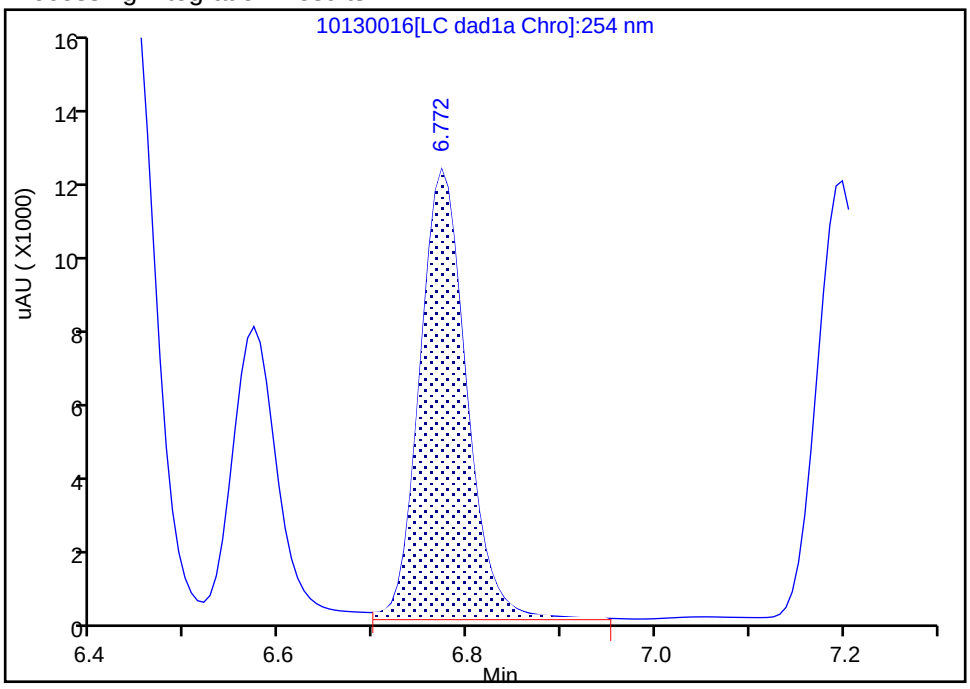
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231013-126501.b\10130016.d				
Injection Date:	13-Oct-2023 17:15:03	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

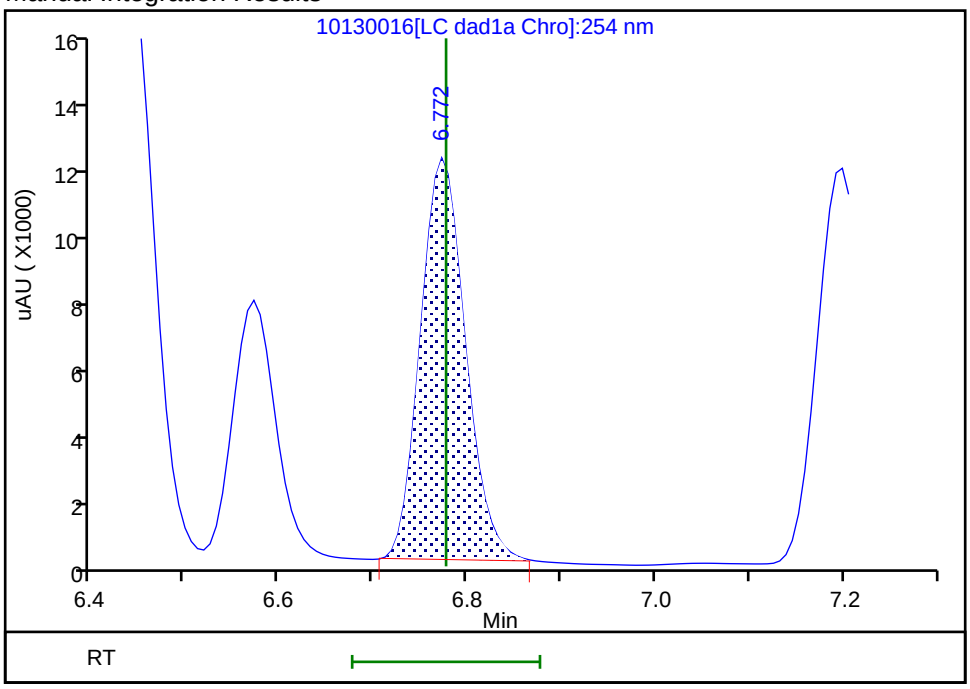
Processing Integration Results

RT: 6.77
Area: 38816
Amount: 0.268636
Amount Units: ug/mL



Manual Integration Results

RT: 6.77
Area: 36643
Amount: 0.253597
Amount Units: ug/mL



Reviewer: LV5D, 13-Oct-2023 18:54:22 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-629672/17 | Calibration Date: 10/13/2023 17:38

Instrument ID: CHHPLC_X3 | Calib Start Date: 06/23/2023 21:43

GC Column: UltraCarb5uODS ID: 4.60(mm) | Calib End Date: 06/24/2023 00:23

Lab File ID: 10130017.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,6-diamino-4-nitrotoluene	Ave	225565	214152		237	250	-5.1	20.0
2,4-diamino-6-nitrotoluene	Ave	143326	130516		228	250	-8.9	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-629672/17 Calibration Date: 10/13/2023 17:38

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 21:43

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/24/2023 00:23

Lab File ID: 10130017.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	6.44	6.29	6.59
2,4-diamino-6-nitrotoluene	6.64	6.48	6.78

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\10130017.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 13-Oct-2023 17:38:03 ALS Bottle#: 8 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub28

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 14-Oct-2023 13:59:12 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1649

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1	6.441	6.443	-0.002	53538	0.2500	0.2374	
5 2,4-diamino-6-nitrotoluene	1	6.635	6.630	0.005	32629	0.2500	0.2277	

Reagents:

8330_ADDs_00038 Amount Added: 12.50 Units: uL

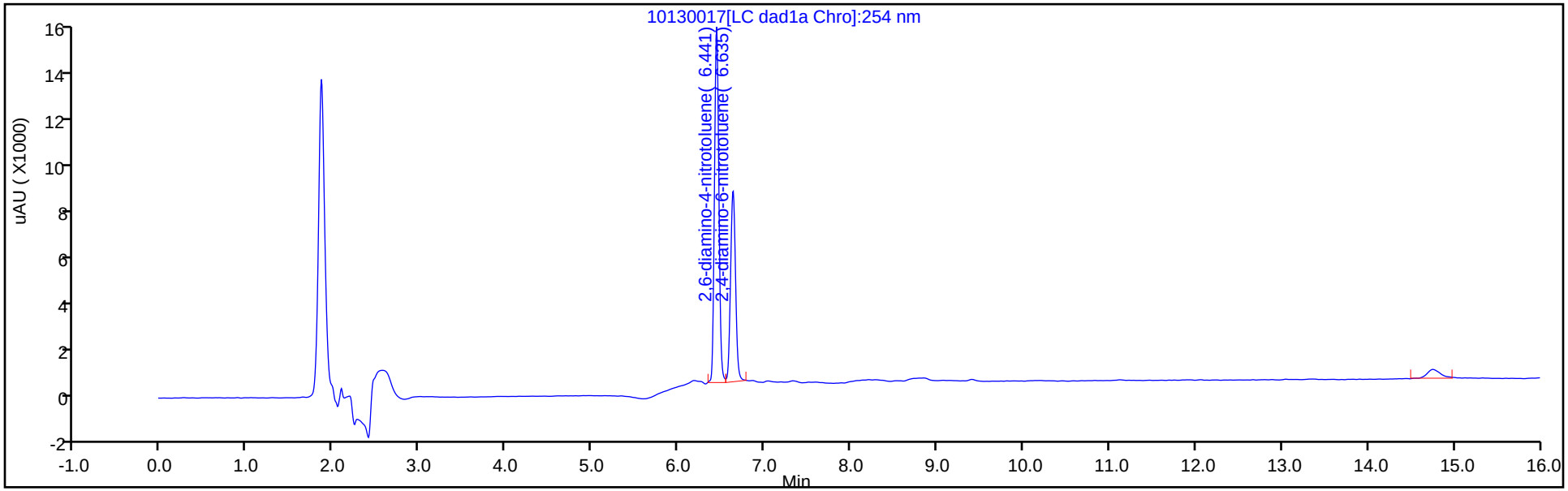
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Eurofins Denver

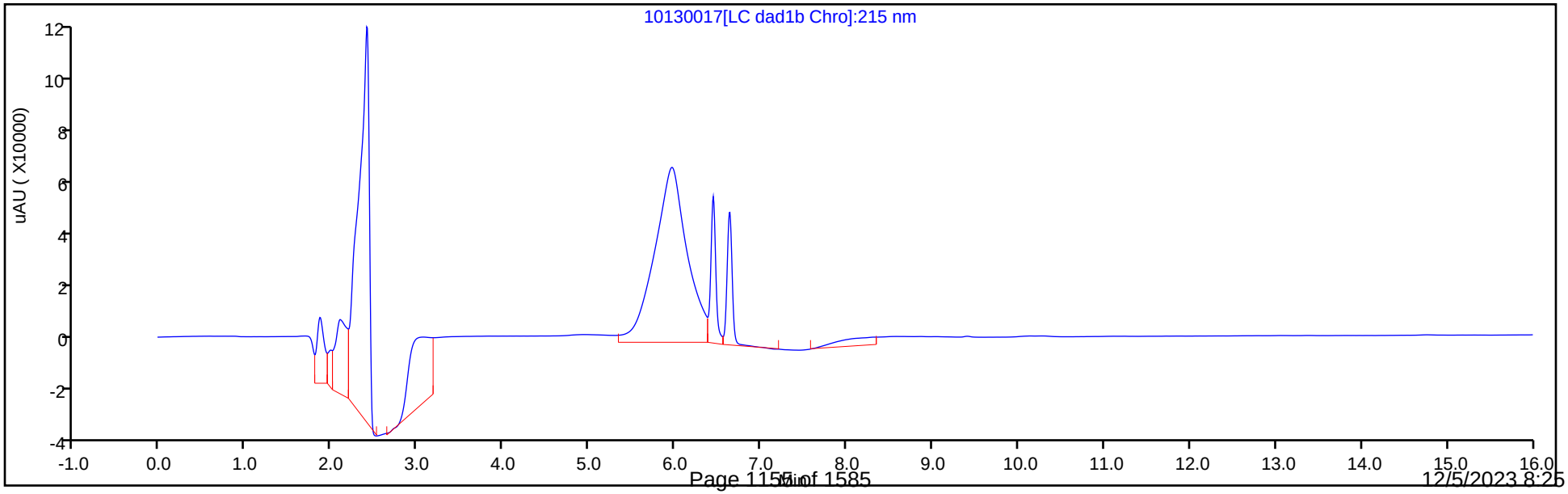
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Injection Date:	13-Oct-2023 17:38:03	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	17
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-629672/28 | Calibration Date: 10/13/2023 21:50

Instrument ID: CHHPLC_X3 | Calib Start Date: 06/23/2023 17:53

GC Column: UltraCarb5uODS ID: 4.60(mm) | Calib End Date: 06/23/2023 20:57

Lab File ID: 10130028.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	200761	199577		249	251	-0.6	20.0
HMX	Ave	94255	91932		244	250	-2.5	20.0
DNX	Ave	144493	148184		257	250	2.6	20.0
MNX	Ave	138689	136953		288	292	-1.3	20.0
RDX	Ave	110493	104716		237	250	-5.2	20.0
Picric acid	Ave	77863	75268		242	250	-3.3	20.0
1,3,5-Trinitrobenzene	Ave	216079	215536		249	250	-0.3	20.0
1,3-Dinitrobenzene	Ave	293347	287020		245	250	-2.2	20.0
Nitrobenzene	Ave	192696	181080		235	250	-6.0	20.0
3,5-Dinitroaniline	Lin2		209476		233	250	-6.7	20.0
Tetryl	Ave	167257	167992		251	250	0.4	20.0
Nitroglycerin	Ave	64651	66004		2550	2500	2.1	20.0
2,4,6-Trinitrotoluene	Ave	204902	201024		245	250	-1.9	20.0
4-Amino-2,6-dinitrotoluene	Ave	149560	147132		246	250	-1.6	20.0
2-Amino-4,6-dinitrotoluene	Ave	193716	187764		242	250	-3.1	20.0
2,6-Dinitrotoluene	Ave	142638	139540		245	250	-2.2	20.0
2,4-Dinitrotoluene	Ave	295706	287404		243	250	-2.8	20.0
2-Nitrotoluene	Ave	126123	117932		234	250	-6.5	20.0
4-Nitrotoluene	Ave	110088	101716		231	250	-7.6	20.0
3-Nitrotoluene	Lin2		128948		234	250	-6.5	20.0
PETN	Ave	72018	72734		2520	2500	1.0	20.0
1,2-Dinitrobenzene	Ave	123911	123368		249	250	-0.4	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-629672/28 Calibration Date: 10/13/2023 21:50

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 17:53

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/23/2023 20:57

Lab File ID: 10130028.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.44	6.34	6.54
HMX	6.57	6.43	6.73
DNX	6.77	6.68	6.88
MNX	7.20	7.05	7.35
RDX	7.58	7.43	7.73
Picric acid	7.95	7.81	8.11
1,3,5-Trinitrobenzene	8.64	8.50	8.80
1,3-Dinitrobenzene	9.25	9.11	9.41
Nitrobenzene	9.62	9.48	9.78
3,5-Dinitroaniline	9.84	9.70	10.00
Tetryl	9.97	9.83	10.13
Nitroglycerin	10.42	10.28	10.58
2,4,6-Trinitrotoluene	10.86	10.77	10.97
4-Amino-2,6-dinitrotoluene	11.03	10.94	11.14
2-Amino-4,6-dinitrotoluene	11.28	11.20	11.40
2,6-Dinitrotoluene	11.44	11.36	11.56
2,4-Dinitrotoluene	11.60	11.52	11.72
2-Nitrotoluene	12.41	12.28	12.58
4-Nitrotoluene	12.82	12.69	12.99
3-Nitrotoluene	13.38	13.25	13.55
PETN	14.50	14.39	14.69
1,2-Dinitrobenzene	8.52	8.37	8.67

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\10130028.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 13-Oct-2023 21:50:13 ALS Bottle#: 7 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-Oct-2023 11:09:25 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1675

First Level Reviewer: K8YG Date: 16-Oct-2023 10:52:43

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.442	6.444	-0.002	50044	0.2508	0.2493	M
4 HMX	1	6.569	6.577	-0.008	22983	0.2500	0.2438	M
6 DNX	1	6.769	6.777	-0.008	37083	0.2503	0.2566	M
7 MNX	1	7.196	7.204	-0.008	39956	0.2918	0.2881	
8 RDX	1	7.576	7.584	-0.008	26179	0.2500	0.2369	
9 2,4,6-Trinitrophenol	1	7.949	7.957	-0.008	18817	0.2500	0.2417	
$ 10 1,2-Dinitrobenzene	1	8.516	8.524	-0.008	30842	0.2500	0.2489	
11 1,3,5-Trinitrobenzene	1	8.642	8.650	-0.008	53884	0.2500	0.2494	M
12 1,3-Dinitrobenzene	1	9.249	9.264	-0.015	71755	0.2500	0.2446	
13 Nitrobenzene	1	9.616	9.630	-0.014	45270	0.2500	0.2349	
14 3,5-Dinitroaniline	1	9.836	9.850	-0.014	52369	0.2500	0.2331	
15 Tetryl	1	9.969	9.984	-0.015	41998	0.2500	0.2511	
16 Nitroglycerin	2	10.416	10.430	-0.014	165011	2.50	2.55	
17 2,4,6-Trinitrotoluene	1	10.856	10.870	-0.014	50256	0.2500	0.2453	
18 4-Amino-2,6-dinitrotoluene	1	11.029	11.044	-0.015	36783	0.2500	0.2459	
19 2-Amino-4,6-dinitrotoluene	1	11.276	11.297	-0.021	46941	0.2500	0.2423	
20 2,6-Dinitrotoluene	1	11.436	11.457	-0.021	34885	0.2500	0.2446	
21 2,4-Dinitrotoluene	1	11.602	11.624	-0.022	71851	0.2500	0.2430	
22 o-Nitrotoluene	1	12.409	12.430	-0.021	29483	0.2500	0.2338	
23 p-Nitrotoluene	1	12.816	12.844	-0.028	25429	0.2500	0.2310	
24 m-Nitrotoluene	1	13.376	13.404	-0.028	32237	0.2500	0.2339	
25 PETN	2	14.496	14.537	-0.041	181834	2.50	2.52	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00015	Amount Added:	12.50	Units: uL
8330IntermStk_00078	Amount Added:	25.00	Units: uL

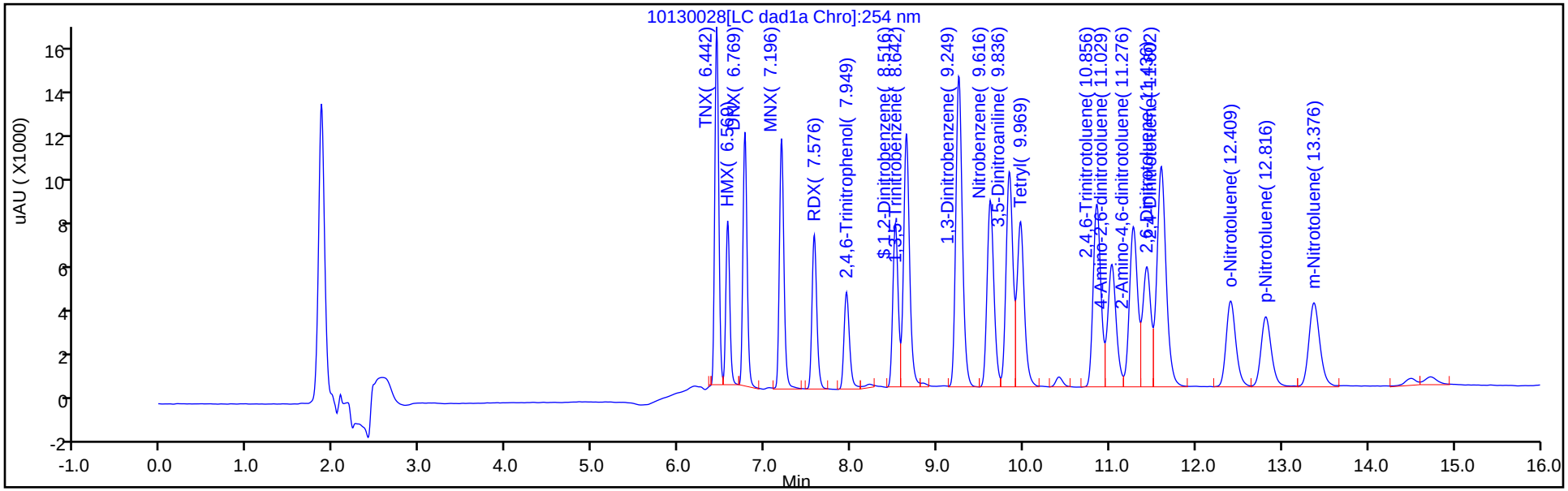
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Eurofins Denver

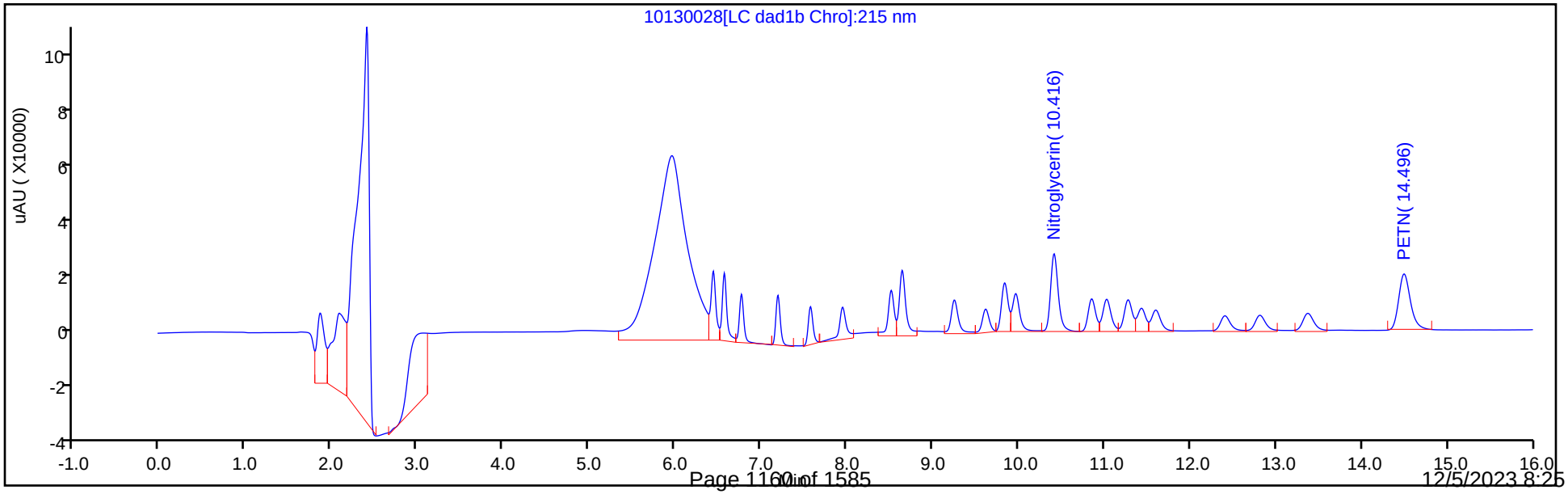
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Injection Date:	13-Oct-2023 21:50:13	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	28
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

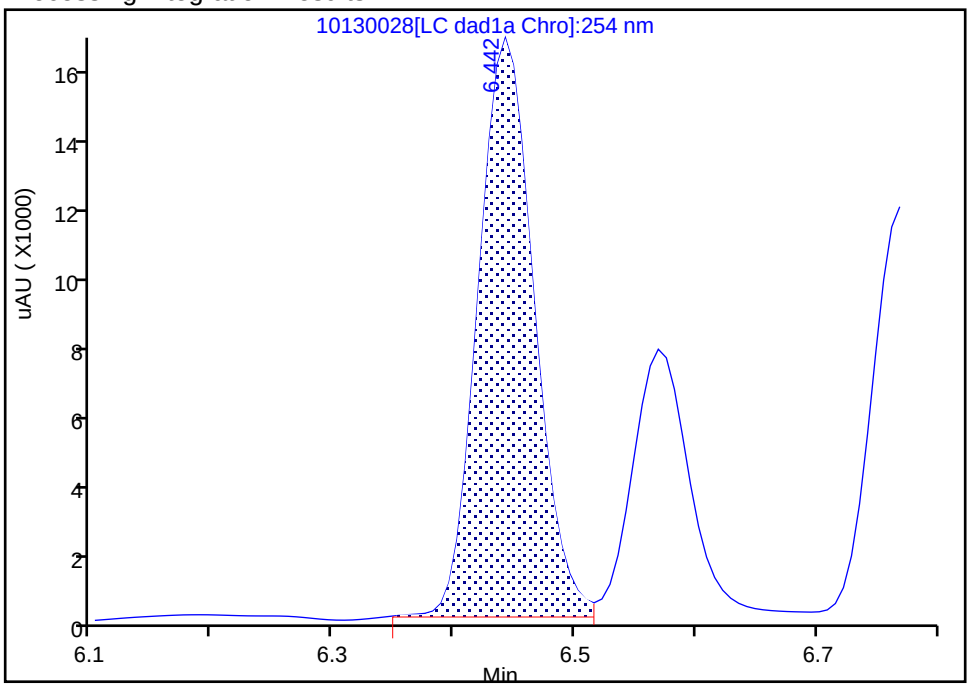
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Injection Date:	13-Oct-2023 21:50:13	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

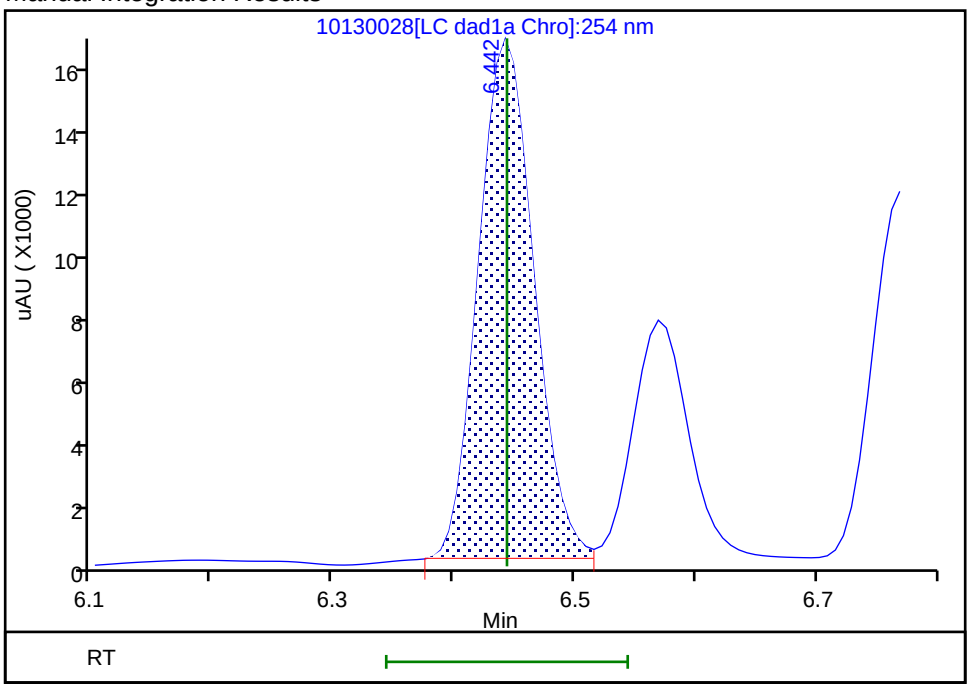
Processing Integration Results

RT: 6.44
Area: 50956
Amount: 0.253814
Amount Units: ug/mL



Manual Integration Results

RT: 6.44
Area: 50044
Amount: 0.249272
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 10:52:29 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

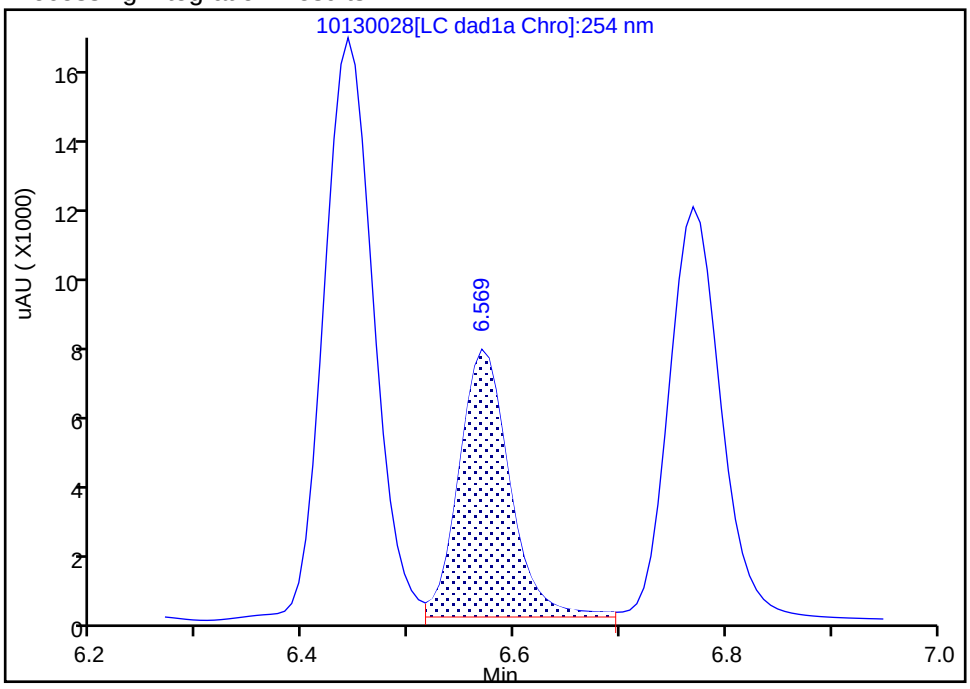
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Injection Date:	13-Oct-2023 21:50:13	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

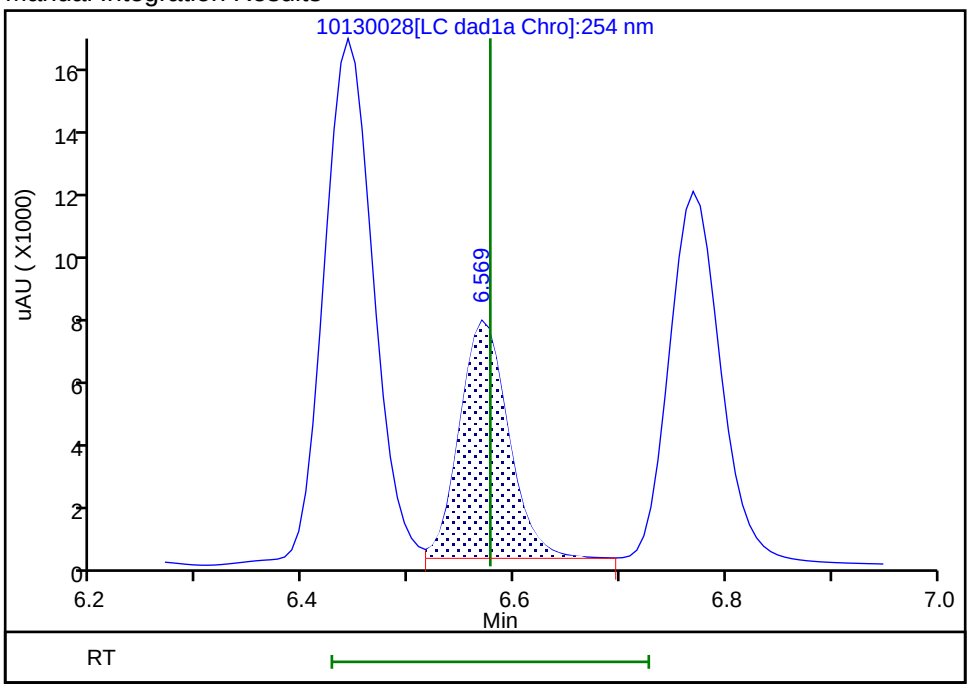
Processing Integration Results

RT: 6.57
Area: 24419
Amount: 0.259073
Amount Units: ug/mL



Manual Integration Results

RT: 6.57
Area: 22983
Amount: 0.243838
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 10:52:19 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

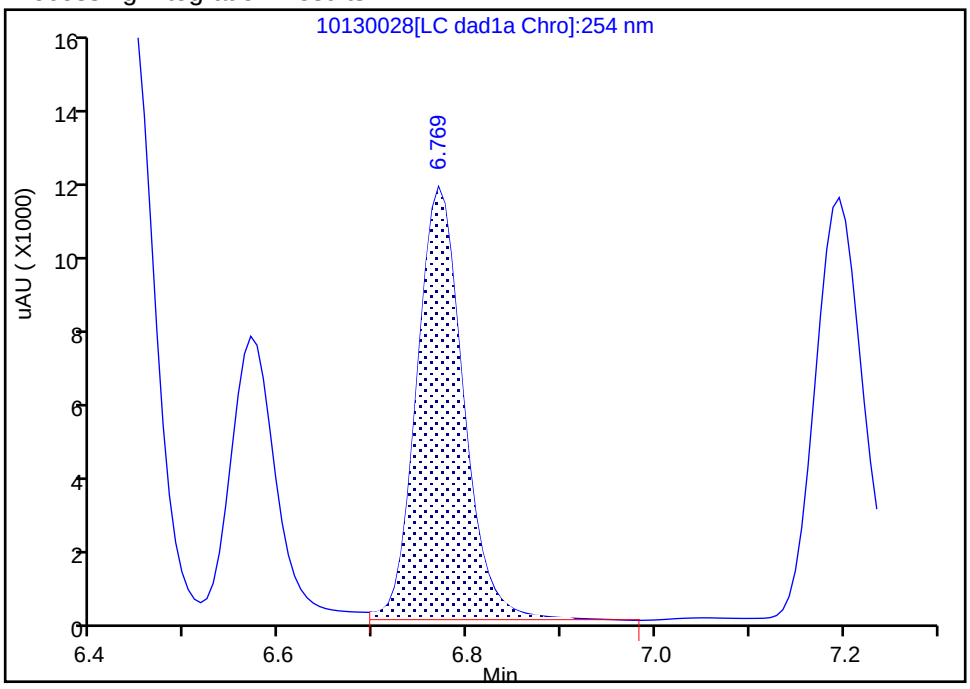
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Injection Date:	13-Oct-2023 21:50:13	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

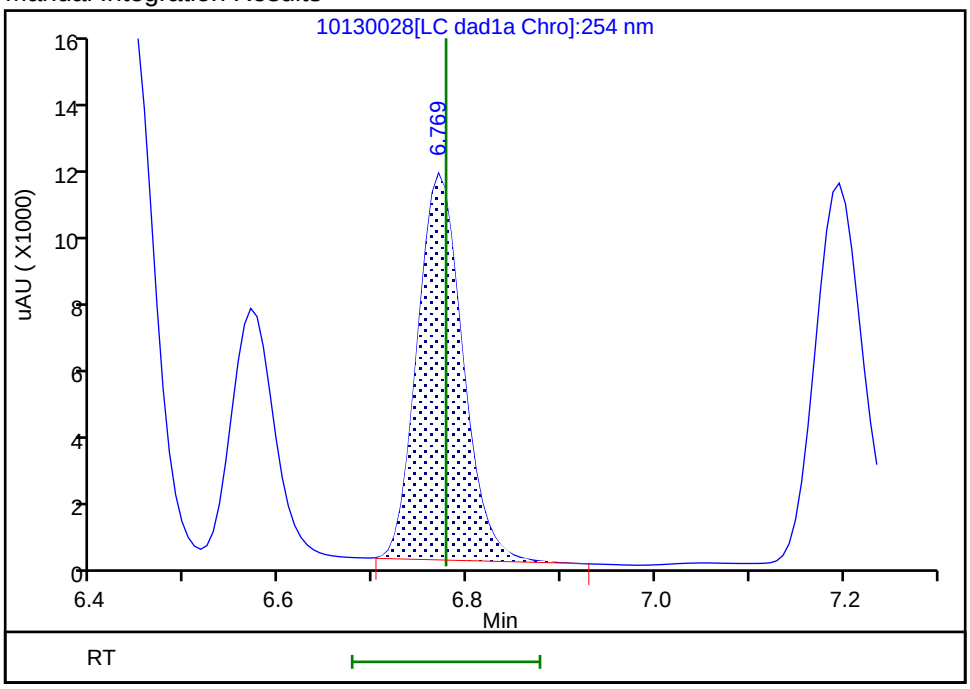
Processing Integration Results

RT: 6.77
Area: 38581
Amount: 0.267010
Amount Units: ug/mL



Manual Integration Results

RT: 6.77
Area: 37083
Amount: 0.256643
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 10:52:24 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

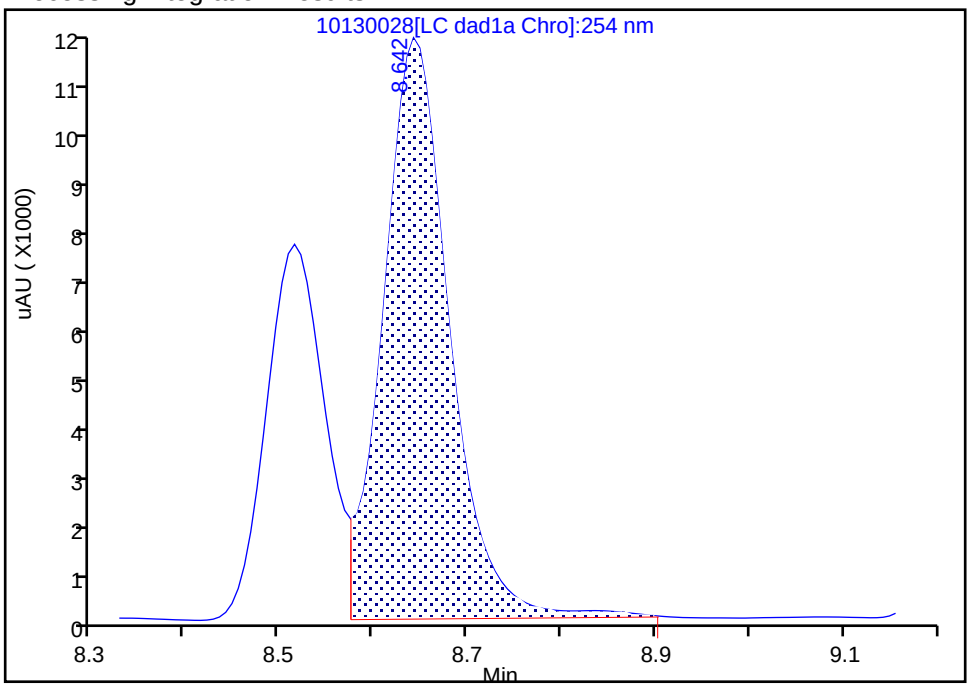
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Injection Date:	13-Oct-2023 21:50:13	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

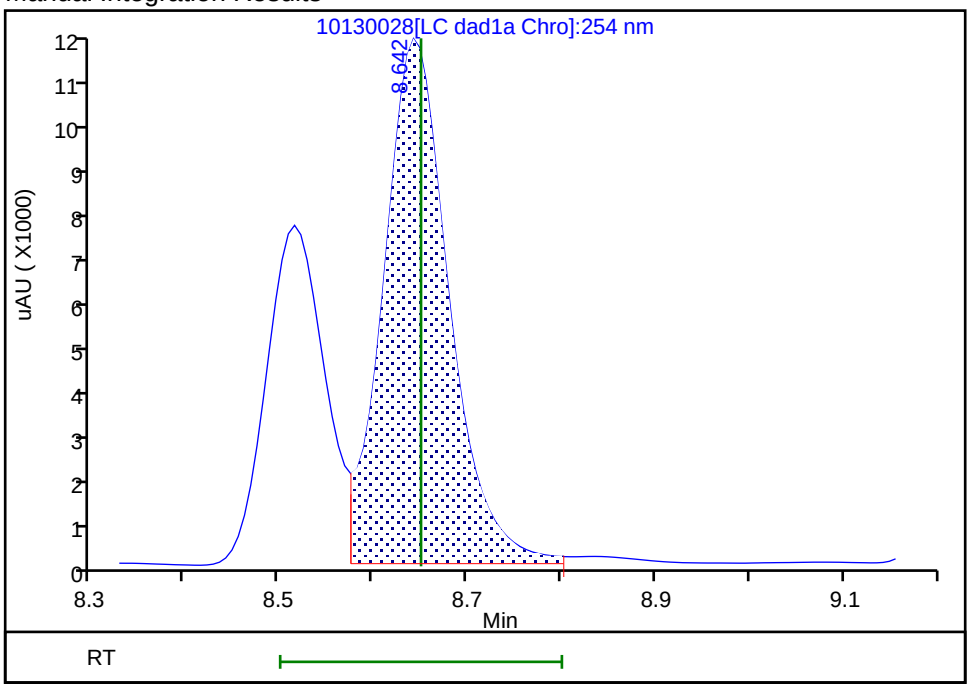
Processing Integration Results

RT: 8.64
Area: 54527
Amount: 0.252348
Amount Units: ug/mL



Manual Integration Results

RT: 8.64
Area: 53884
Amount: 0.249372
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 10:52:37 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-629672/29 Calibration Date: 10/13/2023 22:13

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 21:43

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/24/2023 00:23

Lab File ID: 10130029.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,6-diamino-4-nitrotoluene	Ave	225565	212252		235	250	-5.9	20.0
2,4-diamino-6-nitrotoluene	Ave	143326	128704		224	250	-10.2	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-629672/29 Calibration Date: 10/13/2023 22:13

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 21:43

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/24/2023 00:23

Lab File ID: 10130029.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	6.44	6.29	6.59
2,4-diamino-6-nitrotoluene	6.63	6.48	6.78

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\10130029.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 13-Oct-2023 22:13:13 ALS Bottle#: 8 Worklist Smp#: 29
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub28

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-Oct-2023 11:09:26 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1675

First Level Reviewer: K8YG Date: 16-Oct-2023 10:53:09

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1	6.440	6.443	-0.003	53063	0.2500	0.2352	M
5 2,4-diamino-6-nitrotoluene	1	6.626	6.630	-0.004	32176	0.2500	0.2245	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00038 Amount Added: 12.50 Units: uL

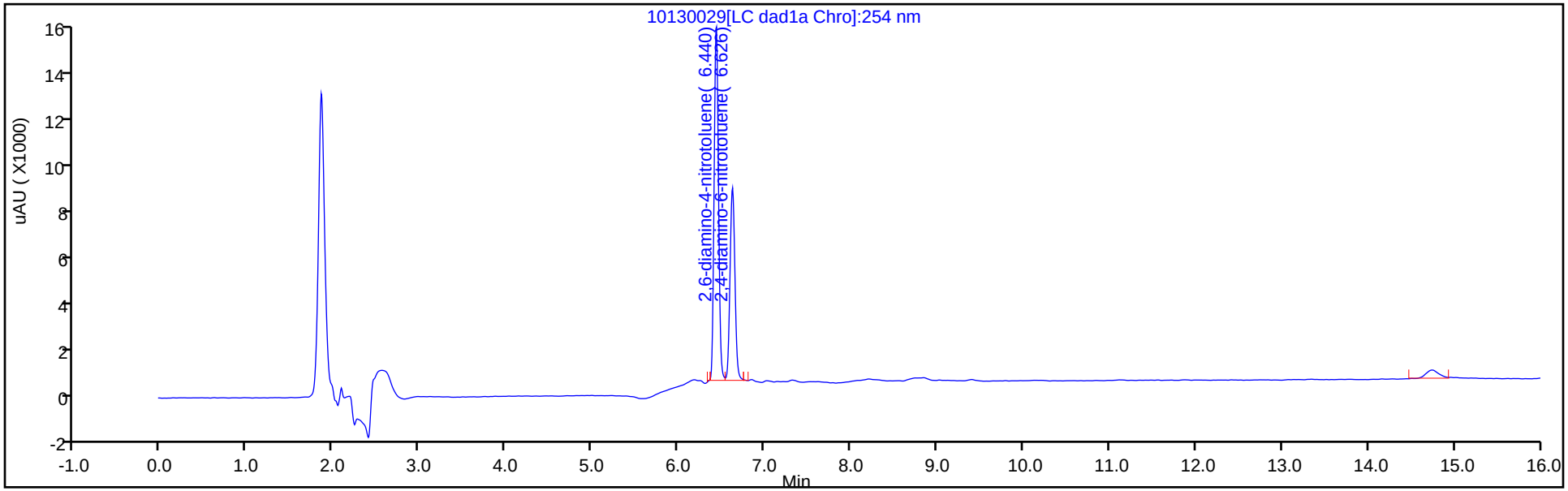
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Eurofins Denver

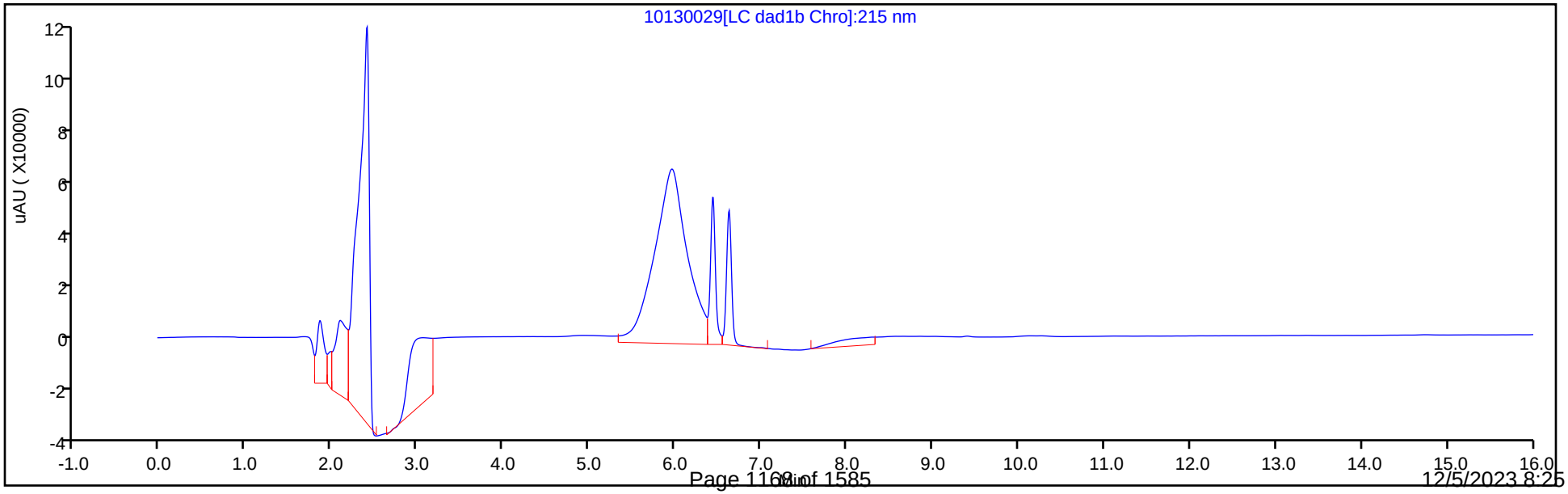
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Injection Date:	13-Oct-2023 22:13:13	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	29
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

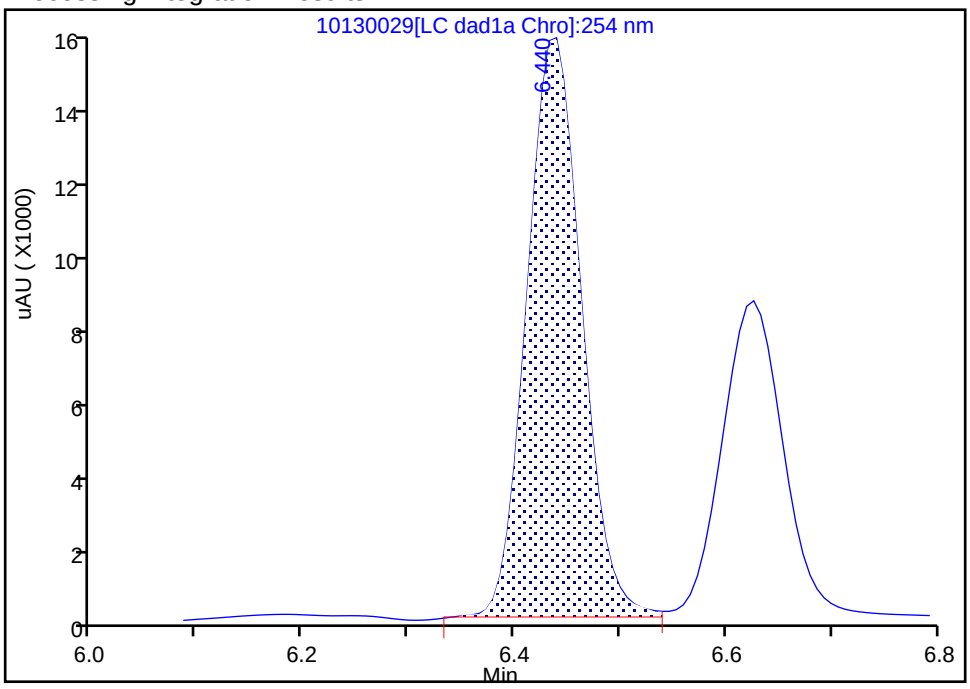
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Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

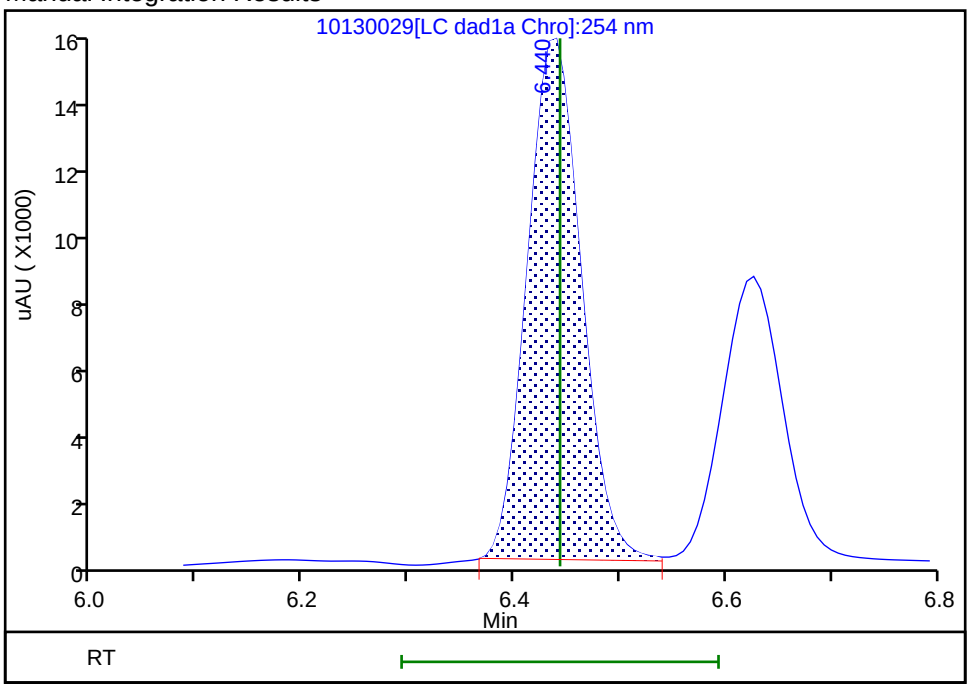
Processing Integration Results

RT: 6.44
Area: 54162
Amount: 0.240117
Amount Units: ug/mL



Manual Integration Results

RT: 6.44
Area: 53063
Amount: 0.235245
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 10:53:03 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

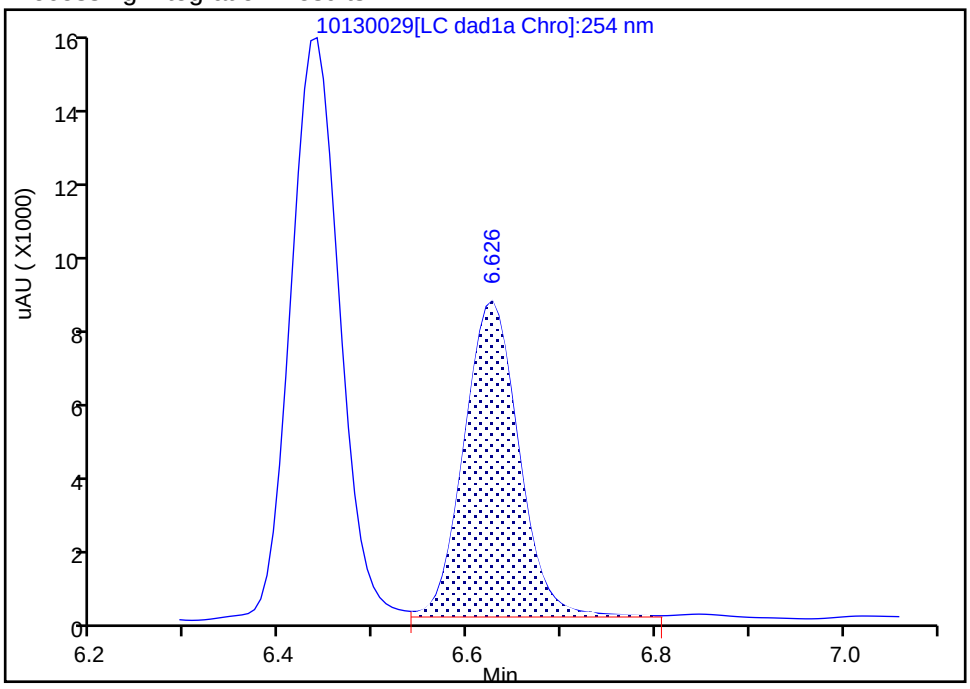
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Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

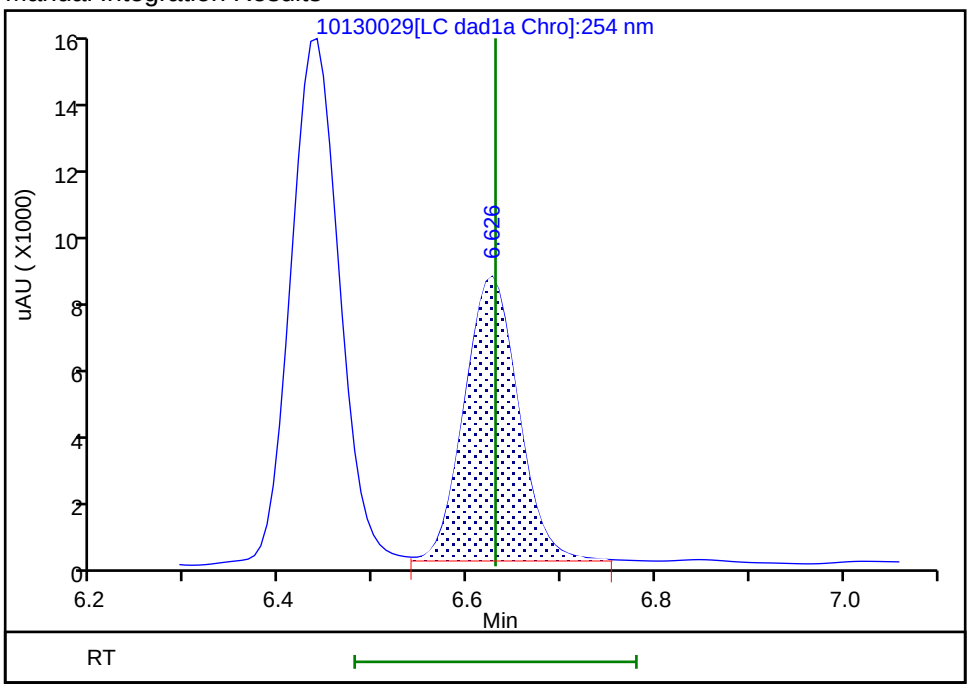
Processing Integration Results

RT: 6.63
Area: 33271
Amount: 0.232135
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 32176
Amount: 0.224495
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 10:53:07 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-629672/40 Calibration Date: 10/14/2023 02:25

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 17:53

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/23/2023 20:57

Lab File ID: 10130040.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	200761	198046		247	251	-1.4	20.0
HMX	Ave	94255	92012		244	250	-2.4	20.0
DNX	Ave	144493	149279		259	250	3.3	20.0
MNX	Ave	138689	137686		290	292	-0.7	20.0
RDX	Ave	110493	105036		238	250	-4.9	20.0
Picric acid	Ave	77863	76032		244	250	-2.4	20.0
1,3,5-Trinitrobenzene	Ave	216079	218252		253	250	1.0	20.0
1,3-Dinitrobenzene	Ave	293347	288208		246	250	-1.8	20.0
Nitrobenzene	Ave	192696	179364		233	250	-6.9	20.0
3,5-Dinitroaniline	Lin2		211140		235	250	-6.0	20.0
Tetryl	Ave	167257	167888		251	250	0.4	20.0
Nitroglycerin	Ave	64651	64758		2500	2500	0.2	20.0
2,4,6-Trinitrotoluene	Ave	204902	200840		245	250	-2.0	20.0
4-Amino-2,6-dinitrotoluene	Ave	149560	146504		245	250	-2.0	20.0
2-Amino-4,6-dinitrotoluene	Ave	193716	186916		241	250	-3.5	20.0
2,6-Dinitrotoluene	Ave	142638	140280		246	250	-1.7	20.0
2,4-Dinitrotoluene	Ave	295706	289356		245	250	-2.1	20.0
2-Nitrotoluene	Ave	126123	116600		231	250	-7.6	20.0
4-Nitrotoluene	Ave	110088	100924		229	250	-8.3	20.0
3-Nitrotoluene	Lin2		127596		231	250	-7.4	20.0
PETN	Ave	72018	72934		2530	2500	1.3	20.0
1,2-Dinitrobenzene	Ave	123911	122996		248	250	-0.7	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-629672/40 Calibration Date: 10/14/2023 02:25

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 17:53

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/23/2023 20:57

Lab File ID: 10130040.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.44	6.34	6.54
HMX	6.57	6.43	6.73
DNX	6.76	6.68	6.88
MNX	7.19	7.05	7.35
RDX	7.57	7.43	7.73
Picric acid	7.94	7.81	8.11
1,3,5-Trinitrobenzene	8.64	8.50	8.80
1,3-Dinitrobenzene	9.25	9.11	9.41
Nitrobenzene	9.62	9.48	9.78
3,5-Dinitroaniline	9.84	9.70	10.00
Tetryl	9.97	9.83	10.13
Nitroglycerin	10.42	10.28	10.58
2,4,6-Trinitrotoluene	10.85	10.77	10.97
4-Amino-2,6-dinitrotoluene	11.03	10.94	11.14
2-Amino-4,6-dinitrotoluene	11.28	11.20	11.40
2,6-Dinitrotoluene	11.44	11.36	11.56
2,4-Dinitrotoluene	11.60	11.52	11.72
2-Nitrotoluene	12.41	12.28	12.58
4-Nitrotoluene	12.82	12.69	12.99
3-Nitrotoluene	13.38	13.25	13.55
PETN	14.50	14.39	14.69
1,2-Dinitrobenzene	8.51	8.37	8.67

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\10130040.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 14-Oct-2023 02:25:53 ALS Bottle#: 7 Worklist Smp#: 40
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-Oct-2023 11:09:17 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1675

First Level Reviewer: K8YG Date: 16-Oct-2023 10:59:21

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.435	6.444	-0.009	49660	0.2508	0.2474	M
4 HMX	1	6.568	6.577	-0.009	23003	0.2500	0.2440	M
6 DNX	1	6.762	6.777	-0.015	37357	0.2503	0.2585	M
7 MNX	1	7.188	7.204	-0.016	40170	0.2918	0.2896	
8 RDX	1	7.568	7.584	-0.016	26259	0.2500	0.2377	
9 2,4,6-Trinitrophenol	1	7.942	7.957	-0.015	19008	0.2500	0.2441	
$ 10 1,2-Dinitrobenzene	1	8.508	8.524	-0.016	30749	0.2500	0.2482	M
11 1,3,5-Trinitrobenzene	1	8.635	8.650	-0.015	54563	0.2500	0.2525	M
12 1,3-Dinitrobenzene	1	9.248	9.264	-0.016	72052	0.2500	0.2456	
13 Nitrobenzene	1	9.615	9.630	-0.015	44841	0.2500	0.2327	
14 3,5-Dinitroaniline	1	9.835	9.850	-0.015	52785	0.2500	0.2350	
15 Tetryl	1	9.968	9.984	-0.016	41972	0.2500	0.2509	
16 Nitroglycerin	2	10.415	10.430	-0.015	161894	2.50	2.50	
17 2,4,6-Trinitrotoluene	1	10.848	10.870	-0.022	50210	0.2500	0.2450	
18 4-Amino-2,6-dinitrotoluene	1	11.028	11.044	-0.016	36626	0.2500	0.2449	
19 2-Amino-4,6-dinitrotoluene	1	11.282	11.297	-0.015	46729	0.2500	0.2412	
20 2,6-Dinitrotoluene	1	11.435	11.457	-0.022	35070	0.2500	0.2459	
21 2,4-Dinitrotoluene	1	11.602	11.624	-0.022	72339	0.2500	0.2446	
22 o-Nitrotoluene	1	12.408	12.430	-0.022	29150	0.2500	0.2311	M
23 p-Nitrotoluene	1	12.815	12.844	-0.029	25231	0.2500	0.2292	M
24 m-Nitrotoluene	1	13.375	13.404	-0.029	31899	0.2500	0.2314	M
25 PETN	2	14.502	14.537	-0.035	182336	2.50	2.53	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00015	Amount Added:	12.50	Units: uL
8330IntermStk_00078	Amount Added:	25.00	Units: uL

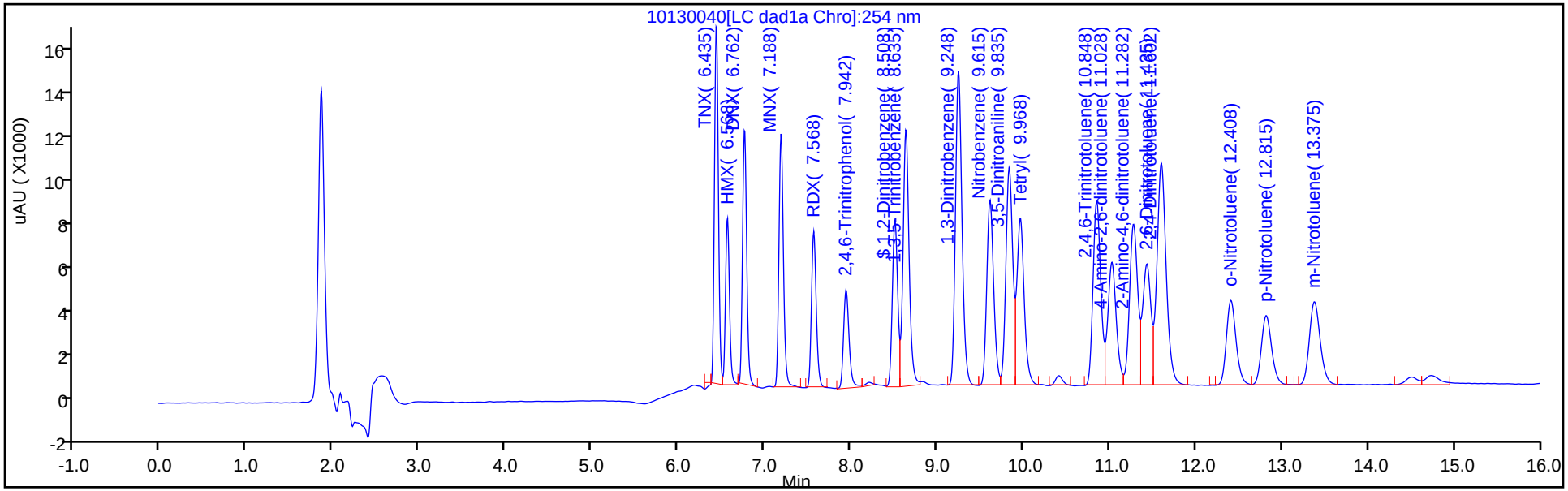
Report Date: 16-Oct-2023 11:09:18 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

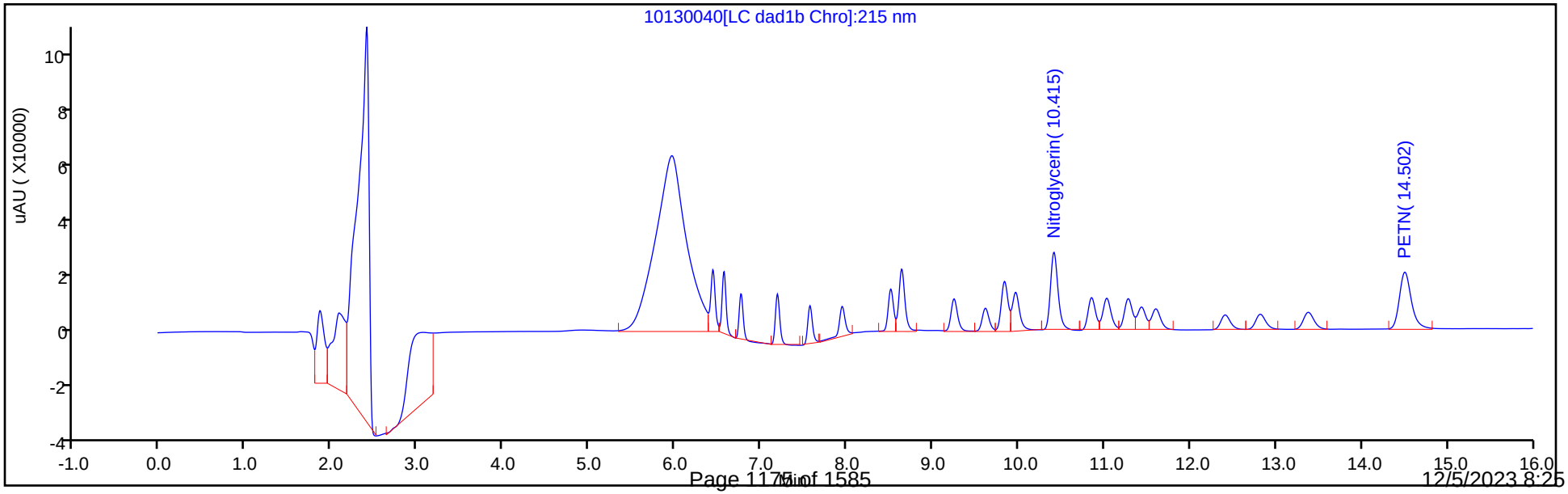
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Injection Date:	14-Oct-2023 02:25:53	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	40
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

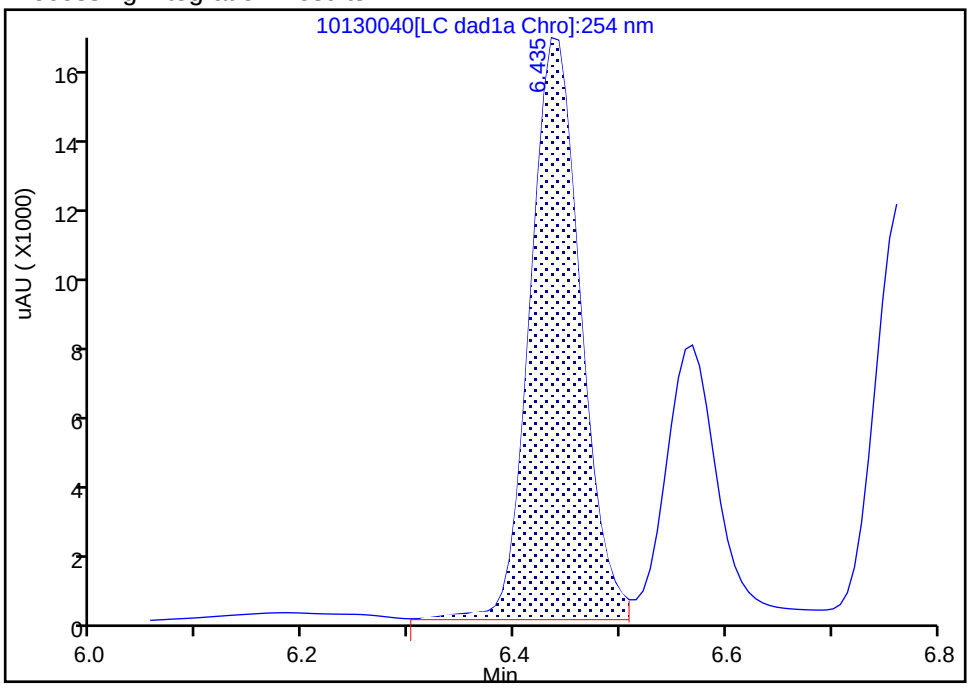
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Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

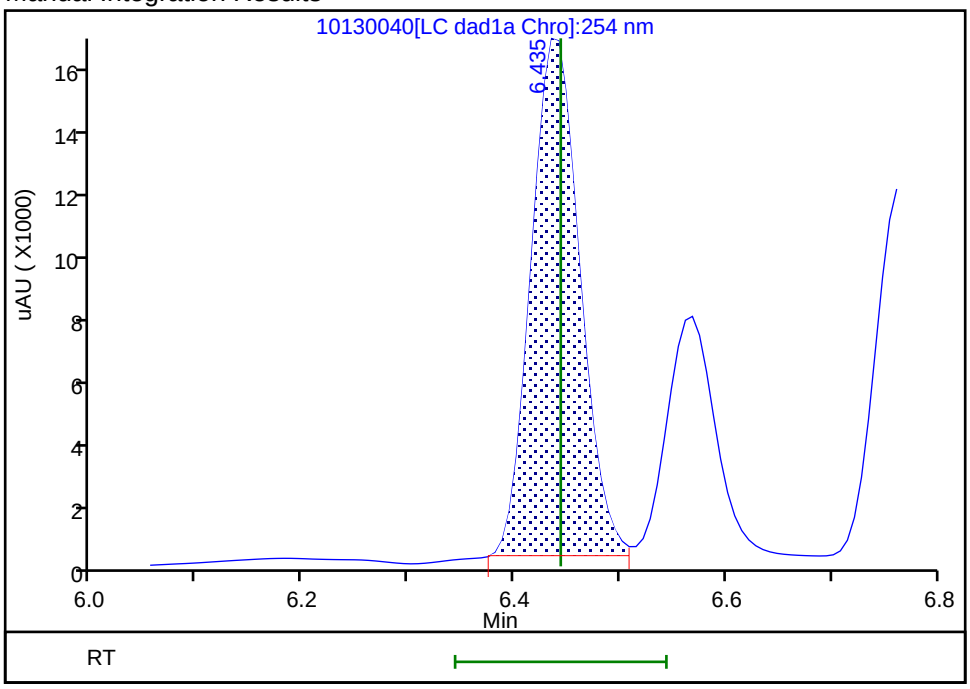
Processing Integration Results

RT: 6.44
Area: 51926
Amount: 0.258646
Amount Units: ug/mL



Manual Integration Results

RT: 6.44
Area: 49660
Amount: 0.247359
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 10:58:43 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

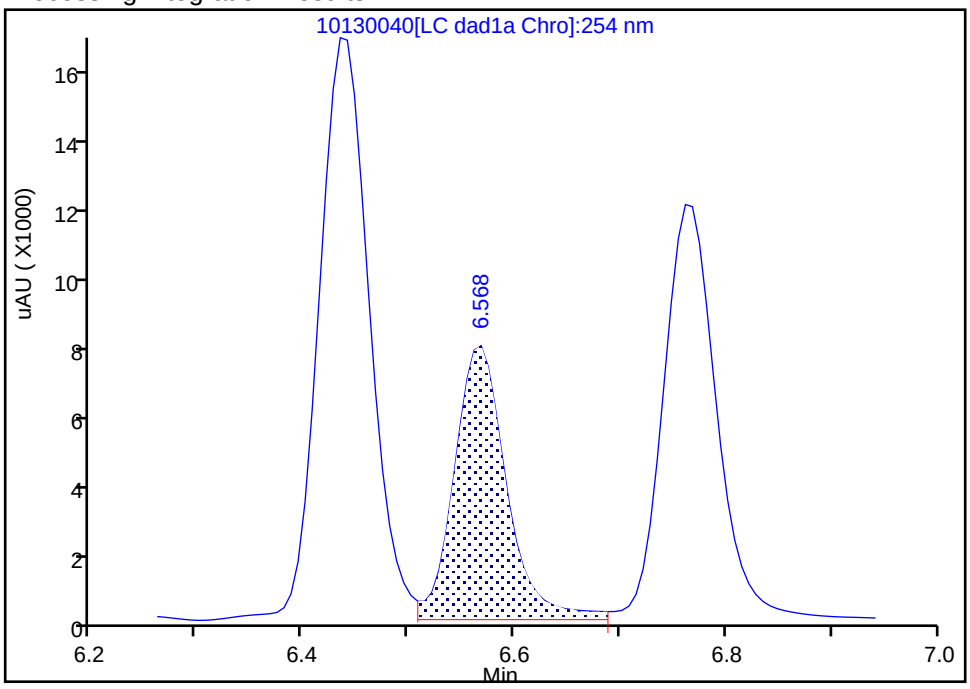
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Injection Date:	14-Oct-2023 02:25:53	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

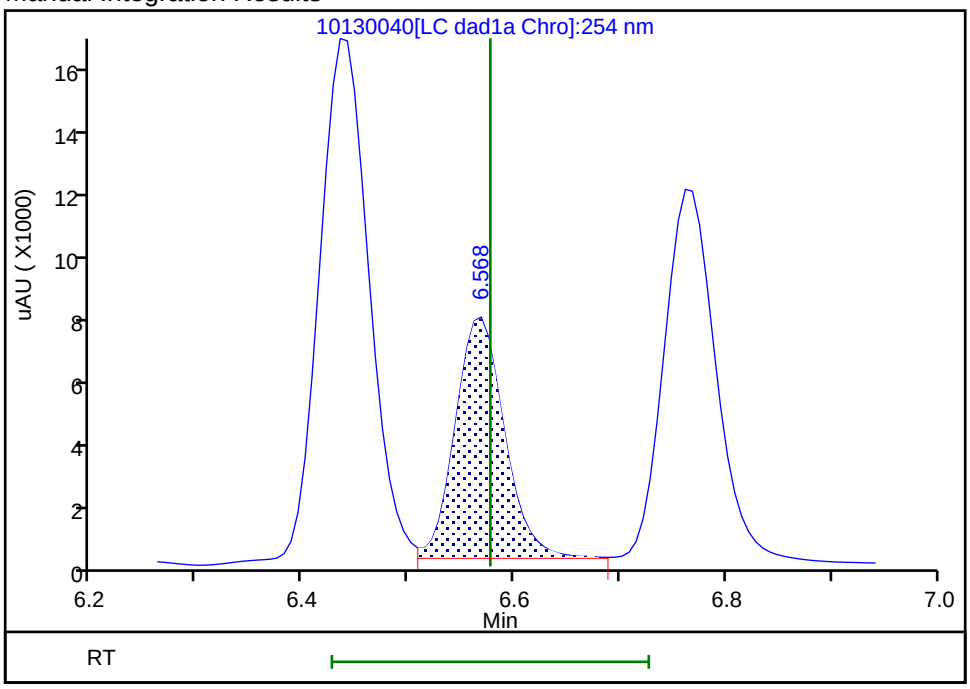
Processing Integration Results

RT: 6.57
Area: 25400
Amount: 0.269481
Amount Units: ug/mL



Manual Integration Results

RT: 6.57
Area: 23003
Amount: 0.244050
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 10:58:39 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

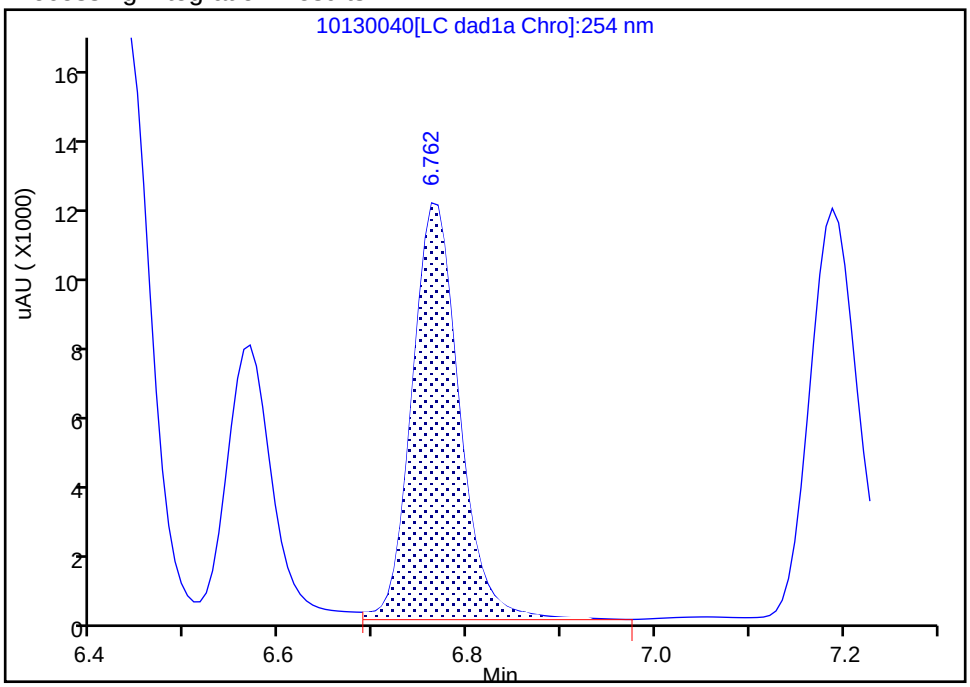
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Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

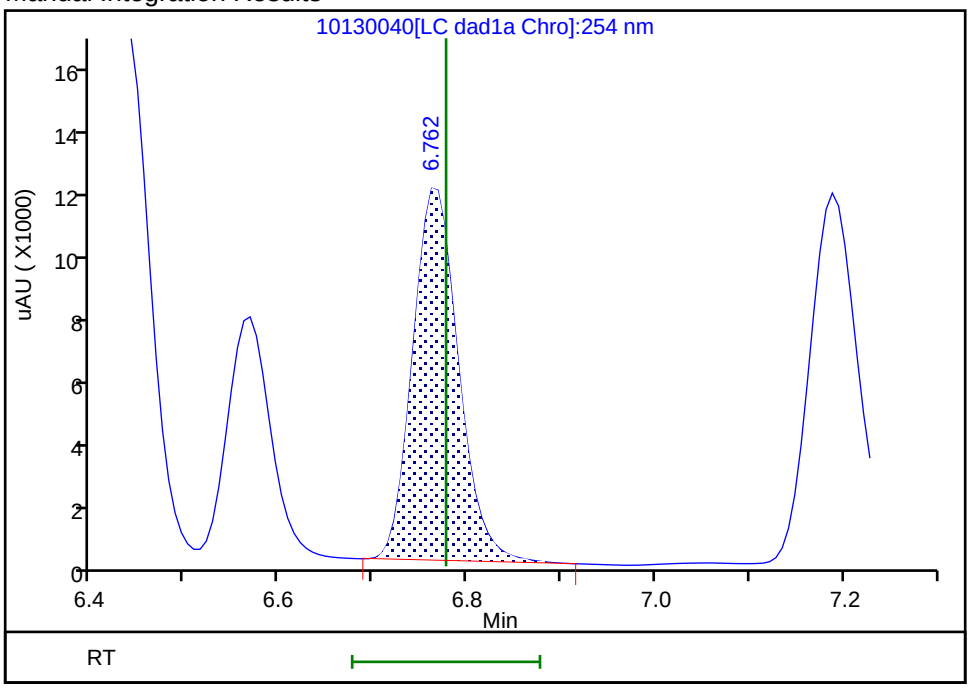
Processing Integration Results

RT: 6.76
Area: 39324
Amount: 0.272152
Amount Units: ug/mL



Manual Integration Results

RT: 6.76
Area: 37357
Amount: 0.258539
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 10:58:49 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

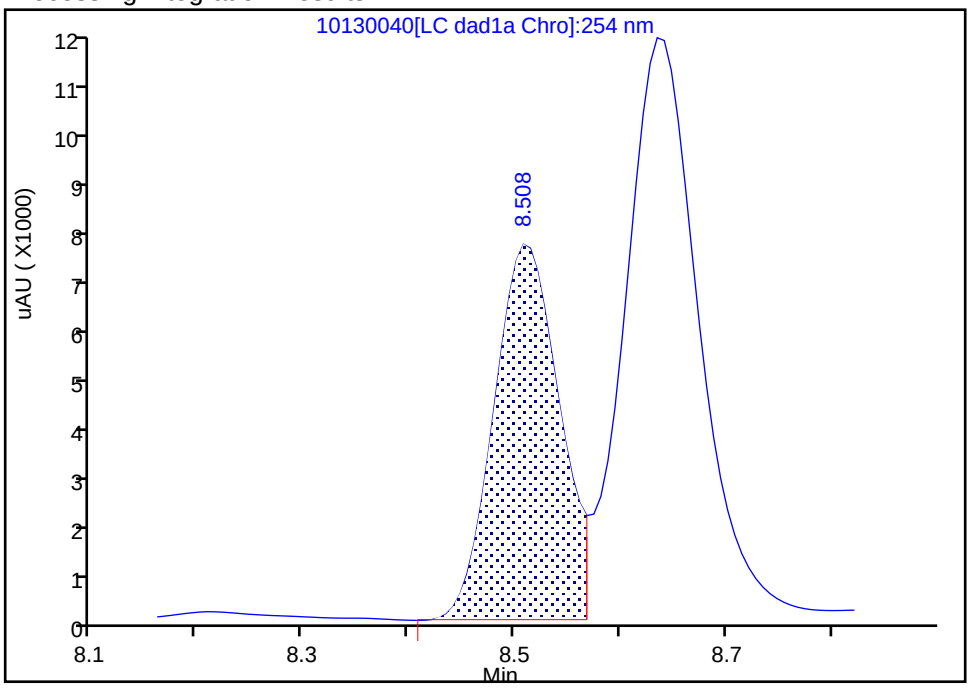
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Injection Date:	14-Oct-2023 02:25:53	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

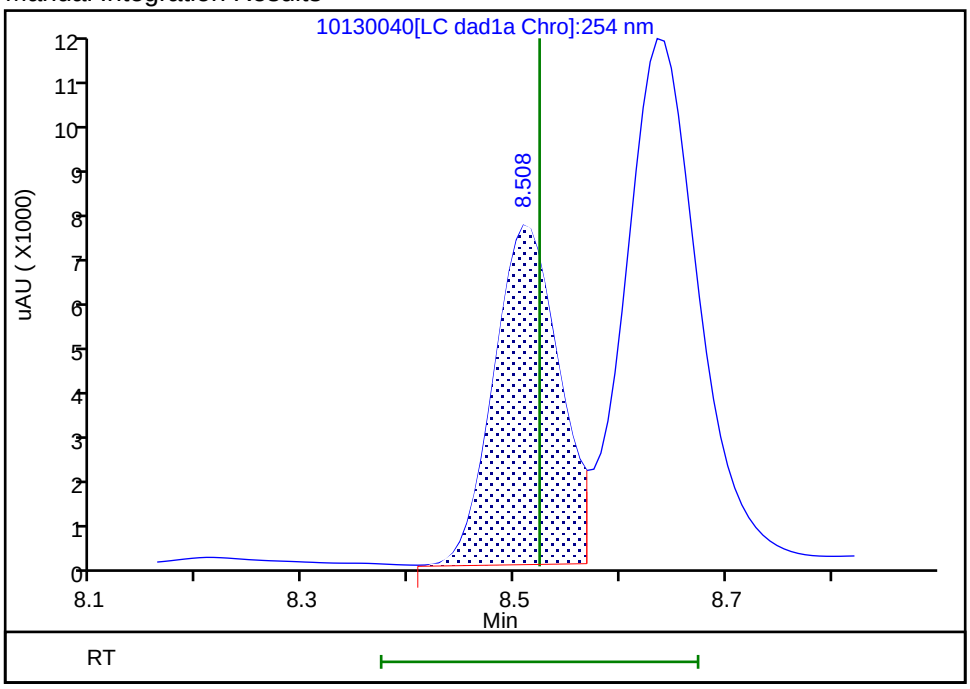
Processing Integration Results

RT: 8.51
Area: 30610
Amount: 0.247032
Amount Units: ug/mL



Manual Integration Results

RT: 8.51
Area: 30749
Amount: 0.248154
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 10:59:02 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

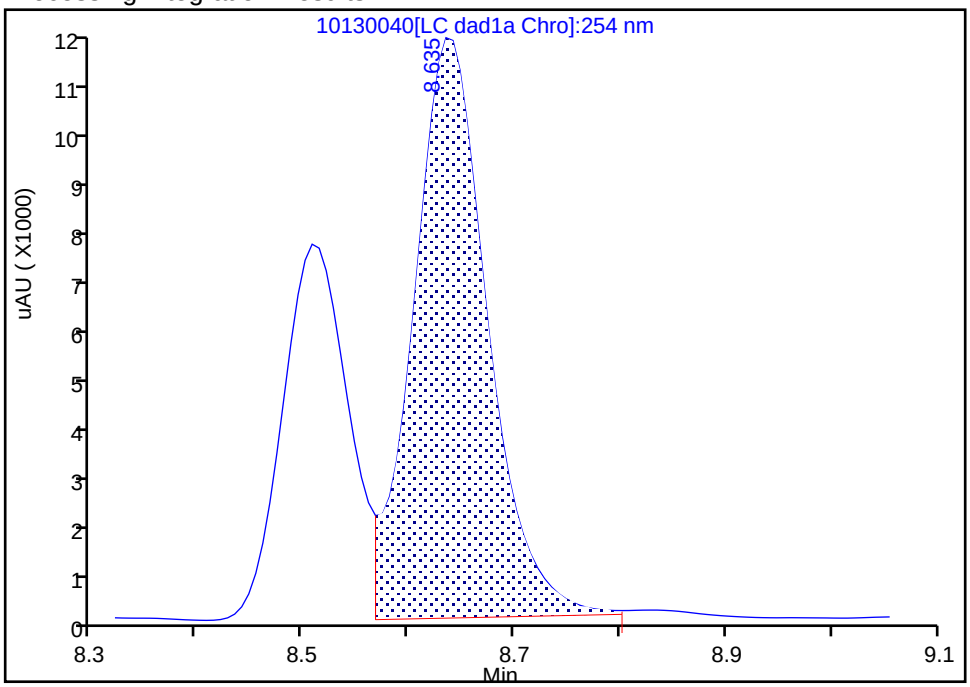
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Injection Date:	14-Oct-2023 02:25:53	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

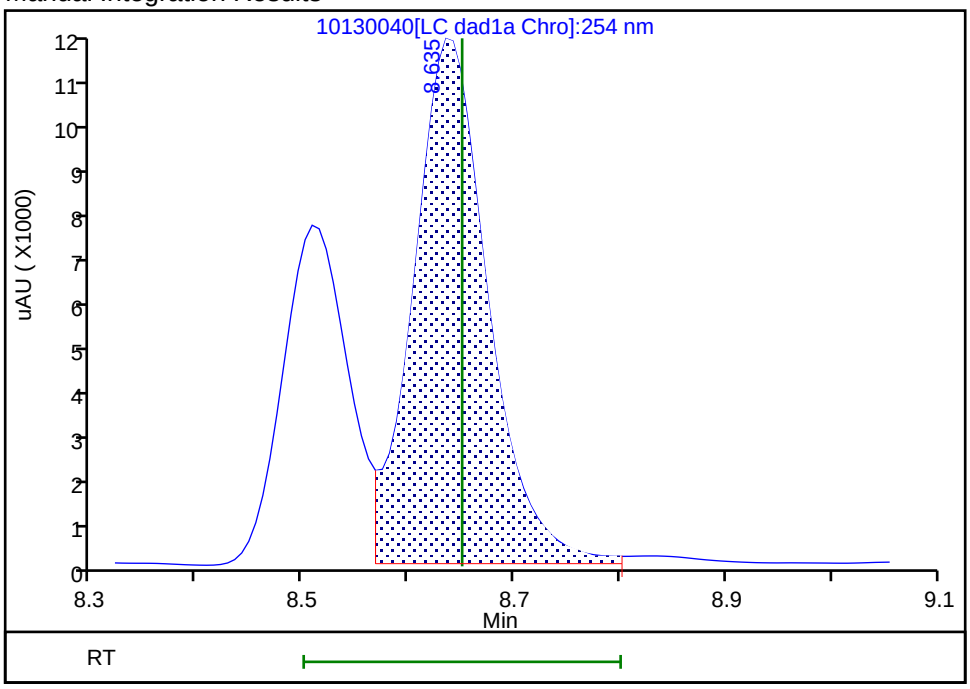
Processing Integration Results

RT: 8.64
Area: 53632
Amount: 0.248206
Amount Units: ug/mL



Manual Integration Results

RT: 8.64
Area: 54563
Amount: 0.252515
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 10:59:02 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

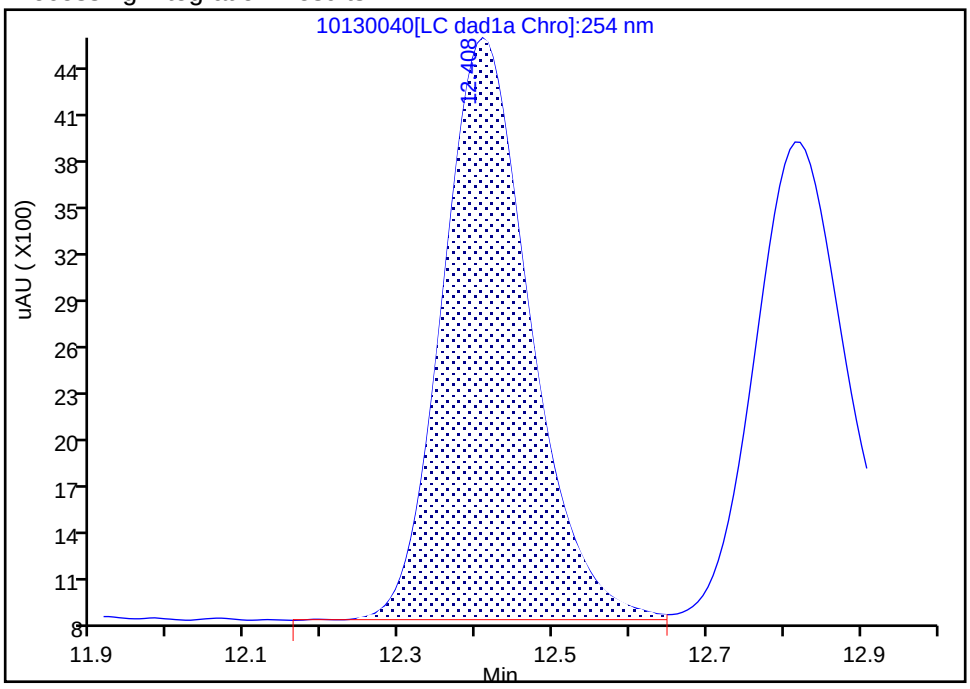
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Injection Date:	14-Oct-2023 02:25:53	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

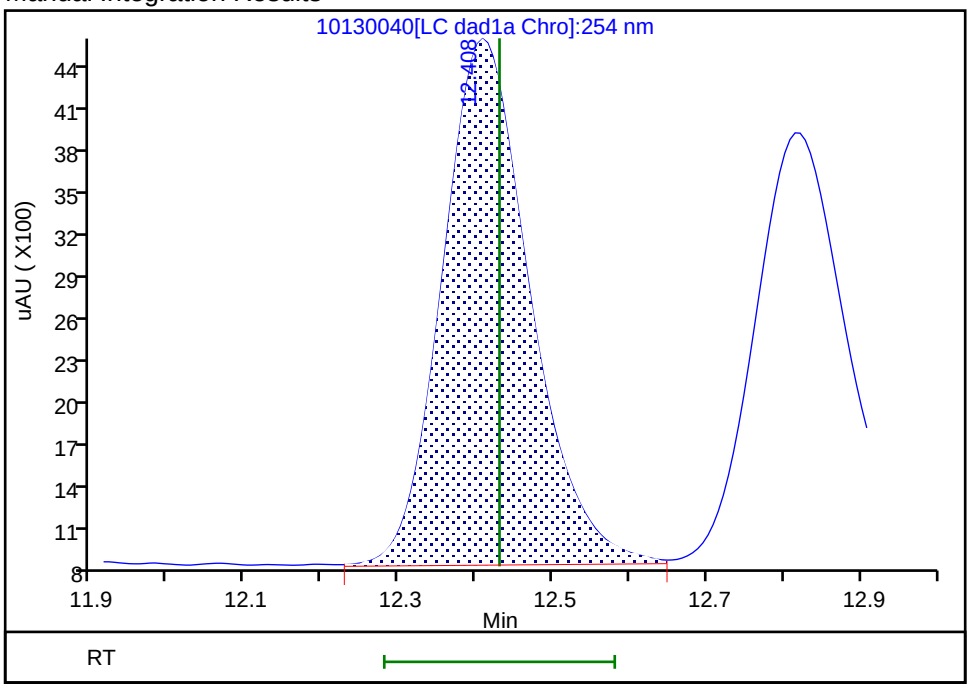
Processing Integration Results

RT: 12.41
Area: 29158
Amount: 0.231186
Amount Units: ug/mL



Manual Integration Results

RT: 12.41
Area: 29150
Amount: 0.231123
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 10:59:11 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

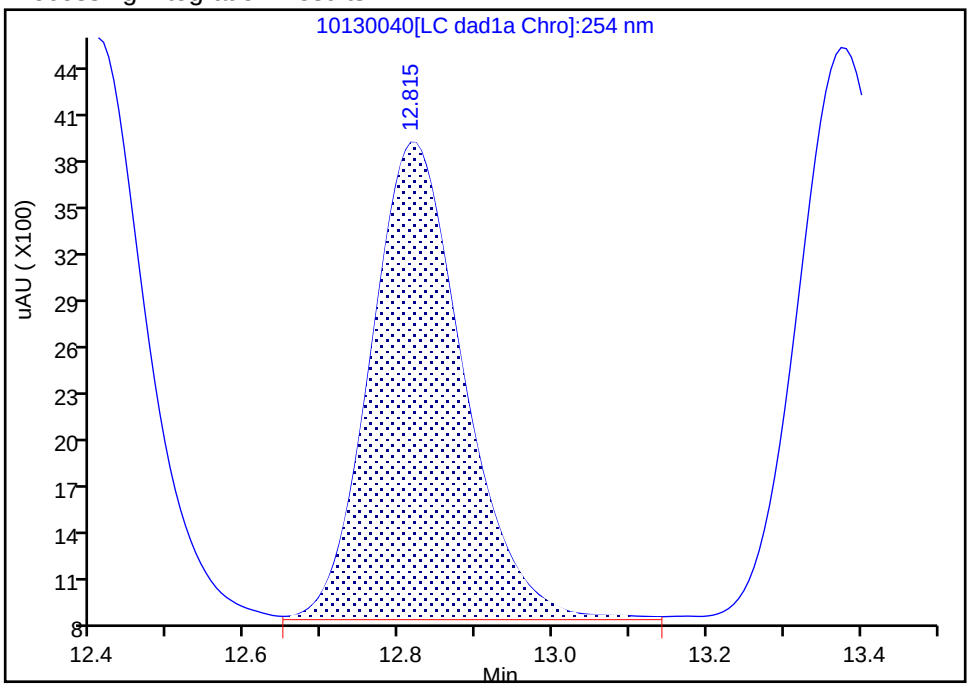
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Injection Date:	14-Oct-2023 02:25:53	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

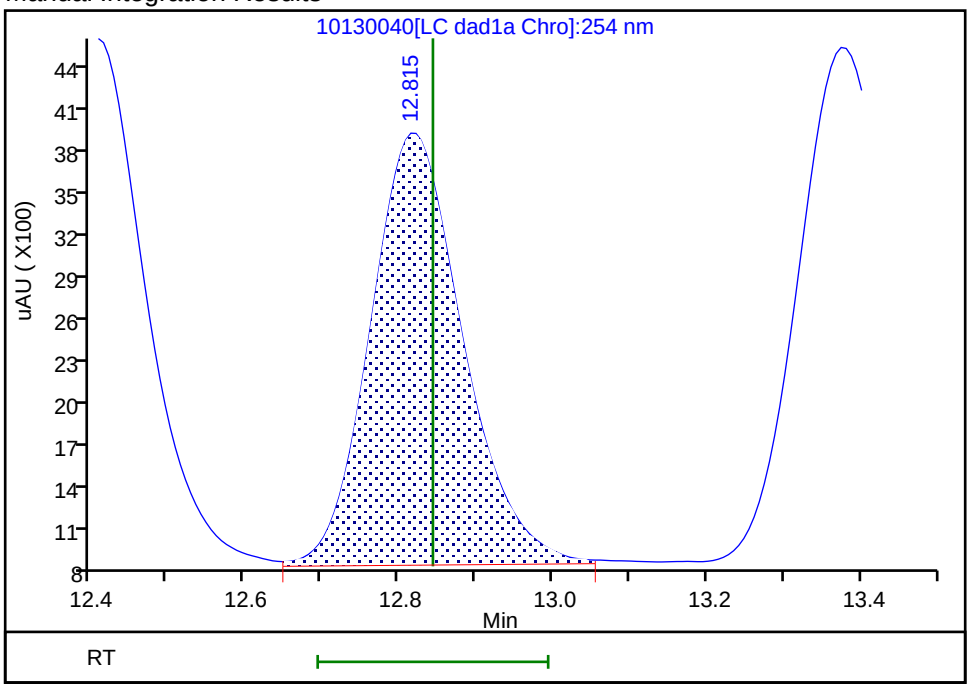
Processing Integration Results

RT: 12.81
Area: 25337
Amount: 0.230151
Amount Units: ug/mL



Manual Integration Results

RT: 12.81
Area: 25231
Amount: 0.229189
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 10:59:16 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

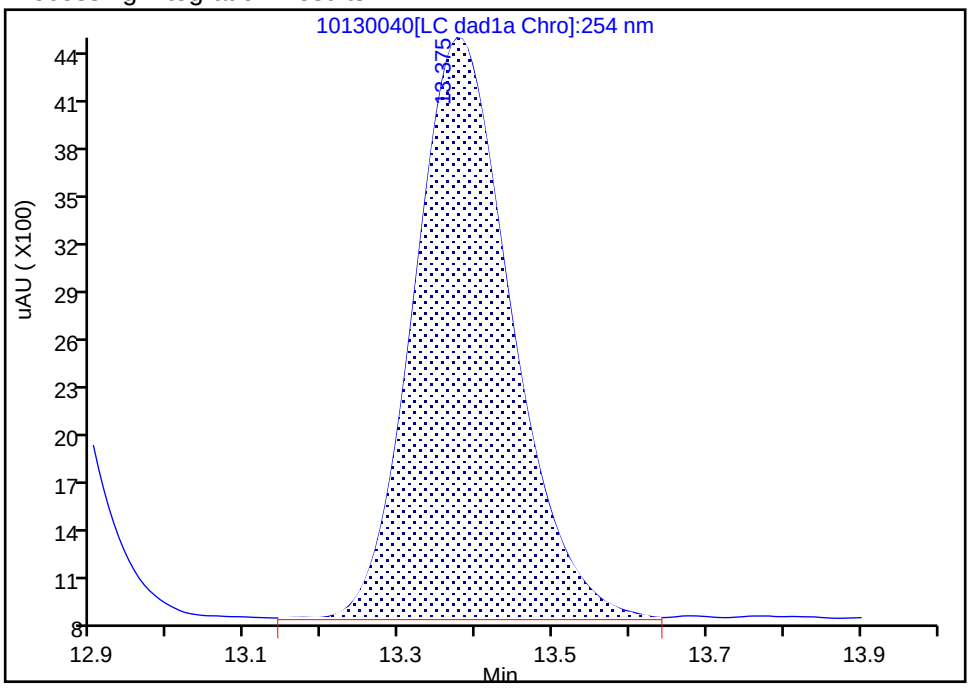
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231013-126501.b\10130040.d				
Injection Date:	14-Oct-2023 02:25:53	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

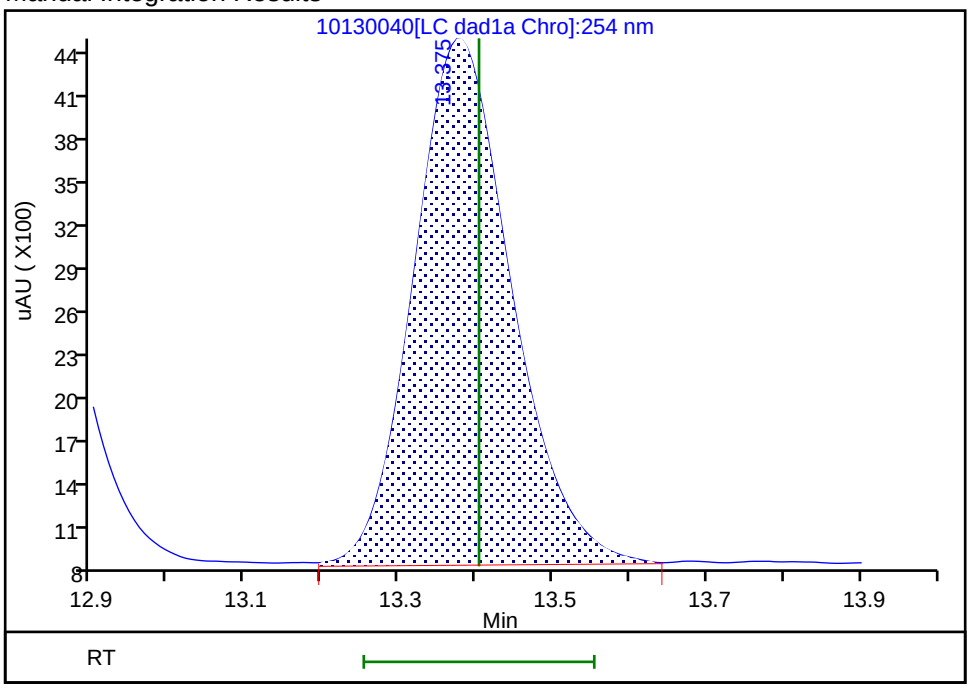
Processing Integration Results

RT: 13.37
Area: 31942
Amount: 0.231695
Amount Units: ug/mL



Manual Integration Results

RT: 13.37
Area: 31899
Amount: 0.231378
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 10:59:18 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-629672/41 Calibration Date: 10/14/2023 02:48

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 21:43

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/24/2023 00:23

Lab File ID: 10130041.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,6-diamino-4-nitrotoluene	Ave	225565	215460		239	250	-4.5	20.0
2,4-diamino-6-nitrotoluene	Ave	143326	132908		232	250	-7.3	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-629672/41 Calibration Date: 10/14/2023 02:48

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 21:43

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/24/2023 00:23

Lab File ID: 10130041.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	6.44	6.29	6.59
2,4-diamino-6-nitrotoluene	6.62	6.48	6.78

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\10130041.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 14-Oct-2023 02:48:55 ALS Bottle#: 8 Worklist Smp#: 41
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub28

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-Oct-2023 11:09:19 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1675

First Level Reviewer: K8YG Date: 16-Oct-2023 10:59:42

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1	6.437	6.443	-0.006	53865	0.2500	0.2388	
5 2,4-diamino-6-nitrotoluene	1	6.624	6.630	-0.006	33227	0.2500	0.2318	

QC Flag Legend
Processing Flags

Reagents:
8330_ADDs_00038 Amount Added: 12.50 Units: uL

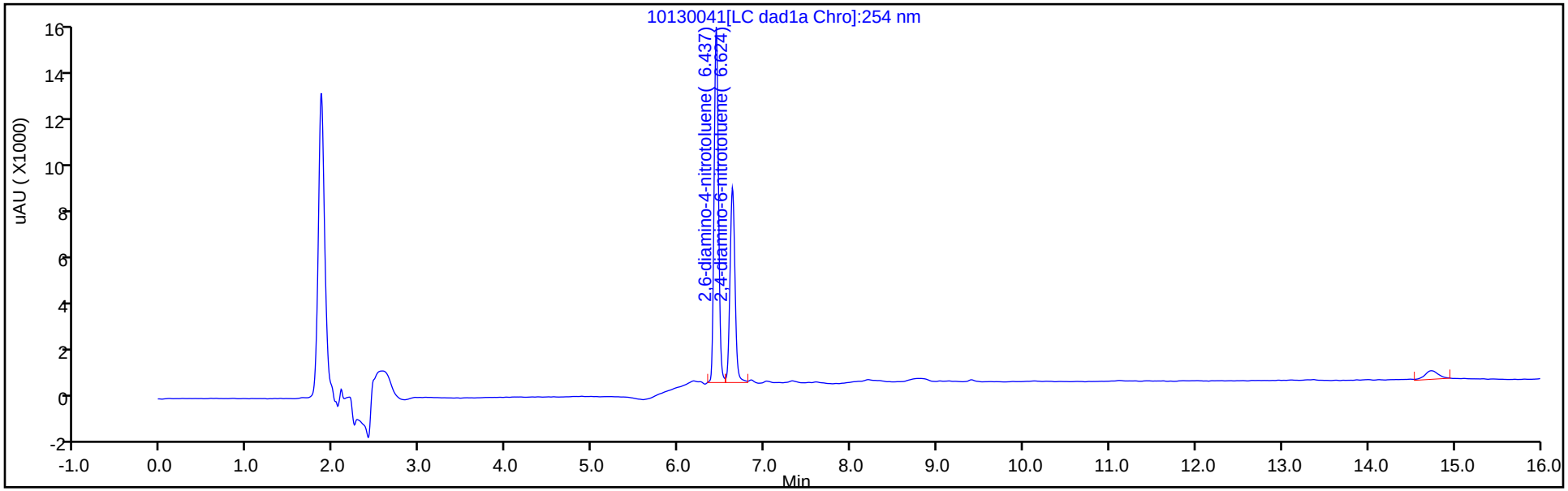
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Eurofins Denver

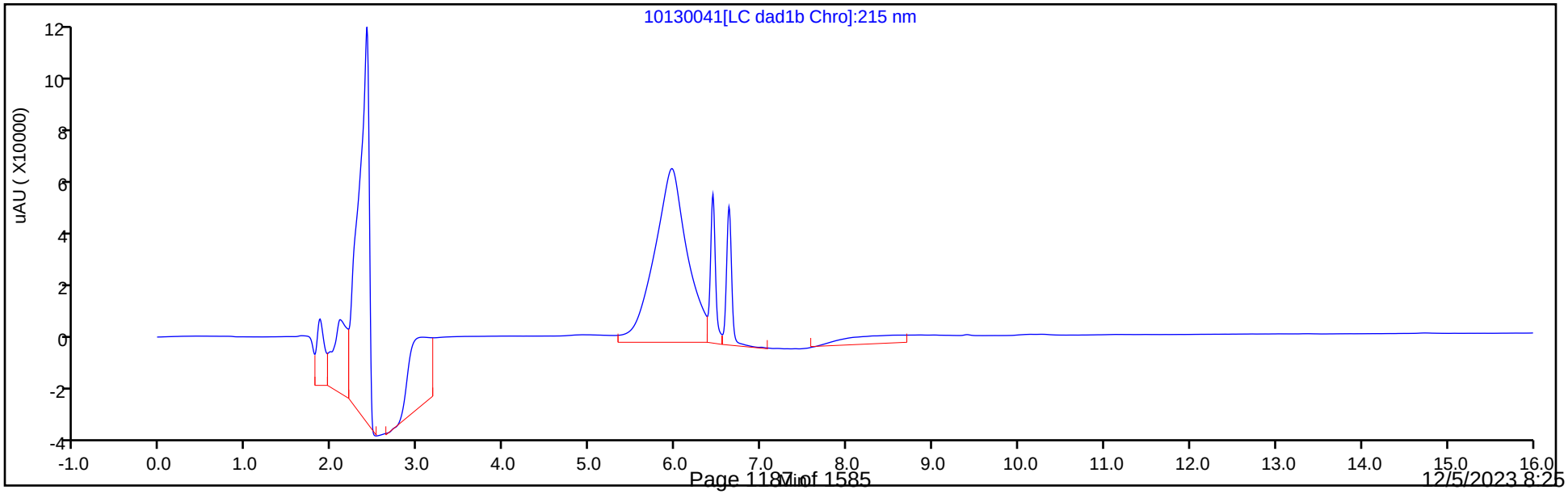
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Injection Date:	14-Oct-2023 02:48:55	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	41
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-629672/47 Calibration Date: 10/14/2023 05:06

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 17:53

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/23/2023 20:57

Lab File ID: 10130047.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	200761	197934		247	251	-1.4	20.0
HMX	Ave	94255	91968		244	250	-2.4	20.0
DNX	Ave	144493	148707		258	250	2.9	20.0
MNX	Ave	138689	136470		287	292	-1.6	20.0
RDX	Ave	110493	105276		238	250	-4.7	20.0
Picric acid	Ave	77863	75384		242	250	-3.2	20.0
1,3,5-Trinitrobenzene	Ave	216079	217732		252	250	0.8	20.0
1,3-Dinitrobenzene	Ave	293347	287976		245	250	-1.8	20.0
Nitrobenzene	Ave	192696	178324		231	250	-7.5	20.0
3,5-Dinitroaniline	Lin2		208464		232	250	-7.2	20.0
Tetryl	Ave	167257	170052		254	250	1.7	20.0
Nitroglycerin	Ave	64651	66076		2560	2500	2.2	20.0
2,4,6-Trinitrotoluene	Ave	204902	201160		245	250	-1.8	20.0
4-Amino-2,6-dinitrotoluene	Ave	149560	146220		244	250	-2.2	20.0
2-Amino-4,6-dinitrotoluene	Ave	193716	187448		242	250	-3.2	20.0
2,6-Dinitrotoluene	Ave	142638	140368		246	250	-1.6	20.0
2,4-Dinitrotoluene	Ave	295706	286832		242	250	-3.0	20.0
2-Nitrotoluene	Ave	126123	115636		229	250	-8.3	20.0
4-Nitrotoluene	Ave	110088	100200		228	250	-9.0	20.0
3-Nitrotoluene	Lin2		127096		230	250	-7.8	20.0
PETN	Ave	72018	72923		2530	2500	1.3	20.0
1,2-Dinitrobenzene	Ave	123911	123156		248	250	-0.6	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-629672/47 Calibration Date: 10/14/2023 05:06

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 17:53

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/23/2023 20:57

Lab File ID: 10130047.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.43	6.34	6.54
HMX	6.57	6.43	6.73
DNX	6.77	6.68	6.88
MNX	7.19	7.05	7.35
RDX	7.57	7.43	7.73
Picric acid	7.95	7.81	8.11
1,3,5-Trinitrobenzene	8.63	8.50	8.80
1,3-Dinitrobenzene	9.25	9.11	9.41
Nitrobenzene	9.61	9.48	9.78
3,5-Dinitroaniline	9.83	9.70	10.00
Tetryl	9.96	9.83	10.13
Nitroglycerin	10.41	10.28	10.58
2,4,6-Trinitrotoluene	10.84	10.77	10.97
4-Amino-2,6-dinitrotoluene	11.02	10.94	11.14
2-Amino-4,6-dinitrotoluene	11.27	11.20	11.40
2,6-Dinitrotoluene	11.42	11.36	11.56
2,4-Dinitrotoluene	11.59	11.52	11.72
2-Nitrotoluene	12.39	12.28	12.58
4-Nitrotoluene	12.81	12.69	12.99
3-Nitrotoluene	13.36	13.25	13.55
PETN	14.48	14.39	14.69
1,2-Dinitrobenzene	8.51	8.37	8.67

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\10130047.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 14-Oct-2023 05:06:33 ALS Bottle#: 7 Worklist Smp#: 47
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-Oct-2023 11:09:23 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1675

First Level Reviewer: K8YG Date: 16-Oct-2023 11:02:13

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.433	6.444	-0.011	49632	0.2508	0.2472	M
4 HMX	1	6.566	6.577	-0.011	22992	0.2500	0.2439	M
6 DNX	1	6.766	6.777	-0.011	37214	0.2503	0.2575	M
7 MNX	1	7.193	7.204	-0.011	39815	0.2918	0.2871	
8 RDX	1	7.573	7.584	-0.011	26319	0.2500	0.2382	
9 2,4,6-Trinitrophenol	1	7.946	7.957	-0.011	18846	0.2500	0.2420	
$ 10 1,2-Dinitrobenzene	1	8.506	8.524	-0.018	30789	0.2500	0.2485	M
11 1,3,5-Trinitrobenzene	1	8.633	8.650	-0.017	54433	0.2500	0.2519	M
12 1,3-Dinitrobenzene	1	9.246	9.264	-0.018	71994	0.2500	0.2454	
13 Nitrobenzene	1	9.606	9.630	-0.024	44581	0.2500	0.2314	
14 3,5-Dinitroaniline	1	9.833	9.850	-0.017	52116	0.2500	0.2320	
15 Tetryl	1	9.960	9.984	-0.024	42513	0.2500	0.2542	
16 Nitroglycerin	2	10.406	10.430	-0.024	165189	2.50	2.56	
17 2,4,6-Trinitrotoluene	1	10.840	10.870	-0.030	50290	0.2500	0.2454	
18 4-Amino-2,6-dinitrotoluene	1	11.020	11.044	-0.024	36555	0.2500	0.2444	
19 2-Amino-4,6-dinitrotoluene	1	11.266	11.297	-0.031	46862	0.2500	0.2419	
20 2,6-Dinitrotoluene	1	11.420	11.457	-0.037	35092	0.2500	0.2460	
21 2,4-Dinitrotoluene	1	11.593	11.624	-0.031	71708	0.2500	0.2425	
22 o-Nitrotoluene	1	12.393	12.430	-0.037	28909	0.2500	0.2292	
23 p-Nitrotoluene	1	12.806	12.844	-0.038	25050	0.2500	0.2275	M
24 m-Nitrotoluene	1	13.360	13.404	-0.044	31774	0.2500	0.2305	M
25 PETN	2	14.480	14.537	-0.057	182307	2.50	2.53	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00015	Amount Added:	12.50	Units: uL
8330IntermStk_00078	Amount Added:	25.00	Units: uL

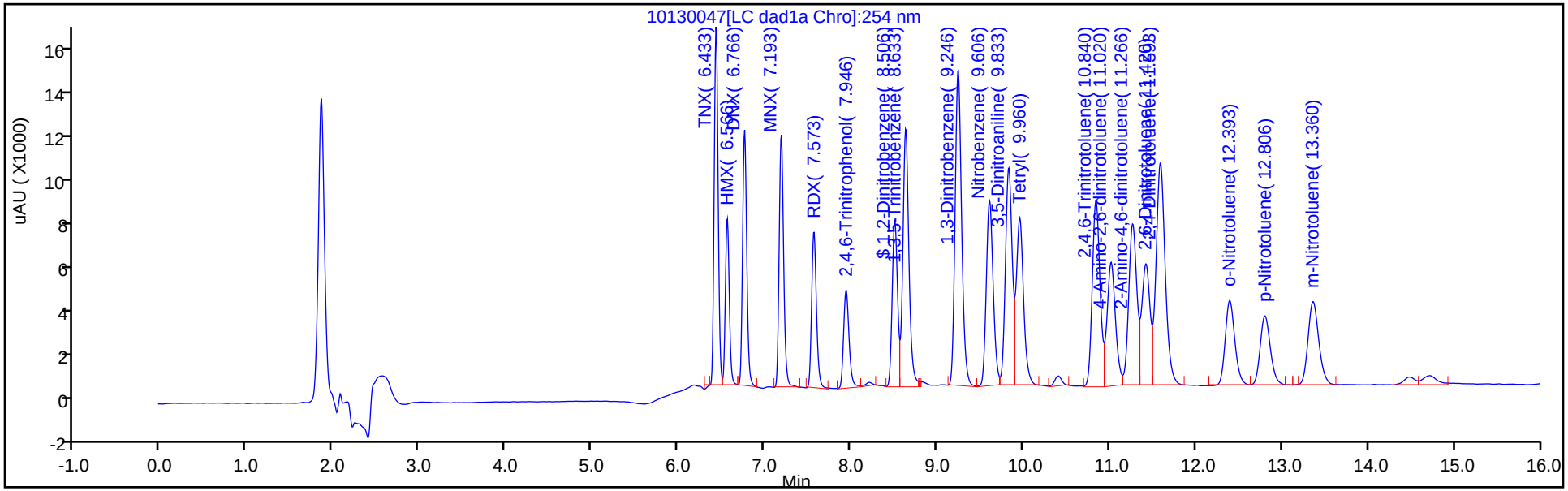
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Eurofins Denver

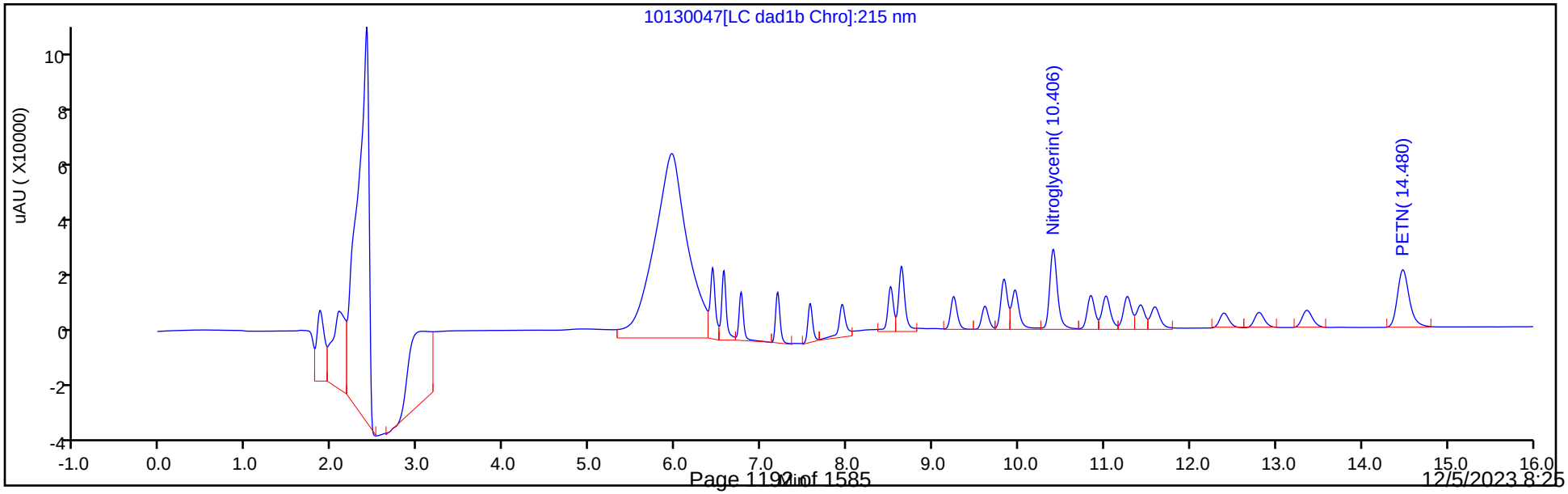
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Injection Date:	14-Oct-2023 05:06:33	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	47
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

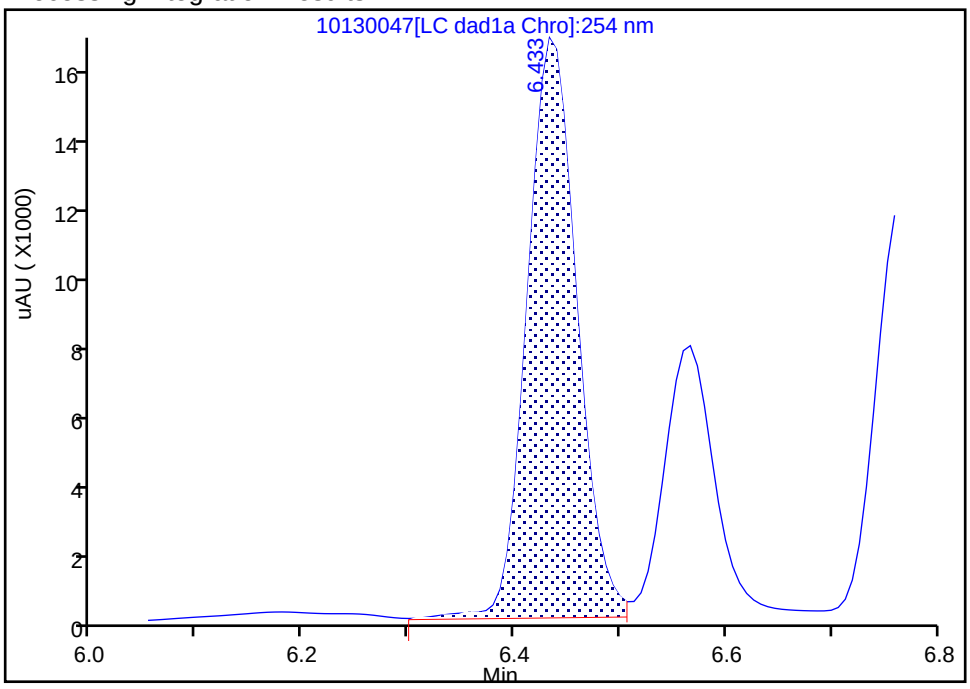
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Injection Date:	14-Oct-2023 05:06:33	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	47
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

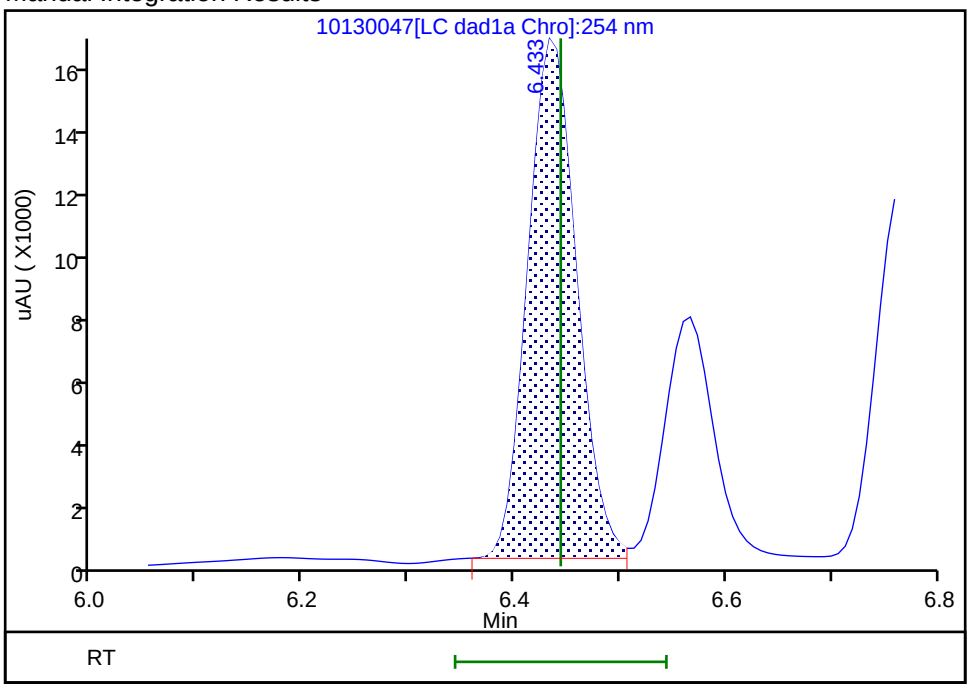
Processing Integration Results

RT: 6.43
Area: 51397
Amount: 0.256011
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 49632
Amount: 0.247219
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 11:01:39 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

