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ANALYTICAL REPORT

PREPARED FOR

Attn: Rita Schmon-Stasik
Leidos, Inc.
Picatinny Arsenal
356 Ninth Avenue
Suite 106
Dover NJ 07801

Generated 5/31/2023 7:23 AM

JOB DESCRIPTION

RVAAP FWGW Spring 2023

JOB NUMBER

280-176335-1

Eurofins Denver
4955 Yarrow Street
Arvada CO 80002

See page two for job notes and contact information.

my EOL

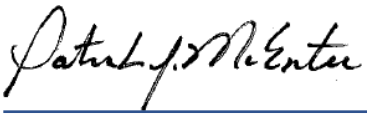
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Job Notes

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Authorization



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Authorized for release by
Patrick J McEntee, Client Service Manager
Patrick.McEntee@et.eurofinsus.com
303 736-0107

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Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
M	Manual integrated compound.
U	Undetected at the Limit of Detection.

General Chemistry

Qualifier	Qualifier Description
J	Estimated: The analyte was positively identified; the quantitation is an estimation
M	Manual integrated compound.
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 Spring 2023

Report Number: 280-176335-1

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.

RECEIPT
The samples were received on 5/11/2023 9:45 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 1.8º C.

EXPLOSIVES (HPLC)
Samples LL1mw-082-230401-GW (280-176335-1), FWGmw-021-230401-GW (280-176335-2), FWGmw-024-230401-GW (280-176335-3) and LL2mw-059-230401-GW (280-176335-4) were analyzed for Explosives (HPLC) in accordance with 8330B. The samples were prepared on 05/17/2023 and analyzed on 05/18/2023 and 05/19/2023.

The %RPD between the primary and confirmation column exceeded 40% for 2-Amino-4,6-dinitrotoluene and RDX for the following sample: LL1mw-082-230401-GW (280-176335-1) and FWGmw-021-230401-GW (280-176335-2) in preparation batch 280-612789 and analytical batch 280-612858. The results from both columns has been qualified and reported in accordance with the laboratory's QAS.

In preparation batch 280-612275, the following sample required filtration to reduce matrix interferences: LL1mw-082-230401-GW (280-176335-1).

In preparation batch 280-612275, the following sample: LL2mw-059-230401-GW (280-176335-4) was decanted prior to preparation.

In preparation batch 280-612789, the following samples required filtration to reduce matrix interferences: LL1mw-082-230401-GW (280-176335-1) and FWGmw-024-230401-GW (280-176335-3).

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

ALKALINITY
Sample LL2mw-059-230401-GW (280-176335-4) was analyzed for Alkalinity in accordance with SM20 2320B. The samples were analyzed on 05/17/2023.

Alkalinity was detected in method blank MB 280-612947/6 at a level that below one half the LOQ.

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

SULFIDE
Sample LL2mw-059-230401-GW (280-176335-4) was analyzed for sulfide in accordance with EPA SW-846 Method 9034. The samples were prepared and analyzed on 05/17/2023.

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

ANIONS, ION CHROMATOGRAPHY
Samples LL2mw-059-230401-GW (280-176335-4), FWGmw-020-230401-GW (280-176335-5) and FWGmw-018-230401-GW (280-176335-6) were analyzed for Anions, Ion Chromatography in accordance with 9056A (48 Hours). The samples were analyzed on 05/11/2023.

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

ANIONS (28 DAYS)
Sample LL2mw-059-230401-GW (280-176335-4) was analyzed for anions (28 days) in accordance with 9056A (28 Days). The samples were analyzed on 05/11/2023.

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

TOTAL ORGANIC CARBON

Sample LL2mw-059-230401-GW (280-176335-4) was analyzed for total organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 05/24/2023.

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

Detection Summary

Client: Leidos, Inc.
Job ID: 280-176335-1
Project/Site: RVAAP FWGW Spring 2023

Client Sample ID: LL1mw-082-230401-GW — Lab Sample ID: 280-176335-1

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
RDX	0.98	J1	0.21	0.20	0.051	ug/L	1		8330B	Total/NA
RDX	0.27	J1	0.21	0.20	0.051	ug/L	1		8330B	Total/NA

Client Sample ID: FWGmw-021-230401-GW — Lab Sample ID: 280-176335-2

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
2-Amino-4,6-dinitrotoluene	0.16	J1	0.12	0.11	0.054	ug/L	1		8330B	Total/NA
2-Amino-4,6-dinitrotoluene	0.28	J1	0.12	0.11	0.054	ug/L	1		8330B	Total/NA

Client Sample ID: FWGmw-024-230401-GW — Lab Sample ID: 280-176335-3

No Detections.

Client Sample ID: LL2mw-059-230401-GW — Lab Sample ID: 280-176335-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trinitrobenzene	1.2	M	0.21	0.20	0.083	ug/L	1		8330B	Total/NA
2,4-Dinitrotoluene	0.30		0.099	0.079	0.027	ug/L	1		8330B	Total/NA
3,5-Dinitroaniline	1.9		0.39	0.30	0.13	ug/L	1		8330B	Total/NA
4-Amino-2,6-dinitrotoluene	0.54		0.15	0.12	0.057	ug/L	1		8330B	Total/NA
Nitrate as N	0.39	J M	0.50	0.20	0.090	mg/L	1		9056	Total/NA
Sulfate	16	M	5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Organic Carbon - Average	1.2		1.0	0.80	0.35	mg/L	1		9060	Total/NA
Alkalinity	110		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: FWGmw-020-230401-GW — Lab Sample ID: 280-176335-5

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Nitrate as N	0.13	J M	0.50	0.20	0.090	mg/L	1		9056	Total/NA

Client Sample ID: FWGmw-018-230401-GW — Lab Sample ID: 280-176335-6

No Detections.

This Detection Summary does not include radiochemical test results.

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

Client Sample ID: LL1mw-082-230401-GW
Lab Sample ID: 280-176335-1
Date Collected: 05/10/23 11:20
Matrix: Water
Date Received: 05/11/23 09:45

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U M	0.21	0.20	0.084	ug/L		05/18/23 14:59	1
1,3-Dinitrobenzene	0.099	U M	0.11	0.099	0.037	ug/L		05/18/23 14:59	1
2,4,6-Trinitrotoluene	0.099	U	0.11	0.099	0.045	ug/L		05/18/23 14:59	1
2,4-diamino-6-nitrotoluene	0.90	U	0.99	0.90	0.43	ug/L		05/18/23 14:59	1
2,4-Dinitrotoluene	0.080	U	0.099	0.080	0.027	ug/L		05/18/23 14:59	1
2,6-diamino-4-nitrotoluene	0.90	U	0.99	0.90	0.22	ug/L		05/18/23 14:59	1
2,6-Dinitrotoluene	0.080	U	0.099	0.080	0.040	ug/L		05/18/23 14:59	1
2-Amino-4,6-dinitrotoluene	0.099	U	0.11	0.099	0.050	ug/L		05/18/23 14:59	1
2-Nitrotoluene	0.20	U M	0.21	0.20	0.085	ug/L		05/18/23 14:59	1
3,5-Dinitroaniline	0.30	U	0.40	0.30	0.13	ug/L		05/18/23 14:59	1
3-Nitrotoluene	0.35	U	0.40	0.35	0.19	ug/L		05/18/23 14:59	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.057	ug/L		05/18/23 14:59	1
4-Nitrotoluene	0.40	U M	0.41	0.40	0.099	ug/L		05/18/23 14:59	1
DNX	0.25	U	0.50	0.25	0.097	ug/L		05/18/23 14:59	1
HMX	0.20	U M	0.21	0.20	0.087	ug/L		05/19/23 08:38	1
MNX	0.29	U	0.50	0.29	0.092	ug/L		05/19/23 08:38	1
Nitrobenzene	0.20	U	0.21	0.20	0.091	ug/L		05/18/23 14:59	1
Nitroglycerin	2.0	U	2.1	2.0	0.92	ug/L		05/18/23 14:59	1
PETN	0.99	U	1.1	0.99	0.44	ug/L		05/18/23 14:59	1
RDX	**0.98**	**J1**	0.21	0.20	0.051	ug/L		05/18/23 14:59	1
RDX	**0.27**	**J1**	0.21	0.20	0.051	ug/L		05/19/23 08:38	1
Tetryl	0.099	U	0.11	0.099	0.032	ug/L		05/18/23 14:59	1
TNX	0.25	U	0.50	0.25	0.079	ug/L		05/18/23 14:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*99*		*83 - 119*	*05/17/23 13:57*	*05/18/23 14:59*	*1*
1,2-Dinitrobenzene	*101*		*83 - 119*	*05/17/23 13:57*	*05/19/23 08:38*	*1*

Client Sample ID: FWGmw-021-230401-GW
Lab Sample ID: 280-176335-2
Date Collected: 05/10/23 14:11
Matrix: Water
Date Received: 05/11/23 09:45

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.089	ug/L		05/18/23 15:22	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039	ug/L		05/18/23 15:22	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048	ug/L		05/18/23 15:22	1
2,4-Dinitrotoluene	0.085	U	0.11	0.085	0.029	ug/L		05/18/23 15:22	1
2,6-Dinitrotoluene	0.085	U	0.11	0.085	0.042	ug/L		05/18/23 15:22	1
2-Amino-4,6-dinitrotoluene	**0.16**	**J1**	0.12	0.11	0.054	ug/L		05/18/23 15:22	1
2-Amino-4,6-dinitrotoluene	**0.28**	**J1**	0.12	0.11	0.054	ug/L		05/19/23 09:14	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.090	ug/L		05/18/23 15:22	1
3-Nitrotoluene	0.37	U	0.42	0.37	0.21	ug/L		05/18/23 15:22	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.061	ug/L		05/19/23 09:14	1
4-Nitrotoluene	0.42	U	0.43	0.42	0.11	ug/L		05/18/23 15:22	1
HMX	0.21	U M	0.22	0.21	0.093	ug/L		05/18/23 15:22	1
Nitrobenzene	0.21	U	0.22	0.21	0.096	ug/L		05/18/23 15:22	1
Nitroglycerin	2.1	U	2.2	2.1	0.97	ug/L		05/18/23 15:22	1
PETN	1.1	U	1.2	1.1	0.47	ug/L		05/18/23 15:22	1
RDX	0.21	U	0.22	0.21	0.054	ug/L		05/18/23 15:22	1
Tetryl	0.11	U	0.12	0.11	0.034	ug/L		05/18/23 15:22	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	102	M	83 - 119	05/17/23 13:57	05/18/23 15:22	1
1,2-Dinitrobenzene	97		83 - 119	05/17/23 13:57	05/19/23 09:14	1

Client Sample ID: FWGmw-024-230401-GW **Lab Sample ID: 280-176335-3**
Date Collected: 05/10/23 13:46 **Matrix: Water**
Date Received: 05/11/23 09:45

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U	0.22	0.20	0.086	ug/L		05/18/23 15:45	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038	ug/L		05/18/23 15:45	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.046	ug/L		05/18/23 15:45	1
2,4-Dinitrotoluene	0.082	U	0.10	0.082	0.028	ug/L		05/18/23 15:45	1
2,6-Dinitrotoluene	0.082	U	0.10	0.082	0.041	ug/L		05/18/23 15:45	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.052	ug/L		05/18/23 15:45	1
2-Nitrotoluene	0.20	U M	0.22	0.20	0.088	ug/L		05/18/23 15:45	1
3-Nitrotoluene	0.36	U	0.41	0.36	0.20	ug/L		05/18/23 15:45	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.059	ug/L		05/18/23 15:45	1
4-Nitrotoluene	0.41	U	0.42	0.41	0.10	ug/L		05/18/23 15:45	1
HMX	0.20	U M	0.22	0.20	0.090	ug/L		05/18/23 15:45	1
Nitrobenzene	0.20	U	0.22	0.20	0.093	ug/L		05/18/23 15:45	1
Nitroglycerin	2.0	U	2.2	2.0	0.94	ug/L		05/18/23 15:45	1
PETN	1.0	U	1.1	1.0	0.46	ug/L		05/18/23 15:45	1
RDX	0.20	U	0.22	0.20	0.053	ug/L		05/18/23 15:45	1
Tetryl	0.10	U	0.11	0.10	0.033	ug/L		05/18/23 15:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	103	M	83 - 119	05/17/23 13:57	05/18/23 15:45	1

Client Sample ID: LL2mw-059-230401-GW **Lab Sample ID: 280-176335-4**
Date Collected: 05/10/23 14:51 **Matrix: Water**
Date Received: 05/11/23 09:45

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**1.2**	**M**	0.21	0.20	0.083	ug/L		05/18/23 16:08	1
1,3-Dinitrobenzene	0.099	U	0.11	0.099	0.036	ug/L		05/19/23 10:26	1
2,4,6-Trinitrotoluene	0.099	U	0.11	0.099	0.044	ug/L		05/18/23 16:08	1
2,4-diamino-6-nitrotoluene	0.89	U	0.99	0.89	0.43	ug/L		05/18/23 16:08	1
2,4-Dinitrotoluene	**0.30**		0.099	0.079	0.027	ug/L		05/18/23 16:08	1
2,6-diamino-4-nitrotoluene	0.89	U	0.99	0.89	0.22	ug/L		05/18/23 16:08	1
2,6-Dinitrotoluene	0.079	U	0.099	0.079	0.040	ug/L		05/18/23 16:08	1
2-Amino-4,6-dinitrotoluene	0.099	U	0.11	0.099	0.050	ug/L		05/19/23 10:26	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.084	ug/L		05/18/23 16:08	1
3,5-Dinitroaniline	**1.9**		0.39	0.30	0.13	ug/L		05/18/23 16:08	1
3-Nitrotoluene	0.35	U	0.39	0.35	0.19	ug/L		05/18/23 16:08	1
4-Amino-2,6-dinitrotoluene	**0.54**		0.15	0.12	0.057	ug/L		05/18/23 16:08	1
4-Nitrotoluene	0.39	U	0.40	0.39	0.099	ug/L		05/18/23 16:08	1
DNX	0.25	U	0.49	0.25	0.096	ug/L		05/18/23 16:08	1
HMX	0.20	U M	0.21	0.20	0.086	ug/L		05/18/23 16:08	1
MNX	0.29	U	0.49	0.29	0.092	ug/L		05/18/23 16:08	1
Nitrobenzene	0.20	U	0.21	0.20	0.090	ug/L		05/18/23 16:08	1
Nitroglycerin	2.0	U	2.1	2.0	0.91	ug/L		05/18/23 16:08	1
PETN	0.99	U	1.1	0.99	0.44	ug/L		05/18/23 16:08	1
RDX	0.20	U	0.21	0.20	0.051	ug/L		05/18/23 16:08	1
Tetryl	0.099	U	0.11	0.099	0.031	ug/L		05/18/23 16:08	1
TNX	0.25	U	0.49	0.25	0.078	ug/L		05/18/23 16:08	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	*100*	*M*	*83 - 119*	*05/17/23 13:57*	*05/18/23 16:08*	*1*
1,2-Dinitrobenzene	*96*		*83 - 119*	*05/17/23 13:57*	*05/19/23 10:26*	*1*

General Chemistry

Client Sample ID: LL2mw-059-230401-GW **Lab Sample ID: 280-176335-4**
Date Collected: 05/10/23 14:51 **Matrix: Water**
Date Received: 05/11/23 09:45

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfide (SW846 9034)	2.0	U	4.0	2.0	1.6	mg/L		05/17/23 13:31	1
Nitrate as N (SW846 9056)	**0.39**	**J M**	0.50	0.20	0.090	mg/L		05/11/23 23:54	1
Nitrite as N (SW846 9056)	0.10	U	0.50	0.10	0.049	mg/L		05/11/23 23:54	1
Sulfate (SW846 9056A)	**16**	**M**	5.0	2.5	1.0	mg/L		05/11/23 23:54	1
Total Organic Carbon - Average (SW846 9060)	**1.2**		1.0	0.80	0.35	mg/L		05/24/23 05:18	1
Alkalinity (SM 2320B)	**110**		10	6.4	3.1	mg/L		05/17/23 18:18	1

Client Sample ID: FWGmw-020-230401-GW **Lab Sample ID: 280-176335-5**
Date Collected: 05/10/23 09:29 **Matrix: Water**
Date Received: 05/11/23 09:45

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate as N (SW846 9056)	**0.13**	**J M**	0.50	0.20	0.090	mg/L		05/11/23 17:53	1

Client Sample ID: FWGmw-018-230401-GW **Lab Sample ID: 280-176335-6**
Date Collected: 05/10/23 09:15 **Matrix: Water**
Date Received: 05/11/23 09:45

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		05/11/23 17:38	1

Default Detection Limits

Client: Leidos, Inc.
Job ID: 280-176335-1
Project/Site: RVAAP FWGW Spring 2023

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
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
Total Organic Carbon - Average	1.0	0.35	mg/L
Alkalinity	10	3.1	mg/L

General Chemistry

Prep: 9030B

Analyte	LOQ	DL	Units
Sulfide	4.0	1.6	mg/L

Surrogate Summary

Client: Leidos, Inc.
Job ID: 280-176335-1
Project/Site: RVAAP FWGW Spring 2023

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	12DNB1 (83-119)								
280-176335-1	LL1mw-082-230401-GW	99								
280-176335-2	FWGmw-021-230401-GW	102 M								
280-176335-3	FWGmw-024-230401-GW	103 M								
280-176335-4	LL2mw-059-230401-GW	100 M								
LCS 280-612789/2-A	Lab Control Sample	100								
LCS 280-612789/4-A	Lab Control Sample	110								
LCSD 280-612789/3-A	Lab Control Sample Dup	102								
LCSD 280-612789/5-A	Lab Control Sample Dup	106								
MB 280-612789/1-A	Method Blank	106								

Surrogate Legend

12DNB = 1,2-Dinitrobenzene

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	12DNB2 (83-119)								
280-176335-1	LL1mw-082-230401-GW	101								
280-176335-2	FWGmw-021-230401-GW	97								
280-176335-4	LL2mw-059-230401-GW	96								

Surrogate Legend

12DNB = 1,2-Dinitrobenzene

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Lab Sample ID: MB 280-612789/1-A
Matrix: Water
Analysis Batch: 612858

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 612789

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U M	0.21	0.20	0.084	ug/L		05/18/23 08:52	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		05/18/23 08:52	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		05/18/23 08:52	1
2,4-diamino-6-nitrotoluene	0.90	U	1.0	0.90	0.43	ug/L		05/18/23 08:52	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027	ug/L		05/18/23 08:52	1
2,6-diamino-4-nitrotoluene	0.90	U	1.0	0.90	0.22	ug/L		05/18/23 08:52	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		05/18/23 08:52	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		05/18/23 08:52	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.086	ug/L		05/18/23 08:52	1
3,5-Dinitroaniline	0.30	U	0.40	0.30	0.13	ug/L		05/18/23 08:52	1
3-Nitrotoluene	0.35	U	0.40	0.35	0.20	ug/L		05/18/23 08:52	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		05/18/23 08:52	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		05/18/23 08:52	1
DNX	0.25	U	0.50	0.25	0.097	ug/L		05/18/23 08:52	1
HMX	0.20	U	0.21	0.20	0.088	ug/L		05/18/23 08:52	1
MNX	0.29	U	0.50	0.29	0.093	ug/L		05/18/23 08:52	1
Nitrobenzene	0.20	U	0.21	0.20	0.091	ug/L		05/18/23 08:52	1
Nitroglycerin	2.0	U	2.1	2.0	0.92	ug/L		05/18/23 08:52	1
PETN	1.0	U	1.1	1.0	0.45	ug/L		05/18/23 08:52	1
RDX	0.20	U	0.21	0.20	0.052	ug/L		05/18/23 08:52	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		05/18/23 08:52	1
TNX	0.25	U	0.50	0.25	0.079	ug/L		05/18/23 08:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*106*		*83 - 119*	*05/17/23 13:57*	*05/18/23 08:52*	*1*

Lab Sample ID: LCS 280-612789/2-A
Matrix: Water
Analysis Batch: 612858

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 612789

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,3,5-Trinitrobenzene	2.00	2.06		ug/L		103	73 - 125
1,3-Dinitrobenzene	2.00	1.99		ug/L		99	78 - 120
2,4,6-Trinitrotoluene	2.00	1.89		ug/L		95	71 - 123
2,4-Dinitrotoluene	2.00	1.88		ug/L		94	78 - 120
2,6-Dinitrotoluene	2.00	1.96		ug/L		98	77 - 127
2-Amino-4,6-dinitrotoluene	2.00	1.85		ug/L		92	79 - 120
2-Nitrotoluene	2.00	1.62		ug/L		81	70 - 127
3,5-Dinitroaniline	2.00	1.79		ug/L		90	71 - 117
3-Nitrotoluene	2.00	1.61		ug/L		81	73 - 125
4-Amino-2,6-dinitrotoluene	2.00	1.85		ug/L		92	76 - 125
4-Nitrotoluene	2.00	1.61		ug/L		80	71 - 127
DNX	2.00	1.98	M	ug/L		99	66 - 119
HMX	2.00	1.80	M	ug/L		90	65 - 135
MNX	2.33	2.35	M	ug/L		101	57 - 132
Nitrobenzene	2.00	1.83		ug/L		92	65 - 134
Nitroglycerin	20.0	19.4		ug/L		97	74 - 127
PETN	20.0	21.1		ug/L		105	73 - 127

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

Lab Sample ID: LCS 280-612789/2-A
Matrix: Water
Analysis Batch: 612858

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 612789

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
RDX			2.00	1.91		ug/L		96	68 - 130		
Tetryl			2.00	2.12		ug/L		106	64 - 128		
TNX			2.01	1.97	M	ug/L		98	50 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dinitrobenzene	*100*		*83 - 119*

Lab Sample ID: LCS 280-612789/4-A
Matrix: Water
Analysis Batch: 612858

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 612789

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
2,4-diamino-6-nitrotoluene			2.00	1.53	M	ug/L		77	68 - 122		
2,6-diamino-4-nitrotoluene			2.00	1.64	M	ug/L		82	72 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dinitrobenzene	*110*		*83 - 119*

Lab Sample ID: LCSD 280-612789/3-A
Matrix: Water
Analysis Batch: 612858

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 612789

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene			2.00	2.06		ug/L		103	73 - 125	0	20
1,3-Dinitrobenzene			2.00	2.00		ug/L		100	78 - 120	1	20
2,4,6-Trinitrotoluene			2.00	1.90		ug/L		95	71 - 123	1	20
2,4-Dinitrotoluene			2.00	1.90		ug/L		95	78 - 120	1	20
2,6-Dinitrotoluene			2.00	1.96		ug/L		98	77 - 127	0	20
2-Amino-4,6-dinitrotoluene			2.00	1.82		ug/L		91	79 - 120	1	20
2-Nitrotoluene			2.00	1.62		ug/L		81	70 - 127	0	20
3,5-Dinitroaniline			2.00	1.79		ug/L		89	71 - 117	0	20
3-Nitrotoluene			2.00	1.59		ug/L		80	73 - 125	1	20
4-Amino-2,6-dinitrotoluene			2.00	1.76		ug/L		88	76 - 125	5	20
4-Nitrotoluene			2.00	1.61		ug/L		80	71 - 127	0	20
DNX			2.00	1.96	M	ug/L		98	66 - 119	1	20
HMX			2.00	1.79	M	ug/L		90	65 - 135	0	20
MNX			2.33	2.36	M	ug/L		101	57 - 132	1	20
Nitrobenzene			2.00	1.80		ug/L		90	65 - 134	2	20
Nitroglycerin			20.0	19.8		ug/L		99	74 - 127	2	20
PETN			20.0	21.1		ug/L		106	73 - 127	0	20
RDX			2.00	1.97		ug/L		99	68 - 130	3	20
Tetryl			2.00	2.12		ug/L		106	64 - 128	0	20
TNX			2.01	1.89	M	ug/L		94	50 - 150	4	20

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

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

Lab Sample ID: LCSD 280-612789/5-A
Matrix: Water
Analysis Batch: 612858

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 612789

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-diamino-6-nitrotoluene			2.00	1.77	M	ug/L		89	68 - 122	15	20
2,6-diamino-4-nitrotoluene			2.00	1.83	M	ug/L		91	72 - 122	11	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dinitrobenzene	*106*		*83 - 119*

Method: 9034 - Sulfide, Acid Soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 280-612820/2-A
Matrix: Water
Analysis Batch: 612827

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 612820

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfide	2.0	U	4.0	2.0	1.6	mg/L		05/17/23 13:31	1

Lab Sample ID: LCS 280-612820/1-A
Matrix: Water
Analysis Batch: 612827

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 612820

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Sulfide			18.6	16.8		mg/L		90	44 - 110		

Method: 9056 - Anions, Ion Chromatography

Lab Sample ID: MB 280-612109/6
Matrix: Water
Analysis Batch: 612109

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		05/11/23 16:23	1
Nitrite as N	0.10	U	0.50	0.10	0.049	mg/L		05/11/23 16:23	1

Lab Sample ID: LCS 280-612109/4
Matrix: Water
Analysis Batch: 612109

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			2.50	2.46	M	mg/L		98	88 - 111		
Nitrite as N			2.50	2.49	M	mg/L		100	87 - 111		

Lab Sample ID: LCSD 280-612109/5
Matrix: Water
Analysis Batch: 612109

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			2.50	2.47	M	mg/L		99	88 - 111	0	10
Nitrite as N			2.50	2.48	M	mg/L		99	87 - 111	0	10

Method: 9056 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MRL 280-612109/3
Matrix: Water
Analysis Batch: 612109

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	0.250	0.265	J M	mg/L		106	50 - 150
Nitrite as N	0.250	0.303	J M	mg/L		121	50 - 150

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 280-612110/6
Matrix: Water
Analysis Batch: 612110

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 M	5.0	2.5	1.0	mg/L		05/11/23 16:23	1

Lab Sample ID: LCS 280-612110/4
Matrix: Water
Analysis Batch: 612110

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	50.0	48.9	M	mg/L		98	87 - 112

Lab Sample ID: LCSD 280-612110/5
Matrix: Water
Analysis Batch: 612110

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	50.0	48.9	M	mg/L		98	87 - 112	0	10

Lab Sample ID: MRL 280-612110/3
Matrix: Water
Analysis Batch: 612110

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	2.50	2.78	J M	mg/L		111	50 - 150

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-613718/35
Matrix: Water
Analysis Batch: 613718

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Organic Carbon - Average	0.80	U	1.0	0.80	0.35	mg/L		05/24/23 03:34	1

Lab Sample ID: LCS 280-613718/34
Matrix: Water
Analysis Batch: 613718

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Average	25.0	24.0		mg/L		96	88 - 112

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-612947/32
Matrix: Water
Analysis Batch: 612947

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Alkalinity	6.4	U	10	6.4	3.1	mg/L		05/17/23 16:57	1

Lab Sample ID: MB 280-612947/6
Matrix: Water
Analysis Batch: 612947

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Alkalinity	3.38	J	10	6.4	3.1	mg/L		05/17/23 14:03	1

Lab Sample ID: LCS 280-612947/31
Matrix: Water
Analysis Batch: 612947

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Alkalinity			200	199		mg/L		99	89 - 110		

Lab Sample ID: LCSD 280-612947/5
Matrix: Water
Analysis Batch: 612947

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
Alkalinity			200	202		mg/L		101	89 - 110	0	10

HPLC/IC

Prep Batch: 612789

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176335-1	LL1mw-082-230401-GW	Total/NA	Water	3535	
280-176335-2	FWGmw-021-230401-GW	Total/NA	Water	3535	
280-176335-3	FWGmw-024-230401-GW	Total/NA	Water	3535	
280-176335-4	LL2mw-059-230401-GW	Total/NA	Water	3535	
MB 280-612789/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-612789/2-A	Lab Control Sample	Total/NA	Water	3535	
LCS 280-612789/4-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 280-612789/3-A	Lab Control Sample Dup	Total/NA	Water	3535	
LCSD 280-612789/5-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 612858

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176335-1	LL1mw-082-230401-GW	Total/NA	Water	8330B	612789
280-176335-2	FWGmw-021-230401-GW	Total/NA	Water	8330B	612789
280-176335-3	FWGmw-024-230401-GW	Total/NA	Water	8330B	612789
280-176335-4	LL2mw-059-230401-GW	Total/NA	Water	8330B	612789
MB 280-612789/1-A	Method Blank	Total/NA	Water	8330B	612789
LCS 280-612789/2-A	Lab Control Sample	Total/NA	Water	8330B	612789
LCS 280-612789/4-A	Lab Control Sample	Total/NA	Water	8330B	612789
LCSD 280-612789/3-A	Lab Control Sample Dup	Total/NA	Water	8330B	612789
LCSD 280-612789/5-A	Lab Control Sample Dup	Total/NA	Water	8330B	612789

Analysis Batch: 612994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176335-1	LL1mw-082-230401-GW	Total/NA	Water	8330B	612789
280-176335-2	FWGmw-021-230401-GW	Total/NA	Water	8330B	612789
280-176335-4	LL2mw-059-230401-GW	Total/NA	Water	8330B	612789

General Chemistry

Analysis Batch: 612109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176335-4	LL2mw-059-230401-GW	Total/NA	Water	9056	
280-176335-5	FWGmw-020-230401-GW	Total/NA	Water	9056	
280-176335-6	FWGmw-018-230401-GW	Total/NA	Water	9056	
MB 280-612109/6	Method Blank	Total/NA	Water	9056	
LCS 280-612109/4	Lab Control Sample	Total/NA	Water	9056	
LCSD 280-612109/5	Lab Control Sample Dup	Total/NA	Water	9056	
MRL 280-612109/3	Lab Control Sample	Total/NA	Water	9056	

Analysis Batch: 612110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176335-4	LL2mw-059-230401-GW	Total/NA	Water	9056A	
MB 280-612110/6	Method Blank	Total/NA	Water	9056A	
LCS 280-612110/4	Lab Control Sample	Total/NA	Water	9056A	
LCSD 280-612110/5	Lab Control Sample Dup	Total/NA	Water	9056A	
MRL 280-612110/3	Lab Control Sample	Total/NA	Water	9056A	

Prep Batch: 612820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176335-4	LL2mw-059-230401-GW	Total/NA	Water	9030B	

General Chemistry (Continued)

Prep Batch: 612820 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-612820/2-A	Method Blank	Total/NA	Water	9030B	
LCS 280-612820/1-A	Lab Control Sample	Total/NA	Water	9030B	

Analysis Batch: 612827

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176335-4	LL2mw-059-230401-GW	Total/NA	Water	9034	612820
MB 280-612820/2-A	Method Blank	Total/NA	Water	9034	612820
LCS 280-612820/1-A	Lab Control Sample	Total/NA	Water	9034	612820

Analysis Batch: 612947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176335-4	LL2mw-059-230401-GW	Total/NA	Water	SM 2320B	
MB 280-612947/32	Method Blank	Total/NA	Water	SM 2320B	
MB 280-612947/6	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-612947/31	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 280-612947/5	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Analysis Batch: 613718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176335-4	LL2mw-059-230401-GW	Total/NA	Water	9060	
MB 280-613718/35	Method Blank	Total/NA	Water	9060	
LCS 280-613718/34	Lab Control Sample	Total/NA	Water	9060	

Client Sample ID: LL1mw-082-230401-GW — Lab Sample ID: 280-176335-1

Date Collected: 05/10/23 11:20 — **Matrix: Water**
Date Received: 05/11/23 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			502.7 mL	5 mL	612789	05/17/23 13:57	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	612994	05/19/23 08:38	JZ	EET DEN
Total/NA	Prep	3535			502.7 mL	5 mL	612789	05/17/23 13:57	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	612858	05/18/23 14:59	JZ	EET DEN

Client Sample ID: FWGmw-021-230401-GW — Lab Sample ID: 280-176335-2

Date Collected: 05/10/23 14:11 — **Matrix: Water**
Date Received: 05/11/23 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			472.5 mL	5 mL	612789	05/17/23 13:57	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	612994	05/19/23 09:14	JZ	EET DEN
Total/NA	Prep	3535			472.5 mL	5 mL	612789	05/17/23 13:57	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	612858	05/18/23 15:22	JZ	EET DEN

Client Sample ID: FWGmw-024-230401-GW — Lab Sample ID: 280-176335-3

Date Collected: 05/10/23 13:46 — **Matrix: Water**
Date Received: 05/11/23 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			487.9 mL	5 mL	612789	05/17/23 13:57	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	612858	05/18/23 15:45	JZ	EET DEN

Client Sample ID: LL2mw-059-230401-GW — Lab Sample ID: 280-176335-4

Date Collected: 05/10/23 14:51 — **Matrix: Water**
Date Received: 05/11/23 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			506.8 mL	5 mL	612789	05/17/23 13:57	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	612994	05/19/23 10:26	JZ	EET DEN
Total/NA	Prep	3535			506.8 mL	5 mL	612789	05/17/23 13:57	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	612858	05/18/23 16:08	JZ	EET DEN
Total/NA	Prep	9030B			50 mL	50 mL	612820	05/17/23 12:32	CAI	EET DEN
Total/NA	Analysis	9034		1			612827	05/17/23 13:31	CAI	EET DEN
Total/NA	Analysis	9056		1	10 mL	10 mL	612109	05/11/23 23:54	MEC	EET DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	612110	05/11/23 23:54	MEC	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	613718	05/24/23 05:18	ABW	EET DEN
Total/NA	Analysis	SM 2320B		1			612947	05/17/23 18:18	KEG	EET DEN

Client Sample ID: FWGmw-020-230401-GW — Lab Sample ID: 280-176335-5

Date Collected: 05/10/23 09:29 — **Matrix: Water**
Date Received: 05/11/23 09:45

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	612109	05/11/23 17:53	MEC	EET DEN

Lab Chronicle

Client: Leidos, Inc.
Job ID: 280-176335-1
Project/Site: RVAAP FWGW Spring 2023

Client Sample ID: FWGmw-018-230401-GW
Lab Sample ID: 280-176335-6

Date Collected: 05/10/23 09:15
Matrix: Water
Date Received: 05/11/23 09:45

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	612109	05/11/23 17:38	MEC	EET DEN

Laboratory References:

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

Accreditation/Certification Summary

Client: Leidos, Inc. Job ID: 280-176335-1
Project/Site: RVAAP FWGW Spring 2023

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. Job ID: 280-176335-1
Project/Site: RVAAP FWGW Spring 2023

Method	Method Description	Protocol	Laboratory
8330B	Nitroaromatics and Nitramines (HPLC)	EPA	EET DEN
9034	Sulfide, Acid Soluble and Insoluble (Titrimetric)	SW846	EET DEN
9056	Anions, Ion Chromatography	SW846	EET DEN
9056A	Anions, Ion Chromatography	SW846	EET DEN
9060	Organic Carbon, Total (TOC)	SW846	EET DEN
SM 2320B	Alkalinity	SM	EET DEN
3535	Solid-Phase Extraction (SPE)	SW846	EET DEN
9030B	Sulfide, Distillation (Acid Soluble and Insoluble)	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: 280-176335-1
Project/Site: RVAAP FWGW Spring 2023

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-176335-1	LL1mw-082-230401-GW	Water	05/10/23 11:20	05/11/23 09:45
280-176335-2	FWGmw-021-230401-GW	Water	05/10/23 14:11	05/11/23 09:45
280-176335-3	FWGmw-024-230401-GW	Water	05/10/23 13:46	05/11/23 09:45
280-176335-4	LL2mw-059-230401-GW	Water	05/10/23 14:51	05/11/23 09:45
280-176335-5	FWGmw-020-230401-GW	Water	05/10/23 09:29	05/11/23 09:45
280-176335-6	FWGmw-018-230401-GW	Water	05/10/23 09:15	05/11/23 09:45

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 494886

Lab Sample ID: IC 280-494886/7 Client Sample ID:

Date Analyzed: 05/14/20 16:16 Lab File ID: 05140007.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	4.30	Baseline	zhangji	05/15/20 11:21
2,4-diamino-6-nitrotoluene	4.77	Baseline	zhangji	05/15/20 11:21
3,5-Dinitroaniline	14.80	Split Peak	zhangji	05/14/20 17:09
2-Nitrotoluene	16.48	Split Peak	zhangji	05/14/20 17:09
4-Nitrotoluene	16.72	Split Peak	zhangji	05/14/20 17:09
4-Amino-2,6-dinitrotoluene	17.07	Split Peak	zhangji	05/14/20 17:08
3-Nitrotoluene	17.78	Split Peak	zhangji	05/14/20 17:08
2-Amino-4,6-dinitrotoluene	17.94	Split Peak	zhangji	05/14/20 17:08
1,3,5-Trinitrobenzene	18.83	Peak assignment corrected	zhangji	05/14/20 17:08
2,6-Dinitrotoluene	19.74	Peak assignment corrected	zhangji	05/14/20 17:08
2,4-Dinitrotoluene	20.24	Peak assignment corrected	zhangji	05/14/20 17:08
Tetryl	23.52	Peak assignment corrected	zhangji	05/14/20 17:08
2,4,6-Trinitrotoluene	24.62	Peak assignment corrected	zhangji	05/14/20 17:08

Lab Sample ID: IC 280-494886/8 Client Sample ID:

Date Analyzed: 05/14/20 16:51 Lab File ID: 05140008.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	4.32	Baseline	zhangji	05/15/20 11:19
2,4-diamino-6-nitrotoluene	4.91	Baseline	zhangji	05/15/20 11:19
1,2-Dinitrobenzene	13.03	Baseline	zhangji	05/15/20 11:34

Lab Sample ID: IC 280-494886/9 Client Sample ID:

Date Analyzed: 05/14/20 17:26 Lab File ID: 05140009.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	13.03	Baseline	zhangji	05/15/20 11:34

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 494886

Lab Sample ID: IC 280-494886/10 Client Sample ID:

Date Analyzed: 05/14/20 18:01 Lab File ID: 05140010.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	4.35	Baseline	zhangji	05/15/20 11:20
2,4-diamino-6-nitrotoluene	4.94	Baseline	zhangji	05/15/20 11:20
Picric acid	6.27	Peak assignment corrected	zhangji	05/15/20 11:20
1,2-Dinitrobenzene	13.04	Baseline	zhangji	05/15/20 11:34
3,5-Dinitroaniline	14.89	Baseline	zhangji	05/15/20 11:20
1,3-Dinitrobenzene	15.55	Baseline	zhangji	05/15/20 11:20
2-Nitrotoluene	16.54	Baseline	zhangji	05/15/20 11:20
4-Nitrotoluene	16.82	Baseline	zhangji	05/15/20 11:20
4-Amino-2,6-dinitrotoluene	17.15	Baseline	zhangji	05/15/20 11:20
3-Nitrotoluene	17.75	Baseline	zhangji	05/15/20 11:20
2-Amino-4,6-dinitrotoluene	18.04	Baseline	zhangji	05/15/20 11:20
2,6-Dinitrotoluene	19.81	Baseline	zhangji	05/15/20 11:20
2,4-Dinitrotoluene	20.29	Baseline	zhangji	05/15/20 11:20
PETN	25.28	Peak Tail	zhangji	05/15/20 11:25

Lab Sample ID: IC 280-494886/11 Client Sample ID:

Date Analyzed: 05/14/20 18:36 Lab File ID: 05140011.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	6.30	Peak assignment corrected	zhangji	05/15/20 11:20
1,2-Dinitrobenzene	13.04	Baseline	zhangji	05/15/20 11:35
Nitroglycerin	15.85	Baseline	zhangji	05/15/20 11:32
PETN	25.28	Peak Tail	zhangji	05/15/20 11:25

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 494886

Lab Sample ID: IC 280-494886/12 Client Sample ID:

Date Analyzed: 05/14/20 19:11 Lab File ID: 05140012.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	6.31	Peak assignment corrected	zhangji	05/15/20 11:22
3,5-Dinitroaniline	14.90	Baseline	zhangji	05/15/20 11:21
1,3-Dinitrobenzene	15.55	Baseline	zhangji	05/15/20 11:21
Nitroglycerin	15.85	Baseline	zhangji	05/15/20 11:32
2-Nitrotoluene	16.53	Baseline	zhangji	05/15/20 11:21
4-Nitrotoluene	16.83	Baseline	zhangji	05/15/20 11:21
4-Amino-2,6-dinitrotoluene	17.15	Baseline	zhangji	05/15/20 11:21
3-Nitrotoluene	17.74	Baseline	zhangji	05/15/20 11:21
2-Amino-4,6-dinitrotoluene	18.05	Baseline	zhangji	05/15/20 11:21
1,3,5-Trinitrobenzene	18.88	Baseline	zhangji	05/15/20 11:21
2,6-Dinitrotoluene	19.79	Baseline	zhangji	05/15/20 11:21
2,4-Dinitrotoluene	20.29	Baseline	zhangji	05/15/20 11:21
PETN	25.28	Peak Tail	zhangji	05/15/20 11:24

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 494886

Lab Sample ID: IC 280-494886/13 Client Sample ID:

Date Analyzed: 05/14/20 19:46 Lab File ID: 05140013.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	6.33	Baseline	zhangji	05/15/20 11:22
1,2-Dinitrobenzene	13.04	Baseline	zhangji	05/15/20 11:35
3,5-Dinitroaniline	14.89	Baseline	zhangji	05/15/20 11:22
1,3-Dinitrobenzene	15.54	Baseline	zhangji	05/15/20 11:22
Nitroglycerin	15.84	Incomplete Integration	zhangji	05/15/20 11:32
2-Nitrotoluene	16.55	Baseline	zhangji	05/15/20 11:22
4-Nitrotoluene	16.84	Baseline	zhangji	05/15/20 11:22
4-Amino-2,6-dinitrotoluene	17.16	Baseline	zhangji	05/15/20 11:22
3-Nitrotoluene	17.72	Baseline	zhangji	05/15/20 11:22
2-Amino-4,6-dinitrotoluene	18.03	Baseline	zhangji	05/15/20 11:22
1,3,5-Trinitrobenzene	18.86	Baseline	zhangji	05/15/20 11:22
2,6-Dinitrotoluene	19.82	Baseline	zhangji	05/15/20 11:22
2,4-Dinitrotoluene	20.29	Baseline	zhangji	05/15/20 11:22
PETN	25.28	Peak Tail	zhangji	05/15/20 11:24

Lab Sample ID: IC 280-494886/14 Client Sample ID:

Date Analyzed: 05/14/20 20:21 Lab File ID: 05140014.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	6.32	Peak assignment corrected	zhangji	05/15/20 11:22
1,2-Dinitrobenzene	13.02	Split Peak	zhangji	05/15/20 11:35
PETN	25.28	Split Peak	zhangji	05/15/20 11:24

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 494886

Lab Sample ID: IC 280-494886/15 Client Sample ID:

Date Analyzed: 05/14/20 20:56 Lab File ID: 05140015.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-Dinitrotoluene	19.76	Baseline	zhangji	05/15/20 11:30
2,4-Dinitrotoluene	20.30	Baseline	zhangji	05/15/20 11:30

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 607981

Lab Sample ID: IC 280-607981/10 Client Sample ID:

Date Analyzed: 04/07/23 19:03 Lab File ID: 04070010.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
DNX	6.08	Baseline	LV5D	04/07/23 20:06
2-Amino-4,6-dinitrotoluene	17.37	Baseline	LV5D	04/07/23 20:06
1,3,5-Trinitrobenzene	17.44	Unspecified		

Lab Sample ID: IC 280-607981/11 Client Sample ID:

Date Analyzed: 04/07/23 19:39 Lab File ID: 04070011.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
DNX	6.16	Baseline	LV5D	04/07/23 21:06
Picric acid	8.10	Baseline	LV5D	04/07/23 21:06

Lab Sample ID: IC 280-607981/15 Client Sample ID:

Date Analyzed: 04/07/23 22:02 Lab File ID: 04070015.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Nitrotoluene	15.83	Baseline	LV5D	04/08/23 10:38
4-Nitrotoluene	16.05	Baseline	LV5D	04/08/23 10:38
4-Amino-2,6-dinitrotoluene	16.59	Baseline	LV5D	04/08/23 10:38
3-Nitrotoluene	16.90	Baseline	LV5D	04/08/23 10:38
2-Amino-4,6-dinitrotoluene	17.41	Baseline	LV5D	04/08/23 10:38
1,3,5-Trinitrobenzene	17.57	Baseline	LV5D	04/08/23 10:38

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 607981

Lab Sample ID: IC 280-607981/16 Client Sample ID:

Date Analyzed: 04/07/23 22:38 Lab File ID: 04070016.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Nitrotoluene	15.84	Baseline	LV5D	04/08/23 10:39
4-Nitrotoluene	16.07	Baseline	LV5D	04/08/23 10:39
4-Amino-2,6-dinitrotoluene	16.61	Baseline	LV5D	04/08/23 10:39
3-Nitrotoluene	16.91	Baseline	LV5D	04/08/23 10:39
2-Amino-4,6-dinitrotoluene	17.43	Baseline	LV5D	04/08/23 10:39
1,3,5-Trinitrobenzene	17.59	Baseline	LV5D	04/08/23 10:39
PETN	24.55	Baseline	LV5D	04/08/23 10:40

Lab Sample ID: IC 280-607981/17 Client Sample ID:

Date Analyzed: 04/07/23 23:14 Lab File ID: 04070017.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	17.43	Baseline	LV5D	04/08/23 10:40
1,3,5-Trinitrobenzene	17.59	Baseline	LV5D	04/08/23 10:40
PETN	24.56	Baseline	LV5D	04/08/23 10:40

Lab Sample ID: IC 280-607981/18 Client Sample ID:

Date Analyzed: 04/07/23 23:50 Lab File ID: 04070018.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Nitrotoluene	15.84	Baseline	LV5D	04/08/23 10:40
4-Nitrotoluene	16.06	Baseline	LV5D	04/08/23 10:40
2-Amino-4,6-dinitrotoluene	17.42	Baseline	LV5D	04/08/23 10:40
1,3,5-Trinitrobenzene	17.58	Baseline	LV5D	04/08/23 10:40
PETN	24.57	Baseline	LV5D	04/08/23 10:40

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 607981

Lab Sample ID: ICV 280-607981/19 Client Sample ID:

Date Analyzed: 04/08/23 00:26 Lab File ID: 04070019.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	24.53	Baseline	LV5D	04/08/23 10:42

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 612994

Lab Sample ID: CCV 280-612994/31 Client Sample ID:

Date Analyzed: 05/19/23 06:50 Lab File ID: 05180031.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Nitrotoluene	15.79	Baseline	LV5D	05/19/23 15:02
4-Nitrotoluene	16.02	Baseline	LV5D	05/19/23 15:02
4-Amino-2,6-dinitrotoluene	16.56	Baseline	LV5D	05/19/23 15:02
3-Nitrotoluene	16.86	Baseline	LV5D	05/19/23 15:02
2-Amino-4,6-dinitrotoluene	17.39	Baseline	LV5D	05/19/23 15:02
1,3,5-Trinitrobenzene	17.54	Baseline	LV5D	05/19/23 15:02

Lab Sample ID: 280-176335-1 Client Sample ID: LL1mw-082-230401-GW

Date Analyzed: 05/19/23 08:38 Lab File ID: 05180033.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	LV5D	05/19/23 15:04

Lab Sample ID: 280-176335-4 Client Sample ID: LL2mw-059-230401-GW

Date Analyzed: 05/19/23 10:26 Lab File ID: 05180036.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	9.08	Baseline	LV5D	05/19/23 15:05
4-Amino-2,6-dinitrotoluene	16.52	Baseline	LV5D	05/19/23 15:05
1,3,5-Trinitrobenzene	17.51	Baseline	LV5D	05/19/23 15:05

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 599427

Lab Sample ID: IC 280-599427/11 Client Sample ID:

Date Analyzed: 01/17/23 00:33 Lab File ID: 01160039.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.43	Baseline	LV5D	01/17/23 12:22
2,4-diamino-6-nitrotoluene	6.62	Baseline	LV5D	01/17/23 12:22

Lab Sample ID: IC 280-599427/12 Client Sample ID:

Date Analyzed: 01/17/23 00:56 Lab File ID: 01160040.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.46	Baseline	LV5D	01/17/23 12:23
2,4-diamino-6-nitrotoluene	6.64	Baseline	LV5D	01/17/23 12:23

Lab Sample ID: IC 280-599427/13 Client Sample ID:

Date Analyzed: 01/17/23 01:19 Lab File ID: 01160041.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.46	Baseline	LV5D	01/17/23 12:23
2,4-diamino-6-nitrotoluene	6.64	Baseline	LV5D	01/17/23 12:23

Lab Sample ID: IC 280-599427/14 Client Sample ID:

Date Analyzed: 01/17/23 01:43 Lab File ID: 01160042.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.46	Baseline	LV5D	01/17/23 12:30
2,4-diamino-6-nitrotoluene	6.64	Baseline	LV5D	01/17/23 12:30

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 599427

Lab Sample ID: IC 280-599427/15 Client Sample ID:

Date Analyzed: 01/17/23 02:06 Lab File ID: 01160043.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.46	Baseline	LV5D	01/17/23 12:31
2,4-diamino-6-nitrotoluene	6.64	Baseline	LV5D	01/17/23 12:31

Lab Sample ID: IC 280-599427/16 Client Sample ID:

Date Analyzed: 01/17/23 02:30 Lab File ID: 01160044.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.46	Baseline	LV5D	01/17/23 12:31
2,4-diamino-6-nitrotoluene	6.63	Baseline	LV5D	01/17/23 12:31

Lab Sample ID: IC 280-599427/17 Client Sample ID:

Date Analyzed: 01/17/23 02:53 Lab File ID: 01160045.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.46	Baseline	LV5D	01/17/23 12:31
2,4-diamino-6-nitrotoluene	6.64	Baseline	LV5D	01/17/23 12:31

Lab Sample ID: IC 280-599427/18 Client Sample ID:

Date Analyzed: 01/17/23 03:16 Lab File ID: 01160046.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.46	Baseline	LV5D	01/17/23 12:31
2,4-diamino-6-nitrotoluene	6.64	Baseline	LV5D	01/17/23 12:31

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 599427

Lab Sample ID: ICV 280-599427/19 Client Sample ID:

Date Analyzed: 01/17/23 03:40 Lab File ID: 01160047.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.45	Baseline	LV5D	01/17/23 12:32
2,4-diamino-6-nitrotoluene	6.63	Baseline	LV5D	01/17/23 12:32

Lab Sample ID: IC 280-599427/20 Client Sample ID:

Date Analyzed: 01/17/23 04:03 Lab File ID: 01160048.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.45	Baseline	LV5D	01/17/23 12:36
DNX	6.77	Baseline	LV5D	01/17/23 12:36
MNX	7.18	Baseline	LV5D	01/17/23 12:36

Lab Sample ID: IC 280-599427/21 Client Sample ID:

Date Analyzed: 01/17/23 04:27 Lab File ID: 01160049.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.45	Baseline	LV5D	01/17/23 12:36
DNX	6.77	Baseline	LV5D	01/17/23 12:36
MNX	7.18	Baseline	LV5D	01/17/23 12:36

Lab Sample ID: IC 280-599427/22 Client Sample ID:

Date Analyzed: 01/17/23 04:50 Lab File ID: 01160050.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.46	Baseline	LV5D	01/17/23 12:36
DNX	6.77	Baseline	LV5D	01/17/23 12:36
MNX	7.18	Baseline	LV5D	01/17/23 12:37

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 599427

Lab Sample ID: IC 280-599427/23 Client Sample ID:

Date Analyzed: 01/17/23 05:13 Lab File ID: 01160051.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.45	Baseline	LV5D	01/17/23 12:37
DNX	6.77	Baseline	LV5D	01/17/23 12:37
MNX	7.18	Baseline	LV5D	01/17/23 12:37

Lab Sample ID: IC 280-599427/24 Client Sample ID:

Date Analyzed: 01/17/23 05:37 Lab File ID: 01160052.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.46	Baseline	LV5D	01/17/23 12:37
DNX	6.77	Baseline	LV5D	01/17/23 12:37
MNX	7.18	Baseline	LV5D	01/17/23 12:37

Lab Sample ID: IC 280-599427/25 Client Sample ID:

Date Analyzed: 01/17/23 06:00 Lab File ID: 01160053.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.46	Baseline	LV5D	01/17/23 12:37
DNX	6.76	Baseline	LV5D	01/17/23 12:37
MNX	7.18	Baseline	LV5D	01/17/23 12:37

Lab Sample ID: IC 280-599427/26 Client Sample ID:

Date Analyzed: 01/17/23 06:24 Lab File ID: 01160054.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.46	Baseline	LV5D	01/17/23 12:37
DNX	6.77	Baseline	LV5D	01/17/23 12:37
MNX	7.18	Baseline	LV5D	01/17/23 12:38

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 599427

Lab Sample ID: IC 280-599427/27 Client Sample ID:

Date Analyzed: 01/17/23 06:47 Lab File ID: 01160055.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.45	Baseline	LV5D	01/17/23 12:38
DNX	6.77	Baseline	LV5D	01/17/23 12:38
MNX	7.18	Baseline	LV5D	01/17/23 12:38

Lab Sample ID: ICV 280-599427/28 Client Sample ID:

Date Analyzed: 01/17/23 07:10 Lab File ID: 01160056.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.46	Baseline	LV5D	01/17/23 12:41
DNX	6.77	Baseline	LV5D	01/17/23 12:38
MNX	7.18	Baseline	LV5D	01/17/23 12:38

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 601664

Lab Sample ID: IC 280-601664/11 Client Sample ID:

Date Analyzed: 02/08/23 15:38 Lab File ID: 02080011.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.55	Baseline Smoothing	LV5D	02/08/23 16:28

Lab Sample ID: IC 280-601664/12 Client Sample ID:

Date Analyzed: 02/08/23 16:01 Lab File ID: 02080012.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.55	Baseline Smoothing	LV5D	02/08/23 16:28

Lab Sample ID: IC 280-601664/13 Client Sample ID:

Date Analyzed: 02/08/23 16:24 Lab File ID: 02080013.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.54	Baseline Smoothing	LV5D	02/08/23 16:55
RDX	7.56	Baseline Smoothing	LV5D	02/08/23 19:09

Lab Sample ID: IC 280-601664/14 Client Sample ID:

Date Analyzed: 02/08/23 16:47 Lab File ID: 02080014.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.55	Baseline Smoothing	LV5D	02/08/23 17:11
RDX	7.56	Baseline Smoothing	LV5D	02/08/23 19:09

Lab Sample ID: IC 280-601664/15 Client Sample ID:

Date Analyzed: 02/08/23 17:10 Lab File ID: 02080015.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.57	Baseline Smoothing	LV5D	02/08/23 19:09

8330B

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 601664

Lab Sample ID: IC 280-601664/16 Client Sample ID:

Date Analyzed: 02/08/23 17:33 Lab File ID: 02080016.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.56	Baseline Smoothing	LV5D	02/08/23 19:09
PETN	14.55	Baseline Smoothing	LV5D	02/08/23 19:08

Lab Sample ID: IC 280-601664/17 Client Sample ID:

Date Analyzed: 02/08/23 17:56 Lab File ID: 02080017.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.55	Baseline Smoothing	LV5D	02/08/23 19:07
RDX	7.57	Baseline Smoothing	LV5D	02/08/23 19:09
PETN	14.58	Baseline Smoothing	LV5D	02/08/23 19:08

Lab Sample ID: IC 280-601664/18 Client Sample ID:

Date Analyzed: 02/08/23 18:19 Lab File ID: 02080018.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.55	Baseline Smoothing	LV5D	02/08/23 19:09
RDX	7.56	Baseline Smoothing	LV5D	02/08/23 19:09
PETN	14.59	Baseline Smoothing	LV5D	02/08/23 19:08

Lab Sample ID: IC 280-601664/19 Client Sample ID:

Date Analyzed: 02/08/23 18:42 Lab File ID: 02080019.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.55	Baseline Smoothing	LV5D	02/08/23 19:09
RDX	7.56	Baseline Smoothing	LV5D	02/08/23 19:08
PETN	14.58	Unspecified		

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 601664

Lab Sample ID: ICV 280-601664/20 Client Sample ID:

Date Analyzed: 02/08/23 19:05 Lab File ID: 02080020.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.55	Baseline Smoothing	LV5D	02/08/23 19:31
RDX	7.56	Baseline Smoothing	LV5D	02/08/23 19:32

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 603284

Lab Sample ID: IC 280-603284/11 Client Sample ID:

Date Analyzed: 02/24/23 15:00 Lab File ID: 02240011.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.44	Baseline	LV5D	02/24/23 16:41
DNX	6.76	Baseline	LV5D	02/24/23 16:41
MNX	7.19	Baseline	LV5D	02/24/23 16:41

Lab Sample ID: IC 280-603284/12 Client Sample ID:

Date Analyzed: 02/24/23 15:23 Lab File ID: 02240012.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.44	Baseline	LV5D	02/24/23 16:41
DNX	6.76	Baseline	LV5D	02/24/23 16:41
MNX	7.19	Baseline	LV5D	02/24/23 16:41

Lab Sample ID: IC 280-603284/13 Client Sample ID:

Date Analyzed: 02/24/23 15:46 Lab File ID: 02240013.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.44	Baseline	LV5D	02/24/23 16:41
DNX	6.77	Baseline	LV5D	02/24/23 16:41
MNX	7.19	Baseline	LV5D	02/24/23 16:41

Lab Sample ID: IC 280-603284/14 Client Sample ID:

Date Analyzed: 02/24/23 16:09 Lab File ID: 02240014.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.44	Baseline	LV5D	02/24/23 16:41
DNX	6.77	Baseline	LV5D	02/24/23 16:41
MNX	7.20	Baseline	LV5D	02/24/23 16:40

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 603284

Lab Sample ID: IC 280-603284/15 Client Sample ID:

Date Analyzed: 02/24/23 16:32 Lab File ID: 02240015.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.44	Baseline	LV5D	02/24/23 17:15
DNX	6.77	Baseline	LV5D	02/24/23 17:15

Lab Sample ID: IC 280-603284/16 Client Sample ID:

Date Analyzed: 02/24/23 16:55 Lab File ID: 02240016.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.45	Baseline	LV5D	02/24/23 17:30
DNX	6.77	Baseline	LV5D	02/24/23 17:30
MNX	7.20	Baseline	LV5D	02/24/23 17:30

Lab Sample ID: IC 280-603284/17 Client Sample ID:

Date Analyzed: 02/24/23 17:18 Lab File ID: 02240017.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.45	Baseline	LV5D	02/24/23 17:51
DNX	6.77	Baseline	LV5D	02/24/23 17:51

Lab Sample ID: IC 280-603284/18 Client Sample ID:

Date Analyzed: 02/24/23 17:41 Lab File ID: 02240018.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.44	Baseline	LV5D	02/24/23 18:10
DNX	6.77	Baseline	LV5D	02/24/23 18:10

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 612858

Lab Sample ID: CCV 280-612858/45 Client Sample ID:

Date Analyzed: 05/18/23 08:06 Lab File ID: 05170045.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.43	Baseline	LV5D	05/18/23 11:56
HMX	6.55	Baseline	LV5D	05/18/23 11:56
DNX	6.76	Baseline	LV5D	05/18/23 11:56

Lab Sample ID: CCV 280-612858/46 Client Sample ID:

Date Analyzed: 05/18/23 08:29 Lab File ID: 05170046.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.43	Baseline	LV5D	05/18/23 11:56
2,4-diamino-6-nitrotoluene	6.62	Baseline	LV5D	05/18/23 11:56

Lab Sample ID: MB 280-612789/1-A Client Sample ID:

Date Analyzed: 05/18/23 08:52 Lab File ID: 05170047.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3,5-Trinitrobenzene		Invalid Compound ID	LV5D	05/18/23 12:17

Lab Sample ID: LCSD 280-612789/3-A Client Sample ID:

Date Analyzed: 05/18/23 09:38 Lab File ID: 05170049.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.43	Baseline	LV5D	05/18/23 12:17
HMX	6.55	Baseline	LV5D	05/18/23 12:17
DNX	6.76	Baseline	LV5D	05/18/23 12:17
MNX	7.19	Baseline	LV5D	05/18/23 12:17

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 612858

Lab Sample ID: LCS 280-612789/4-A Client Sample ID:

Date Analyzed: 05/18/23 10:01 Lab File ID: 05170050.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.42	Baseline	LV5D	05/18/23 11:56
2,4-diamino-6-nitrotoluene	6.61	Baseline	LV5D	05/18/23 11:56

Lab Sample ID: LCSD 280-612789/5-A Client Sample ID:

Date Analyzed: 05/18/23 10:24 Lab File ID: 05170051.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.42	Baseline	LV5D	05/18/23 11:55
2,4-diamino-6-nitrotoluene	6.61	Baseline	LV5D	05/18/23 11:55

Lab Sample ID: LCS 280-612789/2-A Client Sample ID:

Date Analyzed: 05/18/23 12:41 Lab File ID: 0517Z048.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.43	Baseline	LV5D	05/18/23 13:11
HMX	6.55	Baseline	LV5D	05/18/23 13:11
DNX	6.76	Baseline	LV5D	05/18/23 13:11
MNX	7.18	Baseline	LV5D	05/18/23 13:11

Lab Sample ID: CCV 280-612858/57 Client Sample ID:

Date Analyzed: 05/18/23 13:27 Lab File ID: 05170057.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.43	Baseline	LV5D	05/18/23 14:27
HMX	6.55	Baseline	LV5D	05/18/23 14:27
DNX	6.76	Baseline	LV5D	05/18/23 14:27
MNX	7.19	Baseline	LV5D	05/18/23 14:27

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 612858

Lab Sample ID: CCV 280-612858/58 Client Sample ID:

Date Analyzed: 05/18/23 13:50 Lab File ID: 05170058.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.43	Baseline	LV5D	05/18/23 14:27
2,4-diamino-6-nitrotoluene	6.62	Baseline	LV5D	05/18/23 14:27

Lab Sample ID: 280-176335-1 Client Sample ID: LL1mw-082-230401-GW

Date Analyzed: 05/18/23 14:59 Lab File ID: 05170061.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.57	Baseline	LV5D	05/18/23 15:39
MNX	7.21	Baseline	LV5D	05/18/23 15:39
1,3,5-Trinitrobenzene		Invalid Compound ID	LV5D	05/18/23 15:39
1,3-Dinitrobenzene		Invalid Compound ID	LV5D	05/18/23 15:39
2-Nitrotoluene		Invalid Compound ID	LV5D	05/18/23 15:39
4-Nitrotoluene		Invalid Compound ID	LV5D	05/18/23 15:39

Lab Sample ID: 280-176335-2 Client Sample ID: FWGmw-021-230401-GW

Date Analyzed: 05/18/23 15:22 Lab File ID: 05170062.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.53	Baseline	LV5D	05/18/23 16:01
HMX		Invalid Compound ID	LV5D	05/18/23 16:01

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 612858

Lab Sample ID: 280-176335-3 Client Sample ID: FWGmw-024-230401-GW

Date Analyzed: 05/18/23 15:45 Lab File ID: 05170063.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.53	Baseline	LV5D	05/18/23 16:10
2-Nitrotoluene		Invalid Compound ID	LV5D	05/18/23 16:09
HMX		Invalid Compound ID	LV5D	05/18/23 16:09

Lab Sample ID: 280-176335-4 Client Sample ID: LL2mw-059-230401-GW

Date Analyzed: 05/18/23 16:08 Lab File ID: 05170064.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.52	Baseline	LV5D	05/18/23 17:20
1,3,5-Trinitrobenzene	8.65	Baseline	LV5D	05/18/23 17:20
HMX		Invalid Compound ID	LV5D	05/18/23 17:20

Lab Sample ID: CCV 280-612858/65 Client Sample ID:

Date Analyzed: 05/18/23 17:40 Lab File ID: 05170065.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.43	Baseline	LV5D	05/18/23 18:22
HMX	6.55	Baseline	LV5D	05/18/23 18:22
DNX	6.76	Baseline	LV5D	05/18/23 18:22

Lab Sample ID: CCV 280-612858/66 Client Sample ID:

Date Analyzed: 05/18/23 18:03 Lab File ID: 05170066.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.43	Baseline	LV5D	05/18/23 19:51
2,4-diamino-6-nitrotoluene	6.62	Baseline	LV5D	05/18/23 19:51

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Batch Number: 608435

Lab Sample ID: STD 280-608435/1 IC Client Sample ID:

Date Analyzed: 04/12/23 14:04 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Orthophosphate as P	9.45	Baseline Smoothing	LVW8	04/12/23 15:40

Lab Sample ID: STD 280-608435/2 IC Client Sample ID:

Date Analyzed: 04/12/23 14:19 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrite as N	5.12	Baseline Smoothing	LVW8	04/12/23 15:41
Nitrate as N	7.38	Baseline Smoothing	LVW8	04/12/23 15:41
Orthophosphate as P	9.81	Baseline Smoothing	LVW8	04/12/23 15:41

Lab Sample ID: STD 280-608435/3 IC Client Sample ID:

Date Analyzed: 04/12/23 14:34 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrite as N	5.12	Baseline Smoothing	LVW8	04/12/23 15:41
Nitrate as N	7.12	Baseline Smoothing	LVW8	04/12/23 15:41
Orthophosphate as P	9.41	Baseline Smoothing	LVW8	04/12/23 15:42

Lab Sample ID: STD 280-608435/4 IC Client Sample ID:

Date Analyzed: 04/12/23 14:49 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrite as N	5.11	Baseline Smoothing	LVW8	04/12/23 15:42
Nitrate as N	7.10	Baseline Smoothing	LVW8	04/12/23 15:42
Orthophosphate as P	9.39	Baseline Smoothing	LVW8	04/12/23 15:42

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Batch Number: 608435

Lab Sample ID: STD 280-608435/5 IC Client Sample ID:

Date Analyzed: 04/12/23 15:04 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrite as N	5.11	Baseline Smoothing	LVW8	04/12/23 15:43
Nitrate as N	7.08	Baseline Smoothing	LVW8	04/12/23 15:43
Orthophosphate as P	9.37	Baseline Smoothing	LVW8	04/12/23 15:43

Lab Sample ID: STD 280-608435/6 IC Client Sample ID:

Date Analyzed: 04/12/23 15:19 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrite as N	5.10	Baseline Smoothing	LVW8	04/12/23 15:43
Nitrate as N	7.06	Baseline Smoothing	LVW8	04/12/23 15:43
Orthophosphate as P	9.35	Baseline Smoothing	LVW8	04/12/23 15:43

Lab Sample ID: ICV 280-608435/7 Client Sample ID:

Date Analyzed: 04/12/23 15:34 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrite as N	5.11	Baseline Smoothing	XAY4	04/14/23 13:56

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Batch Number: 612109

Lab Sample ID: CCV 280-612109/1 Client Sample ID:

Date Analyzed: 05/11/23 15:08 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrite as N	5.03	Baseline Smoothing	LVW8	05/11/23 15:27
Nitrate as N	6.95	Baseline Smoothing	LVW8	05/11/23 15:27

Lab Sample ID: CCB 280-612109/2 Client Sample ID:

Date Analyzed: 05/11/23 15:23 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrite as N		Unspecified		

Lab Sample ID: MRL 280-612109/3 Client Sample ID:

Date Analyzed: 05/11/23 15:38 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrite as N	5.03	Baseline Smoothing	LVW8	05/12/23 11:11
Nitrate as N	6.99	Baseline Smoothing	LVW8	05/12/23 11:11

Lab Sample ID: LCS 280-612109/4 Client Sample ID:

Date Analyzed: 05/11/23 15:53 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrite as N	5.02	Baseline Smoothing	LVW8	05/12/23 11:12
Nitrate as N	6.95	Baseline Smoothing	LVW8	05/12/23 11:12

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Batch Number: 612109

Lab Sample ID: LCSD 280-612109/5 Client Sample ID:

Date Analyzed: 05/11/23 16:08 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrite as N	5.03	Baseline Smoothing	LVW8	05/12/23 11:13
Nitrate as N	6.95	Baseline Smoothing	LVW8	05/12/23 11:13

Lab Sample ID: 280-176335-5 Client Sample ID: FWGmw-020-230401-GW

Date Analyzed: 05/11/23 17:53 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrate as N	7.09	Baseline Smoothing	LVW8	05/12/23 11:14

Lab Sample ID: CCV 280-612109/17 Client Sample ID:

Date Analyzed: 05/11/23 20:08 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrite as N	5.04	Baseline Smoothing	LVW8	05/12/23 11:17
Nitrate as N	6.96	Baseline Smoothing	LVW8	05/12/23 11:17

Lab Sample ID: CCV 280-612109/29 Client Sample ID:

Date Analyzed: 05/11/23 23:09 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrate as N	6.95	Baseline Smoothing	LVW8	05/12/23 11:23

Lab Sample ID: 280-176335-4 Client Sample ID: LL2mw-059-230401-GW

Date Analyzed: 05/11/23 23:54 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrate as N	6.90	Baseline Smoothing	LVW8	05/12/23 11:24

9056

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Batch Number: 612109

Lab Sample ID: CCV 280-612109/41 Client Sample ID:

Date Analyzed: 05/12/23 02:10 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrite as N	5.01	Baseline Smoothing	LVW8	05/12/23 11:28
Nitrate as N	6.92	Baseline Smoothing	LVW8	05/12/23 11:28

Lab Sample ID: CCB 280-612109/42 Client Sample ID:

Date Analyzed: 05/12/23 02:25 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrite as N		Unspecified		

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Batch Number: 608436

Lab Sample ID: STD 280-608436/1 IC Client Sample ID:

Date Analyzed: 04/12/23 14:04 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloride	4.38	Baseline Smoothing	LVW8	04/12/23 15:40
Sulfate	10.65	Baseline Smoothing	LVW8	04/12/23 15:40

Lab Sample ID: STD 280-608436/2 IC Client Sample ID:

Date Analyzed: 04/12/23 14:19 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.16	Baseline Smoothing	LVW8	04/12/23 15:41
Chloride	4.38	Baseline Smoothing	LVW8	04/12/23 15:41
Sulfate	11.05	Baseline Smoothing	LVW8	04/12/23 15:41

Lab Sample ID: STD 280-608436/3 IC Client Sample ID:

Date Analyzed: 04/12/23 14:34 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.17	Baseline Smoothing	LVW8	04/12/23 15:42
Chloride	4.38	Baseline Smoothing	LVW8	04/12/23 15:41
Bromide	6.32	Baseline Smoothing	LVW8	04/12/23 15:41
Sulfate	10.65	Baseline Smoothing	LVW8	04/12/23 15:42

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Batch Number: 608436

Lab Sample ID: STD 280-608436/4 IC Client Sample ID:

Date Analyzed: 04/12/23 14:49 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.17	Baseline Smoothing	LVW8	04/12/23 15:42
Chloride	4.39	Baseline Smoothing	LVW8	04/12/23 15:42
Bromide	6.31	Baseline Smoothing	LVW8	04/12/23 15:42
Sulfate	10.63	Baseline Smoothing	LVW8	04/12/23 15:42

Lab Sample ID: STD 280-608436/5 IC Client Sample ID:

Date Analyzed: 04/12/23 15:04 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.17	Baseline Smoothing	LVW8	04/12/23 15:43
Chloride	4.41	Baseline Smoothing	LVW8	04/12/23 15:43
Sulfate	10.61	Baseline Smoothing	LVW8	04/12/23 15:43

Lab Sample ID: STD 280-608436/6 IC Client Sample ID:

Date Analyzed: 04/12/23 15:19 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.18	Baseline Smoothing	LVW8	04/12/23 15:43
Chloride	4.43	Baseline Smoothing	LVW8	04/12/23 15:43
Sulfate	10.59	Baseline Smoothing	LVW8	04/12/23 15:43

Lab Sample ID: ICB 280-608436/8 Client Sample ID:

Date Analyzed: 04/12/23 15:49 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.60	Baseline Smoothing	XAY4	04/14/23 14:01

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Batch Number: 612110

Lab Sample ID: CCV 280-612110/1 Client Sample ID:

Date Analyzed: 05/11/23 15:08 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloride	4.33	Baseline Smoothing	LVW8	05/11/23 15:27
Sulfate	10.35	Baseline Smoothing	LVW8	05/11/23 15:27

Lab Sample ID: CCB 280-612110/2 Client Sample ID:

Date Analyzed: 05/11/23 15:23 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.38	Baseline Smoothing	LVW8	05/11/23 15:55

Lab Sample ID: MRL 280-612110/3 Client Sample ID:

Date Analyzed: 05/11/23 15:38 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.36	Baseline Smoothing	LVW8	05/12/23 11:12

Lab Sample ID: LCS 280-612110/4 Client Sample ID:

Date Analyzed: 05/11/23 15:53 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.35	Baseline Smoothing	LVW8	05/12/23 11:12

Lab Sample ID: LCSD 280-612110/5 Client Sample ID:

Date Analyzed: 05/11/23 16:08 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.36	Baseline Smoothing	LVW8	05/12/23 11:13

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Batch Number: 612110

Lab Sample ID: MB 280-612110/6 Client Sample ID:

Date Analyzed: 05/11/23 16:23 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.37	Baseline Smoothing	LVW8	05/12/23 11:14

Lab Sample ID: CCV 280-612110/17 Client Sample ID:

Date Analyzed: 05/11/23 20:08 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloride	4.34	Baseline Smoothing	LVW8	05/12/23 11:17
Sulfate	10.41	Baseline Smoothing	LVW8	05/12/23 11:17

Lab Sample ID: CCB 280-612110/18 Client Sample ID:

Date Analyzed: 05/11/23 20:24 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.46	Baseline Smoothing	LVW8	05/12/23 10:45

Lab Sample ID: CCV 280-612110/29 Client Sample ID:

Date Analyzed: 05/11/23 23:09 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.39	Baseline Smoothing	LVW8	05/12/23 11:23

Lab Sample ID: CCB 280-612110/30 Client Sample ID:

Date Analyzed: 05/11/23 23:24 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.44	Baseline Smoothing	LVW8	05/12/23 11:23

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Batch Number: 612110

Lab Sample ID: 280-176335-4 Client Sample ID: LL2mw-059-230401-GW

Date Analyzed: 05/11/23 23:54 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.21	Baseline Smoothing	LVW8	05/12/23 11:25

Lab Sample ID: CCV 280-612110/41 Client Sample ID:

Date Analyzed: 05/12/23 02:10 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloride	4.32	Baseline Smoothing	LVW8	05/12/23 11:28
Sulfate	10.31	Baseline Smoothing	LVW8	05/12/23 11:28

Lab Sample ID: CCB 280-612110/42 Client Sample ID:

Date Analyzed: 05/12/23 02:25 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.38	Baseline Smoothing	LVW8	05/12/23 11:28

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
3,5-DNA LCS_00042	01/25/23	11/08/22	Acetonitrile, Lot Acetonitrile 00065	100 mL	3,5-DNA Stock_00036	1 mL	3,5-Dinitroaniline	10 ug/mL
.3,5-DNA Stock_00036	04/25/23		Restek, Lot A0149736		(Purchased Reagent)		3,5-Dinitroaniline	1000 ug/mL
3,5-DNA LCS_00043	08/03/23	02/03/23	Acetonitrile, Lot Acetonitrile 00074	100 mL	3,5-DNA Stock_00038	1 mL	3,5-Dinitroaniline	10 ug/mL
.3,5-DNA Stock_00038	02/03/24		Restek, Lot A0164976		(Purchased Reagent)		3,5-Dinitroaniline	1000 ug/mL
8330 DMT_00012	02/28/23	09/30/22	Acetonitrile, Lot ACN_237	5 mL	MNX,TNX,DNX_00070	1 mL	DNX	20.08 ug/mL
							MNX	23.4 ug/mL
							TNX	20 ug/mL
.MNX,TNX,DNX_00070	02/28/23		Agilent, Lot 0006659035		(Purchased Reagent)		DNX	100.4 ug/mL
							MNX	117 ug/mL
							TNX	100 ug/mL
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 LCS_00121	07/21/23	01/21/23	Acetonitrile, Lot Acetonitrile_00073	50 mL	8330_NG_Stk_00118	0.6 mL	Nitroglycerin	100 ug/mL
					8330_NG_Stk_00120	0.4 mL	Nitroglycerin	100 ug/mL
					8330_PETN_Stk_00128	1 mL	PETN	100 ug/mL
					8330LCSMix1_00136	0.5 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_00034	0.5 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
.8330_NG_Stk_00118	12/24/23		Restek, Lot A0188553		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_NG_Stk_00120	01/21/24		Restek, Lot A0188553		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00128	01/21/24		Restek, Lot A0187506		(Purchased Reagent)		PETN	5000 ug/mL
.8330LCSMix1_00136	10/19/23		Restek, Lot A0171502		(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

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							RDX	1000 ug/mL
.8330LCSmix2_00034	01/21/24		Restek, Lot A0186475		(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_00125	12/23/23	04/03/23	Acetonitrile, Lot Acetonitrile_00073	100 mL	3,5-DNA Stock_00040	1 mL	3,5-Dinitroaniline	10 ug/mL
					8330_NG_Stk_00128	1 mL	Nitroglycerin	100 ug/mL
					8330_NG_Stk_00129	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN_Stk_00133	1 mL	PETN	100 ug/mL
					8330_PETN_Stk_00134	1 mL	PETN	100 ug/mL
					8330LCSMix1_00140	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_00038	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_00040	04/03/24		Restek, Lot A0172723		(Purchased Reagent)		3,5-Dinitroaniline	1000 ug/mL
.8330_NG_Stk_00128	04/03/24		Restek, Lot A0194013		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_NG_Stk_00129	04/03/24		Restek, Lot A0194013		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00133	04/03/24		Restek, Lot A0188550		(Purchased Reagent)		PETN	5000 ug/mL
.8330_PETN_Stk_00134	04/03/24		Restek, Lot A0188550		(Purchased Reagent)		PETN	5000 ug/mL
.8330LCSMix1_00140	04/03/24		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
							2,4-Dinitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
.8330LCSmix2_00038	04/03/24		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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
8330 LCS_00126	04/26/24	04/26/23	Acetonitrile, Lot Acetonitrile_00077	100 mL	3,5-DNA Stock_00042	1 mL	3,5-Dinitroaniline	10 ug/mL
					8330_NG_Stk_00130	1 mL	Nitroglycerin	100 ug/mL
					8330_NG_Stk_00131	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN_Stk_00135	1 mL	PETN	100 ug/mL
					8330_PETN_Stk_00136	1 mL	PETN	100 ug/mL
					8330LCSMix1_00141	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_00039	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_00114	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.3,5-DNA Stock_00042	04/26/24		Restek, Lot A0185772		(Purchased Reagent)		3,5-Dinitroaniline	1000 ug/mL
.8330_NG_Stk_00130	04/26/24		Restek, Lot A0194013		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_NG_Stk_00131	04/26/24		Restek, Lot A0194013		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00135	04/26/24		Restek, Lot A0188550		(Purchased Reagent)		PETN	5000 ug/mL
.8330_PETN_Stk_00136	04/26/24		Restek, Lot A0188550		(Purchased Reagent)		PETN	5000 ug/mL
.8330LCSMix1_00141	04/26/24		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
							2,4-Dinitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
.8330LCSmix2_00039	04/26/24		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_00114	04/26/24		Restek, Lot A0183202		(Purchased Reagent)		2,4,6-Trinitrophenol	1000 ug/mL
8330_ADDs_00026	06/02/20	05/08/20	Acetonitrile, Lot 245163	5 mL	2,4Diamino6NT_00074	1 mL	2,4-diamino-6-nitrotoluene	20 ug/mL
					2,6Diamino4NT_00075	1 mL	2,6-diamino-4-nitrotoluene	20 ug/mL
					833035DNAStk_00040	1 mL	3,5-Dinitroaniline	20 ug/mL
.2,4Diamino6NT_00074	05/08/21		AccuStandard, Lot 218051455		(Purchased Reagent)		2,4-diamino-6-nitrotoluene	100 ug/mL
.2,6Diamino4NT_00075	05/08/21		AccuStandard, Lot 219071008		(Purchased Reagent)		2,6-diamino-4-nitrotoluene	100 ug/mL
.833035DNAStk_00040	06/02/20		Accustandard, Lot 21891229-01		(Purchased Reagent)		3,5-Dinitroaniline	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
8330_ADDs_00035	07/13/23	01/13/23	Acetonitrile, Lot ACN_237	5 mL	2,4Diamino6NT_00094	1 mL	2,4-diamino-6-nitrotoluene	20 ug/mL
					2,6Diamino4NT_00095	1 mL	2,6-diamino-4-nitrotoluene	20 ug/mL
					833035DNAStk_00052	1 mL	3,5-Dinitroaniline	20 ug/mL
.2,4Diamino6NT_00094	04/10/24	AccuStandard, Lot 220121267-01			(Purchased Reagent)		2,4-diamino-6-nitrotoluene	100 ug/mL
.2,6Diamino4NT_00095	06/03/24	AccuStandard, Lot 222051002			(Purchased Reagent)		2,6-diamino-4-nitrotoluene	100 ug/mL
.833035DNAStk_00052	10/06/23	Accustandard, Lot 222011692-01			(Purchased Reagent)		3,5-Dinitroaniline	100 ug/mL
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_OP_DMT_00016	02/28/23	12/30/22	Acetonitrile, Lot Acetonitrile_00073	10 mL	MNX,TNX,DNX_00069	1 mL	DNX	10.04 ug/mL
							MNX	11.7 ug/mL
							TNX	10 ug/mL
.MNX,TNX,DNX_00069	02/28/23	Agilent, Lot 0006659035			(Purchased Reagent)		DNX	100.4 ug/mL
							MNX	117 ug/mL
							TNX	100 ug/mL
8330_OP_DMT_00017	08/28/23	02/28/23	Acetonitrile, Lot Acetonitrile_00073	10 mL	MNX,TNX,DNX_00077	1 mL	DNX	10.01 ug/mL
							MNX	11.67 ug/mL
							TNX	10.03 ug/mL
.MNX,TNX,DNX_00077	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_00020	02/29/24	05/09/23	Acetonitrile, Lot Acetonitrile_00077	10 mL	MNX,TNX,DNX_00079	1 mL	DNX	10.01 ug/mL
							MNX	11.67 ug/mL
							TNX	10.03 ug/mL
.MNX,TNX,DNX_00079	02/29/24	Agilent, Lot 0006725091			(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.3 ug/mL
8330DiaminLCS_00052	01/16/23	12/19/22	Acetonitrile, Lot Acetonitrile_00069	10 mL	2,4Diamino6NT_00092	1 mL	2,4-diamino-6-nitrotoluene	10 ug/mL
					2,6Diamino4NT_00099	1 mL	2,6-diamino-4-nitrotoluene	10 ug/mL
.2,4Diamino6NT_00092	01/16/23	AccuStandard, Lot 220121267			(Purchased Reagent)		2,4-diamino-6-nitrotoluene	100 ug/mL
.2,6Diamino4NT_00099	12/19/23	AccuStandard, Lot 222051002			(Purchased Reagent)		2,6-diamino-4-nitrotoluene	100 ug/mL
8330DiaminLCS_00056	01/19/24	01/27/23	Acetonitrile, Lot Acetonitrile_00074	20 mL	2,4Diamino6NT_00098	1 mL	2,4-diamino-6-nitrotoluene	10 ug/mL
					2,4Diamino6NT_00099	1 mL	2,4-diamino-6-nitrotoluene	10 ug/mL
					2,6Diamino4NT_00100	1 mL	2,6-diamino-4-nitrotoluene	10 ug/mL
					2,6Diamino4NT_00102	1 mL	2,6-diamino-4-nitrotoluene	10 ug/mL
.2,4Diamino6NT_00098	04/10/24	AccuStandard, Lot 220121267-01			(Purchased Reagent)		2,4-diamino-6-nitrotoluene	100 ug/mL
.2,4Diamino6NT_00099	04/10/24	AccuStandard, Lot 220121267-01			(Purchased Reagent)		2,4-diamino-6-nitrotoluene	100 ug/mL
.2,6Diamino4NT_00100	06/03/24	AccuStandard, Lot 222051002			(Purchased Reagent)		2,6-diamino-4-nitrotoluene	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.2,6Diamino4NT_00102	06/03/24	AccuStandard, Lot 222051002			(Purchased Reagent)		2,6-diamino-4-nitrotoluene	100 ug/mL
8330IntermStk_00064	09/09/21	04/06/20	Acetonitrile, Lot 130057	10 mL	8330_NG_Stk_00075	200 uL	Nitroglycerin	100 ug/mL
					8330_PETN_Stk_00087	200 uL	PETN	100 ug/mL
					8330ICALStock_00030	1 mL	1,3,5-Trinitrobenzene	10.02 ug/mL
							1,3-Dinitrobenzene	10.02 ug/mL
							2,4,6-Trinitrotoluene	10.04 ug/mL
							2,4-Dinitrotoluene	10.04 ug/mL
							2,6-Dinitrotoluene	10.04 ug/mL
							2-Amino-4,6-dinitrotoluene	10.04 ug/mL
							2-Nitrotoluene	10 ug/mL
							3-Nitrotoluene	10.01 ug/mL
							4-Amino-2,6-dinitrotoluene	10.01 ug/mL
							4-Nitrotoluene	10.02 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10.04 ug/mL
							RDX	10 ug/mL
							Tetryl	10.02 ug/mL
							1,2-Dinitrobenzene	10 ug/mL
					8330PAStkPS_00061	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.8330_NG_Stk_00075	08/31/22	Restek, Lot A0151571			(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00087	11/30/22	Restek, Lot A0154763			(Purchased Reagent)		PETN	5000 ug/mL
.8330ICALStock_00030	03/03/22	01/09/20	Acetonitrile, Lot 130057	10 mL	8330 Stock_TS_00015	1 mL	1,3,5-Trinitrobenzene	100.2 ug/mL
							1,3-Dinitrobenzene	100.2 ug/mL
							2,4,6-Trinitrotoluene	100.4 ug/mL
							2,4-Dinitrotoluene	100.4 ug/mL
							2,6-Dinitrotoluene	100.4 ug/mL
							2-Amino-4,6-dinitrotoluene	100.4 ug/mL
							2-Nitrotoluene	100 ug/mL
							3-Nitrotoluene	100.1 ug/mL
							4-Amino-2,6-dinitrotoluene	100.1 ug/mL
							4-Nitrotoluene	100.2 ug/mL
							HMX	100 ug/mL
							Nitrobenzene	100.4 ug/mL
							RDX	100 ug/mL
							Tetryl	100.2 ug/mL
					8330SurrStock_00164	1 mL	1,2-Dinitrobenzene	100 ug/mL
..8330 Stock_TS_00015	03/31/22	Ultra Scientific, Lot CT-0801			(Purchased Reagent)		1,3,5-Trinitrobenzene	1002 ug/mL
							1,3-Dinitrobenzene	1002 ug/mL
							2,4,6-Trinitrotoluene	1004 ug/mL
							2,4-Dinitrotoluene	1004 ug/mL
							2,6-Dinitrotoluene	1004 ug/mL
							2-Amino-4,6-dinitrotoluene	1004 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1001 ug/mL
							4-Amino-2,6-dinitrotoluene	1001 ug/mL
							4-Nitrotoluene	1002 ug/mL

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							HMX	1000 ug/mL
							Nitrobenzene	1004 ug/mL
							RDX	1000 ug/mL
							Tetryl	1002 ug/mL
..8330SurrStock_00164	07/01/26	AccuStandard, Lot 216071012			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330PAStkPS_00061	09/09/21	AccuStandard, Lot 214121302-02			(Purchased Reagent)		2,4,6-Trinitrophenol	100 ug/mL
8330IntermStk_00075	08/07/23	02/03/23	Acetonitrile, Lot ACN_238	10 mL	8330_NG1000_00007	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN1000_00011	1 mL	PETN	100 ug/mL
					833035DNAStk_00053	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_00070	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.8330_NG1000_00007	02/03/24	Restek, Lot A0175997			(Purchased Reagent)		Nitroglycerin	1000 ug/mL
.8330_PETN1000_00011	02/03/24	Restek, Lot A0187142			(Purchased Reagent)		PETN	1000 ug/mL
.833035DNAStk_00053	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
							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

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-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_00070	08/07/23	AccuStandard, Lot 218031154-03			(Purchased Reagent)		2,4,6-Trinitrophenol	100 ug/mL
8330IntermStk_00076	09/23/23	03/23/23	Acetonitrile, Lot ACN_237	10 mL	8330_NG1000_00010	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN1000_00010	1 mL	PETN	100 ug/mL
					833035DNAStk_00054	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_00071	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.8330_NG1000_00010	03/23/24	Restek, Lot A0187280			(Purchased Reagent)		Nitroglycerin	1000 ug/mL
.8330_PETN1000_00010	03/23/24	Restek, Lot A0187142			(Purchased Reagent)		PETN	1000 ug/mL
.833035DNAStk_00054	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
							3-Nitrotoluene	100 ug/mL
							4-Amino-2,6-dinitrotoluene	100 ug/mL
							4-Nitrotoluene	100 ug/mL
							HMX	100 ug/mL

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00071	03/23/24	AccuStandard, Lot 218031154-04			(Purchased Reagent)		2,4,6-Trinitrophenol	100 ug/mL
8330Surrogate_00138	08/02/23	02/02/23	Acetonitrile, Lot Acetonitrile_00074	500 mL	8330SurrStkSS_00245	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00246	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00247	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00248	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00249	1 mL	1,2-Dinitrobenzene	10 ug/mL
.8330SurrStkSS_00245	02/02/24	Restek, Lot A0192220			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00246	02/02/24	Restek, Lot A0192220			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00247	02/02/24	Restek, Lot A0192220			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00248	02/02/24	Restek, Lot A0192220			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00249	02/02/24	Restek, Lot A0192220			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
8330Surrogate_00141	09/28/23	03/28/23	Acetonitrile, Lot Acetonitrile_00077	500 mL	8330SurrStkSS_00259	1.25 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00260	1.25 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00261	1.25 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00262	1.25 mL	1,2-Dinitrobenzene	10 ug/mL
.8330SurrStkSS_00259	01/31/28	Restek, Lot A0193444			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00260	03/28/24	Restek, Lot A0193444			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00261	03/28/24	Restek, Lot A0193444			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00262	03/28/24	Restek, Lot A0193444			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
8330Surrogate_00143	10/12/23	04/12/23	Acetonitrile, Lot Acetonitrile_00077	500 mL	8330SurrStkSS_00263	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00265	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00266	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					8330SurrStkSS_00267	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00268	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
.8330SurrStkSS_00263	04/12/24		Restek, Lot A0193444		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00265	04/12/24		Restek, Lot A0193444		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00266	04/12/24		Restek, Lot A0194831		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00267	04/12/24		Restek, Lot A0194831		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00268	04/12/24		Restek, Lot A0194831		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
Alk daily lcs_01087	05/18/23	05/11/23	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
IC CAL cl/so4_00475	04/19/23	04/12/23	Di Water, Lot na	100 mL	IC CL cal_00076	12.5 mL	Chloride	125 mg/L
					IC SO4 Cal_00008	12.5 mL	Sulfate	125 mg/L
.IC CL cal_00076	11/30/23		SPEX CertiPrep, Lot 5-146CL-2X		(Purchased Reagent)		Chloride	1000 mg/L
.IC SO4 Cal_00008	07/30/23		SPEX CertiPrep, Lot 5-160SO4-2X		(Purchased Reagent)		Sulfate	1000 mg/L
IC CAL cl/so4_00479	05/17/23	05/10/23	Di Water, Lot na	100 mL	IC SO4 Cal_00008	12.5 mL	Sulfate	125 mg/L
.IC SO4 Cal_00008	07/30/23		SPEX CertiPrep, Lot 5-160SO4-2X		(Purchased Reagent)		Sulfate	1000 mg/L
IC Cal low_00703	04/19/23	04/12/23	Di Water, Lot NA	100 mL	IC BR ICV_00026	2.5 mL	Bromide	25 mg/L
					IC FL cal_00023	2.5 mL	Fluoride	25 mg/L
					IC N03 cal_00028	2.5 mL	Nitrate as N	25 mg/L
					IC NO2 Cal_00007	2.5 mL	Nitrite as N	25 mg/L
					IC P04 cal_00030	2.5 mL	Orthophosphate as P	25 mg/L
.IC BR ICV_00026	04/30/23		RICCA, Lot 4110L50		(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 NO2 Cal_00007	06/30/23		Ricca, Lot 2212826		(Purchased Reagent)		Nitrite as N	1000 mg/L
.IC P04 cal_00030	07/31/24		RICCA, Lot 4208152		(Purchased Reagent)		Orthophosphate as P	1000 mg/L
IC Cal low_00708	05/17/23	05/10/23	Di Water, Lot NA	100 mL	IC N03 cal_00028	2.5 mL	Nitrate as N	25 mg/L
					IC NO2 Cal_00007	2.5 mL	Nitrite as N	25 mg/L
.IC N03 cal_00028	11/30/23		Ricca, Lot 2205B73		(Purchased Reagent)		Nitrate as N	1000 mg/L
.IC NO2 Cal_00007	06/30/23		Ricca, Lot 2212826		(Purchased Reagent)		Nitrite as N	1000 mg/L
IC ICV 5_00403	04/19/23	04/12/23	Di Water, Lot na	100 mL	IC NO2 ICV_00022	2.5 mL	Nitrite as N	25 mg/L
					IC NO3 ICV_00019	2.5 mL	Nitrate as N	25 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
IC LCS_01953	05/17/23	05/10/23	Di Water, Lot 27	200 mL	IC Cal low_00708	20 mL	Nitrate as N	2.5 mg/L
							Nitrite as N	2.5 mg/L
					IC SO4 Cal_00008	10 mL	Sulfate	50 mg/L
.IC Cal low_00708	05/17/23	05/10/23	Di Water, Lot NA	100 mL	IC N03 cal_00028	2.5 mL	Nitrate as N	25 mg/L
					IC NO2 Cal_00007	2.5 mL	Nitrite as N	25 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..IC N03 cal_00028	11/30/23	Ricca, Lot 2205B73			(Purchased Reagent)		Nitrate as N	1000 mg/L
..IC NO2 Cal_00007	06/30/23	Ricca, Lot 2212826			(Purchased Reagent)		Nitrite as N	1000 mg/L
.IC SO4 Cal_00008	07/30/23	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
SFD CAL INT_02401	07/26/23	04/26/23	ELGA Water, Lot NA	500 mL	50% NaOH_00023	2 mL	Sodium Hydroxide	2000 mg/L
					SFD CAL STK_00010	3.49064 g	Sulfide	932.001 mg/L
.50% NaOH_00023	01/31/24	RICCA, Lot 1102857			(Purchased Reagent)		Sodium Hydroxide	50 %
.SFD CAL STK_00010	08/25/25	Thermo Scientific, Lot A0411500			(Purchased Reagent)		Sulfide	0.1335 g/g
TOC ICV Std_00051	07/01/23	Ricca, Lot 2208C86			(Purchased Reagent)		TOC Result 1	1000 ppm
							TOC Result 2	1000 ppm
							TOC Result 3	1000 ppm
							TOC Result 4	1000 ppm
							Total Organic Carbon - Average	1000 ppm
TOC LCS Std_00057	01/31/25	Agilent Technologies, Lot 0006719669			(Purchased Reagent)		TOC Result 1	1001 ppm
							TOC Result 2	1001 ppm
							TOC Result 3	1001 ppm
							TOC Result 4	1001 ppm
							Total Organic Carbon - Average	1001 ppm

Reagent

2,4Diamino6NT_00074

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CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-12
Description: 2,4-Diamino-6-nitrotoluene
Lot: 218051455-01
Solvent: Acetonitrile
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Jun 28, 2019
Expiration: Jul 28, 2021
Sample Size: 1 mL
Components: 1
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463
ANAB ACCREDITED TESTING LABORATORY AT-1339
ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
2,4-Diamino-6-nitrotoluene	6629-29-4	99.0	100.0	99.0

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

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Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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Reagent

2,4Diamino6NT_00092

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CERTIFICATE OF ANALYSIS

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



Signal Word: Danger

Date Certified: Dec 16, 2020
Expiration: Jan 16, 2023
Sample Size: 1 mL
Components: 1
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463 ANAB ACCREDITED TESTING LABORATORY AT-1339 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

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

Reagent

2,4Diamino6NT_00094

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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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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_00095

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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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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_00098

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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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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

2,4Diamino6NT_00099

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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.

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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

2,6Diamino4NT_00075

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CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-13
Description: 2,6-Diamino-4-nitrotoluene
Lot: 219071008
Solvent: Acetonitrile
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Jul 1, 2019
Expiration: Aug 1, 2021
Sample Size: 1 mL
Components: 1
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463
ANAB ACCREDITED TESTING LABORATORY AT-1339
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	100.3	100.0

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.

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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

Reagent

2,6Diamino4NT_00095

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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.

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.

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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

2,6Diamino4NT_00096

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-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.

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.

Reagent

2,6Diamino4NT_00099

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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-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.

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

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Rev. 7/20

AccuStandard

Reagent

2,6Diamino4NT_00100

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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.

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

2,6Diamino4NT_00102

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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.

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

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Rev. 7/20

Reagent

3,5-DNA LCS_00042

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20221108-115900.b\11080002.D

Lims ID: 8330AcidH2O_00003 Inj. Date: 08-Nov-2022 14:15:10

Worklist ID: 280-0115900-002 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535	Limits 2 3535	Limits 3 3535
14 3,5-Dinitroaniline	0.5000	0.4857	97.1		71-117	55-119

Samples for Limit Group: 1, Lims Prep Method: 3535

570-115659-R-2-A 570-115659-R-3-A 570-115659-R-4-A
570-115659-R-5-A 570-115659-R-6-A

Samples for Limit Group: 2, Lims Prep Method: 3535

280-168716-B-1-A 280-168716-B-2-A 280-168716-B-3-A
280-168716-B-4-A 280-168716-B-5-A 280-168716-B-6-A
280-168716-B-7-A 280-168716-B-8-A 280-168716-B-9-A
680-224687-A-1-A 680-224687-A-2-A 680-224687-D-3-A
680-224687-B-4-A

Samples for Limit Group: 3, Lims Prep Method: 3535

860-36027-C-1-A

Reagent

3,5-DNA Stock_00036

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31661 **Lot No.:** A0149736

Description : 3,5-Dinitroaniline Standard

3, 5-Dinitroaniline Std 1000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2024 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	3,5-Dinitroaniline	1,000.0 µg/mL	+/- 10.0737	µg/mL	Gravimetric
	CAS # 618-87-1 (Lot 10311HS)		+/- 31.3469	µg/mL	Unstressed
	Purity 99%		+/- 31.3469	µg/mL	Stressed

Solvent: Acetonitrile
CAS # 75-05-8
Purity 99%

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

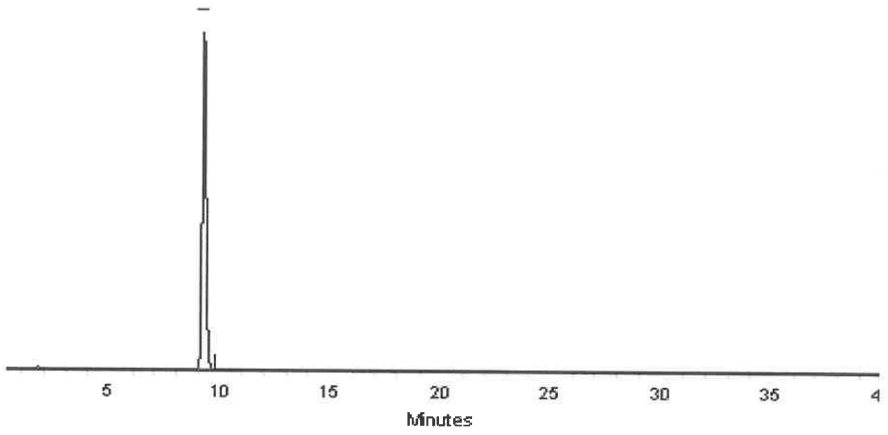
Flow Rate:
1.0 ml/min.

Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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.

Jessica McClenahan - Operations Technician I

Date Mixed: 03-Jun-2019 **Balance:** 1128360905

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 05-Jun-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

Reagent

3,5-DNA Stock_00038

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CERTIFIED REFERENCE MATERIAL

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31661 **Lot No.:** A0164976

Description : 3,5-Dinitroaniline Standard

3, 5-Dinitroaniline Std 1000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 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	3,5-Dinitroaniline **CAS #** 618-87-1 (Lot 10311HS) **Purity** 99%	1,000.8 µg/mL	+/- 10.0818 µg/mL +/- 31.3720 µg/mL +/- 31.3720 µg/mL		Gravimetric Unstressed Stressed

Solvent: Acetonitrile
CAS # 75-05-8
Purity 99%

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

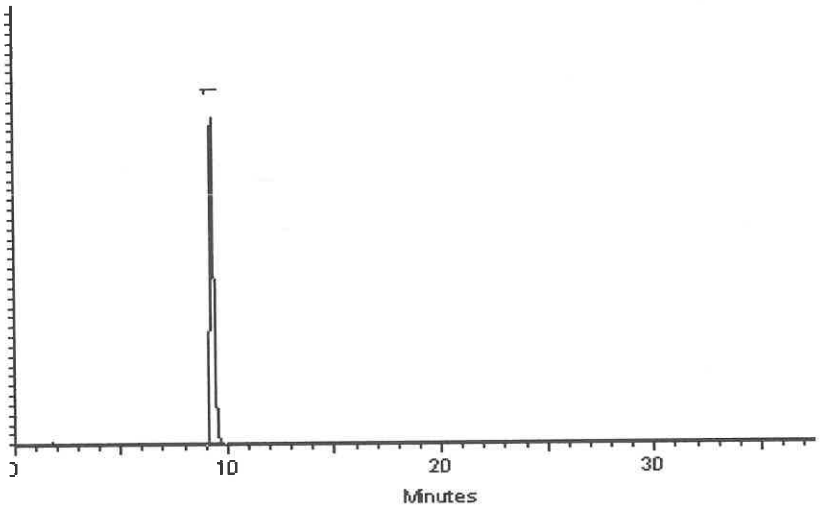
Flow Rate:
1.0 ml/min.

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.

Katelyn McGinnl - Operations Tech I

Date Mixed: 02-Oct-2020 **Balance:** 1128353505

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 06-Oct-2020

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

3,5-DNA Stock_00040

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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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. : 31661 **Lot No.:** A0172723

Description : 3,5-Dinitroaniline Standard

3, 5-Dinitroaniline Std 1000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 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	3,5-Dinitroaniline	1,000.0 µg/mL	+/- 10.0737	µg/mL	Gravimetric
	CAS # 618-87-1 (Lot 10311HS)		+/- 31.3469	µg/mL	Unstressed
	Purity 99%		+/- 31.3469	µg/mL	Stressed

Solvent: Acetonitrile
CAS # 75-05-8
Purity 99%

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

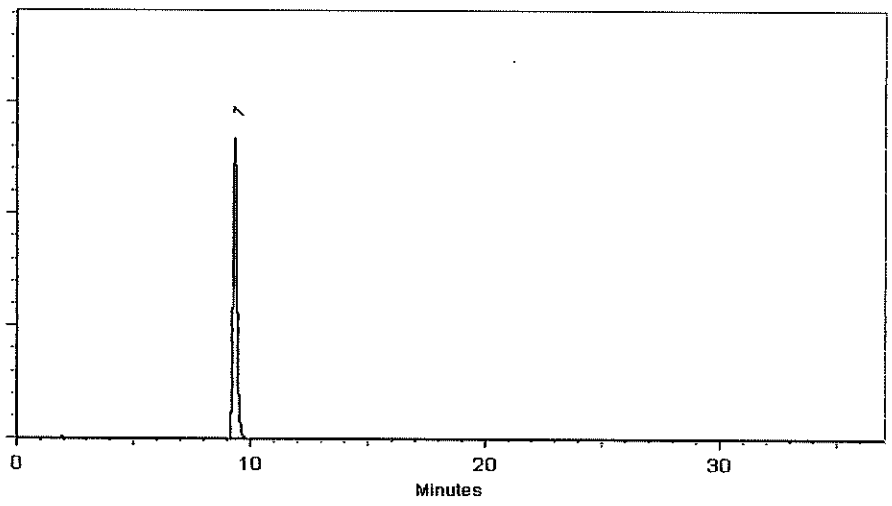
Flow Rate:
1.0 ml/min.

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.

Jeremy Johnson - Mfg. Supervisor

Date Mixed: 25-May-2021 **Balance:** B251644995

Marlina Cowan - Operations Tech I

Date Passed: 27-May-2021

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

3,5-DNA Stock_00042

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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. : 31661 **Lot No.:** A0185772

Description : 3,5-Dinitroaniline Standard

3, 5-Dinitroaniline Std 1000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2026 **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	3,5-Dinitroaniline	1,008.0 µg/mL	+/- 10.1543 µg/mL	Gravimetric
	CAS # 618-87-1 (Lot 10311HS)		+/- 31.5977 µg/mL	Unstressed
	Purity 99%		+/- 31.5977 µg/mL	Stressed

Solvent: Acetonitrile
CAS # 75-05-8
Purity 99%

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

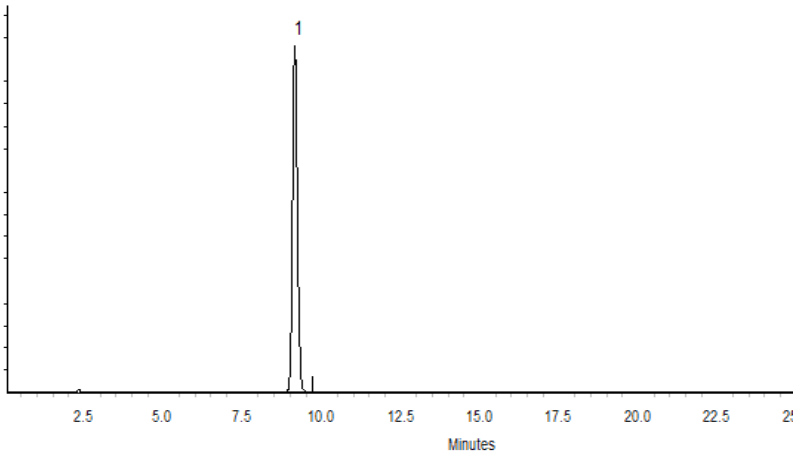
Flow Rate:
1.0 ml/min.

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.

Morgan Craighead - Mix Technician

Date Mixed: 27-May-2022 **Balance:** 1128353505

Marlina Cowan - Operations Tech I

Date Passed: 02-Jun-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

50% NaOH_00023

RICCA CHEMICAL COMPANY®

448 West Fork Dr
Arlington, TX 76012
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

Sodium Hydroxide, 50% (w/w) (760 g/L), Analytical Reagent Grade

Lot Number: 1102857 **Product Number:** 7291

Manufacture Date: FEB 05, 2021
Expiration Date: JAN 2024

The specifications below are equivalent to the ACS Reagent Grade specifications for Sodium Hydroxide pellets, corrected for assay. There is no ACS specification for 50% (w/w) Sodium Hydroxide solution.

Name	CAS#	Grade
Water	7732-18-5	Reagent
Sodium Hydroxide	1310-73-2	Reagent

Test	Specification	Result	NIST SRM#
Appearance	Colorless liquid	Passed	
Assay (vs. Sulfuric Acid/Phenolphthalein)	50-52 % (w/w)	50 % (w/w)	723
Chloride (Cl)	max 0.002 %	< 0.002 %	
Heavy Metals (as Ag)	max 0.001 %	< 0.001 %	
Iron (Fe)	max 5 ppm	0.2 ppm	3126
NH_4OH Precipitate	max 0.01 %	0.00009 %	
Nickel (Ni)	max 5 ppm	< 1 ppm	3136
Nitrogen Compounds (as N)	max 5 ppm	< 5 ppm	
Phosphate (PO_4)	max 5 ppm	< 5 ppm	
Potassium (K)	max 0.01 %	0.002 %	3141
Sodium Carbonate (Na_2CO_3)	max 0.1 %	0.02 %	
Sulfate (SO_4)	max 0.001 %	< 0.001 %	

Specification	Reference
Sodium Hydroxide Solution, 50%	ASTM (D 2187 E)
Sodium Hydroxide Solution, 50%	ASTM (D 2187 F)
Sodium hydroxide stock solution, about 50%	TAPPI (T 235 cm-85)
Sodium Hydroxide Solution	ASTM (D 2187 G)
Sodium Hydroxide Solution, 50%	ASTM (D 4548)
Sodium Hydroxide Solution (50% w/w)	ASTM (D 2036 A)
Sodium Hydroxide Solution (50% w/w)	ASTM (D 2036 B)
Sodium Hydroxide Solution (50% w/w)	ASTM (D 2036 C)
Sodium Hydroxide Solution (50% w/w)	ASTM (D 2036 D)

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)
7291-1	4 L natural poly	36 months
7291-16	500 mL natural poly	36 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)



Israel Alamudun (02/05/2021)
Quality Control Supervisor
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

8330 LCS_00121

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20230121-117963.b\01210012.D

Lims ID: 8330 LCS 121 Inj. Date: 21-Jan-2023 14:04:20

Worklist ID: 280-0117963-012 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535	Limits 2 3535	Limits 3 3535
4 HMX	0.5000	0.4694	93.9	65-135	66-115	
8 RDX	0.5000	0.4904	98.1	68-130	69-122	
9 2,4,6-Trinitrophenol	0.5000	0.5399	108.0	80-120	63-135	
11 1,3,5-Trinitrobenzene	0.5000	0.5414	108.3	73-125	62-127	
12 1,3-Dinitrobenzene	0.5000	0.5314	106.3	78-120	59-131	
13 Nitrobenzene	0.5000	0.5214	104.3	65-134	46-144	
15 Tetryl	0.5000	0.5279	105.6	64-128	56-131	
16 Nitroglycerin	5.00	5.40	107.9	74-127	70-125	
17 2,4,6-Trinitrotoluene	0.5000	0.4569	91.4	71-123	46-139	
18 4-Amino-2,6-dinitrotolu	0.5000	0.5716	114.3	76-125	43-120	
19 2-Amino-4,6-dinitrotolu	0.5000	0.4927	98.5	79-120	46-124	
20 2,6-Dinitrotoluene	0.5000	0.5185	103.7	77-127	51-130	
21 2,4-Dinitrotoluene	0.5000	0.5353	107.1	78-120	53-127	
22 o-Nitrotoluene	0.5000	0.5106	102.1	70-127	37-138	
23 p-Nitrotoluene	0.5000	0.4984	99.7	71-127	41-137	
24 m-Nitrotoluene	0.5000	0.4984	99.7	73-125	31-140	
25 PETN	5.00	5.27	105.5	73-127	67-127	

Samples for Limit Group: 1, Lims Prep Method: 3535

280-171404-A-21-A 280-171267-A-1-A 280-171267-A-2-A
280-171267-A-3-A 280-171267-A-4-A 280-171267-A-5-A
280-171267-A-6-A 280-171267-A-7-A

Samples for Limit Group: 2, Lims Prep Method: 3535

550-196288-AO-1-A 570-123967-A-1-A

Samples for Limit Group: 3, Lims Prep Method: 3535

280-171237-A-1-A 280-171237-A-2-A 280-171237-A-3-A
280-171237-A-4-A

Reagent

8330 LCS_00126

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20230426-120796.b\04260006.D

Lims ID: C18column:B16162 Inj. Date: 26-Apr-2023 15:04:00

Worklist ID: 280-0120796-006 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_	Limits 2 0B_Sonc_
4 HMX	0.5000	0.4359	87.2	80-120	74-124
8 RDX	0.5000	0.4718	94.4	80-124	67-129
9 2,4,6-Trinitrophenol	0.5000	0.5241	104.8	38-154	
11 1,3,5-Trinitrobenzene	0.5000	0.5064	101.3	80-120	80-116
12 1,3-Dinitrobenzene	0.5000	0.5004	100.1	80-120	73-119
13 Nitrobenzene	0.5000	0.5010	100.2	76-122	67-129
14 3,5-Dinitroaniline	0.5000	0.4725	94.5	80-120	86-118
15 Tetryl	0.5000	0.5711	114.2	80-120	68-135
16 Nitroglycerin	5.00	5.04	100.8	75-120	73-124
17 2,4,6-Trinitrotoluene	0.5000	0.4643	92.9	80-120	71-120
18 4-Amino-2,6-dinitrotolu	0.5000	0.4973	99.5	80-120	64-127
19 2-Amino-4,6-dinitrotolu	0.5000	0.4766	95.3	78-120	71-123
20 2,6-Dinitrotoluene	0.5000	0.4994	99.9	80-120	79-117
21 2,4-Dinitrotoluene	0.5000	0.4894	97.9	80-120	75-121
22 o-Nitrotoluene	0.5000	0.4896	97.9	80-124	70-124
23 p-Nitrotoluene	0.5000	0.4868	97.4	80-120	71-124
24 m-Nitrotoluene	0.5000	0.4890	97.8	80-122	67-129
25 PETN	5.00	5.34	106.9	80-120	72-128

Samples for Limit Group: 1, Lims Prep Method: 8330B_Sonc_10g

280-174348-A-25-B	280-174348-A-26-B	280-174348-A-27-B
280-174348-A-28-B	280-174348-A-29-B	280-174348-A-30-D
280-174348-A-31-B	280-174348-A-16-B	280-174348-A-18-B
280-174348-A-19-B	280-174348-A-20-B	280-174348-A-22-B
280-174348-A-24-B	280-174485-A-7-B	280-174485-A-8-B
280-174485-A-9-B	280-174482-A-1-B	280-174482-A-2-B
280-174482-A-3-B	280-174482-A-4-B	280-174482-A-5-B
280-174482-A-6-B	280-174482-A-7-B	280-174482-A-8-B
280-174482-A-9-D	280-174482-A-10-B	280-174482-A-11-B
280-174482-A-12-B	280-174482-A-13-B	280-174482-A-14-B
280-174482-A-15-B	280-174482-A-16-B	280-174482-A-17-B
280-174482-A-18-B	280-174482-A-19-C	

Samples for Limit Group: 2, Lims Prep Method: 8330B_Sonc_10g

280-174408-A-1-I	280-174408-A-2-I

Reagent

8330 Stock_TS_00015

Agilent

Certificate of Analysis
ISO Guide 34

Stock Standard

Product Number: NAIM-833E **Page:** 1 of 2

Lot Number: CT-0801 **Lot Issue Date:** 25-Feb-2019 **Expiration Date:** 31-Mar-2022

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with Agilent's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
HMX	002691-41-0	RM06237	1000 ± 5 µg/mL
RDX	000121-82-4	RM10915	1000 ± 5 µg/mL
1,3,5-trinitrobenzene	000099-35-4	RM06608	1002 ± 5 µg/mL
m-dinitrobenzene	000099-65-0	RM14290	1002 ± 5 µg/mL
nitrobenzene	000098-95-3	RM11472	1004 ± 5 µg/mL
2,4,6-trinitrotoluene (TNT)	000118-96-7	RM11972	1004 ± 5 µg/mL
2,4-dinitrotoluene	000121-14-2	RM10279	1004 ± 5 µg/mL
tetryl	000479-45-8	RM14651	1002 ± 5 µg/mL
2,6-dinitrotoluene	000606-20-2	NT00450	1004 ± 5 µg/mL
2-nitrotoluene	000088-72-2	NT01996	1000 ± 5 µg/mL
3-nitrotoluene	000099-08-1	NT02212	1001 ± 5 µg/mL
4-nitrotoluene	000099-99-0	NT02096	1002 ± 5 µg/mL
2-amino-4,6-dinitrotoluene	035572-78-2	RM04229	1004 ± 5 µg/mL
4-amino-2,6-dinitrotoluene	019406-51-0	RM04226	1001 ± 5 µg/mL

Matrix: acetonitrile

Storage: Store at Room Temperature (15° to 30°C).

Agilent uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER
ISO Guide 34 Cert No. AR-1936

Produced in accordance with TUV USA Inc 56 100 18560026 registered ISO 9001 Quality Management System

ANAB ACCREDITED TESTING LABORATORY
ISO17025 Cert No. AT-1937

Certificate of Analysis
ISO Guide 34

Stock Standard

Product Number: NAIM-833E **Page:** 2 of 2

Lot Number: CT-0801 **Lot Issue Date:** 25-Feb-2019 **Expiration Date:** 31-Mar-2022

Analyte	CAS#	Analyte Lot	True Value

Monica Bourgeois
QMS Representative

ISO Guide 34 Cert No.
AR-1936

Produced in accordance with TUV USA Inc 56 100 18560026
registered ISO 9001 Quality Management System

ISO17025 Cert No.
AT-1937

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_Stk_00075

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Composition

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. : 568871 **Lot No.:** A0151571

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, 2022 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Nitroglycerin	5,036.0 µg/mL	+/- 46.8321	µg/mL	Gravimetric
	CAS # 55-63-0 (Lot 170616JLM)		+/- 278.2306	µg/mL	Unstressed
	Purity 99%		+/- 323.7234	µg/mL	Stressed

Solvent: Acetonitrile
CAS # 75-05-8
Purity 99%

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

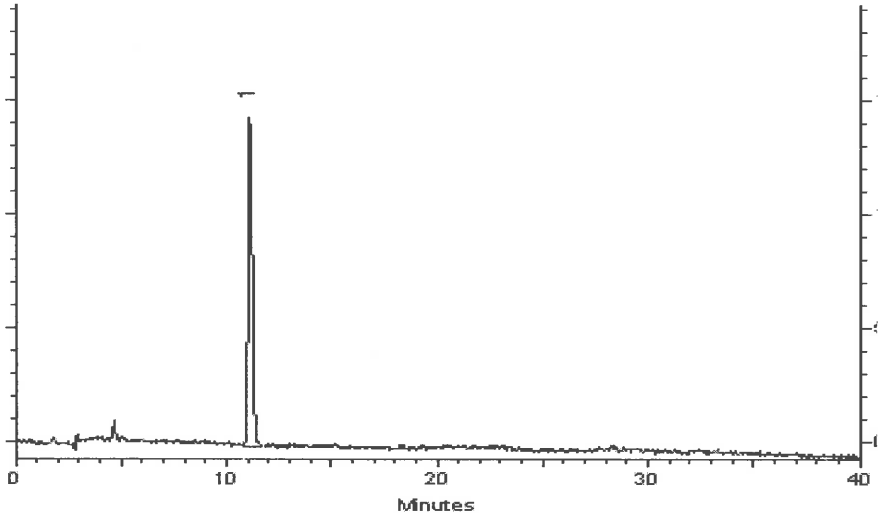
Flow Rate:
1.0 ml/min.

Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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.

Joseph Jaglowski - Mix Technician **Date Mixed:** 05-Aug-2019 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 09-Aug-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

Reagent

8330_NG_Stk_00118

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Composition

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. : 568871 **Lot No.:** A0188553

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, 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	Nitroglycerin	5,016.0 µg/mL	+/- 46.6461	µg/mL	Gravimetric
	CAS # 55-63-0 (Lot 200507JLM)		+/- 277.1256	µg/mL	Unstressed
	Purity 99%		+/- 322.4378	µg/mL	Stressed

Solvent: Acetonitrile
CAS # 75-05-8
Purity 99%

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

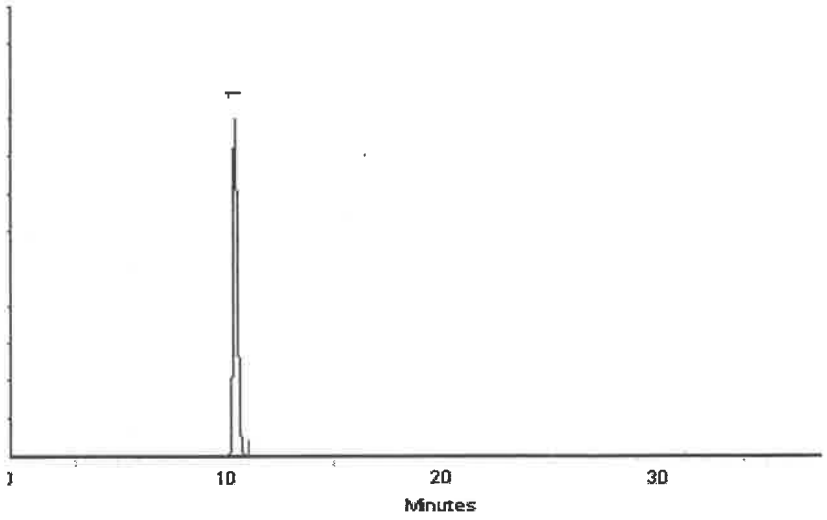
Flow Rate:
1.0 ml/min.

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_NG_Stk_00120

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CERTIFIED REFERENCE MATERIAL

Certificate of Composition

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. : 568871 **Lot No.:** A0188553

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, 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	Nitroglycerin	5,016.0 µg/mL	+/- 46.6461	µg/mL	Gravimetric
	CAS # 55-63-0 (Lot 200507JLM)		+/- 277.1256	µg/mL	Unstressed
	Purity 99%		+/- 322.4378	µg/mL	Stressed

Solvent: Acetonitrile
CAS # 75-05-8
Purity 99%

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

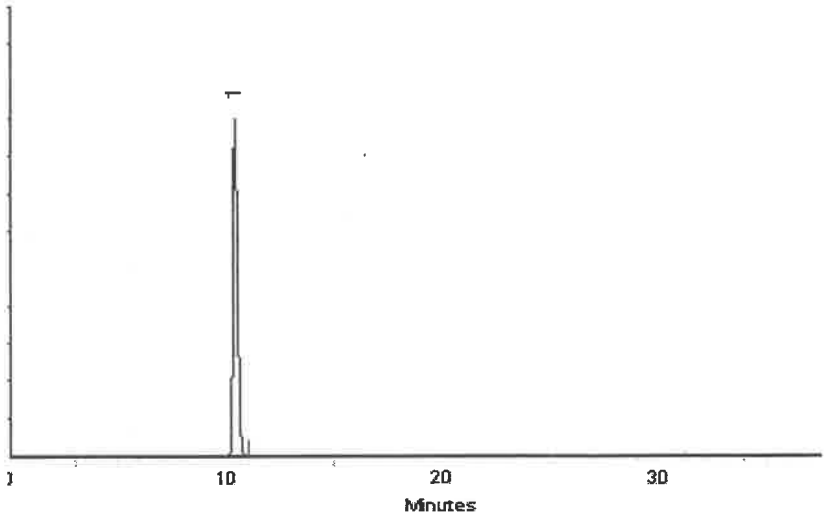
Flow Rate:
1.0 ml/min.

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_NG_Stk_00128

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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. : 568871 **Lot No.:** A0194013

Description : Custom Nitroglycerin Standard

Custom Nitroglycerin Standard 5,000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 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%	5,036.0 µg/mL	+/- 237.6858

* 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.

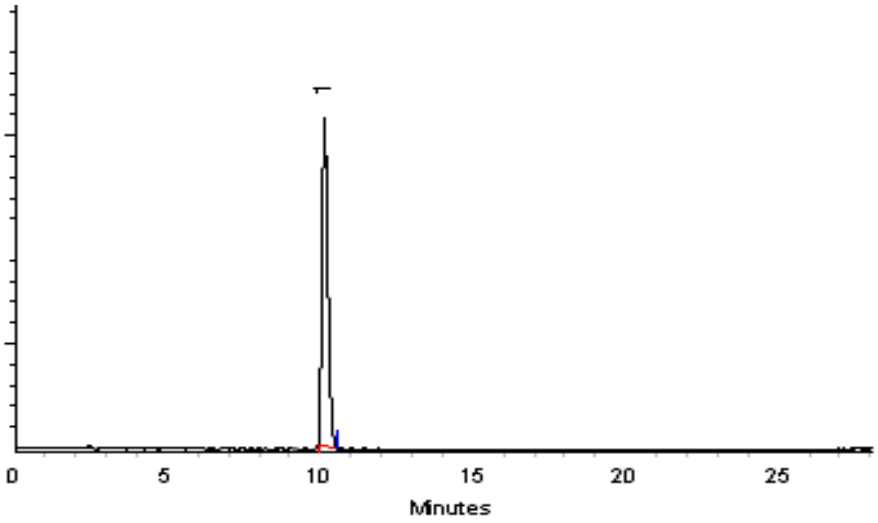
Mobile Phase A:
water:methanol (44:56 V/V)

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.

Brandon Reish - Operations Technician II

Date Mixed: 27-Jan-2023 **Balance Serial #** B251644995

Christie Mills - Operations Tech II - ARM QC

Date Passed: 31-Jan-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_NG_Stk_00129

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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. : 568871 **Lot No.:** A0194013

Description : Custom Nitroglycerin Standard

Custom Nitroglycerin Standard 5,000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 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%	5,036.0 µg/mL	+/- 237.6858

* 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.

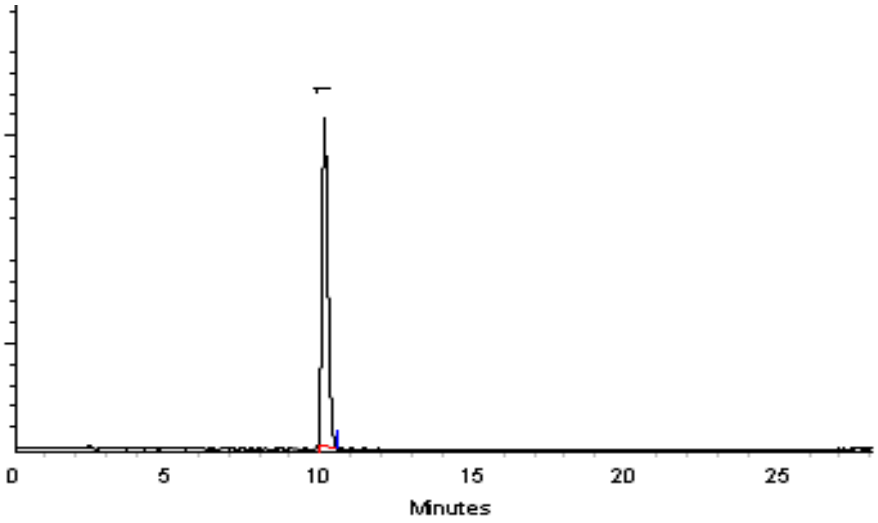
Mobile Phase A:
water:methanol (44:56 V/V)

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.

Brandon Reish - Operations Technician II

Date Mixed: 27-Jan-2023 **Balance Serial #** B251644995

Christie Mills - Operations Tech II - ARM QC

Date Passed: 31-Jan-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_NG_Stk_00130

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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. : 568871 **Lot No.:** A0194013

Description : Custom Nitroglycerin Standard

Custom Nitroglycerin Standard 5,000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 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%	5,036.0 µg/mL	+/- 237.6858

* 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.

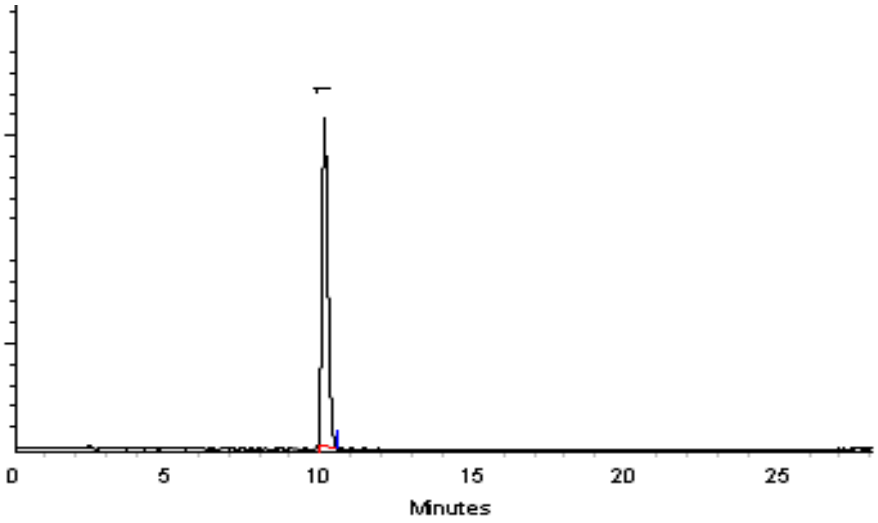
Mobile Phase A:
water:methanol (44:56 V/V)

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.

Brandon Reish - Operations Technician II

Date Mixed: 27-Jan-2023 **Balance Serial #** B251644995

Christie Mills - Operations Tech II - ARM QC

Date Passed: 31-Jan-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_NG_Stk_00131

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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. : 568871 **Lot No.:** A0194013

Description : Custom Nitroglycerin Standard

Custom Nitroglycerin Standard 5,000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 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%	5,036.0 µg/mL	+/- 237.6858

* 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.

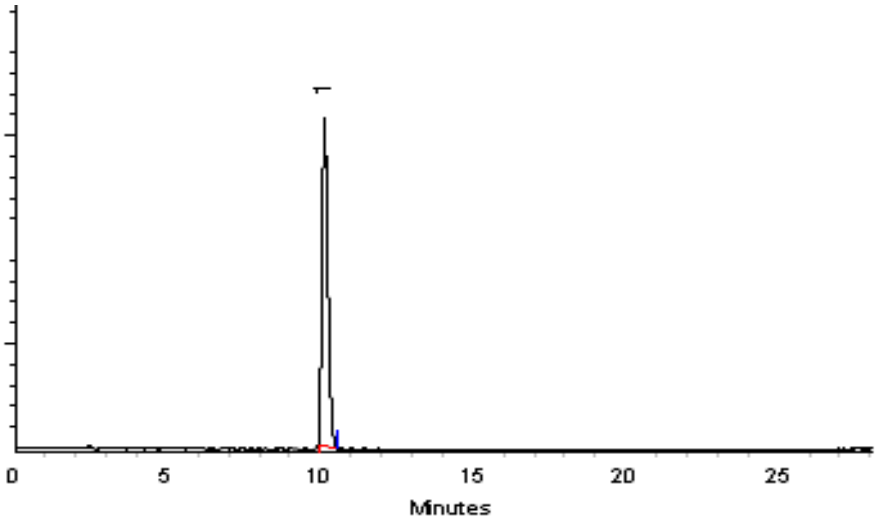
Mobile Phase A:
water:methanol (44:56 V/V)

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.

Brandon Reish - Operations Technician II

Date Mixed: 27-Jan-2023 **Balance Serial #** B251644995

Christie Mills - Operations Tech II - ARM QC

Date Passed: 31-Jan-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_NG1000_00007

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Certificate #3222.01

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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.:** A0175997

Description : Nitroglycerin Standard

Nitroglycerin Standard 1,000µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Nitroglycerin	1,000.0 µg/mL	+/- 5.9397 µg/mL	Gravimetric
	CAS # 55-63-0 (Lot 200507JLM)		+/- 54.7830 µg/mL	Unstressed
	Purity 99%		+/- 63.8824 µg/mL	Stressed

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 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_NG1000_00010

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Testing Laboratory
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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. : 31498 **Lot No.:** A0187280

Description : Nitroglycerin Standard

Nitroglycerin Standard 1,000µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 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	Nitroglycerin	1,004.0 µg/mL	+/- 5.9635	µg/mL	Gravimetric
	CAS # 55-63-0 (Lot 200507JLM)		+/- 55.0021	µg/mL	Unstressed
	Purity 99%		+/- 64.1379	µg/mL	Stressed

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Reagent

8330_OP_DMT_00016

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20221230-117448.b\12300069.D

Lims ID: DMT LCS 16 Inj. Date: 30-Dec-2022 14:12:41

Worklist ID: 280-0117448-069 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_
3 TNX	0.5000	0.5437	108.7	50-150
6 DNX	0.5020	0.5259	104.8	50-150
7 MNX	0.5850	0.6258	107.0	50-150

Samples for Limit Group: 1, Lims Prep Method: 8330B_Sonc_10g

280-170212-A-1-B 280-170212-A-2-D 280-170212-A-3-B
280-170212-A-4-B 280-170212-A-5-B 280-170212-A-6-B
280-170212-A-7-B 280-170212-A-8-B 280-170212-A-9-B
280-170212-A-10-D 280-170212-A-11-B 280-170212-A-12-C
280-170212-A-13-B 280-170212-A-14-B 280-170212-A-15-B
280-170212-A-16-B 280-170212-A-17-B 280-170212-A-18-B
280-170212-A-19-B 280-170212-A-20-B 280-170212-A-21-C
280-170212-A-22-B 280-170212-A-23-B 280-170212-A-24-F
280-170212-A-25-B 280-170212-A-26-C 280-170212-A-27-B
280-170212-A-28-B 280-170212-A-29-B 280-170212-A-30-B
280-170212-A-31-B 280-170212-A-32-B 280-170212-A-33-B
280-170212-A-34-B 280-170212-A-35-B 280-170212-A-36-C
280-170212-A-37-B 280-170212-A-38-B 280-170212-A-39-B
280-170212-A-40-B

Reagent

8330_OP_DMT_00020

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20230509-121258.b\05090011.D

Lims ID: DMT LCS20 Inj. Date: 09-May-2023 16:32:44

Worklist ID: 280-0121258-011 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535	Limits 2 0B_Sonc_	Limits 3 3535
3 TNX	0.5015	0.5099	101.7	50-150		
6 DNX	0.5005	0.5059	101.1	66-119	50-150	
7 MNX	0.5835	0.6032	103.4	57-132	68-123	

Samples for Limit Group: 1, Lims Prep Method: 3535

280-175420-A-1-A 280-175420-A-2-A 280-175459-A-1-A

280-175942-A-3-A 280-175942-A-4-A 280-175942-A-5-A

Samples for Limit Group: 2, Lims Prep Method: 8330B_Sonc_10g

410-124886-B-1-A 550-201589-N-1-A 550-201670-N-1-A

Samples for Limit Group: 3, Lims Prep Method: 3535

280-175990-A-1-A 280-175990-A-2-A 280-175990-A-3-A

280-175990-A-4-A 860-48196-C-1-A

Reagent

8330_PETN_Stk_00087

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CERTIFIED REFERENCE MATERIAL

Certificate of Composition

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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.:** A0154763

Description : Custom PETN Standard

Custom PETN Standard 5,000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2022 **Storage:** 10°C or colder

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	PETN	5,024.0 µg/mL	+/- 46.7205 µg/mL	Gravimetric
	CAS # 78-11-5 (Lot 051108JLM)		+/- 277.5676 µg/mL	Unstressed
	Purity 99%		+/- 322.9521 µg/mL	Stressed

Solvent: Acetonitrile
CAS # 75-05-8
Purity 99%

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

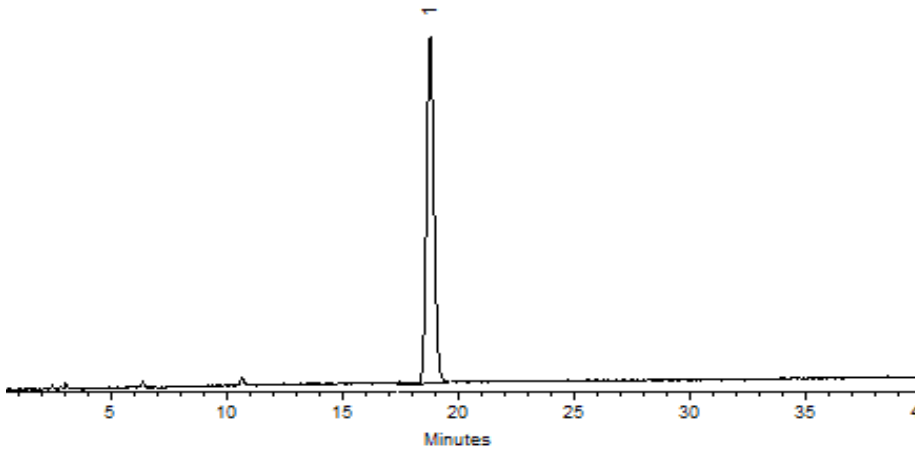
Flow Rate:
1.0 ml/min.

Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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.

Clara Windle - Operations Technician I

Date Mixed: 05-Nov-2019 **Balance:** B442140311

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 08-Nov-2019

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

8330_PETN_Stk_00128

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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.:** A0187506

Description : Custom PETN Standard

Custom PETN Standard 5,000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 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	5,028.0 µg/mL	+/- 46.7577 µg/mL	Gravimetric
	CAS # 78-11-5 (Lot 051108JLM)		+/- 277.7886 µg/mL	Unstressed
	Purity 99%		+/- 323.2092 µg/mL	Stressed

Solvent: Acetonitrile
CAS # 75-05-8
Purity 99%

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

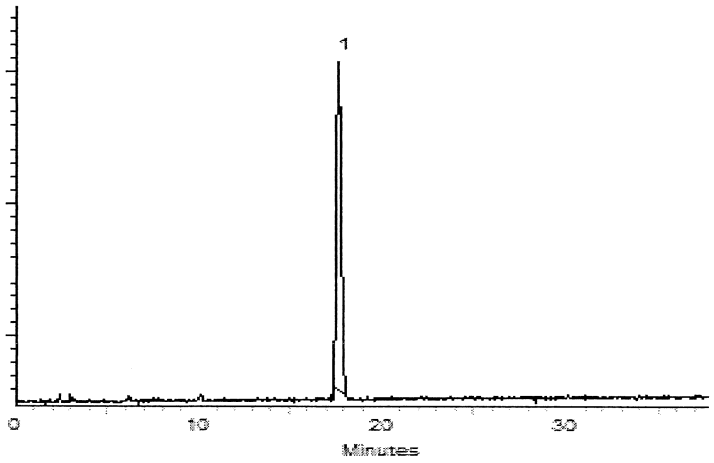
Flow Rate:
1.0 ml/min.

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.

Miranda Kline

Miranda Kline - Operations Technician I **Date Mixed:** 19-Jul-2022 **Balance:** B345965662

Fang-Yun Weaver - Operations Lead Tech - ARM QC **Date Passed:** 22-Jul-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

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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)

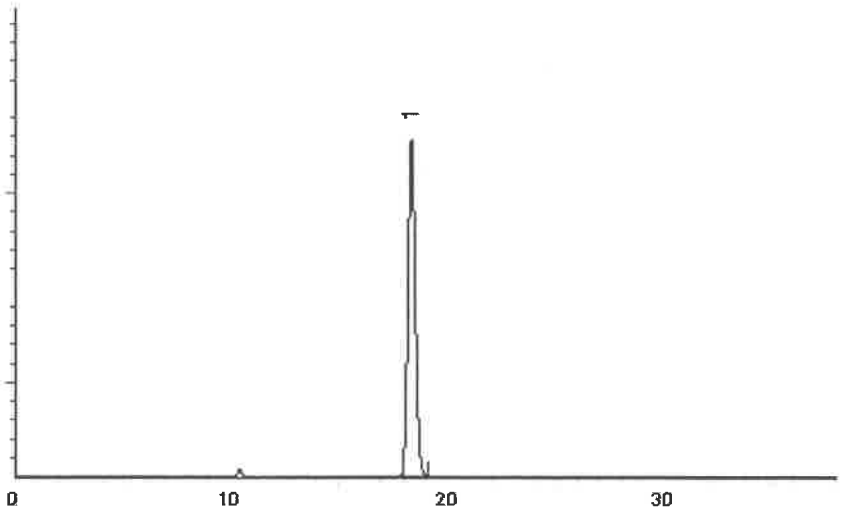
Flow Rate:
1.0 ml/min.

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

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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. : 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)

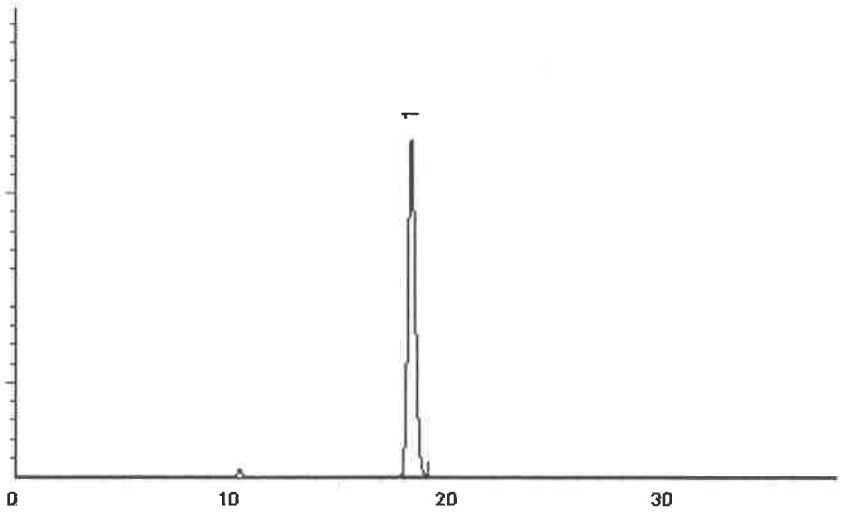
Flow Rate:
1.0 ml/min.

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_00135

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Composition

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. : 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)

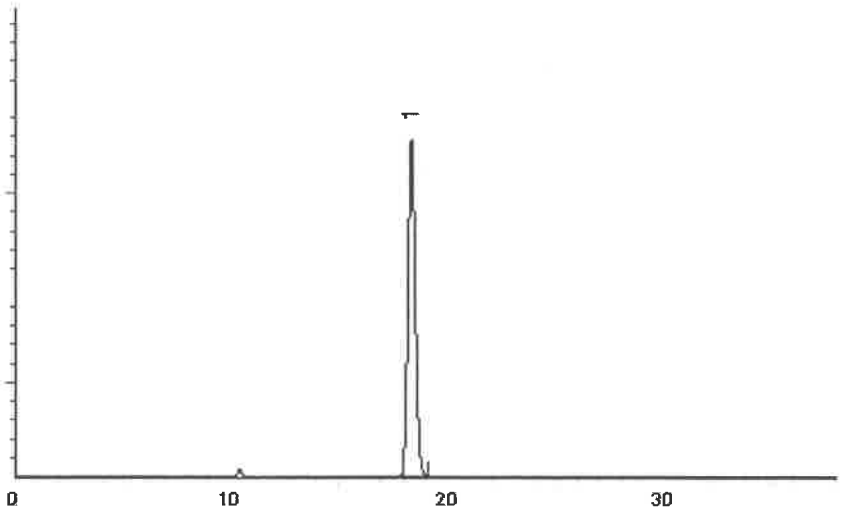
Flow Rate:
1.0 ml/min.

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_00136

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CERTIFIED REFERENCE MATERIAL

Certificate of Composition

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.:** 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)

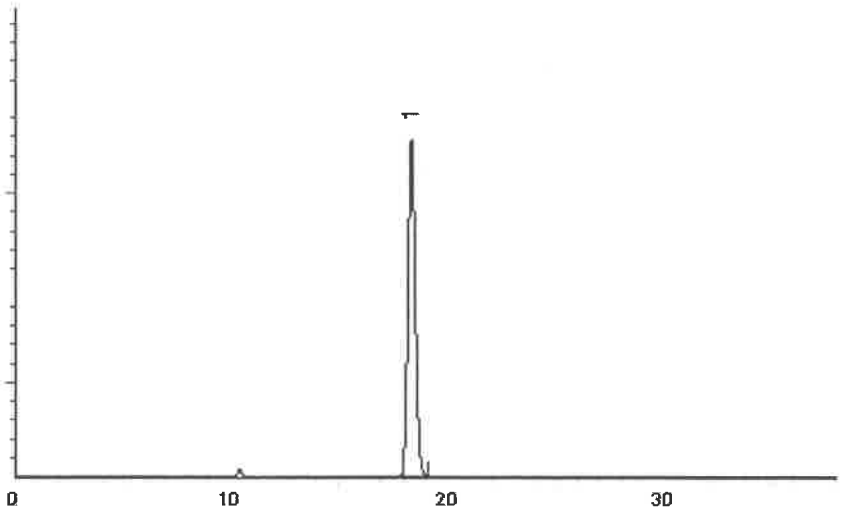
Flow Rate:
1.0 ml/min.

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
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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_PETN1000_00010

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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. : 31600 **Lot No.:** A0187142

Description : PETN Standard

PETN Standard 1000µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2027 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
I	PETN	1,001.0 µg/mL	+/- 5.9456	µg/mL	Gravimetric
	CAS # 78-11-5 (Lot 051108JLM)		+/- 54.8378	µg/mL	Unstressed
	Purity 99%		+/- 63.9463	µg/mL	Stressed

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Reagent

8330_PETN1000_00011

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Certificate of Analysis

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ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

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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.:** A0187142

Description : PETN Standard

PETN Standard 1000µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2027 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
I	PETN	1,001.0 µg/mL	+/- 5.9456	µg/mL	Gravimetric
	CAS # 78-11-5 (Lot 051108JLM)		+/- 54.8378	µg/mL	Unstressed
	Purity 99%		+/- 63.9463	µg/mL	Stressed

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Reagent

833035DNAStk_00040

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: 218091229-01
Solvent: Methanol (50%)
Acetonitrile (50%)
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: May 2, 2019
Expiration: Jun 2, 2020
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463
ANAB ACCREDITED PROFICIENCY TESTING LABORATORY AT-1339
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	100.8	100.8

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

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

Reagent

833035DNAStk_00052

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.

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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

833035DNAStk_00053

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_00054

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.

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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

8330DiaminLCS_00052

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20221221-117211.b\12210014.D

Lims ID: 8330Dia LCS52 Inj. Date: 21-Dec-2022 13:28:20

Worklist ID: 280-0117211-014 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_	Limits 2 3535
2 2,6-diamino-4-nitrotolu	0.5000	0.5110	102.2	10-150	
5 2,4-diamino-6-nitrotolu	0.5000	0.5040	100.8	10-150	

Samples for Limit Group: 1, Lims Prep Method: 8330B_Sonc_10g

280-170073-A-48-B 280-170073-A-43-B

Samples for Limit Group: 2, Lims Prep Method: 3535

280-170078-A-20-C	280-170078-A-21-C	280-170078-A-22-C
280-170078-A-23-C	280-170078-A-24-C	280-170078-A-25-B
280-170078-A-26-B	280-170078-A-27-F	280-170078-A-28-B
280-170078-A-29-B	280-170078-A-30-B	280-170078-A-31-B
280-170078-A-32-B	280-170078-A-33-B	280-170078-E-34-B

Reagent

8330LCSMix1_00136

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	HMX **CAS #** 2691-41-0 **Purity** 99%	(Lot 210324JLM)	1,008.0 µg/mL	+/- 5.9872 µg/mL +/- 55.2213 µg/mL +/- 64.3934 µg/mL		Gravimetric Unstressed Stressed
2	RDX **CAS #** 121-82-4 **Purity** 99%	(Lot 080228JLM)	1,007.0 µg/mL	+/- 5.9813 µg/mL +/- 55.1665 µg/mL +/- 64.3295 µg/mL		Gravimetric Unstressed Stressed
3	1,3,5-Trinitrobenzene **CAS #** 99-35-4 **Purity** 99%	(Lot A6TDK)	1,008.0 µg/mL	+/- 5.9872 µg/mL +/- 55.2213 µg/mL +/- 64.3934 µg/mL		Gravimetric Unstressed Stressed
4	1,3-Dinitrobenzene **CAS #** 99-65-0 **Purity** 99%	(Lot 1-DXX-24-1)	1,006.0 µg/mL	+/- 5.9753 µg/mL +/- 55.1117 µg/mL +/- 64.2657 µg/mL		Gravimetric Unstressed Stressed
5	Nitrobenzene **CAS #** 98-95-3 **Purity** 99%	(Lot 10224044)	1,007.0 µg/mL	+/- 5.9813 µg/mL +/- 55.1665 µg/mL +/- 64.3295 µg/mL		Gravimetric Unstressed Stressed
6	2,4,6-Trinitrotoluene **CAS #** 118-96-7 **Purity** 99%	(Lot D11836200)	1,002.0 µg/mL	+/- 5.9516 µg/mL +/- 54.8926 µg/mL +/- 64.0101 µg/mL		Gravimetric Unstressed Stressed
7	2,4-Dinitrotoluene **CAS #** 121-14-2 **Purity** 99%	(Lot MKAA0690V)	1,005.0 µg/mL	+/- 5.9694 µg/mL +/- 55.0569 µg/mL +/- 64.2018 µg/mL		Gravimetric Unstressed Stressed

Solvent: Acetonitrile
CAS # 75-05-8
Purity 99%

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

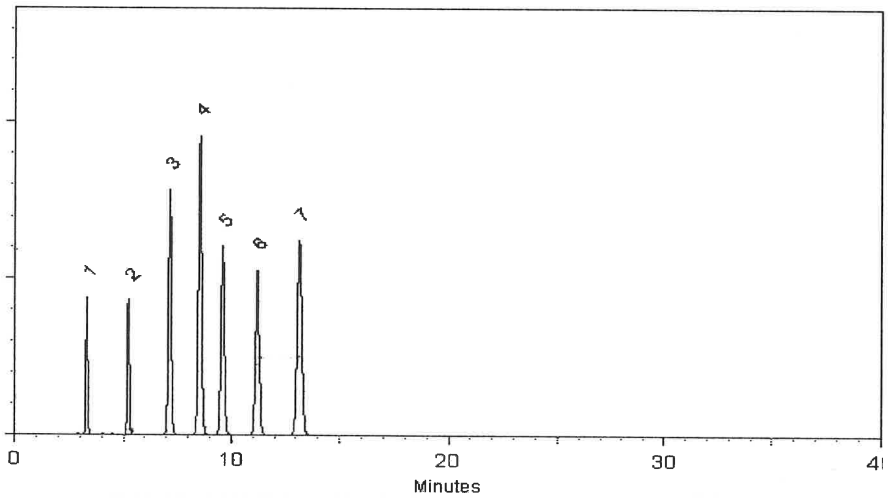
Flow Rate:
1.0 ml/min.

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.

Tom Suckar - Mix Technician

Date Mixed: 08-Apr-2022 **Balance:** B251644995

Feng-Yan 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_00140

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Certificate #3222.01

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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. : 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)

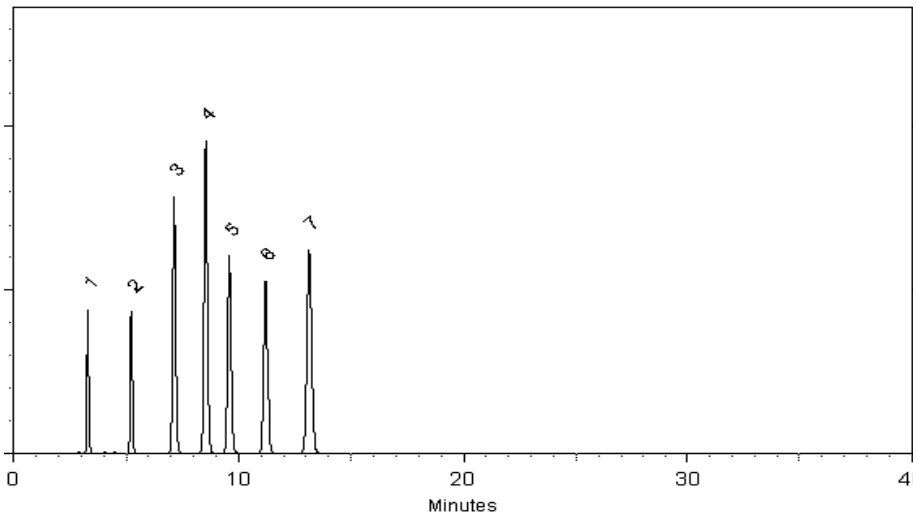
Flow Rate:
1.0 ml/min.

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_00141

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CERTIFIED REFERENCE MATERIAL

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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. : 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)

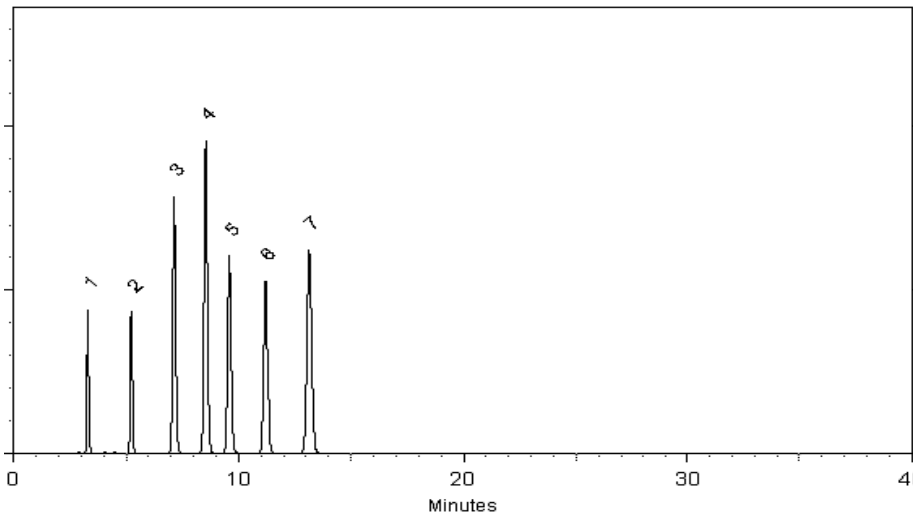
Flow Rate:
1.0 ml/min.

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

8330LCSmix2_00034

4

RESTEK® CERTIFIED REFERENCE MATERIAL

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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. : 31451 **Lot No.:** A0186475

Description : 8330 Calibration Mix #2

8330 Calibration Std #2 1000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 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	Tetryl **CAS #** 479-45-8 **Purity** 99% (Lot 211028JLM)	1,004.0 µg/mL	+/- 5.9635 µg/mL +/- 55.0021 µg/mL +/- 64.1379 µg/mL	Gravimetric Unstressed Stressed
2	4-Amino-2,6-dinitrotoluene **CAS #** 19406-51-0 **Purity** 99% (Lot ER070908-01)	1,002.0 µg/mL	+/- 5.9516 µg/mL +/- 54.8926 µg/mL +/- 64.0101 µg/mL	Gravimetric Unstressed Stressed
3	2-Amino-4,6-dinitrotoluene **CAS #** 35572-78-2 **Purity** 99% (Lot 29550-55)	1,002.0 µg/mL	+/- 5.9516 µg/mL +/- 54.8926 µg/mL +/- 64.0101 µg/mL	Gravimetric Unstressed Stressed
4	2,6-Dinitrotoluene **CAS #** 606-20-2 **Purity** 99% (Lot BCBB8606)	1,004.0 µg/mL	+/- 5.9635 µg/mL +/- 55.0021 µg/mL +/- 64.1379 µg/mL	Gravimetric Unstressed Stressed
5	2-Nitrotoluene **CAS #** 88-72-2 **Purity** 99% (Lot BCBZ7826)	1,002.0 µg/mL	+/- 5.9516 µg/mL +/- 54.8926 µg/mL +/- 64.0101 µg/mL	Gravimetric Unstressed Stressed
6	4-Nitrotoluene **CAS #** 99-99-0 **Purity** 99% (Lot BCCB0171)	1,002.0 µg/mL	+/- 5.9516 µg/mL +/- 54.8926 µg/mL +/- 64.0101 µg/mL	Gravimetric Unstressed Stressed
7	3-Nitrotoluene **CAS #** 99-08-1 **Purity** 99% (Lot FBO01)	1,000.0 µg/mL	+/- 5.9397 µg/mL +/- 54.7830 µg/mL +/- 63.8824 µg/mL	Gravimetric Unstressed Stressed

Solvent: Acetonitrile
CAS # 75-05-8
Purity 99%

Column:
250mm x 4.6mm
Ultra C18 (cat.# 9174575)

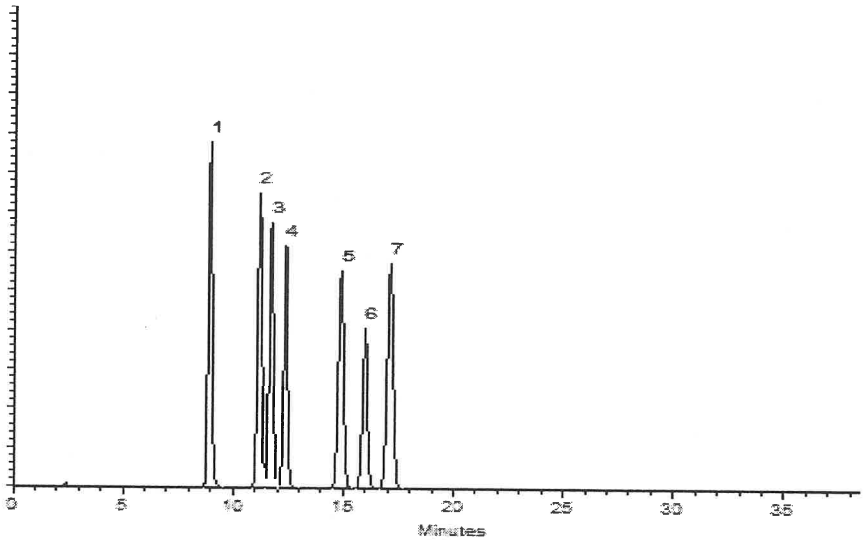
Flow Rate:
1.0 ml/min.

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.

Ashley Frantz - Quoting Technician

Date Mixed: 21-Jun-2022 **Balance:** 1128360905

Christie Mills - Operations Tech II - ARM QC

Date Passed: 29-Jun-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

8330LCSmix2_00038

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.

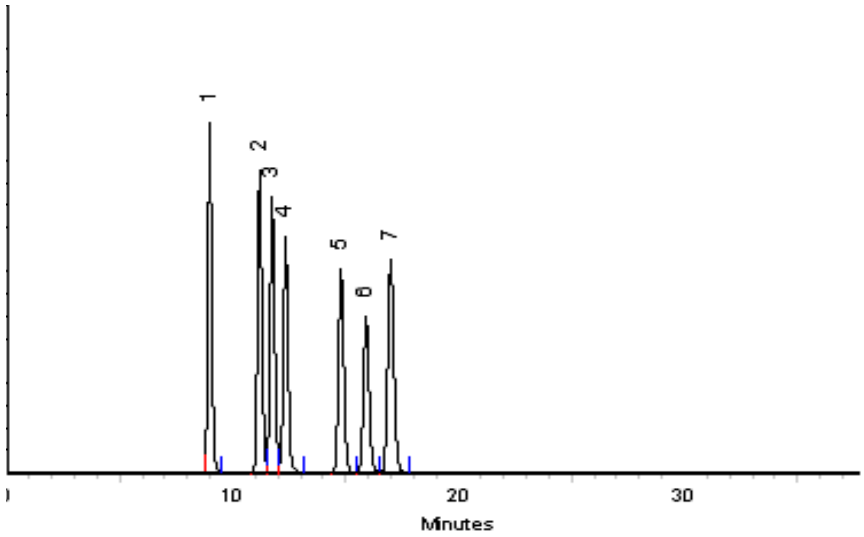
Mobile Phase A:
water:methanol (44:56 V/V)

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

8330LCSmix2_00039

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.

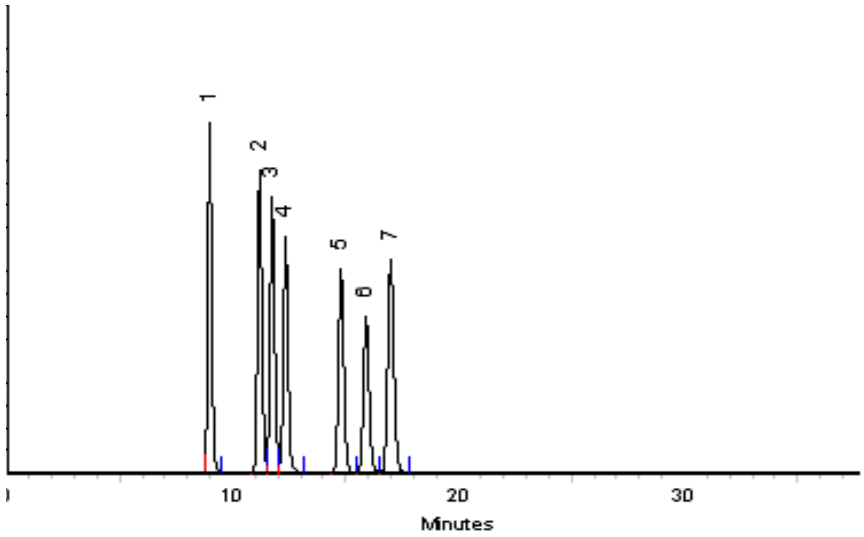
Mobile Phase A:
water:methanol (44:56 V/V)

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_00061

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: 214121302-02
Solvent: Acetonitrile (50%)
Methanol (50%)
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Aug 9, 2019
Expiration: Sep 9, 2021
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463
ANAB ACCREDITED TESTING LABORATORY AT-1339
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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard, Inc.
125 Market St., New Haven, CT 06513 USA
Tel: 203-786-5290 Fax: 203-786-5287

SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1 - Product Identifiers

Catalog Name: M-8330-ADD-3

Description: Picric Acid in Acetonitrile/Methanol Blend

1.2 - Relevant Identified Uses of the Substance or Mixture

Laboratory Chemical Reference Material

1.3 - Supplier Details

Company: AccuStandard, Inc.
125 Market St.
New Haven, CT 06513 USA

Telephone Number: 203-786-5290

Fax: 203-786-5287

Email: edocs@accustandard.com

1.4 - Emergency Telephone Number

Emergency Phone #: AccuStandard, Inc.
1-203-502-7070 (USA)
+001-203-502-7070 (International)

24 hours / 7 days a week

SECTION 2 - HAZARDS IDENTIFICATION

2.1 - GHS Label Elements





Signal Word: Danger

Hazard Codes:

H225 - Highly Flammable (Flammable liquids, category 2)

H315 - Irritating to skin. (Skin corrosion/irritation, category 2)

H319 - Causes severe eye irritation. (Eye damage/irritation, category 2A)

H332 - Harmful if inhaled. (Acute toxicity, inhalation, category 4)

H336 - Overexposure may cause dizziness, nausea, muscle weakness, narcosis and respiratory failure.

H360 - California Proposition 65 Warning: This product contains a component (or components) that may cause birth defects or other reproductive harm in a quantity greater than or equal to 0.1%.

H370 - Causes damage to organs. (Specific target organ toxicity, single exposure, category 1)

Precautionary Codes:

P202 - This product should only by used by persons trained in the safe handling of hazardous chemicals.

P233 - Store in a tightly closed container. (P404)

SECTION 2 - HAZARDS IDENTIFICATION - *continued*

2.1 - GHS Label Elements - *continued*

P260 - Do not breathe vapor.

P262 - Do not get in eyes, on skin or clothing.

P264 - Wash thoroughly after handling. Do not take internally. Eye wash and safety equipment should be readily available.

P284 - Respiratory Protection: If workplace exposure limit(s) of product or any component is exceeded (see TLV/PEL), or a risk assessment shows air-purifying respirators are appropriate, use of a NIOSH/MSHA approved air supplied respirator is advised. Use a full-face respirator with multi-purpose combination (US) or type ABEK (EN14387) respirator cartridges in absence of proper environmental control. Always use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Engineering and/or administrative controls should be implemented to reduce exposure.

P338 - Eye contact: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers.

P340 - Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

P352 - Skin contact: Wash thoroughly with soap and water. Get medical attention if irritation develops or persists.

2.2 - Other Hazards

2.2.1 - Symptom of Exposure Health/Environment

Highly Flammable (Flammable liquids, category 2)

Causes damage to organs. (Specific target organ toxicity, single exposure, category 1)

After ingestion or inhalation, initial symptoms may be only that of mild intoxication, but may become severe after 12 or 18 hours.

Overexposure may cause dizziness, nausea, muscle weakness, narcosis and respiratory failure.

2.2.2 - Potential Health Effects

Causes severe eye irritation. (Eye damage/irritation, category 2A)

Irritating to skin. (Skin corrosion/irritation, category 2)

May be harmful if absorbed through the skin. (Acute toxicity, dermal, category 5)

Irritating to mucous membrane and upper respiratory system.

Harmful if inhaled. (Acute toxicity, inhalation, category 4)

May be harmful if swallowed. (Acute toxicity, oral, category 5)

2.2.3 - Routes of Entry

Inhalation, ingestion or skin contact.

2.2.4 - Carcinogenicity

California Proposition 65 Warning: This product contains a component (or components) that may cause birth defects or other reproductive harm in a quantity greater than or equal to 0.1%.

SECTION 3 - COMPOSITION / ANALYTES DATA

Description: Picric Acid in Acetonitrile/Methanol Blend

			ACGIH -TLV (mg/m³)			OSHA -PEL (mg/m³)		
Analyte	CAS #	% Concentration	TWA	STEL	Skin	TWA	STEL	Skin
Picric acid	88-89-1	0.010	0.1			0.1		
Acetonitrile	75-05-8	49.995				70		
Methanol	67-56-1	49.995				260		

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SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable

Materials to Avoid: Acids
Bases
Oxidizers

Hazardous Decomposition: Hydrogen cyanide (HCN); Carbon oxides; Nitrogen oxides Forms HCN when heated to about 120 °C

Hazardous Polymerization: Will not occur

Condition to Avoid: Heat; Contact with ignition sources

SECTION 11 - TOXICOLOGICAL INFORMATION

Human Health Toxicity

See section 2 for specific toxicological information for the ingredients of this product.

LD50 (Oral): N/A

LD50 (Dermal) : N/A

LC50 (Inhalation): N/A

No specific human health toxicity information is available for this product. Information provided is based on similar products.

WARNING: This product contains chemicals known to the state of California to cause birth defects or other reproductive harm.

No other information related to the toxicological properties of this product is available at this time.

SECTION 12 - ECOLOGICAL INFORMATION

Environmental Toxicity

By complying with sections 6 and 7 there should be no release to the environment.

LC50 (Fish): N/A

EC50 (Aquatic Invertebrate): N/A

BCF: N/A

No specific environmental toxicity information is available for this product. It is not expected to be an environmental concern.

No other information related to the ecological properties of this product is available at this time.

SECTION 13 - DISPOSAL CONSIDERATIONS

Recycle or incinerate at any EPA approved facility or dispose in compliance with Federal, State and local regulations. Empty containers must be triple-rinsed prior to disposal.

SECTION 14 - TRANSPORT INFORMATION

Transportation Information (DOT/IATA)

UN Number: UN1993

Class: 3

Packing Group: II

Proper Shipping Name: Flammable liquid, n.o.s. (Acetonitrile, Methanol)

Poison by Inhalation: No

Marine Pollutant: No

SECTION 15 - REGULATORY INFORMATION

WARNING: This product contains chemicals known to the state of California to cause birth defects or other reproductive harm.

All components are listed on the TSCA Inventory.

For laboratory, research and development use only. Not for manufacturing or commercial purposes.

In addition to federal and state regulations, local regulations may apply. Check with your local regulatory authorities.

SECTION 16 - OTHER INFORMATION

This document has been designed to meet the requirements of OSHA, ANSI, GHS and CHIPs regulations. Chemicals are classified using the Globally Harmonized System for Classification and Labeling of Chemicals and CLP Regulation (EC) No. 1272/2008.

The statements contained herein are offered for informational purposes only and are based on technical data that we believe to be accurate. The manufacturer will not assume any liability for the accuracy and completeness of this information. Final determination of the suitability of the material is the responsibility of the user. Although certain hazards are described herein, the user should not presume that these are the only hazards that exist. Since conditions and manner of use are outside of the manufacturers control, we make

NO WARRANTY OF MERCHANTABILITY, EXPRESSED OR IMPLIED, AND ASSUME NO LIABILITY RESULTING FROM ITS USE.

Legend : N/A = Not Available ND = Not Determined NR = Not Regulated

Alteration of any information contained herein without written permission from the manufacturer is strictly prohibited.

HMIS/NFPA HAZARD INDEX

0 - Minimal
1 - Slight
2 - Moderate
3 - Serious
4 - Severe

* - Additional Hazard

GHS HAZARD INDEX

Category 1 - Most Severe
Category 5 - Least Severe

**** End of Document ****

5/31/2023 7:23 AM
Page 233 of 1252

Reagent

8330PAStkPS_00070

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: 218031154-03
Solvent: Acetonitrile (50%)
Methanol (50%)
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Jul 7, 2021
Expiration: Aug 7, 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 % (HPLC)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
Picric acid	88-89-1	99.1	100.1	99.2

31499

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_00071

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.

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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

8330Surrogate_00138

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20230202-118305.b\02020011.D

Lims ID: Surr138 Inj. Date: 02-Feb-2023 19:11:17

Worklist ID: 280-0118305-011 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_
$ 10 1,2-Dinitrobenzene	0.5000	0.5112	102.2	78-119

Samples for Limit Group: 1, Lims Prep Method: 8330B_Sonc_10g

280-171573-C-4-B	280-171573-C-5-B	280-171573-C-6-B
280-171573-C-7-B	280-171573-C-8-B	280-171573-C-9-D
280-171573-C-10-B	280-171573-C-11-B	280-171573-B-12-B
280-171573-B-13-B	280-171573-B-14-B	280-171573-B-15-B
280-171573-B-16-B	280-171573-C-42-B	280-171573-B-43-B
280-171586-A-1-C	280-171586-A-2-C	280-171586-A-3-C
280-171586-A-4-C	280-171586-A-5-C	280-171586-A-6-J
280-171586-A-7-C		

Reagent

8330Surrogate_00141

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20230329-119943.b\03290011.D

Lims ID: 8330Surr141 Inj. Date: 29-Mar-2023 16:36:57

Worklist ID: 280-0119943-011 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535	Limits 2 3535	Limits 3 3535
$ 10 1,2-Dinitrobenzene	0.5000	0.5368	107.4	63-127	83-119	

Samples for Limit Group: 1, Lims Prep Method: 3535

410-119649-AB-1-A 410-119649-AB-2-A 410-119649-AB-3-A

Samples for Limit Group: 2, Lims Prep Method: 3535

280-173931-A-1-A

Samples for Limit Group: 3, Lims Prep Method: 3535

280-173911-A-1-A 280-173911-A-2-A 860-45374-C-1-A

Reagent

8330Surrogate_00143

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20230413-120394.b\04130011.D

Lims ID: 8330Surr143 Inj. Date: 13-Apr-2023 17:28:02

Worklist ID: 280-0120394-011 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_	Limits 2 0B_Sonc_
$ 10 1,2-Dinitrobenzene	0.5000	0.5398	108.0	83-122	78-119

Samples for Limit Group: 1, Lims Prep Method: 8330B_Sonc_10g

280-174145-A-1-E	280-174145-A-2-C	280-174145-A-3-B
280-174145-A-4-B	280-174145-A-5-B	280-174145-A-6-B
280-174145-A-7-C	280-174145-A-8-B	280-174145-A-9-B
280-174145-A-10-B	280-174145-A-11-B	280-174145-A-12-B
280-174145-A-13-B	280-174145-A-14-B	280-174145-A-15-D
280-174145-A-16-B	280-174145-A-17-B	280-174145-A-18-B
280-174145-A-19-B	280-174145-A-20-B	

Samples for Limit Group: 2, Lims Prep Method: 8330B_Sonc_10g

280-174388-A-1-C	280-174388-A-2-C	280-174388-A-3-C
280-174388-A-4-C	280-174388-A-5-C	280-174388-A-6-C
280-174388-A-7-G	280-174388-A-8-G	280-174388-A-9-C
280-174388-A-10-C	280-174388-A-11-C	280-174388-A-12-C
280-174388-A-13-C	280-174388-A-14-C	280-174388-A-15-C
280-174388-A-16-C	280-174388-A-17-C	280-174388-A-18-C
280-174388-A-19-C	280-174388-A-20-C	

Reagent

8330SurrStkSS_00245

RESTEK
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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 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. : 31453 **Lot No.:** A0192220

Description : 8330 Surrogate Mix

8330 Surrogate Mix 1000 µg/mL, Methanol, 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	1,2-Dinitrobenzene	528-29-0	MKCH6067	99%	1,000.0 µg/mL	+/- 56.1888

* 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.

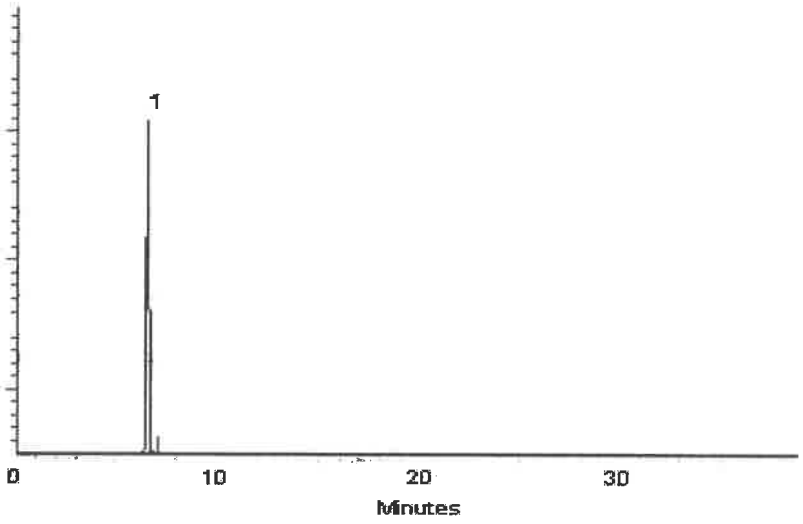
Mobile Phase A:
water:methanol (44:56 V/V)

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.

Alicia Leathers - Operation Technician I **Date Mixed:** 04-Dec-2022 **Balance Serial #** 1128353505

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 06-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

8330SurrStkSS_00246

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

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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. : 31453 **Lot No.:** A0192220

Description : 8330 Surrogate Mix

8330 Surrogate Mix 1000 µg/mL, Methanol, 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	1,2-Dinitrobenzene	528-29-0	MKCH6067	99%	1,000.0 µg/mL	+/- 56.1888

* 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.

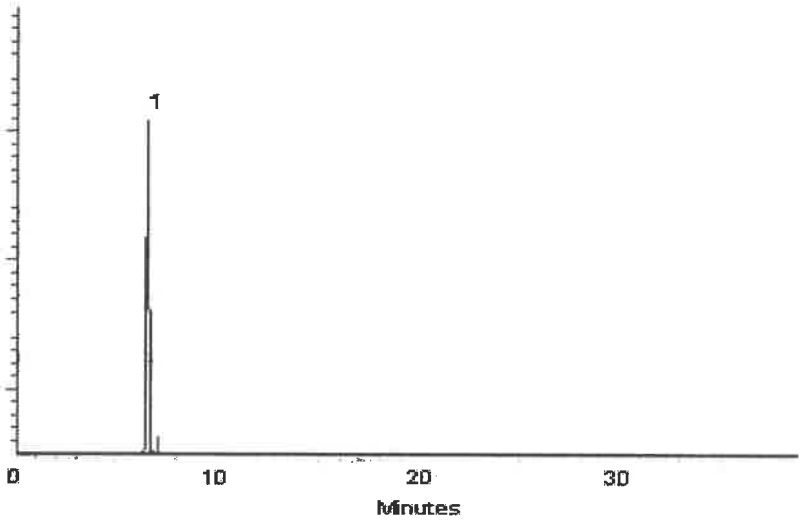
Mobile Phase A:
water:methanol (44:56 V/V)

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.

Alicia Leathers - Operation Technician I **Date Mixed:** 04-Dec-2022 **Balance Serial #** 1128353505

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 06-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

8330SurrStkSS_00247

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

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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. : 31453 **Lot No.:** A0192220

Description : 8330 Surrogate Mix

8330 Surrogate Mix 1000 µg/mL, Methanol, 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	1,2-Dinitrobenzene	528-29-0	MKCH6067	99%	1,000.0 µg/mL	+/- 56.1888

* 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.

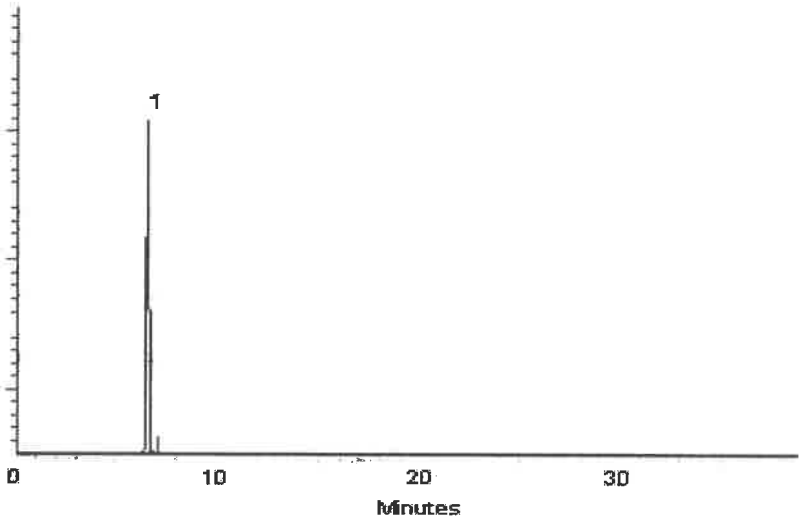
Mobile Phase A:
water:methanol (44:56 V/V)

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.

Alicia Leathers - Operation Technician I **Date Mixed:** 04-Dec-2022 **Balance Serial #** 1128353505

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 06-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.
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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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

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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_00248

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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ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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Catalog No. : 31453 **Lot No.:** A0192220

Description : 8330 Surrogate Mix

8330 Surrogate Mix 1000 µg/mL, Methanol, 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	1,2-Dinitrobenzene	528-29-0	MKCH6067	99%	1,000.0 µg/mL	+/- 56.1888

* 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.

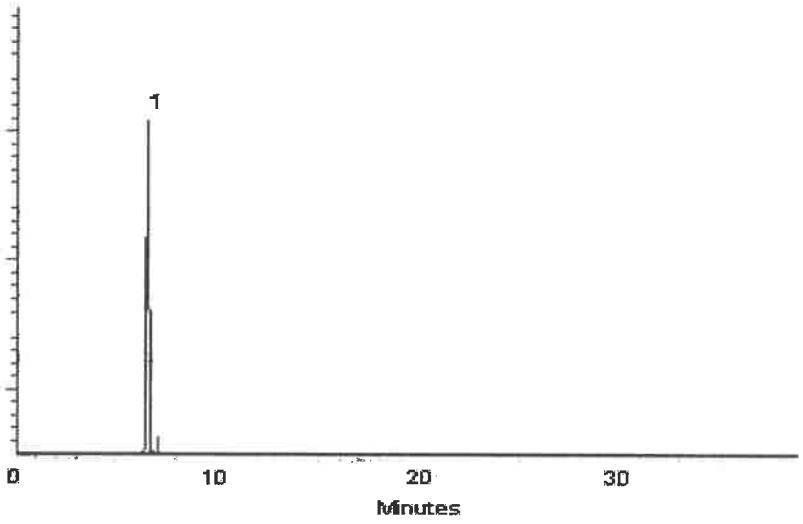
Mobile Phase A:
water:methanol (44:56 V/V)

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.

Alicia Leathers - Operation Technician I **Date Mixed:** 04-Dec-2022 **Balance Serial #** 1128353505

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 06-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:

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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%.

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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_00249

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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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ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

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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. : 31453 **Lot No.:** A0192220

Description : 8330 Surrogate Mix

8330 Surrogate Mix 1000 µg/mL, Methanol, 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	1,2-Dinitrobenzene	528-29-0	MKCH6067	99%	1,000.0 µg/mL	+/- 56.1888

* 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.

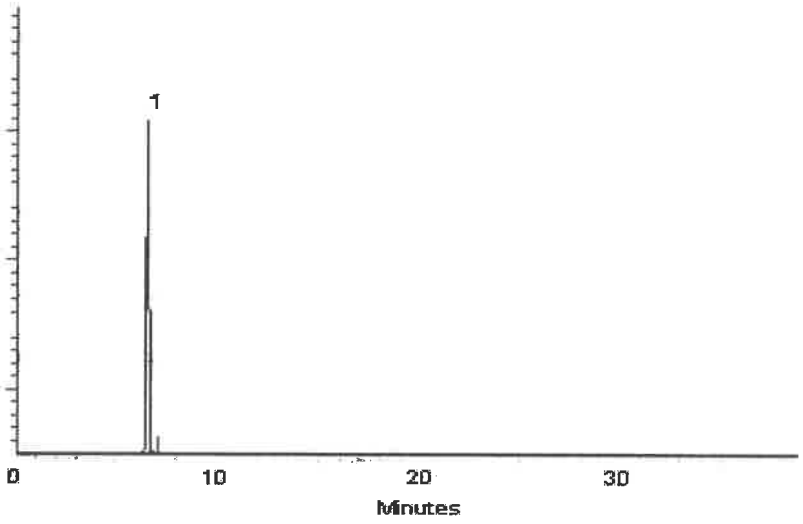
Mobile Phase A:
water:methanol (44:56 V/V)

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.

Alicia Leathers - Operation Technician I **Date Mixed:** 04-Dec-2022 **Balance Serial #** 1128353505

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 06-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.
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- 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:

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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_00259

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

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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. : 31453 **Lot No.:** A0193444

Description : 8330 Surrogate Mix

8330 Surrogate Mix 1000 µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 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%	1,004.0 µg/mL	+/- 56.4136

* 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.

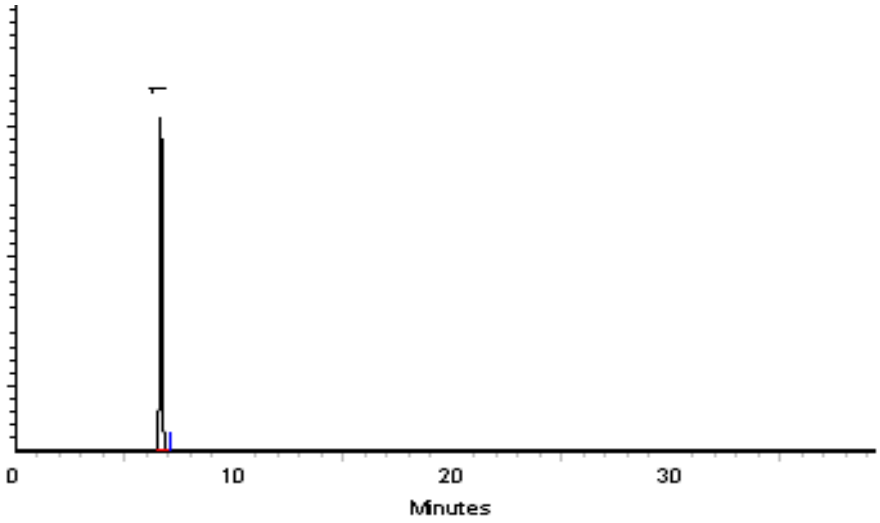
Mobile Phase A:
water:methanol (44:56 V/V)

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.

Bryan Snyder - Operations Tech I

Date Mixed: 11-Jan-2023 **Balance Serial #** 1127510105

Christie Mills - Operations Tech II - ARM QC

Date Passed: 16-Jan-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_00260

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.:** A0193444

Description : 8330 Surrogate Mix

8330 Surrogate Mix 1000 µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 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%	1,004.0 µg/mL	+/- 56.4136

* 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.

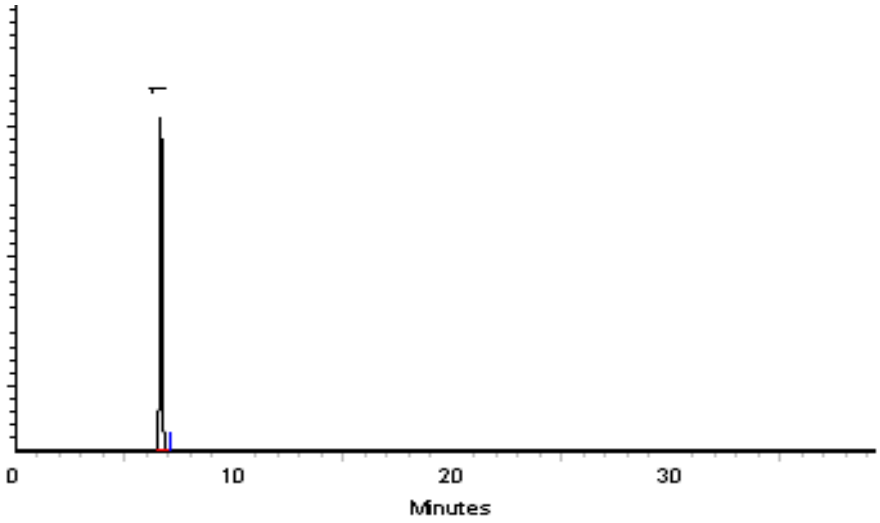
Mobile Phase A:
water:methanol (44:56 V/V)

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.

Bryan Snyder - Operations Tech I

Date Mixed: 11-Jan-2023 **Balance Serial #** 1127510105

Christie Mills - Operations Tech II - ARM QC

Date Passed: 16-Jan-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_00261

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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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.:** A0193444

Description : 8330 Surrogate Mix

8330 Surrogate Mix 1000 µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 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%	1,004.0 µg/mL	+/- 56.4136

* 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.

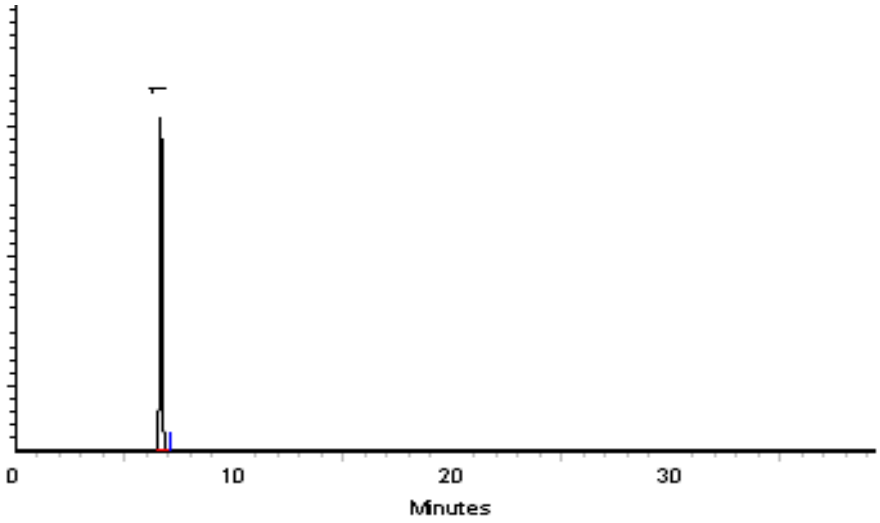
Mobile Phase A:
water:methanol (44:56 V/V)

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.

Bryan Snyder - Operations Tech I

Date Mixed: 11-Jan-2023 **Balance Serial #** 1127510105

Christie Mills - Operations Tech II - ARM QC

Date Passed: 16-Jan-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_00262

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.:** A0193444

Description : 8330 Surrogate Mix

8330 Surrogate Mix 1000 µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 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%	1,004.0 µg/mL	+/- 56.4136

* 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.

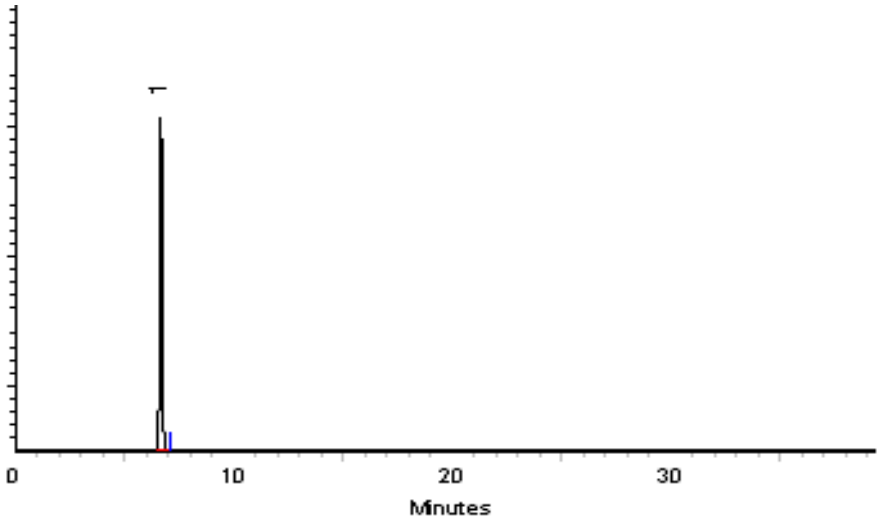
Mobile Phase A:
water:methanol (44:56 V/V)

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.

Bryan Snyder - Operations Tech I

Date Mixed: 11-Jan-2023 **Balance Serial #** 1127510105

Christie Mills - Operations Tech II - ARM QC

Date Passed: 16-Jan-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:

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- 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_00263

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.:** A0193444

Description : 8330 Surrogate Mix

8330 Surrogate Mix 1000 µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 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%	1,004.0 µg/mL	+/- 56.4136

* 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.

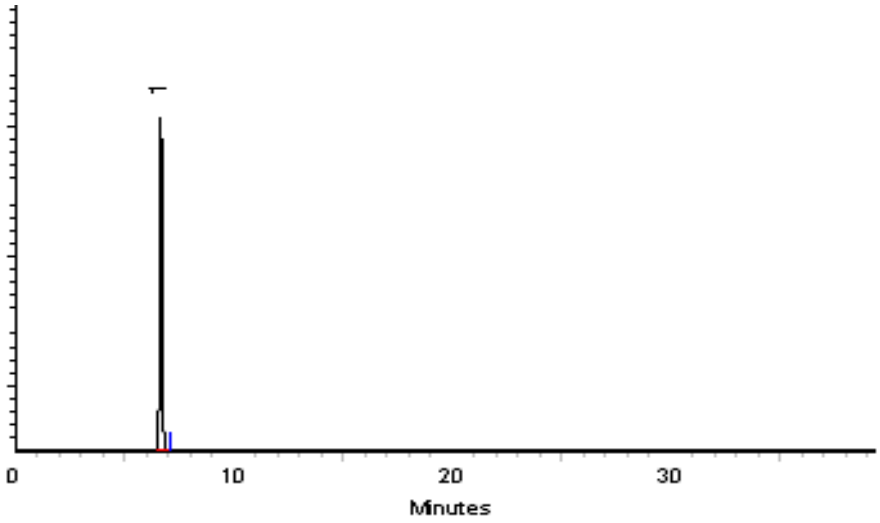
Mobile Phase A:
water:methanol (44:56 V/V)

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.

Bryan Snyder - Operations Tech I

Date Mixed: 11-Jan-2023 **Balance Serial #** 1127510105

Christie Mills - Operations Tech II - ARM QC

Date Passed: 16-Jan-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:

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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:

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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_00265

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.:** A0193444

Description : 8330 Surrogate Mix

8330 Surrogate Mix 1000 µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 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%	1,004.0 µg/mL	+/- 56.4136

* 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.

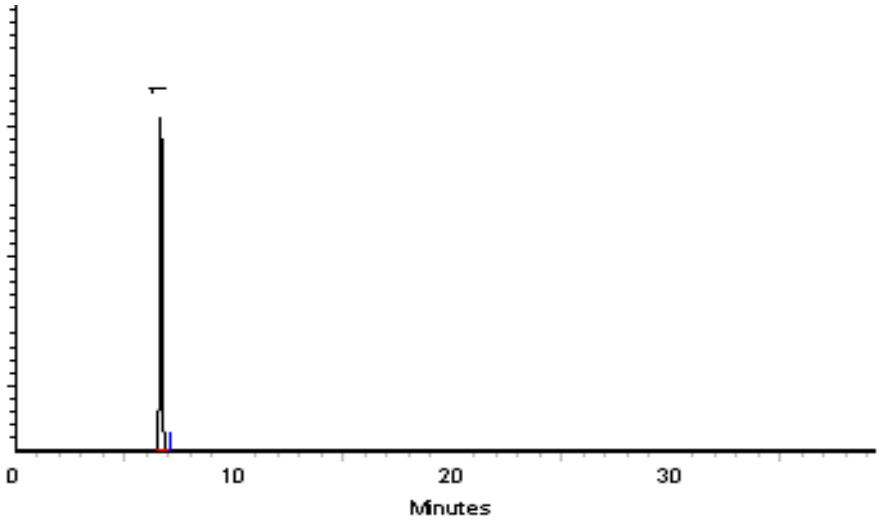
Mobile Phase A:
water:methanol (44:56 V/V)

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.

Bryan Snyder - Operations Tech I

Date Mixed: 11-Jan-2023 **Balance Serial #** 1127510105

Christie Mills - Operations Tech II - ARM QC

Date Passed: 16-Jan-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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Purity Notes:

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Certified Uncertainty Value 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_00266

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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.

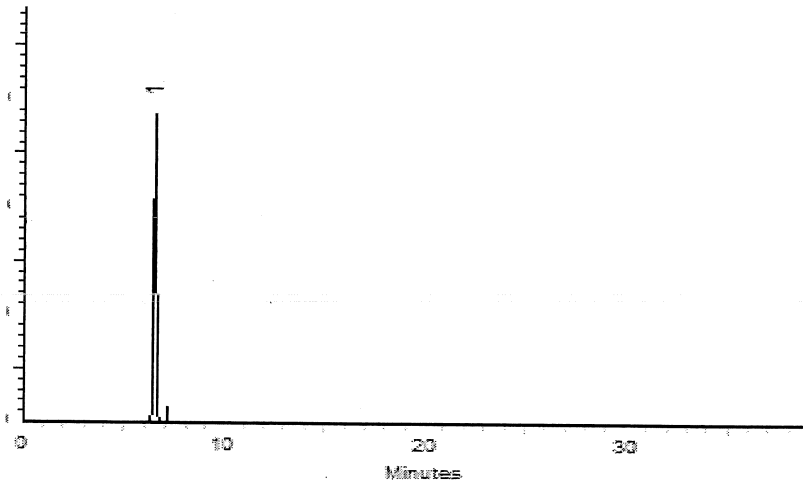
Mobile Phase A:
water:methanol (44:56 V/V)

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_00267

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.

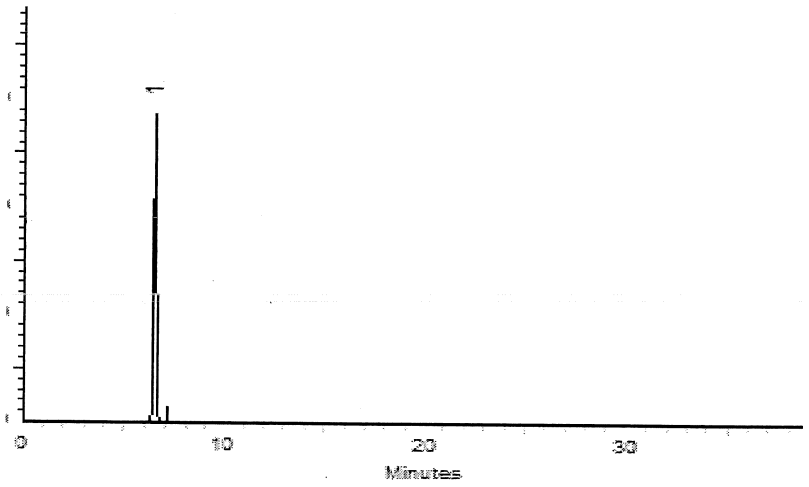
Mobile Phase A:
water:methanol (44:56 V/V)

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_00268

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.

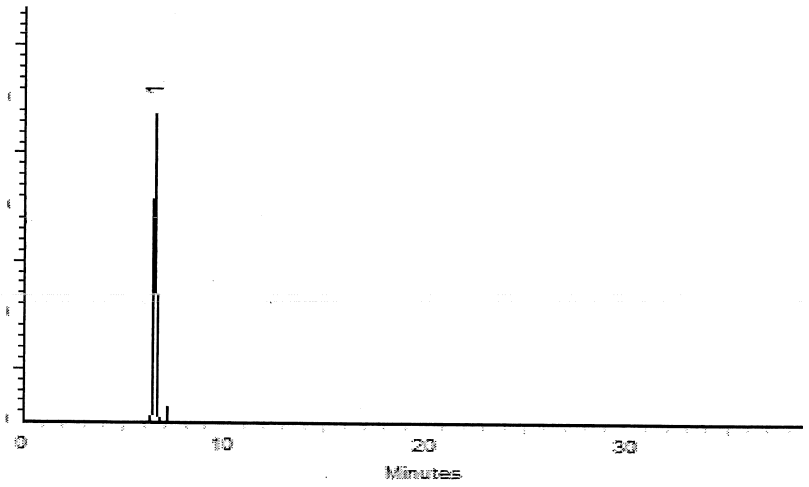
Mobile Phase A:
water:methanol (44:56 V/V)

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

8330SurrStock_00164

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: 216071012
Solvent: Methanol
Hazards: **HIGHLY FLAMMABLE** - *Refer to SDS for safety info*



Danger 2

Date Certified: Jul 1, 2016
Expiration: Jul 1, 2026
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Included on ISO/IEC 17025 Scope of Accreditation: Yes

Included on ISO Guide 34 Scope of Accreditation: Yes

Component	CAS #	Purity % (GC/FID)	Prepared Concentration[1] (µg/mL)	Certified Analyte Concentration[2] (µg/mL)
1,2-Dinitrobenzene	528-29-0	100.0	100.1	1001

ACCUSTANDARD

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] All weights are traceable through NIST, Test No. 822-275872-11

[2] Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the gravimetric values reported on this certificate is ±0.24%. The CRM Uncertainty calculated for this product is ±5%. These values are the expanded uncertainty and represent 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.

See reverse side for additional information

Certified By: _____
Larry Decker, Organic QC Manager

Page 1 of 1

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

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

5/31/2023 7:23 AM

Reagent

IC BR ICV_00026

RICCA CHEMICAL COMPANY®

1490 Lammers Pike
Batesville, IN 47006
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

Bromide Standard, 1000 ppm Br^-

Lot Number: 4110L50 **Product Number:** 1180

Manufacture Date: OCT 22, 2021
Expiration Date: APR 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
1180-4	120 mL natural poly	18 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)



Brandy Bates (10/22/2021)
Quality Control Supervisor
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

IC FL cal_00023

RICCA CHEMICAL COMPANY®

1841 Broad Street
Pocomoke City, MD 21851
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

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."

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

Reagent

IC N03 cal_00028

RICCA CHEMICAL COMPANY®

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Pocomoke City, MD 21851
http://www.riccachemical.com
1-888-GO-RICCA
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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

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 NO2 Cal_00007

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Certificate of Analysis

Nitrite Nitrogen Standard, 1000 ppm N (3285 ppm NO_2^-)

Lot Number: 2212826 **Product Number:** 5461

Manufacture Date: DEC 08, 2022
Expiration Date: JUN 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	1005 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
5461-4	120 mL natural poly	6 months

Recommended Storage: 2°C - 8°C (36°F - 46°F)

Myrlande Gilles (12/08/2022)
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:

$U_{expanded}$ = 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 #1529.03

ISO/IEC 17025:2017 ACCREDITED Chemical Testing Laboratory CERT #1539.02

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Reagent

IC P04 cal_00030

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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_00008

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Cert #2495.01

SPEXertificate®

Certificate of Reference Material

ilac-MRA ACCREDITED
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: JUL -- 2022 Certifying Officer: Katherine Cullinan

Katherine Cullinan, QC Manager

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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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Reagent

IC SO4 ICV_00024

ERA
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Certified Reference Material

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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

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$U_{expanded} = k * SQRT((U_{char}^2) + (U_{homogen}^2) + (U_{LTS}^2) + (U_{STS}^2) + (U_{RSS}^2))$

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

MNX,TNX,DNX_00069

ISO 17034

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Reference Material Certificate

Product Name: Custom Standard
Product Number: CUS-23984
Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006659035
Lot Issue Date: 11-Jan-2022
Expiration Date: 28-Feb-2023

Component Name	CERTIFIED VALUES Concentration	Expanded Uncertainty	CAS#	Analyte Lot
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	100.4 ±	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)	117.0 ±	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 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:

Reagent

MNX,TNX,DNX_00070

ISO 17034

Agilent
Trusted Answers

Reference Material Certificate

Product Name: Custom Standard
Product Number: CUS-23984
Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006659035
Lot Issue Date: 11-Jan-2022
Expiration Date: 28-Feb-2023

Component Name	CERTIFIED VALUES Concentration	Expanded Uncertainty	CAS#	Analyte Lot
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	100.4 ±	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)	117.0 ±	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 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:

Reagent

MNX,TNX,DNX_00076

Agilent

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_00077

Agilent

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_00079

Agilent

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

PicricARestek_00114

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)

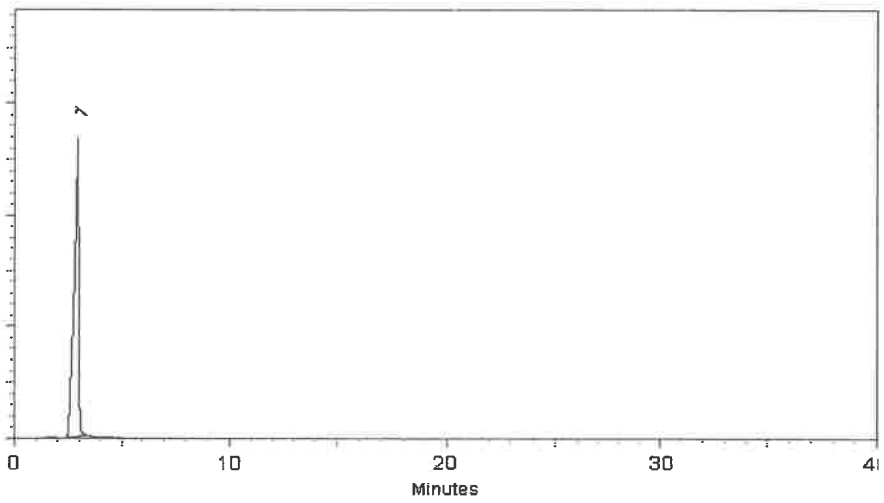
Flow Rate:
1.0 ml/min.

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.

Reagent

SFD CAL STK_00010

ThermoFisher SCIENTIFIC

Version	02
Molecular weight	240.18
Quality Test / Release Date	08/28/2022
Molecular Formula	Na2 S . 9 H2 O
CAS No	1313-84-4
Linear Formula	Na2S.9H2O
Flash Point (°C)	

Certificate of Analysis

Products are processed under ISO 9001:2015 quality management systems and samples are tested for conformance to the noted specifications. Certain data may have been supplied by third parties. We disclaim the implied warranties of merchantability and fitness for a particular purpose, and the accuracy of third party data or information associated with the product. Products are for research and development use only. Products are not for direct administration to humans or animals. It is the responsibility of the final formulator or end user to determine suitability, and to qualify and/or validate each product for its intended use.

Catalog Number	38706	**Quality Test / Release Date**	08/28/2022
Lot Number	A0411500	**Suggested retest date**	08/28/2025
Description	Sodium sulfide nonahydrate,98+%,extra pure		
Country of Origin	INDIA		
Declaration of Origin	synthetic		

BSE/TSE	
Chemical	

Result name	Specifications	Test Value
Appearance (Color)	Colorless to light yellow	off white
Appearance (Form)	Adhering crystals and/or chunks	Adhering crystals and chunks
Titration Iodimetric	32.0 to 38.0 % (Na2S)	32.0 % (Na2S)
Total nitrogen (as N)	=<0.005 %	=<0.005 %
Sulfite (as SO2)	=<2000 ppm	=<1000 ppm
Thiosulphate (S2O3)	=<5000 ppm	=<1000 ppm



C. Wygaerts, QA Manager

Issued: 08-29-2022

Acros Organics BV
ENA23, zone1, nr 1350, Janssen Pharmaceuticalaan 3a, B-2440 Geel, Belgium
Tel +32 14/57.52.11 - Fax+32 14/59.34.34 Internet: https://www.thermofisher.com
1 Reagent Lane, Fair Lawn, NJ 07410, USA Fax 201-796-1329

Reagent

TOC ICV Std_00051

RICCA CHEMICAL COMPANY®

1841 Broad Street
Pocomoke City, MD 21851
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

Organic Carbon Standard, 1000 ppm C

Lot Number: 2208C86 **Product Number:** 1847

Manufacture Date: AUG 08, 2022
Expiration Date: JUL 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
Phosphoric Acid	7664-38-2	ACS
Potassium Acid Phthalate	877-24-7	ACS Acidimetric

Test	Specification	Result
Appearance	Colorless liquid	Passed
Carbon (C)	995-1005 ppm	1000 ppm

Specification	Reference
Organic Carbon Stock Solution	APHA (5310 B)
Potassium Hydrogen Phthalate, Stock Solution	EPA (SW-846) (9060)
Potassium Hydrogen Phthalate, Stock Solution, 1000 mg Carbon/liter	EPA (415.1)
Organic Carbon Solution, Standard (1 mL = 1 mg C)	ASTM (D 2579)

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)
1847-16	500 mL amber glass	12 months
1847-32	1 L amber glass	12 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)



Myrlande Gilles (08/08/2022)
Quality Control
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.

RICCA CHEMICAL COMPANY®

Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS)

SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation: Organic Carbon Standard, 1000 ppm C

Product Number: 1847

Other Identifying Product Numbers: 1847-1, 1847-16, 1847-2.5, 1847-32, 1847-4, 1847-5, 1847-8

1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent

1.3. Details of the Supplier of the Safety Data Sheet

Company: Ricca Chemical Company
Address: 448 West Fork Drive

Arlington, TX 76012 USA

Telephone: 888-467-4222

1.4. Emergency Telephone Number (24 hours)

CHEMTREC (USA)	800-424-9300
CHEMTREC (International)	1+ 703-527-3887

SECTION 2: Hazard(s) Identification

2.1. Classification of the Substance or Mixture

For the full text of the Hazard and Precautionary Statements listed below, see Section 16.

Hazard Class	Category	Hazard Statements	Precautionary Statements:
Hazardous to the Aquatic Environment (Acute)	Category 3	H402	P273, P501

2.2. GHS Label Elements

Pictograms:

Signal Word:

Hazard Statements:

Hazard Number	Hazard Statement
H402	Harmful to aquatic life.

Precautionary Statements:

Precautionary Number	Precautionary Statement
P273	Avoid release to the environment.
P501	Dispose of contents in accordance with local, state, federal and international regulations.

2.4. Hazards not Otherwise Classified or Covered by GHS

Data not available.

SECTION 3: Composition / Information on Ingredients

3.1. Components of Substance or Mixture

Chemical Name	Formula	Molecular Weight	CAS Number	Weight%
Water	H_2O	18.01 g/mol	7732-18-5	99.39
Phosphoric Acid	H_3PO_4	97.99 g/mol	7664-38-2	0.40
Potassium Acid Phthalate	$HOCOC_6H_4COOK$	204.22 g/mol	877-24-7	0.21

SECTION 4: First-Aid Measures

4.1. General First Aid Information

Eye Contact: May cause irritation, redness, pain, and tearing.

Inhalation: Not expected to require first aid. If necessary, remove to fresh air.

Skin Contact: May cause slight irritation.

Ingestion: Dilute with water or milk. Call a physician if necessary.

4.2. Most Important Symptoms and Effects, Acute and Delayed

Does not present any significant health hazards. Wash areas of contact with water. EYE CONTACT: May cause irritation, redness, pain, and tearing. SKIN CONTACT: May cause slight irritation.

4.3. Medical Attention or Special Treatment Needed

Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops. Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen. Flush with plenty of water for at least 15 minutes. Call a physician if irritation develops. Dilute with water or milk. Call a physician if necessary.

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing Media

Use any means suitable for extinguishing surrounding fire.

5.2. Specific Hazards Arising from the Substance or Mixture

Not considered to be a fire or explosion hazard.

5.3. Special Protective Equipment for Firefighters

Use protective clothing and breathing equipment appropriate for the surrounding fire.

SECTION 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Wear appropriate PPE for the size and nature of the spill. As a general rule, wear safety glasses and gloves.

6.2. Cleanup and Containment Methods and Materials

Collect liquid and dilute with water. Neutralize with dilute base solutions. Resulting solution may be flushed to the sewer with excess water. For larger spills, absorb with suitable material and dispose of in accordance with local regulations.

SECTION 7: Handling and Storage

7.1. Precautions for Safe Handling and Storage Conditions

As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage. Keep tightly capped. Store in the refrigerator.

SECTION 8: Exposure Controls / Personal Protection

8.1 Control Parameters

Chemical Name	Limit Type	Country	Exposure Limit	Information Source
Phosphoric Acid (7664-38-2)	TWA	USA	1 mg/m³ TWA	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Phosphoric Acid (7664-38-2)	TLV-STEL	USA	3 mg/m³ STEL	ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL)
Phosphoric Acid (7664-38-2)	TLV-TWA	USA	1 mg/m³ TWA	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)

8.2. Exposure Controls

Engineering Controls: No specific controls are needed. Normal room ventilation is adequate.

Respiratory Protection: Normal room ventilation is adequate.

Skin Protection: Chemical resistant gloves.

Eye Protection: Safety glasses or goggles.

8.3. Personal Protective Equipment

Normal room ventilation is adequate. Chemical resistant gloves. Safety glasses or goggles.

SECTION 9: Physical and Chemical Properties

9.1. Basic Physical and Chemical Properties

Appearance: Colorless liquid

Physical State: Liquid

Odor: Data not available.

Odor Threshold: Data not available.

pH: < 2

Melting/Freezing Point: 0.0°C

Initial Boiling Point/Range: 100°C - 100°C

Flash Point: Data not available.

Evaporation Rate: Data not available.

Flammability: Data not available.

Flammability/Explosive Limits: Data not available.

Vapor Pressure: Data not available.

Vapor Density: Data not available.

Relative Density: 1.00

Solubility: Miscible

Partition Coefficient: Data not available.

Auto-Ignition Temperature: Data not available.

Decomposition Temperature: Data not available.

Viscosity: Data not available.

Explosive Properties: Data not available.

Oxidizing Properties: Data not available.

SECTION 10: Stability and Reactivity

10.1. Reactivity and Chemical Stability

Stable under normal conditions of use and storage.

10.2. Possibility of Hazardous Reactions

Data not available.

10.3. Conditions to Avoid and Incompatible Materials

Nitric Acid.

10.4. Hazardous Decomposition Products

Will not occur.

SECTION 11: Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity - Oral Exposure:

Not applicable.

Acute Toxicity - Dermal Exposure:

Not applicable.

Acute Toxicity - Inhalation Exposure:

Not applicable.

Acute Toxicity - Other Information:

LD50, Oral, Rat: >3200 mg/kg (Potassium Acid Phthalate), details of toxic effects not reported other than lethal dose value. LD50, Oral, Rat: (Phosphoric Acid) 1530 mg/kg, behavioral, kidney, bladder, hair effects noted. LD50, Dermal, Rat: 2740 mg/kg (Phosphoric Acid), behavioral effects noted.

Skin Corrosion and Irritation:

Not applicable.

Serious Eye Damage and Irritation:

Not applicable.

Respiratory Sensitization:

Not applicable.

Skin Sensitization:

Not applicable.

Germ Cell Mutagenicity:

Not applicable.

Carcinogenicity:

Not applicable.

Reproductive Toxicity:

Not applicable.

Specific Target Organ Toxicity from Single Exposure:

Not applicable.

Specific Target Organ Toxicity from Repeated Exposure:

Not applicable.

Aspiration Hazard:

Not applicable.

Additional Toxicology Information:

Data not available.

SECTION 12: Ecological Information

12.1. Ecotoxicity

Harmful to aquatic life. Avoid release to the environment. Dispose of contents in accordance with local, state, federal and international regulations.

12.2. Persistence and Degradability

Data not available.

12.3. Bioaccumulative Potential

Data not available.

12.4. Mobility in Soil

Data not available.

12.5. Other Adverse Ecological Effects

Data not available.

SECTION 13: Disposal Considerations

13.1. Waste Treatment Methods

Data not available.

Safety Data Sheet

SECTION 14: Transportation Information

14.1. Transportation by Land-Department of Transportation (DOT, United States of America)

Not regulated according to DOT Regulations.

14.2. Transportation by Air - International Air Transport Association (IATA)

Not regulated according to IATA Dangerous Goods Regulations.

14.3 Transportation of Dangerous Goods (TDG, Canada)

Not regulated according to TDG Regulations.

Safety Data Sheet

SECTION 15: Regulatory Information

15.1. Occupational Safety and Health Administration (OSHA) Hazards

Not listed.

15.2. Superfund Amendments and Reauthorization Act (SARA) 302 Extremely Hazardous Substances

Not listed.

15.3. Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals

Phosphoric Acid (CAS # 7664-38-2): 5000 lb final RQ; 2270 kg final RQ

15.4. Superfund Amendments and Reauthorization Act (SARA) 313 Toxic Release Inventory (TRI)

Not listed.

15.5. Massachusetts Right-to-Know Substance List

Phosphoric Acid (CAS # 7664-38-2): Present

15.6. Pennsylvania Right-to-Know Hazardous Substances

Phosphoric Acid (CAS # 7664-38-2): Environmental hazard
Phosphoric Acid (CAS # 7664-38-2): Present
Water (CAS # 7732-18-5): Present

15.7. New Jersey Worker and Community Right-to-Know Components

Phosphoric Acid (CAS # 7664-38-2): corrosive
Phosphoric Acid (CAS # 7664-38-2): sn 1516

15.8. California Proposition 65

Not listed.

15.9. Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)

Phosphoric Acid (CAS # 7664-38-2): Present (DSL)
Water (CAS # 7732-18-5): Present (DSL)
Potassium Acid Phthalate (CAS # 877-24-7): Present (DSL)

15.10. United States of America Toxic Substances Control Act (TSCA) List

All components of this solution are listed as active on the TSCA Inventory or are mixtures (hydrates) of active items listed on the TSCA Inventory.

Phosphoric Acid (CAS # 7664-38-2): Present
Water (CAS # 7732-18-5): Present
Potassium Acid Phthalate (CAS # 877-24-7): Present

15.11. European Inventory of Existing Commercial Chemical Substances (EINECS), European List of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP)

Phosphoric Acid (CAS # 7664-38-2): 231-633-2
Water (CAS # 7732-18-5): 231-791-2
Water (CAS # 7732-18-5): 232-148-9
Potassium Acid Phthalate (CAS # 877-24-7): 212-889-4

SECTION 16: Other Information

16.1. Full Text of Hazard Statements and Precautionary Statements

Harmful to aquatic life.

Avoid release to the environment.

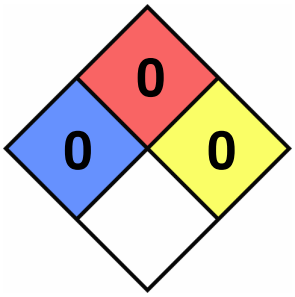
Dispose of contents in accordance with local, state, federal and international regulations.

16.2. Miscellaneous Hazard Classes

Canadian Carcinogenicity Hazard Class: Not Applicable.
Physical Hazards Not Otherwise Classified (PHNOC): Not Applicable.
Health Hazards Not Otherwise Classified (HHNOC): Not Applicable.
Biohazardous Infectious Materials Hazard Class: Not Applicable.

16.3. National Fire Protection Association (NFPA) Rating

Health: 0
Flammability: 0
Reactivity: 0
Special Hazard:



16.4. Document Revision

Last Revision Date: 2023-02-14

DISCLAIMER

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and RICCA CHEMICAL COMPANY assumes no legal responsibility or liability whatsoever resulting from its use.

Reagent

TOC LCS Std_00057

Agilent

Trusted Answers

ISO 17034

Reference Material Certificate

Product Information Sheet

Product Name: Total Organic Carbon (TOC) Standard

Product Number: IOC-106

Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006719669

Lot Issue Date: 28-Dec-2022

Expiration Date: 31-Jan-2025

	CERTIFIED VALUES				
Component Name	Concentration		Expanded Uncertainty	CAS#	Analyte Lot
potassium hydrogen phthalate (KHP) (as TOC)	1001	±	5 mg/L	000877-24-7	RM19275

Matrix: water (low TOC, < 50 ppb)

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system. The analyte concentration(s) were prepared and verified by an ISO 17034 / ISO 17025 accredited laboratory and compared to calibration standards independently prepared using NIST SRM(s) when available. The certified value and uncertainty value at the 95% confidence level for each analyte is determined gravimetrically.

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:
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.

Agilent

Trusted Answers

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-040.1

ISO 17025

8330B_DOD5

Nitroaromatics and Nitramines (HPLC)

FORM II
HPLC/IC SURROGATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-176335-1

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 #
LL1mw-082-230401-GW	280-176335-1		101
LL1mw-082-230401-GW	280-176335-1	99	
FWGmw-021-230401-GW	280-176335-2		97
FWGmw-021-230401-GW	280-176335-2	102 M	
FWGmw-024-230401-GW	280-176335-3	103 M	
LL2mw-059-230401-GW	280-176335-4		96
LL2mw-059-230401-GW	280-176335-4	100 M	
	MB 280-612789/1-A	106	
	LCS 280-612789/2-A	100	
	LCS 280-612789/4-A	110	
	LCSD 280-612789/3-A	102	
	LCSD 280-612789/5-A	106	

	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.: 280-176335-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 0517Z048.D

Lab ID: LCS 280-612789/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	2.06	103	73-125	
1,3-Dinitrobenzene	2.00	1.99	99	78-120	
2,4,6-Trinitrotoluene	2.00	1.89	95	71-123	
2,4-Dinitrotoluene	2.00	1.88	94	78-120	
2,6-Dinitrotoluene	2.00	1.96	98	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.85	92	79-120	
2-Nitrotoluene	2.00	1.62	81	70-127	
3,5-Dinitroaniline	2.00	1.79	90	71-117	
3-Nitrotoluene	2.00	1.61	81	73-125	
4-Amino-2,6-dinitrotoluene	2.00	1.85	92	76-125	
4-Nitrotoluene	2.00	1.61	80	71-127	
DNX	2.00	1.98	99	66-119	M
HMX	2.00	1.80	90	65-135	M
MNX	2.33	2.35	101	57-132	M
Nitrobenzene	2.00	1.83	92	65-134	
Nitroglycerin	20.0	19.4	97	74-127	
PETN	20.0	21.1	105	73-127	
RDX	2.00	1.91	96	68-130	
Tetryl	2.00	2.12	106	64-128	
TNX	2.01	1.97	98	50-150	M

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.: 280-176335-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05170050.D

Lab ID: LCS 280-612789/4-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
2,4-diamino-6-nitrotoluene	2.00	1.53	77	68-122	M
2,6-diamino-4-nitrotoluene	2.00	1.64	82	72-122	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.: 280-176335-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05170049.D

Lab ID: LCSD 280-612789/3-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	2.06	103	0	20	73-125	
1,3-Dinitrobenzene	2.00	2.00	100	1	20	78-120	
2,4,6-Trinitrotoluene	2.00	1.90	95	1	20	71-123	
2,4-Dinitrotoluene	2.00	1.90	95	1	20	78-120	
2,6-Dinitrotoluene	2.00	1.96	98	0	20	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.82	91	1	20	79-120	
2-Nitrotoluene	2.00	1.62	81	0	20	70-127	
3,5-Dinitroaniline	2.00	1.79	89	0	20	71-117	
3-Nitrotoluene	2.00	1.59	80	1	20	73-125	
4-Amino-2,6-dinitrotoluene	2.00	1.76	88	5	20	76-125	
4-Nitrotoluene	2.00	1.61	80	0	20	71-127	
DNX	2.00	1.96	98	1	20	66-119	M
HMX	2.00	1.79	90	0	20	65-135	M
MNX	2.33	2.36	101	1	20	57-132	M
Nitrobenzene	2.00	1.80	90	2	20	65-134	
Nitroglycerin	20.0	19.8	99	2	20	74-127	
PETN	20.0	21.1	106	0	20	73-127	
RDX	2.00	1.97	99	3	20	68-130	
Tetryl	2.00	2.12	106	0	20	64-128	
TNX	2.01	1.89	94	4	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.: 280-176335-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05170051.D

Lab ID: LCSD 280-612789/5-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	1.77	89	15	20	68-122	M
2,6-diamino-4-nitrotoluene	2.00	1.83	91	11	20	72-122	M

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.: 280-176335-1

SDG No.:

Lab Sample ID: MB 280-612789/1-A

Matrix: Water Date Extracted: 05/17/2023 13:57

Lab File ID:(1) 05170047.D Lab File ID:(2)

Date Analyzed:(1) 05/18/2023 08:52 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
	LCSD 280-612789/3-A	05/18/2023 09:38	
	LCS 280-612789/4-A	05/18/2023 10:01	
	LCSD 280-612789/5-A	05/18/2023 10:24	
	LCS 280-612789/2-A	05/18/2023 12:41	
LL1mw-082-230401-GW	280-176335-1	05/18/2023 14:59	05/19/2023 08:38
FWGmw-021-230401-GW	280-176335-2	05/18/2023 15:22	05/19/2023 09:14
FWGmw-024-230401-GW	280-176335-3	05/18/2023 15:45	
LL2mw-059-230401-GW	280-176335-4	05/18/2023 16:08	05/19/2023 10:26

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Client Sample ID: LL1mw-082-230401-GW Lab Sample ID: 280-176335-1

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_G2_LUNA

Date Analyzed (1): 05/18/2023 14:59 Date Analyzed (2): 05/19/2023 08:38

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
RDX	1		7.59	7.43	7.73	0.98		114.9
	2		9.12	8.95	9.25	0.27		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Client Sample ID: FWGmw-021-230401-GW Lab Sample ID: 280-176335-2

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_G2_LUNA

Date Analyzed (1): 05/18/2023 15:22 Date Analyzed (2): 05/19/2023 09:14

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
2-Amino-4,6-dinitrotoluene	1		11.36	11.27	11.47	0.16		55.8
	2		17.38	17.25	17.55	0.28		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Client Sample ID: LL2mw-059-230401-GW Lab Sample ID: 280-176335-4

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_G2_LUNA

Date Analyzed (1): 05/18/2023 16:08 Date Analyzed (2): 05/19/2023 10:26

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
1,3,5-Trinitrobenzene	1		8.65	8.51	8.81	1.2		10.8
	2		17.51	17.40	17.70	1.3		
3,5-Dinitroaniline	1		9.88	9.74	10.04	1.9		8.2
	2		14.42	14.30	14.60	2.1		
4-Amino-2,6-dinitrotoluene	1		11.10	11.02	11.22	0.54		26.0
	2		16.52	16.42	16.72	0.70		
2,4-Dinitrotoluene	1		11.67	11.59	11.79	0.30		7.0
	2		19.08	19.00	19.30	0.32		

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176335-1

SDG No.:

Client Sample ID: LL1mw-082-230401-GW | Lab Sample ID: 280-176335-1

Matrix: Water | Lab File ID: 05170061.D

Analysis Method: 8330B | Date Collected: 05/10/2023 11:20

Extraction Method: 3535 | Date Extracted: 05/17/2023 13:57

Sample wt/vol: 502.7(mL) | Date Analyzed: 05/18/2023 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.: 612858 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U M	0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	0.099	U M	0.11	0.099	0.037
118-96-7	2,4,6-Trinitrotoluene	0.099	U	0.11	0.099	0.045
6629-29-4	2,4-diamino-6-nitrotoluene	0.90	U	0.99	0.90	0.43
121-14-2	2,4-Dinitrotoluene	0.080	U	0.099	0.080	0.027
59229-75-3	2,6-diamino-4-nitrotoluene	0.90	U	0.99	0.90	0.22
606-20-2	2,6-Dinitrotoluene	0.080	U	0.099	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.099	U	0.11	0.099	0.050
88-72-2	2-Nitrotoluene	0.20	U M	0.21	0.20	0.085
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	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.057
99-99-0	4-Nitrotoluene	0.40	U M	0.41	0.40	0.099
80251-29-2	DNX	0.25	U	0.50	0.25	0.097
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	0.99	U	1.1	0.99	0.44
121-82-4	RDX	0.98	J1	0.21	0.20	0.051
479-45-8	Tetryl	0.099	U	0.11	0.099	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		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230517-121556.b\05170061.D
Lims ID: 280-176335-A-1-A
Client ID: LL1mw-082-230401-GW
Sample Type: Client
Inject. Date: 18-May-2023 14:59:26 ALS Bottle#: 61 Worklist Smp#: 61
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-176335-A-1-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230517-121556.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 18-May-2023 17:39:03 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1645

First Level Reviewer: LV5D Date: 18-May-2023 15:39:46

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	2 2,6-diamino-4-nitrotoluene	1		6.428			ND	
	3 TNX	1		6.432			ND	
	4 HMX	1	6.565	6.552	0.013	1003	0.0107	M
	5 2,4-diamino-6-nitrotoluene	1		6.615			ND	
	6 DNX	1		6.765			ND	
	7 MNX	1	7.205	7.192	0.013	2203	0.0168	M
	8 RDX	1	7.592	7.579	0.013	10505	0.0987	
$	10 1,2-Dinitrobenzene	1	8.525	8.532	-0.007	24883	0.1970	
	11 1,3,5-Trinitrobenzene	1		8.659			ND	U
	12 1,3-Dinitrobenzene	1		9.285			ND	U
	13 Nitrobenzene	1		9.659			ND	
	14 3,5-Dinitroaniline	1		9.892			ND	
	15 Tetryl	1		10.025			ND	
	16 Nitroglycerin	2		10.479			ND	
	17 2,4,6-Trinitrotoluene	1		10.919			ND	
	18 4-Amino-2,6-dinitrotoluene	1		11.119			ND	
	19 2-Amino-4,6-dinitrotoluene	1		11.372			ND	
	20 2,6-Dinitrotoluene	1		11.525			ND	
	21 2,4-Dinitrotoluene	1		11.692			ND	
	22 o-Nitrotoluene	1		12.519			ND	U
	23 p-Nitrotoluene	1		12.939			ND	U
	24 m-Nitrotoluene	1		13.512			ND	
	25 PETN	2		14.692			ND	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
U - Marked Undetected

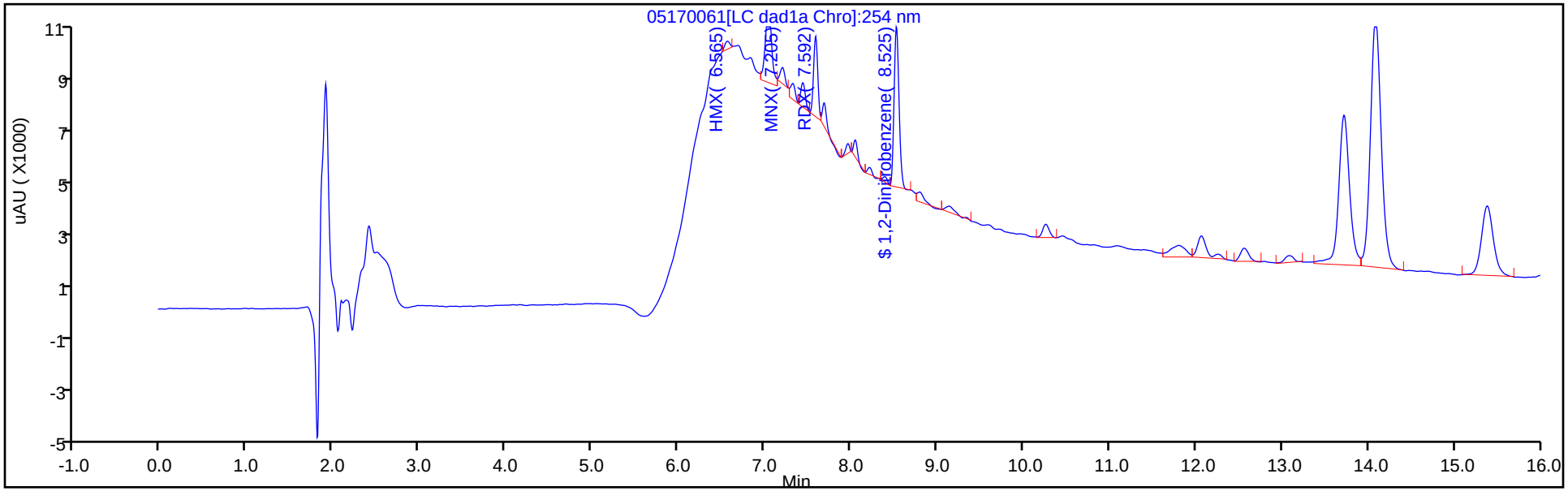
Report Date: 18-May-2023 17:39:05 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

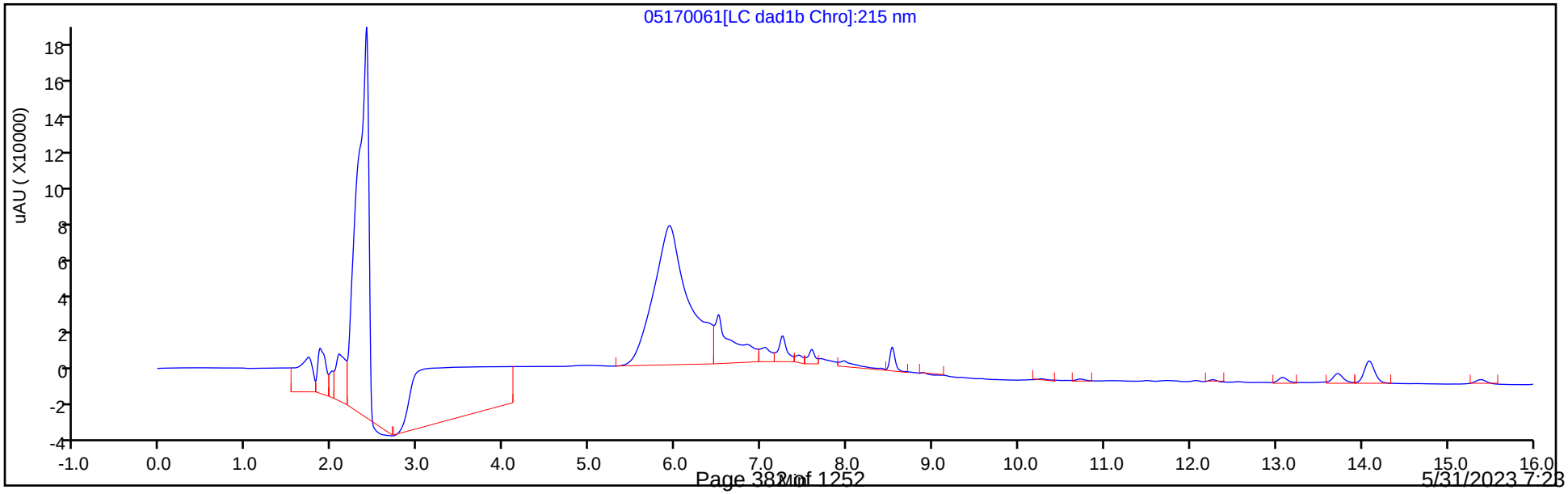
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Injection Date:	18-May-2023 14:59:26	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-176335-A-1-A	Lab Sample ID:	280-176335-1	Worklist Smp#:	61
Client ID:	LL1mw-082-230401-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	61
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\20230517-121556.b\05170061.D				
Lims ID:	280-176335-A-1-A				
Client ID:	LL1mw-082-230401-GW				
Sample Type:	Client				
Inject. Date:	18-May-2023 14:59:26	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-176335-A-1-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230517-121556.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	18-May-2023 17:39:03	Calib Date:	24-Feb-2023 17:41:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1645				

First Level Reviewer: LV5D Date: 18-May-2023 15:39:46

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1970	98.50

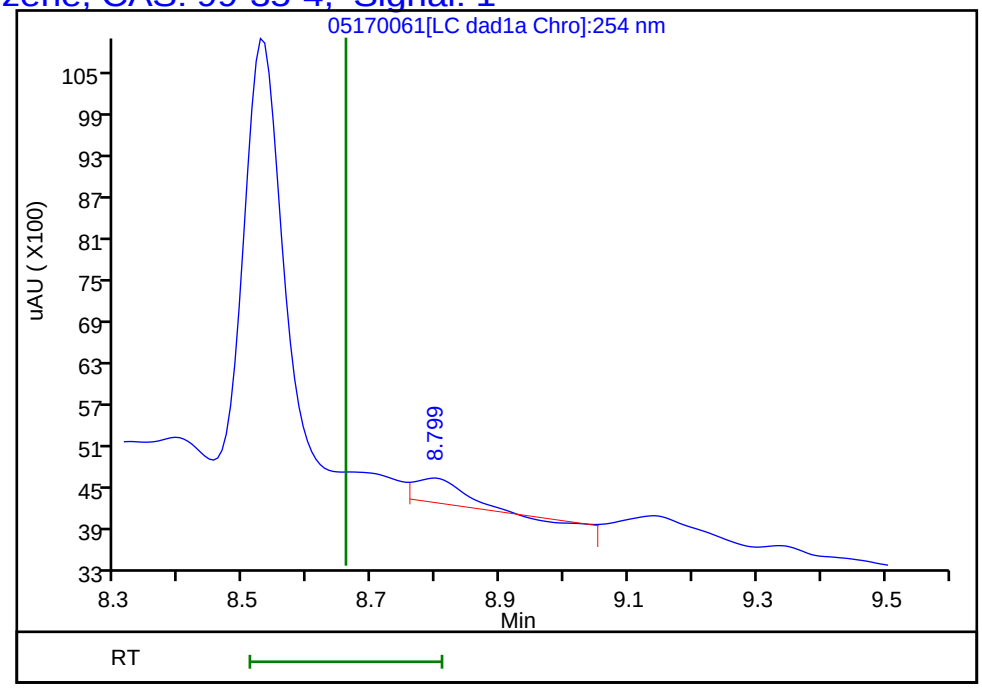
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170061.d				
Injection Date:	18-May-2023 14:59:26	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176335-A-1-A	Lab Sample ID:	280-176335-1		
Client ID:	LL1mw-082-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	61	Worklist Smp#:	61
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: 2182
Amount: 0.010048



Reviewer: LV5D, 18-May-2023 15:39:46
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

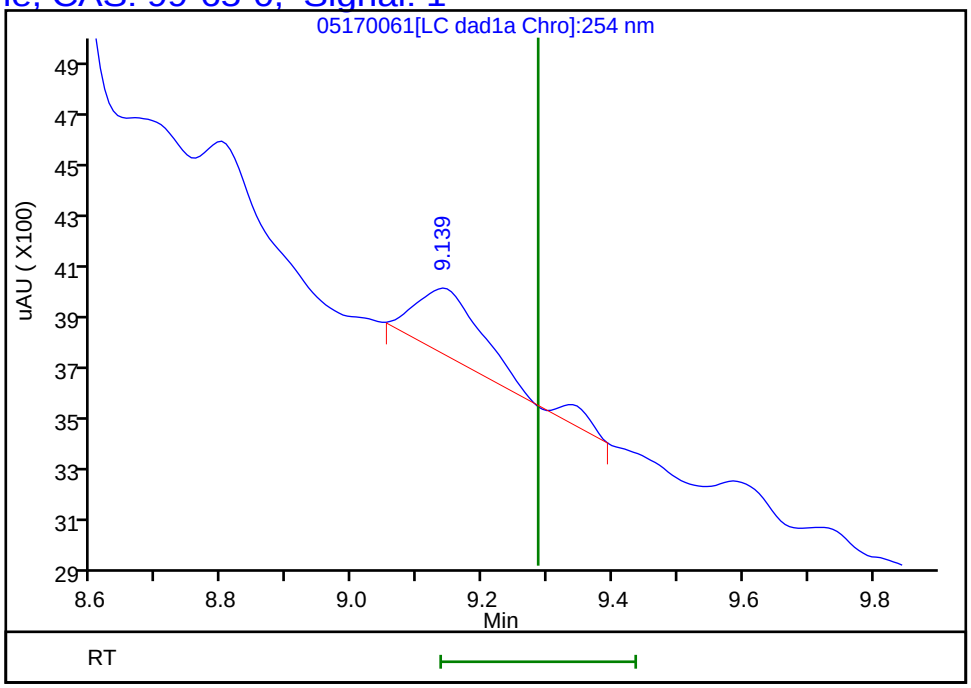
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170061.d				
Injection Date:	18-May-2023 14:59:26	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176335-A-1-A	Lab Sample ID:	280-176335-1		
Client ID:	LL1mw-082-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	61	Worklist Smp#:	61
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: 9.14
Response: 2061
Amount: 0.007001



Reviewer: LV5D, 18-May-2023 15:39:46
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

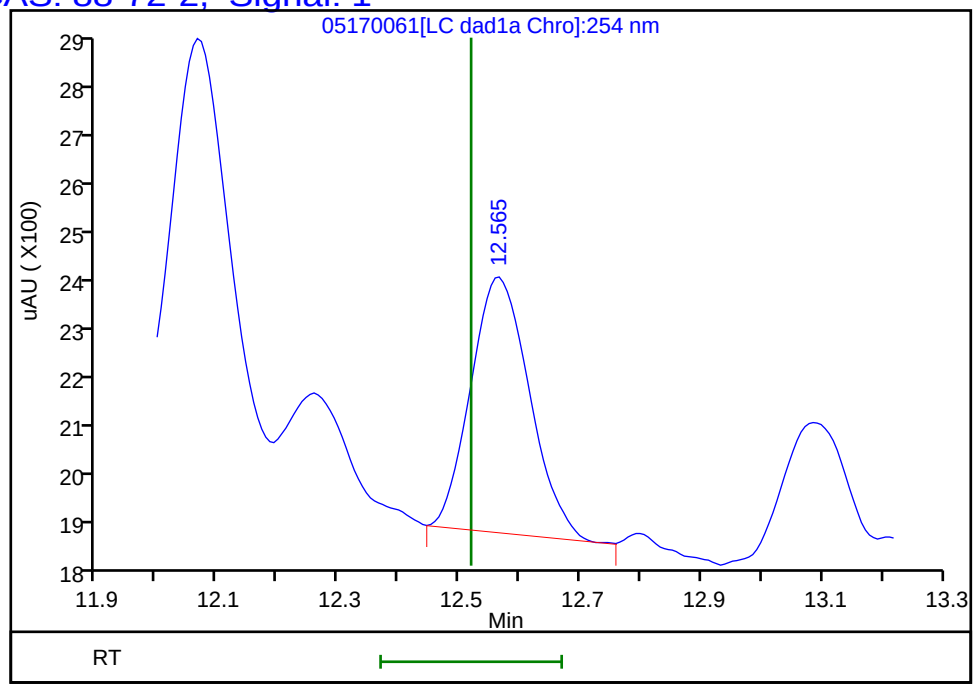
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170061.d				
Injection Date:	18-May-2023 14:59:26	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176335-A-1-A	Lab Sample ID:	280-176335-1		
Client ID:	LL1mw-082-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	61	Worklist Smp#:	61
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

RT: 12.57
Response: 3452
Amount: 0.026991



Reviewer: LV5D, 18-May-2023 15:39:46
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

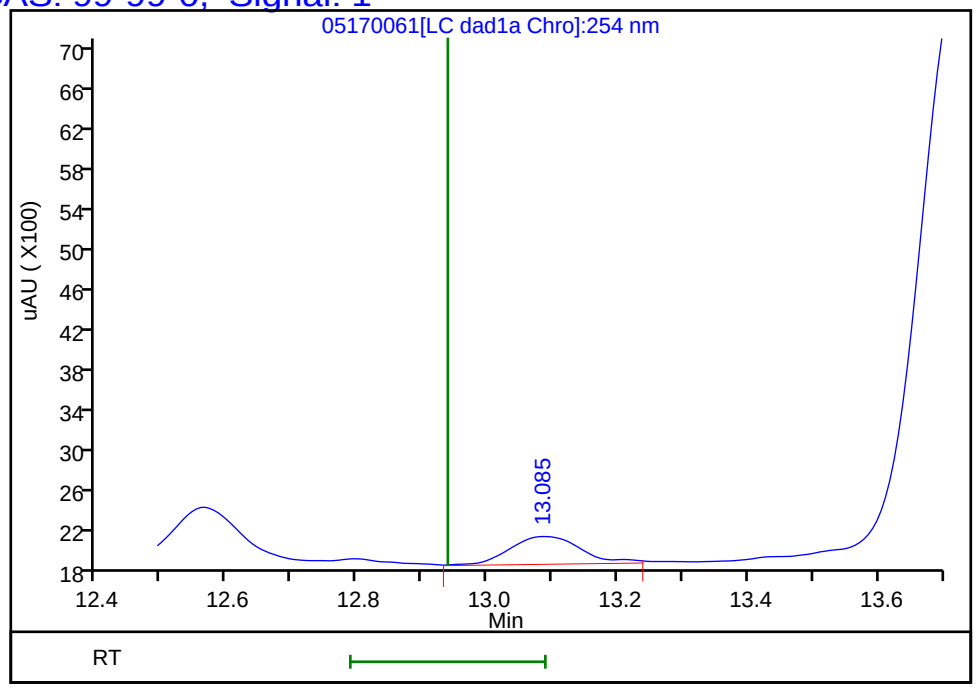
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170061.d				
Injection Date:	18-May-2023 14:59:26	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176335-A-1-A	Lab Sample ID:	280-176335-1		
Client ID:	LL1mw-082-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	61	Worklist Smp#:	61
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

RT: 13.09
Response: 2046
Amount: 0.018287



Reviewer: LV5D, 18-May-2023 15:39:46
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

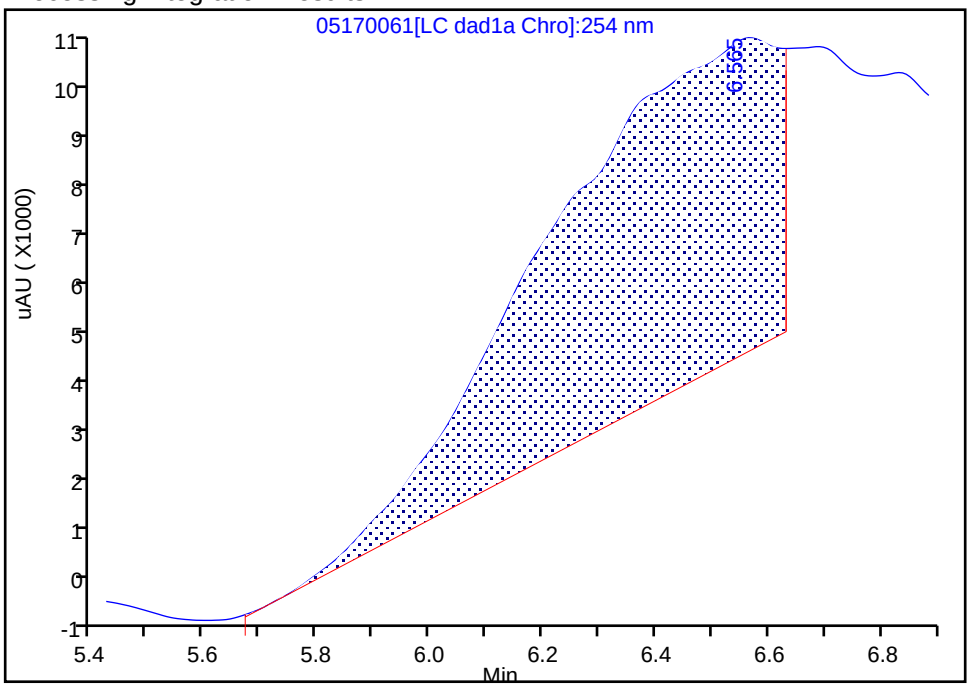
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Injection Date:	18-May-2023 14:59:26	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176335-A-1-A	Lab Sample ID:	280-176335-1		
Client ID:	LL1mw-082-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
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

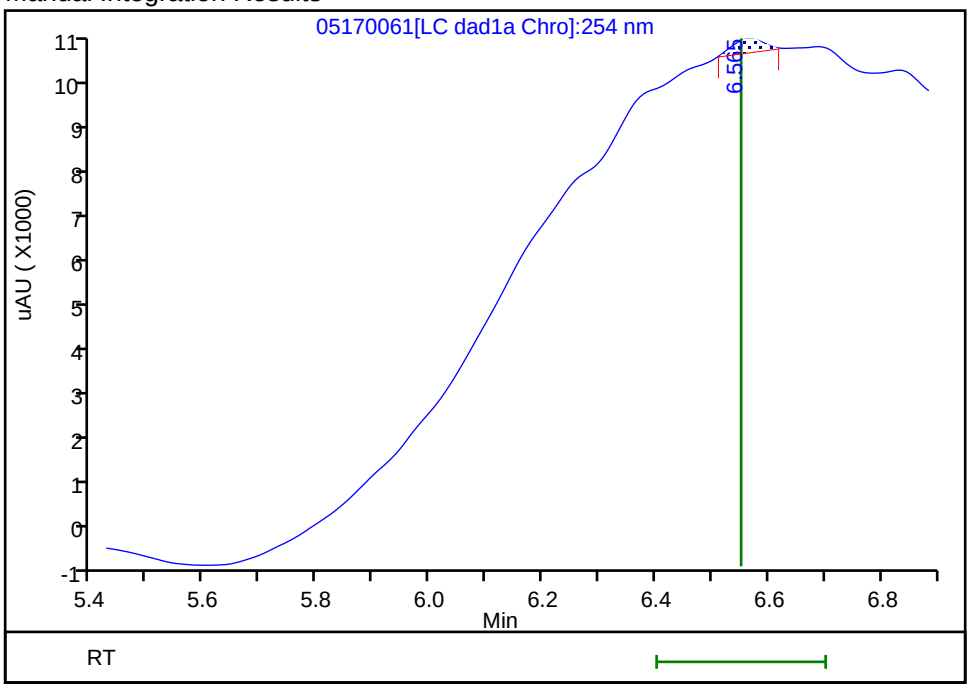
Processing Integration Results

RT: 6.57
Area: 174770
Amount: 1.868635
Amount Units: ug/mL



Manual Integration Results

RT: 6.57
Area: 1003
Amount: 0.010724
Amount Units: ug/mL



Reviewer: LV5D, 18-May-2023 15:39:38 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

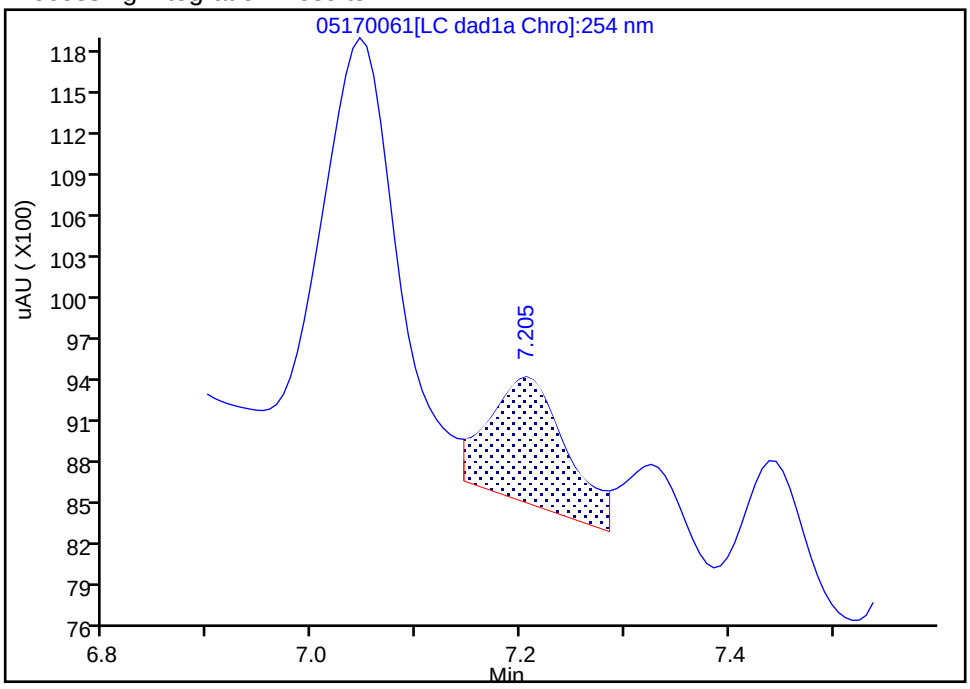
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170061.d				
Injection Date:	18-May-2023 14:59:26	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176335-A-1-A	Lab Sample ID:	280-176335-1		
Client ID:	LL1mw-082-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	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

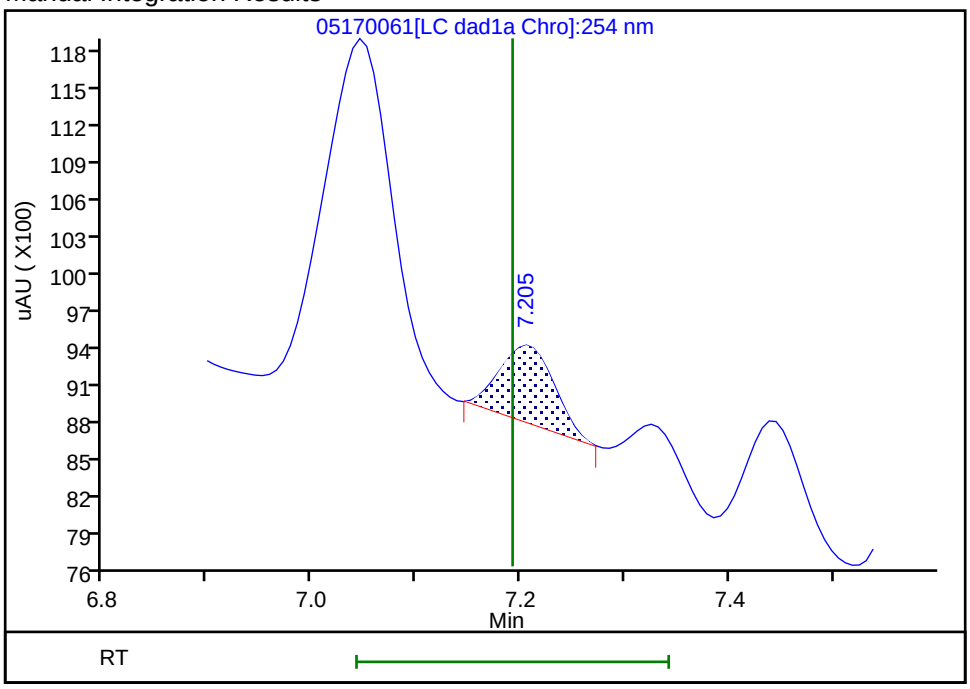
Processing Integration Results

RT: 7.21
Area: 4637
Amount: 0.035351
Amount Units: ug/mL



Manual Integration Results

RT: 7.21
Area: 2203
Amount: 0.016795
Amount Units: ug/mL



Reviewer: LV5D, 18-May-2023 15:39:41 -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.: 280-176335-1

SDG No.:

Client Sample ID: LL1mw-082-230401-GW | Lab Sample ID: 280-176335-1

Matrix: Water | Lab File ID: 05180033.D

Analysis Method: 8330B | Date Collected: 05/10/2023 11:20

Extraction Method: 3535 | Date Extracted: 05/17/2023 13:57

Sample wt/vol: 502.7(mL) | Date Analyzed: 05/19/2023 08:38

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.: 612994 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
2691-41-0	HMX	0.20	U M	0.21	0.20	0.087
5755-27-1	MNX	0.29	U	0.50	0.29	0.092
121-82-4	*RDX*	*0.27*	*J1*	*0.21*	0.20	*0.051*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	101		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230518-121600.b\05180033.D
Lims ID: 280-176335-A-1-A
Client ID: LL1mw-082-230401-GW
Sample Type: Client
Inject. Date: 19-May-2023 08:38:21 ALS Bottle#: 33 Worklist Smp#: 33
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-176335-A-1-A
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230518-121600.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 19-May-2023 15:05:49 Calib Date: 07-Apr-2023 23:50:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\04070018.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1654

First Level Reviewer: LV5D Date: 19-May-2023 15:04:39

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1	2,6-diamino-4-nitrotoluene	1		4.501			ND	
2	2,4-diamino-6-nitrotoluene	1		5.128			ND	
3	TNX	1		5.313			ND	
4	DNX	1		6.180			ND	
6	HMX	1		6.833			ND	U
7	MNX	1		7.693			ND	
8	RDX	1	9.122	9.100	0.022	5760	0.0267	
9	Nitrobenzene	1	11.628	11.620	0.008	4179	0.0110	
$ 10	1,2-Dinitrobenzene	1	12.595	12.593	0.002	53817	0.2028	
11	3,5-Dinitroaniline	1	14.501	14.453	0.048	11079	0.0248	
12	1,3-Dinitrobenzene	1		14.720			ND	
13	Nitroglycerin	2		15.213			ND	7
14	o-Nitrotoluene	1	15.855	15.793	0.062	103412	0.4252	
15	p-Nitrotoluene	1		16.020			ND	
16	4-Amino-2,6-dinitrotoluene	1		16.566			ND	
17	m-Nitrotoluene	1		16.866			ND	
18	2-Amino-4,6-dinitrotoluene	1	17.448	17.400	0.048	18929	0.0473	
19	1,3,5-Trinitrobenzene	1		17.546			ND	
20	2,6-Dinitrotoluene	1		18.686			ND	
21	2,4-Dinitrotoluene	1		19.146			ND	
22	Tetryl	1		22.427			ND	
23	2,4,6-Trinitrotoluene	1		23.247			ND	
24	PETN	2		24.447			ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
U - Marked Undetected

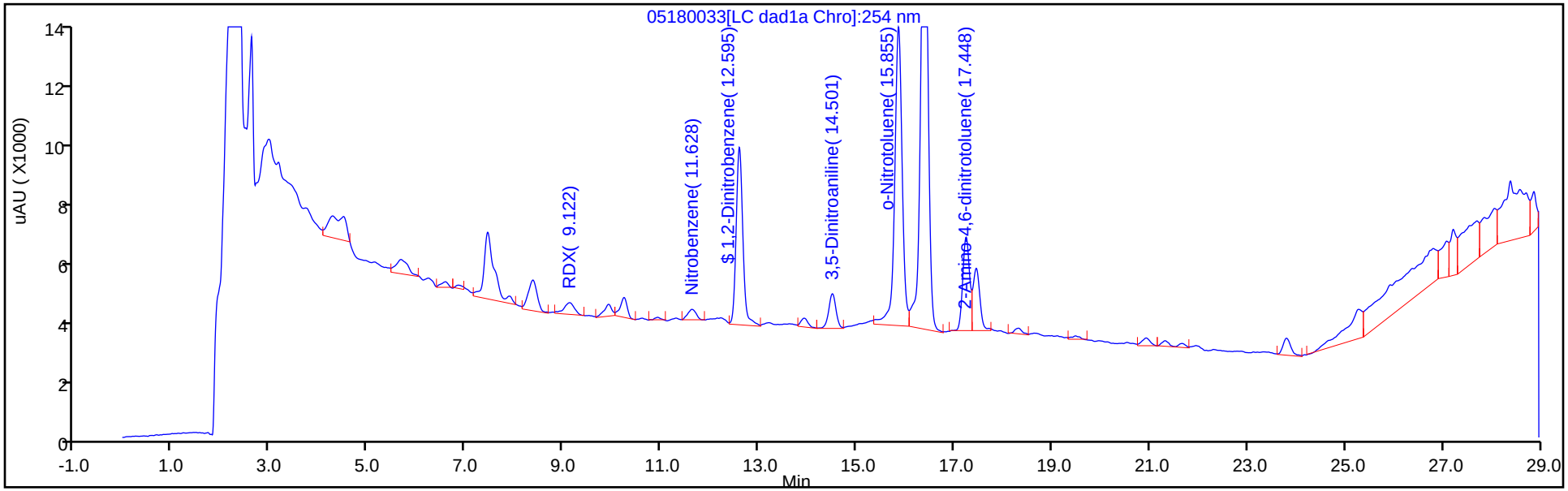
Report Date: 19-May-2023 15:05:52 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

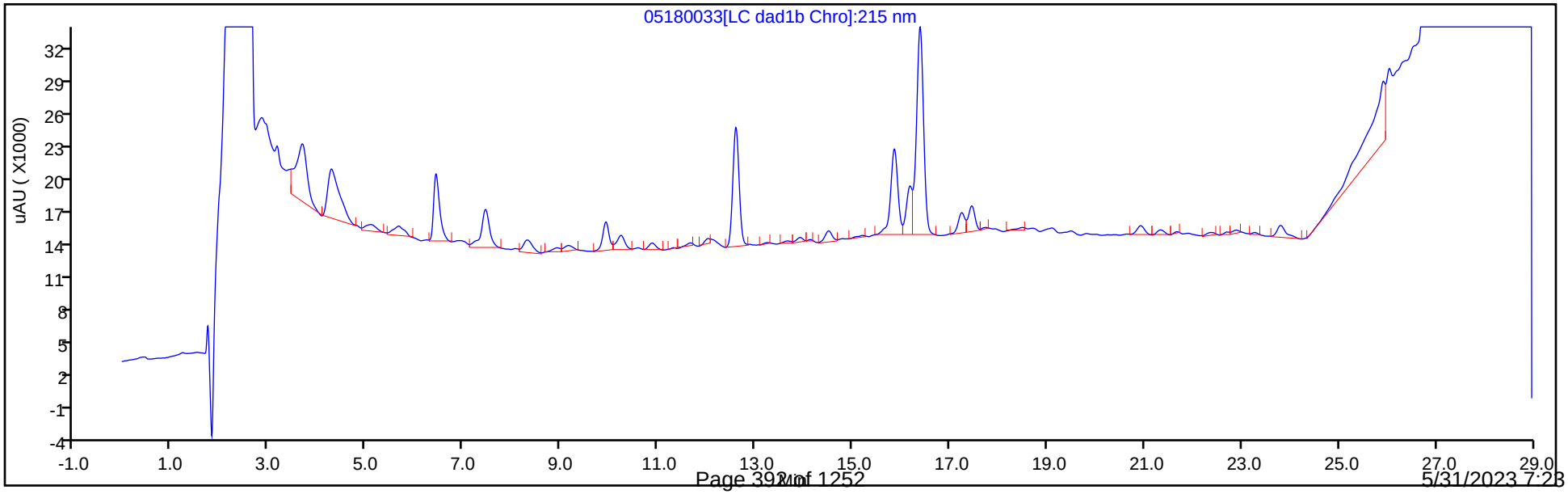
Data File: \\chromfs\denver\chromdata\g2_luna\20230518-121600.b\05180033.d

Injection Date:	19-May-2023 08:38:21	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	280-176335-A-1-A	Lab Sample ID:	280-176335-1	Worklist Smp#:	33
Client ID:	LL1mw-082-230401-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	33
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\20230518-121600.b\05180033.D
Lims ID: 280-176335-A-1-A
Client ID: LL1mw-082-230401-GW
Sample Type: Client
Inject. Date: 19-May-2023 08:38:21 ALS Bottle#: 33 Worklist Smp#: 33
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-176335-A-1-A
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230518-121600.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 19-May-2023 15:05:49 Calib Date: 07-Apr-2023 23:50:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\04070018.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1654

First Level Reviewer: LV5D Date: 19-May-2023 15:04:39

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2028	101.39

User Disabled Compound Report

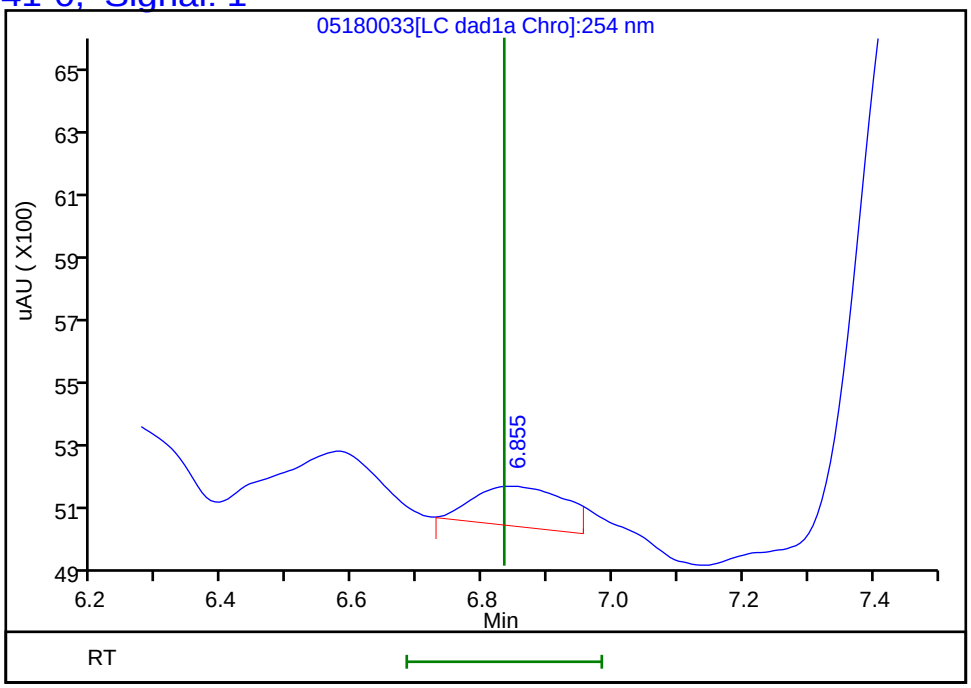
Eurofins Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20230518-121600.b\05180033.d

Injection Date:	19-May-2023 08:38:21	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-176335-A-1-A	Lab Sample ID:	280-176335-1		
Client ID:	LL1mw-082-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	33	Worklist Smp#:	33
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

RT: 6.85
Response: 1218
Amount: 0.006728



Reviewer: LV5D, 19-May-2023 15:04:39

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176335-1

SDG No.:

Client Sample ID: FWGmw-021-230401-GW | Lab Sample ID: 280-176335-2

Matrix: Water | Lab File ID: 05170062.D

Analysis Method: 8330B | Date Collected: 05/10/2023 14:11

Extraction Method: 3535 | Date Extracted: 05/17/2023 13:57

Sample wt/vol: 472.5(mL) | Date Analyzed: 05/18/2023 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.: 612858 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.089
99-65-0	1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039
118-96-7	2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048
121-14-2	2,4-Dinitrotoluene	0.085	U	0.11	0.085	0.029
606-20-2	2,6-Dinitrotoluene	0.085	U	0.11	0.085	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	0.16	J1	0.12	0.11	0.054
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.090
99-08-1	3-Nitrotoluene	0.37	U	0.42	0.37	0.21
99-99-0	4-Nitrotoluene	0.42	U	0.43	0.42	0.11
2691-41-0	HMX	0.21	U M	0.22	0.21	0.093
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.096
55-63-0	Nitroglycerin	2.1	U	2.2	2.1	0.97
78-11-5	PETN	1.1	U	1.2	1.1	0.47
121-82-4	RDX	0.21	U	0.22	0.21	0.054
479-45-8	Tetryl	0.11	U	0.12	0.11	0.034

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	102	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230517-121556.b\05170062.D
Lims ID: 280-176335-A-2-A
Client ID: FWGmw-021-230401-GW
Sample Type: Client
Inject. Date: 18-May-2023 15:22:28 ALS Bottle#: 62 Worklist Smp#: 62
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-176335-A-2-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230517-121556.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 18-May-2023 17:39:03 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1645

First Level Reviewer: LV5D Date: 18-May-2023 16:01:20

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.552			ND	U
8 RDX	1		7.579			ND	
$ 10 1,2-Dinitrobenzene	1	8.530	8.532	-0.002	25867	0.2048	M
11 1,3,5-Trinitrobenzene	1		8.659			ND	
12 1,3-Dinitrobenzene	1		9.285			ND	
13 Nitrobenzene	1		9.659			ND	
15 Tetryl	1		10.025			ND	7
16 Nitroglycerin	2		10.479			ND	
17 2,4,6-Trinitrotoluene	1		10.919			ND	
18 4-Amino-2,6-dinitrotoluene	1	11.110	11.119	-0.009	2296	0.0148	
19 2-Amino-4,6-dinitrotoluene	1	11.363	11.372	-0.009	3032	0.0151	
20 2,6-Dinitrotoluene	1		11.525			ND	
21 2,4-Dinitrotoluene	1		11.692			ND	
22 o-Nitrotoluene	1		12.519			ND	7
23 p-Nitrotoluene	1		12.939			ND	
24 m-Nitrotoluene	1		13.512			ND	
25 PETN	2		14.692			ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

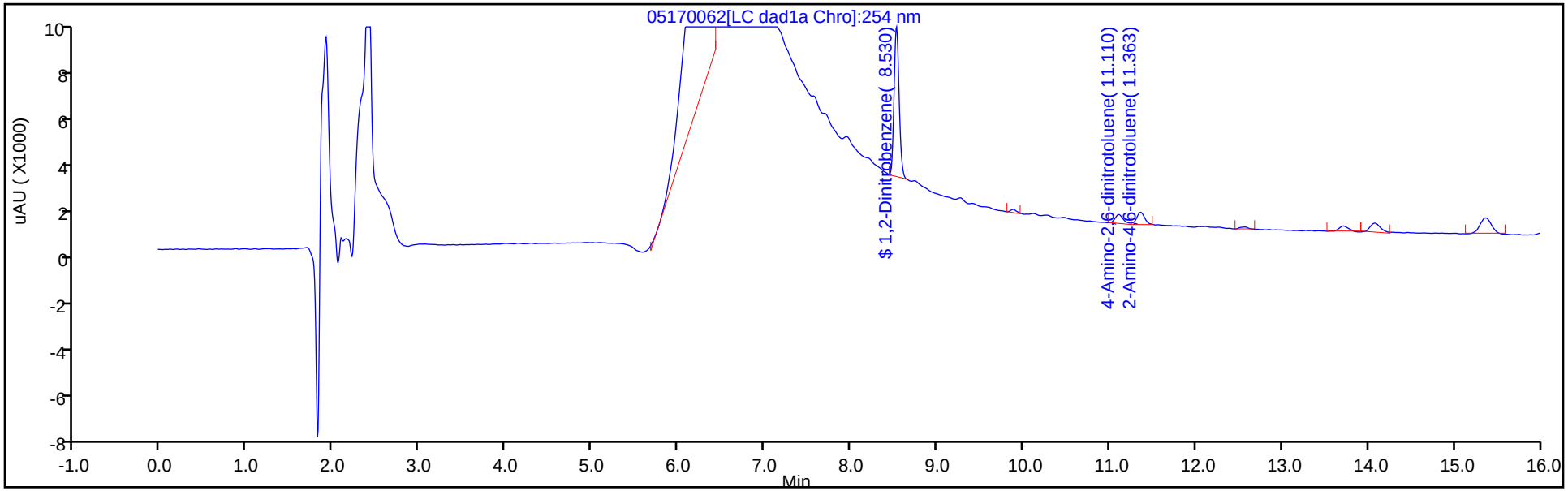
Report Date: 18-May-2023 17:39:06 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

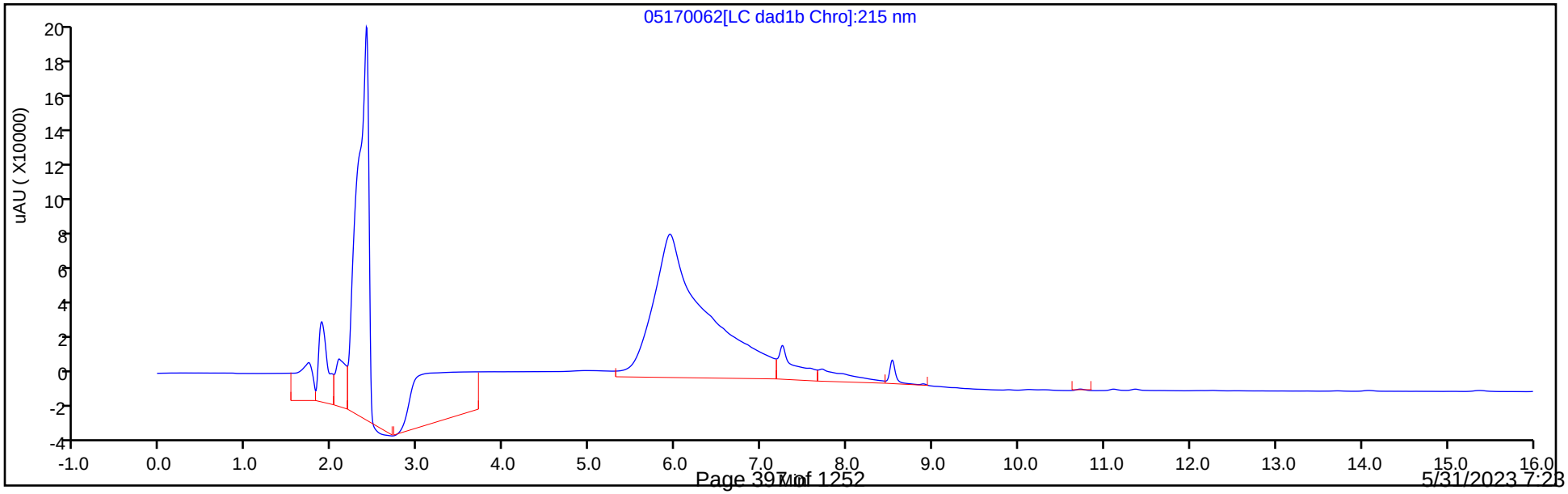
Data File: \\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170062.d

Injection Date:	18-May-2023 15:22:28	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-176335-A-2-A	Lab Sample ID:	280-176335-2	Worklist Smp#:	62
Client ID:	FWGmw-021-230401-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	62
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\20230517-121556.b\05170062.D				
Lims ID:	280-176335-A-2-A				
Client ID:	FWGmw-021-230401-GW				
Sample Type:	Client				
Inject. Date:	18-May-2023 15:22:28	ALS Bottle#:	62	Worklist Smp#:	62
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-176335-A-2-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230517-121556.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	18-May-2023 17:39:03	Calib Date:	24-Feb-2023 17:41:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1645				

First Level Reviewer: LV5D Date: 18-May-2023 16:01:20

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2048	102.40

Manual Integration/User Assign Peak Report

Eurofins Denver

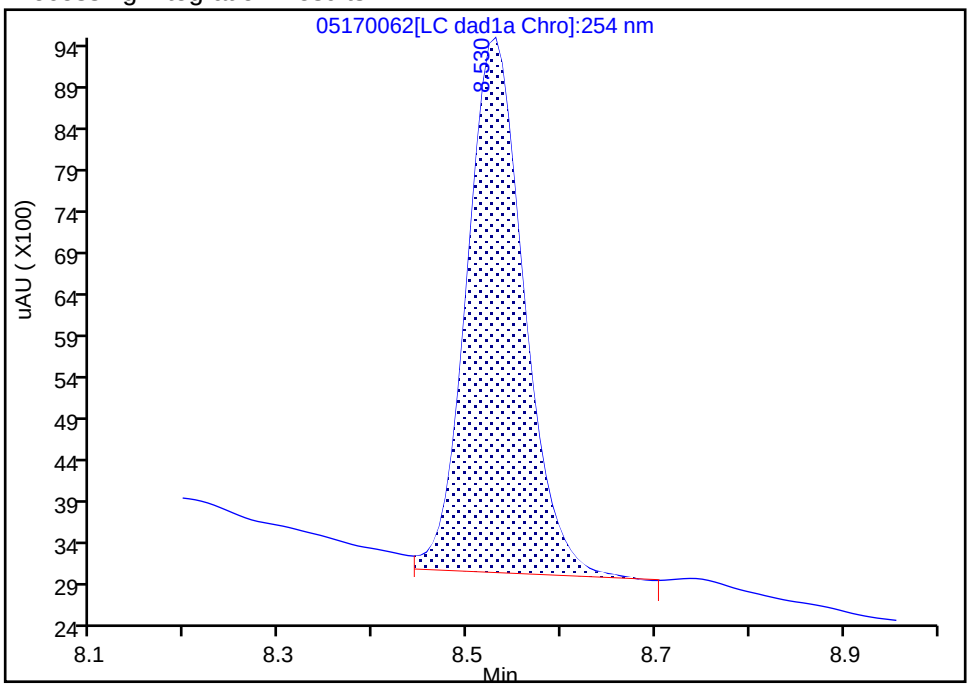
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170062.d				
Injection Date:	18-May-2023 15:22:28	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176335-A-2-A	Lab Sample ID:	280-176335-2		
Client ID:	FWGmw-021-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	62	Worklist Smp#:	62
Injection Vol:	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

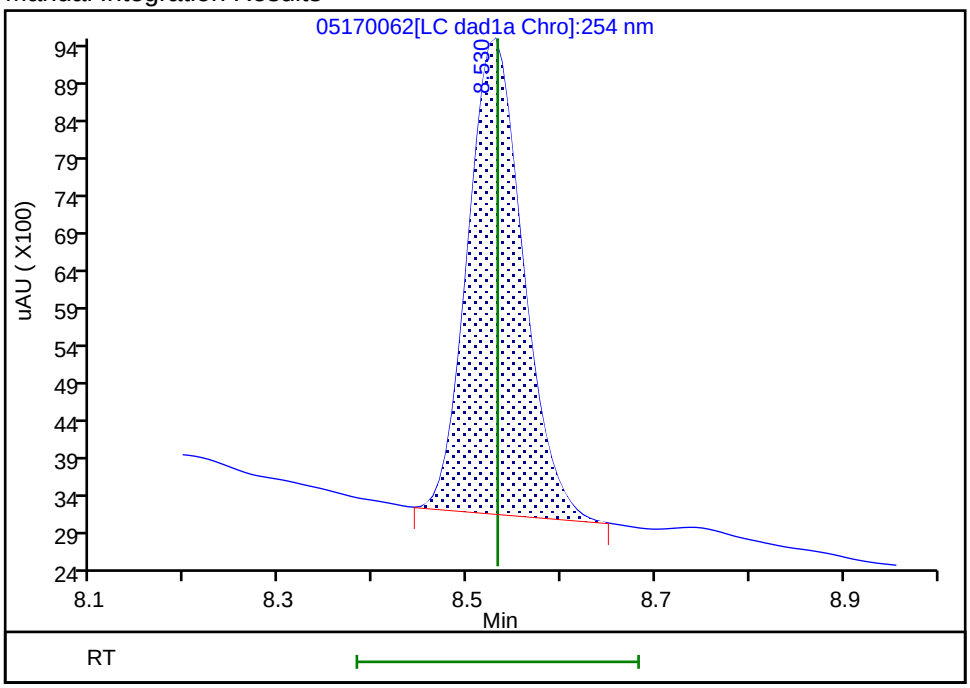
Processing Integration Results

RT: 8.53
Area: 27177
Amount: 0.215163
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 25867
Amount: 0.204792
Amount Units: ug/mL



Reviewer: LV5D, 18-May-2023 16:01:18 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

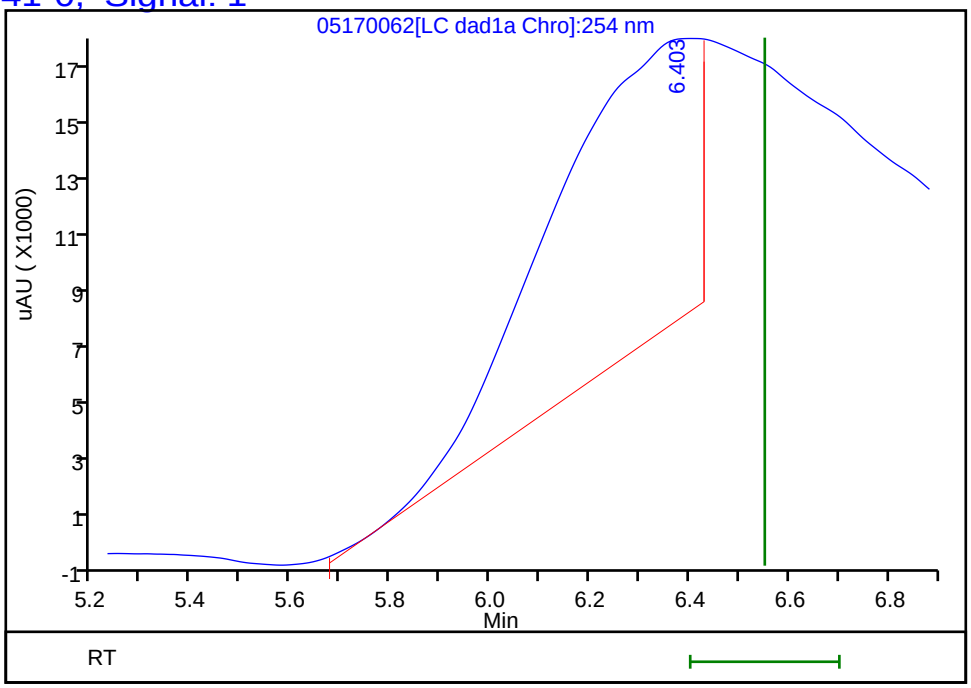
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170062.d
Injection Date: 18-May-2023 15:22:28 Instrument ID: CHHPLC_X3
Lims ID: 280-176335-A-2-A Lab Sample ID: 280-176335-2
Client ID: FWGmw-021-230401-GW
Operator ID: JZ/JG ALS Bottle#: 62 Worklist Smp#: 62
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: 6.40
Response: 201907
Amount: 2.158783



Reviewer: LV5D, 18-May-2023 16:01:20
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176335-1

SDG No.:

Client Sample ID: FWGmw-021-230401-GW | Lab Sample ID: 280-176335-2

Matrix: Water | Lab File ID: 05180034.D

Analysis Method: 8330B | Date Collected: 05/10/2023 14:11

Extraction Method: 3535 | Date Extracted: 05/17/2023 13:57

Sample wt/vol: 472.5(mL) | Date Analyzed: 05/19/2023 09:14

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.: 612994 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
35572-78-2	*2-Amino-4,6-dinitrotoluene*	*0.28*	*J1*	*0.12*	0.11	*0.054*
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.061

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\G2_LUNA\20230518-121600.b\05180034.D
Lims ID: 280-176335-A-2-A
Client ID: FWGmw-021-230401-GW
Sample Type: Client
Inject. Date: 19-May-2023 09:14:17 ALS Bottle#: 34 Worklist Smp#: 34
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-176335-A-2-A
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230518-121600.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 19-May-2023 15:05:49 Calib Date: 07-Apr-2023 23:50:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\04070018.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1654

First Level Reviewer: LV5D Date: 19-May-2023 15:04:49

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	6 HMX	1		6.833			ND	
	8 RDX	1	9.079	9.100	-0.021	2139	0.0099	
	9 Nitrobenzene	1		11.620			ND	
$	10 1,2-Dinitrobenzene	1	12.572	12.593	-0.021	51457	0.1939	
	12 1,3-Dinitrobenzene	1		14.720			ND	
	13 Nitroglycerin	2		15.213			ND	
	14 o-Nitrotoluene	1	15.832	15.793	0.039	4121	0.0169	
	15 p-Nitrotoluene	1		16.020			ND	
	16 4-Amino-2,6-dinitrotoluene	1		16.566			ND	
	17 m-Nitrotoluene	1		16.866			ND	
	18 2-Amino-4,6-dinitrotoluene	1	17.379	17.400	-0.021	10694	0.0267	
	19 1,3,5-Trinitrobenzene	1		17.546			ND	
	20 2,6-Dinitrotoluene	1		18.686			ND	
	21 2,4-Dinitrotoluene	1		19.146			ND	
	22 Tetryl	1		22.427			ND	
	23 2,4,6-Trinitrotoluene	1		23.247			ND	
	24 PETN	2		24.447			ND	

QC Flag Legend
Processing Flags

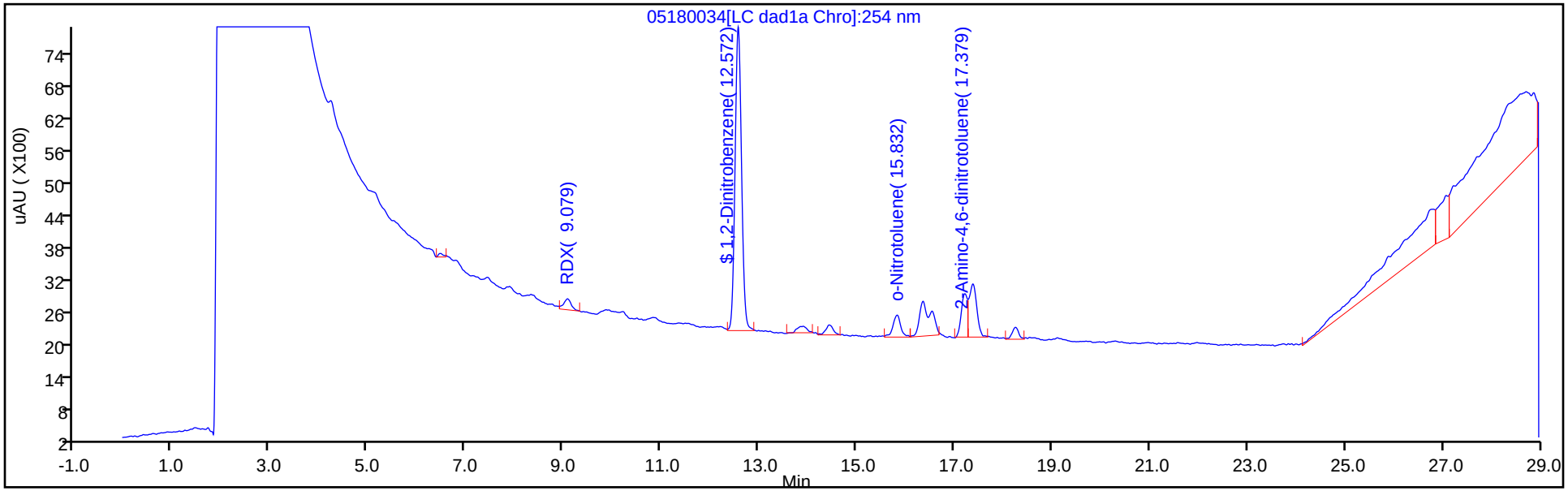
Report Date: 19-May-2023 15:05:52 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

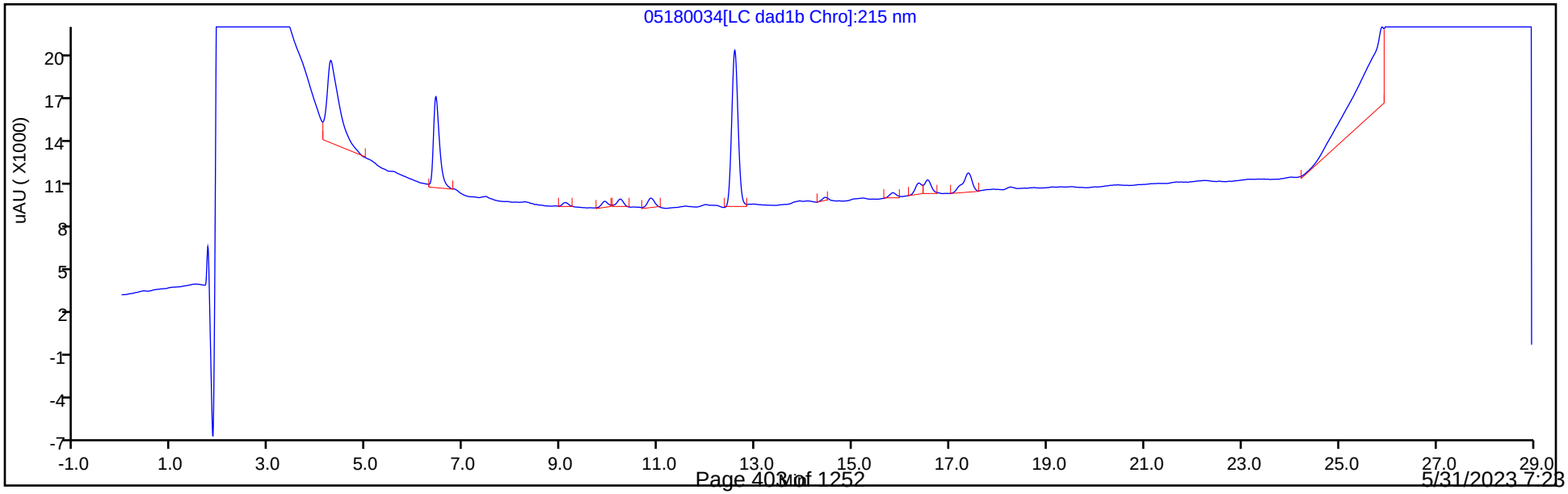
Data File: \\chromfs\denver\chromdata\g2_luna\20230518-121600.b\05180034.d

Injection Date:	19-May-2023 09:14:17	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	280-176335-A-2-A	Lab Sample ID:	280-176335-2	Worklist Smp#:	34
Client ID:	FWGmw-021-230401-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	34
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\20230518-121600.b\05180034.D				
Lims ID:	280-176335-A-2-A				
Client ID:	FWGmw-021-230401-GW				
Sample Type:	Client				
Inject. Date:	19-May-2023 09:14:17	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-176335-A-2-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20230518-121600.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	19-May-2023 15:05:49	Calib Date:	07-Apr-2023 23:50:31		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\04070018.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX1654				

First Level Reviewer: LV5D Date: 19-May-2023 15:04:49

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1939	96.94

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176335-1

SDG No.:

Client Sample ID: FWGmw-024-230401-GW | Lab Sample ID: 280-176335-3

Matrix: Water | Lab File ID: 05170063.D

Analysis Method: 8330B | Date Collected: 05/10/2023 13:46

Extraction Method: 3535 | Date Extracted: 05/17/2023 13:57

Sample wt/vol: 487.9(mL) | Date Analyzed: 05/18/2023 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.: 612858 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U	0.22	0.20	0.086
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.046
121-14-2	2,4-Dinitrotoluene	0.082	U	0.10	0.082	0.028
606-20-2	2,6-Dinitrotoluene	0.082	U	0.10	0.082	0.041
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.052
88-72-2	2-Nitrotoluene	0.20	U M	0.22	0.20	0.088
99-08-1	3-Nitrotoluene	0.36	U	0.41	0.36	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.059
99-99-0	4-Nitrotoluene	0.41	U	0.42	0.41	0.10
2691-41-0	HMX	0.20	U M	0.22	0.20	0.090
98-95-3	Nitrobenzene	0.20	U	0.22	0.20	0.093
55-63-0	Nitroglycerin	2.0	U	2.2	2.0	0.94
78-11-5	PETN	1.0	U	1.1	1.0	0.46
121-82-4	RDX	0.20	U	0.22	0.20	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	103	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230517-121556.b\05170063.D
Lims ID: 280-176335-B-3-A
Client ID: FWGmw-024-230401-GW
Sample Type: Client
Inject. Date: 18-May-2023 15:45:25 ALS Bottle#: 63 Worklist Smp#: 63
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-176335-B-3-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230517-121556.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 18-May-2023 17:39:03 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1645

First Level Reviewer: LV5D Date: 18-May-2023 16:10:06

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	4 HMX	1		6.552			ND	U
	8 RDX	1		7.579			ND	
$	10 1,2-Dinitrobenzene	1	8.531	8.532	-0.001	26118	0.2068	M
	11 1,3,5-Trinitrobenzene	1		8.659			ND	
	12 1,3-Dinitrobenzene	1		9.285			ND	
	13 Nitrobenzene	1		9.659			ND	
	15 Tetryl	1		10.025			ND	
	16 Nitroglycerin	2		10.479			ND	
	17 2,4,6-Trinitrotoluene	1		10.919			ND	
	18 4-Amino-2,6-dinitrotoluene	1		11.119			ND	
	19 2-Amino-4,6-dinitrotoluene	1		11.372			ND	
	20 2,6-Dinitrotoluene	1		11.525			ND	
	21 2,4-Dinitrotoluene	1		11.692			ND	
	22 o-Nitrotoluene	1		12.519			ND	U
	23 p-Nitrotoluene	1		12.939			ND	
	24 m-Nitrotoluene	1		13.512			ND	
	25 PETN	2		14.692			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

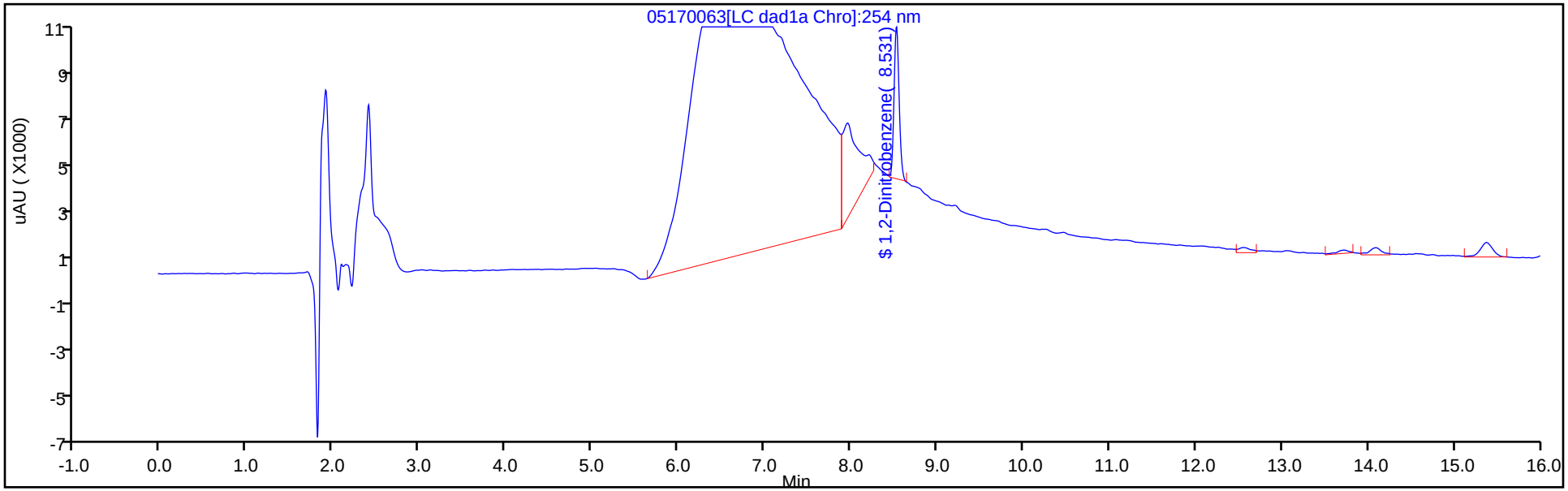
Report Date: 18-May-2023 17:39:06 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

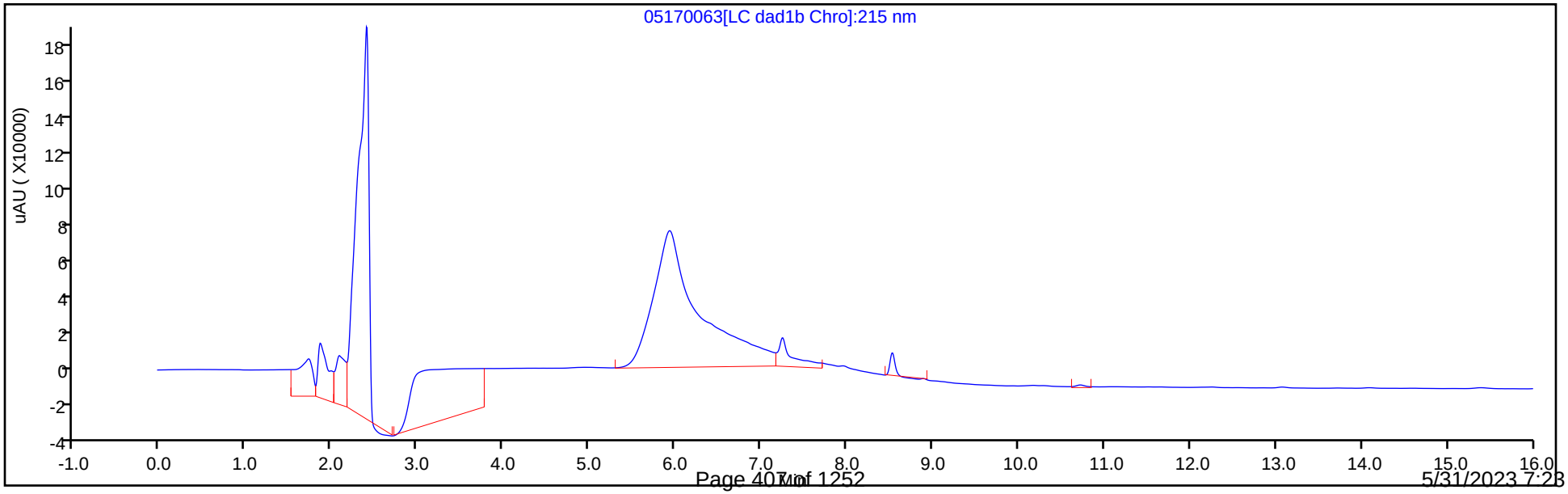
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Injection Date:	18-May-2023 15:45:25	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-176335-B-3-A	Lab Sample ID:	280-176335-3	Worklist Smp#:	63
Client ID:	FWGmw-024-230401-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	63
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\20230517-121556.b\05170063.D				
Lims ID:	280-176335-B-3-A				
Client ID:	FWGmw-024-230401-GW				
Sample Type:	Client				
Inject. Date:	18-May-2023 15:45:25	ALS Bottle#:	63	Worklist Smp#:	63
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-176335-B-3-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230517-121556.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	18-May-2023 17:39:03	Calib Date:	24-Feb-2023 17:41:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1645				

First Level Reviewer: LV5D Date: 18-May-2023 16:10:06

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2068	103.39

Manual Integration/User Assign Peak Report

Eurofins Denver

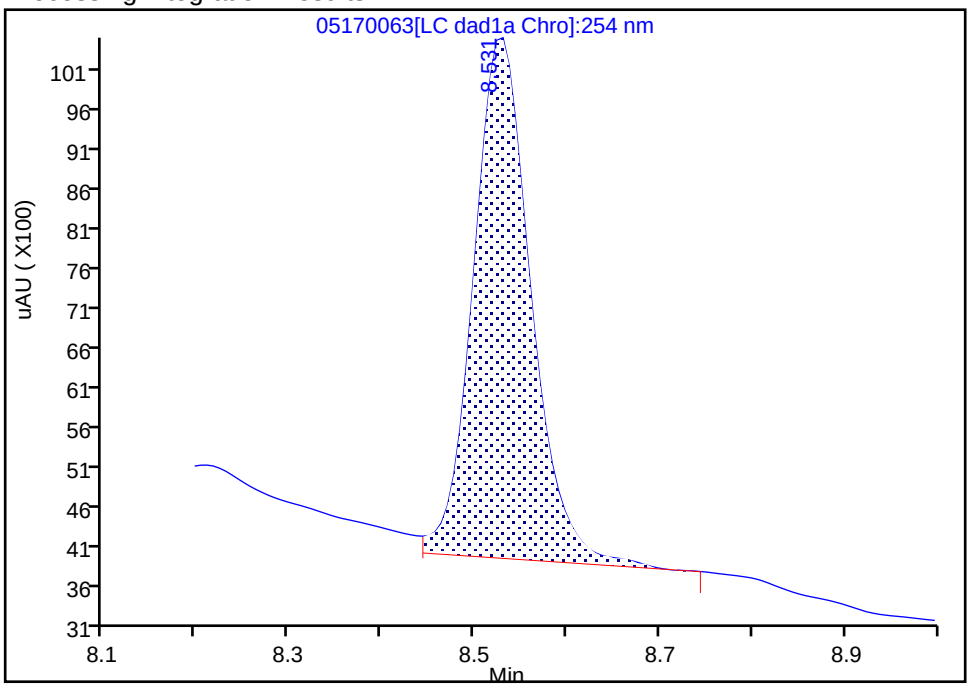
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170063.d				
Injection Date:	18-May-2023 15:45:25	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176335-B-3-A	Lab Sample ID:	280-176335-3		
Client ID:	FWGmw-024-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	63	Worklist Smp#:	63
Injection Vol:	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

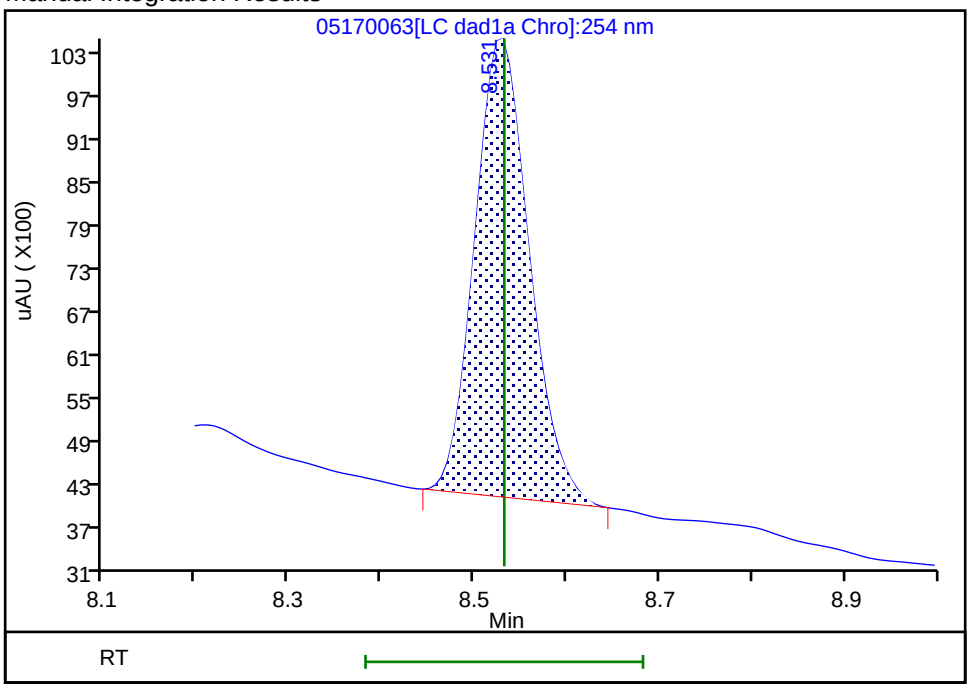
Processing Integration Results

RT: 8.53
Area: 28390
Amount: 0.224767
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 26118
Amount: 0.206779
Amount Units: ug/mL



Reviewer: LV5D, 18-May-2023 16:10:03 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

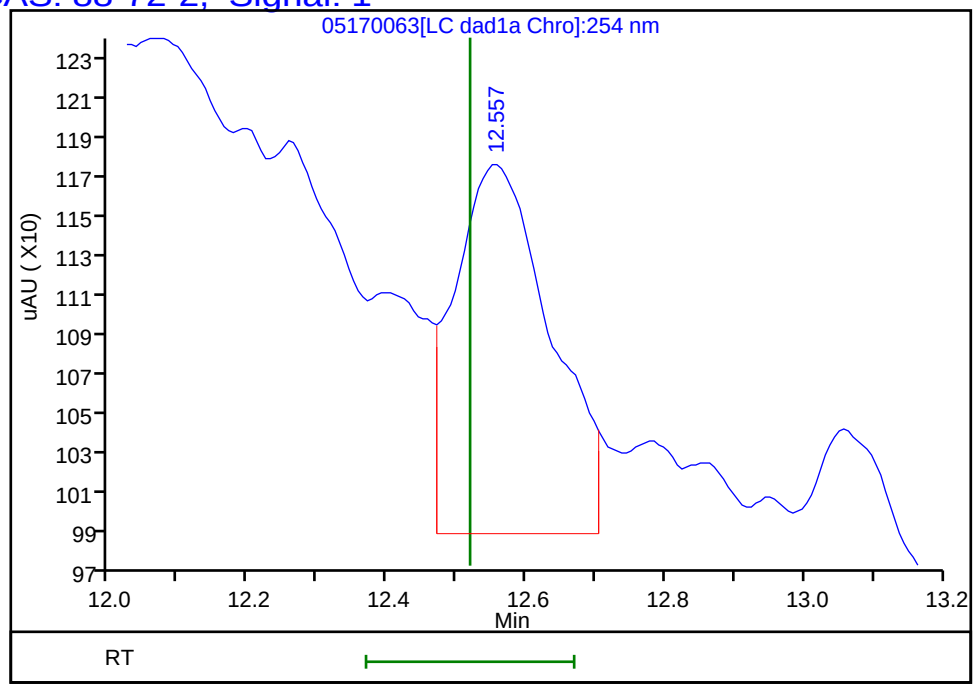
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170063.d
Injection Date: 18-May-2023 15:45:25 Instrument ID: CHHPLC_X3
Lims ID: 280-176335-B-3-A Lab Sample ID: 280-176335-3
Client ID: FWGmw-024-230401-GW
Operator ID: JZ/JG ALS Bottle#: 63 Worklist Smp#: 63
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

RT: 12.56
Response: 1761
Amount: 0.013769



Reviewer: LV5D, 18-May-2023 16:10:06
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

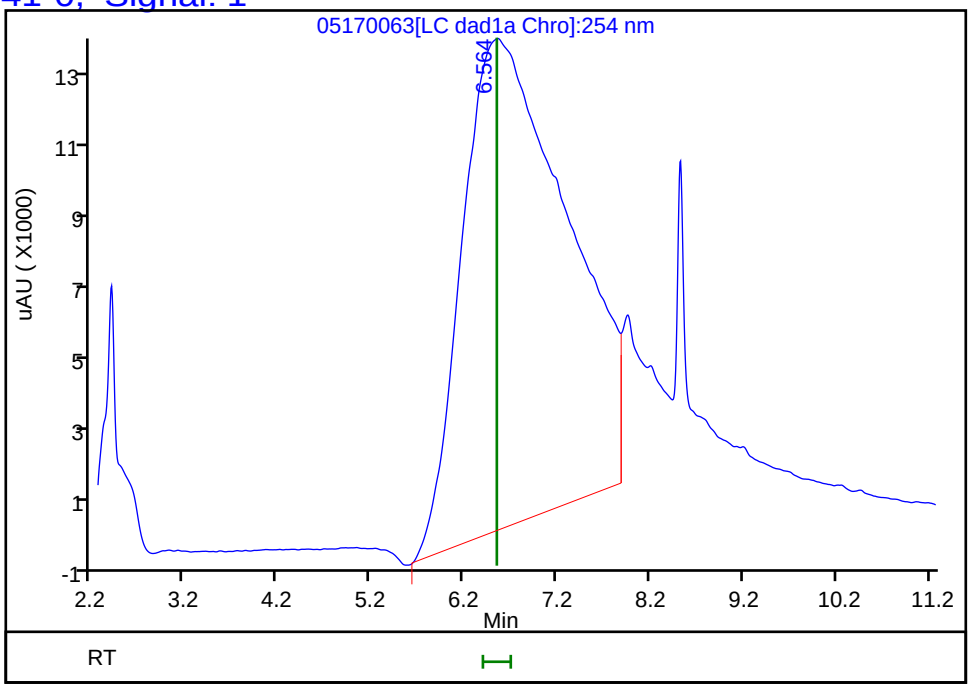
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170063.d

Injection Date:	18-May-2023 15:45:25	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176335-B-3-A	Lab Sample ID:	280-176335-3		
Client ID:	FWGmw-024-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	63	Worklist Smp#:	63
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: 6.56
Response: 1009461
Amount: 10.793125



Reviewer: LV5D, 18-May-2023 16:10:06
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176335-1

SDG No.:

Client Sample ID: LL2mw-059-230401-GW | Lab Sample ID: 280-176335-4

Matrix: Water | Lab File ID: 05170064.D

Analysis Method: 8330B | Date Collected: 05/10/2023 14:51

Extraction Method: 3535 | Date Extracted: 05/17/2023 13:57

Sample wt/vol: 506.8(mL) | Date Analyzed: 05/18/2023 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.: 612858 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.2	M	0.21	0.20	0.083
118-96-7	2,4,6-Trinitrotoluene	0.099	U	0.11	0.099	0.044
6629-29-4	2,4-diamino-6-nitrotoluene	0.89	U	0.99	0.89	0.43
121-14-2	2,4-Dinitrotoluene	0.30		0.099	0.079	0.027
59229-75-3	2,6-diamino-4-nitrotoluene	0.89	U	0.99	0.89	0.22
606-20-2	2,6-Dinitrotoluene	0.079	U	0.099	0.079	0.040
88-72-2	2-Nitrotoluene	0.20	U	0.21	0.20	0.084
618-87-1	3,5-Dinitroaniline	1.9		0.39	0.30	0.13
99-08-1	3-Nitrotoluene	0.35	U	0.39	0.35	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	0.54		0.15	0.12	0.057
99-99-0	4-Nitrotoluene	0.39	U	0.40	0.39	0.099
80251-29-2	DNX	0.25	U	0.49	0.25	0.096
2691-41-0	HMX	0.20	U M	0.21	0.20	0.086
5755-27-1	MNX	0.29	U	0.49	0.29	0.092
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.090
55-63-0	Nitroglycerin	2.0	U	2.1	2.0	0.91
78-11-5	PETN	0.99	U	1.1	0.99	0.44
121-82-4	RDX	0.20	U	0.21	0.20	0.051
479-45-8	Tetryl	0.099	U	0.11	0.099	0.031
13980-04-6	TNX	0.25	U	0.49	0.25	0.078

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\20230517-121556.b\05170064.D
Lims ID: 280-176335-A-4-A
Client ID: LL2mw-059-230401-GW
Sample Type: Client
Inject. Date: 18-May-2023 16:08:23 ALS Bottle#: 64 Worklist Smp#: 64
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-176335-A-4-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230517-121556.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 18-May-2023 17:39:03 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1645

First Level Reviewer: LV5D Date: 18-May-2023 17:20:44

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	2 2,6-diamino-4-nitrotoluene	1		6.428			ND	
	3 TNX	1		6.432			ND	
	4 HMX	1		6.552			ND	U
	5 2,4-diamino-6-nitrotoluene	1		6.615			ND	
	6 DNX	1		6.765			ND	
	7 MNX	1		7.192			ND	
	8 RDX	1		7.579			ND	
$	10 1,2-Dinitrobenzene	1	8.523	8.532	-0.009	25243	0.1999	M
	11 1,3,5-Trinitrobenzene	1	8.650	8.659	-0.009	25512	0.1175	M
	12 1,3-Dinitrobenzene	1	9.263	9.285	-0.022	9828	0.0334	
	13 Nitrobenzene	1		9.659			ND	
	14 3,5-Dinitroaniline	1	9.876	9.892	-0.016	44475	0.1947	
	15 Tetryl	1		10.025			ND	
	16 Nitroglycerin	2		10.479			ND	
	17 2,4,6-Trinitrotoluene	1		10.919			ND	
	18 4-Amino-2,6-dinitrotoluene	1	11.096	11.119	-0.023	8418	0.0543	
	19 2-Amino-4,6-dinitrotoluene	1	11.350	11.372	-0.022	11048	0.0549	
	20 2,6-Dinitrotoluene	1		11.525			ND	
	21 2,4-Dinitrotoluene	1	11.670	11.692	-0.022	8962	0.0302	
	22 o-Nitrotoluene	1		12.519			ND	
	23 p-Nitrotoluene	1		12.939			ND	
	24 m-Nitrotoluene	1		13.512			ND	
	25 PETN	2		14.692			ND	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
U - Marked Undetected

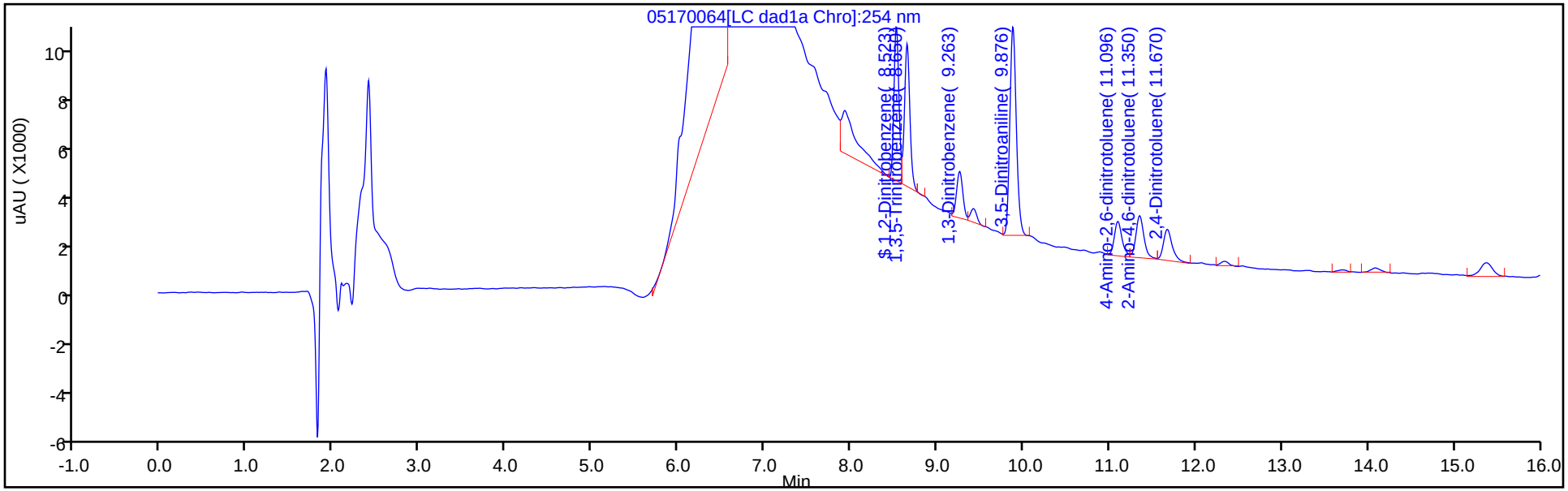
Report Date: 18-May-2023 17:39:07 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

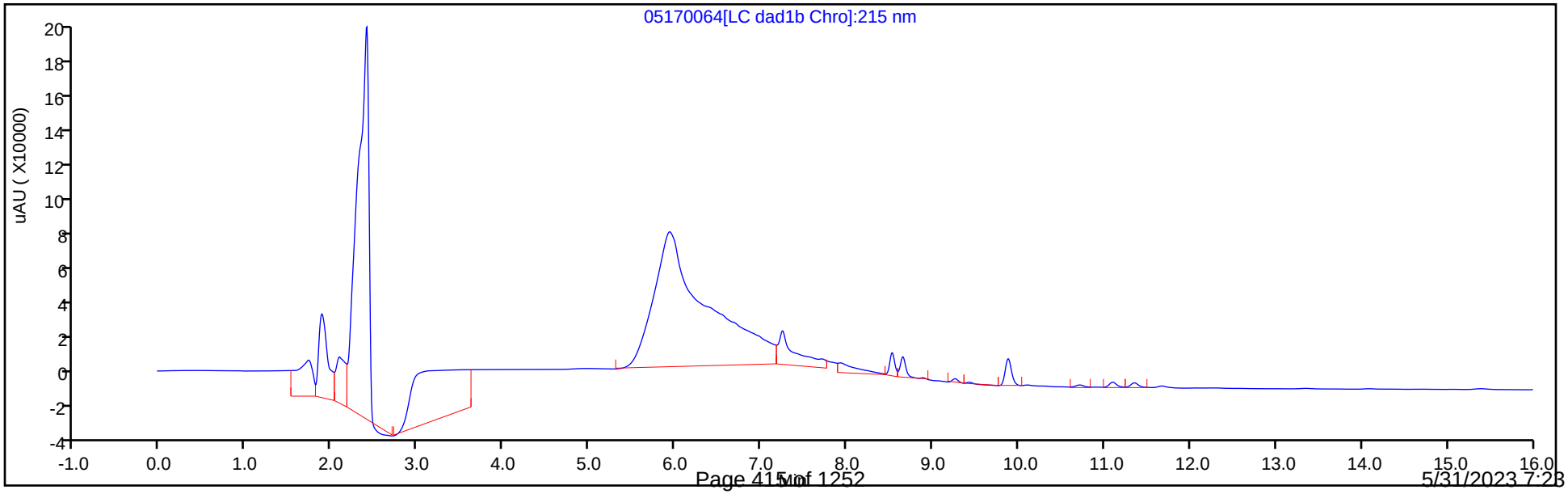
Data File: \\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170064.d

Injection Date:	18-May-2023 16:08:23	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-176335-A-4-A	Lab Sample ID:	280-176335-4	Worklist Smp#:	64
Client ID:	LL2mw-059-230401-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	64
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\20230517-121556.b\05170064.D
Lims ID: 280-176335-A-4-A
Client ID: LL2mw-059-230401-GW
Sample Type: Client
Inject. Date: 18-May-2023 16:08:23 ALS Bottle#: 64 Worklist Smp#: 64
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-176335-A-4-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230517-121556.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 18-May-2023 17:39:03 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1645

First Level Reviewer: LV5D Date: 18-May-2023 17:20:44

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1999	99.93

Manual Integration/User Assign Peak Report

Eurofins Denver

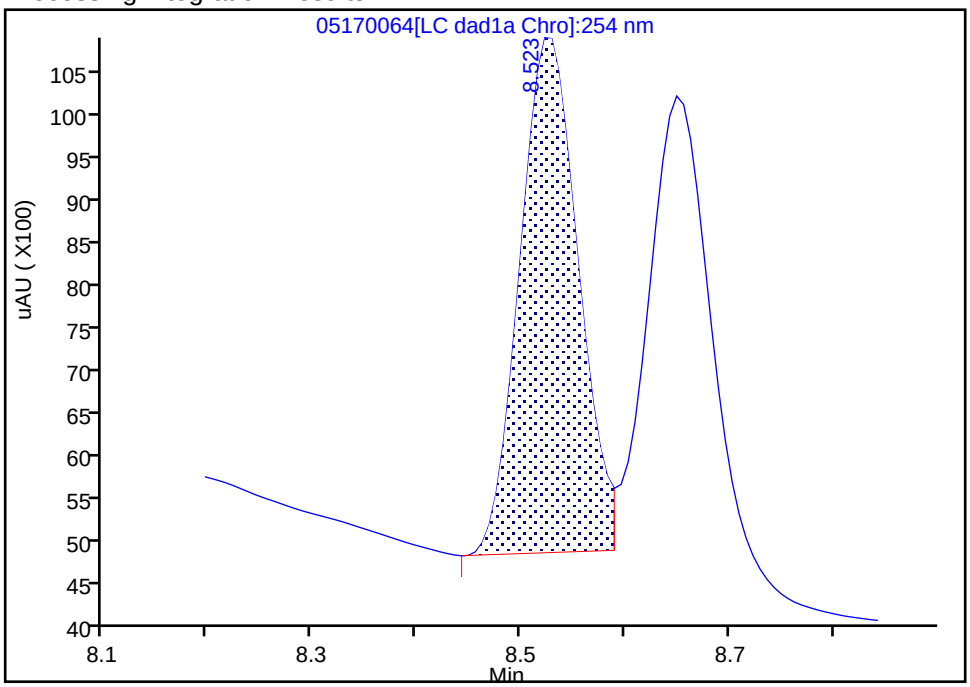
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Injection Date:	18-May-2023 16:08:23	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176335-A-4-A	Lab Sample ID:	280-176335-4		
Client ID:	LL2mw-059-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	64	Worklist Smp#:	64
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
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

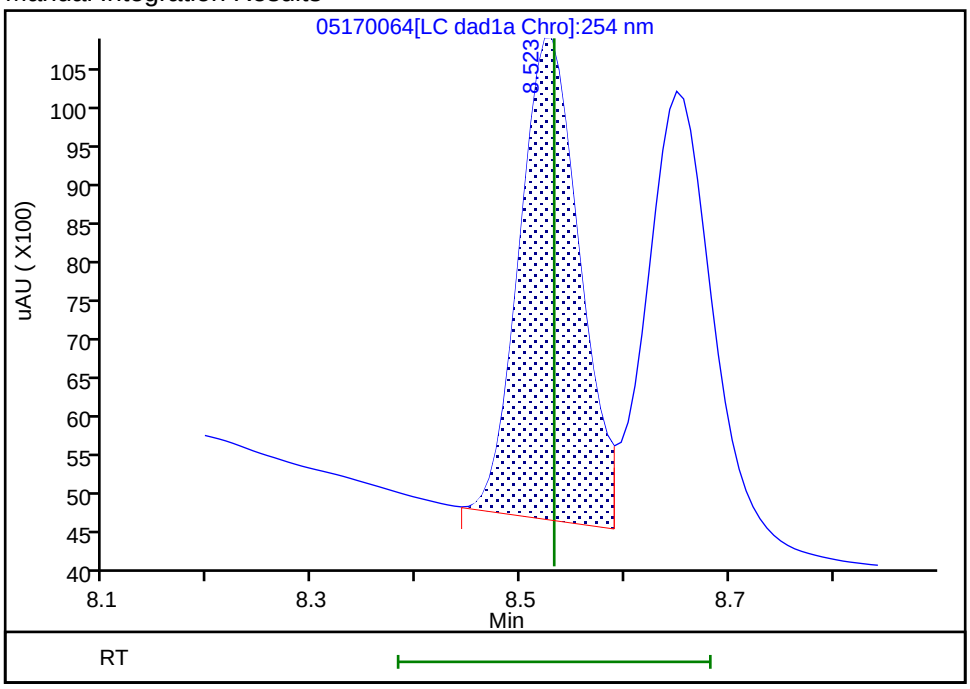
Processing Integration Results

RT: 8.52
Area: 23646
Amount: 0.187208
Amount Units: ug/mL



Manual Integration Results

RT: 8.52
Area: 25243
Amount: 0.199852
Amount Units: ug/mL



Reviewer: LV5D, 18-May-2023 17:20:41 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Eurofins Denver

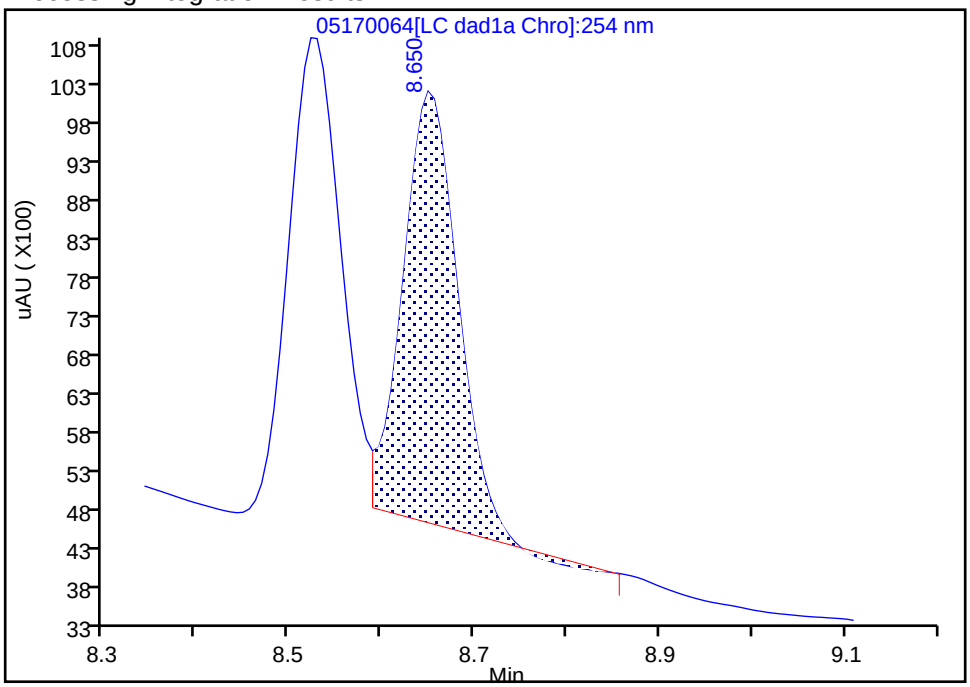
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Injection Date:	18-May-2023 16:08:23	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176335-A-4-A	Lab Sample ID:	280-176335-4		
Client ID:	LL2mw-059-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	64	Worklist Smp#:	64
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
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

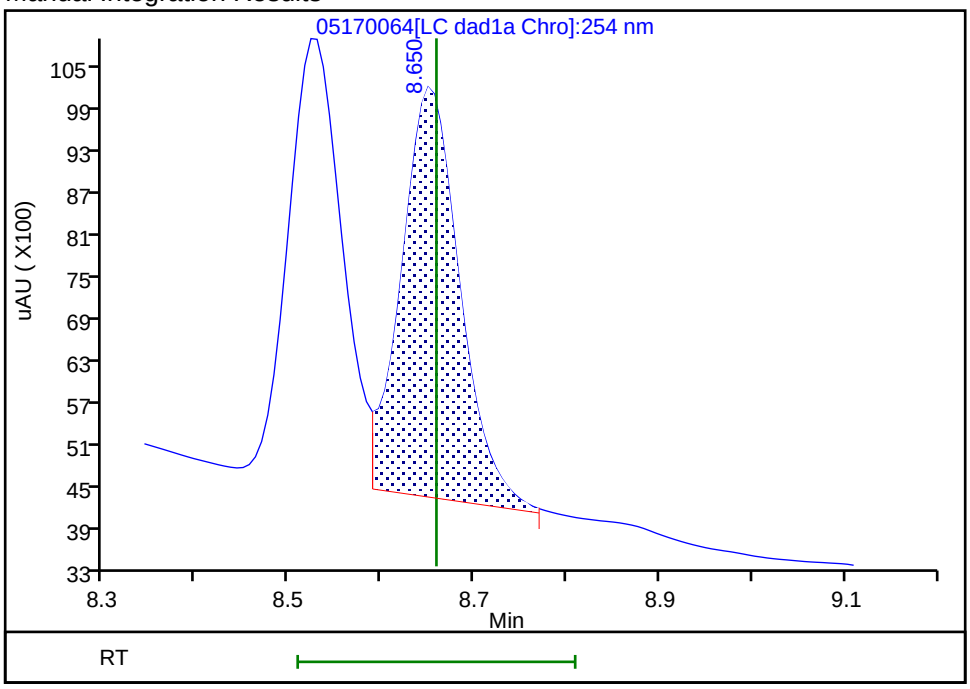
Processing Integration Results

RT: 8.65
Area: 23455
Amount: 0.108014
Amount Units: ug/mL



Manual Integration Results

RT: 8.65
Area: 25512
Amount: 0.117487
Amount Units: ug/mL



Reviewer: LV5D, 18-May-2023 17:20:41 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

User Disabled Compound Report

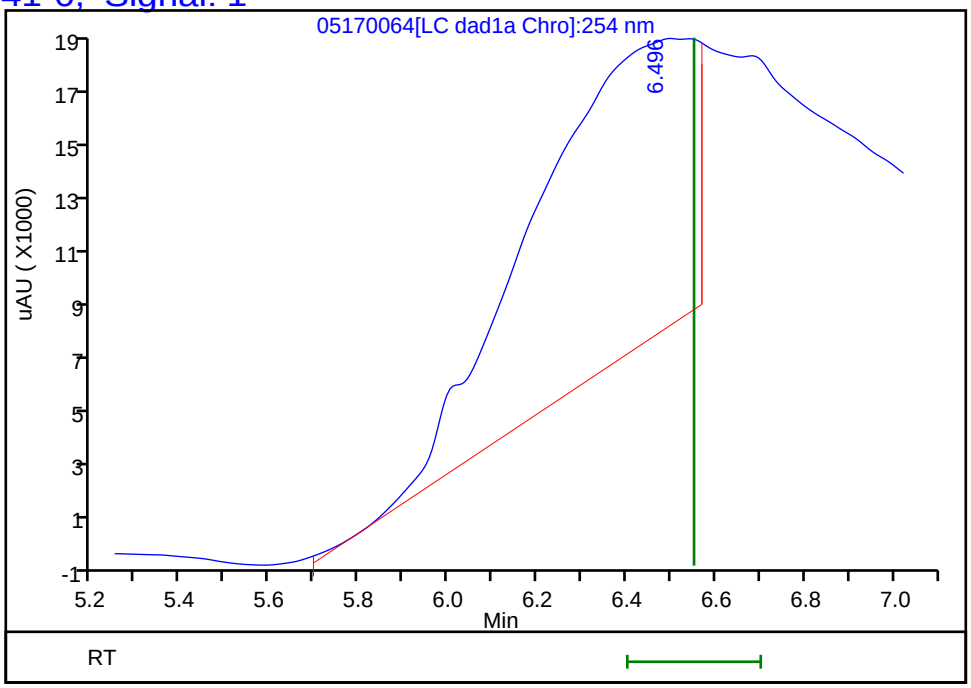
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170064.d
Injection Date: 18-May-2023 16:08:23 Instrument ID: CHHPLC_X3
Lims ID: 280-176335-A-4-A Lab Sample ID: 280-176335-4
Client ID: LL2mw-059-230401-GW
Operator ID: JZ/JG ALS Bottle#: 64 Worklist Smp#: 64
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: 6.50
Response: 283002
Amount: 3.025848



Reviewer: LV5D, 18-May-2023 17:20:44
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176335-1

SDG No.:

Client Sample ID: LL2mw-059-230401-GW | Lab Sample ID: 280-176335-4

Matrix: Water | Lab File ID: 05180036.D

Analysis Method: 8330B | Date Collected: 05/10/2023 14:51

Extraction Method: 3535 | Date Extracted: 05/17/2023 13:57

Sample wt/vol: 506.8(mL) | Date Analyzed: 05/19/2023 10:26

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.: 612994 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.099	U	0.11	0.099	0.036
35572-78-2	2-Amino-4,6-dinitrotoluene	0.099	U	0.11	0.099	0.050

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\G2_LUNA\20230518-121600.b\05180036.D
Lims ID: 280-176335-A-4-A
Client ID: LL2mw-059-230401-GW
Sample Type: Client
Inject. Date: 19-May-2023 10:26:12 ALS Bottle#: 36 Worklist Smp#: 36
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-176335-A-4-A
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230518-121600.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 19-May-2023 15:05:49 Calib Date: 07-Apr-2023 23:50:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\04070018.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1654

First Level Reviewer: LV5D Date: 19-May-2023 15:05:25

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1		4.501			ND	
2 2,4-diamino-6-nitrotoluene	1		5.128			ND	
3 TNX	1		5.313			ND	
4 DNX	1		6.180			ND	
6 HMX	1		6.833			ND	
7 MNX	1		7.693			ND	
8 RDX	1	9.076	9.100	-0.024	1995	0.009248	M
9 Nitrobenzene	1		11.620			ND	
$ 10 1,2-Dinitrobenzene	1	12.569	12.593	-0.024	51107	0.1926	
11 3,5-Dinitroaniline	1	14.416	14.453	-0.037	91304	0.2114	
12 1,3-Dinitrobenzene	1		14.720			ND	
13 Nitroglycerin	2		15.213			ND	
14 o-Nitrotoluene	1	15.803	15.793	0.010	2413	0.0099	
15 p-Nitrotoluene	1		16.020			ND	
16 4-Amino-2,6-dinitrotoluene	1	16.523	16.566	-0.043	19239	0.0706	M
17 m-Nitrotoluene	1		16.866			ND	
18 2-Amino-4,6-dinitrotoluene	1		17.400			ND	
19 1,3,5-Trinitrobenzene	1	17.509	17.546	-0.037	49524	0.1308	M
20 2,6-Dinitrotoluene	1		18.686			ND	
21 2,4-Dinitrotoluene	1	19.083	19.146	-0.063	18141	0.0324	
22 Tetryl	1		22.427			ND	
23 2,4,6-Trinitrotoluene	1		23.247			ND	
24 PETN	2		24.447			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

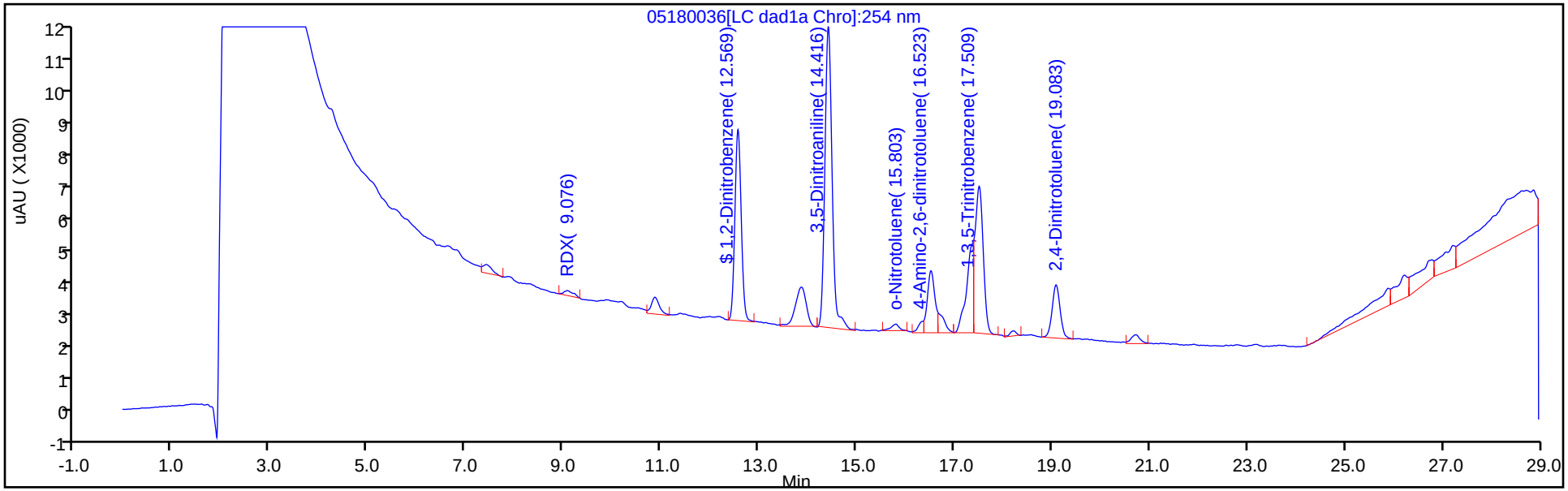
Report Date: 19-May-2023 15:05:53 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

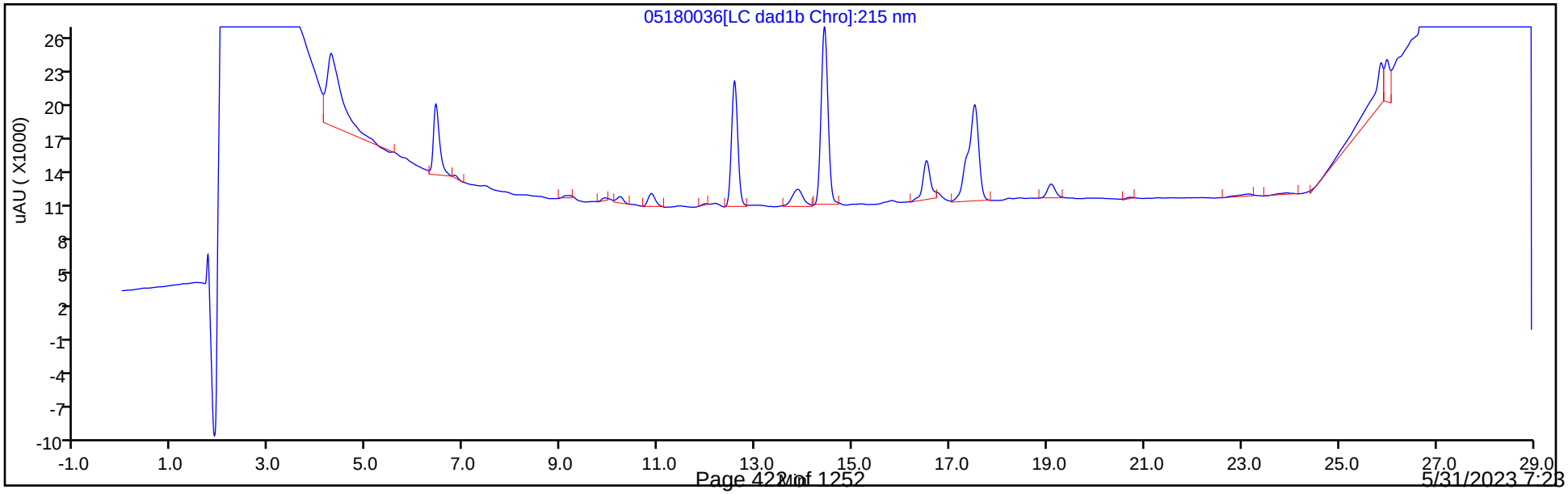
Data File: \\chromfs\denver\chromdata\g2_luna\20230518-121600.b\05180036.d

Injection Date:	19-May-2023 10:26:12	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	280-176335-A-4-A	Lab Sample ID:	280-176335-4	Worklist Smp#:	36
Client ID:	LL2mw-059-230401-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	36
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\20230518-121600.b\05180036.D
Lims ID: 280-176335-A-4-A
Client ID: LL2mw-059-230401-GW
Sample Type: Client
Inject. Date: 19-May-2023 10:26:12 ALS Bottle#: 36 Worklist Smp#: 36
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-176335-A-4-A
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230518-121600.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 19-May-2023 15:05:49 Calib Date: 07-Apr-2023 23:50:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\04070018.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1654