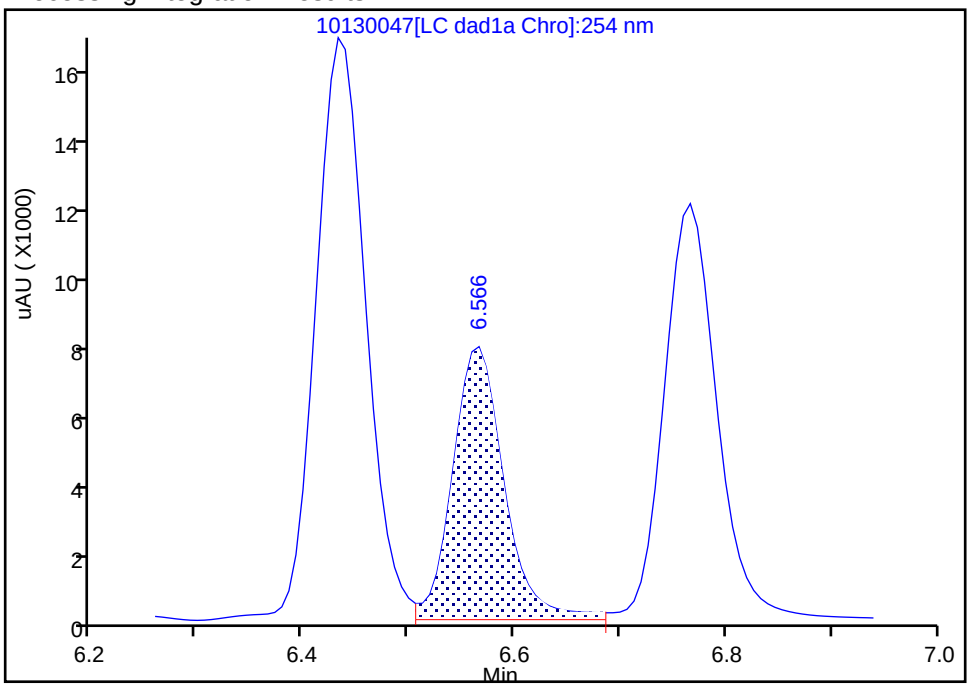
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Injection Date:	14-Oct-2023 05:06:33	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	47
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

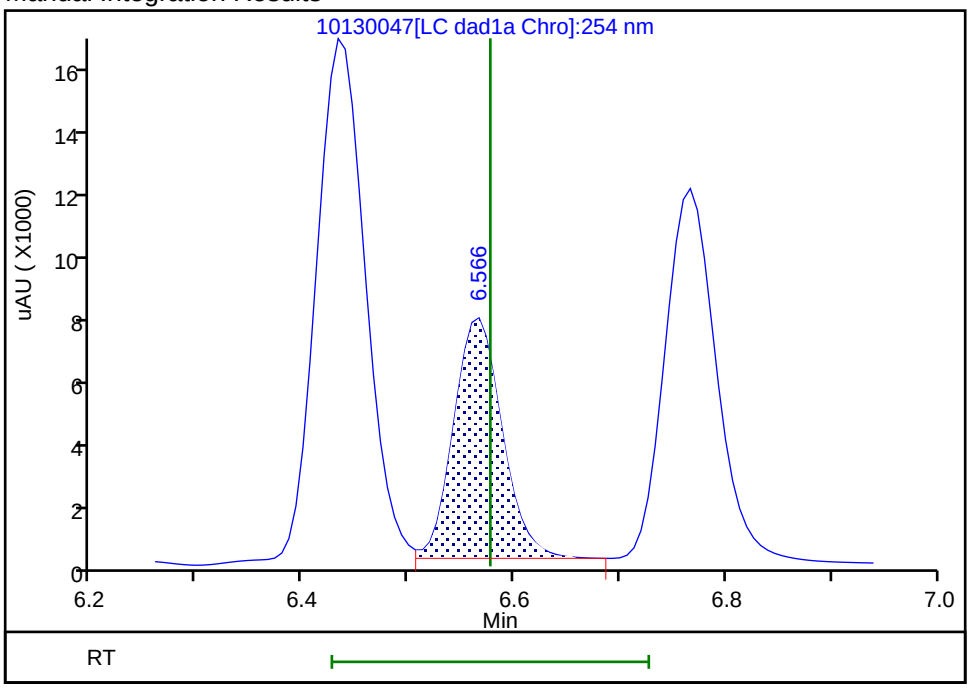
Processing Integration Results

RT: 6.57
Area: 24958
Amount: 0.264791
Amount Units: ug/mL



Manual Integration Results

RT: 6.57
Area: 22992
Amount: 0.243933
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 11:01:35 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

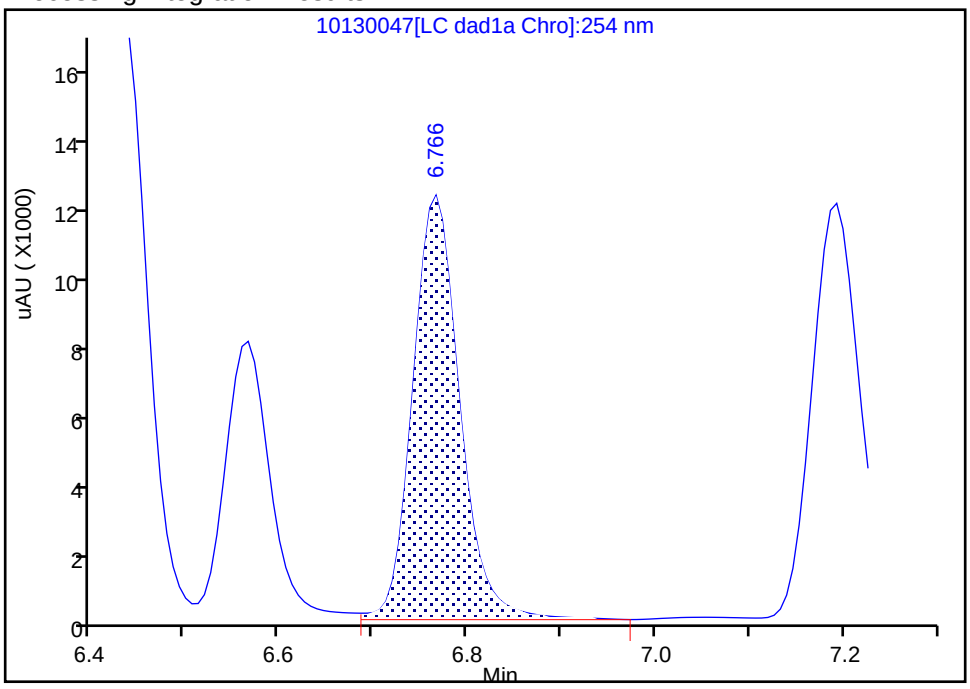
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Injection Date:	14-Oct-2023 05:06:33	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	47
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

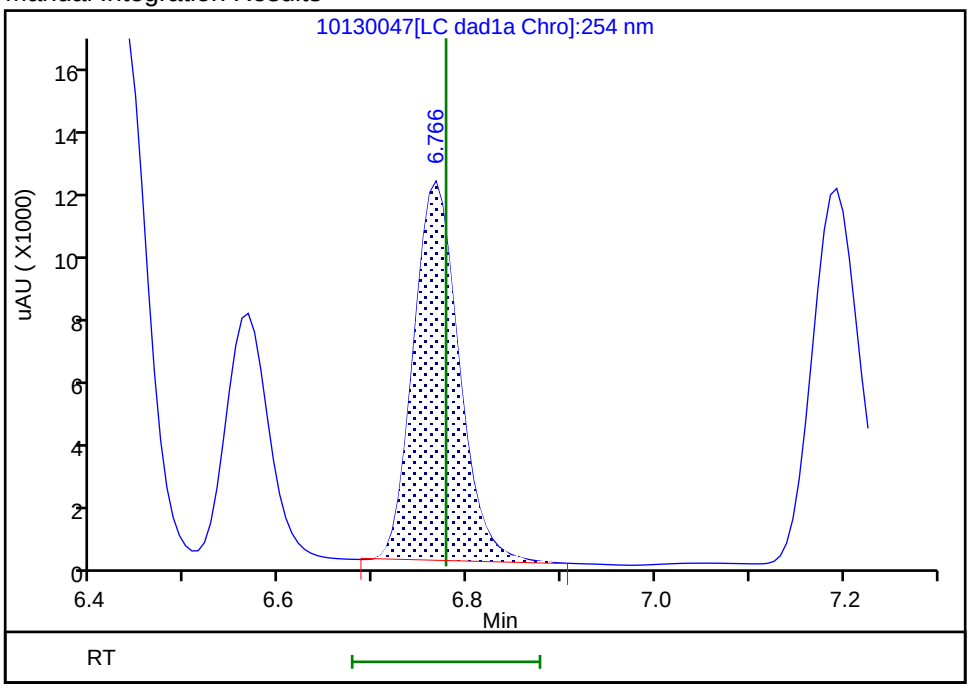
Processing Integration Results

RT: 6.77
Area: 39065
Amount: 0.270360
Amount Units: ug/mL



Manual Integration Results

RT: 6.77
Area: 37214
Amount: 0.257549
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 11:01:43 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

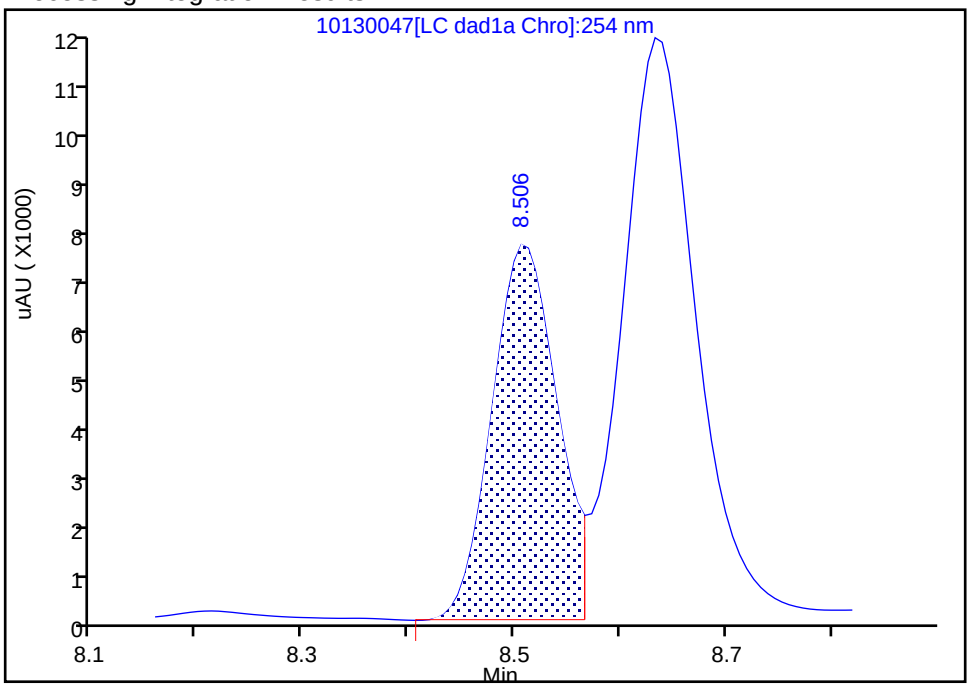
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Injection Date:	14-Oct-2023 05:06:33	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	47
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

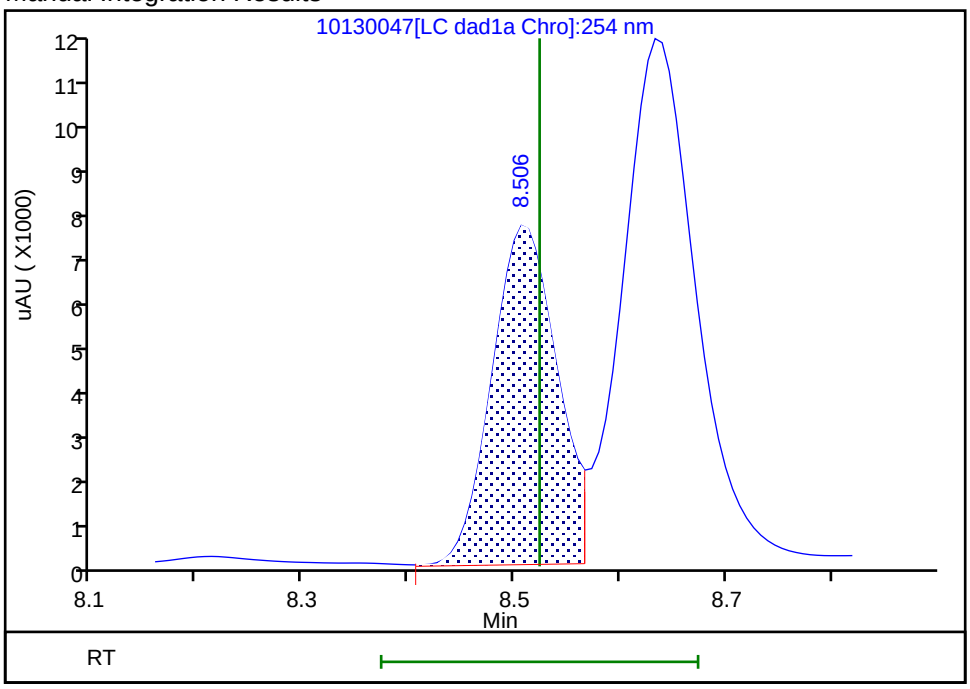
Processing Integration Results

RT: 8.51
Area: 30602
Amount: 0.246968
Amount Units: ug/mL



Manual Integration Results

RT: 8.51
Area: 30789
Amount: 0.248477
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 11:01:53 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

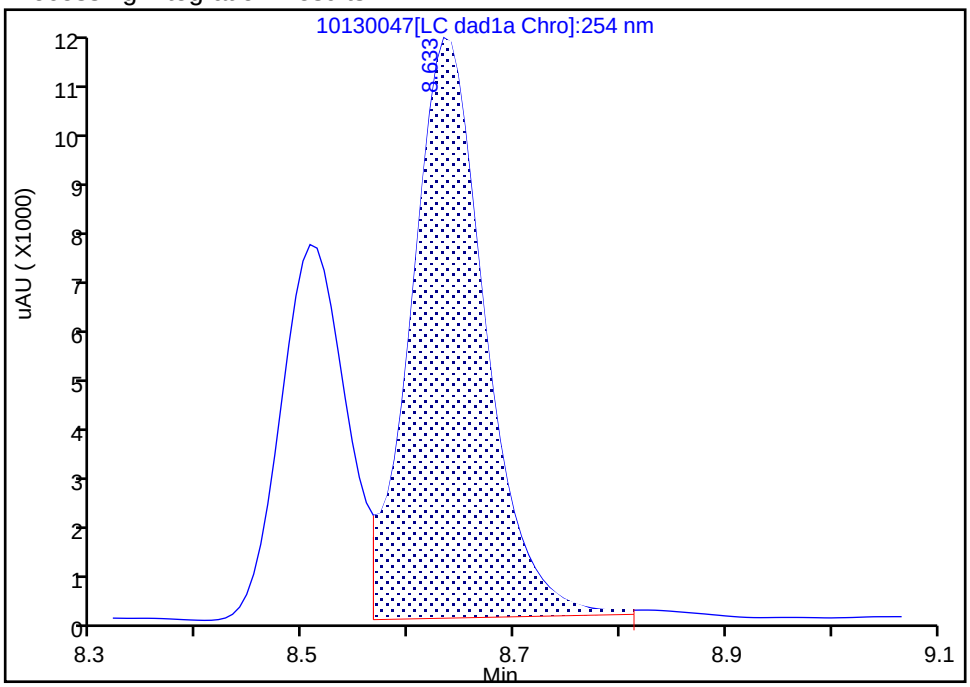
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231013-126501.b\10130047.d				
Injection Date:	14-Oct-2023 05:06:33	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	47
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

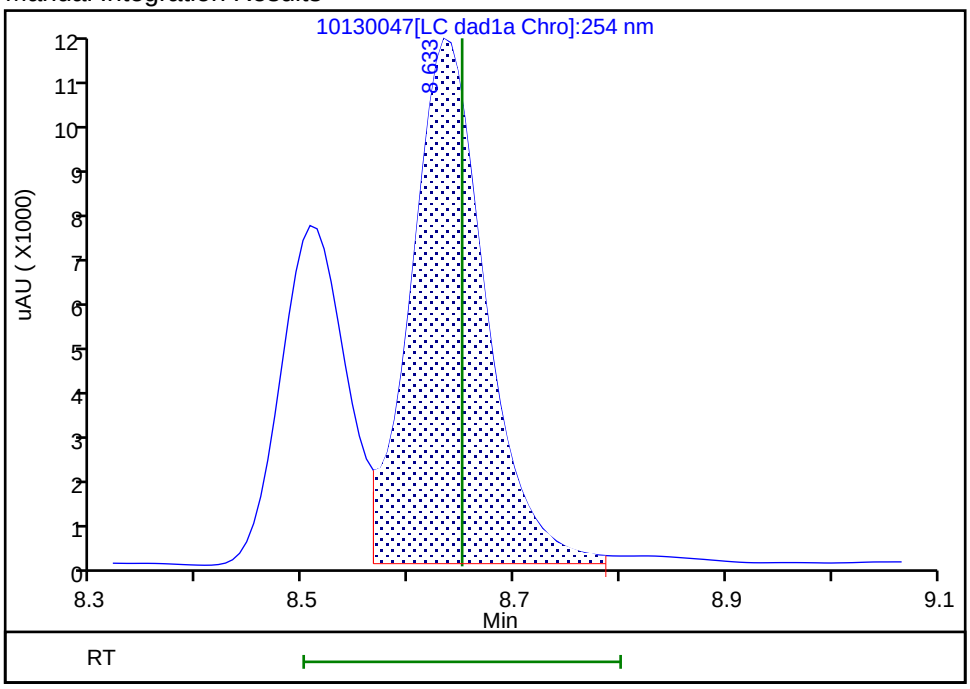
Processing Integration Results

RT: 8.63
Area: 53659
Amount: 0.248331
Amount Units: ug/mL



Manual Integration Results

RT: 8.63
Area: 54433
Amount: 0.251913
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 11:01:57 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

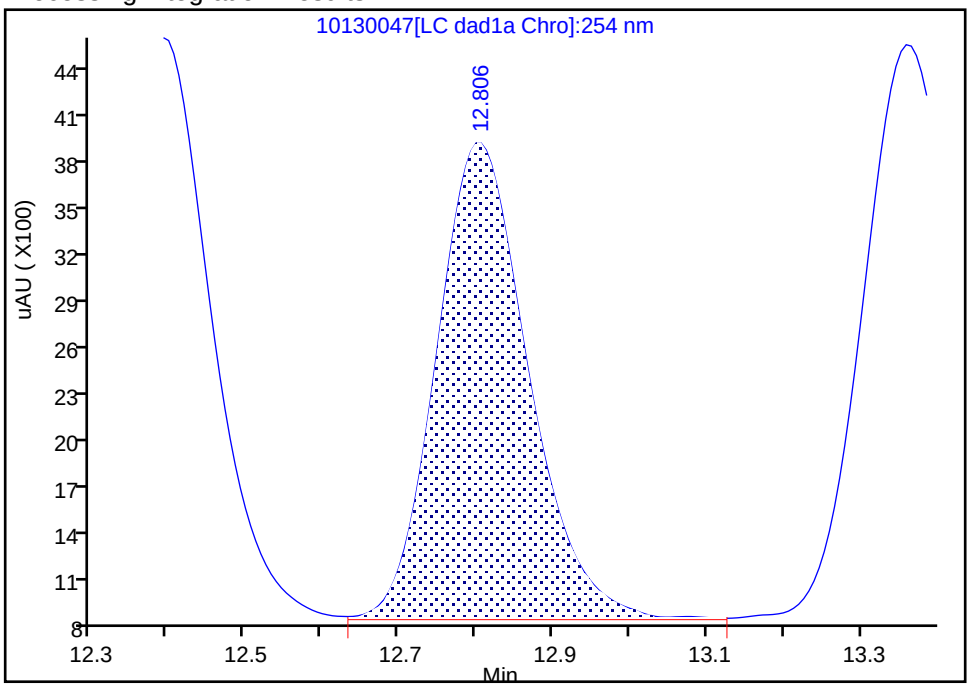
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Injection Date:	14-Oct-2023 05:06:33	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	47
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

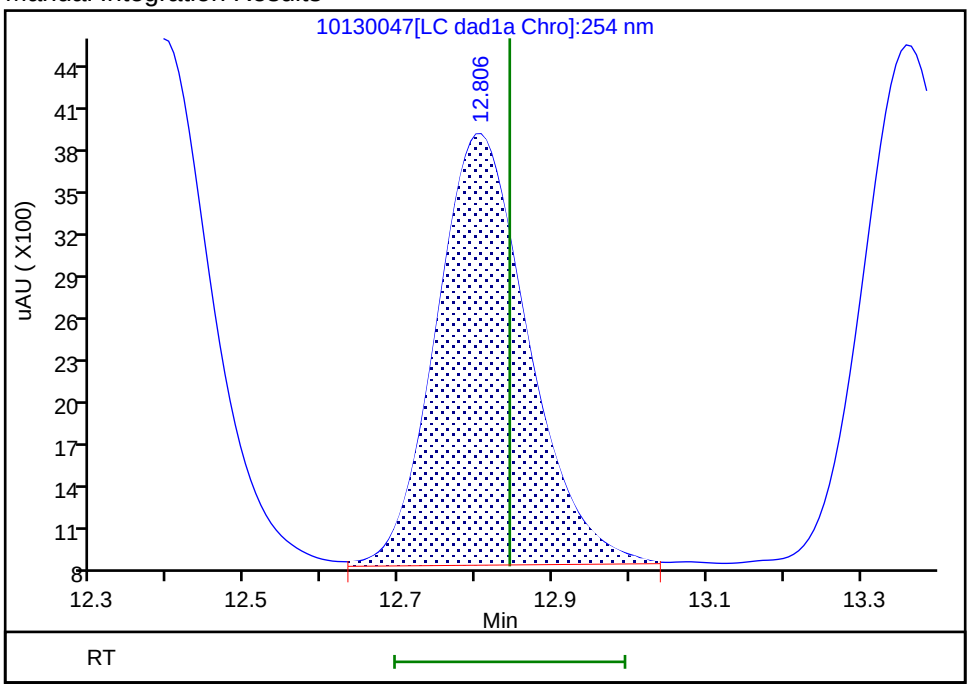
Processing Integration Results

RT: 12.81
Area: 25126
Amount: 0.228235
Amount Units: ug/mL



Manual Integration Results

RT: 12.81
Area: 25050
Amount: 0.227544
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 11:02:06 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

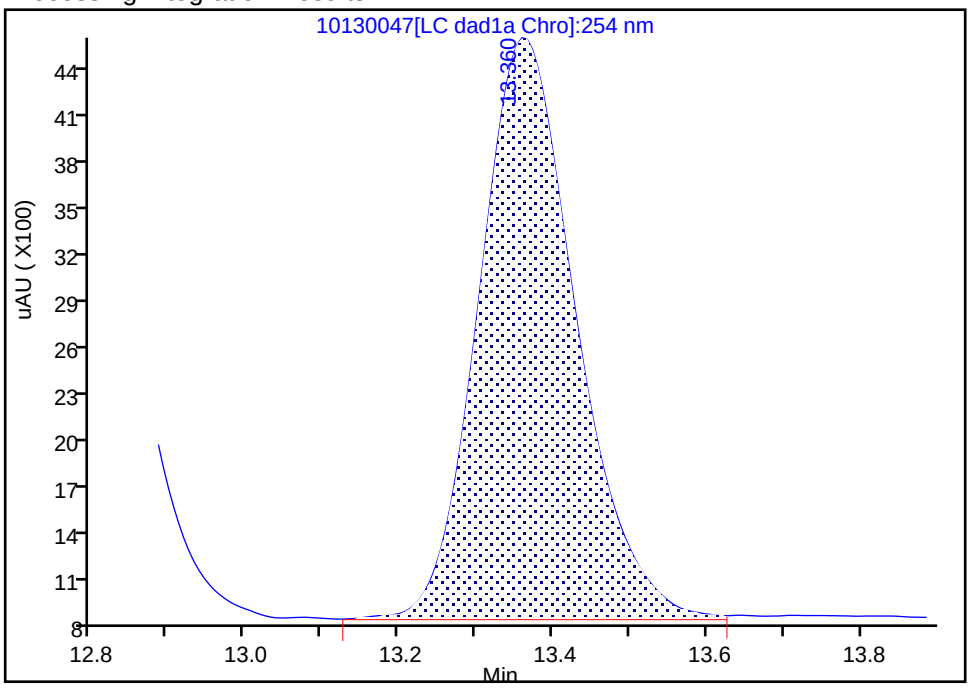
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231013-126501.b\10130047.d				
Injection Date:	14-Oct-2023 05:06:33	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	47
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

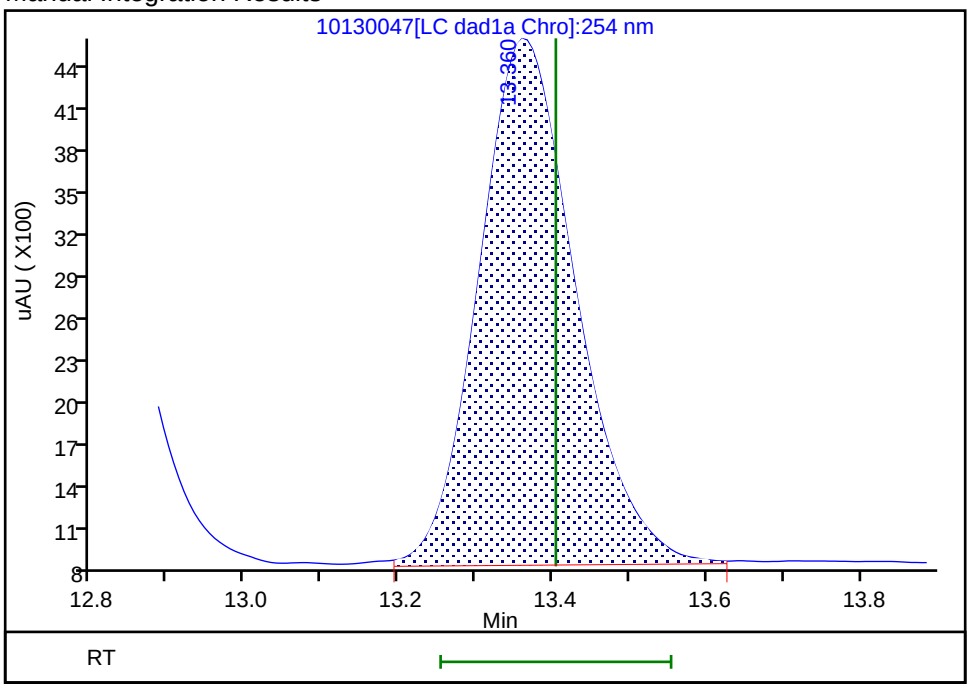
Processing Integration Results

RT: 13.36
Area: 31855
Amount: 0.231053
Amount Units: ug/mL



Manual Integration Results

RT: 13.36
Area: 31774
Amount: 0.230456
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 11:02:09 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-629672/48 Calibration Date: 10/14/2023 05:29

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 21:43

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/24/2023 00:23

Lab File ID: 10130048.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,6-diamino-4-nitrotoluene	Ave	225565	210948		234	250	-6.5	20.0
2,4-diamino-6-nitrotoluene	Ave	143326	127608		223	250	-11.0	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-629672/48 Calibration Date: 10/14/2023 05:29

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 21:43

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/24/2023 00:23

Lab File ID: 10130048.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	6.43	6.29	6.59
2,4-diamino-6-nitrotoluene	6.62	6.48	6.78

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\10130048.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 14-Oct-2023 05:29:29 ALS Bottle#: 8 Worklist Smp#: 48
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub28

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-Oct-2023 11:09:24 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1675

First Level Reviewer: K8YG Date: 16-Oct-2023 11:08:50

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1	6.430	6.443	-0.013	52737	0.2500	0.2338	M
5 2,4-diamino-6-nitrotoluene	1	6.617	6.630	-0.013	31902	0.2500	0.2226	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

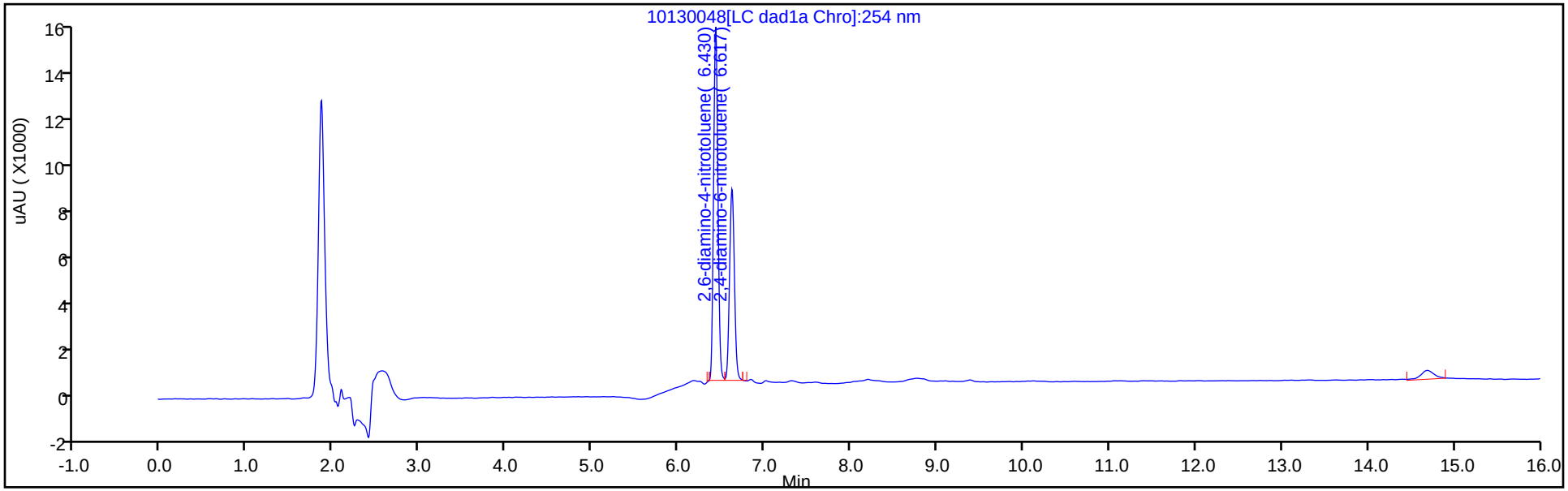
8330_ADDs_00038 Amount Added: 12.50 Units: uL

Report Date: 16-Oct-2023 11:09:24 Chrom Revision: 2.3 22-Sep-2023 11:33:50

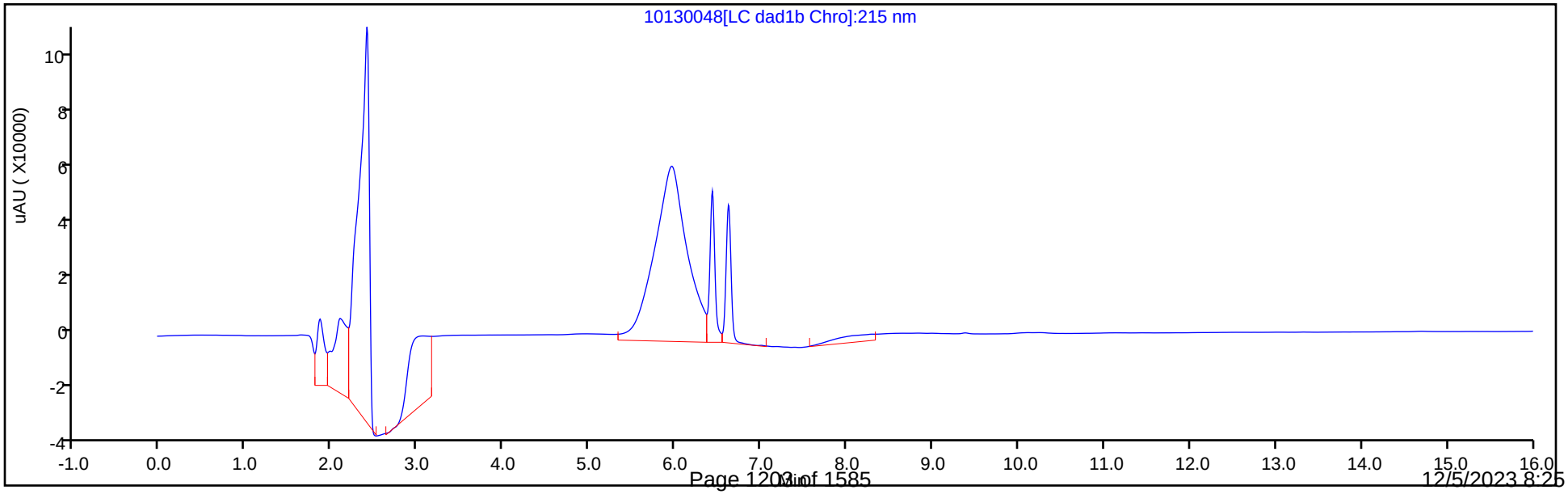
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20231013-126501.b\10130048.d				
Injection Date:	14-Oct-2023 05:29:29	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	48
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

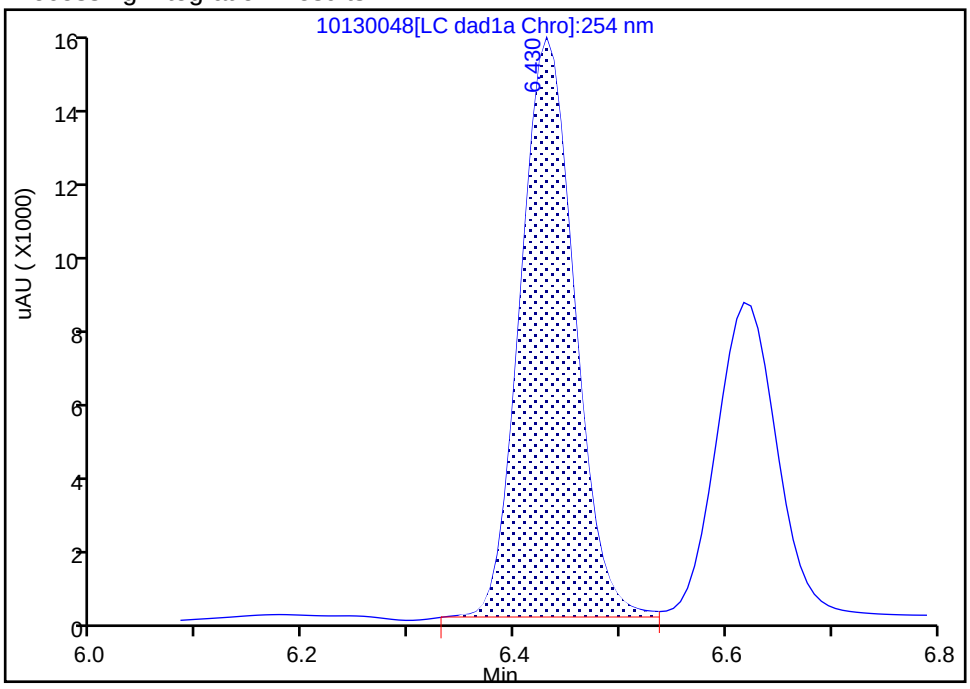
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231013-126501.b\10130048.d				
Injection Date:	14-Oct-2023 05:29:29	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

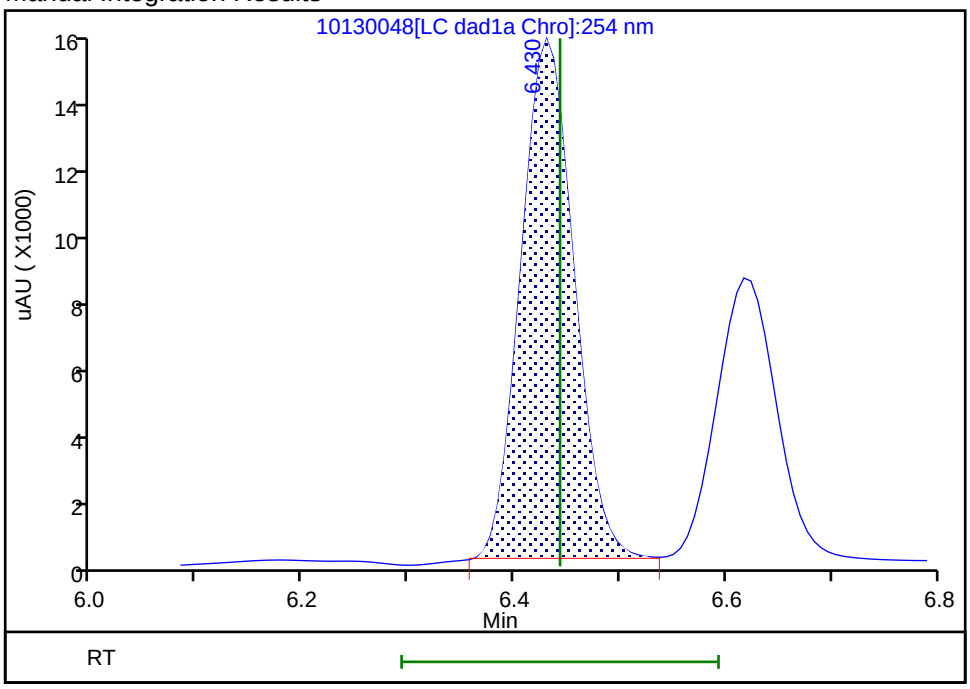
Processing Integration Results

RT: 6.43
Area: 53631
Amount: 0.237763
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 52737
Amount: 0.233799
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 11:07:32 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

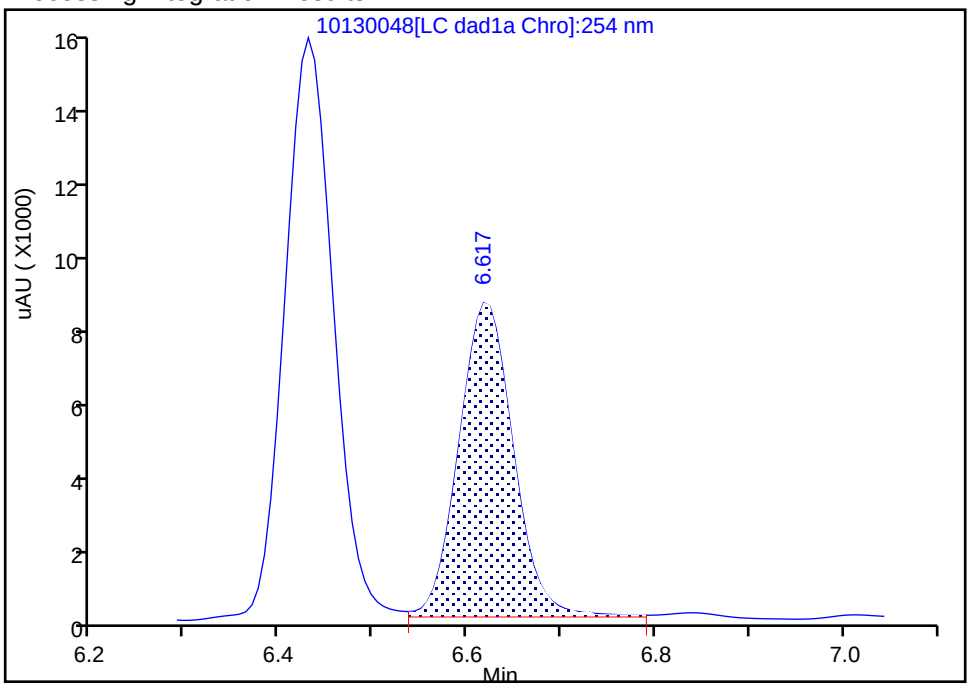
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231013-126501.b\10130048.d				
Injection Date:	14-Oct-2023 05:29:29	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

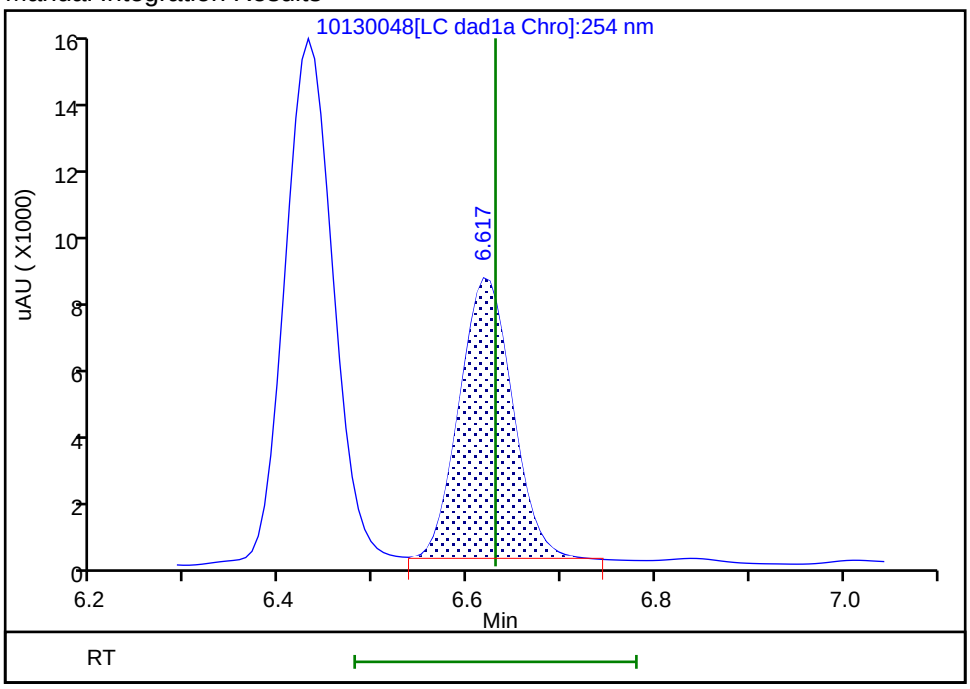
Processing Integration Results

RT: 6.62
Area: 32768
Amount: 0.228625
Amount Units: ug/mL



Manual Integration Results

RT: 6.62
Area: 31902
Amount: 0.222583
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 11:07:35 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Lab Sample ID: ICV 280-626878/19 | Calibration Date: 09/21/2023 01:15

Instrument ID: CHHPLC_X5 | Calib Start Date: 09/20/2023 20:01

GC Column: Luna-phenylhex ID: 4.60(mm) | Calib End Date: 09/21/2023 00:40

Lab File ID: 09200019.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	392878	377994		482	501	-3.8	20.0
DNX	Ave	288451	286653		499	502	-0.6	20.0
HMX	Ave	190100	173260		456	500	-8.9	20.0
MNX	Ave	265061	263354		582	586	-0.6	20.0
Picric acid	Lin2		169712		562	500	12.4	20.0
RDX	Ave	220484	211530		480	500	-4.1	20.0
Nitrobenzene	Ave	384007	395588		515	500	3.0	20.0
3,5-Dinitroaniline	Lin2		447402		540	500	8.1	20.0
1,3-Dinitrobenzene	Ave	585449	632188		540	500	8.0	20.0
Nitroglycerin	Ave	128462	138721		5400	5000	8.0	20.0
2-Nitrotoluene	Ave	237596	250190		527	500	5.3	20.0
4-Nitrotoluene	Ave	213737	226944		531	500	6.2	20.0
4-Amino-2,6-dinitrotoluene	Ave	272035	295158		542	500	8.5	20.0
3-Nitrotoluene	Ave	270588	284778		526	500	5.2	20.0
2-Amino-4,6-dinitrotoluene	Ave	391822	417542		533	500	6.6	20.0
1,3,5-Trinitrobenzene	Ave	398781	452868		568	500	13.6	20.0
2,6-Dinitrotoluene	Ave	274271	282350		515	500	2.9	20.0
2,4-Dinitrotoluene	Ave	544319	573394		527	500	5.3	20.0
Tetryl	Ave	307961	333394		541	500	8.3	20.0
2,4,6-Trinitrotoluene	Ave	394912	416764		528	500	5.5	20.0
PETN	Lin2		149602		5640	5000	12.8	20.0
1,2-Dinitrobenzene	Ave	266741	240938		452	500	-9.7	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: ICV 280-626878/19 Calibration Date: 09/21/2023 01:15

Instrument ID: CHHPLC_X5 Calib Start Date: 09/20/2023 20:01

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 09/21/2023 00:40

Lab File ID: 09200019.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.30	5.17	5.47
DNX	6.19	6.06	6.36
HMX	6.87	6.73	7.03
MNX	7.73	7.60	7.90
Picric acid	8.49	8.40	8.70
RDX	9.17	9.03	9.33
Nitrobenzene	11.77	11.64	11.94
3,5-Dinitroaniline	14.63	14.49	14.79
1,3-Dinitrobenzene	14.89	14.75	15.05
Nitroglycerin	15.48	15.33	15.63
2-Nitrotoluene	16.06	15.92	16.22
4-Nitrotoluene	16.29	16.15	16.45
4-Amino-2,6-dinitrotoluene	16.82	16.68	16.98
3-Nitrotoluene	17.15	17.01	17.31
2-Amino-4,6-dinitrotoluene	17.69	17.54	17.84
1,3,5-Trinitrobenzene	17.70	17.55	17.85
2,6-Dinitrotoluene	18.98	18.84	19.14
2,4-Dinitrotoluene	19.43	19.29	19.59
Tetryl	22.85	22.69	22.99
2,4,6-Trinitrotoluene	23.65	23.51	23.81
PETN	24.97	24.81	25.11
1,2-Dinitrobenzene	12.77	12.63	12.93

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200019.D
Lims ID: ICV INT
Client ID:
Sample Type: ICV
Inject. Date: 21-Sep-2023 01:15:31 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV INT
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist:

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 21-Sep-2023 16:13:02 Calib Date: 21-Sep-2023 00:40:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200018.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1611

First Level Reviewer: LV5D Date: 21-Sep-2023 11:54:59

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.299	5.324	-0.025	189186	0.5005	0.4815	
4 DNX	1	6.186	6.211	-0.025	143900	0.5020	0.4989	
5 HMX	1	6.866	6.877	-0.011	86630	0.5000	0.4557	
6 MNX	1	7.732	7.751	-0.019	154194	0.5855	0.5817	
7 2,4,6-Trinitrophenol	1	8.486	8.551	-0.065	84856	0.5000	0.5619	
8 RDX	1	9.166	9.184	-0.018	105765	0.5000	0.4797	
9 Nitrobenzene	1	11.765	11.790	-0.025	197794	0.5000	0.5151	
$ 10 1,2-Dinitrobenzene	1	12.765	12.784	-0.019	120469	0.5000	0.4516	
11 3,5-Dinitroaniline	1	14.625	14.644	-0.019	223701	0.5000	0.5403	
12 1,3-Dinitrobenzene	1	14.885	14.904	-0.019	316094	0.5000	0.5399	
13 Nitroglycerin	2	15.479	15.484	-0.005	693603	5.00	5.40	
14 o-Nitrotoluene	1	16.059	16.070	-0.011	125095	0.5000	0.5265	
16 p-Nitrotoluene	1	16.285	16.297	-0.012	113472	0.5000	0.5309	
17 4-Amino-2,6-dinitrotoluene	1	16.819	16.830	-0.011	147579	0.5000	0.5425	
18 m-Nitrotoluene	1	17.152	17.164	-0.012	142389	0.5000	0.5262	
19 2-Amino-4,6-dinitrotoluene	1	17.692	17.690	0.002	208771	0.5000	0.5328	M
20 1,3,5-Trinitrobenzene	1	17.699	17.704	-0.005	226434	0.5000	0.5678	M
21 2,6-Dinitrotoluene	1	18.979	18.990	-0.011	141175	0.5000	0.5147	
22 2,4-Dinitrotoluene	1	19.432	19.444	-0.012	286697	0.5000	0.5267	
23 Tetryl	1	22.846	22.837	0.009	166697	0.5000	0.5413	
24 2,4,6-Trinitrotoluene	1	23.652	23.657	-0.005	208382	0.5000	0.5277	
25 PETN	2	24.966	24.957	0.009	748009	5.00	5.64	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330Surrogate_00150	Amount Added:	50.00	Units: uL
8330_OP_DMT_00022	Amount Added:	50.00	Units: uL
8330 LCS_00130	Amount Added:	50.00	Units: uL

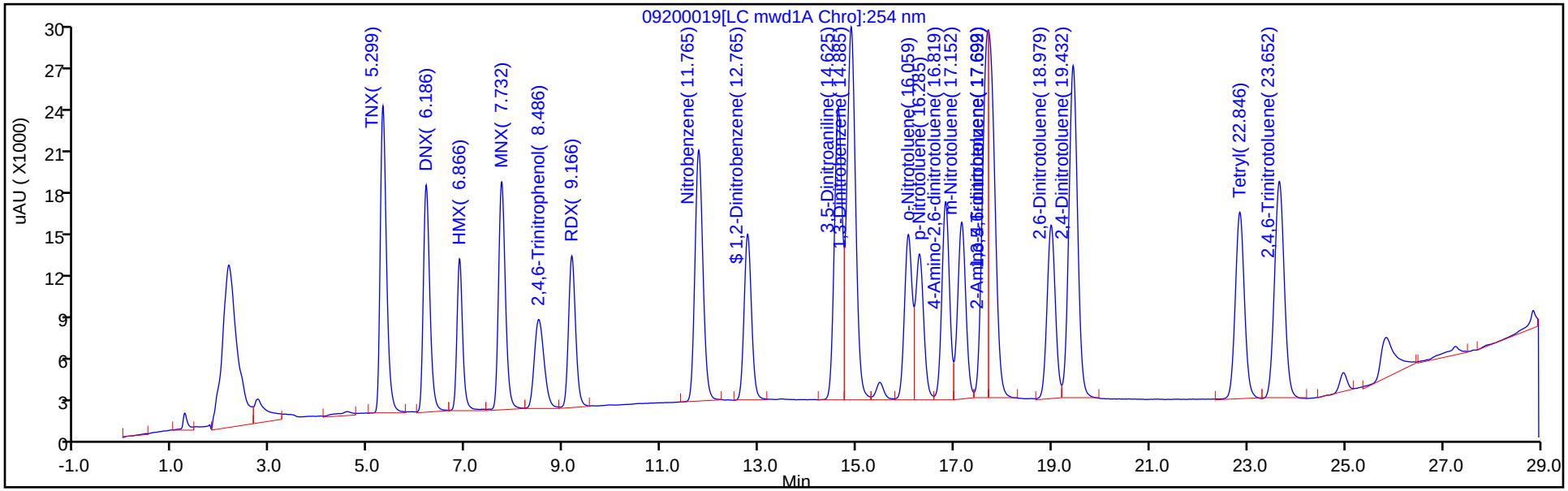
Report Date: 21-Sep-2023 16:13:48 Chrom Revision: 2.3 21-Aug-2023 17:14:06

Eurofins Denver

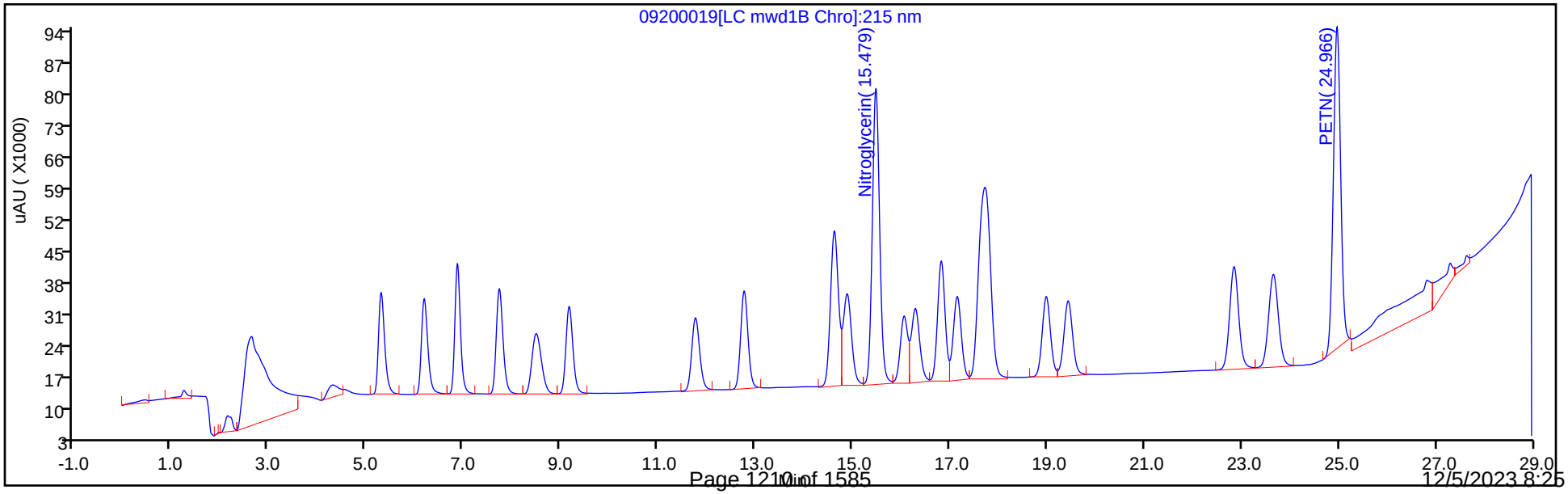
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200019.D

Injection Date:	21-Sep-2023 01:15:31	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	ICV INT			Worklist Smp#:	19
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



12/5/2023 8:25 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

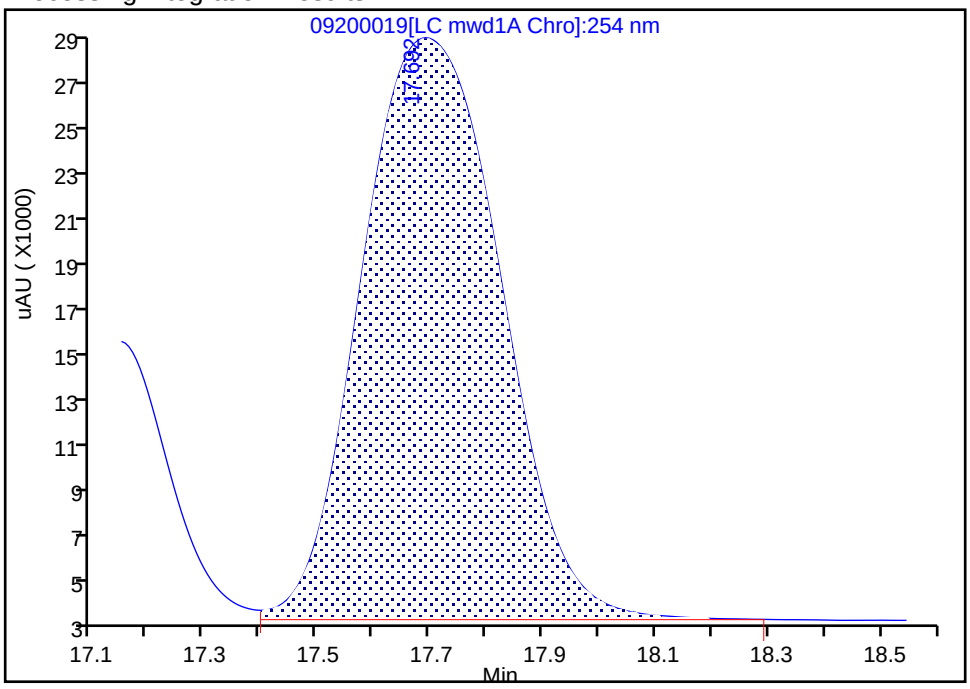
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200019.D
Injection Date: 21-Sep-2023 01:15:31 Instrument ID: CHHPLC_X5
Lims ID: ICV INT
Client ID:
Operator ID: JZ/JG ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC mwd1A, 254 nm

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

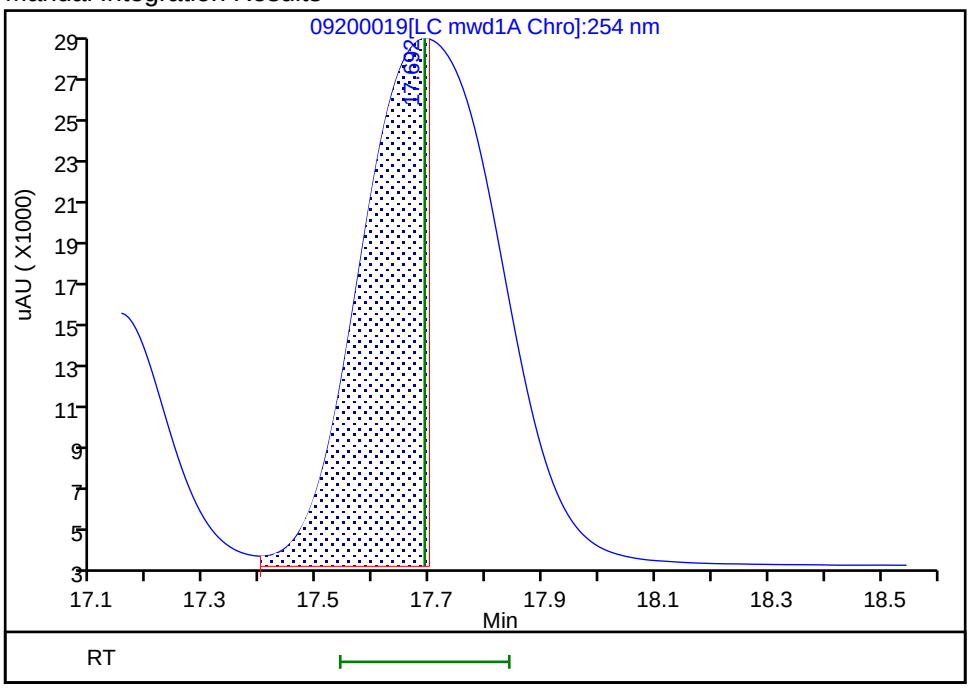
Processing Integration Results

RT: 17.69
Area: 435178
Amount: 1.110653
Amount Units: ug/ml



Manual Integration Results

RT: 17.69
Area: 208771
Amount: 0.532821
Amount Units: ug/ml



Reviewer: LV5D, 21-Sep-2023 11:54:55 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

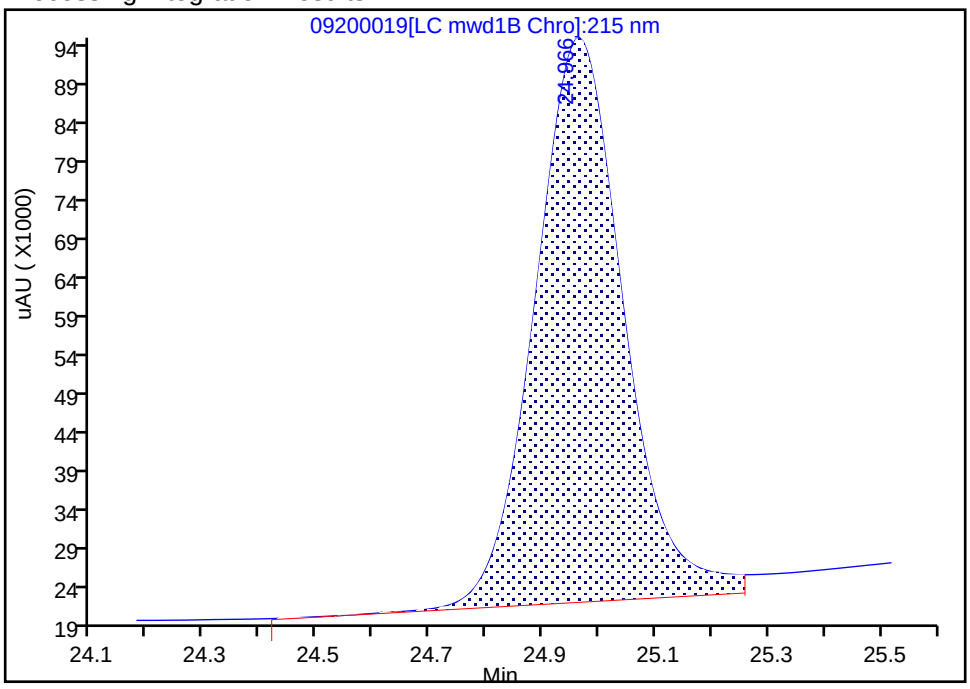
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200019.D				
Injection Date:	21-Sep-2023 01:15:31	Instrument ID:	CHHPLC_X5		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1B, 215 nm		

25 PETN, CAS: 78-11-5

Signal: 1

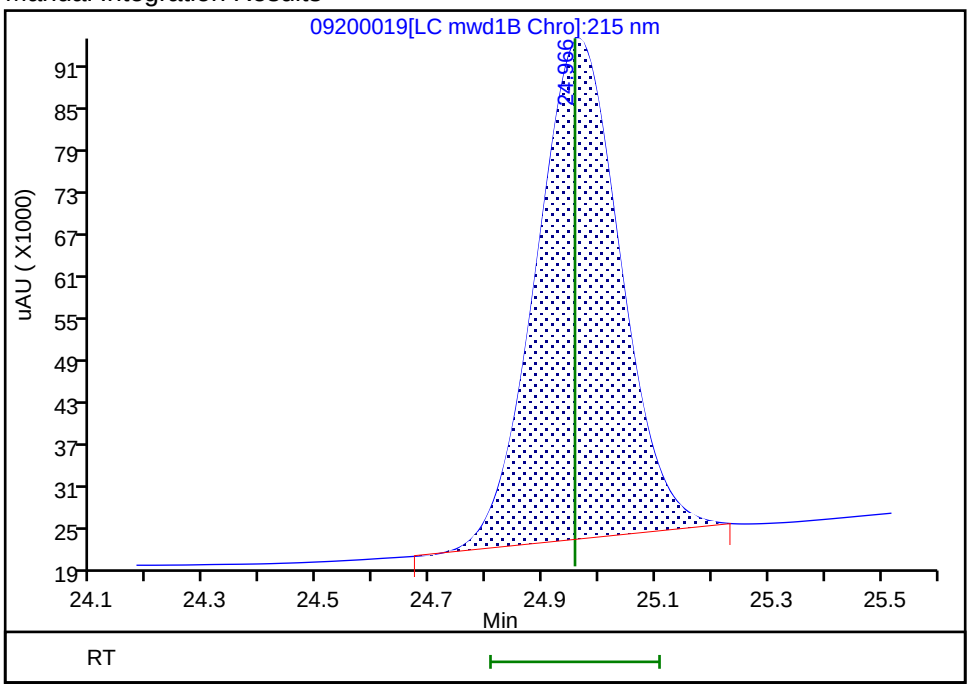
Processing Integration Results

RT: 24.97
Area: 801071
Amount: 5.596870
Amount Units: ug/ml



Manual Integration Results

RT: 24.97
Area: 748009
Amount: 5.637832
Amount Units: ug/ml



Reviewer: LV5D, 21-Sep-2023 16:04:05 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-629183/29 | Calibration Date: 10/11/2023 05:01

Instrument ID: CHHPLC_X5 | Calib Start Date: 09/20/2023 20:01

GC Column: Luna-phenylhex ID: 4.60(mm) | Calib End Date: 09/21/2023 00:40

Lab File ID: 10100029.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	392878	366010		234	251	-6.8	20.0
DNX	Ave	288451	265850		231	250	-7.8	20.0
HMX	Ave	190100	186836		246	250	-1.7	20.0
MNX	Ave	265061	247188		272	292	-6.7	20.0
Picric acid	Lin2		143652		239	250	-4.5	20.0
RDX	Ave	220484	215112		244	250	-2.4	20.0
Nitrobenzene	Ave	384007	361276		235	250	-5.9	20.0
3,5-Dinitroaniline	Lin2		424772		256	250	2.6	20.0
1,3-Dinitrobenzene	Ave	585449	580416		248	250	-0.9	20.0
Nitroglycerin	Ave	128462	129240		2520	2500	0.6	20.0
2-Nitrotoluene	Ave	237596	233204		245	250	-1.8	20.0
4-Nitrotoluene	Ave	213737	207132		242	250	-3.1	20.0
4-Amino-2,6-dinitrotoluene	Ave	272035	275028		253	250	1.1	20.0
3-Nitrotoluene	Ave	270588	263288		243	250	-2.7	20.0
2-Amino-4,6-dinitrotoluene	Ave	391822	389576		249	250	-0.6	20.0
1,3,5-Trinitrobenzene	Ave	398781	410144		257	250	2.8	20.0
2,6-Dinitrotoluene	Ave	274271	274124		250	250	-0.0	20.0
2,4-Dinitrotoluene	Ave	544319	542480		249	250	-0.3	20.0
Tetryl	Ave	307961	314192		255	250	2.0	20.0
2,4,6-Trinitrotoluene	Ave	394912	407092		258	250	3.1	20.0
PETN	Lin2		140059		2650	2500	6.0	20.0
1,2-Dinitrobenzene	Ave	266741	259032		243	250	-2.9	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-629183/29 Calibration Date: 10/11/2023 05:01

Instrument ID: CHHPLC_X5 Calib Start Date: 09/20/2023 20:01

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 09/21/2023 00:40

Lab File ID: 10100029.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.28	5.14	5.44
DNX	6.16	6.00	6.30
HMX	6.82	6.66	6.96
MNX	7.69	7.53	7.83
Picric acid	8.73	8.61	8.91
RDX	9.11	8.96	9.26
Nitrobenzene	11.69	11.53	11.83
3,5-Dinitroaniline	14.52	14.35	14.65
1,3-Dinitrobenzene	14.79	14.62	14.92
Nitroglycerin	15.35	15.18	15.48
2-Nitrotoluene	15.94	15.76	16.06
4-Nitrotoluene	16.17	15.99	16.29
4-Amino-2,6-dinitrotoluene	16.69	16.51	16.81
3-Nitrotoluene	17.03	16.84	17.14
2-Amino-4,6-dinitrotoluene	17.54	17.35	17.65
1,3,5-Trinitrobenzene	17.57	17.41	17.71
2,6-Dinitrotoluene	18.84	18.65	18.95
2,4-Dinitrotoluene	19.29	19.10	19.40
Tetryl	22.65	22.44	22.74
2,4,6-Trinitrotoluene	23.46	23.27	23.57
PETN	24.77	24.58	24.88
1,2-Dinitrobenzene	12.68	12.50	12.80

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20231010-126365.b\10100029.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 11-Oct-2023 05:01:02 ALS Bottle#: 7 Worklist Smp#: 29
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub11

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20231010-126365.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 11-Oct-2023 11:34:21 Calib Date: 21-Sep-2023 05:55:36
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1656

First Level Reviewer: K8YG Date: 11-Oct-2023 11:22:10

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1	4.207	4.207	0.000	93474	0.2500	0.2319	
	2 2,4-diamino-6-nitrotoluene	1	4.834	4.833	0.001	60668	0.2500	0.2397	
	3 TNX	1	5.280	5.287	-0.007	91777	0.2508	0.2336	
	4 DNX	1	6.160	6.153	0.007	66529	0.2503	0.2306	
	5 HMX	1	6.820	6.813	0.007	46709	0.2500	0.2457	
	6 MNX	1	7.687	7.680	0.007	72117	0.2918	0.2721	
	7 2,4,6-Trinitrophenol	1	8.727	8.760	-0.033	35913	0.2500	0.2386	
	8 RDX	1	9.107	9.107	0.000	53778	0.2500	0.2439	
	9 Nitrobenzene	1	11.693	11.680	0.013	90319	0.2500	0.2352	
$	10 1,2-Dinitrobenzene	1	12.680	12.653	0.027	64758	0.2500	0.2428	
	11 3,5-Dinitroaniline	1	14.520	14.500	0.020	106193	0.2500	0.2564	
	12 1,3-Dinitrobenzene	1	14.787	14.773	0.014	145104	0.2500	0.2479	
	13 Nitroglycerin	2	15.347	15.326	0.021	323101	2.50	2.52	
	14 o-Nitrotoluene	1	15.940	15.913	0.027	58301	0.2500	0.2454	
	16 p-Nitrotoluene	1	16.167	16.140	0.027	51783	0.2500	0.2423	
	17 4-Amino-2,6-dinitrotoluene	1	16.693	16.660	0.033	68757	0.2500	0.2528	
	18 m-Nitrotoluene	1	17.027	16.993	0.034	65822	0.2500	0.2433	
	19 2-Amino-4,6-dinitrotoluene	1	17.540	17.500	0.040	97394	0.2500	0.2486	Ma
	20 1,3,5-Trinitrobenzene	1	17.573	17.560	0.013	102536	0.2500	0.2571	M
	21 2,6-Dinitrotoluene	1	18.840	18.800	0.040	68531	0.2500	0.2499	
	22 2,4-Dinitrotoluene	1	19.293	19.253	0.040	135620	0.2500	0.2492	
	23 Tetryl	1	22.647	22.593	0.054	78548	0.2500	0.2551	
	24 2,4,6-Trinitrotoluene	1	23.460	23.420	0.040	101773	0.2500	0.2577	
	25 PETN	2	24.767	24.727	0.040	350148	2.50	2.65	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330 DMT_00015	Amount Added:	12.50	Units: uL
8330IntermStk_00078	Amount Added:	25.00	Units: uL
8330_ADDs_00037	Amount Added:	12.50	Units: uL

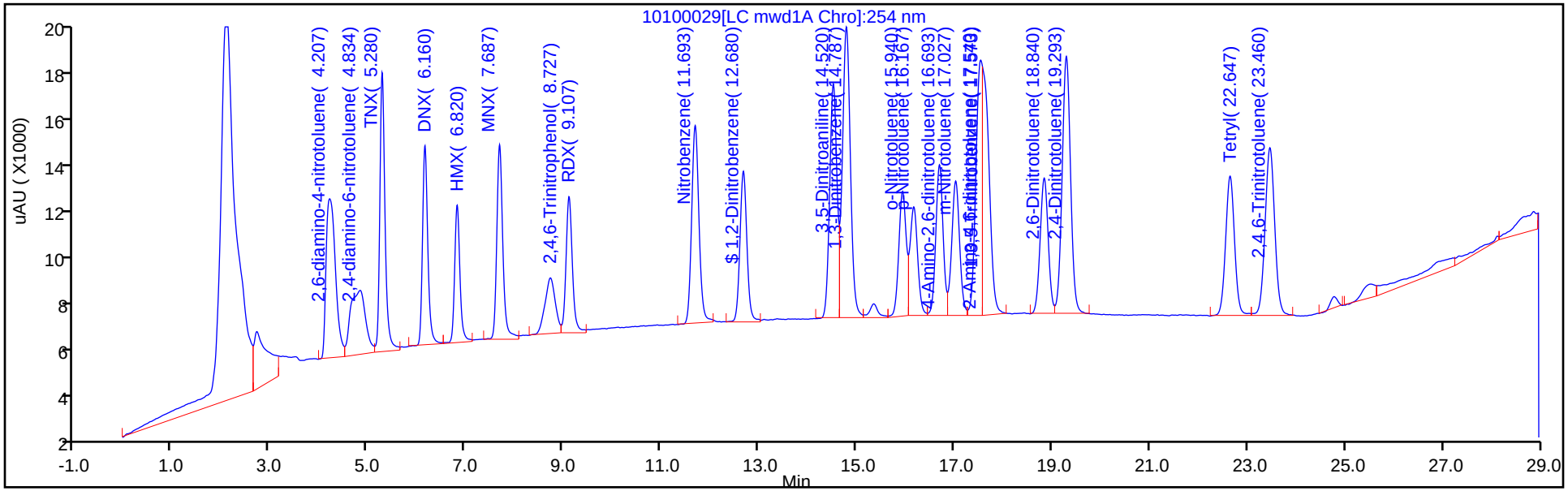
Report Date: 11-Oct-2023 11:34:21 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

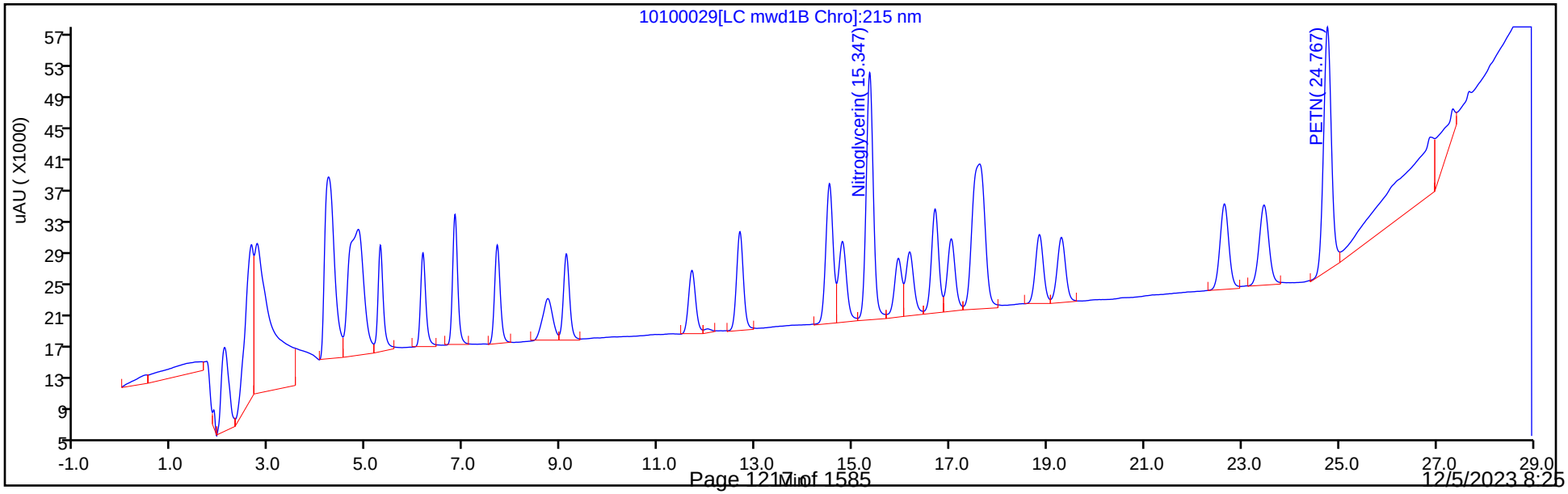
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20231010-126365.b\10100029.D

Injection Date:	11-Oct-2023 05:01:02	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	29
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



12/5/2023 8:25 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

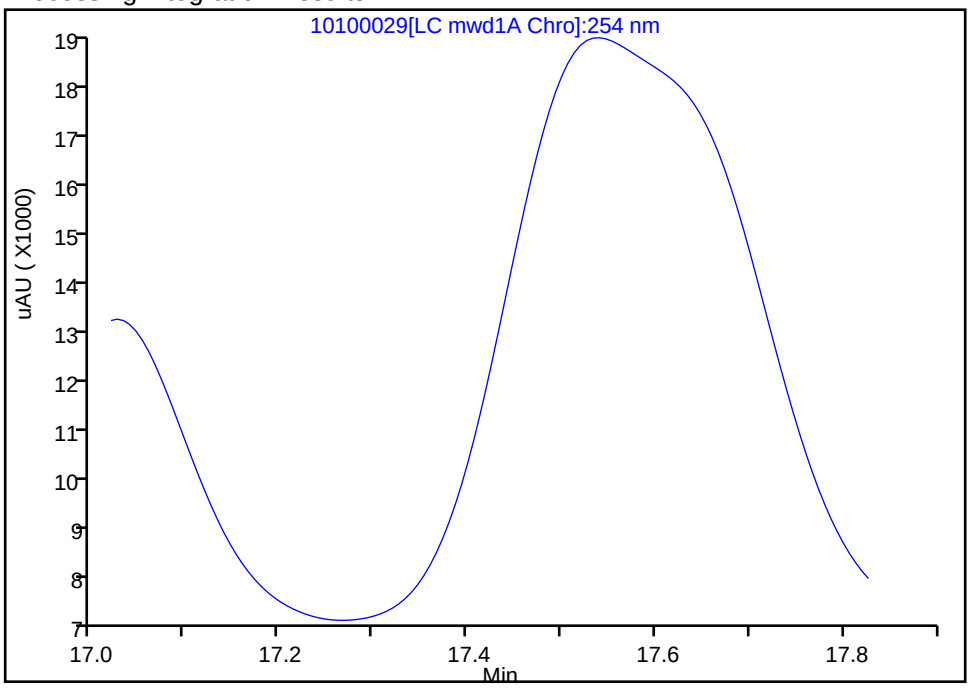
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Injection Date:	11-Oct-2023 05:01:02	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

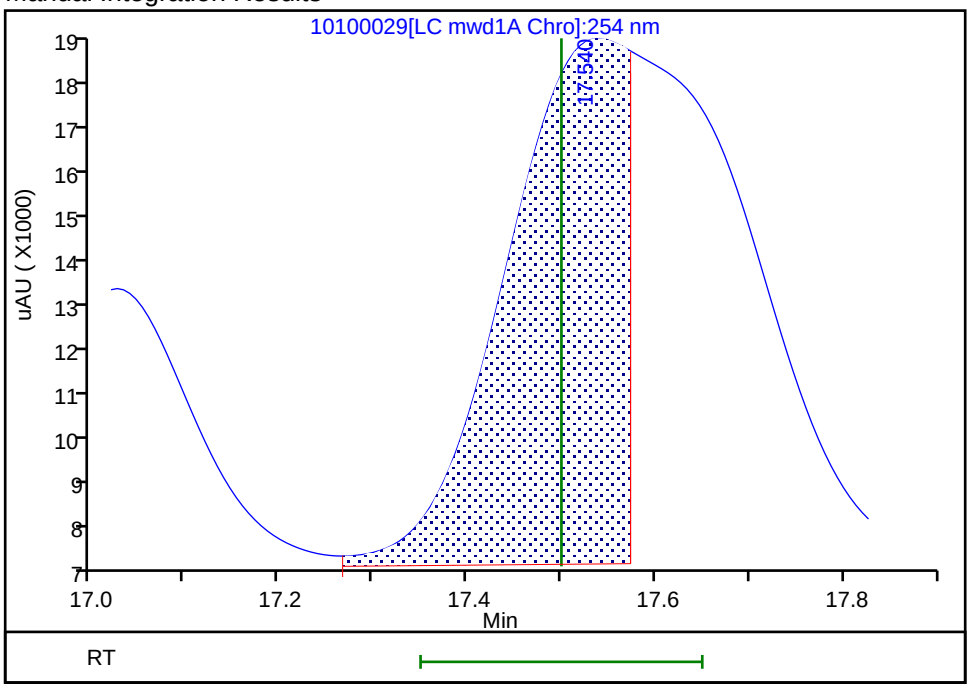
Not Detected
Expected RT: 17.50

Processing Integration Results



Manual Integration Results

RT: 17.54
Area: 97394
Amount: 0.248567
Amount Units: ug/ml



Reviewer: K8YG, 11-Oct-2023 11:22:08 -06:00:00 (UTC)
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Denver

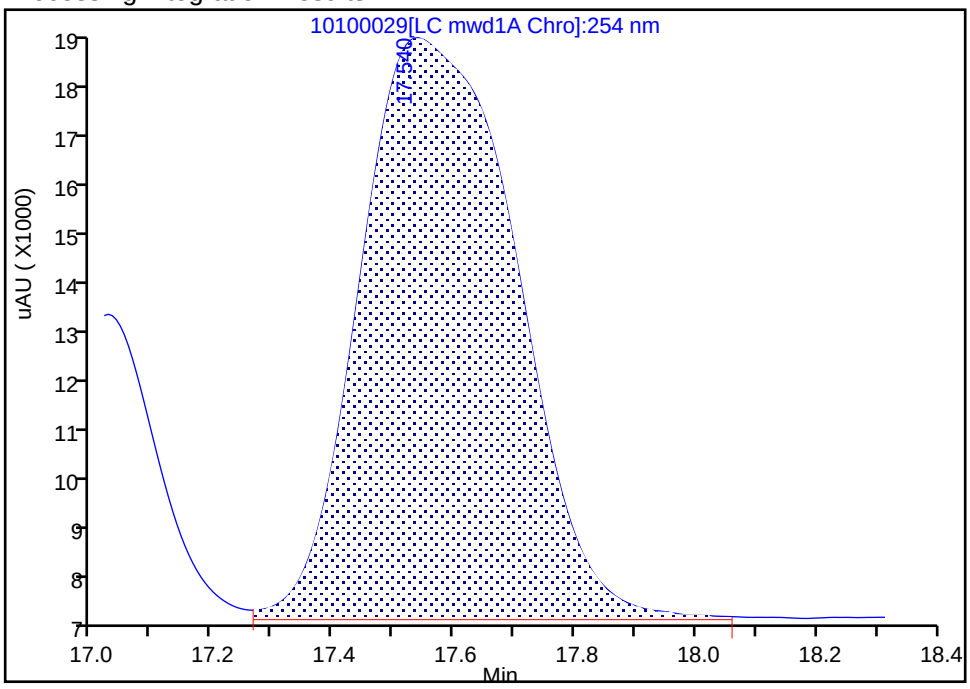
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Injection Date:	11-Oct-2023 05:01:02	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

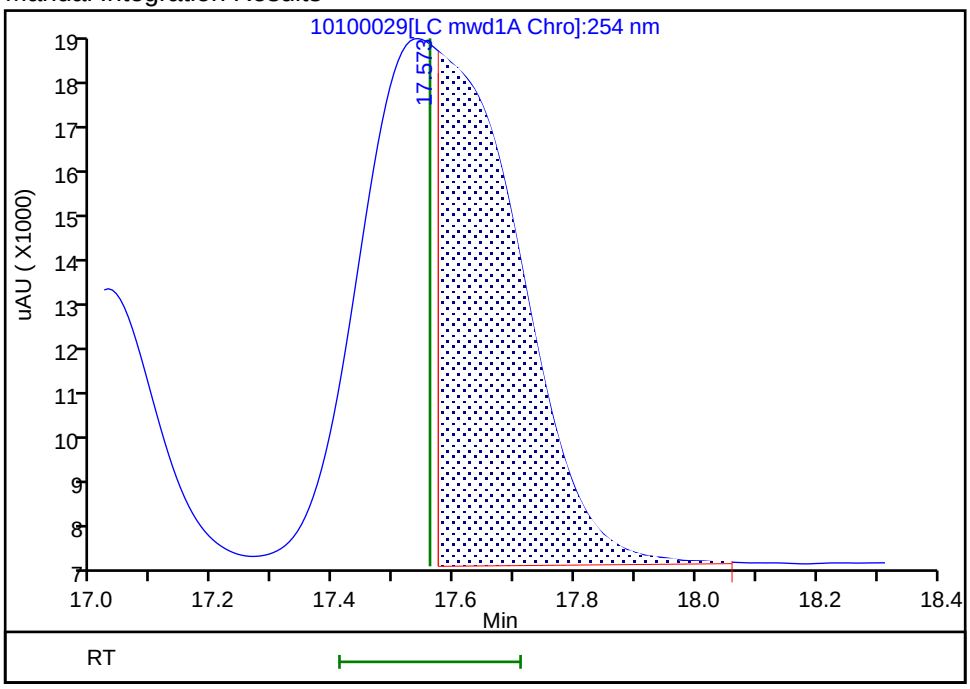
Processing Integration Results

RT: 17.54
Area: 199918
Amount: 0.501322
Amount Units: ug/ml



Manual Integration Results

RT: 17.57
Area: 102536
Amount: 0.257123
Amount Units: ug/ml



Reviewer: K8YG, 11-Oct-2023 11:22:06 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Split Peak

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-629183/29 Calibration Date: 10/11/2023 05:01

Instrument ID: CHHPLC_X5 Calib Start Date: 09/21/2023 01:50

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 09/21/2023 05:55

Lab File ID: 10100029.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,6-diamino-4-nitrotoluene	Lin2		373896		232	250	-7.3	20.0
2,4-diamino-6-nitrotoluene	Lin2		242672		240	250	-4.1	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-629183/29 Calibration Date: 10/11/2023 05:01

Instrument ID: CHHPLC_X5 Calib Start Date: 09/21/2023 01:50

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 09/21/2023 05:55

Lab File ID: 10100029.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	4.21	4.06	4.36
2,4-diamino-6-nitrotoluene	4.83	4.68	4.98

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20231010-126365.b\10100029.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 11-Oct-2023 05:01:02 ALS Bottle#: 7 Worklist Smp#: 29
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub11

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20231010-126365.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 11-Oct-2023 11:34:21 Calib Date: 21-Sep-2023 05:55:36
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1656

First Level Reviewer: K8YG Date: 11-Oct-2023 11:22:10

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1	4.207	4.207	0.000	93474	0.2500	0.2319	
	2 2,4-diamino-6-nitrotoluene	1	4.834	4.833	0.001	60668	0.2500	0.2397	
	3 TNX	1	5.280	5.287	-0.007	91777	0.2508	0.2336	
	4 DNX	1	6.160	6.153	0.007	66529	0.2503	0.2306	
	5 HMX	1	6.820	6.813	0.007	46709	0.2500	0.2457	
	6 MNX	1	7.687	7.680	0.007	72117	0.2918	0.2721	
	7 2,4,6-Trinitrophenol	1	8.727	8.760	-0.033	35913	0.2500	0.2386	
	8 RDX	1	9.107	9.107	0.000	53778	0.2500	0.2439	
	9 Nitrobenzene	1	11.693	11.680	0.013	90319	0.2500	0.2352	
$	10 1,2-Dinitrobenzene	1	12.680	12.653	0.027	64758	0.2500	0.2428	
	11 3,5-Dinitroaniline	1	14.520	14.500	0.020	106193	0.2500	0.2564	
	12 1,3-Dinitrobenzene	1	14.787	14.773	0.014	145104	0.2500	0.2479	
	13 Nitroglycerin	2	15.347	15.326	0.021	323101	2.50	2.52	
	14 o-Nitrotoluene	1	15.940	15.913	0.027	58301	0.2500	0.2454	
	16 p-Nitrotoluene	1	16.167	16.140	0.027	51783	0.2500	0.2423	
	17 4-Amino-2,6-dinitrotoluene	1	16.693	16.660	0.033	68757	0.2500	0.2528	
	18 m-Nitrotoluene	1	17.027	16.993	0.034	65822	0.2500	0.2433	
	19 2-Amino-4,6-dinitrotoluene	1	17.540	17.500	0.040	97394	0.2500	0.2486	Ma
	20 1,3,5-Trinitrobenzene	1	17.573	17.560	0.013	102536	0.2500	0.2571	M
	21 2,6-Dinitrotoluene	1	18.840	18.800	0.040	68531	0.2500	0.2499	
	22 2,4-Dinitrotoluene	1	19.293	19.253	0.040	135620	0.2500	0.2492	
	23 Tetryl	1	22.647	22.593	0.054	78548	0.2500	0.2551	
	24 2,4,6-Trinitrotoluene	1	23.460	23.420	0.040	101773	0.2500	0.2577	
	25 PETN	2	24.767	24.727	0.040	350148	2.50	2.65	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330 DMT_00015	Amount Added:	12.50	Units: uL
8330IntermStk_00078	Amount Added:	25.00	Units: uL
8330_ADDs_00037	Amount Added:	12.50	Units: uL

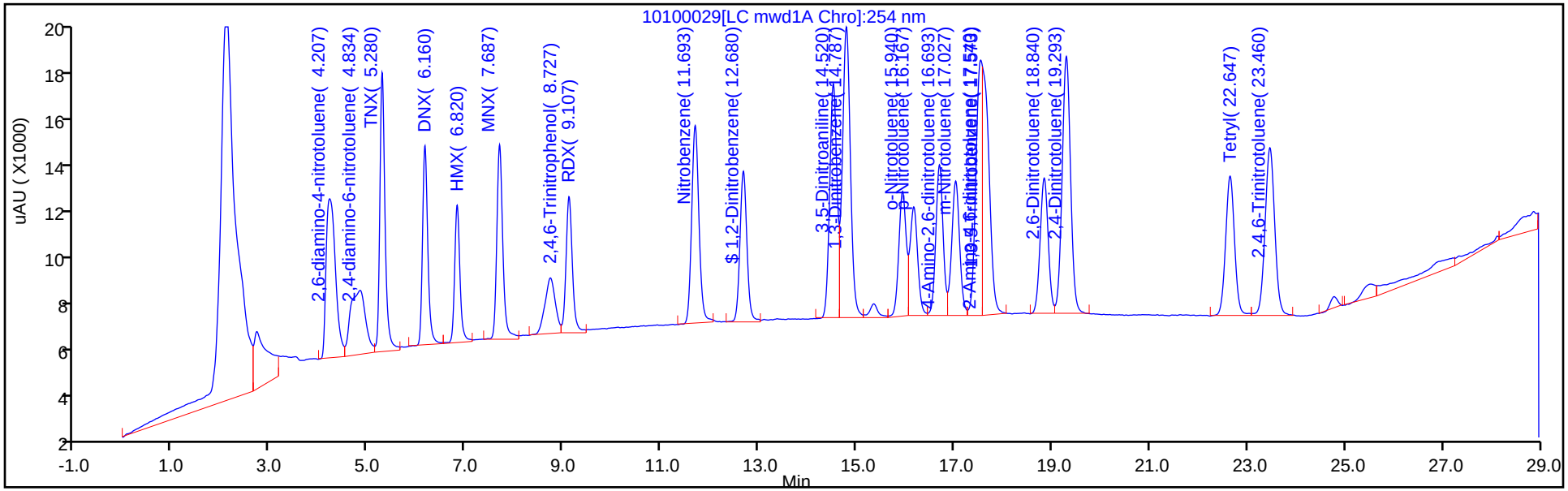
Report Date: 11-Oct-2023 11:34:21 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

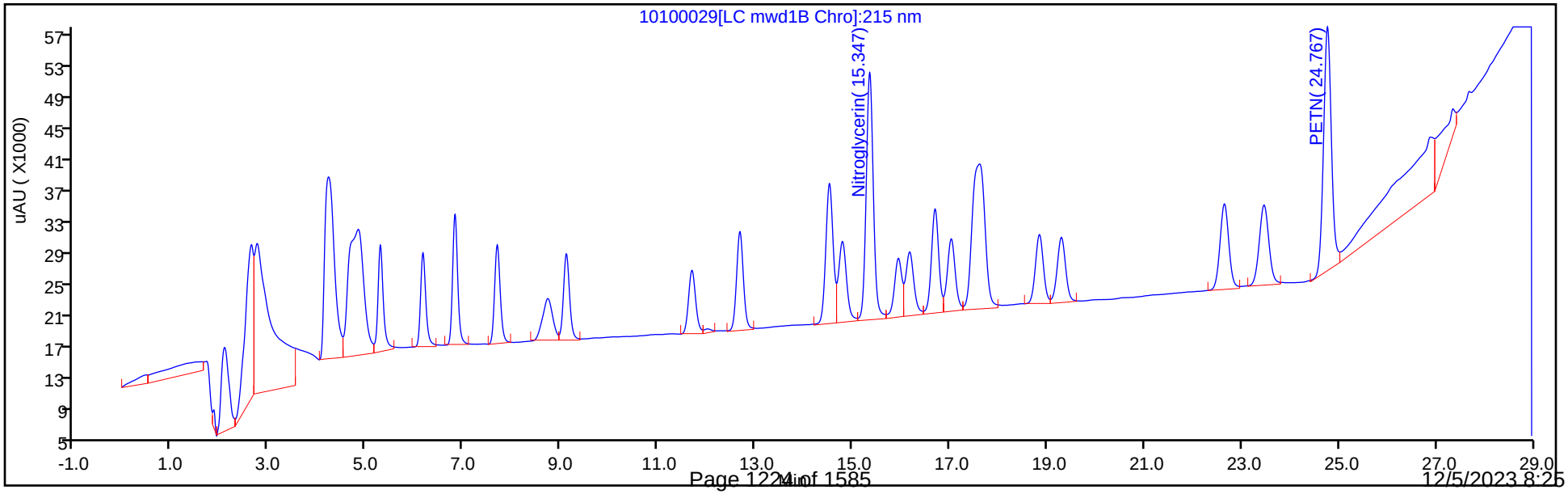
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20231010-126365.b\10100029.D

Injection Date:	11-Oct-2023 05:01:02	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	29
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



12/5/2023 8:25 AM

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-629183/35 | Calibration Date: 10/11/2023 08:30

Instrument ID: CHHPLC_X5 | Calib Start Date: 09/20/2023 20:01

GC Column: Luna-phenylhex ID: 4.60(mm) | Calib End Date: 09/21/2023 00:40

Lab File ID: 10100035.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	392878	376391		240	251	-4.2	20.0
DNX	Ave	288451	291924		253	250	1.2	20.0
HMX	Ave	190100	193248		254	250	1.7	20.0
MNX	Ave	265061	247534		272	292	-6.6	20.0
Picric acid	Lin2		142996		238	250	-5.0	20.0
RDX	Ave	220484	213144		242	250	-3.3	20.0
Nitrobenzene	Ave	384007	370988		242	250	-3.4	20.0
3,5-Dinitroaniline	Lin2		425308		257	250	2.7	20.0
1,3-Dinitrobenzene	Ave	585449	582336		249	250	-0.5	20.0
Nitroglycerin	Ave	128462	129097		2510	2500	0.5	20.0
2-Nitrotoluene	Ave	237596	231748		244	250	-2.5	20.0
4-Nitrotoluene	Ave	213737	208372		244	250	-2.5	20.0
4-Amino-2,6-dinitrotoluene	Ave	272035	274584		252	250	0.9	20.0
3-Nitrotoluene	Ave	270588	262100		242	250	-3.1	20.0
2-Amino-4,6-dinitrotoluene	Ave	391822	396648		253	250	1.2	20.0
1,3,5-Trinitrobenzene	Ave	398781	400832		251	250	0.5	20.0
2,6-Dinitrotoluene	Ave	274271	275300		251	250	0.4	20.0
2,4-Dinitrotoluene	Ave	544319	540932		248	250	-0.6	20.0
Tetryl	Ave	307961	312128		253	250	1.4	20.0
2,4,6-Trinitrotoluene	Ave	394912	404092		256	250	2.3	20.0
PETN	Lin2		139416		2640	2500	5.5	20.0
1,2-Dinitrobenzene	Ave	266741	265680		249	250	-0.4	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-629183/35 Calibration Date: 10/11/2023 08:30

Instrument ID: CHHPLC_X5 Calib Start Date: 09/20/2023 20:01

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 09/21/2023 00:40

Lab File ID: 10100035.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.28	5.14	5.44
DNX	6.15	6.00	6.30
HMX	6.81	6.66	6.96
MNX	7.68	7.53	7.83
Picric acid	8.71	8.61	8.91
RDX	9.09	8.96	9.26
Nitrobenzene	11.69	11.53	11.83
3,5-Dinitroaniline	14.51	14.35	14.65
1,3-Dinitrobenzene	14.78	14.62	14.92
Nitroglycerin	15.35	15.18	15.48
2-Nitrotoluene	15.93	15.76	16.06
4-Nitrotoluene	16.16	15.99	16.29
4-Amino-2,6-dinitrotoluene	16.68	16.51	16.81
3-Nitrotoluene	17.01	16.84	17.14
2-Amino-4,6-dinitrotoluene	17.51	17.35	17.65
1,3,5-Trinitrobenzene	17.56	17.41	17.71
2,6-Dinitrotoluene	18.82	18.65	18.95
2,4-Dinitrotoluene	19.27	19.10	19.40
Tetryl	22.61	22.44	22.74
2,4,6-Trinitrotoluene	23.43	23.27	23.57
PETN	24.75	24.58	24.88
1,2-Dinitrobenzene	12.67	12.50	12.80

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20231010-126365.b\10100035.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 11-Oct-2023 08:30:57 ALS Bottle#: 7 Worklist Smp#: 35
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub11

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20231010-126365.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 11-Oct-2023 11:34:25 Calib Date: 21-Sep-2023 05:55:36
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1656

First Level Reviewer: K8YG Date: 11-Oct-2023 11:33:58

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1	4.208	4.207	0.001	94056	0.2500	0.2334	
	2 2,4-diamino-6-nitrotoluene	1	4.828	4.833	-0.005	62321	0.2500	0.2467	
	3 TNX	1	5.281	5.287	-0.006	94380	0.2508	0.2402	
	4 DNX	1	6.154	6.153	0.001	73054	0.2503	0.2533	
	5 HMX	1	6.814	6.813	0.001	48312	0.2500	0.2541	
	6 MNX	1	7.681	7.680	0.001	72218	0.2918	0.2725	
	7 2,4,6-Trinitrophenol	1	8.714	8.760	-0.046	35749	0.2500	0.2376	
	8 RDX	1	9.094	9.107	-0.013	53286	0.2500	0.2417	
	9 Nitrobenzene	1	11.688	11.680	0.008	92747	0.2500	0.2415	
$	10 1,2-Dinitrobenzene	1	12.668	12.653	0.015	66420	0.2500	0.2490	
	11 3,5-Dinitroaniline	1	14.514	14.500	0.014	106327	0.2500	0.2567	
	12 1,3-Dinitrobenzene	1	14.781	14.773	0.008	145584	0.2500	0.2487	
	13 Nitroglycerin	2	15.348	15.326	0.022	322743	2.50	2.51	
	14 o-Nitrotoluene	1	15.934	15.913	0.021	57937	0.2500	0.2438	
	16 p-Nitrotoluene	1	16.161	16.140	0.021	52093	0.2500	0.2437	
	17 4-Amino-2,6-dinitrotoluene	1	16.681	16.660	0.021	68646	0.2500	0.2523	
	18 m-Nitrotoluene	1	17.014	16.993	0.021	65525	0.2500	0.2422	
	19 2-Amino-4,6-dinitrotoluene	1	17.514	17.500	0.014	99162	0.2500	0.2531	M
	20 1,3,5-Trinitrobenzene	1	17.561	17.560	0.001	100208	0.2500	0.2513	Ma
	21 2,6-Dinitrotoluene	1	18.821	18.800	0.021	68825	0.2500	0.2509	
	22 2,4-Dinitrotoluene	1	19.274	19.253	0.021	135233	0.2500	0.2484	
	23 Tetryl	1	22.614	22.593	0.021	78032	0.2500	0.2534	
	24 2,4,6-Trinitrotoluene	1	23.434	23.420	0.014	101023	0.2500	0.2558	
	25 PETN	2	24.748	24.727	0.021	348539	2.50	2.64	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330 DMT_00015	Amount Added:	12.50	Units: uL
8330IntermStk_00078	Amount Added:	25.00	Units: uL
8330_ADDs_00037	Amount Added:	12.50	Units: uL

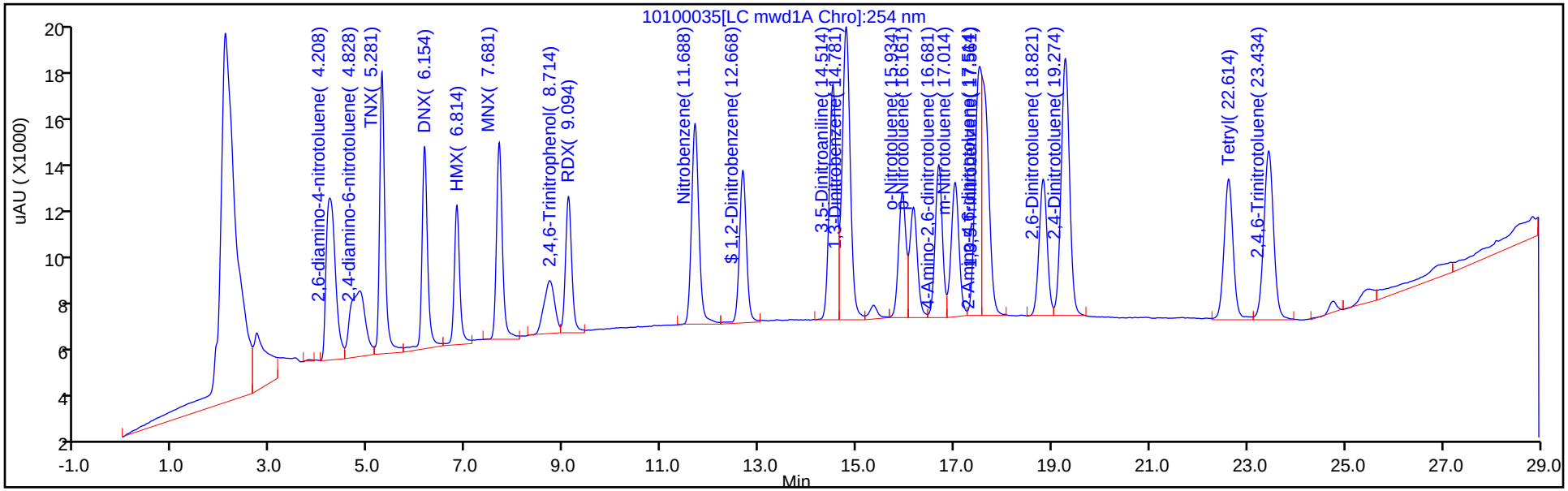
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Eurofins Denver

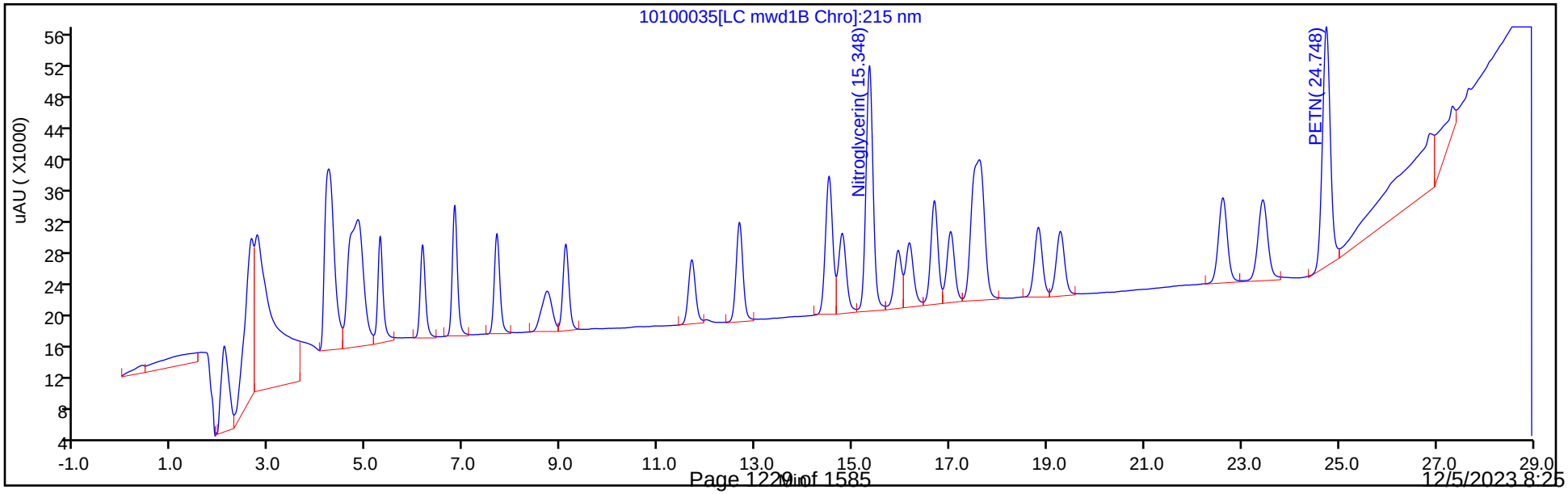
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Injection Date:	11-Oct-2023 08:30:57	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	35
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



12/5/2023 8:25 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

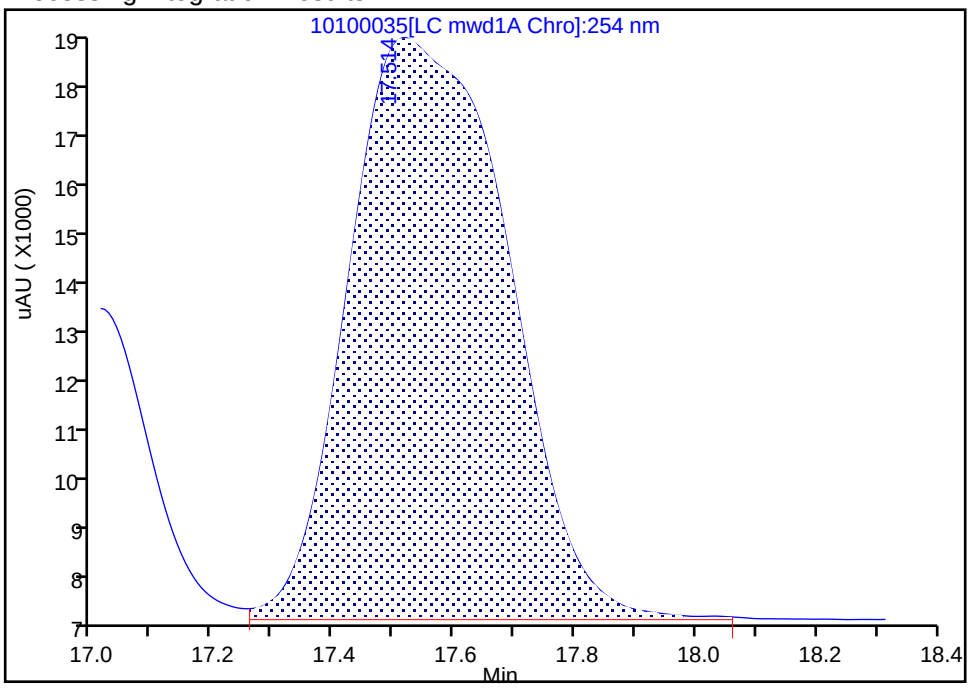
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Injection Date:	11-Oct-2023 08:30:57	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

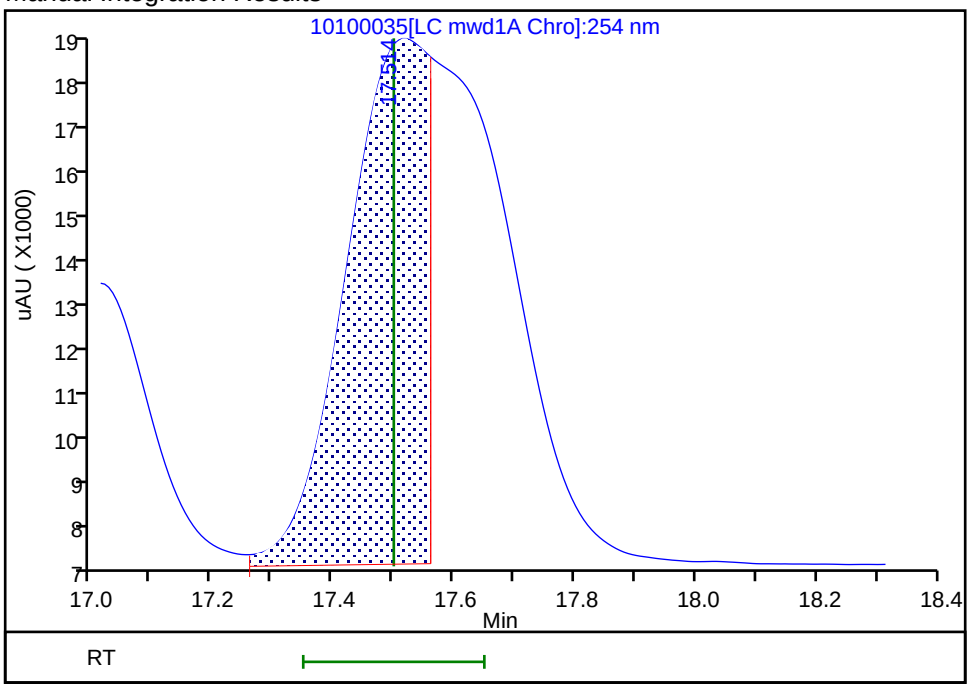
Processing Integration Results

RT: 17.51
Area: 199368
Amount: 0.508823
Amount Units: ug/ml



Manual Integration Results

RT: 17.51
Area: 99162
Amount: 0.253079
Amount Units: ug/ml



Reviewer: K8YG, 11-Oct-2023 11:33:46 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Denver

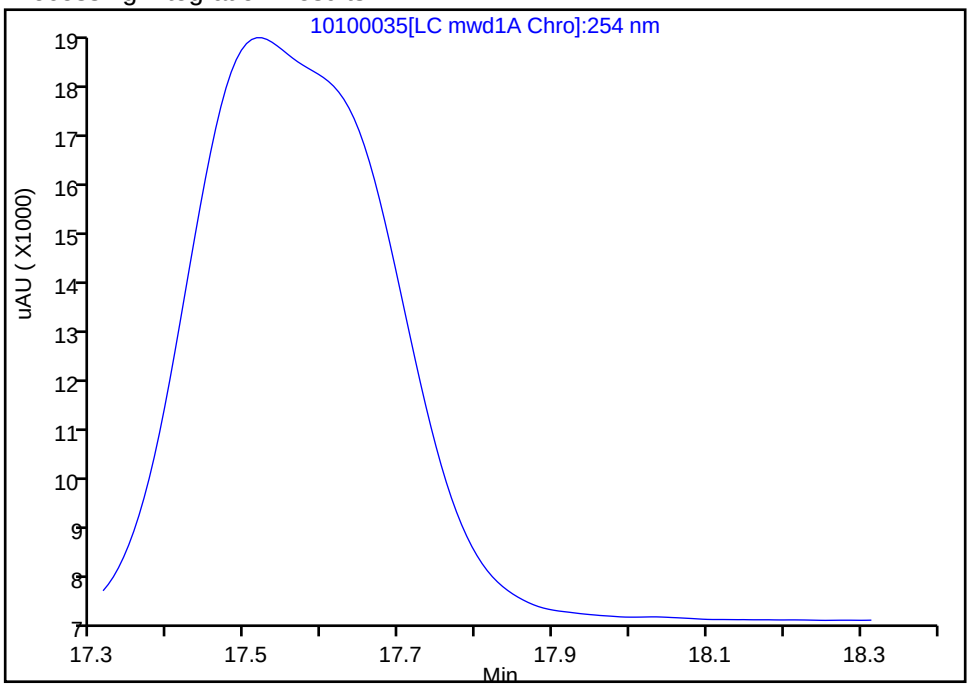
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Injection Date:	11-Oct-2023 08:30:57	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

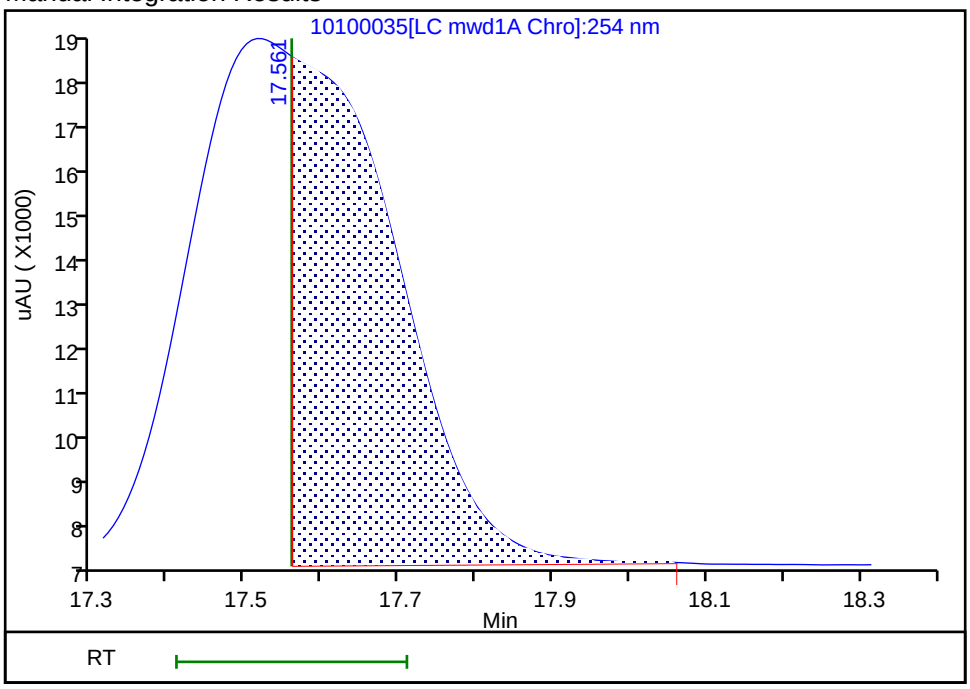
Not Detected
Expected RT: 17.56

Processing Integration Results



Manual Integration Results

RT: 17.56
Area: 100208
Amount: 0.251286
Amount Units: ug/ml



Reviewer: K8YG, 11-Oct-2023 11:33:51 -06:00:00 (UTC)
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Split Peak

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-629183/35 | Calibration Date: 10/11/2023 08:30

Instrument ID: CHHPLC_X5 | Calib Start Date: 09/21/2023 01:50

GC Column: Luna-phenylhex ID: 4.60(mm) | Calib End Date: 09/21/2023 05:55

Lab File ID: 10100035.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,6-diamino-4-nitrotoluene	Lin2		376224		233	250	-6.6	20.0
2,4-diamino-6-nitrotoluene	Lin2		249284		247	250	-1.3	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Lab Sample ID: CCV 280-629183/35 Calibration Date: 10/11/2023 08:30

Instrument ID: CHHPLC_X5 Calib Start Date: 09/21/2023 01:50

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 09/21/2023 05:55

Lab File ID: 10100035.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	4.21	4.06	4.36
2,4-diamino-6-nitrotoluene	4.83	4.68	4.98

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20231010-126365.b\10100035.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 11-Oct-2023 08:30:57 ALS Bottle#: 7 Worklist Smp#: 35
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub11

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20231010-126365.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 11-Oct-2023 11:34:25 Calib Date: 21-Sep-2023 05:55:36
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230920-125649.b\09200027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1656

First Level Reviewer: K8YG Date: 11-Oct-2023 11:33:58

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1	4.208	4.207	0.001	94056	0.2500	0.2334	
	2 2,4-diamino-6-nitrotoluene	1	4.828	4.833	-0.005	62321	0.2500	0.2467	
	3 TNX	1	5.281	5.287	-0.006	94380	0.2508	0.2402	
	4 DNX	1	6.154	6.153	0.001	73054	0.2503	0.2533	
	5 HMX	1	6.814	6.813	0.001	48312	0.2500	0.2541	
	6 MNX	1	7.681	7.680	0.001	72218	0.2918	0.2725	
	7 2,4,6-Trinitrophenol	1	8.714	8.760	-0.046	35749	0.2500	0.2376	
	8 RDX	1	9.094	9.107	-0.013	53286	0.2500	0.2417	
	9 Nitrobenzene	1	11.688	11.680	0.008	92747	0.2500	0.2415	
$	10 1,2-Dinitrobenzene	1	12.668	12.653	0.015	66420	0.2500	0.2490	
	11 3,5-Dinitroaniline	1	14.514	14.500	0.014	106327	0.2500	0.2567	
	12 1,3-Dinitrobenzene	1	14.781	14.773	0.008	145584	0.2500	0.2487	
	13 Nitroglycerin	2	15.348	15.326	0.022	322743	2.50	2.51	
	14 o-Nitrotoluene	1	15.934	15.913	0.021	57937	0.2500	0.2438	
	16 p-Nitrotoluene	1	16.161	16.140	0.021	52093	0.2500	0.2437	
	17 4-Amino-2,6-dinitrotoluene	1	16.681	16.660	0.021	68646	0.2500	0.2523	
	18 m-Nitrotoluene	1	17.014	16.993	0.021	65525	0.2500	0.2422	
	19 2-Amino-4,6-dinitrotoluene	1	17.514	17.500	0.014	99162	0.2500	0.2531	M
	20 1,3,5-Trinitrobenzene	1	17.561	17.560	0.001	100208	0.2500	0.2513	Ma
	21 2,6-Dinitrotoluene	1	18.821	18.800	0.021	68825	0.2500	0.2509	
	22 2,4-Dinitrotoluene	1	19.274	19.253	0.021	135233	0.2500	0.2484	
	23 Tetryl	1	22.614	22.593	0.021	78032	0.2500	0.2534	
	24 2,4,6-Trinitrotoluene	1	23.434	23.420	0.014	101023	0.2500	0.2558	
	25 PETN	2	24.748	24.727	0.021	348539	2.50	2.64	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330 DMT_00015	Amount Added:	12.50	Units: uL
8330IntermStk_00078	Amount Added:	25.00	Units: uL
8330_ADDs_00037	Amount Added:	12.50	Units: uL

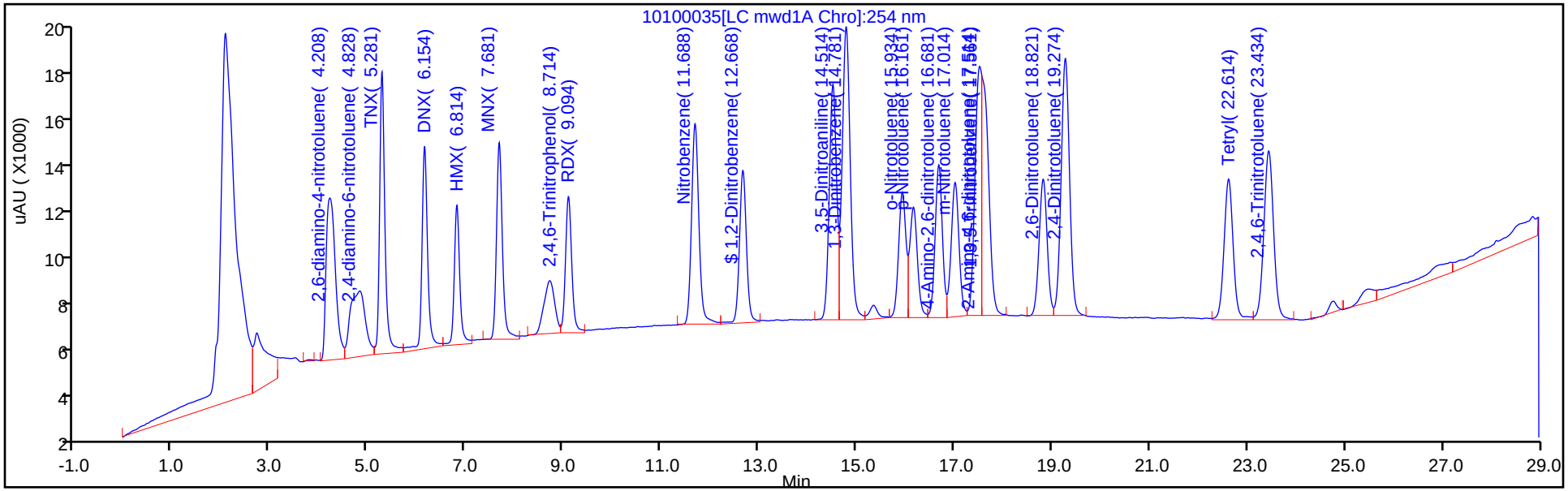
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Eurofins Denver

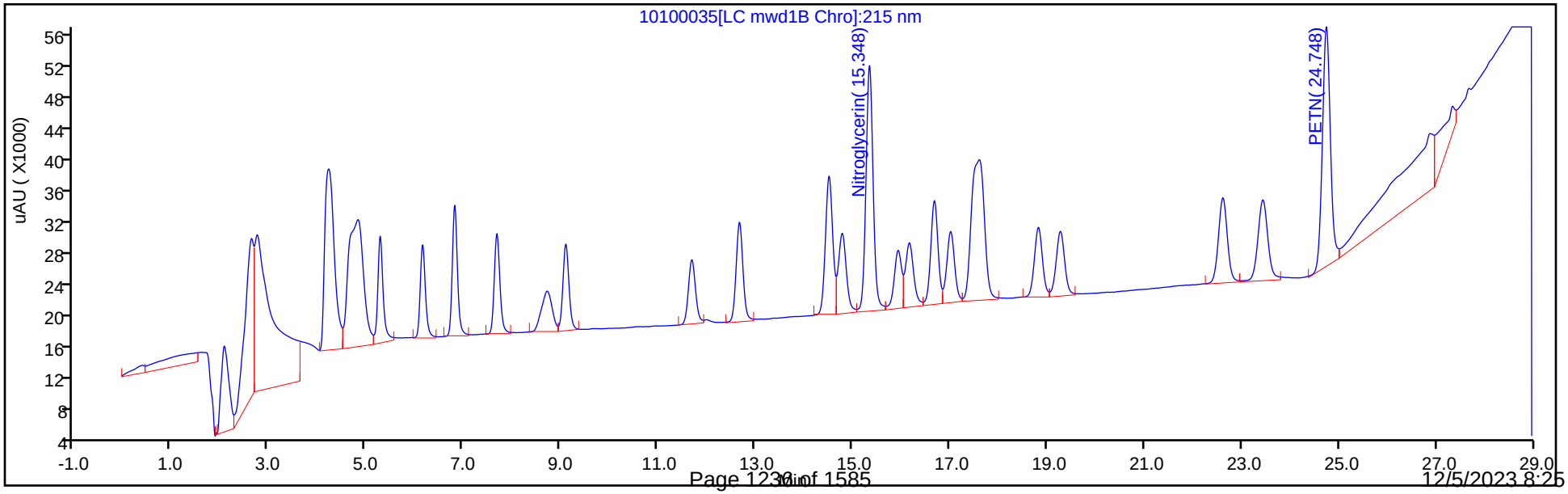
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Injection Date:	11-Oct-2023 08:30:57	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	35
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