First Level Reviewer: LV5D Date: 19-May-2023 15:05:25

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1926	96.28

Manual Integration/User Assign Peak Report

Eurofins Denver

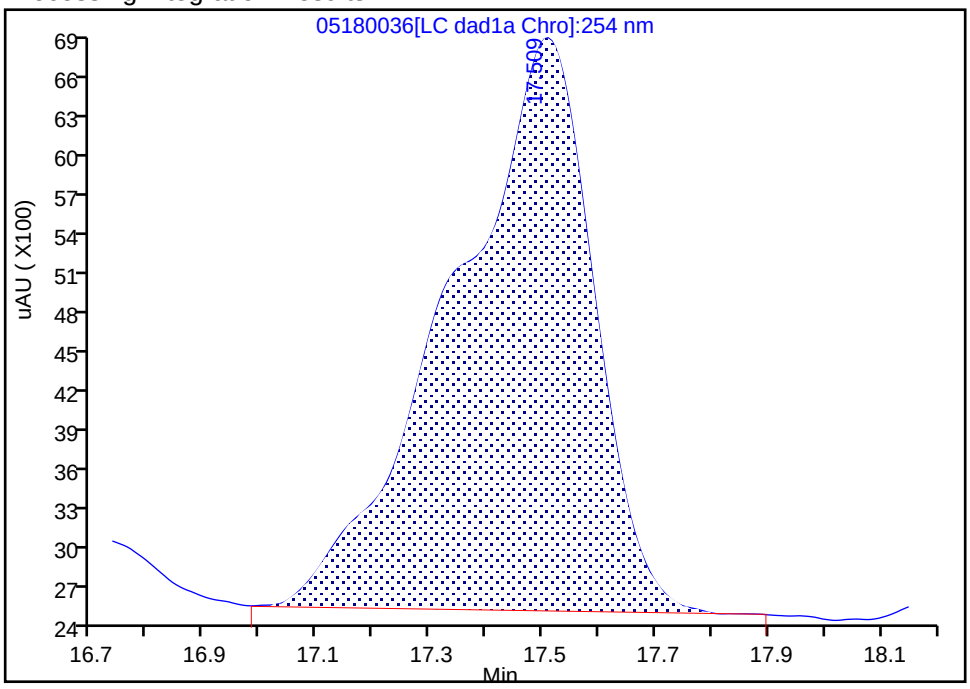
Data File:	\\chromfs\denver\chromdata\g2_luna\20230518-121600.b\05180036.d				
Injection Date:	19-May-2023 10:26:12	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-176335-A-4-A	Lab Sample ID:	280-176335-4		
Client ID:	LL2mw-059-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	36	Worklist Smp#:	36
Injection 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

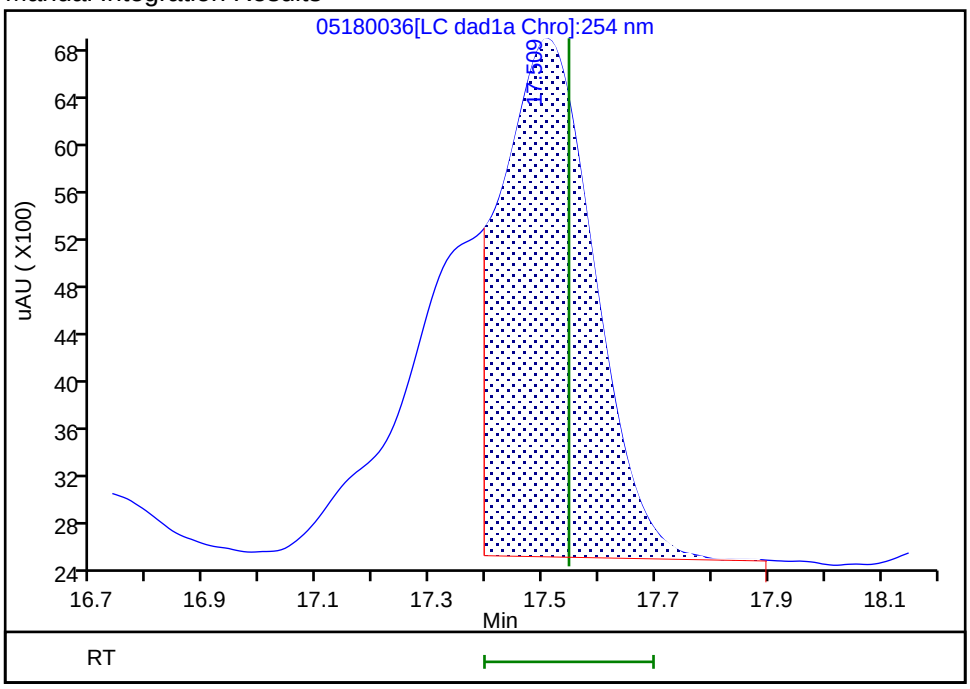
Processing Integration Results

RT: 17.51
Area: 76058
Amount: 0.200952
Amount Units: ug/ml



Manual Integration Results

RT: 17.51
Area: 49524
Amount: 0.130847
Amount Units: ug/ml



Reviewer: LV5D, 19-May-2023 15:05:14 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

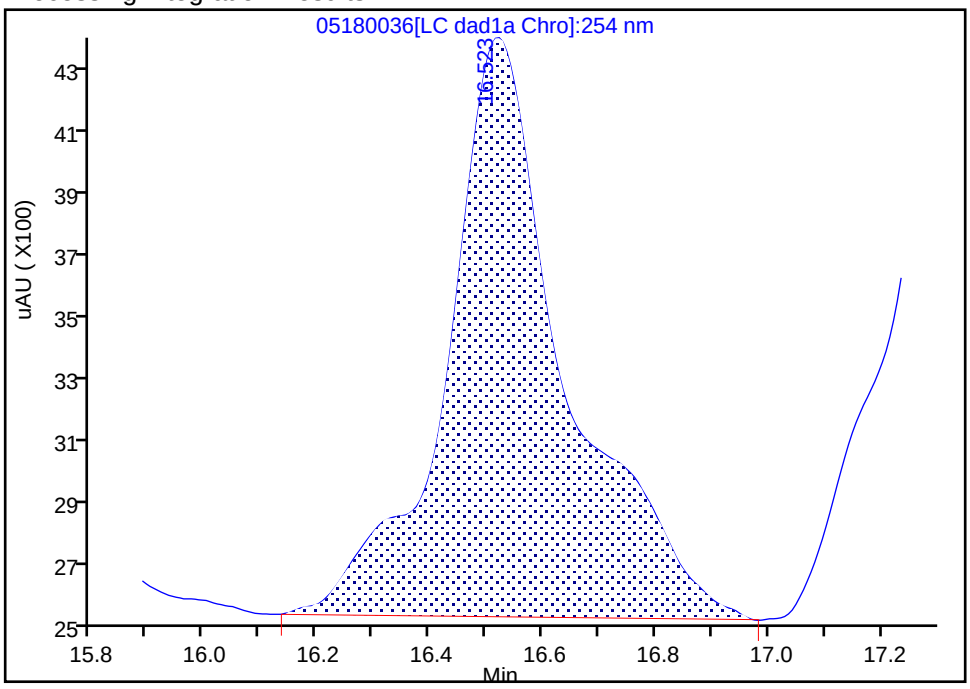
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Injection Date:	19-May-2023 10:26:12	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-176335-A-4-A	Lab Sample ID:	280-176335-4		
Client ID:	LL2mw-059-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	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

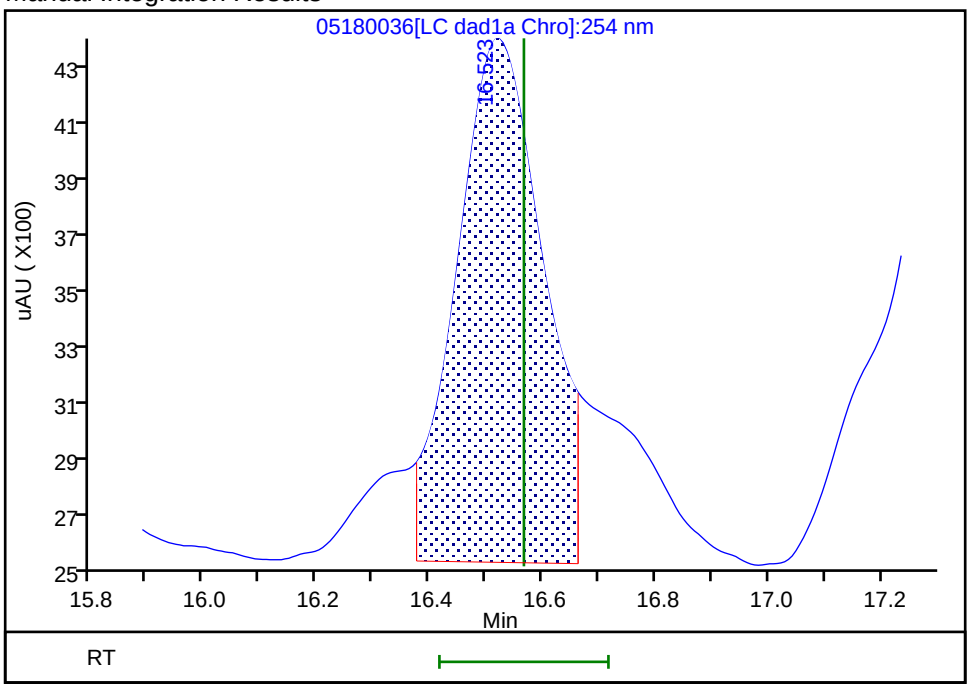
Processing Integration Results

RT: 16.52
Area: 26680
Amount: 0.097869
Amount Units: ug/ml



Manual Integration Results

RT: 16.52
Area: 19239
Amount: 0.070573
Amount Units: ug/ml



Reviewer: LV5D, 19-May-2023 15:05:21 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

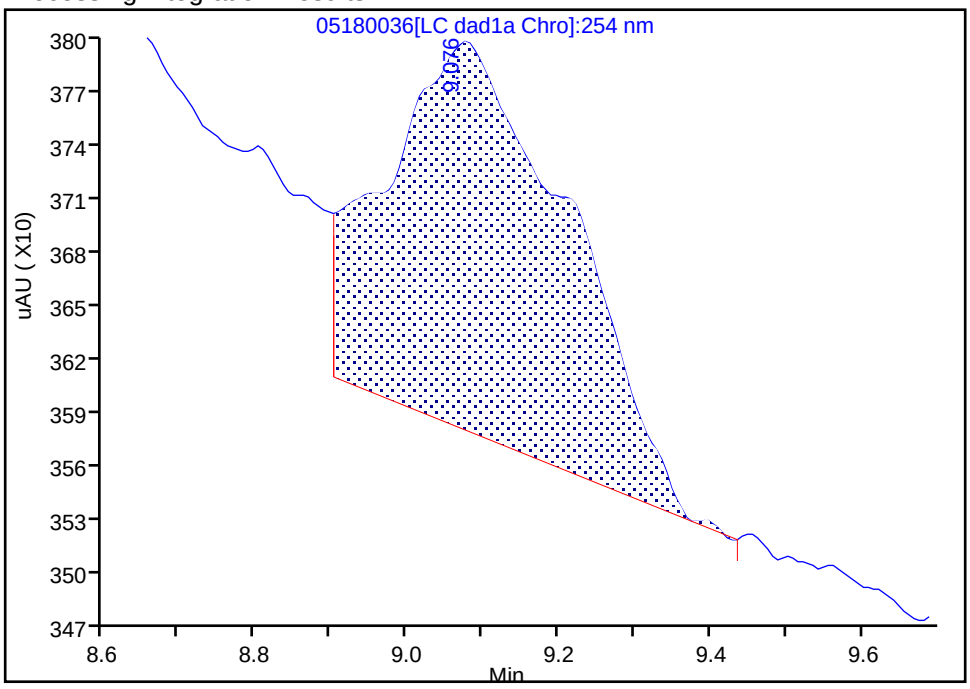
Data File:	\\chromfs\denver\chromdata\g2_luna\20230518-121600.b\05180036.d				
Injection Date:	19-May-2023 10:26:12	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-176335-A-4-A	Lab Sample ID:	280-176335-4		
Client ID:	LL2mw-059-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	36	Worklist Smp#:	36
Injection 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

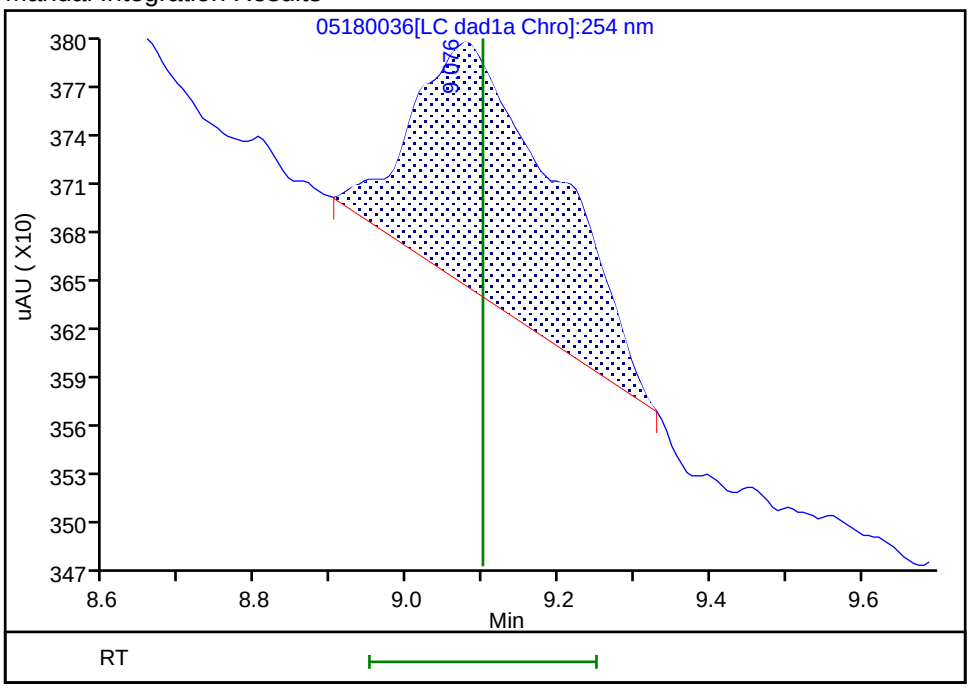
Processing Integration Results

RT: 9.08
Area: 3593
Amount: 0.016656
Amount Units: ug/ml



Manual Integration Results

RT: 9.08
Area: 1995
Amount: 0.009248
Amount Units: ug/ml



Reviewer: LV5D, 19-May-2023 15:05:04 -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.: 280-176335-1 Analy Batch No.: 494886

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2020 16:16 Calibration End Date: 05/14/2020 20:56 Calibration ID: 44234

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-494886/15	05140015.D
Level 2	IC 280-494886/14	05140014.D
Level 3	IC 280-494886/13	05140013.D
Level 4	IC 280-494886/12	05140012.D
Level 5	IC 280-494886/11	05140011.D
Level 6	IC 280-494886/10	05140010.D
Level 7	IC 280-494886/9	05140009.D
Level 8	IC 280-494886/8	05140008.D
Level 9	IC 280-494886/7	05140007.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	LVL 9		RT WINDOW	AVG RT
2,6-diamino-4-nitrotoluene		4.375	4.357	4.361	4.366	4.347	4.342	4.315	4.302		4.216 - 4.516	4.346
2,4-diamino-6-nitrotoluene		4.855	4.851	4.941	4.880	4.940	4.915	4.908	+++++		4.730 - 5.030	4.899
Picric acid		6.322	6.331	6.308	6.300	6.267	6.235	6.195	+++++		6.150 - 6.450	6.280
HMX		6.982	6.984	6.994	6.986	6.987	6.982	6.968	6.916		6.836 - 7.136	6.975
RDX		9.095	9.184	9.181	9.173	9.173	9.162	9.148	9.076		9.023 - 9.323	9.149
Nitrobenzene		12.095	12.110	12.114	12.106	12.107	12.095	12.088	11.995		11.956 - 12.256	12.089
3,5-Dinitroaniline		14.862	14.890	14.901	14.886	14.887	14.875	14.868	14.795		14.736 - 15.036	14.871
1,3-Dinitrobenzene		15.542	15.544	15.554	15.553	15.553	15.548	15.541	15.469		15.403 - 15.703	15.538
Nitroglycerin		15.855	15.844	15.848	15.853	15.853	15.842	15.848	15.782		15.703 - 16.003	15.841
o-Nitrotoluene		16.515	16.550	16.534	16.533	16.540	16.535	16.535	16.475		16.383 - 16.683	16.527
p-Nitrotoluene		16.795	16.837	16.828	16.820	16.820	16.808	16.815	16.715		16.670 - 16.970	16.805
4-Amino-2,6-dinitrotoluene		17.155	17.157	17.148	17.146	17.153	17.142	17.141	17.069		16.996 - 17.296	17.139
m-Nitrotoluene		17.748	17.724	17.741	17.753	17.747	17.742	17.741	17.782		17.603 - 17.903	17.747
2-Amino-4,6-dinitrotoluene		18.048	18.030	18.054	18.046	18.040	18.035	18.028	17.935		17.896 - 18.196	18.027
1,3,5-Trinitrobenzene		18.855	18.864	18.881	18.886	18.887	18.875	18.881	18.829		18.736 - 19.036	18.870
2,6-Dinitrotoluene	+++++	19.828	19.817	19.794	19.806	19.807	19.795	19.801	19.742		19.656 - 19.956	19.799
2,4-Dinitrotoluene	20.295	20.295	20.290	20.288	20.293	20.293	20.288	20.288	20.235		20.143 - 20.443	20.285
Tetryl		23.529	23.557	23.548	23.553	23.553	23.542	23.555	23.516		23.403 - 23.703	23.544
2,4,6-Trinitrotoluene		24.682	24.637	24.654	24.653	24.647	24.642	24.648	24.616		24.503 - 24.803	24.647
PETN		+++++	25.277	25.281	25.280	25.280	25.275	25.281	25.269		25.130 - 25.430	25.278
1,2-Dinitrobenzene		13.022	13.037	13.048	13.040	13.040	13.028	13.028	12.949		12.890 - 13.190	13.024

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-176335-1 Analy Batch No.: 494886

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2020 16:16 Calibration End Date: 05/14/2020 20:56 Calibration ID: 44234

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-494886/15	05140015.D
Level 2	IC 280-494886/14	05140014.D
Level 3	IC 280-494886/13	05140013.D
Level 4	IC 280-494886/12	05140012.D
Level 5	IC 280-494886/11	05140011.D
Level 6	IC 280-494886/10	05140010.D
Level 7	IC 280-494886/9	05140009.D
Level 8	IC 280-494886/8	05140008.D
Level 9	IC 280-494886/7	05140007.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								
2,6-diamino-4-nitrotoluene	427016 378673	505300 403228	459380 388674	447390 424864	Ave		429315.573				9.6		20.0			
2,4-diamino-6-nitrotoluene	299752 +++++	457350 250425	331240 252376	338890 226554	Lin1	5534.76596	237769.698							0.9910		0.9900
Picric acid	194456 +++++	227320 170053	189240 169399	231700 174504	Ave		193810.153				13.5		20.0			
HMX	216260 175837	400720 186210	252920 179567	242940 183992	Lin2	5323.97093	177012.867							0.9900		0.9900
RDX	250504 220101	251440 221363	302380 217280	272330 219481	Ave		244359.838				12.7		20.0			
Nitrobenzene	422566 420057	411355 413613	566215 420302	425090 434621	Ave		439227.211				11.8		20.0			
3,5-Dinitroaniline	521204 487312	615250 475038	558320 457941	517160 495596	Lin2	2774.20567	485000.587							0.9980		0.9900
1,3-Dinitrobenzene	687780 651230	649900 645107	741737 661018	688743 667994	Ave		674188.610				4.7		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.: 280-176335-1 Analy Batch No.: 494886

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2020 16:16 Calibration End Date: 05/14/2020 20:56 Calibration ID: 44234

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								
Nitroglycerin	132151 128856	106184 127479	128084 121758	141489 128426	Ave		126803.331				7.9		20.0			
o-Nitrotoluene	252584 263350	272480 263733	320060 259206	290620 261684	Ave		272964.527				8.1		20.0			
p-Nitrotoluene	237944 205745	214531 233965	309222 235547	259042 231055	Ave		240881.296				13.2		20.0			
4-Amino-2,6-dinitrotoluene	316356 338348	374386 325764	441918 319452	324156 321498	Ave		345234.619				12.5		20.0			
m-Nitrotoluene	284364 280237	276523 288039	385215 286309	305554 280373	Ave		298326.800				12.1		20.0			
2-Amino-4,6-dinitrotoluene	449641 452344	413386 446609	577331 454954	473367 454056	Ave		465211.017				10.4		20.0			
1,3,5-Trinitrobenzene	473888 459025	432016 445838	531916 461195	509261 466466	Ave		472450.766				7.0		20.0			
2,6-Dinitrotoluene	+++++ 296084 293622	462869 294056	380618 294513	345209 297272	Lin2	4435.9560 4	289218.236							0.9990		0.9900
2,4-Dinitrotoluene	636653 610554 606816	669761 610082	743068 605778	672311 605997	Ave		640113.339				7.4		20.0			
Tetryl	368208 349575	394172 348927	403234 350489	384701 350116	Ave		368677.570				6.1		20.0			
2,4,6-Trinitrotoluene	399076 406271	460040 393653	565060 401302	430359 406644	Lin1	3158.0341 6	401610.023							0.9990		0.9900
PETN	135296 128081	+++++ 139434	204240 136840	132172 136576	Lin1	27366.023 2	129287.517							0.9980		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.: 280-176335-1 Analy Batch No.: 494886

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2020 16:16 Calibration End Date: 05/14/2020 20:56 Calibration ID: 44234

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								
1,2-Dinitrobenzene	249500 288347	337440 268080	374880 263961	306830 274673	Lin1	1839.02265	277228.024							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
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-176335-1 Analy Batch No.: 494886

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2020 16:16 Calibration End Date: 05/14/2020 20:56 Calibration ID: 44234

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-494886/15	05140015.D
Level 2	IC 280-494886/14	05140014.D
Level 3	IC 280-494886/13	05140013.D
Level 4	IC 280-494886/12	05140012.D
Level 5	IC 280-494886/11	05140011.D
Level 6	IC 280-494886/10	05140010.D
Level 7	IC 280-494886/9	05140009.D
Level 8	IC 280-494886/8	05140008.D
Level 9	IC 280-494886/7	05140007.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 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
2,6-diamino-4-nitrotoluene	Ave	161291	10106 272072	22969 424864	44739 946682	106754	0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2,4-diamino-6-nitrotoluene	Lin1	100170	9147 176663	16562 226554	33889 +++++	74938	0.400	0.0200 0.700	0.0500 1.00	0.100 +++++	0.250
Picric acid	Ave	68021	5683 118579	9462 174504	23170 +++++	48614	0.400	0.0250 0.700	0.0500 1.00	0.100 +++++	0.250
HMX	Lin2	74484	10018 125697	12646 183992	24294 439592	54065	0.400	0.0250 0.700	0.0500 1.00	0.100 2.50	0.250
RDX	Ave	88545	6286 152096	15119 219481	27233 550253	62626	0.400	0.0250 0.700	0.0500 1.00	0.100 2.50	0.250
Nitrobenzene	Ave	166107	10325 295388	28424 436359	42679 1054344	106064	0.402	0.0251 0.703	0.0502 1.00	0.100 2.51	0.251
3,5-Dinitroaniline	Lin2	190015	12305 320559	27916 495596	51716 1218279	130301	0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
1,3-Dinitrobenzene	Ave	258559	16280 463638	37161 669330	69012 1631331	172289	0.401	0.0251 0.701	0.0501 1.00	0.100 2.51	0.251
Nitroglycerin	Ave	509915	26546 852305	64042 1284256	141489 3221406	330378	4.00	0.250 7.00	0.500 10.0	1.00 25.0	2.50
o-Nitrotoluene	Ave	105493	6812 181444	16003 261684	29062 658375	63146	0.400	0.0250 0.700	0.0500 1.00	0.100 2.50	0.250
p-Nitrotoluene	Ave	93773	5374 165213	15492 231517	25956 515391	59605	0.401	0.0251 0.701	0.0501 1.00	0.100 2.51	0.251
4-Amino-2,6-dinitrotoluene	Ave	130436	9369 223840	22118 321819	32448 846716	79168	0.400	0.0250 0.701	0.0501 1.00	0.100 2.50	0.250
m-Nitrotoluene	Ave		6920	19280	30586	71162		0.0250	0.0501	0.100	0.250

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-176335-1 Analy Batch No.: 494886

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/14/2020 16:16 Calibration End Date: 05/14/2020 20:56 Calibration ID: 44234

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 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
		115331	200617	280653	701292		0.400	0.701	1.00	2.50	
2-Amino-4,6-dinitrotoluene	Ave	179358	10376 319742	28982 455872	47526 1135384	112860	0.402	0.0251 0.703	0.0502 1.00	0.100 2.51	0.251
1,3,5-Trinitrobenzene	Ave	178692	10822 323482	26649 467399	51028 1149858	118709	0.401	0.0251 0.701	0.0501 1.00	0.100 2.51	0.251
2,6-Dinitrotoluene	Lin2	+++++ 118093	11618 206984	19107 298461	34659 736990	74317	+++++ 0.402	0.0251 0.703	0.0502 1.00	0.100 2.51	0.251
2,4-Dinitrotoluene	Ave	7990 245009	16811 425741	37302 608421	67500 1523108	153249	0.0126 0.402	0.0251 0.703	0.0502 1.00	0.100 2.51	0.251
Tetryl	Ave	139850	9874 245833	20202 350816	38547 875686	92236	0.401	0.0251 0.701	0.0501 1.00	0.100 2.51	0.251
2,4,6-Trinitrotoluene	Lin1	158091	11547 282035	28366 408271	43208 1019741	100168	0.402	0.0251 0.703	0.0502 1.00	0.100 2.51	0.251
PETN	Lin1	557734	+++++ 957879	102120 1365764	132172 3202028	338241	4.00	+++++ 7.00	0.500 10.0	1.00 25.0	2.50
1,2-Dinitrobenzene	Lin1	107232	8436 184773	18744 274673	30683 720867	62375	0.400	0.0250 0.700	0.0500 1.00	0.100 2.50	0.250

Curve Type Legend

Ave = Average
Lin1 = Linear 1/conc
Lin2 = Linear 1/conc^2

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140007.D
Lims ID: IC FULL 9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 14-May-2020 16:16:43 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL 9
Misc. Info.: 280-0091518-007
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-May-2020 12:00:54 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0318

First Level Reviewer: zhangji Date: 14-May-2020 17:09:51

	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	4.302	4.366	-0.064	946682	2.50	2.21	M
	2 2,4-diamino-6-nitrotoluene	1	4.769	4.880	-0.111	410736	2.50	1.70	M
	5 2,4,6-Trinitrophenol	1	6.096	6.300	-0.204	359637	2.50	1.86	
	6 HMX	1	6.916	6.986	-0.070	439592	2.50	2.45	
	8 RDX	1	9.076	9.173	-0.097	550253	2.50	2.25	
	9 Nitrobenzene	1	11.995	12.106	-0.111	1054344	2.51	2.40	
$	10 1,2-Dinitrobenzene	1	12.949	13.040	-0.091	720867	2.50	2.59	
	11 3,5-Dinitroaniline	1	14.795	14.886	-0.091	1218279	2.50	2.51	a
	12 1,3-Dinitrobenzene	1	15.469	15.553	-0.084	1631331	2.51	2.42	
	13 Nitroglycerin	2	15.782	15.853	-0.071	3221406	25.0	25.4	
	14 o-Nitrotoluene	1	16.475	16.533	-0.058	658375	2.50	2.41	a
	15 p-Nitrotoluene	1	16.715	16.820	-0.105	515391	2.51	2.14	a
	16 4-Amino-2,6-dinitrotoluene	1	17.069	17.146	-0.077	846716	2.50	2.45	a
	17 m-Nitrotoluene	1	17.782	17.753	0.029	701292	2.50	2.35	Ma
	18 2-Amino-4,6-dinitrotoluene	1	17.935	18.046	-0.111	1135384	2.51	2.44	Ma
	19 1,3,5-Trinitrobenzene	1	18.829	18.886	-0.057	1149858	2.51	2.43	a
	20 2,6-Dinitrotoluene	1	19.742	19.806	-0.064	736990	2.51	2.53	a
	21 2,4-Dinitrotoluene	1	20.235	20.293	-0.058	1523108	2.51	2.38	a
	22 Tetryl	1	23.516	23.553	-0.037	875686	2.51	2.38	a
	23 2,4,6-Trinitrotoluene	1	24.616	24.653	-0.037	1019741	2.51	2.53	a
	24 PETN	2	25.269	25.280	-0.011	3202028	25.0	24.6	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8330IntermStk_00064	Amount Added: 250.00	Units: uL
8330_ADDs_00026	Amount Added: 125.00	Units: uL

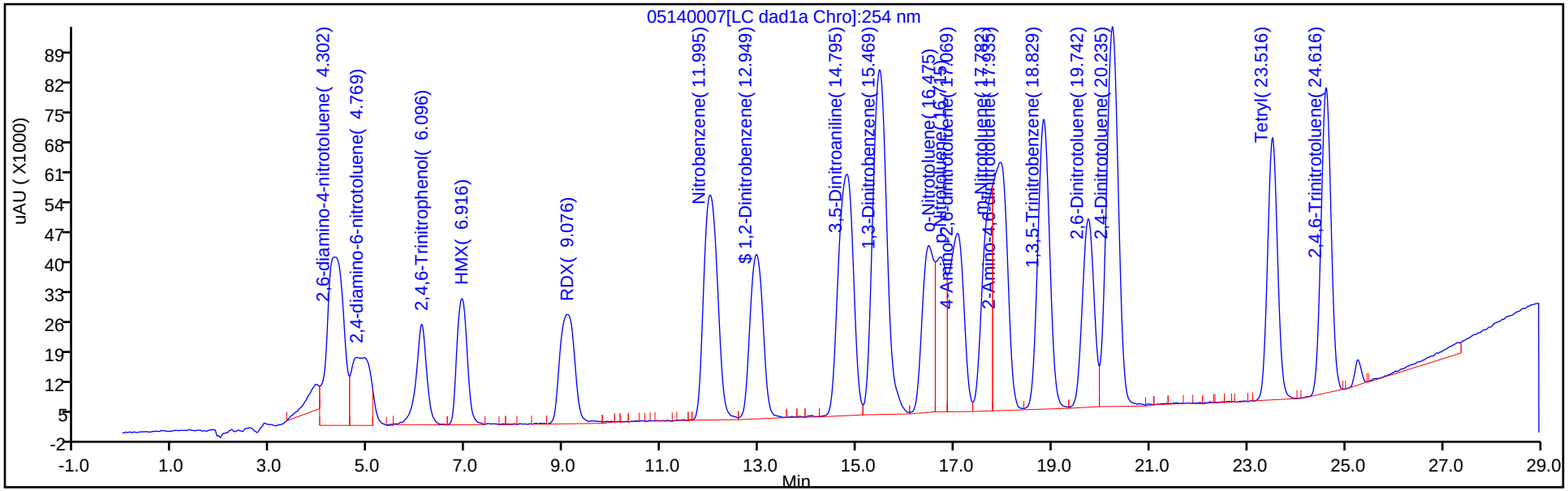
Report Date: 15-May-2020 12:00:54 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

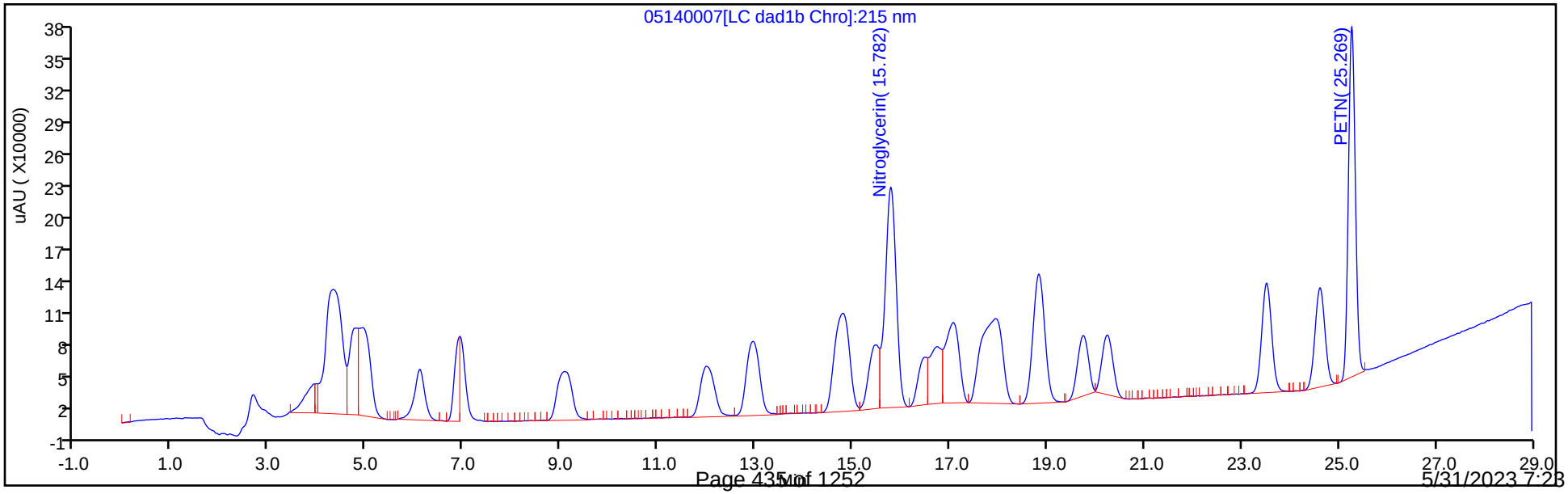
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d

Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC FULL 9			Worklist Smp#:	7
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 Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



5/31/2023 7:28 AM

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

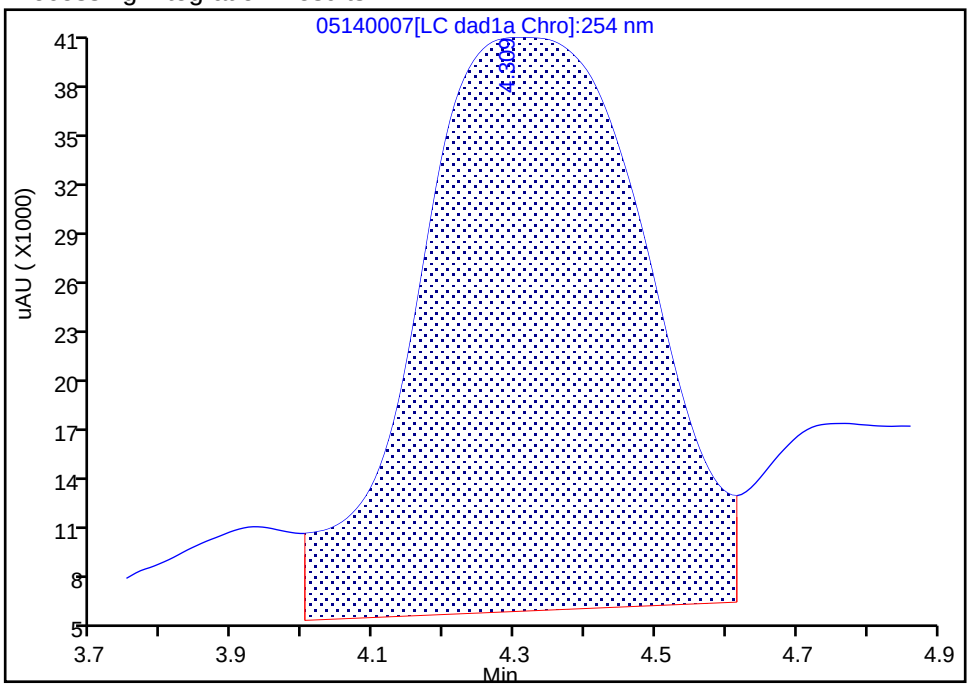
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

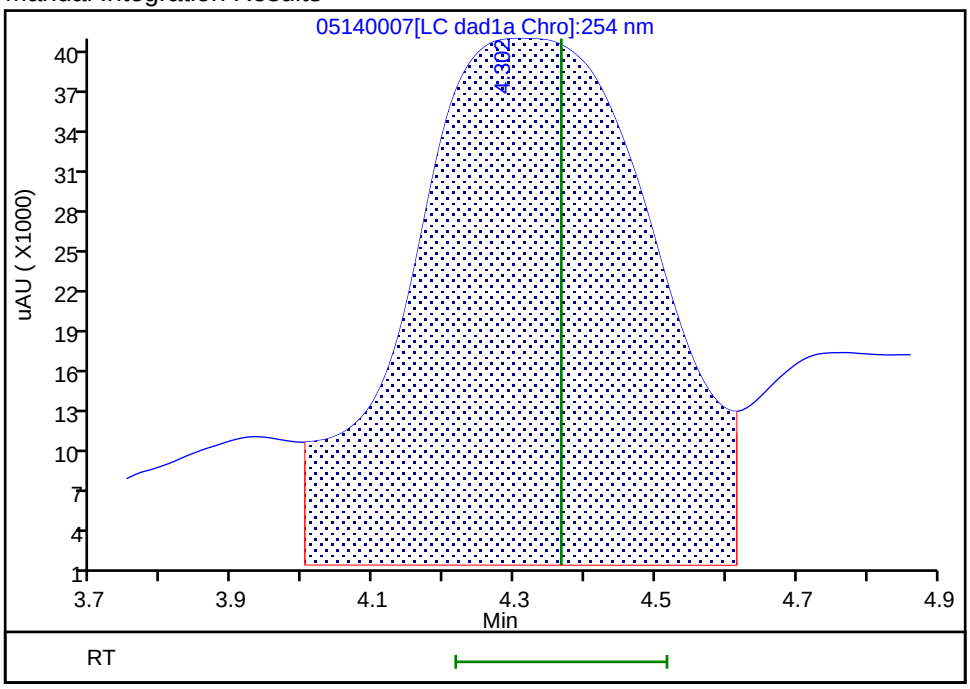
Processing Integration Results

RT: 4.31
Area: 782775
Amount: 1.780400
Amount Units: ug/ml



Manual Integration Results

RT: 4.30
Area: 946682
Amount: 2.205096
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:21:15
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

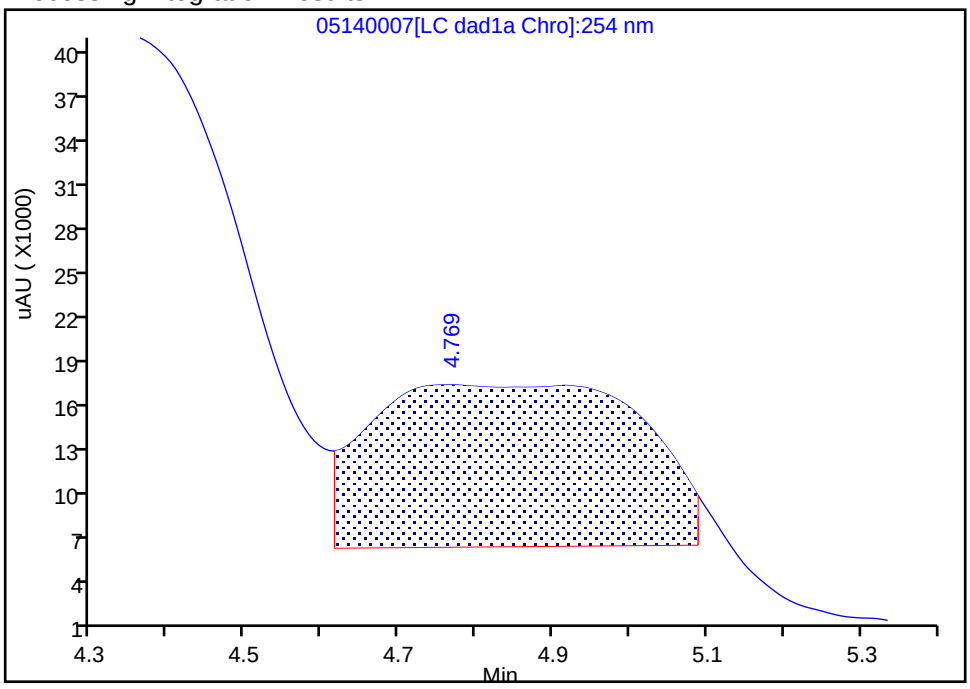
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

2 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

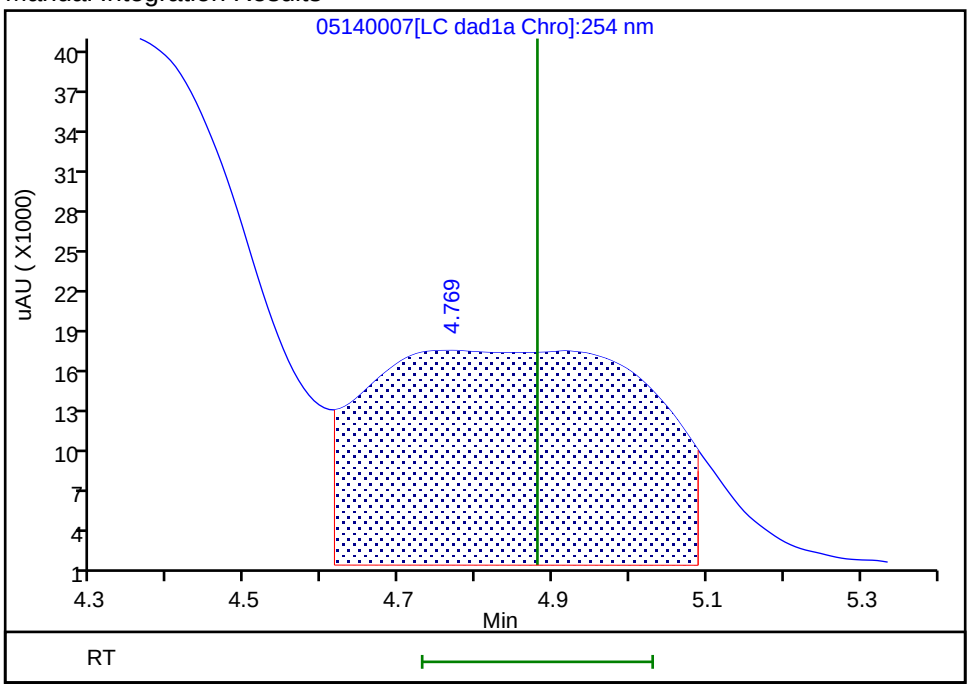
Processing Integration Results

RT: 4.77
Area: 265215
Amount: 1.351017
Amount Units: ug/ml



Manual Integration Results

RT: 4.77
Area: 410736
Amount: 1.704175
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:21:15
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

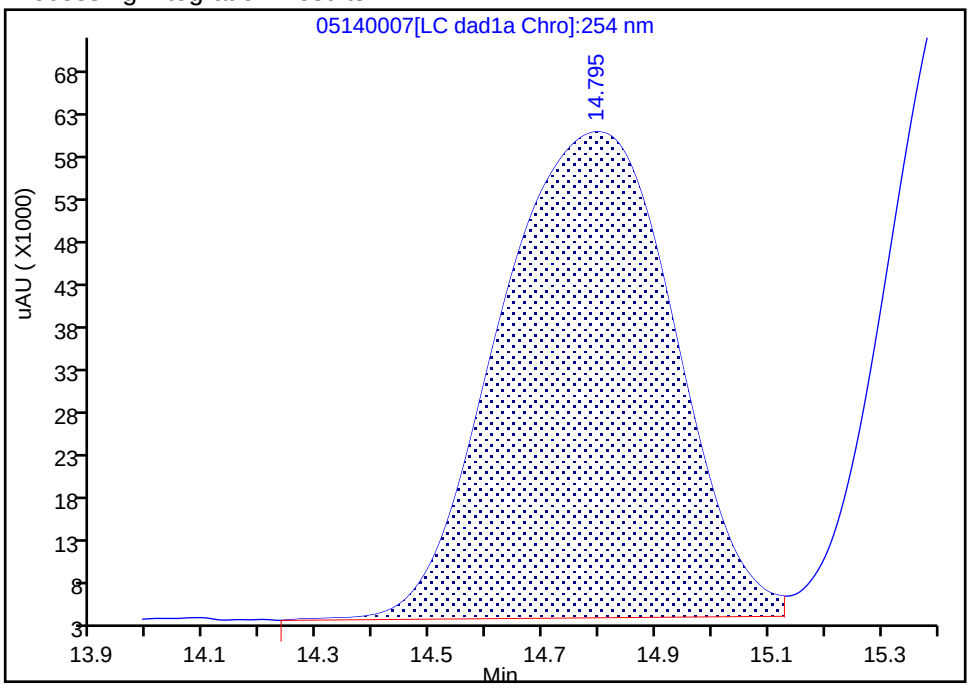
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d
Injection Date: 14-May-2020 16:16:43 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL 9
Client ID:
Operator ID: CB ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

11 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

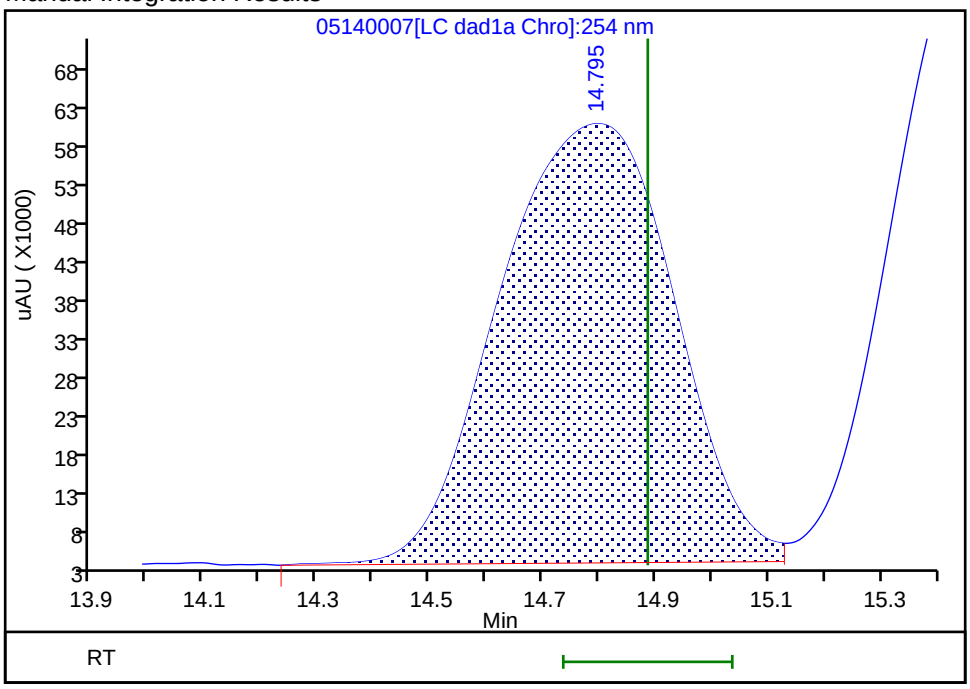
Processing Integration Results

RT: 14.80
Area: 1218279
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 14.80
Area: 1218279
Amount: 2.506192
Amount Units: ug/ml



Reviewer: zhangji, 14-May-2020 17:09:29
Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

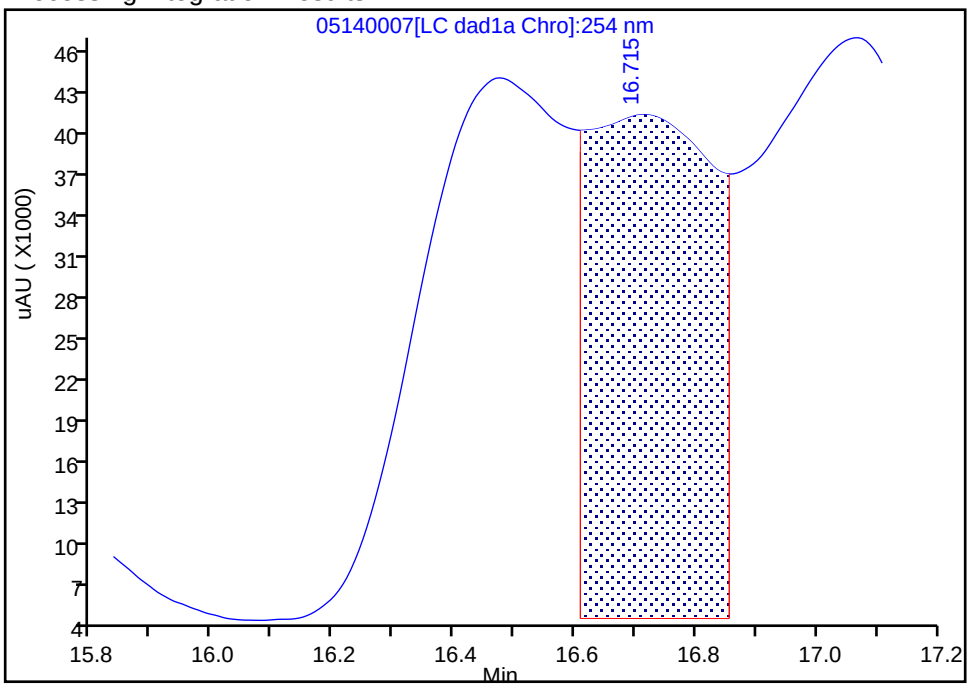
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

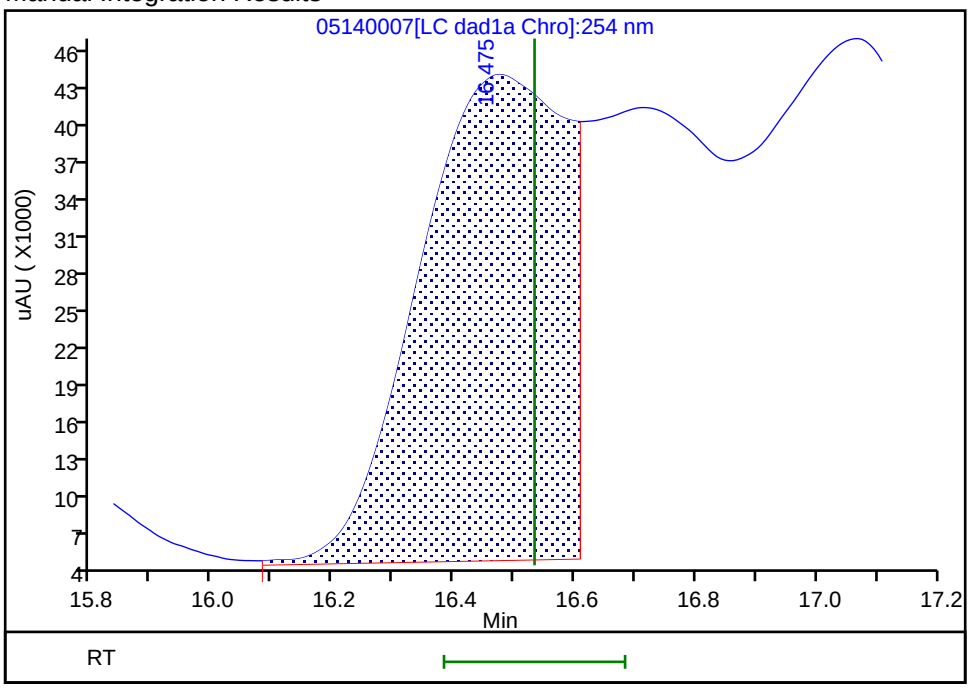
Processing Integration Results

RT: 16.72
Area: 515391
Amount: 1.955872
Amount Units: ug/ml



Manual Integration Results

RT: 16.48
Area: 658375
Amount: 2.411943
Amount Units: ug/ml



Reviewer: zhangji, 14-May-2020 17:09:15

Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

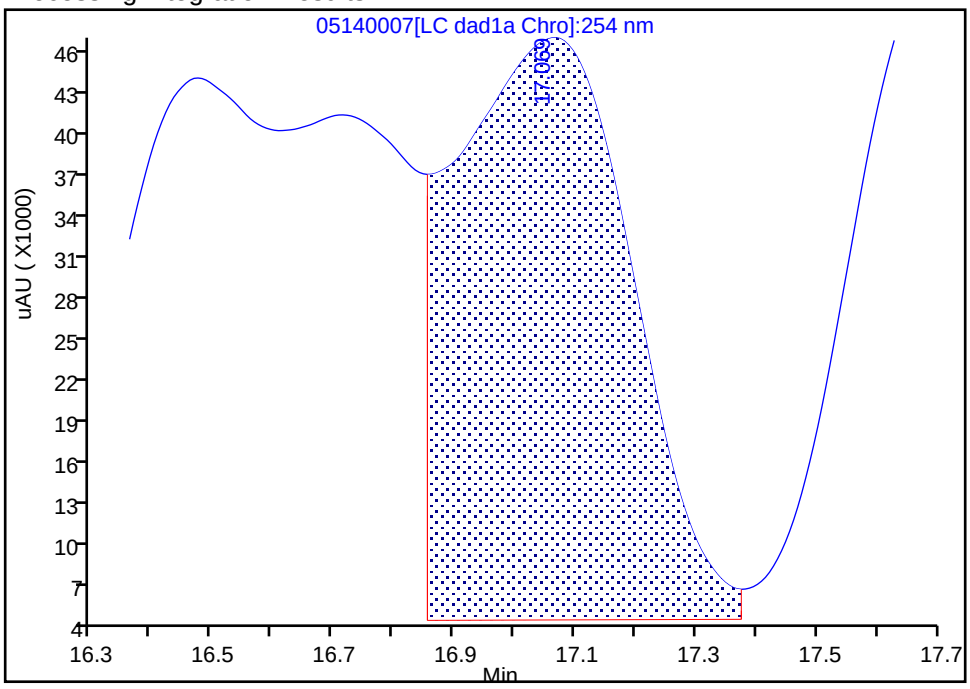
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

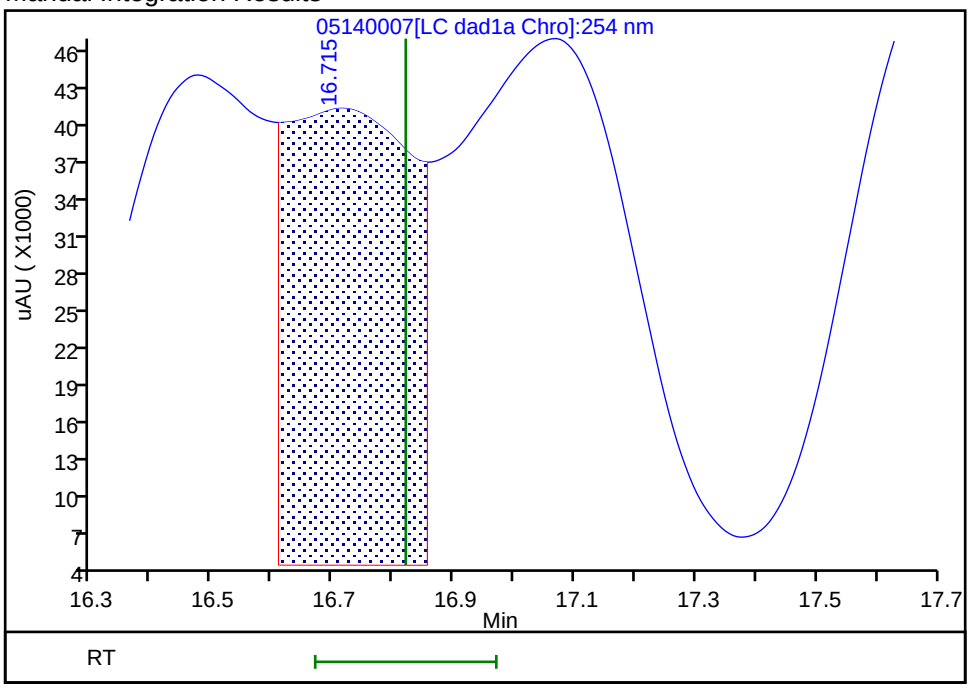
Processing Integration Results

RT: 17.07
Area: 846716
Amount: 4.099164
Amount Units: ug/ml



Manual Integration Results

RT: 16.72
Area: 515391
Amount: 2.139606
Amount Units: ug/ml



Reviewer: zhangji, 14-May-2020 17:09:12

Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

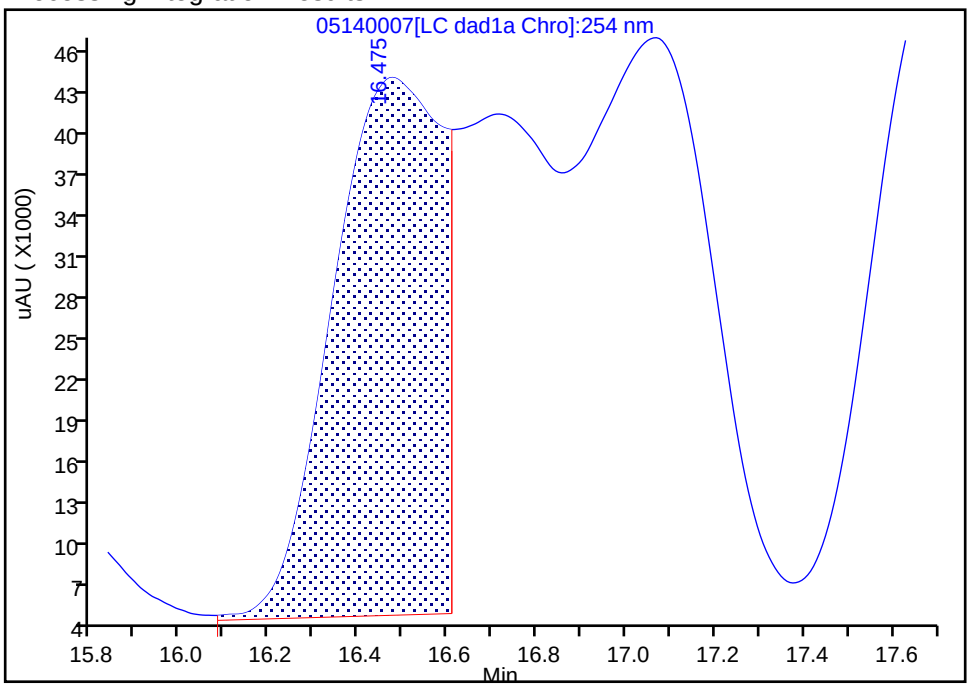
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

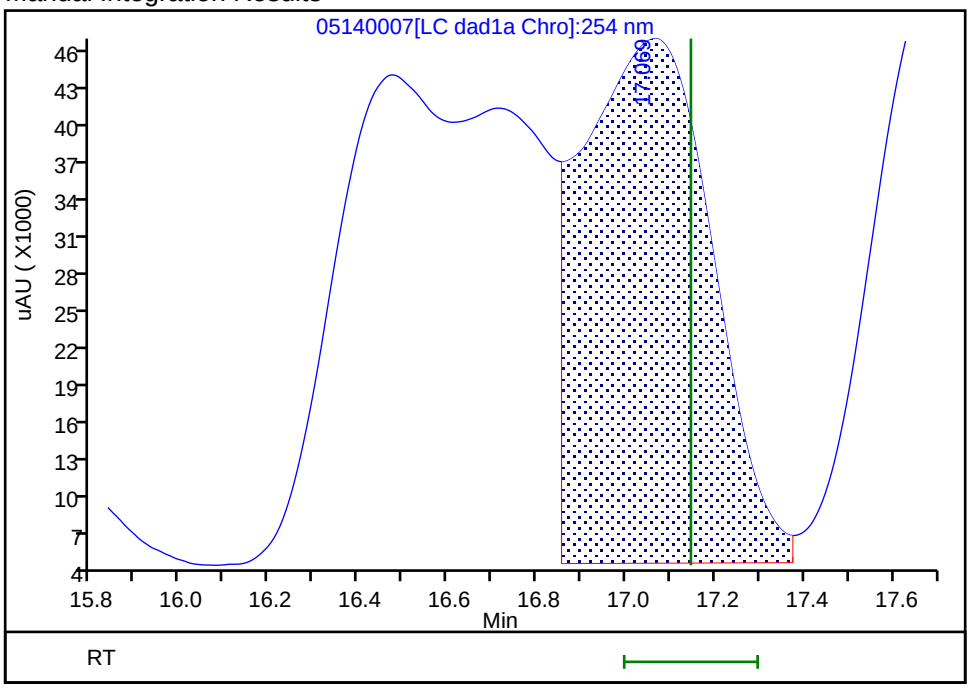
Processing Integration Results

RT: 16.48
Area: 658375
Amount: 2.145710
Amount Units: ug/ml



Manual Integration Results

RT: 17.07
Area: 846716
Amount: 2.452581
Amount Units: ug/ml



Reviewer: zhangji, 14-May-2020 17:08:59

Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

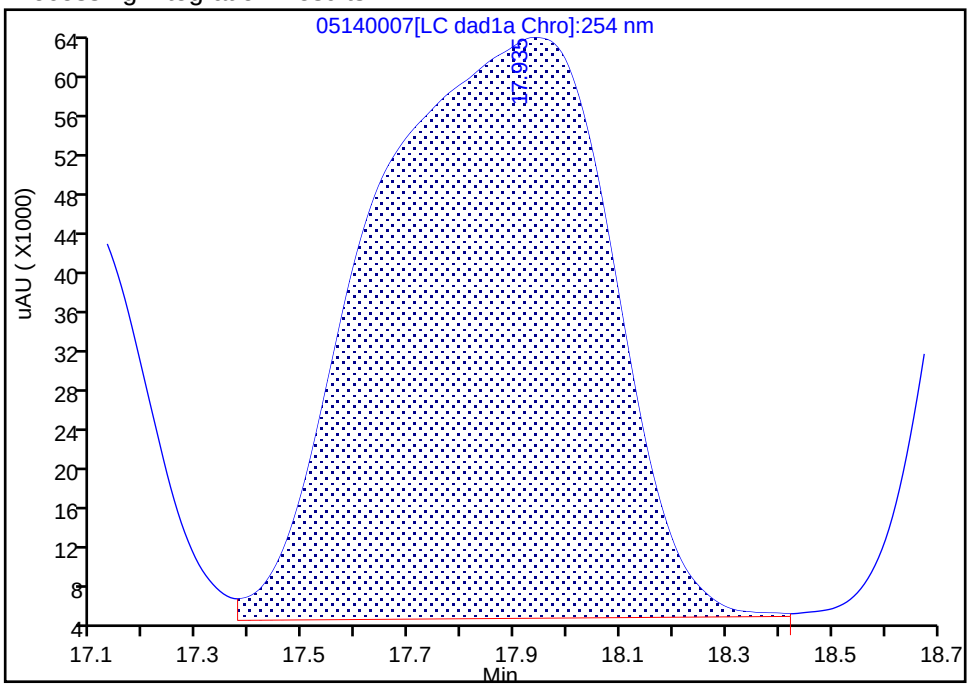
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

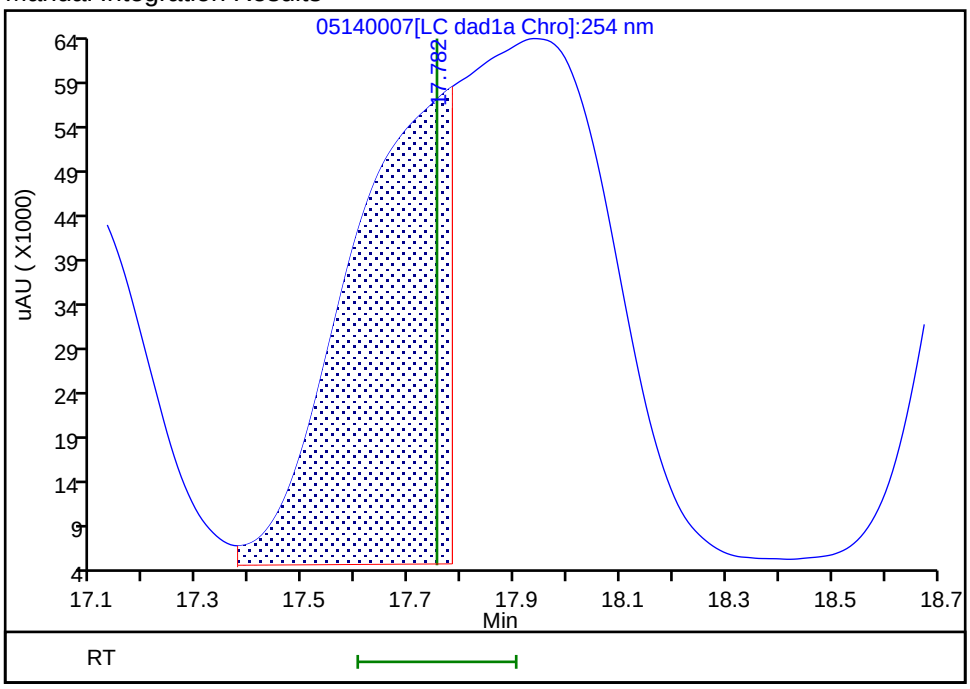
Processing Integration Results

RT: 17.94
Area: 1836650
Amount: 6.513789
Amount Units: ug/ml



Manual Integration Results

RT: 17.78
Area: 701292
Amount: 2.350751
Amount Units: ug/ml



Reviewer: zhangji, 14-May-2020 17:08:45

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

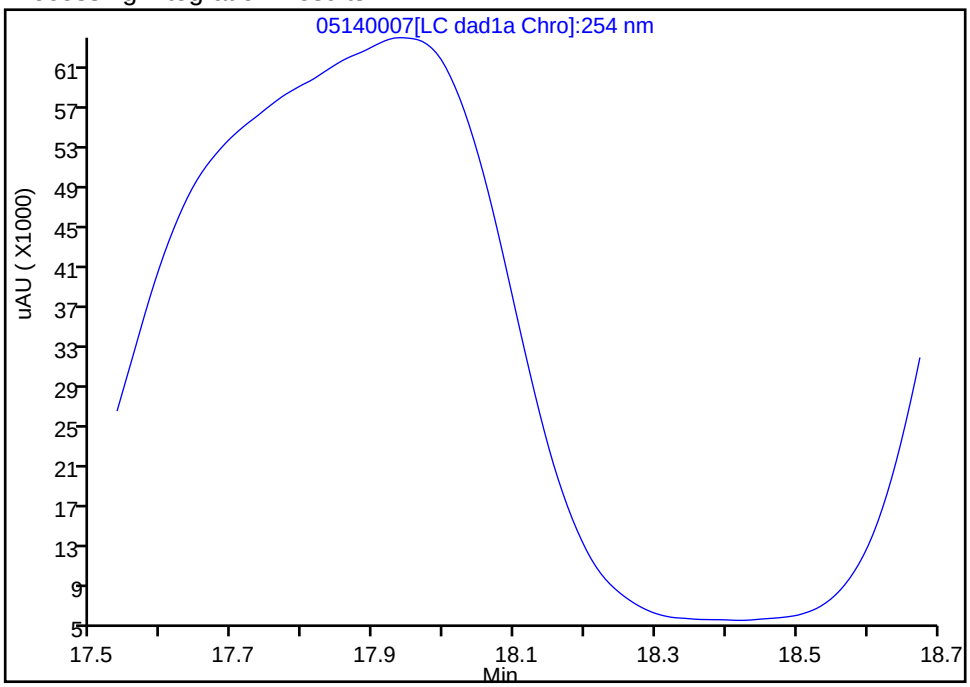
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

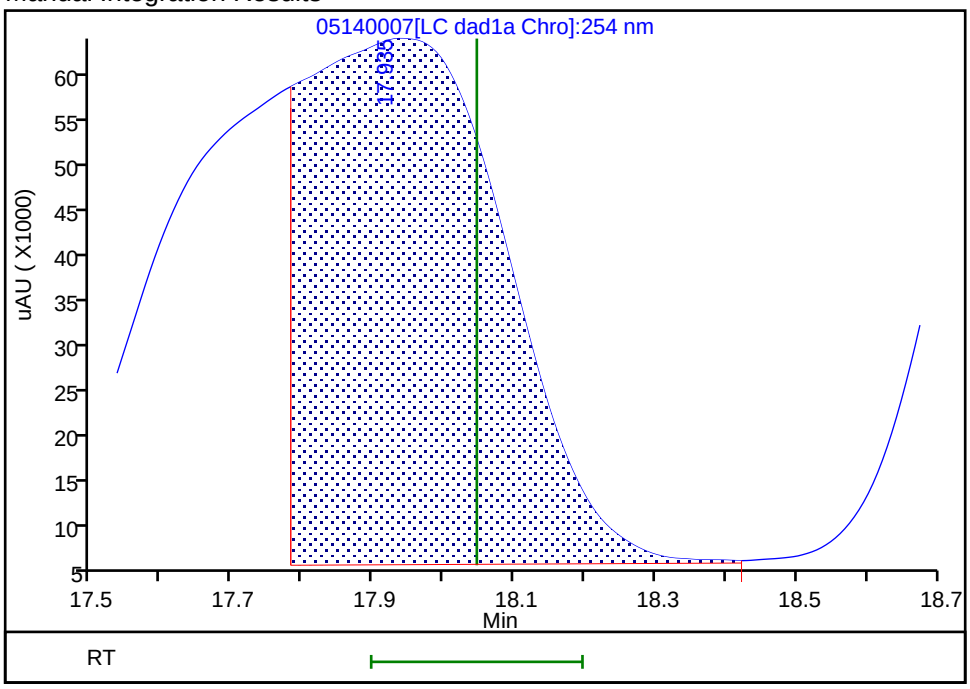
Not Detected
Expected RT: 18.05

Processing Integration Results



Manual Integration Results

RT: 17.94
Area: 1135384
Amount: 2.440578
Amount Units: ug/ml



Reviewer: zhangji, 14-May-2020 17:08:40
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

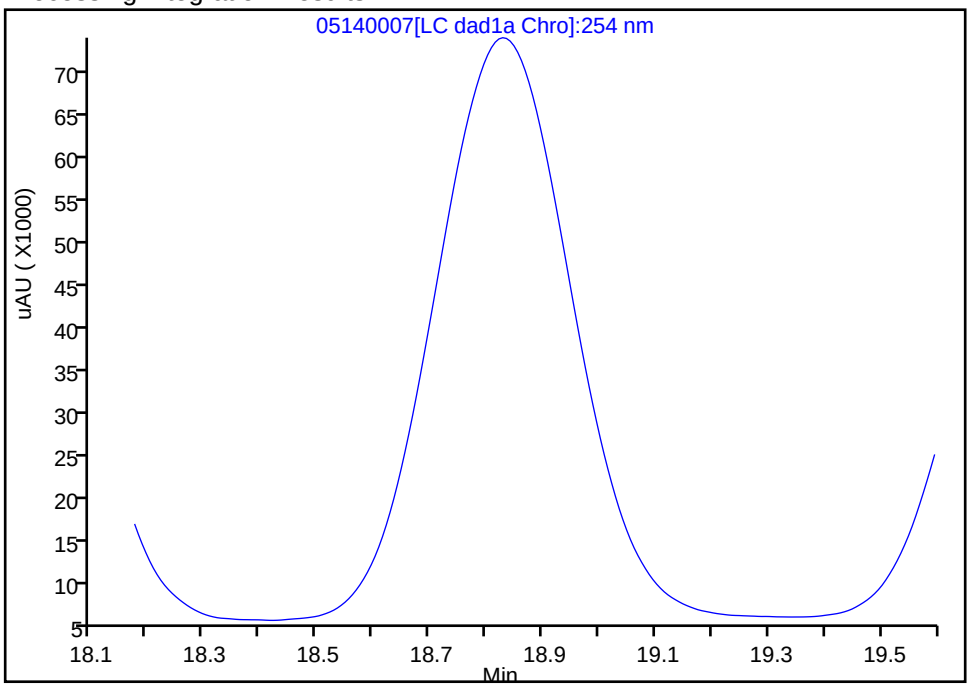
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d
Injection Date: 14-May-2020 16:16:43 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL 9
Client ID:
Operator ID: CB ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

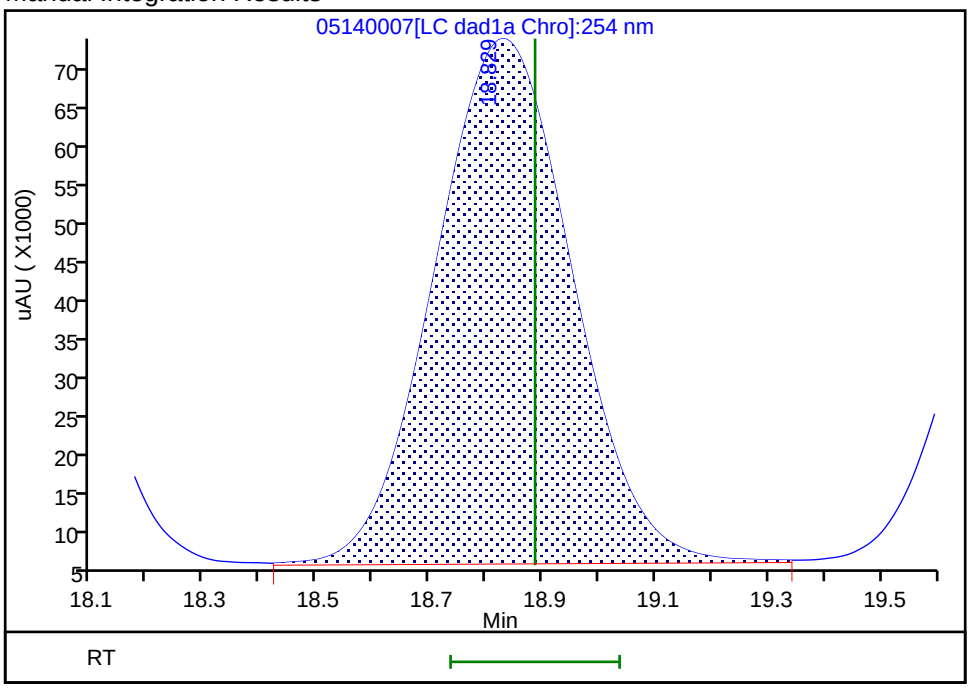
Not Detected
Expected RT: 18.89

Processing Integration Results



Manual Integration Results

RT: 18.83
Area: 1149858
Amount: 2.433816
Amount Units: ug/ml



Reviewer: zhangji, 14-May-2020 17:08:26
Audit Action: Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

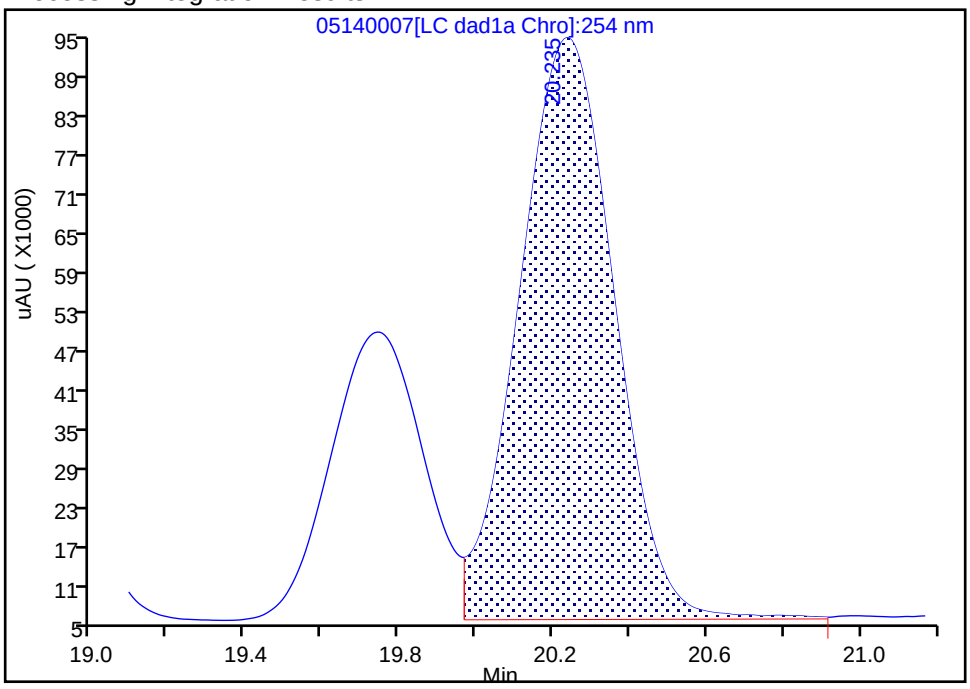
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

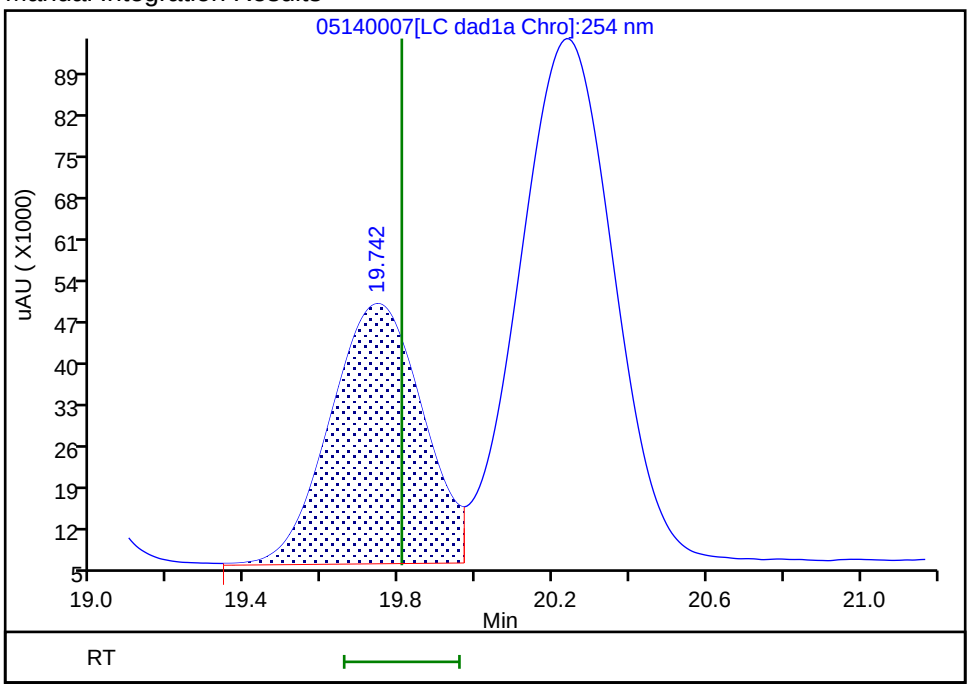
Processing Integration Results

RT: 20.24
Area: 1523108
Amount: 2.510000
Amount Units: ug/ml



Manual Integration Results

RT: 19.74
Area: 736990
Amount: 2.532876
Amount Units: ug/ml



Reviewer: zhangji, 14-May-2020 17:08:23
Audit Action: Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

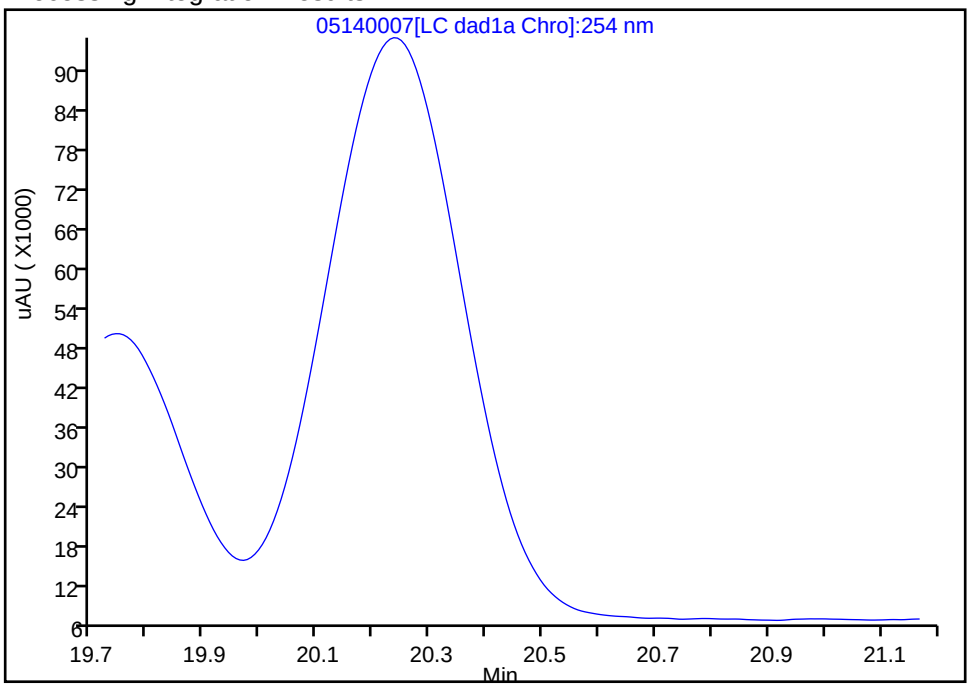
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

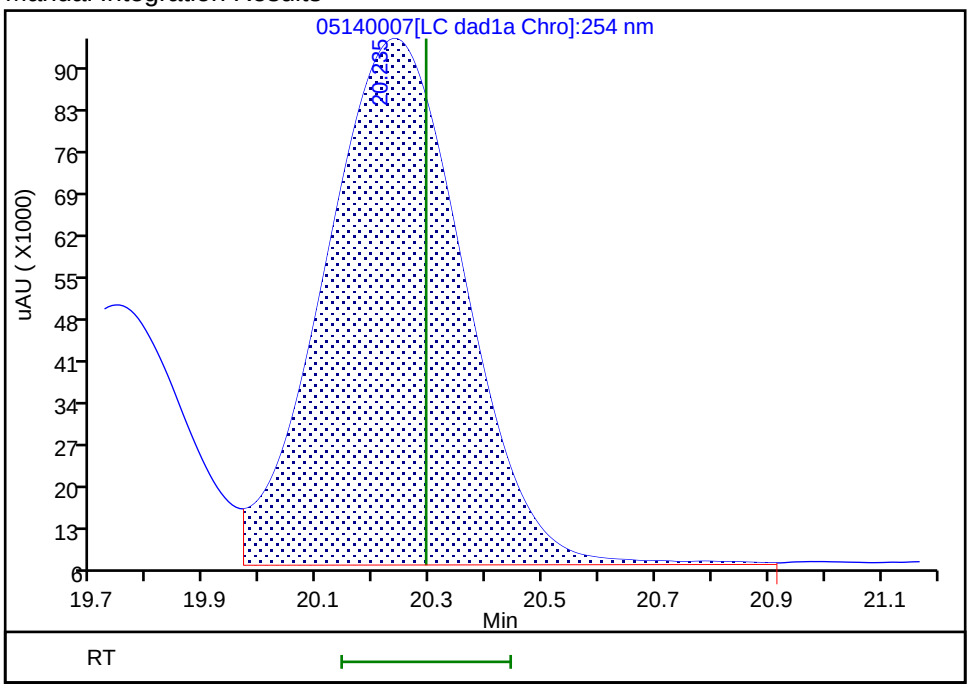
Not Detected
Expected RT: 20.29

Processing Integration Results



Manual Integration Results

RT: 20.24
Area: 1523108
Amount: 2.379435
Amount Units: ug/ml



Reviewer: zhangji, 14-May-2020 17:08:20
Audit Action: Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

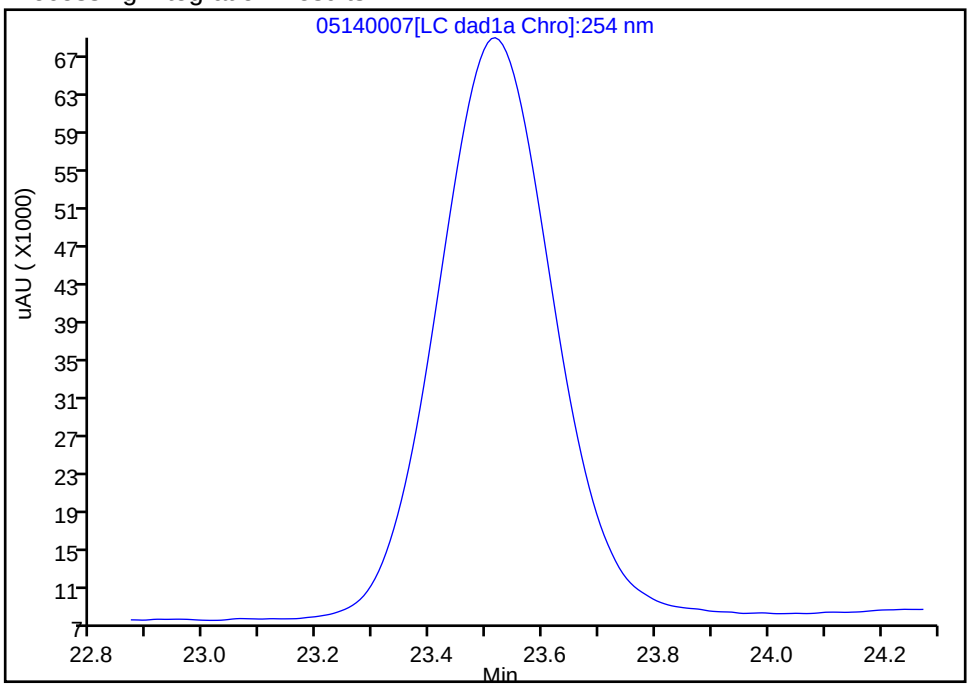
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

22 Tetryl, CAS: 479-45-8

Signal: 1

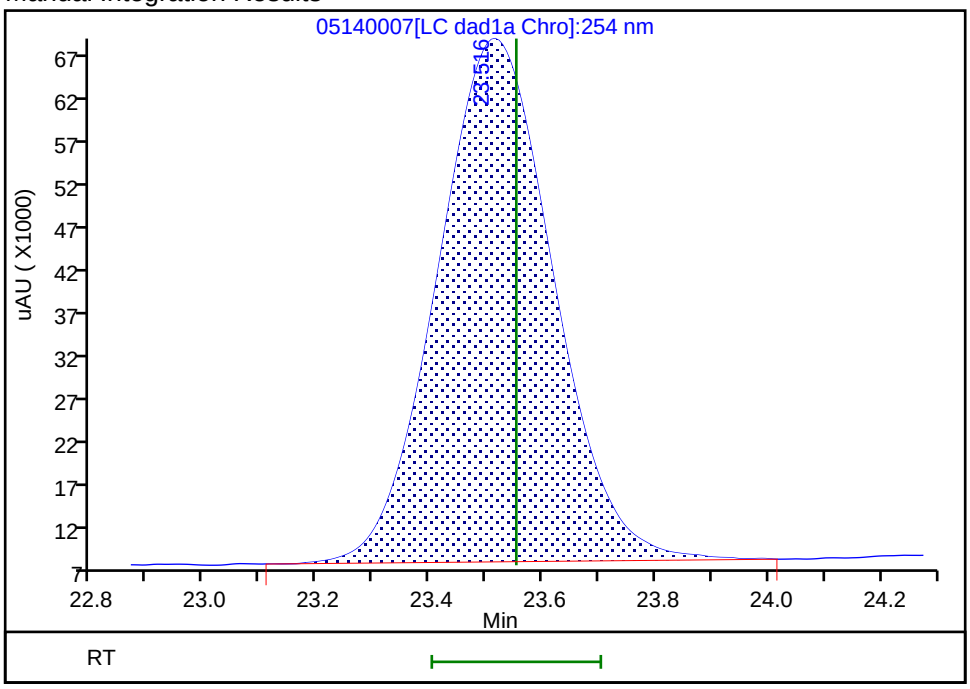
Not Detected
Expected RT: 23.55

Processing Integration Results



Manual Integration Results

RT: 23.52
Area: 875686
Amount: 2.375208
Amount Units: ug/ml



Reviewer: zhangji, 14-May-2020 17:08:11
Audit Action: Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

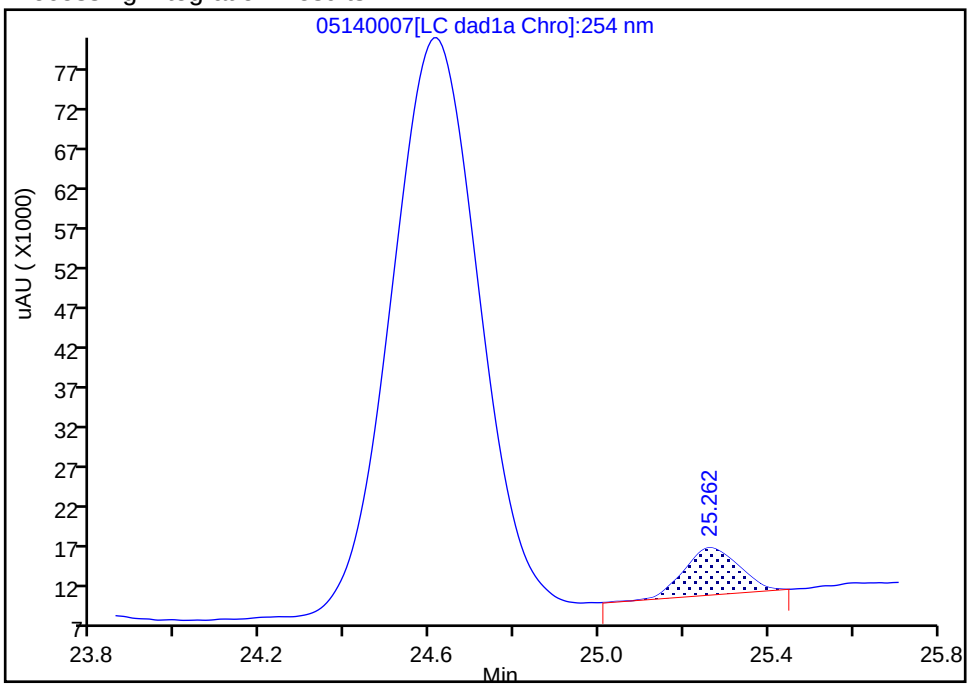
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140007.d				
Injection Date:	14-May-2020 16:16:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 9				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

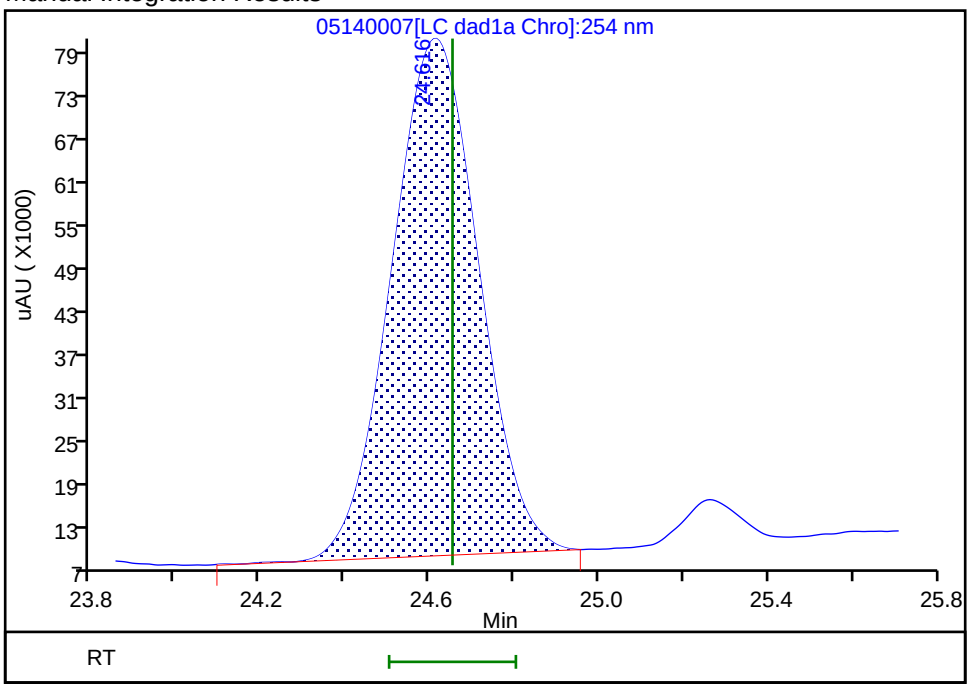
Processing Integration Results

RT: 25.26
Area: 53117
Amount: 0.098897
Amount Units: ug/ml



Manual Integration Results

RT: 24.62
Area: 1019741
Amount: 2.531269
Amount Units: ug/ml



Reviewer: zhangji, 14-May-2020 17:08:08
Audit Action: Assigned Compound ID Audit Reason:

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140008.D
Lims ID: IC FULL 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 14-May-2020 16:51:43 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL 8
Misc. Info.: 280-0091518-008
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-May-2020 12:00:55 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0318

First Level Reviewer: zhangji Date: 15-May-2020 11:19:25

	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	4.315	4.366	-0.051	424864	1.00	0.9896	M
	2 2,4-diamino-6-nitrotoluene	1	4.908	4.880	0.028	226554	1.00	0.9296	M
	5 2,4,6-Trinitrophenol	1	6.195	6.300	-0.105	174504	1.00	0.9004	
	6 HMX	1	6.968	6.986	-0.018	183992	1.00	1.01	
	8 RDX	1	9.148	9.173	-0.025	219481	1.00	0.8982	
	9 Nitrobenzene	1	12.088	12.106	-0.018	436359	1.00	0.99	
$	10 1,2-Dinitrobenzene	1	13.028	13.040	-0.012	274673	1.00	0.9842	M
	11 3,5-Dinitroaniline	1	14.868	14.886	-0.018	495596	1.00	1.02	
	12 1,3-Dinitrobenzene	1	15.541	15.553	-0.012	669330	1.00	0.99	
	13 Nitroglycerin	2	15.848	15.853	-0.005	1284256	10.0	10.1	
	14 o-Nitrotoluene	1	16.535	16.533	0.002	261684	1.00	0.9587	
	15 p-Nitrotoluene	1	16.815	16.820	-0.005	231517	1.00	0.9611	
	16 4-Amino-2,6-dinitrotoluene	1	17.141	17.146	-0.005	321819	1.00	0.9322	
	17 m-Nitrotoluene	1	17.741	17.753	-0.012	280653	1.00	0.9408	
	18 2-Amino-4,6-dinitrotoluene	1	18.028	18.046	-0.018	455872	1.00	0.9799	
	19 1,3,5-Trinitrobenzene	1	18.881	18.886	-0.005	467399	1.00	0.9893	
	20 2,6-Dinitrotoluene	1	19.801	19.806	-0.005	298461	1.00	1.02	
	21 2,4-Dinitrotoluene	1	20.288	20.293	-0.005	608421	1.00	0.9505	
	22 Tetryl	1	23.555	23.553	0.002	350816	1.00	0.9516	
	23 2,4,6-Trinitrotoluene	1	24.648	24.653	-0.005	408271	1.00	1.01	
	24 PETN	2	25.281	25.280	0.001	1365764	10.0	10.4	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00064	Amount Added: 100.00	Units: uL
8330_ADDs_00026	Amount Added: 50.00	Units: uL

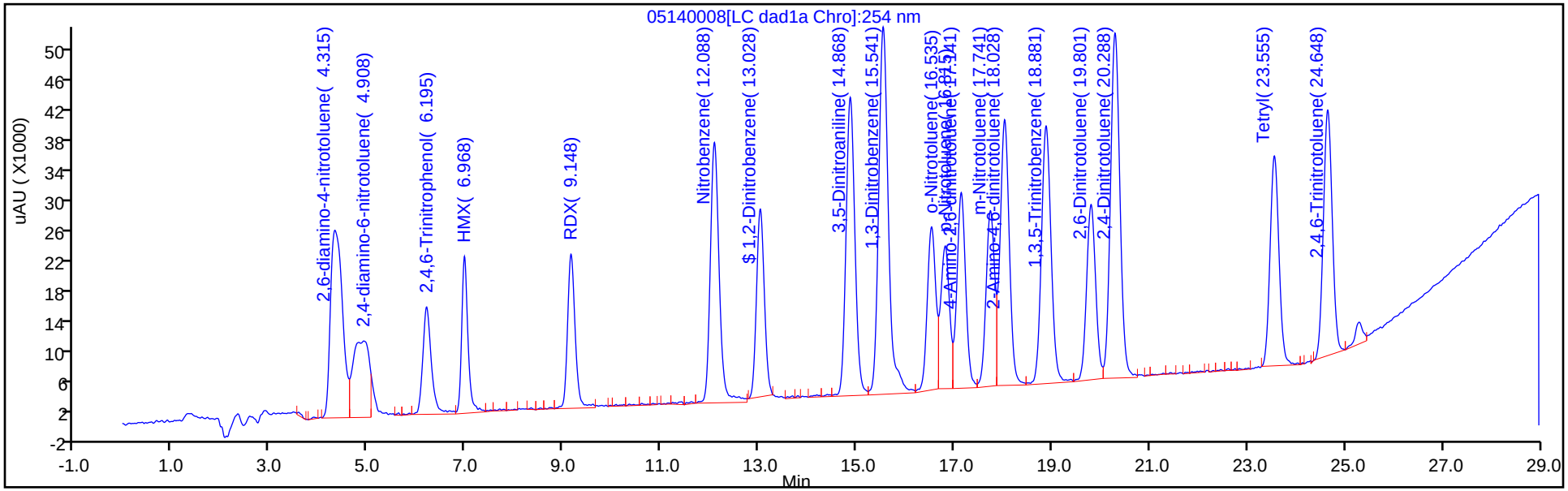
Report Date: 15-May-2020 12:00:55 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

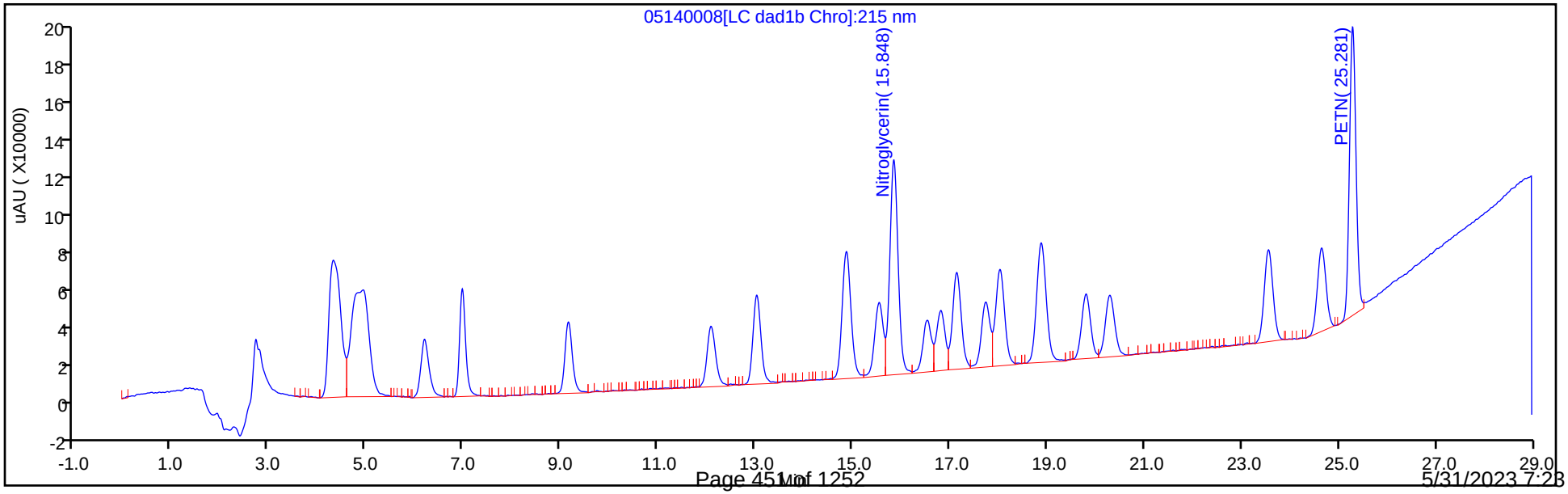
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Injection Date:	14-May-2020 16:51:43	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC FULL 8			Worklist Smp#:	8
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

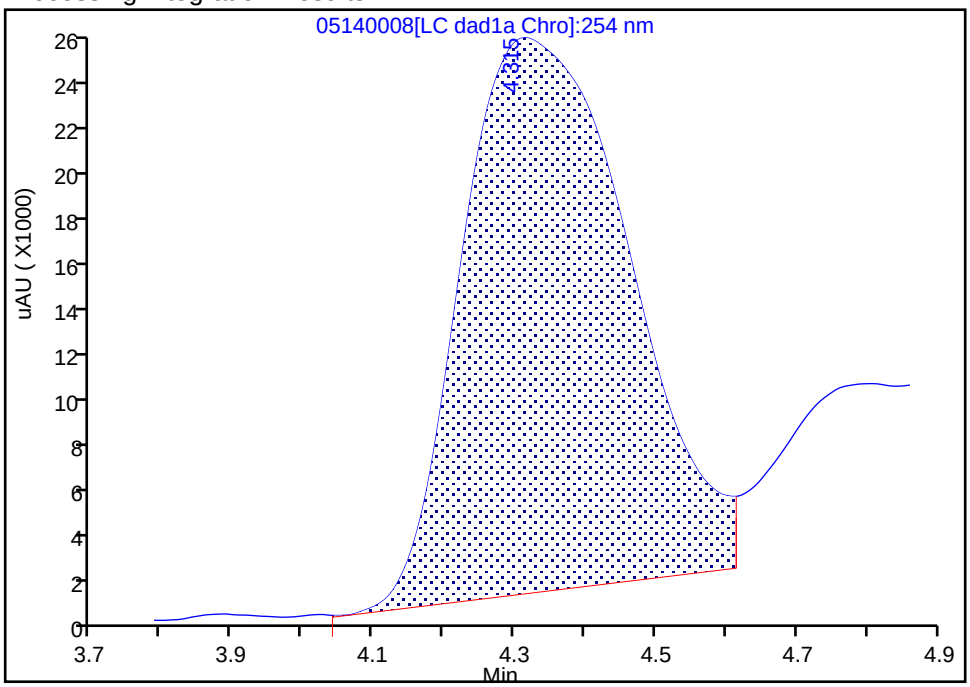
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Lims ID:	IC FULL 8				
Client ID:					
Operator ID:	CB	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

1 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

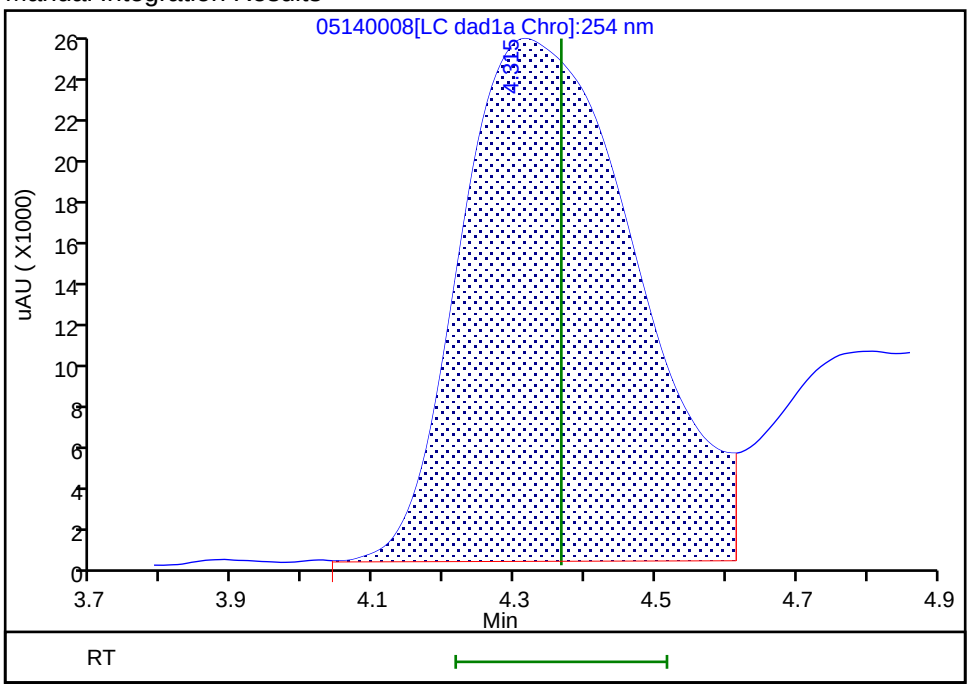
Processing Integration Results

RT: 4.31
Area: 390739
Amount: 0.900341
Amount Units: ug/ml



Manual Integration Results

RT: 4.31
Area: 424864
Amount: 0.989631
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:19:02
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

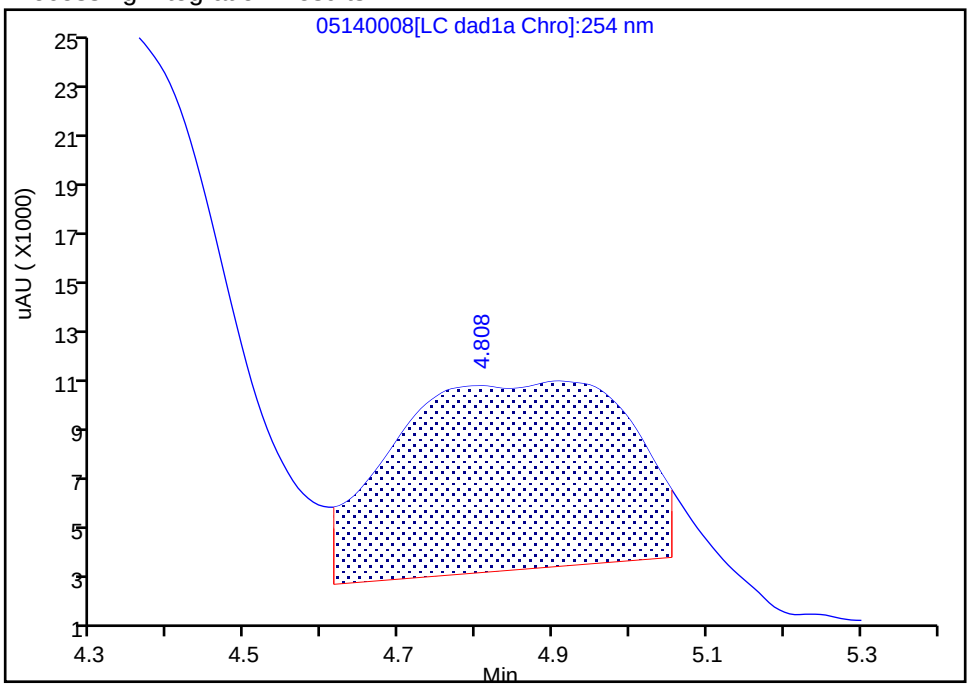
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Injection Date:	14-May-2020 16:51:43	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 8				
Client ID:					
Operator ID:	CB	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

2 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

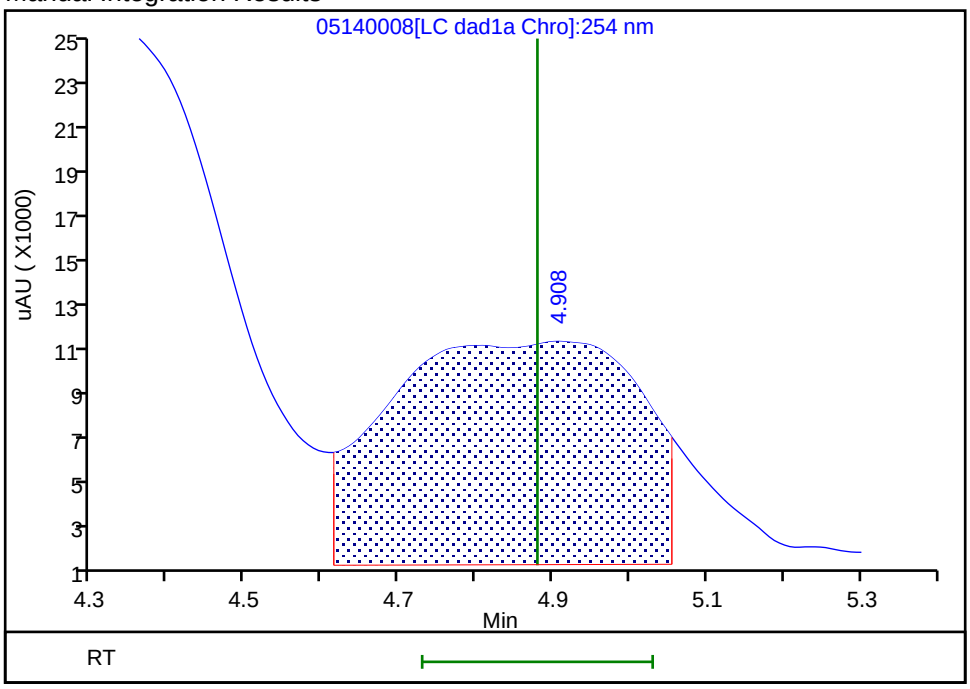
Processing Integration Results

RT: 4.81
Area: 160171
Amount: 0.492769
Amount Units: ug/ml



Manual Integration Results

RT: 4.91
Area: 226554
Amount: 0.929552
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:19:02
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

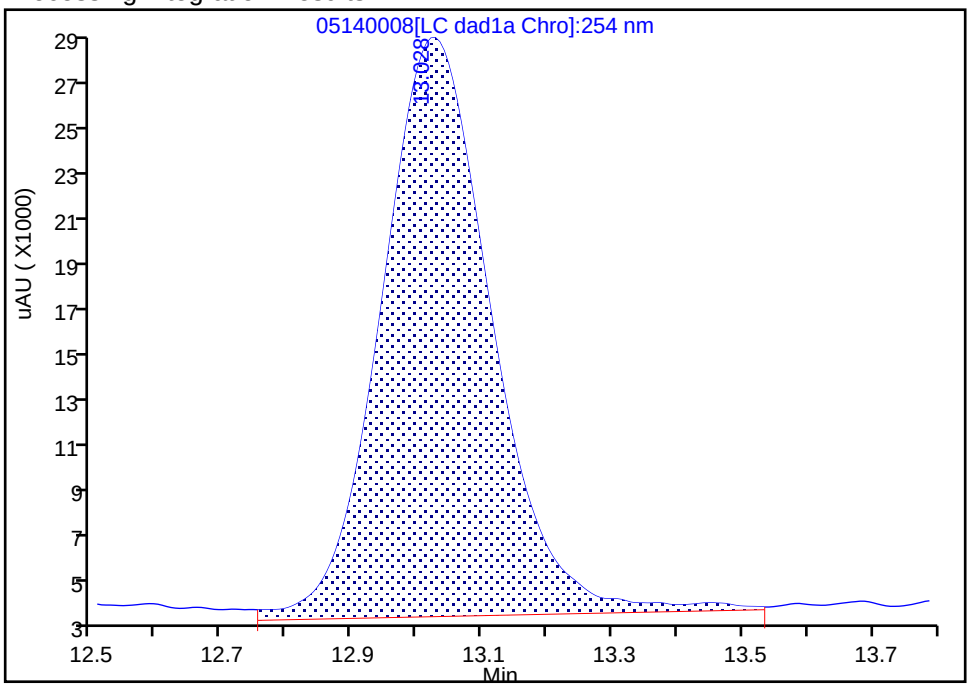
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Lims ID:	IC FULL 8				
Client ID:					
Operator ID:	CB	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

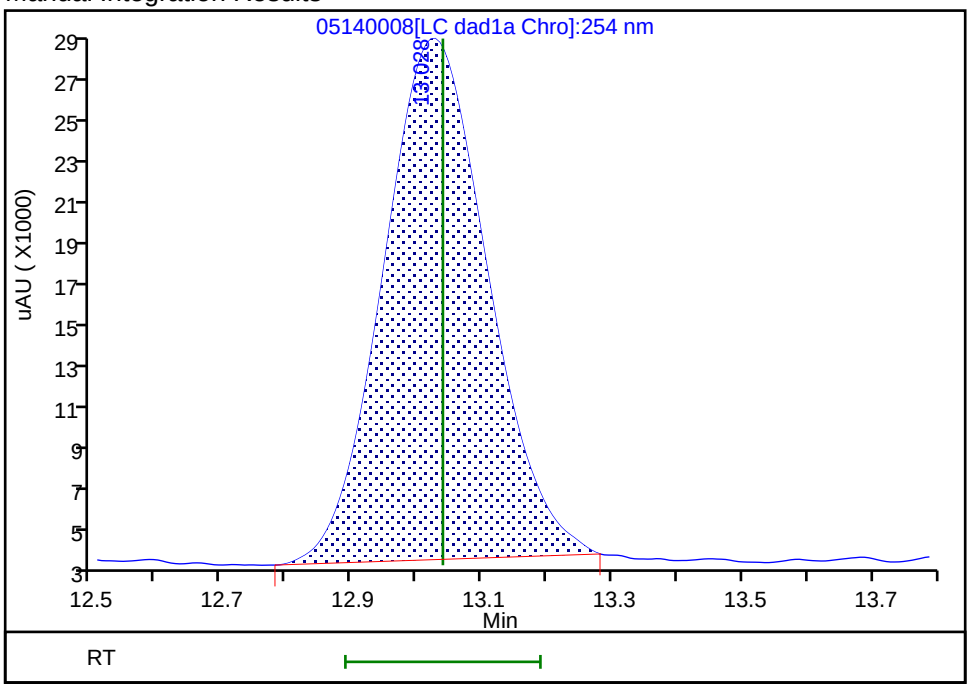
Processing Integration Results

RT: 13.03
Area: 297550
Amount: 0.923853
Amount Units: ug/ml



Manual Integration Results

RT: 13.03
Area: 274673
Amount: 0.984150
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:34:32

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140009.D
Lims ID: IC FULL 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 14-May-2020 17:26:40 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL 7
Misc. Info.: 280-0091518-009
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-May-2020 12:00:55 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0318

First Level Reviewer: zhangji Date: 15-May-2020 11:20:09

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	4.342	4.366	-0.024	272072	0.7000	0.6337	
2 2,4-diamino-6-nitrotoluene	1	4.915	4.880	0.035	176663	0.7000	0.7197	
5 2,4,6-Trinitrophenol	1	6.235	6.300	-0.065	118579	0.7000	0.6118	
6 HMX	1	6.982	6.986	-0.004	125697	0.7000	0.6800	
8 RDX	1	9.162	9.173	-0.011	152096	0.7000	0.6224	
9 Nitrobenzene	1	12.095	12.106	-0.011	295388	0.7028	0.6725	
$ 10 1,2-Dinitrobenzene	1	13.028	13.040	-0.012	184773	0.7000	0.6599	M
11 3,5-Dinitroaniline	1	14.875	14.886	-0.011	320559	0.7000	0.6552	
12 1,3-Dinitrobenzene	1	15.548	15.553	-0.005	463638	0.7014	0.6877	
13 Nitroglycerin	2	15.842	15.853	-0.011	852305	7.00	6.72	
14 o-Nitrotoluene	1	16.535	16.533	0.002	181444	0.7000	0.6647	
15 p-Nitrotoluene	1	16.808	16.820	-0.012	165213	0.7014	0.6859	
16 4-Amino-2,6-dinitrotoluene	1	17.142	17.146	-0.004	223840	0.7007	0.6484	
17 m-Nitrotoluene	1	17.742	17.753	-0.011	200617	0.7007	0.6725	
18 2-Amino-4,6-dinitrotoluene	1	18.035	18.046	-0.011	319742	0.7028	0.6873	
19 1,3,5-Trinitrobenzene	1	18.875	18.886	-0.011	323482	0.7014	0.6847	
20 2,6-Dinitrotoluene	1	19.795	19.806	-0.011	206984	0.7028	0.7003	
21 2,4-Dinitrotoluene	1	20.288	20.293	-0.005	425741	0.7028	0.6651	
22 Tetryl	1	23.542	23.553	-0.011	245833	0.7014	0.6668	
23 2,4,6-Trinitrotoluene	1	24.642	24.653	-0.011	282035	0.7028	0.6944	
24 PETN	2	25.275	25.280	-0.005	957879	7.00	7.20	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00026	Amount Added:	35.00	Units: uL
8330IntermStk_00064	Amount Added:	70.00	Units: uL

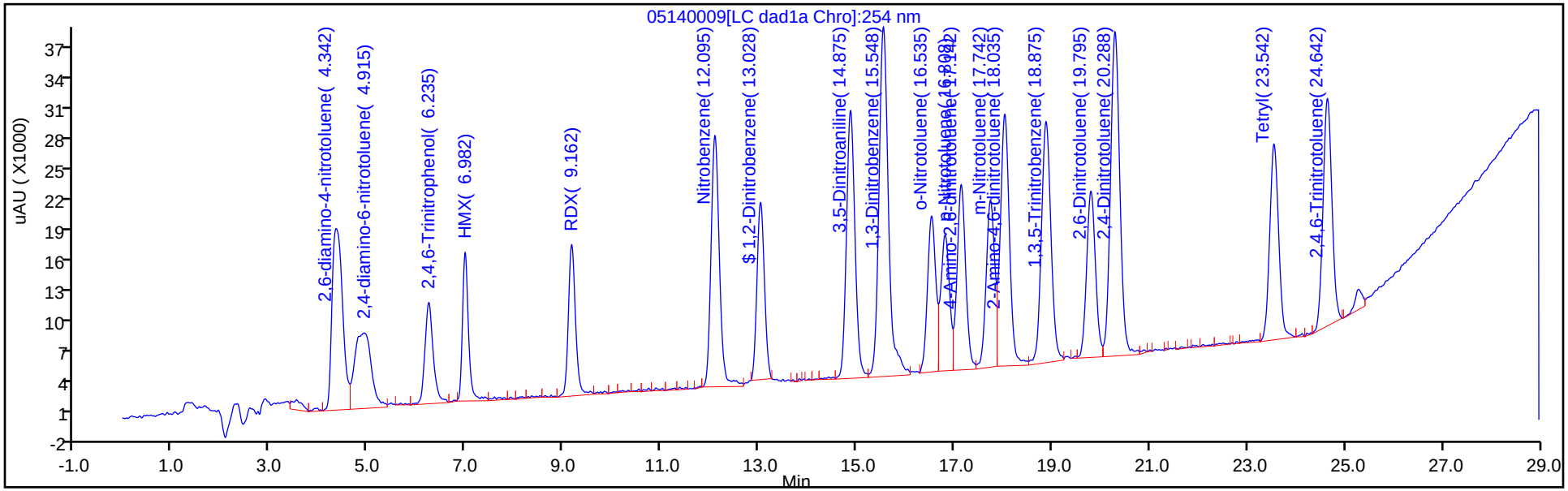
Report Date: 15-May-2020 12:00:55 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

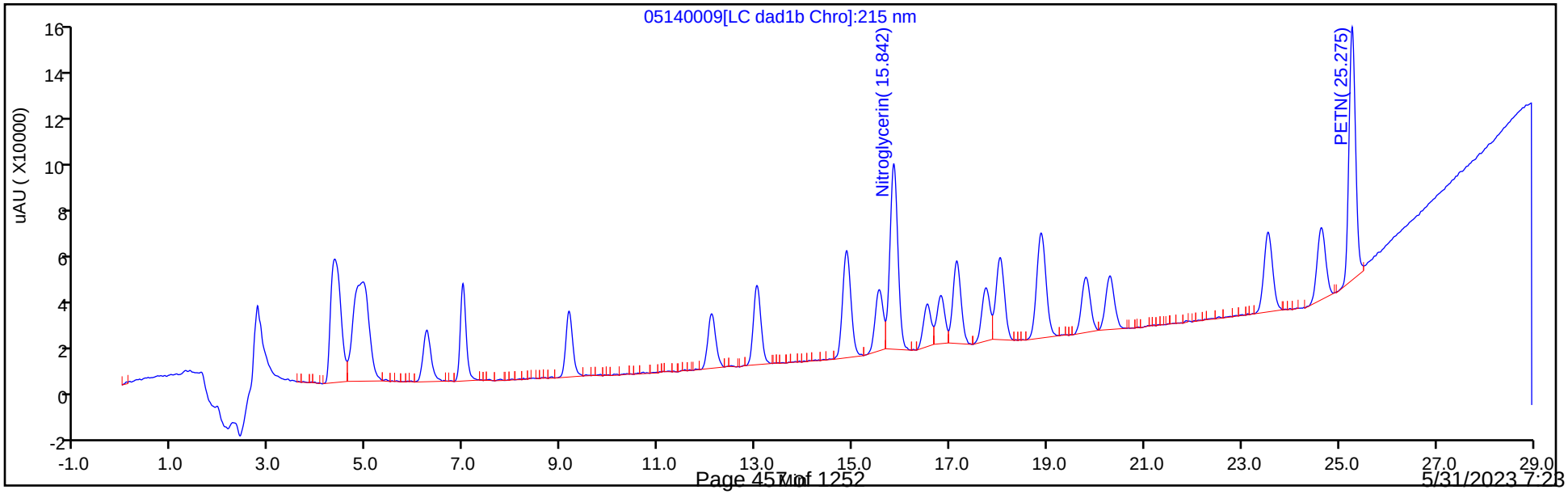
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Injection Date:	14-May-2020 17:26:40	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC FULL 7			Worklist Smp#:	9
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

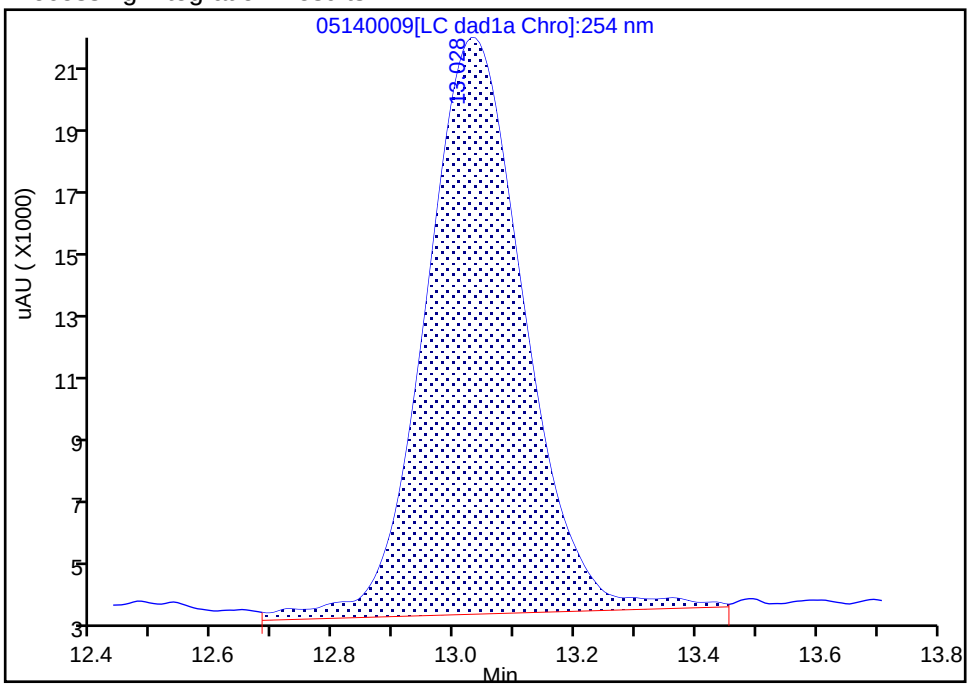
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Injection Date:	14-May-2020 17:26:40	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 7				
Client ID:					
Operator ID:	CB	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

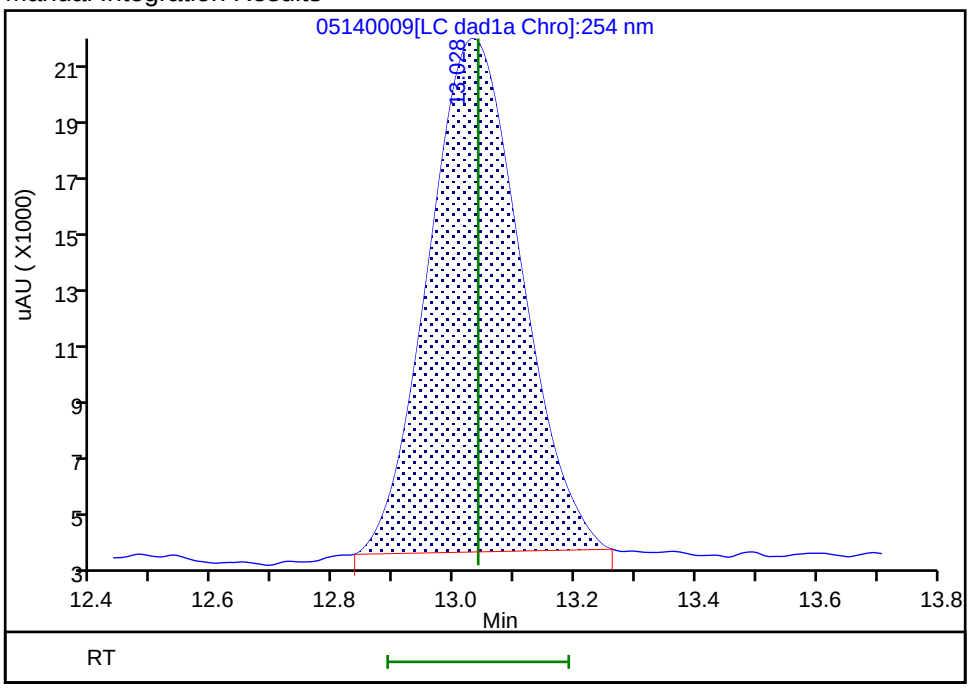
Processing Integration Results

RT: 13.03
Area: 203295
Amount: 0.637674
Amount Units: ug/ml



Manual Integration Results

RT: 13.03
Area: 184773
Amount: 0.659868
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:34:40

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140010.D
Lims ID: IC FULL 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 14-May-2020 18:01:41 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL 6
Misc. Info.: 280-0091518-010
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-May-2020 12:00:56 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0318

First Level Reviewer: zhangji Date: 15-May-2020 11:52:49

	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	4.347	4.366	-0.019	161291	0.4000	0.3757	M
2	2,4-diamino-6-nitrotoluene	1	4.940	4.880	0.060	100170	0.4000	0.3980	M
5	2,4,6-Trinitrophenol	1	6.267	6.300	-0.033	68021	0.4000	0.3510	a
6	HMX	1	6.987	6.986	0.001	74484	0.4000	0.3907	
8	RDX	1	9.173	9.173	0.000	88545	0.4000	0.3624	
9	Nitrobenzene	1	12.107	12.106	0.001	166107	0.4016	0.3782	
$ 10	1,2-Dinitrobenzene	1	13.040	13.040	0.000	107232	0.4000	0.3802	M
11	3,5-Dinitroaniline	1	14.887	14.886	0.001	190015	0.4000	0.3861	M
12	1,3-Dinitrobenzene	1	15.553	15.553	0.000	258559	0.4008	0.3835	M
13	Nitroglycerin	2	15.853	15.853	0.000	509915	4.00	4.02	
14	o-Nitrotoluene	1	16.540	16.533	0.007	105493	0.4000	0.3865	M
15	p-Nitrotoluene	1	16.820	16.820	0.000	93773	0.4008	0.3893	M
16	4-Amino-2,6-dinitrotoluene	1	17.153	17.146	0.007	130436	0.4004	0.3778	M
17	m-Nitrotoluene	1	17.747	17.753	-0.006	115331	0.4004	0.3866	M
18	2-Amino-4,6-dinitrotoluene	1	18.040	18.046	-0.006	179358	0.4016	0.3855	M
19	1,3,5-Trinitrobenzene	1	18.887	18.886	0.001	178692	0.4008	0.3782	
20	2,6-Dinitrotoluene	1	19.807	19.806	0.001	118093	0.4016	0.3930	M
21	2,4-Dinitrotoluene	1	20.293	20.293	0.000	245009	0.4016	0.3828	M
22	Tetryl	1	23.553	23.553	0.000	139850	0.4008	0.3793	
23	2,4,6-Trinitrotoluene	1	24.647	24.653	-0.006	158091	0.4016	0.3858	
24	PETN	2	25.280	25.280	0.000	557734	4.00	4.10	M

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

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8330_ADDs_00026	Amount Added:	20.00	Units: uL

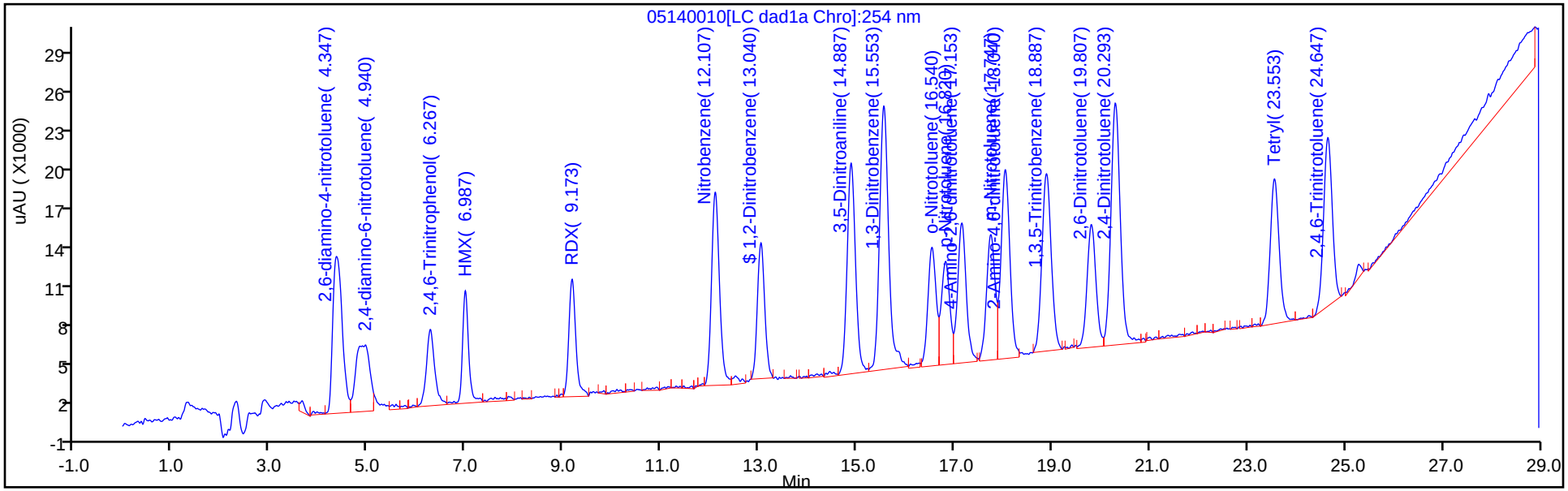
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Eurofins TestAmerica, Denver

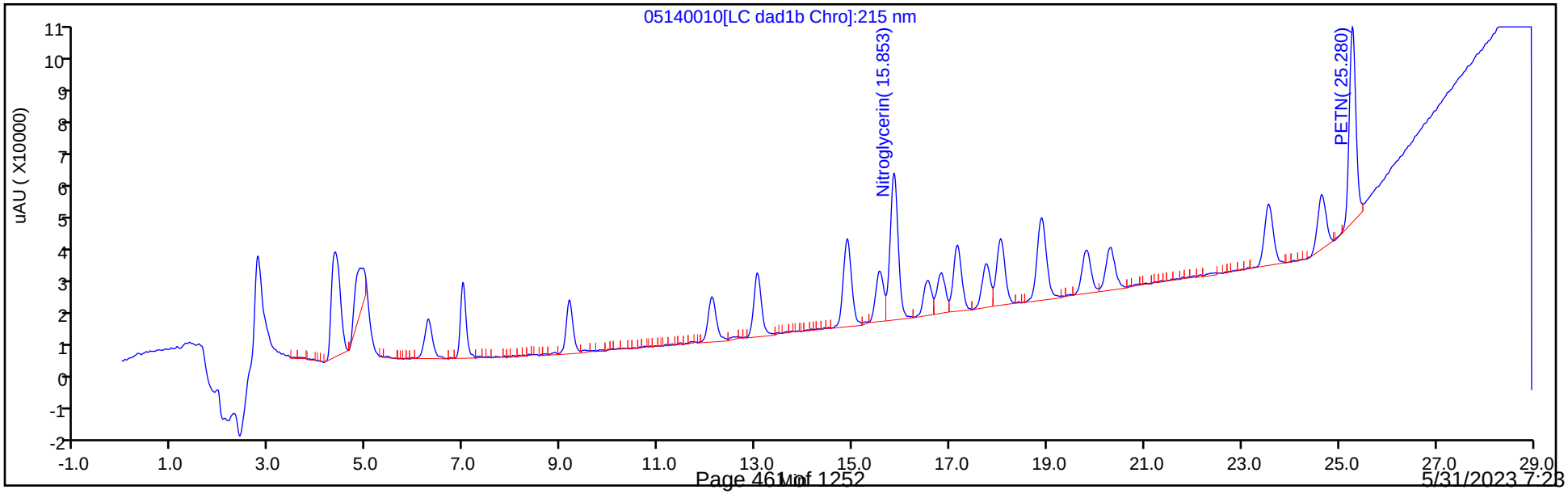
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Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC FULL 6			Worklist Smp#:	10
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

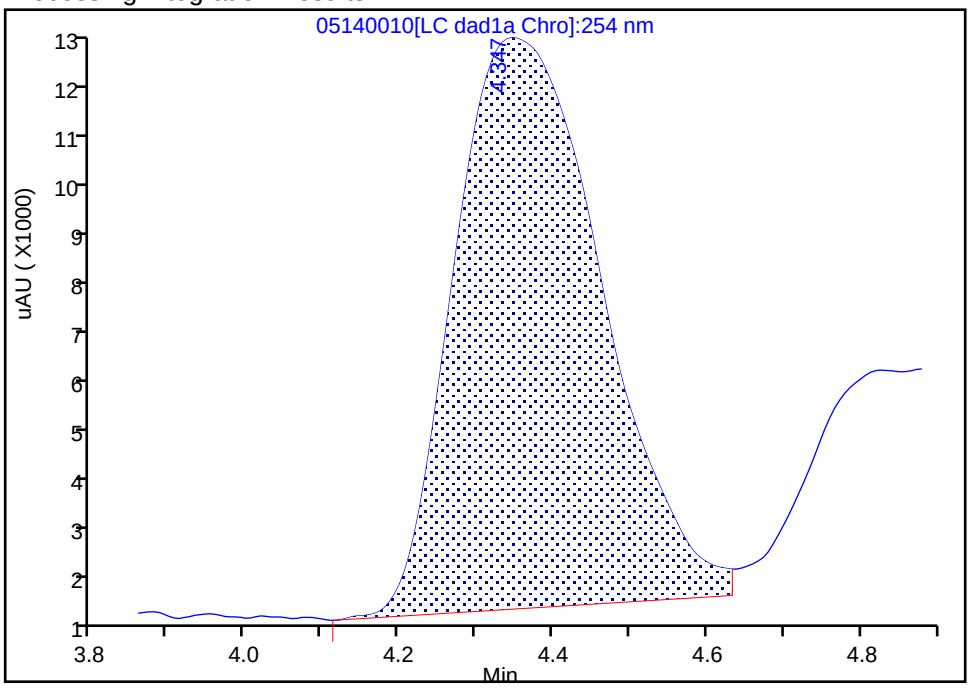
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

1 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

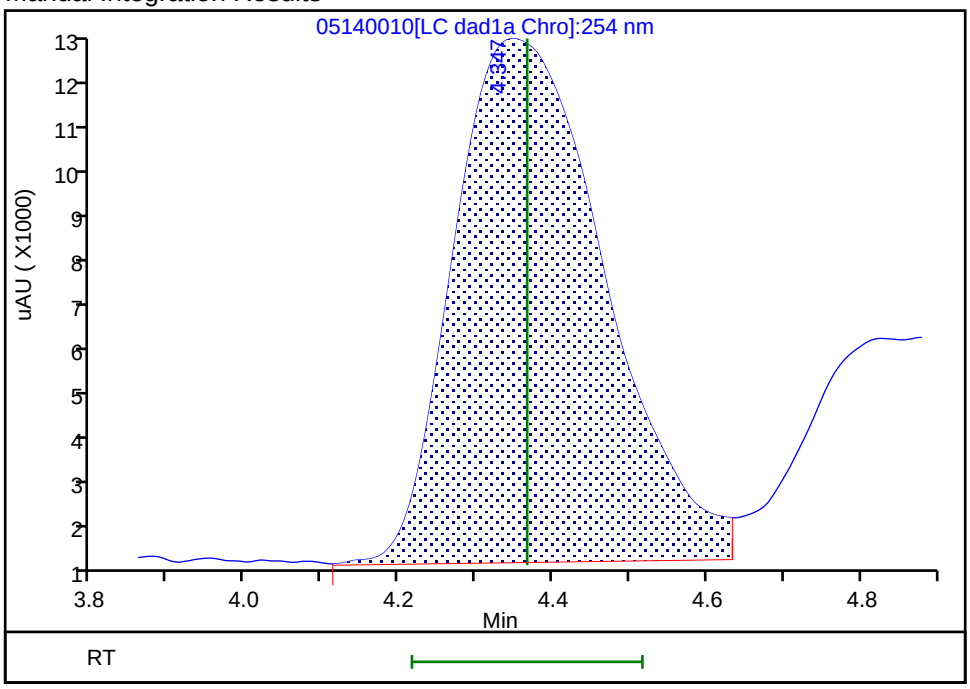
Processing Integration Results

RT: 4.35
Area: 154520
Amount: 0.352961
Amount Units: ug/ml



Manual Integration Results

RT: 4.35
Area: 161291
Amount: 0.375693
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:20:25
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

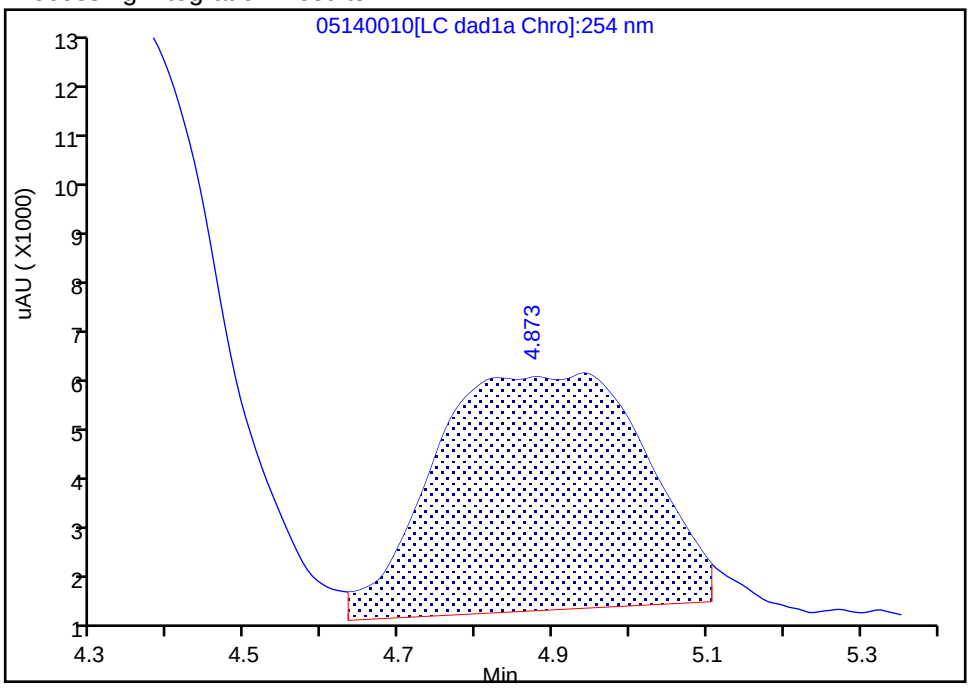
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

2 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

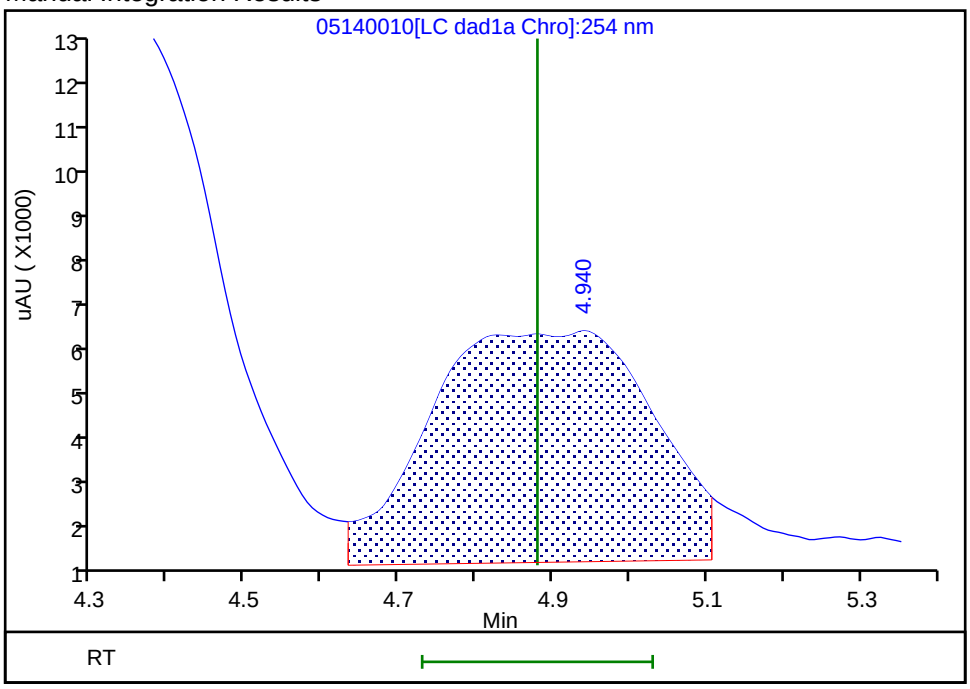
Processing Integration Results

RT: 4.87
Area: 85288
Amount: 0.307387
Amount Units: ug/ml



Manual Integration Results

RT: 4.94
Area: 100170
Amount: 0.398012
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:20:25
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

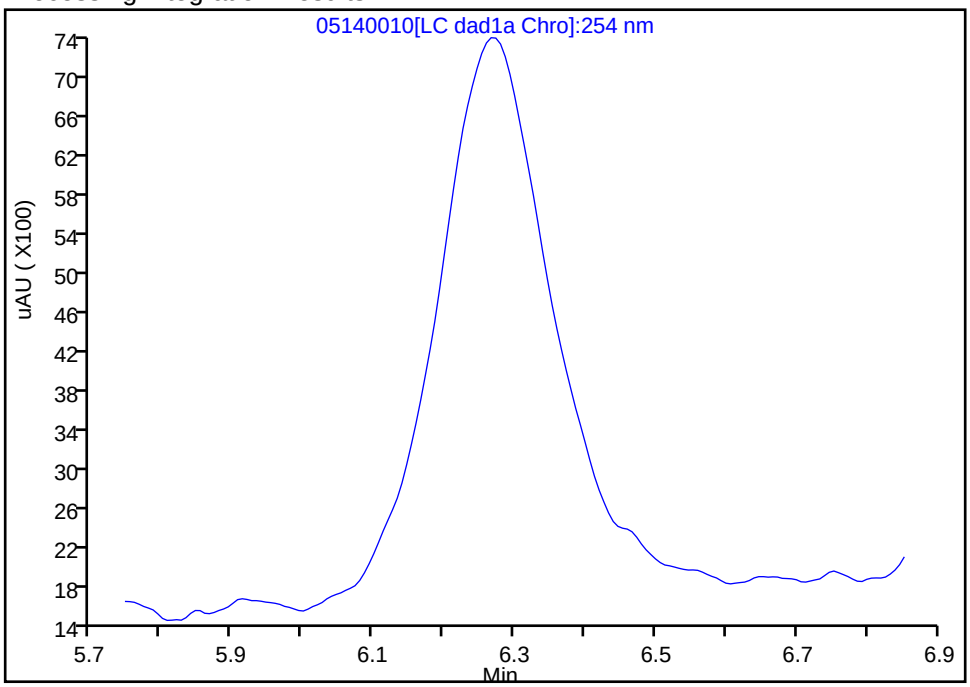
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

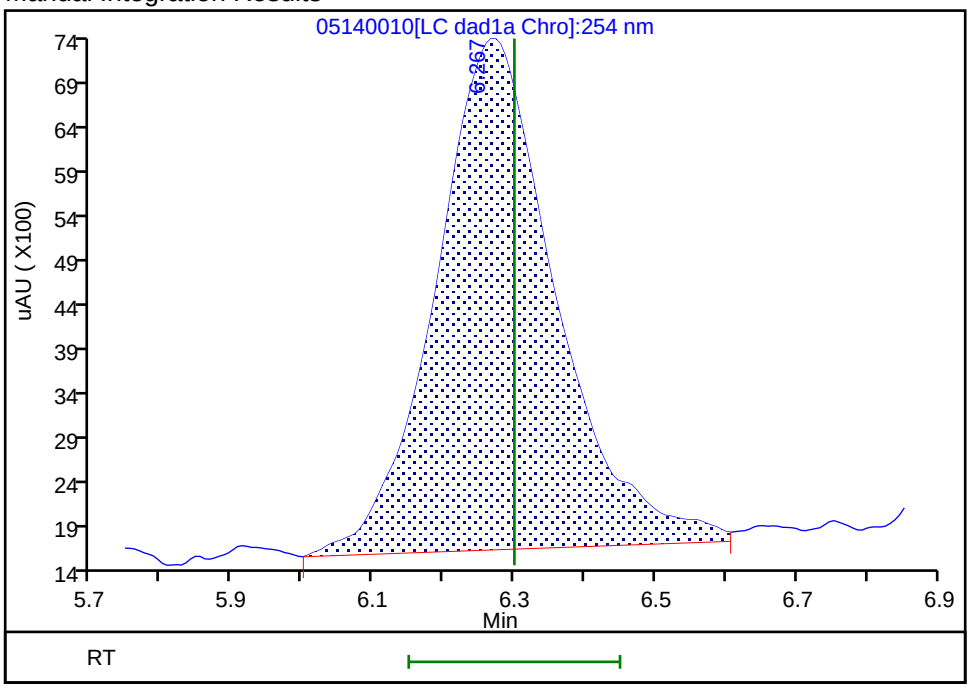
Not Detected
Expected RT: 6.30

Processing Integration Results



Manual Integration Results

RT: 6.27
Area: 68021
Amount: 0.350967
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:20:14
Audit Action: Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

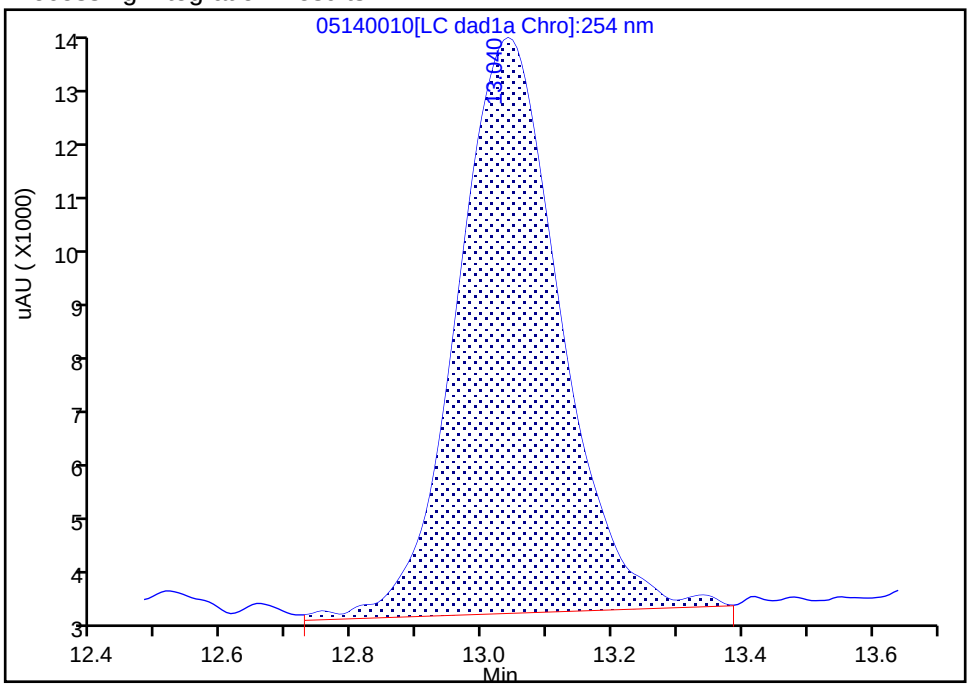
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

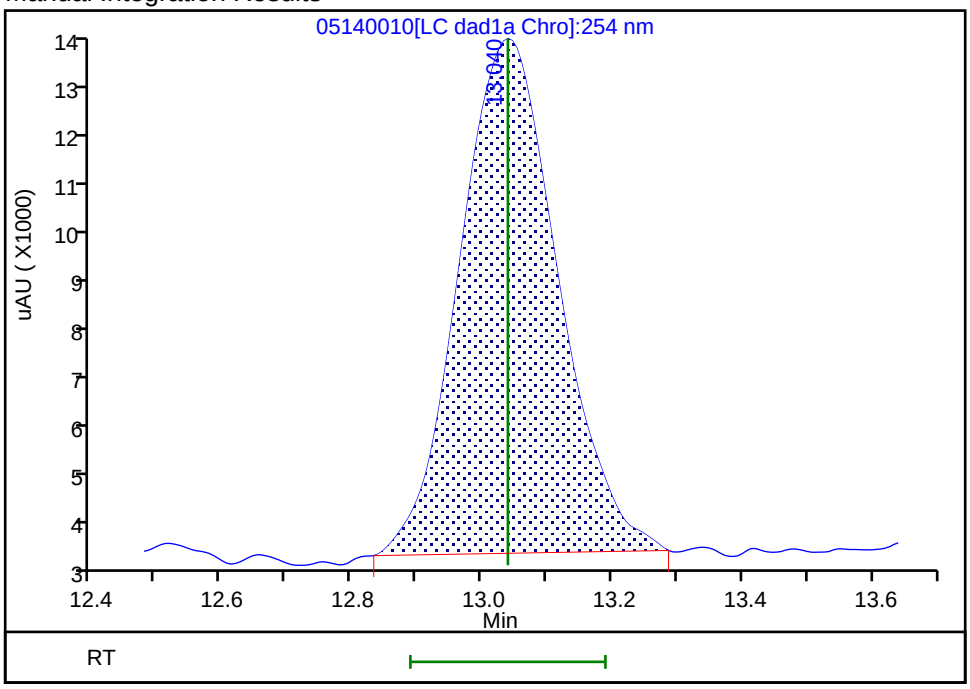
Processing Integration Results

RT: 13.04
Area: 114682
Amount: 0.364039
Amount Units: ug/ml



Manual Integration Results

RT: 13.04
Area: 107232
Amount: 0.380167
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:34:50

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

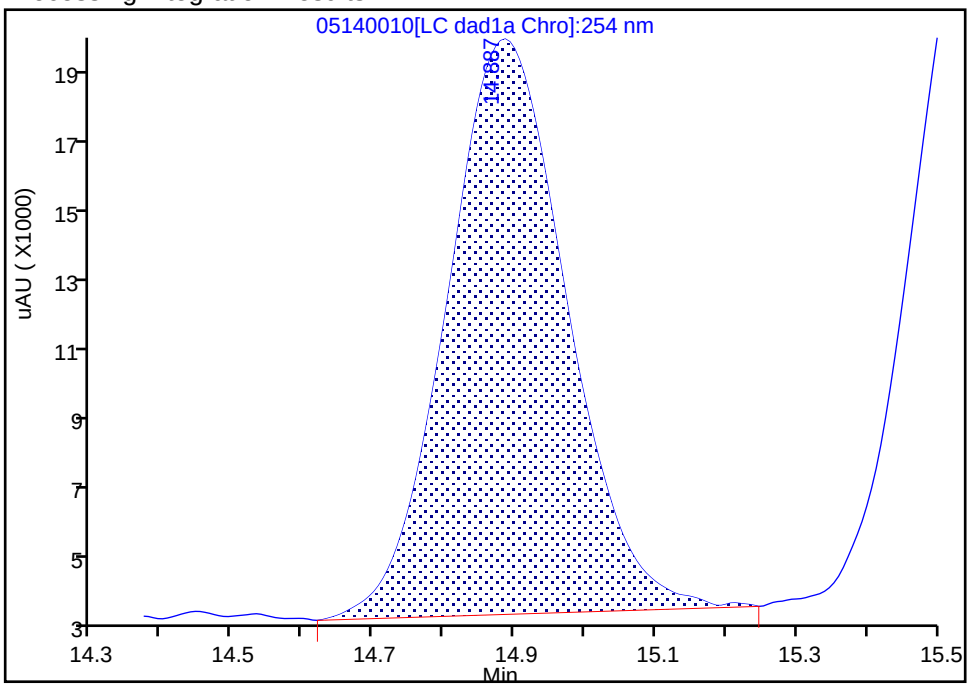
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d
Injection Date: 14-May-2020 18:01:41 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL 6
Client ID:
Operator ID: CB ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

11 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

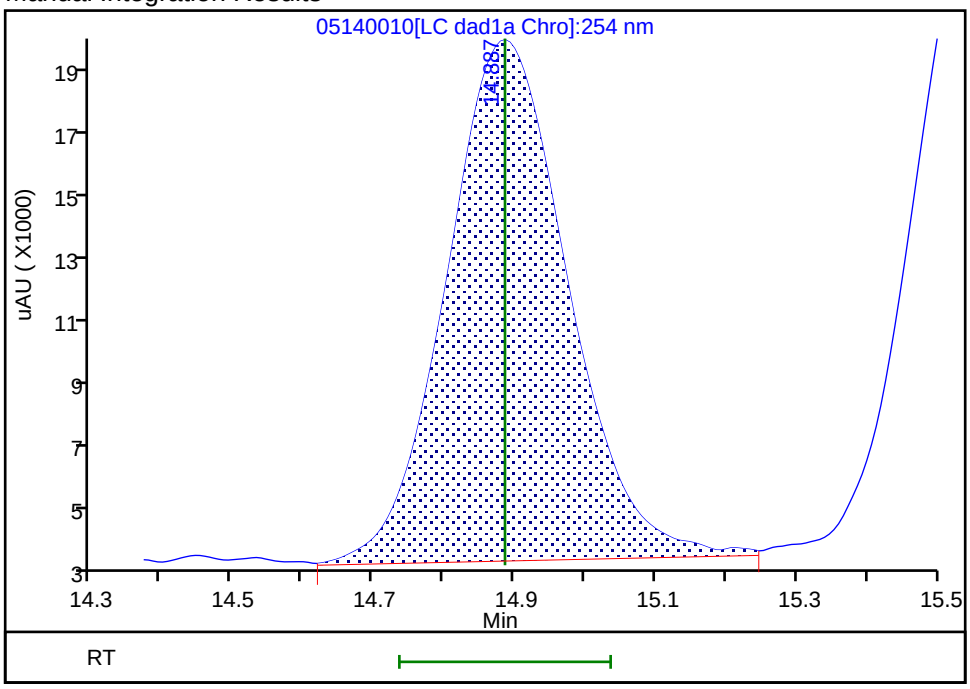
Processing Integration Results

RT: 14.89
Area: 186461
Amount: 0.379812
Amount Units: ug/ml



Manual Integration Results

RT: 14.89
Area: 190015
Amount: 0.386063
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:20:35
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

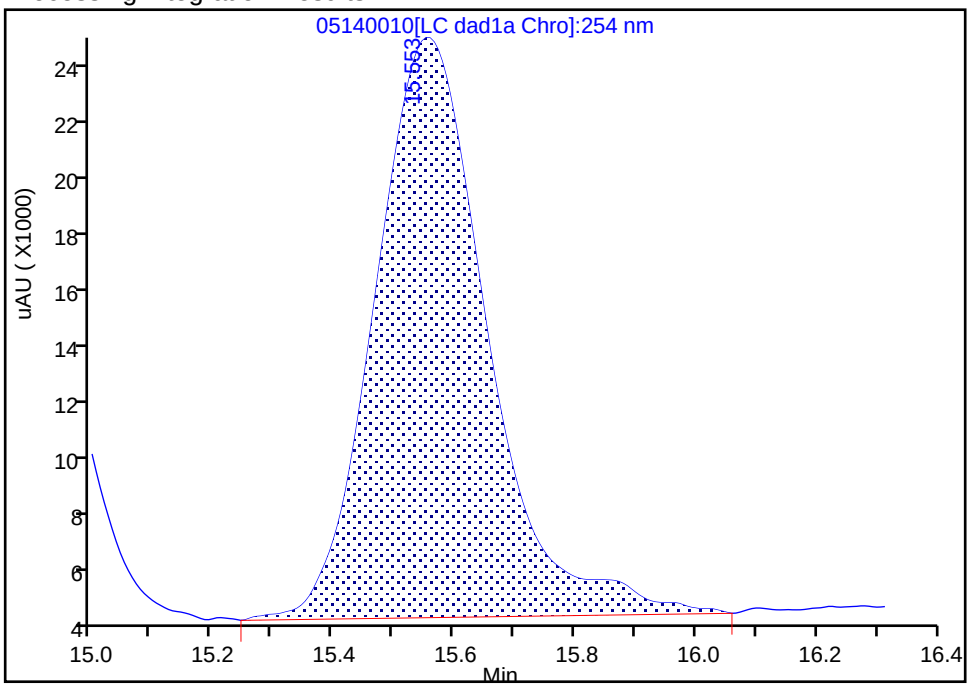
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

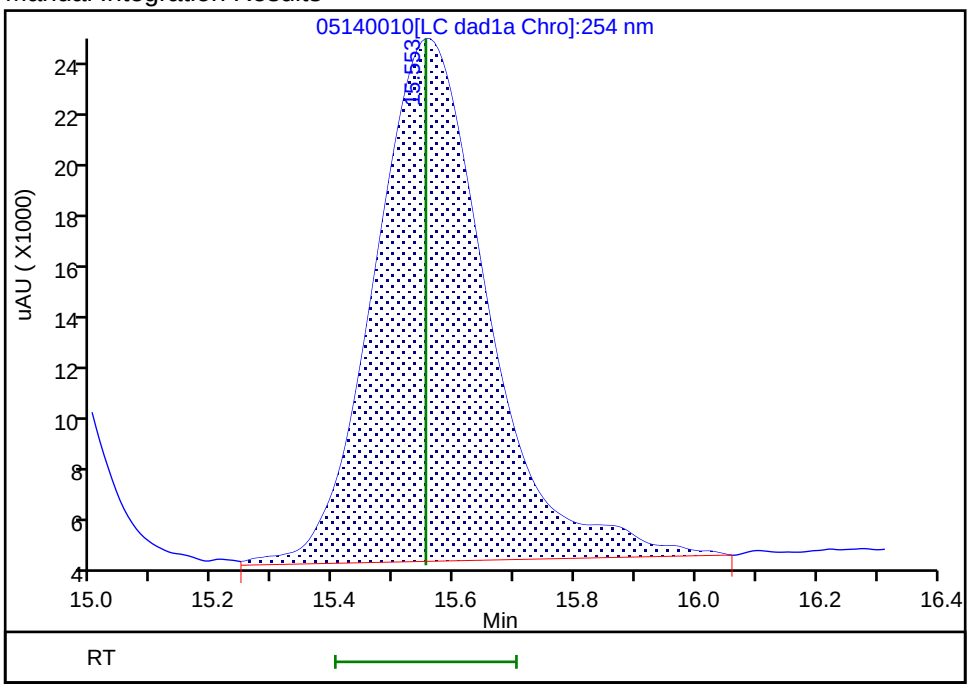
Processing Integration Results

RT: 15.55
Area: 255534
Amount: 0.374138
Amount Units: ug/ml



Manual Integration Results

RT: 15.55
Area: 258559
Amount: 0.383511
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:20:35

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

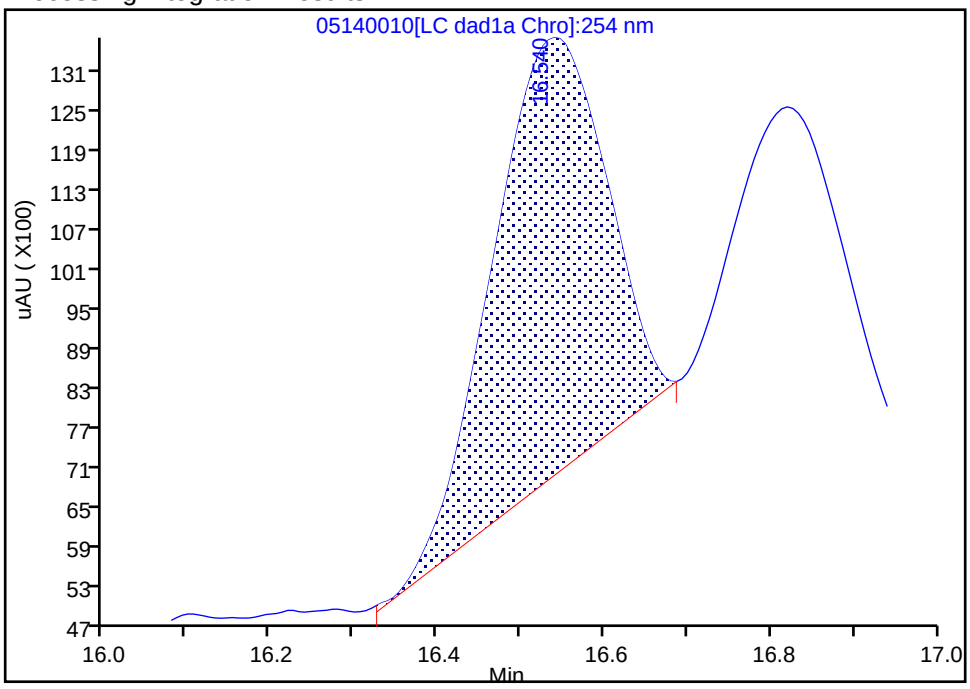
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

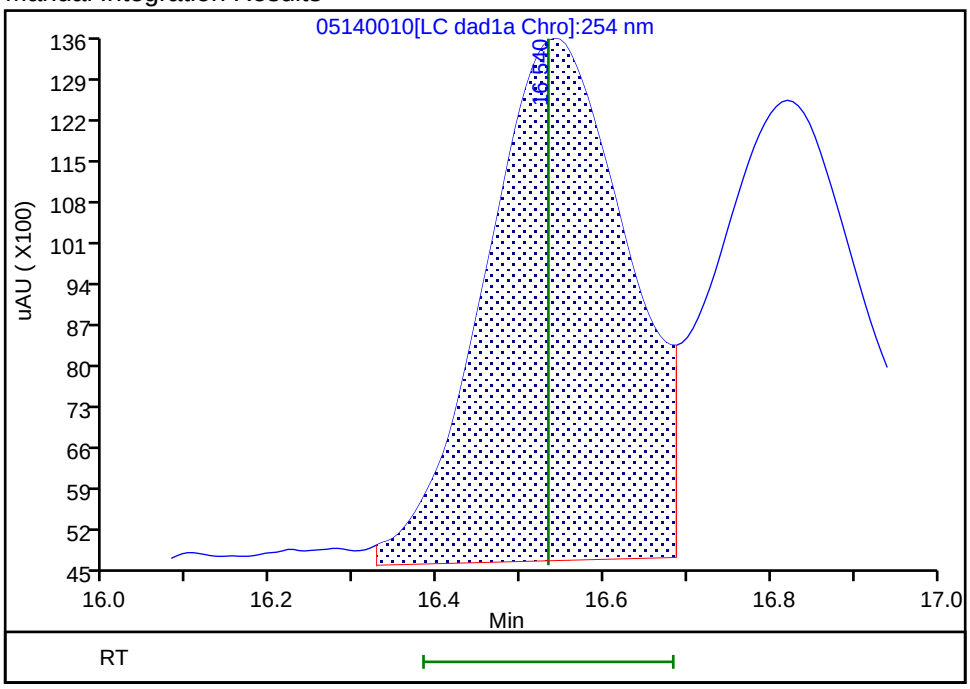
Processing Integration Results

RT: 16.54
Area: 63784
Amount: 0.238403
Amount Units: ug/ml



Manual Integration Results

RT: 16.54
Area: 105493
Amount: 0.386471
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:20:32

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

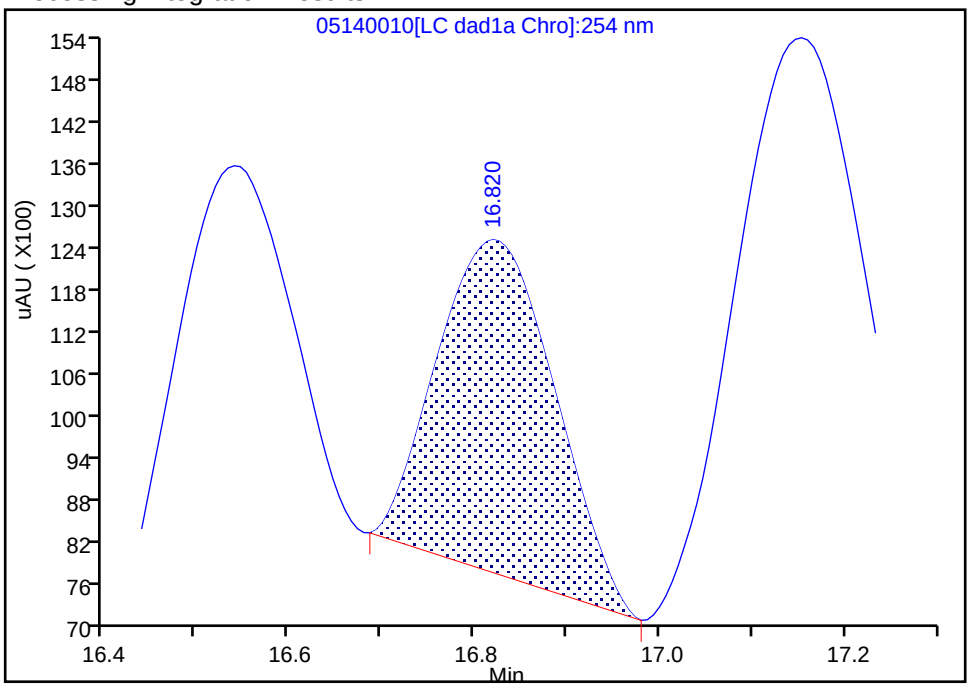
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

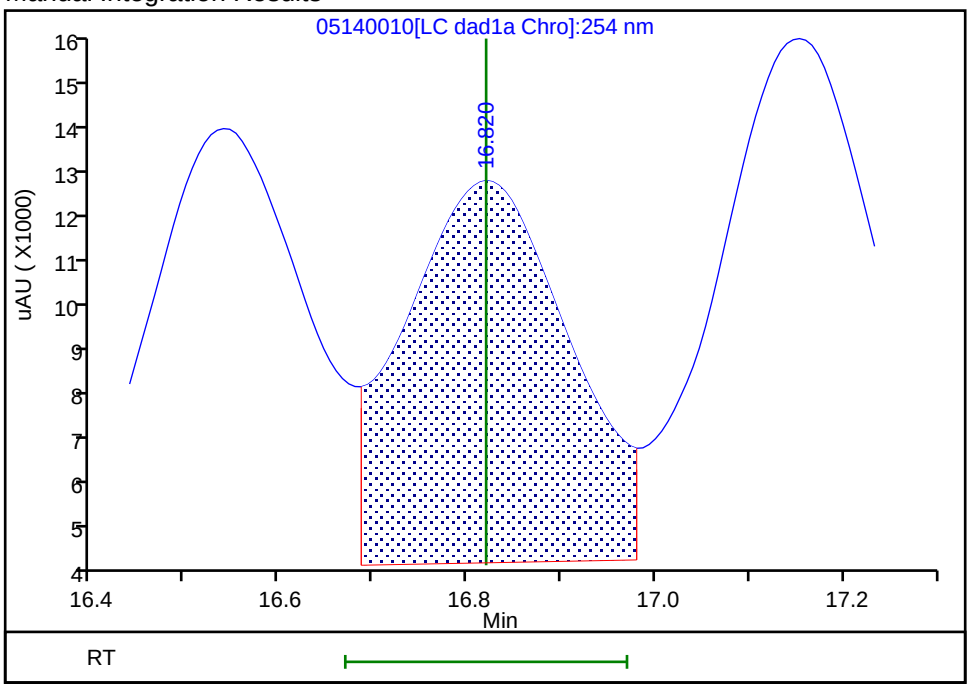
Processing Integration Results

RT: 16.82
Area: 42038
Amount: 0.176152
Amount Units: ug/ml



Manual Integration Results

RT: 16.82
Area: 93773
Amount: 0.389291
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:20:32

Audit Action: Assigned New Baseline Audit Reason: Baseline

Eurofins TestAmerica, Denver

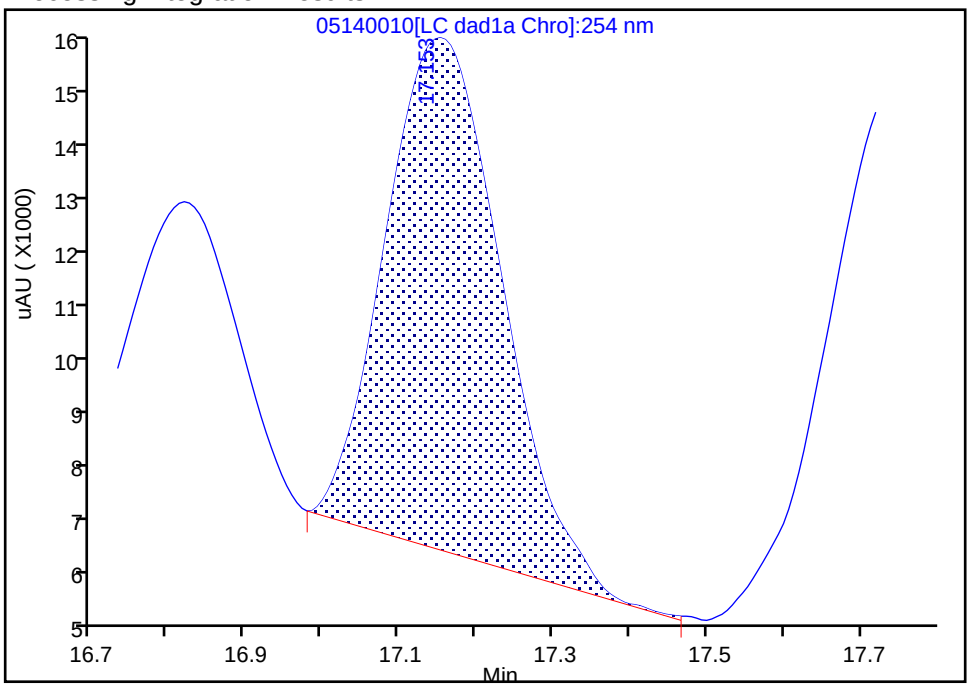
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

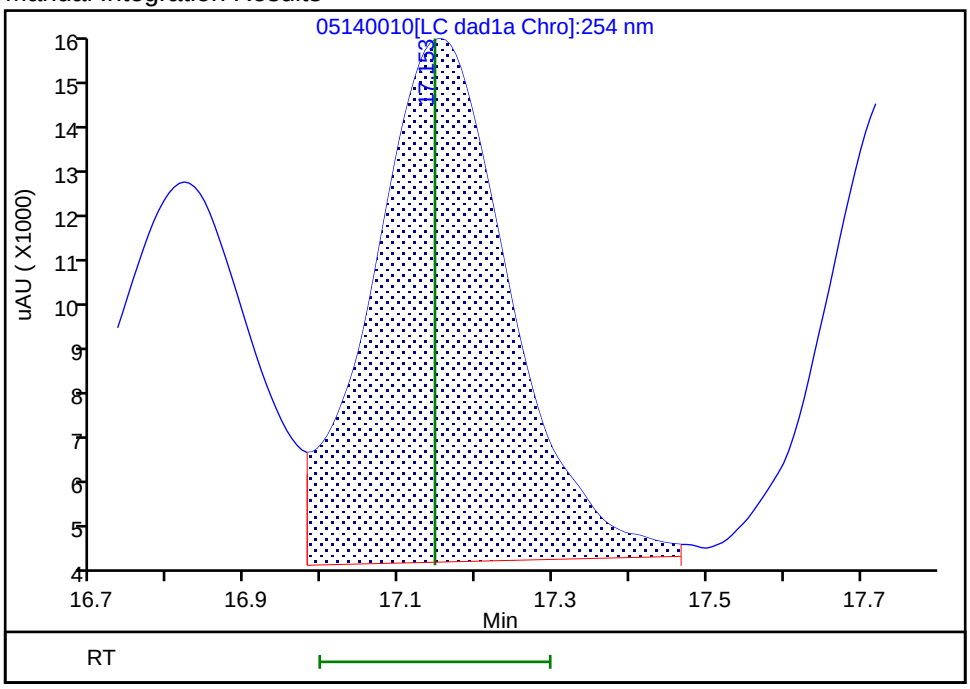
Processing Integration Results

RT: 17.15
Area: 95002
Amount: 0.278639
Amount Units: ug/ml



Manual Integration Results

RT: 17.15
Area: 130436
Amount: 0.377818
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:20:32
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

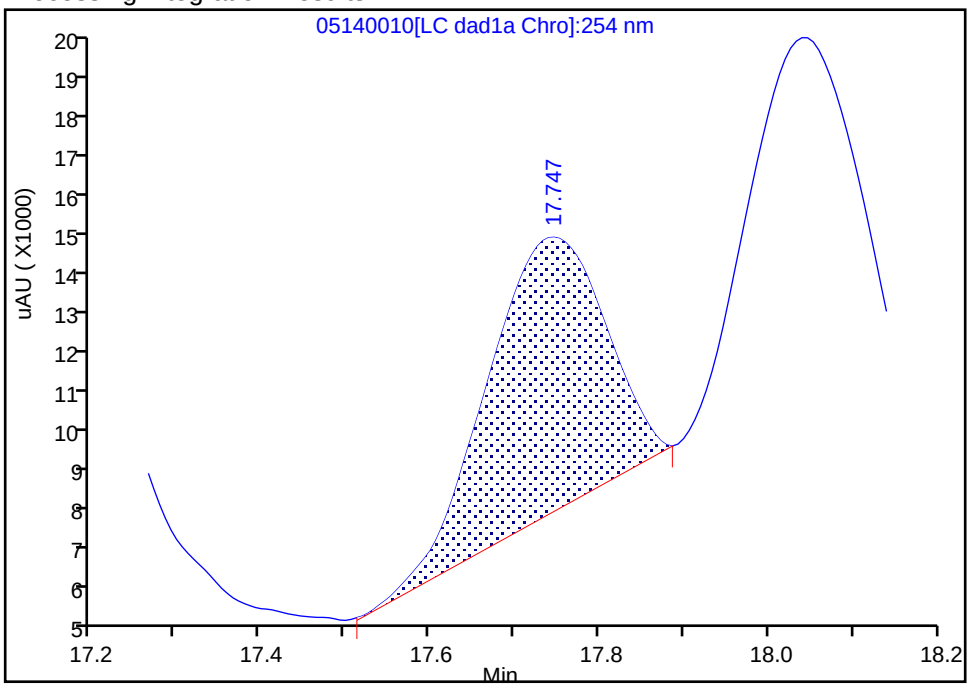
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

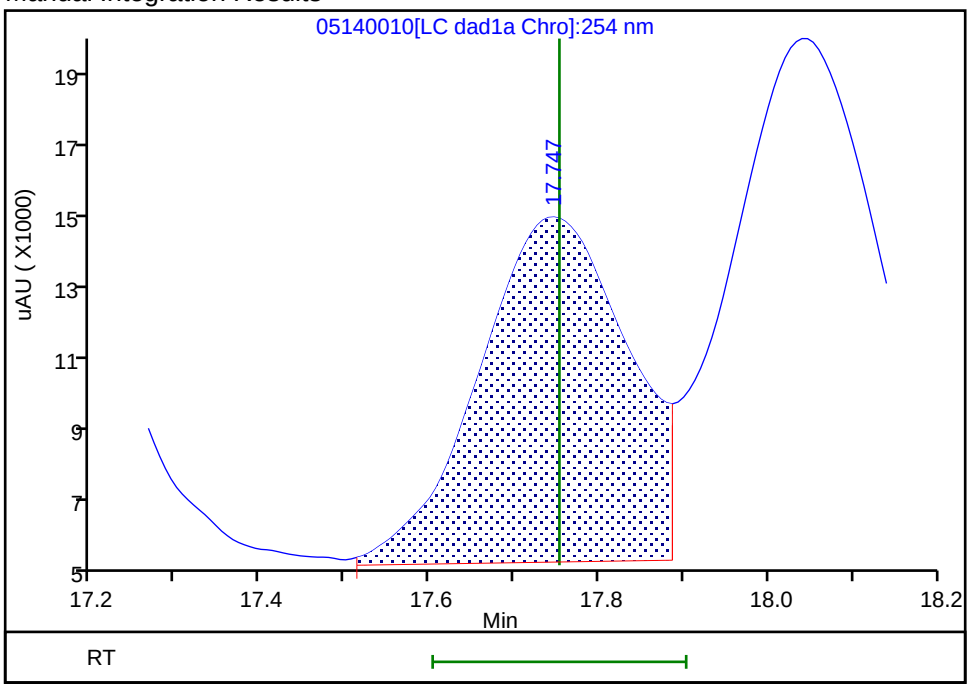
Processing Integration Results

RT: 17.75
Area: 65895
Amount: 0.232967
Amount Units: ug/ml



Manual Integration Results

RT: 17.75
Area: 115331
Amount: 0.386593
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:20:32
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

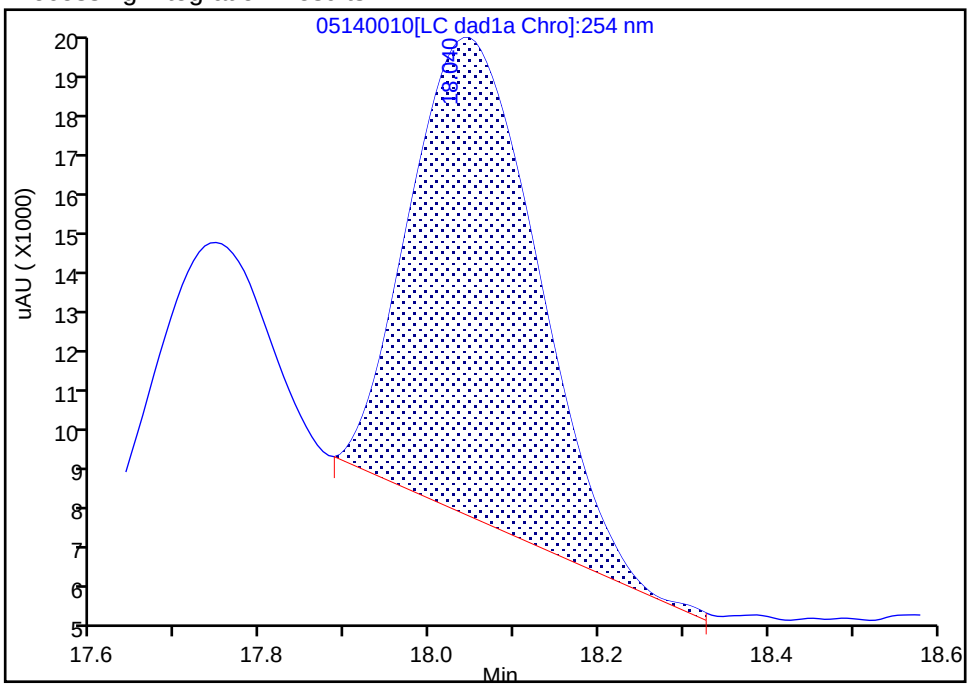
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

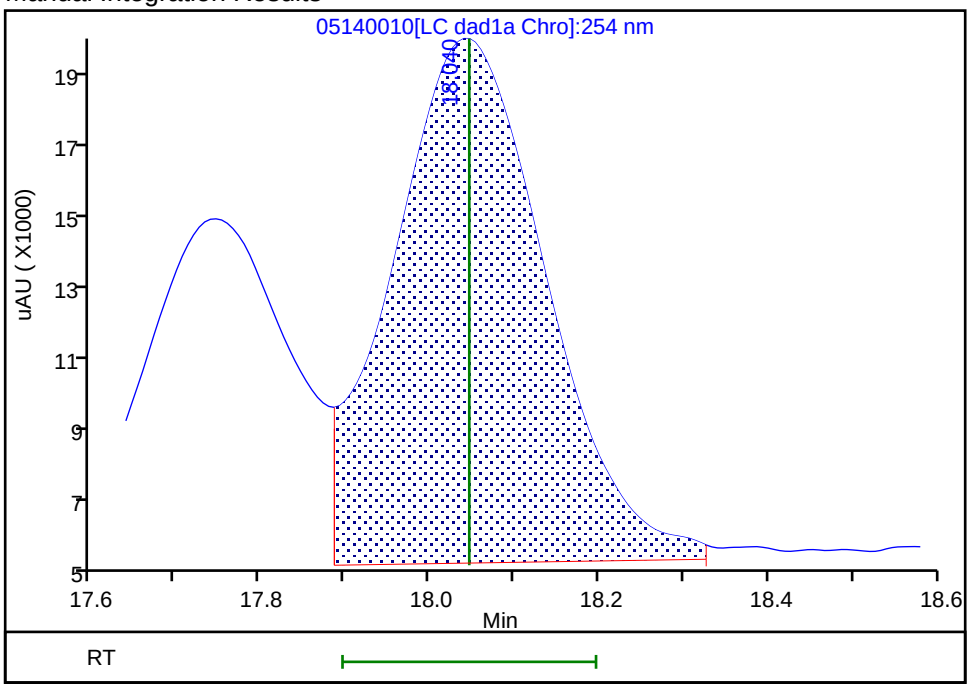
Processing Integration Results

RT: 18.04
Area: 120261
Amount: 0.277181
Amount Units: ug/ml



Manual Integration Results

RT: 18.04
Area: 179358
Amount: 0.385541
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:20:32
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

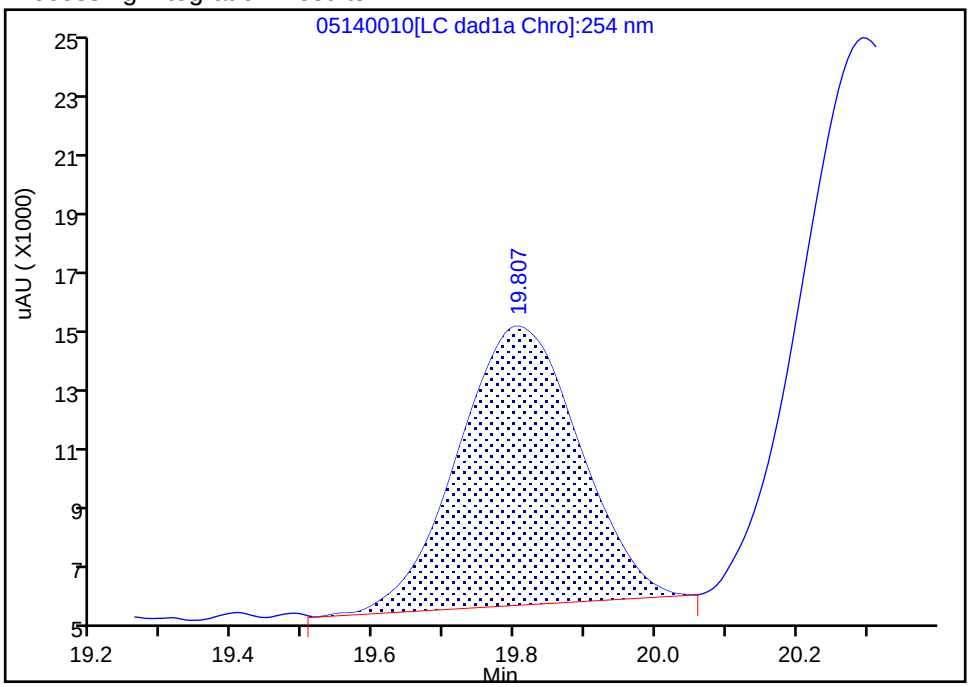
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d
Injection Date: 14-May-2020 18:01:41 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL 6
Client ID:
Operator ID: CB ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

20 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

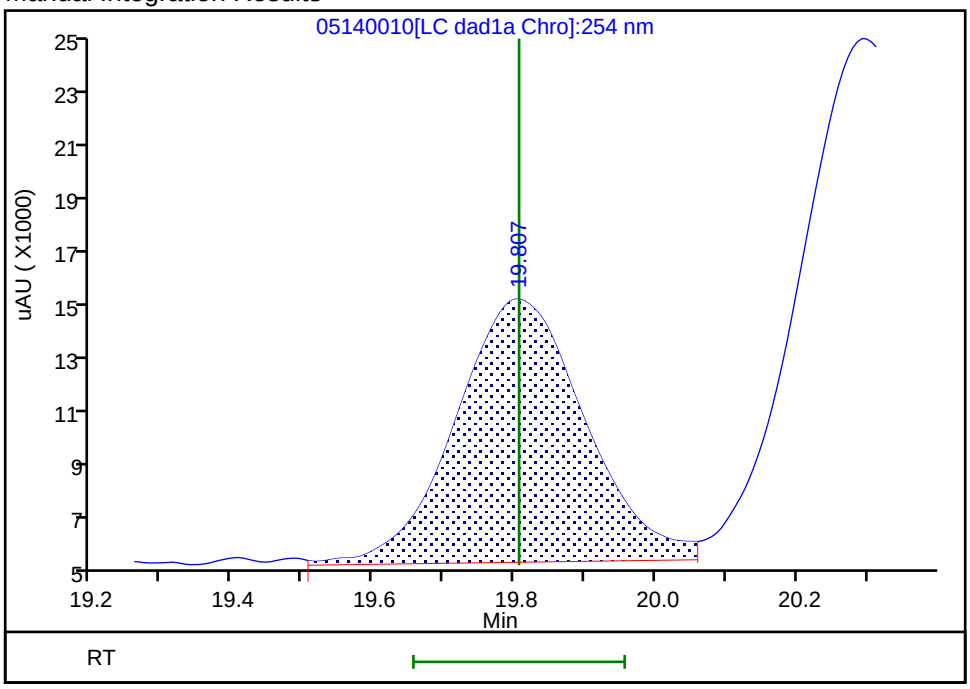
Processing Integration Results

RT: 19.81
Area: 105710
Amount: 0.311662
Amount Units: ug/ml



Manual Integration Results

RT: 19.81
Area: 118093
Amount: 0.392980
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:20:40
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

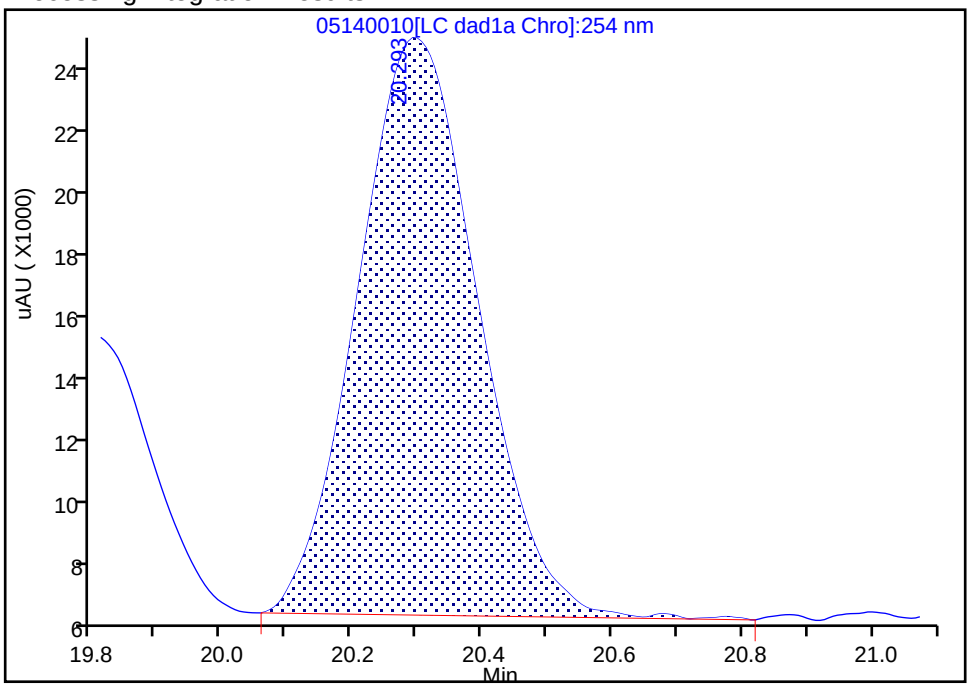
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d
Injection Date: 14-May-2020 18:01:41 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL 6
Client ID:
Operator ID: CB ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

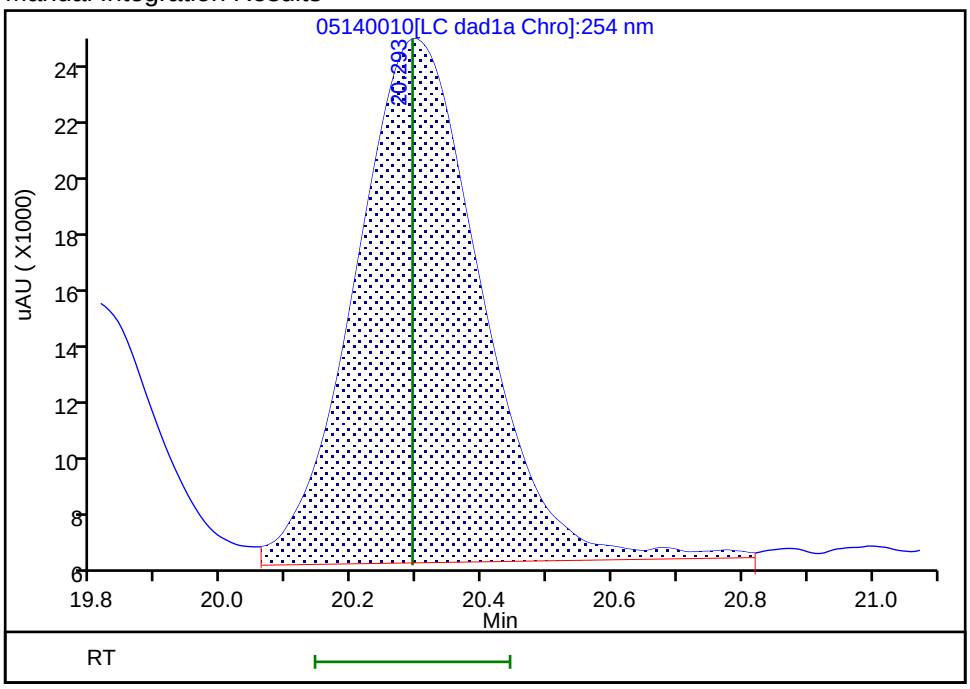
Processing Integration Results

RT: 20.29
Area: 226951
Amount: 0.348081
Amount Units: ug/ml



Manual Integration Results

RT: 20.29
Area: 245009
Amount: 0.382759
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:20:40
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

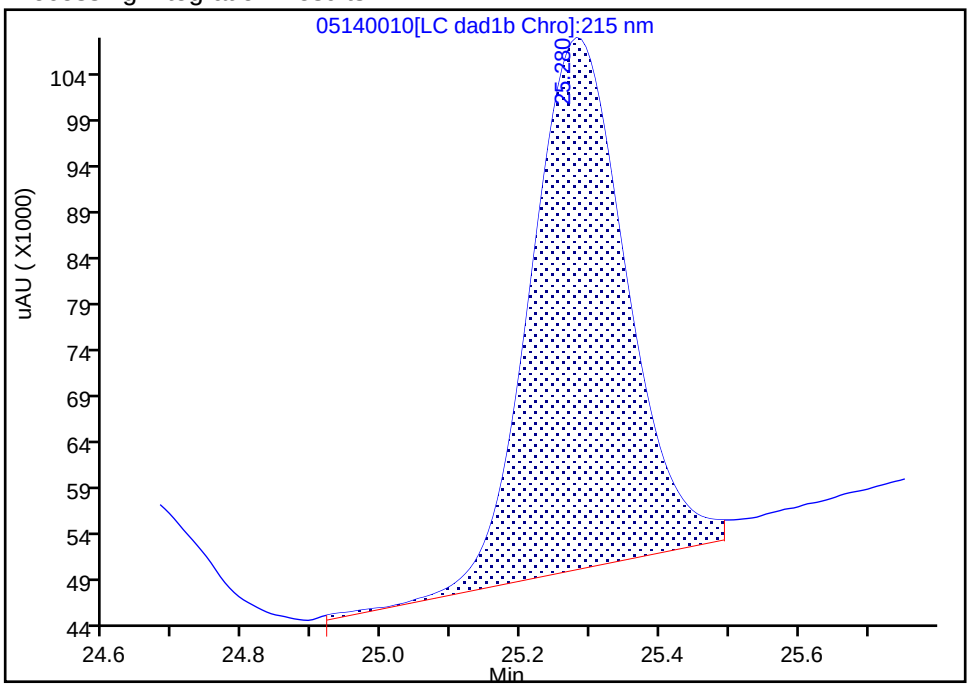
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140010.d				
Injection Date:	14-May-2020 18:01:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

24 PETN, CAS: 78-11-5

Signal: 1

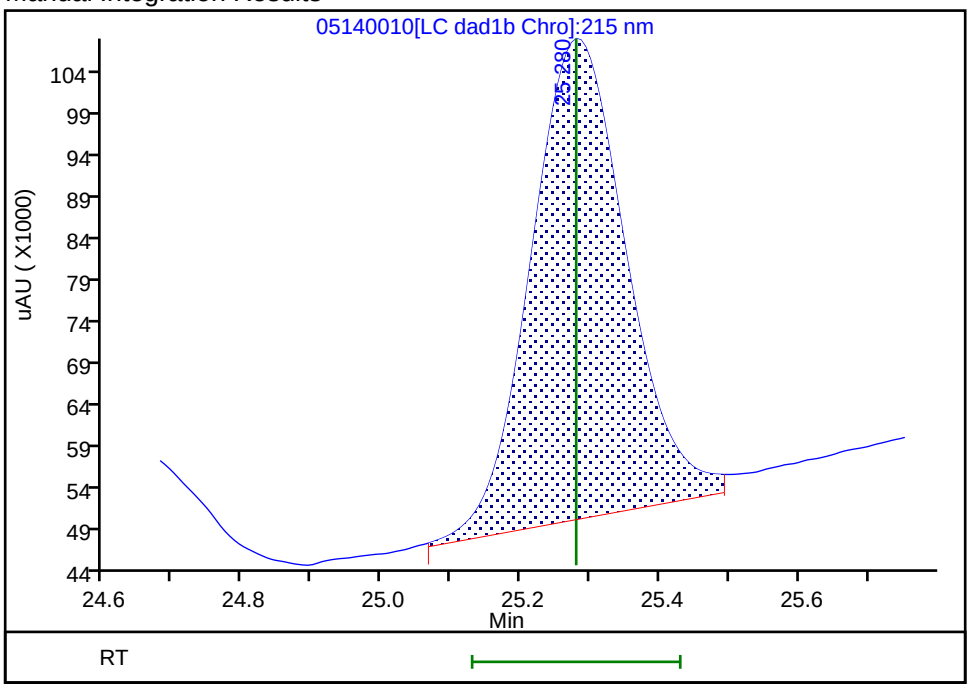
Processing Integration Results

RT: 25.28
Area: 559852
Amount: 4.200524
Amount Units: ug/ml



Manual Integration Results

RT: 25.28
Area: 557734
Amount: 4.102237
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:25:18

Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140011.D
Lims ID: IC FULL 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 14-May-2020 18:36:40 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL 5
Misc. Info.: 280-0091518-011
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-May-2020 12:00:56 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0318

First Level Reviewer: zhangji Date: 15-May-2020 11:20:54

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	4.366	4.366	0.000	106754	0.2500	0.2487	
2 2,4-diamino-6-nitrotoluene	1	4.880	4.880	0.000	74938	0.2500	0.2919	
5 2,4,6-Trinitrophenol	1	6.300	6.300	0.000	48614	0.2500	0.2508	a
6 HMX	1	6.986	6.986	0.000	54065	0.2500	0.2754	
8 RDX	1	9.173	9.173	0.000	62626	0.2500	0.2563	
9 Nitrobenzene	1	12.106	12.106	0.000	106064	0.2510	0.2415	
$ 10 1,2-Dinitrobenzene	1	13.040	13.040	0.000	62375	0.2500	0.2184	M
11 3,5-Dinitroaniline	1	14.886	14.886	0.000	130301	0.2500	0.2629	
12 1,3-Dinitrobenzene	1	15.553	15.553	0.000	172289	0.2505	0.2556	
13 Nitroglycerin	2	15.853	15.853	0.000	330378	2.50	2.61	M
14 o-Nitrotoluene	1	16.533	16.533	0.000	63146	0.2500	0.2313	
15 p-Nitrotoluene	1	16.820	16.820	0.000	59605	0.2505	0.2474	
16 4-Amino-2,6-dinitrotoluene	1	17.146	17.146	0.000	79168	0.2503	0.2293	
17 m-Nitrotoluene	1	17.753	17.753	0.000	71162	0.2503	0.2385	
18 2-Amino-4,6-dinitrotoluene	1	18.046	18.046	0.000	112860	0.2510	0.2426	
19 1,3,5-Trinitrobenzene	1	18.886	18.886	0.000	118709	0.2505	0.2513	
20 2,6-Dinitrotoluene	1	19.806	19.806	0.000	74317	0.2510	0.2416	
21 2,4-Dinitrotoluene	1	20.293	20.293	0.000	153249	0.2510	0.2394	
22 Tetryl	1	23.553	23.553	0.000	92236	0.2505	0.2502	
23 2,4,6-Trinitrotoluene	1	24.653	24.653	0.000	100168	0.2510	0.2416	
24 PETN	2	25.280	25.280	0.000	338241	2.50	2.40	M

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8330IntermStk_00064	Amount Added:	25.00	Units: uL
8330_ADDs_00026	Amount Added:	12.50	Units: uL

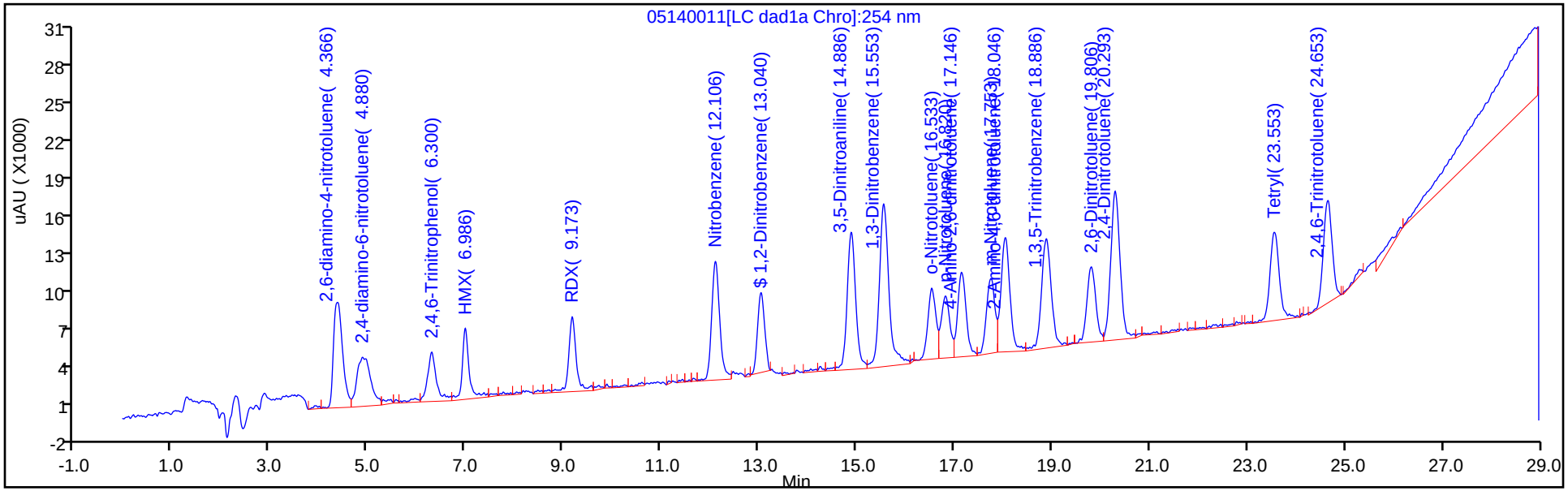
Report Date: 15-May-2020 12:00:57 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

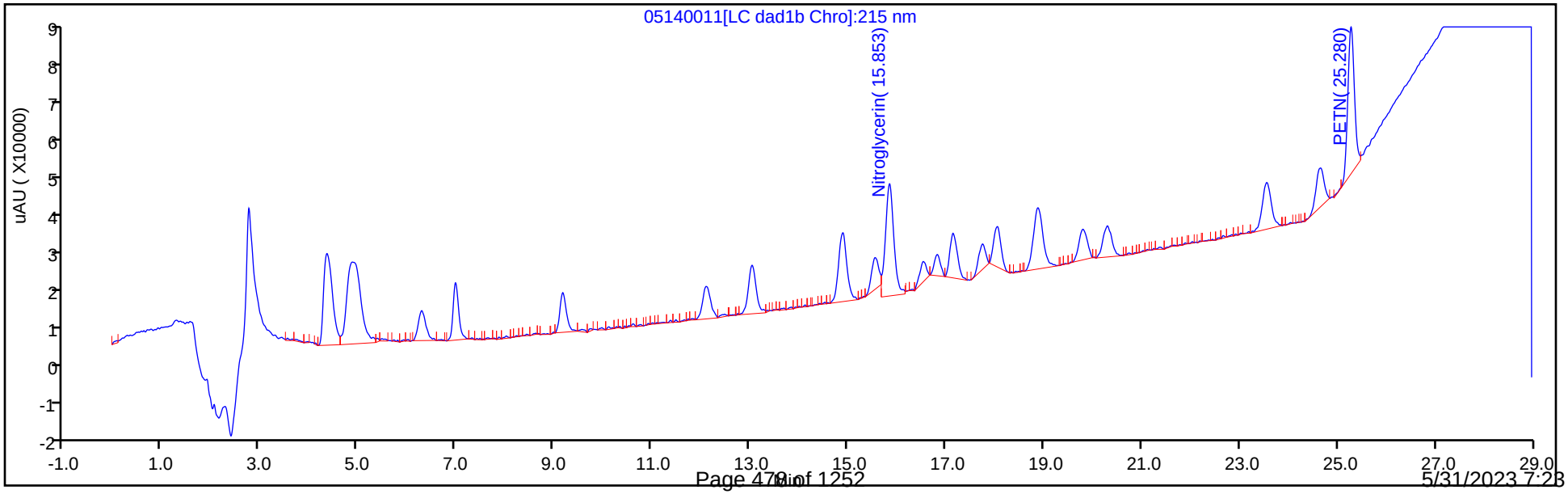
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140011.d

Injection Date:	14-May-2020 18:36:40	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC FULL 5			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 Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

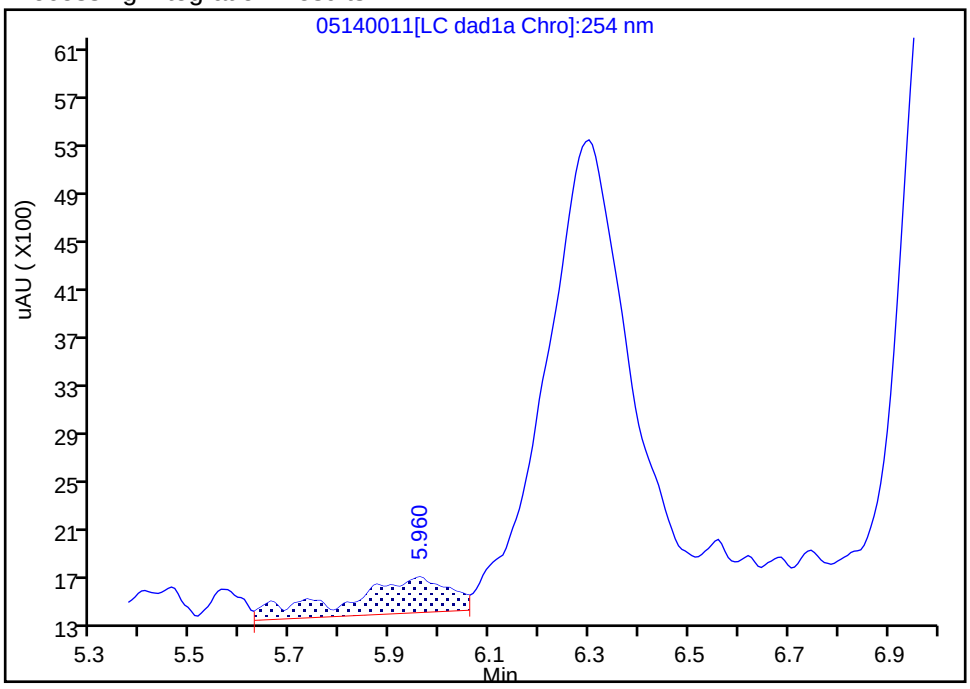
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140011.d
Injection Date: 14-May-2020 18:36:40 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL 5
Client ID:
Operator ID: CB ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

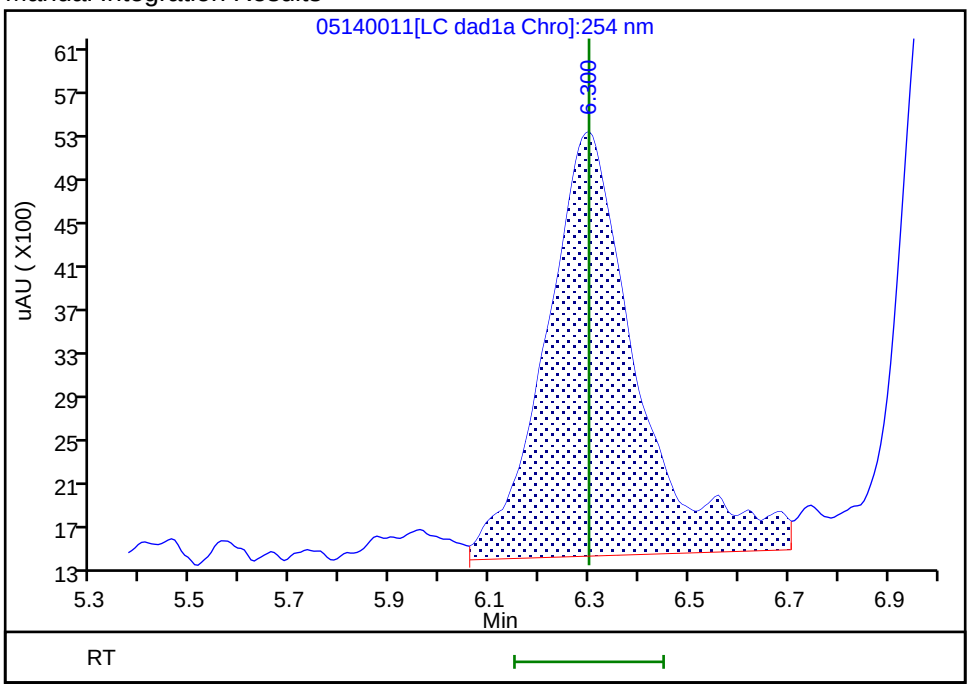
Processing Integration Results

RT: 5.96
Area: 4251
Amount: 0.036696
Amount Units: ug/ml



Manual Integration Results

RT: 6.30
Area: 48614
Amount: 0.250833
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:20:52
Audit Action: Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

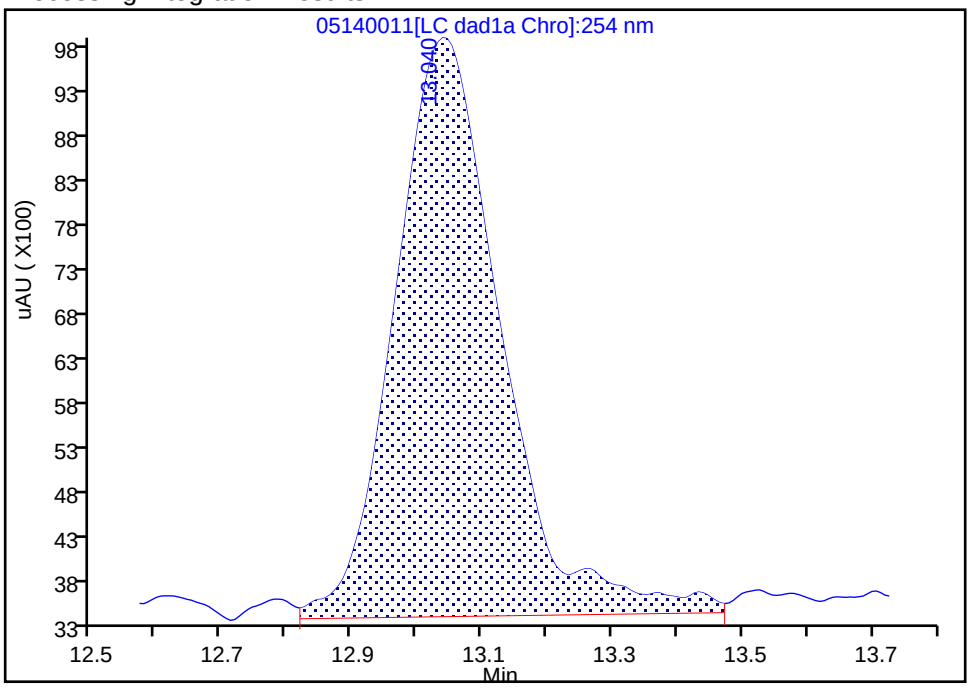
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140011.d
Injection Date: 14-May-2020 18:36:40 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL 5
Client ID:
Operator ID: CB ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

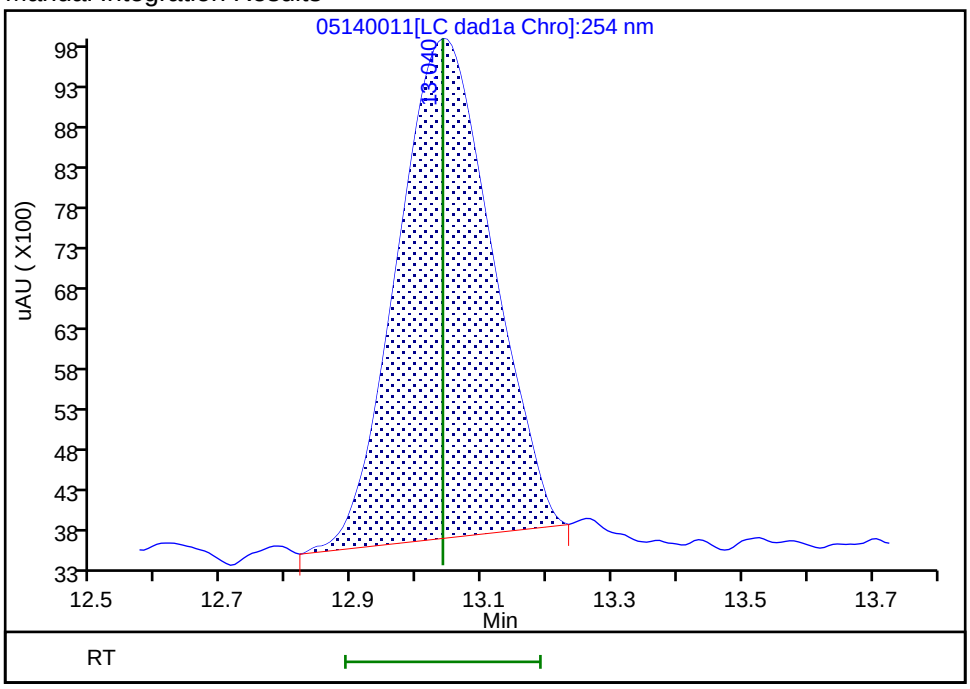
Processing Integration Results

RT: 13.04
Area: 73345
Amount: 0.234804
Amount Units: ug/ml



Manual Integration Results

RT: 13.04
Area: 62375
Amount: 0.218362
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:35:01
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

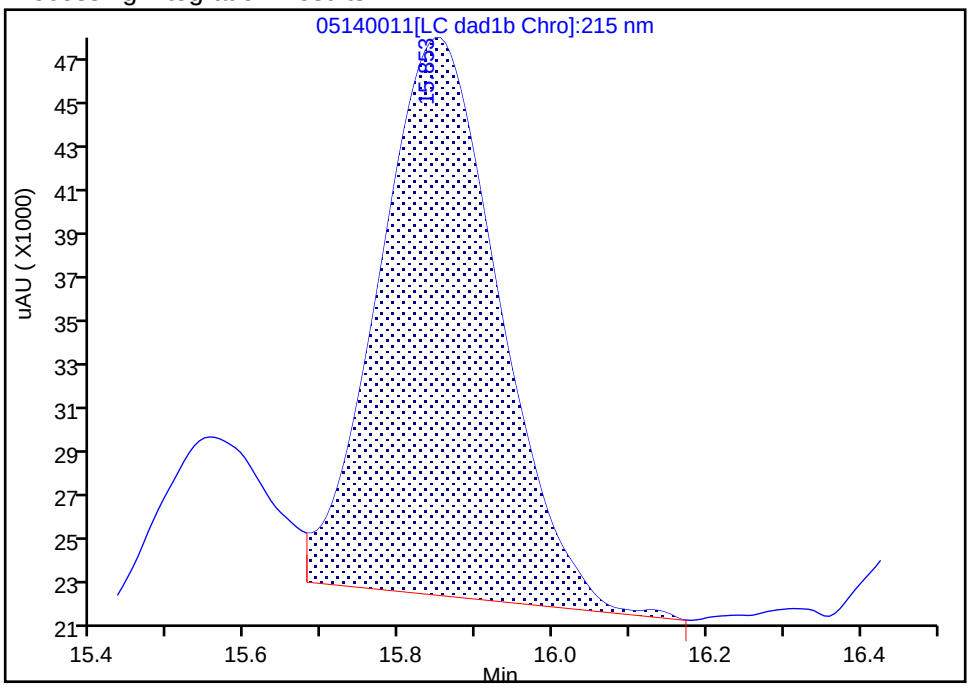
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140011.d
Injection Date: 14-May-2020 18:36:40 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL 5
Client ID:
Operator ID: CB ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Detector LC DAD1B, 215 nm

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

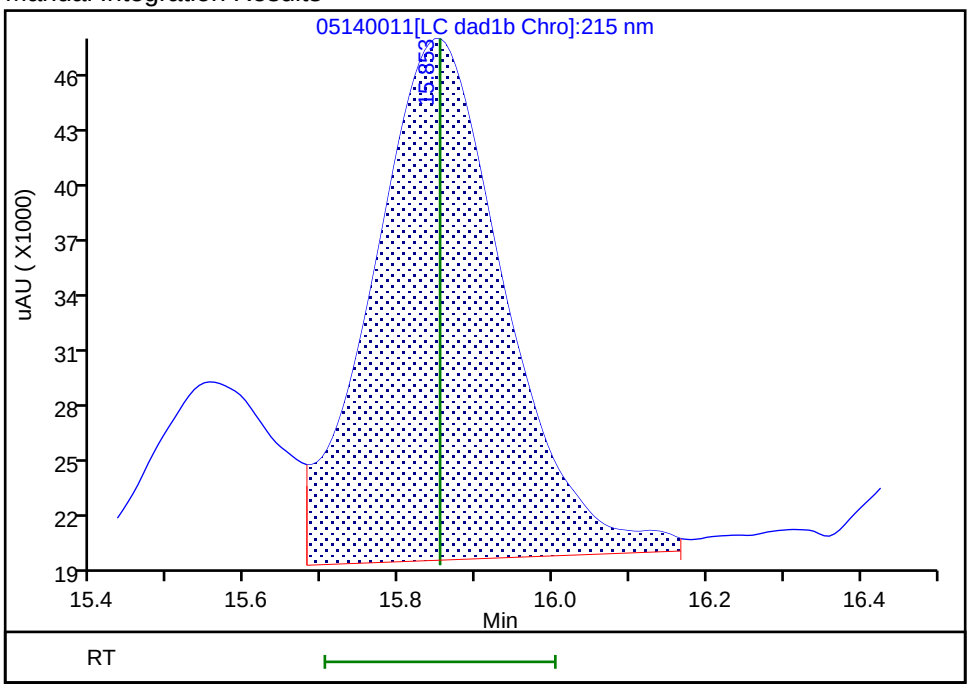
Processing Integration Results

RT: 15.85
Area: 276053
Amount: 2.464482
Amount Units: ug/ml



Manual Integration Results

RT: 15.85
Area: 330378
Amount: 2.605436
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:32:11
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

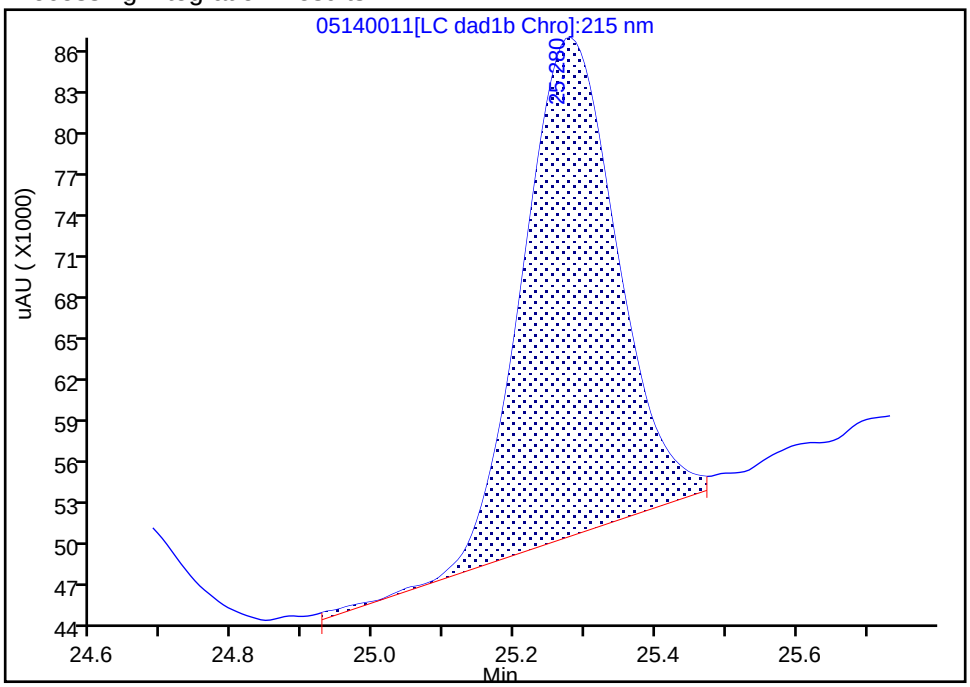
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Injection Date: 14-May-2020 18:36:40 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL 5
Client ID:
Operator ID: CB ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Detector LC DAD1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

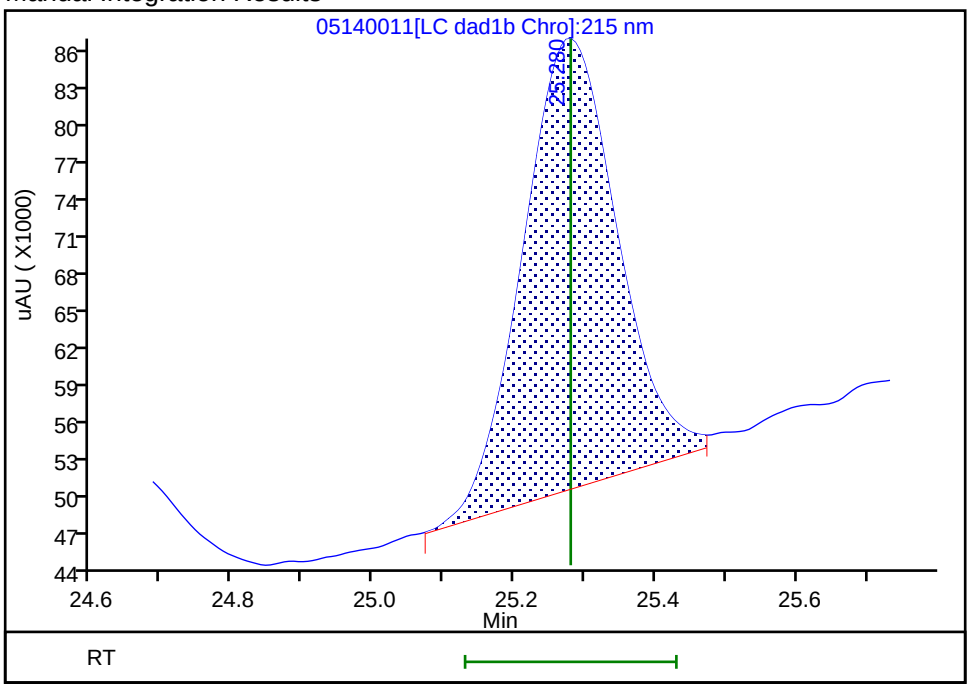
Processing Integration Results

RT: 25.28
Area: 339815
Amount: 2.534573
Amount Units: ug/ml



Manual Integration Results

RT: 25.28
Area: 338241
Amount: 2.404524
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:25:08
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140012.D
Lims ID: IC FULL 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 14-May-2020 19:11:37 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL 4
Misc. Info.: 280-0091518-012
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-May-2020 12:00:57 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0318

First Level Reviewer: zhangji Date: 15-May-2020 11:21:52

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	4.361	4.366	-0.005	44739	0.1000	0.1042	
2 2,4-diamino-6-nitrotoluene	1	4.941	4.880	0.061	33889	0.1000	0.1193	
5 2,4,6-Trinitrophenol	1	6.308	6.300	0.008	23170	0.1000	0.1195	a
6 HMX	1	6.994	6.986	0.008	24294	0.1000	0.1072	
8 RDX	1	9.181	9.173	0.008	27233	0.1000	0.1114	
9 Nitrobenzene	1	12.114	12.106	0.008	42679	0.1004	0.0972	
$ 10 1,2-Dinitrobenzene	1	13.048	13.040	0.008	30683	0.1000	0.1040	
11 3,5-Dinitroaniline	1	14.901	14.886	0.015	51716	0.1000	0.1009	M
12 1,3-Dinitrobenzene	1	15.554	15.553	0.001	69012	0.1002	0.1024	M
13 Nitroglycerin	2	15.848	15.853	-0.005	141489	1.00	1.12	M
14 o-Nitrotoluene	1	16.534	16.533	0.001	29062	0.1000	0.1065	M
15 p-Nitrotoluene	1	16.828	16.820	0.008	25956	0.1002	0.1078	M
16 4-Amino-2,6-dinitrotoluene	1	17.148	17.146	0.002	32448	0.1001	0.0940	M
17 m-Nitrotoluene	1	17.741	17.753	-0.012	30586	0.1001	0.1025	M
18 2-Amino-4,6-dinitrotoluene	1	18.054	18.046	0.008	47526	0.1004	0.1022	M
19 1,3,5-Trinitrobenzene	1	18.881	18.886	-0.005	51028	0.1002	0.1080	M
20 2,6-Dinitrotoluene	1	19.794	19.806	-0.012	34659	0.1004	0.1045	M
21 2,4-Dinitrotoluene	1	20.288	20.293	-0.005	67500	0.1004	0.1055	M
22 Tetryl	1	23.548	23.553	-0.005	38547	0.1002	0.1046	
23 2,4,6-Trinitrotoluene	1	24.654	24.653	0.001	43208	0.1004	0.0997	
24 PETN	2	25.281	25.280	0.001	132172	1.00	0.8106	M

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8330IntermStk_00064	Amount Added:	10.00	Units: uL
8330_ADDs_00026	Amount Added:	5.00	Units: uL

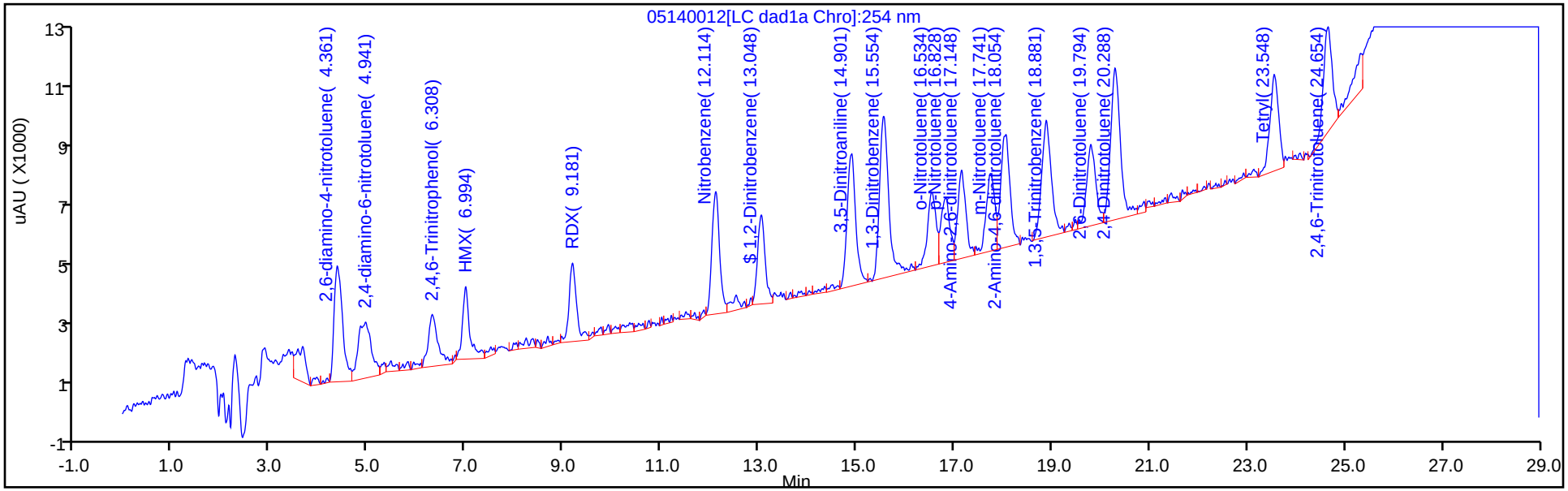
Report Date: 15-May-2020 12:00:57 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

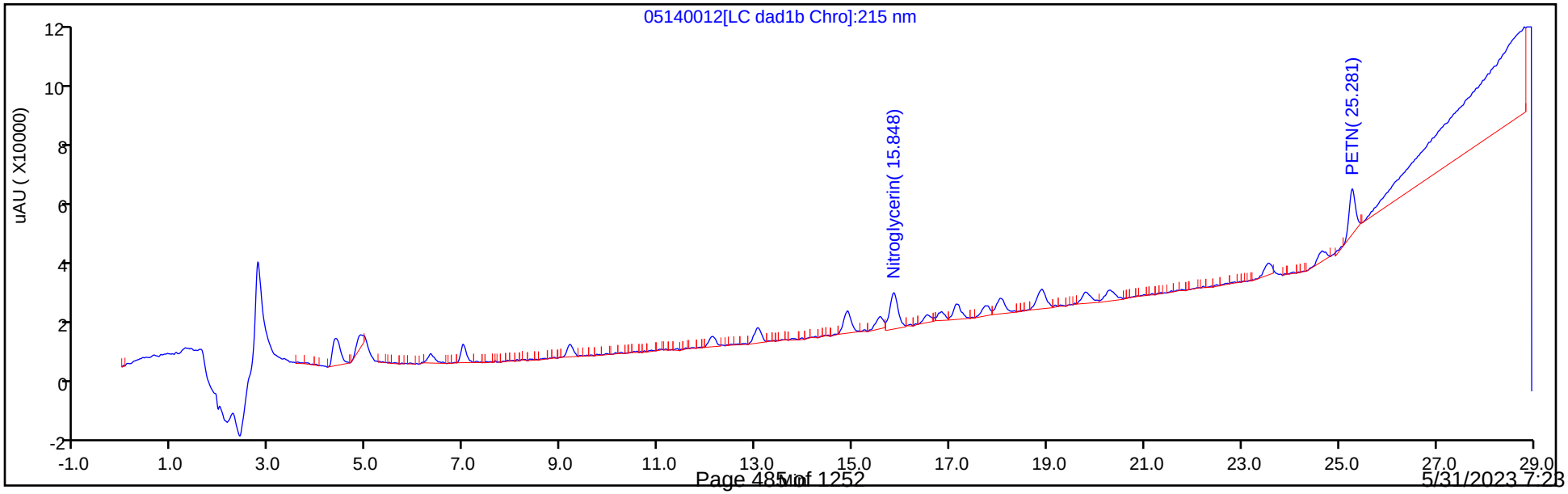
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d

Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC FULL 4			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 Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

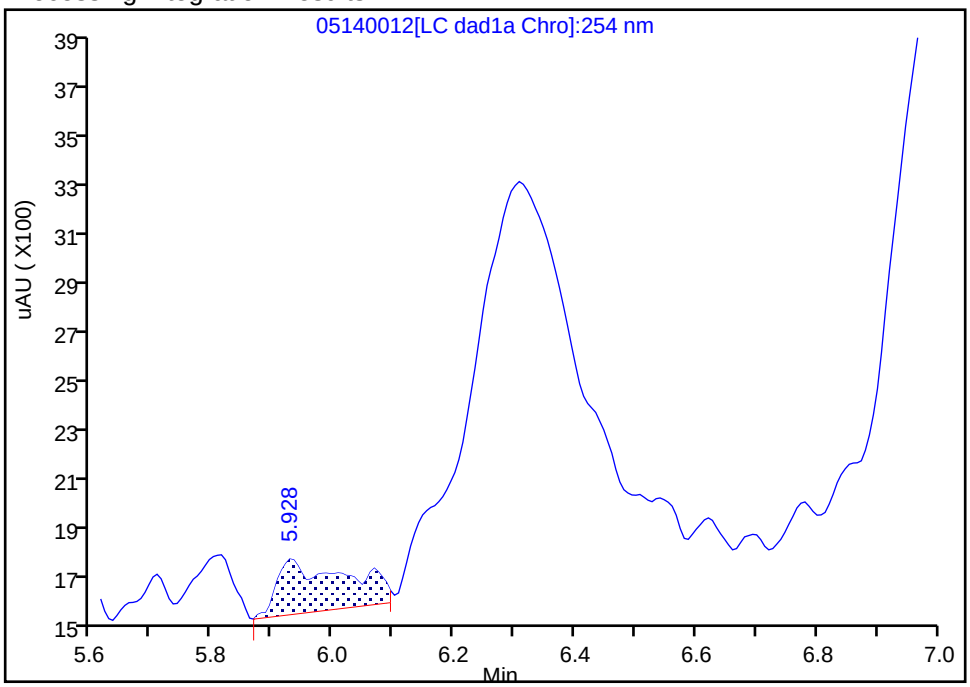
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

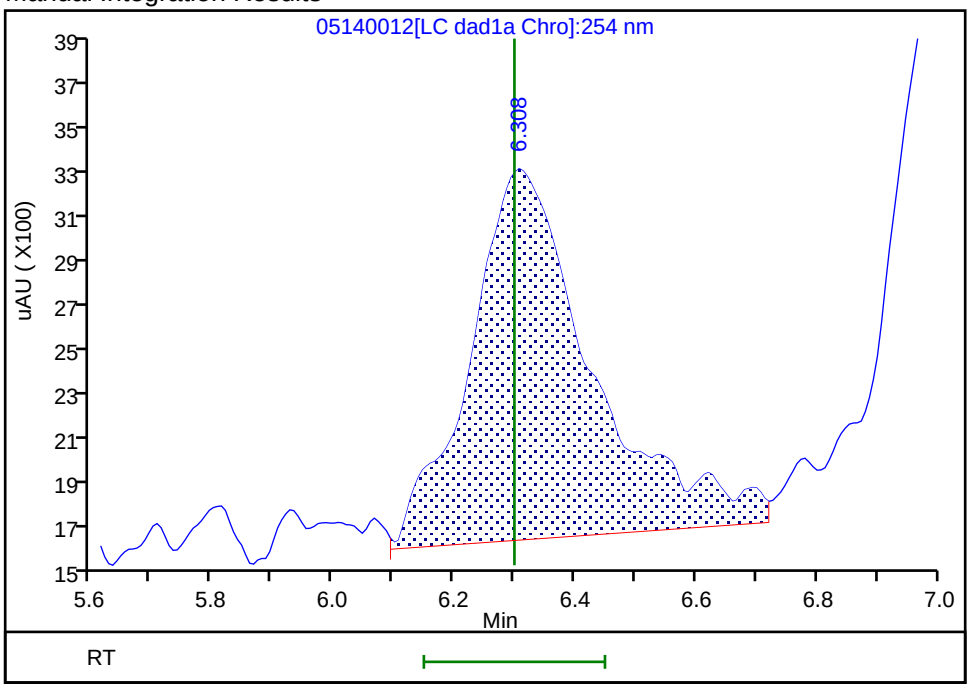
Processing Integration Results

RT: 5.93
Area: 1700
Amount: 0.010784
Amount Units: ug/ml



Manual Integration Results

RT: 6.31
Area: 23170
Amount: 0.119550
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:21
Audit Action: Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

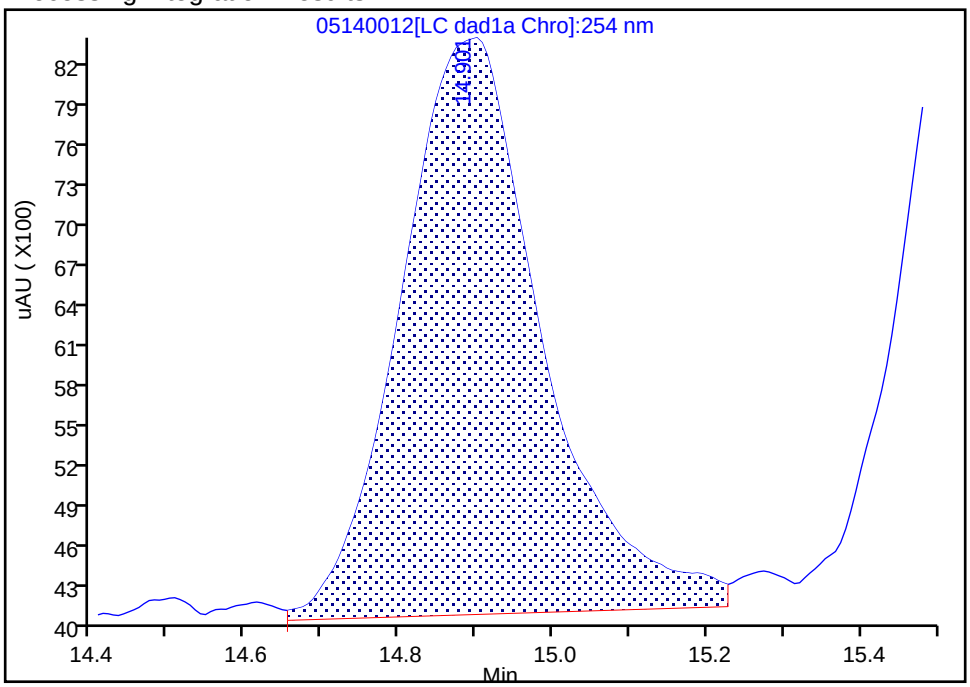
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

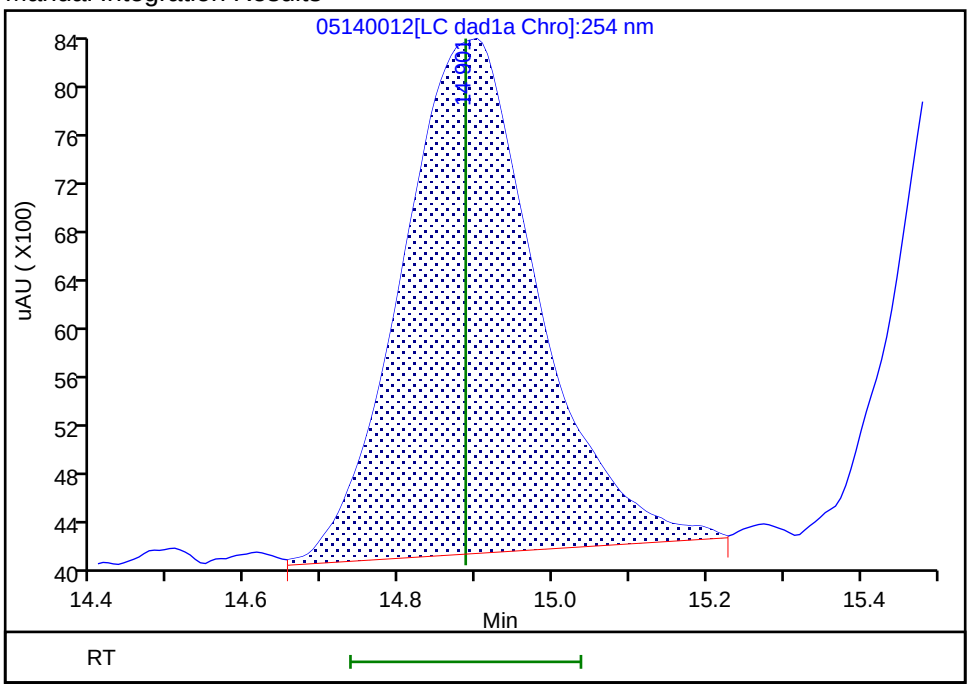
Processing Integration Results

RT: 14.90
Area: 54812
Amount: 0.106944
Amount Units: ug/ml



Manual Integration Results

RT: 14.90
Area: 51716
Amount: 0.100911
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:21:48
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

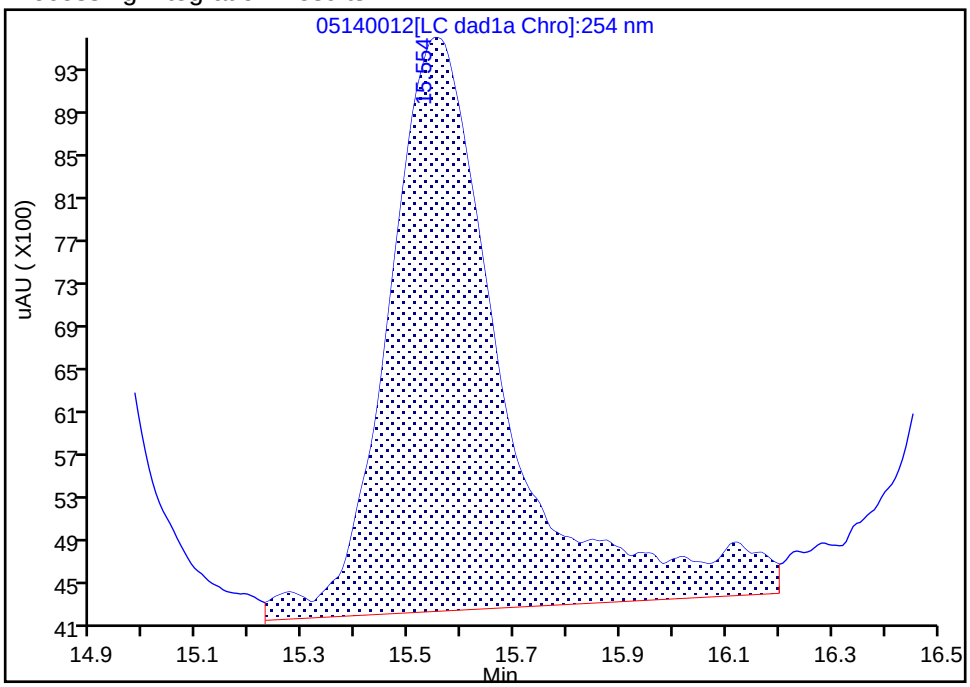
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

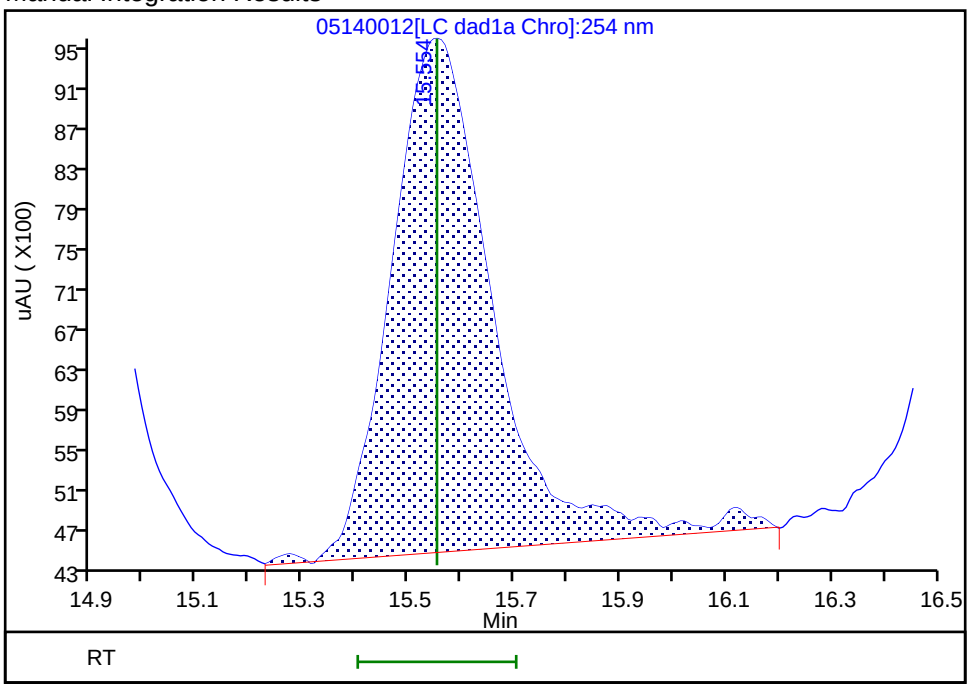
Processing Integration Results

RT: 15.55
Area: 81626
Amount: 0.119366
Amount Units: ug/ml



Manual Integration Results

RT: 15.55
Area: 69012
Amount: 0.102363
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:21:48

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

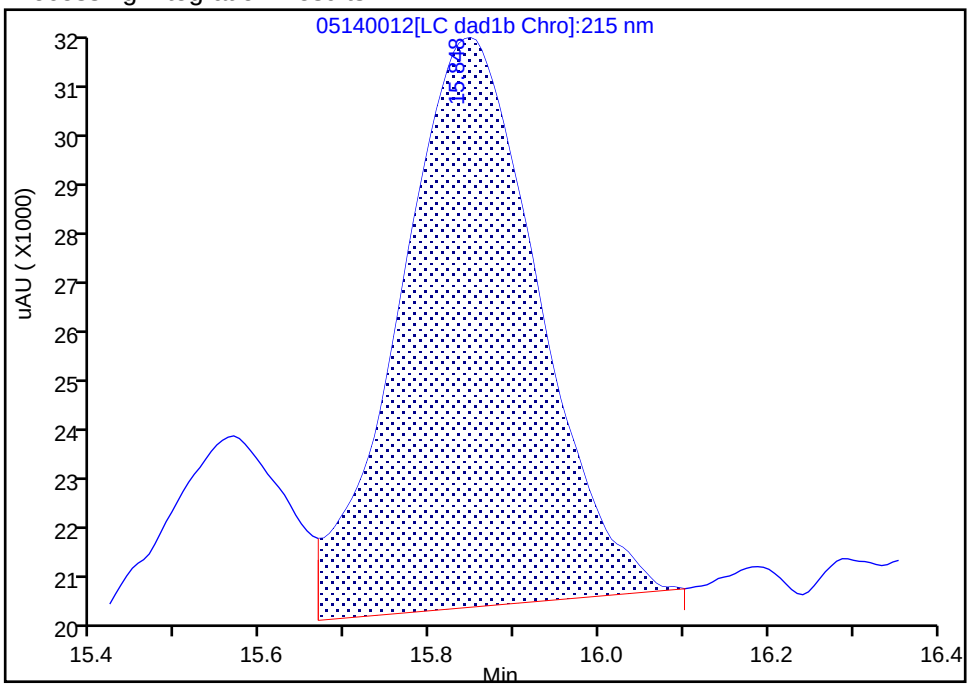
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

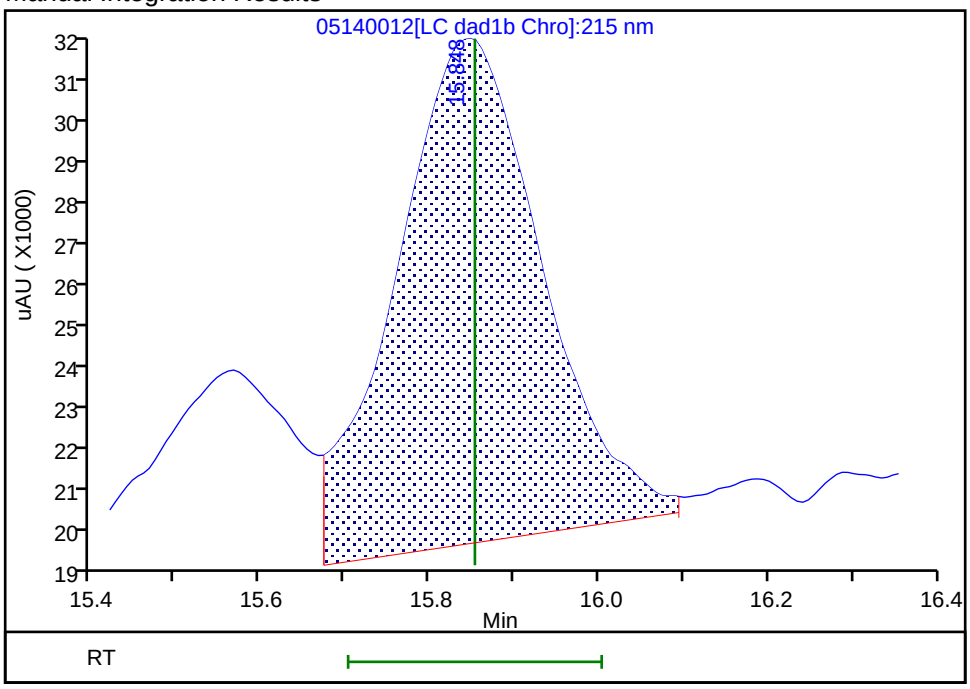
Processing Integration Results

RT: 15.85
Area: 125471
Amount: 1.093631
Amount Units: ug/ml



Manual Integration Results

RT: 15.85
Area: 141489
Amount: 1.115815
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:32:25

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

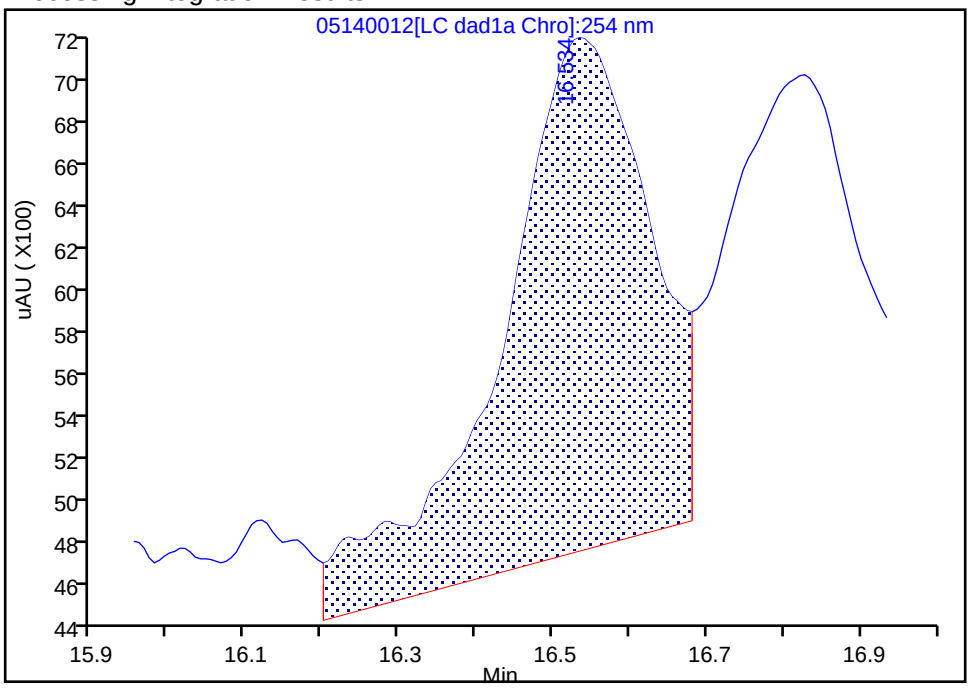
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Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

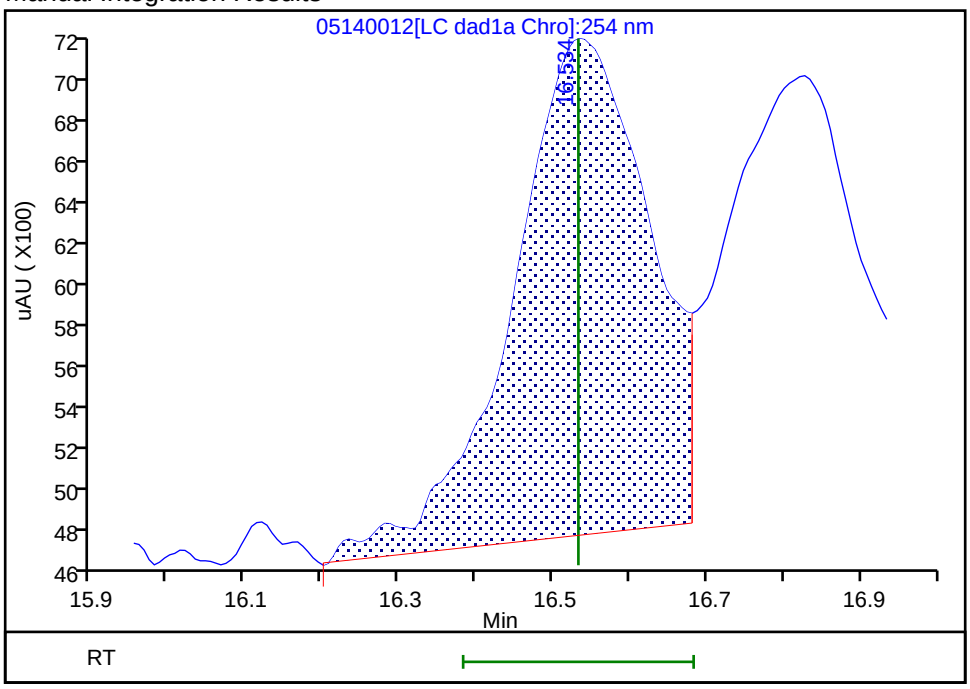
Processing Integration Results

RT: 16.53
Area: 33080
Amount: 0.118510
Amount Units: ug/ml



Manual Integration Results

RT: 16.53
Area: 29062
Amount: 0.106468
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:21:48

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

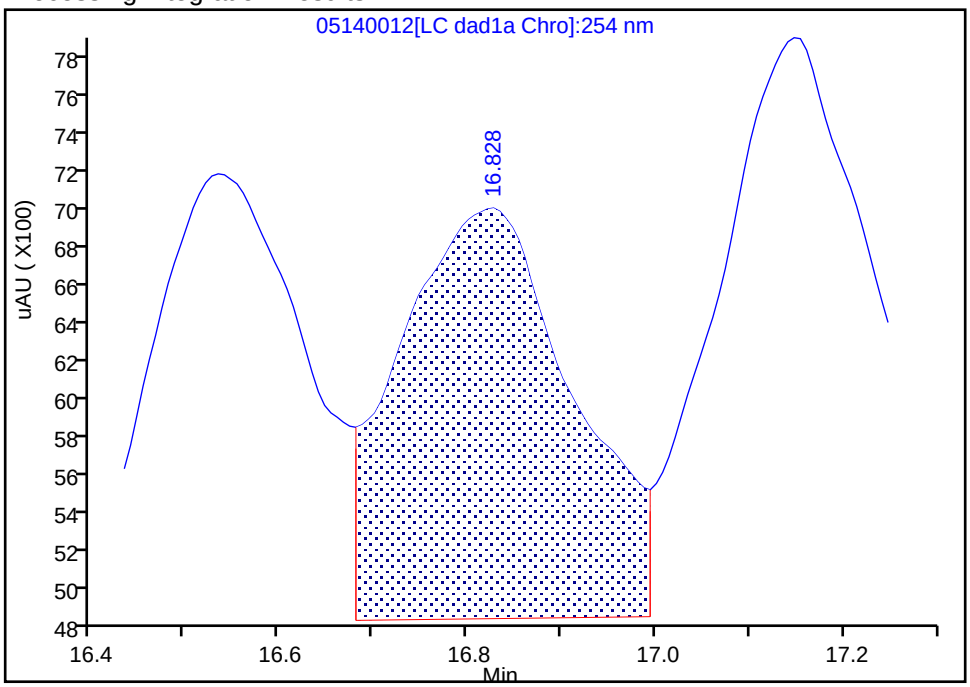
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Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

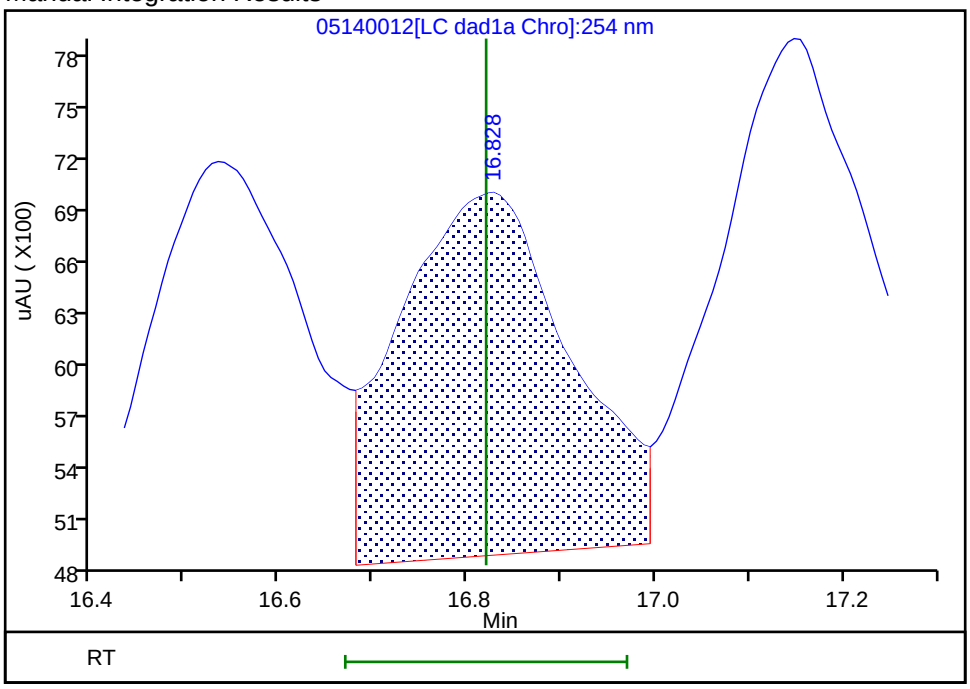
Processing Integration Results

RT: 16.83
Area: 26887
Amount: 0.106277
Amount Units: ug/ml



Manual Integration Results

RT: 16.83
Area: 25956
Amount: 0.107754
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:21:48
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

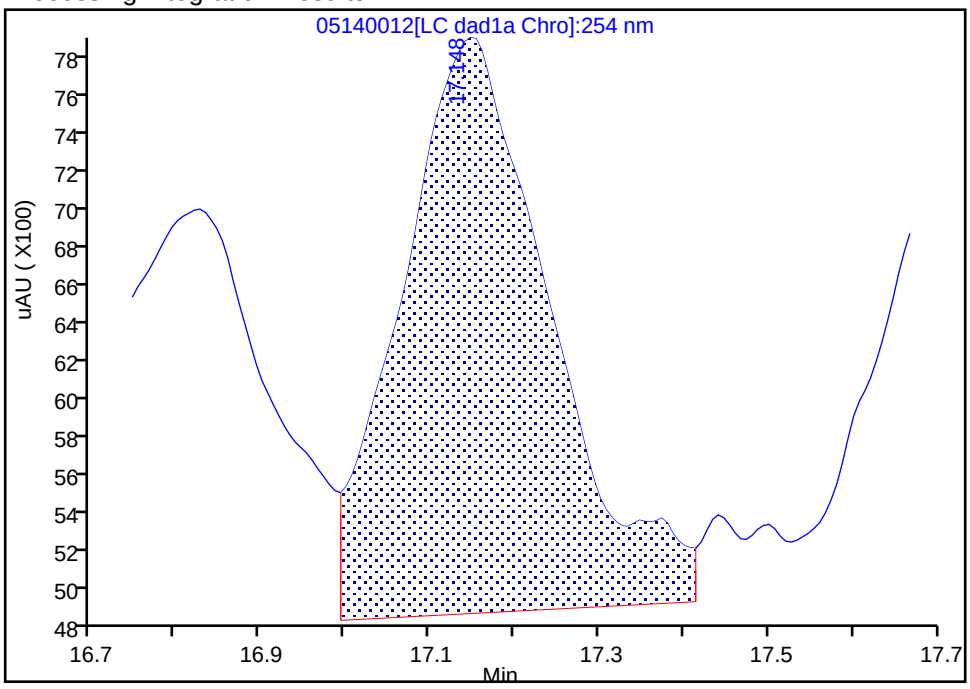
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Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

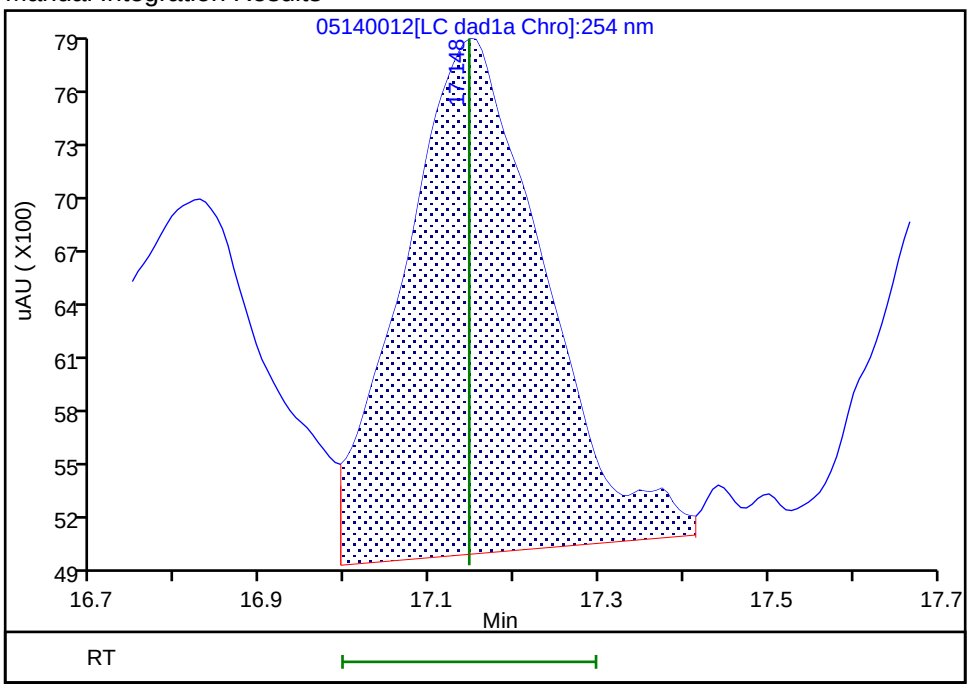
Processing Integration Results

RT: 17.15
Area: 35863
Amount: 0.102237
Amount Units: ug/ml



Manual Integration Results

RT: 17.15
Area: 32448
Amount: 0.093988
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:21:48
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

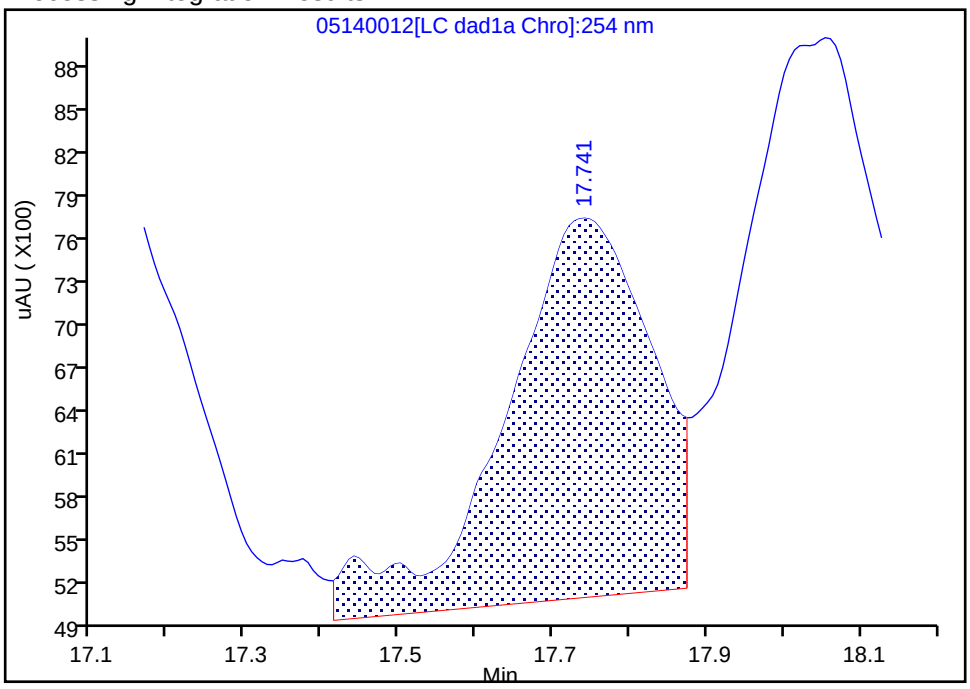
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Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

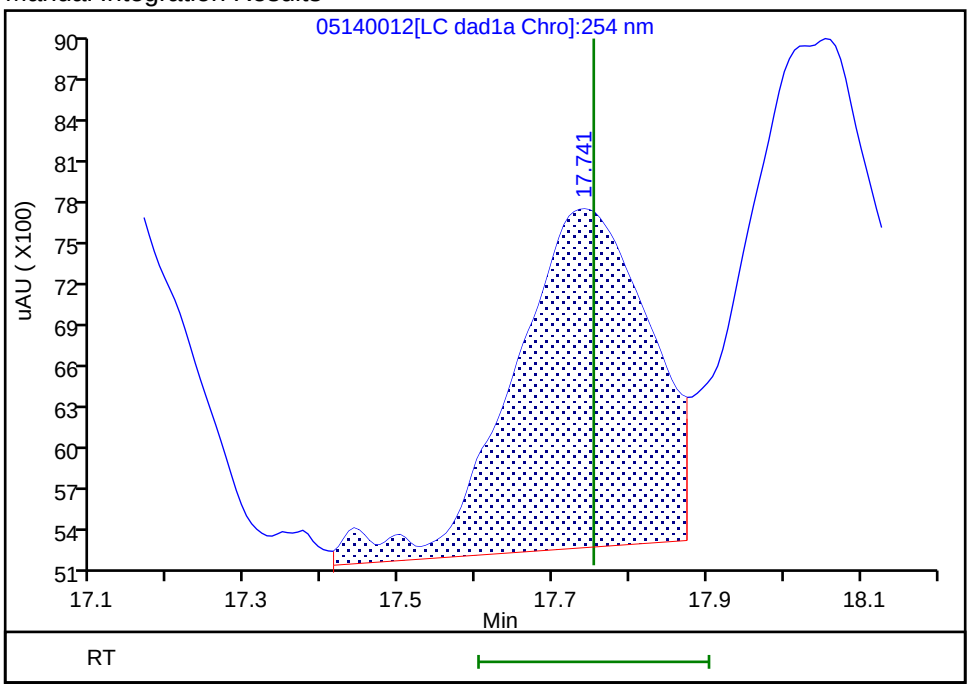
Processing Integration Results

RT: 17.74
Area: 34712
Amount: 0.117045
Amount Units: ug/ml



Manual Integration Results

RT: 17.74
Area: 30586
Amount: 0.102525
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:21:48

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

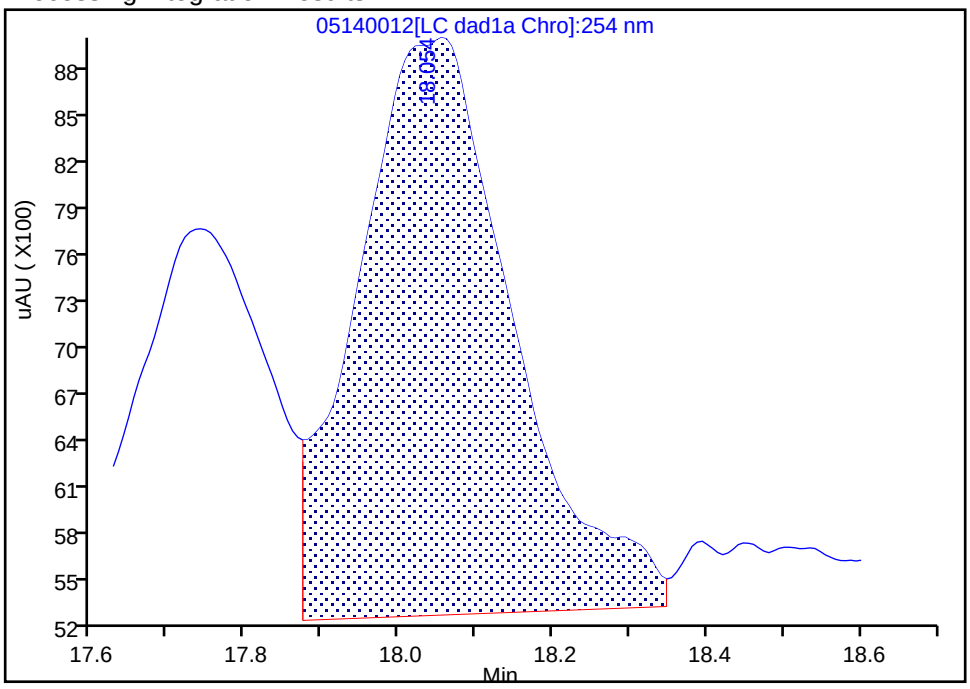
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Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

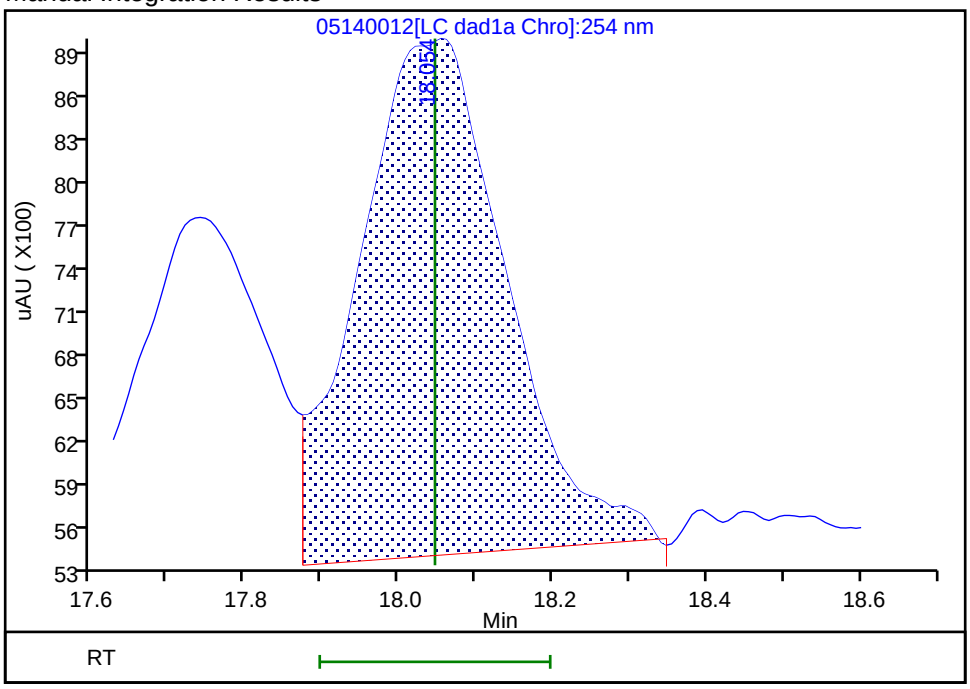
Processing Integration Results

RT: 18.05
Area: 52538
Amount: 0.110599
Amount Units: ug/ml



Manual Integration Results

RT: 18.05
Area: 47526
Amount: 0.102160
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:21:48

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

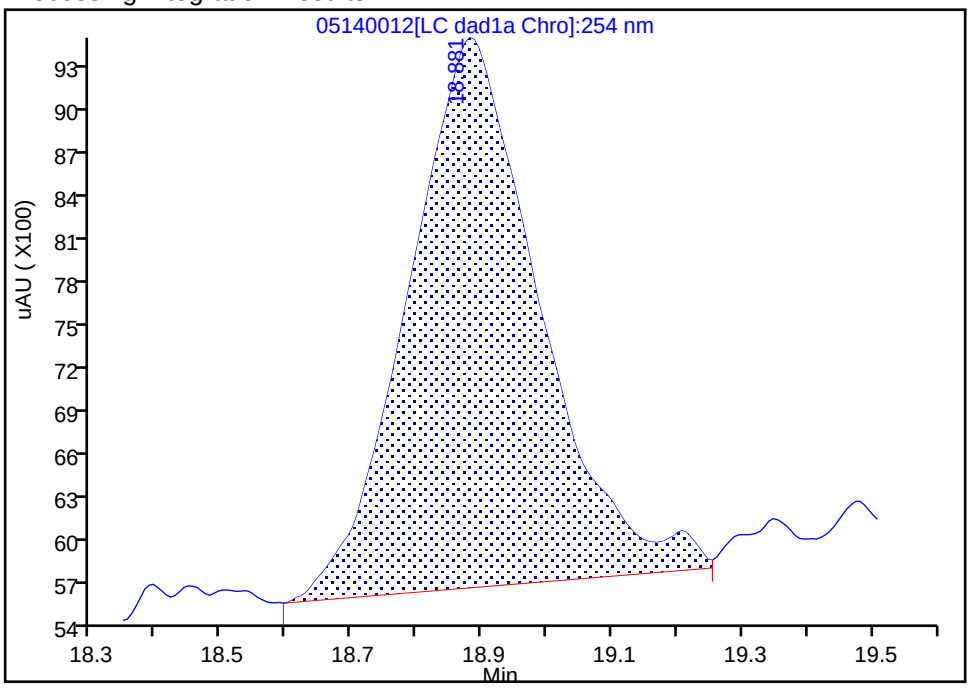
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Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

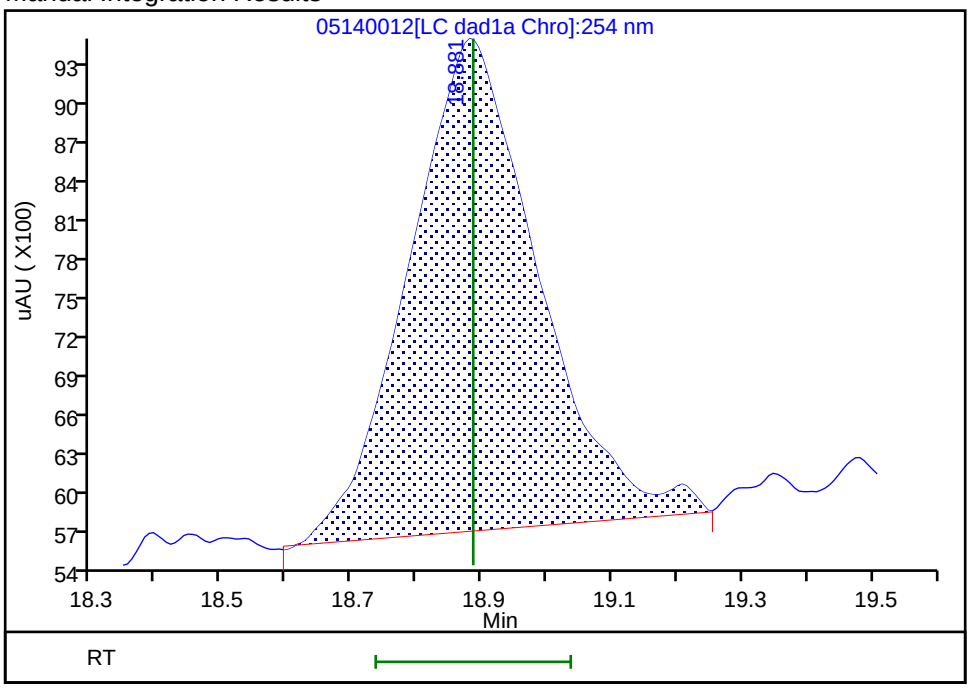
Processing Integration Results

RT: 18.88
Area: 52433
Amount: 0.109995
Amount Units: ug/ml



Manual Integration Results

RT: 18.88
Area: 51028
Amount: 0.108007
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:21:48

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

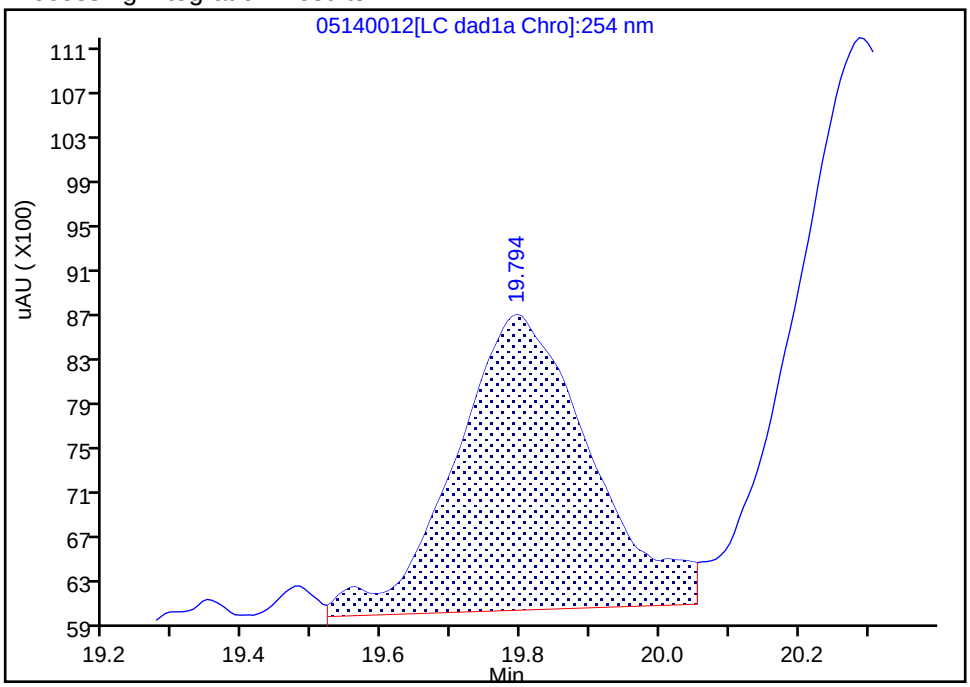
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

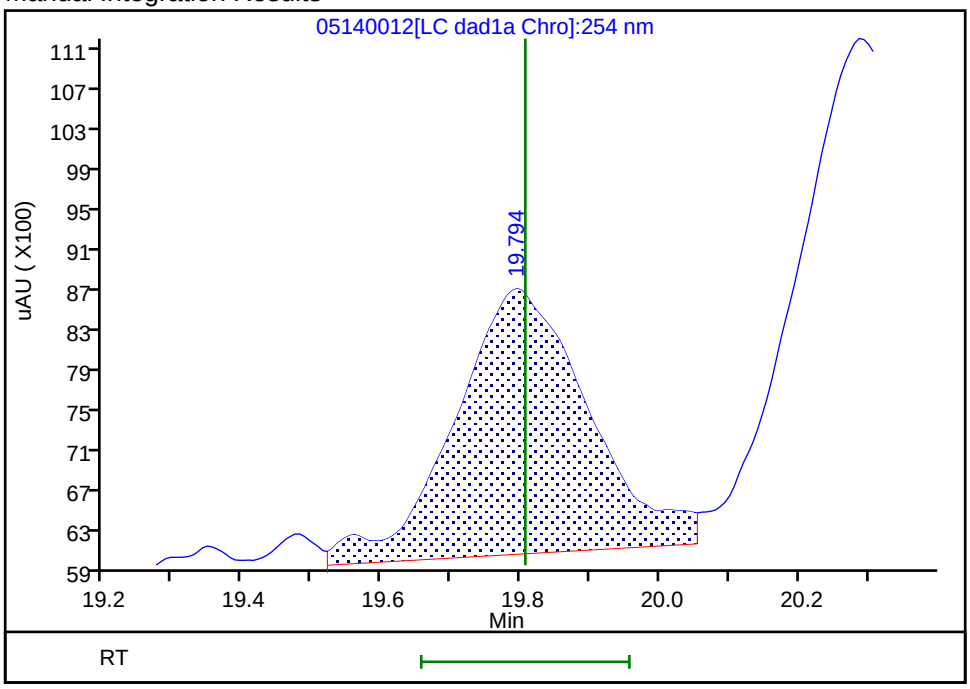
Processing Integration Results

RT: 19.79
Area: 35123
Amount: 0.102517
Amount Units: ug/ml



Manual Integration Results

RT: 19.79
Area: 34659
Amount: 0.104499
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:21:48
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

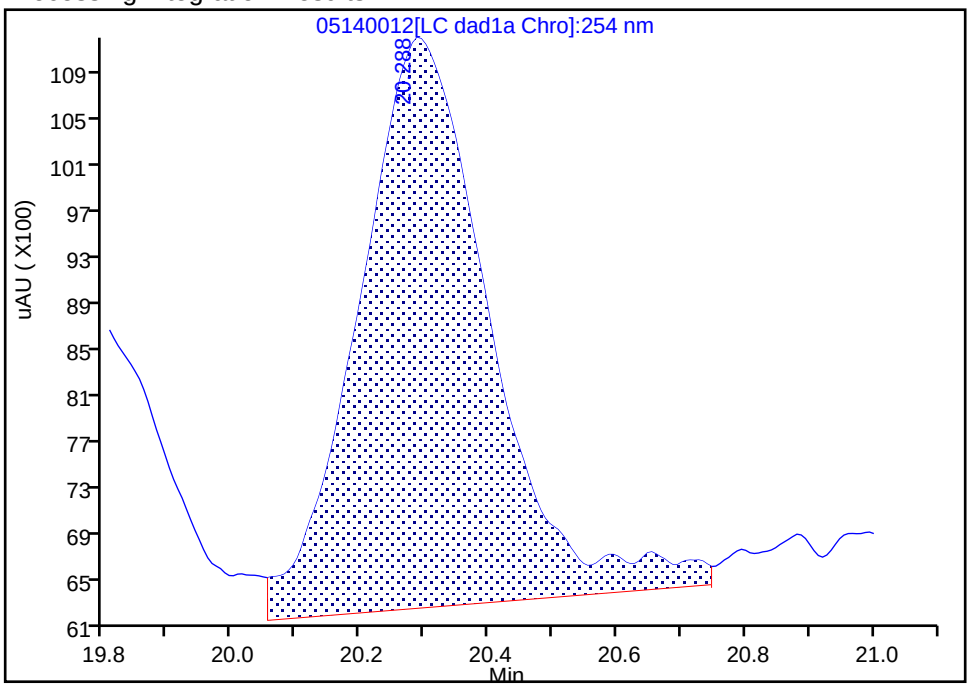
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140012.d				
Injection Date:	14-May-2020 19:11:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

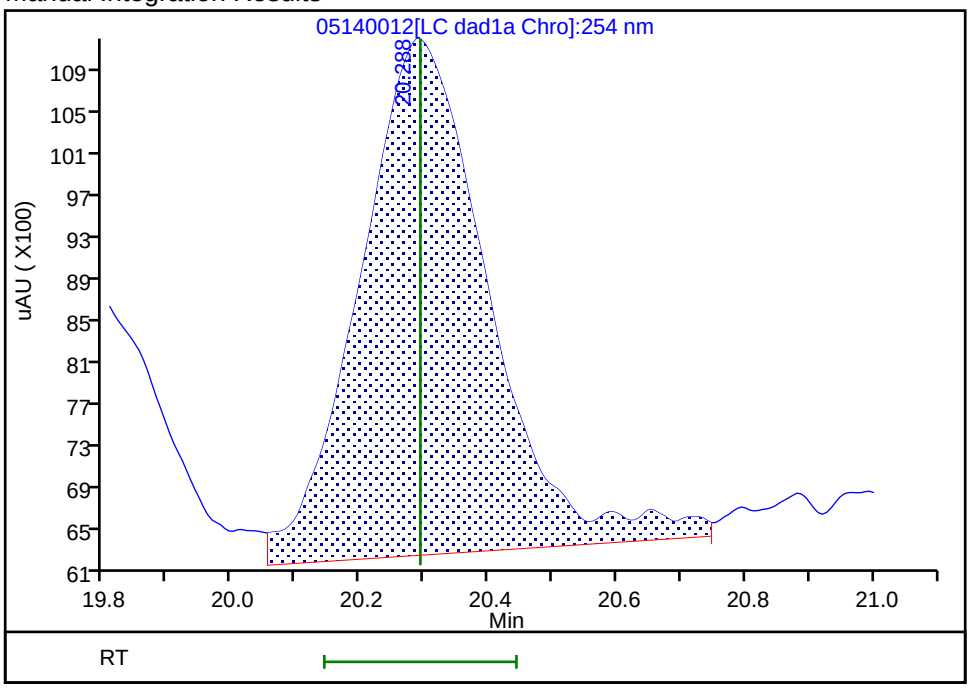
Processing Integration Results

RT: 20.29
Area: 69455
Amount: 0.105715
Amount Units: ug/ml



Manual Integration Results

RT: 20.29
Area: 67500
Amount: 0.105450
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:21:48
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

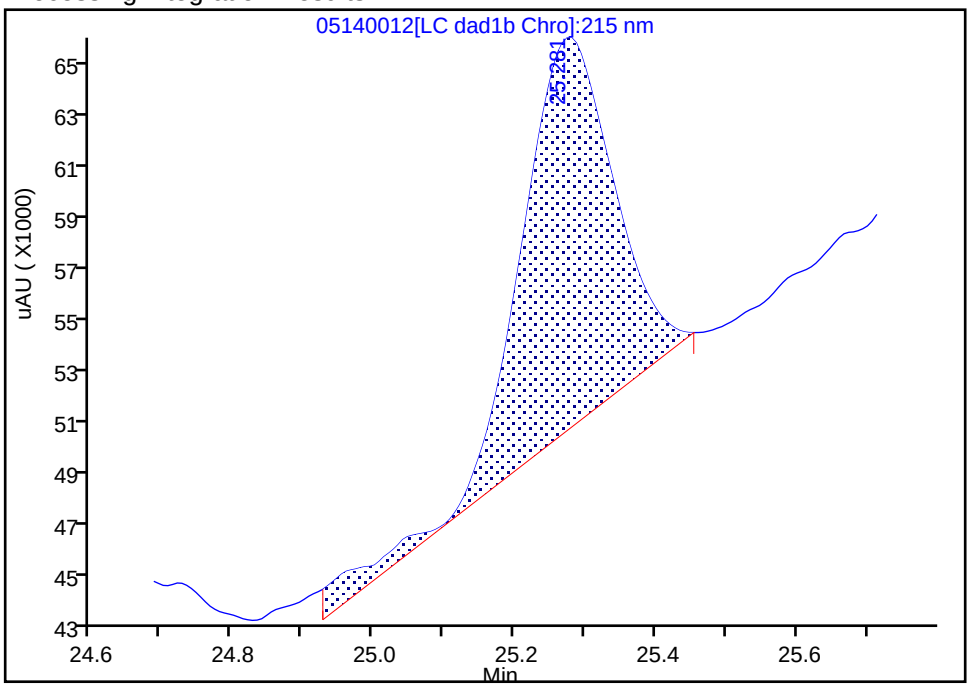
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Injection Date: 14-May-2020 19:11:37 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL 4
Client ID:
Operator ID: CB ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Detector LC DAD1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

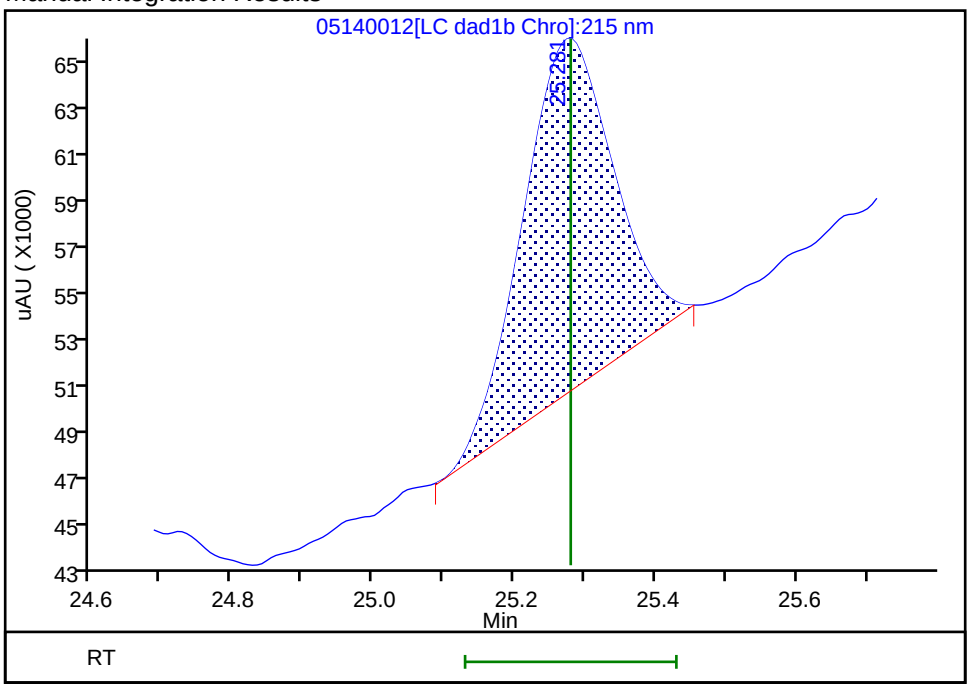
Processing Integration Results

RT: 25.28
Area: 139443
Amount: 1.011611
Amount Units: ug/ml



Manual Integration Results

RT: 25.28
Area: 132172
Amount: 0.810643
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:24:59
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140013.D
Lims ID: IC FULL 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 14-May-2020 19:46:37 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL 3
Misc. Info.: 280-0091518-013
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-May-2020 12:00:58 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0318

First Level Reviewer: zhangji Date: 15-May-2020 11:22:17

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	4.357	4.366	-0.009	22969	0.0500	0.0535	
2 2,4-diamino-6-nitrotoluene	1	4.851	4.880	-0.029	16562	0.0500	0.0464	
5 2,4,6-Trinitrophenol	1	6.331	6.300	0.031	9462	0.0500	0.0488	a
6 HMX	1	6.984	6.986	-0.002	12646	0.0500	0.0414	
8 RDX	1	9.184	9.173	0.011	15119	0.0500	0.0619	
9 Nitrobenzene	1	12.110	12.106	0.004	28424	0.0502	0.0647	
$ 10 1,2-Dinitrobenzene	1	13.037	13.040	-0.003	18744	0.0500	0.0610	M
11 3,5-Dinitroaniline	1	14.890	14.886	0.004	27916	0.0500	0.0518	M
12 1,3-Dinitrobenzene	1	15.544	15.553	-0.009	37161	0.0501	0.0551	M
13 Nitroglycerin	2	15.844	15.853	-0.009	64042	0.5000	0.5050	M
14 o-Nitrotoluene	1	16.550	16.533	0.017	16003	0.0500	0.0586	M
15 p-Nitrotoluene	1	16.837	16.820	0.017	15492	0.0501	0.0643	M
16 4-Amino-2,6-dinitrotoluene	1	17.157	17.146	0.011	22118	0.0501	0.0641	M
17 m-Nitrotoluene	1	17.724	17.753	-0.029	19280	0.0501	0.0646	M
18 2-Amino-4,6-dinitrotoluene	1	18.030	18.046	-0.016	28982	0.0502	0.0623	M
19 1,3,5-Trinitrobenzene	1	18.864	18.886	-0.022	26649	0.0501	0.0564	M
20 2,6-Dinitrotoluene	1	19.817	19.806	0.011	19107	0.0502	0.0507	M
21 2,4-Dinitrotoluene	1	20.290	20.293	-0.003	37302	0.0502	0.0583	M
22 Tetryl	1	23.557	23.553	0.004	20202	0.0501	0.0548	
23 2,4,6-Trinitrotoluene	1	24.637	24.653	-0.016	28366	0.0502	0.0628	
24 PETN	2	25.277	25.280	-0.003	102120	0.5000	0.5782	M

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8330IntermStk_00064	Amount Added:	5.00	Units: uL
8330_ADDs_00026	Amount Added:	2.50	Units: uL

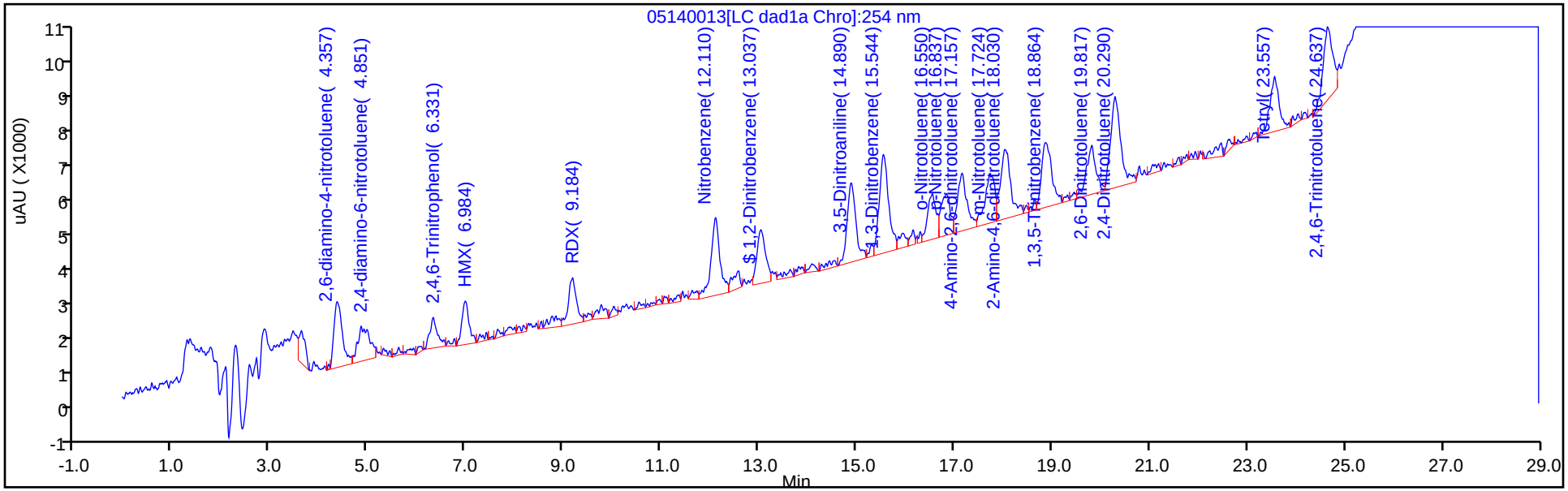
Report Date: 15-May-2020 12:00:58 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

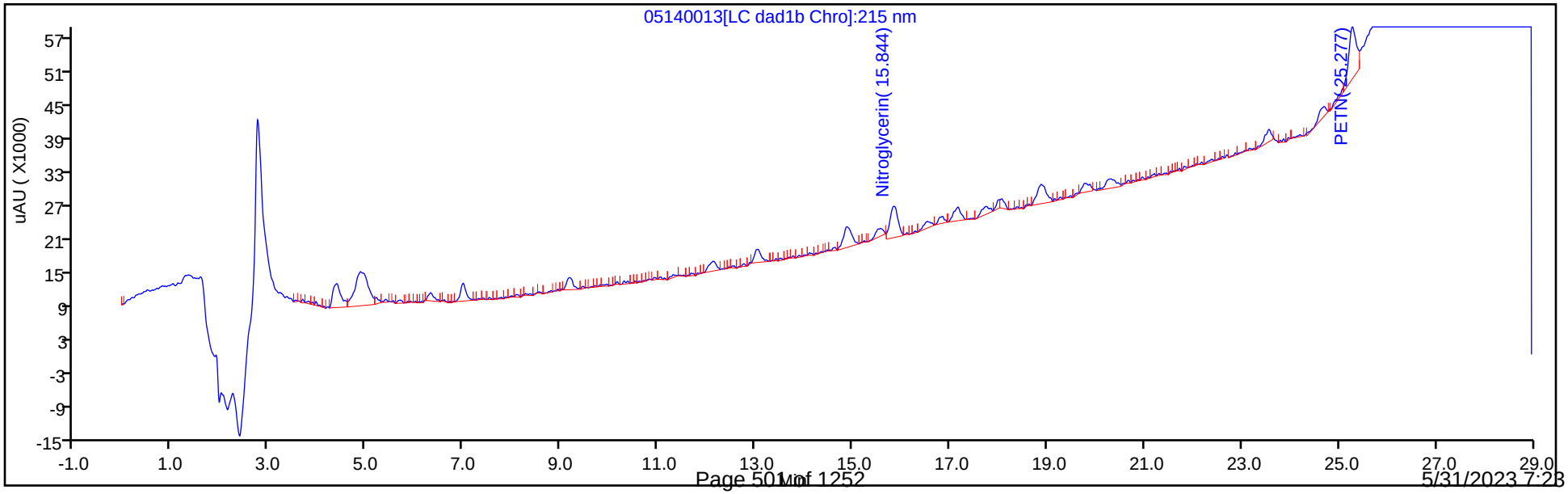
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Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC FULL 3			Worklist Smp#:	13
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins TestAmerica, Denver

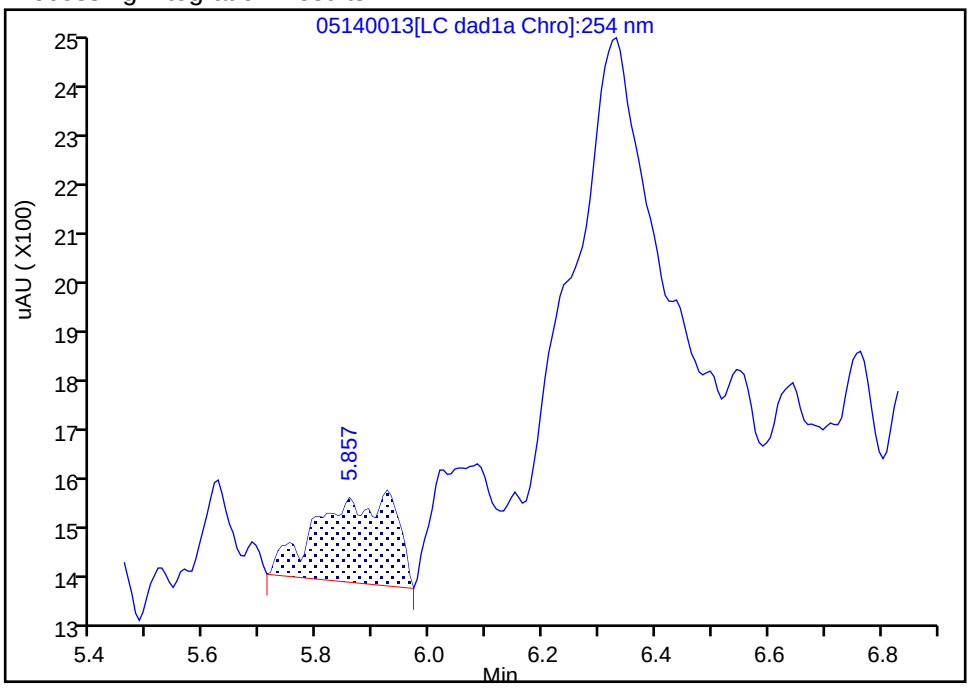
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

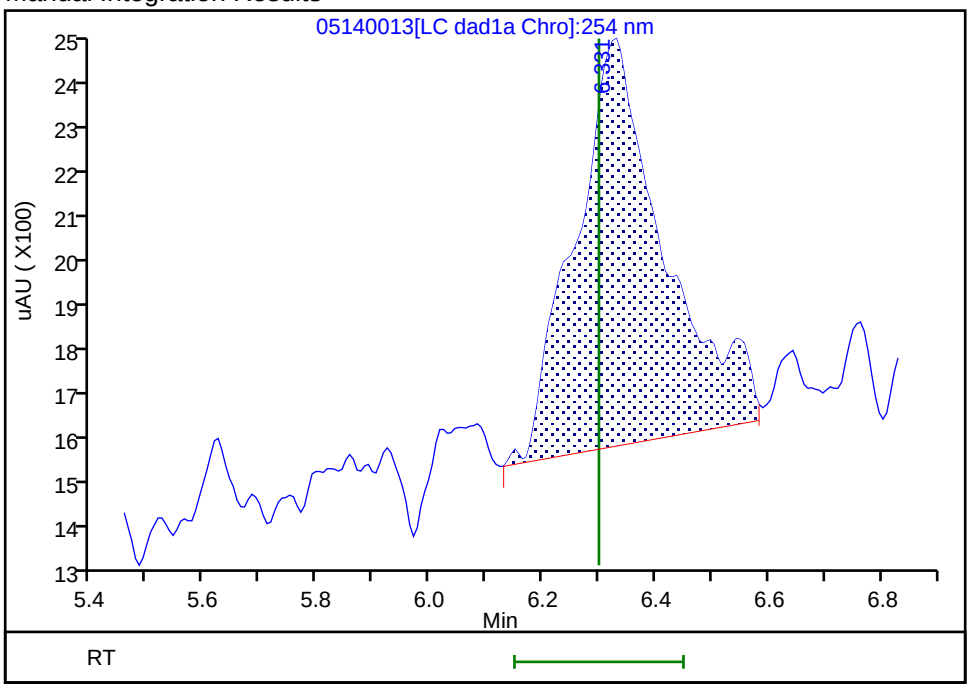
Processing Integration Results

RT: 5.86
Area: 1615
Amount: 0.011701
Amount Units: ug/ml



Manual Integration Results

RT: 6.33
Area: 9462
Amount: 0.048821
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:16
Audit Action: Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

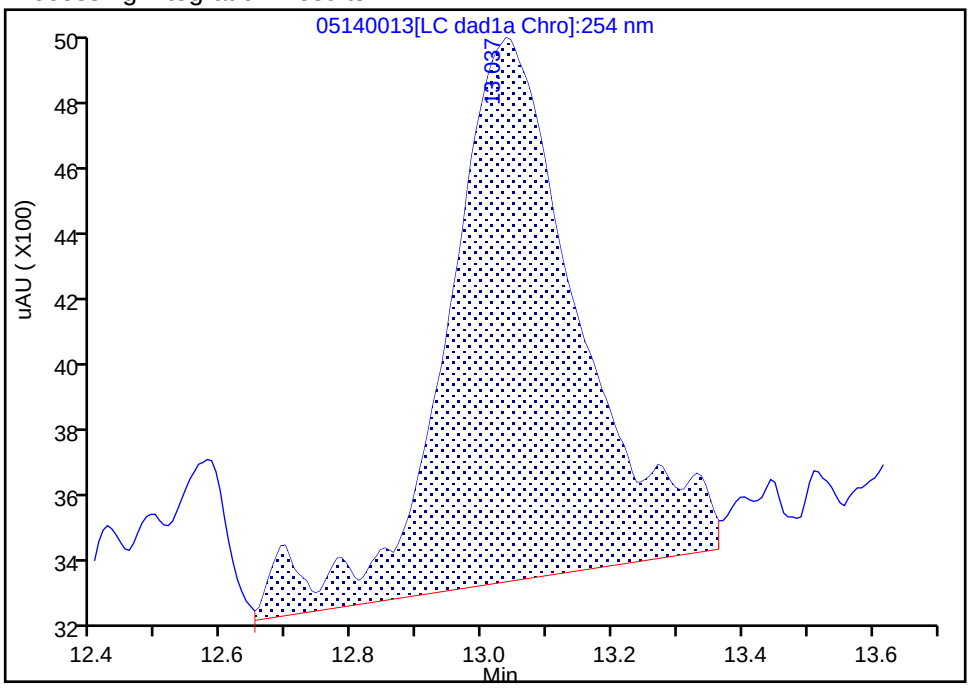
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

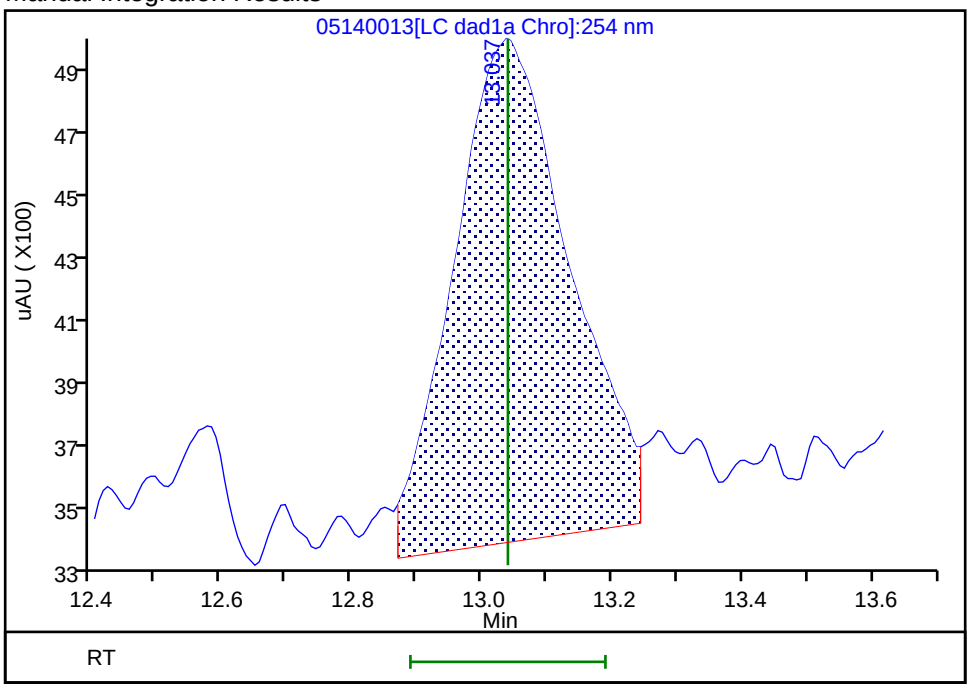
Processing Integration Results

RT: 13.04
Area: 21320
Amount: 0.066490
Amount Units: ug/ml



Manual Integration Results

RT: 13.04
Area: 18744
Amount: 0.060979
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:35:23

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

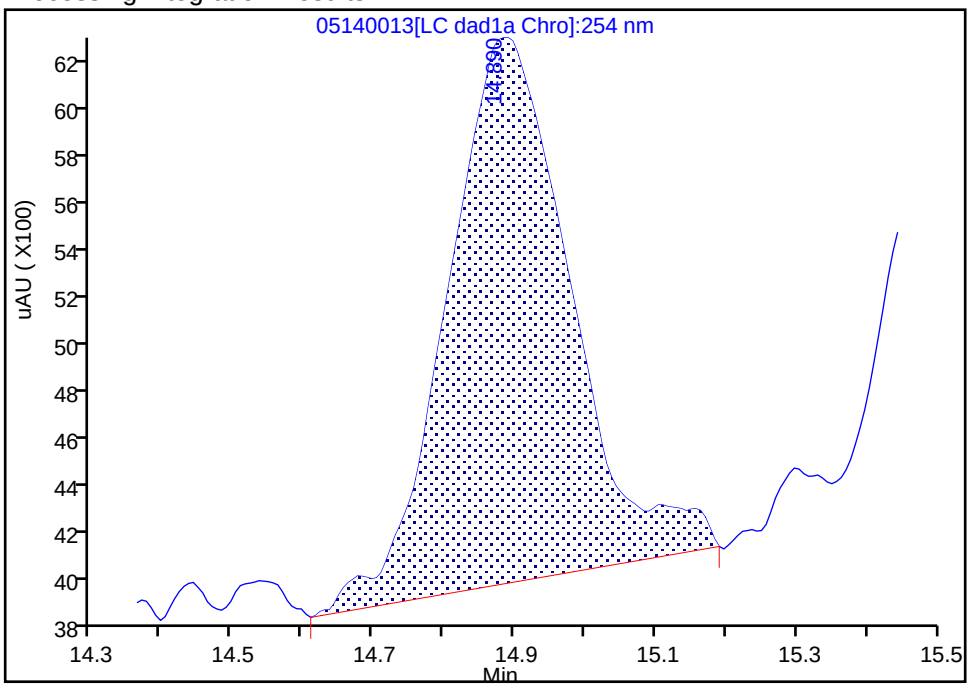
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

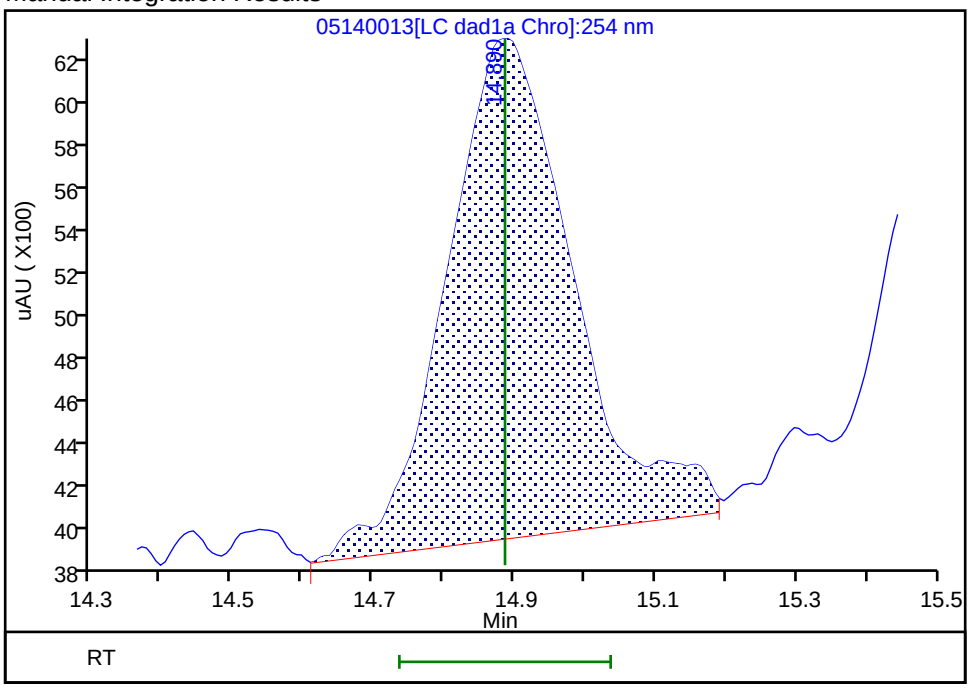
Processing Integration Results

RT: 14.89
Area: 26767
Amount: 0.049390
Amount Units: ug/ml



Manual Integration Results

RT: 14.89
Area: 27916
Amount: 0.051839
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:04
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

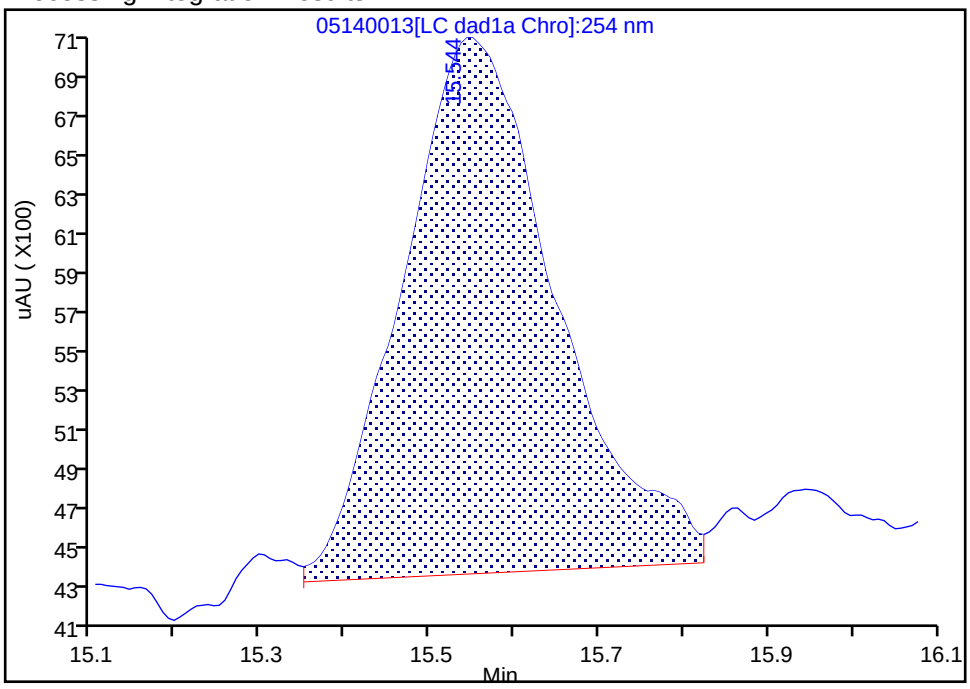
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

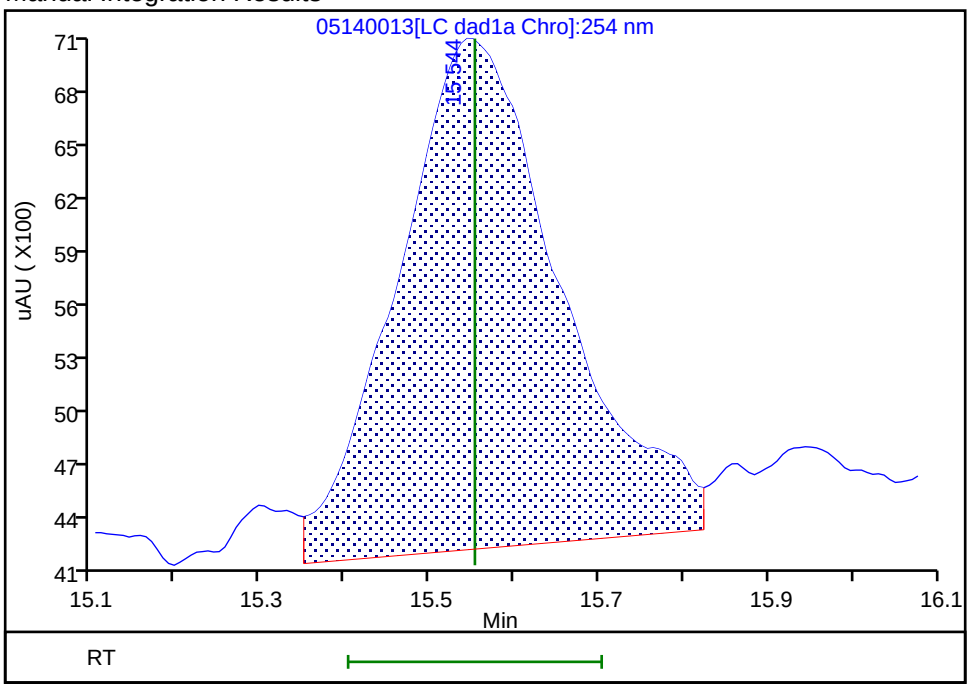
Processing Integration Results

RT: 15.54
Area: 33327
Amount: 0.049753
Amount Units: ug/ml



Manual Integration Results

RT: 15.54
Area: 37161
Amount: 0.055120
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:04
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

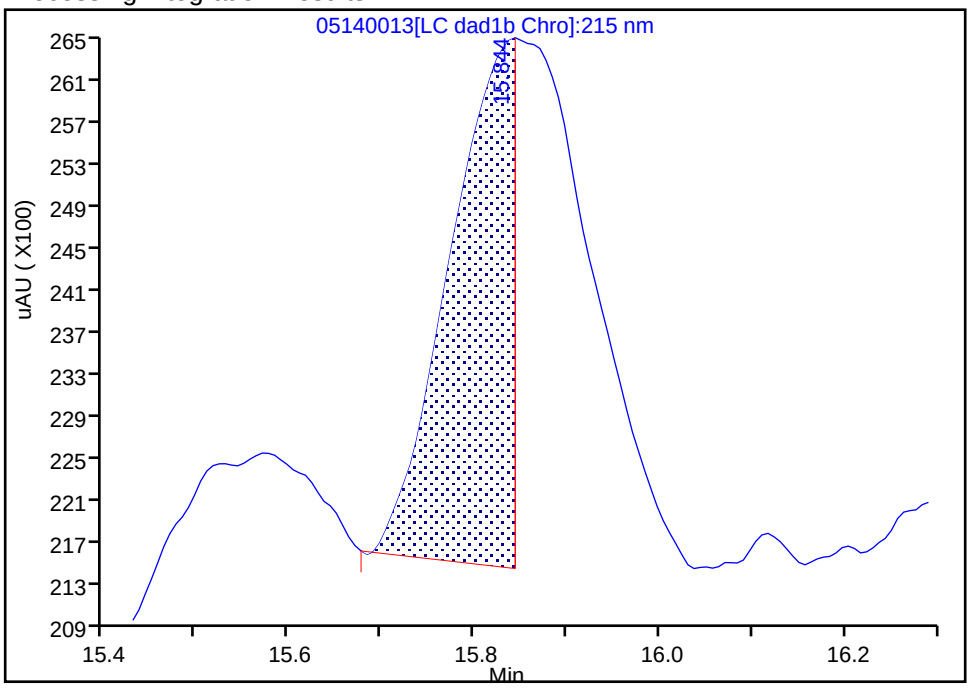
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

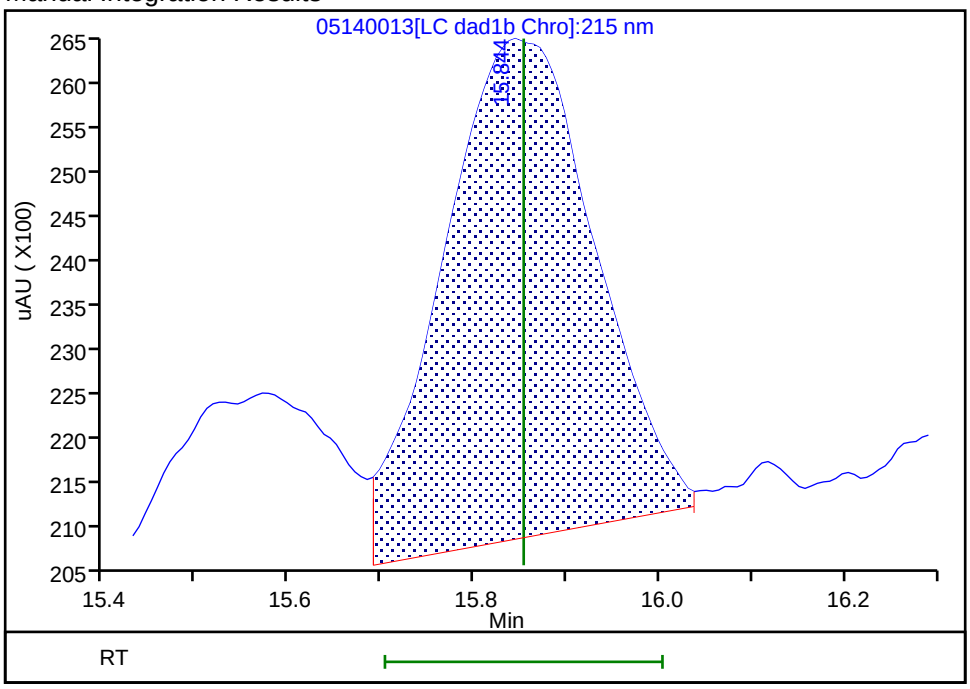
Processing Integration Results

RT: 15.84
Area: 23753
Amount: 0.203485
Amount Units: ug/ml



Manual Integration Results

RT: 15.84
Area: 64042
Amount: 0.505050
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:32:41

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

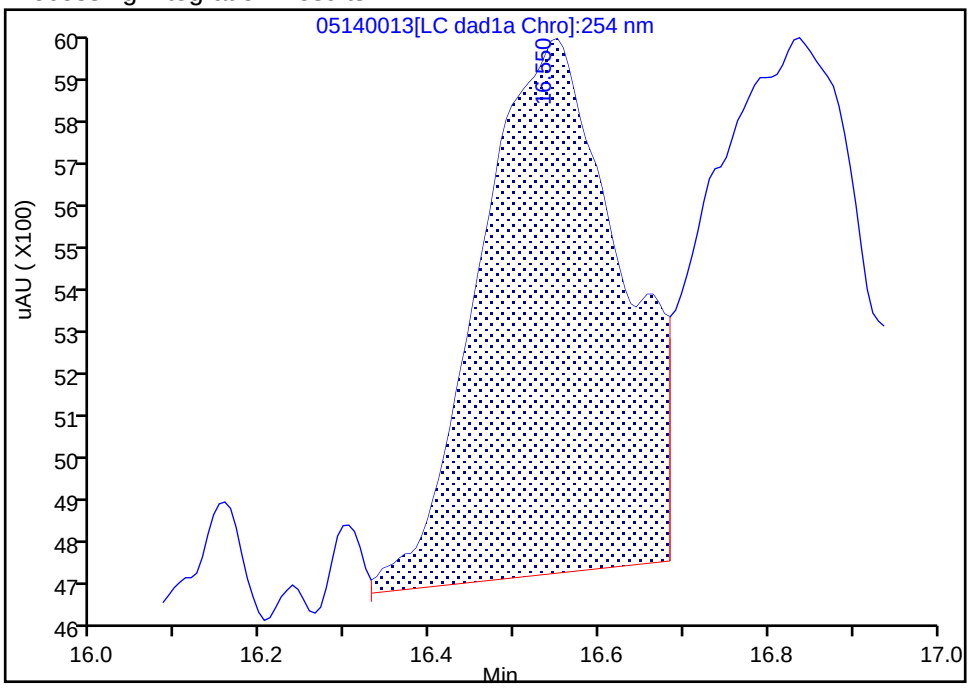
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

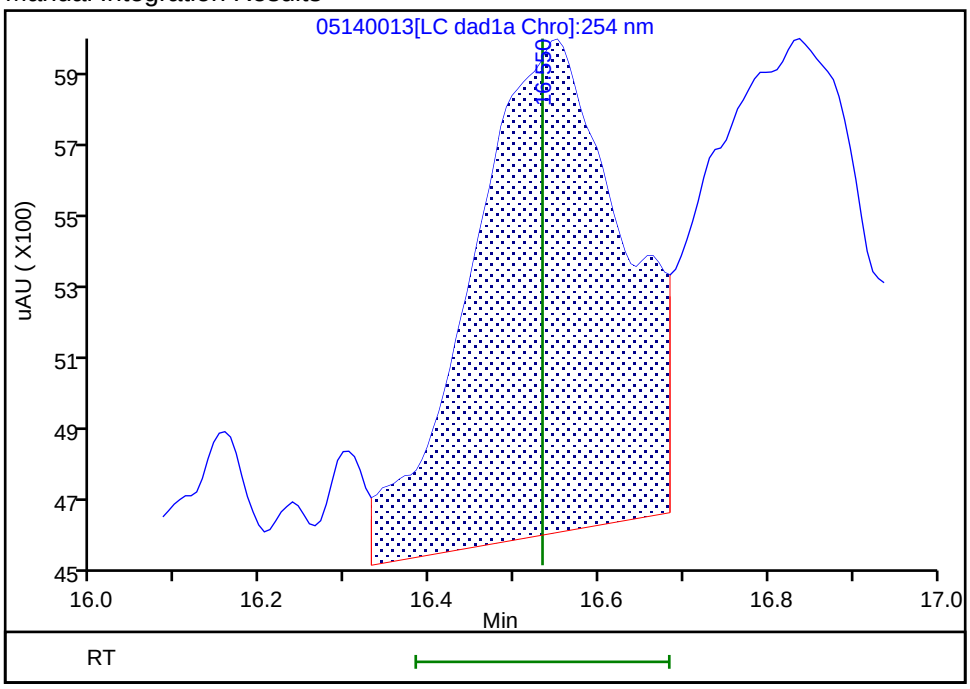
Processing Integration Results

RT: 16.55
Area: 13586
Amount: 0.049463
Amount Units: ug/ml



Manual Integration Results

RT: 16.55
Area: 16003
Amount: 0.058627
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:04
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

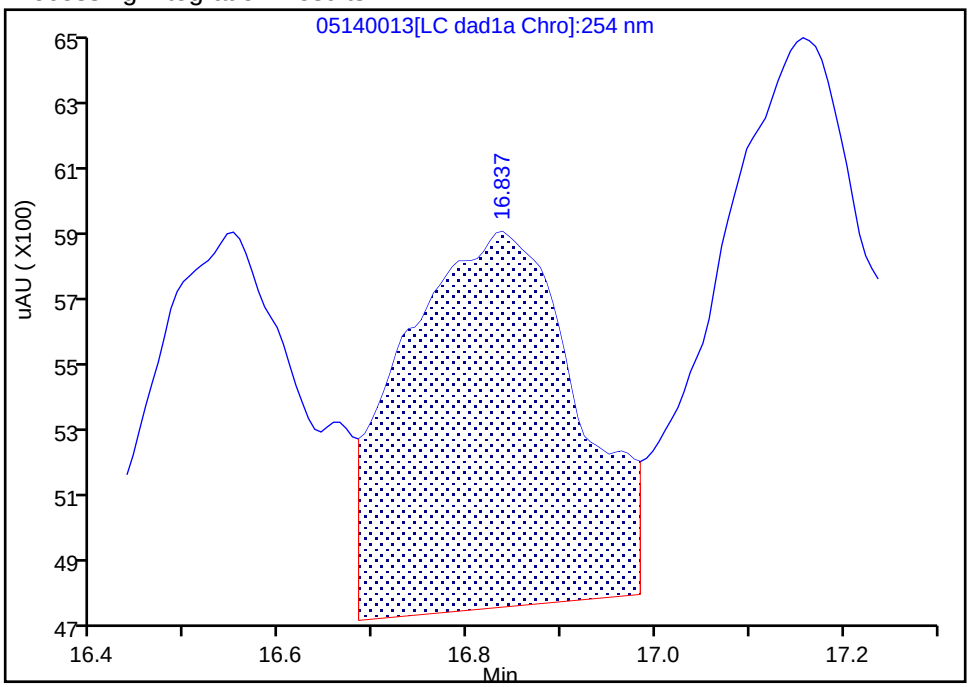
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d
Injection Date: 14-May-2020 19:46:37 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL 3
Client ID:
Operator ID: CB ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

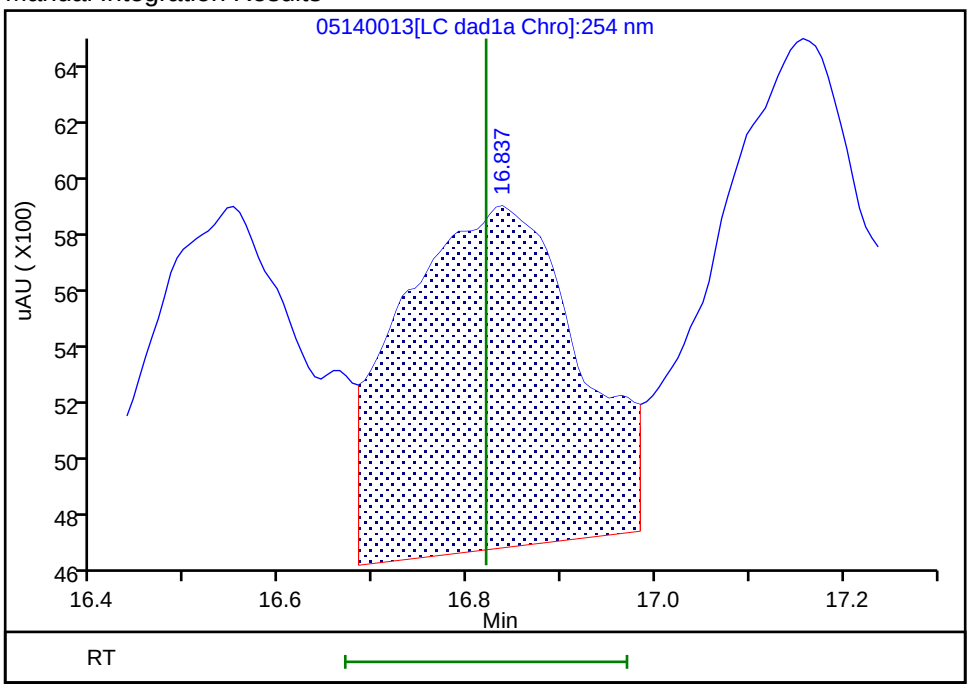
Processing Integration Results

RT: 16.84
Area: 14394
Amount: 0.057129
Amount Units: ug/ml



Manual Integration Results

RT: 16.84
Area: 15492
Amount: 0.064314
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:04
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

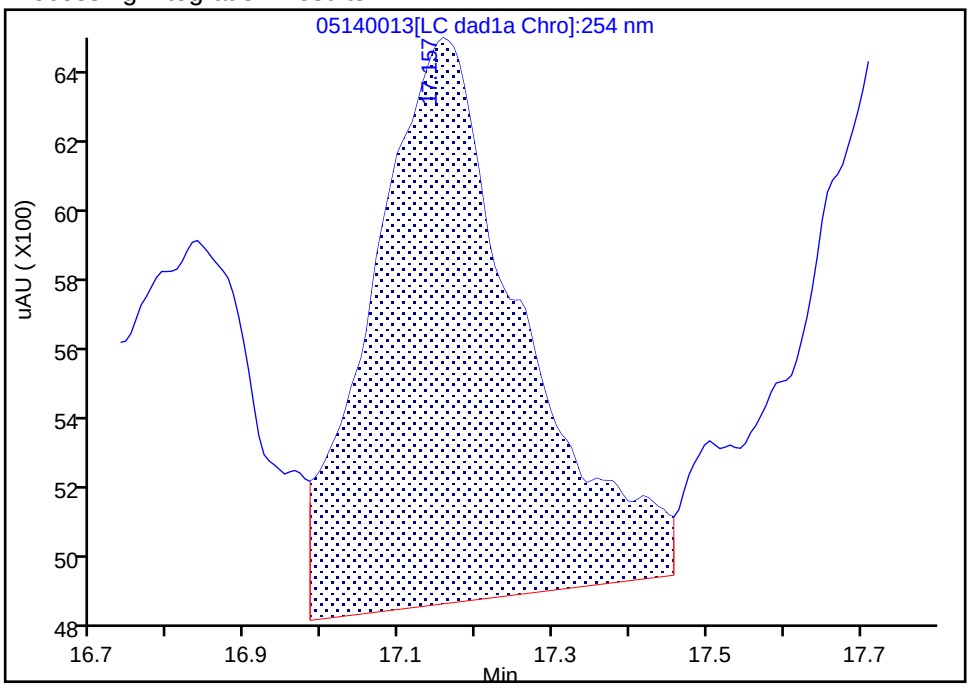
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

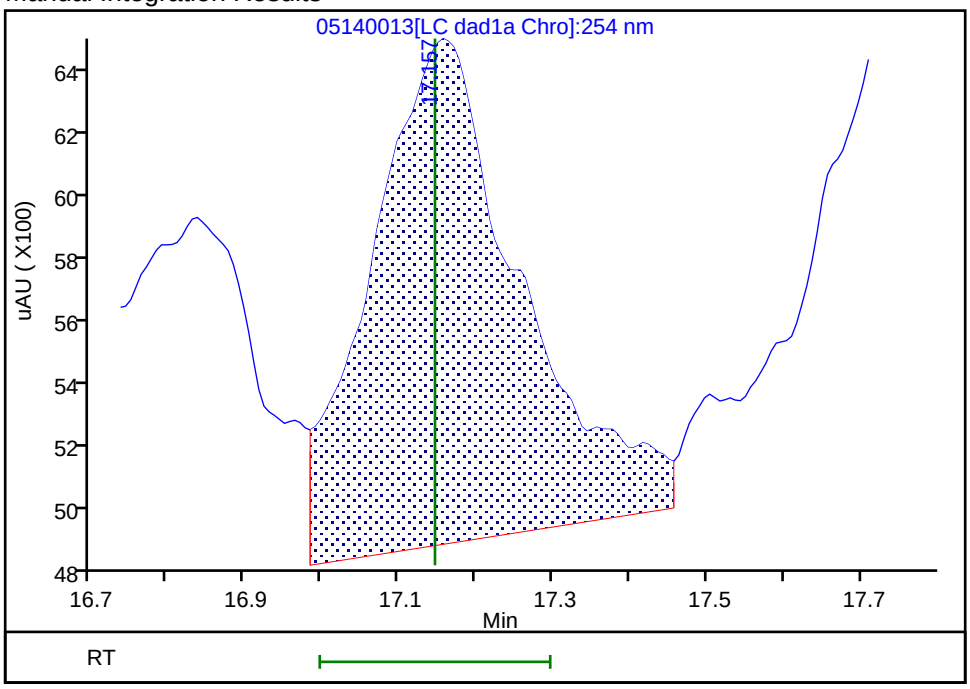
Processing Integration Results

RT: 17.16
Area: 21749
Amount: 0.062679
Amount Units: ug/ml



Manual Integration Results

RT: 17.16
Area: 22118
Amount: 0.064067
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:04

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

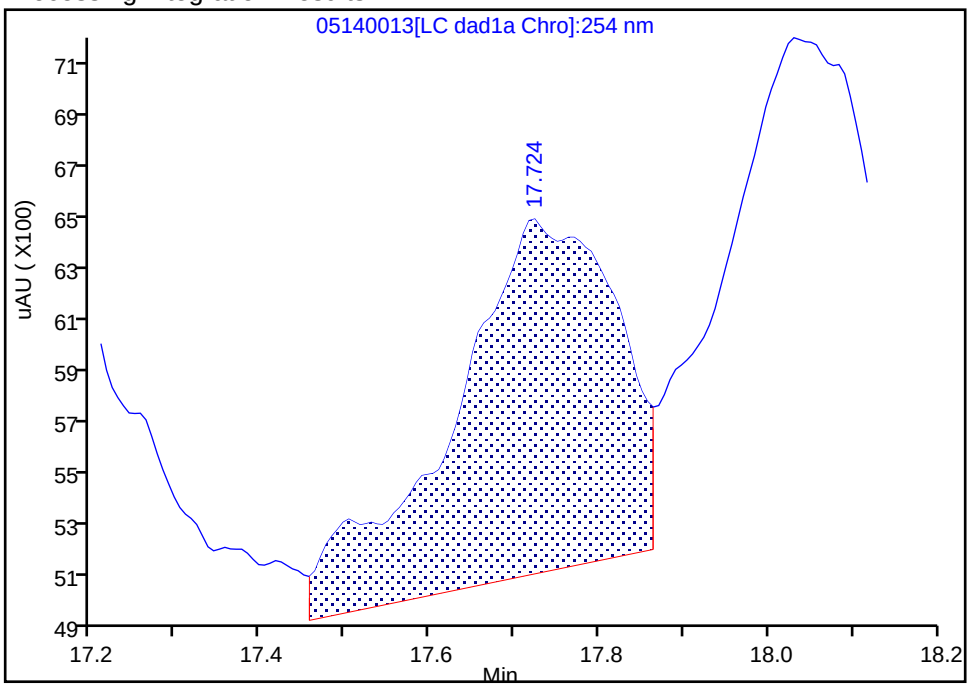
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

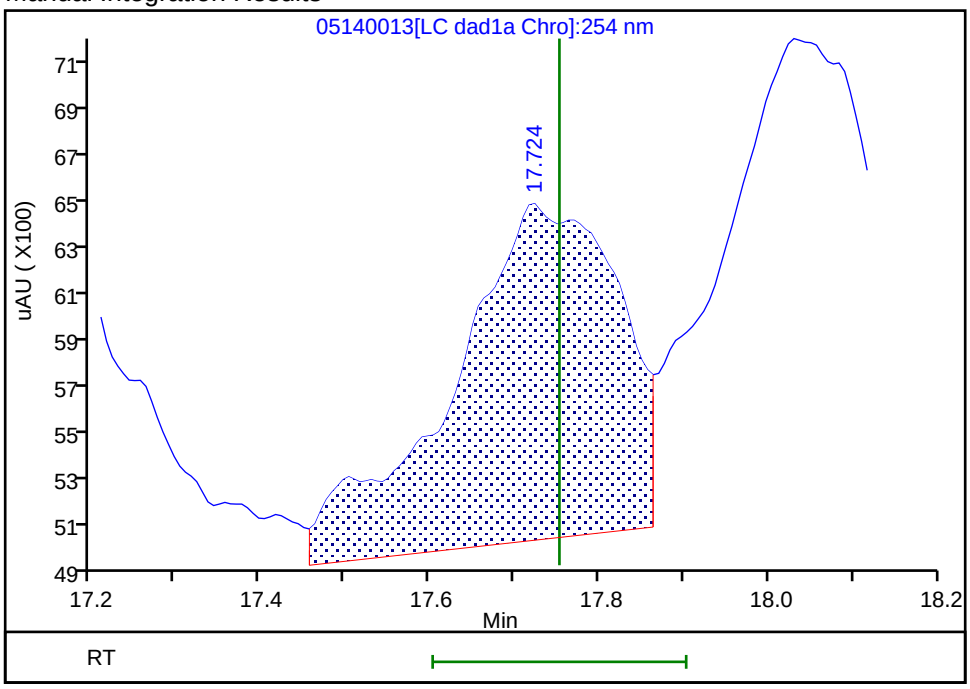
Processing Integration Results

RT: 17.72
Area: 18317
Amount: 0.062732
Amount Units: ug/ml



Manual Integration Results

RT: 17.72
Area: 19280
Amount: 0.064627
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:04
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

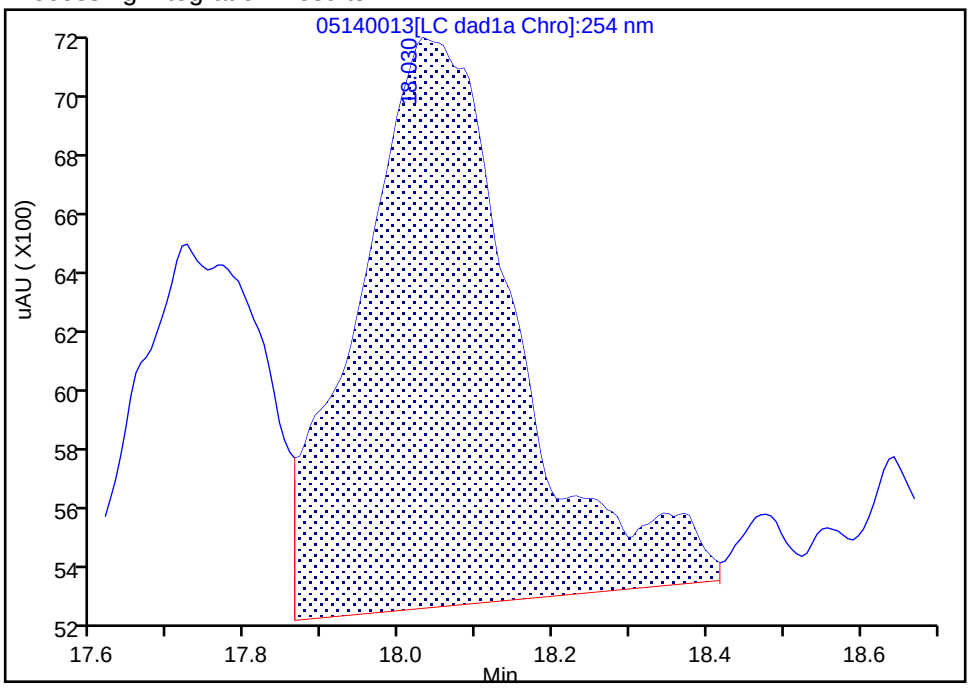
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

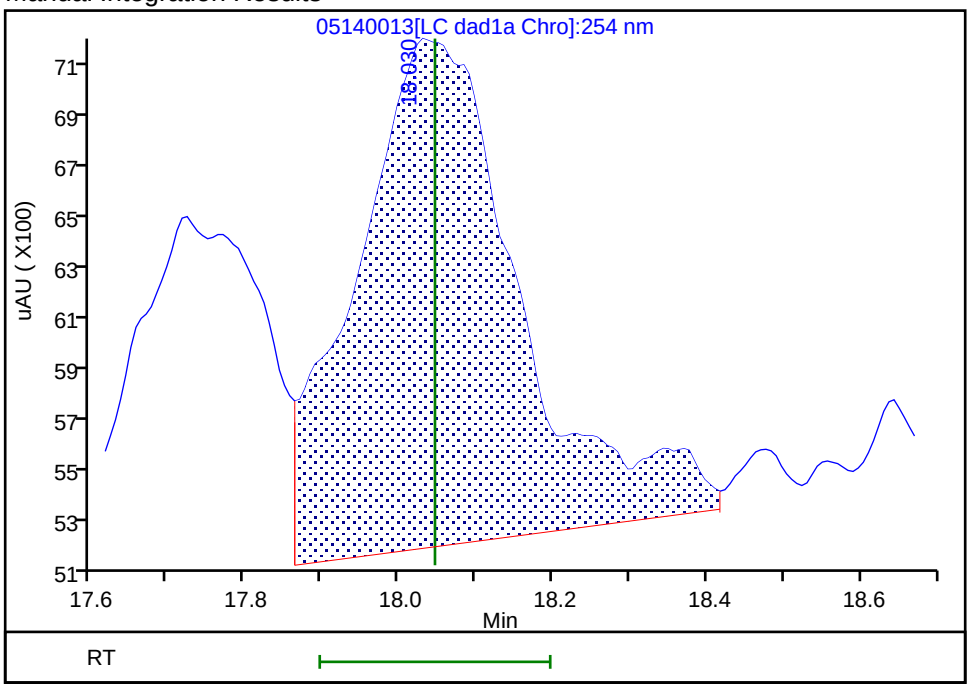
Processing Integration Results

RT: 18.03
Area: 27239
Amount: 0.055134
Amount Units: ug/ml



Manual Integration Results

RT: 18.03
Area: 28982
Amount: 0.062299
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:04

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

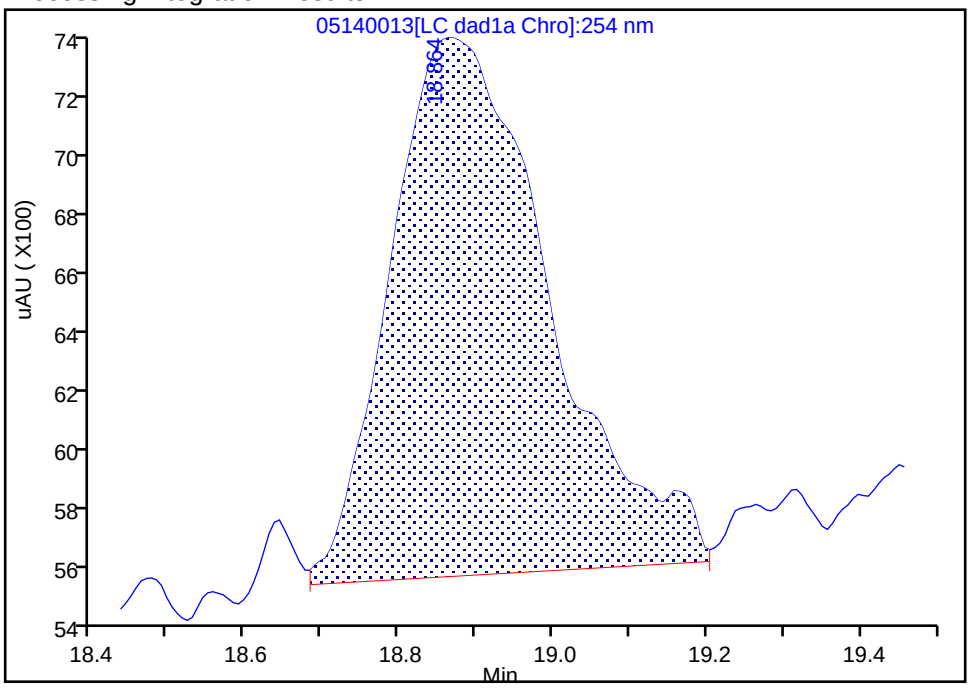
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

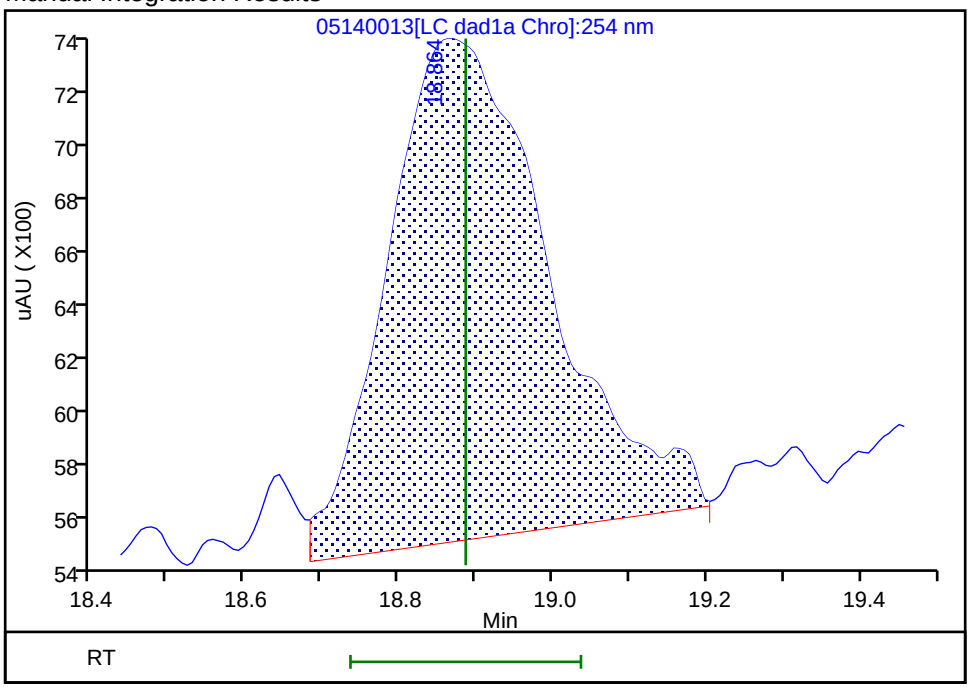
Processing Integration Results

RT: 18.86
Area: 25370
Amount: 0.053396
Amount Units: ug/ml



Manual Integration Results

RT: 18.86
Area: 26649
Amount: 0.056406
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:04

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

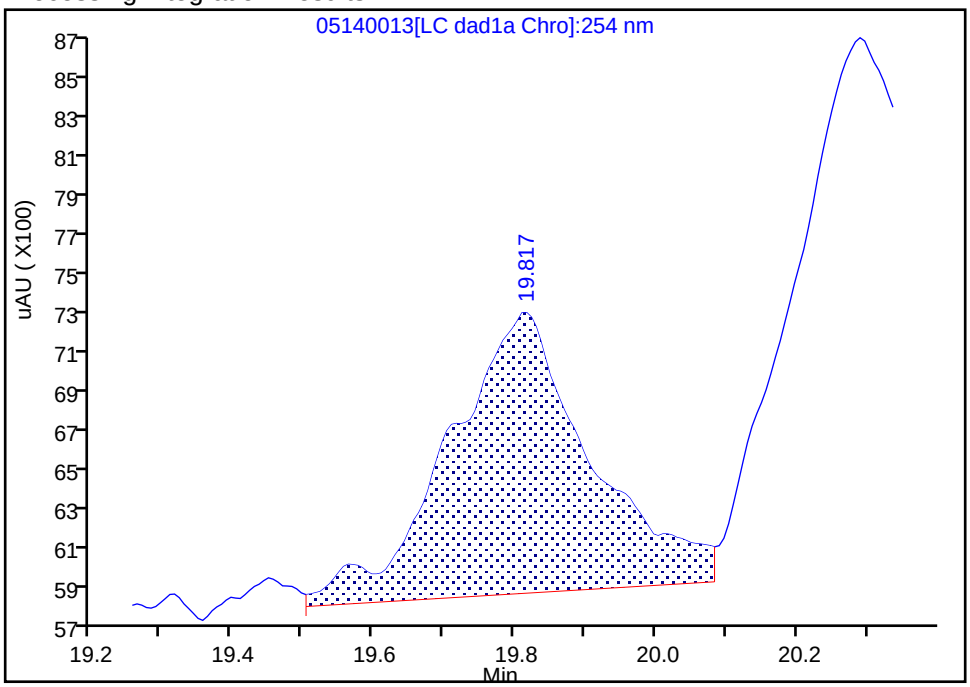
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

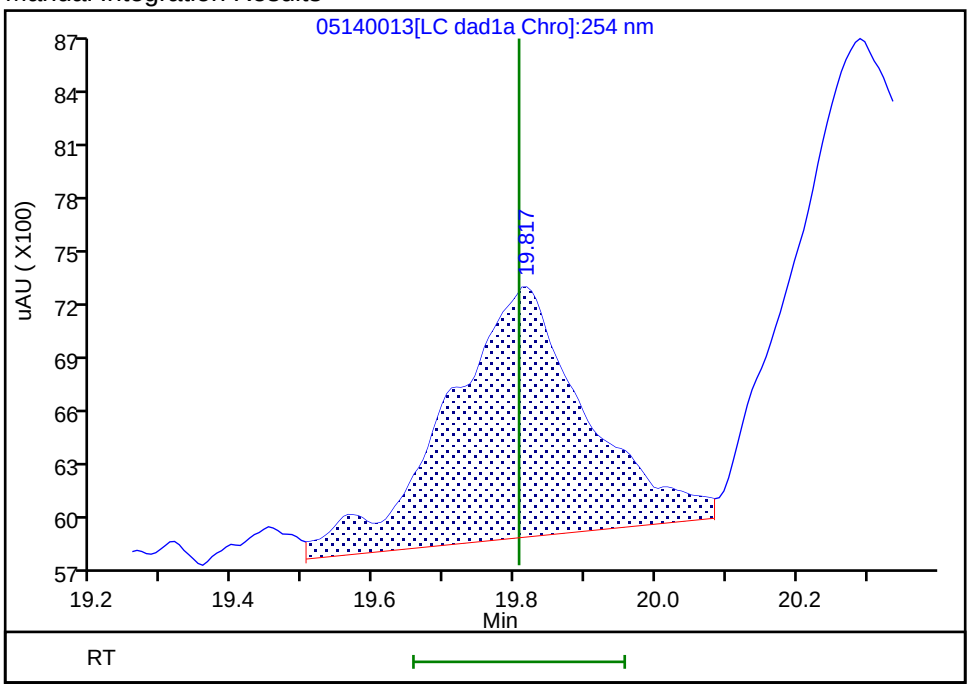
Processing Integration Results

RT: 19.82
Area: 19664
Amount: 0.057481
Amount Units: ug/ml



Manual Integration Results

RT: 19.82
Area: 19107
Amount: 0.050727
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:04
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

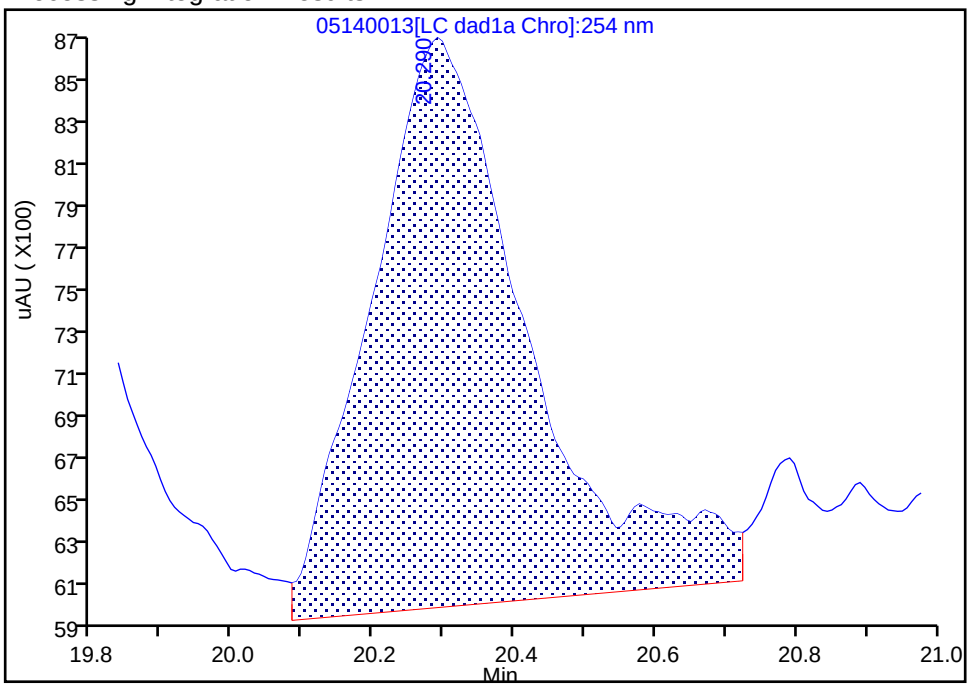
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d				
Injection Date:	14-May-2020 19:46:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

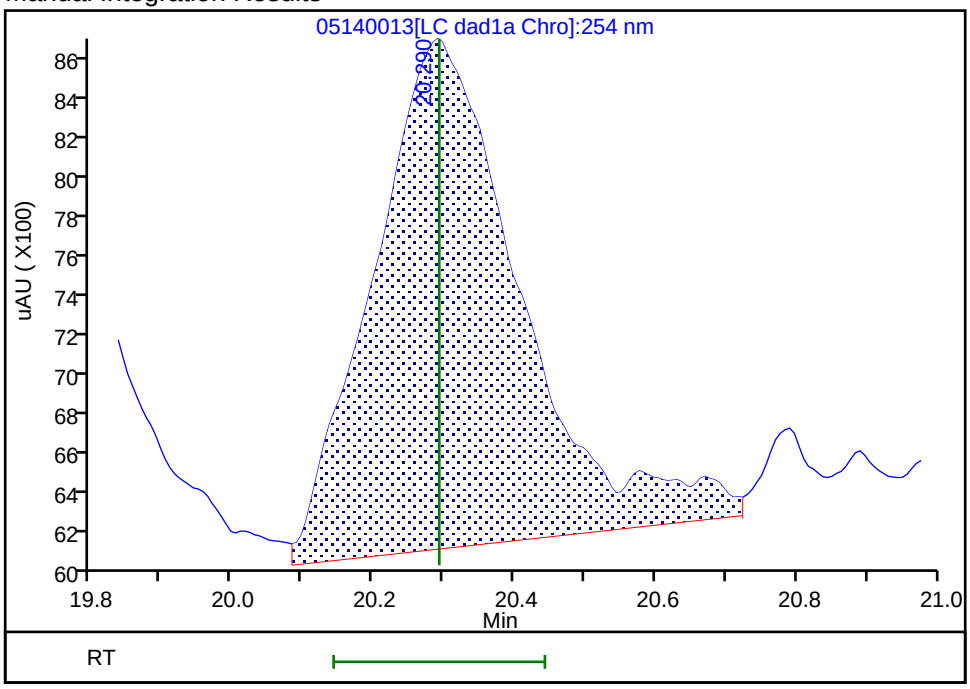
Processing Integration Results

RT: 20.29
Area: 41123
Amount: 0.062799
Amount Units: ug/ml



Manual Integration Results

RT: 20.29
Area: 37302
Amount: 0.058274
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:04
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

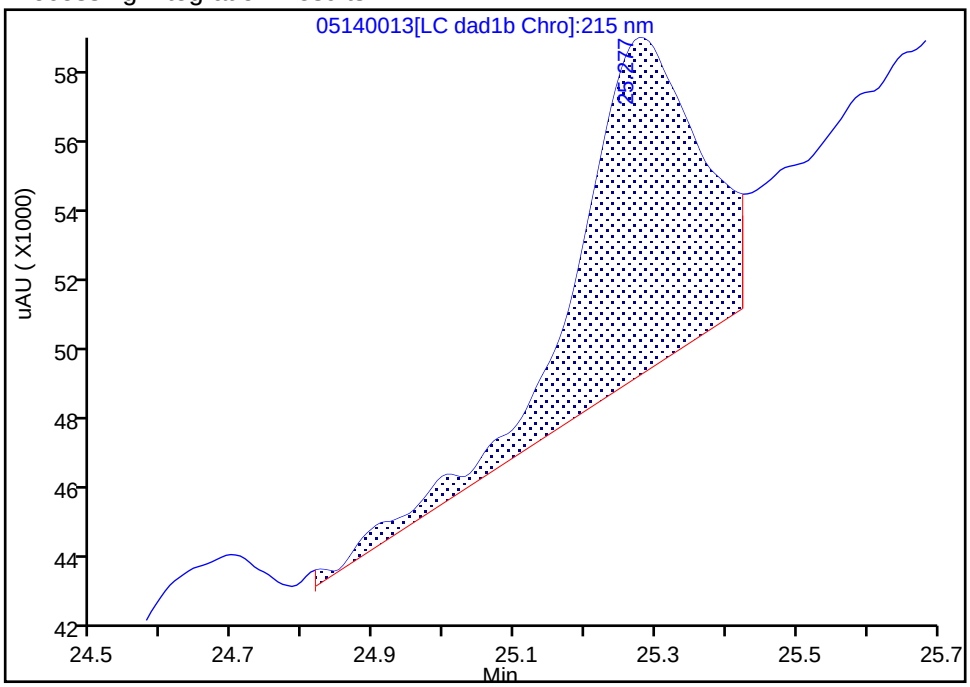
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140013.d
Injection Date: 14-May-2020 19:46:37 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL 3
Client ID:
Operator ID: CB ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Detector LC DAD1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

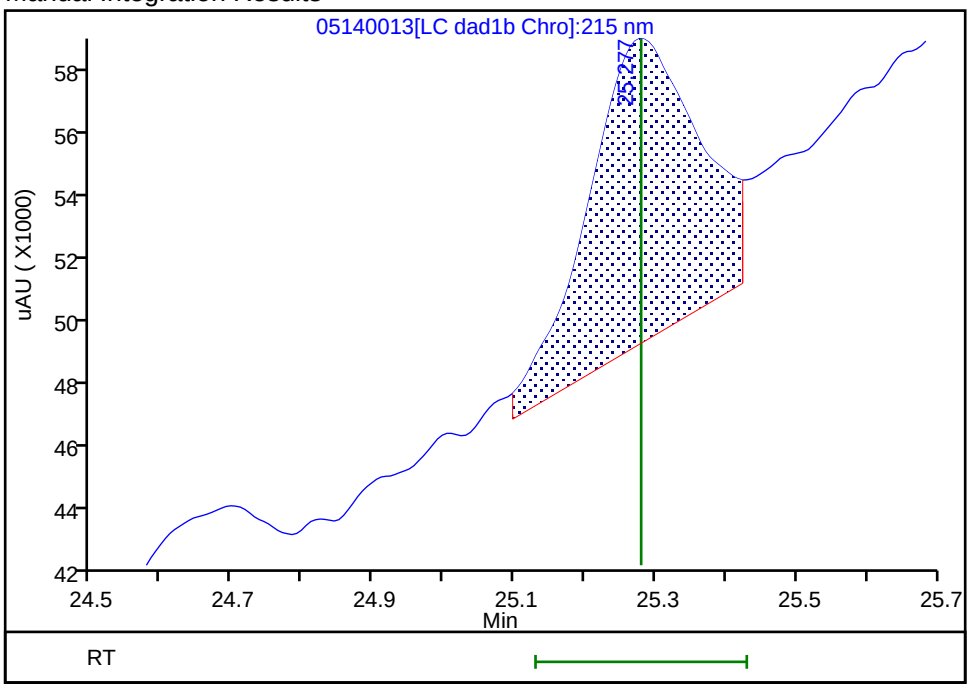
Processing Integration Results

RT: 25.28
Area: 109947
Amount: 0.773174
Amount Units: ug/ml



Manual Integration Results

RT: 25.28
Area: 102120
Amount: 0.578199
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:24:48
Audit Action: Split an Integrated Peak Audit Reason: Peak Tail

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140014.D
Lims ID: IC FULL 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 14-May-2020 20:21:33 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL 2
Misc. Info.: 280-0091518-014
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-May-2020 12:00:58 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0318

First Level Reviewer: zhangji Date: 15-May-2020 11:22:32

	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	4.375	4.366	0.009	10106	0.0200	0.0235	
	2 2,4-diamino-6-nitrotoluene	1	4.855	4.880	-0.025	9147	0.0200	0.0152	
	5 2,4,6-Trinitrophenol	1	6.322	6.300	0.022	5683	0.0250	0.0293	a
	6 HMX	1	6.982	6.986	-0.004	10018	0.0250	0.0265	
	8 RDX	1	9.095	9.173	-0.078	6286	0.0250	0.0257	
	9 Nitrobenzene	1	12.095	12.106	-0.011	10325	0.0251	0.0235	
$	10 1,2-Dinitrobenzene	1	13.022	13.040	-0.018	8436	0.0250	0.0238	M
	11 3,5-Dinitroaniline	1	14.862	14.886	-0.024	12305	0.0200	0.0197	
	12 1,3-Dinitrobenzene	1	15.542	15.553	-0.011	16280	0.0251	0.0241	
	13 Nitroglycerin	2	15.855	15.853	0.002	26546	0.2500	0.2093	
	14 o-Nitrotoluene	1	16.515	16.533	-0.018	6812	0.0250	0.0250	
	15 p-Nitrotoluene	1	16.795	16.820	-0.025	5374	0.0251	0.0223	
	16 4-Amino-2,6-dinitrotoluene	1	17.155	17.146	0.009	9369	0.0250	0.0271	
	17 m-Nitrotoluene	1	17.748	17.753	-0.005	6920	0.0250	0.0232	
	18 2-Amino-4,6-dinitrotoluene	1	18.048	18.046	0.002	10376	0.0251	0.0223	
	19 1,3,5-Trinitrobenzene	1	18.855	18.886	-0.031	10822	0.0251	0.0229	
	20 2,6-Dinitrotoluene	1	19.828	19.806	0.022	11618	0.0251	0.0248	
	21 2,4-Dinitrotoluene	1	20.295	20.293	0.002	16811	0.0251	0.0263	
	22 Tetryl	1	23.529	23.553	-0.024	9874	0.0251	0.0268	
	23 2,4,6-Trinitrotoluene	1	24.682	24.653	0.029	11547	0.0251	0.0209	
	24 PETN	2	25.282	25.280	0.002	20453	0.2500	-0.0535	M

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8330IntermStk_00064	Amount Added:	2.50	Units: uL
8330_ADDs_00026	Amount Added:	1.00	Units: uL

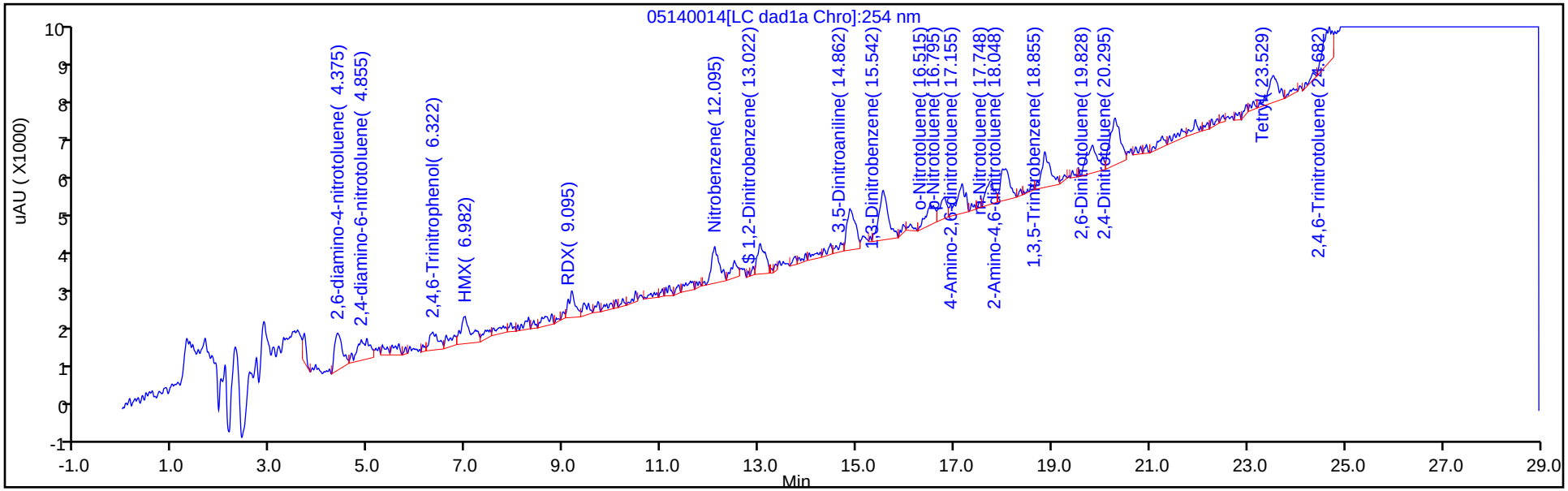
Report Date: 15-May-2020 12:00:59 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

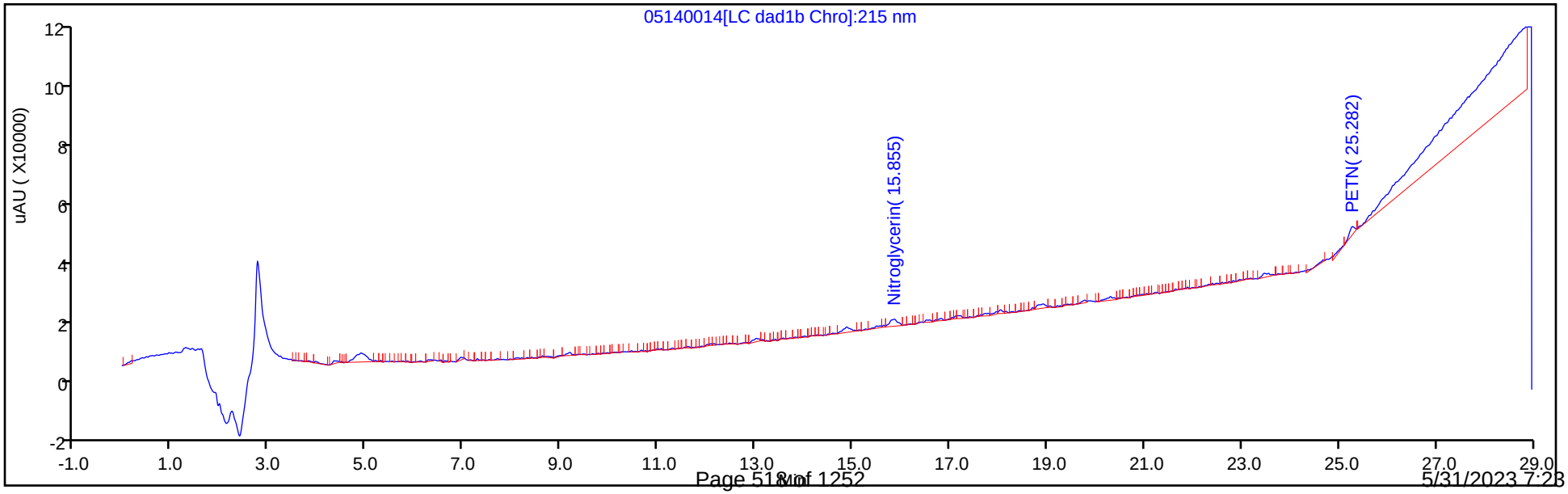
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140014.d

Injection Date:	14-May-2020 20:21:33	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC FULL 2			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 Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



5/31/2023 7:28 AM

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

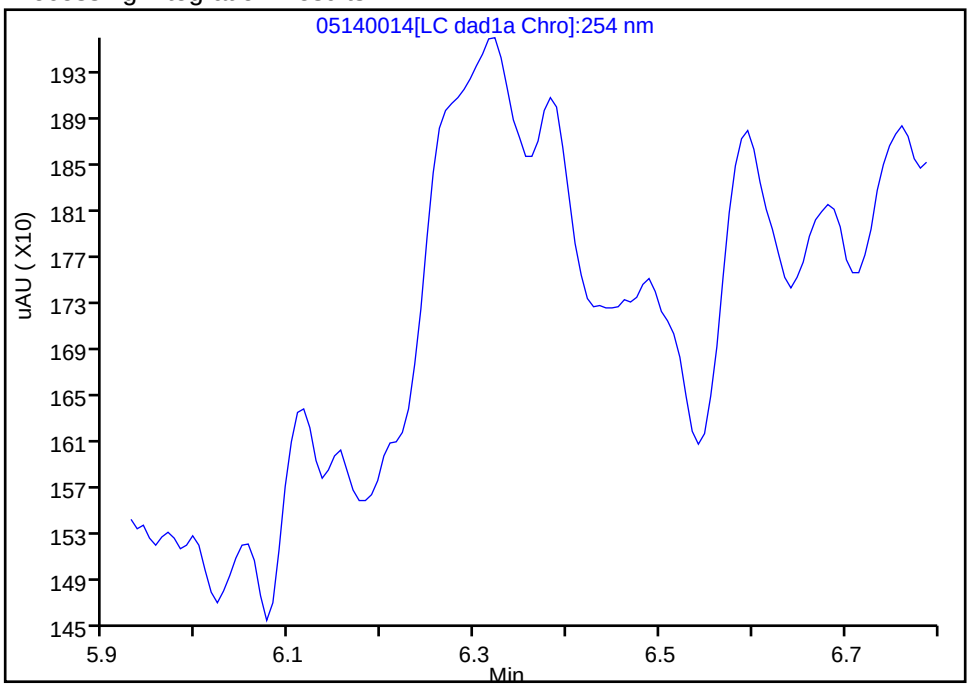
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140014.d				
Injection Date:	14-May-2020 20:21:33	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 2				
Client ID:					
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

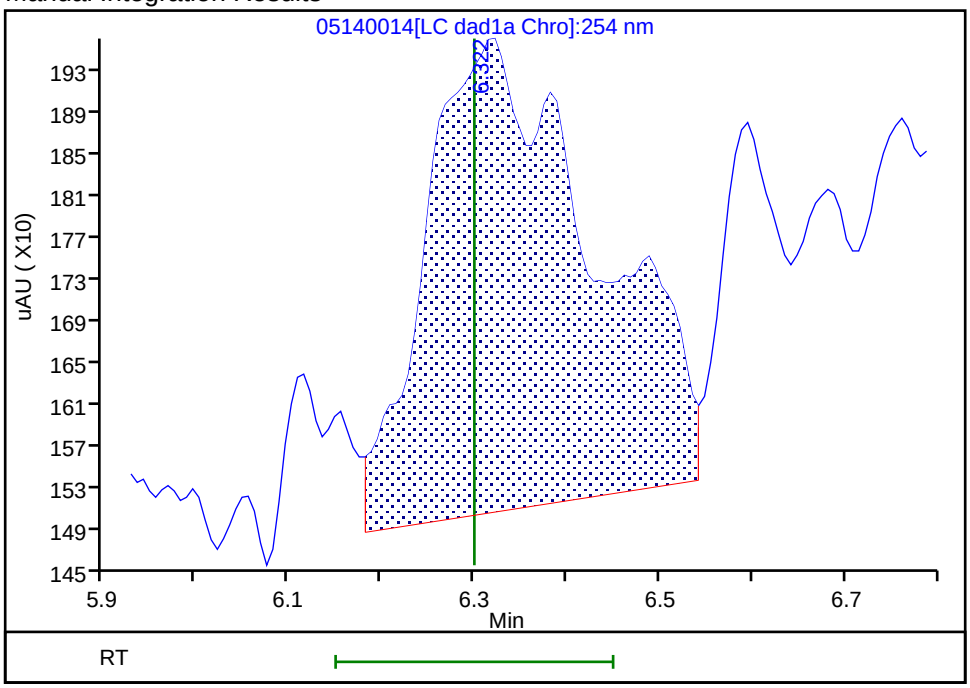
Not Detected
Expected RT: 6.30

Processing Integration Results



Manual Integration Results

RT: 6.32
Area: 5683
Amount: 0.029323
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:22:29
Audit Action: Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

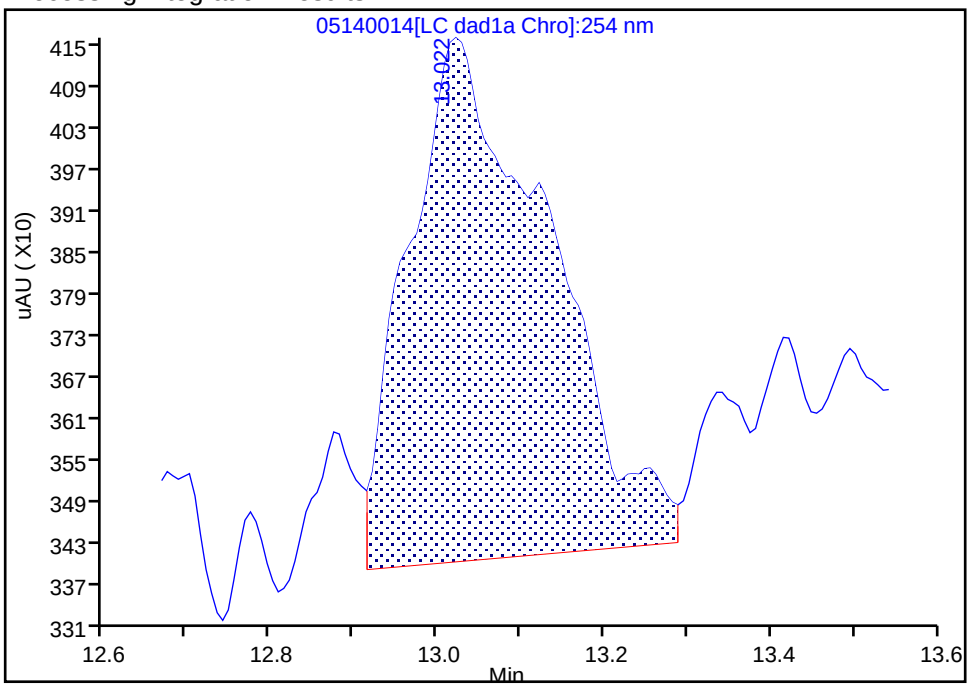
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140014.d				
Injection Date:	14-May-2020 20:21:33	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 2				
Client ID:					
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

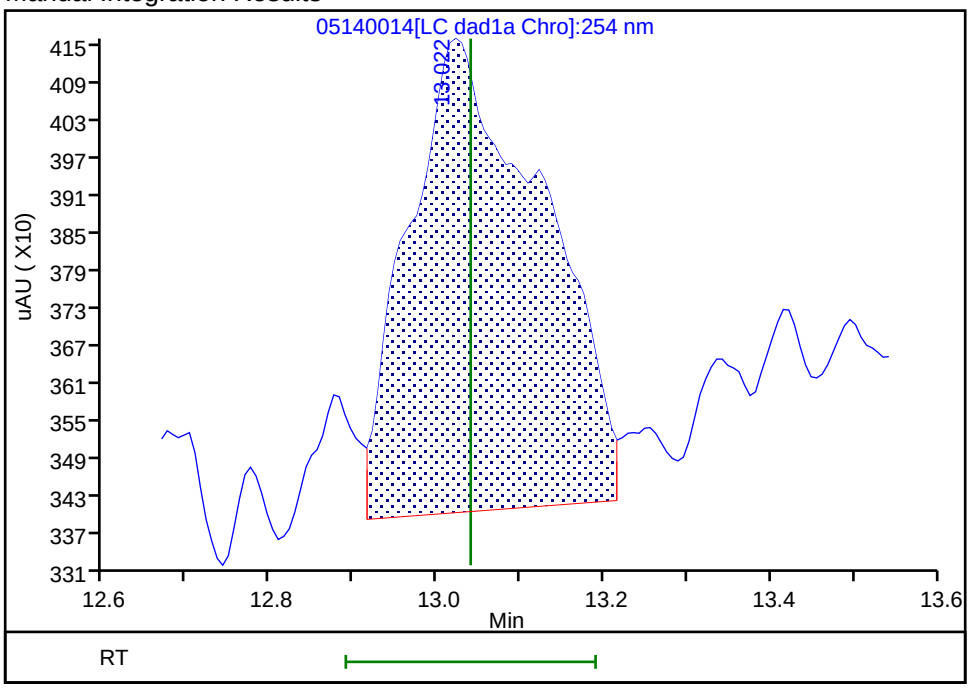
Processing Integration Results

RT: 13.02
Area: 8831
Amount: 0.029561
Amount Units: ug/ml



Manual Integration Results

RT: 13.02
Area: 8436
Amount: 0.023796
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:35:34

Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

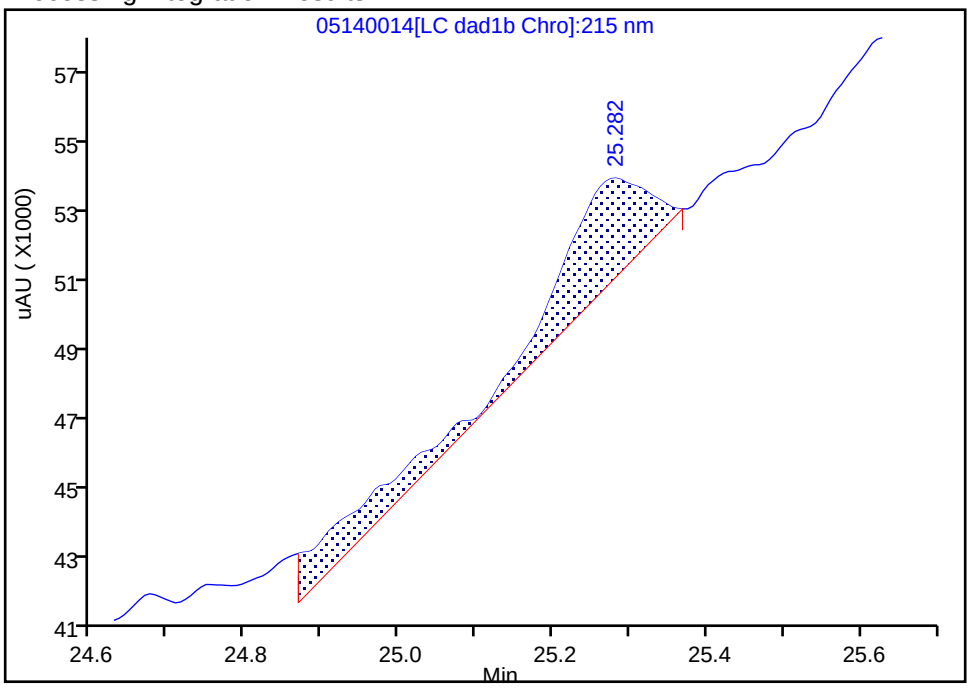
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140014.d
Injection Date: 14-May-2020 20:21:33 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC FULL 2
Client ID:
Operator ID: CB ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Detector LC DAD1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

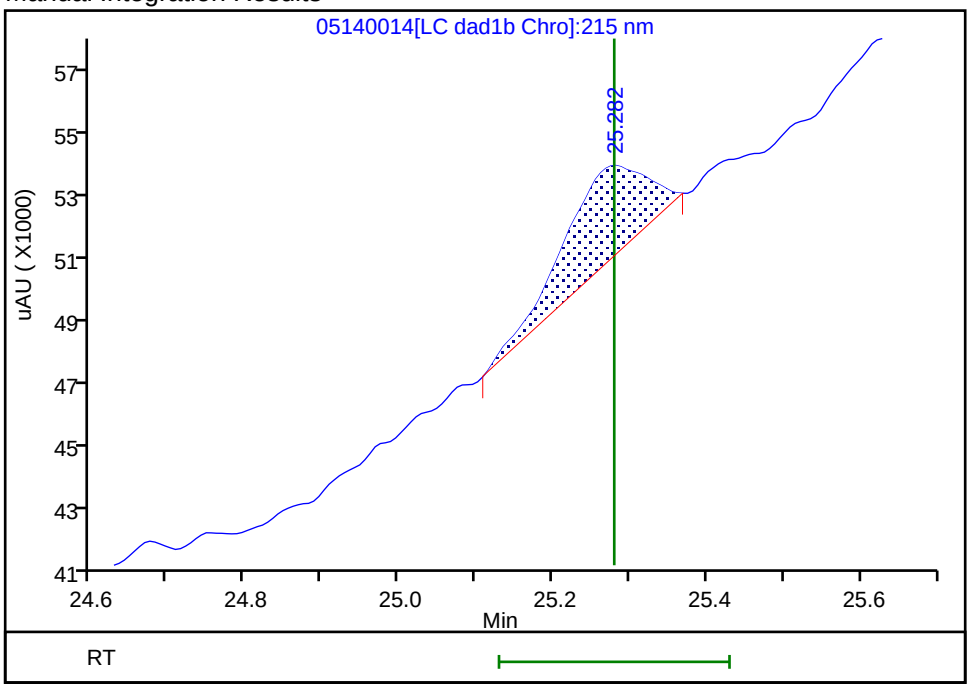
Processing Integration Results

RT: 25.28
Area: 31007
Amount: 0.129673
Amount Units: ug/ml



Manual Integration Results

RT: 25.28
Area: 20453
Amount: -0.053470
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:24:34
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140015.D
Lims ID: IC FULL 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 14-May-2020 20:56:30 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC FULL 1
Misc. Info.: 280-0091518-015
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-May-2020 12:00:59 Calib Date: 15-May-2020 02:11:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20200514-91518.b\05140024.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0318

First Level Reviewer: zhangji Date: 15-May-2020 11:24:04

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		4.366			ND	ND	U
2 2,4-diamino-6-nitrotoluene	1		4.880			ND	ND	U
5 2,4,6-Trinitrophenol	1		6.300			ND	ND	U
6 HMX	1		6.986			ND	ND	U
8 RDX	1		9.173			ND	ND	U
9 Nitrobenzene	1		12.106			ND	ND	U
$ 10 1,2-Dinitrobenzene	1		13.040			ND	ND	U
11 3,5-Dinitroaniline	1		14.886			ND	ND	U
12 1,3-Dinitrobenzene	1		15.553			ND	ND	U
13 Nitroglycerin	2		15.853			ND	ND	U
14 o-Nitrotoluene	1		16.533			ND	ND	U
15 p-Nitrotoluene	1		16.820			ND	ND	U
16 4-Amino-2,6-dinitrotoluene	1		17.146			ND	ND	U
17 m-Nitrotoluene	1		17.753			ND	ND	U
18 2-Amino-4,6-dinitrotoluene	1		18.046			ND	ND	U
19 1,3,5-Trinitrobenzene	1		18.886			ND	ND	U
20 2,6-Dinitrotoluene	1	19.755	19.806	-0.051	4758	0.0126	0.001113	M
21 2,4-Dinitrotoluene	1	20.295	20.293	0.002	7990	0.0126	0.0125	M
22 Tetryl	1		23.553			ND	ND	U
23 2,4,6-Trinitrotoluene	1		24.653			ND	ND	U
24 PETN	2		25.280			ND	ND	U

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

8330IntermStk_00064	Amount Added:	1.25	Units: uL
8330_ADDs_00026	Amount Added:	0.50	Units: uL

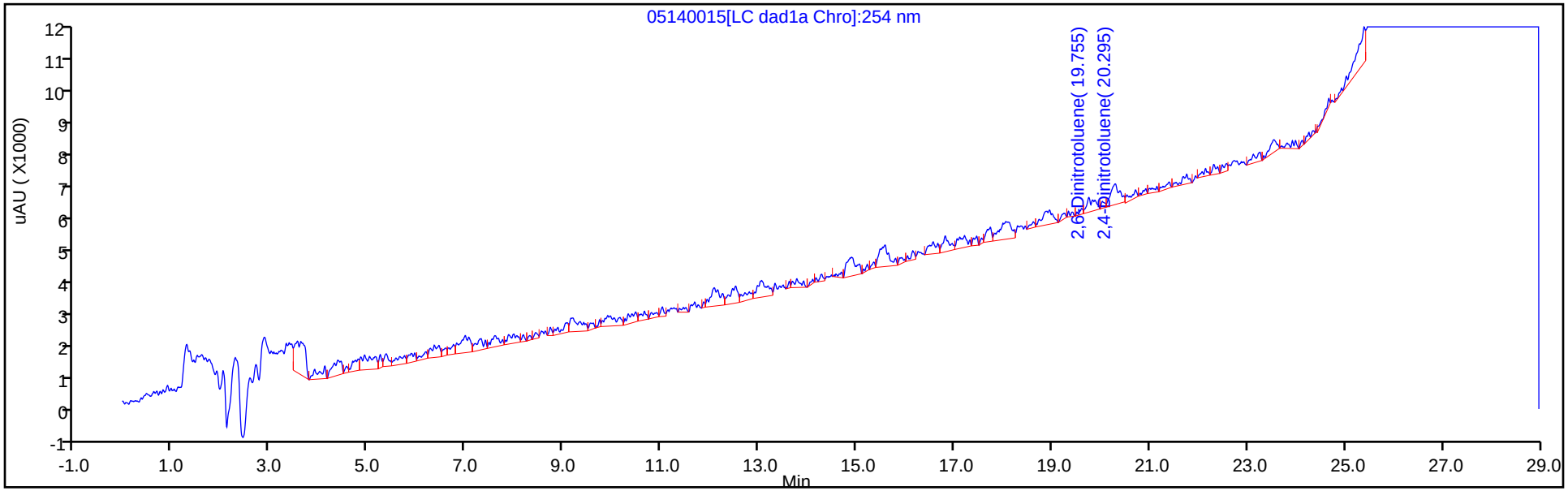
Report Date: 15-May-2020 12:00:59 Chrom Revision: 2.3 05-May-2020 17:48:18

Eurofins TestAmerica, Denver

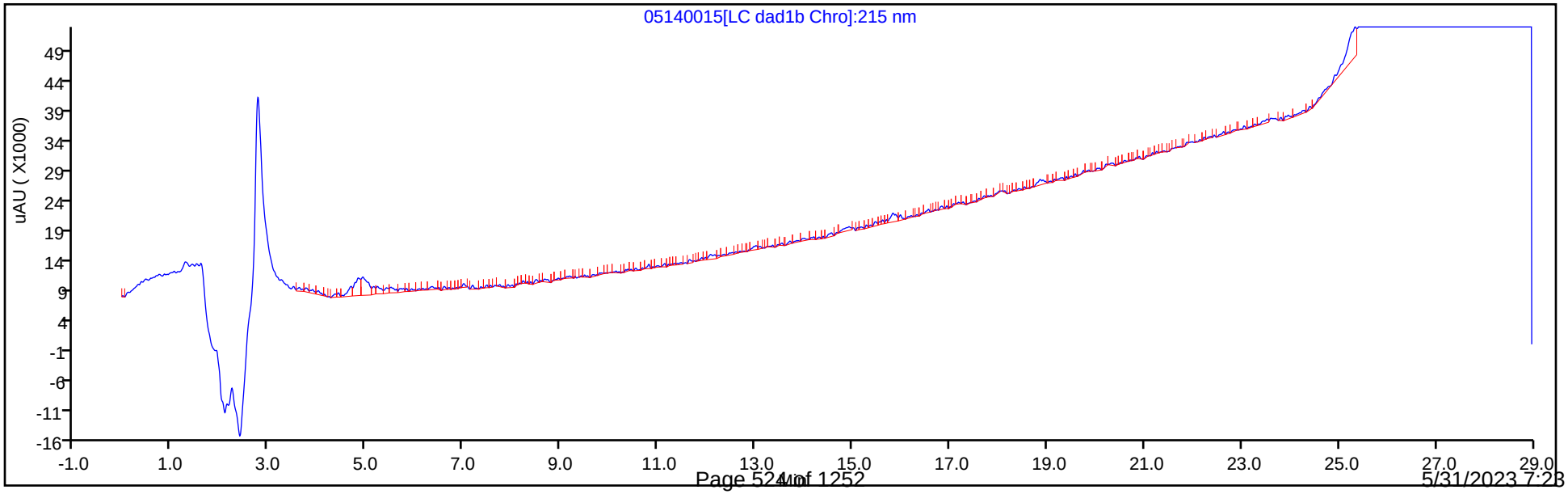
Data File: \\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140015.d

Injection Date:	14-May-2020 20:56:30	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC FULL 1			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 Peak: 1



Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

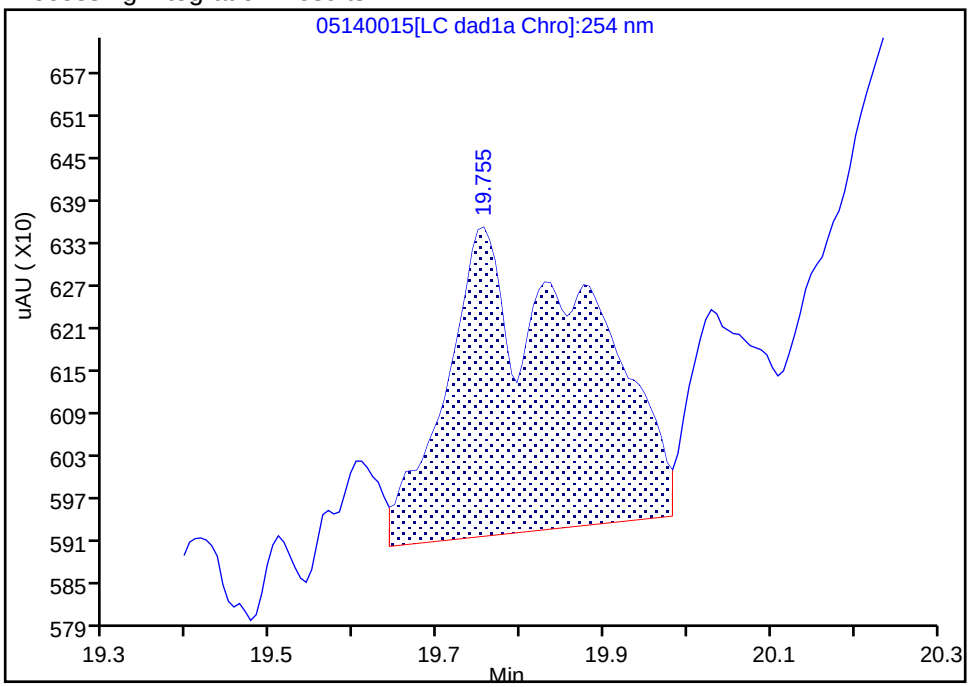
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Injection Date:	14-May-2020 20:56:30	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

20 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

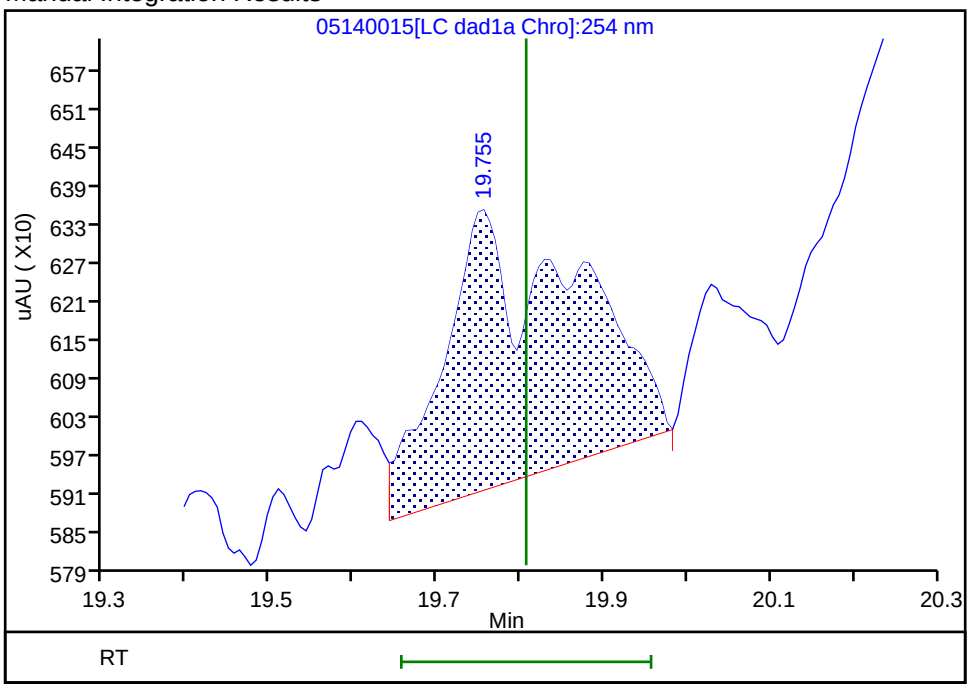
Processing Integration Results

RT: 19.76
Area: 5064
Amount: 0.014857
Amount Units: ug/ml



Manual Integration Results

RT: 19.76
Area: 4758
Amount: 0.001113
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:30:41
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

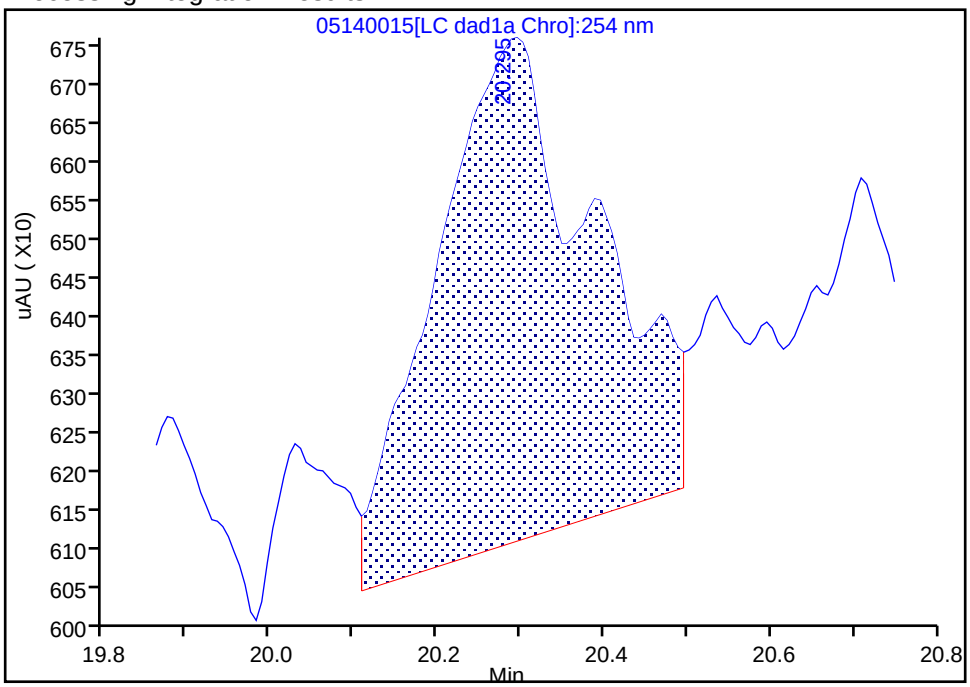
Data File:	\\chromfs\denver\chromdata\g2_luna\20200514-91518.b\05140015.d				
Injection Date:	14-May-2020 20:56:30	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

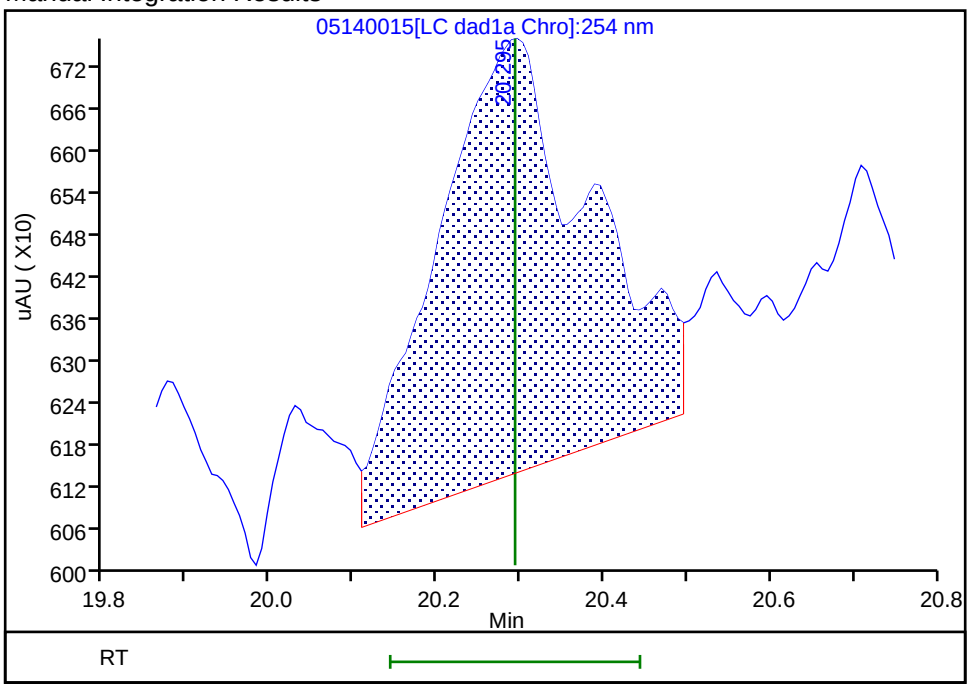
Processing Integration Results

RT: 20.30
Area: 8698
Amount: 0.013456
Amount Units: ug/ml



Manual Integration Results

RT: 20.30
Area: 7990
Amount: 0.012482
Amount Units: ug/ml



Reviewer: zhangji, 15-May-2020 11:30:41
Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1 Analy Batch No.: 607981

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/07/2023 19:03 Calibration End Date: 04/07/2023 23:50 Calibration ID: 79168

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-607981/18	04070018.D
Level 2	IC 280-607981/17	04070017.D
Level 3	IC 280-607981/16	04070016.D
Level 4	IC 280-607981/15	04070015.D
Level 5	IC 280-607981/14	04070014.D
Level 6	IC 280-607981/13	04070013.D
Level 7	IC 280-607981/12	04070012.D
Level 8	IC 280-607981/11	04070011.D
Level 9	IC 280-607981/10	04070010.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	5.328	5.338	5.338	5.334	5.321	5.320	5.310	5.302	5.225		5.171 - 5.471	5.313
DNX	6.195	6.212	6.205	6.201	6.194	6.187	6.177	6.162	6.078		6.044 - 6.344	6.179
HMX	6.855	6.865	6.858	6.854	6.847	6.840	6.837	6.829	6.745		6.697 - 6.997	6.837
MNX	7.715	7.732	7.732	7.721	7.714	7.700	7.697	7.682	7.591		7.564 - 7.864	7.698
Picric acid	8.215	8.245	8.245	8.221	8.187	8.153	8.124	8.095	+++++		8.037 - 8.337	8.186
RDX	9.135	9.145	9.145	9.134	9.127	9.113	9.110	9.095	9.005		8.977 - 9.277	9.112
Nitrobenzene	11.661	11.672	11.672	11.654	11.654	11.640	11.623	11.615	11.518		11.504 - 11.804	11.634
3,5-Dinitroaniline	14.481	14.498	14.492	14.474	14.480	14.453	14.443	14.435	14.378		14.330 - 14.630	14.459
1,3-Dinitrobenzene	14.761	14.765	14.765	14.747	14.754	14.727	14.717	14.709	14.624		14.604 - 14.904	14.730
Nitroglycerin	15.268	15.278	15.278	15.267	15.274	15.247	15.243	15.235	15.178		15.124 - 15.424	15.252
2-Nitrotoluene	15.835	15.845	15.838	15.827	15.827	15.807	15.797	15.789	15.731		15.677 - 15.977	15.811
4-Nitrotoluene	16.055	16.072	16.072	16.054	16.054	16.033	16.023	16.015	15.904		15.904 - 16.204	16.031
4-Amino-2,6-dinitrotoluene	16.608	16.605	16.605	16.594	16.594	16.567	16.557	16.549	16.478		16.444 - 16.744	16.573
3-Nitrotoluene	16.908	16.912	16.912	16.901	16.900	16.880	16.870	16.862	16.791		16.750 - 17.050	16.882
2-Amino-4,6-dinitrotoluene	17.421	17.425	17.425	17.414	17.414	17.387	17.377	17.369	17.371		17.264 - 17.564	17.400
1,3,5-Trinitrobenzene	17.581	17.592	17.585	17.574	17.574	17.553	17.550	17.542	17.438		17.424 - 17.724	17.554
2,6-Dinitrotoluene	18.728	18.732	18.725	18.714	18.714	18.693	18.683	18.675	18.611		18.564 - 18.864	18.697
2,4-Dinitrotoluene	19.175	19.185	19.178	19.174	19.174	19.153	19.143	19.135	19.071		19.024 - 19.324	19.154
Tetryl	22.495	22.492	22.485	22.474	22.481	22.447	22.450	22.429	22.378		22.331 - 22.631	22.459
2,4,6-Trinitrotoluene	23.302	23.312	23.305	23.301	23.301	23.267	23.277	23.249	23.205		23.151 - 23.451	23.280
PETN	24.568	24.558	24.545	24.541	24.547	24.520	24.530	24.502	24.478		24.397 - 24.697	24.532
1,2-Dinitrobenzene	12.628	12.645	12.638	12.621	12.627	12.600	12.590	12.582	12.491		12.477 - 12.777	12.602

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-176335-1 Analy Batch No.: 607981

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/07/2023 19:03 Calibration End Date: 04/07/2023 23:50 Calibration ID: 79168

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-607981/18	04070018.D
Level 2	IC 280-607981/17	04070017.D
Level 3	IC 280-607981/16	04070016.D
Level 4	IC 280-607981/15	04070015.D
Level 5	IC 280-607981/14	04070014.D
Level 6	IC 280-607981/13	04070013.D
Level 7	IC 280-607981/12	04070012.D
Level 8	IC 280-607981/11	04070011.D
Level 9	IC 280-607981/10	04070010.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	465503 385731 393451	400548 373592	406720 387204	392213 387967	Ave		399214.403				6.7		20.0			
DNX	309391 281722 284665	294505 271389	285075 282166	284875 282014	Ave		286200.308				3.7		20.0			
HMX	211600 169036 174964	191550 174635	182080 173619	177110 174813	Ave		181045.130				7.2		20.0			
MNX	271208 255969 286553	265081 247519	261919 257565	259135 256473	Ave		262380.384				4.3		20.0			
Picric acid	160100 146960 +++++	159050 153050	162080 153380	156040 154224	Ave		155610.500				3.1		20.0			
RDX	254300 201916 209153	227100 208078	215980 206971	210150 207770	Ave		215713.081				7.5		20.0			
Nitrobenzene	400200 363800 377966	387200 370995	388100 375580	379000 376803	Ave		379960.400				2.8		20.0			
3,5-Dinitroaniline	472500 427012 391169	440550 442010	445360 440969	441460 444605	Lin2	402.650561	429933.502							0.9980		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.: 280-176335-1 Analy Batch No.: 607981

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/07/2023 19:03 Calibration End Date: 04/07/2023 23:50 Calibration ID: 79168

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	620200 550236 629665	571250 567240	589440 569037	562610 573365	Ave		581449.216				4.6		20.0			
Nitroglycerin	127250 119170 122979	126325 122944	128966 122575	125509 123389	Ave		124345.324				2.4		20.0			
2-Nitrotoluene	259600 232616 248130	238950 239330	243700 242191	241150 243027	Ave		243188.270				3.1		20.0			
4-Nitrotoluene	238800 207820 211238	222200 213408	218540 214554	215370 215111	Ave		217448.976				4.1		20.0			
4-Amino-2,6-dinitrotoluene	300400 264248 275631	242000 273790	274440 273276	274610 275101	Ave		272610.657				5.5		20.0			
3-Nitrotoluene	267300 262304 274153	251050 269340	270580 272416	271500 273461	Ave		268011.502				2.7		20.0			
2-Amino-4,6-dinitrotoluene	414800 392412 354280	414750 406103	403820 402883	408660 404845	Ave		400283.640				4.6		20.0			
1,3,5-Trinitrobenzene	374800 362856 434595	358900 372675	367000 377386	376350 381831	Ave		378488.102				5.9		20.0			
2,6-Dinitrotoluene	350900 258664 269431	293450 267680	271600 267216	270760 269366	Ave		279896.324				10.1		20.0			
2,4-Dinitrotoluene	665000 523424 547166	569100 539635	562660 540656	547910 545578	Ave		560125.368				7.4		20.0			
Tetryl	284700 259416 268784	273000 265883	268940 265971	279690 268469	Ave		270539.259				2.8		20.0			
2,4,6-Trinitrotoluene	404200 386072 401631	476500 398653	420760 398173	418170 401312	Ave		411718.951				6.4		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.: 280-176335-1 Analy Batch No.: 607981

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/07/2023 19:03 Calibration End Date: 04/07/2023 23:50 Calibration ID: 79168

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	92140 120485 127411	107635 124296	117230 125039	124639 126431	Ave		118367.323				9.8		20.0			
1,2-Dinitrobenzene	284000 249520 258328	281350 258703	276120 256417	266300 257906	Ave		265404.894				4.6		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.: 280-176335-1 Analy Batch No.: 607981

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/07/2023 19:03 Calibration End Date: 04/07/2023 23:50 Calibration ID: 79168

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-607981/18	04070018.D
Level 2	IC 280-607981/17	04070017.D
Level 3	IC 280-607981/16	04070016.D
Level 4	IC 280-607981/15	04070015.D
Level 5	IC 280-607981/14	04070014.D
Level 6	IC 280-607981/13	04070013.D
Level 7	IC 280-607981/12	04070012.D
Level 8	IC 280-607981/11	04070011.D
Level 9	IC 280-607981/10	04070010.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	4669	8035	20397	39339	96722	0.0100	0.0201	0.0502	0.100	0.251
		149885	271856	389131	986578		0.401	0.702	1.00	2.51	
DNX	Ave	3097	5896	14268	28516	70501	0.0100	0.0200	0.0501	0.100	0.250
		108664	197714	282296	712375		0.400	0.701	1.00	2.50	
HMX	Ave	2116	3831	9104	17711	42259	0.0100	0.0200	0.0500	0.100	0.250
		69854	121533	174813	437409		0.400	0.700	1.00	2.50	
MNX	Ave	3165	6187	15283	30241	74679	0.0117	0.0233	0.0584	0.117	0.292
		115542	210405	299304	836019		0.467	0.817	1.17	2.92	
Picric acid	Ave	1601	3181	8104	15604	36740	0.0100	0.0200	0.0500	0.100	0.250
		61220	107366	154224	+++++		0.400	0.700	1.00	+++++	
RDX	Ave	2543	4542	10799	21015	50479	0.0100	0.0200	0.0500	0.100	0.250
		83231	144880	207770	522882		0.400	0.700	1.00	2.50	
Nitrobenzene	Ave	4002	7744	19405	37900	90950	0.0100	0.0200	0.0500	0.100	0.250
		148398	262906	376803	944914		0.400	0.700	1.00	2.50	
3,5-Dinitroaniline	Lin2	4725	8811	22268	44146	106753	0.0100	0.0200	0.0500	0.100	0.250
		176804	308678	444605	977923		0.400	0.700	1.00	2.50	
1,3-Dinitrobenzene	Ave	6202	11425	29472	56261	137559	0.0100	0.0200	0.0500	0.100	0.250
		226896	398326	573365	1574162		0.400	0.700	1.00	2.50	
Nitroglycerin	Ave	12725	25265	64483	125509	297926	0.100	0.200	0.500	1.00	2.50
		491776	858025	1233892	3074483		4.00	7.00	10.0	25.0	
2-Nitrotoluene	Ave	2596	4779	12185	24115	58154	0.0100	0.0200	0.0500	0.100	0.250
		95732	169534	243027	620325		0.400	0.700	1.00	2.50	
4-Nitrotoluene	Ave	2388	4444	10927	21537	51955	0.0100	0.0200	0.0500	0.100	0.250
		85363	150188	215111	528095		0.400	0.700	1.00	2.50	
4-Amino-2,6-dinitrotoluene	Ave	3004	4840	13722	27461	66062	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.: 280-176335-1 Analy Batch No.: 607981

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/07/2023 19:03 Calibration End Date: 04/07/2023 23:50 Calibration ID: 79168

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
		109516	191293	275101	689078		0.400	0.700	1.00	2.50	
3-Nitrotoluene	Ave	2673	5021	13529	27150	65576	0.0100	0.0200	0.0500	0.100	0.250
		107736	190691	273461	685382		0.400	0.700	1.00	2.50	
2-Amino-4,6-dinitrotoluene	Ave	4148	8295	20191	40866	98103	0.0100	0.0200	0.0500	0.100	0.250
		162441	282018	404845	885701		0.400	0.700	1.00	2.50	
1,3,5-Trinitrobenzene	Ave	3748	7178	18350	37635	90714	0.0100	0.0200	0.0500	0.100	0.250
		149070	264170	381831	1086488		0.400	0.700	1.00	2.50	
2,6-Dinitrotoluene	Ave	3509	5869	13580	27076	64666	0.0100	0.0200	0.0500	0.100	0.250
		107072	187051	269366	673578		0.400	0.700	1.00	2.50	
2,4-Dinitrotoluene	Ave	6650	11382	28133	54791	130856	0.0100	0.0200	0.0500	0.100	0.250
		215854	378459	545578	1367914		0.400	0.700	1.00	2.50	
Tetryl	Ave	2847	5460	13447	27969	64854	0.0100	0.0200	0.0500	0.100	0.250
		106353	186180	268469	671961		0.400	0.700	1.00	2.50	
2,4,6-Trinitrotoluene	Ave	4042	9530	21038	41817	96518	0.0100	0.0200	0.0500	0.100	0.250
		159461	278721	401312	1004078		0.400	0.700	1.00	2.50	
PETN	Ave	9214	21527	58615	124639	301212	0.100	0.200	0.500	1.00	2.50
		497183	875273	1264310	3185284		4.00	7.00	10.0	25.0	
1,2-Dinitrobenzene	Ave	2840	5627	13806	26630	62380	0.0100	0.0200	0.0500	0.100	0.250
		103481	179492	257906	645821		0.400	0.700	1.00	2.50	

Curve Type Legend
Ave = Average
Lin2 = Linear 1/conc^2

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\04070010.D
Lims ID: IC INT DMT 9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 07-Apr-2023 19:03:08 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT DMT 9
Operator ID: JZ Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub18

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Apr-2023 15:55:23 Calib Date: 07-Apr-2023 23:50:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\04070018.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1657

First Level Reviewer: LV5D Date: 07-Apr-2023 20:07:11

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.225	5.321	-0.096	986578	2.51	2.47	
4 DNX	1	6.078	6.194	-0.116	712375	2.50	2.49	a
6 HMX	1	6.745	6.847	-0.102	437409	2.50	2.42	
7 MNX	1	7.591	7.714	-0.123	836019	2.92	3.19	
5 2,4,6-Trinitrophenol	1	8.018	8.187	-0.169	230437	2.50	1.48	
8 RDX	1	9.005	9.127	-0.122	522882	2.50	2.42	
9 Nitrobenzene	1	11.518	11.654	-0.136	944914	2.50	2.49	
$ 10 1,2-Dinitrobenzene	1	12.491	12.627	-0.136	645821	2.50	2.43	
11 3,5-Dinitroaniline	1	14.378	14.480	-0.102	977923	2.50	2.27	
12 1,3-Dinitrobenzene	1	14.624	14.754	-0.130	1574162	2.50	2.71	
13 Nitroglycerin	2	15.178	15.274	-0.096	3074483	25.0	24.7	
14 o-Nitrotoluene	1	15.731	15.827	-0.096	620325	2.50	2.55	
15 p-Nitrotoluene	1	15.904	16.054	-0.150	528095	2.50	2.43	
16 4-Amino-2,6-dinitrotoluene	1	16.478	16.594	-0.116	689078	2.50	2.53	
17 m-Nitrotoluene	1	16.791	16.900	-0.109	685382	2.50	2.56	
18 2-Amino-4,6-dinitrotoluene	1	17.371	17.414	-0.043	885701	2.50	2.21	M
19 1,3,5-Trinitrobenzene	1	17.438	17.574	-0.136	1086488	2.50	2.87	M
20 2,6-Dinitrotoluene	1	18.611	18.714	-0.103	673578	2.50	2.41	
21 2,4-Dinitrotoluene	1	19.071	19.174	-0.103	1367914	2.50	2.44	
22 Tetryl	1	22.378	22.481	-0.103	671961	2.50	2.48	
23 2,4,6-Trinitrotoluene	1	23.205	23.301	-0.096	1004078	2.50	2.44	
24 PETN	2	24.478	24.547	-0.069	3185284	25.0	26.9	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00076	Amount Added: 250.00	Units: uL
8330 DMT_00013	Amount Added: 125.00	Units: uL

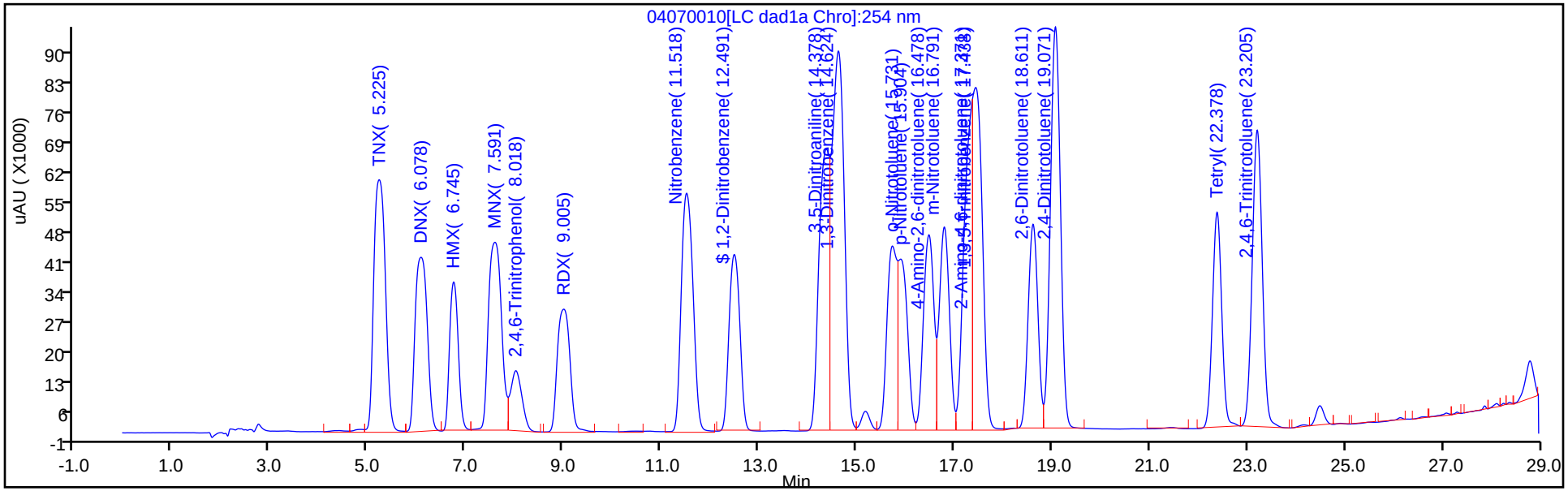
Report Date: 12-Apr-2023 15:55:23 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

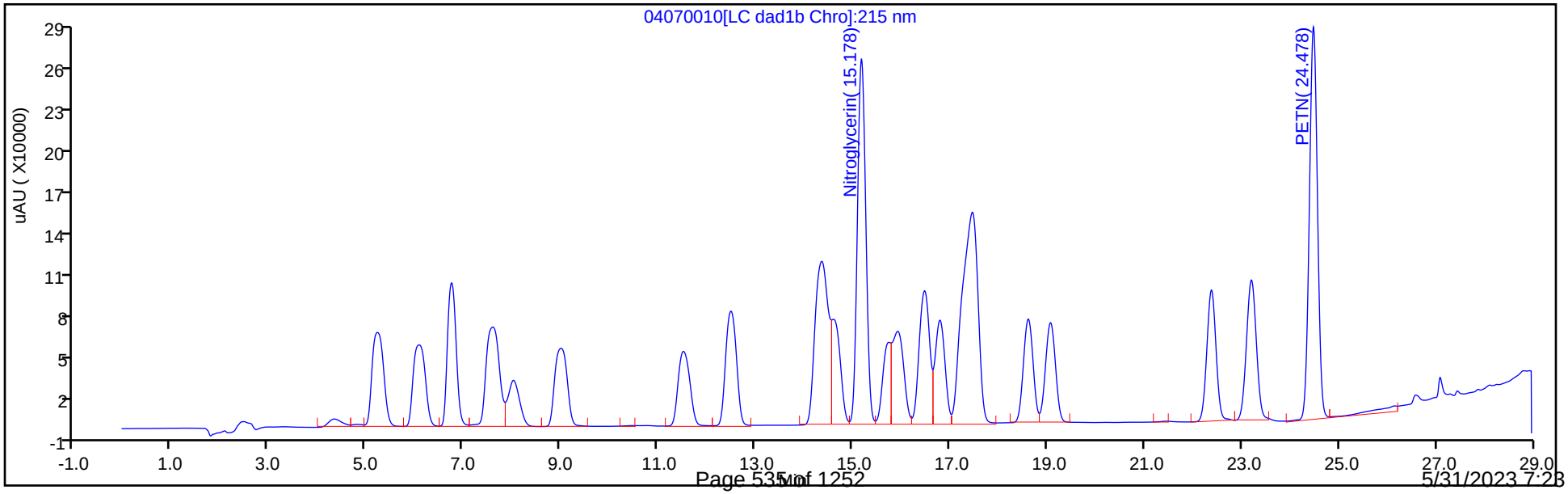
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Injection Date:	07-Apr-2023 19:03:08	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	IC INT DMT 9			Worklist Smp#:	10
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 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

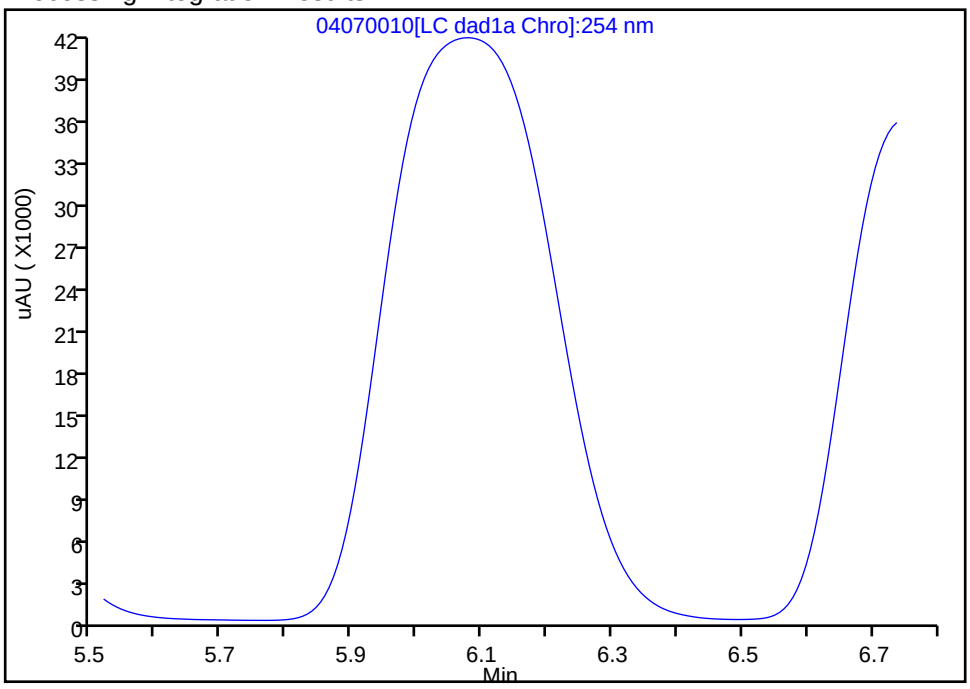
Data File:	\\chromfs\denver\chromdata\g2_luna\20230407-120232.b\04070010.d				
Injection Date:	07-Apr-2023 19:03:08	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT DMT 9				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

4 DNX, CAS: 80251-29-2

Signal: 1

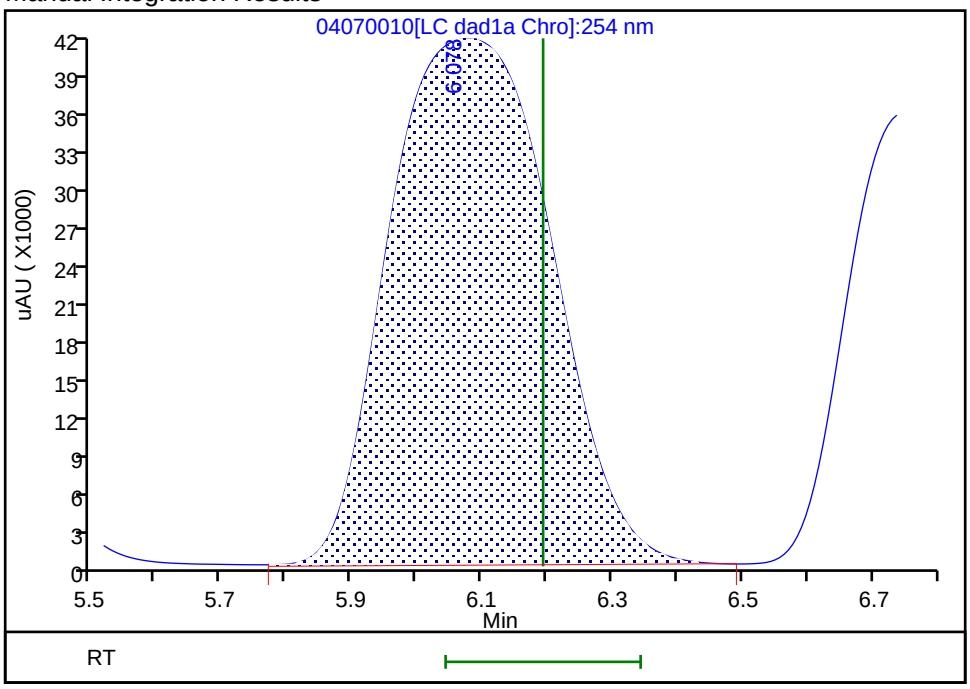
Processing Integration Results

Not Detected
Expected RT: 6.19



Manual Integration Results

RT: 6.08
Area: 712375
Amount: 2.489078
Amount Units: ug/ml



Reviewer: LV5D, 07-Apr-2023 20:06:38
Audit Action: Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

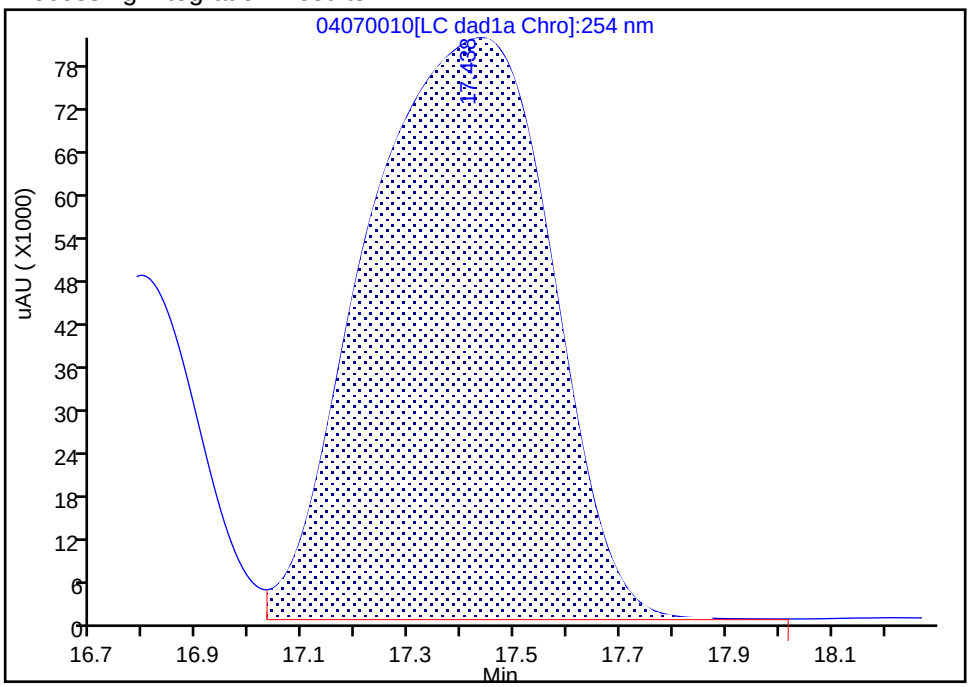
Data File: \\chromfs\denver\chromdata\g2_luna\20230407-120232.b\04070010.d
Injection Date: 07-Apr-2023 19:03:08 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT DMT 9
Client ID:
Operator ID: JZ ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

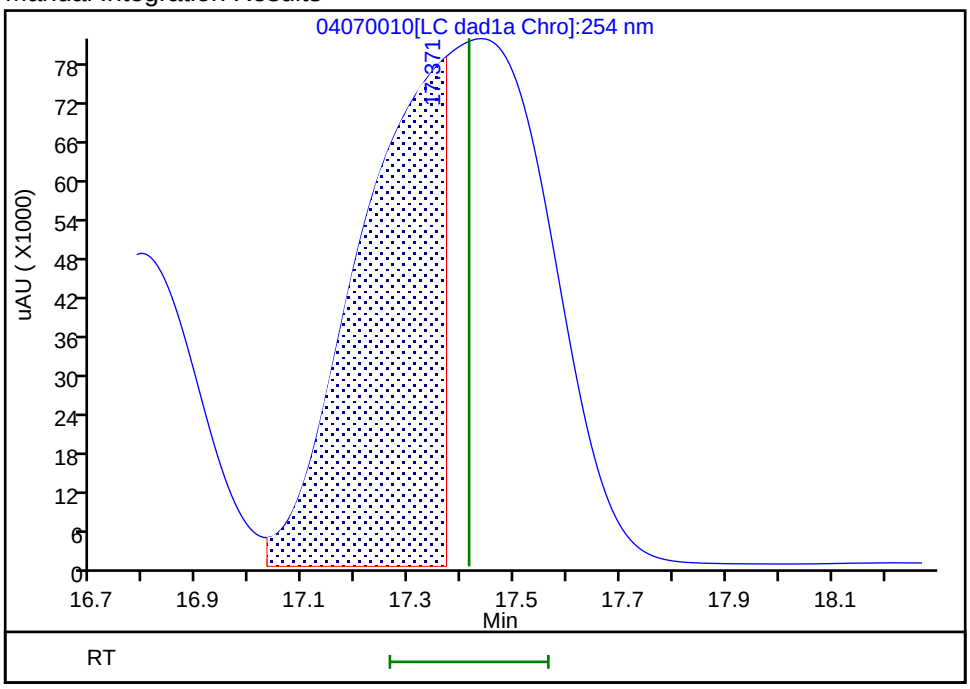
Processing Integration Results

RT: 17.44
Area: 1972184
Amount: 2.500000
Amount Units: ug/ml



Manual Integration Results

RT: 17.37
Area: 885701
Amount: 2.212683
Amount Units: ug/ml



Reviewer: LV5D, 07-Apr-2023 20:06:29
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\04070011.D
Lims ID: IC INT DMT 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 07-Apr-2023 19:39:05 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT DMT 8
Operator ID: JZ Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub18

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Apr-2023 15:55:24 Calib Date: 07-Apr-2023 23:50:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\04070018.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1657

First Level Reviewer: LV5D Date: 07-Apr-2023 20:28:24

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.302	5.321	-0.019	389131	1.00	0.9747	
4 DNX	1	6.162	6.194	-0.032	282296	1.00	0.9864	a
6 HMX	1	6.829	6.847	-0.018	174813	1.00	0.9656	
7 MNX	1	7.682	7.714	-0.032	299304	1.17	1.14	
5 2,4,6-Trinitrophenol	1	8.095	8.187	-0.092	154224	1.00	0.99	a
8 RDX	1	9.095	9.127	-0.032	207770	1.00	0.9632	
9 Nitrobenzene	1	11.615	11.654	-0.039	376803	1.00	0.99	
$ 10 1,2-Dinitrobenzene	1	12.582	12.627	-0.045	257906	1.00	0.9717	
11 3,5-Dinitroaniline	1	14.435	14.480	-0.045	444605	1.00	1.03	
12 1,3-Dinitrobenzene	1	14.709	14.754	-0.045	573365	1.00	0.9861	
13 Nitroglycerin	2	15.235	15.274	-0.039	1233892	10.0	9.92	
14 o-Nitrotoluene	1	15.789	15.827	-0.038	243027	1.00	1.00	
15 p-Nitrotoluene	1	16.015	16.054	-0.039	215111	1.00	0.9892	
16 4-Amino-2,6-dinitrotoluene	1	16.549	16.594	-0.045	275101	1.00	1.01	
17 m-Nitrotoluene	1	16.862	16.900	-0.038	273461	1.00	1.02	
18 2-Amino-4,6-dinitrotoluene	1	17.369	17.414	-0.045	404845	1.00	1.01	
19 1,3,5-Trinitrobenzene	1	17.542	17.574	-0.032	381831	1.00	1.01	
20 2,6-Dinitrotoluene	1	18.675	18.714	-0.039	269366	1.00	0.9624	
21 2,4-Dinitrotoluene	1	19.135	19.174	-0.039	545578	1.00	0.9740	
22 Tetryl	1	22.429	22.481	-0.052	268469	1.00	0.99	
23 2,4,6-Trinitrotoluene	1	23.249	23.301	-0.052	401312	1.00	0.9747	
24 PETN	2	24.502	24.547	-0.045	1264310	10.0	10.7	

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

8330IntermStk_00076	Amount Added: 100.00	Units: uL
8330 DMT_00013	Amount Added: 50.00	Units: uL

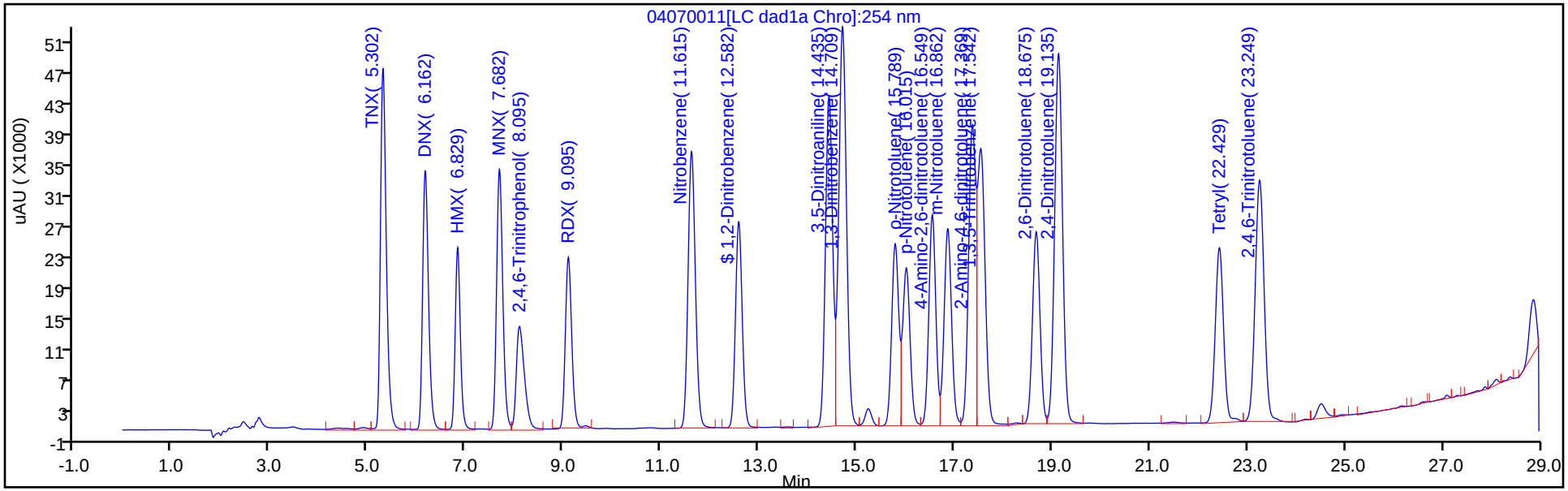
Report Date: 12-Apr-2023 15:55:24 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

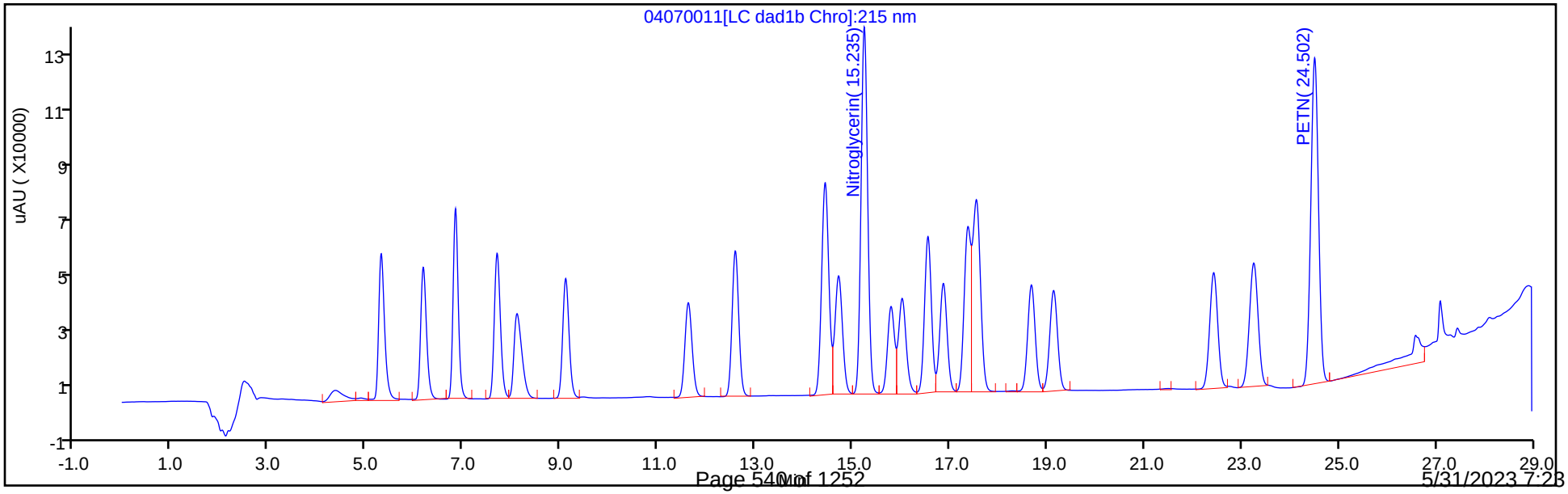
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Injection Date:	07-Apr-2023 19:39:05	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	IC INT DMT 8			Worklist Smp#:	11
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



5/31/2023 7:28 AM

Manual Integration/User Assign Peak Report

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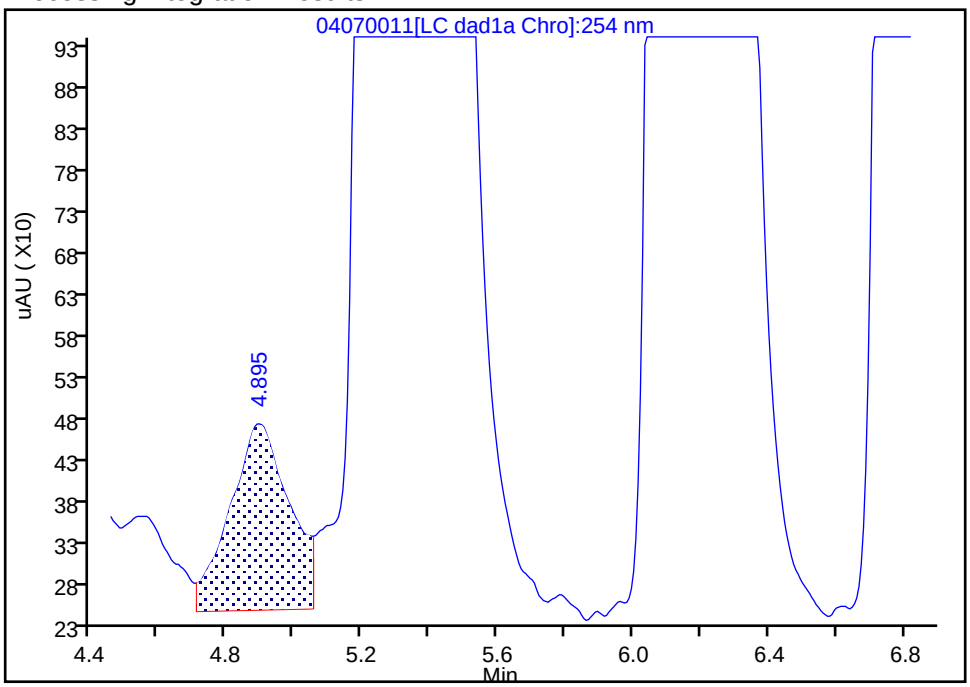
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Injection Date:	07-Apr-2023 19:39:05	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT DMT 8				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

4 DNX, CAS: 80251-29-2

Signal: 1

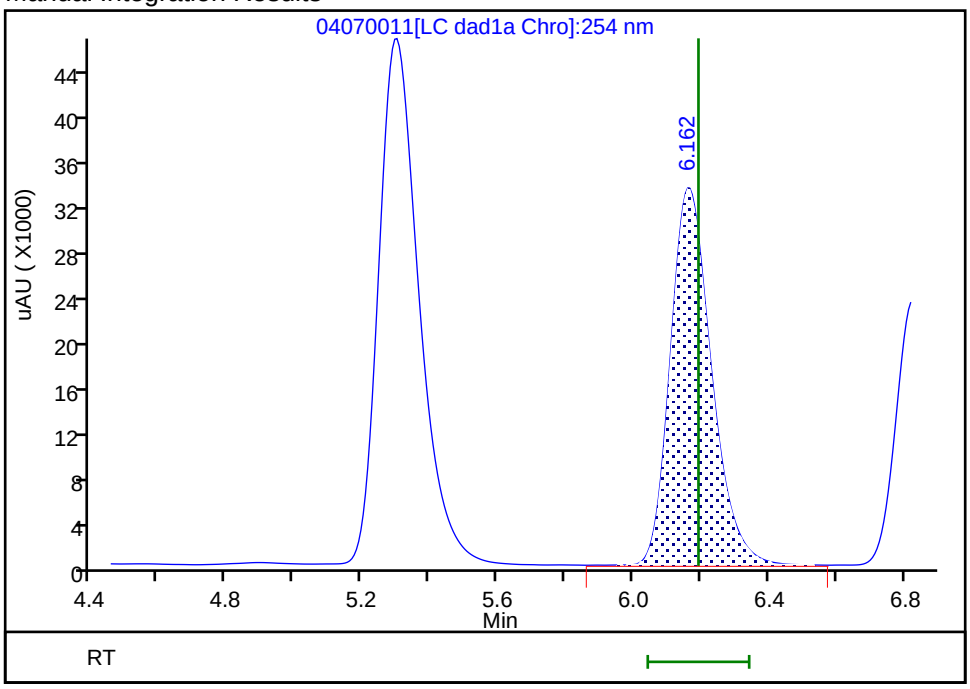
Processing Integration Results

RT: 4.90
Area: 2755
Amount: 0.014511
Amount Units: ug/ml



Manual Integration Results

RT: 6.16
Area: 282296
Amount: 0.986358
Amount Units: ug/ml



Reviewer: LV5D, 07-Apr-2023 21:06:28
Audit Action: Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

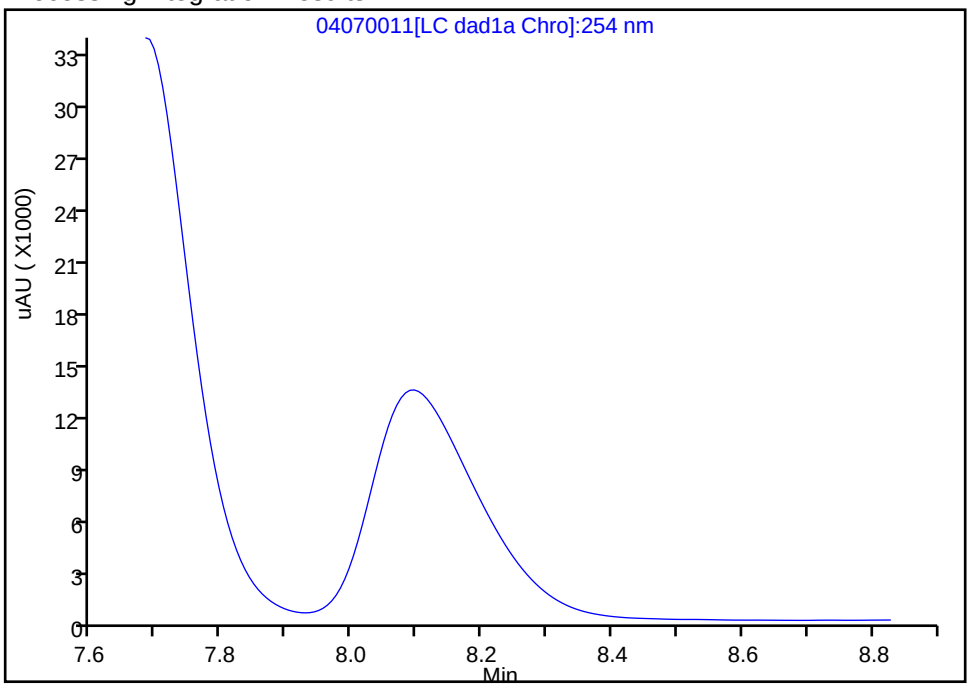
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Injection Date:	07-Apr-2023 19:39:05	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT DMT 8				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

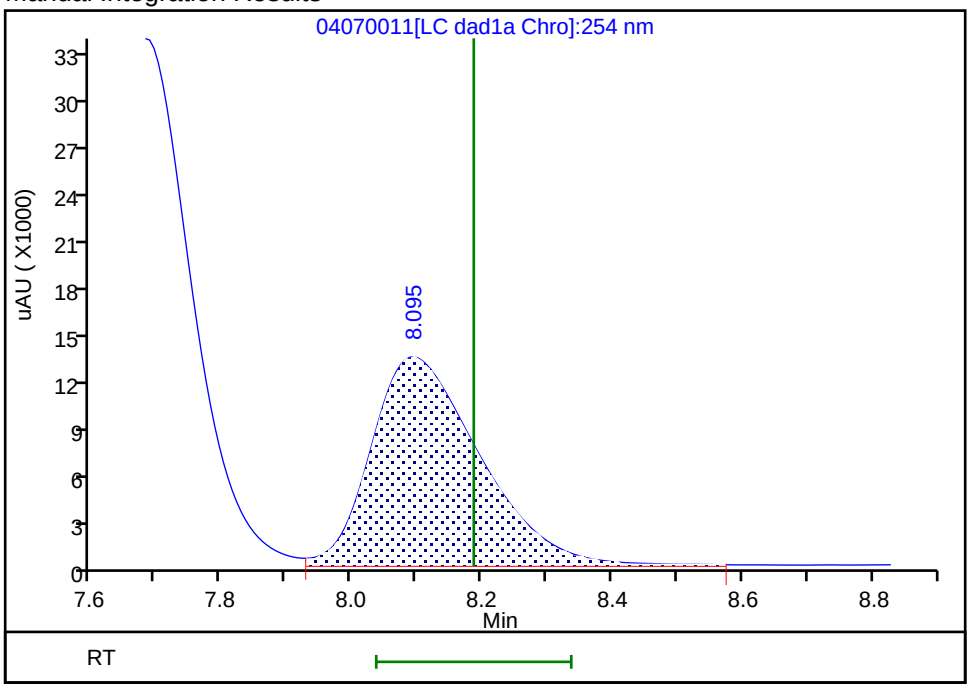
Not Detected
Expected RT: 8.19

Processing Integration Results



Manual Integration Results

RT: 8.10
Area: 154224
Amount: 0.991090
Amount Units: ug/ml



Reviewer: LV5D, 07-Apr-2023 21:06:31
Audit Action: Assigned Compound ID Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\04070012.D
Lims ID: IC INT DMT 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 07-Apr-2023 20:14:59 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT DMT 7
Operator ID: JZ Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub18

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Apr-2023 15:55:25 Calib Date: 07-Apr-2023 23:50:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\04070018.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1657

First Level Reviewer: LV5D Date: 07-Apr-2023 21:06:15

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	5.321	-0.011	271856	0.7021	0.6810	
4 DNX	1	6.177	6.194	-0.017	197714	0.7007	0.6908	
6 HMX	1	6.837	6.847	-0.010	121533	0.7000	0.6713	
7 MNX	1	7.697	7.714	-0.017	210405	0.8169	0.8019	
5 2,4,6-Trinitrophenol	1	8.124	8.187	-0.063	107366	0.7000	0.6900	
8 RDX	1	9.110	9.127	-0.017	144880	0.7000	0.6716	
9 Nitrobenzene	1	11.623	11.654	-0.031	262906	0.7000	0.6919	
$ 10 1,2-Dinitrobenzene	1	12.590	12.627	-0.037	179492	0.7000	0.6763	
11 3,5-Dinitroaniline	1	14.443	14.480	-0.037	308678	0.7000	0.7170	
12 1,3-Dinitrobenzene	1	14.717	14.754	-0.037	398326	0.7000	0.6851	
13 Nitroglycerin	2	15.243	15.274	-0.031	858025	7.00	6.90	
14 o-Nitrotoluene	1	15.797	15.827	-0.030	169534	0.7000	0.6971	
15 p-Nitrotoluene	1	16.023	16.054	-0.031	150188	0.7000	0.6907	
16 4-Amino-2,6-dinitrotoluene	1	16.557	16.594	-0.037	191293	0.7000	0.7017	
17 m-Nitrotoluene	1	16.870	16.900	-0.030	190691	0.7000	0.7115	
18 2-Amino-4,6-dinitrotoluene	1	17.377	17.414	-0.037	282018	0.7000	0.7045	
19 1,3,5-Trinitrobenzene	1	17.550	17.574	-0.024	264170	0.7000	0.6980	
20 2,6-Dinitrotoluene	1	18.683	18.714	-0.031	187051	0.7000	0.6683	
21 2,4-Dinitrotoluene	1	19.143	19.174	-0.031	378459	0.7000	0.6757	
22 Tetryl	1	22.450	22.481	-0.031	186180	0.7000	0.6882	
23 2,4,6-Trinitrotoluene	1	23.277	23.301	-0.024	278721	0.7000	0.6770	
24 PETN	2	24.530	24.547	-0.017	875273	7.00	7.39	

QC Flag Legend
Processing Flags

Reagents:

8330IntermStk_00076	Amount Added:	70.00	Units: uL
8330 DMT_00013	Amount Added:	35.00	Units: uL

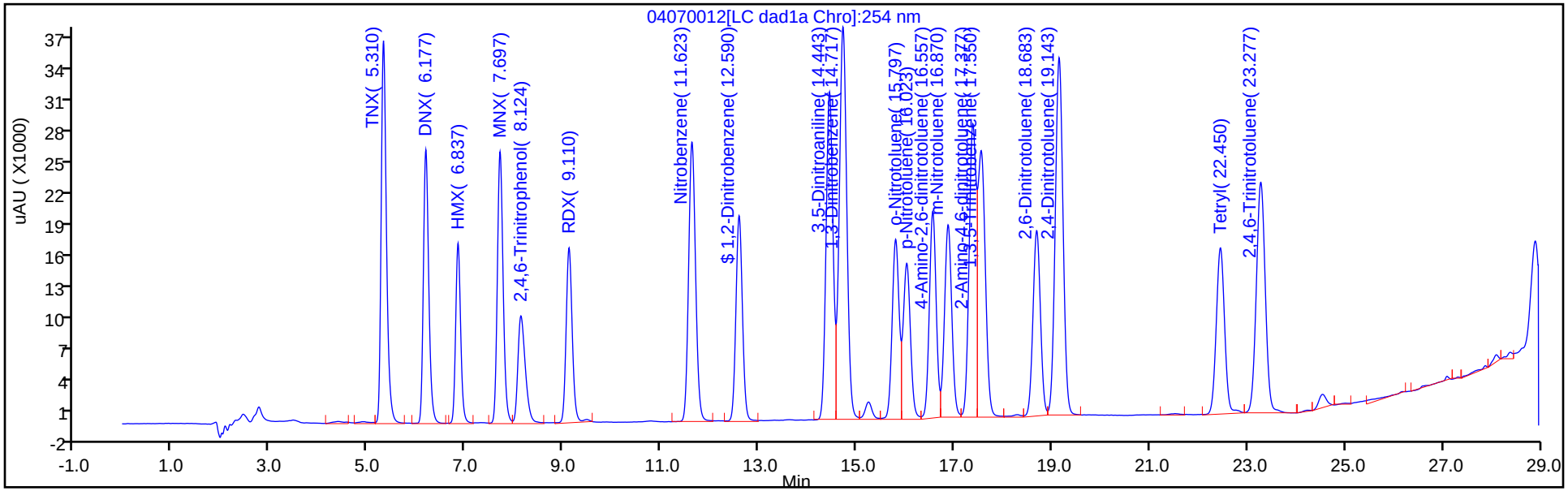
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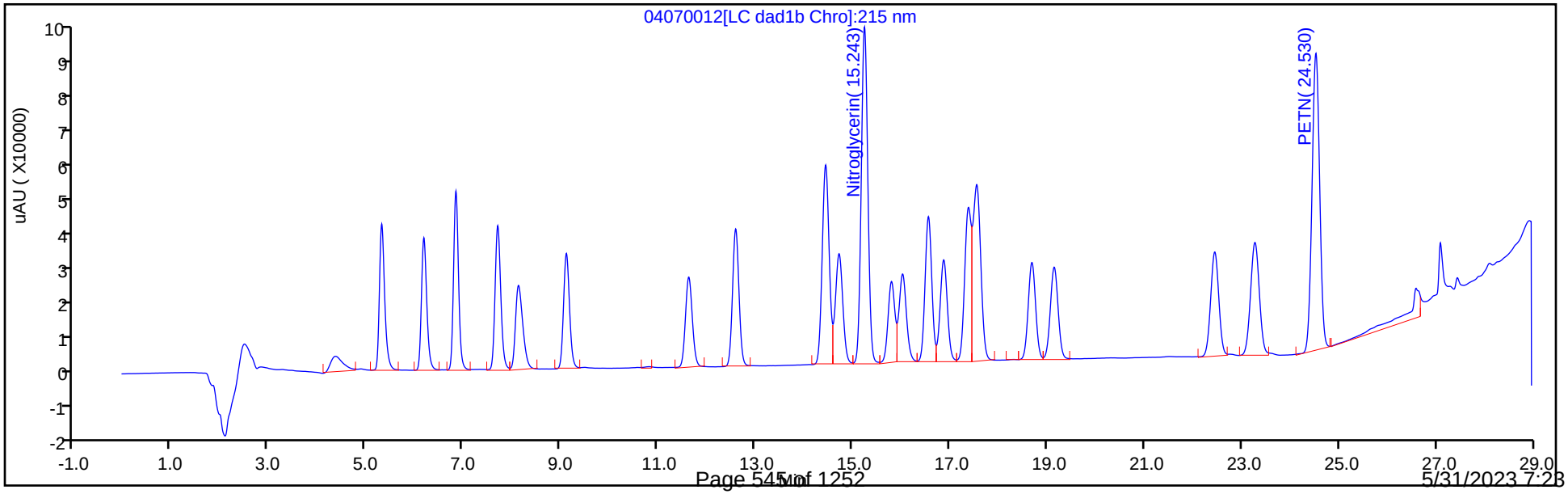
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Injection Date:	07-Apr-2023 20:14:59	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	IC INT DMT 7			Worklist Smp#:	12
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 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\20230407-120232.b\04070013.D
Lims ID: IC INT DMT 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 07-Apr-2023 20:50:53 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT DMT 6
Operator ID: JZ Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub18

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Apr-2023 15:55:26 Calib Date: 07-Apr-2023 23:50:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\04070018.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1657

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.320	5.321	-0.001	149885	0.4012	0.3754	
4 DNX	1	6.187	6.194	-0.007	108664	0.4004	0.3797	
6 HMX	1	6.840	6.847	-0.007	69854	0.4000	0.3858	
7 MNX	1	7.700	7.714	-0.014	115542	0.4668	0.4404	
5 2,4,6-Trinitrophenol	1	8.153	8.187	-0.034	61220	0.4000	0.3934	
8 RDX	1	9.113	9.127	-0.014	83231	0.4000	0.3858	
9 Nitrobenzene	1	11.640	11.654	-0.014	148398	0.4000	0.3906	
$ 10 1,2-Dinitrobenzene	1	12.600	12.627	-0.027	103481	0.4000	0.3899	
11 3,5-Dinitroaniline	1	14.453	14.480	-0.027	176804	0.4000	0.4103	
12 1,3-Dinitrobenzene	1	14.727	14.754	-0.027	226896	0.4000	0.3902	
13 Nitroglycerin	2	15.247	15.274	-0.027	491776	4.00	3.95	
14 o-Nitrotoluene	1	15.807	15.827	-0.020	95732	0.4000	0.3937	
15 p-Nitrotoluene	1	16.033	16.054	-0.021	85363	0.4000	0.3926	
16 4-Amino-2,6-dinitrotoluene	1	16.567	16.594	-0.027	109516	0.4000	0.4017	
17 m-Nitrotoluene	1	16.880	16.900	-0.020	107736	0.4000	0.4020	
18 2-Amino-4,6-dinitrotoluene	1	17.387	17.414	-0.027	162441	0.4000	0.4058	
19 1,3,5-Trinitrobenzene	1	17.553	17.574	-0.021	149070	0.4000	0.3939	
20 2,6-Dinitrotoluene	1	18.693	18.714	-0.021	107072	0.4000	0.3825	
21 2,4-Dinitrotoluene	1	19.153	19.174	-0.021	215854	0.4000	0.3854	
22 Tetryl	1	22.447	22.481	-0.034	106353	0.4000	0.3931	
23 2,4,6-Trinitrotoluene	1	23.267	23.301	-0.034	159461	0.4000	0.3873	
24 PETN	2	24.520	24.547	-0.027	497183	4.00	4.20	

Reagents:

8330IntermStk_00076 Amount Added: 40.00 Units: uL
8330 DMT_00013 Amount Added: 20.00 Units: uL

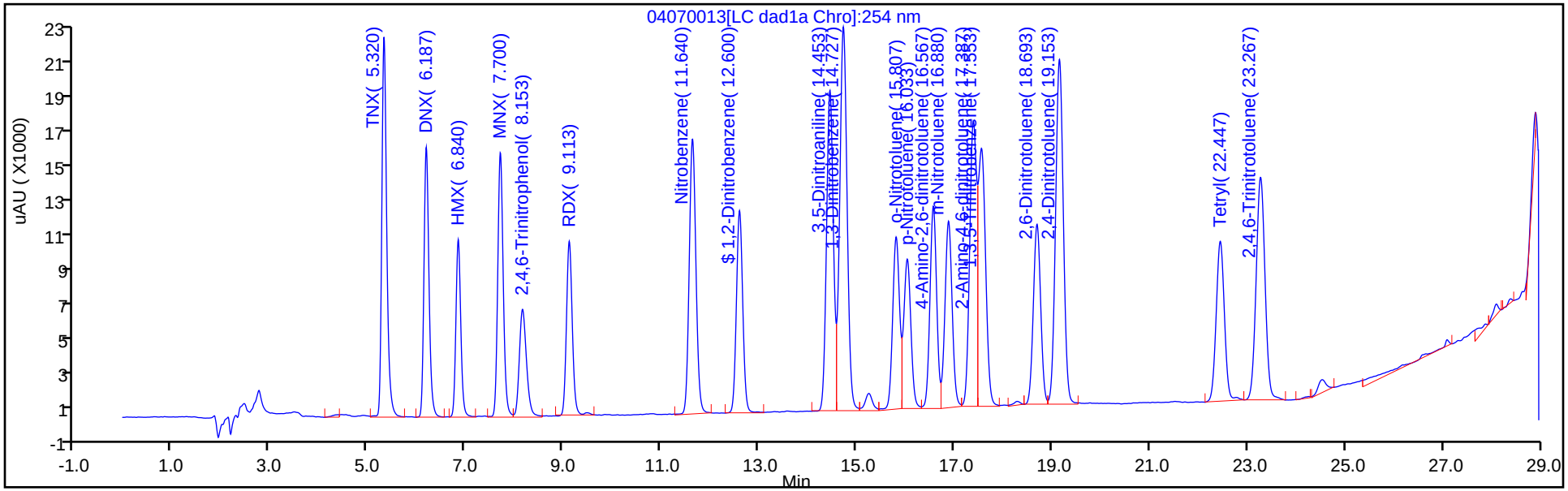
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Eurofins Denver

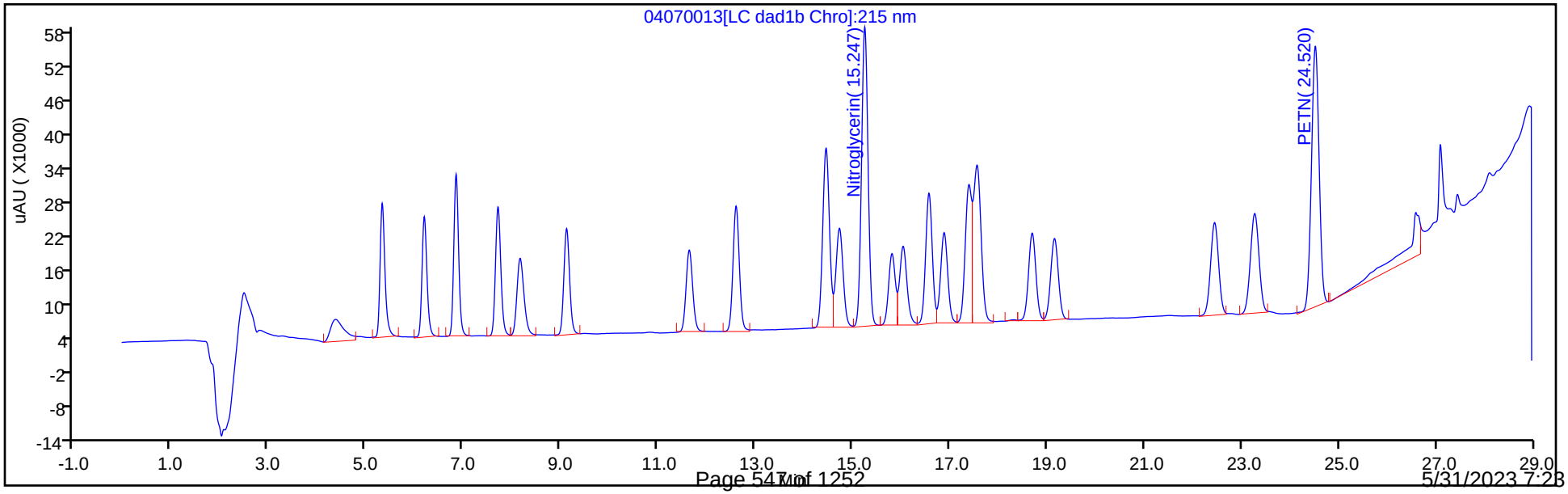
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Injection Date:	07-Apr-2023 20:50:53	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	IC INT DMT 6			Worklist Smp#:	13
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



5/31/2023 7:28 AM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\04070014.D
Lims ID: IC INT DMT 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 07-Apr-2023 21:26:49 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT DMT 5
Operator ID: JZ Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub18

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Apr-2023 15:55:26 Calib Date: 07-Apr-2023 23:50:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\04070018.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1657

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.321	5.321	0.000	96722	0.2508	0.2423	
4 DNX	1	6.194	6.194	0.000	70501	0.2503	0.2463	
6 HMX	1	6.847	6.847	0.000	42259	0.2500	0.2334	
7 MNX	1	7.714	7.714	0.000	74679	0.2918	0.2846	
5 2,4,6-Trinitrophenol	1	8.187	8.187	0.000	36740	0.2500	0.2361	
8 RDX	1	9.127	9.127	0.000	50479	0.2500	0.2340	
9 Nitrobenzene	1	11.654	11.654	0.000	90950	0.2500	0.2394	
$ 10 1,2-Dinitrobenzene	1	12.627	12.627	0.000	62380	0.2500	0.2350	
11 3,5-Dinitroaniline	1	14.480	14.480	0.000	106753	0.2500	0.2474	
12 1,3-Dinitrobenzene	1	14.754	14.754	0.000	137559	0.2500	0.2366	
13 Nitroglycerin	2	15.274	15.274	0.000	297926	2.50	2.40	
14 o-Nitrotoluene	1	15.827	15.827	0.000	58154	0.2500	0.2391	
15 p-Nitrotoluene	1	16.054	16.054	0.000	51955	0.2500	0.2389	
16 4-Amino-2,6-dinitrotoluene	1	16.594	16.594	0.000	66062	0.2500	0.2423	
17 m-Nitrotoluene	1	16.900	16.900	0.000	65576	0.2500	0.2447	
18 2-Amino-4,6-dinitrotoluene	1	17.414	17.414	0.000	98103	0.2500	0.2451	
19 1,3,5-Trinitrobenzene	1	17.574	17.574	0.000	90714	0.2500	0.2397	
20 2,6-Dinitrotoluene	1	18.714	18.714	0.000	64666	0.2500	0.2310	
21 2,4-Dinitrotoluene	1	19.174	19.174	0.000	130856	0.2500	0.2336	
22 Tetryl	1	22.481	22.481	0.000	64854	0.2500	0.2397	
23 2,4,6-Trinitrotoluene	1	23.301	23.301	0.000	96518	0.2500	0.2344	
24 PETN	2	24.547	24.547	0.000	301212	2.50	2.54	

Reagents:

8330IntermStk_00076 Amount Added: 25.00 Units: uL
8330 DMT_00013 Amount Added: 12.50 Units: uL

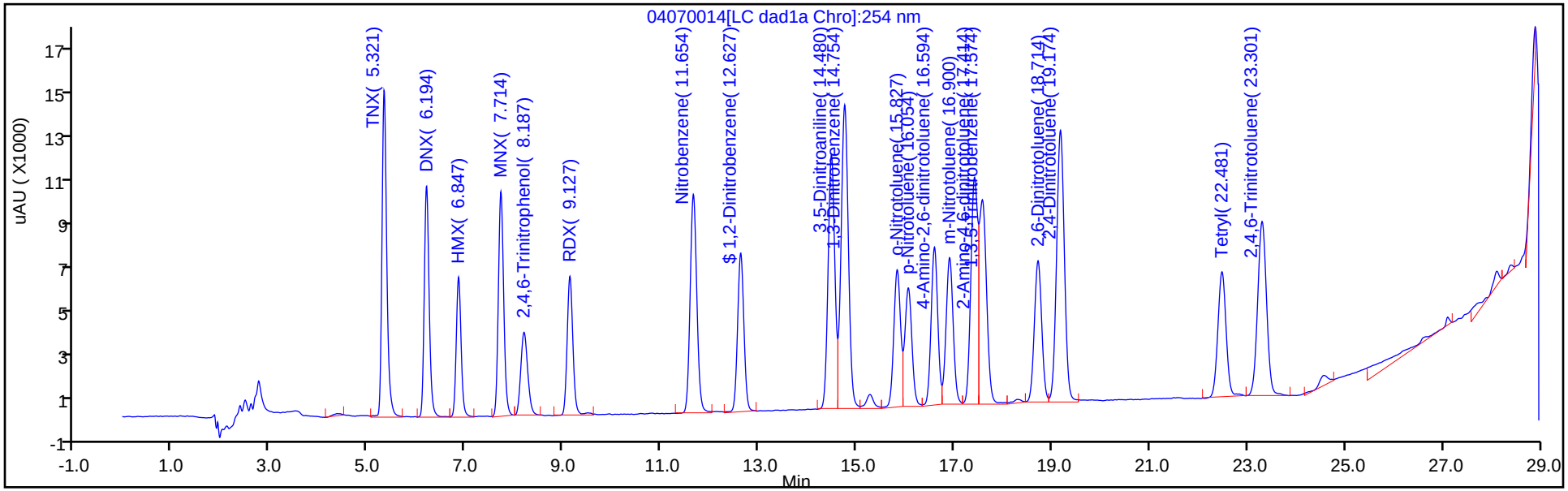
Report Date: 12-Apr-2023 15:55:26 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

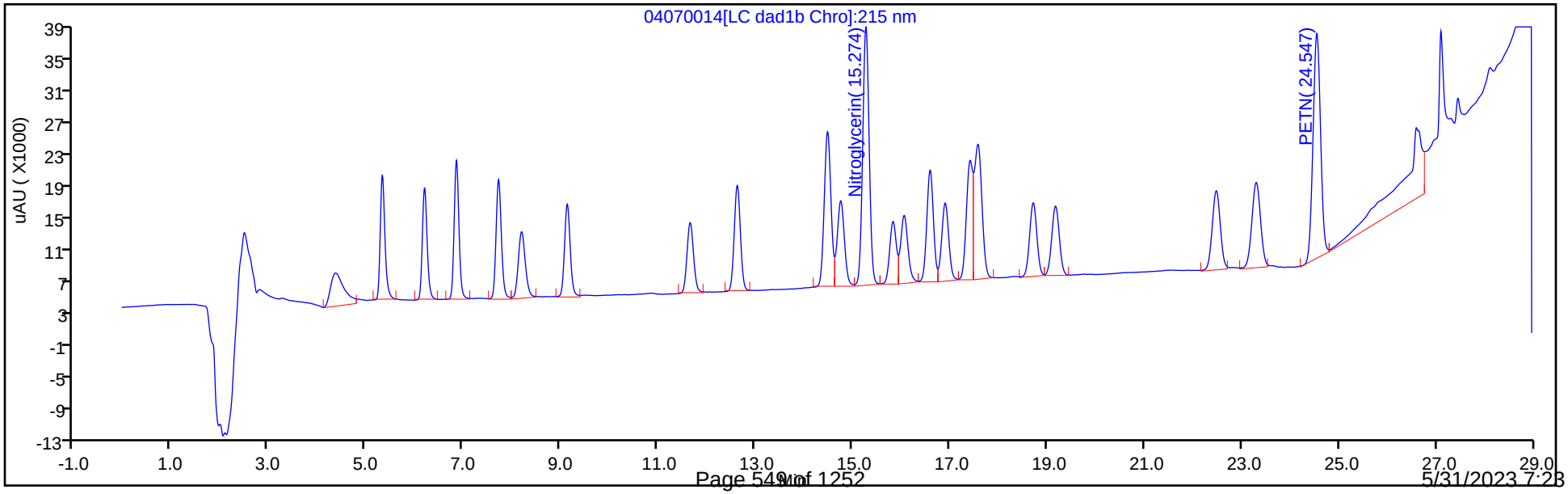
Data File: \\chromfs\denver\chromdata\g2_luna\20230407-120232.b\04070014.d

Injection Date:	07-Apr-2023 21:26:49	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	IC INT DMT 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 Peak: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



5/31/2023 7:28 AM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\04070015.D
Lims ID: IC INT DMT 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 07-Apr-2023 22:02:48 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT DMT 4
Operator ID: JZ Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub18

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Apr-2023 15:55:27 Calib Date: 07-Apr-2023 23:50:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\04070018.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1657

First Level Reviewer: LV5D Date: 08-Apr-2023 10:39:08

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.334	5.321	0.013	39339	0.1003	0.0985	
4 DNX	1	6.201	6.194	0.007	28516	0.1001	0.0996	
6 HMX	1	6.854	6.847	0.007	17711	0.1000	0.0978	
7 MNX	1	7.721	7.714	0.007	30241	0.1167	0.1153	
5 2,4,6-Trinitrophenol	1	8.221	8.187	0.034	15604	0.1000	0.1003	
8 RDX	1	9.134	9.127	0.007	21015	0.1000	0.0974	
9 Nitrobenzene	1	11.654	11.654	0.000	37900	0.1000	0.0997	
$ 10 1,2-Dinitrobenzene	1	12.621	12.627	-0.006	26630	0.1000	0.1003	
11 3,5-Dinitroaniline	1	14.474	14.480	-0.006	44146	0.1000	0.1017	
12 1,3-Dinitrobenzene	1	14.747	14.754	-0.007	56261	0.1000	0.0968	
13 Nitroglycerin	2	15.267	15.274	-0.007	125509	1.00	1.01	
14 o-Nitrotoluene	1	15.827	15.827	0.000	24115	0.1000	0.0992	Ma
15 p-Nitrotoluene	1	16.054	16.054	0.000	21537	0.1000	0.0990	Ma
16 4-Amino-2,6-dinitrotoluene	1	16.594	16.594	0.000	27461	0.1000	0.1007	Ma
17 m-Nitrotoluene	1	16.901	16.900	0.001	27150	0.1000	0.1013	Ma
18 2-Amino-4,6-dinitrotoluene	1	17.414	17.414	0.000	40866	0.1000	0.1021	Ma
19 1,3,5-Trinitrobenzene	1	17.574	17.574	0.000	37635	0.1000	0.0994	Ma
20 2,6-Dinitrotoluene	1	18.714	18.714	0.000	27076	0.1000	0.0967	
21 2,4-Dinitrotoluene	1	19.174	19.174	0.000	54791	0.1000	0.0978	
22 Tetryl	1	22.474	22.481	-0.007	27969	0.1000	0.1034	
23 2,4,6-Trinitrotoluene	1	23.301	23.301	0.000	41817	0.1000	0.1016	
24 PETN	2	24.541	24.547	-0.006	124639	1.00	1.05	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00076	Amount Added:	10.00	Units: uL
8330 DMT_00013	Amount Added:	5.00	Units: uL

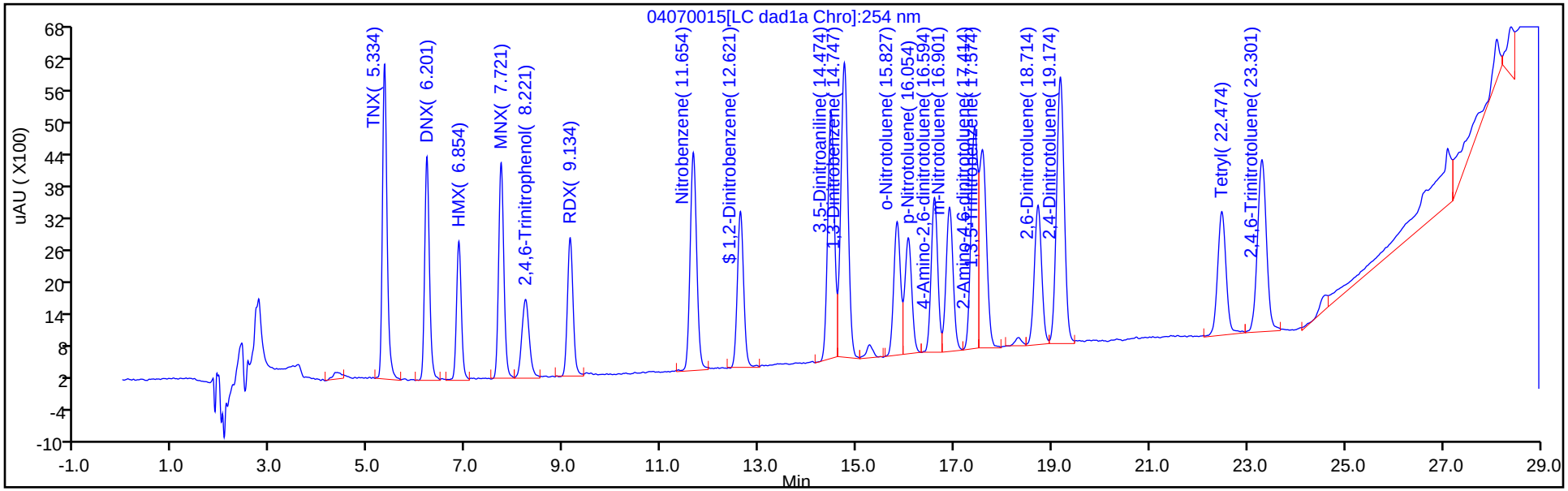
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Eurofins Denver

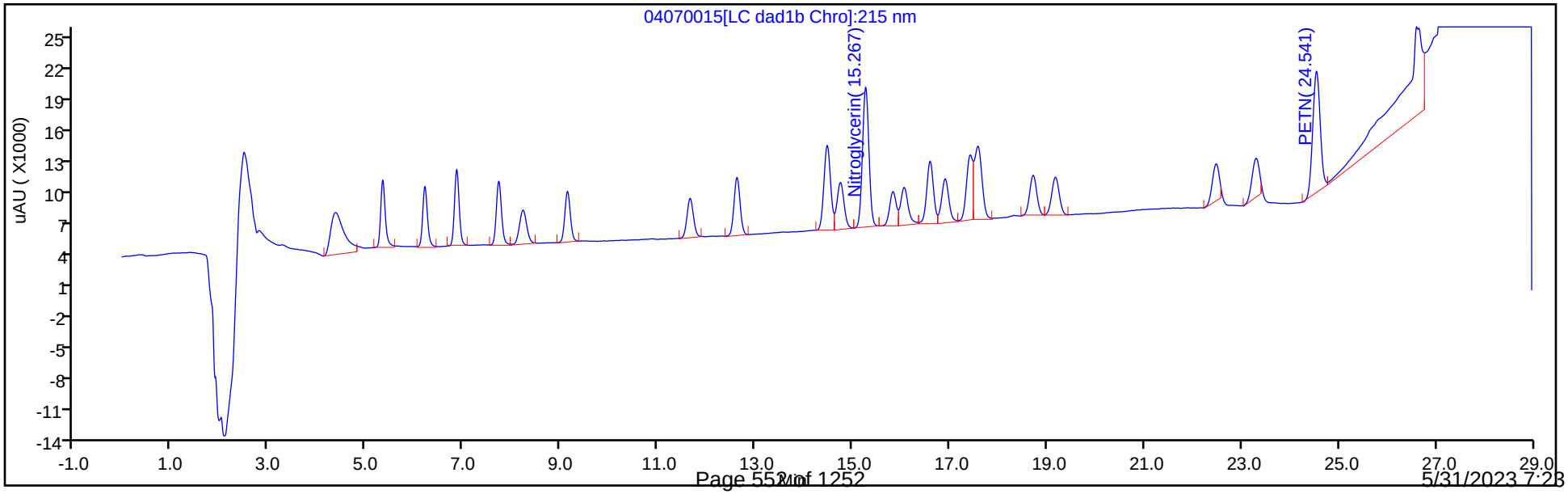
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Injection Date:	07-Apr-2023 22:02:48	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	IC INT DMT 4			Worklist Smp#:	15
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 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

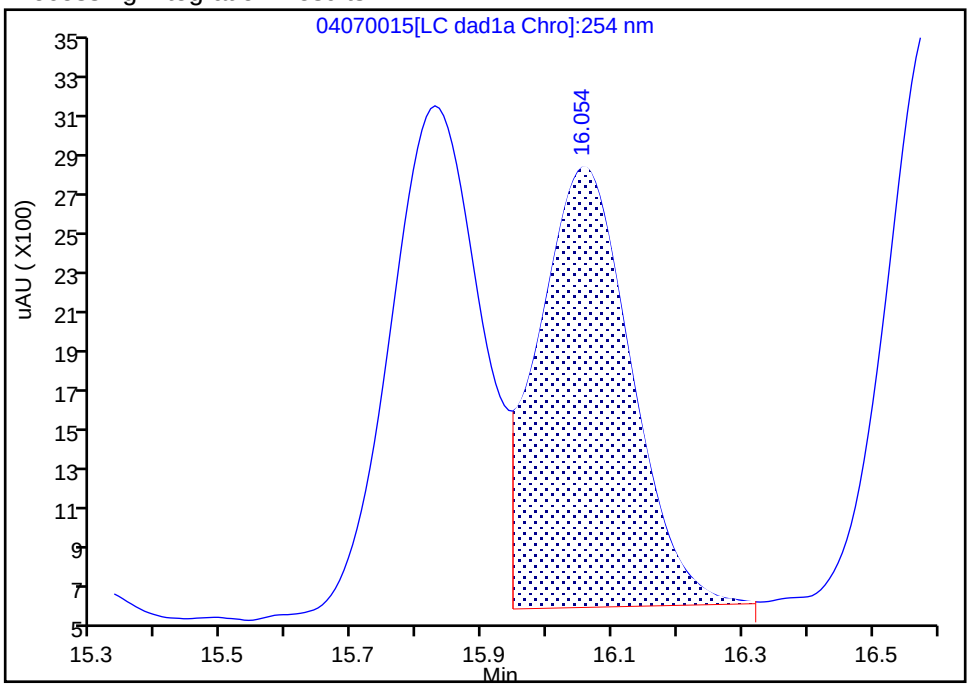
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Lims ID:	IC INT DMT 4				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

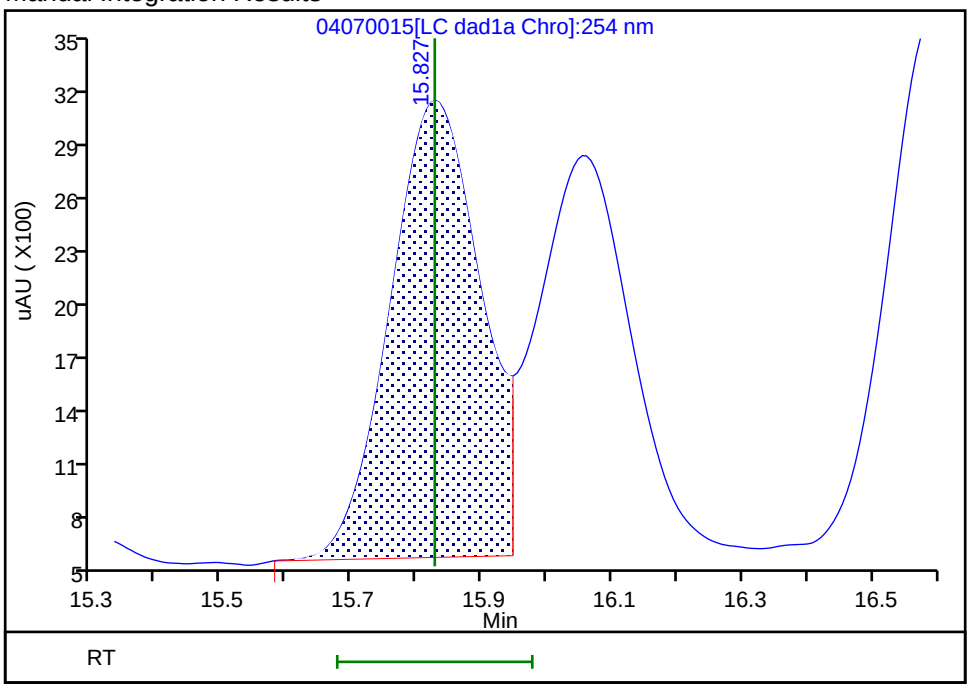
Processing Integration Results

RT: 16.05
Area: 21537
Amount: 0.080916
Amount Units: ug/ml



Manual Integration Results

RT: 15.83
Area: 24115
Amount: 0.099162
Amount Units: ug/ml



Reviewer: LV5D, 08-Apr-2023 10:38:38

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

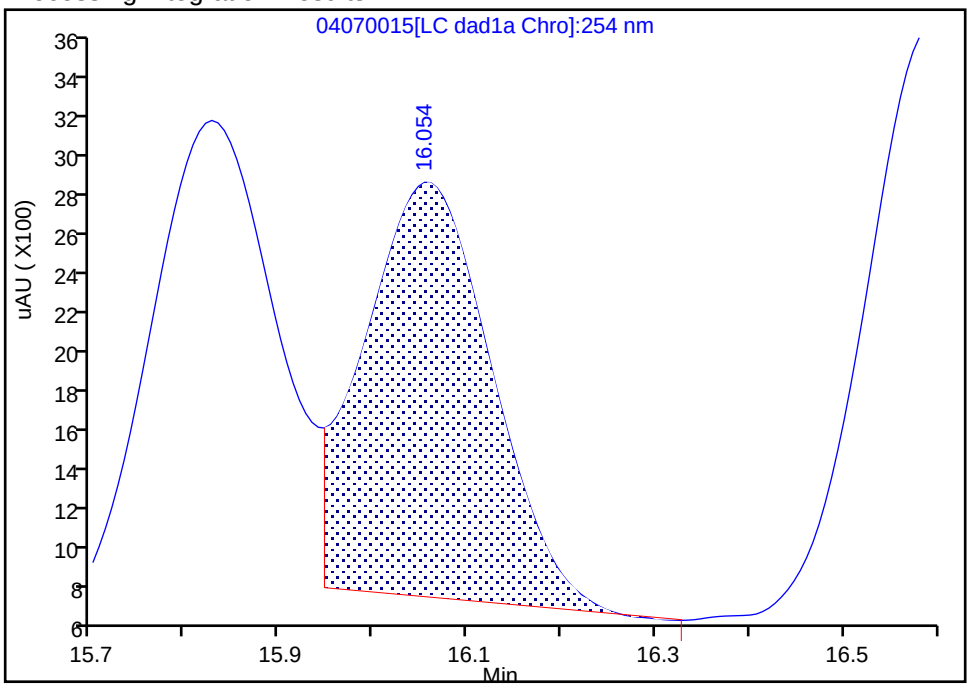
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Injection Date:	07-Apr-2023 22:02:48	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT DMT 4				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

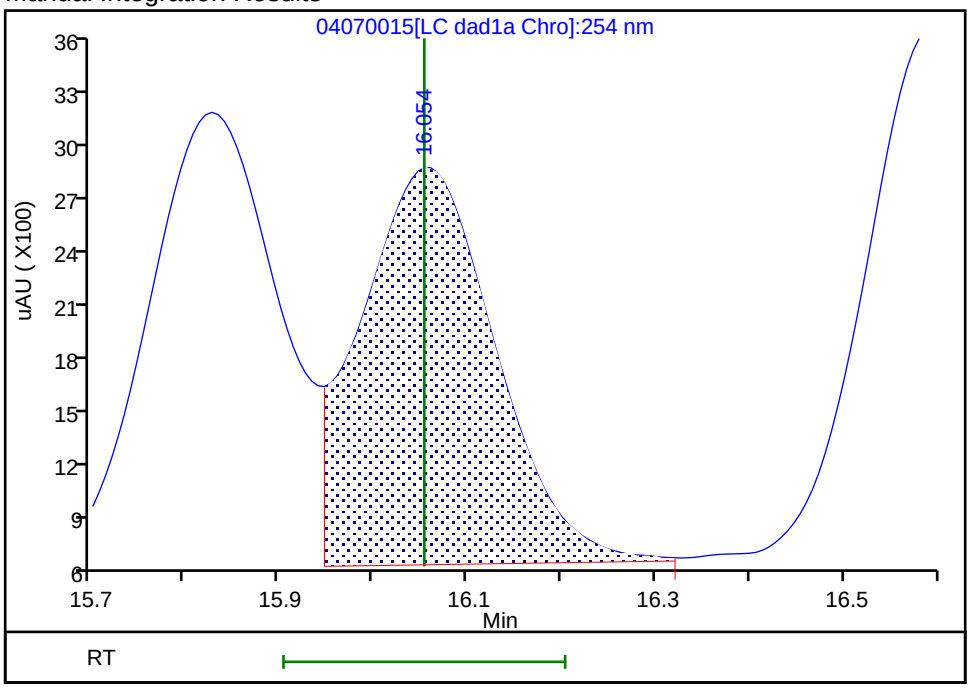
Processing Integration Results

RT: 16.05
Area: 19182
Amount: 0.091061
Amount Units: ug/ml



Manual Integration Results

RT: 16.05
Area: 21537
Amount: 0.099044
Amount Units: ug/ml



Reviewer: LV5D, 08-Apr-2023 10:38:39

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

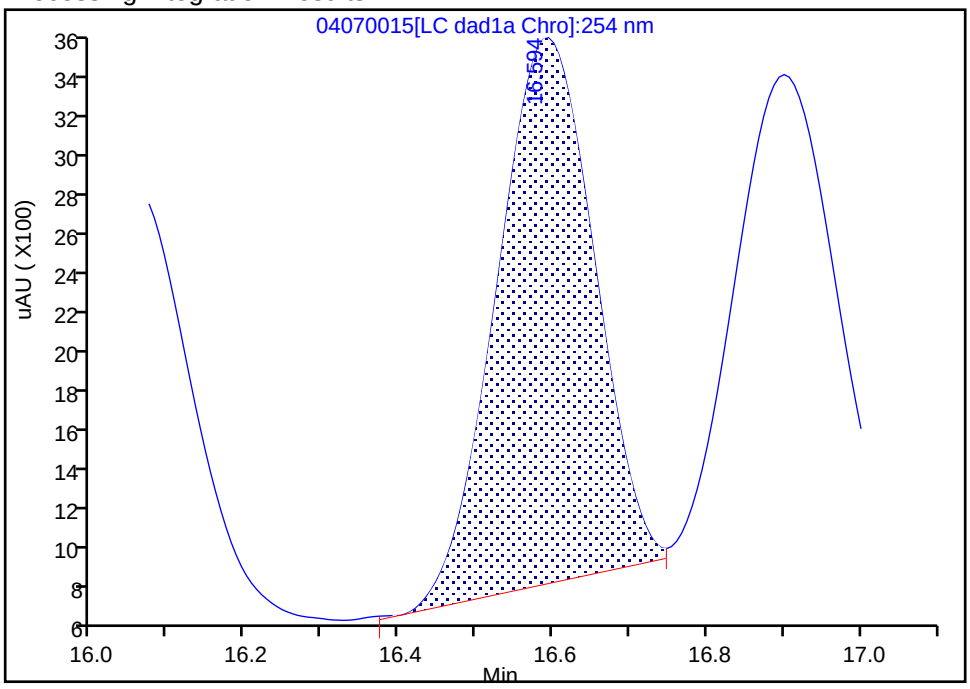
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Injection Date:	07-Apr-2023 22:02:48	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT DMT 4				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

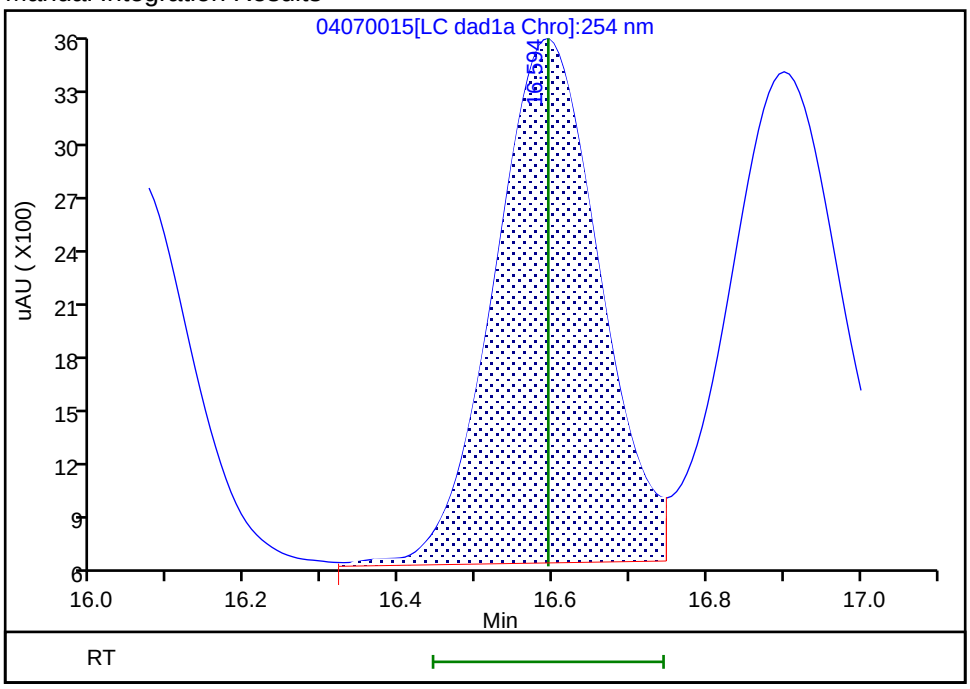
Processing Integration Results

RT: 16.59
Area: 24031
Amount: 0.090376
Amount Units: ug/ml



Manual Integration Results

RT: 16.59
Area: 27461
Amount: 0.100733
Amount Units: ug/ml



Reviewer: LV5D, 08-Apr-2023 10:38:40

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

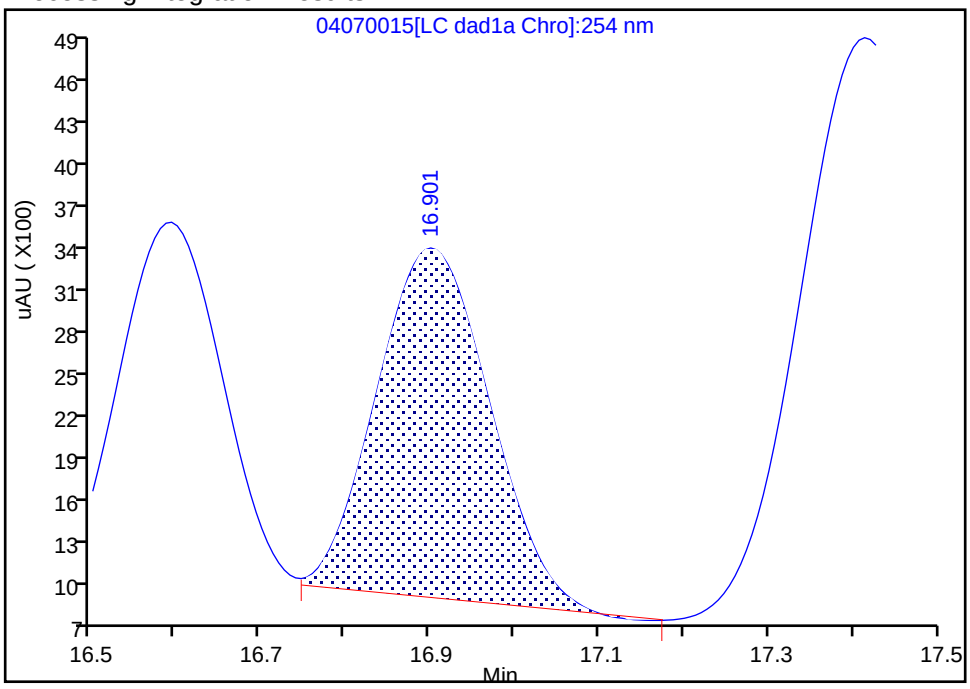
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Injection Date:	07-Apr-2023 22:02:48	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT DMT 4				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

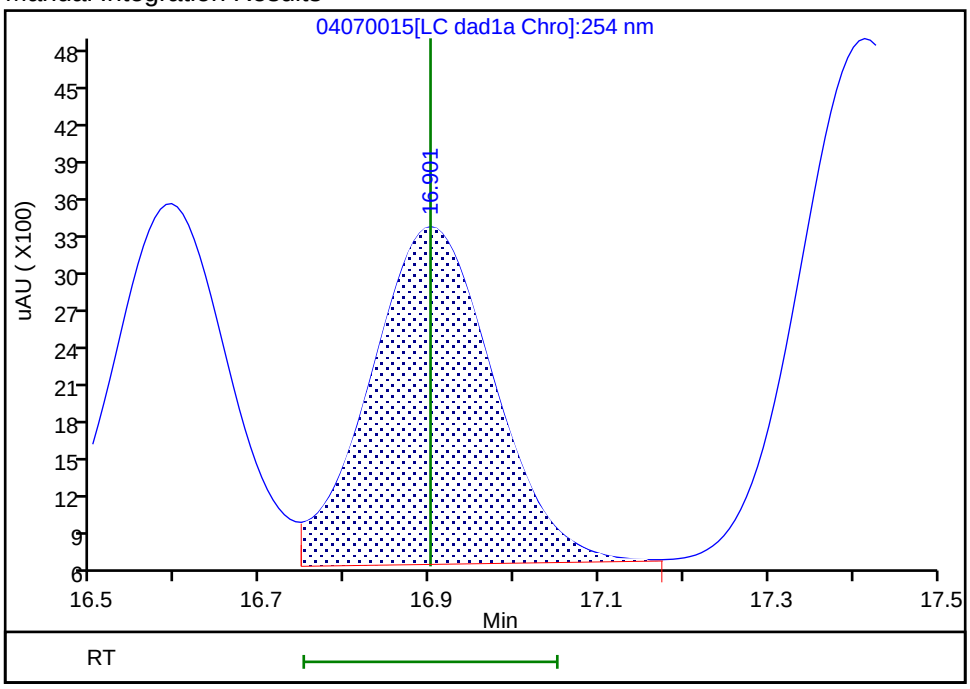
Processing Integration Results

RT: 16.90
Area: 23442
Amount: 0.089730
Amount Units: ug/ml



Manual Integration Results

RT: 16.90
Area: 27150
Amount: 0.101302
Amount Units: ug/ml



Reviewer: LV5D, 08-Apr-2023 10:38:41
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

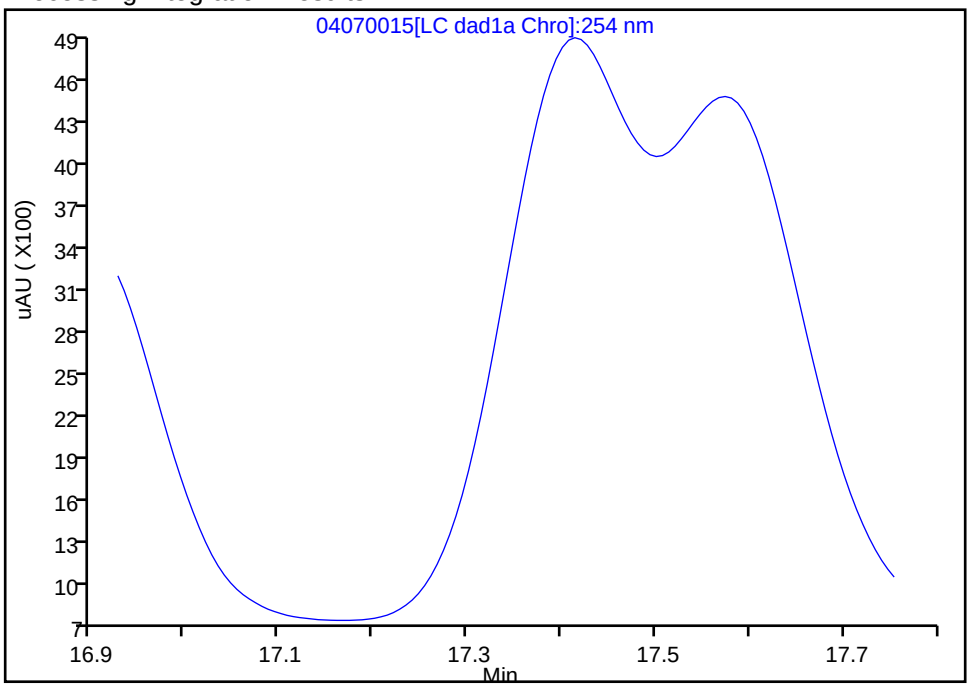
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Injection Date:	07-Apr-2023 22:02:48	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT DMT 4				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

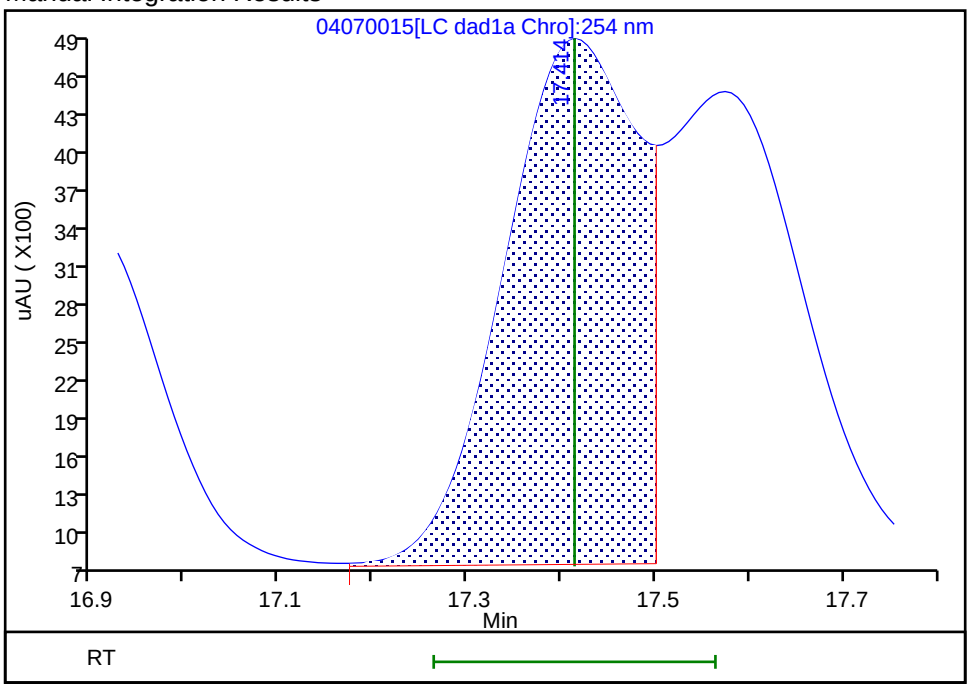
Not Detected
Expected RT: 17.41

Processing Integration Results



Manual Integration Results

RT: 17.41
Area: 40866
Amount: 0.102093
Amount Units: ug/ml



Reviewer: LV5D, 08-Apr-2023 10:38:42
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

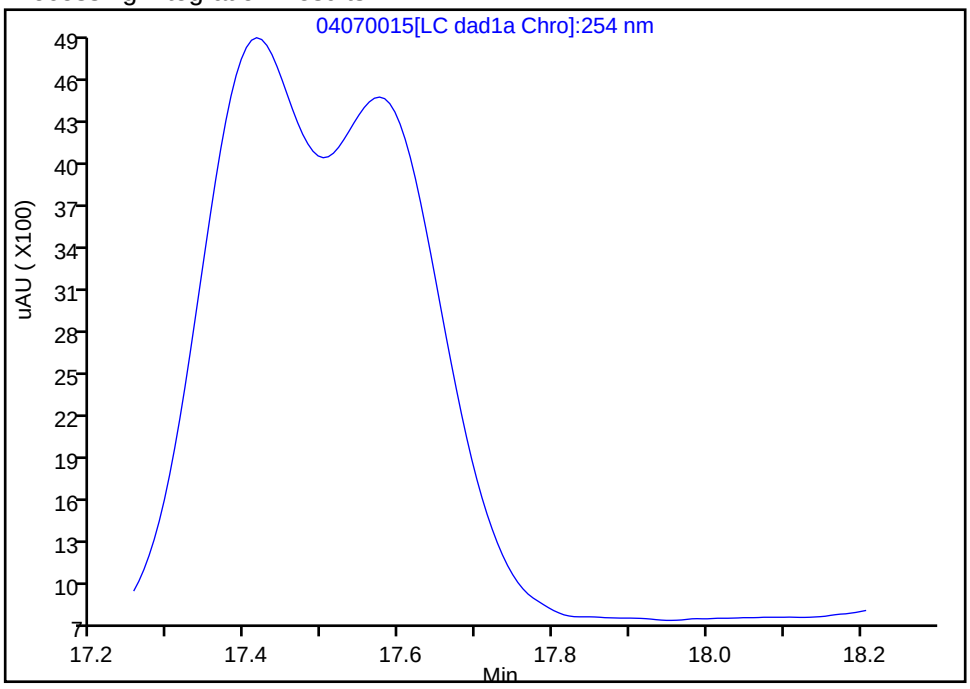
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Injection Date:	07-Apr-2023 22:02:48	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT DMT 4				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

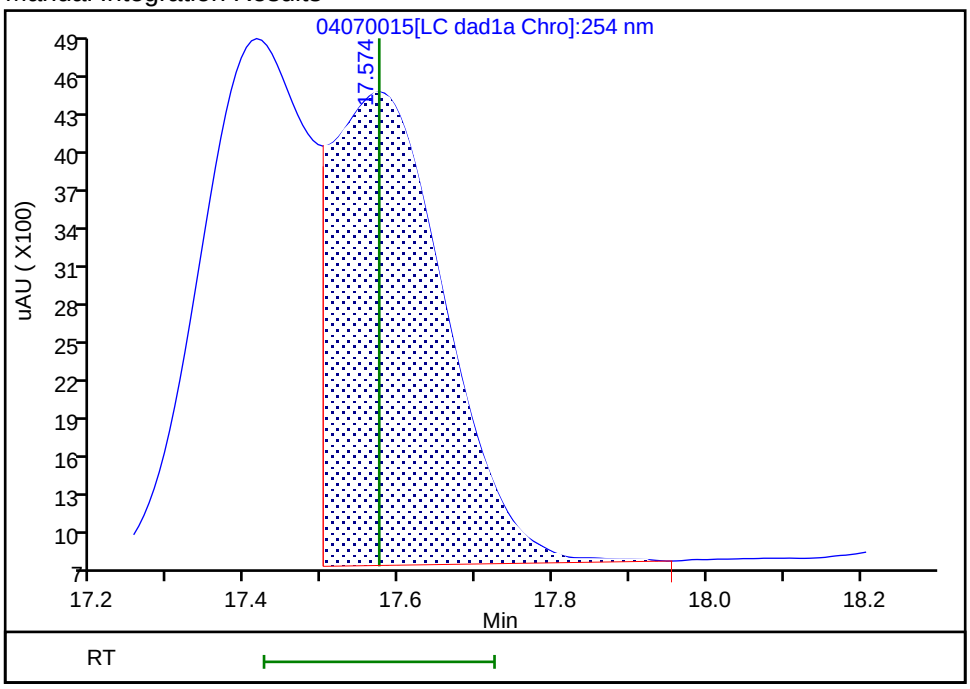
Not Detected
Expected RT: 17.57

Processing Integration Results



Manual Integration Results

RT: 17.57
Area: 37635
Amount: 0.099435
Amount Units: ug/ml



Reviewer: LV5D, 08-Apr-2023 10:38:43
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\04070016.D
Lims ID: IC INT DMT 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 07-Apr-2023 22:38:44 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT DMT 3
Operator ID: JZ Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub18

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Apr-2023 15:55:28 Calib Date: 07-Apr-2023 23:50:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\04070018.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1657

First Level Reviewer: LV5D Date: 08-Apr-2023 10:39:45

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.338	5.321	0.017	20397	0.0502	0.0511	
4 DNX	1	6.205	6.194	0.011	14268	0.0501	0.0499	
6 HMX	1	6.858	6.847	0.011	9104	0.0500	0.0503	
7 MNX	1	7.732	7.714	0.018	15283	0.0584	0.0582	
5 2,4,6-Trinitrophenol	1	8.245	8.187	0.058	8104	0.0500	0.0521	
8 RDX	1	9.145	9.127	0.018	10799	0.0500	0.0501	
9 Nitrobenzene	1	11.672	11.654	0.018	19405	0.0500	0.0511	
$ 10 1,2-Dinitrobenzene	1	12.638	12.627	0.011	13806	0.0500	0.0520	
11 3,5-Dinitroaniline	1	14.492	14.480	0.012	22268	0.0500	0.0509	
12 1,3-Dinitrobenzene	1	14.765	14.754	0.011	29472	0.0500	0.0507	
13 Nitroglycerin	2	15.278	15.274	0.004	64483	0.5000	0.5186	
14 o-Nitrotoluene	1	15.838	15.827	0.011	12185	0.0500	0.0501	M
15 p-Nitrotoluene	1	16.072	16.054	0.018	10927	0.0500	0.0503	M
16 4-Amino-2,6-dinitrotoluene	1	16.605	16.594	0.011	13722	0.0500	0.0503	M
17 m-Nitrotoluene	1	16.912	16.900	0.012	13529	0.0500	0.0505	M
18 2-Amino-4,6-dinitrotoluene	1	17.425	17.414	0.011	20191	0.0500	0.0504	M
19 1,3,5-Trinitrobenzene	1	17.585	17.574	0.011	18350	0.0500	0.0485	Ma
20 2,6-Dinitrotoluene	1	18.725	18.714	0.011	13580	0.0500	0.0485	
21 2,4-Dinitrotoluene	1	19.178	19.174	0.004	28133	0.0500	0.0502	
22 Tetryl	1	22.485	22.481	0.004	13447	0.0500	0.0497	
23 2,4,6-Trinitrotoluene	1	23.305	23.301	0.004	21038	0.0500	0.0511	
24 PETN	2	24.545	24.547	-0.002	58615	0.5000	0.4952	M

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00076	Amount Added:	5.00	Units: uL
8330 DMT_00013	Amount Added:	2.50	Units: uL

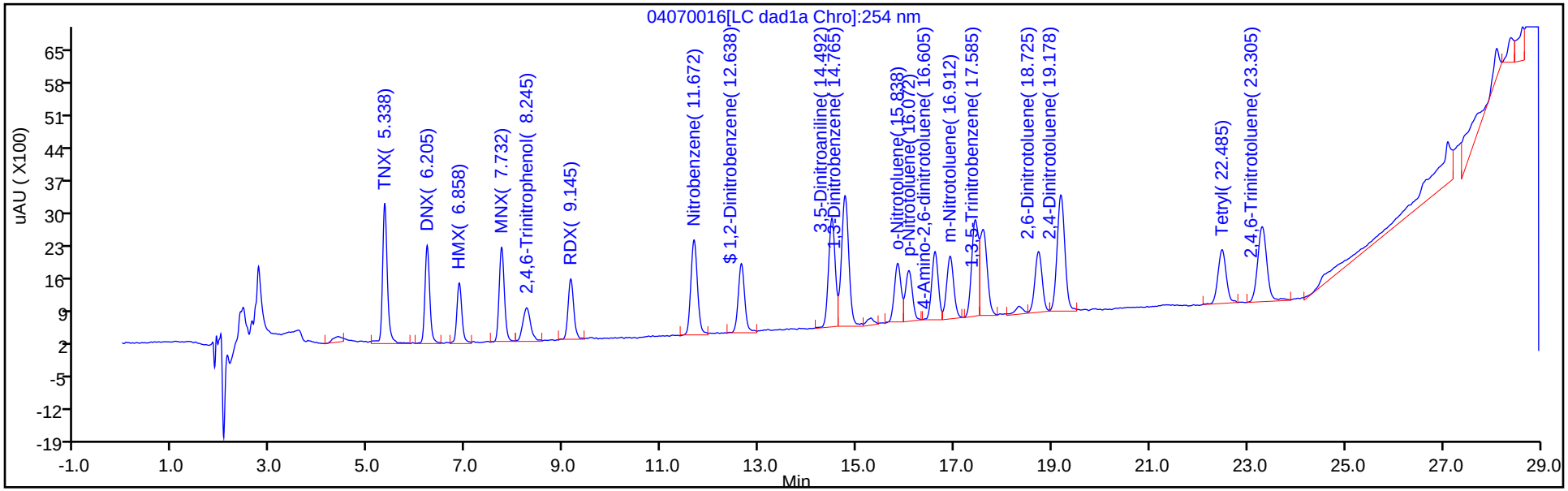
Report Date: 12-Apr-2023 15:55:28 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

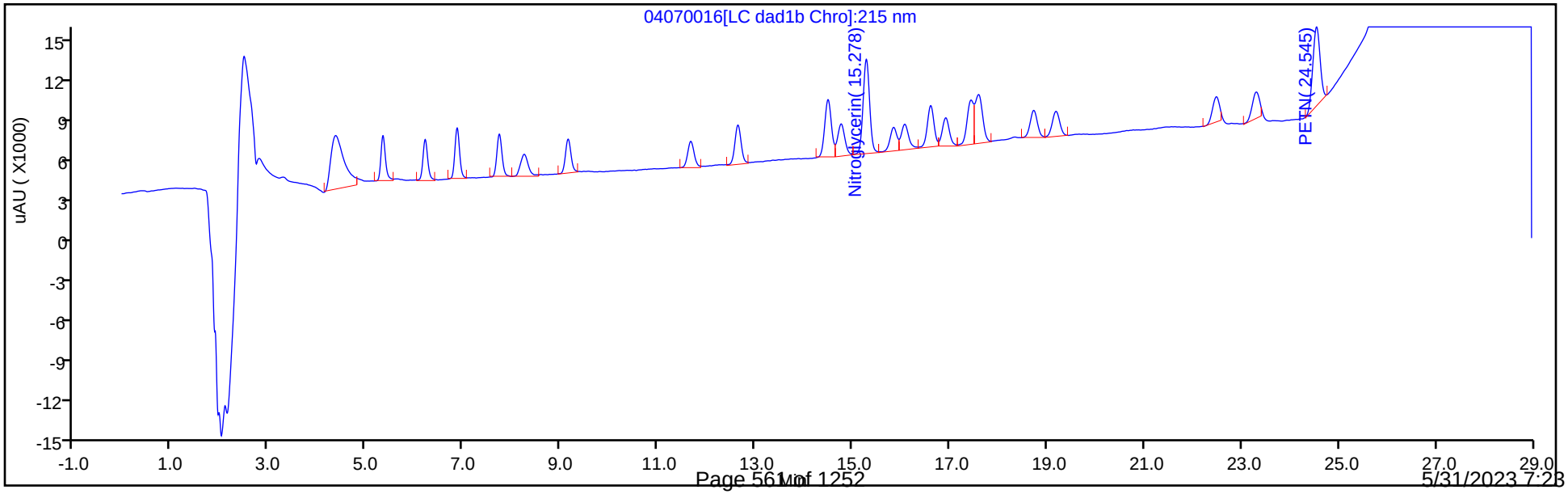
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Injection Date:	07-Apr-2023 22:38:44	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	IC INT DMT 3			Worklist Smp#:	16
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 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

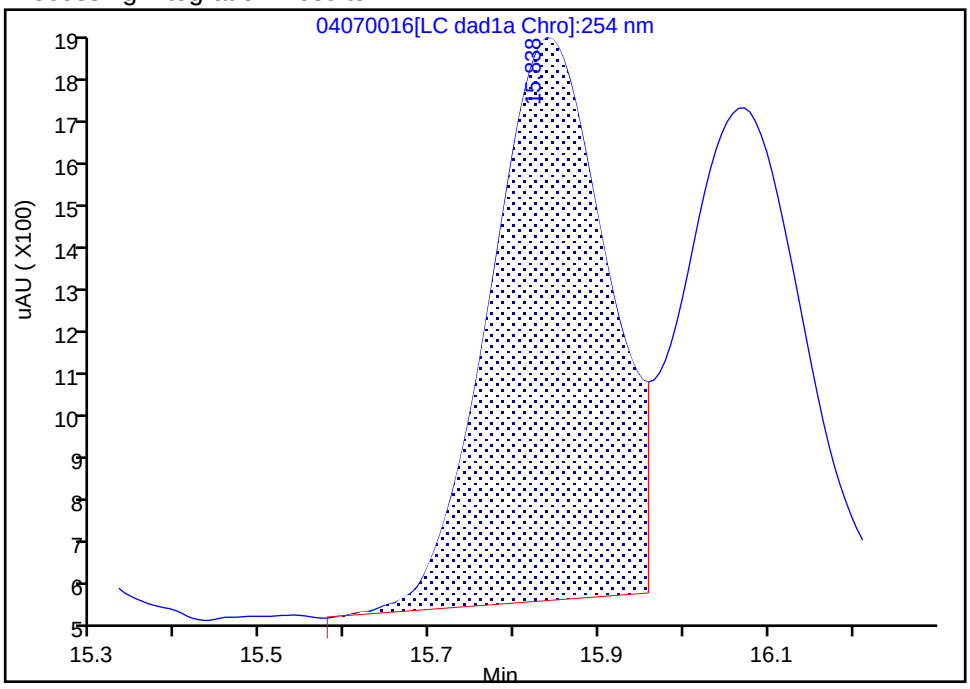
Data File:	\\chromfs\denver\chromdata\g2_luna\20230407-120232.b\04070016.d				
Injection Date:	07-Apr-2023 22:38:44	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT DMT 3				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

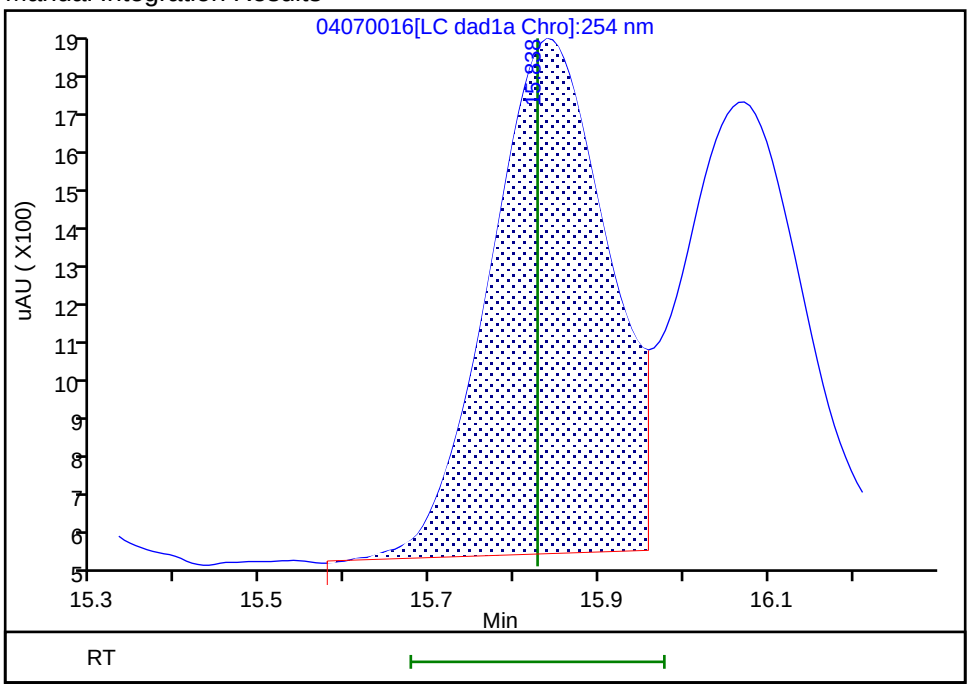
Processing Integration Results

RT: 15.84
Area: 11923
Amount: 0.044319
Amount Units: ug/ml



Manual Integration Results

RT: 15.84
Area: 12185
Amount: 0.050105
Amount Units: ug/ml



Reviewer: LV5D, 08-Apr-2023 10:39:29
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

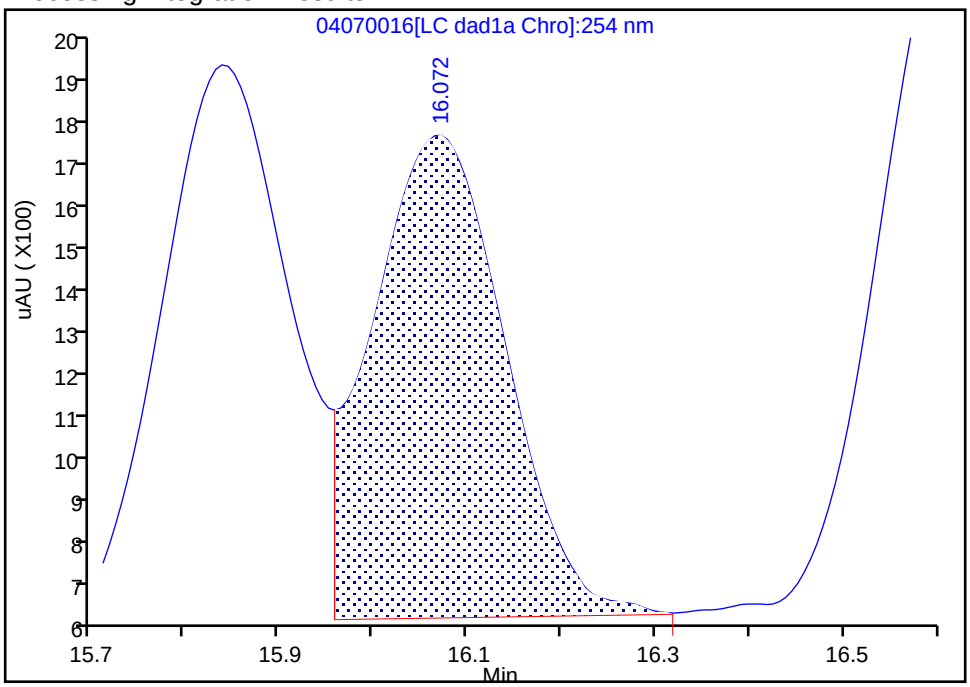
Data File:	\\chromfs\denver\chromdata\g2_luna\20230407-120232.b\04070016.d				
Injection Date:	07-Apr-2023 22:38:44	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT DMT 3				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

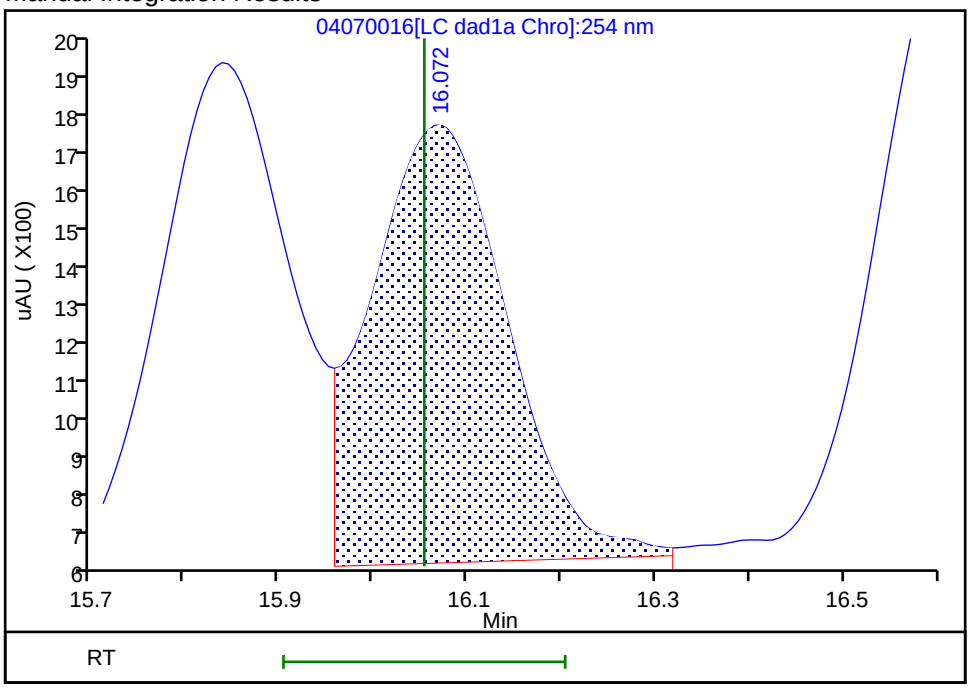
Processing Integration Results

RT: 16.07
Area: 10452
Amount: 0.048934
Amount Units: ug/ml



Manual Integration Results

RT: 16.07
Area: 10927
Amount: 0.050251
Amount Units: ug/ml



Reviewer: LV5D, 08-Apr-2023 10:39:29
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

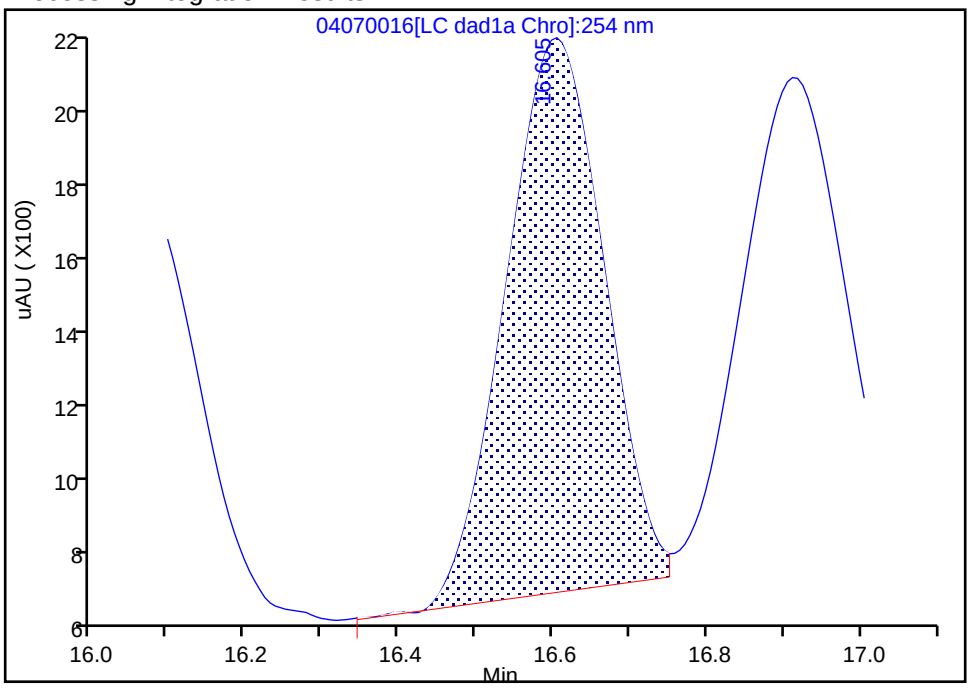
Data File:	\\chromfs\denver\chromdata\g2_luna\20230407-120232.b\04070016.d				
Injection Date:	07-Apr-2023 22:38:44	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT DMT 3				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

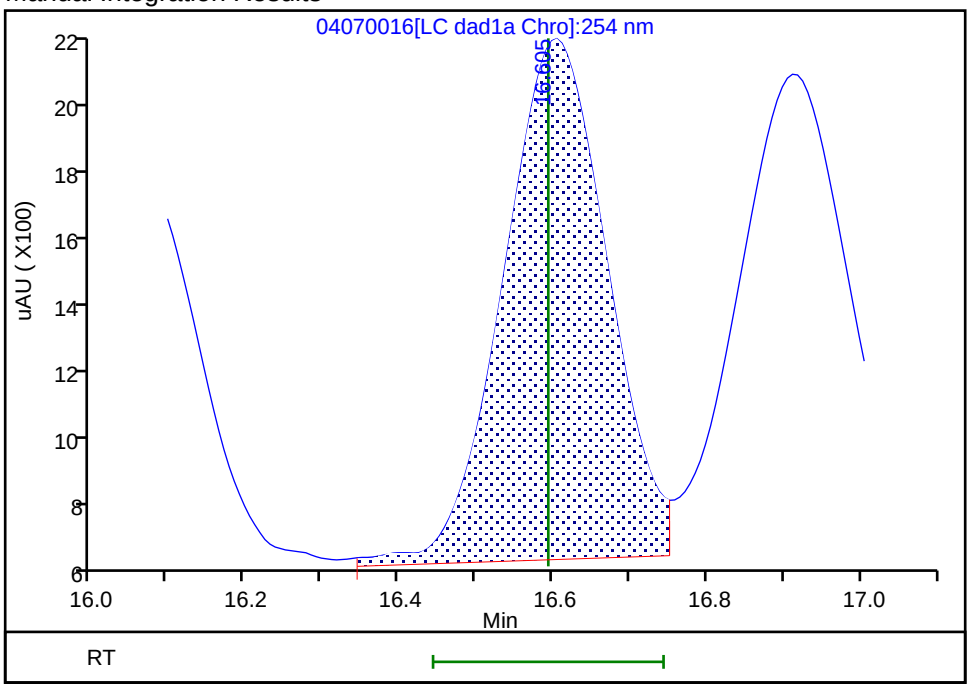
Processing Integration Results

RT: 16.60
Area: 12417
Amount: 0.046038
Amount Units: ug/ml



Manual Integration Results

RT: 16.60
Area: 13722
Amount: 0.050336
Amount Units: ug/ml



Reviewer: LV5D, 08-Apr-2023 10:39:29
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

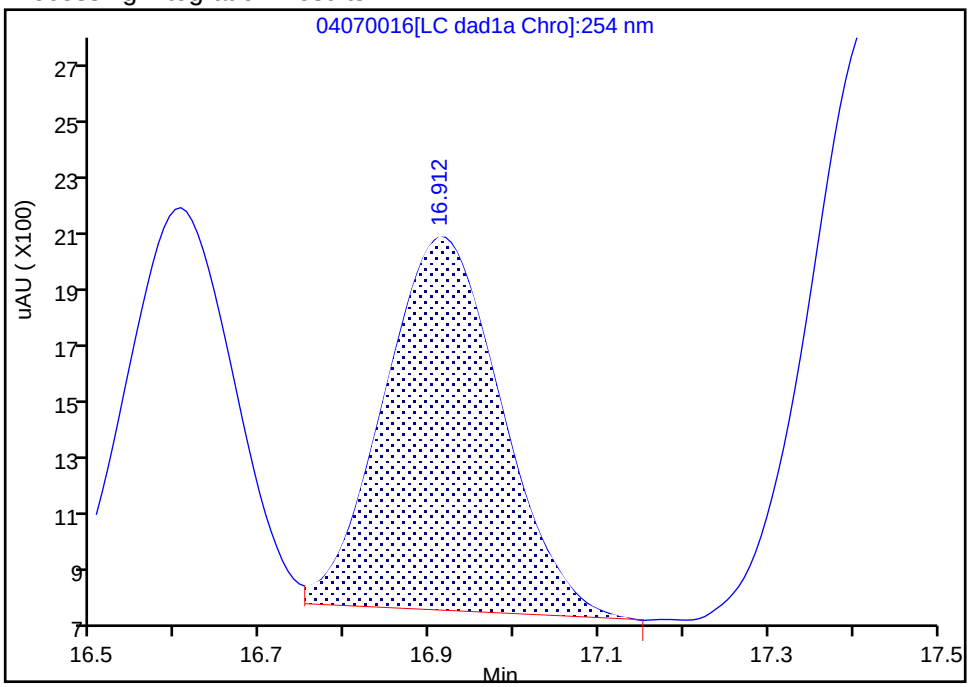
Data File:	\\chromfs\denver\chromdata\g2_luna\20230407-120232.b\04070016.d				
Injection Date:	07-Apr-2023 22:38:44	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT DMT 3				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

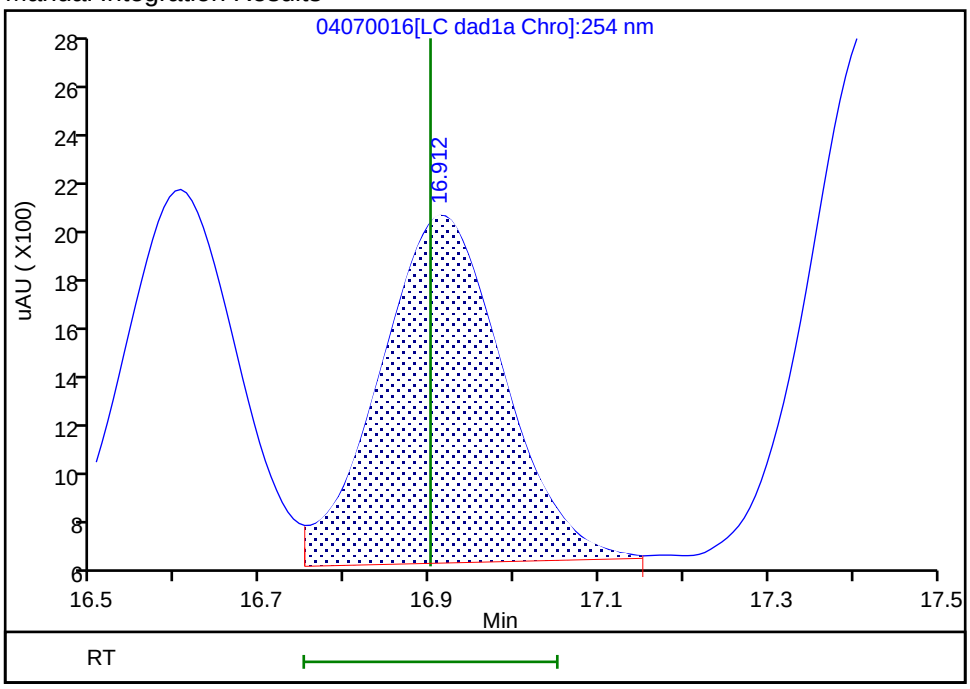
Processing Integration Results

RT: 16.91
Area: 12341
Amount: 0.046505
Amount Units: ug/ml



Manual Integration Results

RT: 16.91
Area: 13529
Amount: 0.050479
Amount Units: ug/ml



Reviewer: LV5D, 08-Apr-2023 10:39:29
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

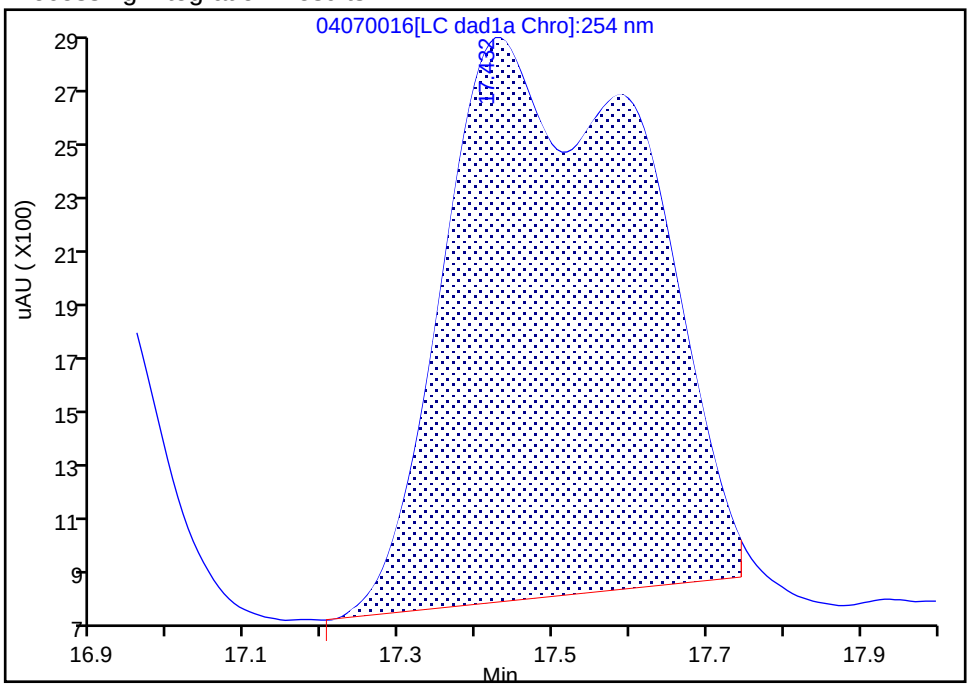
Data File: \\chromfs\denver\chromdata\g2_luna\20230407-120232.b\04070016.d
Injection Date: 07-Apr-2023 22:38:44 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT DMT 3
Client ID:
Operator ID: JZ ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

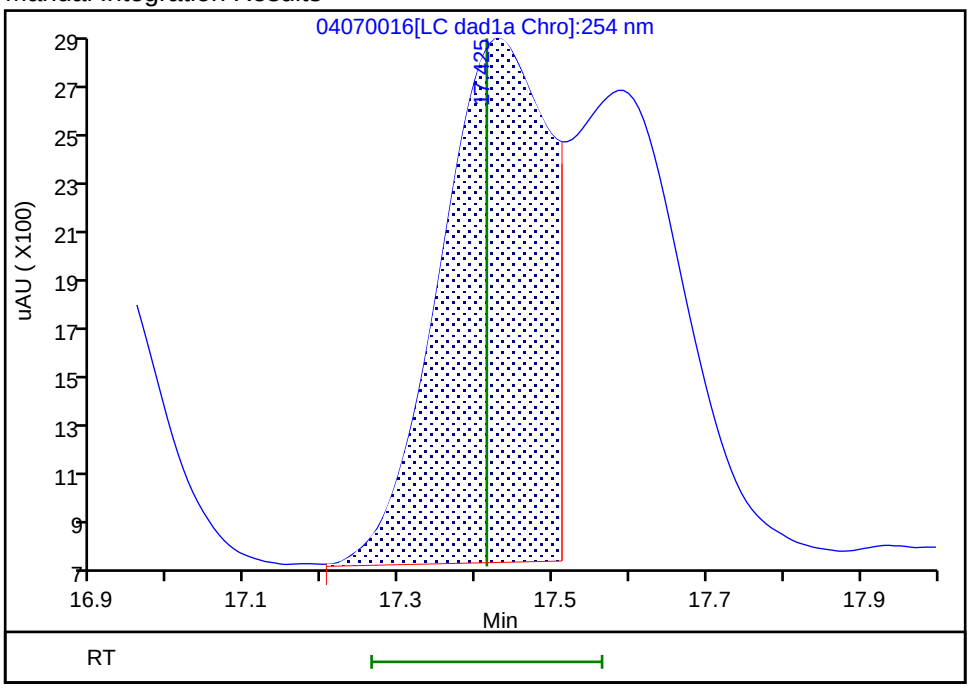
Processing Integration Results

RT: 17.43
Area: 36682
Amount: 0.079883
Amount Units: ug/ml



Manual Integration Results

RT: 17.42
Area: 20191
Amount: 0.050442
Amount Units: ug/ml



Reviewer: LV5D, 08-Apr-2023 10:39:29
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

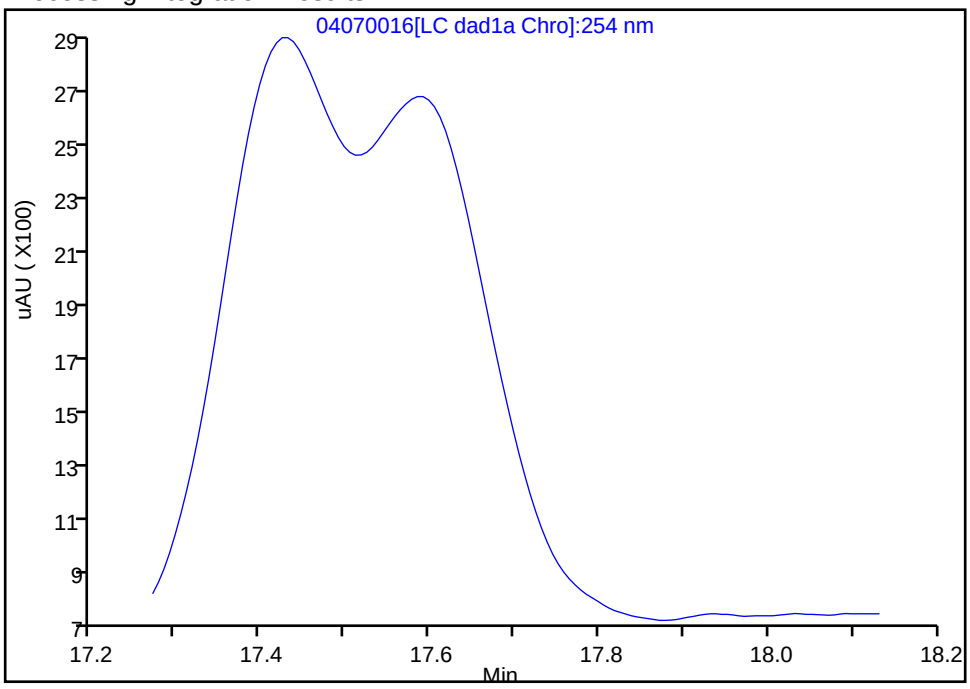
Data File:	\\chromfs\denver\chromdata\g2_luna\20230407-120232.b\04070016.d				
Injection Date:	07-Apr-2023 22:38:44	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT DMT 3				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

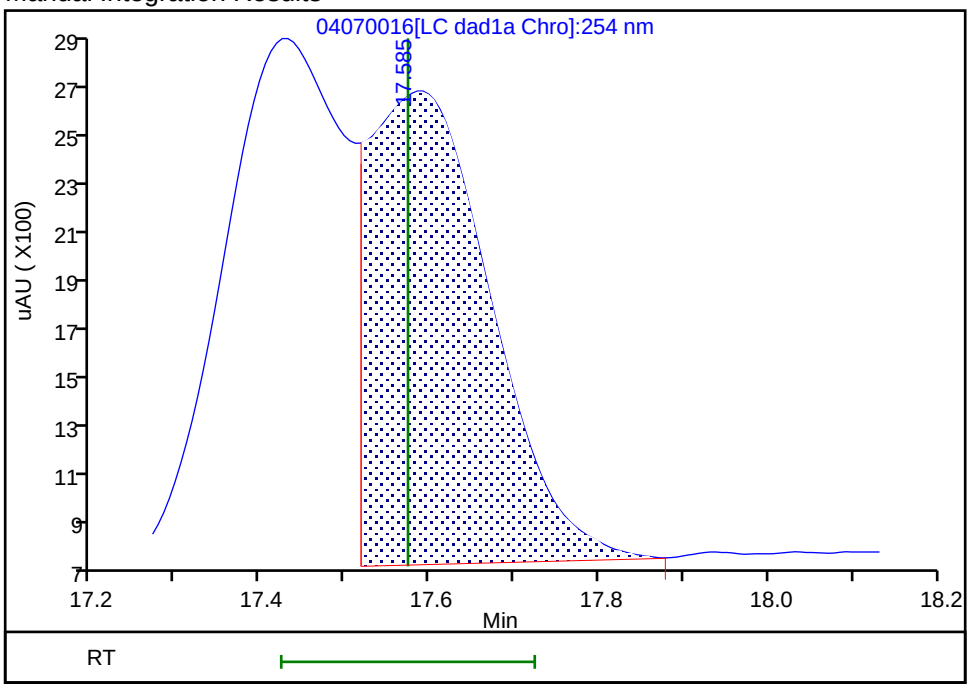
Not Detected
Expected RT: 17.57

Processing Integration Results



Manual Integration Results

RT: 17.58
Area: 18350
Amount: 0.048482
Amount Units: ug/ml



Reviewer: LV5D, 08-Apr-2023 10:39:42
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

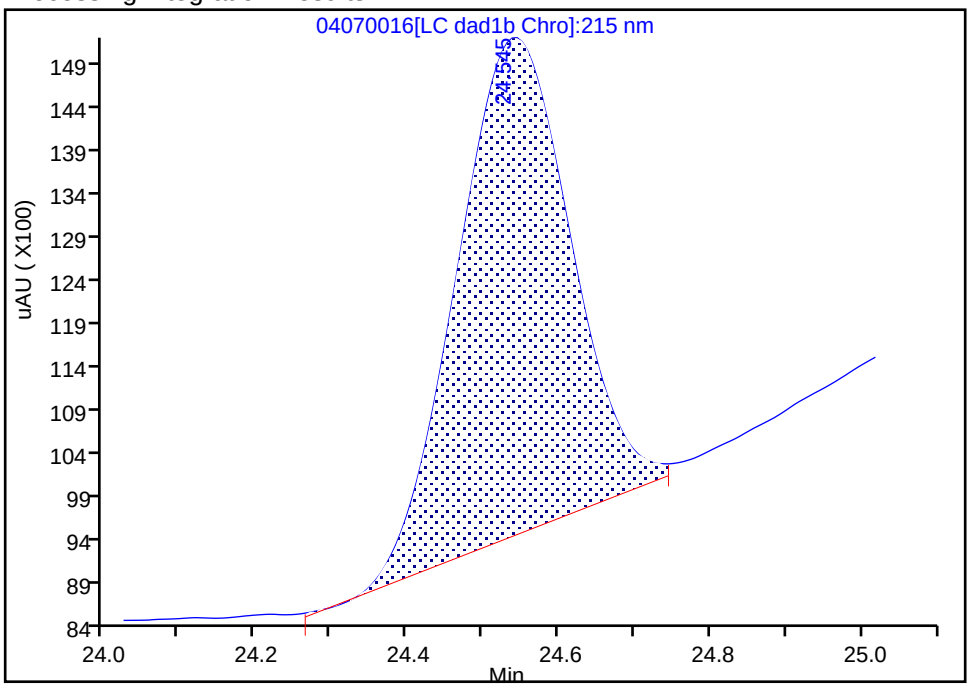
Data File:	\\chromfs\denver\chromdata\g2_luna\20230407-120232.b\04070016.d				
Injection Date:	07-Apr-2023 22:38:44	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT DMT 3				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1B, 215 nm		

24 PETN, CAS: 78-11-5

Signal: 1

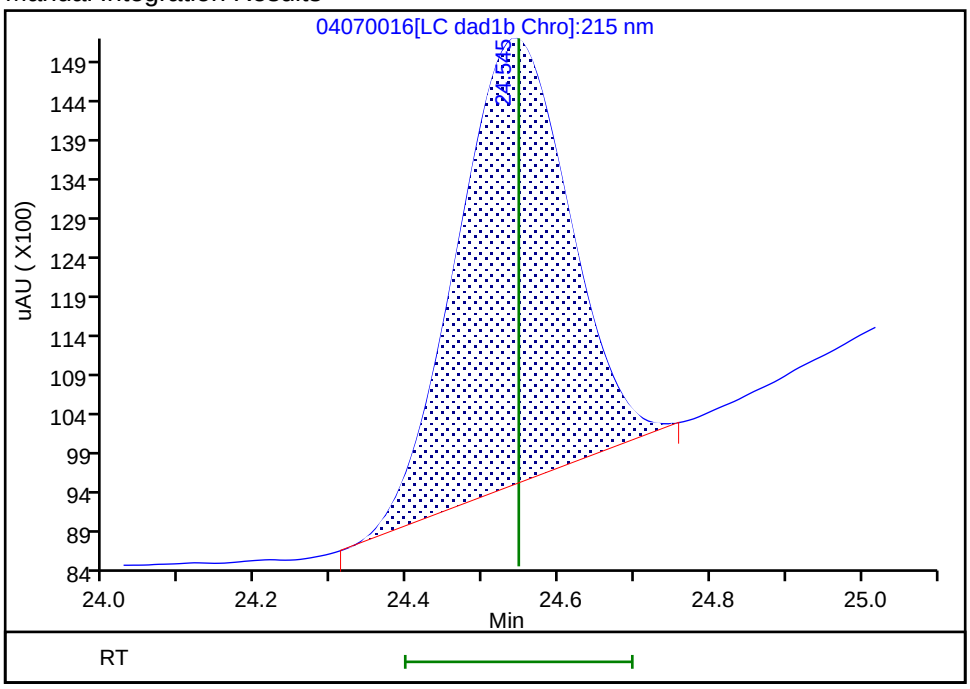
Processing Integration Results

RT: 24.55
Area: 59907
Amount: 0.504886
Amount Units: ug/ml



Manual Integration Results

RT: 24.55
Area: 58615
Amount: 0.495196
Amount Units: ug/ml



Reviewer: LV5D, 08-Apr-2023 10:40:46

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\04070017.D
Lims ID: IC INT DMT 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 07-Apr-2023 23:14:38 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT DMT 2
Operator ID: JZ Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub18

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Apr-2023 15:55:29 Calib Date: 07-Apr-2023 23:50:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\04070018.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1657

First Level Reviewer: LV5D Date: 08-Apr-2023 10:40:04

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.338	5.321	0.017	8035	0.0201	0.0201	
4 DNX	1	6.212	6.194	0.018	5896	0.0200	0.0206	
6 HMX	1	6.865	6.847	0.018	3831	0.0200	0.0212	
7 MNX	1	7.732	7.714	0.018	6187	0.0233	0.0236	
5 2,4,6-Trinitrophenol	1	8.245	8.187	0.058	3181	0.0200	0.0204	
8 RDX	1	9.145	9.127	0.018	4542	0.0200	0.0211	
9 Nitrobenzene	1	11.672	11.654	0.018	7744	0.0200	0.0204	
$ 10 1,2-Dinitrobenzene	1	12.645	12.627	0.018	5627	0.0200	0.0212	
11 3,5-Dinitroaniline	1	14.498	14.480	0.018	8811	0.0200	0.0196	
12 1,3-Dinitrobenzene	1	14.765	14.754	0.011	11425	0.0200	0.0196	
13 Nitroglycerin	2	15.278	15.274	0.004	25265	0.2000	0.2032	
14 o-Nitrotoluene	1	15.845	15.827	0.018	4779	0.0200	0.0197	
15 p-Nitrotoluene	1	16.072	16.054	0.018	4444	0.0200	0.0204	
16 4-Amino-2,6-dinitrotoluene	1	16.605	16.594	0.011	4840	0.0200	0.0178	
17 m-Nitrotoluene	1	16.912	16.900	0.012	5021	0.0200	0.0187	
18 2-Amino-4,6-dinitrotoluene	1	17.425	17.414	0.011	8295	0.0200	0.0207	M
19 1,3,5-Trinitrobenzene	1	17.592	17.574	0.018	7178	0.0200	0.0190	Ma
20 2,6-Dinitrotoluene	1	18.732	18.714	0.018	5869	0.0200	0.0210	
21 2,4-Dinitrotoluene	1	19.185	19.174	0.011	11382	0.0200	0.0203	
22 Tetryl	1	22.492	22.481	0.011	5460	0.0200	0.0202	
23 2,4,6-Trinitrotoluene	1	23.312	23.301	0.011	9530	0.0200	0.0231	
24 PETN	2	24.558	24.547	0.011	21527	0.2000	0.1819	M

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00076	Amount Added:	2.00	Units: uL
8330 DMT_00013	Amount Added:	1.00	Units: uL

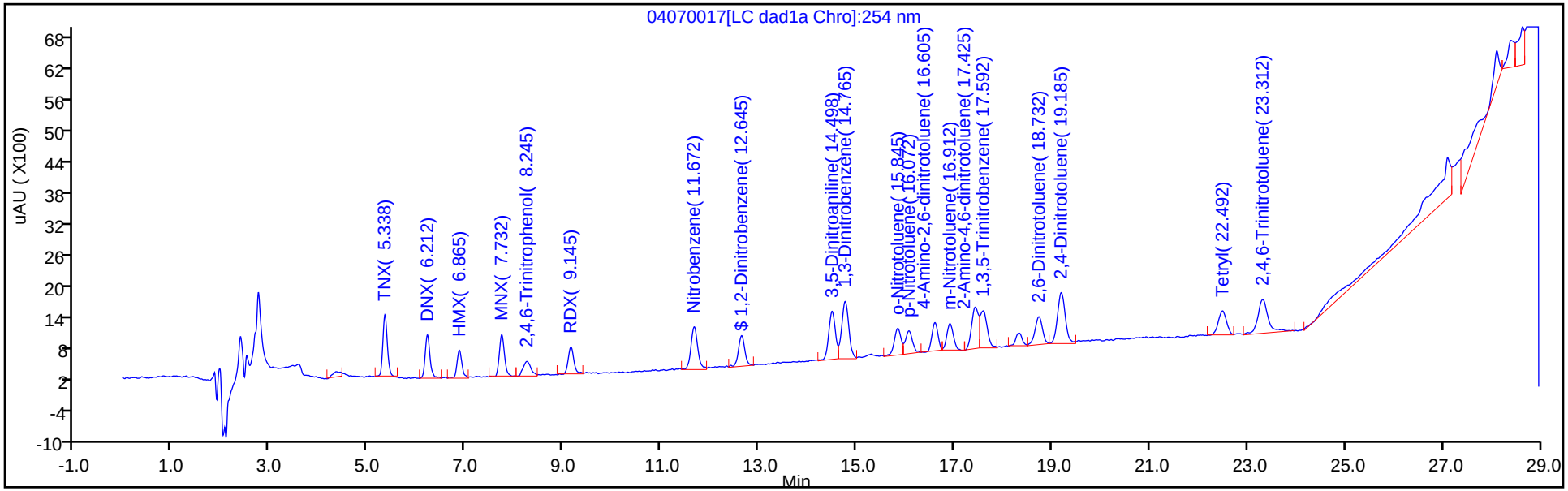
Report Date: 12-Apr-2023 15:55:29 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

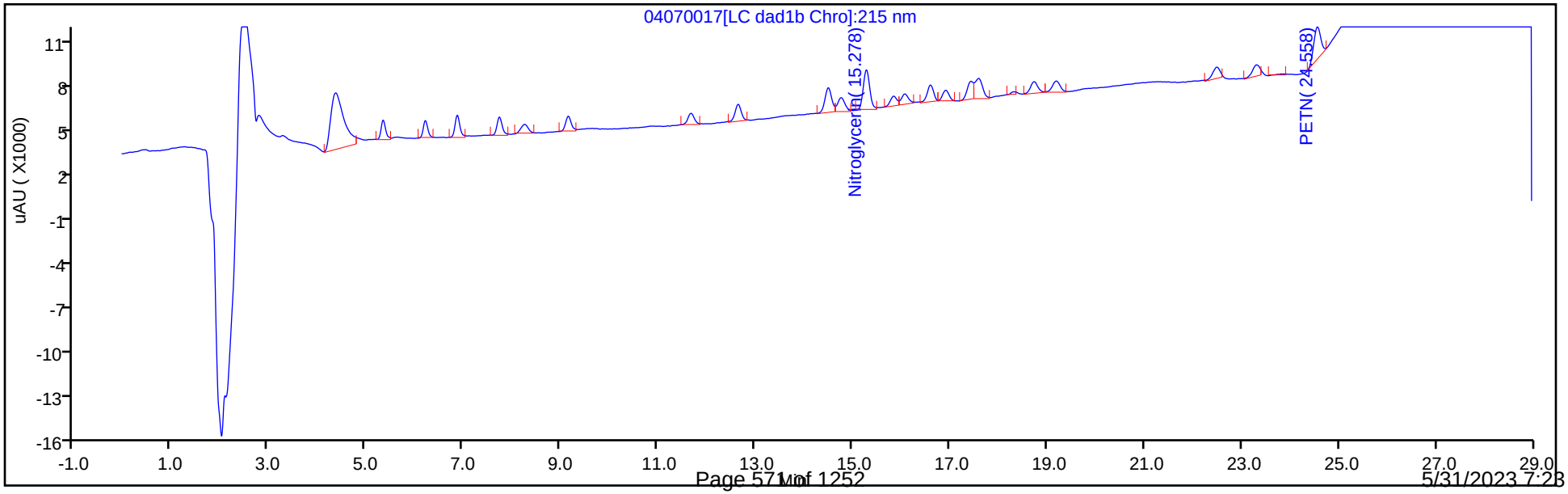
Data File: \\chromfs\denver\chromdata\g2_luna\20230407-120232.b\04070017.d

Injection Date:	07-Apr-2023 23:14:38	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	IC INT DMT 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 Peak: 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

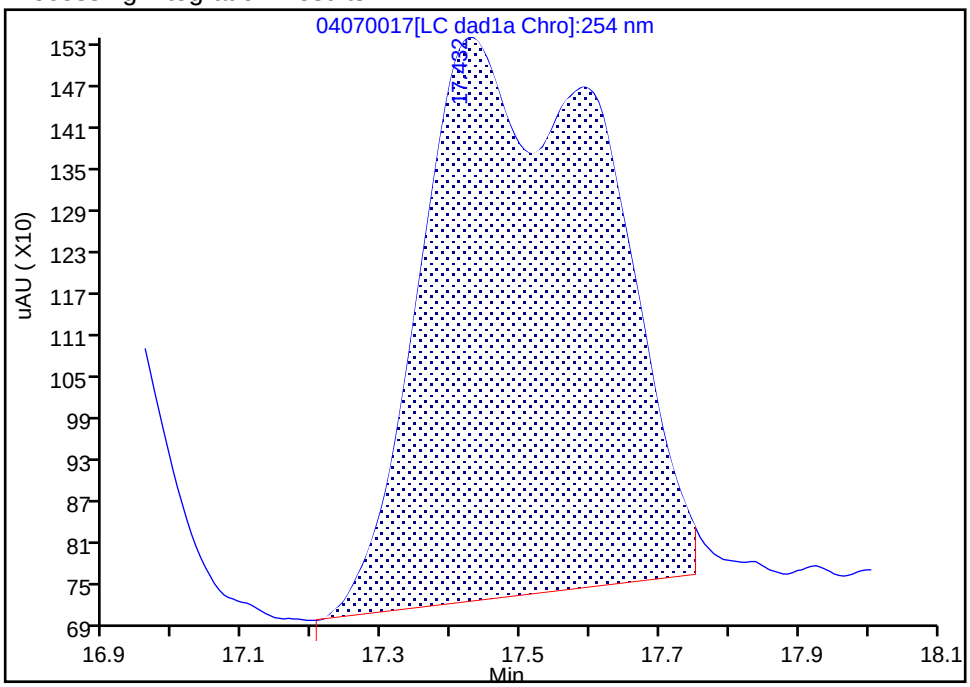
Data File:	\\chromfs\denver\chromdata\g2_luna\20230407-120232.b\04070017.d				
Injection Date:	07-Apr-2023 23:14:38	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT DMT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

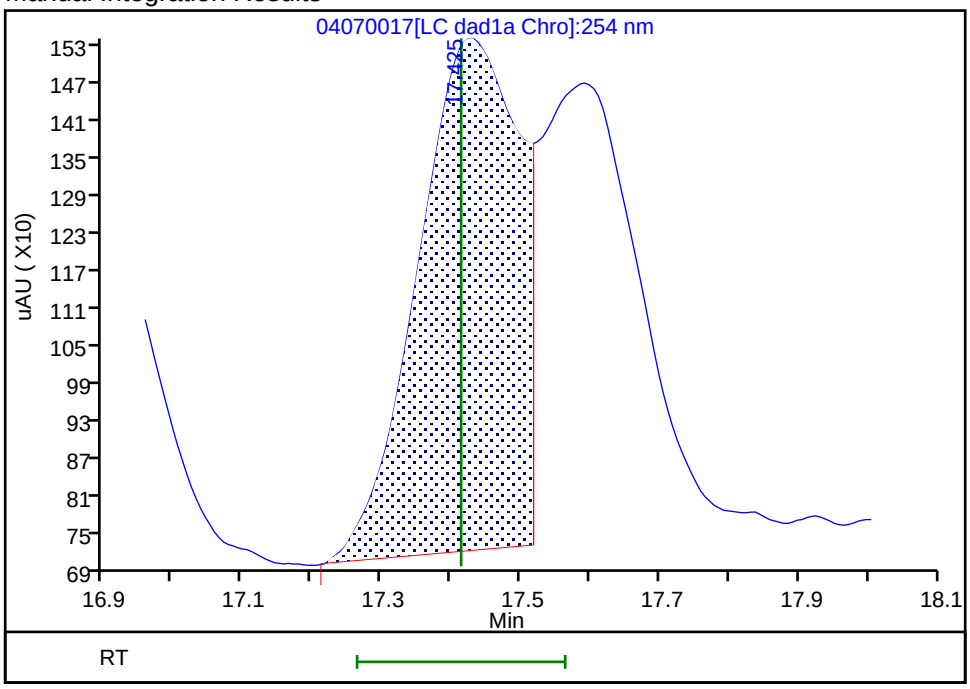
Processing Integration Results

RT: 17.43
Area: 15089
Amount: 0.026510
Amount Units: ug/ml



Manual Integration Results

RT: 17.42
Area: 8295
Amount: 0.020723
Amount Units: ug/ml



Reviewer: LV5D, 08-Apr-2023 10:40:01

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

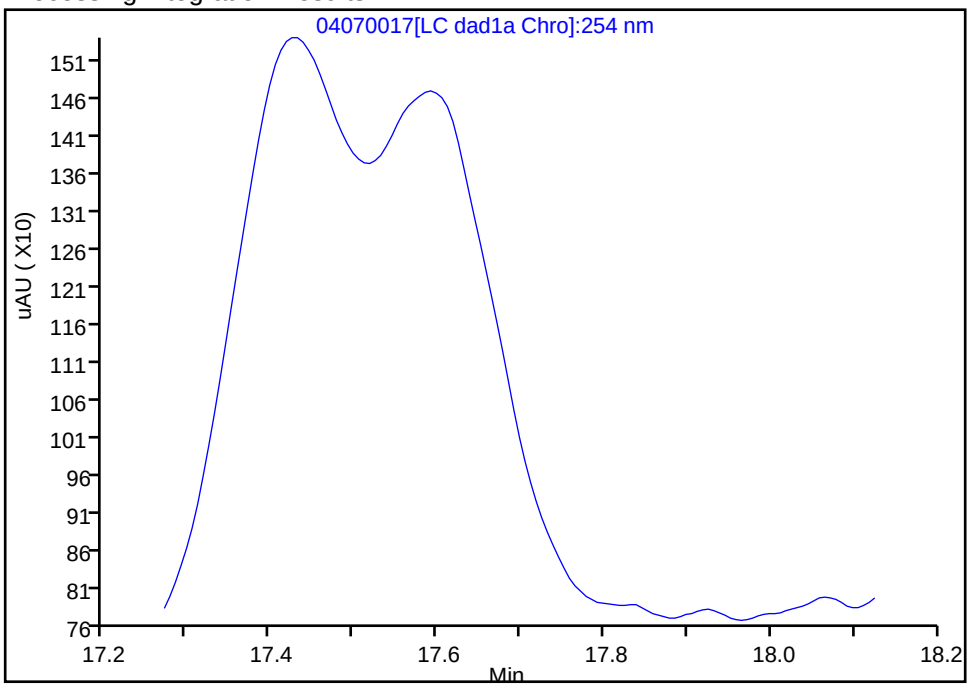
Data File: \\chromfs\denver\chromdata\g2_luna\20230407-120232.b\04070017.d
Injection Date: 07-Apr-2023 23:14:38 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT DMT 2
Client ID:
Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: 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

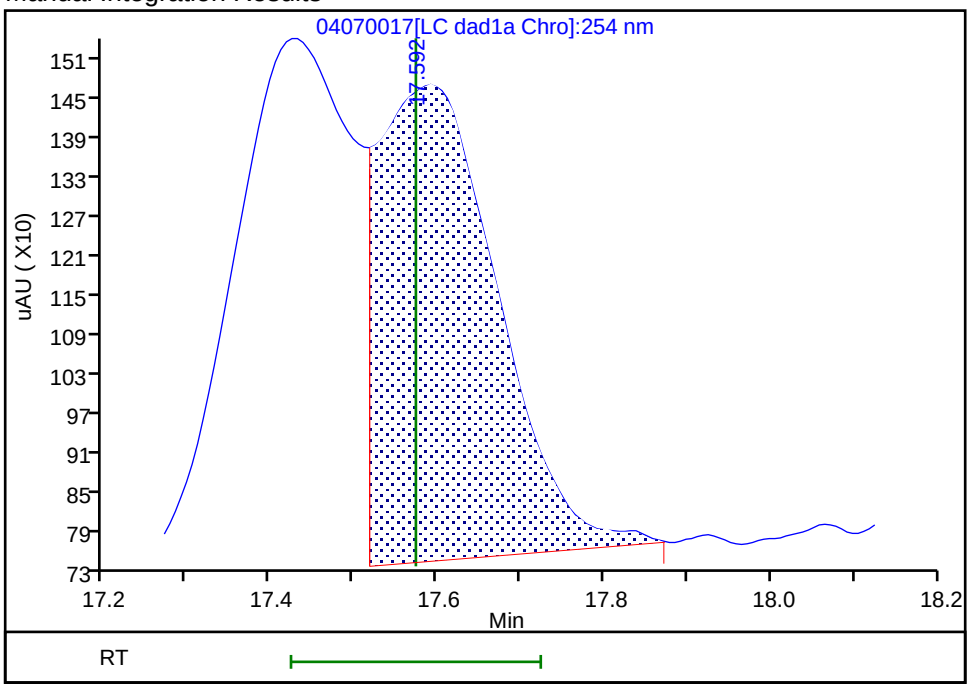
Processing Integration Results

Not Detected
Expected RT: 17.57



Manual Integration Results

RT: 17.59
Area: 7178
Amount: 0.018965
Amount Units: ug/ml



Reviewer: LV5D, 08-Apr-2023 10:40:03
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

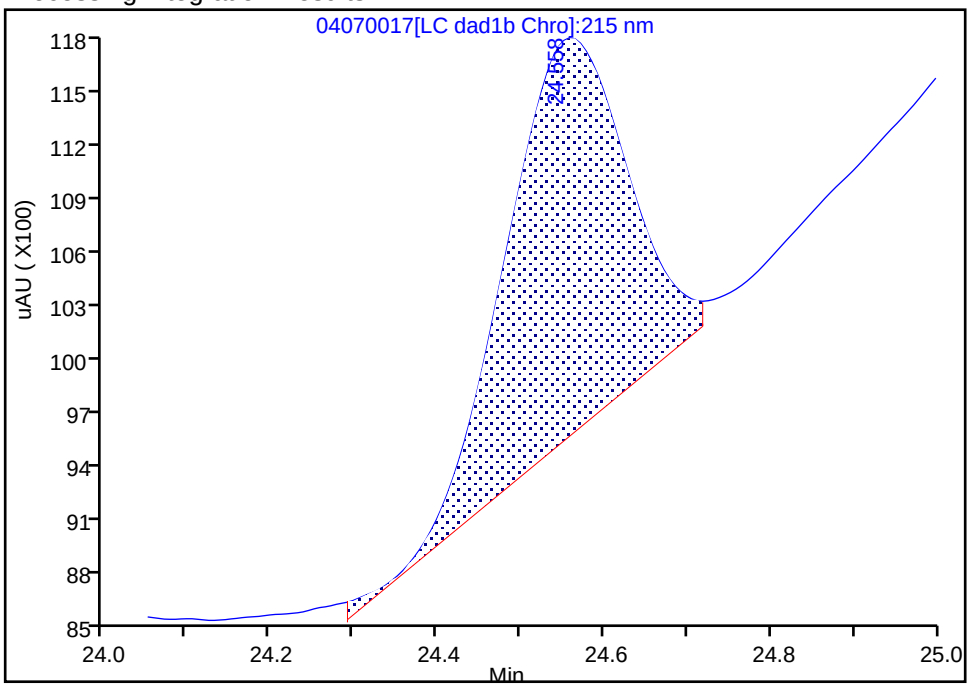
Data File: \\chromfs\denver\chromdata\g2_luna\20230407-120232.b\04070017.d
Injection Date: 07-Apr-2023 23:14:38 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT DMT 2
Client ID:
Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

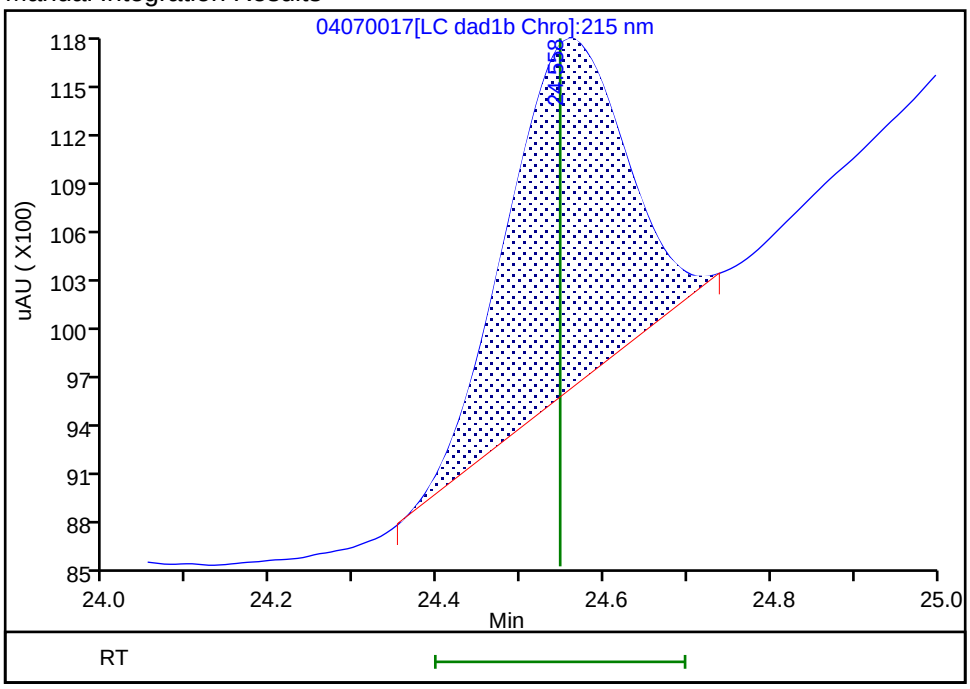
Processing Integration Results

RT: 24.56
Area: 22662
Amount: 0.189982
Amount Units: ug/ml



Manual Integration Results

RT: 24.56
Area: 21527
Amount: 0.181866
Amount Units: ug/ml



Reviewer: LV5D, 08-Apr-2023 10:40:41
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\04070018.D
Lims ID: IC INT DMT 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 07-Apr-2023 23:50:31 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT DMT 1
Operator ID: JZ Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub18

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Apr-2023 15:55:29 Calib Date: 07-Apr-2023 23:50:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\04070018.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1657

First Level Reviewer: LV5D Date: 12-Apr-2023 15:55:06

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.328	5.321	0.007	4669	0.0100	0.0117	
4 DNX	1	6.195	6.194	0.001	3097	0.0100	0.0108	
6 HMX	1	6.855	6.847	0.008	2116	0.0100	0.0117	
7 MNX	1	7.715	7.714	0.001	3165	0.0117	0.0121	
5 2,4,6-Trinitrophenol	1	8.215	8.187	0.028	1601	0.0100	0.0103	
8 RDX	1	9.135	9.127	0.008	2543	0.0100	0.0118	
9 Nitrobenzene	1	11.661	11.654	0.007	4002	0.0100	0.0105	
$ 10 1,2-Dinitrobenzene	1	12.628	12.627	0.001	2840	0.0100	0.0107	
11 3,5-Dinitroaniline	1	14.481	14.480	0.001	4725	0.0100	0.0101	
12 1,3-Dinitrobenzene	1	14.761	14.754	0.007	6202	0.0100	0.0107	
13 Nitroglycerin	2	15.268	15.274	-0.006	12725	0.1000	0.1023	
14 o-Nitrotoluene	1	15.835	15.827	0.008	2596	0.0100	0.0107	M
15 p-Nitrotoluene	1	16.055	16.054	0.001	2388	0.0100	0.0110	Ma
16 4-Amino-2,6-dinitrotoluene	1	16.608	16.594	0.014	3004	0.0100	0.0110	
17 m-Nitrotoluene	1	16.908	16.900	0.008	2673	0.0100	0.0100	
18 2-Amino-4,6-dinitrotoluene	1	17.421	17.414	0.007	4148	0.0100	0.0104	M
19 1,3,5-Trinitrobenzene	1	17.581	17.574	0.007	3748	0.0100	0.0099	Ma
20 2,6-Dinitrotoluene	1	18.728	18.714	0.014	3509	0.0100	0.0125	
21 2,4-Dinitrotoluene	1	19.175	19.174	0.001	6650	0.0100	0.0119	
22 Tetryl	1	22.495	22.481	0.014	2847	0.0100	0.0105	
23 2,4,6-Trinitrotoluene	1	23.302	23.301	0.001	4042	0.0100	0.009817	
24 PETN	2	24.568	24.547	0.021	9214	0.1000	0.0778	M

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00076	Amount Added:	1.00	Units: uL
8330 DMT_00013	Amount Added:	0.50	Units: uL

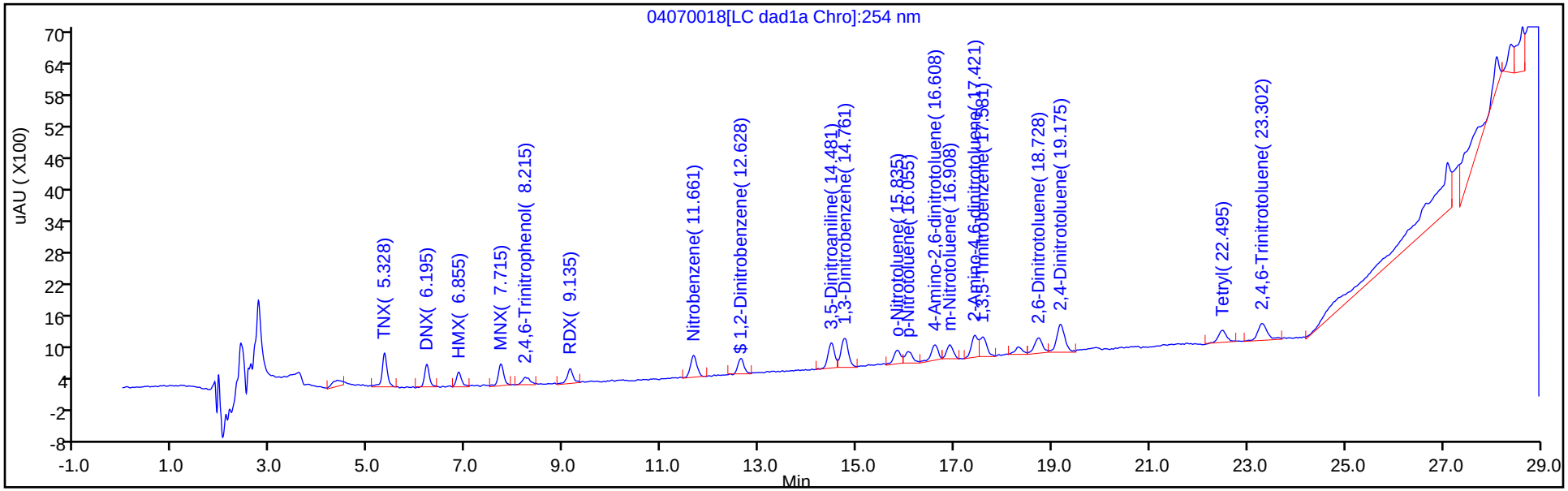
Report Date: 12-Apr-2023 15:55:29 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

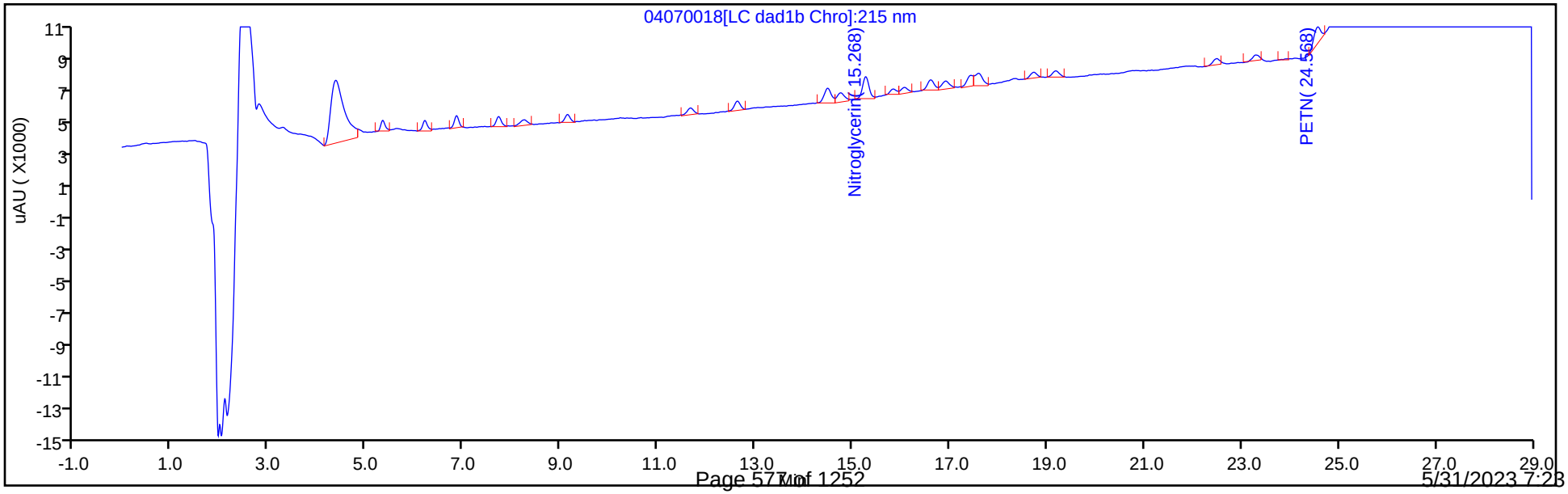
Data File: \\chromfs\denver\chromdata\g2_luna\20230407-120232.b\04070018.d

Injection Date:	07-Apr-2023 23:50:31	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	IC INT DMT 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 Peak: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



5/31/2023 7:28 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

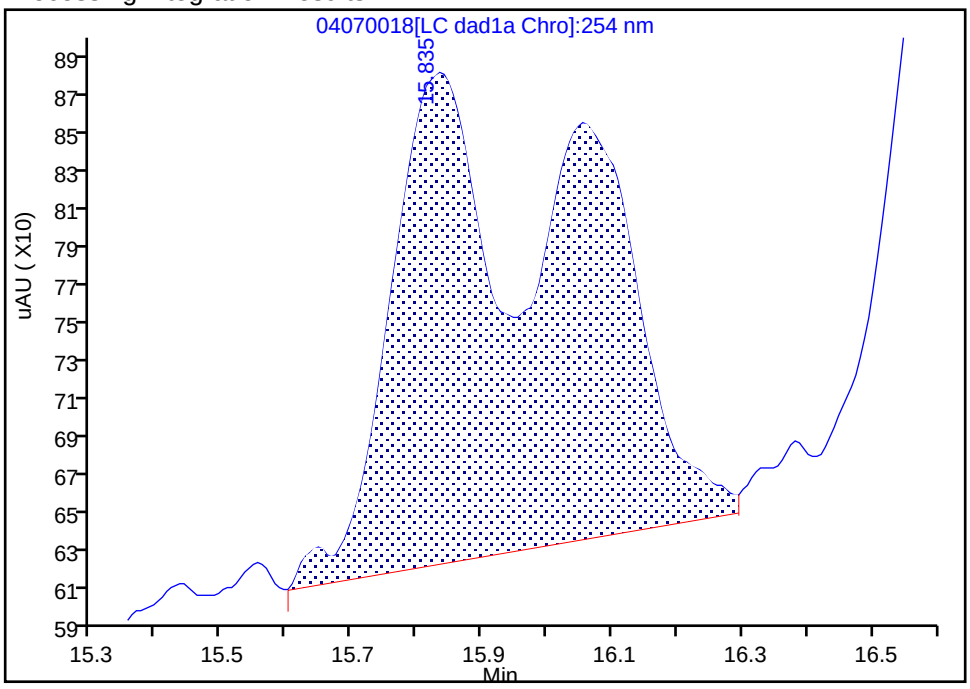
Data File: \\chromfs\denver\chromdata\g2_luna\20230407-120232.b\04070018.d
Injection Date: 07-Apr-2023 23:50:31 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT DMT 1
Client ID:
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

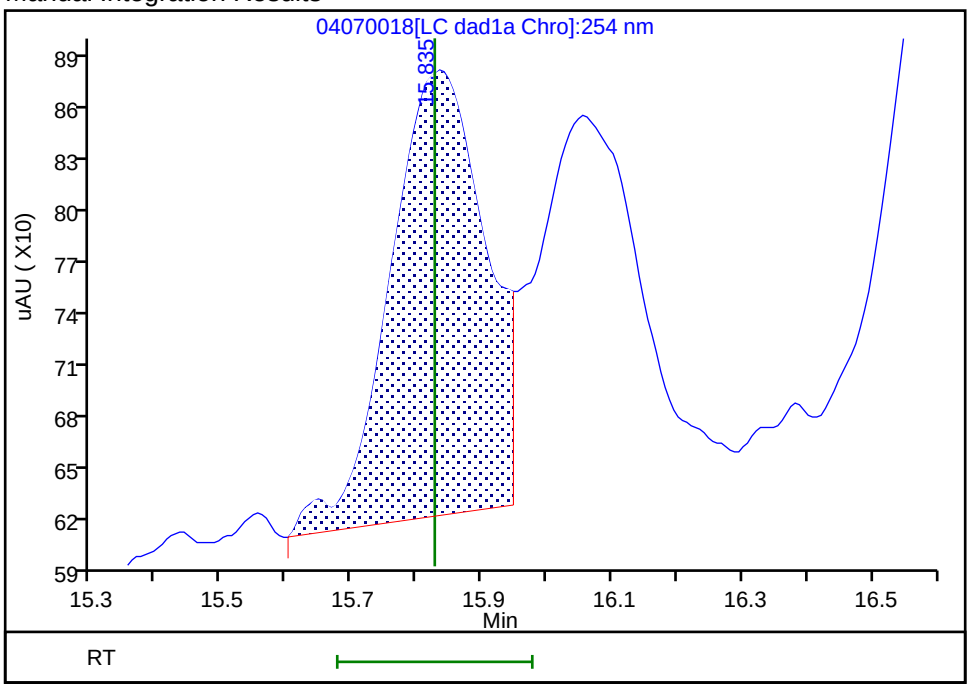
Processing Integration Results

RT: 15.83
Area: 4974
Amount: 0.018449
Amount Units: ug/ml



Manual Integration Results

RT: 15.83
Area: 2596
Amount: 0.010675
Amount Units: ug/ml



Reviewer: LV5D, 08-Apr-2023 10:40:09
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

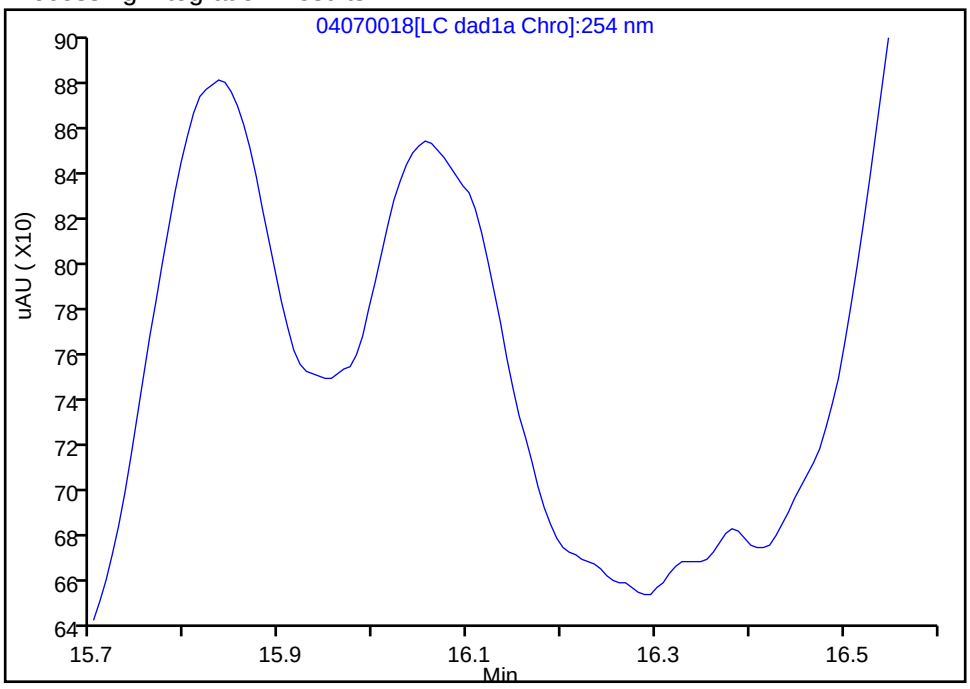
Data File:	\\chromfs\denver\chromdata\g2_luna\20230407-120232.b\04070018.d				
Injection Date:	07-Apr-2023 23:50:31	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT DMT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

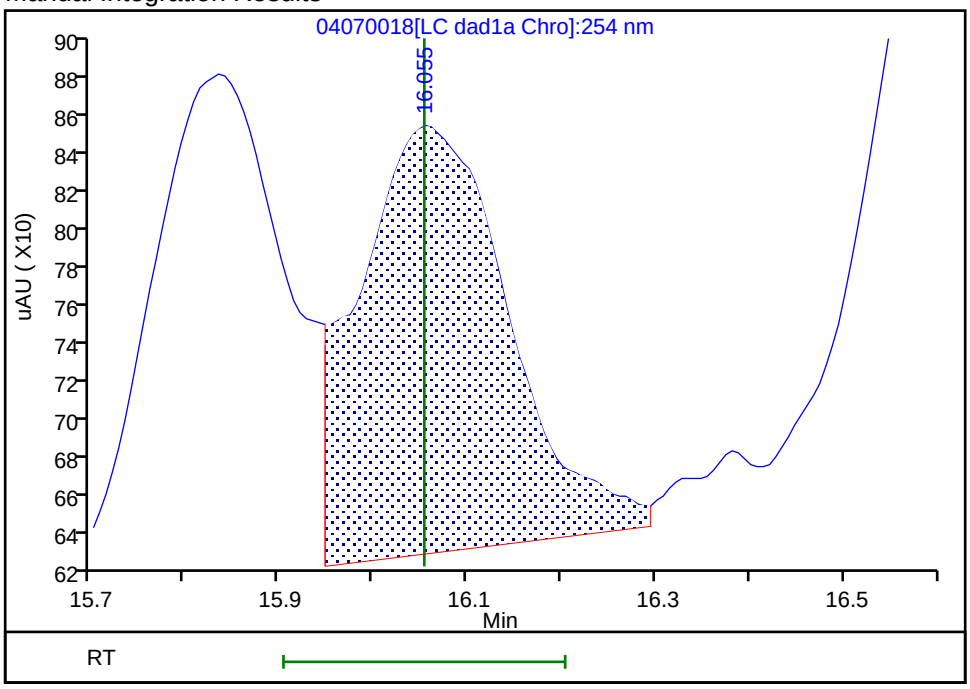
Not Detected
Expected RT: 16.05

Processing Integration Results



Manual Integration Results

RT: 16.05
Area: 2388
Amount: 0.010982
Amount Units: ug/ml



Reviewer: LV5D, 08-Apr-2023 10:40:12
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

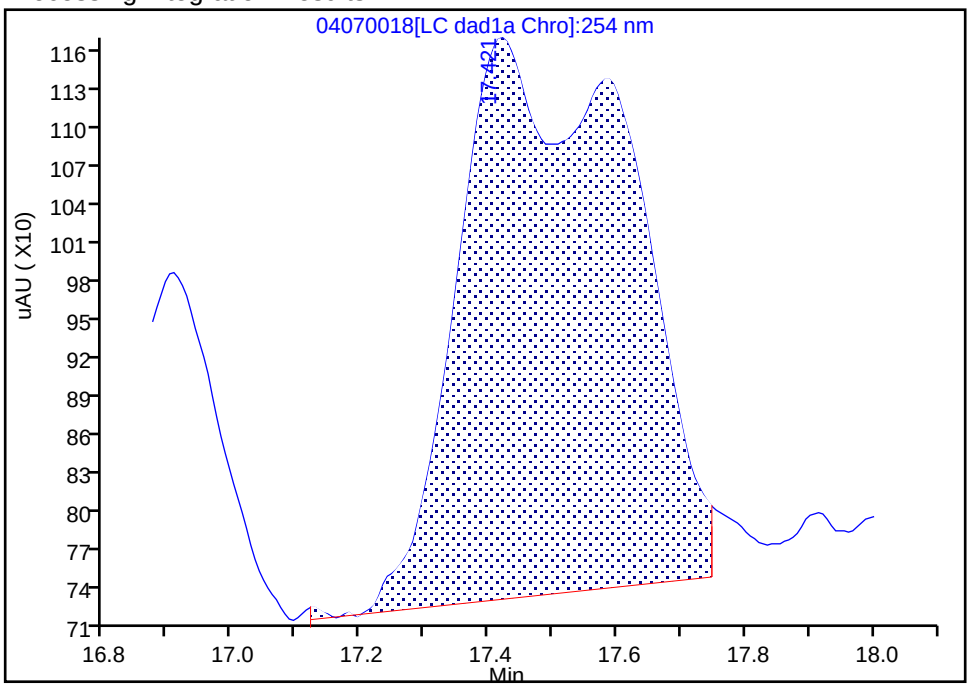
Data File:	\\chromfs\denver\chromdata\g2_luna\20230407-120232.b\04070018.d				
Injection Date:	07-Apr-2023 23:50:31	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT DMT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

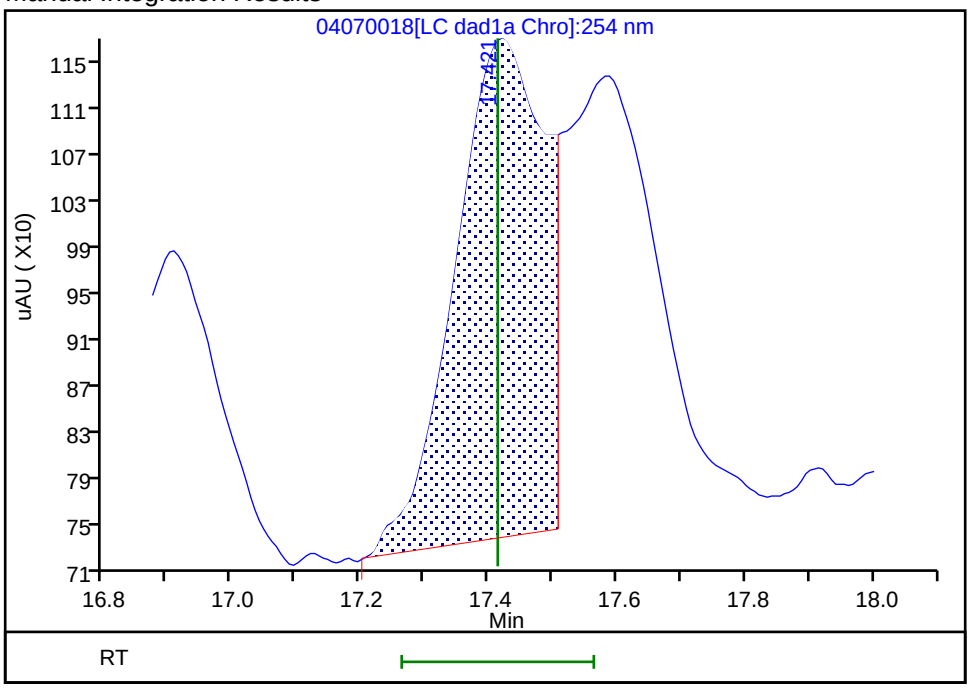
Processing Integration Results

RT: 17.42
Area: 8095
Amount: 0.012716
Amount Units: ug/ml



Manual Integration Results

RT: 17.42
Area: 4148
Amount: 0.010363
Amount Units: ug/ml



Reviewer: LV5D, 08-Apr-2023 10:40:27

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver

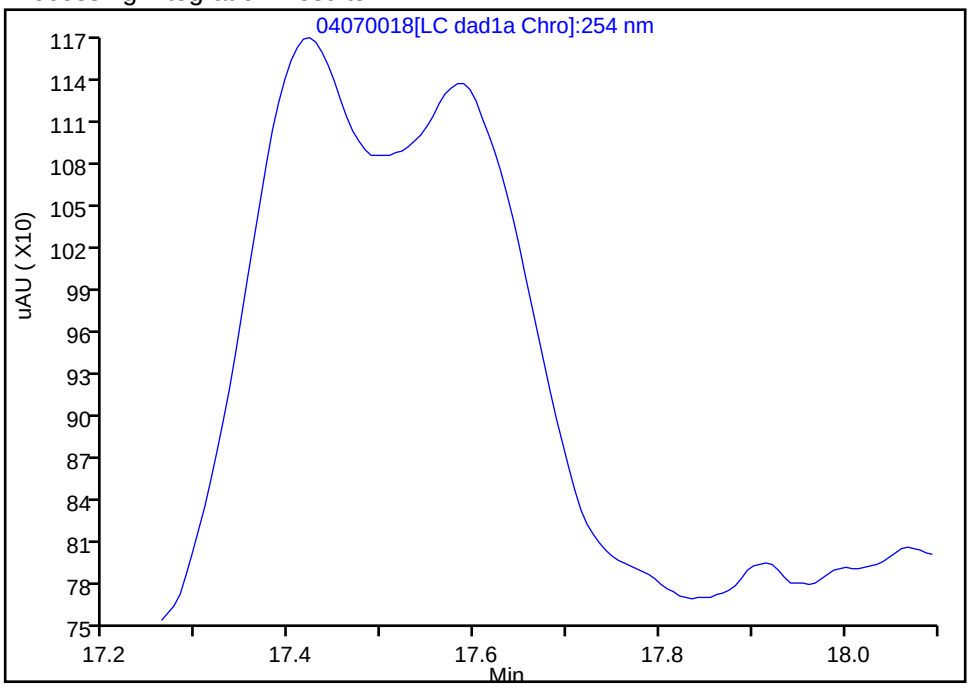
Data File:	\\chromfs\denver\chromdata\g2_luna\20230407-120232.b\04070018.d				
Injection Date:	07-Apr-2023 23:50:31	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT DMT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

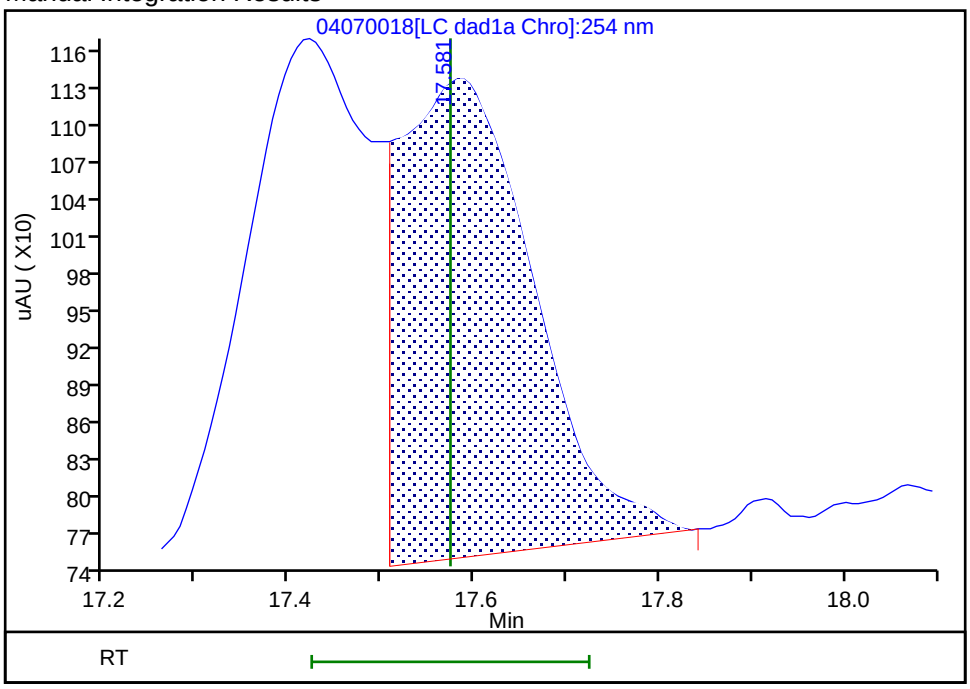
Not Detected
Expected RT: 17.57

Processing Integration Results



Manual Integration Results

RT: 17.58
Area: 3748
Amount: 0.009903
Amount Units: ug/ml



Reviewer: LV5D, 08-Apr-2023 10:40:30
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

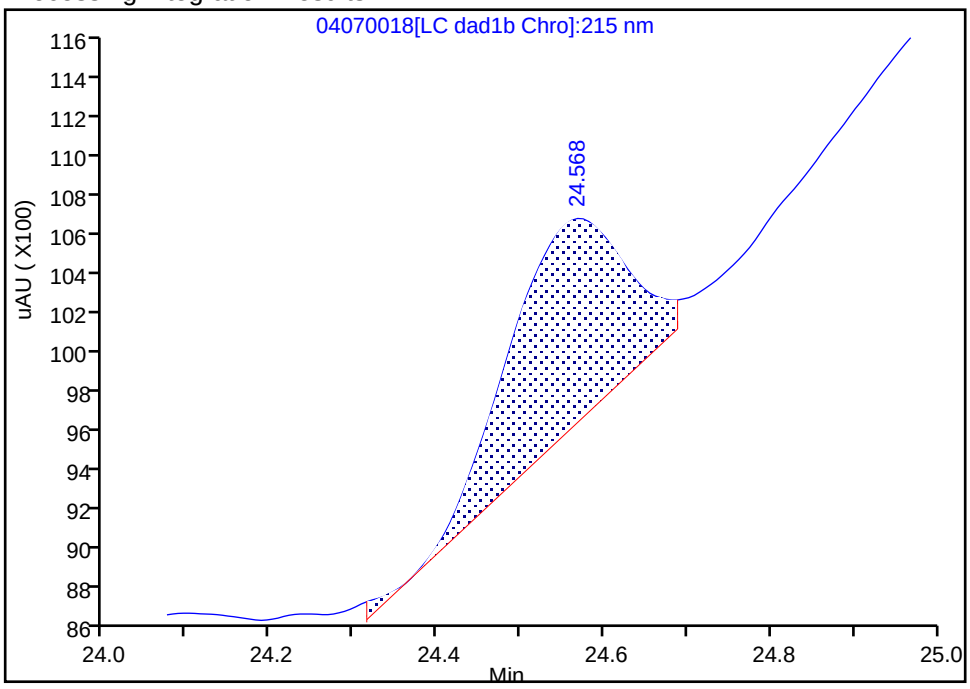
Data File: \\chromfs\denver\chromdata\g2_luna\20230407-120232.b\04070018.d
Injection Date: 07-Apr-2023 23:50:31 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT DMT 1
Client ID:
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

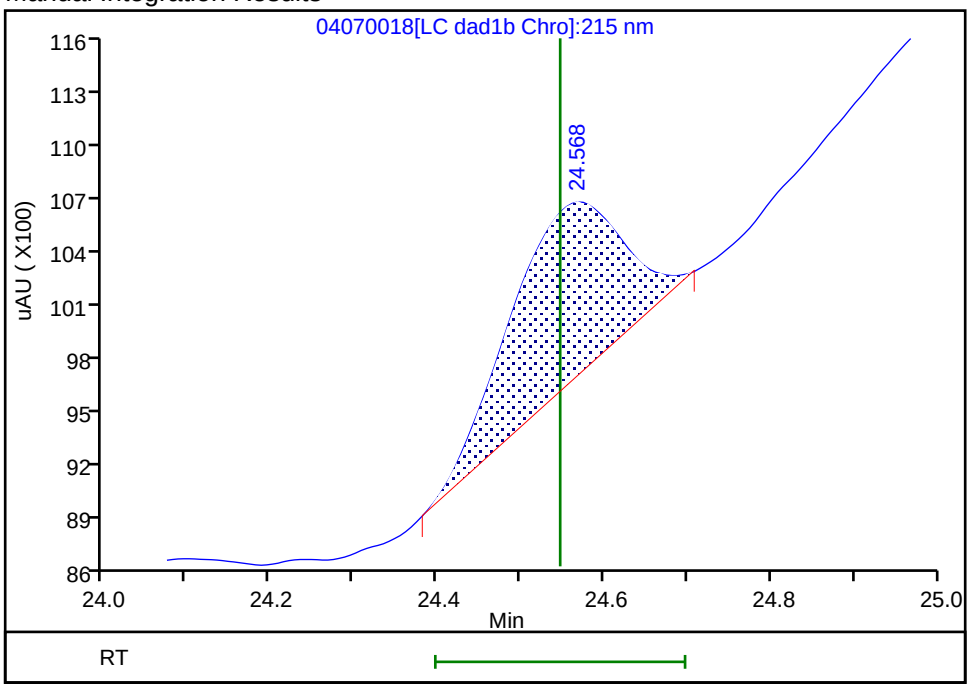
Processing Integration Results

RT: 24.57
Area: 10181
Amount: 0.084588
Amount Units: ug/ml



Manual Integration Results

RT: 24.57
Area: 9214
Amount: 0.077842
Amount Units: ug/ml



Reviewer: LV5D, 08-Apr-2023 10:40:36
Audit Action: Manually Integrated Audit Reason: Baseline

Calibration / TNX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

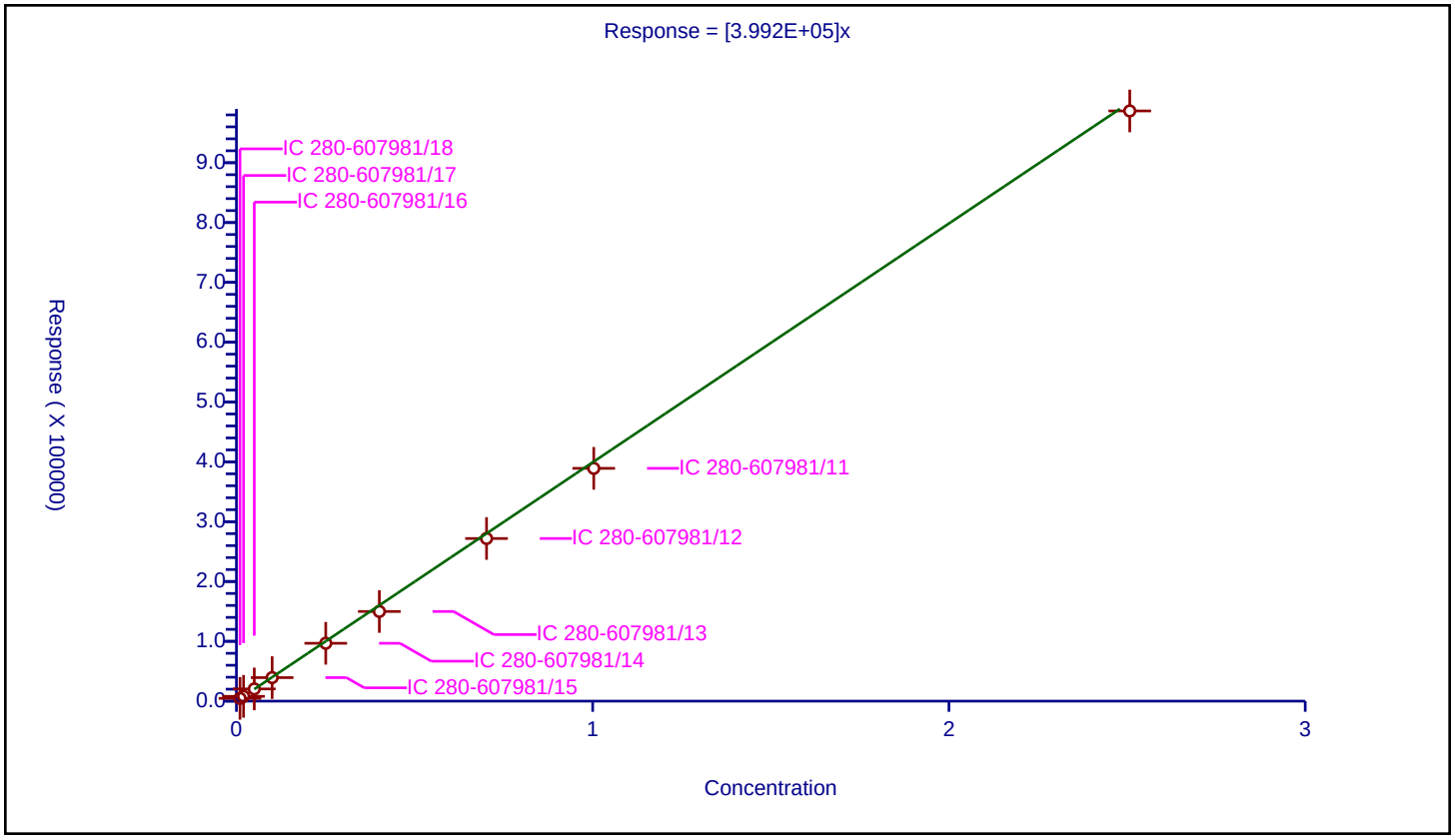
Curve Coefficients

Intercept:	0
Slope:	3.992E+05

Error Coefficients

Standard Error:	8100
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 280-607981/18	0.01003	4669.0			465503.489531	Y
2	IC 280-607981/17	0.02006	8035.0			400548.354935	Y
3	IC 280-607981/16	0.05015	20397.0			406719.840479	Y
4	IC 280-607981/15	0.1003	39339.0			392213.35992	Y
5	IC 280-607981/14	0.25075	96722.0			385730.807577	Y
6	IC 280-607981/13	0.4012	149885.0			373591.724826	Y
7	IC 280-607981/12	0.7021	271856.0			387204.10198	Y
8	IC 280-607981/11	1.003	389131.0			387967.098704	Y
9	IC 280-607981/10	2.5075	986578.0			393450.847458	Y



Calibration / DNX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

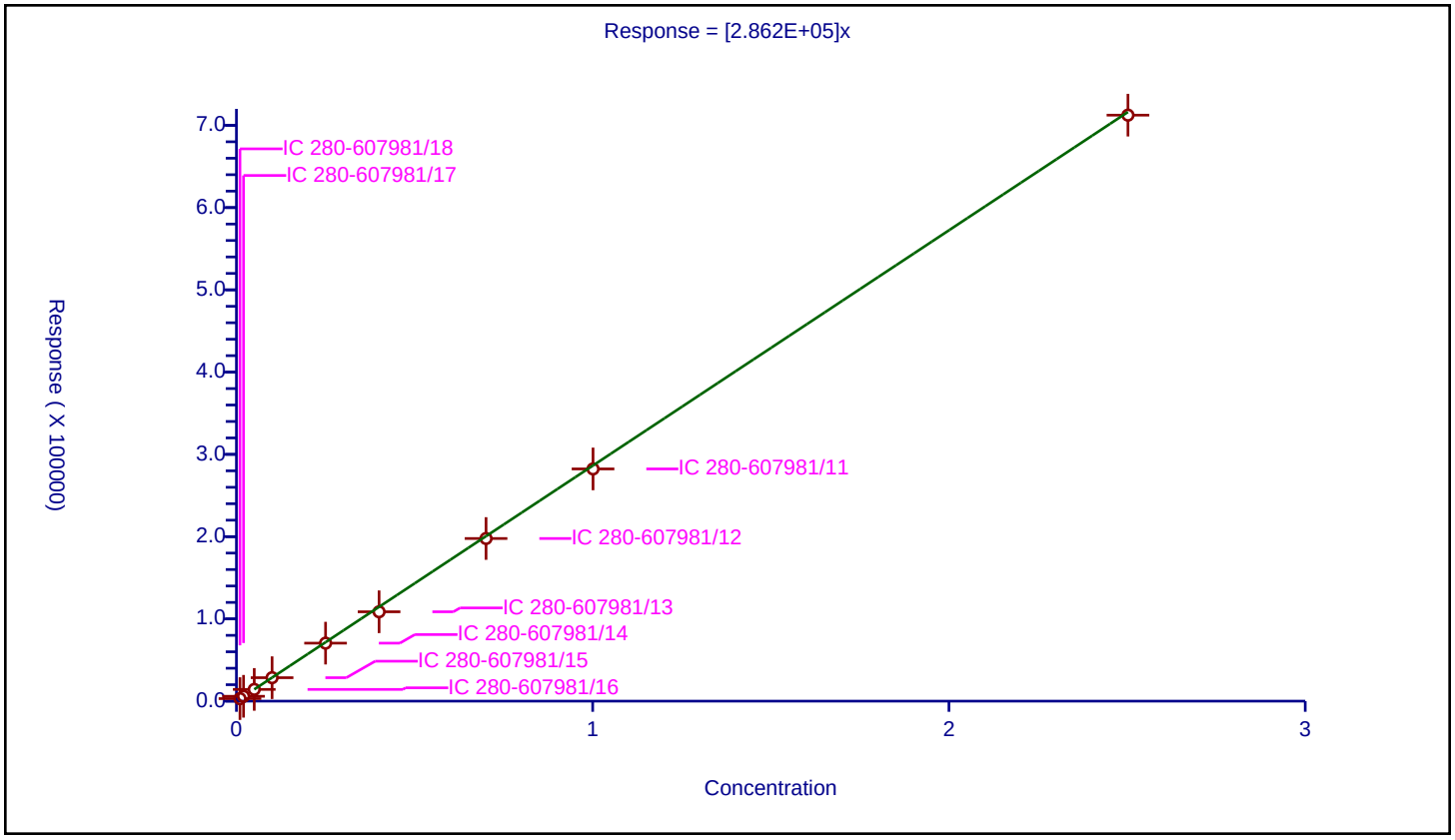
Curve Coefficients

Intercept:	0
Slope:	2.862E+05

Error Coefficients

Standard Error:	3100
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-607981/18	0.01001	3097.0			309390.609391	Y
2	IC 280-607981/17	0.02002	5896.0			294505.494505	Y
3	IC 280-607981/16	0.05005	14268.0			285074.925075	Y
4	IC 280-607981/15	0.1001	28516.0			284875.124875	Y
5	IC 280-607981/14	0.25025	70501.0			281722.277722	Y
6	IC 280-607981/13	0.4004	108664.0			271388.611389	Y
7	IC 280-607981/12	0.7007	197714.0			282166.405024	Y
8	IC 280-607981/11	1.001	282296.0			282013.986014	Y
9	IC 280-607981/10	2.5025	712375.0			284665.334665	Y



Calibration / HMX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

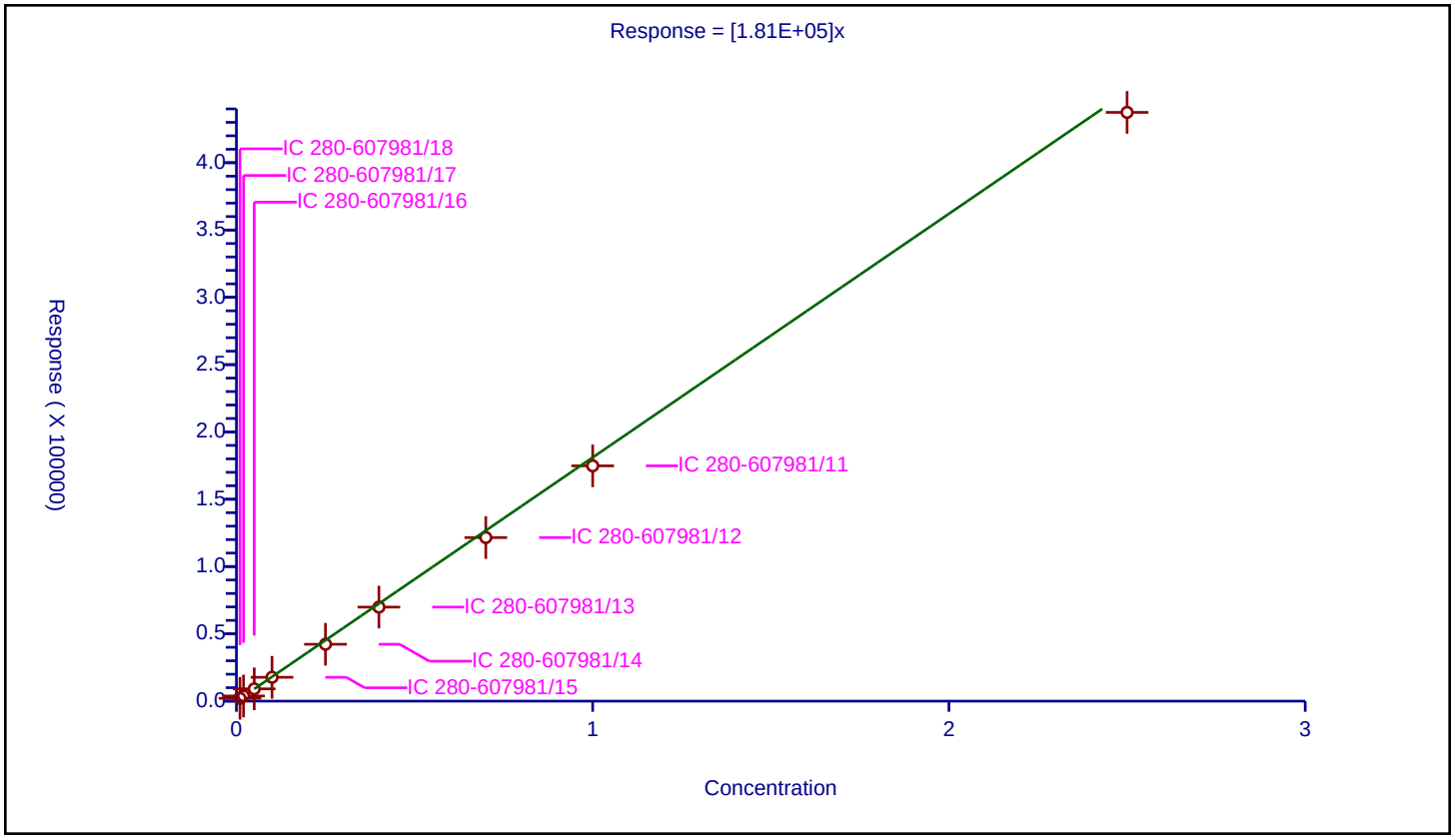
Curve Coefficients

Intercept:	0
Slope:	1.81E+05

Error Coefficients

Standard Error:	6250
Relative Standard Error:	7.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-607981/18	0.01	2116.0			211600.0	Y
2	IC 280-607981/17	0.02	3831.0			191550.0	Y
3	IC 280-607981/16	0.05	9104.0			182080.0	Y
4	IC 280-607981/15	0.1	17711.0			177110.0	Y
5	IC 280-607981/14	0.25	42259.0			169036.0	Y
6	IC 280-607981/13	0.4	69854.0			174635.0	Y
7	IC 280-607981/12	0.7	121533.0			173618.571429	Y
8	IC 280-607981/11	1.0	174813.0			174813.0	Y
9	IC 280-607981/10	2.5	437409.0			174963.6	Y



Calibration / MNX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

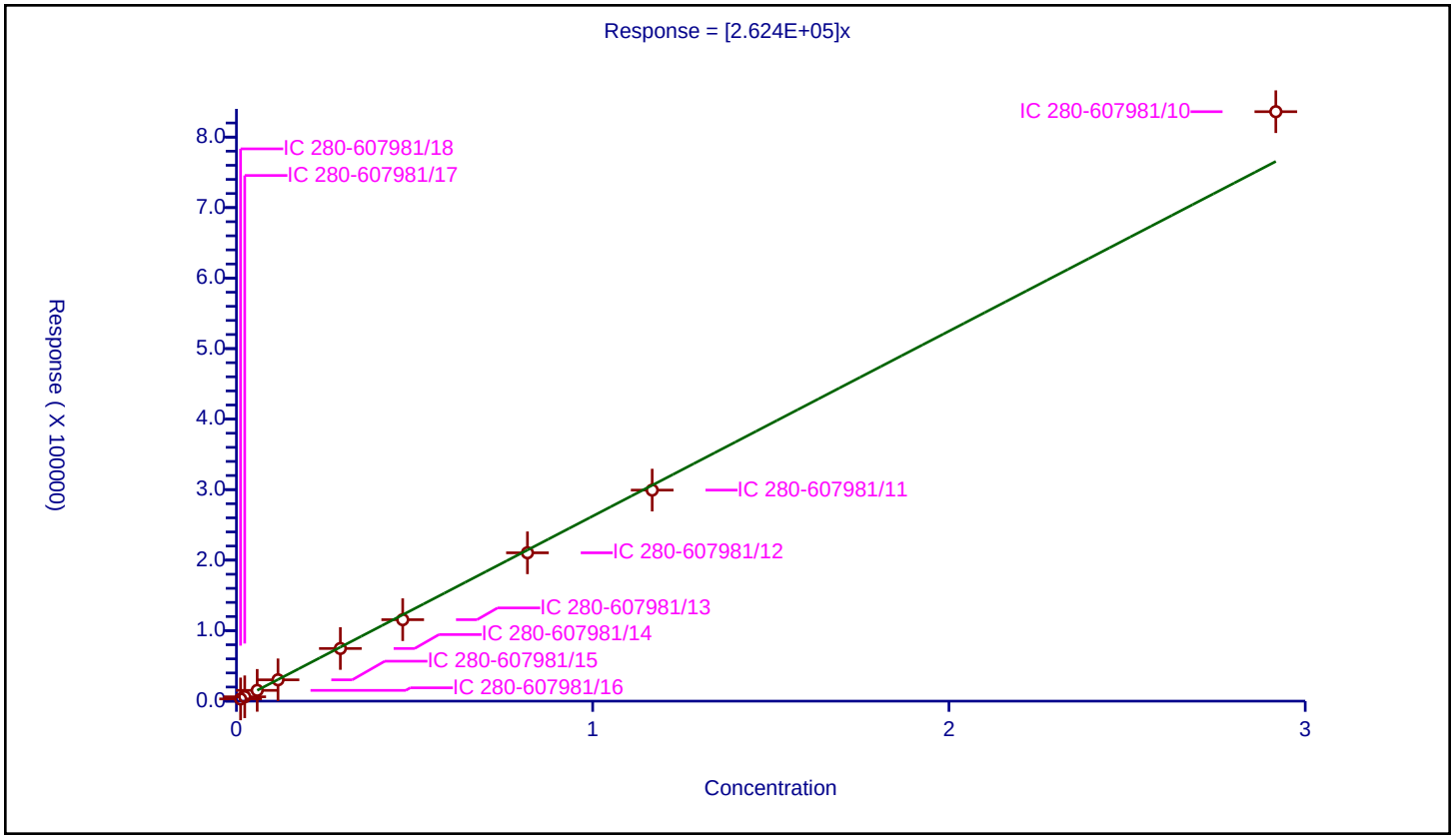
Curve Coefficients

Intercept:	0
Slope:	2.624E+05

Error Coefficients

Standard Error:	25200
Relative Standard Error:	4.3
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-607981/18	0.01167	3165.0			271208.226221	Y
2	IC 280-607981/17	0.02334	6187.0			265081.405313	Y
3	IC 280-607981/16	0.05835	15283.0			261919.451585	Y
4	IC 280-607981/15	0.1167	30241.0			259134.532991	Y
5	IC 280-607981/14	0.29175	74679.0			255969.151671	Y
6	IC 280-607981/13	0.4668	115542.0			247519.280206	Y
7	IC 280-607981/12	0.8169	210405.0			257565.185457	Y
8	IC 280-607981/11	1.167	299304.0			256473.007712	Y
9	IC 280-607981/10	2.9175	836019.0			286553.213368	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

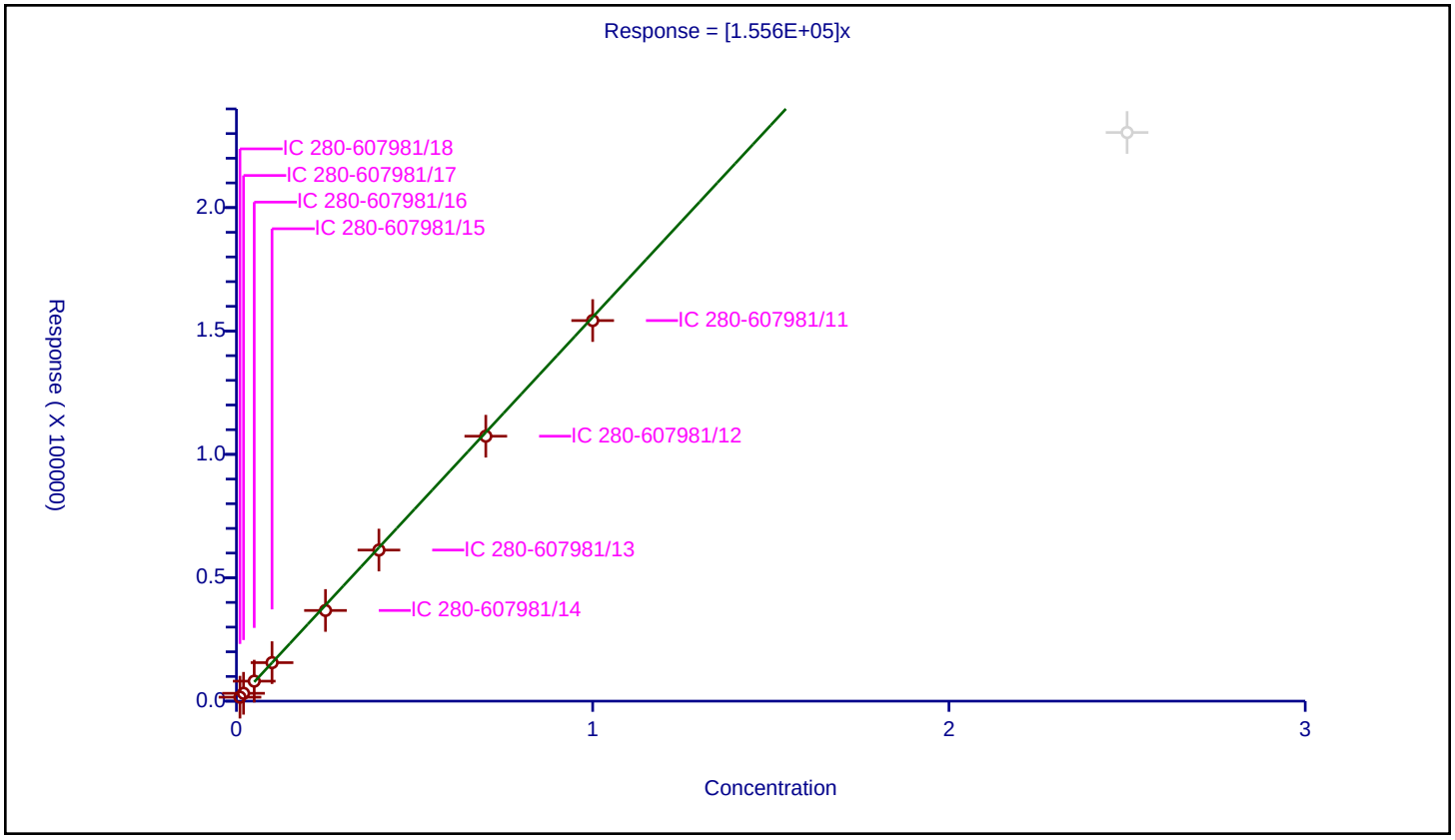
Curve Coefficients

Intercept:	0
Slope:	1.556E+05

Error Coefficients

Standard Error:	1210
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-607981/18	0.01	1601.0			160100.0	Y
2	IC 280-607981/17	0.02	3181.0			159050.0	Y
3	IC 280-607981/16	0.05	8104.0			162080.0	Y
4	IC 280-607981/15	0.1	15604.0			156040.0	Y
5	IC 280-607981/14	0.25	36740.0			146960.0	Y
6	IC 280-607981/13	0.4	61220.0			153050.0	Y
7	IC 280-607981/12	0.7	107366.0			153380.0	Y
8	IC 280-607981/11	1.0	154224.0			154224.0	Y
9	IC 280-607981/10	2.5	230437.0			92174.8	N



Calibration / RDX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

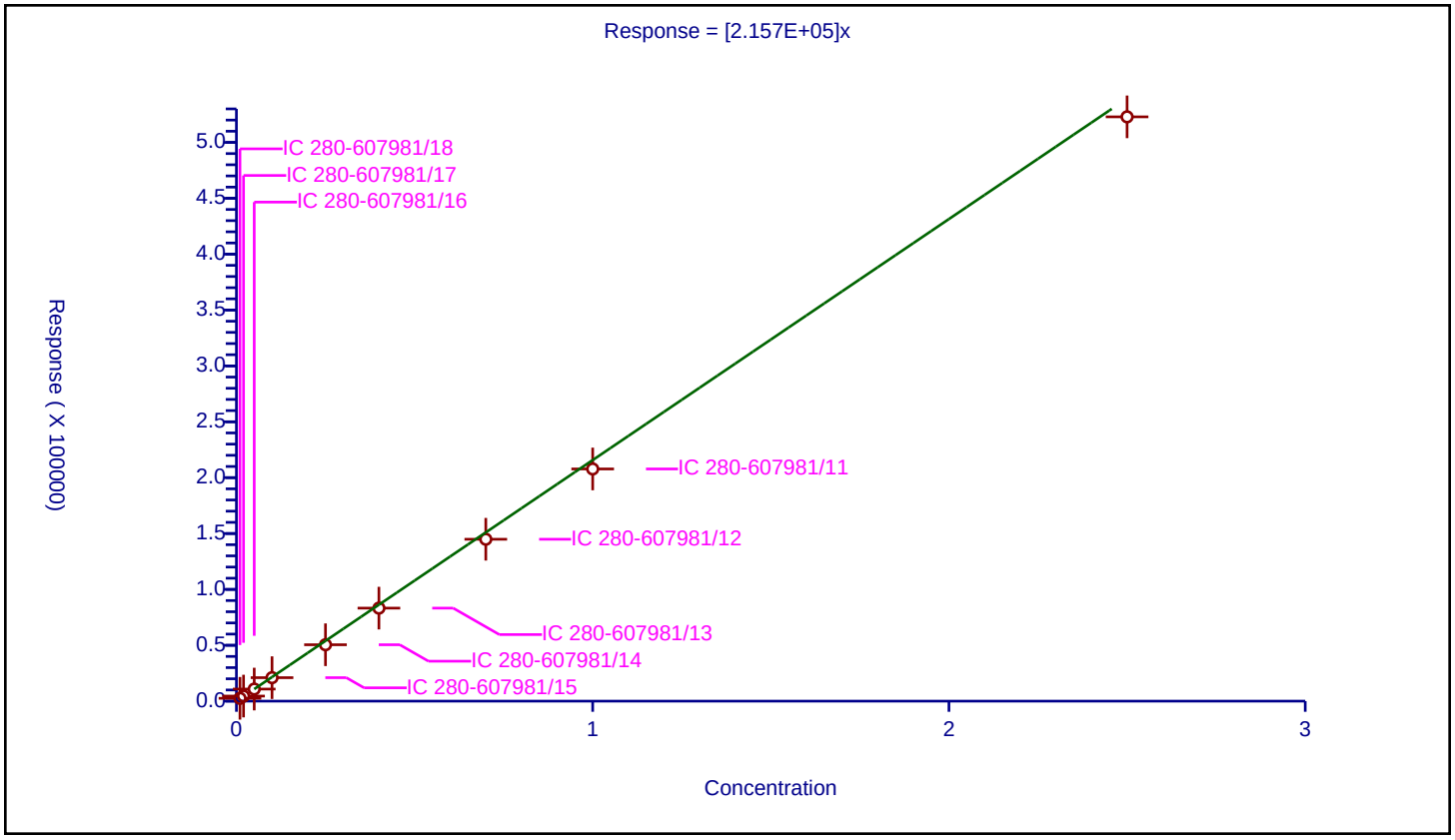
Curve Coefficients

Intercept:	0
Slope:	2.157E+05

Error Coefficients

Standard Error:	6990
Relative Standard Error:	7.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-607981/18	0.01	2543.0			254300.0	Y
2	IC 280-607981/17	0.02	4542.0			227100.0	Y
3	IC 280-607981/16	0.05	10799.0			215980.0	Y
4	IC 280-607981/15	0.1	21015.0			210150.0	Y
5	IC 280-607981/14	0.25	50479.0			201916.0	Y
6	IC 280-607981/13	0.4	83231.0			208077.5	Y
7	IC 280-607981/12	0.7	144880.0			206971.428571	Y
8	IC 280-607981/11	1.0	207770.0			207770.0	Y
9	IC 280-607981/10	2.5	522882.0			209152.8	Y



Calibration / Nitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

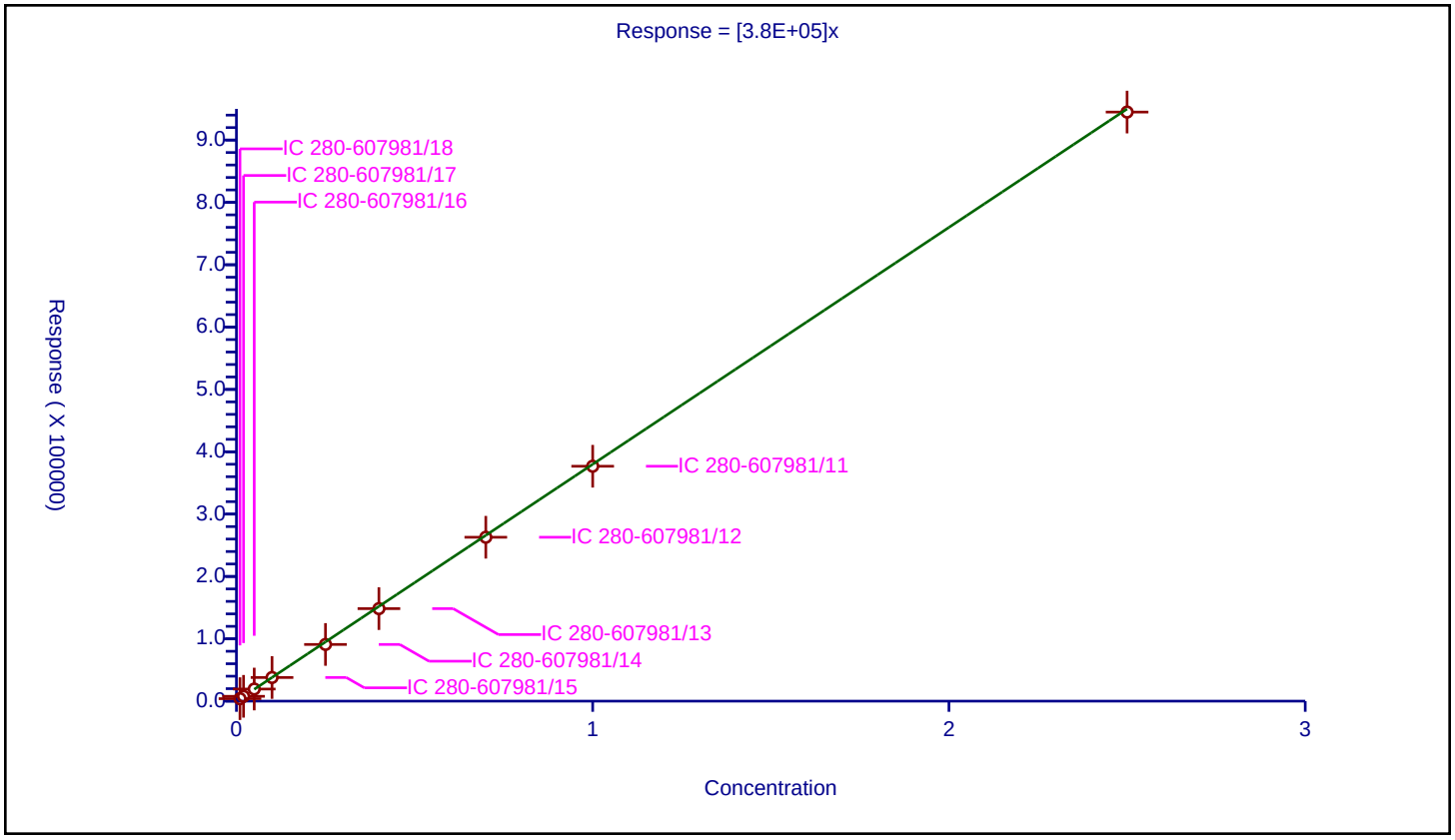
Curve Coefficients

Intercept:	0
Slope:	3.8E+05

Error Coefficients

Standard Error:	3030
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 280-607981/18	0.01	4002.0			400200.0	Y
2	IC 280-607981/17	0.02	7744.0			387200.0	Y
3	IC 280-607981/16	0.05	19405.0			388100.0	Y
4	IC 280-607981/15	0.1	37900.0			379000.0	Y
5	IC 280-607981/14	0.25	90950.0			363800.0	Y
6	IC 280-607981/13	0.4	148398.0			370995.0	Y
7	IC 280-607981/12	0.7	262906.0			375580.0	Y
8	IC 280-607981/11	1.0	376803.0			376803.0	Y
9	IC 280-607981/10	2.5	944914.0			377965.6	Y



Calibration / 1,2-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

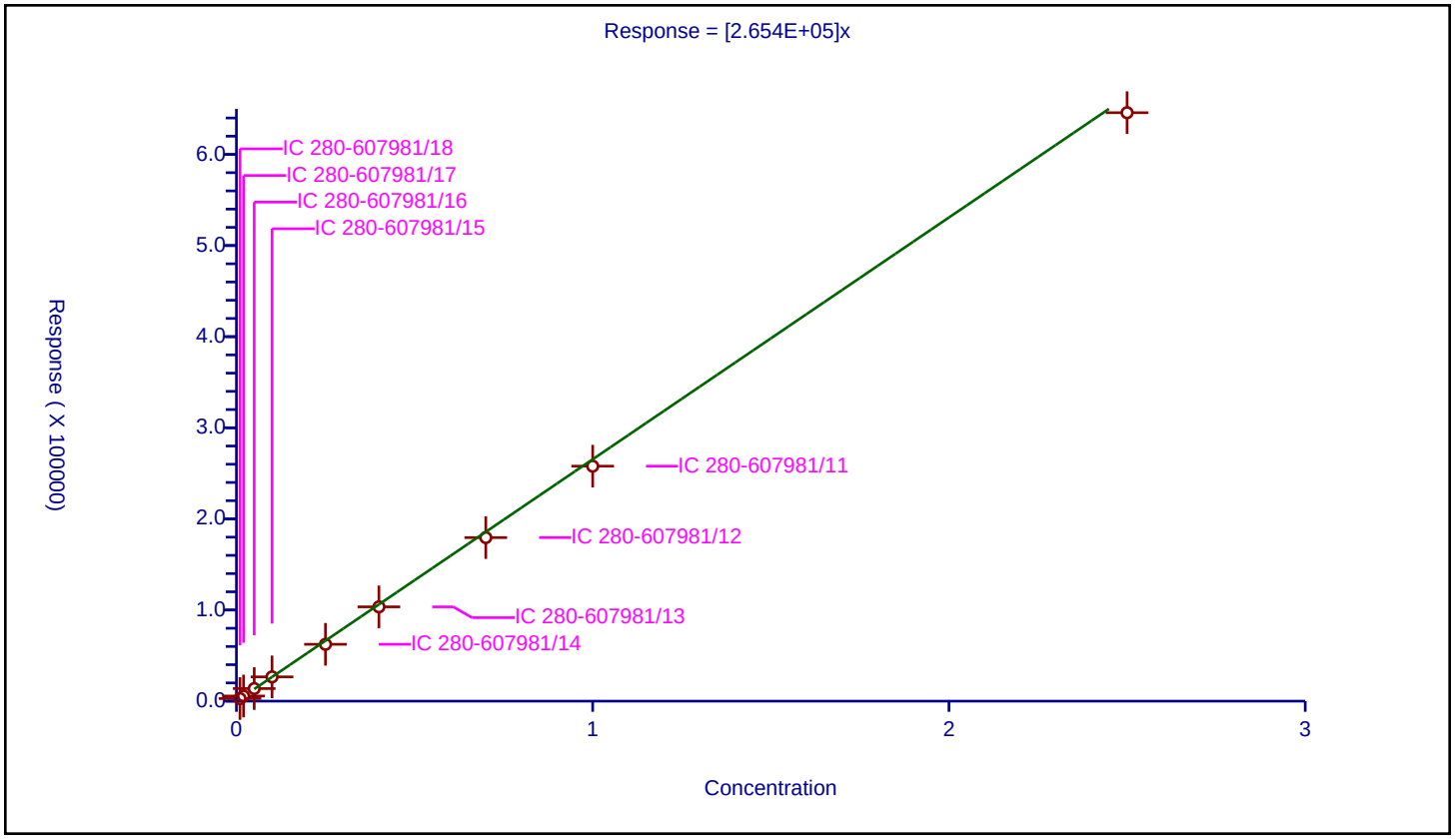
Curve Coefficients

Intercept:	0
Slope:	2.654E+05

Error Coefficients

Standard Error:	7350
Relative Standard Error:	4.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-607981/18	0.01	2840.0			284000.0	Y
2	IC 280-607981/17	0.02	5627.0			281350.0	Y
3	IC 280-607981/16	0.05	13806.0			276120.0	Y
4	IC 280-607981/15	0.1	26630.0			266300.0	Y
5	IC 280-607981/14	0.25	62380.0			249520.0	Y
6	IC 280-607981/13	0.4	103481.0			258702.5	Y
7	IC 280-607981/12	0.7	179492.0			256417.142857	Y
8	IC 280-607981/11	1.0	257906.0			257906.0	Y
9	IC 280-607981/10	2.5	645821.0			258328.4	Y



Calibration / 3,5-Dinitroaniline

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

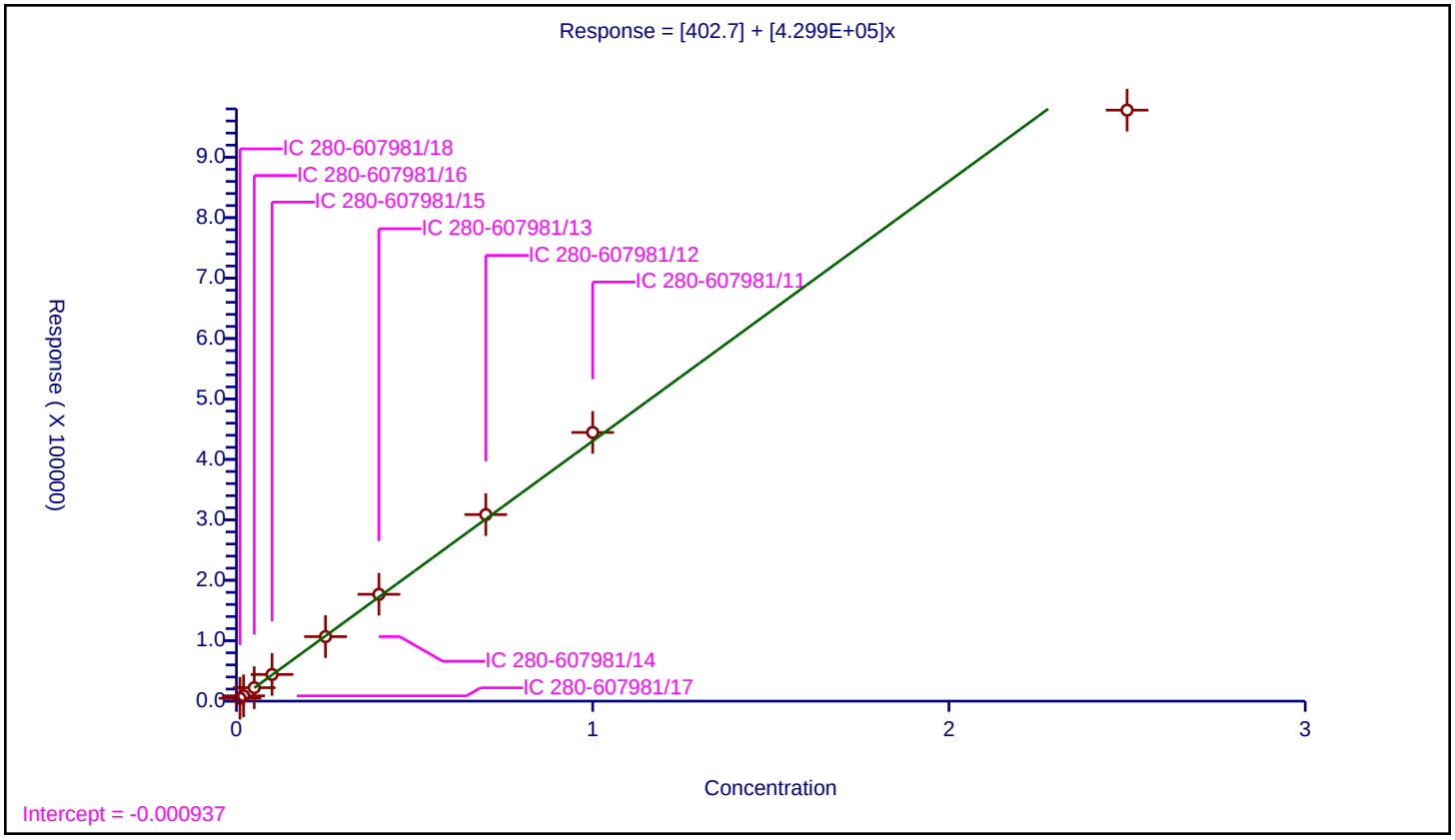
Curve Coefficients

Intercept:	402.7
Slope:	4.299E+05

Error Coefficients

Standard Error:	37300
Relative Standard Error:	4.1
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-607981/18	0.01	4725.0			472500.0	Y
2	IC 280-607981/17	0.02	8811.0			440550.0	Y
3	IC 280-607981/16	0.05	22268.0			445360.0	Y
4	IC 280-607981/15	0.1	44146.0			441460.0	Y
5	IC 280-607981/14	0.25	106753.0			427012.0	Y
6	IC 280-607981/13	0.4	176804.0			442010.0	Y
7	IC 280-607981/12	0.7	308678.0			440968.571429	Y
8	IC 280-607981/11	1.0	444605.0			444605.0	Y
9	IC 280-607981/10	2.5	977923.0			391169.2	Y



Calibration / 1,3-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

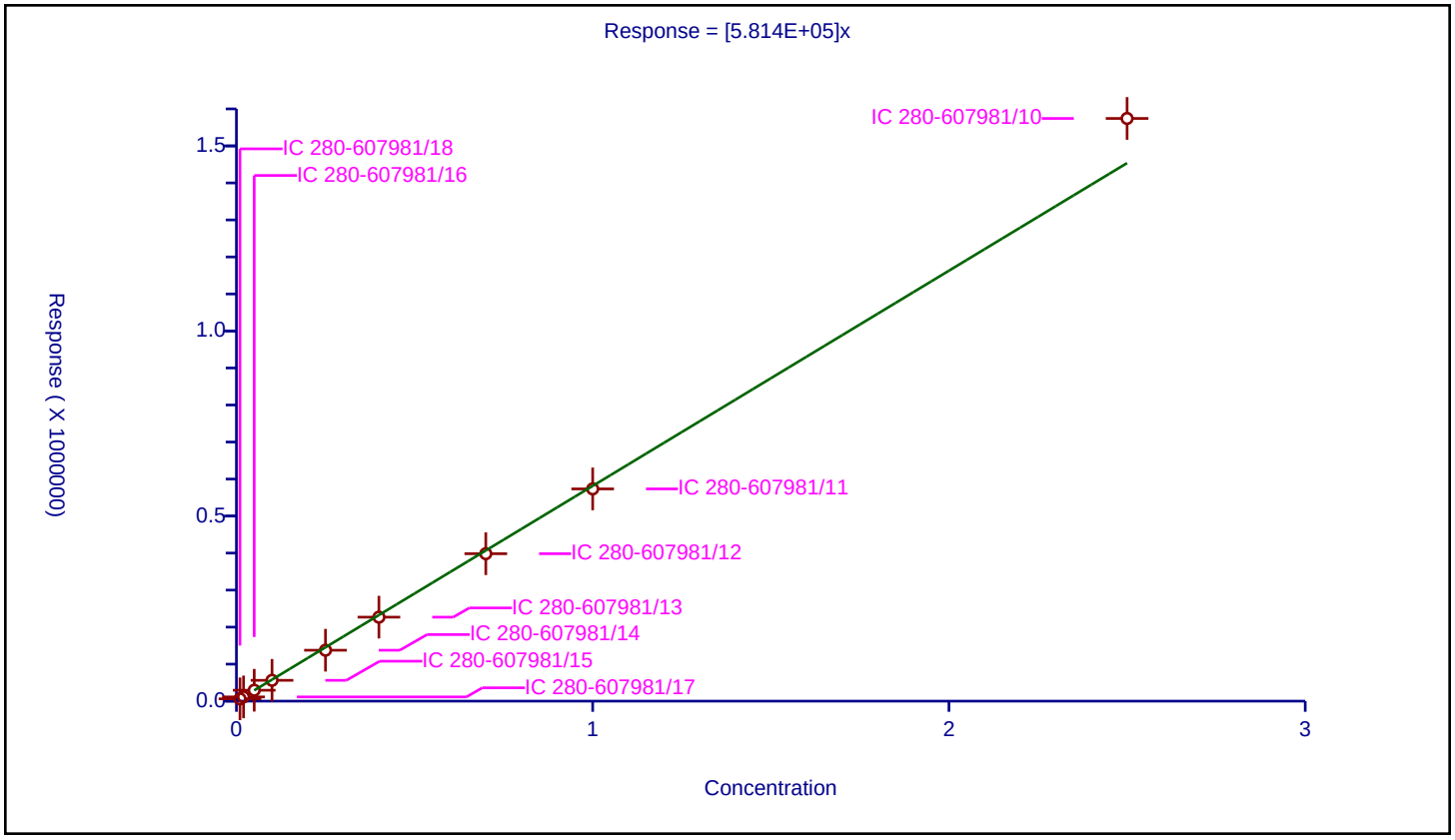
Curve Coefficients

Intercept:	0
Slope:	5.814E+05

Error Coefficients

Standard Error:	43000
Relative Standard Error:	4.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-607981/18	0.01	6202.0			620200.0	Y
2	IC 280-607981/17	0.02	11425.0			571250.0	Y
3	IC 280-607981/16	0.05	29472.0			589440.0	Y
4	IC 280-607981/15	0.1	56261.0			562610.0	Y
5	IC 280-607981/14	0.25	137559.0			550236.0	Y
6	IC 280-607981/13	0.4	226896.0			567240.0	Y
7	IC 280-607981/12	0.7	398326.0			569037.142857	Y
8	IC 280-607981/11	1.0	573365.0			573365.0	Y
9	IC 280-607981/10	2.5	1574162.0			629664.8	Y



Calibration / Nitroglycerin

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

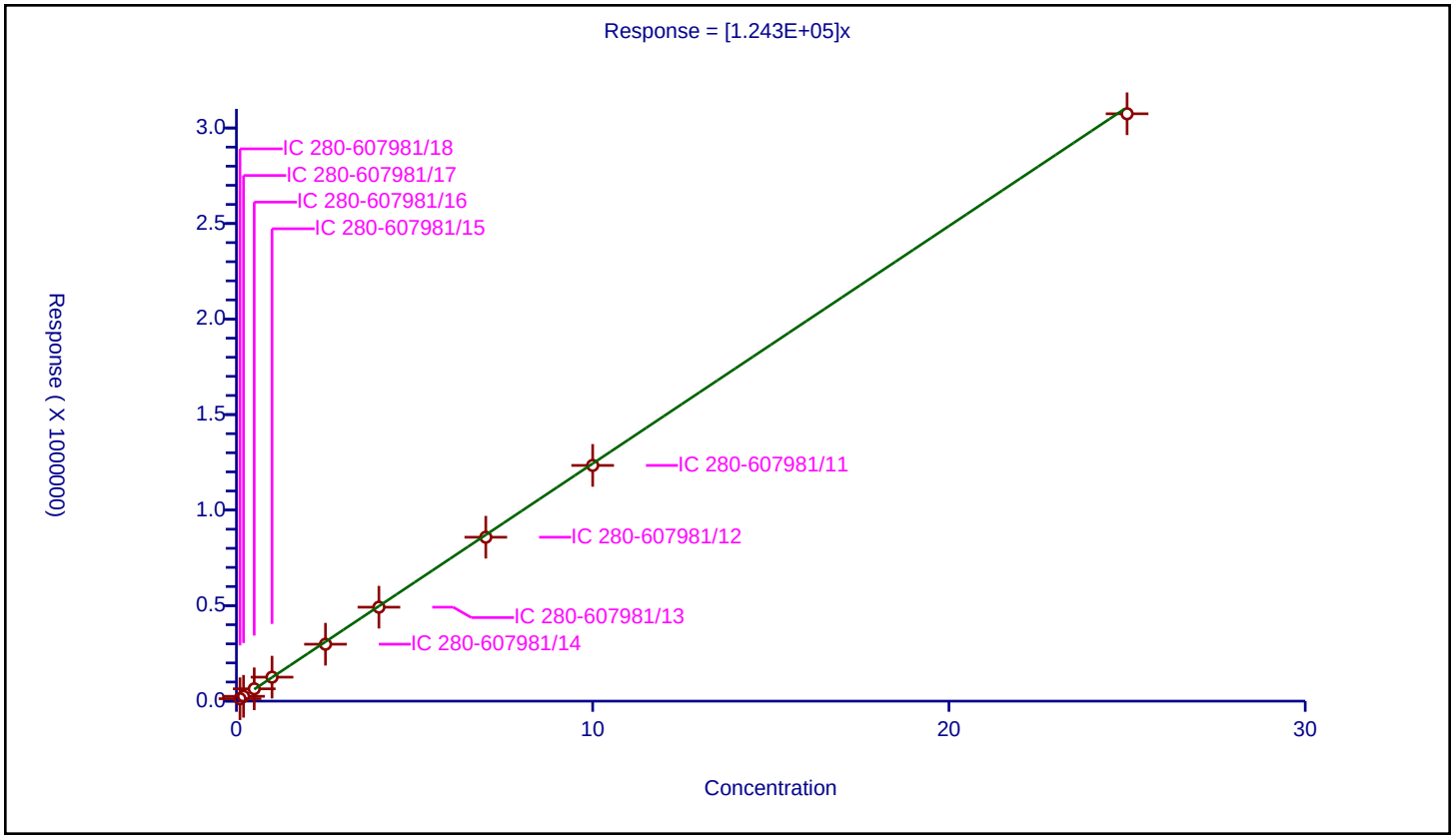
Curve Coefficients

Intercept:	0
Slope:	1.243E+05

Error Coefficients

Standard Error:	14200
Relative Standard Error:	2.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-607981/18	0.1	12725.0			127250.0	Y
2	IC 280-607981/17	0.2	25265.0			126325.0	Y
3	IC 280-607981/16	0.5	64483.0			128966.0	Y
4	IC 280-607981/15	1.0	125509.0			125509.0	Y
5	IC 280-607981/14	2.5	297926.0			119170.4	Y
6	IC 280-607981/13	4.0	491776.0			122944.0	Y
7	IC 280-607981/12	7.0	858025.0			122575.0	Y
8	IC 280-607981/11	10.0	1233892.0			123389.2	Y
9	IC 280-607981/10	25.0	3074483.0			122979.32	Y



Calibration / o-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

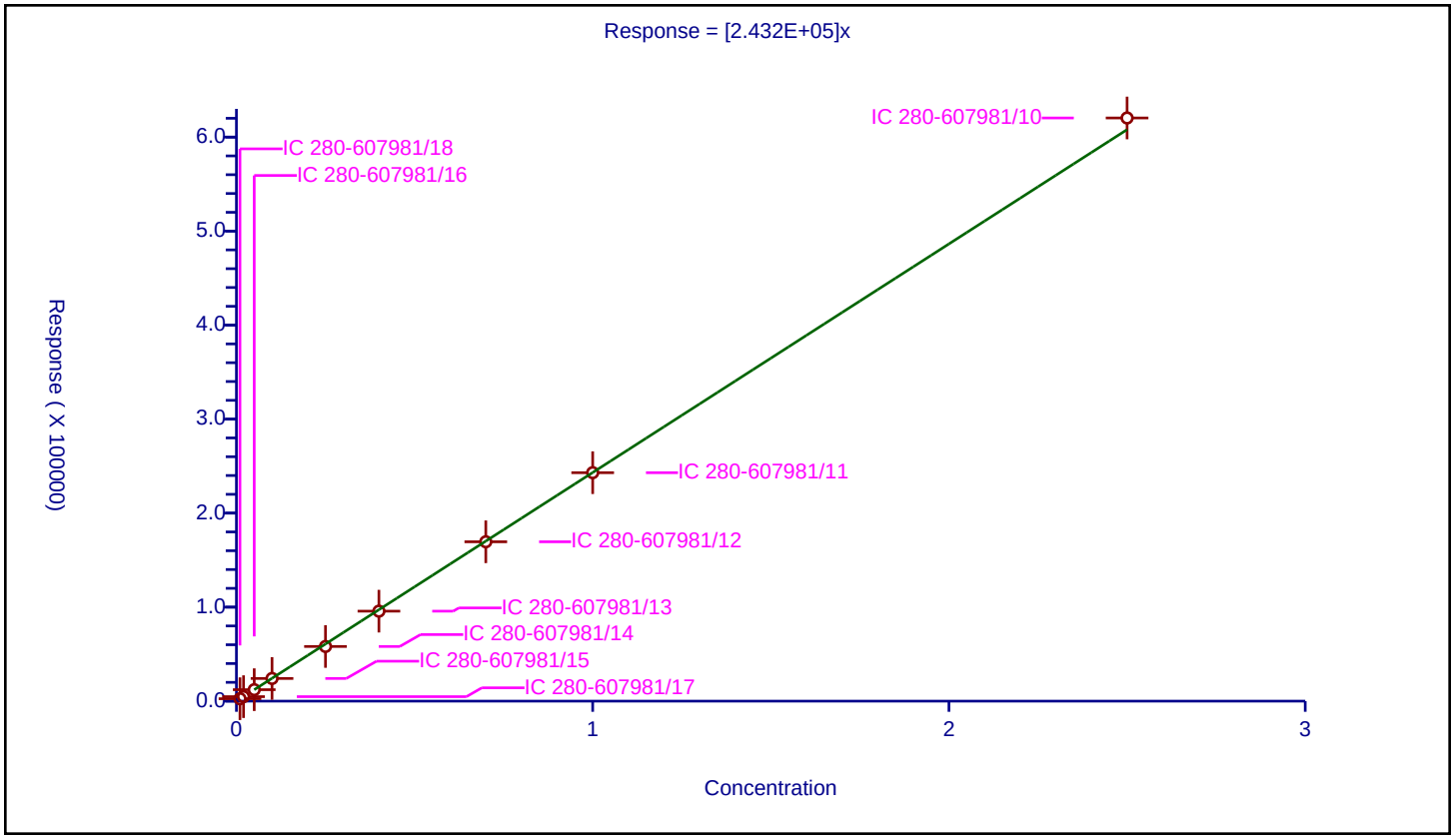
Curve Coefficients

Intercept:	0
Slope:	2.432E+05

Error Coefficients

Standard Error:	4510
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-607981/18	0.01	2596.0			259600.0	Y
2	IC 280-607981/17	0.02	4779.0			238950.0	Y
3	IC 280-607981/16	0.05	12185.0			243700.0	Y
4	IC 280-607981/15	0.1	24115.0			241150.0	Y
5	IC 280-607981/14	0.25	58154.0			232616.0	Y
6	IC 280-607981/13	0.4	95732.0			239330.0	Y
7	IC 280-607981/12	0.7	169534.0			242191.428571	Y
8	IC 280-607981/11	1.0	243027.0			243027.0	Y
9	IC 280-607981/10	2.5	620325.0			248130.0	Y



Calibration / p-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

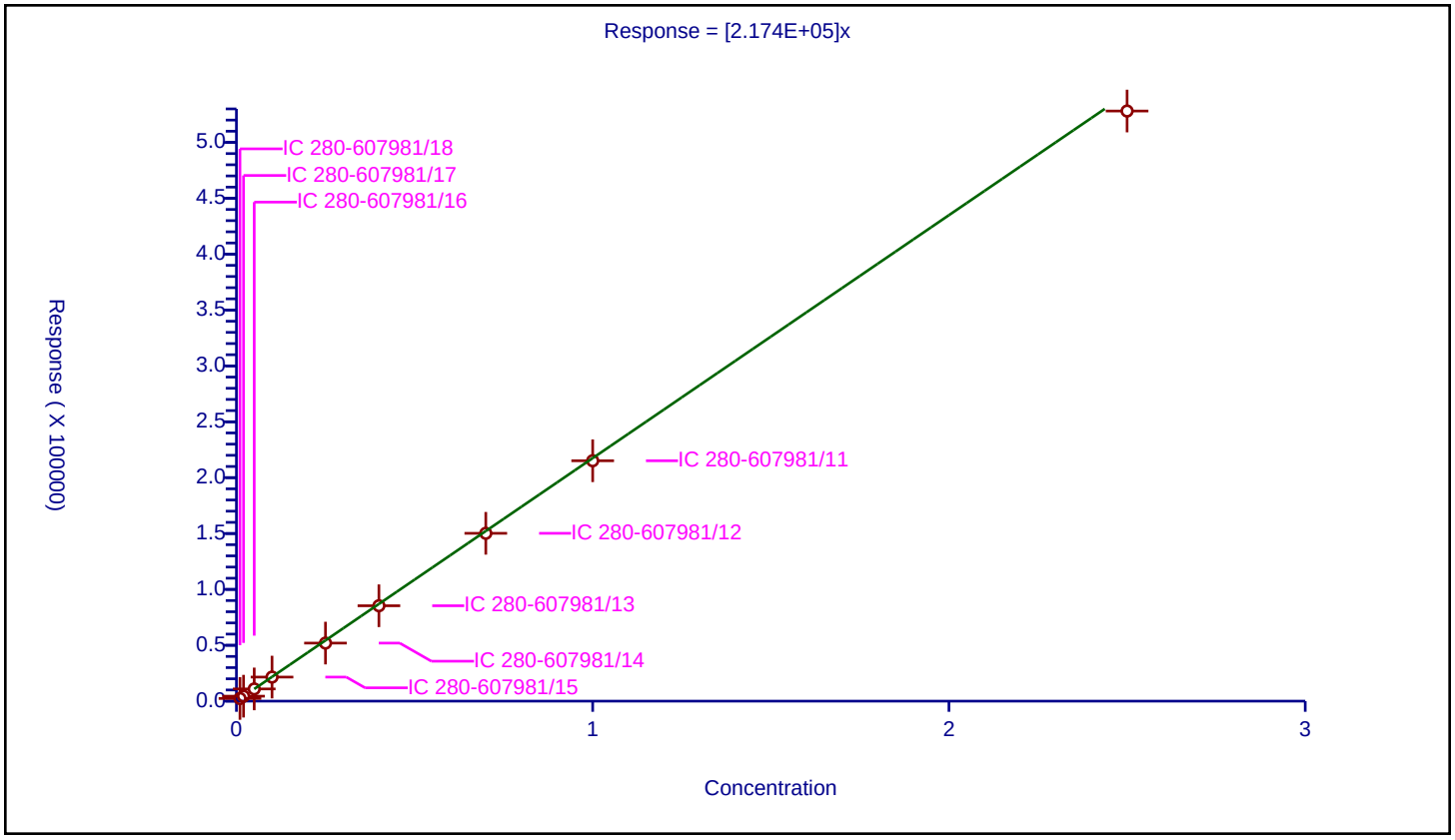
Curve Coefficients

Intercept:	0
Slope:	2.174E+05

Error Coefficients

Standard Error:	5690
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 280-607981/18	0.01	2388.0			238800.0	Y
2	IC 280-607981/17	0.02	4444.0			222200.0	Y
3	IC 280-607981/16	0.05	10927.0			218540.0	Y
4	IC 280-607981/15	0.1	21537.0			215370.0	Y
5	IC 280-607981/14	0.25	51955.0			207820.0	Y
6	IC 280-607981/13	0.4	85363.0			213407.5	Y
7	IC 280-607981/12	0.7	150188.0			214554.285714	Y
8	IC 280-607981/11	1.0	215111.0			215111.0	Y
9	IC 280-607981/10	2.5	528095.0			211238.0	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

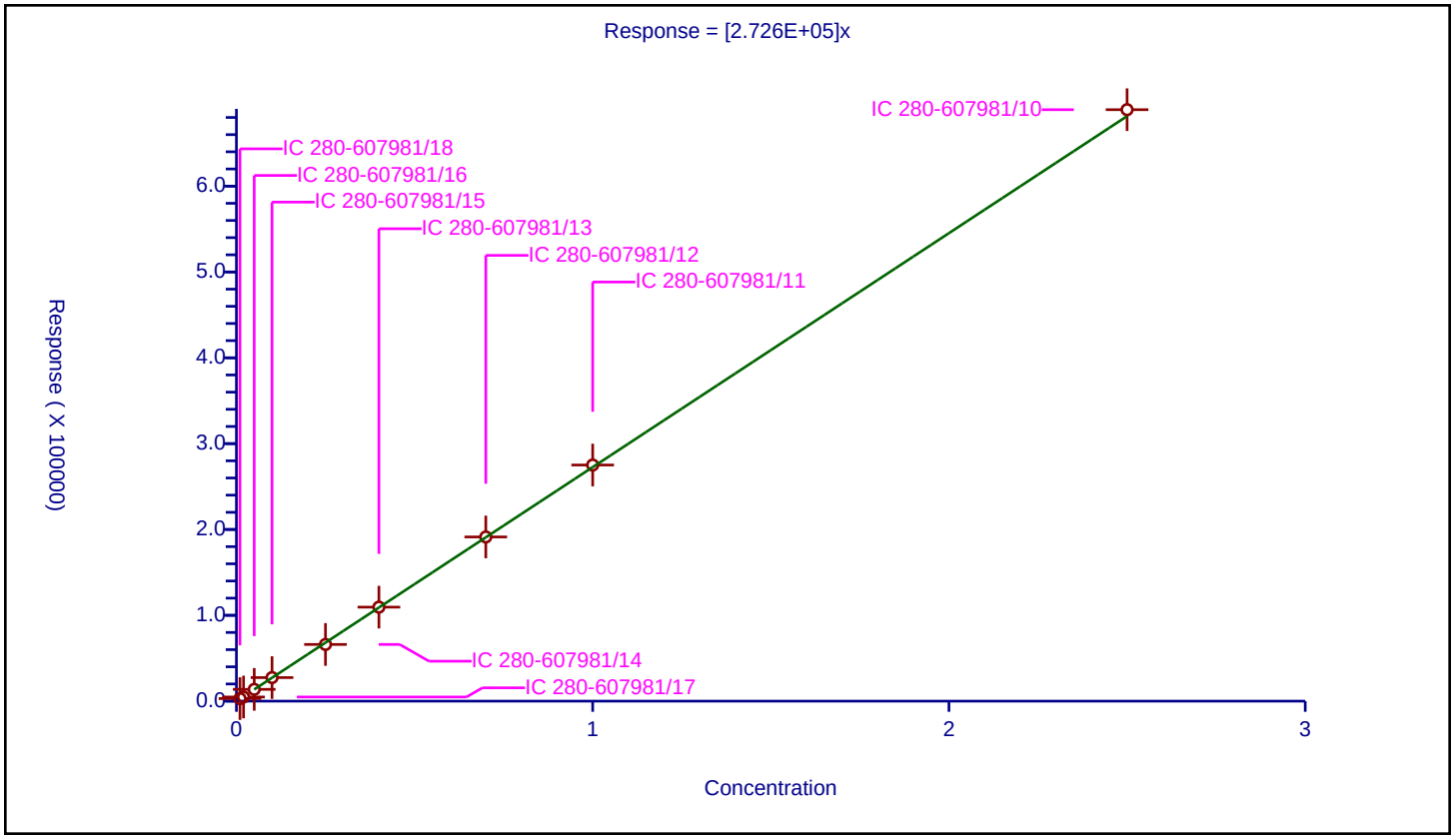
Curve Coefficients

Intercept:	0
Slope:	2.726E+05

Error Coefficients

Standard Error:	2930
Relative Standard Error:	5.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-607981/18	0.01	3004.0			300400.0	Y
2	IC 280-607981/17	0.02	4840.0			242000.0	Y
3	IC 280-607981/16	0.05	13722.0			274440.0	Y
4	IC 280-607981/15	0.1	27461.0			274610.0	Y
5	IC 280-607981/14	0.25	66062.0			264248.0	Y
6	IC 280-607981/13	0.4	109516.0			273790.0	Y
7	IC 280-607981/12	0.7	191293.0			273275.714286	Y
8	IC 280-607981/11	1.0	275101.0			275101.0	Y
9	IC 280-607981/10	2.5	689078.0			275631.2	Y



Calibration / m-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

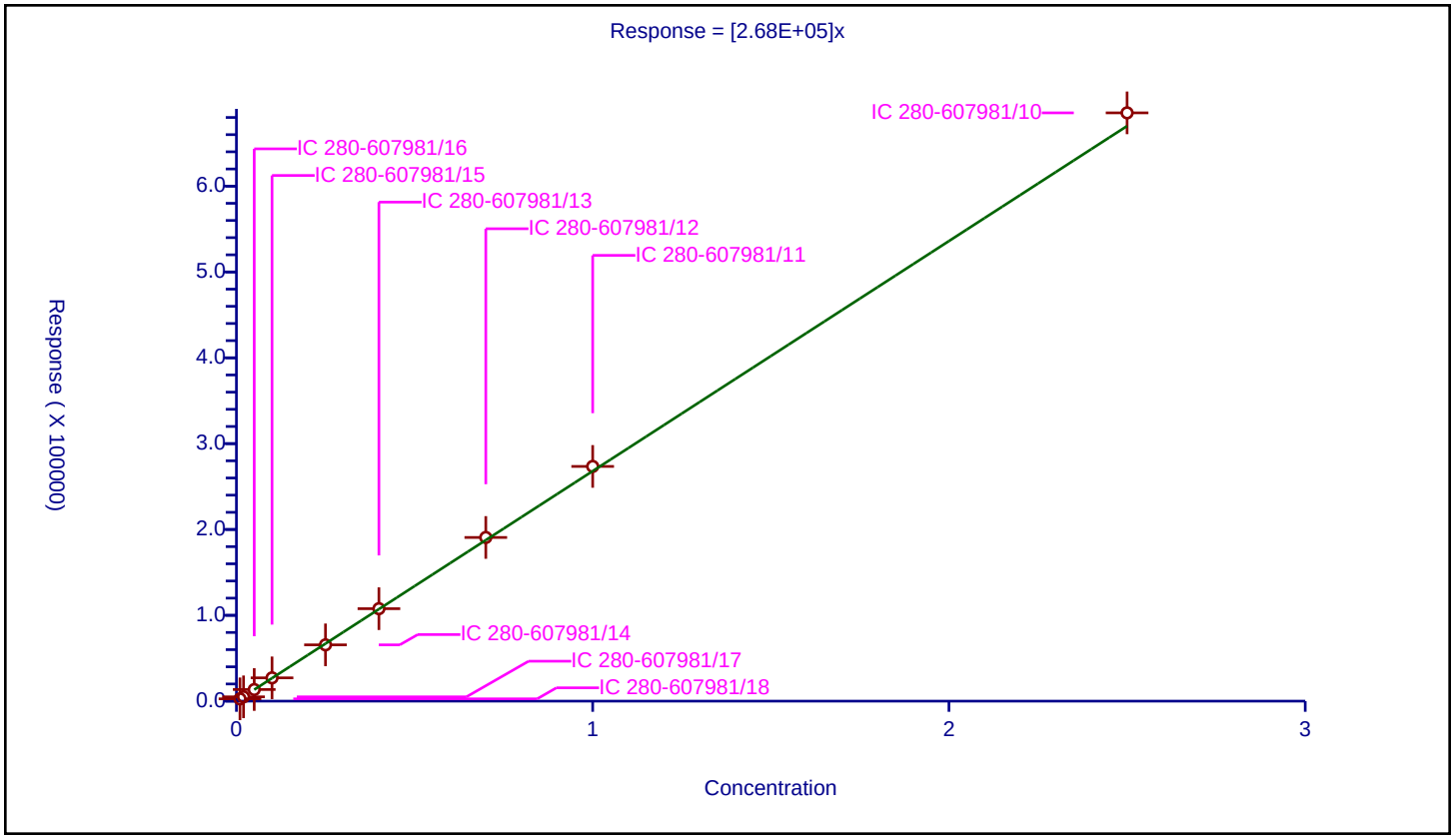
Curve Coefficients

Intercept:	0
Slope:	2.68E+05

Error Coefficients

Standard Error:	5890
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 280-607981/18	0.01	2673.0			267300.0	Y
2	IC 280-607981/17	0.02	5021.0			251050.0	Y
3	IC 280-607981/16	0.05	13529.0			270580.0	Y
4	IC 280-607981/15	0.1	27150.0			271500.0	Y
5	IC 280-607981/14	0.25	65576.0			262304.0	Y
6	IC 280-607981/13	0.4	107736.0			269340.0	Y
7	IC 280-607981/12	0.7	190691.0			272415.714286	Y
8	IC 280-607981/11	1.0	273461.0			273461.0	Y
9	IC 280-607981/10	2.5	685382.0			274152.8	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

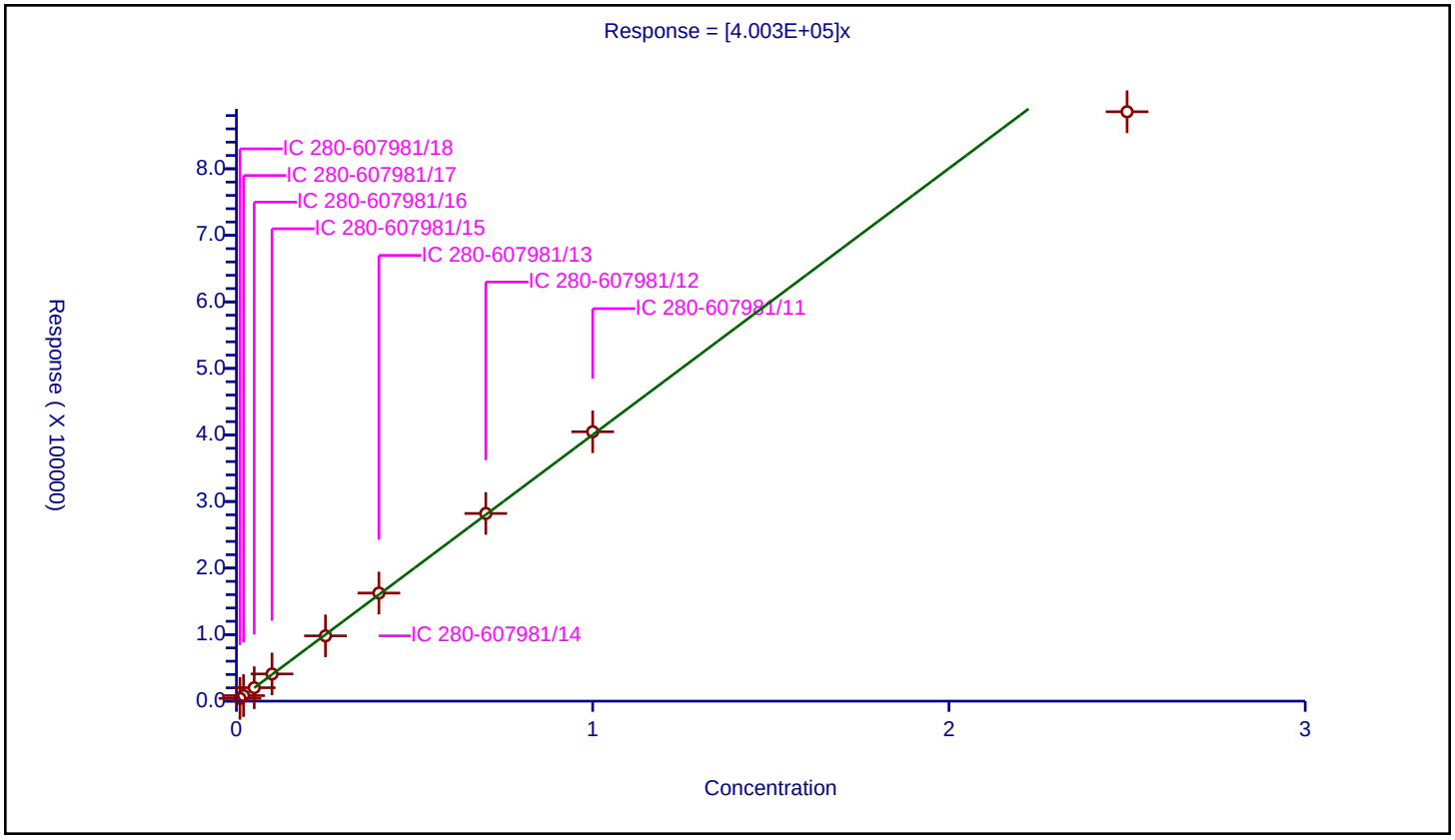
Curve Coefficients

Intercept:	0
Slope:	4.003E+05

Error Coefficients

Standard Error:	40700
Relative Standard Error:	4.6
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-607981/18	0.01	4148.0			414800.0	Y
2	IC 280-607981/17	0.02	8295.0			414750.0	Y
3	IC 280-607981/16	0.05	20191.0			403820.0	Y
4	IC 280-607981/15	0.1	40866.0			408660.0	Y
5	IC 280-607981/14	0.25	98103.0			392412.0	Y
6	IC 280-607981/13	0.4	162441.0			406102.5	Y
7	IC 280-607981/12	0.7	282018.0			402882.857143	Y
8	IC 280-607981/11	1.0	404845.0			404845.0	Y
9	IC 280-607981/10	2.5	885701.0			354280.4	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