12/5/2023 8:25 AM

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-628171/1-A

Matrix: Water | Lab File ID: 10070011.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 10/03/2023 13:12

Sample wt/vol: 500(mL) | Date Analyzed: 10/07/2023 14:59

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 628897 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045
6629-29-4	2,4-diamino-6-nitrotoluene	0.90	U	1.0	0.90	0.43
121-14-2	2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027
59229-75-3	2,6-diamino-4-nitrotoluene	0.90	U	1.0	0.90	0.22
606-20-2	2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051
88-72-2	2-Nitrotoluene	0.20	U	0.21	0.20	0.086
618-87-1	3,5-Dinitroaniline	0.30	U	0.40	0.30	0.13
99-08-1	3-Nitrotoluene	0.35	U	0.40	0.35	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058
99-99-0	4-Nitrotoluene	0.40	U	0.41	0.40	0.10
80251-29-2	DNX	0.25	U	0.50	0.25	0.097
2691-41-0	HMX	0.20	U	0.21	0.20	0.088
5755-27-1	MNX	0.138	J	0.50	0.29	0.093
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.091
55-63-0	Nitroglycerin	2.0	U	2.1	2.0	0.92
78-11-5	PETN	1.0	U	1.1	1.0	0.45
121-82-4	RDX	0.20	U	0.21	0.20	0.052
479-45-8	Tetryl	0.10	U	0.11	0.10	0.032
13980-04-6	TNX	0.25	U	0.50	0.25	0.079

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	85	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\10070011.D
Lims ID: MB 280-628171/1-A
Client ID:
Sample Type: MB
Inject. Date: 07-Oct-2023 14:59:30 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-628171/1-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2023 11:16:40 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1602

First Level Reviewer: LV5D Date: 07-Oct-2023 15:25:17

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
1 Triamine Trinitrobenzene	1		2.444				ND	
2 2,6-diamino-4-nitrotoluene	1		6.438				ND	7
3 TNX	1		6.450				ND	
4 HMX	1		6.570				ND	
5 2,4-diamino-6-nitrotoluene	1		6.625				ND	
6 DNX	1		6.776				ND	
7 MNX	1	7.214	7.196	0.018	1913		0.0138	
8 RDX	1		7.576				ND	
9 2,4,6-Trinitrophenol	1		7.943				ND	
$ 10 1,2-Dinitrobenzene	1	8.514	8.516	-0.002	20986	0.2000	0.1694	M
11 1,3,5-Trinitrobenzene	1		8.643				ND	
12 1,3-Dinitrobenzene	1		9.250				ND	
13 Nitrobenzene	1		9.616				ND	
14 3,5-Dinitroaniline	1		9.830				ND	
15 Tetryl	1		9.956				ND	
16 Nitroglycerin	2		10.410				ND	
17 2,4,6-Trinitrotoluene	1		10.843				ND	
18 4-Amino-2,6-dinitrotoluene	1		11.010				ND	
19 2-Amino-4,6-dinitrotoluene	1		11.256				ND	
20 2,6-Dinitrotoluene	1		11.423				ND	
21 2,4-Dinitrotoluene	1		11.590				ND	
22 o-Nitrotoluene	1		12.390				ND	7
23 p-Nitrotoluene	1		12.796				ND	
24 m-Nitrotoluene	1		13.356				ND	
25 PETN	2		14.470				ND	
26 Ammonium Picrate	1		0.000				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Review Flags
M - Manually Integrated

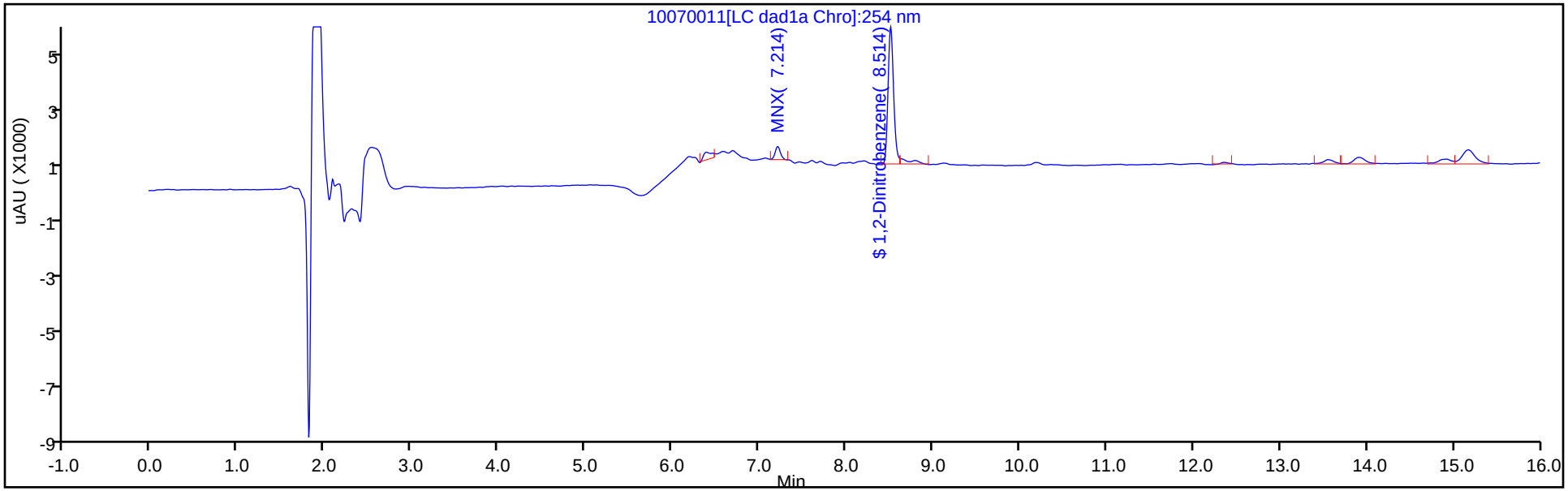
Report Date: 09-Oct-2023 11:16:49 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

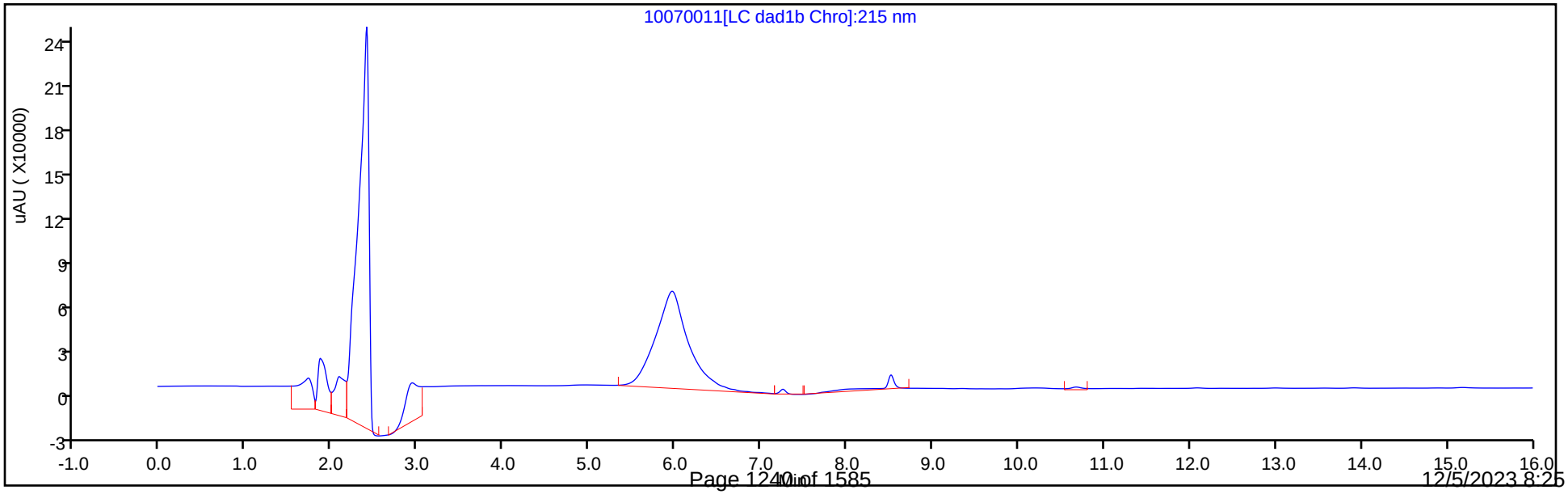
Data File: \\chromfs\denver\chromdata\chhplc_x\20231007-126276.b\10070011.d

Injection Date:	07-Oct-2023 14:59:30	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	MB 280-628171/1-A			Worklist Smp#:	11
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\10070011.D				
Lims ID:	MB 280-628171/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	07-Oct-2023 14:59:30	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	MB 280-628171/1-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	09-Oct-2023 11:16:40	Calib Date:	24-Jun-2023 00:23:49		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1602				

First Level Reviewer: LV5D Date: 07-Oct-2023 15:25:17

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1694	84.68

Manual Integration/User Assign Peak Report

Eurofins Denver

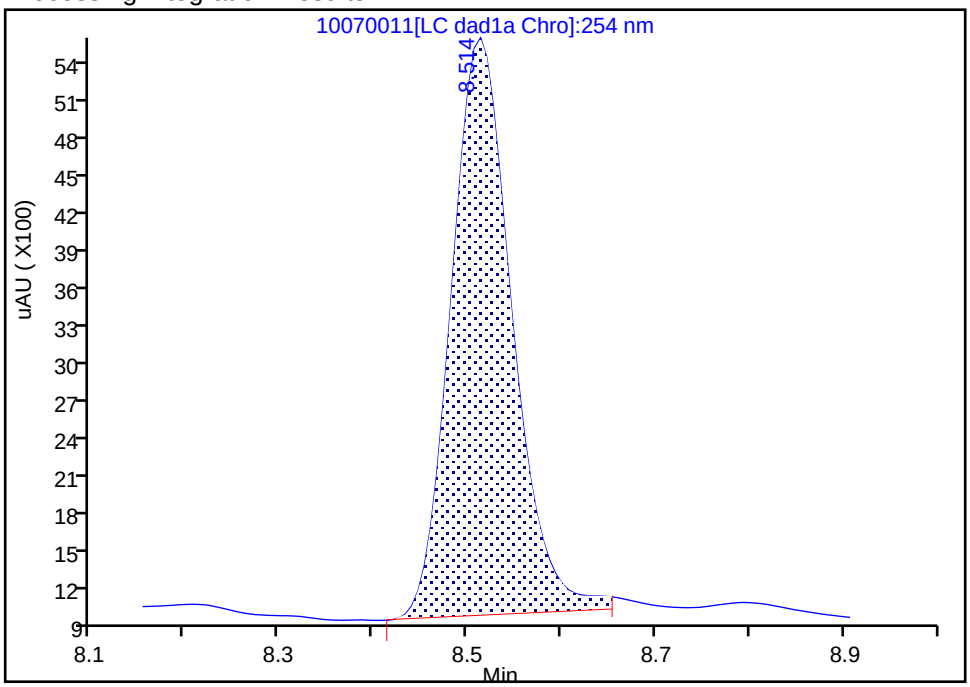
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231007-126276.b\10070011.d				
Injection Date:	07-Oct-2023 14:59:30	Instrument ID:	CHHPLC_X3		
Lims ID:	MB 280-628171/1-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

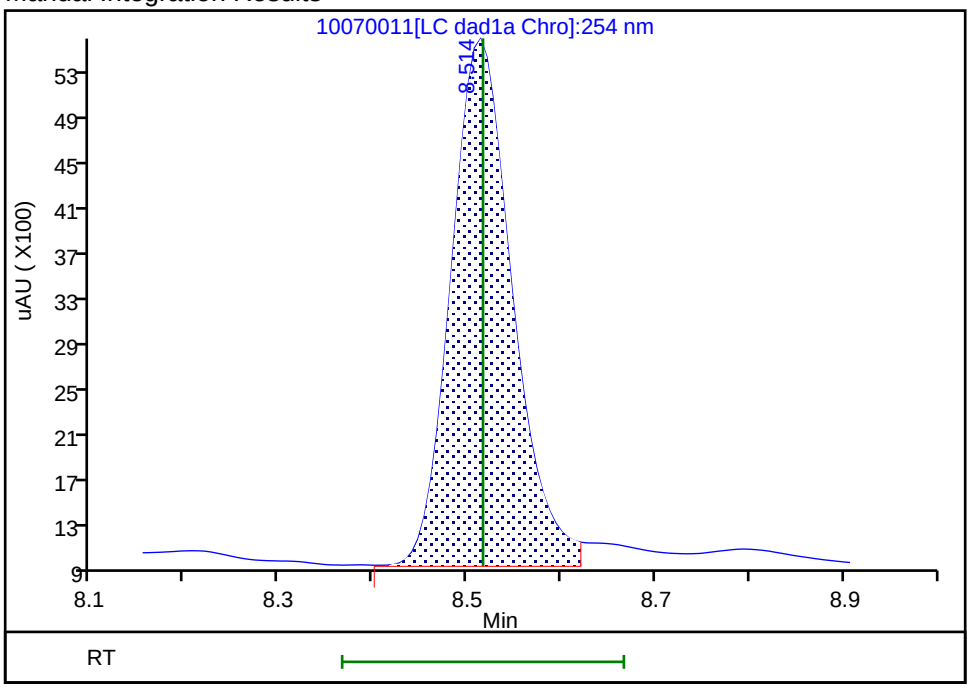
Processing Integration Results

RT: 8.51
Area: 20719
Amount: 0.167209
Amount Units: ug/mL



Manual Integration Results

RT: 8.51
Area: 20986
Amount: 0.169364
Amount Units: ug/mL



Reviewer: LV5D, 07-Oct-2023 15:25:16 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-629471/1-A

Matrix: Water | Lab File ID: 10130018.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 10/12/2023 14:54

Sample wt/vol: 500(mL) | Date Analyzed: 10/13/2023 18:00

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 629672 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045
6629-29-4	2,4-diamino-6-nitrotoluene	0.90	U	1.0	0.90	0.43
121-14-2	2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027
59229-75-3	2,6-diamino-4-nitrotoluene	0.90	U	1.0	0.90	0.22
606-20-2	2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051
88-72-2	2-Nitrotoluene	0.20	U	0.21	0.20	0.086
618-87-1	3,5-Dinitroaniline	0.30	U	0.40	0.30	0.13
99-08-1	3-Nitrotoluene	0.35	U	0.40	0.35	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058
99-99-0	4-Nitrotoluene	0.40	U	0.41	0.40	0.10
80251-29-2	DNX	0.25	U	0.50	0.25	0.097
2691-41-0	HMX	0.20	U	0.21	0.20	0.088
5755-27-1	MNX	0.154	J	0.50	0.29	0.093
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.091
55-63-0	Nitroglycerin	2.0	U	2.1	2.0	0.92
78-11-5	PETN	1.0	U	1.1	1.0	0.45
121-82-4	RDX	0.20	U	0.21	0.20	0.052
479-45-8	Tetryl	0.10	U	0.11	0.10	0.032
13980-04-6	TNX	0.25	U	0.50	0.25	0.079

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	99	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\10130018.D
Lims ID: MB 280-629471/1-A
Client ID:
Sample Type: MB
Inject. Date: 13-Oct-2023 18:00:58 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-629471/1-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-Oct-2023 11:09:26 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1675

First Level Reviewer: LV5D Date: 13-Oct-2023 18:54:32

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
1	Triamine Trinitrobenzene	1		2.444				ND	
2	2,6-diamino-4-nitrotoluene	1		6.443				ND	7
3	TNX	1		6.444				ND	
4	HMX	1		6.577				ND	
5	2,4-diamino-6-nitrotoluene	1		6.630				ND	
6	DNX	1		6.777				ND	
7	MNX	1	7.220	7.204	0.016	2135		0.0154	
8	RDX	1		7.584				ND	
9	2,4,6-Trinitrophenol	1		7.957				ND	
$ 10	1,2-Dinitrobenzene	1	8.527	8.524	0.003	24602	0.2000	0.1985	M
11	1,3,5-Trinitrobenzene	1		8.650				ND	
12	1,3-Dinitrobenzene	1		9.264				ND	
13	Nitrobenzene	1		9.630				ND	
14	3,5-Dinitroaniline	1		9.850				ND	
15	Tetryl	1		9.984				ND	
16	Nitroglycerin	2		10.430				ND	
17	2,4,6-Trinitrotoluene	1		10.870				ND	
18	4-Amino-2,6-dinitrotoluene	1		11.044				ND	
19	2-Amino-4,6-dinitrotoluene	1		11.297				ND	
20	2,6-Dinitrotoluene	1		11.457				ND	
21	2,4-Dinitrotoluene	1		11.624				ND	
22	o-Nitrotoluene	1		12.430				ND	7
23	p-Nitrotoluene	1		12.844				ND	
24	m-Nitrotoluene	1		13.404				ND	
25	PETN	2		14.537				ND	
26	Ammonium Picrate	1		0.000				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Review Flags
M - Manually Integrated

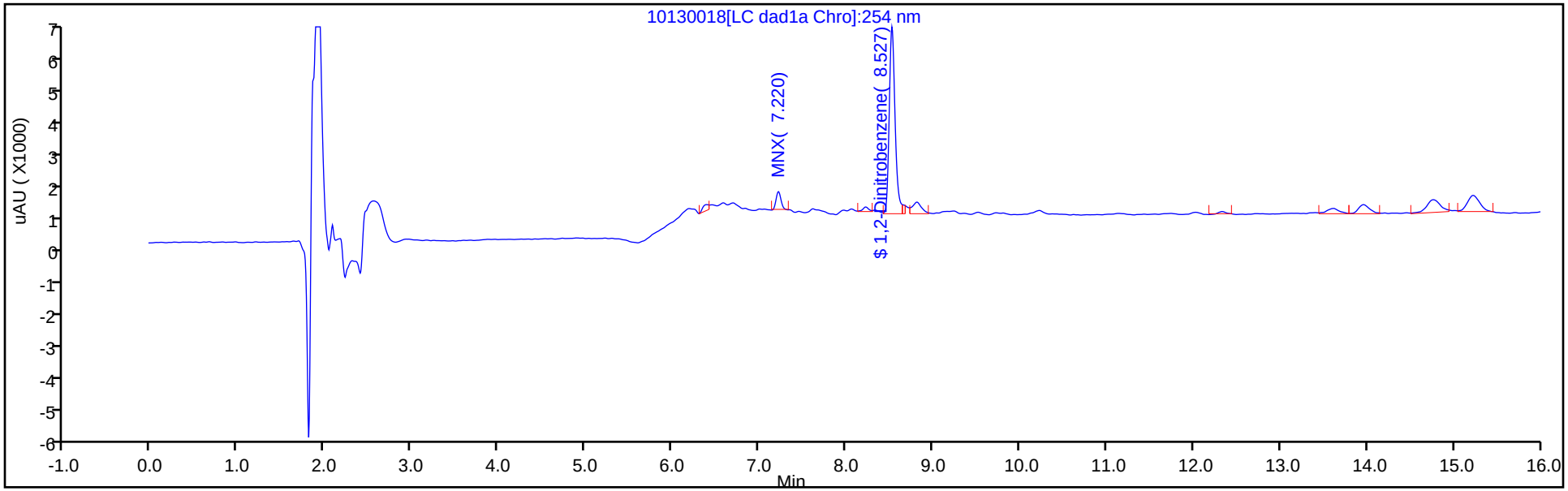
Report Date: 16-Oct-2023 11:34:47 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

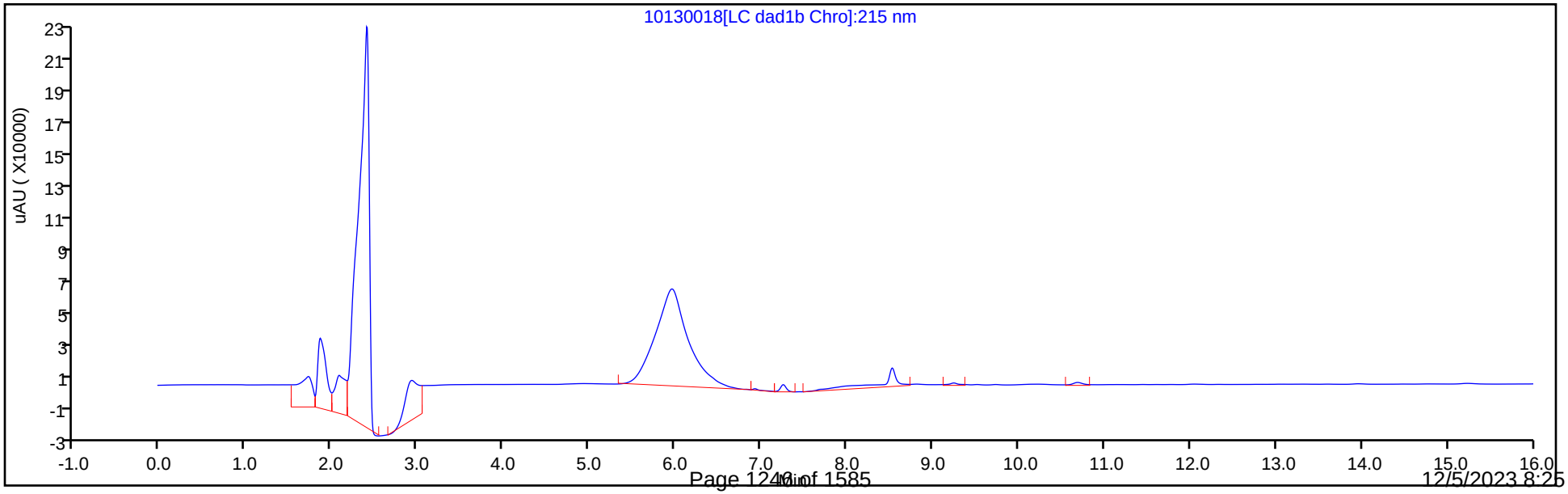
Data File: \\chromfs\denver\chromdata\chhplc_x\20231013-126501.b\10130018.d

Injection Date:	13-Oct-2023 18:00:58	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	MB 280-629471/1-A			Worklist Smp#:	18
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\10130018.D
Lims ID: MB 280-629471/1-A
Client ID:
Sample Type: MB
Inject. Date: 13-Oct-2023 18:00:58 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-629471/1-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-Oct-2023 11:09:26 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1675

First Level Reviewer: LV5D Date: 13-Oct-2023 18:54:32

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1985	99.27

Manual Integration/User Assign Peak Report

Eurofins Denver

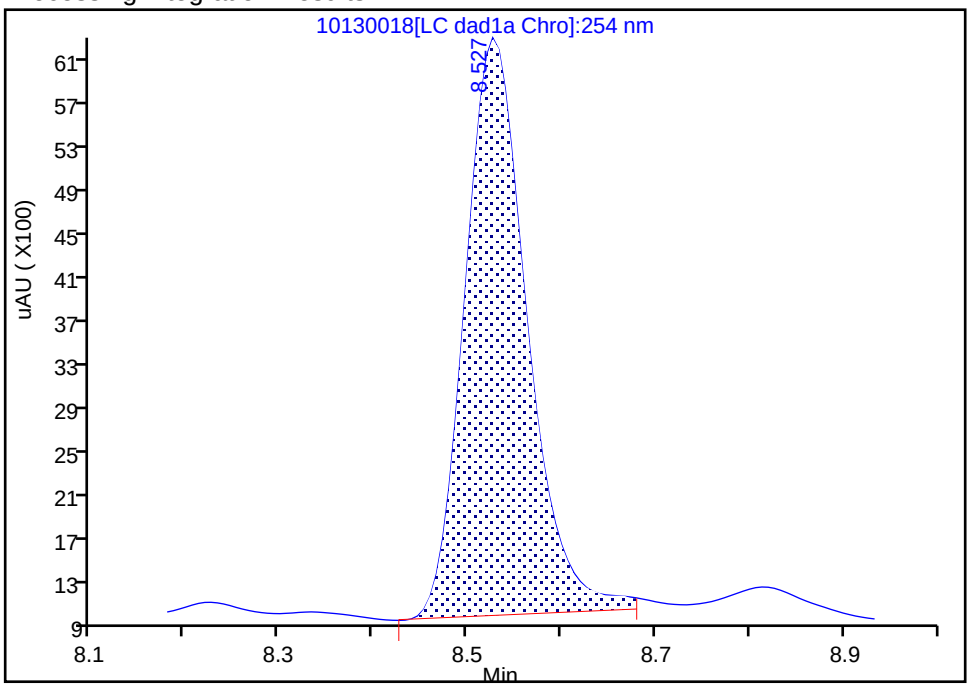
Data File: \\chromfs\denver\chromdata\chhplc_x\20231013-126501.b\10130018.d
Injection Date: 13-Oct-2023 18:00:58 Instrument ID: CHHPLC_X3
Lims ID: MB 280-629471/1-A
Client ID:
Operator ID: JZ/JG ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

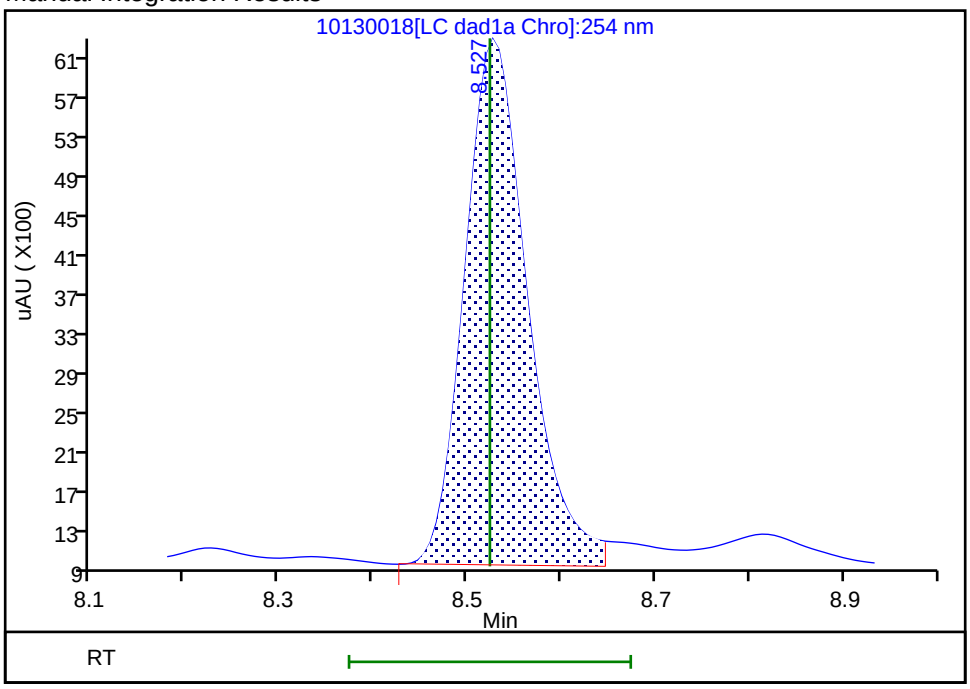
Processing Integration Results

RT: 8.53
Area: 24193
Amount: 0.195245
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 24602
Amount: 0.198546
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 10:03:47 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-628171/2-A

Matrix: Water | Lab File ID: 10070012.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 10/03/2023 13:12

Sample wt/vol: 500(mL) | Date Analyzed: 10/07/2023 15:22

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 628897 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.88		0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	1.78		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	1.71		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	1.68		0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	1.66		0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.66		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.46		0.21	0.20	0.086
618-87-1	3,5-Dinitroaniline	1.53		0.40	0.30	0.13
99-08-1	3-Nitrotoluene	1.45	Q	0.40	0.35	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.47	Q	0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.40	Q	0.41	0.40	0.10
80251-29-2	DNX	2.14		0.50	0.25	0.097
2691-41-0	HMX	1.96		0.21	0.20	0.088
5755-27-1	MNX	2.27		0.50	0.29	0.093
98-95-3	Nitrobenzene	1.62		0.21	0.20	0.091
55-63-0	Nitroglycerin	18.4		2.1	2.0	0.92
78-11-5	PETN	18.8		1.1	1.0	0.45
121-82-4	RDX	1.74		0.21	0.20	0.052
479-45-8	Tetryl	1.83		0.11	0.10	0.032
13980-04-6	TNX	1.97		0.50	0.25	0.079

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	85		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\10070012.D
Lims ID: LCS 280-628171/2-A
Client ID:
Sample Type: LCS
Inject. Date: 07-Oct-2023 15:22:22 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-628171/2-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2023 11:16:40 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1602

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 TNX	1	6.444	6.450	-0.006	39647	0.2002	0.1975	
	4 HMX	1	6.570	6.570	0.000	18433	0.2000	0.1956	
	6 DNX	1	6.770	6.776	-0.006	30947	0.2008	0.2142	
	7 MNX	1	7.197	7.196	0.001	31509	0.2342	0.2272	
	8 RDX	1	7.577	7.576	0.001	19198	0.2000	0.1737	
	9 2,4,6-Trinitrophenol	1	7.937	7.943	-0.006	16256	0.2000	0.2088	
$	10 1,2-Dinitrobenzene	1	8.517	8.516	0.001	20987	0.2000	0.1694	
	11 1,3,5-Trinitrobenzene	1	8.644	8.643	0.001	40612	0.2000	0.1880	
	12 1,3-Dinitrobenzene	1	9.250	9.250	0.000	52184	0.2000	0.1779	
	13 Nitrobenzene	1	9.617	9.616	0.001	31197	0.2000	0.1619	
	14 3,5-Dinitroaniline	1	9.830	9.830	0.000	34343	0.2000	0.1531	
	15 Tetryl	1	9.963	9.956	0.007	30661	0.2000	0.1833	
	16 Nitroglycerin	2	10.410	10.410	0.000	119105	2.00	1.84	
	17 2,4,6-Trinitrotoluene	1	10.843	10.843	0.000	35046	0.2000	0.1710	
	18 4-Amino-2,6-dinitrotoluene	1	11.010	11.010	0.000	22007	0.2000	0.1471	
	19 2-Amino-4,6-dinitrotoluene	1	11.257	11.256	0.001	32121	0.2000	0.1658	
	20 2,6-Dinitrotoluene	1	11.423	11.423	0.000	23720	0.2000	0.1663	
	21 2,4-Dinitrotoluene	1	11.590	11.590	0.000	49757	0.2000	0.1683	
	22 o-Nitrotoluene	1	12.390	12.390	0.000	18370	0.2000	0.1457	
	23 p-Nitrotoluene	1	12.797	12.796	0.001	15419	0.2000	0.1401	
	24 m-Nitrotoluene	1	13.357	13.356	0.001	20168	0.2000	0.1448	
	25 PETN	2	14.477	14.470	0.007	135722	2.00	1.88	

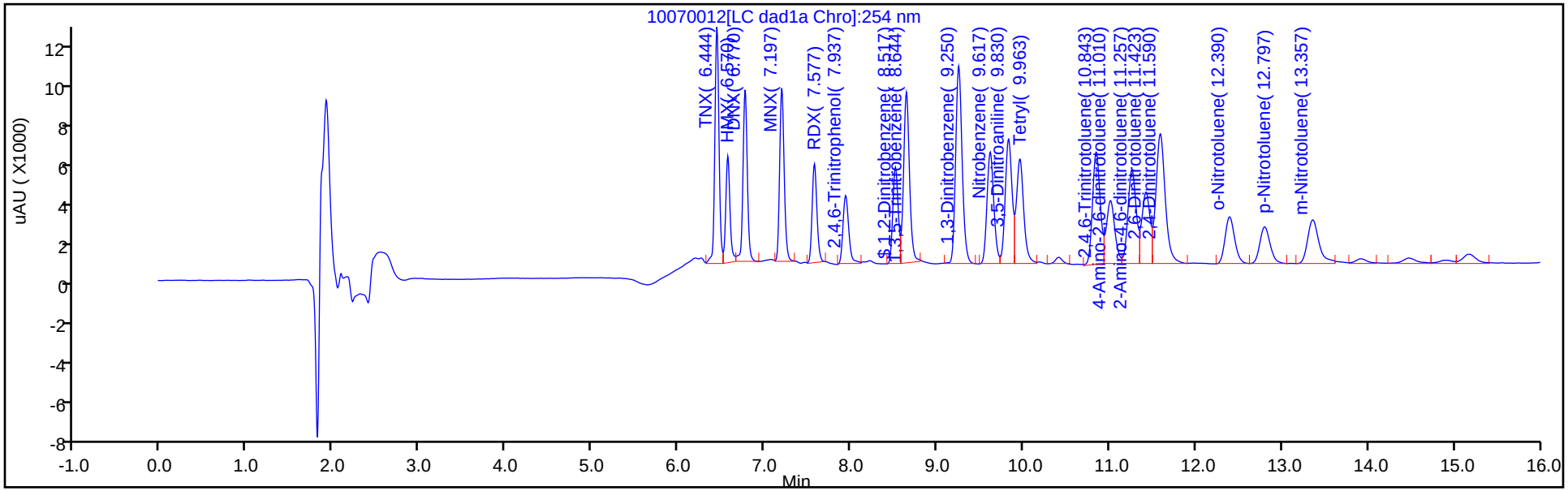
Report Date: 09-Oct-2023 11:16:50 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

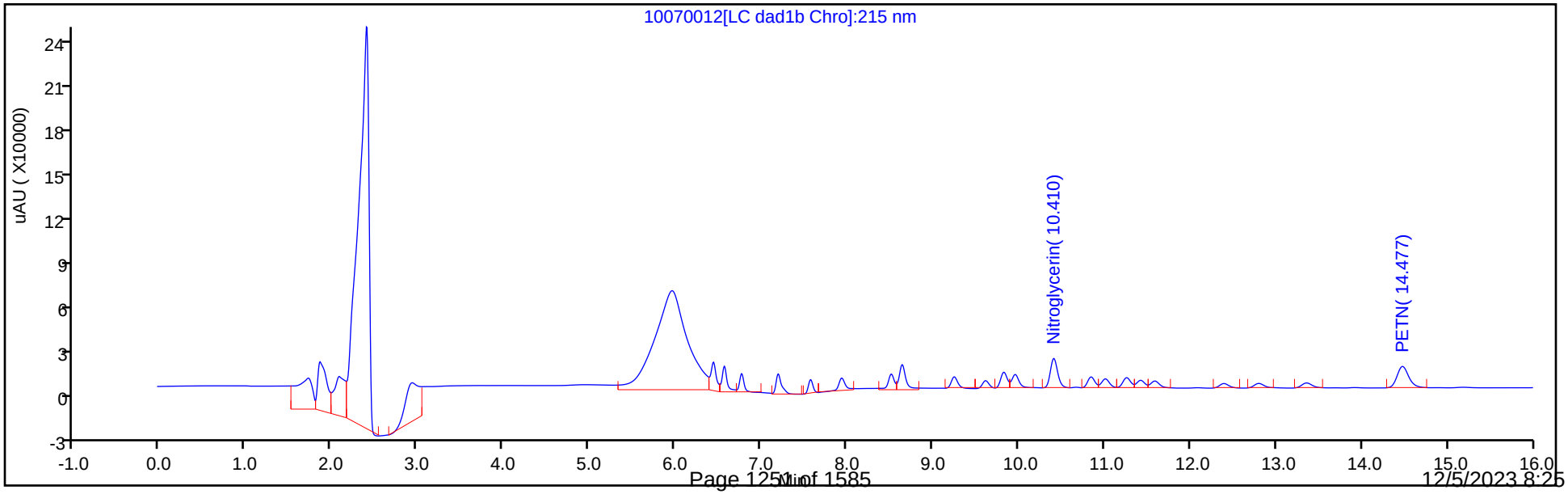
Data File: \\chromfs\denver\chromdata\chhplc_x\20231007-126276.b\10070012.d

Injection Date:	07-Oct-2023 15:22:22	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	LCS 280-628171/2-A			Worklist Smp#:	12
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



12/5/2023 8:25 AM

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\10070012.D
Lims ID: LCS 280-628171/2-A
Client ID:
Sample Type: LCS
Inject. Date: 07-Oct-2023 15:22:22 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-628171/2-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2023 11:16:40 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1602

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1694	84.69

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-628171/4-A

Matrix: Water | Lab File ID: 10070014.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 10/03/2023 13:12

Sample wt/vol: 500(mL) | Date Analyzed: 10/07/2023 16:08

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 628897 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
6629-29-4	2,4-diamino-6-nitrotoluene	1.33	Q	1.0	0.90	0.43
59229-75-3	2,6-diamino-4-nitrotoluene	1.48		1.0	0.90	0.22

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	96		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\10070014.D
Lims ID: LCS 280-628171/4-A
Client ID:
Sample Type: LCS
Inject. Date: 07-Oct-2023 16:08:09 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-628171/4-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2023 11:16:40 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1602

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2	2,6-diamino-4-nitrotoluene	1	6.440	6.438	0.002	33447	0.2000	0.1483	
5	2,4-diamino-6-nitrotoluene	1	6.626	6.625	0.001	19035	0.2000	0.1328	
$ 10	1,2-Dinitrobenzene	1	8.513	8.516	-0.003	23690	0.2000	0.1912	

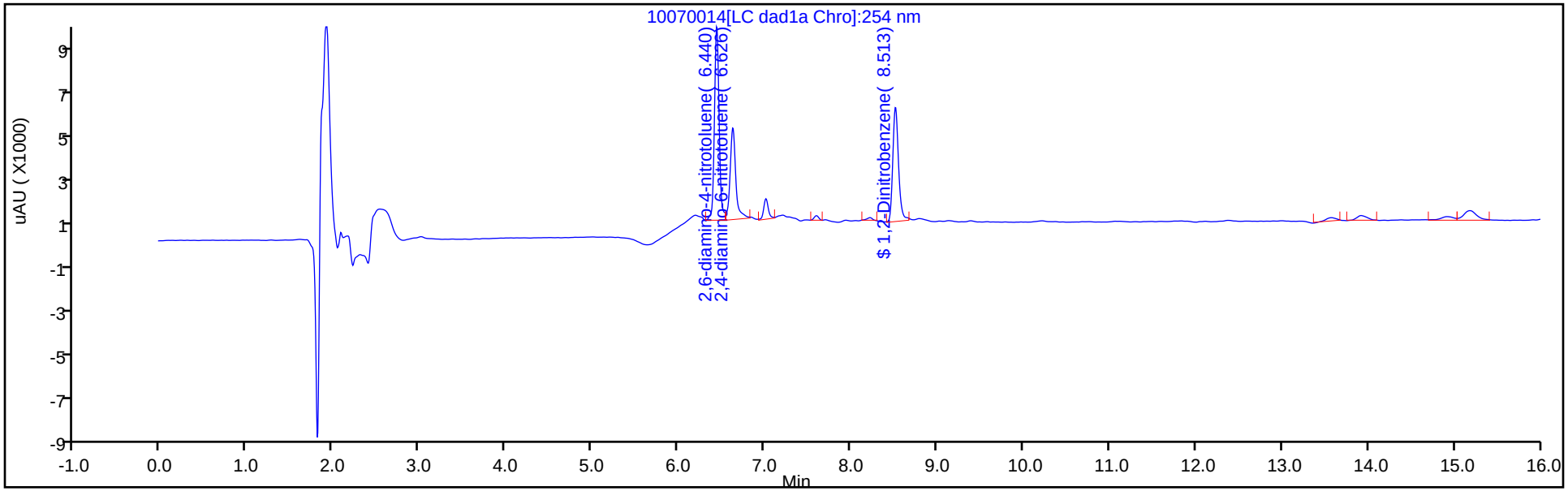
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Eurofins Denver

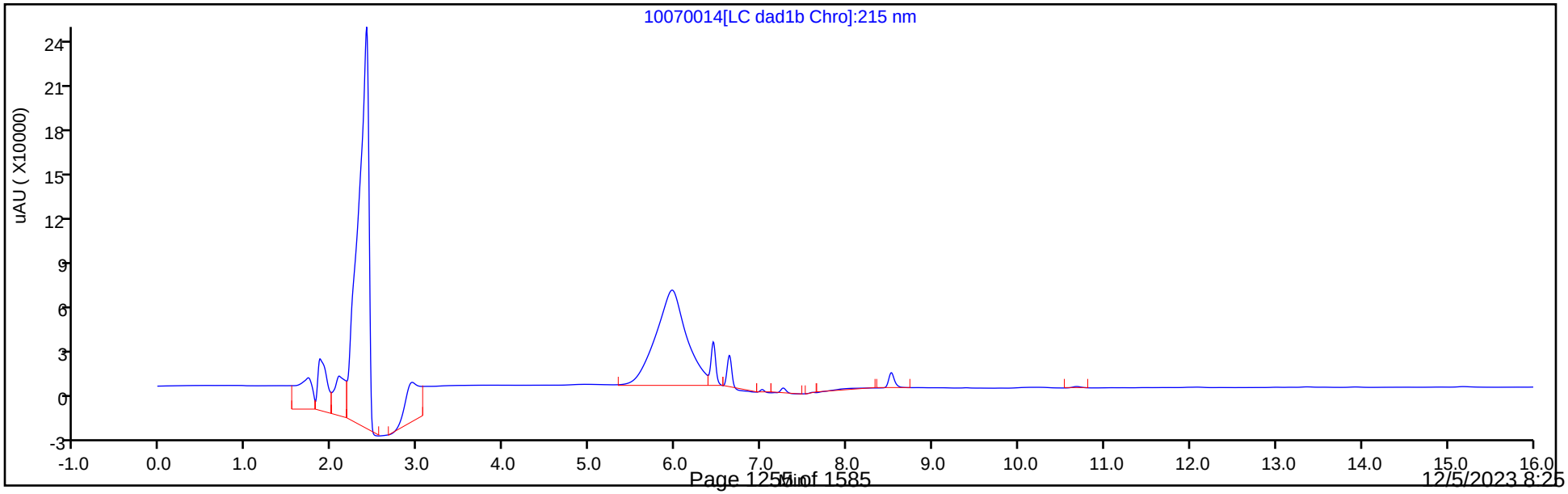
Data File: \\chromfs\denver\chromdata\chhplc_x\20231007-126276.b\10070014.d

Injection Date:	07-Oct-2023 16:08:09	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	LCS 280-628171/4-A			Worklist Smp#:	14
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\10070014.D
Lims ID: LCS 280-628171/4-A
Client ID:
Sample Type: LCS
Inject. Date: 07-Oct-2023 16:08:09 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-628171/4-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2023 11:16:40 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1602

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1912	95.59

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-629471/2-A

Matrix: Water | Lab File ID: 10130019.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 10/12/2023 14:54

Sample wt/vol: 500(mL) | Date Analyzed: 10/13/2023 18:23

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 629672 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.81	M Q	0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	1.64	M Q	0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	1.56	Q	0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	1.45	Q	0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	1.48	Q	0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.47	Q	0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.15	Q	0.21	0.20	0.086
618-87-1	3,5-Dinitroaniline	1.42	M Q	0.40	0.30	0.13
99-08-1	3-Nitrotoluene	1.09	M Q	0.40	0.35	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.42	Q	0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.12	Q	0.41	0.40	0.10
80251-29-2	DNX	1.77	M Q	0.50	0.25	0.097
2691-41-0	HMX	1.62	M Q	0.21	0.20	0.088
5755-27-1	MNX	2.06	Q	0.50	0.29	0.093
98-95-3	Nitrobenzene	1.37	M Q	0.21	0.20	0.091
55-63-0	Nitroglycerin	18.0	Q	2.1	2.0	0.92
78-11-5	PETN	18.1	Q	1.1	1.0	0.45
121-82-4	RDX	1.81	Q	0.21	0.20	0.052
479-45-8	Tetryl	1.79	M Q	0.11	0.10	0.032
13980-04-6	TNX	1.63	M Q	0.50	0.25	0.079

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	81	M Q	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\10130019.D
Lims ID: LCS 280-629471/2-A
Client ID:
Sample Type: LCS
Inject. Date: 13-Oct-2023 18:23:59 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-629471/2-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-Oct-2023 11:09:26 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1675

First Level Reviewer: K8YG Date: 16-Oct-2023 10:11:26

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.444	6.444	0.000	32678	0.2002	0.1628	M
4 HMX	1	6.570	6.577	-0.007	15289	0.2000	0.1622	M
6 DNX	1	6.770	6.777	-0.007	25507	0.2008	0.1765	M
7 MNX	1	7.197	7.204	-0.007	28626	0.2342	0.2064	
8 RDX	1	7.577	7.584	-0.007	19956	0.2000	0.1806	
9 2,4,6-Trinitrophenol	1	7.950	7.957	-0.007	16994	0.2000	0.2183	
$ 10 1,2-Dinitrobenzene	1	8.524	8.524	0.000	20192	0.2000	0.1630	M
11 1,3,5-Trinitrobenzene	1	8.650	8.650	0.000	39089	0.2000	0.1809	Ma
12 1,3-Dinitrobenzene	1	9.263	9.264	-0.001	48136	0.2000	0.1641	M
13 Nitrobenzene	1	9.630	9.630	0.000	26342	0.2000	0.1367	M
14 3,5-Dinitroaniline	1	9.850	9.850	0.000	31813	0.2000	0.1418	M
15 Tetryl	1	9.983	9.984	-0.001	29888	0.2000	0.1787	M
16 Nitroglycerin	2	10.430	10.430	0.000	116250	2.00	1.80	
17 2,4,6-Trinitrotoluene	1	10.863	10.870	-0.007	31970	0.2000	0.1560	
18 4-Amino-2,6-dinitrotoluene	1	11.043	11.044	-0.001	21180	0.2000	0.1416	
19 2-Amino-4,6-dinitrotoluene	1	11.290	11.297	-0.007	28453	0.2000	0.1469	
20 2,6-Dinitrotoluene	1	11.450	11.457	-0.007	21060	0.2000	0.1476	
21 2,4-Dinitrotoluene	1	11.617	11.624	-0.007	42824	0.2000	0.1448	
22 o-Nitrotoluene	1	12.423	12.430	-0.007	14539	0.2000	0.1153	
23 p-Nitrotoluene	1	12.830	12.844	-0.014	12283	0.2000	0.1116	
24 m-Nitrotoluene	1	13.390	13.404	-0.014	15378	0.2000	0.1095	M
25 PETN	2	14.523	14.537	-0.014	130420	2.00	1.81	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

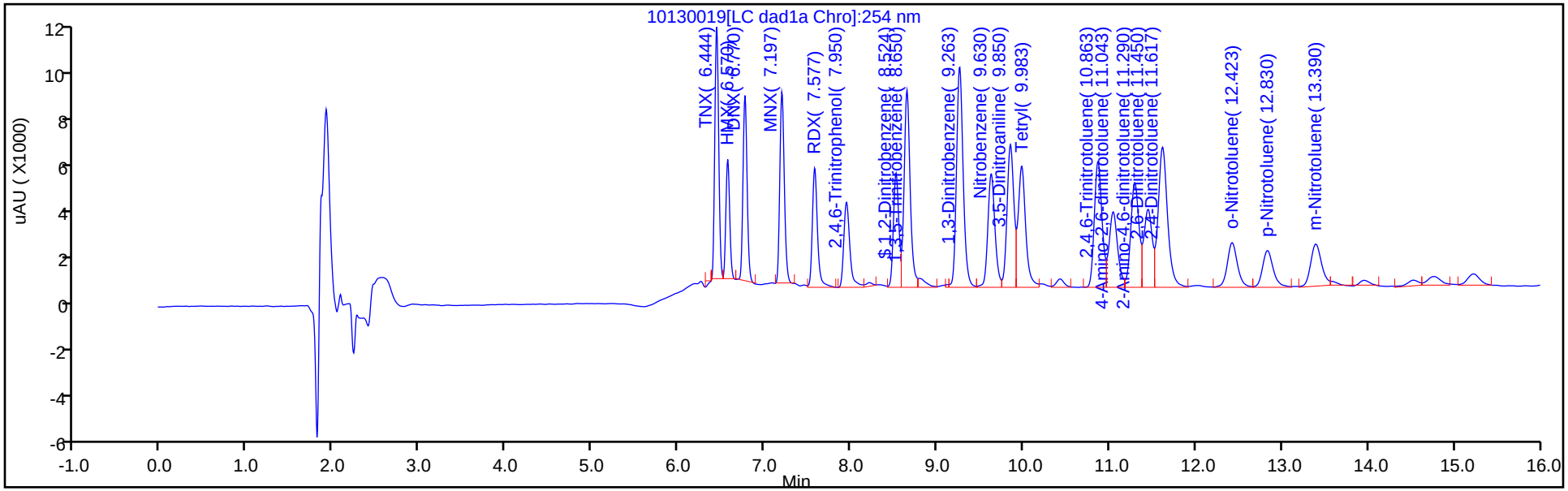
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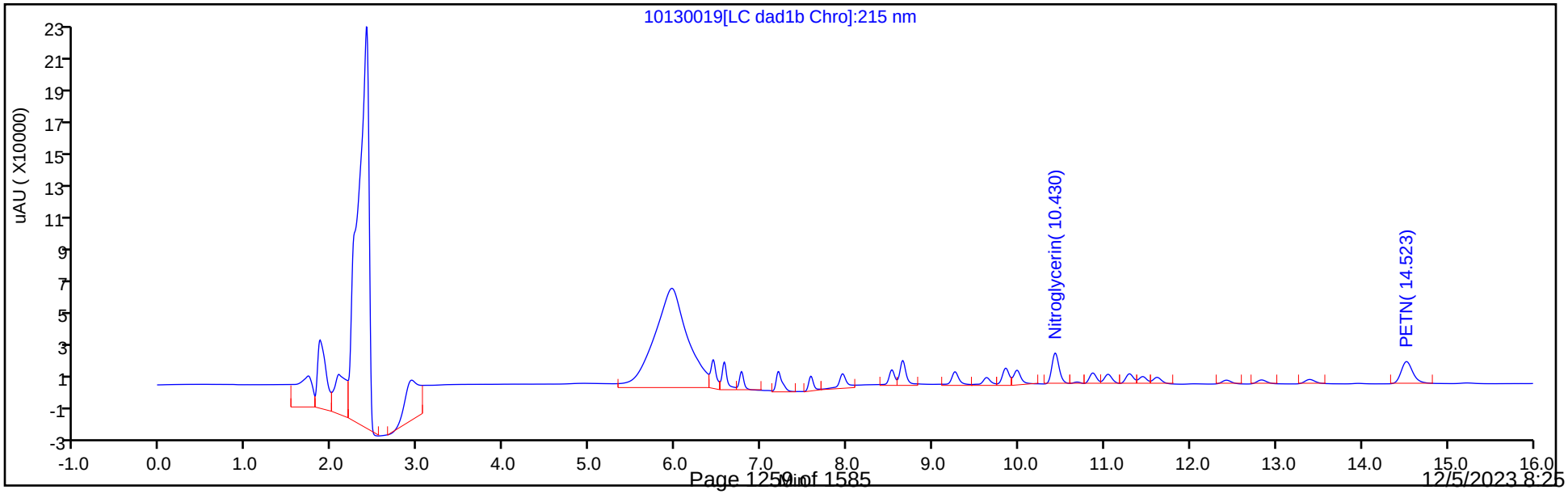
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Injection Date:	13-Oct-2023 18:23:59	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	LCS 280-629471/2-A			Worklist Smp#:	19
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



12/5/2023 8:25 AM

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\10130019.D
Lims ID: LCS 280-629471/2-A
Client ID:
Sample Type: LCS
Inject. Date: 13-Oct-2023 18:23:59 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-629471/2-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-Oct-2023 11:09:26 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1675

First Level Reviewer: K8YG Date: 16-Oct-2023 10:11:26

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1630	81.48

Manual Integration/User Assign Peak Report

Eurofins Denver

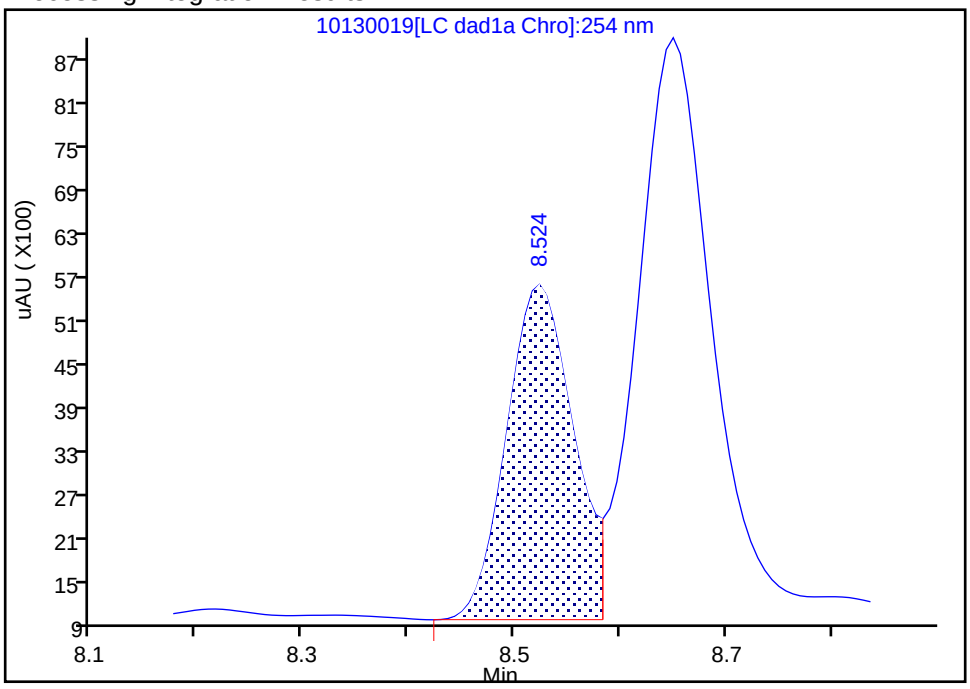
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Injection Date:	13-Oct-2023 18:23:59	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-629471/2-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

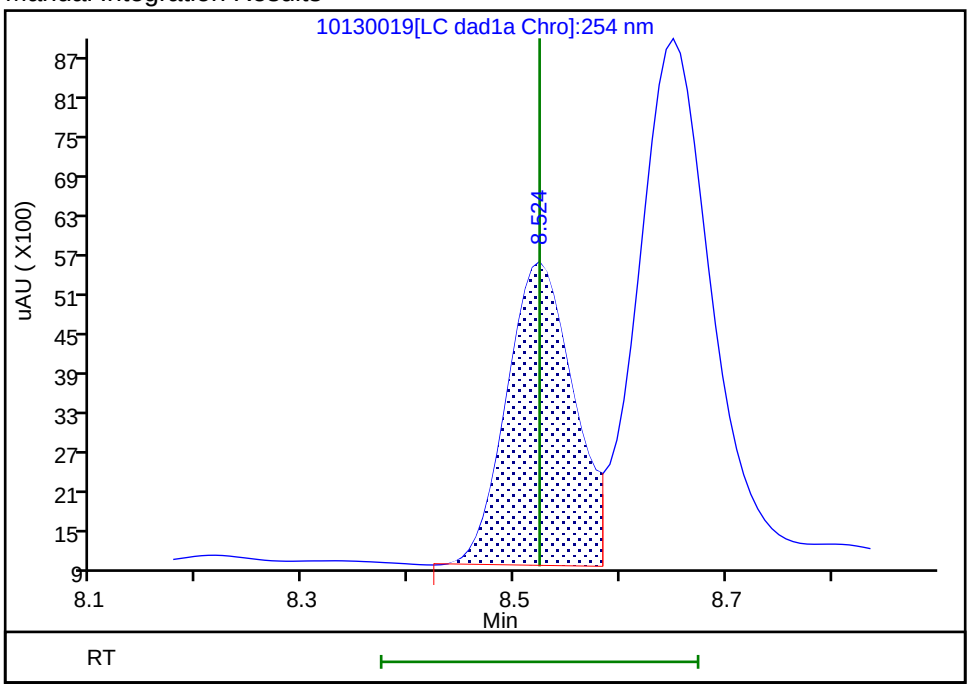
Processing Integration Results

RT: 8.52
Area: 19875
Amount: 0.160398
Amount Units: ug/mL



Manual Integration Results

RT: 8.52
Area: 20192
Amount: 0.162956
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 10:10:44 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver

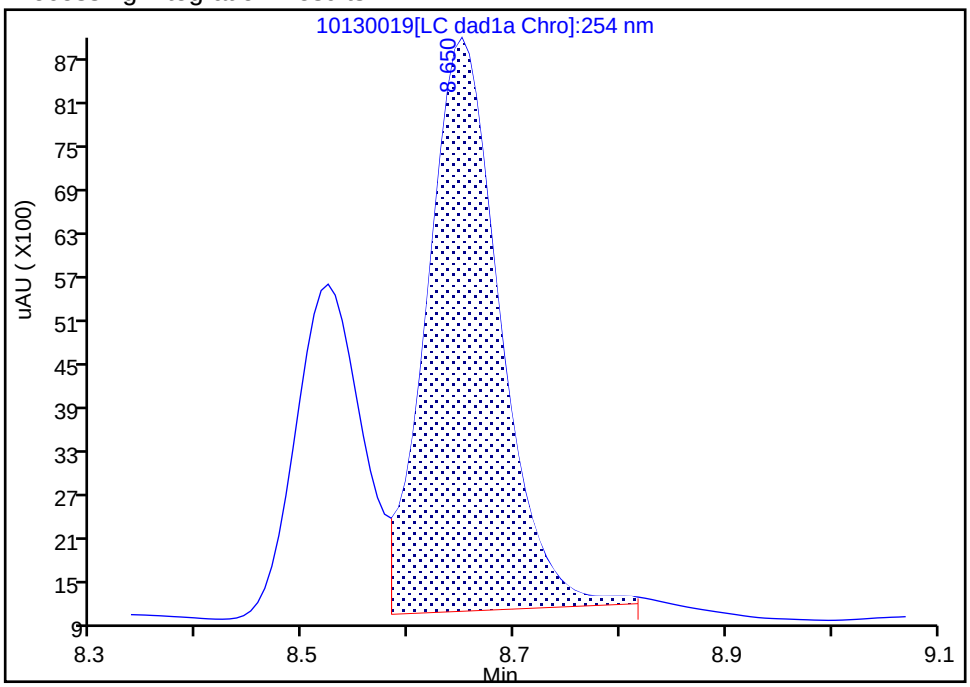
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231013-126501.b\10130019.d				
Injection Date:	13-Oct-2023 18:23:59	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-629471/2-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

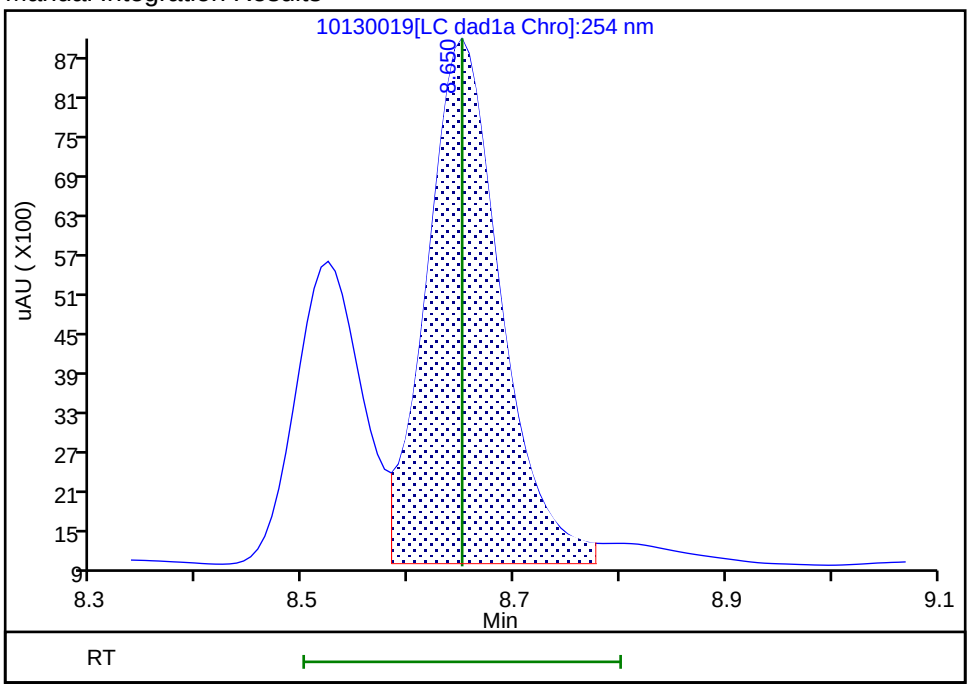
Processing Integration Results

RT: 8.65
Area: 37837
Amount: 0.175108
Amount Units: ug/mL



Manual Integration Results

RT: 8.65
Area: 39089
Amount: 0.180902
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 10:10:47 -06:00:00 (UTC)
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

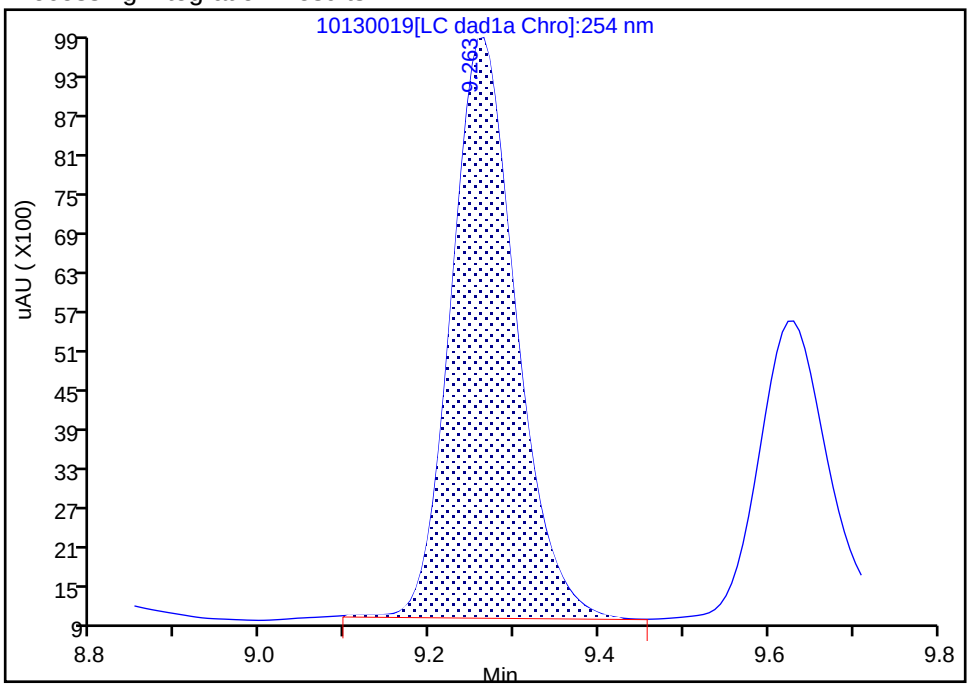
Data File: \\chromfs\denver\chromdata\chhplc_x\20231013-126501.b\10130019.d
Injection Date: 13-Oct-2023 18:23:59 Instrument ID: CHHPLC_X3
Lims ID: LCS 280-629471/2-A
Client ID:
Operator ID: JZ/JG ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

12 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

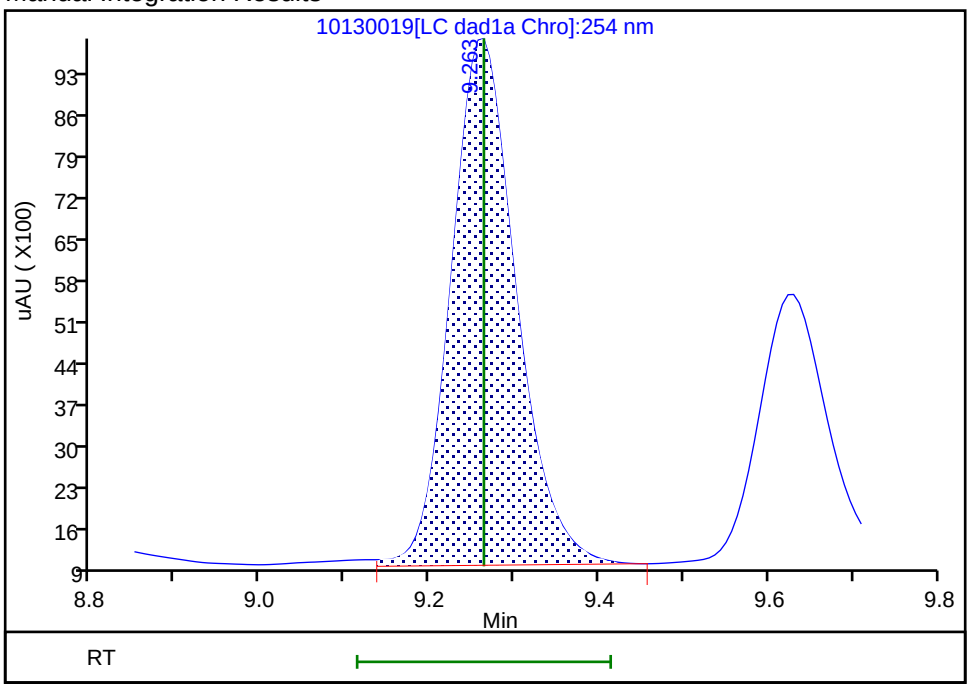
Processing Integration Results

RT: 9.26
Area: 47266
Amount: 0.161126
Amount Units: ug/mL



Manual Integration Results

RT: 9.26
Area: 48136
Amount: 0.164092
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 10:11:02 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

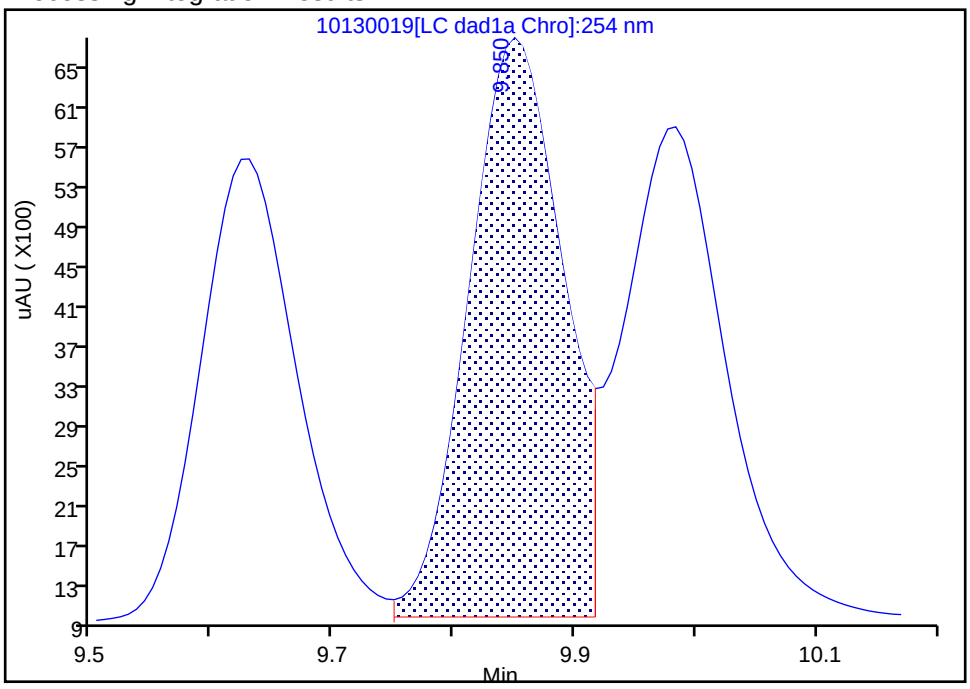
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Injection Date:	13-Oct-2023 18:23:59	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-629471/2-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

14 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

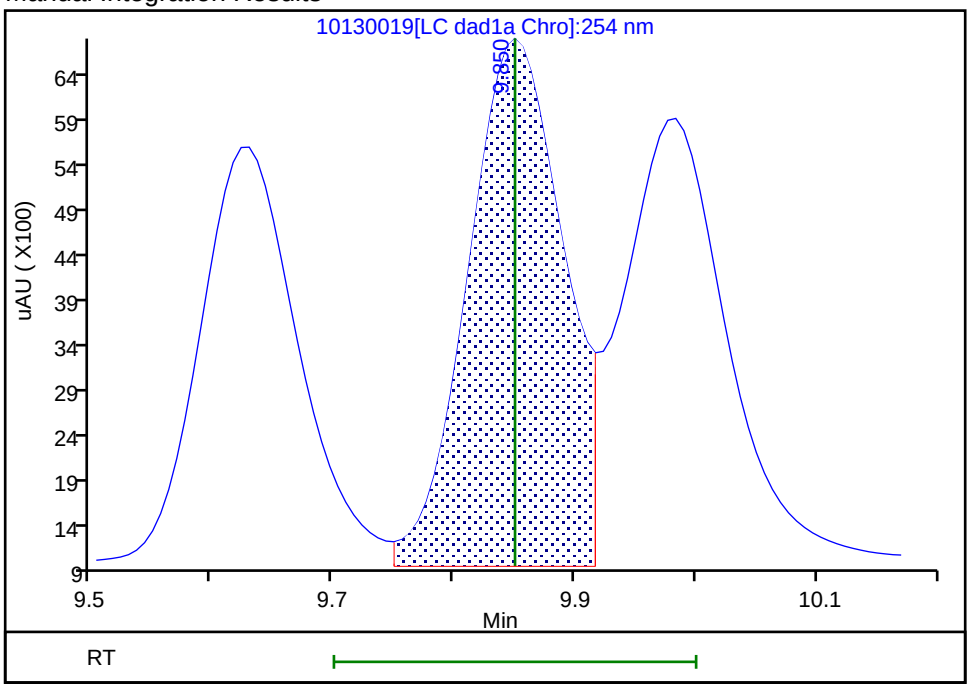
Processing Integration Results

RT: 9.85
Area: 30908
Amount: 0.137829
Amount Units: ug/mL



Manual Integration Results

RT: 9.85
Area: 31813
Amount: 0.141849
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 10:10:58 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

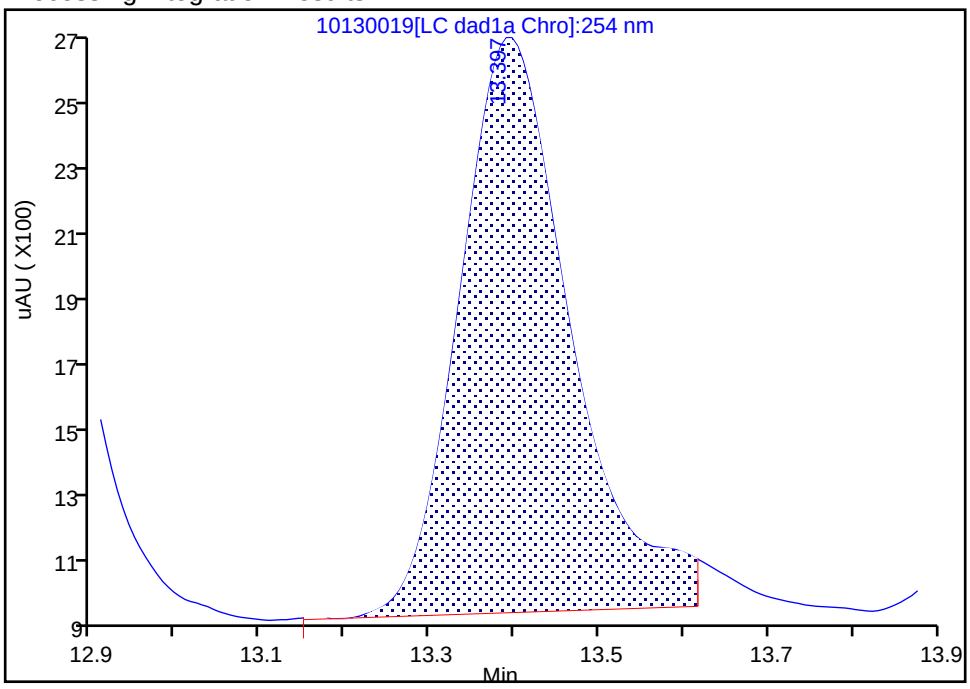
Data File: \\chromfs\denver\chromdata\chhplc_x\20231013-126501.b\10130019.d
Injection Date: 13-Oct-2023 18:23:59 Instrument ID: CHHPLC_X3
Lims ID: LCS 280-629471/2-A
Client ID:
Operator ID: JZ/JG ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

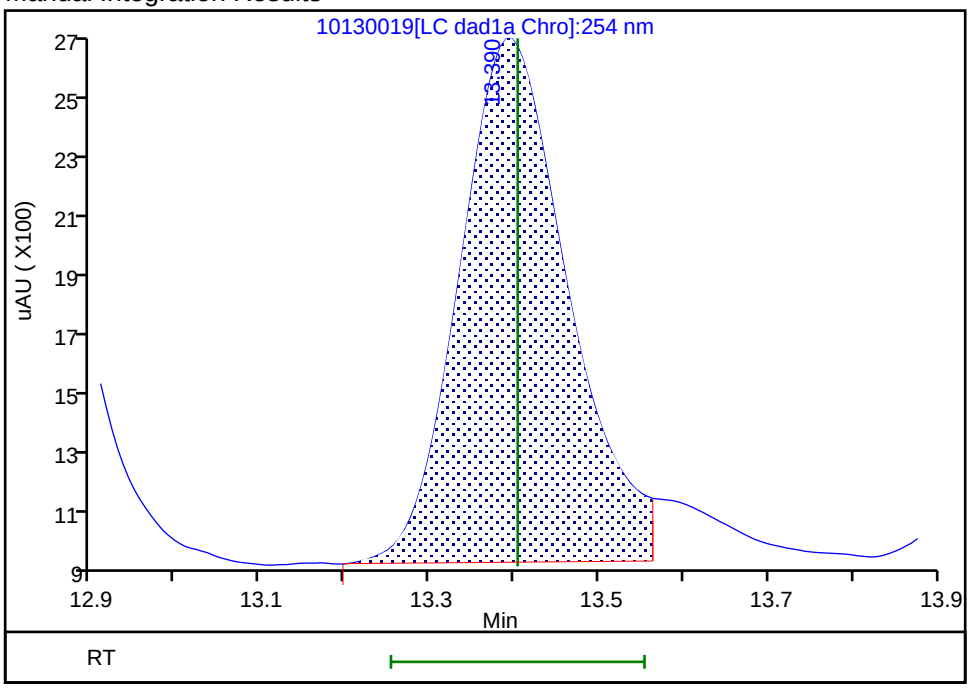
Processing Integration Results

RT: 13.40
Area: 15670
Amount: 0.111654
Amount Units: ug/mL



Manual Integration Results

RT: 13.39
Area: 15378
Amount: 0.109499
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 10:11:21 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

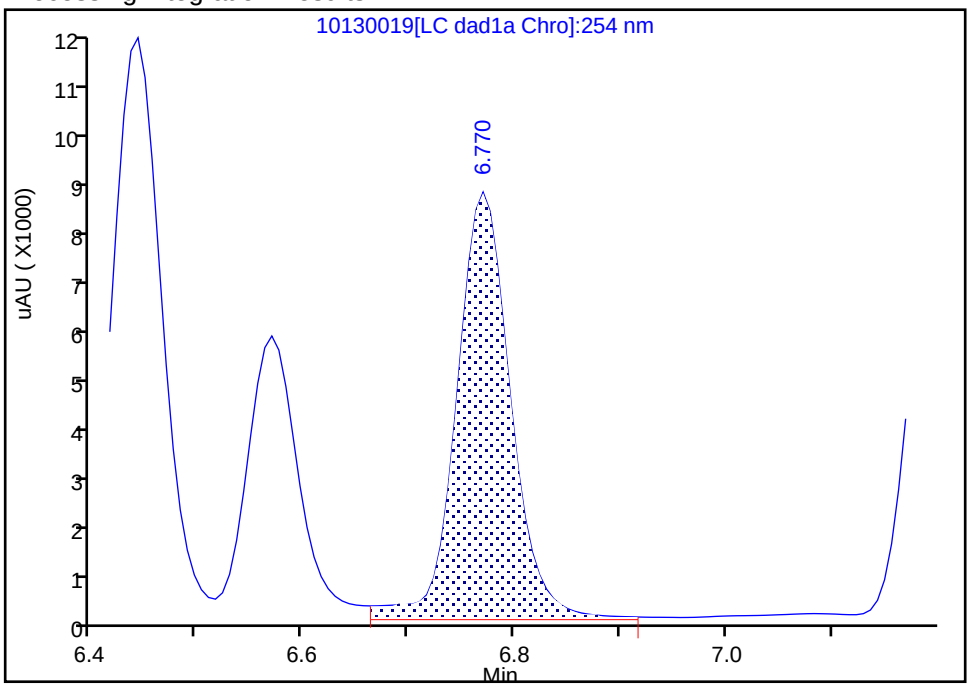
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Injection Date:	13-Oct-2023 18:23:59	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-629471/2-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

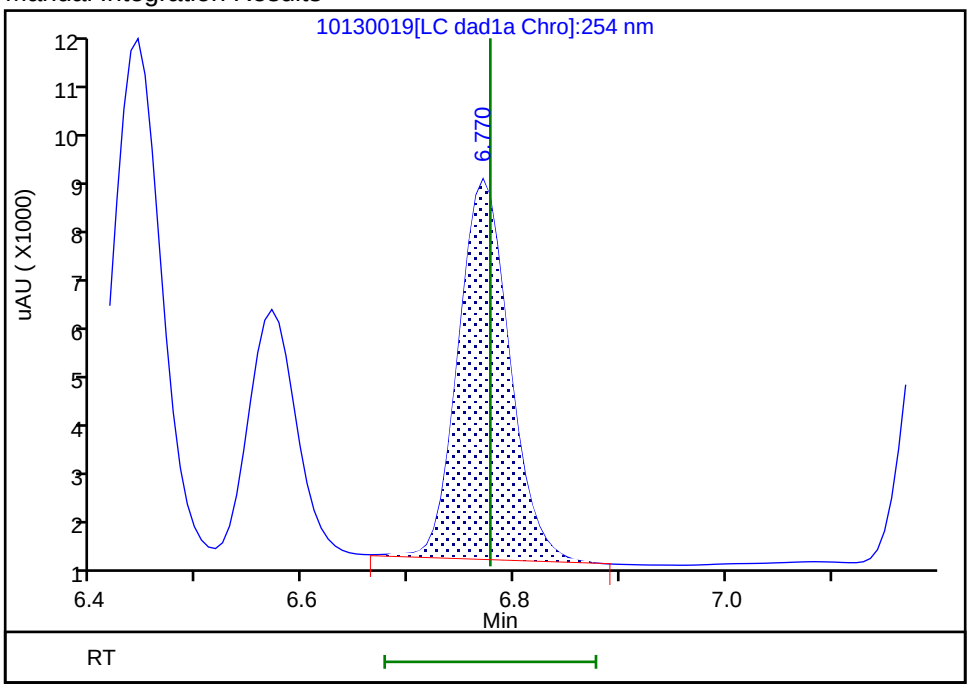
Processing Integration Results

RT: 6.77
Area: 27641
Amount: 0.191297
Amount Units: ug/mL



Manual Integration Results

RT: 6.77
Area: 25507
Amount: 0.176528
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 10:10:03 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

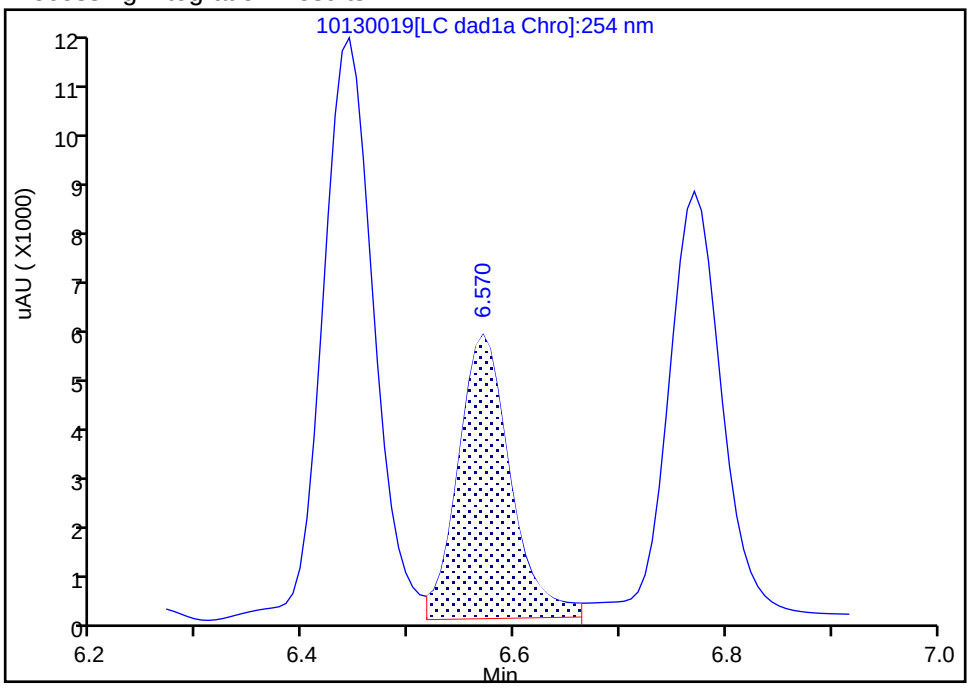
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231013-126501.b\10130019.d				
Injection Date:	13-Oct-2023 18:23:59	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-629471/2-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

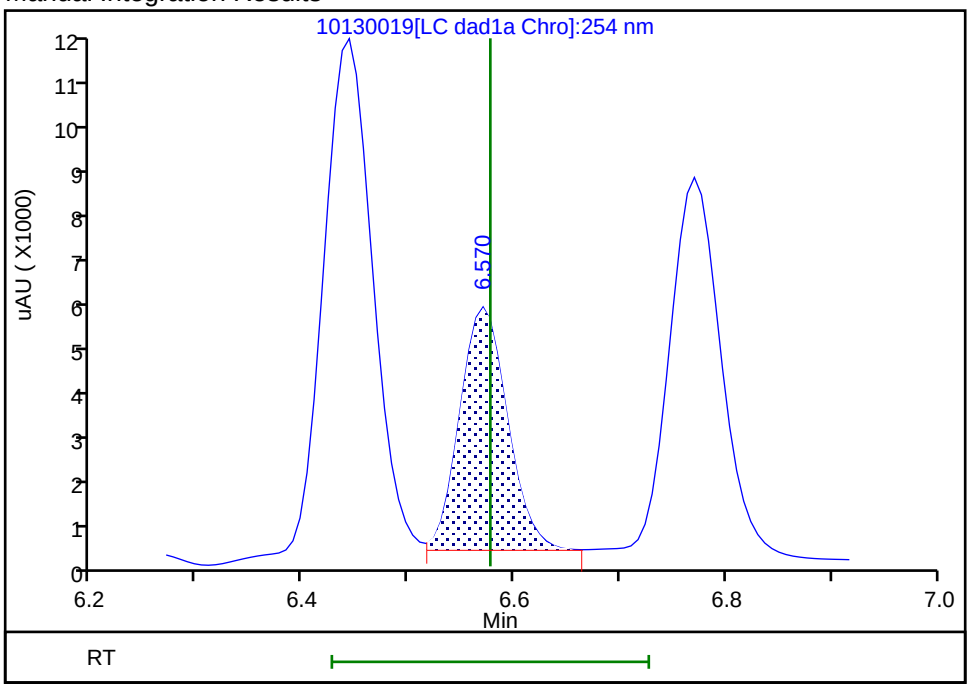
Processing Integration Results

RT: 6.57
Area: 17727
Amount: 0.188074
Amount Units: ug/mL



Manual Integration Results

RT: 6.57
Area: 15289
Amount: 0.162208
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 10:09:54 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

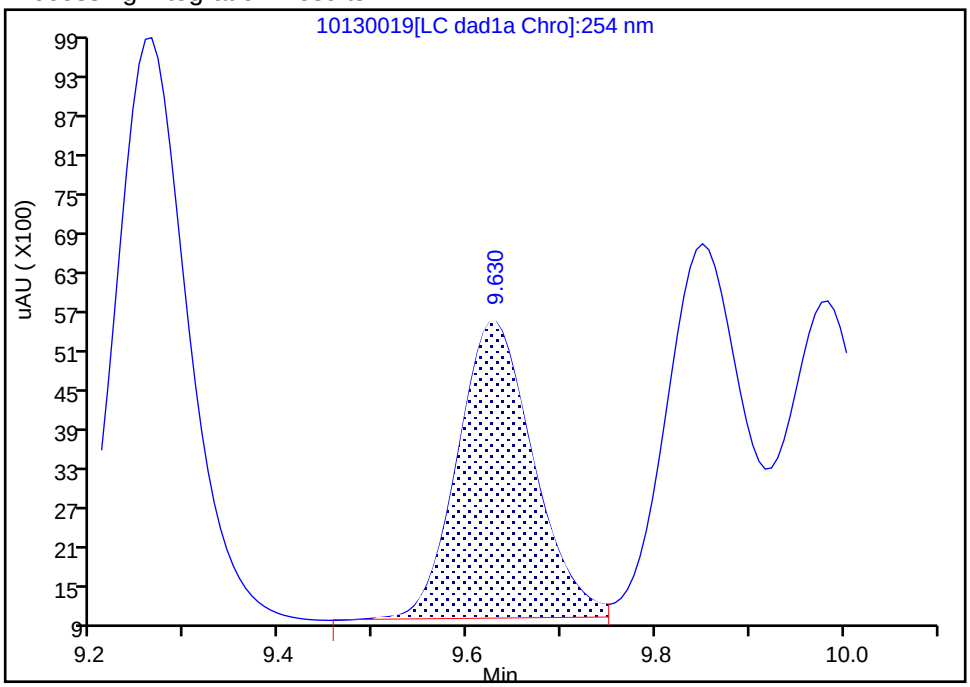
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231013-126501.b\10130019.d				
Injection Date:	13-Oct-2023 18:23:59	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-629471/2-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

13 Nitrobenzene, CAS: 98-95-3

Signal: 1

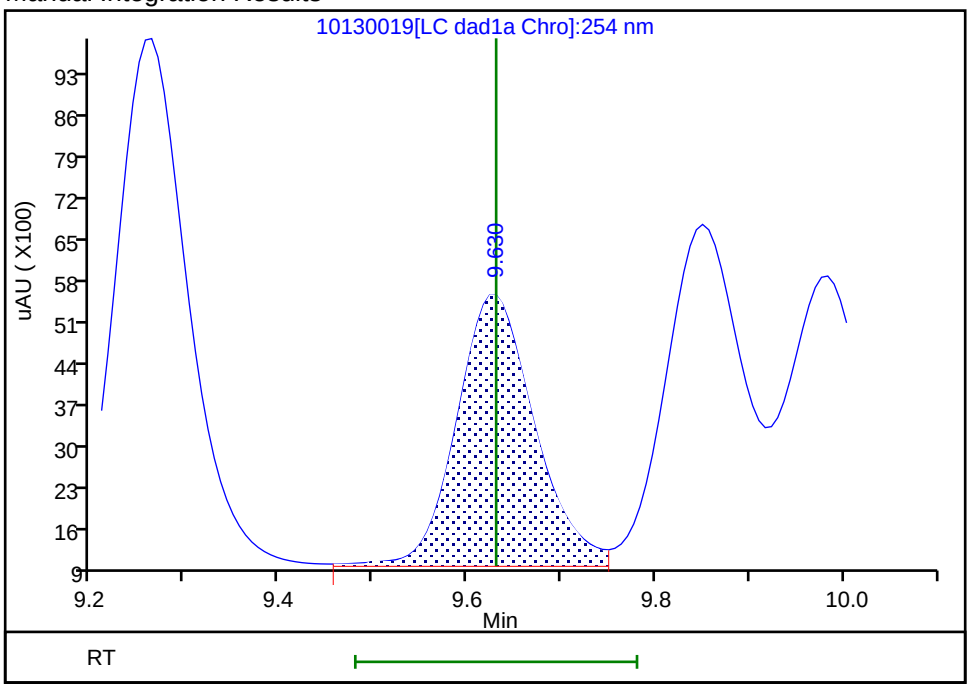
Processing Integration Results

RT: 9.63
Area: 25392
Amount: 0.131772
Amount Units: ug/mL



Manual Integration Results

RT: 9.63
Area: 26342
Amount: 0.136702
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 10:10:58 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

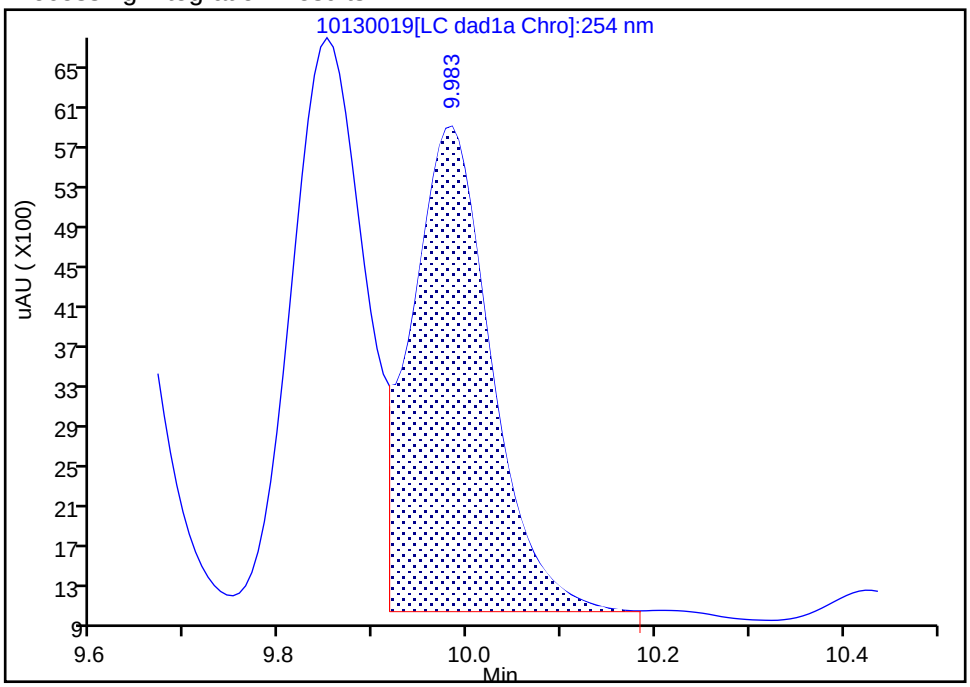
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Injection Date: 13-Oct-2023 18:23:59 Instrument ID: CHHPLC_X3
Lims ID: LCS 280-629471/2-A
Client ID:
Operator ID: JZ/JG ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

15 Tetryl, CAS: 479-45-8

Signal: 1

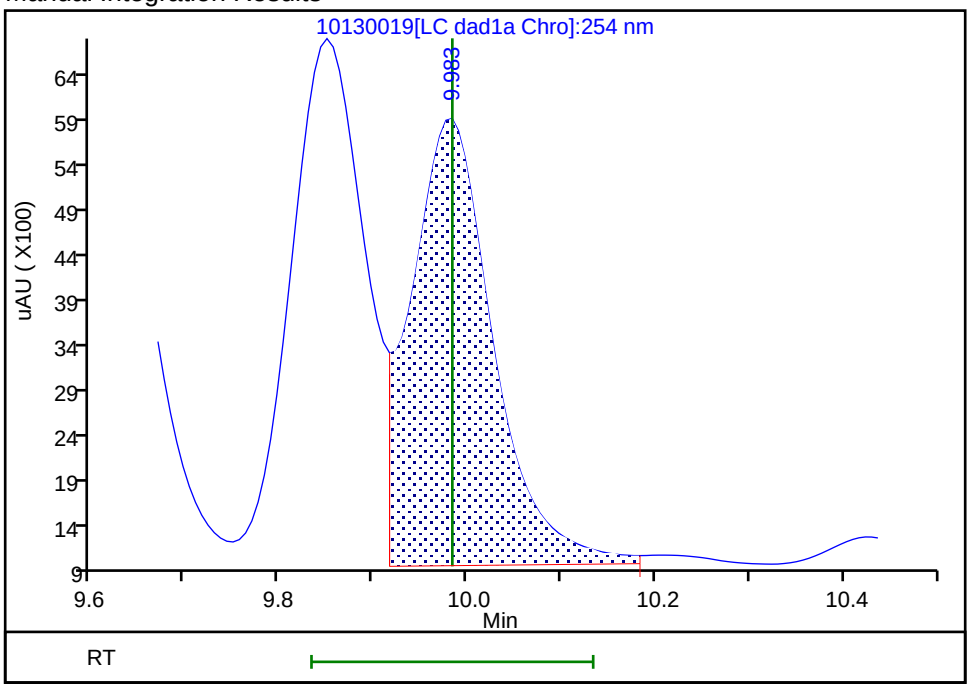
Processing Integration Results

RT: 9.98
Area: 28360
Amount: 0.169560
Amount Units: ug/mL



Manual Integration Results

RT: 9.98
Area: 29888
Amount: 0.178695
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 10:10:58 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

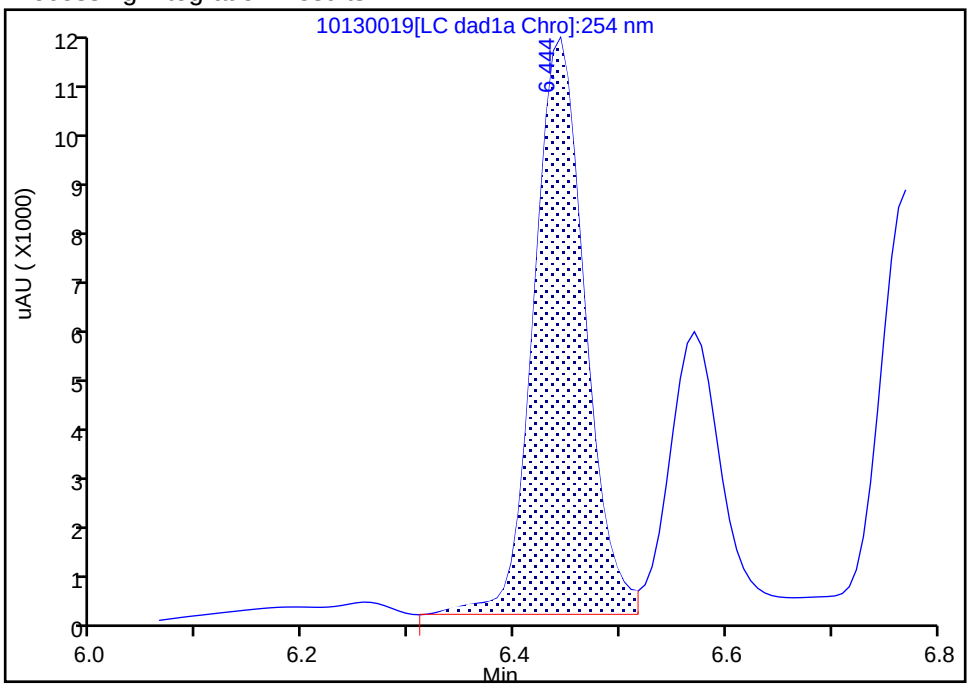
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231013-126501.b\10130019.d				
Injection Date:	13-Oct-2023 18:23:59	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-629471/2-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

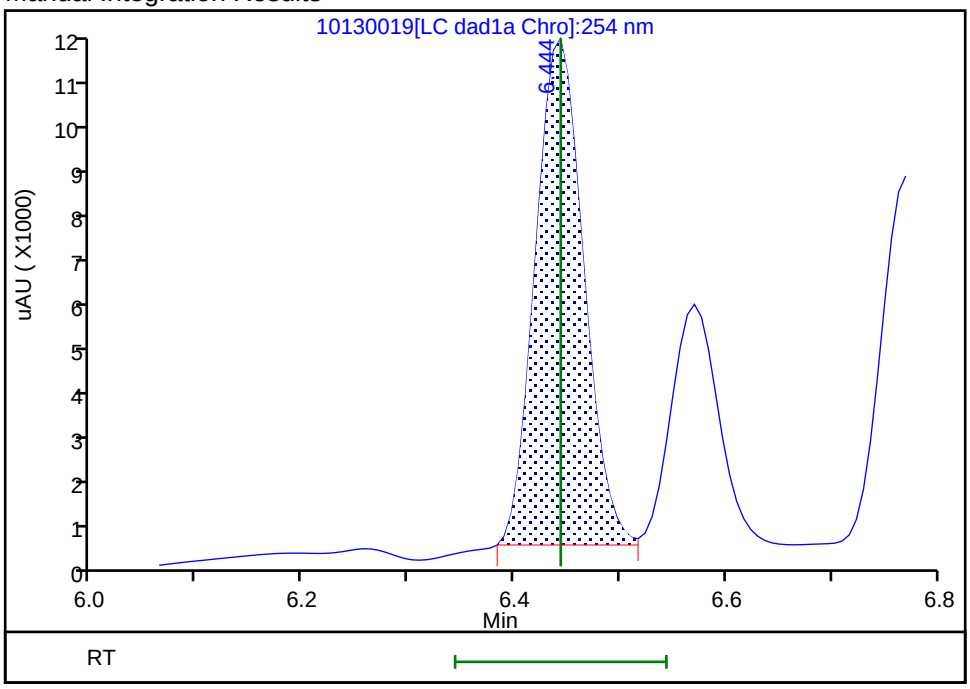
Processing Integration Results

RT: 6.44
Area: 35659
Amount: 0.177619
Amount Units: ug/mL



Manual Integration Results

RT: 6.44
Area: 32678
Amount: 0.162771
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 10:09:58 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-629471/4-A

Matrix: Water | Lab File ID: 10130021.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 10/12/2023 14:54

Sample wt/vol: 500(mL) | Date Analyzed: 10/13/2023 19:09

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 629672 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
6629-29-4	2,4-diamino-6-nitrotoluene	1.47	M	1.0	0.90	0.43
59229-75-3	2,6-diamino-4-nitrotoluene	1.57		1.0	0.90	0.22

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	102		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\10130021.D
Lims ID: LCS 280-629471/4-A
Client ID:
Sample Type: LCS
Inject. Date: 13-Oct-2023 19:09:50 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-629471/4-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-Oct-2023 11:09:26 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1675

First Level Reviewer: K8YG Date: 16-Oct-2023 10:47:50

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	2 2,6-diamino-4-nitrotoluene	1	6.442	6.443	-0.001	35341	0.2000	0.1567	
	5 2,4-diamino-6-nitrotoluene	1	6.628	6.630	-0.002	21111	0.2000	0.1473	M
$	10 1,2-Dinitrobenzene	1	8.522	8.524	-0.002	25327	0.2000	0.2044	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

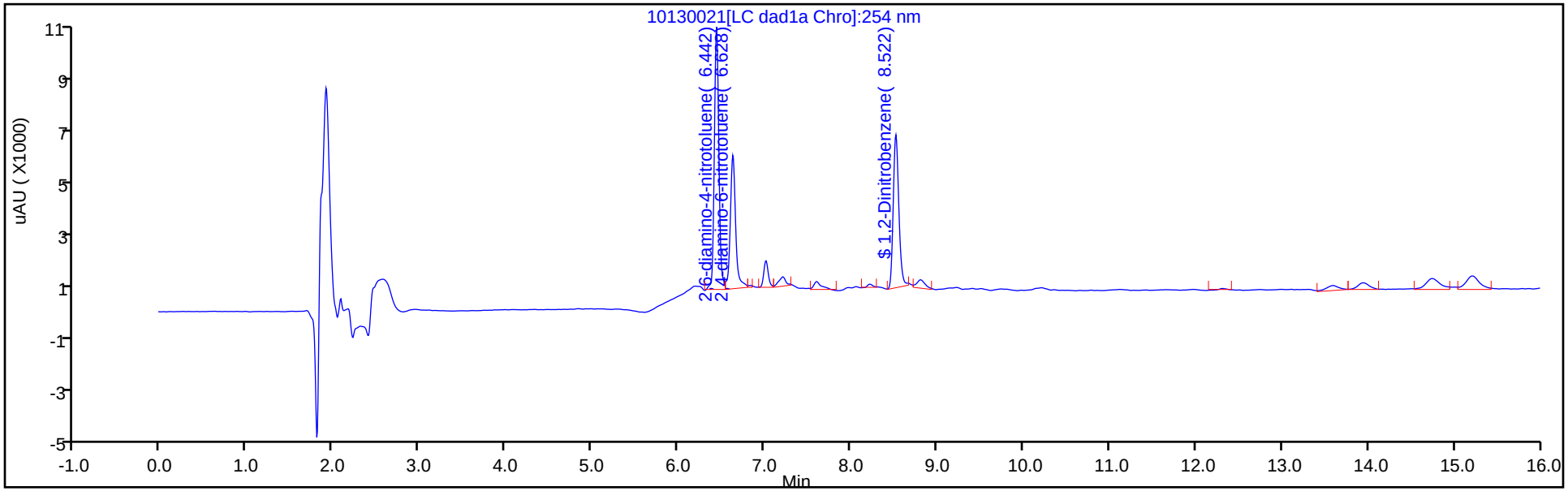
Report Date: 16-Oct-2023 11:34:50 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

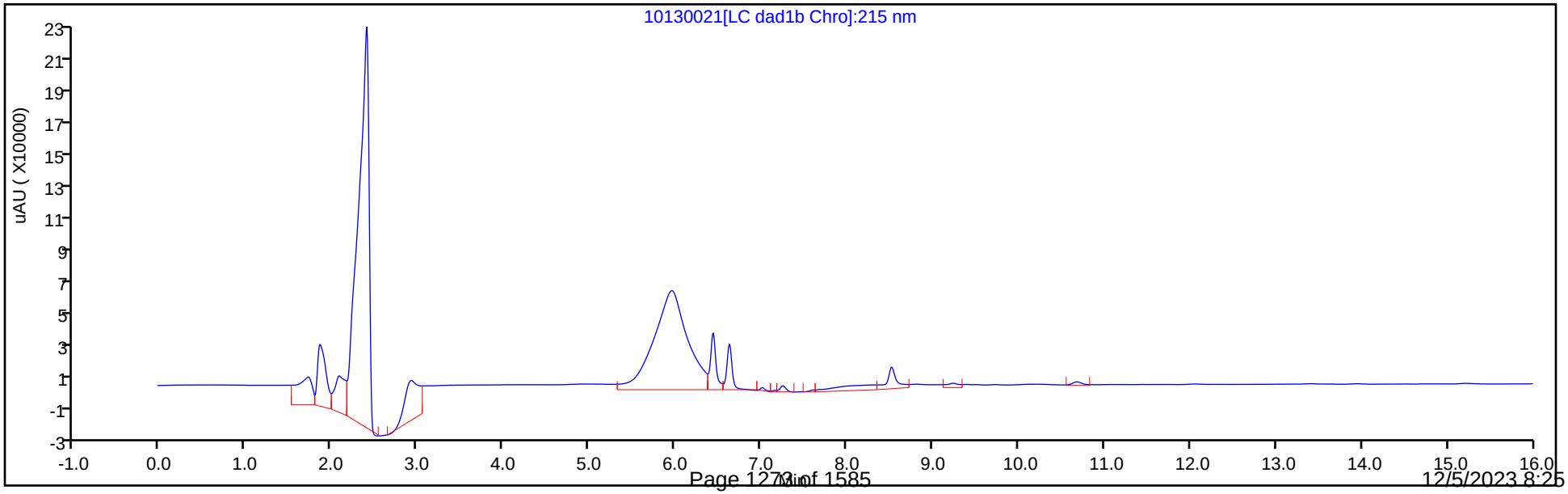
Data File: \\chromfs\denver\chromdata\chhplc_x\20231013-126501.b\10130021.d

Injection Date:	13-Oct-2023 19:09:50	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	LCS 280-629471/4-A			Worklist Smp#:	21
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\10130021.D
Lims ID: LCS 280-629471/4-A
Client ID:
Sample Type: LCS
Inject. Date: 13-Oct-2023 19:09:50 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-629471/4-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-Oct-2023 11:09:26 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1675

First Level Reviewer: K8YG Date: 16-Oct-2023 10:47:50

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2044	102.20

Manual Integration/User Assign Peak Report

Eurofins Denver

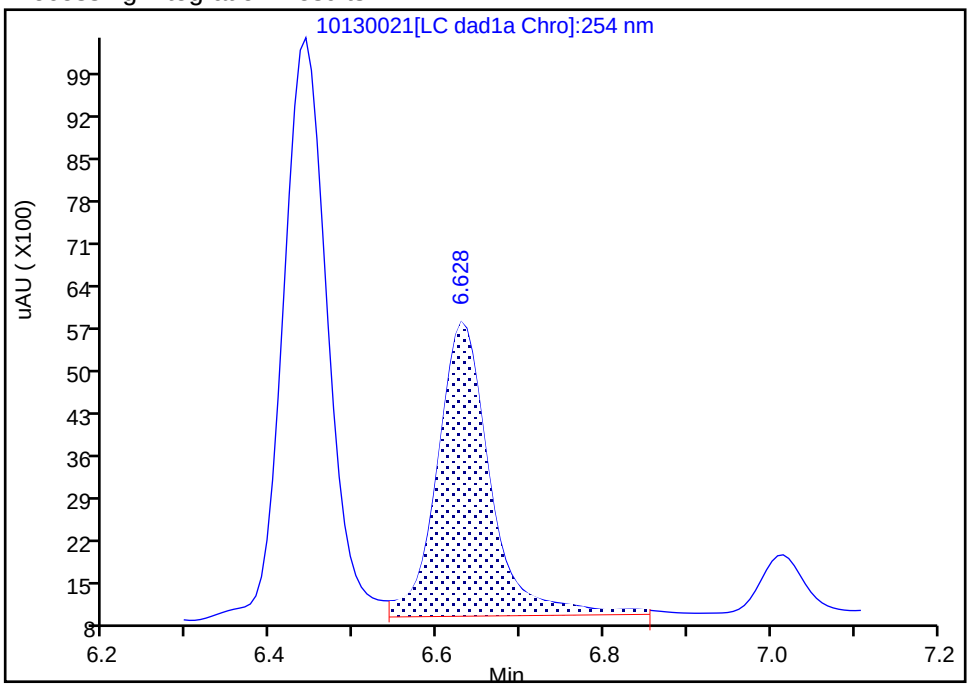
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Injection Date:	13-Oct-2023 19:09:50	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-629471/4-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

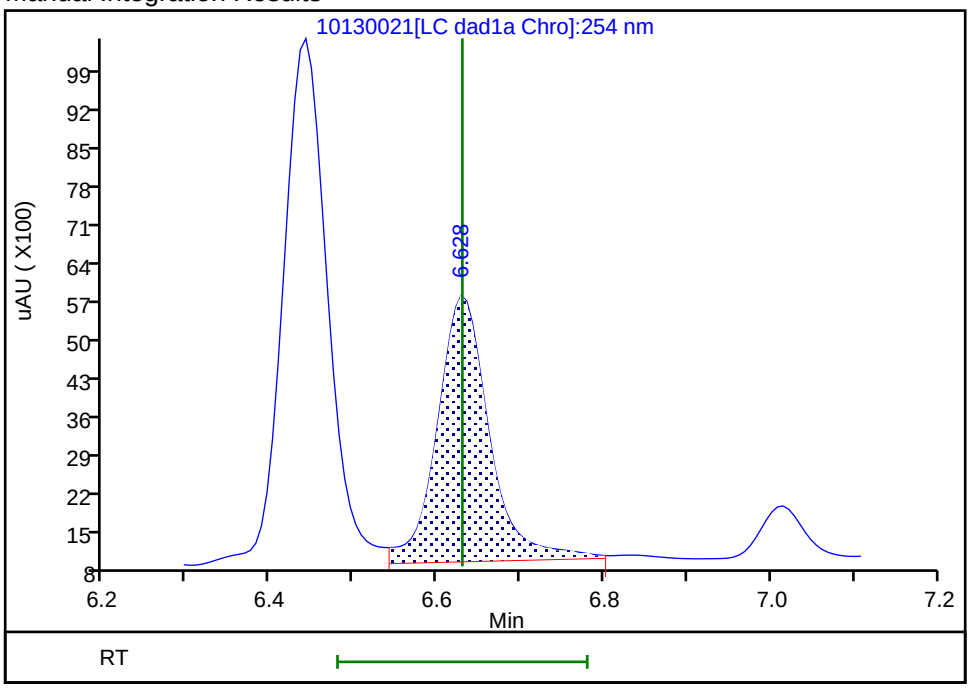
Processing Integration Results

RT: 6.63
Area: 21320
Amount: 0.148752
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 21111
Amount: 0.147293
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 10:47:48 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 280-628171/3-A

Matrix: Water | Lab File ID: 10070013.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 10/03/2023 13:12

Sample wt/vol: 500(mL) | Date Analyzed: 10/07/2023 15:45

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 628897 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.62	Q	0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	1.51	Q	0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	1.44	Q	0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	1.39	Q	0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	1.43	Q	0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.36	Q	0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.19	Q	0.21	0.20	0.086
618-87-1	3,5-Dinitroaniline	1.28	Q	0.40	0.30	0.13
99-08-1	3-Nitrotoluene	1.14	Q	0.40	0.35	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.17	Q	0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.15	Q	0.41	0.40	0.10
80251-29-2	DNX	1.90	Q	0.50	0.25	0.097
2691-41-0	HMX	1.74	Q	0.21	0.20	0.088
5755-27-1	MNX	1.89	Q	0.50	0.29	0.093
98-95-3	Nitrobenzene	1.33	Q	0.21	0.20	0.091
55-63-0	Nitroglycerin	16.0	Q	2.1	2.0	0.92
78-11-5	PETN	16.1	Q	1.1	1.0	0.45
121-82-4	RDX	1.51	Q	0.21	0.20	0.052
479-45-8	Tetryl	1.59	Q	0.11	0.10	0.032
13980-04-6	TNX	1.76	Q	0.50	0.25	0.079

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	71	Q	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\10070013.D
Lims ID: LCSD 280-628171/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 07-Oct-2023 15:45:14 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-628171/3-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2023 11:16:40 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1602

First Level Reviewer: K8YG Date: 09-Oct-2023 08:46:18

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.445	6.450	-0.005	35388	0.2002	0.1763	
4 HMX	1	6.571	6.570	0.001	16431	0.2000	0.1743	
6 DNX	1	6.771	6.776	-0.005	27433	0.2008	0.1899	
7 MNX	1	7.198	7.196	0.002	26196	0.2342	0.1889	
8 RDX	1	7.571	7.576	-0.005	16656	0.2000	0.1507	
9 2,4,6-Trinitrophenol	1	7.938	7.943	-0.005	12981	0.2000	0.1667	
$ 10 1,2-Dinitrobenzene	1	8.518	8.516	0.002	17590	0.2000	0.1420	
11 1,3,5-Trinitrobenzene	1	8.645	8.643	0.002	35097	0.2000	0.1624	
12 1,3-Dinitrobenzene	1	9.251	9.250	0.001	44203	0.2000	0.1507	
13 Nitrobenzene	1	9.618	9.616	0.002	25714	0.2000	0.1334	
14 3,5-Dinitroaniline	1	9.824	9.830	-0.006	28737	0.2000	0.1282	
15 Tetryl	1	9.958	9.956	0.002	26511	0.2000	0.1585	
16 Nitroglycerin	2	10.411	10.410	0.001	103569	2.00	1.60	
17 2,4,6-Trinitrotoluene	1	10.844	10.843	0.001	29584	0.2000	0.1444	
18 4-Amino-2,6-dinitrotoluene	1	11.011	11.010	0.001	17461	0.2000	0.1167	
19 2-Amino-4,6-dinitrotoluene	1	11.258	11.256	0.002	26312	0.2000	0.1358	
20 2,6-Dinitrotoluene	1	11.424	11.423	0.001	20344	0.2000	0.1426	
21 2,4-Dinitrotoluene	1	11.591	11.590	0.001	41250	0.2000	0.1395	
22 o-Nitrotoluene	1	12.391	12.390	0.001	15006	0.2000	0.1190	
23 p-Nitrotoluene	1	12.804	12.796	0.008	12627	0.2000	0.1147	
24 m-Nitrotoluene	1	13.358	13.356	0.002	16001	0.2000	0.1141	
25 PETN	2	14.478	14.470	0.008	116062	2.00	1.61	

QC Flag Legend
Processing Flags

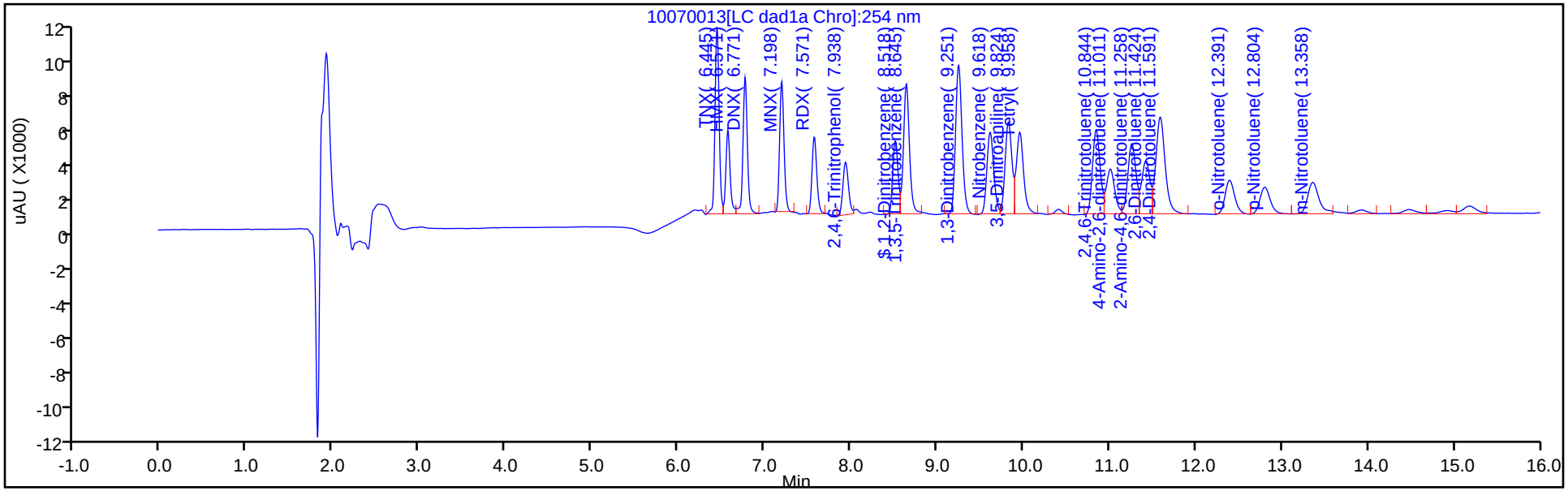
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Eurofins Denver

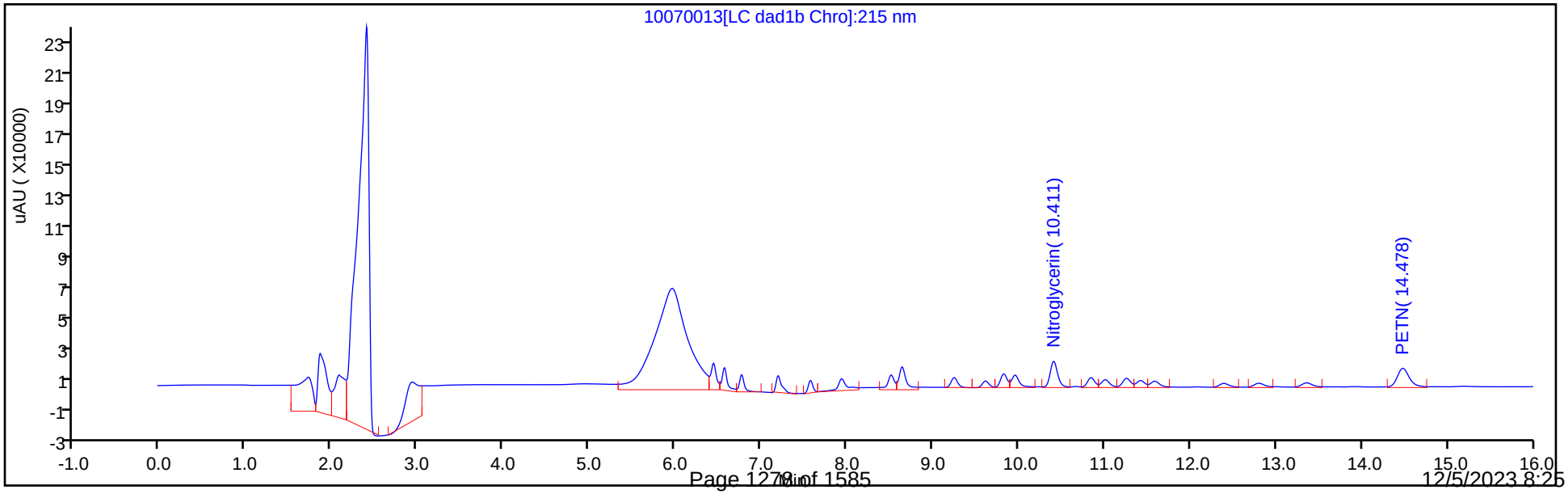
Data File: \\chromfs\denver\chromdata\chhplc_x\20231007-126276.b\10070013.d

Injection Date:	07-Oct-2023 15:45:14	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	LCSD 280-628171/3-A			Worklist Smp#:	13
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



12/5/2023 8:25 AM

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\10070013.D				
Lims ID:	LCSD 280-628171/3-A				
Client ID:					
Sample Type:	LCSD				
Inject. Date:	07-Oct-2023 15:45:14	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCSD 280-628171/3-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	09-Oct-2023 11:16:40	Calib Date:	24-Jun-2023 00:23:49		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1602				

First Level Reviewer: K8YG Date: 09-Oct-2023 08:46:18

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1420	70.98

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 280-628171/5-A

Matrix: Water | Lab File ID: 10070015.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 10/03/2023 13:12

Sample wt/vol: 500(mL) | Date Analyzed: 10/07/2023 16:31

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 628897 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
6629-29-4	2,4-diamino-6-nitrotoluene	1.48		1.0	0.90	0.43
59229-75-3	2,6-diamino-4-nitrotoluene	1.56		1.0	0.90	0.22

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	86		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\10070015.D
Lims ID: LCSD 280-628171/5-A
Client ID:
Sample Type: LCSD
Inject. Date: 07-Oct-2023 16:31:04 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-628171/5-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2023 11:16:40 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1602

First Level Reviewer: K8YG Date: 09-Oct-2023 08:46:23

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2	2,6-diamino-4-nitrotoluene	1	6.445	6.438	0.007	35209	0.2000	0.1561	
5	2,4-diamino-6-nitrotoluene	1	6.632	6.625	0.007	21253	0.2000	0.1483	
$ 10	1,2-Dinitrobenzene	1	8.512	8.516	-0.004	21321	0.2000	0.1721	

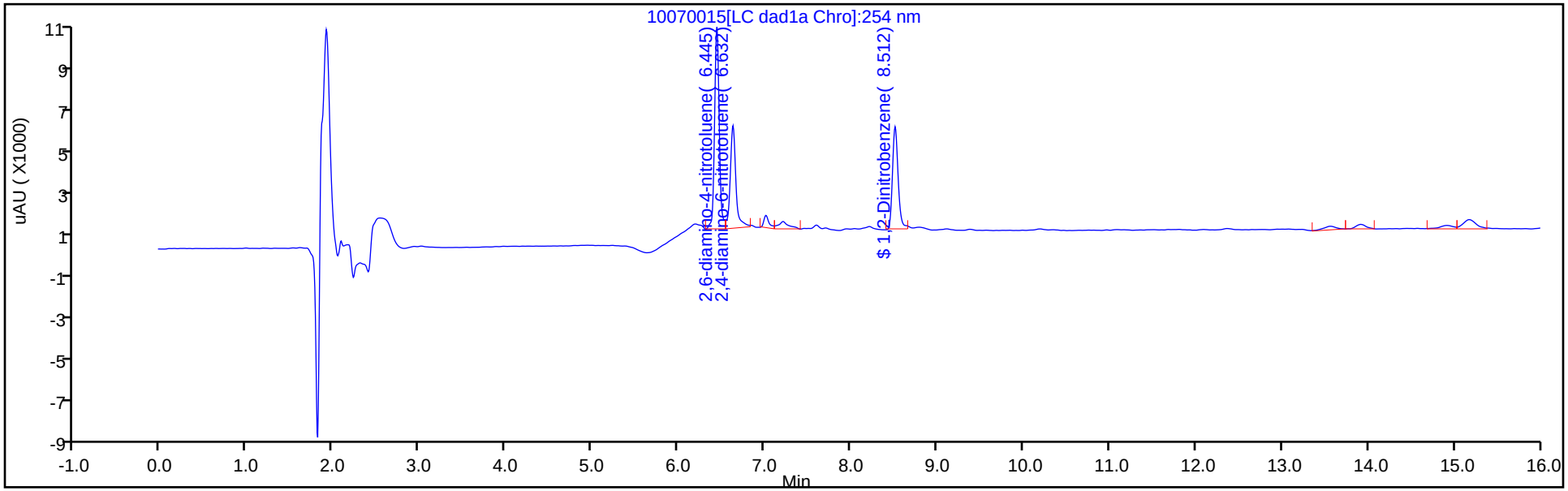
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Eurofins Denver

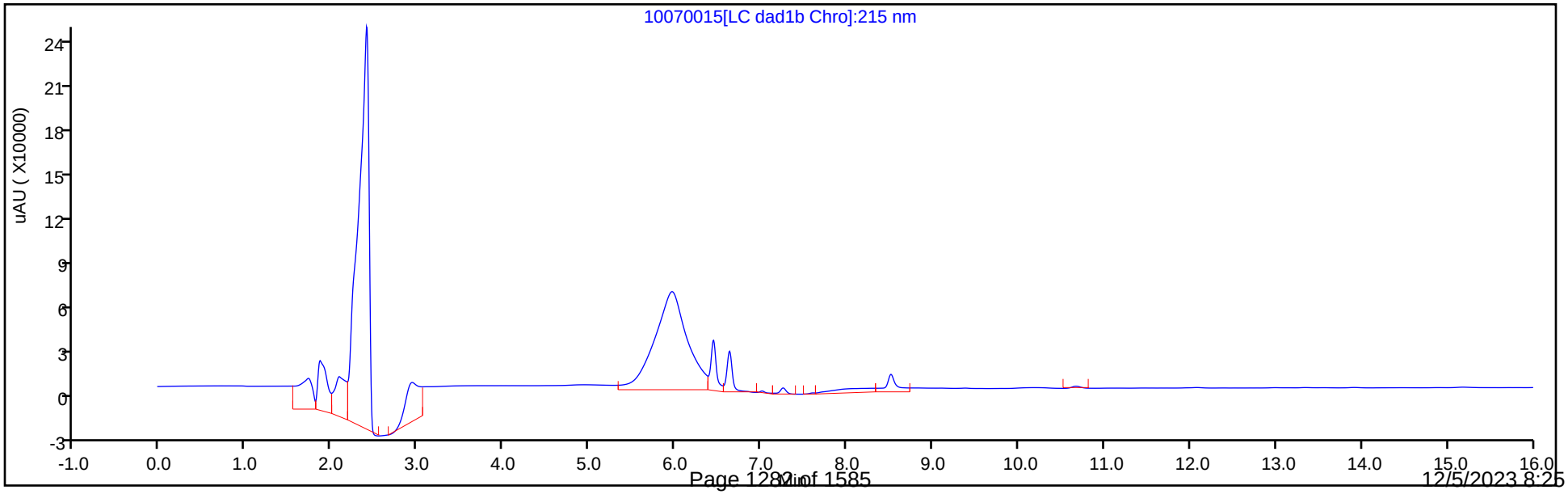
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Injection Date:	07-Oct-2023 16:31:04	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	LCSD 280-628171/5-A			Worklist Smp#:	15
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\10070015.D
Lims ID: LCSD 280-628171/5-A
Client ID:
Sample Type: LCSD
Inject. Date: 07-Oct-2023 16:31:04 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-628171/5-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231007-126276.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2023 11:16:40 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1602

First Level Reviewer: K8YG Date: 09-Oct-2023 08:46:23

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1721	86.03

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 280-629471/3-A

Matrix: Water | Lab File ID: 10130020.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 10/12/2023 14:54

Sample wt/vol: 500(mL) | Date Analyzed: 10/13/2023 18:46

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 629672 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.98	M	0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	1.82		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	1.77		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	1.68		0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	1.72		0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.69		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.36	Q	0.21	0.20	0.086
618-87-1	3,5-Dinitroaniline	1.57		0.40	0.30	0.13
99-08-1	3-Nitrotoluene	1.36	Q	0.40	0.35	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.55		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.33	Q	0.41	0.40	0.10
80251-29-2	DNX	1.89	M	0.50	0.25	0.097
2691-41-0	HMX	1.74	M	0.21	0.20	0.088
5755-27-1	MNX	2.21		0.50	0.29	0.093
98-95-3	Nitrobenzene	1.54		0.21	0.20	0.091
55-63-0	Nitroglycerin	19.3		2.1	2.0	0.92
78-11-5	PETN	19.6		1.1	1.0	0.45
121-82-4	RDX	1.84		0.21	0.20	0.052
479-45-8	Tetryl	1.89		0.11	0.10	0.032
13980-04-6	TNX	1.78	M	0.50	0.25	0.079

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	91	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\10130020.D
Lims ID: LCSD 280-629471/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 13-Oct-2023 18:46:56 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-629471/3-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-Oct-2023 11:09:26 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1675

First Level Reviewer: LV5D Date: 13-Oct-2023 19:20:25

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.444	6.444	0.000	35689	0.2002	0.1778	M
4 HMX	1	6.570	6.577	-0.007	16366	0.2000	0.1736	M
6 DNX	1	6.770	6.777	-0.007	27318	0.2008	0.1891	M
7 MNX	1	7.197	7.204	-0.007	30584	0.2342	0.2205	
8 RDX	1	7.577	7.584	-0.007	20333	0.2000	0.1840	
9 2,4,6-Trinitrophenol	1	7.950	7.957	-0.007	17502	0.2000	0.2248	
$ 10 1,2-Dinitrobenzene	1	8.524	8.524	0.000	22591	0.2000	0.1823	M
11 1,3,5-Trinitrobenzene	1	8.650	8.650	0.000	42731	0.2000	0.1978	M
12 1,3-Dinitrobenzene	1	9.257	9.264	-0.007	53435	0.2000	0.1822	
13 Nitrobenzene	1	9.624	9.630	-0.006	29689	0.2000	0.1541	
14 3,5-Dinitroaniline	1	9.850	9.850	0.000	35175	0.2000	0.1568	
15 Tetryl	1	9.977	9.984	-0.007	31690	0.2000	0.1895	
16 Nitroglycerin	2	10.424	10.430	-0.006	125088	2.00	1.93	
17 2,4,6-Trinitrotoluene	1	10.864	10.870	-0.006	36203	0.2000	0.1767	
18 4-Amino-2,6-dinitrotoluene	1	11.044	11.044	0.000	23192	0.2000	0.1551	
19 2-Amino-4,6-dinitrotoluene	1	11.290	11.297	-0.007	32670	0.2000	0.1686	
20 2,6-Dinitrotoluene	1	11.444	11.457	-0.013	24577	0.2000	0.1723	
21 2,4-Dinitrotoluene	1	11.617	11.624	-0.007	49792	0.2000	0.1684	
22 o-Nitrotoluene	1	12.424	12.430	-0.006	17171	0.2000	0.1361	
23 p-Nitrotoluene	1	12.830	12.844	-0.014	14682	0.2000	0.1334	
24 m-Nitrotoluene	1	13.390	13.404	-0.014	19013	0.2000	0.1363	
25 PETN	2	14.517	14.537	-0.020	141334	2.00	1.96	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

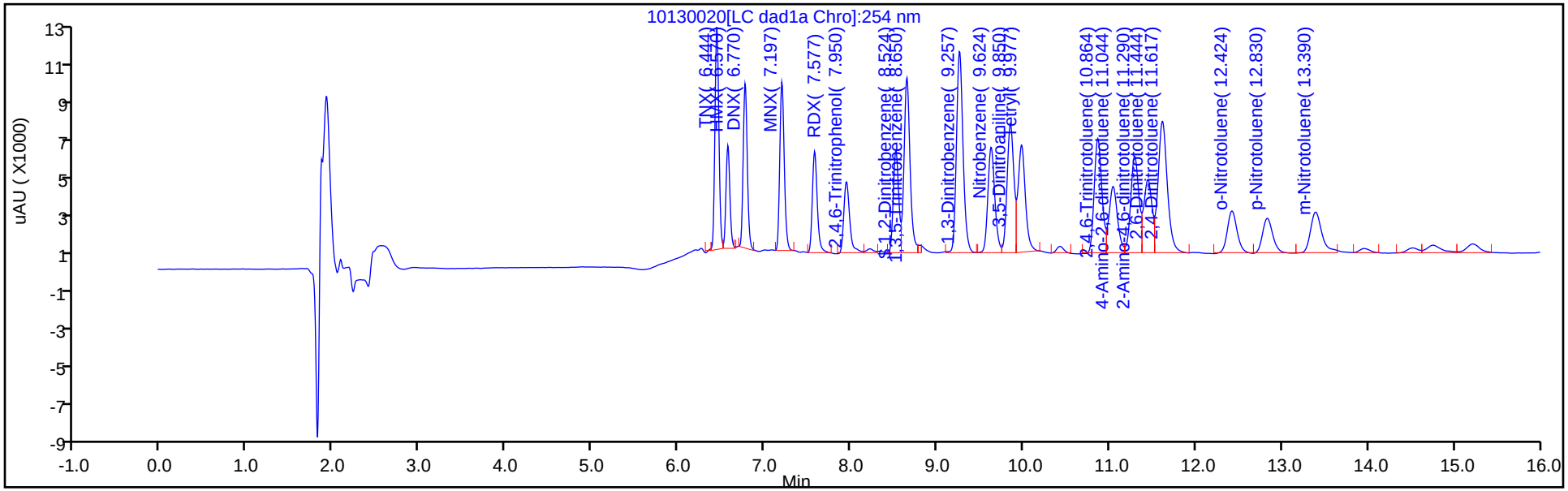
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Eurofins Denver

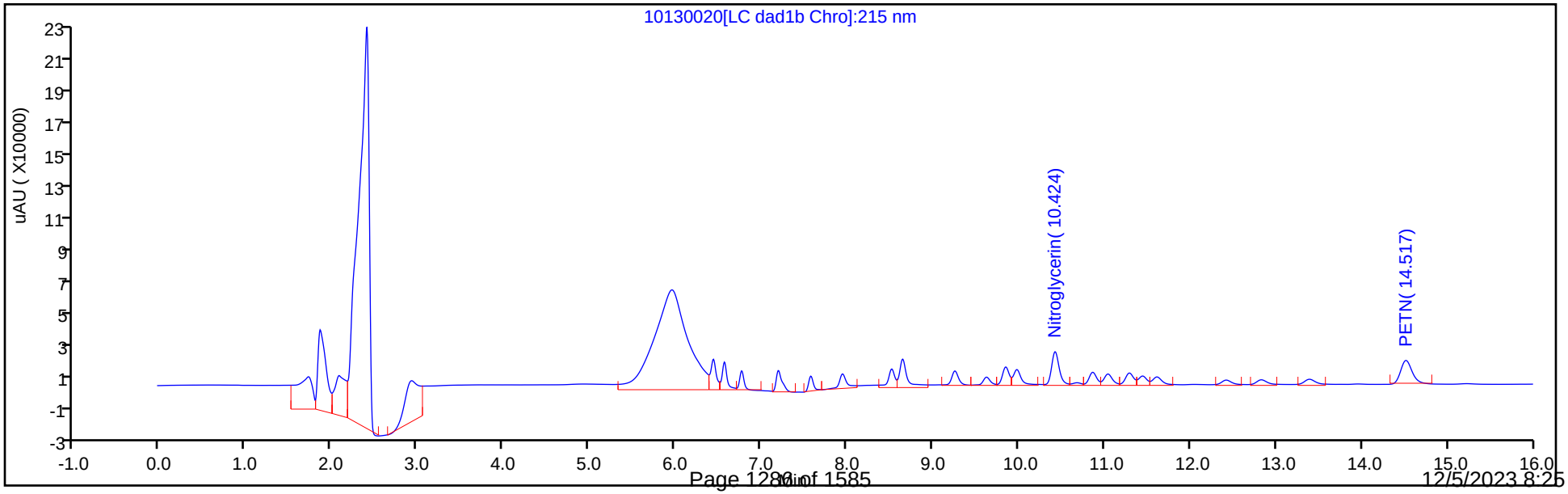
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Injection Date:	13-Oct-2023 18:46:56	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	LCSD 280-629471/3-A			Worklist Smp#:	20
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\10130020.D
Lims ID: LCSD 280-629471/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 13-Oct-2023 18:46:56 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-629471/3-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-Oct-2023 11:09:26 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1675

First Level Reviewer: LV5D Date: 13-Oct-2023 19:20:25

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1823	91.16

Manual Integration/User Assign Peak Report

Eurofins Denver

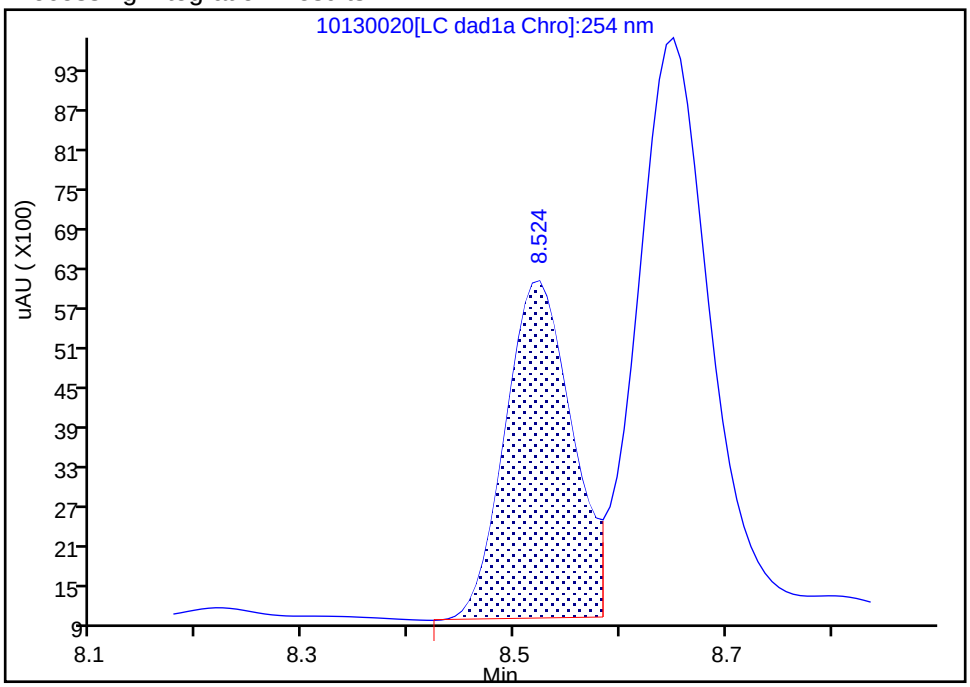
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Injection Date:	13-Oct-2023 18:46:56	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-629471/3-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

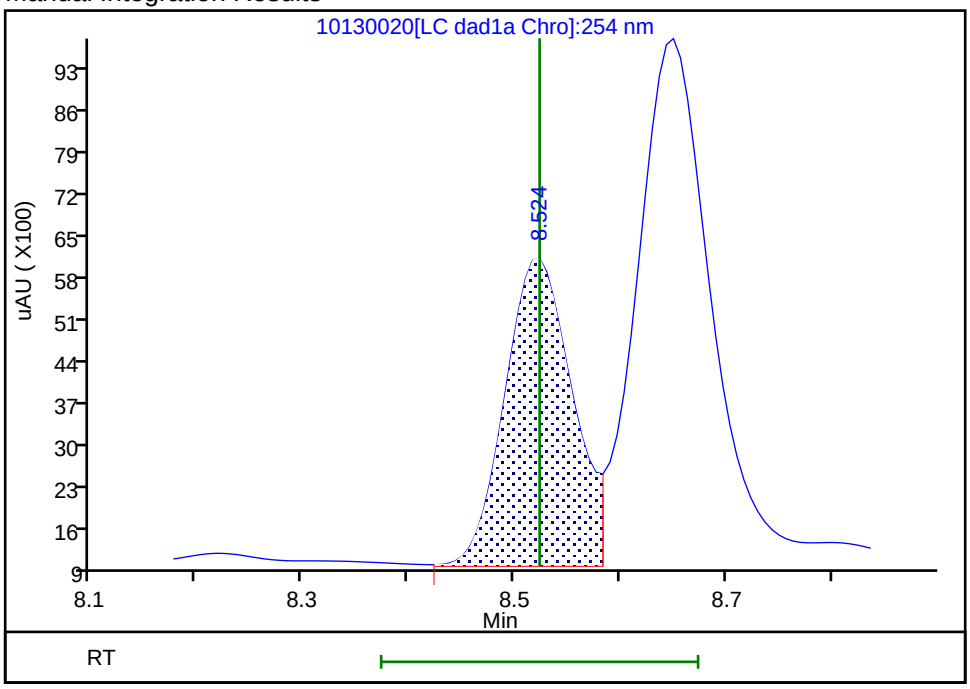
Processing Integration Results

RT: 8.52
Area: 22183
Amount: 0.179024
Amount Units: ug/mL



Manual Integration Results

RT: 8.52
Area: 22591
Amount: 0.182317
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 10:43:01 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

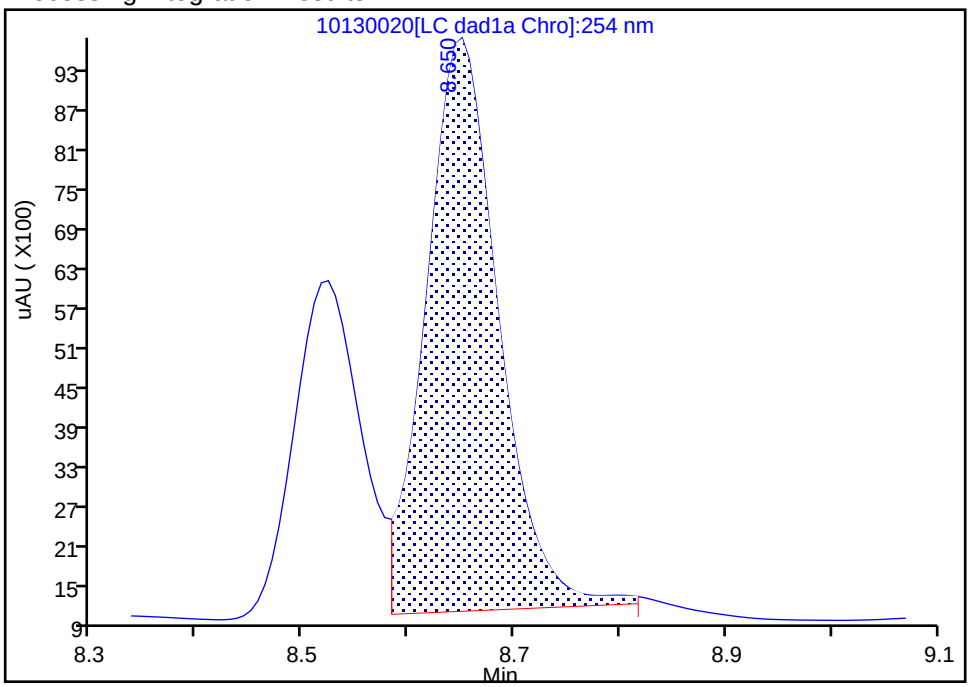
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231013-126501.b\10130020.d				
Injection Date:	13-Oct-2023 18:46:56	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-629471/3-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

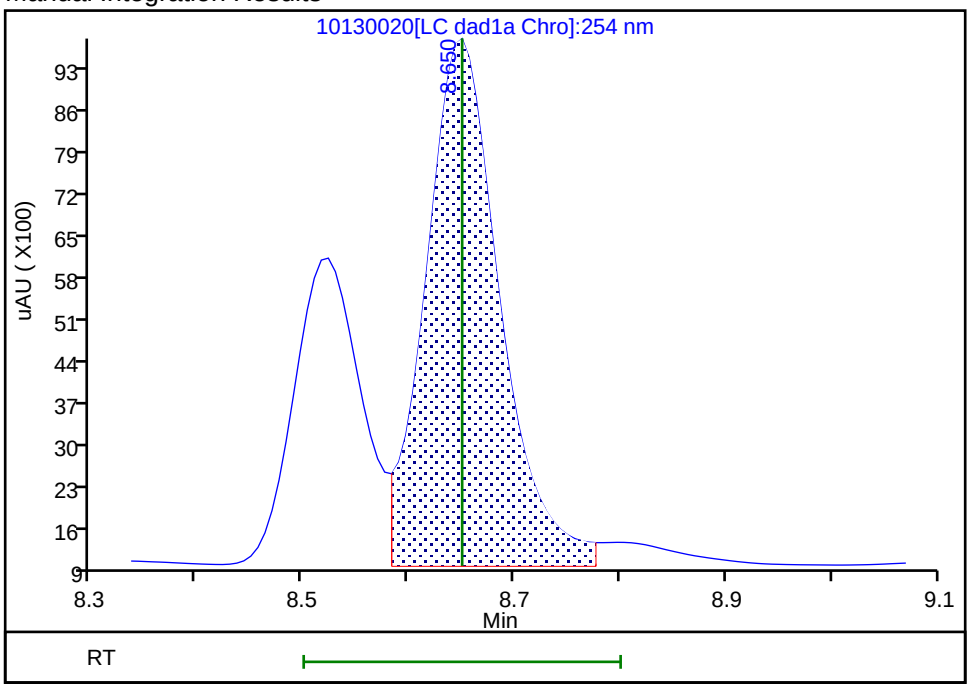
Processing Integration Results

RT: 8.65
Area: 41280
Amount: 0.191042
Amount Units: ug/mL



Manual Integration Results

RT: 8.65
Area: 42731
Amount: 0.197757
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 10:43:05 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

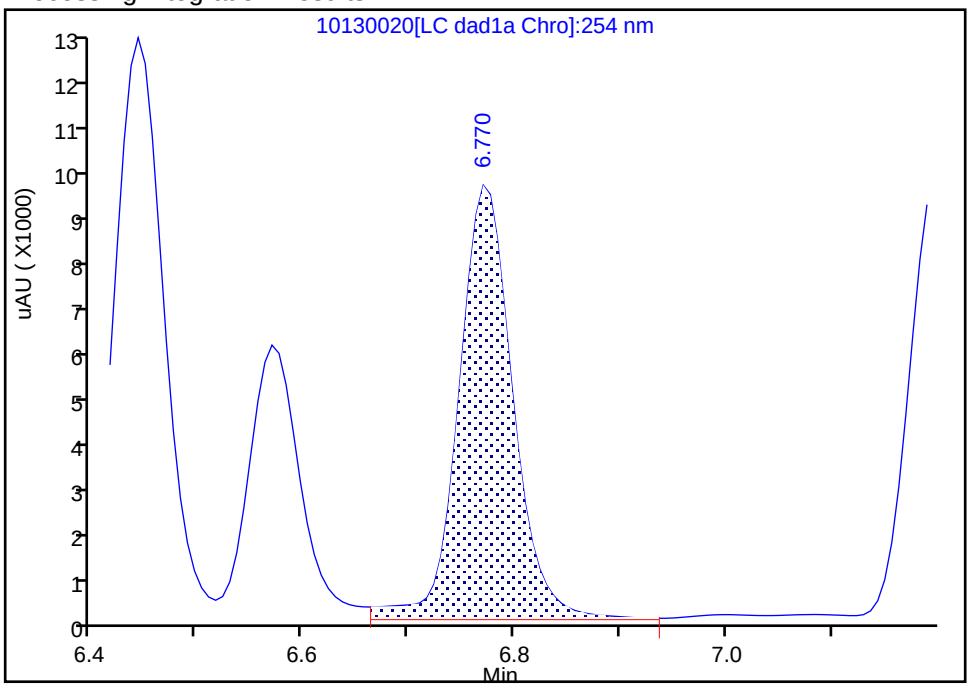
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231013-126501.b\10130020.d				
Injection Date:	13-Oct-2023 18:46:56	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-629471/3-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

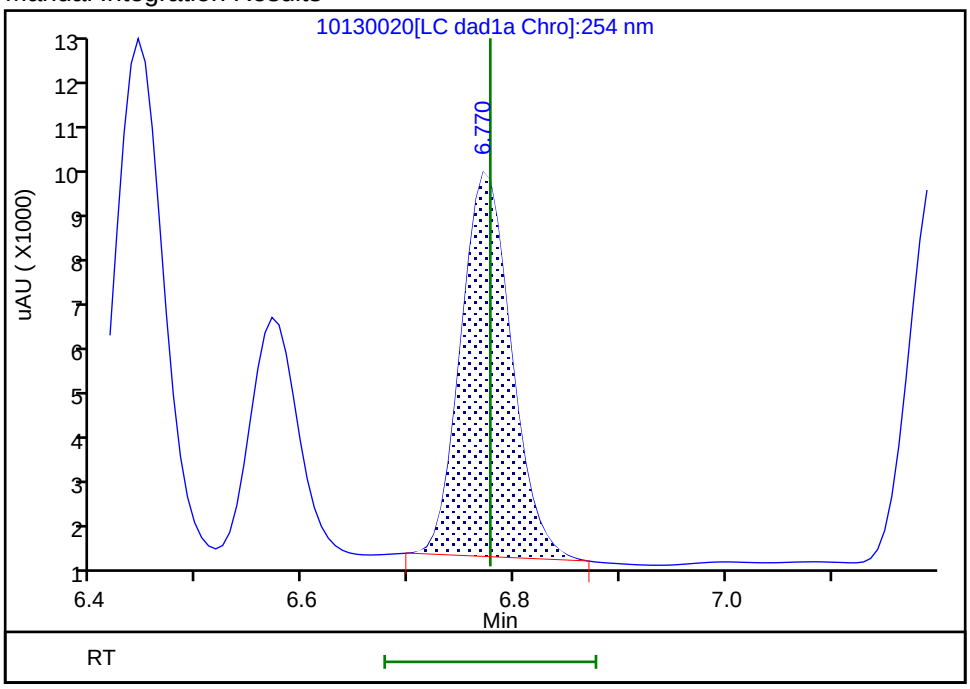
Processing Integration Results

RT: 6.77
Area: 30165
Amount: 0.208765
Amount Units: ug/mL



Manual Integration Results

RT: 6.77
Area: 27318
Amount: 0.189061
Amount Units: ug/mL



Reviewer: LV5D, 13-Oct-2023 19:20:24 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

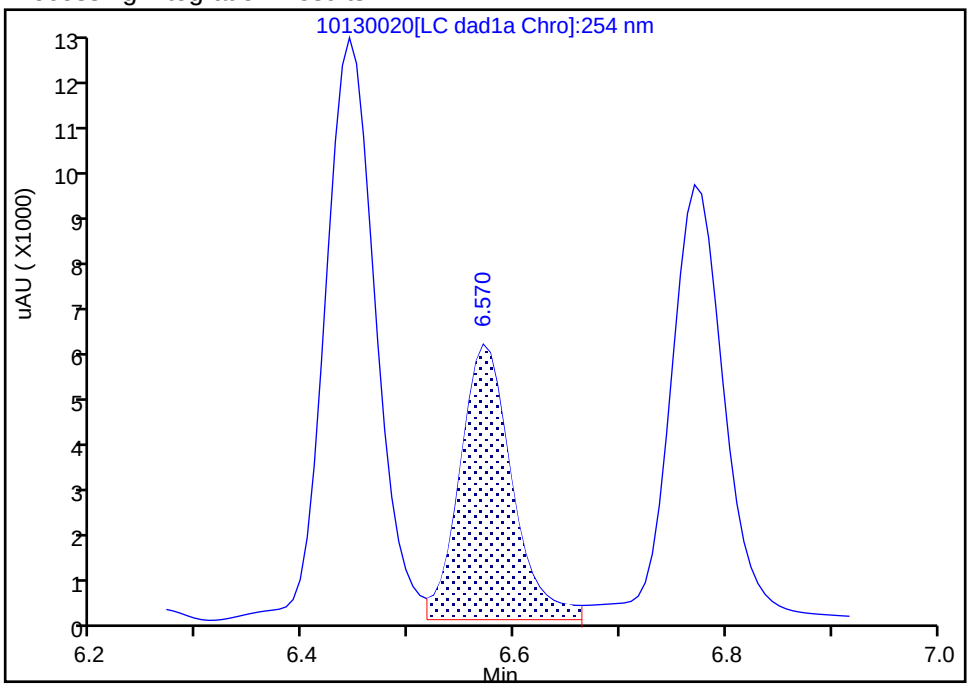
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231013-126501.b\10130020.d				
Injection Date:	13-Oct-2023 18:46:56	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-629471/3-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

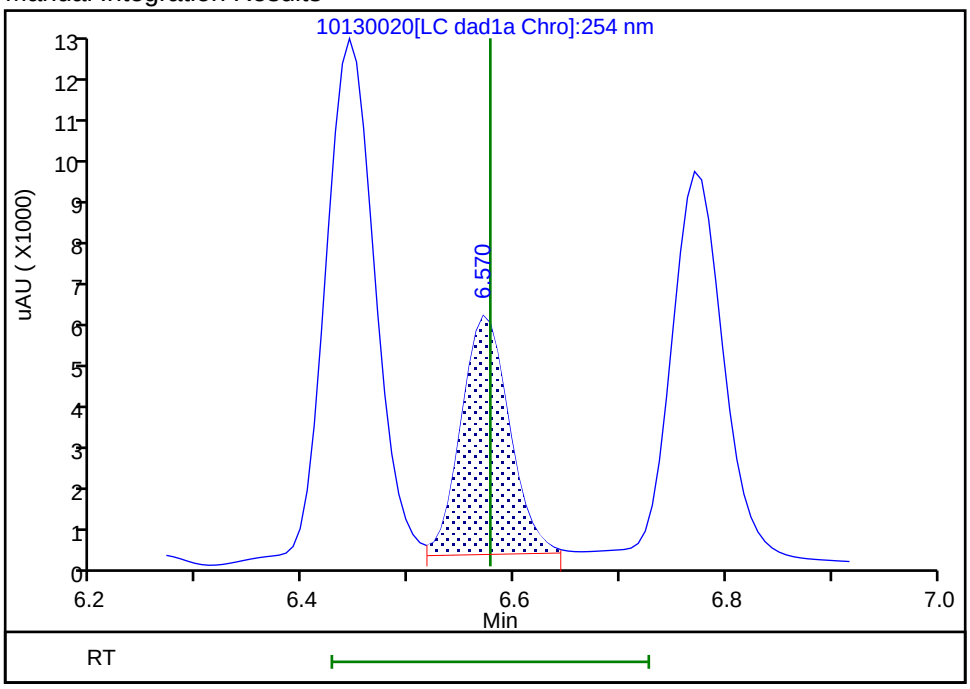
Processing Integration Results

RT: 6.57
Area: 18221
Amount: 0.193315
Amount Units: ug/mL



Manual Integration Results

RT: 6.57
Area: 16366
Amount: 0.173635
Amount Units: ug/mL



Reviewer: LV5D, 13-Oct-2023 19:20:22 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

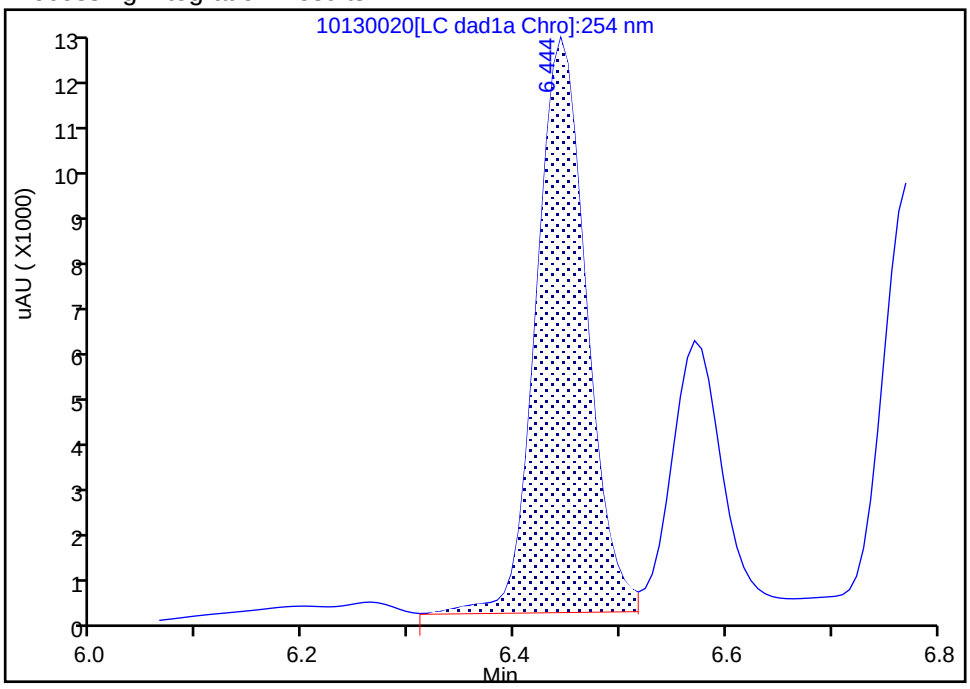
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231013-126501.b\10130020.d				
Injection Date:	13-Oct-2023 18:46:56	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-629471/3-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

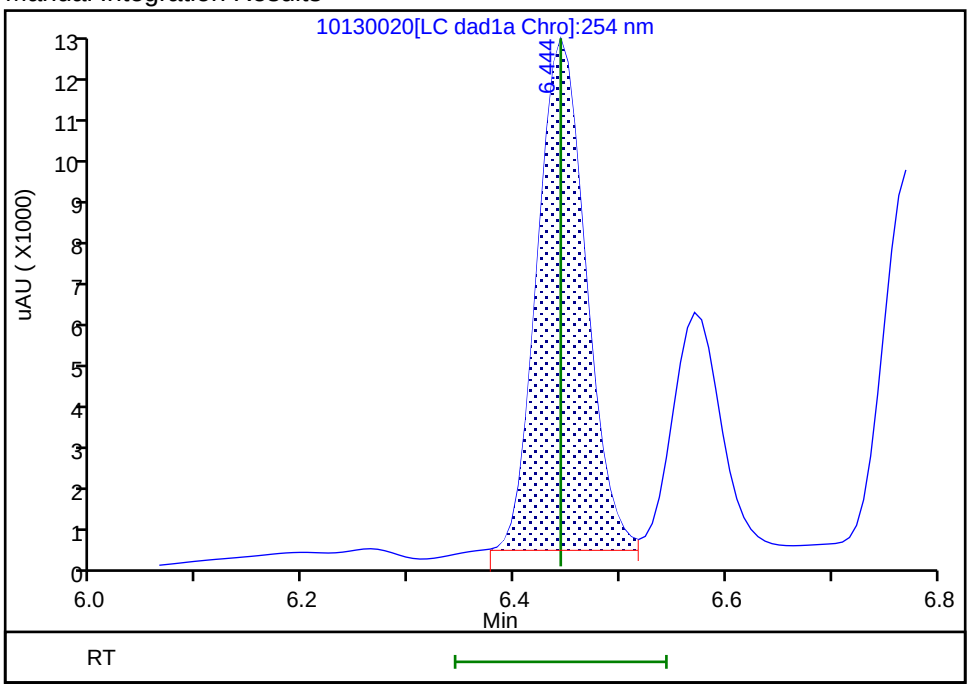
Processing Integration Results

RT: 6.44
Area: 37562
Amount: 0.187098
Amount Units: ug/mL



Manual Integration Results

RT: 6.44
Area: 35689
Amount: 0.177769
Amount Units: ug/mL



Reviewer: LV5D, 13-Oct-2023 19:20:21 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 280-629471/5-A

Matrix: Water | Lab File ID: 10130022.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 10/12/2023 14:54

Sample wt/vol: 500(mL) | Date Analyzed: 10/13/2023 19:32

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 629672 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
6629-29-4	2,4-diamino-6-nitrotoluene	1.26	Q	1.0	0.90	0.43
59229-75-3	2,6-diamino-4-nitrotoluene	1.40	Q	1.0	0.90	0.22

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	104	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\10130022.D
Lims ID: LCSD 280-629471/5-A
Client ID:
Sample Type: LCSD
Inject. Date: 13-Oct-2023 19:32:43 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-629471/5-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-Oct-2023 11:09:26 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1675

First Level Reviewer: K8YG Date: 16-Oct-2023 10:48:17

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	2 2,6-diamino-4-nitrotoluene	1	6.440	6.443	-0.003	31679	0.2000	0.1404	
	5 2,4-diamino-6-nitrotoluene	1	6.634	6.630	0.004	18030	0.2000	0.1258	
$	10 1,2-Dinitrobenzene	1	8.520	8.524	-0.004	25676	0.2000	0.2072	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

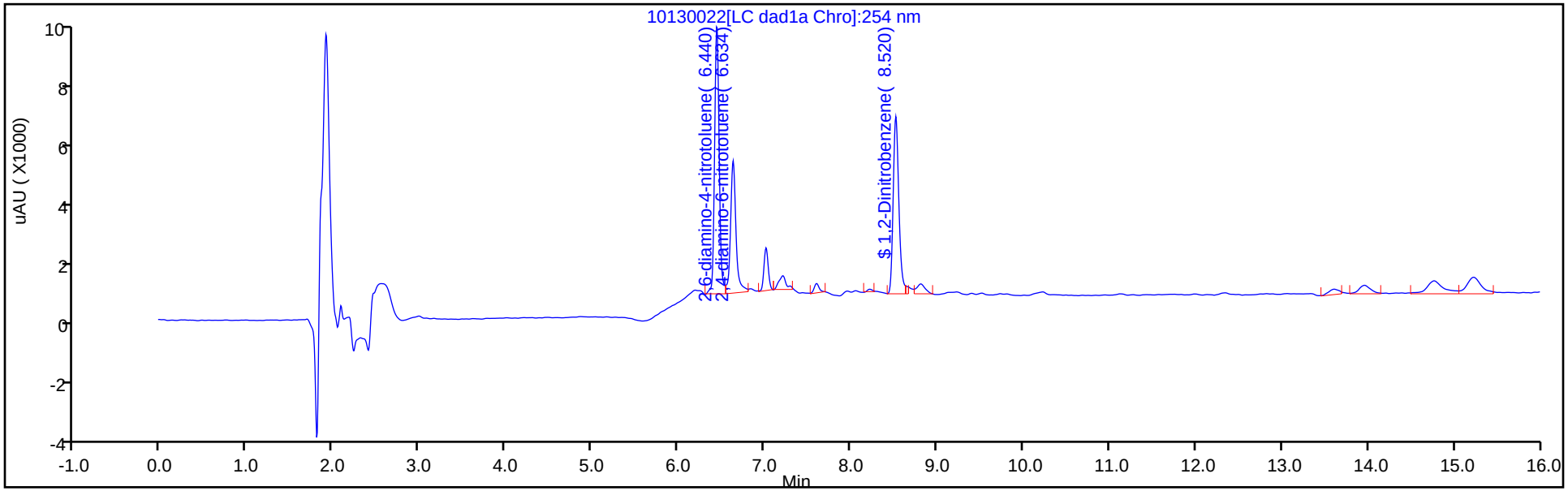
Report Date: 16-Oct-2023 11:34:51 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

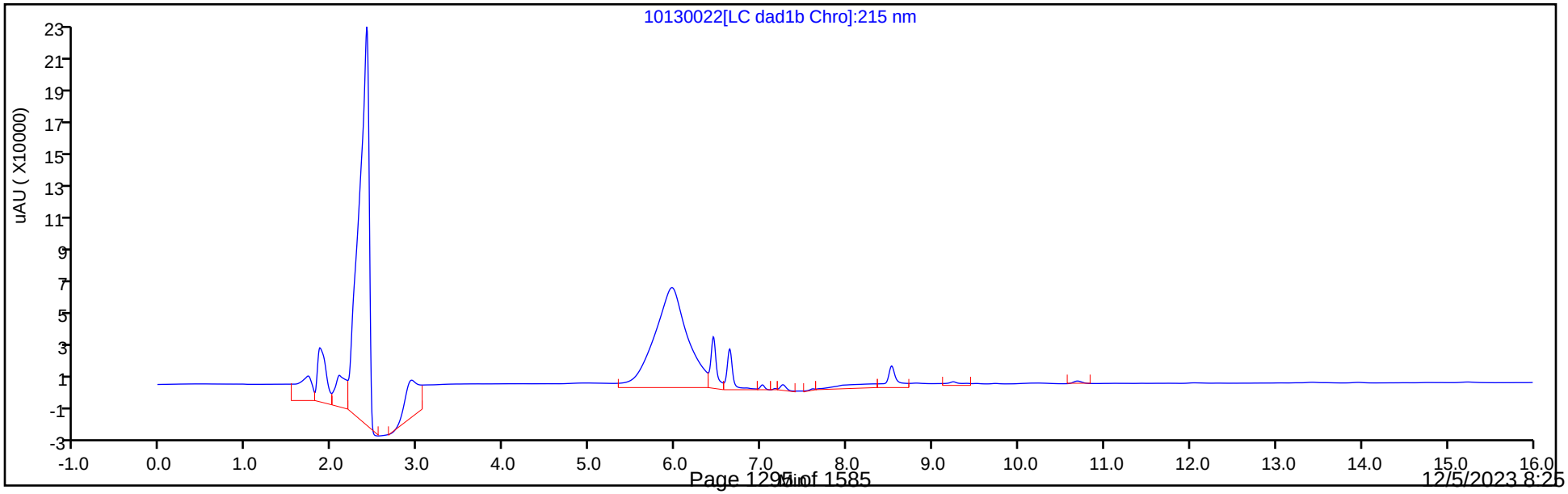
Data File: \\chromfs\denver\chromdata\chhplc_x\20231013-126501.b\10130022.d

Injection Date:	13-Oct-2023 19:32:43	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	LCSD 280-629471/5-A			Worklist Smp#:	22
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\10130022.D
Lims ID: LCSD 280-629471/5-A
Client ID:
Sample Type: LCSD
Inject. Date: 13-Oct-2023 19:32:43 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-629471/5-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231013-126501.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-Oct-2023 11:09:26 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1675

First Level Reviewer: K8YG Date: 16-Oct-2023 10:48:17

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2072	103.61

Manual Integration/User Assign Peak Report

Eurofins Denver

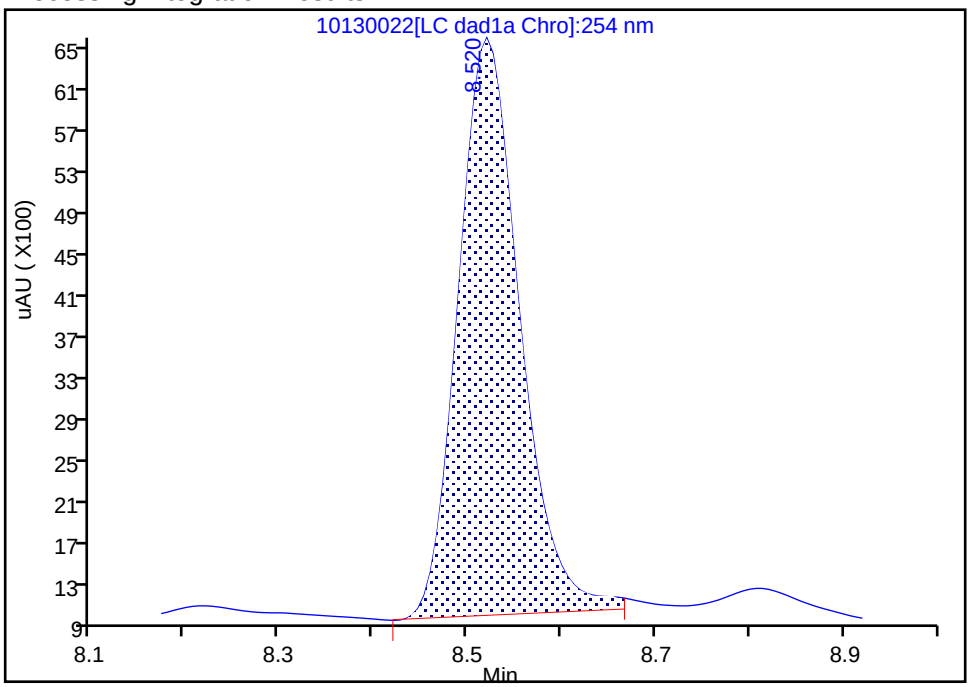
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231013-126501.b\10130022.d				
Injection Date:	13-Oct-2023 19:32:43	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-629471/5-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

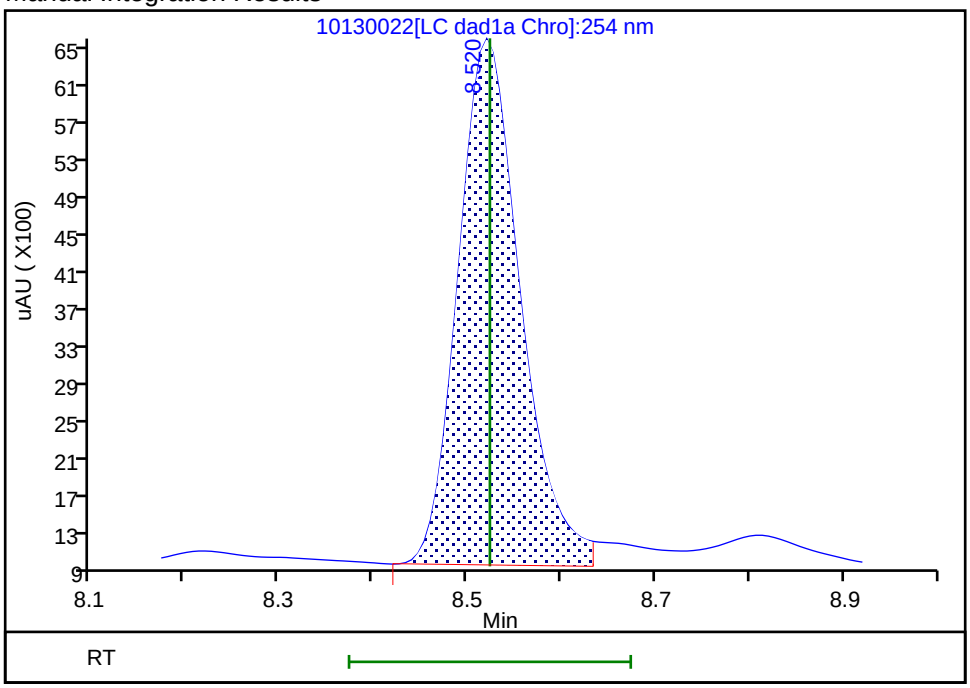
Processing Integration Results

RT: 8.52
Area: 25256
Amount: 0.203824
Amount Units: ug/mL



Manual Integration Results

RT: 8.52
Area: 25676
Amount: 0.207213
Amount Units: ug/mL



Reviewer: K8YG, 16-Oct-2023 10:48:15 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 06/23/2023 17:53

Analysis Batch Number: 617295 End Date: 06/24/2023 00:46

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-617295/11		06/23/2023 17:53	1	06230011.D	UltraCarb5uODS 4.6(mm)
IC 280-617295/12		06/23/2023 18:16	1	06230012.D	UltraCarb5uODS 4.6(mm)
IC 280-617295/13		06/23/2023 18:39	1	06230013.D	UltraCarb5uODS 4.6(mm)
IC 280-617295/14		06/23/2023 19:02	1	06230014.D	UltraCarb5uODS 4.6(mm)
IC 280-617295/15		06/23/2023 19:25	1	06230015.D	UltraCarb5uODS 4.6(mm)
IC 280-617295/16		06/23/2023 19:48	1	06230016.D	UltraCarb5uODS 4.6(mm)
IC 280-617295/17		06/23/2023 20:11	1	06230017.D	UltraCarb5uODS 4.6(mm)
IC 280-617295/18		06/23/2023 20:34	1	06230018.D	UltraCarb5uODS 4.6(mm)
IC 280-617295/19		06/23/2023 20:57	1	06230019.D	UltraCarb5uODS 4.6(mm)
ICV 280-617295/20		06/23/2023 21:20	1	06230020.D	UltraCarb5uODS 4.6(mm)
IC 280-617295/21		06/23/2023 21:43	1	06230021.D	UltraCarb5uODS 4.6(mm)
IC 280-617295/22		06/23/2023 22:06	1	06230022.D	UltraCarb5uODS 4.6(mm)
IC 280-617295/23		06/23/2023 22:29	1	06230023.D	UltraCarb5uODS 4.6(mm)
IC 280-617295/24		06/23/2023 22:52	1	06230024.D	UltraCarb5uODS 4.6(mm)
IC 280-617295/25		06/23/2023 23:14	1	06230025.D	UltraCarb5uODS 4.6(mm)
IC 280-617295/26		06/23/2023 23:37	1	06230026.D	UltraCarb5uODS 4.6(mm)
IC 280-617295/27		06/24/2023 00:00	1	06230027.D	UltraCarb5uODS 4.6(mm)
IC 280-617295/28		06/24/2023 00:23	1	06230028.D	UltraCarb5uODS 4.6(mm)
ICV 280-617295/29		06/24/2023 00:46	1	06230029.D	UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: CHHPLC_X5 Start Date: 09/20/2023 20:01

Analysis Batch Number: 626878 End Date: 09/21/2023 06:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-626878/10		09/20/2023 20:01	1	09200010.D	Luna-phenylhex 4.6(mm)
IC 280-626878/11		09/20/2023 20:36	1	09200011.D	Luna-phenylhex 4.6(mm)
IC 280-626878/12		09/20/2023 21:11	1	09200012.D	Luna-phenylhex 4.6(mm)
IC 280-626878/13		09/20/2023 21:45	1	09200013.D	Luna-phenylhex 4.6(mm)
IC 280-626878/14		09/20/2023 22:20	1	09200014.D	Luna-phenylhex 4.6(mm)
IC 280-626878/15		09/20/2023 22:55	1	09200015.D	Luna-phenylhex 4.6(mm)
IC 280-626878/16		09/20/2023 23:30	1	09200016.D	Luna-phenylhex 4.6(mm)
IC 280-626878/17		09/21/2023 00:05	1	09200017.D	Luna-phenylhex 4.6(mm)
IC 280-626878/18		09/21/2023 00:40	1	09200018.D	Luna-phenylhex 4.6(mm)
ICV 280-626878/19		09/21/2023 01:15	1	09200019.D	Luna-phenylhex 4.6(mm)
IC 280-626878/20		09/21/2023 01:50	1		Luna-phenylhex 4.6(mm)
IC 280-626878/21		09/21/2023 02:25	1		Luna-phenylhex 4.6(mm)
IC 280-626878/22		09/21/2023 03:00	1		Luna-phenylhex 4.6(mm)
IC 280-626878/23		09/21/2023 03:35	1		Luna-phenylhex 4.6(mm)
IC 280-626878/24		09/21/2023 04:10	1		Luna-phenylhex 4.6(mm)
IC 280-626878/25		09/21/2023 04:45	1		Luna-phenylhex 4.6(mm)
IC 280-626878/26		09/21/2023 05:20	1		Luna-phenylhex 4.6(mm)
IC 280-626878/27		09/21/2023 05:55	1		Luna-phenylhex 4.6(mm)
ICV 280-626878/28		09/21/2023 06:30	1		Luna-phenylhex 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Start Date: 09/25/2023 18:42

Analysis Batch Number: 627290 End Date: 09/26/2023 05:31

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-627290/10		09/25/2023 18:42	1	09250010.D	Luna-phenylhex 4.6(mm)
IC 280-627290/11		09/25/2023 19:17	1	09250011.D	Luna-phenylhex 4.6(mm)
IC 280-627290/12		09/25/2023 19:53	1	09250012.D	Luna-phenylhex 4.6(mm)
IC 280-627290/13		09/25/2023 20:29	1	09250013.D	Luna-phenylhex 4.6(mm)
IC 280-627290/14		09/25/2023 21:05	1	09250014.D	Luna-phenylhex 4.6(mm)
IC 280-627290/15		09/25/2023 21:42	1	09250015.D	Luna-phenylhex 4.6(mm)
IC 280-627290/16		09/25/2023 22:18	1	09250016.D	Luna-phenylhex 4.6(mm)
IC 280-627290/17		09/25/2023 22:54	1	09250017.D	Luna-phenylhex 4.6(mm)
IC 280-627290/18		09/25/2023 23:30	1	09250018.D	Luna-phenylhex 4.6(mm)
ICV 280-627290/19		09/26/2023 00:06	1	09250019.D	Luna-phenylhex 4.6(mm)
IC 280-627290/20		09/26/2023 00:42	1	09250020.D	Luna-phenylhex 4.6(mm)
IC 280-627290/21		09/26/2023 01:18	1	09250021.D	Luna-phenylhex 4.6(mm)
IC 280-627290/22		09/26/2023 01:54	1	09250022.D	Luna-phenylhex 4.6(mm)
IC 280-627290/23		09/26/2023 02:30	1	09250023.D	Luna-phenylhex 4.6(mm)
IC 280-627290/24		09/26/2023 03:06	1	09250024.D	Luna-phenylhex 4.6(mm)
IC 280-627290/25		09/26/2023 03:42	1	09250025.D	Luna-phenylhex 4.6(mm)
IC 280-627290/26		09/26/2023 04:18	1	09250026.D	Luna-phenylhex 4.6(mm)
IC 280-627290/27		09/26/2023 04:54	1	09250027.D	Luna-phenylhex 4.6(mm)
ICV 280-627290/28		09/26/2023 05:31	1	09250028.D	Luna-phenylhex 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 10/07/2023 14:13

Analysis Batch Number: 628897 End Date: 10/08/2023 11:15

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-628897/8		10/07/2023 14:13	1	10070008.D	UltraCarb5uODS 4.6(mm)
CCV 280-628897/9		10/07/2023 14:36	1		UltraCarb5uODS 4.6(mm)
MB 280-628171/1-A		10/07/2023 14:59	1	10070011.D	UltraCarb5uODS 4.6(mm)
LCS 280-628171/2-A		10/07/2023 15:22	1	10070012.D	UltraCarb5uODS 4.6(mm)
LCSD 280-628171/3-A		10/07/2023 15:45	1	10070013.D	UltraCarb5uODS 4.6(mm)
LCS 280-628171/4-A		10/07/2023 16:08	1	10070014.D	UltraCarb5uODS 4.6(mm)
LCSD 280-628171/5-A		10/07/2023 16:31	1	10070015.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		10/07/2023 16:53	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/07/2023 17:16	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/07/2023 17:39	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/07/2023 18:02	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/07/2023 18:25	1		UltraCarb5uODS 4.6(mm)
CCV 280-628897/21		10/07/2023 18:48	1	10070021.D	UltraCarb5uODS 4.6(mm)
CCV 280-628897/22		10/07/2023 19:11	1	10070022.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		10/07/2023 19:34	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/07/2023 19:57	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/07/2023 20:20	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/07/2023 20:43	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/07/2023 21:06	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/07/2023 21:29	1		UltraCarb5uODS 4.6(mm)
280-182145-7	FWGmw-021-230901-GW	10/07/2023 21:52	1	10070029.D	UltraCarb5uODS 4.6(mm)
280-182145-8	LL3mw-245-230901-GW	10/07/2023 22:15	1	10070030.D	UltraCarb5uODS 4.6(mm)
280-182145-11	FWGmw-024-230901-GW	10/07/2023 22:38	1	10070031.D	UltraCarb5uODS 4.6(mm)
280-182145-12	FWGmw-023-230901-GW	10/07/2023 23:01	1	10070032.D	UltraCarb5uODS 4.6(mm)
CCV 280-628897/33		10/07/2023 23:24	1	10070033.D	UltraCarb5uODS 4.6(mm)
CCV 280-628897/34		10/07/2023 23:47	1	10070034.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		10/08/2023 00:10	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/08/2023 00:33	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/08/2023 00:56	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/08/2023 01:19	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/08/2023 01:42	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/08/2023 02:05	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/08/2023 02:27	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/08/2023 02:50	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/08/2023 03:13	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/08/2023 03:36	1		UltraCarb5uODS 4.6(mm)
CCV 280-628897/45		10/08/2023 03:59	1		UltraCarb5uODS 4.6(mm)
CCV 280-628897/46		10/08/2023 04:22	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/08/2023 04:45	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/08/2023 05:08	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/08/2023 05:31	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/08/2023 05:54	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/08/2023 06:17	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/08/2023 06:40	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/08/2023 07:03	1		UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 10/07/2023 14:13

Analysis Batch Number: 628897 End Date: 10/08/2023 11:15

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		10/08/2023 07:26	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/08/2023 07:49	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/08/2023 08:12	1		UltraCarb5uODS 4.6(mm)
CCV 280-628897/57		10/08/2023 08:35	1		UltraCarb5uODS 4.6(mm)
CCV 280-628897/58		10/08/2023 08:58	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/08/2023 09:21	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/08/2023 09:44	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/08/2023 10:06	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/08/2023 10:29	1		UltraCarb5uODS 4.6(mm)
CCV 280-628897/63		10/08/2023 10:52	1		UltraCarb5uODS 4.6(mm)
CCV 280-628897/64		10/08/2023 11:15	1		UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: CHHPLC_X5 Start Date: 10/10/2023 22:36

Analysis Batch Number: 629183 End Date: 10/11/2023 08:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-629183/18		10/10/2023 22:36	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/10/2023 23:11	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/10/2023 23:46	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/11/2023 00:21	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/11/2023 00:56	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/11/2023 01:31	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/11/2023 02:06	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/11/2023 02:41	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/11/2023 03:16	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/11/2023 03:51	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/11/2023 04:26	1		Luna-phenylhex 4.6(mm)
CCV 280-629183/29		10/11/2023 05:01	1	10100029.D	Luna-phenylhex 4.6(mm)
ZZZZZ		10/11/2023 05:36	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/11/2023 06:11	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/11/2023 06:46	5		Luna-phenylhex 4.6(mm)
280-182145-7	FWGmw-021-230901-GW	10/11/2023 07:20	1	10100033.D	Luna-phenylhex 4.6(mm)
ZZZZZ		10/11/2023 07:55	1		Luna-phenylhex 4.6(mm)
CCV 280-629183/35		10/11/2023 08:30	1	10100035.D	Luna-phenylhex 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 10/13/2023 17:15

Analysis Batch Number: 629672 End Date: 10/14/2023 05:29

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-629672/16		10/13/2023 17:15	1	10130016.D	UltraCarb5uODS 4.6(mm)
CCV 280-629672/17		10/13/2023 17:38	1	10130017.D	UltraCarb5uODS 4.6(mm)
MB 280-629471/1-A		10/13/2023 18:00	1	10130018.D	UltraCarb5uODS 4.6(mm)
LCS 280-629471/2-A		10/13/2023 18:23	1	10130019.D	UltraCarb5uODS 4.6(mm)
LCSD 280-629471/3-A		10/13/2023 18:46	1	10130020.D	UltraCarb5uODS 4.6(mm)
LCS 280-629471/4-A		10/13/2023 19:09	1	10130021.D	UltraCarb5uODS 4.6(mm)
LCSD 280-629471/5-A		10/13/2023 19:32	1	10130022.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		10/13/2023 19:55	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/13/2023 20:18	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/13/2023 20:41	500		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/13/2023 21:04	500		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/13/2023 21:27	1		UltraCarb5uODS 4.6(mm)
CCV 280-629672/28		10/13/2023 21:50	1	10130028.D	UltraCarb5uODS 4.6(mm)
CCV 280-629672/29		10/13/2023 22:13	1	10130029.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		10/13/2023 22:36	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/13/2023 22:59	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/13/2023 23:22	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/13/2023 23:45	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/14/2023 00:08	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/14/2023 00:31	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/14/2023 00:53	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/14/2023 01:16	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/14/2023 01:39	1		UltraCarb5uODS 4.6(mm)
280-182145-7 RE	FWGmw-021-230901-GW RE	10/14/2023 02:02	1	10130039.D	UltraCarb5uODS 4.6(mm)
CCV 280-629672/40		10/14/2023 02:25	1	10130040.D	UltraCarb5uODS 4.6(mm)
CCV 280-629672/41		10/14/2023 02:48	1	10130041.D	UltraCarb5uODS 4.6(mm)
280-182145-8 RE	LL3mw-245-230901-GW RE	10/14/2023 03:11	1	10130042.D	UltraCarb5uODS 4.6(mm)
280-182145-11 RE	FWGmw-024-230901-GW RE	10/14/2023 03:34	1	10130043.D	UltraCarb5uODS 4.6(mm)
280-182145-12 RE	FWGmw-023-230901-GW RE	10/14/2023 03:57	1	10130044.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		10/14/2023 04:20	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		10/14/2023 04:43	1		UltraCarb5uODS 4.6(mm)
CCV 280-629672/47		10/14/2023 05:06	1	10130047.D	UltraCarb5uODS 4.6(mm)
CCV 280-629672/48		10/14/2023 05:29	1	10130048.D	UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Start Date: 10/13/2023 16:48

Analysis Batch Number: 629682 End Date: 10/14/2023 09:36

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-629682/9		10/13/2023 16:48	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/13/2023 17:24	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/13/2023 18:00	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/13/2023 18:36	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/13/2023 19:12	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/13/2023 19:48	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/13/2023 20:24	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/13/2023 21:00	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/13/2023 21:36	500		Luna-phenylhex 4.6(mm)
ZZZZZ		10/13/2023 22:12	500		Luna-phenylhex 4.6(mm)
ZZZZZ		10/13/2023 22:48	1		Luna-phenylhex 4.6(mm)
CCV 280-629682/20		10/13/2023 23:24	1	10130020.D	Luna-phenylhex 4.6(mm)
ZZZZZ		10/14/2023 00:00	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/14/2023 03:00	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/14/2023 03:36	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/14/2023 04:12	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/14/2023 04:48	1		Luna-phenylhex 4.6(mm)
CCV 280-629682/30		10/14/2023 05:24	1	10130030.D	Luna-phenylhex 4.6(mm)
280-182145-7 RE	FWGmw-021-230901-GW RE	10/14/2023 06:00	1	10130031.D	Luna-phenylhex 4.6(mm)
280-182145-8 RE	LL3mw-245-230901-GW RE	10/14/2023 06:36	1	10130032.D	Luna-phenylhex 4.6(mm)
CCV 280-629682/37		10/14/2023 09:36	1	10130037.D	Luna-phenylhex 4.6(mm)

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Batch Number: 617295 Batch Start Date: 06/23/23 17:53 Batch Analyst: Zhang, Jian

Batch Method: 8330B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	8330 DMT 00013	8330 LCS 00127	8330_ADDs 00037	8330_OP_DMT 00021	8330DiaminLCS 00058
IC 280-617295/11		8330B		1 mL	125 uL				
IC 280-617295/12		8330B		1 mL	50 uL				
IC 280-617295/13		8330B		1 mL	35 uL				
IC 280-617295/14		8330B		1 mL	20 uL				
IC 280-617295/15		8330B		1 mL	12.5 uL				
IC 280-617295/16		8330B		1 mL	5 uL				
IC 280-617295/17		8330B		1 mL	2.5 uL				
IC 280-617295/18		8330B		1 mL	1 uL				
IC 280-617295/19		8330B		1 mL	0.5 uL				
ICV 280-617295/20		8330B		1 mL		50 uL		50 uL	
IC 280-617295/21		8330B		1 mL			125 uL		
IC 280-617295/22		8330B		1 mL			50 uL		
IC 280-617295/23		8330B		1 mL			35 uL		
IC 280-617295/24		8330B		1 mL			20 uL		
IC 280-617295/25		8330B		1 mL			12.5 uL		
IC 280-617295/26		8330B		1 mL			5 uL		
IC 280-617295/27		8330B		1 mL			2 uL		
IC 280-617295/28		8330B		1 mL			1 uL		
ICV 280-617295/29		8330B		1 mL					50 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330IntermStk 00077	8330Surrogate 00146				

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.

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Batch Number: 617295 Batch Start Date: 06/23/23 17:53 Batch Analyst: Zhang, Jian

Batch Method: 8330B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330IntermStk 00077	8330Surrogate 00146				
IC 280-617295/11		8330B		250 uL					
IC 280-617295/12		8330B		100 uL					
IC 280-617295/13		8330B		70 uL					
IC 280-617295/14		8330B		40 uL					
IC 280-617295/15		8330B		25 uL					
IC 280-617295/16		8330B		10 uL					
IC 280-617295/17		8330B		5 uL					
IC 280-617295/18		8330B		2 uL					
IC 280-617295/19		8330B		1 uL					
ICV 280-617295/20		8330B			50 uL				
IC 280-617295/21		8330B							
IC 280-617295/22		8330B							
IC 280-617295/23		8330B							
IC 280-617295/24		8330B							
IC 280-617295/25		8330B							
IC 280-617295/26		8330B							
IC 280-617295/27		8330B							
IC 280-617295/28		8330B							
ICV 280-617295/29		8330B							

Batch Notes	
Methanol ID	223237

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.

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Batch Number: 617295 Batch Start Date: 06/23/23 17:53 Batch Analyst: Zhang, Jian

Batch Method: 8330B Batch End Date:

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.

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Batch Number: 626878 Batch Start Date: 09/20/23 20:01 Batch Analyst: Zhang, Jian

Batch Method: 8330B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	8330 DMT 00015	8330 LCS 00130	8330_OP_DMT 00022	8330IntermStk 00078	8330Surrogate 00150
IC 280-626878/10		8330B		1 mL	125 uL			250 uL	
IC 280-626878/11		8330B		1 mL	50 uL			100 uL	
IC 280-626878/12		8330B		1 mL	35 uL			70 uL	
IC 280-626878/13		8330B		1 mL	20 uL			40 uL	
IC 280-626878/14		8330B		1 mL	12.5 uL			25 uL	
IC 280-626878/15		8330B		1 mL	5 uL			10 uL	
IC 280-626878/16		8330B		1 mL	2.5 uL			5 uL	
IC 280-626878/17		8330B		1 mL	1 uL			2 uL	
IC 280-626878/18		8330B		1 mL	0.5 uL			1 uL	
ICV 280-626878/19		8330B		1 mL		50 uL	50 uL		50 uL

Batch Notes	
Methanol ID	230922

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.

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Batch Number: 627290 Batch Start Date: 09/25/23 18:42 Batch Analyst: Zhang, Jian

Batch Method: 8330B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	8330 DMT 00015	8330 LCS 00130	8330_ADDs 00037	8330_OP_DMT 00022	8330DiaminLCS 00060
IC 280-627290/10		8330B		1 mL	125 uL				
IC 280-627290/11		8330B		1 mL	50 uL				
IC 280-627290/12		8330B		1 mL	35 uL				
IC 280-627290/13		8330B		1 mL	20 uL				
IC 280-627290/14		8330B		1 mL	12.5 uL				
IC 280-627290/15		8330B		1 mL	5 uL				
IC 280-627290/16		8330B		1 mL	2.5 uL				
IC 280-627290/17		8330B		1 mL	1 uL				
IC 280-627290/18		8330B		1 mL	0.5 uL				
ICV 280-627290/19		8330B		1 mL		25 uL		25 uL	
IC 280-627290/20		8330B		1 mL			125 uL		
IC 280-627290/21		8330B		1 mL			50 uL		
IC 280-627290/22		8330B		1 mL			35 uL		
IC 280-627290/23		8330B		1 mL			20 uL		
IC 280-627290/24		8330B		1 mL			12.5 uL		
IC 280-627290/25		8330B		1 mL			5 uL		
IC 280-627290/26		8330B		1 mL			2 uL		
IC 280-627290/27		8330B		1 mL			1 uL		
ICV 280-627290/28		8330B		1 mL					12.5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330IntermStk 00078	8330Surrogate 00150

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.

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Batch Number: 627290 Batch Start Date: 09/25/23 18:42 Batch Analyst: Zhang, Jian

Batch Method: 8330B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330IntermStk 00078	8330Surrogate 00150				
IC 280-627290/10		8330B		250 uL					
IC 280-627290/11		8330B		100 uL					
IC 280-627290/12		8330B		70 uL					
IC 280-627290/13		8330B		40 uL					
IC 280-627290/14		8330B		25 uL					
IC 280-627290/15		8330B		10 uL					
IC 280-627290/16		8330B		5 uL					
IC 280-627290/17		8330B		2 uL					
IC 280-627290/18		8330B		1 uL					
ICV 280-627290/19		8330B			25 uL				
IC 280-627290/20		8330B							
IC 280-627290/21		8330B							
IC 280-627290/22		8330B							
IC 280-627290/23		8330B							
IC 280-627290/24		8330B							
IC 280-627290/25		8330B							
IC 280-627290/26		8330B							
IC 280-627290/27		8330B							
ICV 280-627290/28		8330B							

Batch Notes	
Methanol ID	230922

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.

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Batch Number: 627290 Batch Start Date: 09/25/23 18:42 Batch Analyst: Zhang, Jian

Batch Method: 8330B Batch End Date:

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.

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Batch Number: 628171 Batch Start Date: 10/03/23 13:12 Batch Analyst: Hermanova, Eva

Batch Method: 3535 Batch End Date: 10/03/23 17:22

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	8330 LCS 00131	8330_OP_DMT 00022
MB 280-628171/1		3535, 8330B				500 mL	5 mL		
LCS 280-628171/2		3535, 8330B				500 mL	5 mL	0.1 mL	0.1 mL
LCSD 280-628171/3		3535, 8330B				500 mL	5 mL	0.1 mL	0.1 mL
LCS 280-628171/4		3535, 8330B				500 mL	5 mL		
LCSD 280-628171/5		3535, 8330B				500 mL	5 mL		
280-182145-B-7	FWGmw-021-230901-GW	3535, 8330B	T	779.8 g	286.0 g	493.8 mL	5 mL		
280-182145-B-8	LL3mw-245-230901-GW	3535, 8330B	T	765.7 g	278.9 g	486.8 mL	5 mL		
280-182145-A-11	FWGmw-024-230901-GW	3535, 8330B	T	763.4 g	282.0 g	481.4 mL	5 mL		
280-182145-A-12	FWGmw-023-230901-GW	3535, 8330B	T	766.6 g	284.9 g	481.7 mL	5 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330DiaminLCS 00060	8330Surrogate 00150	AnalysisComment			
MB 280-628171/1		3535, 8330B			0.1 mL				
LCS 280-628171/2		3535, 8330B			0.1 mL	DMT			
LCSD 280-628171/3		3535, 8330B			0.1 mL	DMT			
LCS 280-628171/4		3535, 8330B		0.05 mL	0.1 mL	Diamino			
LCSD 280-628171/5		3535, 8330B		0.05 mL	0.1 mL	Diamino			
280-182145-B-7	FWGmw-021-230901-GW	3535, 8330B	T		0.1 mL				
280-182145-B-8	LL3mw-245-230901-GW	3535, 8330B	T		0.1 mL				
280-182145-A-11	FWGmw-024-230901-GW	3535, 8330B	T		0.1 mL				
280-182145-A-12	FWGmw-023-230901-GW	3535, 8330B	T		0.1 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.

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Batch Number: 628171 Batch Start Date: 10/03/23 13:12 Batch Analyst: Hermanova, Eva

Batch Method: 3535 Batch End Date: 10/03/23 17:22

Batch Notes	
First Start time	10/03/2023 13:50
First End time	10/03/2023 16:35
SPE Cartridge Type	Sep-Pak Porapak Rdx
SPE Cartridge Lot ID	005433023A
Balance ID	24350888
Balance is Level? (Y/N)	yes
Manifold ID	Manifold: B, C
QC Bottle Lot ID	0202401I
Pipette/Syringe/Dispenser ID	Dobby/ DOD/ Pugsley
Solvent Name	CaCl2
Solvent Lot #	CaCl2_Sol_00088
Rinse Solvent Name	Acetonotrile
Rinse Solvent Lot	Acetonotrile_00079
Acid Name	0.2% AAinACN
Acid ID	0.2% AAinACN_00001
Analyst ID - Spike Analyst	EH
Analyst ID - Spike Witness Analyst	Reviewer: DL
Batch Comment	DV-OP-0017

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.

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Batch Number: 629471 Batch Start Date: 10/12/23 14:54 Batch Analyst: Hermanova, Eva

Batch Method: 3535 Batch End Date: 10/12/23 18:35

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	8330 LCS 00131	8330_OP_DMT 00024
MB 280-629471/1		3535, 8330B				500 mL	5 mL		
LCS 280-629471/2		3535, 8330B				500 mL	5 mL	0.1 mL	0.1 mL
LCSD 280-629471/3		3535, 8330B				500 mL	5 mL	0.1 mL	0.1 mL
LCS 280-629471/4		3535, 8330B				500 mL	5 mL		
LCSD 280-629471/5		3535, 8330B				500 mL	5 mL		
280-182145-A-7	FWGmw-021-230901-GW	3535, 8330B	T	770.5 g	284.9 g	485.6 mL	5 mL		
280-182145-A-8	LL3mw-245-230901-GW	3535, 8330B	T	751.1 g	279.0 g	472.1 mL	5 mL		
280-182145-B-11	FWGmw-024-230901-GW	3535, 8330B	T	768.7 g	282.1 g	486.6 mL	5 mL		
280-182145-B-12	FWGmw-023-230901-GW	3535, 8330B	T	772.6 g	283.6 g	489 mL	5 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330DiaminLCS 00059	8330Surrogate 00151	AnalysisComment			
MB 280-629471/1		3535, 8330B			0.1 mL				
LCS 280-629471/2		3535, 8330B			0.1 mL	DMT			
LCSD 280-629471/3		3535, 8330B			0.1 mL	DMT			
LCS 280-629471/4		3535, 8330B		0.05 mL	0.1 mL	Diamino			
LCSD 280-629471/5		3535, 8330B		0.05 mL	0.1 mL	Diamino			
280-182145-A-7	FWGmw-021-230901-GW	3535, 8330B	T		0.1 mL				
280-182145-A-8	LL3mw-245-230901-GW	3535, 8330B	T		0.1 mL				
280-182145-B-11	FWGmw-024-230901-GW	3535, 8330B	T		0.1 mL				
280-182145-B-12	FWGmw-023-230901-GW	3535, 8330B	T		0.1 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.

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Batch Number: 629471 Batch Start Date: 10/12/23 14:54 Batch Analyst: Hermanova, Eva

Batch Method: 3535 Batch End Date: 10/12/23 18:35

Batch Notes	
First Start time	10/12/2023 15:10
First End time	10/12/2023 17:49
SPE Cartridge Type	Sep-Pak Porapak Rdx
SPE Cartridge Lot ID	005433023A
Balance ID	24350888
Balance is Level? (Y/N)	yes
Manifold ID	Manifold: B, C
QC Bottle Lot ID	02024011
Pipette/Syringe/Dispenser ID	Dobby/ DOD/ Pugsley
Solvent Name	CaCl2
Solvent Lot #	CaCl2_Sol_00088
Rinse Solvent Name	Acetonotrile
Rinse Solvent Lot	Acetonotrile_00079
Acid Name	0.2% AAinACN
Acid ID	0.2% AAinACN_00001
Analyst ID - Spike Analyst	EH
Analyst ID - Spike Witness Analyst	Reviewer: AA
Batch Comment	DV-OP-0017

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: Eurofins Denver Job Number: 280-182145-1

SDG No.:

Project: RVAAP FWGW

Client Sample ID	Lab Sample ID
LL1mw-080-230901-GW-R	280-182145-1
FWGmw-018-230901-GW	280-182145-2
FWGmw-020-230901-GW	280-182145-3
LL1mw-083-230901-GW-R	280-182145-4
LL1mw-084-230901-R	280-182145-5
LL1mw-084-230902-GW-R	280-182145-6
LL12mw-246-230901-GW	280-182145-9
LL12MW-RB-246-2023	280-182145-10

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: LL1mw-080-230901-GW-R
Lab Sample ID: 280-182145-1
Lab Name: Eurofins Denver
Job No.: 280-182145-1
SDG ID.:
Matrix: Water
Date Sampled: 09/28/2023 09:07
Reporting Basis: WET
Date Received: 09/29/2023 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrate as N	0.090	0.50	0.20	0.090	mg/L	J		1	9056
Nitrite as N	0.10	0.50	0.10	0.049	mg/L	U		1	9056
Sulfate	500	5.0	2.5	1.0	mg/L		J1	1	9056A
Alkalinity	140	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: FWGmw-018-230901-GW
Lab Sample ID: 280-182145-2
Lab Name: Eurofins Denver
Job No.: 280-182145-1
SDG ID.:
Matrix: Water
Date Sampled: 09/28/2023 09:41
Reporting Basis: WET
Date Received: 09/29/2023 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrate as N	0.20	0.50	0.20	0.090	mg/L	U		1	9056

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: FWGmw-020-230901-GW
Lab Sample ID: 280-182145-3
Lab Name: Eurofins Denver
Job No.: 280-182145-1
SDG ID.:
Matrix: Water
Date Sampled: 09/28/2023 09:55
Reporting Basis: WET
Date Received: 09/29/2023 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrate as N	0.20	0.50	0.20	0.090	mg/L	U		1	9056

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: LL1mw-083-230901-GW-R
Lab Sample ID: 280-182145-4
Lab Name: Eurofins Denver
Job No.: 280-182145-1
SDG ID.:
Matrix: Water
Date Sampled: 09/28/2023 10:11
Reporting Basis: WET
Date Received: 09/29/2023 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrate as N	0.18	0.50	0.20	0.090	mg/L	J		1	9056
Nitrite as N	0.10	0.50	0.10	0.049	mg/L	U		1	9056
Sulfate	180	5.0	2.5	1.0	mg/L			1	9056A
Alkalinity	6.4	10	6.4	3.1	mg/L	U		1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: LL1mw-084-230901-R
Lab Sample ID: 280-182145-5
Lab Name: Eurofins Denver
Job No.: 280-182145-1
SDG ID.:
Matrix: Water
Date Sampled: 09/28/2023 10:57
Reporting Basis: WET
Date Received: 09/29/2023 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrate as N	0.40	0.50	0.20	0.090	mg/L	J		1	9056
Nitrite as N	0.10	0.50	0.10	0.049	mg/L	U		1	9056
Sulfate	120	5.0	2.5	1.0	mg/L			1	9056A
Alkalinity	29	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: LL1mw-084-230902-GW-R
Lab Sample ID: 280-182145-6
Lab Name: Eurofins Denver
Job No.: 280-182145-1
SDG ID.:
Matrix: Water
Date Sampled: 09/28/2023 10:57
Reporting Basis: WET
Date Received: 09/29/2023 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrate as N	0.39	0.50	0.20	0.090	mg/L	J		1	9056
Nitrite as N	0.10	0.50	0.10	0.049	mg/L	U		1	9056
Sulfate	120	5.0	2.5	1.0	mg/L			1	9056A
Alkalinity	29	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: LL12mw-246-230901-GW
Lab Sample ID: 280-182145-9
Lab Name: Eurofins Denver
Job No.: 280-182145-1
SDG ID.:
Matrix: Water
Date Sampled: 09/28/2023 13:25
Reporting Basis: WET
Date Received: 09/29/2023 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia as N	0.14	0.10	0.050	0.029	mg/L			1	350.1
Nitrate as N	0.20	0.50	0.20	0.090	mg/L	U		1	9056

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: LL12MW-RB-246-2023 Lab Sample ID: 280-182145-10

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG ID.:

Matrix: Water Date Sampled: 09/28/2023 15:10

Reporting Basis: WET Date Received: 09/29/2023 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia as N	0.050	0.10	0.050	0.029	mg/L	U		1	350.1
Nitrate as N	0.20	0.50	0.20	0.090	mg/L	U		1	9056

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Analyst: MMP Batch Start Date: 10/16/2023

Reporting Units: mg/L Analytical Batch No.: 630033

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
14	ICV	12:05	Ammonia as N	2.48	2.51	99	90-110		350.1 ICV_00581
15	ICVL	12:07	Ammonia as N	0.519	0.501	104	90-110		350.1 ICV_00581
16	ICB	12:10	Ammonia as N	0.0280				J	
40	CCV	13:14	Ammonia as N	2.53	2.50	101	90-110		350.1 cal_00600
41	CCVL	13:16	Ammonia as N	0.532	0.500	106	90-110		350.1 cal_00600
42	CCB	13:19	Ammonia as N	0.050				U	
55	CCV	13:54	Ammonia as N	2.54	2.50	101	90-110		350.1 cal_00600
56	CCVL	13:56	Ammonia as N	0.524	0.500	105	90-110		350.1 cal_00600
57	CCB	13:59	Ammonia as N	0.050				U	
68	CCV	14:28	Ammonia as N	2.57	2.50	103	90-110		350.1 cal_00600
69	CCVL	14:31	Ammonia as N	0.530	0.500	106	90-110		350.1 cal_00600
70	CCB	14:34	Ammonia as N	0.050				U	
96	CCV	15:43	Ammonia as N	2.56	2.50	103	90-110		350.1 cal_00600
97	CCVL	15:46	Ammonia as N	0.529	0.500	106	90-110		350.1 cal_00600
98	CCB	15:48	Ammonia as N	0.050				U	

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

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Analyst: MEC Batch Start Date: 08/16/2023

Reporting Units: mg/L Analytical Batch No.: 623067

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
8	ICV	10:08	Nitrate as N	3.95	4.00	99	90-110		IC ICV 5_00413
			Nitrite as N	4.14	4.00	104	90-110		IC ICV 5_00413
9	ICB	10:23	Nitrate as N	0.20				U	
			Nitrite as N	0.10				U	

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

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Analyst: EJS Batch Start Date: 09/29/2023

Reporting Units: mg/L Analytical Batch No.: 627894

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	12:10	Nitrate as N	4.71	5.00	94	90-110		IC LCS_01980
			Nitrite as N	4.88	5.00	98	90-110		IC LCS_01980
2	CCB	12:25	Nitrate as N	0.20				U	
			Nitrite as N	0.10				U	
17	CCV	16:10	Nitrate as N	4.70	5.00	94	90-110		IC LCS_01980
			Nitrite as N	4.88	5.00	98	90-110		IC LCS_01980
18	CCB	16:25	Nitrate as N	0.20				U	
			Nitrite as N	0.10				U	
29	CCV	19:11	Nitrate as N	4.71	5.00	94	90-110		IC LCS_01980
			Nitrite as N	4.86	5.00	97	90-110		IC LCS_01980
30	CCB	19:26	Nitrate as N	0.20				U	
			Nitrite as N	0.10				U	
41	CCV	22:11	Nitrate as N	4.72	5.00	94	90-110		IC LCS_01980
42	CCB	22:26	Nitrate as N	0.20				U	
53	CCV	01:11	Nitrate as N	4.74	5.00	95	90-110		IC LCS_01980
54	CCB	01:26	Nitrate as N	0.20				U	

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

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Analyst: MEC Batch Start Date: 08/16/2023

Reporting Units: mg/L Analytical Batch No.: 623068

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
8	ICV	10:08	Sulfate	81.1	80.0	101	90-110		IC SO4 ICV_00024
9	ICB	10:23	Sulfate	2.5				U	

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

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Analyst: EJS Batch Start Date: 09/29/2023

Reporting Units: mg/L Analytical Batch No.: 627895

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	12:10	Sulfate	99.4	100	99	90-110		IC LCS_01980
2	CCB	12:25	Sulfate	2.5				U	
17	CCV	16:10	Sulfate	99.6	100	100	90-110		IC LCS_01980
18	CCB	16:25	Sulfate	2.5				U	
29	CCV	19:11	Sulfate	101	100	101	90-110		IC LCS_01980
30	CCB	19:26	Sulfate	1.29				J	

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

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Analyst: LL Batch Start Date: 10/04/2023

Reporting Units: mg/L Analytical Batch No.: 628623

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
16	CCV	23:40	Alkalinity	200	200	100	90-110		Alk daily lcs 01109
17	CCB	23:46	Alkalinity	3.28				J	
28	CCV	01:01	Alkalinity	201	200	101	90-110		Alk daily lcs 01109
29	CCB	01:07	Alkalinity	3.25				J	

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

FORM II-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	LOQ	Dil
Batch ID: 630033 Date: 10/16/2023 13:43							
350.1	MB 280-630033/51	Ammonia as N	0.0440	J	mg/L	0.10	1
Batch ID: 627894 Date: 09/29/2023 13:25							
9056	MB 280-627894/6	Nitrate as N	0.20	U	mg/L	0.50	1
9056	MB 280-627894/6	Nitrite as N	0.10	U	mg/L	0.50	1
Batch ID: 627894 Date: 09/29/2023 21:41							
9056	MB 280-627894/39	Nitrate as N	0.20	U	mg/L	0.50	1
Batch ID: 627895 Date: 09/29/2023 13:25							
9056A	MB 280-627895/6	Sulfate	2.5	U	mg/L	5.0	1
Batch ID: 628623 Date: 10/04/2023 22:23							
SM 2320B	MB 280-628623/5	Alkalinity	3.44	J	mg/L	10	1

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 630033 Date: 10/16/2023 14:44											
350.1	280-182145-9	Ammonia as N	0.14		mg/L						
350.1	280-182145-9 MS	Ammonia as N	1.23		mg/L	1.00	109	90-110			
Batch ID: 627894 Date: 09/29/2023 15:40											
9056	280-182145-5	Nitrate as N	0.40	J	mg/L						
9056	280-182145-5 MS	Nitrate as N	5.88		mg/L	5.00	110	88-111			
9056	280-182145-5	Nitrite as N	0.10	U	mg/L						
9056	280-182145-5 MS	Nitrite as N	4.53		mg/L	5.00	91	87-111			
Batch ID: 627895 Date: 09/29/2023 15:40											
9056A	280-182145-5	Sulfate	120		mg/L						
9056A	280-182145-5 MS	Sulfate	174		mg/L	50.0	109	87-112			

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

FORM V-IN

5-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 630033 Date: 10/16/2023 14:47											
350.1	280-182145-9 MSD	Ammonia as N	1.23		mg/L	1.00	110	90-110	1	10	
Batch ID: 627894 Date: 09/29/2023 15:55											
9056	280-182145-5 MSD	Nitrate as N	5.93		mg/L	5.00	111	88-111	1	10	
9056	280-182145-5 MSD	Nitrite as N	4.57		mg/L	5.00	91	87-111	1	10	
Batch ID: 627895 Date: 09/29/2023 15:55											
9056A	280-182145-5 MSD	Sulfate	174		mg/L	50.0	110	87-112	0	10	

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

FORM V-IN

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Matrix: Water

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 627894 Date: 09/29/2023 15:25								
9056	LL1mw-084-230901-R	280-182145-5	Nitrate as N	0.40	mg/L			J
9056	LL1mw-084-230901-R	280-182145-5 DU	Nitrate as N	0.404	mg/L	0.8	10	J
9056	LL1mw-084-230901-R	280-182145-5	Nitrite as N	0.10	mg/L			U
9056	LL1mw-084-230901-R	280-182145-5 DU	Nitrite as N	0.10	mg/L	NC	10	U
Batch ID: 627895 Date: 09/29/2023 15:25								
9056A	LL1mw-084-230901-R	280-182145-5	Sulfate	120	mg/L			
9056A	LL1mw-084-230901-R	280-182145-5 DU	Sulfate	120	mg/L	0.4	10	

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

FORM VI-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 630033	Date: 10/16/2023 13:46										
						LCS Source: 350.1 cal_00600					
350.1	LCS 280-630033/52	Ammonia as N	2.58		mg/L	2.50	103	90-110			
Batch ID: 627894	Date: 09/29/2023 12:55										
						LCS Source: IC LCS_01980					
9056	LCS 280-627894/4	Nitrate as N	4.70		mg/L	5.00	94	88-111	0	10	
9056	LCS 280-627894/4	Nitrite as N	4.89		mg/L	5.00	98	87-111	0	10	
Batch ID: 627894	Date: 09/29/2023 21:11										
						LCS Source: IC LCS_01980					
9056	LCS 280-627894/37	Nitrate as N	4.71		mg/L	5.00	94	88-111	0	10	
Batch ID: 627895	Date: 09/29/2023 12:55										
						LCS Source: IC LCS_01980					
9056A	LCS 280-627895/4	Sulfate	99.3		mg/L	100	99	87-112	0	10	
Batch ID: 628623	Date: 10/04/2023 22:17										
						LCS Source: Alk daily lcs_01109					
SM 2320B	LCS 280-628623/4	Alkalinity	207		mg/L	200	103	89-110			

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

FORM VIIA-IN

7A-IN
LAB CONTROL SAMPLE DUPLICATE
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 627894	Date: 09/29/2023 13:10										
						LCSD Source: IC LCS_01980					
9056	LCSD 280-627894/5	Nitrate as N	4.70		mg/L	5.00	94	88-111	0	10	
9056	LCSD 280-627894/5	Nitrite as N	4.89		mg/L	5.00	98	87-111	0	10	
Batch ID: 627894	Date: 09/29/2023 21:26										
						LCSD Source: IC LCS_01980					
9056	LCSD 280-627894/38	Nitrate as N	4.72		mg/L	5.00	94	88-111	0	10	
Batch ID: 627895	Date: 09/29/2023 13:10										
						LCSD Source: IC LCS_01980					
9056A	LCSD 280-627895/5	Sulfate	99.3		mg/L	100	99	87-112	0	10	

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

FORM VIIA-IN

7A-IN
METHOD REPORTING LIMIT CHECK
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 627894	Date: 09/29/2023 12:40										
						LCS Source: IC Cal low_00731					
9056	MRL 280-627894/3	Nitrate as N	0.411	J	mg/L	0.500	82	50-150			
9056	MRL 280-627894/3	Nitrite as N	0.447	J	mg/L	0.500	89	50-150			
Batch ID: 627895	Date: 09/29/2023 12:40										
						LCS Source: IC CAL cl/so4_00501					
9056A	MRL 280-627895/3	Sulfate	5.66		mg/L	5.00	113	50-150			

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

FORM VIIA-IN

16A-IN
INITIAL CALIBRATION SUMMARY

Lab Name: Eurofins Denver Job No: 280-182145-1

SDG No.: Analysis Batch No.: 623067

Instrument ID: WC_IonChrom10 Calibration ID: 83633

Start Date: 08/16/2023 08:23 End Date: 08/16/2023 09:39

Analytical Method: 9056

Analyte	Corr. Coeff.	Slope	Intercept	Calib. Type	Weighting
Nitrate as N	1.0000	49200000	-1790000	WLR	Inverse Conc
Nitrite as N	1.0000	52900000	-660000	WLR	Inverse Conc

16B-IN
INITIAL CALIBRATION

Lab Name: Eurofins Denver Job No: 280-182145-1

SDG No.: Analysis Batch No.: 623067

Instrument ID: WC_IonChrom10 Calibration ID: 83633

Start Date: 08/16/2023 08:23 End Date: 08/16/2023 09:39

Analytical Method: 9056 Concentration Units: ug/mL

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Nitrate as N	0.20	0.22	8	0.50	0.49	-3	1.0	0.95	-5
Nitrite as N	0.20	0.19	-4	0.50	0.50	-1	1.0	1.0	3

16B-IN
INITIAL CALIBRATION

Lab Name: Eurofins Denver Job No: 280-182145-1

SDG No.: Analysis Batch No.: 623067

Instrument ID: WC_IonChrom10 Calibration ID: 83633

Start Date: 08/16/2023 08:23 End Date: 08/16/2023 09:39

Analytical Method: 9056 Concentration Units: ug/mL

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Nitrate as N	4.0	3.9	-1	8.0	8.0	0	10.0	10.1	1
Nitrite as N	4.0	4.1	4	8.0	8.0	0	10.0	9.8	-2

16A-IN
INITIAL CALIBRATION SUMMARY

Lab Name: Eurofins Denver Job No: 280-182145-1

SDG No.: Analysis Batch No.: 623068

Instrument ID: WC_IonChrom10 Calibration ID: 83634

Start Date: 08/16/2023 08:23 End Date: 08/16/2023 09:39

Analytical Method: 9056A

Analyte	Corr. Coeff.	Slope	Intercept	Calib. Type	Weighting
Sulfate	1.0000	14500000	-1220000	WLR	Inverse Conc

16B-IN
INITIAL CALIBRATION

Lab Name: Eurofins Denver Job No: 280-182145-1

SDG No.: Analysis Batch No.: 623068

Instrument ID: WC_IonChrom10 Calibration ID: 83634

Start Date: 08/16/2023 08:23 End Date: 08/16/2023 09:39

Analytical Method: 9056A Concentration Units: ug/mL

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Sulfate	1.0	1.2	19	2.5	2.3	-7	5.0	4.4	-13

16B-IN
INITIAL CALIBRATION

Lab Name: Eurofins Denver Job No: 280-182145-1

SDG No.: Analysis Batch No.: 623068

Instrument ID: WC_IonChrom10 Calibration ID: 83634

Start Date: 08/16/2023 08:23 End Date: 08/16/2023 09:39

Analytical Method: 9056A Concentration Units: ug/mL

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Sulfate	60.0	59.2	-1	120	121	1	200	200	0

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-182145-1

SDG Number:

Matrix: Water Instrument ID: WC_SKALAR_01

Method: 350.1 DL Date: 04/29/2022 13:46

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Ammonia as N		0.1	0.029

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-182145-1

SDG Number:

Matrix: Water Instrument ID: WC_SKALAR_01

Method: 350.1 XMDL Date: 03/28/2011 13:26

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Ammonia as N		0.1	0.0225

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-182145-1

SDG Number:

Matrix: Water Instrument ID: WC_IonChrom10

Method: 9056 DL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Nitrate as N		0.5	0.0901
Nitrite as N		0.5	0.049

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-182145-1

SDG Number:

Matrix: Water Instrument ID: WC_IonChrom10

Method: 9056 XMDL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Nitrate as N		0.5	0.0901
Nitrite as N		0.5	0.049

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-182145-1

SDG Number:

Matrix: Water Instrument ID: WC_IonChrom10

Method: 9056A DL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Sulfate		5	1.03

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-182145-1

SDG Number:

Matrix: Water Instrument ID: WC_IonChrom10

Method: 9056A XMDL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Sulfate		5	1.03

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-182145-1

SDG Number:

Matrix: Water Instrument ID: WC_AT4

Method: SM 2320B DL Date: 02/03/2019 00:00

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Alkalinity		10	3.08

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-182145-1

SDG Number:

Matrix: Water Instrument ID: WC_AT4

Method: SM 2320B XMDL Date: 02/03/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Alkalinity		10	3.08

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver | Job No.: 280-182145-1

SDG No.:

Instrument ID: WC_SKALAR_01 | Analysis Method: 350.1

Start Date: 10/16/2023 11:26 | End Date: 10/16/2023 17:19

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			11:26																									
ZZZZZZ			11:29																									
ZZZZZZ			11:32																									
ZZZZZZ			11:35																									
ZZZZZZ			11:39																									
ZZZZZZ			11:41																									
ZZZZZZ			11:45																									
ZZZZZZ			11:48																									
ZZZZZZ			11:51																									
ZZZZZZ			11:54																									
ZZZZZZ			11:56																									
ZZZZZZ			11:59																									
ZZZZZZ			12:02																									
ICV 280-630033/14	1		12:05	X																								
ICVL 280-630033/15	1		12:07	X																								
ICB 280-630033/16	1		12:10	X																								
ZZZZZZ			12:12																									
ZZZZZZ			12:15																									
ZZZZZZ			12:18																									
ZZZZZZ			12:20																									
ZZZZZZ			12:23																									
ZZZZZZ			12:26																									
ZZZZZZ			12:28																									
ZZZZZZ			12:31																									
ZZZZZZ			12:33																									
ZZZZZZ			12:36																									
CCV 280-630033/27			12:39																									
CCVL 280-630033/28			12:41																									
CCB 280-630033/29			12:44																									
ZZZZZZ			12:47																									
ZZZZZZ			12:50																									
ZZZZZZ			12:52																									
ZZZZZZ			12:55																									
ZZZZZZ			12:58																									
ZZZZZZ			13:00																									
ZZZZZZ			13:03																									
ZZZZZZ			13:06																									
ZZZZZZ			13:09																									
ZZZZZZ			13:11																									
CCV 280-630033/40	1		13:14	X																								
CCVL 280-630033/41	1		13:16	X																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: WC_SKALAR_01 Analysis Method: 350.1

Start Date: 10/16/2023 11:26 End Date: 10/16/2023 17:19

Lab Sample Id	D/F	Type	Time	Analytes
				NH3
CCB 280-630033/42	1		13:19	X
ZZZZZZ			13:22	
ZZZZZZ			13:24	
ZZZZZZ			13:28	
ZZZZZZ			13:30	
ZZZZZZ			13:32	
ZZZZZZ			13:35	
ZZZZZZ			13:38	
ZZZZZZ			13:40	
MB 280-630033/51	1	T	13:43	X
LCS 280-630033/52	1	T	13:46	X
ZZZZZZ			13:48	
ZZZZZZ			13:51	
CCV 280-630033/55	1		13:54	X
CCVL 280-630033/56	1		13:56	X
CCB 280-630033/57	1		13:59	X
ZZZZZZ			14:02	
ZZZZZZ			14:04	
ZZZZZZ			14:07	
ZZZZZZ			14:10	
ZZZZZZ			14:12	
ZZZZZZ			14:15	
ZZZZZZ			14:18	
ZZZZZZ			14:20	
ZZZZZZ			14:23	
ZZZZZZ			14:26	
CCV 280-630033/68	1		14:28	X
CCVL 280-630033/69	1		14:31	X
CCB 280-630033/70	1		14:34	X
ZZZZZZ			14:36	
ZZZZZZ			14:39	
280-182145-9	1	T	14:41	X
280-182145-9 MS	1	T	14:44	X
280-182145-9 MSD	1	T	14:47	X
280-182145-10	1	T	14:50	X
ZZZZZZ			14:52	
ZZZZZZ			14:55	
ZZZZZZ			14:58	
ZZZZZZ			15:00	
ZZZZZZ			15:03	
ZZZZZZ			15:06	

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: WC_SKALAR_01 Analysis Method: 350.1

Start Date: 10/16/2023 11:26 End Date: 10/16/2023 17:19

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
CCV 280-630033/83			15:09																									
CCVL 280-630033/84			15:11																									
CCB 280-630033/85			15:14																									
ZZZZZZ			15:17																									
ZZZZZZ			15:19																									
ZZZZZZ			15:21																									
ZZZZZZ			15:24																									
ZZZZZZ			15:27																									
ZZZZZZ			15:29																									
ZZZZZZ			15:32																									
ZZZZZZ			15:35																									
ZZZZZZ			15:37																									
ZZZZZZ			15:40																									
CCV 280-630033/96	1		15:43	X																								
CCVL 280-630033/97	1		15:46	X																								
CCB 280-630033/98	1		15:48	X																								
CCV 280-630033/99			15:51																									
CCVL 280-630033/100			15:54																									
CCB 280-630033/101			15:56																									
ZZZZZZ			15:59																									
ZZZZZZ			16:01																									
ZZZZZZ			16:05																									
ZZZZZZ			16:07																									
ZZZZZZ			16:09																									
ZZZZZZ			16:12																									
ZZZZZZ			16:15																									
ZZZZZZ			16:18																									
ZZZZZZ			16:20																									
ZZZZZZ			16:23																									
ZZZZZZ			16:26																									
ZZZZZZ			16:28																									
CCV 280-630033/114			16:31																									
CCVL 280-630033/115			16:34																									
CCB 280-630033/116			16:36																									
ZZZZZZ			16:39																									
ZZZZZZ			16:41																									
ZZZZZZ			16:44																									
ZZZZZZ			16:47																									
ZZZZZZ			16:49																									
ZZZZZZ			16:52																									
ZZZZZZ			16:55																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: WC_SKALAR_01 Analysis Method: 350.1

Start Date: 10/16/2023 11:26 End Date: 10/16/2023 17:19

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			16:57																									
ZZZZZZ			17:00																									
ZZZZZZ			17:03																									
CCV 280-630033/127			17:05																									
CCVL 280-630033/128			17:08																									
CCB 280-630033/129			17:11																									
ZZZZZZ			17:13																									
ZZZZZZ			17:16																									
ZZZZZZ			17:19																									

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056

Start Date: 08/16/2023 08:23 End Date: 08/17/2023 02:38

Lab Sample Id	D/F	Type	Time	Analytes																									
				NO2-N	NO3																								
STD1 280-623067/1 IC	1		08:23	X	X																								
STD2 280-623067/2 IC	1		08:38	X	X																								
STD3 280-623067/3 IC	1		08:54	X	X																								
STD4 280-623067/4 IC	1		09:09	X	X																								
STD5 280-623067/5 IC	1		09:24	X	X																								
STD6 280-623067/6 IC	1		09:39	X	X																								
RTC 280-623067/7			09:54																										
ICV 280-623067/8	1		10:08	X	X																								
ICB 280-623067/9	1		10:23	X	X																								
ZZZZZZ			11:49																										
ZZZZZZ			12:04																										
ZZZZZZ			12:19																										
ZZZZZZ			12:34																										
ZZZZZZ			12:49																										
ZZZZZZ			13:04																										
ZZZZZZ			13:19																										
ZZZZZZ			13:34																										
ZZZZZZ			13:49																										
ZZZZZZ			14:04																										
ZZZZZZ			14:19																										
ZZZZZZ			16:52																										
ZZZZZZ			17:07																										
ZZZZZZ			17:22																										
CCV 280-623067/24			17:37																										
CCB 280-623067/25			17:52																										
ZZZZZZ			18:07																										
ZZZZZZ			18:22																										
ZZZZZZ			18:37																										
ZZZZZZ			18:52																										
ZZZZZZ			19:07																										
ZZZZZZ			19:22																										
ZZZZZZ			19:38																										
ZZZZZZ			19:53																										
ZZZZZZ			20:08																										
ZZZZZZ			20:23																										
CCV 280-623067/36			20:38																										
CCB 280-623067/37			20:53																										
ZZZZZZ			21:08																										
ZZZZZZ			21:23																										

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056

Start Date: 08/16/2023 08:23 End Date: 08/17/2023 02:38

Lab Sample Id	D/F	Type	Time	Analytes																									
				NO2-N	NO3																								
ZZZZZZ			21:38																										
ZZZZZZ			21:53																										
ZZZZZZ			22:08																										
ZZZZZZ			22:23																										
ZZZZZZ			22:38																										
ZZZZZZ			22:53																										
ZZZZZZ			23:08																										
ZZZZZZ			23:23																										
CCV 280-623067/48			23:38																										
CCB 280-623067/49			23:53																										
ZZZZZZ			00:08																										
ZZZZZZ			00:23																										
ZZZZZZ			00:38																										
ZZZZZZ			00:53																										
ZZZZZZ			01:08																										
ZZZZZZ			01:23																										
ZZZZZZ			01:38																										
ZZZZZZ			01:53																										
ZZZZZZ			02:08																										
CCV 280-623067/59			02:23																										
CCB 280-623067/60			02:38																										

Prep Types:
=

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056

Start Date: 09/29/2023 12:10 End Date: 09/30/2023 05:42

Lab Sample Id	D/F	Type	Time	Analytes																											
				NO2-N	NO3																										
CCV 280-627894/1	1		12:10	X	X																										
CCB 280-627894/2	1		12:25	X	X																										
MRL 280-627894/3	1	T	12:40	X	X																										
LCS 280-627894/4	1	T	12:55	X	X																										
LCSD 280-627894/5	1	T	13:10	X	X																										
MB 280-627894/6	1	T	13:25	X	X																										
ZZZZZZ			13:40																												
ZZZZZZ			13:55																												
280-182145-1	1	T	14:10	X	X																										
280-182145-2	1	T	14:25		X																										
280-182145-3	1	T	14:40		X																										
280-182145-4	1	T	14:55	X	X																										
280-182145-5	1	T	15:10	X	X																										
280-182145-5 DU	1	T	15:25	X	X																										
280-182145-5 MS	1	T	15:40	X	X																										
280-182145-5 MSD	1	T	15:55	X	X																										
CCV 280-627894/17	1		16:10	X	X																										
CCB 280-627894/18	1		16:25	X	X																										
280-182145-6	1	T	16:40	X	X																										
ZZZZZZ			16:55																												
ZZZZZZ			17:10																												
ZZZZZZ			17:25																												
ZZZZZZ			17:40																												
ZZZZZZ			17:55																												
ZZZZZZ			18:11																												
ZZZZZZ			18:26																												
ZZZZZZ			18:41																												
280-182145-9	1	T	18:56		X																										
CCV 280-627894/29	1		19:11	X	X																										
CCB 280-627894/30	1		19:26	X	X																										
ZZZZZZ			19:41																												
ZZZZZZ			19:56																												
ZZZZZZ			20:11																												
ZZZZZZ			20:26																												
ZZZZZZ			20:41																												
ZZZZZZ			20:56																												
LCS 280-627894/37	1	T	21:11		X																										
LCSD 280-627894/38	1	T	21:26		X																										
MB 280-627894/39	1	T	21:41		X																										

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056

Start Date: 09/29/2023 12:10 End Date: 09/30/2023 05:42

Lab Sample Id	D/F	Type	Time	Analytes																									
				NO2-N	NO3																								
ZZZZZZ			21:56																										
CCV 280-627894/41	1		22:11		X																								
CCB 280-627894/42	1		22:26		X																								
ZZZZZZ			22:41																										
280-182145-10	1	T	22:56		X																								
ZZZZZZ			23:11																										
ZZZZZZ			23:26																										
ZZZZZZ			23:41																										
ZZZZZZ			23:56																										
ZZZZZZ			00:11																										
ZZZZZZ			00:26																										
ZZZZZZ			00:41																										
ZZZZZZ			00:56																										
CCV 280-627894/53	1		01:11		X																								
CCB 280-627894/54	1		01:26		X																								
ZZZZZZ			01:41																										
ZZZZZZ			01:56																										
ZZZZZZ			02:11																										
ZZZZZZ			02:26																										
ZZZZZZ			02:41																										
ZZZZZZ			02:56																										
ZZZZZZ			03:11																										
ZZZZZZ			03:26																										
ZZZZZZ			03:41																										
CCV 280-627894/64			03:56																										
CCB 280-627894/65			04:11																										
ZZZZZZ			04:26																										
ZZZZZZ			04:41																										
ZZZZZZ			04:56																										
ZZZZZZ			05:12																										
CCV 280-627894/70			05:27																										
CCB 280-627894/71			05:42																										

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056A

Start Date: 08/16/2023 08:23 End Date: 08/17/2023 02:38

Lab Sample Id	D/F	Type	Time	Analytes
				SO4
STD1 280-623068/1 IC	1		08:23	X
STD2 280-623068/2 IC	1		08:38	X
STD3 280-623068/3 IC	1		08:54	X
STD4 280-623068/4 IC	1		09:09	X
STD5 280-623068/5 IC	1		09:24	X
STD6 280-623068/6 IC	1		09:39	X
RTC 280-623068/7			09:54	
ICV 280-623068/8	1		10:08	X
ICB 280-623068/9	1		10:23	X
ZZZZZZ			11:49	
ZZZZZZ			12:04	
ZZZZZZ			12:19	
ZZZZZZ			12:34	
ZZZZZZ			12:49	
ZZZZZZ			13:04	
ZZZZZZ			13:19	
ZZZZZZ			14:04	
ZZZZZZ			14:19	
ZZZZZZ			16:52	
ZZZZZZ			17:07	
ZZZZZZ			17:22	
CCV 280-623068/24			17:37	
CCB 280-623068/25			17:52	
ZZZZZZ			18:07	
ZZZZZZ			18:22	
ZZZZZZ			18:37	
ZZZZZZ			18:52	
ZZZZZZ			19:07	
ZZZZZZ			19:22	
ZZZZZZ			19:38	
ZZZZZZ			19:53	
ZZZZZZ			20:08	
ZZZZZZ			20:23	
CCV 280-623068/36			20:38	
CCB 280-623068/37			20:53	
ZZZZZZ			21:08	
ZZZZZZ			21:23	
ZZZZZZ			21:38	
ZZZZZZ			21:53	
ZZZZZZ			22:08	
ZZZZZZ			22:23	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056A

Start Date: 08/16/2023 08:23 End Date: 08/17/2023 02:38

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
ZZZZZZ			22:38																									
ZZZZZZ			22:53																									
ZZZZZZ			23:08																									
ZZZZZZ			23:23																									
CCV 280-623068/48			23:38																									
CCB 280-623068/49			23:53																									
ZZZZZZ			00:08																									
ZZZZZZ			00:23																									
ZZZZZZ			00:38																									
ZZZZZZ			00:53																									
ZZZZZZ			01:08																									
ZZZZZZ			01:23																									
ZZZZZZ			01:38																									
ZZZZZZ			01:53																									
ZZZZZZ			02:08																									
CCV 280-623068/59			02:23																									
CCB 280-623068/60			02:38																									

Prep Types:
=

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056A

Start Date: 09/29/2023 12:10 End Date: 09/30/2023 05:42

Lab Sample Id	D/F	Type	Time	Analytes
				SO4
CCV 280-627895/1	1		12:10	X
CCB 280-627895/2	1		12:25	X
MRL 280-627895/3	1	T	12:40	X
LCS 280-627895/4	1	T	12:55	X
LCSD 280-627895/5	1	T	13:10	X
MB 280-627895/6	1	T	13:25	X
ZZZZZZ			13:40	
ZZZZZZ			13:55	
280-182145-1	1	T	14:10	X
ZZZZZZ			14:25	
ZZZZZZ			14:40	
280-182145-4	1	T	14:55	X
280-182145-5	1	T	15:10	X
280-182145-5 DU	1	T	15:25	X
280-182145-5 MS	1	T	15:40	X
280-182145-5 MSD	1	T	15:55	X
CCV 280-627895/17	1		16:10	X
CCB 280-627895/18	1		16:25	X
280-182145-6	1	T	16:40	X
ZZZZZZ			17:55	
ZZZZZZ			18:11	
ZZZZZZ			18:26	
ZZZZZZ			18:41	
ZZZZZZ			18:56	
CCV 280-627895/29	1		19:11	X
CCB 280-627895/30	1		19:26	X
ZZZZZZ			19:41	
ZZZZZZ			20:26	
ZZZZZZ			21:11	
ZZZZZZ			21:26	
ZZZZZZ			21:41	
CCV 280-627895/41			22:11	
CCB 280-627895/42			22:26	
ZZZZZZ			22:56	
ZZZZZZ			00:11	
ZZZZZZ			00:26	
ZZZZZZ			00:41	
ZZZZZZ			00:56	
CCV 280-627895/53			01:11	
CCB 280-627895/54			01:26	
ZZZZZZ			01:56	

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056A

Start Date: 09/29/2023 12:10 End Date: 09/30/2023 05:42

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
ZZZZZZ			02:11																									
ZZZZZZ			02:26																									
ZZZZZZ			02:41																									
ZZZZZZ			02:56																									
ZZZZZZ			03:11																									
ZZZZZZ			03:26																									
ZZZZZZ			03:41																									
CCV 280-627895/64			03:56																									
CCB 280-627895/65			04:11																									
ZZZZZZ			04:26																									
ZZZZZZ			04:41																									
ZZZZZZ			04:56																									
ZZZZZZ			05:12																									
CCV 280-627895/70			05:27																									
CCB 280-627895/71			05:42																									

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 10/04/2023 22:01 End Date: 10/05/2023 01:07

Lab Sample Id	D/F	Type	Time	Analytes
				Alk
RINSE 280-628623/1			22:01	
ZZZZZZ			22:08	
ZZZZZZ			22:11	
LCS 280-628623/4	1	T	22:17	X
MB 280-628623/5	1	T	22:23	X
ZZZZZZ			22:29	
ZZZZZZ			22:34	
ZZZZZZ			22:39	
ZZZZZZ			22:45	
ZZZZZZ			22:52	
ZZZZZZ			22:58	
ZZZZZZ			23:06	
ZZZZZZ			23:14	
ZZZZZZ			23:25	
ZZZZZZ			23:33	
CCV 280-628623/16	1		23:40	X
CCB 280-628623/17	1		23:46	X
ZZZZZZ			00:04	
ZZZZZZ			00:10	
ZZZZZZ			00:18	
280-182145-4	1	T	00:23	X
280-182145-6	1	T	00:27	X
280-182145-5	1	T	00:32	X
280-182145-1	1	T	00:38	X
ZZZZZZ			00:44	
ZZZZZZ			00:50	
ZZZZZZ			00:55	
CCV 280-628623/28	1		01:01	X
CCB 280-628623/29	1		01:07	X

Prep Types:
T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Batch Number: 630033 Batch Start Date: 10/16/23 11:26 Batch Analyst: Peterson, McKenzy M

Batch Method: 350.1 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	Initial pH	350.1 cal 00600	350.1 ICV 00581
ICV 280-630033/14		350.1		no	100 mL	100 mL	<2 SU		2.5 mL
ICVL 280-630033/15		350.1		no	100 mL	100 mL	<2 SU		0.5 mL
ICB 280-630033/16		350.1		no	35 mL	35 mL	<2 SU		
CCV 280-630033/40		350.1		no	100 mL	100 mL	<2 SU	2.5 mL	
CCVL 280-630033/41		350.1		no	100 mL	100 mL	<2 SU	0.5 mL	
CCB 280-630033/42		350.1		no	10 mL	10 mL	<2 SU		
MB 280-630033/51		350.1		no	35 mL	35 mL	<2 SU		
LCS 280-630033/52		350.1		no	100 mL	100 mL	<2 SU	2.5 mL	
CCV 280-630033/55		350.1		no	100 mL	100 mL	<2 SU	2.5 mL	
CCVL 280-630033/56		350.1		no	100 mL	100 mL	<2 SU	0.5 mL	
CCB 280-630033/57		350.1		no	10 mL	10 mL	<2 SU		
CCV 280-630033/68		350.1		no	100 mL	100 mL	<2 SU	2.5 mL	
CCVL 280-630033/69		350.1		no	100 mL	100 mL	<2 SU	0.5 mL	
CCB 280-630033/70		350.1		no	10 mL	10 mL	<2 SU		
280-182145-A-9	LL12mw-246-230901-GW	350.1	T	no	10 mL	10 mL	<2 SU		
280-182145-A-9 MS	LL12mw-246-230901-GW	350.1	T	no	10 mL	10 mL	<2 SU	0.1 mL	
280-182145-A-9 MSD	LL12mw-246-230901-GW	350.1	T	no	10 mL	10 mL	<2 SU	0.1 mL	
280-182145-A-10	LL12MW-RB-246-2023	350.1	T	no	10 mL	10 mL	<2 SU		
CCV 280-630033/96		350.1		no	100 mL	100 mL	<2 SU	2.5 mL	
CCVL 280-630033/97		350.1		no	100 mL	100 mL	<2 SU	0.5 mL	
CCB 280-630033/98		350.1		no	10 mL	10 mL	<2 SU		

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: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Batch Number: 630033 Batch Start Date: 10/16/23 11:26 Batch Analyst: Peterson, McKenzy M

Batch Method: 350.1 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
ICV 280-630033/14		350.1							
ICVL 280-630033/15		350.1							
ICB 280-630033/16		350.1							
CCV 280-630033/40		350.1							
CCVL 280-630033/41		350.1							
CCB 280-630033/42		350.1							
MB 280-630033/51		350.1		FILTERED					
LCS 280-630033/52		350.1		FILTERED					
CCV 280-630033/55		350.1							
CCVL 280-630033/56		350.1							
CCB 280-630033/57		350.1							
CCV 280-630033/68		350.1							
CCVL 280-630033/69		350.1							
CCB 280-630033/70		350.1							
280-182145-A-9	LL12mw-246-230901-GW	350.1	T						
280-182145-A-9 MS	LL12mw-246-230901-GW	350.1	T						
280-182145-A-9 MSD	LL12mw-246-230901-GW	350.1	T						
280-182145-A-10	LL12MW-RB-246-2023	350.1	T						
CCV 280-630033/96		350.1		RERUN, passes, close out line 73-81					
CCVL 280-630033/97		350.1		RERUN, passes, close out line 73-81					

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: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Batch Number: 630033 Batch Start Date: 10/16/23 11:26 Batch Analyst: Peterson, McKenzy M

Batch Method: 350.1 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
CCB 280-630033/98		350.1		RERUN, passes, close out line 73-81					

Batch Notes	
pH Indicator ID	HC312502
Acid used for pH adjustment	SulfuricAcid_00294
Sodium Nitroprusside ID	Na Nitro_00065 Na Salicylate_00082
Hypochlorite ID	Na Hypo_00071
EDTA Buffer ID	Buffer A_00053
Potassium Sodium Tartrate ID	Buffer B_00074
Carrier Identification	Ammonia Rinse_00074
Sodium Salicylate ID	Sodium Sal_00028
Pipette/Syringe/Dispenser ID	ARM 5000, 1000 INTERCESSOR, BWH 200
Dichloroisocyanurate ID	Na Dichloro_00001

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: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Batch Number: 623067 Batch Start Date: 08/16/23 08:23 Batch Analyst: Collins, Michael E

Batch Method: 9056 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Cl ICV Std 00006	IC CAL cl/so4 00494	IC Cal low 00722	IC ICV 5 00413
STD1 280-623067/1 IC		9056		10 mL	10 mL		0.04 mL	0.04 mL	
STD2 280-623067/2 IC		9056		10 mL	10 mL		0.1 mL	0.1 mL	
STD3 280-623067/3 IC		9056		10 mL	10 mL		0.2 mL	0.2 mL	
STD4 280-623067/4 IC		9056		10 mL	10 mL		2.4 mL	0.8 mL	
STD5 280-623067/5 IC		9056		10 mL	10 mL		4.8 mL	1.6 mL	
STD6 280-623067/6 IC		9056		10 mL	10 mL		8 mL	2 mL	
ICV 280-623067/8		9056		10 mL	10 mL	0.8 mL			0.8 mL
ICB 280-623067/9		9056		10 mL	10 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	IC SO4 ICV 00024					
STD1 280-623067/1 IC		9056							
STD2 280-623067/2 IC		9056							
STD3 280-623067/3 IC		9056							
STD4 280-623067/4 IC		9056							
STD5 280-623067/5 IC		9056							
STD6 280-623067/6 IC		9056							
ICV 280-623067/8		9056		0.8 mL					
ICB 280-623067/9		9056							

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: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Batch Number: 623067 Batch Start Date: 08/16/23 08:23 Batch Analyst: Collins, Michael E

Batch Method: 9056 Batch End Date:

Batch Notes	
Filter ID	SF020E
Pipette/Syringe/Dispenser ID	ARM5000, 1000HEX, 200CJ, 100IC, ICM5000
Sufficient Volume for Batch QC	yes
Eluent 1 ID	IC10 Eluent_00006
Batch Comment	MEC

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 BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Batch Number: 627894 Batch Start Date: 09/29/23 12:10 Batch Analyst: Sherman, Erik J

Batch Method: 9056 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CAL cl/so4 00501	IC Cal low 00731	IC LCS 01980	ICMS/MSD WEEK 00838
CCV 280-627894/1		9056		10 mL	10 mL			10 mL	
CCB 280-627894/2		9056		10 mL	10 mL				
MRL 280-627894/3		9056		10 mL	10 mL	0.2 mL	0.1 mL		
LCS 280-627894/4		9056		10 mL	10 mL			10 mL	
LCSD 280-627894/5		9056		10 mL	10 mL			10 mL	
MB 280-627894/6		9056		10 mL	10 mL				
280-182145-A-1	LL1mw-080-230901-GW-R	9056	T	10 mL	10 mL				
280-182145-A-2	FWGmw-018-230901-GW	9056	T	10 mL	10 mL				
280-182145-A-3	FWGmw-020-230901-GW	9056	T	10 mL	10 mL				
280-182145-A-4	LL1mw-083-230901-GW-R	9056	T	10 mL	10 mL				
280-182145-A-5	LL1mw-084-230901-R	9056	T	10 mL	10 mL				
280-182145-A-5 DU	LL1mw-084-230901-R	9056	T	10 mL	10 mL				
280-182145-A-5 MS	LL1mw-084-230901-R	9056	T	10 mL	10 mL				0.1 mL
280-182145-A-5 MSD	LL1mw-084-230901-R	9056	T	10 mL	10 mL				0.1 mL
CCV 280-627894/17		9056		10 mL	10 mL			10 mL	
CCB 280-627894/18		9056		10 mL	10 mL				
280-182145-A-6	LL1mw-084-230902-GW-R	9056	T	10 mL	10 mL				
280-182145-B-9	LL12mw-246-230901-GW	9056	T	10 mL	10 mL				
CCV 280-627894/29		9056		10 mL	10 mL			10 mL	
CCB 280-627894/30		9056		10 mL	10 mL				
LCS 280-627894/37		9056		10 mL	10 mL			10 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.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Batch Number: 627894 Batch Start Date: 09/29/23 12:10 Batch Analyst: Sherman, Erik J

Batch Method: 9056 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CAL cl/so4 00501	IC Cal low 00731	IC LCS 01980	ICMS/MSD WEEK 00838
LCSD 280-627894/38		9056		10 mL	10 mL			10 mL	
MB 280-627894/39		9056		10 mL	10 mL				
CCV 280-627894/41		9056		10 mL	10 mL			10 mL	
CCB 280-627894/42		9056		10 mL	10 mL				
280-182145-B-10	LL12MW-RB-246-2023	9056	T	10 mL	10 mL				
CCV 280-627894/53		9056		10 mL	10 mL			10 mL	
CCB 280-627894/54		9056		10 mL	10 mL				