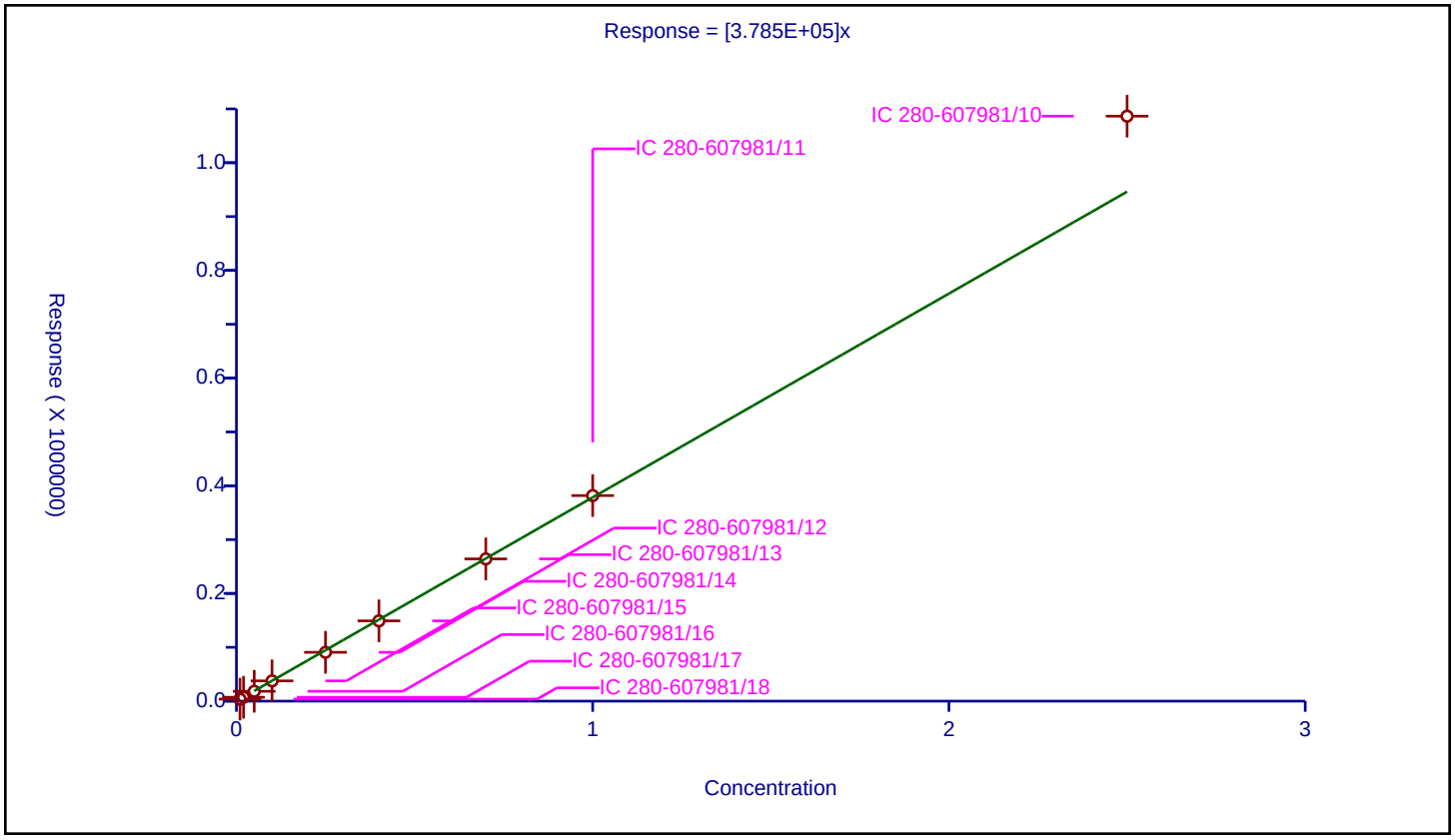
Curve Coefficients

Intercept:	0
Slope:	3.785E+05

Error Coefficients

Standard Error:	49600
Relative Standard Error:	5.9
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-607981/18	0.01	3748.0			374800.0	Y
2	IC 280-607981/17	0.02	7178.0			358900.0	Y
3	IC 280-607981/16	0.05	18350.0			367000.0	Y
4	IC 280-607981/15	0.1	37635.0			376350.0	Y
5	IC 280-607981/14	0.25	90714.0			362856.0	Y
6	IC 280-607981/13	0.4	149070.0			372675.0	Y
7	IC 280-607981/12	0.7	264170.0			377385.714286	Y
8	IC 280-607981/11	1.0	381831.0			381831.0	Y
9	IC 280-607981/10	2.5	1086488.0			434595.2	Y



Calibration / 2,6-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

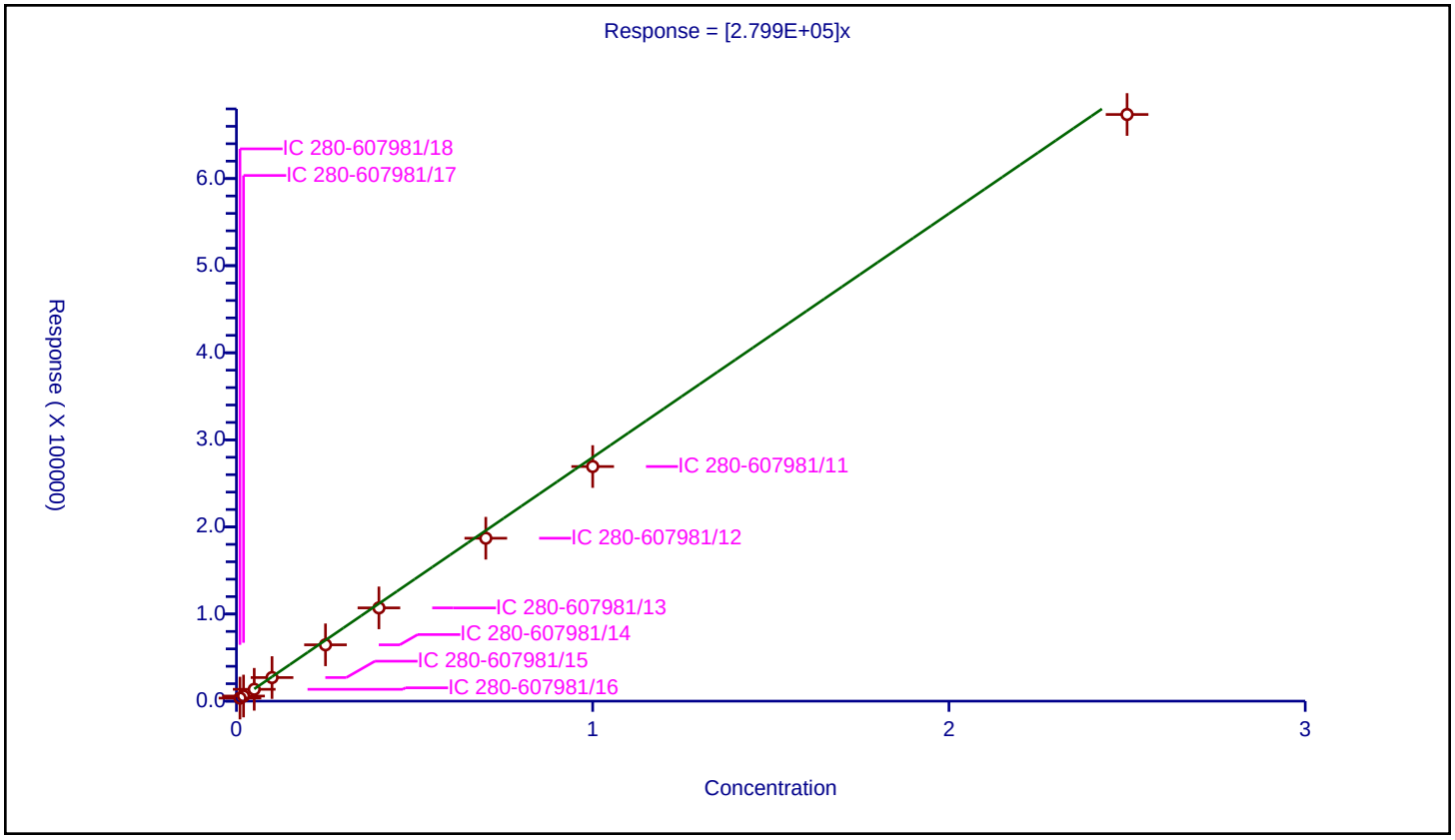
Curve Coefficients

Intercept:	0
Slope:	2.799E+05

Error Coefficients

Standard Error:	10800
Relative Standard Error:	10.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-607981/18	0.01	3509.0			350900.0	Y
2	IC 280-607981/17	0.02	5869.0			293450.0	Y
3	IC 280-607981/16	0.05	13580.0			271600.0	Y
4	IC 280-607981/15	0.1	27076.0			270760.0	Y
5	IC 280-607981/14	0.25	64666.0			258664.0	Y
6	IC 280-607981/13	0.4	107072.0			267680.0	Y
7	IC 280-607981/12	0.7	187051.0			267215.714286	Y
8	IC 280-607981/11	1.0	269366.0			269366.0	Y
9	IC 280-607981/10	2.5	673578.0			269431.2	Y



Calibration / 2,4-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

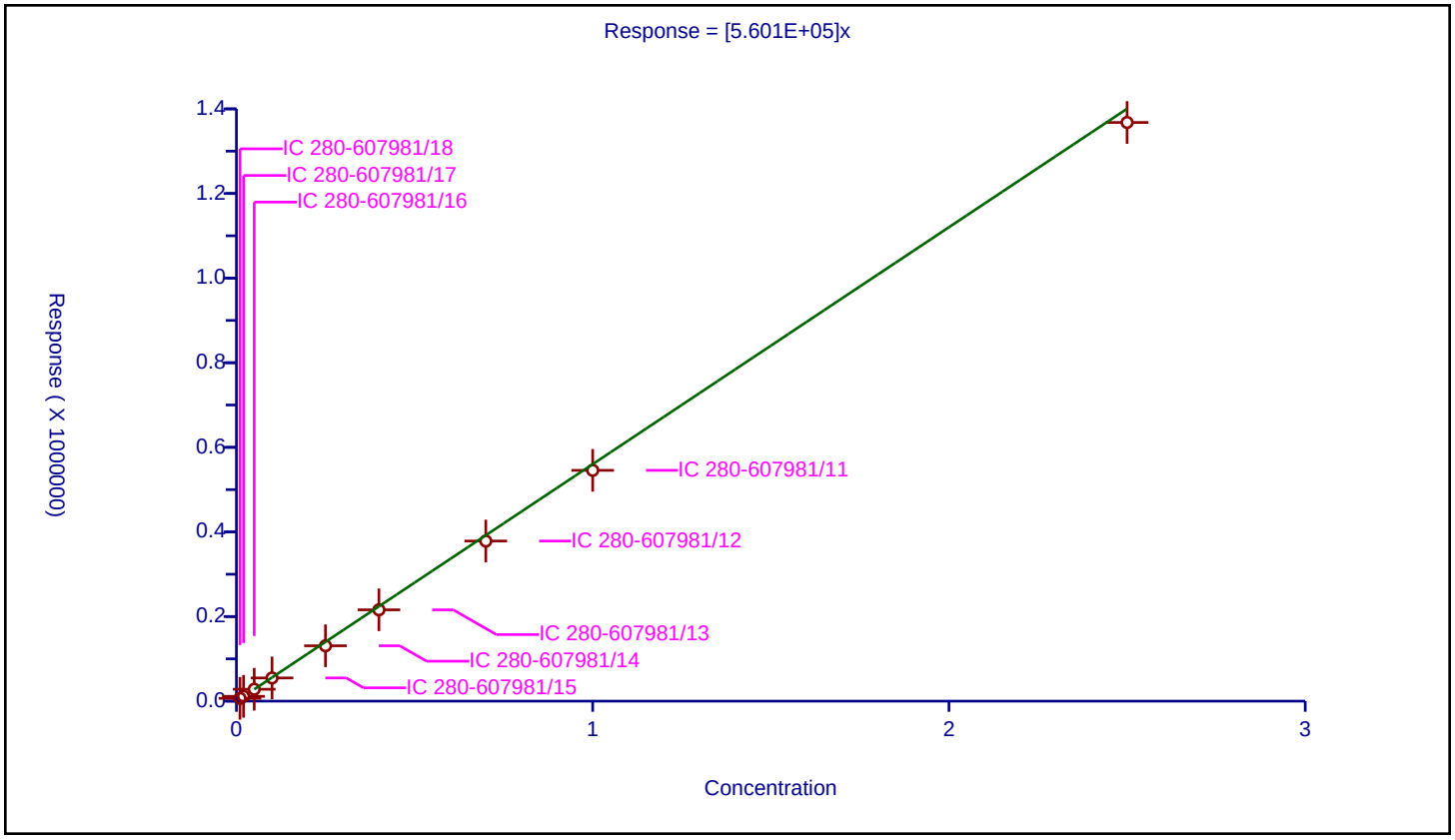
Curve Coefficients

Intercept:	0
Slope:	5.601E+05

Error Coefficients

Standard Error:	14100
Relative Standard Error:	7.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-607981/18	0.01	6650.0			665000.0	Y
2	IC 280-607981/17	0.02	11382.0			569100.0	Y
3	IC 280-607981/16	0.05	28133.0			562660.0	Y
4	IC 280-607981/15	0.1	54791.0			547910.0	Y
5	IC 280-607981/14	0.25	130856.0			523424.0	Y
6	IC 280-607981/13	0.4	215854.0			539635.0	Y
7	IC 280-607981/12	0.7	378459.0			540655.714286	Y
8	IC 280-607981/11	1.0	545578.0			545578.0	Y
9	IC 280-607981/10	2.5	1367914.0			547165.6	Y



Calibration / Tetryl

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

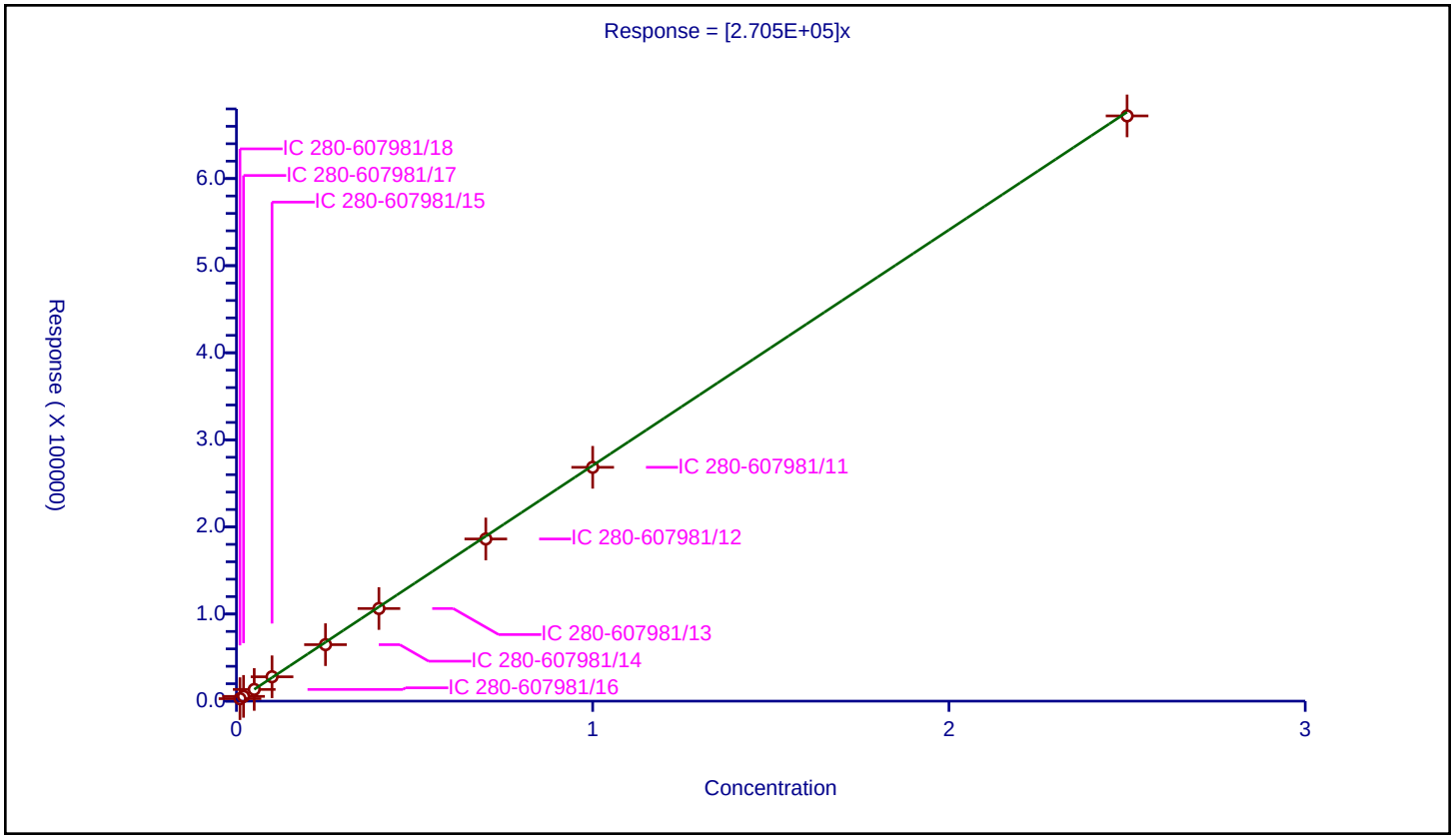
Curve Coefficients

Intercept:	0
Slope:	2.705E+05

Error Coefficients

Standard Error:	2390
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 280-607981/18	0.01	2847.0			284700.0	Y
2	IC 280-607981/17	0.02	5460.0			273000.0	Y
3	IC 280-607981/16	0.05	13447.0			268940.0	Y
4	IC 280-607981/15	0.1	27969.0			279690.0	Y
5	IC 280-607981/14	0.25	64854.0			259416.0	Y
6	IC 280-607981/13	0.4	106353.0			265882.5	Y
7	IC 280-607981/12	0.7	186180.0			265971.428571	Y
8	IC 280-607981/11	1.0	268469.0			268469.0	Y
9	IC 280-607981/10	2.5	671961.0			268784.4	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

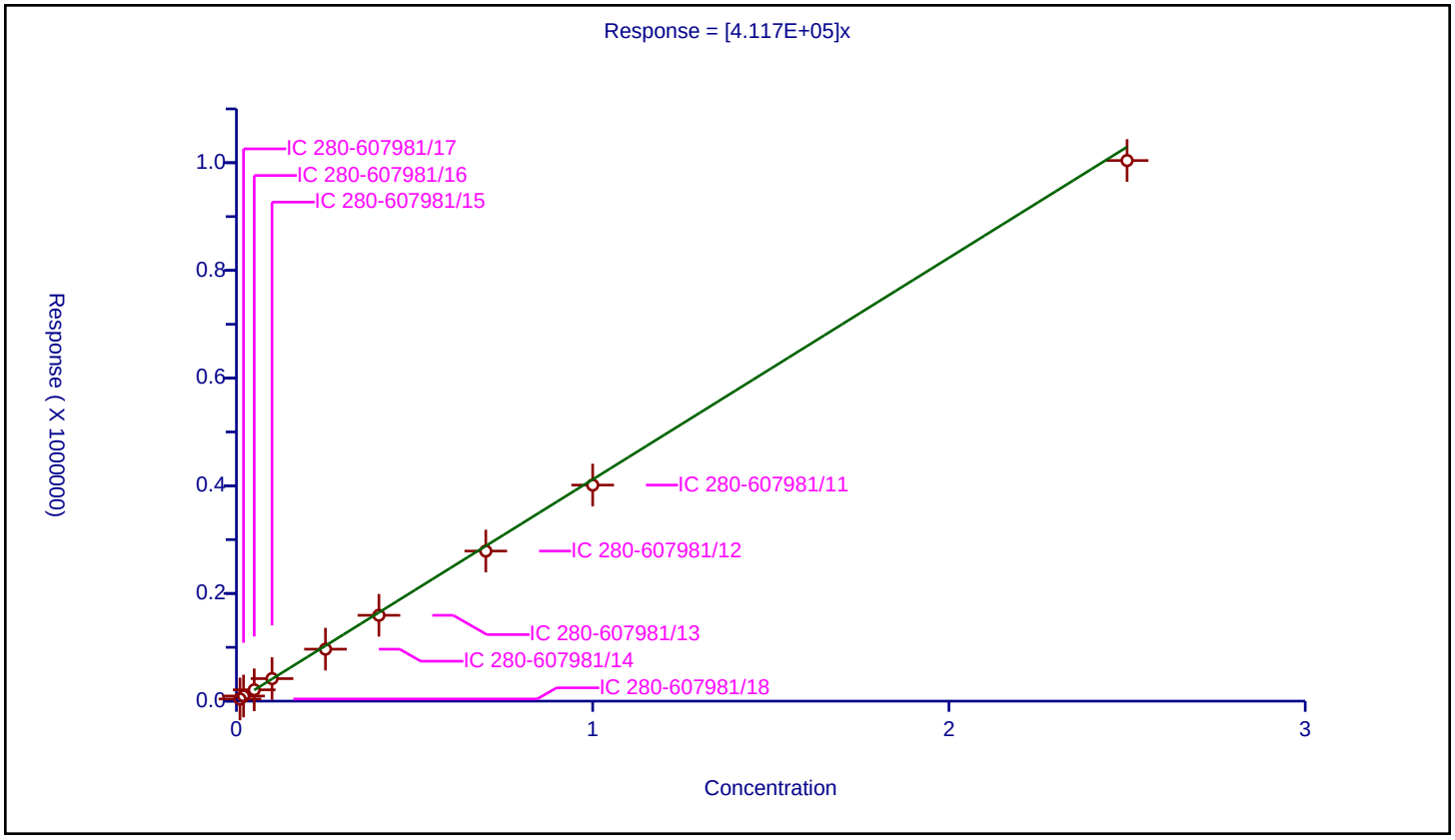
Curve Coefficients

Intercept:	0
Slope:	4.117E+05

Error Coefficients

Standard Error:	10600
Relative Standard Error:	6.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-607981/18	0.01	4042.0			404200.0	Y
2	IC 280-607981/17	0.02	9530.0			476500.0	Y
3	IC 280-607981/16	0.05	21038.0			420760.0	Y
4	IC 280-607981/15	0.1	41817.0			418170.0	Y
5	IC 280-607981/14	0.25	96518.0			386072.0	Y
6	IC 280-607981/13	0.4	159461.0			398652.5	Y
7	IC 280-607981/12	0.7	278721.0			398172.857143	Y
8	IC 280-607981/11	1.0	401312.0			401312.0	Y
9	IC 280-607981/10	2.5	1004078.0			401631.2	Y



Calibration / PETN

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

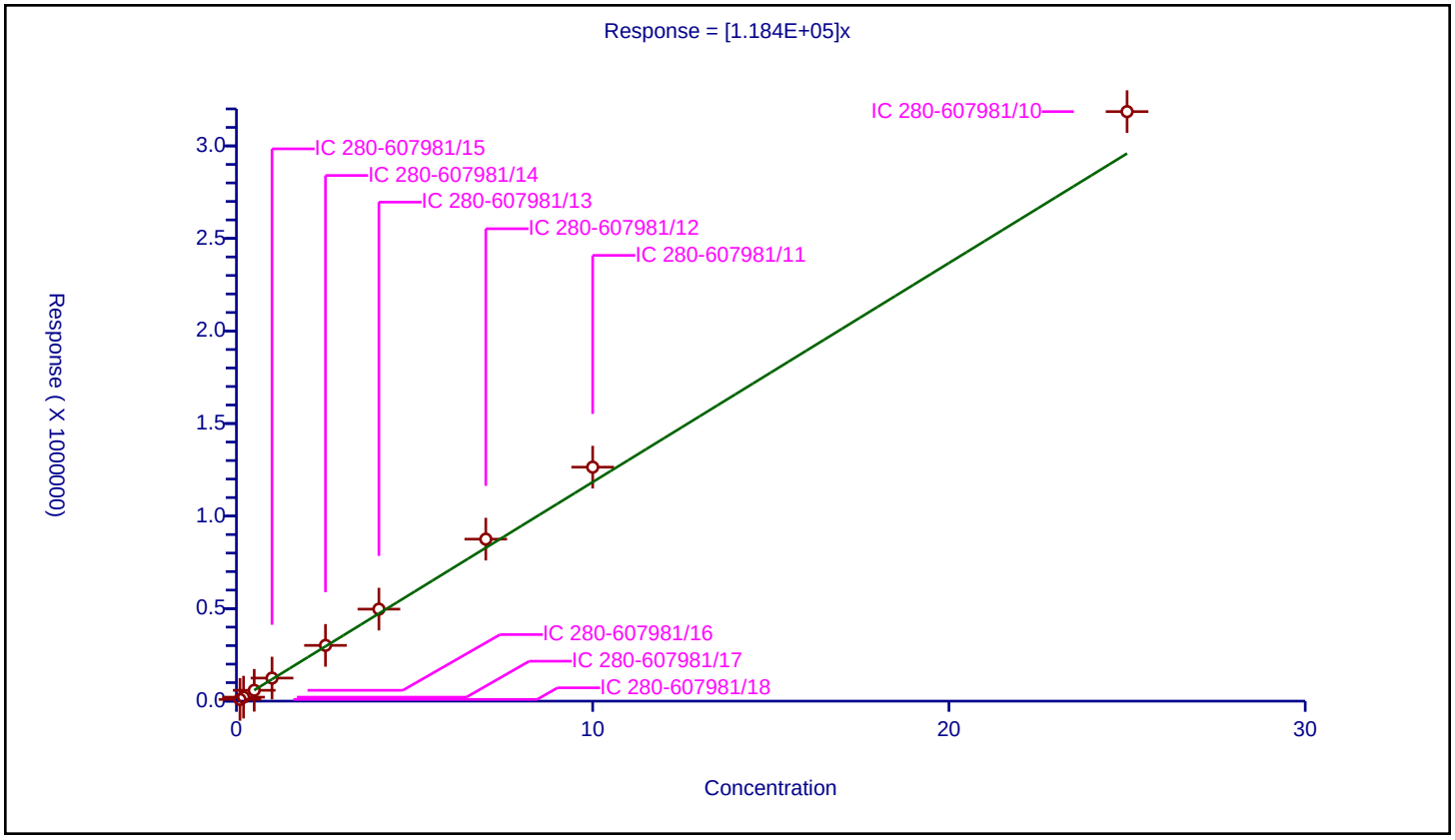
Curve Coefficients

Intercept:	0
Slope:	1.184E+05

Error Coefficients

Standard Error:	86900
Relative Standard Error:	9.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-607981/18	0.1	9214.0			92140.0	Y
2	IC 280-607981/17	0.2	21527.0			107635.0	Y
3	IC 280-607981/16	0.5	58615.0			117230.0	Y
4	IC 280-607981/15	1.0	124639.0			124639.0	Y
5	IC 280-607981/14	2.5	301212.0			120484.8	Y
6	IC 280-607981/13	4.0	497183.0			124295.75	Y
7	IC 280-607981/12	7.0	875273.0			125039.0	Y
8	IC 280-607981/11	10.0	1264310.0			126431.0	Y
9	IC 280-607981/10	25.0	3185284.0			127411.36	Y



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1 Analy Batch No.: 599427

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/17/2023 00:33 Calibration End Date: 01/17/2023 03:16 Calibration ID: 75939

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-599427/18	01160046.D
Level 2	IC 280-599427/17	01160045.D
Level 3	IC 280-599427/16	01160044.D
Level 4	IC 280-599427/15	01160043.D
Level 5	IC 280-599427/14	01160042.D
Level 6	IC 280-599427/13	01160041.D
Level 7	IC 280-599427/12	01160040.D
Level 8	IC 280-599427/11	01160039.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	6.459	6.459	6.459	6.460	6.459	6.460	6.457	6.432			6.305 - 6.605	6.456
2,4-diamino-6-nitrotoluene	6.639	6.639	6.632	6.640	6.639	6.640	6.637	6.618			6.619 - 6.919	6.636
3,5-Dinitroaniline	9.805	9.798	9.812	9.800	9.806	9.800	9.804	9.798			9.650 - 9.950	9.803

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-176335-1 Analy Batch No.: 599427

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/17/2023 00:33 Calibration End Date: 01/17/2023 03:16 Calibration ID: 75939

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-599427/18	01160046.D
Level 2	IC 280-599427/17	01160045.D
Level 3	IC 280-599427/16	01160044.D
Level 4	IC 280-599427/15	01160043.D
Level 5	IC 280-599427/14	01160042.D
Level 6	IC 280-599427/13	01160041.D
Level 7	IC 280-599427/12	01160040.D
Level 8	IC 280-599427/11	01160039.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	266300 235998	260780 221767	247020 234891	225236 222744	Lin2	864.132254	229692.993							0.9980		0.9900
2,4-diamino-6-nitrotoluene	152100 147503	163500 136319	149080 148050	138680 136546	Ave		146472.134				6.3		20.0			
3,5-Dinitroaniline	219850 241580	252000 241484	246040 245164	237836 244381	Lin2	-392.42757	245423.810							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
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-176335-1 Analy Batch No.: 599427

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/17/2023 00:33 Calibration End Date: 01/17/2023 03:16 Calibration ID: 75939

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-599427/18	01160046.D
Level 2	IC 280-599427/17	01160045.D
Level 3	IC 280-599427/16	01160044.D
Level 4	IC 280-599427/15	01160043.D
Level 5	IC 280-599427/14	01160042.D
Level 6	IC 280-599427/13	01160041.D
Level 7	IC 280-599427/12	01160040.D
Level 8	IC 280-599427/11	01160039.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	Lin2	5326 155237	13039 234891	24702 556860	56309	94399	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
2,4-diamino-6-nitrotoluene	Ave	3042 95423	8175 148050	14908 341365	34670	59001	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
3,5-Dinitroaniline	Lin2	4397 169039	12600 245164	24604 610953	59459	96632	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400

Curve Type Legend

Ave = Average
Lin2 = Linear 1/conc^2

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160039.D
Lims ID: IC ADD 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 17-Jan-2023 00:33:01 ALS Bottle#: 42 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICADD8
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub10

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jan-2023 12:50:38 Calib Date: 17-Jan-2023 06:47:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160055.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: NQH7 Date: 17-Jan-2023 08:20:12

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	6.432	6.455	-0.023	556860	2.50	2.42	M
5 2,4-diamino-6-nitrotoluene	1	6.618	6.769	-0.151	341365	2.50	2.33	M
14 3,5-Dinitroaniline	1	9.798	9.800	-0.002	610953	2.50	2.49	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00035 Amount Added: 125.00 Units: uL

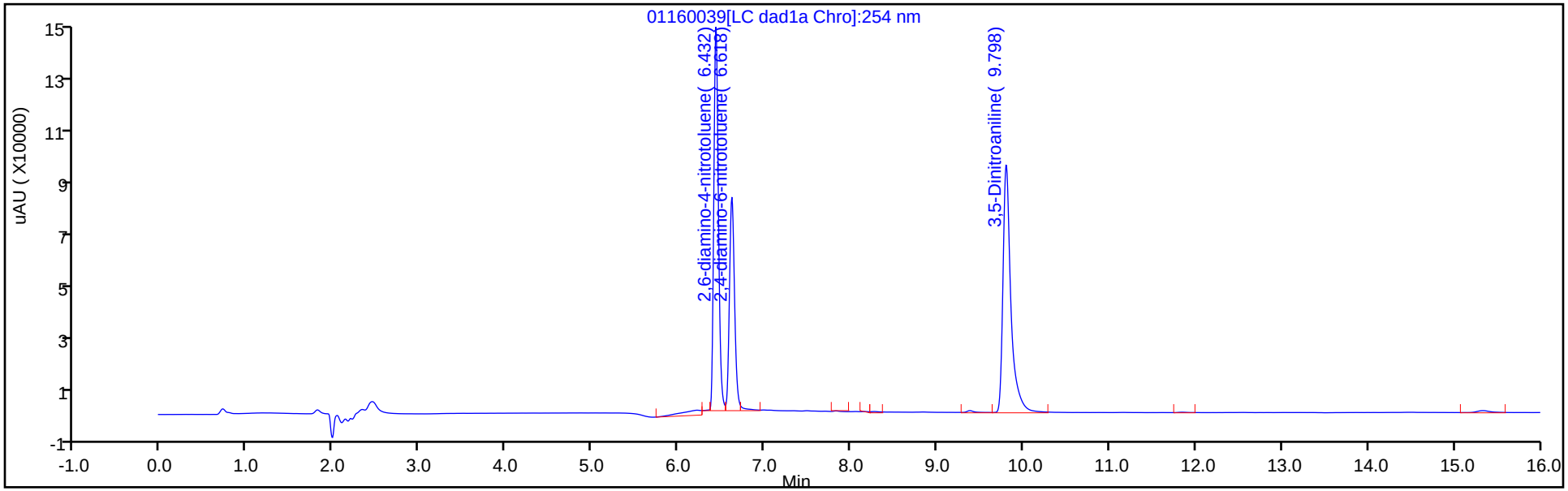
Report Date: 17-Jan-2023 12:50:38 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Denver

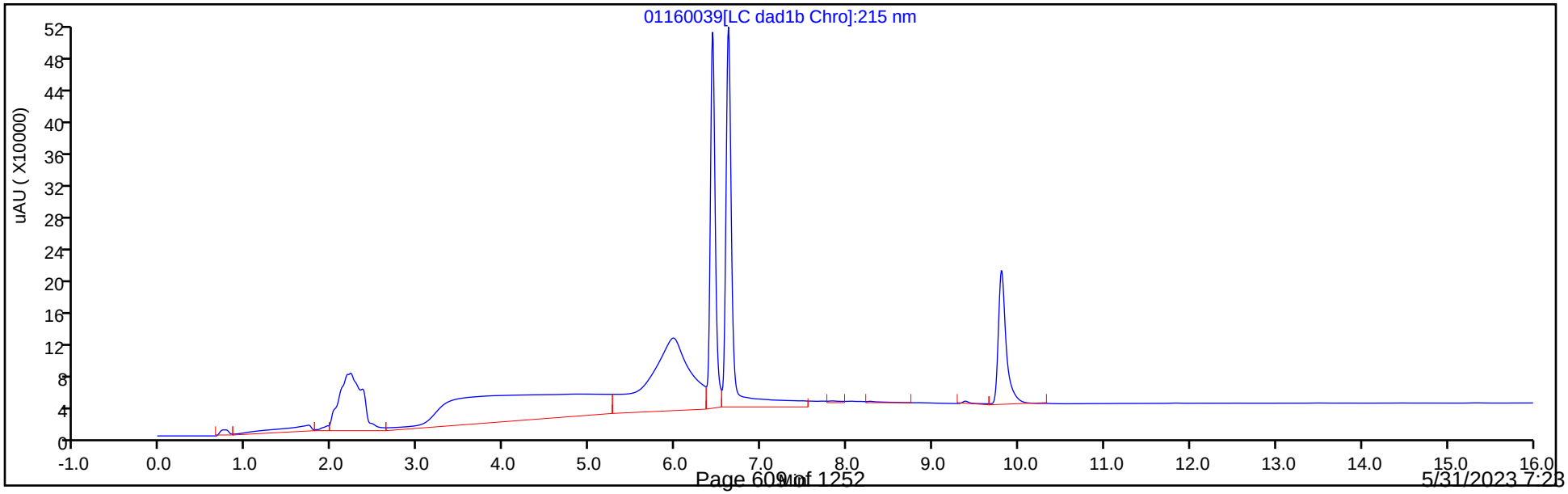
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160039.d

Injection Date:	17-Jan-2023 00:33:01	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC ADD 8			Worklist Smp#:	11
Client ID:					
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



Manual Integration/User Assign Peak Report

Eurofins Denver

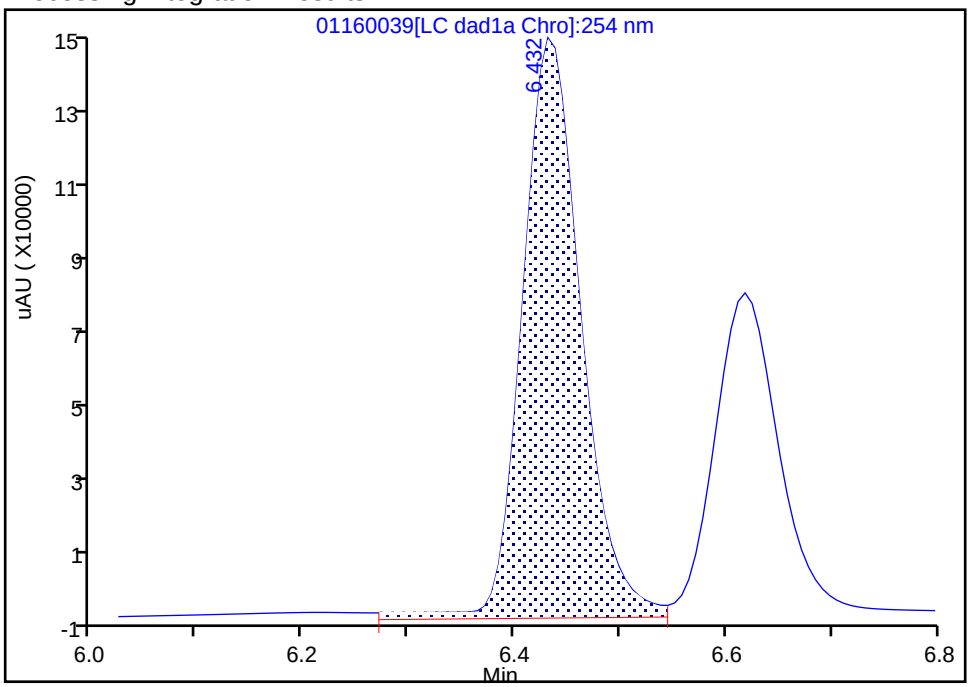
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160039.d
Injection Date: 17-Jan-2023 00:33:01 Instrument ID: CHHPLC_X3
Lims ID: IC ADD 8
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 42 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

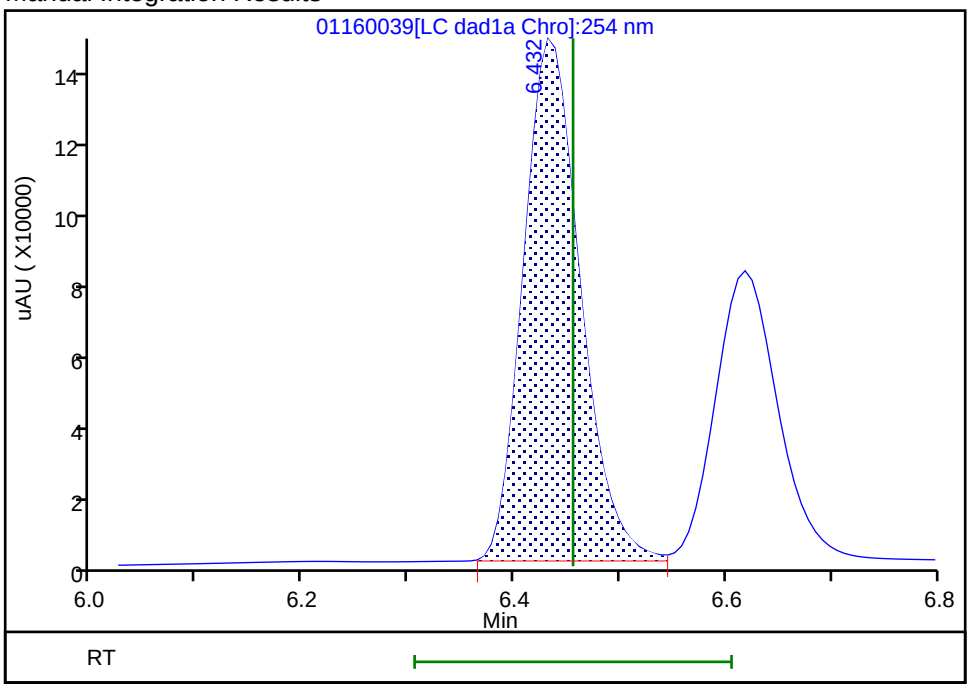
Processing Integration Results

RT: 6.43
Area: 581780
Amount: 2.370843
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 556860
Amount: 2.420604
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:22:46
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

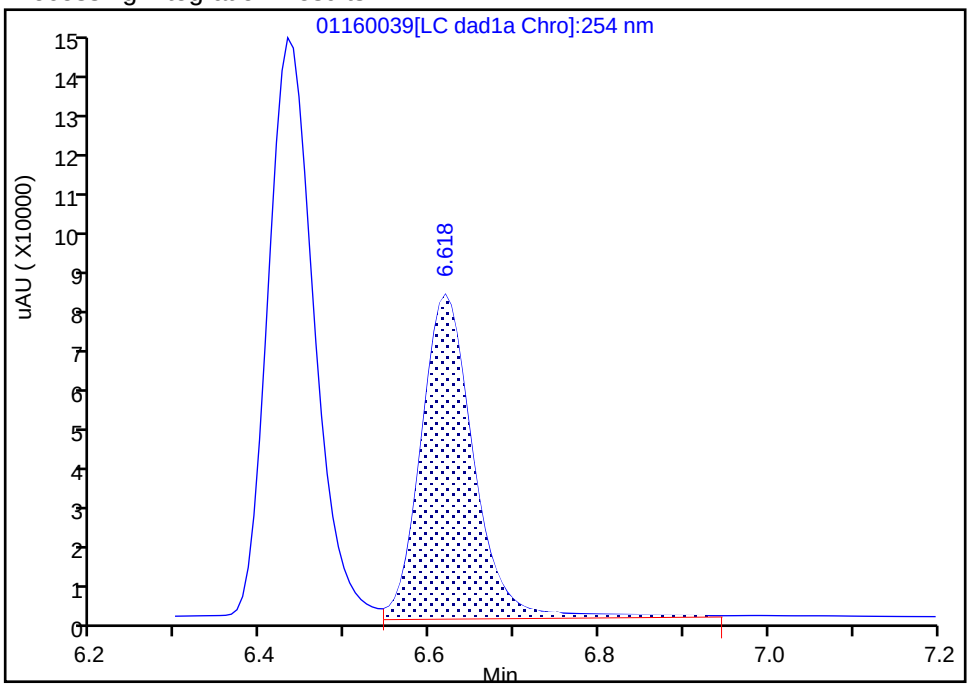
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160039.d				
Injection Date:	17-Jan-2023 00:33:01	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 8				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	42	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

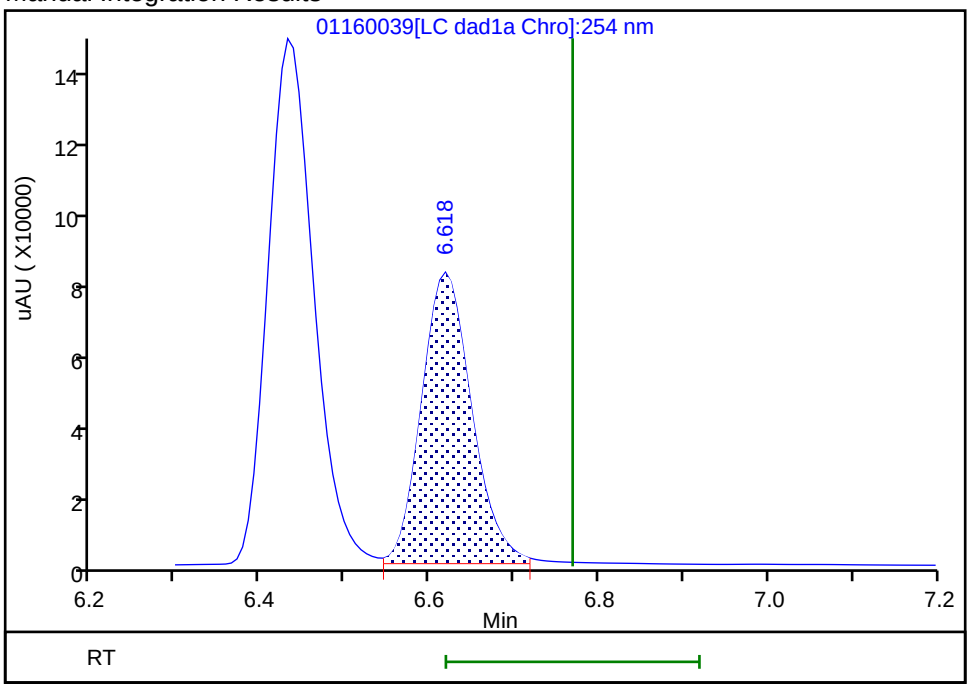
Processing Integration Results

RT: 6.62
Area: 364706
Amount: 2.146312
Amount Units: ug/mL



Manual Integration Results

RT: 6.62
Area: 341365
Amount: 2.330580
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:22:47
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160040.D
Lims ID: IC ADD 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 17-Jan-2023 00:56:21 ALS Bottle#: 43 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICADD7
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub10

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jan-2023 12:50:39 Calib Date: 17-Jan-2023 06:47:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160055.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: LV5D Date: 17-Jan-2023 12:23:10

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	6.457	6.455	0.002	234891	1.00	1.02	M
5 2,4-diamino-6-nitrotoluene	1	6.637	6.769	-0.132	148050	1.00	1.01	M
14 3,5-Dinitroaniline	1	9.804	9.800	0.004	245164	1.00	1.00	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

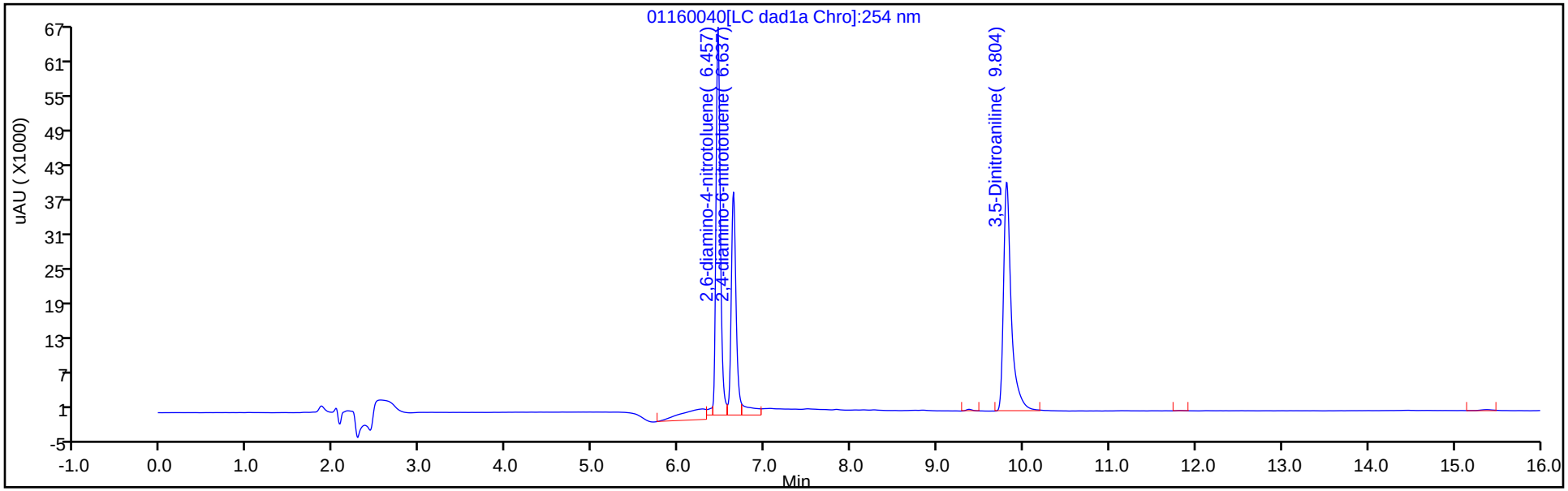
8330_ADDs_00035 Amount Added: 50.00 Units: uL

Report Date: 17-Jan-2023 12:50:39 Chrom Revision: 2.3 20-Dec-2022 14:14:06

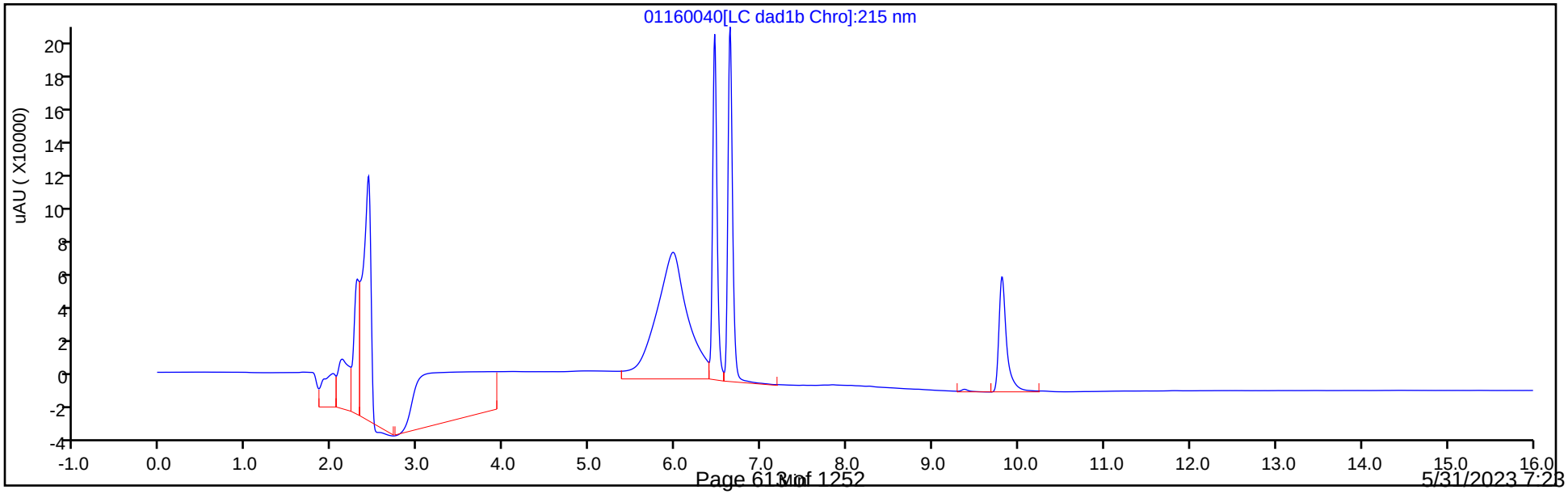
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160040.d				
Injection Date:	17-Jan-2023 00:56:21	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC ADD 7			Worklist Smp#:	12
Client ID:					
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



Manual Integration/User Assign Peak Report

Eurofins Denver

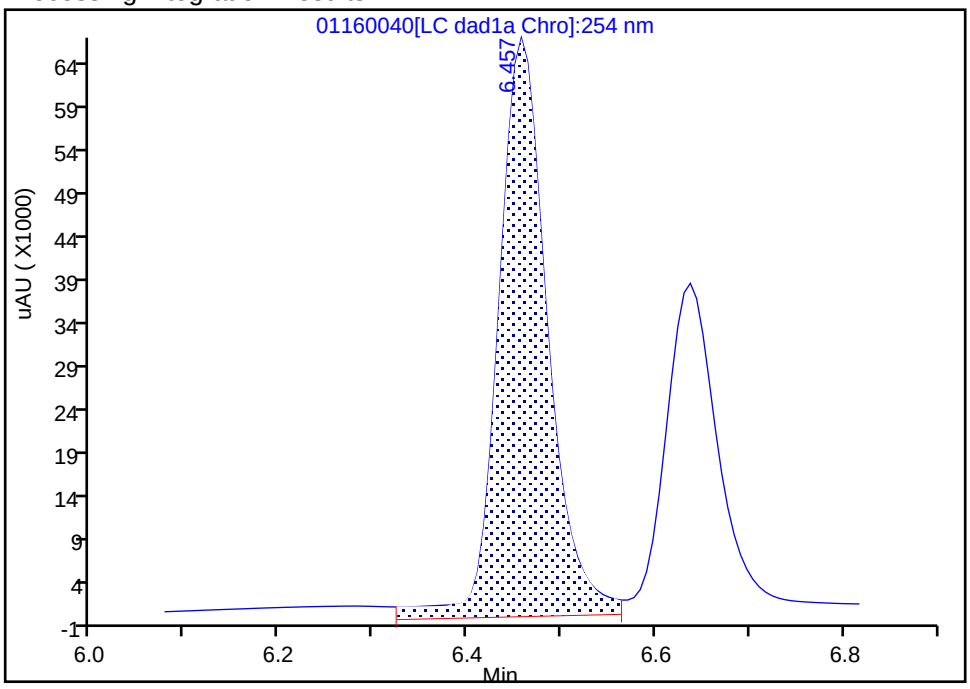
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Injection Date: 17-Jan-2023 00:56:21 Instrument ID: CHHPLC_X3
Lims ID: IC ADD 7
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 43 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

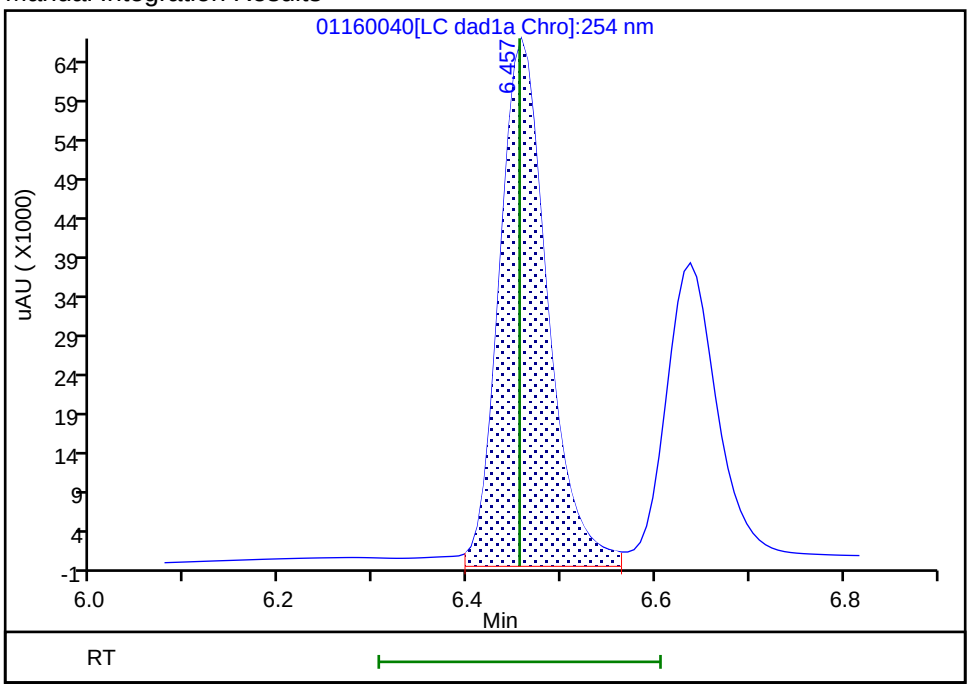
Processing Integration Results

RT: 6.46
Area: 243731
Amount: 0.963471
Amount Units: ug/mL



Manual Integration Results

RT: 6.46
Area: 234891
Amount: 1.018868
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:23:08
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

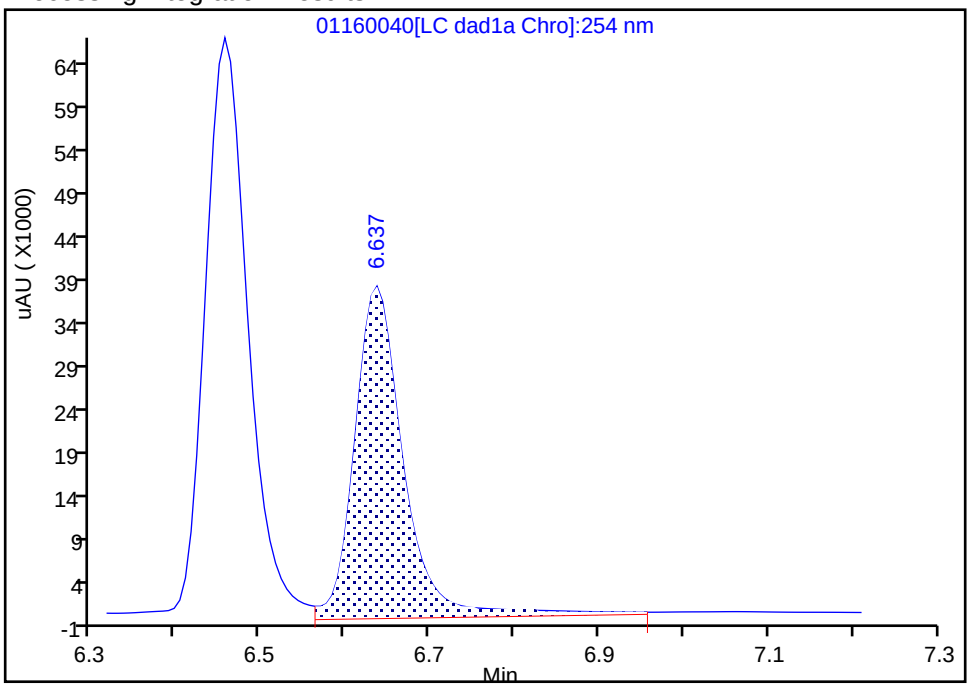
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160040.d
Injection Date: 17-Jan-2023 00:56:21 Instrument ID: CHHPLC_X3
Lims ID: IC ADD 7
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 43 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

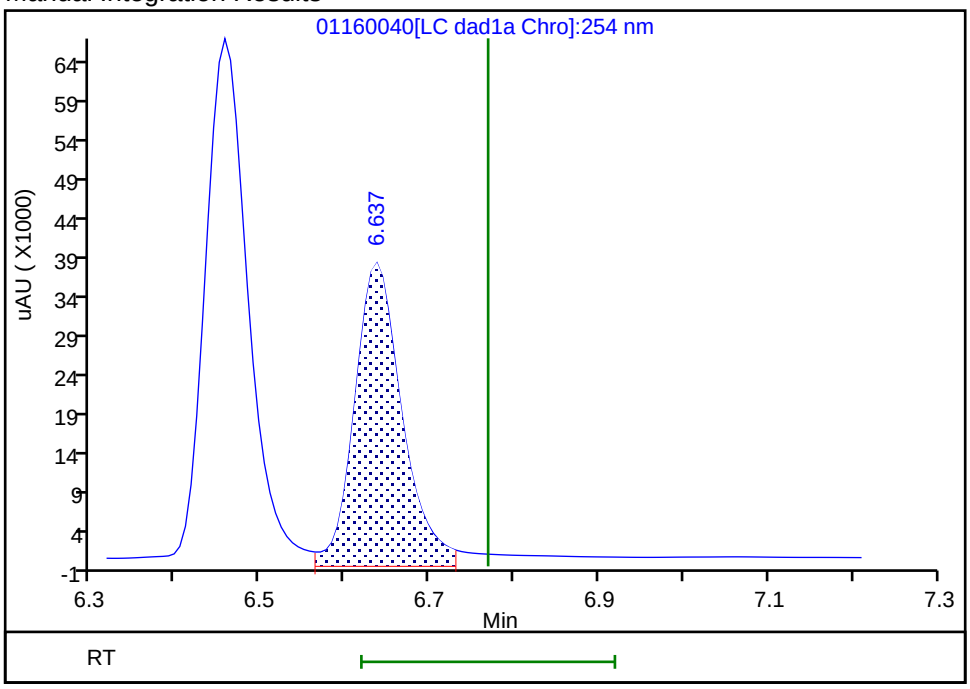
Processing Integration Results

RT: 6.64
Area: 156243
Amount: 0.928768
Amount Units: ug/mL



Manual Integration Results

RT: 6.64
Area: 148050
Amount: 1.010772
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:23:09
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160041.D
Lims ID: IC ADD 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 17-Jan-2023 01:19:43 ALS Bottle#: 44 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICADD6
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub10

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jan-2023 12:50:39 Calib Date: 17-Jan-2023 06:47:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160055.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: LV5D Date: 17-Jan-2023 12:23:22

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	6.460	6.455	0.005	155237	0.7000	0.6721	M
5 2,4-diamino-6-nitrotoluene	1	6.640	6.769	-0.129	95423	0.7000	0.6515	M
14 3,5-Dinitroaniline	1	9.800	9.800	0.000	169039	0.7000	0.6904	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

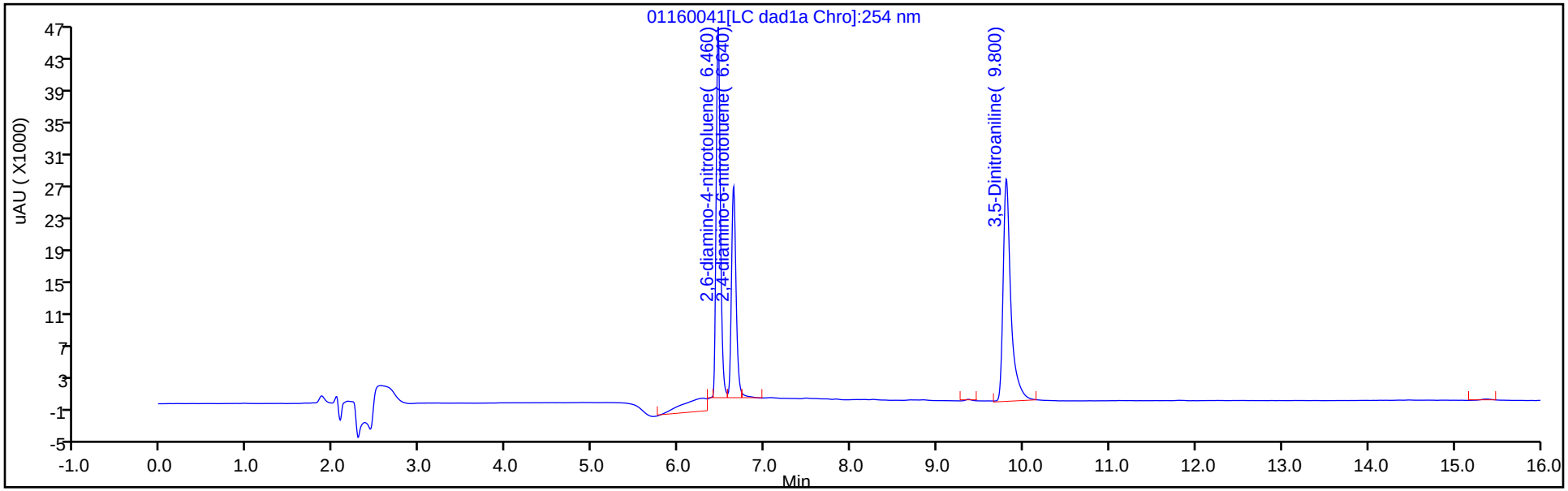
8330_ADDs_00035 Amount Added: 35.00 Units: uL

Report Date: 17-Jan-2023 12:50:39 Chrom Revision: 2.3 20-Dec-2022 14:14:06

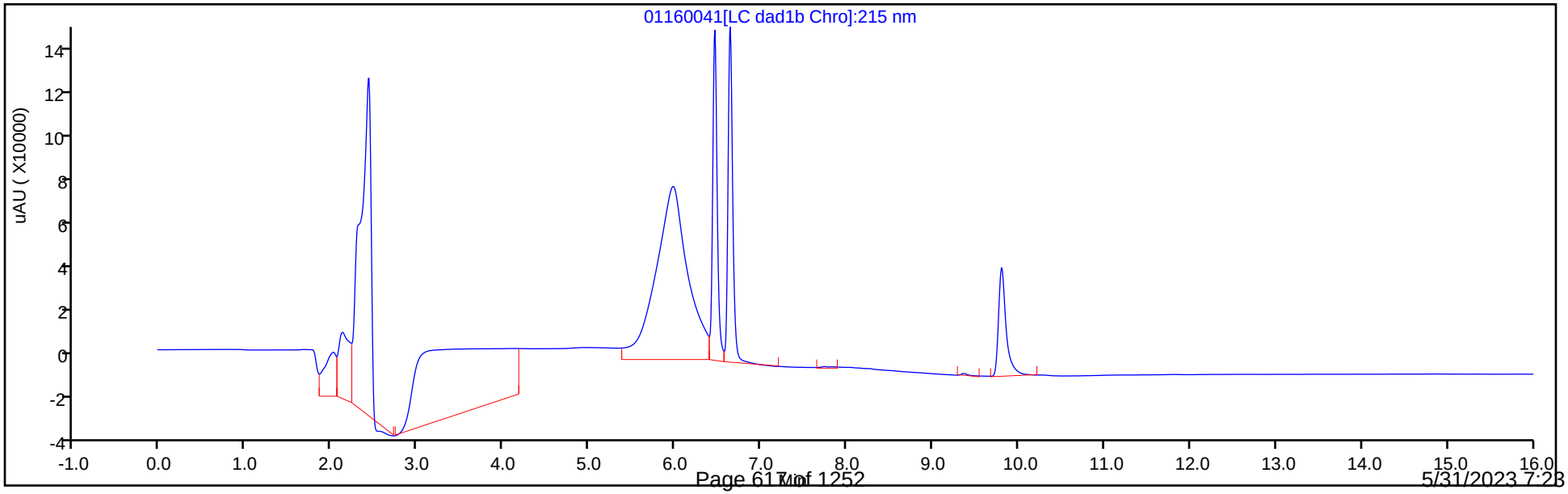
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160041.d				
Injection Date:	17-Jan-2023 01:19:43	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC ADD 6			Worklist Smp#:	13
Client ID:					
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



Manual Integration/User Assign Peak Report

Eurofins Denver

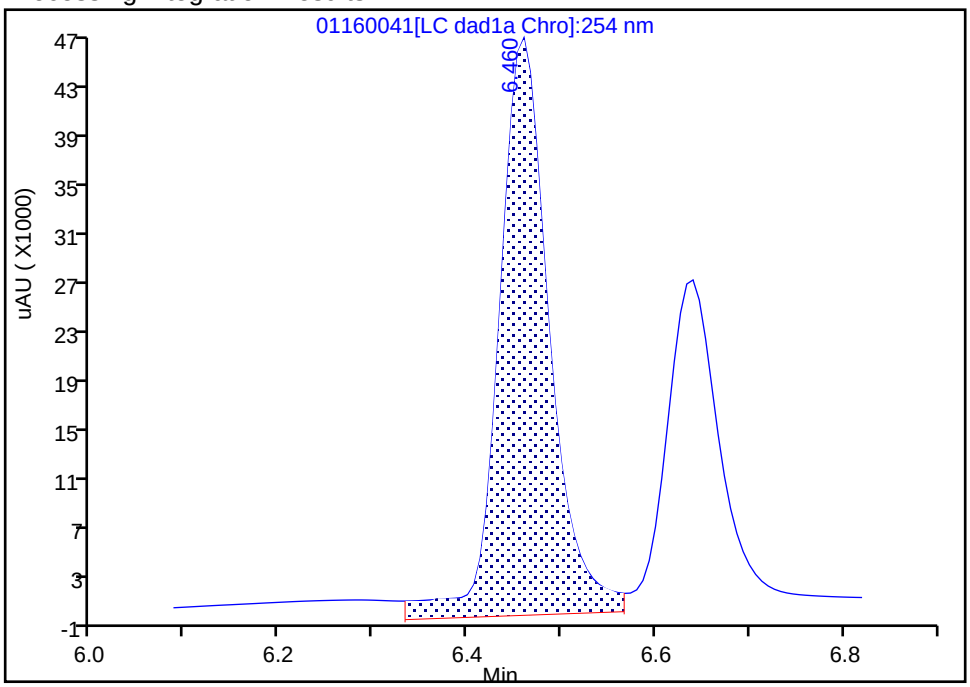
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160041.d
Injection Date: 17-Jan-2023 01:19:43 Instrument ID: CHHPLC_X3
Lims ID: IC ADD 6
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 44 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

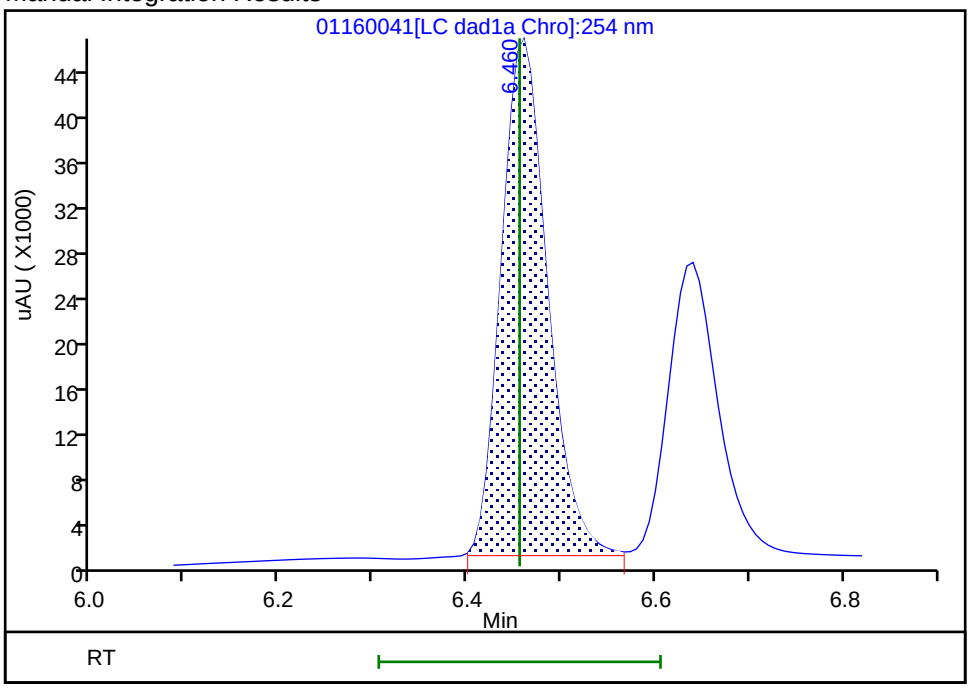
Processing Integration Results

RT: 6.46
Area: 174539
Amount: 0.677131
Amount Units: ug/mL



Manual Integration Results

RT: 6.46
Area: 155237
Amount: 0.672083
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:23:20
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

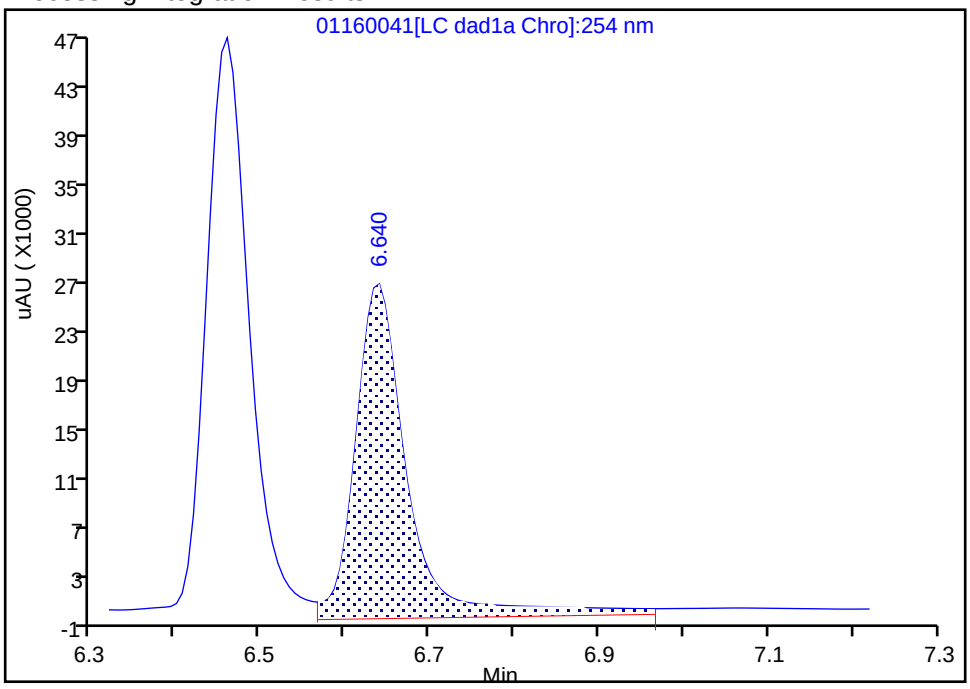
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160041.d				
Injection Date:	17-Jan-2023 01:19:43	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 6				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	44	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

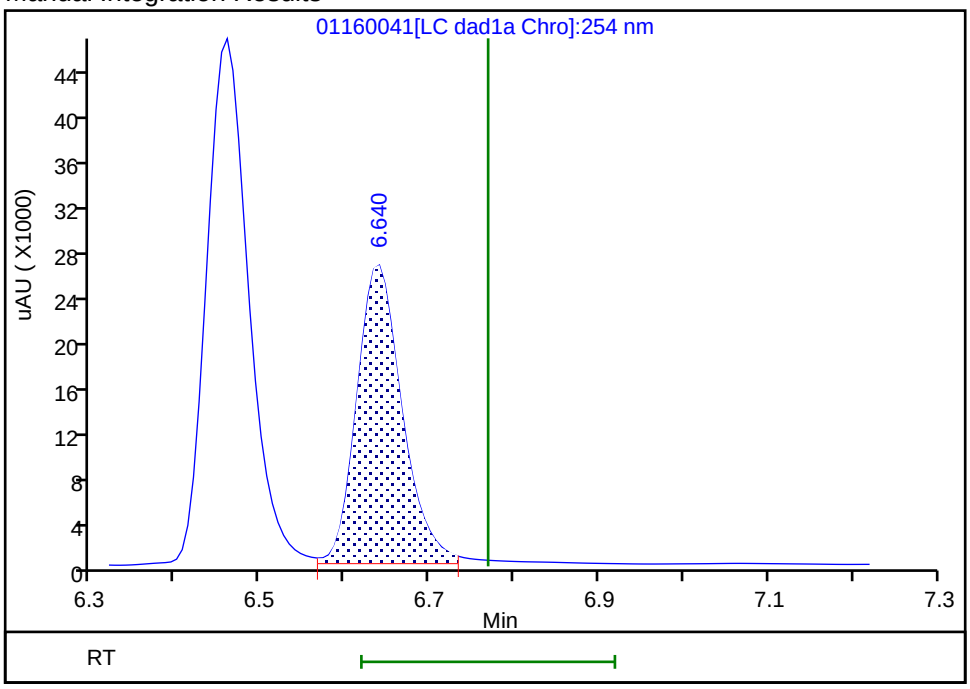
Processing Integration Results

RT: 6.64
Area: 114251
Amount: 0.682909
Amount Units: ug/mL



Manual Integration Results

RT: 6.64
Area: 95423
Amount: 0.651475
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:23:21
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160042.D
Lims ID: IC ADD 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 17-Jan-2023 01:43:11 ALS Bottle#: 45 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICADD5
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub10

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jan-2023 12:50:40 Calib Date: 17-Jan-2023 06:47:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160055.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: LV5D Date: 17-Jan-2023 12:30:57

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	6.459	6.455	0.004	94399	0.4000	0.4072	M
5 2,4-diamino-6-nitrotoluene	1	6.639	6.769	-0.130	59001	0.4000	0.4028	M
14 3,5-Dinitroaniline	1	9.806	9.800	0.006	96632	0.4000	0.3953	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00035 Amount Added: 20.00 Units: uL

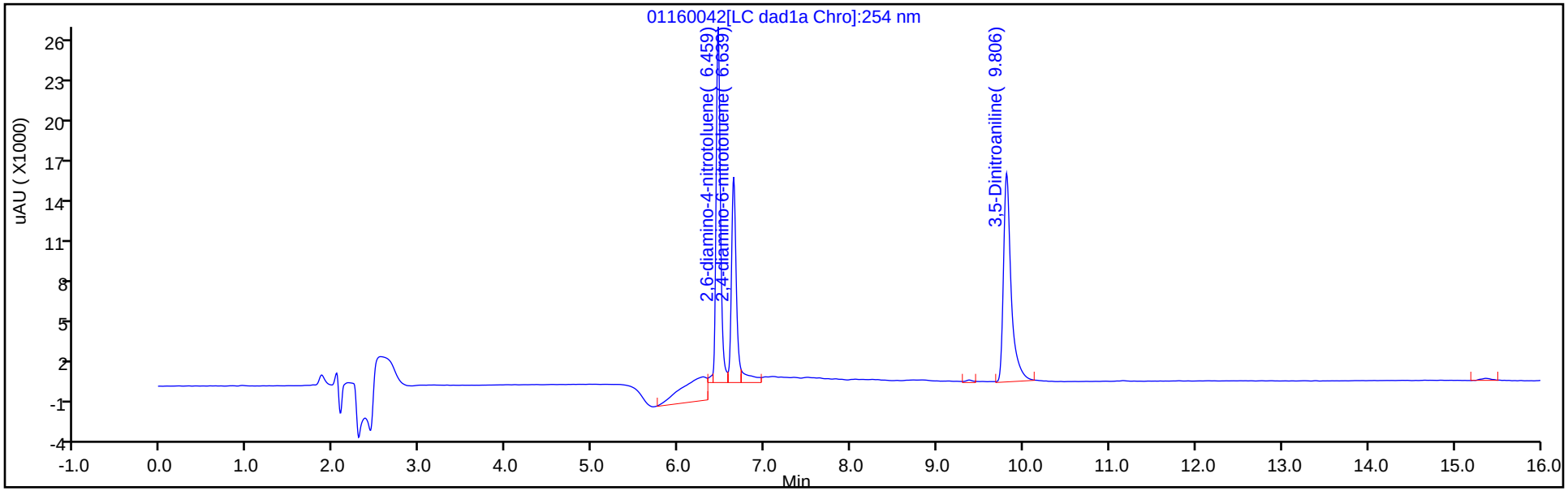
Report Date: 17-Jan-2023 12:50:40 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Denver

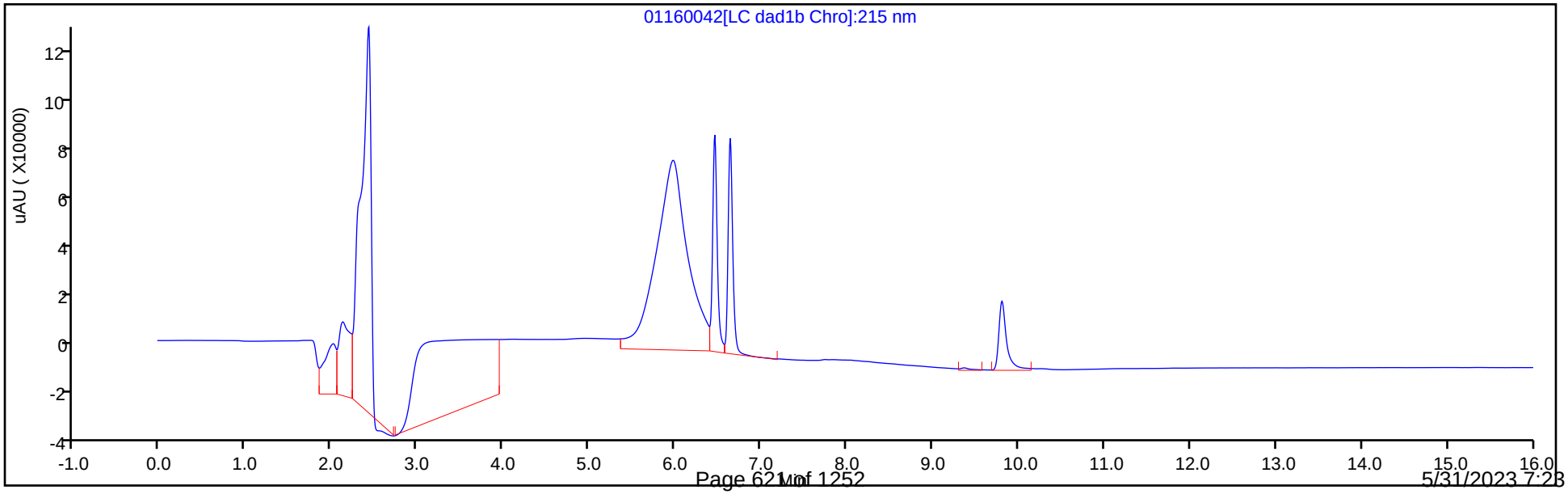
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160042.d

Injection Date:	17-Jan-2023 01:43:11	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC ADD 5			Worklist Smp#:	14
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	45
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

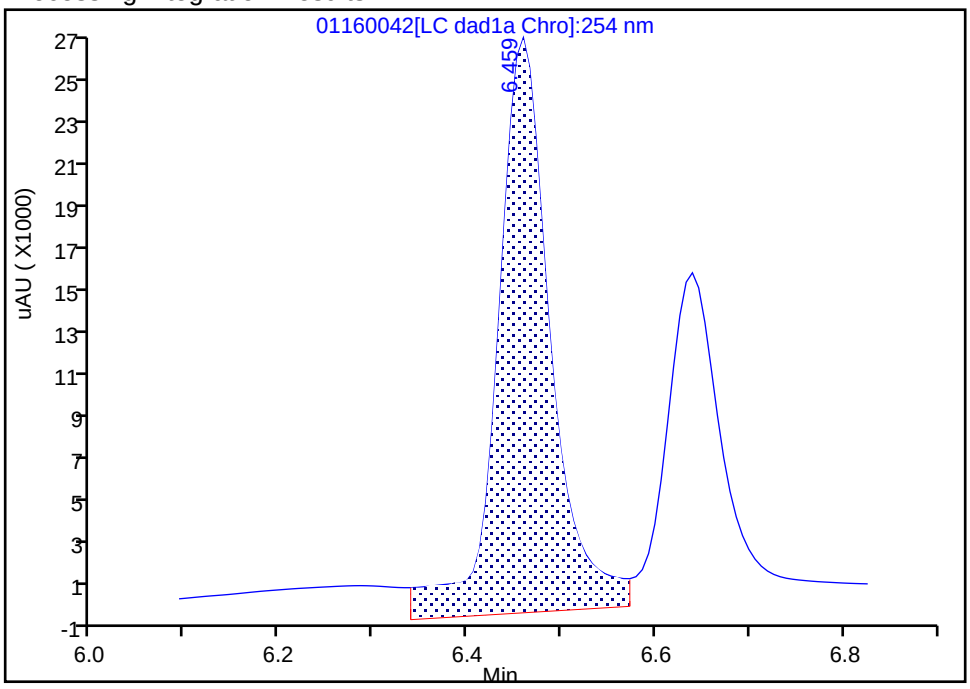
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160042.d				
Injection Date:	17-Jan-2023 01:43:11	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 5				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	45	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

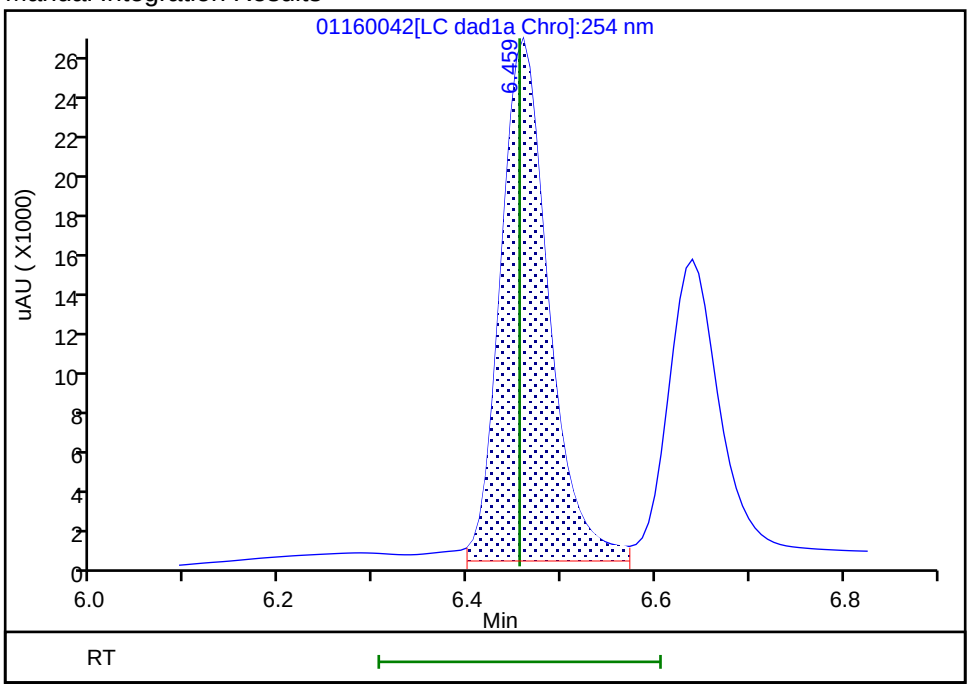
Processing Integration Results

RT: 6.46
Area: 108476
Amount: 0.410648
Amount Units: ug/mL



Manual Integration Results

RT: 6.46
Area: 94399
Amount: 0.407217
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:30:54
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

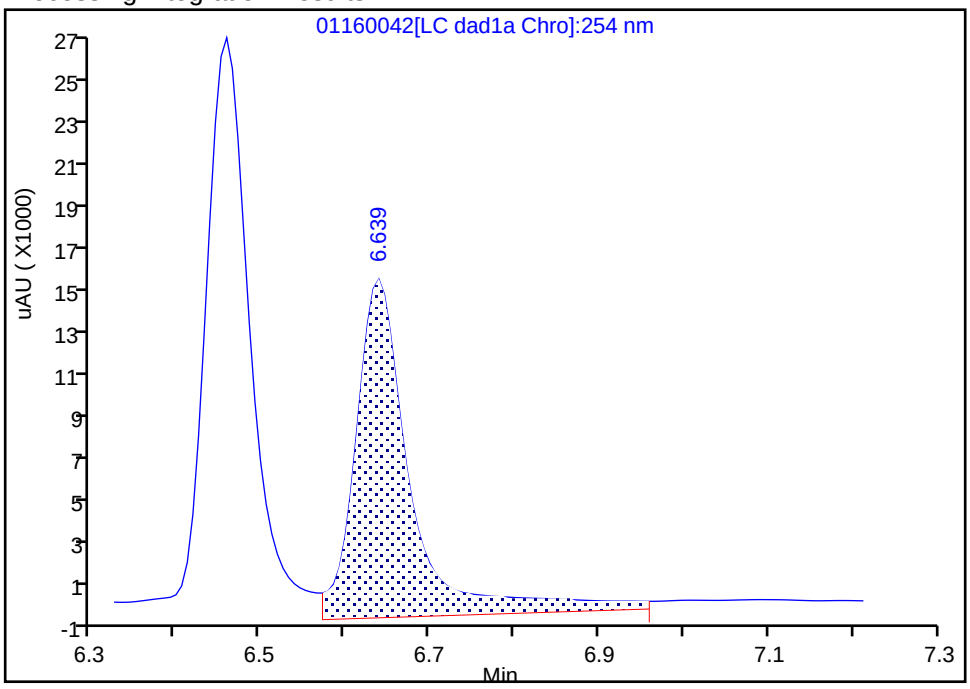
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160042.d				
Injection Date:	17-Jan-2023 01:43:11	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 5				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	45	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

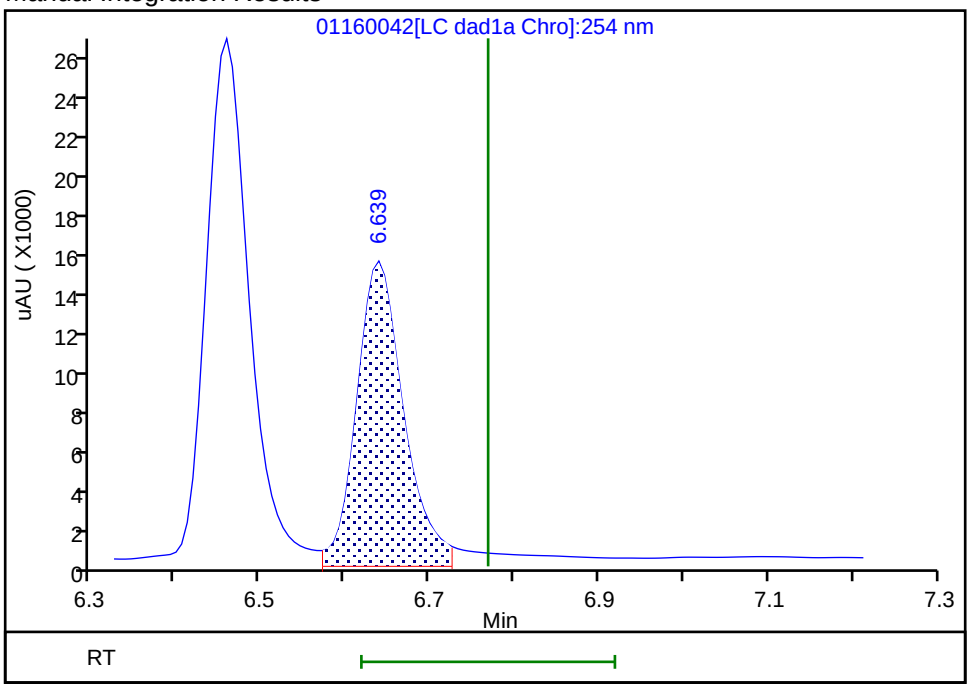
Processing Integration Results

RT: 6.64
Area: 71991
Amount: 0.437489
Amount Units: ug/mL



Manual Integration Results

RT: 6.64
Area: 59001
Amount: 0.402814
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:30:55
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160043.D
Lims ID: IC ADD 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 17-Jan-2023 02:06:34 ALS Bottle#: 46 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICADD4
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub10

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jan-2023 12:50:41 Calib Date: 17-Jan-2023 06:47:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160055.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: LV5D Date: 17-Jan-2023 12:31:13

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	6.460	6.455	0.005	56309	0.2500	0.2414	M
5 2,4-diamino-6-nitrotoluene	1	6.640	6.769	-0.129	34670	0.2500	0.2367	M
14 3,5-Dinitroaniline	1	9.800	9.800	0.000	59459	0.2500	0.2439	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00035 Amount Added: 12.50 Units: uL

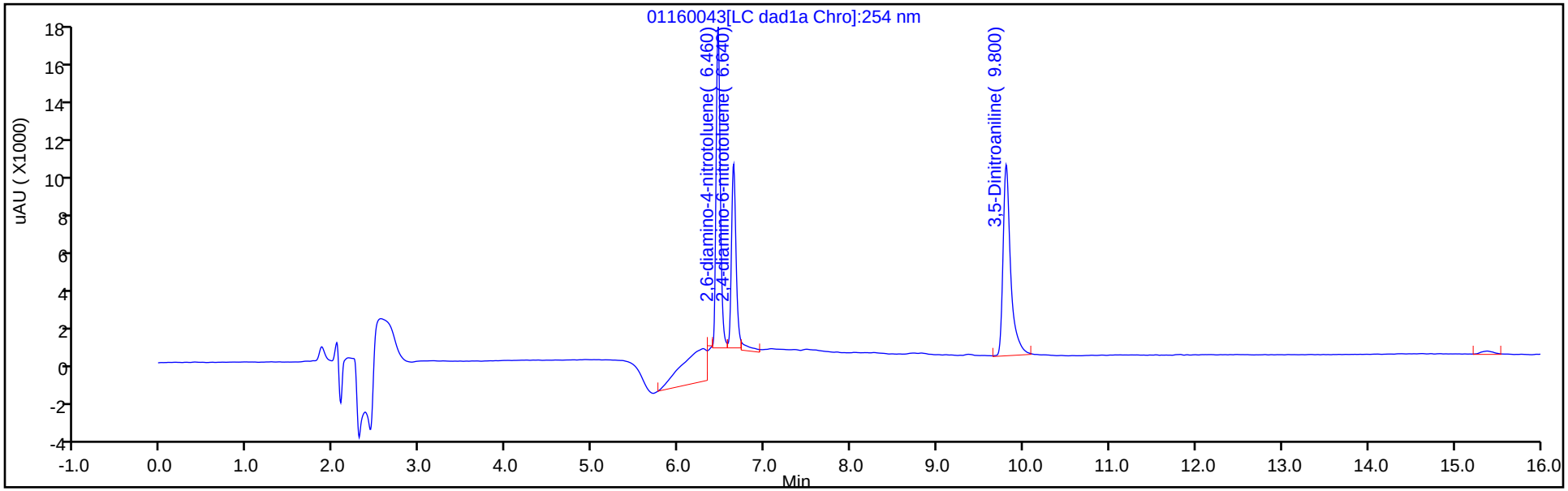
Report Date: 17-Jan-2023 12:50:41 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Denver

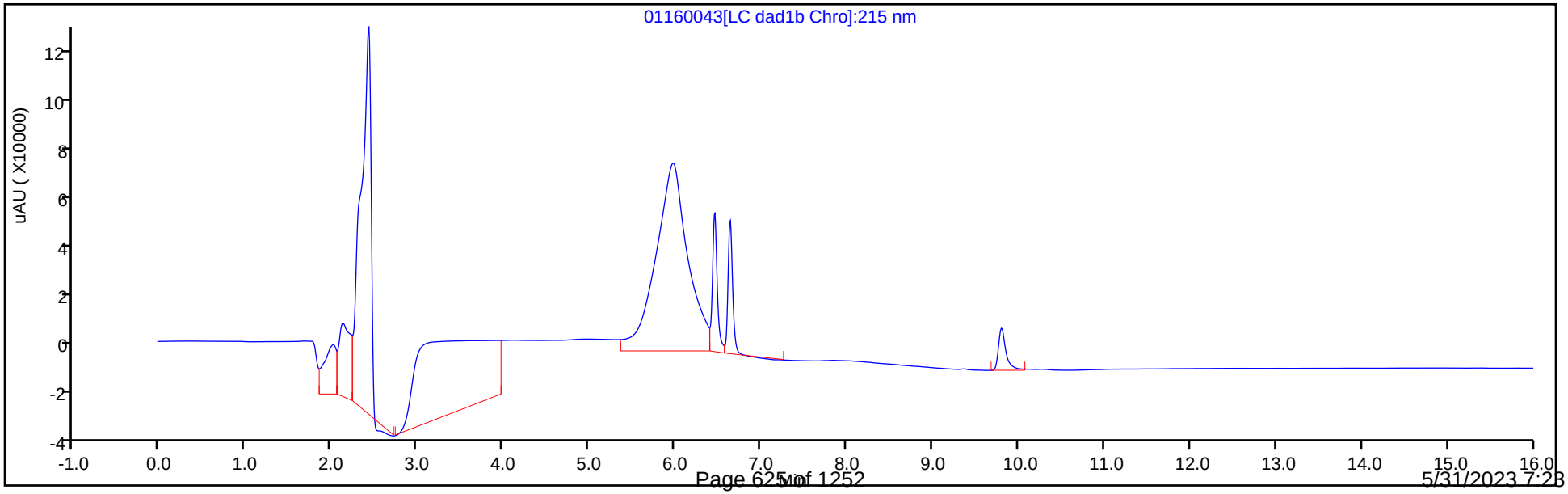
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160043.d

Injection Date:	17-Jan-2023 02:06:34	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC ADD 4			Worklist Smp#:	15
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	46
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

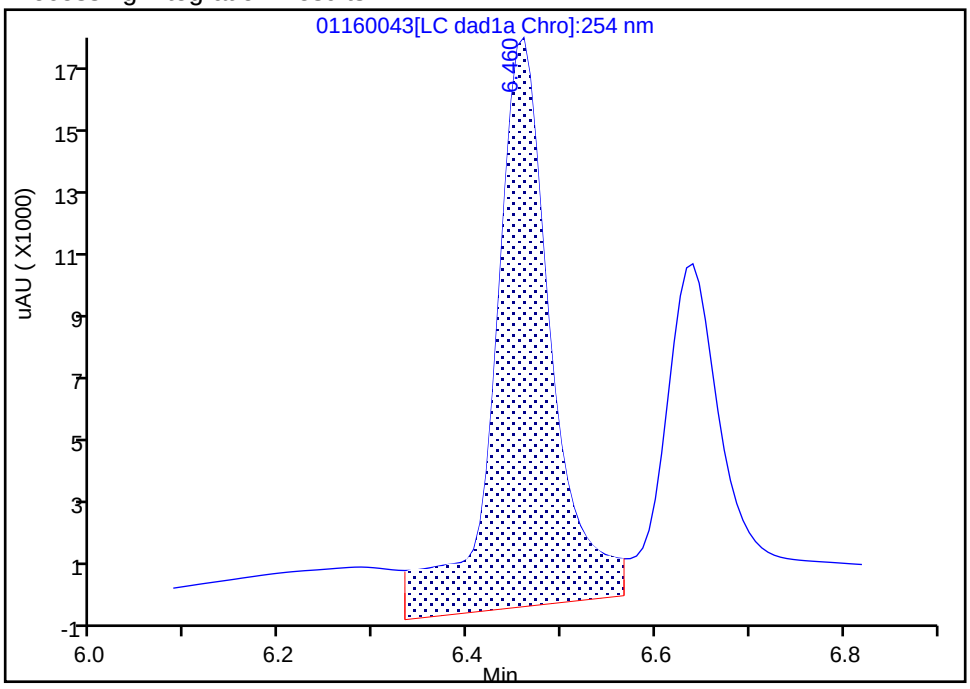
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160043.d				
Injection Date:	17-Jan-2023 02:06:34	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 4				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	46	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

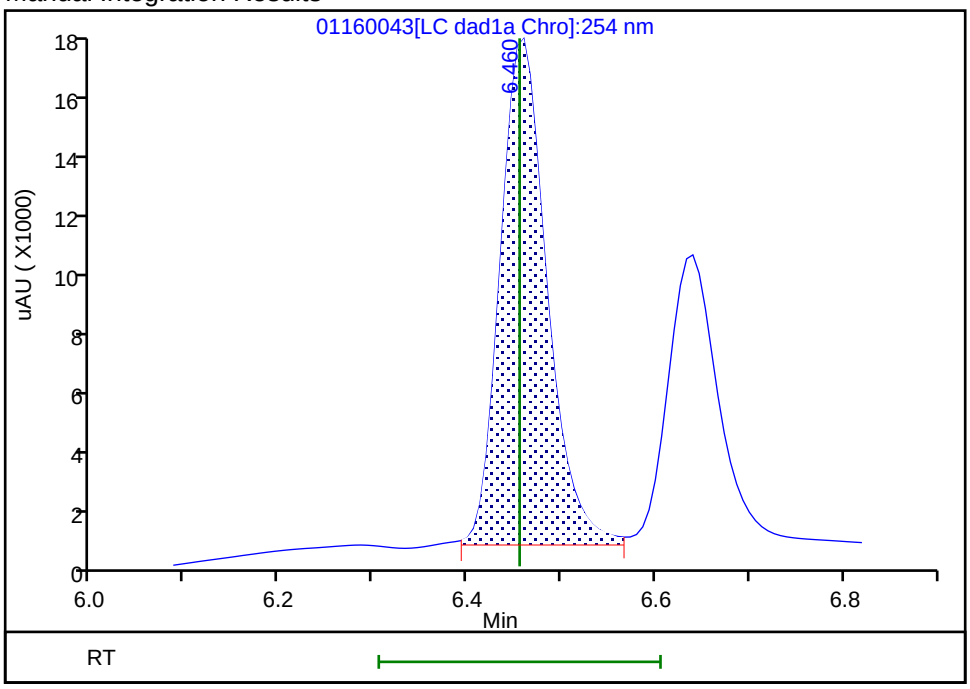
Processing Integration Results

RT: 6.46
Area: 74424
Amount: 0.275328
Amount Units: ug/mL



Manual Integration Results

RT: 6.46
Area: 56309
Amount: 0.241387
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:31:11
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

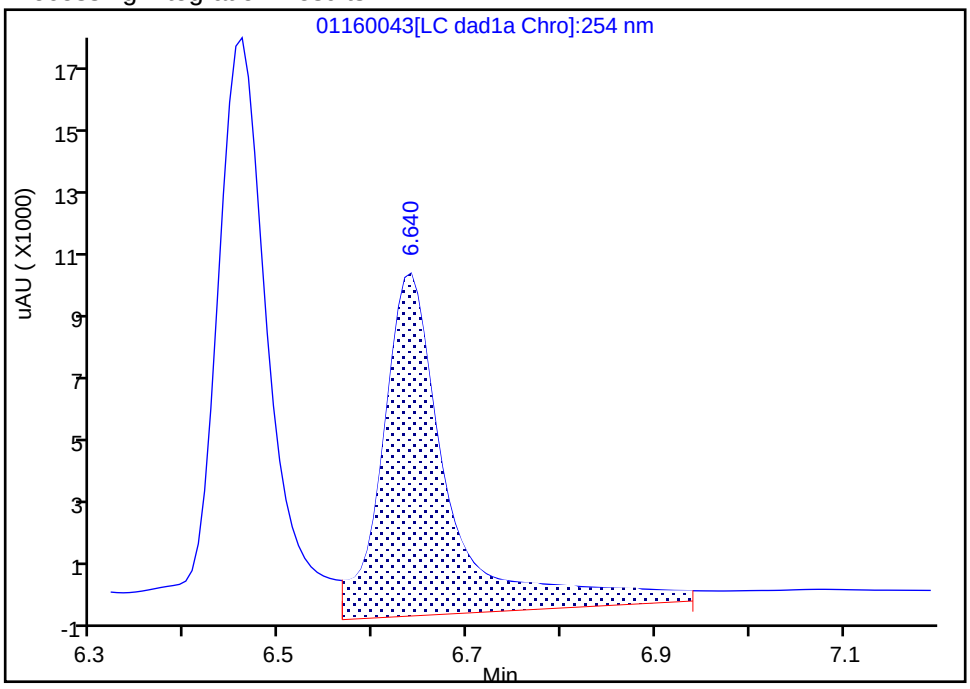
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160043.d				
Injection Date:	17-Jan-2023 02:06:34	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 4				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	46	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

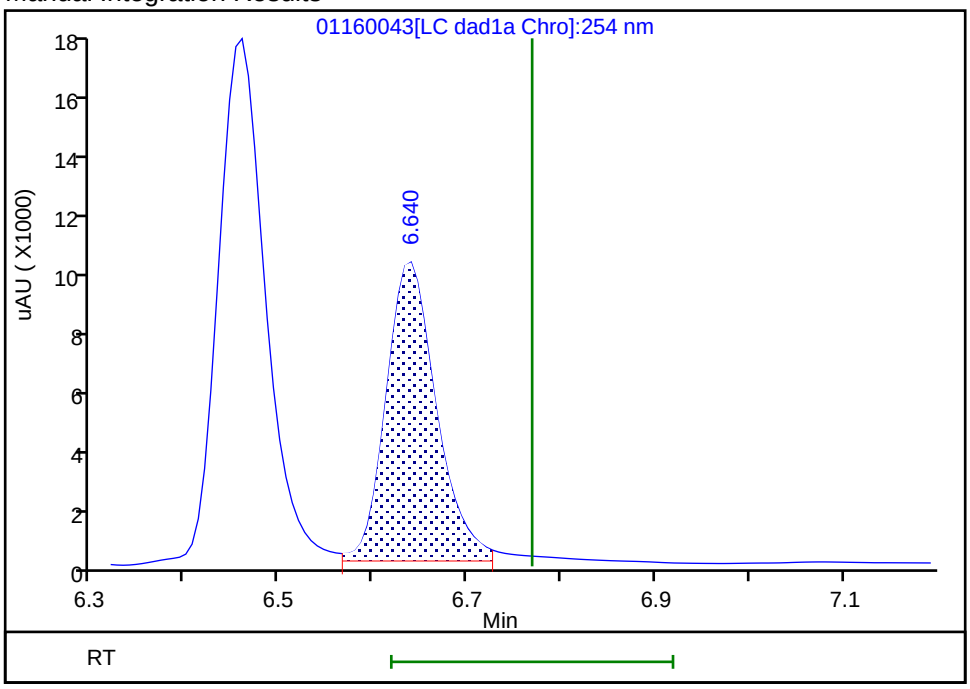
Processing Integration Results

RT: 6.64
Area: 50478
Amount: 0.310727
Amount Units: ug/mL



Manual Integration Results

RT: 6.64
Area: 34670
Amount: 0.236700
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:31:11
Audit Action: Assigned New Baseline Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160044.D
Lims ID: IC ADD 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 17-Jan-2023 02:30:00 ALS Bottle#: 47 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICADD3
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub10

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jan-2023 12:50:41 Calib Date: 17-Jan-2023 06:47:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160055.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: LV5D Date: 17-Jan-2023 12:31:24

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	6.459	6.455	0.004	24702	0.1000	0.1038	M
5 2,4-diamino-6-nitrotoluene	1	6.632	6.769	-0.137	14908	0.1000	0.1018	M
14 3,5-Dinitroaniline	1	9.812	9.800	0.012	24604	0.1000	0.1019	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00035 Amount Added: 5.00 Units: uL

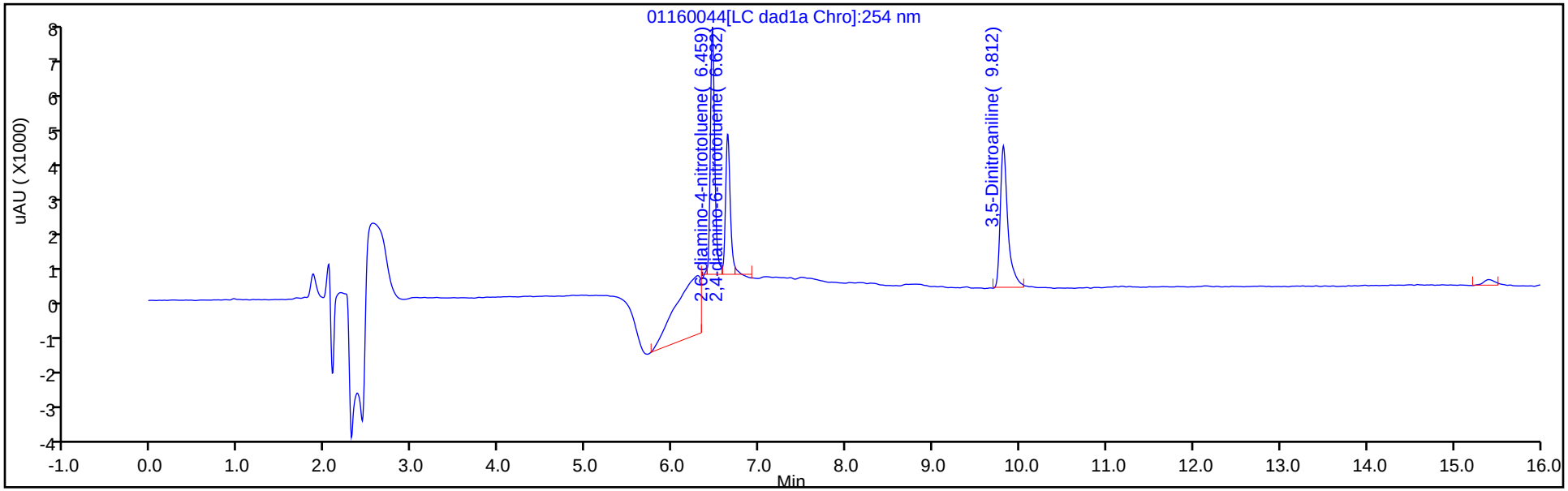
Report Date: 17-Jan-2023 12:50:41 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Denver

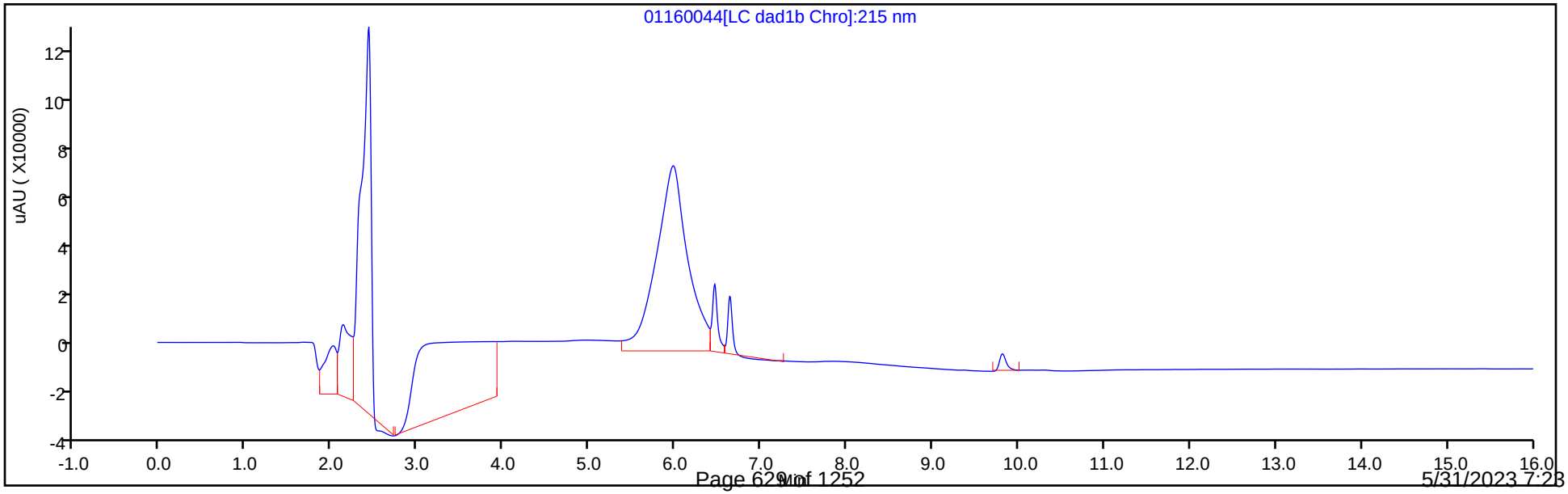
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160044.d

Injection Date:	17-Jan-2023 02:30:00	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC ADD 3			Worklist Smp#:	16
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	47
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

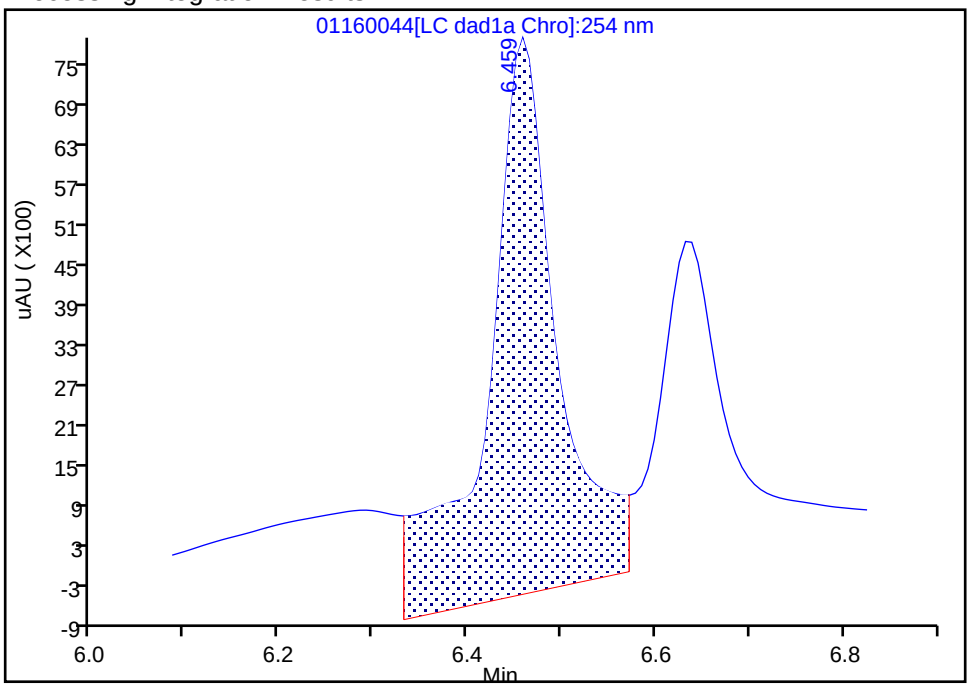
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160044.d
Injection Date: 17-Jan-2023 02:30:00 Instrument ID: CHHPLC_X3
Lims ID: IC ADD 3
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 47 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

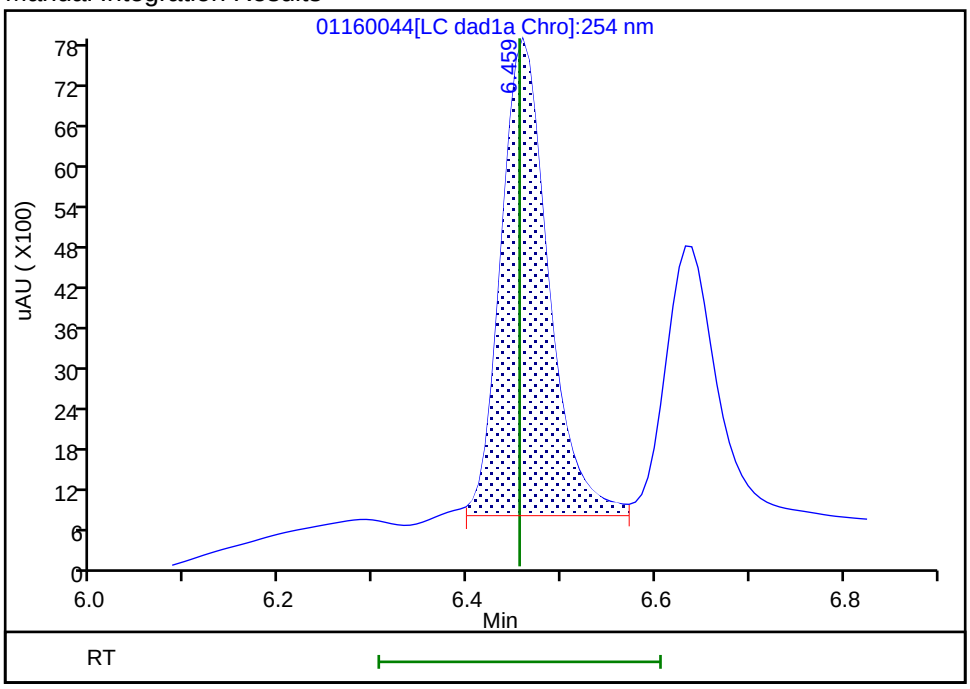
Processing Integration Results

RT: 6.46
Area: 43811
Amount: 0.142153
Amount Units: ug/mL



Manual Integration Results

RT: 6.46
Area: 24702
Amount: 0.103781
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:31:22
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

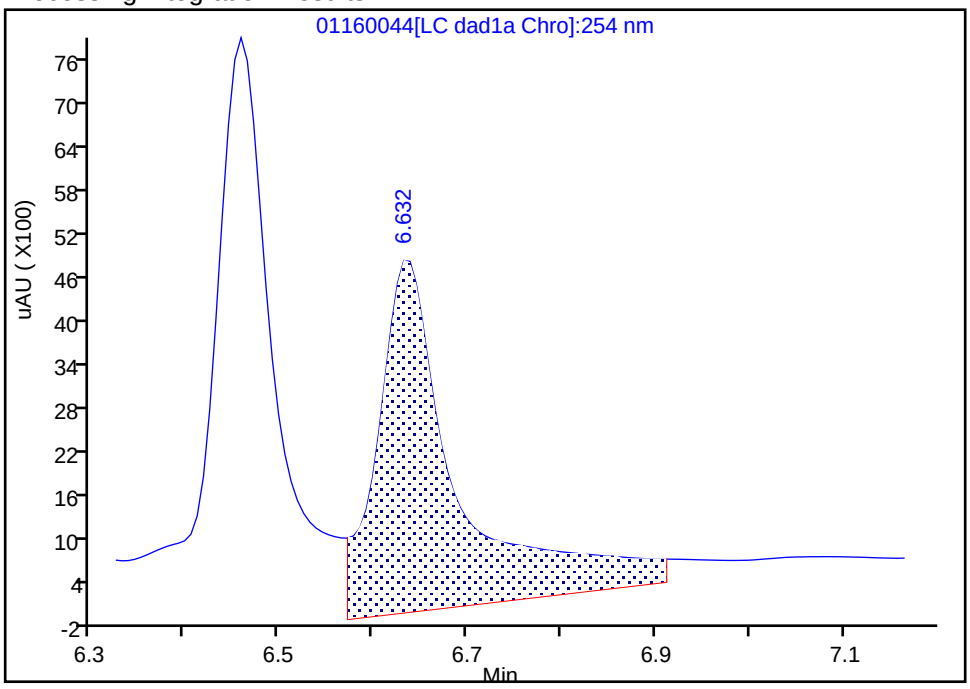
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160044.d				
Injection Date:	17-Jan-2023 02:30:00	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 3				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	47	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

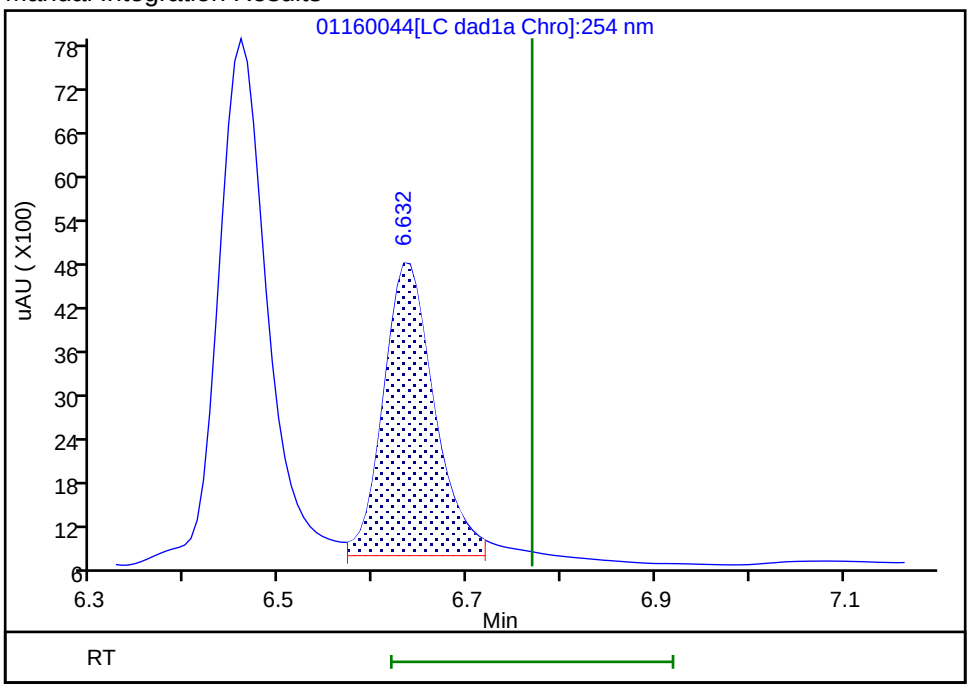
Processing Integration Results

RT: 6.63
Area: 28852
Amount: 0.169920
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 14908
Amount: 0.101780
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:31:22
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160045.D
Lims ID: IC ADD 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 17-Jan-2023 02:53:21 ALS Bottle#: 48 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICADD2
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub10

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jan-2023 12:50:42 Calib Date: 17-Jan-2023 06:47:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160055.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: LV5D Date: 17-Jan-2023 12:31:36

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	6.459	6.455	0.004	13039	0.0500	0.0530	M
5 2,4-diamino-6-nitrotoluene	1	6.639	6.769	-0.130	8175	0.0500	0.0558	M
14 3,5-Dinitroaniline	1	9.798	9.800	-0.002	12600	0.0500	0.0529	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00035 Amount Added: 2.50 Units: uL

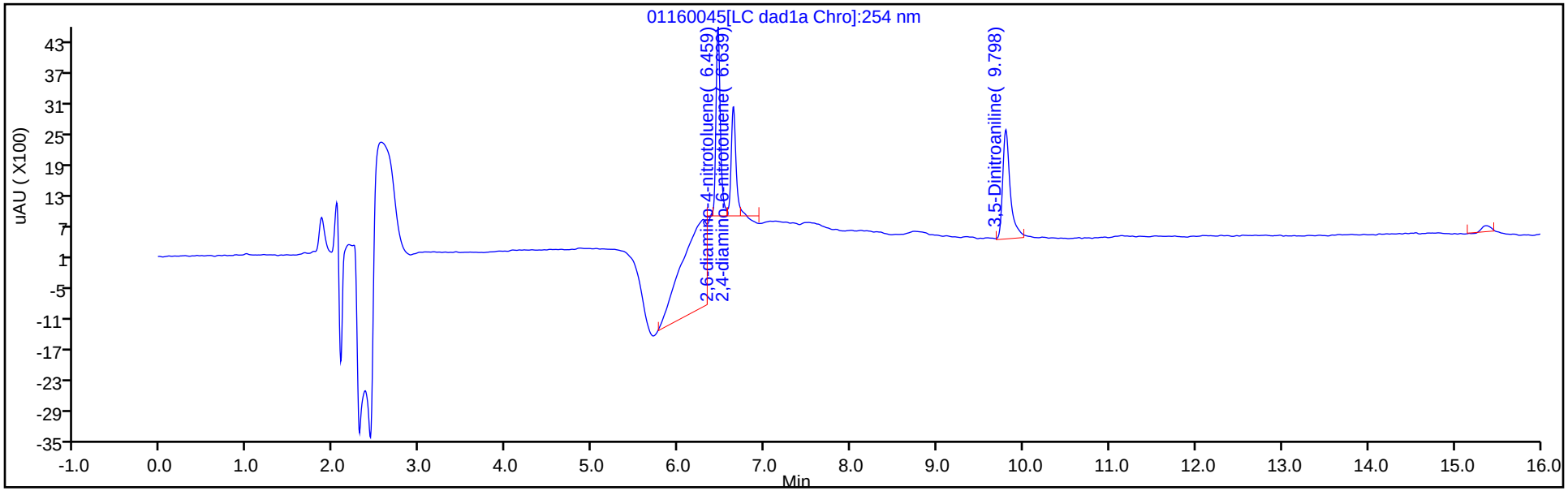
Report Date: 17-Jan-2023 12:50:42 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Denver

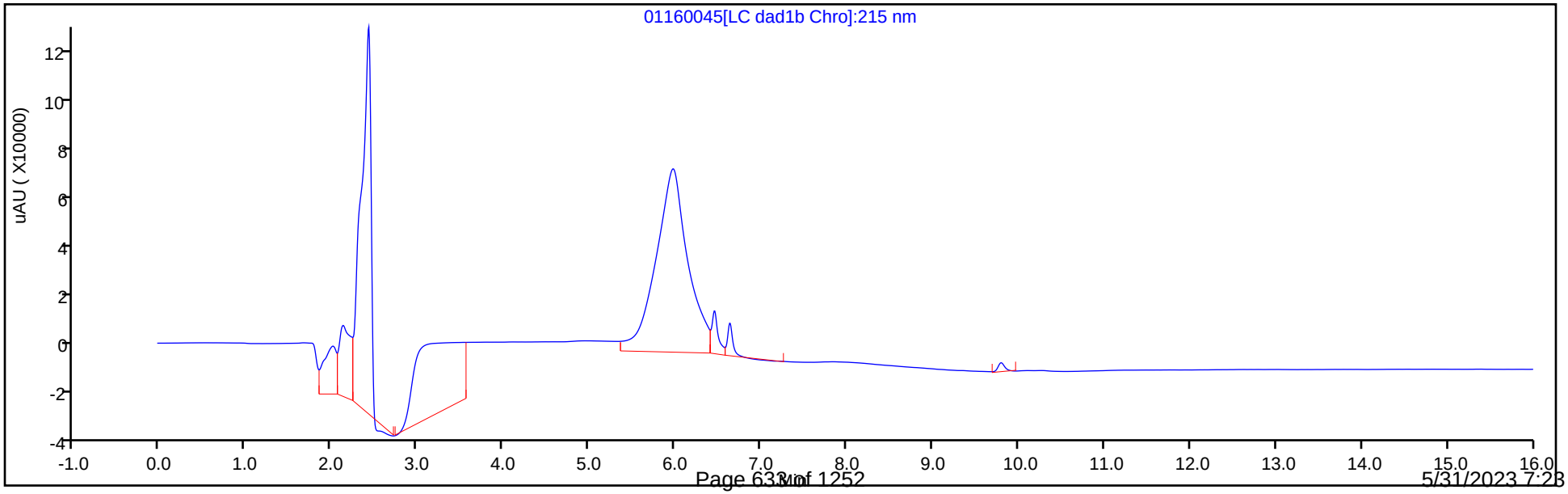
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160045.d

Injection Date:	17-Jan-2023 02:53:21	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC ADD 2			Worklist Smp#:	17
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	48
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

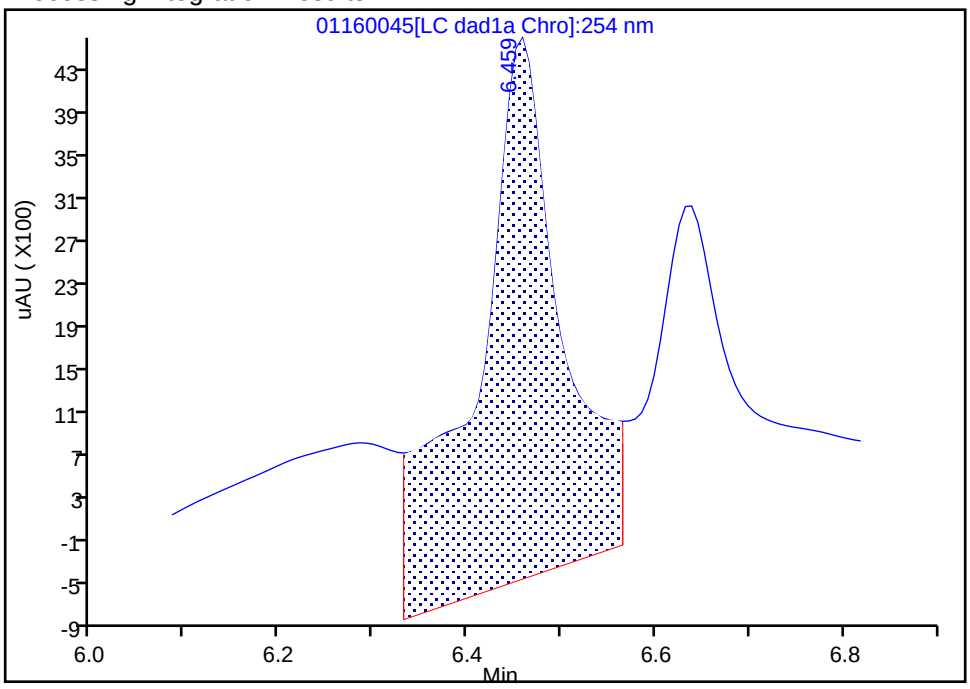
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160045.d
Injection Date: 17-Jan-2023 02:53:21 Instrument ID: CHHPLC_X3
Lims ID: IC ADD 2
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 48 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

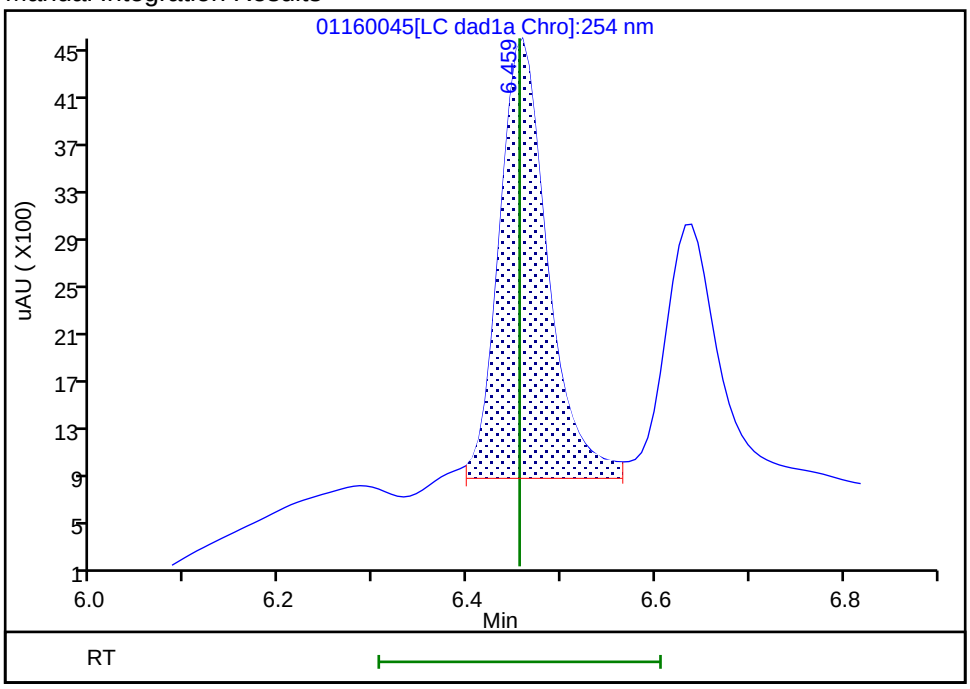
Processing Integration Results

RT: 6.46
Area: 31801
Amount: 0.089109
Amount Units: ug/mL



Manual Integration Results

RT: 6.46
Area: 13039
Amount: 0.053005
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:31:33
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

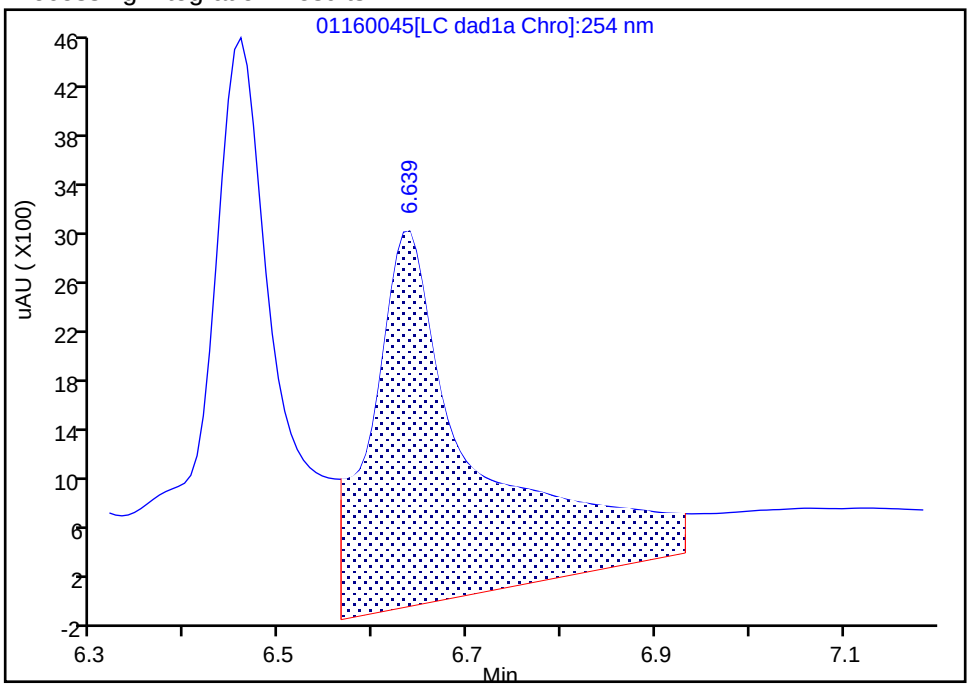
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160045.d				
Injection Date:	17-Jan-2023 02:53:21	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 2				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	48	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

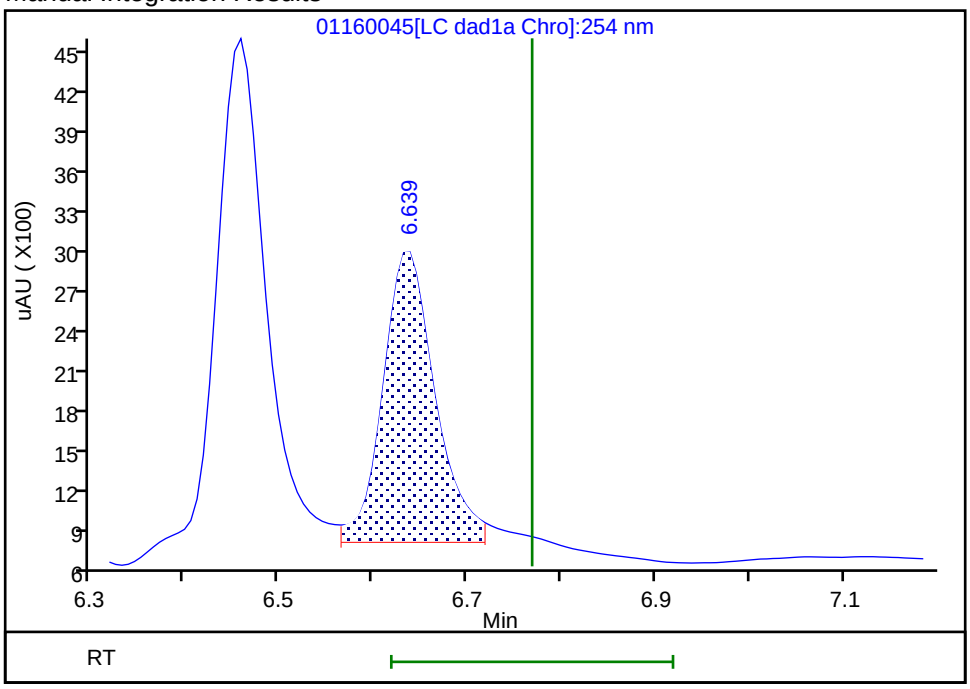
Processing Integration Results

RT: 6.64
Area: 23838
Amount: 0.125460
Amount Units: ug/mL



Manual Integration Results

RT: 6.64
Area: 8175
Amount: 0.055813
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:31:34
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160046.D
Lims ID: IC ADD 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 17-Jan-2023 03:16:44 ALS Bottle#: 49 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICADD1
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub10

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jan-2023 12:50:42 Calib Date: 17-Jan-2023 06:47:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160055.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: LV5D Date: 17-Jan-2023 12:31:50

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	6.459	6.455	0.004	5326	0.0200	0.0194	M
5 2,4-diamino-6-nitrotoluene	1	6.639	6.769	-0.130	3042	0.0200	0.0208	M
14 3,5-Dinitroaniline	1	9.805	9.800	0.005	4397	0.0200	0.0195	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00035 Amount Added: 1.00 Units: uL

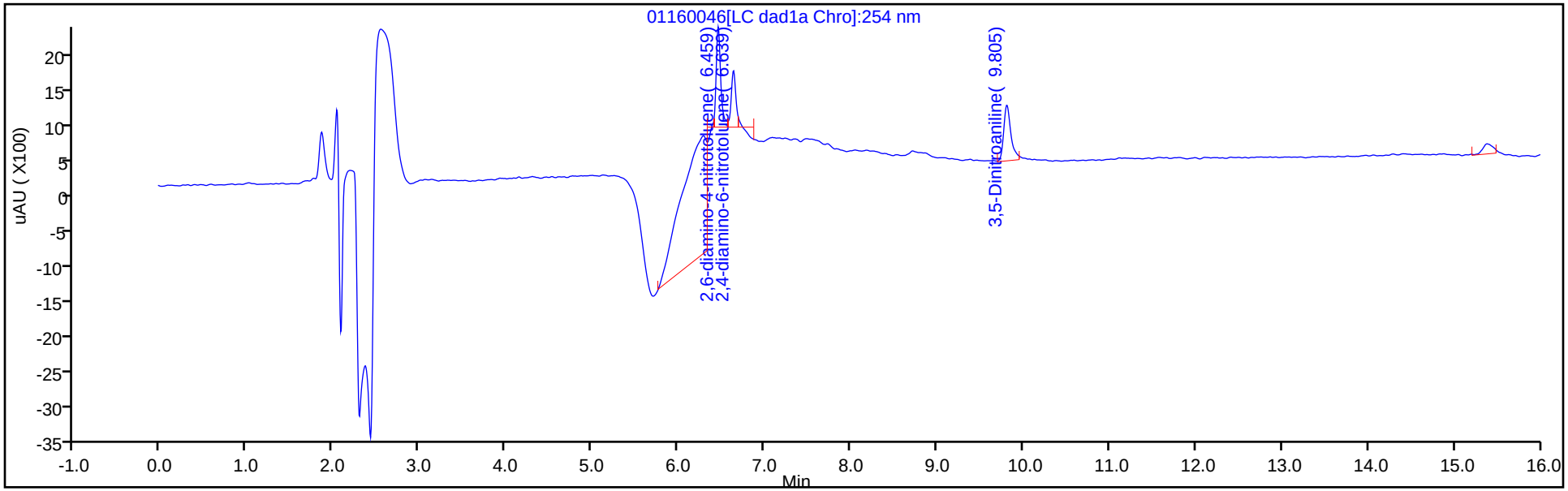
Report Date: 17-Jan-2023 12:50:42 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Denver

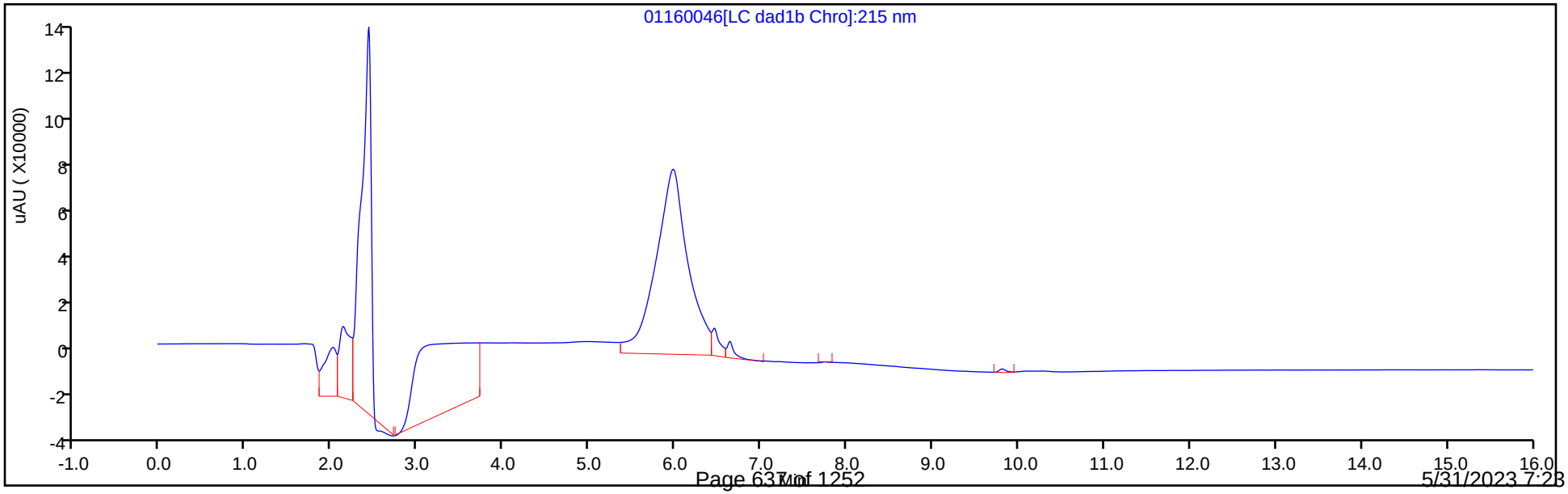
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160046.d

Injection Date:	17-Jan-2023 03:16:44	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC ADD 1			Worklist Smp#:	18
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	49
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

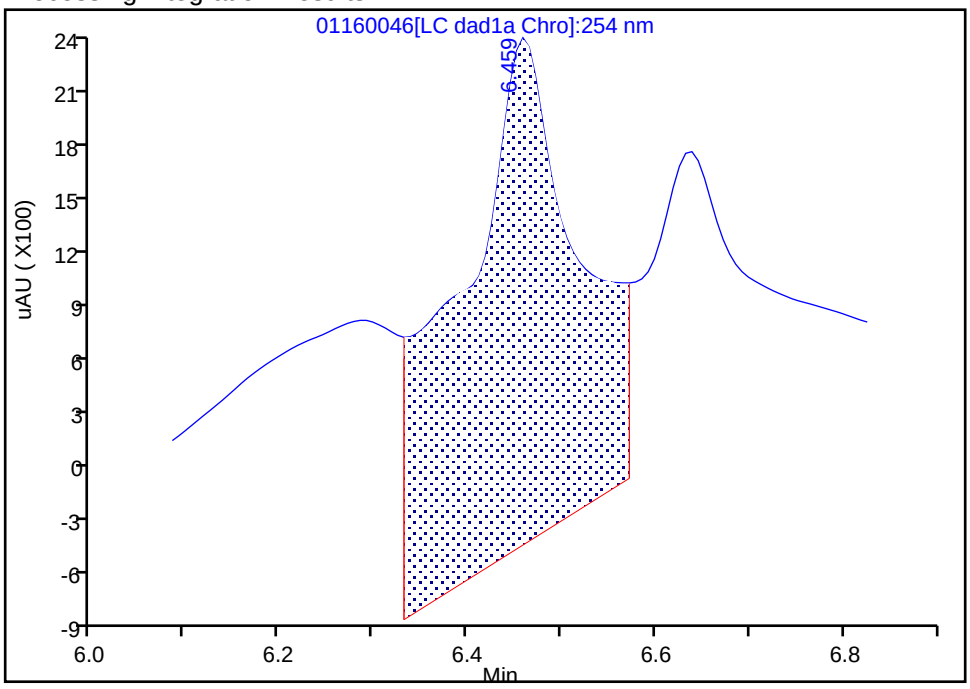
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160046.d
Injection Date: 17-Jan-2023 03:16:44 Instrument ID: CHHPLC_X3
Lims ID: IC ADD 1
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 49 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

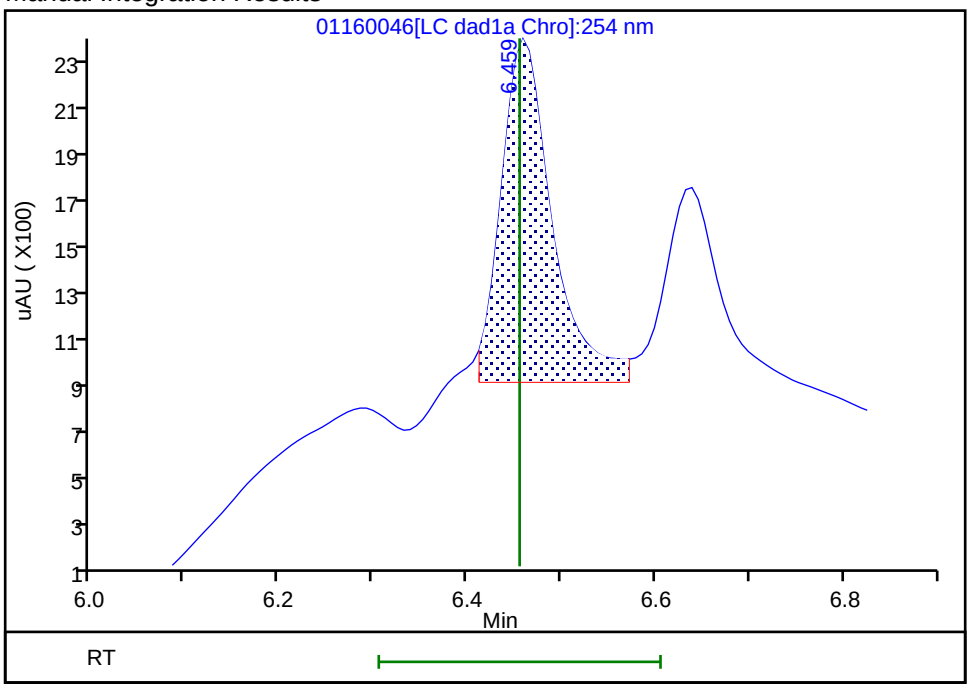
Processing Integration Results

RT: 6.46
Area: 24501
Amount: 0.068213
Amount Units: ug/mL



Manual Integration Results

RT: 6.46
Area: 5326
Amount: 0.019425
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:31:46
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

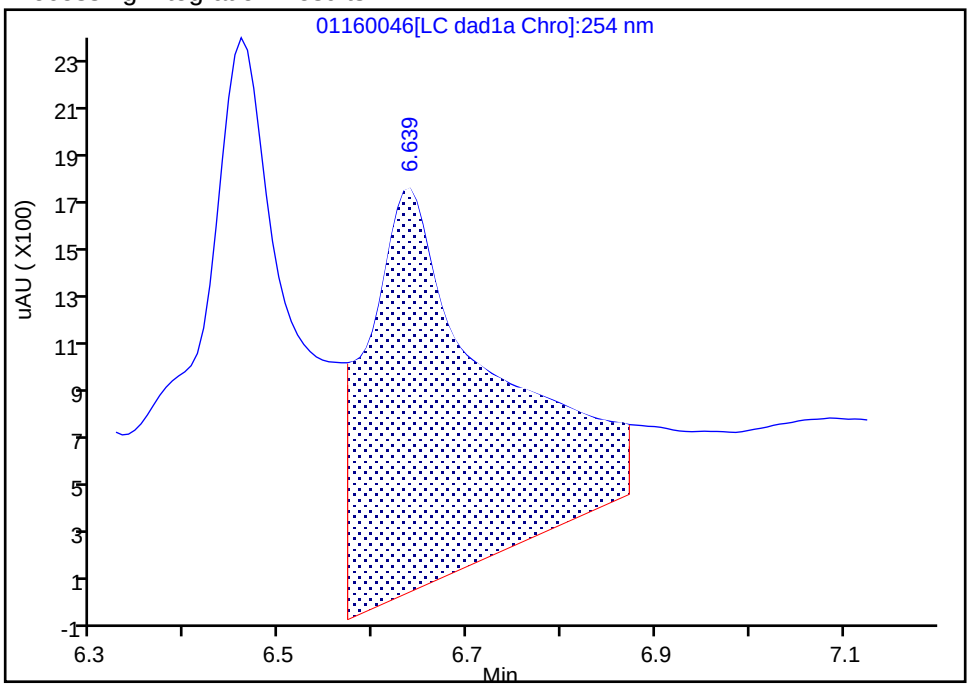
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160046.d				
Injection Date:	17-Jan-2023 03:16:44	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 1				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	49	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

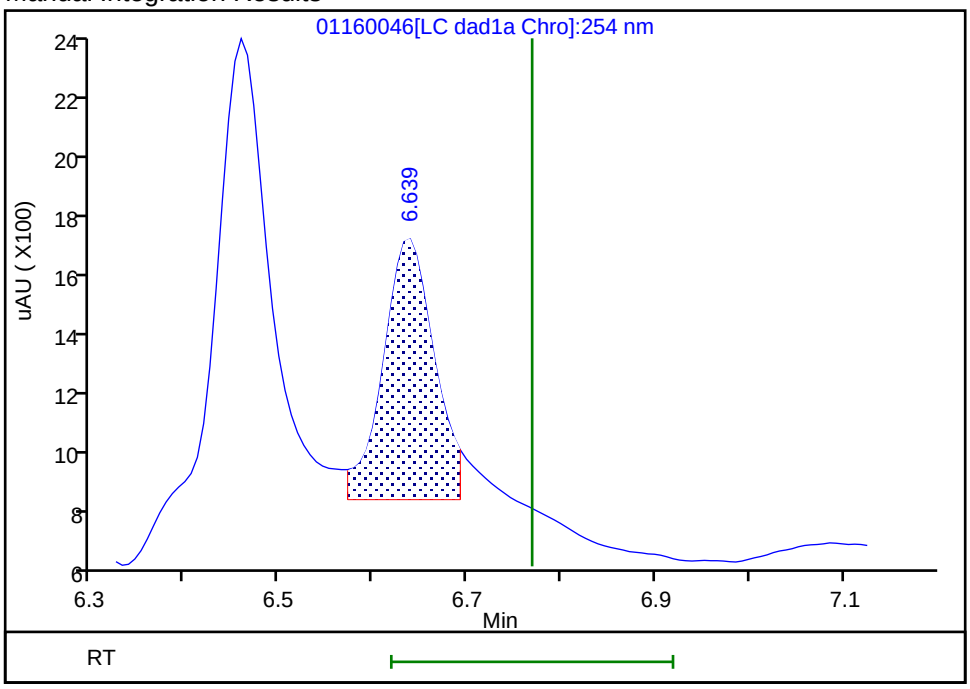
Processing Integration Results

RT: 6.64
Area: 15283
Amount: 0.068540
Amount Units: ug/mL



Manual Integration Results

RT: 6.64
Area: 3042
Amount: 0.020768
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:31:48
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Calibration / 2,6-diamino-4-nitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

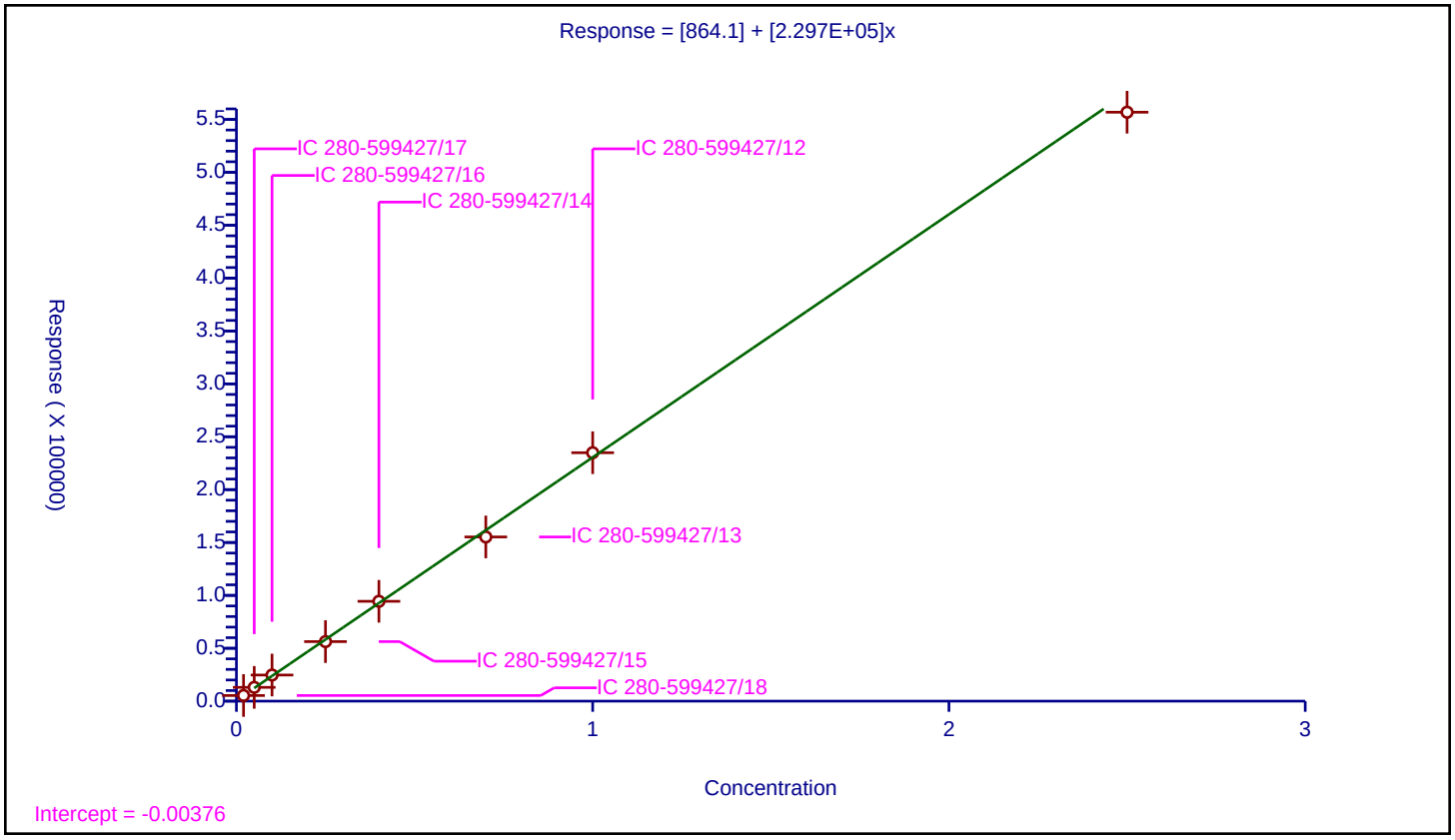
Curve Coefficients

Intercept:	864.1
Slope:	2.297E+05

Error Coefficients

Standard Error:	8170
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 280-599427/18	0.02	5326.0			266300.0	Y
2	IC 280-599427/17	0.05	13039.0			260780.0	Y
3	IC 280-599427/16	0.1	24702.0			247020.0	Y
4	IC 280-599427/15	0.25	56309.0			225236.0	Y
5	IC 280-599427/14	0.4	94399.0			235997.5	Y
6	IC 280-599427/13	0.7	155237.0			221767.142857	Y
7	IC 280-599427/12	1.0	234891.0			234891.0	Y
8	IC 280-599427/11	2.5	556860.0			222744.0	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

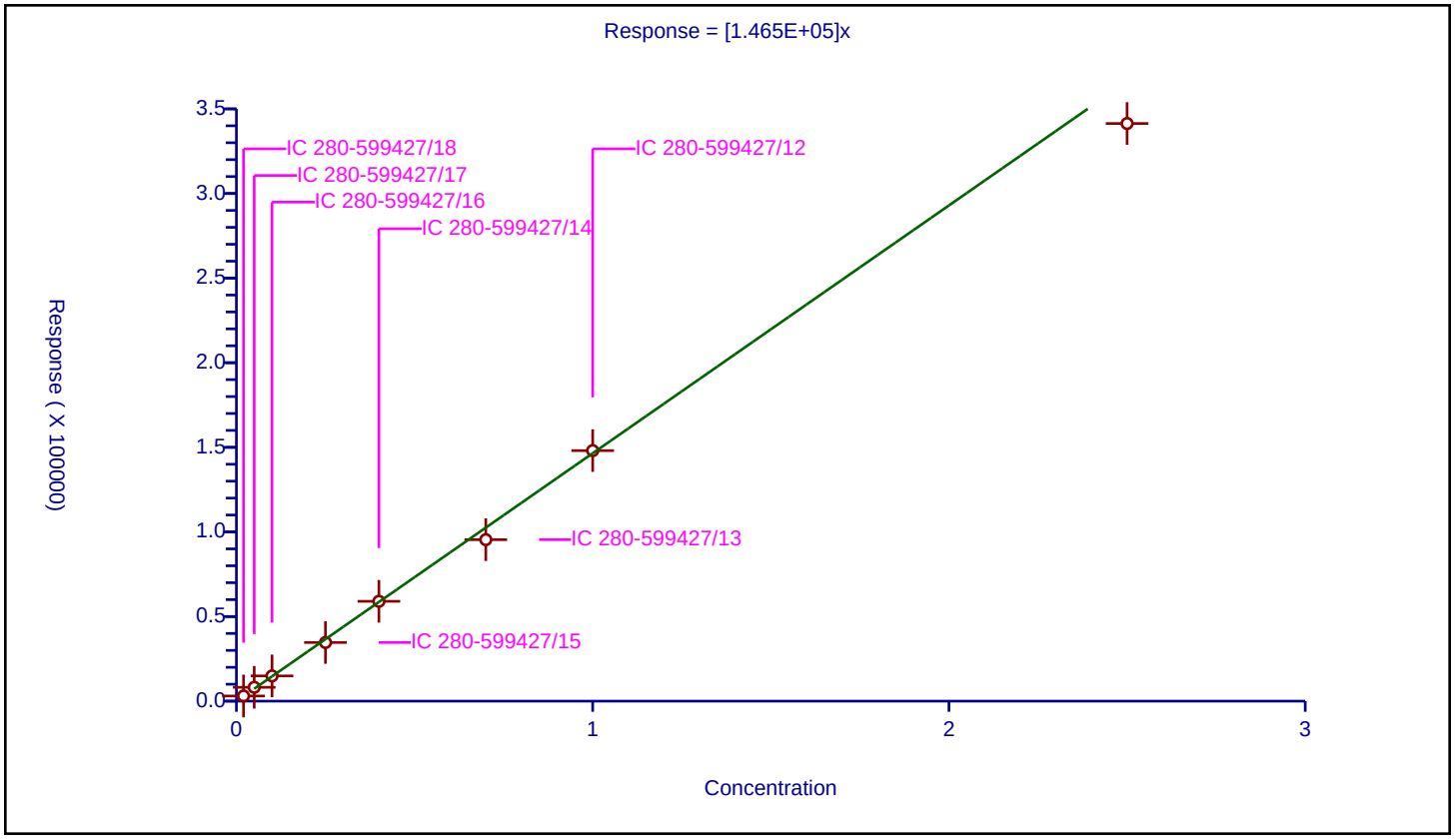
Curve Coefficients

Intercept:	0
Slope:	1.465E+05

Error Coefficients

Standard Error:	9810
Relative Standard Error:	6.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-599427/18	0.02	3042.0			152100.0	Y
2	IC 280-599427/17	0.05	8175.0			163500.0	Y
3	IC 280-599427/16	0.1	14908.0			149080.0	Y
4	IC 280-599427/15	0.25	34670.0			138680.0	Y
5	IC 280-599427/14	0.4	59001.0			147502.5	Y
6	IC 280-599427/13	0.7	95423.0			136318.571429	Y
7	IC 280-599427/12	1.0	148050.0			148050.0	Y
8	IC 280-599427/11	2.5	341365.0			136546.0	Y



Calibration / 3,5-Dinitroaniline

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

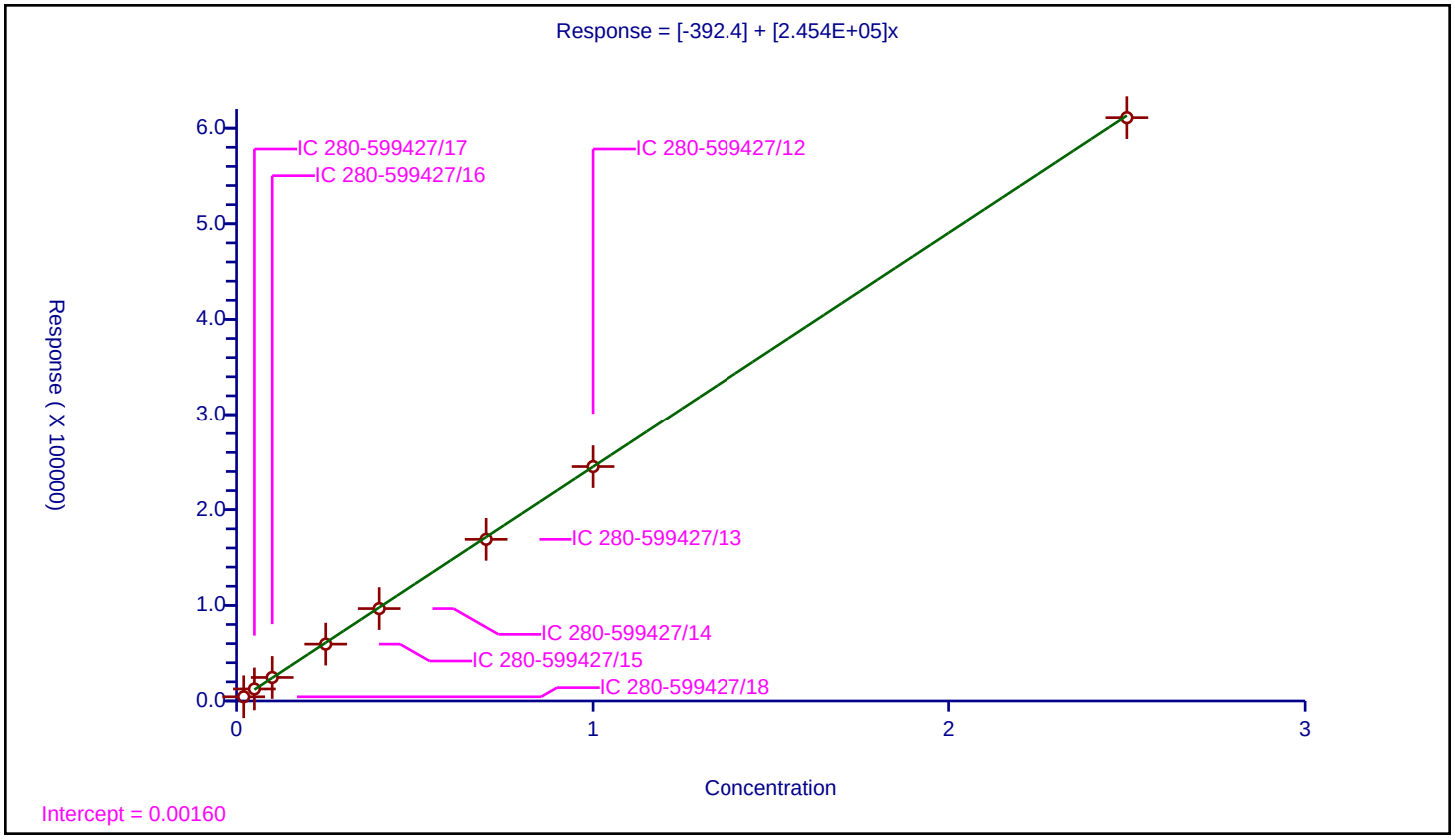
Curve Coefficients

Intercept:	-392.4
Slope:	2.454E+05

Error Coefficients

Standard Error:	1570
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 280-599427/18	0.02	4397.0			219850.0	Y
2	IC 280-599427/17	0.05	12600.0			252000.0	Y
3	IC 280-599427/16	0.1	24604.0			246040.0	Y
4	IC 280-599427/15	0.25	59459.0			237836.0	Y
5	IC 280-599427/14	0.4	96632.0			241580.0	Y
6	IC 280-599427/13	0.7	169039.0			241484.285714	Y
7	IC 280-599427/12	1.0	245164.0			245164.0	Y
8	IC 280-599427/11	2.5	610953.0			244381.2	Y



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1 Analy Batch No.: 599427

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/17/2023 04:03 Calibration End Date: 01/17/2023 06:47 Calibration ID: 75940

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-599427/27	01160055.D
Level 2	IC 280-599427/26	01160054.D
Level 3	IC 280-599427/25	01160053.D
Level 4	IC 280-599427/24	01160052.D
Level 5	IC 280-599427/23	01160051.D
Level 6	IC 280-599427/22	01160050.D
Level 7	IC 280-599427/21	01160049.D
Level 8	IC 280-599427/20	01160048.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
TNX	+++++	6.457	6.456	6.455	6.452	6.458	6.452	6.452			6.355 - 6.555	6.455
DNX	+++++	6.770	6.763	6.769	6.765	6.765	6.766	6.765			6.669 - 6.869	6.766
MNX	+++++	7.184	7.183	7.182	7.178	7.178	7.179	7.179			7.032 - 7.332	7.180

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-176335-1 Analy Batch No.: 599427

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/17/2023 04:03 Calibration End Date: 01/17/2023 06:47 Calibration ID: 75940

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-599427/27	01160055.D
Level 2	IC 280-599427/26	01160054.D
Level 3	IC 280-599427/25	01160053.D
Level 4	IC 280-599427/24	01160052.D
Level 5	IC 280-599427/23	01160051.D
Level 6	IC 280-599427/22	01160050.D
Level 7	IC 280-599427/21	01160049.D
Level 8	IC 280-599427/20	01160048.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								
TNX	+++++ 191695	268925 195080	204490 197199	196352 195327	Lin2	3002.2137 3	187997.76 5							0.9980		0.9900
DNX	+++++ 141300	200149 143589	154651 145681	143773 144224	Lin2	2329.3740 9	138645.82 1							0.9980		0.9900
MNX	+++++ 132547	181432 132559	142607 134742	133364 133185	Lin2	2321.3568 8	128926.45 3							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
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-176335-1 Analy Batch No.: 599427

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/17/2023 04:03 Calibration End Date: 01/17/2023 06:47 Calibration ID: 75940

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-599427/27	01160055.D
Level 2	IC 280-599427/26	01160054.D
Level 3	IC 280-599427/25	01160053.D
Level 4	IC 280-599427/24	01160052.D
Level 5	IC 280-599427/23	01160051.D
Level 6	IC 280-599427/22	01160050.D
Level 7	IC 280-599427/21	01160049.D
Level 8	IC 280-599427/20	01160048.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
TNX	Lin2	+++++ 136556	10757 197199	20449 488318	49088	76678	+++++ 0.700	0.0400 1.00	0.100 2.50	0.250	0.400
DNX	Lin2	+++++ 100914	8038 146264	15527 362002	36087	56746	+++++ 0.703	0.0402 1.00	0.100 2.51	0.251	0.402
MNX	Lin2	+++++ 108566	8491 157648	16685 389567	39009	62032	+++++ 0.819	0.0468 1.17	0.117 2.93	0.293	0.468

Curve Type Legend
Lin2 = Linear 1/conc^2

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160048.D
Lims ID: IC DMT 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 17-Jan-2023 04:03:37 ALS Bottle#: 51 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICDMT8
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jan-2023 12:50:43 Calib Date: 17-Jan-2023 06:47:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160055.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: LV5D Date: 17-Jan-2023 12:36:34

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.452	6.455	-0.003	488318	2.50	2.58	M
6 DNX	1	6.765	6.769	-0.004	362002	2.51	2.59	M
7 MNX	1	7.179	7.182	-0.003	389567	2.93	3.00	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00012 Amount Added: 125.00 Units: uL

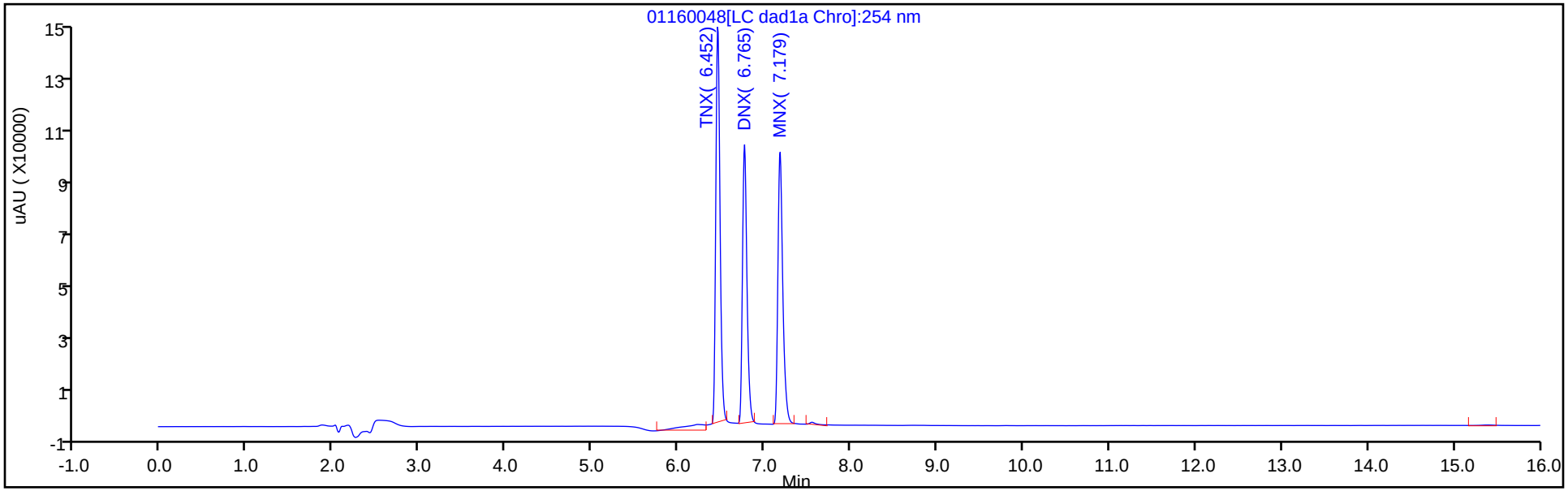
Report Date: 17-Jan-2023 12:50:43 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Denver

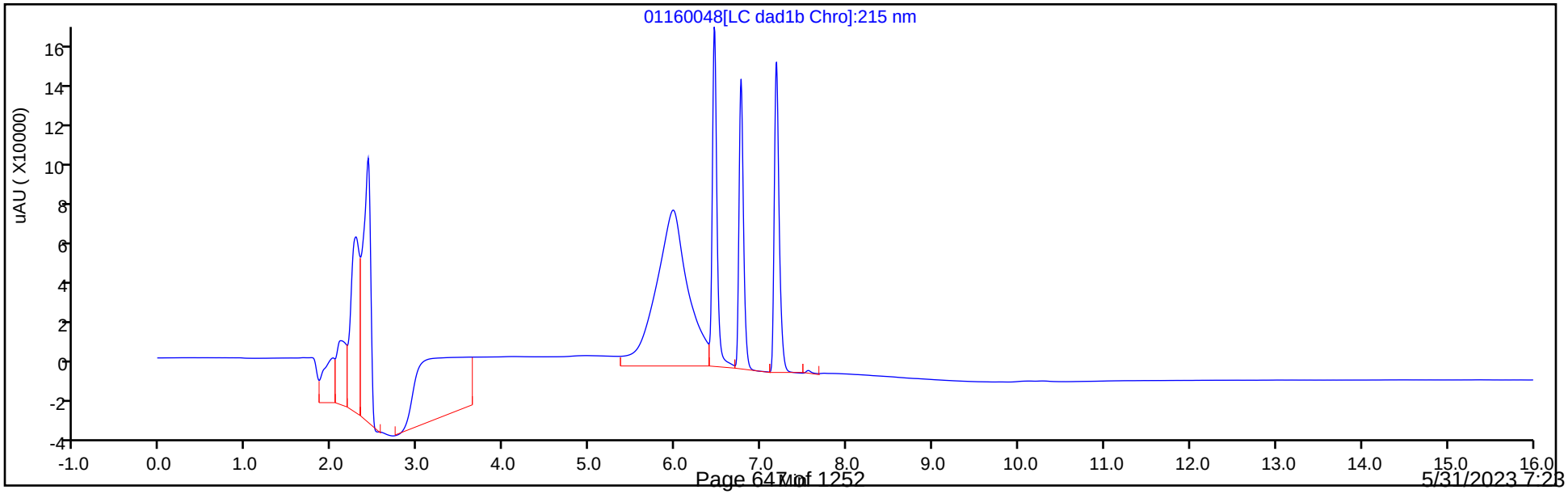
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160048.d

Injection Date:	17-Jan-2023 04:03:37	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC DMT 8			Worklist Smp#:	20
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	51
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

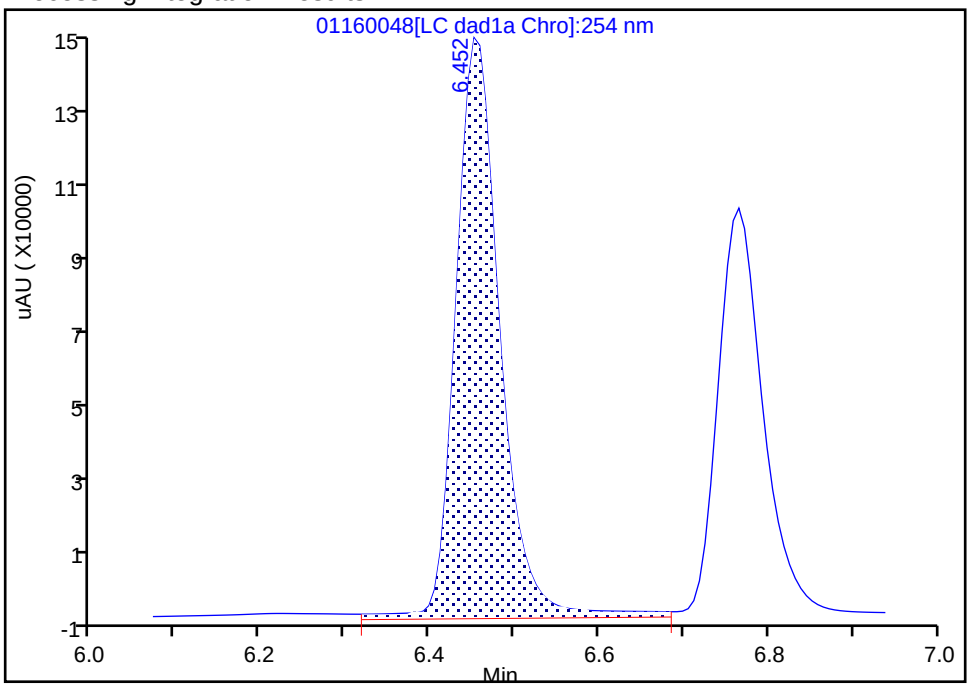
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160048.d				
Injection Date:	17-Jan-2023 04:03:37	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 8				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	51	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

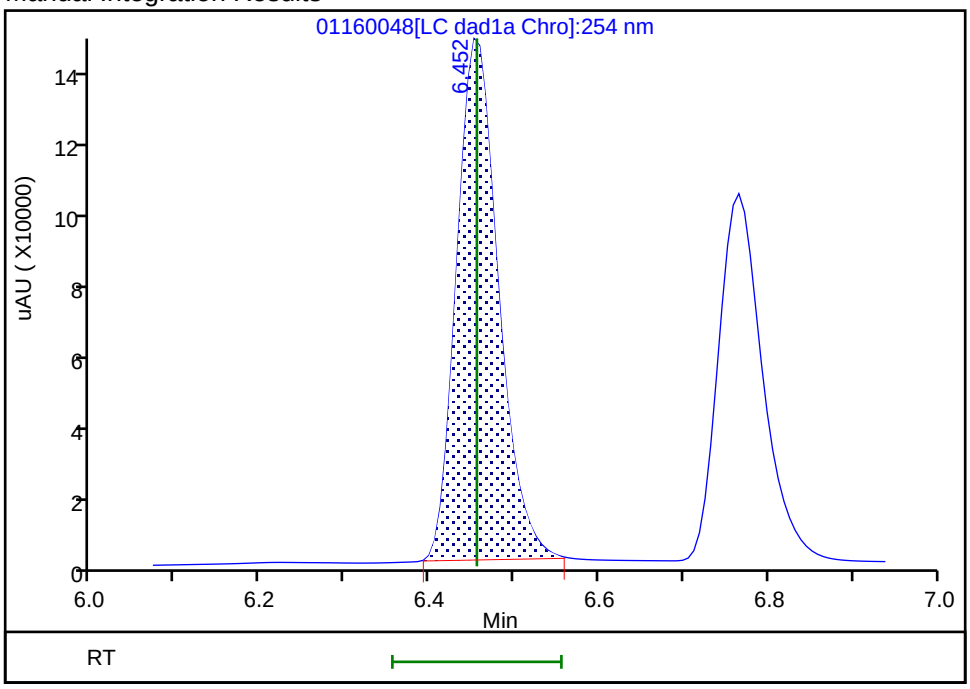
Processing Integration Results

RT: 6.45
Area: 531449
Amount: 2.385819
Amount Units: ug/mL



Manual Integration Results

RT: 6.45
Area: 488318
Amount: 2.581498
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:36:26
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

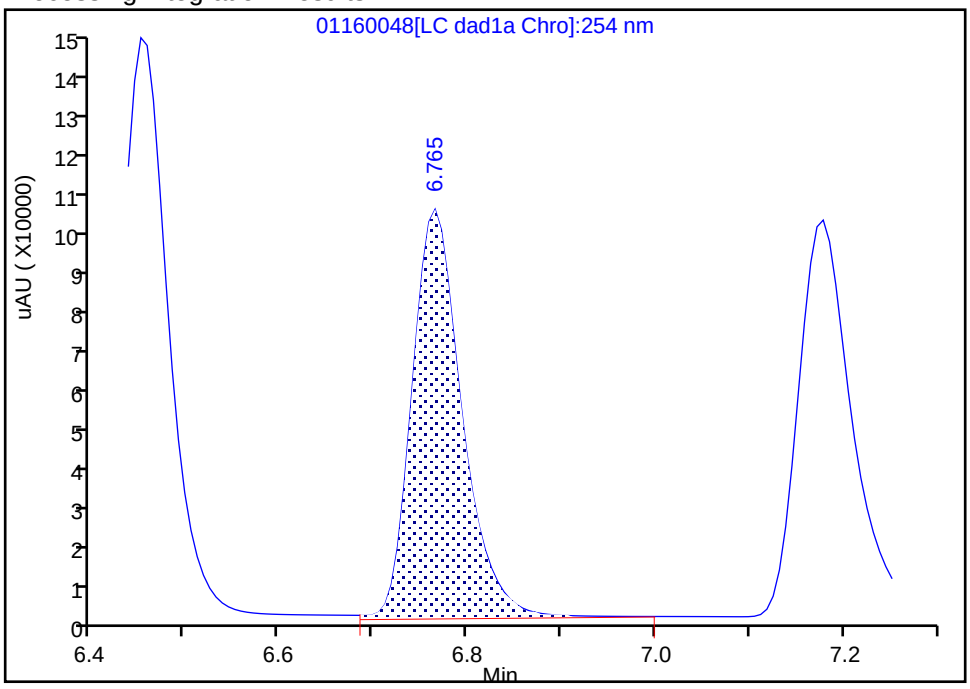
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160048.d				
Injection Date:	17-Jan-2023 04:03:37	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 8				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	51	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

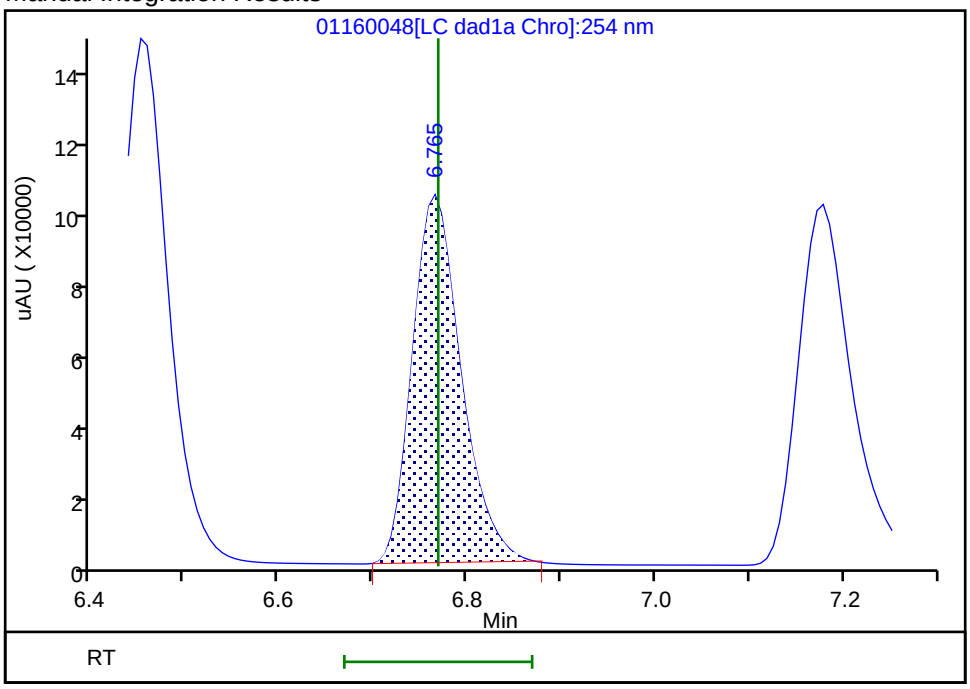
Processing Integration Results

RT: 6.77
Area: 381468
Amount: 2.173019
Amount Units: ug/mL



Manual Integration Results

RT: 6.77
Area: 362002
Amount: 2.594183
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:36:29
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

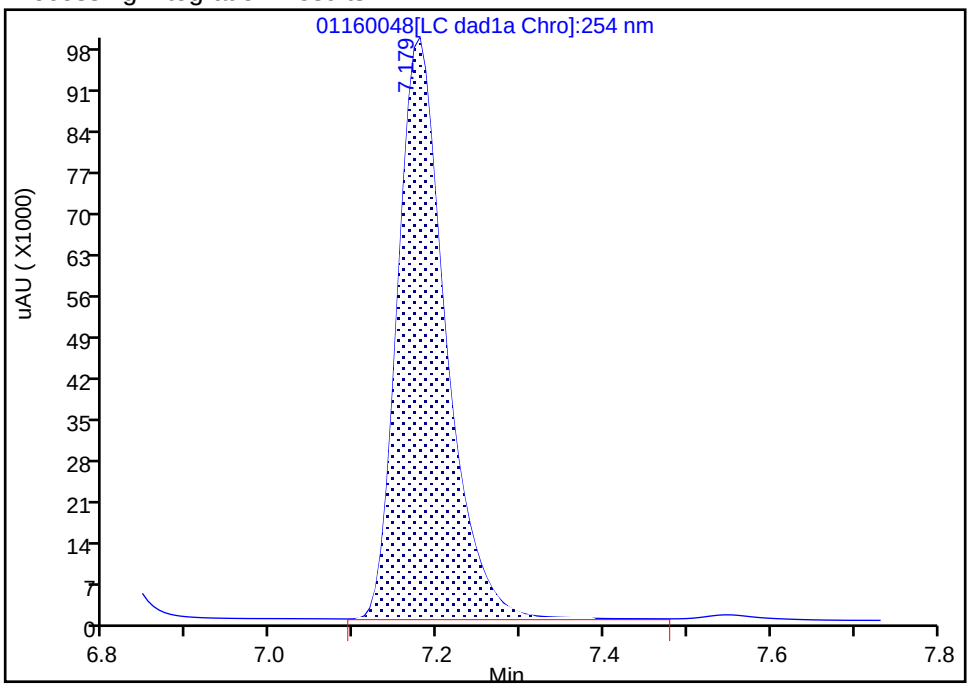
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160048.d				
Injection Date:	17-Jan-2023 04:03:37	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 8				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	51	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

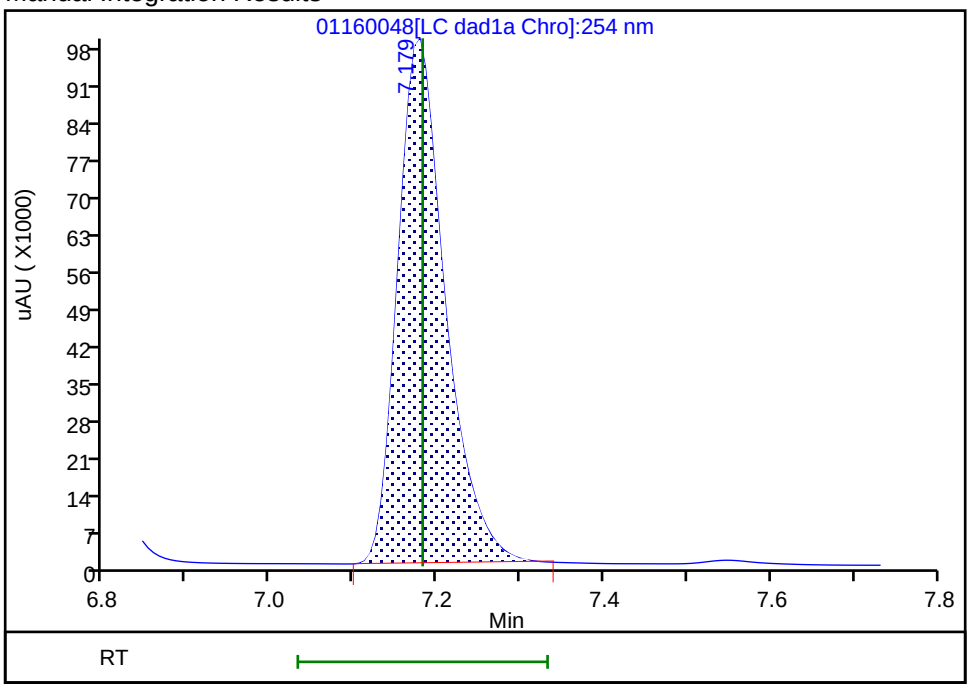
Processing Integration Results

RT: 7.18
Area: 395442
Amount: 2.769634
Amount Units: ug/mL



Manual Integration Results

RT: 7.18
Area: 389567
Amount: 3.003617
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:36:33
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160049.D
Lims ID: IC DMT 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 17-Jan-2023 04:27:00 ALS Bottle#: 52 Worklist Smp#: 21
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICDMT7
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jan-2023 12:50:43 Calib Date: 17-Jan-2023 06:47:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160055.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: LV5D Date: 17-Jan-2023 12:36:49

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.452	6.455	-0.003	197199	1.00	1.03	M
6 DNX	1	6.766	6.769	-0.003	146264	1.00	1.04	M
7 MNX	1	7.179	7.182	-0.003	157648	1.17	1.20	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00012 Amount Added: 50.00 Units: uL

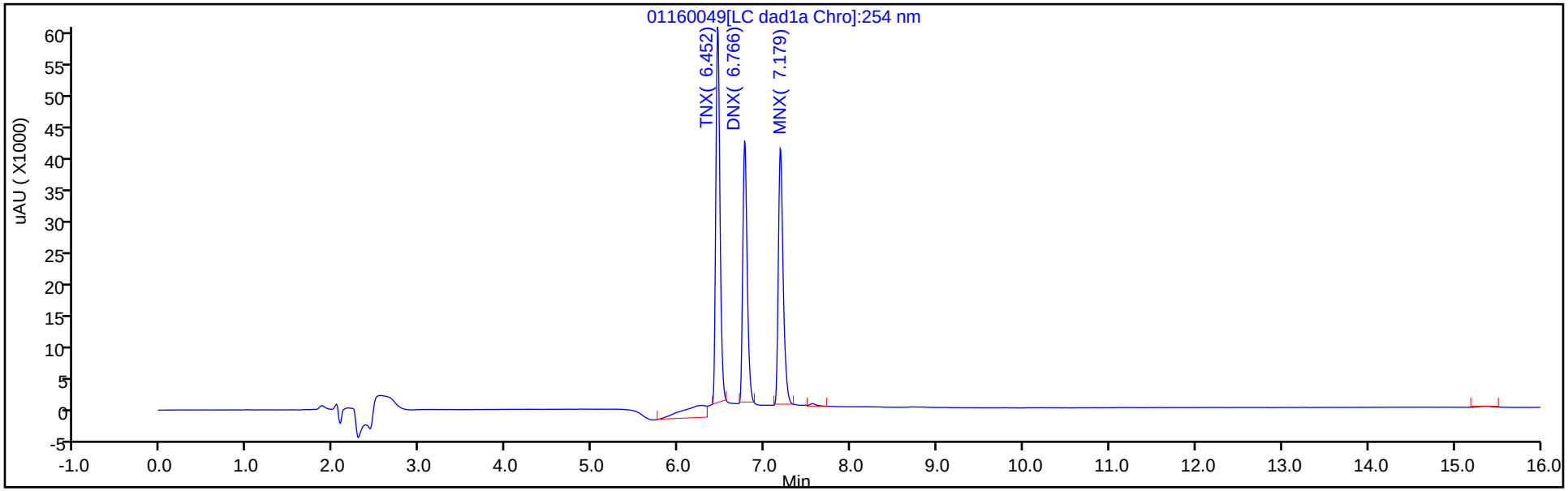
Report Date: 17-Jan-2023 12:50:43 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Denver

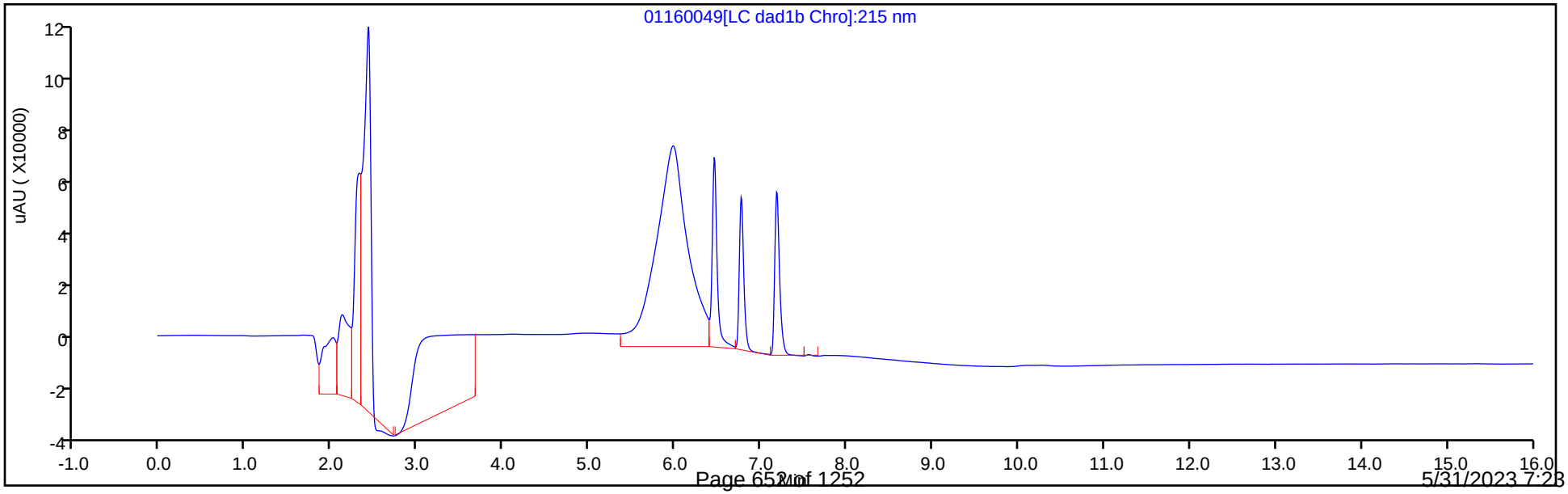
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160049.d

Injection Date:	17-Jan-2023 04:27:00	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC DMT 7			Worklist Smp#:	21
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	52
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

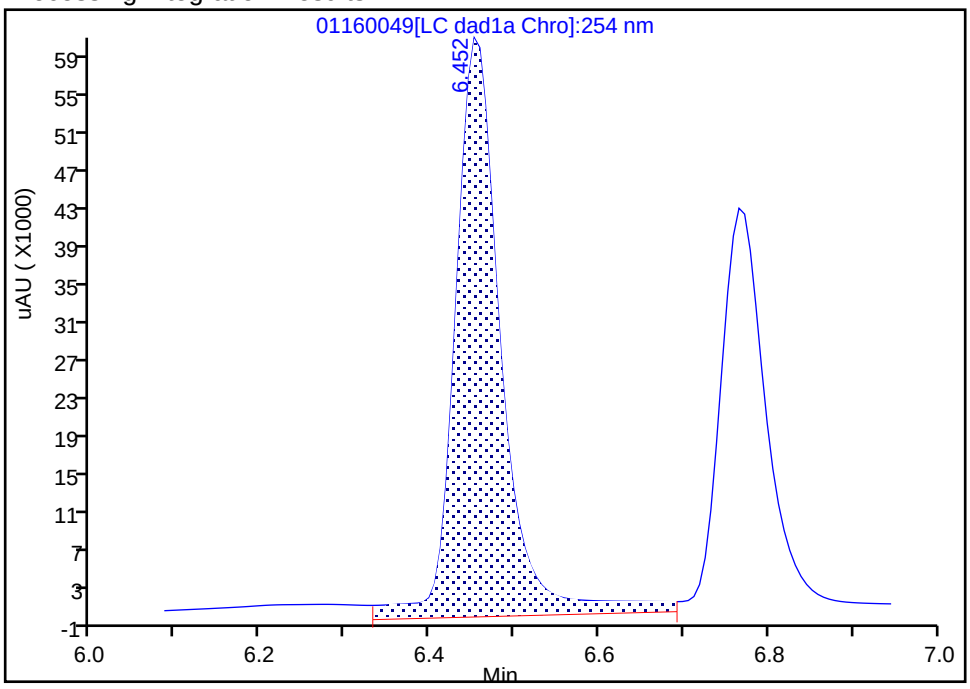
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160049.d				
Injection Date:	17-Jan-2023 04:27:00	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	52	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

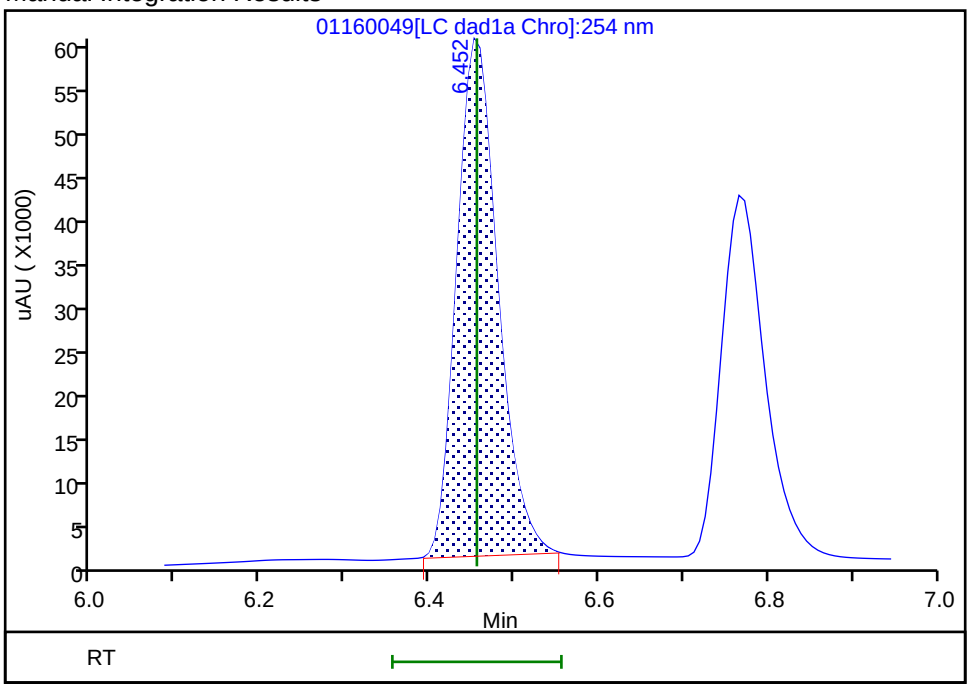
Processing Integration Results

RT: 6.45
Area: 232549
Amount: 0.993464
Amount Units: ug/mL



Manual Integration Results

RT: 6.45
Area: 197199
Amount: 1.032974
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:36:44

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

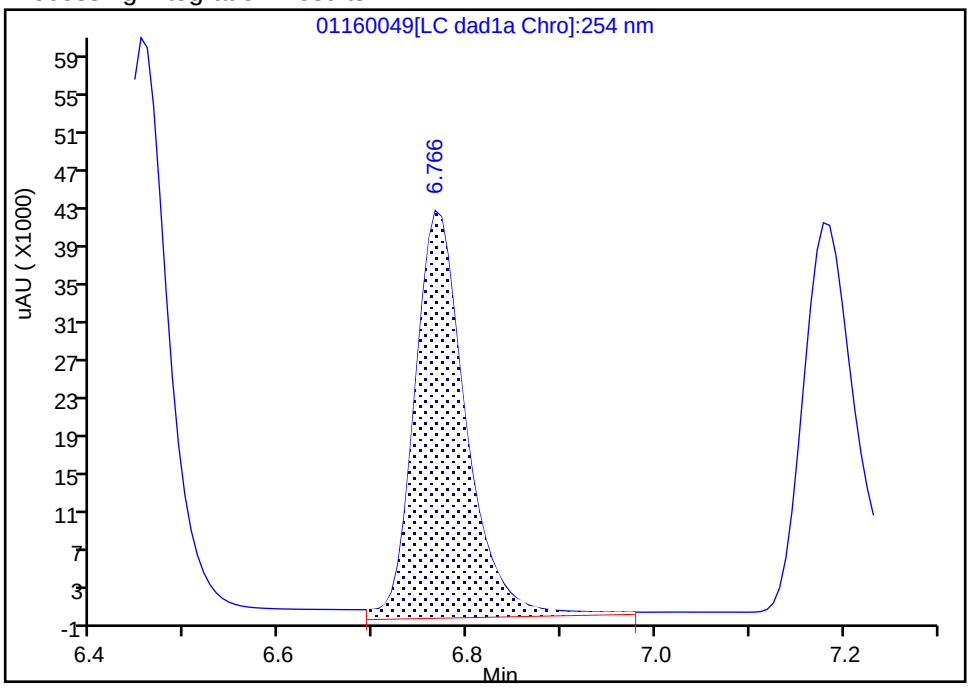
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160049.d				
Injection Date:	17-Jan-2023 04:27:00	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	52	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

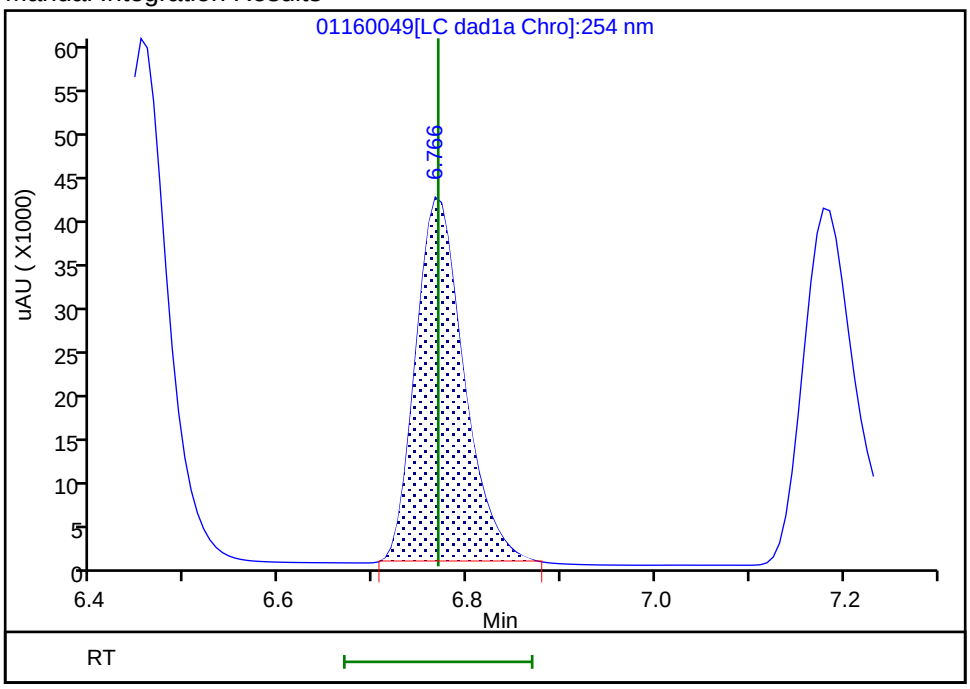
Processing Integration Results

RT: 6.77
Area: 160475
Amount: 0.919216
Amount Units: ug/mL



Manual Integration Results

RT: 6.77
Area: 146264
Amount: 1.038146
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:36:47
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

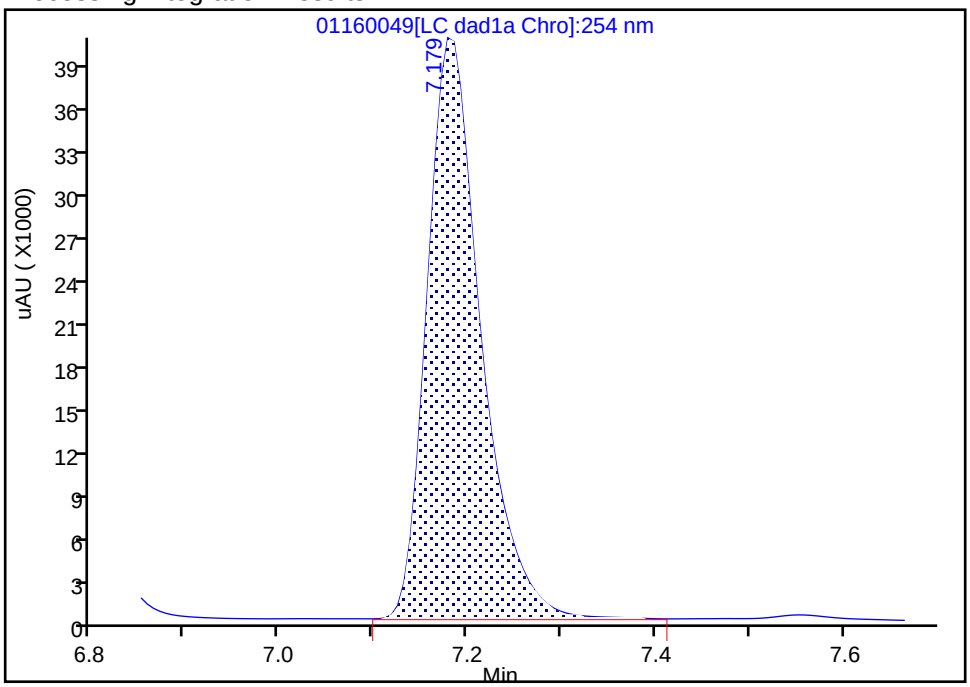
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160049.d				
Injection Date:	17-Jan-2023 04:27:00	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	52	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

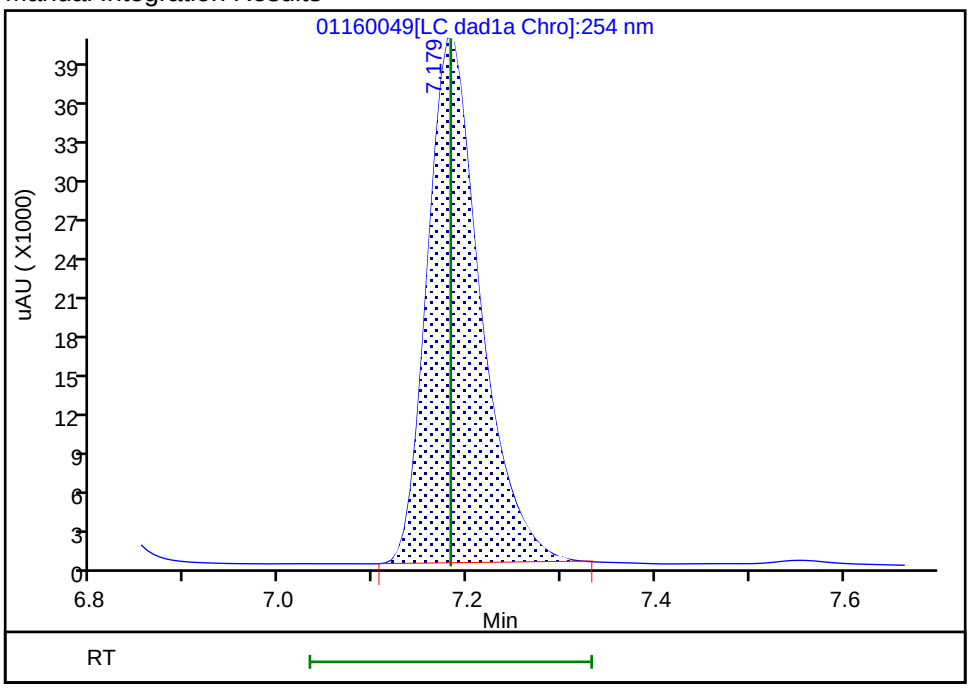
Processing Integration Results

RT: 7.18
Area: 159221
Amount: 1.117132
Amount Units: ug/mL



Manual Integration Results

RT: 7.18
Area: 157648
Amount: 1.204769
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:36:40

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160050.D
Lims ID: IC DMT 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 17-Jan-2023 04:50:26 ALS Bottle#: 53 Worklist Smp#: 22
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICDMT6
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jan-2023 12:50:44 Calib Date: 17-Jan-2023 06:47:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160055.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: LV5D Date: 17-Jan-2023 12:37:03

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.458	6.455	0.003	136556	0.7000	0.7104	M
6 DNX	1	6.765	6.769	-0.004	100914	0.7028	0.7111	M
7 MNX	1	7.178	7.182	-0.004	108566	0.8190	0.8241	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

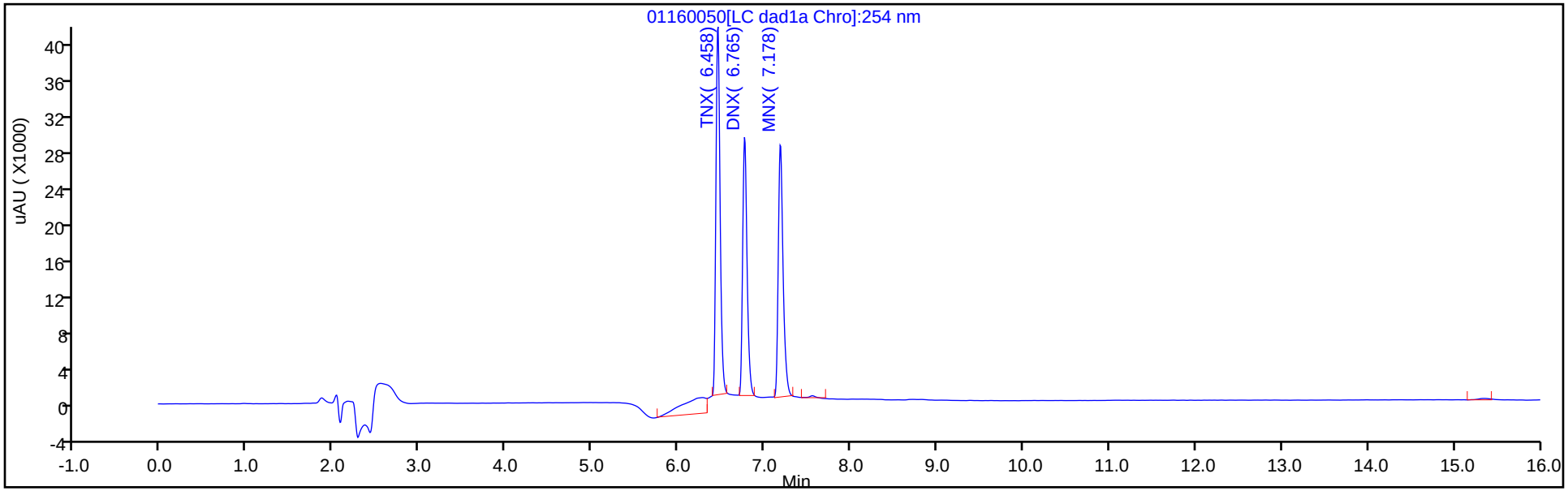
8330 DMT_00012 Amount Added: 35.00 Units: uL

Report Date: 17-Jan-2023 12:50:44 Chrom Revision: 2.3 20-Dec-2022 14:14:06

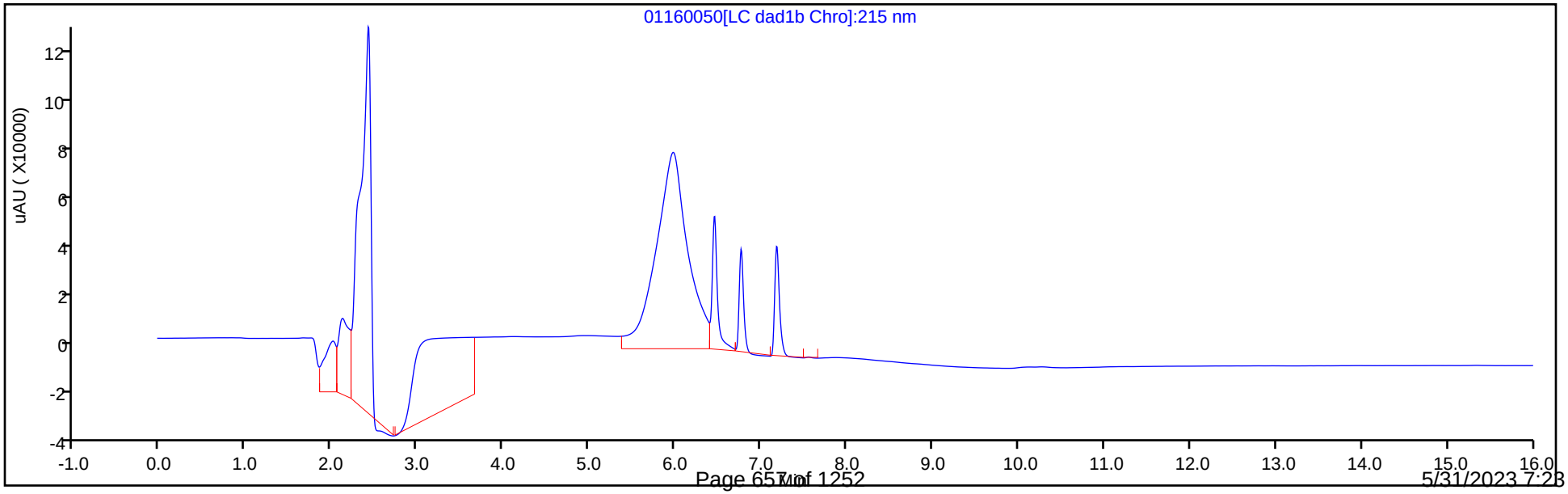
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160050.d				
Injection Date:	17-Jan-2023 04:50:26	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC DMT 6			Worklist Smp#:	22
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	53
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

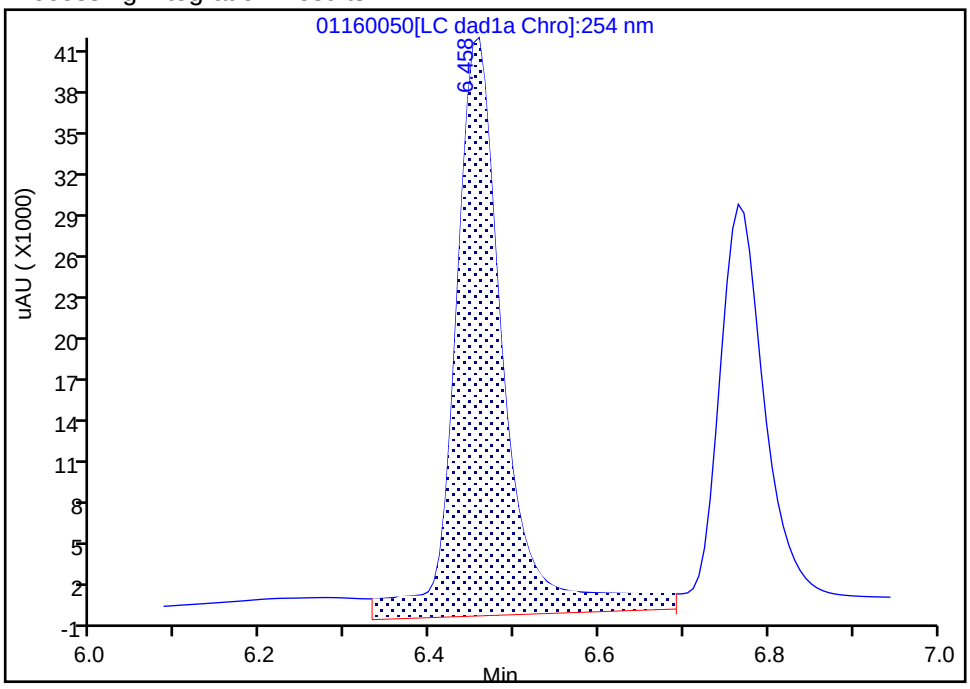
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160050.d				
Injection Date:	17-Jan-2023 04:50:26	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	53	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

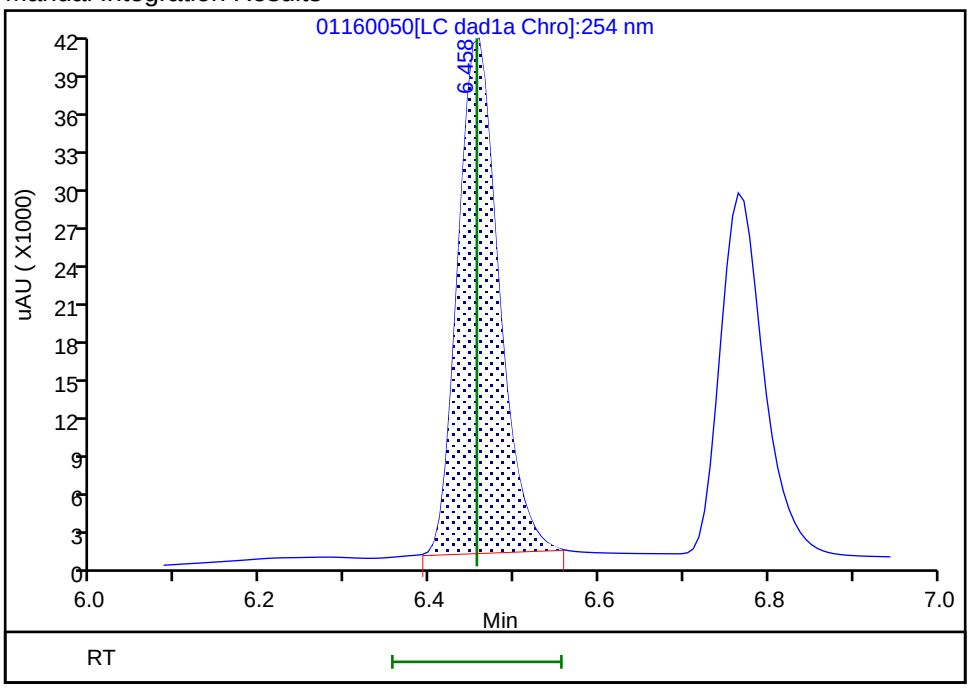
Processing Integration Results

RT: 6.46
Area: 170230
Amount: 0.447000
Amount Units: ug/mL



Manual Integration Results

RT: 6.46
Area: 136556
Amount: 0.710401
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:36:55
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

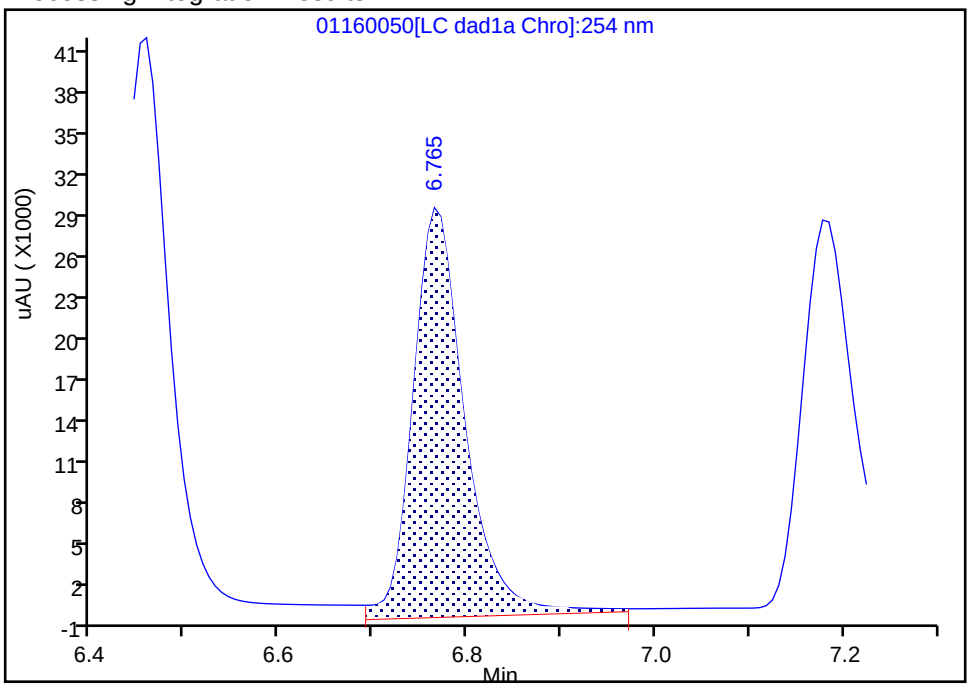
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160050.d				
Injection Date:	17-Jan-2023 04:50:26	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	53	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

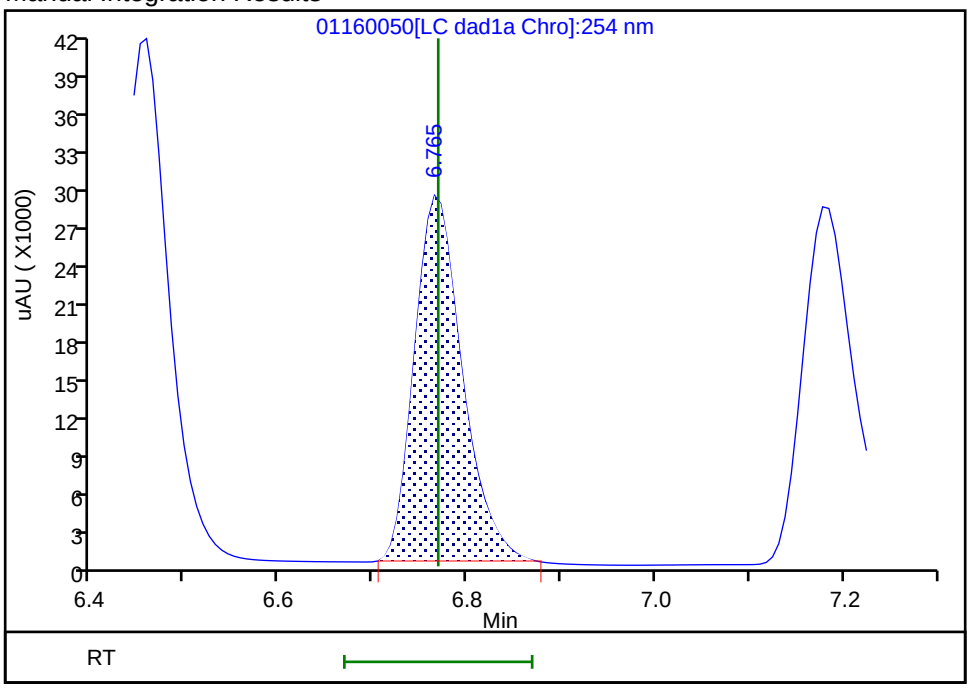
Processing Integration Results

RT: 6.76
Area: 113699
Amount: 0.657947
Amount Units: ug/mL



Manual Integration Results

RT: 6.76
Area: 100914
Amount: 0.711054
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:36:58
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

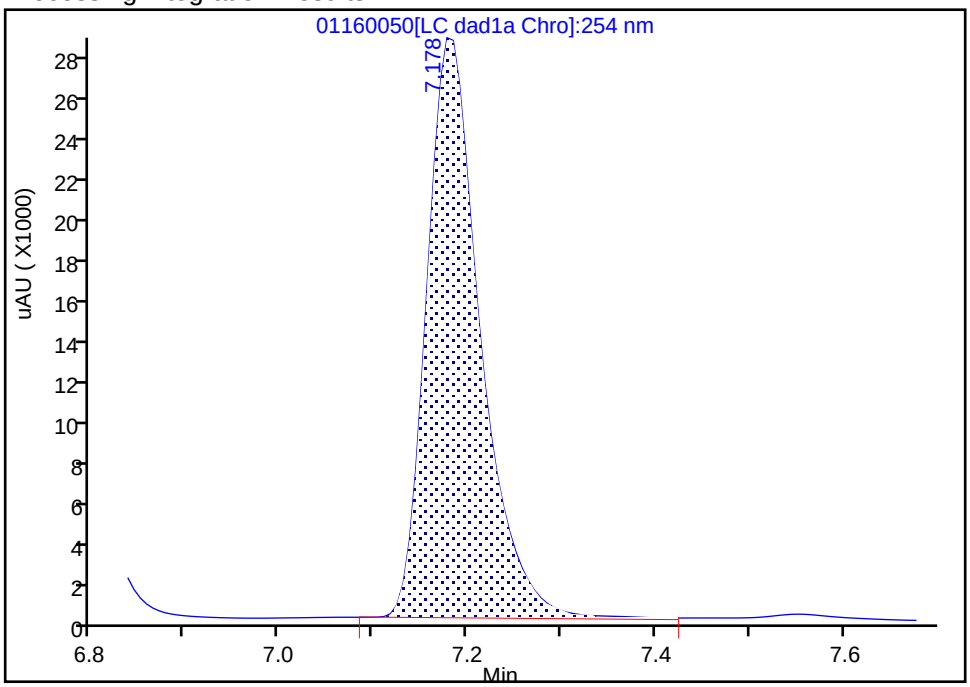
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160050.d				
Injection Date:	17-Jan-2023 04:50:26	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	53	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

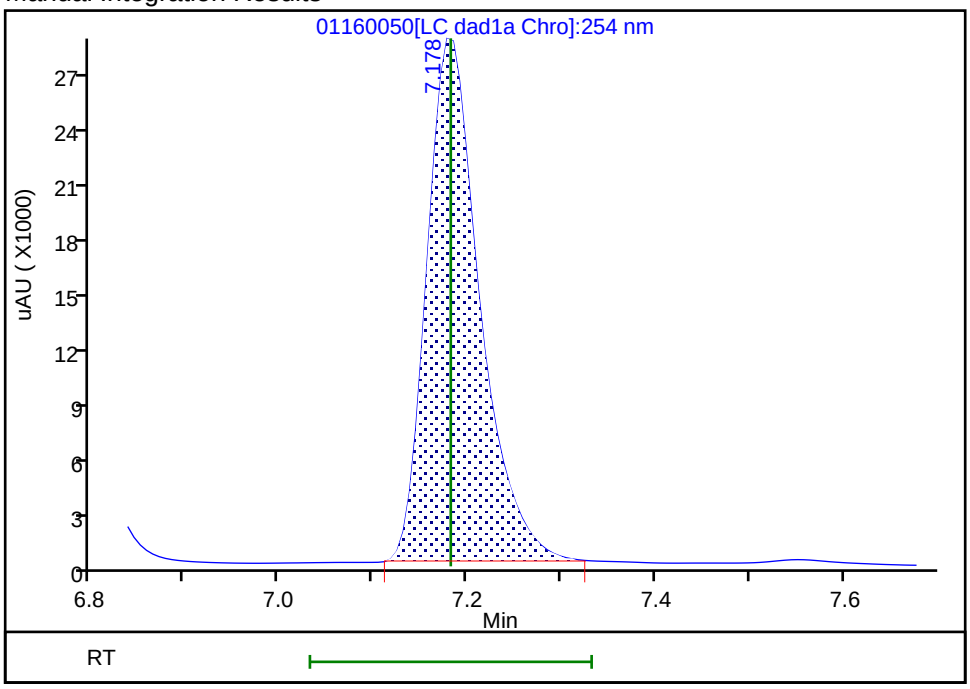
Processing Integration Results

RT: 7.18
Area: 111013
Amount: 0.779813
Amount Units: ug/mL



Manual Integration Results

RT: 7.18
Area: 108566
Amount: 0.824072
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:37:01
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160051.D
Lims ID: IC DMT 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 17-Jan-2023 05:13:53 ALS Bottle#: 54 Worklist Smp#: 23
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICDMT5
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jan-2023 12:50:44 Calib Date: 17-Jan-2023 06:47:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160055.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: LV5D Date: 17-Jan-2023 12:37:18

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.452	6.455	-0.003	76678	0.4000	0.3919	M
6 DNX	1	6.765	6.769	-0.004	56746	0.4016	0.3925	M
7 MNX	1	7.178	7.182	-0.004	62032	0.4680	0.4631	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00012 Amount Added: 20.00 Units: uL

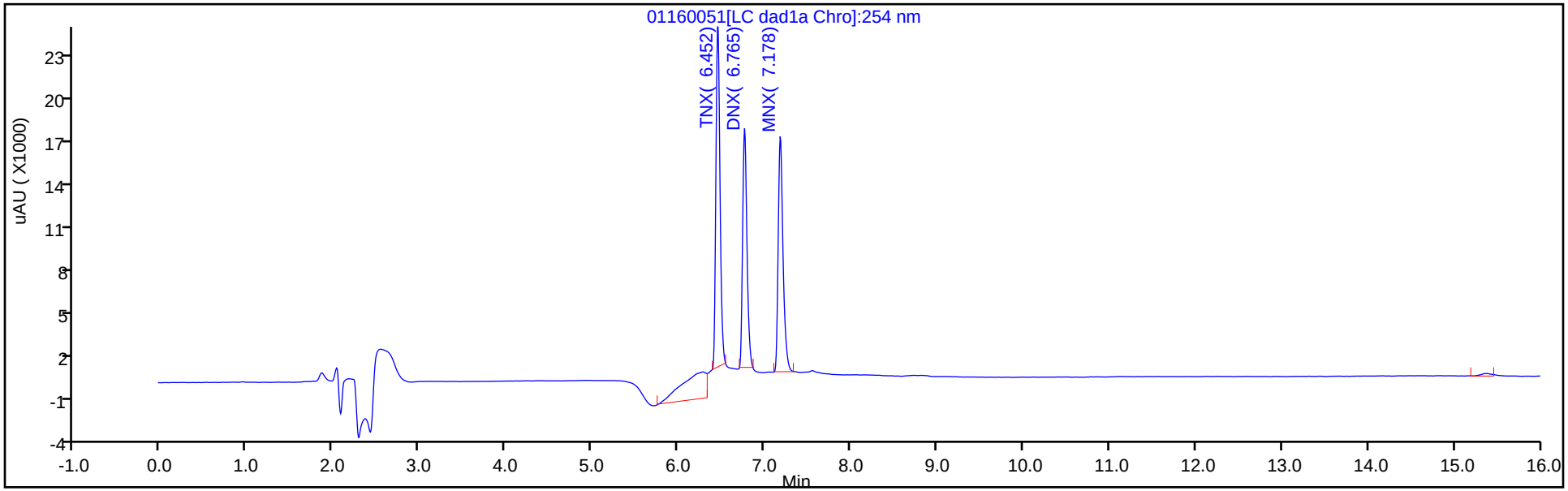
Report Date: 17-Jan-2023 12:50:45 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Denver

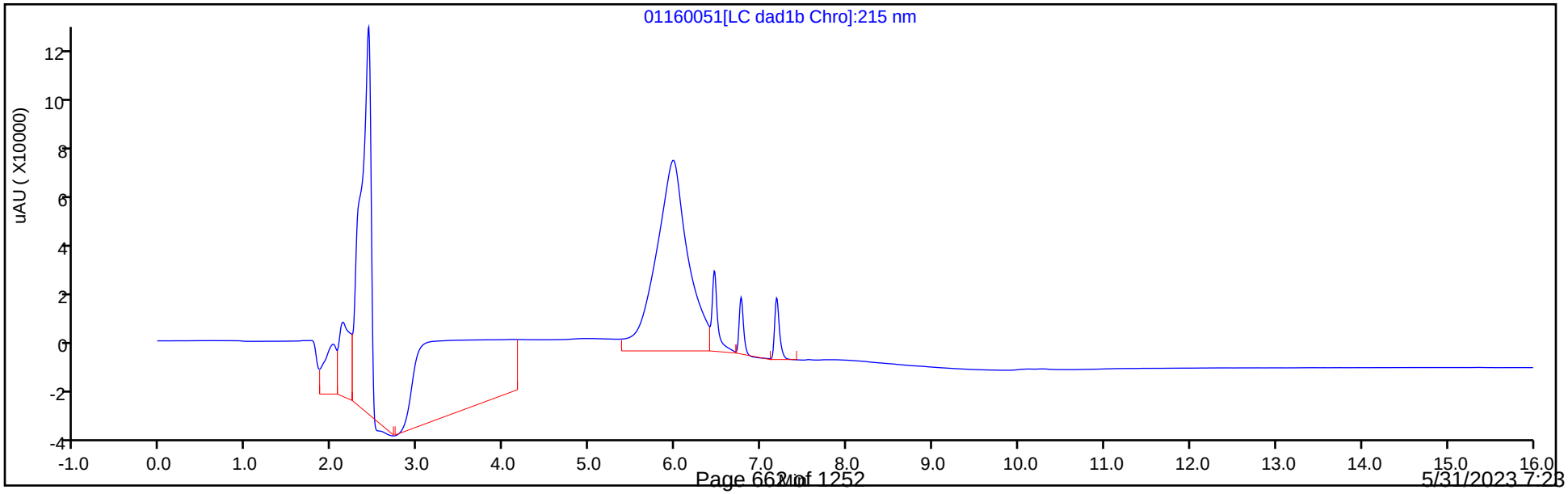
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160051.d

Injection Date:	17-Jan-2023 05:13:53	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC DMT 5			Worklist Smp#:	23
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	54
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

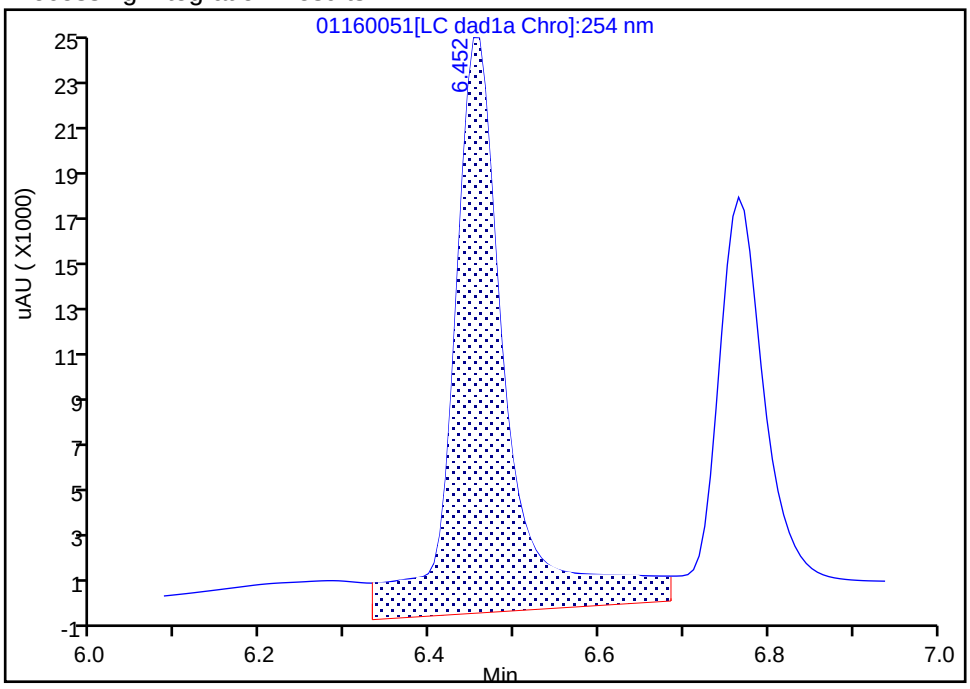
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160051.d				
Injection Date:	17-Jan-2023 05:13:53	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 5				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	54	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

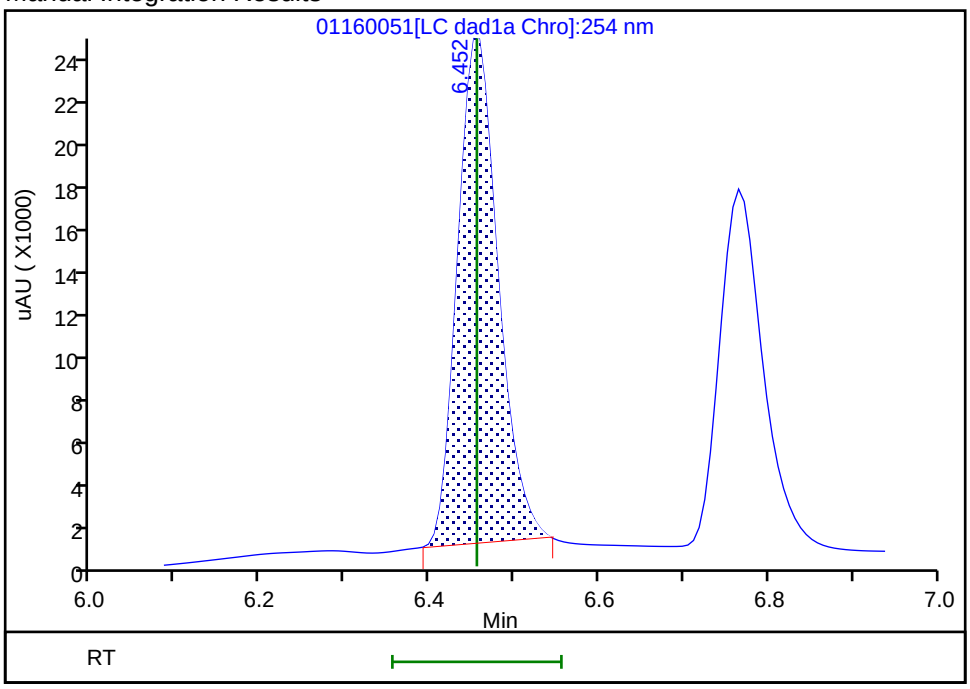
Processing Integration Results

RT: 6.45
Area: 109761
Amount: 0.292841
Amount Units: ug/mL



Manual Integration Results

RT: 6.45
Area: 76678
Amount: 0.391897
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:37:10
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

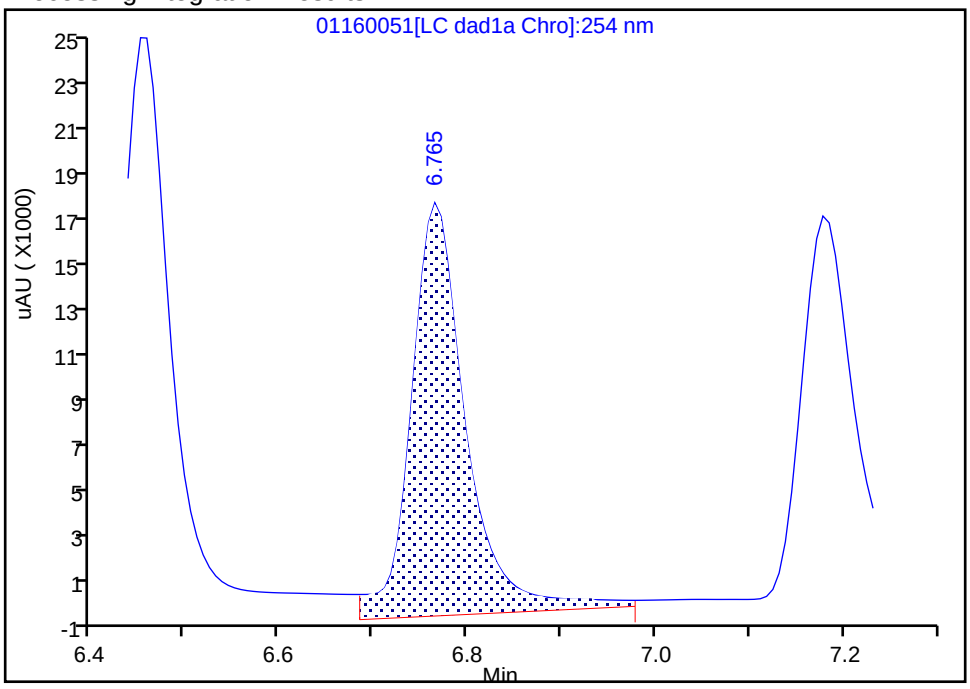
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160051.d				
Injection Date:	17-Jan-2023 05:13:53	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 5				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	54	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

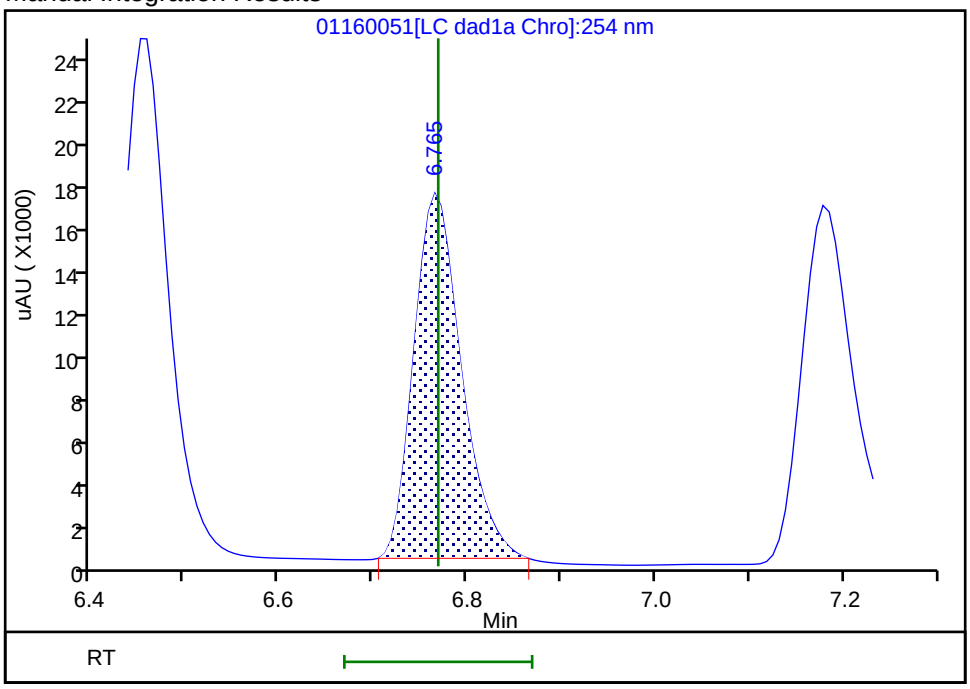
Processing Integration Results

RT: 6.77
Area: 70018
Amount: 0.410579
Amount Units: ug/mL



Manual Integration Results

RT: 6.77
Area: 56746
Amount: 0.392487
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:37:13
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

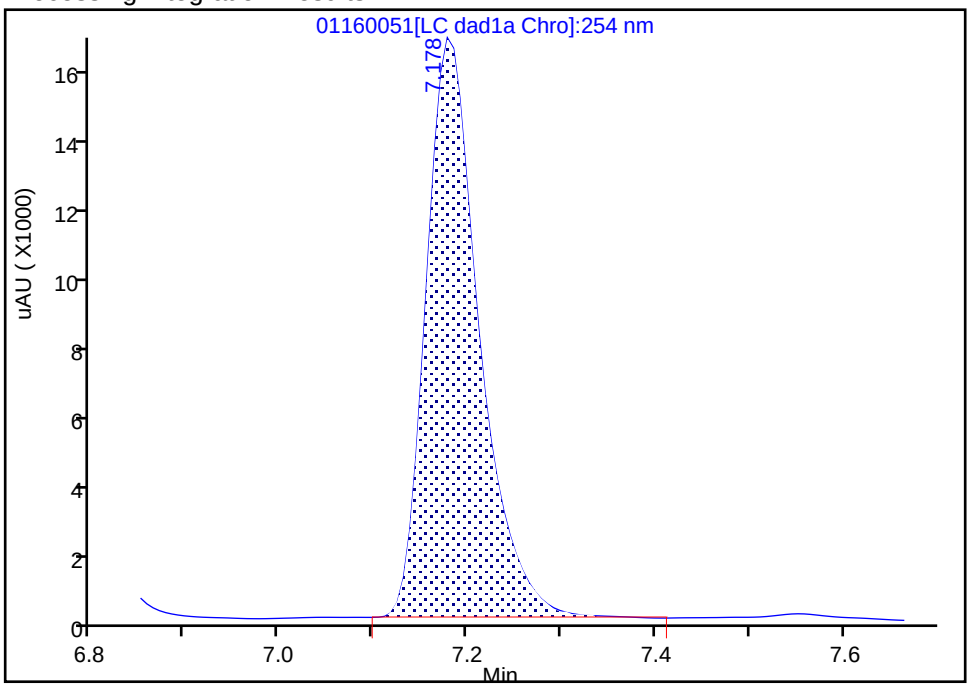
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160051.d				
Injection Date:	17-Jan-2023 05:13:53	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 5				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	54	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

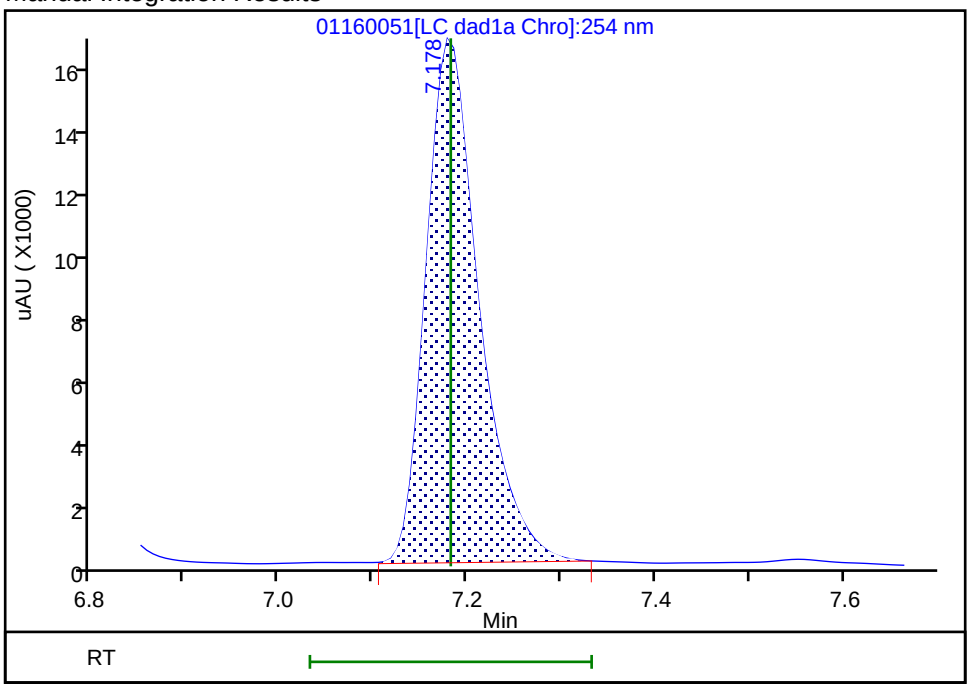
Processing Integration Results

RT: 7.18
Area: 62721
Amount: 0.441744
Amount Units: ug/mL



Manual Integration Results

RT: 7.18
Area: 62032
Amount: 0.463137
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:37:17
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160052.D
Lims ID: IC DMT 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 17-Jan-2023 05:37:19 ALS Bottle#: 55 Worklist Smp#: 24
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICDMT4
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jan-2023 12:50:45 Calib Date: 17-Jan-2023 06:47:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160055.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: LV5D Date: 17-Jan-2023 12:37:31

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.455	6.455	0.000	49088	0.2500	0.2451	M
6 DNX	1	6.769	6.769	0.000	36087	0.2510	0.2435	M
7 MNX	1	7.182	7.182	0.000	39009	0.2925	0.2846	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00012 Amount Added: 12.50 Units: uL

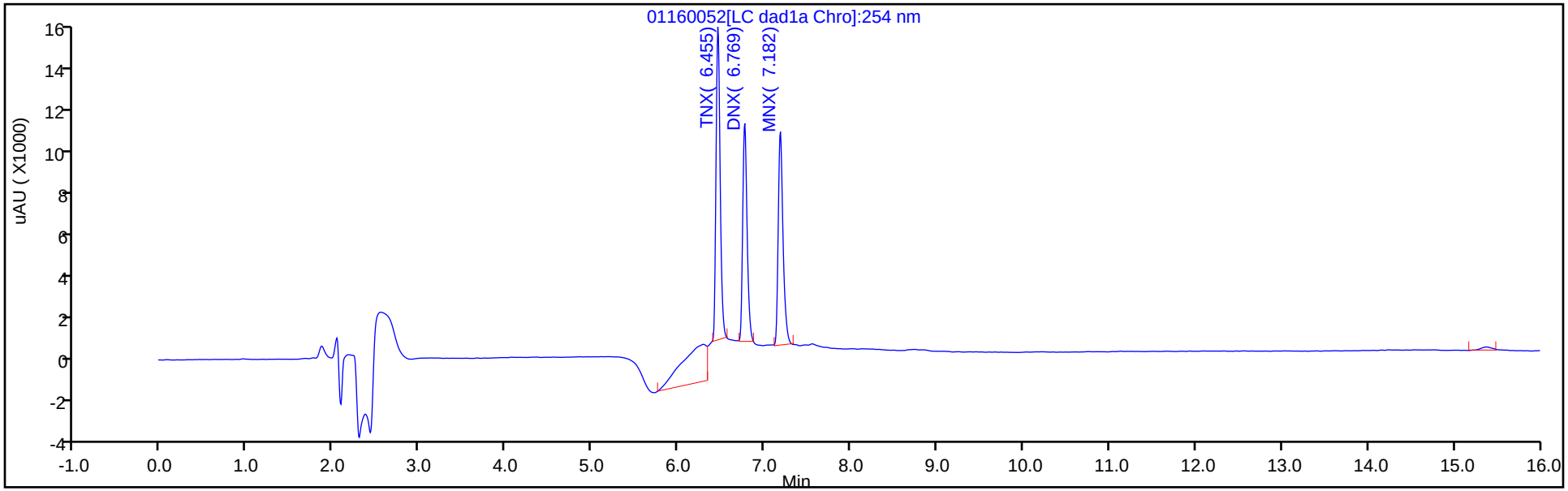
Report Date: 17-Jan-2023 12:50:45 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Denver

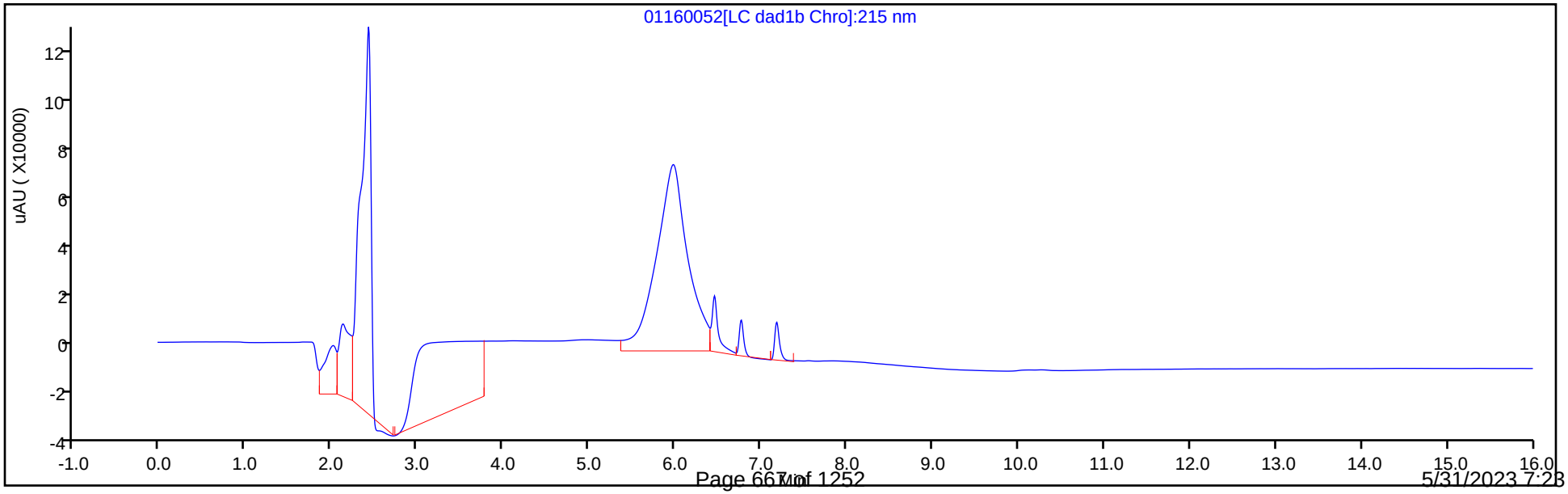
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160052.d

Injection Date:	17-Jan-2023 05:37:19	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC DMT 4			Worklist Smp#:	24
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	55
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

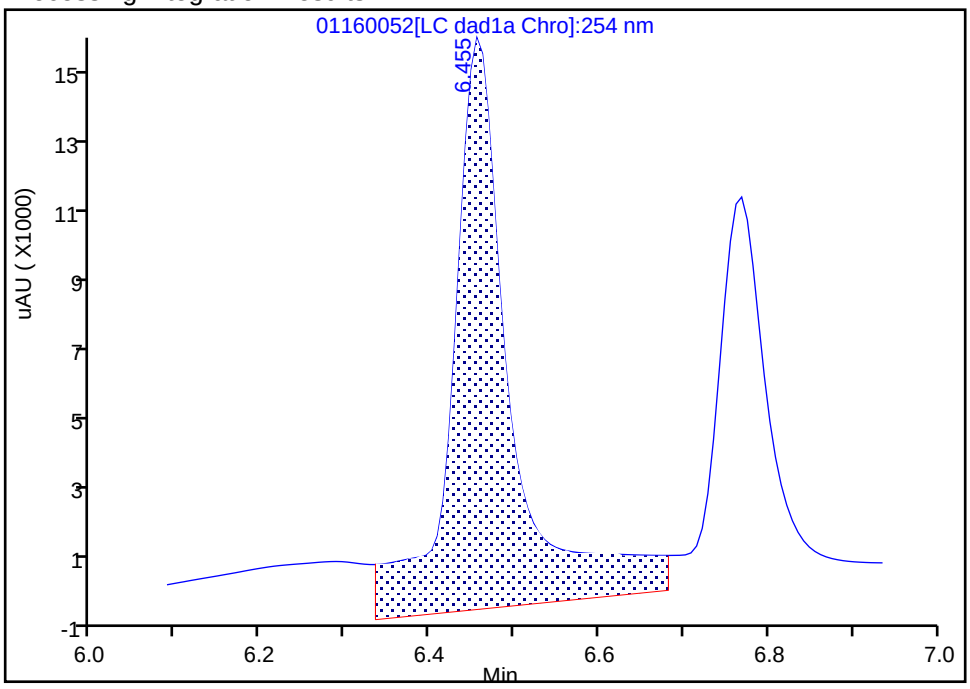
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Injection Date:	17-Jan-2023 05:37:19	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 4				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	55	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

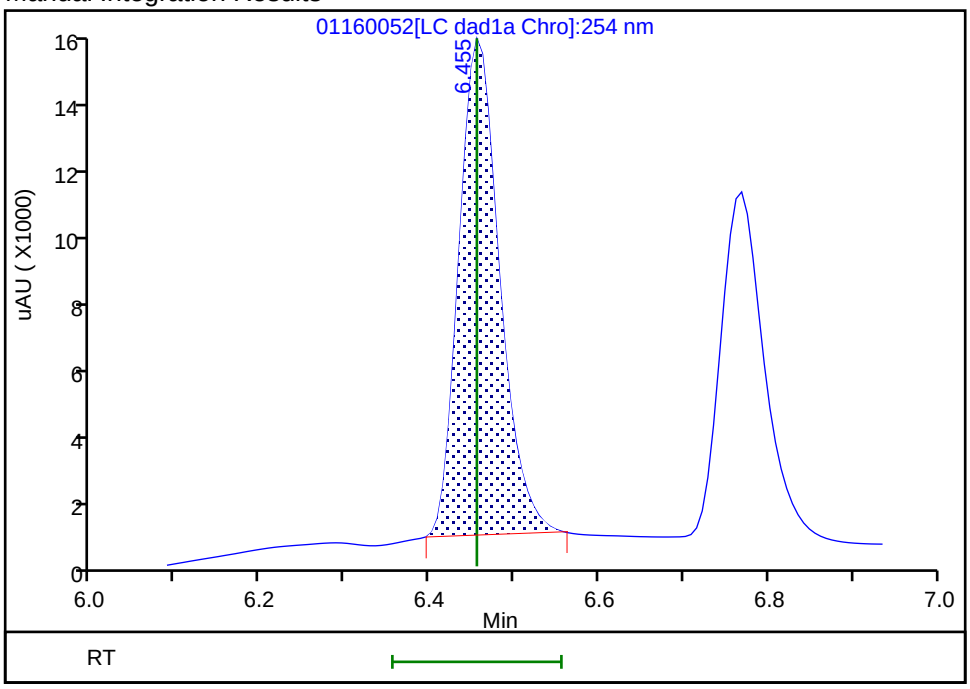
Processing Integration Results

RT: 6.46
Area: 79168
Amount: 0.217210
Amount Units: ug/mL



Manual Integration Results

RT: 6.46
Area: 49088
Amount: 0.245140
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:37:24
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver

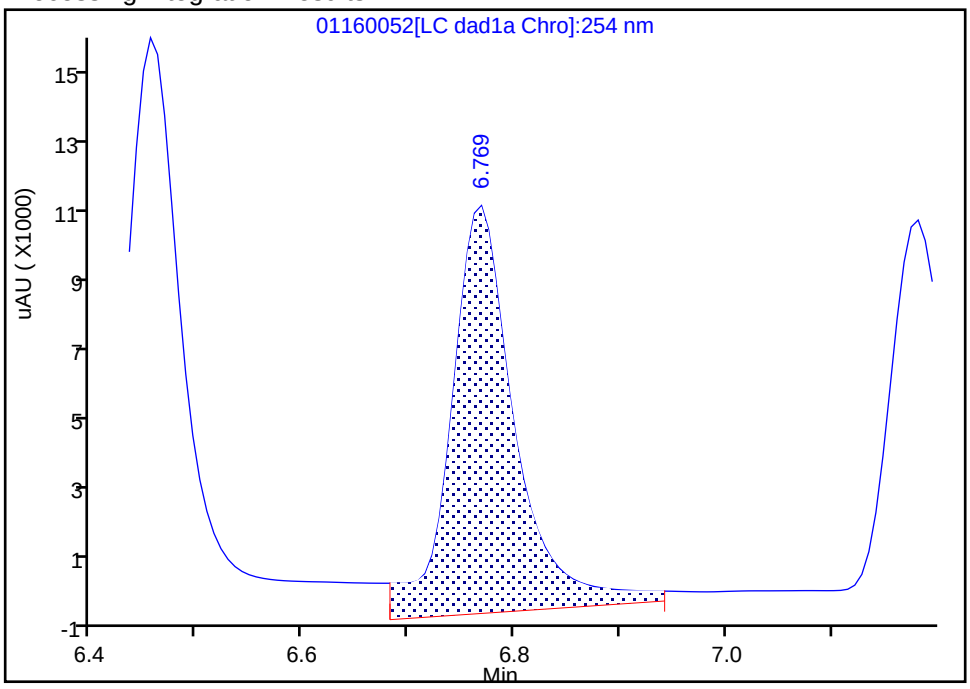
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160052.d
Injection Date: 17-Jan-2023 05:37:19 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 4
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 55 Worklist Smp#: 24
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 DNX, CAS: 80251-29-2

Signal: 1

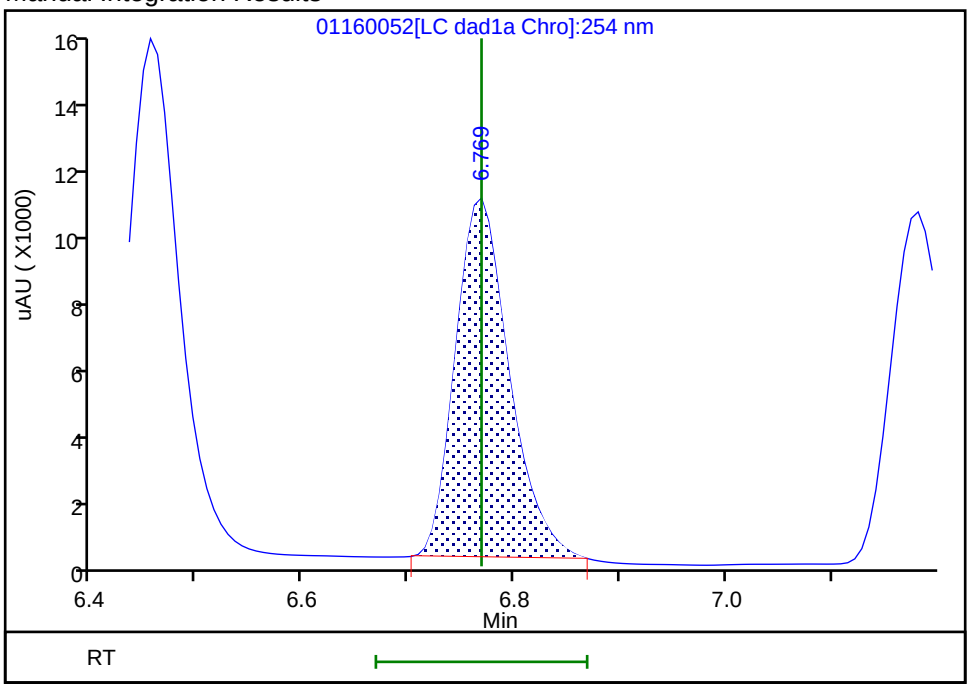
Processing Integration Results

RT: 6.77
Area: 46567
Amount: 0.279843
Amount Units: ug/mL



Manual Integration Results

RT: 6.77
Area: 36087
Amount: 0.243481
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:37:27
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

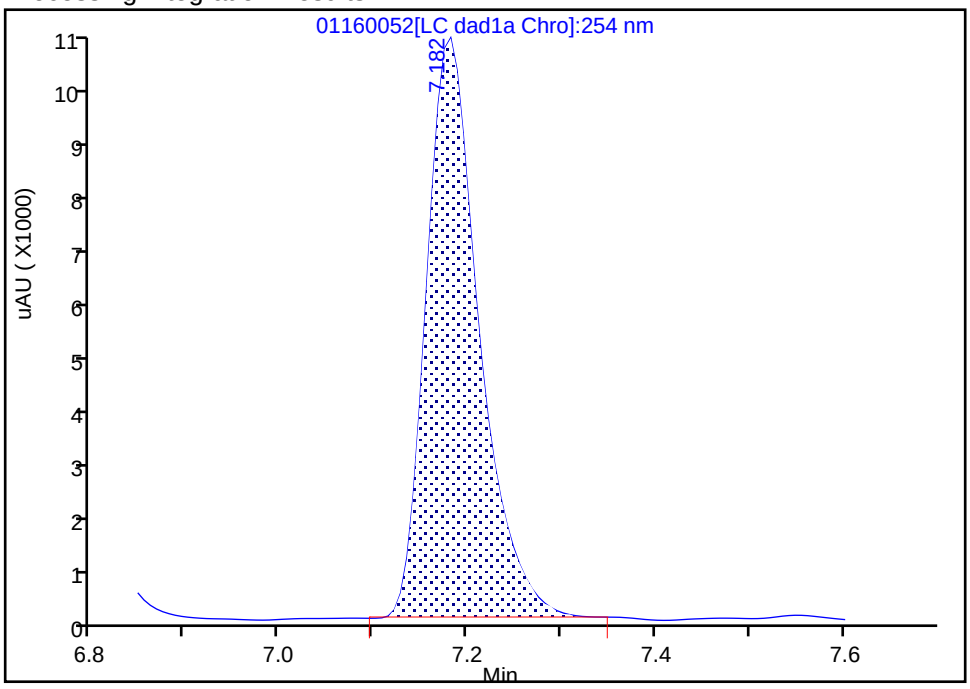
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160052.d				
Injection Date:	17-Jan-2023 05:37:19	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 4				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	55	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

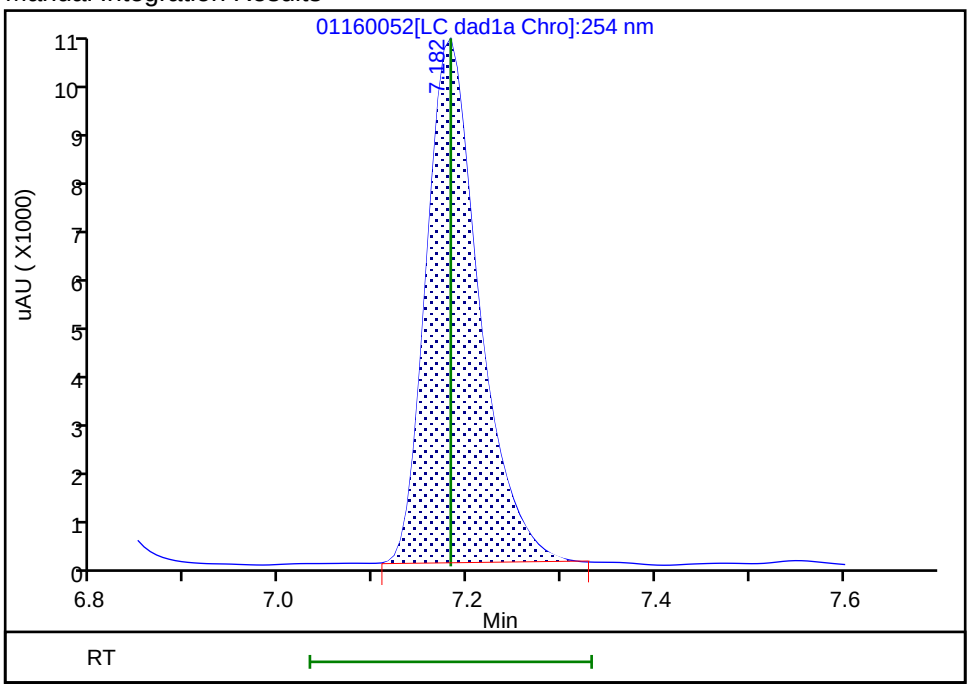
Processing Integration Results

RT: 7.18
Area: 39186
Amount: 0.276345
Amount Units: ug/mL



Manual Integration Results

RT: 7.18
Area: 39009
Amount: 0.284563
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:37:30
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160053.D
Lims ID: IC DMT 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 17-Jan-2023 06:00:45 ALS Bottle#: 56 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICDMT3
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jan-2023 12:50:45 Calib Date: 17-Jan-2023 06:47:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160055.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: LV5D Date: 17-Jan-2023 12:37:48

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.456	6.455	0.001	20449	0.1000	0.0928	M
6 DNX	1	6.763	6.769	-0.006	15527	0.1004	0.0952	M
7 MNX	1	7.183	7.182	0.001	16685	0.1170	0.1114	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00012 Amount Added: 5.00 Units: uL

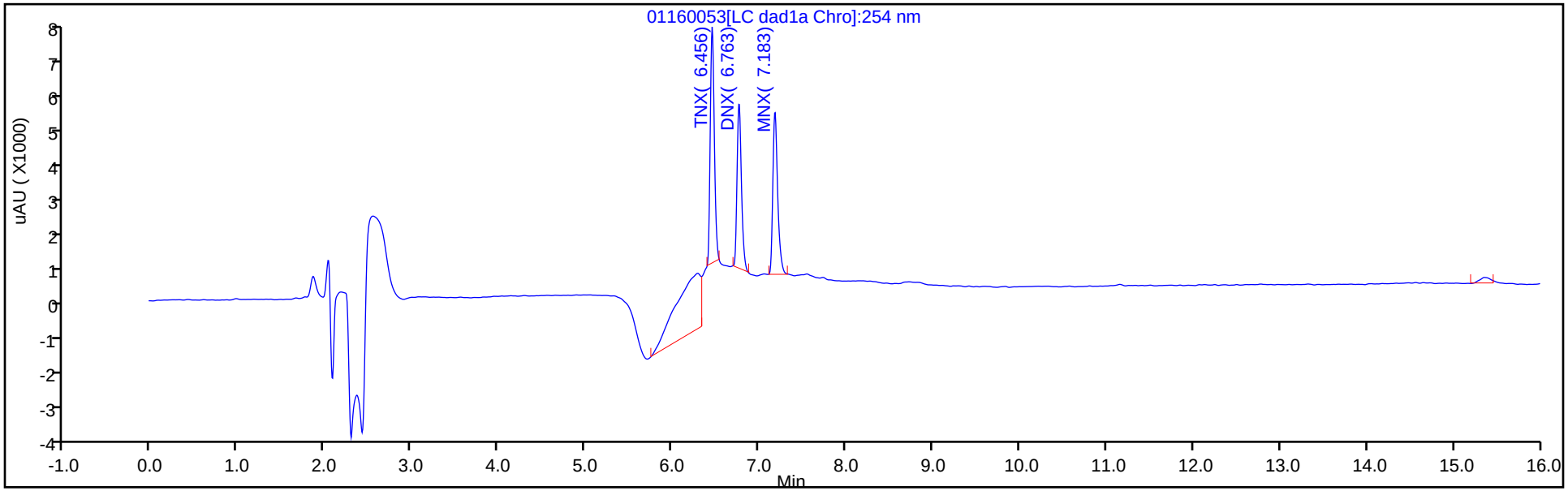
Report Date: 17-Jan-2023 12:50:46 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Denver

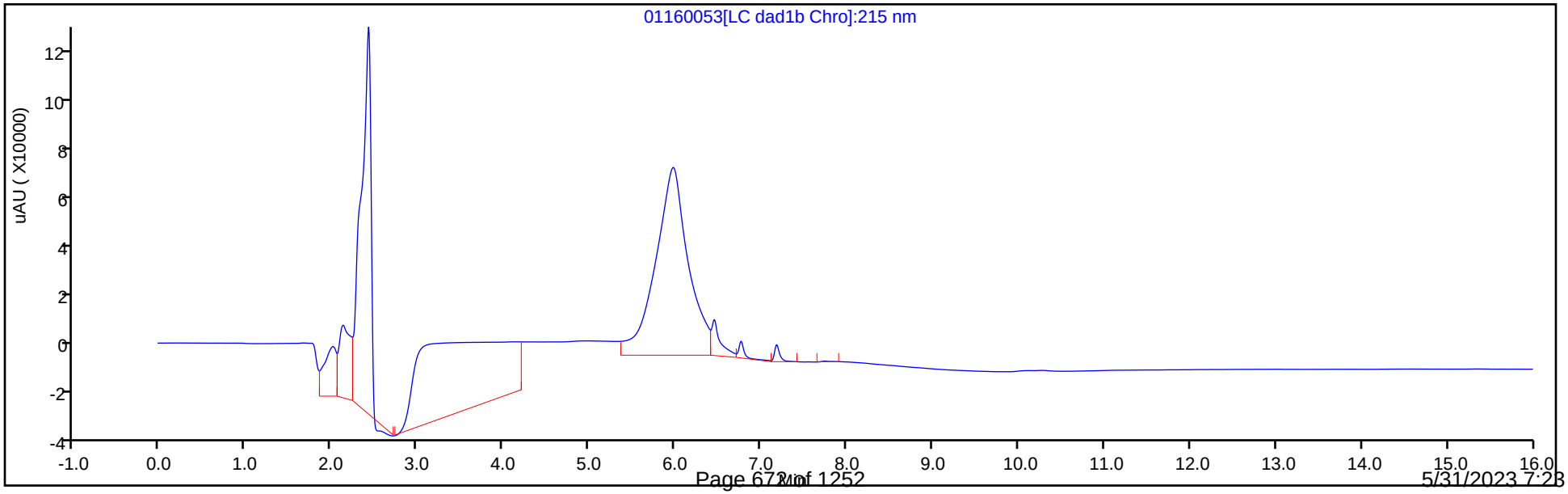
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160053.d

Injection Date:	17-Jan-2023 06:00:45	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC DMT 3			Worklist Smp#:	25
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	56
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

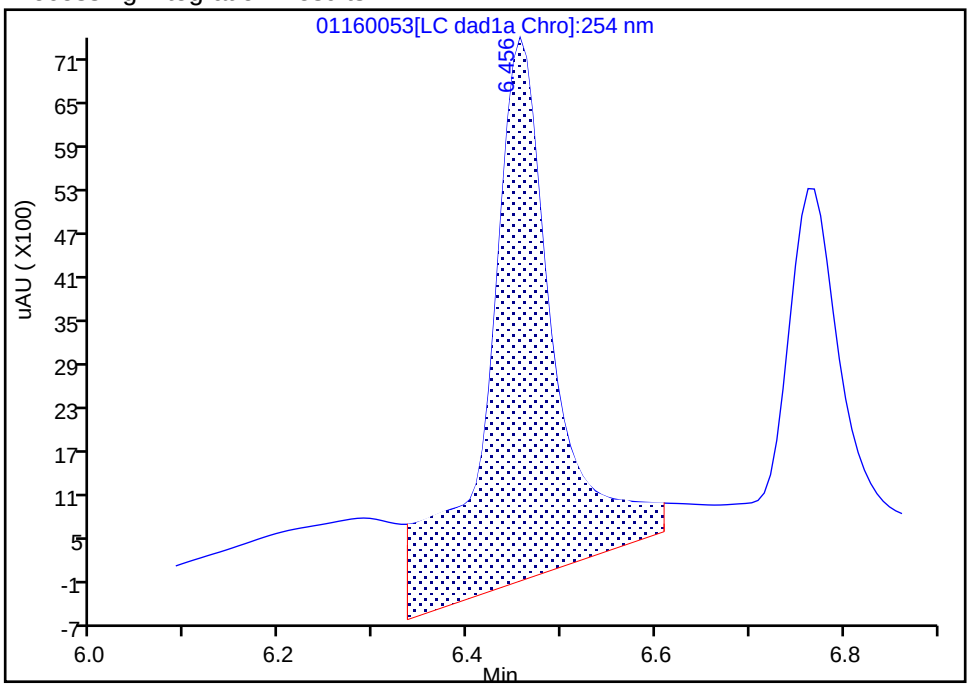
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160053.d
Injection Date: 17-Jan-2023 06:00:45 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 3
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 56 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

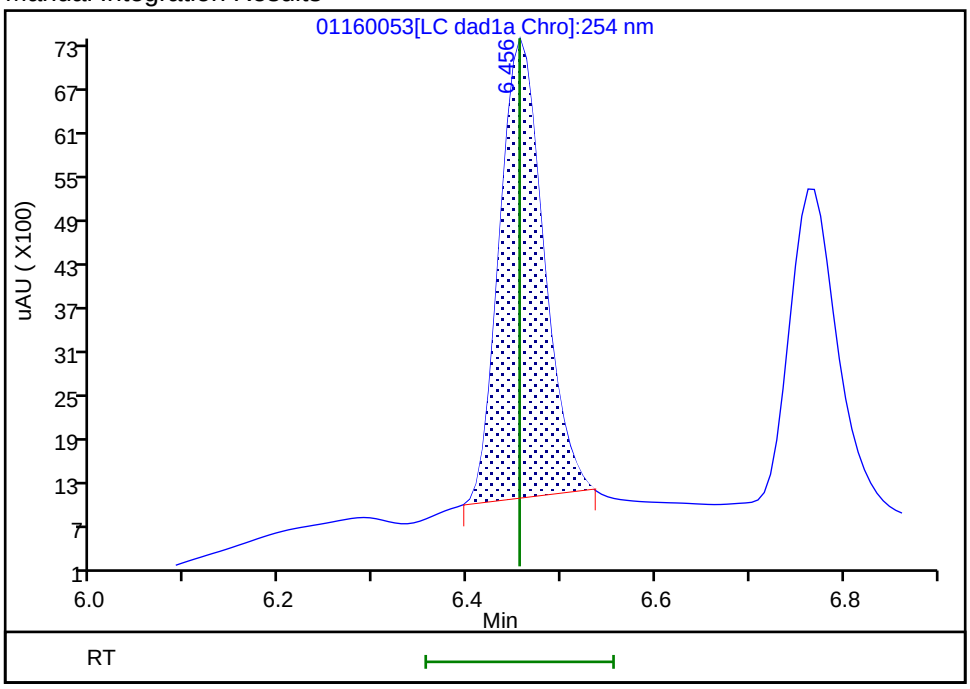
Processing Integration Results

RT: 6.46
Area: 36826
Amount: 0.124283
Amount Units: ug/mL



Manual Integration Results

RT: 6.46
Area: 20449
Amount: 0.092803
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:37:37
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

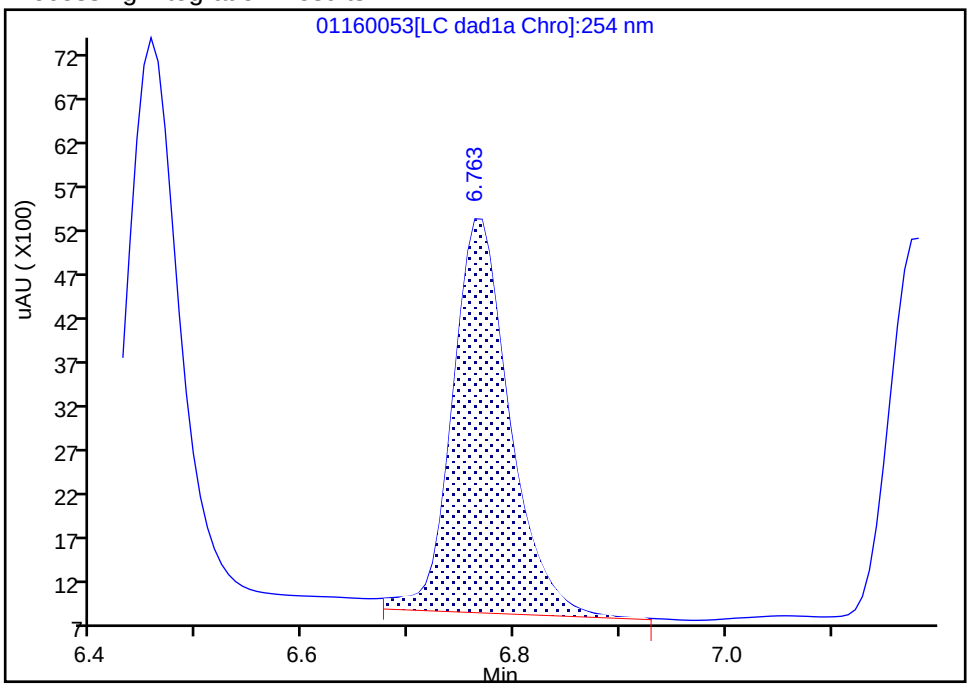
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160053.d				
Injection Date:	17-Jan-2023 06:00:45	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 3				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	56	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

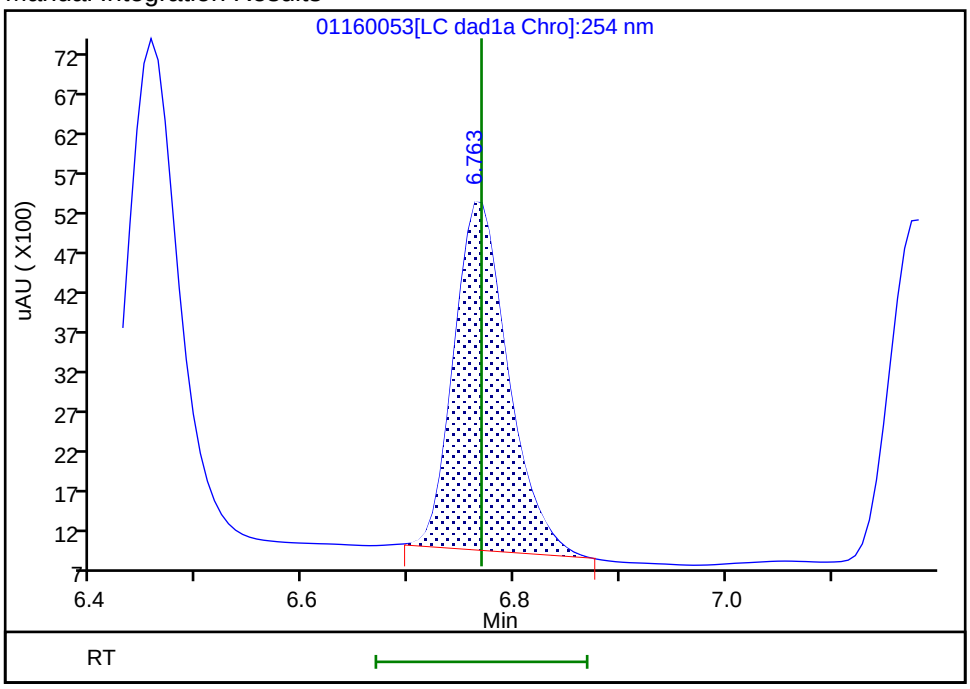
Processing Integration Results

RT: 6.76
Area: 16652
Amount: 0.103310
Amount Units: ug/mL



Manual Integration Results

RT: 6.76
Area: 15527
Amount: 0.095189
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:37:43

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

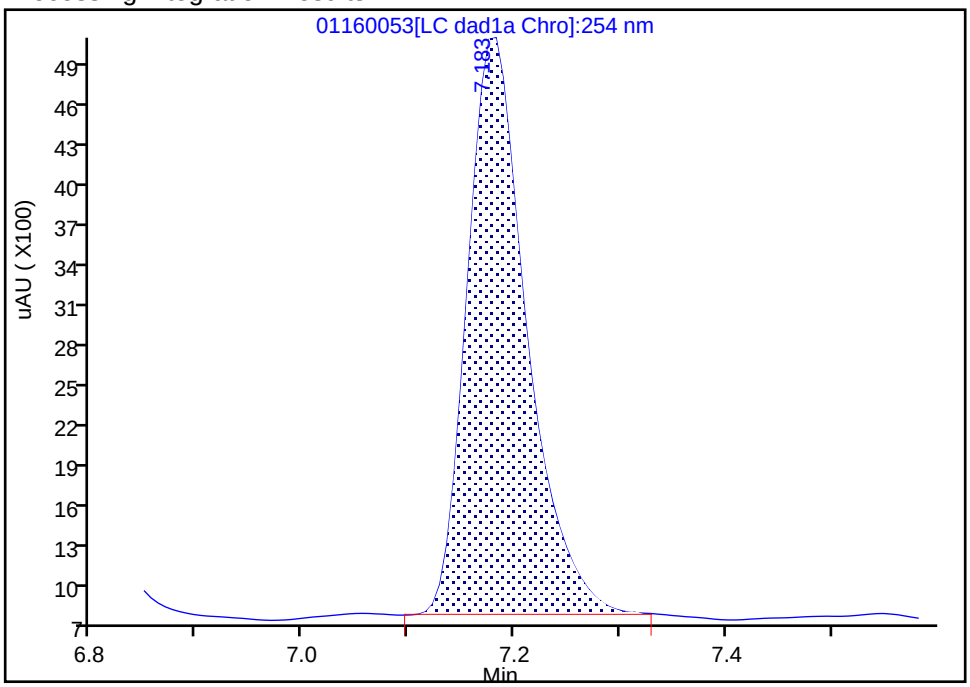
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160053.d
Injection Date: 17-Jan-2023 06:00:45 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 3
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 56 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

7 MNX, CAS: 5755-27-1

Signal: 1

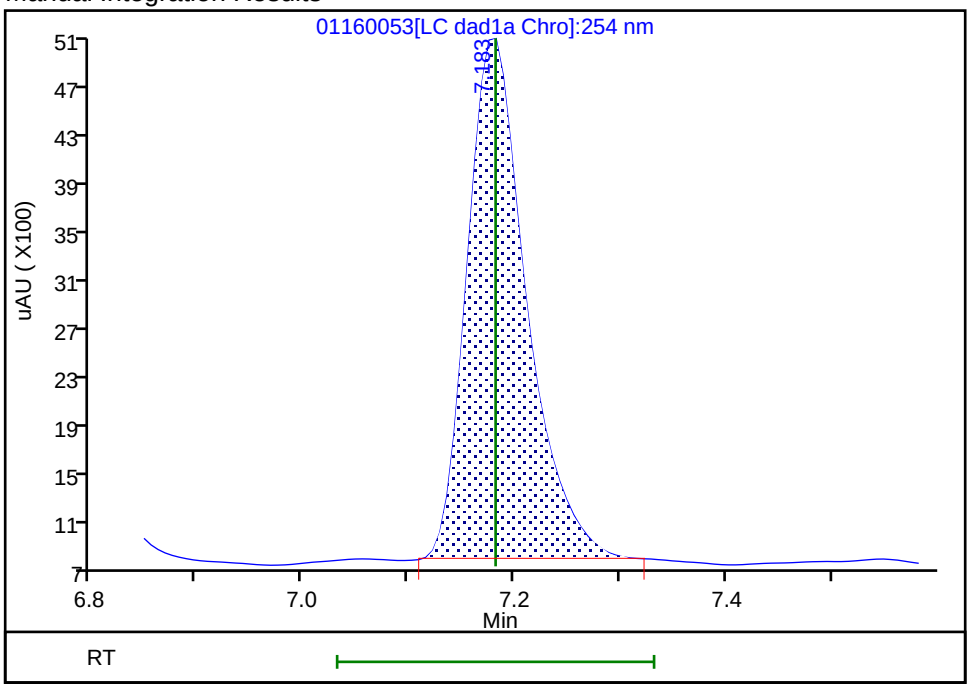
Processing Integration Results

RT: 7.18
Area: 16784
Amount: 0.118426
Amount Units: ug/mL



Manual Integration Results

RT: 7.18
Area: 16685
Amount: 0.111410
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:37:46
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160054.D				
Lims ID:	IC DMT 2				
Client ID:					
Sample Type:	IC	Calib Level:	2		
Inject. Date:	17-Jan-2023 06:24:12	ALS Bottle#:	57	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	ICDMT2				
Operator ID:	JZ/MAR	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	17-Jan-2023 12:50:46	Calib Date:	17-Jan-2023 06:47:07		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160055.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1672				
First Level Reviewer: LV5D		Date:	17-Jan-2023 12:38:03		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.457	6.455	0.002	10757	0.0400	0.0412	M
6 DNX	1	6.770	6.769	0.001	8038	0.0402	0.0412	M
7 MNX	1	7.184	7.182	0.002	8491	0.0468	0.0479	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

8330 DMT_00012 Amount Added: 2.00 Units: uL

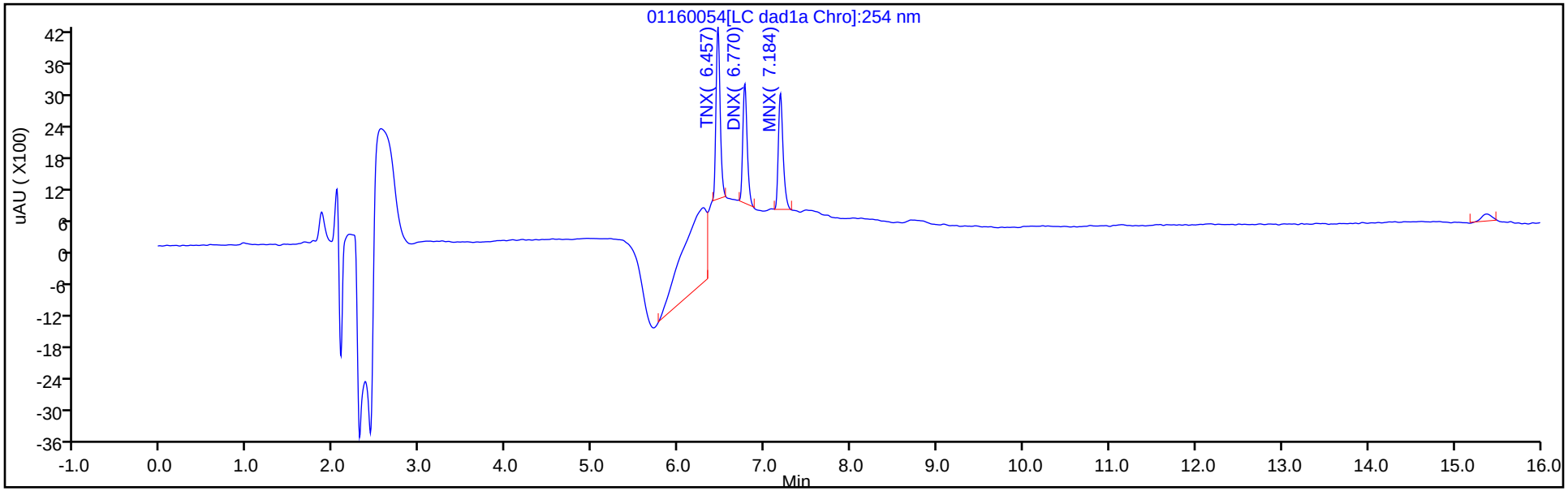
Report Date: 17-Jan-2023 12:50:46 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Denver

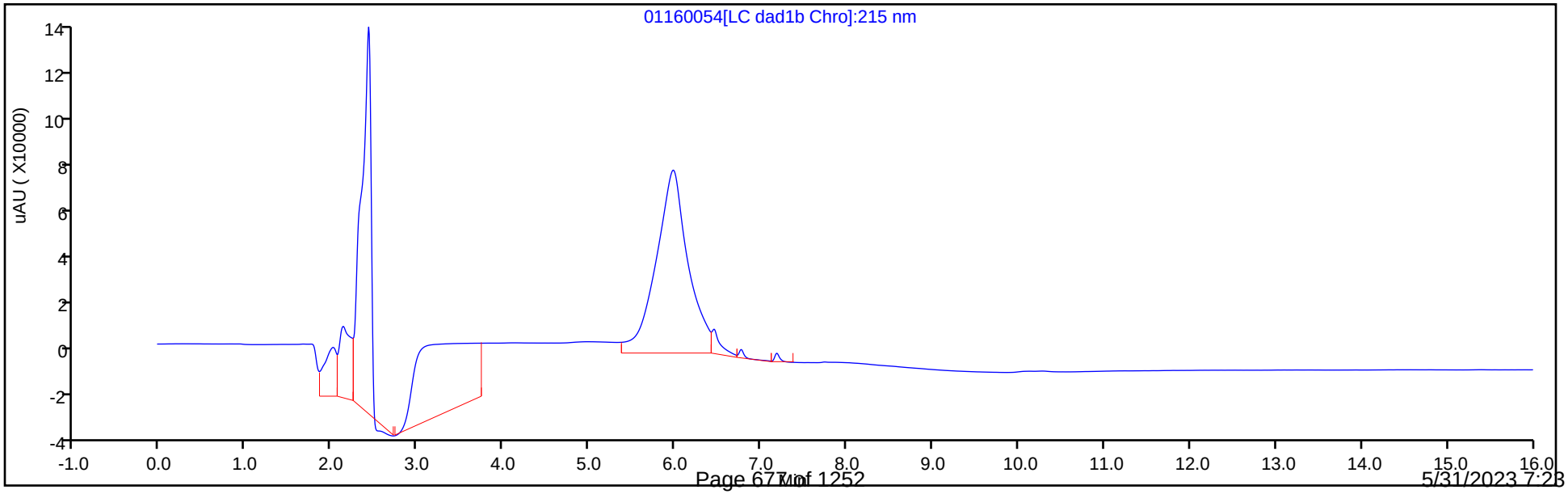
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160054.d

Injection Date:	17-Jan-2023 06:24:12	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC DMT 2			Worklist Smp#:	26
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	57
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

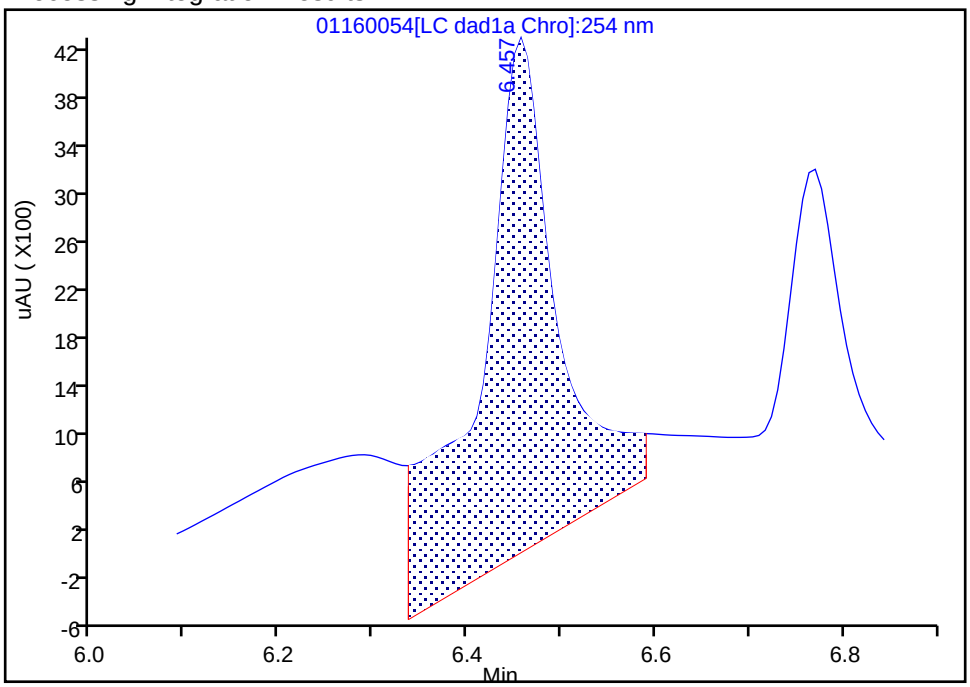
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160054.d
Injection Date: 17-Jan-2023 06:24:12 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 2
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 57 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

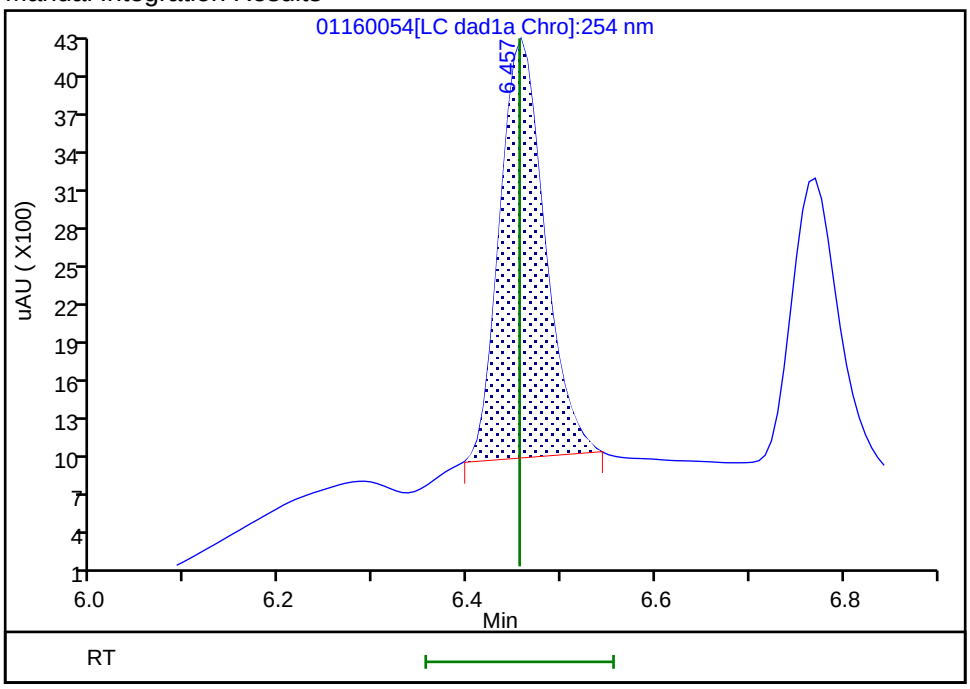
Processing Integration Results

RT: 6.46
Area: 24809
Amount: 0.075415
Amount Units: ug/mL



Manual Integration Results

RT: 6.46
Area: 10757
Amount: 0.041249
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:37:55
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver

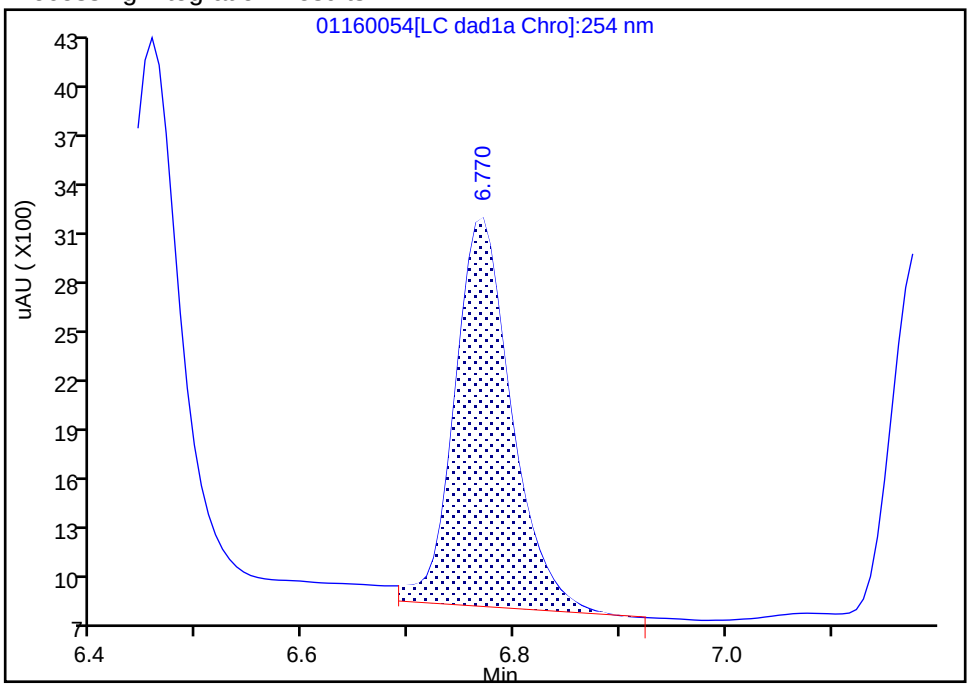
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160054.d				
Injection Date:	17-Jan-2023 06:24:12	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 2				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	57	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

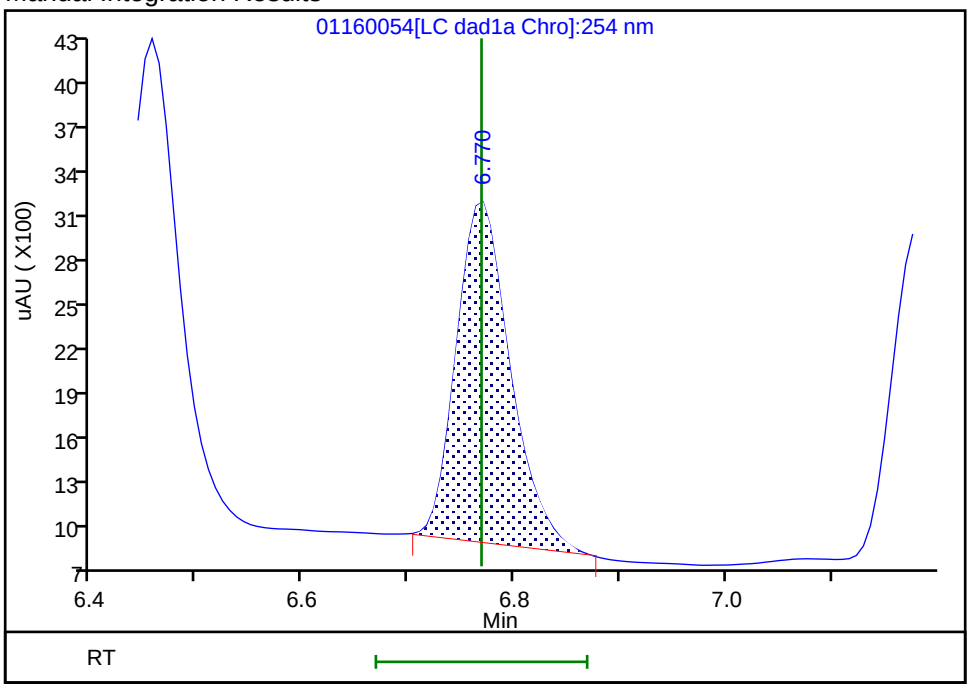
Processing Integration Results

RT: 6.77
Area: 8783
Amount: 0.054968
Amount Units: ug/mL



Manual Integration Results

RT: 6.77
Area: 8038
Amount: 0.041174
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:37:58
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

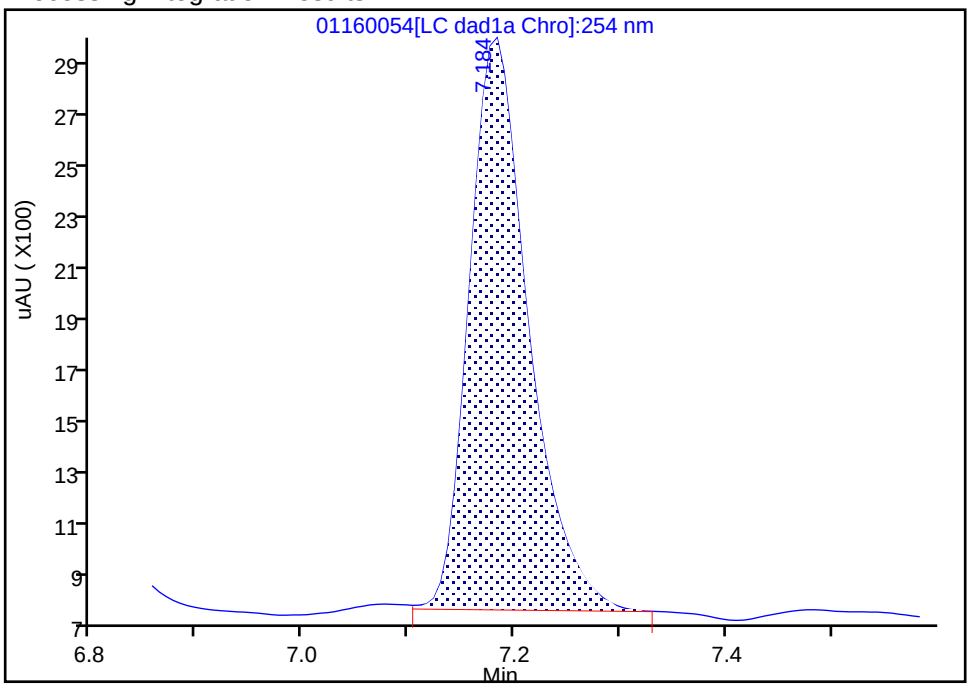
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160054.d
Injection Date: 17-Jan-2023 06:24:12 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 2
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 57 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

7 MNX, CAS: 5755-27-1

Signal: 1

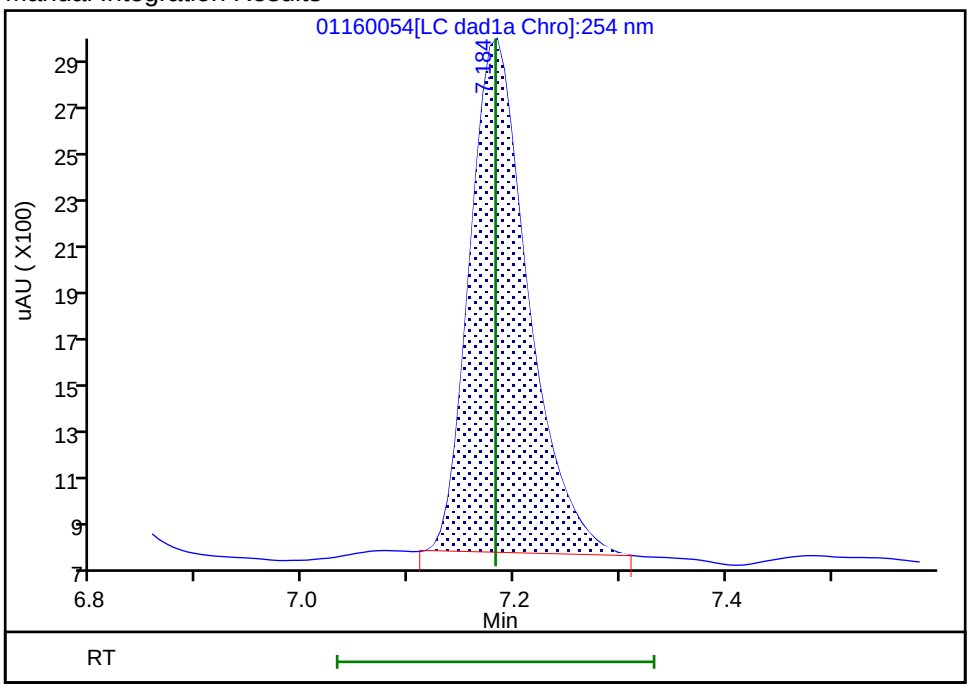
Processing Integration Results

RT: 7.18
Area: 8615
Amount: 0.060832
Amount Units: ug/mL



Manual Integration Results

RT: 7.18
Area: 8491
Amount: 0.047854
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:38:01
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160055.D
Lims ID: IC DMT 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 17-Jan-2023 06:47:07 ALS Bottle#: 58 Worklist Smp#: 27
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICDMT1
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jan-2023 12:50:47 Calib Date: 17-Jan-2023 06:47:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160055.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: LV5D Date: 17-Jan-2023 12:38:22

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.453	6.455	-0.002	3966	0.0200	0.005127	M
6 DNX	1	6.767	6.769	-0.002	2791	0.0201	0.003330	M
7 MNX	1	7.180	7.182	-0.002	3164	0.0234	0.006536	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00012 Amount Added: 1.00 Units: uL

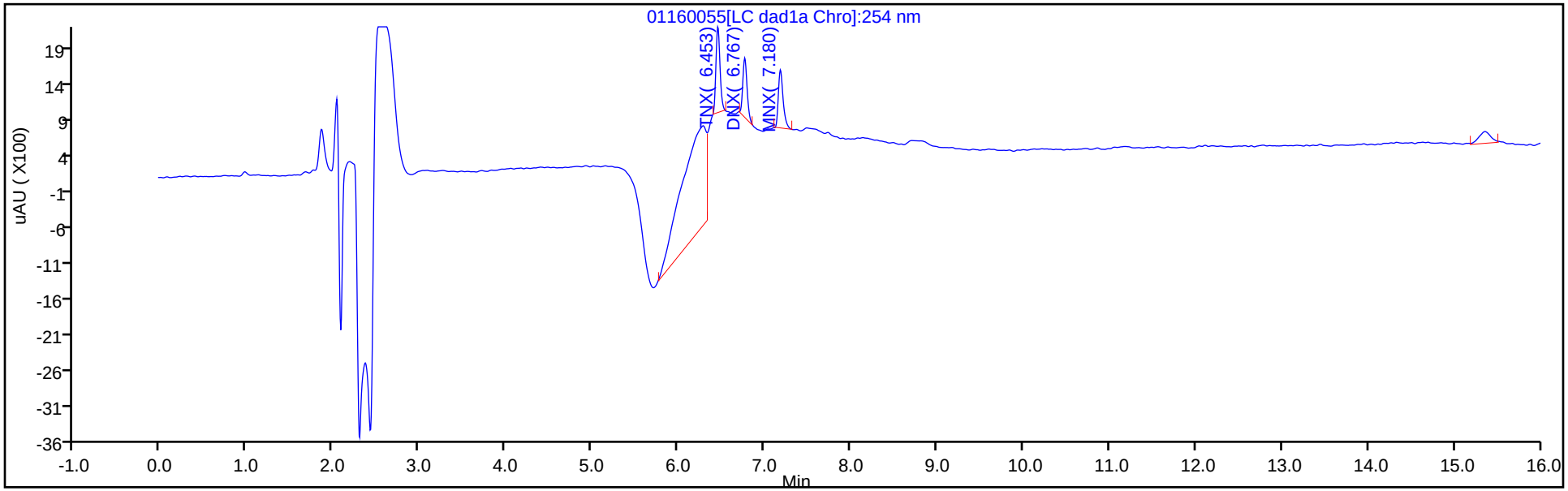
Report Date: 17-Jan-2023 12:50:47 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Denver

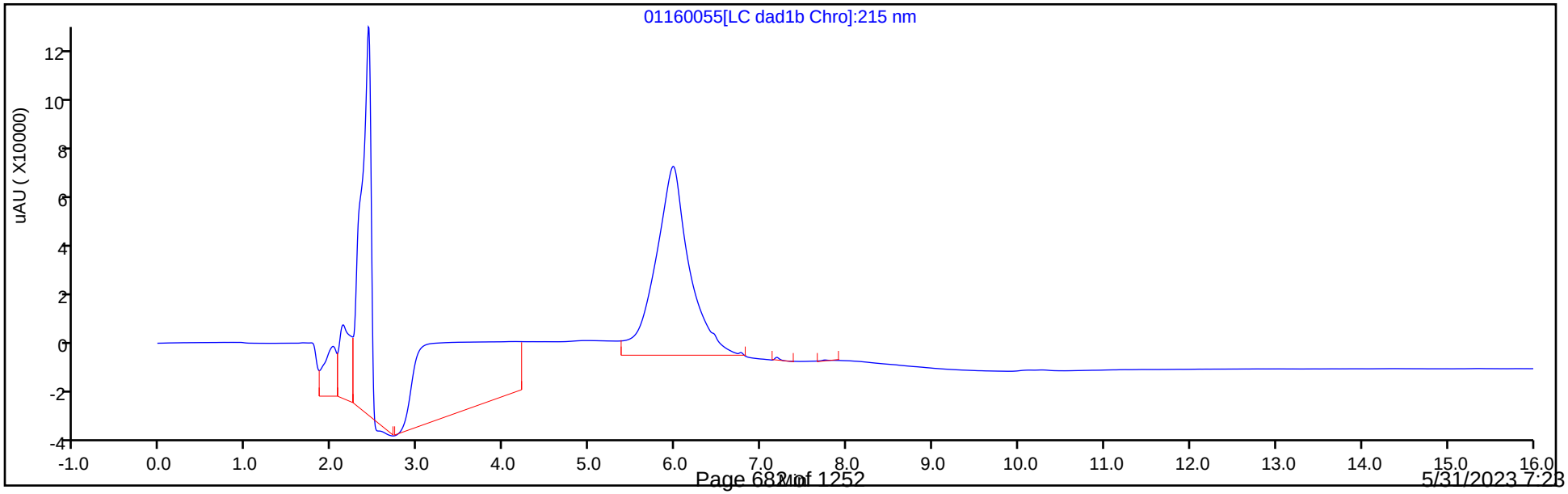
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160055.d

Injection Date:	17-Jan-2023 06:47:07	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC DMT 1			Worklist Smp#:	27
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	58
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

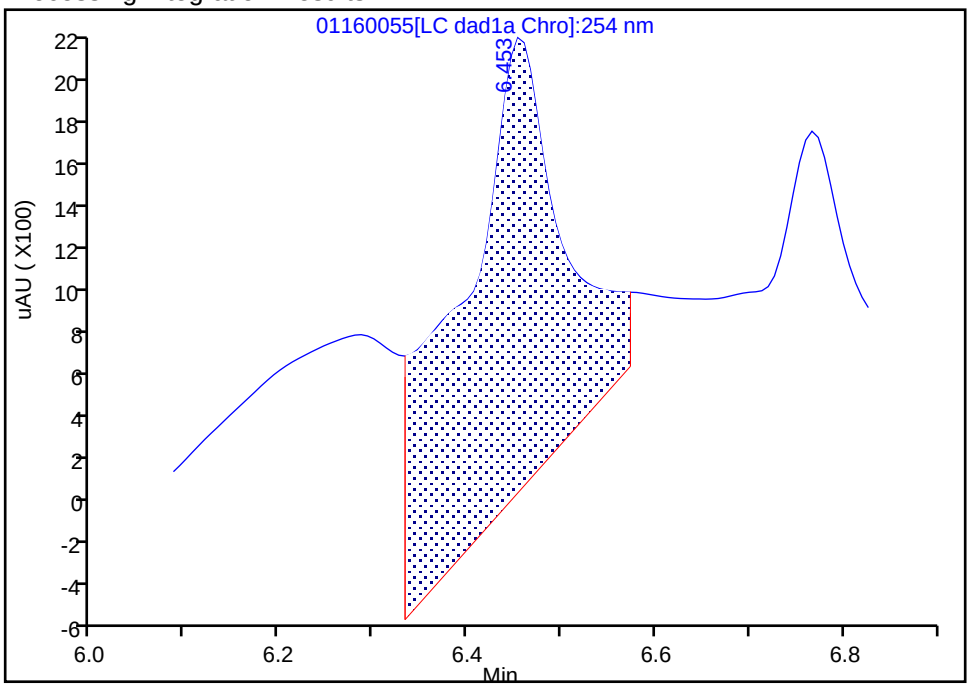
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160055.d
Injection Date: 17-Jan-2023 06:47:07 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 1
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 58 Worklist Smp#: 27
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

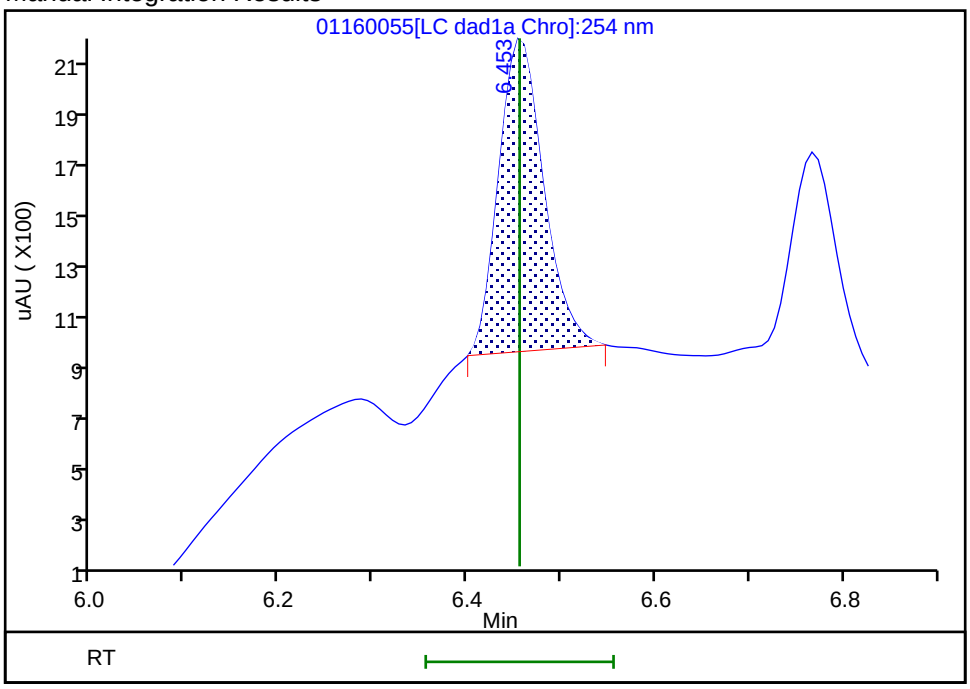
Processing Integration Results

RT: 6.45
Area: 16627
Amount: 0.058330
Amount Units: ug/mL



Manual Integration Results

RT: 6.45
Area: 3966
Amount: 0.005127
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:38:16
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

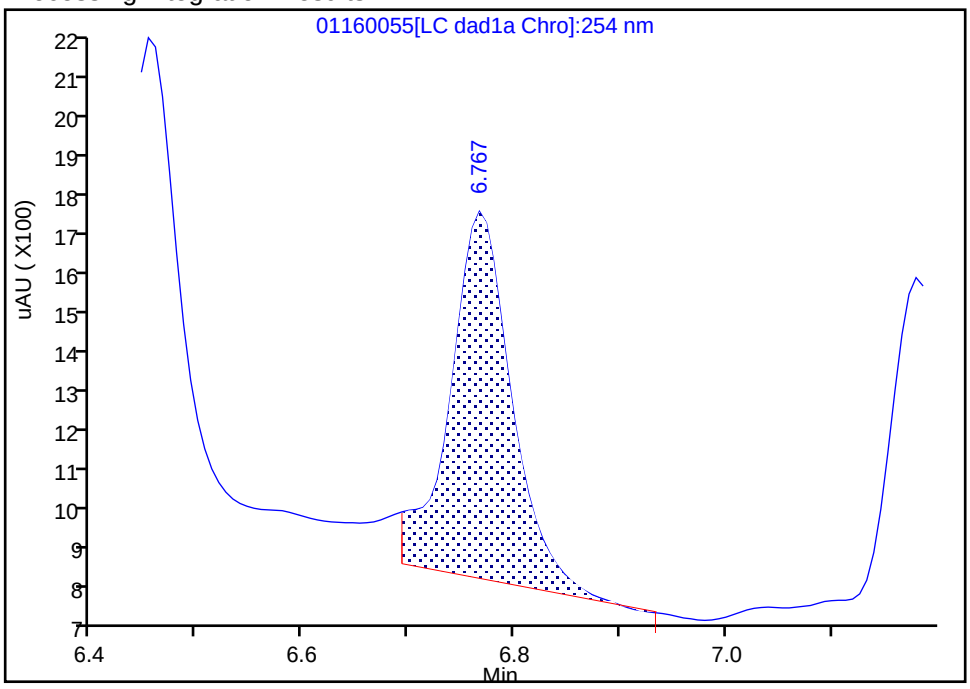
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160055.d				
Injection Date:	17-Jan-2023 06:47:07	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 1				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	58	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

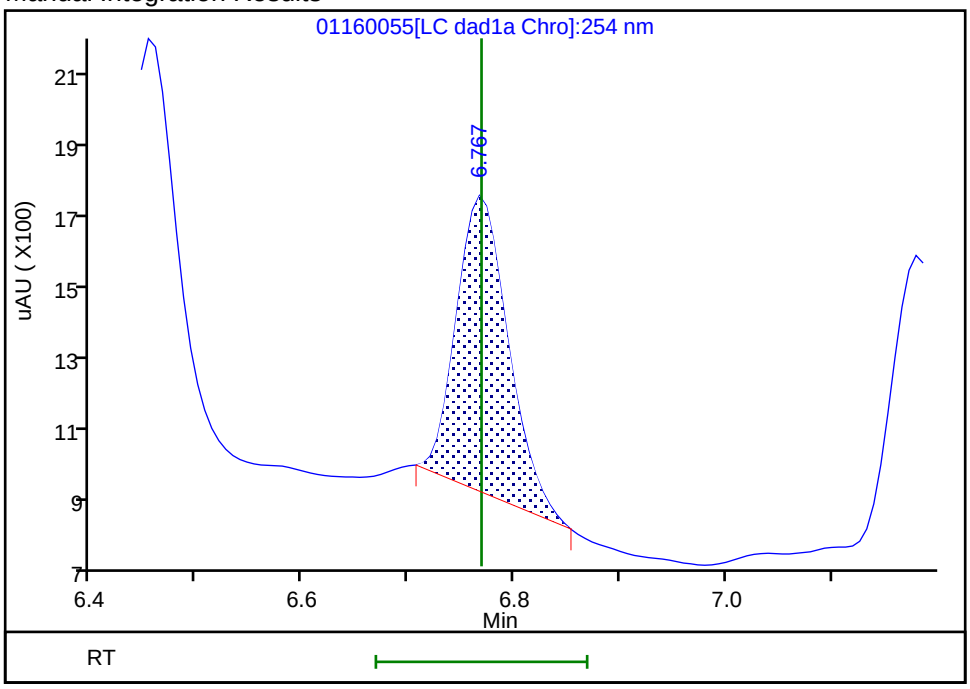
Processing Integration Results

RT: 6.77
Area: 3742
Amount: 0.023764
Amount Units: ug/mL



Manual Integration Results

RT: 6.77
Area: 2791
Amount: 0.003330
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:38:19

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

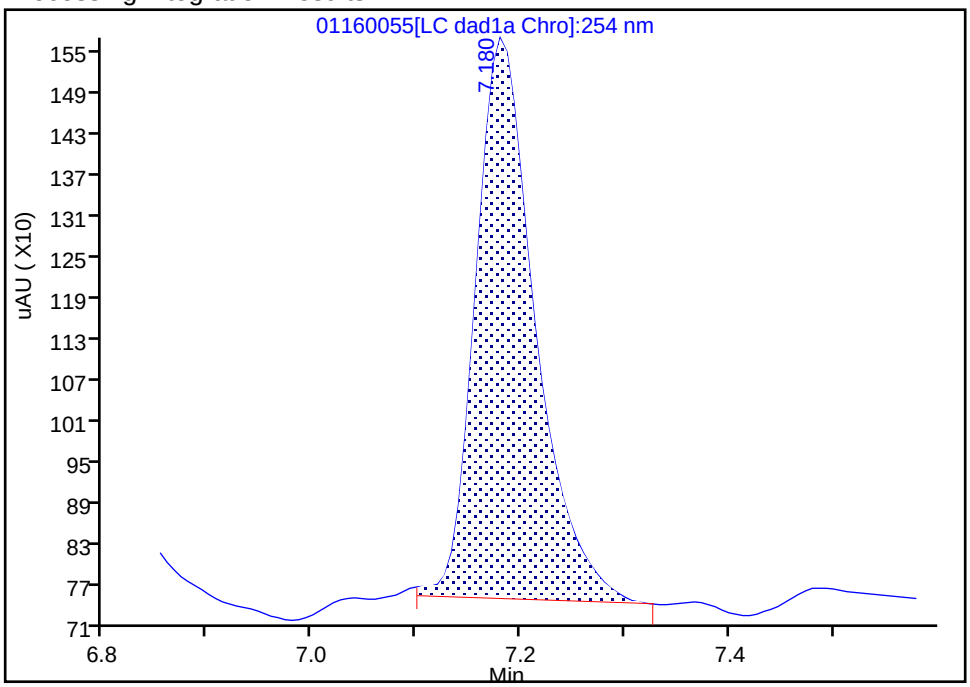
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160055.d				
Injection Date:	17-Jan-2023 06:47:07	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 1				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	58	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

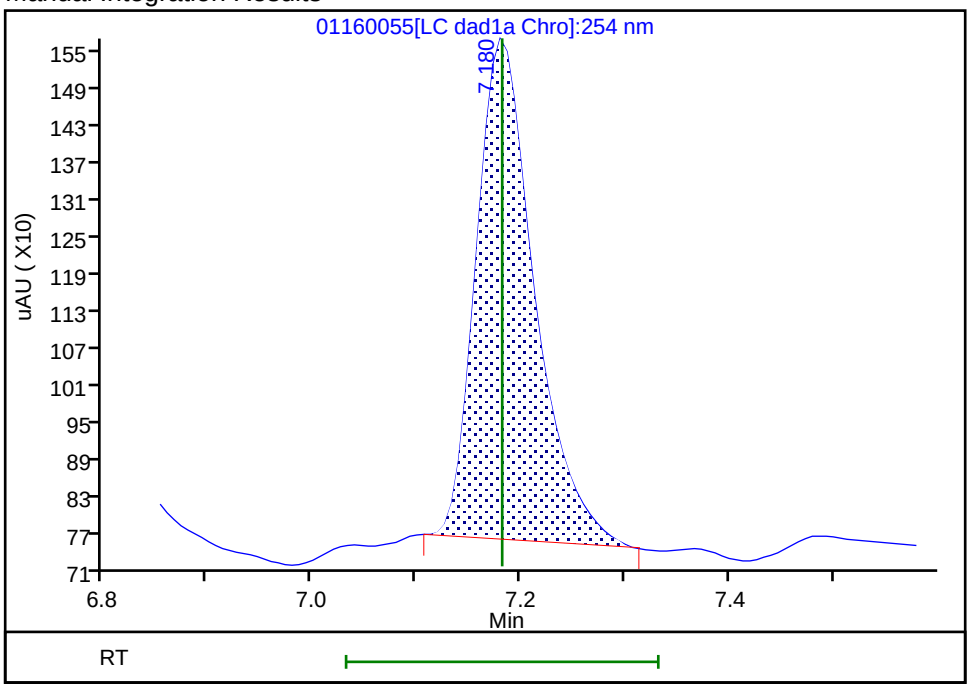
Processing Integration Results

RT: 7.18
Area: 3273
Amount: 0.023165
Amount Units: ug/mL



Manual Integration Results

RT: 7.18
Area: 3164
Amount: 0.006536
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:38:09
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

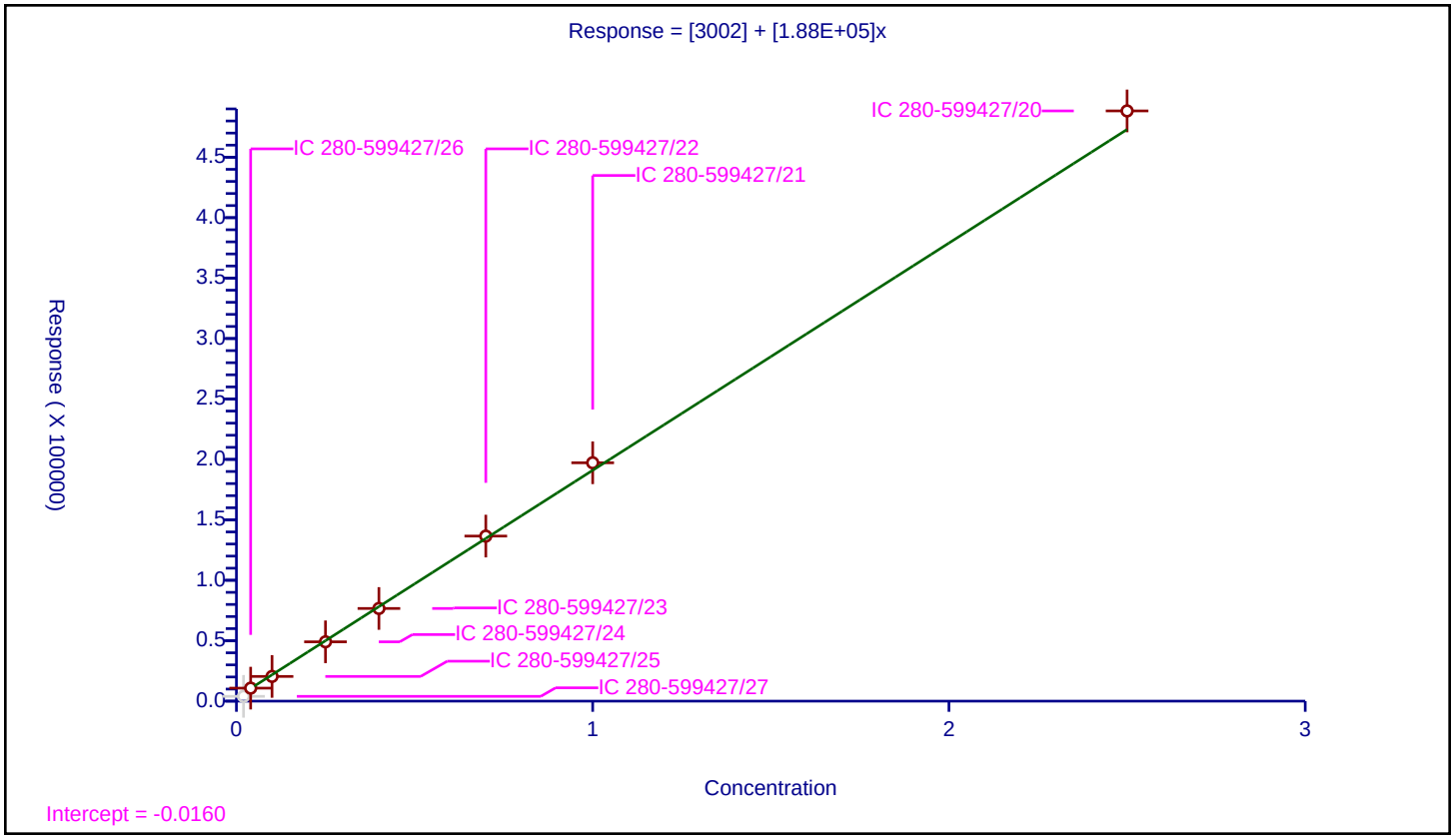
Curve Coefficients

Intercept:	3002
Slope:	1.88E+05

Error Coefficients

Standard Error:	7510
Relative Standard Error:	4.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-599427/27	0.02	3966.0			198300.0	N
2	IC 280-599427/26	0.04	10757.0			268925.0	Y
3	IC 280-599427/25	0.1	20449.0			204490.0	Y
4	IC 280-599427/24	0.25	49088.0			196352.0	Y
5	IC 280-599427/23	0.4	76678.0			191695.0	Y
6	IC 280-599427/22	0.7	136556.0			195080.0	Y
7	IC 280-599427/21	1.0	197199.0			197199.0	Y
8	IC 280-599427/20	2.5	488318.0			195327.2	Y



Calibration / DNX

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

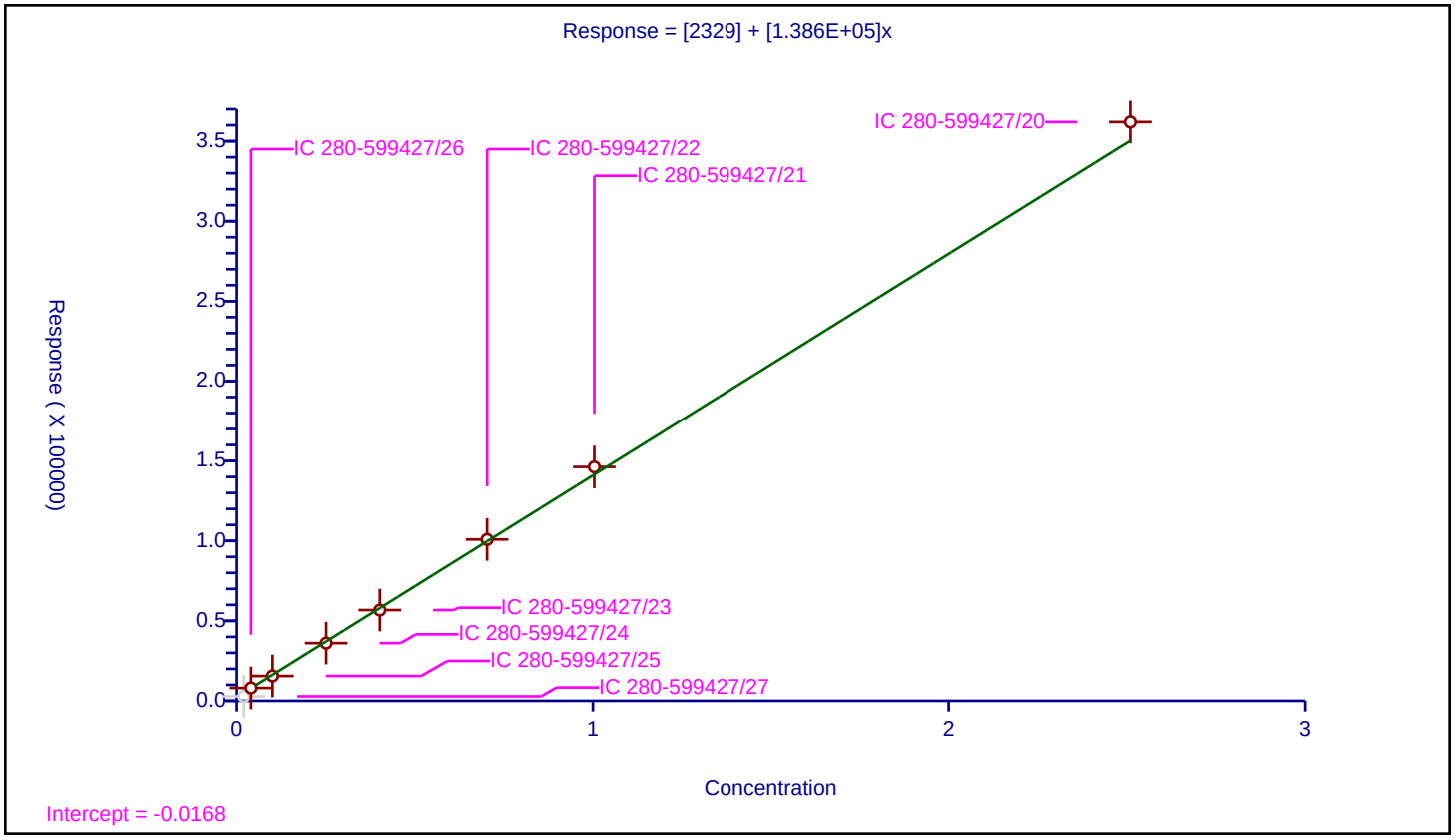
Curve Coefficients

Intercept:	2329
Slope:	1.386E+05

Error Coefficients

Standard Error:	5710
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 280-599427/27	0.02008	2791.0			138994.023904	N
2	IC 280-599427/26	0.04016	8038.0			200149.40239	Y
3	IC 280-599427/25	0.1004	15527.0			154651.394422	Y
4	IC 280-599427/24	0.251	36087.0			143772.908367	Y
5	IC 280-599427/23	0.4016	56746.0			141299.800797	Y
6	IC 280-599427/22	0.7028	100914.0			143588.50313	Y
7	IC 280-599427/21	1.004	146264.0			145681.2749	Y
8	IC 280-599427/20	2.51	362002.0			144223.904382	Y



Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

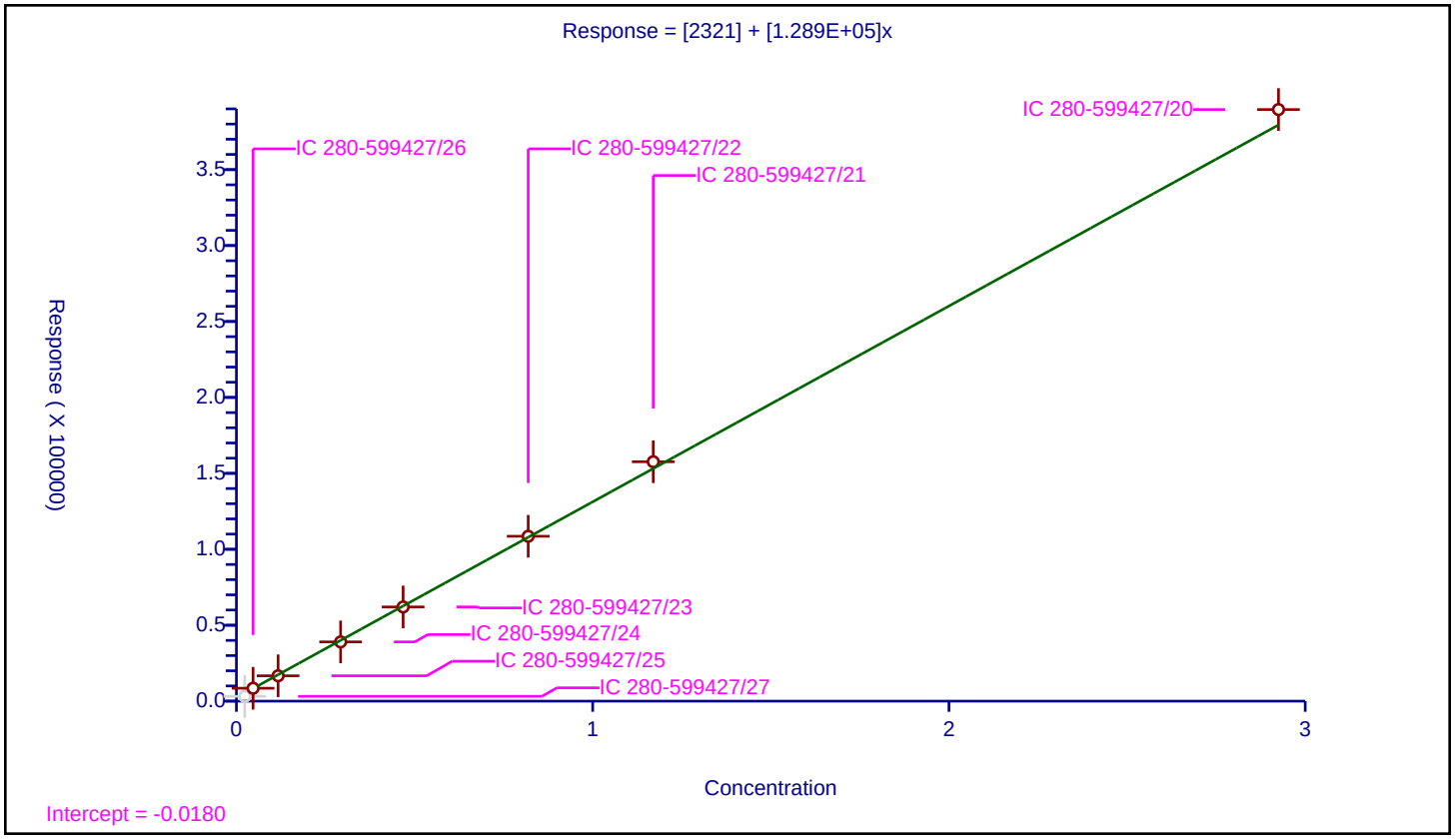
Curve Coefficients

Intercept:	2321
Slope:	1.289E+05

Error Coefficients

Standard Error:	5000
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 280-599427/27	0.0234	3164.0			135213.675214	N
2	IC 280-599427/26	0.0468	8491.0			181431.623932	Y
3	IC 280-599427/25	0.117	16685.0			142606.837607	Y
4	IC 280-599427/24	0.2925	39009.0			133364.102564	Y
5	IC 280-599427/23	0.468	62032.0			132547.008547	Y
6	IC 280-599427/22	0.819	108566.0			132559.218559	Y
7	IC 280-599427/21	1.17	157648.0			134741.880342	Y
8	IC 280-599427/20	2.925	389567.0			133185.299145	Y