Batch Notes	
Filter ID	SF020E
Pipette/Syringe/Dispenser ID	ARM5000, 1000HEX, 200CJ, IC100, BMF1000, AB8A100, ICM5000
Sufficient Volume for Batch QC	Y
Eluent 1 ID	AS22 ELUENT_00008
Batch Comment	MEC, REVIEWED BY EJS

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: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Batch Number: 623068 Batch Start Date: 08/16/23 08:23 Batch Analyst: Collins, Michael E

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Cl ICV Std 00006	IC CAL cl/so4 00494	IC Cal low 00722	IC ICV 5 00413
STD1 280-623068/1 IC		9056A		10 mL	10 mL		0.04 mL	0.04 mL	
STD2 280-623068/2 IC		9056A		10 mL	10 mL		0.1 mL	0.1 mL	
STD3 280-623068/3 IC		9056A		10 mL	10 mL		0.2 mL	0.2 mL	
STD4 280-623068/4 IC		9056A		10 mL	10 mL		2.4 mL	0.8 mL	
STD5 280-623068/5 IC		9056A		10 mL	10 mL		4.8 mL	1.6 mL	
STD6 280-623068/6 IC		9056A		10 mL	10 mL		8 mL	2 mL	
ICV 280-623068/8		9056A		10 mL	10 mL	0.8 mL			0.8 mL
ICB 280-623068/9		9056A		10 mL	10 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	IC SO4 ICV 00024					
STD1 280-623068/1 IC		9056A							
STD2 280-623068/2 IC		9056A							
STD3 280-623068/3 IC		9056A							
STD4 280-623068/4 IC		9056A							
STD5 280-623068/5 IC		9056A							
STD6 280-623068/6 IC		9056A							
ICV 280-623068/8		9056A		0.8 mL					
ICB 280-623068/9		9056A							

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: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Batch Number: 623068 Batch Start Date: 08/16/23 08:23 Batch Analyst: Collins, Michael E

Batch Method: 9056A Batch End Date:

Batch Notes	
Filter ID	SF020E
Pipette/Syringe/Dispenser ID	ARM5000, 1000HEX, 200CJ, 100IC, 1000ICM
Sufficient Volume for Batch QC	yes
Eluent 1 ID	IC10 Eluent_00006
Batch Comment	MEC

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 BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Batch Number: 627895 Batch Start Date: 09/29/23 12:10 Batch Analyst: Sherman, Erik J

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CAL cl/so4 00501	IC Cal low 00731	IC LCS 01980	ICMS/MSD WEEK 00838
CCV 280-627895/1		9056A		10 mL	10 mL			10 mL	
CCB 280-627895/2		9056A		10 mL	10 mL				
MRL 280-627895/3		9056A		10 mL	10 mL	0.2 mL	0.1 mL		
LCS 280-627895/4		9056A		10 mL	10 mL			10 mL	
LCSD 280-627895/5		9056A		10 mL	10 mL			10 mL	
MB 280-627895/6		9056A		10 mL	10 mL				
280-182145-A-1	LL1mw-080-230901-GW-R	9056A	T	10 mL	10 mL				
280-182145-A-4	LL1mw-083-230901-GW-R	9056A	T	10 mL	10 mL				
280-182145-A-5	LL1mw-084-230901-R	9056A	T	10 mL	10 mL				
280-182145-A-5 DU	LL1mw-084-230901-R	9056A	T	10 mL	10 mL				
280-182145-A-5 MS	LL1mw-084-230901-R	9056A	T	10 mL	10 mL				0.1 mL
280-182145-A-5 MSD	LL1mw-084-230901-R	9056A	T	10 mL	10 mL				0.1 mL
CCV 280-627895/17		9056A		10 mL	10 mL			10 mL	
CCB 280-627895/18		9056A		10 mL	10 mL				
280-182145-A-6	LL1mw-084-230902-GW-R	9056A	T	10 mL	10 mL				
CCV 280-627895/29		9056A		10 mL	10 mL			10 mL	
CCB 280-627895/30		9056A		10 mL	10 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.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Batch Number: 627895 Batch Start Date: 09/29/23 12:10 Batch Analyst: Sherman, Erik J

Batch Method: 9056A Batch End Date:

Batch Notes	
Filter ID	SF020E
Pipette/Syringe/Dispenser ID	ARM5000, 1000HEX, 200CJ, IC100, BMF1000, AB8A100, ICM5000
Sufficient Volume for Batch QC	Y
Eluent 1 ID	IC10 ELUENT_00007
Batch Comment	MEC, REVIEWED BY EJS

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: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Batch Number: 628623 Batch Start Date: 10/04/23 22:01 Batch Analyst: Luce, Luke

Batch Method: SM 2320B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	Alk daily lcs 01109				
LCS 280-628623/4		SM 2320B		InitialAmount is blank	10 mL				
MB 280-628623/5		SM 2320B		InitialAmount is blank					
CCV 280-628623/16		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-628623/17		SM 2320B		InitialAmount is blank					
280-182145-A-4	LL1mw-083-230901-GW-R	SM 2320B	T	InitialAmount is blank					
280-182145-A-6	LL1mw-084-230902-GW-R	SM 2320B	T	InitialAmount is blank					
280-182145-A-5	LL1mw-084-230901-R	SM 2320B	T	InitialAmount is blank					
280-182145-A-1	LL1mw-080-230901-GW-R	SM 2320B	T	InitialAmount is blank					
CCV 280-628623/28		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-628623/29		SM 2320B		InitialAmount is blank					

Batch Notes	
Nominal Amount Used	10 mL
Acid ID	0.02 H2SO4_00304
Normality of First Titrant	0.02 N
Sodium Carbonate ID	Alk Stk Std_00023
pH Buffer 1 ID	pH 2.0 buffer_00101
pH Buffer 2 ID	pH 4.0 buffer_00212
pH Buffer 3 ID	pH 7.0 buffer_00326
pH Buffer 4 ID	pH 7.0 buffer_00327
pH Buffer 5 ID	pH 10 buffer_00164
pH Buffer 6 ID	pH 12 buffer_00184
Probe ID	PCE 80 pH 1200D_8918
Batch Comment	LL

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: Eurofins Denver Job No.: 280-182145-1

SDG No.:

Batch Number: 628623 Batch Start Date: 10/04/23 22:01 Batch Analyst: Luce, Luke

Batch Method: SM 2320B Batch End Date:

Basis	Basis Description
T	Total/NA

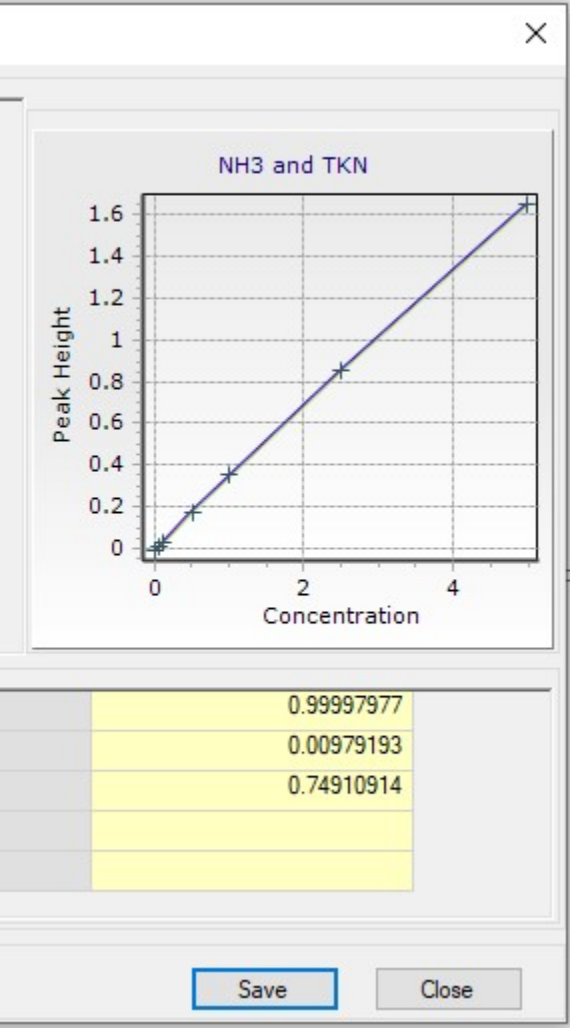
The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Select/deselect Standards

	SerialNumber	Cup position	Sample Type	Identity	Concentration	Corrected Height	Result	Use this	Y Residuals	Relative Error(%)
1	4	ST1	S1	0 mg/L	0.000	-0.009	-0.002	☑		
2	5	ST2	S2	0.05	0.050	0.010	0.049	☑	-2.56%	-1.4%
3	6	ST3	S3	0.1	0.100	0.028	0.099	☑	-1.08%	-0.83%
4	7	ST4	S4	0.5	0.500	0.170	0.495	☑	-1.11%	-1.06%
5	8	ST5	S5	1	1.000	0.354	1.016	☑	1.61%	1.63%
6	9	ST6	S6	2.5	2.500	0.856	2.491	☑	-0.34%	-0.36%
7	10	ST7	S7	5	5.000	1.649	5.002	☑	0.03%	0.04%

Method Name	Ammonia	a	-0.00796579	R Squared
Module Name	NH3 and TKN	b	0.36245596	Constant Sx0
Calibration Order	II Order ISO 8466	c	-0.00623140	Constant Vx0
Residual Std. Dev. (Sy)	0.00338962516060	d		
		Correlation Coefficient	0.99969246	

Calibration Order: II Order ISO 8466

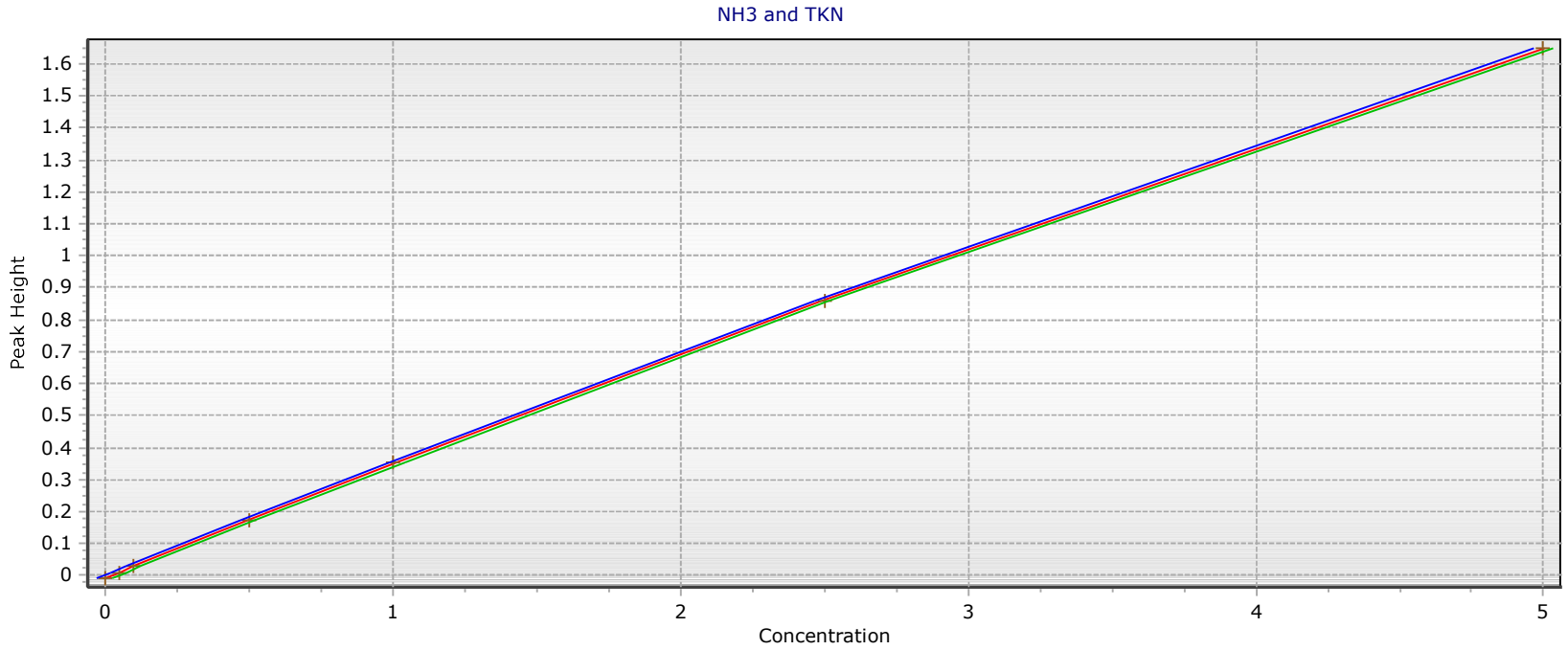


	0.99997977
	0.00979193
	0.74910914

Save Close

FlowAccessV3

Date:Oct 16 2023 4:38:06PM

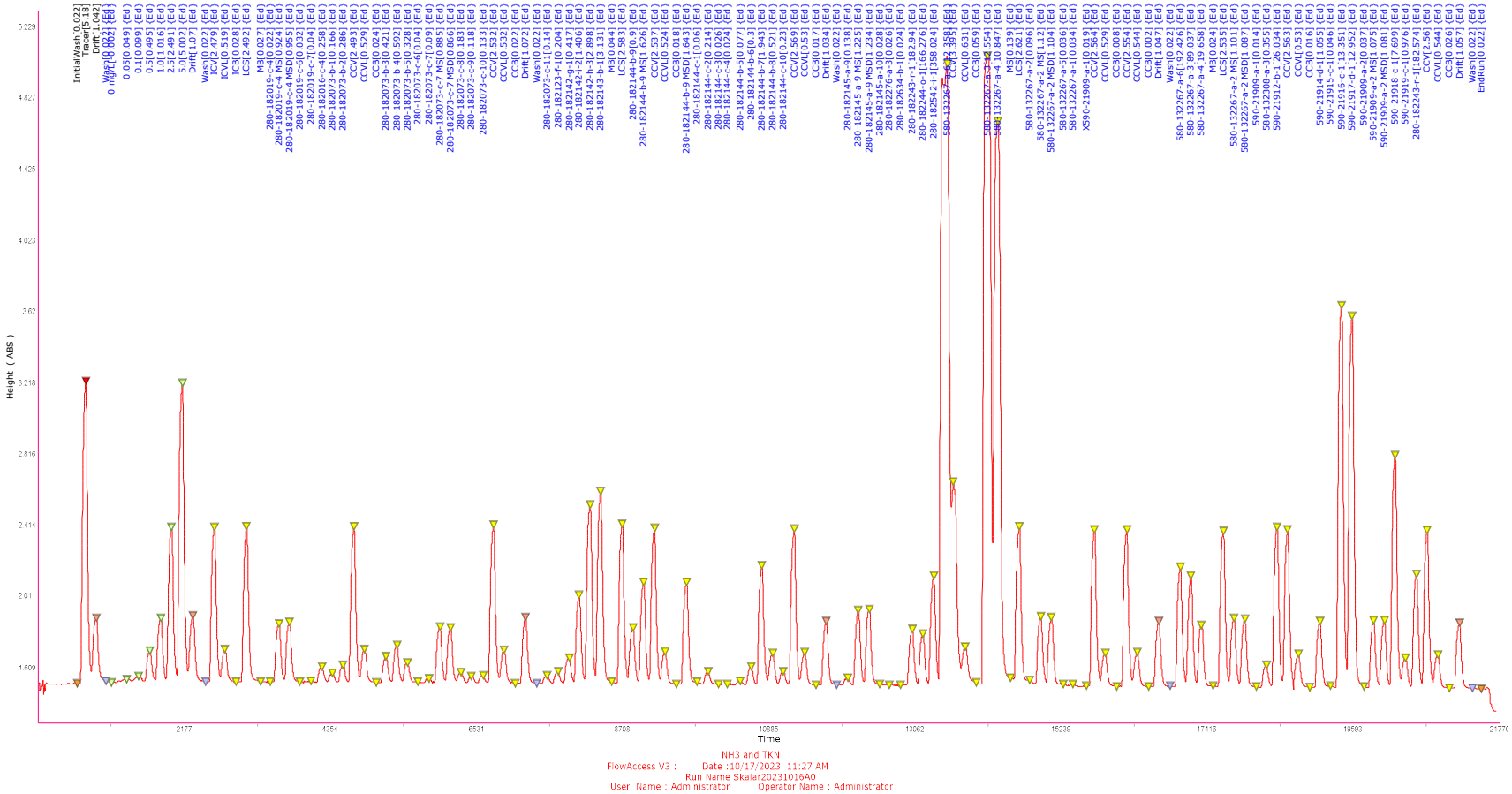


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r =0.99969246272570 R2 = 0.99997976911904

Run Name : Skalar20231016A0

User Name : Administrator Operator Name : Administrator


InitialWash[0.022]
Tracer[5.18]
Drift[1.042]
Wash[10.862] {Ed}
0.05[0.049] {Ed}
0.1[0.099] {Ed}
0.5[0.495] {Ed}
1.0[1.016] {Ed}
2.5[2.491] {Ed}
5.0[5.002] {Ed}
Drift[1.07] {Ed}
Wash[0.022] {Ed}
ICV[2.492] {Ed}
ICV[0.519] {Ed}
ICB[0.028] {Ed}
LCS[2.492] {Ed}
MB[0.027] {Ed}
280-182019-c-4[0.022] {Ed}
280-182019-c-4 MS[0.924] {Ed}
280-182019-c-4 MSD[0.955] {Ed}
280-182019-c-6[0.032] {Ed}
280-182019-c-7[0.041] {Ed}
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280-182073-b-2[0.286] {Ed}
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CCV[0.529] {Ed}
CCB[0.024] {Ed}
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280-182073-b-4[0.592] {Ed}
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Wash[0.022] {Ed}
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280-182142-h-3[2.898] {Ed}
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MB[0.024] {Ed}
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CCV[2.537] {Ed}
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CCB[0.018] {Ed}
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CCB[0.017] {Ed}
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Wash[0.022] {Ed}
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280-182244-o-1[166.276] {Ed}
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590-21917-c-1[1.357] {Ed}
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EndRun[0.022] {Ed}
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4.827
4.425
4.023
3.62
3.218
2.816
2.414
2.011
1.609
2177
4354
6531
8708
10885
13062
15239
17416
19593
21770
Time
NH3 and TKN
FlowAccess V3 : Date :10/17/2023 11:27 AM
Run Name Skalar20231016A0
User Name : Administrator Operator Name : Administrator

FlowAccessV3 Results Report

Run Name : Skalar20231016A0
DateTime :Oct 16 2023 11:16:46AM
User Name : Administrator Operator Name : Administrator

	Position	SampleType	SampleIdentity	Comments	ExternalDilution	NH3 and TKN- Results
1	IW	IW	InitialWash		1.0000	0.022
2	ST7	T	Tracer		1.0000	5.180
3	ST5	D	Drift		1.0000	1.042
4	WT	W	Wash		1.0000	0.022
5	ST1	S1	0 mg/L		1.0000	-0.002
6	ST2	S2	0.05		1.0000	0.049
7	ST3	S3	0.1		1.0000	0.099
8	ST4	S4	0.5		1.0000	0.495
9	ST5	S5	1.0		1.0000	1.016
10	ST6	S6	2.5		1.0000	2.491
11	ST7	S7	5.0		1.0000	5.002
12	ST5	D	Drift		1.0000	1.070
13	WT	W	Wash		1.0000	0.022
14	ST8	U	ICV		1.0000	2.479
15	ST9	U	ICVL		1.0000	0.519
16	ST1	U	ICB		1.0000	0.028
17	D29	U	LCS		1.0000	2.492
18	ST1	U	MB		1.0000	0.027
19	A1	U	280-182019-c-4		1.0000	0.022
20	A2	U	280-182019-c-4 MS		1.0000	0.924
21	A3	U	280-182019-c-4 MSD		1.0000	0.955
22	A4	U	280-182019-c-6		1.0000	0.032
23	A5	U	280-182019-c-7		1.0000	0.040
24	A6	U	280-182016-c-4		1.0000	0.258
25	A7	U	280-182073-b-1		1.0000	0.166
26	A8	U	280-182073-b-2		1.0000	0.286
27	ST6	U	CCV		1.0000	2.493
28	ST4	U	CCVL		1.0000	0.529
29	WT	U	CCB		1.0000	0.024
30	A9	U	280-182073-b-3		1.0000	0.421
31	A10	U	280-182073-b-4		1.0000	0.592
32	A11	U	280-182073-b-5		1.0000	0.328
33	A12	U	280-182073-c-6		1.0000	0.040
34	A13	U	280-182073-c-7		1.0000	0.090
35	A14	U	280-182073-c-7 MS		1.0000	0.885
36	A15	U	280-182073-c-7 MSD		1.0000	0.866
37	A16	U	280-182073-c-8		1.0000	0.183
38	A17	U	280-182073-c-9		1.0000	0.118
39	A18	U	280-182073-c-10		1.0000	0.133
40	ST6	U	CCV		1.0000	2.532

Run Name : Skalar20231016A0
DateTime :Oct 16 2023 11:16:46AM
User Name : Administrator Operator Name : Administrator

	Position	SampleType	SampleIdentity	Comments	ExternalDilution	NH3 and TKN- Results
41	ST4	U	CCVL		1.0000	0.532
42	WT	U	CCB		1.0000	0.022
43	ST5	D	Drift		1.0000	1.072
44	WT	W	Wash		1.0000	0.022
45	A19	U	280-182073-c-11		1.0000	0.140
46	A20	U	280-182123-f-1	pH adjusted	1.0000	0.204
47	A21	U	280-182142-g-1		1.0000	0.417
48	A22	U	280-182142-i-2		1.0000	1.406
49	A23	U	280-182142-h-3		1.0000	2.898
50	A24	U	280-182143-b-1	20 SAMPLES	1.0000	3.131
51	ST1	U	MB	FILTERED	1.0000	0.044
52	D29	U	LCS	FILTERED	1.0000	2.583
53	A25	U	280-182144-b-9		1.0000	0.900
54	A26	U	280-182144-b-9 MS		1.0000	1.626
55	ST6	U	CCV		1.0000	2.537
56	ST4	U	CCVL		1.0000	0.524
57	WT	U	CCB		1.0000	0.018
58	A27	U	280-182144-b-9 MSD		1.0000	1.643
59	A28	U	280-182144-c-1		1.0000	0.060
60	A29	U	280-182144-c-2		1.0000	0.214
61	A30	U	280-182144-c-3		1.0000	0.026
62	A31	U	280-182144-c-4		1.0000	0.024
63	A32	U	280-182144-b-5		1.0000	0.077
64	A33	U	280-182144-b-6		1.0000	0.300
65	A34	U	280-182144-b-7	FILTERED	1.0000	1.943
66	A35	U	280-182144-b-8		1.0000	0.521
67	B1	U	280-182144-c-10		1.0000	0.230
68	ST6	U	CCV		1.0000	2.569
69	ST4	U	CCVL		1.0000	0.530
70	WT	U	CCB		1.0000	0.017
71	ST5	D	Drift		1.0000	1.034
72	WT	W	Wash		1.0000	0.022
73	B2	U	280-182145-a-9		1.0000	0.138
74	B3	U	280-182145-a-9 MS		1.0000	1.225
75	B4	U	280-182145-a-9 MSD		1.0000	1.234
76	B5	U	280-182145-a-10		1.0000	0.028
77	B6	U	280-182276-a-3	DOD	1.0000	0.026
78	B7	U	280-182634-b-1		1.0000	0.024
79	B8	U	280-182243-r-1		200.0000	182.940
80	B9	U	280-182244-o-1		200.0000	166.276

Run Name : Skalar20231016A0
DateTime :Oct 16 2023 11:16:46AM
User Name : Administrator Operator Name : Administrator

	Position	SampleType	SampleIdentity	Comments	ExternalDilution	NH3 and TKN- Results
81	B10	U	280-182542-i-1		200.0000	358.024
82	B11	U	580-132267-a-6		1.0000	12.358
83	ST6	U	CCV		1.0000	3.395
84	ST4	U	CCVL		1.0000	0.631
85	WT	U	CCB		1.0000	0.059
86	B12	U	580-132267-a-3		1.0000	12.554
87	B13	U	580-132267-a-4	40 SAMPLES	1.0000	10.847
88	ST1	U	MS		1.0000	0.139
89	D29	U	LCS		1.0000	2.621
90	B14	U	580-132267-a-2		1.0000	0.096
91	B15	U	580-132267-a-2 MS		1.0000	1.120
92	B16	U	580-132267-a-2 MSD		1.0000	1.104
93	B17	U	580-132267-a-5		1.0000	0.036
94	B18	U	580-132267-a-1		1.0000	0.034
95	B19	U	X590-21909-a-1		1.0000	0.019
96	ST6	U	CCV	RERUN	1.0000	2.564
97	ST4	U	CCVL	RERUN	1.0000	0.529
98	WT	U	CCB	RERUN	1.0000	0.008
99	ST6	U	CCV		1.0000	2.554
100	ST4	U	CCVL		1.0000	0.544
101	WT	U	CCB		1.0000	0.002
102	ST5	D	Drift		1.0000	1.047
103	WT	W	Wash		1.0000	0.022
104	B11	U	580-132267-a-6	RERUN	100.0000	192.426
105	B12	U	580-132267-a-3	RERUN	50.0000	89.037
106	B13	U	580-132267-a-4	RERUN	20.0000	19.658
107	ST1	U	MB	RERUN	1.0000	0.024
108	D29	U	LCS	RERUN	1.0000	2.535
109	B15	U	580-132267-a-2 MS	RERUN	1.0000	1.101
110	B16	U	580-132267-a-2 MSD	RERUN	1.0000	1.087
111	B19	U	590-21909-a-1		1.0000	0.014
112	B20	U	580-132308-a-3		1.0000	0.355
113	B21	U	590-21912-b-1		10.0000	26.034
114	ST6	U	CCV		1.0000	2.563
115	ST4	U	CCVL		1.0000	0.530
116	WT	U	CCB		1.0000	0.016
117	B22	U	590-21914-d-1		1.0000	1.055
118	B23	U	590-21915-c-1		1.0000	0.046
119	B24	U	590-21916-c-1		2.0000	13.351
120	B25	U	590-21917-d-1		2.0000	12.952

Run Name : Skalar20231016A0
DateTime :Oct 16 2023 11:16:46AM
User Name : Administrator Operator Name : Administrator

	Position	SampleType	SampleIdentity	Comments	ExternalDilution	NH3 and TKN- Results
121	B26	U	590-21909-a-2		1.0000	0.037
122	B27	U	590-21909-a-2 MS		1.0000	1.075
123	B28	U	590-21909-a-2 MSD		1.0000	1.081
124	B29	U	590-21918-c-1		2.0000	7.699
125	B30	U	590-21919-c-1	53 SAMPLES	2.0000	0.976
126	B31	U	280-182243-r-1	RERUN FOR HF	100.0000	182.574
127	ST6	U	CCV		1.0000	2.560
128	ST4	U	CCVL		1.0000	0.544
129	WT	U	CCB		1.0000	0.026
130	ST5	D	Drift		1.0000	1.057
131	WT	W	Wash		1.0000	0.022
132	E	E	EndRun		1.0000	0.022

Run Name : Skalar20231016A0
DateTime :Oct 16 2023 11:16:46AM
User Name : Administrator Operator Name : Administrator

	NH3 and TKN-	NH3 and TKN-	NH3 and TKN-
1	0.0000	Oct 16 2023 11:26:00AM	0.022
2	1.7022	Oct 16 2023 11:29:00AM	5.180
3	0.3630	Oct 16 2023 11:32:00AM	1.042
4	0.0000	Oct 16 2023 11:35:00AM	0.022
5	-0.0088	Oct 16 2023 11:39:00AM	-0.002
6	0.0099	Oct 16 2023 11:41:00AM	0.049
7	0.0279	Oct 16 2023 11:45:00AM	0.099
8	0.1698	Oct 16 2023 11:48:00AM	0.495
9	0.3540	Oct 16 2023 11:51:00AM	1.016
10	0.8563	Oct 16 2023 11:54:00AM	2.491
11	1.6491	Oct 16 2023 11:56:00AM	5.002
12	0.3728	Oct 16 2023 11:59:00AM	1.070
13	0.0000	Oct 16 2023 12:02:00PM	0.022
14	0.8523	Oct 16 2023 12:05:00PM	2.479
15	0.1785	Oct 16 2023 12:07:00PM	0.519
16	0.0021	Oct 16 2023 12:10:00PM	0.028
17	0.8567	Oct 16 2023 12:12:00PM	2.492
18	0.0019	Oct 16 2023 12:15:00PM	0.027
19	-0.0001	Oct 16 2023 12:18:00PM	0.022
20	0.3215	Oct 16 2023 12:20:00PM	0.924
21	0.3324	Oct 16 2023 12:23:00PM	0.955
22	0.0035	Oct 16 2023 12:26:00PM	0.032
23	0.0066	Oct 16 2023 12:28:00PM	0.040
24	0.0850	Oct 16 2023 12:31:00PM	0.258
25	0.0519	Oct 16 2023 12:33:00PM	0.166
26	0.0952	Oct 16 2023 12:36:00PM	0.286
27	0.8568	Oct 16 2023 12:39:00PM	2.493
28	0.1820	Oct 16 2023 12:41:00PM	0.529
29	0.0006	Oct 16 2023 12:44:00PM	0.024
30	0.1436	Oct 16 2023 12:47:00PM	0.421
31	0.2044	Oct 16 2023 12:50:00PM	0.592
32	0.1104	Oct 16 2023 12:52:00PM	0.328
33	0.0066	Oct 16 2023 12:55:00PM	0.040
34	0.0245	Oct 16 2023 12:58:00PM	0.090
35	0.3079	Oct 16 2023 1:00:00PM	0.885
36	0.3011	Oct 16 2023 1:03:00PM	0.866
37	0.0583	Oct 16 2023 1:06:00PM	0.183
38	0.0347	Oct 16 2023 1:09:00PM	0.118
39	0.0402	Oct 16 2023 1:11:00PM	0.133
40	0.8699	Oct 16 2023 1:14:00PM	2.532

Run Name : Skalar20231016A0
DateTime :Oct 16 2023 11:16:46AM
User Name : Administrator Operator Name : Administrator

	NH3 and TKN-	NH3 and TKN-	NH3 and TKN-
41	0.1831	Oct 16 2023 1:16:00PM	0.532
42	-0.0001	Oct 16 2023 1:19:00PM	0.022
43	0.3734	Oct 16 2023 1:22:00PM	1.072
44	0.0000	Oct 16 2023 1:24:00PM	0.022
45	0.0425	Oct 16 2023 1:28:00PM	0.140
46	0.0656	Oct 16 2023 1:30:00PM	0.204
47	0.1420	Oct 16 2023 1:32:00PM	0.417
48	0.4894	Oct 16 2023 1:35:00PM	1.406
49	0.9902	Oct 16 2023 1:38:00PM	2.898
50	1.0656	Oct 16 2023 1:40:00PM	3.131
51	0.0081	Oct 16 2023 1:43:00PM	0.044
52	0.8867	Oct 16 2023 1:46:00PM	2.583
53	0.3132	Oct 16 2023 1:48:00PM	0.900
54	0.5650	Oct 16 2023 1:51:00PM	1.626
55	0.8714	Oct 16 2023 1:54:00PM	2.537
56	0.1801	Oct 16 2023 1:56:00PM	0.524
57	-0.0014	Oct 16 2023 1:59:00PM	0.018
58	0.5707	Oct 16 2023 2:02:00PM	1.643
59	0.0138	Oct 16 2023 2:04:00PM	0.060
60	0.0693	Oct 16 2023 2:07:00PM	0.214
61	0.0013	Oct 16 2023 2:10:00PM	0.026
62	0.0007	Oct 16 2023 2:12:00PM	0.024
63	0.0199	Oct 16 2023 2:15:00PM	0.077
64	0.1002	Oct 16 2023 2:18:00PM	0.300
65	0.6728	Oct 16 2023 2:20:00PM	1.943
66	0.1793	Oct 16 2023 2:23:00PM	0.521
67	0.0749	Oct 16 2023 2:26:00PM	0.230
68	0.8822	Oct 16 2023 2:28:00PM	2.569
69	0.1825	Oct 16 2023 2:31:00PM	0.530
70	-0.0017	Oct 16 2023 2:34:00PM	0.017
71	0.3602	Oct 16 2023 2:36:00PM	1.034
72	0.0000	Oct 16 2023 2:39:00PM	0.022
73	0.0420	Oct 16 2023 2:41:00PM	0.138
74	0.4267	Oct 16 2023 2:44:00PM	1.225
75	0.4299	Oct 16 2023 2:47:00PM	1.234
76	0.0022	Oct 16 2023 2:50:00PM	0.028
77	0.0015	Oct 16 2023 2:52:00PM	0.026
78	0.0006	Oct 16 2023 2:55:00PM	0.024
79	0.3184	Oct 16 2023 2:58:00PM	0.915
80	0.2891	Oct 16 2023 3:00:00PM	0.831

Run Name : Skalar20231016A0
DateTime :Oct 16 2023 11:16:46AM
User Name : Administrator Operator Name : Administrator

	NH3 and TKN-	NH3 and TKN-	NH3 and TKN-
81	0.6209	Oct 16 2023 3:03:00PM	1.790
82	3.5196	Oct 16 2023 3:06:00PM	12.358
83	1.1508	Oct 16 2023 3:09:00PM	3.395
84	0.2182	Oct 16 2023 3:11:00PM	0.631
85	0.0134	Oct 16 2023 3:14:00PM	0.059
86	3.5603	Oct 16 2023 3:17:00PM	12.554
87	3.1905	Oct 16 2023 3:19:00PM	10.847
88	0.0422	Oct 16 2023 3:21:00PM	0.139
89	0.8992	Oct 16 2023 3:24:00PM	2.621
90	0.0267	Oct 16 2023 3:27:00PM	0.096
91	0.3903	Oct 16 2023 3:29:00PM	1.120
92	0.3846	Oct 16 2023 3:32:00PM	1.104
93	0.0052	Oct 16 2023 3:35:00PM	0.036
94	0.0042	Oct 16 2023 3:37:00PM	0.034
95	-0.0010	Oct 16 2023 3:40:00PM	0.019
96	0.8804	Oct 16 2023 3:43:00PM	2.564
97	0.1821	Oct 16 2023 3:46:00PM	0.529
98	-0.0050	Oct 16 2023 3:48:00PM	0.008
99	0.8771	Oct 16 2023 3:51:00PM	2.554
100	0.1872	Oct 16 2023 3:54:00PM	0.544
101	-0.0073	Oct 16 2023 3:56:00PM	0.002
102	0.3647	Oct 16 2023 3:59:00PM	1.047
103	0.0000	Oct 16 2023 4:01:00PM	0.022
104	0.6664	Oct 16 2023 4:05:00PM	1.924
105	0.6177	Oct 16 2023 4:07:00PM	1.781
106	0.3423	Oct 16 2023 4:09:00PM	0.983
107	0.0009	Oct 16 2023 4:12:00PM	0.024
108	0.8708	Oct 16 2023 4:15:00PM	2.535
109	0.3834	Oct 16 2023 4:18:00PM	1.101
110	0.3786	Oct 16 2023 4:20:00PM	1.087
111	-0.0028	Oct 16 2023 4:23:00PM	0.014
112	0.1200	Oct 16 2023 4:26:00PM	0.355
113	0.8934	Oct 16 2023 4:28:00PM	2.603
114	0.8801	Oct 16 2023 4:31:00PM	2.563
115	0.1826	Oct 16 2023 4:34:00PM	0.530
116	-0.0021	Oct 16 2023 4:36:00PM	0.016
117	0.3673	Oct 16 2023 4:39:00PM	1.055
118	0.0087	Oct 16 2023 4:41:00PM	0.046
119	2.1339	Oct 16 2023 4:44:00PM	6.675
120	2.0780	Oct 16 2023 4:47:00PM	6.476

Run Name : Skalar20231016A0
DateTime :Oct 16 2023 11:16:46AM
User Name : Administrator Operator Name : Administrator

	NH3 and TKN-	NH3 and TKN-	NH3 and TKN-
121	0.0054	Oct 16 2023 4:49:00PM	0.037
122	0.3744	Oct 16 2023 4:52:00PM	1.075
123	0.3765	Oct 16 2023 4:55:00PM	1.081
124	1.2949	Oct 16 2023 4:57:00PM	3.849
125	0.1675	Oct 16 2023 5:00:00PM	0.488
126	0.6330	Oct 16 2023 5:03:00PM	1.826
127	0.8791	Oct 16 2023 5:05:00PM	2.560
128	0.1874	Oct 16 2023 5:08:00PM	0.544
129	0.0015	Oct 16 2023 5:11:00PM	0.026
130	0.3681	Oct 16 2023 5:13:00PM	1.057
131	0.0000	Oct 16 2023 5:16:00PM	0.022
132	0.0000	Oct 16 2023 5:19:00PM	0.022

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100
Lims ID: STD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 16-Aug-2023 08:23:00 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0124540-001
Misc. Info.: 280-0124540-001
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub9

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 17-Aug-2023 10:41:27 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1649

First Level Reviewer: LVW8 Date: 16-Aug-2023 10:26:43

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.073	3.088	-0.015	6493840	NC	NC	Ma
2 Chloride	4.205	4.257	-0.052	16343527	NC	NC	
3 Nitrite as N	4.892	4.875	0.017	9494239	0.2000	0.1920	
4 Bromide	6.050	6.008	0.042	2213156	NC	NC	
5 Nitrate as N	6.813	6.717	0.096	8809383	0.2000	0.2157	
6 Orthophosphate as P	8.590	8.530	0.060	20373197	0.2000	0.1606	Ma
7 Sulfate	9.640	9.610	0.030	16127136	NC	NC	Ma

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

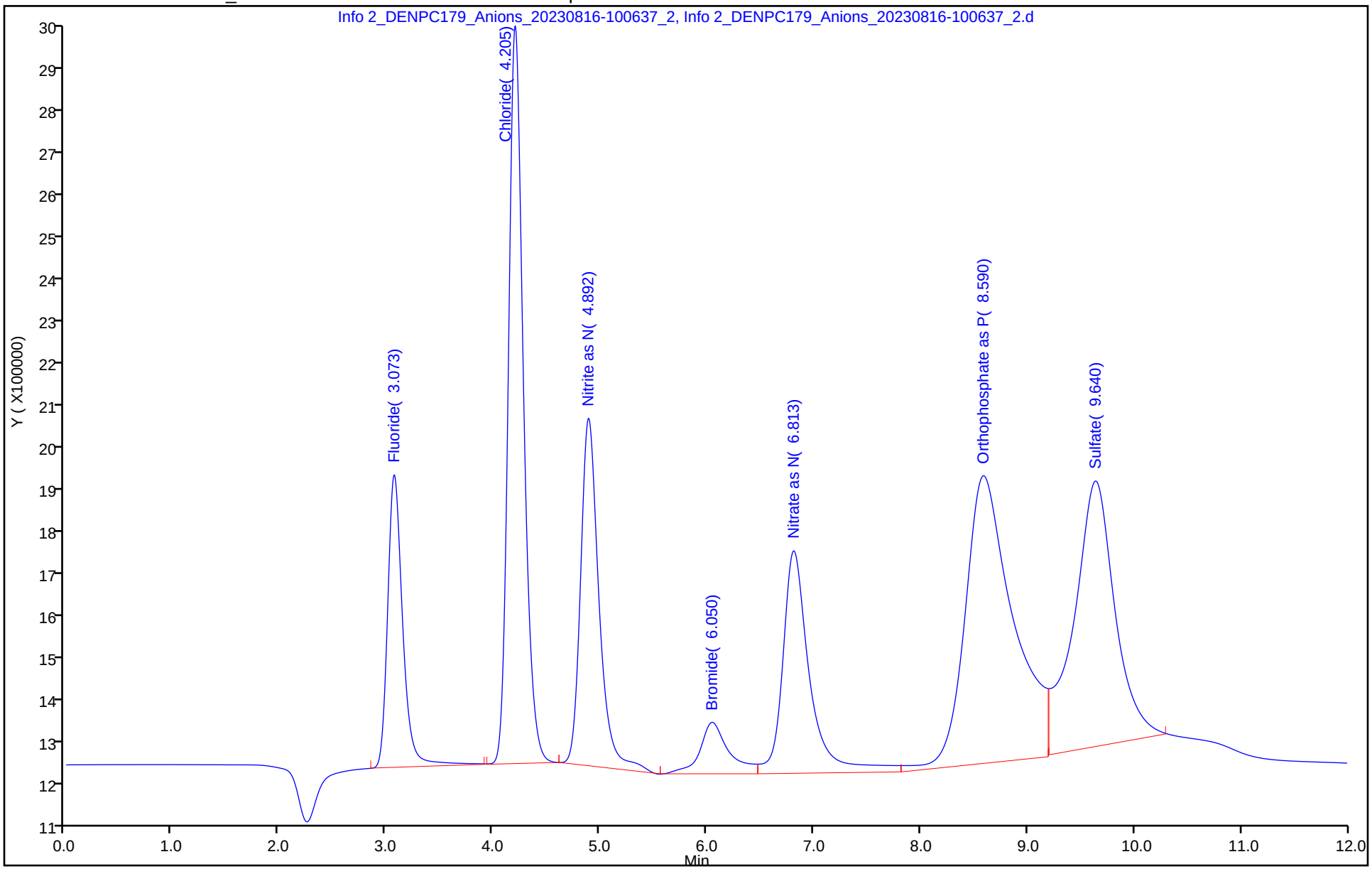
Reagents:

IC Cal low_00722 Amount Added: 0.04 Units: mL
IC CAL cl/so4_00494 Amount Added: 0.04 Units: mL

Report Date: 17-Aug-2023 10:41:27 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100637_2.d				
Injection Date:	16-Aug-2023 08:23:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD1			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



12/5/2023 8:25 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Injection Date: 16-Aug-2023 08:23:00 Instrument ID: WC_IonChrom10

Lims ID: STD1

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 1

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions

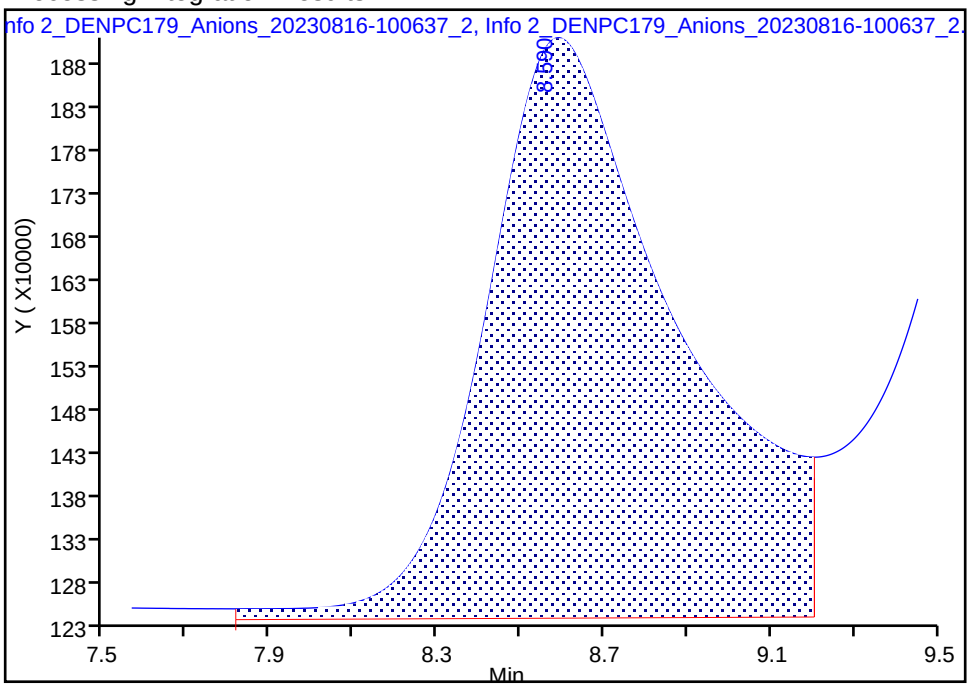
Column: Detector Info 2_091554_1

6 Orthophosphate as P, CAS: STL00599

Signal: 1

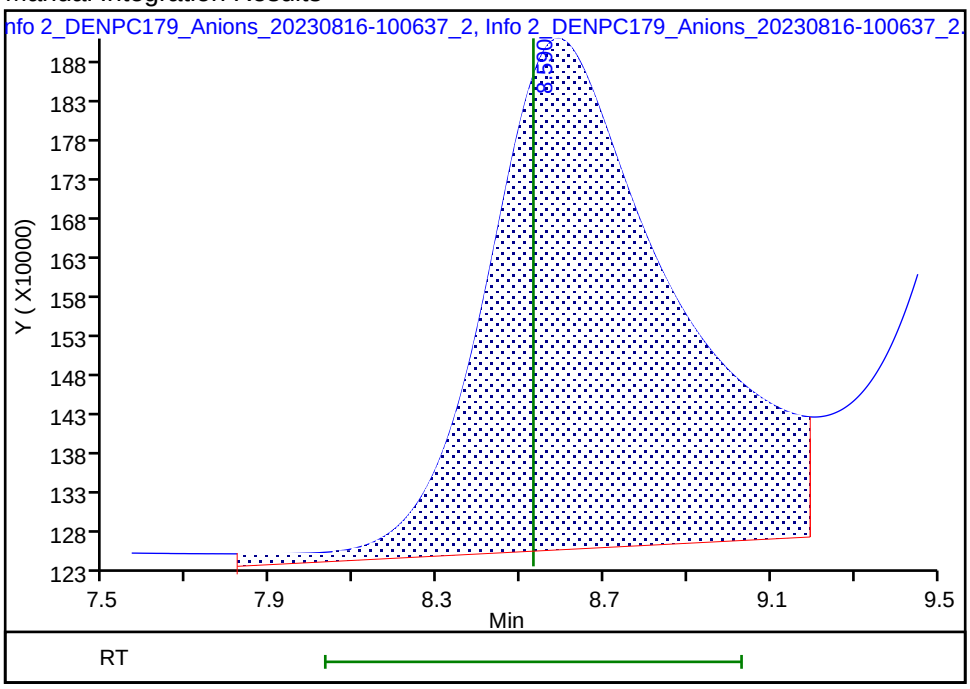
Processing Integration Results

RT: 8.59
Area: 21590016
Amount: 0.049185
Amount Units: ug/ml



Manual Integration Results

RT: 8.59
Area: 20373197
Amount: 0.160645
Amount Units: ug/ml



Reviewer: LVW8, 16-Aug-2023 10:42:23 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100
Lims ID: STD2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 16-Aug-2023 08:38:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0124540-002
Misc. Info.: 280-0124540-002
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub9

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 17-Aug-2023 10:41:28 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1649

First Level Reviewer: LVW8 Date: 16-Aug-2023 10:27:05

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.077	3.088	-0.011	18607618	NC	NC	Ma
2 Chloride	4.205	4.257	-0.052	44142315	NC	NC	
3 Nitrite as N	4.890	4.875	0.015	25589762	0.5000	0.4965	
4 Bromide	6.045	6.008	0.037	4337564	NC	NC	
5 Nitrate as N	6.797	6.717	0.080	22129548	0.5000	0.4867	
6 Orthophosphate as P	8.580	8.530	0.050	30713996	0.5000	0.5759	M
7 Sulfate	9.643	9.610	0.033	32737705	NC	NC	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

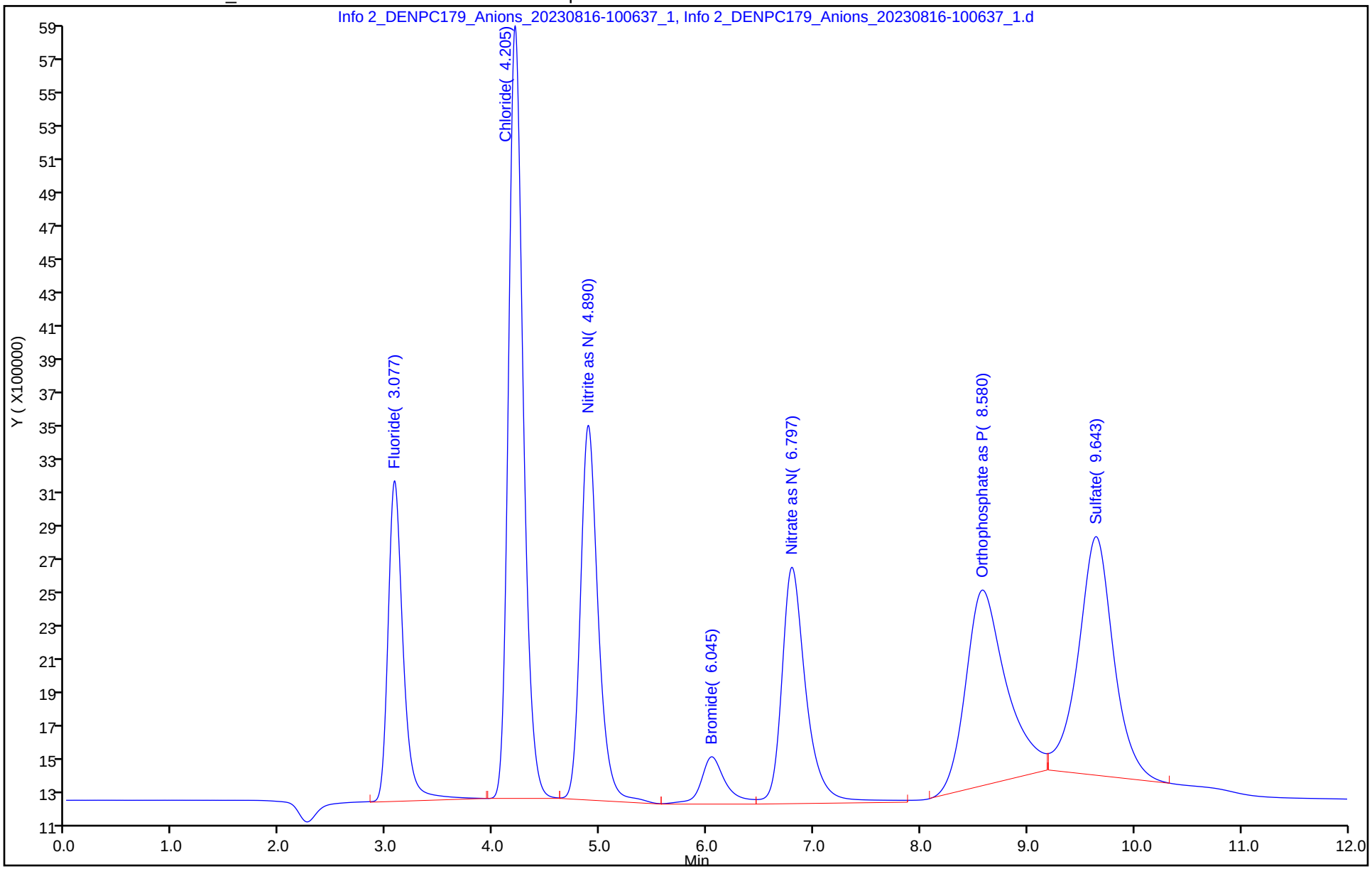
Reagents:

IC Cal low_00722 Amount Added: 0.10 Units: mL
IC CAL cl/so4_00494 Amount Added: 0.10 Units: mL

Report Date: 17-Aug-2023 10:41:28 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100637_1.d				
Injection Date:	16-Aug-2023 08:38:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD2			Worklist Smp#:	2
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



12/5/2023 8:25 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Injection Date: 16-Aug-2023 08:38:00 Instrument ID: WC_IonChrom10

Lims ID: STD2

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 2

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions

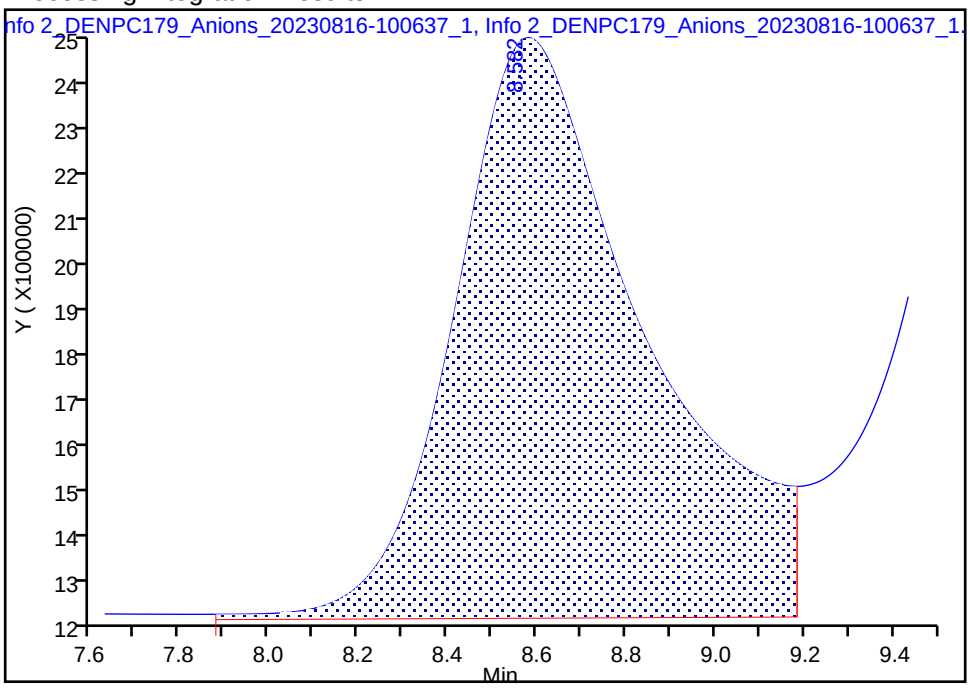
Column: Detector Info 2_091554_1

6 Orthophosphate as P, CAS: STL00599

Signal: 1

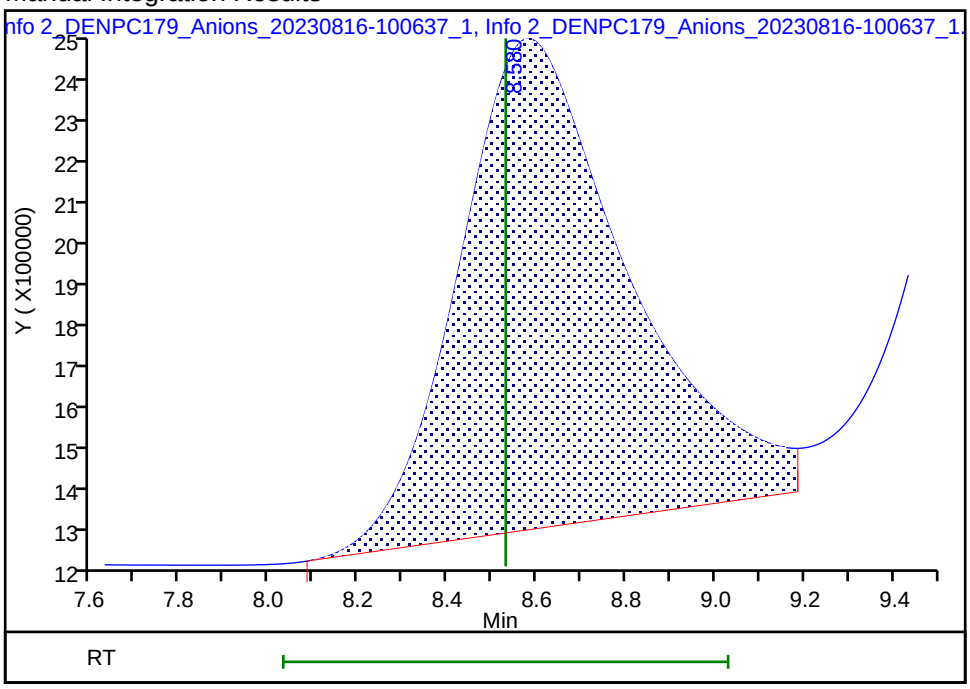
Processing Integration Results

RT: 8.58
Area: 37638482
Amount: 0.687214
Amount Units: ug/ml



Manual Integration Results

RT: 8.58
Area: 30713996
Amount: 0.575942
Amount Units: ug/ml



Reviewer: LVW8, 16-Aug-2023 10:36:01 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100
Lims ID: STD3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 16-Aug-2023 08:54:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0124540-003
Misc. Info.: 280-0124540-003
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub9

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 17-Aug-2023 10:39:52 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1649

First Level Reviewer: LVW8 Date: 16-Aug-2023 10:27:53

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.078	3.078	0.000	40803610	NC	NC	Ma
2 Chloride	4.202	4.238	-0.036	92390398	NC	NC	
3 Nitrite as N	4.885	4.873	0.012	53593060	1.00	1.03	
4 Bromide	6.037	6.012	0.025	7960626	NC	NC	
5 Nitrate as N	6.777	6.723	0.054	44959242	1.00	0.9512	
6 Orthophosphate as P	8.570	8.545	0.025	42106377	1.00	1.03	M
7 Sulfate	9.643	9.628	0.015	62271915	NC	NC	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

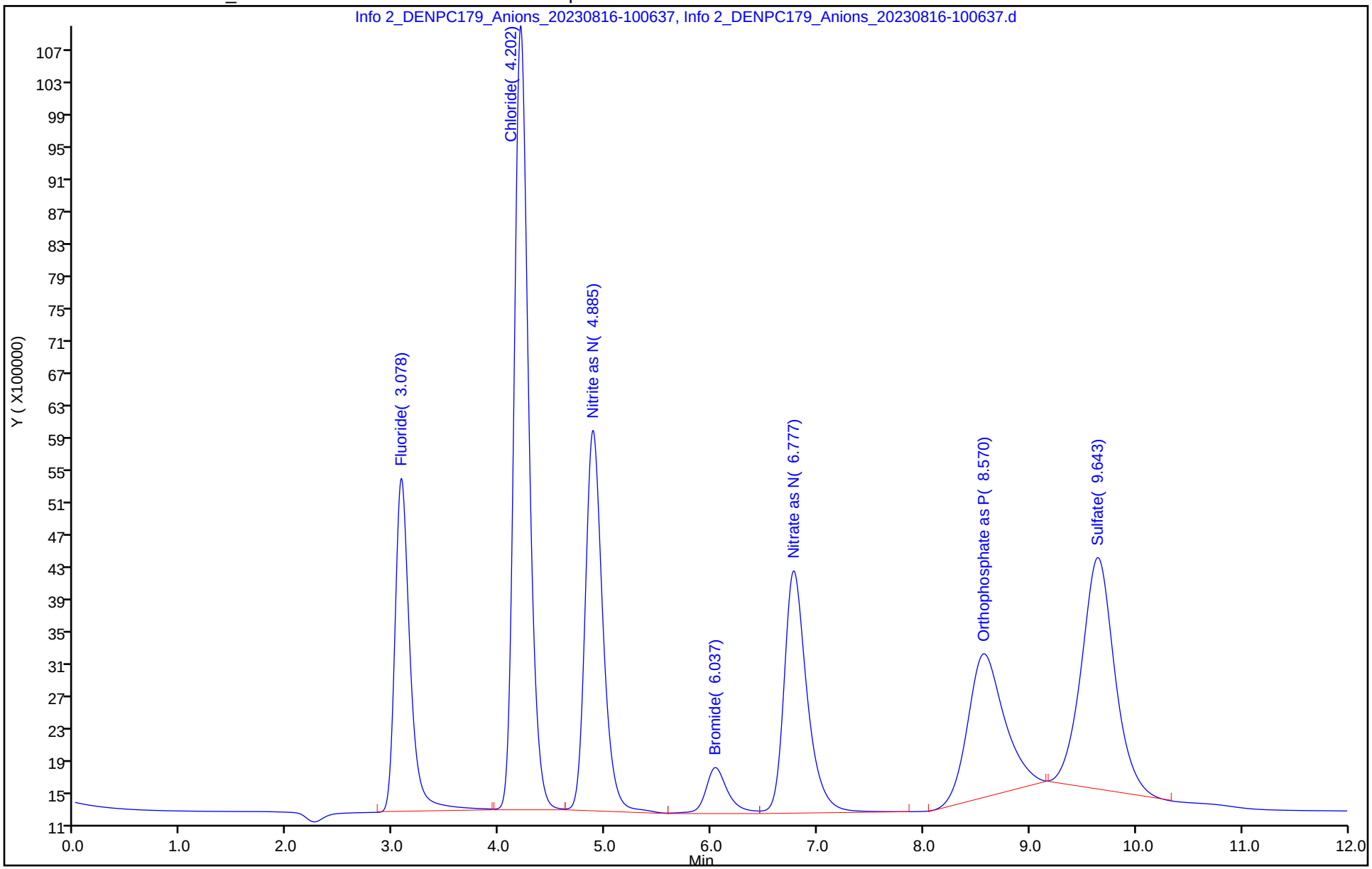
Reagents:

IC Cal low_00722 Amount Added: 0.20 Units: mL
IC CAL cl/so4_00494 Amount Added: 0.20 Units: mL

Report Date: 17-Aug-2023 10:39:52 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100637.d				
Injection Date:	16-Aug-2023 08:54:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD3			Worklist Smp#:	3
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



12/5/2023 8:25 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Injection Date: 16-Aug-2023 08:54:00 Instrument ID: WC_IonChrom10

Lims ID: STD3

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 3

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions

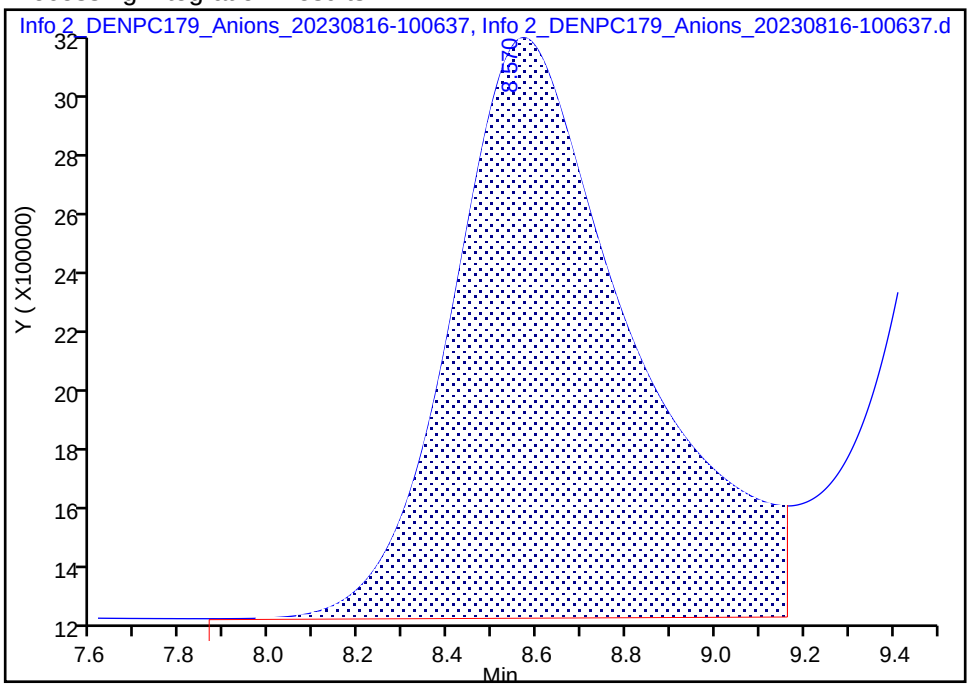
Column: Detector Info 2_091554_1

6 Orthophosphate as P, CAS: STL00599

Signal: 1

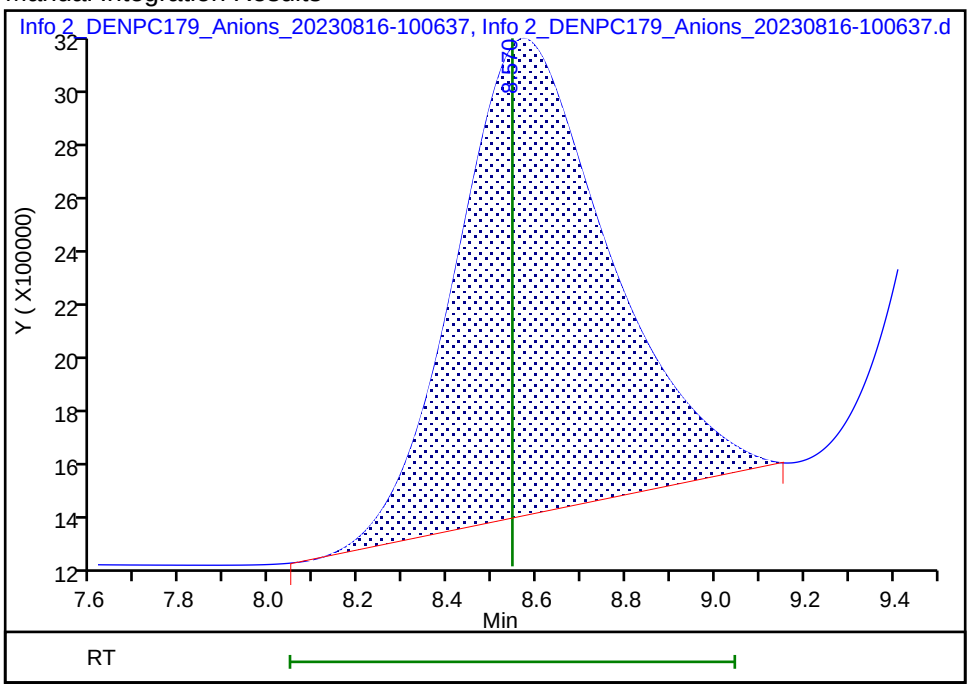
Processing Integration Results

RT: 8.57
Area: 55252876
Amount: 1.438957
Amount Units: ug/ml



Manual Integration Results

RT: 8.57
Area: 42106377
Amount: 1.033471
Amount Units: ug/ml



Reviewer: LVW8, 16-Aug-2023 10:27:44 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100
Lims ID: STD4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 16-Aug-2023 09:09:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0124540-004
Misc. Info.: 280-0124540-004
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub9

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 17-Aug-2023 10:41:29 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1649

First Level Reviewer: LVW8 Date: 16-Aug-2023 10:28:16

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.083	3.083	0.000	171459973	NC	NC	Ma
2 Chloride	4.225	4.225	0.000	1158723576	NC	NC	
3 Nitrite as N	4.877	4.877	0.000	218611235	4.00	4.15	
4 Bromide	6.022	6.022	0.000	32146652	NC	NC	
5 Nitrate as N	6.737	6.737	0.000	192114513	4.00	3.94	
6 Orthophosphate as P	8.543	8.543	0.000	118853705	4.00	4.12	M
7 Sulfate	9.627	9.627	0.000	859732703	NC	NC	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

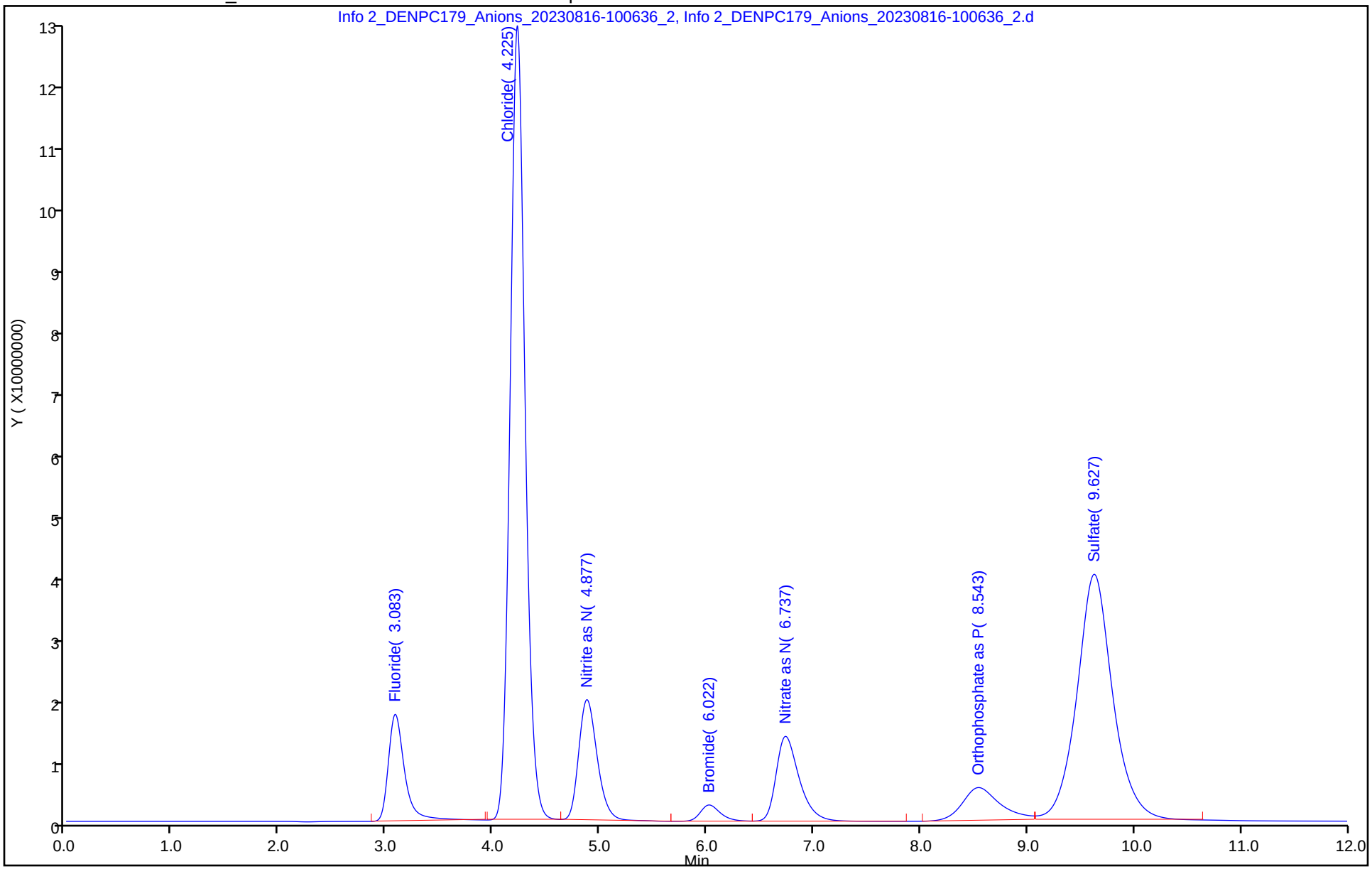
Reagents:

IC Cal low_00722 Amount Added: 0.80 Units: mL
IC CAL cl/so4_00494 Amount Added: 2.40 Units: mL

Report Date: 17-Aug-2023 10:41:29 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100636_2.d				
Injection Date:	16-Aug-2023 09:09:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD4			Worklist Smp#:	4
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



12/5/2023 8:25 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Injection Date: 16-Aug-2023 09:09:00 Instrument ID: WC_IonChrom10

Lims ID: STD4

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 4

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions

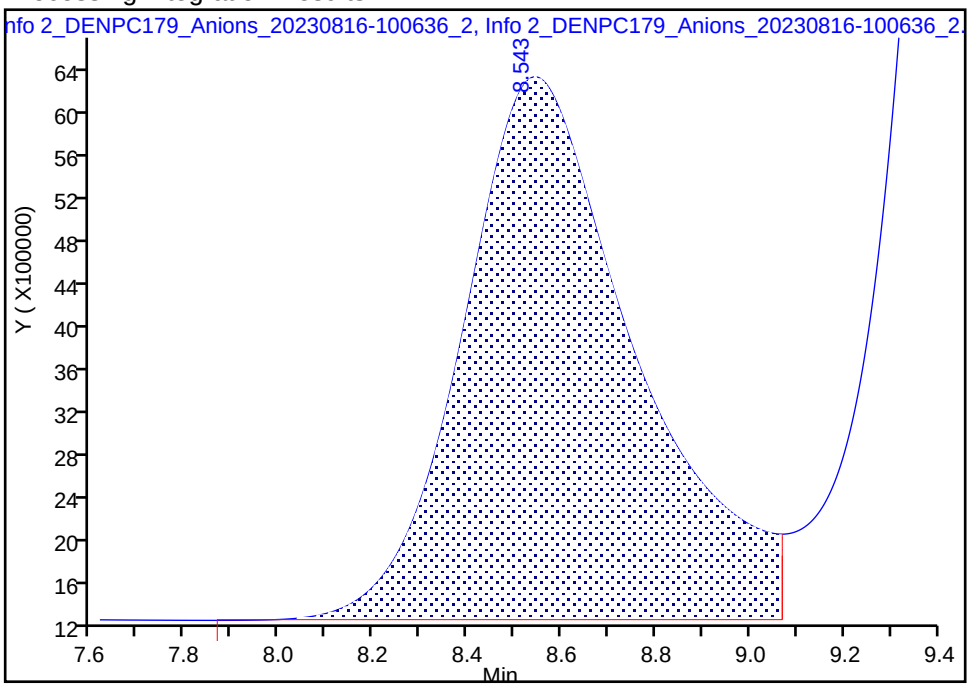
Column: Detector Info 2_091554_1

6 Orthophosphate as P, CAS: STL00599

Signal: 1

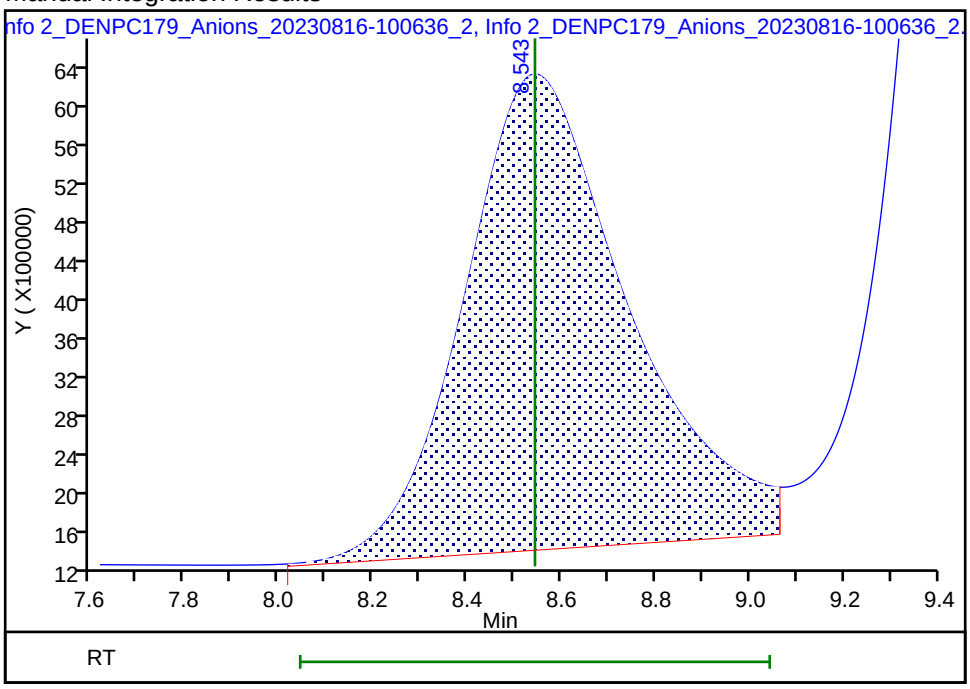
Processing Integration Results

RT: 8.54
Area: 129165919
Amount: 4.442737
Amount Units: ug/ml



Manual Integration Results

RT: 8.54
Area: 118853705
Amount: 4.115722
Amount Units: ug/ml



Reviewer: LVW8, 16-Aug-2023 10:28:08 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100
Lims ID: STD5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 16-Aug-2023 09:24:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0124540-005
Misc. Info.: 280-0124540-005
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub9

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 17-Aug-2023 10:41:30 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1649

First Level Reviewer: LVW8 Date: 16-Aug-2023 10:30:04

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.088	3.088	0.000	330613515	NC	NC	Ma
2 Chloride	4.257	4.257	0.000	2318734502	NC	NC	
3 Nitrite as N	4.875	4.875	0.000	422833757	8.00	8.01	
4 Bromide	6.008	6.008	0.000	66462794	NC	NC	
5 Nitrate as N	6.717	6.717	0.000	392369909	8.00	8.02	
6 Orthophosphate as P	8.530	8.530	0.000	216637163	8.00	8.04	
7 Sulfate	9.610	9.610	0.000	1757412080	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

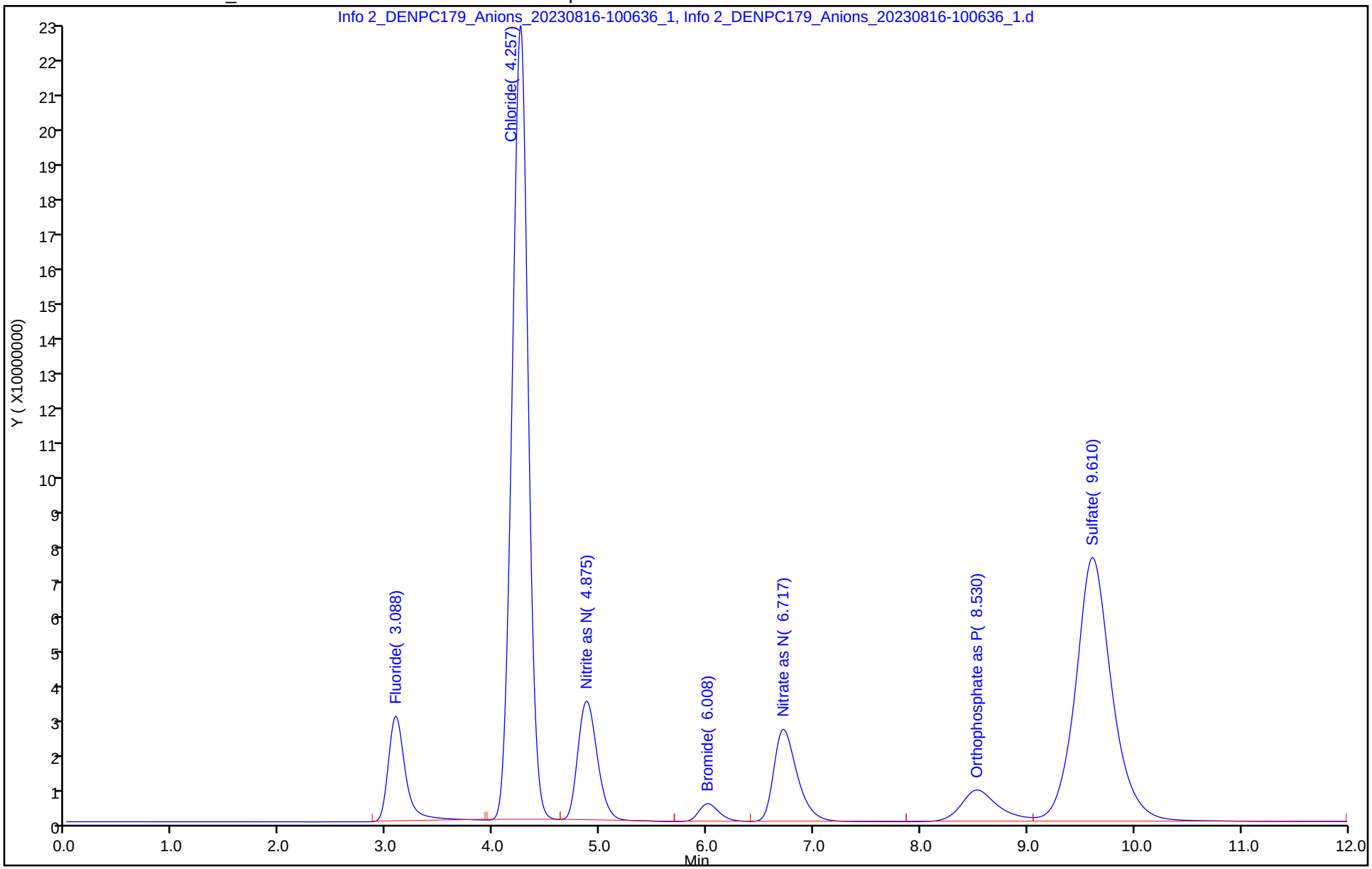
Reagents:

IC Cal low_00722 Amount Added: 1.60 Units: mL
IC CAL cl/so4_00494 Amount Added: 4.80 Units: mL

Report Date: 17-Aug-2023 10:41:31 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100636_1.d				
Injection Date:	16-Aug-2023 09:24:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD5			Worklist Smp#:	5
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



12/5/2023 8:25 AM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100
Lims ID: STD6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 16-Aug-2023 09:39:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0124540-006
Misc. Info.: 280-0124540-006
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub9

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 17-Aug-2023 10:39:54 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1649

First Level Reviewer: LVW8 Date: 16-Aug-2023 10:29:55

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.085	3.088	-0.003	411861883	NC	NC	Ma
2 Chloride	4.292	4.257	0.035	3859357572	NC	NC	
3 Nitrite as N	4.877	4.875	0.002	519039593	10.0	9.83	
4 Bromide	5.998	6.008	-0.010	84169414	NC	NC	
5 Nitrate as N	6.708	6.717	-0.009	493796088	10.0	10.1	
6 Orthophosphate as P	8.523	8.530	-0.007	259679126	10.0	9.77	
7 Sulfate	9.588	9.610	-0.022	2909731694	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

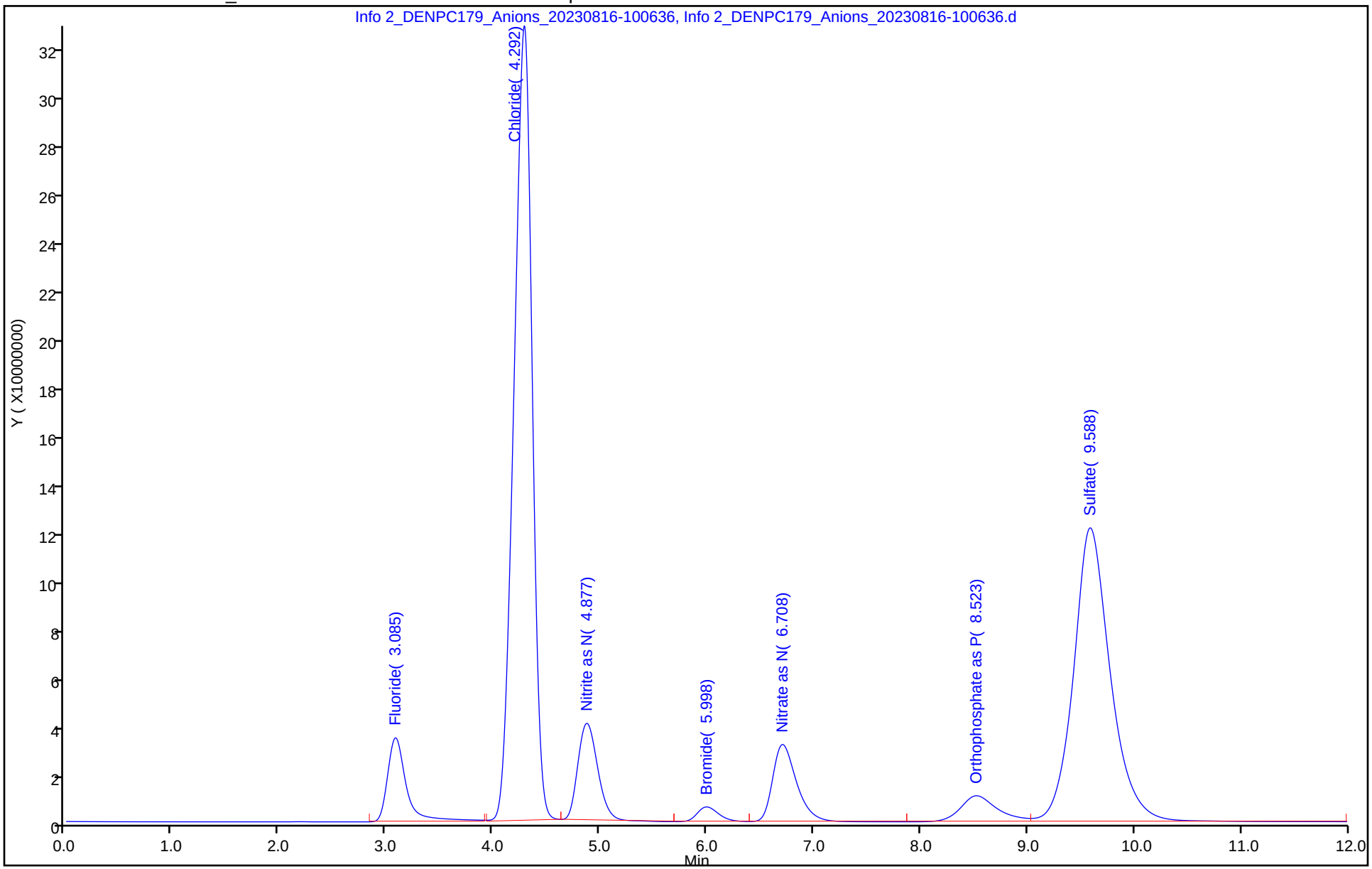
Reagents:

IC Cal low_00722 Amount Added: 2.00 Units: mL
IC CAL cl/so4_00494 Amount Added: 8.00 Units: mL

Report Date: 17-Aug-2023 10:39:54 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100636.d				
Injection Date:	16-Aug-2023 09:39:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD6			Worklist Smp#:	6
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



12/5/2023 8:25 AM

Eurofins Environment Testing America
Worklist Report

Worklist Name: 08 15 23 CAL
Worklist Number: 124540
Instrument Name: WC_IonChrom10
Chrom Method: Anions_IC10
Injection Volume: 5.000
Units: ul
Analysis Type: Semi VOA
Batch Directory: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b
Upload Directory: \\CORPTALSAPP16\280-DN-RawData\WetChem\IonChrom10

Smp #	Lims ID	Smp Type	Ical Lvl	Dil Fact	Fract	Initial Vol/Wt	Vol/Wt Units	Sample Reagents	pH	Comment
1	# 1 STD1	IC	1	1.000	rectInjection	10.00	mL	IC Cal low_00722 IC CAL cl/so4_00494		
2	# 2 STD2	IC	2	1.000	rectInjection	10.00	mL	IC Cal low_00722 IC CAL cl/so4_00494		
3	# 3 STD3	IC	3	1.000	rectInjection	10.00	mL	IC Cal low_00722 IC CAL cl/so4_00494		
4	# 4 STD4	IC	4	1.000	rectInjection	10.00	mL	IC Cal low_00722 IC CAL cl/so4_00494		
5	# 5 STD5	IC	5	1.000	rectInjection	10.00	mL	IC Cal low_00722 IC CAL cl/so4_00494		
6	# 6 STD6	IC	6	1.000	rectInjection	10.00	mL	IC Cal low_00722 IC CAL cl/so4_00494		
7	# 7 rtc	RTC		1.000	rectInjection	10.00	mL	IC LCS_01972		
8	# 8 icv	ICV		1.000	rectInjection	10.00	mL	IC ICV 5_00413 IC SO4 ICV_00024 Cl ICV Std_00006		
9	# 9 icb	ICB		1.000	rectInjection	10.00	mL			
10	#10 mrl	MRL		1.000	rectInjection	10.00	mL	IC Cal low_00722 IC CAL cl/so4_00494		
11	#11 lcs	LCS		1.000	rectInjection	10.00	mL	IC LCS_01972		
12	#12 lcsd	LCSD		1.000	rectInjection	10.00	mL	IC LCS_01972		
13	#13 mb	MB		1.000	rectInjection	10.00	mL			
14	#14 280-180347-D-18	Client		1.000	rectInjection	10.00	mL			
15	#15 280-180347-D-19	Client		1.000	rectInjection	10.00	mL			
16	#16 280-180347-D-20	Client		1.000	rectInjection	10.00	mL			
17	#17 280-179722-B-11-A	Client		1.000	rectInjection	10.00	mL			
18	#18 280-179722-B-11-A	Client		10.00	rectInjection	10.00	mL			
19	#19 280-179722-C-6-A	Client		1.000	rectInjection	10.00	mL			
20	#20 280-179722-C-6-A	Client		10.00	rectInjection	10.00	mL			
21	#21 280-180350-B-2	Client		1.000	rectInjection	10.00	mL			
22	#22 280-180350-B-3	Client		1.000	rectInjection	10.00	mL			
23	#23 280-180361-A-2	Client		1.000	rectInjection	10.00	mL			
24	#24 ccv	CCV		1.000	rectInjection	10.00	mL	IC LCS_01972		
25	#25 ccb	CCB		1.000	rectInjection	10.00	mL			
26	#26 280-180361-A-2 DU	DU		1.000	rectInjection	10.00	mL			
27	#27 280-180361-A-2 MS	MS		1.000	rectInjection	10.00	mL	ICMS/MSD WEEK_00831		
28	#28 280-180361-A-2 MSD	MSD		1.000	rectInjection	10.00	mL	ICMS/MSD WEEK_00831		
29	#29 280-180361-A-1	Client		10.00	rectInjection	10.00	mL			
30	#30 280-180349-B-2	Client		1.000	rectInjection	10.00	mL			
31	#31 280-180363-A-1	Client		1.000	rectInjection	10.00	mL			
32	#32 280-180362-A-1	Client		5.000	rectInjection	10.00	mL			
33	#33 280-180359-A-3	Client		1.000	rectInjection	10.00	mL			
34	#34 280-180362-A-2	Client		5.000	rectInjection	10.00	mL			
35	#35 280-180359-A-2	Client		2.000	rectInjection	10.00	mL			
36	#36 ccv	CCV		1.000	rectInjection	10.00	mL	IC LCS_01972		
37	#37 ccb	CCB		1.000	rectInjection	10.00	mL			
38	#38 280-180363-A-3	Client		1.000	rectInjection	10.00	mL			
39	#39 280-180363-A-2	Client		1.000	rectInjection	10.00	mL			
40	#40 280-180363-A-2 DU	DU		1.000	rectInjection	10.00	mL			
41	#41 280-180363-A-2 MS	MS		1.000	rectInjection	10.00	mL	ICMS/MSD WEEK_00831		
42	#42 280-180363-A-2 MSD	MSD		1.000	rectInjection	10.00	mL	ICMS/MSD WEEK_00831		
43	#43 280-180359-A-4	Client		1.000	rectInjection	10.00	mL			
44	#44 280-180349-B-3	Client		1.000	rectInjection	10.00	mL			
45	#45 280-180359-A-1	Client		1.000	rectInjection	10.00	mL			
46	#46 lcs	LCS		1.000	rectInjection	10.00	mL	IC LCS_01972		
47	#47 lcsd	LCSD		1.000	rectInjection	10.00	mL	IC LCS_01972		
48	#48 ccv	CCV		1.000	rectInjection	10.00	mL	IC LCS_01972		
49	#49 ccb	CCB		1.000	rectInjection	10.00	mL			
50	#50 mb	MB		1.000	rectInjection	10.00	mL			
51	#51 280-180355-A-1	Client		1.000	rectInjection	10.00	mL			
52	#52 280-180360-B-5	Client		2.000	rectInjection	10.00	mL			
53	#53 280-180362-A-4	Client		1.000	rectInjection	10.00	mL			
54	#54 280-180362-A-4 DU	DU		1.000	rectInjection	10.00	mL			

Smp #	Lims ID	Smp Type	Ical Lvl	Dil Fact	Fract	Initial Vol/Wt	Vol/Wt Units	Sample Reagents	pH	Comment
55	#55 280-180362-A-4 MS	MS		1.000	rectInjection	10.00	mL	ICMS/MSD WEEK_00831		
56	#56 280-180362-A-4 MSD	MSD		1.000	rectInjection	10.00	mL	ICMS/MSD WEEK_00831		
57	#57 280-180360-B-3	Client		1.000	rectInjection	10.00	mL			
58	#58 280-180360-B-1	Client		1.000	rectInjection	10.00	mL			
59	#59 ccv	CCV		1.000	rectInjection	10.00	mL	IC LCS_01972		
60	#60 ccb	CCB		1.000	rectInjection	10.00	mL			

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 17-Aug-2023 11:15:05
No.Compounds:7
Sublist: chrom-Anions_IC10*sub9
Limit Group: Wet - Anions

Detectors

Detector: 1, Info 2_091554_1
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-14.933 No. Points: 7196

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 08:23:00 Worklist: 124540 Sample#: 1
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 08:38:00 Worklist: 124540 Sample#: 2
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 08:54:00 Worklist: 124540 Sample#: 3
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 09:09:00 Worklist: 124540 Sample#: 4
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 09:24:00 Worklist: 124540 Sample#: 5
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 09:39:00 Worklist: 124540 Sample#: 6

Start Cal Date: 16-Aug-2023 08:23:00 End Cal Date: 16-Aug-2023 09:39:00

Individual Compound Calibration Parameters

Quant Method: ESTD RF Calibration: Replace
Rule Name: Linear1 Curve: Linear Weighting: Conc
Origin: None Error: raw_COD Error Limit: 1.00
RF %Dif: 0.0 SPCC Limit: 0.0 CCC Limit: 0.0
Dependent Variable: Resp

Number of Compounds: 3

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
3 Nitrite as N				Signal: 1					
47471195	51179524	53593060	54652809	52854220	51903959	-659672			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		52874248		
9494239	25589762	53593060	218611235	422833757	519039593				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				
5 Nitrate as N				Signal: 1					
44046915	44259096	44959242	48028628	49046239	49379609	-1793758			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		49153639		
8809383	22129548	44959242	192114513	392369909	493796088				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				
6 Orthophosphate as P				Signal: 1					
101865985	61427992	42106377	29713426	27079645	25967913	16373185			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		24899766		
M20373197	M30713996	M42106377	M118853705	216637163	259679126				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 17-Aug-2023 11:15:05
No.Compounds:7
Sublist: chrom-Anions_IC10*sub9
Limit Group: Wet - Anions 28D

Detectors

Detector: 1, Info 2_091554_1
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-14.933 No. Points: 7196

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 08:23:00 Worklist: 124540 Sample#: 1
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 08:38:00 Worklist: 124540 Sample#: 2
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 08:54:00 Worklist: 124540 Sample#: 3
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 09:09:00 Worklist: 124540 Sample#: 4
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 09:24:00 Worklist: 124540 Sample#: 5
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 09:39:00 Worklist: 124540 Sample#: 6

Start Cal Date: 16-Aug-2023 08:23:00 End Cal Date: 16-Aug-2023 09:39:00

Individual Compound Calibration Parameters

Quant Method: ESTD RF Calibration: Replace
Rule Name: Linear1 Curve: Linear Weighting: Conc
Origin: None Error: raw_COD Error Limit: 1.00
RF %Dif: 0.0 SPCC Limit: 0.0 CCC Limit: 0.0
Dependent Variable: Resp

Number of Compounds: 4

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
1 Fluoride				Signal: 1					
32469200	37215236	40803610	42864993	41326689	41186188	-1753153			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		41787315		
M6493840	M18607618	M40803610	M171459973	M330613515	M411861883				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				
2 Chloride				Signal: 1					
16343527	17656926	18478080	19312060	19322788	19296788	-3421991			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		19331335		
16343527	44142315	92390398	1158723576	2318734502	3859357572				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				
4 Bromide				Signal: 1					
11065780	8675128	7960626	8036663	8307849	8416941	361716			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		8232908		
2213156	4337564	7960626	32146652	66462794	84169414				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				
7 Sulfate				Signal: 1					
16127136	13095082	12454383	14328878	14645101	14548658	-1219203			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		14531090		
M16127136	M32737705	M62271915	M859732703	1757412080	2909731694				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				

Preliminary Report

Eurofins Denver
ICV, ICal Verification Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 16-Aug-2023 10:08:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0124540-008
Misc. Info.: 280-0124540-008
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist:

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 17-Aug-2023 11:15:05 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10(

Column 1 : Det: Info 2_091554_1
Process Host: CTX1649

First Level Reviewer: LVW8 Date: 17-Aug-2023 11:27:01

Start Cal Date: 16-Aug-2023 08:23:00
End Cal Date: 16-Aug-2023 09:39:00

Compound	Amount Added	Amount Detected	%Drift	Max. %Drift	%Rec	%Rec Limits
1 Fluoride	4.00	3.60	*-10.0	10.0	90.0	
2 Chloride	80.0	84.0	5.0	10.0	105.0	
4 Bromide	4.00	3.88	-3.1	10.0	96.9	
7 Sulfate	80.0	81.1	1.3	10.0	101.3	

Preliminary Report

Eurofins Denver
ICV, ICal Verification Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10				
Lims ID:	icv				
Client ID:					
Sample Type:	ICV				
Inject. Date:	16-Aug-2023 10:08:00	ALS Bottle#:	0	Worklist Smp#:	8
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0124540-008				
Misc. Info.:	280-0124540-008				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Sublist:					
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m				
Limit Group:	Wet - Anions				
Last Update:	17-Aug-2023 11:27:17	Calib Date:	16-Aug-2023 09:39:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10(				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1649				
First Level Reviewer:	LVW8	Date:	17-Aug-2023 11:27:17		
Start Cal Date:	16-Aug-2023 08:23:00				
End Cal Date:	16-Aug-2023 09:39:00				

Compound	Amount Added	Amount Detected	%Drift	Max. %Drift	%Rec	%Rec Limits
3 Nitrite as N	4.00	4.14	3.5	10.0	103.5	
5 Nitrate as N	4.00	3.95	-1.2	10.0	98.8	
6 Orthophosphate as	4.00	4.21	5.3	10.0	105.3	

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Soil / Hazardous Waste PT Concentration Ranges and PTRLs

PTRL TNI Proficiency Testing Reporting Limits (PTRLs) are provided as guidance to laboratories analyzing TNI PT samples. At a minimum, the laboratory should use a method that is sensitive enough to generate quantitative results at the PTRLs shown. (REF: TNI PT FOT Tables)

NA Not Applicable (NA) has been applied to analytes where a PTRL is not applicable and to state specific analytes that have not had a PTRL determined by the applicable accrediting agency.

Nitrite in Soil

NELAC Code	Analyte Name	Units	Concentration Range	PTRL
1840	Nitrite as N	mg/kg	10.0 - 500	NA

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Instructions for Soil (HW) - Nitrite as N

SAMPLE DESCRIPTION

- Provided in two different containers.
- Provided as a 20 g Ottawa sand matrix in a 40 mL VOA vial.
- Provided as a 5 mL spiking solution in water flame sealed in a 5 mL amber ampoule.
- The standard should be stored at 4±2°C.

GENERAL INFORMATION

- This standard is pre-dried so percent moisture is 0%.
- After spiking, the diluted standard will contain the analyte in the concentration range.
- Store any remaining standard at 4±2°C.
- It is recommended to save any remaining standard until final reports have been sent.

ADDITIONAL INFORMATION

- Use a sample weight of 10 grams when reporting.
- Due to the nature of this standard, the standard should be analyzed immediately after dilution.

INSTRUCTIONS

- The standard should be brought to room temperature when used.
- Open the blank soil matrix vial and transfer the 10.0 g of the matrix into your extraction vessel.
- Carefully open the ampule by snapping off the top at the narrow part of the neck.
- Using a gas tight syringe, transfer exactly 1.0 mL of the spiking solution onto the blank soil matrix in the extraction vessel.
- The standard is now ready for preparation and analysis per your normal procedure.
- Due to the nature of this standard, the standard should be analyzed **immediately** after dilution.
- Report result in mg/kg.

Please take all necessary safety precautions when handling this product. Phenova products are intended for use by laboratory professionals only and may be hazardous. Buyer/user shall ensure sufficient knowledge, training, facilities and skills necessary to safely handle and store products provided. Material Safety Data Sheets (MSDS) for all Phenova products are available upon request.

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Performance Test (PT) Preparation Form

Preparation

Job #: 280-179722 Sample # 11

Method: 9056 48Hr

Sample Name (*from vial or PT instructions*): Soil(HW) Nitrite as N

Standard Lot #(s) or Vial #(s) (If Applicable): 7093-71

Analyst Review of PT Instructions by (Initials): MEC (Date): 8/16/23

PT Sample Type: X Ampoule ____ Whole volume

Volume or Weight of PT Sample Used : 1 (Units): mL

Prepared Volume of diluted PT Sample (If reagent blank spiked from ampoule):

10 (Units): G or 100 mL

2nd Analyst Witness/Review of PT Instructions by (Initials): mp (Date): 8-16-23
(This 2nd level review is to be done at the time of PT preparation)

Include a copy of the PT instructions with this form, and include both in the batch folder.

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Soil / Hazardous Waste PT Concentration Ranges and PTRLs

PTRL TNI Proficiency Testing Reporting Limits (PTRLs) are provided as guidance to laboratories analyzing TNI PT samples. At a minimum, the laboratory should use a method that is sensitive enough to generate quantitative results at the PTRLs shown. (REF: TNI PT FOT Tables)

NA Not Applicable (NA) has been applied to analytes where a PTRL is not applicable and to state specific analytes that have not had a PTRL determined by the applicable accrediting agency.

Anions

NELAC Code	Analyte Name	Units	Concentration Range	PTRL
1540	Bromide	mg/kg	10.0 - 100	1.00
1575	Chloride	mg/kg	200 - 1000	20.0
1730	Fluoride	mg/kg	25.0 - 500	2.50
1810	Nitrate as N	mg/kg	25.0 - 500	2.50
2000	Sulfate	mg/kg	25.0 - 2000	2.50
1870	Orthophosphate as P	mg/kg	25.0 - 500	NA

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Instructions for Soil (HW) - Anions

SAMPLE DESCRIPTION

- Provided as a 40 g pre-spiked soil matrix in a 2 oz glass jar.
- This standard can be stored at room temperature (20 - 25° C).

GENERAL INFORMATION

- This standard is pre-spiked and ready to use,
- This standard is pre-dried so percent moisture is 0%.
- The standard will contain the analytes within the required concentration range.
- Store any remaining standard at room temperature (20 - 25° C).
- It is recommended to save any remaining standard until final reports have been sent.

ADDITIONAL INFORMATION

- This standard was designed for use with deionized water extraction technique.
- Due to potential settling during shipping, homogenize this standard before taking an aliquot.

INSTRUCTIONS

- This standard is pre-spiked and ready to use.
- Thoroughly mix the standard prior to removing an aliquot.
- Extract an aliquot of the sample and analyze by your normal procedure.
- Report result in mg/kg.

Please take all necessary safety precautions when handling this product. Phenova products are intended for use by laboratory professionals only and may be hazardous. Buyer/user shall ensure sufficient knowledge, training, facilities and skills necessary to safely handle and store products provided. Material Safety Data Sheets (MSDS) for all Phenova products are available upon request.

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Performance Test (PT) Preparation Form

Preparation

Job #: 280-179722 Sample # 6

Method: ~~300~~ MEC 9056 48Hr/28D

Sample Name (*from vial or PT instructions*): Soil (HW) - Anions

Standard Lot #(s) or Vial #(s) (If Applicable): 7093-08

Analyst Review of PT Instructions by (Initials): MEC (Date): 8/16/23

PT Sample Type: _____ Ampoule ____ Whole volume

Volume or Weight of PT Sample Used : 10 (Units): G

Prepared Volume of diluted PT Sample (If reagent blank spiked from ampoule):

_____(Units):_____

2nd Analyst Witness/Review of PT Instructions by (Initials): mp (Date): 8-16-23
(This 2nd level review is to be done at the time of PT preparation)

Include a copy of the PT instructions with this form, and include both in the batch folder.