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1 Analy Batch No.: 601664

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/08/2023 15:38 Calibration End Date: 02/08/2023 18:42 Calibration ID: 76877

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-601664/19	02080019.D
Level 2	IC 280-601664/18	02080018.D
Level 3	IC 280-601664/17	02080017.D
Level 4	IC 280-601664/16	02080016.D
Level 5	IC 280-601664/15	02080015.D
Level 6	IC 280-601664/14	02080014.D
Level 7	IC 280-601664/13	02080013.D
Level 8	IC 280-601664/12	02080012.D
Level 9	IC 280-601664/11	02080011.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	LVL 9		RT WINDOW	AVG RT
HMX	6.550	6.549	6.547	6.544	6.548	6.548	6.544	6.547	6.546		6.394 - 6.694	6.547
RDX	7.563	7.563	7.567	7.564	7.568	7.562	7.564	7.567	7.559		7.414 - 7.714	7.564
Picric acid	8.050	8.049	8.047	8.044	8.041	8.028	8.018	8.014	7.966		7.894 - 8.194	8.029
1,3,5-Trinitrobenzene	8.643	8.643	8.647	8.644	8.641	8.642	8.638	8.647	8.639		8.494 - 8.794	8.643
1,3-Dinitrobenzene	9.263	9.256	9.260	9.257	9.255	9.255	9.251	9.260	9.246		9.107 - 9.407	9.256
Nitrobenzene	9.636	9.636	9.633	9.631	9.628	9.628	9.624	9.634	9.619		9.481 - 9.781	9.630
3,5-Dinitroaniline	9.836	9.836	9.840	9.831	9.828	9.828	9.824	9.840	9.819		9.681 - 9.981	9.831
Tetryl	9.983	9.982	9.987	9.977	9.975	9.968	9.971	9.987	9.966		9.827 - 10.127	9.977
Nitroglycerin	10.450	10.449	10.453	10.437	10.441	10.435	10.437	10.454	10.426		10.287 - 10.587	10.442
2,4,6-Trinitrotoluene	10.876	10.876	10.880	10.864	10.868	10.868	10.864	10.880	10.859		10.764 - 10.964	10.871
4-Amino-2,6-dinitrotoluene	11.043	11.042	11.040	11.031	11.028	11.022	11.024	11.040	11.013		10.931 - 11.131	11.031
2-Amino-4,6-dinitrotoluene	11.296	11.289	11.293	11.277	11.275	11.275	11.271	11.287	11.259		11.177 - 11.377	11.280
2,6-Dinitrotoluene	11.470	11.469	11.467	11.451	11.455	11.448	11.451	11.467	11.439		11.351 - 11.551	11.457
2,4-Dinitrotoluene	11.636	11.636	11.633	11.617	11.621	11.615	11.617	11.634	11.606		11.517 - 11.717	11.624
2-Nitrotoluene	12.456	12.456	12.453	12.437	12.441	12.435	12.431	12.447	12.426		12.287 - 12.587	12.442
4-Nitrotoluene	12.863	12.869	12.867	12.844	12.848	12.842	12.844	12.860	12.833		12.694 - 12.994	12.852
3-Nitrotoluene	13.430	13.442	13.433	13.411	13.415	13.408	13.404	13.420	13.399		13.261 - 13.561	13.418
PETN	14.583	14.589	14.580	14.551	14.555	14.548	14.544	14.567	14.539		14.401 - 14.701	14.562
1,2-Dinitrobenzene	8.517	8.516	8.520	8.517	8.515	8.515	8.511	8.521	8.506		8.367 - 8.667	8.515

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-176335-1 Analy Batch No.: 601664

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/08/2023 15:38 Calibration End Date: 02/08/2023 18:42 Calibration ID: 76877

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-601664/19	02080019.D
Level 2	IC 280-601664/18	02080018.D
Level 3	IC 280-601664/17	02080017.D
Level 4	IC 280-601664/16	02080016.D
Level 5	IC 280-601664/15	02080015.D
Level 6	IC 280-601664/14	02080014.D
Level 7	IC 280-601664/13	02080013.D
Level 8	IC 280-601664/12	02080012.D
Level 9	IC 280-601664/11	02080011.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								
HMX	96200 93960 91737	98050 92130	92960 91317	93870 91529	Ave		93528.1492				2.5		20.0			
RDX	120300 102168 106491	109800 103248	104720 102589	101120 106983	Ave		106379.808				5.5		20.0			
Picric acid	67300 77436 78734	74600 77483	75360 77481	76400 77676	Ave		75829.9476				4.5		20.0			
1,3,5-Trinitrobenzene	219600 217528 217838	215650 218445	213580 218654	213990 219038	Ave		217147.032				1.0		20.0			
1,3-Dinitrobenzene	290200 296196 297242	292450 296278	293280 294821	292490 296615	Ave		294396.925				0.8		20.0			
Nitrobenzene	190500 190360 192956	190800 192660	192100 189984	190190 191651	Ave		191244.543				0.6		20.0			
3,5-Dinitroaniline	214700 228212 230510	218850 227498	228520 228160	227230 229927	Lin2	-154.28261	229201.890							1.0000		0.9900
Tetryl	161100 165680 166480	153650 171658	163060 165663	164380 165416	Ave		164120.706				3.0		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.: 280-176335-1 Analy Batch No.: 601664

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/08/2023 15:38 Calibration End Date: 02/08/2023 18:42 Calibration ID: 76877

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								
Nitroglycerin	61590 64985 65842	59395 66398	63298 66047	63170 65903	Ave		64069.9243				3.7		20.0			
2,4,6-Trinitrotoluene	216700 210476 209648	213100 208335	214160 208960	207870 210110	Ave		211039.889				1.4		20.0			
4-Amino-2,6-dinitrotoluene	167000 152884 152878	155300 152868	157500 150916	154070 150980	Ave		154932.802				3.2		20.0			
2-Amino-4,6-dinitrotoluene	221400 198056 200205	201050 198963	201440 196574	197650 197356	Ave		201410.398				3.8		20.0			
2,6-Dinitrotoluene	148600 143452 140114	145550 140035	142180 142239	139670 142869	Ave		142745.397				2.0		20.0			
2,4-Dinitrotoluene	314100 293052 294340	299250 294023	297440 290757	295390 291656	Ave		296667.471				2.4		20.0			
2-Nitrotoluene	137700 124752 126235	130550 125108	132460 124116	125480 124668	Ave		127896.490				3.7		20.0			
4-Nitrotoluene	126300 108612 108849	119650 108228	111680 107359	108570 107671	Ave		111879.808				5.9		20.0			
3-Nitrotoluene	147300 137292 138526	153100 136790	141920 136640	136660 136203	Ave		140492.289				4.2		20.0			
PETN	72730 68498 68809	67310 68653	68114 68586	68161 68748	Ave		68845.4251				2.2		20.0			
1,2-Dinitrobenzene	118800 127432 129675	124550 128775	125560 126837	127270 127879	Ave		126308.705				2.5		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.: 280-176335-1 Analy Batch No.: 601664

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/08/2023 15:38 Calibration End Date: 02/08/2023 18:42 Calibration ID: 76877

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-601664/19	02080019.D
Level 2	IC 280-601664/18	02080018.D
Level 3	IC 280-601664/17	02080017.D
Level 4	IC 280-601664/16	02080016.D
Level 5	IC 280-601664/15	02080015.D
Level 6	IC 280-601664/14	02080014.D
Level 7	IC 280-601664/13	02080013.D
Level 8	IC 280-601664/12	02080012.D
Level 9	IC 280-601664/11	02080011.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
HMX	Ave	962 36852	1961 63922	4648 91529	9387 229343	23490	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
RDX	Ave	1203 41299	2196 71812	5236 106983	10112 266228	25542	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Picric acid	Ave	673 30993	1492 54237	3768 77676	7640 196834	19359	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
1,3,5-Trinitrobenzene	Ave	2196 87378	4313 153058	10679 219038	21399 544595	54382	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
1,3-Dinitrobenzene	Ave	2902 118511	5849 206375	14664 296615	29249 743106	74049	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Nitrobenzene	Ave	1905 77064	3816 132989	9605 191651	19019 482389	47590	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
3,5-Dinitroaniline	Lin2	2147 90999	4377 159712	11426 229927	22723 576276	57053	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Tetryl	Ave	1611 68663	3073 115964	8153 165416	16438 416200	41420	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Nitroglycerin	Ave	6159 265593	11879 462332	31649 659032	63170 1646056	162463	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
2,4,6-Trinitrotoluene	Ave	2167 83334	4262 146272	10708 210110	20787 524120	52619	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
4-Amino-2,6-dinitrotoluene	Ave	1670 61147	3106 105641	7875 150980	15407 382195	38221	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2-Amino-4,6-dinitrotoluene	Ave	2214 79585	4021 137602	10072 197356	19765 500512	49514	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2,6-Dinitrotoluene	Ave	1486	2911	7109	13967	35863	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.: 280-176335-1 Analy Batch No.: 601664

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/08/2023 15:38 Calibration End Date: 02/08/2023 18:42 Calibration ID: 76877

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
		56014	99567	142869	350285		0.400	0.700	1.00	2.50	
2,4-Dinitrotoluene	Ave	3141	5985	14872	29539	73263	0.0100	0.0200	0.0500	0.100	0.250
		117609	203530	291656	735849		0.400	0.700	1.00	2.50	
2-Nitrotoluene	Ave	1377	2611	6623	12548	31188	0.0100	0.0200	0.0500	0.100	0.250
		50043	86881	124668	315588		0.400	0.700	1.00	2.50	
4-Nitrotoluene	Ave	1263	2393	5584	10857	27153	0.0100	0.0200	0.0500	0.100	0.250
		43291	75151	107671	272123		0.400	0.700	1.00	2.50	
3-Nitrotoluene	Ave	1473	3062	7096	13666	34323	0.0100	0.0200	0.0500	0.100	0.250
		54716	95648	136203	346314		0.400	0.700	1.00	2.50	
PETN	Ave	7273	13462	34057	68161	171245	0.100	0.200	0.500	1.00	2.50
		274612	480104	687477	1720221		4.00	7.00	10.0	25.0	
1,2-Dinitrobenzene	Ave	1188	2491	6278	12727	31858	0.0100	0.0200	0.0500	0.100	0.250
		51510	88786	127879	324188		0.400	0.700	1.00	2.50	

Curve Type Legend
Ave = Average
Lin2 = Linear 1/conc^2

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080011.D
Lims ID: IC INT 9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 08-Feb-2023 15:38:53 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 9
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub26

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Feb-2023 12:48:02 Calib Date: 08-Feb-2023 18:42:13
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 08-Feb-2023 16:28:55

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.546	6.544	0.002	229343	2.50	2.45	M
8 RDX	1	7.559	7.564	-0.005	266228	2.50	2.50	
9 2,4,6-Trinitrophenol	1	7.966	8.044	-0.078	196834	2.50	2.60	
$ 10 1,2-Dinitrobenzene	1	8.506	8.517	-0.011	324188	2.50	2.57	
11 1,3,5-Trinitrobenzene	1	8.639	8.644	-0.005	544595	2.50	2.51	
12 1,3-Dinitrobenzene	1	9.246	9.257	-0.011	743106	2.50	2.52	
13 Nitrobenzene	1	9.619	9.631	-0.012	482389	2.50	2.52	
14 3,5-Dinitroaniline	1	9.819	9.831	-0.012	576276	2.50	2.51	
15 Tetryl	1	9.966	9.977	-0.011	416200	2.50	2.54	
16 Nitroglycerin	2	10.426	10.437	-0.011	1646056	25.0	25.7	
17 2,4,6-Trinitrotoluene	1	10.859	10.864	-0.005	524120	2.50	2.48	
18 4-Amino-2,6-dinitrotoluene	1	11.013	11.031	-0.018	382195	2.50	2.47	
19 2-Amino-4,6-dinitrotoluene	1	11.259	11.277	-0.018	500512	2.50	2.49	
20 2,6-Dinitrotoluene	1	11.439	11.451	-0.012	350285	2.50	2.45	
21 2,4-Dinitrotoluene	1	11.606	11.617	-0.011	735849	2.50	2.48	
22 o-Nitrotoluene	1	12.426	12.437	-0.011	315588	2.50	2.47	
23 p-Nitrotoluene	1	12.833	12.844	-0.011	272123	2.50	2.43	
24 m-Nitrotoluene	1	13.399	13.411	-0.012	346314	2.50	2.47	
25 PETN	2	14.539	14.551	-0.012	1720221	25.0	25.0	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00075 Amount Added: 250.00 Units: uL

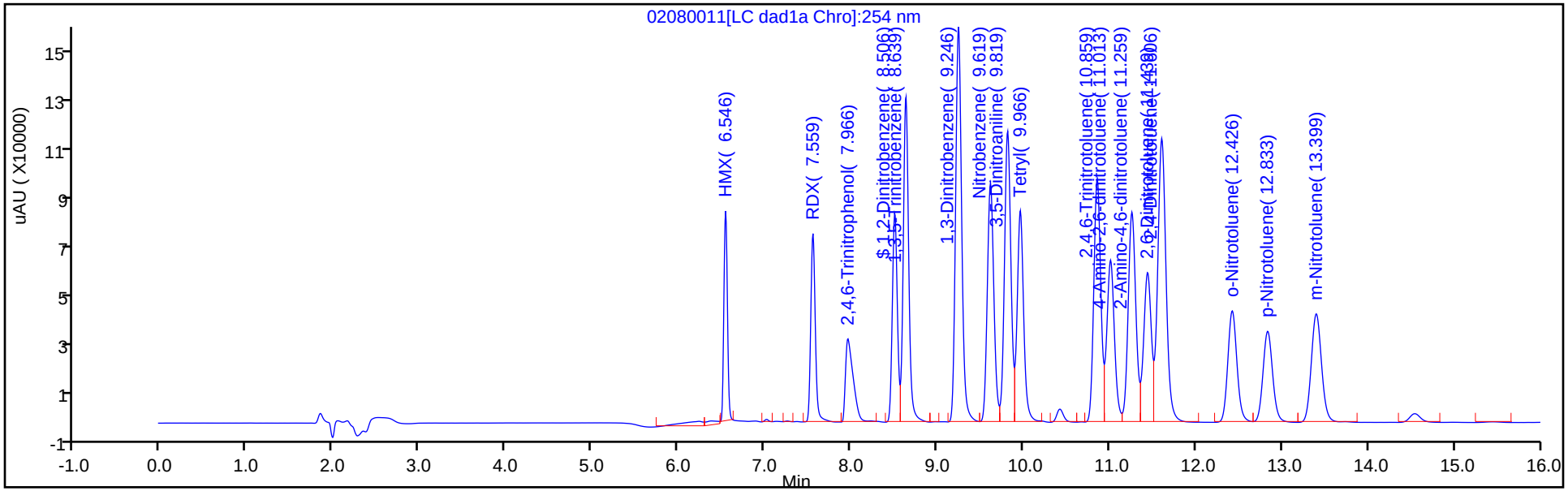
Report Date: 09-Feb-2023 12:48:02 Chrom Revision: 2.3 01-Feb-2023 13:23:06

Eurofins Denver

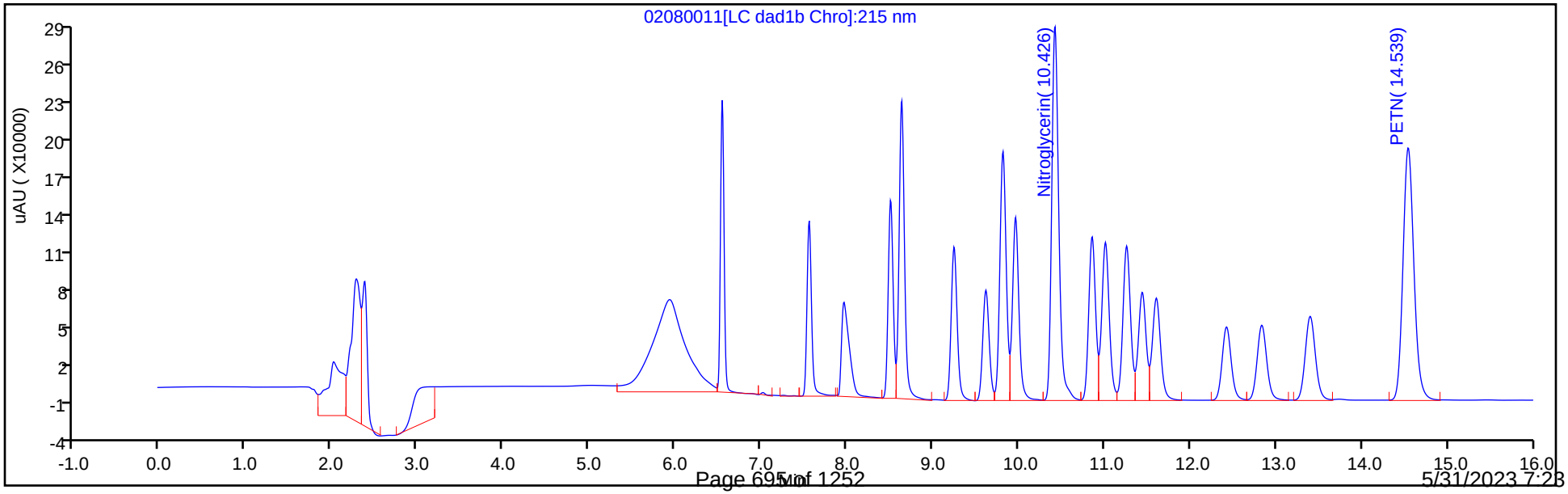
Data File: \\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080011.d

Injection Date:	08-Feb-2023 15:38:53	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC INT 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



5/31/2023 7:28 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

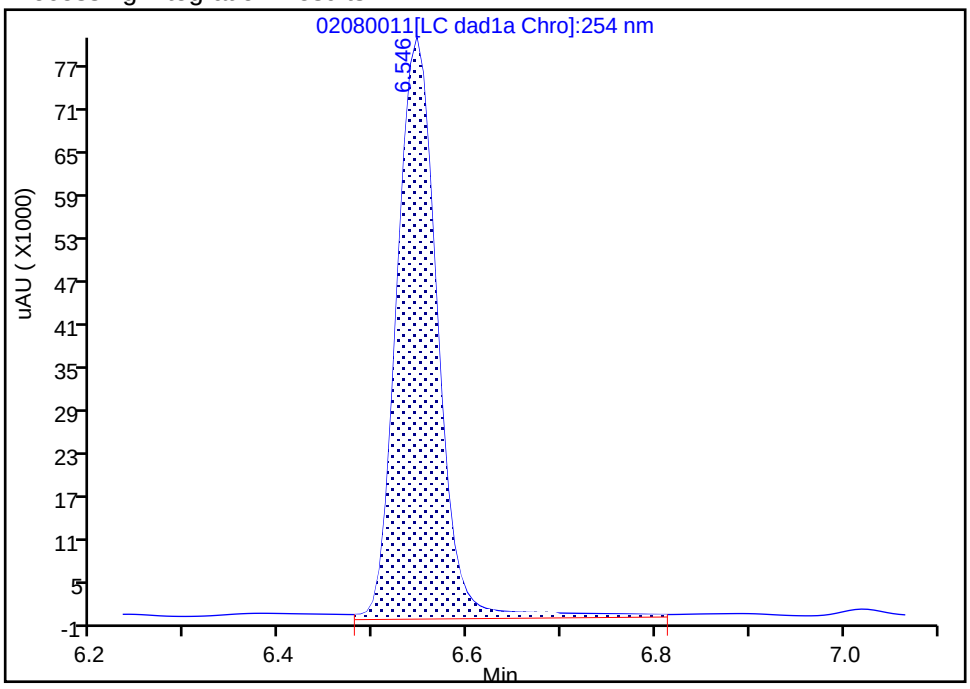
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080011.d				
Injection Date:	08-Feb-2023 15:38:53	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

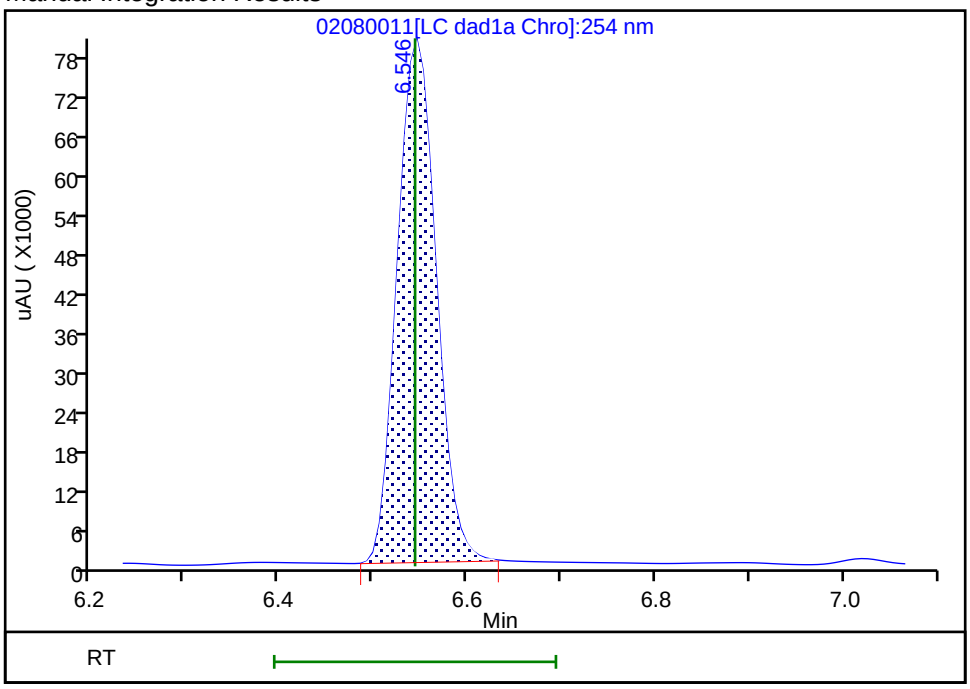
Processing Integration Results

RT: 6.55
Area: 245170
Amount: 2.586222
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 229343
Amount: 2.452128
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 16:28:37
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080012.D
Lims ID: IC INT 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 08-Feb-2023 16:01:51 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 8
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub26

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Feb-2023 12:48:03 Calib Date: 08-Feb-2023 18:42:13
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 08-Feb-2023 16:28:33

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.547	6.544	0.003	91529	1.00	0.9786	M
8 RDX	1	7.567	7.564	0.003	106983	1.00	1.01	
9 2,4,6-Trinitrophenol	1	8.014	8.044	-0.030	77676	1.00	1.02	
$ 10 1,2-Dinitrobenzene	1	8.521	8.517	0.004	127879	1.00	1.01	
11 1,3,5-Trinitrobenzene	1	8.647	8.644	0.003	219038	1.00	1.01	
12 1,3-Dinitrobenzene	1	9.260	9.257	0.003	296615	1.00	1.01	
13 Nitrobenzene	1	9.634	9.631	0.003	191651	1.00	1.00	
14 3,5-Dinitroaniline	1	9.840	9.831	0.009	229927	1.00	1.00	
15 Tetryl	1	9.987	9.977	0.010	165416	1.00	1.01	
16 Nitroglycerin	2	10.454	10.437	0.017	659032	10.0	10.3	
17 2,4,6-Trinitrotoluene	1	10.880	10.864	0.016	210110	1.00	1.00	
18 4-Amino-2,6-dinitrotoluene	1	11.040	11.031	0.009	150980	1.00	0.9745	
19 2-Amino-4,6-dinitrotoluene	1	11.287	11.277	0.010	197356	1.00	0.9799	
20 2,6-Dinitrotoluene	1	11.467	11.451	0.016	142869	1.00	1.00	
21 2,4-Dinitrotoluene	1	11.634	11.617	0.017	291656	1.00	0.9831	
22 o-Nitrotoluene	1	12.447	12.437	0.010	124668	1.00	0.9748	
23 p-Nitrotoluene	1	12.860	12.844	0.016	107671	1.00	0.9624	
24 m-Nitrotoluene	1	13.420	13.411	0.009	136203	1.00	0.9695	
25 PETN	2	14.567	14.551	0.016	687477	10.0	9.99	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00075 Amount Added: 100.00 Units: uL

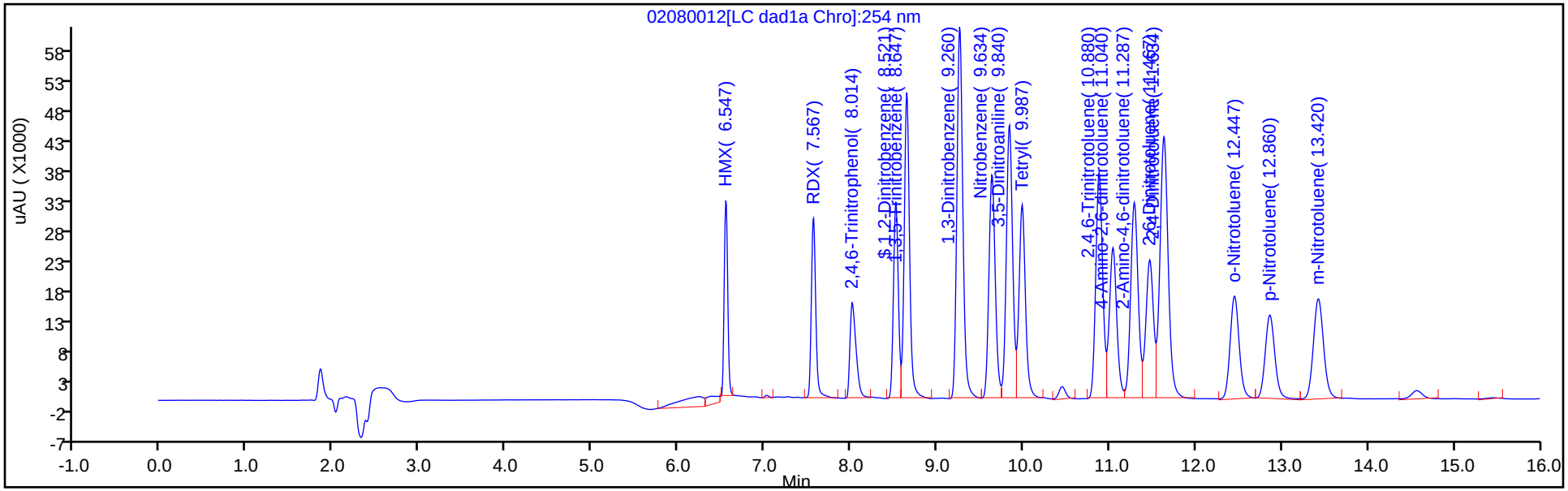
Report Date: 09-Feb-2023 12:48:03 Chrom Revision: 2.3 01-Feb-2023 13:23:06

Eurofins Denver

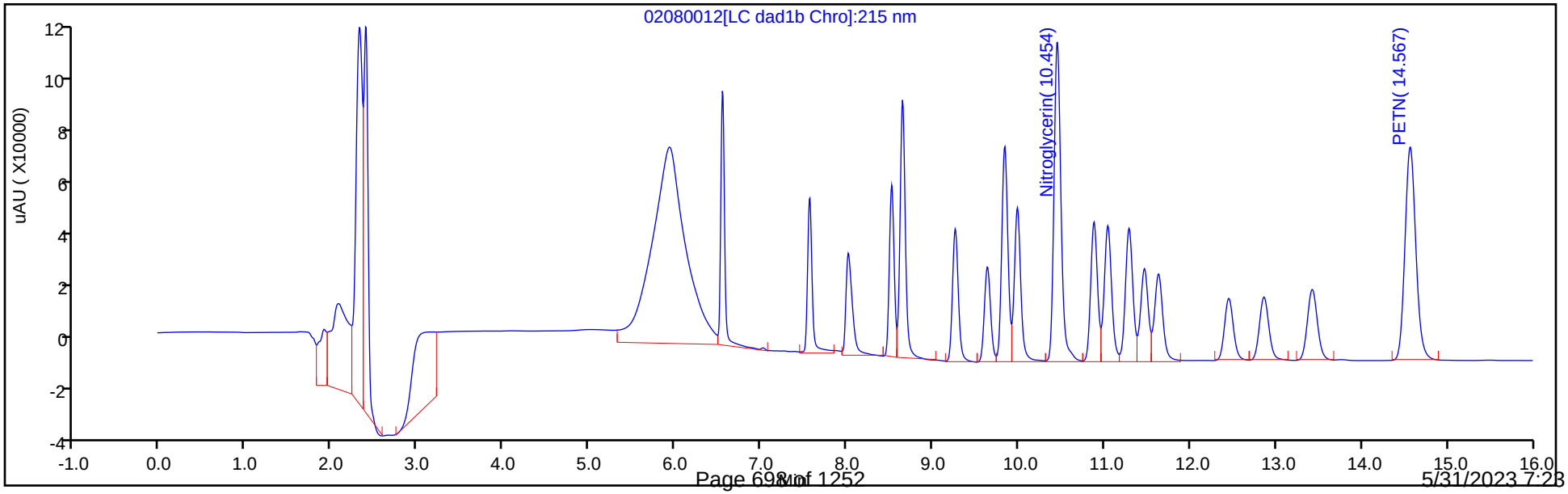
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Injection Date:	08-Feb-2023 16:01:51	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC INT 8			Worklist Smp#:	12
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8330_X3	Limit Group:	GCSV - 8330		

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

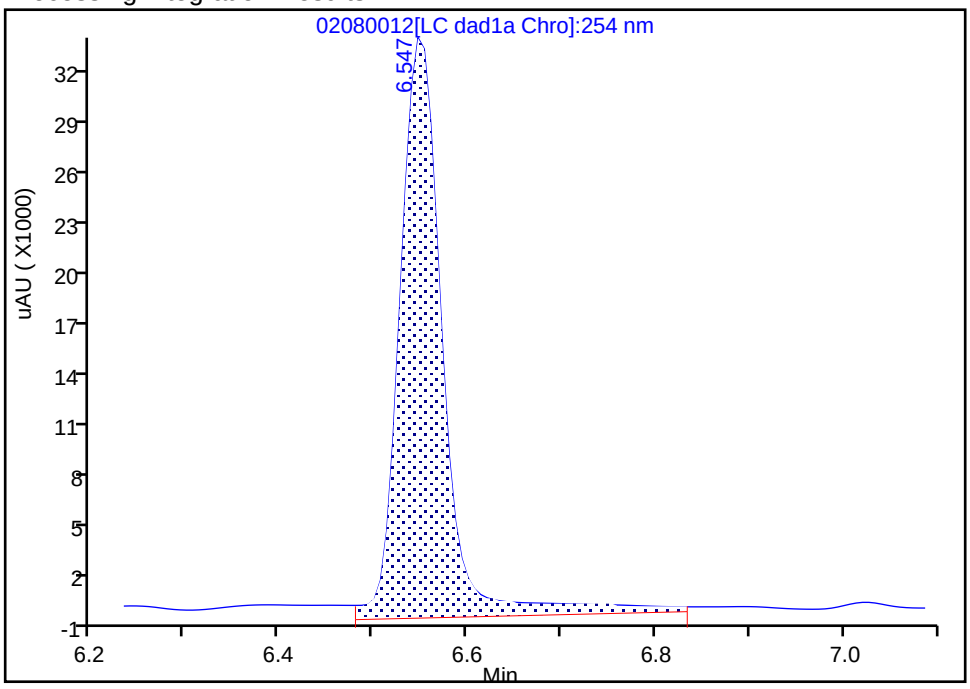
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080012.d				
Injection Date:	08-Feb-2023 16:01:51	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 8				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

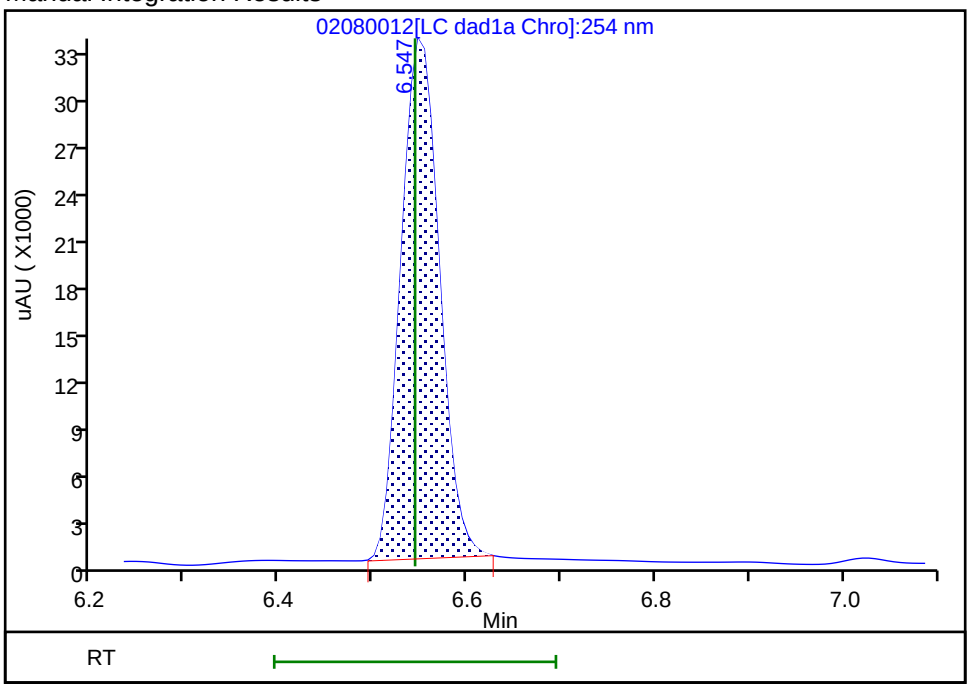
Processing Integration Results

RT: 6.55
Area: 107005
Amount: 1.043580
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 91529
Amount: 0.978625
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 16:28:16
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080013.D
Lims ID: IC INT 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 08-Feb-2023 16:24:45 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 7
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub26

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Feb-2023 12:48:04 Calib Date: 08-Feb-2023 18:42:13
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 08-Feb-2023 16:55:38

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.544	6.544	0.000	63922	0.7000	0.6835	M
8 RDX	1	7.564	7.564	0.000	71812	0.7000	0.6751	M
9 2,4,6-Trinitrophenol	1	8.018	8.044	-0.026	54237	0.7000	0.7152	
$ 10 1,2-Dinitrobenzene	1	8.511	8.517	-0.006	88786	0.7000	0.7029	
11 1,3,5-Trinitrobenzene	1	8.638	8.644	-0.006	153058	0.7000	0.7049	
12 1,3-Dinitrobenzene	1	9.251	9.257	-0.006	206375	0.7000	0.7010	
13 Nitrobenzene	1	9.624	9.631	-0.007	132989	0.7000	0.6954	
14 3,5-Dinitroaniline	1	9.824	9.831	-0.007	159712	0.7000	0.6975	
15 Tetryl	1	9.971	9.977	-0.006	115964	0.7000	0.7066	
16 Nitroglycerin	2	10.437	10.437	0.000	462332	7.00	7.22	
17 2,4,6-Trinitrotoluene	1	10.864	10.864	0.000	146272	0.7000	0.6931	
18 4-Amino-2,6-dinitrotoluene	1	11.024	11.031	-0.007	105641	0.7000	0.6819	
19 2-Amino-4,6-dinitrotoluene	1	11.271	11.277	-0.006	137602	0.7000	0.6832	
20 2,6-Dinitrotoluene	1	11.451	11.451	0.000	99567	0.7000	0.6975	
21 2,4-Dinitrotoluene	1	11.617	11.617	0.000	203530	0.7000	0.6861	
22 o-Nitrotoluene	1	12.431	12.437	-0.006	86881	0.7000	0.6793	
23 p-Nitrotoluene	1	12.844	12.844	0.000	75151	0.7000	0.6717	
24 m-Nitrotoluene	1	13.404	13.411	-0.007	95648	0.7000	0.6808	
25 PETN	2	14.544	14.551	-0.007	480104	7.00	6.97	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00075 Amount Added: 70.00 Units: uL

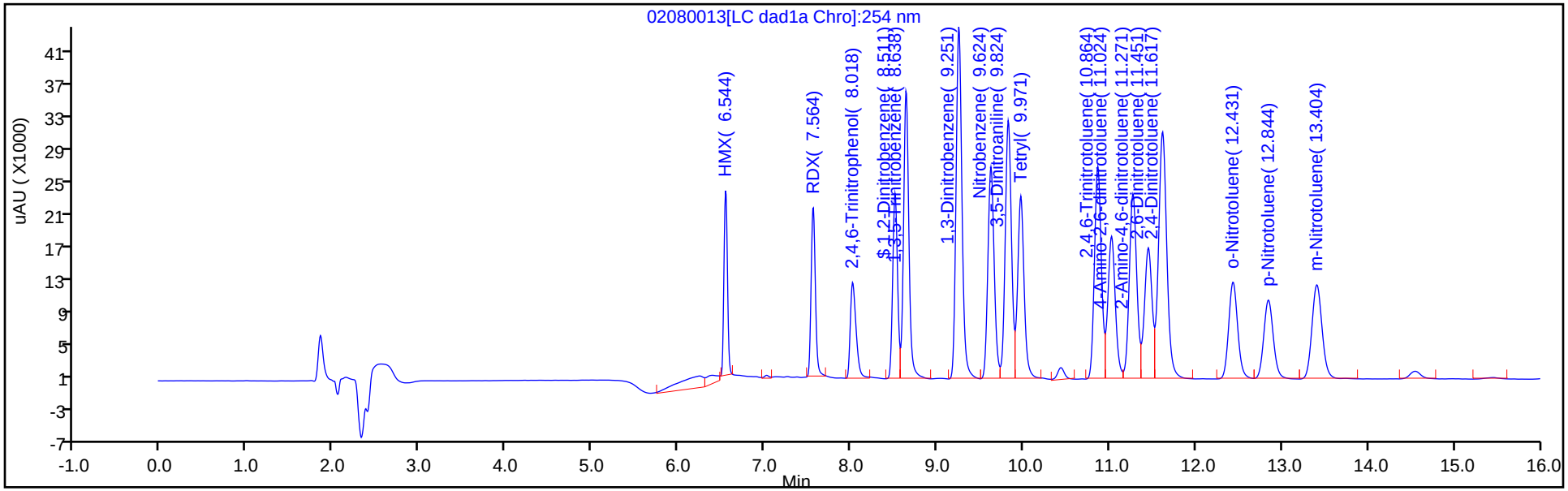
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Eurofins Denver

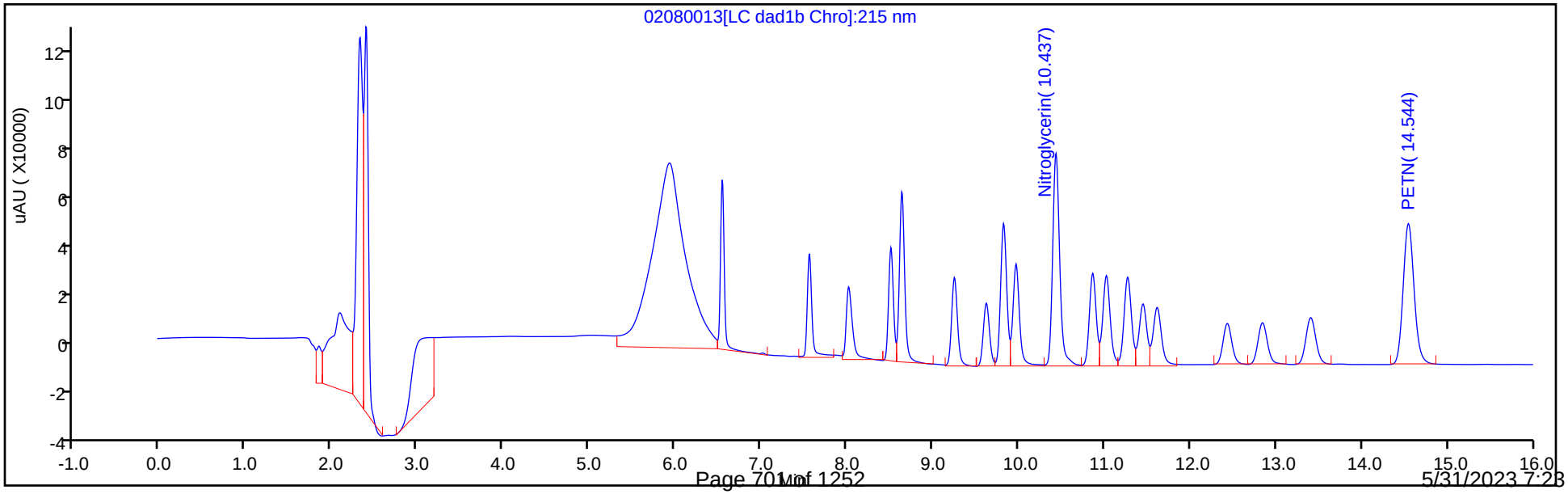
Data File: \\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080013.d

Injection Date:	08-Feb-2023 16:24:45	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC INT 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

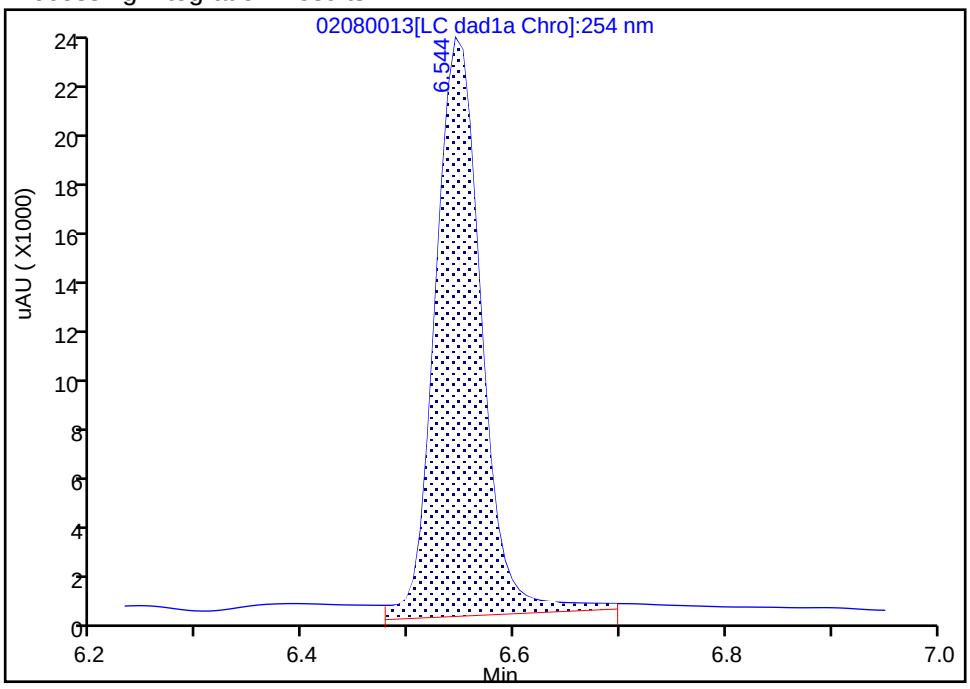
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Injection Date:	08-Feb-2023 16:24:45	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 7				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

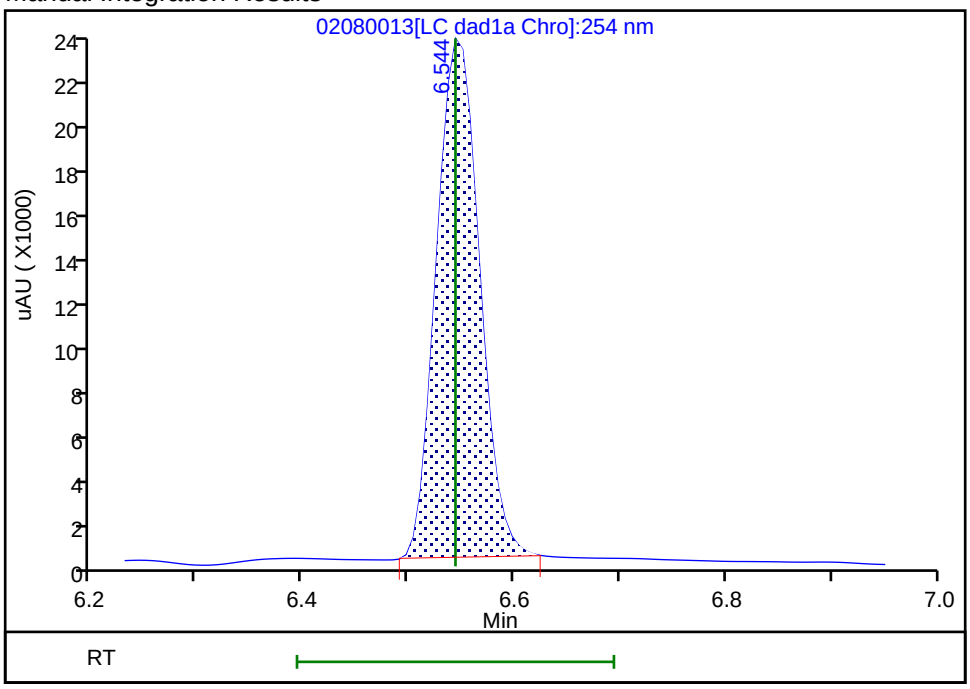
Processing Integration Results

RT: 6.54
Area: 70424
Amount: 0.744251
Amount Units: ug/mL



Manual Integration Results

RT: 6.54
Area: 63922
Amount: 0.683452
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 16:55:19

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

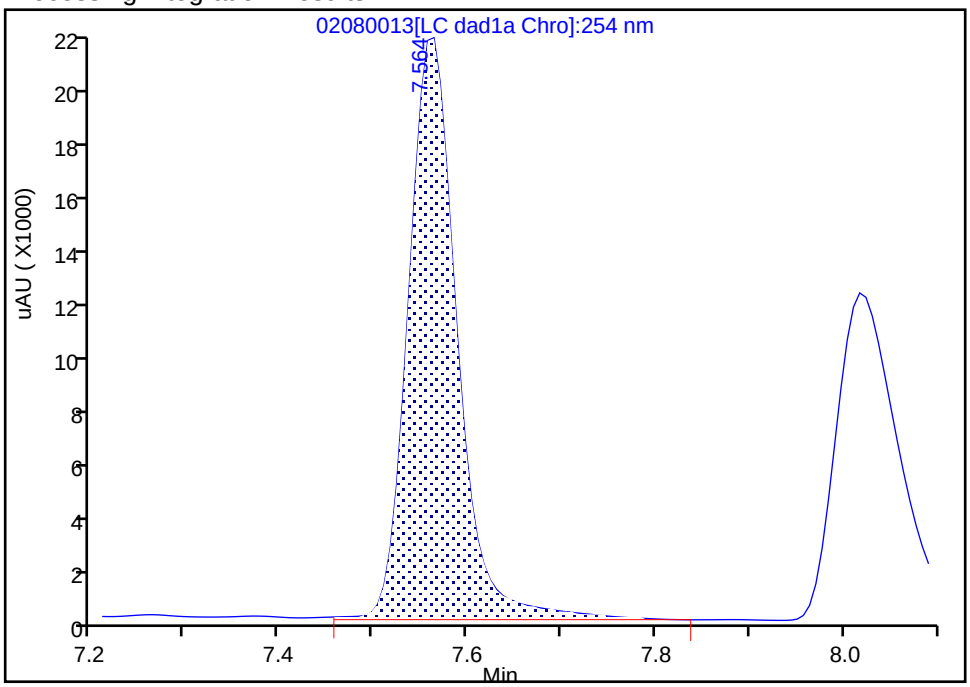
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080013.d				
Injection Date:	08-Feb-2023 16:24:45	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 7				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

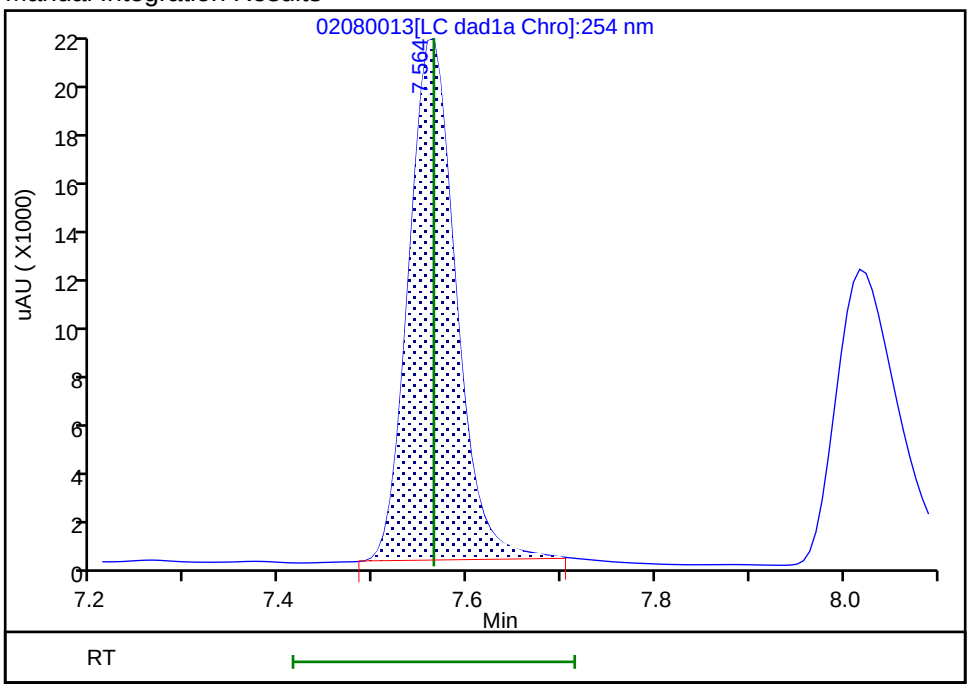
Processing Integration Results

RT: 7.56
Area: 75013
Amount: 0.701791
Amount Units: ug/mL



Manual Integration Results

RT: 7.56
Area: 71812
Amount: 0.675053
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:09:56
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080014.D
Lims ID: IC INT 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 08-Feb-2023 16:47:39 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 6
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub26

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Feb-2023 12:48:05 Calib Date: 08-Feb-2023 18:42:13
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 08-Feb-2023 17:11:22

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.548	6.544	0.004	36852	0.4000	0.3940	M
8 RDX	1	7.562	7.564	-0.002	41299	0.4000	0.3882	M
9 2,4,6-Trinitrophenol	1	8.028	8.044	-0.016	30993	0.4000	0.4087	
$ 10 1,2-Dinitrobenzene	1	8.515	8.517	-0.002	51510	0.4000	0.4078	
11 1,3,5-Trinitrobenzene	1	8.642	8.644	-0.002	87378	0.4000	0.4024	
12 1,3-Dinitrobenzene	1	9.255	9.257	-0.002	118511	0.4000	0.4026	
13 Nitrobenzene	1	9.628	9.631	-0.003	77064	0.4000	0.4030	
14 3,5-Dinitroaniline	1	9.828	9.831	-0.003	90999	0.4000	0.3977	
15 Tetryl	1	9.968	9.977	-0.009	68663	0.4000	0.4184	
16 Nitroglycerin	2	10.435	10.437	-0.002	265593	4.00	4.15	
17 2,4,6-Trinitrotoluene	1	10.868	10.864	0.004	83334	0.4000	0.3949	
18 4-Amino-2,6-dinitrotoluene	1	11.022	11.031	-0.009	61147	0.4000	0.3947	
19 2-Amino-4,6-dinitrotoluene	1	11.275	11.277	-0.002	79585	0.4000	0.3951	
20 2,6-Dinitrotoluene	1	11.448	11.451	-0.003	56014	0.4000	0.3924	
21 2,4-Dinitrotoluene	1	11.615	11.617	-0.002	117609	0.4000	0.3964	
22 o-Nitrotoluene	1	12.435	12.437	-0.002	50043	0.4000	0.3913	
23 p-Nitrotoluene	1	12.842	12.844	-0.002	43291	0.4000	0.3869	
24 m-Nitrotoluene	1	13.408	13.411	-0.003	54716	0.4000	0.3895	
25 PETN	2	14.548	14.551	-0.003	274612	4.00	3.99	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00075 Amount Added: 40.00 Units: uL

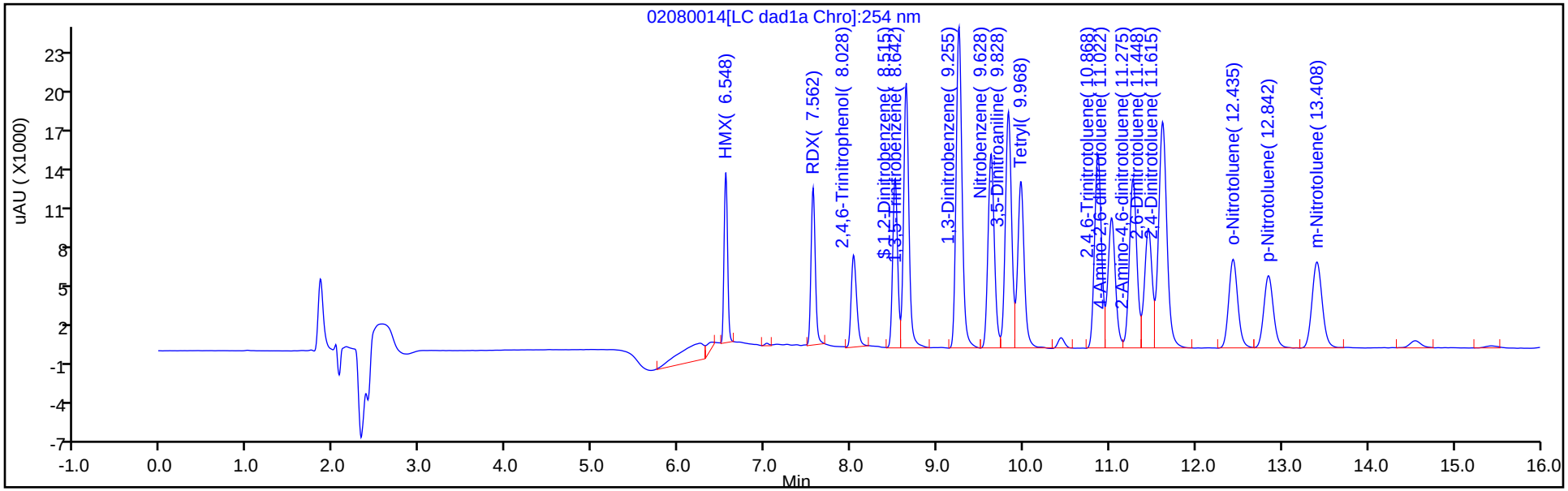
Report Date: 09-Feb-2023 12:48:05 Chrom Revision: 2.3 01-Feb-2023 13:23:06

Eurofins Denver

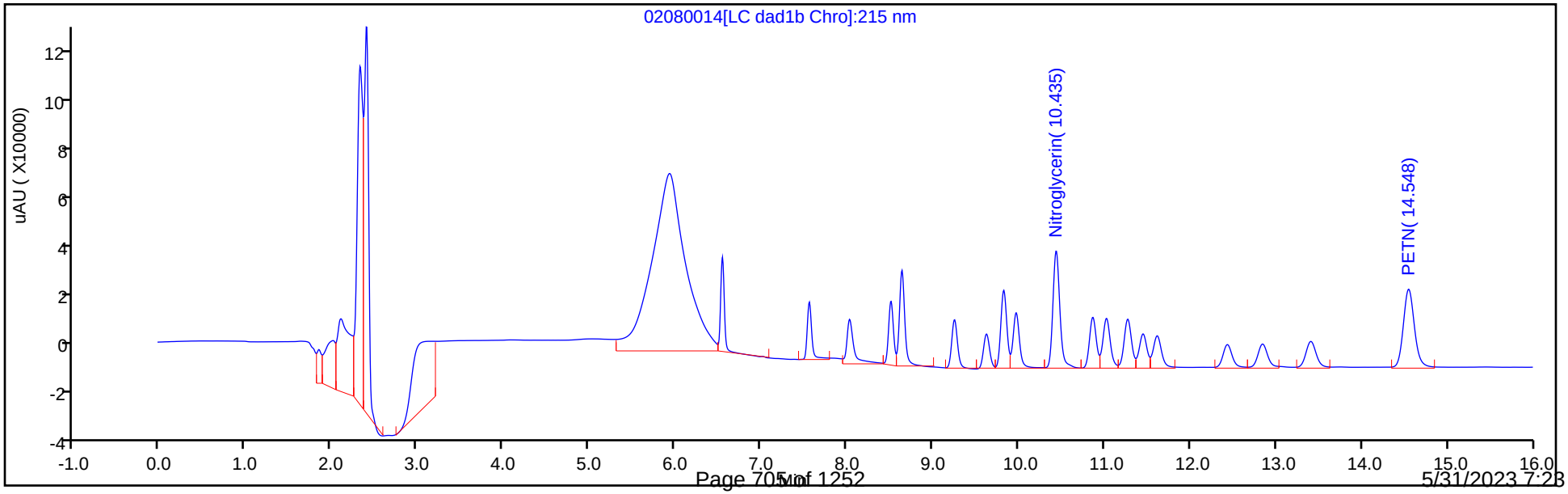
Data File: \\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080014.d

Injection Date:	08-Feb-2023 16:47:39	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC INT 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

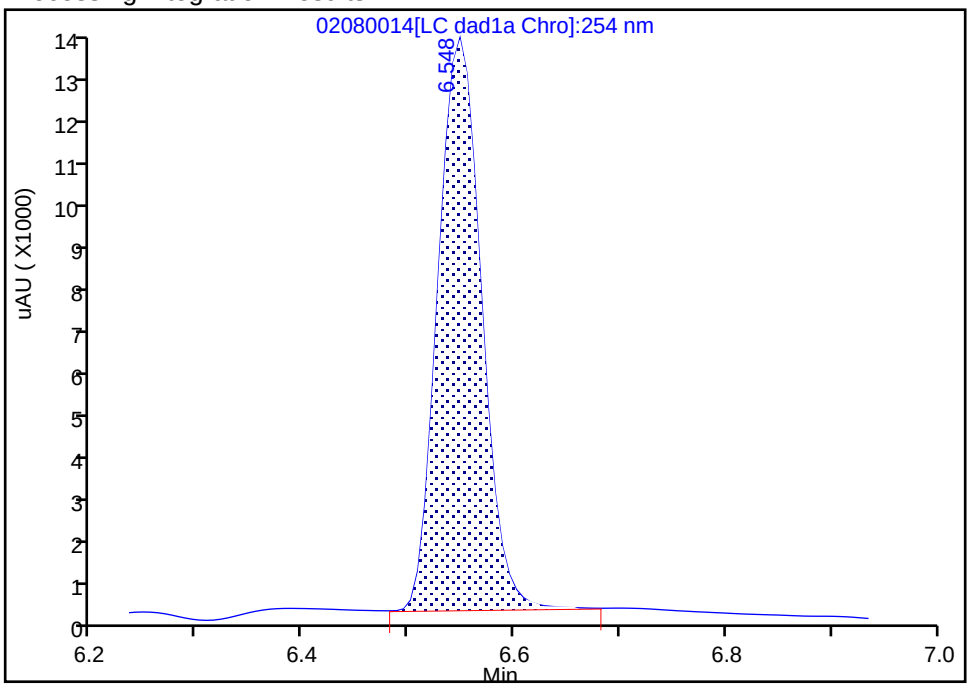
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080014.d				
Injection Date:	08-Feb-2023 16:47:39	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 6				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

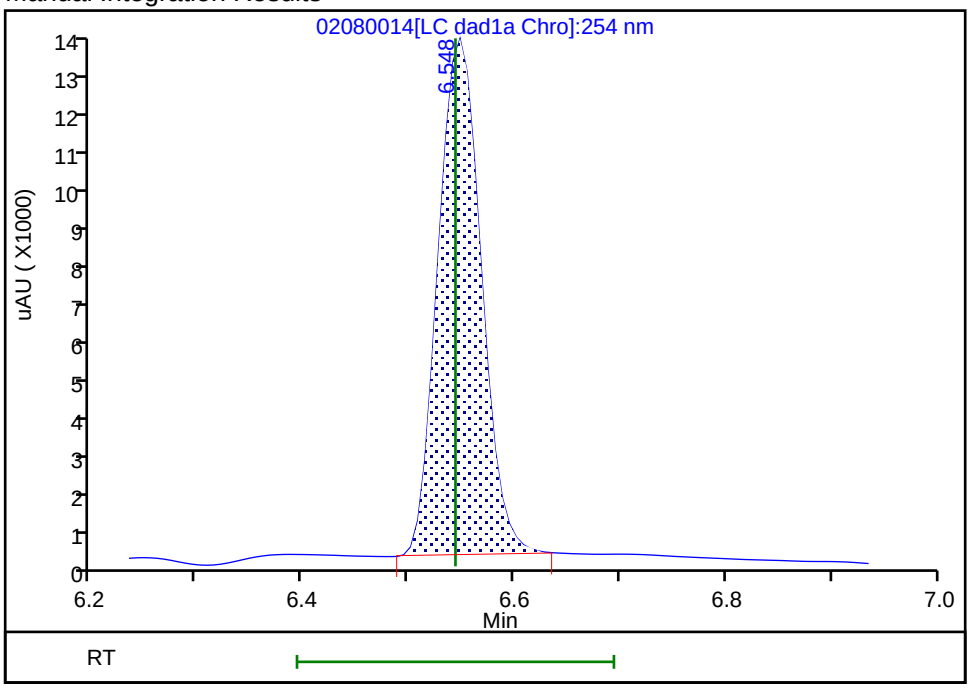
Processing Integration Results

RT: 6.55
Area: 37332
Amount: 0.405878
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 36852
Amount: 0.394020
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 17:11:10
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

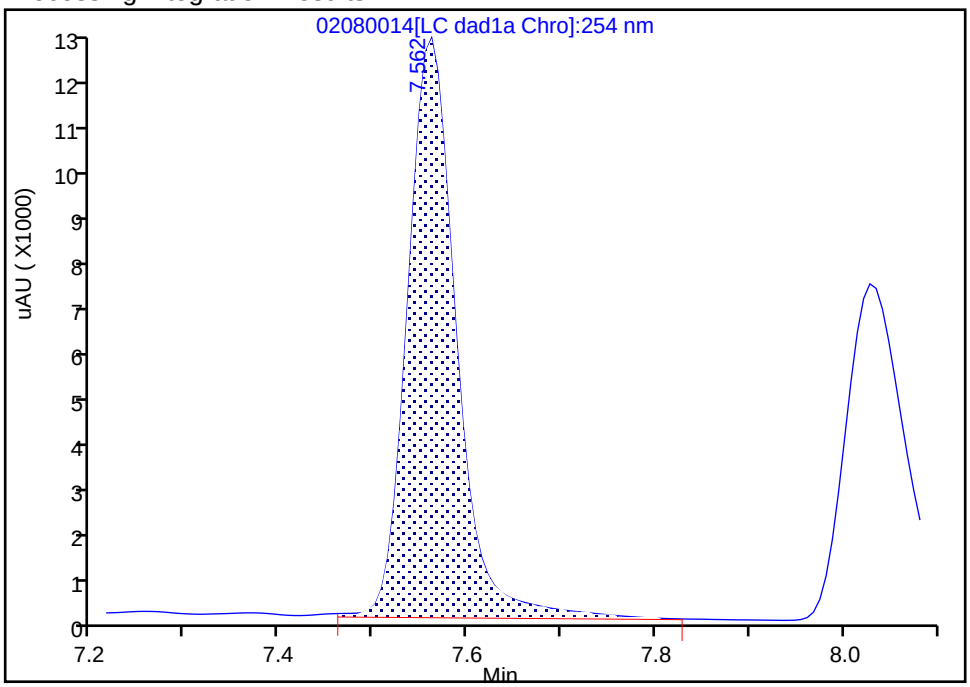
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080014.d				
Injection Date:	08-Feb-2023 16:47:39	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 6				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

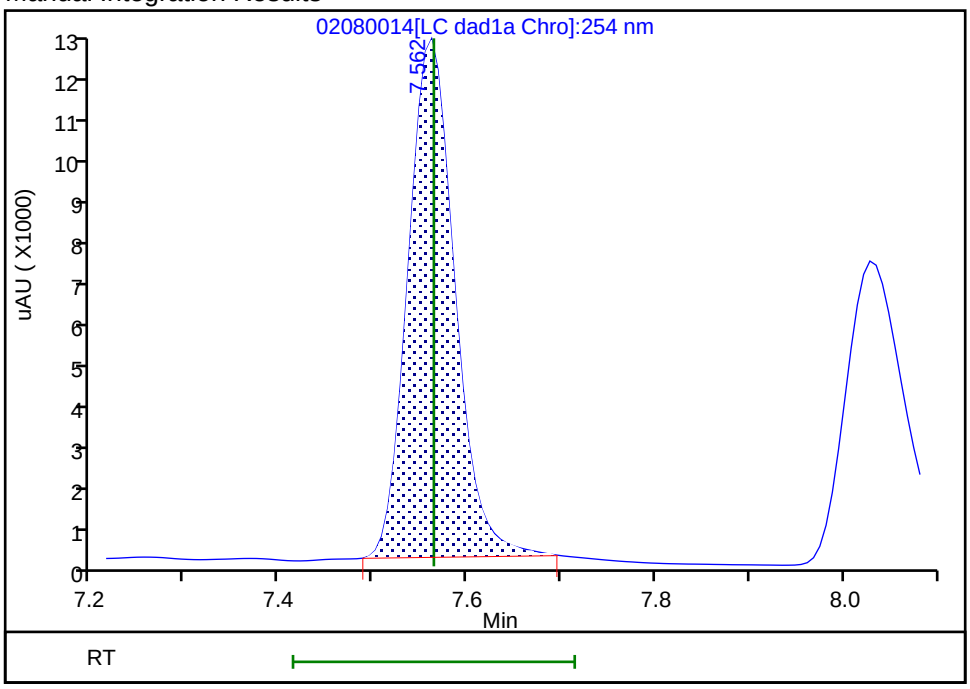
Processing Integration Results

RT: 7.56
Area: 43581
Amount: 0.405322
Amount Units: ug/mL



Manual Integration Results

RT: 7.56
Area: 41299
Amount: 0.388222
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:09:51
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080015.D
Lims ID: IC INT 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 08-Feb-2023 17:10:30 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 5
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub26

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Feb-2023 12:48:05 Calib Date: 08-Feb-2023 18:42:13
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 08-Feb-2023 17:44:54

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.548	6.544	0.004	23490	0.2500	0.2512	
8 RDX	1	7.568	7.564	0.004	25542	0.2500	0.2401	M
9 2,4,6-Trinitrophenol	1	8.041	8.044	-0.003	19359	0.2500	0.2553	
$ 10 1,2-Dinitrobenzene	1	8.515	8.517	-0.002	31858	0.2500	0.2522	
11 1,3,5-Trinitrobenzene	1	8.641	8.644	-0.003	54382	0.2500	0.2504	
12 1,3-Dinitrobenzene	1	9.255	9.257	-0.002	74049	0.2500	0.2515	
13 Nitrobenzene	1	9.628	9.631	-0.003	47590	0.2500	0.2488	
14 3,5-Dinitroaniline	1	9.828	9.831	-0.003	57053	0.2500	0.2496	
15 Tetryl	1	9.975	9.977	-0.002	41420	0.2500	0.2524	
16 Nitroglycerin	2	10.441	10.437	0.004	162463	2.50	2.54	
17 2,4,6-Trinitrotoluene	1	10.868	10.864	0.004	52619	0.2500	0.2493	
18 4-Amino-2,6-dinitrotoluene	1	11.028	11.031	-0.003	38221	0.2500	0.2467	
19 2-Amino-4,6-dinitrotoluene	1	11.275	11.277	-0.002	49514	0.2500	0.2458	
20 2,6-Dinitrotoluene	1	11.455	11.451	0.004	35863	0.2500	0.2512	
21 2,4-Dinitrotoluene	1	11.621	11.617	0.004	73263	0.2500	0.2470	
22 o-Nitrotoluene	1	12.441	12.437	0.004	31188	0.2500	0.2439	
23 p-Nitrotoluene	1	12.848	12.844	0.004	27153	0.2500	0.2427	
24 m-Nitrotoluene	1	13.415	13.411	0.004	34323	0.2500	0.2443	
25 PETN	2	14.555	14.551	0.004	171245	2.50	2.49	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

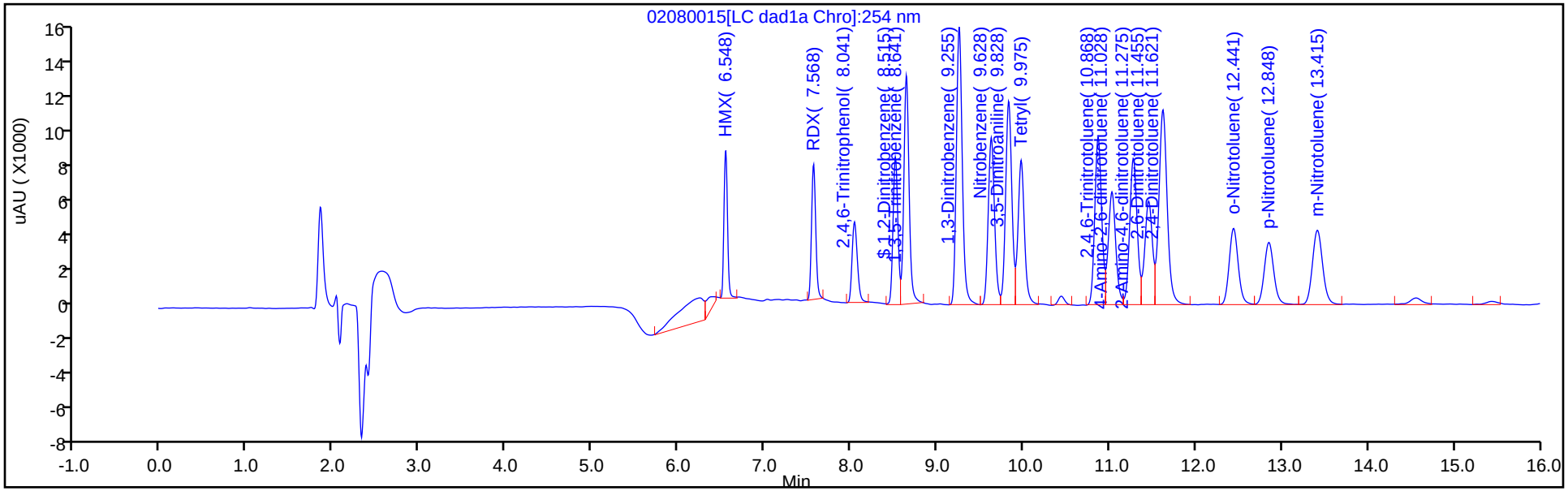
8330IntermStk_00075 Amount Added: 25.00 Units: uL

Report Date: 09-Feb-2023 12:48:06 Chrom Revision: 2.3 01-Feb-2023 13:23:06

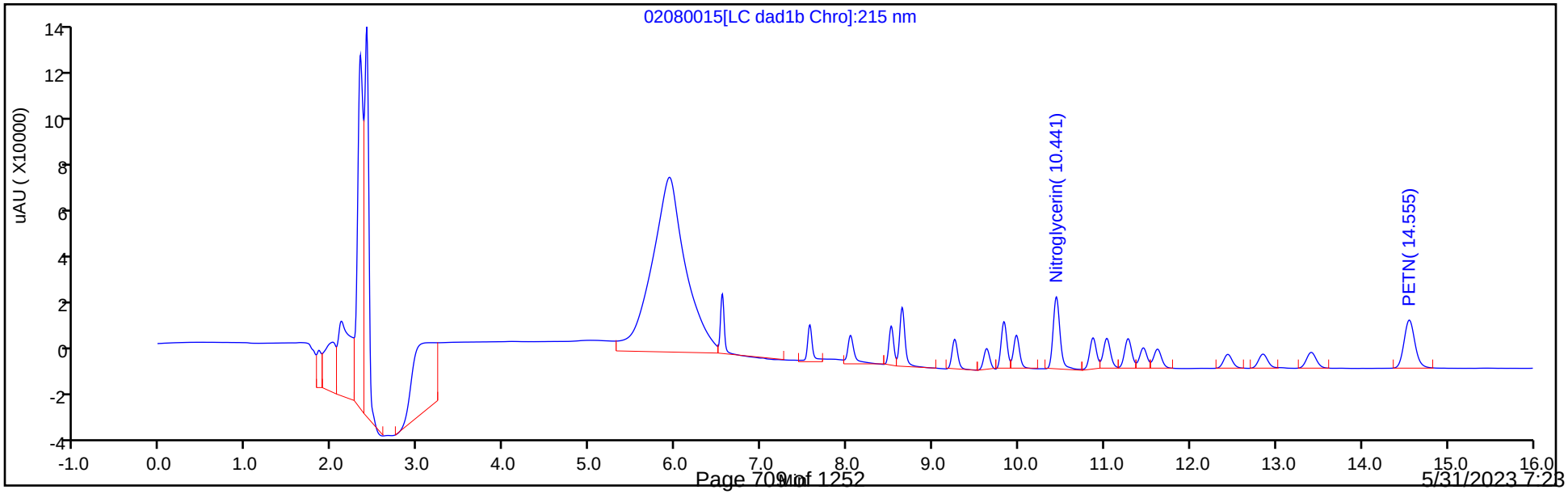
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080015.d				
Injection Date:	08-Feb-2023 17:10:30	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC INT 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

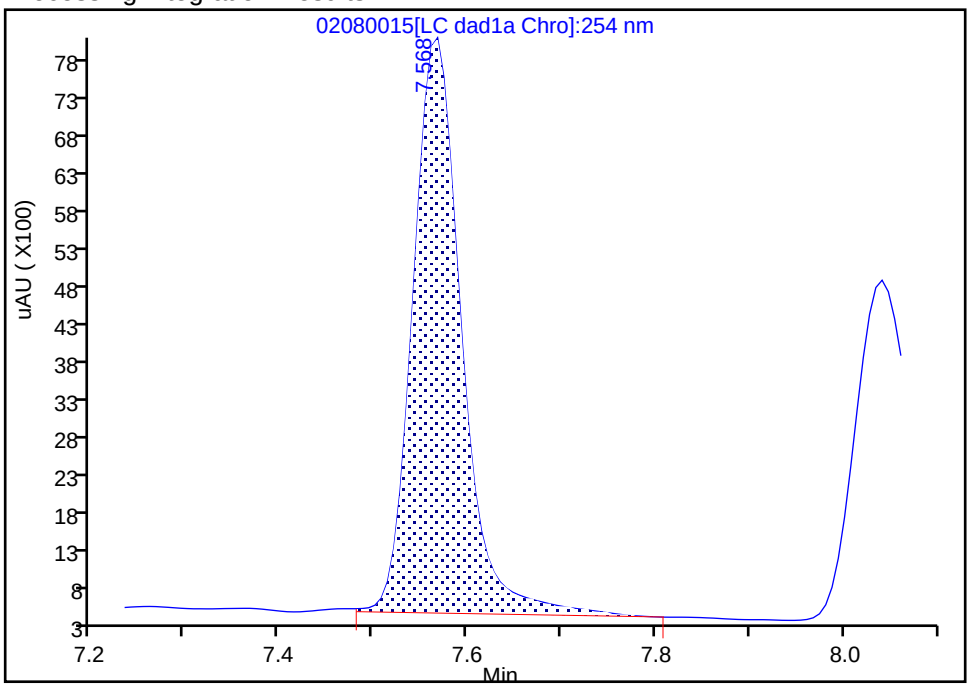
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080015.d				
Injection Date:	08-Feb-2023 17:10:30	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 5				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

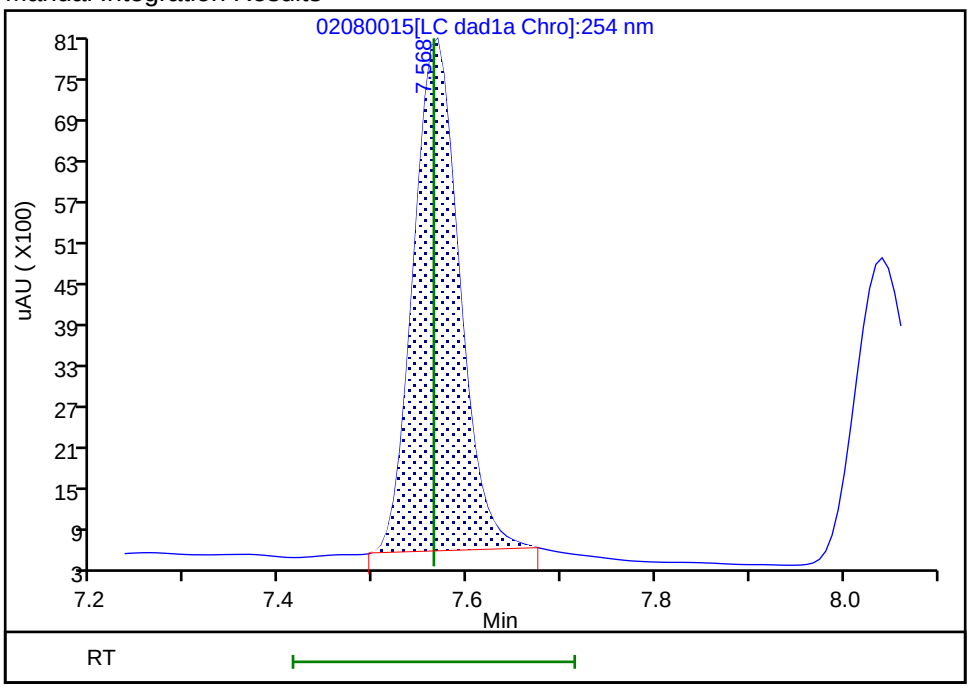
Processing Integration Results

RT: 7.57
Area: 27559
Amount: 0.254192
Amount Units: ug/mL



Manual Integration Results

RT: 7.57
Area: 25542
Amount: 0.240102
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:09:46
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080016.D
Lims ID: IC INT 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 08-Feb-2023 17:33:25 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 4
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub26

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Feb-2023 12:48:06 Calib Date: 08-Feb-2023 18:42:13
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 08-Feb-2023 18:05:31

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.544	6.544	0.000	9387	0.1000	0.1004	
8 RDX	1	7.564	7.564	0.000	10112	0.1000	0.0951	M
9 2,4,6-Trinitrophenol	1	8.044	8.044	0.000	7640	0.1000	0.1008	
$ 10 1,2-Dinitrobenzene	1	8.517	8.517	0.000	12727	0.1000	0.1008	
11 1,3,5-Trinitrobenzene	1	8.644	8.644	0.000	21399	0.1000	0.0985	
12 1,3-Dinitrobenzene	1	9.257	9.257	0.000	29249	0.1000	0.0994	
13 Nitrobenzene	1	9.631	9.631	0.000	19019	0.1000	0.0994	
14 3,5-Dinitroaniline	1	9.831	9.831	0.000	22723	0.1000	0.0998	
15 Tetryl	1	9.977	9.977	0.000	16438	0.1000	0.1002	
16 Nitroglycerin	2	10.437	10.437	0.000	63170	1.00	0.9860	
17 2,4,6-Trinitrotoluene	1	10.864	10.864	0.000	20787	0.1000	0.0985	
18 4-Amino-2,6-dinitrotoluene	1	11.031	11.031	0.000	15407	0.1000	0.0994	
19 2-Amino-4,6-dinitrotoluene	1	11.277	11.277	0.000	19765	0.1000	0.0981	
20 2,6-Dinitrotoluene	1	11.451	11.451	0.000	13967	0.1000	0.0978	
21 2,4-Dinitrotoluene	1	11.617	11.617	0.000	29539	0.1000	0.0996	
22 o-Nitrotoluene	1	12.437	12.437	0.000	12548	0.1000	0.0981	
23 p-Nitrotoluene	1	12.844	12.844	0.000	10857	0.1000	0.0970	
24 m-Nitrotoluene	1	13.411	13.411	0.000	13666	0.1000	0.0973	
25 PETN	2	14.551	14.551	0.000	68161	1.00	0.99	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00075 Amount Added: 10.00 Units: uL

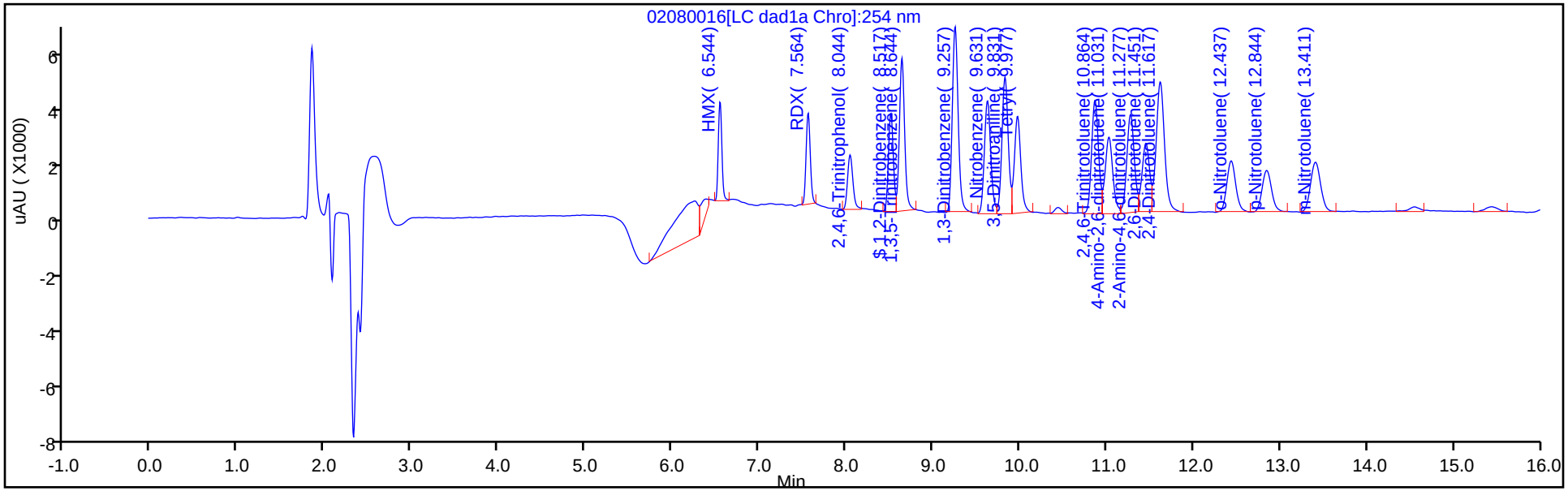
Report Date: 09-Feb-2023 12:48:06 Chrom Revision: 2.3 01-Feb-2023 13:23:06

Eurofins Denver

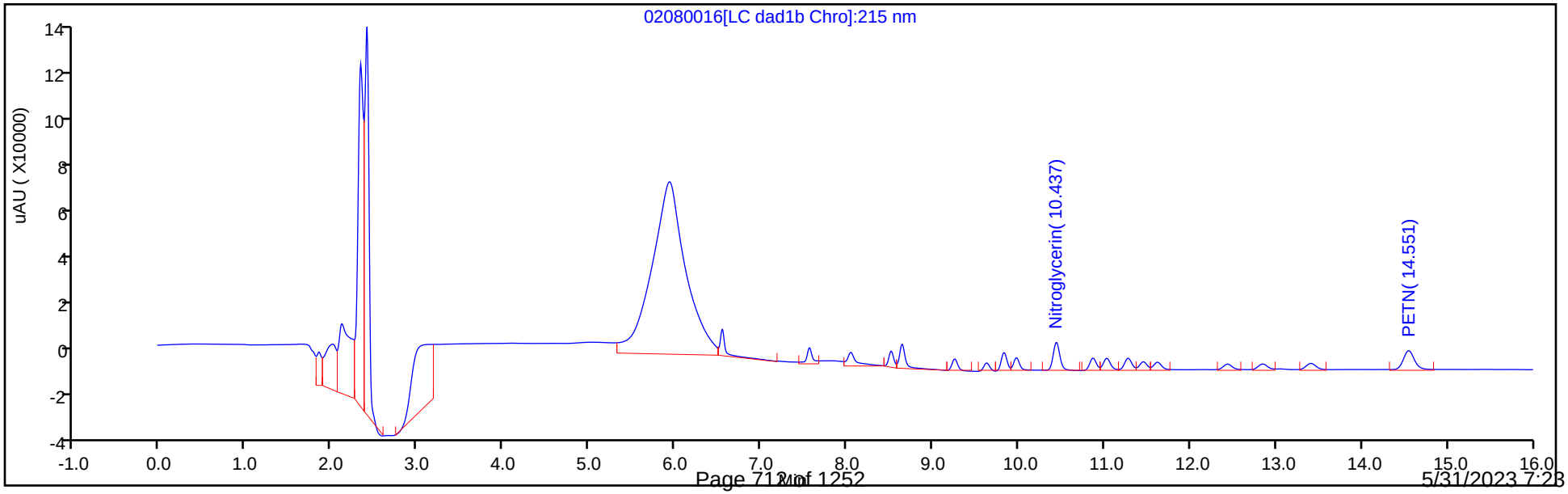
Data File: \\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080016.d

Injection Date:	08-Feb-2023 17:33:25	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC INT 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

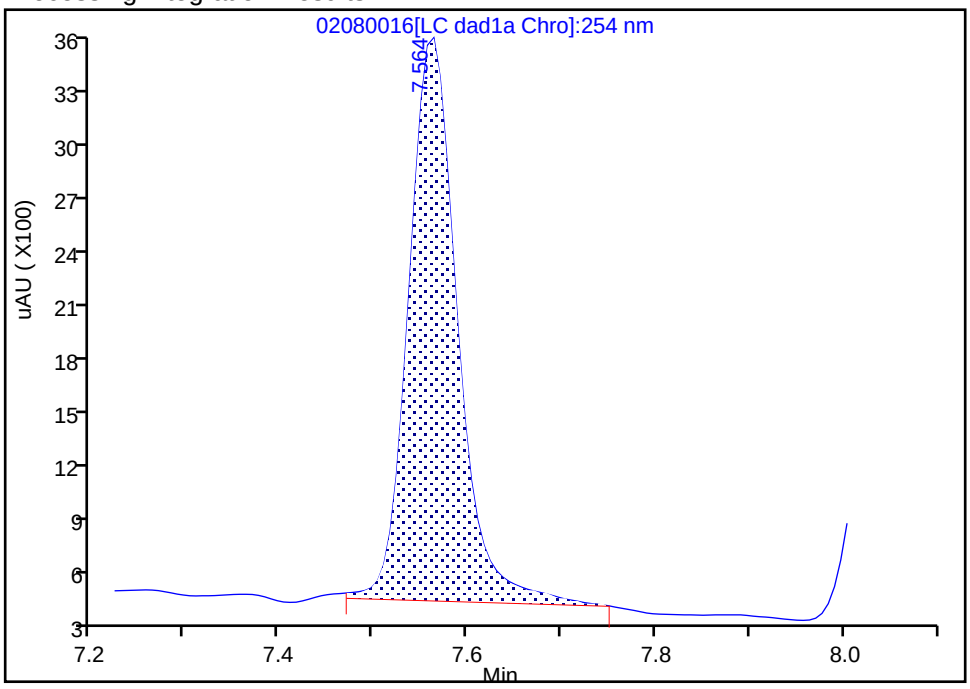
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080016.d				
Injection Date:	08-Feb-2023 17:33:25	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

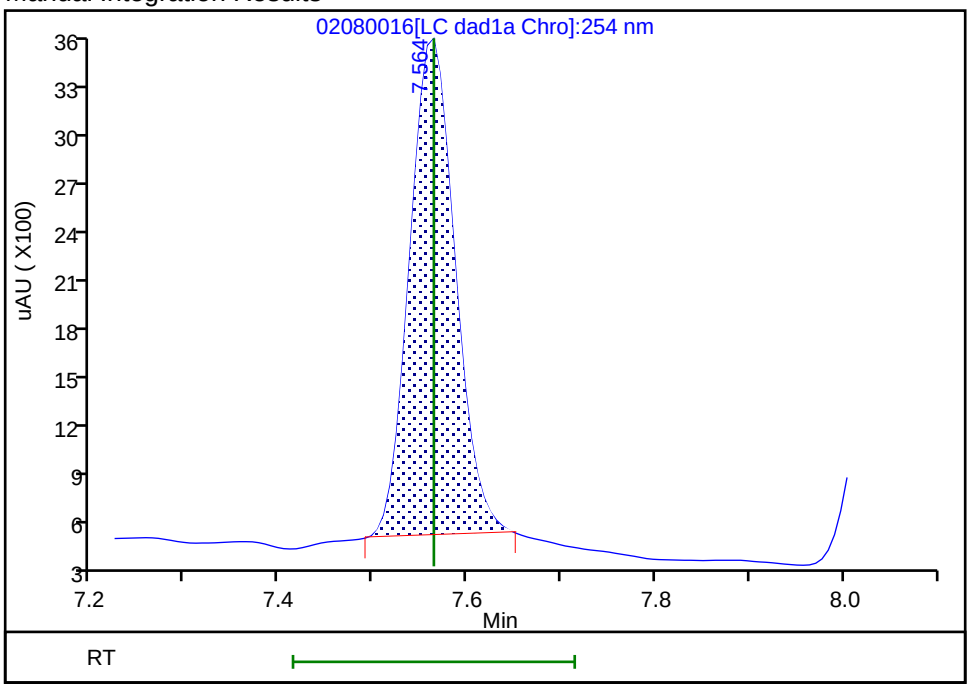
Processing Integration Results

RT: 7.56
Area: 11152
Amount: 0.101776
Amount Units: ug/mL



Manual Integration Results

RT: 7.56
Area: 10112
Amount: 0.095056
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:09:38
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

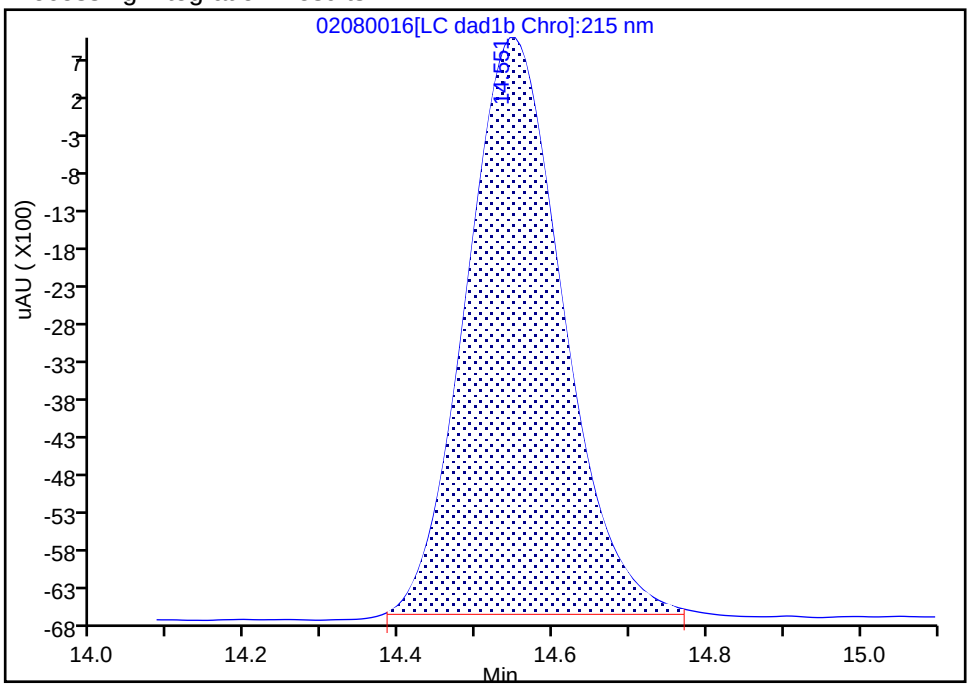
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080016.d				
Injection Date:	08-Feb-2023 17:33:25	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1C, 215 nm		

25 PETN, CAS: 78-11-5

Signal: 1

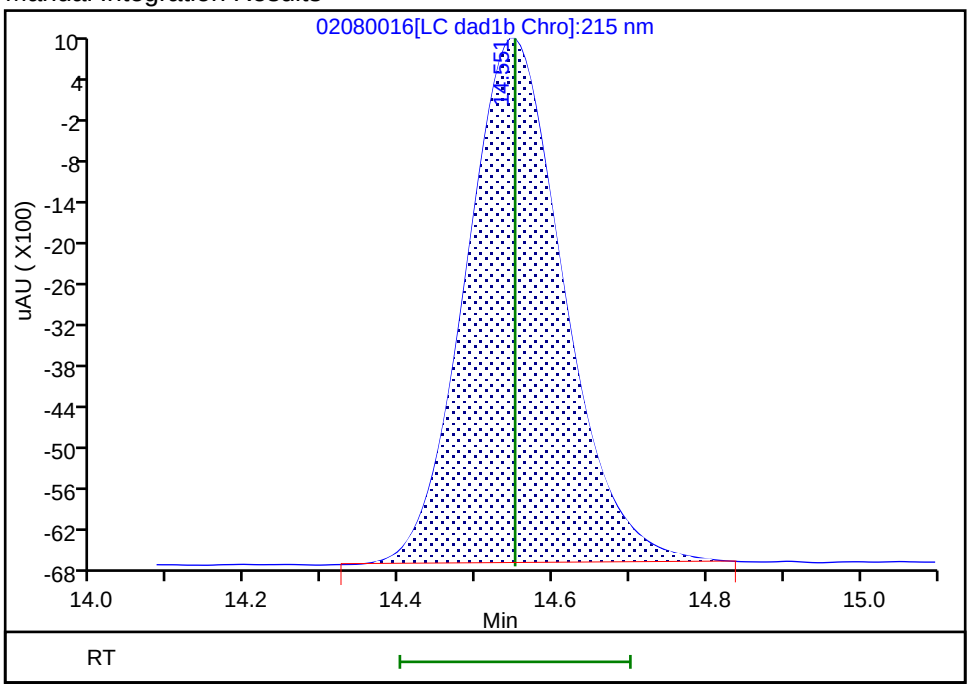
Processing Integration Results

RT: 14.55
Area: 66752
Amount: 0.971802
Amount Units: ug/mL



Manual Integration Results

RT: 14.55
Area: 68161
Amount: 0.990059
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:08:31

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080017.D
Lims ID: IC INT 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 08-Feb-2023 17:56:21 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 3
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub26

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Feb-2023 12:48:07 Calib Date: 08-Feb-2023 18:42:13
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 08-Feb-2023 19:07:50

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.547	6.544	0.003	4648	0.0500	0.0497	M
8 RDX	1	7.567	7.564	0.003	5236	0.0500	0.0492	M
9 2,4,6-Trinitrophenol	1	8.047	8.044	0.003	3768	0.0500	0.0497	
$ 10 1,2-Dinitrobenzene	1	8.520	8.517	0.003	6278	0.0500	0.0497	
11 1,3,5-Trinitrobenzene	1	8.647	8.644	0.003	10679	0.0500	0.0492	
12 1,3-Dinitrobenzene	1	9.260	9.257	0.003	14664	0.0500	0.0498	
13 Nitrobenzene	1	9.633	9.631	0.002	9605	0.0500	0.0502	
14 3,5-Dinitroaniline	1	9.840	9.831	0.009	11426	0.0500	0.0505	
15 Tetryl	1	9.987	9.977	0.010	8153	0.0500	0.0497	
16 Nitroglycerin	2	10.453	10.437	0.016	31649	0.5000	0.4940	
17 2,4,6-Trinitrotoluene	1	10.880	10.864	0.016	10708	0.0500	0.0507	
18 4-Amino-2,6-dinitrotoluene	1	11.040	11.031	0.009	7875	0.0500	0.0508	
19 2-Amino-4,6-dinitrotoluene	1	11.293	11.277	0.016	10072	0.0500	0.0500	
20 2,6-Dinitrotoluene	1	11.467	11.451	0.016	7109	0.0500	0.0498	
21 2,4-Dinitrotoluene	1	11.633	11.617	0.016	14872	0.0500	0.0501	
22 o-Nitrotoluene	1	12.453	12.437	0.016	6623	0.0500	0.0518	
23 p-Nitrotoluene	1	12.867	12.844	0.023	5584	0.0500	0.0499	
24 m-Nitrotoluene	1	13.433	13.411	0.022	7096	0.0500	0.0505	
25 PETN	2	14.580	14.551	0.029	34057	0.5000	0.4947	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00075 Amount Added: 5.00 Units: uL

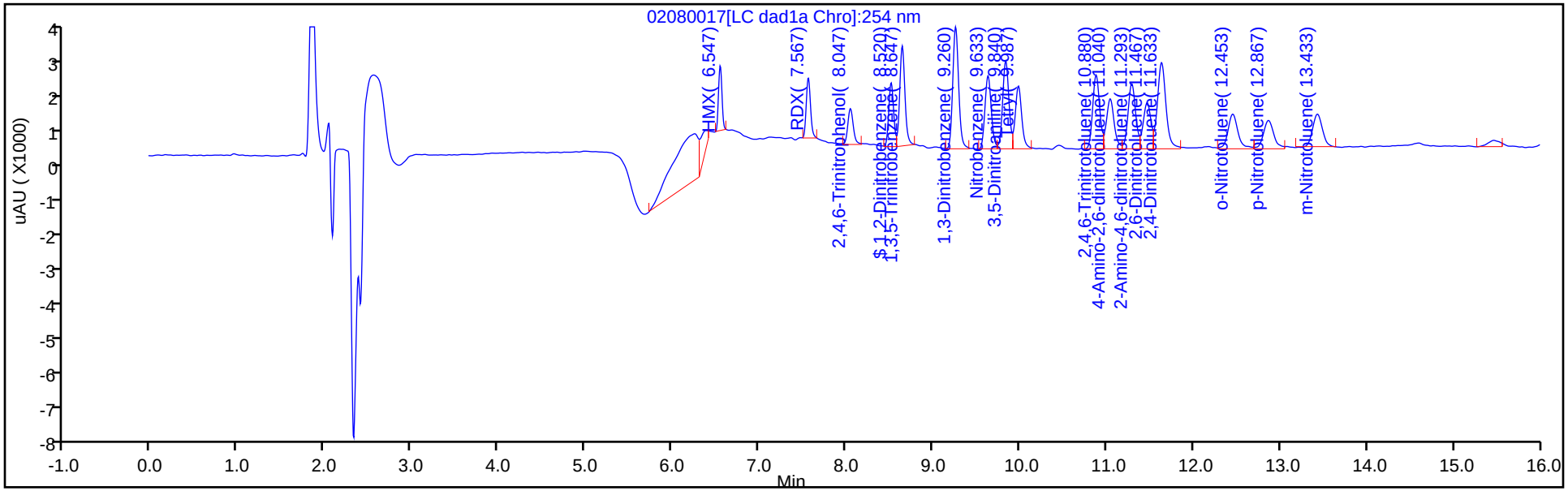
Report Date: 09-Feb-2023 12:48:07 Chrom Revision: 2.3 01-Feb-2023 13:23:06

Eurofins Denver

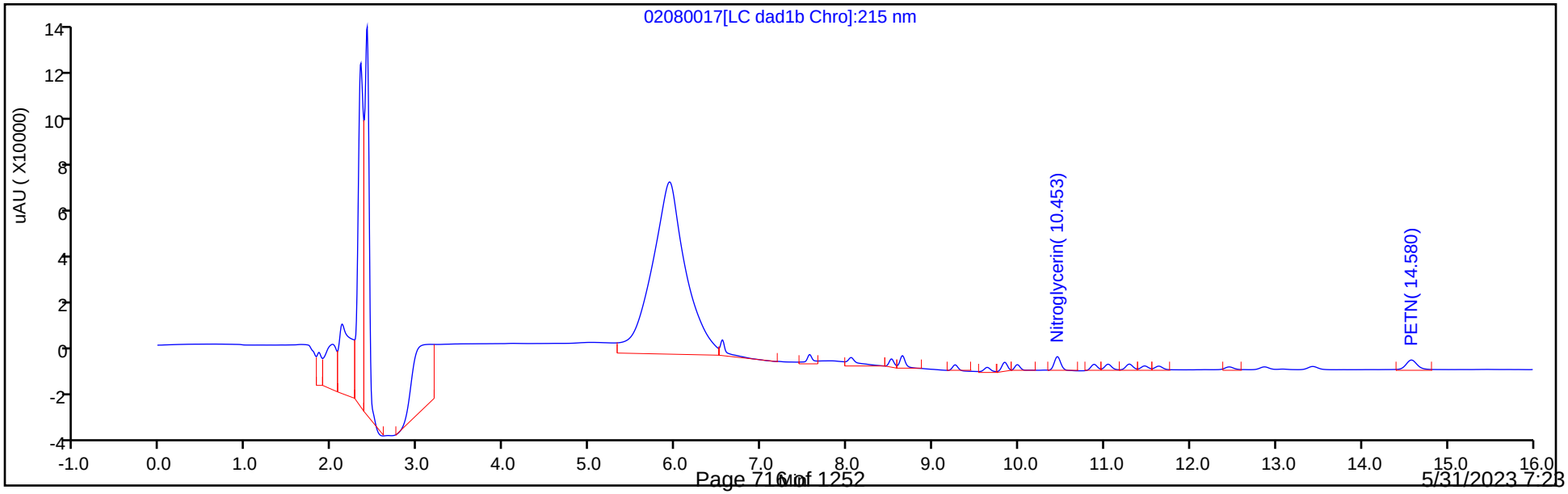
Data File: \\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080017.d

Injection Date:	08-Feb-2023 17:56:21	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC INT 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

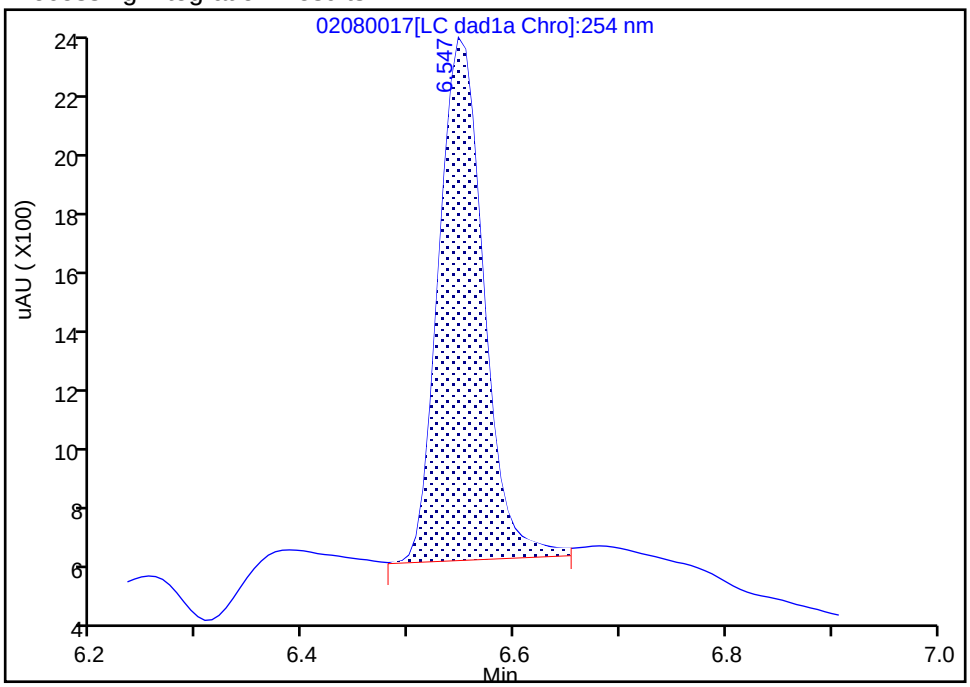
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080017.d				
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Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

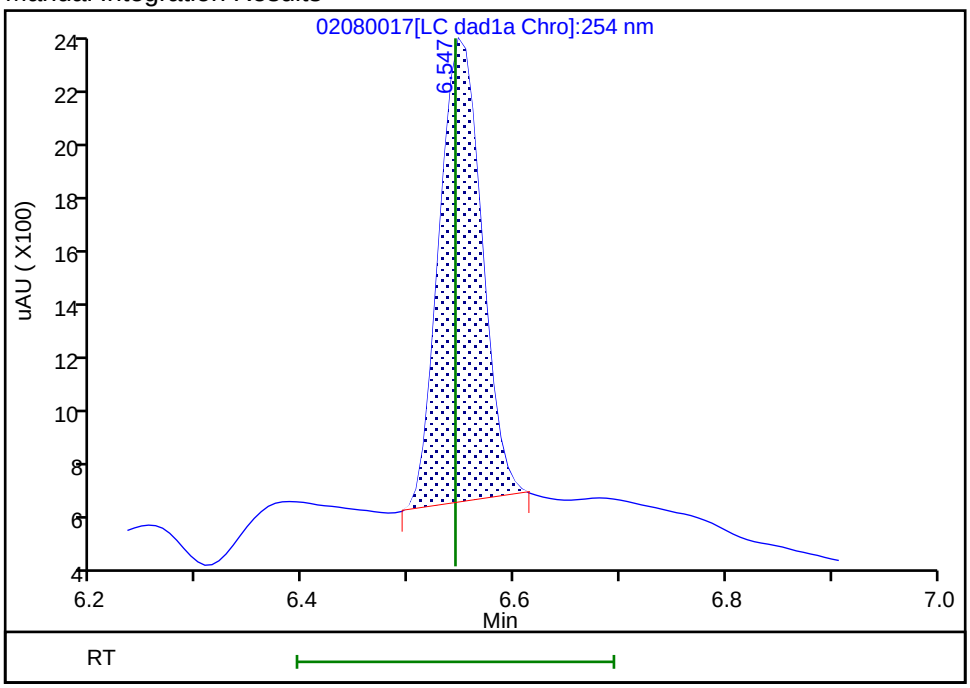
Processing Integration Results

RT: 6.55
Area: 4942
Amount: 0.050700
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 4648
Amount: 0.049696
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:07:46

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

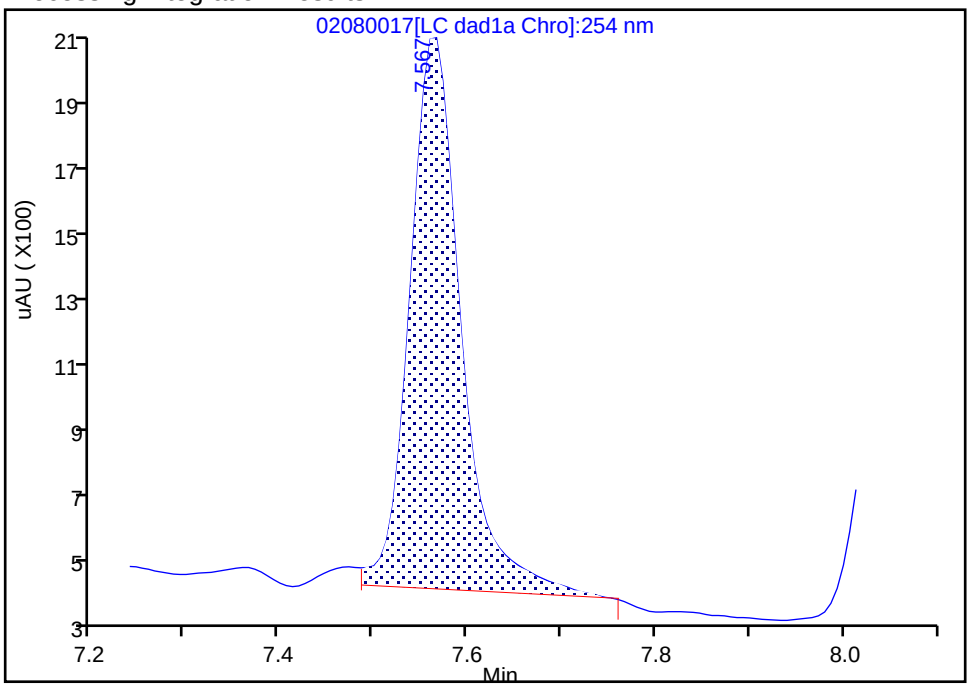
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080017.d				
Injection Date:	08-Feb-2023 17:56:21	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

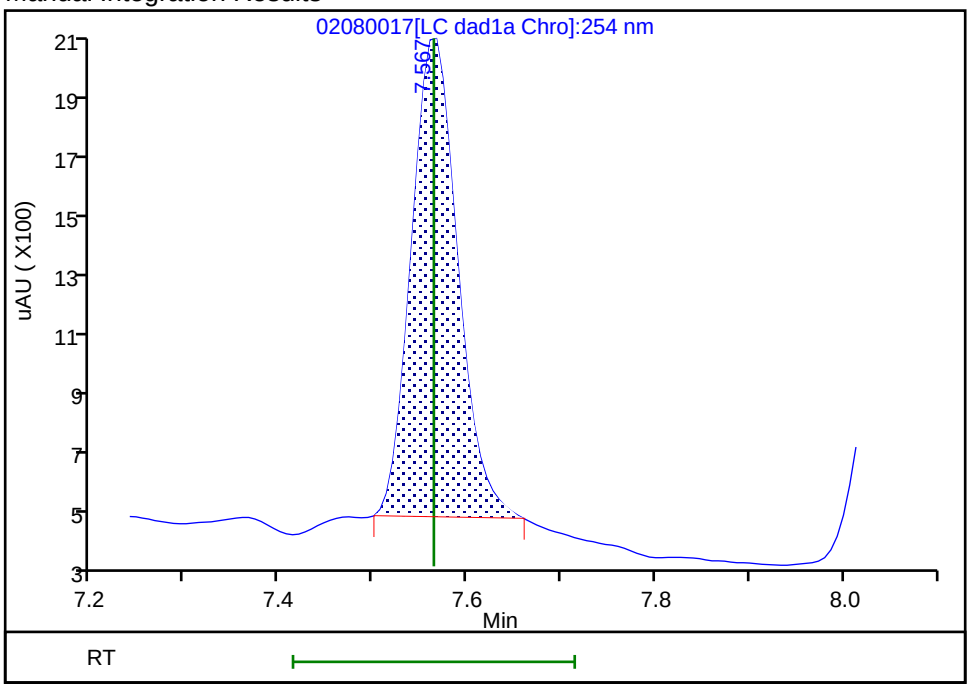
Processing Integration Results

RT: 7.57
Area: 6041
Amount: 0.054246
Amount Units: ug/mL



Manual Integration Results

RT: 7.57
Area: 5236
Amount: 0.049220
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:09:26
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

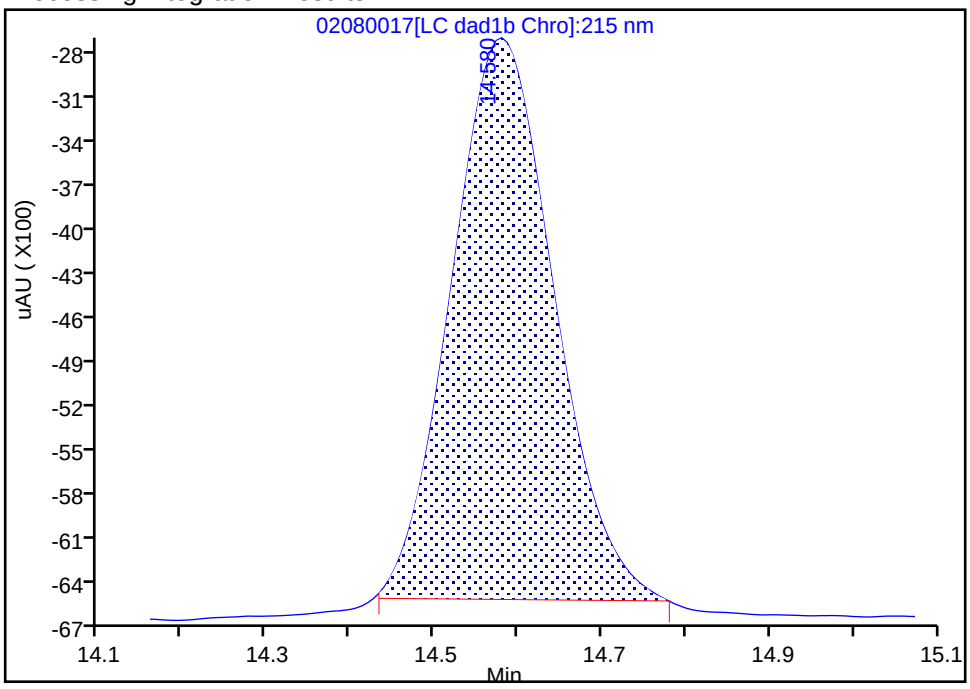
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080017.d				
Injection Date:	08-Feb-2023 17:56:21	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1C, 215 nm		

25 PETN, CAS: 78-11-5

Signal: 1

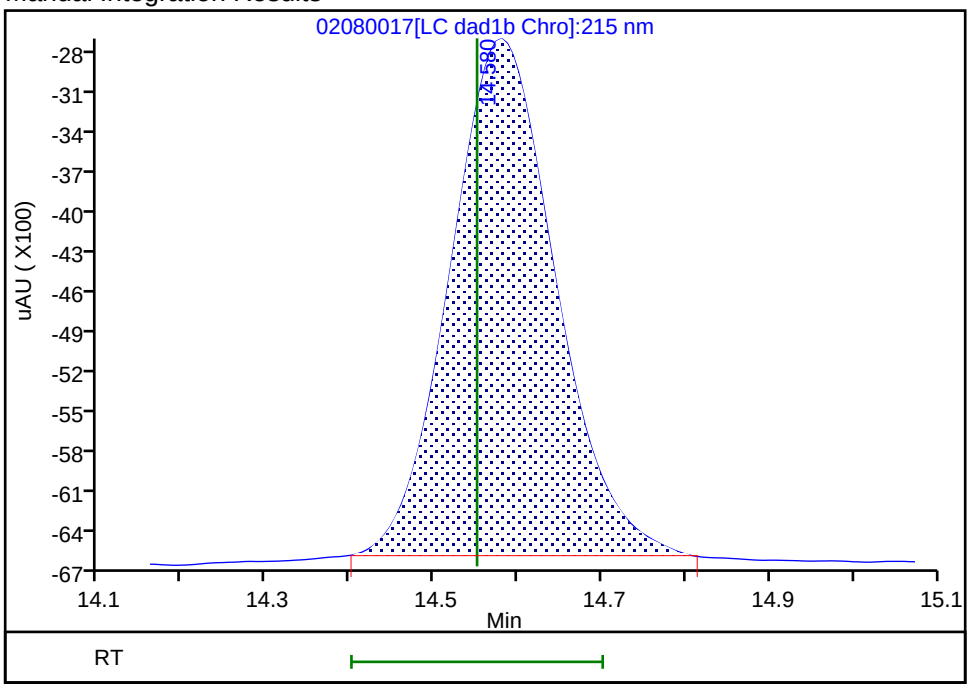
Processing Integration Results

RT: 14.58
Area: 32403
Amount: 0.474274
Amount Units: ug/mL



Manual Integration Results

RT: 14.58
Area: 34057
Amount: 0.494688
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:08:23

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080018.D
Lims ID: IC INT 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 08-Feb-2023 18:19:14 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 2
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub26

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Feb-2023 12:48:08 Calib Date: 08-Feb-2023 18:42:13
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 08-Feb-2023 19:08:08

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.549	6.544	0.005	1961	0.0200	0.0210	M
8 RDX	1	7.563	7.564	-0.001	2196	0.0200	0.0206	M
9 2,4,6-Trinitrophenol	1	8.049	8.044	0.005	1492	0.0200	0.0197	
$ 10 1,2-Dinitrobenzene	1	8.516	8.517	-0.001	2491	0.0200	0.0197	
11 1,3,5-Trinitrobenzene	1	8.643	8.644	-0.001	4313	0.0200	0.0199	
12 1,3-Dinitrobenzene	1	9.256	9.257	-0.001	5849	0.0200	0.0199	
13 Nitrobenzene	1	9.636	9.631	0.005	3816	0.0200	0.0200	
14 3,5-Dinitroaniline	1	9.836	9.831	0.005	4377	0.0200	0.0198	
15 Tetryl	1	9.982	9.977	0.005	3073	0.0200	0.0187	
16 Nitroglycerin	2	10.449	10.437	0.012	11879	0.2000	0.1854	
17 2,4,6-Trinitrotoluene	1	10.876	10.864	0.012	4262	0.0200	0.0202	
18 4-Amino-2,6-dinitrotoluene	1	11.042	11.031	0.011	3106	0.0200	0.0200	
19 2-Amino-4,6-dinitrotoluene	1	11.289	11.277	0.012	4021	0.0200	0.0200	
20 2,6-Dinitrotoluene	1	11.469	11.451	0.018	2911	0.0200	0.0204	
21 2,4-Dinitrotoluene	1	11.636	11.617	0.019	5985	0.0200	0.0202	
22 o-Nitrotoluene	1	12.456	12.437	0.019	2611	0.0200	0.0204	
23 p-Nitrotoluene	1	12.869	12.844	0.025	2393	0.0200	0.0214	
24 m-Nitrotoluene	1	13.442	13.411	0.031	3062	0.0200	0.0218	
25 PETN	2	14.589	14.551	0.038	13462	0.2000	0.1955	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00075 Amount Added: 2.00 Units: uL

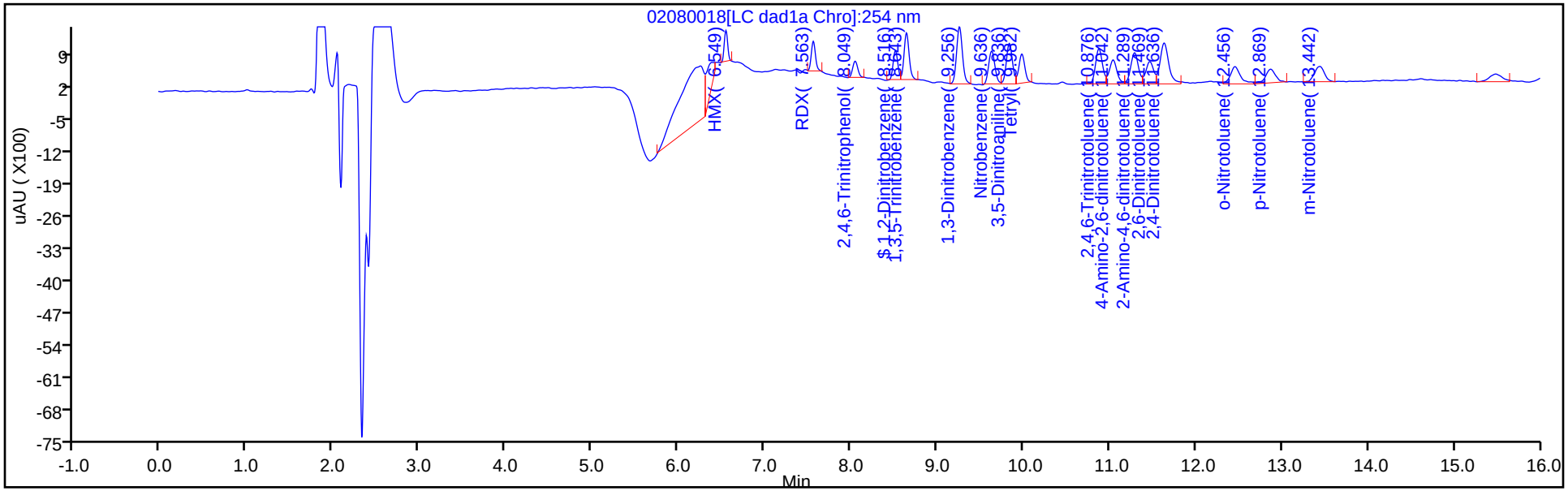
Report Date: 09-Feb-2023 12:48:08 Chrom Revision: 2.3 01-Feb-2023 13:23:06

Eurofins Denver

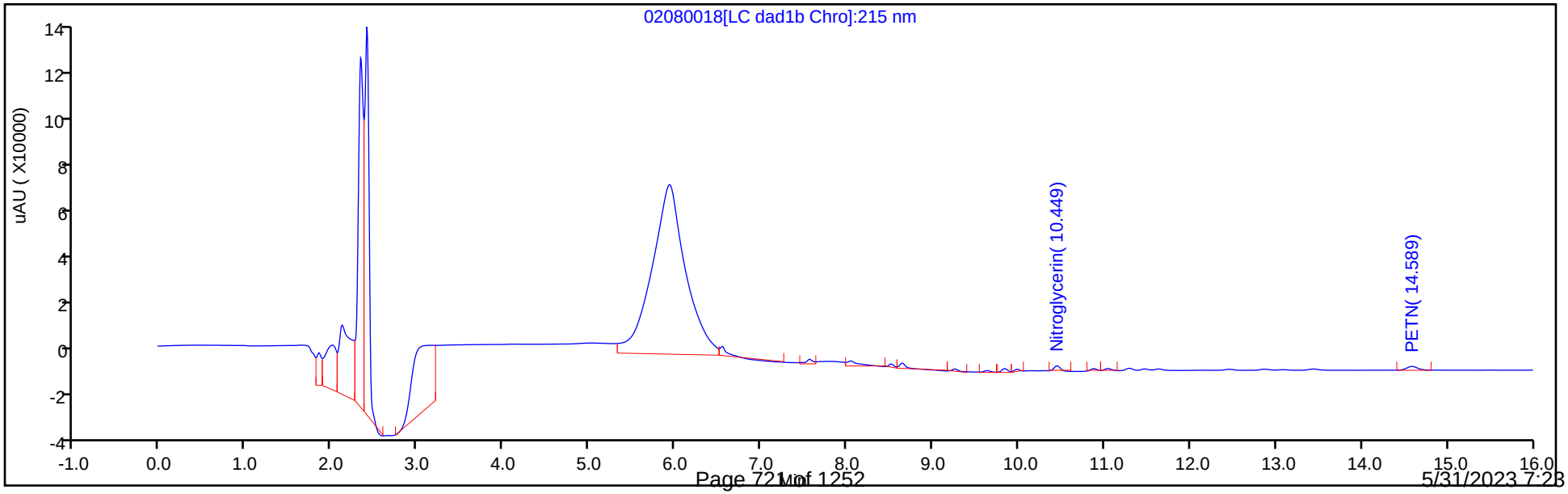
Data File: \\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080018.d

Injection Date:	08-Feb-2023 18:19:14	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC INT 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



Manual Integration/User Assign Peak Report

Eurofins Denver

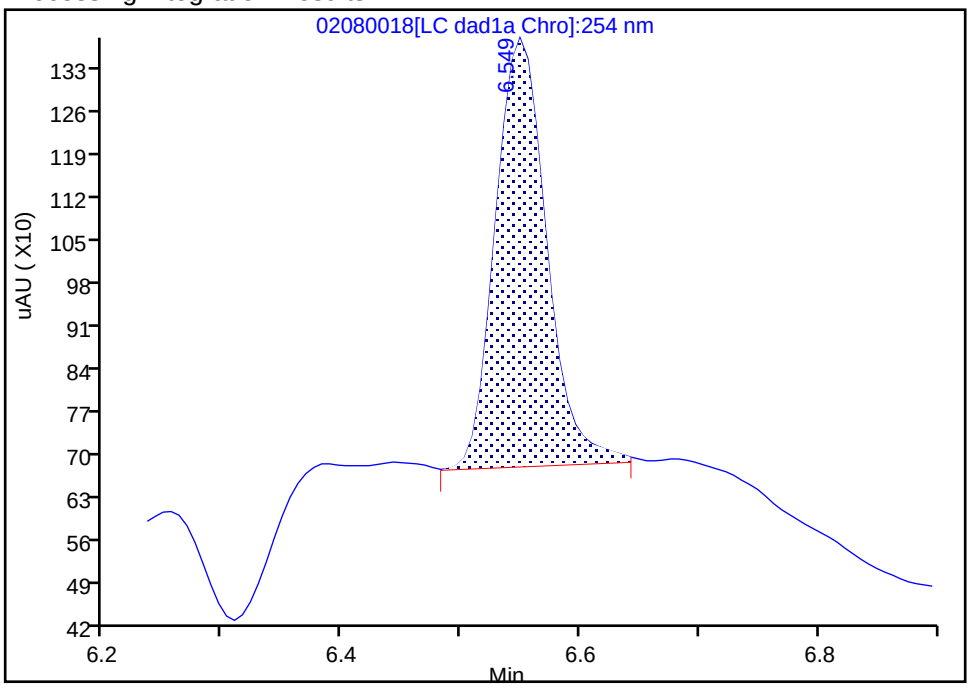
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080018.d				
Injection Date:	08-Feb-2023 18:19:14	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

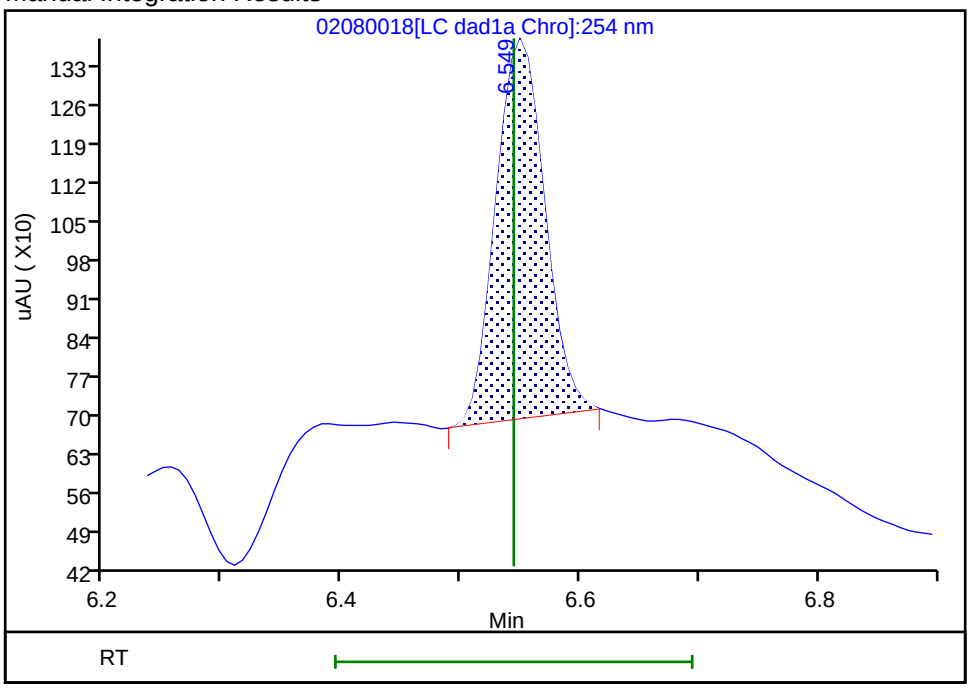
Processing Integration Results

RT: 6.55
Area: 2102
Amount: 0.022288
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 1961
Amount: 0.020967
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:09:07
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

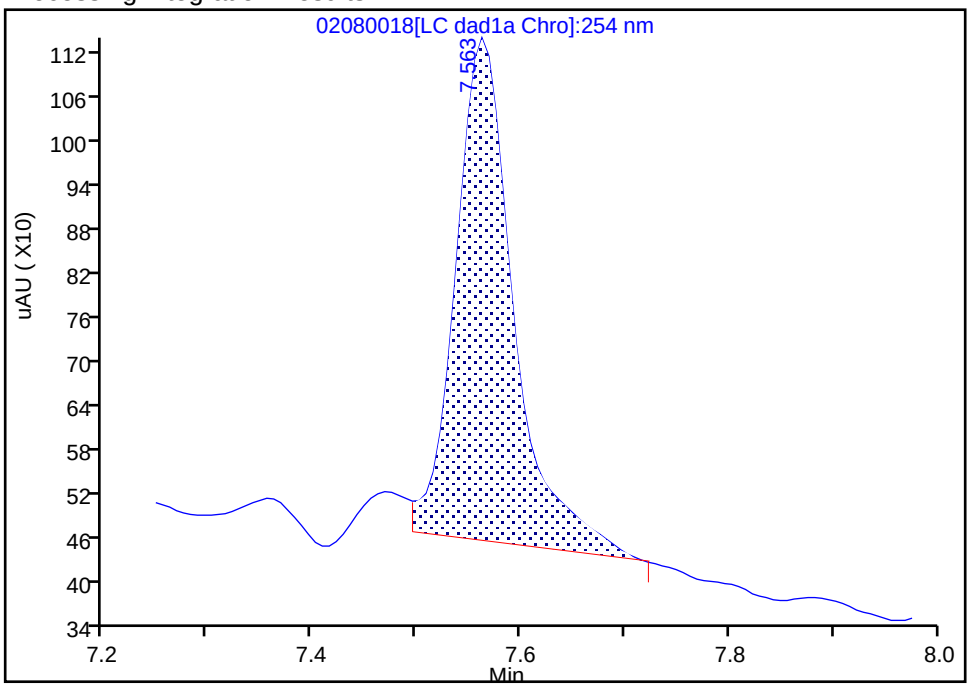
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080018.d				
Injection Date:	08-Feb-2023 18:19:14	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

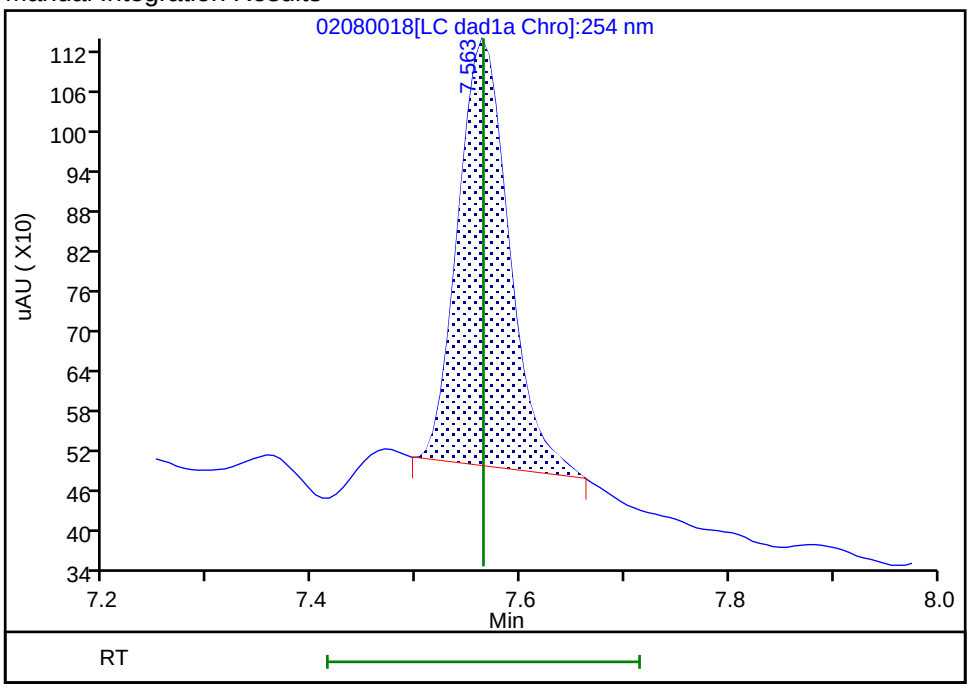
Processing Integration Results

RT: 7.56
Area: 2668
Amount: 0.023407
Amount Units: ug/mL



Manual Integration Results

RT: 7.56
Area: 2196
Amount: 0.020643
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:09:19
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

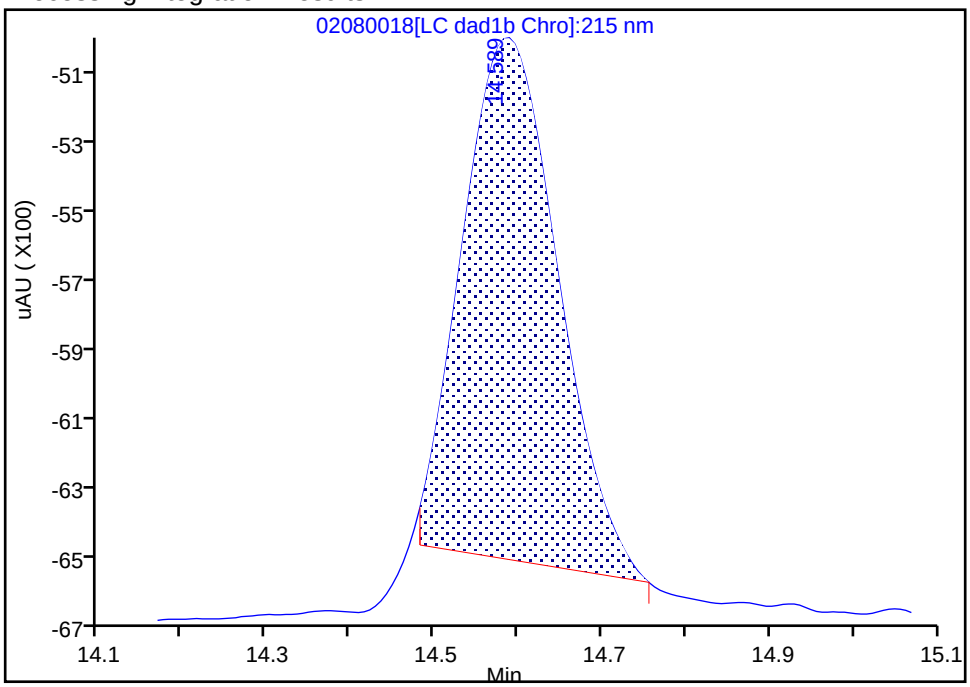
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080018.d				
Injection Date:	08-Feb-2023 18:19:14	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1C, 215 nm		

25 PETN, CAS: 78-11-5

Signal: 1

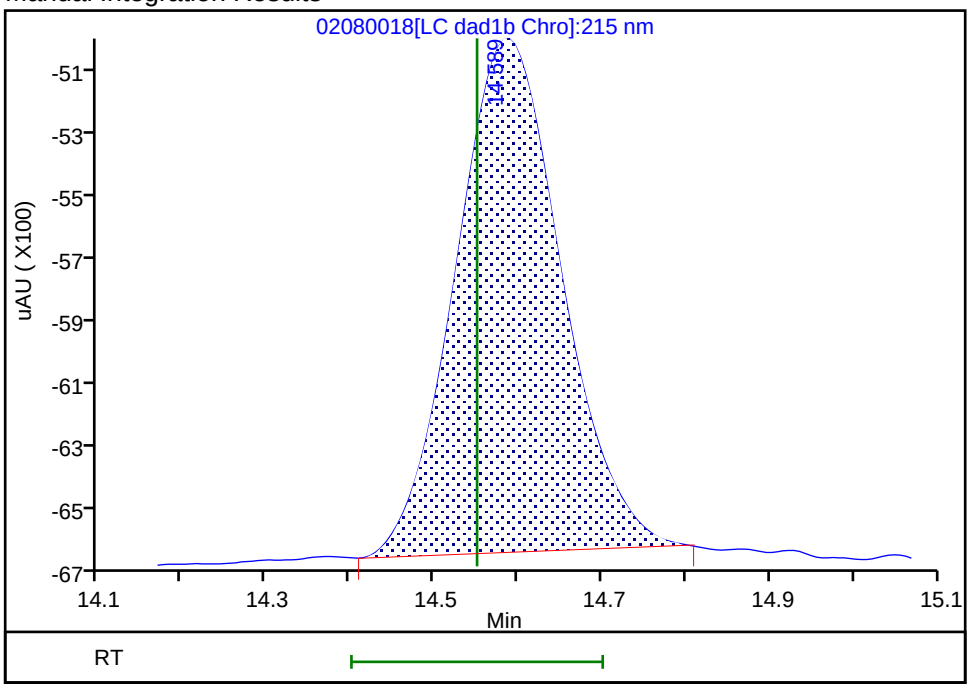
Processing Integration Results

RT: 14.59
Area: 11186
Amount: 0.166814
Amount Units: ug/mL



Manual Integration Results

RT: 14.59
Area: 13462
Amount: 0.195540
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:08:19
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080019.D
Lims ID: IC INT 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 08-Feb-2023 18:42:13 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 1
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub26

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Feb-2023 12:48:08 Calib Date: 08-Feb-2023 18:42:13
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 08-Feb-2023 19:08:17

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.550	6.544	0.006	962	0.0100	0.0103	M
8 RDX	1	7.563	7.564	-0.001	1203	0.0100	0.0113	M
9 2,4,6-Trinitrophenol	1	8.050	8.044	0.006	673	0.0100	0.008875	
$ 10 1,2-Dinitrobenzene	1	8.517	8.517	0.000	1188	0.0100	0.009406	
11 1,3,5-Trinitrobenzene	1	8.643	8.644	-0.001	2196	0.0100	0.0101	
12 1,3-Dinitrobenzene	1	9.263	9.257	0.006	2902	0.0100	0.009857	
13 Nitrobenzene	1	9.636	9.631	0.005	1905	0.0100	0.0100	
14 3,5-Dinitroaniline	1	9.836	9.831	0.005	2147	0.0100	0.0100	
15 Tetryl	1	9.983	9.977	0.006	1611	0.0100	0.009816	
16 Nitroglycerin	2	10.450	10.437	0.013	6159	0.1000	0.0961	
17 2,4,6-Trinitrotoluene	1	10.876	10.864	0.012	2167	0.0100	0.0103	
18 4-Amino-2,6-dinitrotoluene	1	11.043	11.031	0.012	1670	0.0100	0.0108	
19 2-Amino-4,6-dinitrotoluene	1	11.296	11.277	0.019	2214	0.0100	0.0110	
20 2,6-Dinitrotoluene	1	11.470	11.451	0.019	1486	0.0100	0.0104	
21 2,4-Dinitrotoluene	1	11.636	11.617	0.019	3141	0.0100	0.0106	
22 o-Nitrotoluene	1	12.456	12.437	0.019	1377	0.0100	0.0108	
23 p-Nitrotoluene	1	12.863	12.844	0.019	1263	0.0100	0.0113	
24 m-Nitrotoluene	1	13.430	13.411	0.019	1473	0.0100	0.0105	
25 PETN	2	14.583	14.551	0.032	7273	0.1000	0.1056	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00075 Amount Added: 1.00 Units: uL

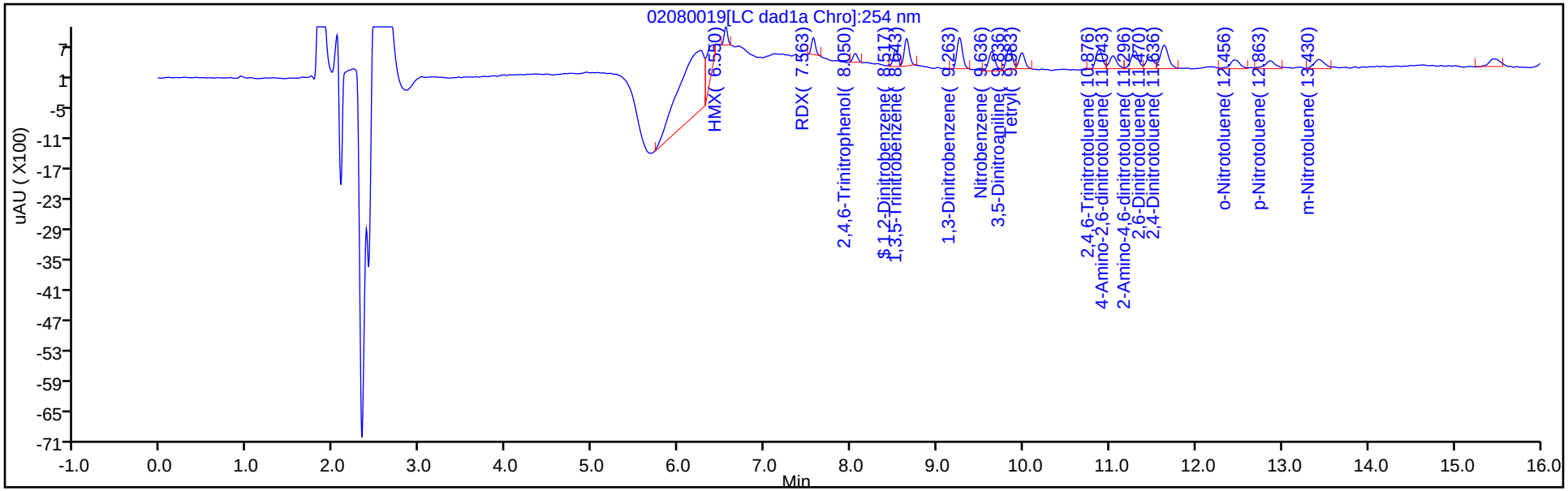
Report Date: 09-Feb-2023 12:48:08 Chrom Revision: 2.3 01-Feb-2023 13:23:06

Eurofins Denver

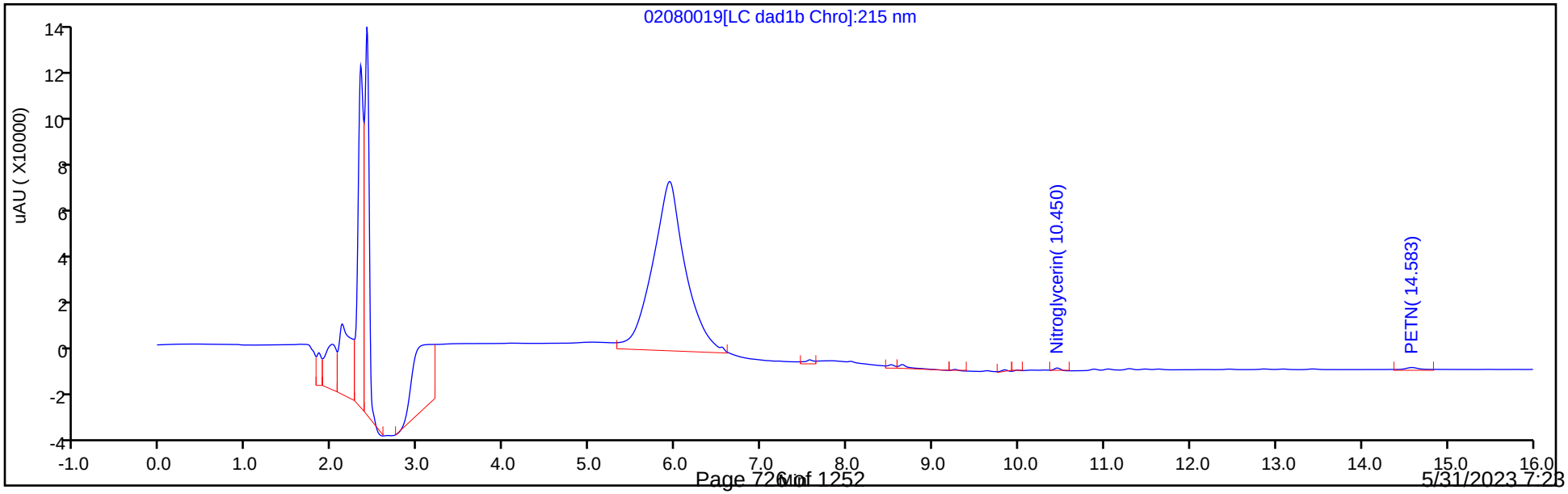
Data File: \\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080019.d

Injection Date:	08-Feb-2023 18:42:13	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC INT 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



5/31/2023 7:28 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

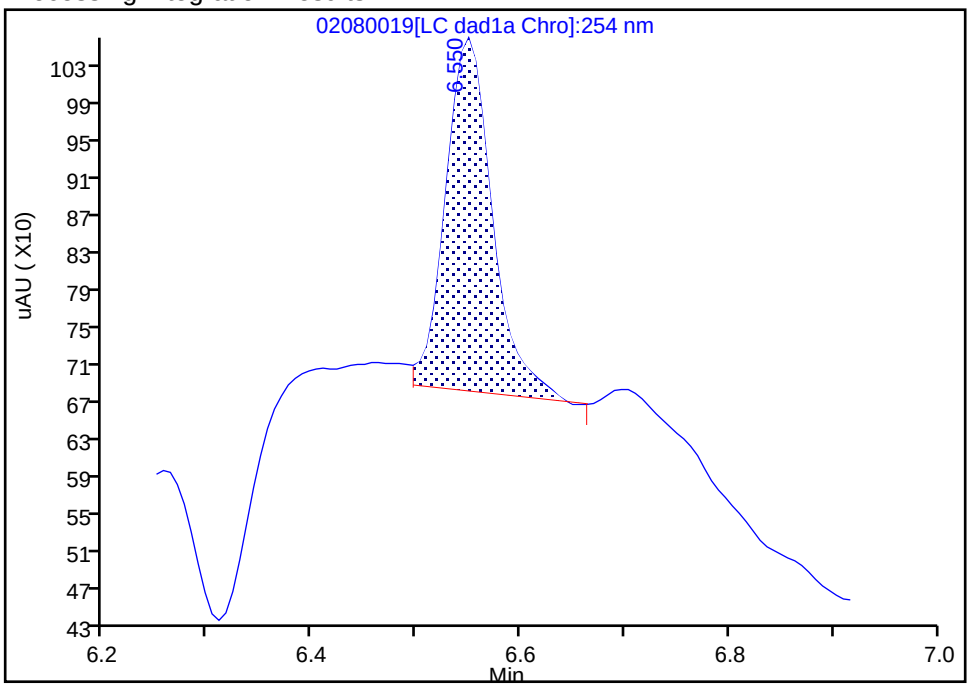
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080019.d				
Injection Date:	08-Feb-2023 18:42:13	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

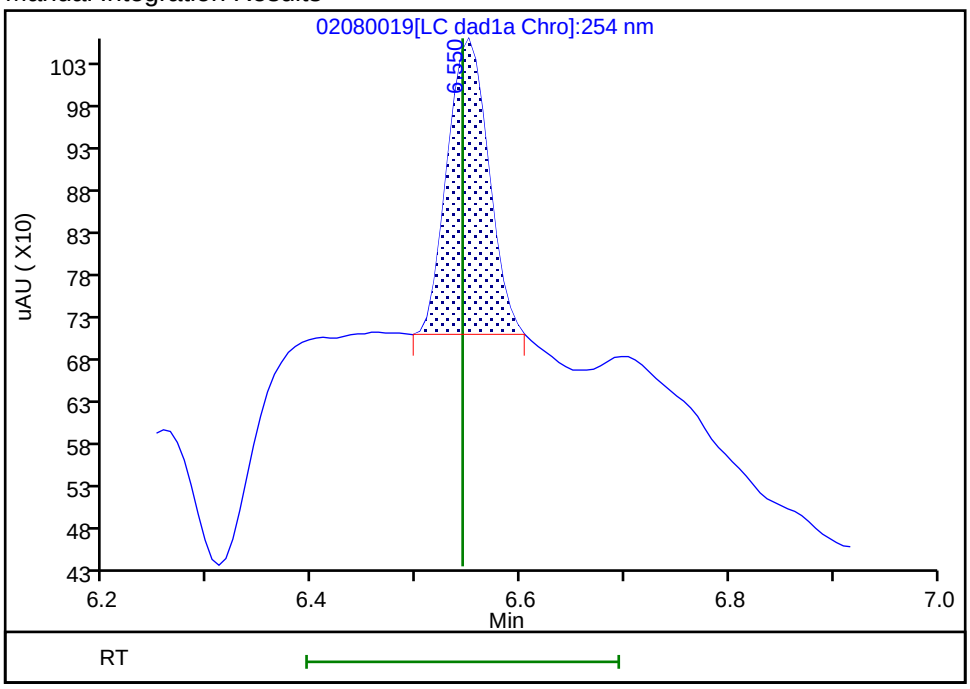
Processing Integration Results

RT: 6.55
Area: 1188
Amount: 0.012270
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 962
Amount: 0.010286
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:09:00
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

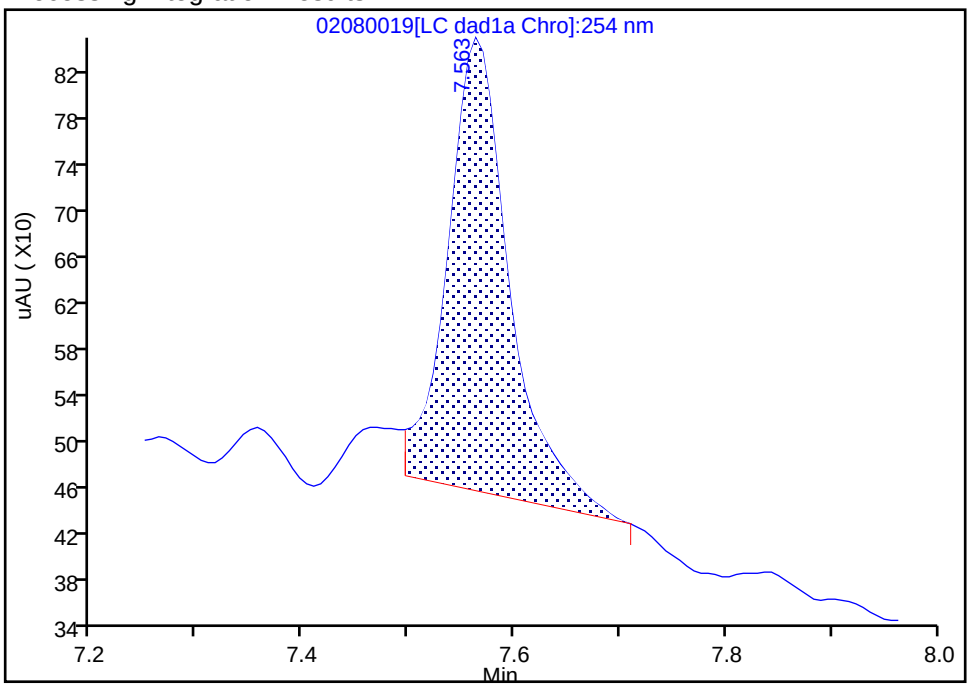
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080019.d				
Injection Date:	08-Feb-2023 18:42:13	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

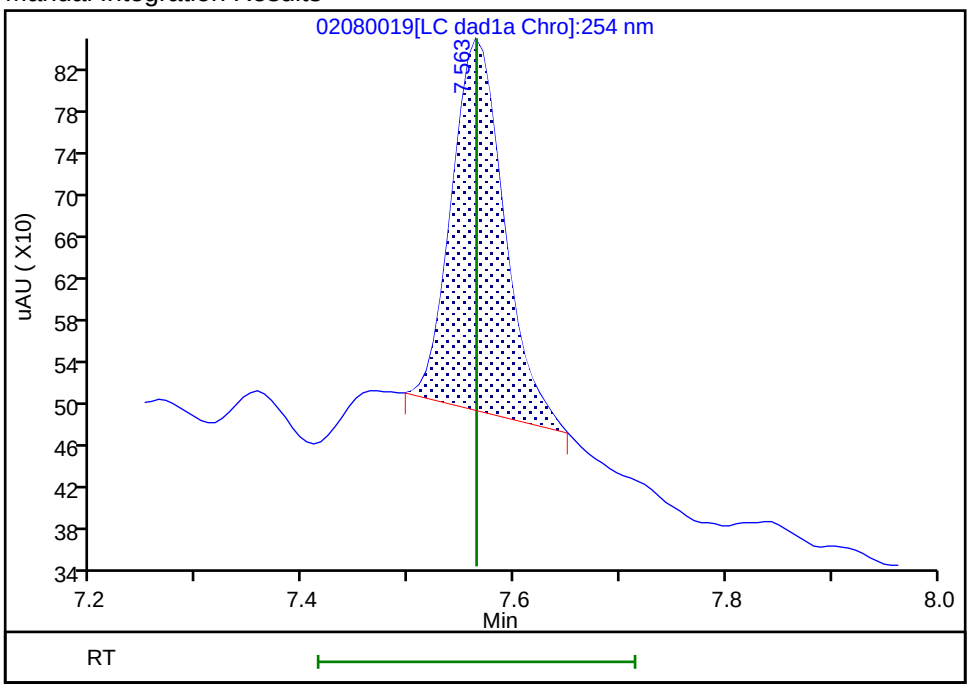
Processing Integration Results

RT: 7.56
Area: 1576
Amount: 0.013341
Amount Units: ug/mL



Manual Integration Results

RT: 7.56
Area: 1203
Amount: 0.011309
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:08:52
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1 Analy Batch No.: 603284

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/24/2023 15:00 Calibration End Date: 02/24/2023 17:41 Calibration ID: 77558

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-603284/18	02240018.D
Level 2	IC 280-603284/17	02240017.D
Level 3	IC 280-603284/16	02240016.D
Level 4	IC 280-603284/15	02240015.D
Level 5	IC 280-603284/14	02240014.D
Level 6	IC 280-603284/13	02240013.D
Level 7	IC 280-603284/12	02240012.D
Level 8	IC 280-603284/11	02240011.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
TNX	6.444	6.448	6.446	6.443	6.442	6.441	6.439	6.442			6.343 - 6.543	6.443
DNX	6.771	6.768	6.766	6.770	6.769	6.767	6.759	6.762			6.670 - 6.870	6.767
MNX	7.197	7.195	7.199	7.196	7.195	7.194	7.192	7.189			7.046 - 7.346	7.195

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-176335-1 Analy Batch No.: 603284

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/24/2023 15:00 Calibration End Date: 02/24/2023 17:41 Calibration ID: 77558

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-603284/18	02240018.D
Level 2	IC 280-603284/17	02240017.D
Level 3	IC 280-603284/16	02240016.D
Level 4	IC 280-603284/15	02240015.D
Level 5	IC 280-603284/14	02240014.D
Level 6	IC 280-603284/13	02240013.D
Level 7	IC 280-603284/12	02240012.D
Level 8	IC 280-603284/11	02240011.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								
TNX	187089 192298	197747 202669	198325 203463	196782 203127	Ave		197687.33 1				2.9		20.0			
DNX	139760 138674	146613 146977	145554 146290	145335 146496	Ave		144462.48 6				2.3		20.0			
MNX	127763 125139	130334 133592	131602 134086	134629 132227	Ave		131171.56 5				2.5		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.: 280-176335-1 | Analy Batch No.: 603284

SDG No.:

Instrument ID: CHHPLC_X3 | GC Column: UltraCarb5u ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 02/24/2023 15:00 | Calibration End Date: 02/24/2023 17:41 | Calibration ID: 77558

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-603284/18	02240018.D
Level 2	IC 280-603284/17	02240017.D
Level 3	IC 280-603284/16	02240016.D
Level 4	IC 280-603284/15	02240015.D
Level 5	IC 280-603284/14	02240014.D
Level 6	IC 280-603284/13	02240013.D
Level 7	IC 280-603284/12	02240012.D
Level 8	IC 280-603284/11	02240011.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
TNX	Ave	3753 142294	9917 204073	19892 509340	49343	77150	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251	0.401
DNX	Ave	2798 102987	7338 146436	14570 366607	36370	55525	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
MNX	Ave	2982 109131	7605 156478	15358 385772	39278	58415	0.0233 0.817	0.0584 1.17	0.117 2.92	0.292	0.467

Curve Type Legend
Ave = Average

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240011.D
Lims ID: IC DMT 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 24-Feb-2023 15:00:10 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 8
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-Feb-2023 13:17:25 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1602

First Level Reviewer: LV5D Date: 24-Feb-2023 15:28:35

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	6.443	-0.001	509340	2.51	2.58	M
6 DNX	1	6.762	6.770	-0.008	366607	2.50	2.54	M
7 MNX	1	7.189	7.196	-0.007	385772	2.92	2.94	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00013 Amount Added: 125.00 Units: uL

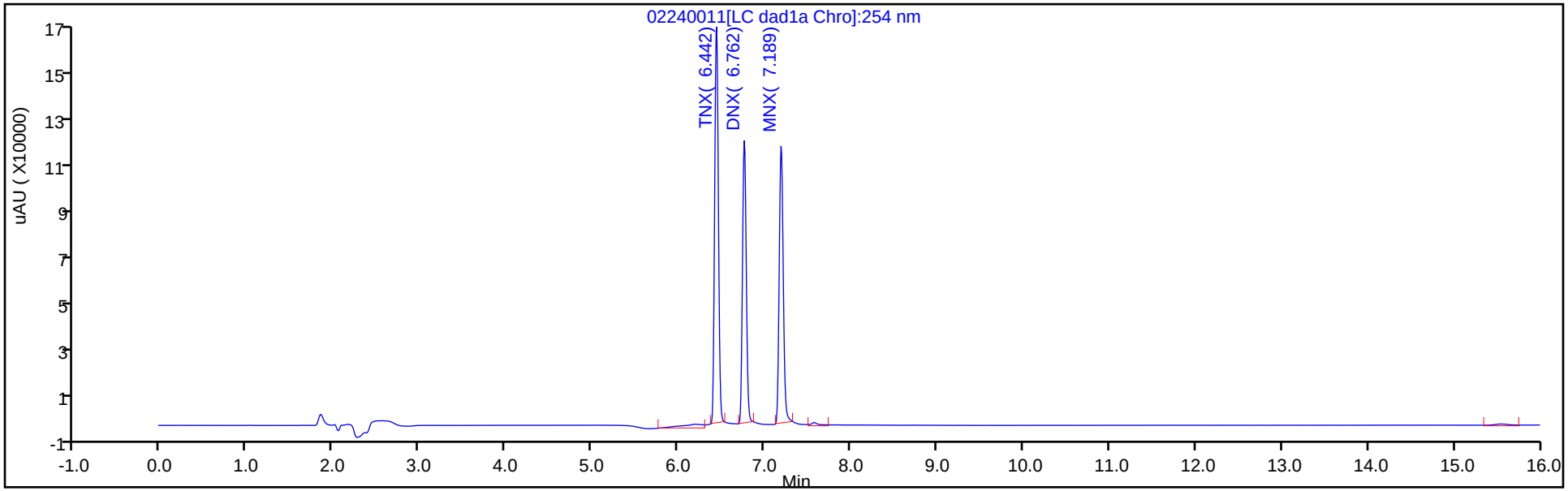
Report Date: 28-Feb-2023 13:17:26 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Denver

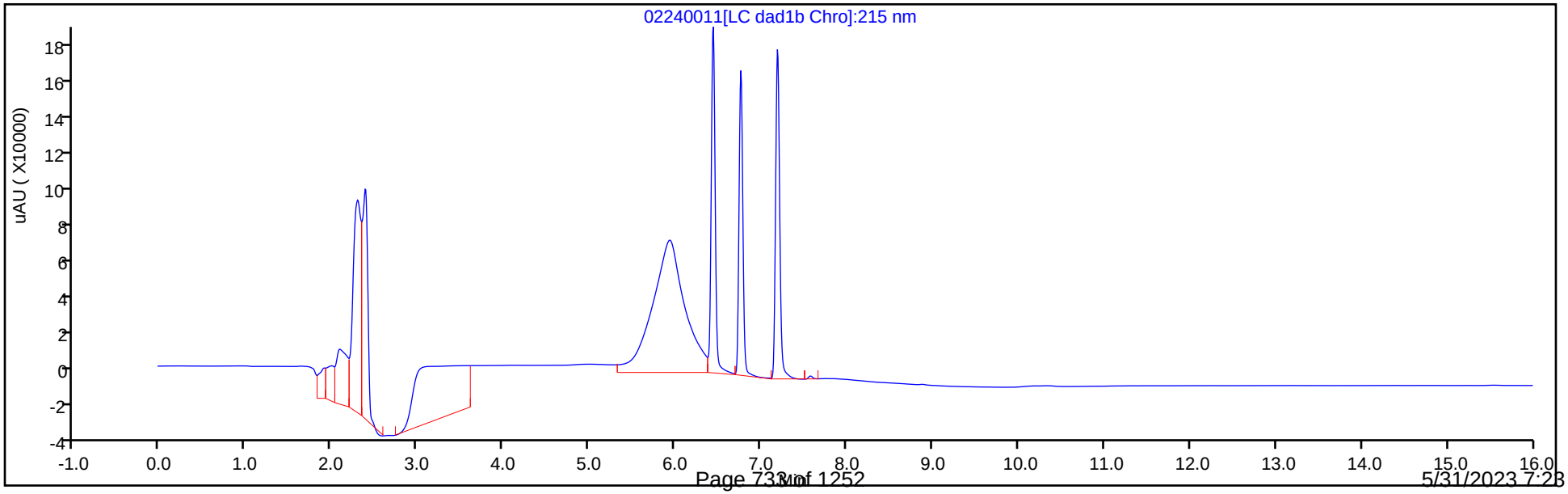
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240011.d

Injection Date:	24-Feb-2023 15:00:10	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC DMT 8			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

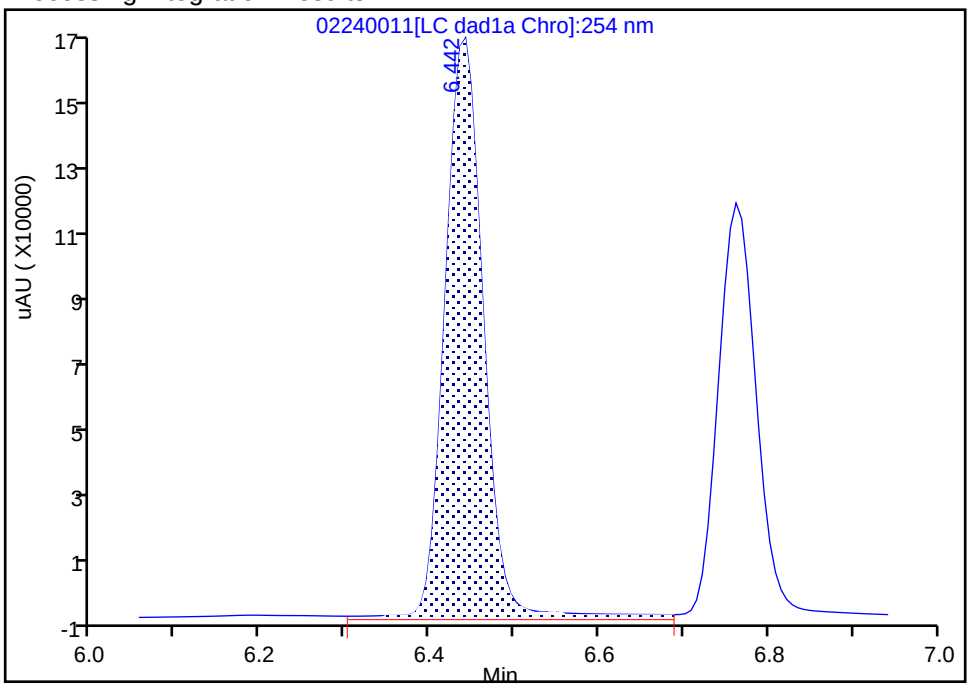
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240011.d
Injection Date: 24-Feb-2023 15:00:10 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 8
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

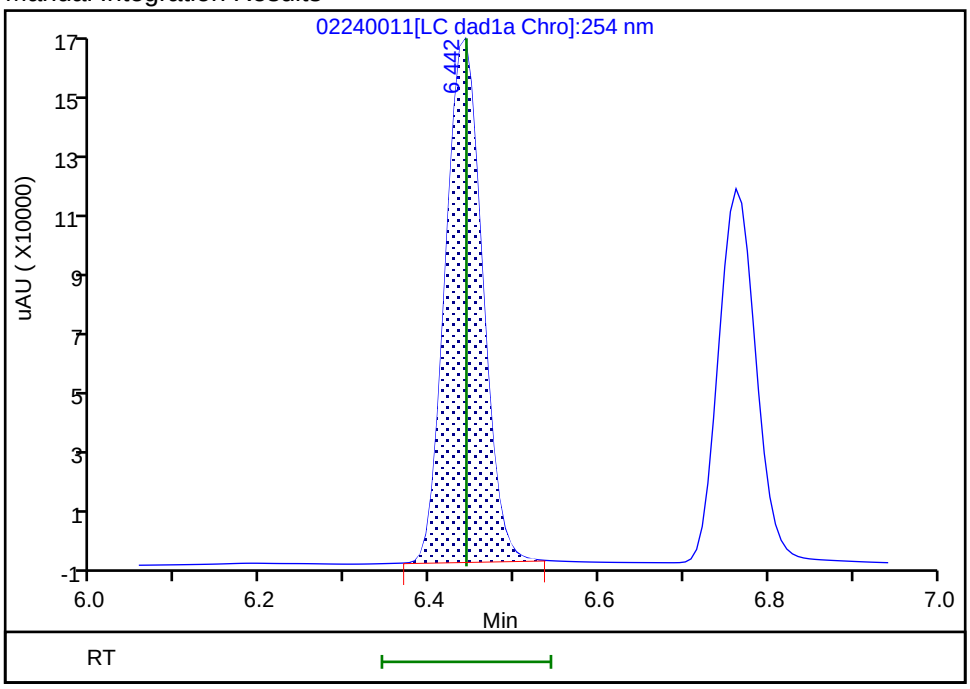
Processing Integration Results

RT: 6.44
Area: 548148
Amount: 2.507500
Amount Units: ug/mL



Manual Integration Results

RT: 6.44
Area: 509340
Amount: 2.576493
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 16:41:21
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

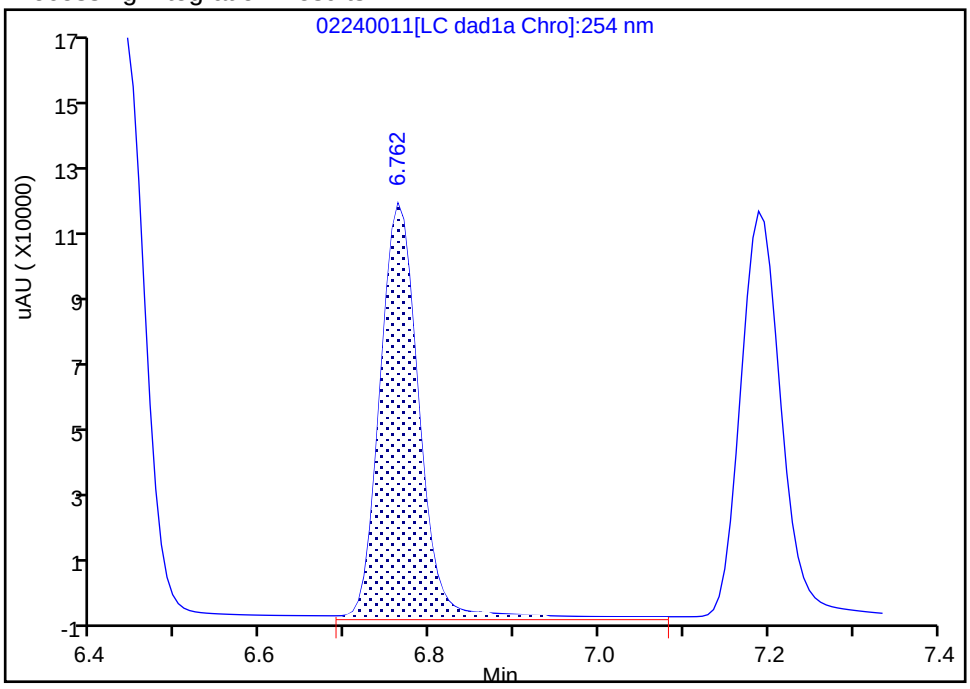
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240011.d
Injection Date: 24-Feb-2023 15:00:10 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 8
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 DNX, CAS: 80251-29-2

Signal: 1

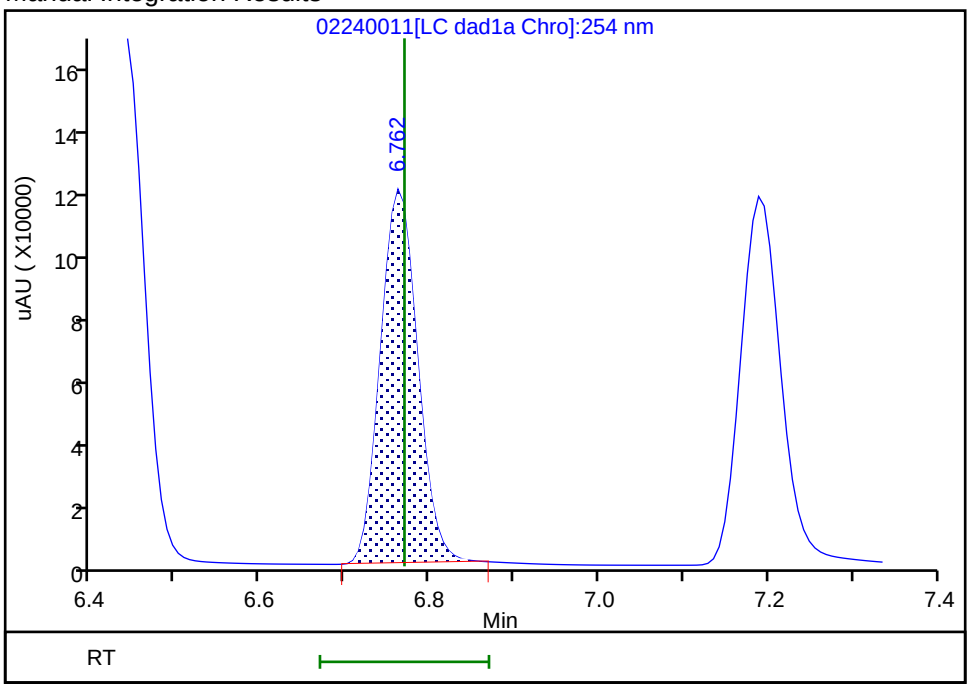
Processing Integration Results

RT: 6.76
Area: 399339
Amount: 2.502500
Amount Units: ug/mL



Manual Integration Results

RT: 6.76
Area: 366607
Amount: 2.537731
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 16:41:24
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

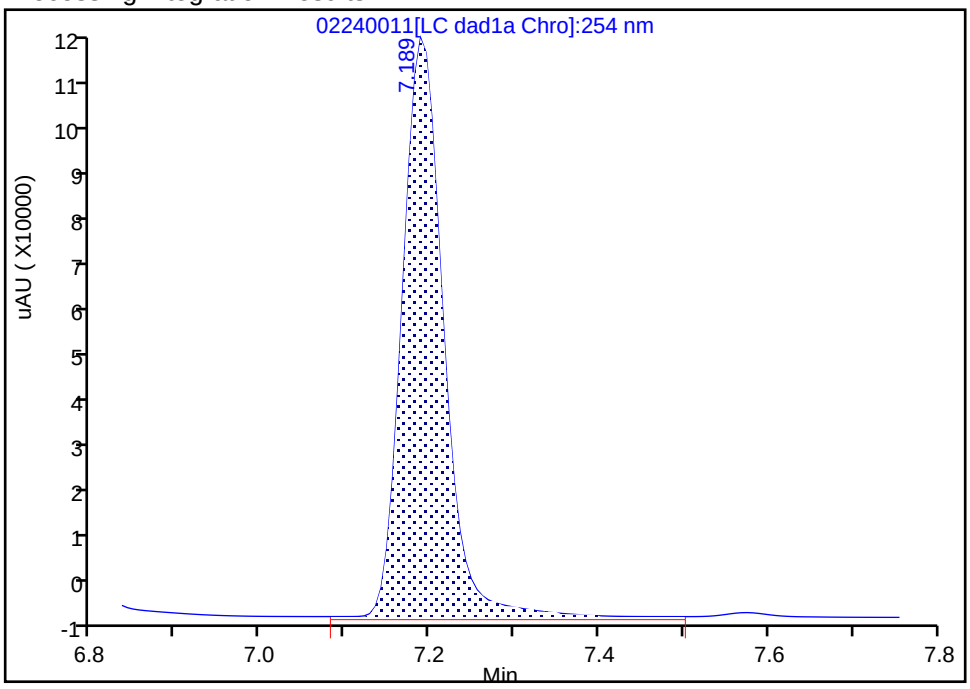
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240011.d				
Injection Date:	24-Feb-2023 15:00:10	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 8				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

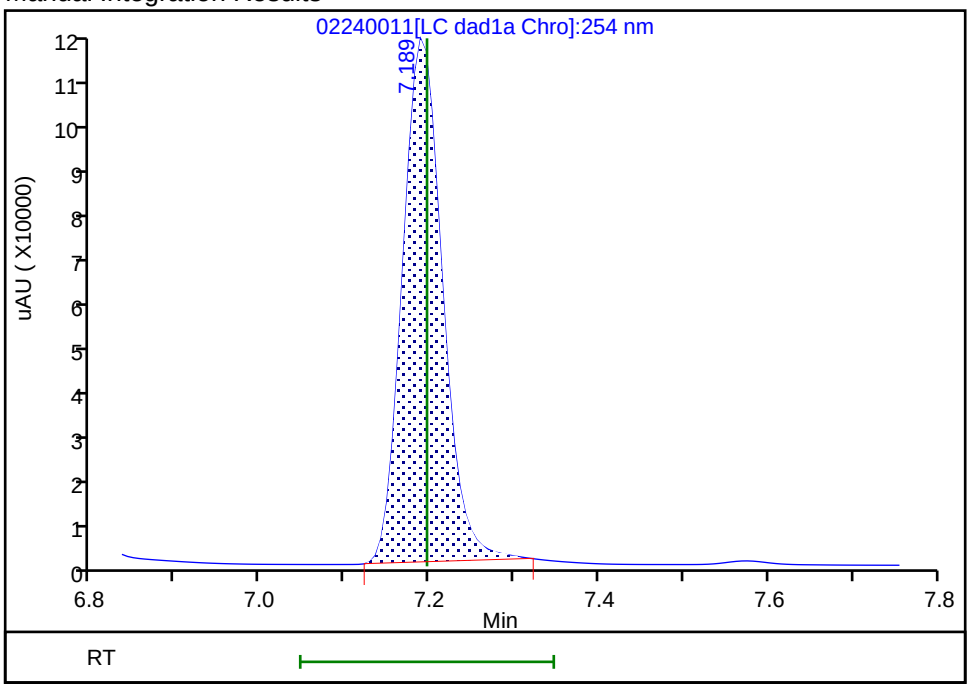
Processing Integration Results

RT: 7.19
Area: 413424
Amount: 2.917500
Amount Units: ug/mL



Manual Integration Results

RT: 7.19
Area: 385772
Amount: 2.940973
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 16:41:14
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240012.D
Lims ID: IC DMT 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 24-Feb-2023 15:23:08 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 7
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-Feb-2023 13:17:26 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1602

First Level Reviewer: LV5D Date: 24-Feb-2023 16:07:37

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.439	6.443	-0.004	204073	1.00	1.03	M
6 DNX	1	6.759	6.770	-0.011	146436	1.00	1.01	M
7 MNX	1	7.192	7.196	-0.004	156478	1.17	1.19	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00013 Amount Added: 50.00 Units: uL

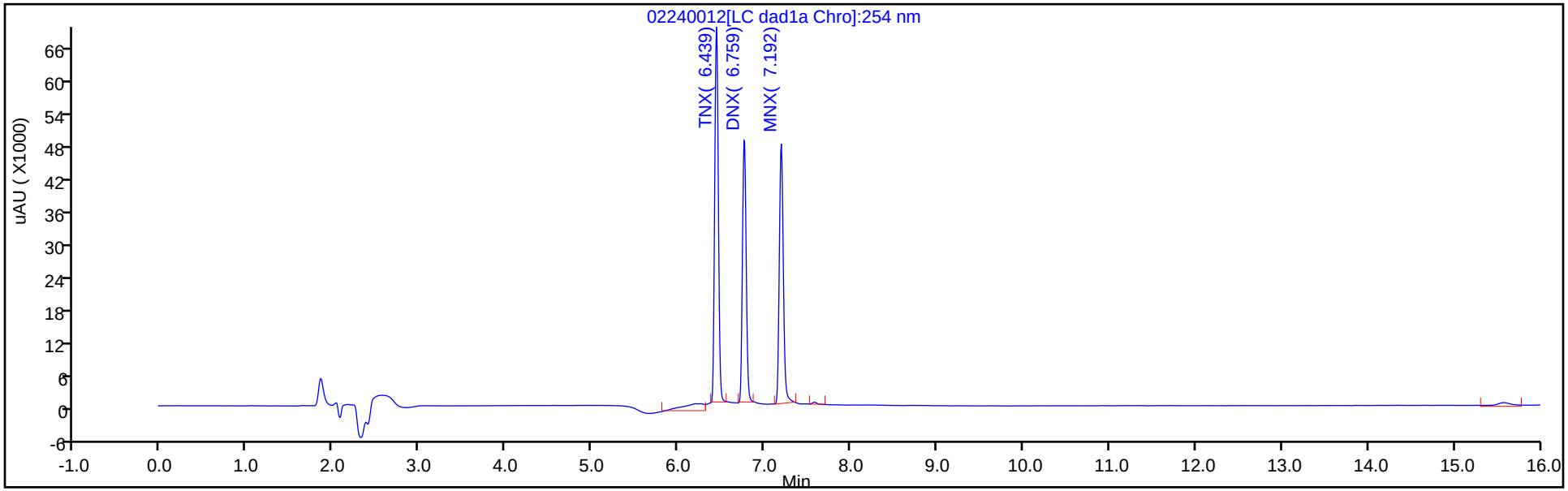
Report Date: 28-Feb-2023 13:17:26 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Denver

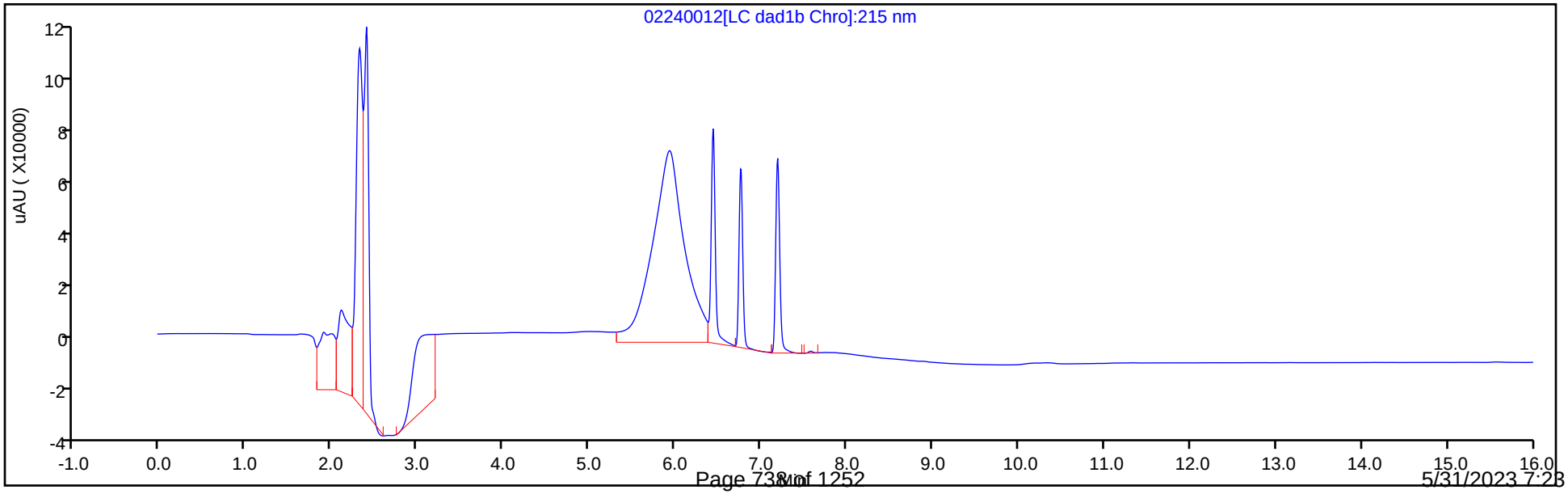
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240012.d

Injection Date:	24-Feb-2023 15:23:08	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC DMT 7			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

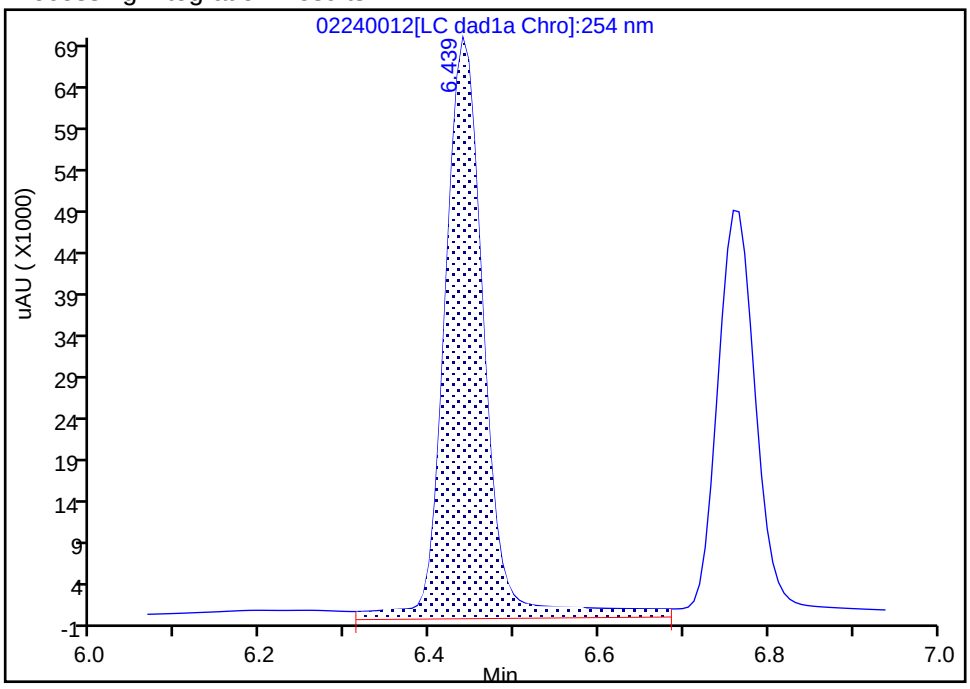
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240012.d
Injection Date: 24-Feb-2023 15:23:08 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 7
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

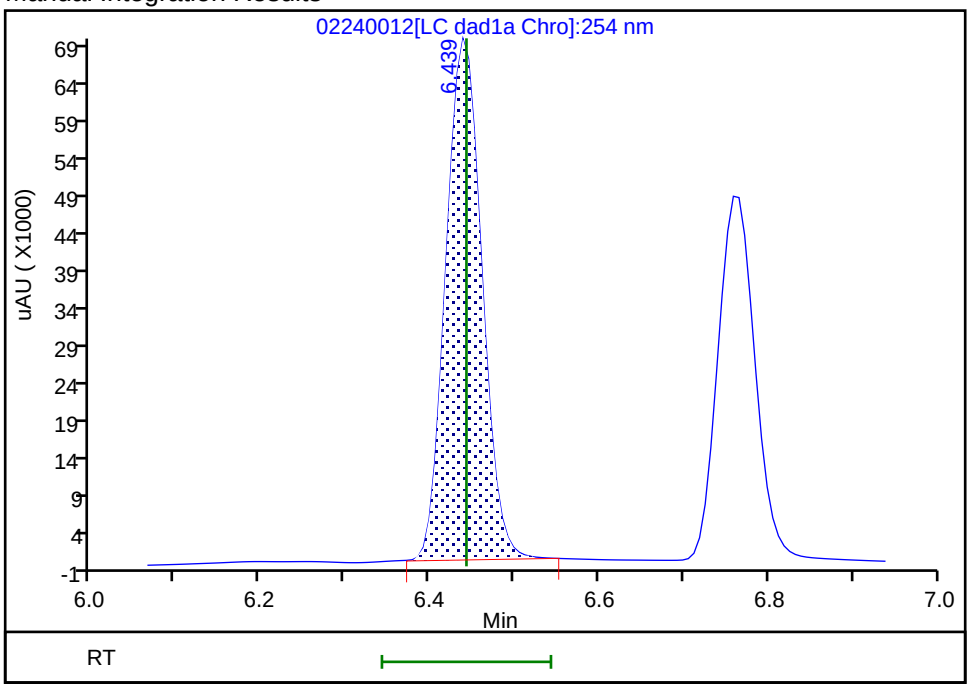
Processing Integration Results

RT: 6.44
Area: 232230
Amount: 1.069897
Amount Units: ug/mL



Manual Integration Results

RT: 6.44
Area: 204073
Amount: 1.032302
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 16:41:30
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

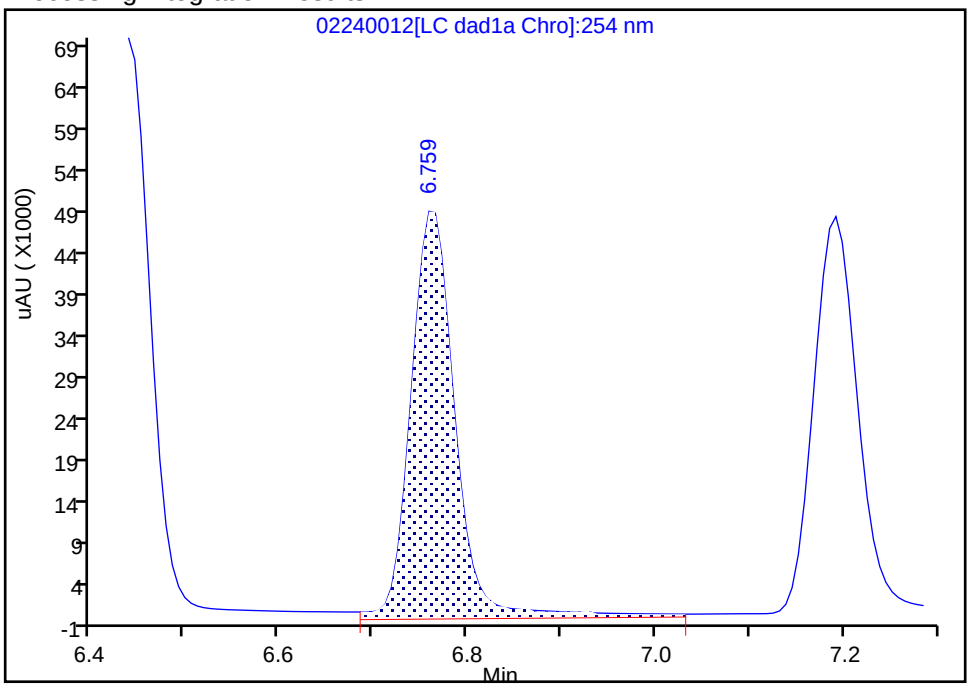
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240012.d
Injection Date: 24-Feb-2023 15:23:08 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 7
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 DNX, CAS: 80251-29-2

Signal: 1

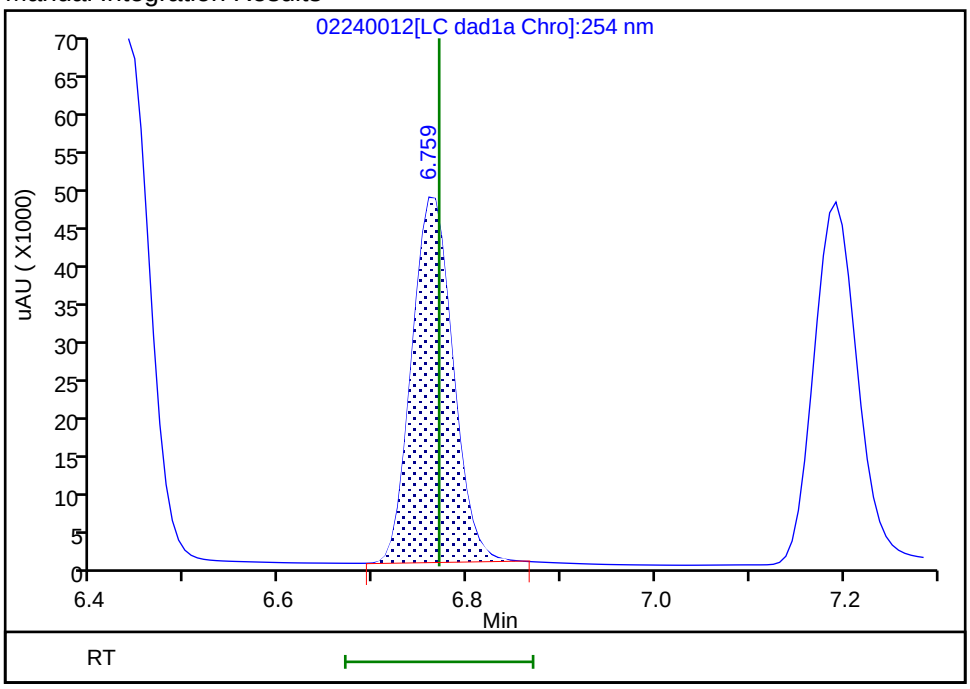
Processing Integration Results

RT: 6.76
Area: 164380
Amount: 1.059050
Amount Units: ug/mL



Manual Integration Results

RT: 6.76
Area: 146436
Amount: 1.013661
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 16:41:34
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

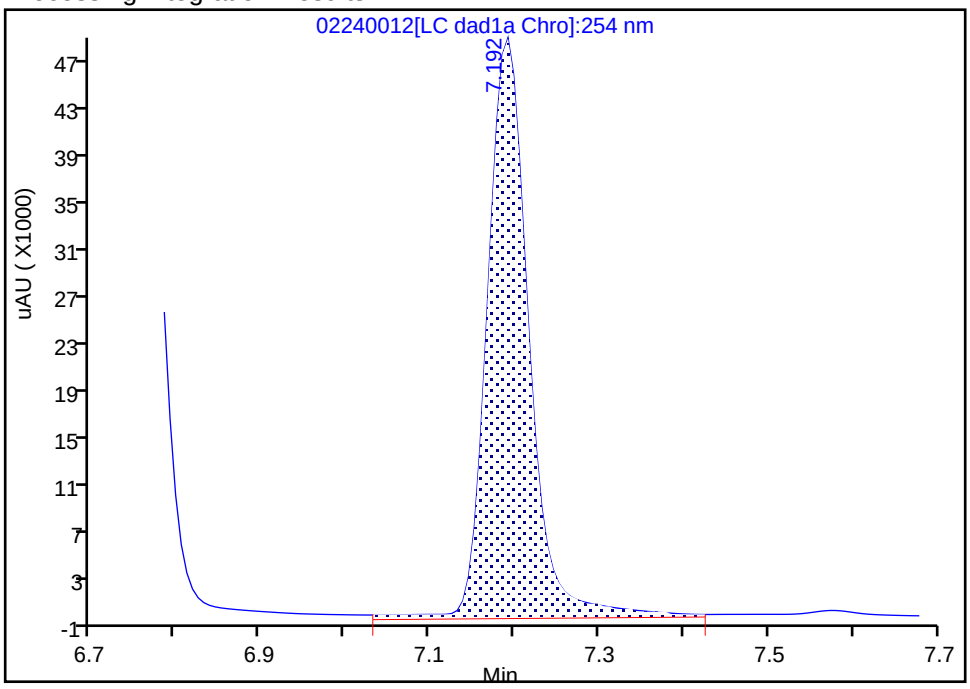
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240012.d
Injection Date: 24-Feb-2023 15:23:08 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 7
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

7 MNX, CAS: 5755-27-1

Signal: 1

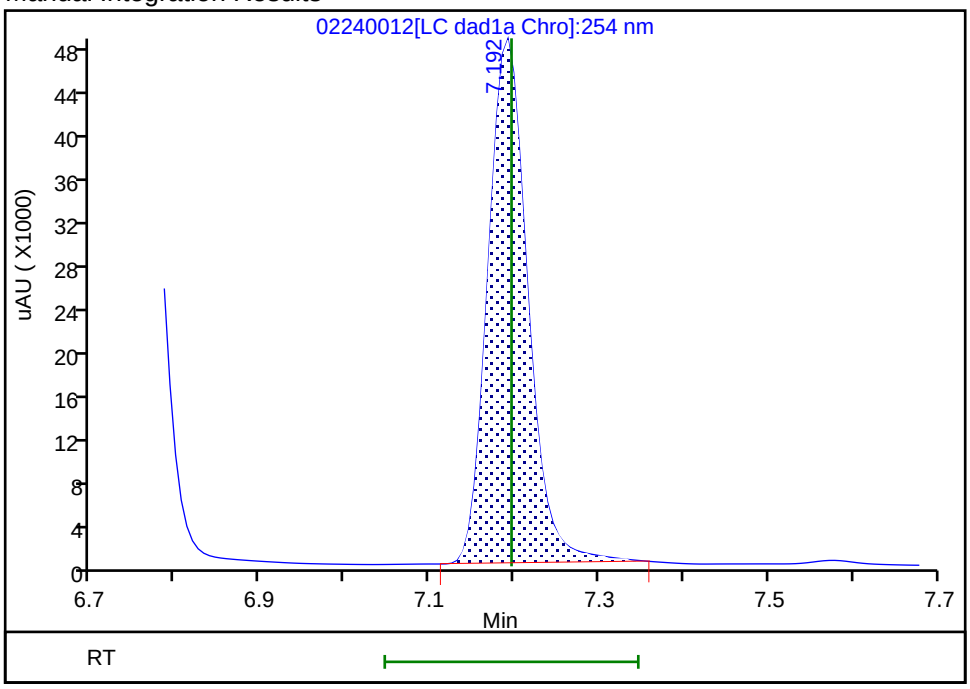
Processing Integration Results

RT: 7.19
Area: 166389
Amount: 1.221740
Amount Units: ug/mL



Manual Integration Results

RT: 7.19
Area: 156478
Amount: 1.192926
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 16:41:38
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240013.D
Lims ID: IC DMT 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 24-Feb-2023 15:46:11 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 6
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-Feb-2023 13:17:27 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1602

First Level Reviewer: LV5D Date: 24-Feb-2023 16:40:45

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	6.443	-0.002	142294	0.7021	0.7198	M
6 DNX	1	6.767	6.770	-0.003	102987	0.7007	0.7129	M
7 MNX	1	7.194	7.196	-0.002	109131	0.8169	0.8320	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00013 Amount Added: 35.00 Units: uL

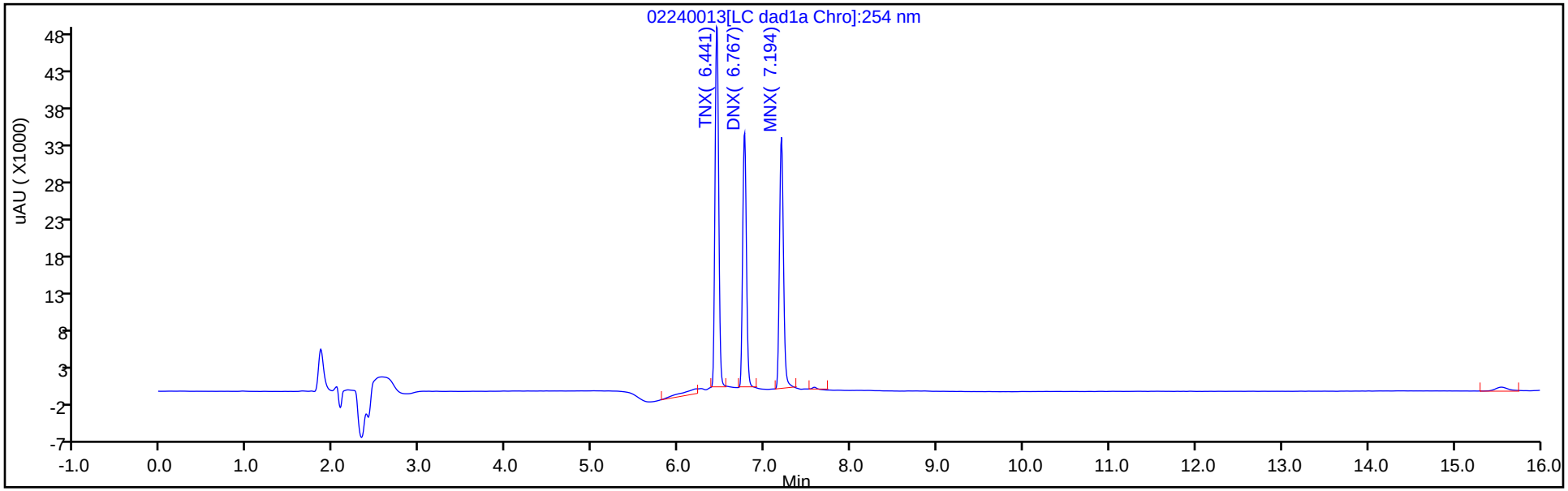
Report Date: 28-Feb-2023 13:17:27 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Denver

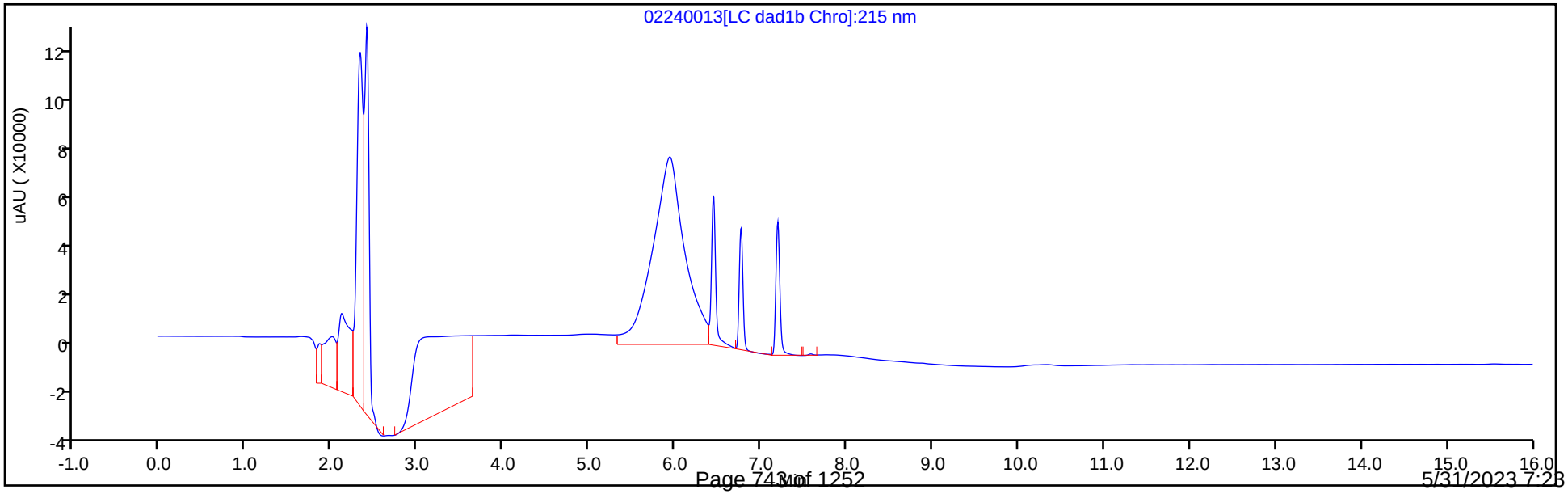
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240013.d

Injection Date:	24-Feb-2023 15:46:11	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC DMT 6			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

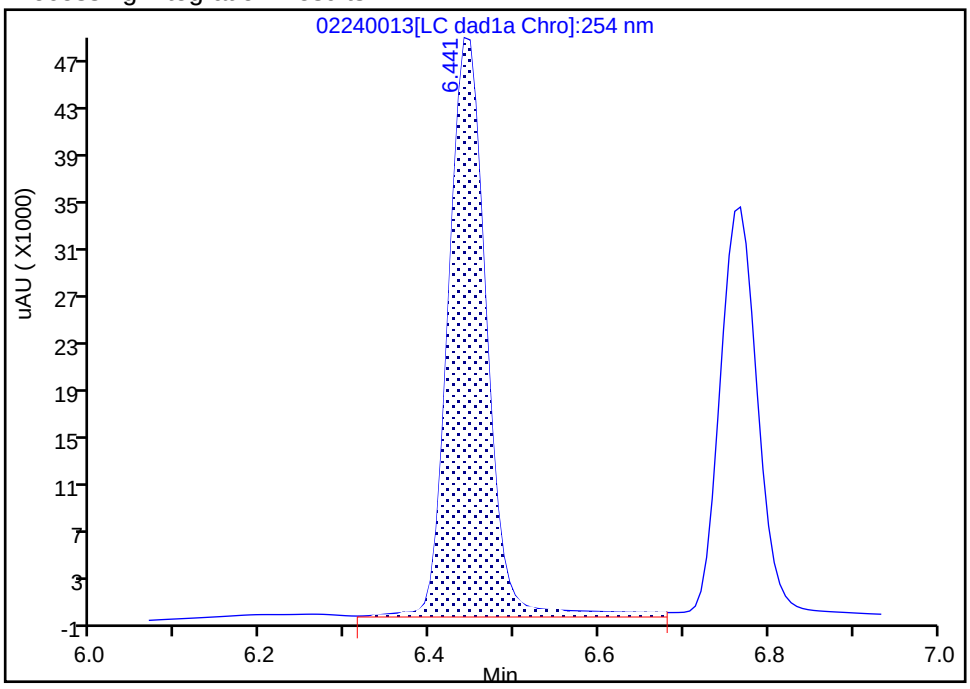
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Injection Date: 24-Feb-2023 15:46:11 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 6
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

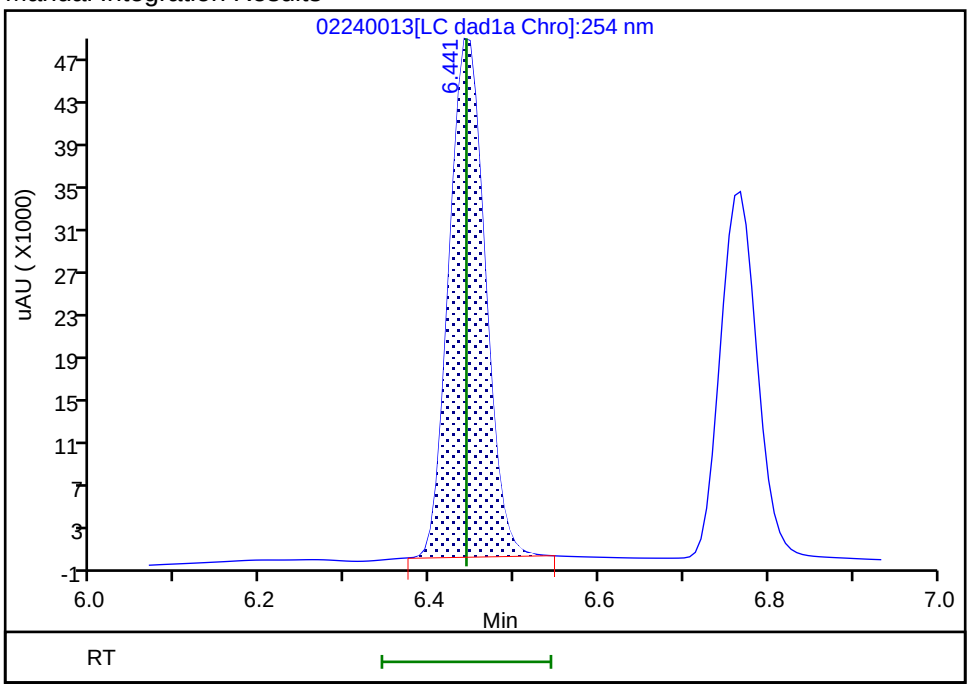
Processing Integration Results

RT: 6.44
Area: 149855
Amount: 0.731638
Amount Units: ug/mL



Manual Integration Results

RT: 6.44
Area: 142294
Amount: 0.719793
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 16:41:49
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

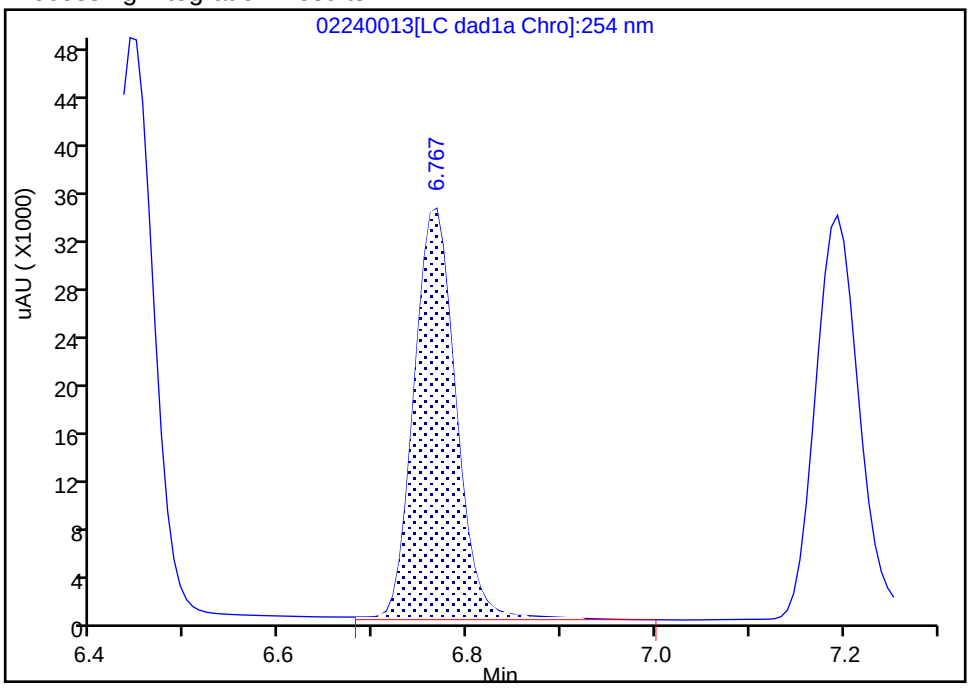
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240013.d				
Injection Date:	24-Feb-2023 15:46:11	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

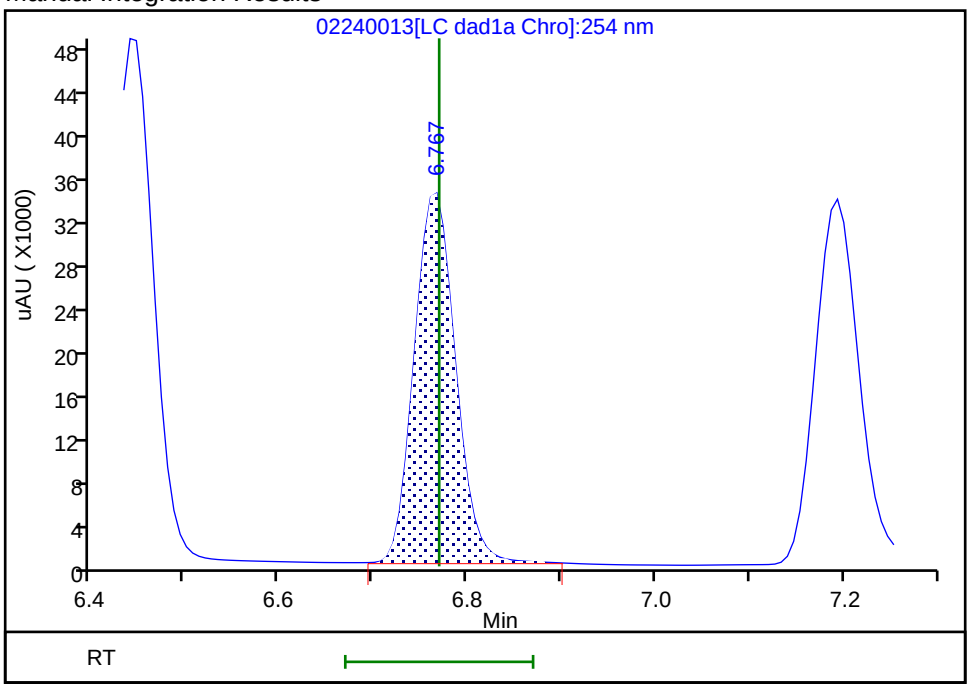
Processing Integration Results

RT: 6.77
Area: 106819
Amount: 0.729190
Amount Units: ug/mL



Manual Integration Results

RT: 6.77
Area: 102987
Amount: 0.712898
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 16:41:44
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

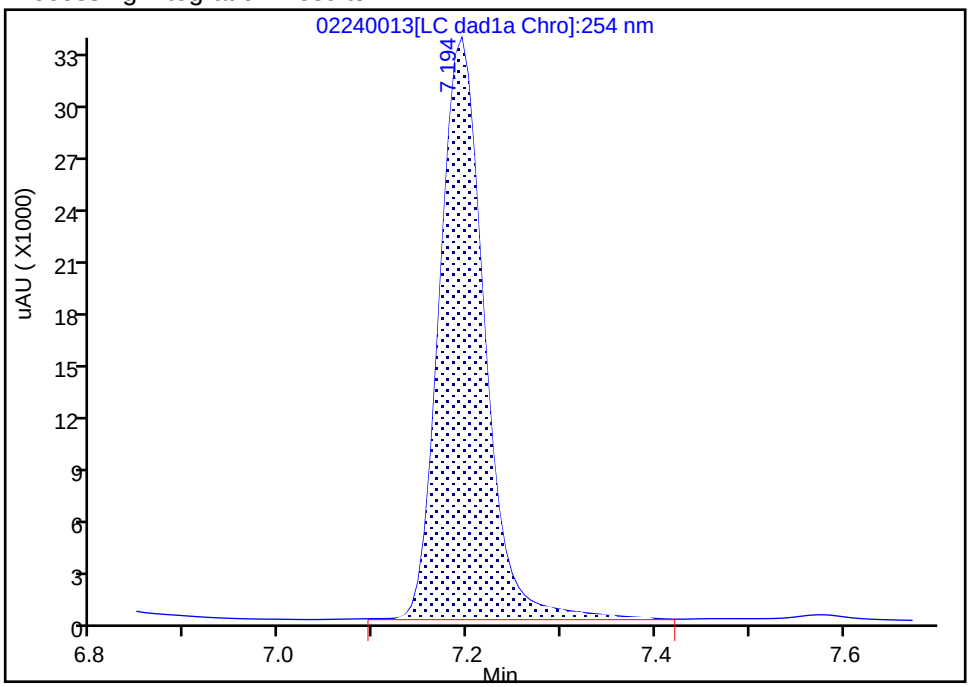
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240013.d
Injection Date: 24-Feb-2023 15:46:11 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 6
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

7 MNX, CAS: 5755-27-1

Signal: 1

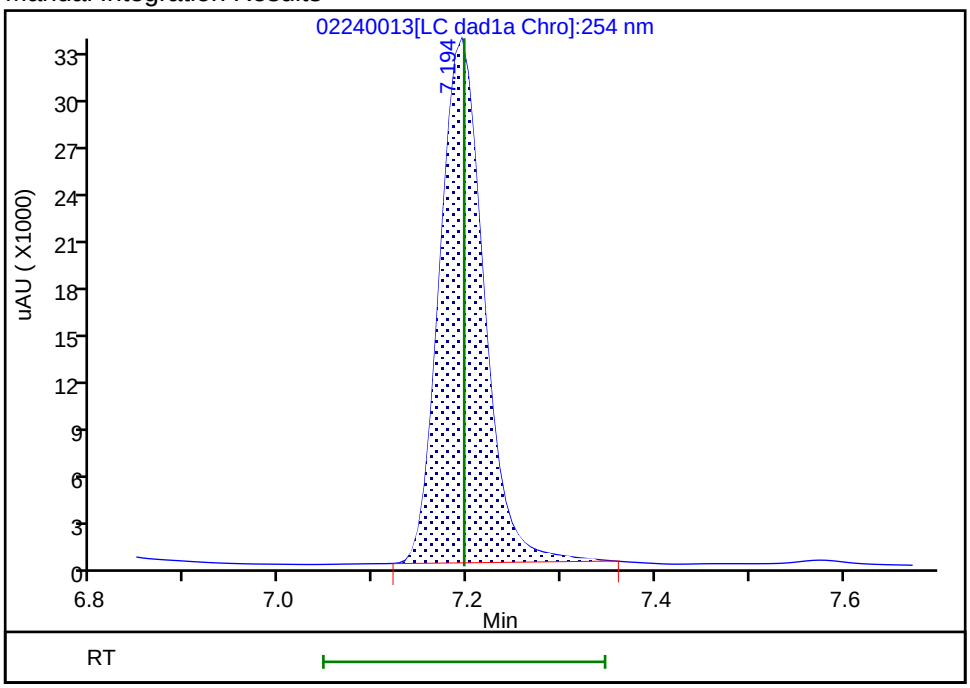
Processing Integration Results

RT: 7.19
Area: 110998
Amount: 0.844687
Amount Units: ug/mL



Manual Integration Results

RT: 7.19
Area: 109131
Amount: 0.831971
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 16:41:46
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240014.D
Lims ID: IC DMT 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 24-Feb-2023 16:09:13 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 5
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-Feb-2023 13:17:27 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1602

First Level Reviewer: LV5D Date: 24-Feb-2023 16:41:09

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	6.443	-0.001	77150	0.4012	0.3903	M
6 DNX	1	6.769	6.770	-0.001	55525	0.4004	0.3844	M
7 MNX	1	7.195	7.196	-0.001	58415	0.4668	0.4453	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00013 Amount Added: 20.00 Units: uL

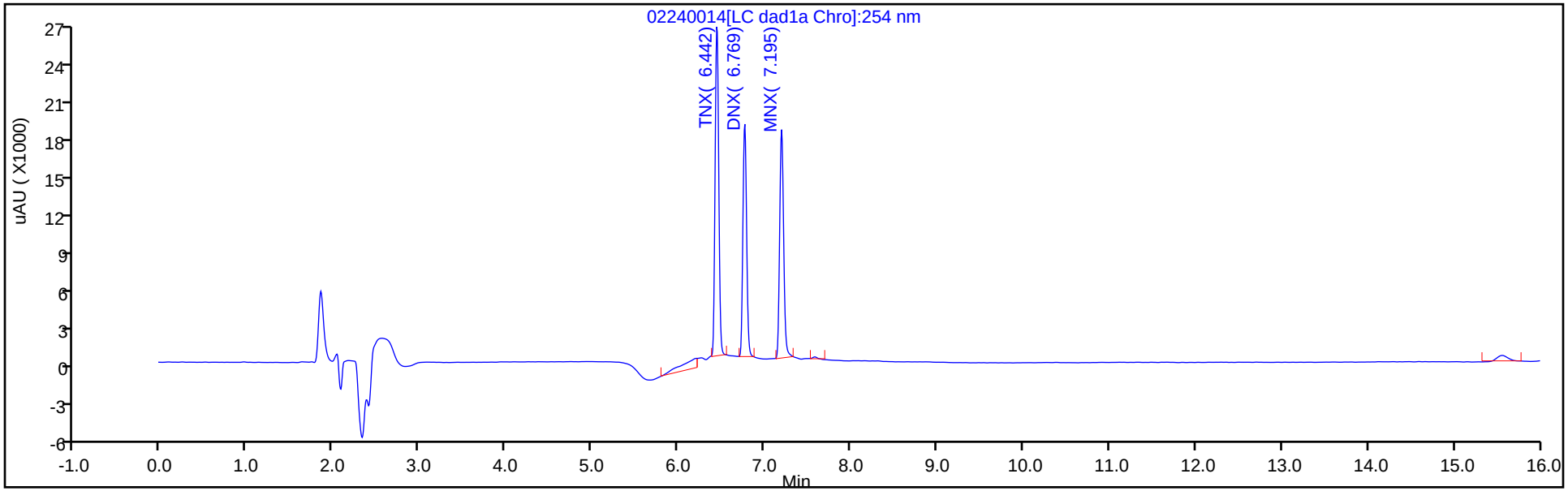
Report Date: 28-Feb-2023 13:17:27 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Denver

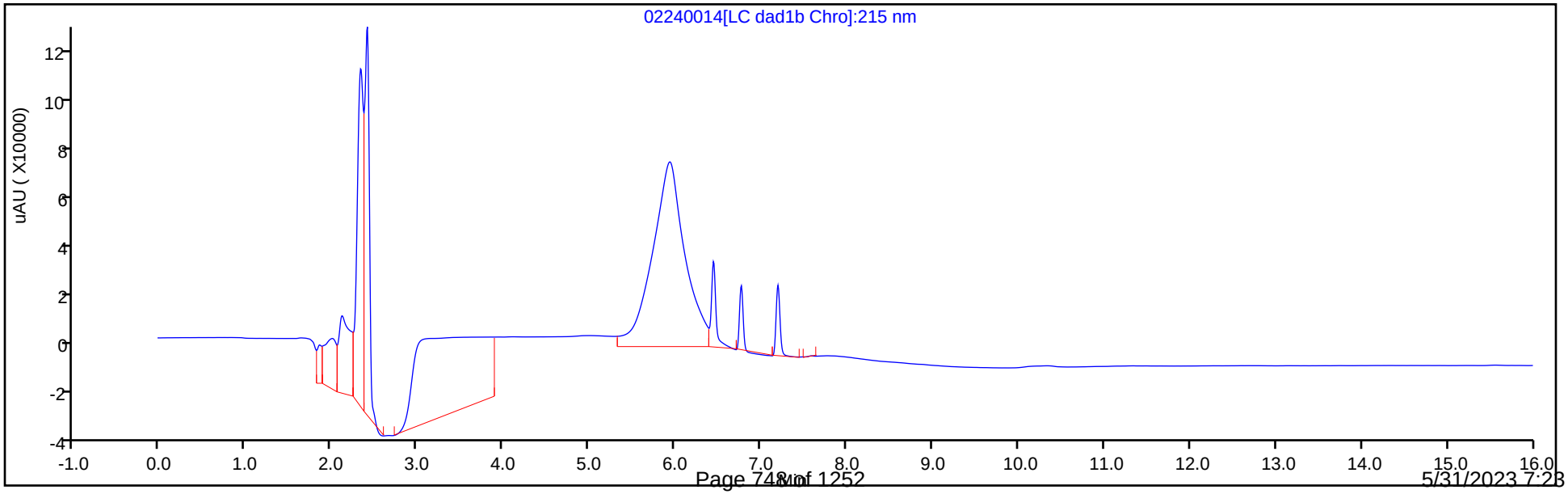
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240014.d

Injection Date:	24-Feb-2023 16:09:13	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC DMT 5			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

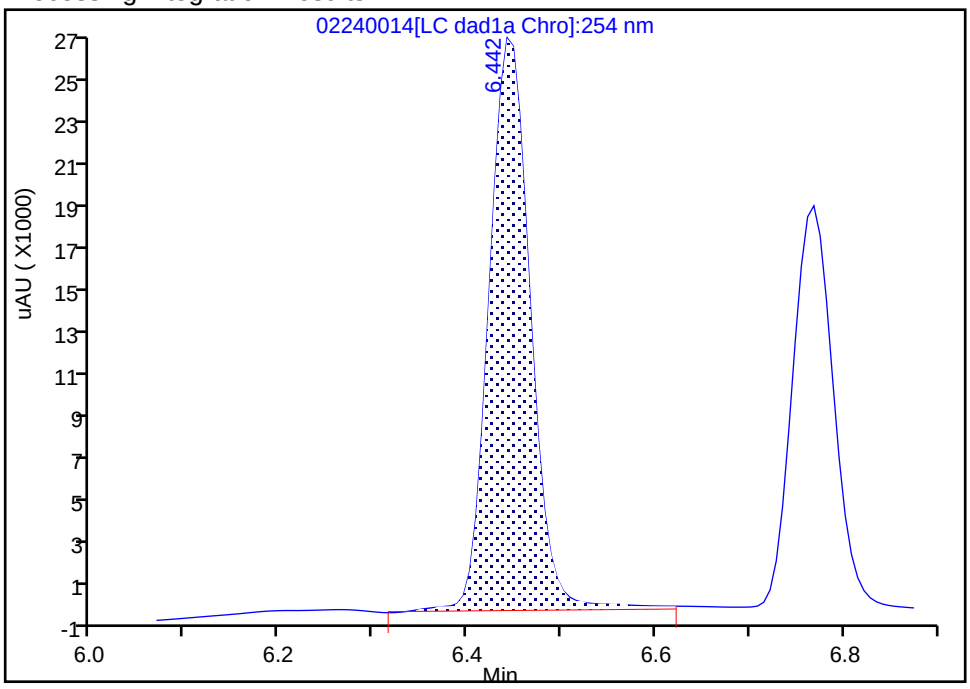
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240014.d
Injection Date: 24-Feb-2023 16:09:13 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 5
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

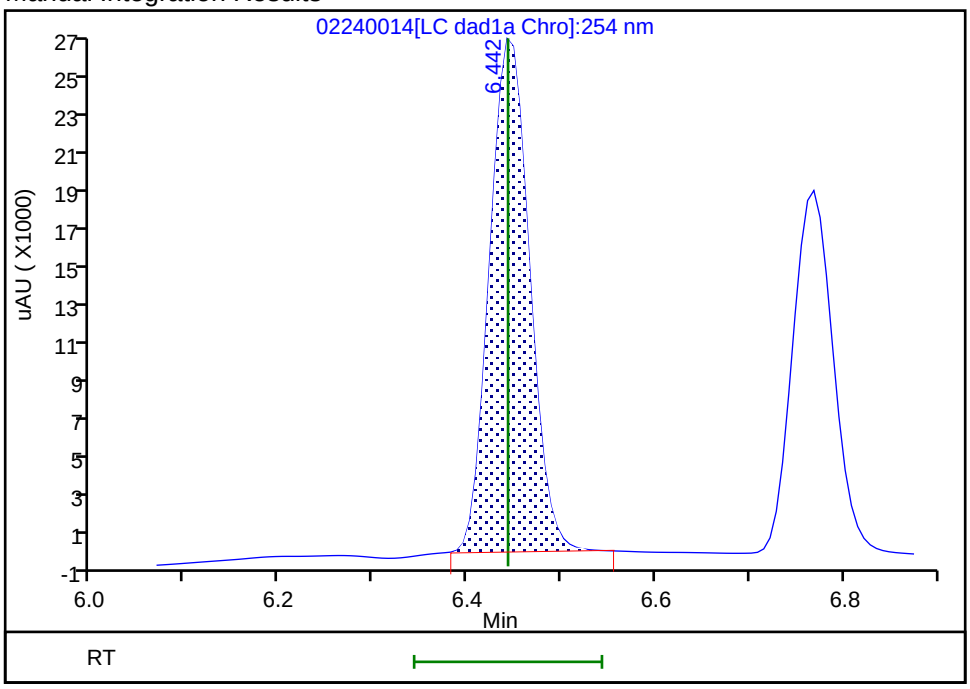
Processing Integration Results

RT: 6.44
Area: 81283
Amount: 0.403064
Amount Units: ug/mL



Manual Integration Results

RT: 6.44
Area: 77150
Amount: 0.390263
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 16:41:55
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

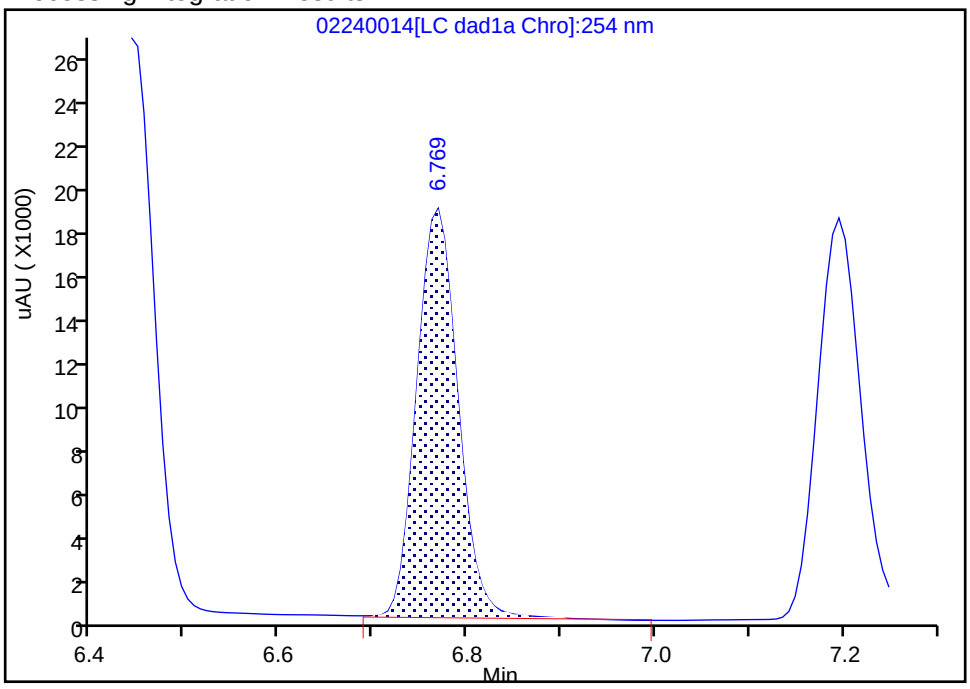
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240014.d
Injection Date: 24-Feb-2023 16:09:13 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 5
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 DNX, CAS: 80251-29-2

Signal: 1

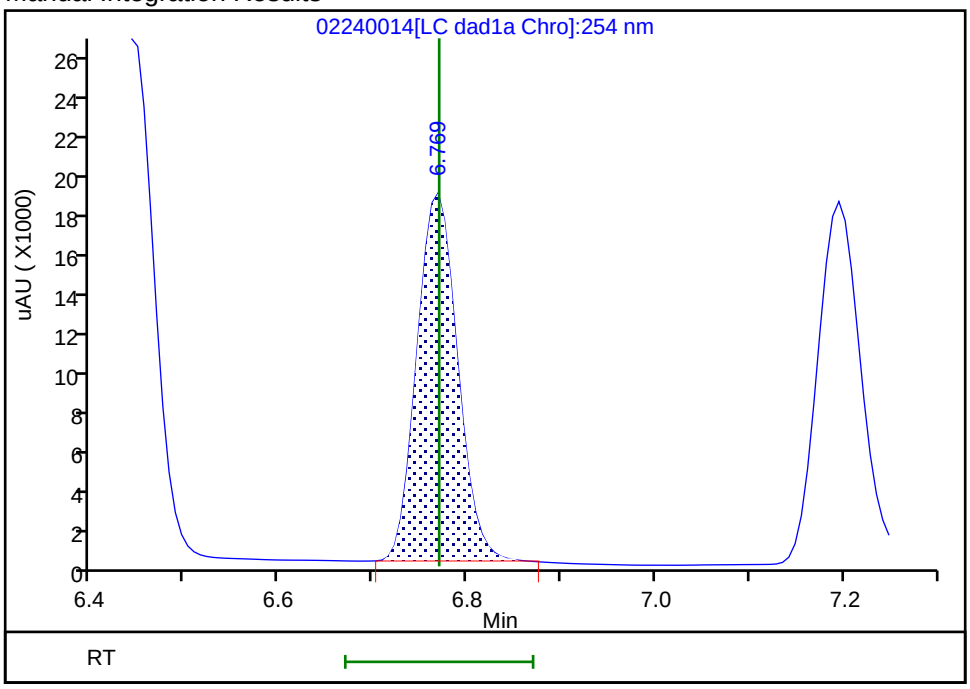
Processing Integration Results

RT: 6.77
Area: 57199
Amount: 0.395371
Amount Units: ug/mL



Manual Integration Results

RT: 6.77
Area: 55525
Amount: 0.384356
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 16:41:57
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

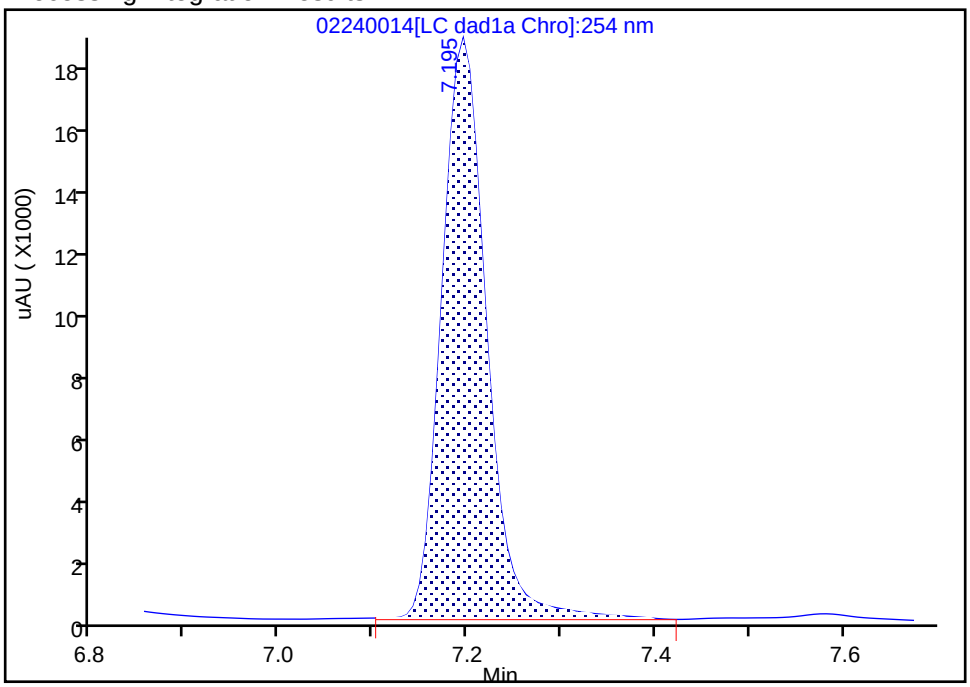
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240014.d
Injection Date: 24-Feb-2023 16:09:13 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 5
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

7 MNX, CAS: 5755-27-1

Signal: 1

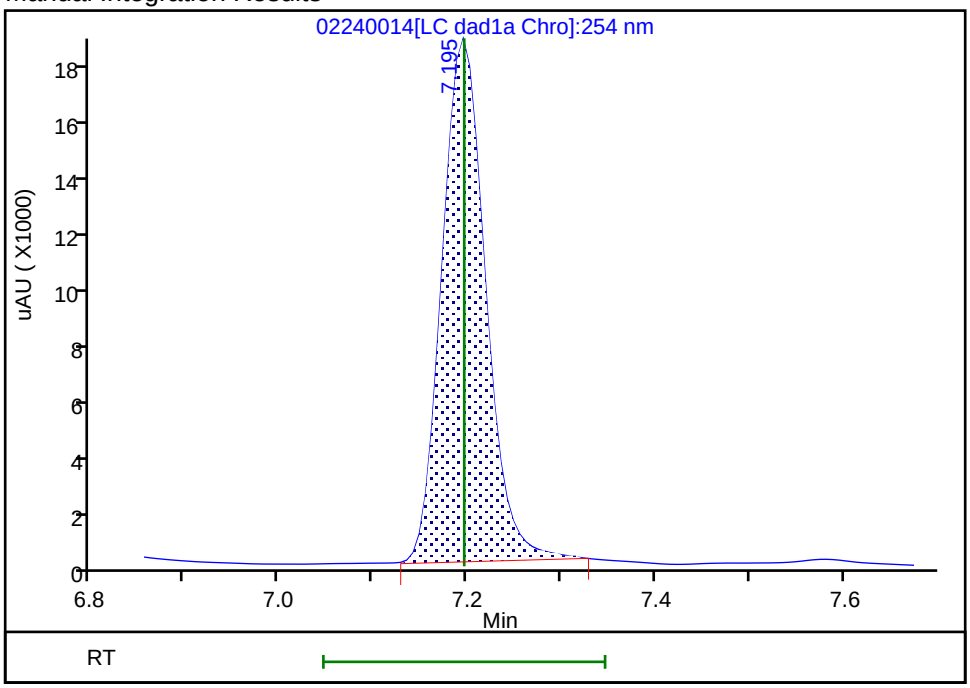
Processing Integration Results

RT: 7.20
Area: 60440
Amount: 0.462241
Amount Units: ug/mL



Manual Integration Results

RT: 7.20
Area: 58415
Amount: 0.445333
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 16:40:59
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240015.D
Lims ID: IC DMT 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 24-Feb-2023 16:32:12 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 4
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-Feb-2023 13:17:28 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1602

First Level Reviewer: LV5D Date: 24-Feb-2023 17:15:42

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.443	6.443	0.000	49343	0.2508	0.2496	M
6 DNX	1	6.770	6.770	0.000	36370	0.2503	0.2518	M
7 MNX	1	7.196	7.196	0.000	39278	0.2918	0.2994	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00013 Amount Added: 12.50 Units: uL

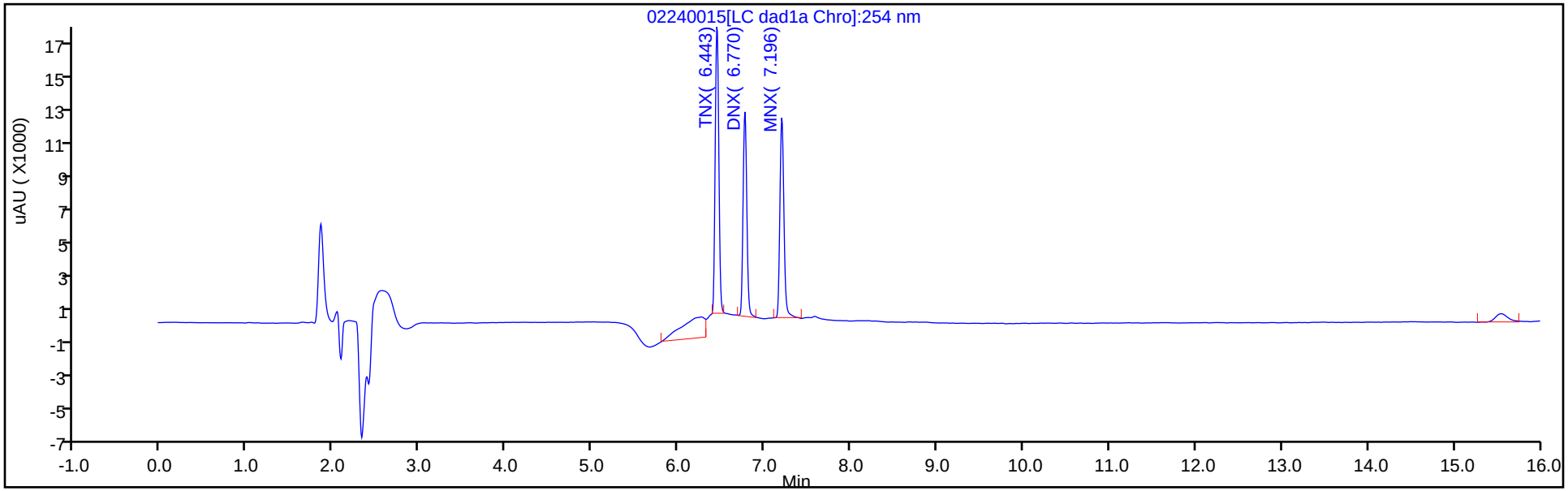
Report Date: 28-Feb-2023 13:17:28 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Denver

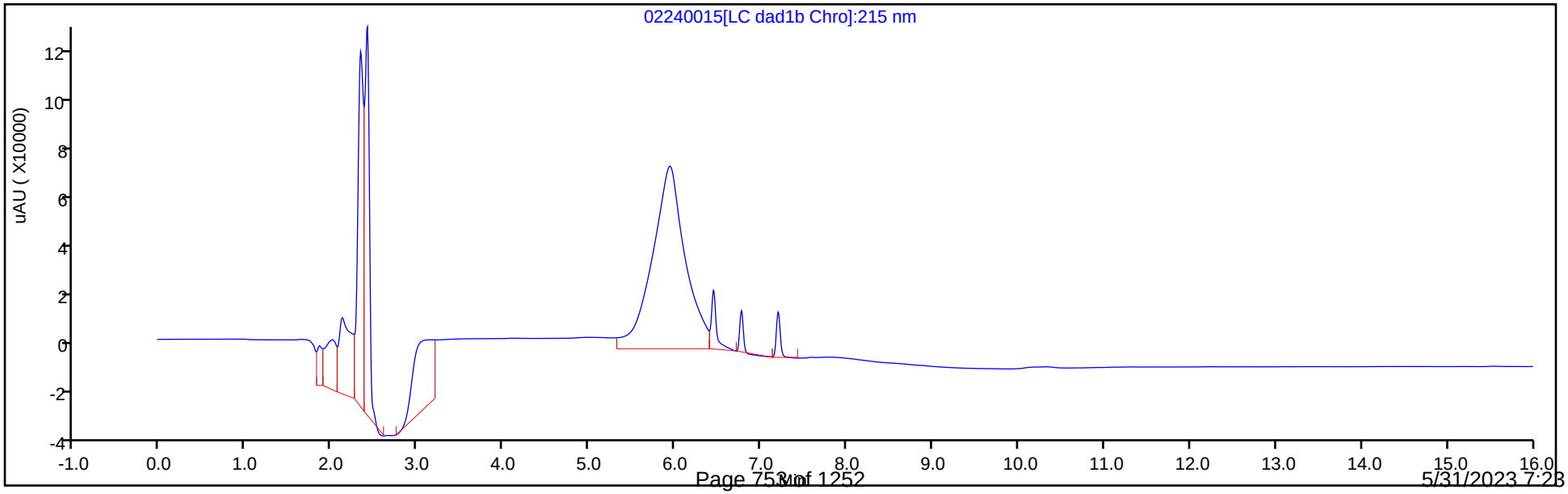
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240015.d

Injection Date:	24-Feb-2023 16:32:12	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC DMT 4			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

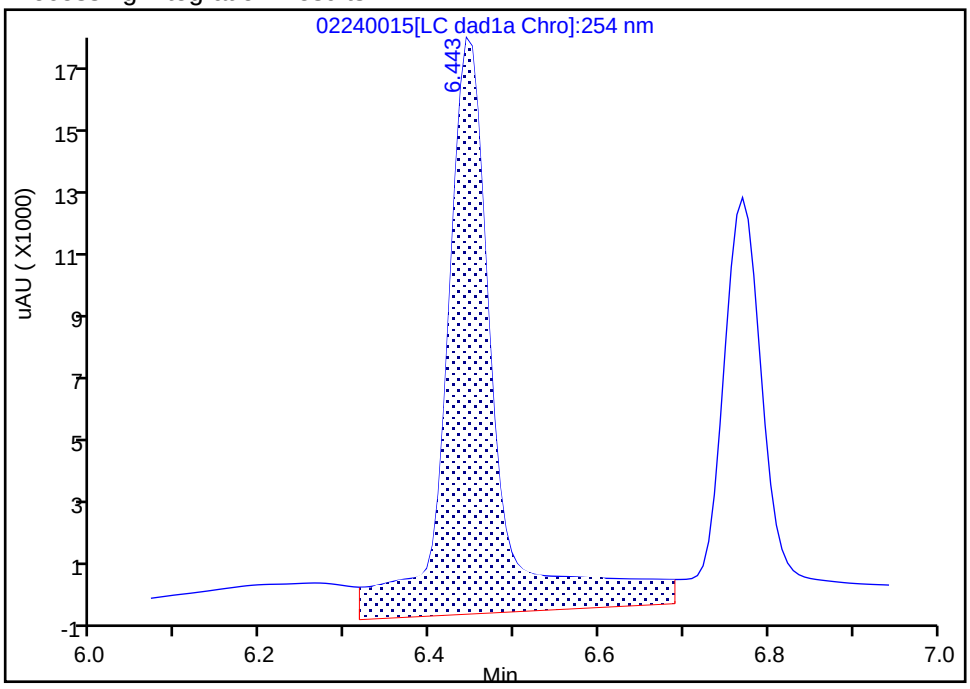
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240015.d				
Injection Date:	24-Feb-2023 16:32:12	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 4				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

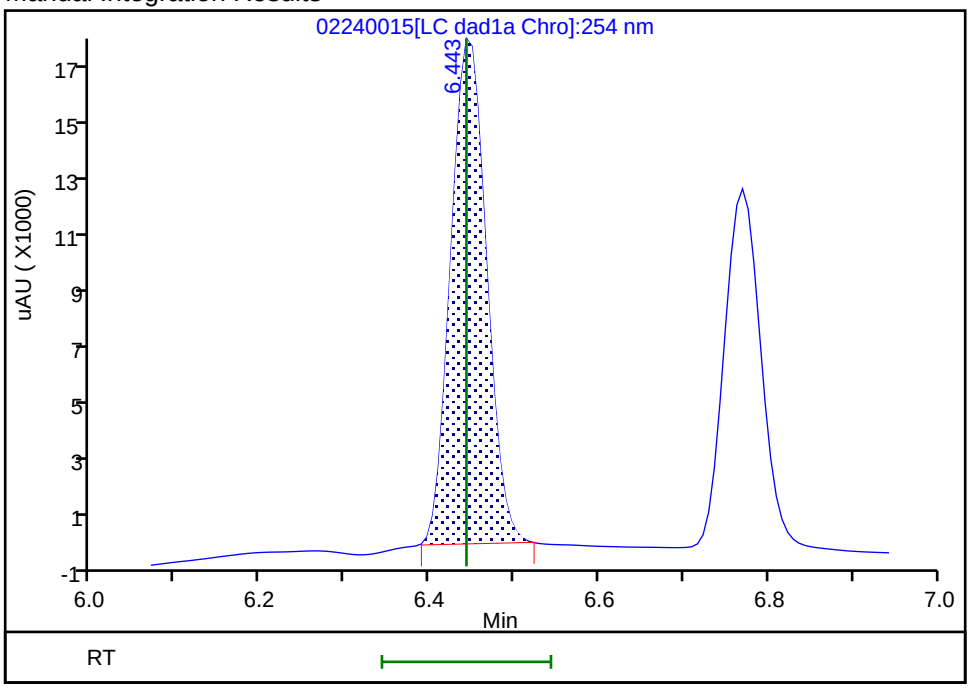
Processing Integration Results

RT: 6.44
Area: 73619
Amount: 0.336113
Amount Units: ug/mL



Manual Integration Results

RT: 6.44
Area: 49343
Amount: 0.249601
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 17:15:24
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

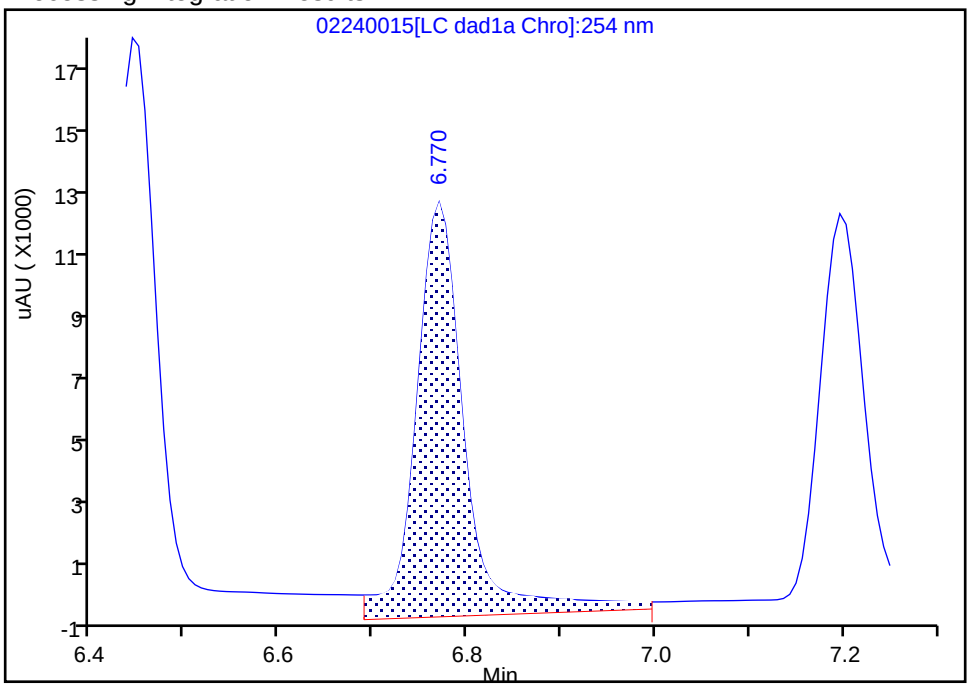
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240015.d				
Injection Date:	24-Feb-2023 16:32:12	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 4				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

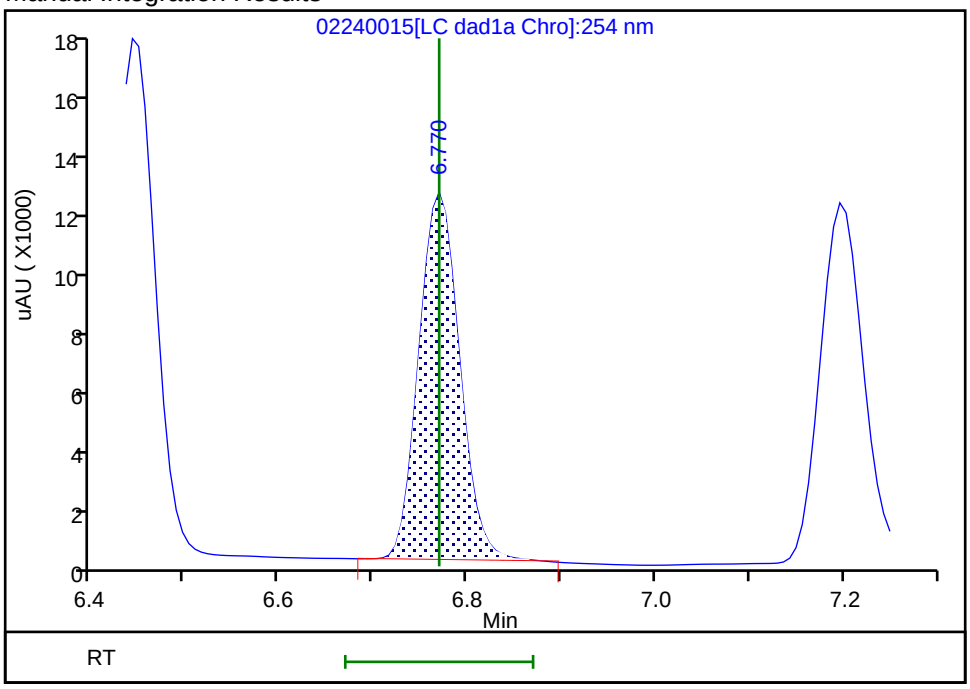
Processing Integration Results

RT: 6.77
Area: 45251
Amount: 0.297994
Amount Units: ug/mL



Manual Integration Results

RT: 6.77
Area: 36370
Amount: 0.251761
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 17:15:28
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240016.D				
Lims ID:	IC DMT 3				
Client ID:					
Sample Type:	IC	Calib Level:	3		
Inject. Date:	24-Feb-2023 16:55:16	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 3				
Operator ID:	JZ/MAR	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	28-Feb-2023 13:17:28	Calib Date:	24-Feb-2023 17:41:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1602				
First Level Reviewer: LV5D		Date:	24-Feb-2023 17:30:15		

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	6.443	0.003	19892	0.1003	0.1006	M
6 DNX	1	6.766	6.770	-0.004	14570	0.1001	0.1009	M
7 MNX	1	7.199	7.196	0.003	15358	0.1167	0.1171	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

8330 DMT_00013 Amount Added: 5.00 Units: uL

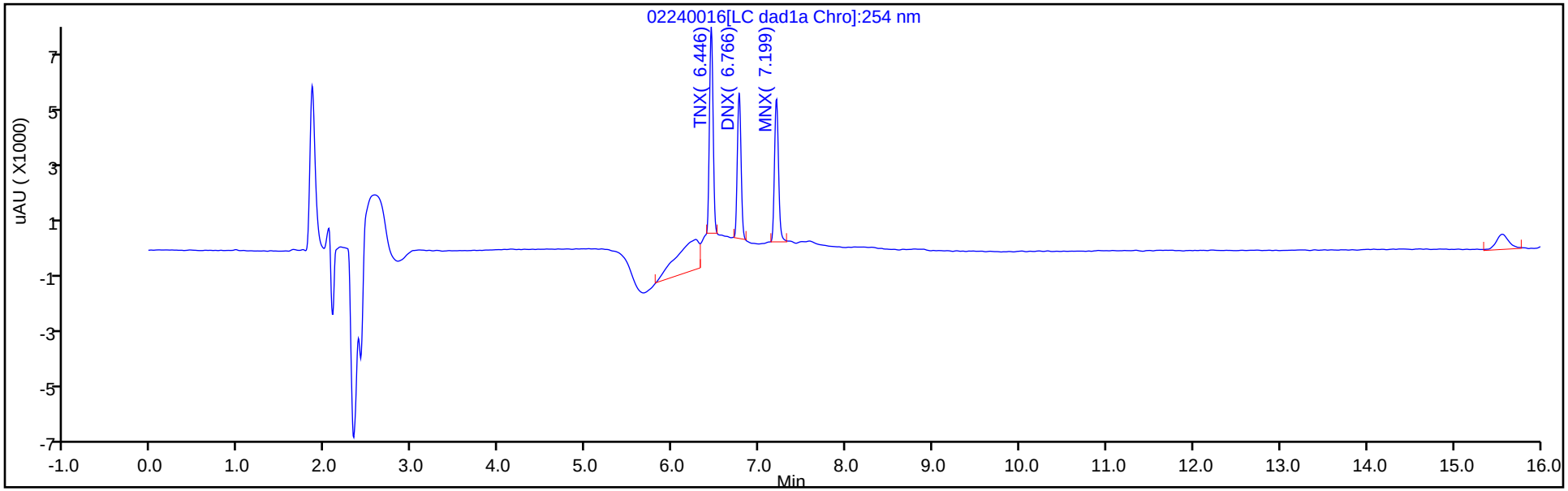
Report Date: 28-Feb-2023 13:17:28 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Denver

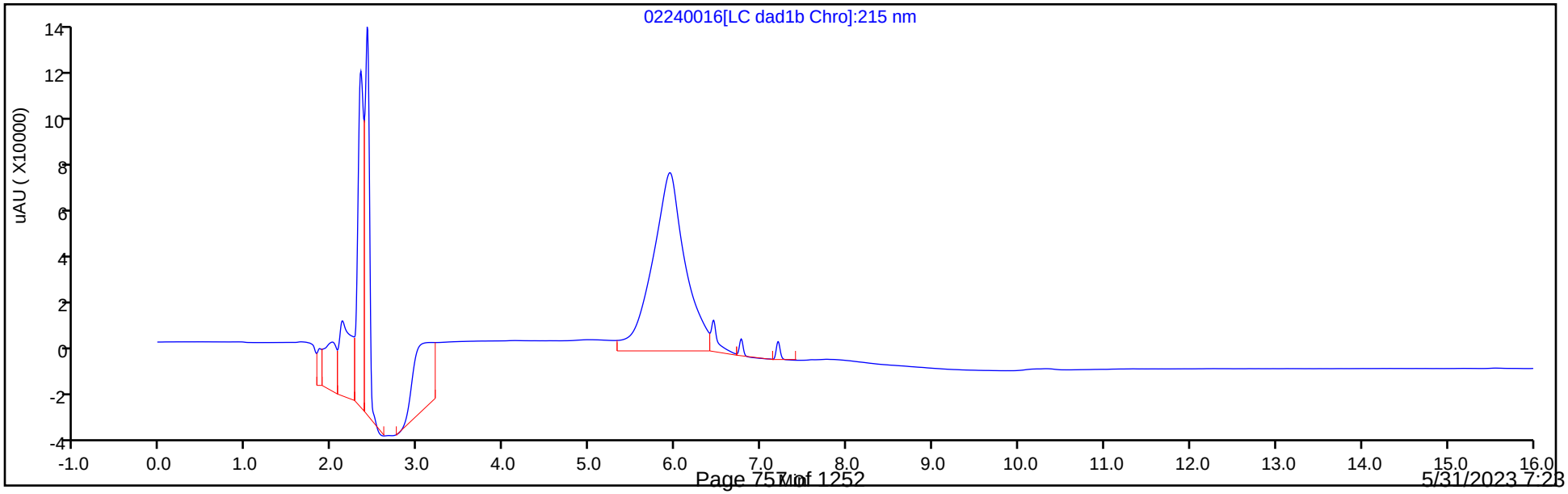
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240016.d

Injection Date:	24-Feb-2023 16:55:16	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC DMT 3			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

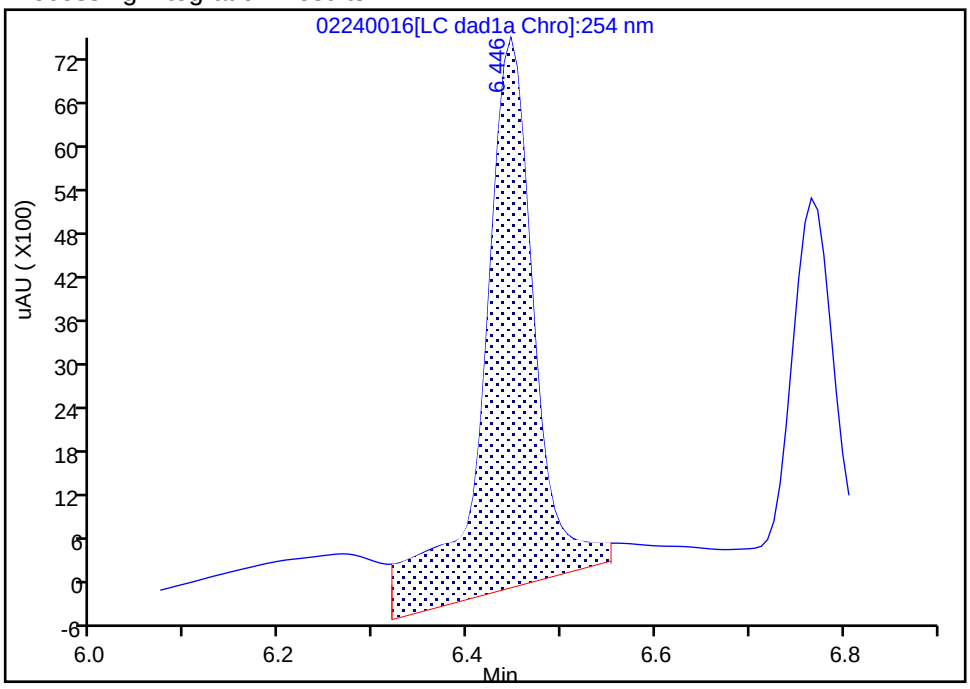
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Lims ID:	IC DMT 3				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

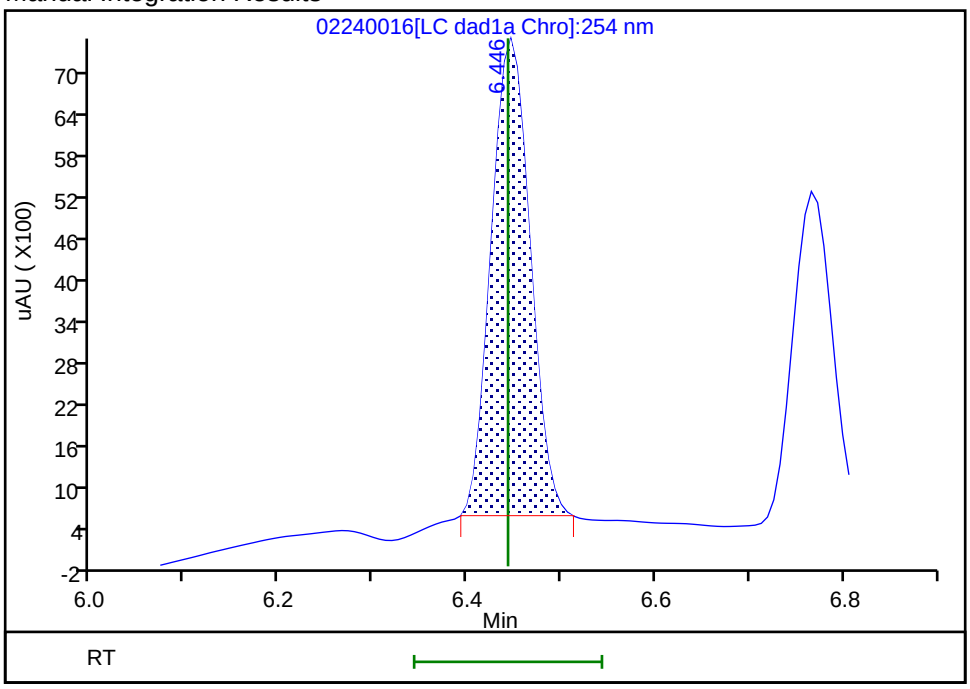
Processing Integration Results

RT: 6.45
Area: 29096
Amount: 0.135495
Amount Units: ug/mL



Manual Integration Results

RT: 6.45
Area: 19892
Amount: 0.100624
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 17:30:03
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

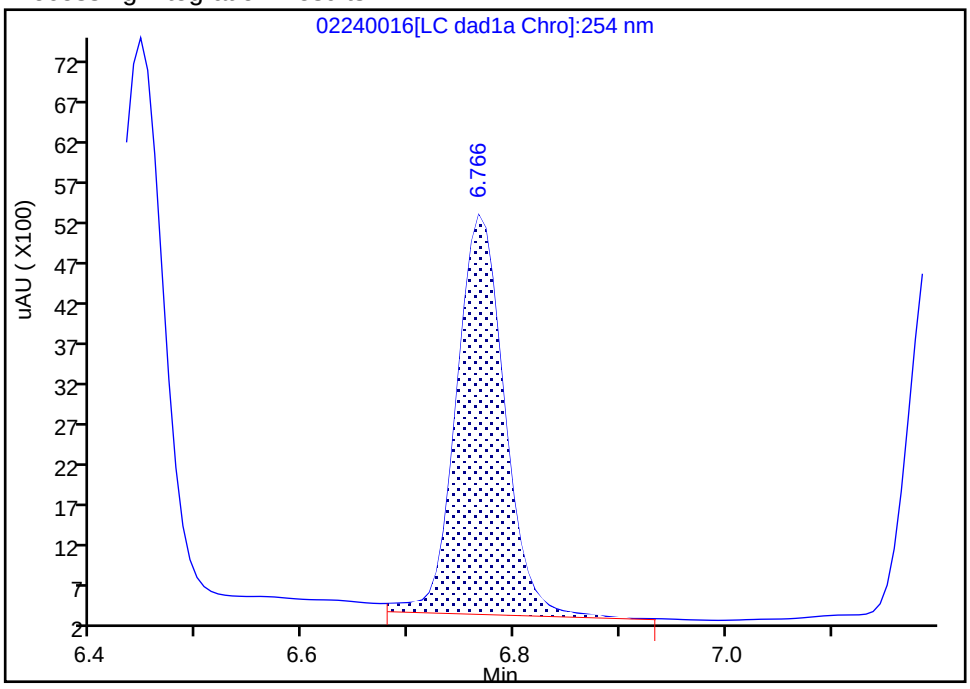
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240016.d				
Injection Date:	24-Feb-2023 16:55:16	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 3				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

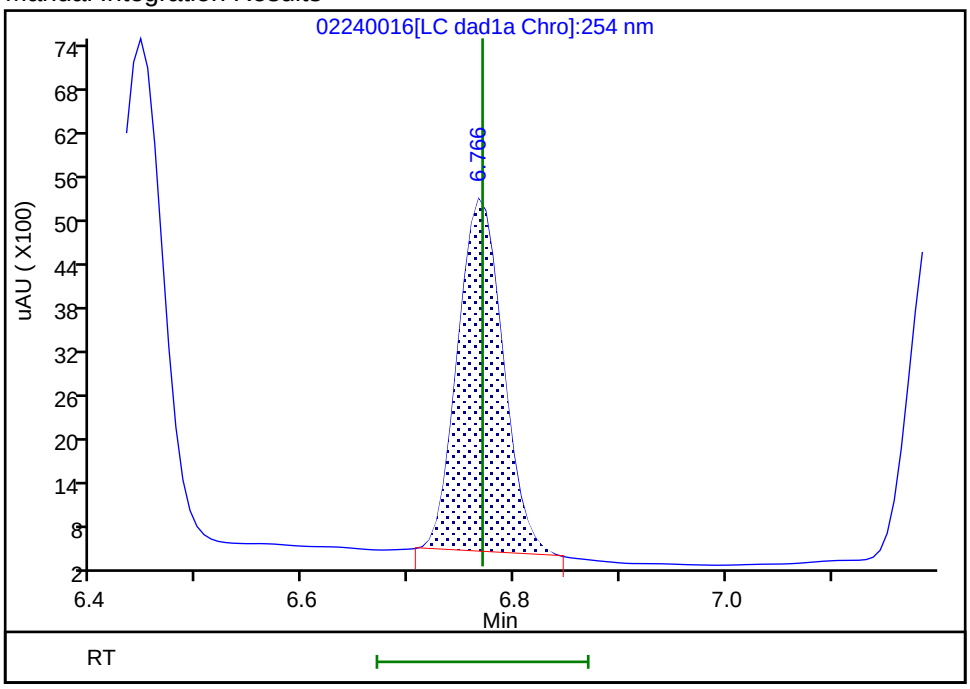
Processing Integration Results

RT: 6.77
Area: 15665
Amount: 0.106775
Amount Units: ug/mL



Manual Integration Results

RT: 6.77
Area: 14570
Amount: 0.100857
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 17:30:07
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

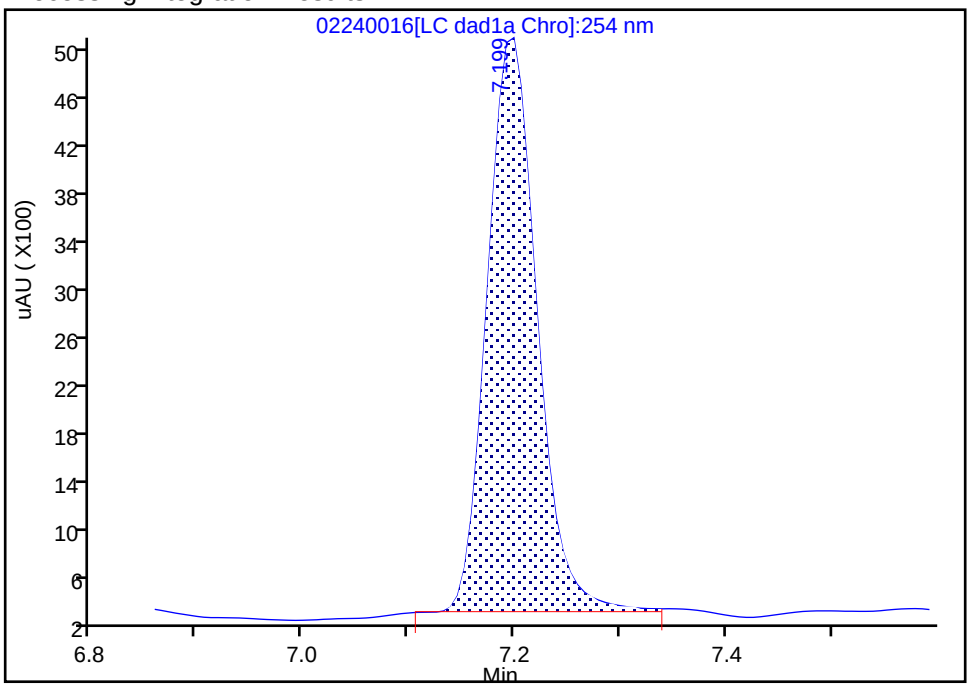
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Injection Date:	24-Feb-2023 16:55:16	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 3				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

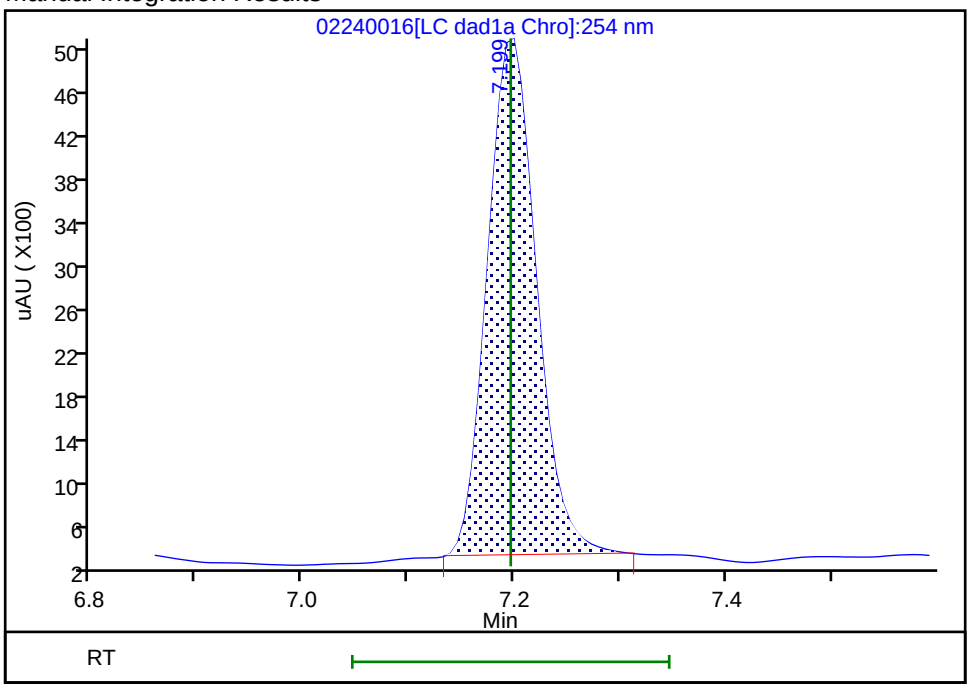
Processing Integration Results

RT: 7.20
Area: 15598
Amount: 0.117968
Amount Units: ug/mL



Manual Integration Results

RT: 7.20
Area: 15358
Amount: 0.117083
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 17:30:11
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240017.D
Lims ID: IC DMT 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 24-Feb-2023 17:18:19 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 2
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-Feb-2023 13:17:29 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1602

First Level Reviewer: LV5D Date: 24-Feb-2023 17:51:38

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	6.443	0.005	9917	0.0502	0.0502	M
6 DNX	1	6.768	6.770	-0.002	7338	0.0501	0.0508	M
7 MNX	1	7.195	7.196	-0.001	7605	0.0584	0.0580	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00013 Amount Added: 2.50 Units: uL

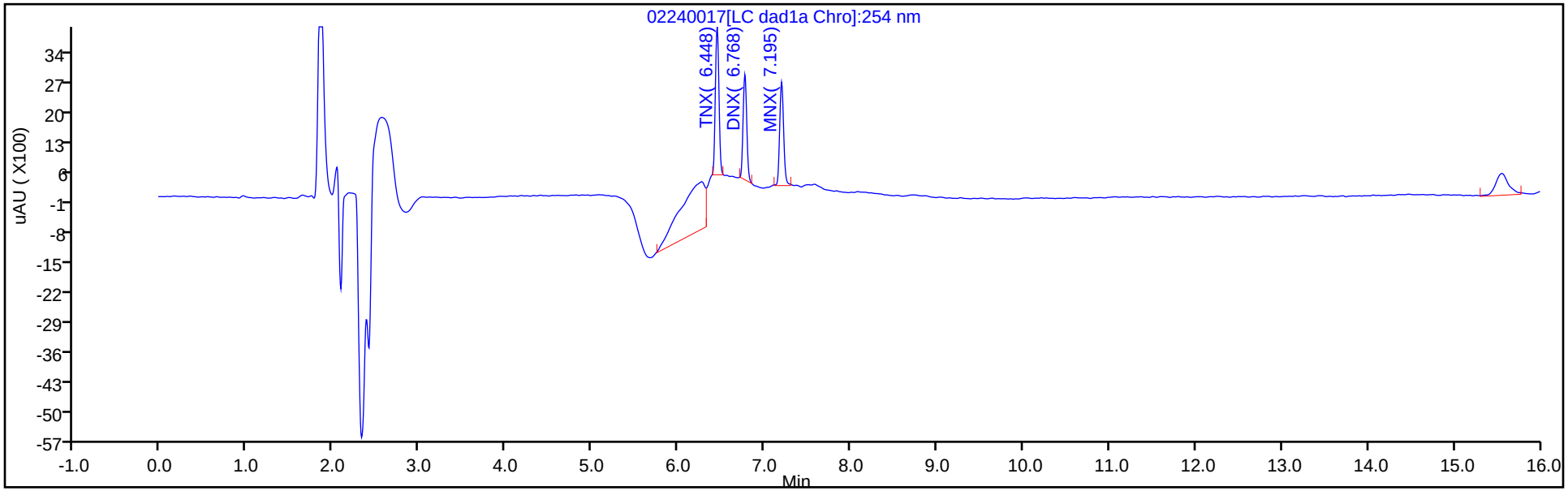
Report Date: 28-Feb-2023 13:17:29 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Denver

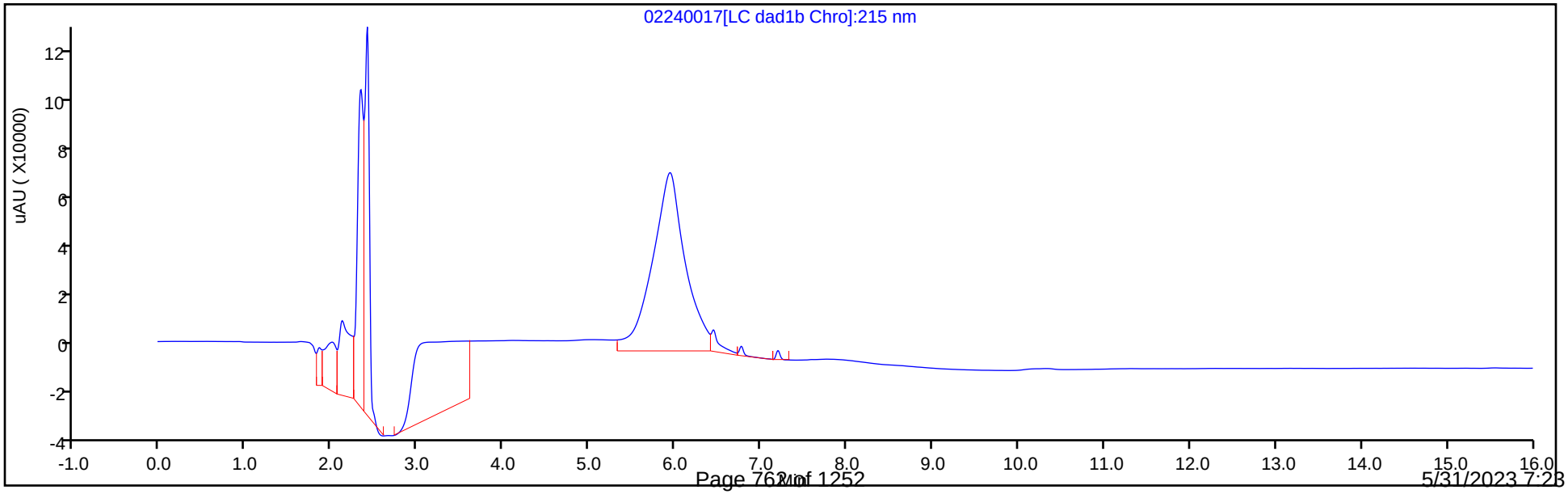
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240017.d

Injection Date:	24-Feb-2023 17:18:19	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC DMT 2			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

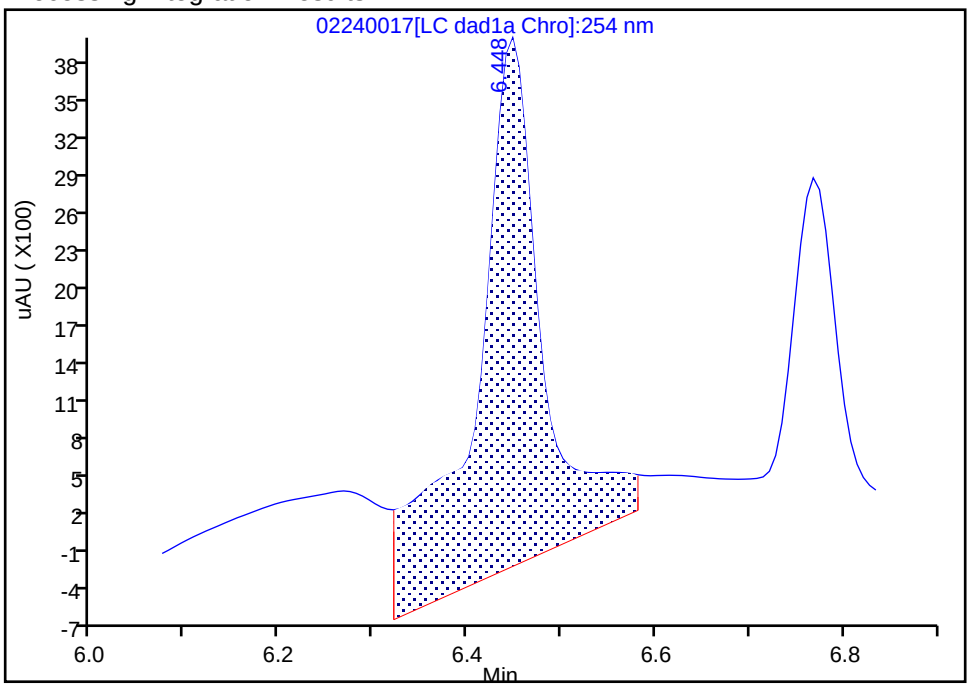
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240017.d				
Injection Date:	24-Feb-2023 17:18:19	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 2				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

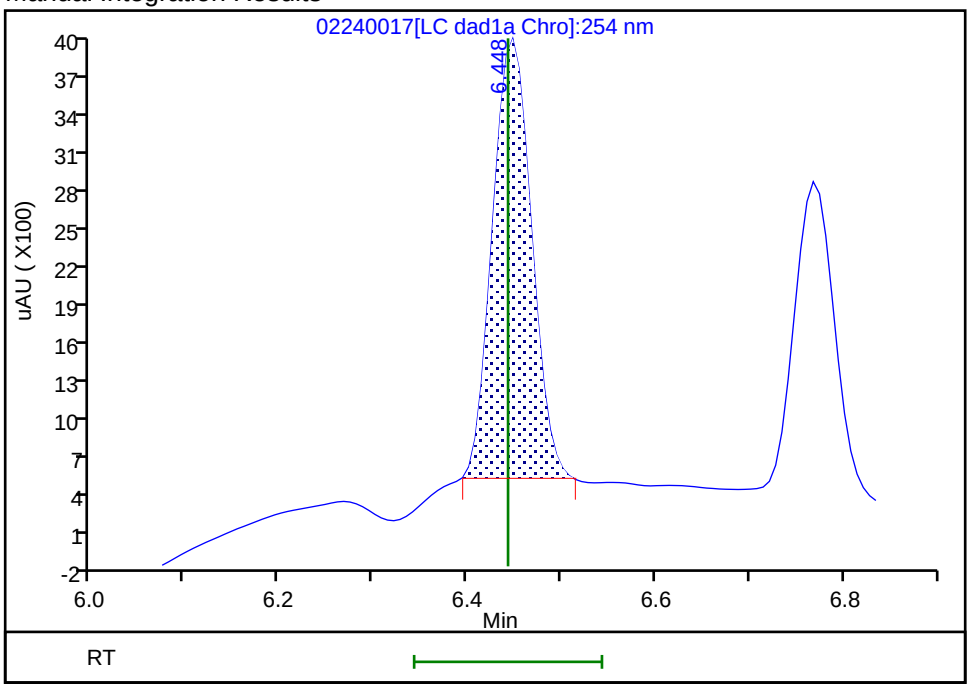
Processing Integration Results

RT: 6.45
Area: 21070
Amount: 0.091223
Amount Units: ug/mL



Manual Integration Results

RT: 6.45
Area: 9917
Amount: 0.050165
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 17:51:28
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

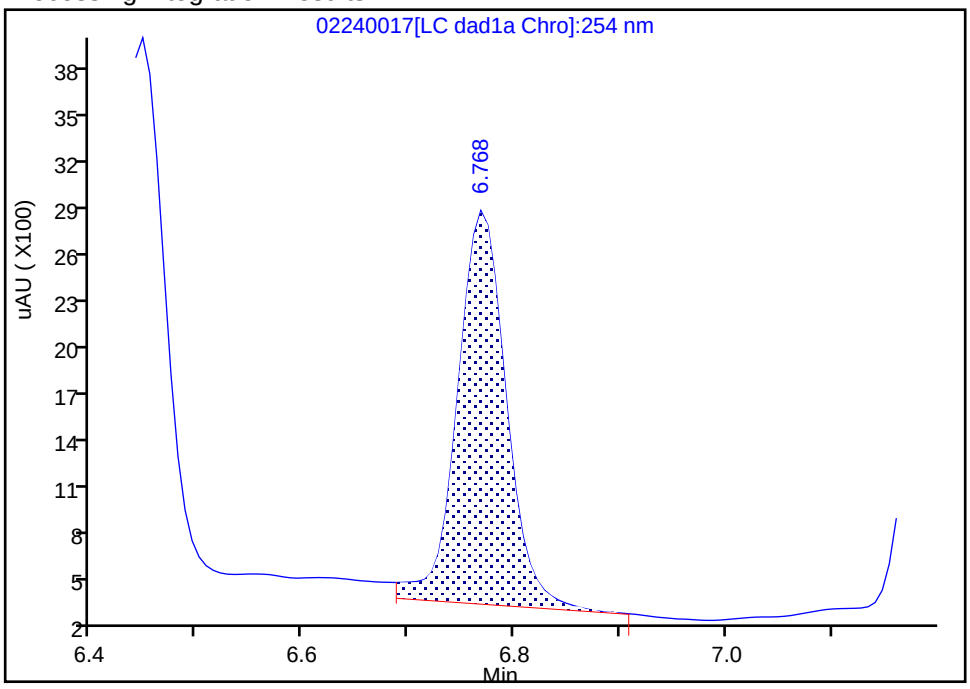
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240017.d				
Injection Date:	24-Feb-2023 17:18:19	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 2				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

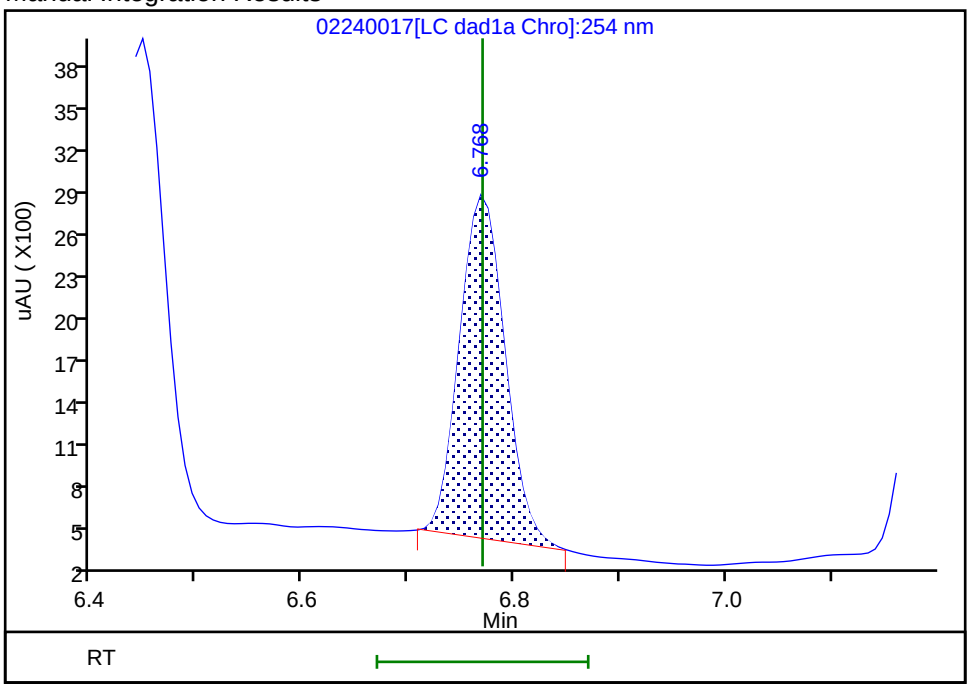
Processing Integration Results

RT: 6.77
Area: 8177
Amount: 0.055426
Amount Units: ug/mL



Manual Integration Results

RT: 6.77
Area: 7338
Amount: 0.050795
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 17:51:32
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D
Lims ID: IC DMT 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 24-Feb-2023 17:41:20 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 1
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-Feb-2023 13:17:30 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1602

First Level Reviewer: LV5D Date: 24-Feb-2023 18:10:19

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	6.443	0.001	3753	0.0201	0.0190	M
6 DNX	1	6.771	6.770	0.001	2798	0.0200	0.0194	M
7 MNX	1	7.197	7.196	0.001	2982	0.0233	0.0227	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00013 Amount Added: 1.00 Units: uL

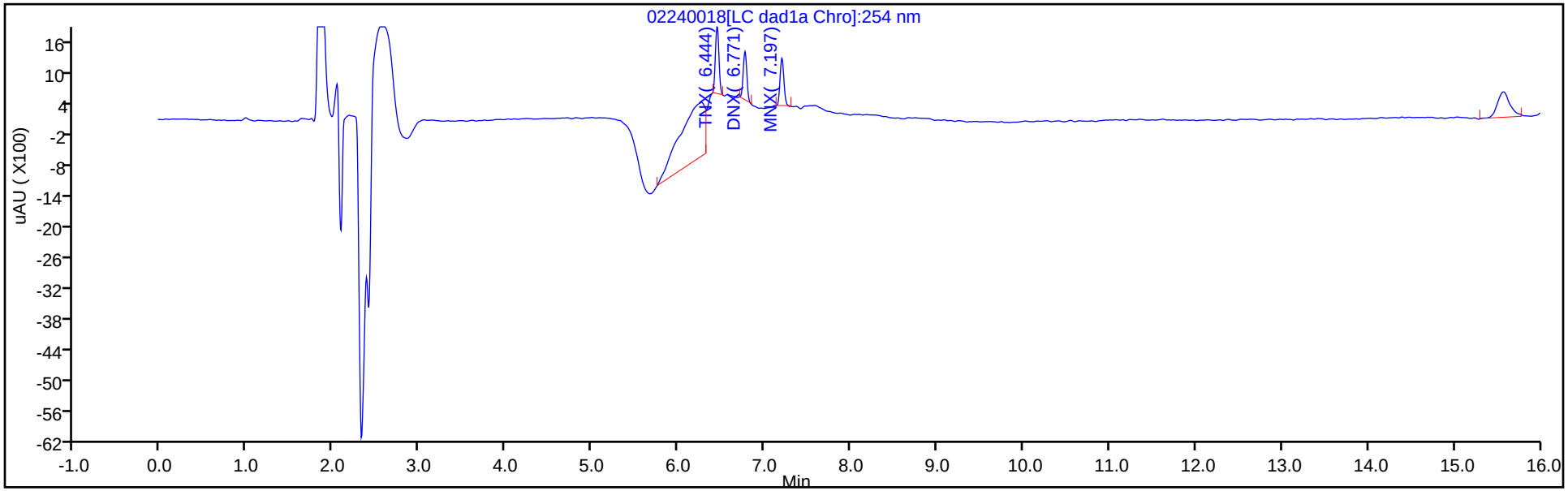
Report Date: 28-Feb-2023 13:17:30 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Denver

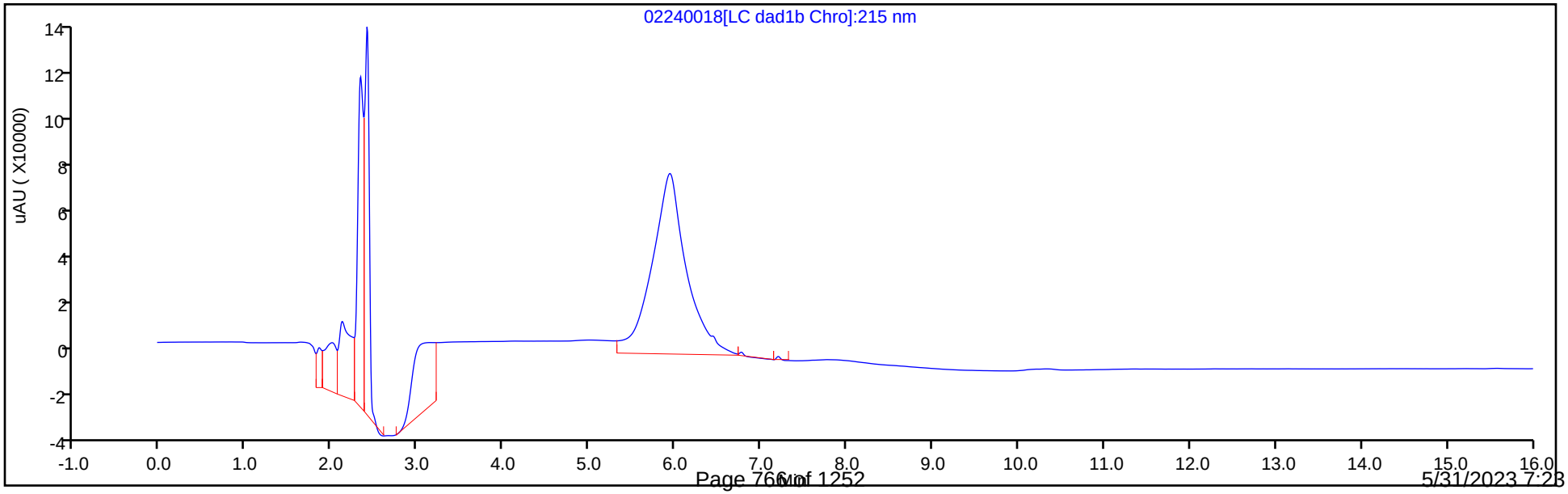
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240018.d

Injection Date:	24-Feb-2023 17:41:20	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC DMT 1			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



Manual Integration/User Assign Peak Report

Eurofins Denver

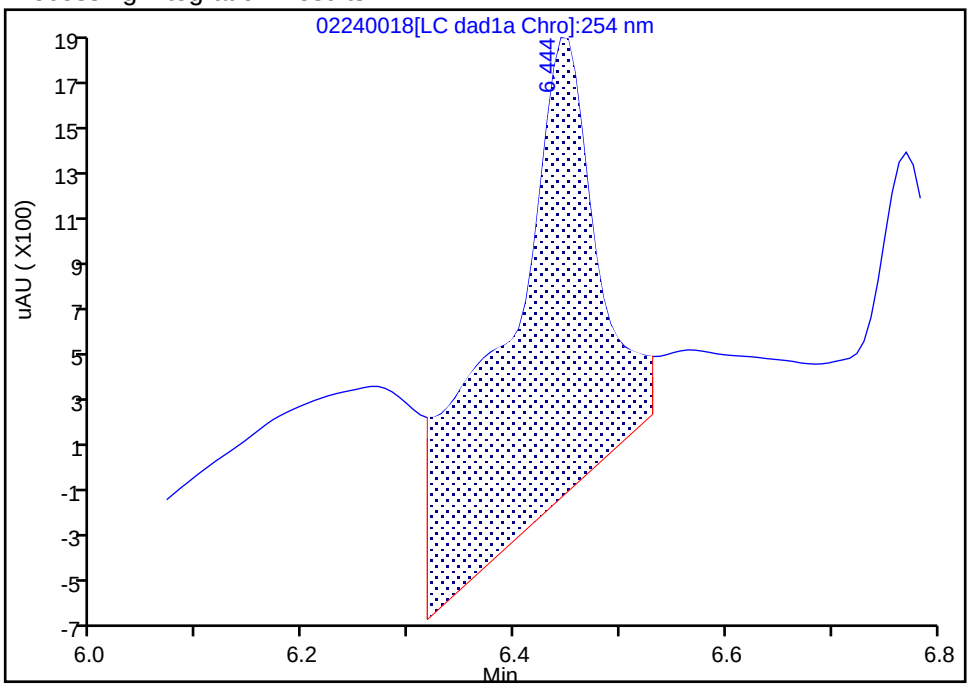
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Injection Date: 24-Feb-2023 17:41:20 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 1
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

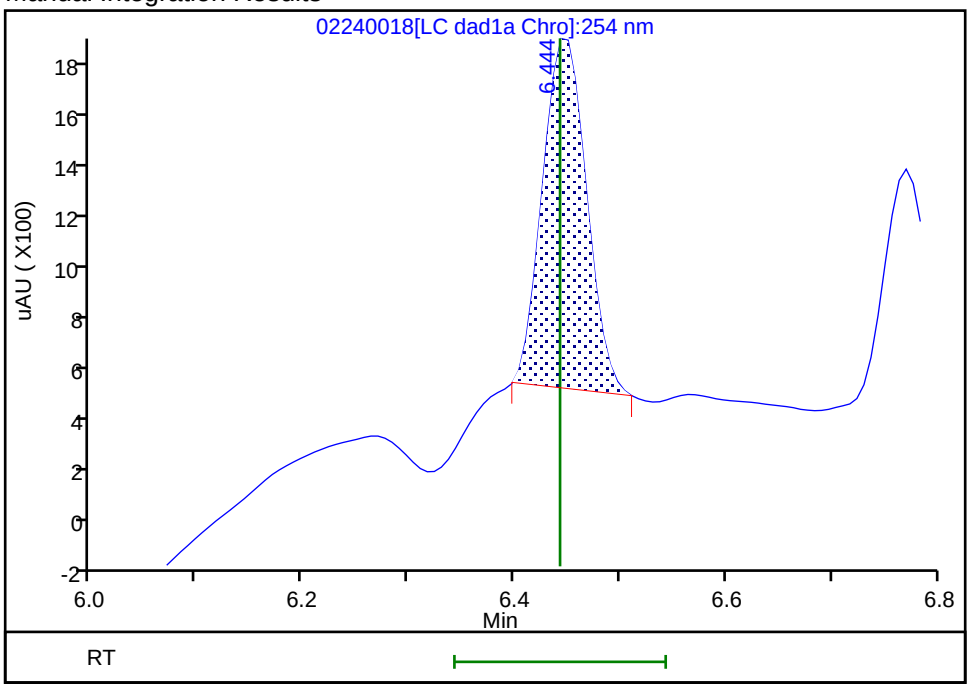
Processing Integration Results

RT: 6.44
Area: 12281
Amount: 0.048962
Amount Units: ug/mL



Manual Integration Results

RT: 6.44
Area: 3753
Amount: 0.018985
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 18:10:04
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

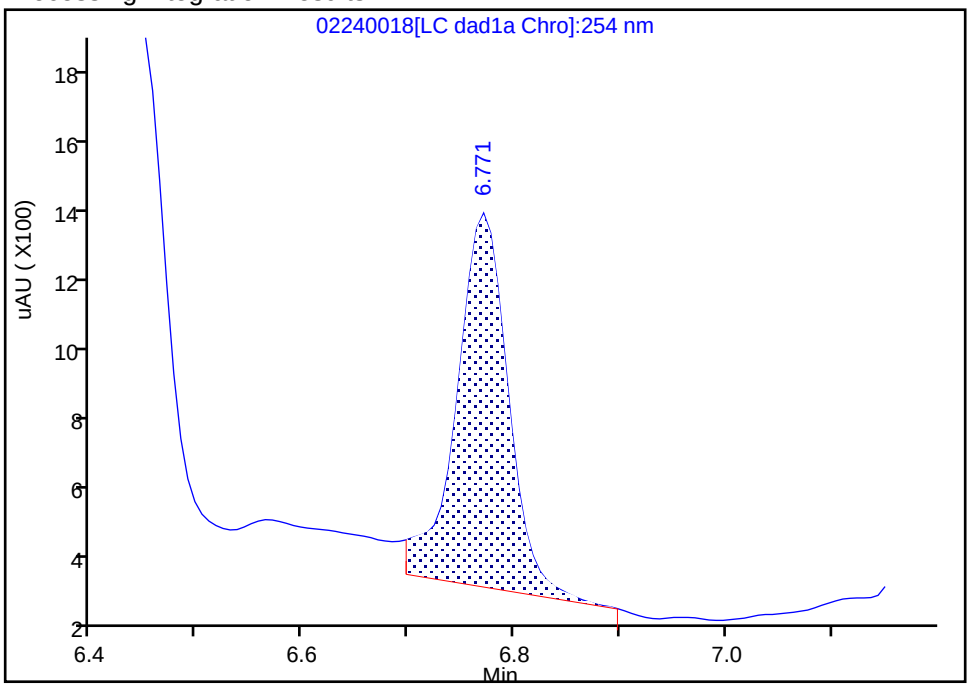
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240018.d				
Injection Date:	24-Feb-2023 17:41:20	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 1				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

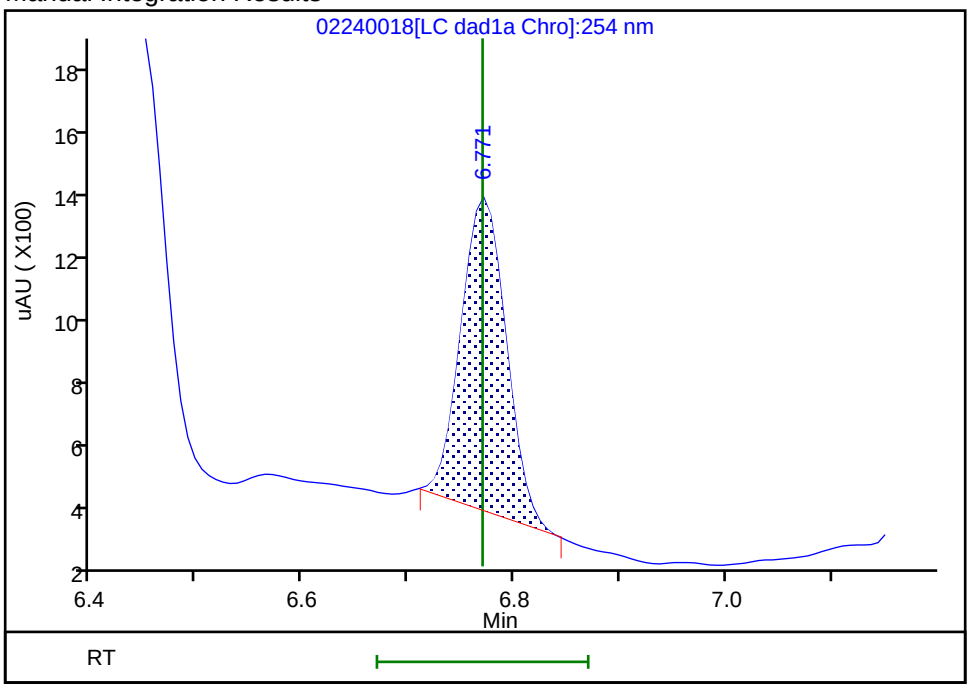
Processing Integration Results

RT: 6.77
Area: 3465
Amount: 0.023313
Amount Units: ug/mL



Manual Integration Results

RT: 6.77
Area: 2798
Amount: 0.019368
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 18:10:11
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

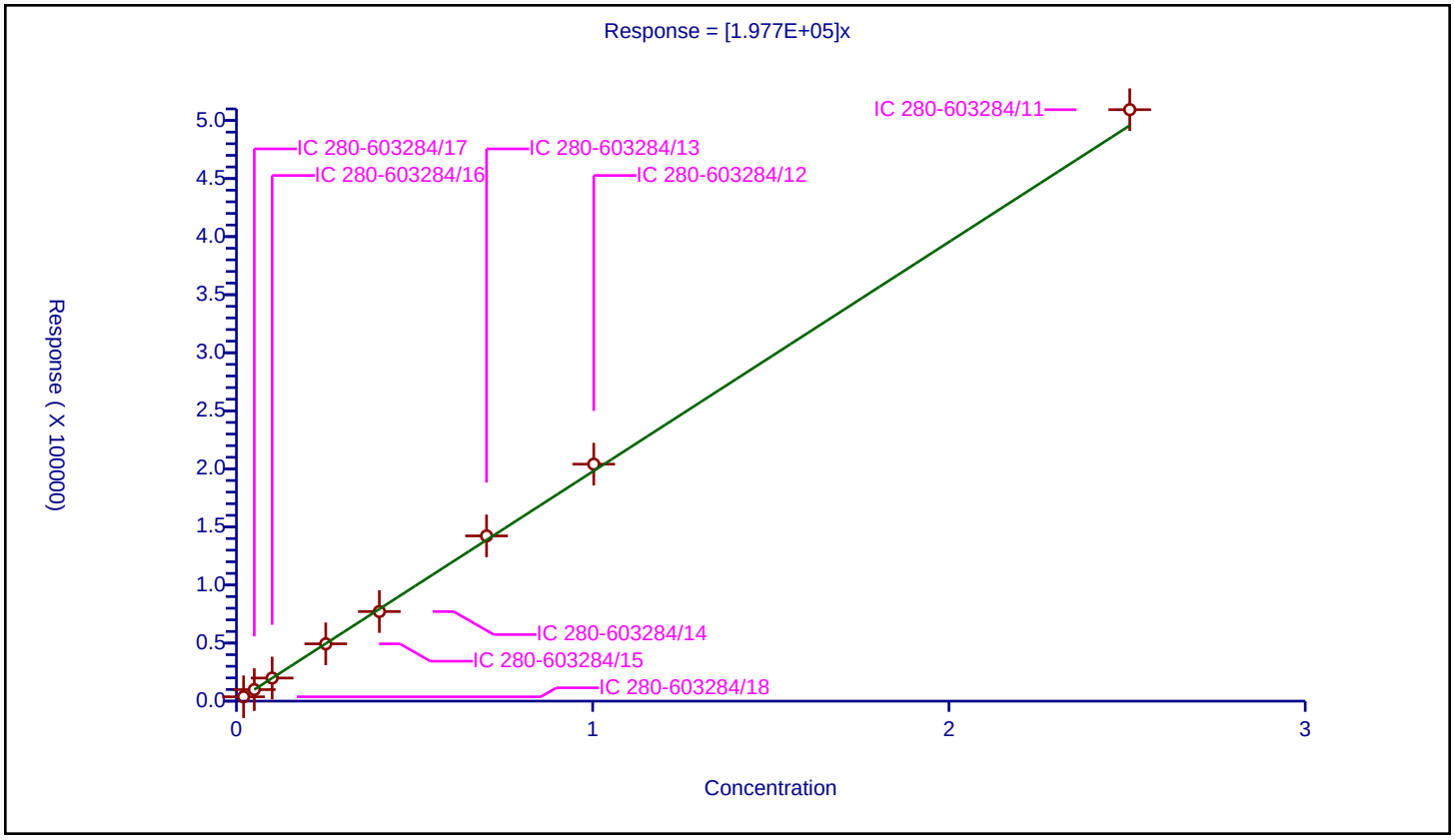
Curve Coefficients

Intercept:	0
Slope:	1.977E+05

Error Coefficients

Standard Error:	5810
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 280-603284/18	0.02006	3753.0			187088.733799	Y
2	IC 280-603284/17	0.05015	9917.0			197746.759721	Y
3	IC 280-603284/16	0.1003	19892.0			198325.024925	Y
4	IC 280-603284/15	0.25075	49343.0			196781.655035	Y
5	IC 280-603284/14	0.4012	77150.0			192298.105683	Y
6	IC 280-603284/13	0.7021	142294.0			202669.135451	Y
7	IC 280-603284/12	1.003	204073.0			203462.612164	Y
8	IC 280-603284/11	2.5075	509340.0			203126.62014	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

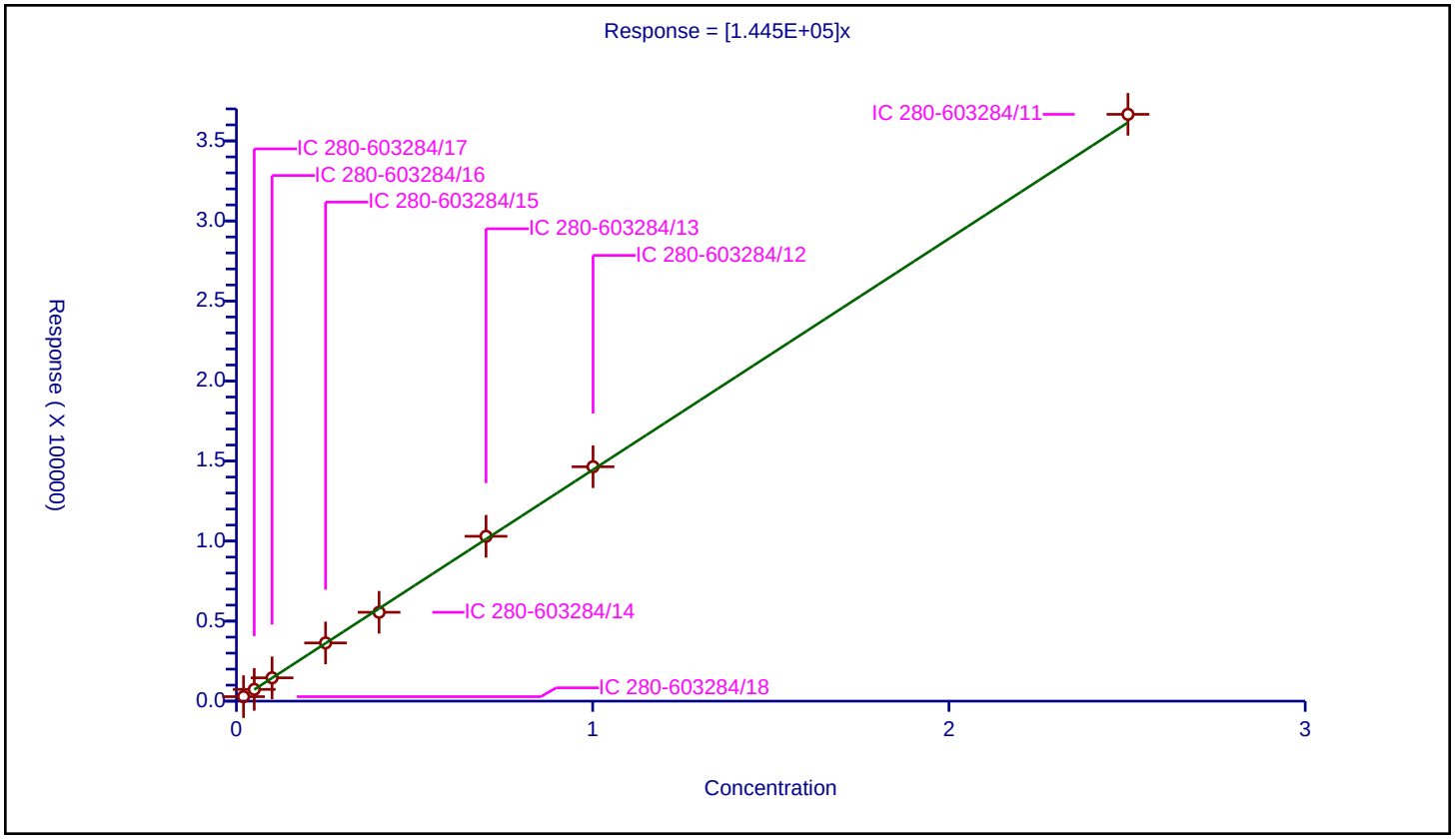
Curve Coefficients

Intercept:	0
Slope:	1.445E+05

Error Coefficients

Standard Error:	2320
Relative Standard Error:	2.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-603284/18	0.02002	2798.0			139760.23976	Y
2	IC 280-603284/17	0.05005	7338.0			146613.386613	Y
3	IC 280-603284/16	0.1001	14570.0			145554.445554	Y
4	IC 280-603284/15	0.25025	36370.0			145334.665335	Y
5	IC 280-603284/14	0.4004	55525.0			138673.826174	Y
6	IC 280-603284/13	0.7007	102987.0			146977.308406	Y
7	IC 280-603284/12	1.001	146436.0			146289.71029	Y
8	IC 280-603284/11	2.5025	366607.0			146496.303696	Y



Calibration / MNX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

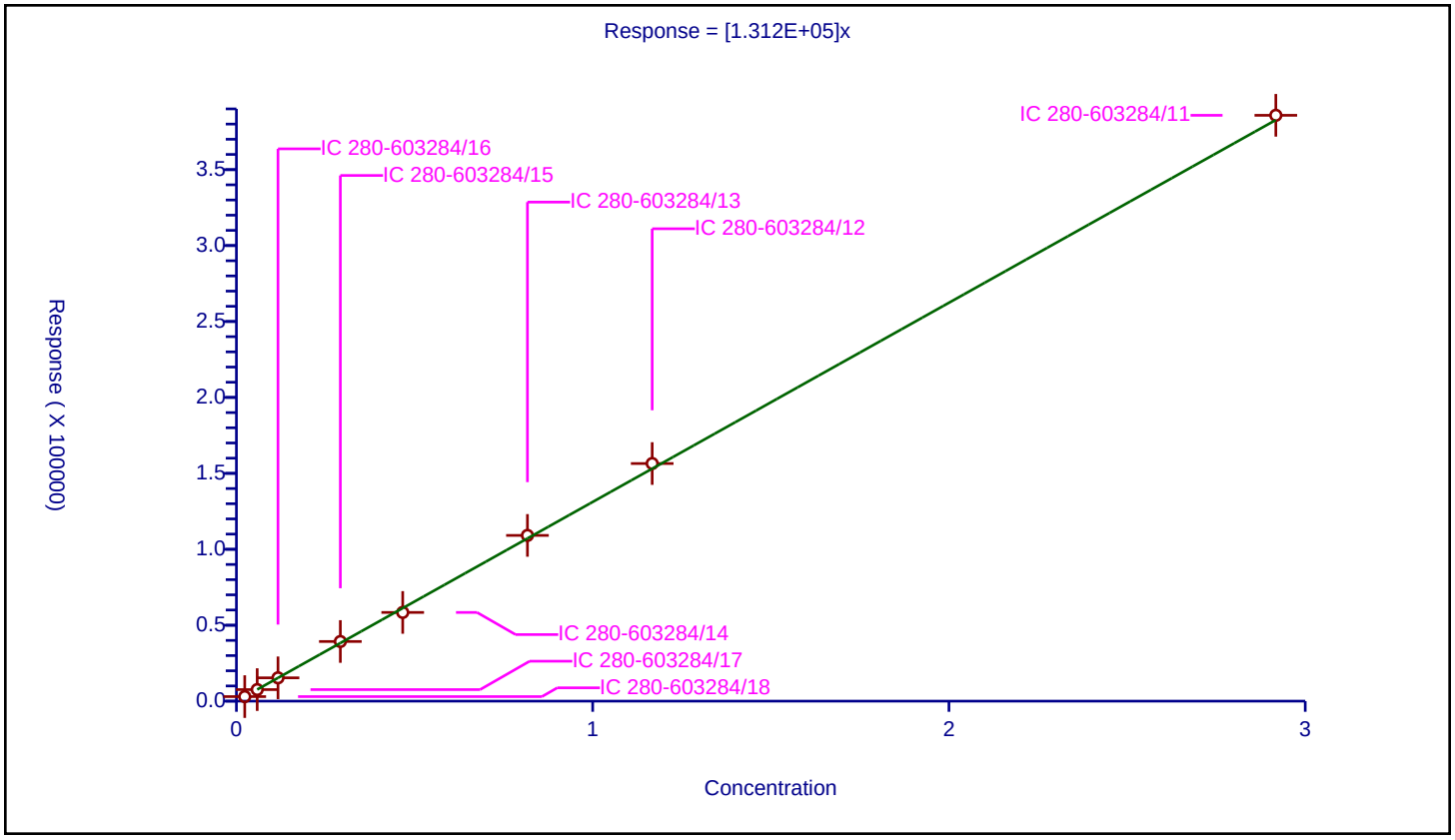
Curve Coefficients

Intercept:	0
Slope:	1.312E+05

Error Coefficients

Standard Error:	2200
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 280-603284/18	0.02334	2982.0			127763.496144	Y
2	IC 280-603284/17	0.05835	7605.0			130334.190231	Y
3	IC 280-603284/16	0.1167	15358.0			131602.399314	Y
4	IC 280-603284/15	0.29175	39278.0			134628.963153	Y
5	IC 280-603284/14	0.4668	58415.0			125139.24593	Y
6	IC 280-603284/13	0.8169	109131.0			133591.626882	Y
7	IC 280-603284/12	1.167	156478.0			134085.689803	Y
8	IC 280-603284/11	2.9175	385772.0			132226.906598	Y



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-176335-1

SDG No.:

Lab Sample ID: ICV 280-607981/19 | Calibration Date: 04/08/2023 00:26

Instrument ID: CHHPLC_G2_LUNA | Calib Start Date: 04/07/2023 19:03

GC Column: Luna-phenylhex ID: 4.60(mm) | Calib End Date: 04/07/2023 23:50

Lab File ID: 04070019.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	399214	395611		497	502	-0.9	20.0
DNX	Ave	286200	292252		511	501	2.1	20.0
HMX	Ave	181045	154926		428	500	-14.4	20.0
MNX	Ave	262380	264929		589	584	1.0	20.0
Picric acid	Ave	155611	159032		511	500	2.2	20.0
RDX	Ave	215713	192400		446	500	-10.8	20.0
Nitrobenzene	Ave	379960	370424		487	500	-2.5	20.0
3,5-Dinitroaniline	Lin2		432678		502	500	0.5	20.0
1,3-Dinitrobenzene	Ave	581449	566740		487	500	-2.5	20.0
Nitroglycerin	Ave	124345	123410		4960	5000	-0.8	20.0
2-Nitrotoluene	Ave	243188	233752		481	500	-3.9	20.0
4-Nitrotoluene	Ave	217449	211762		487	500	-2.6	20.0
4-Amino-2,6-dinitrotoluene	Ave	272611	275652		506	500	1.1	20.0
3-Nitrotoluene	Ave	268012	262928		491	500	-1.9	20.0
2-Amino-4,6-dinitrotoluene	Ave	400284	386562		483	500	-3.4	20.0
1,3,5-Trinitrobenzene	Ave	378488	411990		544	500	8.9	20.0
2,6-Dinitrotoluene	Ave	279896	260986		466	500	-6.8	20.0
2,4-Dinitrotoluene	Ave	560125	522904		467	500	-6.6	20.0
Tetryl	Ave	270539	317230		586	500	17.3	20.0
2,4,6-Trinitrotoluene	Ave	411719	385322		468	500	-6.4	20.0
PETN	Ave	118367	131706		5560	5000	11.3	20.0
1,2-Dinitrobenzene	Ave	265405	273592		515	500	3.1	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Lab Sample ID: ICV 280-607981/19 Calibration Date: 04/08/2023 00:26

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 04/07/2023 19:03

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 04/07/2023 23:50

Lab File ID: 04070019.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.30	5.17	5.47
DNX	6.17	6.04	6.34
HMX	6.84	6.70	7.00
MNX	7.69	7.56	7.86
Picric acid	8.11	8.04	8.34
RDX	9.11	8.98	9.28
Nitrobenzene	11.63	11.50	11.80
3,5-Dinitroaniline	14.45	14.33	14.63
1,3-Dinitrobenzene	14.73	14.60	14.90
Nitroglycerin	15.25	15.12	15.42
2-Nitrotoluene	15.80	15.68	15.98
4-Nitrotoluene	16.03	15.90	16.20
4-Amino-2,6-dinitrotoluene	16.57	16.44	16.74
3-Nitrotoluene	16.88	16.75	17.05
2-Amino-4,6-dinitrotoluene	17.40	17.26	17.56
1,3,5-Trinitrobenzene	17.56	17.42	17.72
2,6-Dinitrotoluene	18.71	18.56	18.86
2,4-Dinitrotoluene	19.16	19.02	19.32
Tetryl	22.47	22.33	22.63
2,4,6-Trinitrotoluene	23.29	23.15	23.45
PETN	24.53	24.40	24.70
1,2-Dinitrobenzene	12.60	12.48	12.78

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\04070019.D
Lims ID: ICV INT DMT
Client ID:
Sample Type: ICV
Inject. Date: 08-Apr-2023 00:26:27 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV INT DMT
Operator ID: JZ Instrument ID: CHHPLC_G2_LUNA
Sublist:

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Apr-2023 15:59:25 Calib Date: 07-Apr-2023 23:50:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\04070018.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1657

First Level Reviewer: LV5D Date: 08-Apr-2023 10:41:39

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.299	5.321	-0.022	198399	0.5015	0.4970	
4 DNX	1	6.166	6.194	-0.028	146272	0.5005	0.5111	
6 HMX	1	6.839	6.847	-0.008	77463	0.5000	0.4279	
7 MNX	1	7.686	7.714	-0.028	154586	0.5835	0.5892	
5 2,4,6-Trinitrophenol	1	8.113	8.187	-0.074	79516	0.5000	0.5110	
8 RDX	1	9.106	9.127	-0.021	96200	0.5000	0.4460	
9 Nitrobenzene	1	11.626	11.654	-0.028	185212	0.5000	0.4875	
$ 10 1,2-Dinitrobenzene	1	12.599	12.627	-0.028	136796	0.5000	0.5154	
11 3,5-Dinitroaniline	1	14.453	14.480	-0.027	216339	0.5000	0.5023	
12 1,3-Dinitrobenzene	1	14.726	14.754	-0.028	283370	0.5000	0.4874	
13 Nitroglycerin	2	15.253	15.274	-0.021	617048	5.00	4.96	
14 o-Nitrotoluene	1	15.799	15.827	-0.028	116876	0.5000	0.4806	
15 p-Nitrotoluene	1	16.026	16.054	-0.028	105881	0.5000	0.4869	
16 4-Amino-2,6-dinitrotoluene	1	16.573	16.594	-0.021	137826	0.5000	0.5056	
17 m-Nitrotoluene	1	16.879	16.900	-0.021	131464	0.5000	0.4905	
18 2-Amino-4,6-dinitrotoluene	1	17.399	17.414	-0.015	193281	0.5000	0.4829	
19 1,3,5-Trinitrobenzene	1	17.559	17.574	-0.015	205995	0.5000	0.5443	
20 2,6-Dinitrotoluene	1	18.706	18.714	-0.008	130493	0.5000	0.4662	
21 2,4-Dinitrotoluene	1	19.159	19.174	-0.015	261452	0.5000	0.4668	
22 Tetryl	1	22.466	22.481	-0.015	158615	0.5000	0.5863	
23 2,4,6-Trinitrotoluene	1	23.286	23.301	-0.015	192661	0.5000	0.4679	
24 PETN	2	24.533	24.547	-0.014	658530	5.00	5.56	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330Surrogate_00141	Amount Added:	50.00	Units: uL
8330 LCS_00125	Amount Added:	50.00	Units: uL
8330_OP_DMT_00017	Amount Added:	50.00	Units: uL

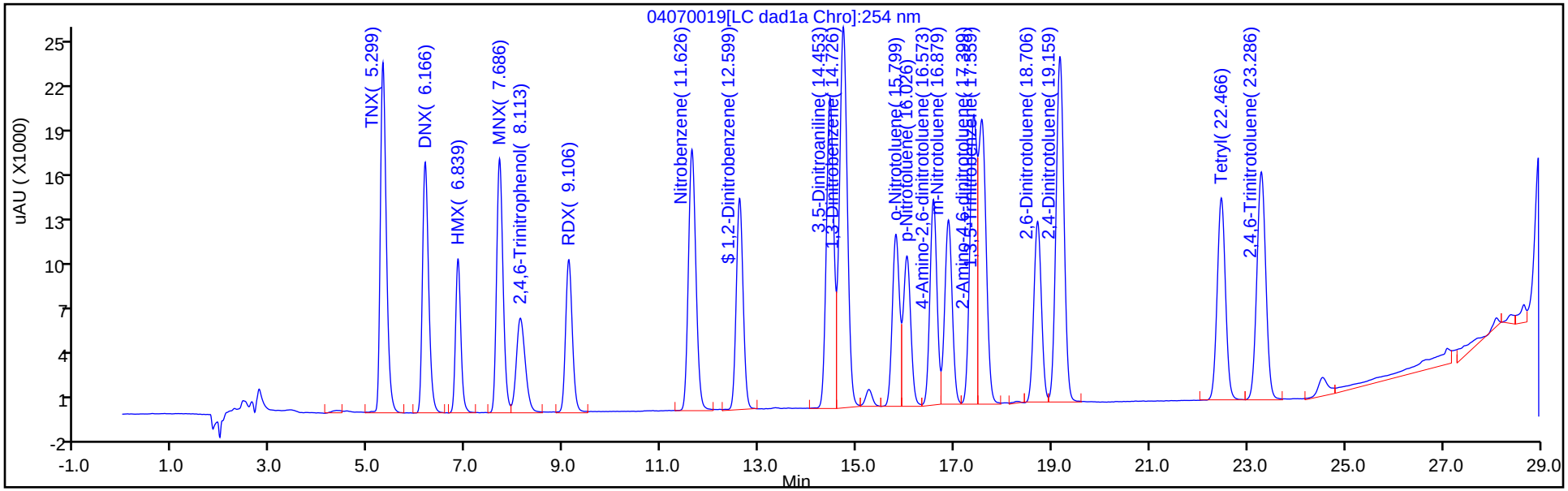
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Eurofins Denver

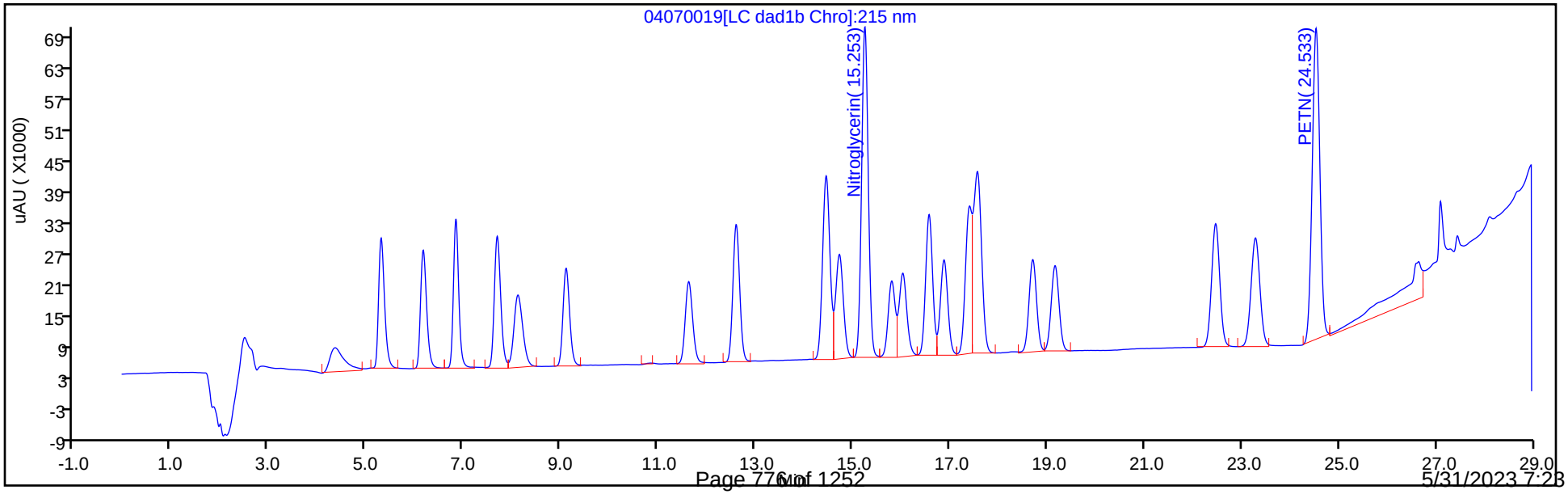
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Injection Date:	08-Apr-2023 00:26:27	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ
Lims ID:	ICV INT DMT			Worklist Smp#:	19
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 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

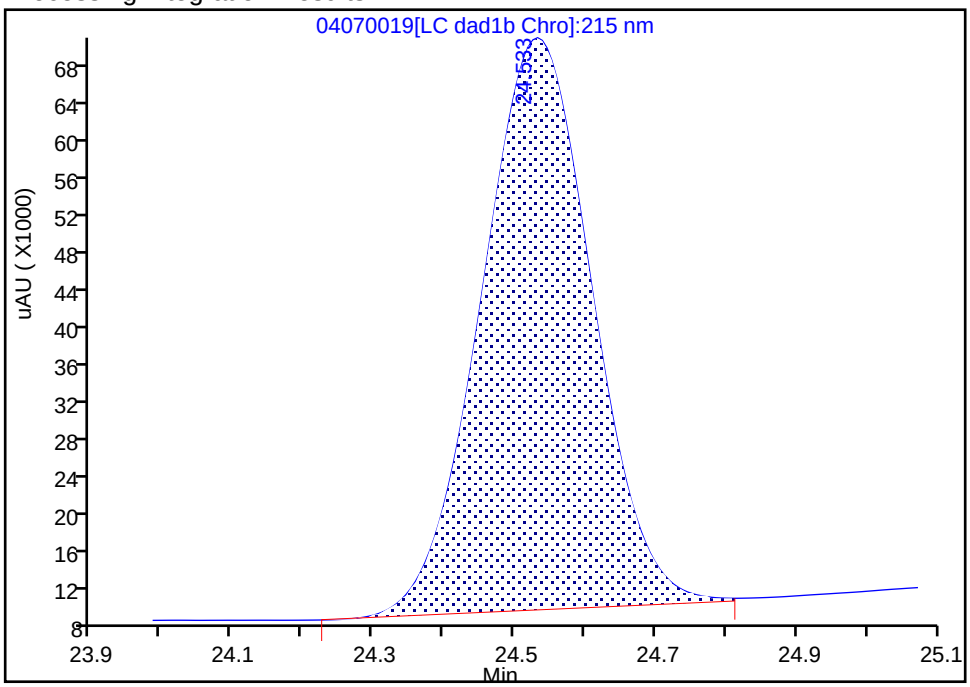
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Injection Date: 08-Apr-2023 00:26:27 Instrument ID: CHHPLC_G2_LUNA
Lims ID: ICV INT DMT
Client ID:
Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

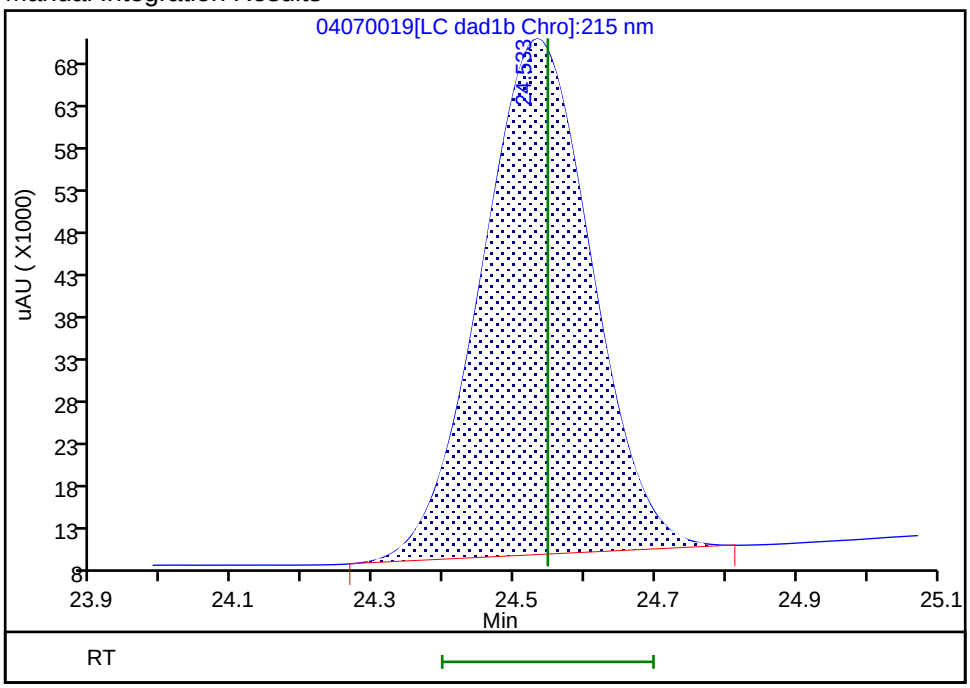
Processing Integration Results

RT: 24.53
Area: 665106
Amount: 5.619000
Amount Units: ug/ml



Manual Integration Results

RT: 24.53
Area: 658530
Amount: 5.563444
Amount Units: ug/ml



Reviewer: LV5D, 08-Apr-2023 10:42:14
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-176335-1

SDG No.:

Lab Sample ID: CCV 280-612994/31 | Calibration Date: 05/19/2023 06:50

Instrument ID: CHHPLC_G2_LUNA | Calib Start Date: 04/07/2023 19:03

GC Column: Luna-phenylhex ID: 4.60(mm) | Calib End Date: 04/07/2023 23:50

Lab File ID: 05180031.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	399214	376853		237	251	-5.6	20.0
DNX	Ave	286200	277023		242	250	-3.2	20.0
HMX	Ave	181045	183572		253	250	1.4	20.0
MNX	Ave	262380	254293		283	292	-3.1	20.0
Picric acid	Ave	155611	161444		259	250	3.7	20.0
RDX	Ave	215713	220744		256	250	2.3	20.0
Nitrobenzene	Ave	379960	375724		247	250	-1.1	20.0
3,5-Dinitroaniline	Lin2		463604		269	250	7.5	20.0
1,3-Dinitrobenzene	Ave	581449	597996		257	250	2.8	20.0
Nitroglycerin	Ave	124345	130484		2620	2500	4.9	20.0
2-Nitrotoluene	Ave	243188	241380		248	250	-0.7	20.0
4-Nitrotoluene	Ave	217449	217924		251	250	0.2	20.0
4-Amino-2,6-dinitrotoluene	Ave	272611	286516		263	250	5.1	20.0
3-Nitrotoluene	Ave	268012	276808		258	250	3.3	20.0
2-Amino-4,6-dinitrotoluene	Ave	400284	422020		264	250	5.4	20.0
1,3,5-Trinitrobenzene	Ave	378488	395660		261	250	4.5	20.0
2,6-Dinitrotoluene	Ave	279896	277720		248	250	-0.8	20.0
2,4-Dinitrotoluene	Ave	560125	566424		253	250	1.1	20.0
Tetryl	Ave	270539	278176		257	250	2.8	20.0
2,4,6-Trinitrotoluene	Ave	411719	423904		257	250	3.0	20.0
PETN	Ave	118367	129361		2730	2500	9.3	20.0
1,2-Dinitrobenzene	Ave	265405	269296		254	250	1.5	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Lab Sample ID: CCV 280-612994/31 Calibration Date: 05/19/2023 06:50

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 04/07/2023 19:03

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 04/07/2023 23:50

Lab File ID: 05180031.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.32	5.16	5.46
DNX	6.18	6.03	6.33
HMX	6.84	6.68	6.98
MNX	7.70	7.54	7.84
Picric acid	8.59	8.43	8.73
RDX	9.11	8.95	9.25
Nitrobenzene	11.63	11.47	11.77
3,5-Dinitroaniline	14.46	14.30	14.60
1,3-Dinitrobenzene	14.72	14.57	14.87
Nitroglycerin	15.21	15.06	15.36
2-Nitrotoluene	15.79	15.64	15.94
4-Nitrotoluene	16.02	15.87	16.17
4-Amino-2,6-dinitrotoluene	16.56	16.42	16.72
3-Nitrotoluene	16.86	16.72	17.02
2-Amino-4,6-dinitrotoluene	17.39	17.25	17.55
1,3,5-Trinitrobenzene	17.54	17.40	17.70
2,6-Dinitrotoluene	18.67	18.54	18.84
2,4-Dinitrotoluene	19.12	19.00	19.30
Tetryl	22.40	22.28	22.58
2,4,6-Trinitrotoluene	23.22	23.10	23.40
PETN	24.40	24.30	24.60
1,2-Dinitrobenzene	12.60	12.44	12.74

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230518-121600.b\05180031.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 19-May-2023 06:50:33 ALS Bottle#: 7 Worklist Smp#: 31
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub18

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230518-121600.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 19-May-2023 15:05:49 Calib Date: 07-Apr-2023 23:50:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\04070018.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1654

First Level Reviewer: LV5D Date: 19-May-2023 15:02:39

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.317	5.313	0.004	94496	0.2508	0.2367	
4 DNX	1	6.177	6.180	-0.003	69325	0.2503	0.2422	
6 HMX	1	6.837	6.833	0.004	45893	0.2500	0.2535	
7 MNX	1	7.697	7.693	0.004	74190	0.2918	0.2828	
5 2,4,6-Trinitrophenol	1	8.590	8.580	0.010	40361	0.2500	0.2594	
8 RDX	1	9.110	9.100	0.010	55186	0.2500	0.2558	
9 Nitrobenzene	1	11.630	11.620	0.010	93931	0.2500	0.2472	
$ 10 1,2-Dinitrobenzene	1	12.597	12.593	0.004	67324	0.2500	0.2537	
11 3,5-Dinitroaniline	1	14.463	14.453	0.010	115901	0.2500	0.2686	
12 1,3-Dinitrobenzene	1	14.723	14.720	0.003	149499	0.2500	0.2571	
13 Nitroglycerin	2	15.210	15.213	-0.003	326210	2.50	2.62	
14 o-Nitrotoluene	1	15.790	15.793	-0.003	60345	0.2500	0.2481	M
15 p-Nitrotoluene	1	16.017	16.020	-0.003	54481	0.2500	0.2505	M
16 4-Amino-2,6-dinitrotoluene	1	16.563	16.566	-0.003	71629	0.2500	0.2628	M
17 m-Nitrotoluene	1	16.863	16.866	-0.003	69202	0.2500	0.2582	M
18 2-Amino-4,6-dinitrotoluene	1	17.390	17.400	-0.010	105505	0.2500	0.2636	M
19 1,3,5-Trinitrobenzene	1	17.537	17.546	-0.009	98915	0.2500	0.2613	M
20 2,6-Dinitrotoluene	1	18.670	18.686	-0.016	69430	0.2500	0.2481	
21 2,4-Dinitrotoluene	1	19.123	19.146	-0.023	141606	0.2500	0.2528	
22 Tetryl	1	22.397	22.427	-0.030	69544	0.2500	0.2571	
23 2,4,6-Trinitrotoluene	1	23.217	23.247	-0.030	105976	0.2500	0.2574	
24 PETN	2	24.404	24.447	-0.043	323403	2.50	2.73	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00076	Amount Added:	25.00	Units: uL
8330 DMT_00013	Amount Added:	12.50	Units: uL

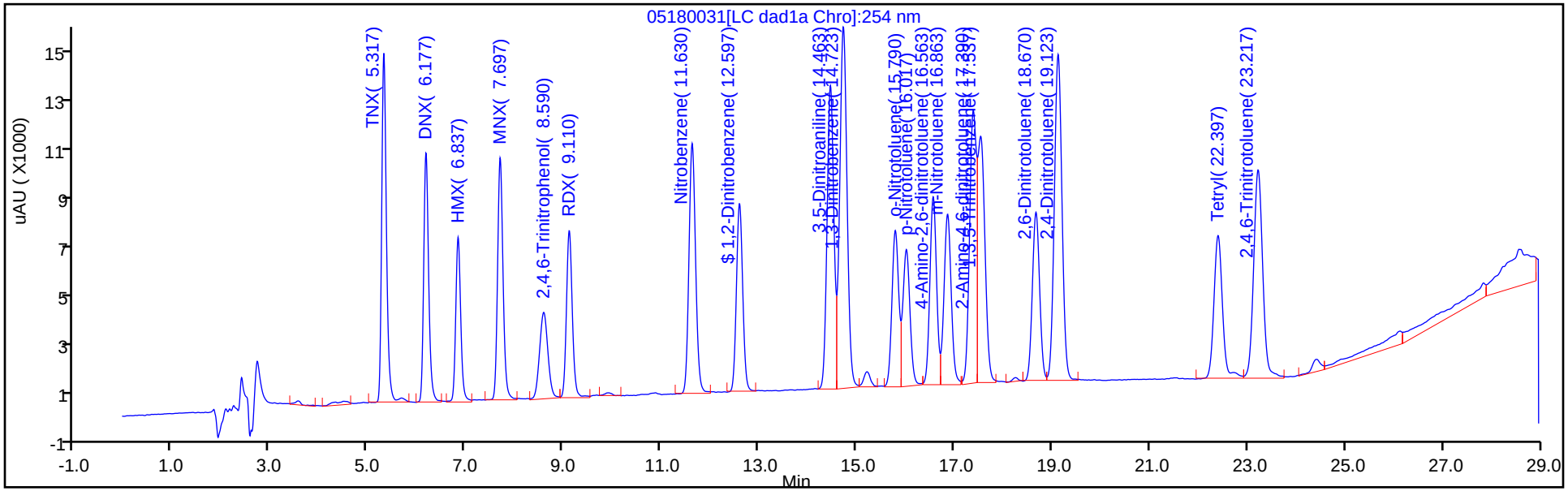
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Eurofins Denver

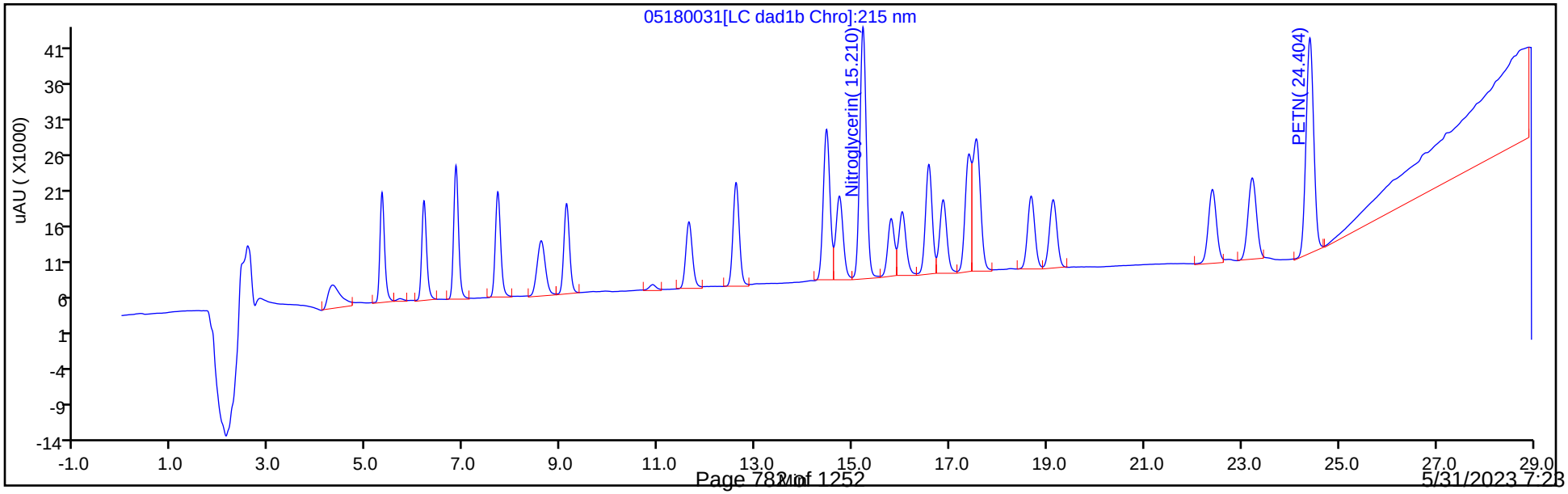
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Injection Date:	19-May-2023 06:50:33	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	31
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

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



5/31/2023 7:28 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

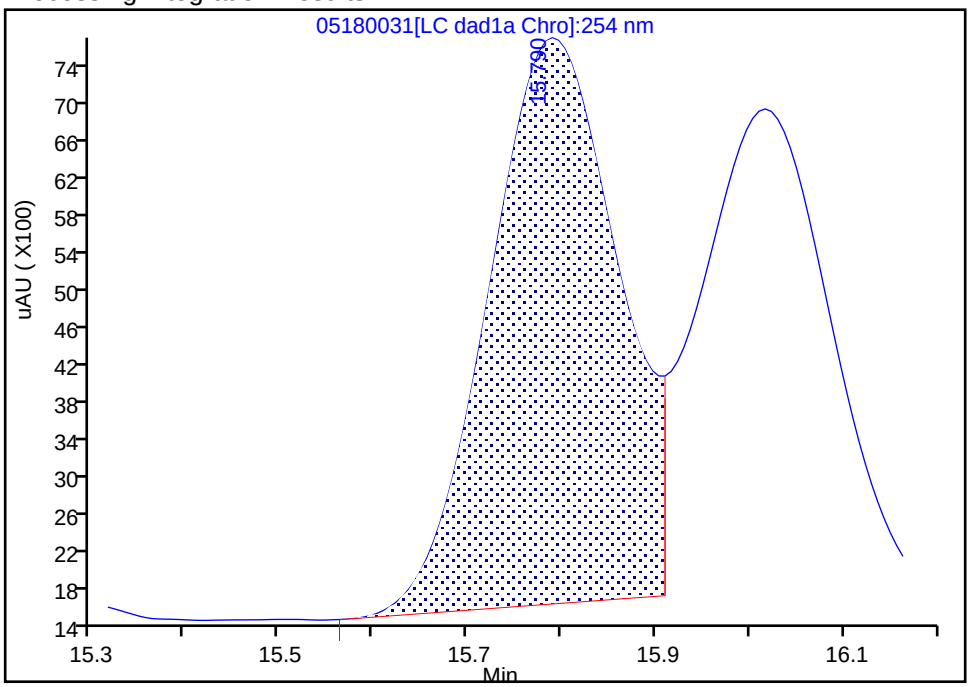
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Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

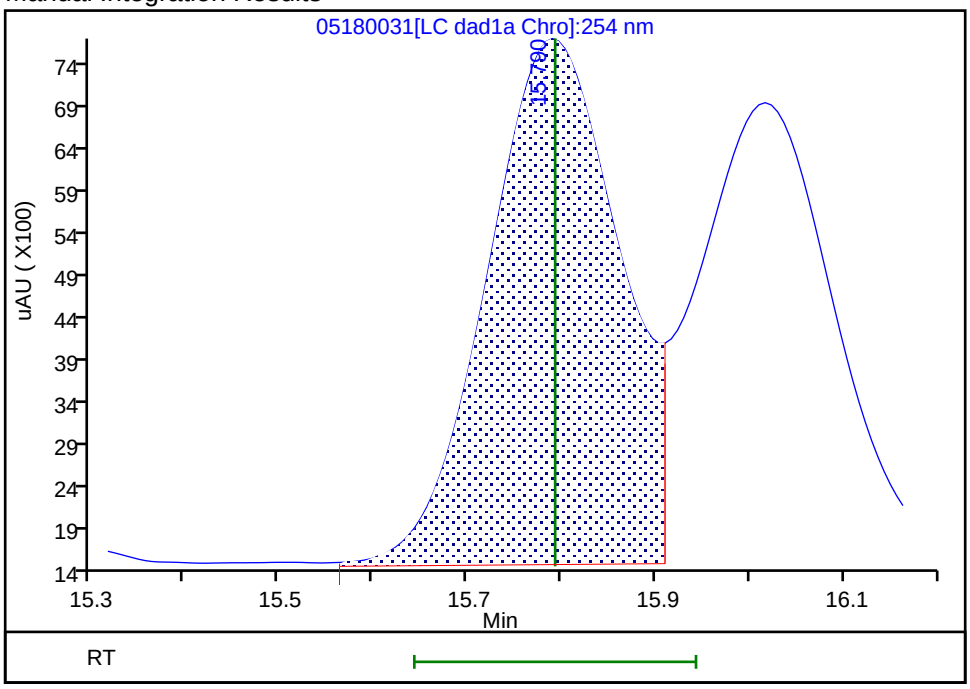
Processing Integration Results

RT: 15.79
Area: 57308
Amount: 0.235653
Amount Units: ug/ml



Manual Integration Results

RT: 15.79
Area: 60345
Amount: 0.248141
Amount Units: ug/ml



Reviewer: LV5D, 19-May-2023 15:02:38 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

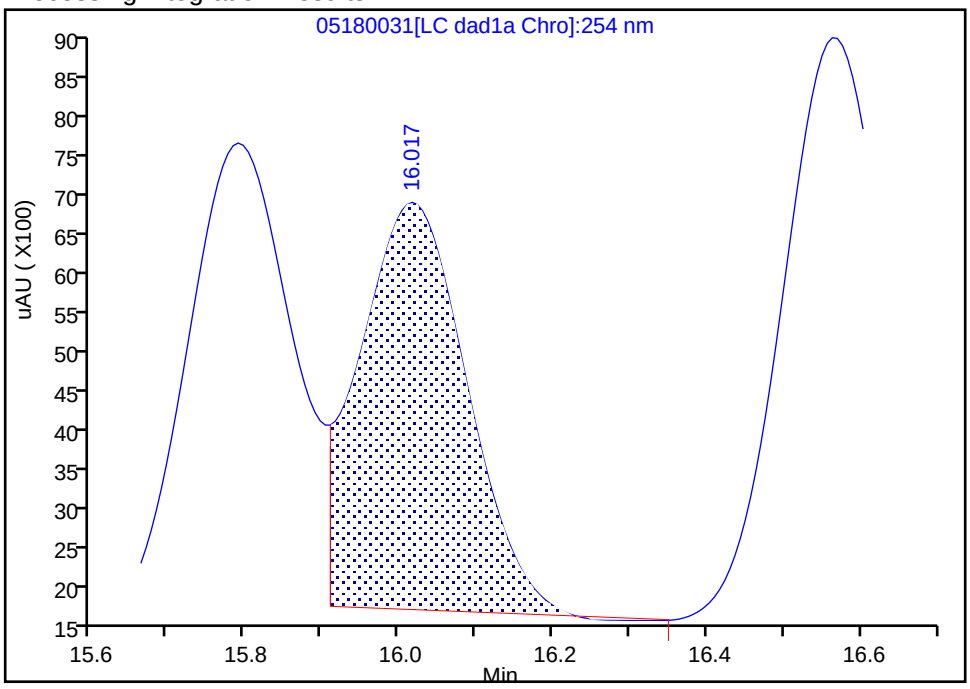
Data File:	\\chromfs\denver\chromdata\g2_luna\20230518-121600.b\05180031.d				
Injection Date:	19-May-2023 06:50:33	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

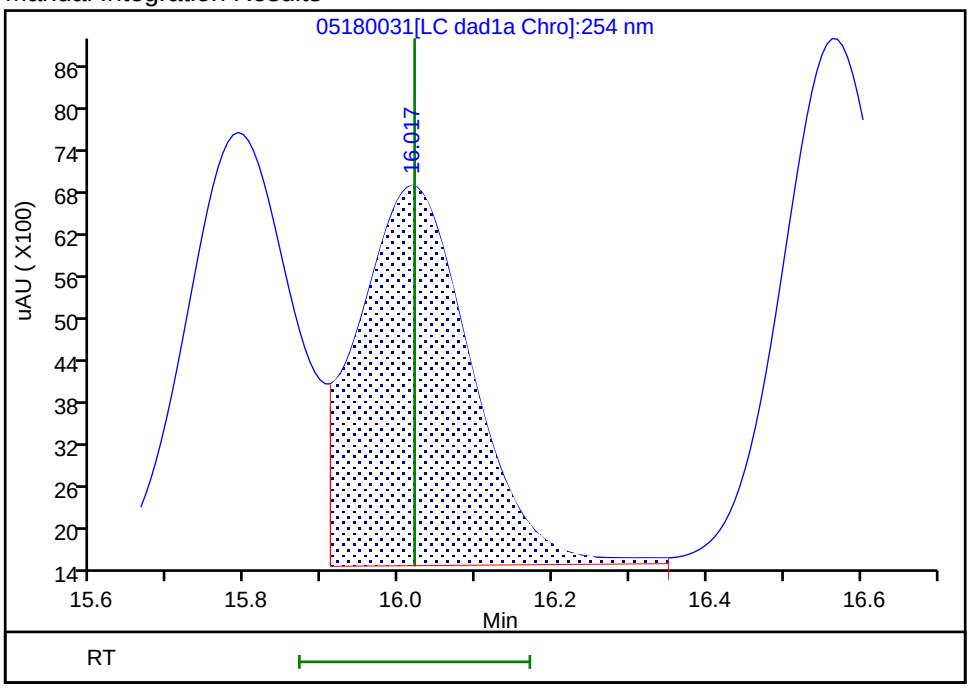
Processing Integration Results

RT: 16.02
Area: 50404
Amount: 0.231797
Amount Units: ug/ml



Manual Integration Results

RT: 16.02
Area: 54481
Amount: 0.250546
Amount Units: ug/ml



Reviewer: LV5D, 19-May-2023 15:02:38 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

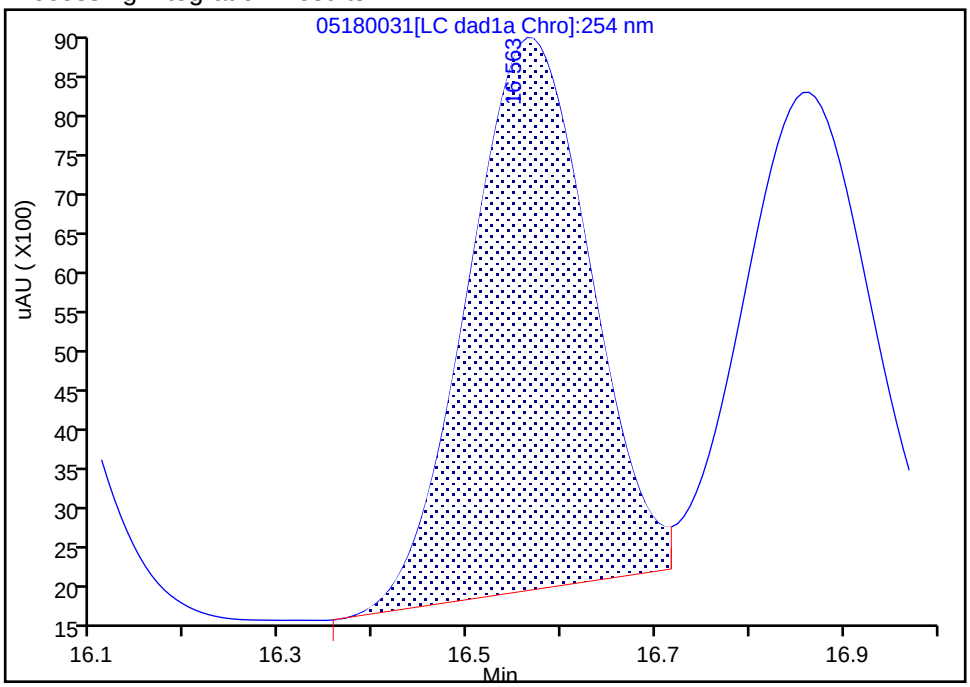
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Injection Date:	19-May-2023 06:50:33	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

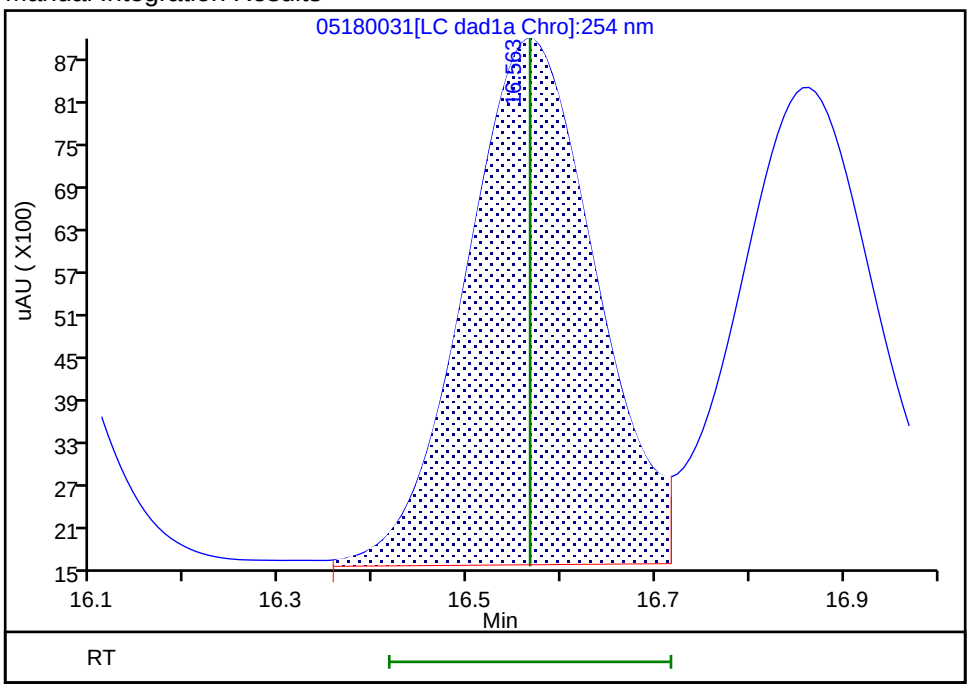
Processing Integration Results

RT: 16.56
Area: 63464
Amount: 0.232801
Amount Units: ug/ml



Manual Integration Results

RT: 16.56
Area: 71629
Amount: 0.262752
Amount Units: ug/ml



Reviewer: LV5D, 19-May-2023 15:02:38 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

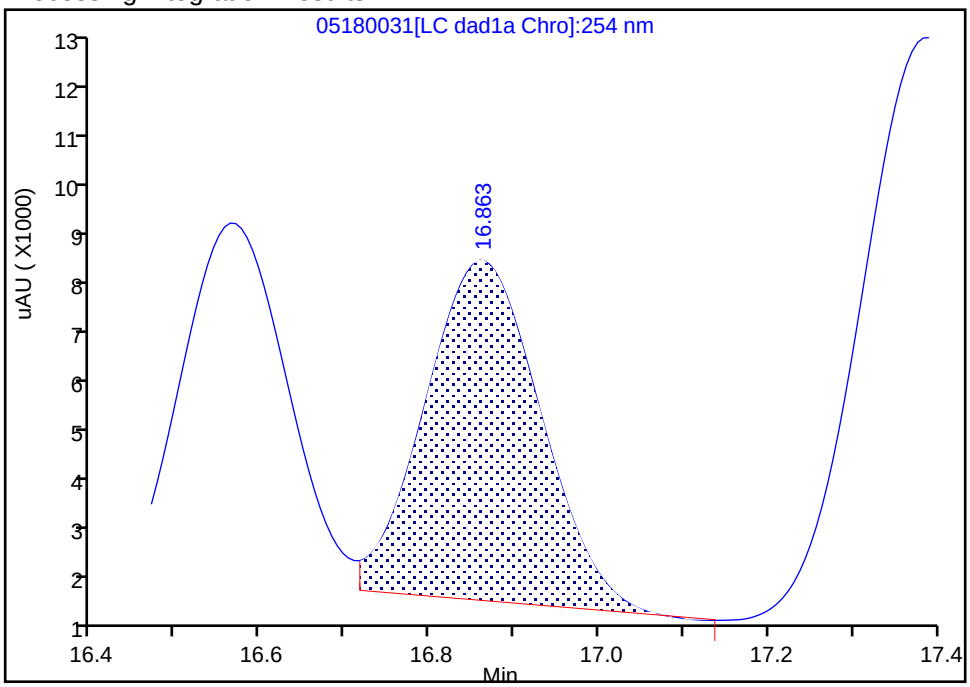
Data File:	\\chromfs\denver\chromdata\g2_luna\20230518-121600.b\05180031.d				
Injection Date:	19-May-2023 06:50:33	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

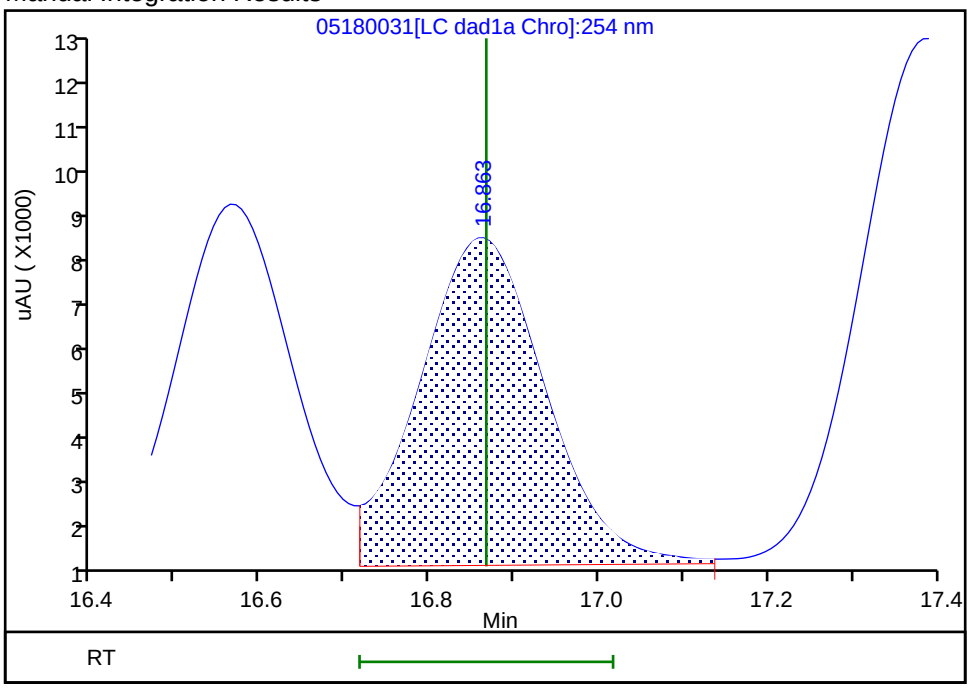
Processing Integration Results

RT: 16.86
Area: 59720
Amount: 0.222826
Amount Units: ug/ml



Manual Integration Results

RT: 16.86
Area: 69202
Amount: 0.258205
Amount Units: ug/ml



Reviewer: LV5D, 19-May-2023 15:02:38 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

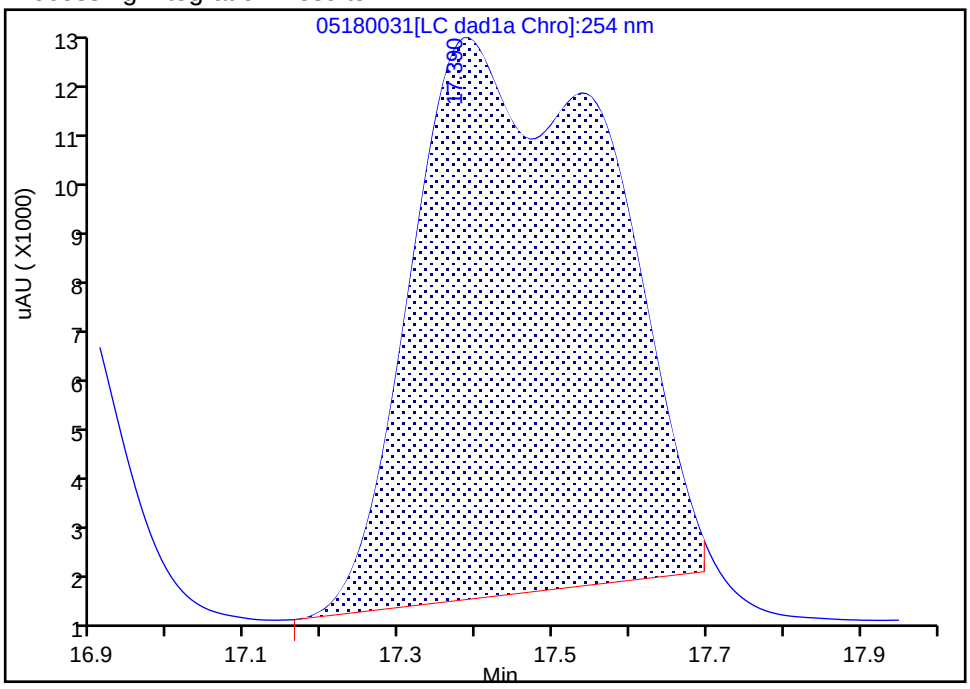
Data File:	\\chromfs\denver\chromdata\g2_luna\20230518-121600.b\05180031.d				
Injection Date:	19-May-2023 06:50:33	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	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

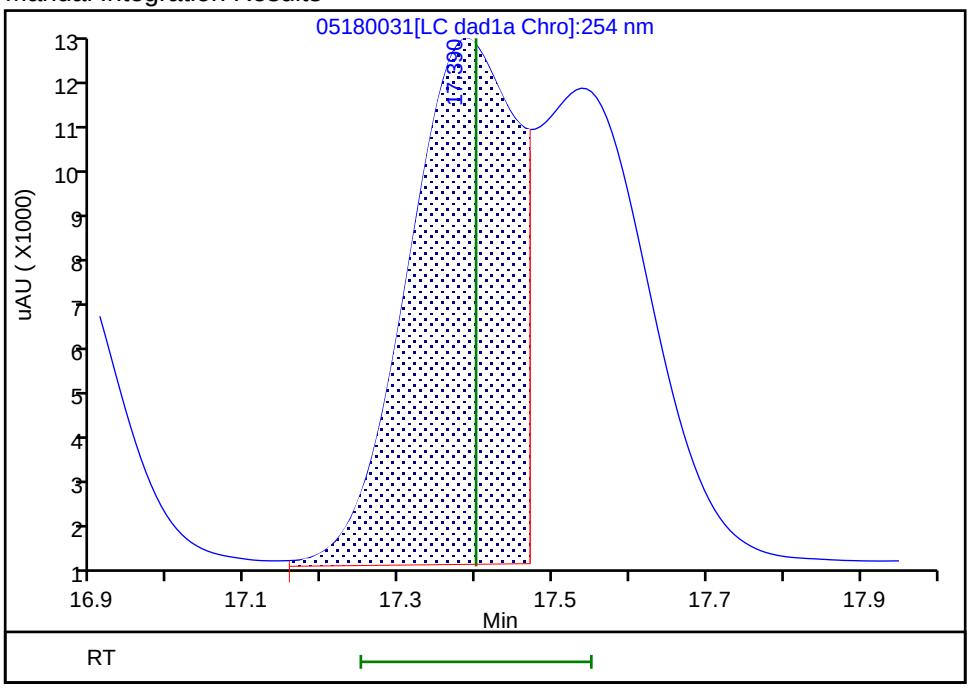
Processing Integration Results

RT: 17.39
Area: 183995
Amount: 0.459662
Amount Units: ug/ml



Manual Integration Results

RT: 17.39
Area: 105505
Amount: 0.263576
Amount Units: ug/ml



Reviewer: LV5D, 19-May-2023 15:02:38 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

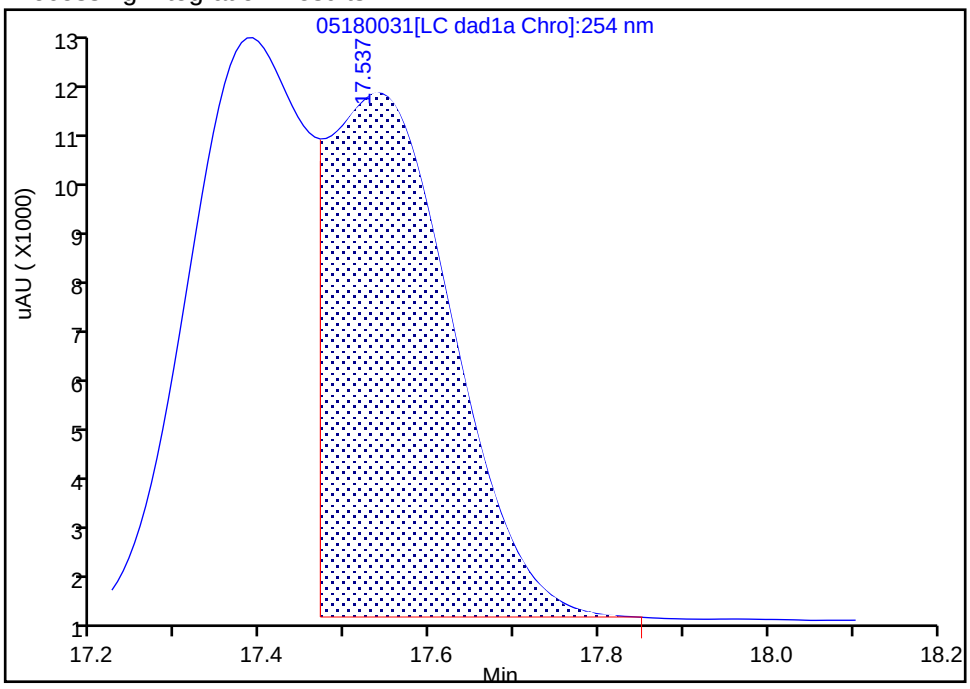
Data File: \\chromfs\denver\chromdata\g2_luna\20230518-121600.b\05180031.d
Injection Date: 19-May-2023 06:50:33 Instrument ID: CHHPLC_G2_LUNA
Lims ID: CCV DMT
Client ID:
Operator ID: JZ/JG ALS Bottle#: 7 Worklist Smp#: 31
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

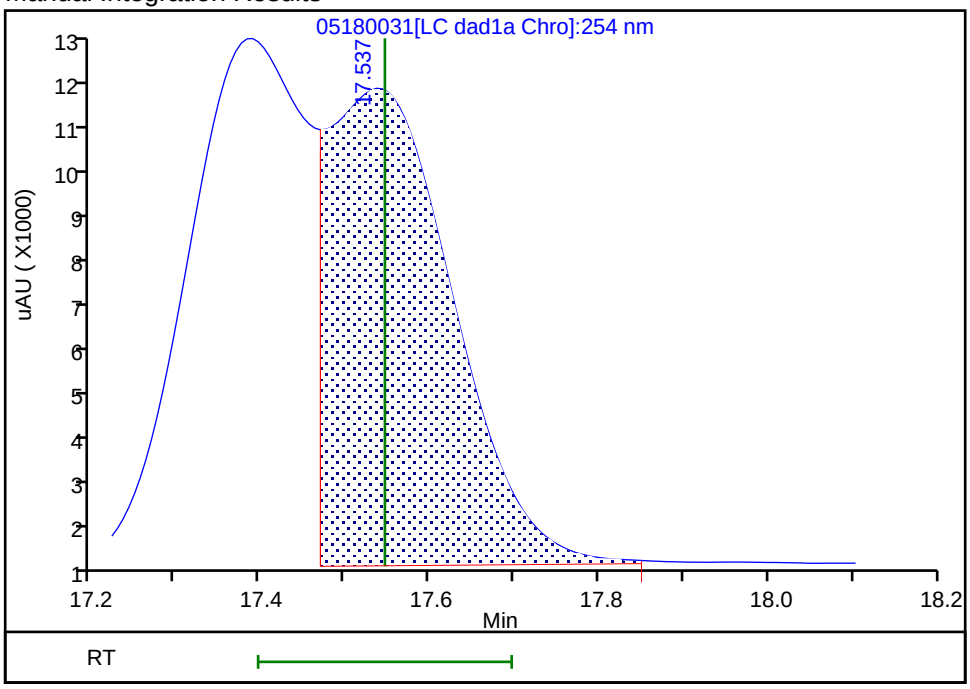
Processing Integration Results

RT: 17.54
Area: 97216
Amount: 0.256854
Amount Units: ug/ml



Manual Integration Results

RT: 17.54
Area: 98915
Amount: 0.261342
Amount Units: ug/ml



Reviewer: LV5D, 19-May-2023 15:02:38 -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.: 280-176335-1

SDG No.:

Lab Sample ID: CCV 280-612994/37 | Calibration Date: 05/19/2023 11:02

Instrument ID: CHHPLC_G2_LUNA | Calib Start Date: 04/07/2023 19:03

GC Column: Luna-phenylhex ID: 4.60(mm) | Calib End Date: 04/07/2023 23:50

Lab File ID: 05180037.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	399214	377783		237	251	-5.4	20.0
DNX	Ave	286200	277115		242	250	-3.2	20.0
HMX	Ave	181045	183688		254	250	1.5	20.0
MNX	Ave	262380	254893		283	292	-2.9	20.0
Picric acid	Ave	155611	159888		257	250	2.7	20.0
RDX	Ave	215713	218208		253	250	1.2	20.0
Nitrobenzene	Ave	379960	372480		245	250	-2.0	20.0
3,5-Dinitroaniline	Lin2		461056		267	250	6.9	20.0
1,3-Dinitrobenzene	Ave	581449	602768		259	250	3.7	20.0
Nitroglycerin	Ave	124345	129882		2610	2500	4.5	20.0
2-Nitrotoluene	Ave	243188	237176		244	250	-2.5	20.0
4-Nitrotoluene	Ave	217449	220328		253	250	1.3	20.0
4-Amino-2,6-dinitrotoluene	Ave	272611	288704		265	250	5.9	20.0
3-Nitrotoluene	Ave	268012	274980		257	250	2.6	20.0
2-Amino-4,6-dinitrotoluene	Ave	400284	420628		263	250	5.1	20.0
1,3,5-Trinitrobenzene	Ave	378488	402564		266	250	6.4	20.0
2,6-Dinitrotoluene	Ave	279896	278864		249	250	-0.4	20.0
2,4-Dinitrotoluene	Ave	560125	566972		253	250	1.2	20.0
Tetryl	Ave	270539	255592		236	250	-5.5	20.0
2,4,6-Trinitrotoluene	Ave	411719	410716		249	250	-0.2	20.0
PETN	Ave	118367	129856		2740	2500	9.7	20.0
1,2-Dinitrobenzene	Ave	265405	270308		255	250	1.8	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Lab Sample ID: CCV 280-612994/37 Calibration Date: 05/19/2023 11:02

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 04/07/2023 19:03

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 04/07/2023 23:50

Lab File ID: 05180037.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.31	5.16	5.46
DNX	6.17	6.03	6.33
HMX	6.83	6.68	6.98
MNX	7.69	7.54	7.84
Picric acid	8.55	8.43	8.73
RDX	9.09	8.95	9.25
Nitrobenzene	11.61	11.47	11.77
3,5-Dinitroaniline	14.42	14.30	14.60
1,3-Dinitrobenzene	14.69	14.57	14.87
Nitroglycerin	15.17	15.06	15.36
2-Nitrotoluene	15.75	15.64	15.94
4-Nitrotoluene	15.97	15.87	16.17
4-Amino-2,6-dinitrotoluene	16.51	16.42	16.72
3-Nitrotoluene	16.81	16.72	17.02
2-Amino-4,6-dinitrotoluene	17.33	17.25	17.55
1,3,5-Trinitrobenzene	17.50	17.40	17.70
2,6-Dinitrotoluene	18.61	18.54	18.84
2,4-Dinitrotoluene	19.07	19.00	19.30
Tetryl	22.33	22.28	22.58
2,4,6-Trinitrotoluene	23.15	23.10	23.40
PETN	24.33	24.30	24.60
1,2-Dinitrobenzene	12.57	12.44	12.74

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230518-121600.b\05180037.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 19-May-2023 11:02:08 ALS Bottle#: 7 Worklist Smp#: 37
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub18

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230518-121600.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 19-May-2023 15:05:54 Calib Date: 07-Apr-2023 23:50:31
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230407-120232.b\04070018.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1654

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.312	5.313	-0.001	94729	0.2508	0.2373	
4 DNX	1	6.172	6.180	-0.008	69348	0.2503	0.2423	
6 HMX	1	6.826	6.833	-0.007	45922	0.2500	0.2536	
7 MNX	1	7.686	7.693	-0.007	74365	0.2918	0.2834	
5 2,4,6-Trinitrophenol	1	8.552	8.580	-0.028	39972	0.2500	0.2569	
8 RDX	1	9.092	9.100	-0.008	54552	0.2500	0.2529	
9 Nitrobenzene	1	11.606	11.620	-0.014	93120	0.2500	0.2451	
$ 10 1,2-Dinitrobenzene	1	12.566	12.593	-0.027	67577	0.2500	0.2546	
11 3,5-Dinitroaniline	1	14.419	14.453	-0.034	115264	0.2500	0.2672	
12 1,3-Dinitrobenzene	1	14.686	14.720	-0.034	150692	0.2500	0.2592	
13 Nitroglycerin	2	15.166	15.213	-0.047	324705	2.50	2.61	
14 o-Nitrotoluene	1	15.746	15.793	-0.047	59294	0.2500	0.2438	
15 p-Nitrotoluene	1	15.972	16.020	-0.048	55082	0.2500	0.2533	
16 4-Amino-2,6-dinitrotoluene	1	16.512	16.566	-0.054	72176	0.2500	0.2648	
17 m-Nitrotoluene	1	16.812	16.866	-0.054	68745	0.2500	0.2565	
18 2-Amino-4,6-dinitrotoluene	1	17.326	17.400	-0.074	105157	0.2500	0.2627	
19 1,3,5-Trinitrobenzene	1	17.499	17.546	-0.047	100641	0.2500	0.2659	
20 2,6-Dinitrotoluene	1	18.612	18.686	-0.074	69716	0.2500	0.2491	
21 2,4-Dinitrotoluene	1	19.072	19.146	-0.074	141743	0.2500	0.2531	
22 Tetryl	1	22.332	22.427	-0.095	63898	0.2500	0.2362	
23 2,4,6-Trinitrotoluene	1	23.152	23.247	-0.095	102679	0.2500	0.2494	
24 PETN	2	24.332	24.447	-0.115	324639	2.50	2.74	

Reagents:

8330IntermStk_00076 Amount Added: 25.00 Units: uL
8330 DMT_00013 Amount Added: 12.50 Units: uL

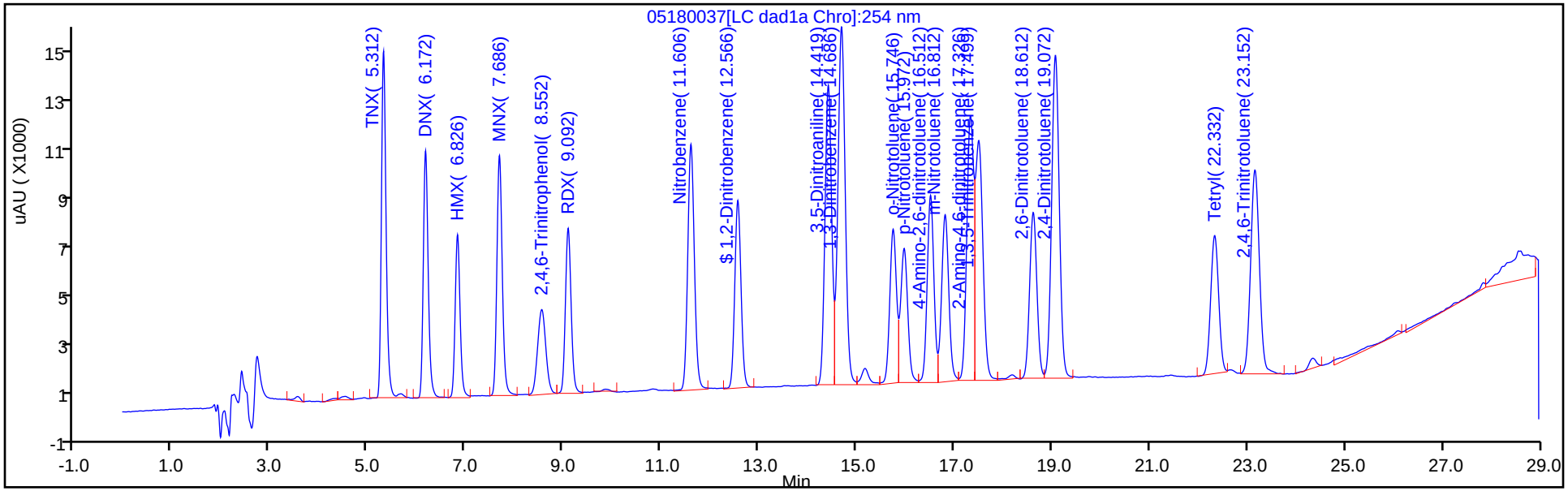
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Eurofins Denver

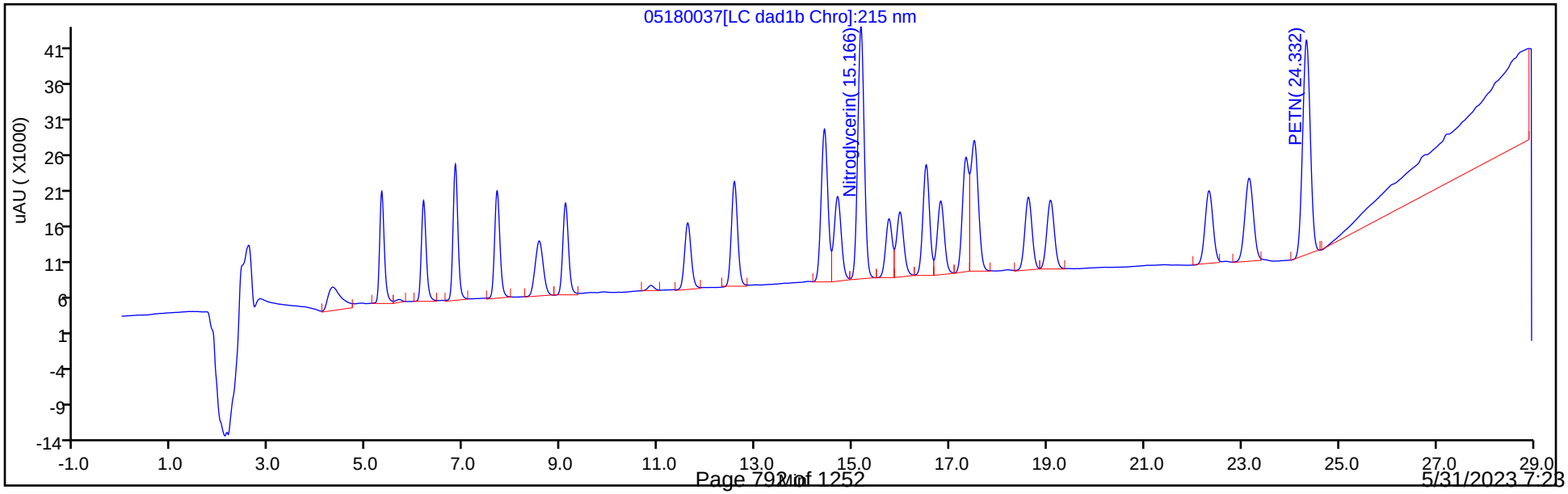
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Injection Date:	19-May-2023 11:02:08	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	37
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

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



5/31/2023 7:28 AM

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Lab Sample ID: ICV 280-599427/19 Calibration Date: 01/17/2023 03:40

Instrument ID: CHHPLC_X3 Calib Start Date: 01/17/2023 00:33

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/17/2023 03:16

Lab File ID: 01160047.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		224434		485	500	-3.0	20.0
2,4-diamino-6-nitrotoluene	Ave	146472	141938		485	500	-3.1	20.0
3,5-Dinitroaniline	Lin2		235360		481	500	-3.8	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Lab Sample ID: ICV 280-599427/19 Calibration Date: 01/17/2023 03:40

Instrument ID: CHHPLC_X3 Calib Start Date: 01/17/2023 00:33

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/17/2023 03:16

Lab File ID: 01160047.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	6.45	6.31	6.61
2,4-diamino-6-nitrotoluene	6.63	6.62	6.92
3,5-Dinitroaniline	9.80	9.65	9.95

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160047.D
Lims ID: ICV ADD
Client ID:
Sample Type: ICV
Inject. Date: 17-Jan-2023 03:40:08 ALS Bottle#: 50 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICVADD
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist:

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jan-2023 12:54:36 Calib Date: 17-Jan-2023 03:16:44
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160046.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: LV5D Date: 17-Jan-2023 12:32:06

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	6.454	6.455	-0.001	112217	0.5000	0.4848	M
5 2,4-diamino-6-nitrotoluene	1	6.634	6.769	-0.135	70969	0.5000	0.4845	M
14 3,5-Dinitroaniline	1	9.801	9.800	0.001	117680	0.5000	0.4811	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330DiaminLCS_00052 Amount Added: 50.00 Units: uL
3,5-DNA LCS_00042 Amount Added: 50.00 Units: uL

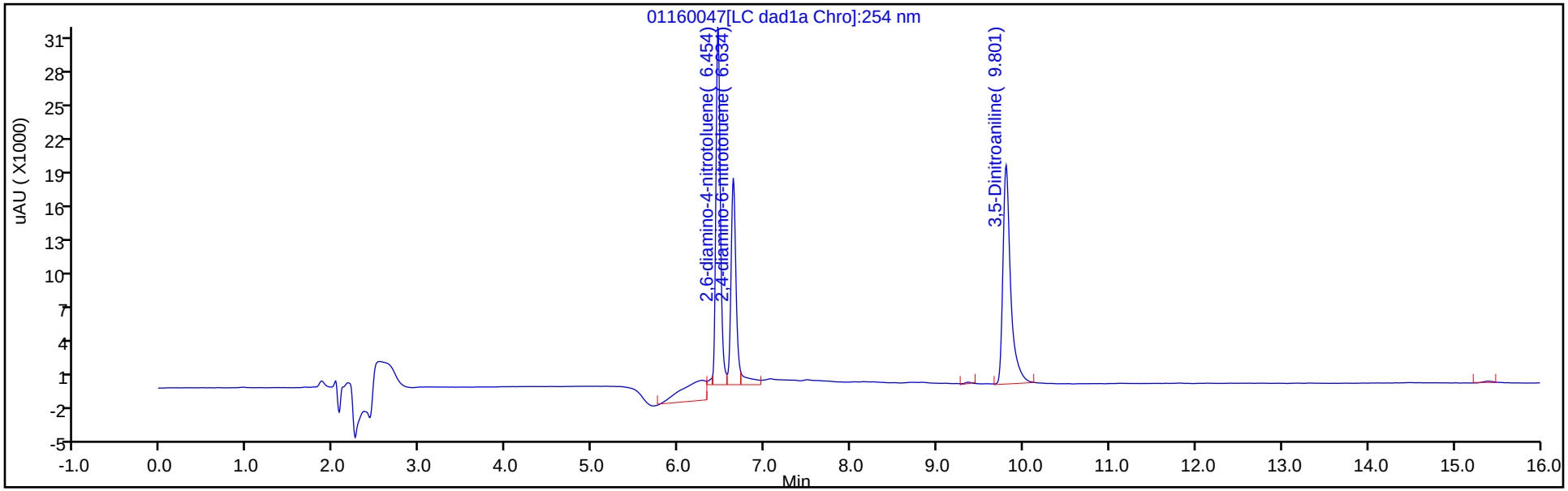
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Eurofins Denver

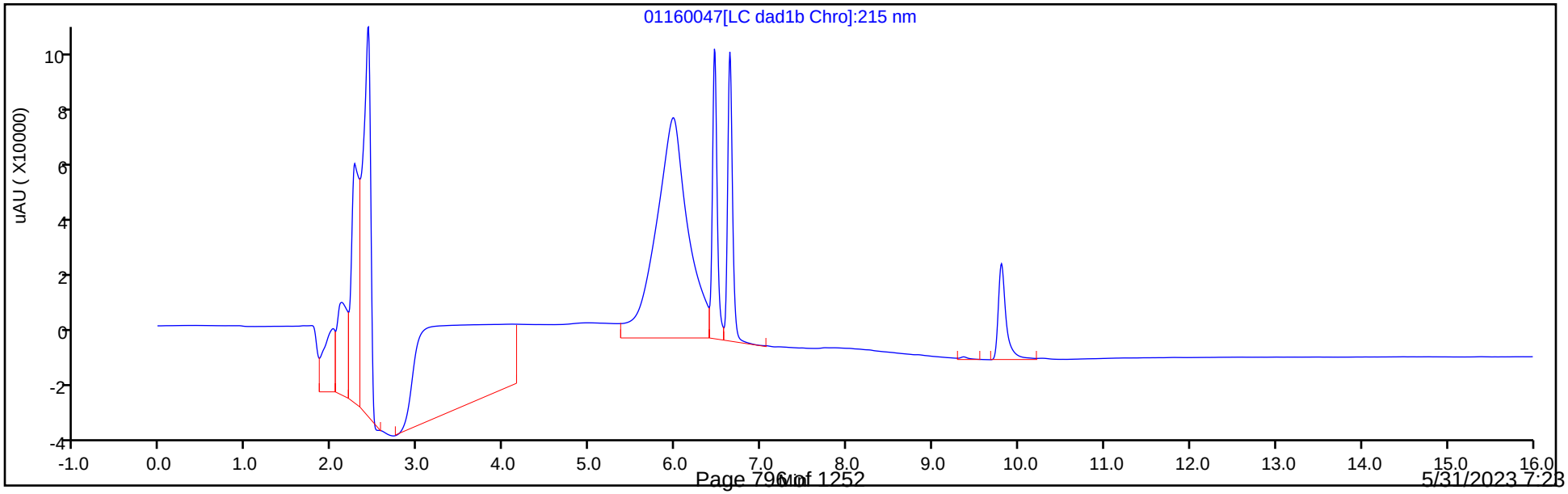
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160047.d

Injection Date:	17-Jan-2023 03:40:08	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	ICV ADD			Worklist Smp#:	19
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	50
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

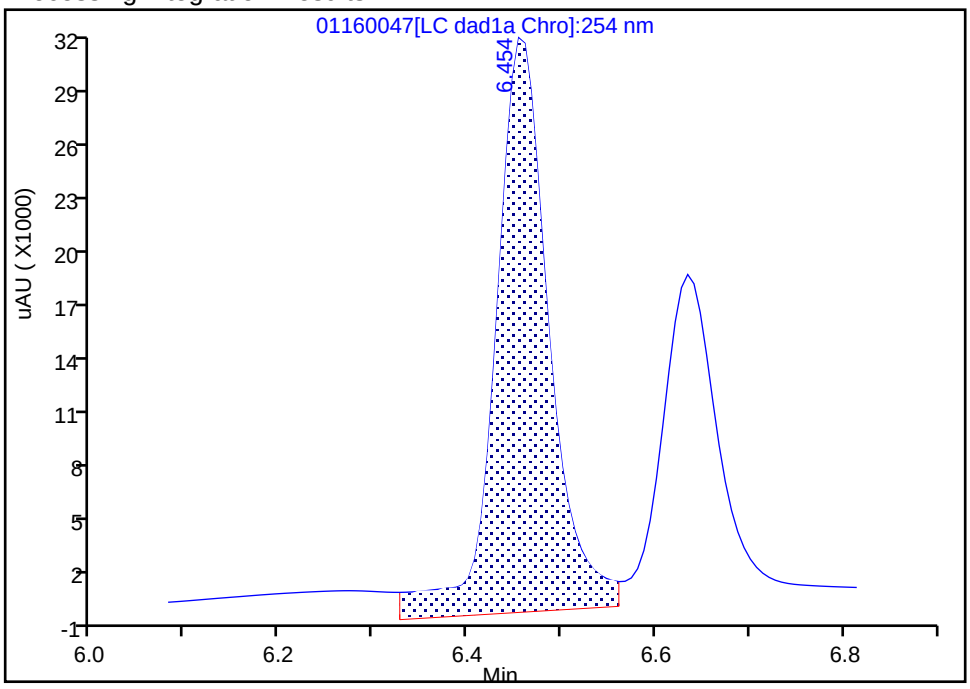
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160047.d				
Injection Date:	17-Jan-2023 03:40:08	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV ADD				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	50	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

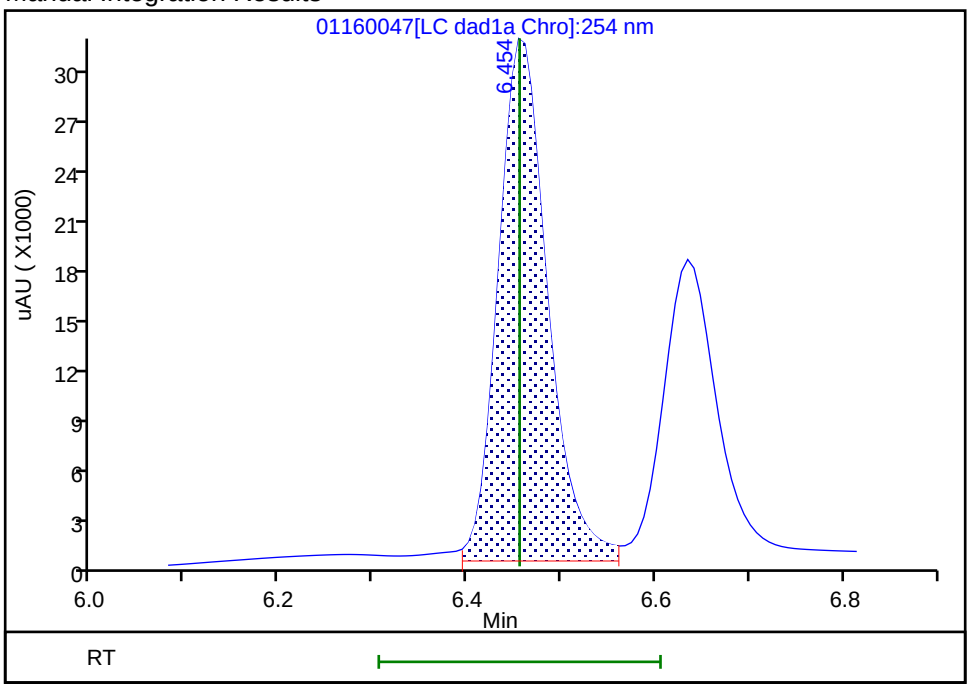
Processing Integration Results

RT: 6.45
Area: 126714
Amount: 0.529427
Amount Units: ug/mL



Manual Integration Results

RT: 6.45
Area: 112217
Amount: 0.484790
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:32:03
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

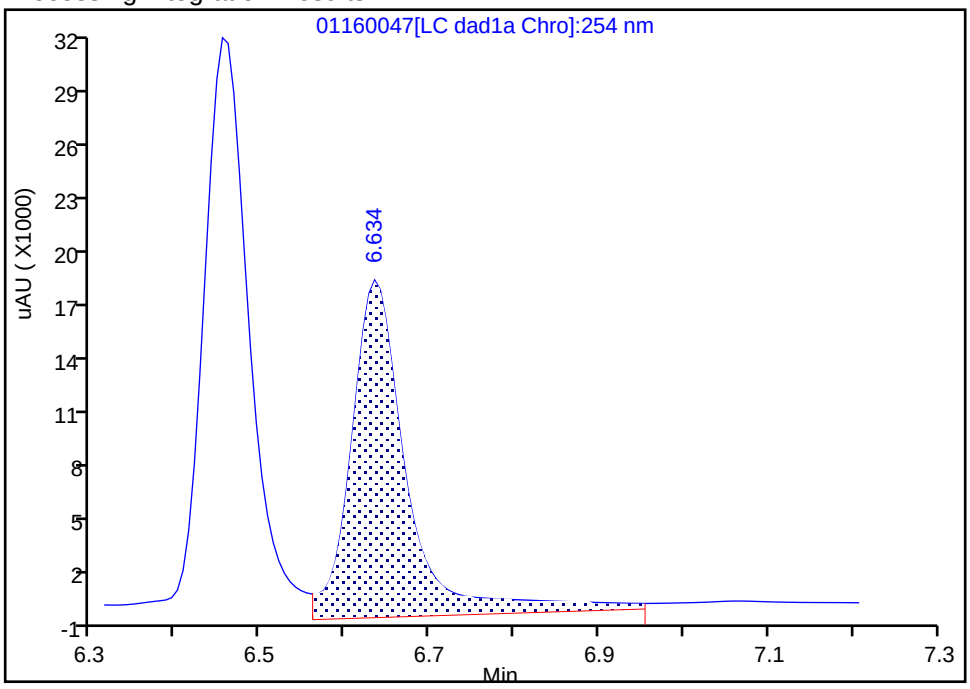
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160047.d				
Injection Date:	17-Jan-2023 03:40:08	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV ADD				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	50	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

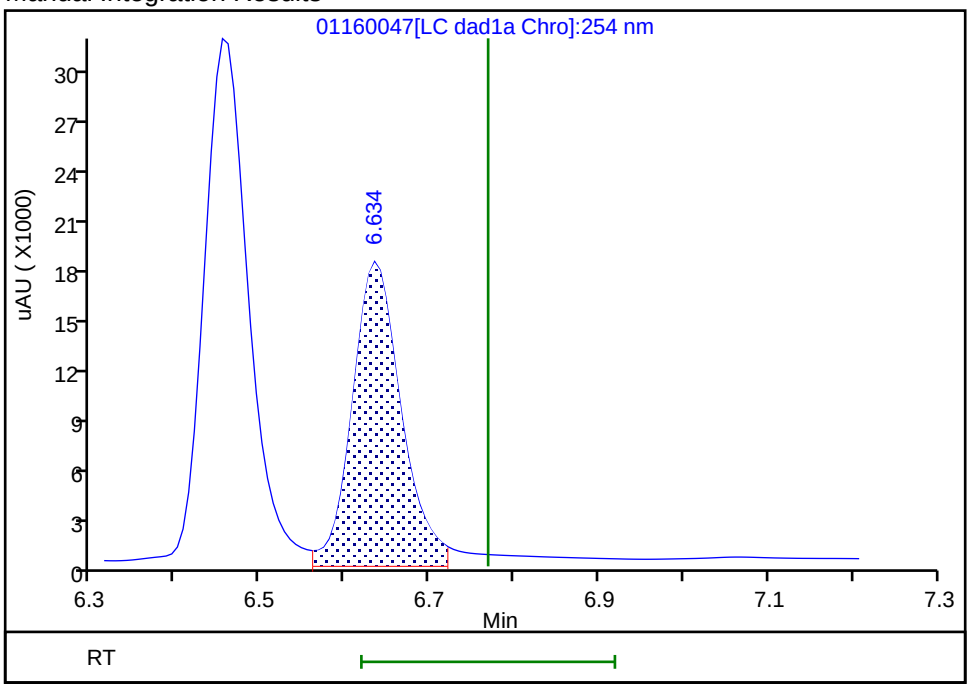
Processing Integration Results

RT: 6.63
Area: 84952
Amount: 0.579987
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 70969
Amount: 0.484522
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:32:04
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Lab Sample ID: ICV 280-599427/28 Calibration Date: 01/17/2023 07:10

Instrument ID: CHHPLC_X3 Calib Start Date: 01/17/2023 04:03

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/17/2023 06:47

Lab File ID: 01160056.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Lin2		196026		505	500	1.1	20.0
DNX	Lin2		142024		497	502	-0.9	20.0
MNX	Lin2		132279		582	585	-0.5	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Lab Sample ID: ICV 280-599427/28 Calibration Date: 01/17/2023 07:10

Instrument ID: CHHPLC_X3 Calib Start Date: 01/17/2023 04:03

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/17/2023 06:47

Lab File ID: 01160056.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.46	6.36	6.56
DNX	6.77	6.67	6.87
MNX	7.18	7.03	7.33

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160056.D
Lims ID: ICV DMT
Client ID:
Sample Type: ICV
Inject. Date: 17-Jan-2023 07:10:03 ALS Bottle#: 59 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICVDMT
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist:

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jan-2023 12:54:36 Calib Date: 17-Jan-2023 06:47:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160055.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: LV5D Date: 17-Jan-2023 12:38:40

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.455	6.455	0.000	98013	0.5000	0.5054	M
6 DNX	1	6.768	6.769	-0.001	71296	0.5020	0.4974	M
7 MNX	1	7.181	7.182	-0.001	77383	0.5850	0.5822	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330_OP_DMT_00016 Amount Added: 50.00 Units: uL

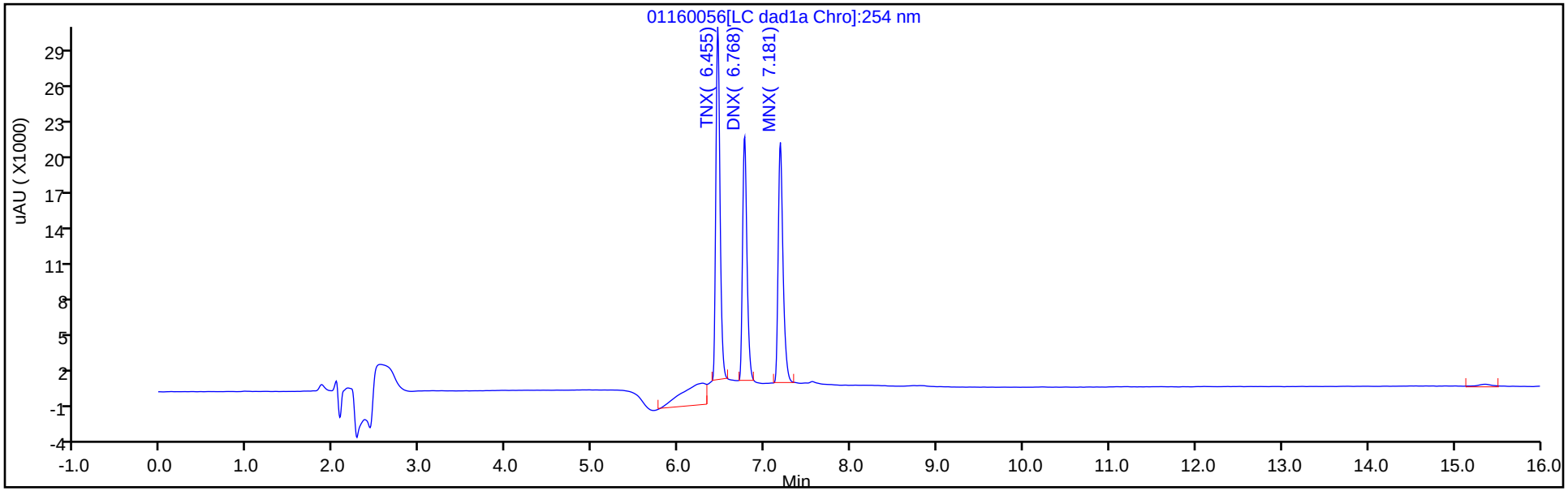
Report Date: 17-Jan-2023 12:54:43 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Denver

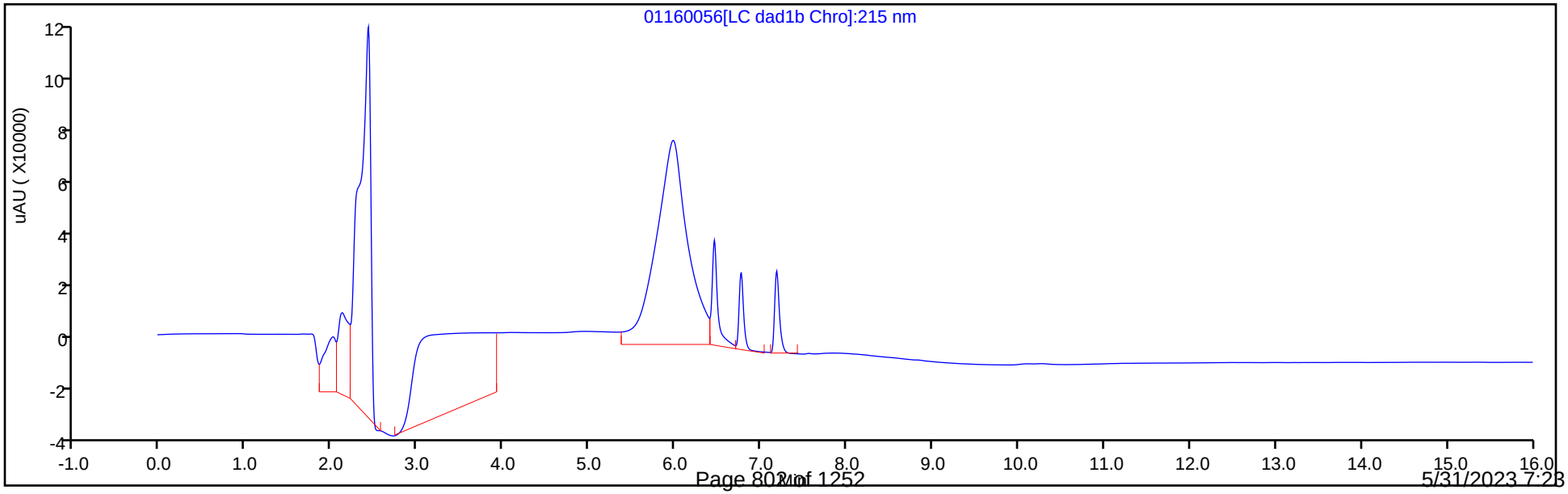
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160056.d

Injection Date:	17-Jan-2023 07:10:03	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	ICV DMT			Worklist Smp#:	28
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	59
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

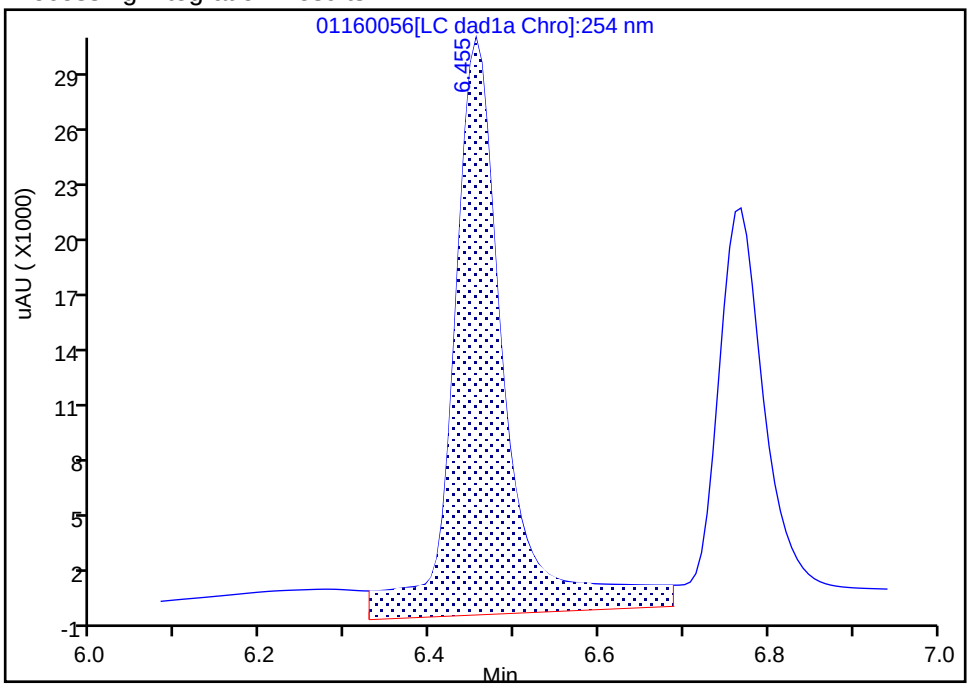
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160056.d				
Injection Date:	17-Jan-2023 07:10:03	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	59	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

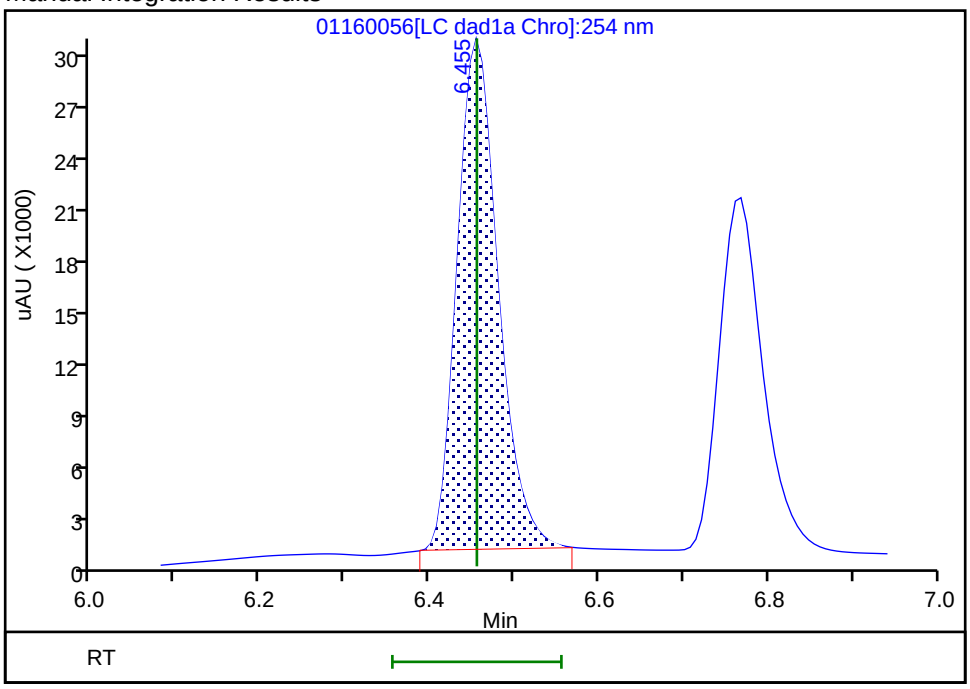
Processing Integration Results

RT: 6.45
Area: 130076
Amount: 0.631679
Amount Units: ug/mL



Manual Integration Results

RT: 6.45
Area: 98013
Amount: 0.505383
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:41:06
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

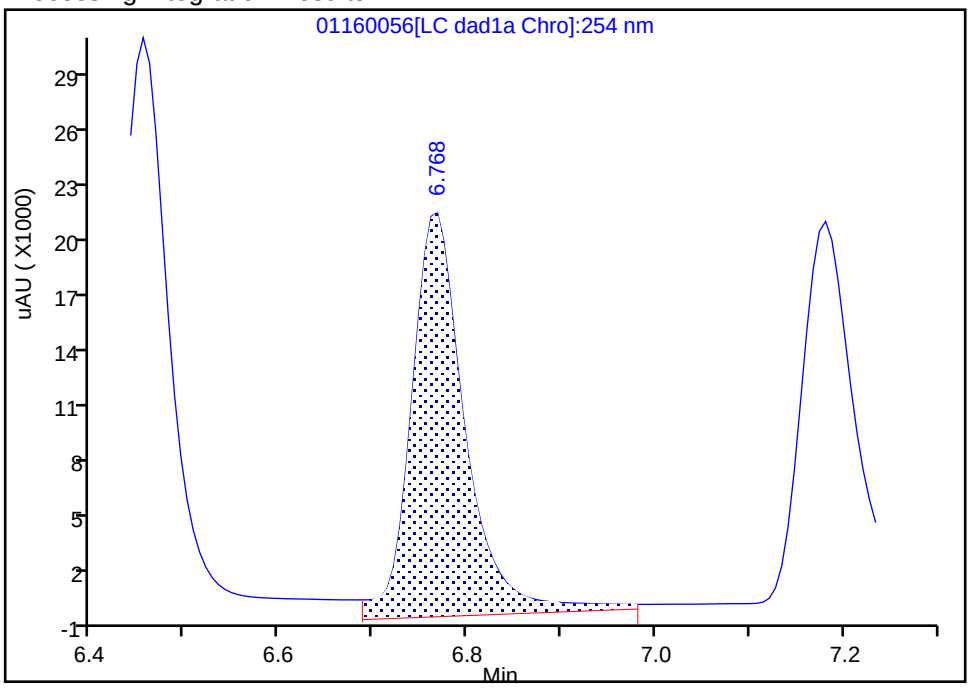
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160056.d				
Injection Date:	17-Jan-2023 07:10:03	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	59	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

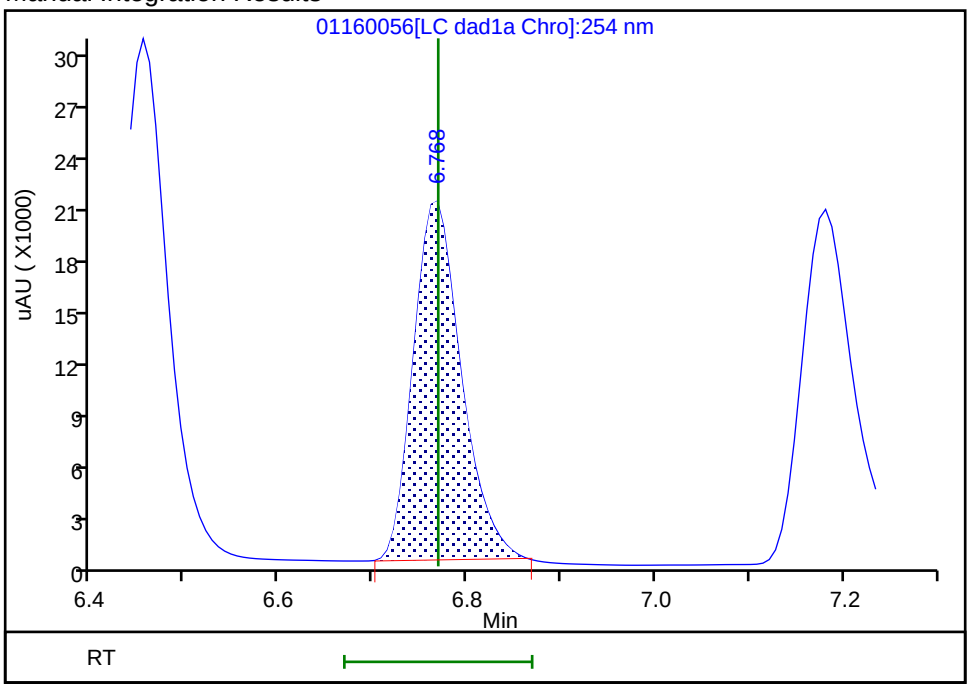
Processing Integration Results

RT: 6.77
Area: 84458
Amount: 0.557312
Amount Units: ug/mL



Manual Integration Results

RT: 6.77
Area: 71296
Amount: 0.497430
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:38:35

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

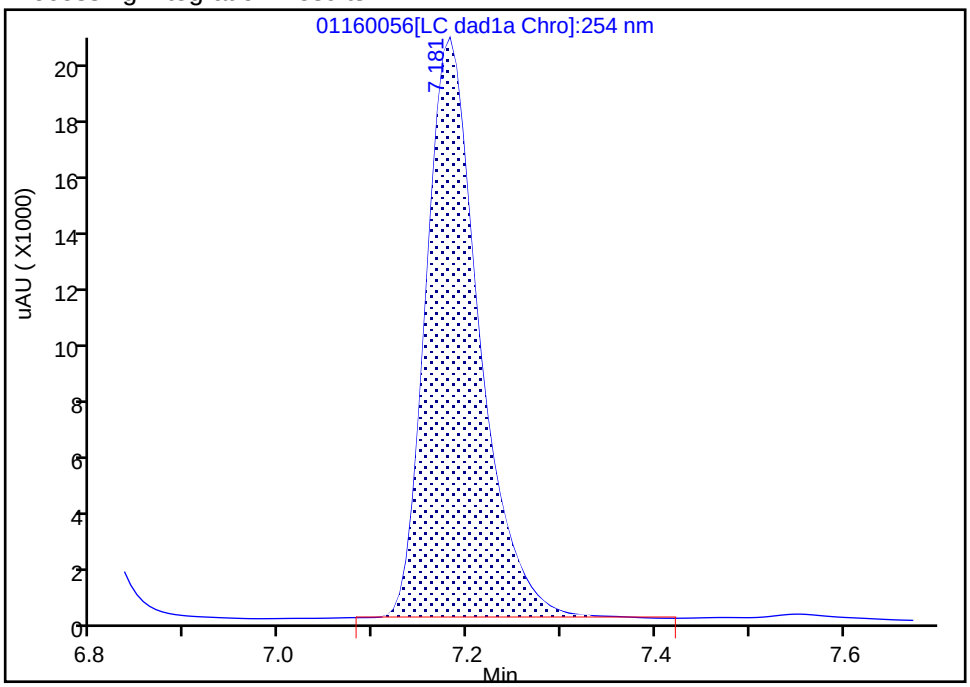
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160056.d
Injection Date: 17-Jan-2023 07:10:03 Instrument ID: CHHPLC_X3
Lims ID: ICV DMT
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 59 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

7 MNX, CAS: 5755-27-1

Signal: 1

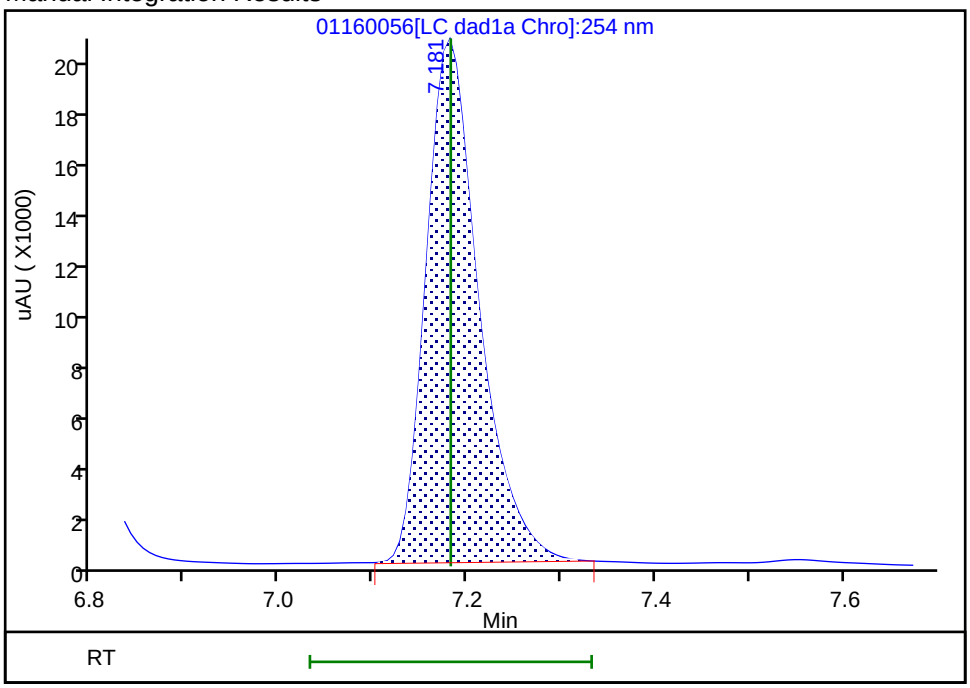
Processing Integration Results

RT: 7.18
Area: 78282
Amount: 0.556351
Amount Units: ug/mL



Manual Integration Results

RT: 7.18
Area: 77383
Amount: 0.582205
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:38:38
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Lab Sample ID: ICV 280-601664/20 Calibration Date: 02/08/2023 19:05

Instrument ID: CHHPLC_X3 Calib Start Date: 02/08/2023 15:38

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 02/08/2023 18:42

Lab File ID: 02080020.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	93528	88148		471	500	-5.8	20.0
RDX	Ave	106380	105642		497	500	-0.7	20.0
Picric acid	Ave	75830	83408		550	500	10.0	20.0
1,3,5-Trinitrobenzene	Ave	217147	243558		561	500	12.2	20.0
1,3-Dinitrobenzene	Ave	294397	317476		539	500	7.8	20.0
Nitrobenzene	Ave	191245	205682		538	500	7.5	20.0
3,5-Dinitroaniline	Lin2		223846		489	500	-2.2	20.0
Tetryl	Ave	164121	182414		556	500	11.1	20.0
Nitroglycerin	Ave	64070	67923		5300	5000	6.0	20.0
2,4,6-Trinitrotoluene	Ave	211040	213428		506	500	1.1	20.0
4-Amino-2,6-dinitrotoluene	Ave	154933	158824		513	500	2.5	20.0
2-Amino-4,6-dinitrotoluene	Ave	201410	204888		509	500	1.7	20.0
2,6-Dinitrotoluene	Ave	142745	147024		515	500	3.0	20.0
2,4-Dinitrotoluene	Ave	296667	301684		508	500	1.7	20.0
2-Nitrotoluene	Ave	127896	128960		504	500	0.8	20.0
4-Nitrotoluene	Ave	111880	111646		499	500	-0.2	20.0
3-Nitrotoluene	Ave	140492	138998		495	500	-1.1	20.0
PETN	Ave	68845	76520		5560	5000	11.1	20.0
1,2-Dinitrobenzene	Ave	126309	125412		496	500	-0.7	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Lab Sample ID: ICV 280-601664/20 Calibration Date: 02/08/2023 19:05

Instrument ID: CHHPLC_X3 Calib Start Date: 02/08/2023 15:38

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 02/08/2023 18:42

Lab File ID: 02080020.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.55	6.39	6.69
RDX	7.56	7.41	7.71
Picric acid	8.02	7.89	8.19
1,3,5-Trinitrobenzene	8.65	8.49	8.79
1,3-Dinitrobenzene	9.26	9.11	9.41
Nitrobenzene	9.64	9.48	9.78
3,5-Dinitroaniline	9.84	9.68	9.98
Tetryl	9.99	9.83	10.13
Nitroglycerin	10.46	10.29	10.59
2,4,6-Trinitrotoluene	10.88	10.76	10.96
4-Amino-2,6-dinitrotoluene	11.05	10.93	11.13
2-Amino-4,6-dinitrotoluene	11.30	11.18	11.38
2,6-Dinitrotoluene	11.48	11.35	11.55
2,4-Dinitrotoluene	11.64	11.52	11.72
2-Nitrotoluene	12.46	12.29	12.59
4-Nitrotoluene	12.88	12.69	12.99
3-Nitrotoluene	13.44	13.26	13.56
PETN	14.60	14.40	14.70
1,2-Dinitrobenzene	8.52	8.37	8.67

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080020.D
Lims ID: ICV INT
Client ID:
Sample Type: ICV
Inject. Date: 08-Feb-2023 19:05:10 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV INT
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist:

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Feb-2023 13:03:49 Calib Date: 08-Feb-2023 18:42:13
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 08-Feb-2023 19:31:36

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.549	6.544	0.005	44074	0.5000	0.4712	M
8 RDX	1	7.563	7.564	-0.001	52821	0.5000	0.4965	M
9 2,4,6-Trinitrophenol	1	8.023	8.044	-0.021	41704	0.5000	0.5500	
$ 10 1,2-Dinitrobenzene	1	8.523	8.517	0.006	62706	0.5000	0.4965	
11 1,3,5-Trinitrobenzene	1	8.649	8.644	0.005	121779	0.5000	0.5608	
12 1,3-Dinitrobenzene	1	9.263	9.257	0.006	158738	0.5000	0.5392	
13 Nitrobenzene	1	9.636	9.631	0.005	102841	0.5000	0.5377	
14 3,5-Dinitroaniline	1	9.843	9.831	0.012	111923	0.5000	0.4890	
15 Tetryl	1	9.989	9.977	0.012	91207	0.5000	0.5557	
16 Nitroglycerin	2	10.456	10.437	0.019	339614	5.00	5.30	
17 2,4,6-Trinitrotoluene	1	10.883	10.864	0.019	106714	0.5000	0.5057	
18 4-Amino-2,6-dinitrotoluene	1	11.049	11.031	0.018	79412	0.5000	0.5126	
19 2-Amino-4,6-dinitrotoluene	1	11.296	11.277	0.019	102444	0.5000	0.5086	
20 2,6-Dinitrotoluene	1	11.476	11.451	0.025	73512	0.5000	0.5150	
21 2,4-Dinitrotoluene	1	11.643	11.617	0.026	150842	0.5000	0.5085	
22 o-Nitrotoluene	1	12.463	12.437	0.026	64480	0.5000	0.5042	
23 p-Nitrotoluene	1	12.876	12.844	0.032	55823	0.5000	0.4990	
24 m-Nitrotoluene	1	13.443	13.411	0.032	69499	0.5000	0.4947	
25 PETN	2	14.596	14.551	0.045	382602	5.00	5.56	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330Surrogate_00138	Amount Added:	50.00	Units: uL
8330 LCS_00121	Amount Added:	50.00	Units: uL
3,5-DNA LCS_00043	Amount Added:	50.00	Units: uL

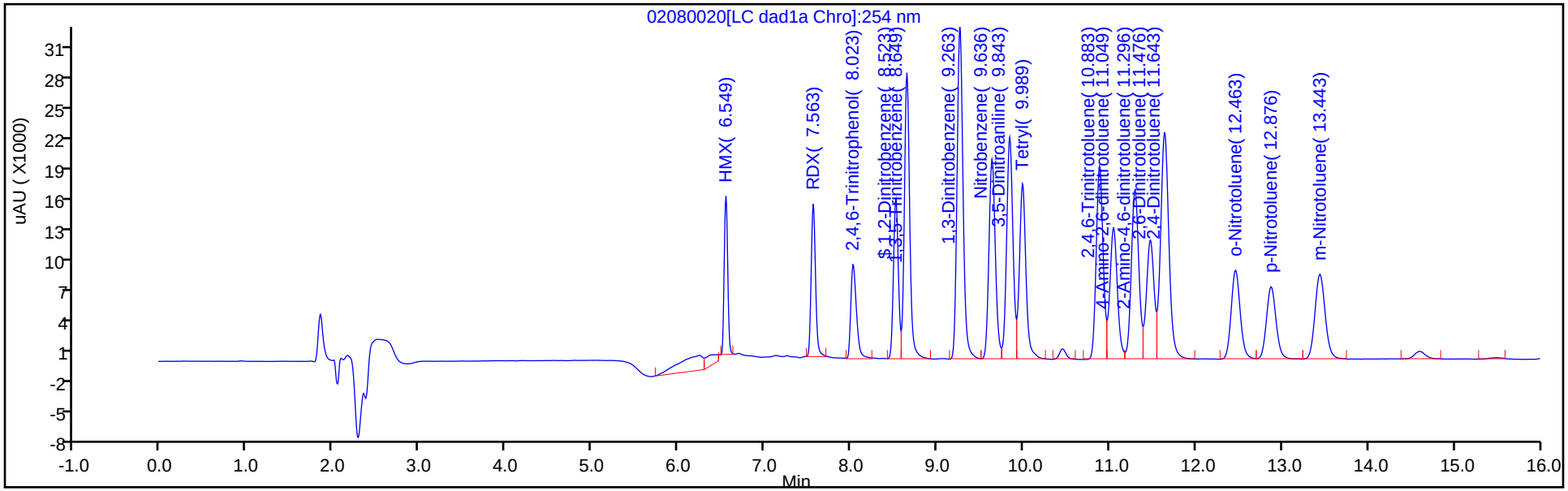
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Eurofins Denver

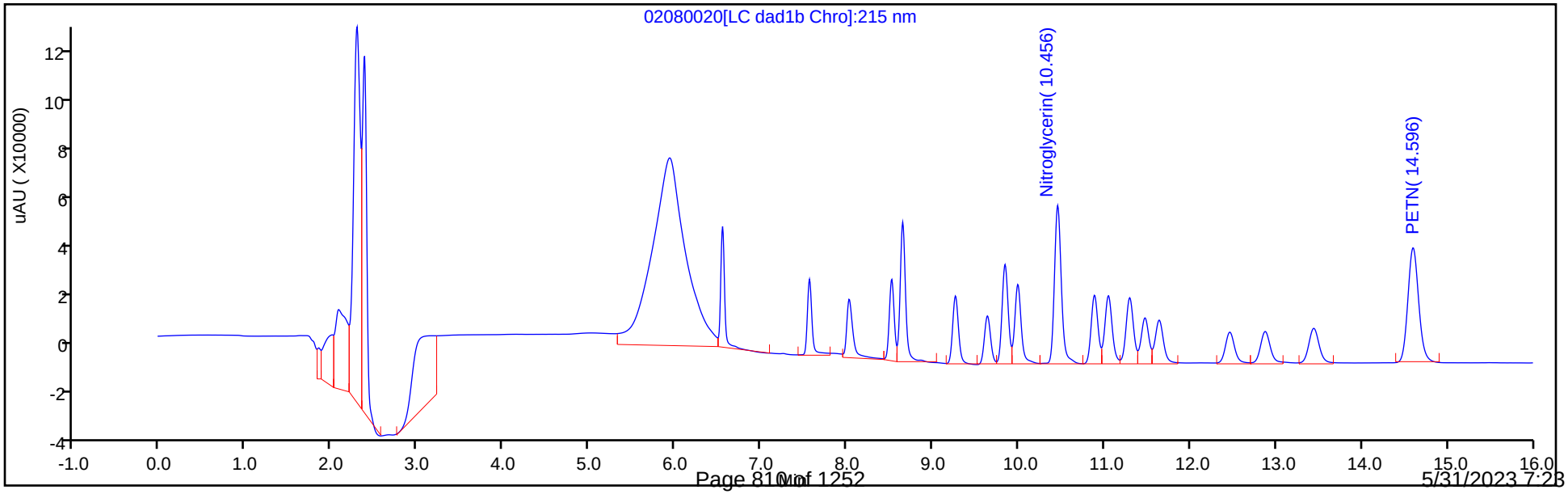
Data File: \\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080020.d

Injection Date:	08-Feb-2023 19:05:10	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	ICV INT			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



5/31/2023 7:28 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

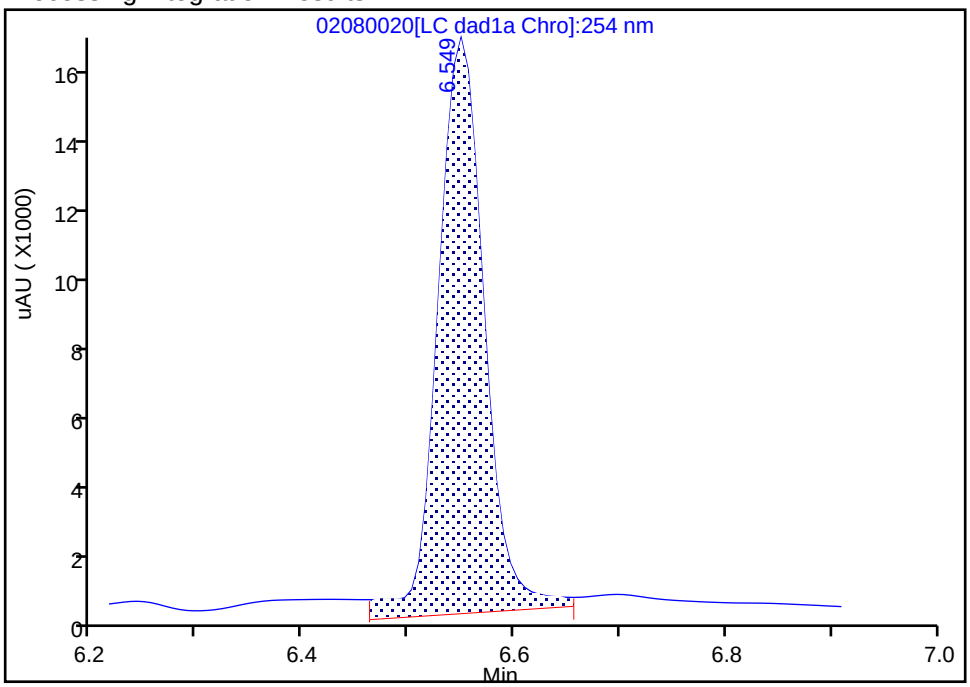
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Injection Date:	08-Feb-2023 19:05:10	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

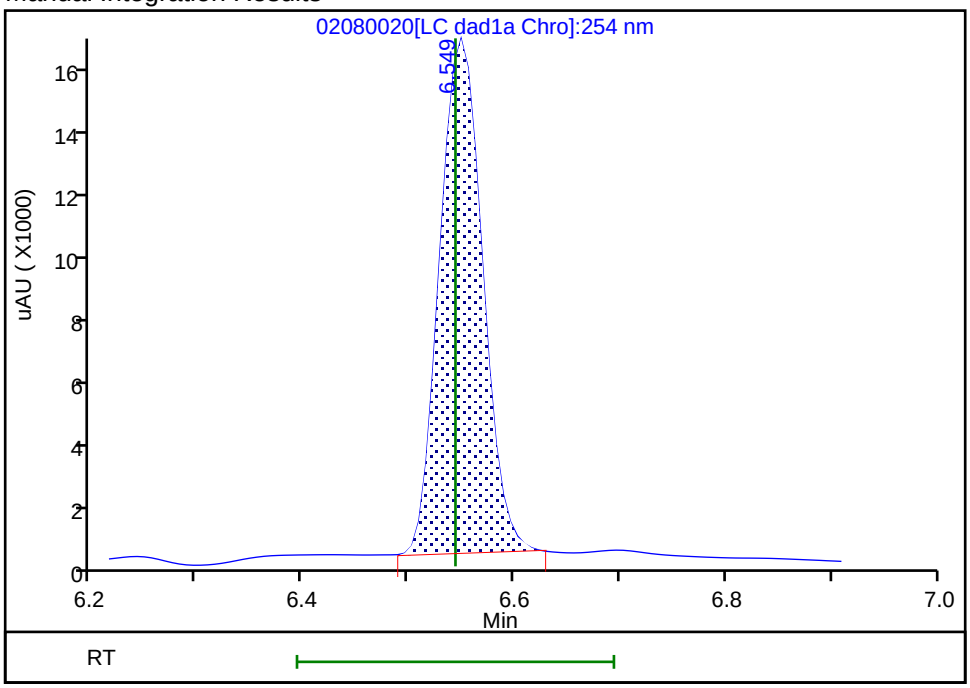
Processing Integration Results

RT: 6.55
Area: 49010
Amount: 0.524013
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 44074
Amount: 0.471238
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:31:27
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

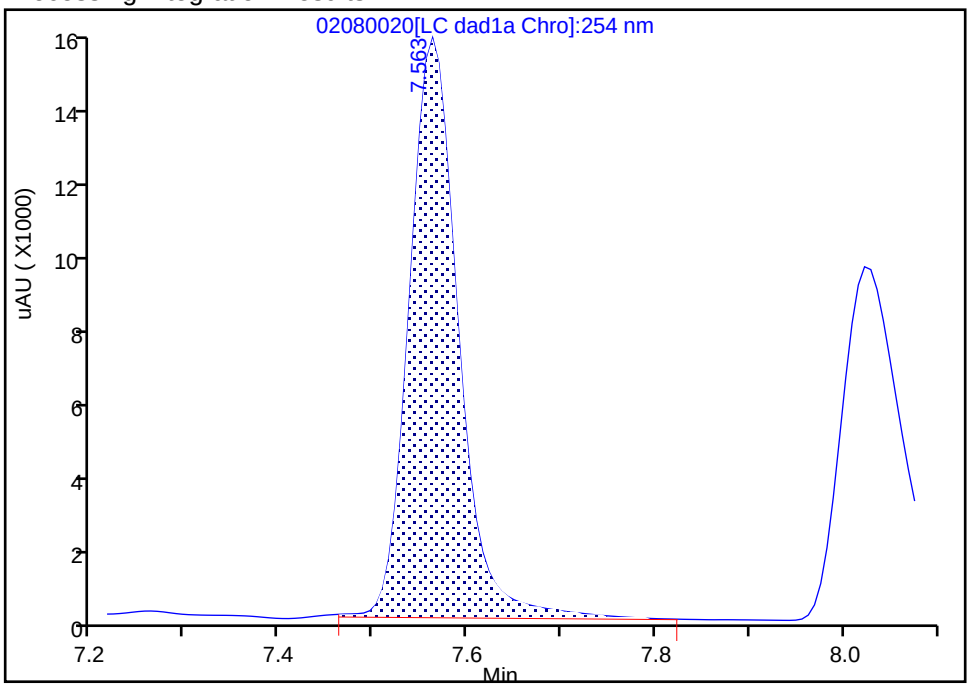
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Injection Date:	08-Feb-2023 19:05:10	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

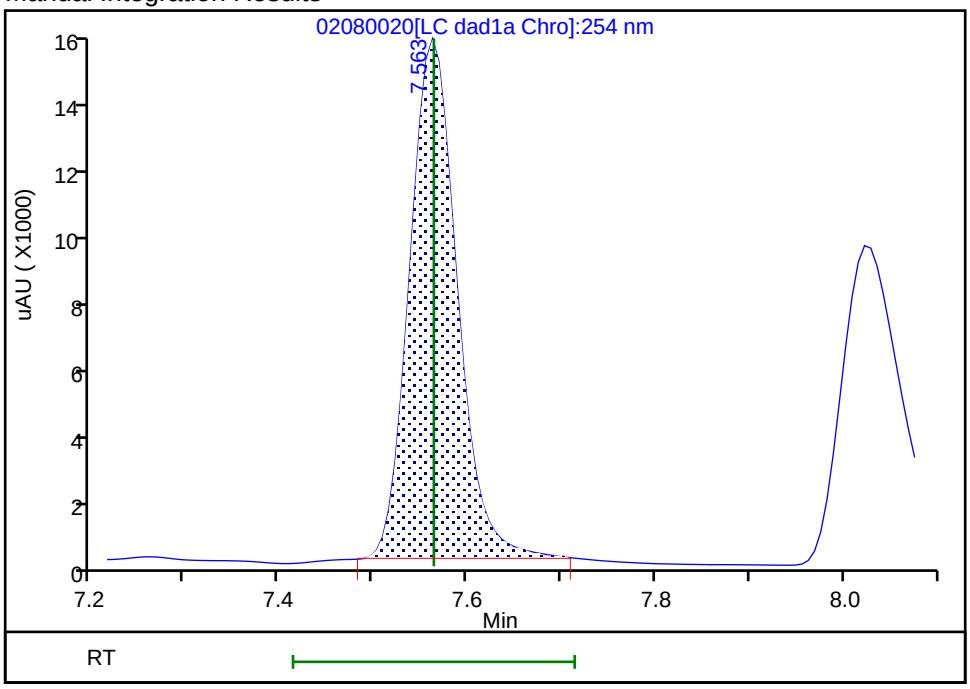
Processing Integration Results

RT: 7.56
Area: 54996
Amount: 0.516978
Amount Units: ug/mL



Manual Integration Results

RT: 7.56
Area: 52821
Amount: 0.496532
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:32:23
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Lab Sample ID: CCV 280-612858/45 Calibration Date: 05/18/2023 08:06

Instrument ID: CHHPLC_X3 Calib Start Date: 02/08/2023 15:38

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 02/08/2023 18:42

Lab File ID: 05170045.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	93528	95924		256	250	2.6	20.0
RDX	Ave	106380	114612		269	250	7.7	20.0
Picric acid	Ave	75830	84444		278	250	11.4	20.0
1,3,5-Trinitrobenzene	Ave	217147	230028		265	250	5.9	20.0
1,3-Dinitrobenzene	Ave	294397	311768		265	250	5.9	20.0
Nitrobenzene	Ave	191245	190648		249	250	-0.3	20.0
3,5-Dinitroaniline	Lin2		240192		263	250	5.1	20.0
Tetryl	Ave	164121	145948		222	250	-11.1	20.0
Nitroglycerin	Ave	64070	68043		2660	2500	6.2	20.0
2,4,6-Trinitrotoluene	Ave	211040	214604		254	250	1.7	20.0
4-Amino-2,6-dinitrotoluene	Ave	154933	160440		259	250	3.6	20.0
2-Amino-4,6-dinitrotoluene	Ave	201410	204816		254	250	1.7	20.0
2,6-Dinitrotoluene	Ave	142745	153076		268	250	7.2	20.0
2,4-Dinitrotoluene	Ave	296667	312140		263	250	5.2	20.0
2-Nitrotoluene	Ave	127896	124388		243	250	-2.7	20.0
4-Nitrotoluene	Ave	111880	108596		243	250	-2.9	20.0
3-Nitrotoluene	Ave	140492	136176		242	250	-3.1	20.0
PETN	Ave	68845	73632		2670	2500	7.0	20.0
1,2-Dinitrobenzene	Ave	126309	137588		272	250	8.9	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Lab Sample ID: CCV 280-612858/45 Calibration Date: 05/18/2023 08:06

Instrument ID: CHHPLC_X3 Calib Start Date: 02/08/2023 15:38

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 02/08/2023 18:42

Lab File ID: 05170045.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.55	6.40	6.70
RDX	7.57	7.43	7.73
Picric acid	7.97	7.83	8.13
1,3,5-Trinitrobenzene	8.65	8.51	8.81
1,3-Dinitrobenzene	9.27	9.14	9.44
Nitrobenzene	9.64	9.51	9.81
3,5-Dinitroaniline	9.88	9.74	10.04
Tetryl	10.01	9.88	10.18
Nitroglycerin	10.46	10.33	10.63
2,4,6-Trinitrotoluene	10.90	10.82	11.02
4-Amino-2,6-dinitrotoluene	11.10	11.02	11.22
2-Amino-4,6-dinitrotoluene	11.36	11.27	11.47
2,6-Dinitrotoluene	11.51	11.43	11.63
2,4-Dinitrotoluene	11.68	11.59	11.79
2-Nitrotoluene	12.50	12.37	12.67
4-Nitrotoluene	12.92	12.79	13.09
3-Nitrotoluene	13.49	13.36	13.66
PETN	14.66	14.54	14.84
1,2-Dinitrobenzene	8.52	8.38	8.68

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230517-121556.b\05170045.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 18-May-2023 08:06:23 ALS Bottle#: 7 Worklist Smp#: 45
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\20230517-121556.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 18-May-2023 12:52:48 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1645

First Level Reviewer: LV5D Date: 18-May-2023 11:56:22

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.429	6.432	-0.003	47130	0.2508	0.2384	M
4 HMX	1	6.549	6.552	-0.003	23981	0.2500	0.2564	M
6 DNX	1	6.756	6.765	-0.009	34972	0.2503	0.2421	M
7 MNX	1	7.182	7.192	-0.010	38256	0.2918	0.2916	
8 RDX	1	7.569	7.579	-0.010	28653	0.2500	0.2693	
9 2,4,6-Trinitrophenol	1	7.969	7.979	-0.010	21111	0.2500	0.2784	
$ 10 1,2-Dinitrobenzene	1	8.522	8.532	-0.010	34397	0.2500	0.2723	
11 1,3,5-Trinitrobenzene	1	8.649	8.659	-0.010	57507	0.2500	0.2648	
12 1,3-Dinitrobenzene	1	9.269	9.285	-0.016	77942	0.2500	0.2648	
13 Nitrobenzene	1	9.642	9.659	-0.017	47662	0.2500	0.2492	
14 3,5-Dinitroaniline	1	9.875	9.892	-0.017	60048	0.2500	0.2627	
15 Tetryl	1	10.009	10.025	-0.016	36487	0.2500	0.2223	
16 Nitroglycerin	2	10.462	10.479	-0.017	170108	2.50	2.66	
17 2,4,6-Trinitrotoluene	1	10.902	10.919	-0.017	53651	0.2500	0.2542	
18 4-Amino-2,6-dinitrotoluene	1	11.102	11.119	-0.017	40110	0.2500	0.2589	
19 2-Amino-4,6-dinitrotoluene	1	11.355	11.372	-0.017	51204	0.2500	0.2542	
20 2,6-Dinitrotoluene	1	11.509	11.525	-0.016	38269	0.2500	0.2681	
21 2,4-Dinitrotoluene	1	11.675	11.692	-0.017	78035	0.2500	0.2630	
22 o-Nitrotoluene	1	12.495	12.519	-0.024	31097	0.2500	0.2431	
23 p-Nitrotoluene	1	12.915	12.939	-0.024	27149	0.2500	0.2427	
24 m-Nitrotoluene	1	13.489	13.512	-0.023	34044	0.2500	0.2423	
25 PETN	2	14.662	14.692	-0.030	184079	2.50	2.67	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00013	Amount Added:	12.50	Units: uL
8330IntermStk_00075	Amount Added:	25.00	Units: uL

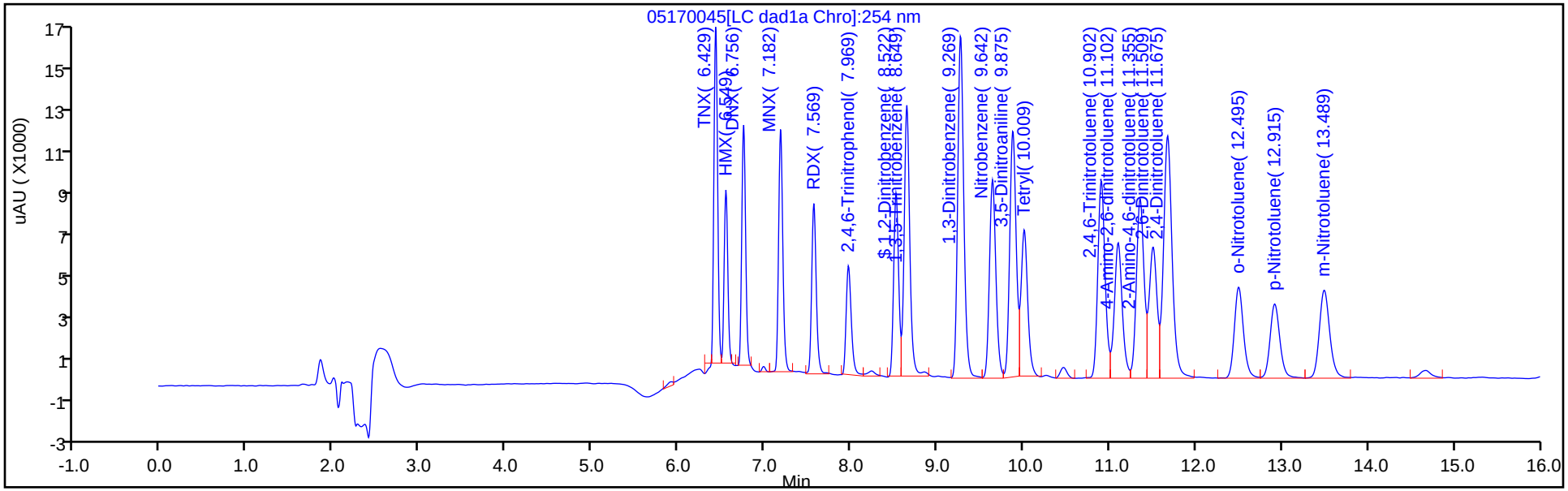
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Eurofins Denver

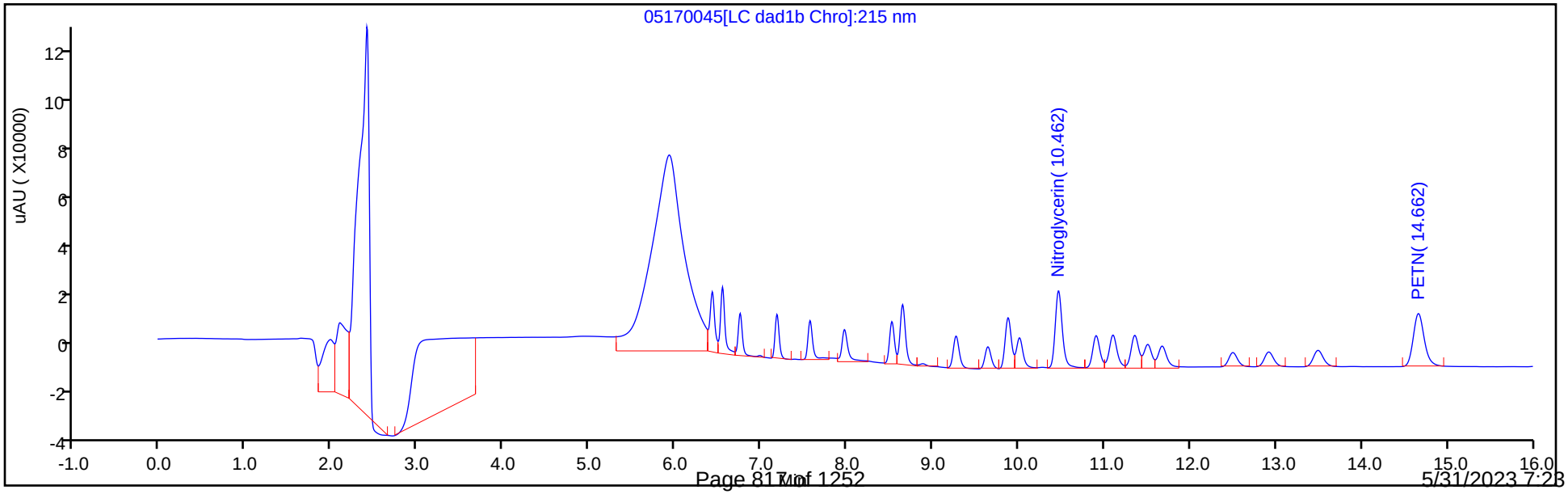
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Injection Date:	18-May-2023 08:06:23	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	45
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

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

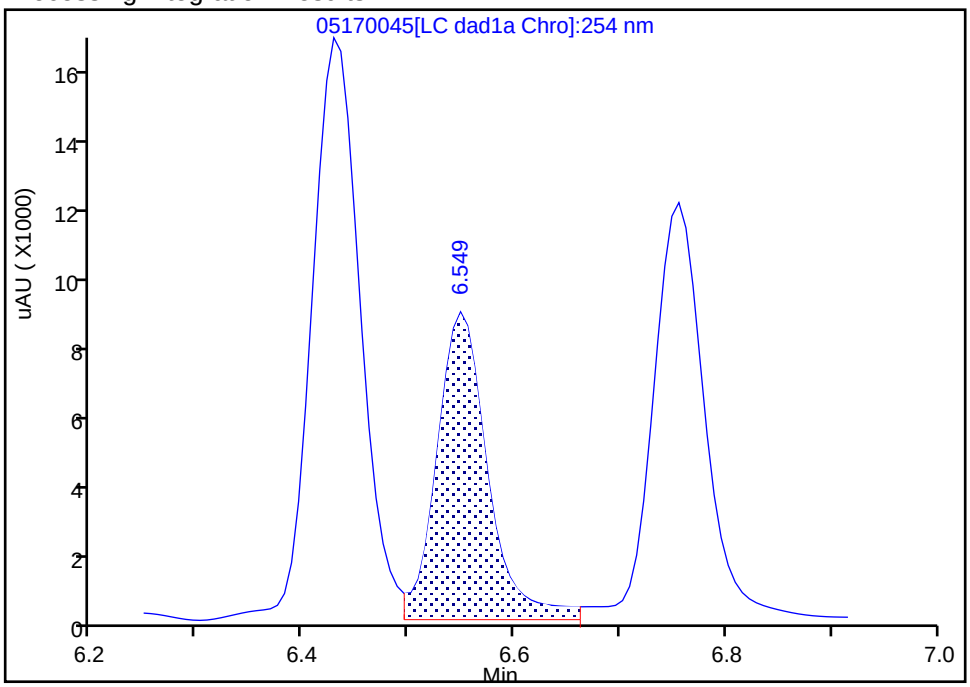
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Injection Date:	18-May-2023 08:06:23	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

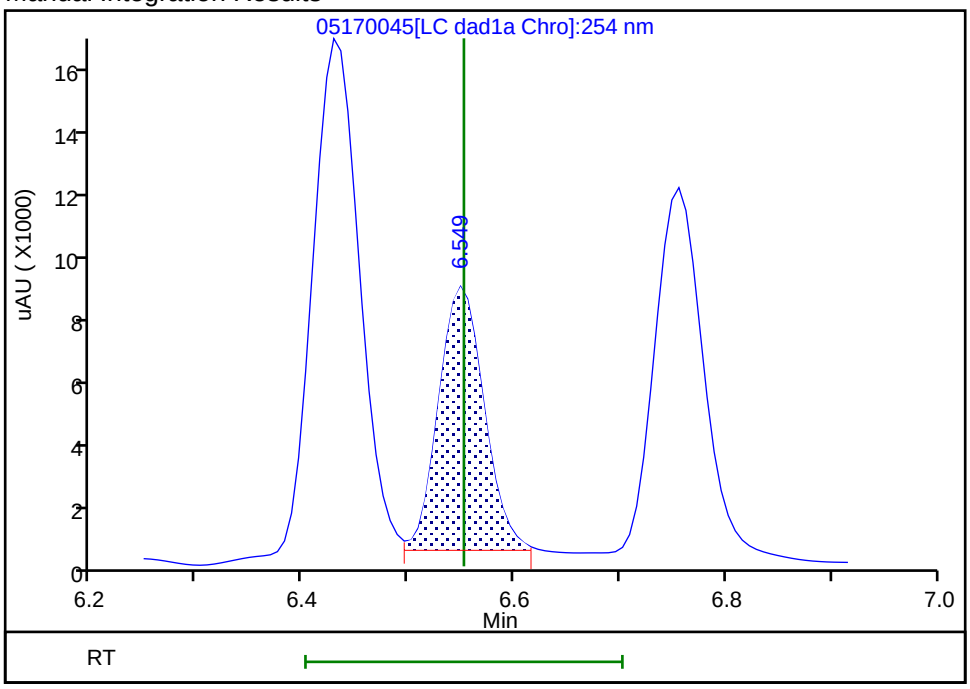
Processing Integration Results

RT: 6.55
Area: 28327
Amount: 0.302871
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 23981
Amount: 0.256404
Amount Units: ug/mL



Reviewer: LV5D, 18-May-2023 11:56:17 -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.: 280-176335-1

SDG No.:

Lab Sample ID: CCV 280-612858/45 Calibration Date: 05/18/2023 08:06

Instrument ID: CHHPLC_X3 Calib Start Date: 02/24/2023 15:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 02/24/2023 17:41

Lab File ID: 05170045.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	197687	187956		238	251	-4.9	20.0
DNX	Ave	144462	139748		242	250	-3.3	20.0
MNX	Ave	131172	131126		292	292	-0.0	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Lab Sample ID: CCV 280-612858/45 Calibration Date: 05/18/2023 08:06

Instrument ID: CHHPLC_X3 Calib Start Date: 02/24/2023 15:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 02/24/2023 17:41

Lab File ID: 05170045.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.43	6.33	6.53
DNX	6.76	6.67	6.87
MNX	7.18	7.04	7.34

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230517-121556.b\05170045.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 18-May-2023 08:06:23 ALS Bottle#: 7 Worklist Smp#: 45
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\20230517-121556.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 18-May-2023 12:52:48 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1645

First Level Reviewer: LV5D Date: 18-May-2023 11:56:22

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.429	6.432	-0.003	47130	0.2508	0.2384	M
4 HMX	1	6.549	6.552	-0.003	23981	0.2500	0.2564	M
6 DNX	1	6.756	6.765	-0.009	34972	0.2503	0.2421	M
7 MNX	1	7.182	7.192	-0.010	38256	0.2918	0.2916	
8 RDX	1	7.569	7.579	-0.010	28653	0.2500	0.2693	
9 2,4,6-Trinitrophenol	1	7.969	7.979	-0.010	21111	0.2500	0.2784	
$ 10 1,2-Dinitrobenzene	1	8.522	8.532	-0.010	34397	0.2500	0.2723	
11 1,3,5-Trinitrobenzene	1	8.649	8.659	-0.010	57507	0.2500	0.2648	
12 1,3-Dinitrobenzene	1	9.269	9.285	-0.016	77942	0.2500	0.2648	
13 Nitrobenzene	1	9.642	9.659	-0.017	47662	0.2500	0.2492	
14 3,5-Dinitroaniline	1	9.875	9.892	-0.017	60048	0.2500	0.2627	
15 Tetryl	1	10.009	10.025	-0.016	36487	0.2500	0.2223	
16 Nitroglycerin	2	10.462	10.479	-0.017	170108	2.50	2.66	
17 2,4,6-Trinitrotoluene	1	10.902	10.919	-0.017	53651	0.2500	0.2542	
18 4-Amino-2,6-dinitrotoluene	1	11.102	11.119	-0.017	40110	0.2500	0.2589	
19 2-Amino-4,6-dinitrotoluene	1	11.355	11.372	-0.017	51204	0.2500	0.2542	
20 2,6-Dinitrotoluene	1	11.509	11.525	-0.016	38269	0.2500	0.2681	
21 2,4-Dinitrotoluene	1	11.675	11.692	-0.017	78035	0.2500	0.2630	
22 o-Nitrotoluene	1	12.495	12.519	-0.024	31097	0.2500	0.2431	
23 p-Nitrotoluene	1	12.915	12.939	-0.024	27149	0.2500	0.2427	
24 m-Nitrotoluene	1	13.489	13.512	-0.023	34044	0.2500	0.2423	
25 PETN	2	14.662	14.692	-0.030	184079	2.50	2.67	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00013	Amount Added:	12.50	Units: uL
8330IntermStk_00075	Amount Added:	25.00	Units: uL

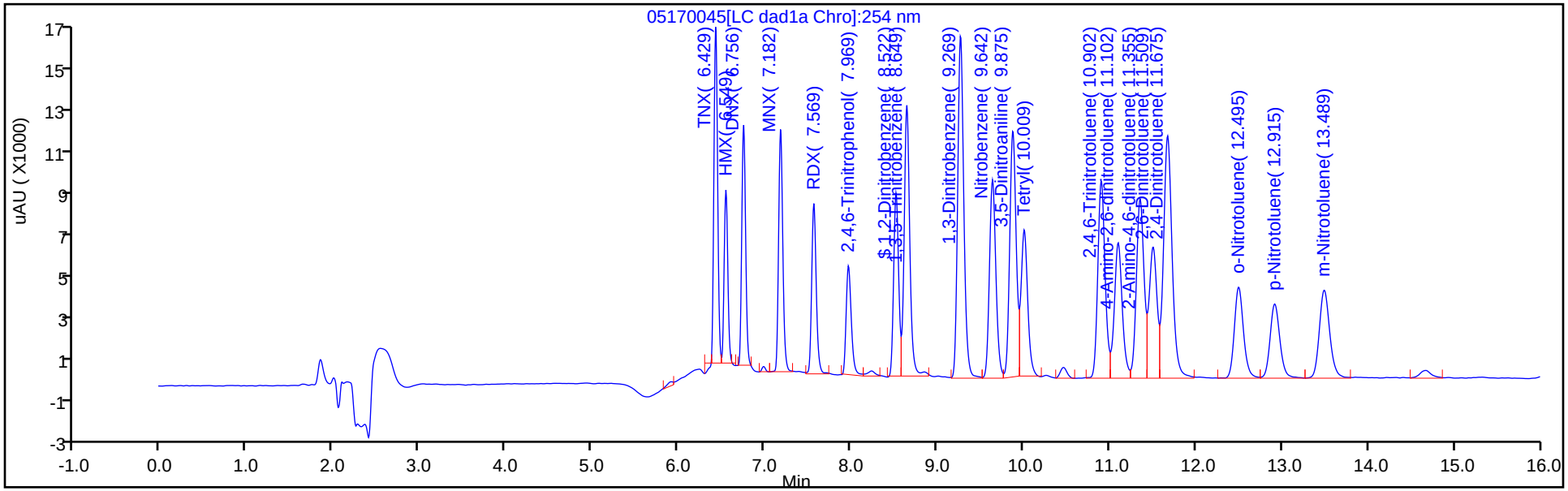
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Eurofins Denver

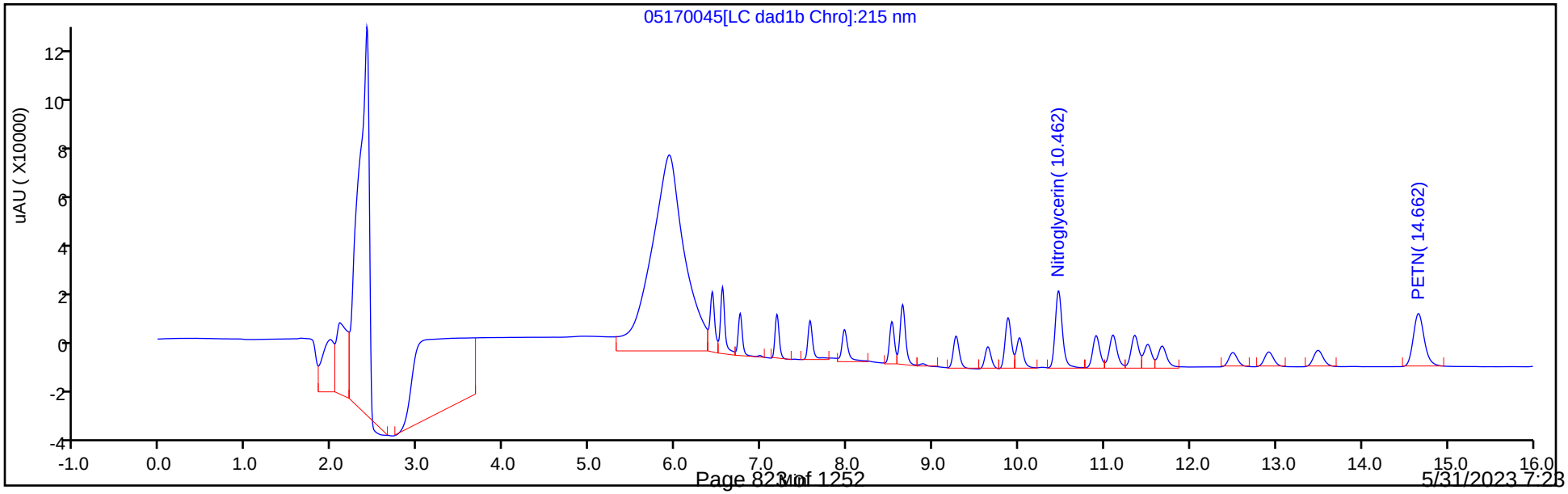
Data File: \\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170045.d

Injection Date:	18-May-2023 08:06:23	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	45
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

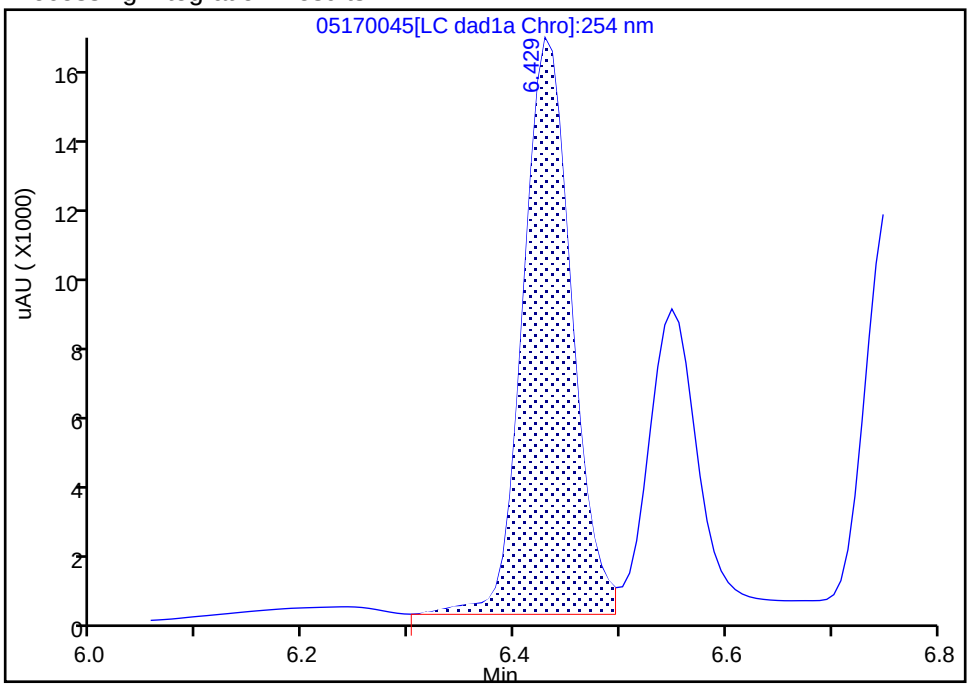
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Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

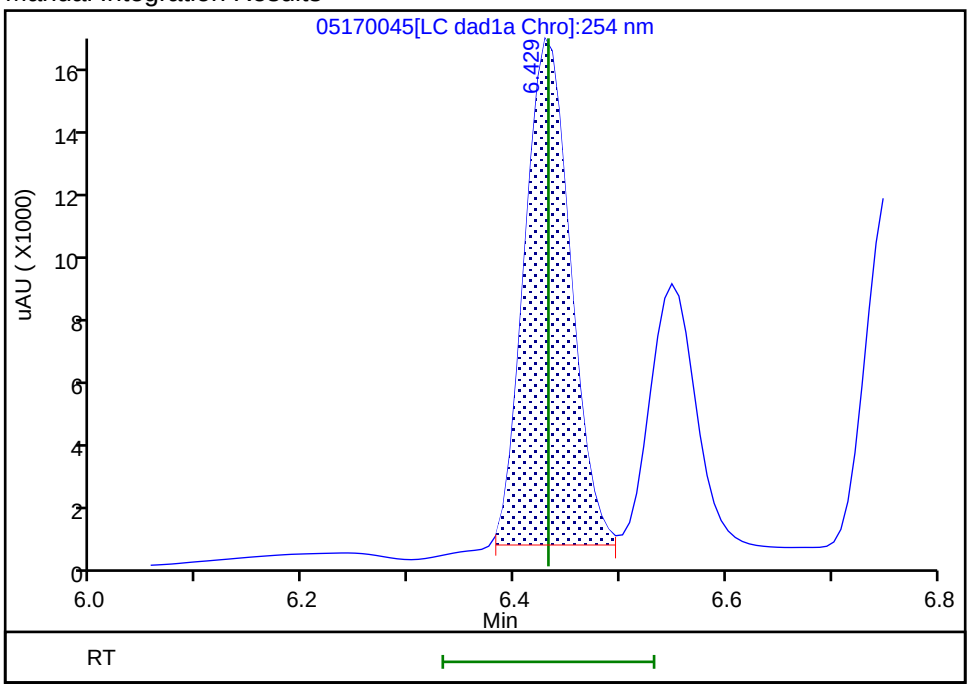
Processing Integration Results

RT: 6.43
Area: 51248
Amount: 0.259238
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 47130
Amount: 0.238407
Amount Units: ug/mL



Reviewer: LV5D, 18-May-2023 11:56:15 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

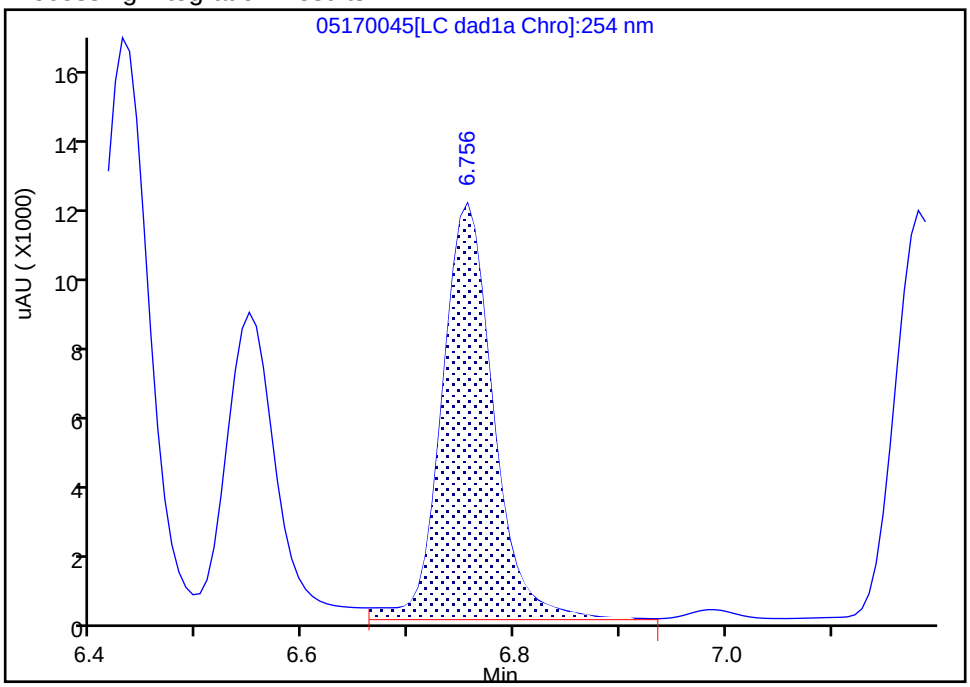
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170045.d				
Injection Date:	18-May-2023 08:06:23	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

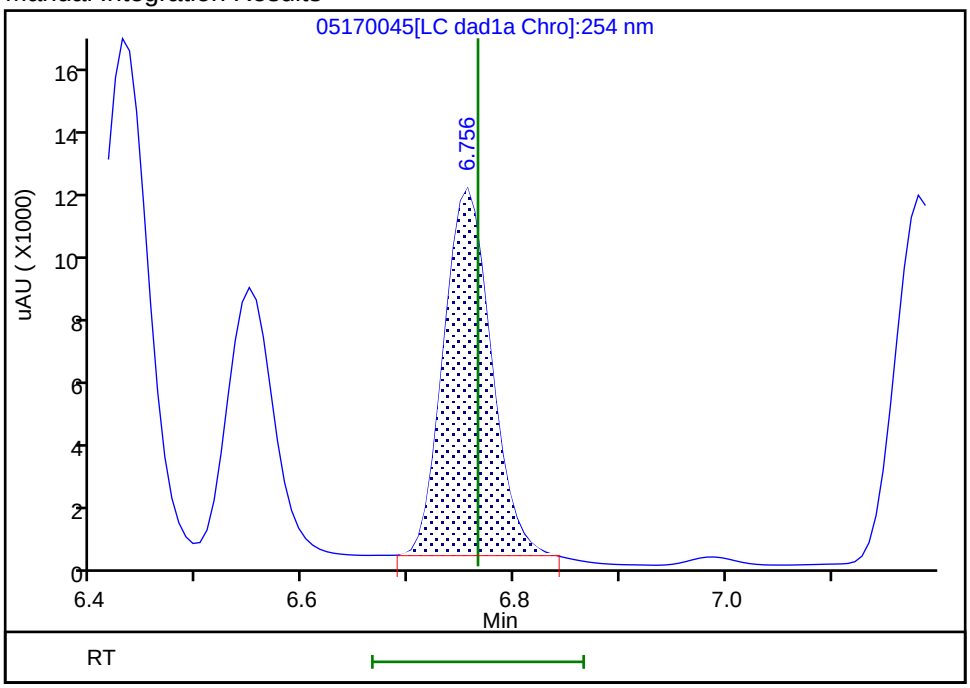
Processing Integration Results

RT: 6.76
Area: 39053
Amount: 0.270333
Amount Units: ug/mL



Manual Integration Results

RT: 6.76
Area: 34972
Amount: 0.242084
Amount Units: ug/mL



Reviewer: LV5D, 18-May-2023 11:56:21 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Lab Sample ID: CCV 280-612858/46 Calibration Date: 05/18/2023 08:29

Instrument ID: CHHPLC_X3 Calib Start Date: 01/17/2023 00:33

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/17/2023 03:16

Lab File ID: 05170046.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		216624		232	250	-7.2	20.0
2,4-diamino-6-nitrotoluene	Ave	146472	132836		227	250	-9.3	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Lab Sample ID: CCV 280-612858/46 Calibration Date: 05/18/2023 08:29

Instrument ID: CHHPLC_X3 Calib Start Date: 01/17/2023 00:33

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/17/2023 03:16

Lab File ID: 05170046.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	6.43	6.28	6.58
2,4-diamino-6-nitrotoluene	6.62	6.47	6.77

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230517-121556.b\05170046.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 18-May-2023 08:29:22 ALS Bottle#: 8 Worklist Smp#: 46
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\20230517-121556.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 18-May-2023 12:52:49 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1645

First Level Reviewer: LV5D Date: 18-May-2023 11:56:29

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	6.425	6.428	-0.003	54156	0.2500	0.2320	M
5 2,4-diamino-6-nitrotoluene	1	6.619	6.615	0.004	33209	0.2500	0.2267	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00037 Amount Added: 12.50 Units: uL

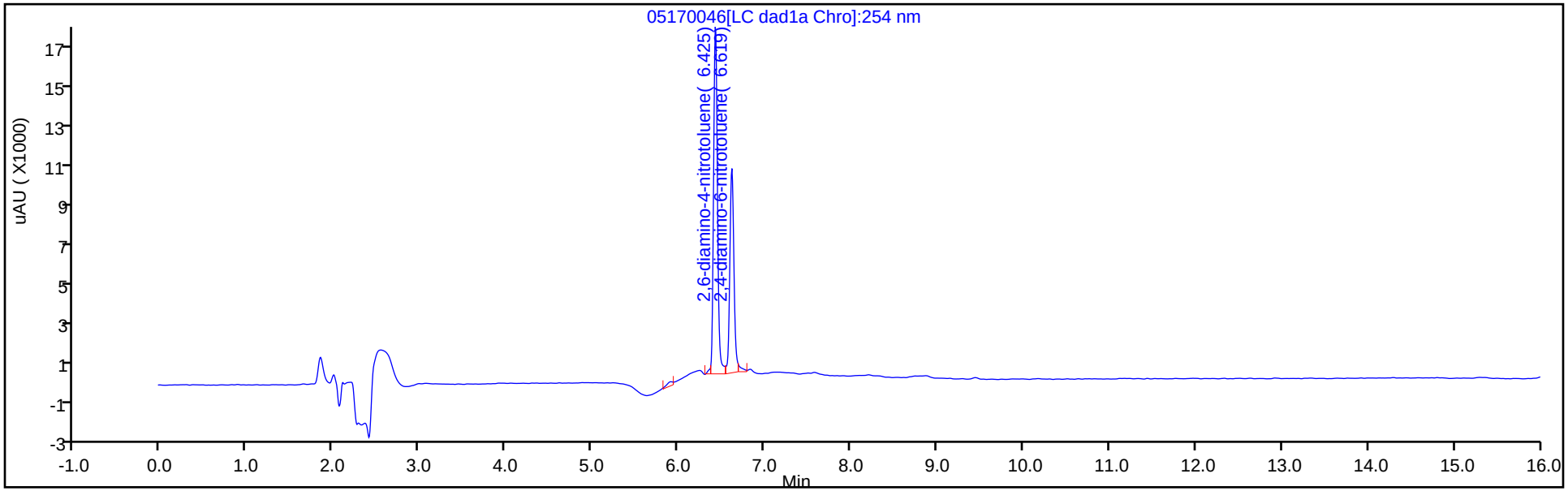
Report Date: 18-May-2023 12:52:50 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

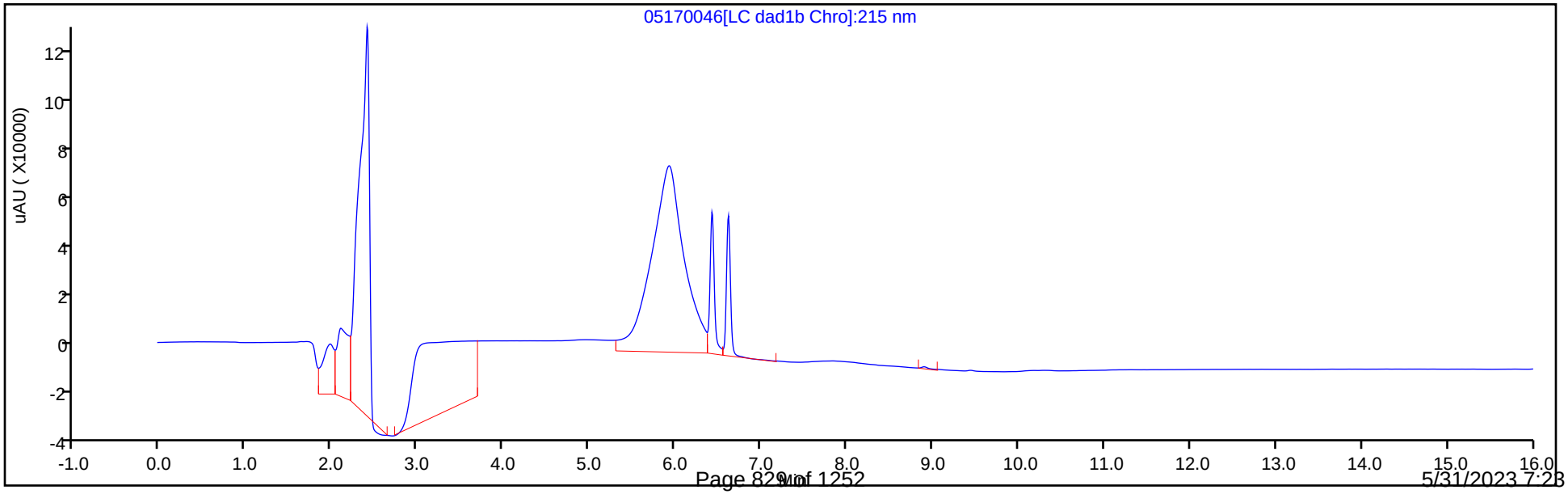
Data File: \\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170046.d

Injection Date:	18-May-2023 08:29:22	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	46
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

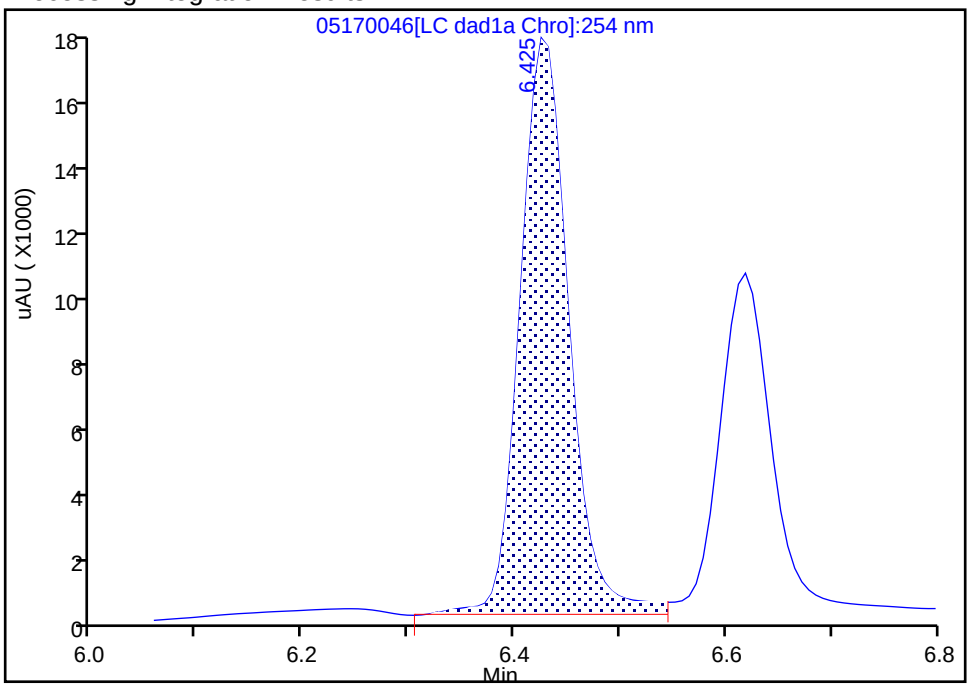
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170046.d				
Injection Date:	18-May-2023 08:29:22	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	46
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit 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

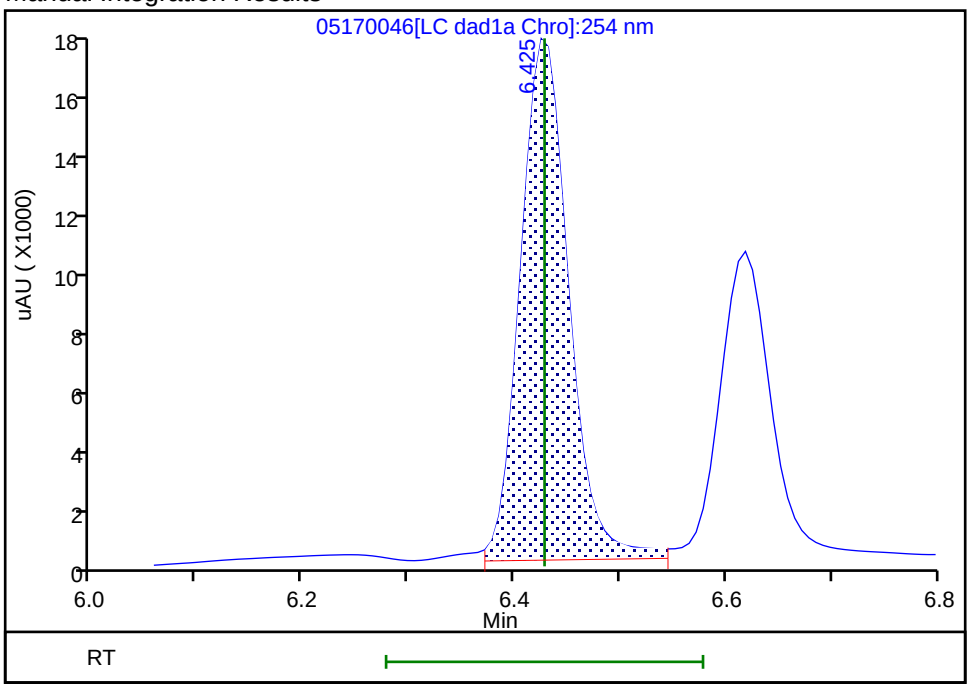
Processing Integration Results

RT: 6.43
Area: 54728
Amount: 0.234504
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 54156
Amount: 0.232013
Amount Units: ug/mL



Reviewer: LV5D, 18-May-2023 11:56:26 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

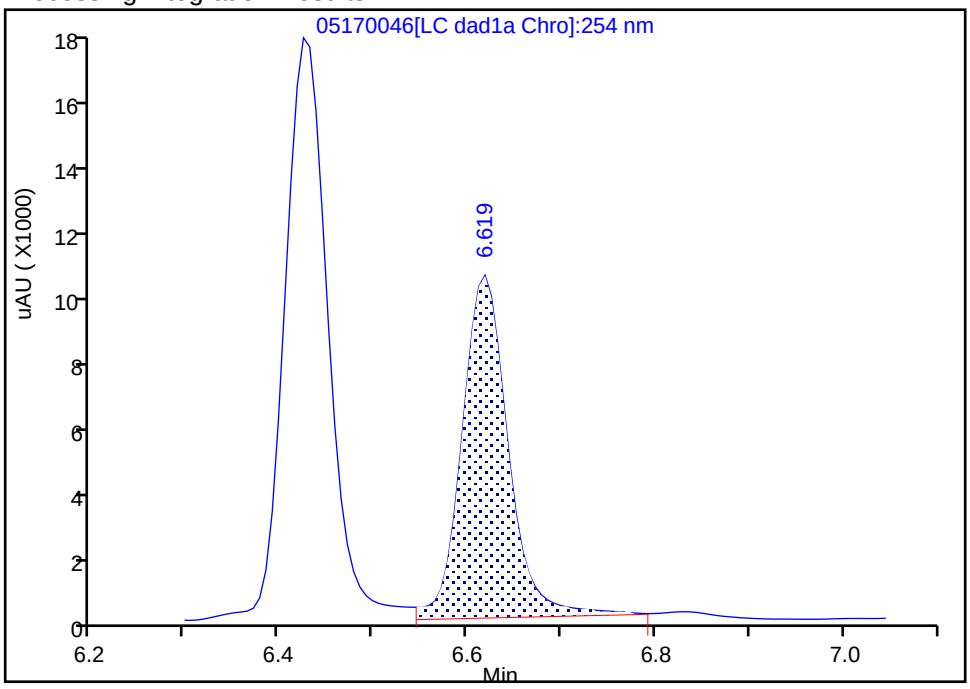
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170046.d				
Injection Date:	18-May-2023 08:29:22	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	46
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit 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

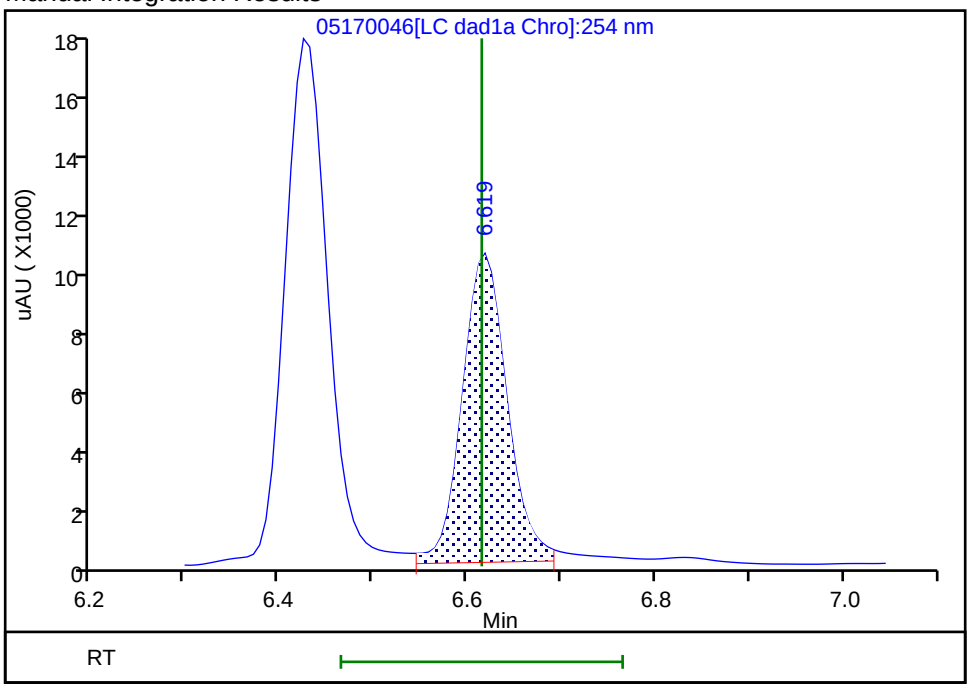
Processing Integration Results

RT: 6.62
Area: 34232
Amount: 0.233710
Amount Units: ug/mL



Manual Integration Results

RT: 6.62
Area: 33209
Amount: 0.226726
Amount Units: ug/mL



Reviewer: LV5D, 18-May-2023 11:56:27 -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.: 280-176335-1

SDG No.:

Lab Sample ID: CCV 280-612858/57 Calibration Date: 05/18/2023 13:27

Instrument ID: CHHPLC_X3 Calib Start Date: 02/08/2023 15:38

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 02/08/2023 18:42

Lab File ID: 05170057.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	93528	97944		262	250	4.7	20.0
RDX	Ave	106380	114440		269	250	7.6	20.0
Picric acid	Ave	75830	85320		281	250	12.5	20.0
1,3,5-Trinitrobenzene	Ave	217147	228940		264	250	5.4	20.0
1,3-Dinitrobenzene	Ave	294397	313520		266	250	6.5	20.0
Nitrobenzene	Ave	191245	190356		249	250	-0.5	20.0
3,5-Dinitroaniline	Lin2		239088		261	250	4.6	20.0
Tetryl	Ave	164121	148280		226	250	-9.7	20.0
Nitroglycerin	Ave	64070	68034		2650	2500	6.2	20.0
2,4,6-Trinitrotoluene	Ave	211040	215052		255	250	1.9	20.0
4-Amino-2,6-dinitrotoluene	Ave	154933	160192		258	250	3.4	20.0
2-Amino-4,6-dinitrotoluene	Ave	201410	206912		257	250	2.7	20.0
2,6-Dinitrotoluene	Ave	142745	152884		268	250	7.1	20.0
2,4-Dinitrotoluene	Ave	296667	311500		262	250	5.0	20.0
2-Nitrotoluene	Ave	127896	122784		240	250	-4.0	20.0
4-Nitrotoluene	Ave	111880	106560		238	250	-4.8	20.0
3-Nitrotoluene	Ave	140492	134744		240	250	-4.1	20.0
PETN	Ave	68845	73763		2680	2500	7.1	20.0
1,2-Dinitrobenzene	Ave	126309	140100		277	250	10.9	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Lab Sample ID: CCV 280-612858/57 Calibration Date: 05/18/2023 13:27

Instrument ID: CHHPLC_X3 Calib Start Date: 02/08/2023 15:38

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 02/08/2023 18:42

Lab File ID: 05170057.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.55	6.40	6.70
RDX	7.58	7.43	7.73
Picric acid	7.98	7.83	8.13
1,3,5-Trinitrobenzene	8.65	8.51	8.81
1,3-Dinitrobenzene	9.28	9.14	9.44
Nitrobenzene	9.65	9.51	9.81
3,5-Dinitroaniline	9.89	9.74	10.04
Tetryl	10.02	9.88	10.18
Nitroglycerin	10.47	10.33	10.63
2,4,6-Trinitrotoluene	10.91	10.82	11.02
4-Amino-2,6-dinitrotoluene	11.11	11.02	11.22
2-Amino-4,6-dinitrotoluene	11.36	11.27	11.47
2,6-Dinitrotoluene	11.51	11.43	11.63
2,4-Dinitrotoluene	11.67	11.59	11.79
2-Nitrotoluene	12.50	12.37	12.67
4-Nitrotoluene	12.92	12.79	13.09
3-Nitrotoluene	13.49	13.36	13.66
PETN	14.65	14.54	14.84
1,2-Dinitrobenzene	8.53	8.38	8.68

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230517-121556.b\05170057.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 18-May-2023 13:27:37 ALS Bottle#: 7 Worklist Smp#: 57
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\20230517-121556.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 18-May-2023 17:39:02 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1645

First Level Reviewer: LV5D Date: 18-May-2023 14:27:39

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.432	6.432	0.000	47400	0.2508	0.2398	M
4 HMX	1	6.552	6.552	0.000	24486	0.2500	0.2618	M
6 DNX	1	6.759	6.765	-0.006	34756	0.2503	0.2406	M
7 MNX	1	7.192	7.192	0.000	38022	0.2918	0.2899	M
8 RDX	1	7.579	7.579	0.000	28610	0.2500	0.2689	
9 2,4,6-Trinitrophenol	1	7.979	7.979	0.000	21330	0.2500	0.2813	
$ 10 1,2-Dinitrobenzene	1	8.532	8.532	0.000	35025	0.2500	0.2773	
11 1,3,5-Trinitrobenzene	1	8.652	8.659	-0.007	57235	0.2500	0.2636	
12 1,3-Dinitrobenzene	1	9.278	9.285	-0.007	78380	0.2500	0.2662	
13 Nitrobenzene	1	9.645	9.659	-0.014	47589	0.2500	0.2488	
14 3,5-Dinitroaniline	1	9.885	9.892	-0.007	59772	0.2500	0.2615	
15 Tetryl	1	10.018	10.025	-0.007	37070	0.2500	0.2259	
16 Nitroglycerin	2	10.472	10.479	-0.007	170086	2.50	2.65	
17 2,4,6-Trinitrotoluene	1	10.905	10.919	-0.014	53763	0.2500	0.2548	
18 4-Amino-2,6-dinitrotoluene	1	11.105	11.119	-0.014	40048	0.2500	0.2585	
19 2-Amino-4,6-dinitrotoluene	1	11.358	11.372	-0.014	51728	0.2500	0.2568	
20 2,6-Dinitrotoluene	1	11.505	11.525	-0.020	38221	0.2500	0.2678	
21 2,4-Dinitrotoluene	1	11.672	11.692	-0.020	77875	0.2500	0.2625	
22 o-Nitrotoluene	1	12.498	12.519	-0.021	30696	0.2500	0.2400	
23 p-Nitrotoluene	1	12.918	12.939	-0.021	26640	0.2500	0.2381	
24 m-Nitrotoluene	1	13.492	13.512	-0.020	33686	0.2500	0.2398	
25 PETN	2	14.652	14.692	-0.040	184407	2.50	2.68	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00013	Amount Added:	12.50	Units: uL
8330IntermStk_00075	Amount Added:	25.00	Units: uL

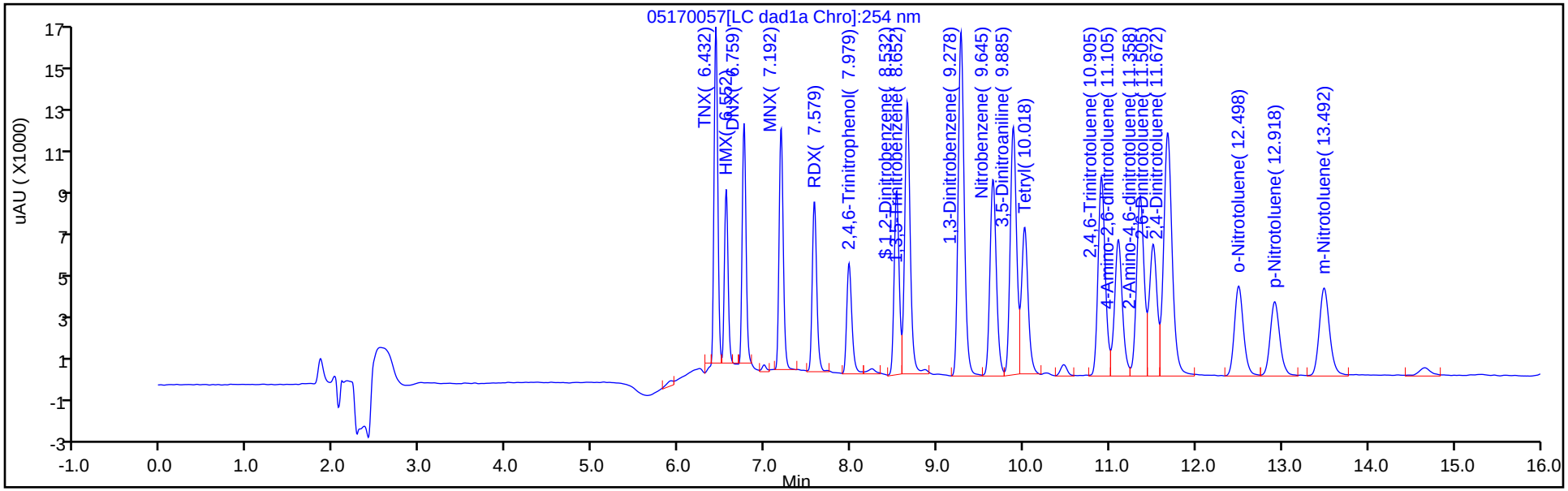
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Eurofins Denver

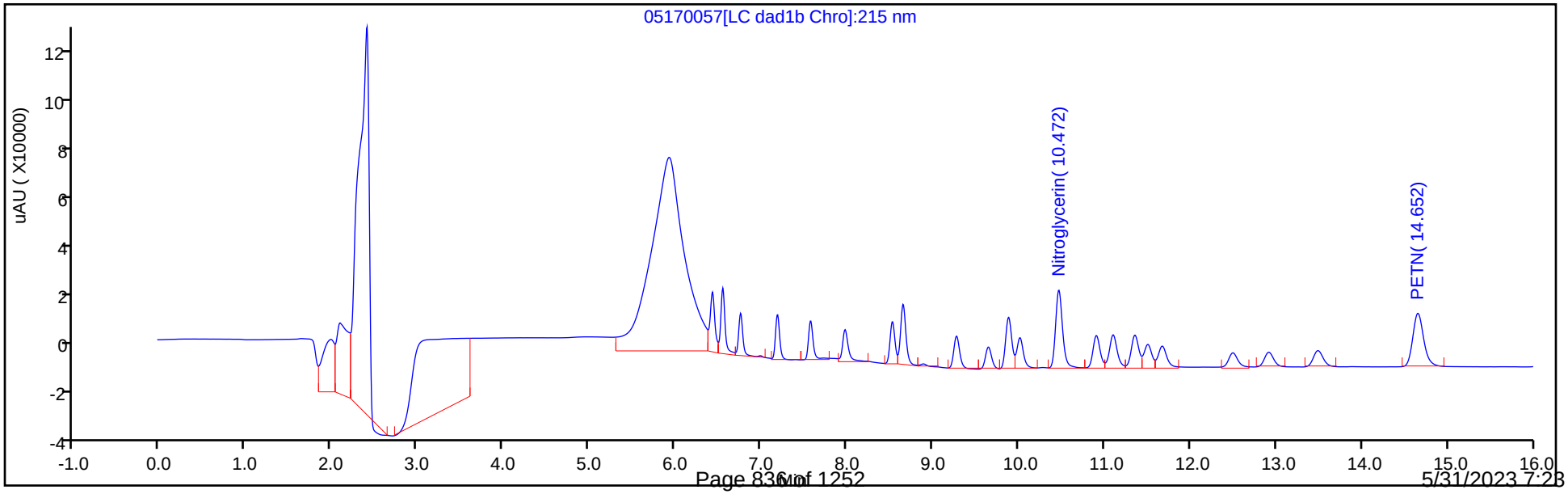
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Injection Date:	18-May-2023 13:27:37	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	57
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

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

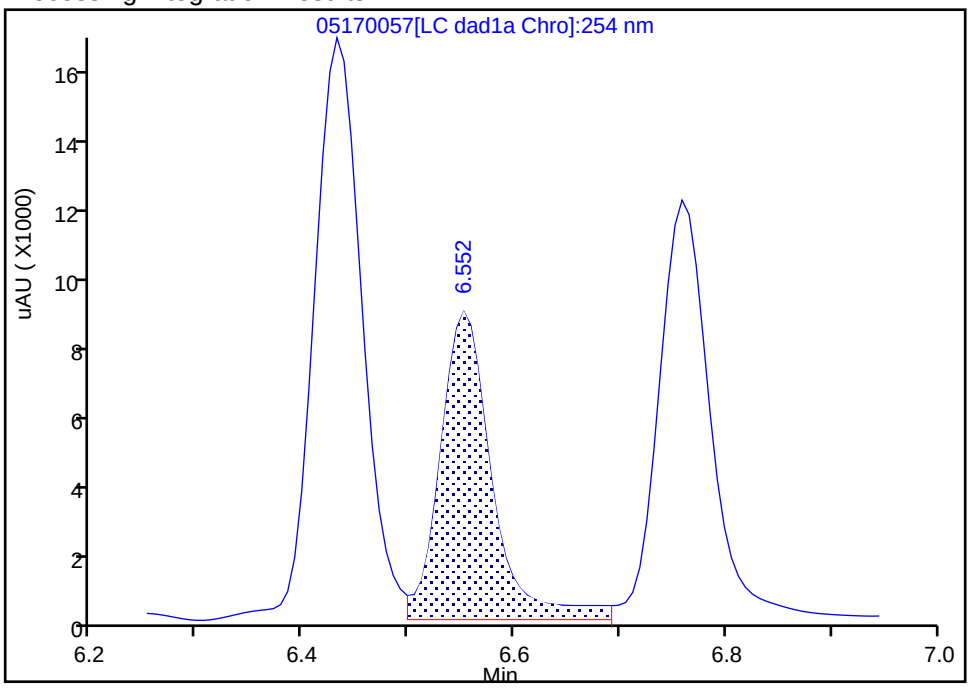
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170057.d				
Injection Date:	18-May-2023 13:27:37	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

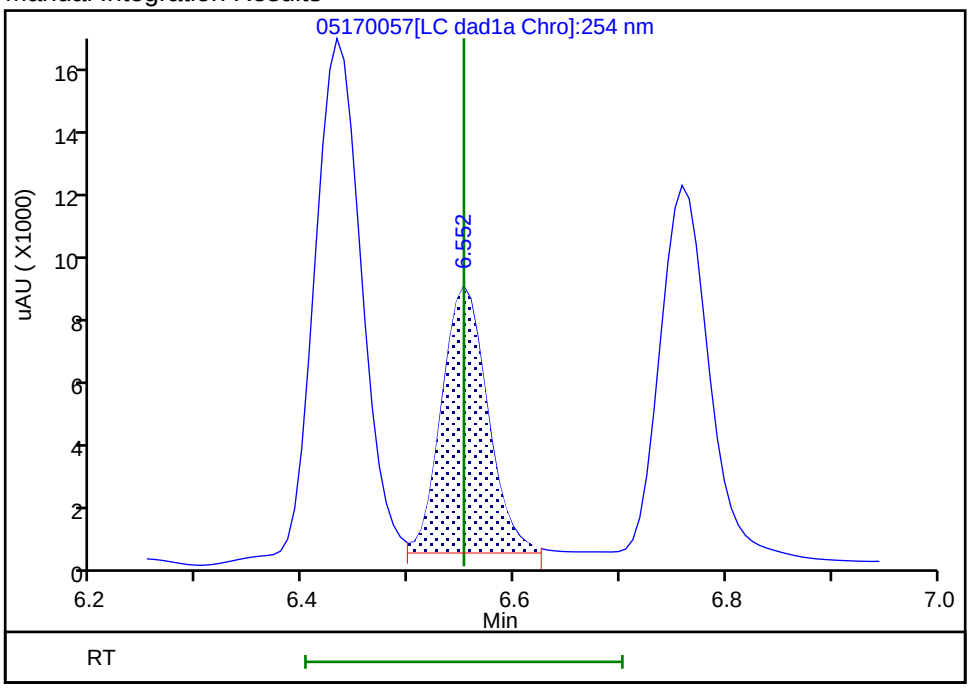
Processing Integration Results

RT: 6.55
Area: 28999
Amount: 0.310056
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 24486
Amount: 0.261804
Amount Units: ug/mL



Reviewer: LV5D, 18-May-2023 14:27:28 -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.: 280-176335-1

SDG No.:

Lab Sample ID: CCV 280-612858/57 Calibration Date: 05/18/2023 13:27

Instrument ID: CHHPLC_X3 Calib Start Date: 02/24/2023 15:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 02/24/2023 17:41

Lab File ID: 05170057.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	197687	189033		240	251	-4.4	20.0
DNX	Ave	144462	138885		241	250	-3.9	20.0
MNX	Ave	131172	130324		290	292	-0.6	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Lab Sample ID: CCV 280-612858/57 Calibration Date: 05/18/2023 13:27

Instrument ID: CHHPLC_X3 Calib Start Date: 02/24/2023 15:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 02/24/2023 17:41

Lab File ID: 05170057.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.43	6.33	6.53
DNX	6.76	6.67	6.87
MNX	7.19	7.04	7.34

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230517-121556.b\05170057.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 18-May-2023 13:27:37 ALS Bottle#: 7 Worklist Smp#: 57
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\20230517-121556.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 18-May-2023 17:39:02 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1645

First Level Reviewer: LV5D Date: 18-May-2023 14:27:39

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.432	6.432	0.000	47400	0.2508	0.2398	M
4 HMX	1	6.552	6.552	0.000	24486	0.2500	0.2618	M
6 DNX	1	6.759	6.765	-0.006	34756	0.2503	0.2406	M
7 MNX	1	7.192	7.192	0.000	38022	0.2918	0.2899	M
8 RDX	1	7.579	7.579	0.000	28610	0.2500	0.2689	
9 2,4,6-Trinitrophenol	1	7.979	7.979	0.000	21330	0.2500	0.2813	
$ 10 1,2-Dinitrobenzene	1	8.532	8.532	0.000	35025	0.2500	0.2773	
11 1,3,5-Trinitrobenzene	1	8.652	8.659	-0.007	57235	0.2500	0.2636	
12 1,3-Dinitrobenzene	1	9.278	9.285	-0.007	78380	0.2500	0.2662	
13 Nitrobenzene	1	9.645	9.659	-0.014	47589	0.2500	0.2488	
14 3,5-Dinitroaniline	1	9.885	9.892	-0.007	59772	0.2500	0.2615	
15 Tetryl	1	10.018	10.025	-0.007	37070	0.2500	0.2259	
16 Nitroglycerin	2	10.472	10.479	-0.007	170086	2.50	2.65	
17 2,4,6-Trinitrotoluene	1	10.905	10.919	-0.014	53763	0.2500	0.2548	
18 4-Amino-2,6-dinitrotoluene	1	11.105	11.119	-0.014	40048	0.2500	0.2585	
19 2-Amino-4,6-dinitrotoluene	1	11.358	11.372	-0.014	51728	0.2500	0.2568	
20 2,6-Dinitrotoluene	1	11.505	11.525	-0.020	38221	0.2500	0.2678	
21 2,4-Dinitrotoluene	1	11.672	11.692	-0.020	77875	0.2500	0.2625	
22 o-Nitrotoluene	1	12.498	12.519	-0.021	30696	0.2500	0.2400	
23 p-Nitrotoluene	1	12.918	12.939	-0.021	26640	0.2500	0.2381	
24 m-Nitrotoluene	1	13.492	13.512	-0.020	33686	0.2500	0.2398	
25 PETN	2	14.652	14.692	-0.040	184407	2.50	2.68	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00013	Amount Added:	12.50	Units: uL
8330IntermStk_00075	Amount Added:	25.00	Units: uL

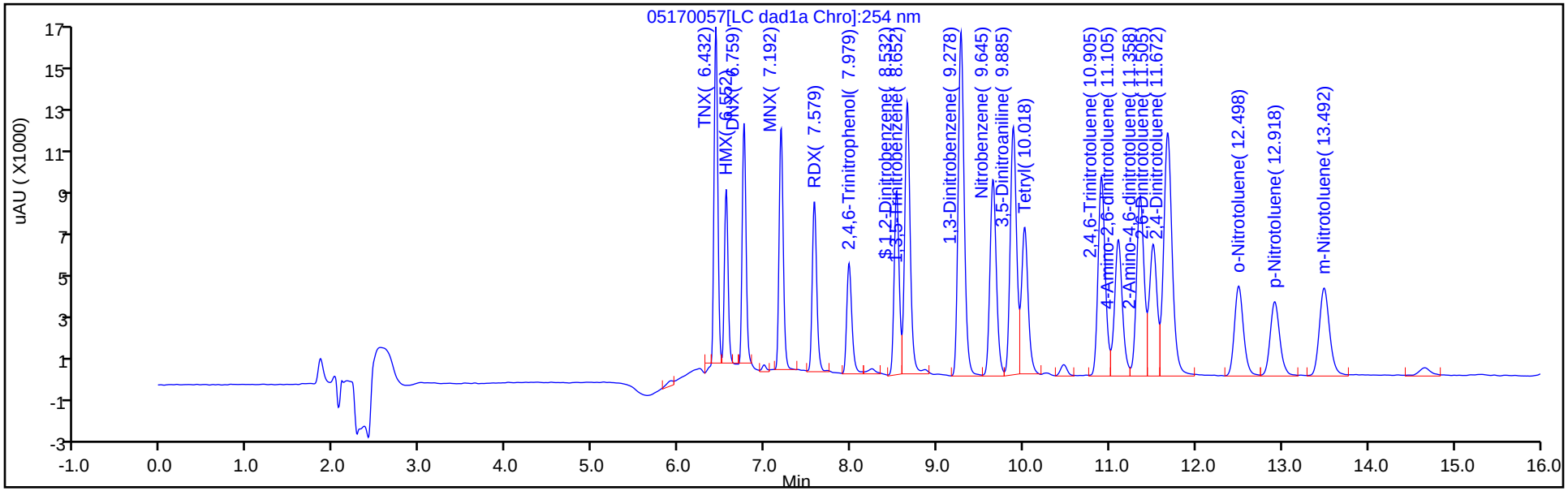
Report Date: 18-May-2023 17:39:02 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

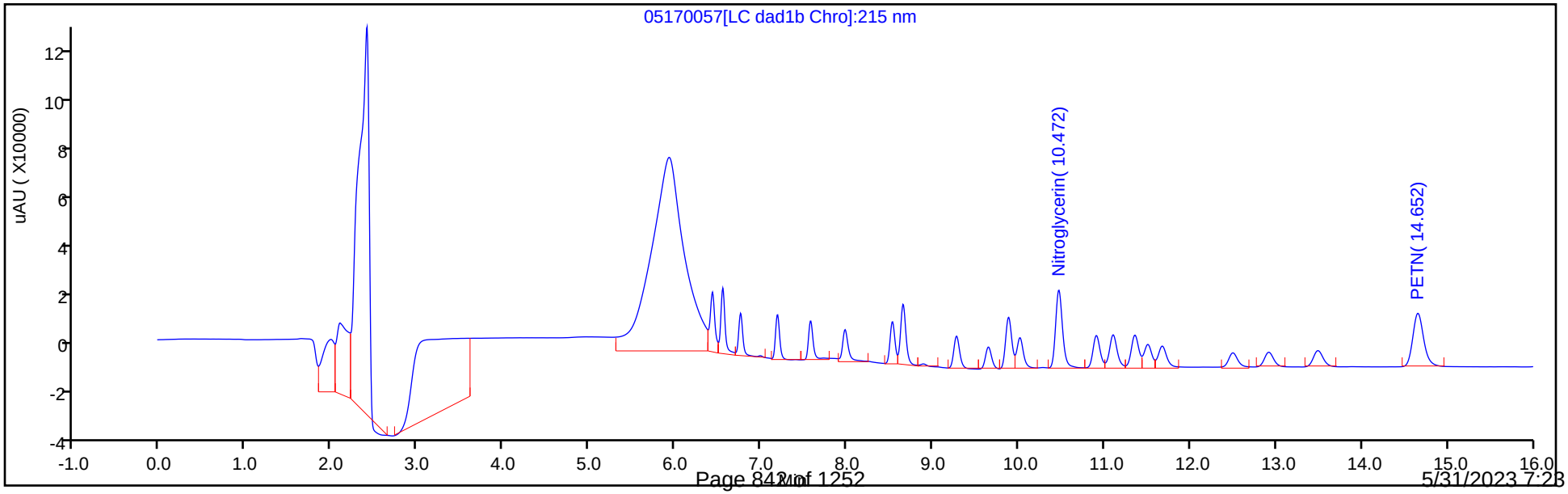
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Injection Date:	18-May-2023 13:27:37	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	57
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



5/31/2023 7:28 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

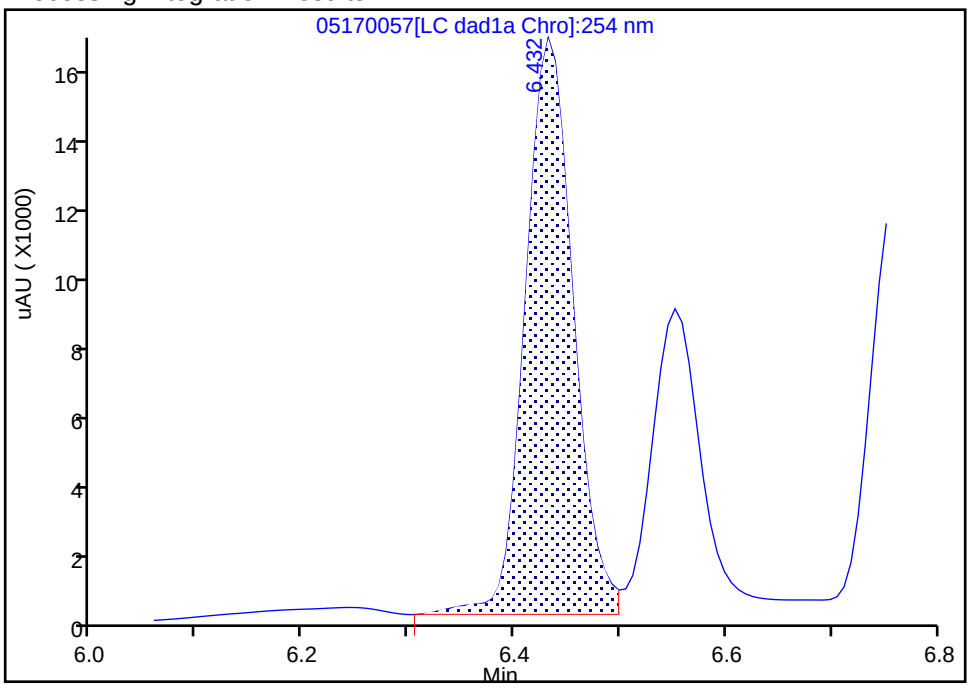
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Injection Date:	18-May-2023 13:27:37	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

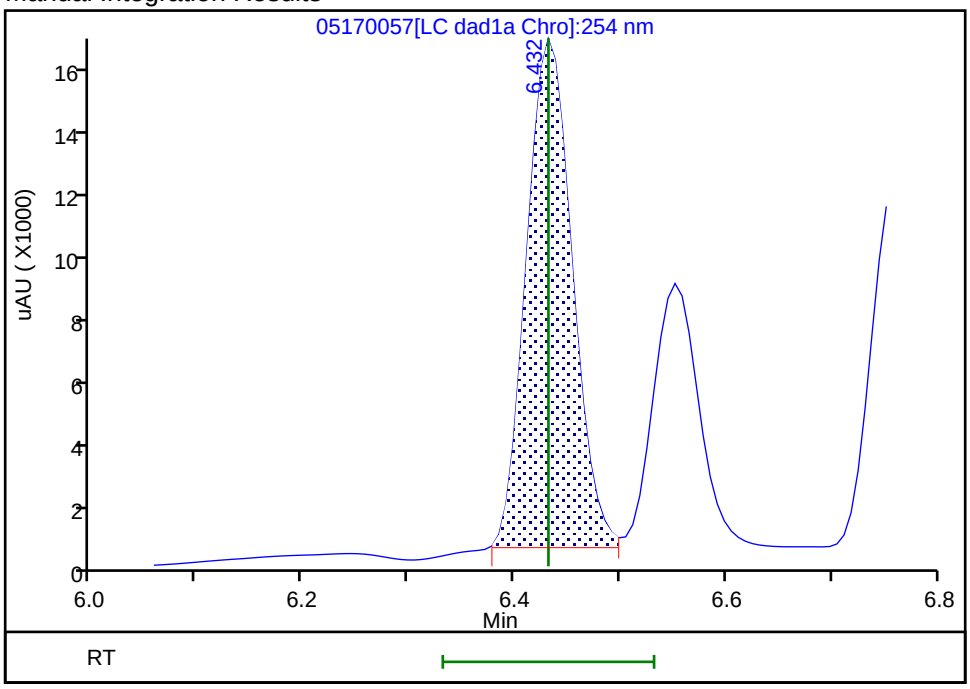
Processing Integration Results

RT: 6.43
Area: 51076
Amount: 0.258368
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 47400
Amount: 0.239773
Amount Units: ug/mL



Reviewer: LV5D, 18-May-2023 14:27:26 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

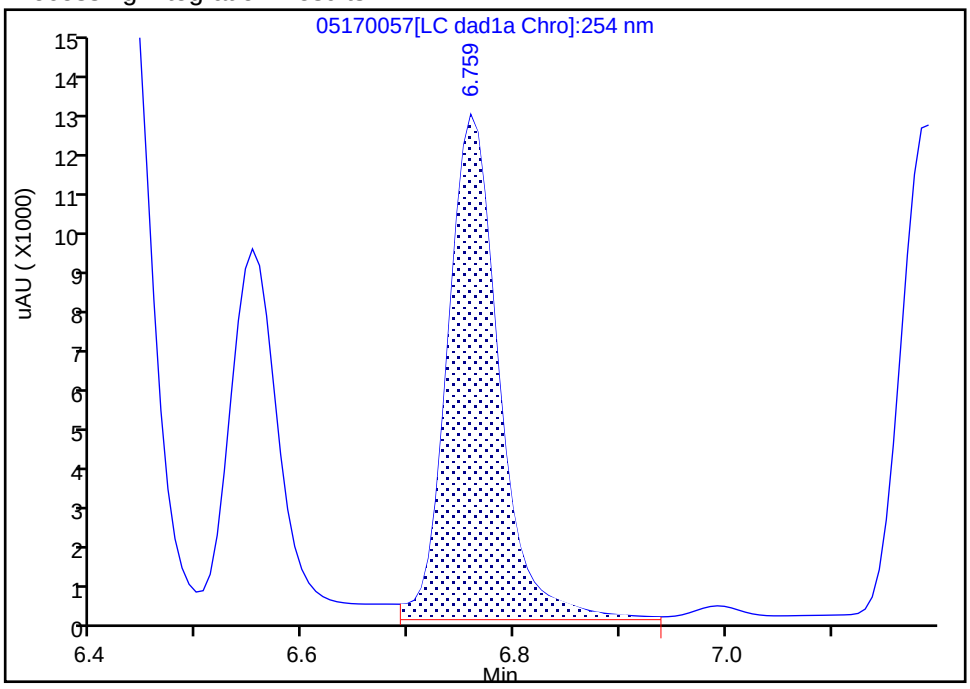
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Injection Date:	18-May-2023 13:27:37	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

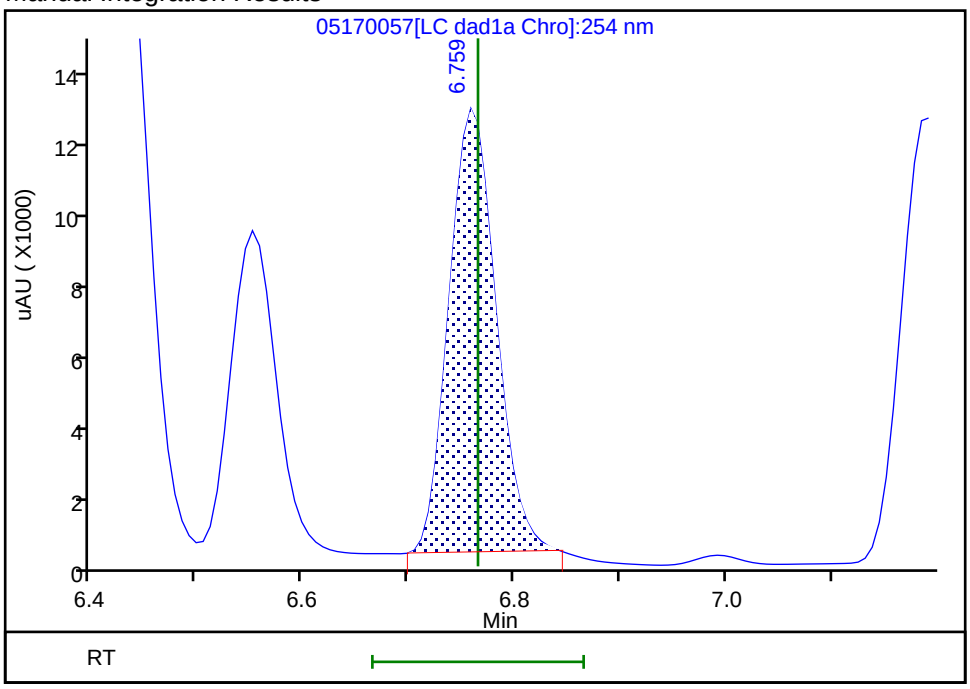
Processing Integration Results

RT: 6.76
Area: 39280
Amount: 0.271905
Amount Units: ug/mL



Manual Integration Results

RT: 6.76
Area: 34756
Amount: 0.240588
Amount Units: ug/mL



Reviewer: LV5D, 18-May-2023 14:27:31 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

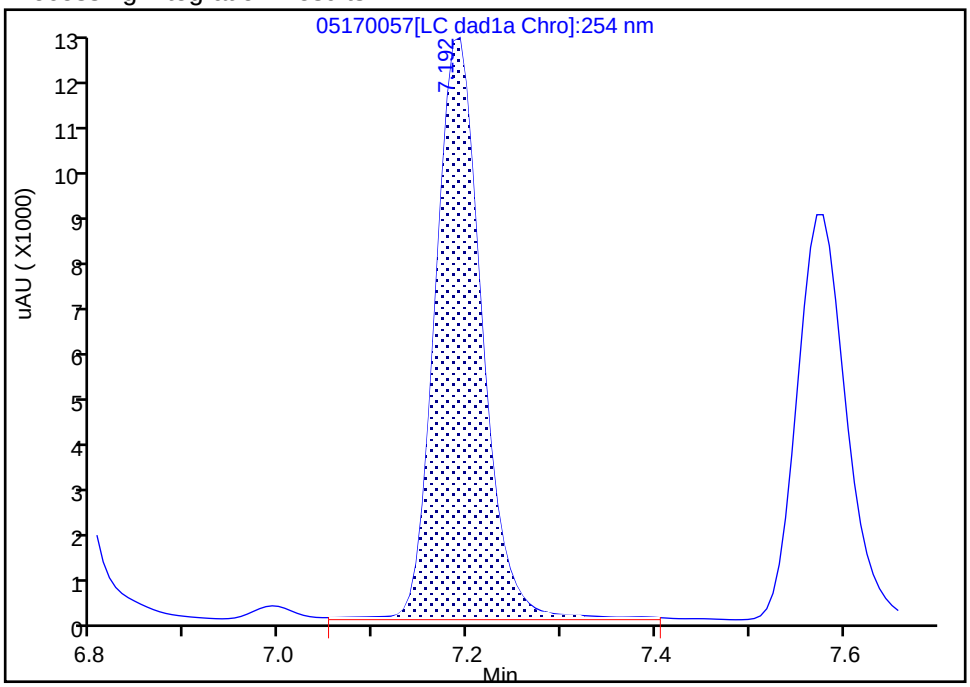
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Injection Date:	18-May-2023 13:27:37	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

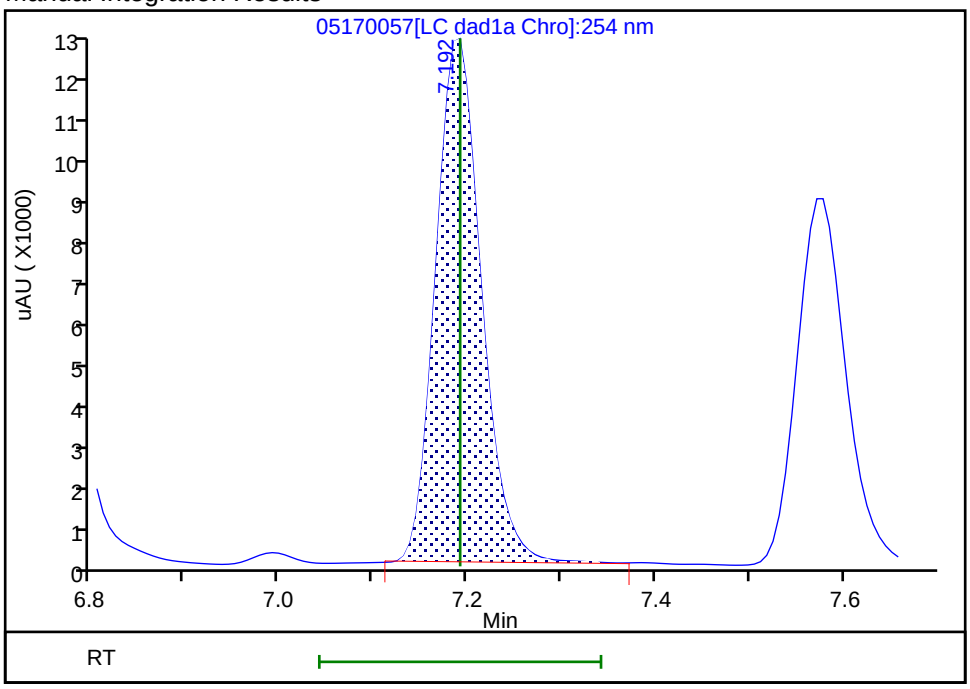
Processing Integration Results

RT: 7.19
Area: 39145
Amount: 0.298426
Amount Units: ug/mL



Manual Integration Results

RT: 7.19
Area: 38022
Amount: 0.289865
Amount Units: ug/mL



Reviewer: LV5D, 18-May-2023 14:27:37 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Lab Sample ID: CCV 280-612858/58 Calibration Date: 05/18/2023 13:50

Instrument ID: CHHPLC_X3 Calib Start Date: 01/17/2023 00:33

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/17/2023 03:16

Lab File ID: 05170058.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		217472		233	250	-6.8	20.0
2,4-diamino-6-nitrotoluene	Ave	146472	135248		231	250	-7.7	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Lab Sample ID: CCV 280-612858/58 Calibration Date: 05/18/2023 13:50

Instrument ID: CHHPLC_X3 Calib Start Date: 01/17/2023 00:33

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/17/2023 03:16

Lab File ID: 05170058.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	6.43	6.28	6.58
2,4-diamino-6-nitrotoluene	6.62	6.47	6.77

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230517-121556.b\05170058.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 18-May-2023 13:50:37 ALS Bottle#: 8 Worklist Smp#: 58
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\20230517-121556.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 18-May-2023 17:39:03 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1645

First Level Reviewer: LV5D Date: 18-May-2023 14:27:50

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	6.428	6.428	0.000	54368	0.2500	0.2329	M
5 2,4-diamino-6-nitrotoluene	1	6.622	6.615	0.007	33812	0.2500	0.2308	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00037 Amount Added: 12.50 Units: uL

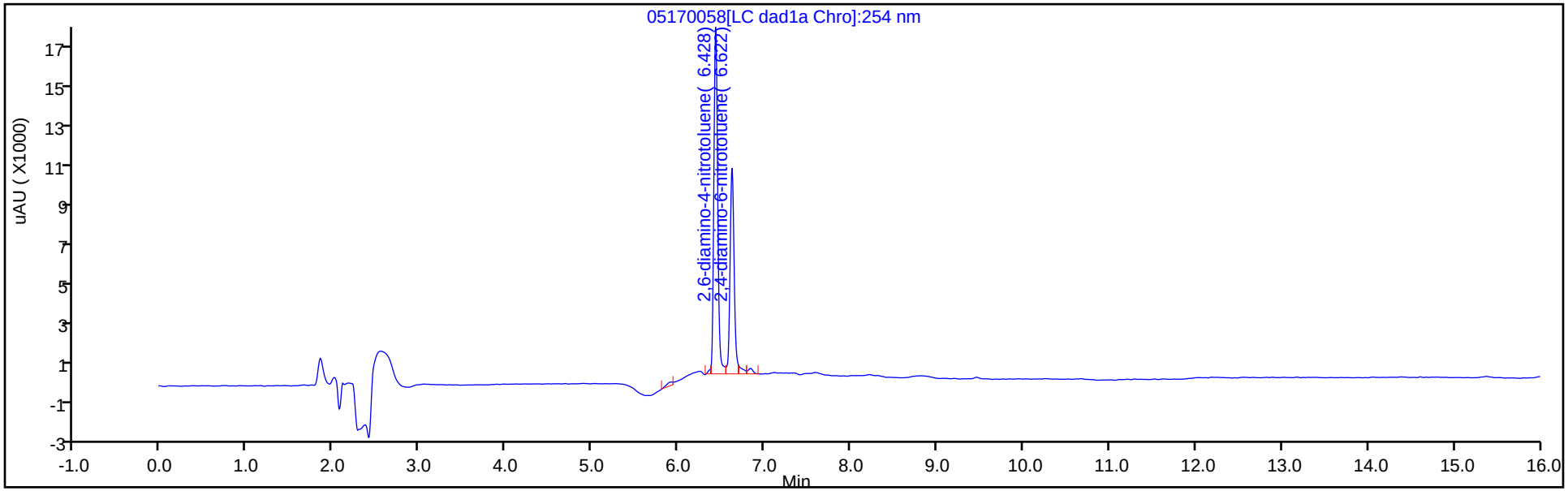
Report Date: 18-May-2023 17:39:03 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

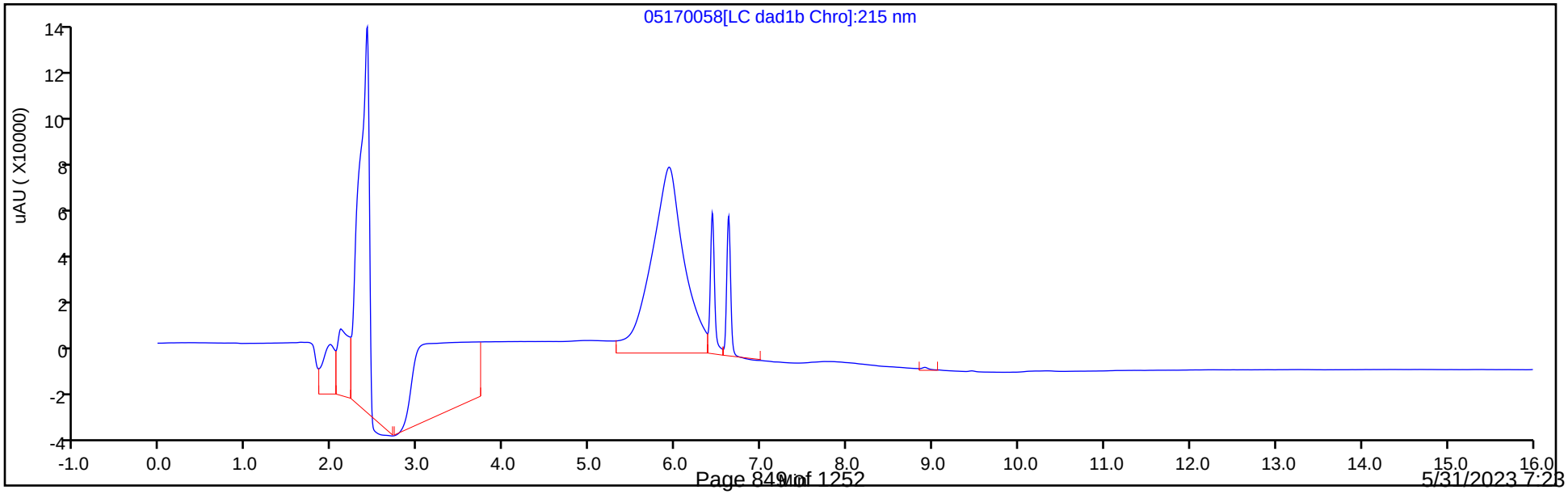
Data File: \\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170058.d

Injection Date:	18-May-2023 13:50:37	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	58
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

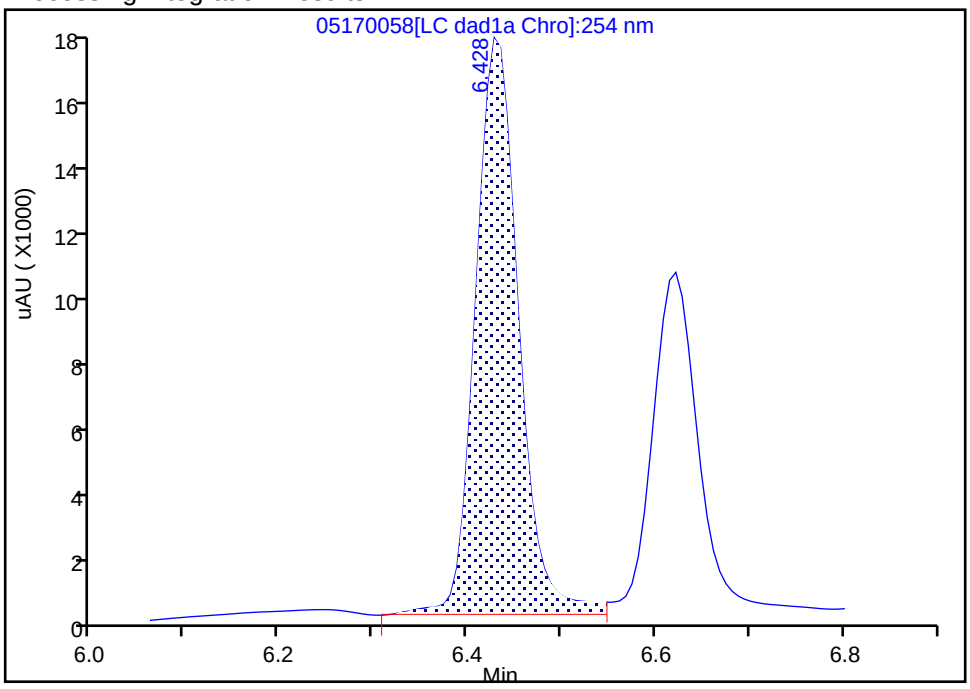
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Injection Date:	18-May-2023 13:50:37	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	58
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

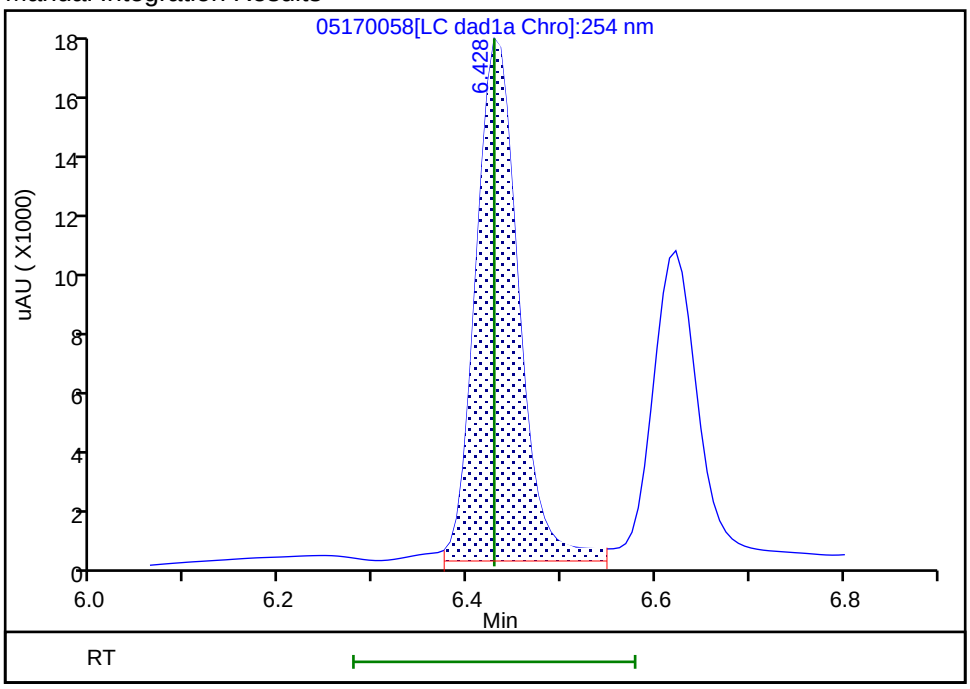
Processing Integration Results

RT: 6.43
Area: 54950
Amount: 0.235470
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 54368
Amount: 0.232936
Amount Units: ug/mL



Reviewer: LV5D, 18-May-2023 14:27:45 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

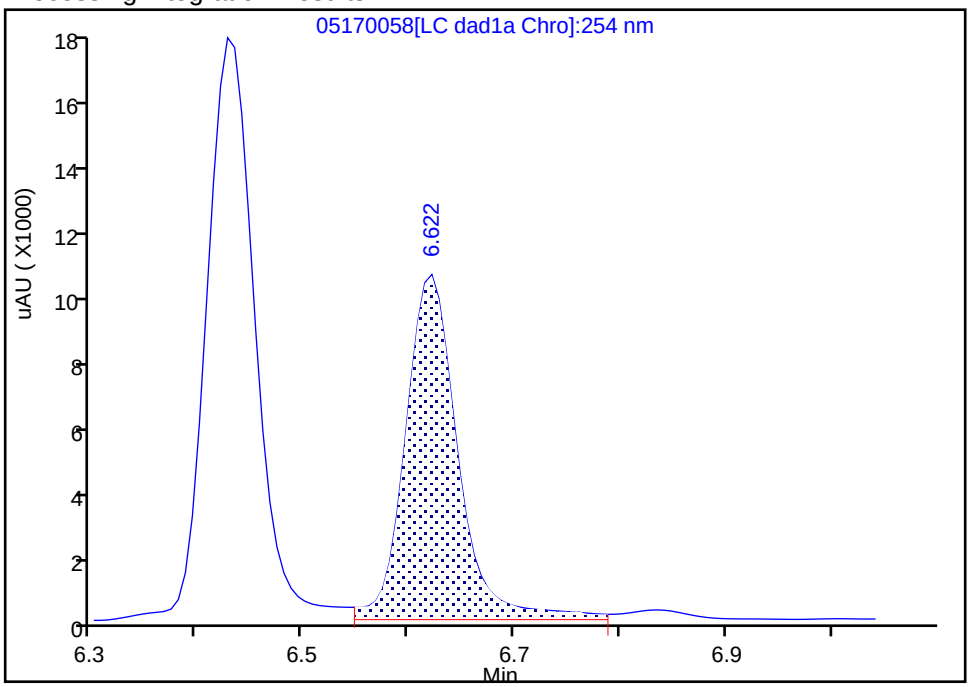
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170058.d				
Injection Date:	18-May-2023 13:50:37	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	58
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit 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

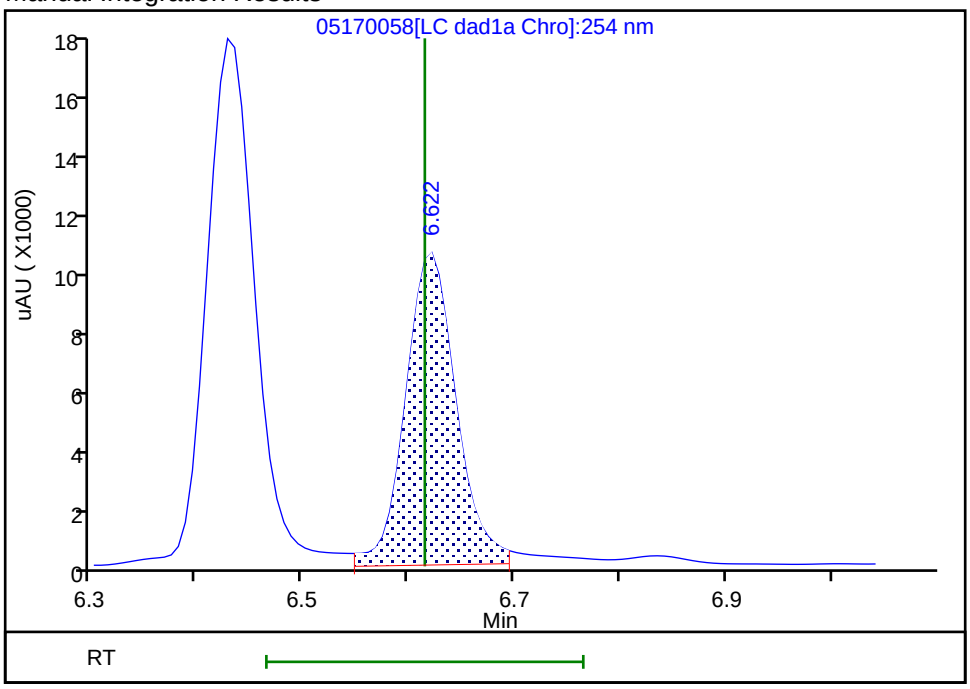
Processing Integration Results

RT: 6.62
Area: 35282
Amount: 0.240879
Amount Units: ug/mL



Manual Integration Results

RT: 6.62
Area: 33812
Amount: 0.230843
Amount Units: ug/mL



Reviewer: LV5D, 18-May-2023 14:27:47 -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.: 280-176335-1

SDG No.:

Lab Sample ID: CCV 280-612858/65 Calibration Date: 05/18/2023 17:40

Instrument ID: CHHPLC_X3 Calib Start Date: 02/08/2023 15:38

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 02/08/2023 18:42

Lab File ID: 05170065.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	93528	100460		269	250	7.4	20.0
RDX	Ave	106380	114496		269	250	7.6	20.0
Picric acid	Ave	75830	85252		281	250	12.4	20.0
1,3,5-Trinitrobenzene	Ave	217147	230260		265	250	6.0	20.0
1,3-Dinitrobenzene	Ave	294397	312812		266	250	6.3	20.0
Nitrobenzene	Ave	191245	187108		245	250	-2.2	20.0
3,5-Dinitroaniline	Lin2		236256		258	250	3.3	20.0
Tetryl	Ave	164121	149316		227	250	-9.0	20.0
Nitroglycerin	Ave	64070	67821		2650	2500	5.9	20.0
2,4,6-Trinitrotoluene	Ave	211040	215876		256	250	2.3	20.0
4-Amino-2,6-dinitrotoluene	Ave	154933	158768		256	250	2.5	20.0
2-Amino-4,6-dinitrotoluene	Ave	201410	203620		253	250	1.1	20.0
2,6-Dinitrotoluene	Ave	142745	153576		269	250	7.6	20.0
2,4-Dinitrotoluene	Ave	296667	312176		263	250	5.2	20.0
2-Nitrotoluene	Ave	127896	121200		237	250	-5.2	20.0
4-Nitrotoluene	Ave	111880	105492		236	250	-5.7	20.0
3-Nitrotoluene	Ave	140492	133352		237	250	-5.1	20.0
PETN	Ave	68845	73803		2680	2500	7.2	20.0
1,2-Dinitrobenzene	Ave	126309	137248		272	250	8.7	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Lab Sample ID: CCV 280-612858/65 Calibration Date: 05/18/2023 17:40

Instrument ID: CHHPLC_X3 Calib Start Date: 02/08/2023 15:38

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 02/08/2023 18:42

Lab File ID: 05170065.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.55	6.40	6.70
RDX	7.57	7.43	7.73
Picric acid	7.97	7.83	8.13
1,3,5-Trinitrobenzene	8.65	8.51	8.81
1,3-Dinitrobenzene	9.27	9.14	9.44
Nitrobenzene	9.65	9.51	9.81
3,5-Dinitroaniline	9.88	9.74	10.04
Tetryl	10.01	9.88	10.18
Nitroglycerin	10.47	10.33	10.63
2,4,6-Trinitrotoluene	10.91	10.82	11.02
4-Amino-2,6-dinitrotoluene	11.10	11.02	11.22
2-Amino-4,6-dinitrotoluene	11.35	11.27	11.47
2,6-Dinitrotoluene	11.51	11.43	11.63
2,4-Dinitrotoluene	11.67	11.59	11.79
2-Nitrotoluene	12.49	12.37	12.67
4-Nitrotoluene	12.91	12.79	13.09
3-Nitrotoluene	13.49	13.36	13.66
PETN	14.66	14.54	14.84
1,2-Dinitrobenzene	8.52	8.38	8.68

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230517-121556.b\05170065.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 18-May-2023 17:40:16 ALS Bottle#: 7 Worklist Smp#: 65
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\20230517-121556.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 18-May-2023 19:51:40 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1645

First Level Reviewer: LV5D Date: 18-May-2023 18:22:46

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.432	6.432	0.000	48025	0.2508	0.2429	M
4 HMX	1	6.552	6.552	0.000	25115	0.2500	0.2685	M
6 DNX	1	6.758	6.765	-0.007	35144	0.2503	0.2433	M
7 MNX	1	7.192	7.192	0.000	38536	0.2918	0.2938	
8 RDX	1	7.572	7.579	-0.007	28624	0.2500	0.2691	
9 2,4,6-Trinitrophenol	1	7.972	7.979	-0.007	21313	0.2500	0.2811	
$ 10 1,2-Dinitrobenzene	1	8.518	8.532	-0.014	34312	0.2500	0.2717	
11 1,3,5-Trinitrobenzene	1	8.645	8.659	-0.014	57565	0.2500	0.2651	
12 1,3-Dinitrobenzene	1	9.272	9.285	-0.013	78203	0.2500	0.2656	
13 Nitrobenzene	1	9.645	9.659	-0.014	46777	0.2500	0.2446	
14 3,5-Dinitroaniline	1	9.878	9.892	-0.014	59064	0.2500	0.2584	
15 Tetryl	1	10.012	10.025	-0.013	37329	0.2500	0.2274	
16 Nitroglycerin	2	10.465	10.479	-0.014	169552	2.50	2.65	
17 2,4,6-Trinitrotoluene	1	10.905	10.919	-0.014	53969	0.2500	0.2557	
18 4-Amino-2,6-dinitrotoluene	1	11.098	11.119	-0.021	39692	0.2500	0.2562	
19 2-Amino-4,6-dinitrotoluene	1	11.352	11.372	-0.020	50905	0.2500	0.2527	
20 2,6-Dinitrotoluene	1	11.505	11.525	-0.020	38394	0.2500	0.2690	
21 2,4-Dinitrotoluene	1	11.672	11.692	-0.020	78044	0.2500	0.2631	
22 o-Nitrotoluene	1	12.492	12.519	-0.027	30300	0.2500	0.2369	
23 p-Nitrotoluene	1	12.912	12.939	-0.027	26373	0.2500	0.2357	
24 m-Nitrotoluene	1	13.485	13.512	-0.027	33338	0.2500	0.2373	
25 PETN	2	14.658	14.692	-0.034	184507	2.50	2.68	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00013	Amount Added:	12.50	Units: uL
8330IntermStk_00075	Amount Added:	25.00	Units: uL

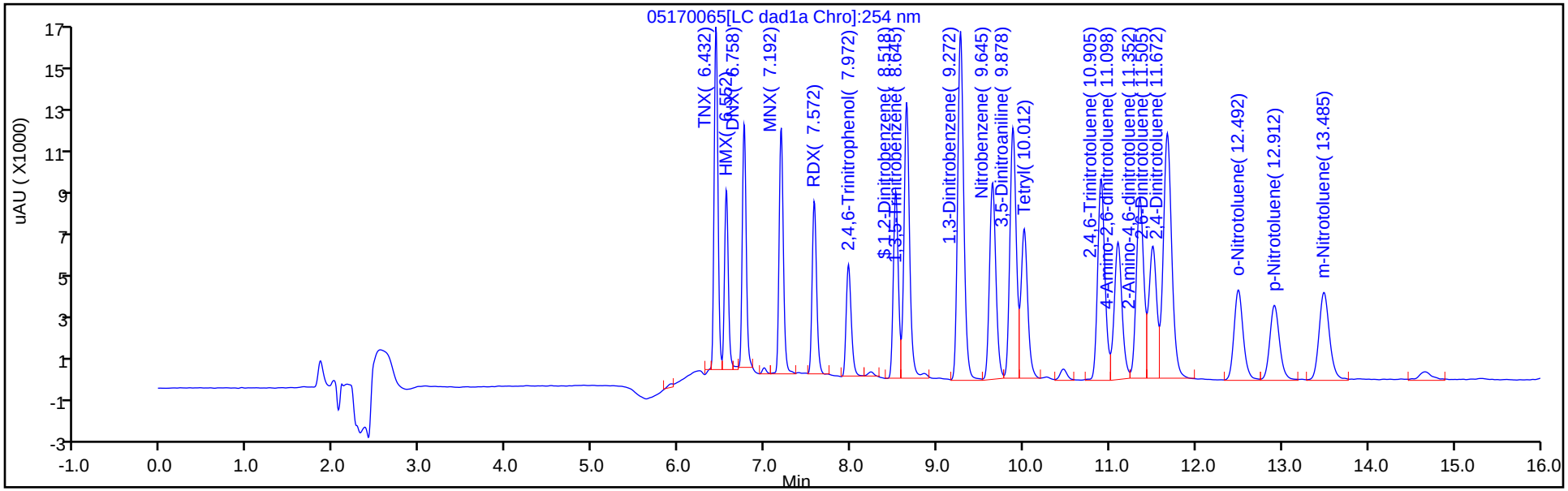
Report Date: 18-May-2023 19:51:40 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

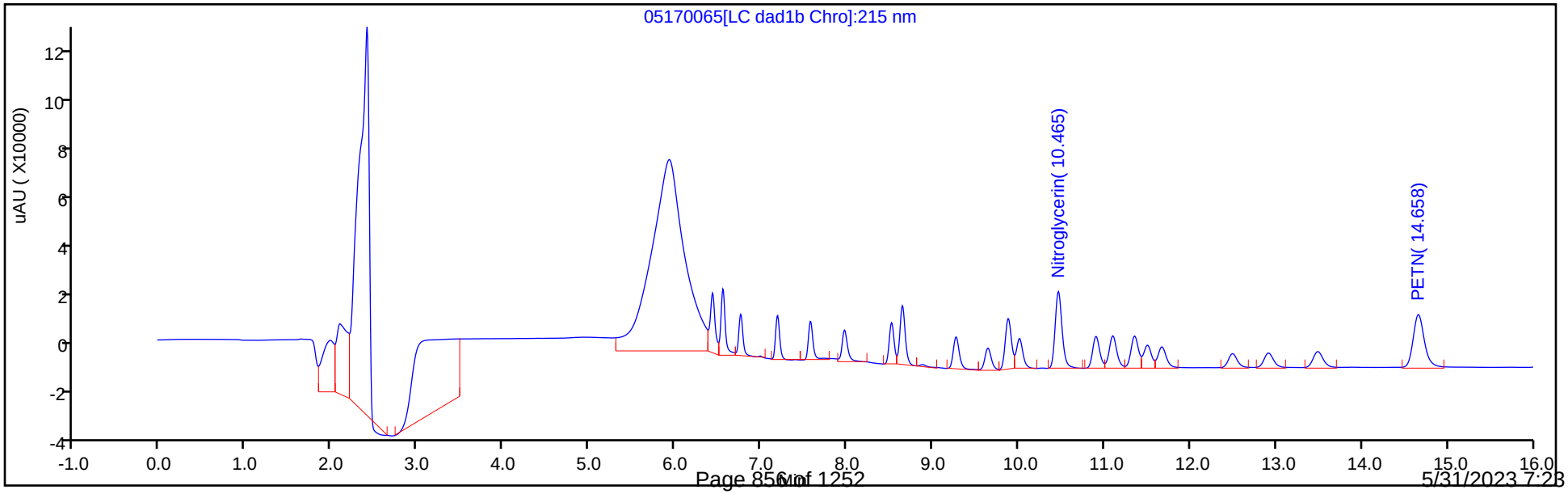
Data File: \\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170065.d

Injection Date:	18-May-2023 17:40:16	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	65
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

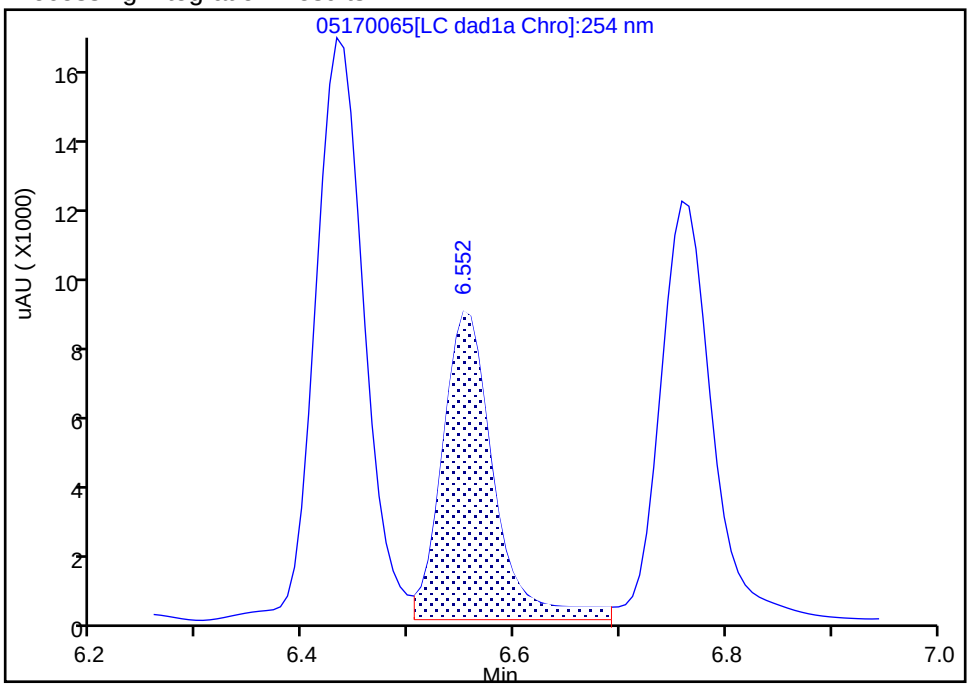
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Injection Date:	18-May-2023 17:40:16	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	65
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

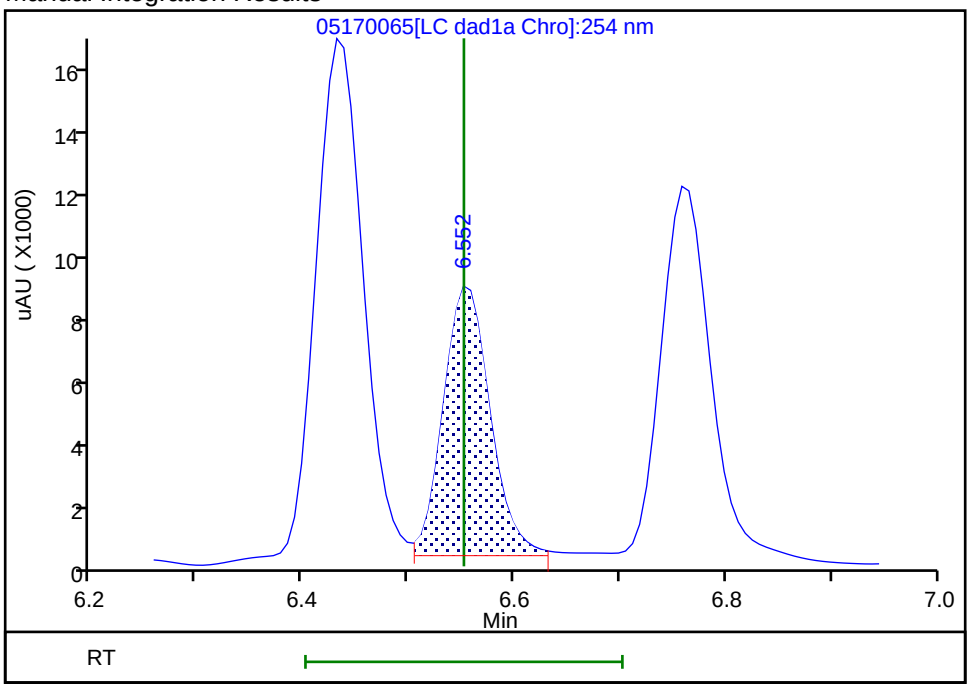
Processing Integration Results

RT: 6.55
Area: 28412
Amount: 0.303780
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 25115
Amount: 0.268529
Amount Units: ug/mL



Reviewer: LV5D, 18-May-2023 18:22:38 -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.: 280-176335-1

SDG No.:

Lab Sample ID: CCV 280-612858/65 Calibration Date: 05/18/2023 17:40

Instrument ID: CHHPLC_X3 Calib Start Date: 02/24/2023 15:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 02/24/2023 17:41

Lab File ID: 05170065.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	197687	191525		243	251	-3.1	20.0
DNX	Ave	144462	140436		243	250	-2.8	20.0
MNX	Ave	131172	132086		294	292	0.7	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Lab Sample ID: CCV 280-612858/65 Calibration Date: 05/18/2023 17:40

Instrument ID: CHHPLC_X3 Calib Start Date: 02/24/2023 15:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 02/24/2023 17:41

Lab File ID: 05170065.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.43	6.33	6.53
DNX	6.76	6.67	6.87
MNX	7.19	7.04	7.34

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230517-121556.b\05170065.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 18-May-2023 17:40:16 ALS Bottle#: 7 Worklist Smp#: 65
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\20230517-121556.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 18-May-2023 19:51:40 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1645

First Level Reviewer: LV5D Date: 18-May-2023 18:22:46

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.432	6.432	0.000	48025	0.2508	0.2429	M
4 HMX	1	6.552	6.552	0.000	25115	0.2500	0.2685	M
6 DNX	1	6.758	6.765	-0.007	35144	0.2503	0.2433	M
7 MNX	1	7.192	7.192	0.000	38536	0.2918	0.2938	
8 RDX	1	7.572	7.579	-0.007	28624	0.2500	0.2691	
9 2,4,6-Trinitrophenol	1	7.972	7.979	-0.007	21313	0.2500	0.2811	
$ 10 1,2-Dinitrobenzene	1	8.518	8.532	-0.014	34312	0.2500	0.2717	
11 1,3,5-Trinitrobenzene	1	8.645	8.659	-0.014	57565	0.2500	0.2651	
12 1,3-Dinitrobenzene	1	9.272	9.285	-0.013	78203	0.2500	0.2656	
13 Nitrobenzene	1	9.645	9.659	-0.014	46777	0.2500	0.2446	
14 3,5-Dinitroaniline	1	9.878	9.892	-0.014	59064	0.2500	0.2584	
15 Tetryl	1	10.012	10.025	-0.013	37329	0.2500	0.2274	
16 Nitroglycerin	2	10.465	10.479	-0.014	169552	2.50	2.65	
17 2,4,6-Trinitrotoluene	1	10.905	10.919	-0.014	53969	0.2500	0.2557	
18 4-Amino-2,6-dinitrotoluene	1	11.098	11.119	-0.021	39692	0.2500	0.2562	
19 2-Amino-4,6-dinitrotoluene	1	11.352	11.372	-0.020	50905	0.2500	0.2527	
20 2,6-Dinitrotoluene	1	11.505	11.525	-0.020	38394	0.2500	0.2690	
21 2,4-Dinitrotoluene	1	11.672	11.692	-0.020	78044	0.2500	0.2631	
22 o-Nitrotoluene	1	12.492	12.519	-0.027	30300	0.2500	0.2369	
23 p-Nitrotoluene	1	12.912	12.939	-0.027	26373	0.2500	0.2357	
24 m-Nitrotoluene	1	13.485	13.512	-0.027	33338	0.2500	0.2373	
25 PETN	2	14.658	14.692	-0.034	184507	2.50	2.68	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00013	Amount Added:	12.50	Units: uL
8330IntermStk_00075	Amount Added:	25.00	Units: uL

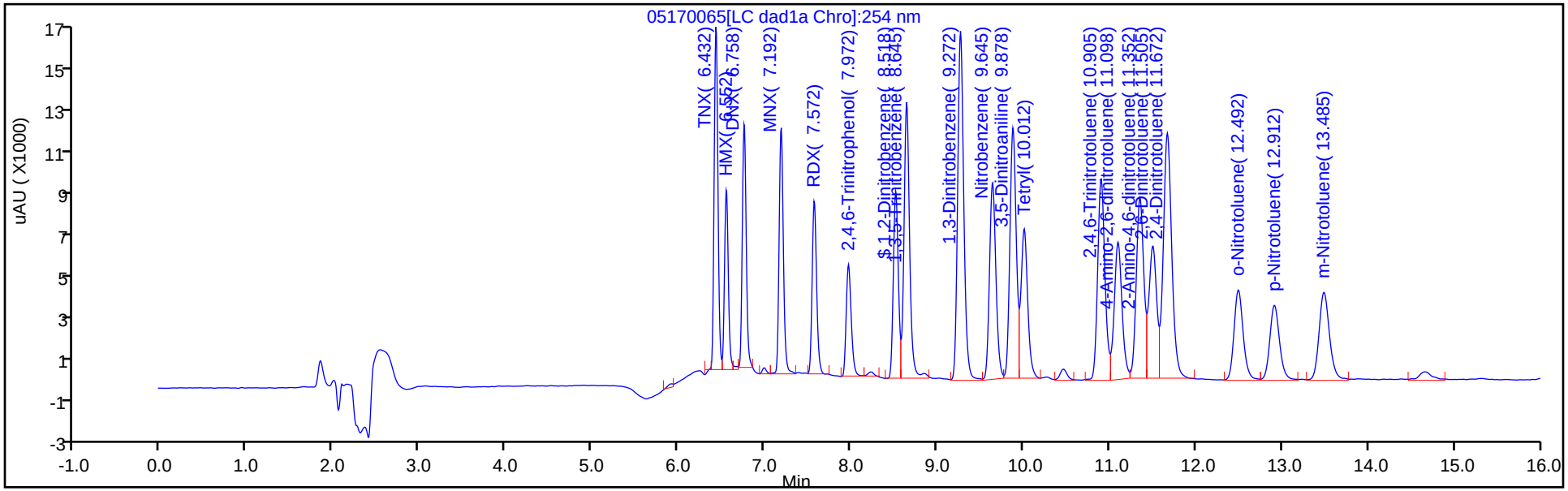
Report Date: 18-May-2023 19:51:40 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

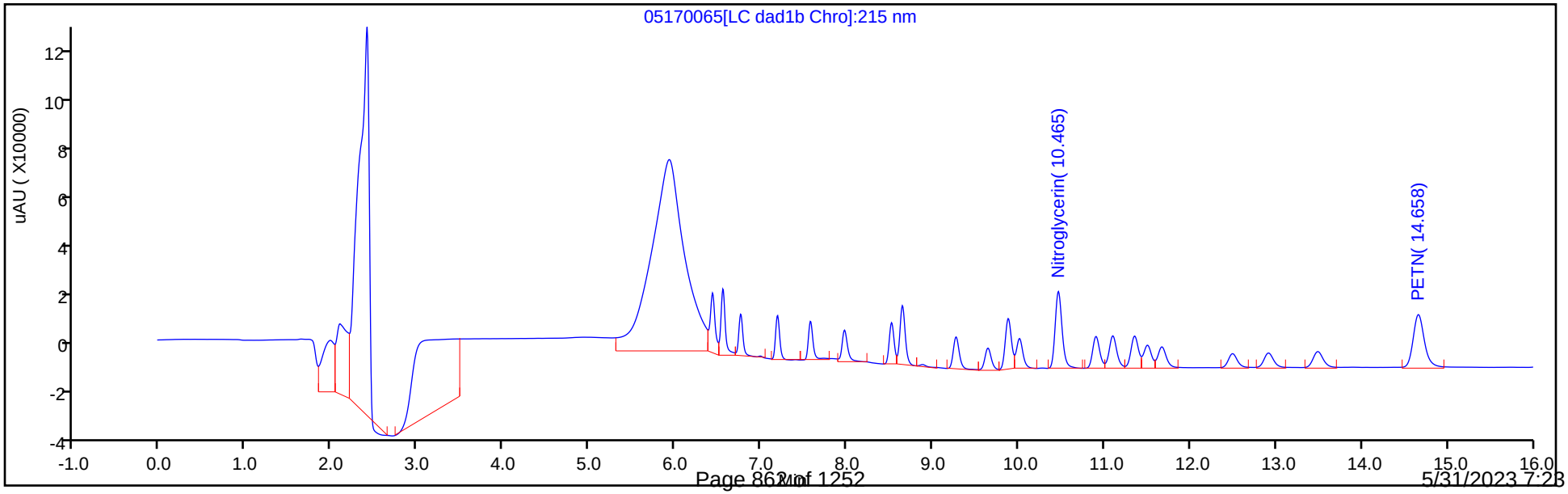
Data File: \\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170065.d

Injection Date:	18-May-2023 17:40:16	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	65
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

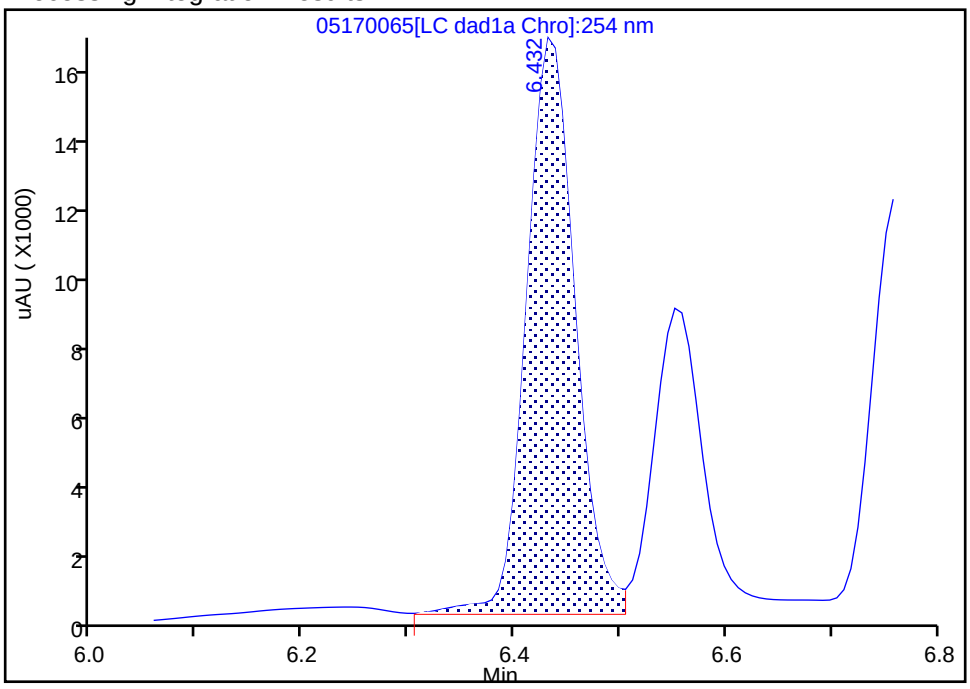
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Injection Date:	18-May-2023 17:40:16	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	65
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

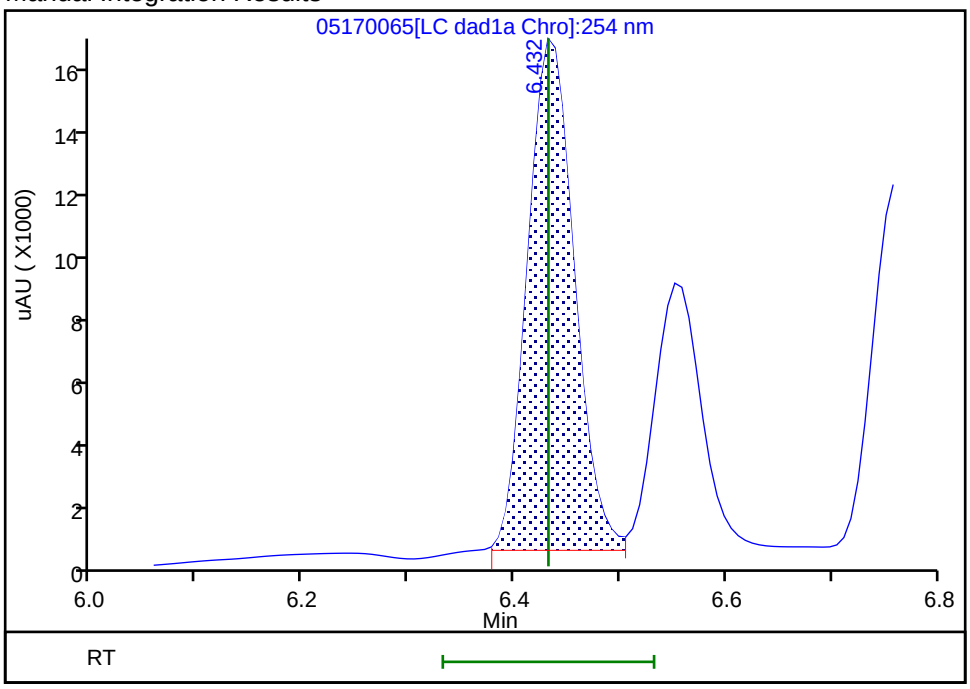
Processing Integration Results

RT: 6.43
Area: 50793
Amount: 0.256936
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 48025
Amount: 0.242934
Amount Units: ug/mL



Reviewer: LV5D, 18-May-2023 18:22:37 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

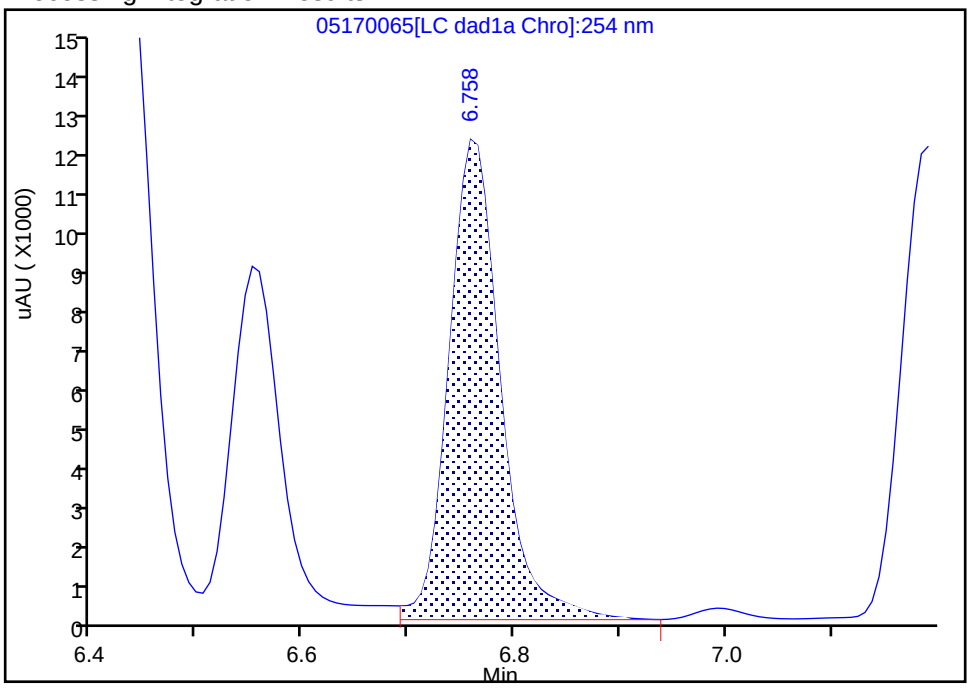
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Injection Date:	18-May-2023 17:40:16	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	65
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

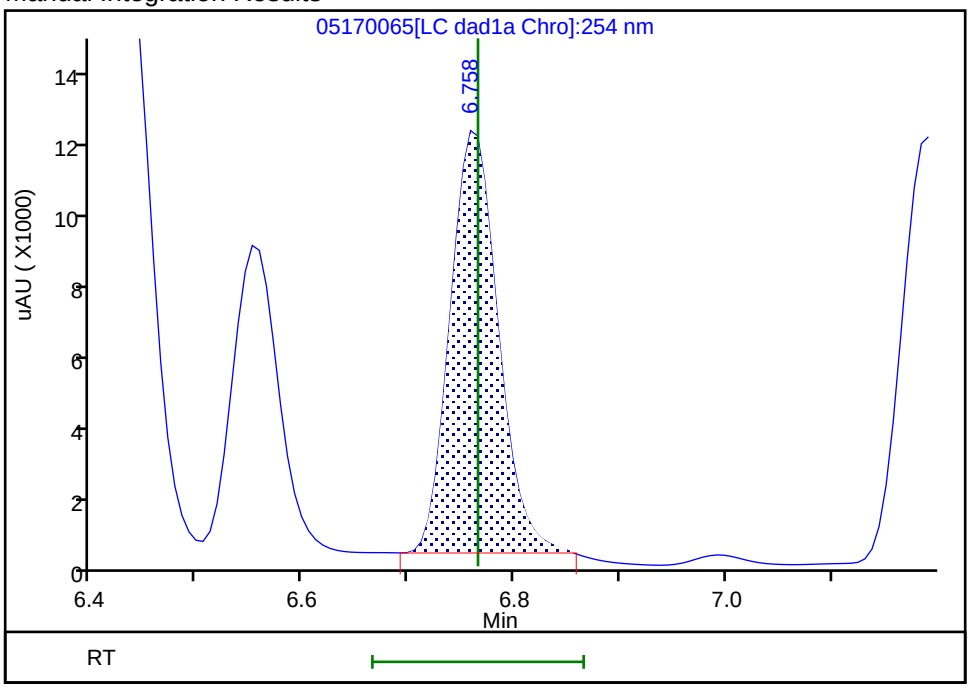
Processing Integration Results

RT: 6.76
Area: 38857
Amount: 0.268976
Amount Units: ug/mL



Manual Integration Results

RT: 6.76
Area: 35144
Amount: 0.243274
Amount Units: ug/mL



Reviewer: LV5D, 18-May-2023 18:22:41 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-176335-1

SDG No.:

Lab Sample ID: CCV 280-612858/66 | Calibration Date: 05/18/2023 18:03

Instrument ID: CHHPLC_X3 | Calib Start Date: 01/17/2023 00:33

GC Column: UltraCarb5uODS ID: 4.60(mm) | Calib End Date: 01/17/2023 03:16

Lab File ID: 05170066.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		213456		229	250	-8.6	20.0
2,4-diamino-6-nitrotoluene	Ave	146472	132184		226	250	-9.8	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Lab Sample ID: CCV 280-612858/66 Calibration Date: 05/18/2023 18:03

Instrument ID: CHHPLC_X3 Calib Start Date: 01/17/2023 00:33

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/17/2023 03:16

Lab File ID: 05170066.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	6.43	6.28	6.58
2,4-diamino-6-nitrotoluene	6.62	6.47	6.77

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230517-121556.b\05170066.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 18-May-2023 18:03:15 ALS Bottle#: 8 Worklist Smp#: 66
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\20230517-121556.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 18-May-2023 19:51:41 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1645

First Level Reviewer: LV5D Date: 18-May-2023 19:51:37

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	6.428	0.002	53364	0.2500	0.2286	M
5 2,4-diamino-6-nitrotoluene	1	6.616	6.615	0.001	33046	0.2500	0.2256	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00037 Amount Added: 12.50 Units: uL

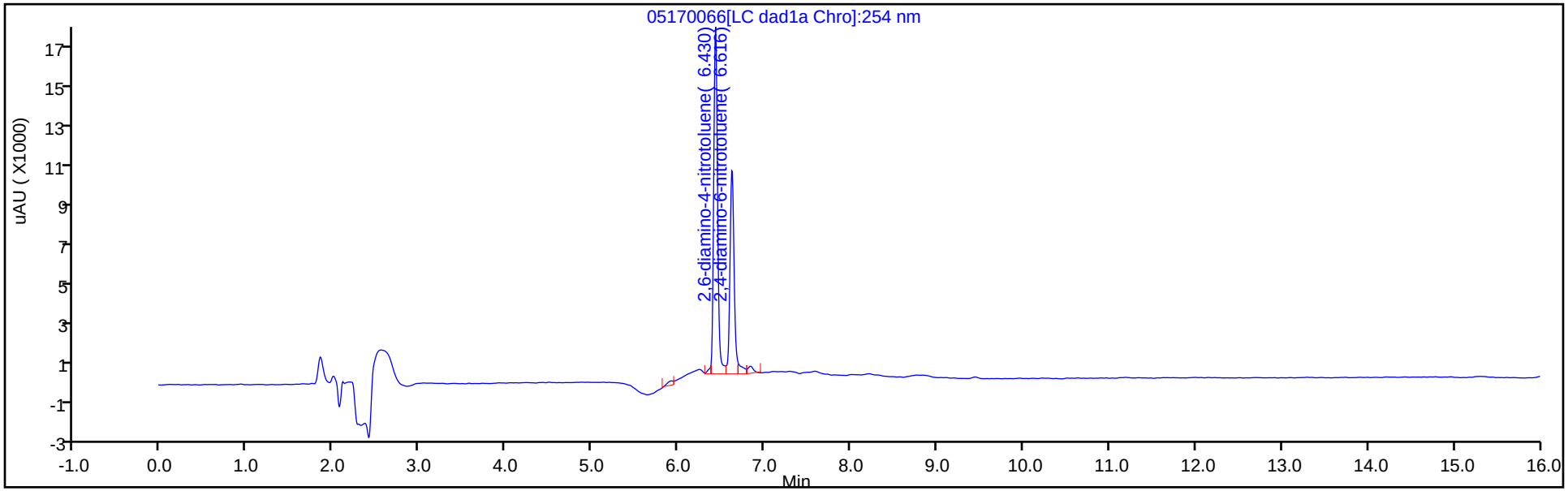
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Eurofins Denver

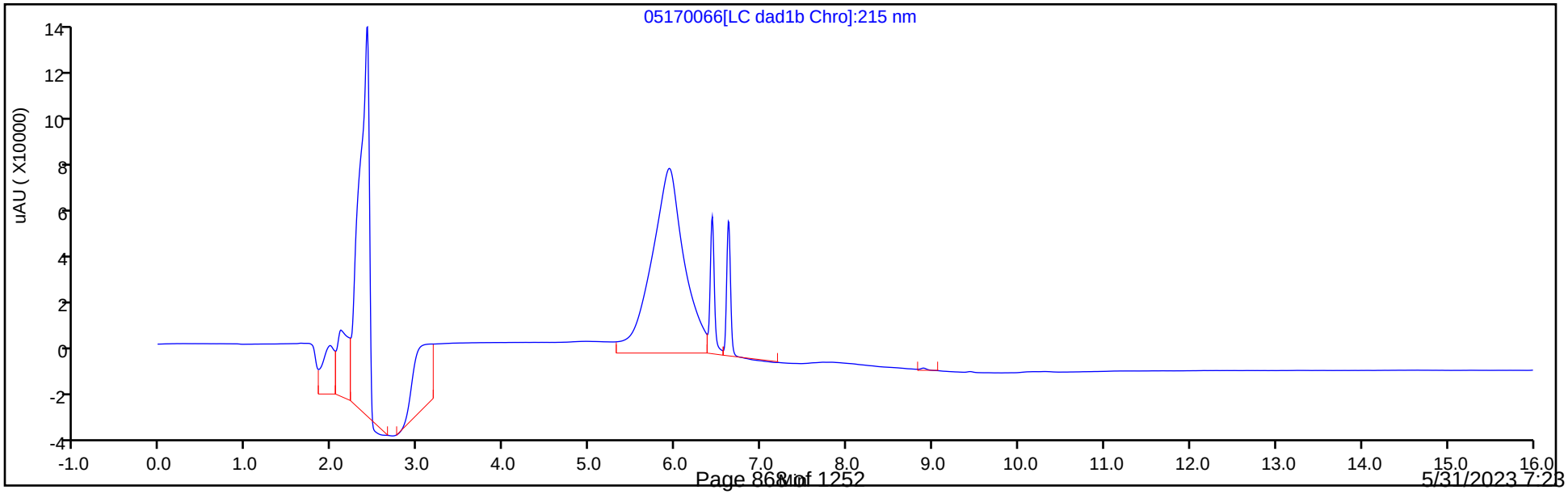
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Injection Date:	18-May-2023 18:03:15	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	66
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8330_X3	Limit Group:	GCSV - 8330		

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

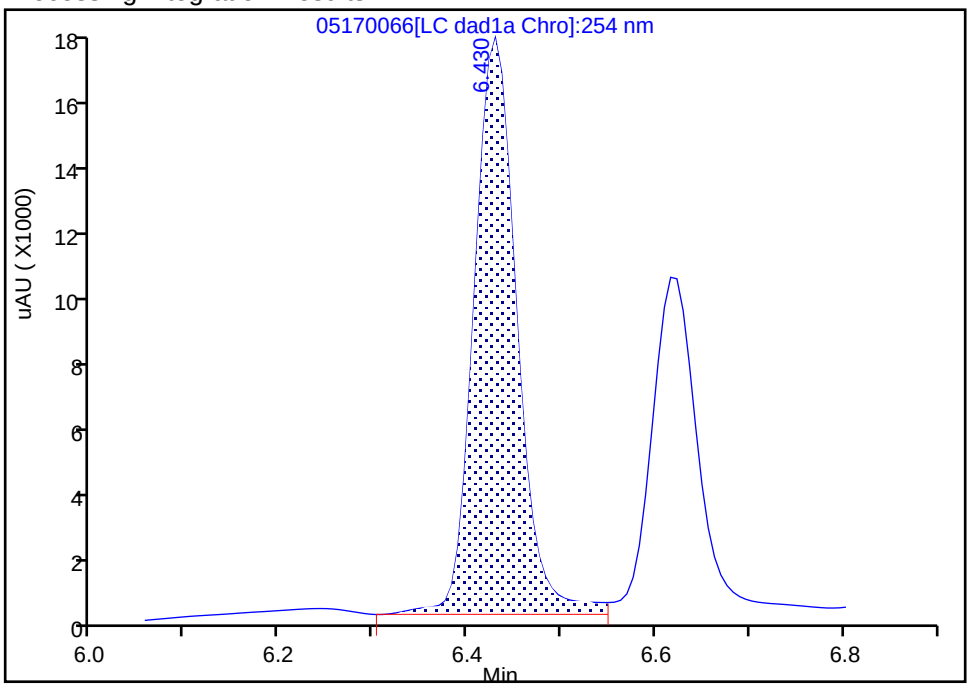
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170066.d				
Injection Date:	18-May-2023 18:03:15	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	66
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit 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

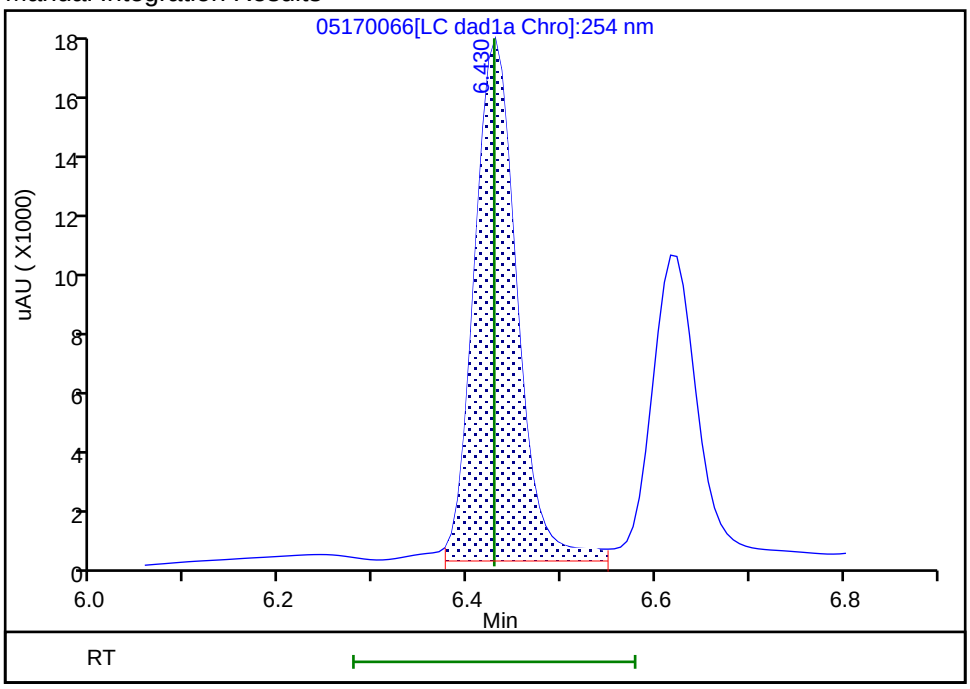
Processing Integration Results

RT: 6.43
Area: 53964
Amount: 0.231178
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 53364
Amount: 0.228565
Amount Units: ug/mL



Reviewer: LV5D, 18-May-2023 19:51:34 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

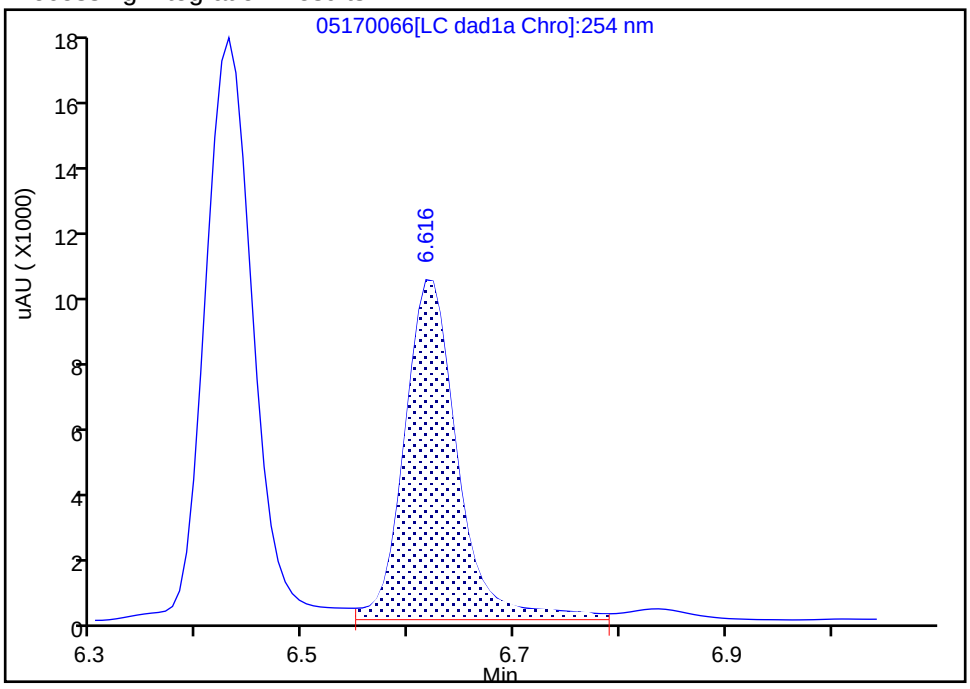
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170066.d				
Injection Date:	18-May-2023 18:03:15	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	66
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit 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

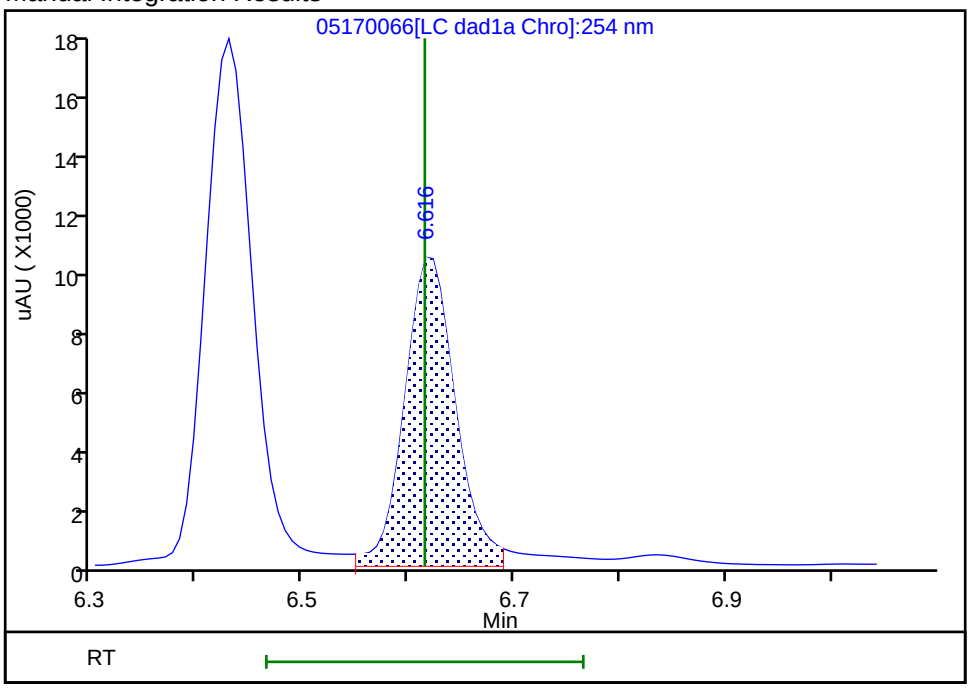
Processing Integration Results

RT: 6.62
Area: 34797
Amount: 0.237567
Amount Units: ug/mL



Manual Integration Results

RT: 6.62
Area: 33046
Amount: 0.225613
Amount Units: ug/mL



Reviewer: LV5D, 18-May-2023 19:51:35 -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.: 280-176335-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-612789/1-A

Matrix: Water | Lab File ID: 05170047.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/17/2023 13:57

Sample wt/vol: 500(mL) | Date Analyzed: 05/18/2023 08:52

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.: 612858 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U M	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	0.29	U	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	106		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230517-121556.b\05170047.D
Lims ID: MB 280-612789/1-A
Client ID:
Sample Type: MB
Inject. Date: 18-May-2023 08:52:17 ALS Bottle#: 47 Worklist Smp#: 47
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-612789/1-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230517-121556.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 18-May-2023 17:23:12 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1645

First Level Reviewer: LV5D Date: 18-May-2023 12:17:32

	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		6.428				ND	7
	3 TNX	1		6.432				ND	
	4 HMX	1		6.552				ND	
	5 2,4-diamino-6-nitrotoluene	1		6.615				ND	
	6 DNX	1		6.765				ND	
	7 MNX	1		7.192				ND	
	8 RDX	1		7.579				ND	
	9 2,4,6-Trinitrophenol	1		7.979				ND	
$	10 1,2-Dinitrobenzene	1	8.525	8.532	-0.007	26791	0.2000	0.2121	
	11 1,3,5-Trinitrobenzene	1		8.659				ND	U
	12 1,3-Dinitrobenzene	1		9.285				ND	
	13 Nitrobenzene	1		9.659				ND	
	14 3,5-Dinitroaniline	1		9.892				ND	
	15 Tetryl	1		10.025				ND	
	16 Nitroglycerin	2		10.479				ND	
	17 2,4,6-Trinitrotoluene	1		10.919				ND	
	18 4-Amino-2,6-dinitrotoluene	1		11.119				ND	
	19 2-Amino-4,6-dinitrotoluene	1		11.372				ND	
	20 2,6-Dinitrotoluene	1		11.525				ND	
	21 2,4-Dinitrotoluene	1		11.692				ND	
	22 o-Nitrotoluene	1		12.519				ND	
	23 p-Nitrotoluene	1		12.939				ND	
	24 m-Nitrotoluene	1		13.512				ND	
	25 PETN	2		14.692				ND	
	26 Ammonium Picrate	1		0.000				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Review Flags
U - Marked Undetected

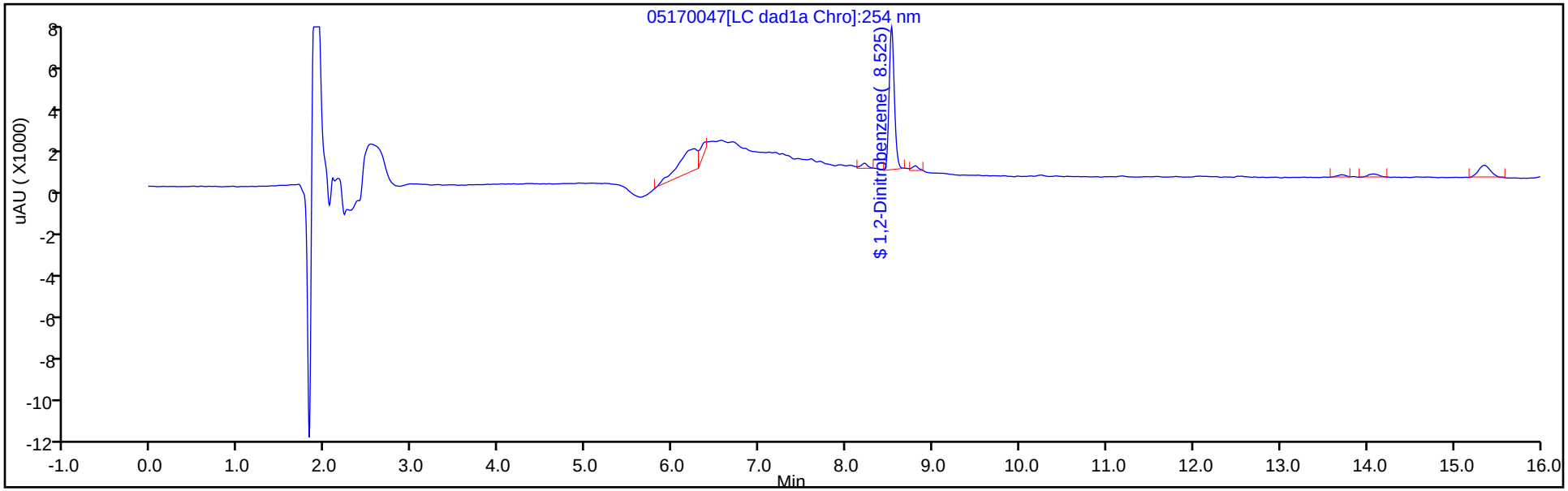
Report Date: 18-May-2023 17:38:56 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

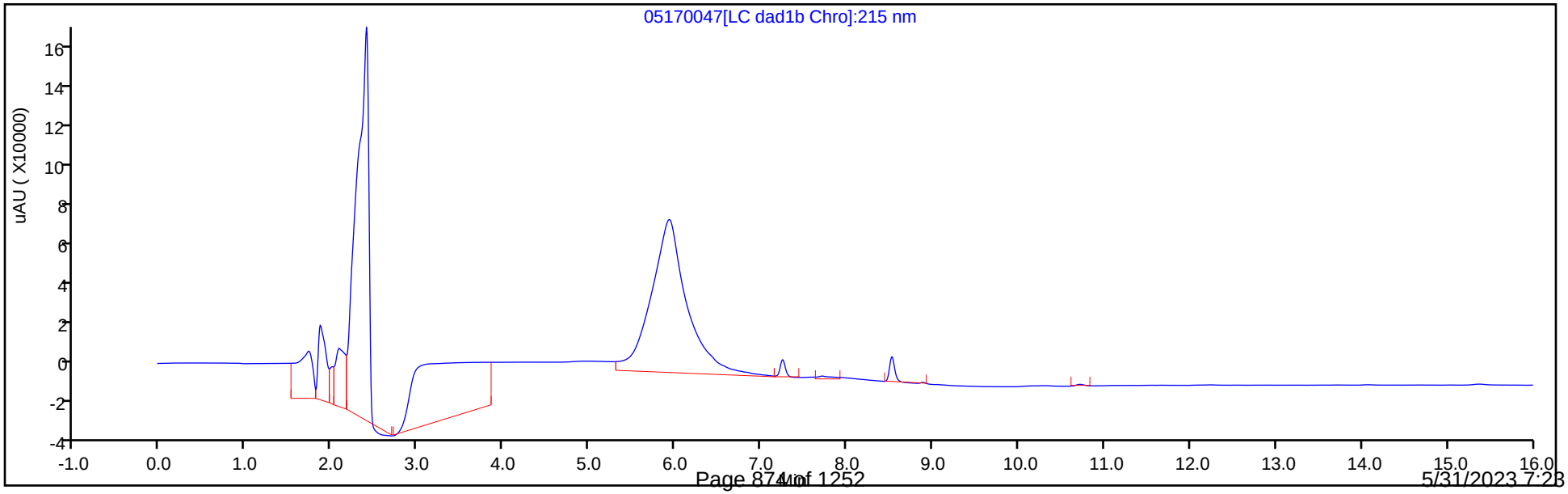
Data File: \\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170047.d

Injection Date:	18-May-2023 08:52:17	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	MB 280-612789/1-A			Worklist Smp#:	47
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	47
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\20230517-121556.b\05170047.D				
Lims ID:	MB 280-612789/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	18-May-2023 08:52:17	ALS Bottle#:	47	Worklist Smp#:	47
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	MB 280-612789/1-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230517-121556.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	18-May-2023 17:23:12	Calib Date:	24-Feb-2023 17:41:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1645				

First Level Reviewer: LV5D Date: 18-May-2023 12:17:32

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2121	106.05

User Disabled Compound Report

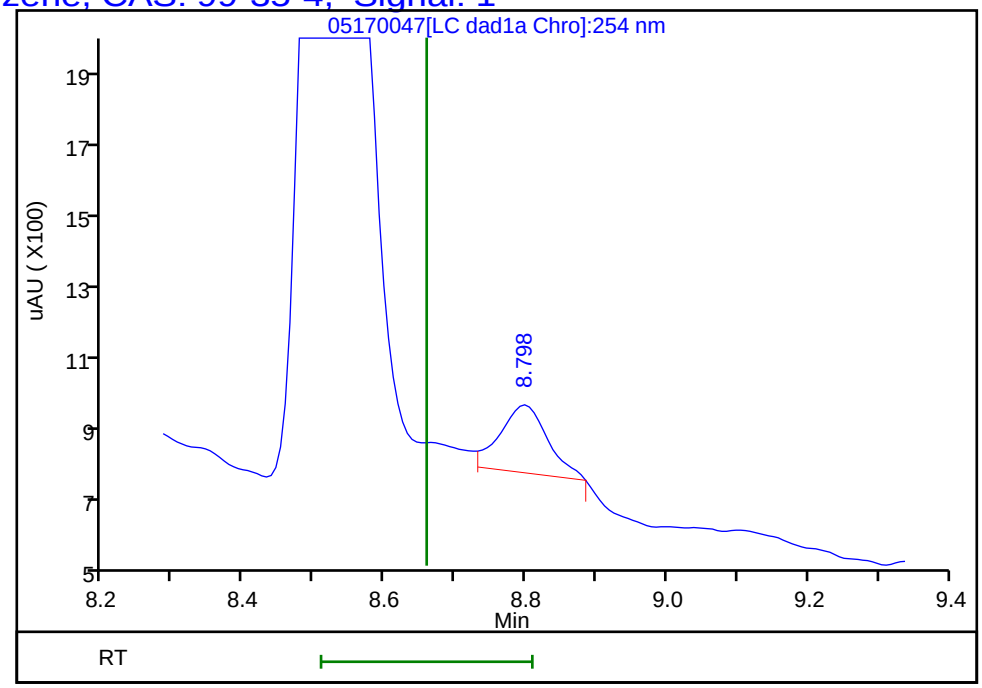
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170047.d
Injection Date: 18-May-2023 08:52:17 Instrument ID: CHHPLC_X3
Lims ID: MB 280-612789/1-A
Client ID:
Operator ID: JZ/JG ALS Bottle#: 47 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

RT: 8.80
Response: 824
Amount: 0.003795



Reviewer: LV5D, 18-May-2023 12:17:32
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176335-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-612789/2-A

Matrix: Water | Lab File ID: 0517Z048.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/17/2023 13:57

Sample wt/vol: 500(mL) | Date Analyzed: 05/18/2023 12:41

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.: 612858 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.06		0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	1.99		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	1.89		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	1.88		0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	1.96		0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.85		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.62		0.21	0.20	0.086
618-87-1	3,5-Dinitroaniline	1.79		0.40	0.30	0.13
99-08-1	3-Nitrotoluene	1.61		0.40	0.35	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.85		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.61		0.41	0.40	0.10
80251-29-2	DNX	1.98	M	0.50	0.25	0.097
2691-41-0	HMX	1.80	M	0.21	0.20	0.088
5755-27-1	MNX	2.35	M	0.50	0.29	0.093
98-95-3	Nitrobenzene	1.83		0.21	0.20	0.091
55-63-0	Nitroglycerin	19.4		2.1	2.0	0.92
78-11-5	PETN	21.1		1.1	1.0	0.45
121-82-4	RDX	1.91		0.21	0.20	0.052
479-45-8	Tetryl	2.12		0.11	0.10	0.032
13980-04-6	TNX	1.97	M	0.50	0.25	0.079

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\20230517-121556.b\0517Z048.D
Lims ID: LCS 280-612789/2-A
Client ID:
Sample Type: LCS
Inject. Date: 18-May-2023 12:41:42 ALS Bottle#: 72 Worklist Smp#: 48
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-612789/2-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230517-121556.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 18-May-2023 17:23:12 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1645

First Level Reviewer: LV5D Date: 18-May-2023 13:11:19

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 TNX	1	6.430	6.432	-0.002	38902	0.2006	0.1968	M
	4 HMX	1	6.550	6.552	-0.002	16790	0.2000	0.1795	M
	6 DNX	1	6.757	6.765	-0.008	28556	0.2002	0.1977	M
	7 MNX	1	7.183	7.192	-0.009	30833	0.2334	0.2351	M
	8 RDX	1	7.570	7.579	-0.009	20353	0.2000	0.1913	
	9 2,4,6-Trinitrophenol	1	7.970	7.979	-0.009	16982	0.2000	0.2239	
$	10 1,2-Dinitrobenzene	1	8.530	8.532	-0.002	25351	0.2000	0.2007	
	11 1,3,5-Trinitrobenzene	1	8.657	8.659	-0.002	44635	0.2000	0.2056	
	12 1,3-Dinitrobenzene	1	9.277	9.285	-0.008	58438	0.2000	0.1985	
	13 Nitrobenzene	1	9.650	9.659	-0.009	35018	0.2000	0.1831	
	14 3,5-Dinitroaniline	1	9.890	9.892	-0.002	40946	0.2000	0.1793	
	15 Tetryl	1	10.023	10.025	-0.002	34750	0.2000	0.2117	
	16 Nitroglycerin	2	10.477	10.479	-0.002	124571	2.00	1.94	
	17 2,4,6-Trinitrotoluene	1	10.910	10.919	-0.009	39904	0.2000	0.1891	
	18 4-Amino-2,6-dinitrotoluene	1	11.110	11.119	-0.009	28618	0.2000	0.1847	
	19 2-Amino-4,6-dinitrotoluene	1	11.363	11.372	-0.009	37218	0.2000	0.1848	
	20 2,6-Dinitrotoluene	1	11.510	11.525	-0.015	27962	0.2000	0.1959	
	21 2,4-Dinitrotoluene	1	11.683	11.692	-0.009	55841	0.2000	0.1882	
	22 o-Nitrotoluene	1	12.503	12.519	-0.016	20769	0.2000	0.1624	
	23 p-Nitrotoluene	1	12.923	12.939	-0.016	17991	0.2000	0.1608	
	24 m-Nitrotoluene	1	13.497	13.512	-0.015	22655	0.2000	0.1613	
	25 PETN	2	14.663	14.692	-0.029	145008	2.00	2.11	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

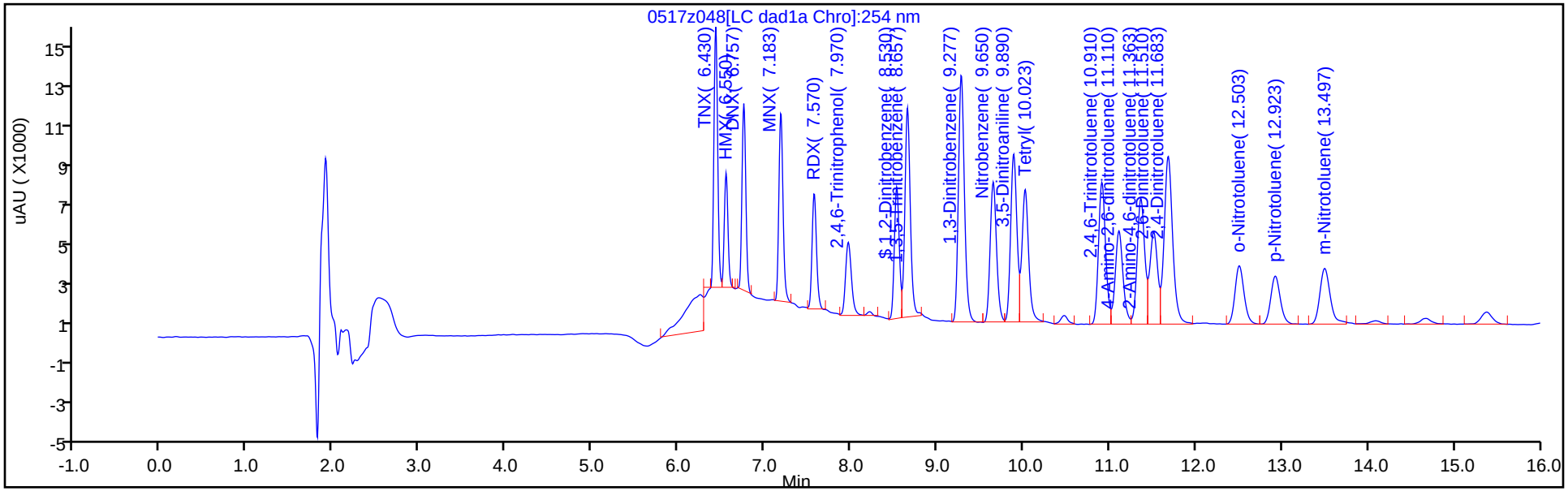
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Eurofins Denver

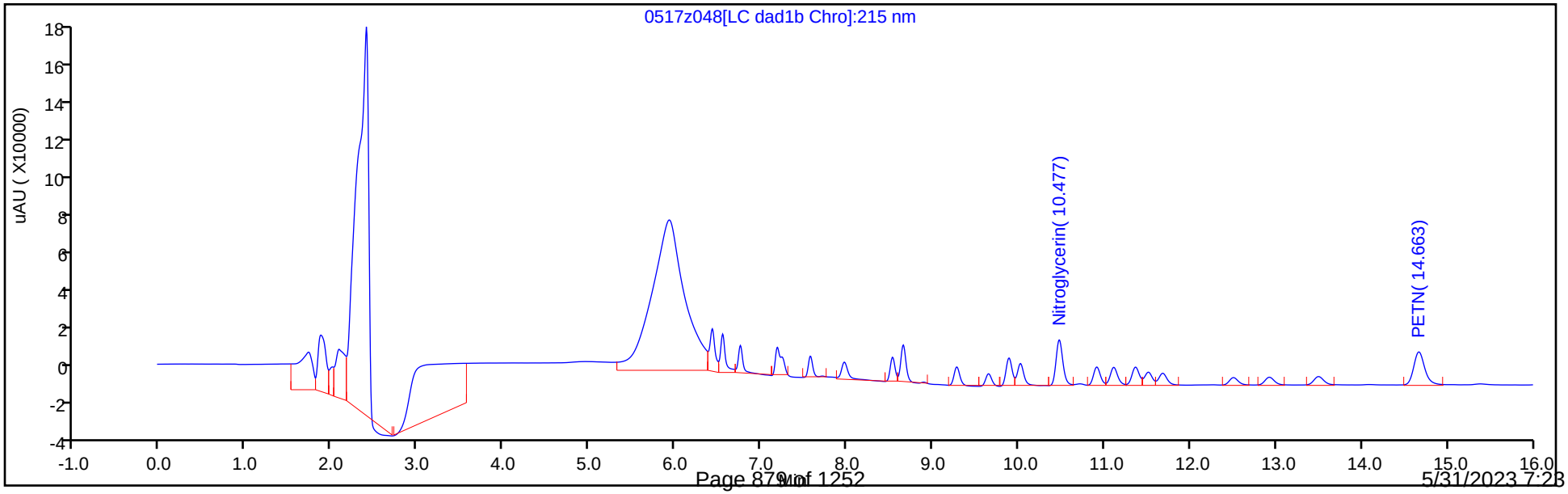
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Injection Date:	18-May-2023 12:41:42	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	LCS 280-612789/2-A			Worklist Smp#:	48
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	72
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



5/31/2023 7:28 AM

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230517-121556.b\0517Z048.D
Lims ID: LCS 280-612789/2-A
Client ID:
Sample Type: LCS
Inject. Date: 18-May-2023 12:41:42 ALS Bottle#: 72 Worklist Smp#: 48
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-612789/2-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230517-121556.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 18-May-2023 17:23:12 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1645

First Level Reviewer: LV5D Date: 18-May-2023 13:11:19

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2007	100.35

Manual Integration/User Assign Peak Report

Eurofins Denver

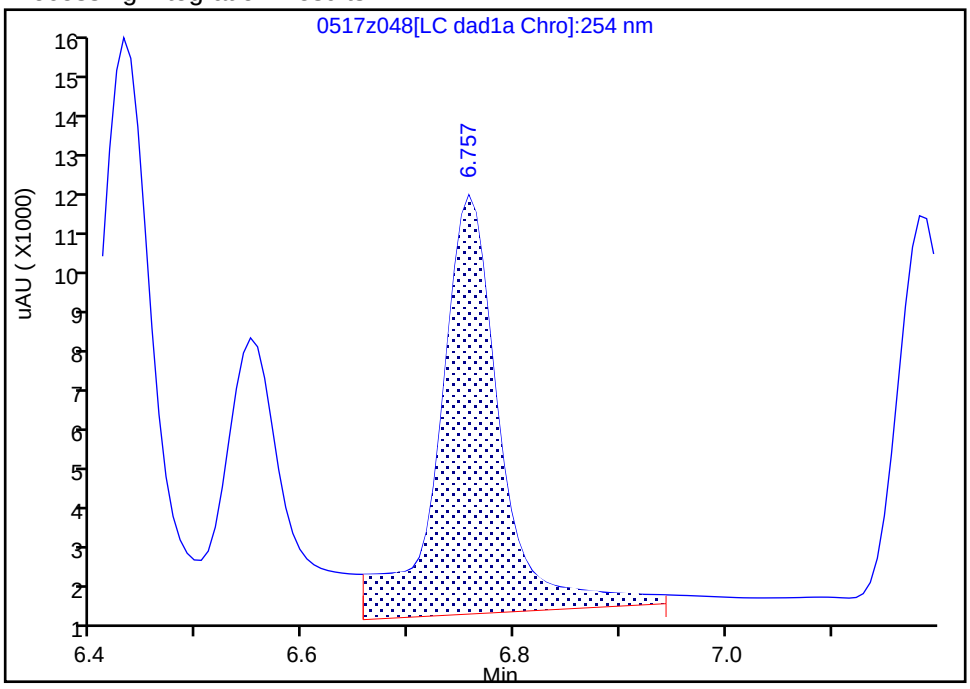
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Injection Date: 18-May-2023 12:41:42 Instrument ID: CHHPLC_X3
Lims ID: LCS 280-612789/2-A
Client ID:
Operator ID: JZ/JG ALS Bottle#: 72 Worklist Smp#: 48
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 DNX, CAS: 80251-29-2

Signal: 1

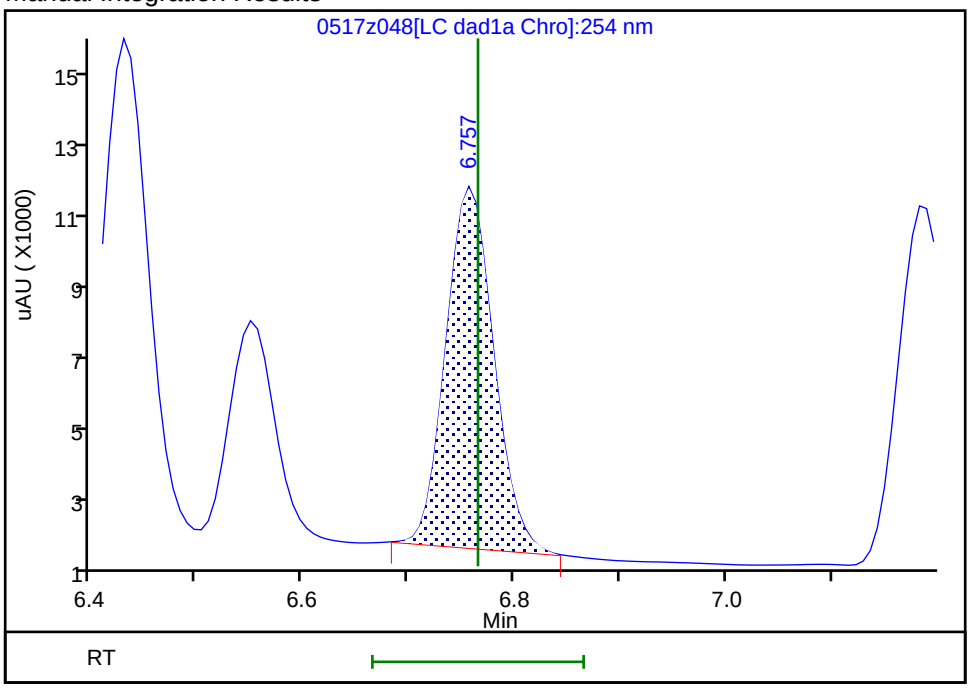
Processing Integration Results

RT: 6.76
Area: 40349
Amount: 0.279304
Amount Units: ug/mL



Manual Integration Results

RT: 6.76
Area: 28556
Amount: 0.197671
Amount Units: ug/mL



Reviewer: LV5D, 18-May-2023 13:11:10 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

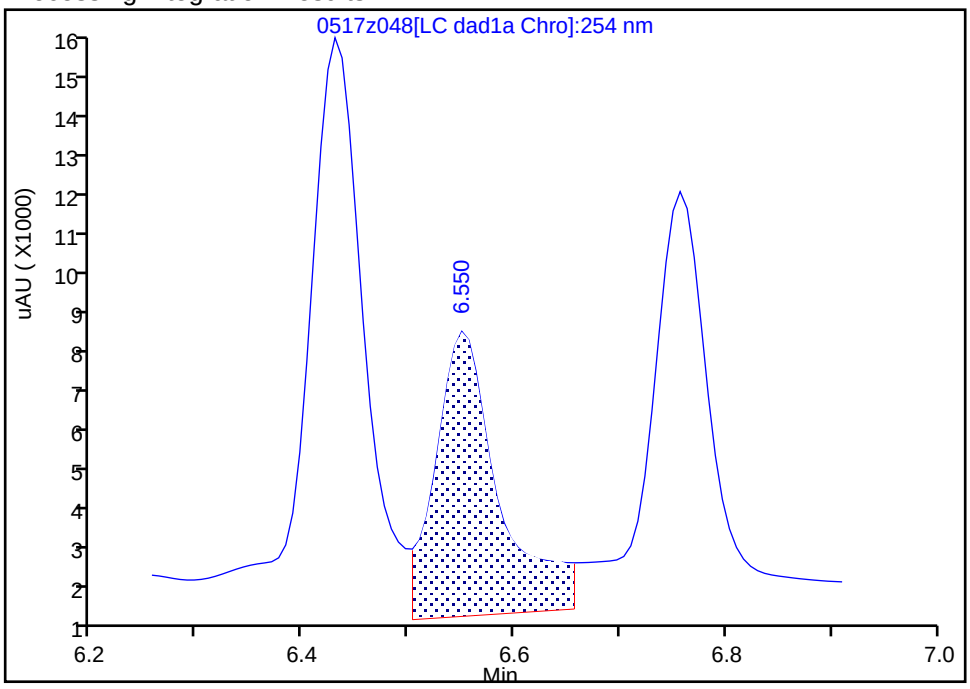
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\0517z048.d				
Injection Date:	18-May-2023 12:41:42	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-612789/2-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	72	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

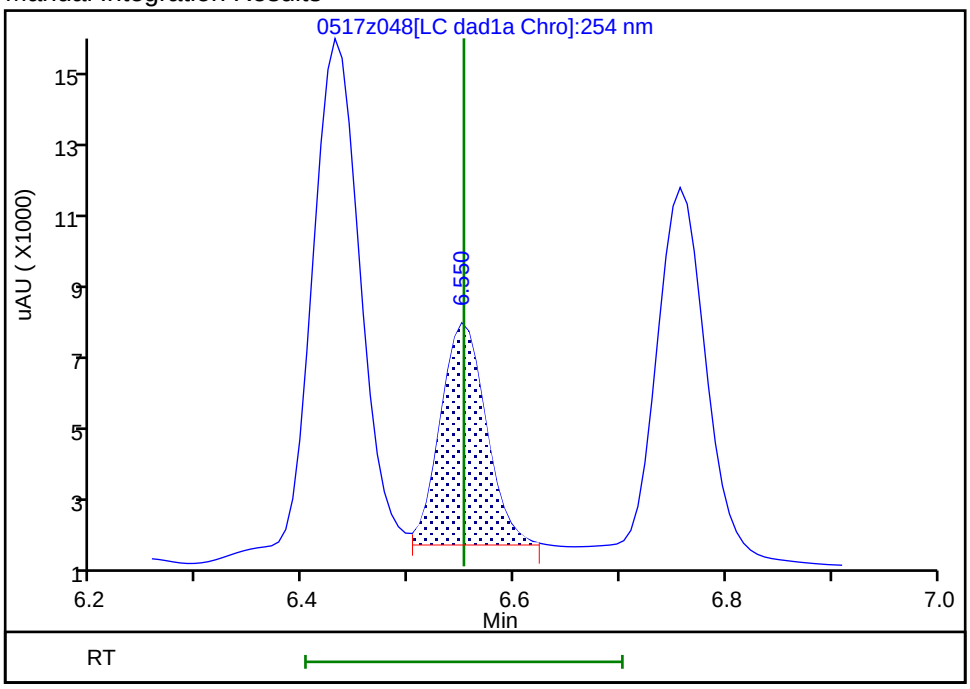
Processing Integration Results

RT: 6.55
Area: 28430
Amount: 0.303973
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 16790
Amount: 0.179518
Amount Units: ug/mL



Reviewer: LV5D, 18-May-2023 13:11:07 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

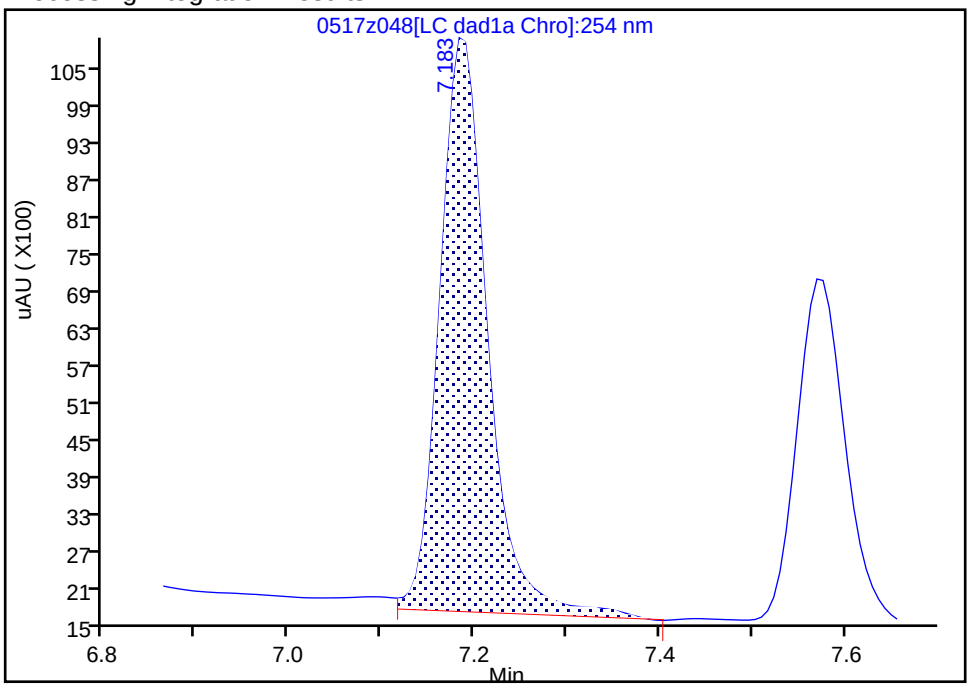
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Injection Date: 18-May-2023 12:41:42 Instrument ID: CHHPLC_X3
Lims ID: LCS 280-612789/2-A
Client ID:
Operator ID: JZ/JG ALS Bottle#: 72 Worklist Smp#: 48
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

7 MNX, CAS: 5755-27-1

Signal: 1

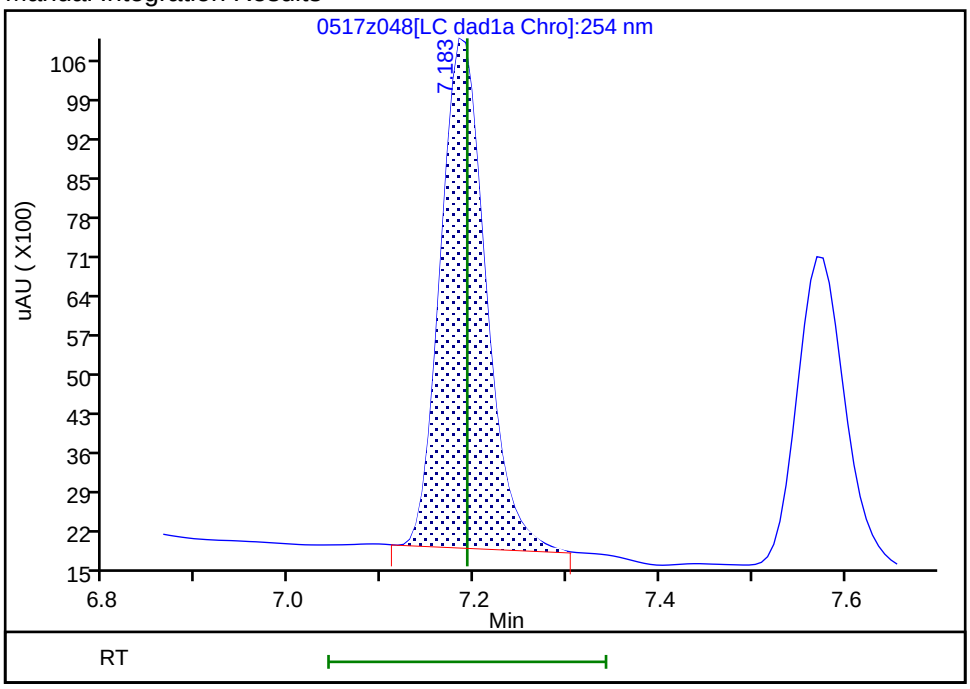
Processing Integration Results

RT: 7.18
Area: 33481
Amount: 0.255246
Amount Units: ug/mL



Manual Integration Results

RT: 7.18
Area: 30833
Amount: 0.235059
Amount Units: ug/mL



Reviewer: LV5D, 18-May-2023 13:11:16 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

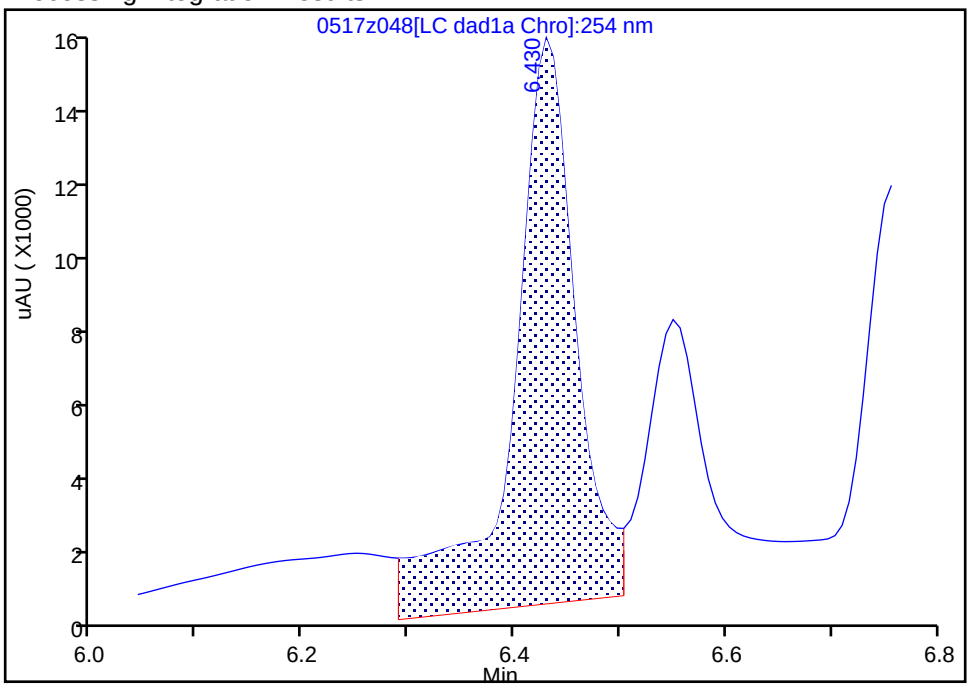
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Injection Date:	18-May-2023 12:41:42	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-612789/2-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	72	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

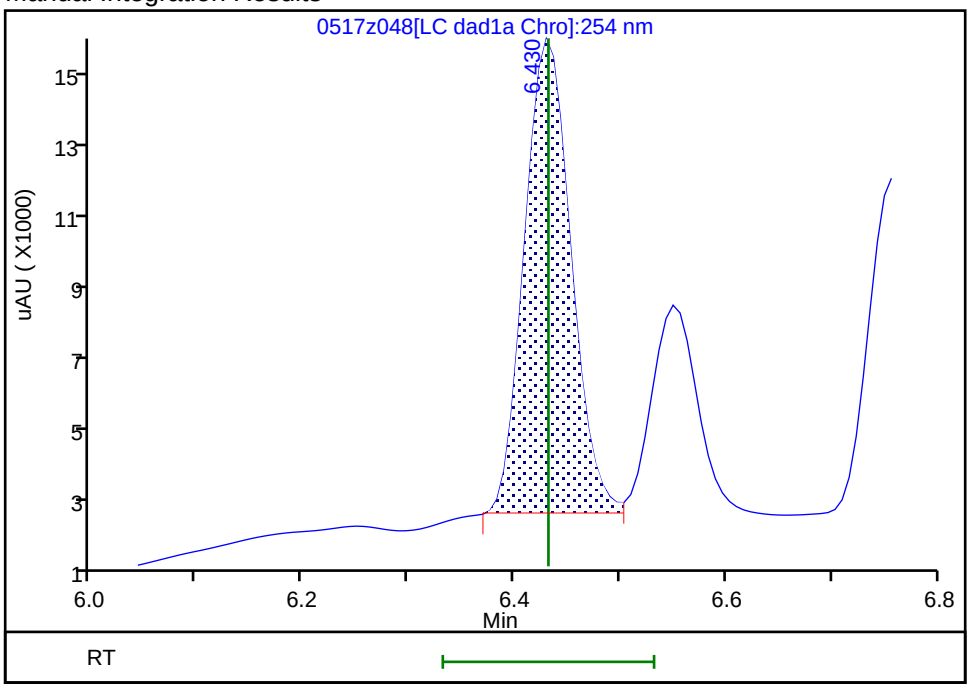
Processing Integration Results

RT: 6.43
Area: 59685
Amount: 0.301916
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 38902
Amount: 0.196785
Amount Units: ug/mL



Reviewer: LV5D, 18-May-2023 13:11:06 -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.: 280-176335-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-612789/4-A

Matrix: Water | Lab File ID: 05170050.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/17/2023 13:57

Sample wt/vol: 500(mL) | Date Analyzed: 05/18/2023 10:01

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.: 612858 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
6629-29-4	2,4-diamino-6-nitrotoluene	1.53	M	1.0	0.90	0.43
59229-75-3	2,6-diamino-4-nitrotoluene	1.64	M	1.0	0.90	0.22

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	110		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230517-121556.b\05170050.D
Lims ID: LCS 280-612789/4-A
Client ID:
Sample Type: LCS
Inject. Date: 18-May-2023 10:01:04 ALS Bottle#: 50 Worklist Smp#: 50
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-612789/4-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230517-121556.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 18-May-2023 17:23:12 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1645

First Level Reviewer: LV5D Date: 18-May-2023 11:55:44

	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	6.422	6.428	-0.006	38598	0.2000	0.1643	M
5	2,4-diamino-6-nitrotoluene	1	6.609	6.615	-0.006	22415	0.2000	0.1530	M
$ 10	1,2-Dinitrobenzene	1	8.535	8.532	0.003	27700	0.2000	0.2193	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

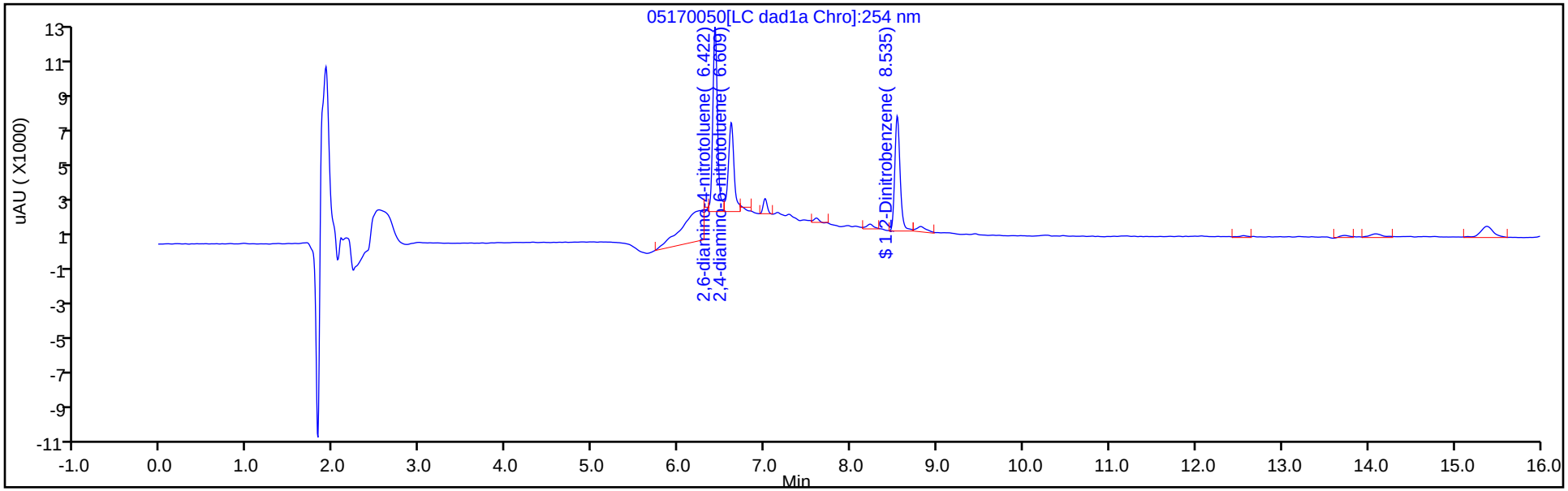
Report Date: 18-May-2023 17:38:58 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

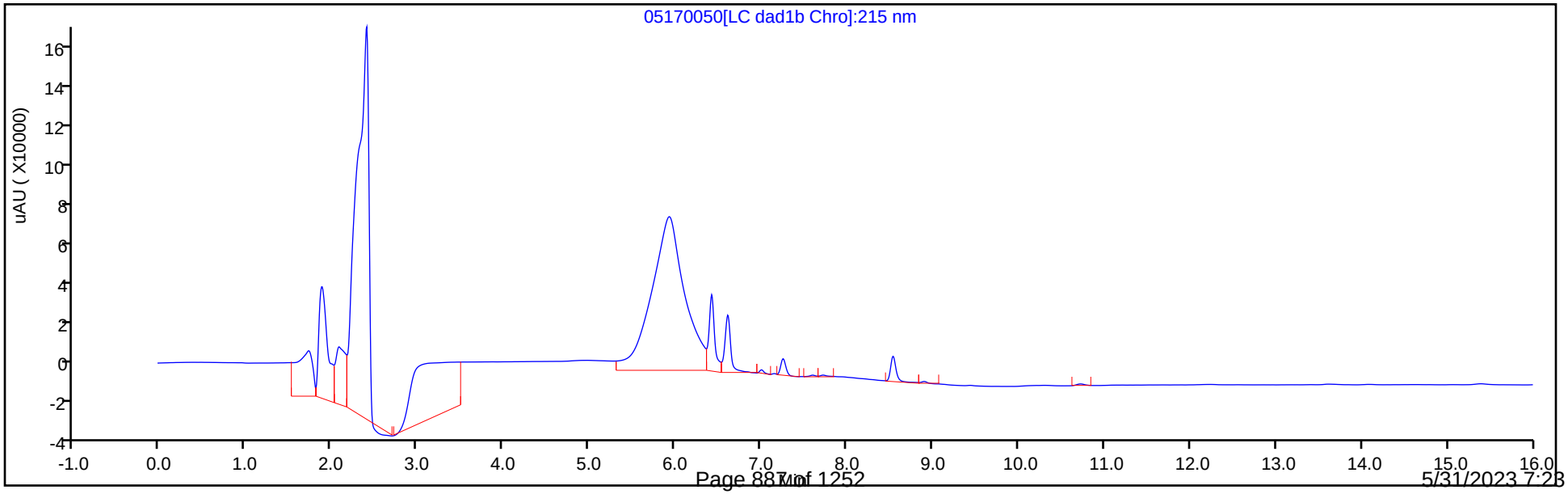
Data File: \\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170050.d

Injection Date:	18-May-2023 10:01:04	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	LCS 280-612789/4-A			Worklist Smp#:	50
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	50
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\20230517-121556.b\05170050.D				
Lims ID:	LCS 280-612789/4-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	18-May-2023 10:01:04	ALS Bottle#:	50	Worklist Smp#:	50
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-612789/4-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230517-121556.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	18-May-2023 17:23:12	Calib Date:	24-Feb-2023 17:41:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1645				

First Level Reviewer: LV5D Date: 18-May-2023 11:55:44

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2193	109.65

Manual Integration/User Assign Peak Report

Eurofins Denver

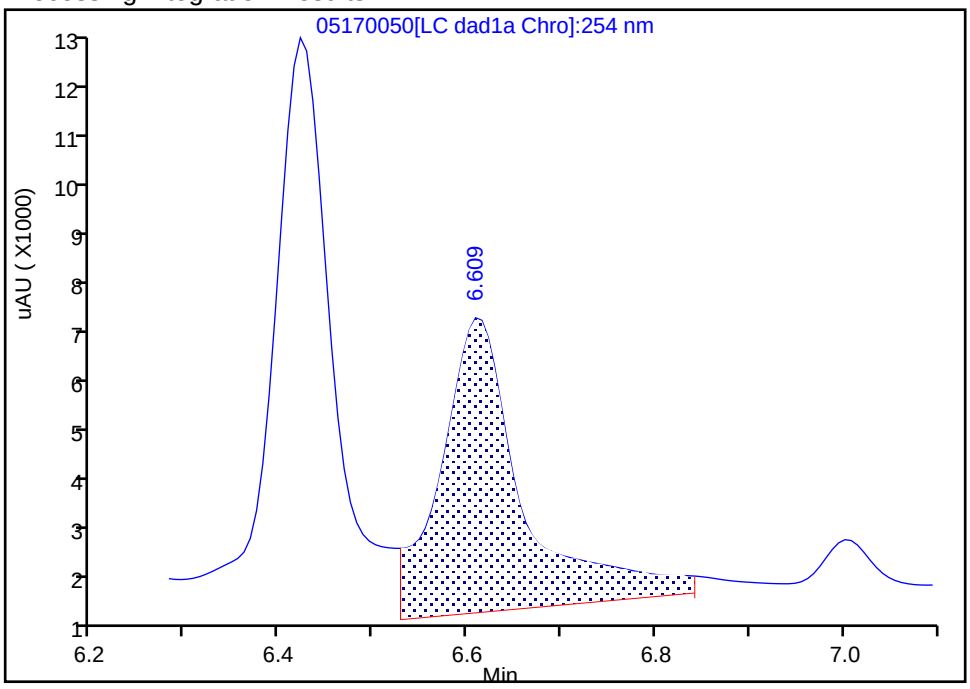
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Injection Date:	18-May-2023 10:01:04	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-612789/4-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	50	Worklist Smp#:	50
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

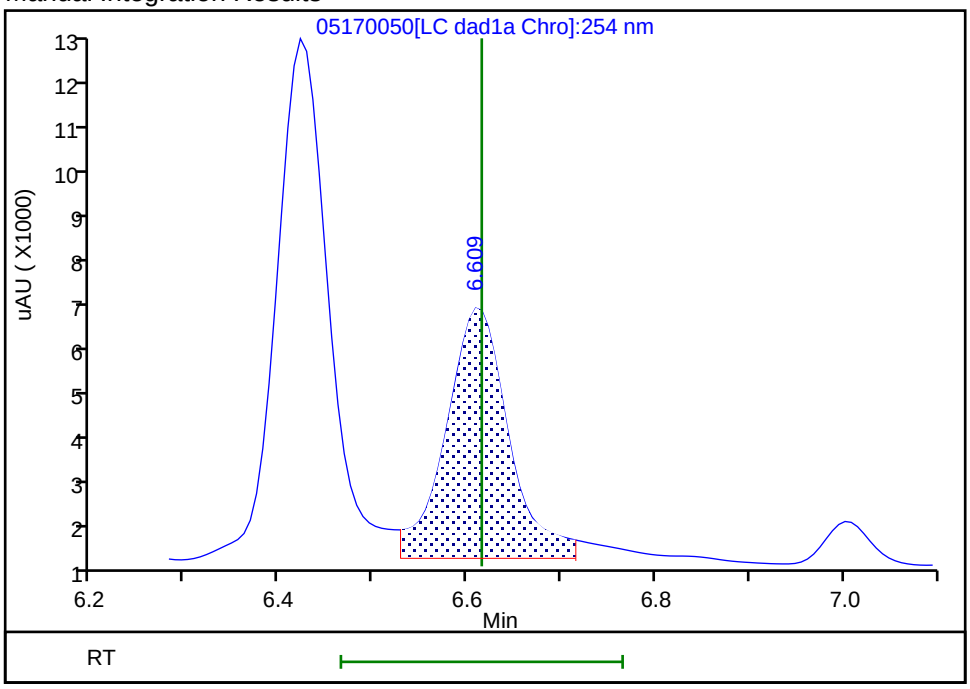
Processing Integration Results

RT: 6.61
Area: 33840
Amount: 0.231034
Amount Units: ug/mL



Manual Integration Results

RT: 6.61
Area: 22415
Amount: 0.153033
Amount Units: ug/mL



Reviewer: LV5D, 18-May-2023 11:56:00 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

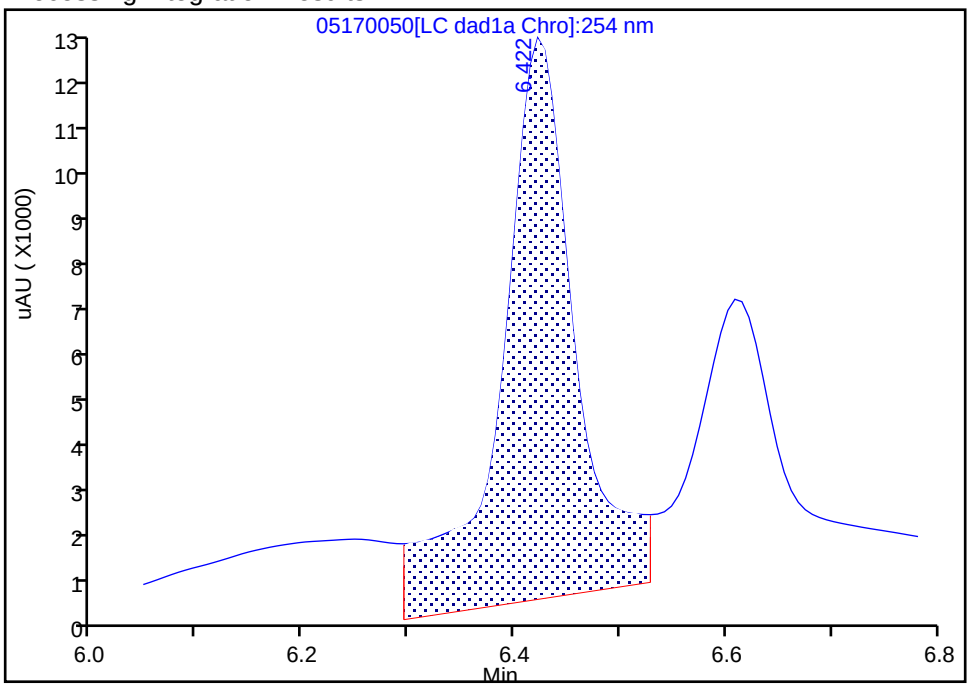
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170050.d				
Injection Date:	18-May-2023 10:01:04	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-612789/4-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	50	Worklist Smp#:	50
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	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

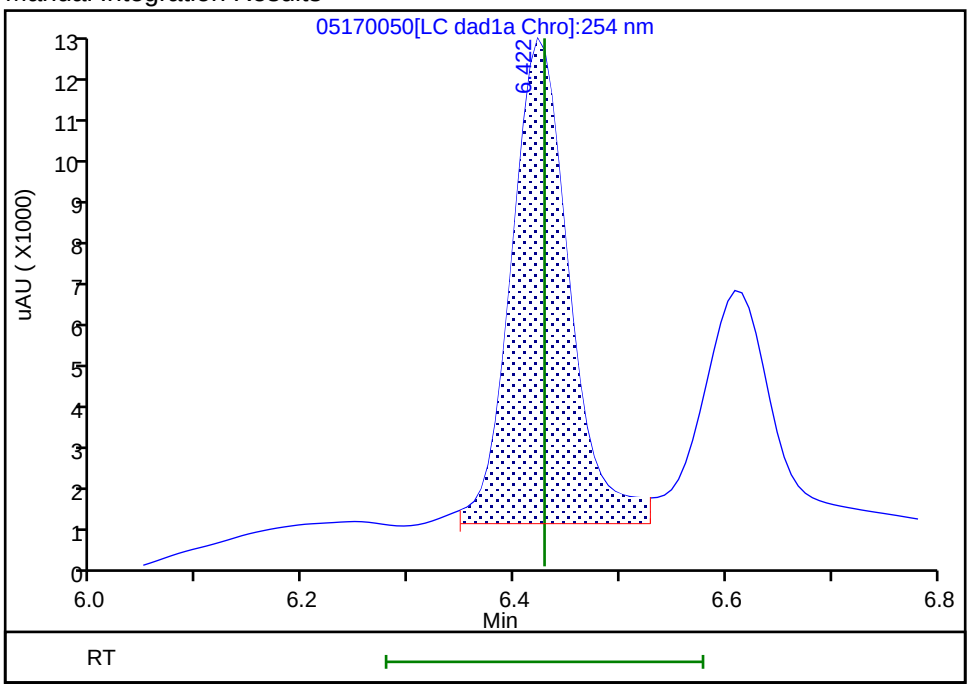
Processing Integration Results

RT: 6.42
Area: 55751
Amount: 0.238958
Amount Units: ug/mL



Manual Integration Results

RT: 6.42
Area: 38598
Amount: 0.164280
Amount Units: ug/mL



Reviewer: LV5D, 18-May-2023 11:56:00 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176335-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 280-612789/3-A

Matrix: Water | Lab File ID: 05170049.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/17/2023 13:57

Sample wt/vol: 500(mL) | Date Analyzed: 05/18/2023 09:38

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.: 612858 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.06		0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	2.00		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	1.90		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	1.90		0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	1.96		0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.82		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.62		0.21	0.20	0.086
618-87-1	3,5-Dinitroaniline	1.79		0.40	0.30	0.13
99-08-1	3-Nitrotoluene	1.59		0.40	0.35	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.76		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.61		0.41	0.40	0.10
80251-29-2	DNX	1.96	M	0.50	0.25	0.097
2691-41-0	HMX	1.79	M	0.21	0.20	0.088
5755-27-1	MNX	2.36	M	0.50	0.29	0.093
98-95-3	Nitrobenzene	1.80		0.21	0.20	0.091
55-63-0	Nitroglycerin	19.8		2.1	2.0	0.92
78-11-5	PETN	21.1		1.1	1.0	0.45
121-82-4	RDX	1.97		0.21	0.20	0.052
479-45-8	Tetryl	2.12		0.11	0.10	0.032
13980-04-6	TNX	1.89	M	0.50	0.25	0.079

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\20230517-121556.b\05170049.D
Lims ID: LCSD 280-612789/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 18-May-2023 09:38:09 ALS Bottle#: 49 Worklist Smp#: 49
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-612789/3-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230517-121556.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 18-May-2023 17:23:12 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1645

First Level Reviewer: LV5D Date: 18-May-2023 12:17:52

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.432	6.432	0.000	37398	0.2006	0.1892	M
4 HMX	1	6.552	6.552	0.000	16748	0.2000	0.1791	M
6 DNX	1	6.759	6.765	-0.006	28315	0.2002	0.1960	M
7 MNX	1	7.192	7.192	0.000	30998	0.2334	0.2363	M
8 RDX	1	7.572	7.579	-0.007	20959	0.2000	0.1970	
9 2,4,6-Trinitrophenol	1	7.966	7.979	-0.013	17155	0.2000	0.2262	
$ 10 1,2-Dinitrobenzene	1	8.532	8.532	0.000	25784	0.2000	0.2041	
11 1,3,5-Trinitrobenzene	1	8.652	8.659	-0.007	44632	0.2000	0.2055	
12 1,3-Dinitrobenzene	1	9.279	9.285	-0.006	58867	0.2000	0.2000	
13 Nitrobenzene	1	9.652	9.659	-0.007	34380	0.2000	0.1798	
14 3,5-Dinitroaniline	1	9.885	9.892	-0.007	40865	0.2000	0.1790	
15 Tetryl	1	10.019	10.025	-0.006	34715	0.2000	0.2115	
16 Nitroglycerin	2	10.472	10.479	-0.007	126965	2.00	1.98	
17 2,4,6-Trinitrotoluene	1	10.912	10.919	-0.007	40118	0.2000	0.1901	
18 4-Amino-2,6-dinitrotoluene	1	11.112	11.119	-0.007	27218	0.2000	0.1757	
19 2-Amino-4,6-dinitrotoluene	1	11.365	11.372	-0.007	36682	0.2000	0.1821	
20 2,6-Dinitrotoluene	1	11.519	11.525	-0.006	28019	0.2000	0.1963	
21 2,4-Dinitrotoluene	1	11.685	11.692	-0.007	56373	0.2000	0.1900	
22 o-Nitrotoluene	1	12.512	12.519	-0.007	20734	0.2000	0.1621	
23 p-Nitrotoluene	1	12.932	12.939	-0.007	17983	0.2000	0.1607	
24 m-Nitrotoluene	1	13.512	13.512	0.000	22363	0.2000	0.1592	
25 PETN	2	14.692	14.692	0.000	145314	2.00	2.11	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

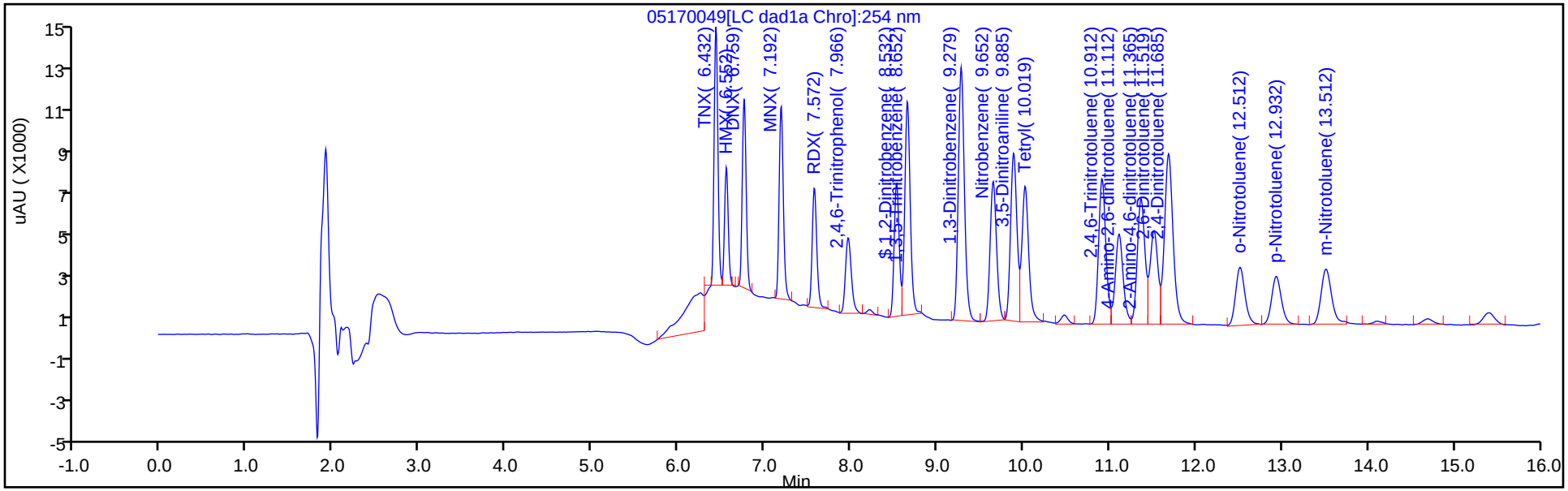
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Eurofins Denver

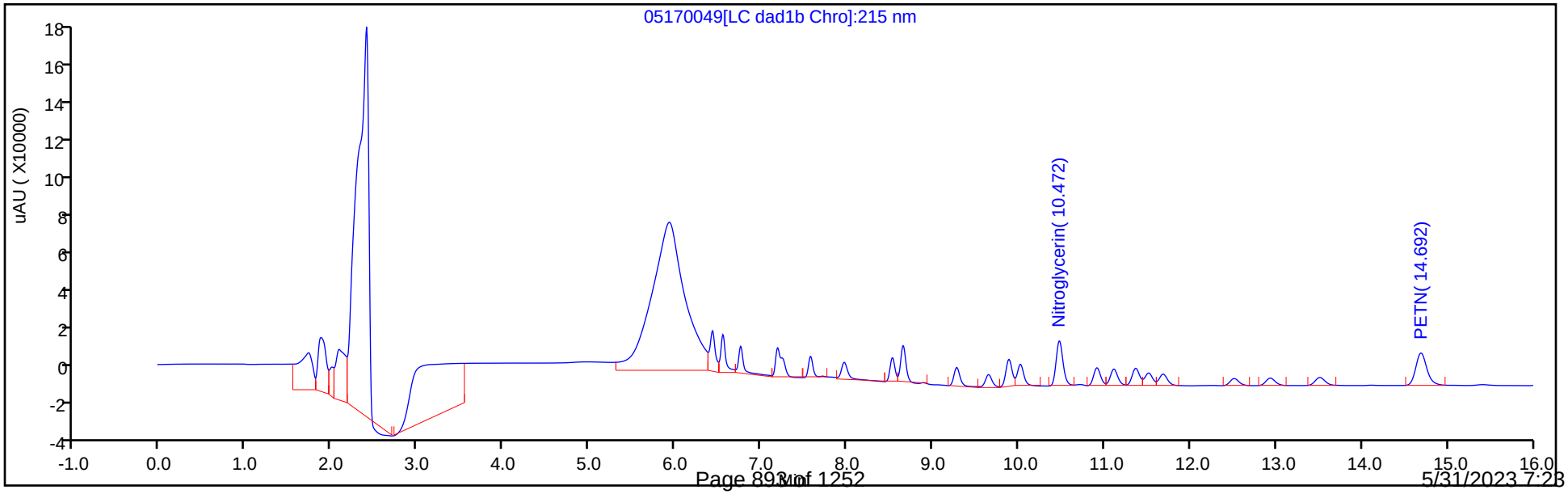
Data File: \\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170049.d

Injection Date:	18-May-2023 09:38:09	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	LCSD 280-612789/3-A			Worklist Smp#:	49
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	49
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\20230517-121556.b\05170049.D				
Lims ID:	LCSD 280-612789/3-A				
Client ID:					
Sample Type:	LCSD				
Inject. Date:	18-May-2023 09:38:09	ALS Bottle#:	49	Worklist Smp#:	49
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCSD 280-612789/3-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230517-121556.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	18-May-2023 17:23:12	Calib Date:	24-Feb-2023 17:41:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1645				

First Level Reviewer: LV5D Date: 18-May-2023 12:17:52

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2041	102.07

Manual Integration/User Assign Peak Report

Eurofins Denver

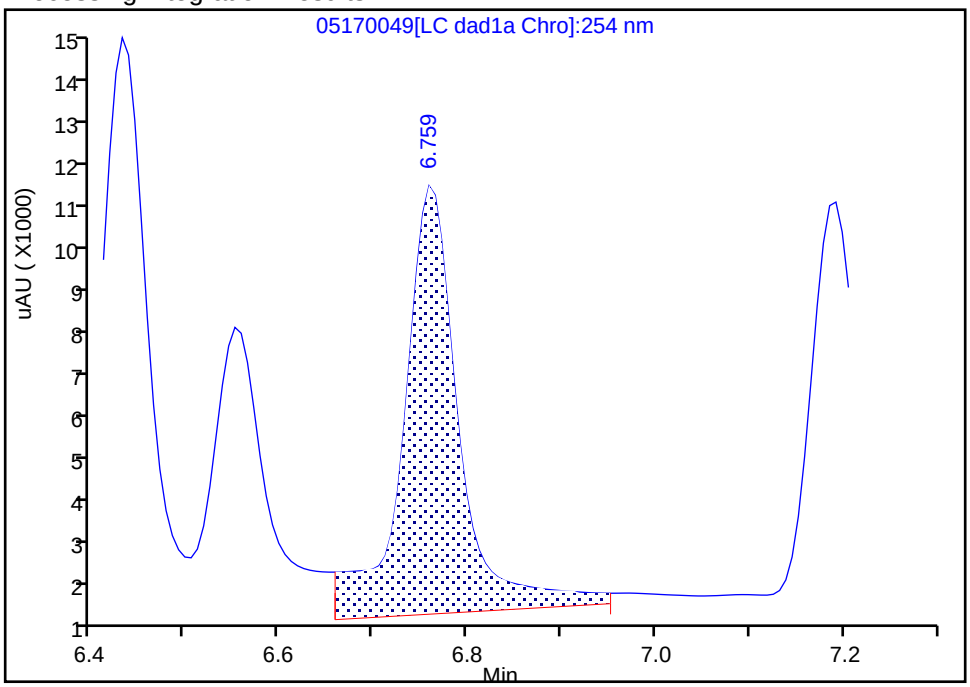
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170049.d				
Injection Date:	18-May-2023 09:38:09	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-612789/3-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	49	Worklist Smp#:	49
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

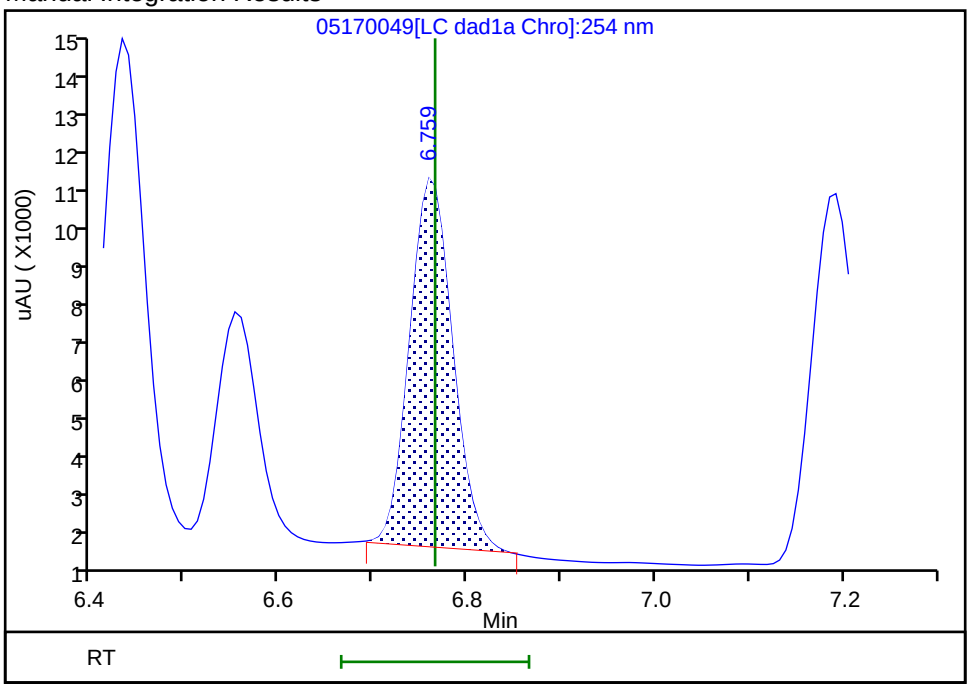
Processing Integration Results

RT: 6.76
Area: 40829
Amount: 0.282627
Amount Units: ug/mL



Manual Integration Results

RT: 6.76
Area: 28315
Amount: 0.196002
Amount Units: ug/mL



Reviewer: LV5D, 18-May-2023 12:17:45 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

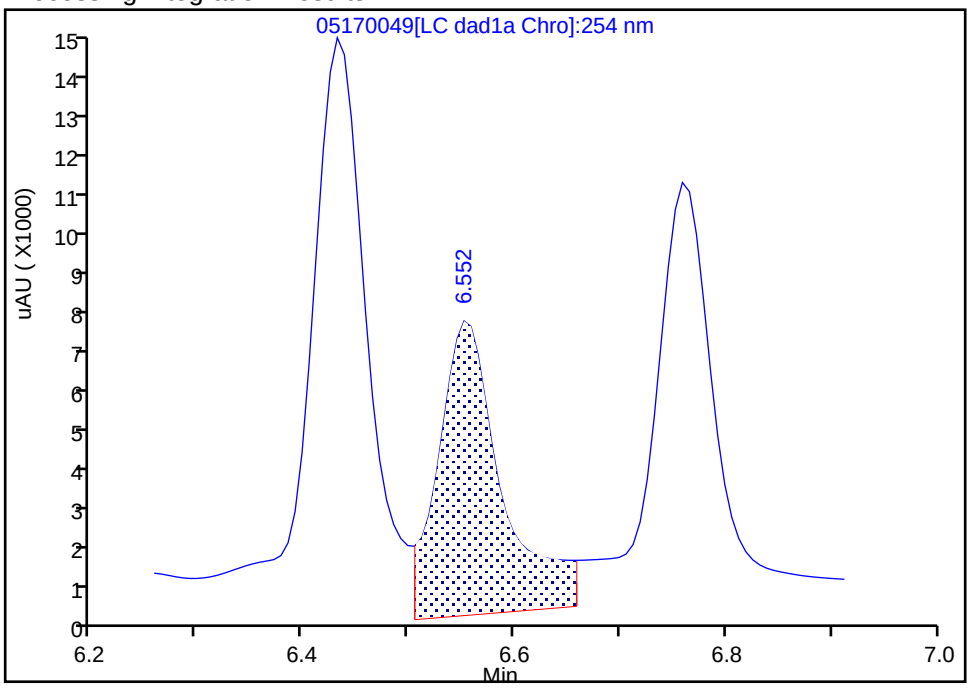
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170049.d				
Injection Date:	18-May-2023 09:38:09	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-612789/3-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	49	Worklist Smp#:	49
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

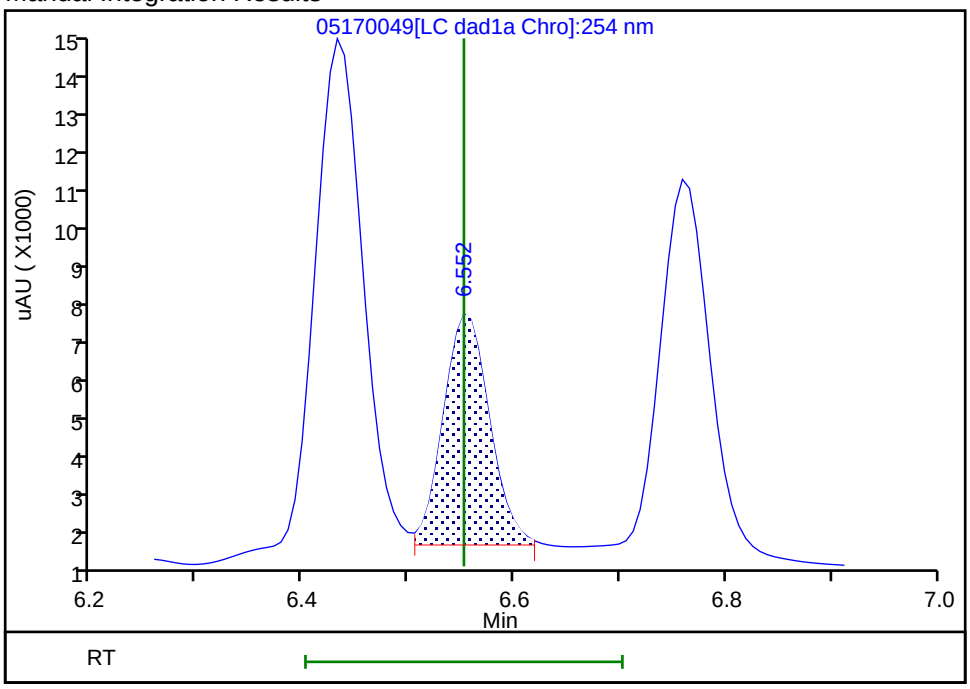
Processing Integration Results

RT: 6.55
Area: 28626
Amount: 0.306068
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 16748
Amount: 0.179069
Amount Units: ug/mL



Reviewer: LV5D, 18-May-2023 12:17:42 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

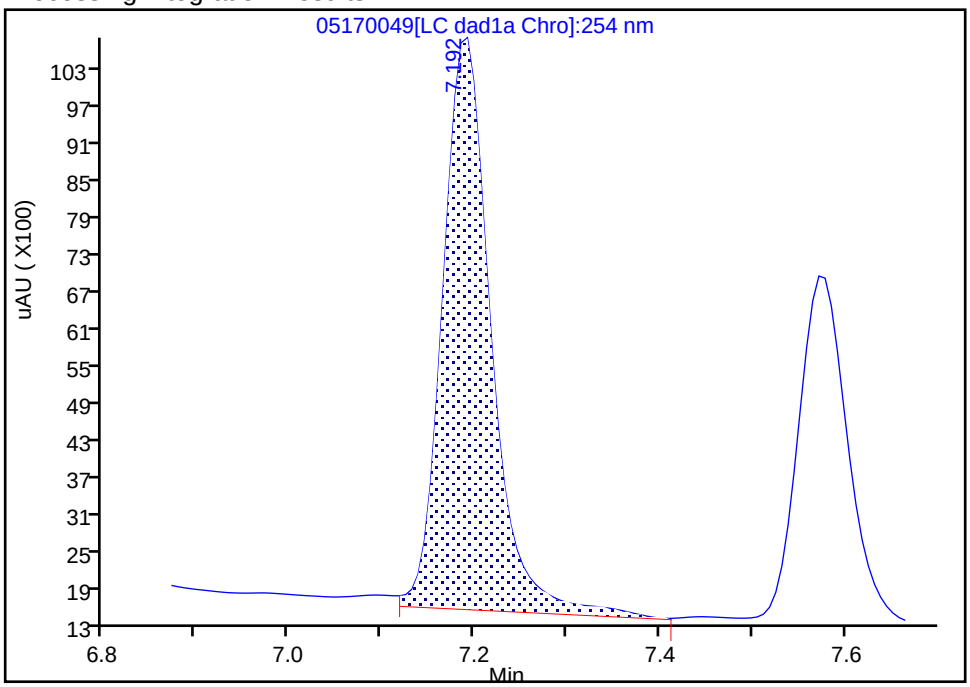
Data File: \\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170049.d
Injection Date: 18-May-2023 09:38:09 Instrument ID: CHHPLC_X3
Lims ID: LCSD 280-612789/3-A
Client ID:
Operator ID: JZ/JG ALS Bottle#: 49 Worklist Smp#: 49
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

7 MNX, CAS: 5755-27-1

Signal: 1

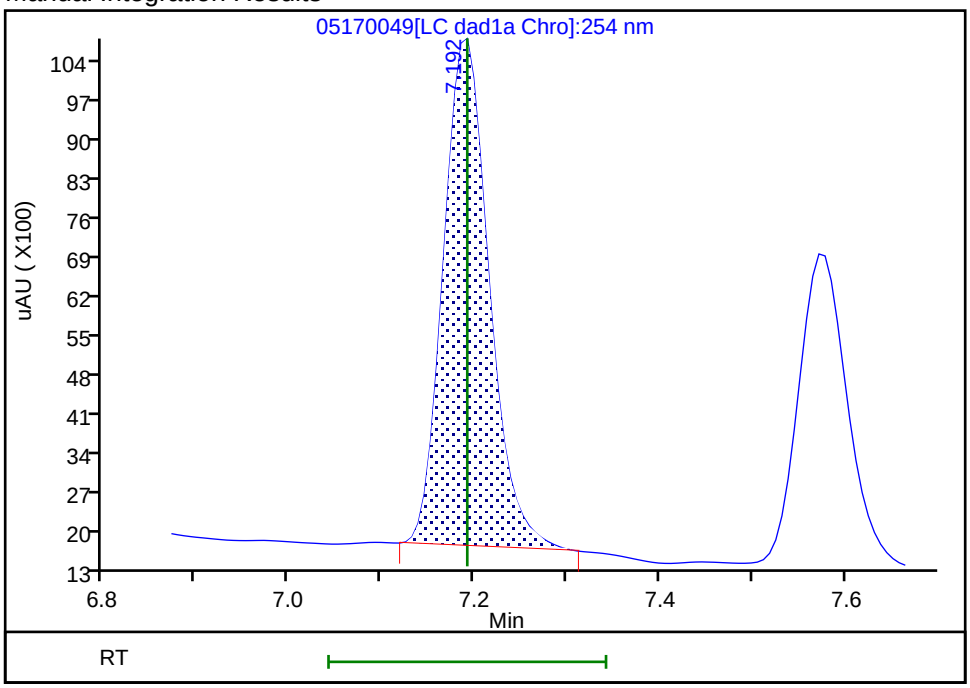
Processing Integration Results

RT: 7.19
Area: 33456
Amount: 0.255055
Amount Units: ug/mL



Manual Integration Results

RT: 7.19
Area: 30998
Amount: 0.236316
Amount Units: ug/mL



Reviewer: LV5D, 18-May-2023 12:17:51 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

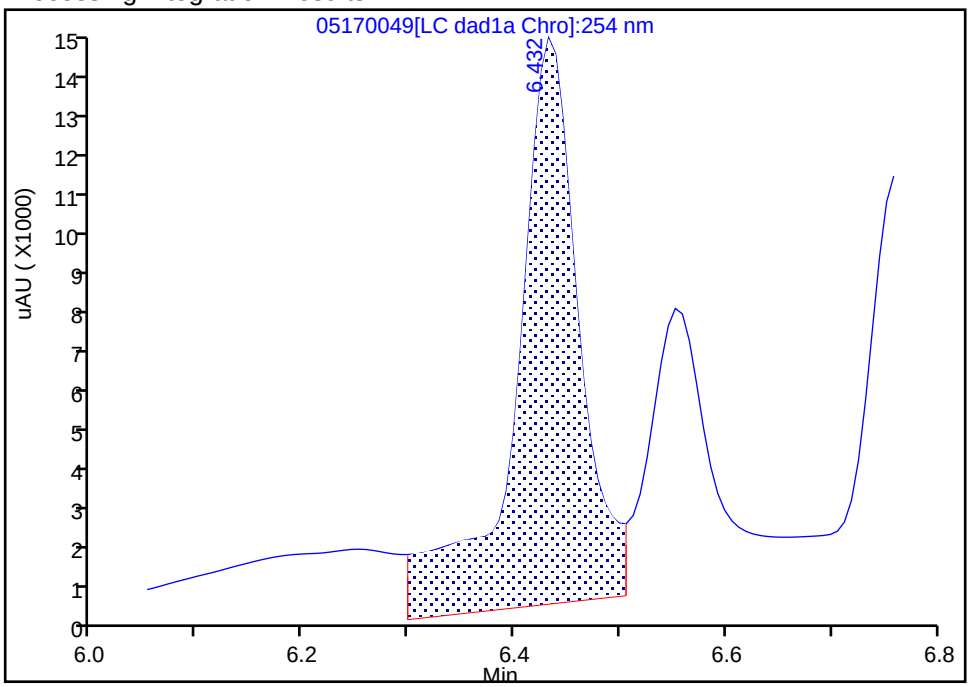
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170049.d				
Injection Date:	18-May-2023 09:38:09	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-612789/3-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	49	Worklist Smp#:	49
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

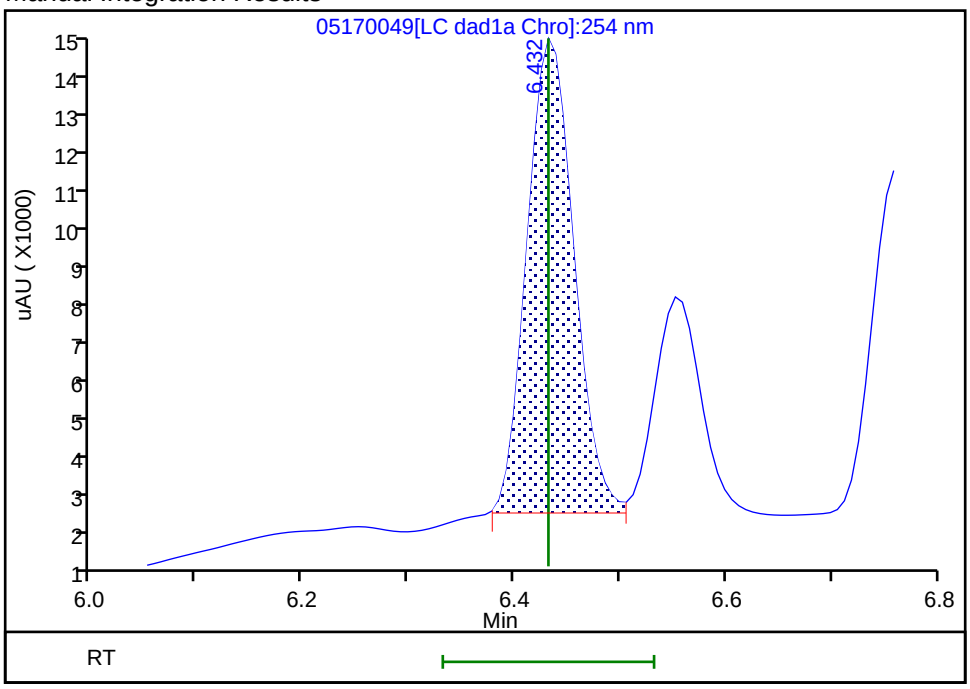
Processing Integration Results

RT: 6.43
Area: 58064
Amount: 0.293716
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 37398
Amount: 0.189178
Amount Units: ug/mL



Reviewer: LV5D, 18-May-2023 12:17:41 -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.: 280-176335-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 280-612789/5-A

Matrix: Water | Lab File ID: 05170051.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/17/2023 13:57

Sample wt/vol: 500(mL) | Date Analyzed: 05/18/2023 10:24

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.: 612858 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
6629-29-4	2,4-diamino-6-nitrotoluene	1.77	M	1.0	0.90	0.43
59229-75-3	2,6-diamino-4-nitrotoluene	1.83	M	1.0	0.90	0.22

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	106		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230517-121556.b\05170051.D
Lims ID: LCSD 280-612789/5-A
Client ID:
Sample Type: LCSD
Inject. Date: 18-May-2023 10:24:00 ALS Bottle#: 51 Worklist Smp#: 51
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-612789/5-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230517-121556.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 18-May-2023 17:23:12 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1645

First Level Reviewer: LV5D Date: 18-May-2023 11:55:56

	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	6.420	6.428	-0.008	42829	0.2000	0.1827	M
	5 2,4-diamino-6-nitrotoluene	1	6.613	6.615	-0.002	25984	0.2000	0.1774	M
$	10 1,2-Dinitrobenzene	1	8.526	8.532	-0.006	26837	0.2000	0.2125	

QC Flag Legend

Review Flags
M - Manually Integrated

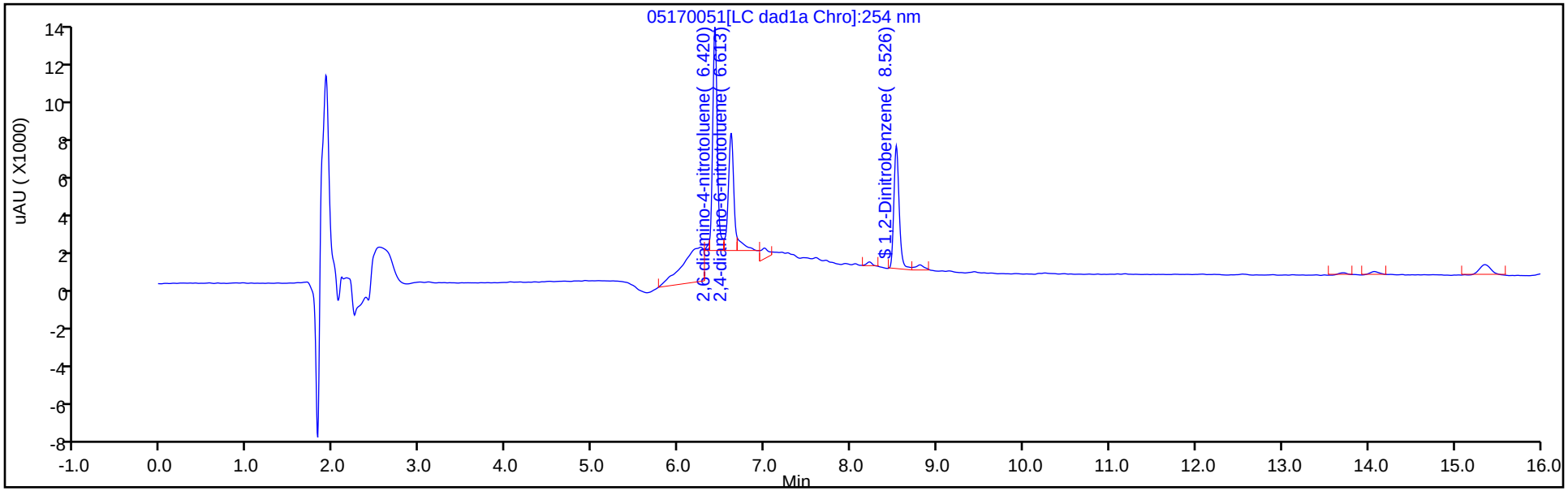
Report Date: 18-May-2023 17:38:59 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