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-104
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 16-Aug-2023 10:08:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0124540-008
Misc. Info.: 280-0124540-008
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist:

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 17-Aug-2023 11:45:40 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1649

First Level Reviewer: LVW8 Date: 17-Aug-2023 11:27:17

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.078	3.078	0.000	148600573	NC	NC	Ma
2 Chloride	4.238	4.238	0.000	1620371327	NC	NC	
3 Nitrite as N	4.873	4.873	0.000	218249168	4.00	4.14	
4 Bromide	6.012	6.012	0.000	32280328	NC	NC	
5 Nitrate as N	6.723	6.723	0.000	192424246	4.00	3.95	
6 Orthophosphate as P	8.545	8.545	0.000	121270311	4.00	4.21	
7 Sulfate	9.628	9.628	0.000	1176664399	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

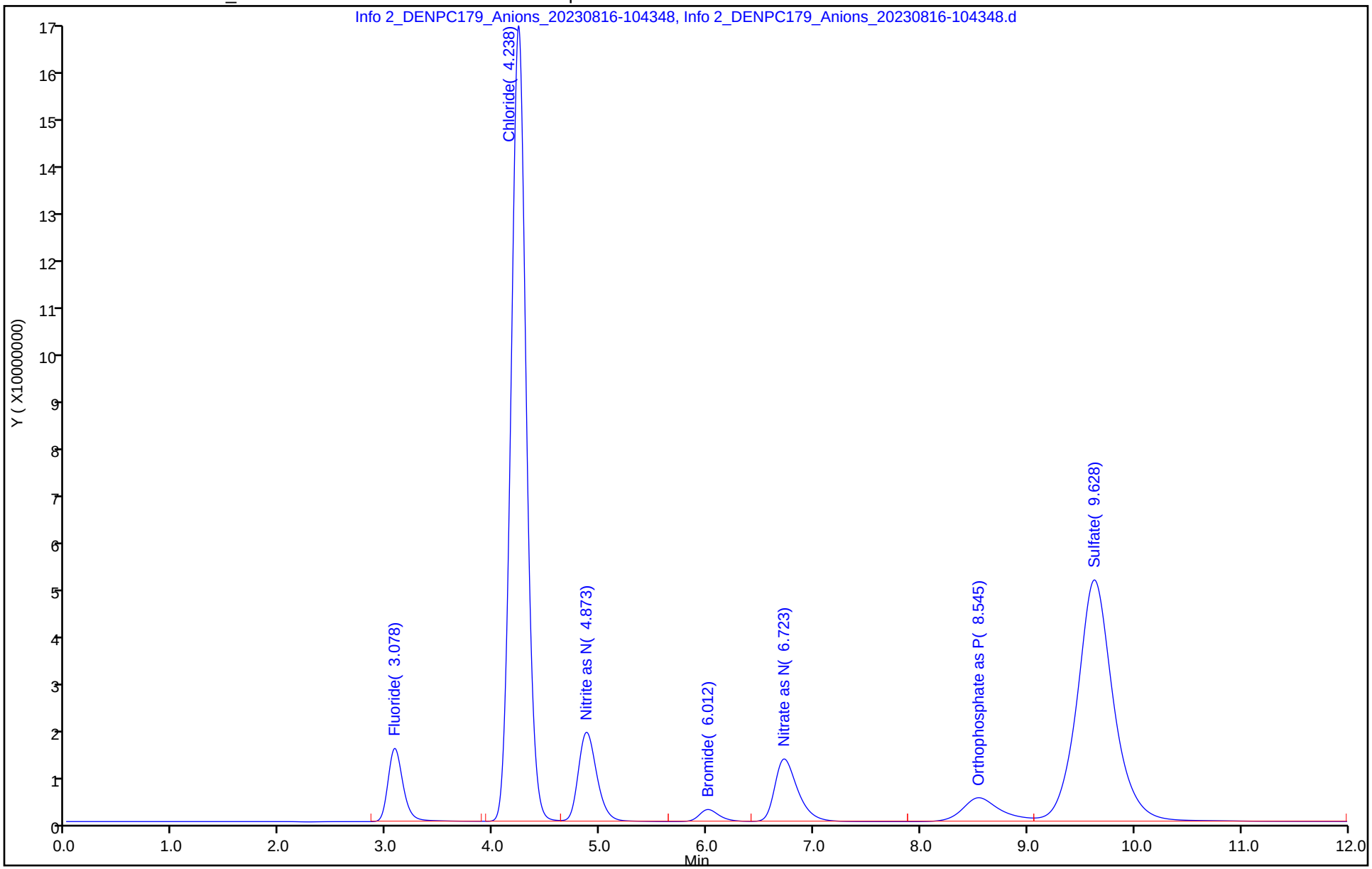
IC ICV 5_00413	Amount Added:	0.80	Units: mL
IC SO4 ICV_00024	Amount Added:	0.80	Units: mL
Cl ICV Std_00006	Amount Added:	0.80	Units: mL

Report Date: 17-Aug-2023 11:45:40 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-104348.d

Injection Date:	16-Aug-2023 10:08:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	icv			Worklist Smp#:	8
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



12/5/2023 8:25 AM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-104
Lims ID: icb
Client ID:
Sample Type: ICB
Inject. Date: 16-Aug-2023 10:23:00 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0124540-009
Misc. Info.: 280-0124540-009
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 17-Aug-2023 11:45:40 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1649

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078				ND	
2 Chloride	4.200	4.238	-0.038	264090		NC	
3 Nitrite as N	4.857	4.873	-0.016	208499		0.0164	
4 Bromide	6.118	6.012	0.106	349466		NC	
5 Nitrate as N		6.723				ND	
6 Orthophosphate as P	8.595	8.545	0.050	6392990		-0.4008	
7 Sulfate	9.723	9.628	0.095	5568928		NC	

QC Flag Legend

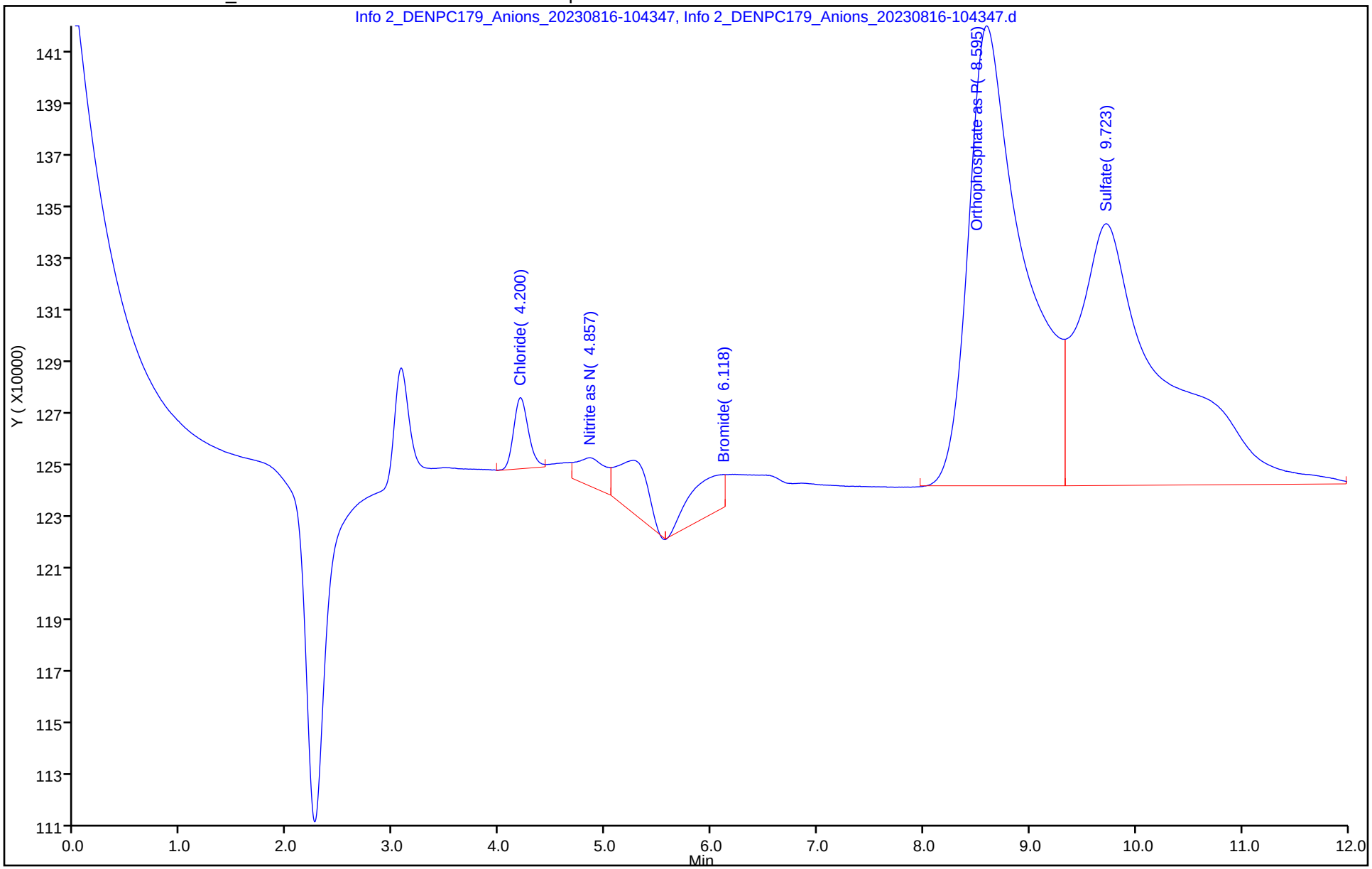
Processing Flags
NC - Not Calibrated

Report Date: 17-Aug-2023 11:45:41 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-104347.d

Injection Date:	16-Aug-2023 10:23:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	icb			Worklist Smp#:	9
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



12/5/2023 8:25 AM

Eurofins Environment Testing
Worklist Report

Worklist Name: 09 29 23
Worklist Number: 125974
Instrument Name: WC_IonChrom10
Chrom Method: Anions_IC10
Injection Volume: 5.000
Units: ul
Analysis Type: Semi VOA
Batch Directory: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b
Upload Directory: \\CORPTALSAPP16\280-DN-RawData\WetChem\IonChrom10

Smp #	Lims ID	Smp Type	Dil Fact	Fract	Initial Vol/Wt	Vol/Wt Units	Sample Reagents	pH	Comment
1	# 1 ccv	CCV	1.000	irectInjection	10.00	mL	IC LCS_01980		
2	# 2 ccb	CCB	1.000	irectInjection	10.00	mL			
3	# 3 mrl	MRL	1.000	irectInjection	10.00	mL	IC Cal low_00731 IC CAL cl/so4_00501		
4	# 4 lcs	LCS	1.000	irectInjection	10.00	mL	IC LCS_01980		
5	# 5 lcsd	LCSD	1.000	irectInjection	10.00	mL	IC LCS_01980		
6	# 6 mb	MB	1.000	irectInjection	10.00	mL			
7	# 7 280-182083-A-1	Client	100.0	irectInjection	10.00	mL			
8	# 8 280-182142-D-3	Client	1.000	irectInjection	10.00	mL			
9	# 9 280-182145-A-1	Client	1.000	irectInjection	10.00	mL			
10	#10 280-182145-A-2	Client	1.000	irectInjection	10.00	mL			
11	#11 280-182145-A-3	Client	1.000	irectInjection	10.00	mL			
12	#12 280-182145-A-4	Client	1.000	irectInjection	10.00	mL			
13	#13 280-182145-A-5	Client	1.000	irectInjection	10.00	mL			
14	#14 280-182145-A-5 DU	DU	1.000	irectInjection	10.00	mL			
15	#15 280-182145-A-5 MS	MS	1.000	irectInjection	10.00	mL	ICMS/MSD WEEK_00838		
16	#16 280-182145-A-5 MSD	MSD	1.000	irectInjection	10.00	mL	ICMS/MSD WEEK_00838		
17	#17 ccv	CCV	1.000	irectInjection	10.00	mL	IC LCS_01980		
18	#18 ccb	CCB	1.000	irectInjection	10.00	mL			
19	#19 280-182145-A-6	Client	1.000	irectInjection	10.00	mL			
20	#20 280-182144-A-8	Client	1.000	irectInjection	10.00	mL			
21	#21 280-182144-B-1	Client	1.000	irectInjection	10.00	mL			
22	#22 280-182162-E-1	Client	1.000	irectInjection	10.00	mL			
23	#23 280-182162-F-2	Client	1.000	irectInjection	10.00	mL			
24	#24 280-182144-A-9	Client	1.000	irectInjection	10.00	mL			
25	#25 280-182144-A-9 DU	DU	1.000	irectInjection	10.00	mL			
26	#26 280-182144-A-9 MS	MS	1.000	irectInjection	10.00	mL	ICMS/MSD WEEK_00838		
27	#27 280-182144-A-9 MSD	MSD	1.000	irectInjection	10.00	mL	ICMS/MSD WEEK_00838		
28	#28 280-182145-B-9	Client	1.000	irectInjection	10.00	mL			
29	#29 ccv	CCV	1.000	irectInjection	10.00	mL	IC LCS_01980		
30	#30 ccb	CCB	1.000	irectInjection	10.00	mL			
31	#31 280-182142-C-2	Client	1.000	irectInjection	10.00	mL			
32	#32 280-182144-A-7	Client	1.000	irectInjection	10.00	mL			
33	#33 280-182162-F-3	Client	1.000	irectInjection	10.00	mL			
34	#34 280-182142-C-1	Client	1.000	irectInjection	10.00	mL			
35	#35 280-182144-A-2	Client	1.000	irectInjection	10.00	mL			
36	#36 280-182144-A-6	Client	1.000	irectInjection	10.00	mL			
37	#37 lcs	LCS	1.000	irectInjection	10.00	mL	IC LCS_01980		
38	#38 lcsd	LCSD	1.000	irectInjection	10.00	mL	IC LCS_01980		
39	#39 mb	MB	1.000	irectInjection	10.00	mL			
40	#40 280-182144-A-10	Client	1.000	irectInjection	10.00	mL			
41	#41 ccv	CCV	1.000	irectInjection	10.00	mL	IC LCS_01980		
42	#42 ccb	CCB	1.000	irectInjection	10.00	mL			
43	#43 280-182144-A-5	Client	1.000	irectInjection	10.00	mL			
44	#44 280-182145-B-10	Client	1.000	irectInjection	10.00	mL			
45	#45 280-182144-A-3	Client	1.000	irectInjection	10.00	mL			
46	#46 280-182162-F-4	Client	1.000	irectInjection	10.00	mL			
47	#47 280-182162-D-7	Client	1.000	irectInjection	10.00	mL			
48	#48 280-182143-A-1	Client	1.000	irectInjection	10.00	mL			
49	#49 280-182144-B-4	Client	1.000	irectInjection	10.00	mL			
50	#50 280-182144-B-4 DU	DU	1.000	irectInjection	10.00	mL			
51	#51 280-182144-B-4 MS	MS	1.000	irectInjection	10.00	mL	ICMS/MSD WEEK_00838		
52	#52 280-182144-B-4 MSD	MSD	1.000	irectInjection	10.00	mL	ICMS/MSD WEEK_00838		
53	#53 ccv	CCV	1.000	irectInjection	10.00	mL	IC LCS_01980		
54	#54 ccb	CCB	1.000	irectInjection	10.00	mL			
55	#55 280-182162-E-5	Client	1.000	irectInjection	10.00	mL			
56	#56 280-182140-G-2	Client	1.000	irectInjection	10.00	mL			
57	#57 280-182140-G-3	Client	5.000	irectInjection	10.00	mL			
58	#58 280-182162-E-6	Client	1.000	irectInjection	10.00	mL			
59	#59 280-182162-E-6 DU	DU	1.000	irectInjection	10.00	mL			
60	#60 280-182162-E-6 MS	MS	1.000	irectInjection	10.00	mL	ICMS/MSD WEEK_00838		
61	#61 280-182162-E-6 MSD	MSD	1.000	irectInjection	10.00	mL	ICMS/MSD WEEK_00838		
62	#62 280-182140-G-4	Client	5.000	irectInjection	10.00	mL			

Smp #	Lims ID	Smp Type	Dil Fact	Fract	Initial Vol/Wt	Vol/Wt Units	Sample Reagents	pH	Comment
63	#63 280-182164-F-1	Client	50.00	irectInjection	10.00	mL			
64	#64 ccv	CCV	1.000	irectInjection	10.00	mL	IC LCS_01980		
65	#65 ccb	CCB	1.000	irectInjection	10.00	mL			
66	#66 280-182180-F-1	Client	1.000	irectInjection	10.00	mL			
67	#67 280-182180-F-2	Client	1.000	irectInjection	10.00	mL			
68	#68 280-182180-F-3	Client	1.000	irectInjection	10.00	mL			
69	#69 280-182180-F-4	Client	1.000	irectInjection	10.00	mL			
70	#70 ccv	CCV	1.000	irectInjection	10.00	mL	IC LCS_01980		
71	#71 ccb	CCB	1.000	irectInjection	10.00	mL			

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 17-Aug-2023 11:15:05
No.Compounds:7
Sublist: chrom-Anions_IC10*sub9
Limit Group: Wet - Anions

Detectors

Detector: 1, Info 2_091554_1
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-14.933 No. Points: 7196

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 08:23:00 Worklist: 124540 Sample#: 1
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 08:38:00 Worklist: 124540 Sample#: 2
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 08:54:00 Worklist: 124540 Sample#: 3
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 09:09:00 Worklist: 124540 Sample#: 4
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 09:24:00 Worklist: 124540 Sample#: 5
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 09:39:00 Worklist: 124540 Sample#: 6

Start Cal Date: 16-Aug-2023 08:23:00 End Cal Date: 16-Aug-2023 09:39:00

Individual Compound Calibration Parameters

Quant Method: ESTD RF Calibration: Replace
Rule Name: Linear1 Curve: Linear Weighting: Conc
Origin: None Error: raw_COD Error Limit: 1.00
RF %Dif: 0.0 SPCC Limit: 0.0 CCC Limit: 0.0
Dependent Variable: Resp

Number of Compounds: 3

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
3 Nitrite as N				Signal: 1					
47471195	51179524	53593060	54652809	52854220	51903959	-659672			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		52874248		
9494239	25589762	53593060	218611235	422833757	519039593				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				
5 Nitrate as N				Signal: 1					
44046915	44259096	44959242	48028628	49046239	49379609	-1793758			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		49153639		
8809383	22129548	44959242	192114513	392369909	493796088				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				
6 Orthophosphate as P				Signal: 1					
101865985	61427992	42106377	29713426	27079645	25967913	16373185			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		24899766		
M20373197	M30713996	M42106377	M118853705	216637163	259679126				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 17-Aug-2023 11:15:05
No.Compounds:7
Sublist: chrom-Anions_IC10*sub9
Limit Group: Wet - Anions 28D

Detectors

Detector: 1, Info 2_091554_1
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-14.933 No. Points: 7196

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 08:23:00 Worklist: 124540 Sample#: 1
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 08:38:00 Worklist: 124540 Sample#: 2
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 08:54:00 Worklist: 124540 Sample#: 3
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 09:09:00 Worklist: 124540 Sample#: 4
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 09:24:00 Worklist: 124540 Sample#: 5
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 09:39:00 Worklist: 124540 Sample#: 6

Start Cal Date: 16-Aug-2023 08:23:00 End Cal Date: 16-Aug-2023 09:39:00

Individual Compound Calibration Parameters

Quant Method: ESTD RF Calibration: Replace
Rule Name: Linear1 Curve: Linear Weighting: Conc
Origin: None Error: raw_COD Error Limit: 1.00
RF %Dif: 0.0 SPCC Limit: 0.0 CCC Limit: 0.0
Dependent Variable: Resp

Number of Compounds: 4

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
1 Fluoride				Signal: 1					
32469200	37215236	40803610	42864993	41326689	41186188	-1753153			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		41787315		
M6493840	M18607618	M40803610	M171459973	M330613515	M411861883				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				
2 Chloride				Signal: 1					
16343527	17656926	18478080	19312060	19322788	19296788	-3421991			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		19331335		
16343527	44142315	92390398	1158723576	2318734502	3859357572				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				
4 Bromide				Signal: 1					
11065780	8675128	7960626	8036663	8307849	8416941	361716			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		8232908		
2213156	4337564	7960626	32146652	66462794	84169414				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				
7 Sulfate				Signal: 1					
16127136	13095082	12454383	14328878	14645101	14548658	-1219203			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		14531090		
M16127136	M32737705	M62271915	M859732703	1757412080	2909731694				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				

Preliminary Report

Eurofins Denver
ICV, ICal Verification Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 16-Aug-2023 10:08:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0124540-008
Misc. Info.: 280-0124540-008
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist:

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 17-Aug-2023 11:15:05 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10(

Column 1 : Det: Info 2_091554_1
Process Host: CTX1649

First Level Reviewer: LVW8 Date: 17-Aug-2023 11:27:01

Start Cal Date: 16-Aug-2023 08:23:00
End Cal Date: 16-Aug-2023 09:39:00

Compound	Amount Added	Amount Detected	%Drift	Max. %Drift	%Rec	%Rec Limits
1 Fluoride	4.00	3.60	*-10.0	10.0	90.0	
2 Chloride	80.0	84.0	5.0	10.0	105.0	
4 Bromide	4.00	3.88	-3.1	10.0	96.9	
7 Sulfate	80.0	81.1	1.3	10.0	101.3	

Preliminary Report

Eurofins Denver
ICV, ICal Verification Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 16-Aug-2023 10:08:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0124540-008
Misc. Info.: 280-0124540-008
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist:

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 17-Aug-2023 11:27:17 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10(

Column 1 : Det: Info 2_091554_1
Process Host: CTX1649

First Level Reviewer: LVW8 Date: 17-Aug-2023 11:27:17

Start Cal Date: 16-Aug-2023 08:23:00
End Cal Date: 16-Aug-2023 09:39:00

Compound	Amount Added	Amount Detected	%Drift	Max. %Drift	%Rec	%Rec Limits
3 Nitrite as N	4.00	4.14	3.5	10.0	103.5	
5 Nitrate as N	4.00	3.95	-1.2	10.0	98.8	
6 Orthophosphate as	4.00	4.21	5.3	10.0	105.3	

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-130
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 29-Sep-2023 12:10:00 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-001
Misc. Info.: 280-0125974-001
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub9

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 02-Oct-2023 07:45:07 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

First Level Reviewer: XAY4 Date: 02-Oct-2023 07:45:07

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	ND	
2 Chloride	4.230	4.235	-0.005	1904663395	NC	NC	
3 Nitrite as N	4.863	4.865	-0.002	257273134	5.00	4.88	
4 Bromide	6.007	6.010	-0.003	35662441	NC	NC	
5 Nitrate as N	6.735	6.730	0.005	229618129	5.00	4.71	
6 Orthophosphate as P	8.477	8.503	-0.026	162335015	5.00	5.86	
7 Sulfate	9.538	9.568	-0.030	1443140797	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

Reagents:

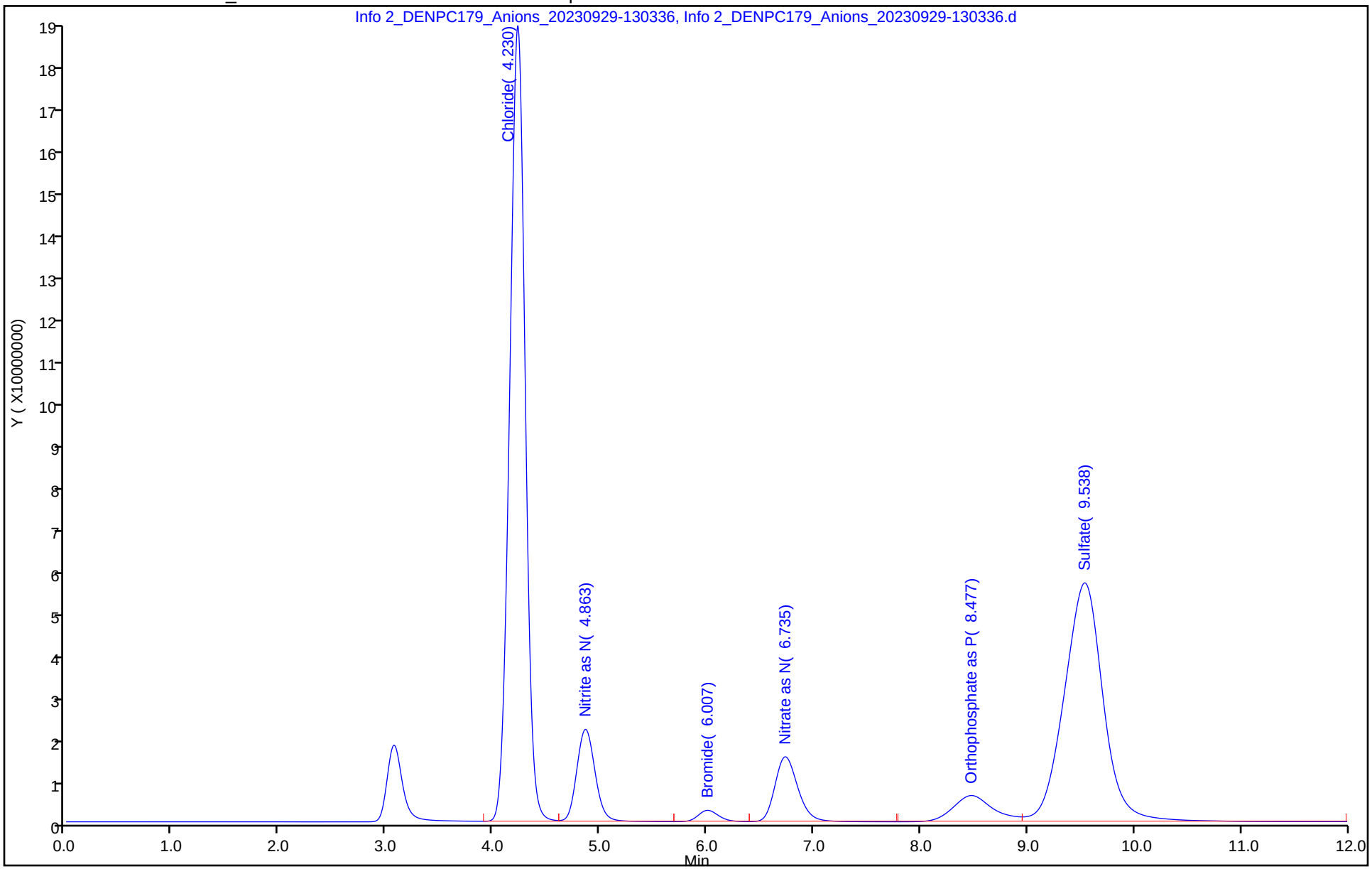
IC LCS_01980 Amount Added: 10.00 Units: mL

Report Date: 02-Oct-2023 07:45:07 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-130336.d

Injection Date:	29-Sep-2023 12:10:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



12/5/2023 8:25 AM

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-130				
Lims ID:	ccb				
Client ID:					
Sample Type:	CCB				
Inject. Date:	29-Sep-2023 12:25:00	ALS Bottle#:	0	Worklist Smp#:	2
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0125974-002				
Misc. Info.:	280-0125974-002				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m				
Limit Group:	Wet - Anions				
Last Update:	02-Oct-2023 10:18:00	Calib Date:	16-Aug-2023 09:39:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1656				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078				ND	
2 Chloride		4.235				ND	
3 Nitrite as N		4.865				ND	
4 Bromide	5.933	6.010	-0.077	16420		NC	
5 Nitrate as N		6.730				ND	
6 Orthophosphate as P	8.577	8.503	0.074	24094100		0.3101	
7 Sulfate		9.568				ND	

QC Flag Legend

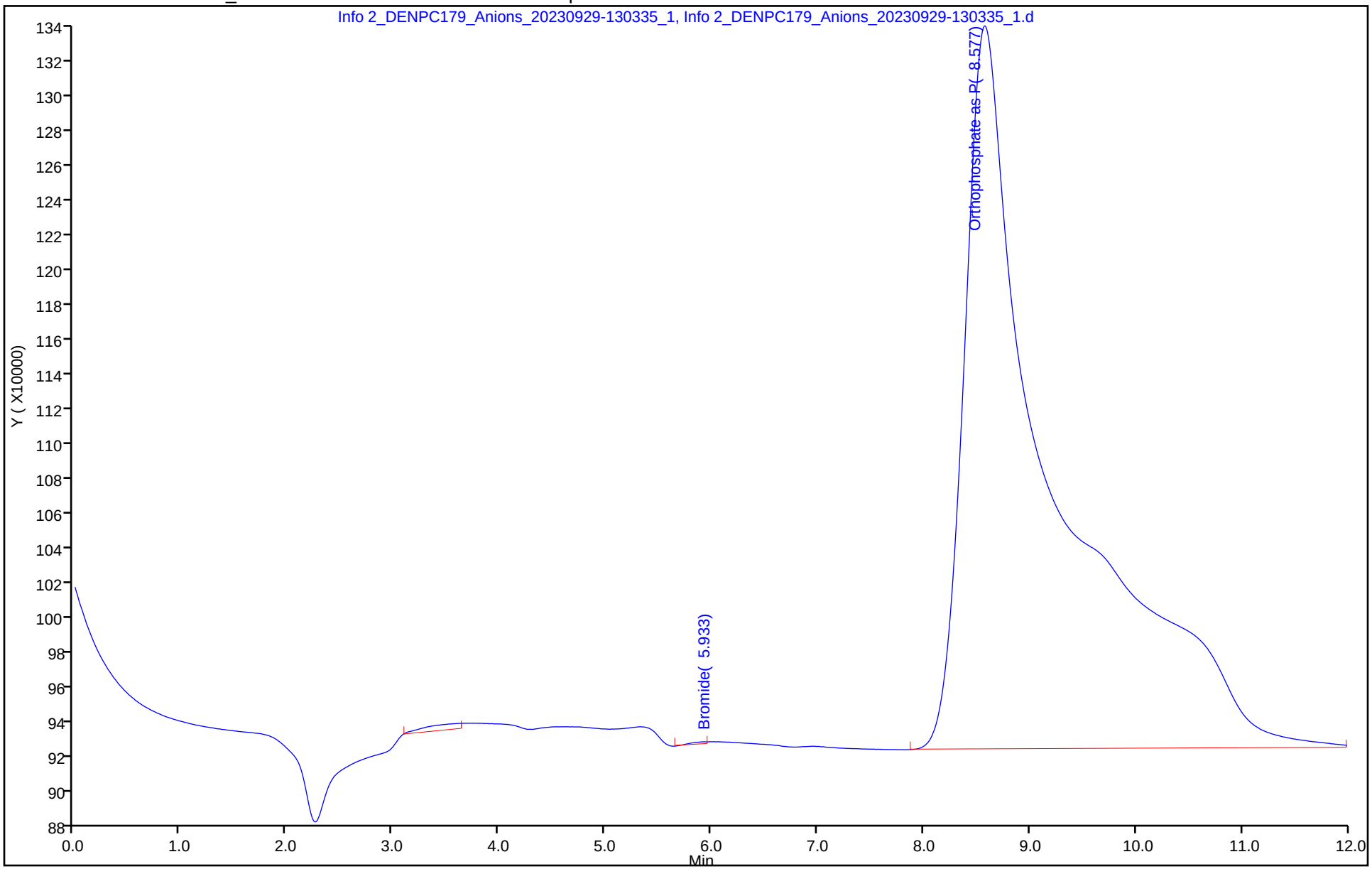
Processing Flags

NC - Not Calibrated

Report Date: 02-Oct-2023 10:22:54 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-130335_1.d				
Injection Date:	29-Sep-2023 12:25:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	2
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



12/5/2023 8:25 AM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-130
Lims ID: mrl
Client ID:
Sample Type: MRL
Inject. Date: 29-Sep-2023 12:40:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-003
Misc. Info.: 280-0125974-003
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 02-Oct-2023 07:45:07 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	ND	
2 Chloride	4.192	4.235	-0.043	90556805	NC	NC	
3 Nitrite as N	4.873	4.865	0.008	22998967	0.5000	0.4475	
4 Bromide	6.040	6.010	0.030	2973845	NC	NC	
5 Nitrate as N	6.790	6.730	0.060	18412077	0.5000	0.4111	
6 Orthophosphate as P	8.538	8.503	0.035	39924995	0.5000	0.9459	
7 Sulfate	9.577	9.568	0.009	81056347	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

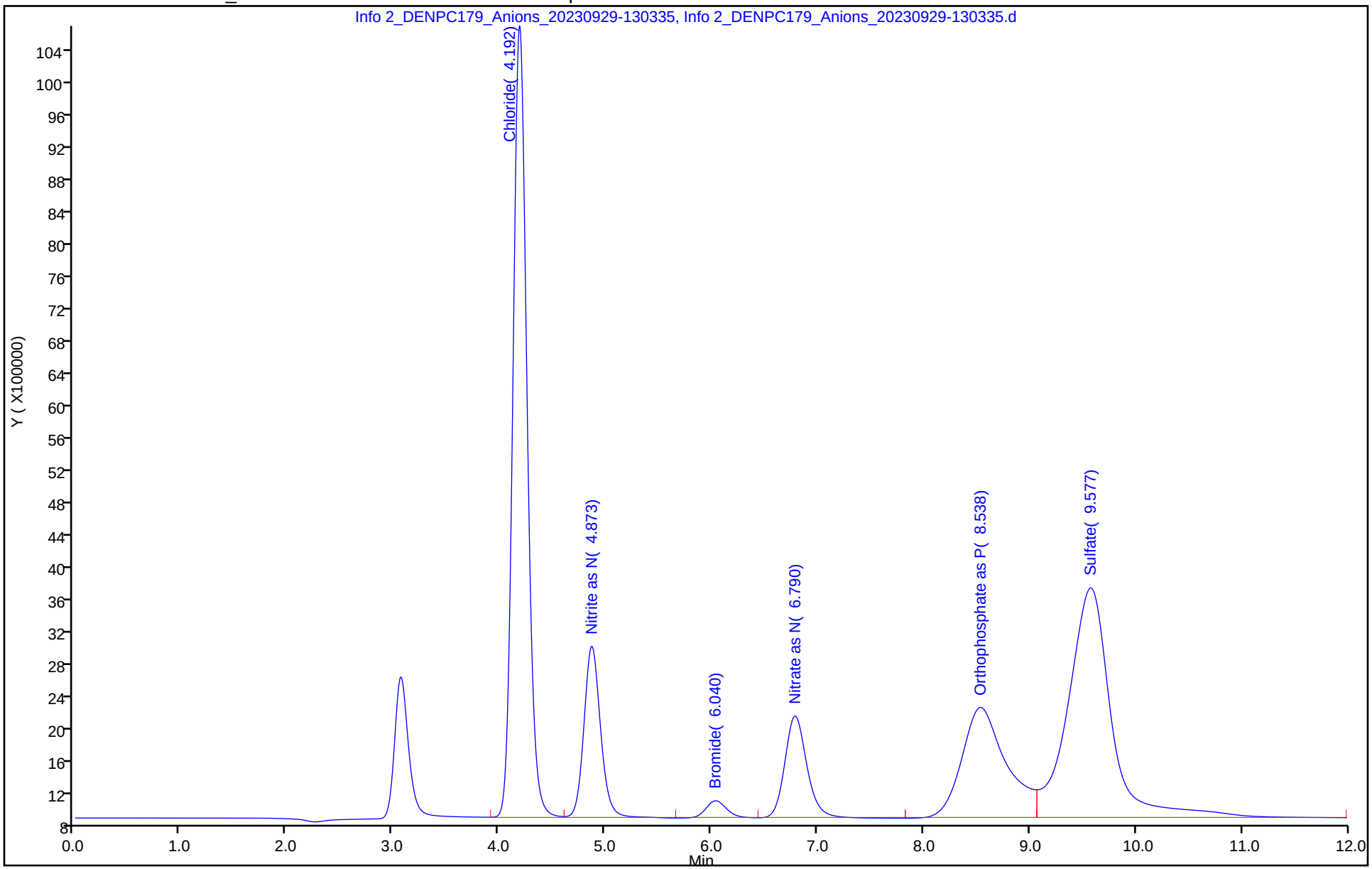
Reagents:

IC Cal low_00731 Amount Added: 0.10 Units: mL
IC CAL cl/so4_00501 Amount Added: 0.20 Units: mL

Report Date: 02-Oct-2023 07:45:11 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-130335.d				
Injection Date:	29-Sep-2023 12:40:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	mrl			Worklist Smp#:	3
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



12/5/2023 8:25 AM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-152
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 29-Sep-2023 12:55:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-004
Misc. Info.: 280-0125974-004
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 02-Oct-2023 10:18:00 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	ND	
2 Chloride	4.232	4.235	-0.003	1900225763	NC	NC	
3 Nitrite as N	4.863	4.865	-0.002	257801017	5.00	4.89	
4 Bromide	6.007	6.010	-0.003	35629182	NC	NC	
5 Nitrate as N	6.728	6.730	-0.002	229253577	5.00	4.70	
6 Orthophosphate as P	8.495	8.503	-0.008	166778922	5.00	6.04	
7 Sulfate	9.560	9.568	-0.008	1441493448	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

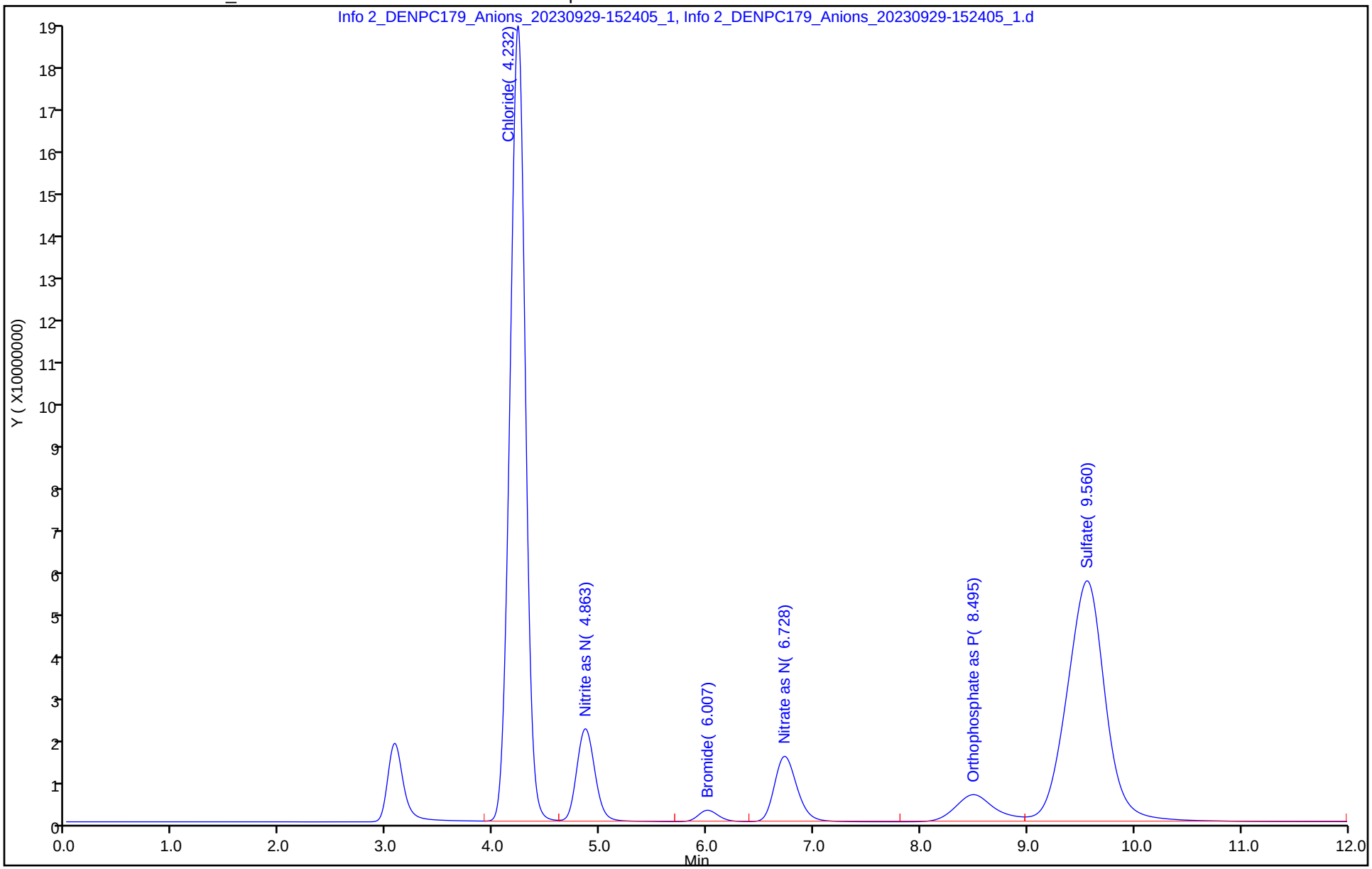
Reagents:

IC LCS_01980 Amount Added: 10.00 Units: mL

Report Date: 02-Oct-2023 10:22:54 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-152405_1.d				
Injection Date:	29-Sep-2023 12:55:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	lcs			Worklist Smp#:	4
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-152
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 29-Sep-2023 13:10:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-005
Misc. Info.: 280-0125974-005
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 02-Oct-2023 07:45:13 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	ND	
2 Chloride	4.235	4.235	0.000	1899337590	NC	NC	
3 Nitrite as N	4.865	4.865	0.000	258159084	5.00	4.89	
4 Bromide	6.010	6.010	0.000	35609542	NC	NC	
5 Nitrate as N	6.730	6.730	0.000	229089096	5.00	4.70	
6 Orthophosphate as P	8.503	8.503	0.000	167428506	5.00	6.07	
7 Sulfate	9.568	9.568	0.000	1441361187	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

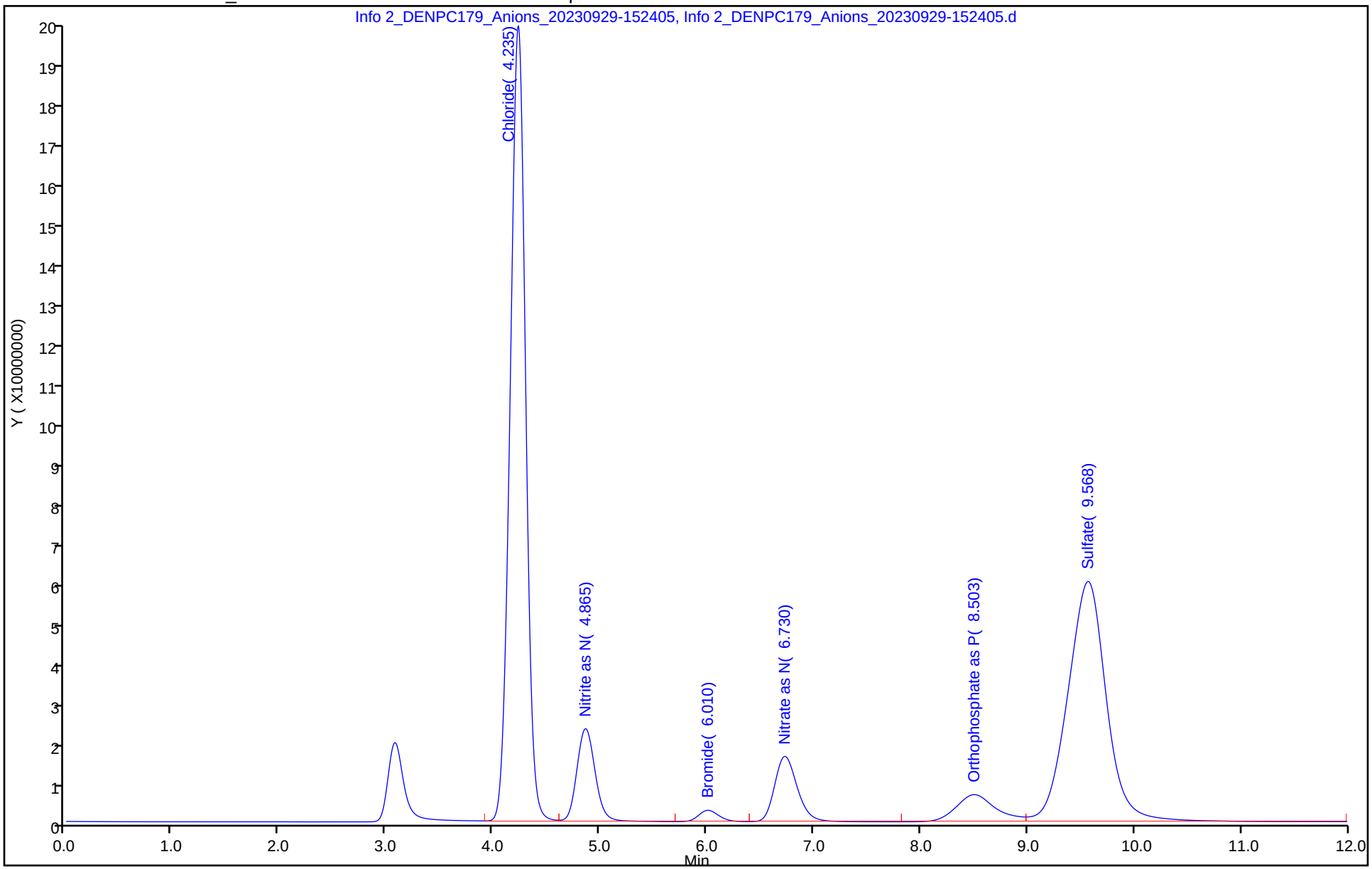
Reagents:

IC LCS_01980 Amount Added: 10.00 Units: mL

Report Date: 02-Oct-2023 07:45:13 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-152405.d				
Injection Date:	29-Sep-2023 13:10:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	lcsd			Worklist Smp#:	5
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-152
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 29-Sep-2023 13:25:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-006
Misc. Info.: 280-0125974-006
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 02-Oct-2023 10:18:00 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078				ND	
2 Chloride	4.175	4.235	-0.060	113031		NC	
3 Nitrite as N		4.865				ND	
4 Bromide	5.973	6.010	-0.037	19041		NC	
5 Nitrate as N		6.730				ND	
6 Orthophosphate as P	8.585	8.503	0.082	29972144		0.5461	
7 Sulfate		9.568				ND	

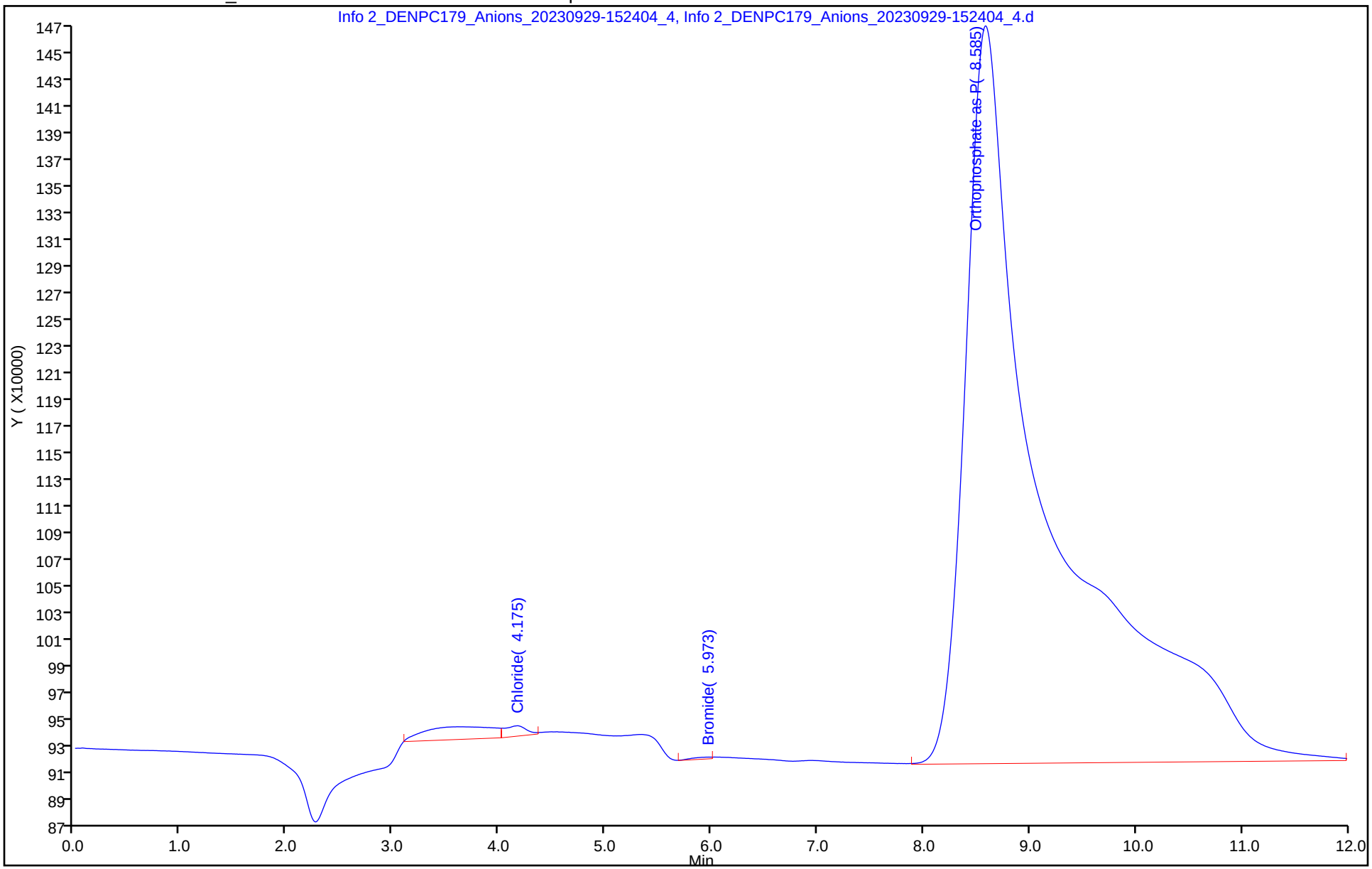
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 02-Oct-2023 10:22:51 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-152404_4.d				
Injection Date:	29-Sep-2023 13:25:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	mb			Worklist Smp#:	6
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



12/5/2023 8:25 AM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-152
Lims ID: 280-182145-A-1
Client ID: LL1mw-080-230901-GW-R
Sample Type: Client
Inject. Date: 29-Sep-2023 14:10:00 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-009
Misc. Info.: 280-0125974-009
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 02-Oct-2023 10:18:00 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	
2 Chloride	4.190	4.235	-0.045	6078425	NC	
3 Nitrite as N	4.868	4.865	0.003	32073	0.0131	
4 Bromide	5.912	6.010	-0.098	20733	NC	
5 Nitrate as N	6.900	6.730	0.170	2650746	0.0904	
6 Orthophosphate as P		8.503			ND	
7 Sulfate	9.570	9.568	0.002	7283486862	NC	

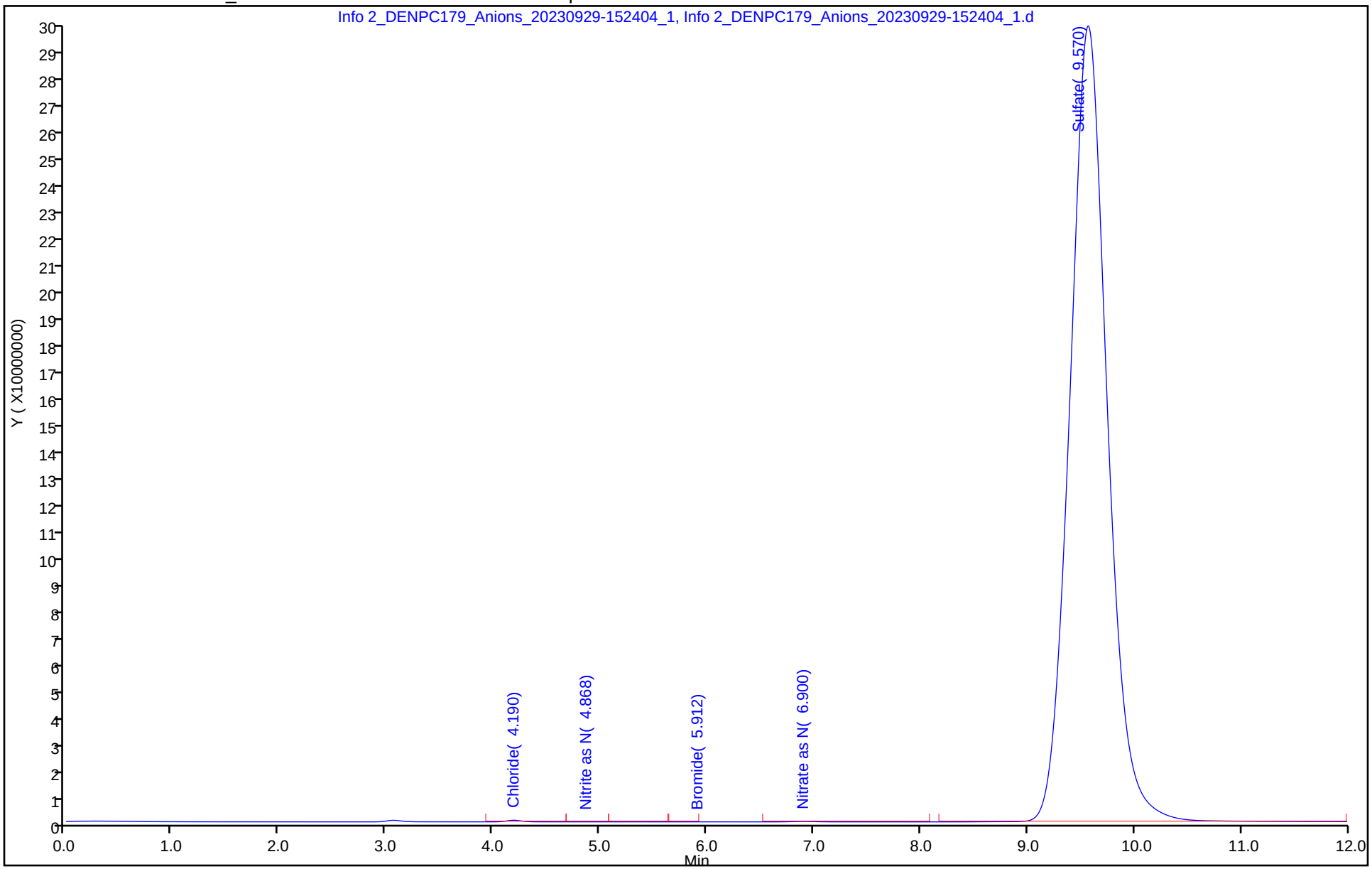
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 02-Oct-2023 10:22:53 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-152404_1.d				
Injection Date:	29-Sep-2023 14:10:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-182145-A-1	Lab Sample ID:	280-182145-1	Worklist Smp#:	9
Client ID:	LL1mw-080-230901-GW-R				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



12/5/2023 8:25 AM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-152
Lims ID: 280-182145-A-2
Client ID: FWGmw-018-230901-GW
Sample Type: Client
Inject. Date: 29-Sep-2023 14:25:00 ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-010
Misc. Info.: 280-0125974-010
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 02-Oct-2023 07:45:13 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	
2 Chloride	4.193	4.235	-0.042	38019033	NC	
3 Nitrite as N		4.865			ND	
4 Bromide	6.153	6.010	0.143	374824	NC	
5 Nitrate as N		6.730			ND	
6 Orthophosphate as P	8.777	8.503	0.274	1694698	-0.5895	
7 Sulfate	9.632	9.568	0.064	1105531532	NC	

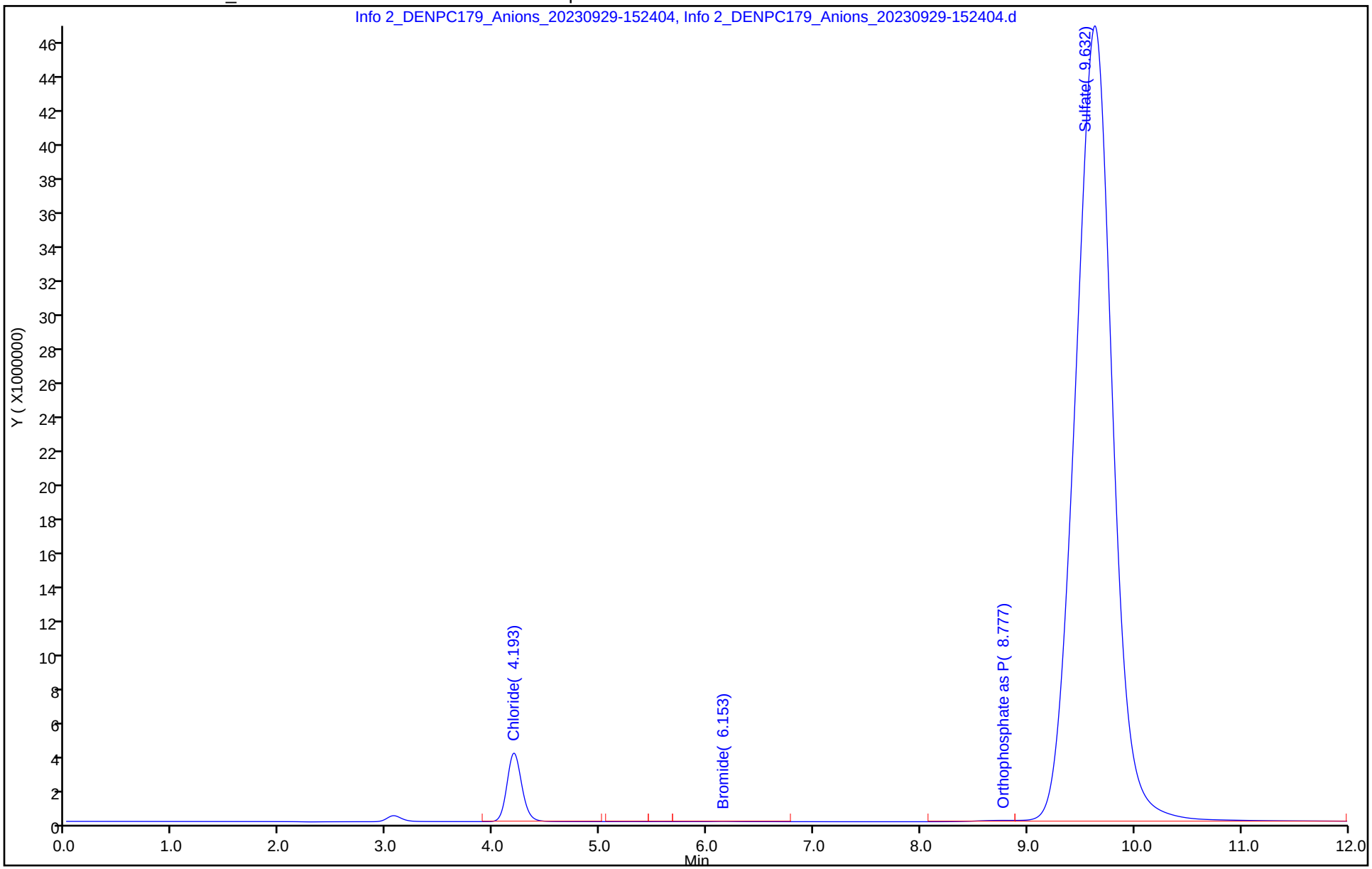
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 02-Oct-2023 07:45:15 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-152404.d				
Injection Date:	29-Sep-2023 14:25:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-182145-A-2	Lab Sample ID:	280-182145-2	Worklist Smp#:	10
Client ID:	FWGmw-018-230901-GW				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



12/5/2023 8:25 AM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-152
Lims ID: 280-182145-A-3
Client ID: FWGmw-020-230901-GW
Sample Type: Client
Inject. Date: 29-Sep-2023 14:40:00 ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-011
Misc. Info.: 280-0125974-011
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 02-Oct-2023 07:45:13 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	
2 Chloride	4.195	4.235	-0.040	53916999	NC	
3 Nitrite as N	4.875	4.865	0.010	117695	0.0147	
4 Bromide	6.163	6.010	0.153	297682	NC	
5 Nitrate as N	6.897	6.730	0.167	2121169	0.0796	
6 Orthophosphate as P	8.808	8.503	0.305	1342564	-0.6036	
7 Sulfate	9.643	9.568	0.075	1038344705	NC	

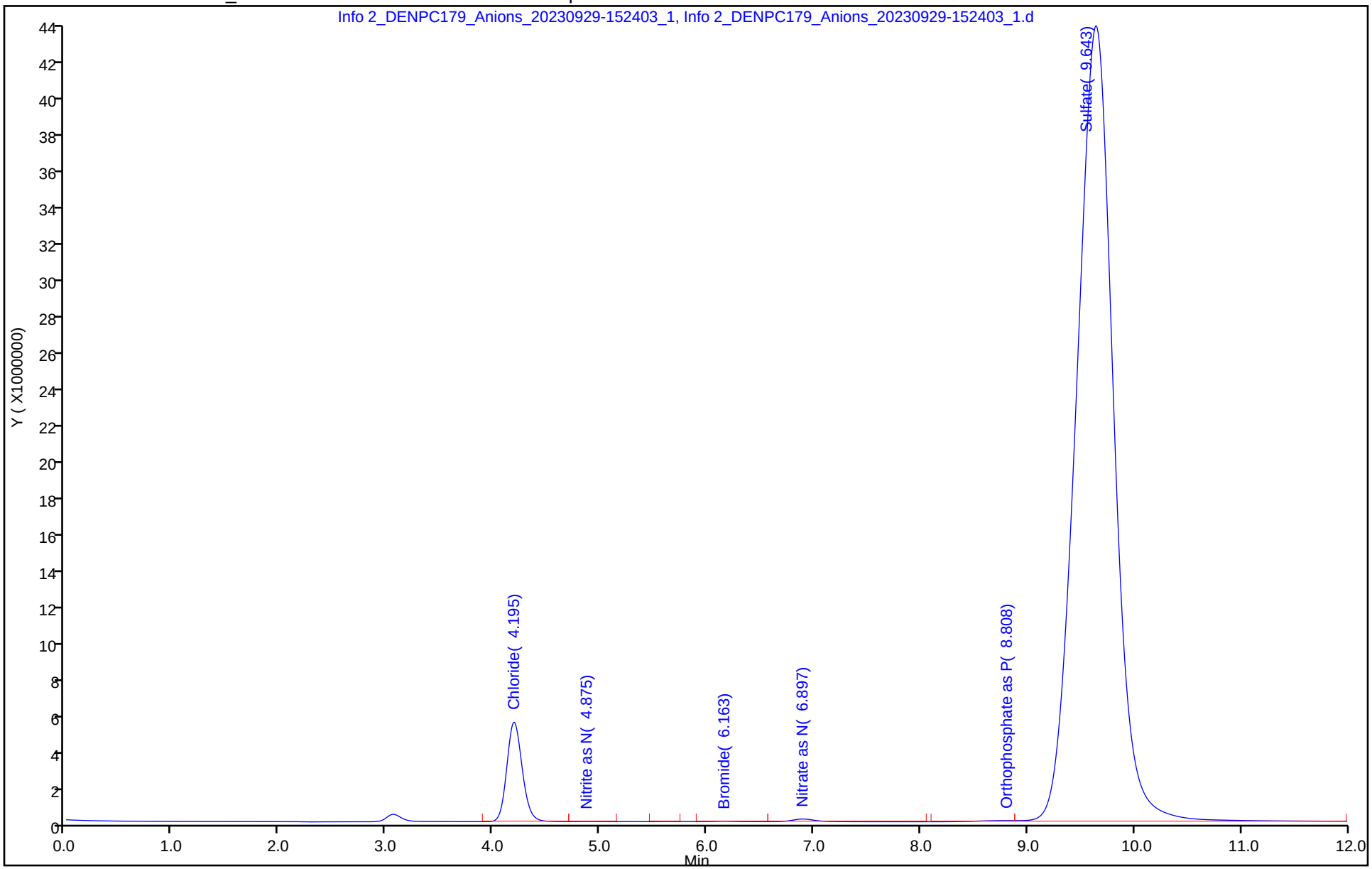
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 02-Oct-2023 07:45:16 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-152403_1.d				
Injection Date:	29-Sep-2023 14:40:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-182145-A-3	Lab Sample ID:	280-182145-3	Worklist Smp#:	11
Client ID:	FWGmw-020-230901-GW				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



12/5/2023 8:25 AM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-152
Lims ID: 280-182145-A-4
Client ID: LL1mw-083-230901-GW-R
Sample Type: Client
Inject. Date: 29-Sep-2023 14:55:00 ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-012
Misc. Info.: 280-0125974-012
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 02-Oct-2023 07:28:48 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	
2 Chloride	4.193	4.235	-0.042	32704363	NC	
3 Nitrite as N		4.865			ND	
4 Bromide	6.047	6.010	0.037	315889	NC	
5 Nitrate as N	6.823	6.730	0.093	6894874	0.1768	
6 Orthophosphate as P	8.670	8.503	0.167	3430626	-0.5198	
7 Sulfate	9.582	9.568	0.014	2675938662	NC	

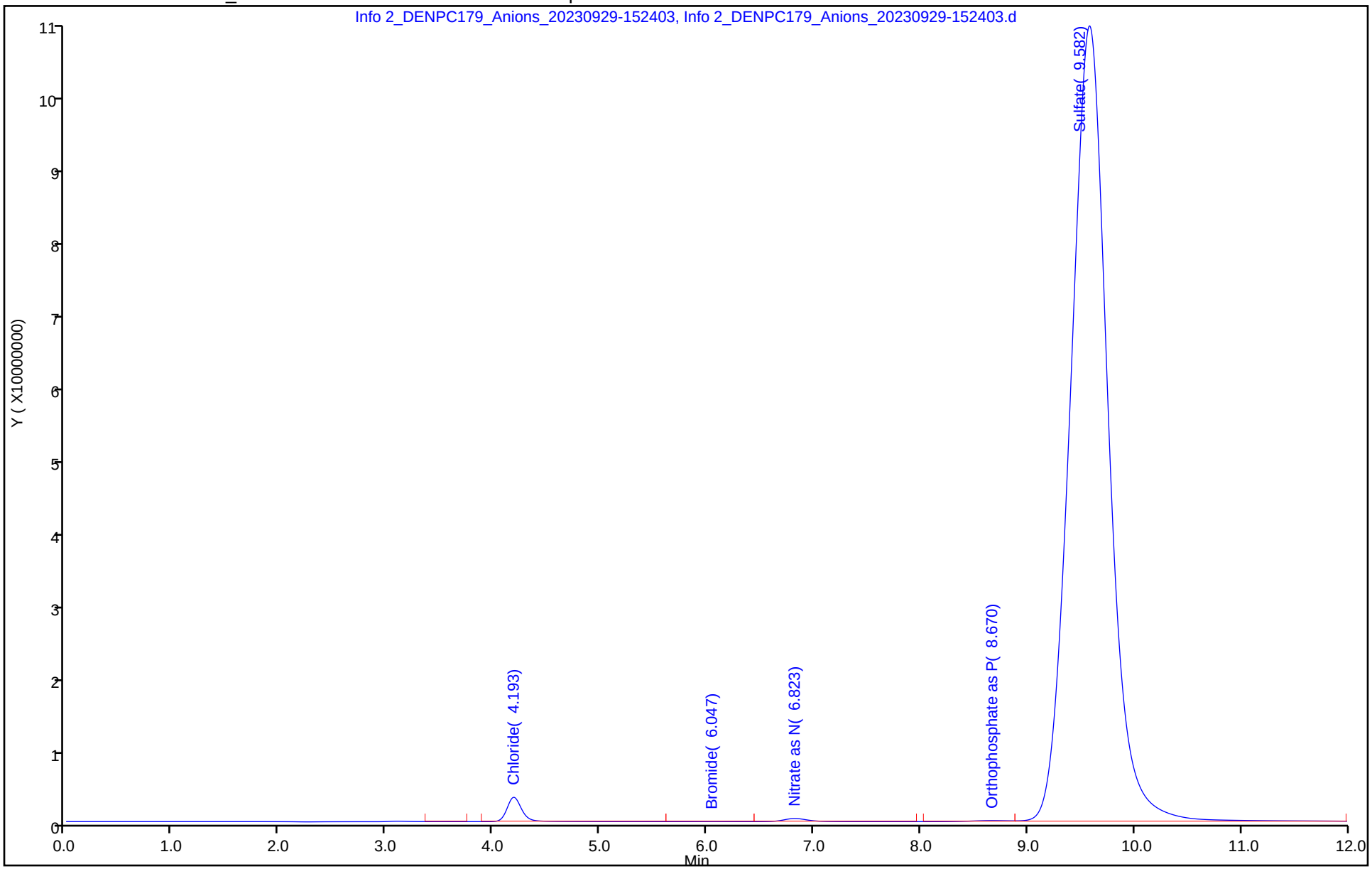
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 02-Oct-2023 07:28:52 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-152403.d				
Injection Date:	29-Sep-2023 14:55:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-182145-A-4	Lab Sample ID:	280-182145-4	Worklist Smp#:	12
Client ID:	LL1mw-083-230901-GW-R				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



12/5/2023 8:25 AM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-152
Lims ID: 280-182145-A-5
Client ID: LL1mw-084-230901-R
Sample Type: Client
Inject. Date: 29-Sep-2023 15:10:00 ALS Bottle#: 0 Worklist Smp#: 13
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-013
Misc. Info.: 280-0125974-013
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 02-Oct-2023 07:28:48 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	
2 Chloride	4.190	4.235	-0.045	12435642	NC	
3 Nitrite as N	4.863	4.865	-0.002	56855	0.0136	
4 Bromide	6.092	6.010	0.082	156920	NC	
5 Nitrate as N	6.825	6.730	0.095	17921927	0.4011	
6 Orthophosphate as P	8.697	8.503	0.194	1363048	-0.6028	
7 Sulfate	9.603	9.568	0.035	1731285837	NC	

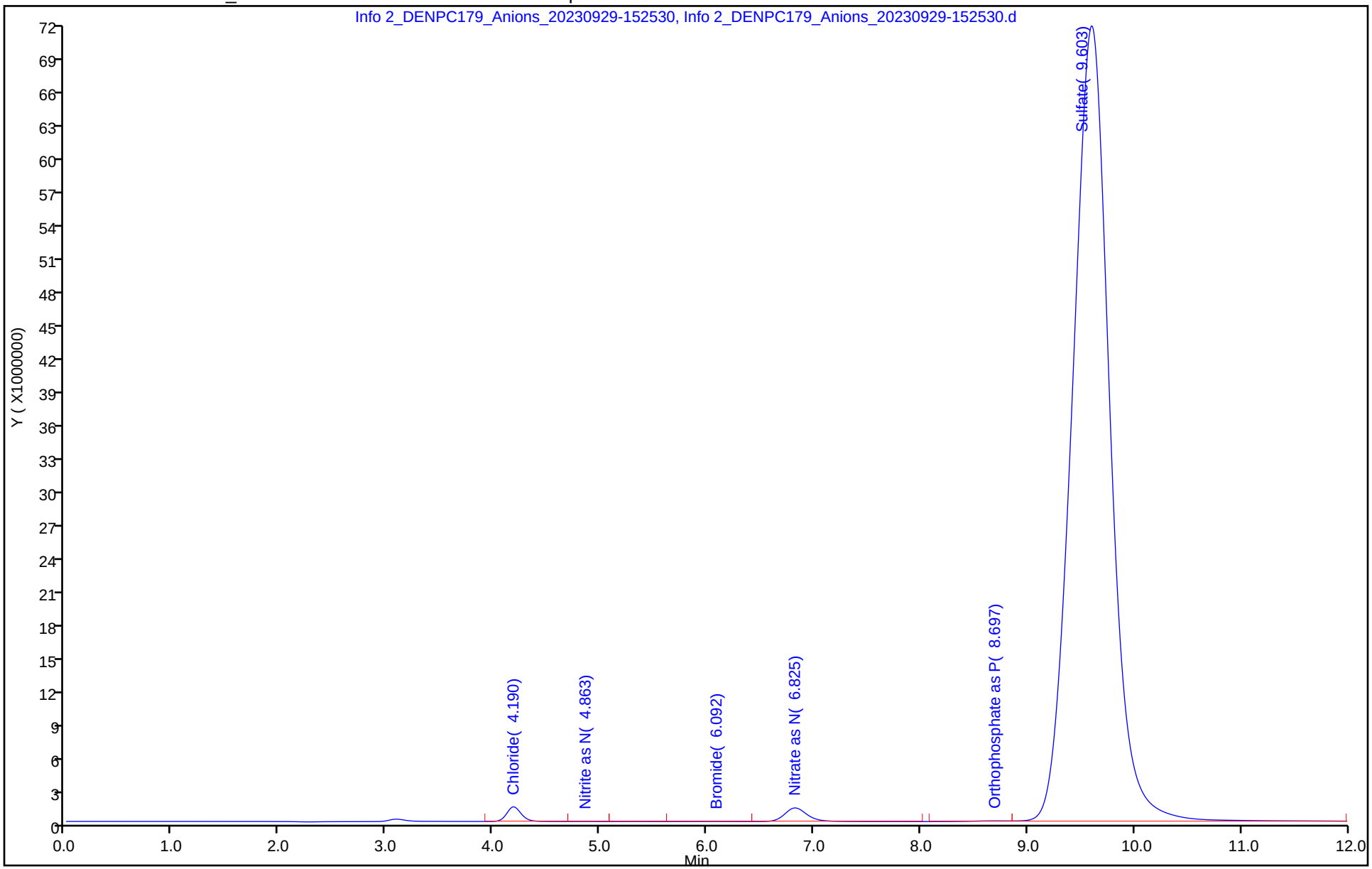
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 02-Oct-2023 07:28:52 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-152530.d				
Injection Date:	29-Sep-2023 15:10:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-182145-A-5	Lab Sample ID:	280-182145-5	Worklist Smp#:	13
Client ID:	LL1mw-084-230901-R				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-154
Lims ID: 280-182145-A-5 DU
Client ID:
Sample Type: DU
Inject. Date: 29-Sep-2023 15:25:00 ALS Bottle#: 0 Worklist Smp#: 14
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-014
Misc. Info.: 280-0125974-014
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 02-Oct-2023 07:28:48 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078				ND	
2 Chloride	4.188	4.235	-0.047	13195753		NC	
3 Nitrite as N	4.857	4.865	-0.008	80444		0.0140	
4 Bromide	6.077	6.010	0.067	138380		NC	
5 Nitrate as N	6.810	6.730	0.080	18070634		0.4041	
6 Orthophosphate as P	8.733	8.503	0.230	1140120		-0.6118	
7 Sulfate	9.582	9.568	0.014	1737519705		NC	

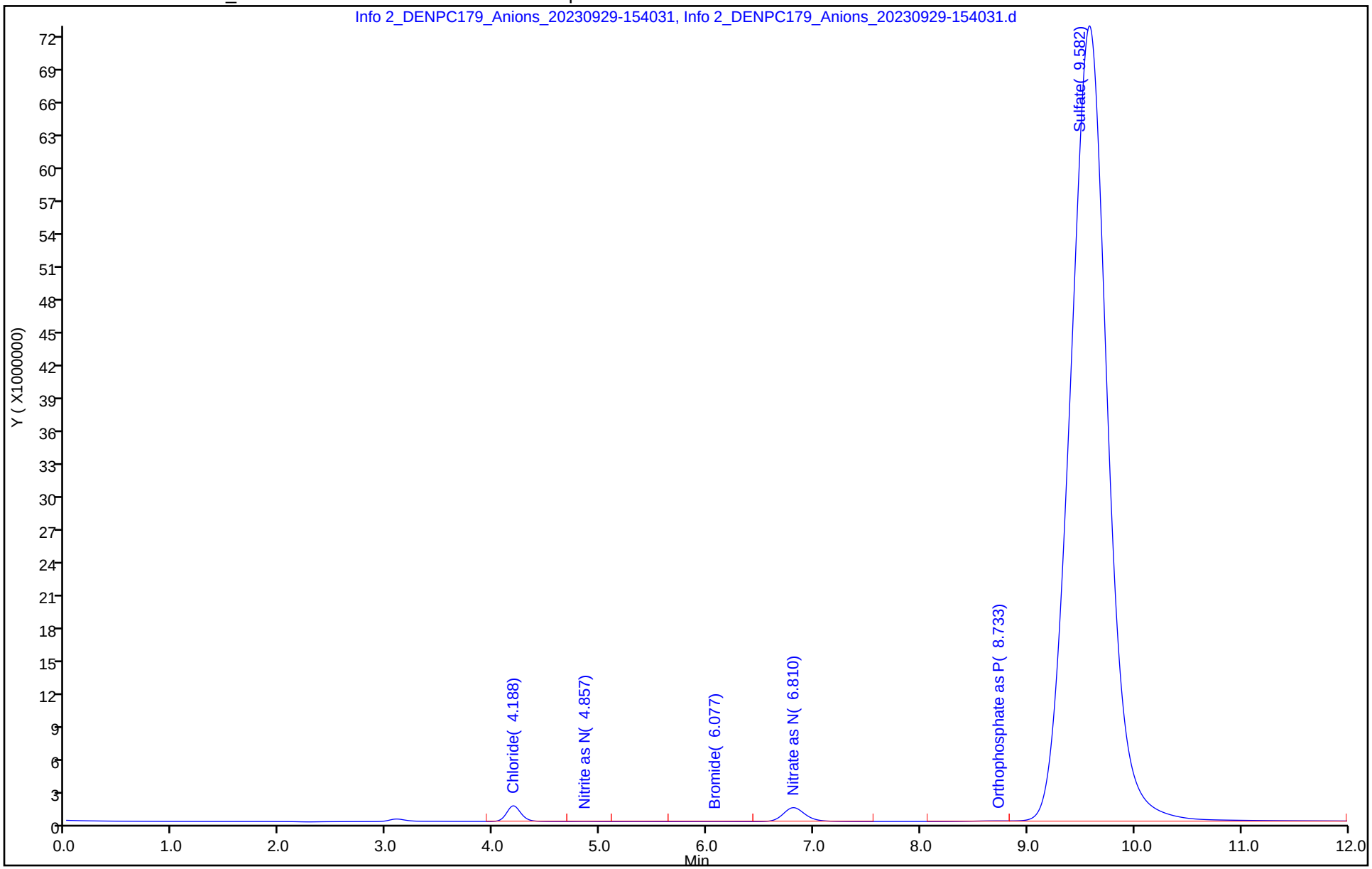
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 02-Oct-2023 07:28:53 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-154031.d				
Injection Date:	29-Sep-2023 15:25:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-182145-A-5 DU			Worklist Smp#:	14
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-155
Lims ID: 280-182145-A-5 MS
Client ID: LL1mw-084-230901-R
Sample Type: MS
Inject. Date: 29-Sep-2023 15:40:00 ALS Bottle#: 0 Worklist Smp#: 15
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-015
Misc. Info.: 280-0125974-015
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 02-Oct-2023 07:28:48 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	ND	
2 Chloride	4.205	4.235	-0.030	1121629890	NC	NC	
3 Nitrite as N	4.852	4.865	-0.013	238740210	5.00	4.53	
4 Bromide	6.045	6.010	0.035	38491556	NC	NC	
5 Nitrate as N	6.747	6.730	0.017	287444528	5.00	5.88	
6 Orthophosphate as P	8.590	8.503	0.087	191699179	5.00	7.04	
7 Sulfate	9.565	9.568	-0.003	2522192677	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

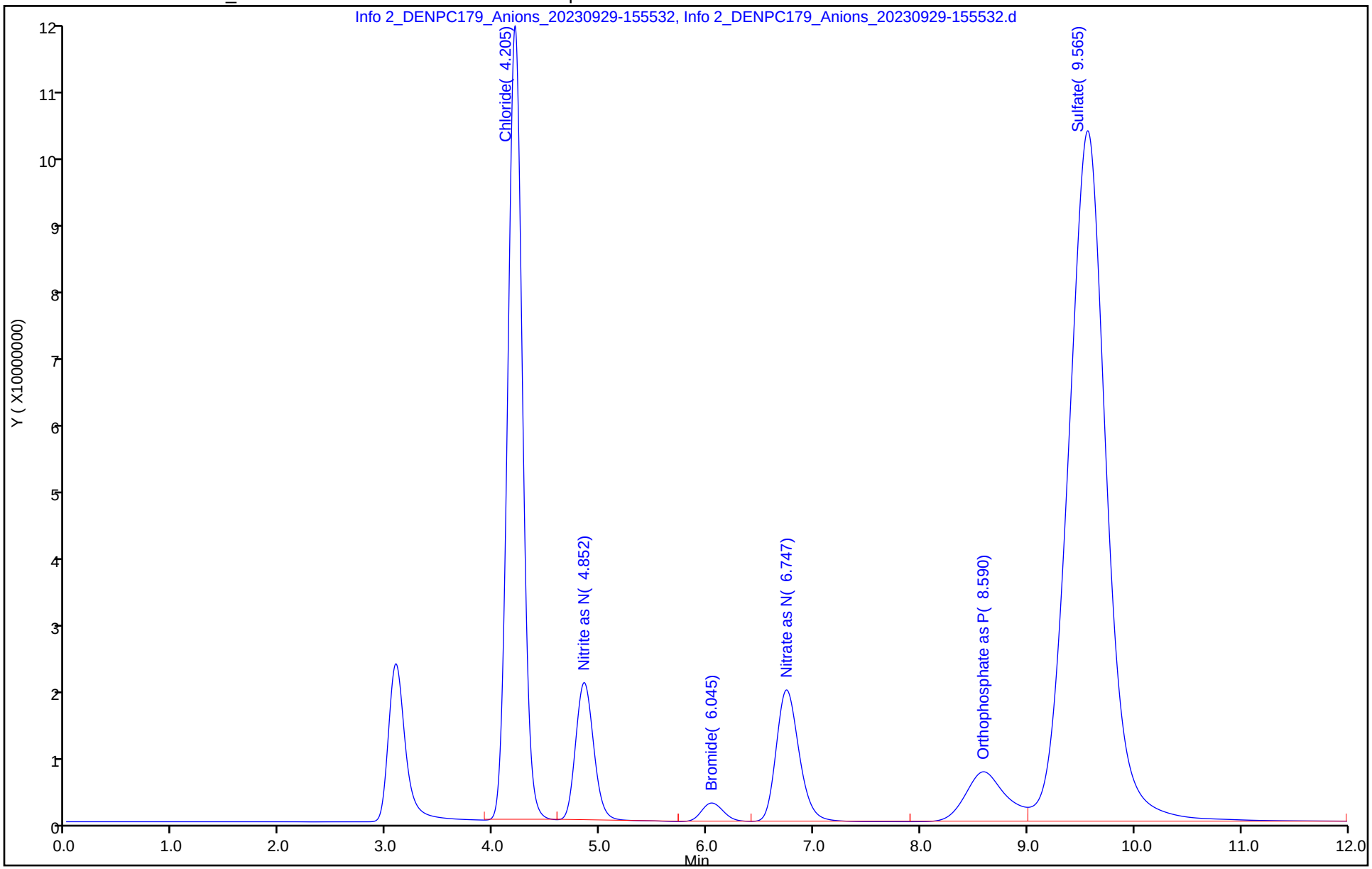
Reagents:

ICMS/MSD WEEK_00838 Amount Added: 0.10 Units: mL

Report Date: 02-Oct-2023 07:28:53 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-155532.d				
Injection Date:	29-Sep-2023 15:40:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-182145-A-5 MS			Worklist Smp#:	15
Client ID:	LL1mw-084-230901-R				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-161
Lims ID: 280-182145-A-5 MSD
Client ID: LL1mw-084-230901-R
Sample Type: MSD
Inject. Date: 29-Sep-2023 15:55:00 ALS Bottle#: 0 Worklist Smp#: 16
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-016
Misc. Info.: 280-0125974-016
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 02-Oct-2023 07:28:48 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	ND	
2 Chloride	4.203	4.235	-0.032	1130835743	NC	NC	
3 Nitrite as N	4.850	4.865	-0.015	241122468	5.00	4.57	
4 Bromide	6.040	6.010	0.030	38926186	NC	NC	
5 Nitrate as N	6.743	6.730	0.013	289835589	5.00	5.93	
6 Orthophosphate as P	8.588	8.503	0.085	189346885	5.00	6.95	
7 Sulfate	9.567	9.568	-0.001	2527251366	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

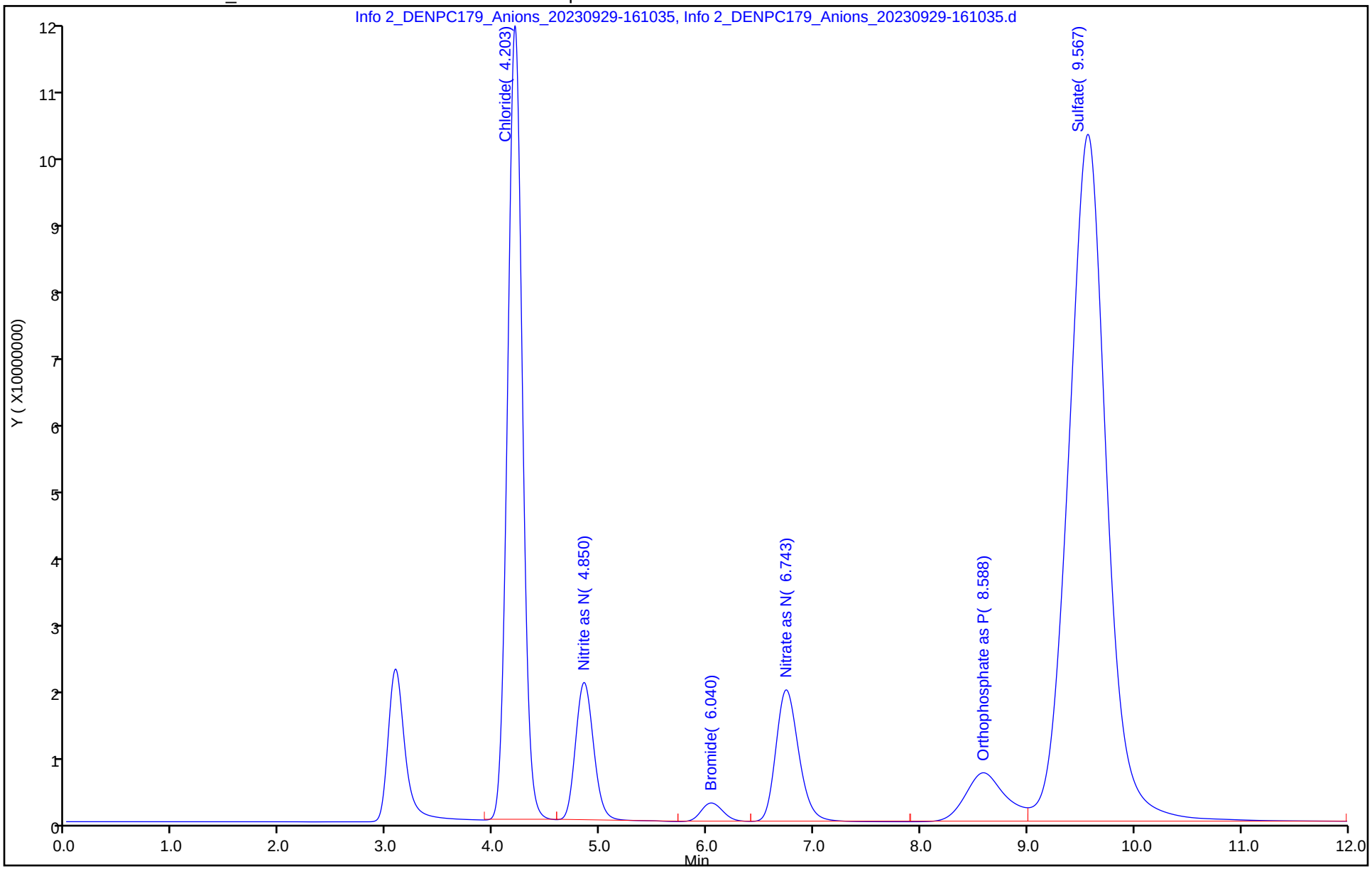
Reagents:

ICMS/MSD WEEK_00838 Amount Added: 0.10 Units: mL

Report Date: 02-Oct-2023 07:28:54 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-161035.d				
Injection Date:	29-Sep-2023 15:55:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-182145-A-5 MSD			Worklist Smp#:	16
Client ID:	LL1mw-084-230901-R				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-162
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 29-Sep-2023 16:10:00 ALS Bottle#: 0 Worklist Smp#: 17
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-017
Misc. Info.: 280-0125974-017
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub9

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 02-Oct-2023 07:28:54 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	ND	
2 Chloride	4.235	4.235	0.000	1894535105	NC	NC	
3 Nitrite as N	4.862	4.865	-0.003	257146011	5.00	4.88	
4 Bromide	5.995	6.010	-0.015	35819872	NC	NC	
5 Nitrate as N	6.713	6.730	-0.017	229297120	5.00	4.70	
6 Orthophosphate as P	8.547	8.503	0.044	159332733	5.00	5.74	
7 Sulfate	9.572	9.568	0.004	1446643149	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

Reagents:

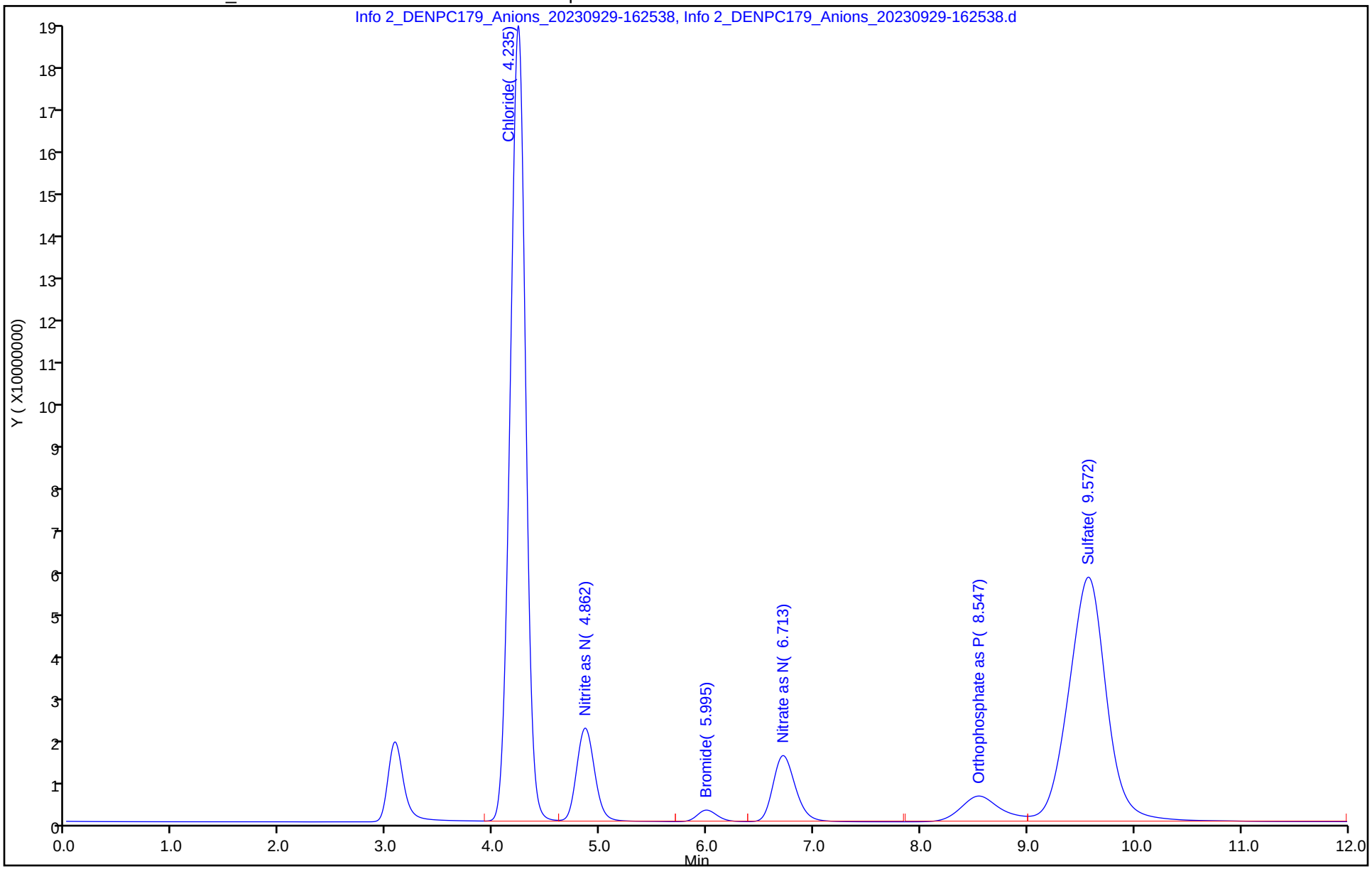
IC LCS_01980 Amount Added: 10.00 Units: mL

Report Date: 02-Oct-2023 07:28:54 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-162538.d

Injection Date:	29-Sep-2023 16:10:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	17
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-164
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 29-Sep-2023 16:25:00 ALS Bottle#: 0 Worklist Smp#: 18
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-018
Misc. Info.: 280-0125974-018
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 02-Oct-2023 07:28:54 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078				ND	
2 Chloride		4.235				ND	
3 Nitrite as N		4.865				ND	
4 Bromide	6.043	6.010	0.033	28965		NC	
5 Nitrate as N		6.730				ND	
6 Orthophosphate as P	8.628	8.503	0.125	33800836		0.6999	
7 Sulfate		9.568				ND	

QC Flag Legend

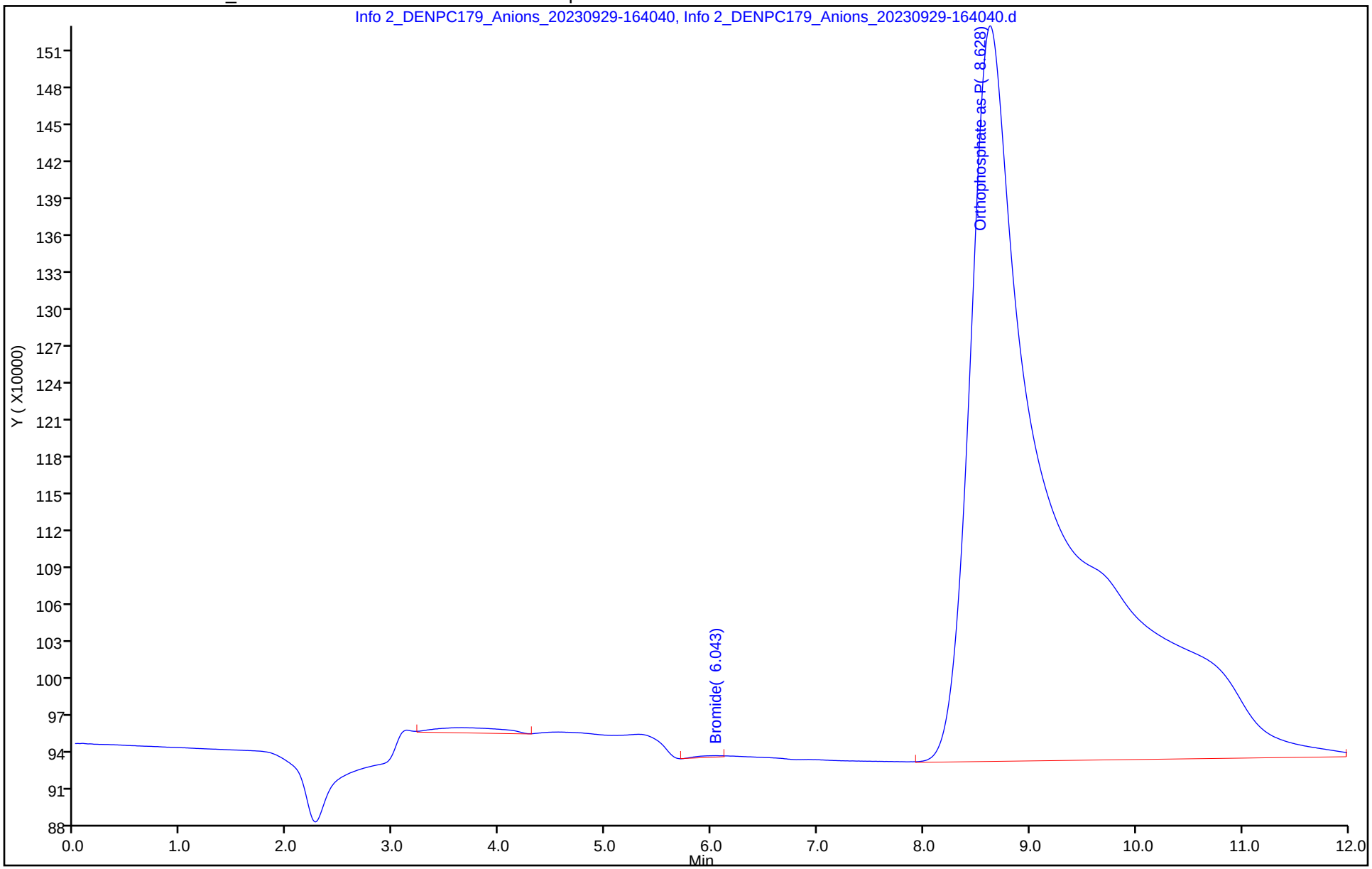
Processing Flags
NC - Not Calibrated

Report Date: 02-Oct-2023 07:28:55 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-164040.d

Injection Date:	29-Sep-2023 16:25:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	18
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-165
Lims ID: 280-182145-A-6
Client ID: LL1mw-084-230902-GW-R
Sample Type: Client
Inject. Date: 29-Sep-2023 16:40:00 ALS Bottle#: 0 Worklist Smp#: 19
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-019
Misc. Info.: 280-0125974-019
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 02-Oct-2023 07:28:54 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	
2 Chloride	4.190	4.235	-0.045	12521578	NC	
3 Nitrite as N	4.843	4.865	-0.022	34648	0.0131	
4 Bromide	6.085	6.010	0.075	235024	NC	
5 Nitrate as N	6.818	6.730	0.088	17296285	0.3884	
6 Orthophosphate as P	8.695	8.503	0.192	6554018	-0.3943	
7 Sulfate	9.593	9.568	0.025	1701882683	NC	

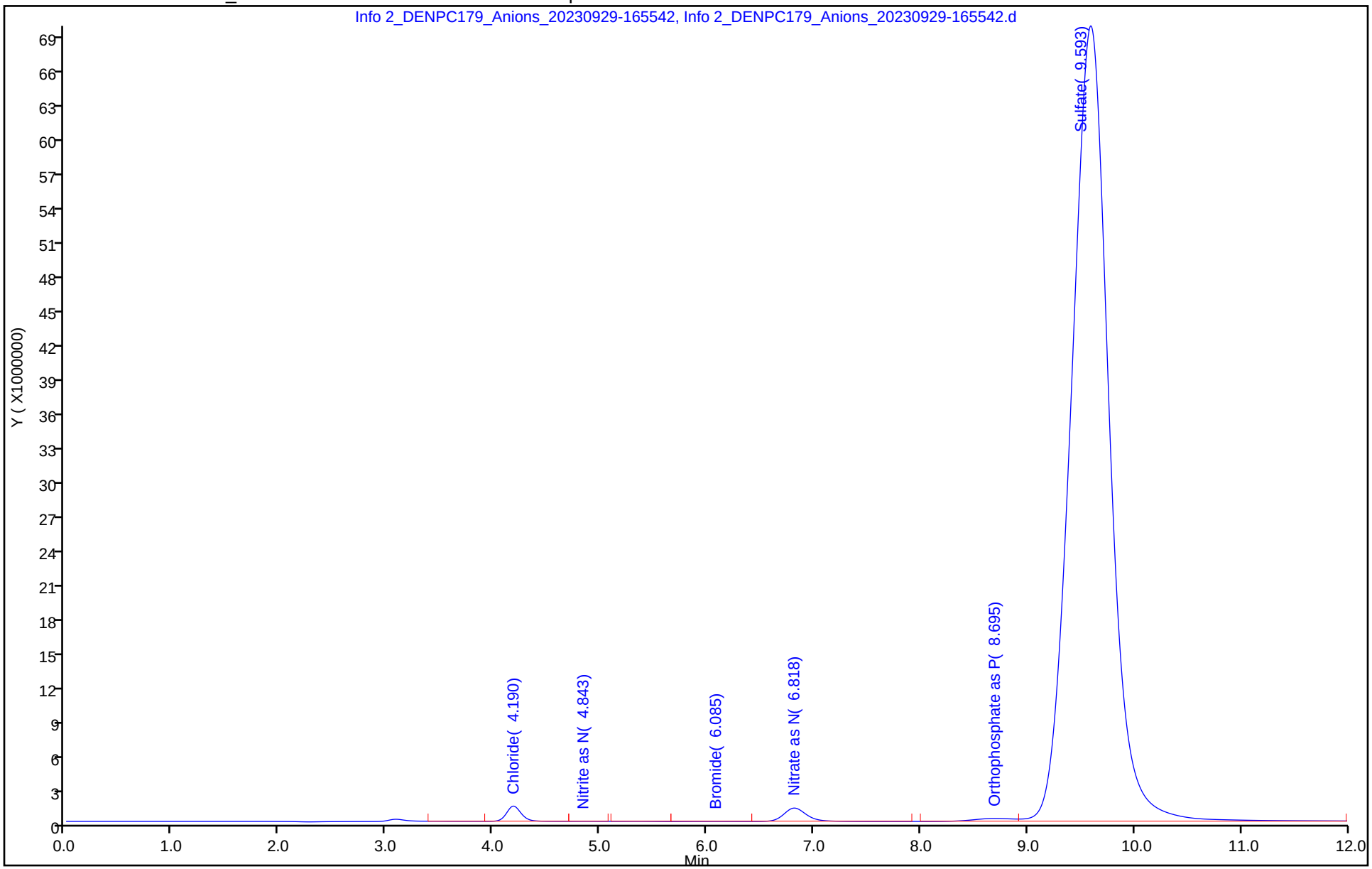
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 02-Oct-2023 07:28:56 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-165542.d				
Injection Date:	29-Sep-2023 16:40:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-182145-A-6	Lab Sample ID:	280-182145-6	Worklist Smp#:	19
Client ID:	LL1mw-084-230902-GW-R				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-191				
Lims ID:	280-182145-B-9				
Client ID:	LL12mw-246-230901-GW				
Sample Type:	Client				
Inject. Date:	29-Sep-2023 18:56:00	ALS Bottle#:	0	Worklist Smp#:	28
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0125974-028				
Misc. Info.:	280-0125974-028				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m				
Limit Group:	Wet - Anions				
Last Update:	02-Oct-2023 07:28:54	Calib Date:	16-Aug-2023 09:39:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1656				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	
2 Chloride	4.200	4.235	-0.035	480489339	NC	
3 Nitrite as N		4.865			ND	
4 Bromide	6.187	6.010	0.177	851212	NC	
5 Nitrate as N	6.937	6.730	0.207	76799	0.0381	
6 Orthophosphate as P	8.833	8.503	0.330	11481756	-0.1964	
7 Sulfate	9.640	9.568	0.072	1502743363	NC	

QC Flag Legend

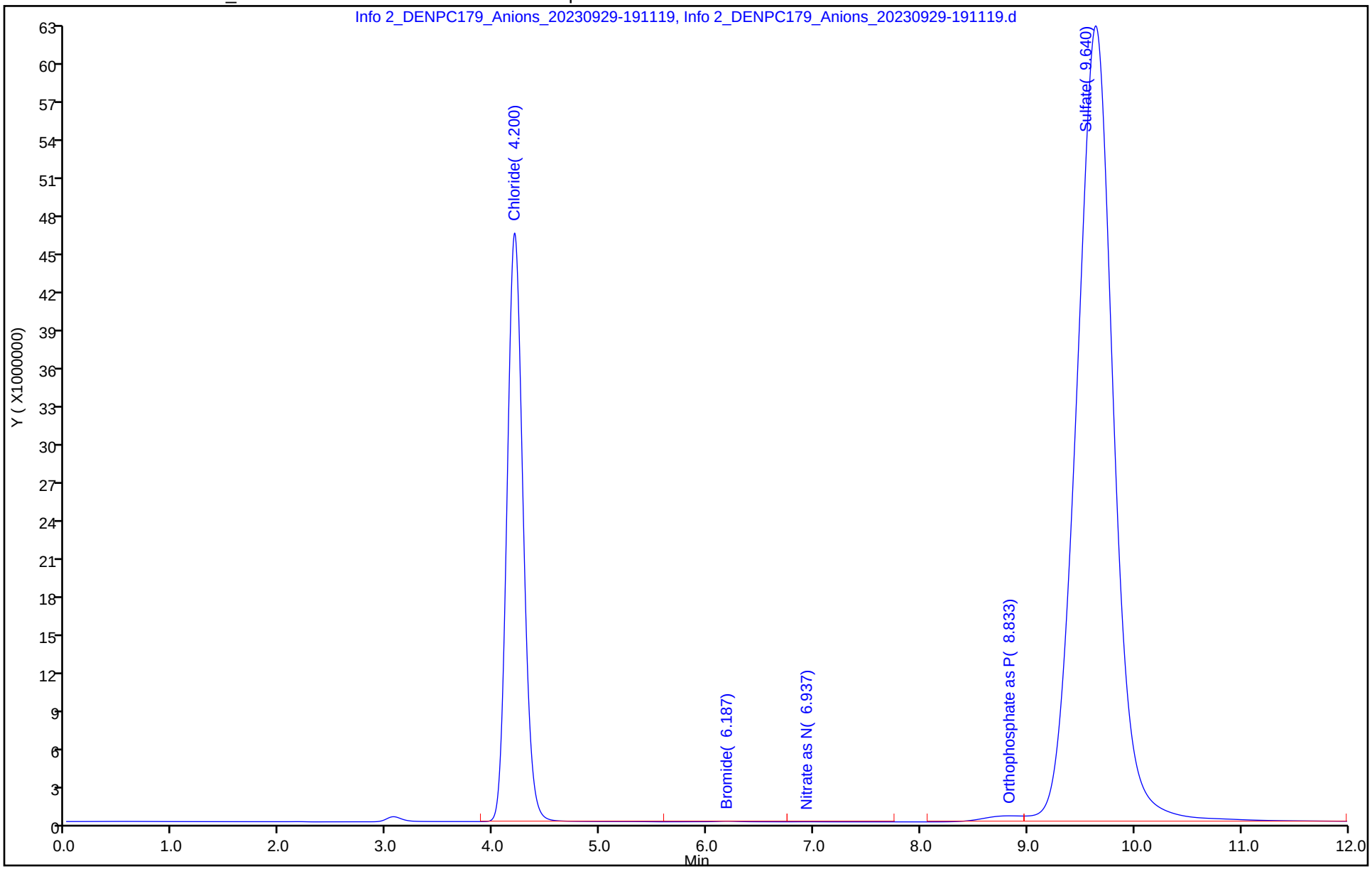
Processing Flags

NC - Not Calibrated

Report Date: 02-Oct-2023 07:29:00 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-191119.d				
Injection Date:	29-Sep-2023 18:56:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-182145-B-9	Lab Sample ID:	280-182145-9	Worklist Smp#:	28
Client ID:	LL12mw-246-230901-GW				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-192
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 29-Sep-2023 19:11:00 ALS Bottle#: 0 Worklist Smp#: 29
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-029
Misc. Info.: 280-0125974-029
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub9

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 02-Oct-2023 07:29:01 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	ND	
2 Chloride	4.237	4.235	0.002	1896256580	NC	NC	
3 Nitrite as N	4.865	4.865	0.000	256449925	5.00	4.86	
4 Bromide	5.995	6.010	-0.015	36132738	NC	NC	
5 Nitrate as N	6.720	6.730	-0.010	229738038	5.00	4.71	
6 Orthophosphate as P	8.548	8.503	0.045	163588017	5.00	5.91	
7 Sulfate	9.562	9.568	-0.006	1462601884	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

Reagents:

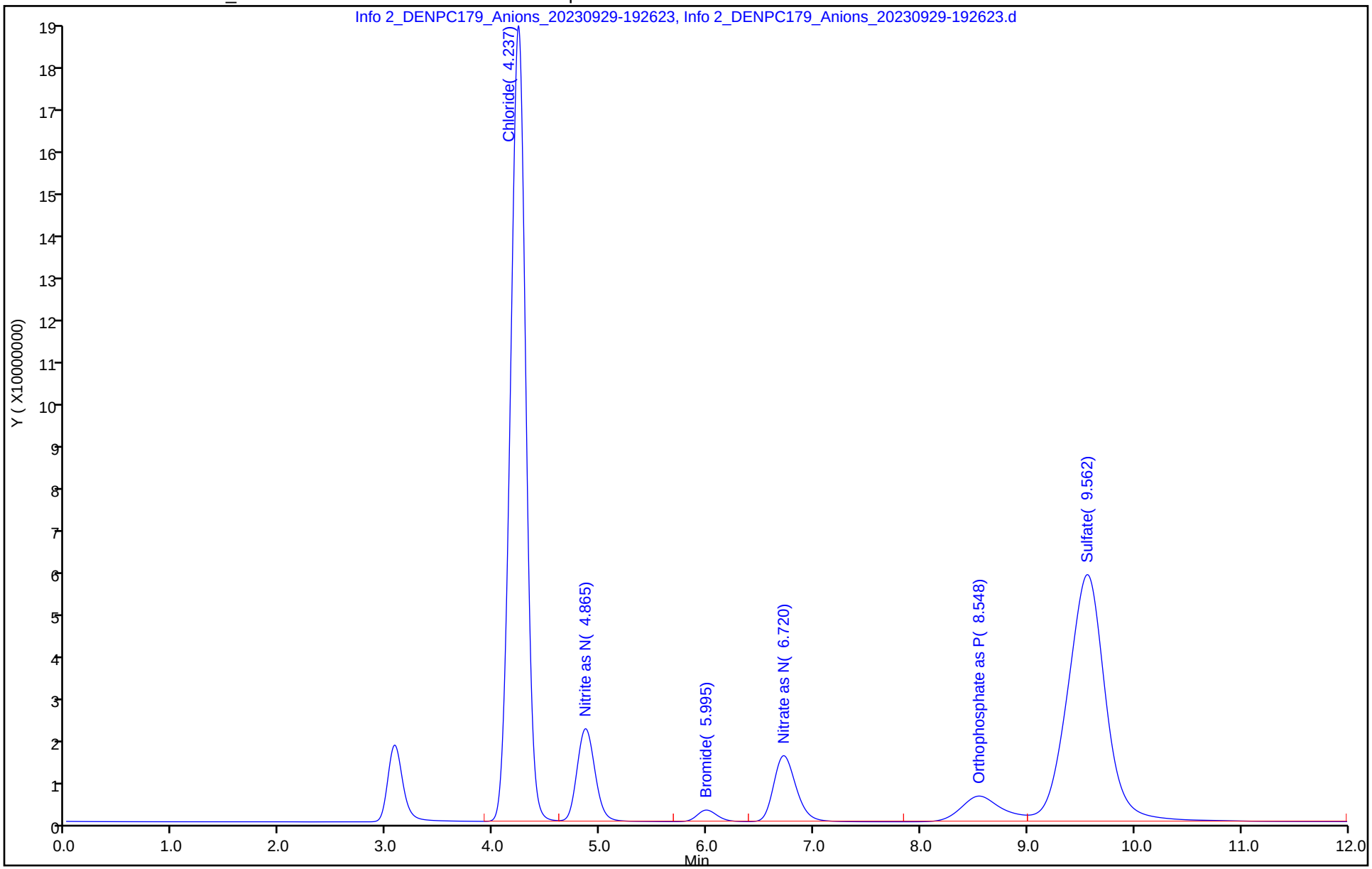
IC LCS_01980 Amount Added: 10.00 Units: mL

Report Date: 02-Oct-2023 07:29:01 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-192623.d

Injection Date:	29-Sep-2023 19:11:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	29
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-194
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 29-Sep-2023 19:26:00 ALS Bottle#: 0 Worklist Smp#: 30
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-030
Misc. Info.: 280-0125974-030
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 02-Oct-2023 07:29:01 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078				ND	
2 Chloride	4.175	4.235	-0.060	39535		NC	
3 Nitrite as N		4.865				ND	
4 Bromide	6.032	6.010	0.022	58681		NC	
5 Nitrate as N		6.730				ND	
6 Orthophosphate as P	8.643	8.503	0.140	24815768		0.3391	
7 Sulfate	9.562	9.568	-0.006	17531048		NC	

QC Flag Legend

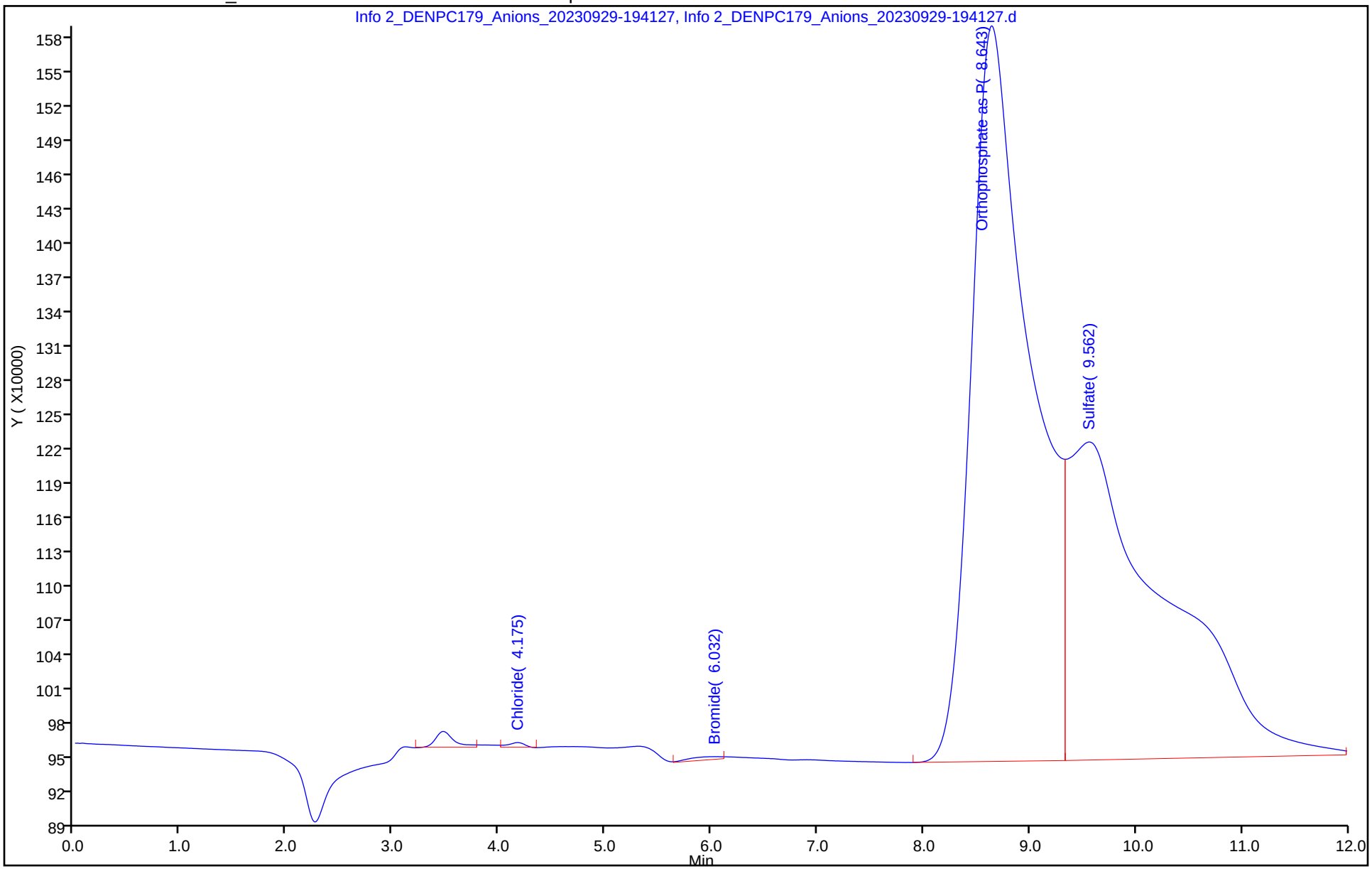
Processing Flags
NC - Not Calibrated

Report Date: 02-Oct-2023 07:29:02 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-194127.d

Injection Date:	29-Sep-2023 19:26:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	30
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



12/5/2023 8:25 AM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-212
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 29-Sep-2023 21:11:00 ALS Bottle#: 0 Worklist Smp#: 37
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-037
Misc. Info.: 280-0125974-037
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 02-Oct-2023 07:29:01 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	ND	
2 Chloride	4.238	4.235	0.003	1900885475	NC	NC	
3 Nitrite as N	4.868	4.865	0.003	256792221	5.00	4.87	
4 Bromide	6.000	6.010	-0.010	36071333	NC	NC	
5 Nitrate as N	6.728	6.730	-0.002	229887244	5.00	4.71	
6 Orthophosphate as P	8.537	8.503	0.034	162173812	5.00	5.86	
7 Sulfate	9.553	9.568	-0.015	1457172298	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

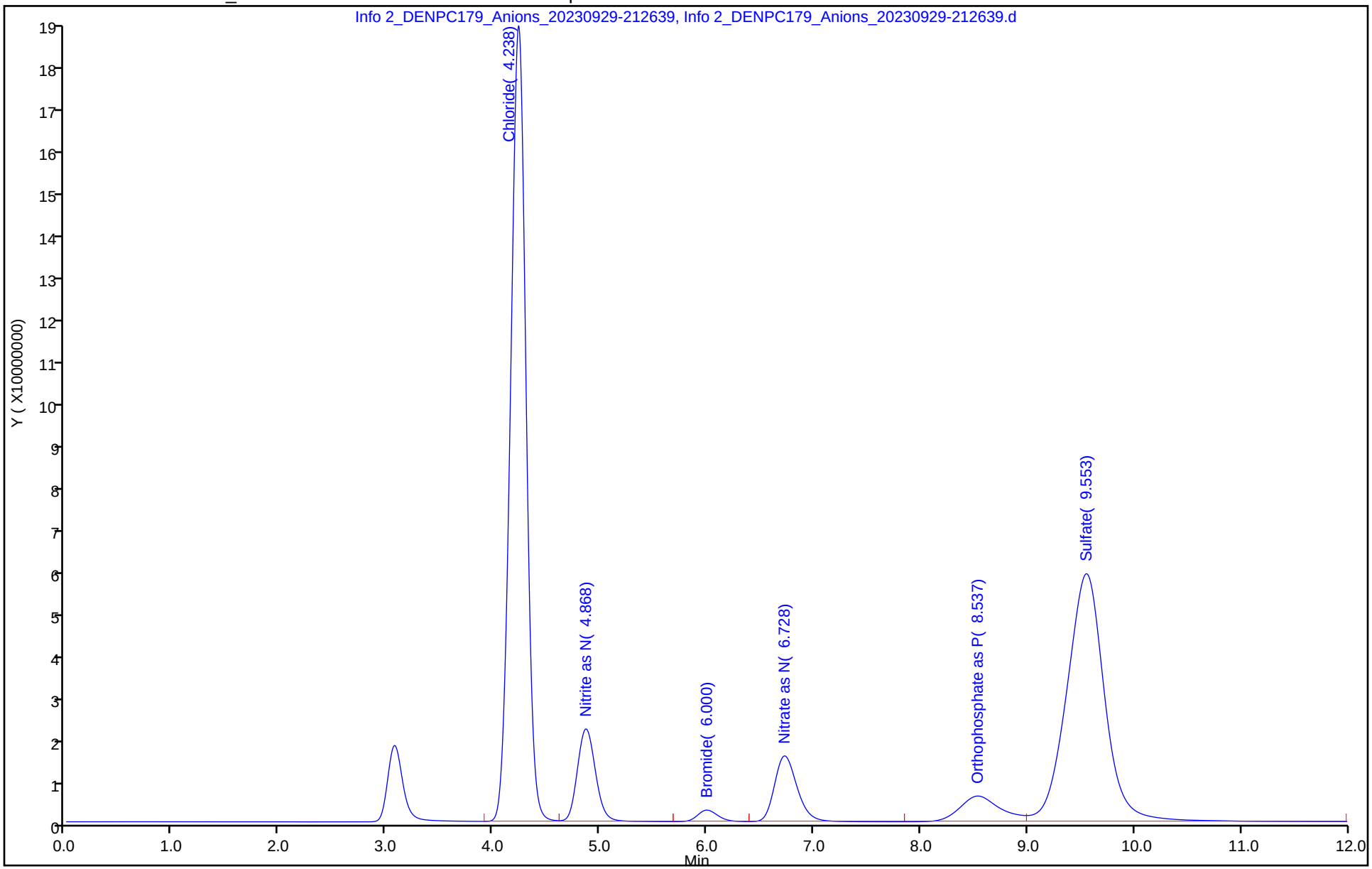
Reagents:

IC LCS_01980 Amount Added: 10.00 Units: mL

Report Date: 02-Oct-2023 07:29:05 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-212639.d				
Injection Date:	29-Sep-2023 21:11:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	lcs			Worklist Smp#:	37
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-214
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 29-Sep-2023 21:26:00 ALS Bottle#: 0 Worklist Smp#: 38
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-038
Misc. Info.: 280-0125974-038
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 02-Oct-2023 07:29:01 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	ND	
2 Chloride	4.238	4.235	0.003	1902425870	NC	NC	
3 Nitrite as N	4.868	4.865	0.003	258080316	5.00	4.89	
4 Bromide	6.005	6.010	-0.005	36039790	NC	NC	
5 Nitrate as N	6.732	6.730	0.002	229968423	5.00	4.72	
6 Orthophosphate as P	8.533	8.503	0.030	167642276	5.00	6.08	
7 Sulfate	9.555	9.568	-0.013	1457494257	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

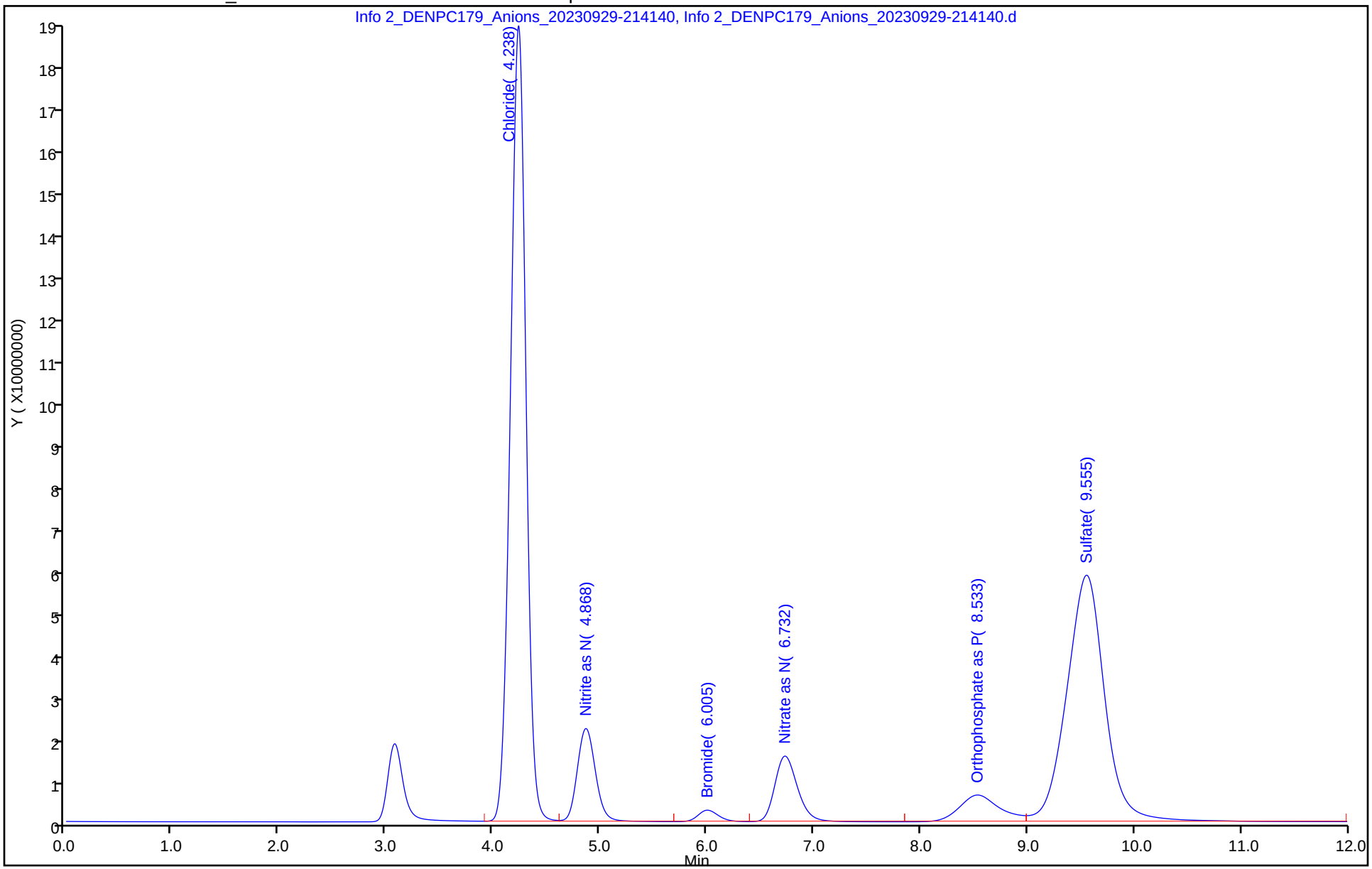
Reagents:

IC LCS_01980 Amount Added: 10.00 Units: mL

Report Date: 02-Oct-2023 07:29:05 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-214140.d				
Injection Date:	29-Sep-2023 21:26:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	lcsd			Worklist Smp#:	38
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-215
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 29-Sep-2023 21:41:00 ALS Bottle#: 0 Worklist Smp#: 39
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-039
Misc. Info.: 280-0125974-039
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 02-Oct-2023 07:29:01 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078				ND	
2 Chloride	4.182	4.235	-0.053	33313		NC	
3 Nitrite as N		4.865				ND	
4 Bromide	6.083	6.010	0.073	205518		NC	
5 Nitrate as N		6.730				ND	
6 Orthophosphate as P	8.622	8.503	0.119	34918122		0.7448	
7 Sulfate		9.568				ND	

QC Flag Legend

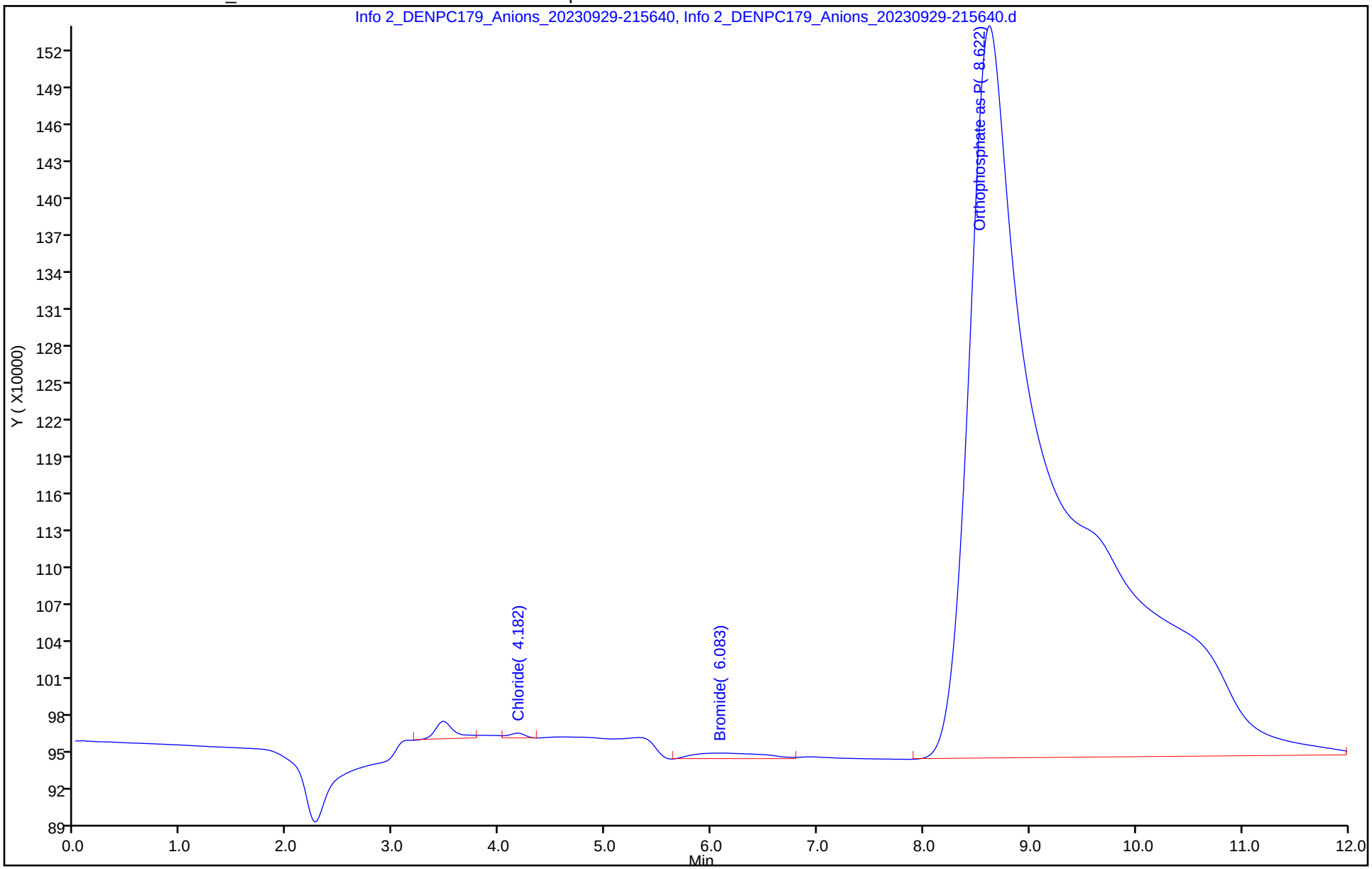
Processing Flags
NC - Not Calibrated

Report Date: 02-Oct-2023 07:29:06 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-215640.d

Injection Date:	29-Sep-2023 21:41:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	mb			Worklist Smp#:	39
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-222
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 29-Sep-2023 22:11:00 ALS Bottle#: 0 Worklist Smp#: 41
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-041
Misc. Info.: 280-0125974-041
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub9

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 02-Oct-2023 07:29:07 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	ND	
2 Chloride	4.235	4.235	0.000	1901901468	NC	NC	
3 Nitrite as N	4.865	4.865	0.000	257051823	5.00	4.87	
4 Bromide	6.000	6.010	-0.010	36034447	NC	NC	
5 Nitrate as N	6.727	6.730	-0.003	229992320	5.00	4.72	
6 Orthophosphate as P	8.518	8.503	0.015	158919599	5.00	5.72	
7 Sulfate	9.542	9.568	-0.026	1448977363	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

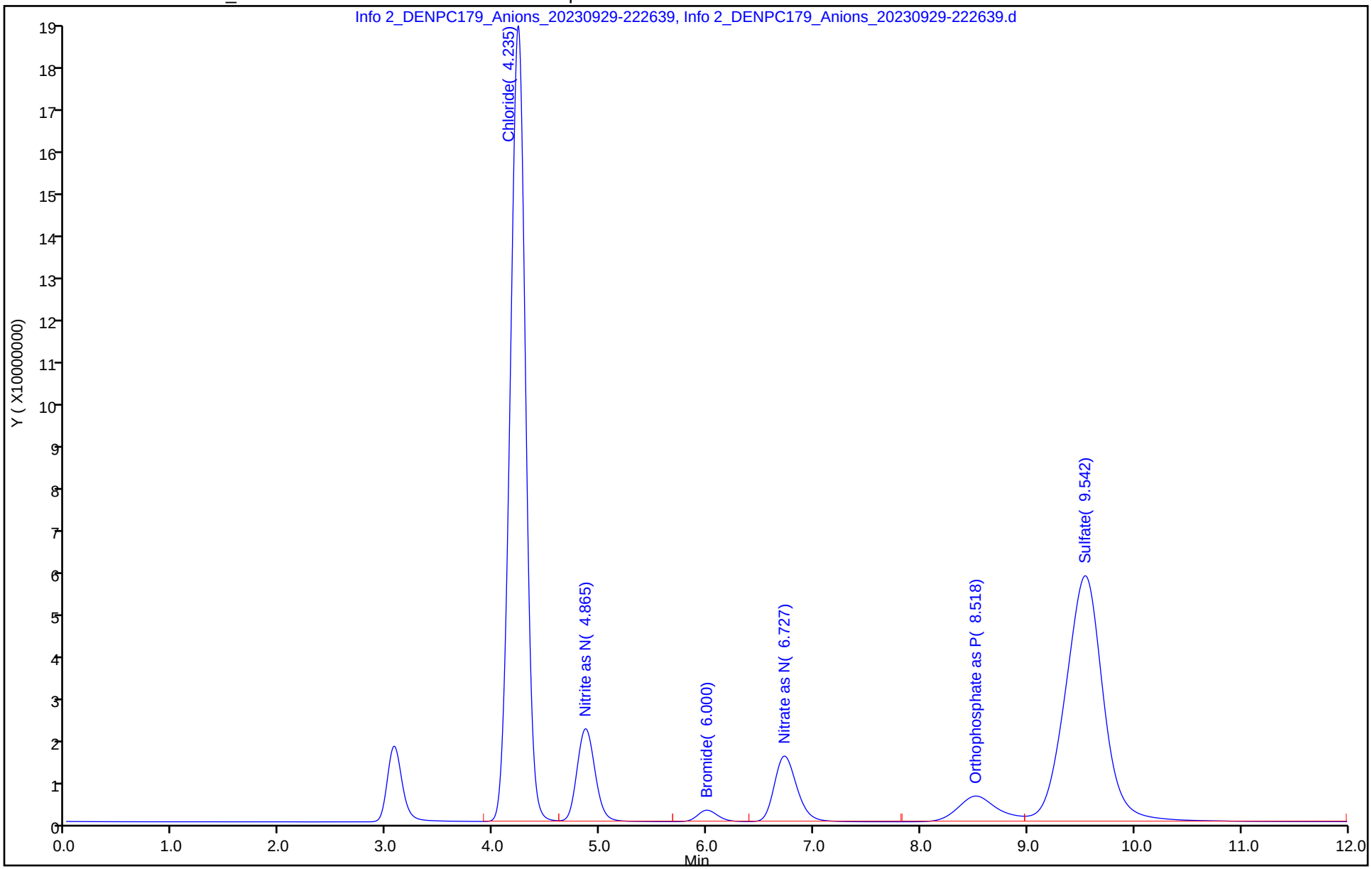
Reagents:

IC LCS_01980 Amount Added: 10.00 Units: mL

Report Date: 02-Oct-2023 07:29:07 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-222639.d				
Injection Date:	29-Sep-2023 22:11:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	41
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-224				
Lims ID:	ccb				
Client ID:					
Sample Type:	CCB				
Inject. Date:	29-Sep-2023 22:26:00	ALS Bottle#:	0	Worklist Smp#:	42
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0125974-042				
Misc. Info.:	280-0125974-042				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m				
Limit Group:	Wet - Anions				
Last Update:	02-Oct-2023 07:29:07	Calib Date:	16-Aug-2023 09:39:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1656				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078				ND	
2 Chloride	4.187	4.235	-0.048	49850		NC	
3 Nitrite as N		4.865				ND	
4 Bromide	6.063	6.010	0.053	82531		NC	
5 Nitrate as N		6.730				ND	
6 Orthophosphate as P	8.625	8.503	0.122	26046890		0.3885	
7 Sulfate		9.568				ND	

QC Flag Legend

Processing Flags

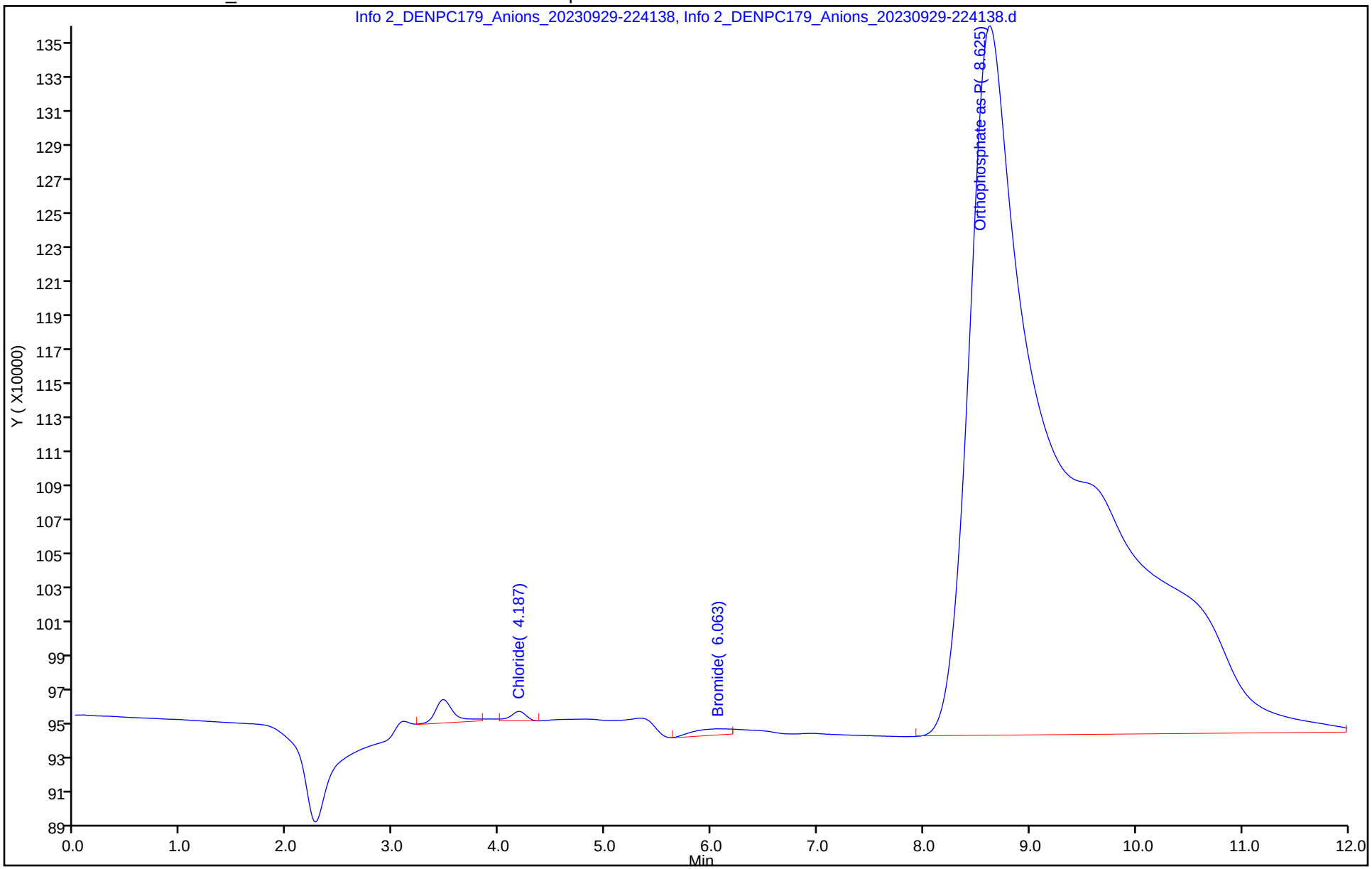
NC - Not Calibrated

Report Date: 02-Oct-2023 07:29:08 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-224138.d