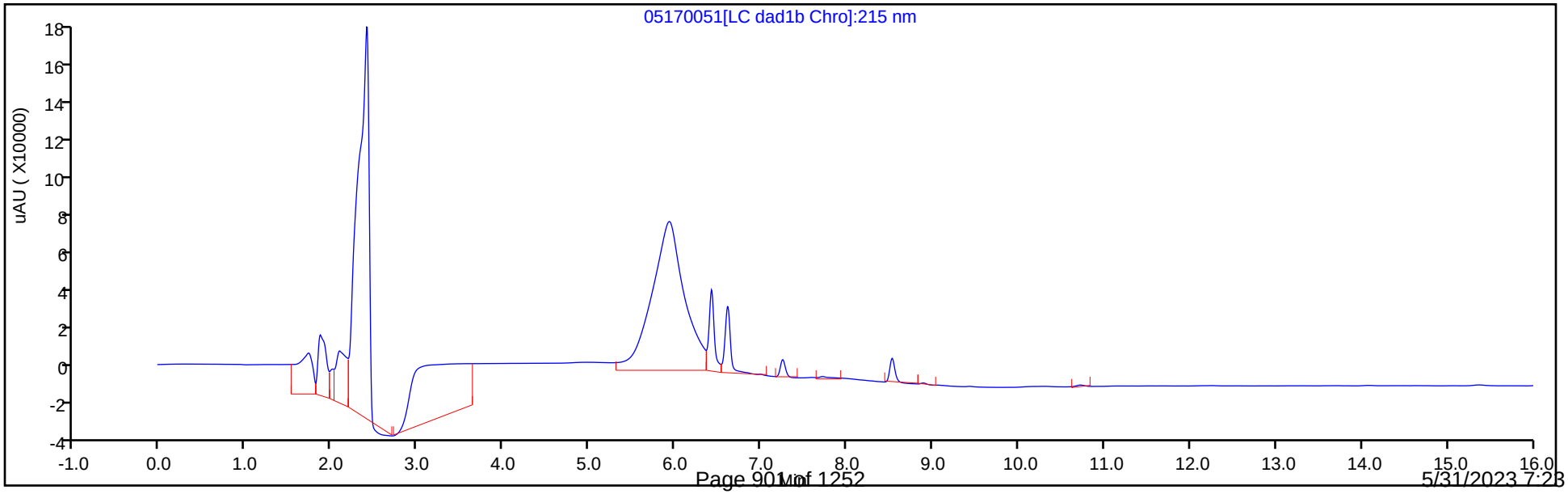
Data File: \\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170051.d

Injection Date:	18-May-2023 10:24:00	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	LCSD 280-612789/5-A			Worklist Smp#:	51
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	51
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\20230517-121556.b\05170051.D
Lims ID: LCSD 280-612789/5-A
Client ID:
Sample Type: LCSD
Inject. Date: 18-May-2023 10:24:00 ALS Bottle#: 51 Worklist Smp#: 51
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-612789/5-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230517-121556.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 18-May-2023 17:23:12 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1645

First Level Reviewer: LV5D Date: 18-May-2023 11:55:56

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2125	106.24

Eurofins Denver

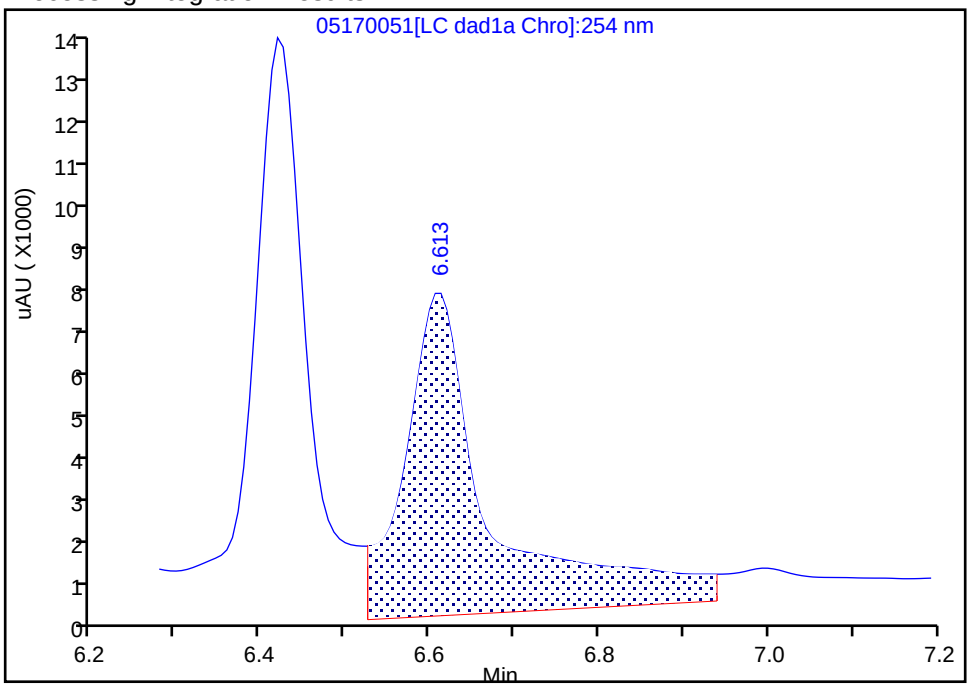
Data File: \\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170051.d
Injection Date: 18-May-2023 10:24:00 Instrument ID: CHHPLC_X3
Lims ID: LCSD 280-612789/5-A
Client ID:
Operator ID: JZ/JG ALS Bottle#: 51 Worklist Smp#: 51
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: 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

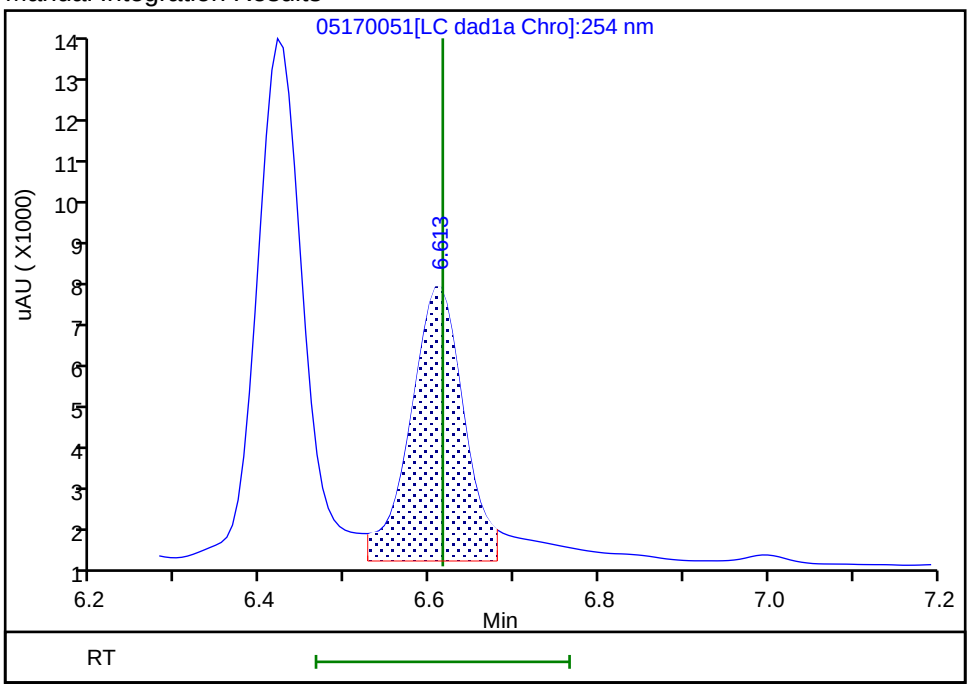
Processing Integration Results

RT: 6.61
Area: 48506
Amount: 0.331162
Amount Units: ug/mL



Manual Integration Results

RT: 6.61
Area: 25984
Amount: 0.177399
Amount Units: ug/mL



Reviewer: LV5D, 18-May-2023 11:55:53 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

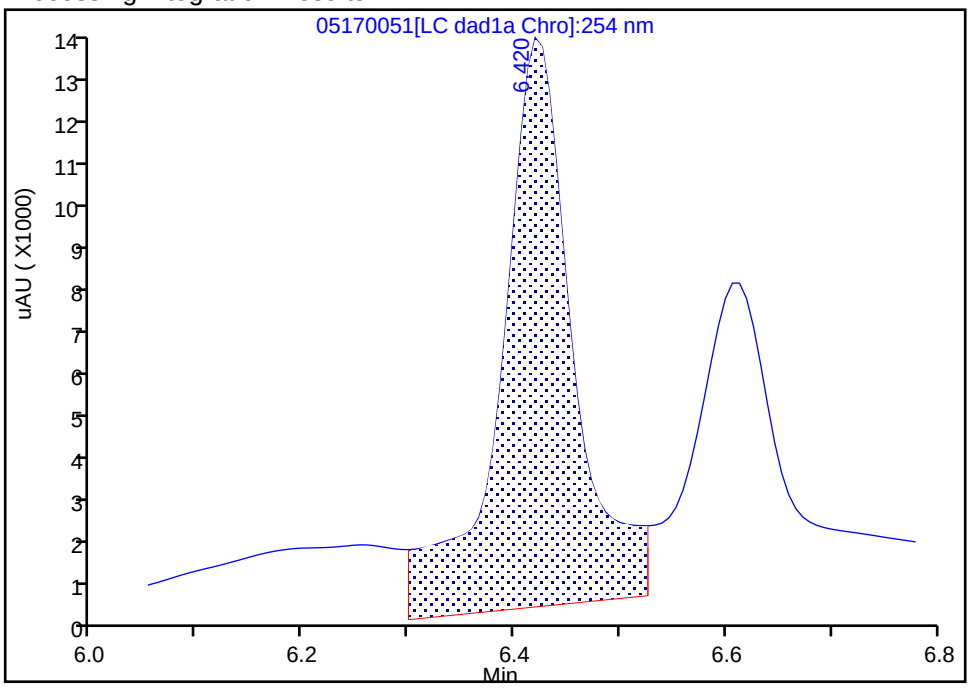
Data File: \\chromfs\denver\chromdata\chhplc_x\20230517-121556.b\05170051.d
Injection Date: 18-May-2023 10:24:00 Instrument ID: CHHPLC_X3
Lims ID: LCSD 280-612789/5-A
Client ID:
Operator ID: JZ/JG ALS Bottle#: 51 Worklist Smp#: 51
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: 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

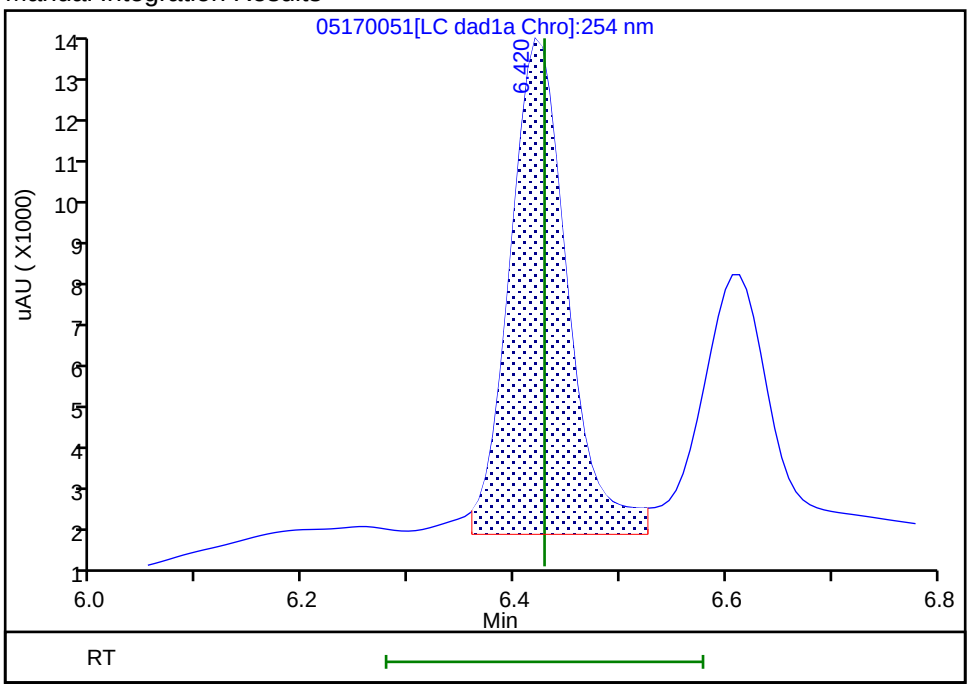
Processing Integration Results

RT: 6.42
Area: 60727
Amount: 0.260621
Amount Units: ug/mL



Manual Integration Results

RT: 6.42
Area: 42829
Amount: 0.182700
Amount Units: ug/mL



Reviewer: LV5D, 18-May-2023 11:55:52 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Start Date: 05/14/2020 16:16

Analysis Batch Number: 494886 End Date: 05/15/2020 20:15

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-494886/7		05/14/2020 16:16	1	05140007.D	Luna-phenylhex 4.6(mm)
IC 280-494886/8		05/14/2020 16:51	1	05140008.D	Luna-phenylhex 4.6(mm)
IC 280-494886/9		05/14/2020 17:26	1	05140009.D	Luna-phenylhex 4.6(mm)
IC 280-494886/10		05/14/2020 18:01	1	05140010.D	Luna-phenylhex 4.6(mm)
IC 280-494886/11		05/14/2020 18:36	1	05140011.D	Luna-phenylhex 4.6(mm)
IC 280-494886/12		05/14/2020 19:11	1	05140012.D	Luna-phenylhex 4.6(mm)
IC 280-494886/13		05/14/2020 19:46	1	05140013.D	Luna-phenylhex 4.6(mm)
IC 280-494886/14		05/14/2020 20:21	1	05140014.D	Luna-phenylhex 4.6(mm)
IC 280-494886/15		05/14/2020 20:56	1	05140015.D	Luna-phenylhex 4.6(mm)
ICV 280-494886/16		05/14/2020 21:31	1		Luna-phenylhex 4.6(mm)
IC 280-494886/17		05/14/2020 22:06	1		Luna-phenylhex 4.6(mm)
IC 280-494886/18		05/14/2020 22:41	1		Luna-phenylhex 4.6(mm)
IC 280-494886/19		05/14/2020 23:16	1		Luna-phenylhex 4.6(mm)
IC 280-494886/20		05/14/2020 23:51	1		Luna-phenylhex 4.6(mm)
IC 280-494886/21		05/15/2020 00:26	1		Luna-phenylhex 4.6(mm)
IC 280-494886/22		05/15/2020 01:01	1		Luna-phenylhex 4.6(mm)
IC 280-494886/23		05/15/2020 01:36	1		Luna-phenylhex 4.6(mm)
IC 280-494886/24		05/15/2020 02:11	1		Luna-phenylhex 4.6(mm)
IC 280-494886/25		05/15/2020 02:46	1		Luna-phenylhex 4.6(mm)
ICV 280-494886/26		05/15/2020 03:21	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 03:56	50		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 04:31	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 05:06	1		Luna-phenylhex 4.6(mm)
CCV 280-494886/30		05/15/2020 05:41	1		Luna-phenylhex 4.6(mm)
CCV 280-494886/31		05/15/2020 06:16	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 06:51	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 07:26	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 08:01	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 08:36	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 09:11	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 09:46	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 10:21	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 10:56	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 11:31	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 12:06	1		Luna-phenylhex 4.6(mm)
CCV 280-494886/42		05/15/2020 12:40	1		Luna-phenylhex 4.6(mm)
CCV 280-494886/43		05/15/2020 13:15	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 13:50	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 14:25	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 15:00	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 15:35	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 16:10	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 16:45	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 17:20	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 17:55	1		Luna-phenylhex 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Start Date: 05/14/2020 16:16

Analysis Batch Number: 494886 End Date: 05/15/2020 20:15

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		05/15/2020 18:30	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/15/2020 19:05	1		Luna-phenylhex 4.6(mm)
CCV 280-494886/54		05/15/2020 19:40	1		Luna-phenylhex 4.6(mm)
CCV 280-494886/55		05/15/2020 20:15	1		Luna-phenylhex 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 01/17/2023 00:33

Analysis Batch Number: 599427 End Date: 01/17/2023 07:10

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-599427/11		01/17/2023 00:33	1	01160039.D	UltraCarb5uODS 4.6(mm)
IC 280-599427/12		01/17/2023 00:56	1	01160040.D	UltraCarb5uODS 4.6(mm)
IC 280-599427/13		01/17/2023 01:19	1	01160041.D	UltraCarb5uODS 4.6(mm)
IC 280-599427/14		01/17/2023 01:43	1	01160042.D	UltraCarb5uODS 4.6(mm)
IC 280-599427/15		01/17/2023 02:06	1	01160043.D	UltraCarb5uODS 4.6(mm)
IC 280-599427/16		01/17/2023 02:30	1	01160044.D	UltraCarb5uODS 4.6(mm)
IC 280-599427/17		01/17/2023 02:53	1	01160045.D	UltraCarb5uODS 4.6(mm)
IC 280-599427/18		01/17/2023 03:16	1	01160046.D	UltraCarb5uODS 4.6(mm)
ICV 280-599427/19		01/17/2023 03:40	1	01160047.D	UltraCarb5uODS 4.6(mm)
IC 280-599427/20		01/17/2023 04:03	1	01160048.D	UltraCarb5uODS 4.6(mm)
IC 280-599427/21		01/17/2023 04:27	1	01160049.D	UltraCarb5uODS 4.6(mm)
IC 280-599427/22		01/17/2023 04:50	1	01160050.D	UltraCarb5uODS 4.6(mm)
IC 280-599427/23		01/17/2023 05:13	1	01160051.D	UltraCarb5uODS 4.6(mm)
IC 280-599427/24		01/17/2023 05:37	1	01160052.D	UltraCarb5uODS 4.6(mm)
IC 280-599427/25		01/17/2023 06:00	1	01160053.D	UltraCarb5uODS 4.6(mm)
IC 280-599427/26		01/17/2023 06:24	1	01160054.D	UltraCarb5uODS 4.6(mm)
IC 280-599427/27		01/17/2023 06:47	1	01160055.D	UltraCarb5uODS 4.6(mm)
ICV 280-599427/28		01/17/2023 07:10	1	01160056.D	UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 02/08/2023 15:38

Analysis Batch Number: 601664 End Date: 02/08/2023 19:05

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-601664/11		02/08/2023 15:38	1	02080011.D	UltraCarb5uODS 4.6(mm)
IC 280-601664/12		02/08/2023 16:01	1	02080012.D	UltraCarb5uODS 4.6(mm)
IC 280-601664/13		02/08/2023 16:24	1	02080013.D	UltraCarb5uODS 4.6(mm)
IC 280-601664/14		02/08/2023 16:47	1	02080014.D	UltraCarb5uODS 4.6(mm)
IC 280-601664/15		02/08/2023 17:10	1	02080015.D	UltraCarb5uODS 4.6(mm)
IC 280-601664/16		02/08/2023 17:33	1	02080016.D	UltraCarb5uODS 4.6(mm)
IC 280-601664/17		02/08/2023 17:56	1	02080017.D	UltraCarb5uODS 4.6(mm)
IC 280-601664/18		02/08/2023 18:19	1	02080018.D	UltraCarb5uODS 4.6(mm)
IC 280-601664/19		02/08/2023 18:42	1	02080019.D	UltraCarb5uODS 4.6(mm)
ICV 280-601664/20		02/08/2023 19:05	1	02080020.D	UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 02/24/2023 15:00

Analysis Batch Number: 603284 End Date: 02/24/2023 18:04

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-603284/11		02/24/2023 15:00	1	02240011.D	UltraCarb5uODS 4.6(mm)
IC 280-603284/12		02/24/2023 15:23	1	02240012.D	UltraCarb5uODS 4.6(mm)
IC 280-603284/13		02/24/2023 15:46	1	02240013.D	UltraCarb5uODS 4.6(mm)
IC 280-603284/14		02/24/2023 16:09	1	02240014.D	UltraCarb5uODS 4.6(mm)
IC 280-603284/15		02/24/2023 16:32	1	02240015.D	UltraCarb5uODS 4.6(mm)
IC 280-603284/16		02/24/2023 16:55	1	02240016.D	UltraCarb5uODS 4.6(mm)
IC 280-603284/17		02/24/2023 17:18	1	02240017.D	UltraCarb5uODS 4.6(mm)
IC 280-603284/18		02/24/2023 17:41	1	02240018.D	UltraCarb5uODS 4.6(mm)
ICV 280-603284/19		02/24/2023 18:04	1		UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Start Date: 04/07/2023 19:03

Analysis Batch Number: 607981 End Date: 04/08/2023 00:26

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-607981/10		04/07/2023 19:03	1	04070010.D	Luna-phenylhex 4.6(mm)
IC 280-607981/11		04/07/2023 19:39	1	04070011.D	Luna-phenylhex 4.6(mm)
IC 280-607981/12		04/07/2023 20:14	1	04070012.D	Luna-phenylhex 4.6(mm)
IC 280-607981/13		04/07/2023 20:50	1	04070013.D	Luna-phenylhex 4.6(mm)
IC 280-607981/14		04/07/2023 21:26	1	04070014.D	Luna-phenylhex 4.6(mm)
IC 280-607981/15		04/07/2023 22:02	1	04070015.D	Luna-phenylhex 4.6(mm)
IC 280-607981/16		04/07/2023 22:38	1	04070016.D	Luna-phenylhex 4.6(mm)
IC 280-607981/17		04/07/2023 23:14	1	04070017.D	Luna-phenylhex 4.6(mm)
IC 280-607981/18		04/07/2023 23:50	1	04070018.D	Luna-phenylhex 4.6(mm)
ICV 280-607981/19		04/08/2023 00:26	1	04070019.D	Luna-phenylhex 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 05/18/2023 08:06

Analysis Batch Number: 612858 End Date: 05/18/2023 18:03

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-612858/45		05/18/2023 08:06	1	05170045.D	UltraCarb5uODS 4.6(mm)
CCV 280-612858/46		05/18/2023 08:29	1	05170046.D	UltraCarb5uODS 4.6(mm)
MB 280-612789/1-A		05/18/2023 08:52	1	05170047.D	UltraCarb5uODS 4.6(mm)
LCSD 280-612789/3-A		05/18/2023 09:38	1	05170049.D	UltraCarb5uODS 4.6(mm)
LCS 280-612789/4-A		05/18/2023 10:01	1	05170050.D	UltraCarb5uODS 4.6(mm)
LCSD 280-612789/5-A		05/18/2023 10:24	1	05170051.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		05/18/2023 10:46	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/18/2023 11:09	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/18/2023 11:32	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/18/2023 12:18	1		UltraCarb5uODS 4.6(mm)
LCS 280-612789/2-A		05/18/2023 12:41	1	0517Z048.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		05/18/2023 13:04	1		UltraCarb5uODS 4.6(mm)
CCV 280-612858/57		05/18/2023 13:27	1	05170057.D	UltraCarb5uODS 4.6(mm)
CCV 280-612858/58		05/18/2023 13:50	1	05170058.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		05/18/2023 14:13	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/18/2023 14:36	1		UltraCarb5uODS 4.6(mm)
280-176335-1	LL1mw-082-230401-GW	05/18/2023 14:59	1	05170061.D	UltraCarb5uODS 4.6(mm)
280-176335-2	FWGmw-021-230401-GW	05/18/2023 15:22	1	05170062.D	UltraCarb5uODS 4.6(mm)
280-176335-3	FWGmw-024-230401-GW	05/18/2023 15:45	1	05170063.D	UltraCarb5uODS 4.6(mm)
280-176335-4	LL2mw-059-230401-GW	05/18/2023 16:08	1	05170064.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		05/18/2023 16:31	5		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/18/2023 16:54	5		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/18/2023 17:17	1		UltraCarb5uODS 4.6(mm)
CCV 280-612858/65		05/18/2023 17:40	1	05170065.D	UltraCarb5uODS 4.6(mm)
CCV 280-612858/66		05/18/2023 18:03	1	05170066.D	UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Start Date: 05/18/2023 17:39

Analysis Batch Number: 612994 End Date: 05/19/2023 11:02

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-612994/8		05/18/2023 17:39	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/18/2023 18:15	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/18/2023 18:51	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/18/2023 19:27	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/18/2023 20:03	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/18/2023 20:39	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/18/2023 21:15	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/18/2023 21:51	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/18/2023 22:27	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/18/2023 23:03	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/18/2023 23:39	1		Luna-phenylhex 4.6(mm)
CCV 280-612994/20		05/19/2023 00:15	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/19/2023 00:51	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/19/2023 01:27	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/19/2023 02:03	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/19/2023 02:38	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/19/2023 03:14	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/19/2023 03:50	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/19/2023 04:26	5		Luna-phenylhex 4.6(mm)
ZZZZZ		05/19/2023 05:02	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/19/2023 05:38	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/19/2023 06:14	1		Luna-phenylhex 4.6(mm)
CCV 280-612994/31		05/19/2023 06:50	1	05180031.D	Luna-phenylhex 4.6(mm)
ZZZZZ		05/19/2023 07:26	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/19/2023 08:02	5		Luna-phenylhex 4.6(mm)
280-176335-1	LL1mw-082-230401-GW	05/19/2023 08:38	1	05180033.D	Luna-phenylhex 4.6(mm)
280-176335-2	FWGmw-021-230401-GW	05/19/2023 09:14	1	05180034.D	Luna-phenylhex 4.6(mm)
ZZZZZ		05/19/2023 09:50	1		Luna-phenylhex 4.6(mm)
280-176335-4	LL2mw-059-230401-GW	05/19/2023 10:26	1	05180036.D	Luna-phenylhex 4.6(mm)
CCV 280-612994/37		05/19/2023 11:02	1	05180037.D	Luna-phenylhex 4.6(mm)

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Batch Number: 494886 Batch Start Date: 05/14/20 16:16 Batch Analyst: Zhang, Jian

Batch Method: 8330B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	8330_ADDs 00026	8330IntermStk 00064			
IC 280-494886/7		8330B		1.0 mL	125 uL	250 uL			
IC 280-494886/8		8330B		1.0 mL	50 uL	100 uL			
IC 280-494886/9		8330B		1.0 mL	35 uL	70 uL			
IC 280-494886/10		8330B		1.0 mL	20 uL	40 uL			
IC 280-494886/11		8330B		1.0 mL	12.5 uL	25 uL			
IC 280-494886/12		8330B		1.0 mL	5 uL	10 uL			
IC 280-494886/13		8330B		1.0 mL	2.5 uL	5 uL			
IC 280-494886/14		8330B		1.0 mL	1 uL	2.5 uL			
IC 280-494886/15		8330B		1.0 mL	0.5 uL	1.25 uL			

Batch Notes	
Methanol ID	246945
Batch Comment	JZ(Trained by HF)

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.: 280-176335-1

SDG No.:

Batch Number: 599427 Batch Start Date: 01/17/23 00:33 Batch Analyst: Zhang, Jian

Batch Method: 8330B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	3,5-DNA LCS 00042	8330 DMT 00012	8330_ADDs 00035	8330_OP_DMT 00016	8330DiaminLCS 00052
IC 280-599427/11		8330B		1 mL			125 uL		
IC 280-599427/12		8330B		1 mL			50 uL		
IC 280-599427/13		8330B		1 mL			35 uL		
IC 280-599427/14		8330B		1 mL			20 uL		
IC 280-599427/15		8330B		1 mL			12.5 uL		
IC 280-599427/16		8330B		1 mL			5 uL		
IC 280-599427/17		8330B		1 mL			2.5 uL		
IC 280-599427/18		8330B		1 mL			1 uL		
ICV 280-599427/19		8330B		1 mL	50 uL				50 uL
IC 280-599427/20		8330B		1 mL		125 uL			
IC 280-599427/21		8330B		1 mL		50 uL			
IC 280-599427/22		8330B		1 mL		35 uL			
IC 280-599427/23		8330B		1 mL		20 uL			
IC 280-599427/24		8330B		1 mL		12.5 uL			
IC 280-599427/25		8330B		1 mL		5 uL			
IC 280-599427/26		8330B		1 mL		2 uL			
IC 280-599427/27		8330B		1 mL		1 uL			
ICV 280-599427/28		8330B		1 mL				50 uL	

Batch Notes	
Methanol ID	221054

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.: 280-176335-1

SDG No.:

Batch Number: 599427 Batch Start Date: 01/17/23 00:33 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.: 280-176335-1

SDG No.:

Batch Number: 601664 Batch Start Date: 02/08/23 15:38 Batch Analyst: Zhang, Jian

Batch Method: 8330B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	3,5-DNA LCS 00043	8330 LCS 00121	8330IntermStk 00075	8330Surrogate 00138	
IC 280-601664/11		8330B		1 mL			250 uL		
IC 280-601664/12		8330B		1 mL			100 uL		
IC 280-601664/13		8330B		1 mL			70 uL		
IC 280-601664/14		8330B		1 mL			40 uL		
IC 280-601664/15		8330B		1 mL			25 uL		
IC 280-601664/16		8330B		1 mL			10 uL		
IC 280-601664/17		8330B		1 mL			5 uL		
IC 280-601664/18		8330B		1 mL			2 uL		
IC 280-601664/19		8330B		1 mL			1 uL		
ICV 280-601664/20		8330B		1 mL	50 uL	50 uL		50 uL	

Batch Notes	
Methanol ID	221054

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.: 280-176335-1

SDG No.:

Batch Number: 603284 Batch Start Date: 02/24/23 15:00 Batch Analyst: Zhang, Jian

Batch Method: 8330B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	8330 DMT 00013				
IC 280-603284/11		8330B		1 mL	125 uL				
IC 280-603284/12		8330B		1 mL	50 uL				
IC 280-603284/13		8330B		1 mL	35 uL				
IC 280-603284/14		8330B		1 mL	20 uL				
IC 280-603284/15		8330B		1 mL	12.5 uL				
IC 280-603284/16		8330B		1 mL	5 uL				
IC 280-603284/17		8330B		1 mL	2.5 uL				
IC 280-603284/18		8330B		1 mL	1 uL				

Batch Notes	
Methanol ID	221054

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.: 280-176335-1

SDG No.:

Batch Number: 607981 Batch Start Date: 04/07/23 19:03 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 00125	8330_OP_DMT 00017	8330IntermStk 00076	8330Surrogate 00141
IC 280-607981/10		8330B		1 mL	125 uL			250 uL	
IC 280-607981/11		8330B		1 mL	50 uL			100 uL	
IC 280-607981/12		8330B		1 mL	35 uL			70 uL	
IC 280-607981/13		8330B		1 mL	20 uL			40 uL	
IC 280-607981/14		8330B		1 mL	12.5 uL			25 uL	
IC 280-607981/15		8330B		1 mL	5 uL			10 uL	
IC 280-607981/16		8330B		1 mL	2.5 uL			5 uL	
IC 280-607981/17		8330B		1 mL	1 uL			2 uL	
IC 280-607981/18		8330B		1 mL	0.5 uL			1 uL	
ICV 280-607981/19		8330B		1 mL		50 uL	50 uL		50 uL

Batch Notes	
Methanol ID	221056

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.: 280-176335-1

SDG No.:

Batch Number: 612789 Batch Start Date: 05/17/23 13:57 Batch Analyst: Hermanova, Eva

Batch Method: 3535 Batch End Date: 05/17/23 17:29

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	8330 LCS 00126	8330_OP_DMT 00020
MB 280-612789/1		3535, 8330B				500 mL	5 mL		
LCS 280-612789/2		3535, 8330B				500 mL	5 mL	0.1 mL	0.1 mL
LCSD 280-612789/3		3535, 8330B				500 mL	5 mL	0.1 mL	0.1 mL
LCS 280-612789/4		3535, 8330B				500 mL	5 mL		
LCSD 280-612789/5		3535, 8330B				500 mL	5 mL		
280-176335-A-1	LL1mw-082-230401-GW	3535, 8330B	T	789.3 g	286.6 g	502.7 mL	5 mL		
280-176335-A-2	FWGmw-021-230401-GW	3535, 8330B	T	756.8 g	284.3 g	472.5 mL	5 mL		
280-176335-B-3	FWGmw-024-230401-GW	3535, 8330B	T	770.0 g	282.1 g	487.9 mL	5 mL		
280-176335-A-4	LL2mw-059-230401-GW	3535, 8330B	T	795.6 g	288.8 g	506.8 mL	5 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330DiaminLCS 00056	8330Surrogate 00143				
MB 280-612789/1		3535, 8330B			0.1 mL				
LCS 280-612789/2		3535, 8330B			0.1 mL				
LCSD 280-612789/3		3535, 8330B			0.1 mL				
LCS 280-612789/4		3535, 8330B		0.1 mL	0.1 mL				
LCSD 280-612789/5		3535, 8330B		0.1 mL	0.1 mL				
280-176335-A-1	LL1mw-082-230401-GW	3535, 8330B	T		0.1 mL				
280-176335-A-2	FWGmw-021-230401-GW	3535, 8330B	T		0.1 mL				
280-176335-B-3	FWGmw-024-230401-GW	3535, 8330B	T		0.1 mL				
280-176335-A-4	LL2mw-059-230401-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.: 280-176335-1

SDG No.:

Batch Number: 612789 Batch Start Date: 05/17/23 13:57 Batch Analyst: Hermanova, Eva

Batch Method: 3535 Batch End Date: 05/17/23 17:29

Batch Notes	
First Start time	05/17/2023 14:23
First End time	05/17/2023 16:57
SPE Cartridge Type	Sep-Pak Porapak Rdx
SPE Cartridge Lot ID	005332286A
Balance ID	24350888
Manifold ID	Manifold: A, B
QC Bottle Lot ID	02024011
Pipette/Syringe/Dispenser ID	Dobby/DOD/Pugsley
Solvent Name	CaCl2
Solvent Lot #	CaCl2_Sol_00085
Rinse Solvent Name	Acetonotrile
Rinse Solvent Lot	Acetonitrile_00078
Acid Name	0.1% AAinACN
Acid ID	0.1% AAinACN_00207
Analyst ID - Spike Analyst	DL
Analyst ID - Spike Witness Analyst	Reviewer:JZ
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: 280-176335-1

SDG No.:

Project: RVAAP FWGW Spring 2023

Client Sample ID	Lab Sample ID
LL2mw-059-230401-GW	280-176335-4
FWGmw-020-230401-GW	280-176335-5
FWGmw-018-230401-GW	280-176335-6

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: LL2mw-059-230401-GW
Lab Sample ID: 280-176335-4
Lab Name: Eurofins Denver
Job No.: 280-176335-1
SDG ID.:
Matrix: Water
Date Sampled: 05/10/2023 14:51
Reporting Basis: WET
Date Received: 05/11/2023 09:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Sulfide	2.0	4.0	2.0	1.6	mg/L	U		1	9034
Nitrate as N	0.39	0.50	0.20	0.090	mg/L	J	M	1	9056
Nitrite as N	0.10	0.50	0.10	0.049	mg/L	U		1	9056
Sulfate	16	5.0	2.5	1.0	mg/L		M	1	9056A
Total Organic Carbon - Average	1.2	1.0	0.80	0.35	mg/L			1	9060
Alkalinity	110	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: FWGmw-020-230401-GW
Lab Sample ID: 280-176335-5
Lab Name: Eurofins Denver
Job No.: 280-176335-1
SDG ID.:
Matrix: Water
Date Sampled: 05/10/2023 09:29
Reporting Basis: WET
Date Received: 05/11/2023 09:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrate as N	0.13	0.50	0.20	0.090	mg/L	J	M	1	9056

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: FWGmw-018-230401-GW
Lab Sample ID: 280-176335-6
Lab Name: Eurofins Denver
Job No.: 280-176335-1
SDG ID.:
Matrix: Water
Date Sampled: 05/10/2023 09:15
Reporting Basis: WET
Date Received: 05/11/2023 09:45

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

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Analyst: EJS Batch Start Date: 04/12/2023

Reporting Units: mg/L Analytical Batch No.: 608435

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
7	ICV	15:34	Nitrate as N	2.15	2.00	107	90-110		IC ICV 5_00403
			Nitrite as N	2.12	2.00	106	90-110		IC ICV 5_00403
8	ICB	15:49	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.: 280-176335-1

SDG No.:

Analyst: MEC Batch Start Date: 05/11/2023

Reporting Units: mg/L Analytical Batch No.: 612109

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	15:08	Nitrate as N	2.47	2.50	99	90-110		IC LCS_01953
			Nitrite as N	2.49	2.50	100	90-110		IC LCS_01953
2	CCB	15:23	Nitrate as N	0.20				U	
			Nitrite as N	0.10				U	
17	CCV	20:08	Nitrate as N	2.47	2.50	99	90-110		IC LCS_01953
			Nitrite as N	2.45	2.50	98	90-110		IC LCS_01953
18	CCB	20:24	Nitrate as N	0.20				U	
			Nitrite as N	0.10				U	
29	CCV	23:09	Nitrate as N	2.46	2.50	99	90-110		IC LCS_01953
			Nitrite as N	2.42	2.50	97	90-110		IC LCS_01953
30	CCB	23:24	Nitrate as N	0.20				U	
			Nitrite as N	0.10				U	
41	CCV	02:10	Nitrate as N	2.47	2.50	99	90-110		IC LCS_01953
			Nitrite as N	2.46	2.50	98	90-110		IC LCS_01953
42	CCB	02:25	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.: 280-176335-1

SDG No.:

Analyst: EJS Batch Start Date: 04/12/2023

Reporting Units: mg/L Analytical Batch No.: 608436

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
7	ICV	15:34	Sulfate	86.9	80.0	109	90-110		IC SO4 ICV_00024
8	ICB	15:49	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.: 280-176335-1

SDG No.:

Analyst: MEC Batch Start Date: 05/11/2023

Reporting Units: mg/L Analytical Batch No.: 612110

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	15:08	Sulfate	48.7	50.0	97	90-110		IC LCS_01953
2	CCB	15:23	Sulfate	2.5				U	
17	CCV	20:08	Sulfate	48.6	50.0	97	90-110		IC LCS_01953
18	CCB	20:24	Sulfate	2.5				U	
29	CCV	23:09	Sulfate	49.4	50.0	99	90-110		IC LCS_01953
30	CCB	23:24	Sulfate	2.5				U	
41	CCV	02:10	Sulfate	48.3	50.0	97	90-110		IC LCS_01953
42	CCB	02:25	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.: 280-176335-1

SDG No.:

Analyst: ABW Batch Start Date: 05/23/2023

Reporting Units: mg/L Analytical Batch No.: 613718

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	17:20	Total Organic Carbon - Average	20.1	20.0	101	90-110		TOC ICV Std_00051
2	ICB	17:38	Total Organic Carbon - Average	0.80				U	
27	CCV	01:18	Total Organic Carbon - Average	24.5	25.0	98	90-110		TOC LCS Std_00057
28	CCB	01:36	Total Organic Carbon - Average	0.80				U	
39	CCV	04:45	Total Organic Carbon - Average	24.0	25.0	96	90-110		TOC LCS Std_00057
40	CCB	05:03	Total Organic Carbon - Average	0.80				U	
51	CCV	08:09	Total Organic Carbon - Average	24.1	25.0	96	90-110		TOC LCS Std_00057
52	CCB	08:27	Total Organic Carbon - Average	0.80				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.: 280-176335-1

SDG No.:

Analyst: KEG Batch Start Date: 05/17/2023

Reporting Units: mg/L Analytical Batch No.: 612947

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
17	CCV	15:15	Alkalinity	195	200	98	90-110		Alk daily lcs 01087
18	CCB	15:21	Alkalinity	6.4				U	
29	CCV	16:36	Alkalinity	199	200	100	90-110		Alk daily lcs 01087
30	CCB	16:42	Alkalinity	3.19				J	
43	CCV	18:26	Alkalinity	197	200	99	90-110		Alk daily lcs 01087
44	CCB	18:32	Alkalinity	3.10				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.: 280-176335-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	LOQ	Dil
Batch ID: 612827	Date: 05/17/2023 13:31	Prep Batch: 612820	Date: 05/17/2023 12:32				
9034	MB 280-612820/2-A	Sulfide	2.0	U	mg/L	4.0	1
Batch ID: 612109	Date: 05/11/2023 16:23						
9056	MB 280-612109/6	Nitrate as N	0.20	U	mg/L	0.50	1
9056	MB 280-612109/6	Nitrite as N	0.10	U	mg/L	0.50	1
Batch ID: 612110	Date: 05/11/2023 16:23						
9056A	MB 280-612110/6	Sulfate	2.5	U M	mg/L	5.0	1
Batch ID: 613718	Date: 05/24/2023 03:34						
9060	MB 280-613718/35	Total Organic Carbon - Average	0.80	U	mg/L	1.0	1
Batch ID: 612947	Date: 05/17/2023 14:03						
SM 2320B	MB 280-612947/6	Alkalinity	3.38	J	mg/L	10	1
Batch ID: 612947	Date: 05/17/2023 16:57						
SM 2320B	MB 280-612947/32	Alkalinity	6.4	U	mg/L	10	1

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 612827	Date: 05/17/2023 13:31		Prep Batch: 612820			Date: 05/17/2023 12:32					
						LCS Source: SFD CAL INT_02401					
9034	LCS 280-612820/1-A	Sulfide	16.8		mg/L	18.6	90	44-110			
Batch ID: 612109	Date: 05/11/2023 15:53										
						LCS Source: IC LCS_01953					
9056	LCS 280-612109/4	Nitrate as N	2.46		mg/L	2.50	98	88-111	0	10	M
9056	LCS 280-612109/4	Nitrite as N	2.49		mg/L	2.50	100	87-111	0	10	M
Batch ID: 612110	Date: 05/11/2023 15:53										
						LCS Source: IC LCS_01953					
9056A	LCS 280-612110/4	Sulfate	48.9		mg/L	50.0	98	87-112	0	10	M
Batch ID: 613718	Date: 05/24/2023 03:16										
						LCS Source: TOC LCS Std_00057					
9060	LCS 280-613718/34	Total Organic Carbon - Average	24.0		mg/L	25.0	96	88-112			
Batch ID: 612947	Date: 05/17/2023 16:50										
						LCS Source: Alk daily lcs_01087					
SM 2320B	LCS 280-612947/31	Alkalinity	199		mg/L	200	99	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.: 280-176335-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 612109	Date: 05/11/2023 16:08										
						LCSD Source: IC LCS_01953					
9056	LCSD 280-612109/5	Nitrate as N	2.47		mg/L	2.50	99	88-111	0	10	M
9056	LCSD 280-612109/5	Nitrite as N	2.48		mg/L	2.50	99	87-111	0	10	M
Batch ID: 612110	Date: 05/11/2023 16:08										
						LCSD Source: IC LCS_01953					
9056A	LCSD 280-612110/5	Sulfate	48.9		mg/L	50.0	98	87-112	0	10	M
Batch ID: 612947	Date: 05/17/2023 13:57										
						LCSD Source: Alk daily lcs_01087					
SM 2320B	LCSD 280-612947/5	Alkalinity	202		mg/L	200	101	89-110	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.: 280-176335-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 612109	Date: 05/11/2023 15:38										
						LCS Source: IC Cal low_00708					
9056	MRL 280-612109/3	Nitrate as N	0.265	J	mg/L	0.250	106	50-150			M
9056	MRL 280-612109/3	Nitrite as N	0.303	J	mg/L	0.250	121	50-150			M
Batch ID: 612110	Date: 05/11/2023 15:38										
						LCS Source: IC CAL cl/so4_00479					
9056A	MRL 280-612110/3	Sulfate	2.78	J	mg/L	2.50	111	50-150			M

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: 280-176335-1

SDG No.: Analysis Batch No.: 608435

Instrument ID: WC_IonChrom10 Calibration ID: 79245

Start Date: 04/12/2023 14:04 End Date: 04/12/2023 15:19

Analytical Method: 9056

Analyte	Corr. Coeff.	Slope	Intercept	Calib. Type	Weighting
Nitrate as N	0.9995	45900000	-1630000	WLR	Inverse Conc
Nitrite as N	1.0000	46400000	-1280000	WLR	Inverse Conc

16B-IN
INITIAL CALIBRATION

Lab Name: Eurofins Denver | Job No: 280-176335-1

SDG No.: | Analysis Batch No.: 608435

Instrument ID: WC_IonChrom10 | Calibration ID: 79245

Start Date: 04/12/2023 14:04 | End Date: 04/12/2023 15:19

Analytical Method: 9056 | Concentration Units: ug/mL

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Nitrate as N				0.20	0.22	10	0.50	0.47	-6
Nitrite as N				0.20	0.20	1	0.50	0.49	-1

16B-IN
INITIAL CALIBRATION

Lab Name: Eurofins Denver Job No: 280-176335-1

SDG No.: Analysis Batch No.: 608435

Instrument ID: WC_IonChrom10 Calibration ID: 79245

Start Date: 04/12/2023 14:04 End Date: 04/12/2023 15:19

Analytical Method: 9056 Concentration Units: ug/mL

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Nitrate as N	1.0	0.95	-5	2.5	2.5	0	5.0	5.1	1
Nitrite as N	1.0	0.99	-1	2.5	2.5	1	5.0	5.0	0

16A-IN
INITIAL CALIBRATION SUMMARY

Lab Name: Eurofins Denver Job No: 280-176335-1

SDG No.: Analysis Batch No.: 608436

Instrument ID: WC_IonChrom10 Calibration ID: 79246

Start Date: 04/12/2023 14:04 End Date: 04/12/2023 15:19

Analytical Method: 9056A

Analyte	Corr. Coeff.	Slope	Intercept	Calib. Type	Weighting
Sulfate	1.0000	13800000	-1280000	WLR	Inverse Conc

16B-IN
INITIAL CALIBRATION

Lab Name: Eurofins Denver Job No: 280-176335-1

SDG No.: Analysis Batch No.: 608436

Instrument ID: WC_IonChrom10 Calibration ID: 79246

Start Date: 04/12/2023 14:04 End Date: 04/12/2023 15:19

Analytical Method: 9056A Concentration Units: ug/mL

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Sulfate	0.50	0.60	20	1.3	1.1	-9	2.5	2.2	-11

16B-IN
INITIAL CALIBRATION

Lab Name: Eurofins Denver | Job No: 280-176335-1

SDG No.: | Analysis Batch No.: 608436

Instrument ID: WC_IonChrom10 | Calibration ID: 79246

Start Date: 04/12/2023 14:04 | End Date: 04/12/2023 15:19

Analytical Method: 9056A | Concentration Units: ug/mL

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Sulfate	30.0	29.8	-1	60.0	60.1	0	100	100	0

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-176335-1

SDG Number:

Matrix: Water Instrument ID: NOEQUIP

Method: 9034 DL Date: 04/15/2022 13:08

Prep Method: 9030B

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Sulfide		4	1.6

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-176335-1

SDG Number:

Matrix: Water Instrument ID: NOEQUIP

Method: 9034 XMDL Date: 04/15/2022 13:09

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Sulfide		4	1.6

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-176335-1

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: 280-176335-1

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: 280-176335-1

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: 280-176335-1

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: 280-176335-1

SDG Number:

Matrix: Water Instrument ID: WC_SHI7

Method: 9060 DL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Total Organic Carbon - Average		1	0.345

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-176335-1

SDG Number:

Matrix: Water Instrument ID: WC_SHI7

Method: 9060 XMDL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Total Organic Carbon - Average		1	0.345

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-176335-1

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: 280-176335-1

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

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-612820/1-A	05/17/2023 12:32	612820		50	50
MB 280-612820/2-A	05/17/2023 12:32	612820		50	50
280-176335-4	05/17/2023 12:32	612820		50	50

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: 9034

Start Date: 05/17/2023 13:31 End Date: 05/17/2023 13:31

Lab Sample Id	D/F	Type	Time	Analytes																								
				S2																								
LCS 280-612820/1-A	1	T	13:31	X																								
MB 280-612820/2-A	1	T	13:31	X																								
ZZZZZZ			13:31																									
ZZZZZZ			13:31																									
ZZZZZZ			13:31																									
ZZZZZZ			13:31																									
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ZZZZZZ			13:31																									
ZZZZZZ			13:31																									
ZZZZZZ			13:31																									
280-176335-4	1	T	13:31	X																								
ZZZZZZ			13:31																									
ZZZZZZ			13:31																									
ZZZZZZ			13:31																									

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056

Start Date: 04/12/2023 14:04 End Date: 04/13/2023 17:51

Lab Sample Id	D/F	Type	Time	Analytes																										
				NO2-N	NO3																									
STD 280-608435/1 IC	1		14:04	X	X																									
STD 280-608435/2 IC	1		14:19	X	X																									
STD 280-608435/3 IC	1		14:34	X	X																									
STD 280-608435/4 IC	1		14:49	X	X																									
STD 280-608435/5 IC	1		15:04	X	X																									
STD 280-608435/6 IC	1		15:19	X	X																									
ICV 280-608435/7	1		15:34	X	X																									
ICB 280-608435/8	1		15:49	X	X																									
RTC 280-608435/9			16:04																											
ZZZZZZ			16:19																											
ZZZZZZ			16:34																											
ZZZZZZ			16:49																											
ZZZZZZ			17:04																											
ZZZZZZ			17:20																											
ZZZZZZ			17:36																											
ZZZZZZ			13:39																											
ZZZZZZ			13:54																											
ZZZZZZ			14:09																											
ZZZZZZ			14:24																											
ZZZZZZ			14:39																											
ZZZZZZ			14:54																											
ZZZZZZ			15:09																											
ZZZZZZ			15:24																											
CCV 280-608435/24			15:54																											
CCB 280-608435/25			17:51																											

Prep Types:
=

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056

Start Date: 05/11/2023 15:08 End Date: 05/12/2023 13:10

Lab Sample Id	D/F	Type	Time	Analytes																										
				NO2-N	NO3																									
CCV 280-612109/1	1		15:08	X	X																									
CCB 280-612109/2	1		15:23	X	X																									
MRL 280-612109/3	1	T	15:38	X	X																									
LCS 280-612109/4	1	T	15:53	X	X																									
LCSD 280-612109/5	1	T	16:08	X	X																									
MB 280-612109/6	1	T	16:23	X	X																									
280-176335-6	1	T	17:38		X																									
280-176335-5	1	T	17:53		X																									
ZZZZZZ			18:08																											
ZZZZZZ			18:23																											
ZZZZZZ			18:38																											
ZZZZZZ			18:53																											
ZZZZZZ			19:08																											
ZZZZZZ			19:23																											
ZZZZZZ			19:38																											
ZZZZZZ			19:53																											
CCV 280-612109/17	1		20:08	X	X																									
CCB 280-612109/18	1		20:24	X	X																									
ZZZZZZ			20:39																											
ZZZZZZ			20:54																											
ZZZZZZ			21:09																											
ZZZZZZ			21:24																											
ZZZZZZ			21:39																											
ZZZZZZ			21:54																											
ZZZZZZ			22:09																											
ZZZZZZ			22:24																											
ZZZZZZ			22:39																											
ZZZZZZ			22:54																											
CCV 280-612109/29	1		23:09	X	X																									
CCB 280-612109/30	1		23:24	X	X																									
ZZZZZZ			23:39																											
280-176335-4	1	T	23:54	X	X																									
ZZZZZZ			00:09																											
ZZZZZZ			00:24																											
ZZZZZZ			00:40																											
ZZZZZZ			00:55																											
ZZZZZZ			01:10																											
ZZZZZZ			01:25																											
ZZZZZZ			01:40																											

FORM XIII-IN

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056

Start Date: 05/11/2023 15:08 End Date: 05/12/2023 13:10

Lab Sample Id	D/F	Type	Time	Analytes																										
				NO2-N	NO3																									
ZZZZZZ			01:55																											
CCV 280-612109/41	1		02:10	X	X																									
CCB 280-612109/42	1		02:25	X	X																									
ZZZZZZ			02:40																											
ZZZZZZ			02:55																											
ZZZZZZ			03:09																											
ZZZZZZ			03:24																											
ZZZZZZ			03:39																											
ZZZZZZ			03:54																											
ZZZZZZ			04:09																											
ZZZZZZ			04:24																											
ZZZZZZ			04:39																											
ZZZZZZ			04:54																											
CCV 280-612109/53			05:09																											
CCB 280-612109/54			05:24																											
ZZZZZZ			05:39																											
ZZZZZZ			05:54																											
ZZZZZZ			06:09																											
ZZZZZZ			06:24																											
ZZZZZZ			06:39																											
ZZZZZZ			06:54																											
ZZZZZZ			07:09																											
ZZZZZZ			07:24																											
ZZZZZZ			07:40																											
ZZZZZZ			07:55																											
CCV 280-612109/65			08:10																											
CCB 280-612109/66			08:25																											
ZZZZZZ			08:40																											
ZZZZZZ			08:55																											
ZZZZZZ			09:10																											
ZZZZZZ			09:25																											
ZZZZZZ			09:40																											
ZZZZZZ			09:55																											
ZZZZZZ			10:10																											
ZZZZZZ			10:25																											
ZZZZZZ			10:40																											
CCV 280-612109/76			10:55																											
CCB 280-612109/77			11:10																											
ZZZZZZ			11:25																											

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056

Start Date: 05/11/2023 15:08 End Date: 05/12/2023 13:10

Lab Sample Id	D/F	Type	Time	Analytes																									
				NO2-N	NO3																								
ZZZZZZ			11:40																										
ZZZZZZ			11:55																										
ZZZZZZ			12:10																										
ZZZZZZ			12:25																										
ZZZZZZ			12:40																										
CCV 280-612109/84			12:55																										
CCB 280-612109/85			13:10																										

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056A

Start Date: 04/12/2023 14:04 End Date: 04/13/2023 17:51

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
STD 280-608436/1 IC	1		14:04	X																								
STD 280-608436/2 IC	1		14:19	X																								
STD 280-608436/3 IC	1		14:34	X																								
STD 280-608436/4 IC	1		14:49	X																								
STD 280-608436/5 IC	1		15:04	X																								
STD 280-608436/6 IC	1		15:19	X																								
ICV 280-608436/7	1		15:34	X																								
ICB 280-608436/8	1		15:49	X																								
RTC 280-608436/9			16:04																									
ZZZZZZ			16:19																									
ZZZZZZ			16:34																									
ZZZZZZ			16:49																									
ZZZZZZ			17:04																									
ZZZZZZ			17:20																									
ZZZZZZ			17:36																									
ZZZZZZ			13:39																									
ZZZZZZ			13:54																									
ZZZZZZ			14:09																									
ZZZZZZ			14:24																									
ZZZZZZ			14:39																									
ZZZZZZ			14:54																									
ZZZZZZ			15:09																									
ZZZZZZ			15:24																									
CCV 280-608436/24			15:54																									
CCB 280-608436/25			17:51																									

Prep Types:
=

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056A

Start Date: 05/11/2023 15:08 End Date: 05/12/2023 13:10

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
CCV 280-612110/1	1		15:08	X																								
CCB 280-612110/2	1		15:23	X																								
MRL 280-612110/3	1	T	15:38	X																								
LCS 280-612110/4	1	T	15:53	X																								
LCSD 280-612110/5	1	T	16:08	X																								
MB 280-612110/6	1	T	16:23	X																								
ZZZZZZ			17:38																									
ZZZZZZ			17:53																									
ZZZZZZ			18:08																									
ZZZZZZ			18:23																									
ZZZZZZ			18:38																									
ZZZZZZ			18:53																									
ZZZZZZ			19:08																									
ZZZZZZ			19:23																									
ZZZZZZ			19:38																									
ZZZZZZ			19:53																									
CCV 280-612110/17	1		20:08	X																								
CCB 280-612110/18	1		20:24	X																								
ZZZZZZ			20:39																									
ZZZZZZ			20:54																									
ZZZZZZ			21:09																									
ZZZZZZ			21:24																									
ZZZZZZ			21:39																									
ZZZZZZ			21:54																									
ZZZZZZ			22:09																									
ZZZZZZ			22:24																									
ZZZZZZ			22:39																									
ZZZZZZ			22:54																									
CCV 280-612110/29	1		23:09	X																								
CCB 280-612110/30	1		23:24	X																								
ZZZZZZ			23:39																									
280-176335-4	1	T	23:54	X																								
ZZZZZZ			00:09																									
ZZZZZZ			00:24																									
ZZZZZZ			00:40																									
ZZZZZZ			00:55																									
ZZZZZZ			01:10																									
ZZZZZZ			01:25																									
ZZZZZZ			01:40																									
ZZZZZZ			01:55																									
CCV 280-612110/41	1		02:10	X																								

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056A

Start Date: 05/11/2023 15:08 End Date: 05/12/2023 13:10

Lab Sample Id	D/F	Type	Time	Analytes																									
				SO4																									
CCB 280-612110/42	1		02:25	X																									
ZZZZZZ			02:40																										
ZZZZZZ			02:55																										
ZZZZZZ			03:09																										
ZZZZZZ			03:24																										
ZZZZZZ			03:39																										
ZZZZZZ			03:54																										
ZZZZZZ			04:09																										
ZZZZZZ			04:24																										
CCV 280-612110/53			05:09																										
CCB 280-612110/54			05:24																										
ZZZZZZ			05:39																										
ZZZZZZ			05:54																										
ZZZZZZ			06:09																										
ZZZZZZ			06:24																										
ZZZZZZ			06:39																										
ZZZZZZ			06:54																										
ZZZZZZ			07:09																										
ZZZZZZ			07:24																										
ZZZZZZ			07:40																										
ZZZZZZ			07:55																										
CCV 280-612110/65			08:10																										
CCB 280-612110/66			08:25																										
ZZZZZZ			08:40																										
ZZZZZZ			08:55																										
ZZZZZZ			09:10																										
ZZZZZZ			09:25																										
ZZZZZZ			09:40																										
ZZZZZZ			09:55																										
ZZZZZZ			10:10																										
ZZZZZZ			10:25																										
ZZZZZZ			10:40																										
CCV 280-612110/76			10:55																										
CCB 280-612110/77			11:10																										
ZZZZZZ			11:25																										
ZZZZZZ			11:40																										
			11:55																										
ZZZZZZ			12:10																										
ZZZZZZ			12:25																										
ZZZZZZ			12:40																										
CCV 280-612110/84			12:55																										

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056A

Start Date: 05/11/2023 15:08 End Date: 05/12/2023 13:10

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
CCB 280-612110/85			13:10																									

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: WC_SHI7 Analysis Method: 9060

Start Date: 05/23/2023 17:20 End Date: 05/24/2023 20:33

Lab Sample Id	D/F	Type	Time	Analytes																									
				TOCQ																									
ICV 280-613718/1	1		17:20	X																									
ICB 280-613718/2	1		17:38	X																									
ZZZZZZ			17:54																										
ZZZZZZ			18:12																										
ZZZZZZ			18:26																										
ZZZZZZ			18:43																										
ZZZZZZ			19:02																										
ZZZZZZ			19:22																										
ZZZZZZ			19:42																										
ZZZZZZ			20:02																										
ZZZZZZ			20:22																										
ZZZZZZ			20:40																										
ZZZZZZ			20:59																										
ZZZZZZ			21:17																										
CCV 280-613718/15			21:36																										
CCB 280-613718/16			21:54																										
ZZZZZZ			22:09																										
ZZZZZZ			22:27																										
ZZZZZZ			22:46																										
ZZZZZZ			23:04																										
ZZZZZZ			23:23																										
ZZZZZZ			23:43																										
ZZZZZZ			00:02																										
ZZZZZZ			00:21																										
ZZZZZZ			00:40																										
ZZZZZZ			00:59																										
CCV 280-613718/27	1		01:18	X																									
CCB 280-613718/28	1		01:36	X																									
ZZZZZZ			01:51																										
ZZZZZZ			02:06																										
ZZZZZZ			02:23																										
ZZZZZZ			02:39																										
ZZZZZZ			02:57																										
LCS 280-613718/34	1	T	03:16	X																									
MB 280-613718/35	1	T	03:34	X																									
ZZZZZZ			03:49																										
ZZZZZZ			04:07																										
ZZZZZZ			04:26																										
CCV 280-613718/39	1		04:45	X																									
CCB 280-613718/40	1		05:03	X																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: WC_SHI7 Analysis Method: 9060

Start Date: 05/23/2023 17:20 End Date: 05/24/2023 20:33

Lab Sample Id	D/F	Type	Time	Analytes
				TOCQ
280-176335-4	1	T	05:18	X
ZZZZZZ			05:35	
ZZZZZZ			05:52	
ZZZZZZ			06:08	
ZZZZZZ			06:25	
ZZZZZZ			06:41	
ZZZZZZ			06:58	
ZZZZZZ			07:16	
ZZZZZZ			07:34	
ZZZZZZ			07:51	
CCV 280-613718/51	1		08:09	X
CCB 280-613718/52	1		08:27	X
ZZZZZZ			08:42	
ZZZZZZ			09:01	
ZZZZZZ			09:20	
ZZZZZZ			09:37	
ZZZZZZ			09:55	
ZZZZZZ			10:12	
ZZZZZZ			10:30	
ZZZZZZ			10:49	
ZZZZZZ			11:06	
ZZZZZZ			11:24	
CCV 280-613718/63			11:43	
CCB 280-613718/64			12:01	
ZZZZZZ			12:16	
ZZZZZZ			12:34	
ZZZZZZ			12:54	
ZZZZZZ			13:12	
ZZZZZZ			13:27	
ZZZZZZ			13:42	
ZZZZZZ			14:00	
ZZZZZZ			14:19	
ZZZZZZ			14:38	
ZZZZZZ			14:55	
CCV 280-613718/75			15:12	
CCB 280-613718/76			15:31	
ZZZZZZ			15:46	
ZZZZZZ			16:02	
ZZZZZZ			16:20	
ZZZZZZ			16:36	

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: WC_SHI7 Analysis Method: 9060

Start Date: 05/23/2023 17:20 End Date: 05/24/2023 20:33

Lab Sample Id	D/F	Type	Time	Analytes																									
				TOCQ																									
ZZZZZZ			16:54																										
ZZZZZZ			17:14																										
ZZZZZZ			17:32																										
ZZZZZZ			17:49																										
ZZZZZZ			18:07																										
ZZZZZZ			18:27																										
CCV 280-613718/87			18:46																										
CCB 280-613718/88			19:04																										
ZZZZZZ			19:20																										
ZZZZZZ			19:40																										
ZZZZZZ			19:58																										
CCV 280-613718/92			20:15																										
CCB 280-613718/93			20:33																										

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 05/17/2023 13:30 End Date: 05/18/2023 10:07

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
RINSE 280-612947/1			13:30																									
ZZZZZZ			13:38																									
ZZZZZZ			13:41																									
ZZZZZZ			13:49																									
LCSD 280-612947/5	1	T	13:57	X																								
MB 280-612947/6	1	T	14:03	X																								
ZZZZZZ			14:09																									
ZZZZZZ			14:14																									
ZZZZZZ			14:20																									
ZZZZZZ			14:25																									
ZZZZZZ			14:31																									
ZZZZZZ			14:40																									
ZZZZZZ			14:47																									
ZZZZZZ			14:52																									
ZZZZZZ			15:01																									
ZZZZZZ			15:07																									
CCV 280-612947/17	1		15:15	X																								
CCB 280-612947/18	1		15:21	X																								
ZZZZZZ			15:28																									
ZZZZZZ			15:35																									
ZZZZZZ			15:40																									
ZZZZZZ			15:45																									
ZZZZZZ			15:51																									
ZZZZZZ			15:57																									
ZZZZZZ			16:03																									
ZZZZZZ			16:11																									
ZZZZZZ			16:22																									
ZZZZZZ			16:29																									
CCV 280-612947/29	1		16:36	X																								
CCB 280-612947/30	1		16:42	X																								
LCS 280-612947/31	1	T	16:50	X																								
MB 280-612947/32	1	T	16:57	X																								
ZZZZZZ			17:02																									
ZZZZZZ			17:08																									
ZZZZZZ			17:18																									
ZZZZZZ			17:30																									
ZZZZZZ			17:43																									
ZZZZZZ			17:50																									
ZZZZZZ			17:57																									
ZZZZZZ			18:05																									
ZZZZZZ			18:12																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 05/17/2023 13:30 End Date: 05/18/2023 10:07

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
280-176335-4	1	T	18:18	X																								
CCV 280-612947/43	1		18:26	X																								
CCB 280-612947/44	1		18:32	X																								
ZZZZZZ			18:38																									
ZZZZZZ			18:43																									
ZZZZZZ			18:49																									
ZZZZZZ			18:56																									
ZZZZZZ			19:04																									
ZZZZZZ			19:11																									
ZZZZZZ			19:18																									
ZZZZZZ			19:24																									
ZZZZZZ			19:30																									
ZZZZZZ			19:41																									
CCV 280-612947/55			19:49																									
CCB 280-612947/56			19:55																									
ZZZZZZ			20:03																									
ZZZZZZ			20:09																									
ZZZZZZ			20:18																									
ZZZZZZ			20:26																									
ZZZZZZ			20:37																									
ZZZZZZ			20:49																									
ZZZZZZ			20:55																									
ZZZZZZ			21:16																									
ZZZZZZ			21:37																									
ZZZZZZ			21:44																									
ZZZZZZ			21:54																									
ZZZZZZ			22:15																									
CCV 280-612947/69			22:23																									
CCB 280-612947/70			22:29																									
ZZZZZZ			22:40																									
ZZZZZZ			22:50																									
ZZZZZZ			23:11																									
ZZZZZZ			23:24																									
ZZZZZZ			23:45																									
ZZZZZZ			23:58																									
ZZZZZZ			00:18																									
ZZZZZZ			00:27																									
ZZZZZZ			00:47																									
ZZZZZZ			01:00																									
CCV 280-612947/81			01:08																									
CCB 280-612947/82			01:14																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 05/17/2023 13:30 End Date: 05/18/2023 10:07

Lab Sample Id	D/F	Type	Time	Analytes
				Alk
ZZZZZZ			01:22	
ZZZZZZ			01:28	
ZZZZZZ			01:40	
ZZZZZZ			01:52	
ZZZZZZ			02:13	
ZZZZZZ			02:22	
ZZZZZZ			02:42	
ZZZZZZ			02:54	
ZZZZZZ			02:59	
ZZZZZZ			03:14	
ZZZZZZ			03:29	
ZZZZZZ			03:44	
CCV 280-612947/95			03:52	
CCB 280-612947/96			03:59	
ZZZZZZ			04:12	
ZZZZZZ			04:25	
ZZZZZZ			04:36	
ZZZZZZ			04:43	
ZZZZZZ			04:48	
ZZZZZZ			04:54	
ZZZZZZ			05:01	
ZZZZZZ			05:07	
ZZZZZZ			05:19	
ZZZZZZ			05:26	
CCV 280-612947/107			05:34	
CCB 280-612947/108			05:40	
ZZZZZZ			05:48	
ZZZZZZ			05:54	
ZZZZZZ			06:00	
ZZZZZZ			06:07	
ZZZZZZ			06:13	
ZZZZZZ			06:20	
ZZZZZZ			06:26	
ZZZZZZ			06:32	
ZZZZZZ			06:40	
ZZZZZZ			06:48	
ZZZZZZ			06:56	
ZZZZZZ			07:04	
CCV 280-612947/121			07:12	
CCB 280-612947/122			07:18	
ZZZZZZ			07:25	

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 05/17/2023 13:30 End Date: 05/18/2023 10:07

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
ZZZZZZ			07:31																									
ZZZZZZ			07:39																									
ZZZZZZ			08:00																									
ZZZZZZ			08:21																									
ZZZZZZ			08:41																									
ZZZZZZ			08:56																									
ZZZZZZ			09:06																									
ZZZZZZ			09:25																									
ZZZZZZ			09:45																									
RINSE 280-612947/133			09:53																									
CCV 280-612947/134			10:01																									
CCB 280-612947/135			10:07																									

Prep Types:
T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Batch Number: 612820 Batch Start Date: 05/17/23 12:32 Batch Analyst: Ince, Connor A

Batch Method: 9030B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DistillUnitPort	Initial pH	Final pH	AcidVolAdded
LCS 280-612820/1		9030B, 9034		50 mL	50 mL	1	7 SU	<2 SU	5 mL
MB 280-612820/2		9030B, 9034		50 mL	50 mL	2	7 SU	<2 SU	5 mL
280-176335-E-4	LL2mw-059-230401-GW	9030B, 9034	T	50 mL	50 mL	14	12+ SU	<2 SU	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD CAL INT 02401					
LCS 280-612820/1		9030B, 9034		1 mL					
MB 280-612820/2		9030B, 9034							
280-176335-E-4	LL2mw-059-230401-GW	9030B, 9034	T						

Batch Notes	
Formaldehyde ID	Form_00125
Zinc Acetate Buffer ID	znac_00127
Pipette/Syringe/Dispenser ID	WC-5000BOD1
Sulfuric Acid Reagent ID Number	SulfuricAcid_00288
Balance ID	M19170
pH Indicator ID	HC157843
Oven, Bath or Block Temperature 1	80 Degrees C
Distillation Start Time	05/17/2023 12:30
Uncorrected Temperature 2	80 Degrees C
Oven, Bath or Block Temperature 2	80 Degrees C
Distillation End Time	05/17/2023 14:00
Batch Comment	CAI

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.: 280-176335-1

SDG No.:

Batch Number: 612827 Batch Start Date: 05/17/23 13:31 Batch Analyst: Ince, Connor A

Batch Method: 9034 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStart1	BuretStop1	IodineAmount	TitrantVolume1	FinalAmount	
LCS 280-612820/1-A		9034		0.0 mL	2.9 mL	1.25 mL	2.9 mL	50 mL	
MB 280-612820/2-A		9034		2.9 mL	3.9 mL	0.25 mL	1 mL	50 mL	
280-176335-E-4-A	LL2mw-059-230401-GW	9034	T	18.5 mL	19.5 mL	0.25 mL	1 mL	50 mL	

Batch Notes	
Normality of First Titrant	0.025 N
Normality of Iodine Solution	0.1 N
Zinc Acetate Buffer ID	znac_00127
Iodine ID	Iod_00279
Hydrochloric Acid ID	HCL Sol_00207
Sodium Thiosulfate ID	Na Thio_00181
Starch Reagent ID	Starch Ind_00071
Pipette/Syringe/Dispenser ID	WC-5000BOD1
Batch Comment	CAI

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.: 280-176335-1

SDG No.:

Batch Number: 608435 Batch Start Date: 04/12/23 14:04 Batch Analyst: Sherman, Erik J

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 00475	IC Cal low 00703	IC ICV 5 00403
STD 280-608435/1 IC		9056		10 mL	10 mL		0.04 mL		
STD 280-608435/2 IC		9056		10 mL	10 mL		0.1 mL	0.08 mL	
STD 280-608435/3 IC		9056		10 mL	10 mL		0.2 mL	0.2 mL	
STD 280-608435/4 IC		9056		10 mL	10 mL		2.4 mL	0.4 mL	
STD 280-608435/5 IC		9056		10 mL	10 mL		4.8 mL	1 mL	
STD 280-608435/6 IC		9056		10 mL	10 mL		8 mL	2 mL	
ICV 280-608435/7		9056		10 mL	10 mL	0.8 mL			0.8 mL
ICB 280-608435/8		9056		10 mL	10 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	IC SO4 ICV 00024					
STD 280-608435/1 IC		9056							
STD 280-608435/2 IC		9056							
STD 280-608435/3 IC		9056							
STD 280-608435/4 IC		9056							
STD 280-608435/5 IC		9056							
STD 280-608435/6 IC		9056							
ICV 280-608435/7		9056		0.8 mL					
ICB 280-608435/8		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.: 280-176335-1

SDG No.:

Batch Number: 608435 Batch Start Date: 04/12/23 14:04 Batch Analyst: Sherman, Erik J

Batch Method: 9056 Batch End Date:

Batch Notes	
Filter ID	SF020E
Pipette/Syringe/Dispenser ID	ARM5000, 1000HEX, 200CJ, IC100, BMF100, AB8A100
Sufficient Volume for Batch QC	Y
Eluent 1 ID	IC10 ELUENT_00006
Batch Comment	EJS

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.: 280-176335-1

SDG No.:

Batch Number: 612109 Batch Start Date: 05/11/23 15:08 Batch Analyst: Collins, Michael E

Batch Method: 9056 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CAL cl/so4 00479	IC Cal low 00708	IC LCS 01953	
CCV 280-612109/1		9056		10 mL	10 mL			10 mL	
CCB 280-612109/2		9056		10 mL	10 mL				
MRL 280-612109/3		9056		10 mL	10 mL	0.2 mL	0.1 mL		
LCS 280-612109/4		9056		10 mL	10 mL			10 mL	
LCSD 280-612109/5		9056		10 mL	10 mL			10 mL	
MB 280-612109/6		9056		10 mL	10 mL				
280-176335-A-6	FWGmw-018-230401 -GW	9056	T	10 mL	10 mL				
280-176335-A-5	FWGmw-020-230401 -GW	9056	T	10 mL	10 mL				
CCV 280-612109/17		9056		10 mL	10 mL			10 mL	
CCB 280-612109/18		9056		10 mL	10 mL				
CCV 280-612109/29		9056		10 mL	10 mL			10 mL	
CCB 280-612109/30		9056		10 mL	10 mL				
280-176335-C-4	LL2mw-059-230401 -GW	9056	T	10 mL	10 mL				
CCV 280-612109/41		9056		10 mL	10 mL			10 mL	
CCB 280-612109/42		9056		10 mL	10 mL				

Batch Notes	
Filter ID	SF020E
Pipette/Syringe/Dispenser ID	ARM5000, 1000HEX, 200CJ, 100IC
Sufficient Volume for Batch QC	yes
Eluent 1 ID	IC10 Eluent_00006
Batch Comment	MEC

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.: 280-176335-1

SDG No.:

Batch Number: 612109 Batch Start Date: 05/11/23 15:08 Batch Analyst: Collins, Michael E

Batch Method: 9056 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.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-176335-1

SDG No.:

Batch Number: 608436 Batch Start Date: 04/12/23 14:04 Batch Analyst: Sherman, Erik J

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 00475	IC Cal low 00703	IC ICV 5 00403
STD 280-608436/1 IC		9056A		10 mL	10 mL		0.04 mL		
STD 280-608436/2 IC		9056A		10 mL	10 mL		0.1 mL	0.08 mL	
STD 280-608436/3 IC		9056A		10 mL	10 mL		0.2 mL	0.2 mL	
STD 280-608436/4 IC		9056A		10 mL	10 mL		2.4 mL	0.4 mL	
STD 280-608436/5 IC		9056A		10 mL	10 mL		4.8 mL	1 mL	
STD 280-608436/6 IC		9056A		10 mL	10 mL		8 mL	2 mL	
ICV 280-608436/7		9056A		10 mL	10 mL	0.8 mL			0.8 mL
ICB 280-608436/8		9056A		10 mL	10 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	IC SO4 ICV 00024					
STD 280-608436/1 IC		9056A							
STD 280-608436/2 IC		9056A							
STD 280-608436/3 IC		9056A							
STD 280-608436/4 IC		9056A							
STD 280-608436/5 IC		9056A							
STD 280-608436/6 IC		9056A							
ICV 280-608436/7		9056A		0.8 mL					
ICB 280-608436/8		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.: 280-176335-1

SDG No.:

Batch Number: 608436 Batch Start Date: 04/12/23 14:04 Batch Analyst: Sherman, Erik J

Batch Method: 9056A Batch End Date:

Batch Notes	
Filter ID	SF020E
Pipette/Syringe/Dispenser ID	ARM5000, 1000HEX, 200CJ, IC100, BMF100, AB8A100
Sufficient Volume for Batch QC	Y
Eluent 1 ID	IC10 ELUENT_00006
Batch Comment	EJS

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.: 280-176335-1

SDG No.:

Batch Number: 612110 Batch Start Date: 05/11/23 15:08 Batch Analyst: Collins, Michael E

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CAL cl/so4 00479	IC Cal low 00708	IC LCS 01953	
CCV 280-612110/1		9056A		10 mL	10 mL			10 mL	
CCB 280-612110/2		9056A		10 mL	10 mL				
MRL 280-612110/3		9056A		10 mL	10 mL	0.2 mL	0.1 mL		
LCS 280-612110/4		9056A		10 mL	10 mL			10 mL	
LCSD 280-612110/5		9056A		10 mL	10 mL			10 mL	
MB 280-612110/6		9056A		10 mL	10 mL				
CCV 280-612110/17		9056A		10 mL	10 mL			10 mL	
CCB 280-612110/18		9056A		10 mL	10 mL				
CCV 280-612110/29		9056A		10 mL	10 mL			10 mL	
CCB 280-612110/30		9056A		10 mL	10 mL				
280-176335-C-4	LL2mw-059-230401 -GW	9056A	T	10 mL	10 mL				
CCV 280-612110/41		9056A		10 mL	10 mL			10 mL	
CCB 280-612110/42		9056A		10 mL	10 mL				

Batch Notes	
Filter ID	SF020E
Pipette/Syringe/Dispenser ID	ARM5000, 1000HEX, 200CJ, 100IC
Sufficient Volume for Batch QC	yes
Eluent 1 ID	IC10 Eluent_00006
Batch Comment	MEC

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.: 280-176335-1

SDG No.:

Batch Number: 613718 Batch Start Date: 05/23/23 17:20 Batch Analyst: Wondimu, Akewak B

Batch Method: 9060 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	Final pH	TOC ICV Std 00051	TOC LCS Std 00057
ICV 280-613718/1		9060		50 mL	50 mL	<2 SU	<2 SU	1 mL	
ICB 280-613718/2		9060		20 mL	20 mL	<2 SU	<2 SU		
CCV 280-613718/27		9060		200 mL	200 mL	<2 SU	<2 SU		5 mL
CCB 280-613718/28		9060		20 mL	20 mL	<2 SU	<2 SU		
LCS 280-613718/34		9060		200 mL	200 mL	<2 SU	<2 SU		5 mL
MB 280-613718/35		9060		20 mL	20 mL	<2 SU	<2 SU		
CCV 280-613718/39		9060		200 mL	200 mL	<2 SU	<2 SU		5 mL
CCB 280-613718/40		9060		20 mL	20 mL	<2 SU	<2 SU		
280-176335-D-4	LL2mw-059-230401 -GW	9060	T	20 mL	20 mL	<2 SU	<2 SU		
CCV 280-613718/51		9060		200 mL	200 mL	<2 SU	<2 SU		5 mL
CCB 280-613718/52		9060		20 mL	20 mL	<2 SU	<2 SU		

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
ICV 280-613718/1		9060		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
ICB 280-613718/2		9060		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					

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.: 280-176335-1

SDG No.:

Batch Number: 613718 Batch Start Date: 05/23/23 17:20 Batch Analyst: Wondimu, Akewak B

Batch Method: 9060 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
CCV 280-613718/27		9060		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCB 280-613718/28		9060		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
LCS 280-613718/34		9060		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
MB 280-613718/35		9060		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCV 280-613718/39		9060		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCB 280-613718/40		9060		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-176335-D-4	LL2mw-059-230401-GW	9060	T	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					

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.: 280-176335-1

SDG No.:

Batch Number: 613718 Batch Start Date: 05/23/23 17:20 Batch Analyst: Wondimu, Akewak B

Batch Method: 9060 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
CCV 280-613718/51		9060		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCB 280-613718/52		9060		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					

Batch Notes	
Acid ID	0.2% H2SO4_00462, H2SO4_00214
Combustion Catylyst ID	S638-92069-02
Pipette/Syringe/Dispenser ID	BWH 5000,1000 MS
pH Paper ID	HC205981
Vial Lot Number	705212201761
Batch Comment	Run and reviewed by ABW

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.: 280-176335-1

SDG No.:

Batch Number: 613719 Batch Start Date: 05/23/23 17:20 Batch Analyst: Wondimu, Akewak B

Batch Method: 9060 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	Final pH	TOC ICV Std 00051	TOC LCS Std 00057
MB 280-613719/4		9060		20 mL	20 mL	<2 SU	<2 SU		
LCS 280-613719/34		9060		200 mL	200 mL	<2 SU	<2 SU		5 mL
MB 280-613719/35		9060		20 mL	20 mL	<2 SU	<2 SU		
280-176335-D-4	LL2mw-059-230401-GW	9060	T	20 mL	20 mL	<2 SU	<2 SU		
LCSD 280-613719/67		9060		100 mL	100 mL	<2 SU	<2 SU	2.5 mL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
MB 280-613719/4		9060		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
LCS 280-613719/34		9060		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
MB 280-613719/35		9060		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-176335-D-4	LL2mw-059-230401-GW	9060	T	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
LCSD 280-613719/67		9060		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					

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.: 280-176335-1

SDG No.:

Batch Number: 613719 Batch Start Date: 05/23/23 17:20 Batch Analyst: Wondimu, Akewak B

Batch Method: 9060 Batch End Date:

Batch Notes	
Acid ID	0.2% H2SO4_00462, H2SO4_00214
Combustion Catylyst ID	S638-92069-02
Pipette/Syringe/Dispenser ID	BWH 5000,1000 MS
pH Paper ID	HC205981
Batch Comment	Run and reviewed by ABW

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.: 280-176335-1

SDG No.:

Batch Number: 612947 Batch Start Date: 05/17/23 13:30 Batch Analyst: Guillen, Kristela E

Batch Method: SM 2320B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	Alk daily lcs 01087				
LCSD 280-612947/5		SM 2320B		InitialAmount is blank	10 mL				
MB 280-612947/6		SM 2320B		InitialAmount is blank					
CCV 280-612947/17		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-612947/18		SM 2320B		InitialAmount is blank					
CCV 280-612947/29		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-612947/30		SM 2320B		InitialAmount is blank					
LCS 280-612947/31		SM 2320B		InitialAmount is blank	10 mL				
MB 280-612947/32		SM 2320B		InitialAmount is blank					
280-176335-C-4	LL2mw-059-230401 -GW	SM 2320B	T	InitialAmount is blank					
CCV 280-612947/43		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-612947/44		SM 2320B		InitialAmount is blank					

Batch Notes	
Nominal Amount Used	10 mL
Acid ID	0.02 H2SO4_00303
Normality of First Titrant	0.02 N
Sodium Carbonate ID	Alk Stk Std_00023
pH Buffer 1 ID	pH 2.0 buffer_00100
pH Buffer 2 ID	pH 4.0 buffer_00211
pH Buffer 3 ID	pH 7.0 buffer_00323
pH Buffer 4 ID	pH 7.0 buffer_00322
pH Buffer 5 ID	pH 10 buffer_00163
pH Buffer 6 ID	pH 12 buffer_00182
Probe ID	PCE 80 pH 1200D_8918
Batch Comment	KG

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.: 280-176335-1

SDG No.:

Batch Number: 612947 Batch Start Date: 05/17/23 13:30 Batch Analyst: Guillen, Kristela E

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.

General Chemistry Raw Data Report

Job ID: 280-176335-1

Batch: 612827 **Analyst Initials: CAI**

Method: 9034 **Instrument: No Equipment Used for this Test**

Lab Sample ID: LCS 280-612820/1-A **Analysis Date: May 17, 2023 13:31**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	16.8	mg/L	50 mL	50 mL

Lab Sample ID: MB 280-612820/2-A **Analysis Date: May 17, 2023 13:31**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-176335-E-4-A **Analysis Date: May 17, 2023 13:31**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Sulfide by Titration

Analyst:	slr	SOP Information:	
Date:	5/17/2023	Number:	91
Titration Solutions		**Calibration Information**	
Solution 1:	Iodine	Source/Ver-Lot#:	INT_02386
TALS ID	Iod_00279	Prep Date:	4/26/2023
Normality:	0.1	Made By:	CAI
Solution 2:	sodium thiosulfate	Concentration:	932
TALS ID	Na Thio_00181	Expiration Date:	7/26/2023
Normality:	0.025		
	Starch Indicator		
TALS ID	Starch IND_00071		

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
CAL	5	0.00	8.40	5	8.40	928.000
CAL	5	8.40	16.70	5	8.30	936.000

ICV Information	
Source/Ver-Lot#:	INT_02291
Prep Date:	4/26/2023
Made By:	CAI
Concentration:	882
Expiration Date:	7/26/2023

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
ICV	5	0.00	8.90	5	8.90	888.000
ICV	5	8.95	18.00	5	9.05	876.000

TALS Raw Data Report

Job Number: 280-176335-1
LIMS Batch: 612827
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-612820/1-A** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	90	44 110		
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-612820/2-A** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

RS# 3 Lab ID: **280-176349-E-3-A** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

RS# 4 Lab ID: **280-176349-E-3-B MS** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	90	44 110		
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 5 Lab ID: **280-176349-E-3-C MSD** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	90	44 110	0	20
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 14 Lab ID: **280-176335-E-4-A** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

TALS Raw Data Report

Job Number: 280-176349-1
LIMS Batch: 612827
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-612820/1-A** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	90	44 110		
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-612820/2-A** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

RS# 3 Lab ID: **280-176349-E-3-A** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

RS# 4 Lab ID: **280-176349-E-3-B MS** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	90	44 110		
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 5 Lab ID: **280-176349-E-3-C MSD** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	90	44 110	0	20
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 6 Lab ID: **280-176349-E-8-A** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

RS# 7 Lab ID: **280-176349-E-9-A** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

RS# 8 Lab ID: **280-176349-E-11-A** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

RS# 9 Lab ID: **280-176349-E-15-A** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	2.0 U mg/L				
Sulfide as H2S		0.85 mg/L	2.1 U mg/L				

RS# 10 Lab ID: **280-176349-E-16-A** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	2.0 U mg/L				
Sulfide as H2S		0.85 mg/L	2.1 U mg/L				

TALS Raw Data Report

RS# 11 Lab ID: **280-176349-E-18-A** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

TALS Raw Data Report

Job Number: 280-176434-1
LIMS Batch: 612827
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-612820/1-A** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	90	44 110		
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-612820/2-A** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

RS# 3 Lab ID: **280-176349-E-3-A** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

RS# 4 Lab ID: **280-176349-E-3-B MS** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	90	44 110		
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 5 Lab ID: **280-176349-E-3-C MSD** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	90	44 110	0	20
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 17 Lab ID: **280-176434-E-7-A** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

TALS Raw Data Report

Job Number: 280-176439-1
LIMS Batch: 612827
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-612820/1-A** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	90	44 110		
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-612820/2-A** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 3 Lab ID: **280-176349-E-3-A** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 4 Lab ID: **280-176349-E-3-B MS** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	90	44 110		
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 5 Lab ID: **280-176349-E-3-C MSD** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	90	44 110	0	20
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 15 Lab ID: **280-176439-F-1-A** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 16 Lab ID: **280-176439-F-2-A** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	mg/L				
Sulfide as H2S		0.85 mg/L	mg/L				

TALS Raw Data Report

Job Number: 280-176451-1
LIMS Batch: 612827
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-612820/1-A** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	90	44 110		
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-612820/2-A** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

RS# 3 Lab ID: **280-176349-E-3-A** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

RS# 4 Lab ID: **280-176349-E-3-B MS** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	90	44 110		
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 5 Lab ID: **280-176349-E-3-C MSD** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	90	44 110	0	20
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 13 Lab ID: **280-176451-E-7-A** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

TALS Raw Data Report

Job Number: 280-176478-1
LIMS Batch: 612827
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-612820/1-A** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	90	44 110		
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-612820/2-A** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 3 Lab ID: **280-176349-E-3-A** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 4 Lab ID: **280-176349-E-3-B MS** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	90	44 110		
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 5 Lab ID: **280-176349-E-3-C MSD** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	90	44 110	0	20
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 12 Lab ID: **280-176478-F-1-A** Inj Date: 5/17/2023 1:31:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-141				
Lims ID:	STD L1				
Client ID:					
Sample Type:	IC	Calib Level:	1		
Inject. Date:	12-Apr-2023 14:04:00	ALS Bottle#:	0	Worklist Smp#:	1
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0120345-001				
Misc. Info.:	280-0120345-001				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Sublist:	chrom-Anions_IC10*sub5				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Anions_IC10.m				
Limit Group:	Wet - Anions				
Last Update:	14-Apr-2023 14:03:48	Calib Date:	12-Apr-2023 15:19:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1620				
First Level Reviewer: LVW8		Date:	12-Apr-2023 15:40:32		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.175				ND	
2 Chloride	4.383	4.383	0.000	7464190	NC	NC	M
3 Nitrite as N		5.103				ND	
4 Bromide		6.292				ND	U
5 Nitrate as N		7.057				ND	
6 Orthophosphate as P	9.447	9.447	0.000	3338493		-0.3613	M
7 Sulfate	10.645	10.645	0.000	7022789	NC	NC	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Reagents:

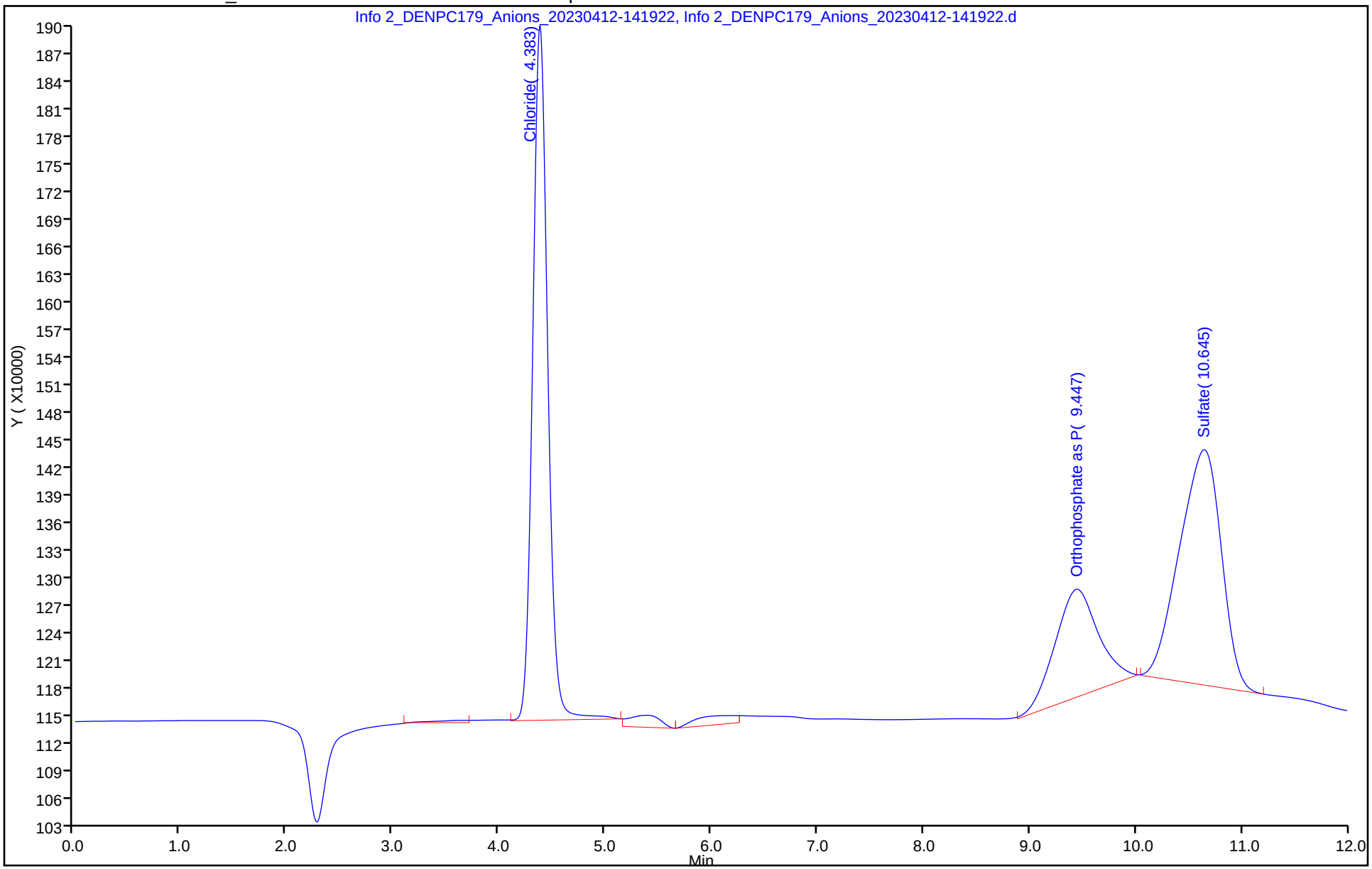
IC CAL cl/so4_00475	Amount Added:	0.04	Units: mL
IC Cal low_00703	Amount Added:	0.00	Units: mL

Report Date: 14-Apr-2023 14:03:49 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-141922.d

Injection Date:	12-Apr-2023 14:04:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD L1			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/31/2023 7:23 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-141

Injection Date: 12-Apr-2023 14:04:00 Instrument ID: WC_IonChrom10

Lims ID: STD L1

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

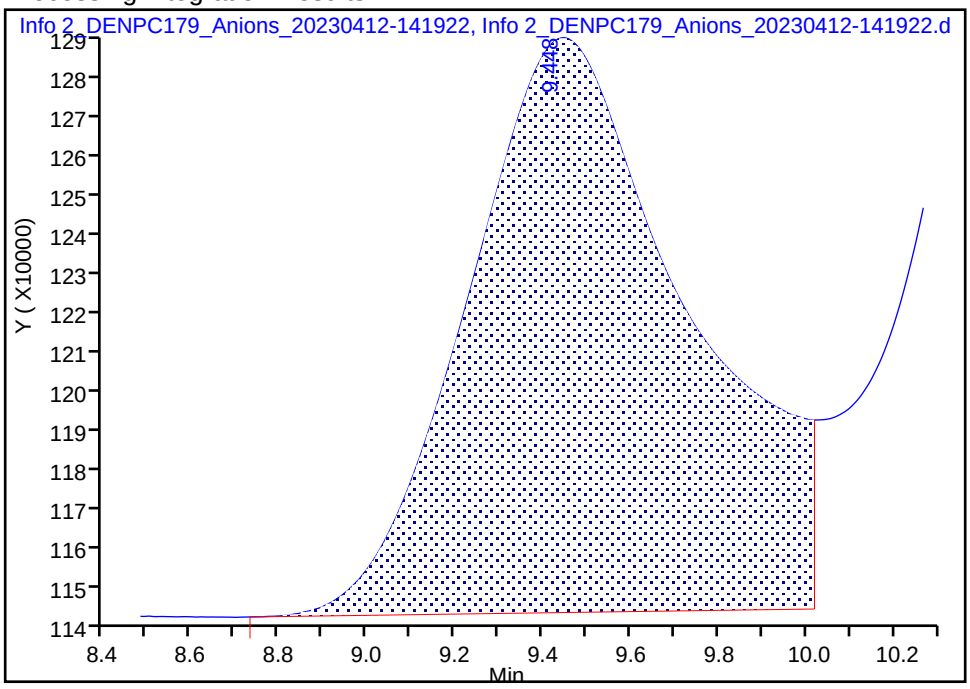
Column: Detector Info 2_091554_1

6 Orthophosphate as P, CAS: STL00599

Signal: 1

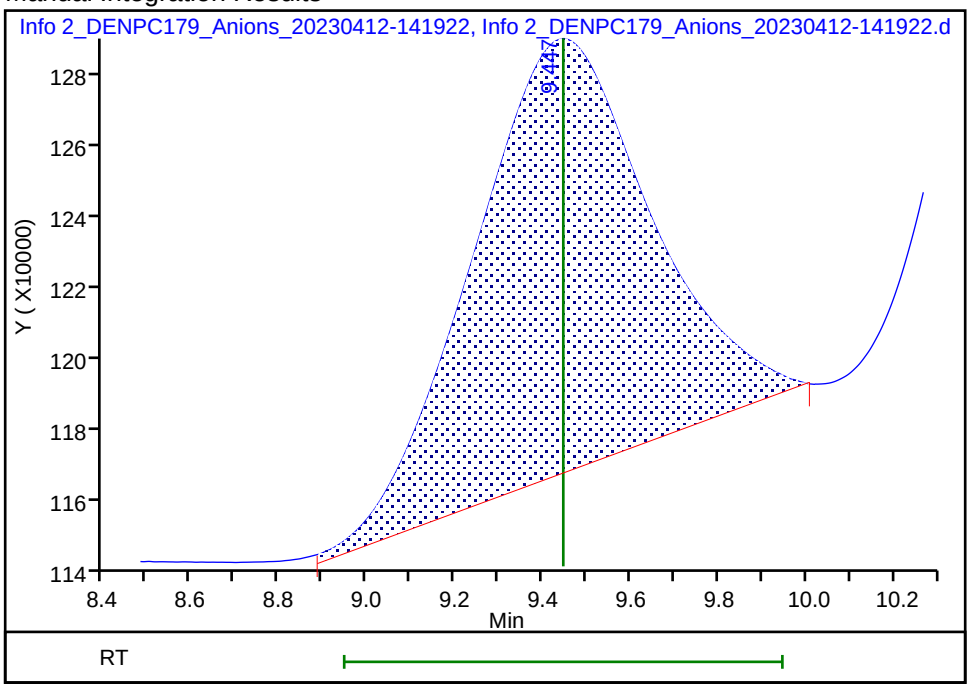
Processing Integration Results

RT: 9.45
Area: 4931641
Amount: -0.506480
Amount Units: ug/ml



Manual Integration Results

RT: 9.45
Area: 3338493
Amount: -0.361342
Amount Units: ug/ml



Reviewer: LVW8, 12-Apr-2023 15:40:49

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-143				
Lims ID:	STD L2				
Client ID:					
Sample Type:	IC	Calib Level:	2		
Inject. Date:	12-Apr-2023 14:19:00	ALS Bottle#:	0	Worklist Smp#:	2
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0120345-002				
Misc. Info.:	280-0120345-002				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Sublist:	chrom-Anions_IC10*sub5				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Anions_IC10.m				
Limit Group:	Wet - Anions				
Last Update:	14-Apr-2023 14:03:50	Calib Date:	12-Apr-2023 15:19:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1620				
First Level Reviewer: LVW8		Date:	12-Apr-2023 15:41:35		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.163	3.163	0.000	6262507	NC	NC	Ma
2 Chloride	4.380	4.380	0.000	20679388	NC	NC	M
3 Nitrite as N	5.115	5.115	0.000	8087413	0.2000	0.2019	M
4 Bromide	6.352	6.352	0.000	2964734	NC	NC	
5 Nitrate as N	7.383	7.383	0.000	8434441	0.2000	0.2195	a
6 Orthophosphate as P	9.813	9.813	0.000	13953811	0.2000	0.1404	M
7 Sulfate	11.045	11.045	0.000	14421328	NC	NC	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

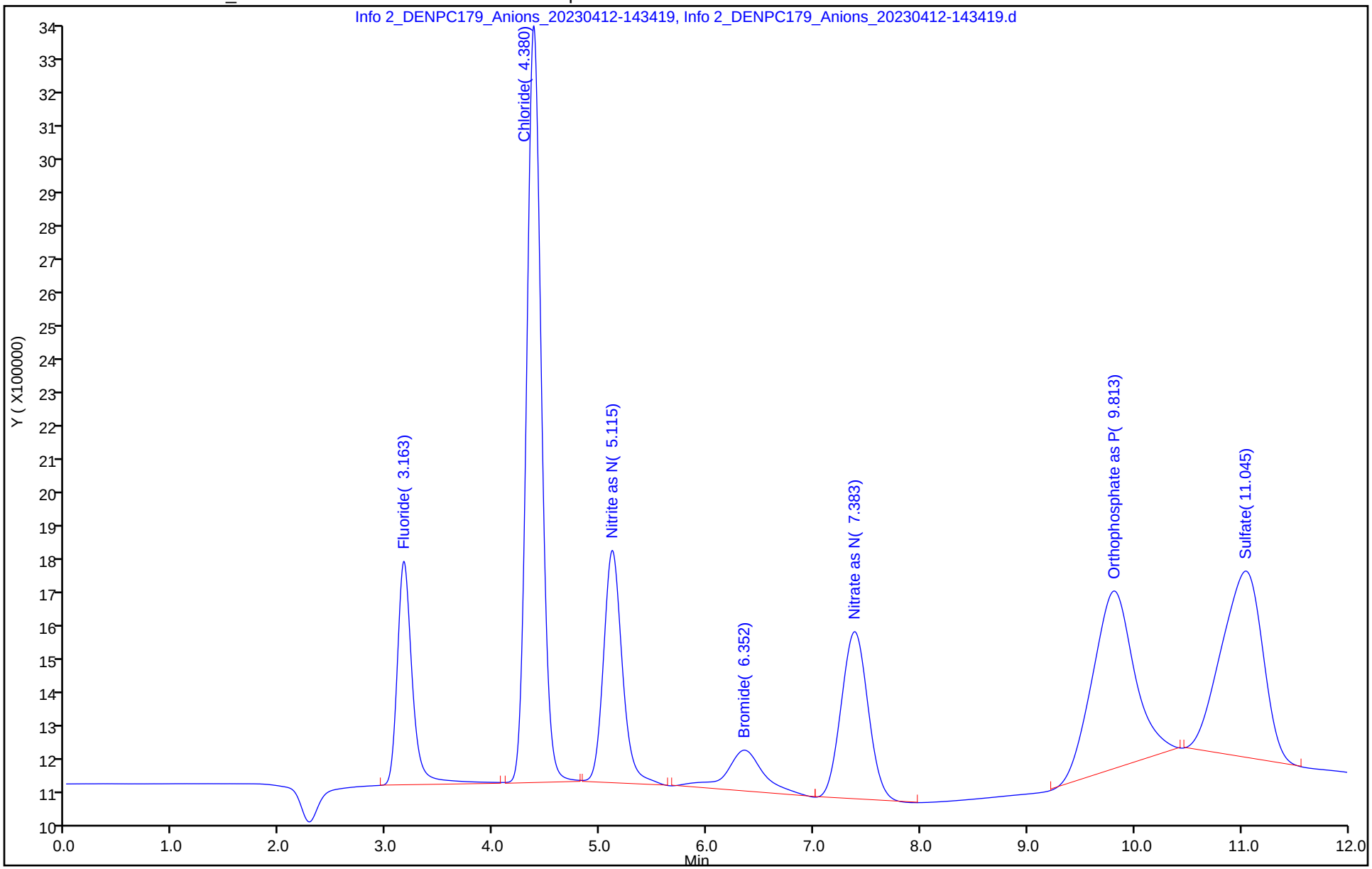
IC CAL cl/so4_00475	Amount Added:	0.10	Units: mL
IC Cal low_00703	Amount Added:	0.08	Units: mL

Report Date: 14-Apr-2023 14:03:51 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-143419.d

Injection Date:	12-Apr-2023 14:19:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD L2			Worklist Smp#:	2
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/31/2023 7:23 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-143

Injection Date: 12-Apr-2023 14:19:00 Instrument ID: WC_IonChrom10

Lims ID: STD L2

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

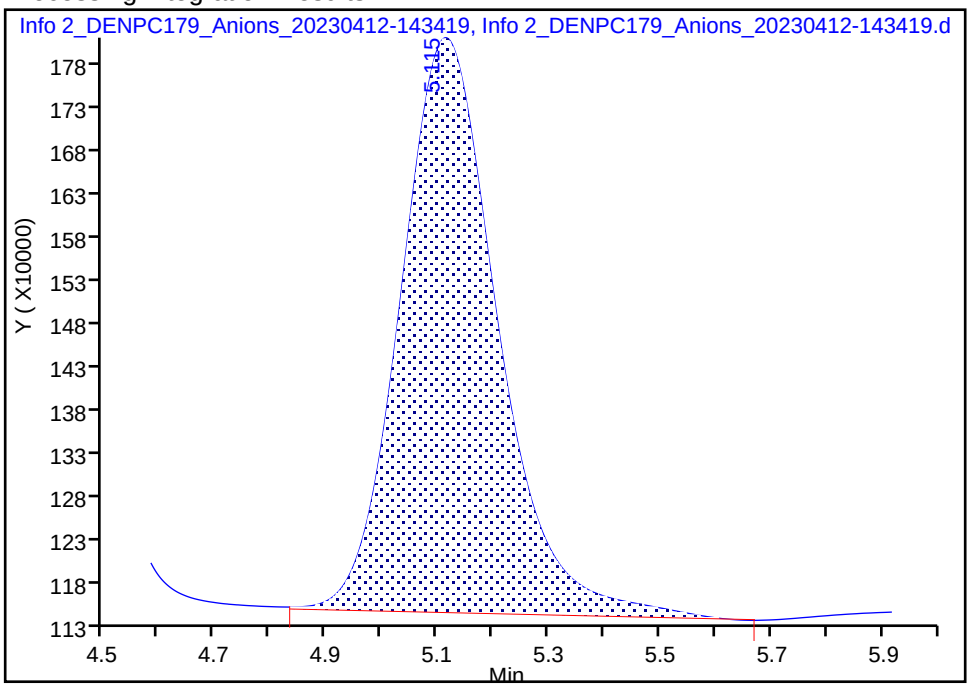
Column: Detector Info 2_091554_1

3 Nitrite as N, CAS: 14797-65-0

Signal: 1

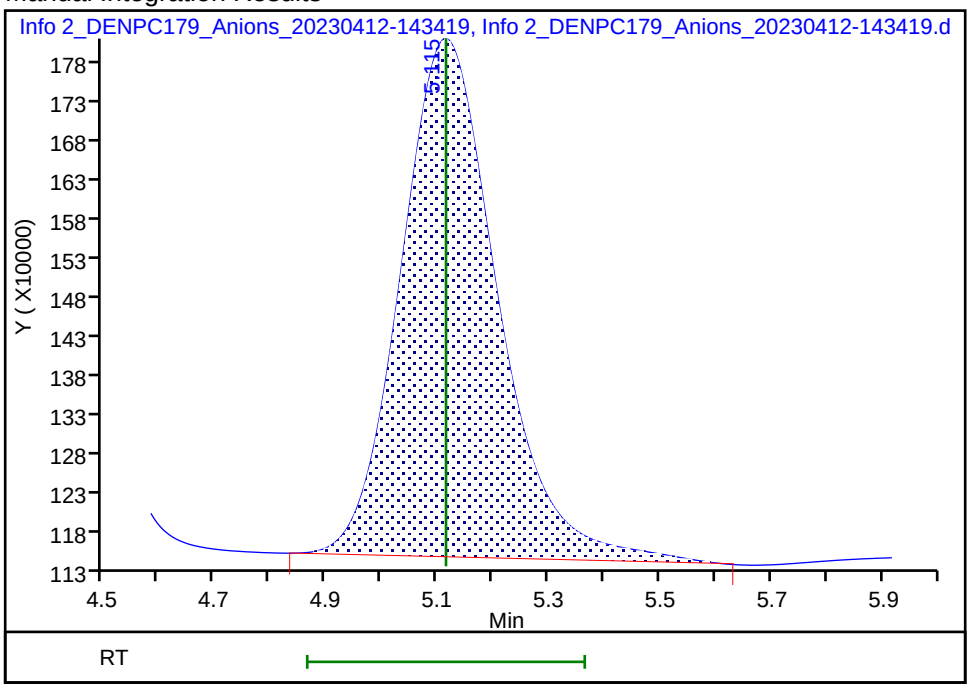
Processing Integration Results

RT: 5.12
Area: 8151496
Amount: 0.199877
Amount Units: ug/ml



Manual Integration Results

RT: 5.12
Area: 8087413
Amount: 0.201920
Amount Units: ug/ml



Reviewer: LVW8, 12-Apr-2023 15:41:06

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-143

Injection Date: 12-Apr-2023 14:19:00 Instrument ID: WC_IonChrom10

Lims ID: STD L2

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

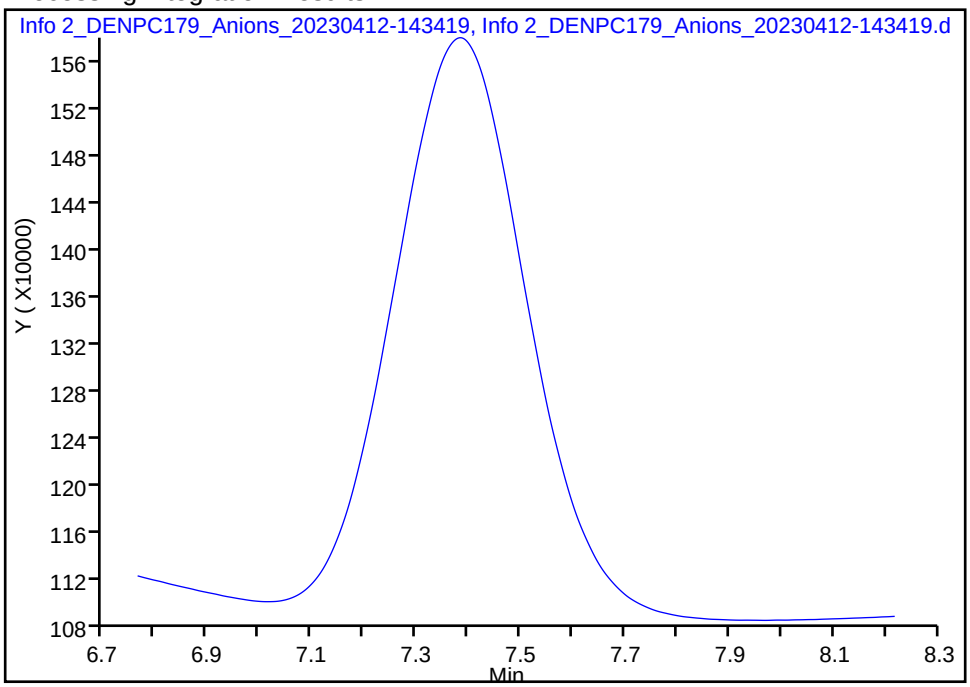
5 Nitrate as N, CAS: 14797-55-8

Signal: 1

Not Detected

Expected RT: 7.38

Processing Integration Results



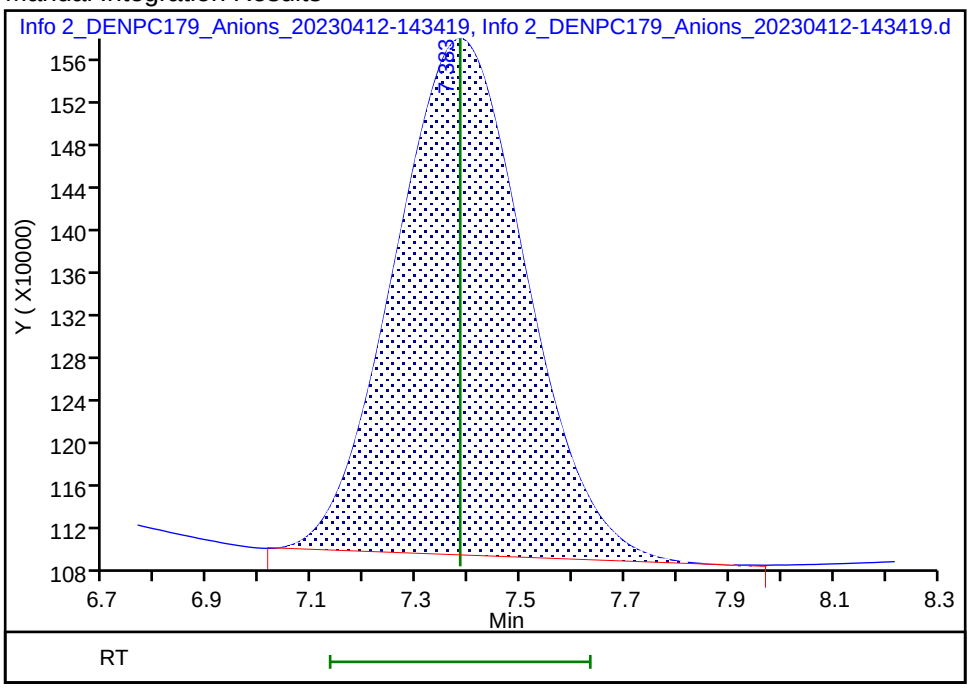
Manual Integration Results

RT: 7.38

Area: 8434441

Amount: 0.219511

Amount Units: ug/ml



Reviewer: LVW8, 12-Apr-2023 15:41:22

Audit Action: Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-143

Injection Date: 12-Apr-2023 14:19:00 Instrument ID: WC_IonChrom10

Lims ID: STD L2

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

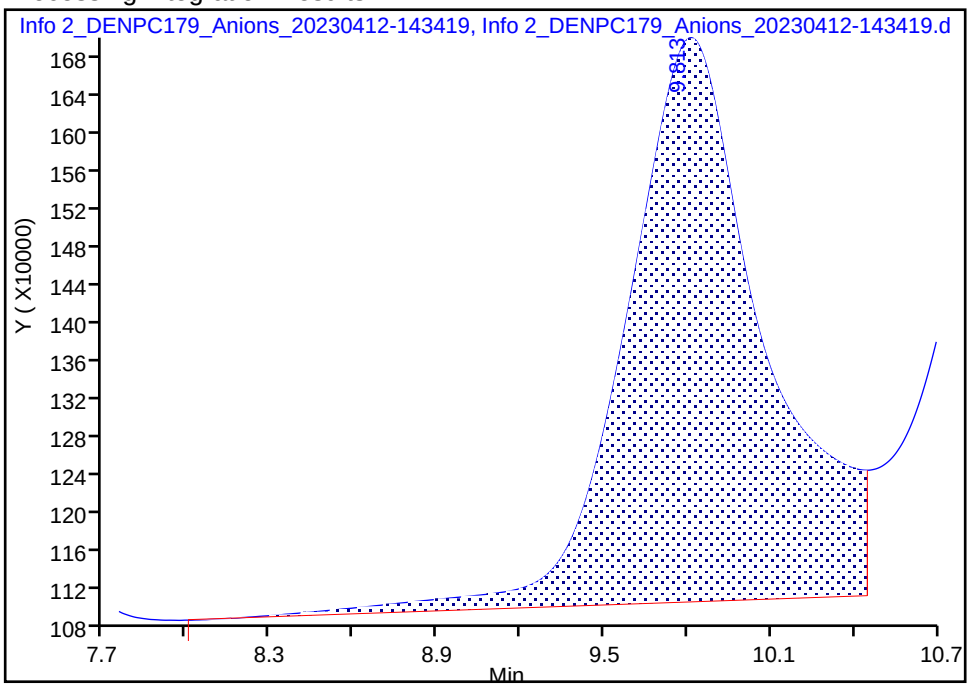
Column: Detector Info 2_091554_1

6 Orthophosphate as P, CAS: STL00599

Signal: 1

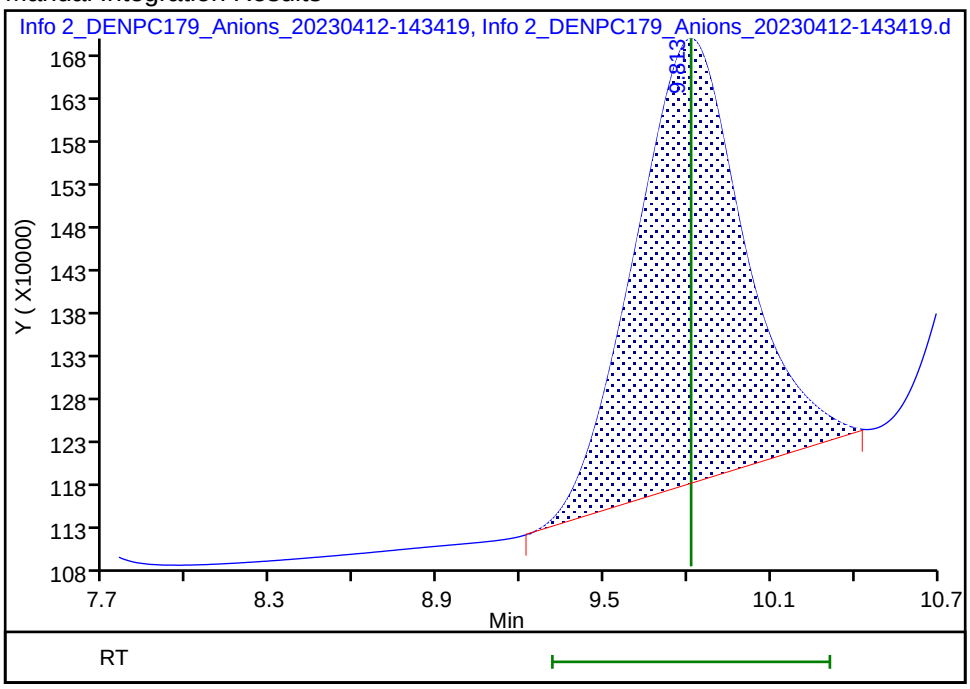
Processing Integration Results

RT: 9.81
Area: 20197362
Amount: 0.155449
Amount Units: ug/ml



Manual Integration Results

RT: 9.81
Area: 13953811
Amount: 0.140386
Amount Units: ug/ml



Reviewer: LVW8, 12-Apr-2023 15:41:19

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-144
Lims ID: STD L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 12-Apr-2023 14:34:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0120345-003
Misc. Info.: 280-0120345-003
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 14-Apr-2023 14:03:53 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1620

First Level Reviewer: LVW8 Date: 12-Apr-2023 15:42:15

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.168	3.168	0.000	16995372	NC	NC	Ma
2 Chloride	4.383	4.383	0.000	43975181	NC	NC	M
3 Nitrite as N	5.118	5.118	0.000	21615246	0.5000	0.4936	M
4 Bromide	6.317	6.317	0.000	3222251	NC	NC	M
5 Nitrate as N	7.123	7.123	0.000	19909305	0.5000	0.4697	M
6 Orthophosphate as P	9.405	9.405	0.000	23629516	0.5000	0.5977	M
7 Sulfate	10.647	10.647	0.000	29311364	NC	NC	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

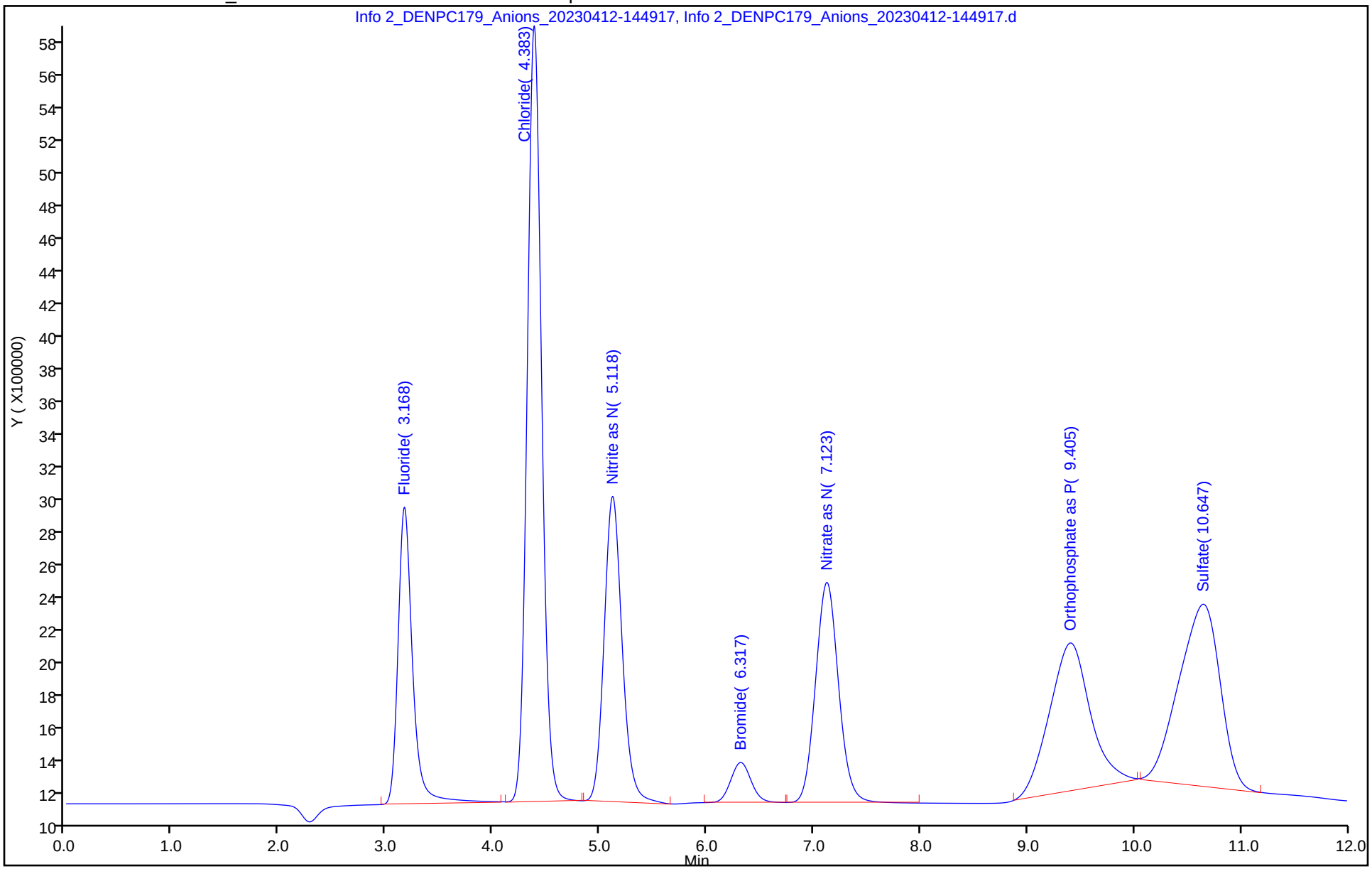
IC CAL cl/so4_00475 Amount Added: 0.20 Units: mL
IC Cal low_00703 Amount Added: 0.20 Units: mL

Report Date: 14-Apr-2023 14:03:53 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-144917.d

Injection Date:	12-Apr-2023 14:34:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD L3			Worklist Smp#:	3
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/31/2023 7:23 AM

Eurofins Denver

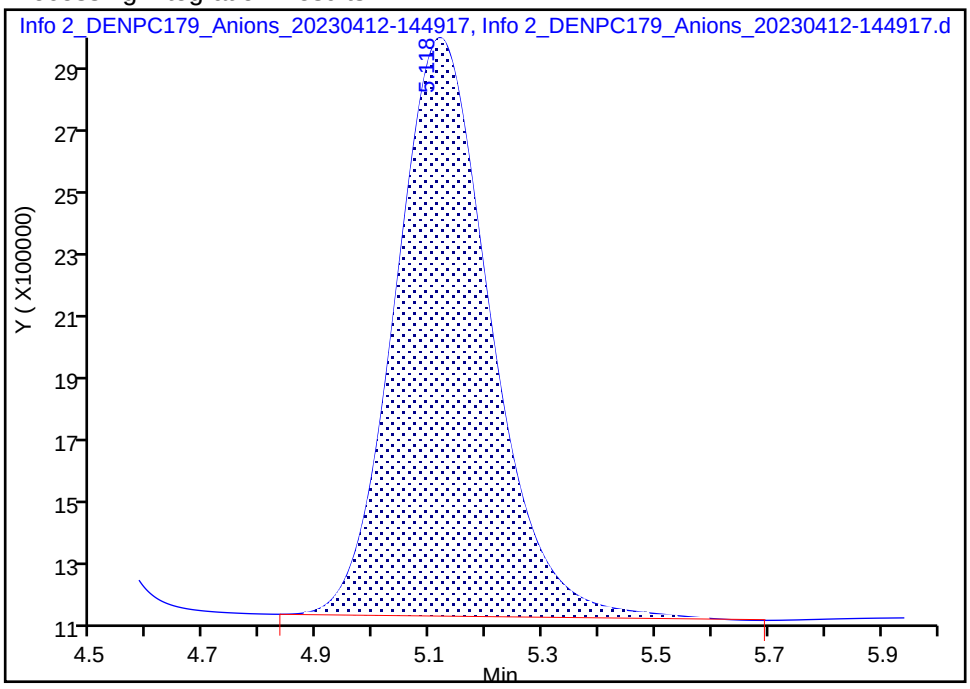
Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-144
Injection Date: 12-Apr-2023 14:34:00 Instrument ID: WC_IonChrom10
Lims ID: STD L3
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions_IC10 Limit Group: Wet - Anions
Column: Detector Info 2_091554_1

3 Nitrite as N, CAS: 14797-65-0

Signal: 1

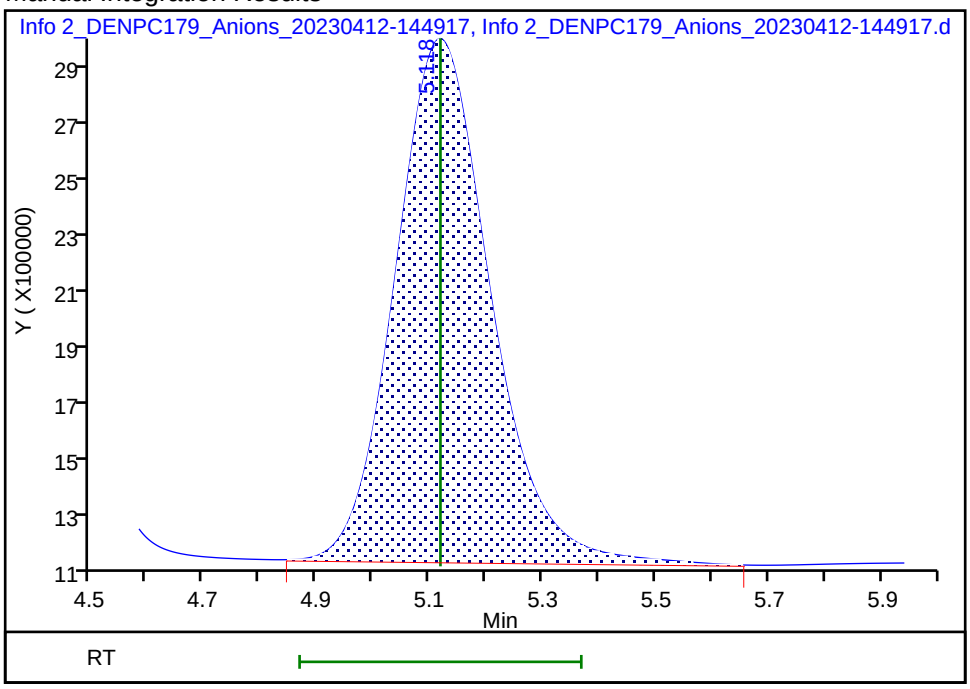
Processing Integration Results

RT: 5.12
Area: 21704269
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 5.12
Area: 21615246
Amount: 0.493602
Amount Units: ug/ml



Reviewer: LVW8, 12-Apr-2023 15:41:46
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver

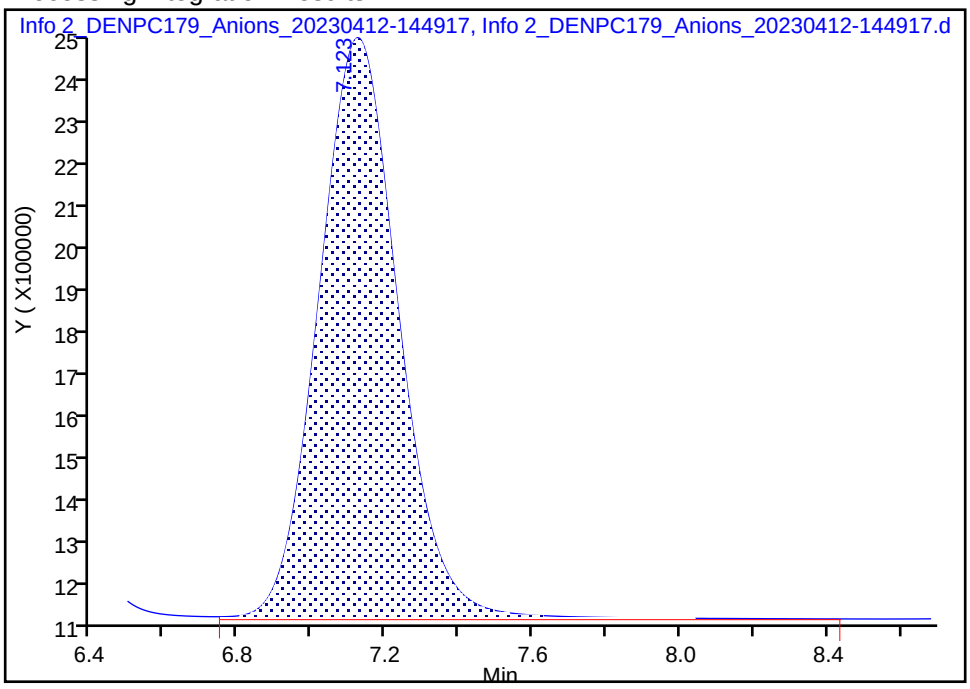
Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-144
Injection Date: 12-Apr-2023 14:34:00 Instrument ID: WC_IonChrom10
Lims ID: STD L3
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions_IC10 Limit Group: Wet - Anions
Column: Detector Info 2_091554_1

5 Nitrate as N, CAS: 14797-55-8

Signal: 1

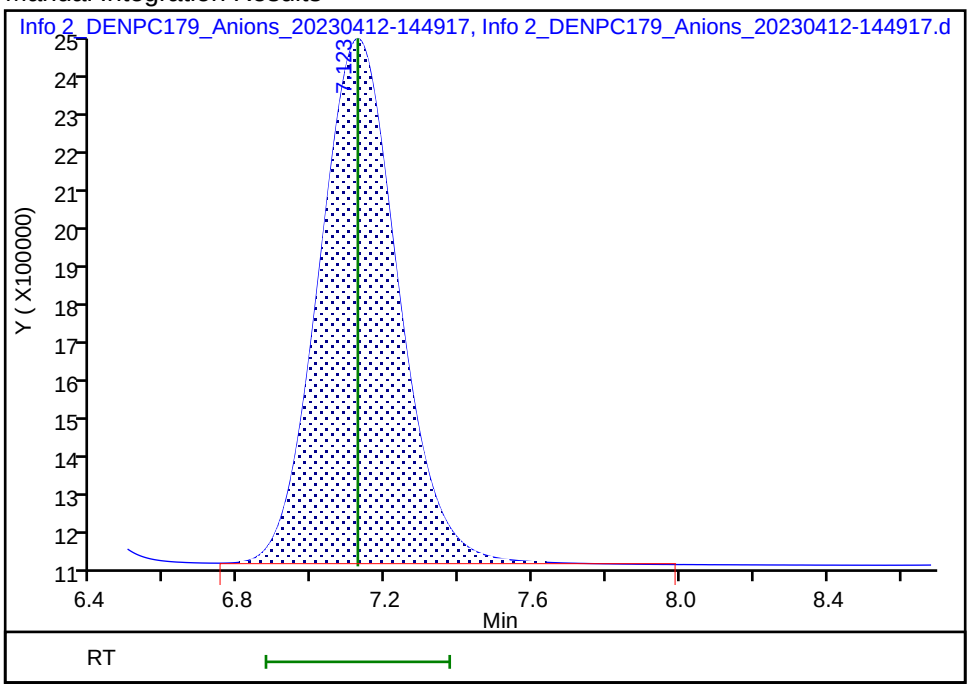
Processing Integration Results

RT: 7.12
Area: 20406914
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 7.12
Area: 19909305
Amount: 0.469685
Amount Units: ug/ml



Reviewer: LVW8, 12-Apr-2023 15:41:55
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-144

Injection Date: 12-Apr-2023 14:34:00 Instrument ID: WC_IonChrom10

Lims ID: STD L3

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

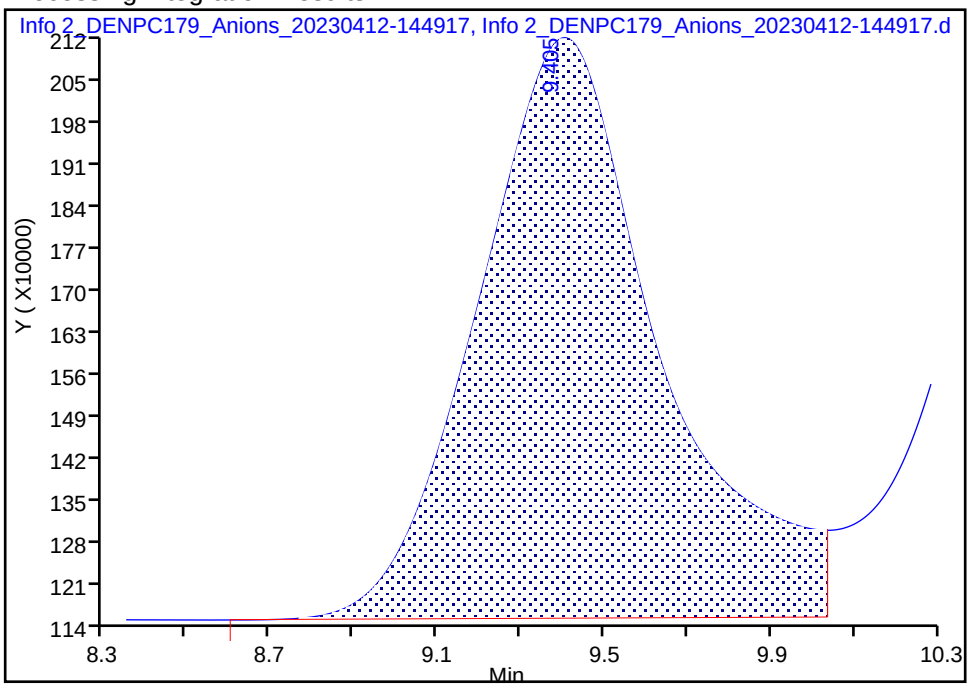
Column: Detector Info 2_091554_1

6 Orthophosphate as P, CAS: STL00599

Signal: 1

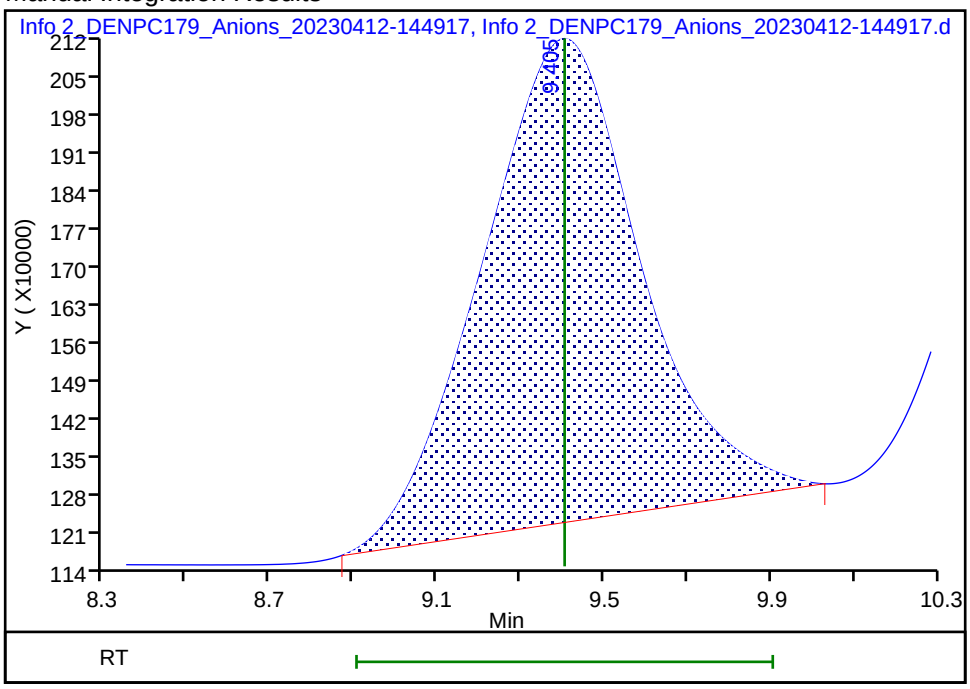
Processing Integration Results

RT: 9.41
Area: 29322324
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 9.41
Area: 23629516
Amount: 0.597704
Amount Units: ug/ml



Reviewer: LVW8, 12-Apr-2023 15:42:10

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-150
Lims ID: STD L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 12-Apr-2023 14:49:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0120345-004
Misc. Info.: 280-0120345-004
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 14-Apr-2023 14:03:55 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1620

First Level Reviewer: LVW8 Date: 12-Apr-2023 15:42:52

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.168	3.168	0.000	37412858	NC	NC	Ma
2 Chloride	4.390	4.390	0.000	575824993	NC	NC	M
3 Nitrite as N	5.113	5.113	0.000	44844044	1.00	0.99	M
4 Bromide	6.308	6.308	0.000	6583592	NC	NC	M
5 Nitrate as N	7.103	7.103	0.000	42066844	1.00	0.9528	M
6 Orthophosphate as P	9.388	9.388	0.000	34760084	1.00	1.12	M
7 Sulfate	10.628	10.628	0.000	410479688	NC	NC	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

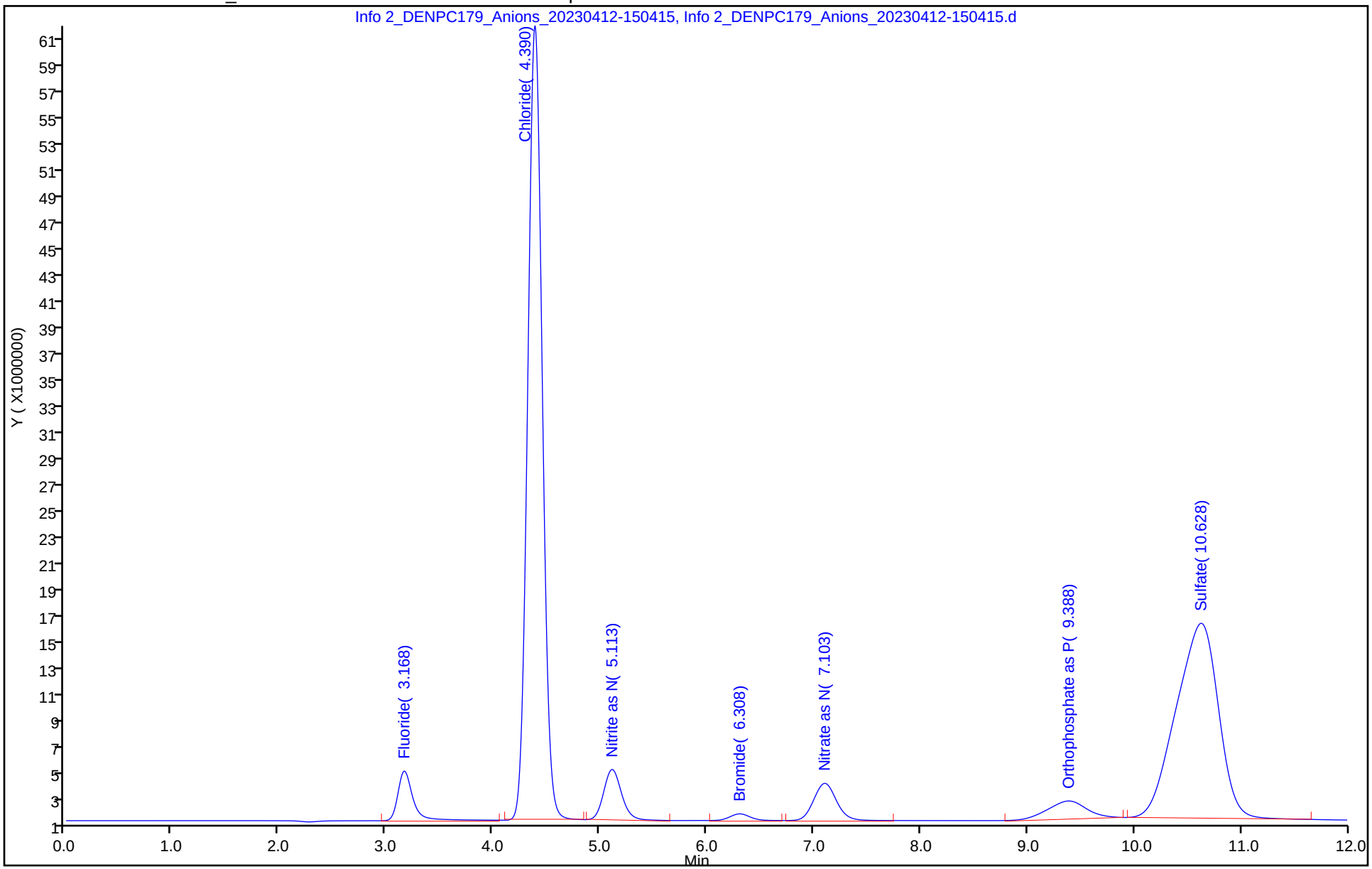
IC CAL cl/so4_00475 Amount Added: 2.40 Units: mL
IC Cal low_00703 Amount Added: 0.40 Units: mL

Report Date: 14-Apr-2023 14:03:55 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-150415.d

Injection Date:	12-Apr-2023 14:49:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD L4			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

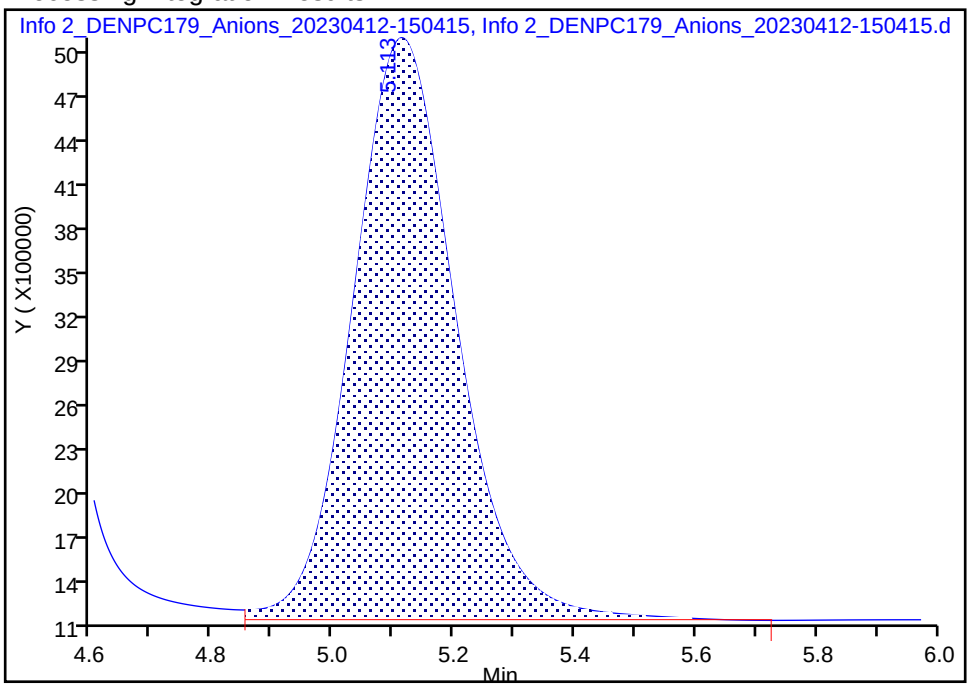
Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-150
Injection Date: 12-Apr-2023 14:49:00 Instrument ID: WC_IonChrom10
Lims ID: STD L4
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions_IC10 Limit Group: Wet - Anions
Column: Detector Info 2_091554_1

3 Nitrite as N, CAS: 14797-65-0

Signal: 1

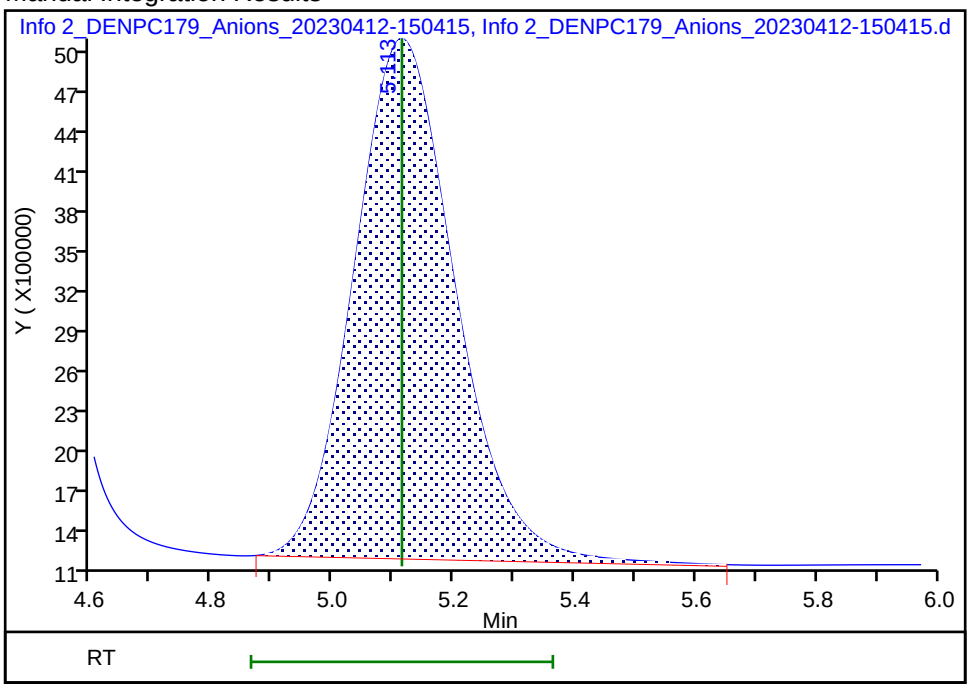
Processing Integration Results

RT: 5.11
Area: 46326440
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 5.11
Area: 44844044
Amount: 0.994454
Amount Units: ug/ml



Reviewer: LVW8, 12-Apr-2023 15:42:27
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-150

Injection Date: 12-Apr-2023 14:49:00 Instrument ID: WC_IonChrom10

Lims ID: STD L4

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

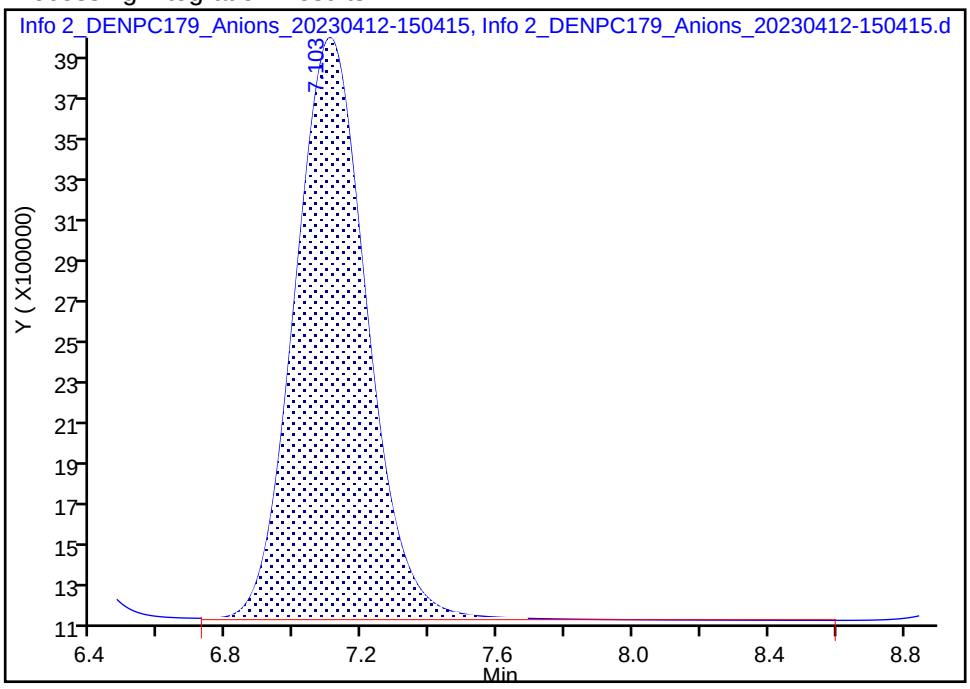
Column: Detector Info 2_091554_1

5 Nitrate as N, CAS: 14797-55-8

Signal: 1

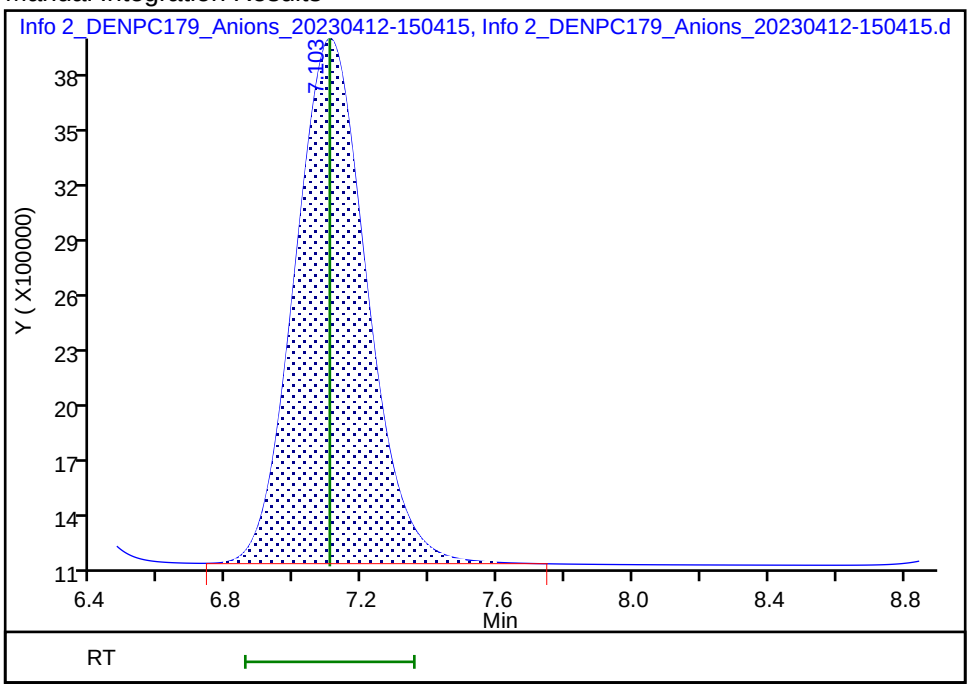
Processing Integration Results

RT: 7.10
Area: 42281044
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 7.10
Area: 42066844
Amount: 0.952760
Amount Units: ug/ml



Reviewer: LVW8, 12-Apr-2023 15:42:36

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

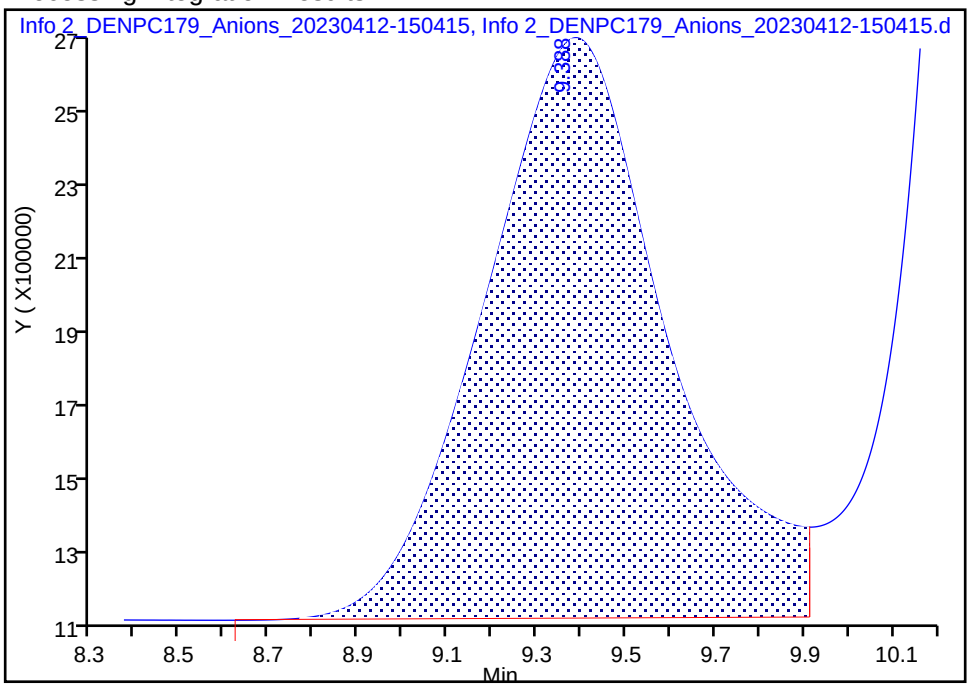
Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-150
Injection Date: 12-Apr-2023 14:49:00 Instrument ID: WC_IonChrom10
Lims ID: STD L4
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions_IC10 Limit Group: Wet - Anions
Column: Detector Info 2_091554_1

6 Orthophosphate as P, CAS: STL00599

Signal: 1

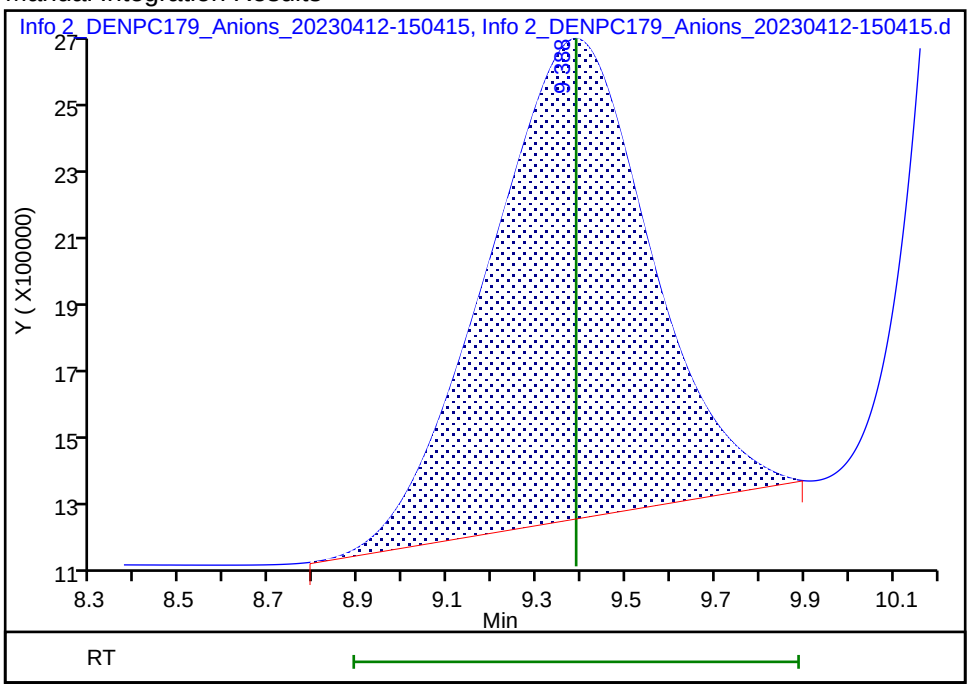
RT: 9.39
Area: 42806166
Amount: 0
Amount Units: ug/ml

Processing Integration Results



RT: 9.39
Area: 34760084
Amount: 1.123785
Amount Units: ug/ml

Manual Integration Results



Reviewer: LVW8, 12-Apr-2023 15:42:46
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-151
Lims ID: STD L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 12-Apr-2023 15:04:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0120345-005
Misc. Info.: 280-0120345-005
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 14-Apr-2023 14:03:57 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1620

First Level Reviewer: LVW8 Date: 12-Apr-2023 15:43:24

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.170	3.170	0.000	96629288	NC	NC	Ma
2 Chloride	4.405	4.405	0.000	1149686166	NC	NC	M
3 Nitrite as N	5.107	5.107	0.000	116231748	2.50	2.53	M
4 Bromide	6.298	6.298	0.000	17672625	NC	NC	
5 Nitrate as N	7.078	7.078	0.000	112738215	2.50	2.49	M
6 Orthophosphate as P	9.368	9.368	0.000	65067694	2.50	2.56	M
7 Sulfate	10.610	10.610	0.000	828007497	NC	NC	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

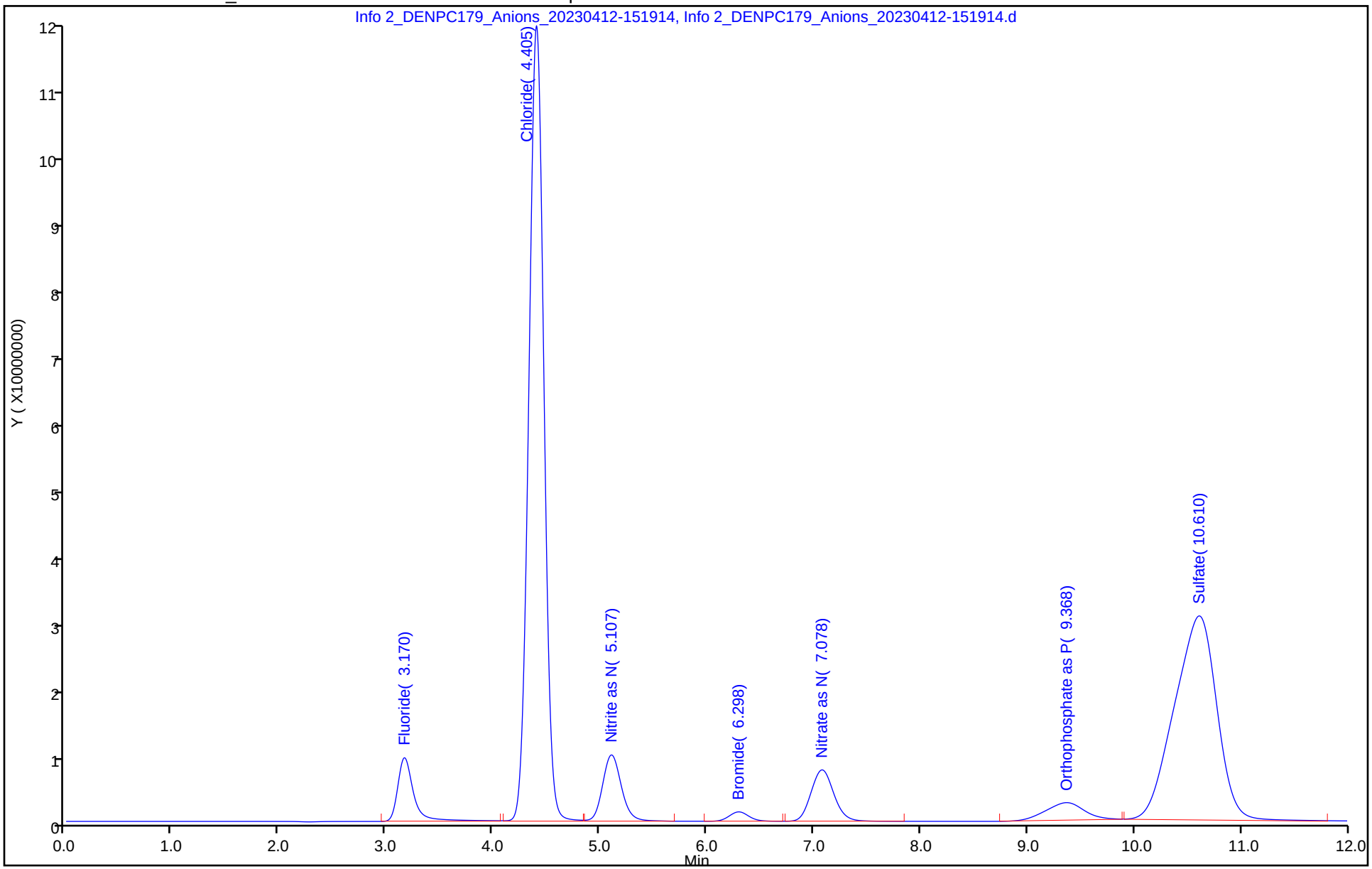
IC CAL cl/so4_00475 Amount Added: 4.80 Units: mL
IC Cal low_00703 Amount Added: 1.00 Units: mL

Report Date: 14-Apr-2023 14:03:58 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-151914.d

Injection Date:	12-Apr-2023 15:04:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD L5			Worklist Smp#:	5
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/31/2023 7:23 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-151

Injection Date: 12-Apr-2023 15:04:00 Instrument ID: WC_IonChrom10

Lims ID: STD L5

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

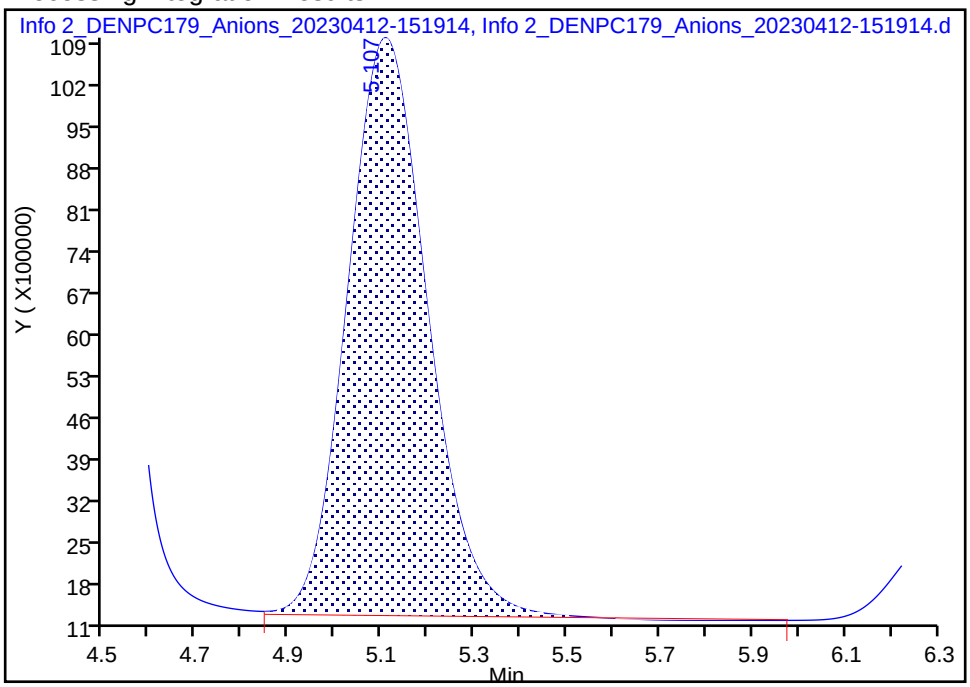
Column: Detector Info 2_091554_1

3 Nitrite as N, CAS: 14797-65-0

Signal: 1

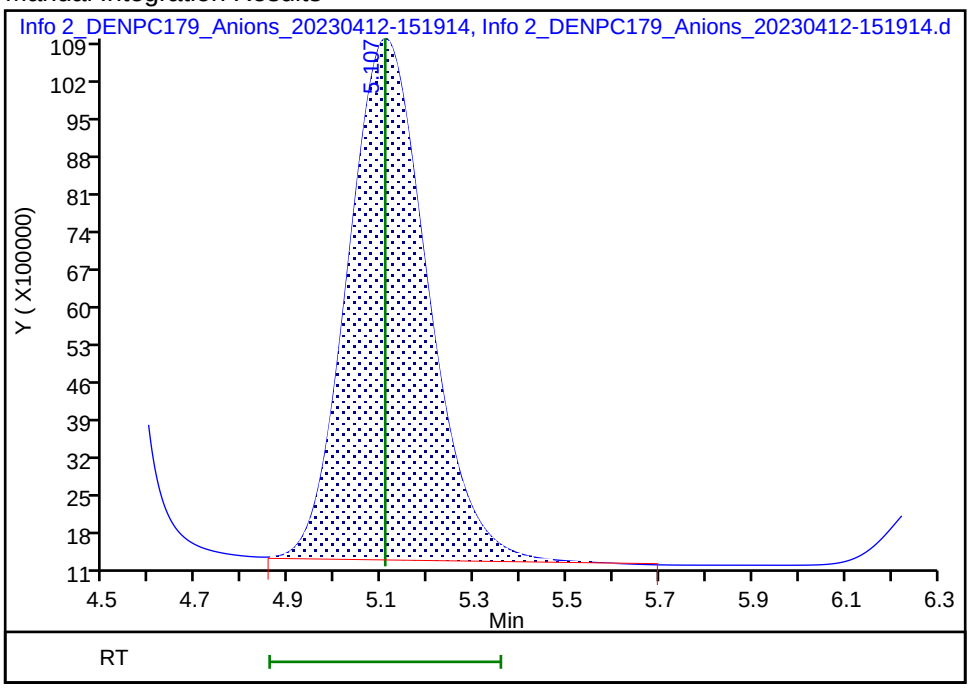
Processing Integration Results

RT: 5.11
Area: 117216841
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 5.11
Area: 116231748
Amount: 2.533691
Amount Units: ug/ml



Reviewer: LVW8, 12-Apr-2023 15:43:01

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-151

Injection Date: 12-Apr-2023 15:04:00 Instrument ID: WC_IonChrom10

Lims ID: STD L5

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

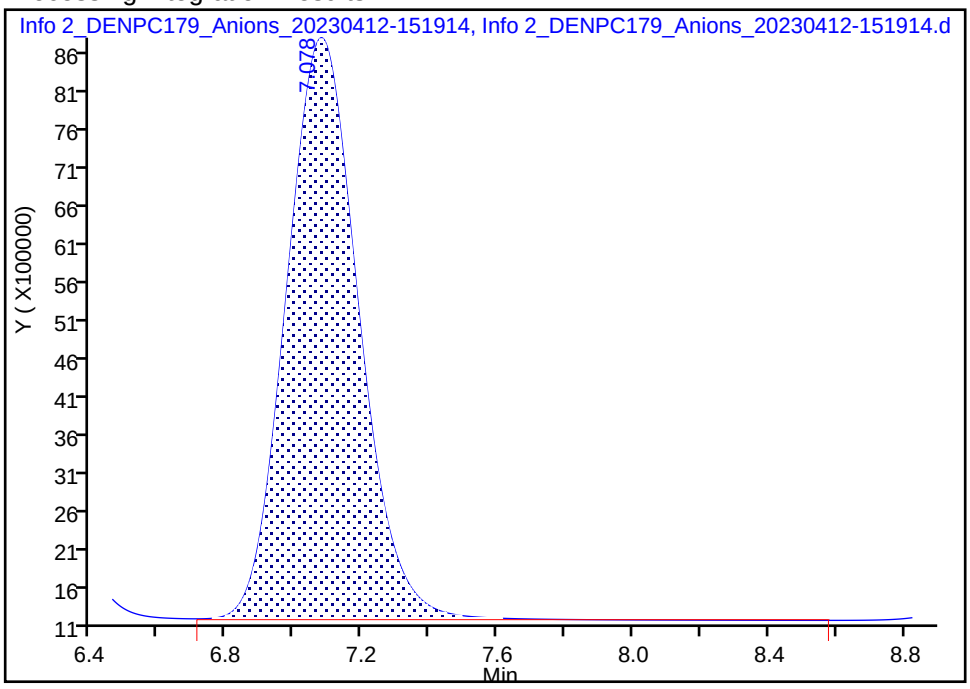
Column: Detector Info 2_091554_1

5 Nitrate as N, CAS: 14797-55-8

Signal: 1

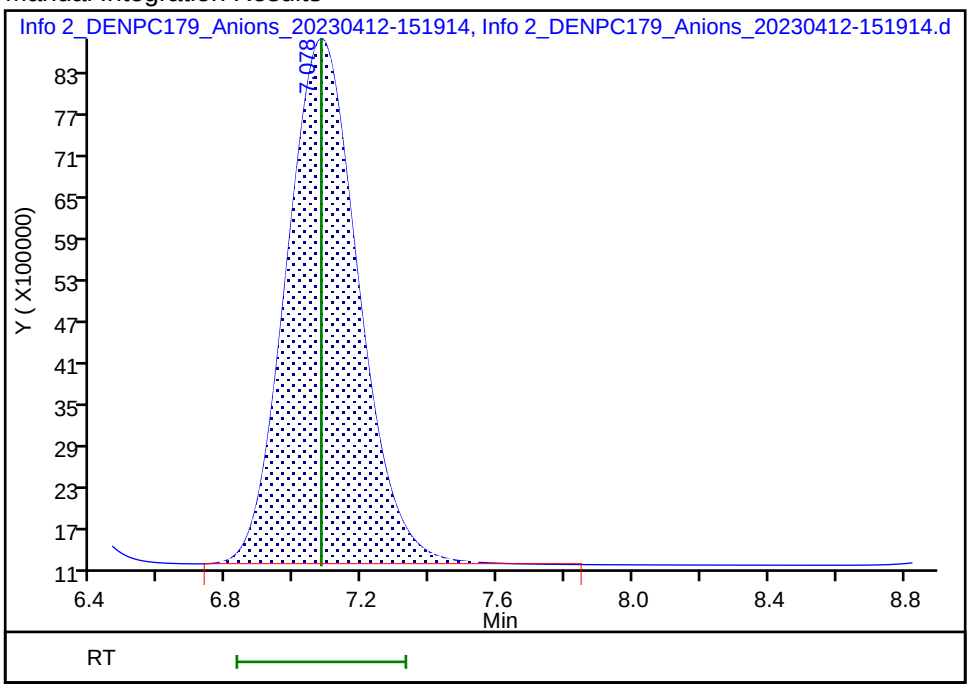
Processing Integration Results

RT: 7.08
Area: 112804805
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 7.08
Area: 112738215
Amount: 2.493526
Amount Units: ug/ml



Reviewer: LVW8, 12-Apr-2023 15:43:10

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-151

Injection Date: 12-Apr-2023 15:04:00 Instrument ID: WC_IonChrom10

Lims ID: STD L5

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

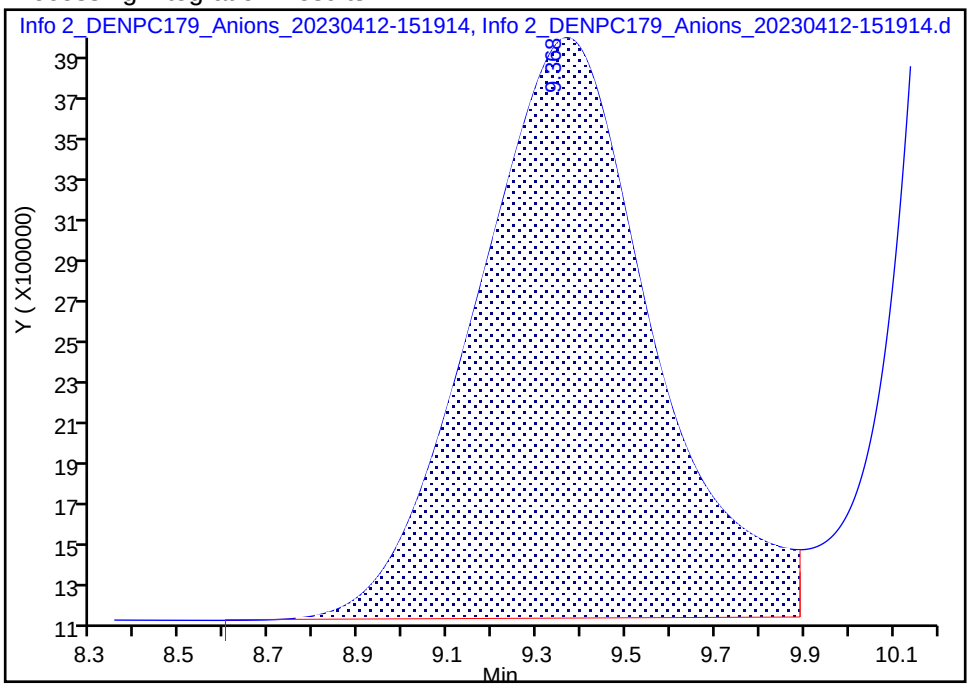
Column: Detector Info 2_091554_1

6 Orthophosphate as P, CAS: STL00599

Signal: 1

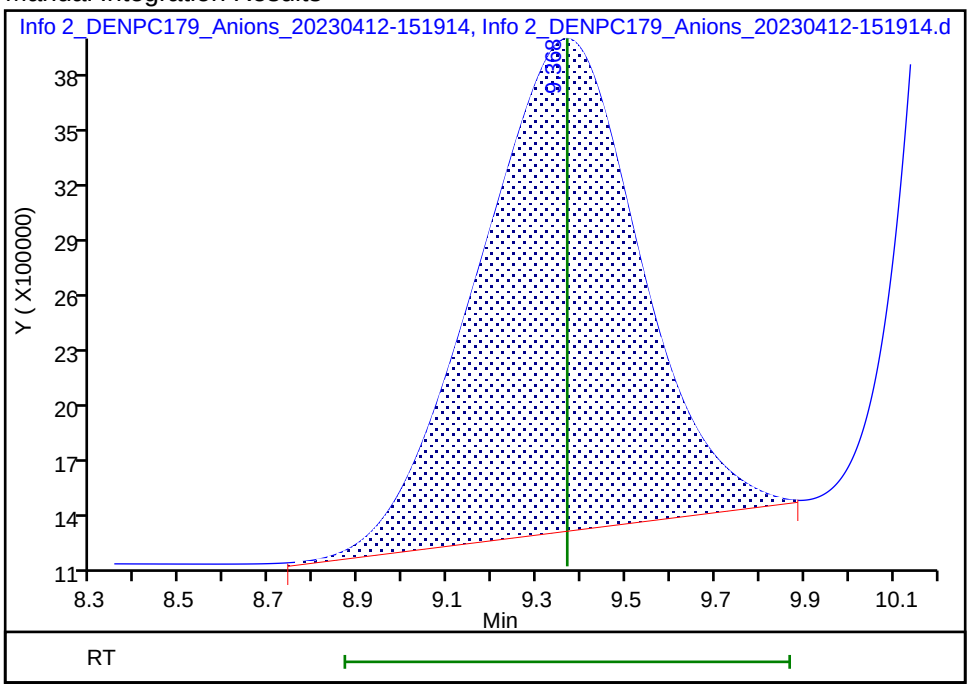
Processing Integration Results

RT: 9.37
Area: 75792721
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 9.37
Area: 65067694
Amount: 2.556261
Amount Units: ug/ml



Reviewer: LVW8, 12-Apr-2023 15:43:19

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153
Lims ID: STD L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 12-Apr-2023 15:19:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0120345-006
Misc. Info.: 280-0120345-006
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 14-Apr-2023 14:04:00 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1620

First Level Reviewer: LVW8 Date: 12-Apr-2023 17:08:50

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.175	3.175	0.000	190381963	NC	NC	Ma
2 Chloride	4.428	4.428	0.000	1914243902	NC	NC	M
3 Nitrite as N	5.103	5.103	0.000	229518060	5.00	4.98	M
4 Bromide	6.292	6.292	0.000	37078318	NC	NC	
5 Nitrate as N	7.057	7.057	0.000	230663663	5.00	5.06	M
6 Orthophosphate as P	9.353	9.353	0.000	112155923	5.00	4.78	M
7 Sulfate	10.592	10.592	0.000	1384314036	NC	NC	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

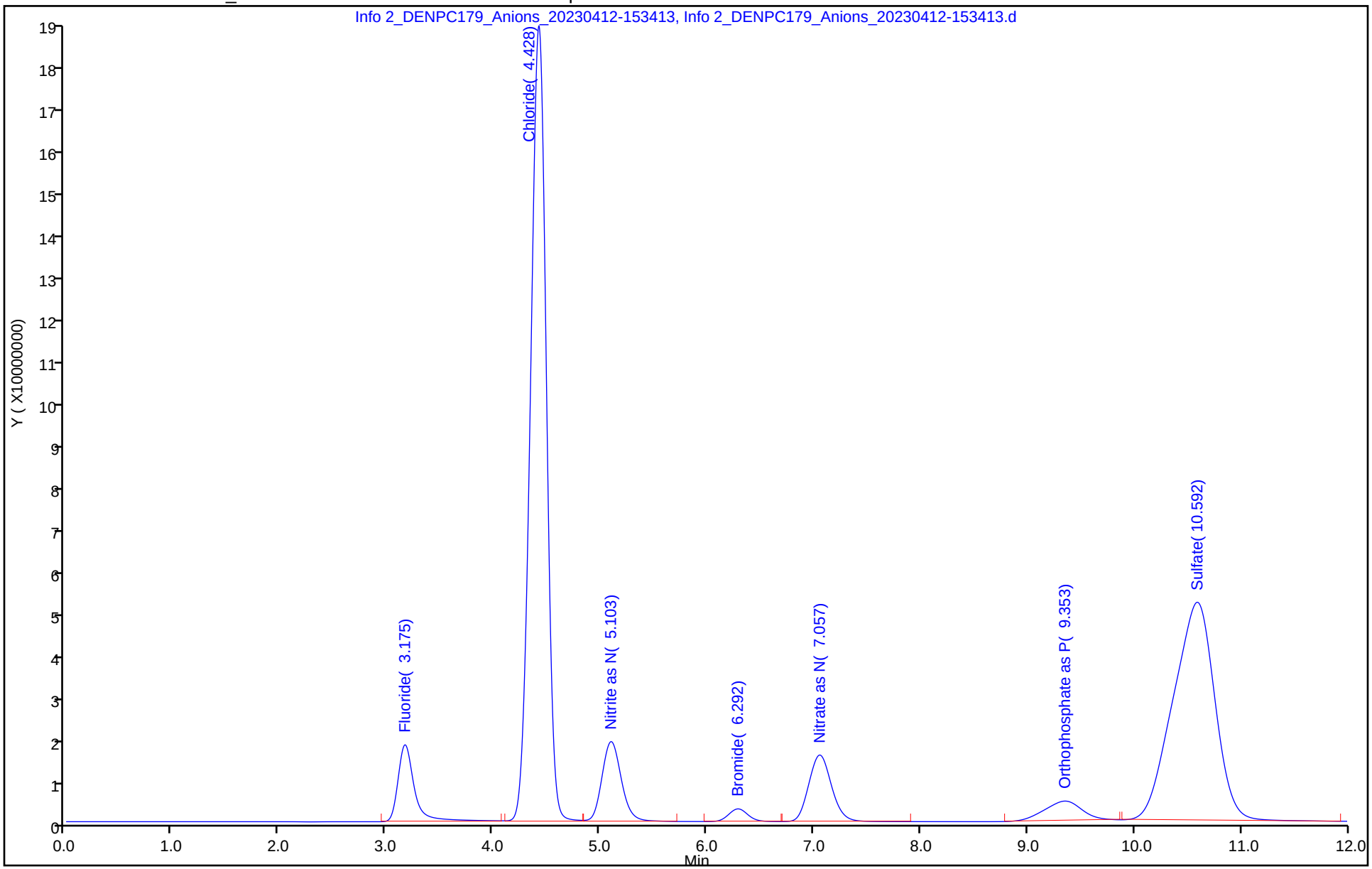
Reagents:

IC CAL cl/so4_00475 Amount Added: 8.00 Units: mL
IC Cal low_00703 Amount Added: 2.00 Units: mL

Report Date: 14-Apr-2023 14:04:00 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153413.d				
Injection Date:	12-Apr-2023 15:19:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD L6			Worklist Smp#:	6
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/31/2023 7:23 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Injection Date: 12-Apr-2023 15:19:00 Instrument ID: WC_IonChrom10

Lims ID: STD L6

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

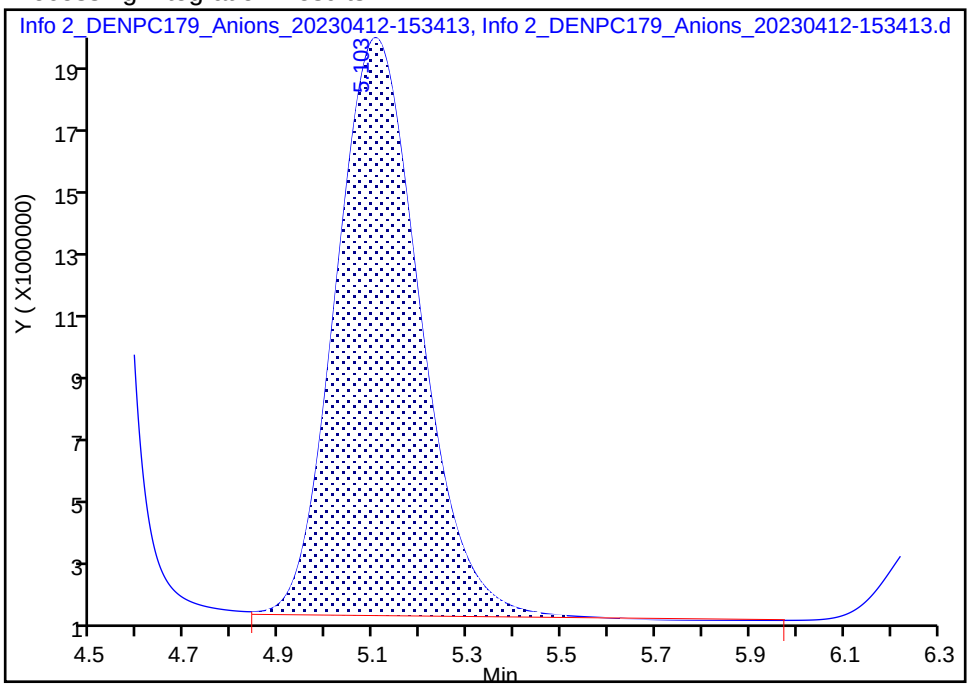
Column: Detector Info 2_091554_1

3 Nitrite as N, CAS: 14797-65-0

Signal: 1

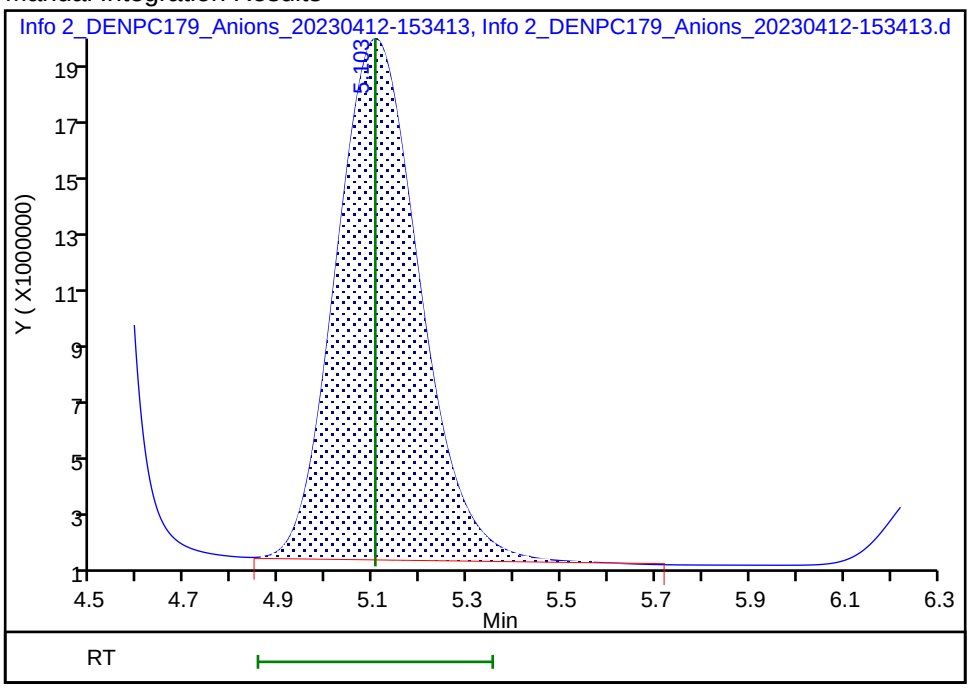
Processing Integration Results

RT: 5.10
Area: 230908651
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 5.10
Area: 229518060
Amount: 4.976333
Amount Units: ug/ml



Reviewer: LVW8, 12-Apr-2023 15:43:38

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Injection Date: 12-Apr-2023 15:19:00 Instrument ID: WC_IonChrom10

Lims ID: STD L6

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

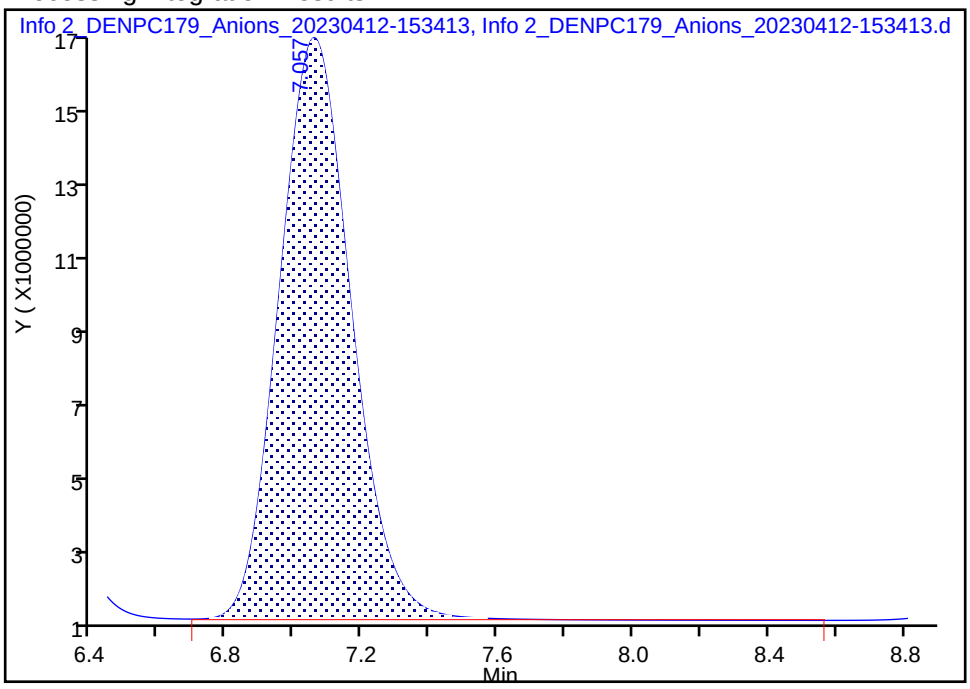
Column: Detector Info 2_091554_1

5 Nitrate as N, CAS: 14797-55-8

Signal: 1

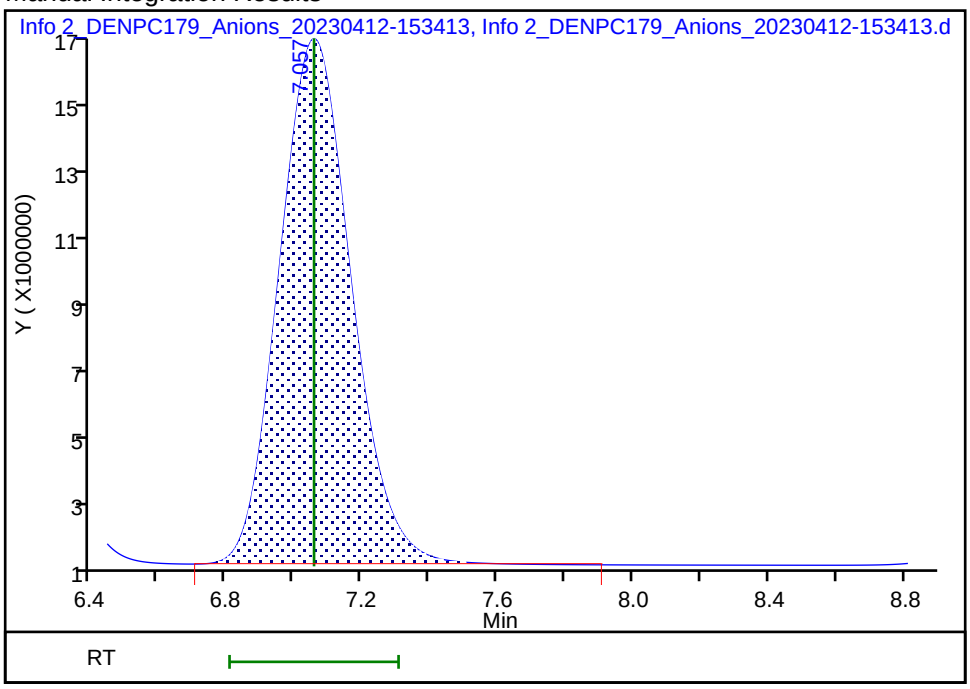
Processing Integration Results

RT: 7.06
Area: 230797057
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 7.06
Area: 230663663
Amount: 5.064518
Amount Units: ug/ml



Reviewer: LVW8, 12-Apr-2023 15:43:47

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Injection Date: 12-Apr-2023 15:19:00 Instrument ID: WC_IonChrom10

Lims ID: STD L6

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

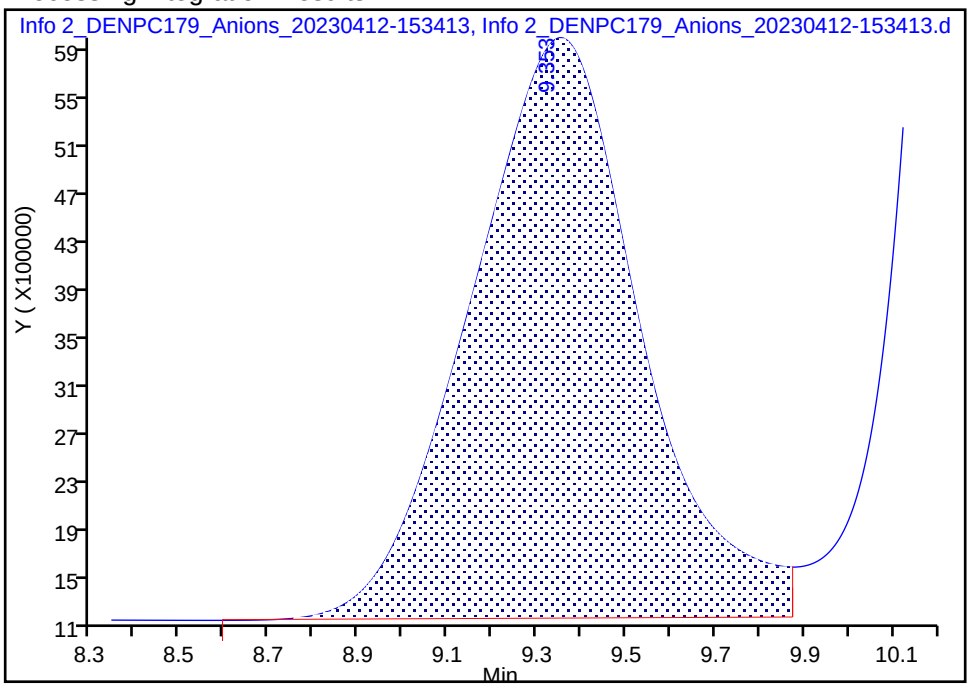
Column: Detector Info 2_091554_1

6 Orthophosphate as P, CAS: STL00599

Signal: 1

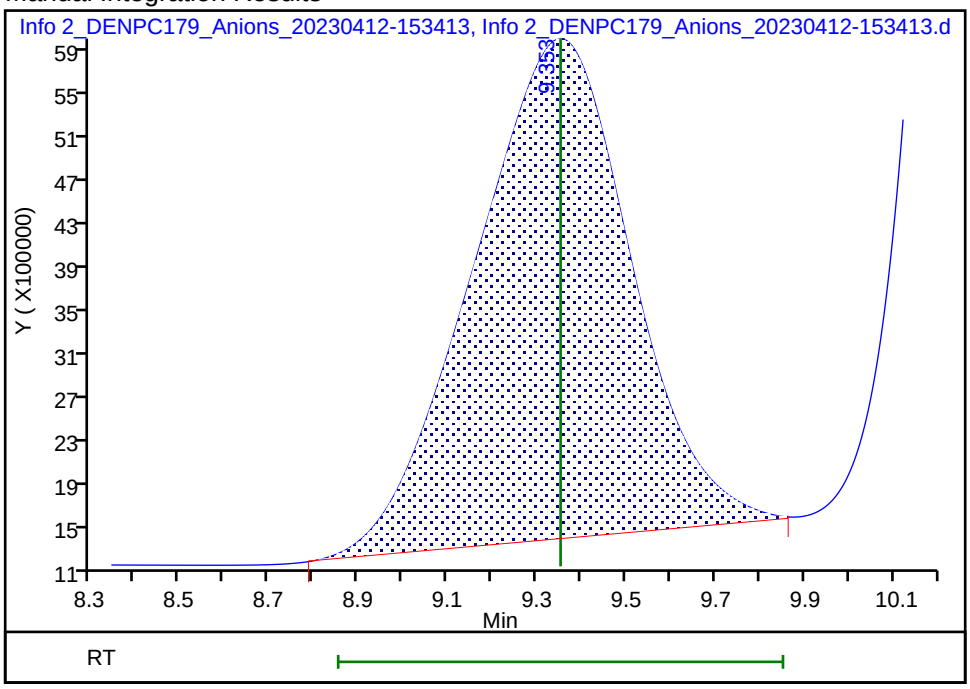
Processing Integration Results

RT: 9.35
Area: 127117672
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 9.35
Area: 112155923
Amount: 4.781864
Amount Units: ug/ml



Reviewer: LVW8, 12-Apr-2023 15:43:56

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

IC Instrument Information

WL: 120345 **Inst ID:** IC16 **Analysis Date:** 04/12/23 **Analyst:** EJS

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	174903	7	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	

Dilutions

Job No.	Samples	Anions	Dilution	Reason
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 13-Apr-2023 18:10:21
No.Compounds:7
Sublist: chrom-Anions_IC10*sub5
Limit Group: Wet - Anions

Detectors

Detector: 1, Info 2_091554_1
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-14.900 No. Points: 7196

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-14192
Inj Date: 12-Apr-2023 14:04:00 Worklist: 120345 Sample#: 1
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-14341
Inj Date: 12-Apr-2023 14:19:00 Worklist: 120345 Sample#: 2
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-14491
Inj Date: 12-Apr-2023 14:34:00 Worklist: 120345 Sample#: 3
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15041
Inj Date: 12-Apr-2023 14:49:00 Worklist: 120345 Sample#: 4
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15191
Inj Date: 12-Apr-2023 15:04:00 Worklist: 120345 Sample#: 5
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15341
Inj Date: 12-Apr-2023 15:19:00 Worklist: 120345 Sample#: 6

Start Cal Date: 12-Apr-2023 14:04:00 End Cal Date: 12-Apr-2023 15:19:00

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					
40437065	43230492	44844044	46492699	45903612		-1277342			1.000
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			46378611		
M8087413	M21615246	M44844044	M116231748	M229518060					
120345(2)	120345(3)	120345(4)	120345(5)	120345(6)					
5 Nitrate as N				Signal: 1					
42172205	39818610	42066844	45095286	46132733		-1634037			0.999
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			45867680		
M8434441	M19909305	M42066844	M112738215	M230663663					
120345(2)	120345(3)	120345(4)	120345(5)	120345(6)					
6 Orthophosphate as P				Signal: 1			R1		
69769055	47259032	34760084	26027078	22431185		10983593			*0.990
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			21157507		
M13953811	M23629516	M34760084	M65067694	M112155923					
120345(2)	120345(3)	120345(4)	120345(5)	120345(6)					

ICalib Error Legend
R1, Curve Fit Fail Error Limit Test

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 13-Apr-2023 18:10:21
No.Compounds:7
Sublist: chrom-Anions_IC10*sub5
Limit Group: Wet - Anions 28D

Detectors

Detector: 1, Info 2_091554_1
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-14.900 No. Points: 7196

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-14192
Inj Date: 12-Apr-2023 14:04:00 Worklist: 120345 Sample#: 1
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-14341
Inj Date: 12-Apr-2023 14:19:00 Worklist: 120345 Sample#: 2
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-14491
Inj Date: 12-Apr-2023 14:34:00 Worklist: 120345 Sample#: 3
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15041
Inj Date: 12-Apr-2023 14:49:00 Worklist: 120345 Sample#: 4
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15191
Inj Date: 12-Apr-2023 15:04:00 Worklist: 120345 Sample#: 5
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15341
Inj Date: 12-Apr-2023 15:19:00 Worklist: 120345 Sample#: 6

Start Cal Date: 12-Apr-2023 14:04:00 End Cal Date: 12-Apr-2023 15:19:00

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

Preliminary Report

Eurofins Denver
ICV, ICal Verification Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15				
Lims ID:	ICV				
Client ID:					
Sample Type:	ICV				
Inject. Date:	12-Apr-2023 15:34:00	ALS Bottle#:	0	Worklist Smp#:	7
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0120345-007				
Misc. Info.:	280-0120345-007				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Sublist:	chrom-Anions_IC7*sub4				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Anions_IC10.m				
Limit Group:	Wet - Anions 28D				
Last Update:	14-Apr-2023 13:55:16	Calib Date:	12-Apr-2023 15:19:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1620				
Start Cal Date:	12-Apr-2023 14:04:00				
End Cal Date:	12-Apr-2023 15:19:00				

Compound	Amount Added	Amount Detected	%Drift	Max. %Drift	%Rec	%Rec Limits
1 Fluoride	2.00	2.34	* 17.1	10.0	117.1	
2 Chloride	80.0	85.7	7.1	10.0	107.1	
4 Bromide	2.00	2.01	0.6	10.0	100.6	
7 Sulfate	80.0	86.9	8.7	10.0	108.7	

Preliminary Report

Eurofins Denver
ICV, ICal Verification Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15				
Lims ID:	ICV				
Client ID:					
Sample Type:	ICV				
Inject. Date:	12-Apr-2023 15:34:00	ALS Bottle#:	0	Worklist Smp#:	7
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0120345-007				
Misc. Info.:	280-0120345-007				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Sublist:	chrom-Anions_IC7*sub4				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Anions_IC10.m				
Limit Group:	Wet - Anions				
Last Update:	14-Apr-2023 13:56:07	Calib Date:	12-Apr-2023 15:19:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1620				
Start Cal Date:	12-Apr-2023 14:04:00				
End Cal Date:	12-Apr-2023 15:19:00				

Compound	Amount Added	Amount Detected	%Drift	Max. %Drift	%Rec	%Rec Limits
3 Nitrite as N	2.00	2.12	6.0	10.0	106.0	
5 Nitrate as N	2.00	2.15	7.4	10.0	107.4	
6 Orthophosphate as	2.00	2.84	* 41.9	10.0	141.9	

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-154
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 12-Apr-2023 15:34:00 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0120345-007
Misc. Info.: 280-0120345-007
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC7*sub4

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 14-Apr-2023 14:06:59 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1620

First Level Reviewer: XAY4 Date: 13-Apr-2023 12:05:56

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.172	3.172	0.000	88983337	NC	NC	Ma
2 Chloride	4.423	4.423	0.000	1641996046	NC	NC	
3 Nitrite as N	5.112	5.112	0.000	97019728	2.00	2.12	M
4 Bromide	6.305	6.305	0.000	14681577	NC	NC	
5 Nitrate as N	7.087	7.087	0.000	96882220	2.00	2.15	
6 Orthophosphate as P	9.373	9.373	0.000	71034633	2.00	2.84	
7 Sulfate	10.593	10.593	0.000	1198792597	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

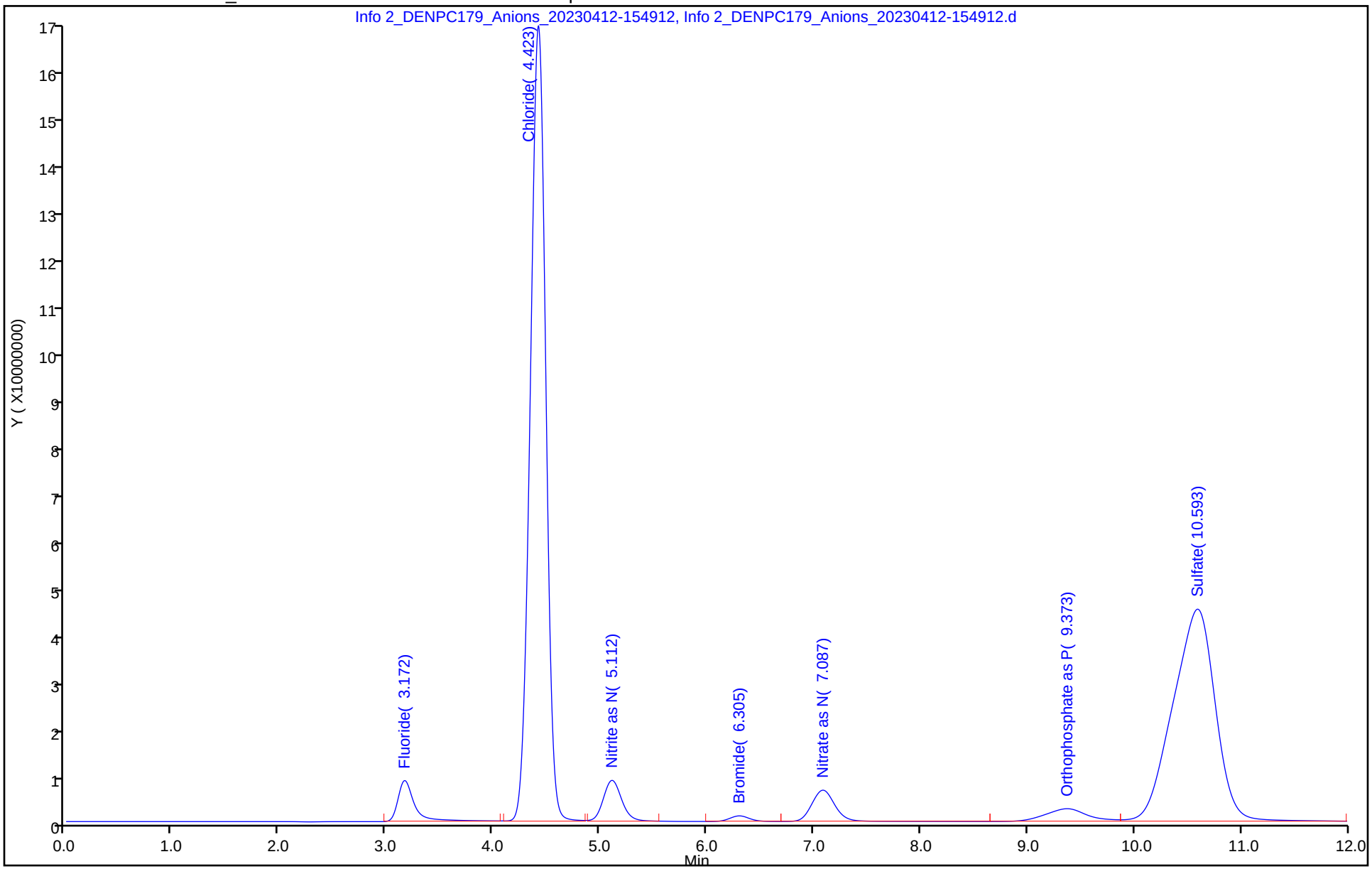
IC SO4 ICV_00024	Amount Added:	0.80	Units: mL
Cl ICV Std_00006	Amount Added:	0.80	Units: mL
IC ICV 5_00403	Amount Added:	0.80	Units: mL

Report Date: 14-Apr-2023 14:06:59 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-154912.d

Injection Date:	12-Apr-2023 15:34:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ICV			Worklist Smp#:	7
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/31/2023 7:23 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-154

Injection Date: 12-Apr-2023 15:34:00 Instrument ID: WC_IonChrom10

Lims ID: ICV

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 7

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions

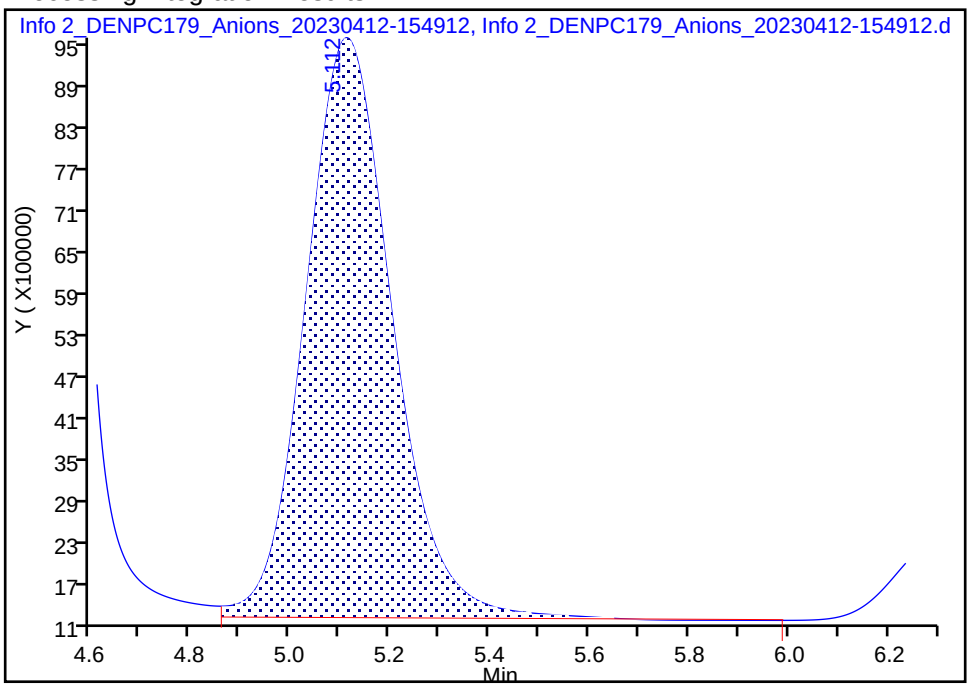
Column: Detector Info 2_091554_1

3 Nitrite as N, CAS: 14797-65-0

Signal: 1

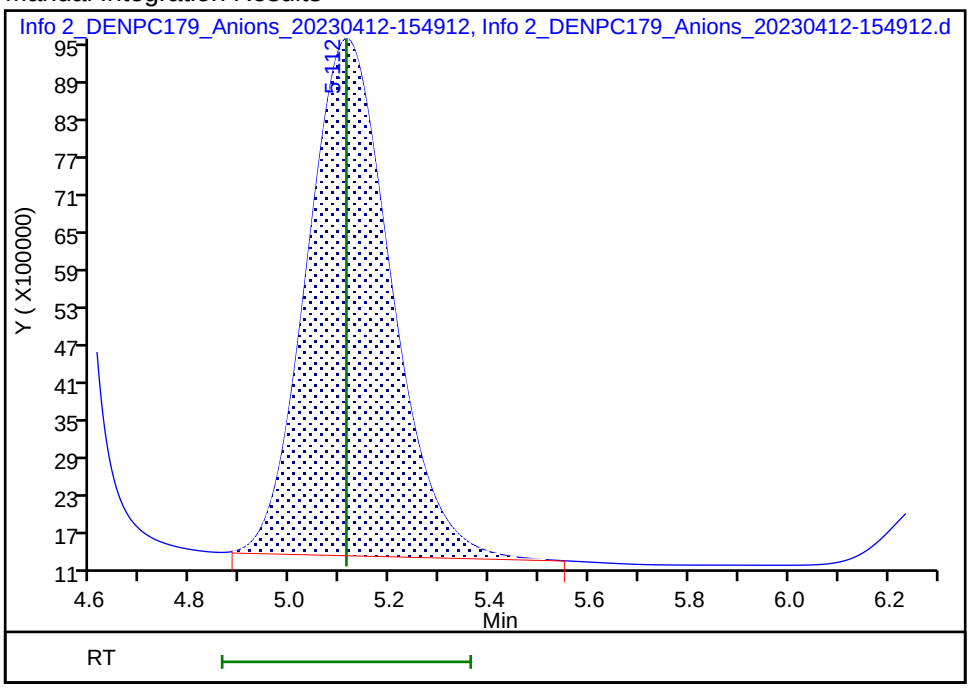
Processing Integration Results

RT: 5.11
Area: 101247304
Amount: 2.210602
Amount Units: ug/ml



Manual Integration Results

RT: 5.11
Area: 97019728
Amount: 2.119448
Amount Units: ug/ml



Reviewer: XAY4, 14-Apr-2023 13:56:04

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-160
Lims ID: ICB
Client ID:
Sample Type: ICB
Inject. Date: 12-Apr-2023 15:49:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0120345-008
Misc. Info.: 280-0120345-008
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 14-Apr-2023 14:07:08 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1620

First Level Reviewer: XAY4 Date: 14-Apr-2023 14:07:17

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.172				ND	U
2 Chloride		4.397				ND	U
3 Nitrite as N		5.103				ND	
4 Bromide		6.293				ND	U
5 Nitrate as N		7.072				ND	
6 Orthophosphate as P	9.417	9.418	-0.001	14030813		0.1440	
7 Sulfate	10.600	10.602	-0.002	368472		NC	M

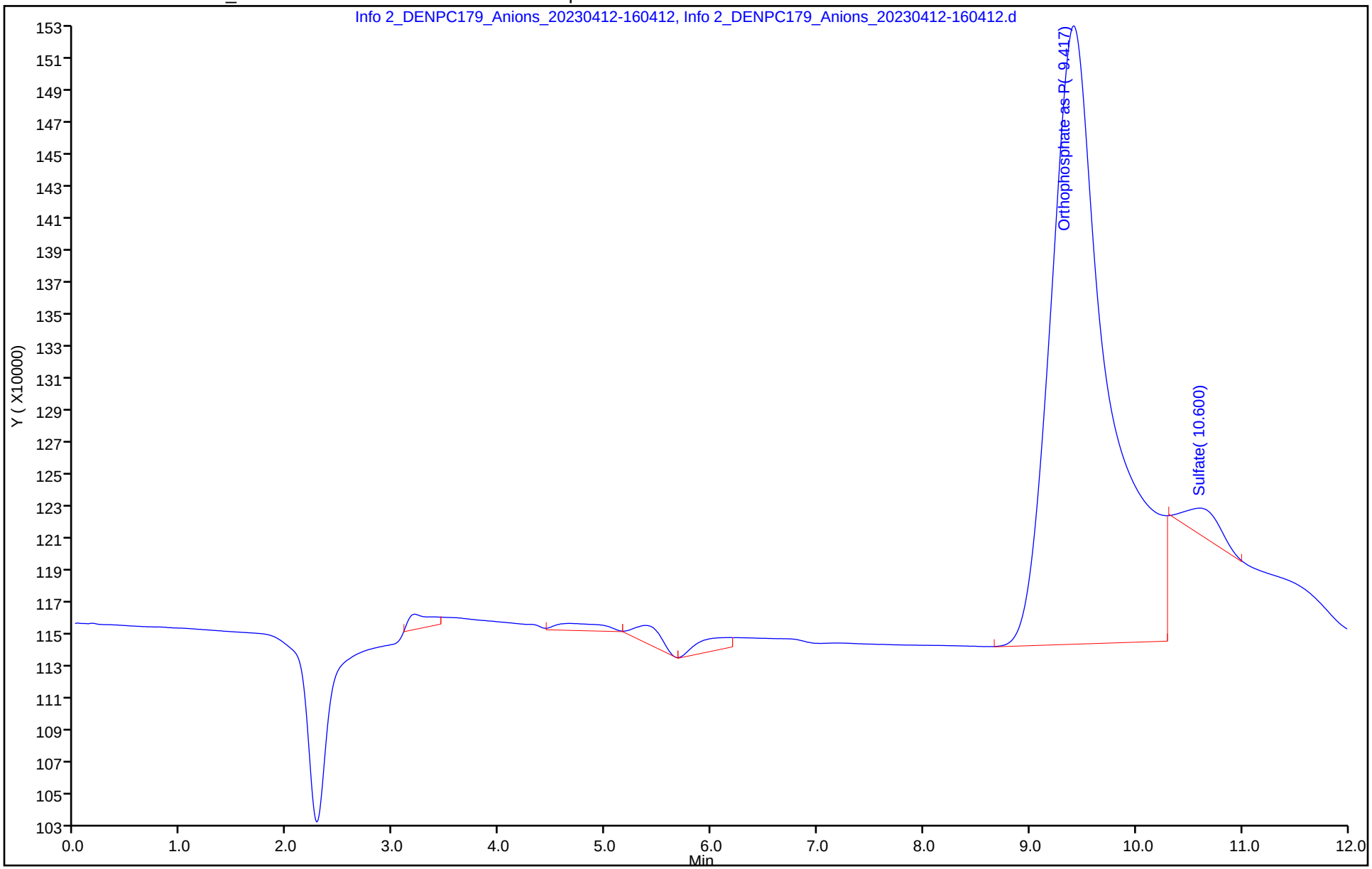
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 14-Apr-2023 14:07:25 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-160412.d				
Injection Date:	12-Apr-2023 15:49:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ICB			Worklist Smp#:	8
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/31/2023 7:23 AM

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

IC Instrument Information

WL: 121350 **Inst ID:** IC10 **Analysis Date:** 5/11/23 **Analyst:** MEC

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	176335	3	F Cl (NO2) Br (NO3) PO4 (SO4)	MS/D	
☐	176327	3	F Cl NO2 Br (NO3) PO4 SO4	MS/D	
☐	176357	15	F Cl NO2 Br (NO3) PO4 SO4	MS/D	
☐	176349	7	F (Cl) (NO2) Br (NO3) PO4 SO4	MS/D	
☐	176375	2	F (Cl) NO2 Br (NO3) PO4 (SO4)	MS/D	
☐	176348	5	(F) (Cl) (NO2) (Br) (NO3) PO4 (SO4)	MS/D	
☐	176333	2	F (Cl) NO2 Br (NO3) PO4 (SO4)	MS/D	
☐	176353	1	(F) (Cl) (NO2) (Br) (NO3) PO4 (SO4)	MS/D	
☐	176366	2	F Cl (NO2) Br (NO3) PO4 SO4	MS/D	
☐	176143	1	F (Cl) NO2 Br (NO3) PO4 (SO4)	MS/D	
☐	176255	1	F (Cl) NO2 Br (NO3) PO4 SO4	MS/D	
☐	176144	1	F (Cl) NO2 Br (NO3) PO4 (SO4)	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	

Dilutions

Job No.	Samples	Anions	Dilution	Reason
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 13-Apr-2023 18:10:21
No.Compounds:7
Sublist: chrom-Anions_IC10*sub5
Limit Group: Wet - Anions

Detectors

Detector: 1, Info 2_091554_1
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-14.900 No. Points: 7196

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-14192
Inj Date: 12-Apr-2023 14:04:00 Worklist: 120345 Sample#: 1
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-14341
Inj Date: 12-Apr-2023 14:19:00 Worklist: 120345 Sample#: 2
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-14491
Inj Date: 12-Apr-2023 14:34:00 Worklist: 120345 Sample#: 3
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15041
Inj Date: 12-Apr-2023 14:49:00 Worklist: 120345 Sample#: 4
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15191
Inj Date: 12-Apr-2023 15:04:00 Worklist: 120345 Sample#: 5
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15341
Inj Date: 12-Apr-2023 15:19:00 Worklist: 120345 Sample#: 6

Start Cal Date: 12-Apr-2023 14:04:00 End Cal Date: 12-Apr-2023 15:19:00

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					
40437065	43230492	44844044	46492699	45903612		-1277342			1.000
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			46378611		
M8087413	M21615246	M44844044	M116231748	M229518060					
120345(2)	120345(3)	120345(4)	120345(5)	120345(6)					
5 Nitrate as N				Signal: 1					
42172205	39818610	42066844	45095286	46132733		-1634037			0.999
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			45867680		
M8434441	M19909305	M42066844	M112738215	M230663663					
120345(2)	120345(3)	120345(4)	120345(5)	120345(6)					
6 Orthophosphate as P				Signal: 1			R1		
69769055	47259032	34760084	26027078	22431185		10983593			*0.990
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			21157507		
M13953811	M23629516	M34760084	M65067694	M112155923					
120345(2)	120345(3)	120345(4)	120345(5)	120345(6)					

ICalib Error Legend
R1, Curve Fit Fail Error Limit Test

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 13-Apr-2023 18:10:21
No.Compounds:7
Sublist: chrom-Anions_IC10*sub5
Limit Group: Wet - Anions 28D

Detectors

Detector: 1, Info 2_091554_1
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-14.900 No. Points: 7196

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-14192
Inj Date: 12-Apr-2023 14:04:00 Worklist: 120345 Sample#: 1
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-14341
Inj Date: 12-Apr-2023 14:19:00 Worklist: 120345 Sample#: 2
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-14491
Inj Date: 12-Apr-2023 14:34:00 Worklist: 120345 Sample#: 3
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15041
Inj Date: 12-Apr-2023 14:49:00 Worklist: 120345 Sample#: 4
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15191
Inj Date: 12-Apr-2023 15:04:00 Worklist: 120345 Sample#: 5
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15341
Inj Date: 12-Apr-2023 15:19:00 Worklist: 120345 Sample#: 6

Start Cal Date: 12-Apr-2023 14:04:00 End Cal Date: 12-Apr-2023 15:19:00

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

Preliminary Report

Eurofins Denver
ICV, ICal Verification Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15				
Lims ID:	ICV				
Client ID:					
Sample Type:	ICV				
Inject. Date:	12-Apr-2023 15:34:00	ALS Bottle#:	0	Worklist Smp#:	7
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0120345-007				
Misc. Info.:	280-0120345-007				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Sublist:	chrom-Anions_IC7*sub4				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Anions_IC10.m				
Limit Group:	Wet - Anions 28D				
Last Update:	14-Apr-2023 13:55:16	Calib Date:	12-Apr-2023 15:19:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1620				
Start Cal Date:	12-Apr-2023 14:04:00				
End Cal Date:	12-Apr-2023 15:19:00				

Compound	Amount Added	Amount Detected	%Drift	Max. %Drift	%Rec	%Rec Limits
1 Fluoride	2.00	2.34	* 17.1	10.0	117.1	
2 Chloride	80.0	85.7	7.1	10.0	107.1	
4 Bromide	2.00	2.01	0.6	10.0	100.6	
7 Sulfate	80.0	86.9	8.7	10.0	108.7	

Preliminary Report

Eurofins Denver
ICV, ICal Verification Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15				
Lims ID:	ICV				
Client ID:					
Sample Type:	ICV				
Inject. Date:	12-Apr-2023 15:34:00	ALS Bottle#:	0	Worklist Smp#:	7
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0120345-007				
Misc. Info.:	280-0120345-007				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Sublist:	chrom-Anions_IC7*sub4				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Anions_IC10.m				
Limit Group:	Wet - Anions				
Last Update:	14-Apr-2023 13:56:07	Calib Date:	12-Apr-2023 15:19:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1620				
Start Cal Date:	12-Apr-2023 14:04:00				
End Cal Date:	12-Apr-2023 15:19:00				

Compound	Amount Added	Amount Detected	%Drift	Max. %Drift	%Rec	%Rec Limits
3 Nitrite as N	2.00	2.12	6.0	10.0	106.0	
5 Nitrate as N	2.00	2.15	7.4	10.0	107.4	
6 Orthophosphate as	2.00	2.84	*41.9	10.0	141.9	

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-152
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 11-May-2023 15:08:00 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121350-001
Misc. Info.: 280-0121350-001
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 12-May-2023 11:43:25 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1666

First Level Reviewer: LVW8 Date: 11-May-2023 15:28:15

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.147	3.147	0.000	89398683	NC	NC	Ma
2 Chloride	4.332	4.332	0.000	929846564	NC	NC	M
3 Nitrite as N	5.025	5.025	0.000	114115391	2.50	2.49	M
4 Bromide	6.183	6.183	0.000	20275421	NC	NC	M
5 Nitrate as N	6.950	6.950	0.000	111629241	2.50	2.47	M
6 Orthophosphate as P	9.162	9.162	0.000	80229669	2.50	3.27	
7 Sulfate	10.352	10.352	0.000	671380340	NC	NC	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

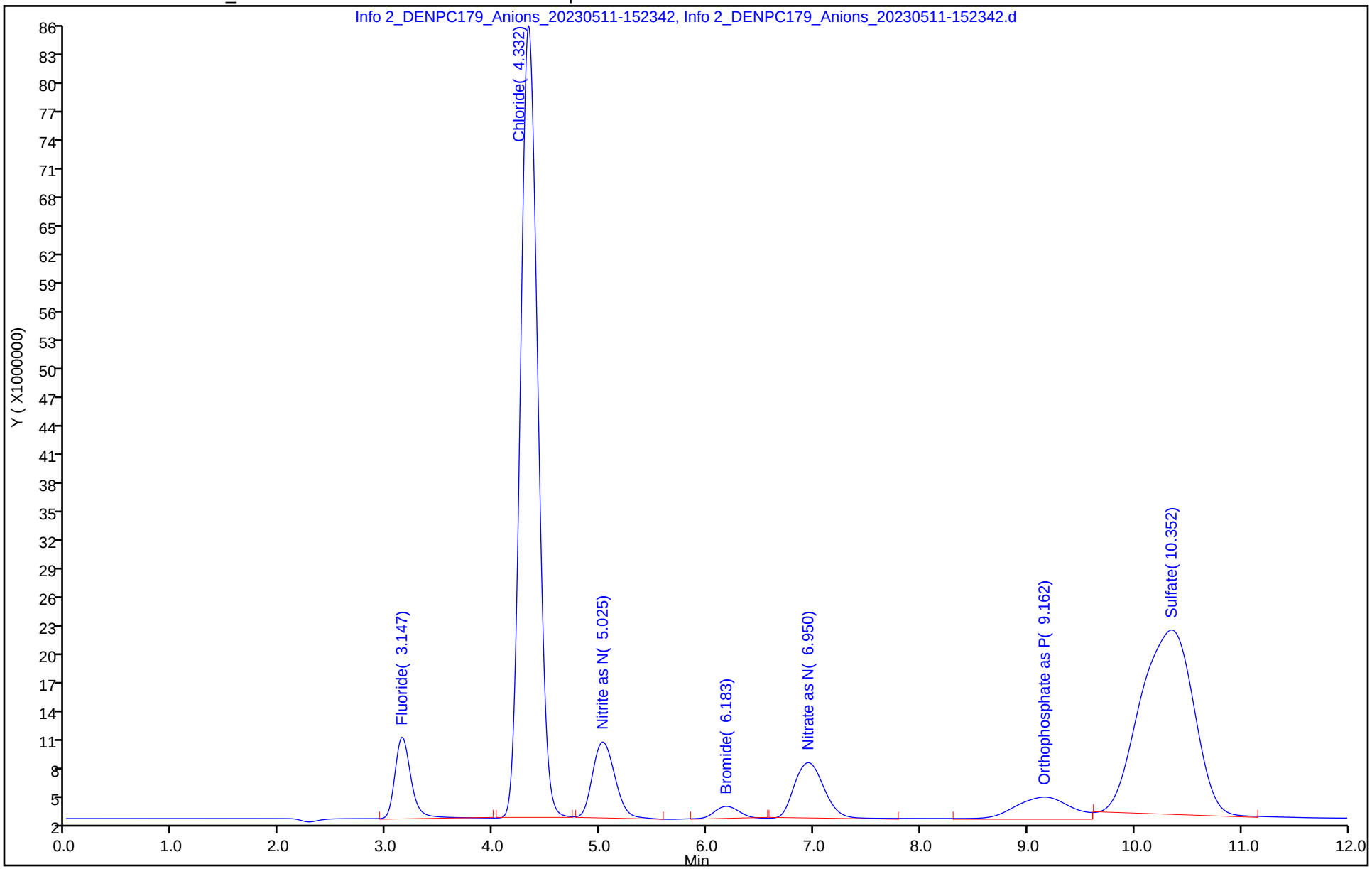
IC LCS_01953 Amount Added: 10.00 Units: mL

Report Date: 12-May-2023 11:43:25 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-152342.d

Injection Date:	11-May-2023 15:08:00	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		



5/31/2023 7:23 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

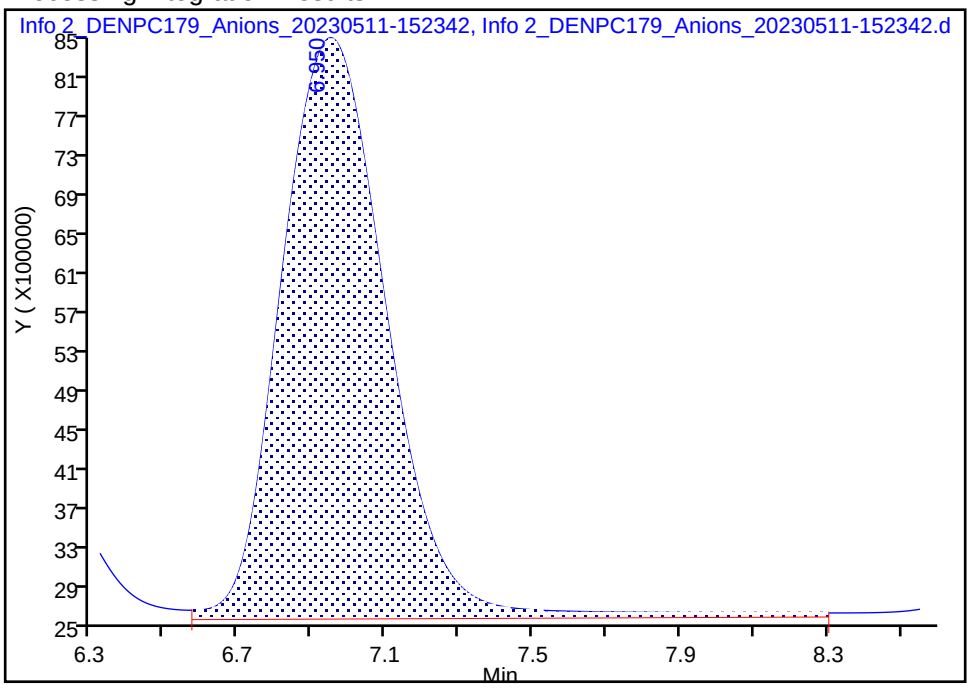
Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-152
Injection Date: 11-May-2023 15:08:00 Instrument ID: WC_IonChrom10
Lims ID: ccv
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions_IC10 Limit Group: Wet - Anions
Column: Detector Info 2_091554_1

5 Nitrate as N, CAS: 14797-55-8

Signal: 1

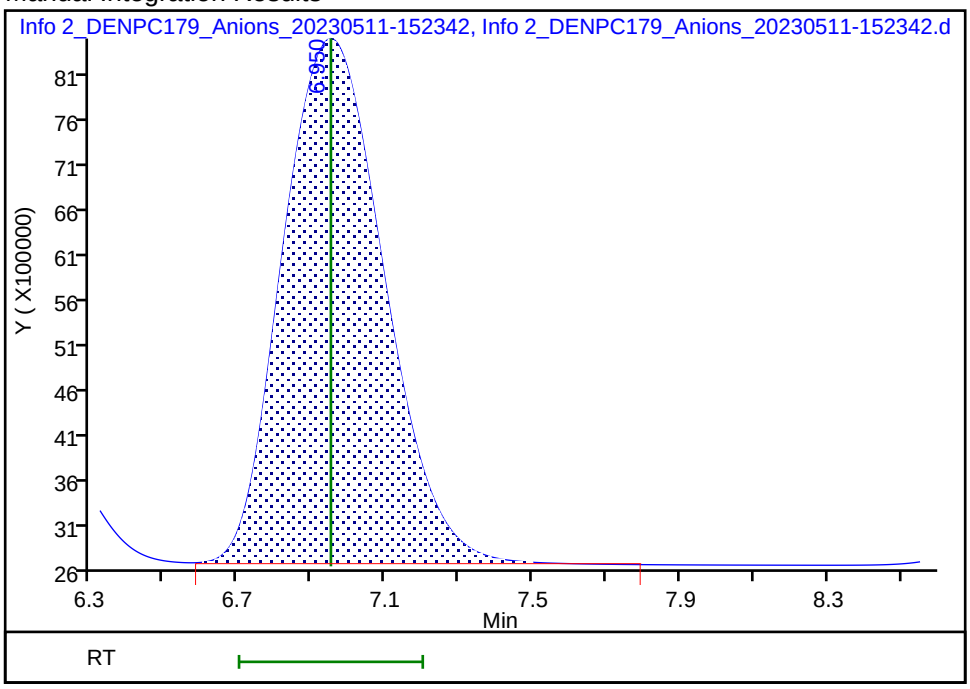
Processing Integration Results

RT: 6.95
Area: 119399218
Amount: 2.638748
Amount Units: ug/ml



Manual Integration Results

RT: 6.95
Area: 111629241
Amount: 2.469348
Amount Units: ug/ml



Reviewer: LVW8, 11-May-2023 15:27:29
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-152

Injection Date: 11-May-2023 15:08:00 Instrument ID: WC_IonChrom10

Lims ID: ccv

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

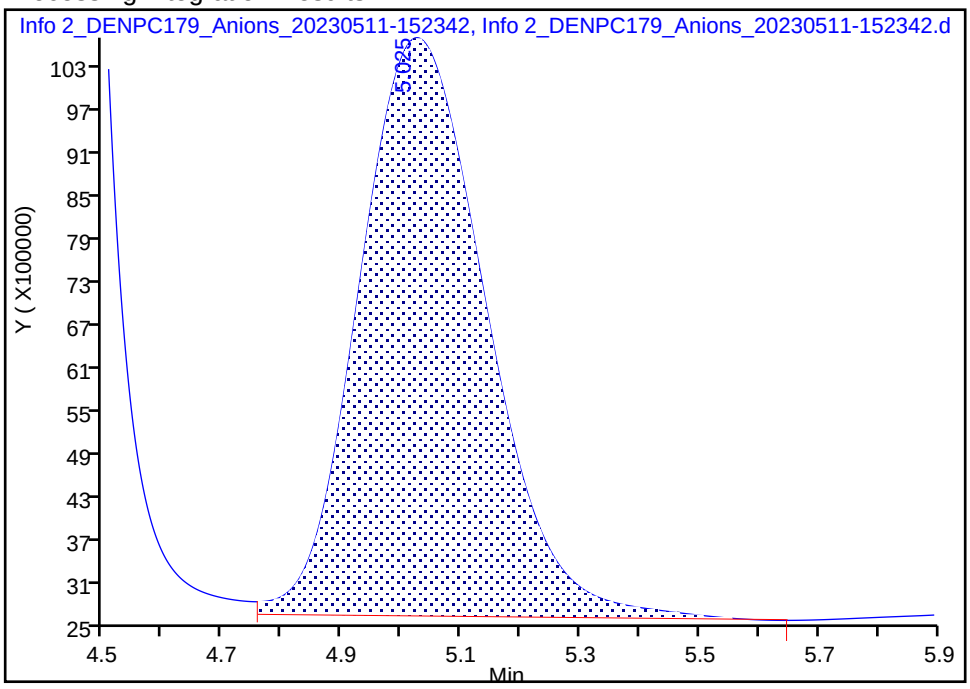
Column: Detector Info 2_091554_1

3 Nitrite as N, CAS: 14797-65-0

Signal: 1

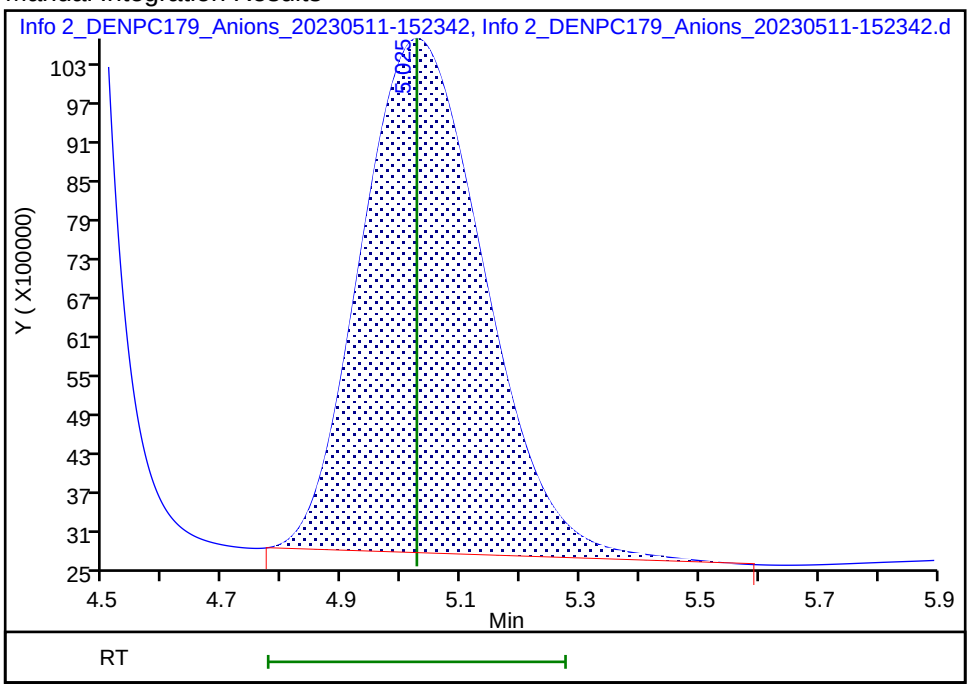
Processing Integration Results

RT: 5.03
Area: 119196878
Amount: 2.597625
Amount Units: ug/ml



Manual Integration Results

RT: 5.03
Area: 114115391
Amount: 2.488059
Amount Units: ug/ml



Reviewer: LVW8, 11-May-2023 15:27:21

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-153
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 11-May-2023 15:23:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: blank
Misc. Info.: blank
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 12-May-2023 11:43:26 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1666

First Level Reviewer: LVW8 Date: 11-May-2023 15:55:05

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.147				ND	
2 Chloride		4.332				ND	
3 Nitrite as N		5.025				ND	U
4 Bromide		6.183				ND	
5 Nitrate as N		6.950				ND	
6 Orthophosphate as P	9.242	9.242	0.000	14061785		0.1455	
7 Sulfate	10.380	10.380	0.000	3839511		NC	M

QC Flag Legend

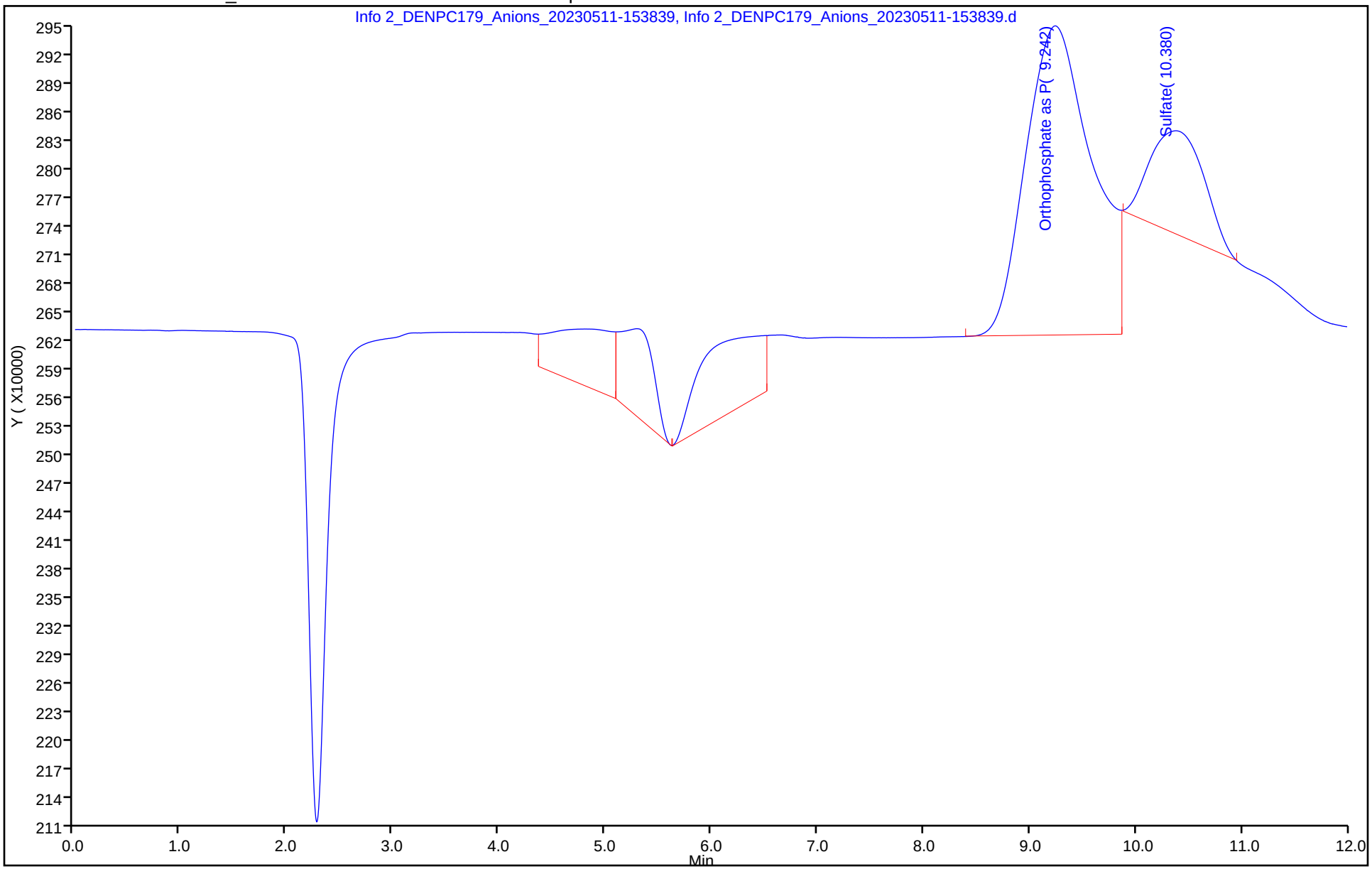
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 12-May-2023 11:43:27 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-153839.d

Injection Date:	11-May-2023 15:23:00	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		



5/31/2023 7:23 AM

User Disabled Compound Report

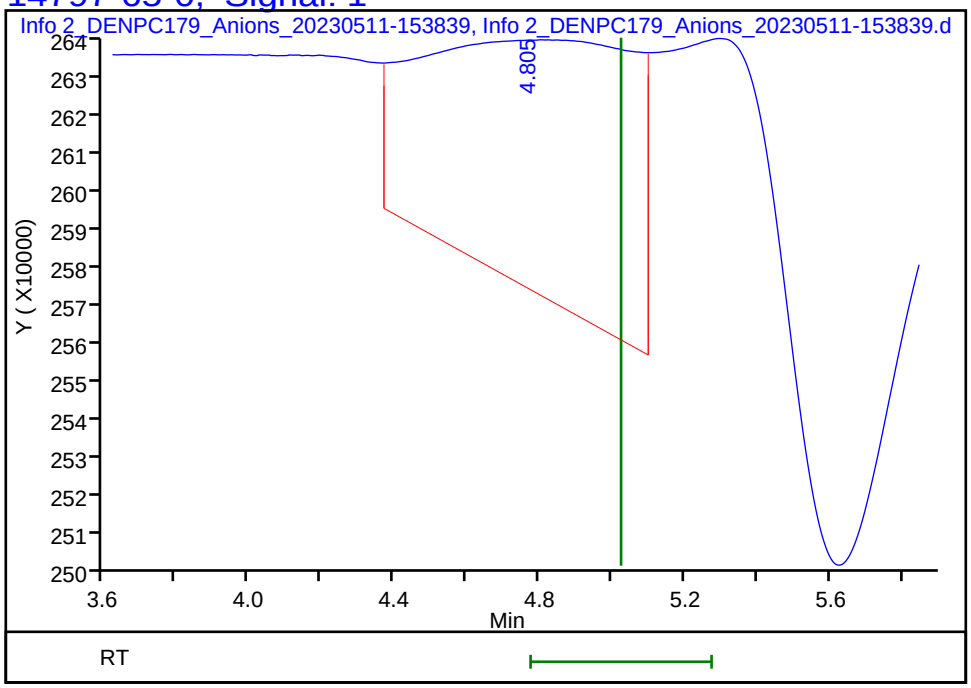
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-153
Injection Date: 11-May-2023 15:23:00 Instrument ID: WC_IonChrom10
Lims ID: ccb
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

3 Nitrite as N, CAS: 14797-65-0, Signal: 1

RT: 4.81
Response: 2376746
Amount: 0



Reviewer: LVW8, 11-May-2023 15:55:05
Audit Action: Manually Integrated Audit Reason:

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-155
Lims ID: mrl
Client ID:
Sample Type: MRL
Inject. Date: 11-May-2023 15:38:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121350-003
Misc. Info.: 280-0121350-003
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 12-May-2023 11:43:27 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1666

First Level Reviewer: LVW8 Date: 12-May-2023 11:12:19

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.147			ND	ND	
2 Chloride	4.320	4.320	0.000	46161710	NC	NC	M
3 Nitrite as N	5.028	5.028	0.000	12754319	0.2500	0.3025	M
4 Bromide	6.203	6.203	0.000	2164887	NC	NC	M
5 Nitrate as N	6.993	6.993	0.000	10514965	0.2500	0.2649	M
6 Orthophosphate as P	9.213	9.213	0.000	20413248	0.2500	0.4457	
7 Sulfate	10.363	10.363	0.000	37057435	NC	NC	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND
Review Flags
M - Manually Integrated

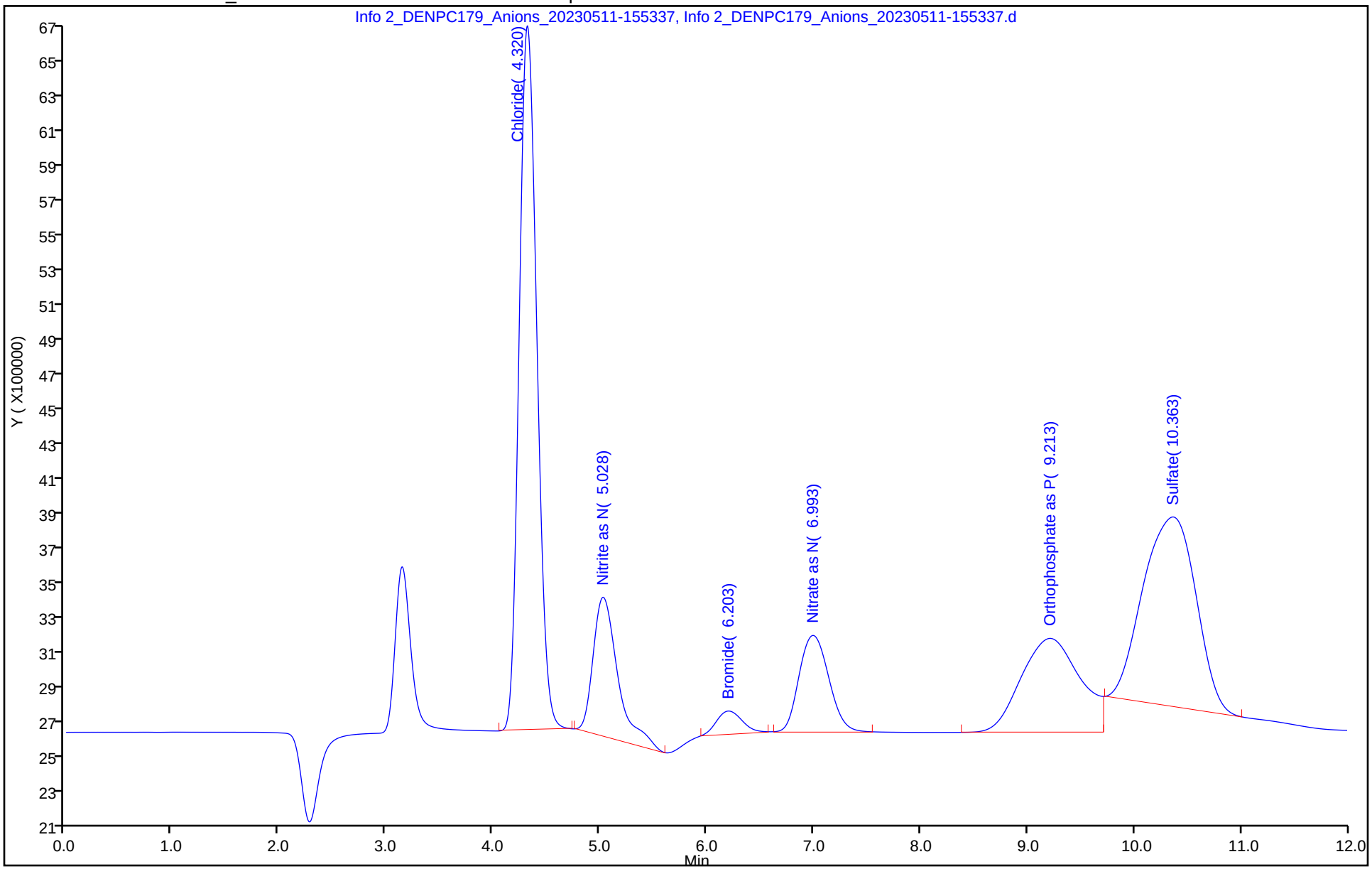
Reagents:

IC CAL cl/so4_00479 Amount Added: 0.20 Units: mL
IC Cal low_00708 Amount Added: 0.10 Units: mL

Report Date: 12-May-2023 11:43:27 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-155337.d				
Injection Date:	11-May-2023 15:38:00	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		



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Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-155

Injection Date: 11-May-2023 15:38:00 Instrument ID: WC_IonChrom10

Lims ID: mrl

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

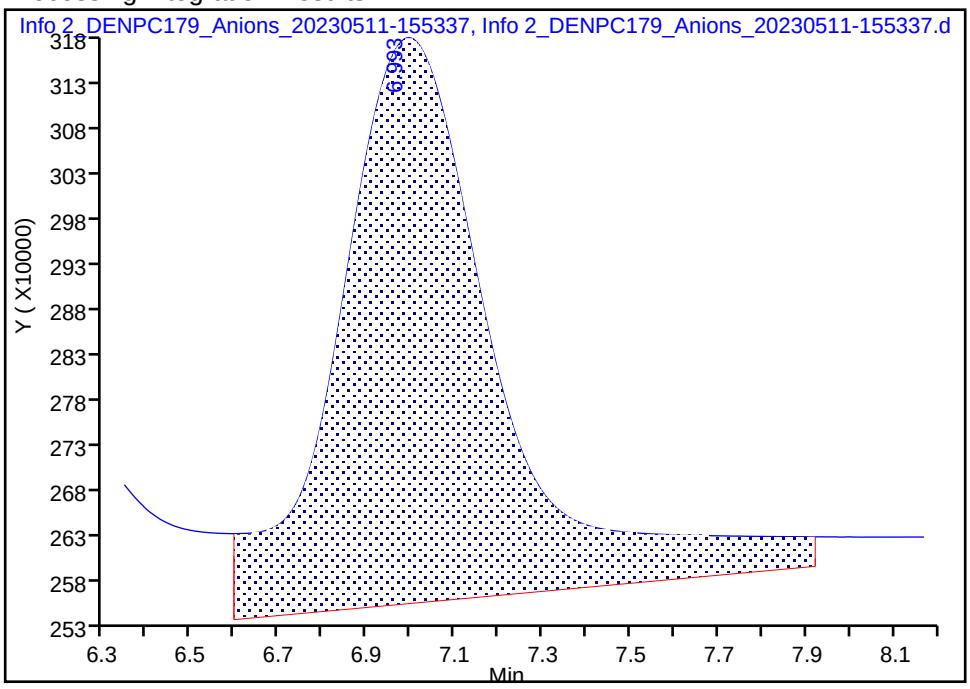
Column: Detector Info 2_091554_1

5 Nitrate as N, CAS: 14797-55-8

Signal: 1

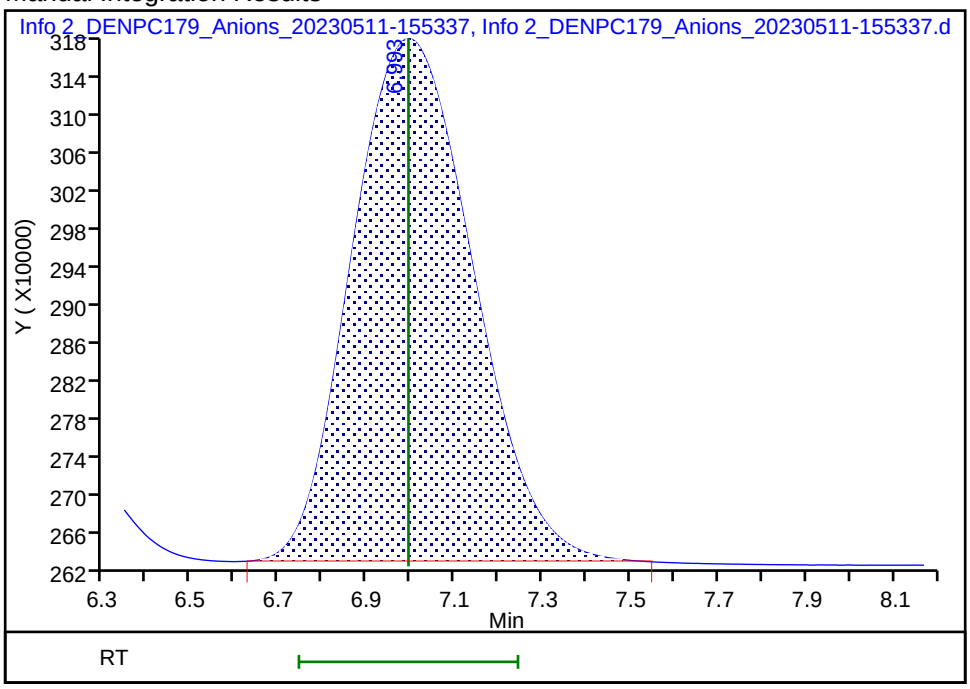
Processing Integration Results

RT: 6.99
Area: 15737873
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 6.99
Area: 10514965
Amount: 0.264871
Amount Units: ug/ml



Reviewer: LVW8, 12-May-2023 11:11:58

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-155

Injection Date: 11-May-2023 15:38:00 Instrument ID: WC_IonChrom10

Lims ID: mrl

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

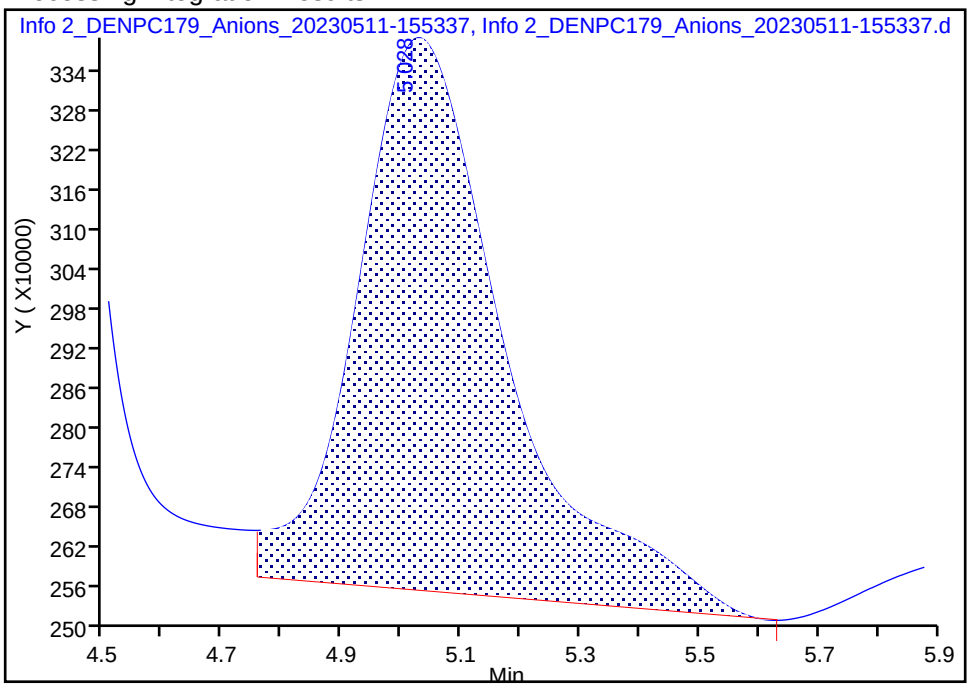
Column: Detector Info 2_091554_1

3 Nitrite as N, CAS: 14797-65-0

Signal: 1

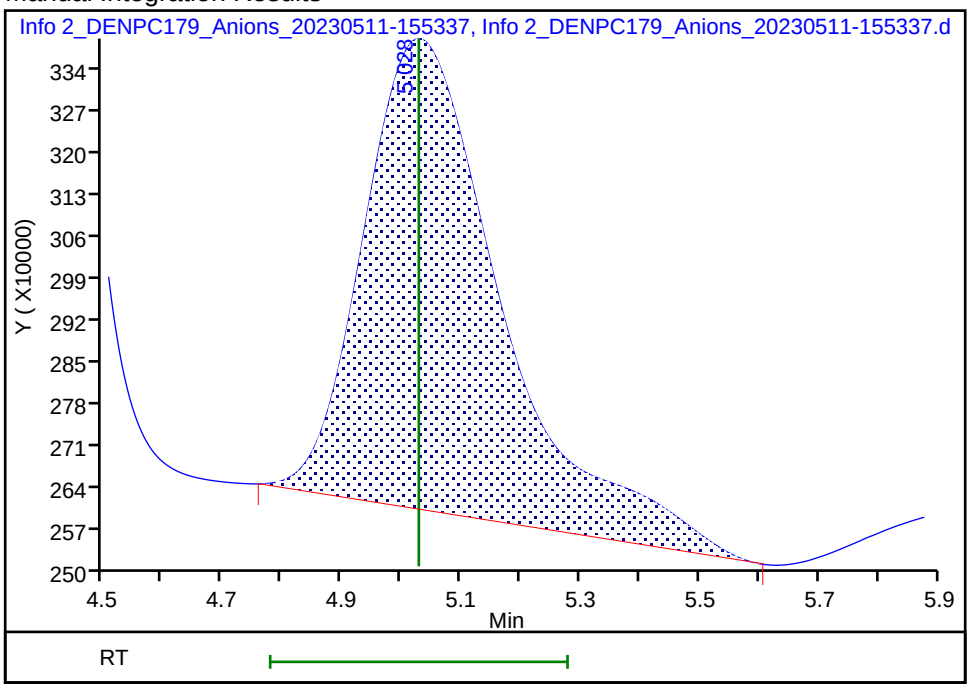
Processing Integration Results

RT: 5.03
Area: 14531632
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 5.03
Area: 12754319
Amount: 0.302546
Amount Units: ug/ml



Reviewer: LVW8, 12-May-2023 11:11:50

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-160
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 11-May-2023 15:53:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121350-004
Misc. Info.: 280-0121350-004
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 12-May-2023 11:43:28 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1666

First Level Reviewer: LVW8 Date: 12-May-2023 11:13:03

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.147			ND	ND	
2 Chloride	4.330	4.330	0.000	926703063	NC	NC	M
3 Nitrite as N	5.023	5.023	0.000	114102490	2.50	2.49	M
4 Bromide	6.185	6.185	0.000	24069710	NC	NC	
5 Nitrate as N	6.950	6.950	0.000	111289912	2.50	2.46	M
6 Orthophosphate as P	9.163	9.163	0.000	61480718	2.50	2.39	M
7 Sulfate	10.352	10.352	0.000	673625806	NC	NC	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND
Review Flags
M - Manually Integrated

Reagents:

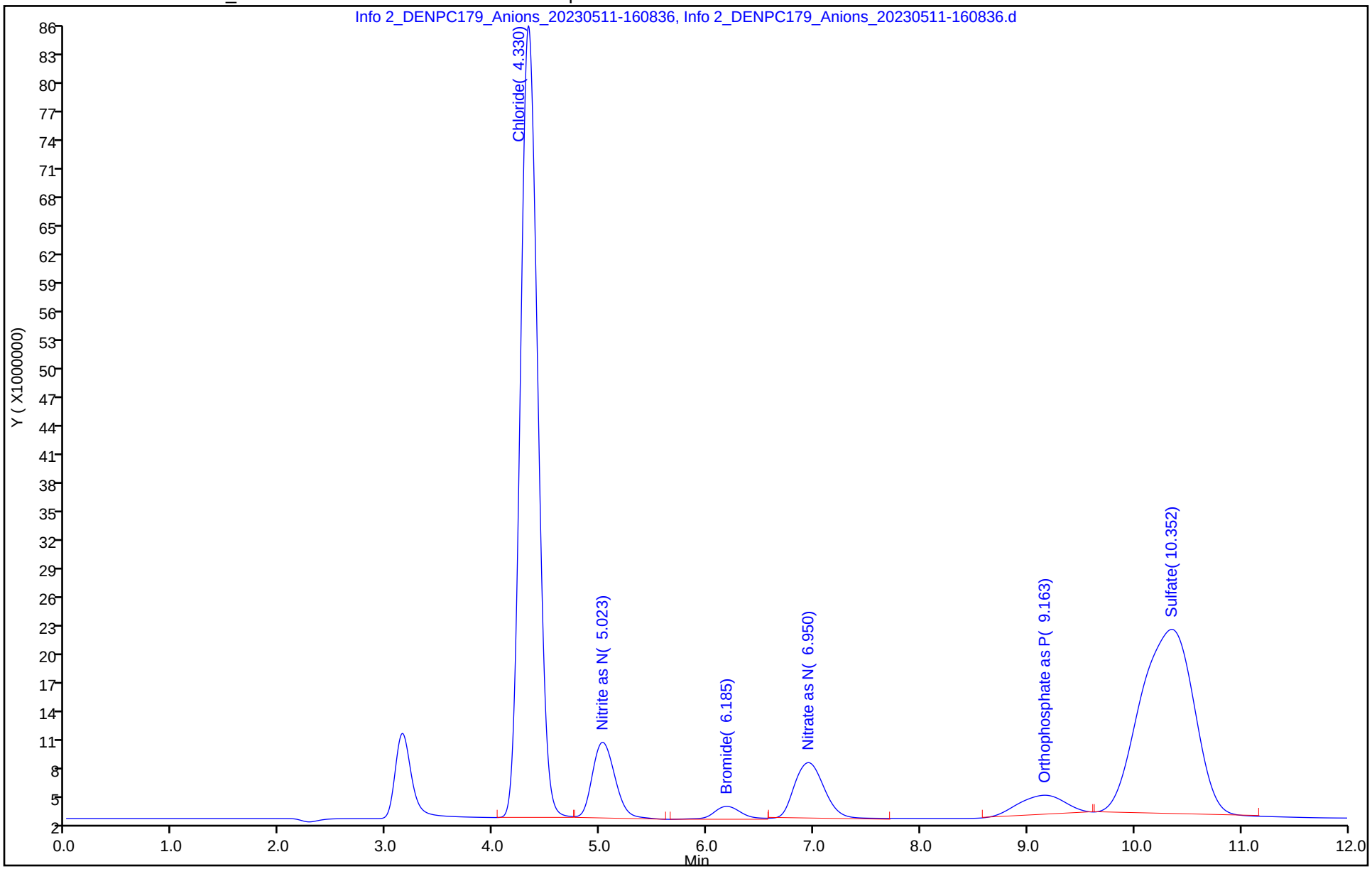
IC LCS_01953 Amount Added: 10.00 Units: mL

Report Date: 12-May-2023 11:43:28 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-160836.d

Injection Date:	11-May-2023 15:53:00	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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Manual Integration/User Assign Peak Report

Eurofins Denver

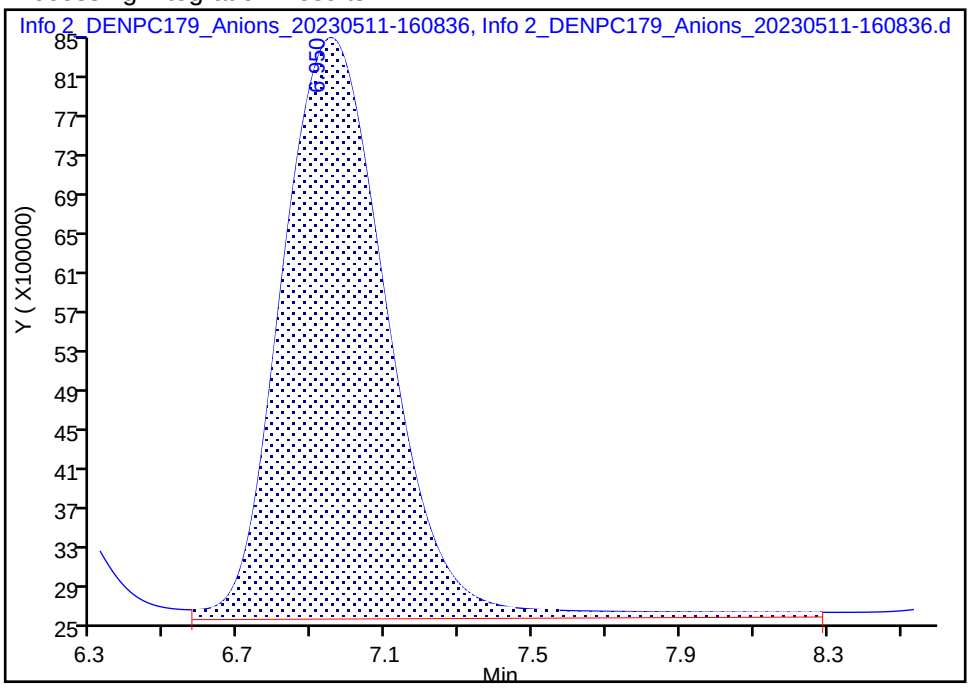
Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-160
Injection Date: 11-May-2023 15:53:00 Instrument ID: WC_IonChrom10
Lims ID: lcs
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions_IC10 Limit Group: Wet - Anions
Column: Detector Info 2_091554_1

5 Nitrate as N, CAS: 14797-55-8

Signal: 1

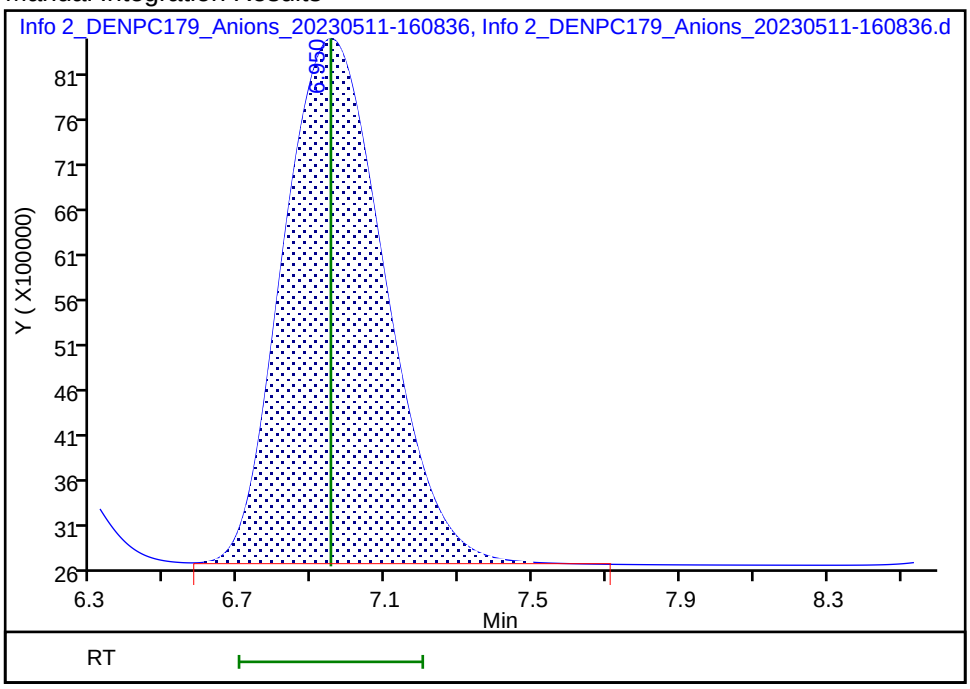
Processing Integration Results

RT: 6.95
Area: 119554234
Amount: 2.642128
Amount Units: ug/ml



Manual Integration Results

RT: 6.95
Area: 111289912
Amount: 2.461950
Amount Units: ug/ml



Reviewer: LVW8, 12-May-2023 11:12:42
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-160

Injection Date: 11-May-2023 15:53:00 Instrument ID: WC_IonChrom10

Lims ID: lcs

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

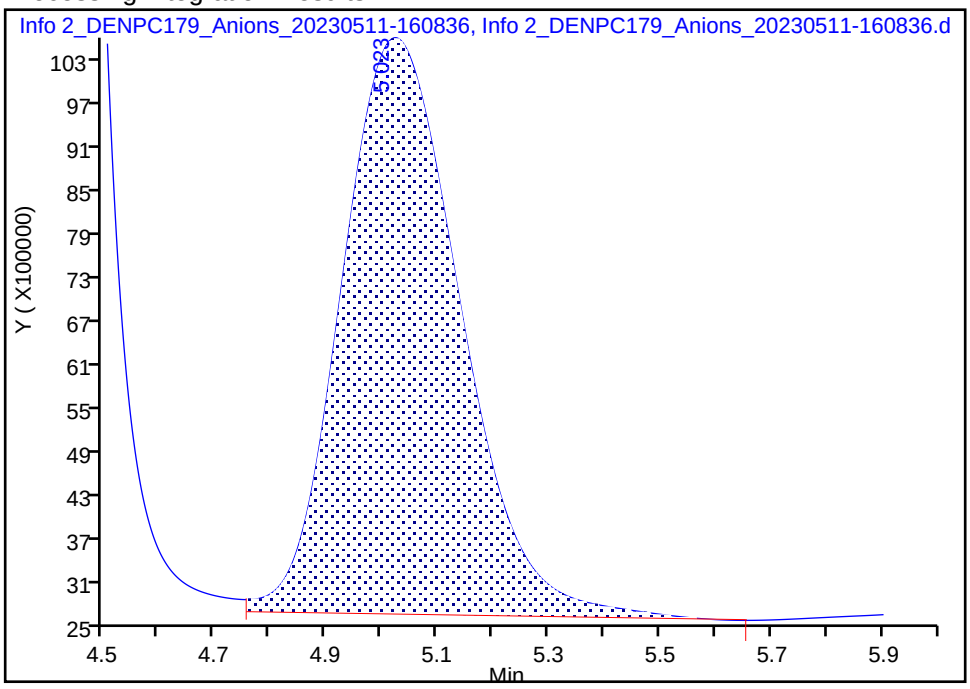
Column: Detector Info 2_091554_1

3 Nitrite as N, CAS: 14797-65-0

Signal: 1

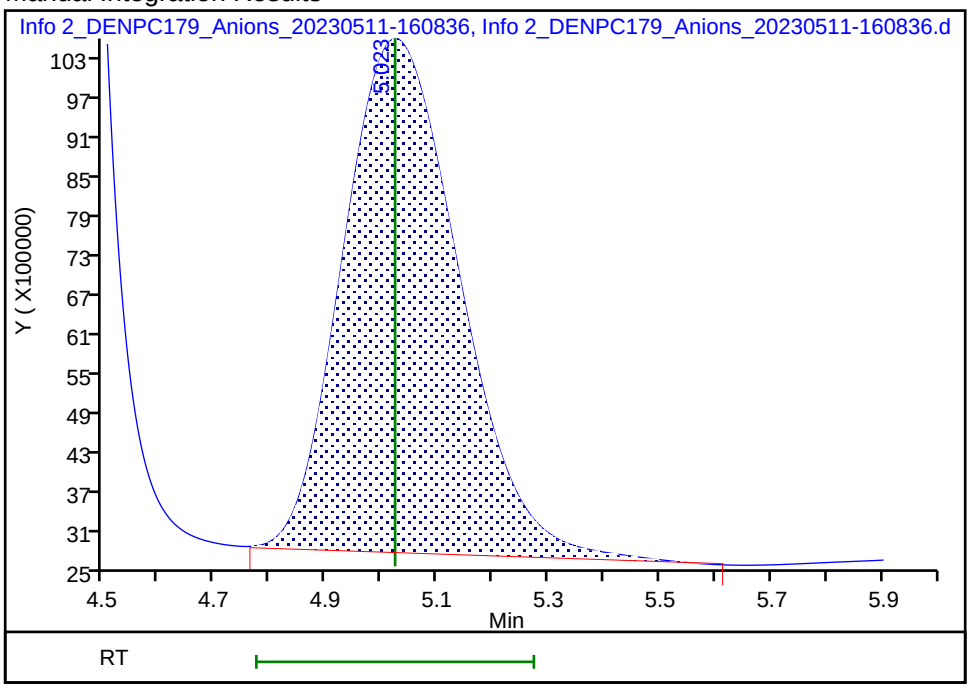
Processing Integration Results

RT: 5.02
Area: 118869560
Amount: 2.590567
Amount Units: ug/ml



Manual Integration Results

RT: 5.02
Area: 114102490
Amount: 2.487781
Amount Units: ug/ml



Reviewer: LVW8, 12-May-2023 11:12:37

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-162
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 11-May-2023 16:08:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121350-005
Misc. Info.: 280-0121350-005
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 12-May-2023 11:43:29 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1666

First Level Reviewer: LVW8 Date: 12-May-2023 11:13:32

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.147			ND	ND	
2 Chloride	4.332	4.332	0.000	929383673	NC	NC	M
3 Nitrite as N	5.025	5.025	0.000	113716713	2.50	2.48	M
4 Bromide	6.188	6.188	0.000	20239524	NC	NC	M
5 Nitrate as N	6.953	6.953	0.000	111496727	2.50	2.47	M
6 Orthophosphate as P	9.165	9.165	0.000	88410374	2.50	3.66	
7 Sulfate	10.357	10.357	0.000	673324291	NC	NC	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND
Review Flags
M - Manually Integrated

Reagents:

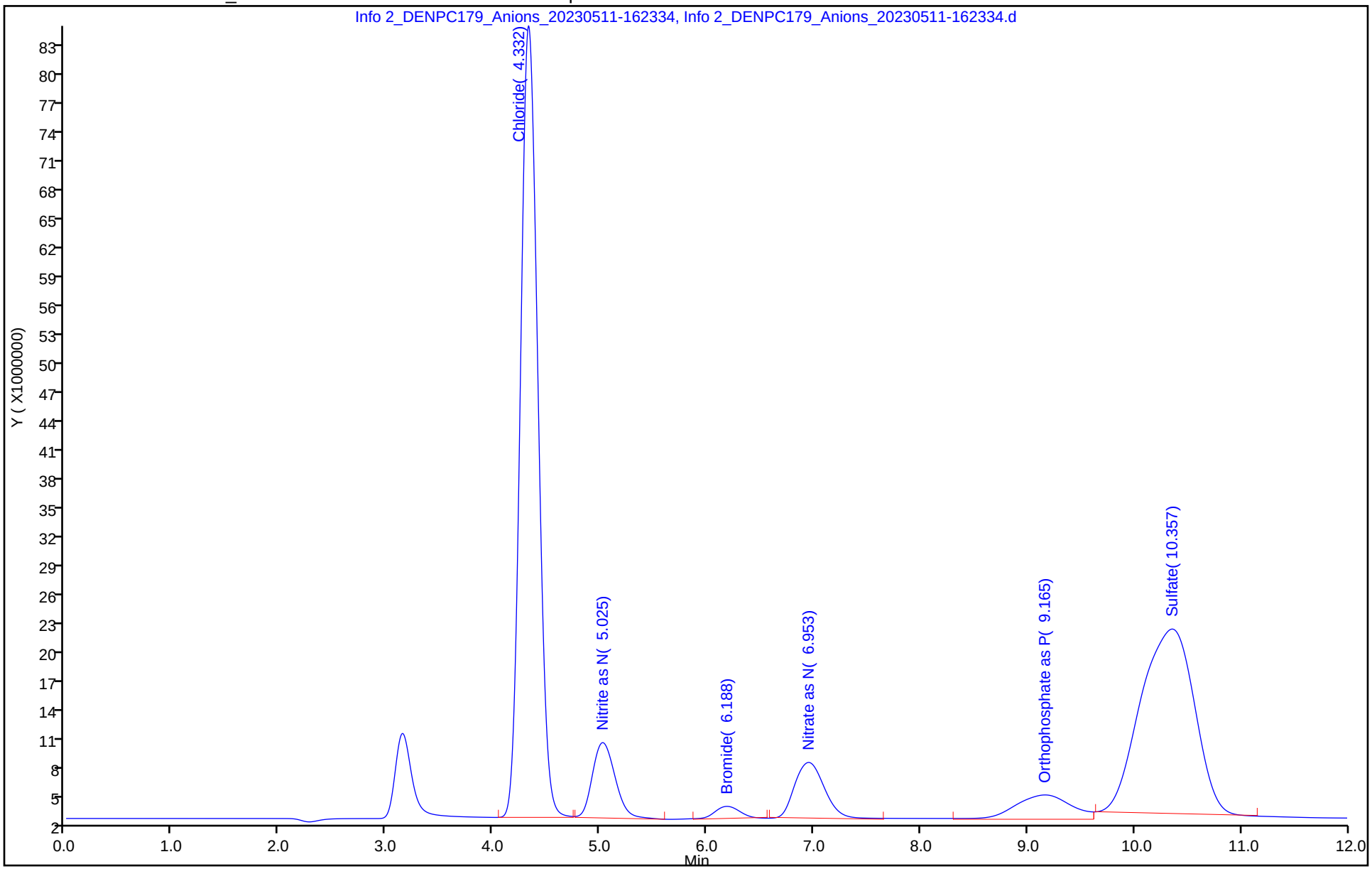
IC LCS_01953 Amount Added: 10.00 Units: mL

Report Date: 12-May-2023 11:43:29 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-162334.d

Injection Date:	11-May-2023 16:08:00	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		



5/31/2023 7:23 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

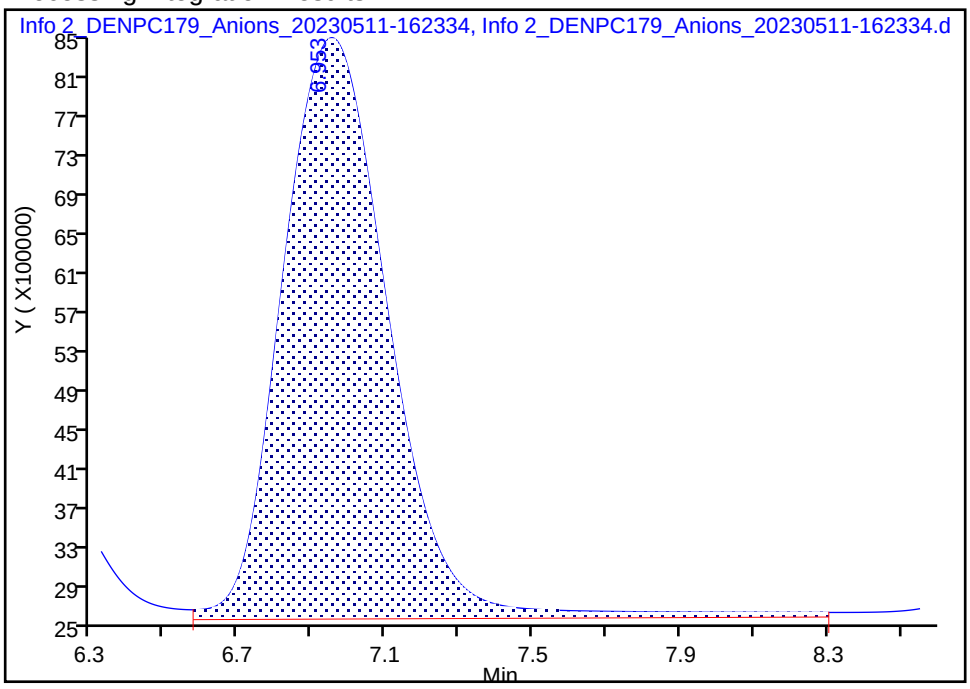
Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-162
Injection Date: 11-May-2023 16:08:00 Instrument ID: WC_IonChrom10
Lims ID: lcsd
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions_IC10 Limit Group: Wet - Anions
Column: Detector Info 2_091554_1

5 Nitrate as N, CAS: 14797-55-8

Signal: 1

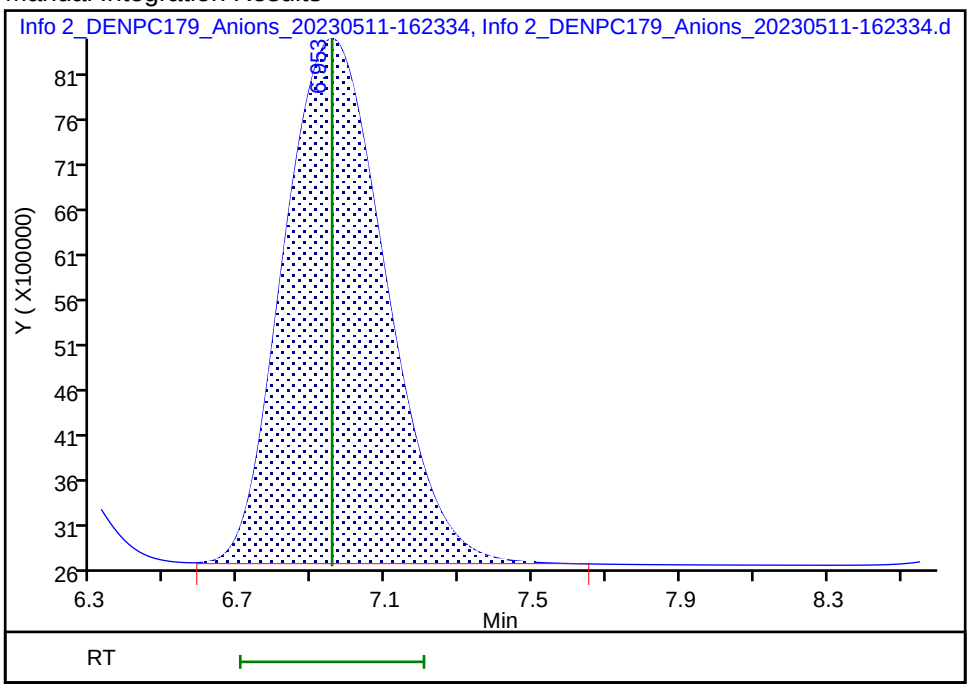
Processing Integration Results

RT: 6.95
Area: 119852980
Amount: 2.648641
Amount Units: ug/ml



Manual Integration Results

RT: 6.95
Area: 111496727
Amount: 2.466459
Amount Units: ug/ml



Reviewer: LVW8, 12-May-2023 11:13:21
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-162

Injection Date: 11-May-2023 16:08:00 Instrument ID: WC_IonChrom10

Lims ID: lcsd

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

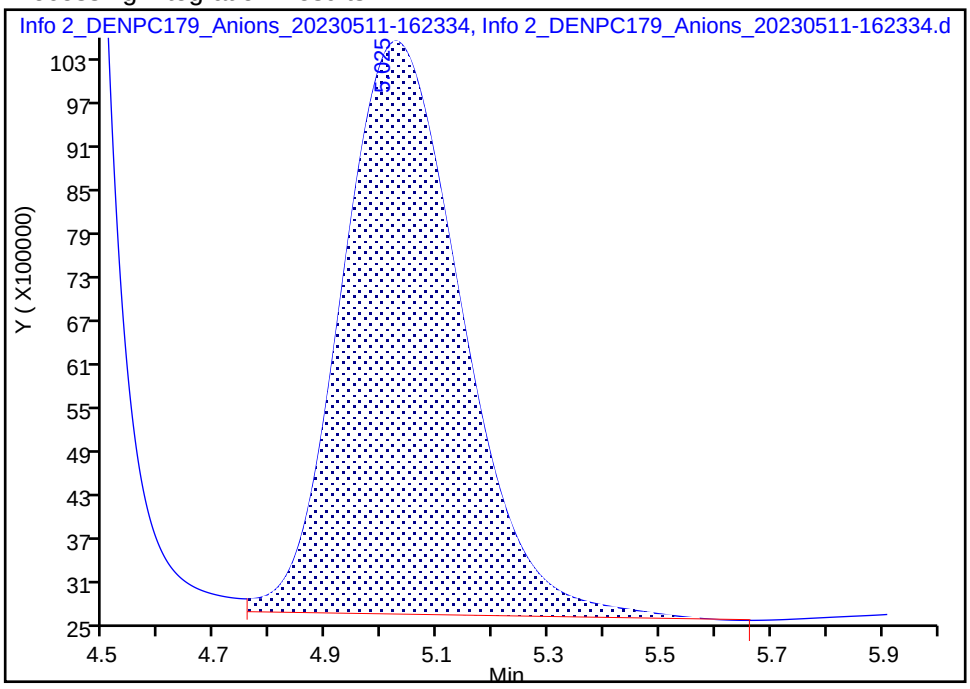
Column: Detector Info 2_091554_1

3 Nitrite as N, CAS: 14797-65-0

Signal: 1

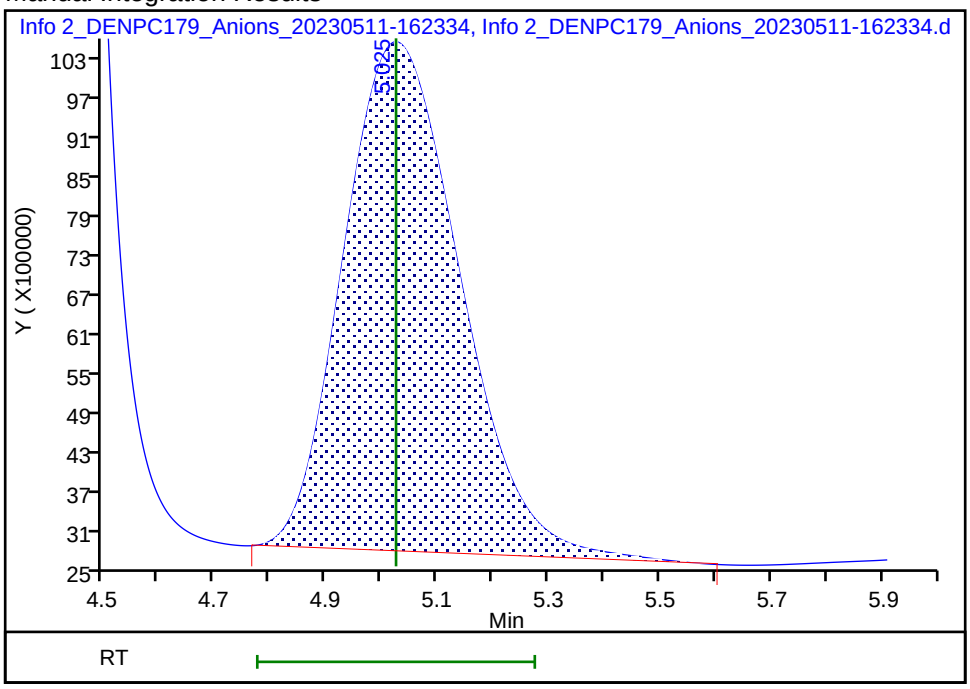
Processing Integration Results

RT: 5.03
Area: 118582306
Amount: 2.584373
Amount Units: ug/ml



Manual Integration Results

RT: 5.03
Area: 113716713
Amount: 2.479463
Amount Units: ug/ml



Reviewer: LVW8, 12-May-2023 11:13:17

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-163
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 11-May-2023 16:23:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121350-006
Misc. Info.: 280-0121350-006
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 12-May-2023 11:43:30 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1666

First Level Reviewer: LVW8 Date: 12-May-2023 11:14:10

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.147				ND	
2 Chloride		4.332				ND	
3 Nitrite as N		5.025				ND	
4 Bromide		6.188				ND	
5 Nitrate as N		6.953				ND	
6 Orthophosphate as P	9.232	9.232	0.000	18996406		0.3787	
7 Sulfate	10.373	10.373	0.000	4064040		NC	M

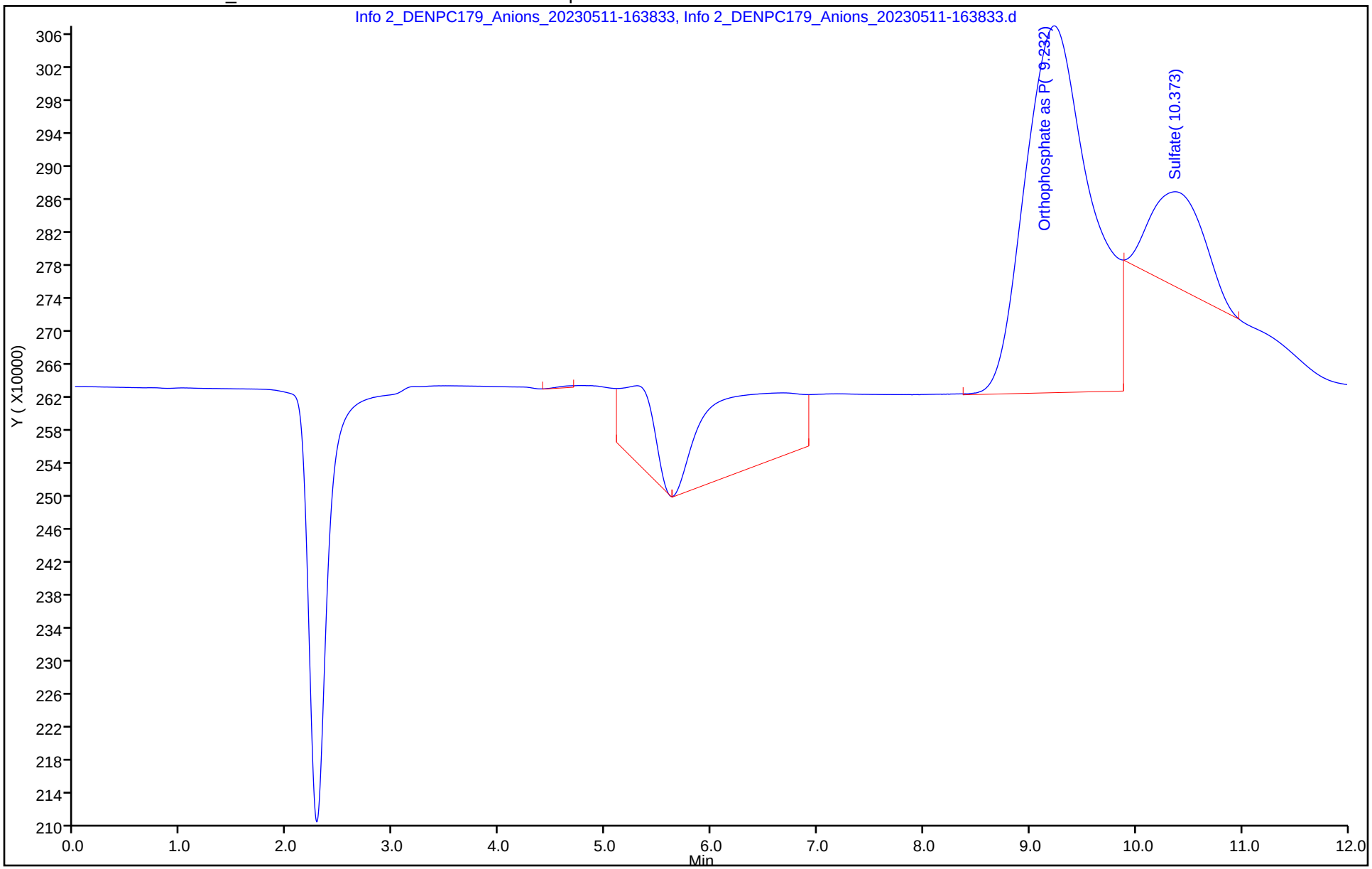
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 12-May-2023 11:43:30 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-163833.d				
Injection Date:	11-May-2023 16:23:00	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		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-175
Lims ID: 280-176335-A-6
Client ID: FWGmw-018-230401-GW
Sample Type: Client
Inject. Date: 11-May-2023 17:38:00 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121350-007
Misc. Info.: 280-0121350-007
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 12-May-2023 11:43:30 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1666

First Level Reviewer: LVW8 Date: 12-May-2023 11:14:31

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		3.147			ND	
2 Chloride	4.338	4.332	0.006	40423603	NC	M
3 Nitrite as N		5.025			ND	
4 Bromide		6.188			ND	U
5 Nitrate as N		6.953			ND	
6 Orthophosphate as P	9.415	9.232	0.183	6157065	-0.2281	
7 Sulfate	10.433	10.373	0.060	1047598759	NC	M

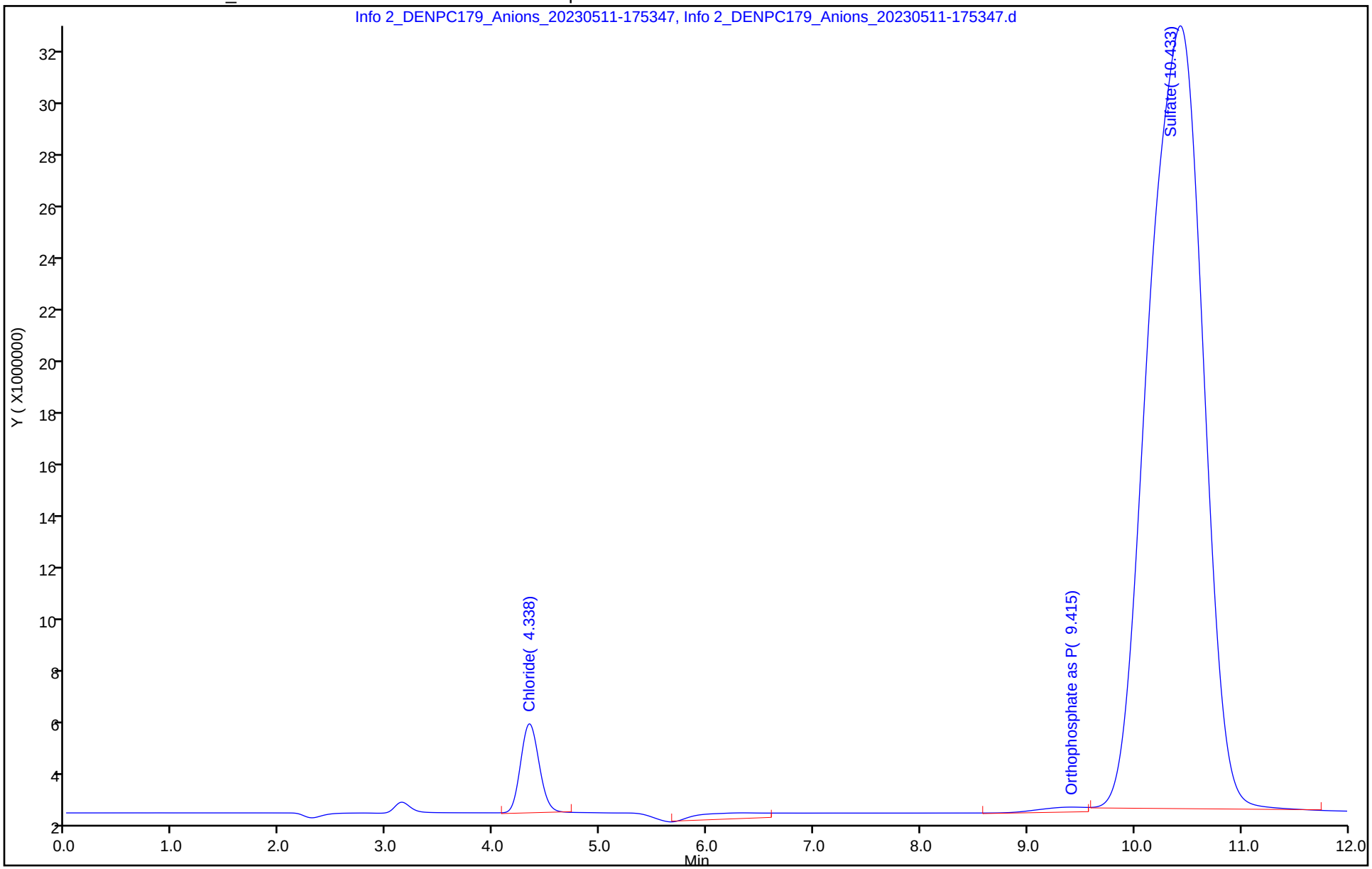
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 12-May-2023 11:43:31 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-175347.d				
Injection Date:	11-May-2023 17:38:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-176335-A-6	Lab Sample ID:	280-176335-6	Worklist Smp#:	7
Client ID:	FWGmw-018-230401-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\20230511-121350.b\Info 2_DENPC179_Anions_20230511-180
Lims ID: 280-176335-A-5
Client ID: FWGmw-020-230401-GW
Sample Type: Client
Inject. Date: 11-May-2023 17:53:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121350-008
Misc. Info.: 280-0121350-008
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 12-May-2023 11:43:30 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1666

First Level Reviewer: LVW8 Date: 12-May-2023 11:14:51

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		3.147			ND	
2 Chloride	4.347	4.332	0.015	55504338	NC	M
3 Nitrite as N		5.025			ND	
4 Bromide		6.188			ND	U
5 Nitrate as N	7.087	6.953	0.134	4347346	0.1304	M
6 Orthophosphate as P	9.455	9.232	0.223	3356976	-0.3605	
7 Sulfate	10.438	10.373	0.065	939648503	NC	M

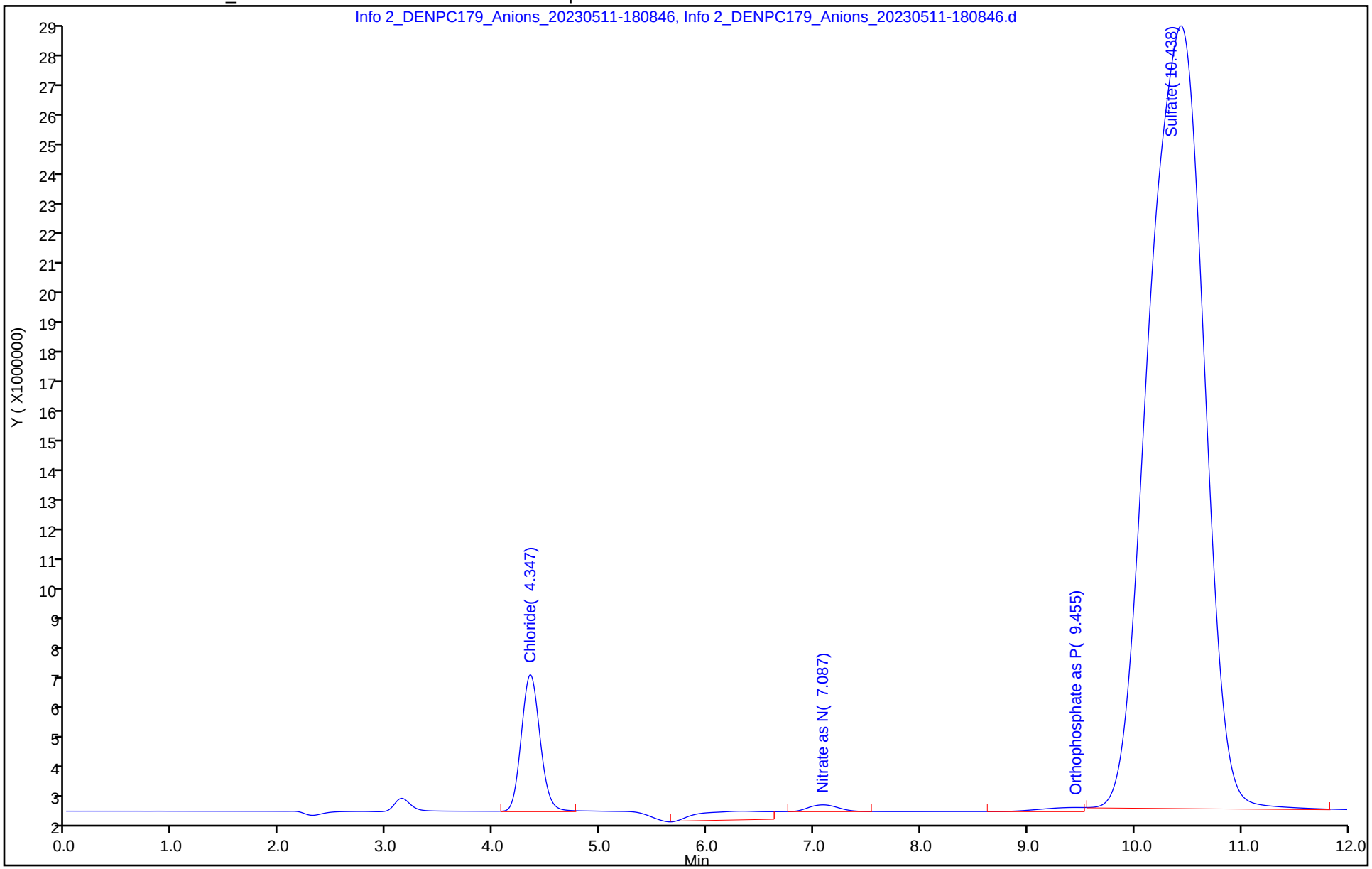
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 12-May-2023 11:43:32 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-180846.d				
Injection Date:	11-May-2023 17:53:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-176335-A-5	Lab Sample ID:	280-176335-5	Worklist Smp#:	8
Client ID:	FWGmw-020-230401-GW				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-180

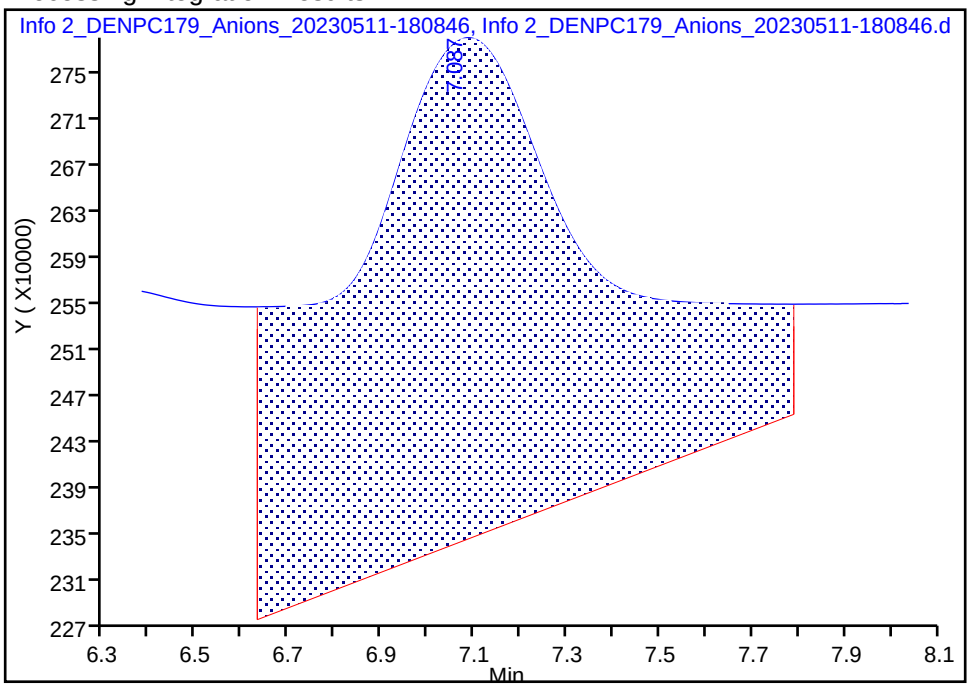
Injection Date:	11-May-2023 17:53:00	Instrument ID:	WC_IonChrom10		
Lims ID:	280-176335-A-5	Lab Sample ID:	280-176335-5		
Client ID:	FWGmw-020-230401-GW				
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	8
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC10	Limit Group:	Wet - Anions		
Column:		Detector	Info 2_091554_1		

5 Nitrate as N, CAS: 14797-55-8

Signal: 1

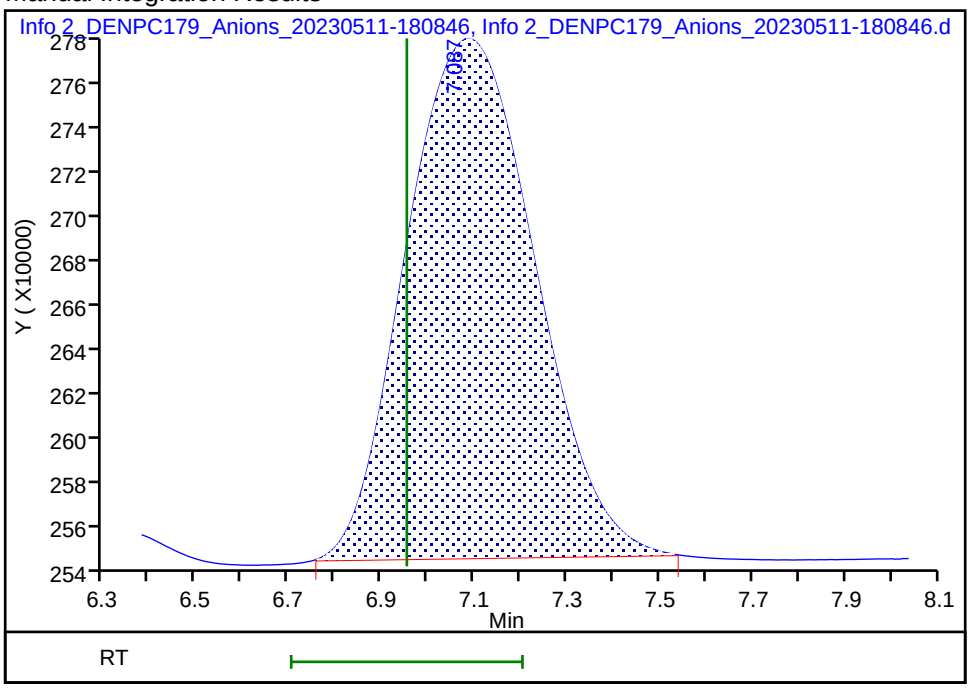
Processing Integration Results

RT: 7.09
Area: 16934016
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 7.09
Area: 4347346
Amount: 0.130405
Amount Units: ug/ml



Reviewer: LVW8, 12-May-2023 11:14:41

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-202
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 11-May-2023 20:08:00 ALS Bottle#: 0 Worklist Smp#: 17
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121350-017
Misc. Info.: 280-0121350-017
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 12-May-2023 11:43:42 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1666

First Level Reviewer: XAY4 Date: 12-May-2023 10:15:07

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.147			ND	ND	
2 Chloride	4.342	4.332	0.010	931343084	NC	NC	M
3 Nitrite as N	5.040	5.025	0.015	112412114	2.50	2.45	M
4 Bromide	6.187	6.188	-0.001	22536855	NC	NC	
5 Nitrate as N	6.963	6.953	0.010	111649189	2.50	2.47	M
6 Orthophosphate as P	9.223	9.232	-0.009	67867640	2.50	2.69	
7 Sulfate	10.410	10.373	0.037	669395684	NC	NC	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND
Review Flags
M - Manually Integrated

Reagents:

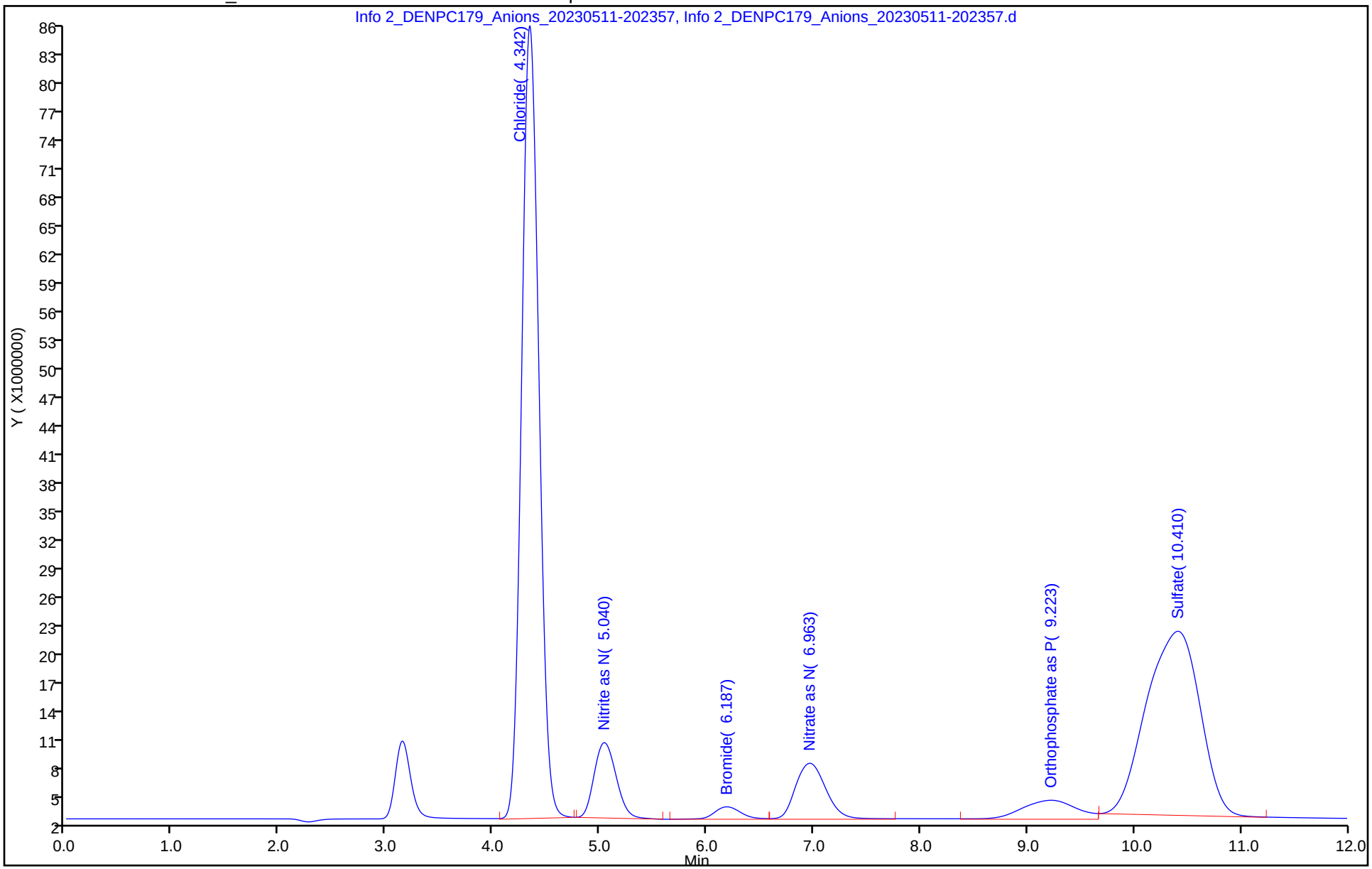
IC LCS_01953 Amount Added: 10.00 Units: mL

Report Date: 12-May-2023 11:43:43 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-202357.d

Injection Date:	11-May-2023 20:08:00	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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Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-202

Injection Date: 11-May-2023 20:08:00 Instrument ID: WC_IonChrom10

Lims ID: ccv

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 17

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions

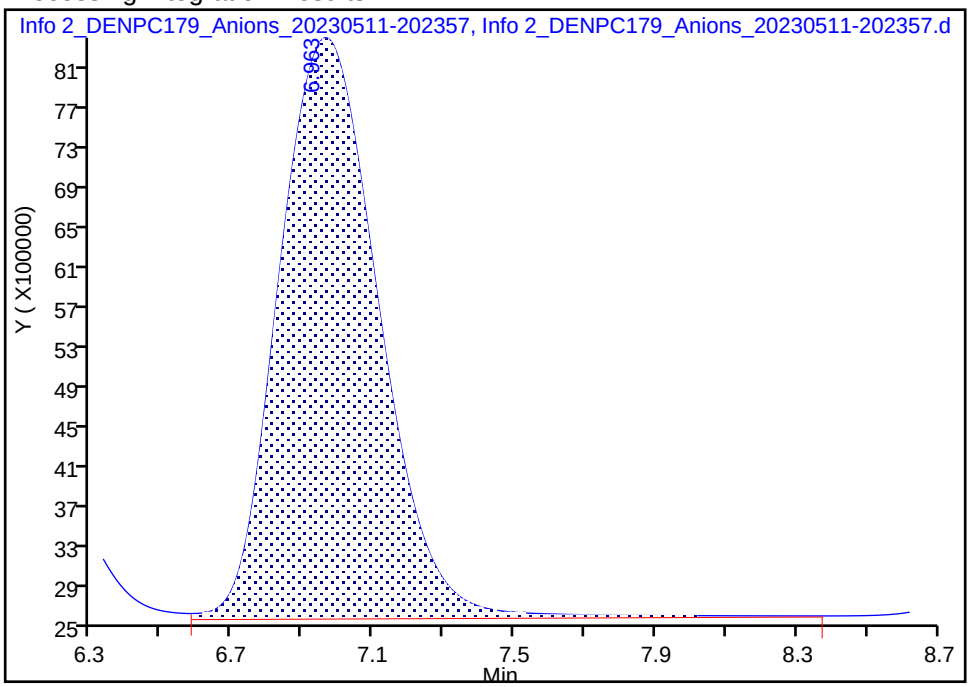
Column: Detector Info 2_091554_1

5 Nitrate as N, CAS: 14797-55-8

Signal: 1

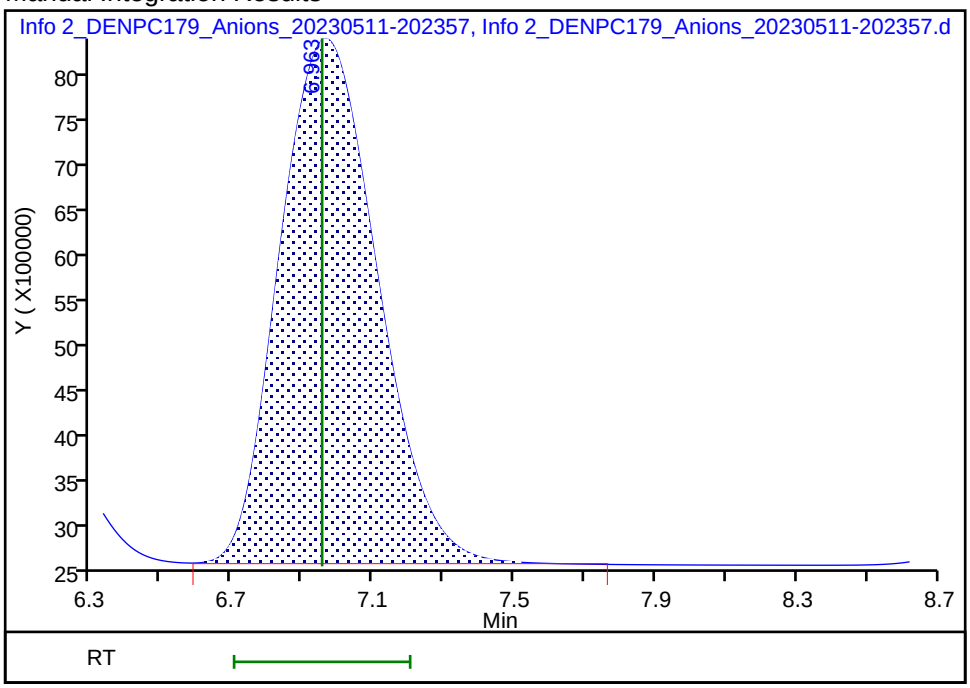
Processing Integration Results

RT: 6.96
Area: 116586862
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 6.96
Area: 111649189
Amount: 2.469783
Amount Units: ug/ml



Reviewer: LVW8, 12-May-2023 11:17:45

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-202

Injection Date: 11-May-2023 20:08:00 Instrument ID: WC_IonChrom10

Lims ID: ccv

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 17

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions

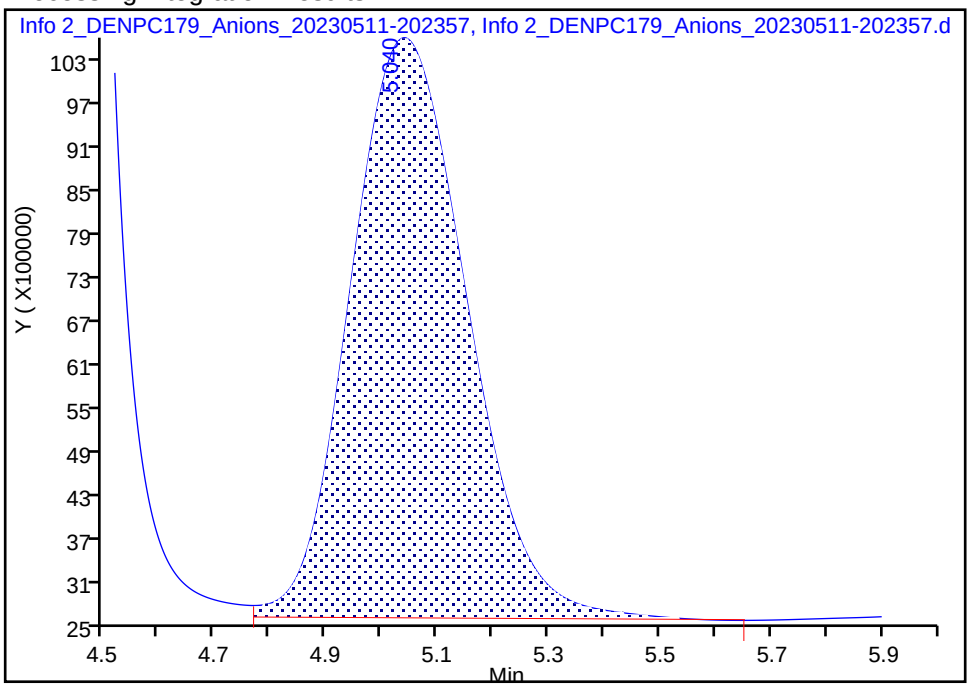
Column: Detector Info 2_091554_1

3 Nitrite as N, CAS: 14797-65-0

Signal: 1

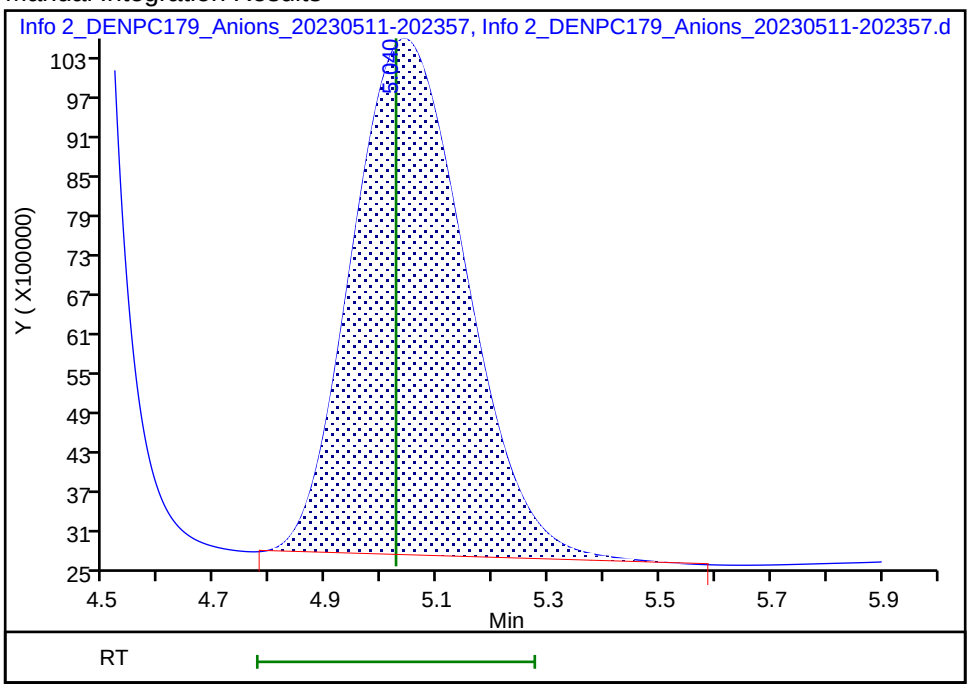
Processing Integration Results

RT: 5.04
Area: 116820250
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 5.04
Area: 112412114
Amount: 2.451334
Amount Units: ug/ml



Reviewer: LVW8, 12-May-2023 11:17:41

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-203
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 11-May-2023 20:24:00 ALS Bottle#: 0 Worklist Smp#: 18
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121350-018
Misc. Info.: 280-0121350-018
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 12-May-2023 11:43:42 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1666

First Level Reviewer: LVW8 Date: 12-May-2023 10:46:02

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.212	3.147	0.065	11058		NC	
2 Chloride		4.332				ND	
3 Nitrite as N		5.025				ND	
4 Bromide	6.317	6.188	0.129	1785713		NC	
5 Nitrate as N		6.953				ND	
6 Orthophosphate as P	9.323	9.232	0.091	7021871		-0.1872	
7 Sulfate	10.458	10.373	0.085	3335077		NC	M

QC Flag Legend

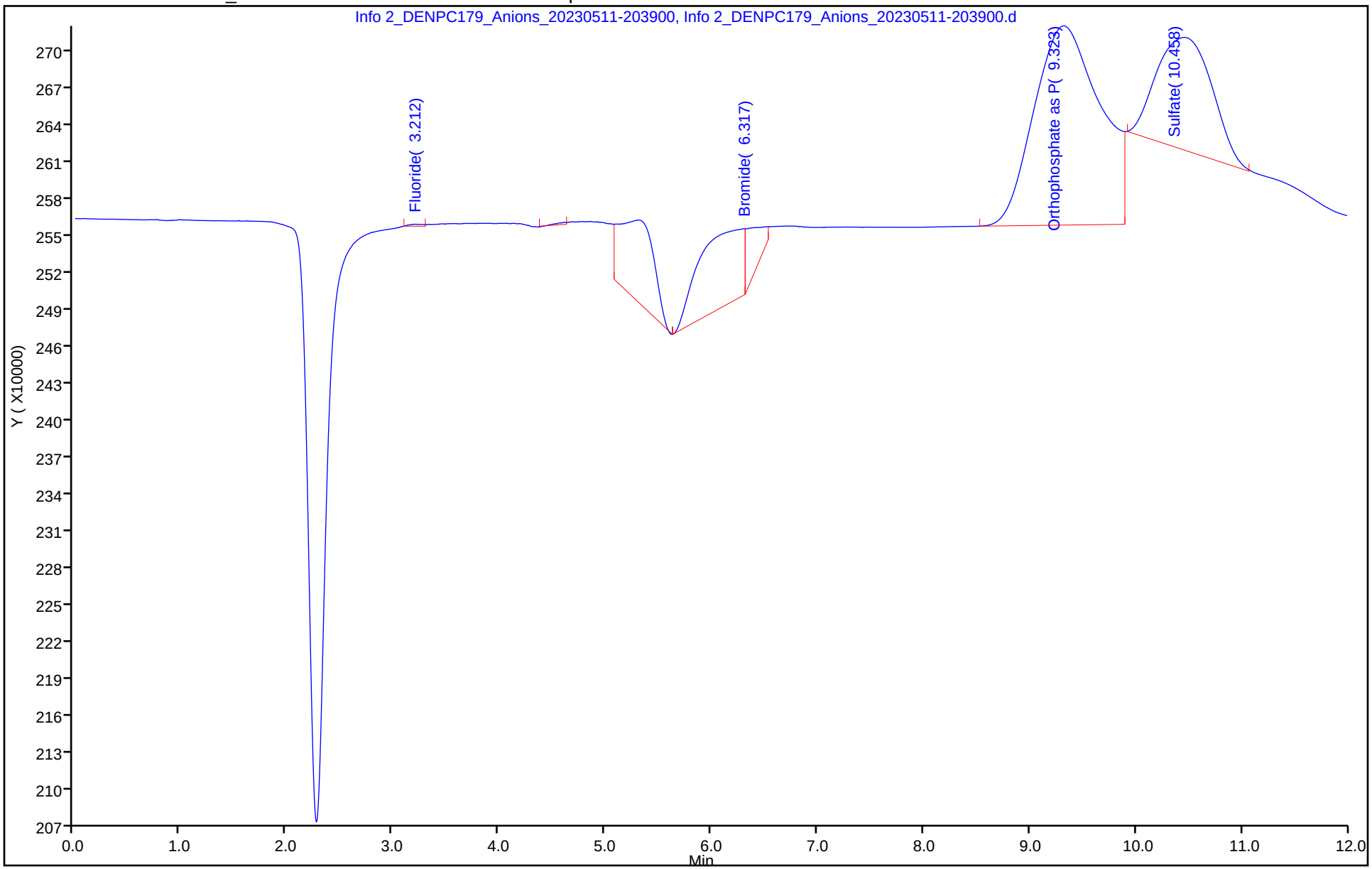
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 12-May-2023 11:43:44 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-203900.d

Injection Date:	11-May-2023 20:24:00	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\20230511-121350.b\Info 2_DENPC179_Anions_20230511-232
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 11-May-2023 23:09:00 ALS Bottle#: 0 Worklist Smp#: 29
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121350-029
Misc. Info.: 280-0121350-029
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 12-May-2023 11:43:57 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1666

First Level Reviewer: LVW8 Date: 12-May-2023 10:46:37

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.147			ND	ND	
2 Chloride	4.333	4.332	0.001	938098480	NC	NC	
3 Nitrite as N	5.025	5.025	0.000	111110665	2.50	2.42	
4 Bromide	6.195	6.188	0.007	23615095	NC	NC	
5 Nitrate as N	6.953	6.953	0.000	111385426	2.50	2.46	M
6 Orthophosphate as P	9.192	9.232	-0.040	60773843	2.50	2.35	
7 Sulfate	10.392	10.373	0.019	681125569	NC	NC	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND
Review Flags
M - Manually Integrated

Reagents:

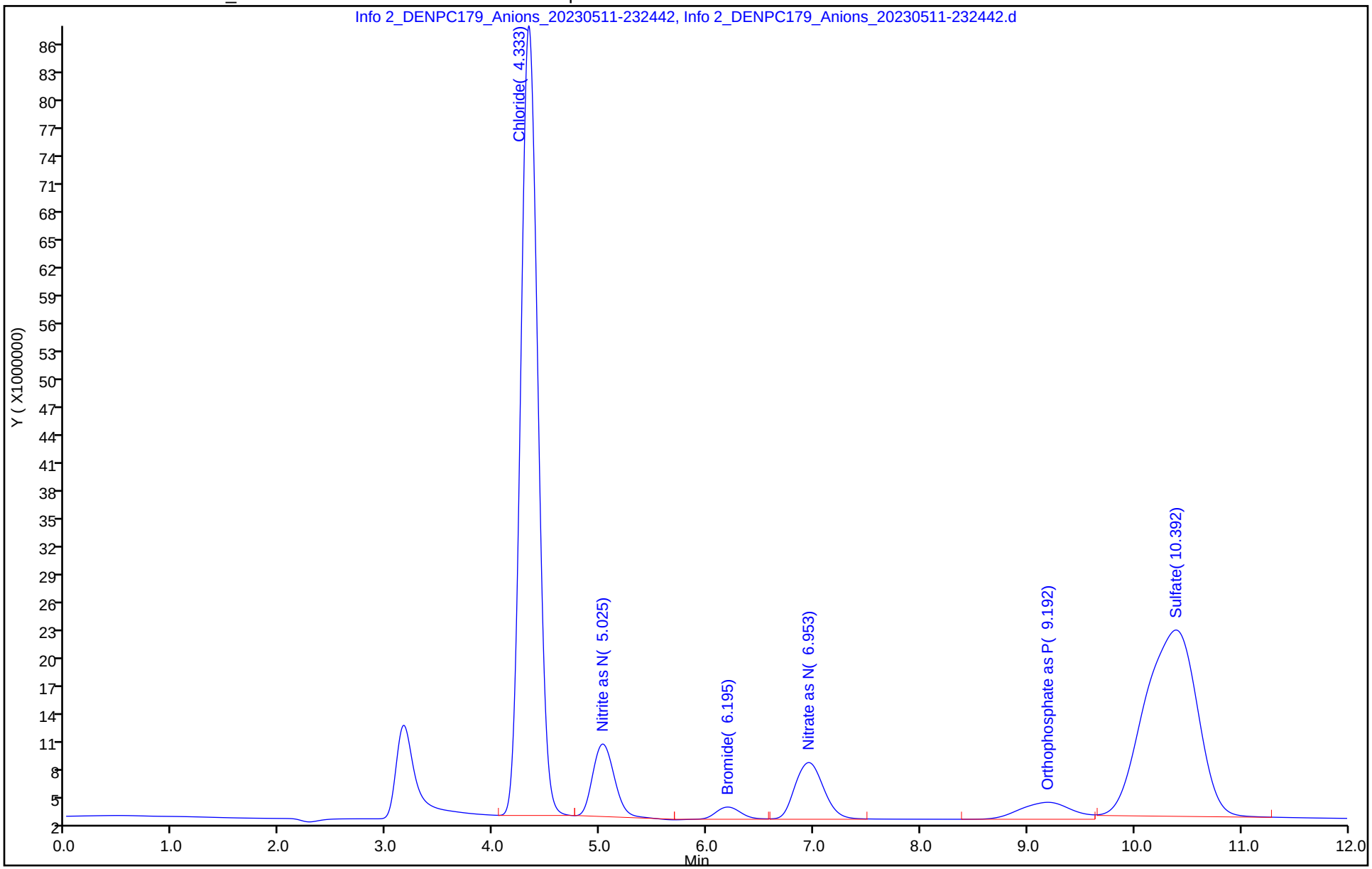
IC LCS_01953 Amount Added: 10.00 Units: mL

Report Date: 12-May-2023 11:43:57 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-232442.d

Injection Date:	11-May-2023 23:09:00	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		



5/31/2023 7:23 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-232

Injection Date: 11-May-2023 23:09:00 Instrument ID: WC_IonChrom10

Lims ID: ccv

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 29

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions

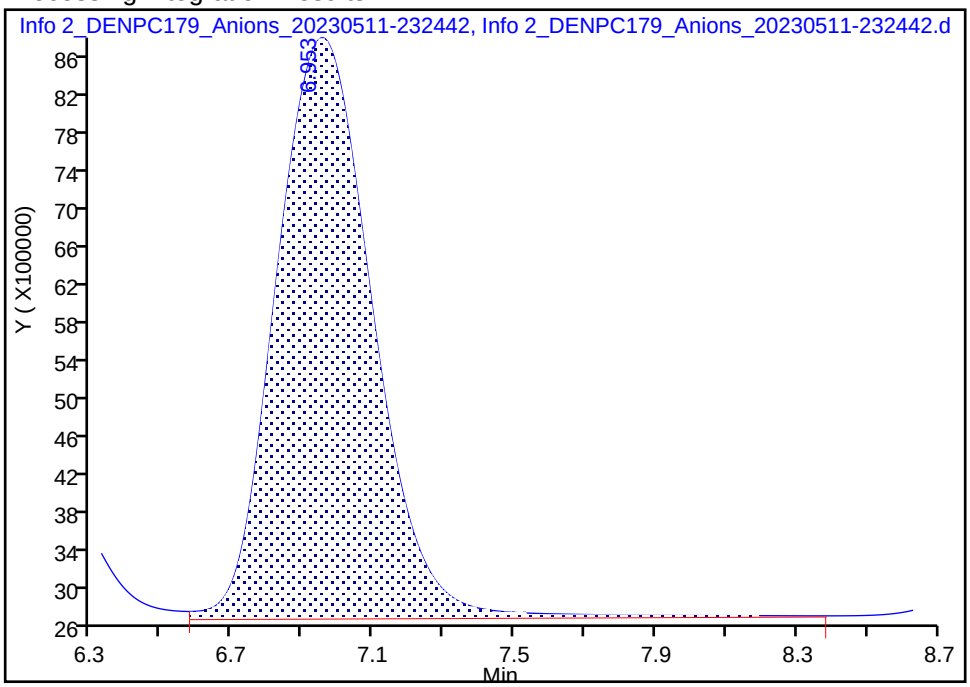
Column: Detector Info 2_091554_1

5 Nitrate as N, CAS: 14797-55-8

Signal: 1

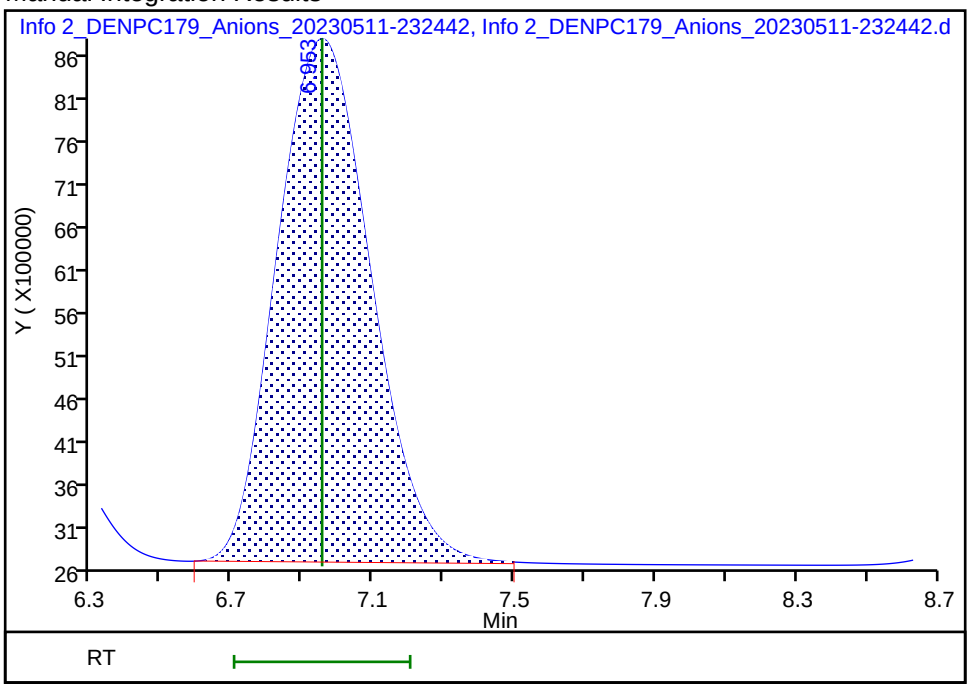
Processing Integration Results

RT: 6.95
Area: 117337736
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 6.95
Area: 111385426
Amount: 2.464033
Amount Units: ug/ml



Reviewer: LVW8, 12-May-2023 11:23:41

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-233
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 11-May-2023 23:24:00 ALS Bottle#: 0 Worklist Smp#: 30
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121350-030
Misc. Info.: 280-0121350-030
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 12-May-2023 11:43:57 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1666

First Level Reviewer: LVW8 Date: 12-May-2023 11:24:01

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.147				ND	
2 Chloride		4.332				ND	
3 Nitrite as N		5.025				ND	
4 Bromide	6.422	6.188	0.234	2650939		NC	
5 Nitrate as N		6.953				ND	
6 Orthophosphate as P	9.280	9.232	0.048	16009089		0.2375	
7 Sulfate	10.438	10.373	0.065	4988316		NC	M

QC Flag Legend

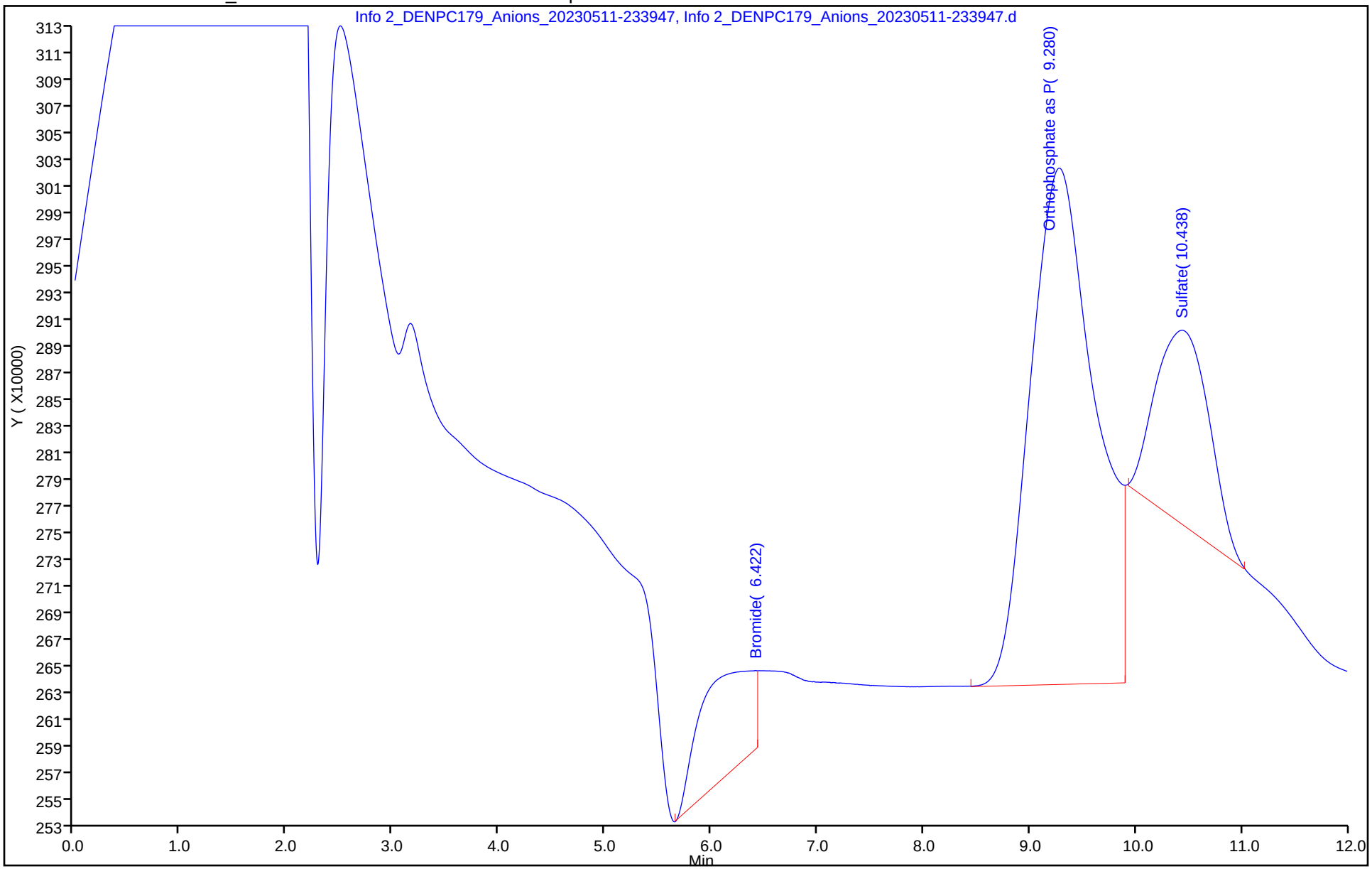
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 12-May-2023 11:43:58 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-233947.d