Injection Date:	29-Sep-2023 22:26:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	42
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-231
Lims ID: 280-182145-B-10
Client ID: LL12MW-RB-246-2023
Sample Type: Client
Inject. Date: 29-Sep-2023 22:56:00 ALS Bottle#: 0 Worklist Smp#: 44
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-044
Misc. Info.: 280-0125974-044
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 02-Oct-2023 07:29:07 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	
2 Chloride	4.187	4.235	-0.048	44050	NC	
3 Nitrite as N		4.865			ND	
4 Bromide	5.957	6.010	-0.053	32742	NC	
5 Nitrate as N	6.843	6.730	0.113	82554	0.0382	
6 Orthophosphate as P	8.645	8.503	0.142	7705846	-0.3481	
7 Sulfate	9.670	9.568	0.102	5931348	NC	

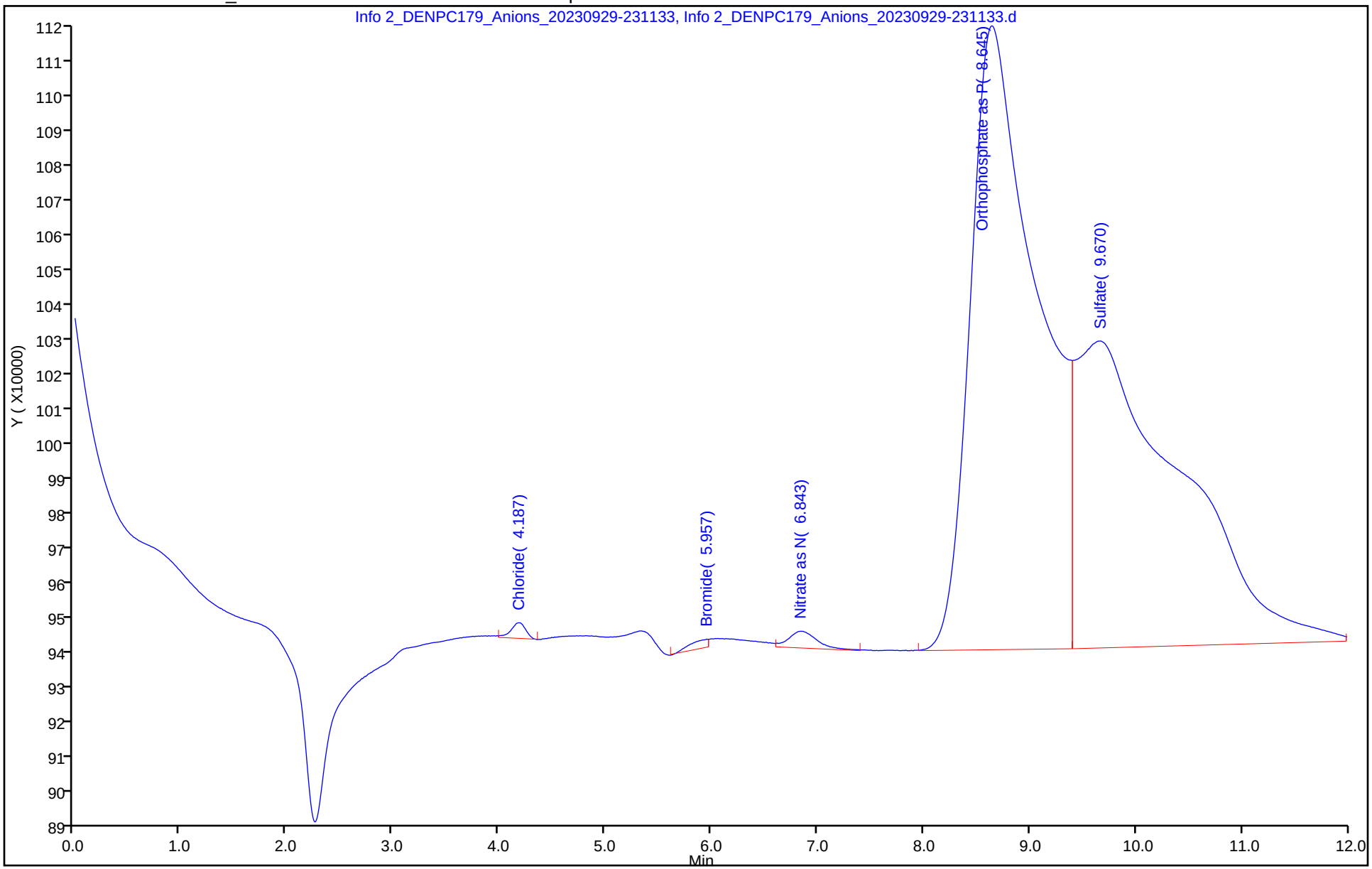
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 02-Oct-2023 07:29:09 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-231133.d				
Injection Date:	29-Sep-2023 22:56:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-182145-B-10	Lab Sample ID:	280-182145-10	Worklist Smp#:	44
Client ID:	LL12MW-RB-246-2023				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230930-012
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 30-Sep-2023 01:11:00 ALS Bottle#: 0 Worklist Smp#: 53
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-053
Misc. Info.: 280-0125974-053
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub9

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 02-Oct-2023 07:29:13 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	ND	
2 Chloride	4.237	4.235	0.002	1914996792	NC	NC	
3 Nitrite as N	4.868	4.865	0.003	259402098	5.00	4.92	
4 Bromide	6.013	6.010	0.003	36129060	NC	NC	
5 Nitrate as N	6.742	6.730	0.012	231431155	5.00	4.74	
6 Orthophosphate as P	8.518	8.503	0.015	167981421	5.00	6.09	
7 Sulfate	9.548	9.568	-0.020	1458972721	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

Reagents:

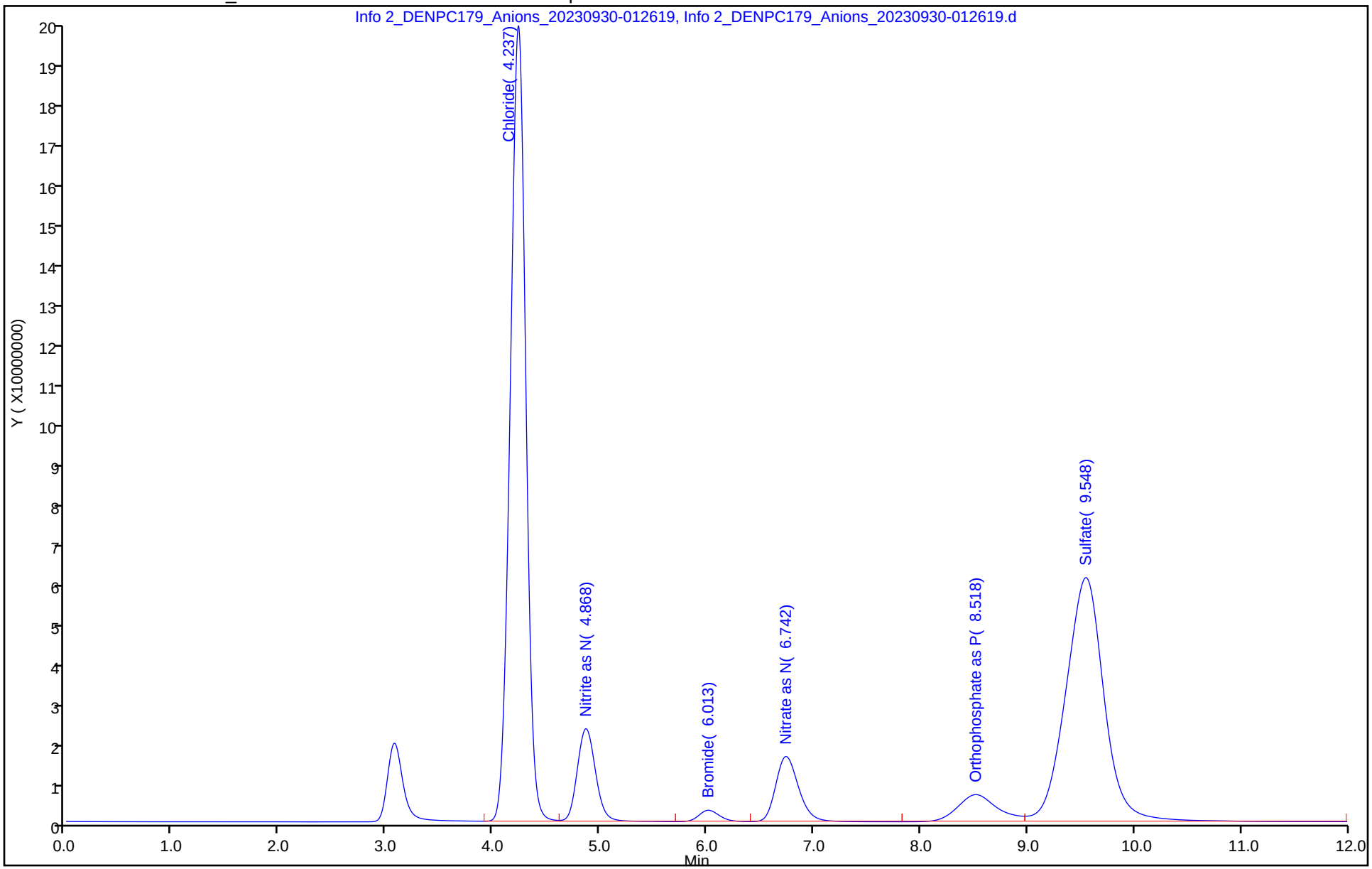
IC LCS_01980 Amount Added: 10.00 Units: mL

Report Date: 02-Oct-2023 07:29:13 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230930-012619.d

Injection Date:	30-Sep-2023 01:11:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	53
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230930-014				
Lims ID:	ccb				
Client ID:					
Sample Type:	CCB				
Inject. Date:	30-Sep-2023 01:26:00	ALS Bottle#:	0	Worklist Smp#:	54
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0125974-054				
Misc. Info.:	280-0125974-054				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m				
Limit Group:	Wet - Anions				
Last Update:	02-Oct-2023 07:29:13	Calib Date:	16-Aug-2023 09:39:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1656				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078				ND	
2 Chloride	4.190	4.235	-0.045	82293		NC	
3 Nitrite as N		4.865				ND	
4 Bromide	6.122	6.010	0.112	59371		NC	
5 Nitrate as N		6.730				ND	
6 Orthophosphate as P	8.612	8.503	0.109	26499144		0.4067	
7 Sulfate		9.568				ND	

QC Flag Legend

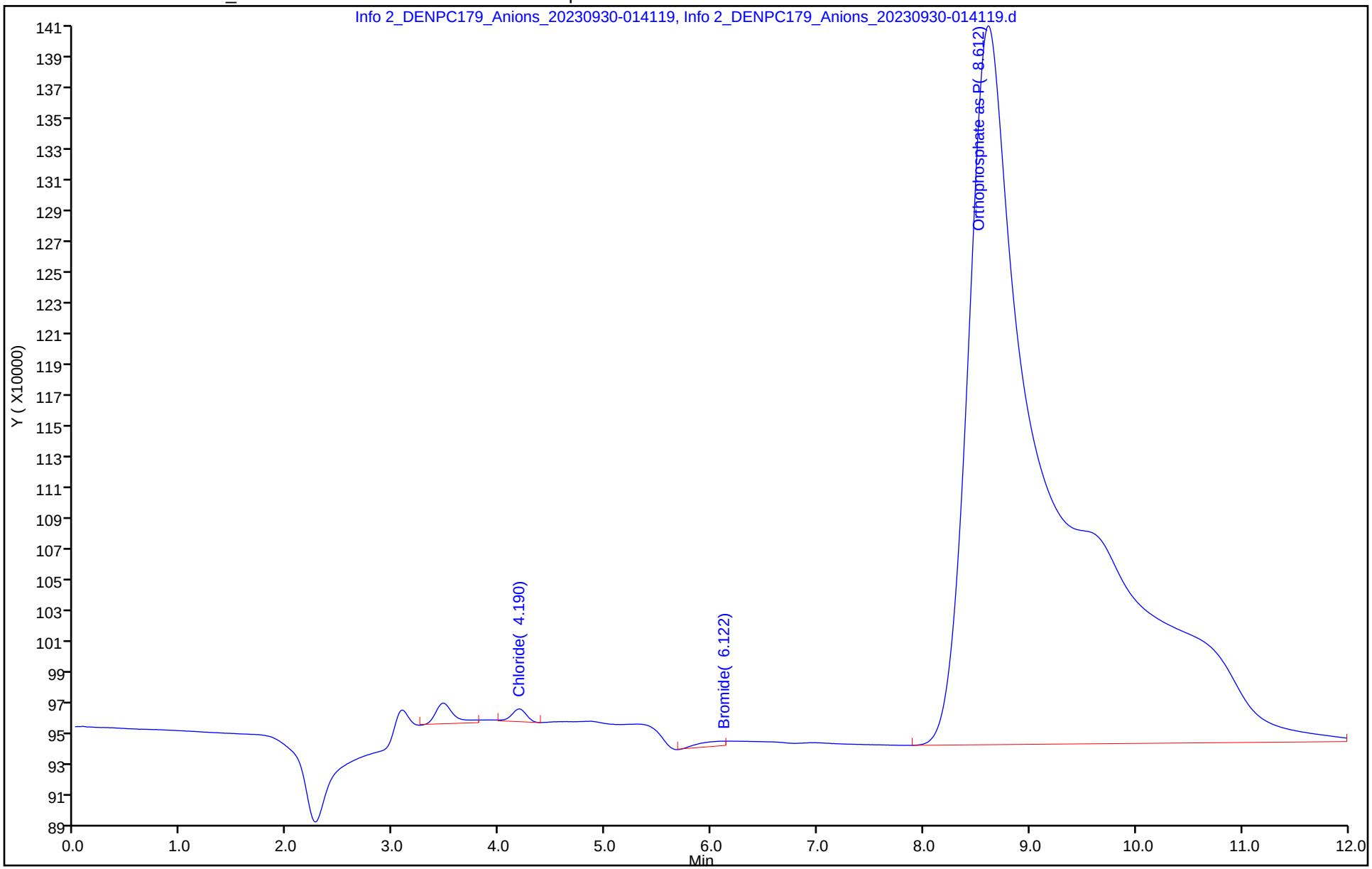
Processing Flags

NC - Not Calibrated

Report Date: 02-Oct-2023 07:29:14 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230930-014119.d				
Injection Date:	30-Sep-2023 01:26:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	54
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



12/5/2023 8:25 AM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100
Lims ID: STD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 16-Aug-2023 08:23:00 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0124540-001
Misc. Info.: 280-0124540-001
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub9

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 17-Aug-2023 10:41:27 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1649

First Level Reviewer: LVW8 Date: 16-Aug-2023 10:26:43

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.073	3.088	-0.015	6493840	0.2000	0.1974	Ma
2 Chloride	4.205	4.257	-0.052	16343527	1.00	1.02	
3 Nitrite as N	4.892	4.875	0.017	9494239	NC	NC	
4 Bromide	6.050	6.008	0.042	2213156	0.2000	0.2249	
5 Nitrate as N	6.813	6.717	0.096	8809383	NC	NC	
6 Orthophosphate as P	8.590	8.530	0.060	20373197	NC	NC	Ma
7 Sulfate	9.640	9.610	0.030	16127136	1.00	1.19	Ma

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

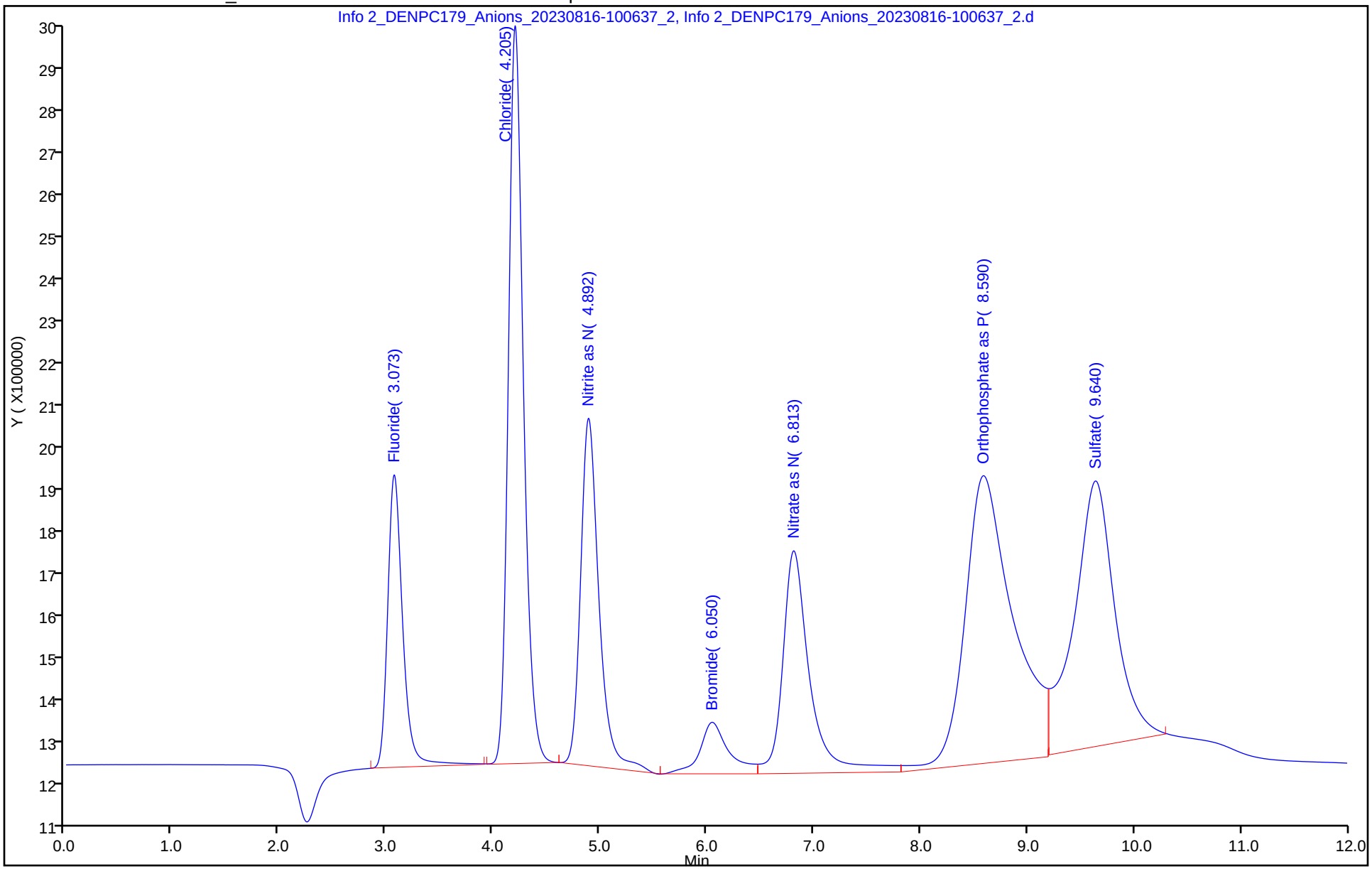
Reagents:

IC Cal low_00722 Amount Added: 0.04 Units: mL
IC CAL cl/so4_00494 Amount Added: 0.04 Units: mL

Report Date: 17-Aug-2023 10:41:27 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100637_2.d				
Injection Date:	16-Aug-2023 08:23:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD1			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



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Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Injection Date: 16-Aug-2023 08:23:00 Instrument ID: WC_IonChrom10

Lims ID: STD1

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 1

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions 28D

Column: Detector Info 2_091554_1

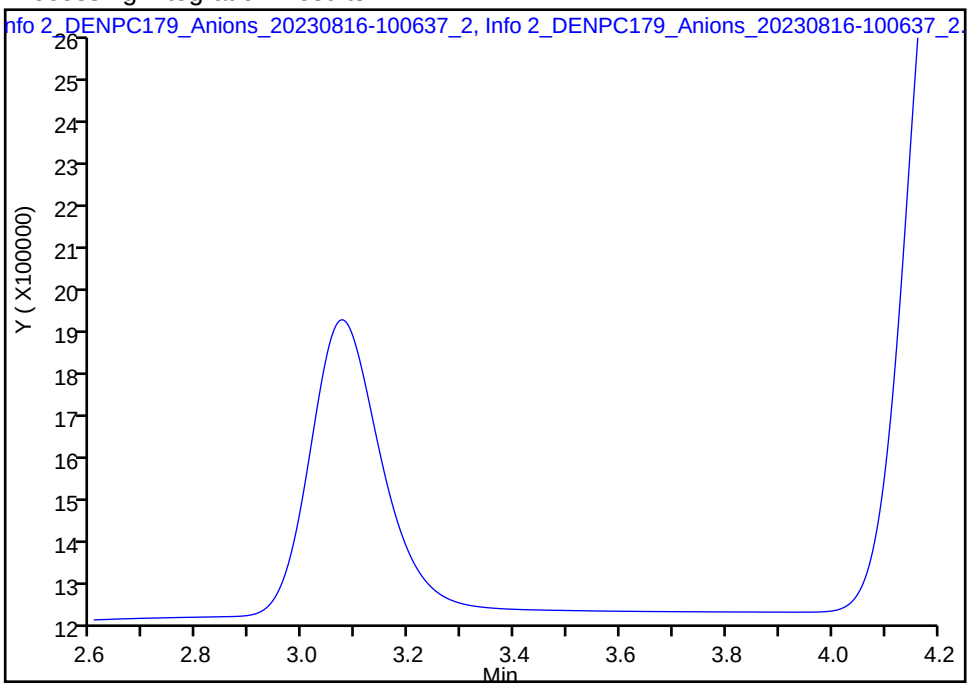
1 Fluoride, CAS: 16984-48-8

Signal: 1

Not Detected

Expected RT: 3.09

Processing Integration Results



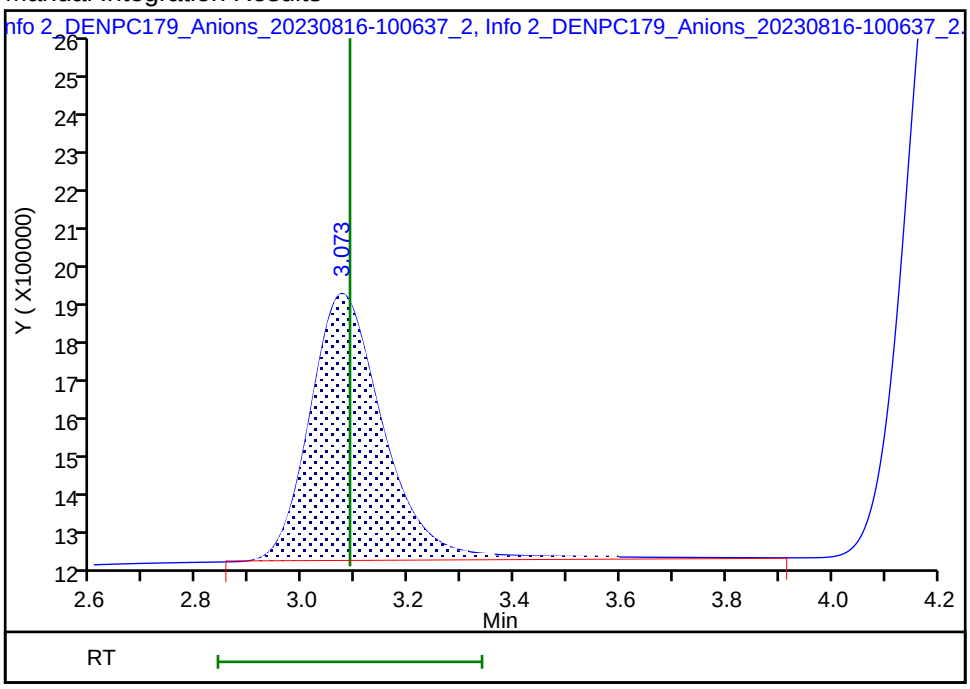
Manual Integration Results

RT: 3.07

Area: 6493840

Amount: 0.197356

Amount Units: ug/ml



Reviewer: LVW8, 16-Aug-2023 10:30:35 -06:00:00 (UTC)

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Injection Date: 16-Aug-2023 08:23:00 Instrument ID: WC_IonChrom10

Lims ID: STD1

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 1

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions 28D

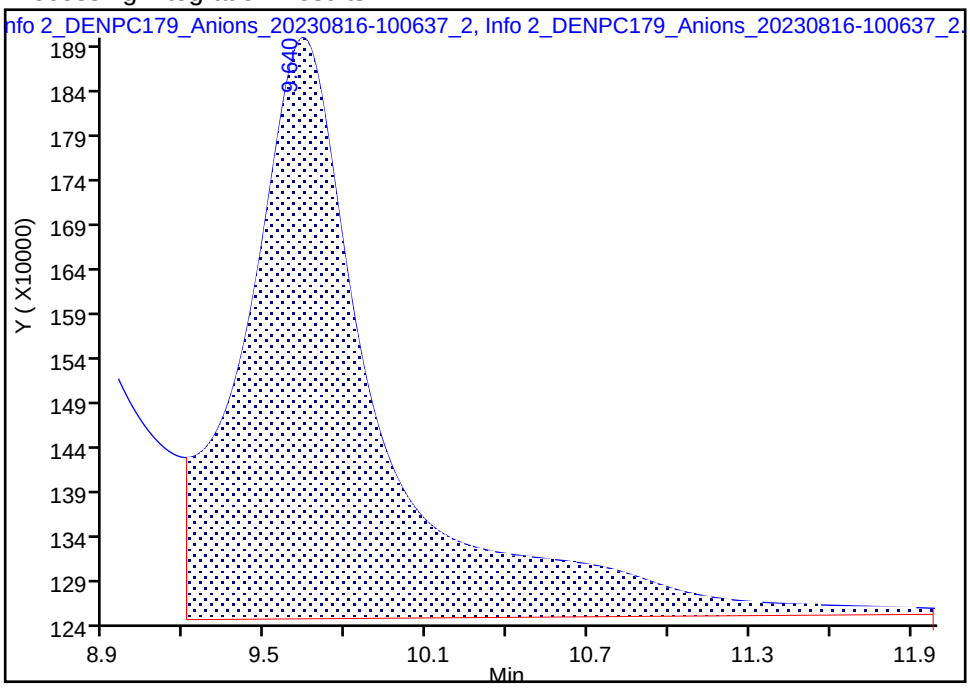
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

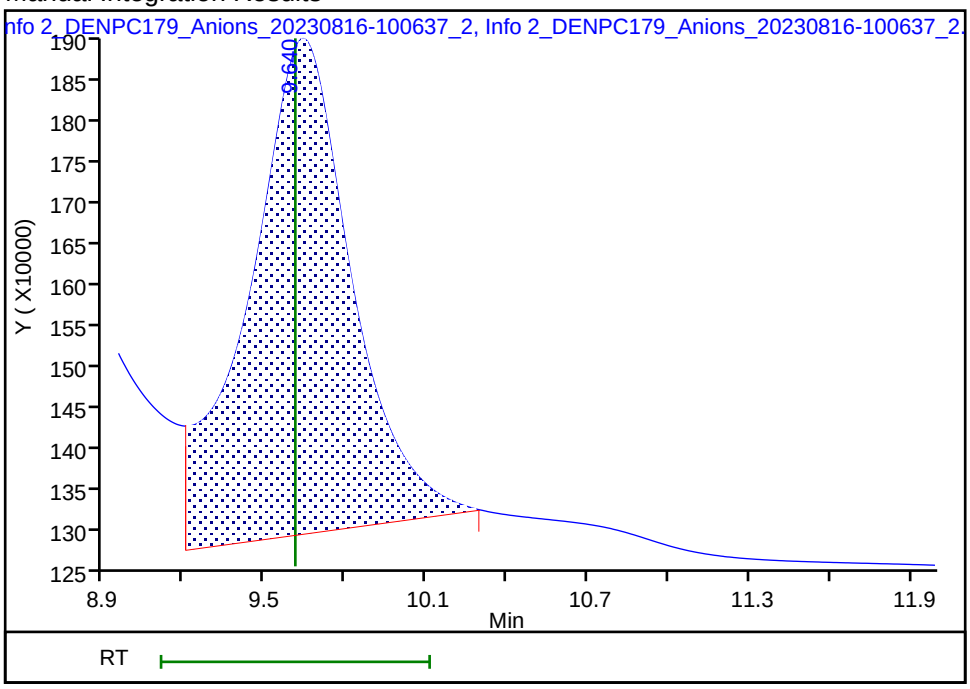
Processing Integration Results

RT: 9.64
Area: 22902781
Amount: 1.350970
Amount Units: ug/ml



Manual Integration Results

RT: 9.64
Area: 16127136
Amount: 1.193740
Amount Units: ug/ml



Reviewer: LVW8, 16-Aug-2023 10:46:32 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100
Lims ID: STD2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 16-Aug-2023 08:38:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0124540-002
Misc. Info.: 280-0124540-002
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub9

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 17-Aug-2023 10:41:28 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1649

First Level Reviewer: LVW8 Date: 16-Aug-2023 10:27:05

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.077	3.088	-0.011	18607618	0.5000	0.4872	Ma
2 Chloride	4.205	4.257	-0.052	44142315	2.50	2.46	
3 Nitrite as N	4.890	4.875	0.015	25589762	NC	NC	
4 Bromide	6.045	6.008	0.037	4337564	0.5000	0.4829	
5 Nitrate as N	6.797	6.717	0.080	22129548	NC	NC	
6 Orthophosphate as P	8.580	8.530	0.050	30713996	NC	NC	M
7 Sulfate	9.643	9.610	0.033	32737705	2.50	2.34	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

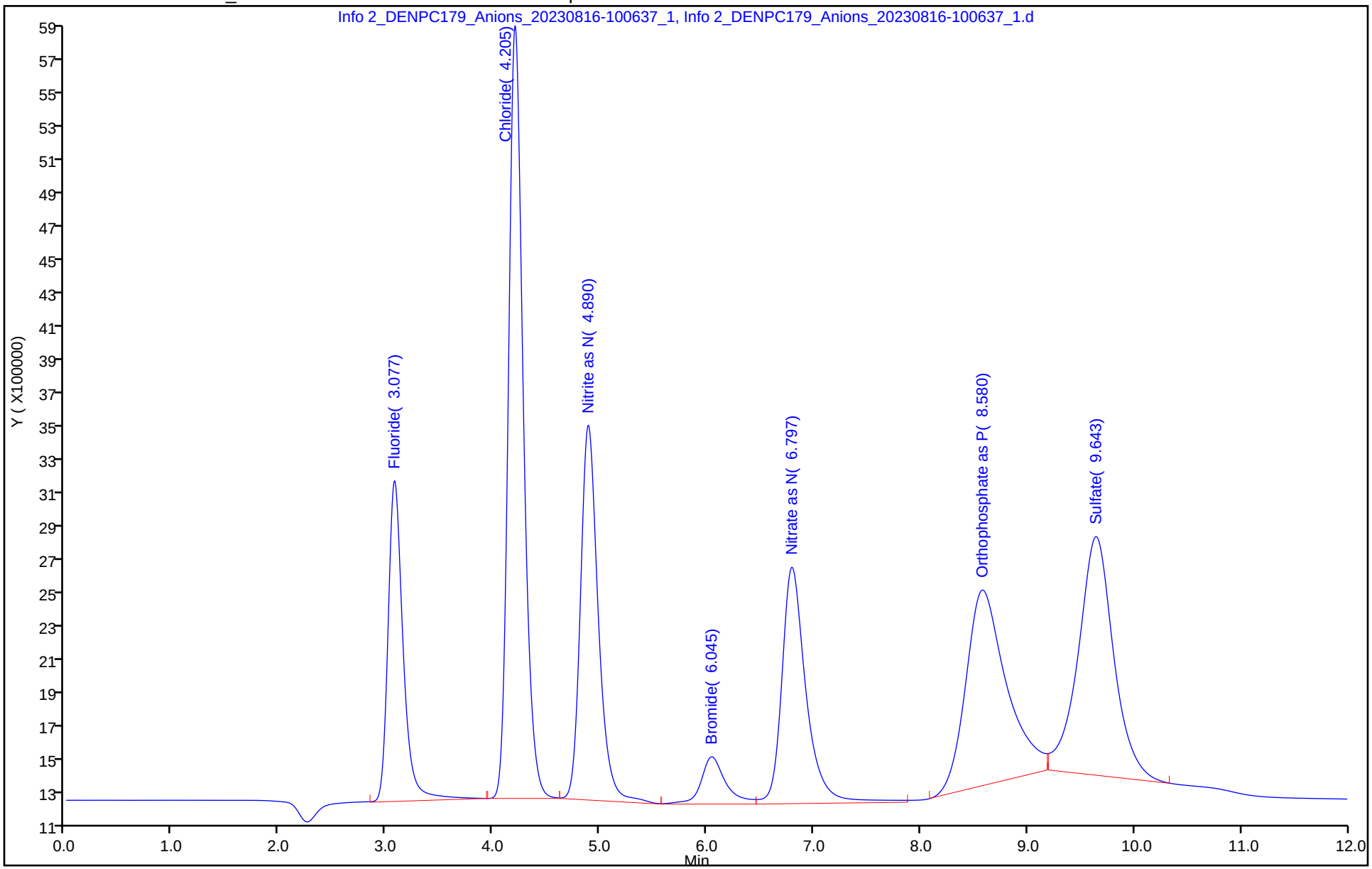
Reagents:

IC Cal low_00722 Amount Added: 0.10 Units: mL
IC CAL cl/so4_00494 Amount Added: 0.10 Units: mL

Report Date: 17-Aug-2023 10:41:28 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100637_1.d				
Injection Date:	16-Aug-2023 08:38:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD2			Worklist Smp#:	2
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



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Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Injection Date: 16-Aug-2023 08:38:00 Instrument ID: WC_IonChrom10

Lims ID: STD2

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 2

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions 28D

Column: Detector Info 2_091554_1

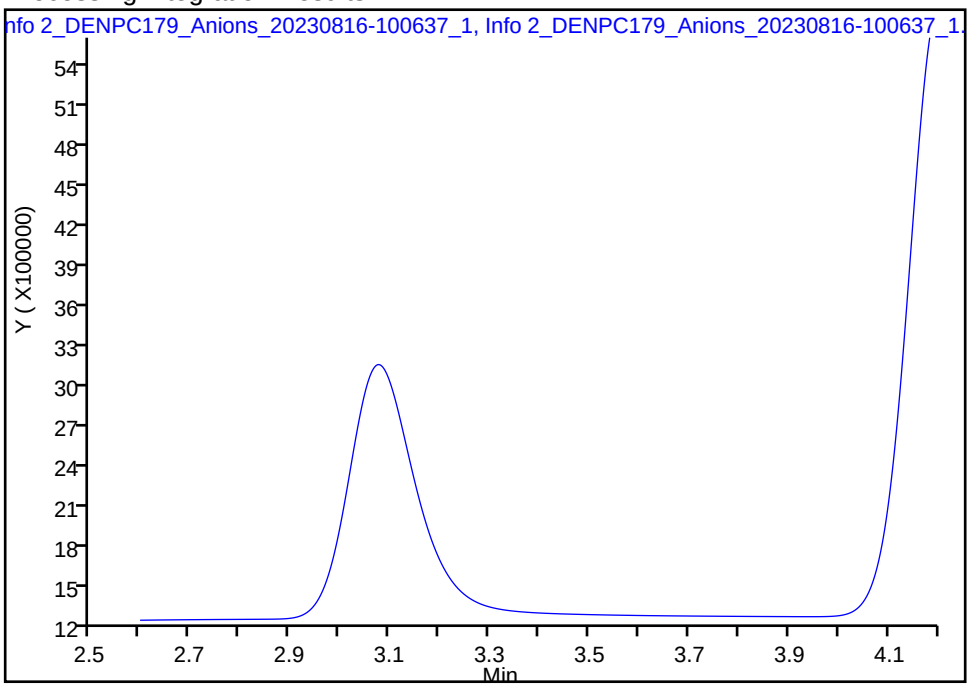
1 Fluoride, CAS: 16984-48-8

Signal: 1

Not Detected

Expected RT: 3.09

Processing Integration Results



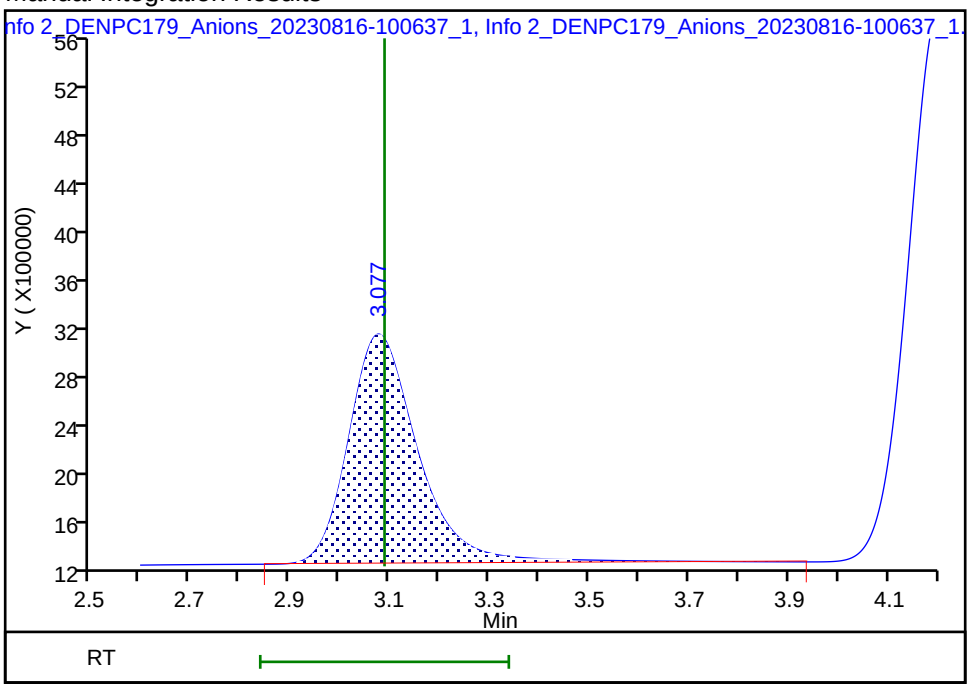
Manual Integration Results

RT: 3.08

Area: 18607618

Amount: 0.487248

Amount Units: ug/ml



Reviewer: LVW8, 16-Aug-2023 10:30:26 -06:00:00 (UTC)

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Injection Date: 16-Aug-2023 08:38:00 Instrument ID: WC_IonChrom10

Lims ID: STD2

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 2

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions 28D

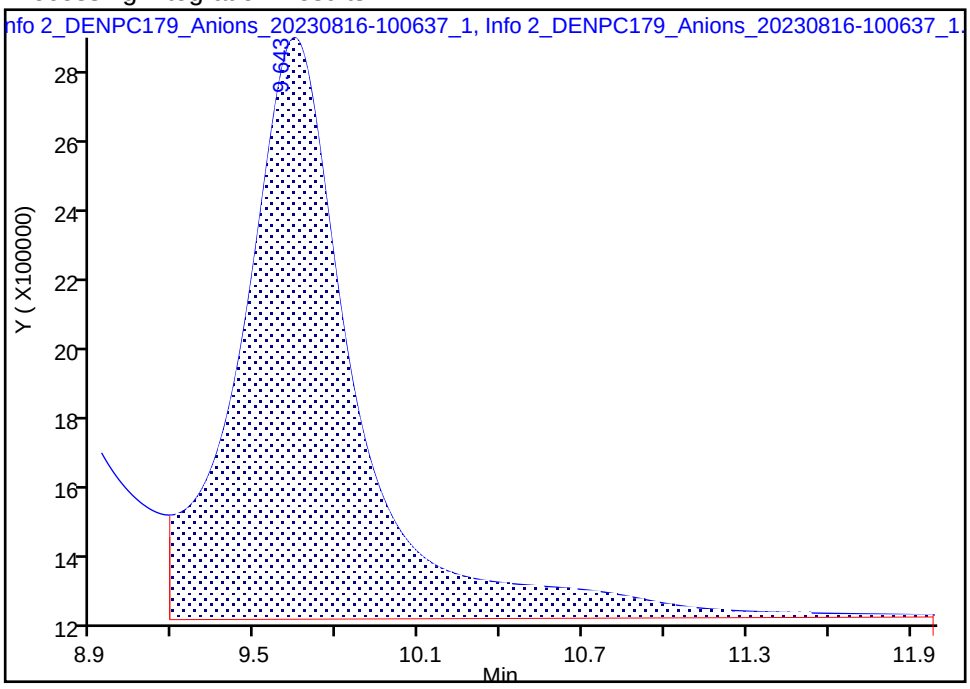
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

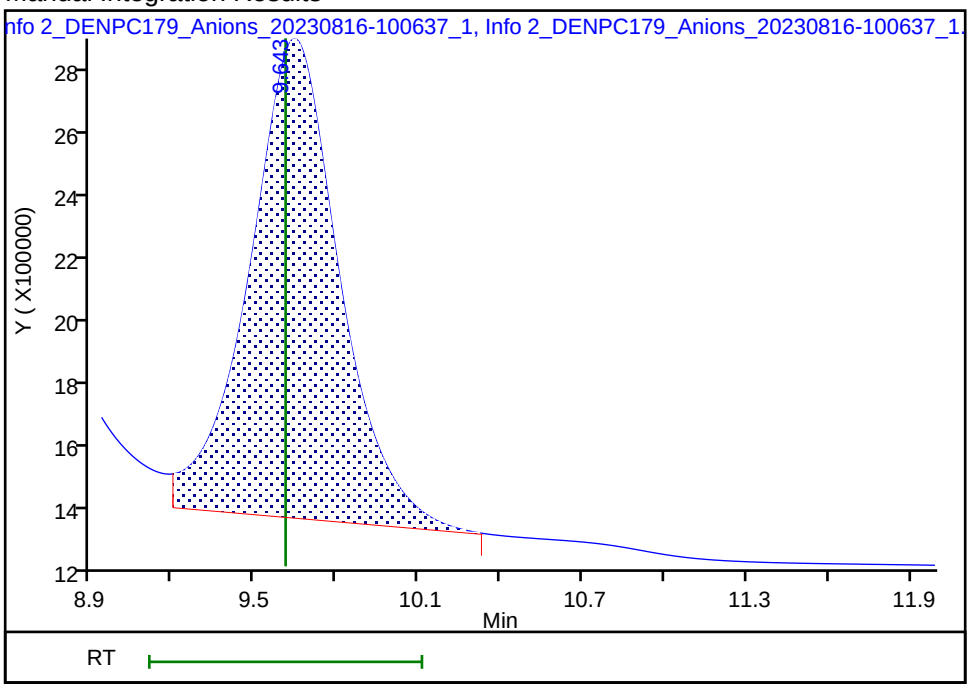
Processing Integration Results

RT: 9.64
Area: 46811509
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 9.64
Area: 32737705
Amount: 2.336845
Amount Units: ug/ml



Reviewer: LVW8, 16-Aug-2023 10:36:04 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100
Lims ID: STD3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 16-Aug-2023 08:54:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0124540-003
Misc. Info.: 280-0124540-003
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub9

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 17-Aug-2023 10:39:52 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1649

First Level Reviewer: LVW8 Date: 16-Aug-2023 10:27:53

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.078	3.078	0.000	40803610	1.00	1.02	Ma
2 Chloride	4.202	4.238	-0.036	92390398	5.00	4.96	
3 Nitrite as N	4.885	4.873	0.012	53593060	NC	NC	
4 Bromide	6.037	6.012	0.025	7960626	1.00	0.9230	
5 Nitrate as N	6.777	6.723	0.054	44959242	NC	NC	
6 Orthophosphate as P	8.570	8.545	0.025	42106377	NC	NC	M
7 Sulfate	9.643	9.628	0.015	62271915	5.00	4.37	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

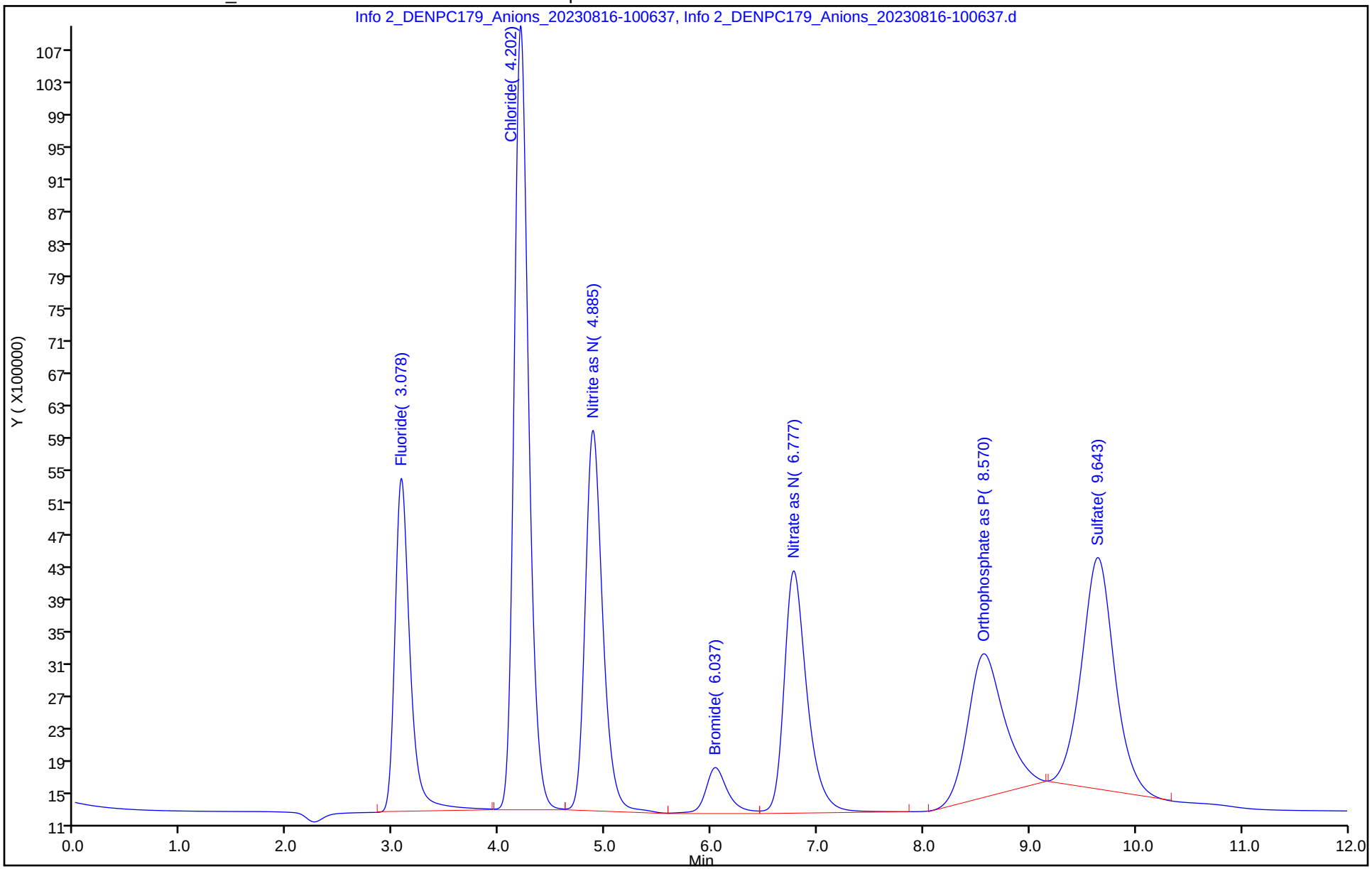
Reagents:

IC Cal low_00722 Amount Added: 0.20 Units: mL
IC CAL cl/so4_00494 Amount Added: 0.20 Units: mL

Report Date: 17-Aug-2023 10:39:52 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100637.d				
Injection Date:	16-Aug-2023 08:54:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD3			Worklist Smp#:	3
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



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Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Injection Date: 16-Aug-2023 08:54:00 Instrument ID: WC_IonChrom10

Lims ID: STD3

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 3

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions 28D

Column: Detector Info 2_091554_1

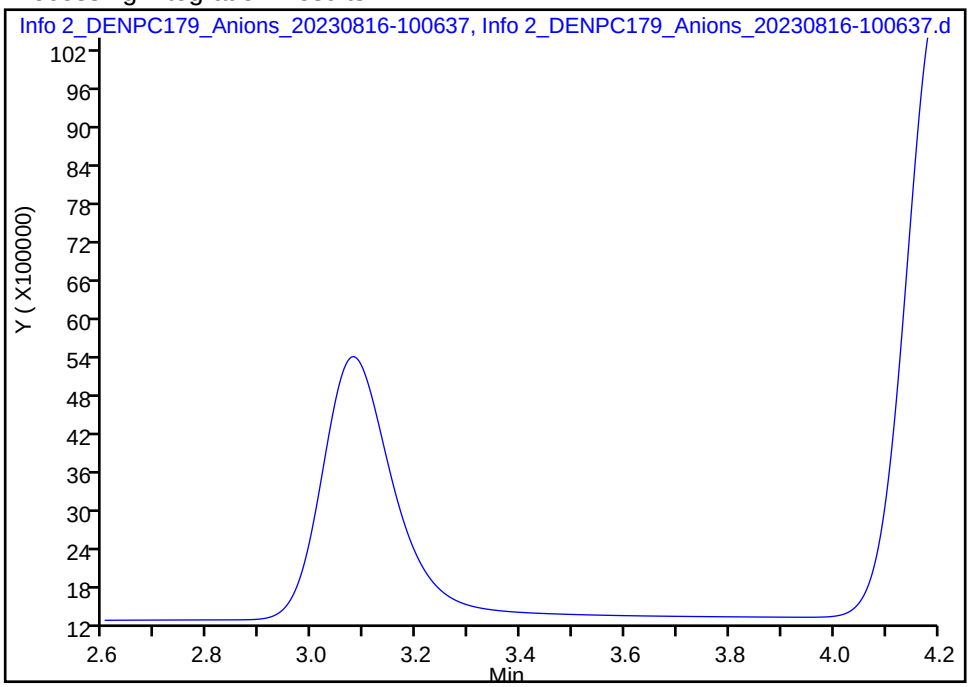
1 Fluoride, CAS: 16984-48-8

Signal: 1

Not Detected

Expected RT: 3.08

Processing Integration Results



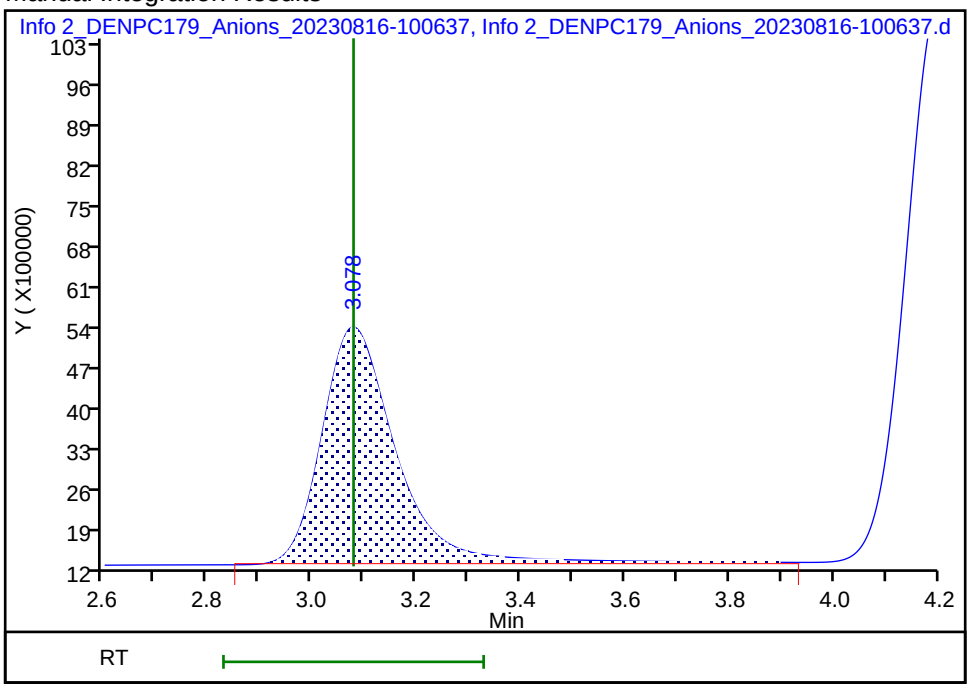
Manual Integration Results

RT: 3.08

Area: 40803610

Amount: 1.018413

Amount Units: ug/ml



Reviewer: LVW8, 16-Aug-2023 10:30:18 -06:00:00 (UTC)

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Injection Date: 16-Aug-2023 08:54:00 Instrument ID: WC_IonChrom10

Lims ID: STD3

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 3

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions 28D

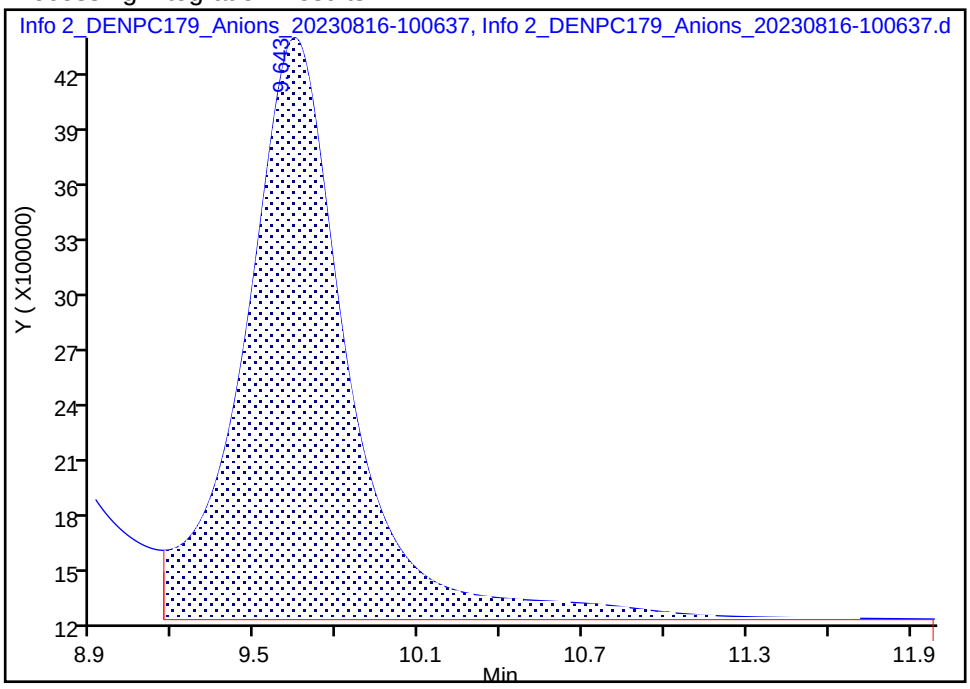
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

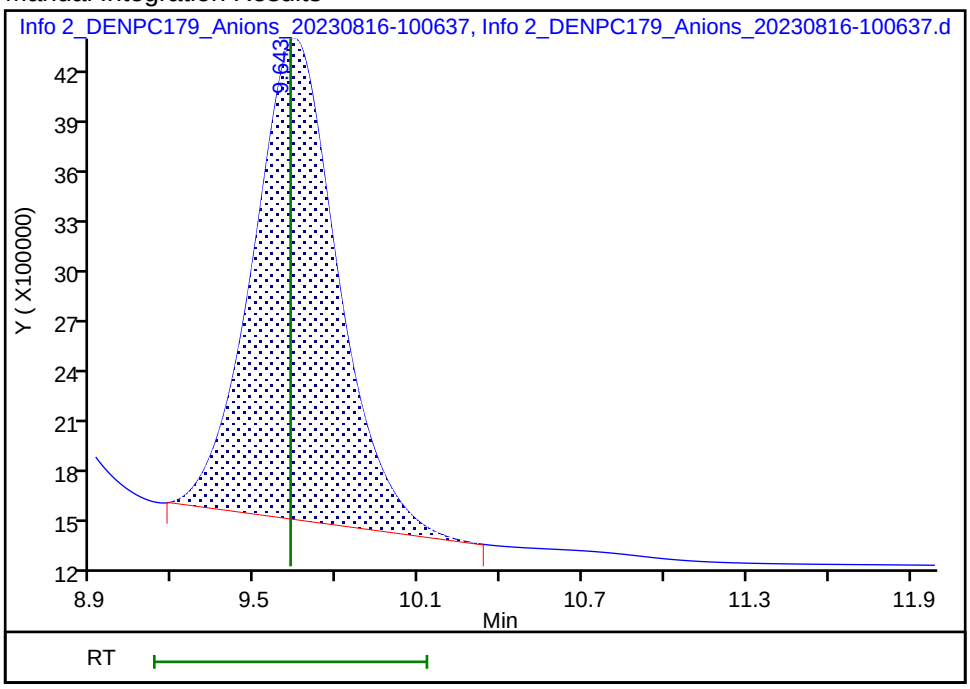
Processing Integration Results

RT: 9.64
Area: 84477656
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 9.64
Area: 62271915
Amount: 4.369329
Amount Units: ug/ml



Reviewer: LVW8, 16-Aug-2023 10:27:50 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100
Lims ID: STD4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 16-Aug-2023 09:09:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0124540-004
Misc. Info.: 280-0124540-004
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub9

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 17-Aug-2023 10:41:29 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1649

First Level Reviewer: LVW8 Date: 16-Aug-2023 10:28:16

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.083	3.083	0.000	171459973	4.00	4.15	Ma
2 Chloride	4.225	4.225	0.000	1158723576	60.0	60.1	
3 Nitrite as N	4.877	4.877	0.000	218611235	NC	NC	
4 Bromide	6.022	6.022	0.000	32146652	4.00	3.86	
5 Nitrate as N	6.737	6.737	0.000	192114513	NC	NC	
6 Orthophosphate as P	8.543	8.543	0.000	118853705	NC	NC	M
7 Sulfate	9.627	9.627	0.000	859732703	60.0	59.2	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

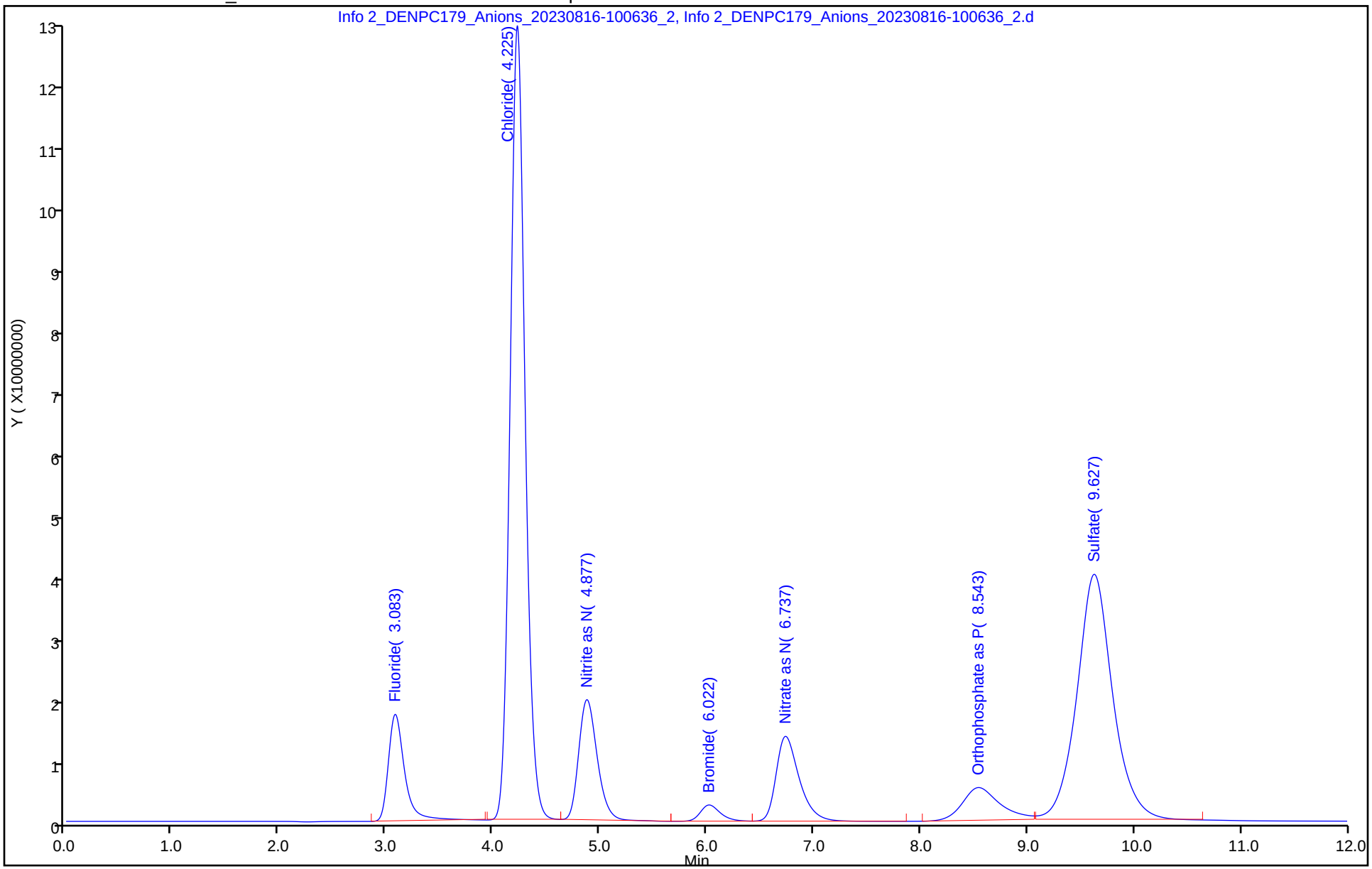
Reagents:

IC Cal low_00722 Amount Added: 0.80 Units: mL
IC CAL cl/so4_00494 Amount Added: 2.40 Units: mL

Report Date: 17-Aug-2023 10:41:30 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100636_2.d				
Injection Date:	16-Aug-2023 09:09:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD4			Worklist Smp#:	4
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



12/5/2023 8:25 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Injection Date: 16-Aug-2023 09:09:00 Instrument ID: WC_IonChrom10

Lims ID: STD4

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 4

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions 28D

Column: Detector Info 2_091554_1

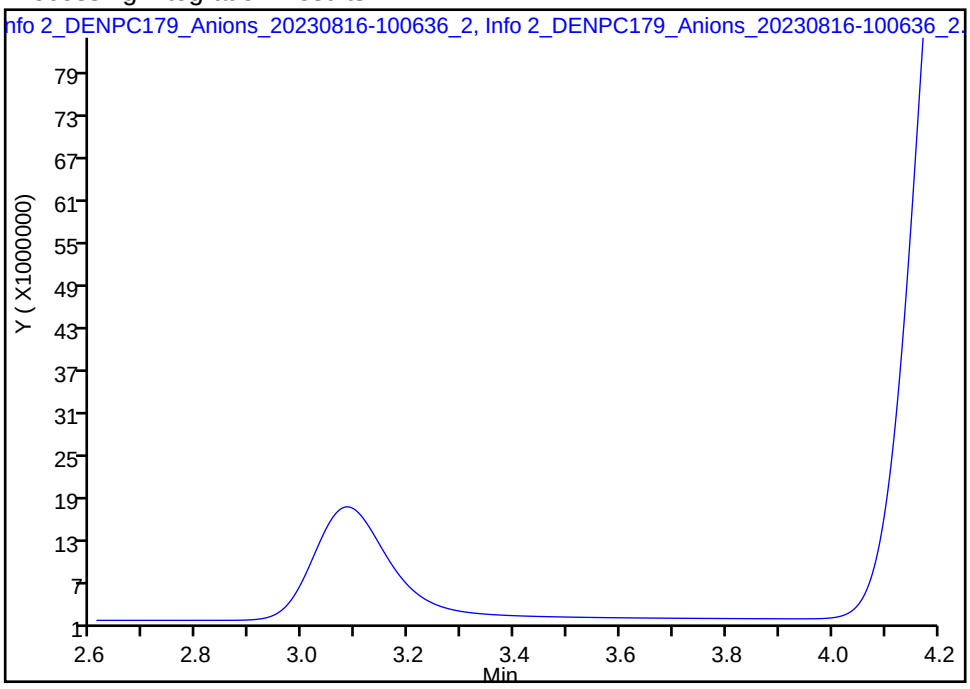
1 Fluoride, CAS: 16984-48-8

Signal: 1

Not Detected

Expected RT: 3.08

Processing Integration Results



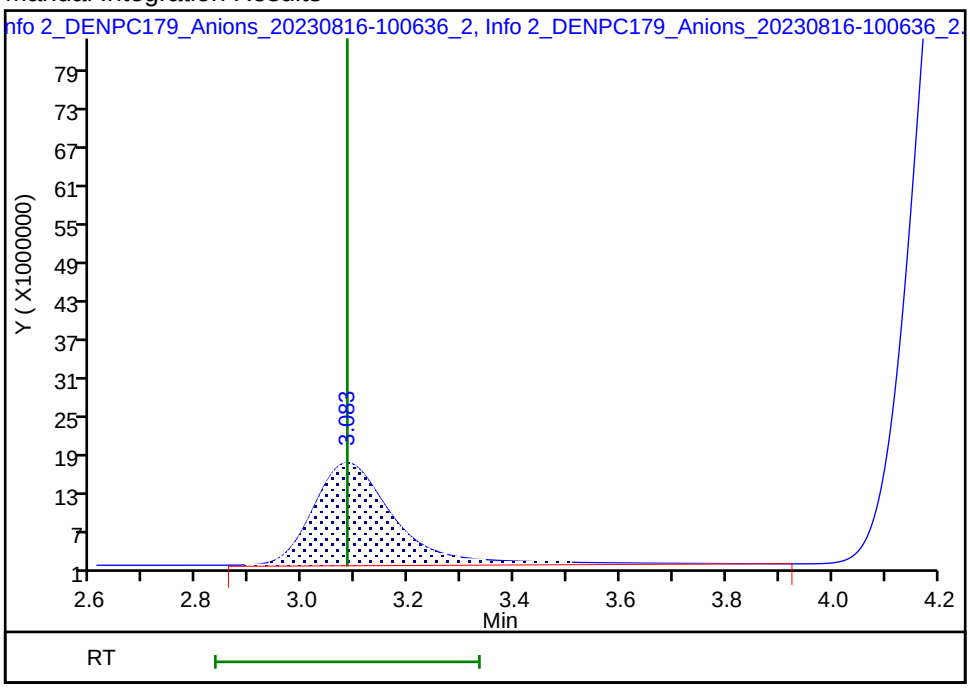
Manual Integration Results

RT: 3.08

Area: 171459973

Amount: 4.145113

Amount Units: ug/ml



Reviewer: LVW8, 16-Aug-2023 10:30:10 -06:00:00 (UTC)

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Injection Date: 16-Aug-2023 09:09:00 Instrument ID: WC_IonChrom10

Lims ID: STD4

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 4

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions 28D

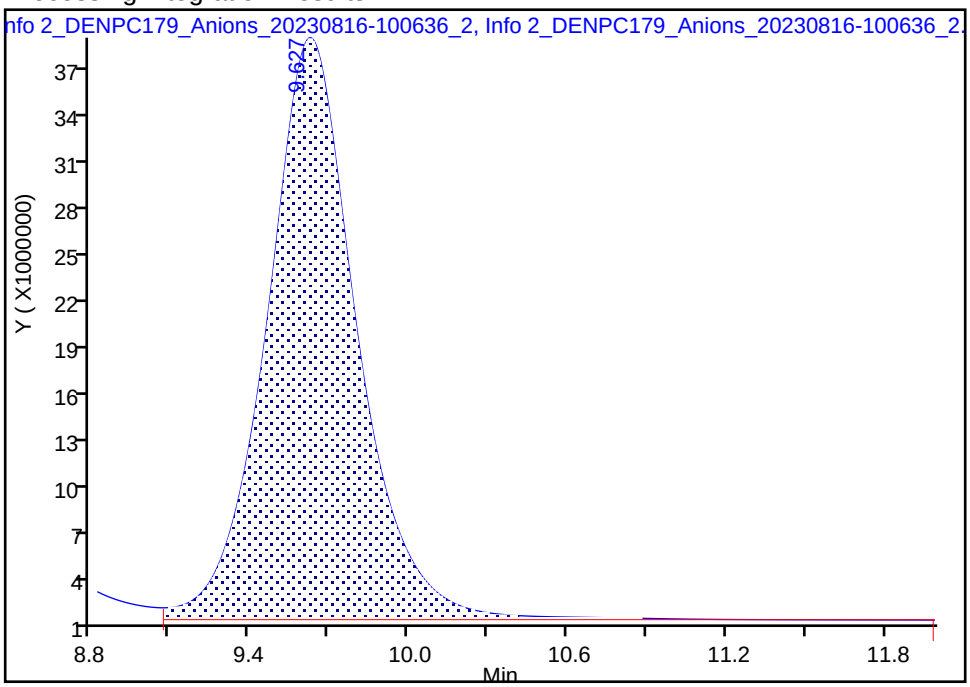
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

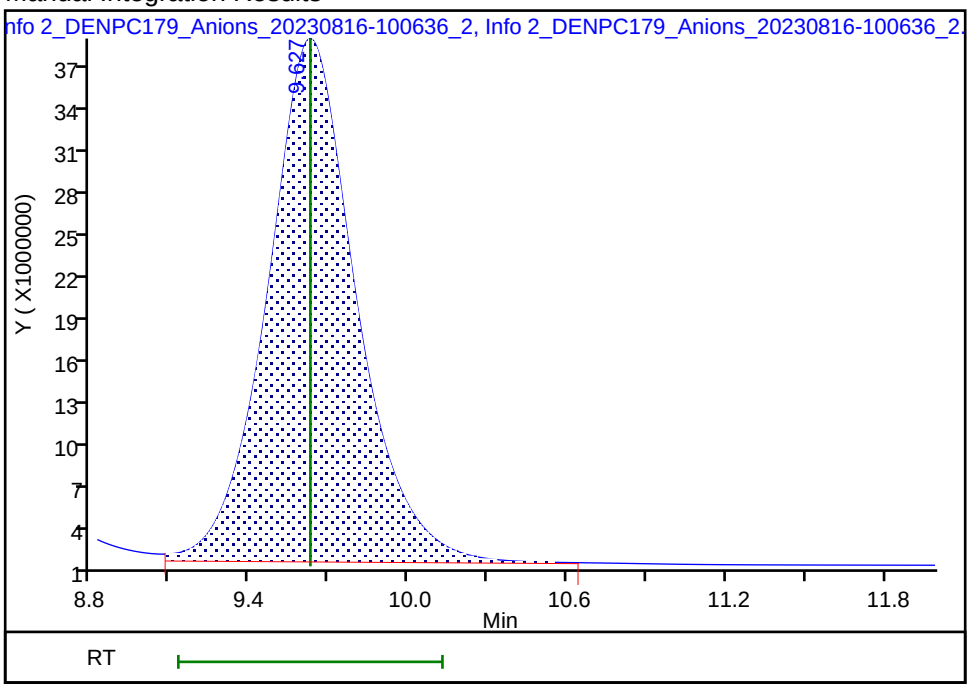
Processing Integration Results

RT: 9.63
Area: 888949000
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 9.63
Area: 859732703
Amount: 59.248956
Amount Units: ug/ml



Reviewer: LVW8, 16-Aug-2023 10:28:13 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100
Lims ID: STD5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 16-Aug-2023 09:24:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0124540-005
Misc. Info.: 280-0124540-005
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub9

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 17-Aug-2023 10:41:30 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1649

First Level Reviewer: LVW8 Date: 16-Aug-2023 10:30:04

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.088	3.088	0.000	330613515	8.00	7.95	Ma
2 Chloride	4.257	4.257	0.000	2318734502	120.0	120.1	
3 Nitrite as N	4.875	4.875	0.000	422833757	NC	NC	
4 Bromide	6.008	6.008	0.000	66462794	8.00	8.03	
5 Nitrate as N	6.717	6.717	0.000	392369909	NC	NC	
6 Orthophosphate as P	8.530	8.530	0.000	216637163	NC	NC	
7 Sulfate	9.610	9.610	0.000	1757412080	120.0	121.0	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

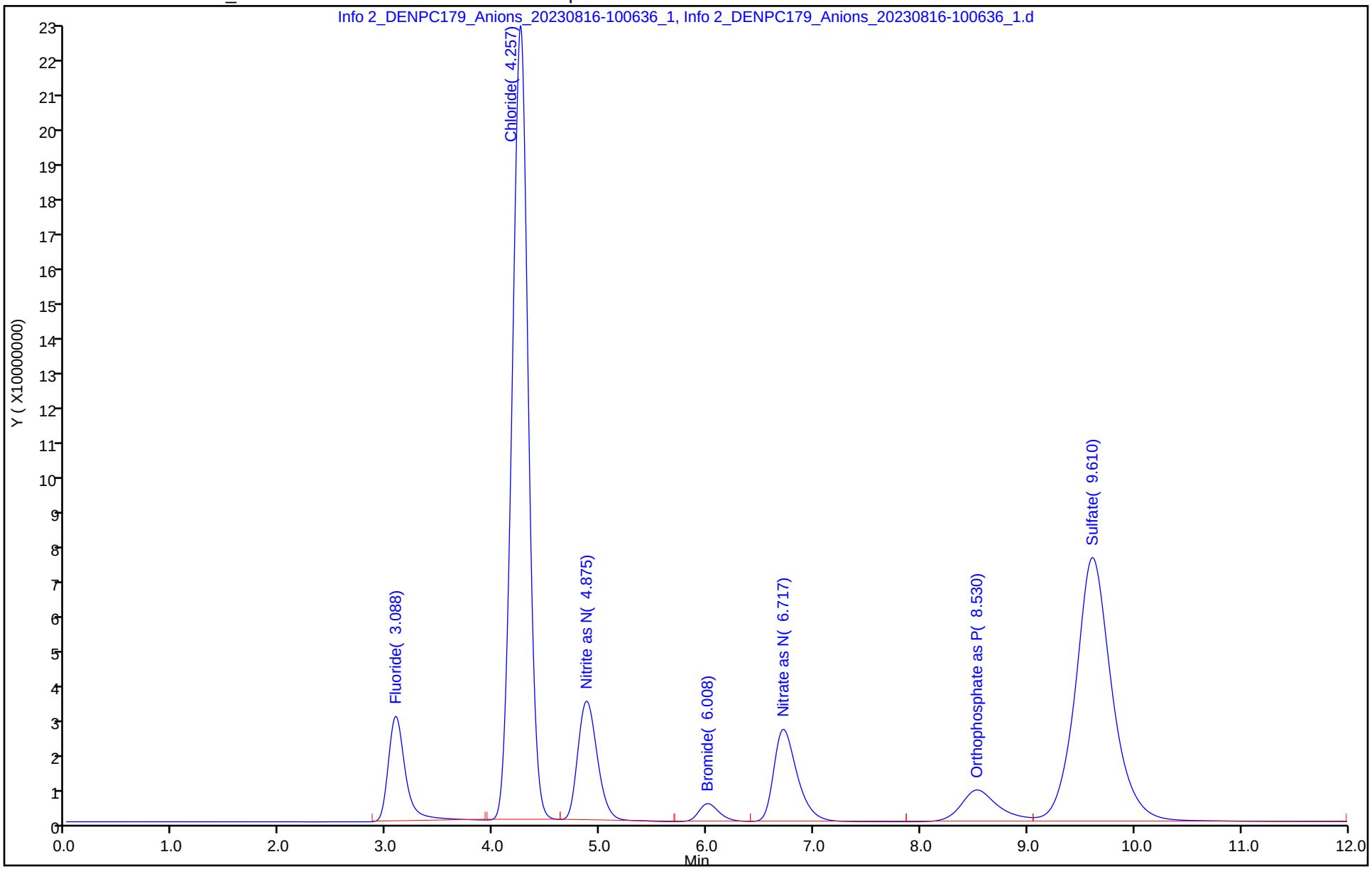
Reagents:

IC Cal low_00722 Amount Added: 1.60 Units: mL
IC CAL cl/so4_00494 Amount Added: 4.80 Units: mL

Report Date: 17-Aug-2023 10:41:31 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100636_1.d				
Injection Date:	16-Aug-2023 09:24:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD5			Worklist Smp#:	5
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



12/5/2023 8:25 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Injection Date: 16-Aug-2023 09:24:00 Instrument ID: WC_IonChrom10

Lims ID: STD5

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 5

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions 28D

Column: Detector Info 2_091554_1

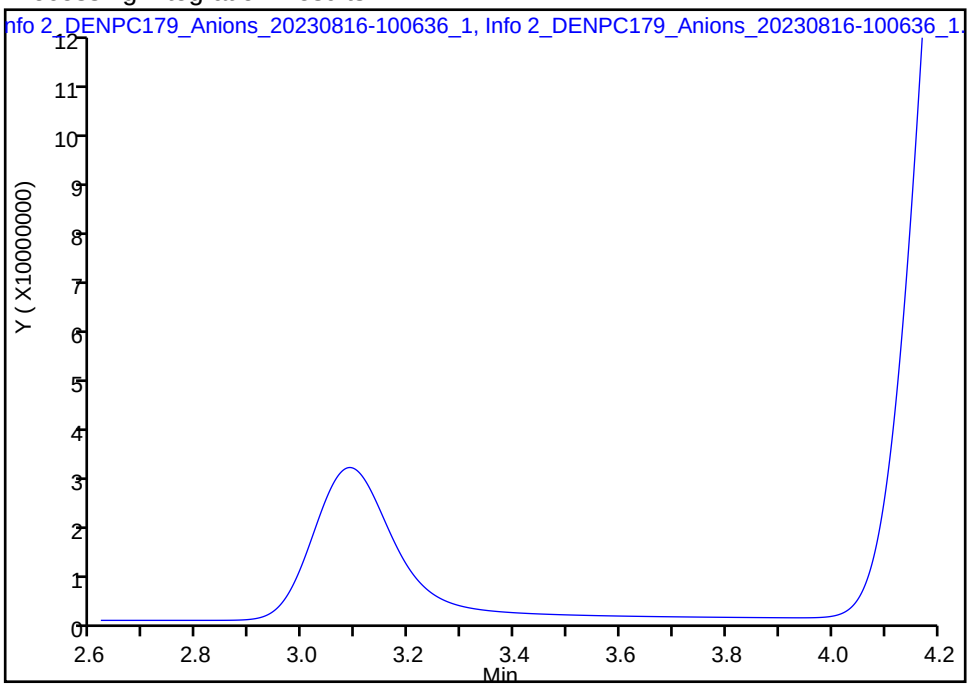
1 Fluoride, CAS: 16984-48-8

Signal: 1

Not Detected

Expected RT: 3.09

Processing Integration Results



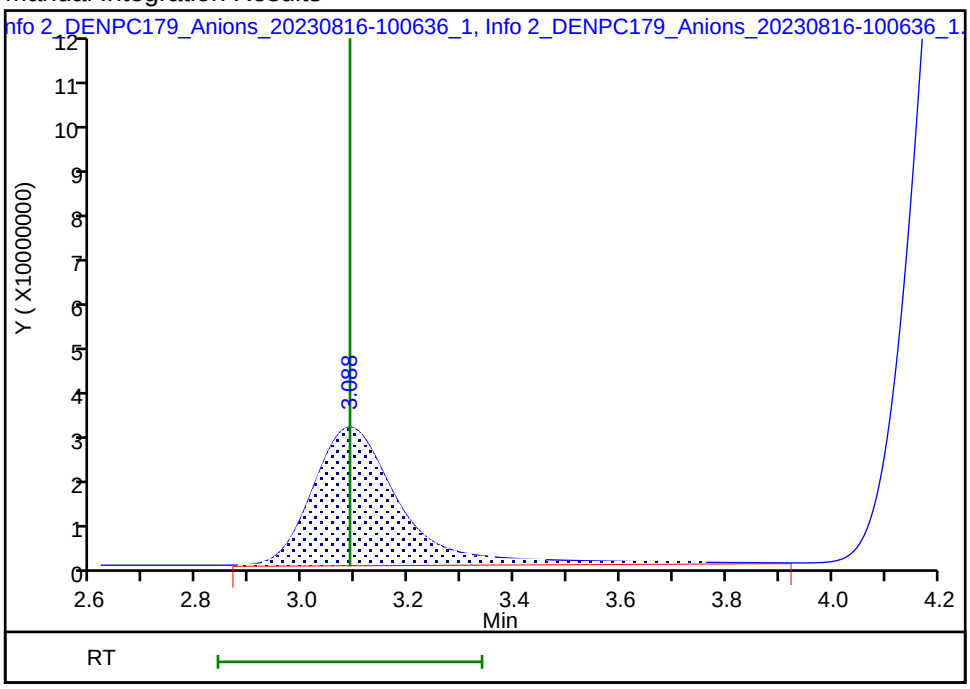
Manual Integration Results

RT: 3.09

Area: 330613515

Amount: 7.953769

Amount Units: ug/ml



Reviewer: LVW8, 16-Aug-2023 10:30:00 -06:00:00 (UTC)

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100
Lims ID: STD6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 16-Aug-2023 09:39:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0124540-006
Misc. Info.: 280-0124540-006
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub9

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 17-Aug-2023 10:39:54 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1649

First Level Reviewer: LVW8 Date: 16-Aug-2023 10:29:55

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.085	3.088	-0.003	411861883	10.0	9.90	Ma
2 Chloride	4.292	4.257	0.035	3859357572	200.0	199.8	
3 Nitrite as N	4.877	4.875	0.002	519039593	NC	NC	
4 Bromide	5.998	6.008	-0.010	84169414	10.0	10.2	
5 Nitrate as N	6.708	6.717	-0.009	493796088	NC	NC	
6 Orthophosphate as P	8.523	8.530	-0.007	259679126	NC	NC	
7 Sulfate	9.588	9.610	-0.022	2909731694	200.0	200.3	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

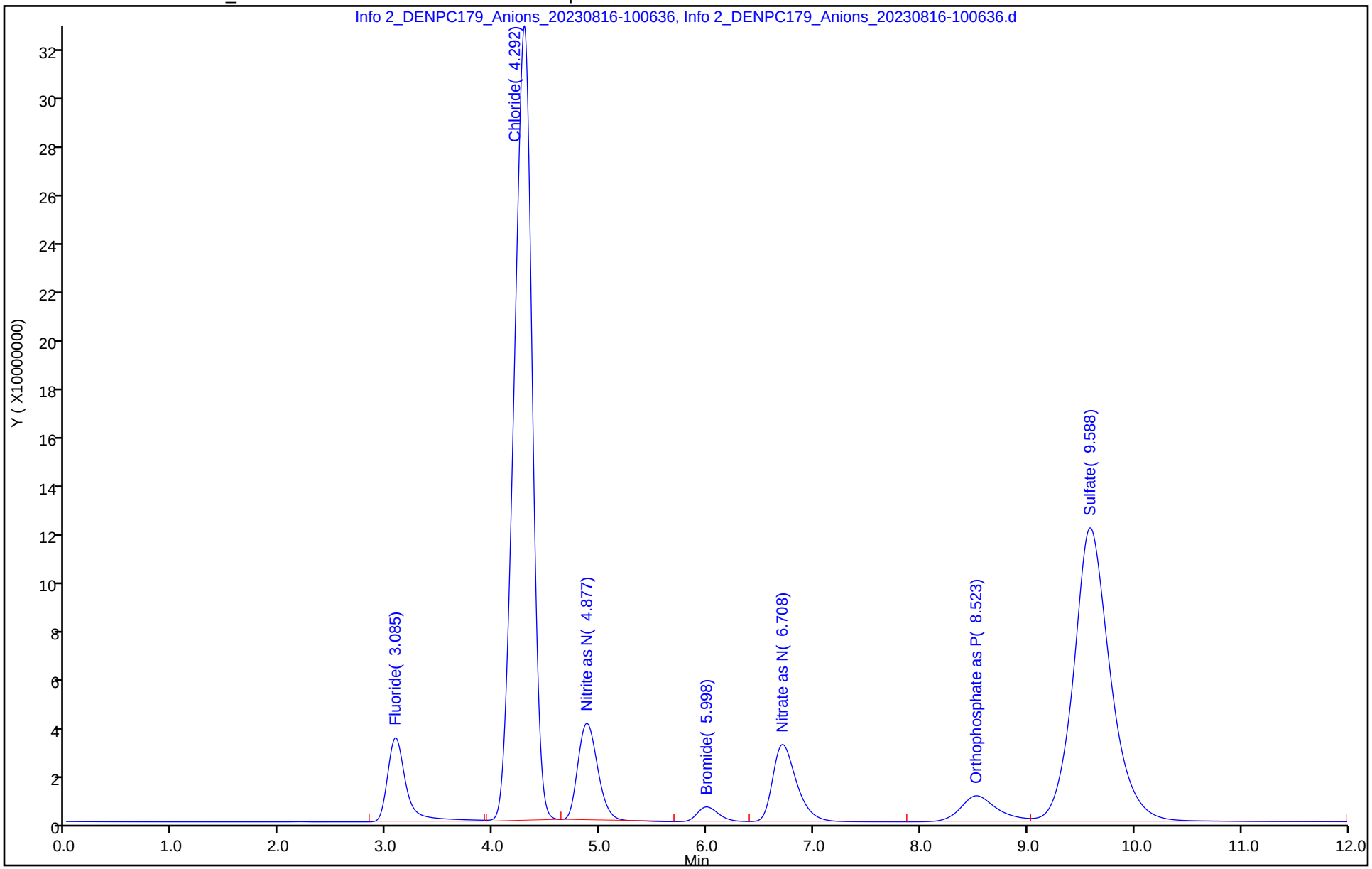
Reagents:

IC Cal low_00722 Amount Added: 2.00 Units: mL
IC CAL cl/so4_00494 Amount Added: 8.00 Units: mL

Report Date: 17-Aug-2023 10:39:55 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100636.d				
Injection Date:	16-Aug-2023 09:39:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD6			Worklist Smp#:	6
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



12/5/2023 8:25 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Injection Date: 16-Aug-2023 09:39:00 Instrument ID: WC_IonChrom10

Lims ID: STD6

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 6

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions 28D

Column: Detector Info 2_091554_1

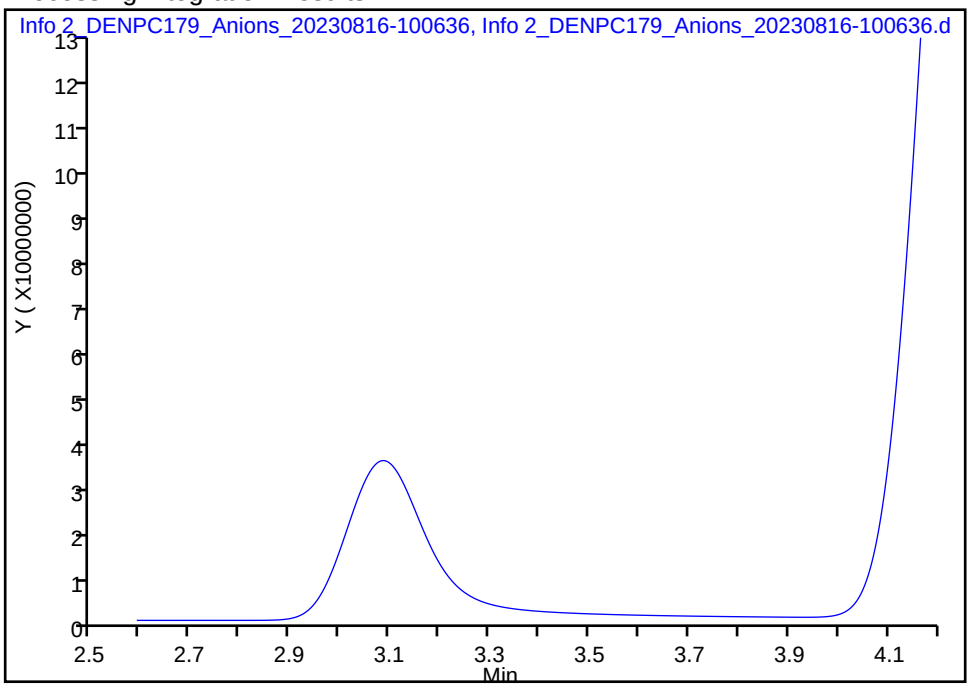
1 Fluoride, CAS: 16984-48-8

Signal: 1

Not Detected

Expected RT: 3.09

Processing Integration Results



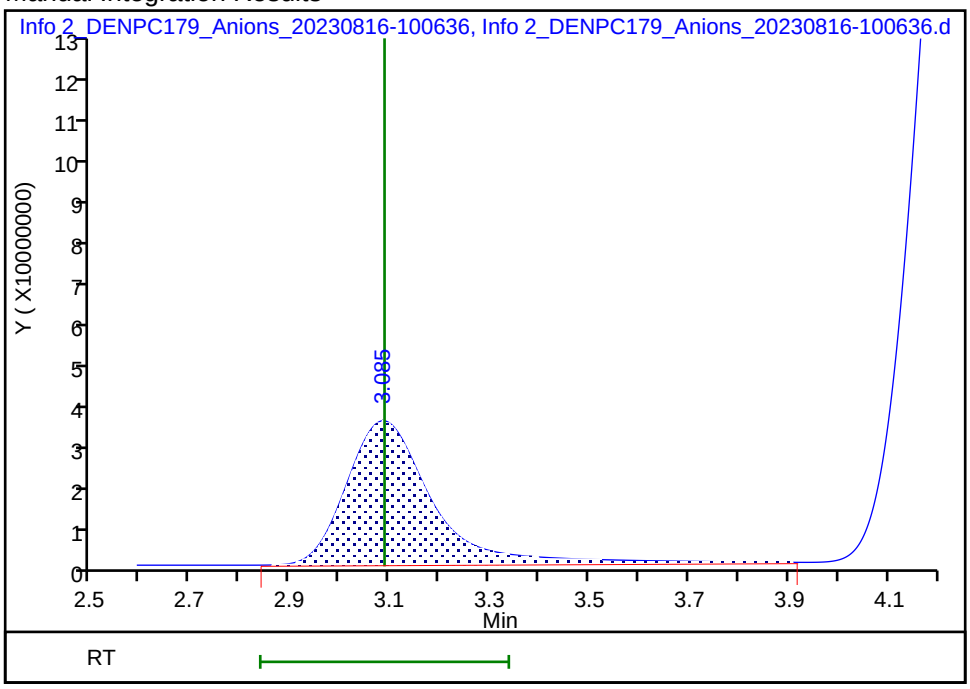
Manual Integration Results

RT: 3.09

Area: 411861883

Amount: 9.898100

Amount Units: ug/ml



Reviewer: LVW8, 16-Aug-2023 10:29:52 -06:00:00 (UTC)

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Eurofins Environment Testing America
Worklist Report

Worklist Name: 08 15 23 CAL
Worklist Number: 124540
Instrument Name: WC_IonChrom10
Chrom Method: Anions_IC10
Injection Volume: 5.000
Units: ul
Analysis Type: Semi VOA
Batch Directory: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b
Upload Directory: \\CORPTALSAPP16\280-DN-RawData\WetChem\IonChrom10

Smp #	Lims ID	Smp Type	Ical Lvl	Dil Fact	Fract	Initial Vol/Wt	Vol/Wt Units	Sample Reagents	pH	Comment
1	# 1 STD1	IC	1	1.000	rectInjection	10.00	mL	IC Cal low_00722 IC CAL cl/so4_00494		
2	# 2 STD2	IC	2	1.000	rectInjection	10.00	mL	IC Cal low_00722 IC CAL cl/so4_00494		
3	# 3 STD3	IC	3	1.000	rectInjection	10.00	mL	IC Cal low_00722 IC CAL cl/so4_00494		
4	# 4 STD4	IC	4	1.000	rectInjection	10.00	mL	IC Cal low_00722 IC CAL cl/so4_00494		
5	# 5 STD5	IC	5	1.000	rectInjection	10.00	mL	IC Cal low_00722 IC CAL cl/so4_00494		
6	# 6 STD6	IC	6	1.000	rectInjection	10.00	mL	IC Cal low_00722 IC CAL cl/so4_00494		
7	# 7 rtc	RTC		1.000	rectInjection	10.00	mL	IC LCS_01972		
8	# 8 icv	ICV		1.000	rectInjection	10.00	mL	IC ICV 5_00413 IC SO4 ICV_00024 Cl ICV Std_00006		
9	# 9 icb	ICB		1.000	rectInjection	10.00	mL			
10	#10 mrl	MRL		1.000	rectInjection	10.00	mL	IC Cal low_00722 IC CAL cl/so4_00494		
11	#11 lcs	LCS		1.000	rectInjection	10.00	mL	IC LCS_01972		
12	#12 lcsd	LCSD		1.000	rectInjection	10.00	mL	IC LCS_01972		
13	#13 mb	MB		1.000	rectInjection	10.00	mL			
14	#14 280-180347-D-18	Client		1.000	rectInjection	10.00	mL			
15	#15 280-180347-D-19	Client		1.000	rectInjection	10.00	mL			
16	#16 280-180347-D-20	Client		1.000	rectInjection	10.00	mL			
17	#17 280-179722-B-11-A	Client		1.000	rectInjection	10.00	mL			
18	#18 280-179722-B-11-A	Client		10.00	rectInjection	10.00	mL			
19	#19 280-179722-C-6-A	Client		1.000	rectInjection	10.00	mL			
20	#20 280-179722-C-6-A	Client		10.00	rectInjection	10.00	mL			
21	#21 280-180350-B-2	Client		1.000	rectInjection	10.00	mL			
22	#22 280-180350-B-3	Client		1.000	rectInjection	10.00	mL			
23	#23 280-180361-A-2	Client		1.000	rectInjection	10.00	mL			
24	#24 ccv	CCV		1.000	rectInjection	10.00	mL	IC LCS_01972		
25	#25 ccb	CCB		1.000	rectInjection	10.00	mL			
26	#26 280-180361-A-2 DU	DU		1.000	rectInjection	10.00	mL			
27	#27 280-180361-A-2 MS	MS		1.000	rectInjection	10.00	mL	ICMS/MSD WEEK_00831		
28	#28 280-180361-A-2 MSD	MSD		1.000	rectInjection	10.00	mL	ICMS/MSD WEEK_00831		
29	#29 280-180361-A-1	Client		10.00	rectInjection	10.00	mL			
30	#30 280-180349-B-2	Client		1.000	rectInjection	10.00	mL			
31	#31 280-180363-A-1	Client		1.000	rectInjection	10.00	mL			
32	#32 280-180362-A-1	Client		5.000	rectInjection	10.00	mL			
33	#33 280-180359-A-3	Client		1.000	rectInjection	10.00	mL			
34	#34 280-180362-A-2	Client		5.000	rectInjection	10.00	mL			
35	#35 280-180359-A-2	Client		2.000	rectInjection	10.00	mL			
36	#36 ccv	CCV		1.000	rectInjection	10.00	mL	IC LCS_01972		
37	#37 ccb	CCB		1.000	rectInjection	10.00	mL			
38	#38 280-180363-A-3	Client		1.000	rectInjection	10.00	mL			
39	#39 280-180363-A-2	Client		1.000	rectInjection	10.00	mL			
40	#40 280-180363-A-2 DU	DU		1.000	rectInjection	10.00	mL			
41	#41 280-180363-A-2 MS	MS		1.000	rectInjection	10.00	mL	ICMS/MSD WEEK_00831		
42	#42 280-180363-A-2 MSD	MSD		1.000	rectInjection	10.00	mL	ICMS/MSD WEEK_00831		
43	#43 280-180359-A-4	Client		1.000	rectInjection	10.00	mL			
44	#44 280-180349-B-3	Client		1.000	rectInjection	10.00	mL			
45	#45 280-180359-A-1	Client		1.000	rectInjection	10.00	mL			
46	#46 lcs	LCS		1.000	rectInjection	10.00	mL	IC LCS_01972		
47	#47 lcsd	LCSD		1.000	rectInjection	10.00	mL	IC LCS_01972		
48	#48 ccv	CCV		1.000	rectInjection	10.00	mL	IC LCS_01972		
49	#49 ccb	CCB		1.000	rectInjection	10.00	mL			
50	#50 mb	MB		1.000	rectInjection	10.00	mL			
51	#51 280-180355-A-1	Client		1.000	rectInjection	10.00	mL			
52	#52 280-180360-B-5	Client		2.000	rectInjection	10.00	mL			
53	#53 280-180362-A-4	Client		1.000	rectInjection	10.00	mL			
54	#54 280-180362-A-4 DU	DU		1.000	rectInjection	10.00	mL			

Smp #	Lims ID	Smp Type	Ical Lvl	Dil Fact	Fract	Initial Vol/Wt	Vol/Wt Units	Sample Reagents	pH	Comment
55	#55 280-180362-A-4 MS	MS		1.000	rectInjection	10.00	mL	ICMS/MSD WEEK_00831		
56	#56 280-180362-A-4 MSD	MSD		1.000	rectInjection	10.00	mL	ICMS/MSD WEEK_00831		
57	#57 280-180360-B-3	Client		1.000	rectInjection	10.00	mL			
58	#58 280-180360-B-1	Client		1.000	rectInjection	10.00	mL			
59	#59 ccv	CCV		1.000	rectInjection	10.00	mL	IC LCS_01972		
60	#60 ccb	CCB		1.000	rectInjection	10.00	mL			

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 17-Aug-2023 11:15:05
No.Compounds:7
Sublist: chrom-Anions_IC10*sub9
Limit Group: Wet - Anions

Detectors

Detector: 1, Info 2_091554_1
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-14.933 No. Points: 7196

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 08:23:00 Worklist: 124540 Sample#: 1
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 08:38:00 Worklist: 124540 Sample#: 2
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 08:54:00 Worklist: 124540 Sample#: 3
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 09:09:00 Worklist: 124540 Sample#: 4
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 09:24:00 Worklist: 124540 Sample#: 5
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 09:39:00 Worklist: 124540 Sample#: 6

Start Cal Date: 16-Aug-2023 08:23:00 End Cal Date: 16-Aug-2023 09:39:00

Individual Compound Calibration Parameters

Quant Method: ESTD RF Calibration: Replace
Rule Name: Linear1 Curve: Linear Weighting: Conc
Origin: None Error: raw_COD Error Limit: 1.00
RF %Dif: 0.0 SPCC Limit: 0.0 CCC Limit: 0.0
Dependent Variable: Resp

Number of Compounds: 3

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
3 Nitrite as N				Signal: 1					
47471195	51179524	53593060	54652809	52854220	51903959	-659672			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		52874248		
9494239	25589762	53593060	218611235	422833757	519039593				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				
5 Nitrate as N				Signal: 1					
44046915	44259096	44959242	48028628	49046239	49379609	-1793758			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		49153639		
8809383	22129548	44959242	192114513	392369909	493796088				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				
6 Orthophosphate as P				Signal: 1					
101865985	61427992	42106377	29713426	27079645	25967913	16373185			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		24899766		
M20373197	M30713996	M42106377	M118853705	216637163	259679126				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 17-Aug-2023 11:15:05
No.Compounds:7
Sublist: chrom-Anions_IC10*sub9
Limit Group: Wet - Anions 28D

Detectors

Detector: 1, Info 2_091554_1
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-14.933 No. Points: 7196

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 08:23:00 Worklist: 124540 Sample#: 1
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 08:38:00 Worklist: 124540 Sample#: 2
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 08:54:00 Worklist: 124540 Sample#: 3
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 09:09:00 Worklist: 124540 Sample#: 4
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 09:24:00 Worklist: 124540 Sample#: 5
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 09:39:00 Worklist: 124540 Sample#: 6

Start Cal Date: 16-Aug-2023 08:23:00 End Cal Date: 16-Aug-2023 09:39:00

Individual Compound Calibration Parameters

Quant Method: ESTD RF Calibration: Replace
Rule Name: Linear1 Curve: Linear Weighting: Conc
Origin: None Error: raw_COD Error Limit: 1.00
RF %Dif: 0.0 SPCC Limit: 0.0 CCC Limit: 0.0
Dependent Variable: Resp

Number of Compounds: 4

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
1 Fluoride				Signal: 1					
32469200	37215236	40803610	42864993	41326689	41186188	-1753153			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		41787315		
M6493840	M18607618	M40803610	M171459973	M330613515	M411861883				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				
2 Chloride				Signal: 1					
16343527	17656926	18478080	19312060	19322788	19296788	-3421991			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		19331335		
16343527	44142315	92390398	1158723576	2318734502	3859357572				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				
4 Bromide				Signal: 1					
11065780	8675128	7960626	8036663	8307849	8416941	361716			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		8232908		
2213156	4337564	7960626	32146652	66462794	84169414				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				
7 Sulfate				Signal: 1					
16127136	13095082	12454383	14328878	14645101	14548658	-1219203			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		14531090		
M16127136	M32737705	M62271915	M859732703	1757412080	2909731694				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				

Preliminary Report

Eurofins Denver
ICV, ICal Verification Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 16-Aug-2023 10:08:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0124540-008
Misc. Info.: 280-0124540-008
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist:

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 17-Aug-2023 11:15:05 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10(

Column 1 : Det: Info 2_091554_1
Process Host: CTX1649

First Level Reviewer: LVW8 Date: 17-Aug-2023 11:27:01

Start Cal Date: 16-Aug-2023 08:23:00
End Cal Date: 16-Aug-2023 09:39:00

Compound	Amount Added	Amount Detected	%Drift	Max. %Drift	%Rec	%Rec Limits
1 Fluoride	4.00	3.60	*-10.0	10.0	90.0	
2 Chloride	80.0	84.0	5.0	10.0	105.0	
4 Bromide	4.00	3.88	-3.1	10.0	96.9	
7 Sulfate	80.0	81.1	1.3	10.0	101.3	

Preliminary Report

Eurofins Denver
ICV, ICal Verification Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 16-Aug-2023 10:08:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0124540-008
Misc. Info.: 280-0124540-008
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist:

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 17-Aug-2023 11:27:17 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10(

Column 1 : Det: Info 2_091554_1
Process Host: CTX1649

First Level Reviewer: LVW8 Date: 17-Aug-2023 11:27:17

Start Cal Date: 16-Aug-2023 08:23:00
End Cal Date: 16-Aug-2023 09:39:00

Compound	Amount Added	Amount Detected	%Drift	Max. %Drift	%Rec	%Rec Limits
3 Nitrite as N	4.00	4.14	3.5	10.0	103.5	
5 Nitrate as N	4.00	3.95	-1.2	10.0	98.8	
6 Orthophosphate as	4.00	4.21	5.3	10.0	105.3	

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Soil / Hazardous Waste PT Concentration Ranges and PTRLs

PTRL TNI Proficiency Testing Reporting Limits (PTRLs) are provided as guidance to laboratories analyzing TNI PT samples. At a minimum, the laboratory should use a method that is sensitive enough to generate quantitative results at the PTRLs shown. (REF: TNI PT FOT Tables)

NA Not Applicable (NA) has been applied to analytes where a PTRL is not applicable and to state specific analytes that have not had a PTRL determined by the applicable accrediting agency.

Anions

NELAC Code	Analyte Name	Units	Concentration Range	PTRL
1540	Bromide	mg/kg	10.0 - 100	1.00
1575	Chloride	mg/kg	200 - 1000	20.0
1730	Fluoride	mg/kg	25.0 - 500	2.50
1810	Nitrate as N	mg/kg	25.0 - 500	2.50
2000	Sulfate	mg/kg	25.0 - 2000	2.50
1870	Orthophosphate as P	mg/kg	25.0 - 500	NA

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Golden, CO 80403

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Fax 866-283-0269
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Instructions for Soil (HW) - Anions

SAMPLE DESCRIPTION

- Provided as a 40 g pre-spiked soil matrix in a 2 oz glass jar.
- This standard can be stored at room temperature (20 - 25° C).

GENERAL INFORMATION

- This standard is pre-spiked and ready to use,
- This standard is pre-dried so percent moisture is 0%.
- The standard will contain the analytes within the required concentration range.
- Store any remaining standard at room temperature (20 - 25° C).
- It is recommended to save any remaining standard until final reports have been sent.

ADDITIONAL INFORMATION

- This standard was designed for use with deionized water extraction technique.
- Due to potential settling during shipping, homogenize this standard before taking an aliquot.

INSTRUCTIONS

- This standard is pre-spiked and ready to use.
- Thoroughly mix the standard prior to removing an aliquot.
- Extract an aliquot of the sample and analyze by your normal procedure.
- Report result in mg/kg.

Please take all necessary safety precautions when handling this product. Phenova products are intended for use by laboratory professionals only and may be hazardous. Buyer/user shall ensure sufficient knowledge, training, facilities and skills necessary to safely handle and store products provided. Material Safety Data Sheets (MSDS) for all Phenova products are available upon request.

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Performance Test (PT) Preparation Form

Preparation

Job #: 280-179722 Sample # 6

Method: ~~300~~ MEC 9056 48Hr/28D

Sample Name (*from vial or PT instructions*): Soil (HW) - Anions

Standard Lot #(s) or Vial #(s) (If Applicable): 7093-08

Analyst Review of PT Instructions by (Initials): MEC (Date): 8/16/23

PT Sample Type: _____ Ampoule ____ Whole volume

Volume or Weight of PT Sample Used : 10 (Units): G

Prepared Volume of diluted PT Sample (If reagent blank spiked from ampoule):

_____(Units):_____

2nd Analyst Witness/Review of PT Instructions by (Initials): mp (Date): 8-16-23
(This 2nd level review is to be done at the time of PT preparation)

Include a copy of the PT instructions with this form, and include both in the batch folder.

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-104
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 16-Aug-2023 10:08:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0124540-008
Misc. Info.: 280-0124540-008
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist:

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 17-Aug-2023 11:45:40 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1649

First Level Reviewer: LVW8 Date: 17-Aug-2023 11:27:17

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.078	3.078	0.000	148600573	4.00	3.60	Ma
2 Chloride	4.238	4.238	0.000	1620371327	80.0	84.0	
3 Nitrite as N	4.873	4.873	0.000	218249168	NC	NC	
4 Bromide	6.012	6.012	0.000	32280328	4.00	3.88	
5 Nitrate as N	6.723	6.723	0.000	192424246	NC	NC	
6 Orthophosphate as P	8.545	8.545	0.000	121270311	NC	NC	
7 Sulfate	9.628	9.628	0.000	1176664399	80.0	81.1	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

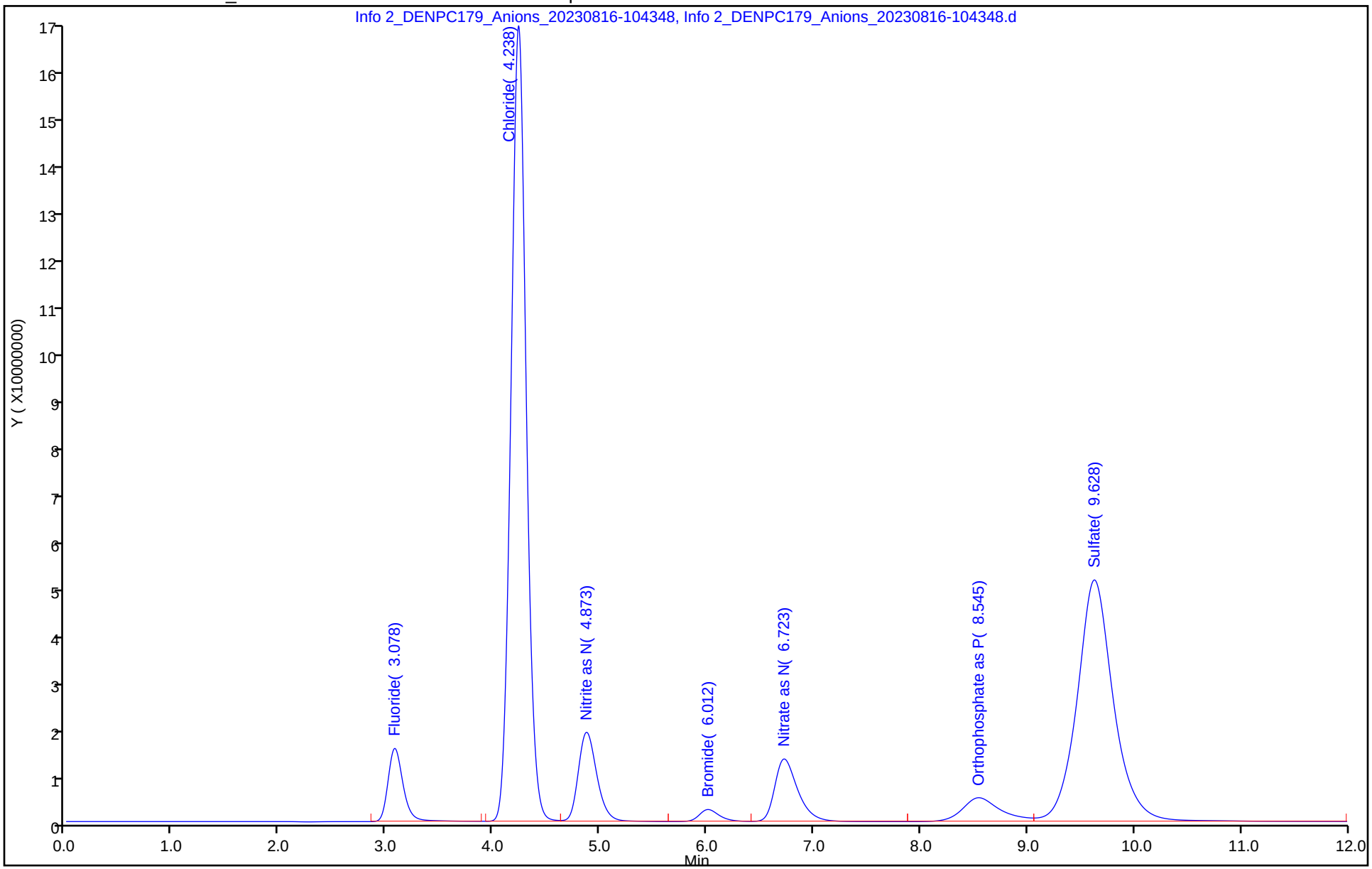
IC ICV 5_00413	Amount Added:	0.80	Units: mL
IC SO4 ICV_00024	Amount Added:	0.80	Units: mL
Cl ICV Std_00006	Amount Added:	0.80	Units: mL

Report Date: 17-Aug-2023 11:45:40 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-104348.d

Injection Date:	16-Aug-2023 10:08:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	icv			Worklist Smp#:	8
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



12/5/2023 8:25 AM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-104
Lims ID: icb
Client ID:
Sample Type: ICB
Inject. Date: 16-Aug-2023 10:23:00 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0124540-009
Misc. Info.: 280-0124540-009
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 17-Aug-2023 11:45:40 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1649

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078				ND	
2 Chloride	4.200	4.238	-0.038	264090		0.1907	
3 Nitrite as N	4.857	4.873	-0.016	208499		NC	
4 Bromide	6.118	6.012	0.106	349466		-0.001488	
5 Nitrate as N		6.723				ND	
6 Orthophosphate as P	8.595	8.545	0.050	6392990		NC	
7 Sulfate	9.723	9.628	0.095	5568928		0.4671	

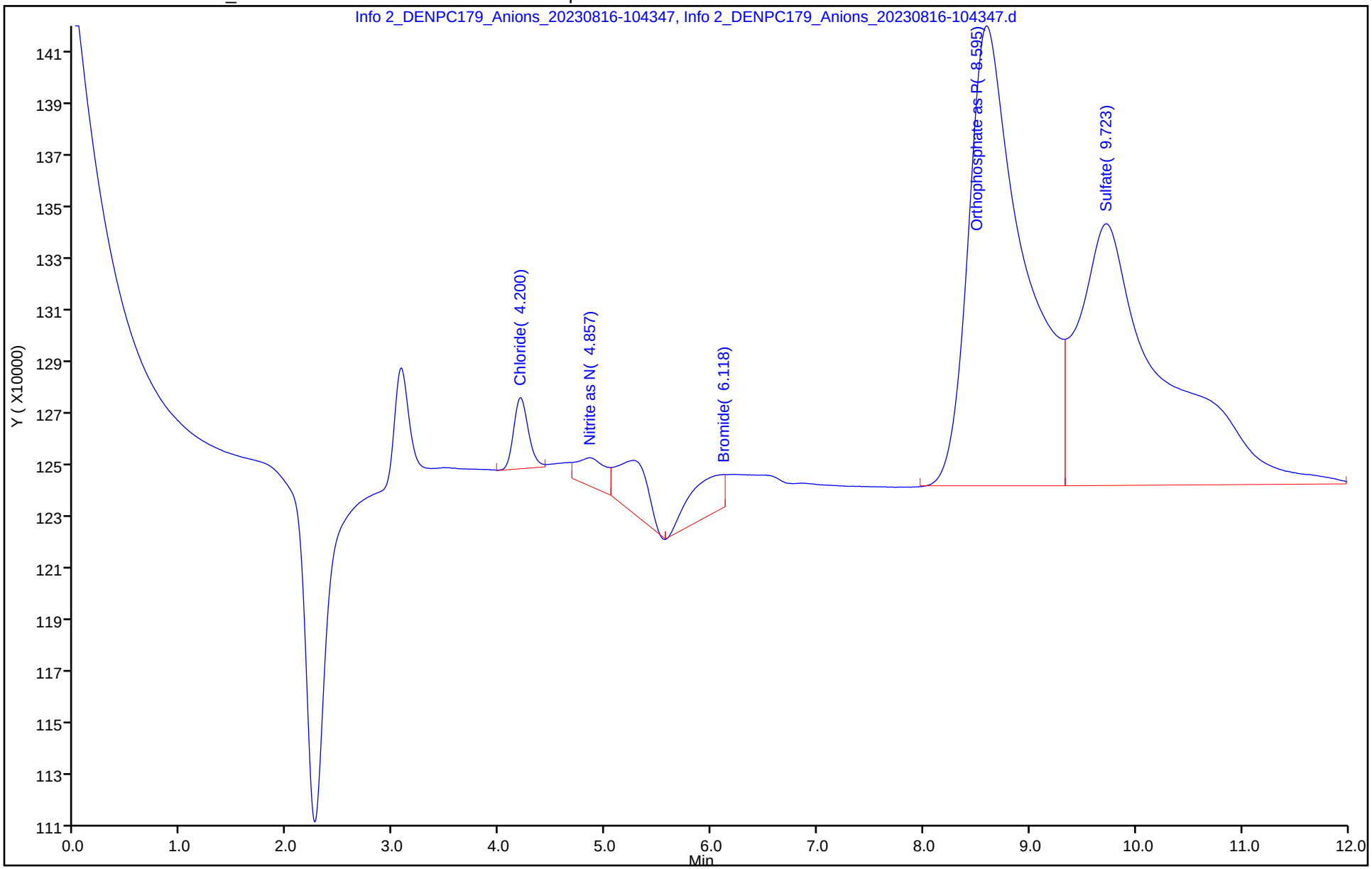
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 17-Aug-2023 11:45:41 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-104347.d				
Injection Date:	16-Aug-2023 10:23:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	icb			Worklist Smp#:	9
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



12/5/2023 8:25 AM

Eurofins Environment Testing
Worklist Report

Worklist Name: 09 29 23 Worklist Number: 125974
Instrument Name: WC_IonChrom10 Chrom Method: Anions_IC10
Injection Volume: 5.000 Units: ul
Analysis Type: Semi VOA
Batch Directory: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b
Upload Directory: \\CORPTALSAPP16\280-DN-RawData\WetChem\IonChrom10

Smp #	Lims ID	Smp Type	Dil Fact	Fract	Initial Vol/Wt	Vol/Wt Units	Sample Reagents	pH	Comment
1	# 1 ccv	CCV	1.000	irectInjection	10.00	mL	IC LCS_01980		
2	# 2 ccb	CCB	1.000	irectInjection	10.00	mL			
3	# 3 mrl	MRL	1.000	irectInjection	10.00	mL	IC Cal low_00731 IC CAL cl/so4_00501		
4	# 4 lcs	LCS	1.000	irectInjection	10.00	mL	IC LCS_01980		
5	# 5 lcsd	LCSD	1.000	irectInjection	10.00	mL	IC LCS_01980		
6	# 6 mb	MB	1.000	irectInjection	10.00	mL			
7	# 7 280-182083-A-1	Client	100.0	irectInjection	10.00	mL			
8	# 8 280-182142-D-3	Client	1.000	irectInjection	10.00	mL			
9	# 9 280-182145-A-1	Client	1.000	irectInjection	10.00	mL			
10	#10 280-182145-A-2	Client	1.000	irectInjection	10.00	mL			
11	#11 280-182145-A-3	Client	1.000	irectInjection	10.00	mL			
12	#12 280-182145-A-4	Client	1.000	irectInjection	10.00	mL			
13	#13 280-182145-A-5	Client	1.000	irectInjection	10.00	mL			
14	#14 280-182145-A-5 DU	DU	1.000	irectInjection	10.00	mL			
15	#15 280-182145-A-5 MS	MS	1.000	irectInjection	10.00	mL	ICMS/MSD WEEK_00838		
16	#16 280-182145-A-5 MSD	MSD	1.000	irectInjection	10.00	mL	ICMS/MSD WEEK_00838		
17	#17 ccv	CCV	1.000	irectInjection	10.00	mL	IC LCS_01980		
18	#18 ccb	CCB	1.000	irectInjection	10.00	mL			
19	#19 280-182145-A-6	Client	1.000	irectInjection	10.00	mL			
20	#20 280-182144-A-8	Client	1.000	irectInjection	10.00	mL			
21	#21 280-182144-B-1	Client	1.000	irectInjection	10.00	mL			
22	#22 280-182162-E-1	Client	1.000	irectInjection	10.00	mL			
23	#23 280-182162-F-2	Client	1.000	irectInjection	10.00	mL			
24	#24 280-182144-A-9	Client	1.000	irectInjection	10.00	mL			
25	#25 280-182144-A-9 DU	DU	1.000	irectInjection	10.00	mL			
26	#26 280-182144-A-9 MS	MS	1.000	irectInjection	10.00	mL	ICMS/MSD WEEK_00838		
27	#27 280-182144-A-9 MSD	MSD	1.000	irectInjection	10.00	mL	ICMS/MSD WEEK_00838		
28	#28 280-182145-B-9	Client	1.000	irectInjection	10.00	mL			
29	#29 ccv	CCV	1.000	irectInjection	10.00	mL	IC LCS_01980		
30	#30 ccb	CCB	1.000	irectInjection	10.00	mL			
31	#31 280-182142-C-2	Client	1.000	irectInjection	10.00	mL			
32	#32 280-182144-A-7	Client	1.000	irectInjection	10.00	mL			
33	#33 280-182162-F-3	Client	1.000	irectInjection	10.00	mL			
34	#34 280-182142-C-1	Client	1.000	irectInjection	10.00	mL			
35	#35 280-182144-A-2	Client	1.000	irectInjection	10.00	mL			
36	#36 280-182144-A-6	Client	1.000	irectInjection	10.00	mL			
37	#37 lcs	LCS	1.000	irectInjection	10.00	mL	IC LCS_01980		
38	#38 lcsd	LCSD	1.000	irectInjection	10.00	mL	IC LCS_01980		
39	#39 mb	MB	1.000	irectInjection	10.00	mL			
40	#40 280-182144-A-10	Client	1.000	irectInjection	10.00	mL			
41	#41 ccv	CCV	1.000	irectInjection	10.00	mL	IC LCS_01980		
42	#42 ccb	CCB	1.000	irectInjection	10.00	mL			
43	#43 280-182144-A-5	Client	1.000	irectInjection	10.00	mL			
44	#44 280-182145-B-10	Client	1.000	irectInjection	10.00	mL			
45	#45 280-182144-A-3	Client	1.000	irectInjection	10.00	mL			
46	#46 280-182162-F-4	Client	1.000	irectInjection	10.00	mL			
47	#47 280-182162-D-7	Client	1.000	irectInjection	10.00	mL			
48	#48 280-182143-A-1	Client	1.000	irectInjection	10.00	mL			
49	#49 280-182144-B-4	Client	1.000	irectInjection	10.00	mL			
50	#50 280-182144-B-4 DU	DU	1.000	irectInjection	10.00	mL			
51	#51 280-182144-B-4 MS	MS	1.000	irectInjection	10.00	mL	ICMS/MSD WEEK_00838		
52	#52 280-182144-B-4 MSD	MSD	1.000	irectInjection	10.00	mL	ICMS/MSD WEEK_00838		
53	#53 ccv	CCV	1.000	irectInjection	10.00	mL	IC LCS_01980		
54	#54 ccb	CCB	1.000	irectInjection	10.00	mL			
55	#55 280-182162-E-5	Client	1.000	irectInjection	10.00	mL			
56	#56 280-182140-G-2	Client	1.000	irectInjection	10.00	mL			
57	#57 280-182140-G-3	Client	5.000	irectInjection	10.00	mL			
58	#58 280-182162-E-6	Client	1.000	irectInjection	10.00	mL			
59	#59 280-182162-E-6 DU	DU	1.000	irectInjection	10.00	mL			
60	#60 280-182162-E-6 MS	MS	1.000	irectInjection	10.00	mL	ICMS/MSD WEEK_00838		
61	#61 280-182162-E-6 MSD	MSD	1.000	irectInjection	10.00	mL	ICMS/MSD WEEK_00838		
62	#62 280-182140-G-4	Client	5.000	irectInjection	10.00	mL			

Smp #	Lims ID	Smp Type	Dil Fact	Fract	Initial Vol/Wt	Vol/Wt Units	Sample Reagents	pH	Comment
63	#63 280-182164-F-1	Client	50.00	irectInjection	10.00	mL			
64	#64 ccv	CCV	1.000	irectInjection	10.00	mL	IC LCS_01980		
65	#65 ccb	CCB	1.000	irectInjection	10.00	mL			
66	#66 280-182180-F-1	Client	1.000	irectInjection	10.00	mL			
67	#67 280-182180-F-2	Client	1.000	irectInjection	10.00	mL			
68	#68 280-182180-F-3	Client	1.000	irectInjection	10.00	mL			
69	#69 280-182180-F-4	Client	1.000	irectInjection	10.00	mL			
70	#70 ccv	CCV	1.000	irectInjection	10.00	mL	IC LCS_01980		
71	#71 ccb	CCB	1.000	irectInjection	10.00	mL			

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 17-Aug-2023 11:15:05
No.Compounds:7
Sublist: chrom-Anions_IC10*sub9
Limit Group: Wet - Anions

Detectors

Detector: 1, Info 2_091554_1
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-14.933 No. Points: 7196

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 08:23:00 Worklist: 124540 Sample#: 1
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 08:38:00 Worklist: 124540 Sample#: 2
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 08:54:00 Worklist: 124540 Sample#: 3
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 09:09:00 Worklist: 124540 Sample#: 4
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 09:24:00 Worklist: 124540 Sample#: 5
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 09:39:00 Worklist: 124540 Sample#: 6

Start Cal Date: 16-Aug-2023 08:23:00 End Cal Date: 16-Aug-2023 09:39:00

Individual Compound Calibration Parameters

Quant Method: ESTD RF Calibration: Replace
Rule Name: Linear1 Curve: Linear Weighting: Conc
Origin: None Error: raw_COD Error Limit: 1.00
RF %Dif: 0.0 SPCC Limit: 0.0 CCC Limit: 0.0
Dependent Variable: Resp

Number of Compounds: 3

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
3 Nitrite as N				Signal: 1					
47471195	51179524	53593060	54652809	52854220	51903959	-659672			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		52874248		
9494239	25589762	53593060	218611235	422833757	519039593				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				
5 Nitrate as N				Signal: 1					
44046915	44259096	44959242	48028628	49046239	49379609	-1793758			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		49153639		
8809383	22129548	44959242	192114513	392369909	493796088				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				
6 Orthophosphate as P				Signal: 1					
101865985	61427992	42106377	29713426	27079645	25967913	16373185			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		24899766		
M20373197	M30713996	M42106377	M118853705	216637163	259679126				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 17-Aug-2023 11:15:05
No.Compounds:7
Sublist: chrom-Anions_IC10*sub9
Limit Group: Wet - Anions 28D

Detectors

Detector: 1, Info 2_091554_1
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-14.933 No. Points: 7196

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 08:23:00 Worklist: 124540 Sample#: 1
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 08:38:00 Worklist: 124540 Sample#: 2
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 08:54:00 Worklist: 124540 Sample#: 3
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 09:09:00 Worklist: 124540 Sample#: 4
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 09:24:00 Worklist: 124540 Sample#: 5
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 09:39:00 Worklist: 124540 Sample#: 6

Start Cal Date: 16-Aug-2023 08:23:00 End Cal Date: 16-Aug-2023 09:39:00

Individual Compound Calibration Parameters

Quant Method: ESTD RF Calibration: Replace
Rule Name: Linear1 Curve: Linear Weighting: Conc
Origin: None Error: raw_COD Error Limit: 1.00
RF %Dif: 0.0 SPCC Limit: 0.0 CCC Limit: 0.0
Dependent Variable: Resp

Number of Compounds: 4

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
1 Fluoride				Signal: 1					
32469200	37215236	40803610	42864993	41326689	41186188	-1753153			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		41787315		
M6493840	M18607618	M40803610	M171459973	M330613515	M411861883				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				
2 Chloride				Signal: 1					
16343527	17656926	18478080	19312060	19322788	19296788	-3421991			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		19331335		
16343527	44142315	92390398	1158723576	2318734502	3859357572				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				
4 Bromide				Signal: 1					
11065780	8675128	7960626	8036663	8307849	8416941	361716			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		8232908		
2213156	4337564	7960626	32146652	66462794	84169414				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				
7 Sulfate				Signal: 1					
16127136	13095082	12454383	14328878	14645101	14548658	-1219203			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		14531090		
M16127136	M32737705	M62271915	M859732703	1757412080	2909731694				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				

Preliminary Report

Eurofins Denver
ICV, ICal Verification Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 16-Aug-2023 10:08:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0124540-008
Misc. Info.: 280-0124540-008
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist:

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 17-Aug-2023 11:15:05 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10(

Column 1 : Det: Info 2_091554_1
Process Host: CTX1649

First Level Reviewer: LVW8 Date: 17-Aug-2023 11:27:01

Start Cal Date: 16-Aug-2023 08:23:00
End Cal Date: 16-Aug-2023 09:39:00

Compound	Amount Added	Amount Detected	%Drift	Max. %Drift	%Rec	%Rec Limits
1 Fluoride	4.00	3.60	*-10.0	10.0	90.0	
2 Chloride	80.0	84.0	5.0	10.0	105.0	
4 Bromide	4.00	3.88	-3.1	10.0	96.9	
7 Sulfate	80.0	81.1	1.3	10.0	101.3	

Preliminary Report

Eurofins Denver
ICV, ICal Verification Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10				
Lims ID:	icv				
Client ID:					
Sample Type:	ICV				
Inject. Date:	16-Aug-2023 10:08:00	ALS Bottle#:	0	Worklist Smp#:	8
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0124540-008				
Misc. Info.:	280-0124540-008				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Sublist:					
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m				
Limit Group:	Wet - Anions				
Last Update:	17-Aug-2023 11:27:17	Calib Date:	16-Aug-2023 09:39:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10(				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1649				
First Level Reviewer: LVW8		Date:	17-Aug-2023 11:27:17		
Start Cal Date:	16-Aug-2023 08:23:00				
End Cal Date:	16-Aug-2023 09:39:00				

Compound	Amount Added	Amount Detected	%Drift	Max. %Drift	%Rec	%Rec Limits
3 Nitrite as N	4.00	4.14	3.5	10.0	103.5	
5 Nitrate as N	4.00	3.95	-1.2	10.0	98.8	
6 Orthophosphate as	4.00	4.21	5.3	10.0	105.3	

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-130
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 29-Sep-2023 12:10:00 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-001
Misc. Info.: 280-0125974-001
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub9

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 02-Oct-2023 07:45:07 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

First Level Reviewer: XAY4 Date: 02-Oct-2023 07:45:07

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	ND	
2 Chloride	4.230	4.235	-0.005	1904663395	100.0	98.7	
3 Nitrite as N	4.863	4.865	-0.002	257273134	NC	NC	
4 Bromide	6.007	6.010	-0.003	35662441	5.00	4.29	
5 Nitrate as N	6.735	6.730	0.005	229618129	NC	NC	
6 Orthophosphate as P	8.477	8.503	-0.026	162335015	NC	NC	
7 Sulfate	9.538	9.568	-0.030	1443140797	100.0	99.4	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

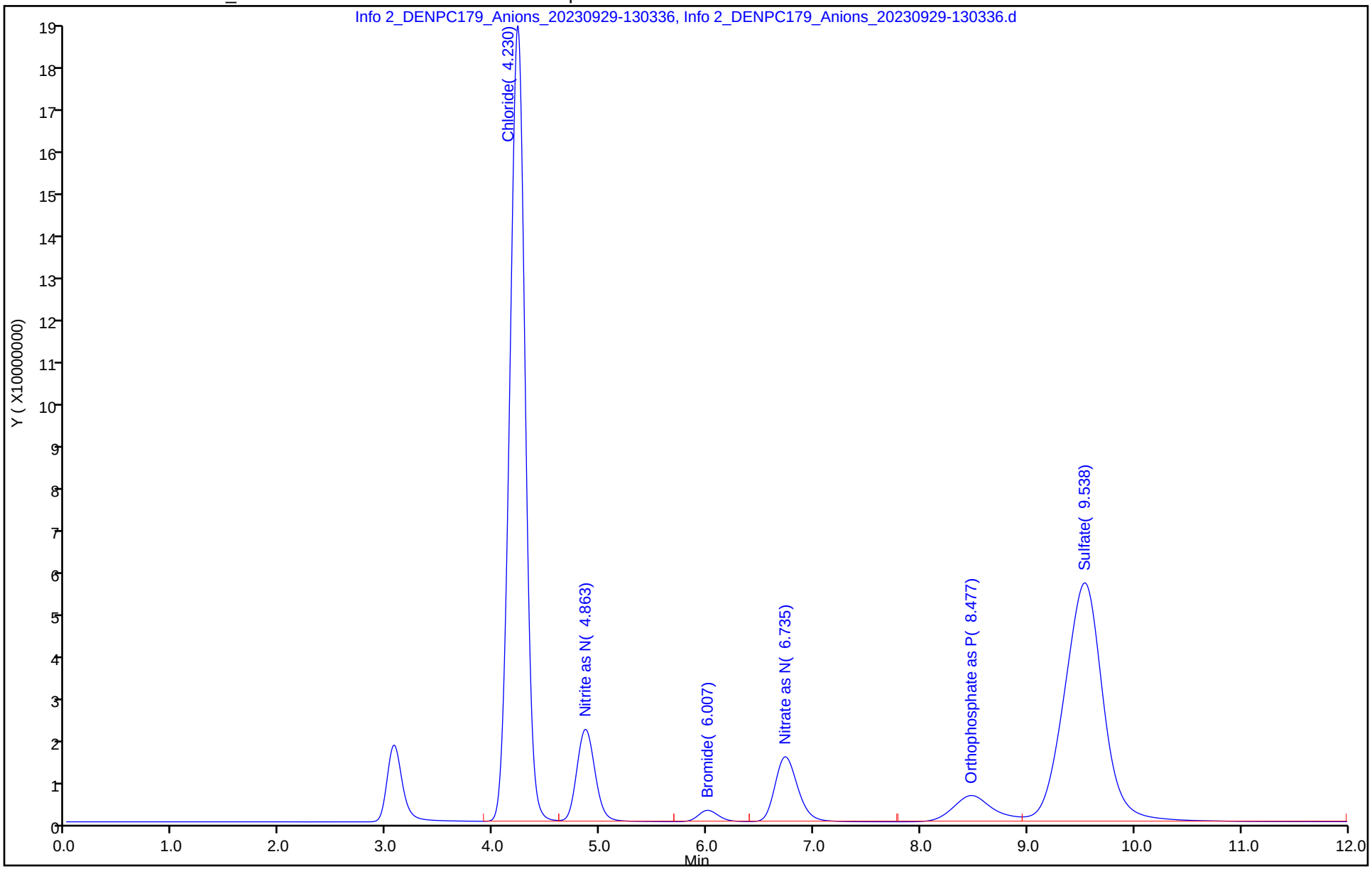
Reagents:

IC LCS_01980 Amount Added: 10.00 Units: mL

Report Date: 02-Oct-2023 07:45:07 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-130336.d				
Injection Date:	29-Sep-2023 12:10:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



12/5/2023 8:25 AM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-130
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 29-Sep-2023 12:25:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-002
Misc. Info.: 280-0125974-002
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 02-Oct-2023 10:18:00 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078				ND	
2 Chloride		4.235				ND	
3 Nitrite as N		4.865				ND	
4 Bromide	5.933	6.010	-0.077	16420		-0.0419	
5 Nitrate as N		6.730				ND	
6 Orthophosphate as P	8.577	8.503	0.074	24094100		NC	
7 Sulfate		9.568				ND	

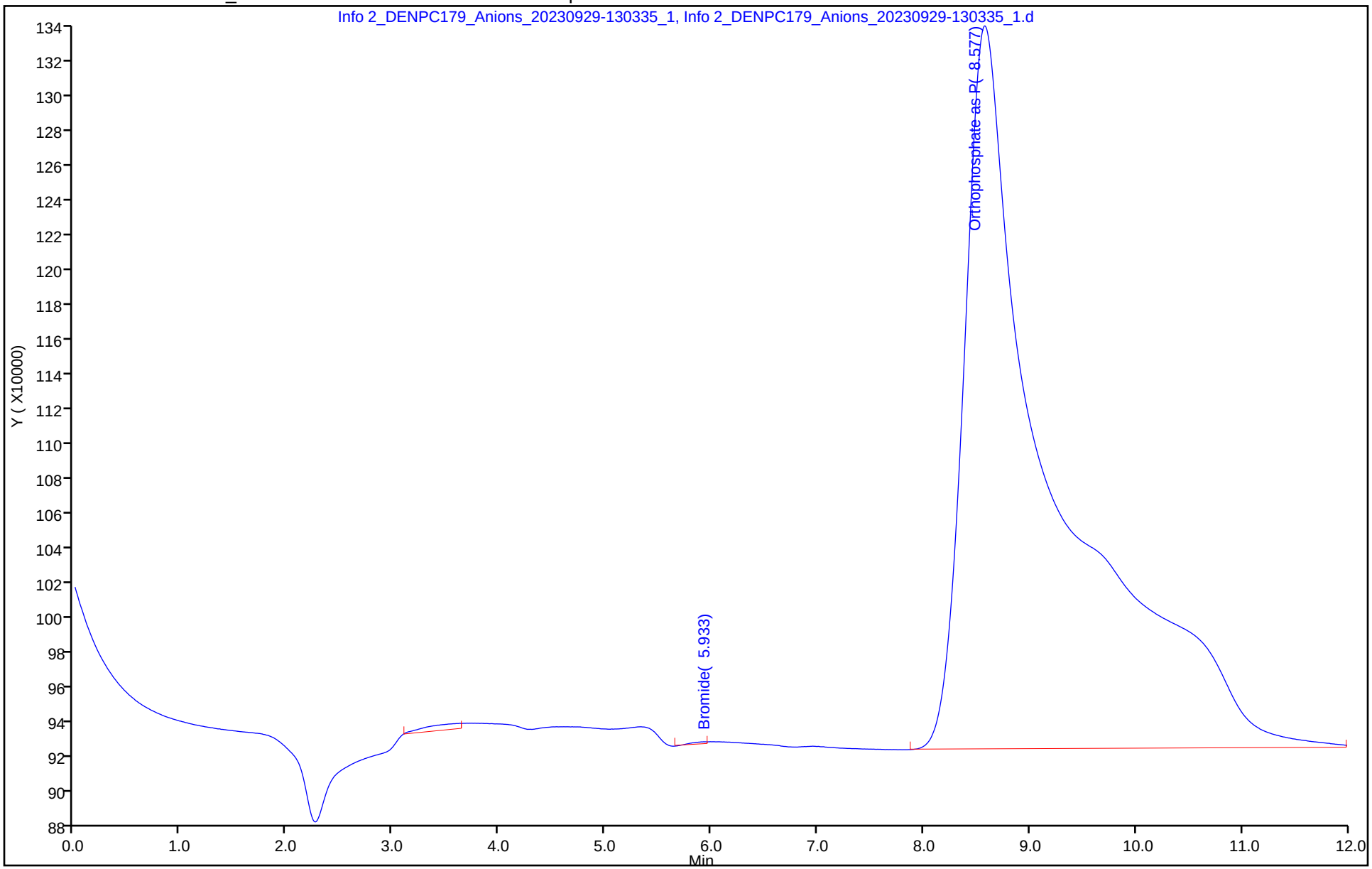
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 02-Oct-2023 10:22:54 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-130335_1.d				
Injection Date:	29-Sep-2023 12:25:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	2
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



12/5/2023 8:25 AM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-130
Lims ID: mrl
Client ID:
Sample Type: MRL
Inject. Date: 29-Sep-2023 12:40:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-003
Misc. Info.: 280-0125974-003
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 02-Oct-2023 07:45:07 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	ND	
2 Chloride	4.192	4.235	-0.043	90556805	5.00	4.86	
3 Nitrite as N	4.873	4.865	0.008	22998967	NC	NC	
4 Bromide	6.040	6.010	0.030	2973845	0.5000	0.3173	
5 Nitrate as N	6.790	6.730	0.060	18412077	NC	NC	
6 Orthophosphate as P	8.538	8.503	0.035	39924995	NC	NC	
7 Sulfate	9.577	9.568	0.009	81056347	5.00	5.66	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

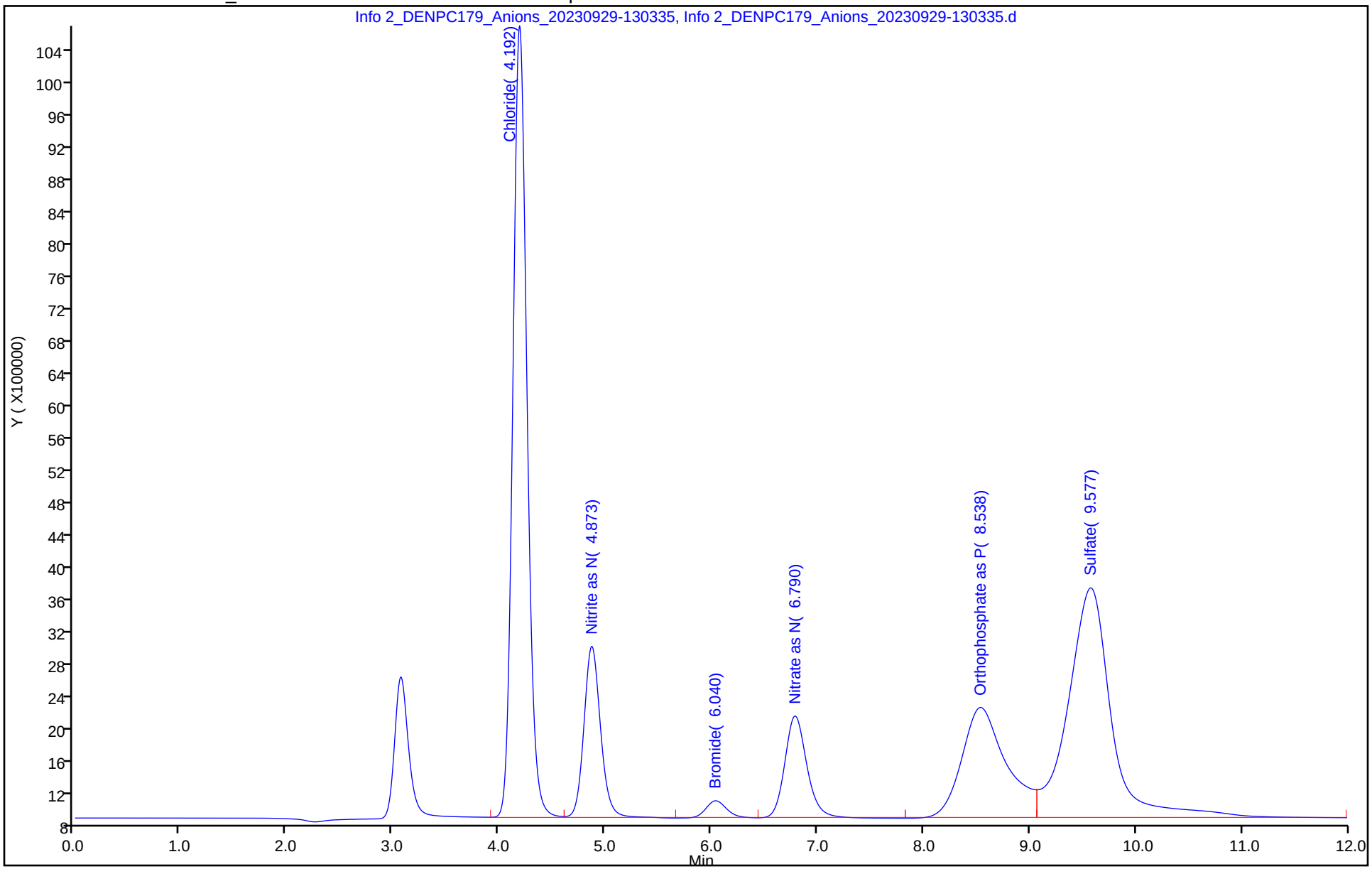
Reagents:

IC Cal low_00731 Amount Added: 0.10 Units: mL
IC CAL cl/so4_00501 Amount Added: 0.20 Units: mL

Report Date: 02-Oct-2023 07:45:12 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-130335.d				
Injection Date:	29-Sep-2023 12:40:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	mrl			Worklist Smp#:	3
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-152
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 29-Sep-2023 12:55:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-004
Misc. Info.: 280-0125974-004
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 02-Oct-2023 10:18:00 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	ND	
2 Chloride	4.232	4.235	-0.003	1900225763	100.0	98.5	
3 Nitrite as N	4.863	4.865	-0.002	257801017	NC	NC	
4 Bromide	6.007	6.010	-0.003	35629182	5.00	4.28	
5 Nitrate as N	6.728	6.730	-0.002	229253577	NC	NC	
6 Orthophosphate as P	8.495	8.503	-0.008	166778922	NC	NC	
7 Sulfate	9.560	9.568	-0.008	1441493448	100.0	99.3	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

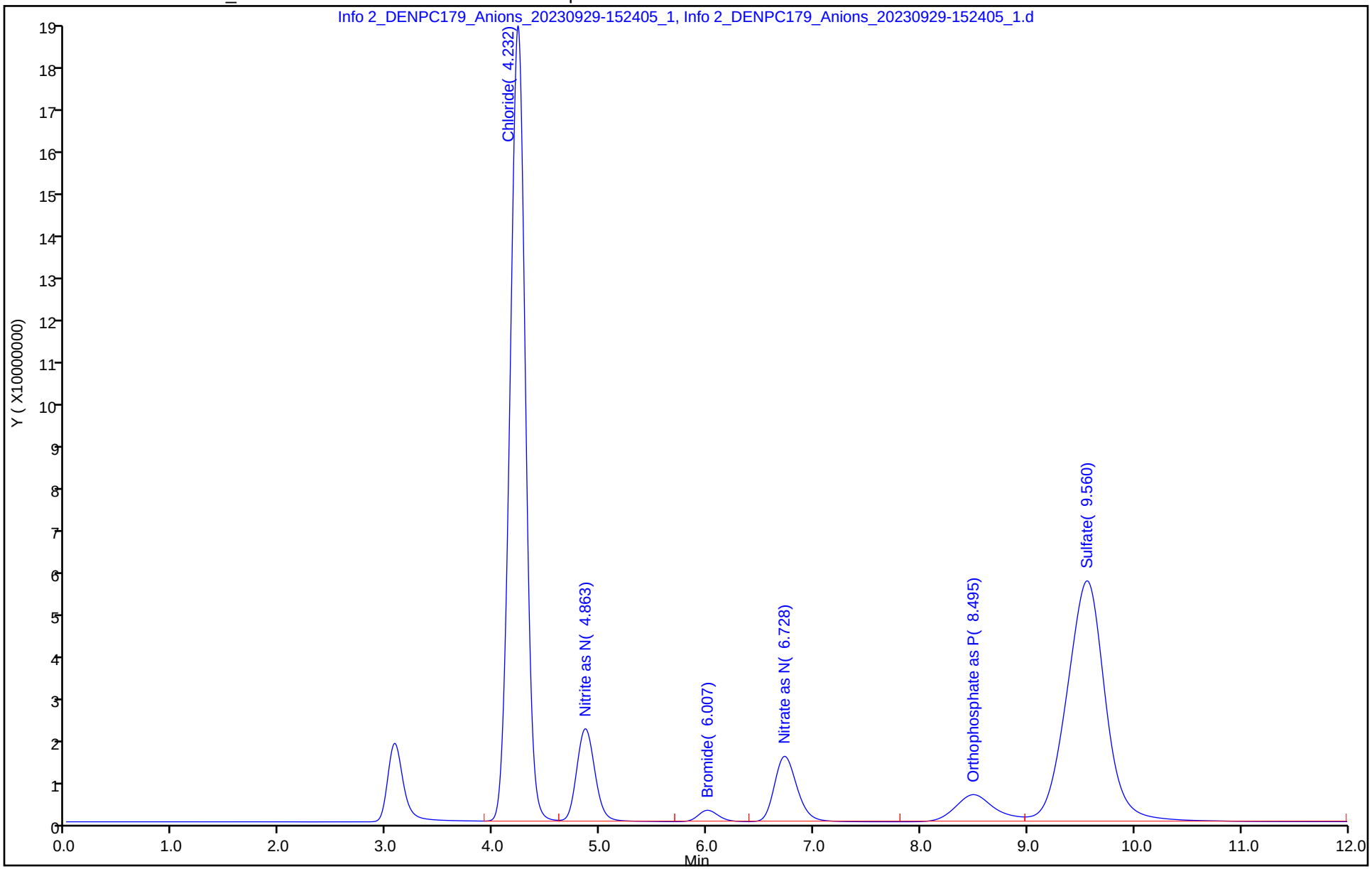
Reagents:

IC LCS_01980 Amount Added: 10.00 Units: mL

Report Date: 02-Oct-2023 10:22:55 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-152405_1.d				
Injection Date:	29-Sep-2023 12:55:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	lcs			Worklist Smp#:	4
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-152
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 29-Sep-2023 13:10:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-005
Misc. Info.: 280-0125974-005
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 02-Oct-2023 07:45:13 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	ND	
2 Chloride	4.235	4.235	0.000	1899337590	100.0	98.4	
3 Nitrite as N	4.865	4.865	0.000	258159084	NC	NC	
4 Bromide	6.010	6.010	0.000	35609542	5.00	4.28	
5 Nitrate as N	6.730	6.730	0.000	229089096	NC	NC	
6 Orthophosphate as P	8.503	8.503	0.000	167428506	NC	NC	
7 Sulfate	9.568	9.568	0.000	1441361187	100.0	99.3	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

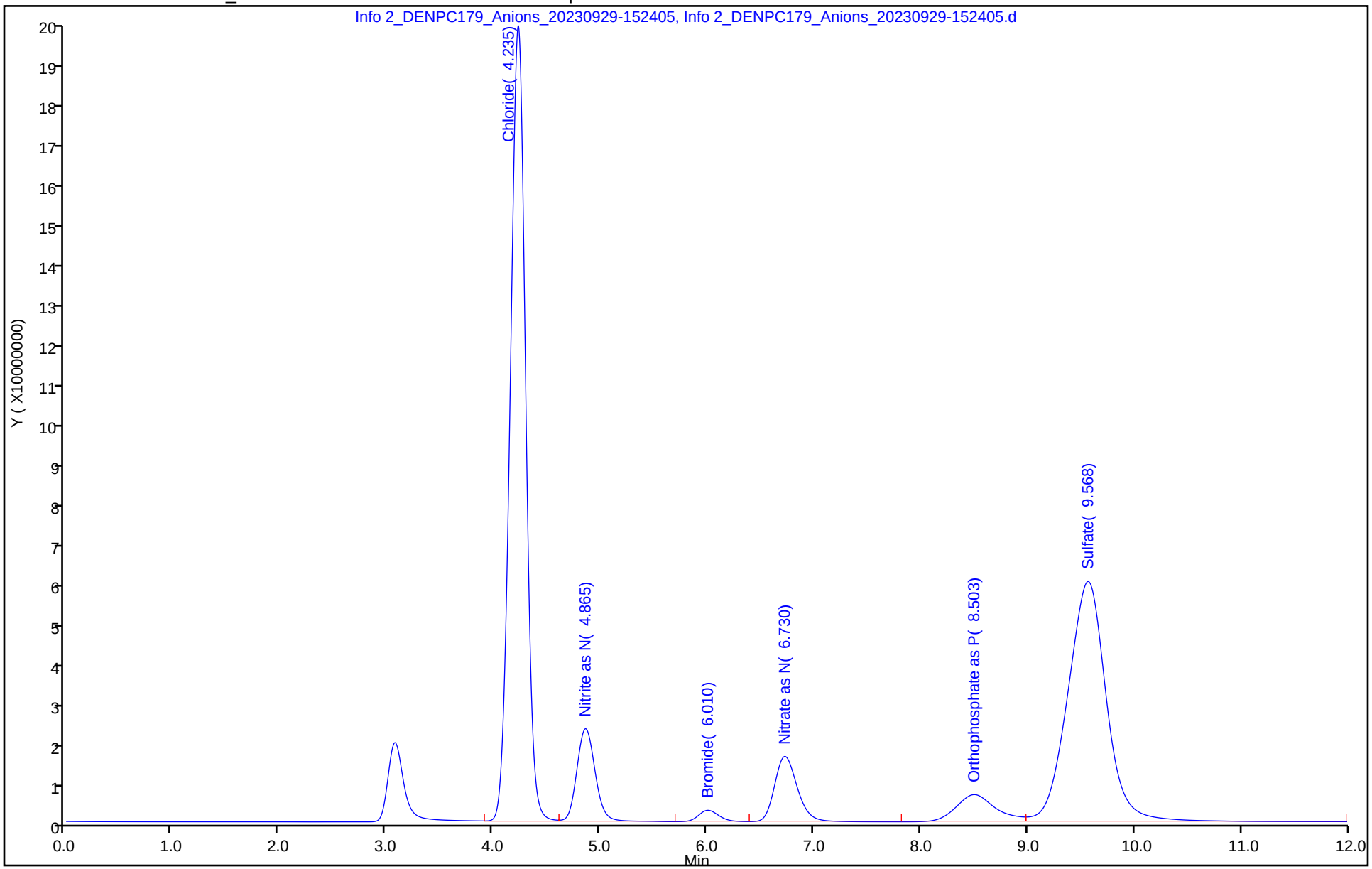
Reagents:

IC LCS_01980 Amount Added: 10.00 Units: mL

Report Date: 02-Oct-2023 07:45:13 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-152405.d				
Injection Date:	29-Sep-2023 13:10:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	lcsd			Worklist Smp#:	5
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-152
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 29-Sep-2023 13:25:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-006
Misc. Info.: 280-0125974-006
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 02-Oct-2023 10:18:00 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078				ND	
2 Chloride	4.175	4.235	-0.060	113031		0.1829	
3 Nitrite as N		4.865				ND	
4 Bromide	5.973	6.010	-0.037	19041		-0.0416	
5 Nitrate as N		6.730				ND	
6 Orthophosphate as P	8.585	8.503	0.082	29972144		NC	
7 Sulfate		9.568				ND	

QC Flag Legend

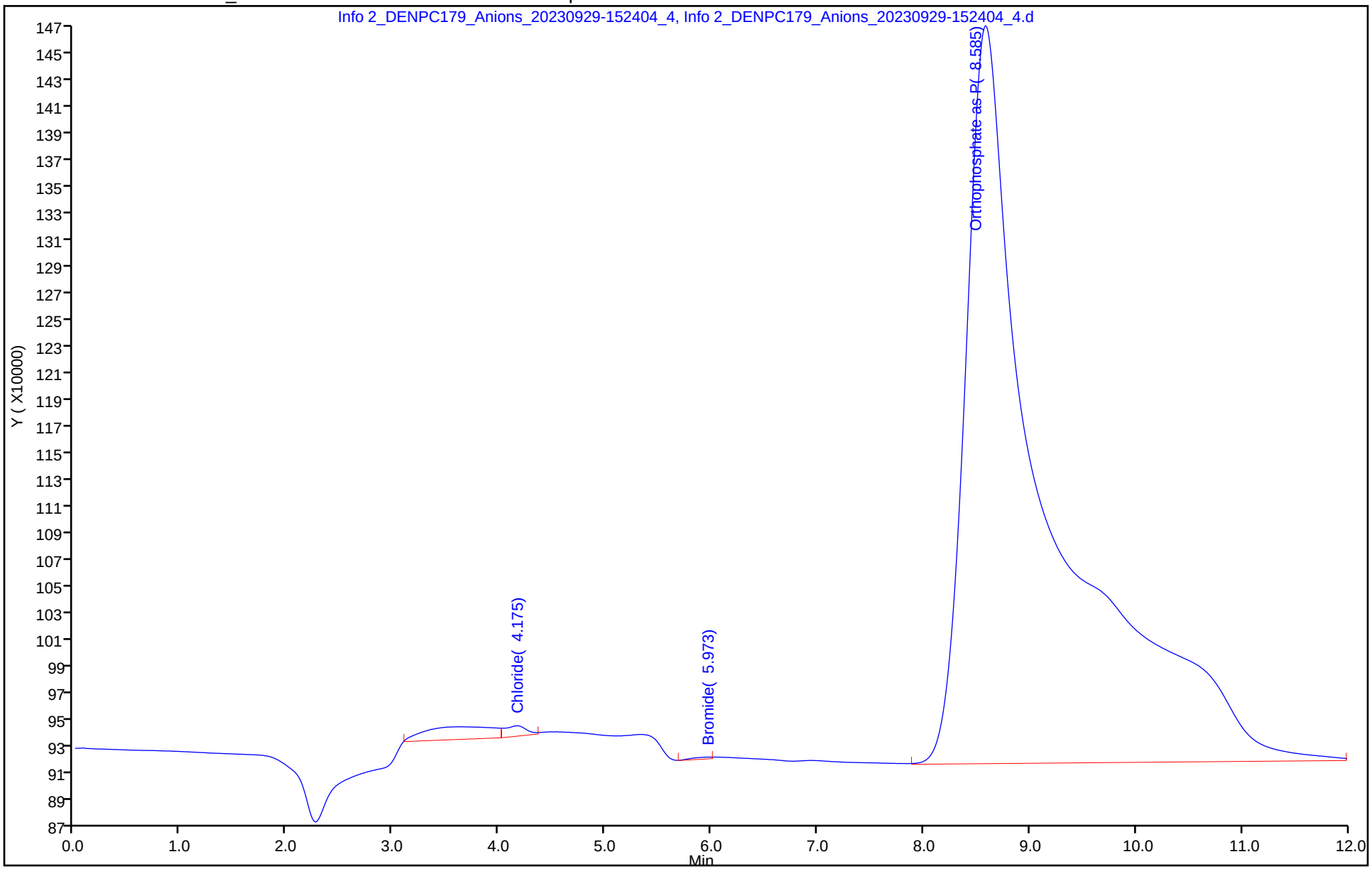
Processing Flags
NC - Not Calibrated

Report Date: 02-Oct-2023 10:22:51 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-152404_4.d

Injection Date:	29-Sep-2023 13:25:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	mb			Worklist Smp#:	6
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-152
Lims ID: 280-182145-A-1
Client ID: LL1mw-080-230901-GW-R
Sample Type: Client
Inject. Date: 29-Sep-2023 14:10:00 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-009
Misc. Info.: 280-0125974-009
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 02-Oct-2023 10:18:00 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	
2 Chloride	4.190	4.235	-0.045	6078425	0.4915	
3 Nitrite as N	4.868	4.865	0.003	32073	NC	
4 Bromide	5.912	6.010	-0.098	20733	-0.0414	
5 Nitrate as N	6.900	6.730	0.170	2650746	NC	
6 Orthophosphate as P		8.503			ND	
7 Sulfate	9.570	9.568	0.002	7283486862	501.3	E

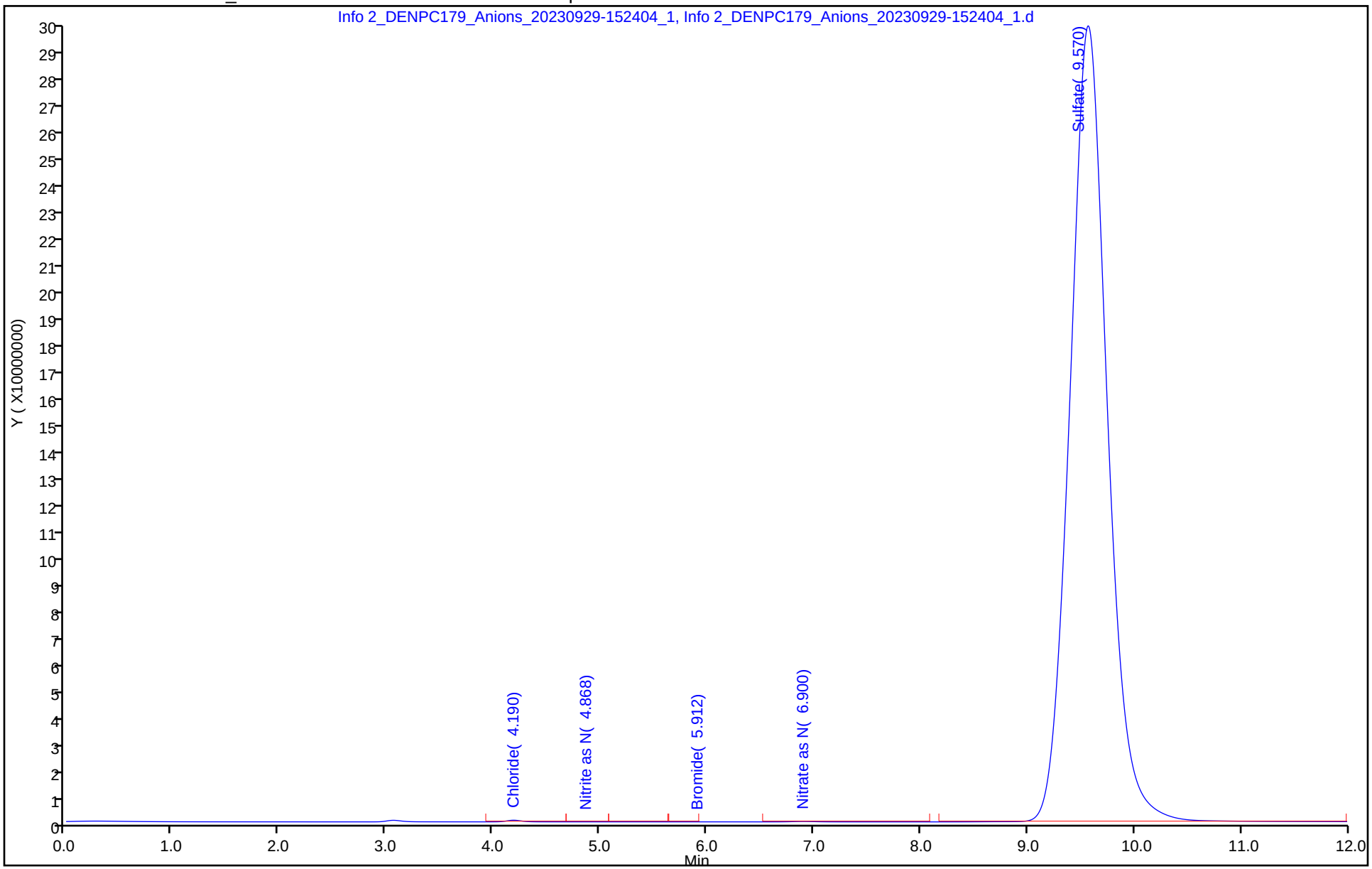
QC Flag Legend

Processing Flags
NC - Not Calibrated
E - Exceeded Maximum Amount

Report Date: 02-Oct-2023 10:22:53 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-152404_1.d				
Injection Date:	29-Sep-2023 14:10:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-182145-A-1	Lab Sample ID:	280-182145-1	Worklist Smp#:	9
Client ID:	LL1mw-080-230901-GW-R				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-152
Lims ID: 280-182145-A-4
Client ID: LL1mw-083-230901-GW-R
Sample Type: Client
Inject. Date: 29-Sep-2023 14:55:00 ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-012
Misc. Info.: 280-0125974-012
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 02-Oct-2023 07:28:48 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	
2 Chloride	4.193	4.235	-0.042	32704363	1.87	
3 Nitrite as N		4.865			ND	
4 Bromide	6.047	6.010	0.037	315889	-0.005566	
5 Nitrate as N	6.823	6.730	0.093	6894874	NC	
6 Orthophosphate as P	8.670	8.503	0.167	3430626	NC	
7 Sulfate	9.582	9.568	0.014	2675938662	184.2	

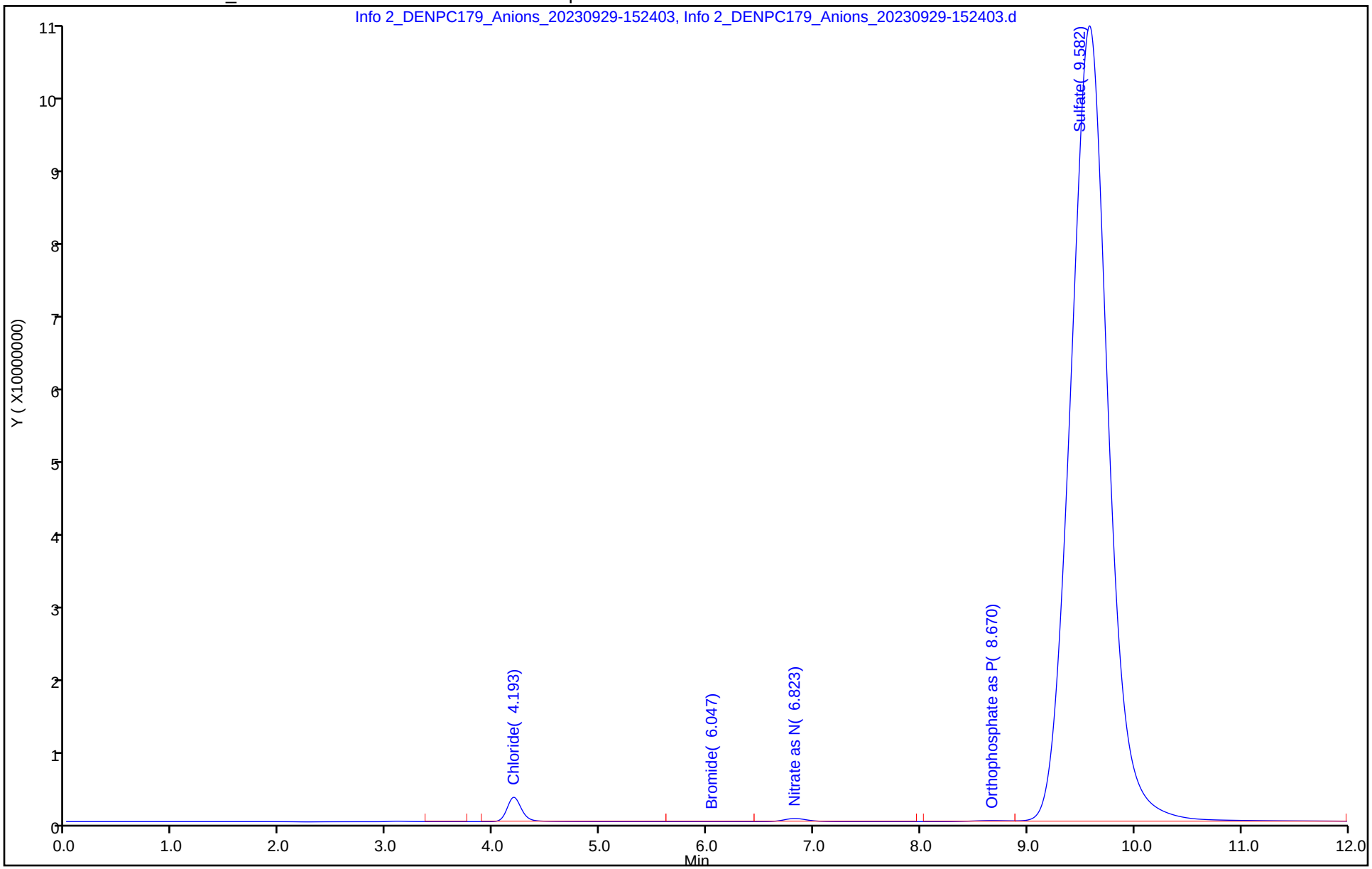
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 02-Oct-2023 07:28:52 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-152403.d				
Injection Date:	29-Sep-2023 14:55:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-182145-A-4	Lab Sample ID:	280-182145-4	Worklist Smp#:	12
Client ID:	LL1mw-083-230901-GW-R				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-152
Lims ID: 280-182145-A-5
Client ID: LL1mw-084-230901-R
Sample Type: Client
Inject. Date: 29-Sep-2023 15:10:00 ALS Bottle#: 0 Worklist Smp#: 13
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-013
Misc. Info.: 280-0125974-013
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 02-Oct-2023 07:28:48 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	
2 Chloride	4.190	4.235	-0.045	12435642	0.8203	
3 Nitrite as N	4.863	4.865	-0.002	56855	NC	
4 Bromide	6.092	6.010	0.082	156920	-0.0249	
5 Nitrate as N	6.825	6.730	0.095	17921927	NC	
6 Orthophosphate as P	8.697	8.503	0.194	1363048	NC	
7 Sulfate	9.603	9.568	0.035	1731285837	119.2	

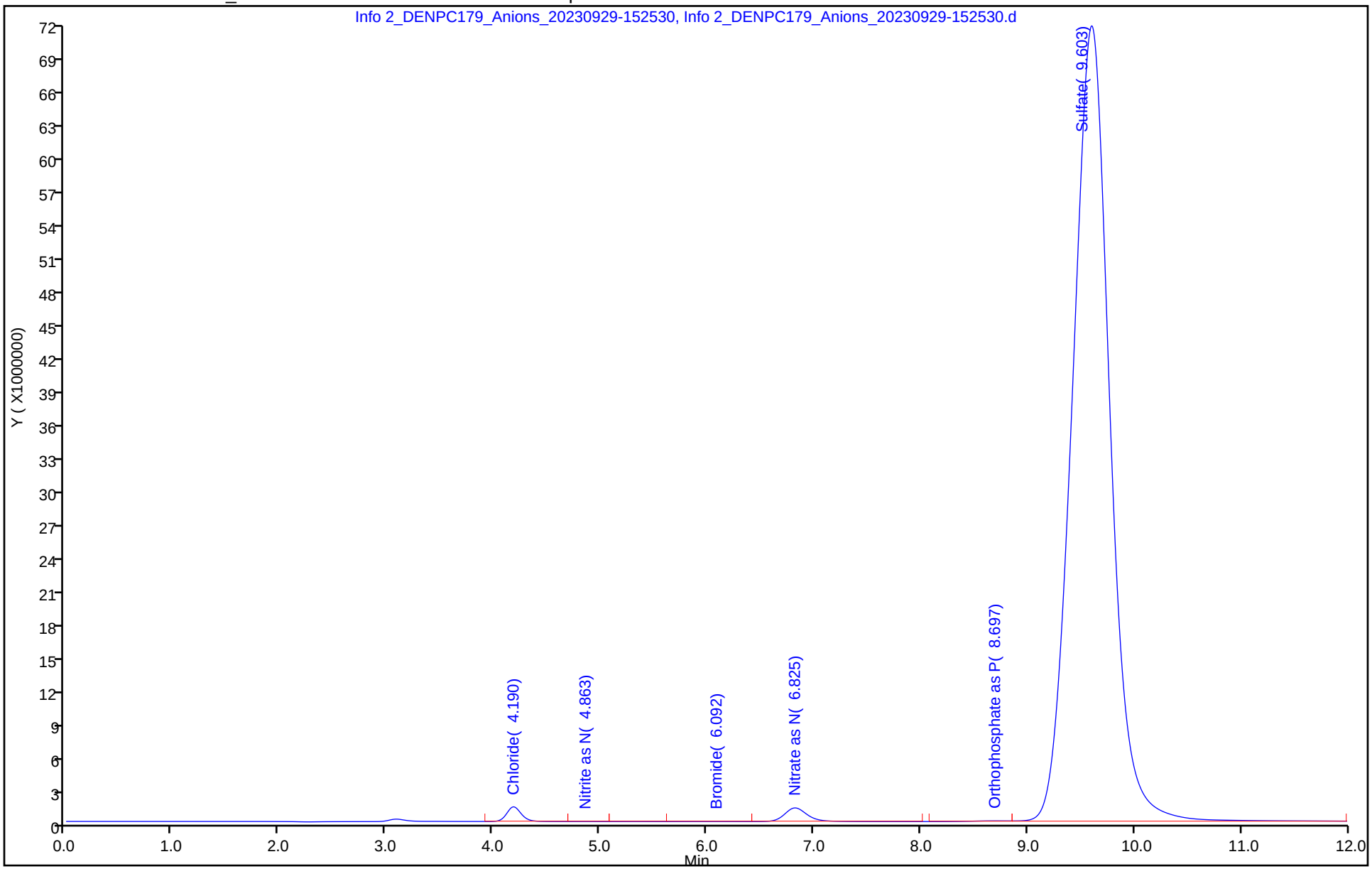
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 02-Oct-2023 07:28:52 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-152530.d				
Injection Date:	29-Sep-2023 15:10:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-182145-A-5	Lab Sample ID:	280-182145-5	Worklist Smp#:	13
Client ID:	LL1mw-084-230901-R				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-154
Lims ID: 280-182145-A-5 DU
Client ID:
Sample Type: DU
Inject. Date: 29-Sep-2023 15:25:00 ALS Bottle#: 0 Worklist Smp#: 14
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-014
Misc. Info.: 280-0125974-014
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 02-Oct-2023 07:28:48 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078				ND	
2 Chloride	4.188	4.235	-0.047	13195753		0.8596	
3 Nitrite as N	4.857	4.865	-0.008	80444		NC	
4 Bromide	6.077	6.010	0.067	138380		-0.0271	
5 Nitrate as N	6.810	6.730	0.080	18070634		NC	
6 Orthophosphate as P	8.733	8.503	0.230	1140120		NC	
7 Sulfate	9.582	9.568	0.014	1737519705		119.7	

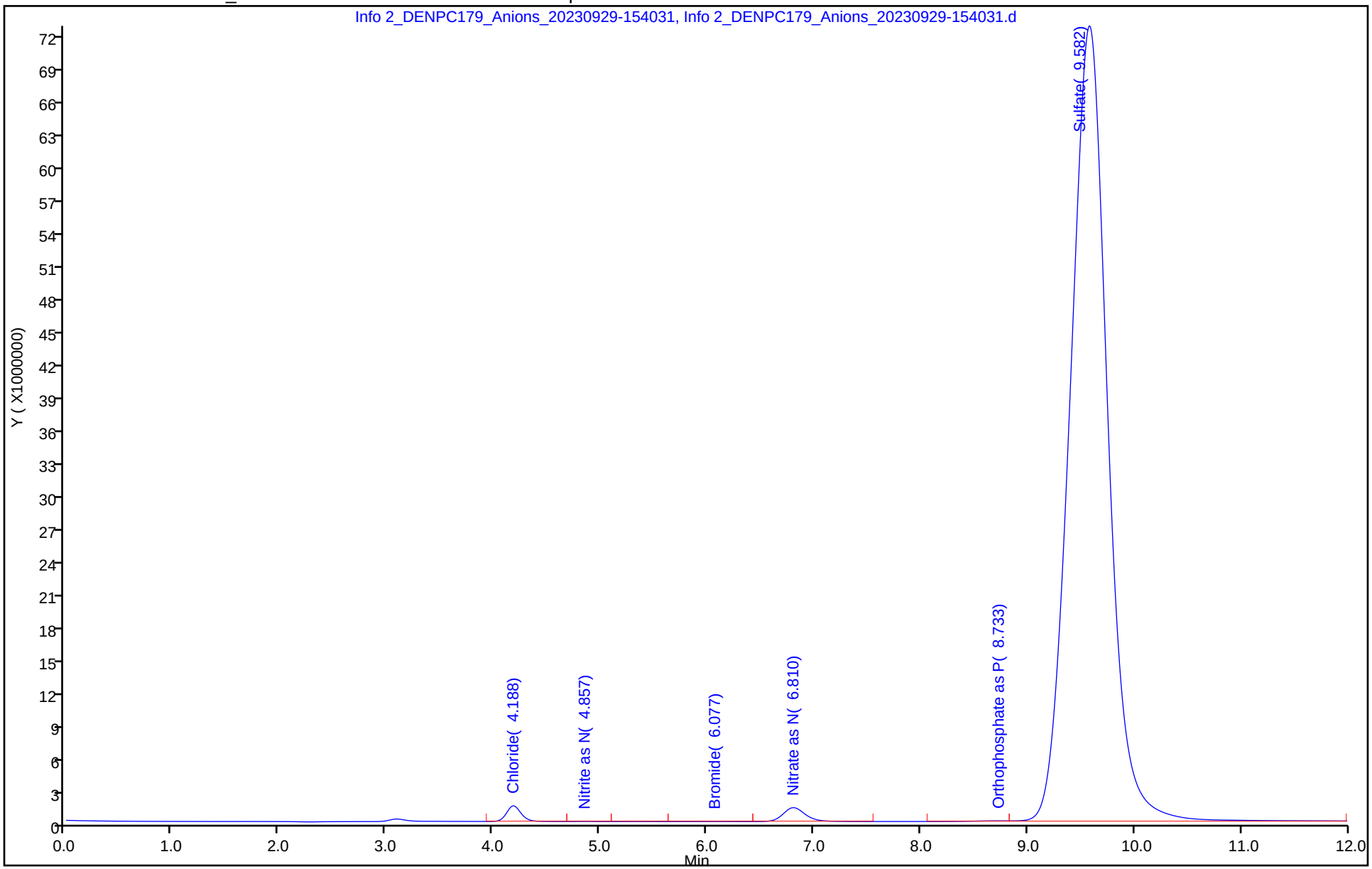
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 02-Oct-2023 07:28:53 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-154031.d				
Injection Date:	29-Sep-2023 15:25:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-182145-A-5 DU			Worklist Smp#:	14
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-155
Lims ID: 280-182145-A-5 MS
Client ID: LL1mw-084-230901-R
Sample Type: MS
Inject. Date: 29-Sep-2023 15:40:00 ALS Bottle#: 0 Worklist Smp#: 15
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-015
Misc. Info.: 280-0125974-015
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 02-Oct-2023 07:28:48 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	ND	
2 Chloride	4.205	4.235	-0.030	1121629890	50.0	58.2	
3 Nitrite as N	4.852	4.865	-0.013	238740210	NC	NC	
4 Bromide	6.045	6.010	0.035	38491556	5.00	4.63	
5 Nitrate as N	6.747	6.730	0.017	287444528	NC	NC	
6 Orthophosphate as P	8.590	8.503	0.087	191699179	NC	NC	
7 Sulfate	9.565	9.568	-0.003	2522192677	50.0	173.7	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

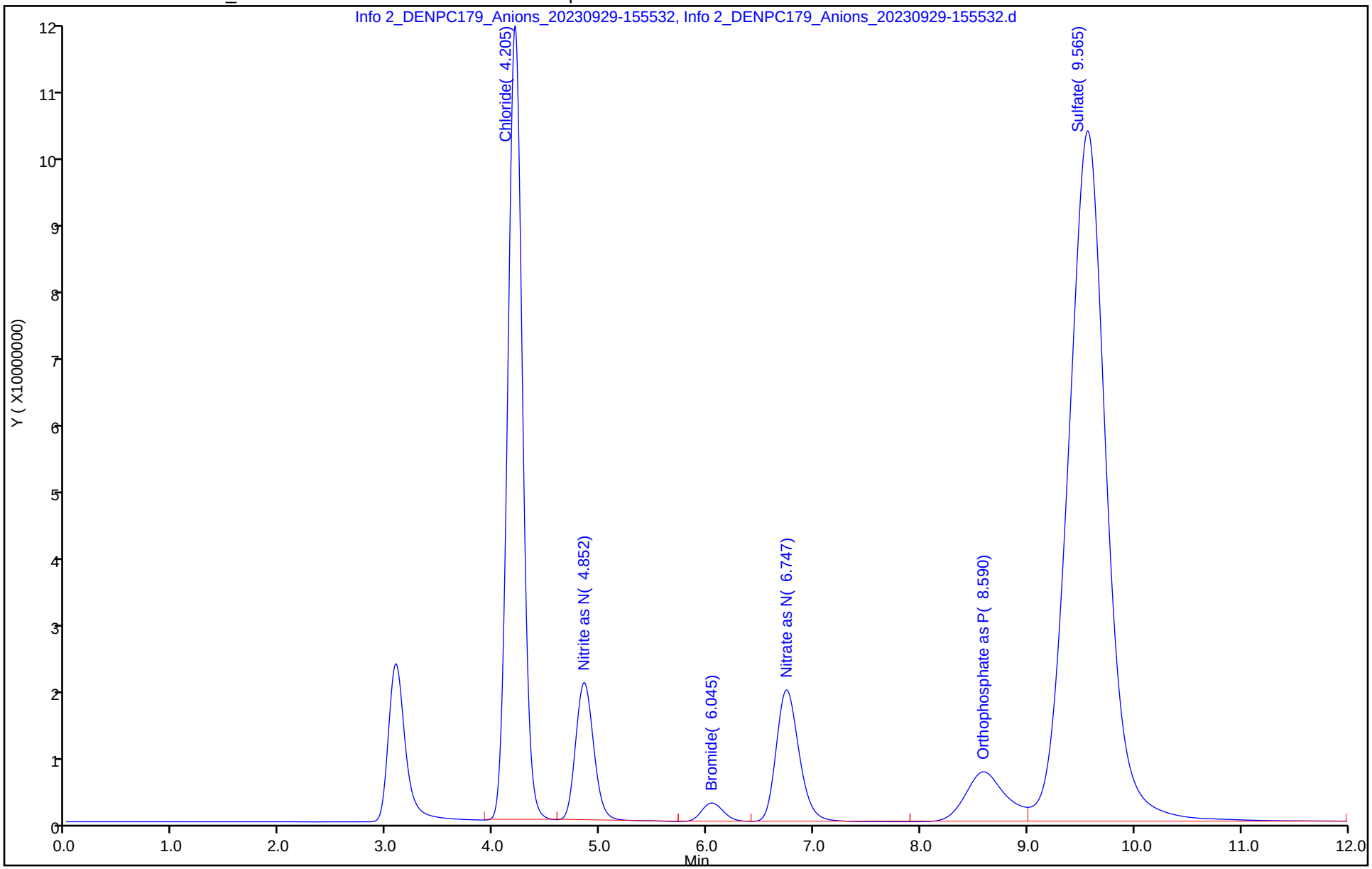
Reagents:

ICMS/MSD WEEK_00838 Amount Added: 0.10 Units: mL

Report Date: 02-Oct-2023 07:28:53 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-155532.d				
Injection Date:	29-Sep-2023 15:40:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-182145-A-5 MS			Worklist Smp#:	15
Client ID:	LL1mw-084-230901-R				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



12/5/2023 8:25 AM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-161
Lims ID: 280-182145-A-5 MSD
Client ID: LL1mw-084-230901-R
Sample Type: MSD
Inject. Date: 29-Sep-2023 15:55:00 ALS Bottle#: 0 Worklist Smp#: 16
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-016
Misc. Info.: 280-0125974-016
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 02-Oct-2023 07:28:48 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	ND	
2 Chloride	4.203	4.235	-0.032	1130835743	50.0	58.7	
3 Nitrite as N	4.850	4.865	-0.015	241122468	NC	NC	
4 Bromide	6.040	6.010	0.030	38926186	5.00	4.68	
5 Nitrate as N	6.743	6.730	0.013	289835589	NC	NC	
6 Orthophosphate as P	8.588	8.503	0.085	189346885	NC	NC	
7 Sulfate	9.567	9.568	-0.001	2527251366	50.0	174.0	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

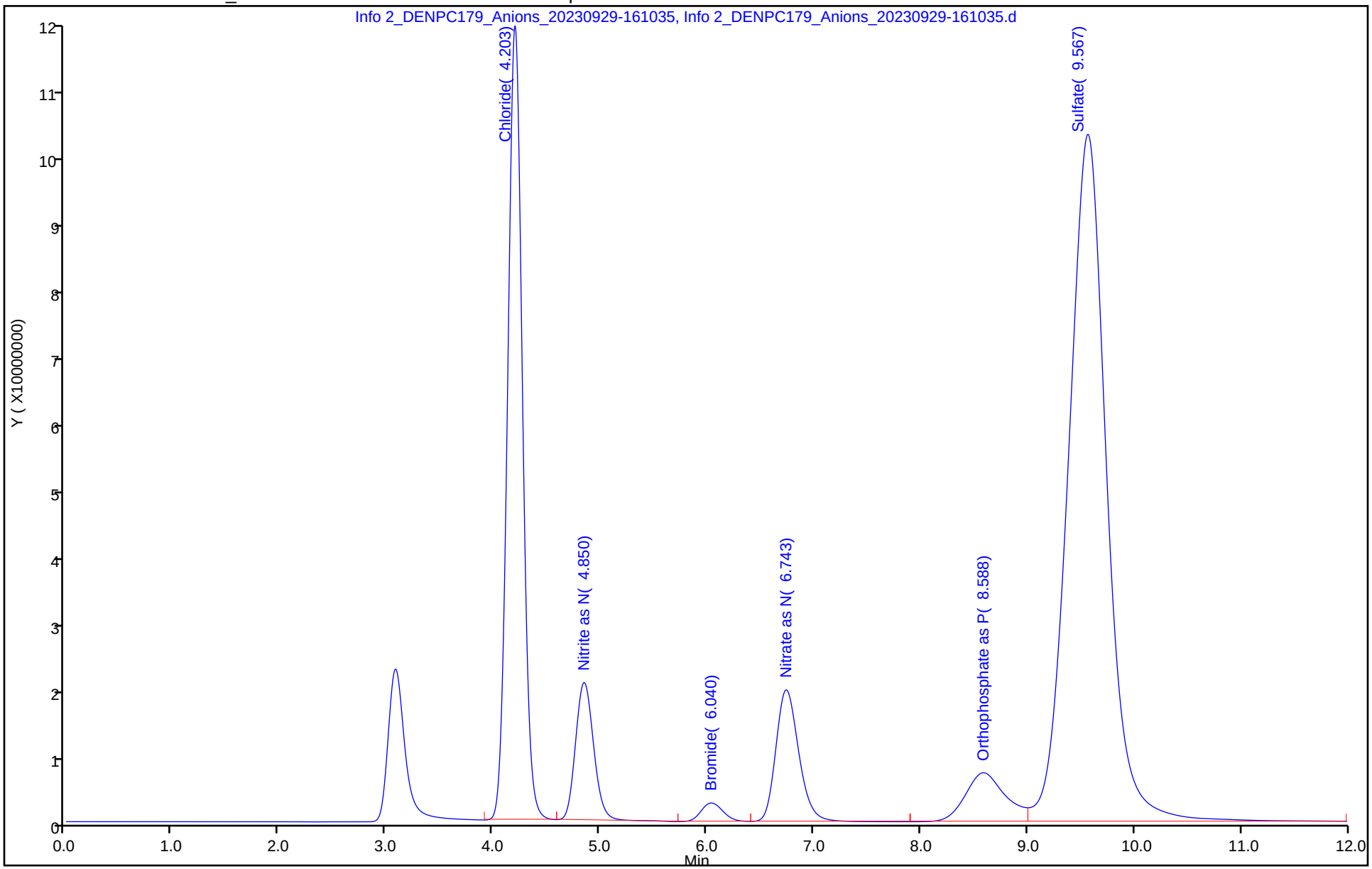
Reagents:

ICMS/MSD WEEK_00838 Amount Added: 0.10 Units: mL

Report Date: 02-Oct-2023 07:28:54 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-161035.d				
Injection Date:	29-Sep-2023 15:55:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-182145-A-5 MSD			Worklist Smp#:	16
Client ID:	LL1mw-084-230901-R				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



12/5/2023 8:25 AM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-162
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 29-Sep-2023 16:10:00 ALS Bottle#: 0 Worklist Smp#: 17
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-017
Misc. Info.: 280-0125974-017
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub9

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 02-Oct-2023 07:28:54 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	ND	
2 Chloride	4.235	4.235	0.000	1894535105	100.0	98.2	
3 Nitrite as N	4.862	4.865	-0.003	257146011	NC	NC	
4 Bromide	5.995	6.010	-0.015	35819872	5.00	4.31	
5 Nitrate as N	6.713	6.730	-0.017	229297120	NC	NC	
6 Orthophosphate as P	8.547	8.503	0.044	159332733	NC	NC	
7 Sulfate	9.572	9.568	0.004	1446643149	100.0	99.6	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

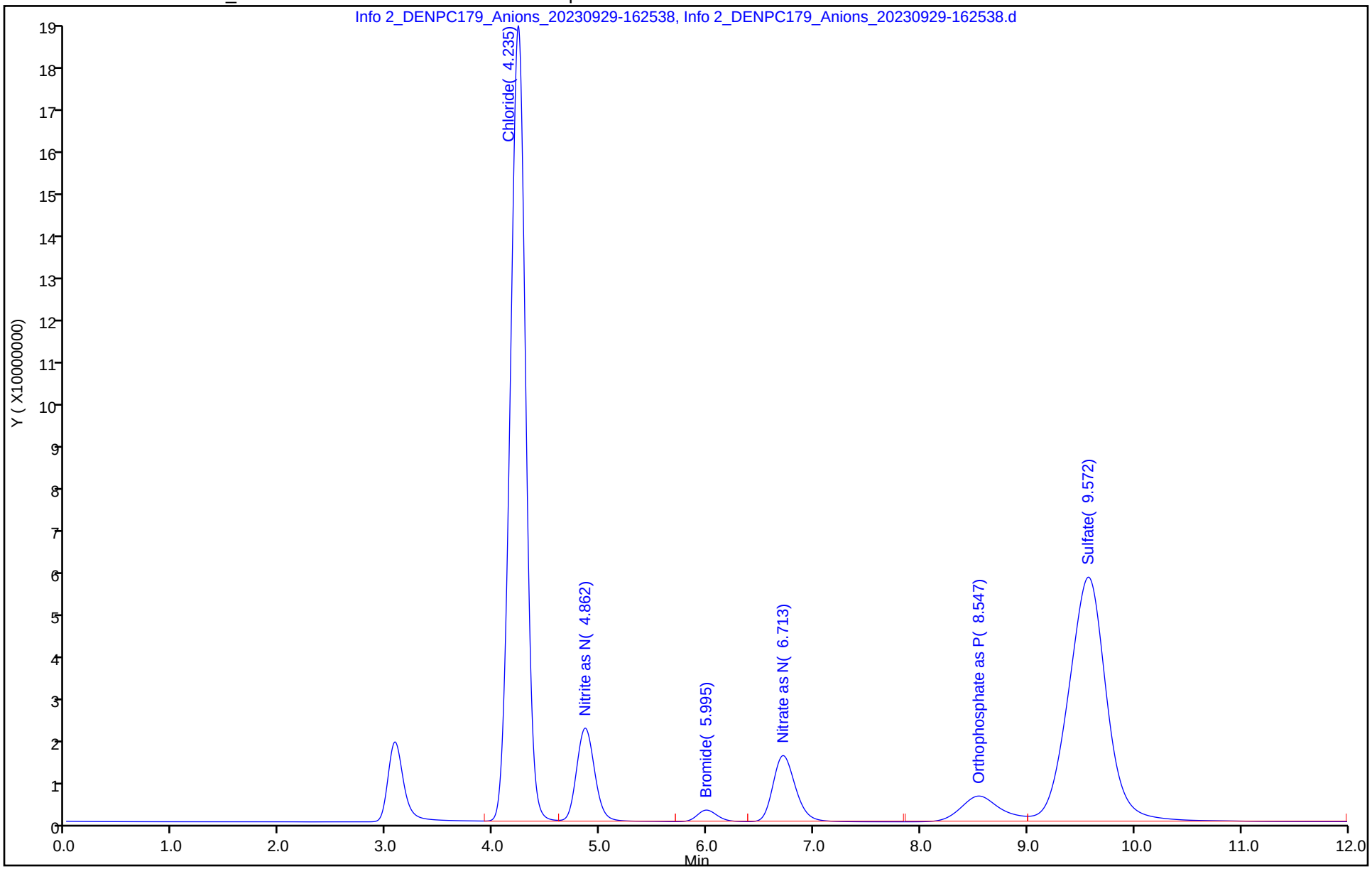
Reagents:

IC LCS_01980 Amount Added: 10.00 Units: mL

Report Date: 02-Oct-2023 07:28:54 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-162538.d				
Injection Date:	29-Sep-2023 16:10:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	17
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



12/5/2023 8:25 AM

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-164				
Lims ID:	ccb				
Client ID:					
Sample Type:	CCB				
Inject. Date:	29-Sep-2023 16:25:00	ALS Bottle#:	0	Worklist Smp#:	18
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0125974-018				
Misc. Info.:	280-0125974-018				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m				
Limit Group:	Wet - Anions 28D				
Last Update:	02-Oct-2023 07:28:54	Calib Date:	16-Aug-2023 09:39:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1656				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078				ND	
2 Chloride		4.235				ND	
3 Nitrite as N		4.865				ND	
4 Bromide	6.043	6.010	0.033	28965		-0.0404	
5 Nitrate as N		6.730				ND	
6 Orthophosphate as P	8.628	8.503	0.125	33800836		NC	
7 Sulfate		9.568				ND	

QC Flag Legend

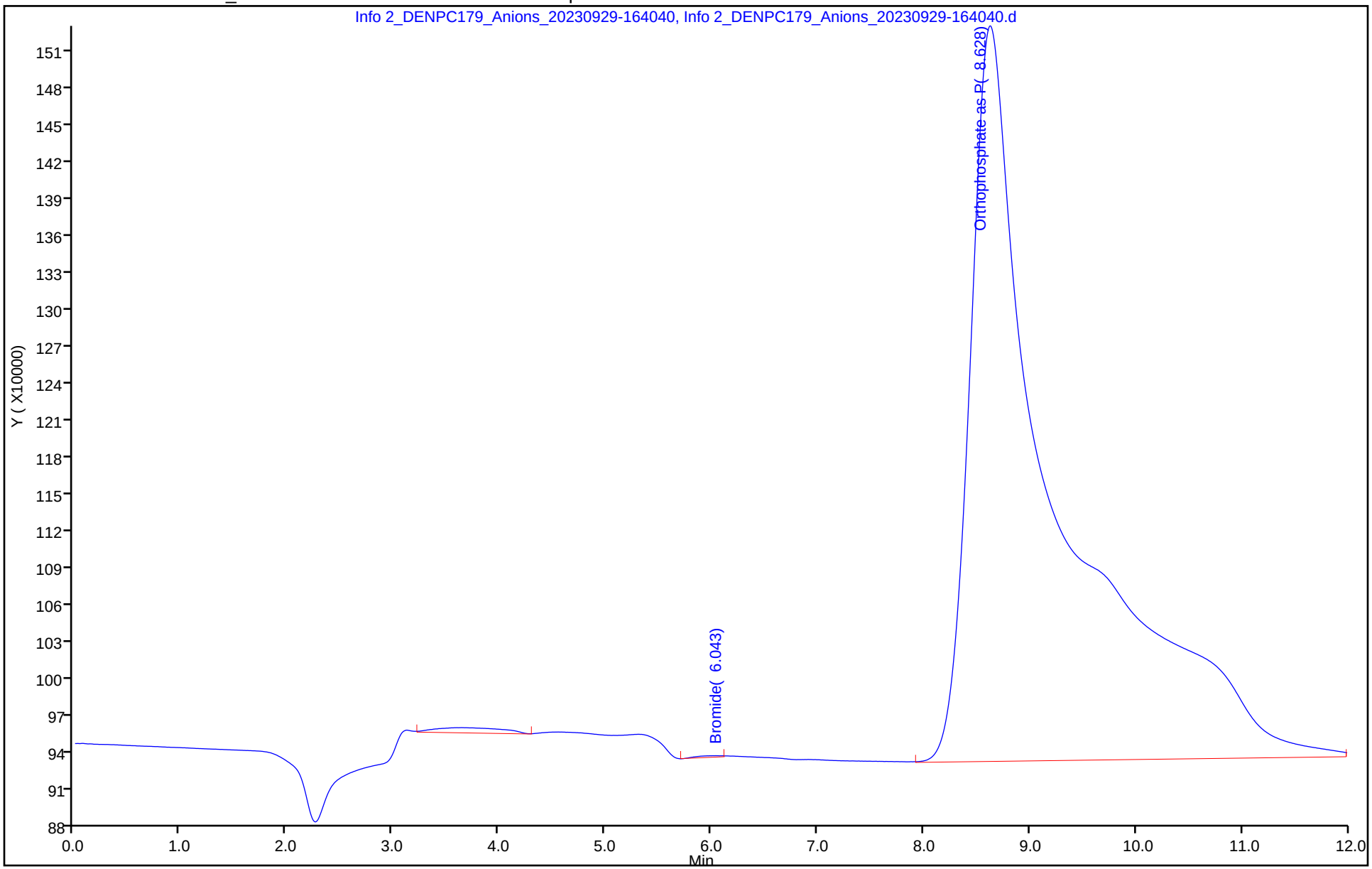
Processing Flags
NC - Not Calibrated

Report Date: 02-Oct-2023 07:28:55 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-164040.d

Injection Date:	29-Sep-2023 16:25:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	18
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



12/5/2023 8:25 AM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-165
Lims ID: 280-182145-A-6
Client ID: LL1mw-084-230902-GW-R
Sample Type: Client
Inject. Date: 29-Sep-2023 16:40:00 ALS Bottle#: 0 Worklist Smp#: 19
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-019
Misc. Info.: 280-0125974-019
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 02-Oct-2023 07:28:54 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	
2 Chloride	4.190	4.235	-0.045	12521578	0.8248	
3 Nitrite as N	4.843	4.865	-0.022	34648	NC	
4 Bromide	6.085	6.010	0.075	235024	-0.0154	
5 Nitrate as N	6.818	6.730	0.088	17296285	NC	
6 Orthophosphate as P	8.695	8.503	0.192	6554018	NC	
7 Sulfate	9.593	9.568	0.025	1701882683	117.2	

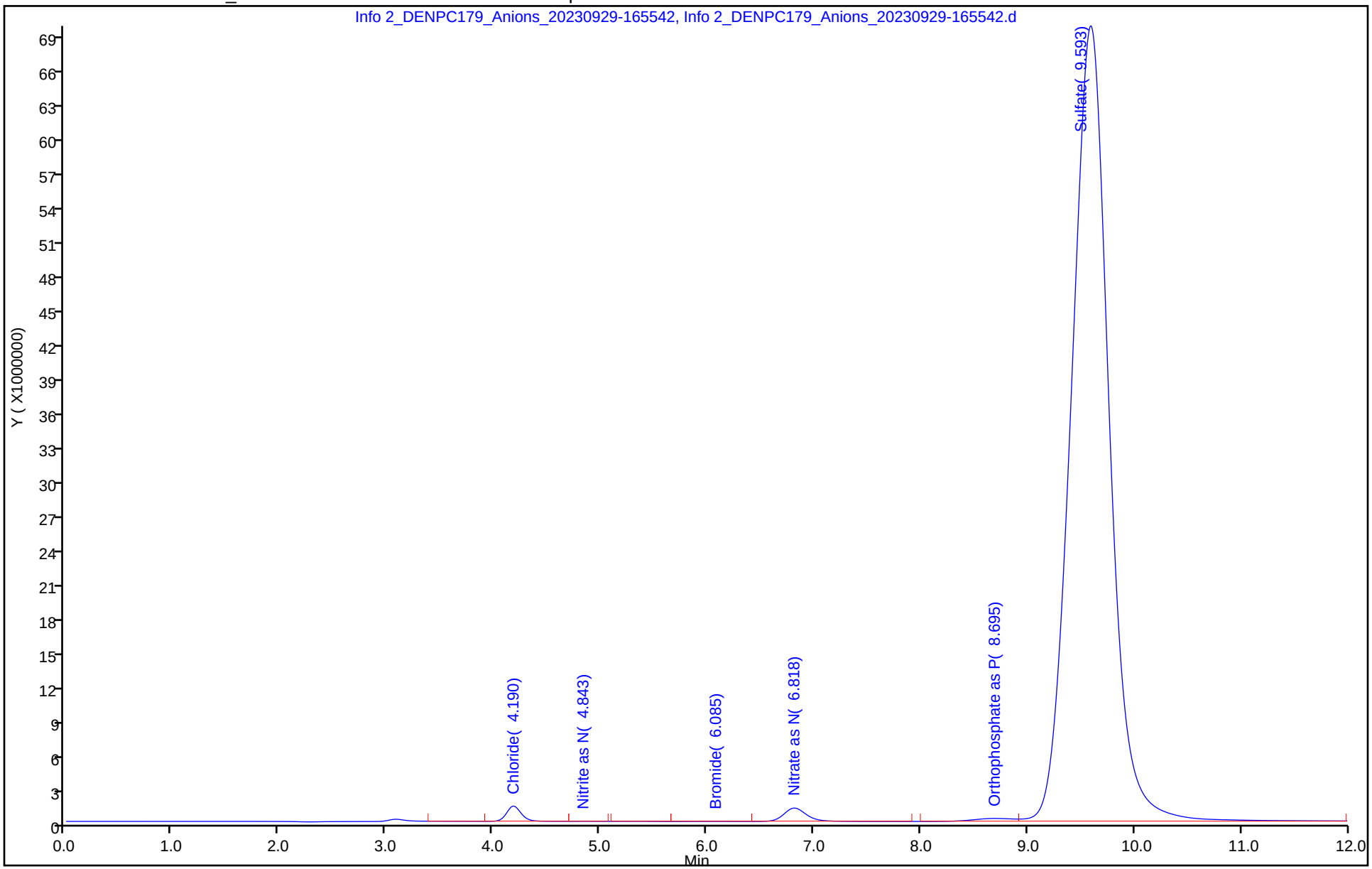
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 02-Oct-2023 07:28:56 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-165542.d				
Injection Date:	29-Sep-2023 16:40:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-182145-A-6	Lab Sample ID:	280-182145-6	Worklist Smp#:	19
Client ID:	LL1mw-084-230902-GW-R				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



12/5/2023 8:25 AM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-192
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 29-Sep-2023 19:11:00 ALS Bottle#: 0 Worklist Smp#: 29
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0125974-029
Misc. Info.: 280-0125974-029
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub9

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 02-Oct-2023 07:29:01 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1656

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	ND	
2 Chloride	4.237	4.235	0.002	1896256580	100.0	98.3	
3 Nitrite as N	4.865	4.865	0.000	256449925	NC	NC	
4 Bromide	5.995	6.010	-0.015	36132738	5.00	4.34	
5 Nitrate as N	6.720	6.730	-0.010	229738038	NC	NC	
6 Orthophosphate as P	8.548	8.503	0.045	163588017	NC	NC	
7 Sulfate	9.562	9.568	-0.006	1462601884	100.0	100.7	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

Reagents:

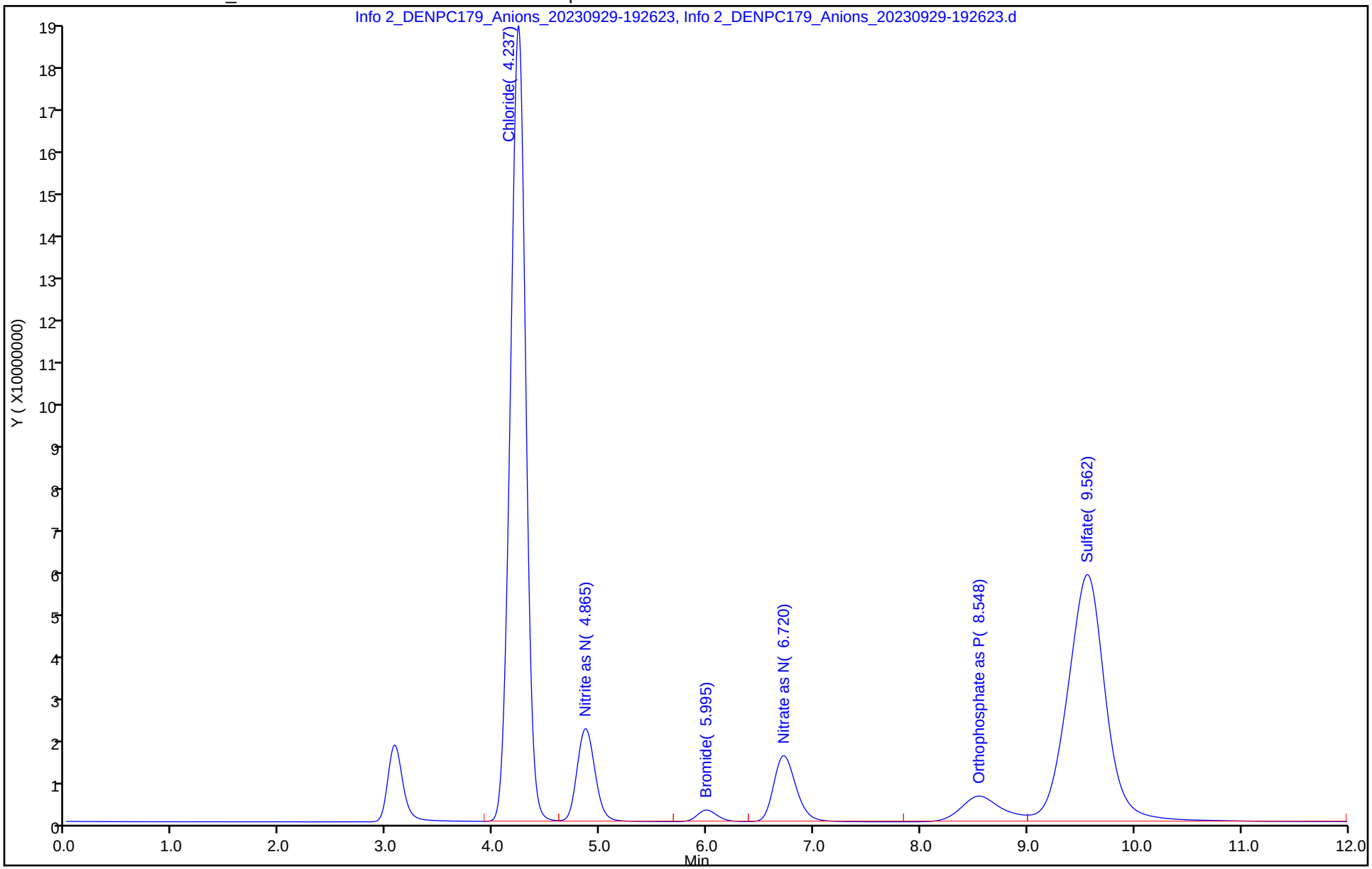
IC LCS_01980 Amount Added: 10.00 Units: mL

Report Date: 02-Oct-2023 07:29:01 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-192623.d

Injection Date:	29-Sep-2023 19:11:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	29
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



12/5/2023 8:25 AM

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-194				
Lims ID:	ccb				
Client ID:					
Sample Type:	CCB				
Inject. Date:	29-Sep-2023 19:26:00	ALS Bottle#:	0	Worklist Smp#:	30
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0125974-030				
Misc. Info.:	280-0125974-030				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Anions_IC10.m				
Limit Group:	Wet - Anions 28D				
Last Update:	02-Oct-2023 07:29:01	Calib Date:	16-Aug-2023 09:39:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1656				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078				ND	
2 Chloride	4.175	4.235	-0.060	39535		0.1791	
3 Nitrite as N		4.865				ND	
4 Bromide	6.032	6.010	0.022	58681		-0.0368	
5 Nitrate as N		6.730				ND	
6 Orthophosphate as P	8.643	8.503	0.140	24815768		NC	
7 Sulfate	9.562	9.568	-0.006	17531048		1.29	

QC Flag Legend

Processing Flags

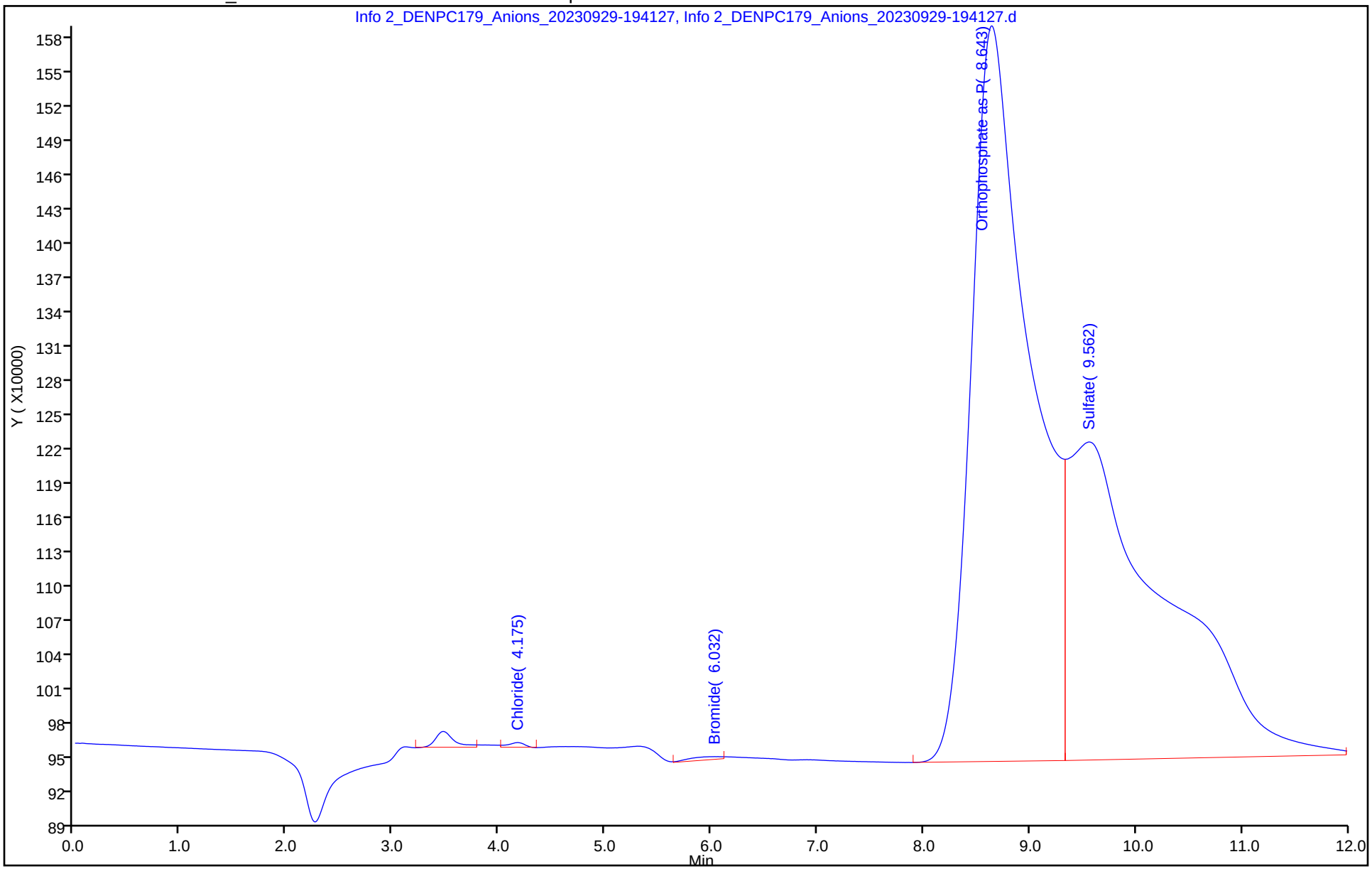
NC - Not Calibrated

Report Date: 02-Oct-2023 07:29:02 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230929-125974.b\Info 2_DENPC179_Anions_20230929-194127.d

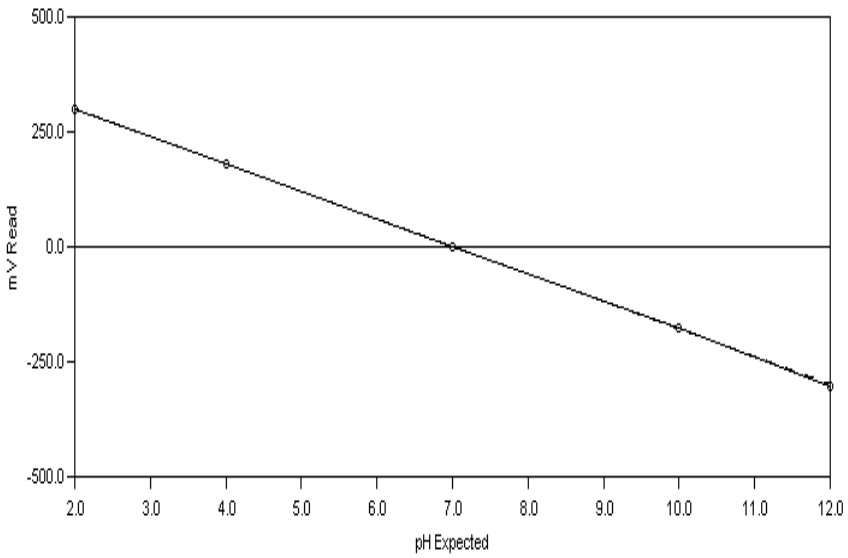
Injection Date:	29-Sep-2023 19:26:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	30
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



12/5/2023 8:25 AM

Calibration Report

Calibration Record # 709



Calibration Settings

Calibration ID	PH	Date	10/4/2023	
Channel	1	Time	1:40 PM	
Probe Type	pH	Temperature	294.09 K	20.94 C
Probe ID	PH ELECTRODE	Analysis Type	Single Line Fit	

Calibration Results

Slope	-60.147	CorrCoeff	0.9999
Intercept	-0.388	Equation:	Y = (-60.147) X + (-0.388)

Calibration Validity **True** Operator

	Result	Minimum	Maximum
Slope	-60.147	-65.00	-53.00
Intercept	-0.388	-100.00	100.00
Correlation Coefficient	0.9999	0.99	1.00

Note: "True" means the calibration was within the specified ranges
"False" means the calibration was NOT within the specified ranges

Calibration Data	Standard	Reading
	2.00	299.80
	4.00	180.05
	7.00	-0.97
	10.00	-176.63
	12.00	-304.19

Test America

AT4 Analyst:_____

Water Analysis Report

Run Number 2046 **Order Number** 20231004-2

SampleID	RunDate	RunTime	Temp	cond (uS)	pH	palk-ppm	talk-ppm	bcarb-ppm	carb-ppm	hydr-ppm	(mL) @ 8.3	(mL) @ 4.5	(mL) @ 4.2	Conc (N)
RINSE	10/4/2023	10:01 PM	20.56	-1.00	5.31	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
INITIAL CHECK	10/4/2023	10:08 PM	20.34	-1.00	10.61	175.61	200.50	.00	49.77	150.73	1.76	2.00	-1.00	.02
BUFFER 7	10/4/2023	10:11 PM	19.96	-1.00	7.03	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
LCS	10/4/2023	10:17 PM	20.02	-1.00	10.67	179.79	206.77	.00	53.97	152.81	1.80	2.07	-1.00	.02
MB	10/4/2023	10:23 PM	19.80	-1.00	8.29	.00	3.44	3.44	.00	.00	.00	.04	.05	.02
280-182078-e-1	10/4/2023	10:29 PM	19.40	-1.00	6.17	.00	104.59	104.59	.00	.00	.00	1.05	-1.00	.02
DU 280-182078-e-1	10/4/2023	10:34 PM	19.23	-1.00	6.22	.00	105.14	105.14	.00	.00	.00	1.05	-1.00	.02
280-182078-e-4	10/4/2023	10:39 PM	19.24	-1.00	6.20	.00	59.97	59.97	.00	.00	.00	.60	-1.00	.02
280-182078-e-5	10/4/2023	10:45 PM	19.47	-1.00	6.45	.00	139.64	139.64	.00	.00	.00	1.40	-1.00	.02
280-182118-e-1	10/4/2023	10:52 PM	20.00	-1.00	6.87	.00	223.38	223.38	.00	.00	.00	2.23	-1.00	.02
280-182123-i-1	10/4/2023	10:58 PM	20.33	-1.00	6.82	.00	106.21	106.21	.00	.00	.00	1.06	-1.00	.02
280-182141-c-5	10/4/2023	11:06 PM	20.00	-1.00	8.30	12.74	376.02	350.55	25.47	.00	.13	3.76	-1.00	.02
280-182141-c-6	10/4/2023	11:14 PM	19.98	-1.00	7.85	.00	446.63	446.63	.00	.00	.00	4.47	-1.00	.02
280-182142-c-2	10/4/2023	11:25 PM	20.04	-1.00	6.71	.00	715.91	715.91	.00	.00	.00	7.16	-1.00	.02
280-182142-c-3	10/4/2023	11:33 PM	20.15	-1.00	7.24	.00	439.08	439.08	.00	.00	.00	4.39	-1.00	.02
CCV	10/4/2023	11:40 PM	20.11	-1.00	10.60	175.97	200.26	.00	48.57	151.68	1.76	2.00	-1.00	.02
CCB	10/4/2023	11:46 PM	20.09	-1.00	8.27	.00	3.28	3.28	.00	.00	.00	.04	.05	.02
280-182142-d-1	10/5/2023	12:04 AM	20.09	-1.00	7.19	.00	1,798.45	1,798.45	.00	.00	.00	17.98	-1.00	.02
280-182143-d-1	10/5/2023	12:10 AM	20.41	-1.00	6.31	.00	64.22	64.22	.00	.00	.00	.64	-1.00	.02
280-182175-c-1	10/5/2023	12:18 AM	20.54	-1.00	6.78	.00	350.80	350.80	.00	.00	.00	3.51	-1.00	.02
280-182145-a-4	10/5/2023	12:23 AM	20.83	-1.00	4.41	.00	-1.92	-1.92	.00	.00	.00	.00	.02	.02
280-182145-a-6	10/5/2023	12:27 AM	20.72	-1.00	5.83	.00	29.08	29.08	.00	.00	.00	.29	-1.00	.02
280-182145-a-5	10/5/2023	12:32 AM	20.70	-1.00	5.89	.00	29.10	29.10	.00	.00	.00	.29	-1.00	.02
280-182145-a-1	10/5/2023	12:38 AM	20.69	-1.00	6.42	.00	140.25	140.25	.00	.00	.00	1.40	-1.00	.02
280-182246-b-3	10/5/2023	12:44 AM	20.62	-1.00	6.83	.00	118.30	118.30	.00	.00	.00	1.18	-1.00	.02
280-182246-b-2	10/5/2023	12:50 AM	20.58	-1.00	6.03	.00	.85	.85	.00	.00	.00	.02	.04	.02
280-182246-b-4	10/5/2023	12:55 AM	20.60	-1.00	5.35	.00	.11	.11	.00	.00	.00	.02	.03	.02

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Run Number 2046 **Order Number** 20231004-2

SampleID	RunDate	RunTime	Temp	cond (uS)	pH	palk-ppm	talk-ppm	bcarb-ppm	carb-ppm	hydr-ppm	(mL) @ 8.3	(mL) @ 4.5	(mL) @ 4.2	Conc (N)
CCV	10/5/2023	1:01 AM	20.49	-1.00	10.58	176.27	201.05	.00	49.57	151.48	1.76	2.01	-1.00	.02
CCB	10/5/2023	1:07 AM	20.47	-1.00	8.28	.00	3.25	3.25	.00	.00	.00	.04	.05	.02

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Shipping and Receiving Documents

leidos

Chain of Custody Record

Page 1 of 11

COC No.: RVAAP-36T-TA

Date: 09/28/23

Name Leidos
Address: 8866 Commons Blvd. Suite 201, Twinsburg, OH 44087
Phone Number: (330) 405-5802
Project Manager: Jed Thomas
Project: RVAAP FWGW Sampling Event Fall 2023
Job/P.O. No.: P010216426
Sampler (Signature) (Printed Name)

Matt Schlabach Matt Rechenberg

Laboratory Name: TA- Denver
Address: 4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0107
Contact: Patrick McEntee

Requested Parameters

Laboratory No	Sample ID	Site Type	Depth	Date	Time	Matrix	Expanded Explosives (6)(A)	Sulfide (9)(F)	Nitrate/Nitrite/Sulfate (10)(A)	Alkalinity (14)(A)	TOC (13)(E)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	LL1mw-080-230901-GW-R			09/28/23	0907	W			1				1	

MS 9/28/23

Relinquished by	Date	Received by	Date
Signature	9/28/23	Signature	9/29/23
Charlie Spann	Time 1730	Jarod Swegle	Time 0935
Printed Name / Leidos / Company		Printed Name GET DEN / Company	
Relinquished by	Date	Received by	Date
Signature		Signature	
Printed Name / Company	Time	Printed Name / Company	Time

Notes: Total Number of Containers: 1

A. Cool, 4C
B. HCl, pH<2, Cool, 4C
C. HNO3, pH<2, Cool, 4C
D. NaOH, pH>12, Cool 4C

1. SW 8260B
2. SW 8270D
3. SW 8270D SIM
4. SW 8082A
5. SW 8081B
6. SW 8330
7. SW 6010/6020/7470
8. SW 9012B
9. SW 9034
10. SW 9056/9056A
11. SW 6860
12. EPA 353.2
13. SW 7196
14. SM2320B

Notes:

Shipment Method: Courier

FedEx

8174 6109 4806

Temperature Blank

Lab:
Leidos
8866 Commons Drive
Twinsburg, OH 44087
(330) 405-5802

Leidos White: Laboratory Pink Project Manager Yellow: Project QAO Goldenrod: Field Project Manager

1.0 QR MOMD CF 0.3

280-182145 Chain of Custody

12/5/2023 8:25 AM

leidos

Chain of Custody Record

COC No.: RVAAP-328-TA

Date: 9/28/23

Name Leidos
Address: 8866 Commons Blvd. Suite 201, Twinsburg, OH 44087
Phone Number: (330) 405-5802
Project Manager: Jed Thomas
Project: RVAAP FWGW Sampling Event Fall 2023
Job/P.O. No.: P010216426
Sampler (Signature) Melissa Rego (Printed Name) Melissa Rego

Laboratory Name: TA- Denver
Address: 4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0107
Contact: Patrick McEntee

Laboratory No	Sample ID	Site Type	Depth	Date	Time	Matrix	VOCs (1)(B)	Nitrate (10)(A)	Temperature Blank	Total Number of Containers
	FWGmw-018-230901-GW	—	—	9/28/23	0941	W		1		1

Requested Parameters

OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS

MR 9/28/23

Relinquished by	Date	Received by	Date	Notes:	Total Number of Containers:	1
Signature	9/28/23	Signature	9/29/23	A. Cool, 4C		
Printed Name: Charles Squire	Time: 1730	Printed Name: Jarod Swegle	Time: 0935	B. HCl, pH<2, Cool, 4C		
Company: Leidos		Company: GGT DEN		C. HNO3, pH<2, Cool, 4C		
				D. NaOH, pH>12, Cool 4C		
Relinquished by	Date	Received by	Date	1. SW 8260B	Notes:	
Signature		Signature		2. SW 8270D		
Printed Name	Time	Printed Name	Time	3. SW 8270D SIM		
Company		Company		4. SW 8082A		
				5. SW 8081B		
				6. SW 8330		
				7. SW 6010/6020/7470		
				8. SW 9012B		
				9. SW 9034		
				10. SW 9056/9056A		
				11. SW 6860		
				12. EPA 353.2		
				13. SW 7196		
				14. SM2320B		

Shipment Method: Courier

Temperature Blank

Lab:
Leidos
8866 Commons Drive
Twinsburg, OH 44087
(330) 405-5802

Leidos

White: Laboratory Pink: Project Manager Yellow: Project QAO Goldenrod: Field Project Manager

12/5/2023 8:25 AM

leidos

Chain of Custody Record

COC No.: RVAAP-369-TA
Date: 9/28/23

Name Leidos
Address: 8866 Commons Blvd. Suite 201, Twinsburg, OH 44087
Phone Number: (330) 405-5802
Project Manager: Jed Thomas
Project: RVAAP FWGW Sampling Event Fall 2023
Job/P.O. No.: P010216426
Sampler (Signature) (Printed Name) Chris McFarland

Laboratory Name: TA- Denver
Address: 4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0107
Contact: Patrick McEntee

Laboratory No	Sample ID	Site Type	Depth	Date	Time	Matrix	Nitrate (10)(A)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	FWGmw-020-230901-GW	-	-	9/28/23	0955	W	1		1	

Requested Parameters

Relinquished by	Date	Received by	Date	Time
Signature	9/28/23	Signature	9/29/23	
Printed Name: Charles Spurr	Time: 1730	Printed Name: Jarod Suggle	Time: 09:35	
Company: Leidos		Company: GET DSN		
Relinquished by	Date	Received by	Date	Time
Signature		Signature		
Printed Name	Time	Printed Name	Time	
Company		Company		

Notes:
A. Cool, 4C
B. HCl, pH<2, Cool, 4C
C. HNO3, pH<2, Cool, 4C
D. NaOH, pH>12, Cool 4C

Total Number of Containers: 1

1. SW 8260B
2. SW 8270D
3. SW 8270D SIM
4. SW 8082A
5. SW 8081B
6. SW 8330
7. SW 6010/6020/7470
8. SW 9012B
9. SW 9034
10. SW 9056/9056A
11. SW 6860
12. EPA 353.2
13. SW 7196
14. SM2320B

Notes:

Shipment Method: Courier

Temperature Blank

Lab:
Leidos
8866 Commons Drive
Twinsburg, OH 44087
(330) 405-5802

Leidos

White: Laboratory Pink. Project Manager Yellow: Project QAO Goldenrod: Field Project Manager

12/5/2023 8:25 AM

leidos

Chain of Custody Record

COC No.: RVAAP-370TA

Page 4 of 11

Date: 9/28/23

Name Leidos
Address: 8866 Commons Blvd. Suite 201, Twinsburg, OH 44087
Phone Number: (330) 405-5802
Project Manager: Jed Thomas
Project: RVAAP FWGW Sampling Event Fall 2023
Job/P.O. No.: P010216426
Sampler (Signature) (Printed Name)

Matt Rechenberg Matt Rechenberg

Laboratory Name: TA- Denver
Address: 4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0107
Contact: Patrick McEntee

Laboratory No	Sample ID	Site Type	Depth	Date	Time	Matrix	Expanded Explosives (6)(A)	Sulfide (9)(F)	Nitrate/Nitrite/Sulfate (10)(A)	Alkalinity (14)(A)	TOC (13)(E)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	LL1mw-083-230901-GW-R	-	-	9/28/23	1011	W			1				1	

Requested Parameters

9/28/23

Relinquished by	Date	Received by	Date	Notes: Total Number of Containers: 1
Signature	9/28/23	Signature	9/29/23	A. Cool, 4C E. NaOH/Zn Acetate, pH>9, Cool 4C
Printed Name: Charlo Spurr	Time: 1730	Printed Name: Jarod Snoga	Time: 9135	B. HCl, pH<2, Cool, 4C
Company: Leidos		Company: GET OGN		C. HNO3, pH<2, Cool, 4C
Relinquished by	Date	Received by	Date	D. NaOH, pH>12, Cool 4C
Signature		Signature		1. SW 8260B Notes:
Printed Name	Time	Printed Name	Time	2. SW 8270D
Company		Company		3. SW 8270D SIM
				4. SW 8082A
				5. SW 8081B
				6. SW 8330
				7. SW 6010/6020/7470
				8. SW 9012B
				9. SW 9034
				10. SW 9056/9056A
				11. SW 6860
				12. EPA 353.2
				13. SW 7196
				14. SM2320B

Shipment Method: Courier

Temperature Blank

Lab:
Leidos
8866 Commons Drive
Twinsburg, OH 44087
(330) 405-5802

Leidos

White: Laboratory Pink: Project Manager Yellow: Project QAO Goldenrod: Field Project Manager

12/5/2023 8:25 AM

Chain of Custody Record

leidos

COC No.: RVAAP-371-TA

Page 5 of 11

Date: 9/28/23

Name Leidos
Address: 8866 Commons Blvd. Suite 201, Twinsburg, OH 44087
Phone Number: (330) 405-5802
Project Manager: Jed Thomas
Project: RVAAP FWGW Sampling Event Fall 2023
Job/P.O. No.: P010216426
Sampler (Signature) (Printed Name)

Matt S Rechenberg Matt Rechenberg

Laboratory Name: TA- Denver
Address: 4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0107
Contact: Patrick McEntee

Laboratory No	Sample ID	Site Type	Depth	Date	Time	Matrix	Expanded Explosives (6)(A)	Sulfide (9)(F)	Nitrate/Nitrite/Sulfate (10)(A)	Alkalinity (14)(A)	TOC (13)(E)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	LL1mw-084-230901-R	—	-	9/28/23	1857	W			1				1	
	LL1mw-084-230901-GWMSD-R	—	-	9/28/23	1857	W			1				1	extra volume for MS/MSD, no alkalinity
	LL1mw-084-230902-GW-R	—	-	9/28/23	1857	W			1				1	

JK 9/28/23

Requested Parameters

Relinquished by	Date	Received by	Date	Notes: Total Number of Containers: 3	Shipment Method: Courier
Signature	9/28/23	Signature	9/29/23	A. Cool, 4C; E. H2SO4, pH<2, Cool, 4C; B. HCl, pH<2, Cool, 4C; F. NaOH/Zn, pH>12, Cool 4C; C. HNO3, pH<2, Cool, 4C; D. NaOH, pH>12, Cool 4C	
Charles Simmons	Time	Printed Name	Time	1. SW 8260B Notes:	
Printed Name	1730	Jarod Swegle	9:35	2. SW 8270D; 3. SW 8270D SIM; 4. SW 8082A; 5. SW 8081B; 6. SW 8330; 7. SW 6010/6020/7470; 8. SW 9012B; 9. SW 9034; 10. SW 9056/9056A; 11. SW 350.1; 12. EPA 353.2; 13. SW 9060A; 14. SM2320B	
Leidos		GGT DEN			
Company		Company			
Relinquished by	Date	Received by	Date		Temperature Blank
Signature		Signature			Lab:
Printed Name	Time	Printed Name	Time		Leidos
Company		Company			8866 Commons Drive, Twinsburg, OH 44087, (330) 405-5802

Leidos White: Laboratory Pink Project Manager Yellow. Project QAO Goldenrod: Field Project Manager

Chain of Custody Record

leidos

Page 6 of 11

COC No.: RVAAP-372-TA

Date: 9/28/23

Name Leidos
Address: 8866 Commons Blvd. Suite 201, Twinsburg, OH 44087
Phone Number: (330) 405-5802
Project Manager: Jed Thomas
Project: RVAAP FWGW Sampling Event Fall 2023
Job/P.O. No.: P010216436
Sampler (Signature) Melissa Rego (Printed Name) Melissa Rego

Laboratory Name: TA- Denver
Address: 4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0107
Contact: Patrick McEntee

Laboratory No	Sample ID	Site Type	Depth	Date	Time	Matrix	Requested Parameters: Explosives (6)(A)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	FWGmw-021-230901-GW	—	—	9/28/23	1137	W	2		2	

MR 9/28/23

Relinquished by	Date	Received by	Date	Notes: Total Number of Containers: 2	Shipment Method: Courier
Signature: Charles Spencer	9/28/23	Signature: Jarod Swegle	9/29/23	A. Cool, 4C B. HCl, pH<2, Cool, 4C C. HNO3, pH<2, Cool, 4C D. NaOH, pH>12, Cool 4C	
Printed Name: Charles Spencer	Time: 1730	Printed Name: Jarod Swegle	Time: 0935	1. SW 8260B Notes: 2. SW 8270D 3. SW 8270D SIM 4. SW 8082A 5. SW 8081B	
Company: Leidos		Company: CET A6N		6. SW 8330 7. SW 6010/6020/7470 8. SW 9012B 9. SW 9034 10. SW 9056/9056A 11. SW 6860 12. EPA 353.2 13. SW 7196 14. SM2320B	
Relinquished by	Date	Received by	Date		
Signature		Signature			
Printed Name	Time	Printed Name	Time		
Company		Company			

Temperature Blank

Lab:
Leidos
8866 Commons Drive
Twinsburg, OH 44087
(330) 405-5802

Leidos

White: Laboratory Pink: Project Manager Yellow: Project QAO Goldenrod: Field Project Manager

12/5/2023 8:25 AM

leidos

Chain of Custody Record

COC No.: RVAAP-373-TA

Date: 9/28/23

Name Leidos
Address: 8866 Commons Blvd. Suite 201, Twinsburg, OH 44087
Phone Number: (330) 405-5802
Project Manager: Jed Thomas
Project: RVAAP FWGW Sampling Event Fall 2023
Job/P.O. No.: P010216426
Sampler (Signature) (Printed Name) Chris McFarland

Laboratory Name: TA- Denver
Address: 4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0107
Contact: Patrick McEntee

Requested Parameters

Laboratory No	Sample ID	Site Type	Depth	Date	Time	Matrix	Expanded Explosives (6)(A)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	LL3mw-245-230901-GW	-	-	92823	1156	W	2		2	

cr 9/28/23

Relinquished by	Date	Received by	Date	Notes: Total Number of Containers: 2
Signature	9/28/23	Signature	9/29/23	A. Cool, 4C B. HCl, pH<2, Cool, 4C C. HNO3, pH<2, Cool, 4C D. NaOH, pH>12, Cool 4C
Charles Spurr	Time	Jacob Swegh	Time	1. SW 8260B Notes:
Printed Name	1730	Printed Name	9:35	2. SW 8270D
Leidos		EET DEN		3. SW 8270D SIM
Company		Company		4. SW 8082A
				5. SW 8081B
Relinquished by	Date	Received by	Date	6. SW 8330
Signature		Signature		7. SW 6010/6020/7470
	Time		Time	8. SW 9012B
Printed Name		Printed Name		9. SW 9034
Company		Company		10. SW 9056/9056A
				11. SW 6860
				12. EPA 353.2
				13. SW 7196
				14. SM2320B

Shipment Method: Courier

Temperature Blank

Lab:
Leidos
8866 Commons Drive
Twinsburg, OH 44087
(330) 405-5802

Leidos

White: Laboratory Pink. Project Manager Yellow: Project QAO Goldenrod: Field Project Manager

12/5/2023 8:25 AM

leidos

Chain of Custody Record

Page 8 of 11

COC No.: RVAAP-374-TA

Date: 9/28/23

Name Leidos
Address: 8866 Commons Blvd. Suite 201, Twinsburg, OH 44087
Phone Number: (330) 405-5802
Project Manager: Jed Thomas
Project: RVAAP FWGW Sampling Event Fall 2023
Job/P.O. No.: P010216426
Sampler (Signature) (Printed Name)

Chris McFarland

Laboratory Name: TA- Denver
Address: 4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0107
Contact: Patrick McEntee

Laboratory No	Sample ID	Site Type	Depth	Date	Time	Matrix	Requested Parameters: Nitrate (10)(A)	AMMONIA 15 (E)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	LL12mw-246-230901-GW	-	-	9/28/23	1325	W	1	1		2	
	LL12MW-RB-346-2023	-	-	9/28/23	1516	W	1	1		2	Rinsate for LL12mw-246

9/28/23

Relinquished by	Date	Received by	Date	Notes: Total Number of Containers: 4	Shipment Method: Courier
Signature: Charles Spur	9/28/23	Signature: Jarod Swegle	9/29/23	A. Cool, 4C E. H2SO4 B. HCl, pH<2, Cool, 4C C. HNO3, pH<2, Cool, 4C D. NaOH, pH>12, Cool 4C	
Printed Name: Charles Spur	Time: 1730	Printed Name: JAROD SWEGLE	Time: 9:35	1. SW 8260B 2. SW 8270D 3. SW 8270D SIM 4. SW 8082A 5. SW 8081B	
Company: Leidos		Company: EST JEN			
Relinquished by	Date	Received by	Date	6. SW 8330 7. SW 6010/6020/7470 8. SW 9012B 9. SW 9034 10. SW 9056/9056A	Temperature Blank
Signature		Signature			
Printed Name	Time	Printed Name	Time	11. SW 6860 12. EPA 353.2 13. SW 7196 14. SM2320B 15. E350.1	Lab: Leidos 8866 Commons Drive Twinsburg, OH 44087 (330) 405-5802
Company		Company			

Leidos

White: Laboratory Pink: Project Manager Yellow: Project QAO Goldenrod: Field Project Manager

12/5/2023 8:25 AM

leidos

Chain of Custody Record

Page 9 of 11

COC No.: RVAAP-374-TA

Date: 9/28/23

Name Leidos
Address: 8866 Commons Blvd. Suite 201, Twinsburg, OH 44087
Phone Number: (330) 405-5802
Project Manager: Jed Thomas
Project: RVAAP FWGW Sampling Event Fall 2023
Job/P.O. No.: P010216426
Sampler (Signature) (Printed Name)
Chris McFarland

Laboratory Name: TA- Denver
Address: 4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0107
Contact: Patrick McEntee

Laboratory No	Sample ID	Site Type	Depth	Date	Time	Matrix	Nitrate (10)(A)	AMMONIA 15 (E)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	LL12mw-246-230901-GW	-	-	9/28/23	1325	W	1	1		2	
	LL12MW-RB-346-2023	-	-	9/28/23	1516	W	1	1		2	Rinsate for LL12mw-246 (-) for clarity jmp 9/29/23

9/28/23

Relinquished by	Date	Received by	Date
Signature: Charles Spurr	9/28/23	Signature: Kevin Ruehsner	
Printed Name: Leidos	Time: 1730	Printed Name: EETDEN	Time
Company		Company	
Relinquished by	Date	Received by	Date
Signature		Signature	
Printed Name	Time	Printed Name	Time
Company		Company	

Notes: Total Number of Containers: 4

A. Cool, 4C
B. HCl, pH<2, Cool, 4C
C. HNO3, pH<2, Cool, 4C
D. NaOH, pH>12, Cool 4C
E. H2SO4

1. SW 8260B
2. SW 8270D
3. SW 8270D SIM
4. SW 8082A
5. SW 8081B
6. SW 8330
7. SW 6010/6020/7470
8. SW 9012B
9. SW 9034
10. SW 9056/9056A
11. SW 6860
12. EPA 353.2
13. SW 7196
14. SM2320B
15. E350.1

Shipment Method: Courier

Temperature Blank

Lab:
Leidos
8866 Commons Drive
Twinsburg, OH 44087
(330) 405-5802

Leidos

White: Laboratory Pink: Project Manager Yellow: Project QAO Goldenrod: Field Project Manager

12/5/2023 8:25 AM

leidos

Chain of Custody Record

Page 1 of 11

COC No.: RVAAP-375-TA

Date: 9/28/23

Name Leidos
Address: 8866 Commons Blvd. Suite 201, Twinsburg, OH 44087
Phone Number: (330) 405-5802
Project Manager: Jed Thomas
Project: RVAAP FWGW Sampling Event Fall 2023
Job/P.O. No.: P010216426
Sampler (Signature) Melissa Rego (Printed Name) Melissa Rego

Laboratory Name: TA- Denver
Address: 4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0107
Contact: Patrick McEntee

Laboratory No	Sample ID	Site Type	Depth	Date	Time	Matrix	Requested Parameters: Explosives (6)(A)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	FWGmw-024-230901-GW	—	—	9/28/23	1316	W	2		2	

MR 9/28/23

Relinquished by	Date	Received by	Date	Notes: Total Number of Containers: 2	Shipment Method: Courier
Signature: Charles Spurr	9/29/23	Signature: Jarod Swegle	9/29/23	A. Cool, 4C B. HCl, pH<2, Cool, 4C C. HNO3, pH<2, Cool, 4C D. NaOH, pH>12, Cool 4C	
Printed Name: Leidos	Time: 1730	Printed Name: EET DEN	Time: 9:35	1. SW 8260B Notes: 2. SW 8270D 3. SW 8270D SIM 4. SW 8082A 5. SW 8081B	
Company		Company		6. SW 8330 7. SW 6010/6020/7470 8. SW 9012B 9. SW 9034 10. SW 9056/9056A	
Relinquished by	Date	Received by	Date	11. SW 6860 12. EPA 353.2 13. SW 7196 14. SM2320B	Temperature Blank
Signature		Signature			Lab: Leidos 8866 Commons Drive Twinsburg, OH 44087 (330) 405-5802
Printed Name	Time	Printed Name	Time		
Company		Company			

Leidos

White: Laboratory Pink: Project Manager Yellow: Project QAO Goldenrod: Field Project Manager

leidos

Chain of Custody Record

COC No.: RVAAP-376TA

Page 9 of 11

Date: 9/28/23

Name Leidos
Address: 8866 Commons Blvd. Suite 201, Twinsburg, OH 44087
Phone Number: (330) 405-5802
Project Manager: Jed Thomas
Project: RVAAP FWGW Sampling Event Fall 2023
Job/P.O. No.: P010216426
Sampler (Signature) (Printed Name)

Matt S Rechenberg Matt Rechenberg

Laboratory Name: TA- Denver
Address: 4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0107
Contact: Patrick McEntee

Laboratory No	Sample ID	Site Type	Depth	Date	Time	Matrix	Expanded Explosives (6)(A)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	FWGmw-023-230901-GW			9/28/23	1405	W	2		2	

Requested Parameters

JK 9/28/23

Relinquished by	Date	Received by	Date	Notes: Total Number of Containers: 2
Signature	9/29/23	Signature	9/29/23	A. Cool, 4C
Charles Spurr	Time	Jarod Swegly	Time	B. HCl, pH<2, Cool, 4C
Printed Name	1730	Printed Name	9:35	C. HNO3, pH<2, Cool, 4C
Leidos		EST NSN		D. NaOH, pH>12, Cool 4C
Company		Company		1. SW 8260B Notes:
Relinquished by	Date	Received by	Date	2. SW 8270D
Signature		Signature		3. SW 8270D SIM
Printed Name	Time	Printed Name	Time	4. SW 8082A
Company		Company		5. SW 8081B
				6. SW 8330
				7. SW 6010/6020/7470
				8. SW 9012B
				9. SW 9034
				10. SW 9056/9056A
				11. SW 6860
				12. EPA 353.2
				13. SW 7196
				14. SM2320B

Shipment Method: Courier

Temperature Blank

Lab:
Leidos
8866 Commons Drive
Twinsburg, OH 44087
(330) 405-5802

Leidos

White: Laboratory Pink: Project Manager Yellow. Project QAO Goldenrod. Field Project Manager

12/5/2023 8:25 AM

leidos

Chain of Custody Record

COC No.: RVAAP-377-TA

Date: 9/28/23

Name Leidos
Address: 8866 Commons Blvd. Suite 201, Twinsburg, OH 44087
Phone Number: (330) 405-5802
Project Manager: Jed Thomas
Project: RVAAP FWGW Sampling Event Fall 2023
Job/P.O. No.: P010216426
Sampler (Signature) (Printed Name)

Matt S Rechenberg — Matt Rechenberg

Laboratory Name: TA- Denver
Address: 4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0107
Contact: Patrick McEntee

Requested Parameters

Laboratory No	Sample ID	Site Type	Depth	Date	Time	Matrix	VOCs (1)(B) CCl4 only	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	LL10mw-003-230901-GW			9/28/23	1458	W	3		3	Carbon tetrachloride only
	FWGTB-230901-TB003			9/28/23	1445	W	3		3	trip blank
					JK	9/28/23				

Relinquished by	Date	Received by	Date	Notes: Total Number of Containers: 6
Signature	9/28/23	Signature	9/29/23	A. Cool, 4C B. HCl, pH<2, Cool, 4C C. HNO3, pH<2, Cool, 4C D. NaOH, pH>12, Cool 4C
Printed Name: Charles	Time: 1730	Printed Name: Jarod Swyglo	Time: 9:35	1. SW 8260B Notes: 2. SW 8270D 3. SW 8270D SIM 4. SW 8082A 5. SW 8081B
Company: Leidos		Company: EST DEN		6. SW 8330 7. SW 6010/6020/7470 8. SW 9012B 9. SW 9034 10. SW 9056/9056A 11. SW 6860 12. EPA 353.2 13. SW 7196 14. SM2320B
Relinquished by	Date	Received by	Date	
Signature		Signature		
Printed Name	Time	Printed Name	Time	
Company		Company		

Shipment Method: Courier

Temperature Blank

Lab:
Leidos
8866 Commons Drive
Twinsburg, OH 44087
(330) 405-5802

Leidos

White: Laboratory Pink: Project Manager Yellow. Project QAO Goldenrod· Field Project Manager

12/5/2023 8:25 AM

Login Sample Receipt Checklist

Client: Leidos, Inc.

Job Number: 280-182145-1

Login Number: 182145
List Number: 1
Creator: Roehsner, Karen P

List Source: Eurofins Denver

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	False	Narrative to indicate if headspace container used for analysis.
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	