Injection Date:	11-May-2023 23:24:00	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		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230512-000
Lims ID: 280-176335-C-4
Client ID: LL2mw-059-230401-GW
Sample Type: Client
Inject. Date: 11-May-2023 23:54:00 ALS Bottle#: 0 Worklist Smp#: 32
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121350-032
Misc. Info.: 280-0121350-032
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 12-May-2023 11:43:57 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1666

First Level Reviewer: LVW8 Date: 12-May-2023 11:25:05

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		3.147			ND	
2 Chloride	4.278	4.332	-0.054	27569400	NC	M
3 Nitrite as N		5.025			ND	
4 Bromide	6.165	6.188	-0.023	12535365	NC	
5 Nitrate as N	6.900	6.953	-0.053	16078306	0.3862	M
6 Orthophosphate as P	9.167	9.232	-0.065	26347061	0.7261	
7 Sulfate	10.212	10.373	-0.161	218454383	NC	M

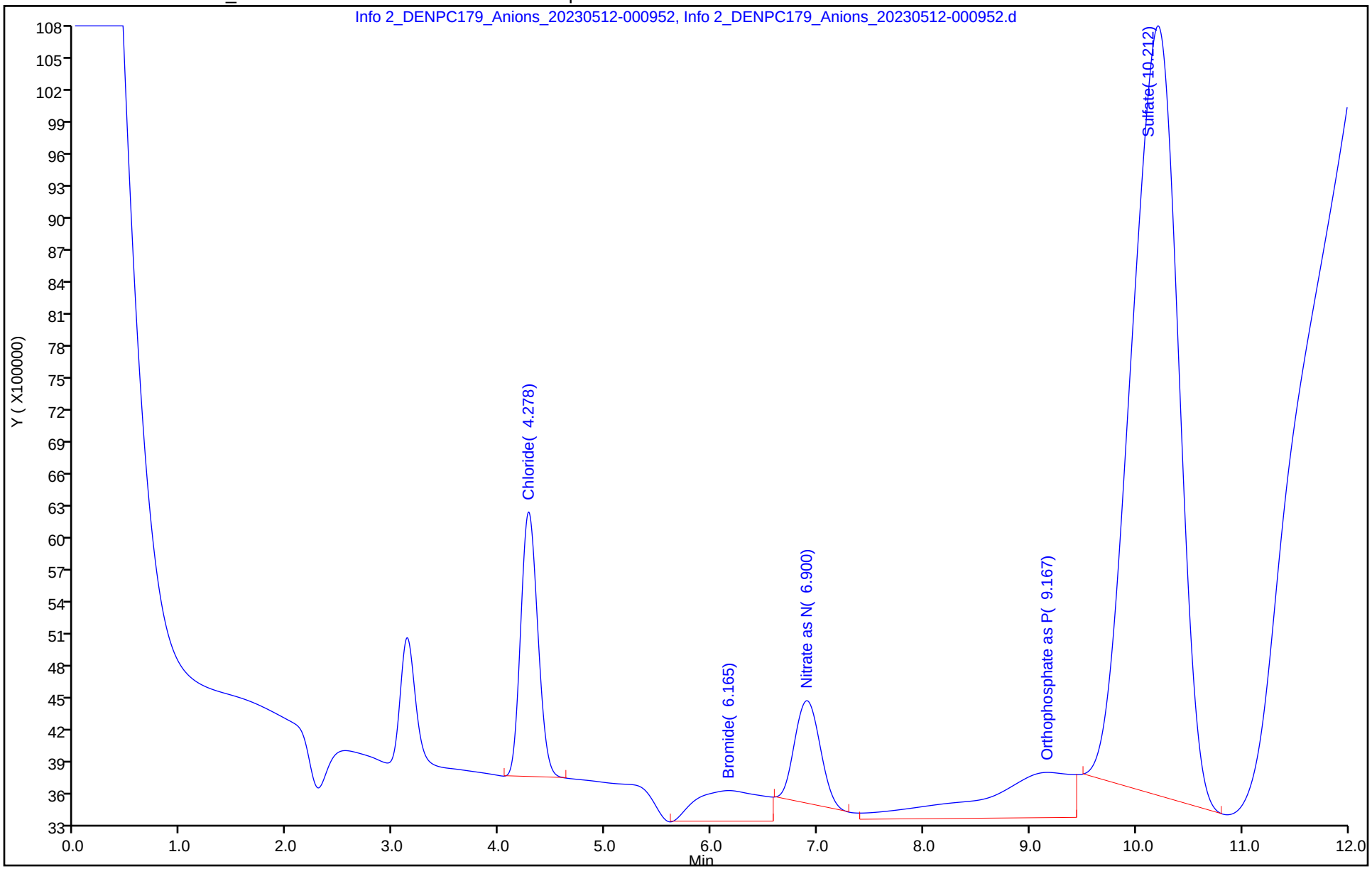
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 12-May-2023 11:43:59 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230512-000952.d				
Injection Date:	11-May-2023 23:54:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-176335-C-4	Lab Sample ID:	280-176335-4	Worklist Smp#:	32
Client ID:	LL2mw-059-230401-GW				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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Manual Integration/User Assign Peak Report

Eurofins Denver

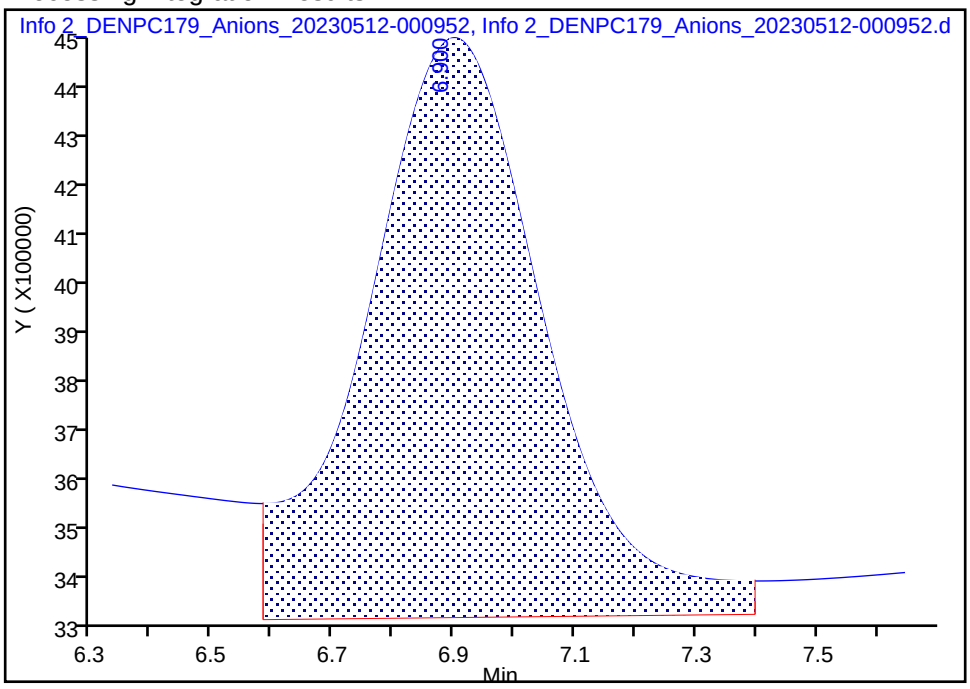
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230512-000				
Injection Date:	11-May-2023 23:54:00	Instrument ID:	WC_IonChrom10		
Lims ID:	280-176335-C-4	Lab Sample ID:	280-176335-4		
Client ID:	LL2mw-059-230401-GW				
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	32
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC10	Limit Group:	Wet - Anions		
Column:		Detector	Info 2_091554_1		

5 Nitrate as N, CAS: 14797-55-8

Signal: 1

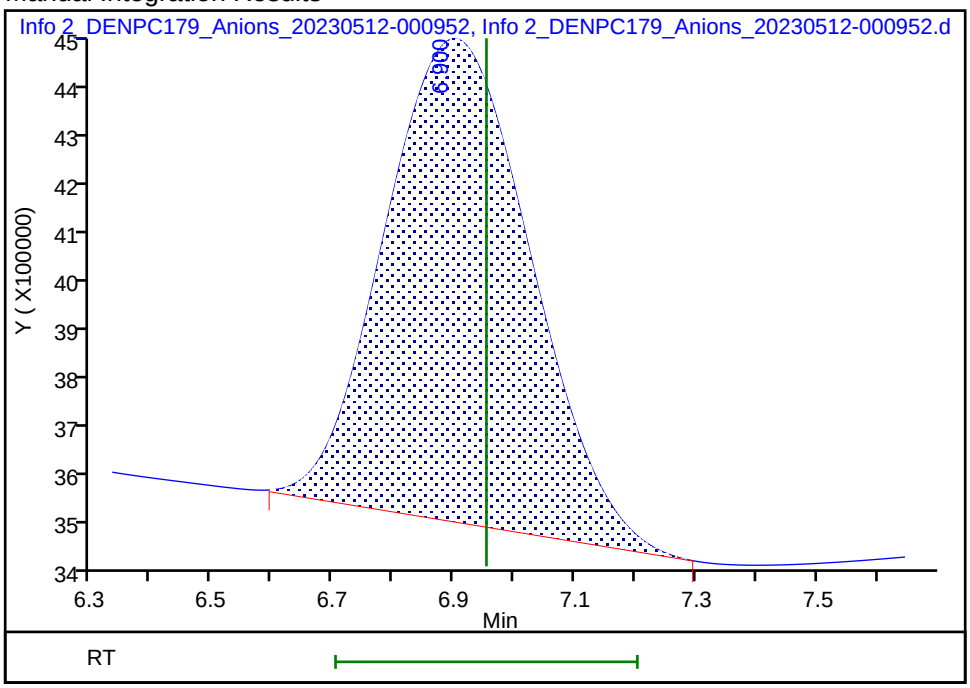
Processing Integration Results

RT: 6.90
Area: 22861140
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 6.90
Area: 16078306
Amount: 0.386162
Amount Units: ug/ml



Reviewer: LVW8, 12-May-2023 11:24:58

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230512-022
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 12-May-2023 02:10:00 ALS Bottle#: 0 Worklist Smp#: 41
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121350-041
Misc. Info.: 280-0121350-041
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 12-May-2023 11:44:09 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1666

First Level Reviewer: LVW8 Date: 12-May-2023 11:28:15

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.147			ND	ND	
2 Chloride	4.323	4.332	-0.009	937330268	NC	NC	M
3 Nitrite as N	5.010	5.025	-0.015	112850374	2.50	2.46	M
4 Bromide	6.162	6.188	-0.026	23880161	NC	NC	
5 Nitrate as N	6.920	6.953	-0.033	111714078	2.50	2.47	M
6 Orthophosphate as P	9.132	9.232	-0.100	65905025	2.50	2.60	
7 Sulfate	10.313	10.373	-0.060	665774756	NC	NC	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND
Review Flags
M - Manually Integrated

Reagents:

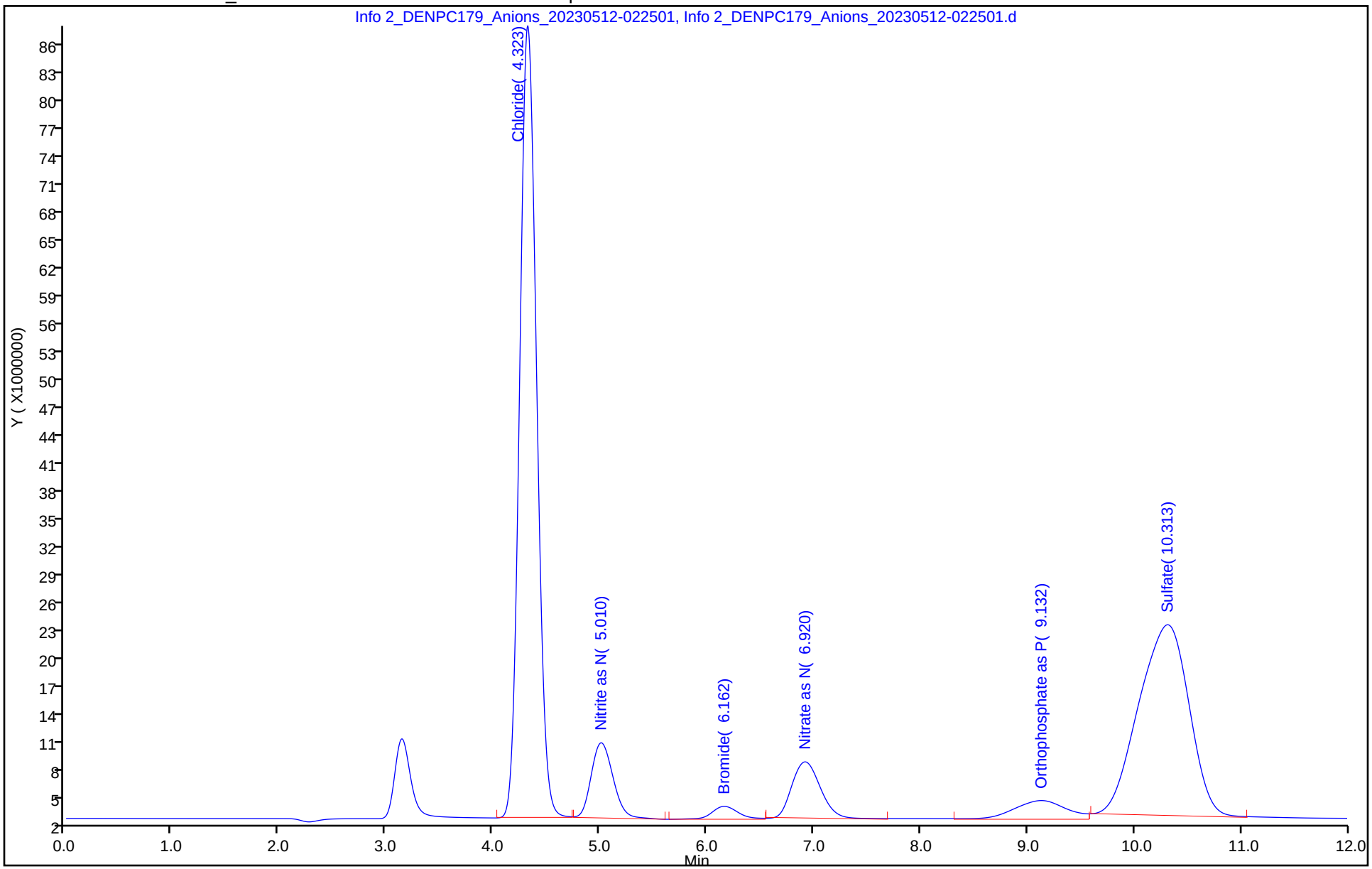
IC LCS_01953 Amount Added: 10.00 Units: mL

Report Date: 12-May-2023 11:44:10 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230512-022501.d

Injection Date:	12-May-2023 02:10:00	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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Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230512-022

Injection Date: 12-May-2023 02:10:00 Instrument ID: WC_IonChrom10

Lims ID: ccv

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 41

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions

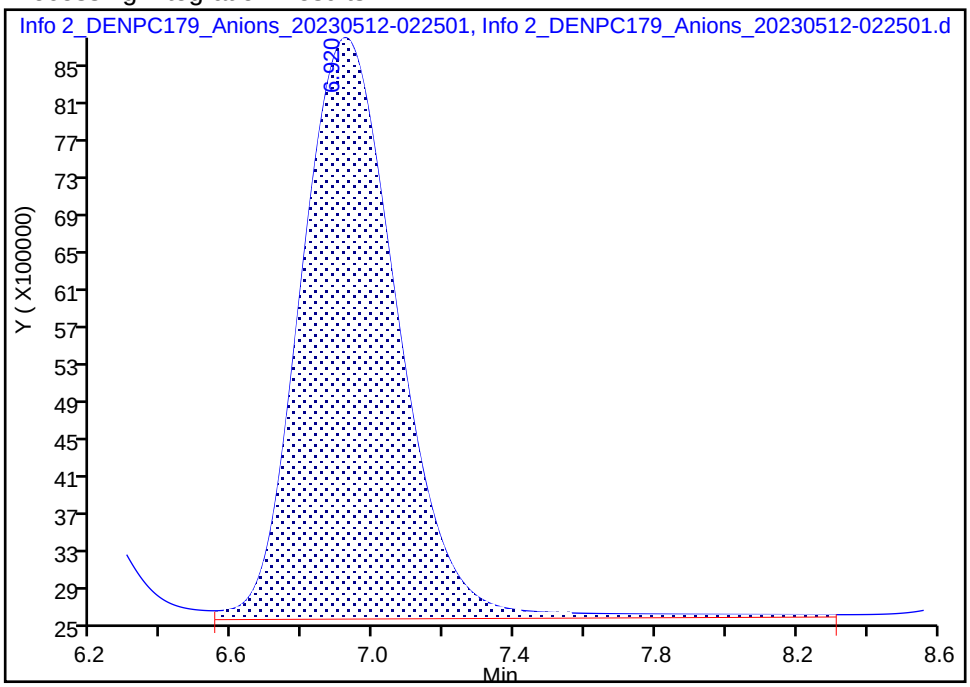
Column: Detector Info 2_091554_1

5 Nitrate as N, CAS: 14797-55-8

Signal: 1

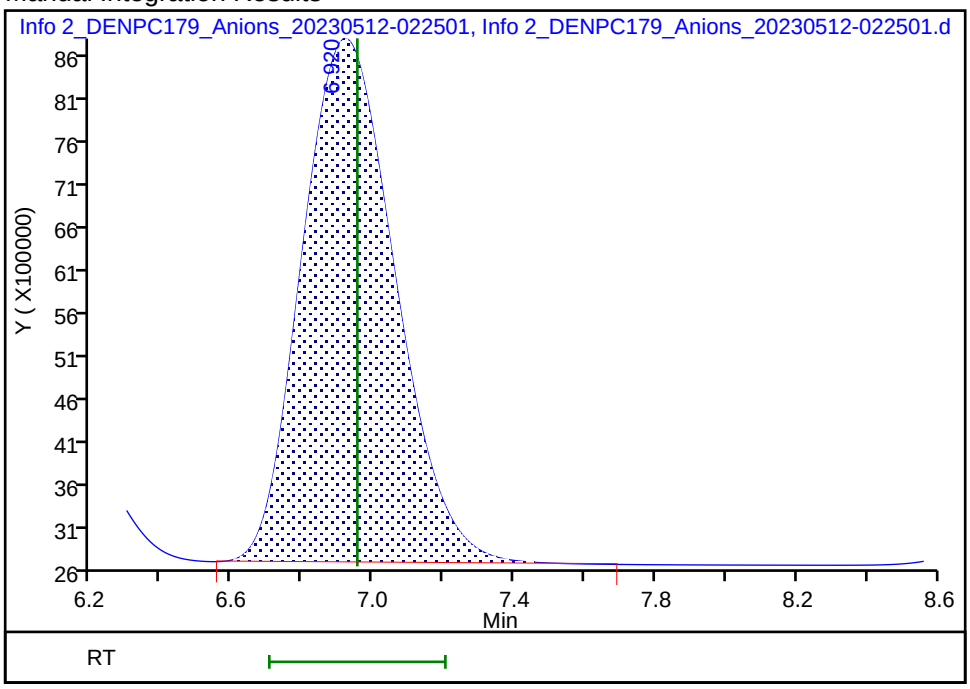
Processing Integration Results

RT: 6.92
Area: 118770631
Amount: 2.625044
Amount Units: ug/ml



Manual Integration Results

RT: 6.92
Area: 111714078
Amount: 2.471198
Amount Units: ug/ml



Reviewer: LVW8, 12-May-2023 11:28:09

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230512-022

Injection Date: 12-May-2023 02:10:00 Instrument ID: WC_IonChrom10

Lims ID: ccv

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 41

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions

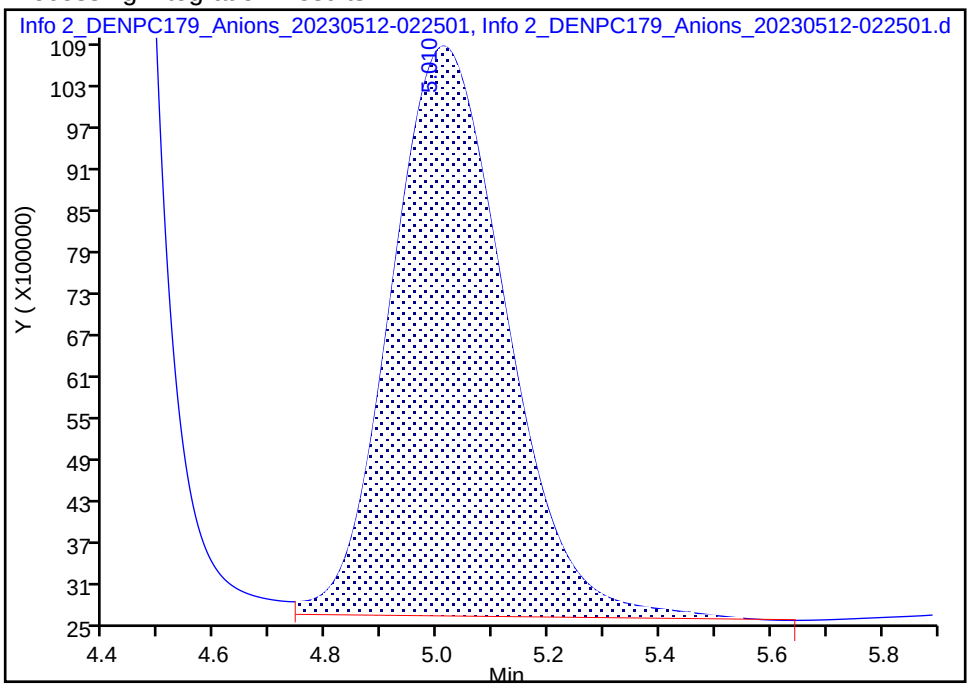
Column: Detector Info 2_091554_1

3 Nitrite as N, CAS: 14797-65-0

Signal: 1

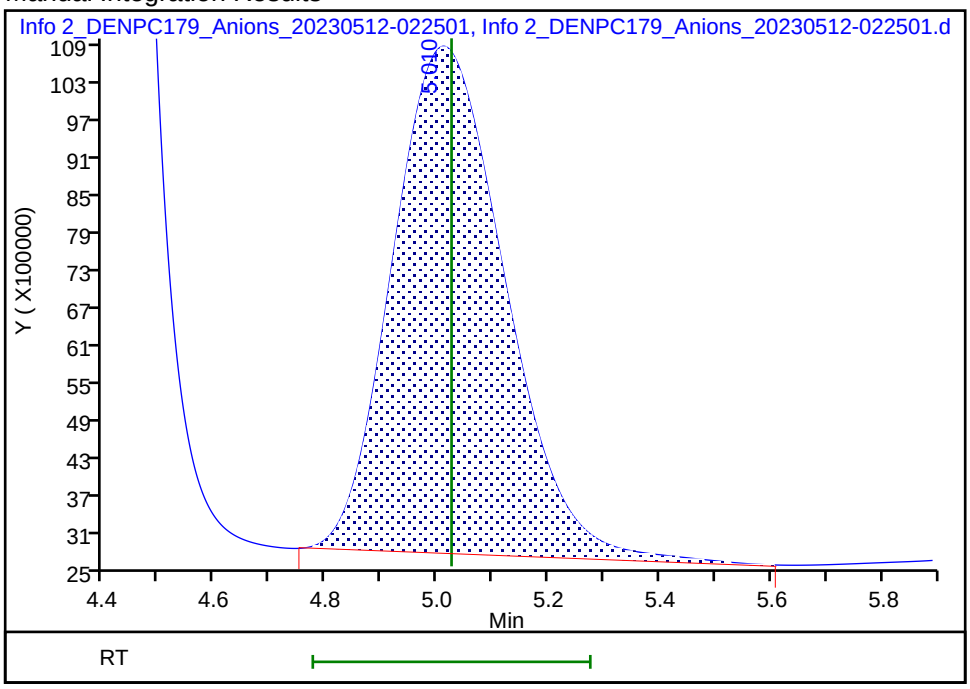
Processing Integration Results

RT: 5.01
Area: 117754388
Amount: 2.566522
Amount Units: ug/ml



Manual Integration Results

RT: 5.01
Area: 112850374
Amount: 2.460783
Amount Units: ug/ml



Reviewer: LVW8, 12-May-2023 11:28:03

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230512-024
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 12-May-2023 02:25:00 ALS Bottle#: 0 Worklist Smp#: 42
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121350-042
Misc. Info.: 280-0121350-042
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 12-May-2023 11:44:09 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1666

First Level Reviewer: LVW8 Date: 12-May-2023 11:28:30

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.147				ND	
2 Chloride		4.332				ND	
3 Nitrite as N		5.025				ND	U
4 Bromide		6.188				ND	
5 Nitrate as N		6.953				ND	
6 Orthophosphate as P	9.222	9.232	-0.010	9935041		-0.0496	
7 Sulfate	10.375	10.373	0.002	4634563		NC	M

QC Flag Legend

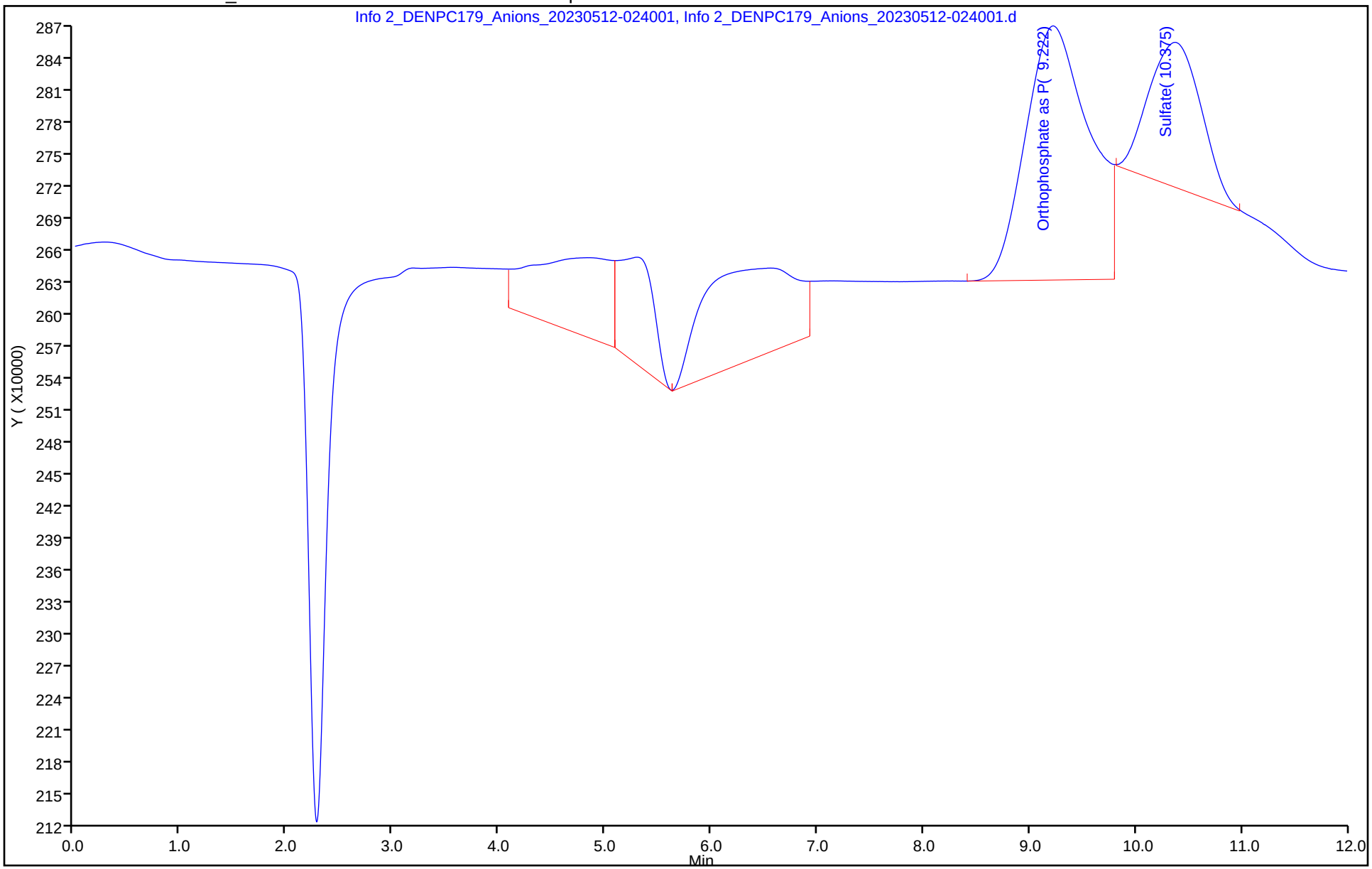
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 12-May-2023 11:44:11 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230512-024001.d

Injection Date:	12-May-2023 02:25:00	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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User Disabled Compound Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230512-024

Injection Date: 12-May-2023 02:25:00 Instrument ID: WC_IonChrom10

Lims ID: ccb

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 42

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions

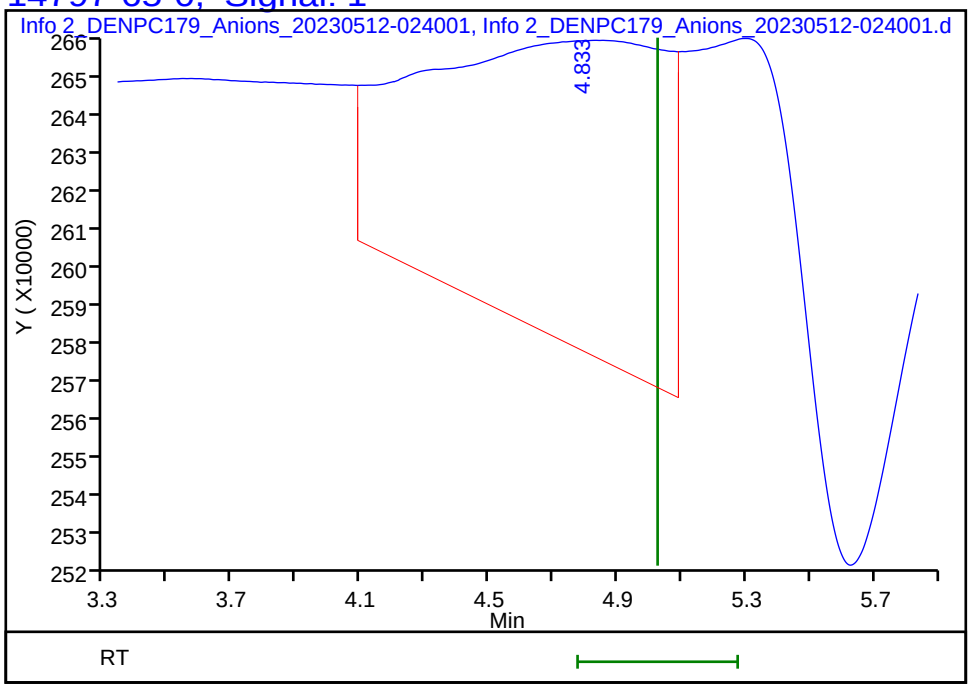
Column: Detector Info 2_091554_1

3 Nitrite as N, CAS: 14797-65-0, Signal: 1

RT: 4.83

Response: 3724277

Amount: 0



Reviewer: LVW8, 12-May-2023 11:28:30

Audit Action: Manually Integrated Audit Reason:

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-141
Lims ID: STD L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 12-Apr-2023 14:04:00 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0120345-001
Misc. Info.: 280-0120345-001
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 14-Apr-2023 14:03:48 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1620

First Level Reviewer: LVW8 Date: 12-Apr-2023 15:40:32

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.175				ND	
2 Chloride	4.383	4.383	0.000	7464190	0.5000	0.5261	M
3 Nitrite as N		5.103				ND	
4 Bromide		6.292				ND	U
5 Nitrate as N		7.057				ND	
6 Orthophosphate as P	9.447	9.447	0.000	3338493		NC	M
7 Sulfate	10.645	10.645	0.000	7022789	0.5000	0.6018	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Reagents:

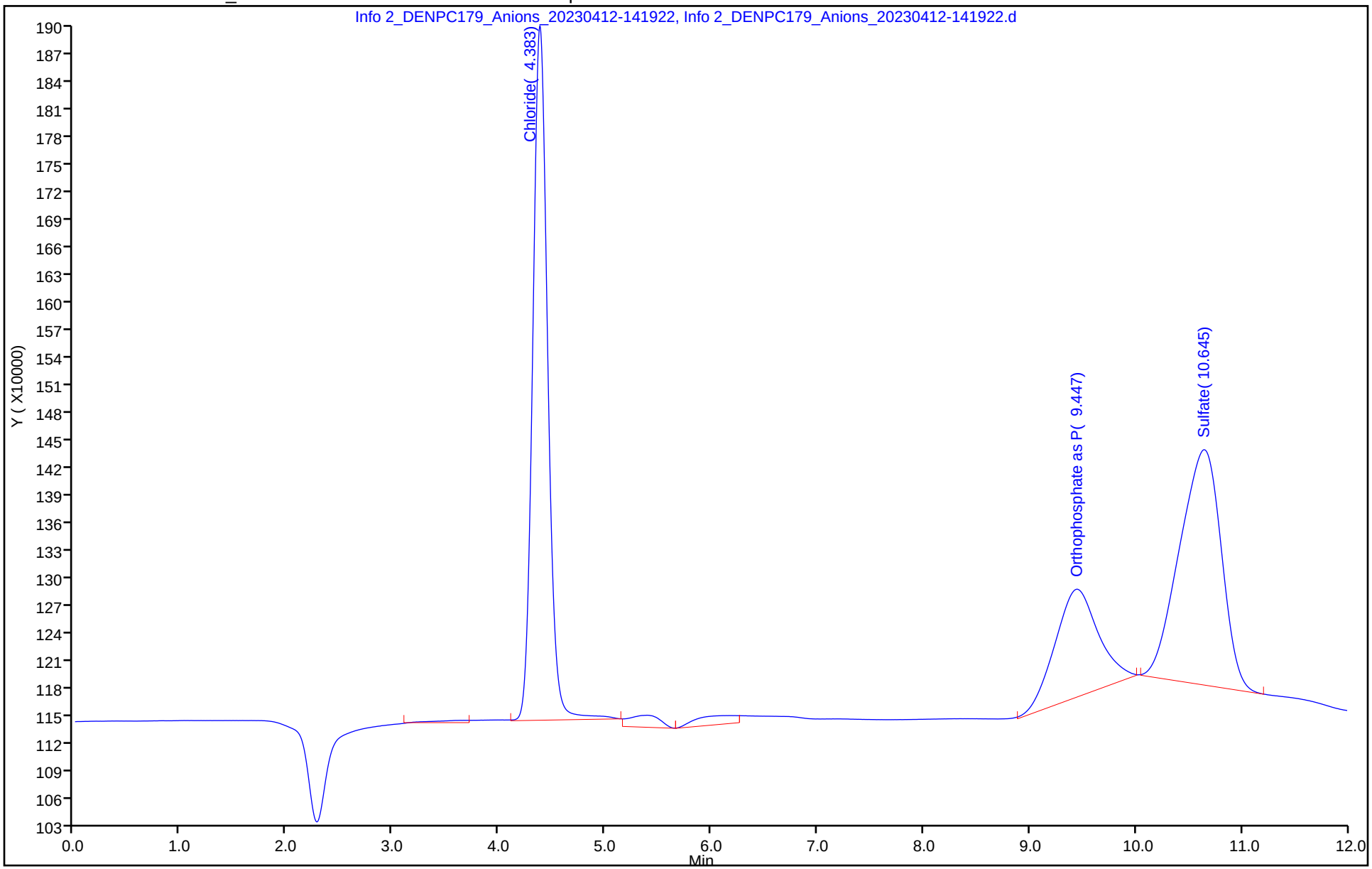
IC CAL cl/so4_00475 Amount Added: 0.04 Units: mL
IC Cal low_00703 Amount Added: 0.00 Units: mL

Report Date: 14-Apr-2023 14:03:49 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-141922.d

Injection Date:	12-Apr-2023 14:04:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD L1			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\20230412-120345.b\Info 2_DENPC179_Anions_20230412-141

Injection Date: 12-Apr-2023 14:04:00 Instrument ID: WC_IonChrom10

Lims ID: STD L1

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

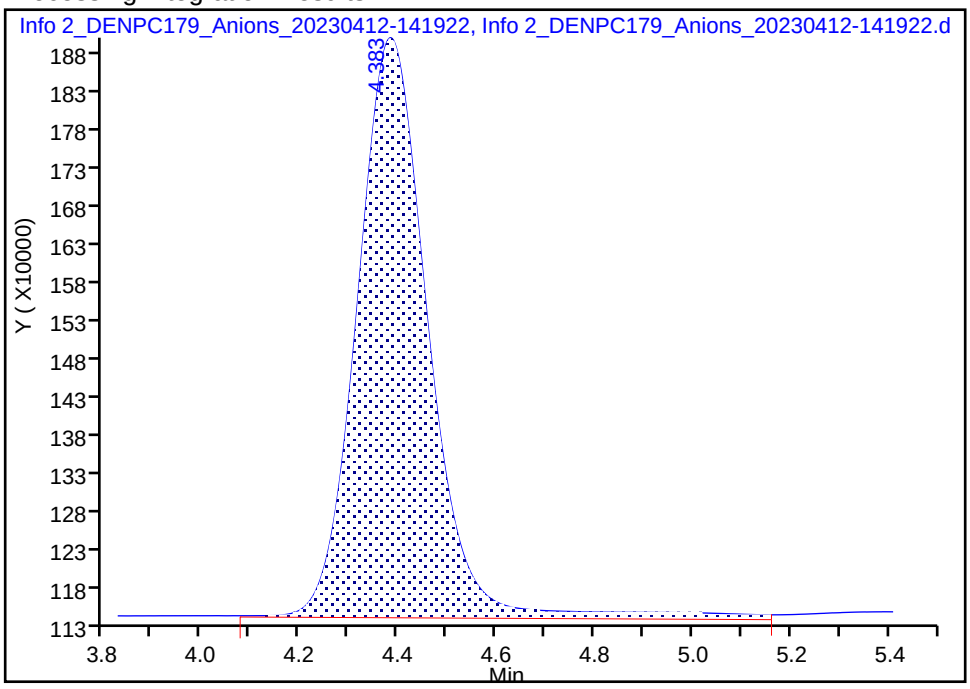
Column: Detector Info 2_091554_1

2 Chloride, CAS: 16887-00-6

Signal: 1

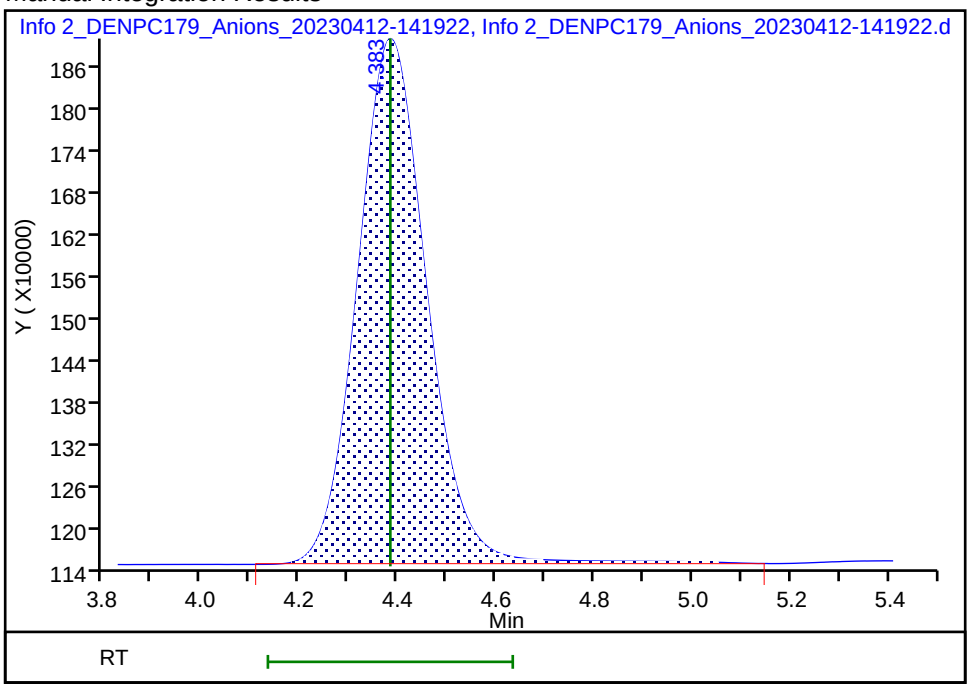
Processing Integration Results

RT: 4.38
Area: 7801695
Amount: 0.531210
Amount Units: ug/ml



Manual Integration Results

RT: 4.38
Area: 7464190
Amount: 0.526115
Amount Units: ug/ml



Reviewer: LVW8, 12-Apr-2023 15:40:25

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-141

Injection Date: 12-Apr-2023 14:04:00 Instrument ID: WC_IonChrom10

Lims ID: STD L1

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

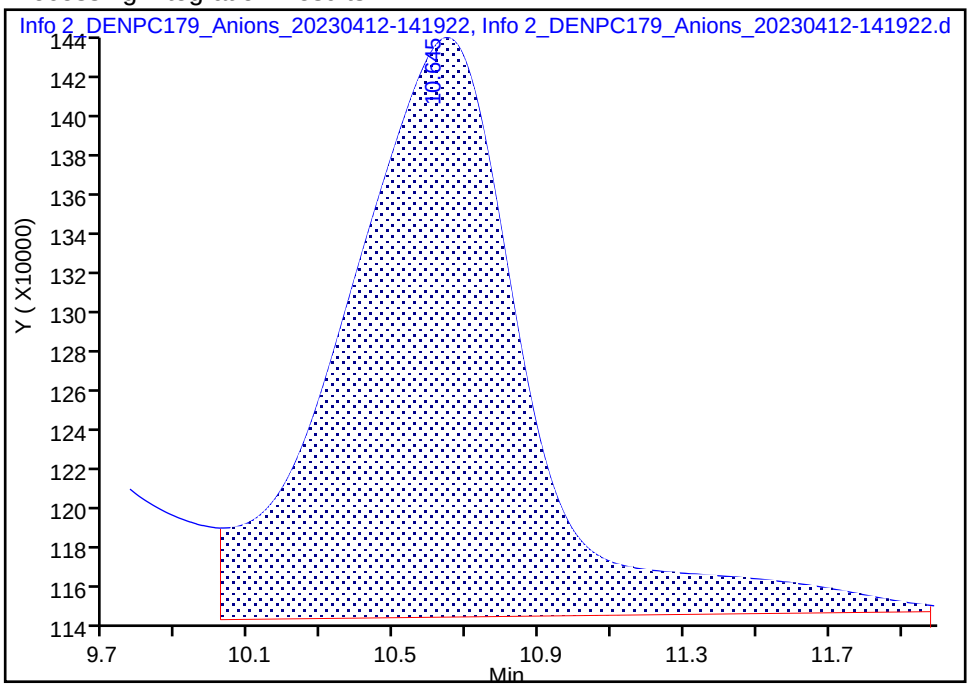
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

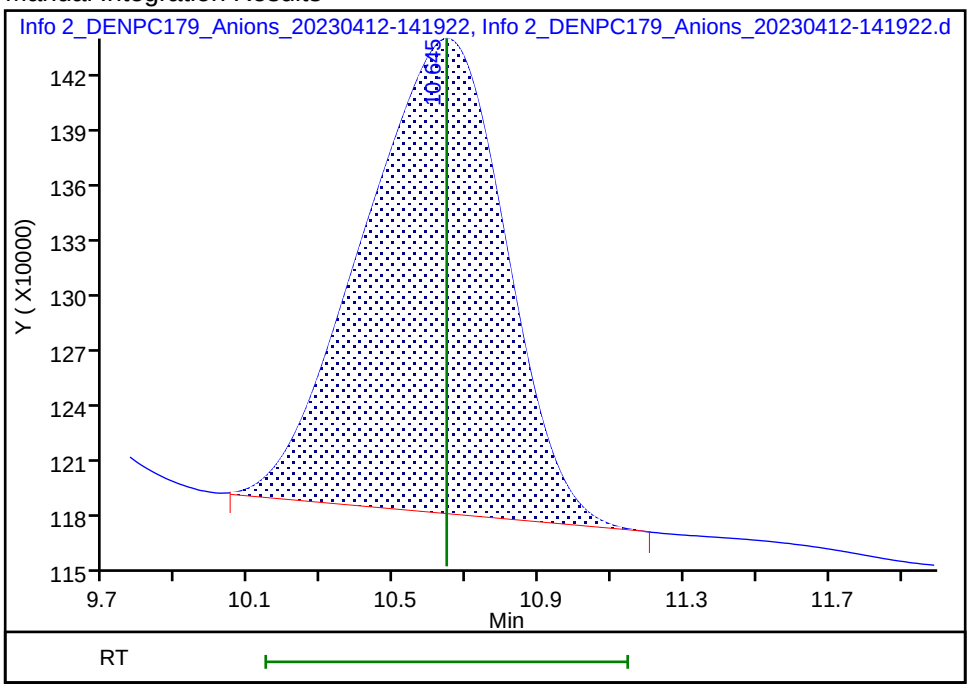
Processing Integration Results

RT: 10.65
Area: 10125141
Amount: 0.498424
Amount Units: ug/ml



Manual Integration Results

RT: 10.65
Area: 7022789
Amount: 0.601802
Amount Units: ug/ml



Reviewer: LVW8, 12-Apr-2023 15:40:28

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-143
Lims ID: STD L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 12-Apr-2023 14:19:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0120345-002
Misc. Info.: 280-0120345-002
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 14-Apr-2023 14:03:50 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1620

First Level Reviewer: LVW8 Date: 12-Apr-2023 15:41:35

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.163	3.163	0.000	6262507	0.2000	0.2038	Ma
2 Chloride	4.380	4.380	0.000	20679388	1.25	1.21	M
3 Nitrite as N	5.115	5.115	0.000	8087413	NC	NC	M
4 Bromide	6.352	6.352	0.000	2964734	0.2000	0.2942	
5 Nitrate as N	7.383	7.383	0.000	8434441	NC	NC	a
6 Orthophosphate as P	9.813	9.813	0.000	13953811	NC	NC	M
7 Sulfate	11.045	11.045	0.000	14421328	1.25	1.14	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

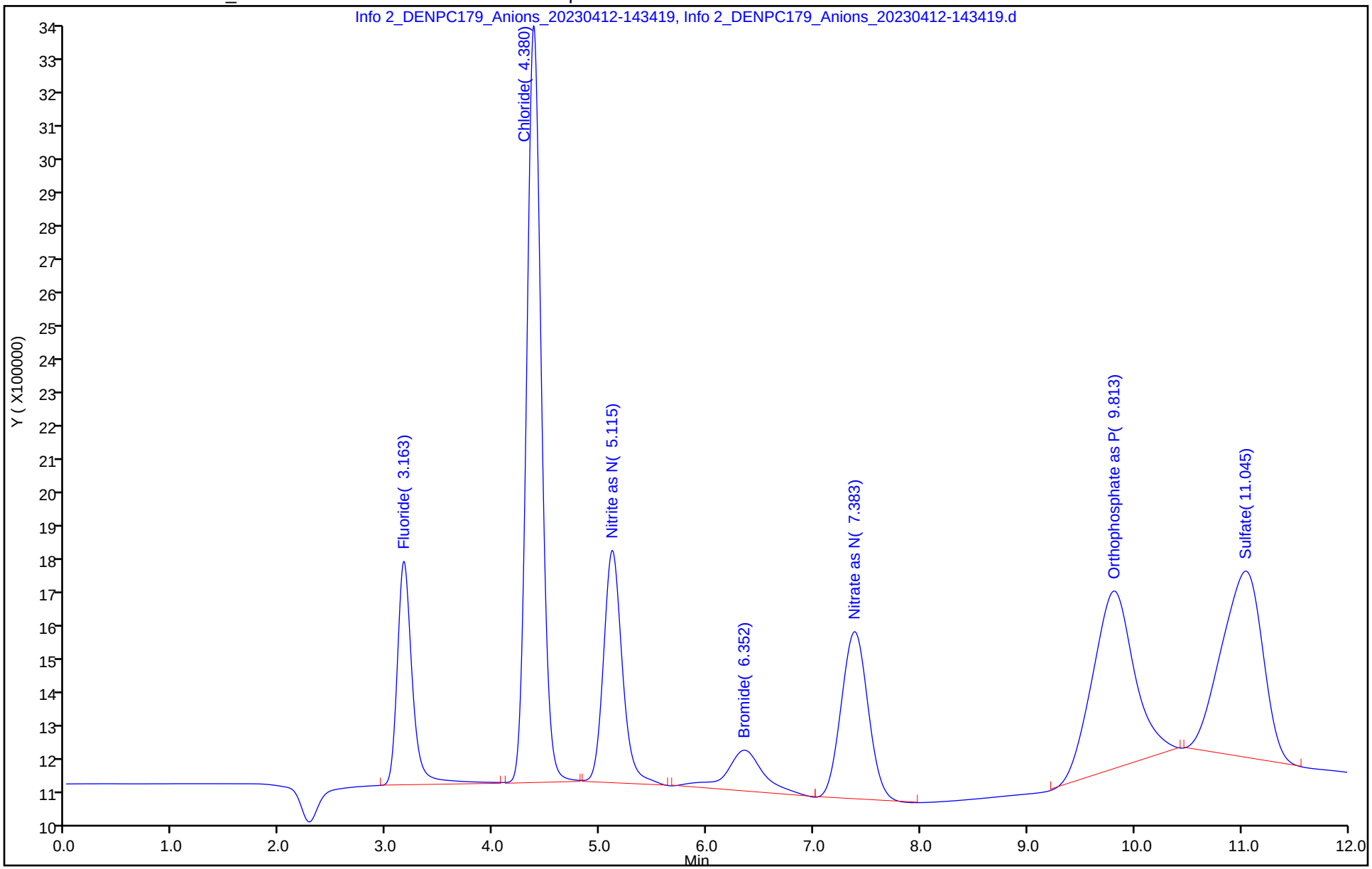
Reagents:

IC CAL cl/so4_00475 Amount Added: 0.10 Units: mL
IC Cal low_00703 Amount Added: 0.08 Units: mL

Report Date: 14-Apr-2023 14:03:51 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-143419.d				
Injection Date:	12-Apr-2023 14:19:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD L2			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		



5/31/2023 7:23 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

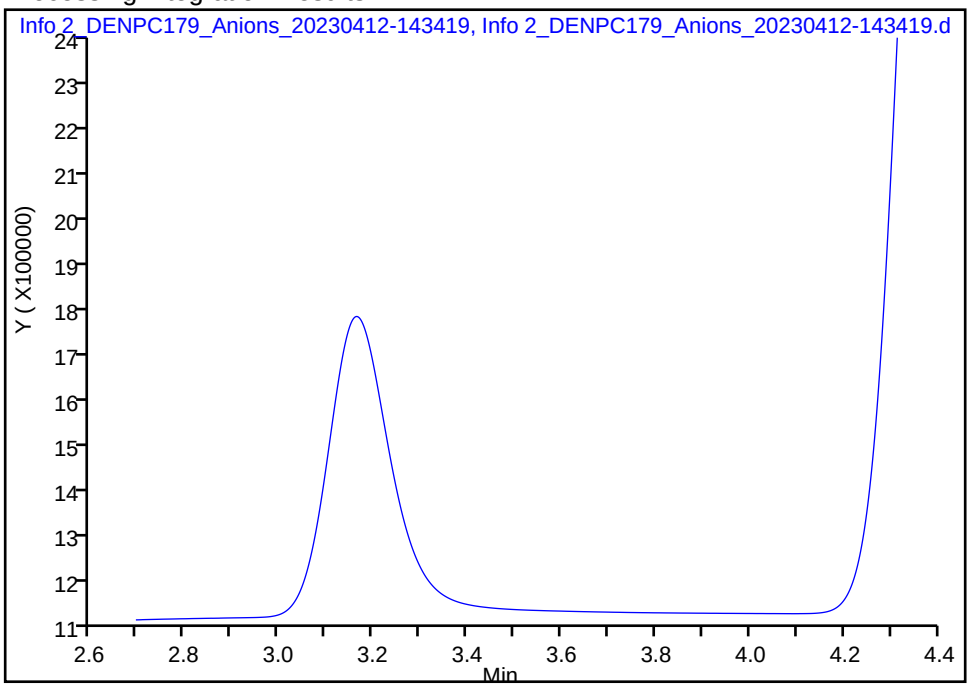
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-143				
Injection Date:	12-Apr-2023 14:19:00	Instrument ID:	WC_IonChrom10		
Lims ID:	STD L2				
Client ID:					
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	2
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		
Column:		Detector	Info 2_091554_1		

1 Fluoride, CAS: 16984-48-8

Signal: 1

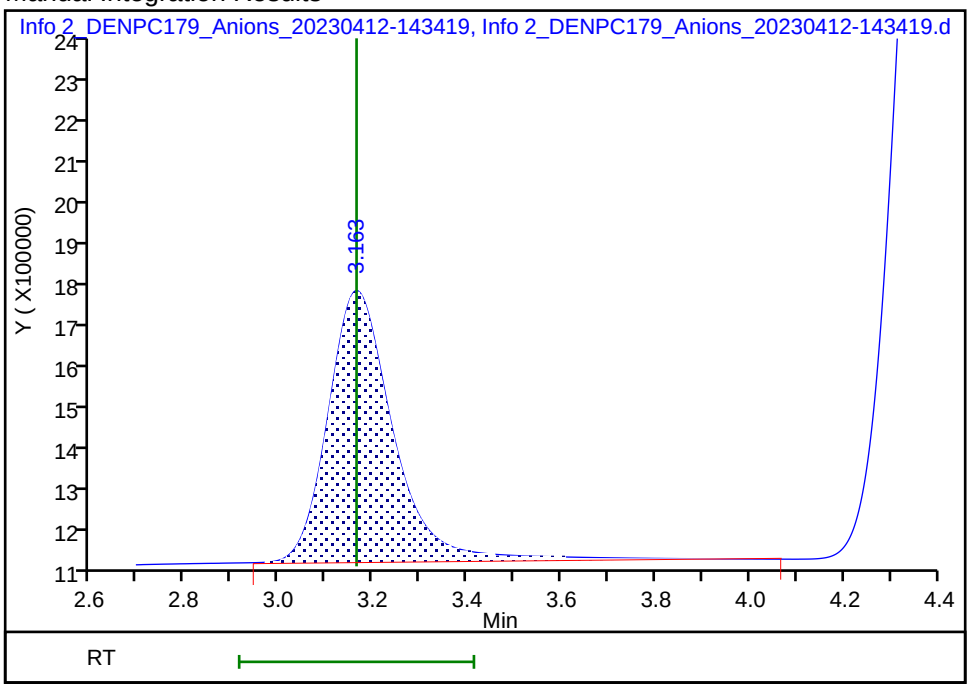
Not Detected
Expected RT: 3.16

Processing Integration Results



Manual Integration Results

RT: 3.16
Area: 6262507
Amount: 0.203766
Amount Units: ug/ml



Reviewer: LVW8, 12-Apr-2023 15:41:29
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\20230412-120345.b\Info 2_DENPC179_Anions_20230412-143

Injection Date: 12-Apr-2023 14:19:00 Instrument ID: WC_IonChrom10

Lims ID: STD L2

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

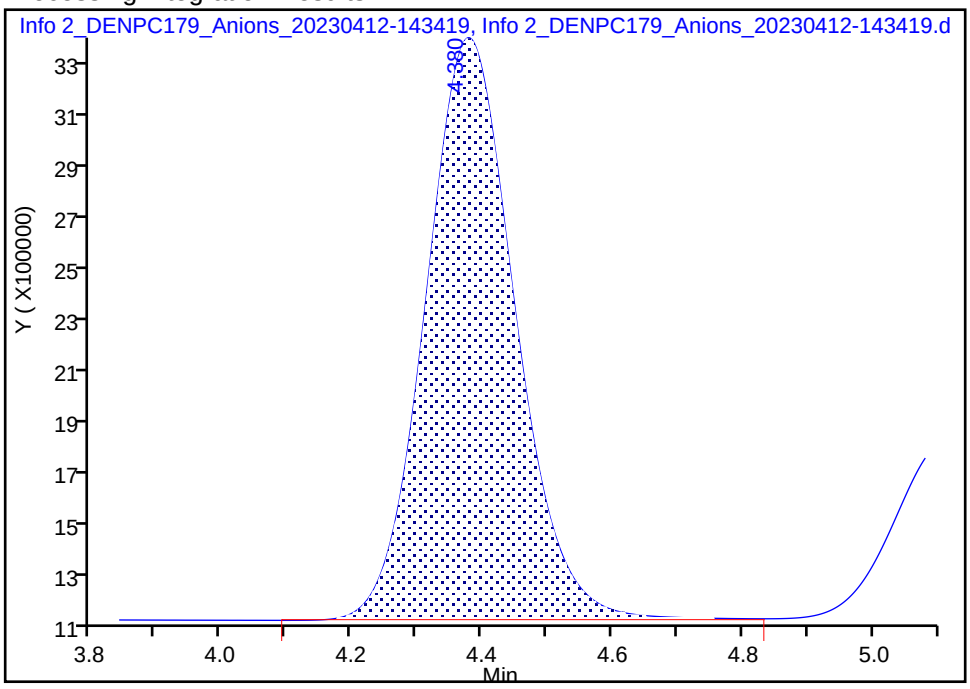
Column: Detector Info 2_091554_1

2 Chloride, CAS: 16887-00-6

Signal: 1

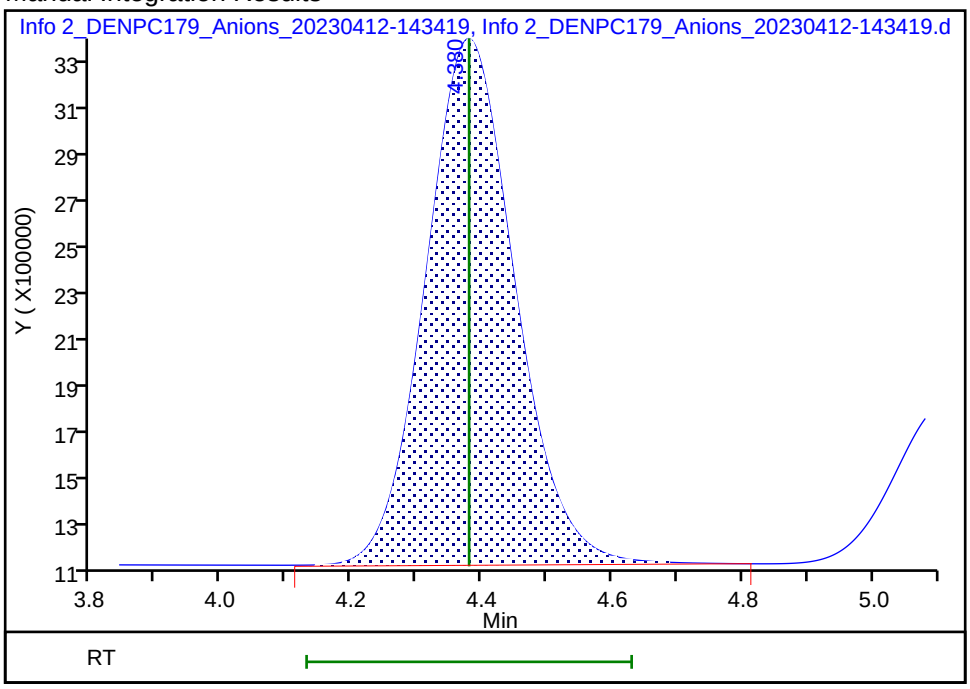
Processing Integration Results

RT: 4.38
Area: 20754406
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 4.38
Area: 20679388
Amount: 1.214764
Amount Units: ug/ml



Reviewer: LVW8, 12-Apr-2023 15:41:02

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-143

Injection Date: 12-Apr-2023 14:19:00 Instrument ID: WC_IonChrom10

Lims ID: STD L2

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

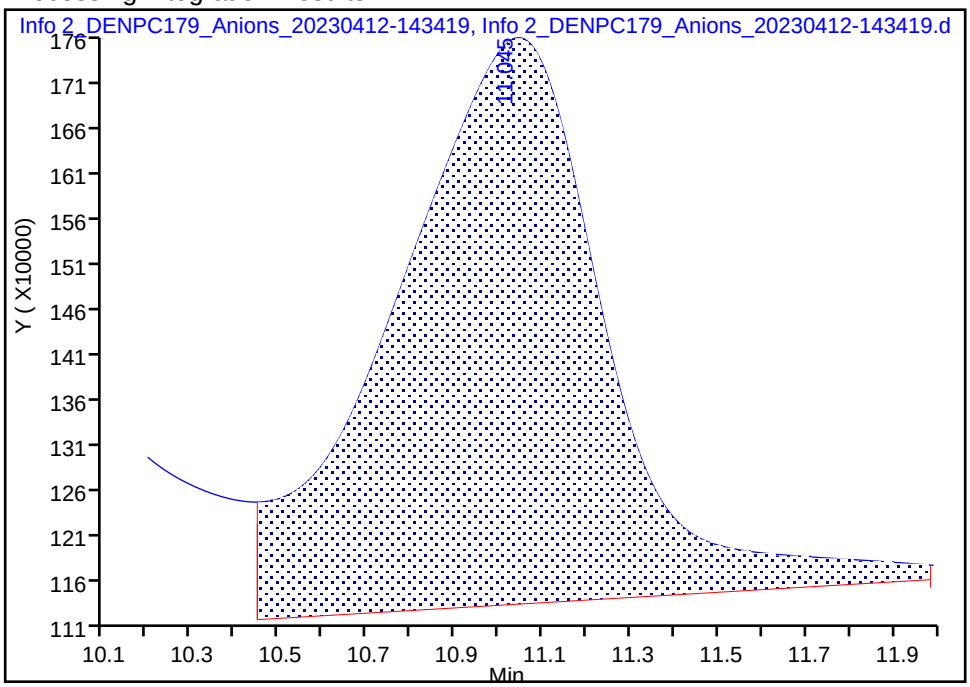
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

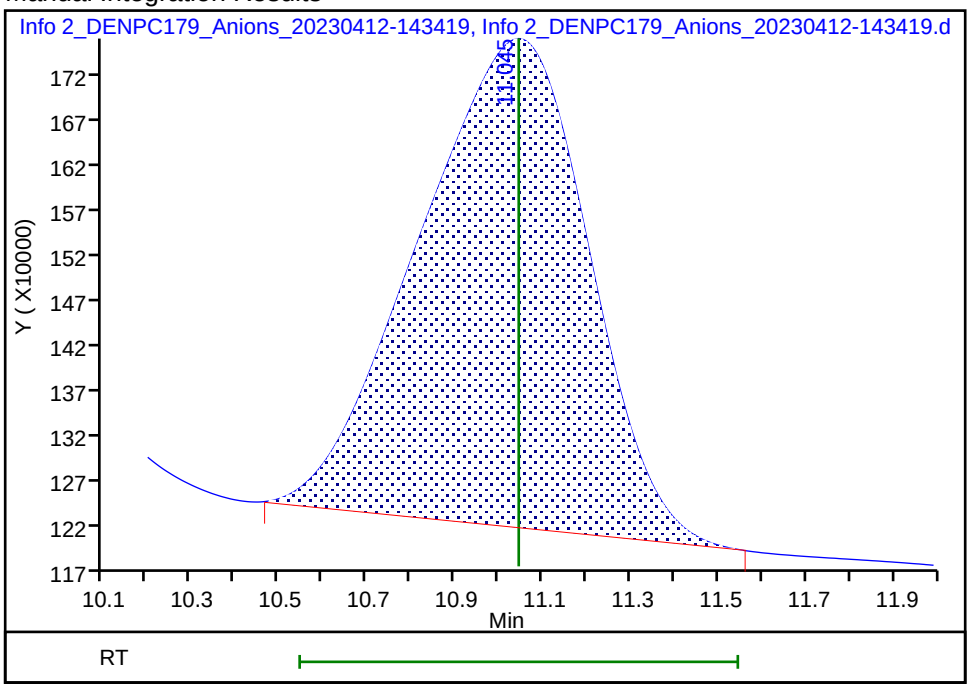
RT: 11.05
Area: 21000030
Amount: 0
Amount Units: ug/ml

Processing Integration Results



RT: 11.05
Area: 14421328
Amount: 1.137806
Amount Units: ug/ml

Manual Integration Results



Reviewer: LVW8, 12-Apr-2023 15:41:15

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-144
Lims ID: STD L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 12-Apr-2023 14:34:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0120345-003
Misc. Info.: 280-0120345-003
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 14-Apr-2023 14:03:53 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1620

First Level Reviewer: LVW8 Date: 12-Apr-2023 15:42:15

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.168	3.168	0.000	16995372	0.5000	0.4813	Ma
2 Chloride	4.383	4.383	0.000	43975181	2.50	2.43	M
3 Nitrite as N	5.118	5.118	0.000	21615246	NC	NC	M
4 Bromide	6.317	6.317	0.000	3222251	0.5000	0.3320	M
5 Nitrate as N	7.123	7.123	0.000	19909305	NC	NC	M
6 Orthophosphate as P	9.405	9.405	0.000	23629516	NC	NC	M
7 Sulfate	10.647	10.647	0.000	29311364	2.50	2.22	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

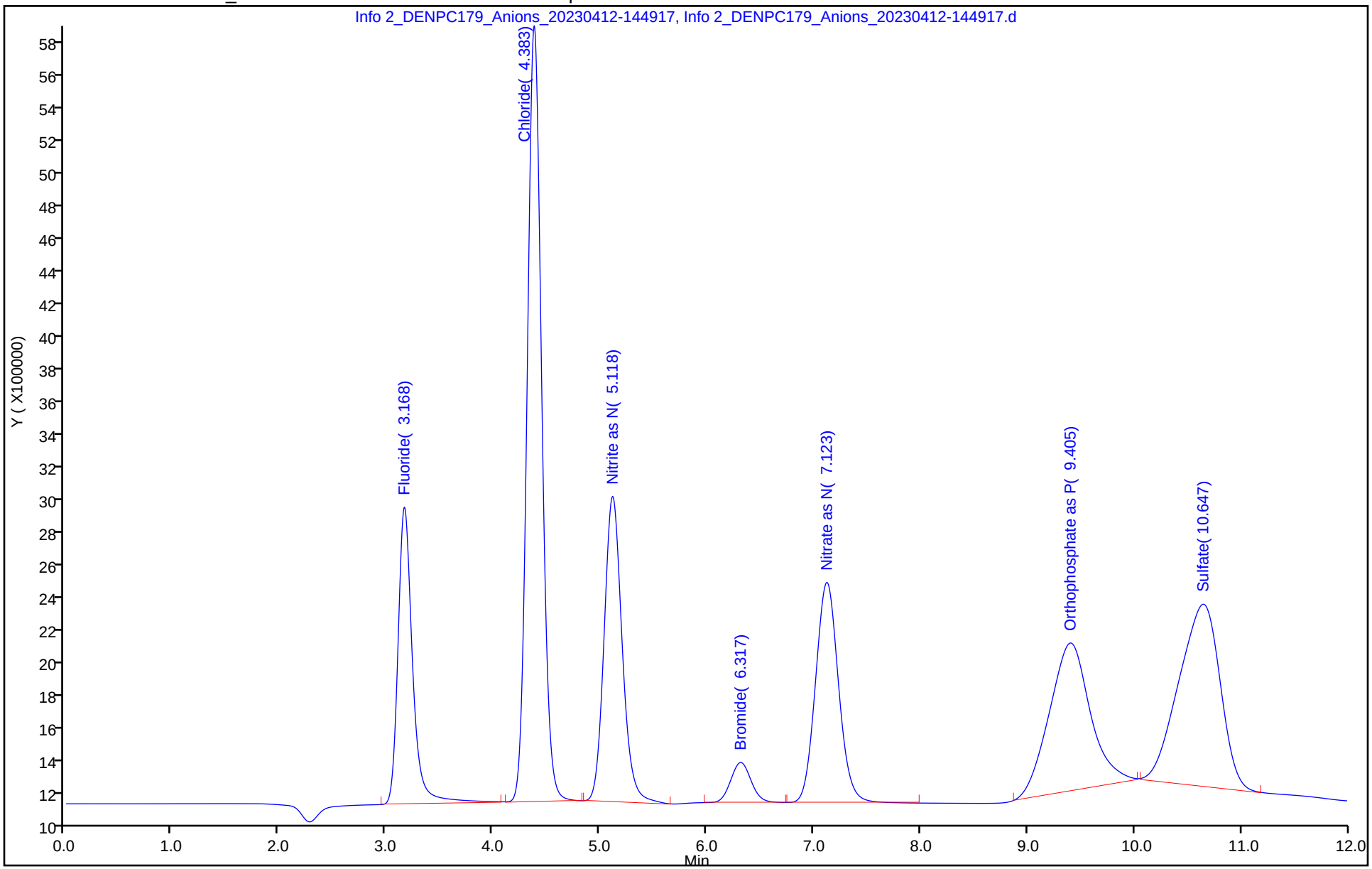
Reagents:

IC CAL cl/so4_00475 Amount Added: 0.20 Units: mL
IC Cal low_00703 Amount Added: 0.20 Units: mL

Report Date: 14-Apr-2023 14:03:54 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-144917.d				
Injection Date:	12-Apr-2023 14:34:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD L3			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\20230412-120345.b\Info 2_DENPC179_Anions_20230412-144

Injection Date: 12-Apr-2023 14:34:00 Instrument ID: WC_IonChrom10

Lims ID: STD L3

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

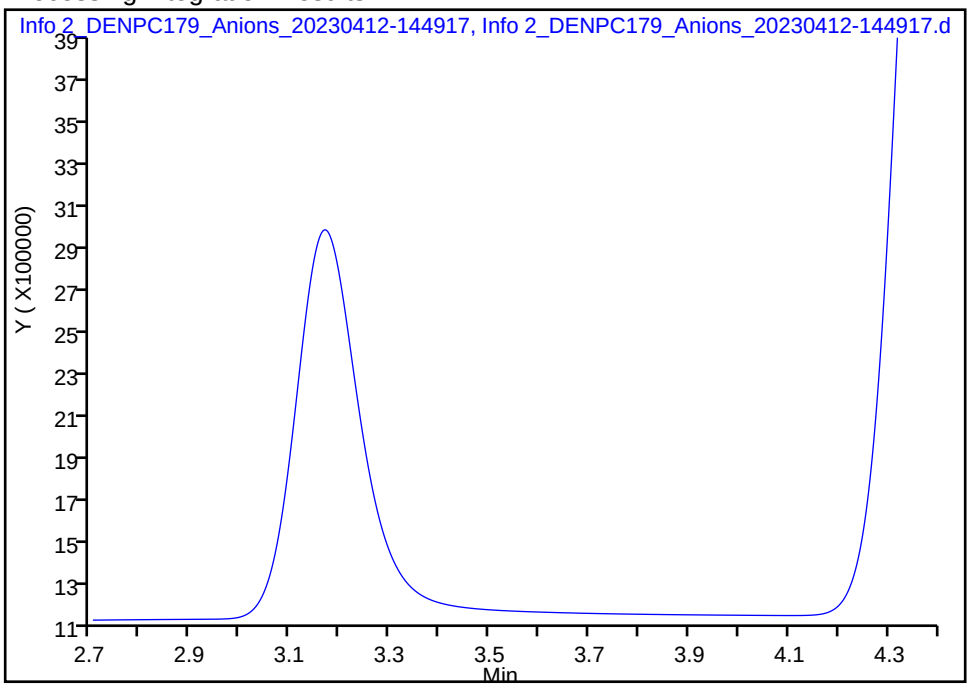
1 Fluoride, CAS: 16984-48-8

Signal: 1

Not Detected

Expected RT: 3.17

Processing Integration Results



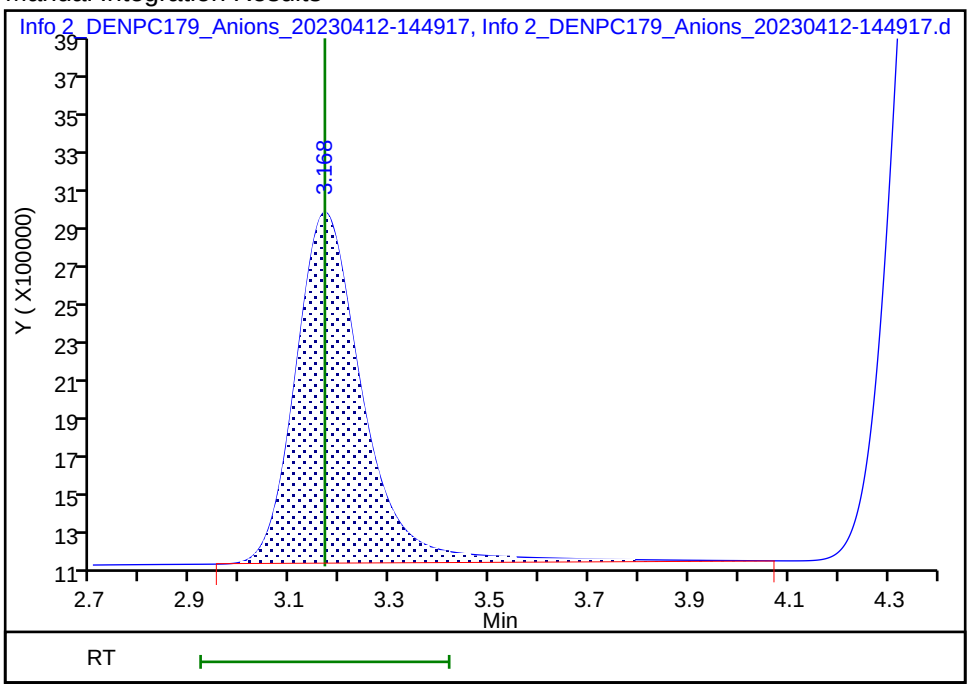
Manual Integration Results

RT: 3.17

Area: 16995372

Amount: 0.481313

Amount Units: ug/ml



Reviewer: LVW8, 12-Apr-2023 15:42:12

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\20230412-120345.b\Info 2_DENPC179_Anions_20230412-144

Injection Date: 12-Apr-2023 14:34:00 Instrument ID: WC_IonChrom10

Lims ID: STD L3

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

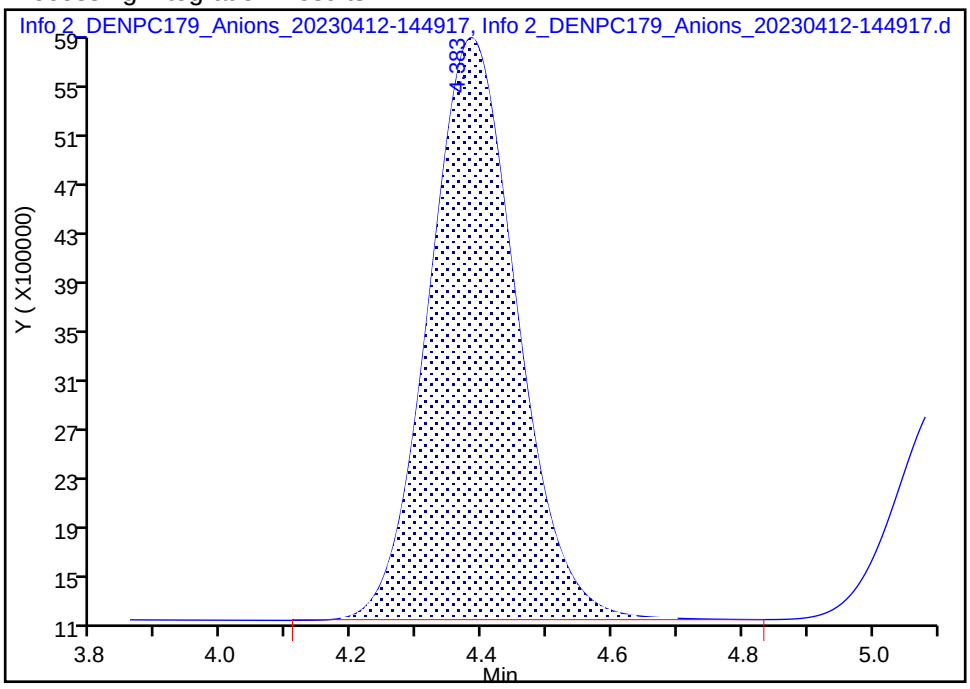
Column: Detector Info 2_091554_1

2 Chloride, CAS: 16887-00-6

Signal: 1

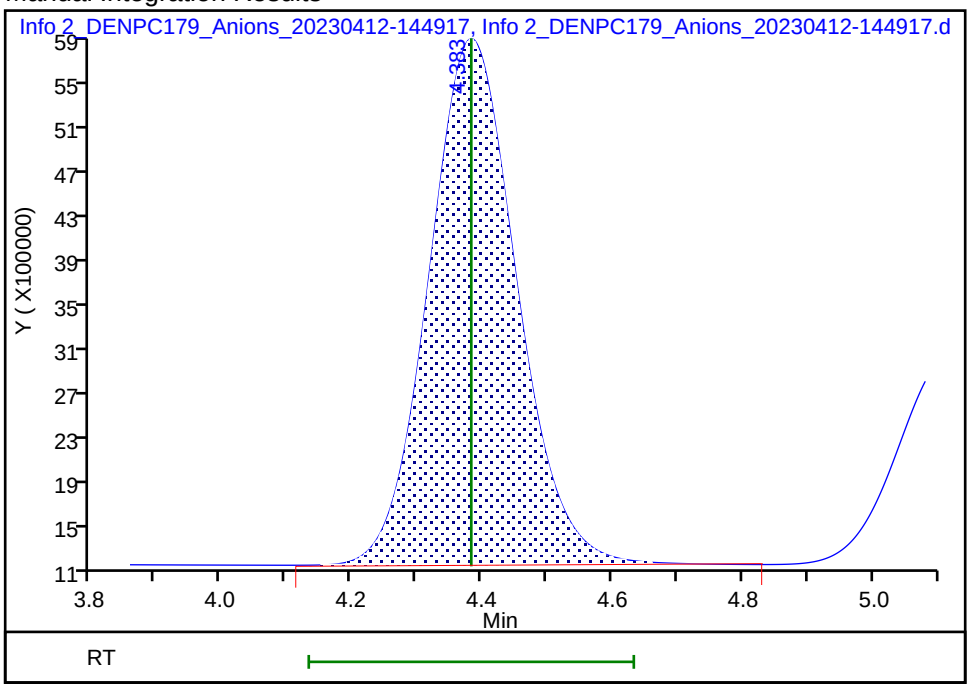
Processing Integration Results

RT: 4.38
Area: 44047360
Amount: 2.430258
Amount Units: ug/ml



Manual Integration Results

RT: 4.38
Area: 43975181
Amount: 2.428716
Amount Units: ug/ml



Reviewer: LVW8, 12-Apr-2023 15:41:50

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-144

Injection Date: 12-Apr-2023 14:34:00 Instrument ID: WC_IonChrom10

Lims ID: STD L3

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

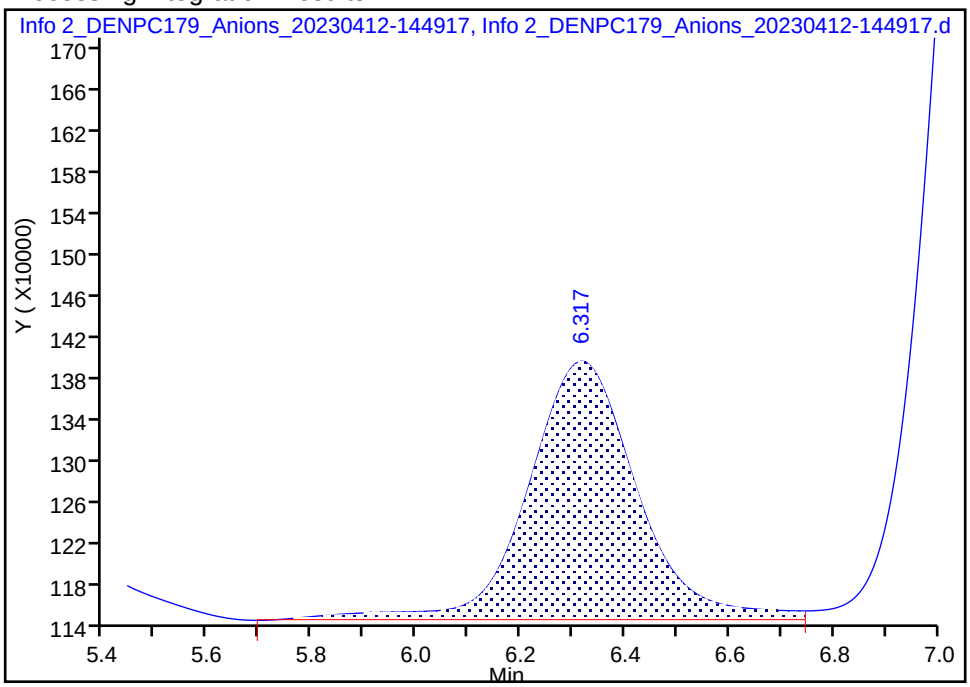
Column: Detector Info 2_091554_1

4 Bromide, CAS: 24959-67-9

Signal: 1

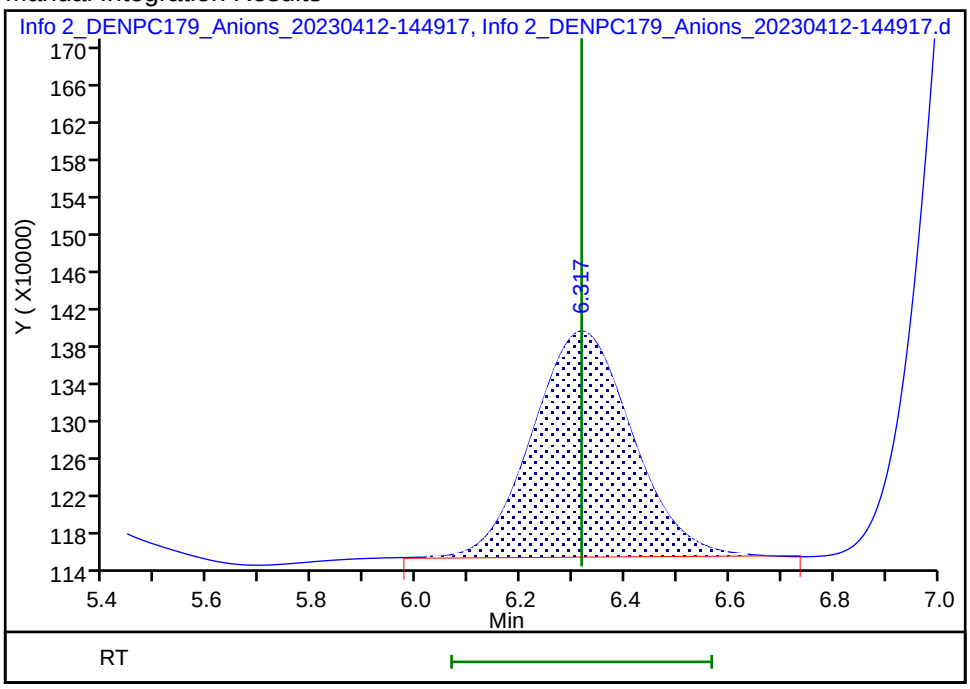
Processing Integration Results

RT: 6.32
Area: 3677937
Amount: 0.379796
Amount Units: ug/ml



Manual Integration Results

RT: 6.32
Area: 3222251
Amount: 0.331977
Amount Units: ug/ml



Reviewer: LVW8, 12-Apr-2023 15:41:59

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-144

Injection Date: 12-Apr-2023 14:34:00 Instrument ID: WC_IonChrom10

Lims ID: STD L3

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

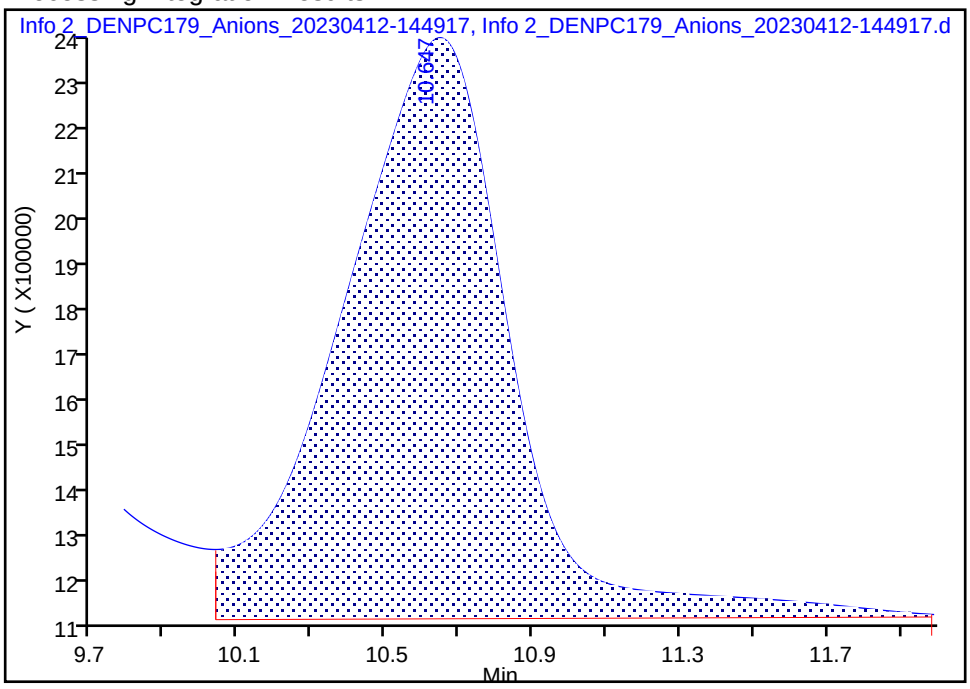
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

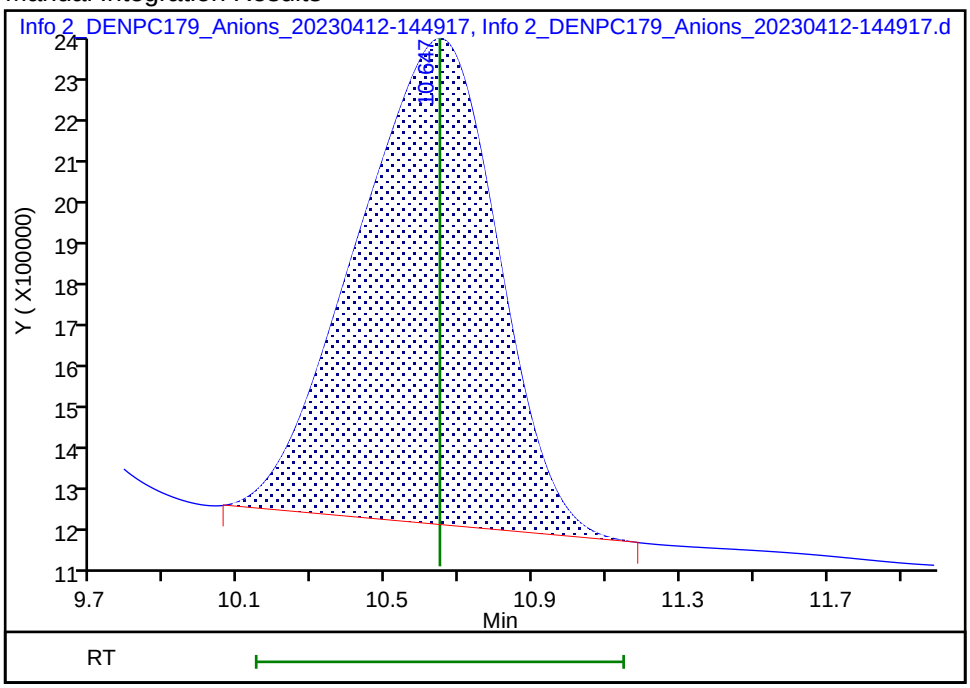
Processing Integration Results

RT: 10.65
Area: 37890185
Amount: 2.712749
Amount Units: ug/ml



Manual Integration Results

RT: 10.65
Area: 29311364
Amount: 2.216549
Amount Units: ug/ml



Reviewer: LVW8, 12-Apr-2023 15:42:07

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-150
Lims ID: STD L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 12-Apr-2023 14:49:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0120345-004
Misc. Info.: 280-0120345-004
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 14-Apr-2023 14:03:55 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1620

First Level Reviewer: LVW8 Date: 12-Apr-2023 15:42:52

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.168	3.168	0.000	37412858	1.00	1.01	Ma
2 Chloride	4.390	4.390	0.000	575824993	30.0	30.1	M
3 Nitrite as N	5.113	5.113	0.000	44844044	NC	NC	M
4 Bromide	6.308	6.308	0.000	6583592	1.00	0.8250	M
5 Nitrate as N	7.103	7.103	0.000	42066844	NC	NC	M
6 Orthophosphate as P	9.388	9.388	0.000	34760084	NC	NC	M
7 Sulfate	10.628	10.628	0.000	410479688	30.0	29.8	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

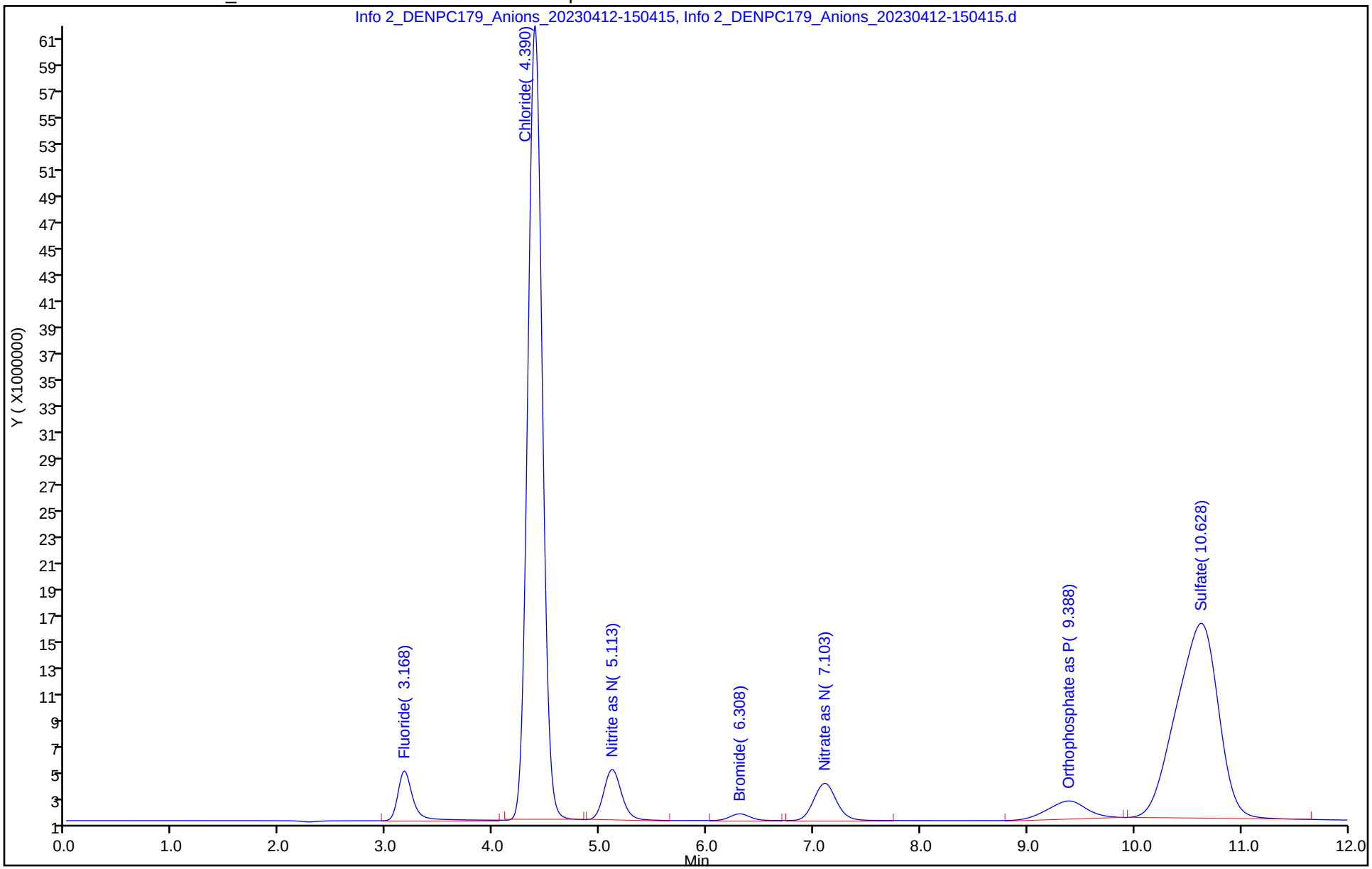
IC CAL cl/so4_00475 Amount Added: 2.40 Units: mL
IC Cal low_00703 Amount Added: 0.40 Units: mL

Report Date: 14-Apr-2023 14:03:55 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-150415.d

Injection Date:	12-Apr-2023 14:49:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD L4			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		



5/31/2023 7:23 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

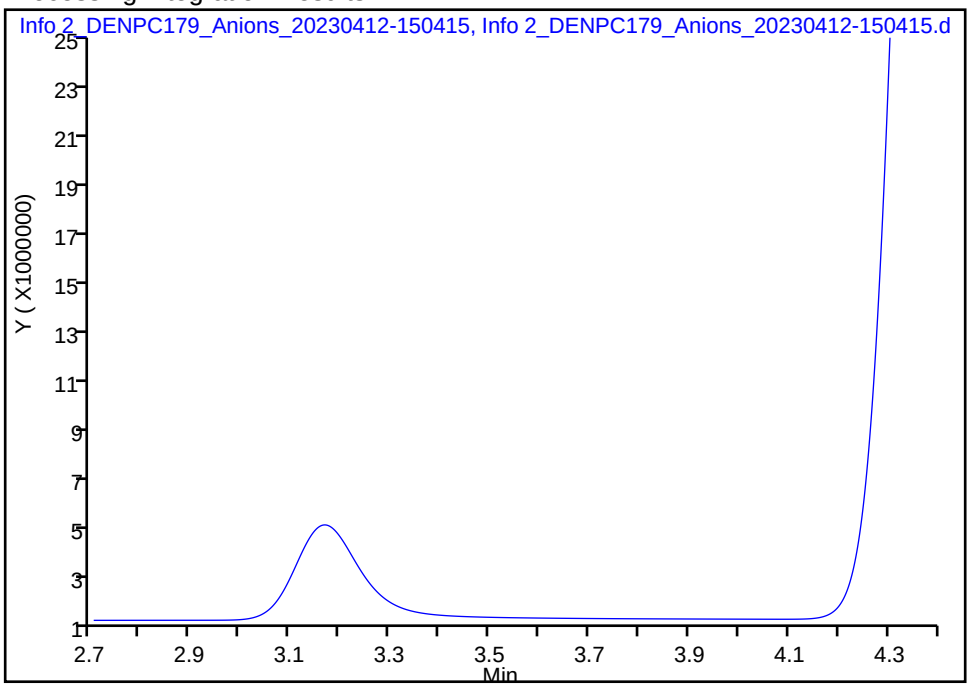
Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-150
Injection Date: 12-Apr-2023 14:49:00 Instrument ID: WC_IonChrom10
Lims ID: STD L4
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions_IC10 Limit Group: Wet - Anions 28D
Column: Detector Info 2_091554_1

1 Fluoride, CAS: 16984-48-8

Signal: 1

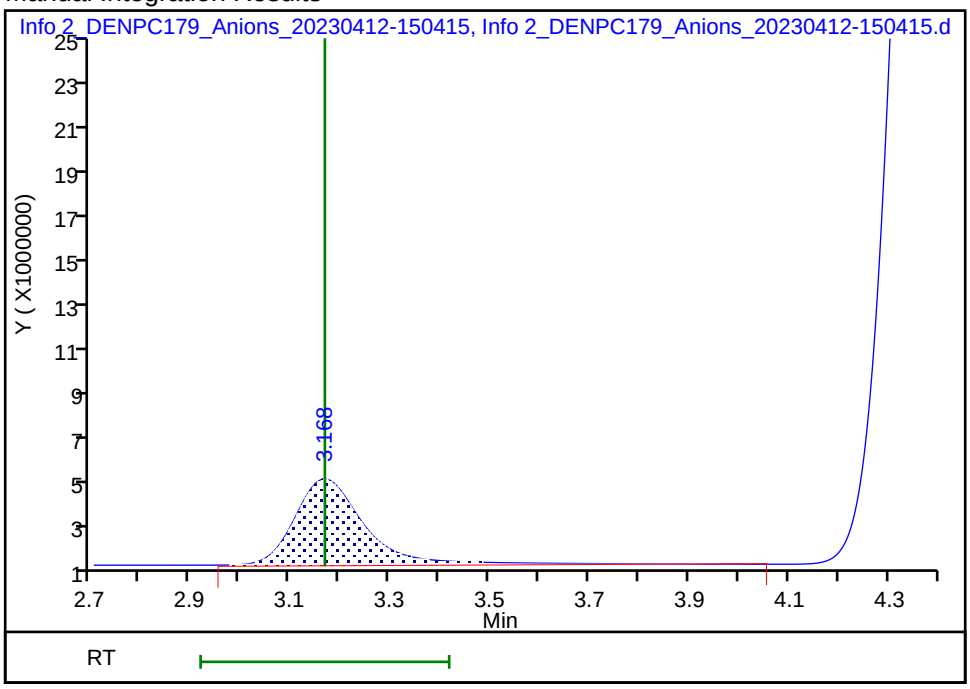
Not Detected
Expected RT: 3.17

Processing Integration Results



Manual Integration Results

RT: 3.17
Area: 37412858
Amount: 1.009300
Amount Units: ug/ml



Reviewer: LVW8, 12-Apr-2023 15:42:48
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

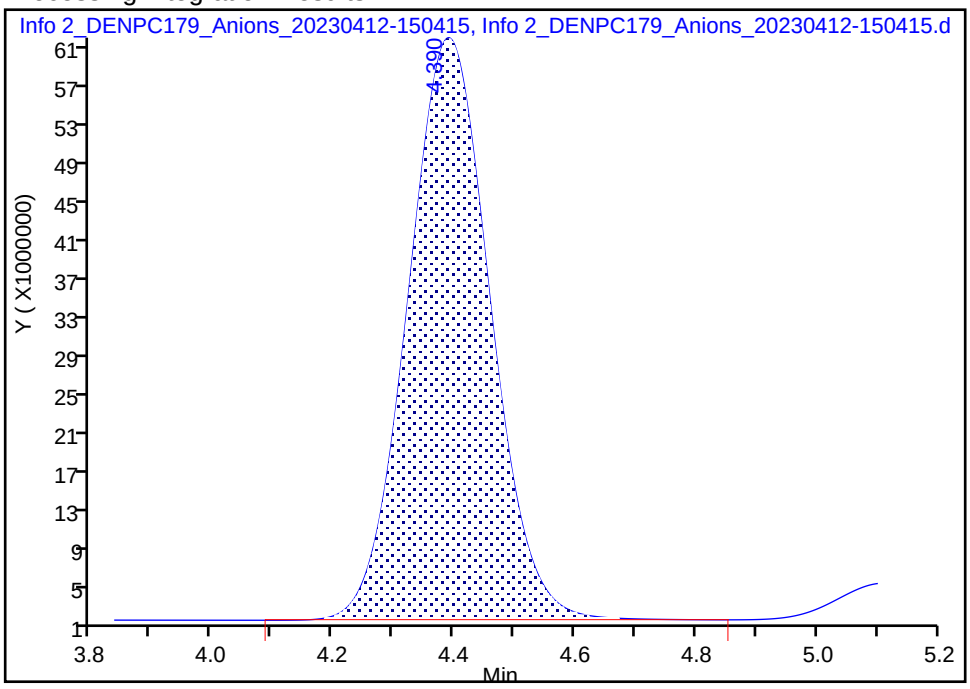
Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-150
Injection Date: 12-Apr-2023 14:49:00 Instrument ID: WC_IonChrom10
Lims ID: STD L4
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions_IC10 Limit Group: Wet - Anions 28D
Column: Detector Info 2_091554_1

2 Chloride, CAS: 16887-00-6

Signal: 1

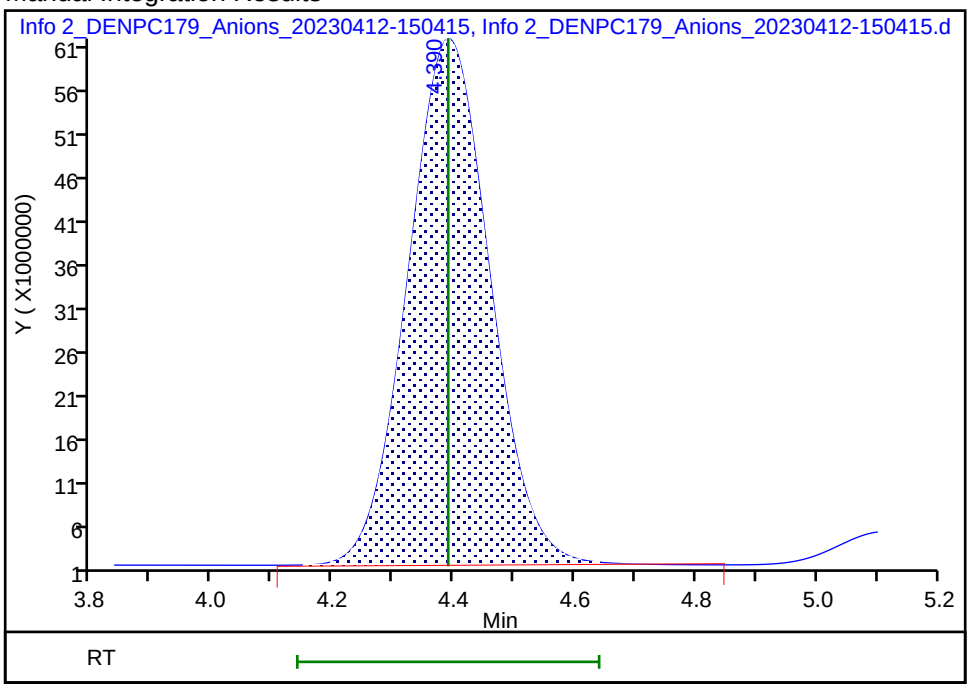
Processing Integration Results

RT: 4.39
Area: 577275465
Amount: 30.190881
Amount Units: ug/ml



Manual Integration Results

RT: 4.39
Area: 575824993
Amount: 30.143601
Amount Units: ug/ml



Reviewer: LVW8, 12-Apr-2023 15:42:25
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-150

Injection Date: 12-Apr-2023 14:49:00 Instrument ID: WC_IonChrom10

Lims ID: STD L4

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

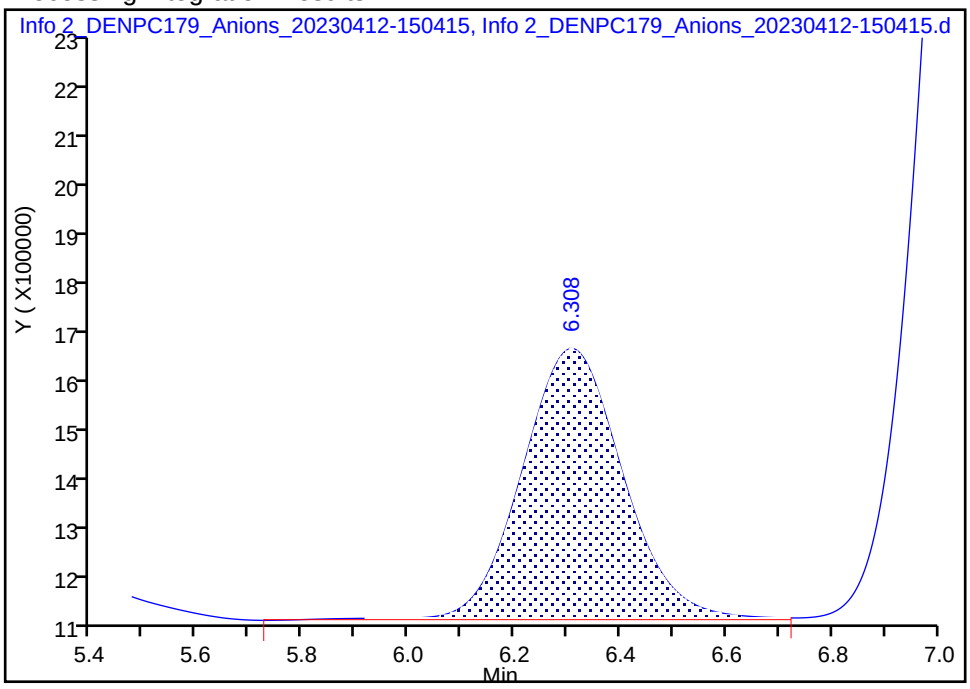
Column: Detector Info 2_091554_1

4 Bromide, CAS: 24959-67-9

Signal: 1

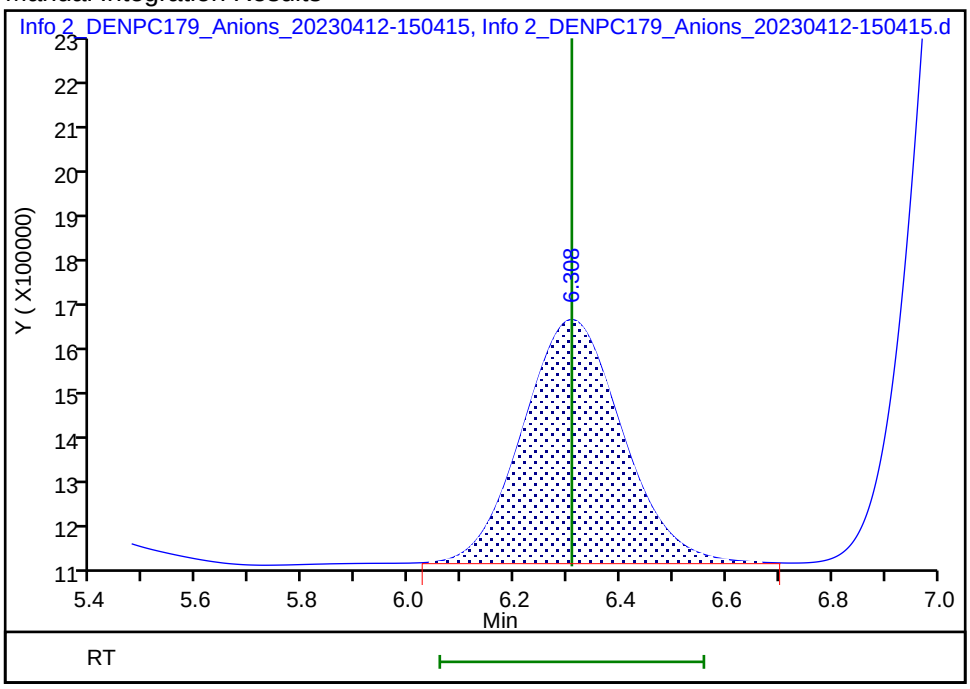
Processing Integration Results

RT: 6.31
Area: 6790567
Amount: 0.851251
Amount Units: ug/ml



Manual Integration Results

RT: 6.31
Area: 6583592
Amount: 0.824970
Amount Units: ug/ml



Reviewer: LVW8, 12-Apr-2023 15:42:31

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

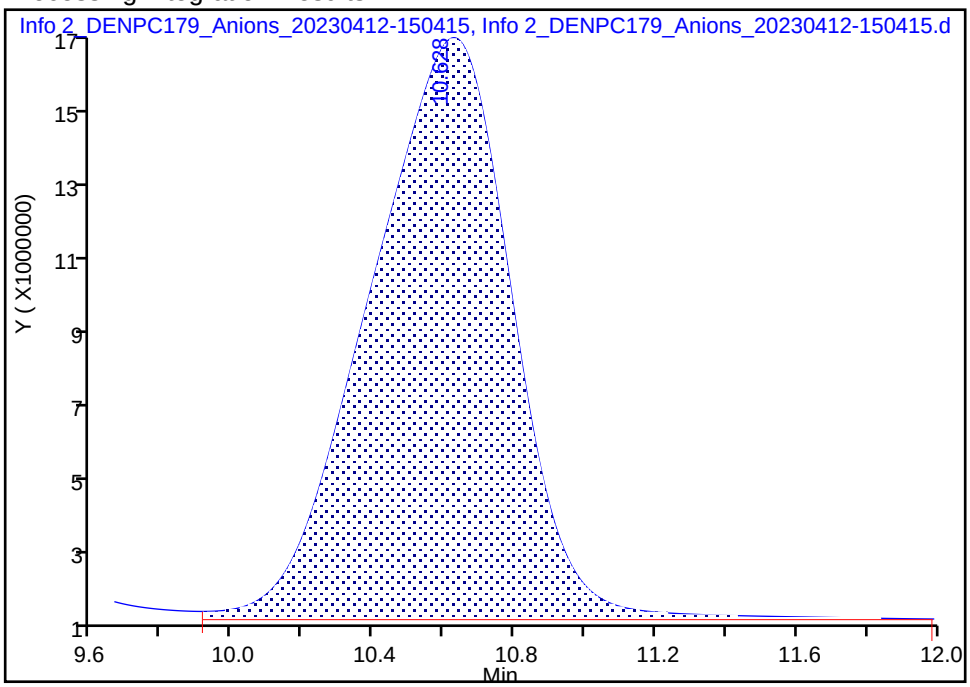
Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-150
Injection Date: 12-Apr-2023 14:49:00 Instrument ID: WC_IonChrom10
Lims ID: STD L4
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions_IC10 Limit Group: Wet - Anions 28D
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

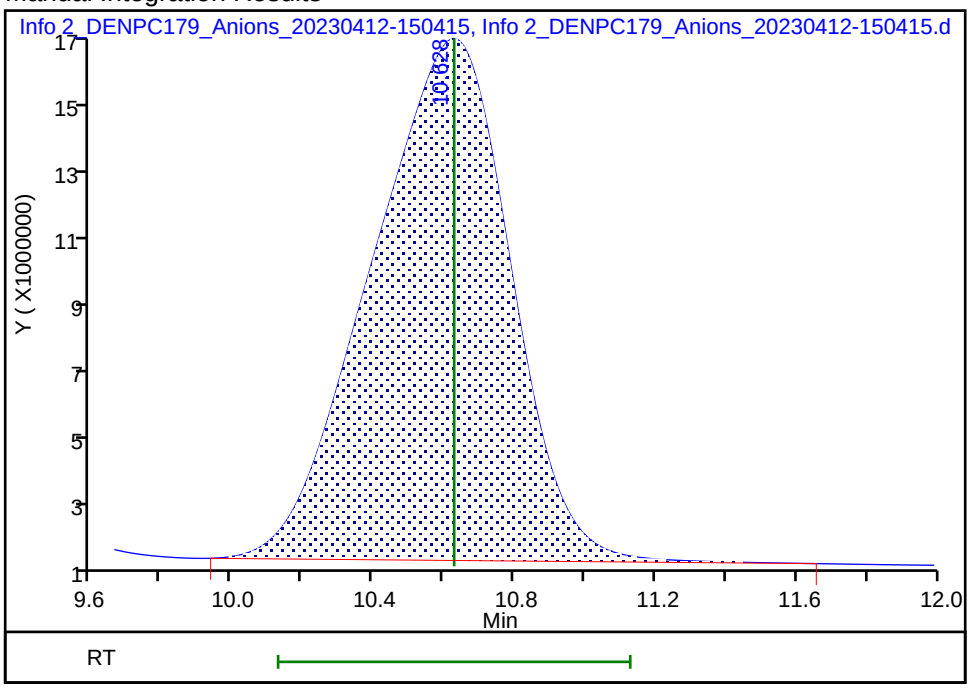
Processing Integration Results

RT: 10.63
Area: 426510642
Amount: 30.246646
Amount Units: ug/ml



Manual Integration Results

RT: 10.63
Area: 410479688
Amount: 29.831152
Amount Units: ug/ml



Reviewer: LVW8, 12-Apr-2023 15:42:42
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-151
Lims ID: STD L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 12-Apr-2023 15:04:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0120345-005
Misc. Info.: 280-0120345-005
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 14-Apr-2023 14:03:57 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1620

First Level Reviewer: LVW8 Date: 12-Apr-2023 15:43:24

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.170	3.170	0.000	96629288	2.50	2.54	Ma
2 Chloride	4.405	4.405	0.000	1149686166	60.0	60.0	M
3 Nitrite as N	5.107	5.107	0.000	116231748	NC	NC	M
4 Bromide	6.298	6.298	0.000	17672625	2.50	2.45	
5 Nitrate as N	7.078	7.078	0.000	112738215	NC	NC	M
6 Orthophosphate as P	9.368	9.368	0.000	65067694	NC	NC	M
7 Sulfate	10.610	10.610	0.000	828007497	60.0	60.1	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

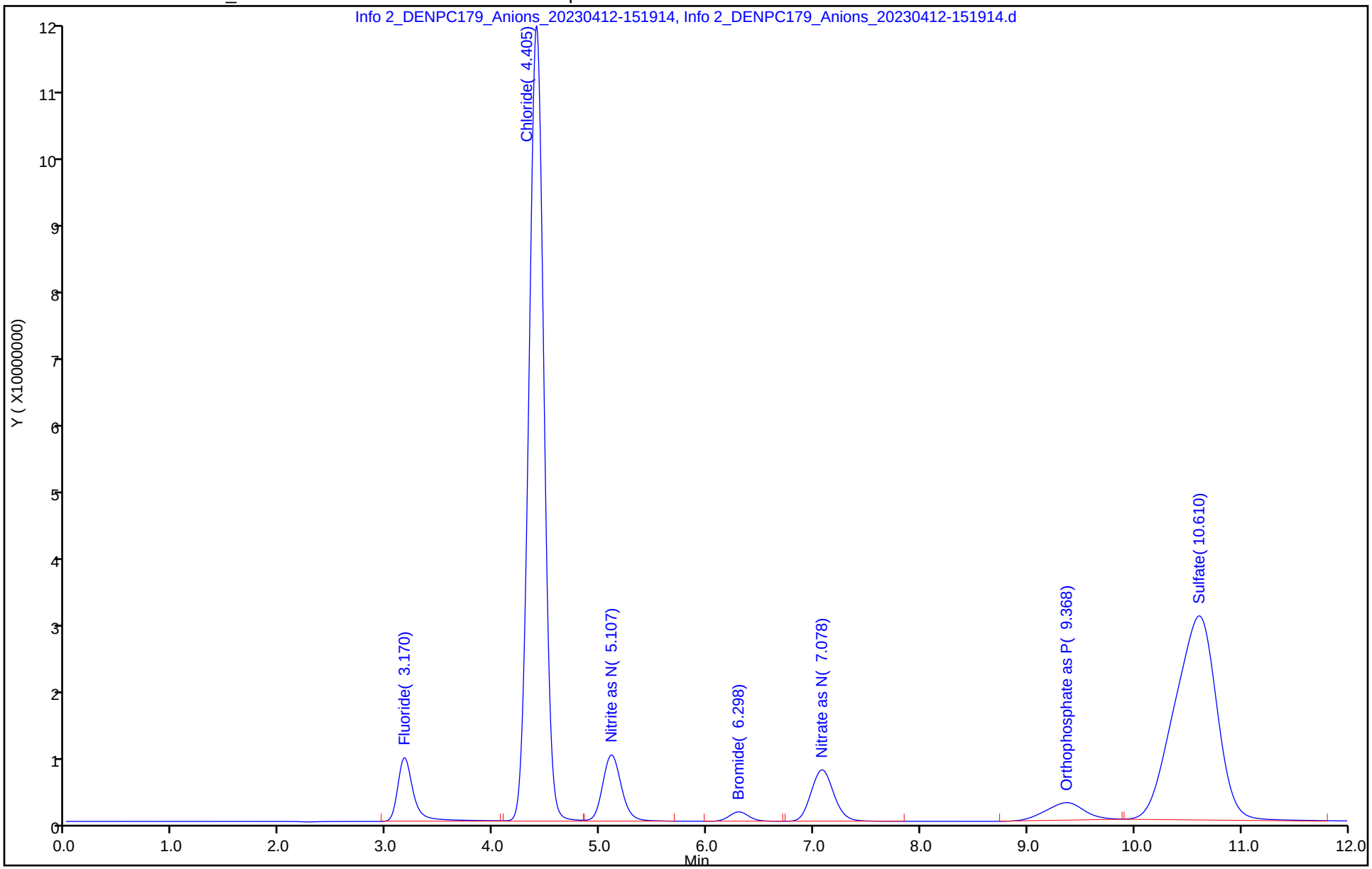
Reagents:

IC CAL cl/so4_00475 Amount Added: 4.80 Units: mL
IC Cal low_00703 Amount Added: 1.00 Units: mL

Report Date: 14-Apr-2023 14:03:58 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-151914.d				
Injection Date:	12-Apr-2023 15:04:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD L5			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		



5/31/2023 7:23 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-151

Injection Date: 12-Apr-2023 15:04:00 Instrument ID: WC_IonChrom10

Lims ID: STD L5

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

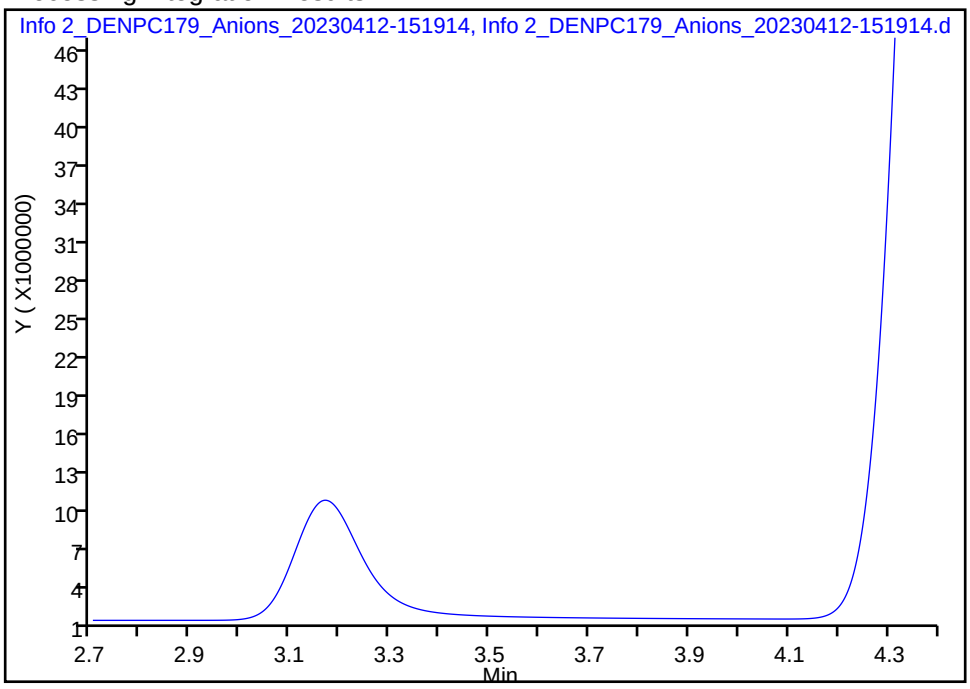
1 Fluoride, CAS: 16984-48-8

Signal: 1

Not Detected

Expected RT: 3.17

Processing Integration Results



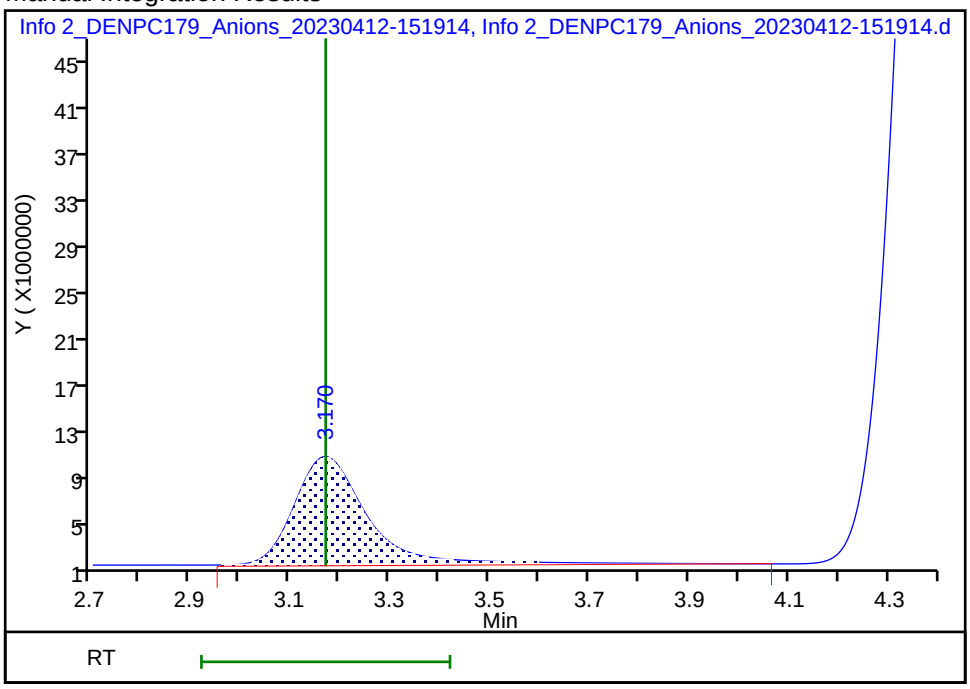
Manual Integration Results

RT: 3.17

Area: 96629288

Amount: 2.540610

Amount Units: ug/ml



Reviewer: LVW8, 12-Apr-2023 15:43:20

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\20230412-120345.b\Info 2_DENPC179_Anions_20230412-151

Injection Date: 12-Apr-2023 15:04:00 Instrument ID: WC_IonChrom10

Lims ID: STD L5

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

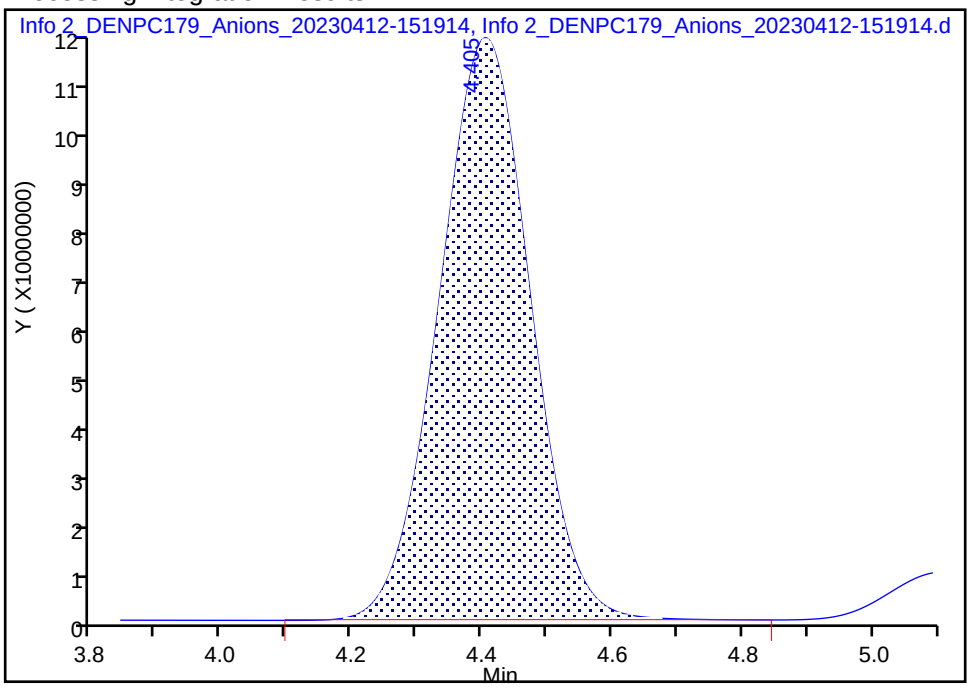
Column: Detector Info 2_091554_1

2 Chloride, CAS: 16887-00-6

Signal: 1

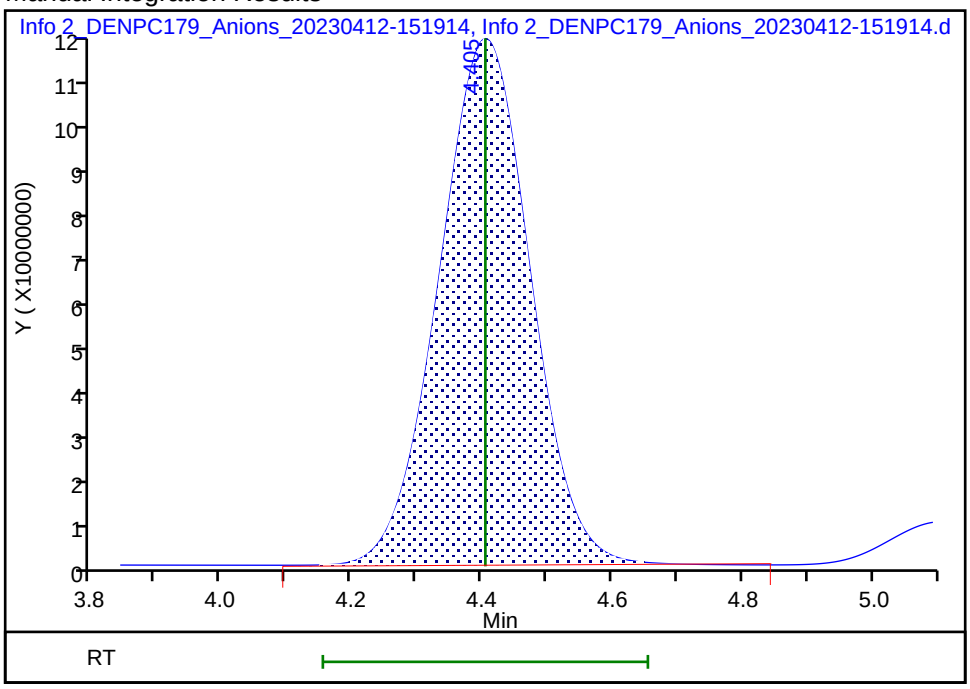
Processing Integration Results

RT: 4.41
Area: 1150534467
Amount: 60.058368
Amount Units: ug/ml



Manual Integration Results

RT: 4.41
Area: 1149686166
Amount: 60.047713
Amount Units: ug/ml



Reviewer: LVW8, 12-Apr-2023 15:43:05

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-151

Injection Date: 12-Apr-2023 15:04:00 Instrument ID: WC_IonChrom10

Lims ID: STD L5

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

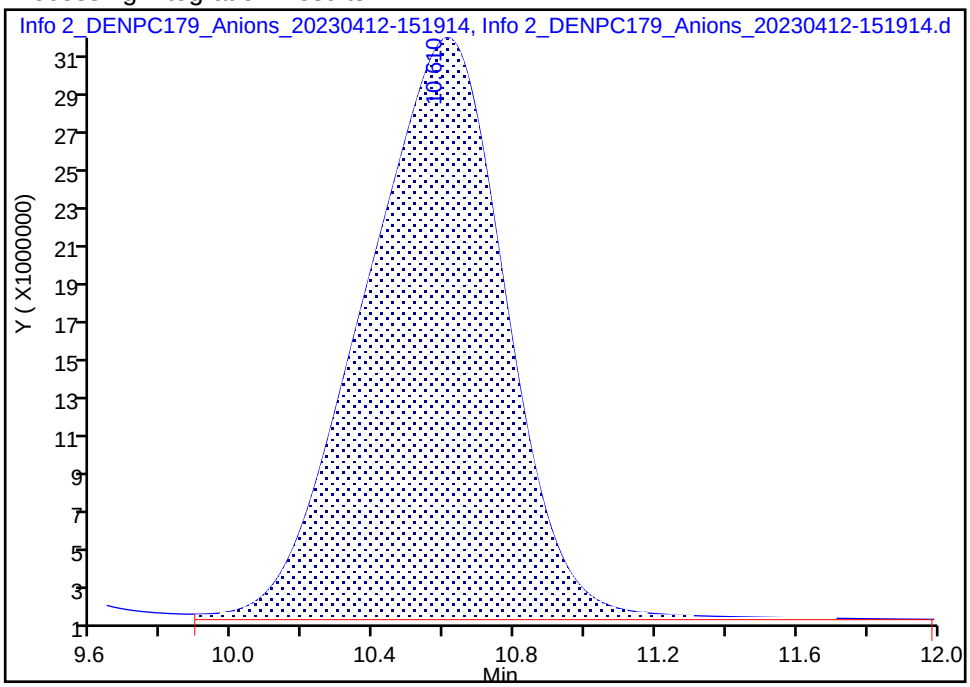
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

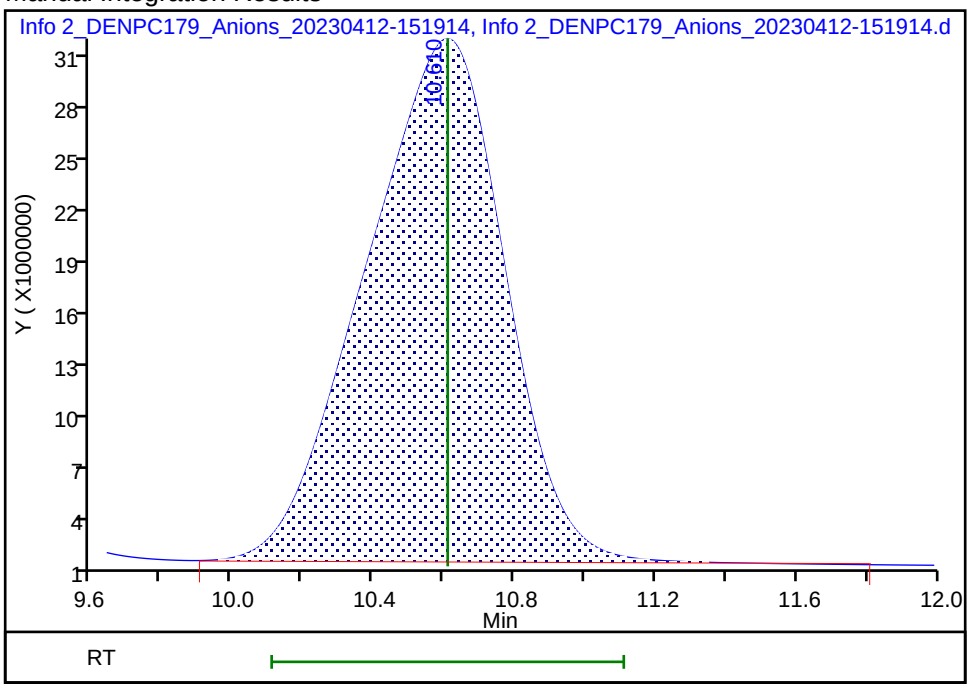
Processing Integration Results

RT: 10.61
Area: 849186271
Amount: 60.463432
Amount Units: ug/ml



Manual Integration Results

RT: 10.61
Area: 828007497
Amount: 60.079901
Amount Units: ug/ml



Reviewer: LVW8, 12-Apr-2023 15:43:15

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153
Lims ID: STD L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 12-Apr-2023 15:19:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0120345-006
Misc. Info.: 280-0120345-006
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 14-Apr-2023 14:04:00 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1620

First Level Reviewer: LVW8 Date: 12-Apr-2023 17:08:50

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.175	3.175	0.000	190381963	5.00	4.97	Ma
2 Chloride	4.428	4.428	0.000	1914243902	100.0	99.9	M
3 Nitrite as N	5.103	5.103	0.000	229518060	NC	NC	M
4 Bromide	6.292	6.292	0.000	37078318	5.00	5.30	
5 Nitrate as N	7.057	7.057	0.000	230663663	NC	NC	M
6 Orthophosphate as P	9.353	9.353	0.000	112155923	NC	NC	M
7 Sulfate	10.592	10.592	0.000	1384314036	100.0	100.4	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

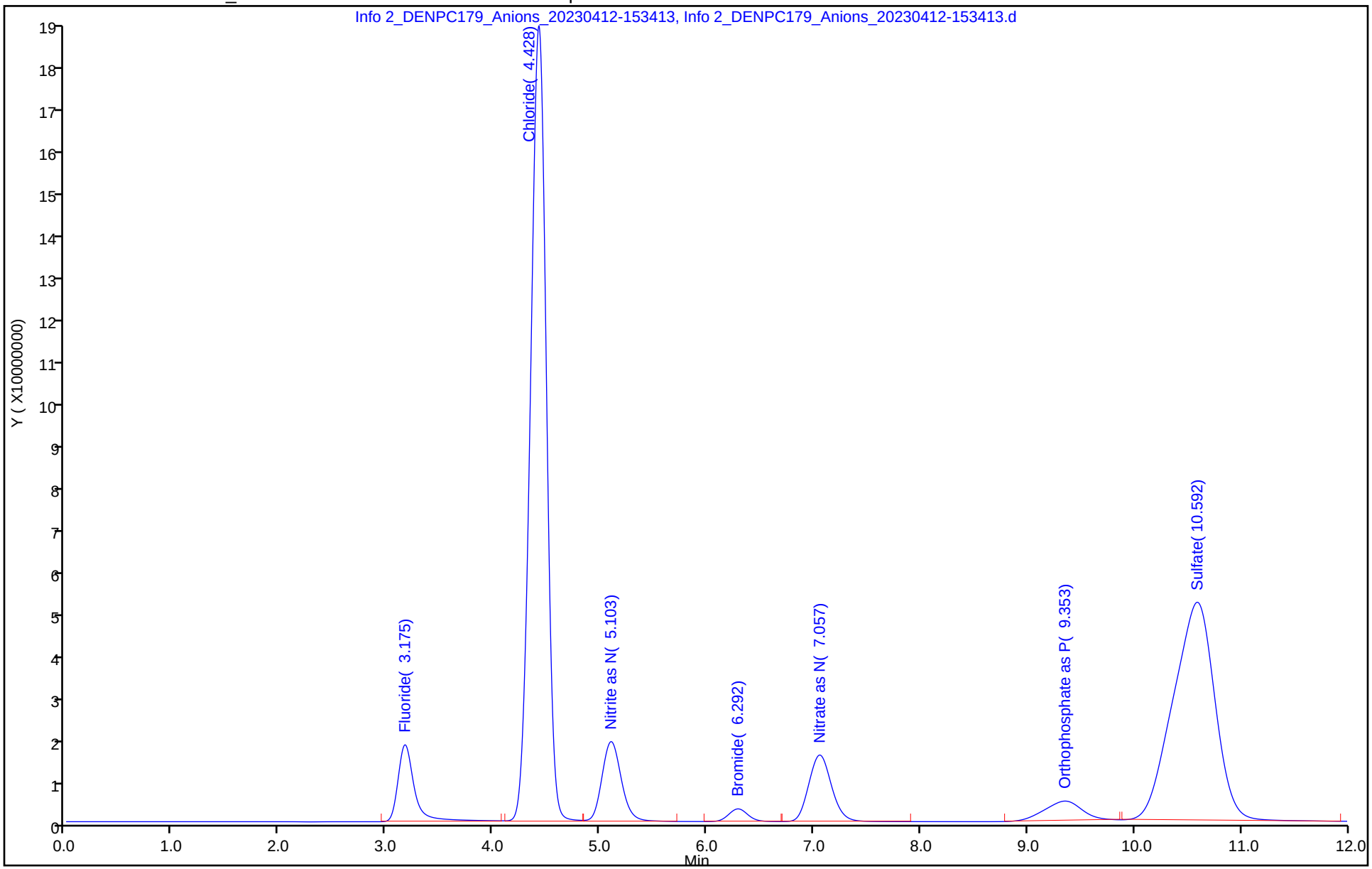
IC CAL cl/so4_00475 Amount Added: 8.00 Units: mL
IC Cal low_00703 Amount Added: 2.00 Units: mL

Report Date: 14-Apr-2023 14:04:01 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153413.d

Injection Date:	12-Apr-2023 15:19:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD L6			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		



5/31/2023 7:23 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Injection Date: 12-Apr-2023 15:19:00 Instrument ID: WC_IonChrom10

Lims ID: STD L6

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

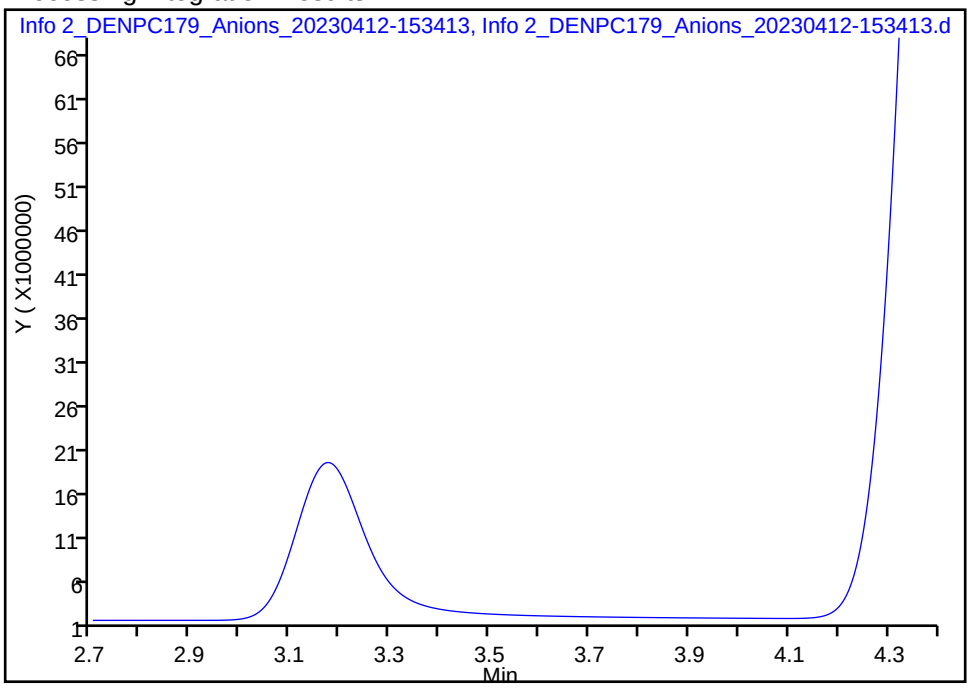
1 Fluoride, CAS: 16984-48-8

Signal: 1

Not Detected

Expected RT: 3.18

Processing Integration Results



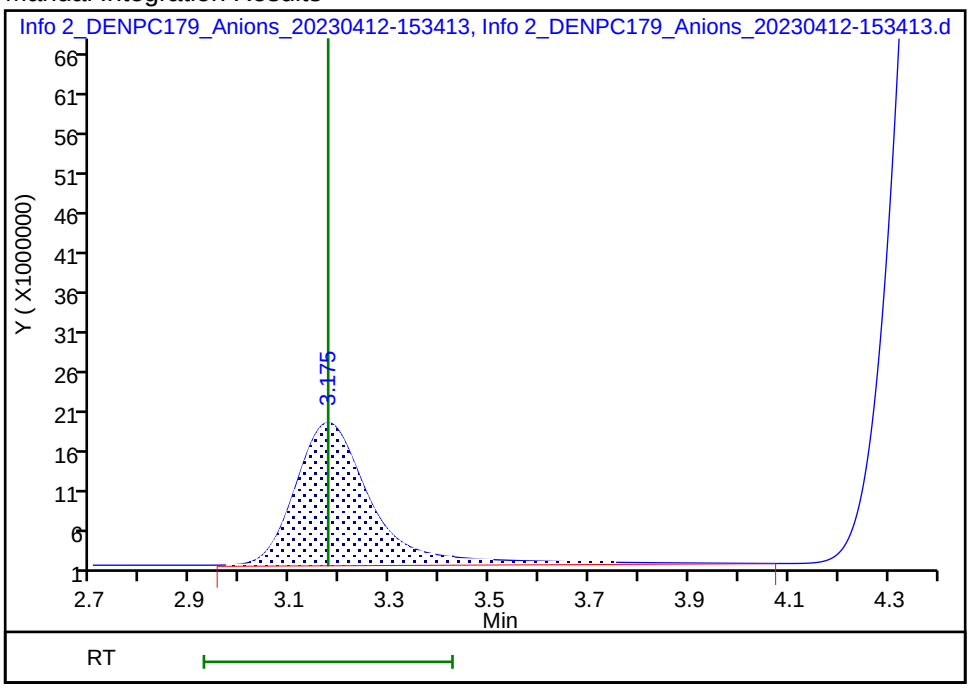
Manual Integration Results

RT: 3.18

Area: 190381963

Amount: 4.965012

Amount Units: ug/ml



Reviewer: LVW8, 12-Apr-2023 15:43:58

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\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Injection Date: 12-Apr-2023 15:19:00 Instrument ID: WC_IonChrom10

Lims ID: STD L6

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

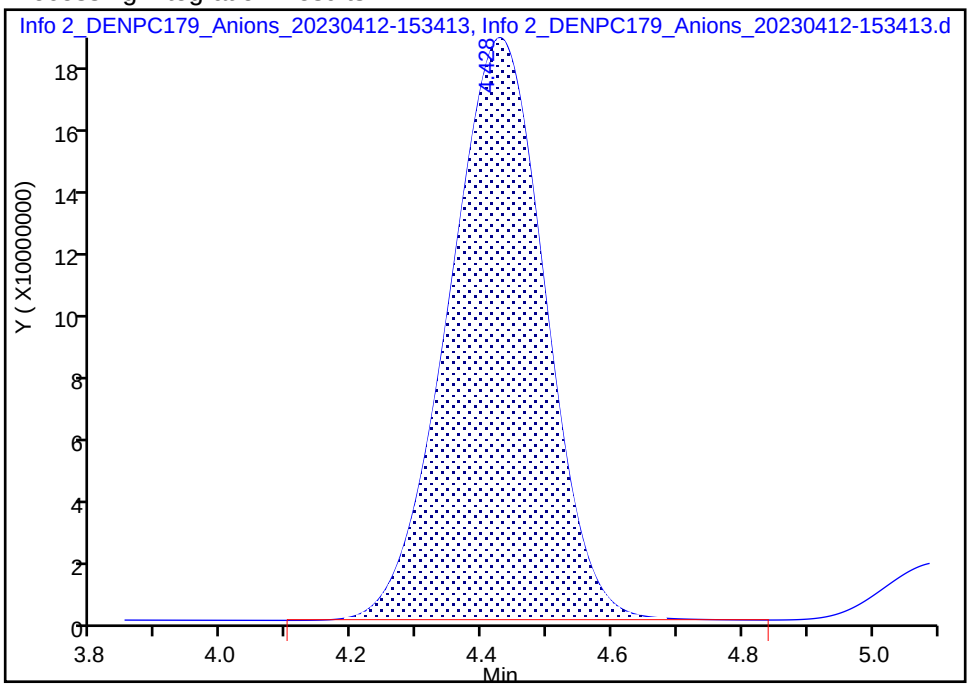
Column: Detector Info 2_091554_1

2 Chloride, CAS: 16887-00-6

Signal: 1

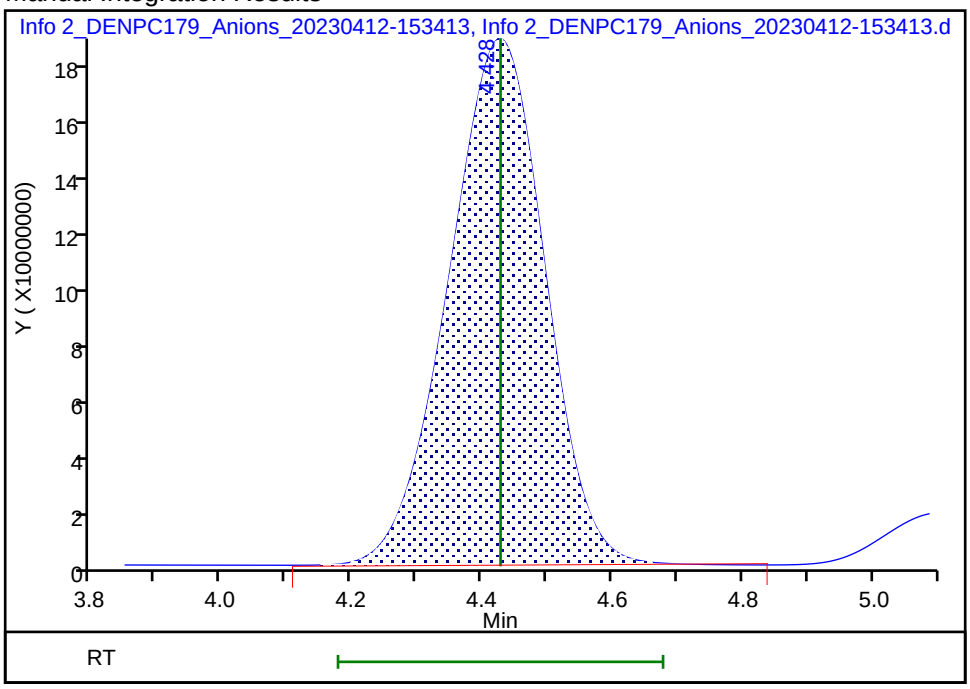
Processing Integration Results

RT: 4.43
Area: 1915444596
Amount: 99.918589
Amount Units: ug/ml



Manual Integration Results

RT: 4.43
Area: 1914243902
Amount: 99.889092
Amount Units: ug/ml



Reviewer: LVW8, 12-Apr-2023 15:43:42

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Injection Date: 12-Apr-2023 15:19:00 Instrument ID: WC_IonChrom10

Lims ID: STD L6

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

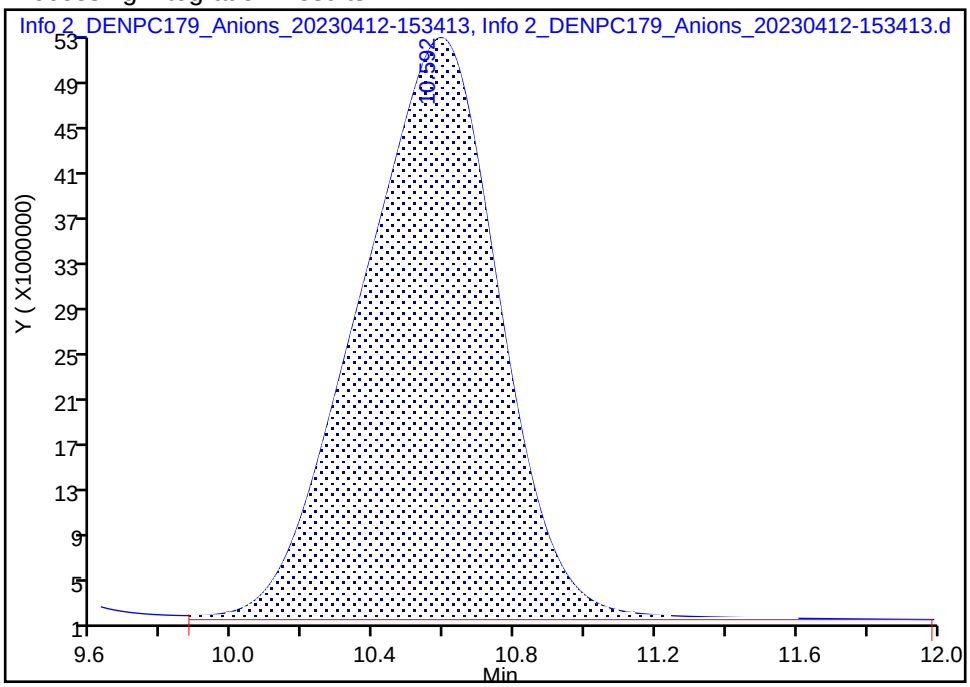
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

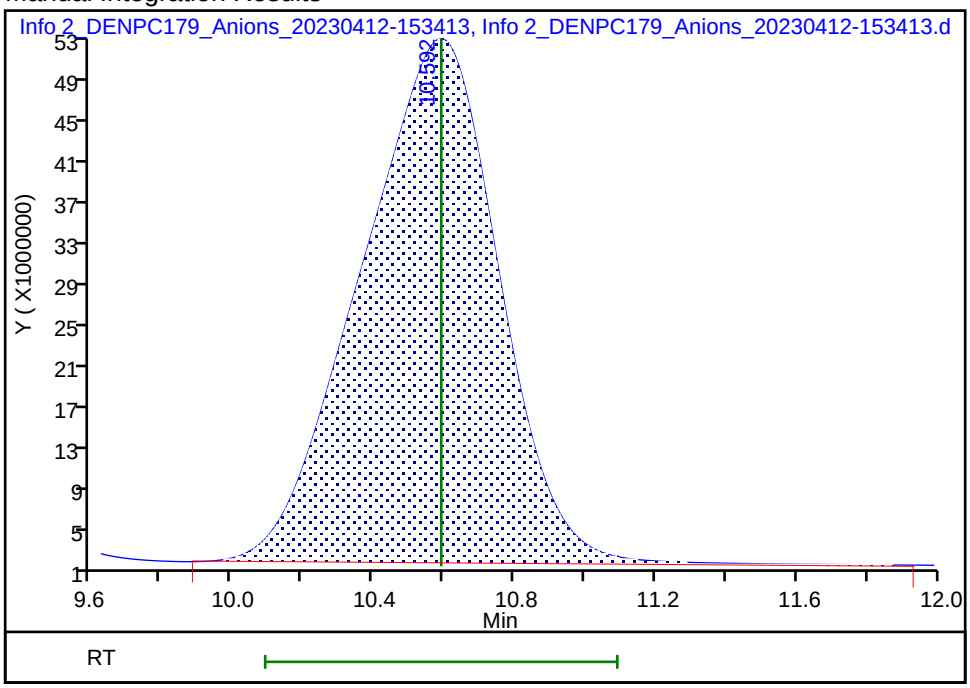
Processing Integration Results

RT: 10.59
Area: 1413345488
Amount: 101.3581
Amount Units: ug/ml



Manual Integration Results

RT: 10.59
Area: 1384314036
Amount: 100.3828
Amount Units: ug/ml



Reviewer: LVW8, 12-Apr-2023 15:43:52

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

IC Instrument Information

WL: 120345 **Inst ID:** IC16 **Analysis Date:** 04/12/23 **Analyst:** EJS

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	174903	7	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	

Dilutions

Job No.	Samples	Anions	Dilution	Reason
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 13-Apr-2023 18:10:21
No.Compounds:7
Sublist: chrom-Anions_IC10*sub5
Limit Group: Wet - Anions

Detectors

Detector: 1, Info 2_091554_1
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-14.900 No. Points: 7196

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-14192
Inj Date: 12-Apr-2023 14:04:00 Worklist: 120345 Sample#: 1
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-14341
Inj Date: 12-Apr-2023 14:19:00 Worklist: 120345 Sample#: 2
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-14491
Inj Date: 12-Apr-2023 14:34:00 Worklist: 120345 Sample#: 3
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15041
Inj Date: 12-Apr-2023 14:49:00 Worklist: 120345 Sample#: 4
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15191
Inj Date: 12-Apr-2023 15:04:00 Worklist: 120345 Sample#: 5
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15341
Inj Date: 12-Apr-2023 15:19:00 Worklist: 120345 Sample#: 6

Start Cal Date: 12-Apr-2023 14:04:00 End Cal Date: 12-Apr-2023 15:19:00

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					
40437065	43230492	44844044	46492699	45903612		-1277342			1.000
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			46378611		
M8087413	M21615246	M44844044	M116231748	M229518060					
120345(2)	120345(3)	120345(4)	120345(5)	120345(6)					
5 Nitrate as N				Signal: 1					
42172205	39818610	42066844	45095286	46132733		-1634037			0.999
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			45867680		
M8434441	M19909305	M42066844	M112738215	M230663663					
120345(2)	120345(3)	120345(4)	120345(5)	120345(6)					
6 Orthophosphate as P				Signal: 1			R1		
69769055	47259032	34760084	26027078	22431185		10983593			*0.990
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			21157507		
M13953811	M23629516	M34760084	M65067694	M112155923					
120345(2)	120345(3)	120345(4)	120345(5)	120345(6)					

ICalib Error Legend
R1, Curve Fit Fail Error Limit Test

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 13-Apr-2023 18:10:21
No.Compounds:7
Sublist: chrom-Anions_IC10*sub5
Limit Group: Wet - Anions 28D

Detectors

Detector: 1, Info 2_091554_1
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-14.900 No. Points: 7196

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-14192
Inj Date: 12-Apr-2023 14:04:00 Worklist: 120345 Sample#: 1
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-14341
Inj Date: 12-Apr-2023 14:19:00 Worklist: 120345 Sample#: 2
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-14491
Inj Date: 12-Apr-2023 14:34:00 Worklist: 120345 Sample#: 3
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15041
Inj Date: 12-Apr-2023 14:49:00 Worklist: 120345 Sample#: 4
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15191
Inj Date: 12-Apr-2023 15:04:00 Worklist: 120345 Sample#: 5
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15341
Inj Date: 12-Apr-2023 15:19:00 Worklist: 120345 Sample#: 6

Start Cal Date: 12-Apr-2023 14:04:00 End Cal Date: 12-Apr-2023 15:19:00

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

Preliminary Report

Eurofins Denver
ICV, ICal Verification Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15				
Lims ID:	ICV				
Client ID:					
Sample Type:	ICV				
Inject. Date:	12-Apr-2023 15:34:00	ALS Bottle#:	0	Worklist Smp#:	7
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0120345-007				
Misc. Info.:	280-0120345-007				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Sublist:	chrom-Anions_IC7*sub4				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Anions_IC10.m				
Limit Group:	Wet - Anions 28D				
Last Update:	14-Apr-2023 13:55:16	Calib Date:	12-Apr-2023 15:19:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1620				
Start Cal Date:	12-Apr-2023 14:04:00				
End Cal Date:	12-Apr-2023 15:19:00				

Compound	Amount Added	Amount Detected	%Drift	Max. %Drift	%Rec	%Rec Limits
1 Fluoride	2.00	2.34	* 17.1	10.0	117.1	
2 Chloride	80.0	85.7	7.1	10.0	107.1	
4 Bromide	2.00	2.01	0.6	10.0	100.6	
7 Sulfate	80.0	86.9	8.7	10.0	108.7	

Preliminary Report

Eurofins Denver
ICV, ICal Verification Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15				
Lims ID:	ICV				
Client ID:					
Sample Type:	ICV				
Inject. Date:	12-Apr-2023 15:34:00	ALS Bottle#:	0	Worklist Smp#:	7
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0120345-007				
Misc. Info.:	280-0120345-007				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Sublist:	chrom-Anions_IC7*sub4				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Anions_IC10.m				
Limit Group:	Wet - Anions				
Last Update:	14-Apr-2023 13:56:07	Calib Date:	12-Apr-2023 15:19:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1620				
Start Cal Date:	12-Apr-2023 14:04:00				
End Cal Date:	12-Apr-2023 15:19:00				

Compound	Amount Added	Amount Detected	%Drift	Max. %Drift	%Rec	%Rec Limits
3 Nitrite as N	2.00	2.12	6.0	10.0	106.0	
5 Nitrate as N	2.00	2.15	7.4	10.0	107.4	
6 Orthophosphate as	2.00	2.84	*41.9	10.0	141.9	

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-154
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 12-Apr-2023 15:34:00 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0120345-007
Misc. Info.: 280-0120345-007
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC7*sub4

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 14-Apr-2023 14:06:59 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1620

First Level Reviewer: XAY4 Date: 13-Apr-2023 12:05:56

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.172	3.172	0.000	88983337	2.00	2.34	Ma
2 Chloride	4.423	4.423	0.000	1641996046	80.0	85.7	
3 Nitrite as N	5.112	5.112	0.000	97019728	NC	NC	M
4 Bromide	6.305	6.305	0.000	14681577	2.00	2.01	
5 Nitrate as N	7.087	7.087	0.000	96882220	NC	NC	
6 Orthophosphate as P	9.373	9.373	0.000	71034633	NC	NC	
7 Sulfate	10.593	10.593	0.000	1198792597	80.0	86.9	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

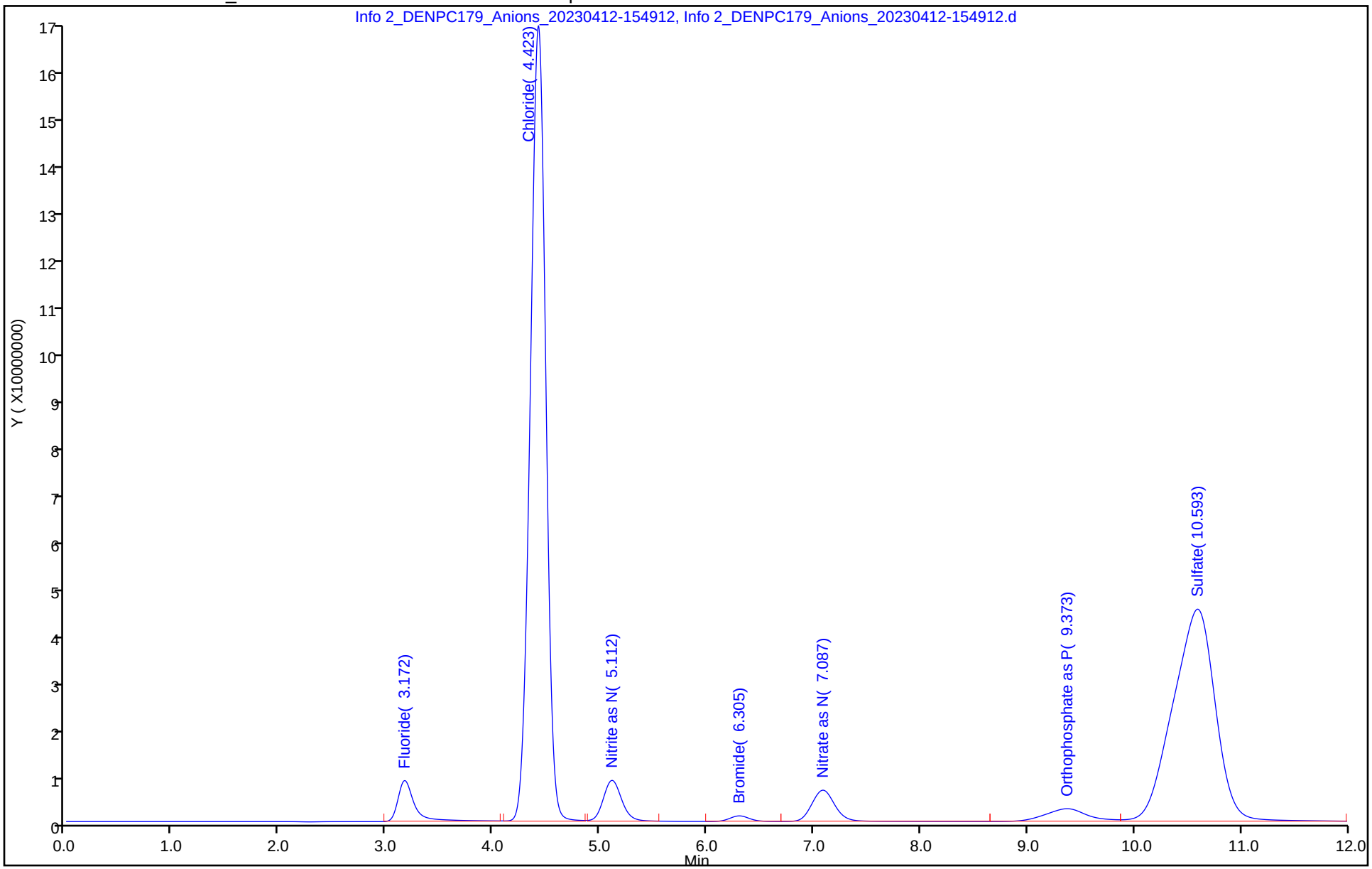
IC SO4 ICV_00024	Amount Added:	0.80	Units: mL
Cl ICV Std_00006	Amount Added:	0.80	Units: mL
IC ICV 5_00403	Amount Added:	0.80	Units: mL

Report Date: 14-Apr-2023 14:06:59 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-154912.d

Injection Date:	12-Apr-2023 15:34:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ICV			Worklist Smp#:	7
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



5/31/2023 7:23 AM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-160
Lims ID: ICB
Client ID:
Sample Type: ICB
Inject. Date: 12-Apr-2023 15:49:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0120345-008
Misc. Info.: 280-0120345-008
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 14-Apr-2023 14:07:08 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1620

First Level Reviewer: XAY4 Date: 14-Apr-2023 14:07:17

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.172				ND	U
2 Chloride		4.397				ND	U
3 Nitrite as N		5.103				ND	
4 Bromide		6.293				ND	U
5 Nitrate as N		7.072				ND	
6 Orthophosphate as P	9.417	9.418	-0.001	14030813		NC	
7 Sulfate	10.600	10.602	-0.002	368472		0.1197	M

QC Flag Legend

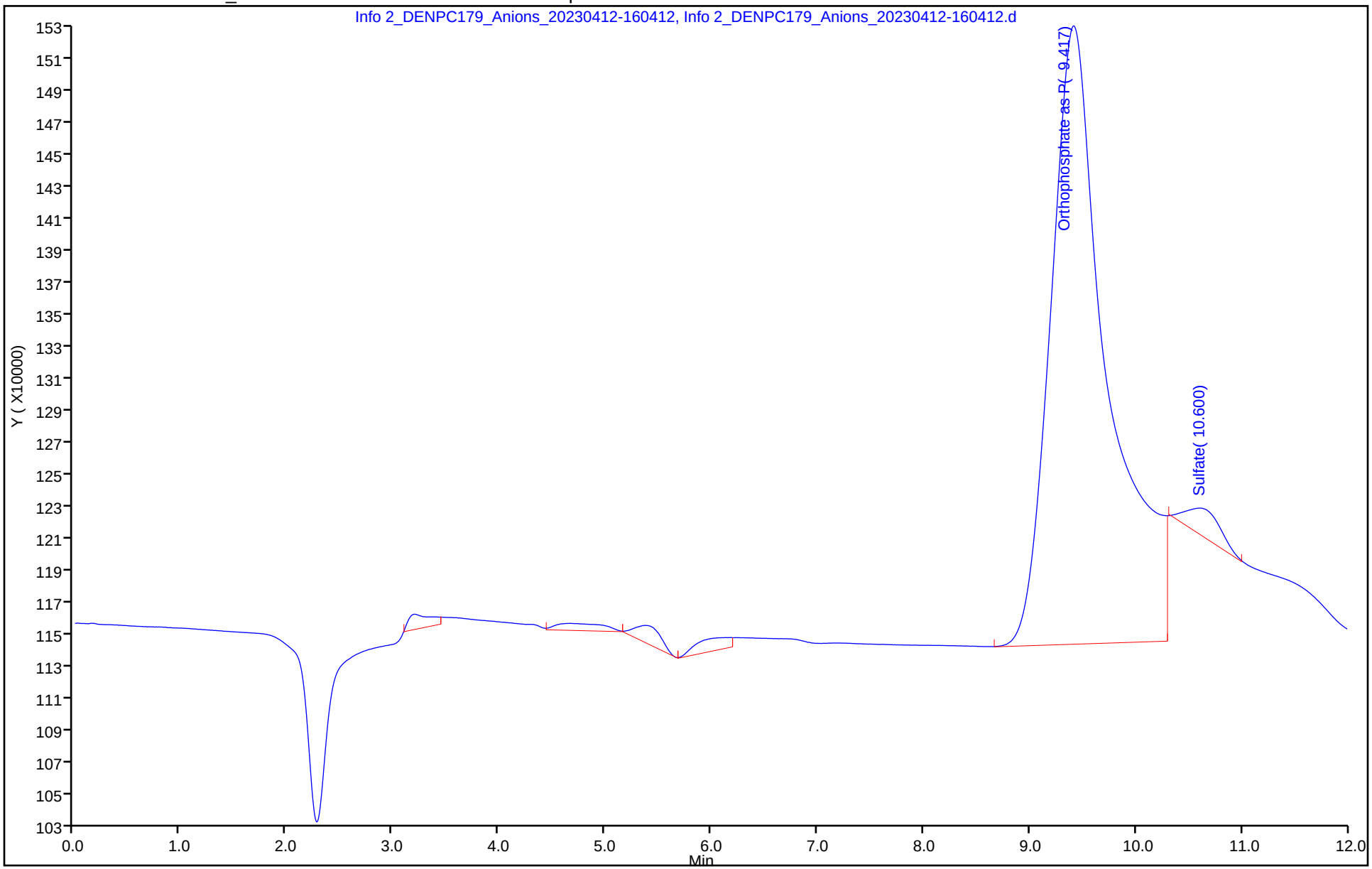
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 14-Apr-2023 14:07:25 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-160412.d

Injection Date:	12-Apr-2023 15:49:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ICB			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		



5/31/2023 7:23 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-160

Injection Date: 12-Apr-2023 15:49:00 Instrument ID: WC_IonChrom10

Lims ID: ICB

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 8

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions 28D

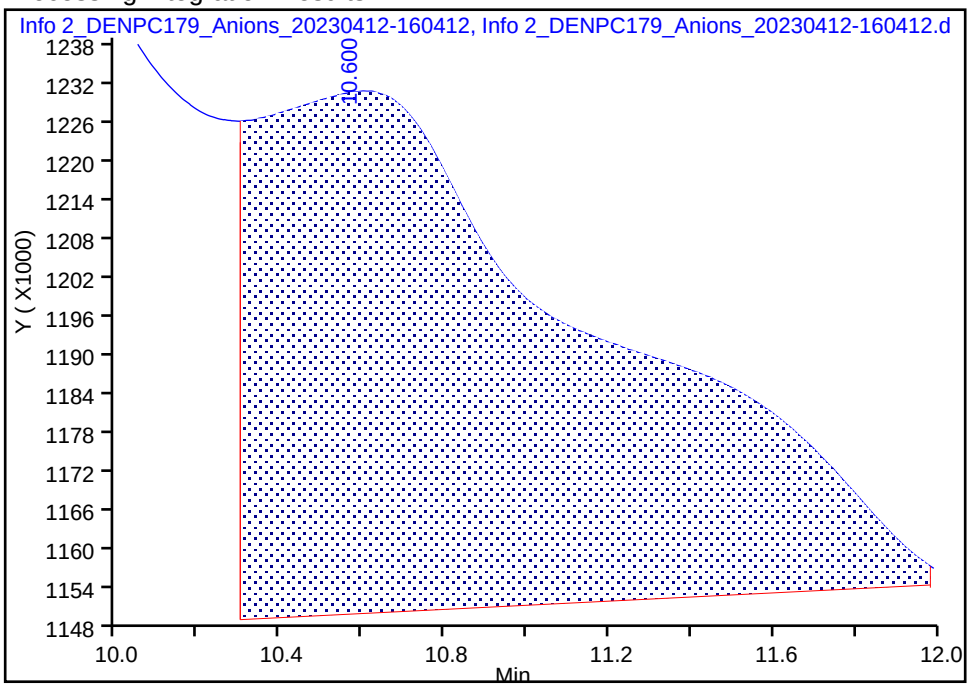
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

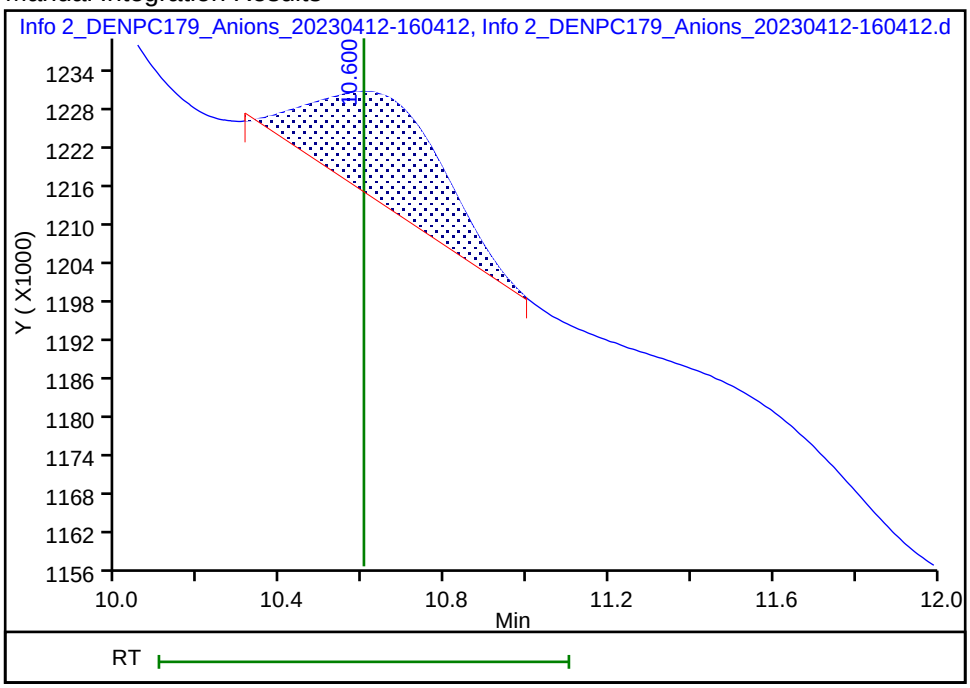
Processing Integration Results

RT: 10.60
Area: 4676250
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 10.60
Area: 368472
Amount: 0.119715
Amount Units: ug/ml



Reviewer: XAY4, 14-Apr-2023 14:01:28

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

IC Instrument Information

WL: 121350 **Inst ID:** IC10 **Analysis Date:** 5/11/23 **Analyst:** MEC

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	176335	3	F Cl (NO2) Br (NO3) PO4 (SO4)	MS/D	
☐	176327	3	F Cl NO2 Br (NO3) PO4 SO4	MS/D	
☐	176357	15	F Cl NO2 Br (NO3) PO4 SO4	MS/D	
☐	176349	7	F (Cl) (NO2) Br (NO3) PO4 SO4	MS/D	
☐	176325	2	F (Cl) NO2 Br (NO3) PO4 (SO4)	MS/D	
☐	176348	5	(F) (Cl) (NO2) (Br) (NO3) PO4 (SO4)	MS/D	
☐	176333	2	F (Cl) NO2 Br (NO3) PO4 (SO4)	MS/D	
☐	176353	1	(F) (Cl) (NO2) (Br) (NO3) PO4 (SO4)	MS/D	
☐	176366	2	F Cl (NO2) Br (NO3) PO4 SO4	MS/D	
☐	176143	1	F (Cl) NO2 Br (NO3) PO4 (SO4)	MS/D	
☐	176255	1	F (Cl) NO2 Br (NO3) PO4 SO4	MS/D	
☐	176144	1	F (Cl) NO2 Br (NO3) PO4 (SO4)	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	

Dilutions

Job No.	Samples	Anions	Dilution	Reason
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 13-Apr-2023 18:10:21
No.Compounds:7
Sublist: chrom-Anions_IC10*sub5
Limit Group: Wet - Anions

Detectors

Detector: 1, Info 2_091554_1
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-14.900 No. Points: 7196

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-14192
Inj Date: 12-Apr-2023 14:04:00 Worklist: 120345 Sample#: 1
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-14341
Inj Date: 12-Apr-2023 14:19:00 Worklist: 120345 Sample#: 2
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-14491
Inj Date: 12-Apr-2023 14:34:00 Worklist: 120345 Sample#: 3
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15041
Inj Date: 12-Apr-2023 14:49:00 Worklist: 120345 Sample#: 4
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15191
Inj Date: 12-Apr-2023 15:04:00 Worklist: 120345 Sample#: 5
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15341
Inj Date: 12-Apr-2023 15:19:00 Worklist: 120345 Sample#: 6

Start Cal Date: 12-Apr-2023 14:04:00 End Cal Date: 12-Apr-2023 15:19:00

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					
40437065	43230492	44844044	46492699	45903612		-1277342			1.000
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			46378611		
M8087413	M21615246	M44844044	M116231748	M229518060					
120345(2)	120345(3)	120345(4)	120345(5)	120345(6)					
5 Nitrate as N				Signal: 1					
42172205	39818610	42066844	45095286	46132733		-1634037			0.999
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			45867680		
M8434441	M19909305	M42066844	M112738215	M230663663					
120345(2)	120345(3)	120345(4)	120345(5)	120345(6)					
6 Orthophosphate as P				Signal: 1			R1		
69769055	47259032	34760084	26027078	22431185		10983593			*0.990
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			21157507		
M13953811	M23629516	M34760084	M65067694	M112155923					
120345(2)	120345(3)	120345(4)	120345(5)	120345(6)					

ICalib Error Legend
R1, Curve Fit Fail Error Limit Test

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 13-Apr-2023 18:10:21
No.Compounds:7
Sublist: chrom-Anions_IC10*sub5
Limit Group: Wet - Anions 28D

Detectors

Detector: 1, Info 2_091554_1
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-14.900 No. Points: 7196

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-14192
Inj Date: 12-Apr-2023 14:04:00 Worklist: 120345 Sample#: 1
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-14341
Inj Date: 12-Apr-2023 14:19:00 Worklist: 120345 Sample#: 2
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-14491
Inj Date: 12-Apr-2023 14:34:00 Worklist: 120345 Sample#: 3
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15041
Inj Date: 12-Apr-2023 14:49:00 Worklist: 120345 Sample#: 4
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15191
Inj Date: 12-Apr-2023 15:04:00 Worklist: 120345 Sample#: 5
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15341
Inj Date: 12-Apr-2023 15:19:00 Worklist: 120345 Sample#: 6

Start Cal Date: 12-Apr-2023 14:04:00 End Cal Date: 12-Apr-2023 15:19:00

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

Preliminary Report

Eurofins Denver
ICV, ICal Verification Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15				
Lims ID:	ICV				
Client ID:					
Sample Type:	ICV				
Inject. Date:	12-Apr-2023 15:34:00	ALS Bottle#:	0	Worklist Smp#:	7
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0120345-007				
Misc. Info.:	280-0120345-007				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Sublist:	chrom-Anions_IC7*sub4				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Anions_IC10.m				
Limit Group:	Wet - Anions 28D				
Last Update:	14-Apr-2023 13:55:16	Calib Date:	12-Apr-2023 15:19:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1620				
Start Cal Date:	12-Apr-2023 14:04:00				
End Cal Date:	12-Apr-2023 15:19:00				

Compound	Amount Added	Amount Detected	%Drift	Max. %Drift	%Rec	%Rec Limits
1 Fluoride	2.00	2.34	* 17.1	10.0	117.1	
2 Chloride	80.0	85.7	7.1	10.0	107.1	
4 Bromide	2.00	2.01	0.6	10.0	100.6	
7 Sulfate	80.0	86.9	8.7	10.0	108.7	

Preliminary Report

Eurofins Denver

ICV, ICal Verification Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15				
Lims ID:	ICV				
Client ID:					
Sample Type:	ICV				
Inject. Date:	12-Apr-2023 15:34:00	ALS Bottle#:	0	Worklist Smp#:	7
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0120345-007				
Misc. Info.:	280-0120345-007				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Sublist:	chrom-Anions_IC7*sub4				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Anions_IC10.m				
Limit Group:	Wet - Anions				
Last Update:	14-Apr-2023 13:56:07	Calib Date:	12-Apr-2023 15:19:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-15				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1620				
Start Cal Date:	12-Apr-2023 14:04:00				
End Cal Date:	12-Apr-2023 15:19:00				

Compound	Amount Added	Amount Detected	%Drift	Max. %Drift	%Rec	%Rec Limits
3 Nitrite as N	2.00	2.12	6.0	10.0	106.0	
5 Nitrate as N	2.00	2.15	7.4	10.0	107.4	
6 Orthophosphate as	2.00	2.84	* 41.9	10.0	141.9	

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-152
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 11-May-2023 15:08:00 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121350-001
Misc. Info.: 280-0121350-001
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-May-2023 11:43:25 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1666

First Level Reviewer: LVW8 Date: 11-May-2023 15:28:15

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.147	3.147	0.000	89398683	2.50	2.35	Ma
2 Chloride	4.332	4.332	0.000	929846564	50.0	48.6	M
3 Nitrite as N	5.025	5.025	0.000	114115391	NC	NC	M
4 Bromide	6.183	6.183	0.000	20275421	2.50	2.83	M
5 Nitrate as N	6.950	6.950	0.000	111629241	NC	NC	M
6 Orthophosphate as P	9.162	9.162	0.000	80229669	NC	NC	
7 Sulfate	10.352	10.352	0.000	671380340	50.0	48.7	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

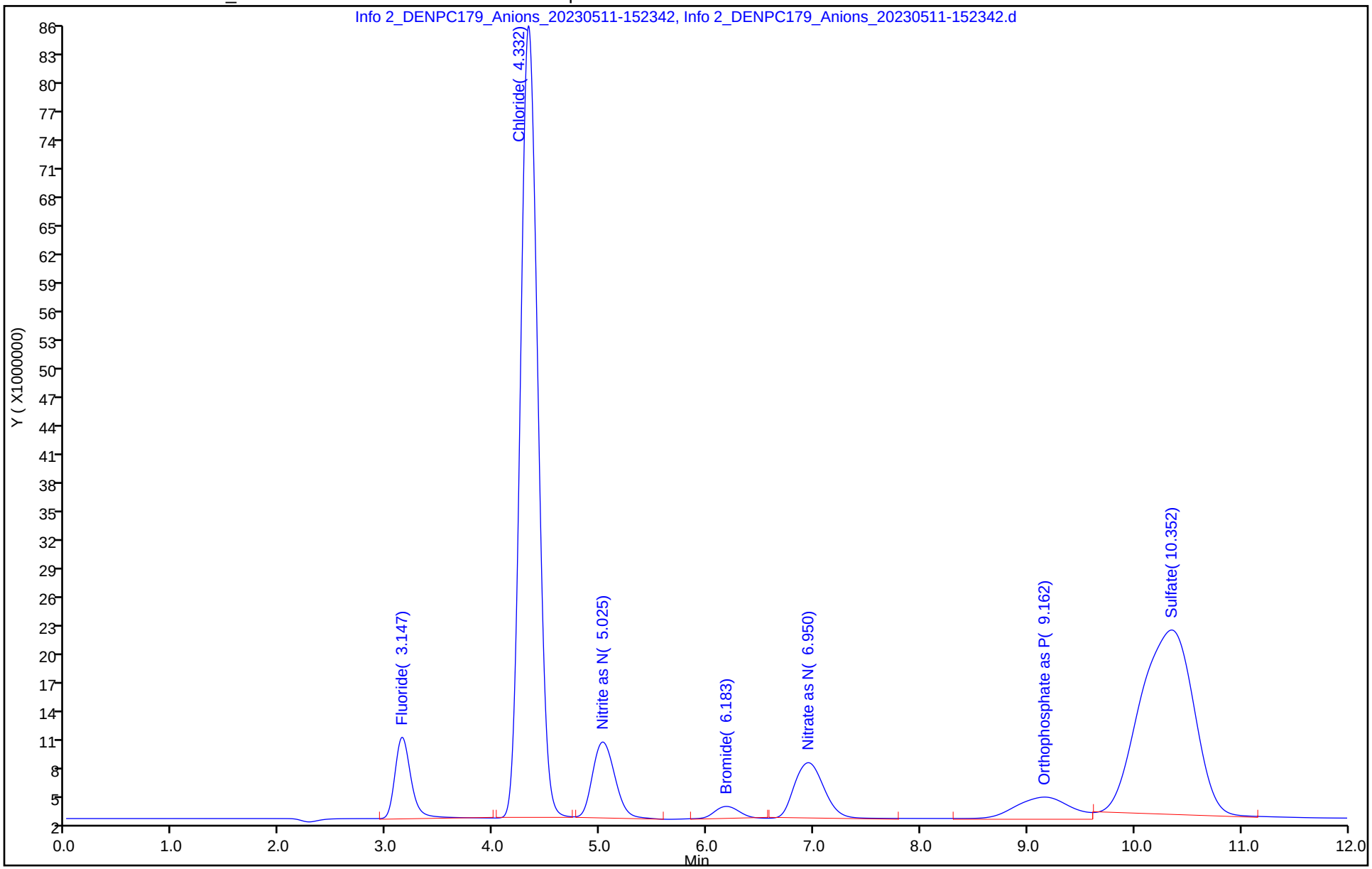
Reagents:

IC LCS_01953 Amount Added: 10.00 Units: mL

Report Date: 12-May-2023 11:43:26 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-152342.d				
Injection Date:	11-May-2023 15:08:00	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		



5/31/2023 7:23 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

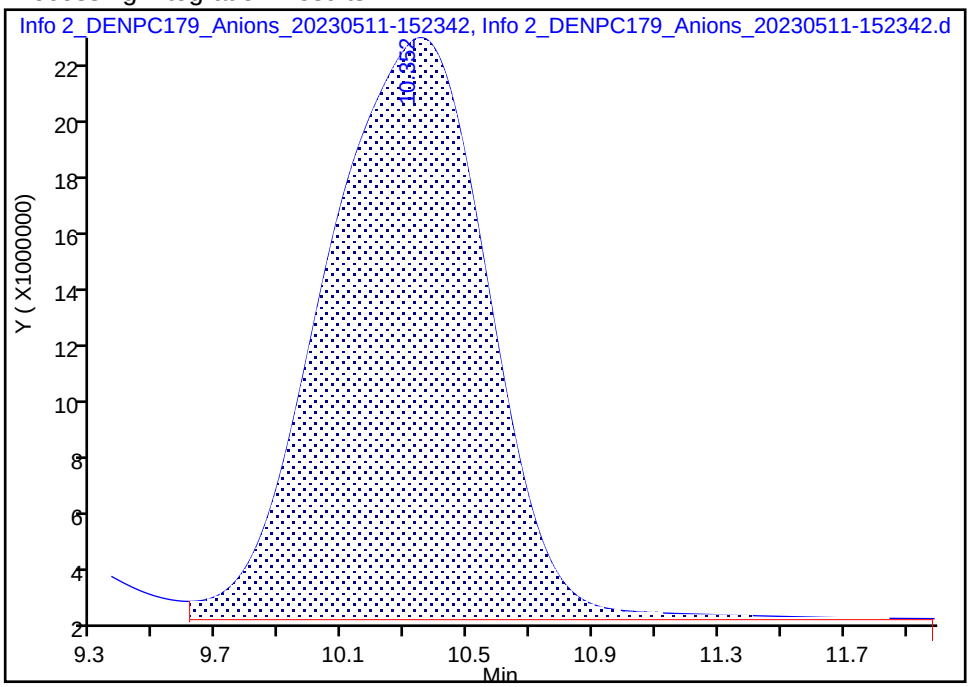
Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-152
Injection Date: 11-May-2023 15:08:00 Instrument ID: WC_IonChrom10
Lims ID: ccv
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions_IC10 Limit Group: Wet - Anions 28D
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

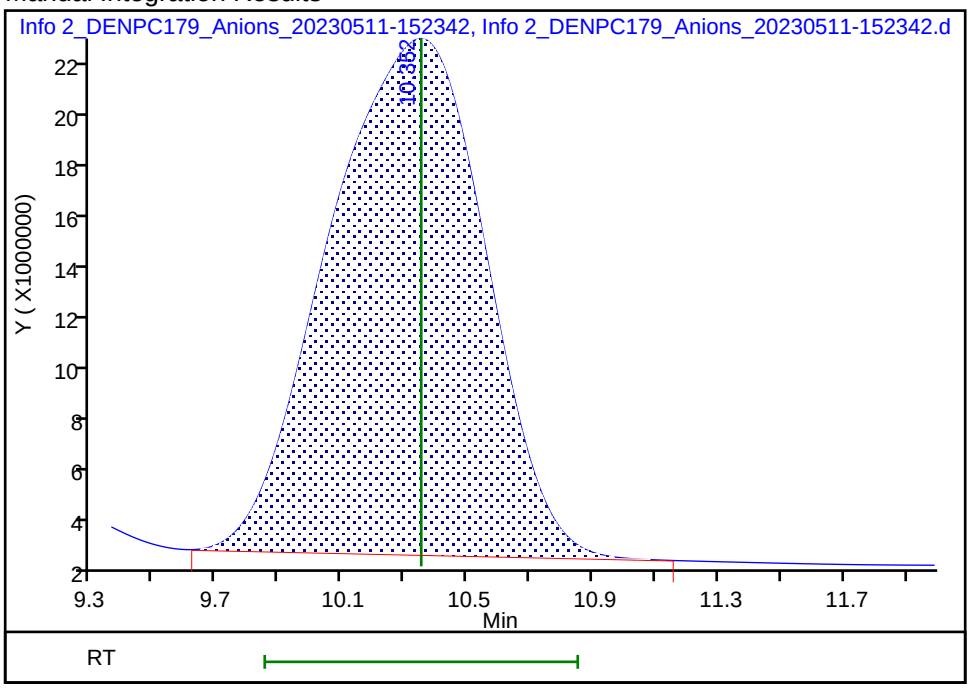
Processing Integration Results

RT: 10.35
Area: 715606022
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 10.35
Area: 671380340
Amount: 48.732692
Amount Units: ug/ml



Reviewer: LVW8, 11-May-2023 15:27:42
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-153
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 11-May-2023 15:23:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: blank
Misc. Info.: blank
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-May-2023 11:43:26 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1666

First Level Reviewer: LVW8 Date: 11-May-2023 15:55:05

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.147				ND	
2 Chloride		4.332				ND	
3 Nitrite as N		5.025				ND	U
4 Bromide		6.183				ND	
5 Nitrate as N		6.950				ND	
6 Orthophosphate as P	9.242	9.242	0.000	14061785		NC	
7 Sulfate	10.380	10.380	0.000	3839511		0.3712	M

QC Flag Legend

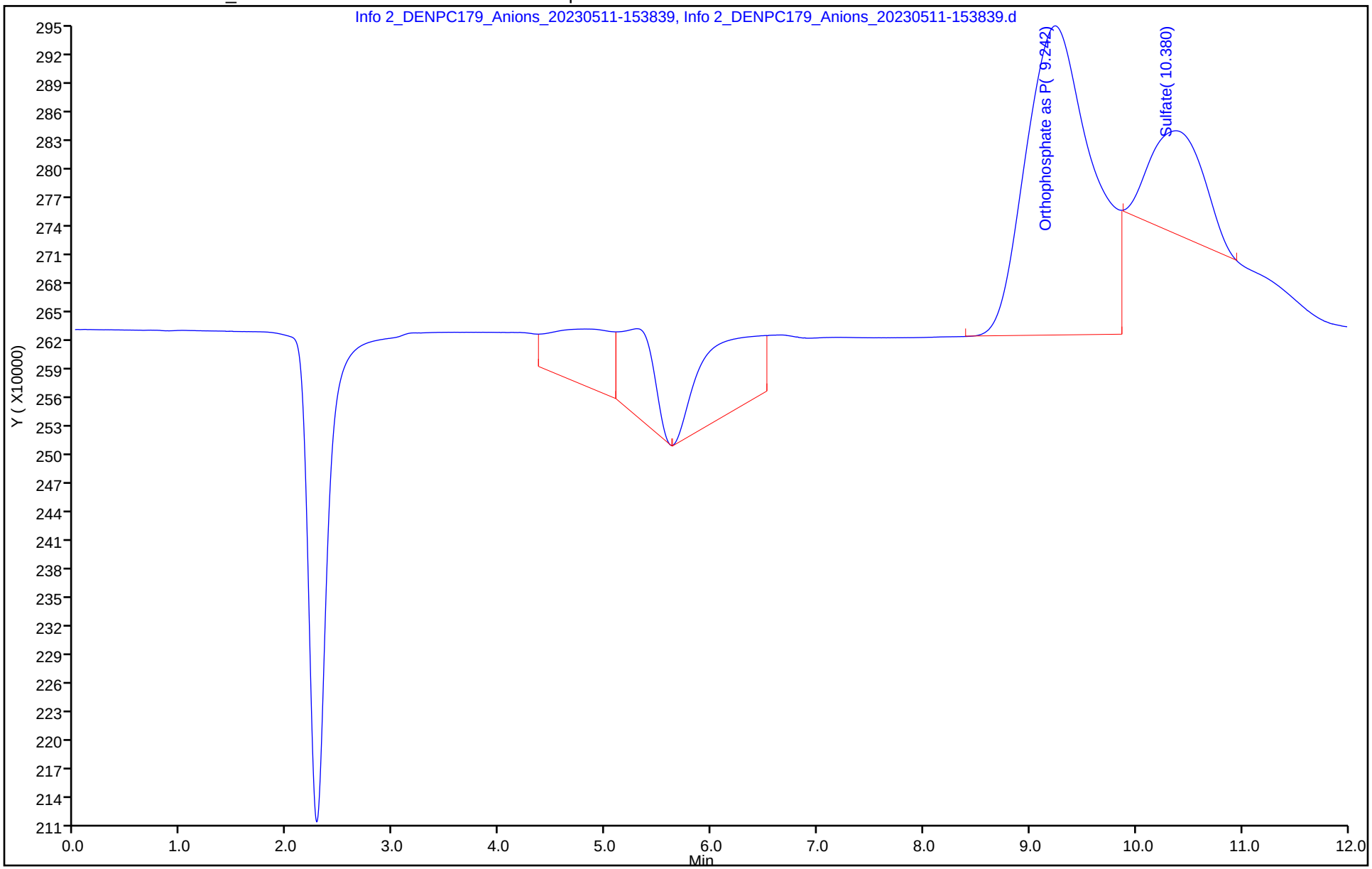
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 12-May-2023 11:43:27 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-153839.d

Injection Date:	11-May-2023 15:23:00	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		



5/31/2023 7:23 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

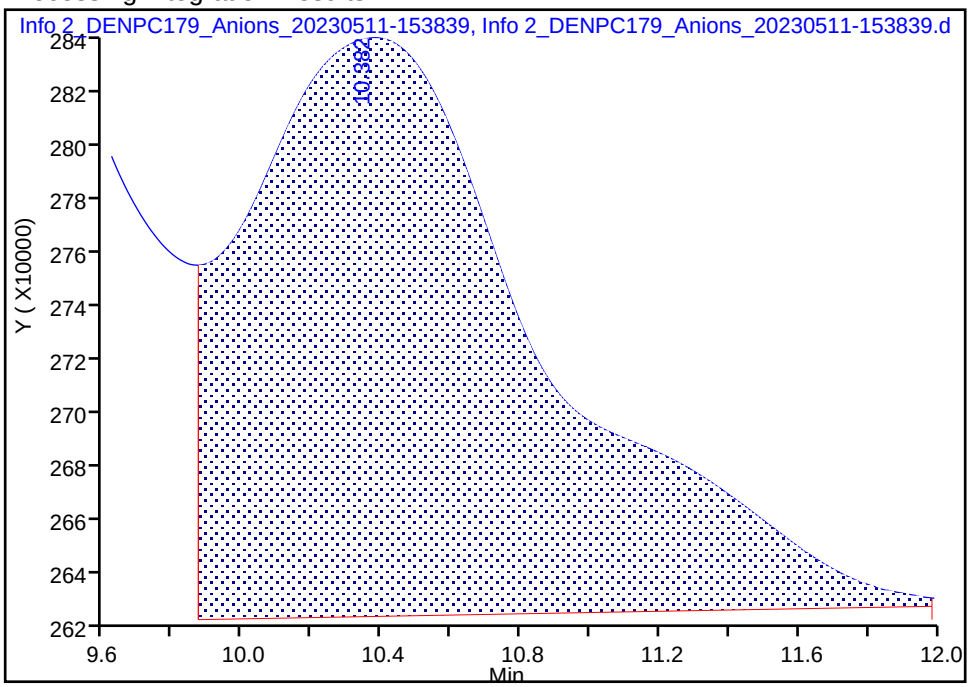
Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-153
Injection Date: 11-May-2023 15:23:00 Instrument ID: WC_IonChrom10
Lims ID: ccb
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions_IC10 Limit Group: Wet - Anions 28D
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

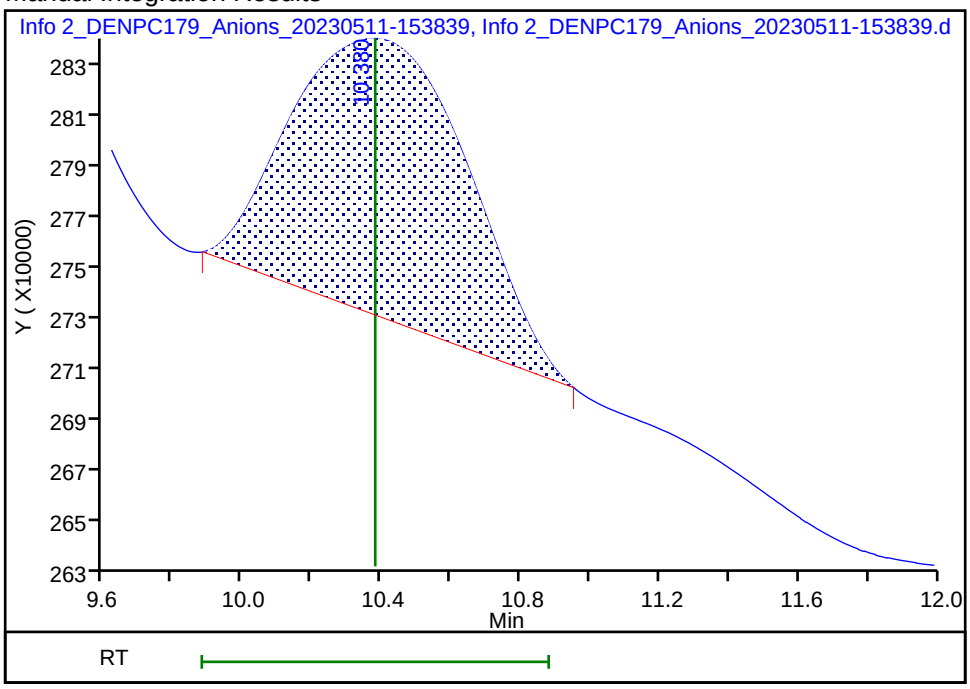
Processing Integration Results

RT: 10.38
Area: 12687044
Amount: 1.012162
Amount Units: ug/ml



Manual Integration Results

RT: 10.38
Area: 3839511
Amount: 0.371182
Amount Units: ug/ml



Reviewer: LVW8, 11-May-2023 15:55:00
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-155
Lims ID: mrl
Client ID:
Sample Type: MRL
Inject. Date: 11-May-2023 15:38:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121350-003
Misc. Info.: 280-0121350-003
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-May-2023 11:43:27 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1666

First Level Reviewer: LVW8 Date: 12-May-2023 11:12:19

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.147			ND	ND	
2 Chloride	4.320	4.320	0.000	46161710	2.50	2.54	M
3 Nitrite as N	5.028	5.028	0.000	12754319	NC	NC	M
4 Bromide	6.203	6.203	0.000	2164887	0.2500	0.1769	M
5 Nitrate as N	6.993	6.993	0.000	10514965	NC	NC	M
6 Orthophosphate as P	9.213	9.213	0.000	20413248	NC	NC	
7 Sulfate	10.363	10.363	0.000	37057435	2.50	2.78	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND
Review Flags
M - Manually Integrated

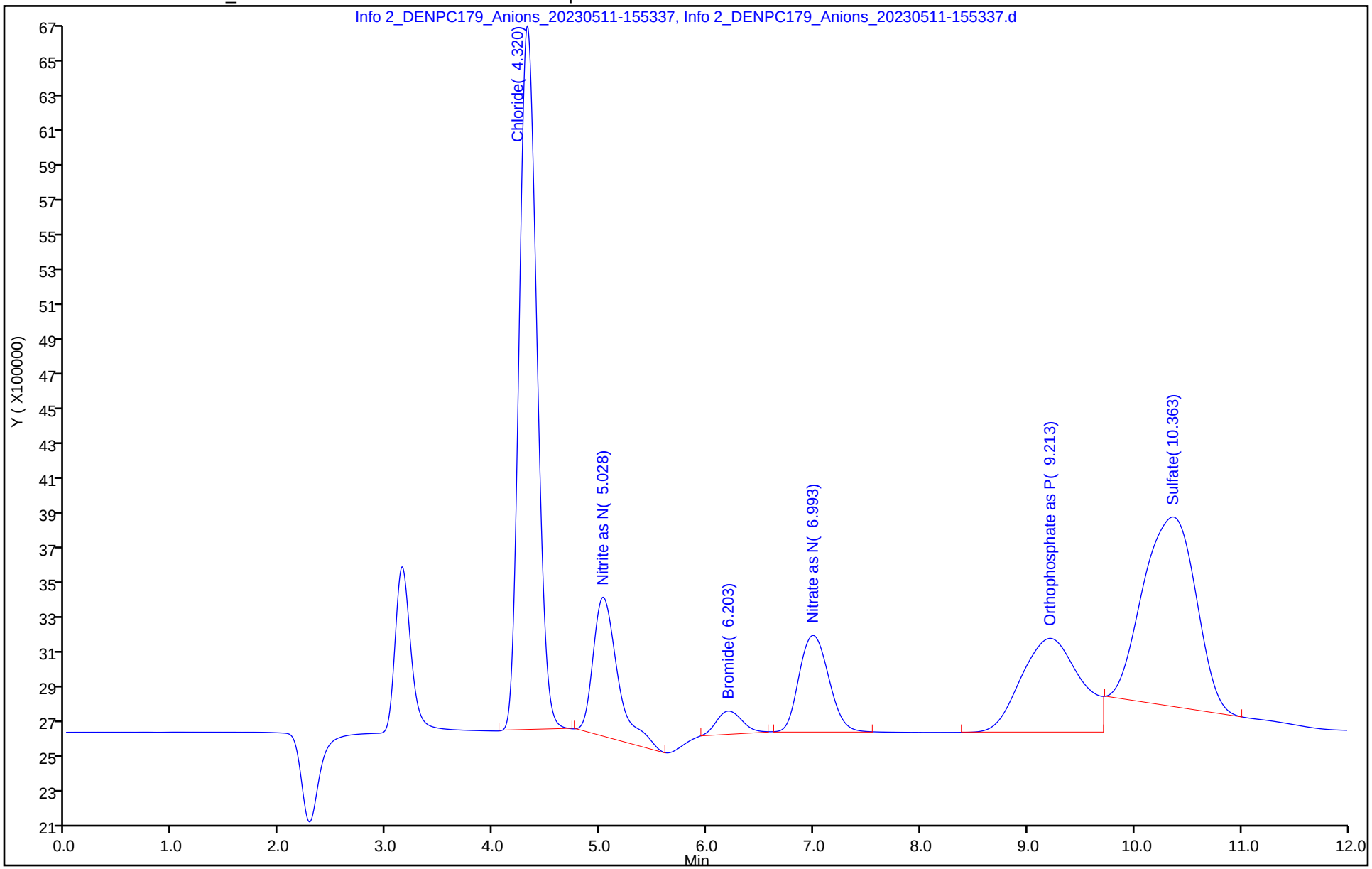
Reagents:

IC CAL cl/so4_00479 Amount Added: 0.20 Units: mL
IC Cal low_00708 Amount Added: 0.10 Units: mL

Report Date: 12-May-2023 11:43:28 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-155337.d				
Injection Date:	11-May-2023 15:38:00	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		



5/31/2023 7:23 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

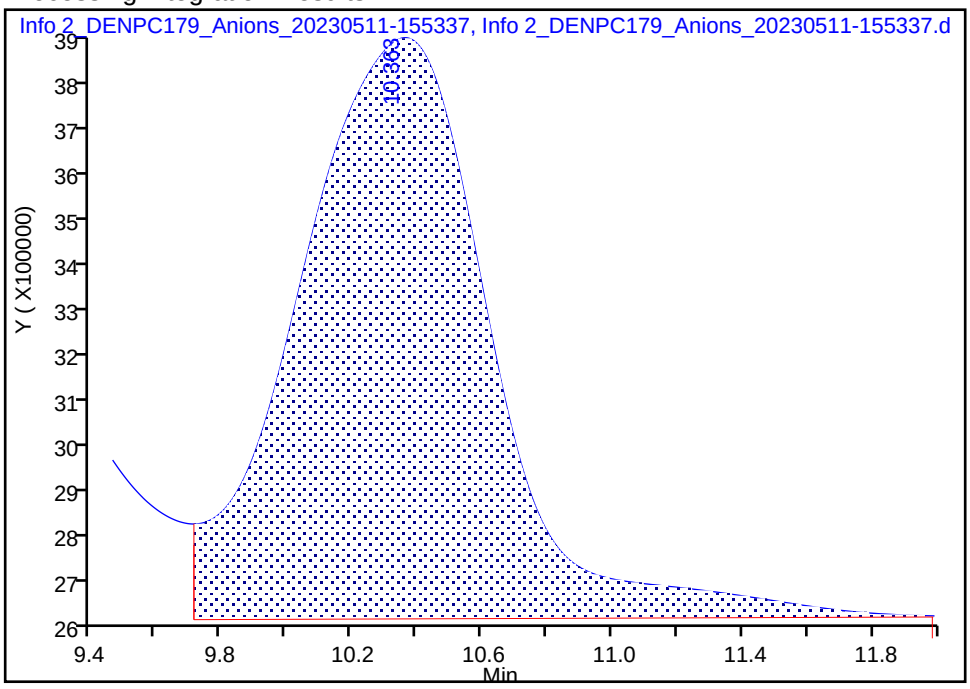
Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-155
Injection Date: 11-May-2023 15:38:00 Instrument ID: WC_IonChrom10
Lims ID: mrl
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions_IC10 Limit Group: Wet - Anions 28D
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

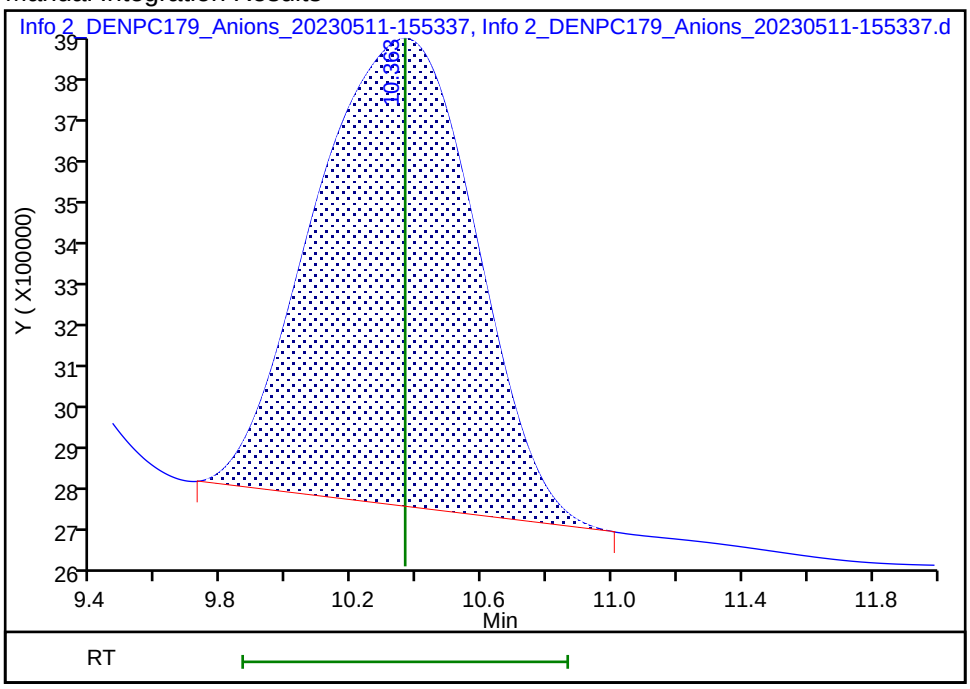
Processing Integration Results

RT: 10.36
Area: 50343942
Amount: 3.740301
Amount Units: ug/ml



Manual Integration Results

RT: 10.36
Area: 37057435
Amount: 2.777730
Amount Units: ug/ml



Reviewer: LVW8, 12-May-2023 11:12:09
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-160
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 11-May-2023 15:53:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121350-004
Misc. Info.: 280-0121350-004
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-May-2023 11:43:28 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1666

First Level Reviewer: LVW8 Date: 12-May-2023 11:13:03

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.147			ND	ND	
2 Chloride	4.330	4.330	0.000	926703063	50.0	48.4	M
3 Nitrite as N	5.023	5.023	0.000	114102490	NC	NC	M
4 Bromide	6.185	6.185	0.000	24069710	2.50	3.39	
5 Nitrate as N	6.950	6.950	0.000	111289912	NC	NC	M
6 Orthophosphate as P	9.163	9.163	0.000	61480718	NC	NC	M
7 Sulfate	10.352	10.352	0.000	673625806	50.0	48.9	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND
Review Flags
M - Manually Integrated

Reagents:

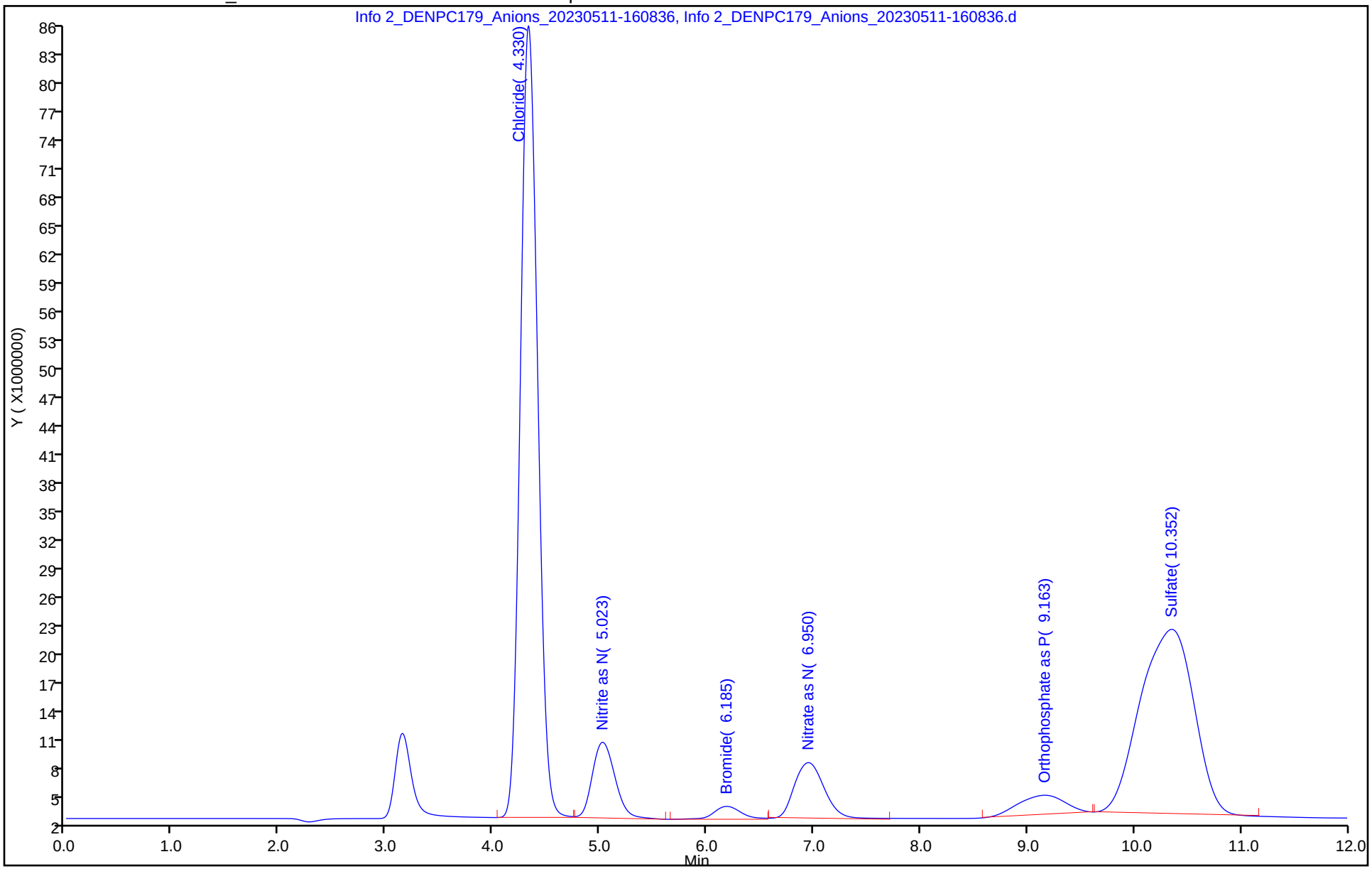
IC LCS_01953 Amount Added: 10.00 Units: mL

Report Date: 12-May-2023 11:43:29 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-160836.d

Injection Date:	11-May-2023 15:53:00	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		



5/31/2023 7:23 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-160

Injection Date: 11-May-2023 15:53:00 Instrument ID: WC_IonChrom10

Lims ID: lcs

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

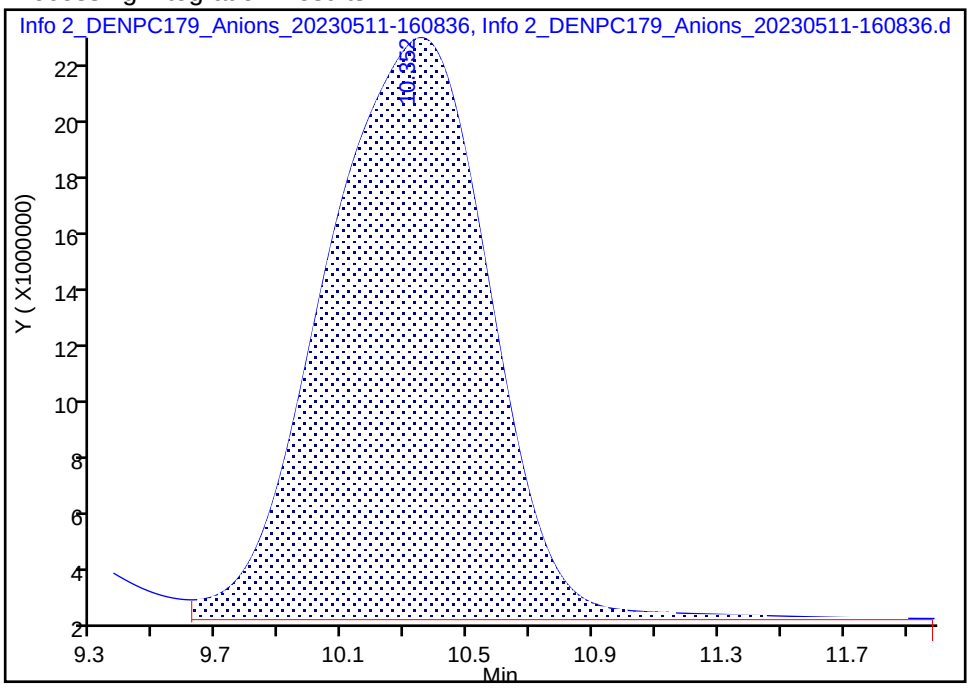
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

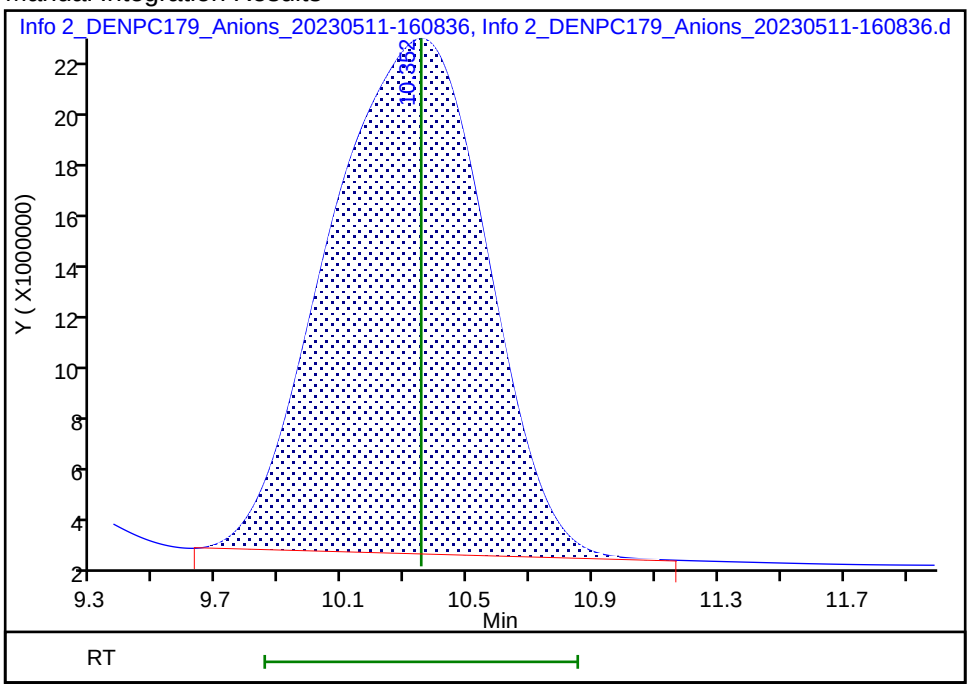
Processing Integration Results

RT: 10.35
Area: 721426753
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 10.35
Area: 673625806
Amount: 48.895369
Amount Units: ug/ml



Reviewer: LVW8, 12-May-2023 11:12:53

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-162
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 11-May-2023 16:08:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121350-005
Misc. Info.: 280-0121350-005
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-May-2023 11:43:29 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1666

First Level Reviewer: LVW8 Date: 12-May-2023 11:13:32

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.147			ND	ND	
2 Chloride	4.332	4.332	0.000	929383673	50.0	48.6	M
3 Nitrite as N	5.025	5.025	0.000	113716713	NC	NC	M
4 Bromide	6.188	6.188	0.000	20239524	2.50	2.83	M
5 Nitrate as N	6.953	6.953	0.000	111496727	NC	NC	M
6 Orthophosphate as P	9.165	9.165	0.000	88410374	NC	NC	
7 Sulfate	10.357	10.357	0.000	673324291	50.0	48.9	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND
Review Flags
M - Manually Integrated

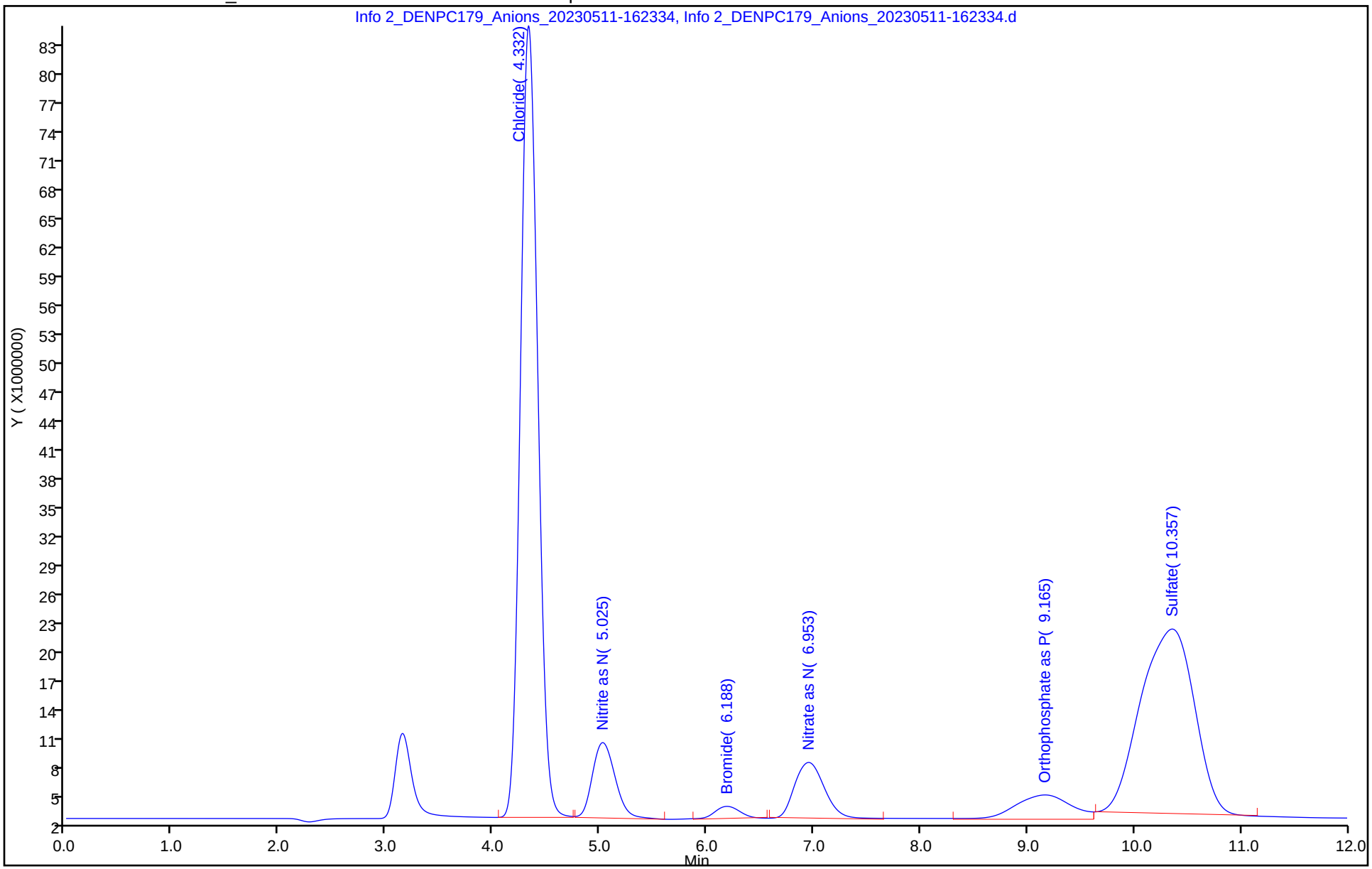
Reagents:

IC LCS_01953 Amount Added: 10.00 Units: mL

Report Date: 12-May-2023 11:43:29 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-162334.d				
Injection Date:	11-May-2023 16:08:00	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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Manual Integration/User Assign Peak Report

Eurofins Denver

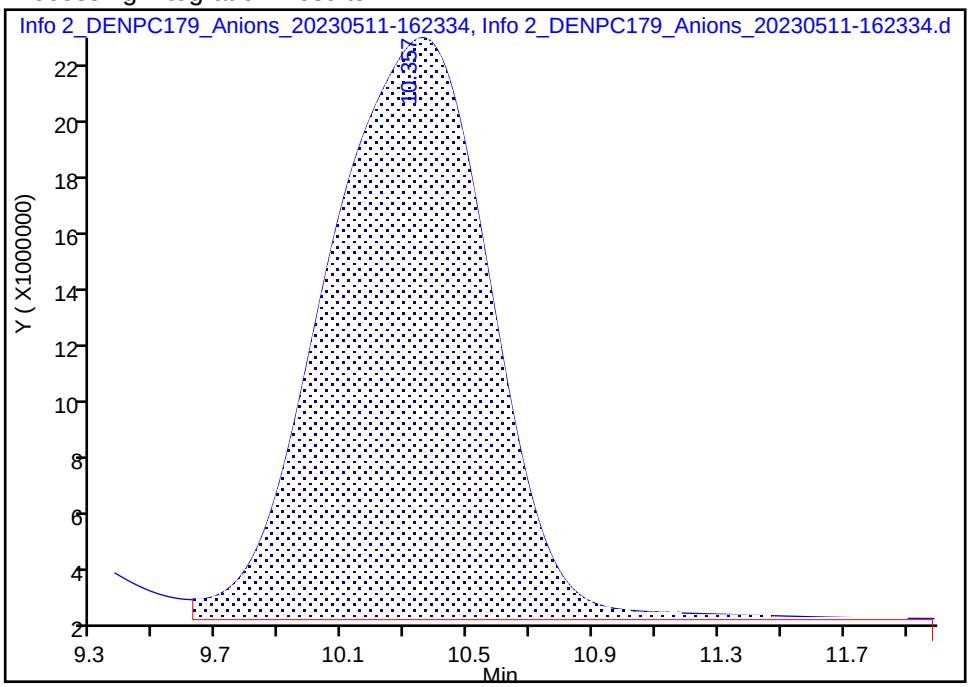
Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-162
Injection Date: 11-May-2023 16:08:00 Instrument ID: WC_IonChrom10
Lims ID: lcsd
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions_IC10 Limit Group: Wet - Anions 28D
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

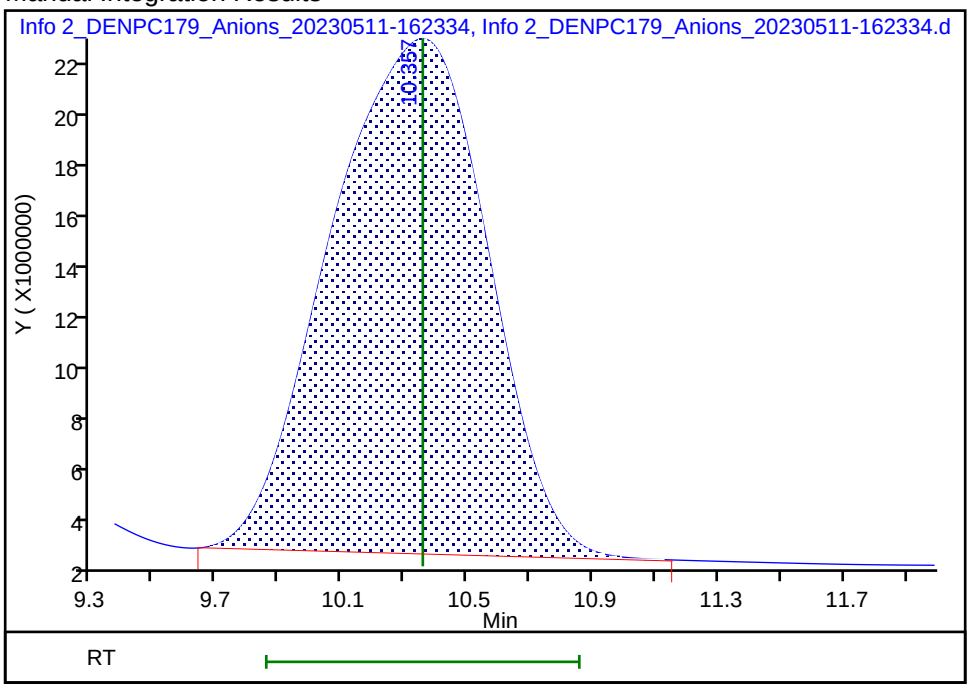
Processing Integration Results

RT: 10.36
Area: 721554997
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 10.36
Area: 673324291
Amount: 48.873525
Amount Units: ug/ml



Reviewer: LVW8, 12-May-2023 11:13:31
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-163
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 11-May-2023 16:23:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121350-006
Misc. Info.: 280-0121350-006
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-May-2023 11:43:30 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1666

First Level Reviewer: LVW8 Date: 12-May-2023 11:14:10

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.147				ND	
2 Chloride		4.332				ND	
3 Nitrite as N		5.025				ND	
4 Bromide		6.188				ND	
5 Nitrate as N		6.953				ND	
6 Orthophosphate as P	9.232	9.232	0.000	18996406		NC	
7 Sulfate	10.373	10.373	0.000	4064040		0.3874	M

QC Flag Legend

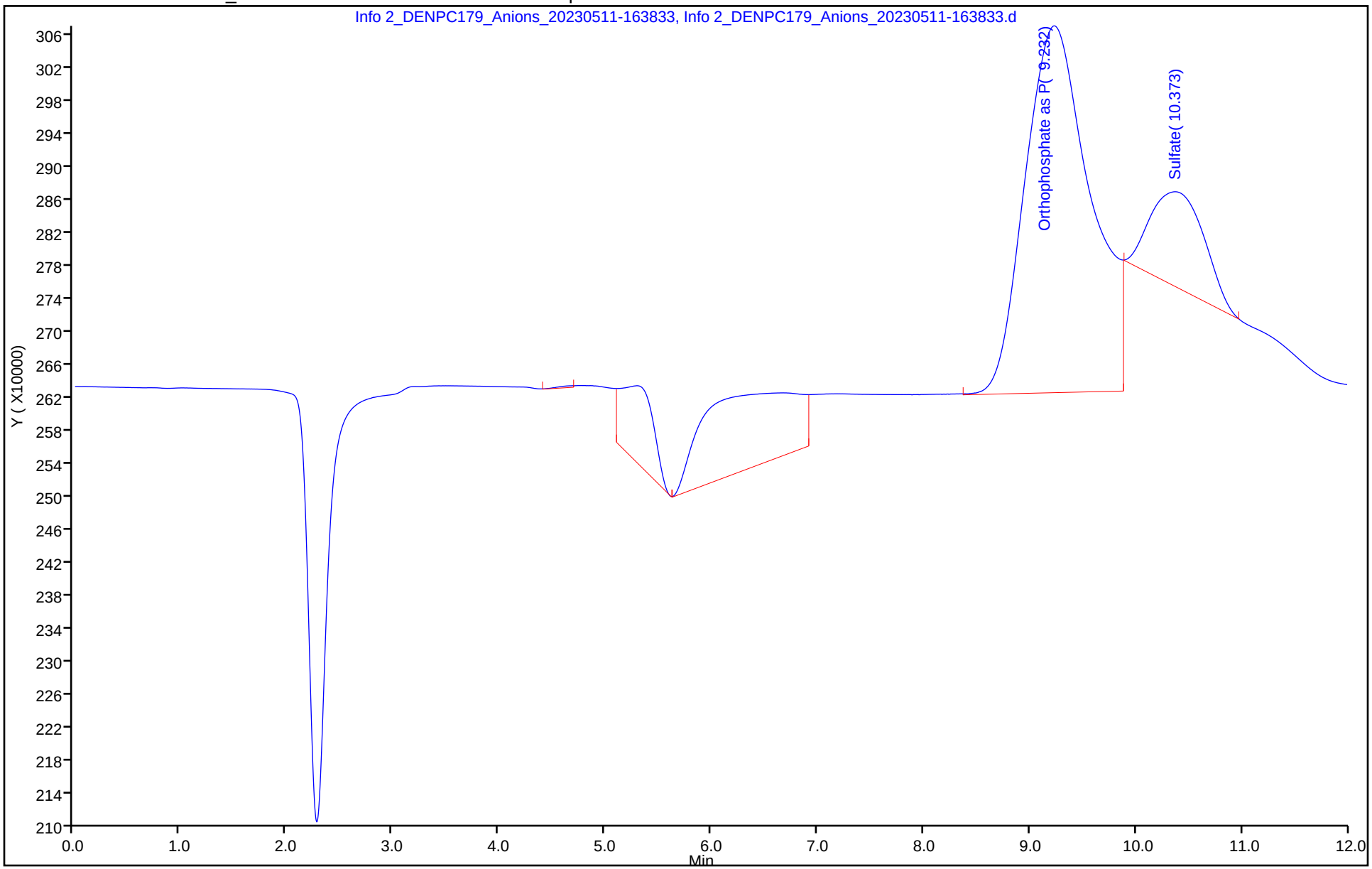
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 12-May-2023 11:43:30 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-163833.d

Injection Date:	11-May-2023 16:23:00	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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Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-163

Injection Date: 11-May-2023 16:23:00 Instrument ID: WC_IonChrom10

Lims ID: mb

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

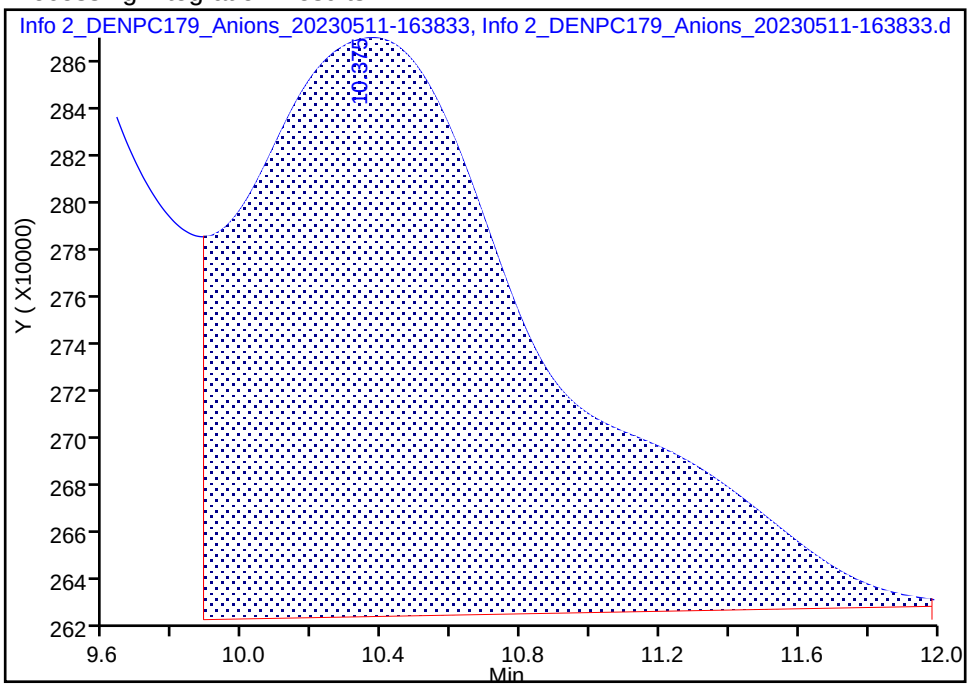
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

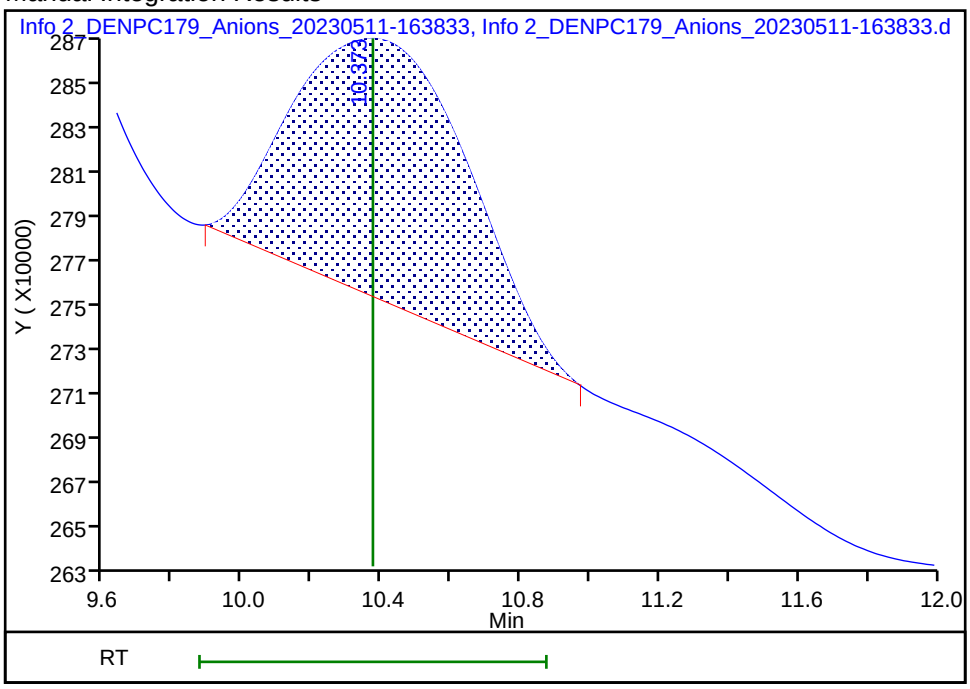
Processing Integration Results

RT: 10.38
Area: 14519261
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 10.37
Area: 4064040
Amount: 0.387449
Amount Units: ug/ml



Reviewer: LVW8, 12-May-2023 11:14:07

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-202
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 11-May-2023 20:08:00 ALS Bottle#: 0 Worklist Smp#: 17
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121350-017
Misc. Info.: 280-0121350-017
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-May-2023 11:43:42 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1666

First Level Reviewer: XAY4 Date: 12-May-2023 10:15:07

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.147			ND	ND	
2 Chloride	4.342	4.332	0.010	931343084	50.0	48.7	M
3 Nitrite as N	5.040	5.025	0.015	112412114	NC	NC	M
4 Bromide	6.187	6.188	-0.001	22536855	2.50	3.16	
5 Nitrate as N	6.963	6.953	0.010	111649189	NC	NC	M
6 Orthophosphate as P	9.223	9.232	-0.009	67867640	NC	NC	
7 Sulfate	10.410	10.373	0.037	669395684	50.0	48.6	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND
Review Flags
M - Manually Integrated

Reagents:

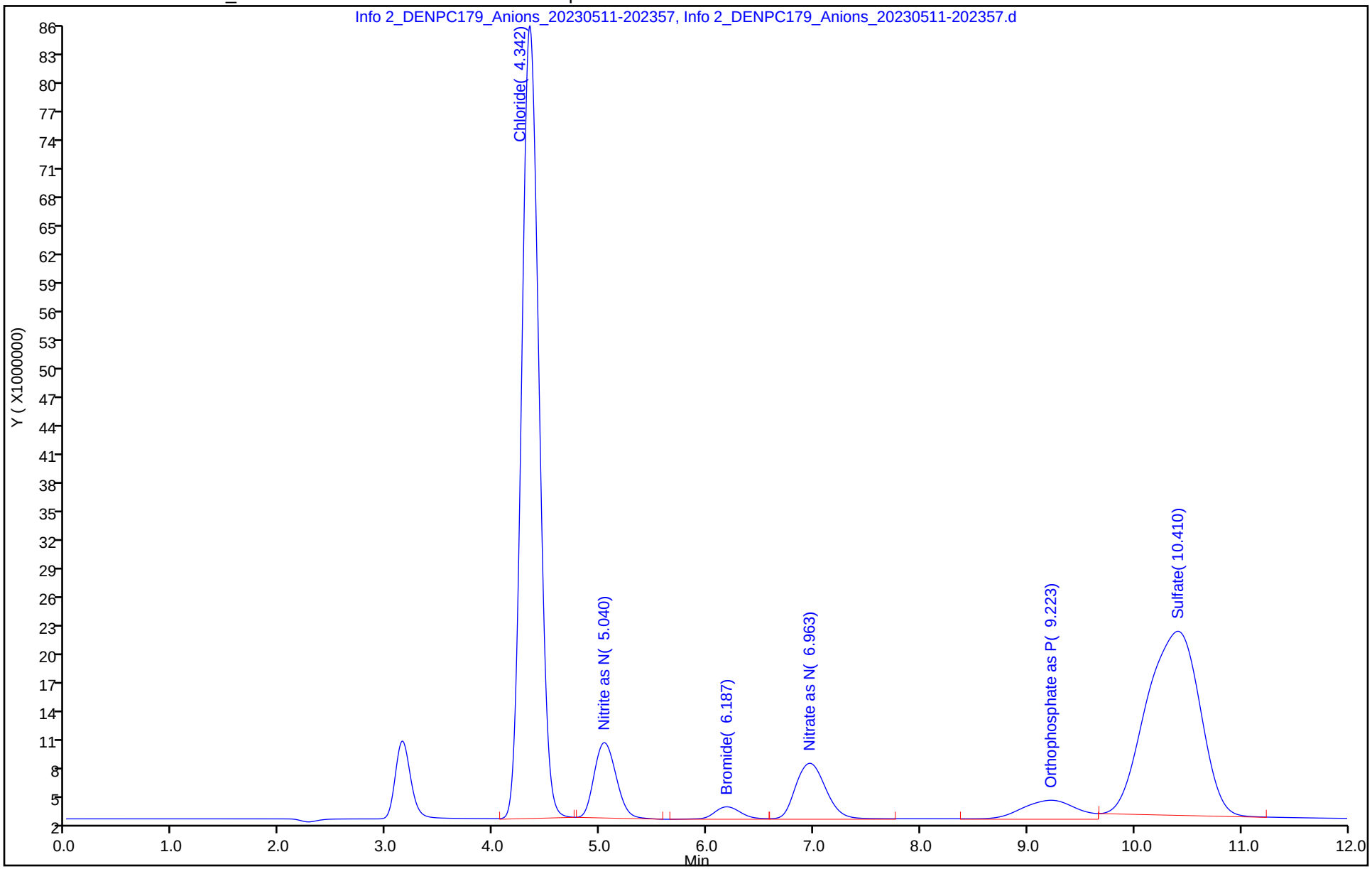
IC LCS_01953 Amount Added: 10.00 Units: mL

Report Date: 12-May-2023 11:43:43 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-202357.d

Injection Date:	11-May-2023 20:08:00	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		



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Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-202

Injection Date: 11-May-2023 20:08:00 Instrument ID: WC_IonChrom10

Lims ID: ccv

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 17

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions 28D

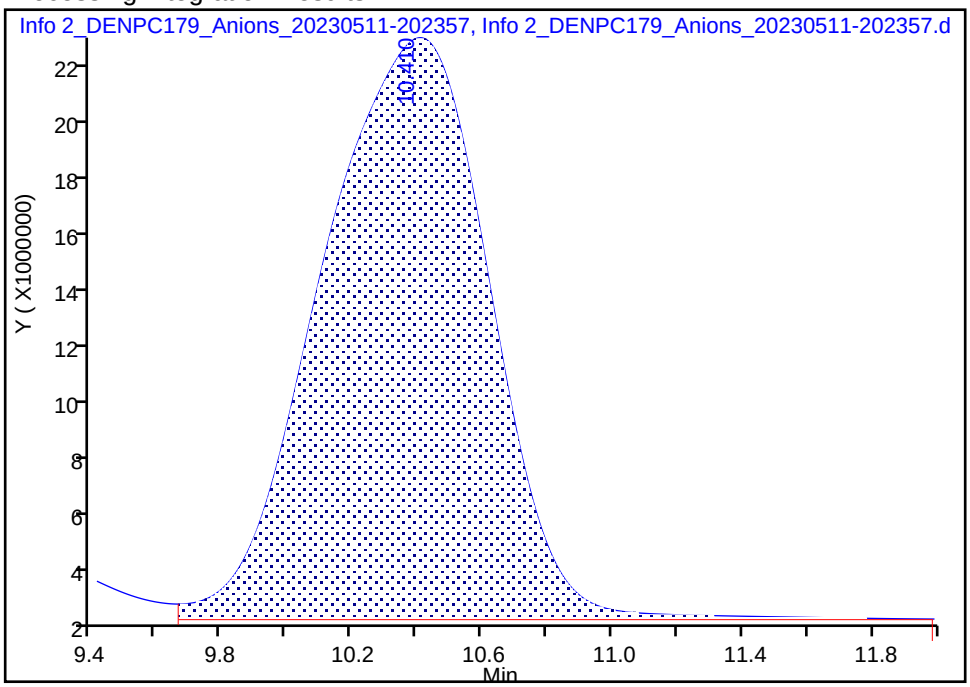
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

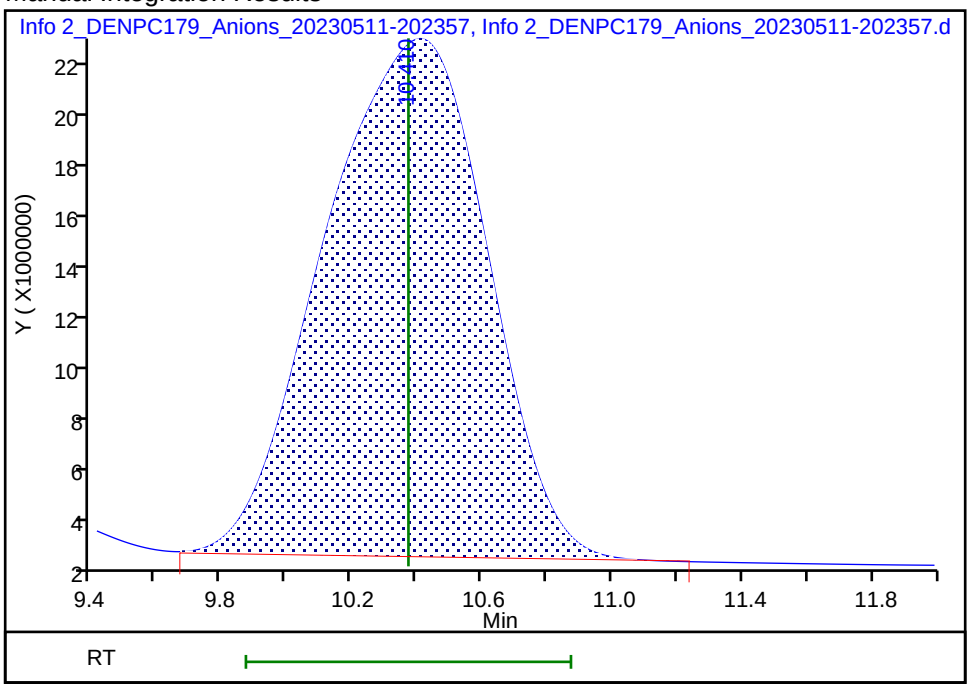
Processing Integration Results

RT: 10.41
Area: 706064015
Amount: 51.245429
Amount Units: ug/ml



Manual Integration Results

RT: 10.41
Area: 669395684
Amount: 48.588909
Amount Units: ug/ml



Reviewer: LVW8, 12-May-2023 11:17:50

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-203
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 11-May-2023 20:24:00 ALS Bottle#: 0 Worklist Smp#: 18
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121350-018
Misc. Info.: 280-0121350-018
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-May-2023 11:43:42 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1666

First Level Reviewer: LVW8 Date: 12-May-2023 10:46:02

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.212	3.147	0.065	11058		0.0421	
2 Chloride		4.332				ND	
3 Nitrite as N		5.025				ND	
4 Bromide	6.317	6.188	0.129	1785713		0.1213	
5 Nitrate as N		6.953				ND	
6 Orthophosphate as P	9.323	9.232	0.091	7021871		NC	
7 Sulfate	10.458	10.373	0.085	3335077		0.3346	M

QC Flag Legend

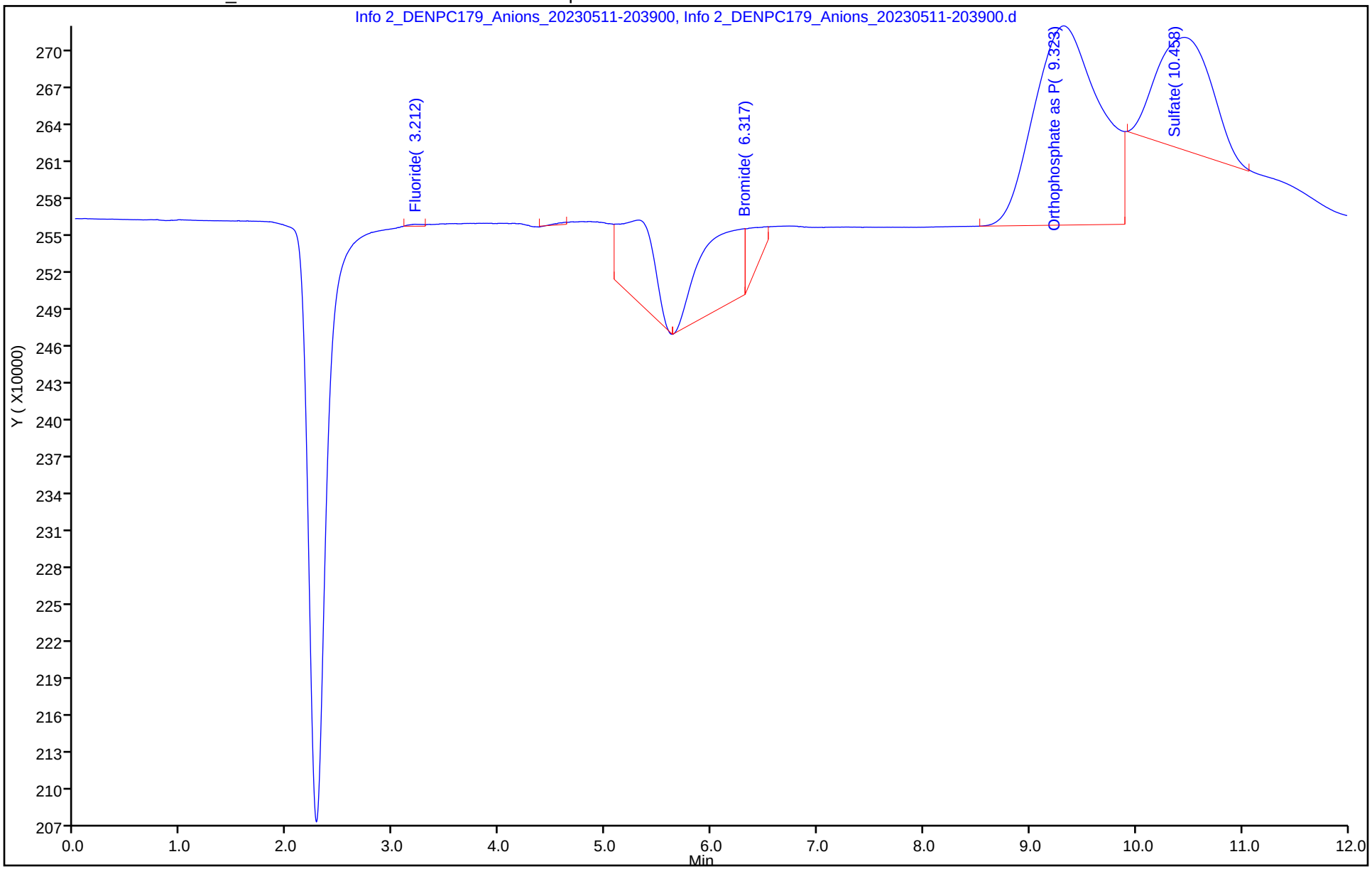
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 12-May-2023 11:43:44 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-203900.d

Injection Date:	11-May-2023 20:24:00	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		



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Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-203

Injection Date: 11-May-2023 20:24:00 Instrument ID: WC_IonChrom10

Lims ID: ccb

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 18

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions 28D

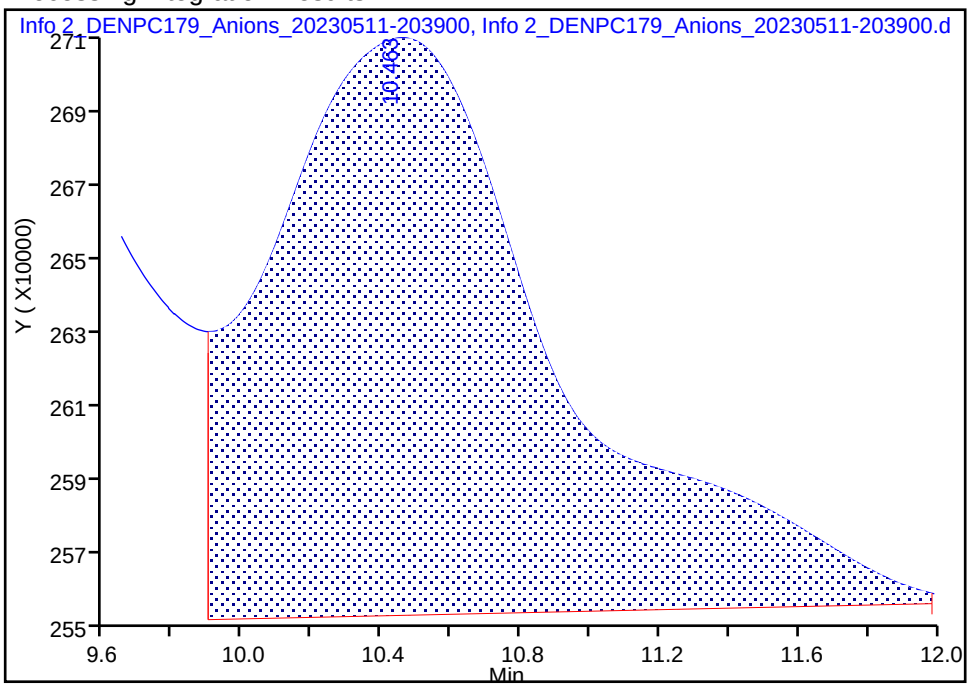
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

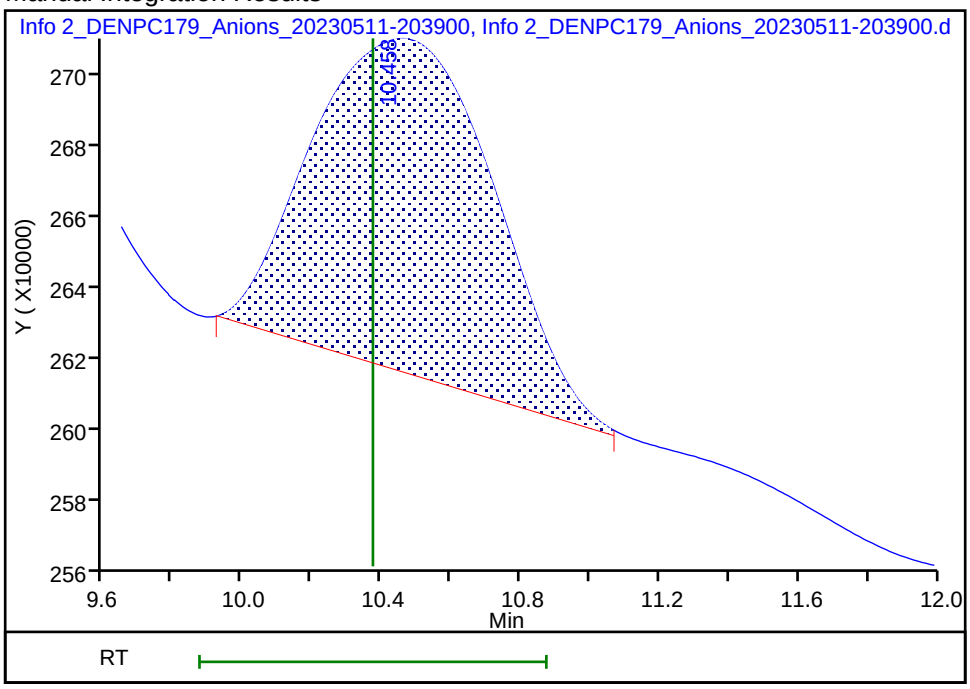
Processing Integration Results

RT: 10.46
Area: 8684529
Amount: 0.722191
Amount Units: ug/ml



Manual Integration Results

RT: 10.46
Area: 3335077
Amount: 0.334638
Amount Units: ug/ml



Reviewer: LVW8, 12-May-2023 10:45:58

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-232
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 11-May-2023 23:09:00 ALS Bottle#: 0 Worklist Smp#: 29
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121350-029
Misc. Info.: 280-0121350-029
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-May-2023 11:43:57 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1666

First Level Reviewer: LVW8 Date: 12-May-2023 10:46:37

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.147			ND	ND	
2 Chloride	4.333	4.332	0.001	938098480	50.0	49.0	
3 Nitrite as N	5.025	5.025	0.000	111110665	NC	NC	
4 Bromide	6.195	6.188	0.007	23615095	2.50	3.32	
5 Nitrate as N	6.953	6.953	0.000	111385426	NC	NC	M
6 Orthophosphate as P	9.192	9.232	-0.040	60773843	NC	NC	
7 Sulfate	10.392	10.373	0.019	681125569	50.0	49.4	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND
Review Flags
M - Manually Integrated

Reagents:

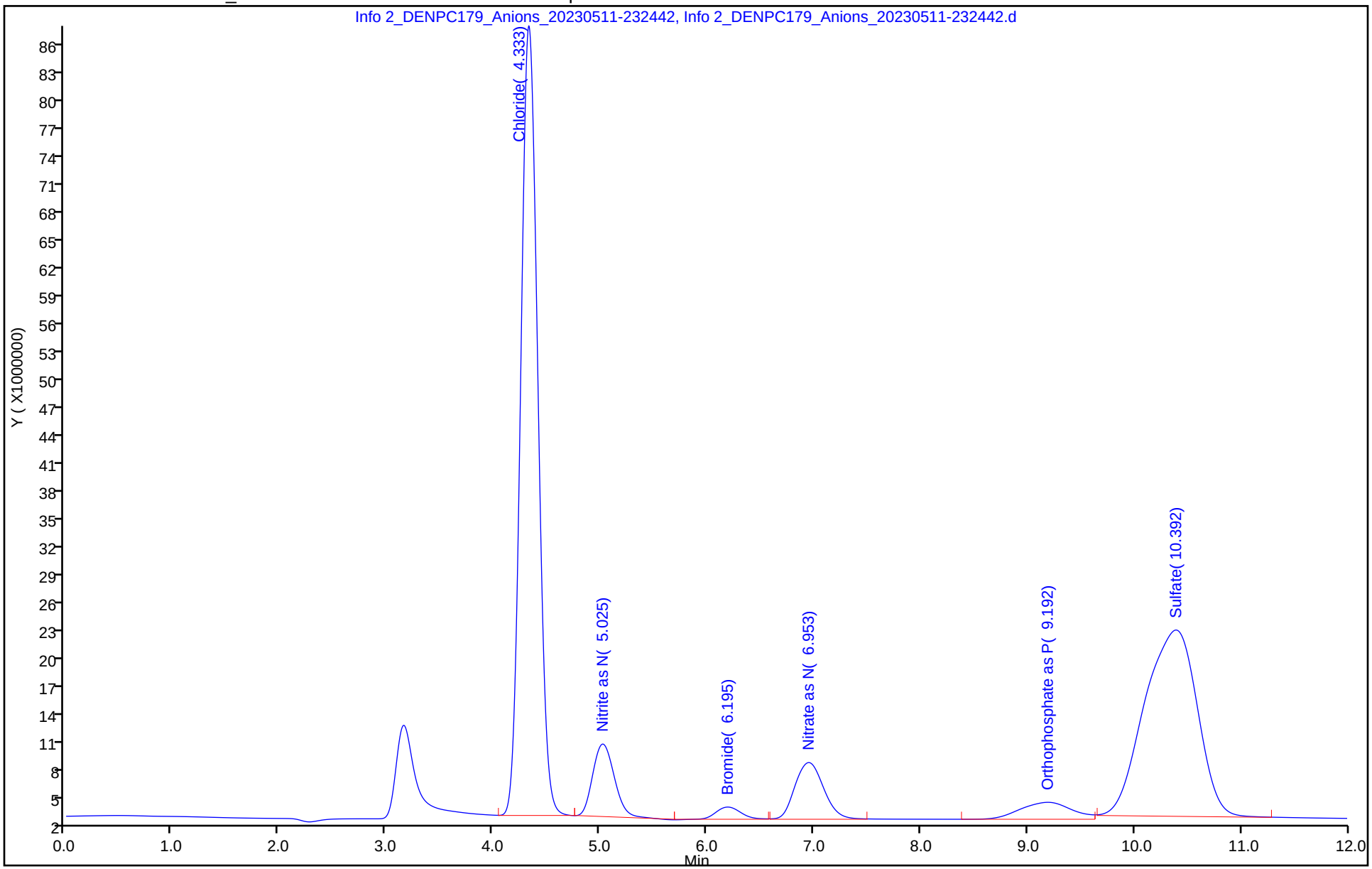
IC LCS_01953 Amount Added: 10.00 Units: mL

Report Date: 12-May-2023 11:43:57 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-232442.d

Injection Date:	11-May-2023 23:09:00	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		



5/31/2023 7:23 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-232

Injection Date: 11-May-2023 23:09:00 Instrument ID: WC_IonChrom10

Lims ID: ccv

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 29

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions 28D

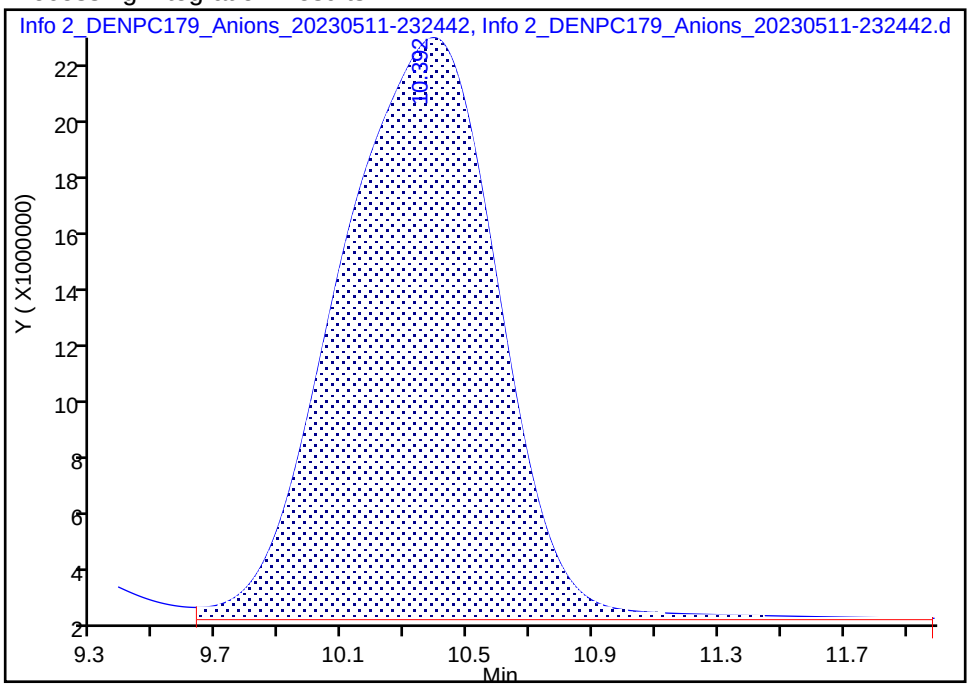
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

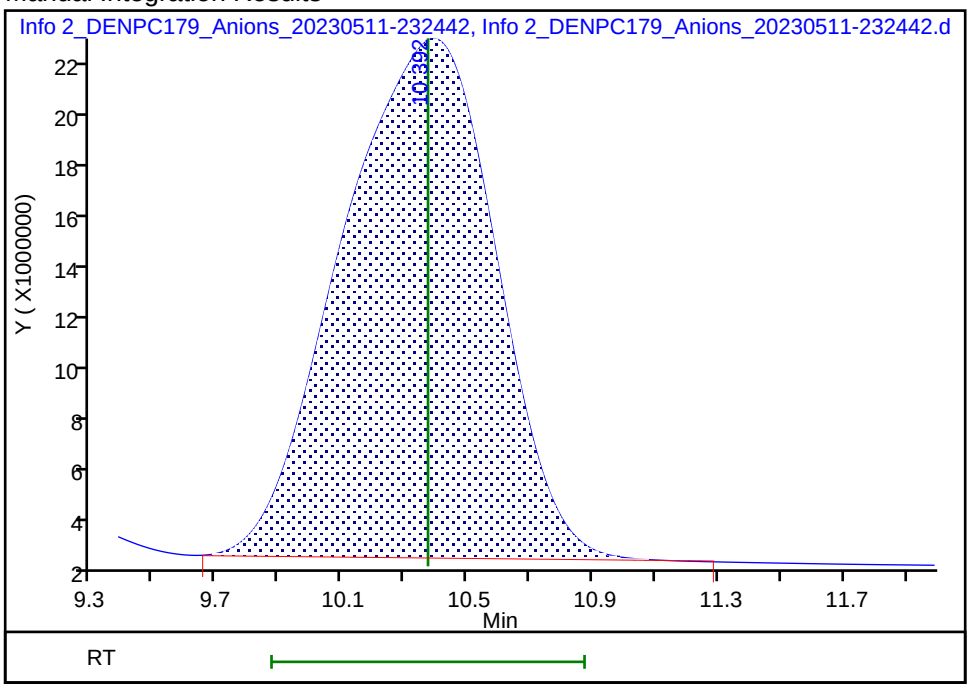
Processing Integration Results

RT: 10.39
Area: 715641858
Amount: 51.939318
Amount Units: ug/ml



Manual Integration Results

RT: 10.39
Area: 681125569
Amount: 49.438707
Amount Units: ug/ml



Reviewer: LVW8, 12-May-2023 11:23:45

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-233
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 11-May-2023 23:24:00 ALS Bottle#: 0 Worklist Smp#: 30
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121350-030
Misc. Info.: 280-0121350-030
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-May-2023 11:43:57 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1666

First Level Reviewer: LVW8 Date: 12-May-2023 11:24:01

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.147				ND	
2 Chloride		4.332				ND	
3 Nitrite as N		5.025				ND	
4 Bromide	6.422	6.188	0.234	2650939		0.2482	
5 Nitrate as N		6.953				ND	
6 Orthophosphate as P	9.280	9.232	0.048	16009089		NC	
7 Sulfate	10.438	10.373	0.065	4988316		0.4544	M

QC Flag Legend

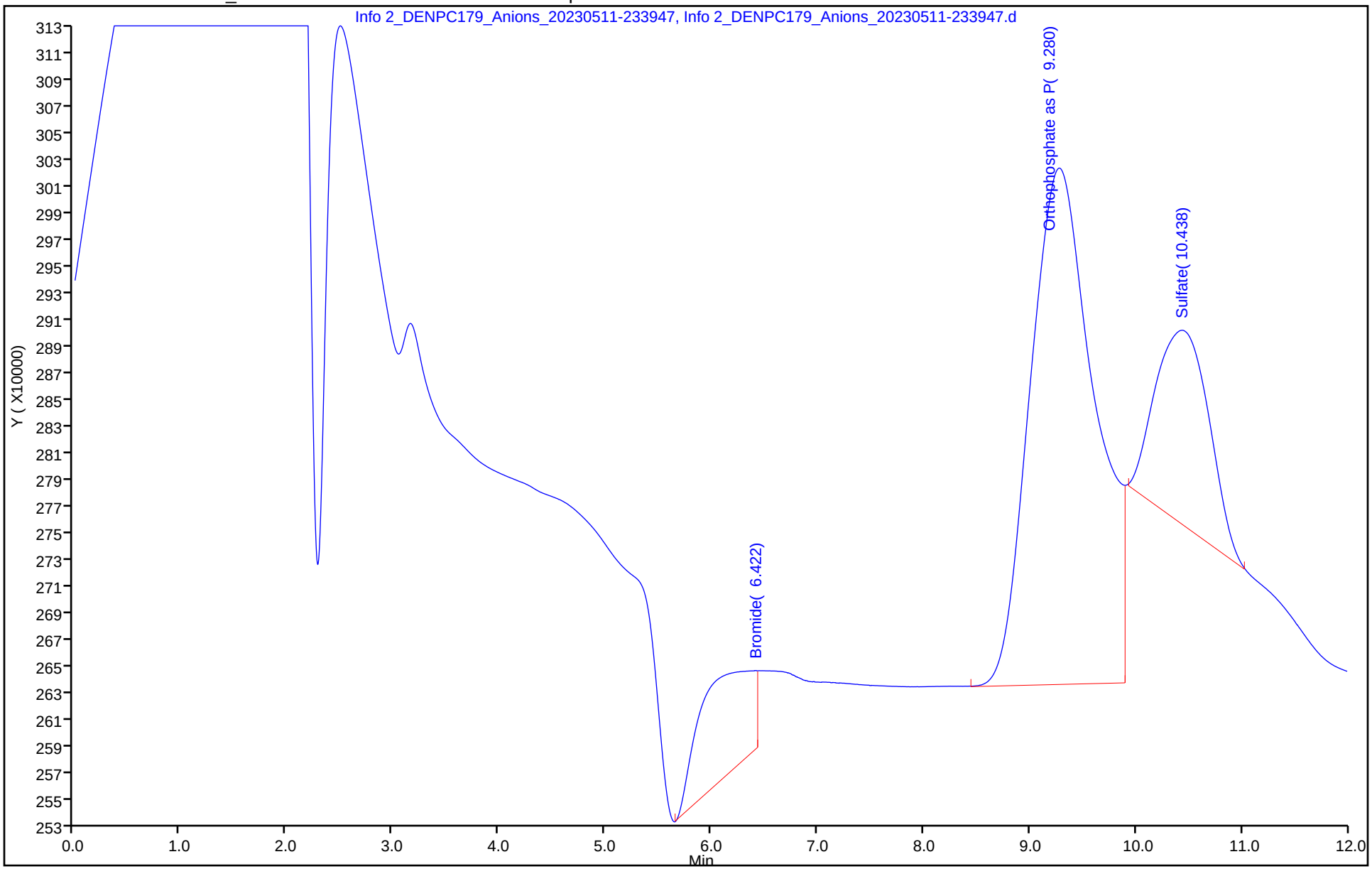
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 12-May-2023 11:43:58 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-233947.d

Injection Date:	11-May-2023 23:24:00	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		



5/31/2023 7:23 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

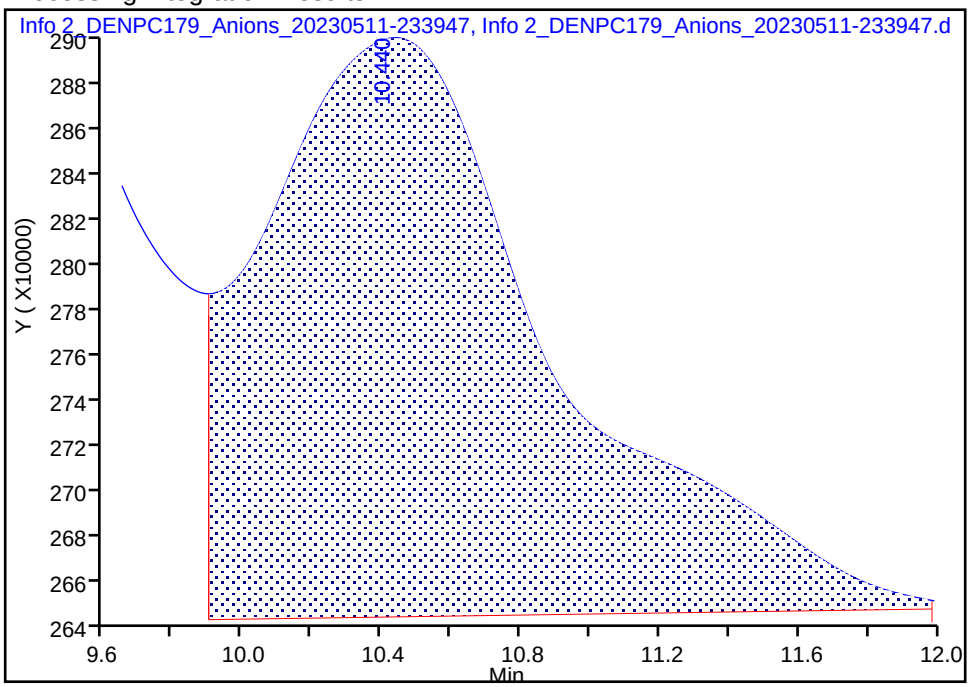
Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230511-233
Injection Date: 11-May-2023 23:24:00 Instrument ID: WC_IonChrom10
Lims ID: ccb
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 30
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions_IC10 Limit Group: Wet - Anions 28D
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

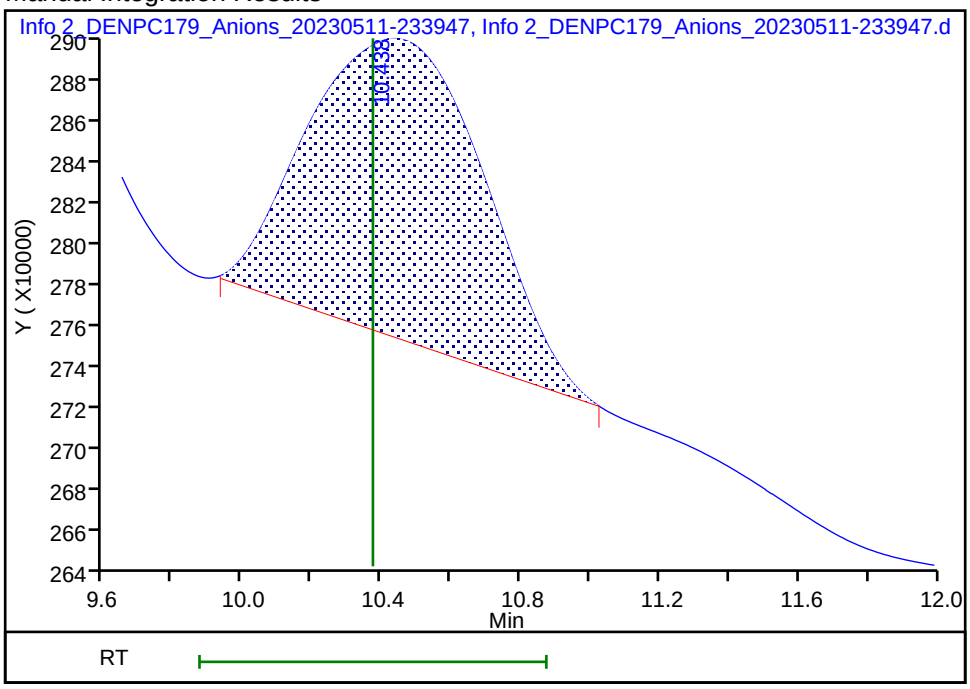
Processing Integration Results

RT: 10.44
Area: 14939265
Amount: 1.175329
Amount Units: ug/ml



Manual Integration Results

RT: 10.44
Area: 4988316
Amount: 0.454410
Amount Units: ug/ml



Reviewer: LVW8, 12-May-2023 11:23:58
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230512-000
Lims ID: 280-176335-C-4
Client ID: LL2mw-059-230401-GW
Sample Type: Client
Inject. Date: 11-May-2023 23:54:00 ALS Bottle#: 0 Worklist Smp#: 32
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121350-032
Misc. Info.: 280-0121350-032
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-May-2023 11:43:57 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1666

First Level Reviewer: LVW8 Date: 12-May-2023 11:25:05

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		3.147			ND	
2 Chloride	4.278	4.332	-0.054	27569400	1.57	M
3 Nitrite as N		5.025			ND	
4 Bromide	6.165	6.188	-0.023	12535365	1.70	
5 Nitrate as N	6.900	6.953	-0.053	16078306	NC	M
6 Orthophosphate as P	9.167	9.232	-0.065	26347061	NC	
7 Sulfate	10.212	10.373	-0.161	218454383	15.9	M

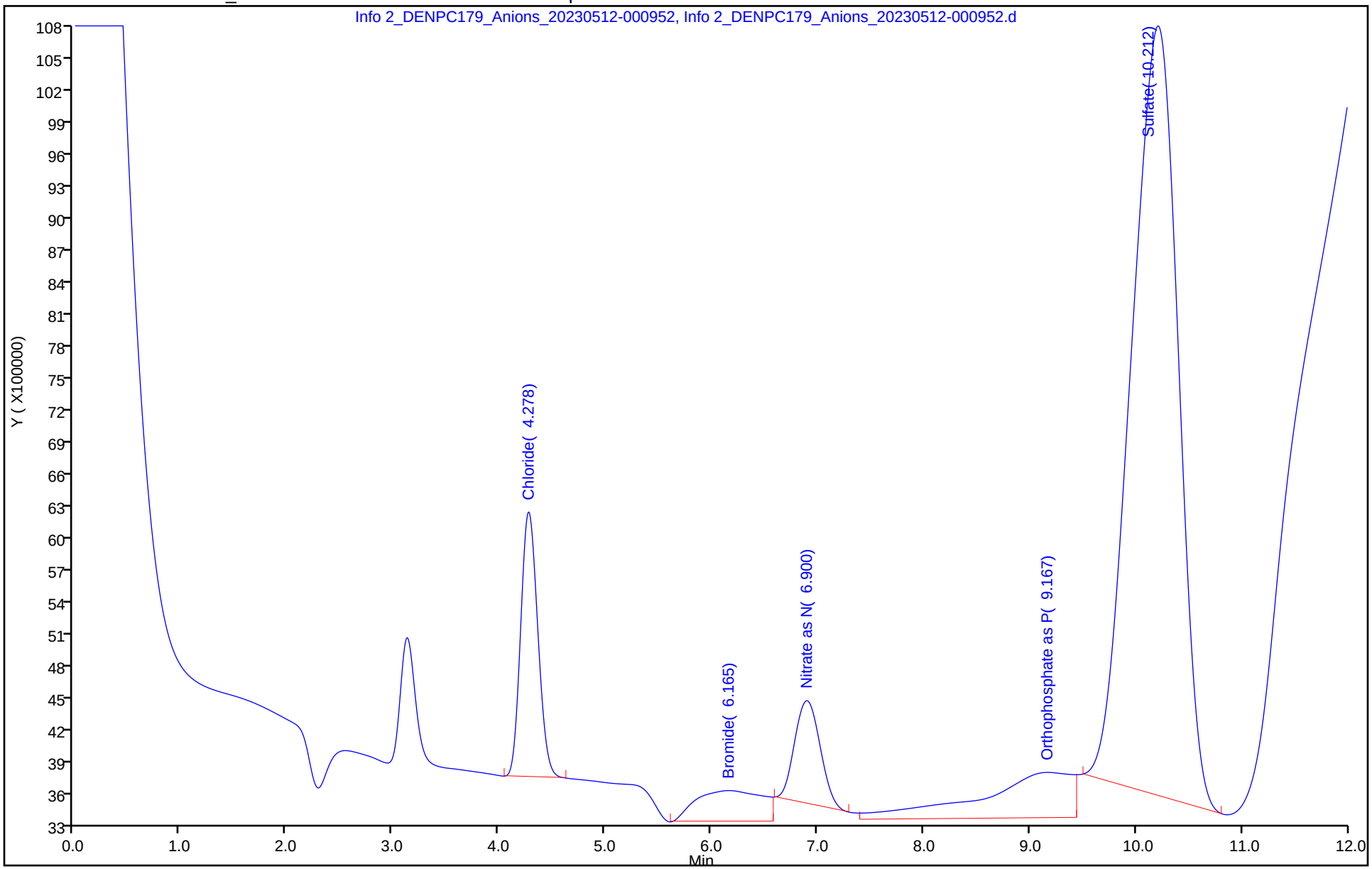
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 12-May-2023 11:44:00 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230512-000952.d				
Injection Date:	11-May-2023 23:54:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-176335-C-4	Lab Sample ID:	280-176335-4	Worklist Smp#:	32
Client ID:	LL2mw-059-230401-GW				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



5/31/2023 7:23 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230512-000

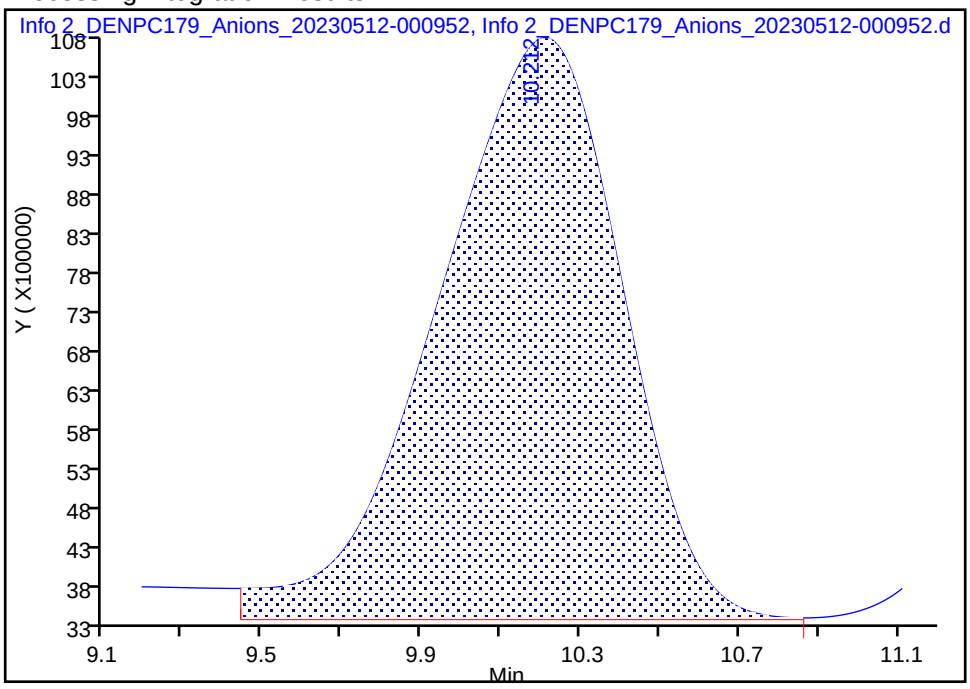
Injection Date:	11-May-2023 23:54:00	Instrument ID:	WC_IonChrom10
Lims ID:	280-176335-C-4	Lab Sample ID:	280-176335-4
Client ID:	LL2mw-059-230401-GW		
Operator ID:	wetchemd	ALS Bottle#:	0 Worklist Smp#: 32
Injection Vol:	5.0 ul	Dil. Factor:	1.0000
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D
Column:		Detector	Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

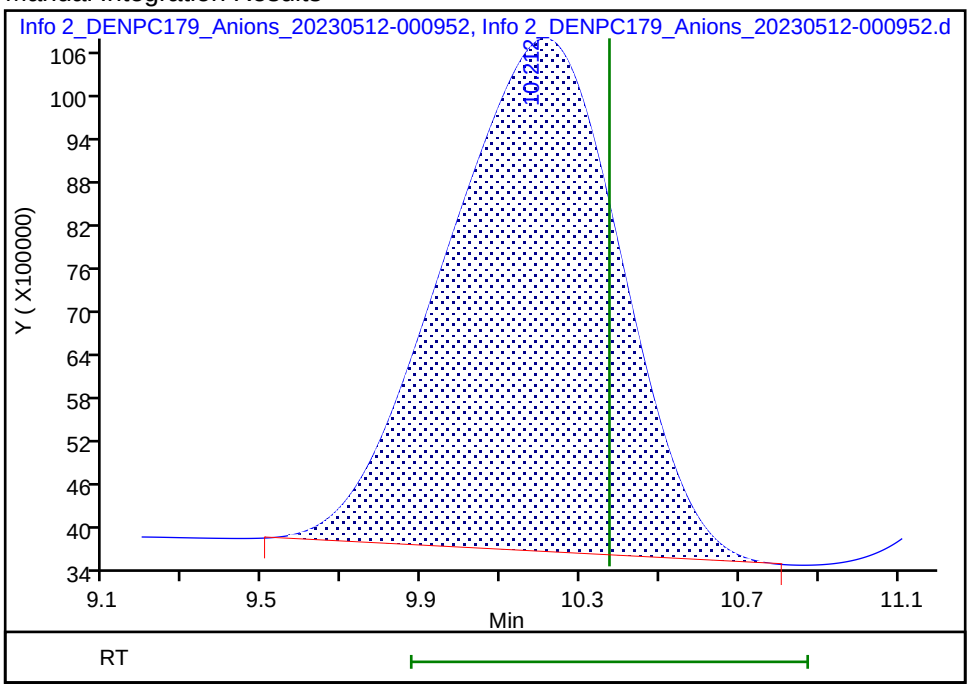
Processing Integration Results

RT: 10.21
Area: 236482145
Amount: 17.225506
Amount Units: ug/ml



Manual Integration Results

RT: 10.21
Area: 218454383
Amount: 15.919443
Amount Units: ug/ml



Reviewer: LVW8, 12-May-2023 11:25:02

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230512-022
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 12-May-2023 02:10:00 ALS Bottle#: 0 Worklist Smp#: 41
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121350-041
Misc. Info.: 280-0121350-041
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-May-2023 11:44:09 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1666

First Level Reviewer: LVW8 Date: 12-May-2023 11:28:15

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.147			ND	ND	
2 Chloride	4.323	4.332	-0.009	937330268	50.0	49.0	M
3 Nitrite as N	5.010	5.025	-0.015	112850374	NC	NC	M
4 Bromide	6.162	6.188	-0.026	23880161	2.50	3.36	
5 Nitrate as N	6.920	6.953	-0.033	111714078	NC	NC	M
6 Orthophosphate as P	9.132	9.232	-0.100	65905025	NC	NC	
7 Sulfate	10.313	10.373	-0.060	665774756	50.0	48.3	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND
Review Flags
M - Manually Integrated

Reagents:

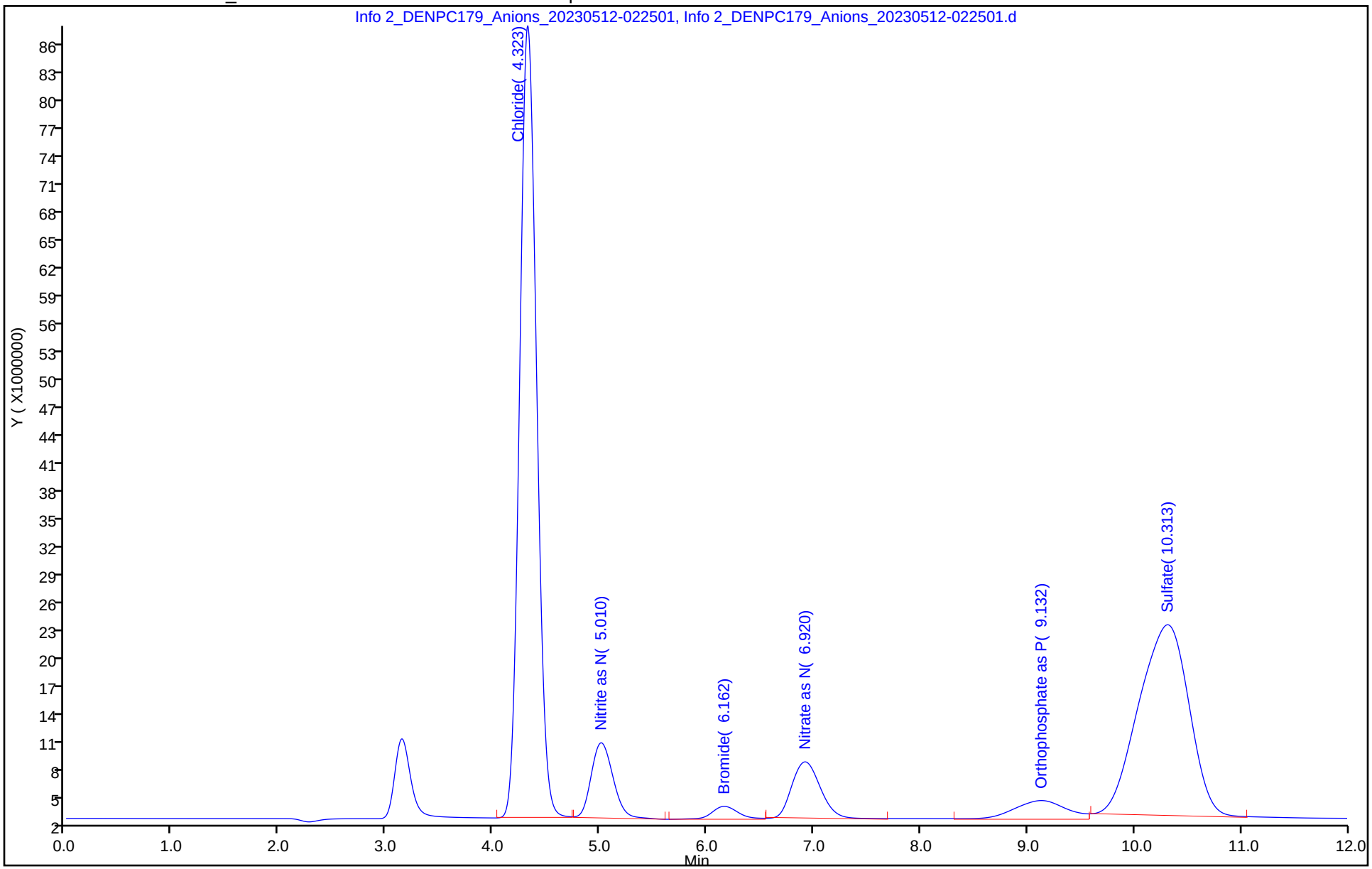
IC LCS_01953 Amount Added: 10.00 Units: mL

Report Date: 12-May-2023 11:44:10 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230512-022501.d

Injection Date:	12-May-2023 02:10:00	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 28D		



5/31/2023 7:23 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230512-022

Injection Date: 12-May-2023 02:10:00 Instrument ID: WC_IonChrom10

Lims ID: ccv

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 41

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions 28D

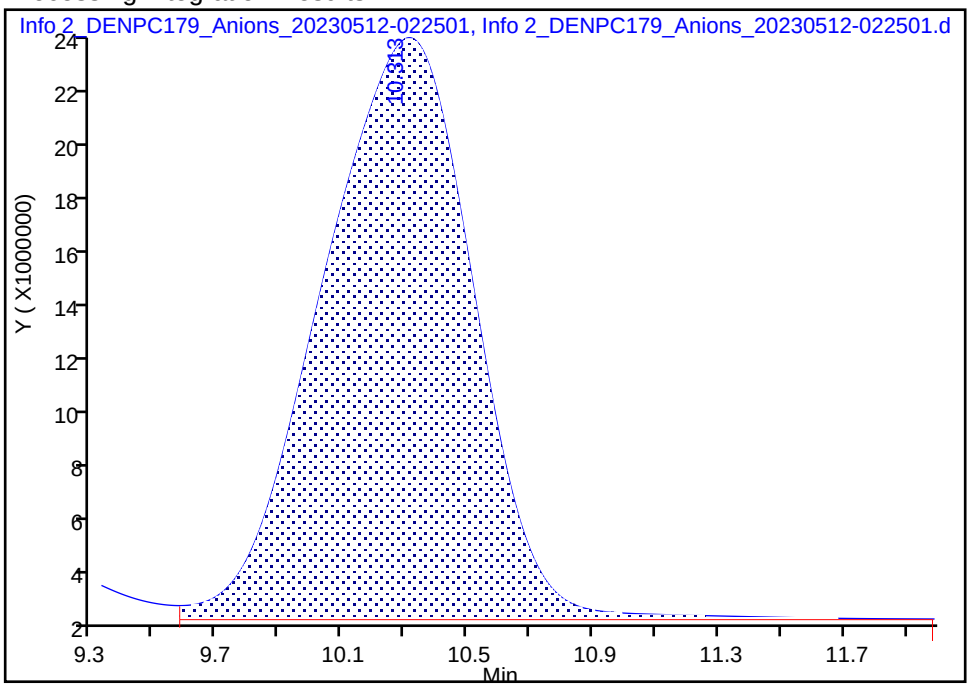
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

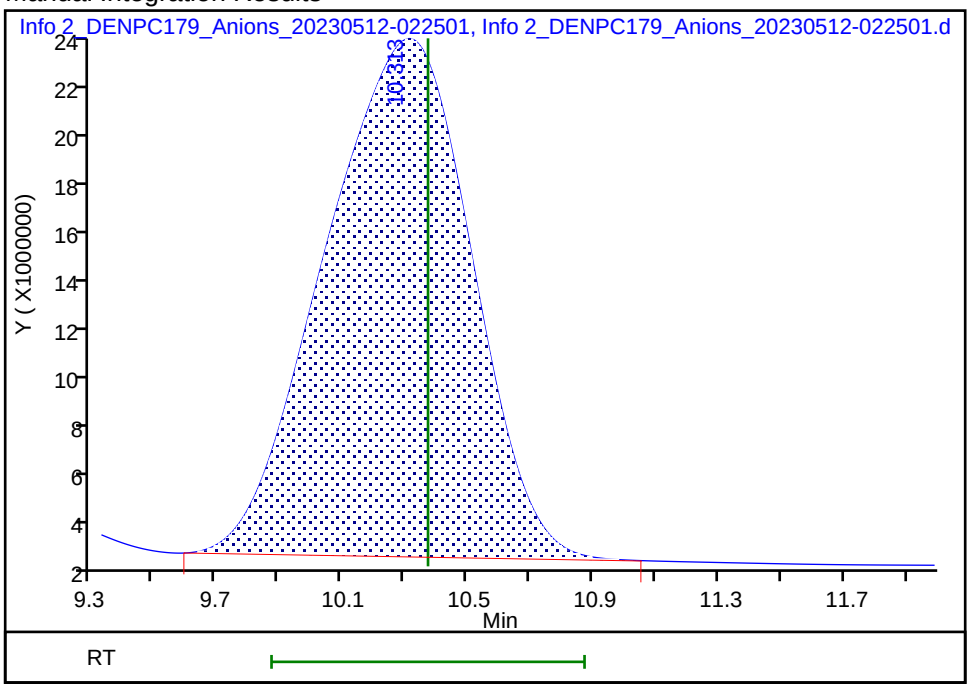
Processing Integration Results

RT: 10.31
Area: 703659746
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 10.31
Area: 665774756
Amount: 48.326582
Amount Units: ug/ml



Reviewer: LVW8, 12-May-2023 11:28:14

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230512-024
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 12-May-2023 02:25:00 ALS Bottle#: 0 Worklist Smp#: 42
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121350-042
Misc. Info.: 280-0121350-042
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 12-May-2023 11:44:09 Calib Date: 12-Apr-2023 15:19:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153

Column 1 : Det: Info 2_091554_1
Process Host: CTX1666

First Level Reviewer: LVW8 Date: 12-May-2023 11:28:30

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.147				ND	
2 Chloride		4.332				ND	
3 Nitrite as N		5.025				ND	U
4 Bromide		6.188				ND	
5 Nitrate as N		6.953				ND	
6 Orthophosphate as P	9.222	9.232	-0.010	9935041		NC	
7 Sulfate	10.375	10.373	0.002	4634563		0.4288	M

QC Flag Legend

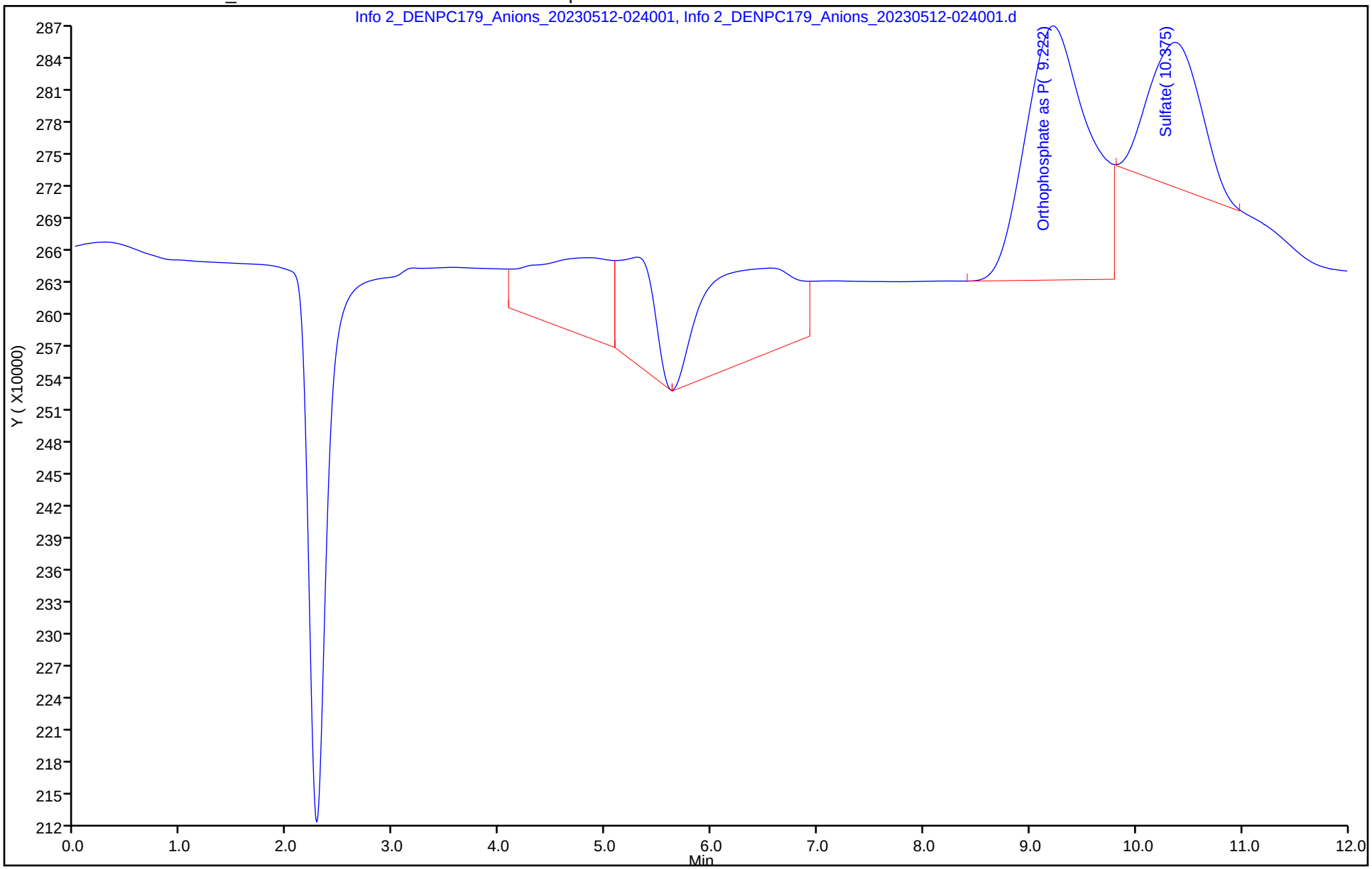
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 12-May-2023 11:44:11 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230512-024001.d

Injection Date:	12-May-2023 02:25:00	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 28D		



5/31/2023 7:23 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230511-121350.b\Info 2_DENPC179_Anions_20230512-024

Injection Date: 12-May-2023 02:25:00 Instrument ID: WC_IonChrom10

Lims ID: ccb

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 42

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions 28D

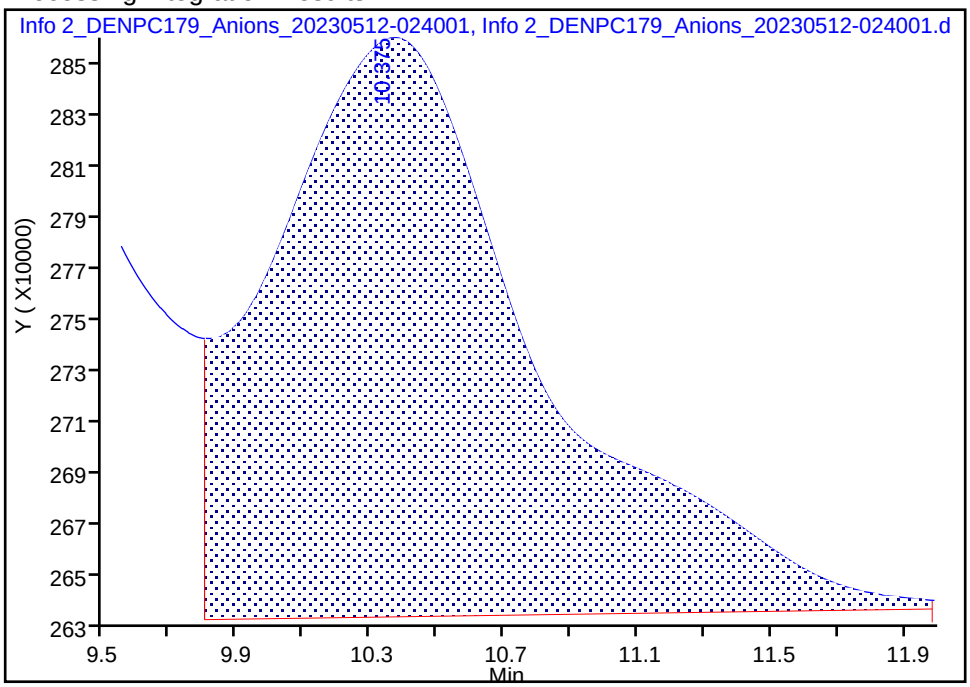
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

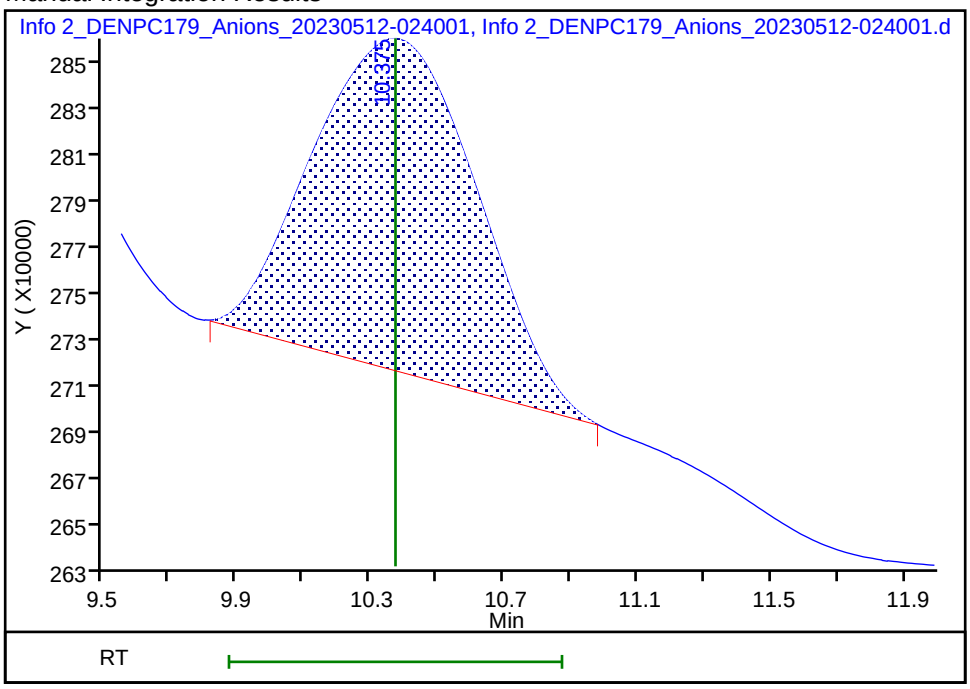
Processing Integration Results

RT: 10.38
Area: 12318626
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 10.38
Area: 4634563
Amount: 0.428782
Amount Units: ug/ml



Reviewer: LVW8, 12-May-2023 11:28:21

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

	Analysis	Sample Name	ObjectID
1	NPOC	ICV	0L-10900100866-10101000-134B17B1B9CE-0000
2	NPOC	ICB	0L-10900100866-10101000-134B17B1B9CE-0001
3	NPOC	LCS	0L-10900100866-10101000-134B17B1B9CE-0002
4	NPOC	MB	0L-10900100866-10101000-134B17B1B9CF-0000
5	NPOC	TIC	0L-10900100866-10101000-134B17B1B9CF-0001
6	NPOC	280-176363-c-9	0L-10900100866-10101000-134B17B1B9CF-0002
7	NPOC	MS 280-176363-c-9	0L-10900100866-10101000-134B17B1B9CF-0003
8	NPOC	MSD 280-176363-c-9	0L-10900100866-10101000-134B17B1B9CF-0004
9	NPOC	280-176363-a-10	0L-10900100866-10101000-134B17B1B9CF-0005
10	NPOC	280-176363-c-11	0L-10900100866-10101000-134B17B1B9CF-0006
11	NPOC	280-176363-c-12	0L-10900100866-10101000-134B17B1B9CF-0007
12	NPOC	280-176363-c-13	0L-10900100866-10101000-134B17B1B9CF-0008
13	NPOC	280-176363-d-14	0L-10900100866-10101000-134B17B1B9CF-0009
14	NPOC	280-176363-d-15	0L-10900100866-10101000-134B17B1B9CF-000A
15	NPOC	CCV	0L-10900100866-10101000-134B17B1B9CF-000B
16	NPOC	CCB	0L-10900100866-10101000-134B17B1B9CF-000C
17	NPOC	280-176363-c-16	0L-10900100866-10101000-134B17B1B9CF-000D
18	NPOC	280-176363-c-17	0L-10900100866-10101000-134B17B1B9CF-000E
19	NPOC	280-176363-d-18	0L-10900100866-10101000-134B17B1B9CF-000F
20	NPOC	280-176363-a-19	0L-10900100866-10101000-134B17B1B9CF-0010
21	NPOC	MS 280-176363-a-19	0L-10900100866-10101000-134B17B1B9CF-0011
22	NPOC	MSD 280-176363-a-19	0L-10900100866-10101000-134B17B1B9CF-0012
23	NPOC	280-176363-d-20	0L-10900100866-10101000-134B17B1B9CF-0013
24	NPOC	280-176363-c-21	0L-10900100866-10101000-134B17B1B9CF-0014
25	NPOC	280-176363-c-22	0L-10900100866-10101000-134B17B1B9CF-0015
26	NPOC	280-176363-d-23	0L-10900100866-10101000-134B17B1B9CF-0016
27	NPOC	CCV	0L-10900100866-10101000-134B17B1B9CF-0017
28	NPOC	CCB	0L-10900100866-10101000-134B17B1B9CF-0018
29	NPOC	280-176363-a-24	0L-10900100866-10101000-134B17B1B9CF-0019
30	NPOC	280-176364-c-1	0L-10900100866-10101000-134B17B1B9CF-001A
31	NPOC	280-176364-c-2	0L-10900100866-10101000-134B17B1B9CF-001B
32	NPOC	280-176364-c-3	0L-10900100866-10101000-134B17B1B9CF-001C
33	NPOC	280-176364-c-4	0L-10900100866-10101000-134B17B1B9CF-001D
34	NPOC	LCS	0L-10900100866-10101000-134B17B1B9CF-001E
35	NPOC	MB	0L-10900100866-10101000-134B17B1B9CF-001F
36	NPOC	280-176364-c-5	0L-10900100866-10101000-134B17B1B9CF-0020
37	NPOC	MS 280-176364-c-5	0L-10900100866-10101000-134B17B1B9CF-0021
38	NPOC	MSD 280-176364-c-5	0L-10900100866-10101000-134B17B1B9CF-0022
39	NPOC	CCV	0L-10900100866-10101000-134B17B1B9CF-0023
40	NPOC	CCB	0L-10900100866-10101000-134B17B1B9CF-0024
41	NPOC	280-176335-d-4	0L-10900100866-10101000-134B17B1B9CF-0025
42	NPOC	280-176434-d-7	0L-10900100866-10101000-134B17B1B9CF-0026
43	NPOC	280-176441-c-1	0L-10900100866-10101000-134B17B1B9CF-0027
44	NPOC	280-176441-c-4	0L-10900100866-10101000-134B17B1B9CF-0028
45	NPOC	280-176456-a-1	0L-10900100866-10101000-134B17B1B9CF-0029
46	NPOC	280-176456-a-2	0L-10900100866-10101000-134B17B1B9CF-002A
47	NPOC	280-176456-a-3	0L-10900100866-10101000-134B17B1B9CF-002B
48	NPOC	280-176588-b-1	0L-10900100866-10101000-134B17B1B9CF-002C
49	NPOC	280-176588-b-2	0L-10900100866-10101000-134B17B1B9CF-002D
50	NPOC	280-176081-j-10	0L-10900100866-10101000-134B17B1B9CF-002E
51	NPOC	CCV	0L-10900100866-10101000-134B17B1B9CF-002F
52	NPOC	CCB	0L-10900100866-10101000-134B17B1B9CF-0030
53	NPOC	MS 280-176081-j-10	0L-10900100866-10101000-134B17B1B9CF-0031

	Origin	Manual Dilution	Result
1	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:20.13mg/L
2	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:0.1752mg/L
3	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:24.38mg/L
4	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:0.06265mg/L
5	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:0.08653mg/L
6	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:29.55mg/L
7	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:53.06mg/L
8	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:52.88mg/L
9	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:29.88mg/L
10	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	2.000	NPOC:167.0mg/L
11	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:21.72mg/L
12	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	10.00	NPOC:195.8mg/L
13	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:9.321mg/L
14	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	25.00	NPOC:257.6mg/L
15	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:24.12mg/L
16	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:0.1299mg/L
17	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:7.254mg/L
18	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	25.00	NPOC:207.6mg/L
19	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:14.78mg/L
20	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:15.18mg/L
21	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:38.72mg/L
22	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:38.64mg/L
23	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	10.00	NPOC:303.1mg/L
24	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:7.001mg/L
25	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	10.00	NPOC:336.0mg/L
26	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:7.231mg/L
27	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:24.46mg/L
28	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:0.2277mg/L
29	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:0.1486mg/L
30	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:3.078mg/L
31	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:0.6021mg/L
32	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:5.435mg/L
33	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:5.288mg/L
34	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:24.04mg/L
35	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:0.1137mg/L
36	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:2.503mg/L
37	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:26.24mg/L
38	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:26.63mg/L
39	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:23.98mg/L
40	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:0.1424mg/L
41	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:1.228mg/L
42	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:1.733mg/L
43	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:0.7541mg/L
44	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:0.9082mg/L
45	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:0.4854mg/L
46	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:2.544mg/L
47	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:1.109mg/L
48	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:3.450mg/L
49	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:3.424mg/L
50	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:1.016mg/L
51	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:24.13mg/L
52	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:0.05500mg/L
53	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:25.11mg/L

	Status	Date / Time	Vial
1	Completed	5/23/2023 5:30:08 PM	1
2	Completed	5/23/2023 5:44:59 PM	2
3	Completed	5/23/2023 6:04:42 PM	3
4	Completed	5/23/2023 6:19:08 PM	4
5	Completed	5/23/2023 6:33:40 PM	5
6	Completed	5/23/2023 6:53:32 PM	6
7	Completed	5/23/2023 7:13:34 PM	7
8	Completed	5/23/2023 7:33:16 PM	8
9	Completed	5/23/2023 7:53:11 PM	9
10	Completed	5/23/2023 8:13:23 PM	10
11	Completed	5/23/2023 8:32:00 PM	11
12	Completed	5/23/2023 8:50:15 PM	12
13	Completed	5/23/2023 9:08:47 PM	13
14	Completed	5/23/2023 9:27:07 PM	14
15	Completed	5/23/2023 9:46:41 PM	15
16	Completed	5/23/2023 10:00:46 PM	16
17	Completed	5/23/2023 10:18:53 PM	17
18	Completed	5/23/2023 10:36:58 PM	18
19	Completed	5/23/2023 10:55:56 PM	19
20	Completed	5/23/2023 11:14:25 PM	20
21	Completed	5/23/2023 11:33:58 PM	21
22	Completed	5/23/2023 11:53:32 PM	22
23	Completed	5/24/2023 12:12:42 AM	23
24	Completed	5/24/2023 12:31:17 AM	24
25	Completed	5/24/2023 12:50:43 AM	25
26	Completed	5/24/2023 1:09:03 AM	26
27	Completed	5/24/2023 1:28:30 AM	27
28	Completed	5/24/2023 1:43:17 AM	28
29	Completed	5/24/2023 1:57:33 AM	29
30	Completed	5/24/2023 2:15:04 AM	30
31	Completed	5/24/2023 2:30:49 AM	31
32	Completed	5/24/2023 2:49:03 AM	32
33	Completed	5/24/2023 3:06:49 AM	33
34	Completed	5/24/2023 3:26:14 AM	34
35	Completed	5/24/2023 3:40:44 AM	35
36	Completed	5/24/2023 3:58:03 AM	36
37	Completed	5/24/2023 4:17:10 AM	37
38	Completed	5/24/2023 4:36:30 AM	38
39	Completed	5/24/2023 4:55:32 AM	39
40	Completed	5/24/2023 5:09:57 AM	40
41	Completed	5/24/2023 5:26:53 AM	41
42	Completed	5/24/2023 5:44:11 AM	42
43	Completed	5/24/2023 6:00:32 AM	43
44	Completed	5/24/2023 6:16:53 AM	44
45	Completed	5/24/2023 6:33:00 AM	45
46	Completed	5/24/2023 6:50:28 AM	46
47	Completed	5/24/2023 7:07:20 AM	47
48	Completed	5/24/2023 7:25:28 AM	48
49	Completed	5/24/2023 7:43:39 AM	49
50	Completed	5/24/2023 7:59:57 AM	50
51	Completed	5/24/2023 8:19:16 AM	51
52	Completed	5/24/2023 8:33:28 AM	52
53	Completed	5/24/2023 8:52:22 AM	53

	Analysis	Sample Name	ObjectID
54	NPOC	MSD 280-176081-j-10	0L-10900100866-10101000-134B17B1B9CF-0032
55	NPOC	280-176588-b-3	0L-10900100866-10101000-134B17B1B9CF-0033
56	NPOC	280-176588-b-4	0L-10900100866-10101000-134B17B1B9CF-0034
57	NPOC	280-176588-b-5	0L-10900100866-10101000-134B17B1B9CF-0035
58	NPOC	280-176588-b-6	0L-10900100866-10101000-134B17B1B9CF-0036
59	NPOC	280-176210-a-2	0L-10900100866-10101000-134B17B1B9CF-0037
60	NPOC	280-176326-b-3	0L-10900100866-10101000-134B17B1B9CF-0038
61	NPOC	280-176580-a-1	0L-10900100866-10101000-134B17B1B9CF-0039
62	NPOC	280-176580-a-2	0L-10900100866-10101000-134B17B1B9CF-003A
63	NPOC	CCV	0L-10900100866-10101000-134B17B1B9CF-003B
64	NPOC	CCB	0L-10900100866-10101000-134B17B1B9CF-003C
65	NPOC	280-176425-a-1	0L-10900100866-10101000-134B17B1B9CF-003D
66	NPOC	LCS	0L-10900100866-10101000-134B17B1B9CF-003E
67	NPOC	LCSD	0L-10900100866-10101000-134B17B1B9CF-003F
68	NPOC	MB	0L-10900100866-10101000-134B17B1B9CF-0040
69	NPOC	TIC	0L-10900100866-10101000-134B17B1B9D0-0000
70	NPOC	280-176361-g-3	0L-10900100866-10101000-134B17B1B9D0-0001
71	NPOC	MS 280-176361-g-3	0L-10900100866-10101000-134B17B1B9D0-0002
72	NPOC	MSD 280-176361-g-3	0L-10900100866-10101000-134B17B1B9D0-0003
73	NPOC	280-176361-g-4	0L-10900100866-10101000-134B17B1B9D0-0004
74	NPOC	280-176361-g-5	0L-10900100866-10101000-134B17B1B9D0-0005
75	NPOC	CCV	0L-10900100866-10101000-134B17B1B9D0-0006
76	NPOC	CCB	0L-10900100866-10101000-134B17B1B9D0-0007
77	NPOC	280-176361-g-6	0L-10900100866-10101000-134B17B1B9D0-0008
78	NPOC	280-176361-g-7	0L-10900100866-10101000-134B17B1B9D0-0009
79	NPOC	280-176361-g-8	0L-10900100866-10101000-134B17B1B9D0-000A
80	NPOC	280-176361-g-9	0L-10900100866-10101000-134B17B1B9D0-000B
81	NPOC	280-176420-n-1	0L-10900100866-10101000-134B17B1B9D0-000C
82	NPOC	280-176420-l-2	0L-10900100866-10101000-134B17B1B9D0-000D
83	NPOC	280-176296-g-4	0L-10900100866-10101000-134B17B1B9D0-000E
84	NPOC	280-176425-a-2	0L-10900100866-10101000-134B17B1B9D0-000F
85	NPOC	MS 280-176425-a-2	0L-10900100866-10101000-134B17B1B9D0-0010
86	NPOC	MSD 280-176425-a-2	0L-10900100866-10101000-134B17B1B9D0-0011
87	NPOC	CCV	0L-10900100866-10101000-134B17B1B9D0-0012
88	NPOC	CCB	0L-10900100866-10101000-134B17B1B9D0-0013
89	NPOC	280-176425-a-3	0L-10900100866-10101000-134B17B1B9D0-0014
90	NPOC	280-176425-a-4	0L-10900100866-10101000-134B17B1B9D0-0015
91	NPOC	280-176437-g-3	0L-10900100866-10101000-134B17B1B9D0-0016
92	NPOC	CCV	0L-10900100866-10101000-134B17B1B9D0-0017
93	NPOC	CCB	0L-10900100866-10101000-134B17B1B9D0-0018

	Origin	Manual Dilution	Result
54	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:25.14mg/L
55	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:2.875mg/L
56	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:3.041mg/L
57	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:3.348mg/L
58	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:2.544mg/L
59	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	100.0	NPOC:2656mg/L
60	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:1.043mg/L
61	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:10.48mg/L
62	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:9.009mg/L
63	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:24.08mg/L
64	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:0.1791mg/L
65	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:2.200mg/L
66	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:24.03mg/L
67	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:24.27mg/L
68	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:0.2103mg/L
69	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:0.1223mg/L
70	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:1.157mg/L
71	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:24.91mg/L
72	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:24.89mg/L
73	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:1.258mg/L
74	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:1.202mg/L
75	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:23.91mg/L
76	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:0.1601mg/L
77	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:0.6286mg/L
78	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:2.425mg/L
79	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:0.8743mg/L
80	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:1.461mg/L
81	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	25.00	NPOC:628.4mg/L
82	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	25.00	NPOC:492.5mg/L
83	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:1.631mg/L
84	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	100.0	NPOC:391.2mg/L
85	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	100.0	NPOC:2804mg/L
86	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	100.0	NPOC:2825mg/L
87	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:23.86mg/L
88	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:0.2009mg/L
89	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	25.00	NPOC:876.2mg/L
90	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	25.00	NPOC:712.7mg/L
91	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:0.8302mg/L
92	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:23.73mg/L
93	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	1.000	NPOC:0.1479mg/L

	Status	Date / Time	Vial
54	Completed	5/24/2023 9:11:34 AM	54
55	Completed	5/24/2023 9:29:09 AM	55
56	Completed	5/24/2023 9:46:44 AM	56
57	Completed	5/24/2023 10:04:18 AM	57
58	Completed	5/24/2023 10:21:47 AM	58
59	Completed	5/24/2023 10:40:40 AM	59
60	Completed	5/24/2023 10:57:15 AM	60
61	Completed	5/24/2023 11:15:51 AM	61
62	Completed	5/24/2023 11:34:11 AM	62
63	Completed	5/24/2023 11:53:30 AM	63
64	Completed	5/24/2023 12:08:00 PM	64
65	Completed	5/24/2023 12:25:54 PM	65
66	Completed	5/24/2023 12:45:04 PM	66
67	Completed	5/24/2023 1:04:41 PM	67
68	Completed	5/24/2023 1:19:46 PM	68
69	Completed	5/24/2023 1:34:15 PM	69
70	Completed	5/24/2023 1:51:13 PM	70
71	Completed	5/24/2023 2:10:16 PM	71
72	Completed	5/24/2023 2:29:42 PM	72
73	Completed	5/24/2023 2:46:41 PM	73
74	Completed	5/24/2023 3:03:35 PM	74
75	Completed	5/24/2023 3:23:21 PM	75
76	Completed	5/24/2023 3:38:01 PM	76
77	Completed	5/24/2023 3:54:06 PM	77
78	Completed	5/24/2023 4:11:36 PM	78
79	Completed	5/24/2023 4:28:23 PM	79
80	Completed	5/24/2023 4:45:31 PM	80
81	Completed	5/24/2023 5:05:08 PM	81
82	Completed	5/24/2023 5:24:10 PM	82
83	Completed	5/24/2023 5:41:16 PM	83
84	Completed	5/24/2023 5:59:00 PM	84
85	Completed	5/24/2023 6:17:55 PM	85
86	Completed	5/24/2023 6:37:33 PM	86
87	Completed	5/24/2023 6:56:32 PM	87
88	Completed	5/24/2023 7:11:23 PM	88
89	Completed	5/24/2023 7:30:52 PM	89
90	Completed	5/24/2023 7:50:01 PM	90
91	Completed	5/24/2023 8:06:05 PM	91
92	Completed	5/24/2023 8:25:24 PM	92
93	Completed	5/24/2023 8:40:08 PM	93

TOC-L Cal Curve Information
C:\TOC-L\CalCurves\NPOC Calibration 10 31 2022.2023 03 20 14 43 51.cal

Date of Creation	3/20/2023 4:26:03 PM
User	abw
System	TOC-LCSN

Cal. Curve

Sample Name:	NPOC Calibration_AutoDilution_Calibration_03_20_2023
Sample ID:	Auto Dilution Calibration 03 20 2023
Object ID	0L-10900100866-10101000-134B0B02249E-0000
Cal. Curve:	NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status	Completed
Comment:	

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.1980	50uL	1.000	*******		3/20/2023 2:51:43 PM
2	0.2915	50uL	1.000	*******		3/20/2023 2:54:03 PM
3	0.3385	50uL	1.000	*******		3/20/2023 2:56:12 PM
4	0.000	50uL	1.000	*******		3/20/2023 2:58:17 PM

Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	0.2070
SD Area	0.1498
CV Area	72.39%
Vial	88
No Washes	2

Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	2.039	50uL	50.00	*******		3/20/2023 3:07:14 PM
2	2.505	50uL	50.00	*******		3/20/2023 3:09:43 PM
3	2.186	50uL	50.00	*******		3/20/2023 3:12:14 PM
4	2.514	50uL	50.00	*******		3/20/2023 3:14:59 PM

Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	2.311
SD Area	0.2370
CV Area	10.25%
Vial	89
No Washes	2

Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	12.32	50uL	10.00	*******		3/20/2023 3:23:17 PM
2	13.04	50uL	10.00	*******		3/20/2023 3:26:06 PM
3	12.48	50uL	10.00	*******		3/20/2023 3:28:50 PM
4	12.86	50uL	10.00	*******		3/20/2023 3:31:49 PM

Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	12.68
SD Area	0.3324
CV Area	2.62%
Vial	89
No Washes	2

Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	24.07	50uL	5.000	*******		3/20/2023 3:40:19 PM
2	25.15	50uL	5.000	*******		3/20/2023 3:43:35 PM
3	24.82	50uL	5.000	*******		3/20/2023 3:46:37 PM
4	25.03	50uL	5.000	*******		3/20/2023 3:49:45 PM

Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	24.77
SD Area	0.4846
CV Area	1.96%
Vial	89
No Washes	2

Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	61.40	50uL	2.000	*******		3/20/2023 3:58:15 PM
2	61.02	50uL	2.000	*******		3/20/2023 4:01:24 PM
3	62.07	50uL	2.000	*******		3/20/2023 4:04:31 PM
4	62.38	50uL	2.000	*******		3/20/2023 4:07:56 PM

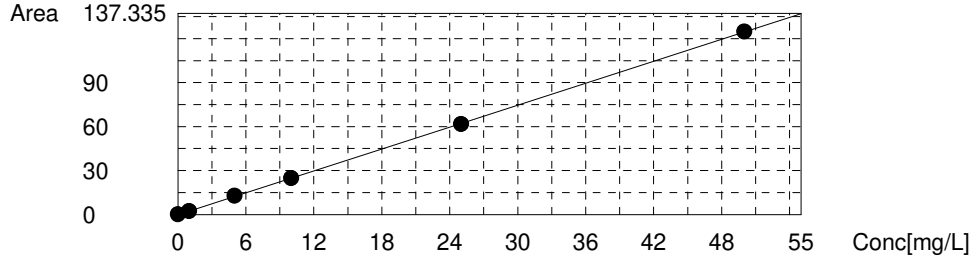
Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	61.72
SD Area	0.6193
CV Area	1.00%
Vial	89
No Washes	2

Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	123.1	50uL	1.000	*******		3/20/2023 4:15:57 PM
2	124.0	50uL	1.000	*******		3/20/2023 4:19:27 PM
3	124.6	50uL	1.000	*******		3/20/2023 4:22:39 PM
4	127.7	50uL	1.000	*******		3/20/2023 4:26:03 PM

Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	124.9
SD Area	1.997
CV Area	1.60%
Vial	89
No Washes	2

Slope:	2.493
Intercept	-0.04883
r^2	1.0000
r	1.0000
RSE(%)	N/A
Zero Shift	No



TOC-Control L Report

ABW
2023_05_23_001.tlx

Instr.Information

Instrument Options TOC/ASI/
Catalyst Regular Sensitivity

Sample

Sample Name: ICV
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

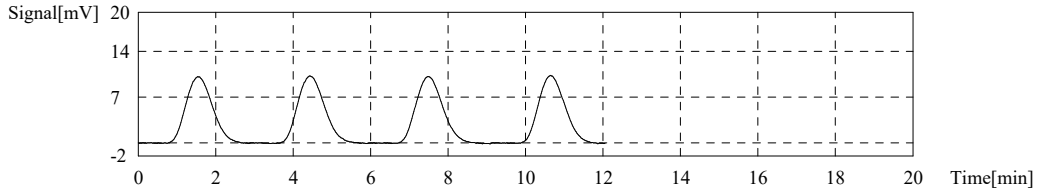
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:20.13mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	49.46	19.86mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 5:20:11 PM
2	50.47	20.27mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 5:23:30 PM
3	50.57	20.31mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 5:26:56 PM
4	50.00	20.08mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 5:30:08 PM

Mean Area 50.13
Mean Conc. 20.13mg/L



Sample

Sample Name: ICB
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

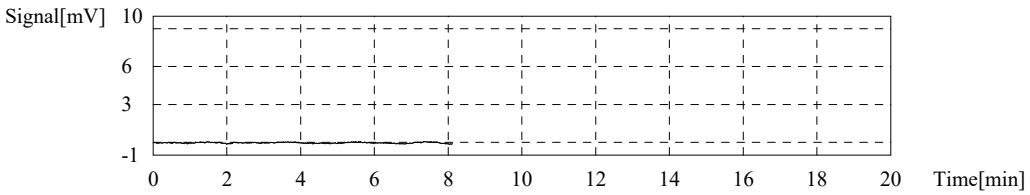
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1752mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4379	0.1953mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 5:38:14 PM
2	0.06670	0.04635mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 5:40:26 PM
3	0.3567	0.1627mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 5:42:35 PM
4	0.6899	0.2964mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 5:44:59 PM

Mean Area 0.3878
Mean Conc. 0.1752mg/L



Sample

Sample Name: LCS
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

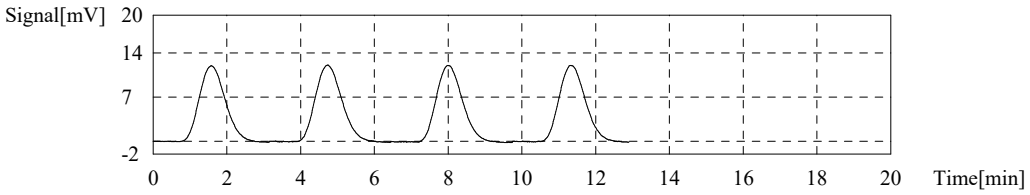
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.38mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	60.02	24.10mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 5:54:05 PM
2	61.84	24.83mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 5:57:38 PM
3	60.28	24.20mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 6:01:12 PM
4	60.73	24.38mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 6:04:42 PM

Mean Area 60.72
Mean Conc. 24.38mg/L



Sample

Sample Name: MB
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

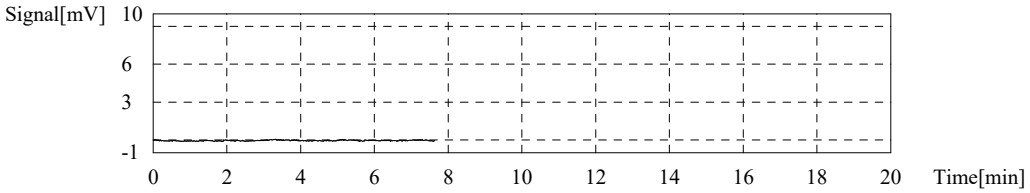
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.06265mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.03970	0.03552mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 6:12:32 PM
2	0.1190	0.06733mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 6:14:41 PM
3	0.2706	0.1282mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 6:16:58 PM
4	0.000	0.01959mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 6:19:08 PM

Mean Area 0.1073
Mean Conc. 0.06265mg/L



Sample

Sample Name: TIC
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

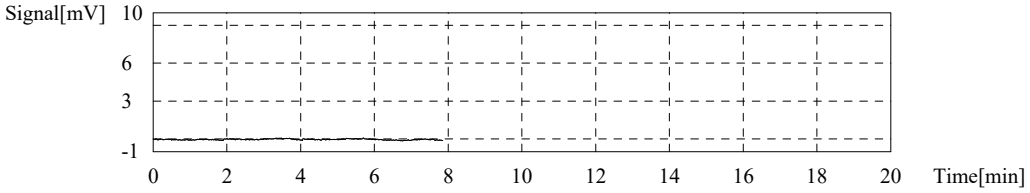
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.08653mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.04860	0.03909mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 6:26:59 PM
2	0.4441	0.1978mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 6:29:24 PM
3	0.06830	0.04699mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 6:31:35 PM
4	0.1064	0.06228mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 6:33:40 PM

Mean Area 0.1669
Mean Conc. 0.08653mg/L



Sample

Sample Name: 280-176363-c-9
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

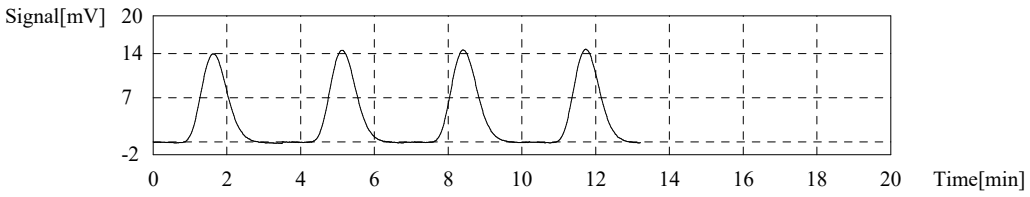
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:29.55mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	72.15	28.97mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 6:43:07 PM
2	73.90	29.67mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 6:46:41 PM
3	74.15	29.77mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 6:50:14 PM
4	74.19	29.78mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 6:53:32 PM

Mean Area 73.60
Mean Conc. 29.55mg/L



Sample

Sample Name: MS 280-176363-c-9
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

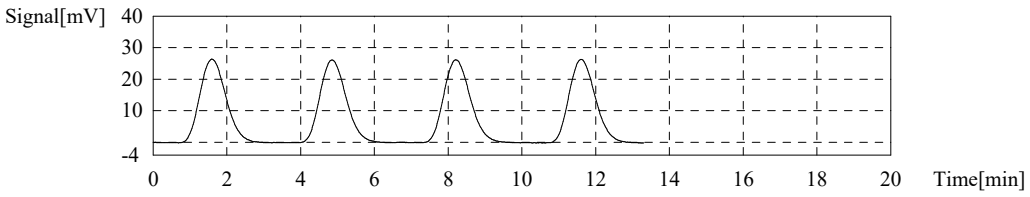
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:53.06mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	132.2	53.06mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 7:02:44 PM
2	130.8	52.50mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 7:06:20 PM
3	132.9	53.34mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 7:09:59 PM
4	132.9	53.34mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 7:13:34 PM

Mean Area 132.2
Mean Conc. 53.06mg/L



Sample

Sample Name: MSD 280-176363-c-9
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

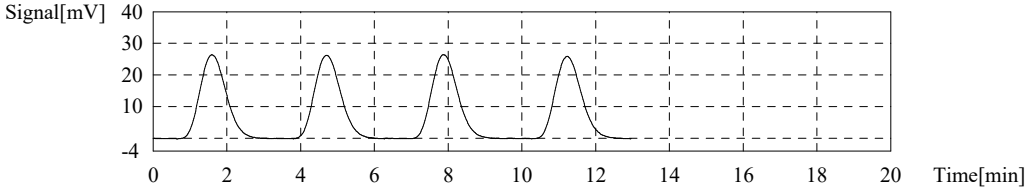
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:52.88mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	132.1	53.02mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 7:22:36 PM
2	132.1	53.02mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 7:25:59 PM
3	131.7	52.86mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 7:29:38 PM
4	131.1	52.62mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 7:33:16 PM

Mean Area 131.8
Mean Conc. 52.88mg/L



Sample

Sample Name: 280-176363-a-10
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

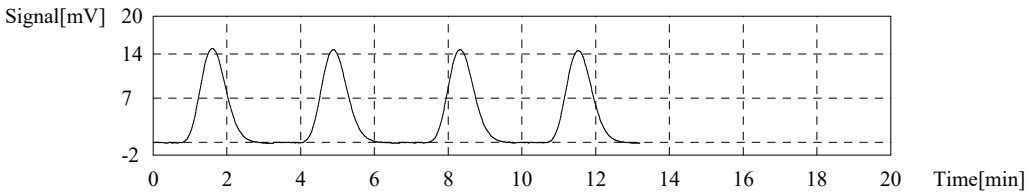
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:29.88mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	75.49	30.31mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 7:42:28 PM
2	74.41	29.87mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 7:46:09 PM
3	74.08	29.74mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 7:49:37 PM
4	73.76	29.61mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 7:53:11 PM

Mean Area 74.44
Mean Conc. 29.88mg/L



Sample

Sample Name: 280-176363-c-11
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

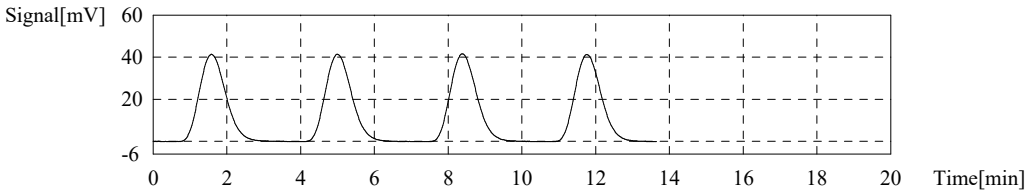
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:167.0mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	208.6	167.4mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 8:02:32 PM
2	207.6	166.6mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 8:06:07 PM
3	209.4	168.1mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 8:09:44 PM
4	206.7	165.9mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 8:13:23 PM

Mean Area 208.1
Mean Conc. 167.0mg/L



Sample

Sample Name: 280-176363-c-12
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

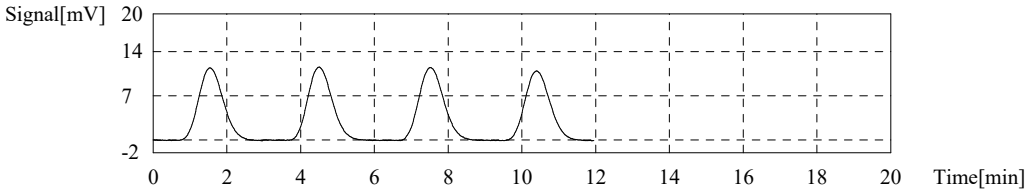
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:21.72mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	54.44	21.86mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 8:22:17 PM
2	54.04	21.70mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 8:25:33 PM
3	55.03	22.10mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 8:28:42 PM
4	52.81	21.21mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 8:32:00 PM

Mean Area 54.08
Mean Conc. 21.72mg/L



Sample

Sample Name: 280-176363-c-13
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

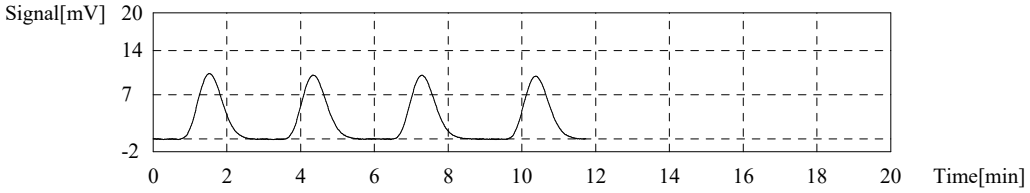
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:195.8mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	49.68	199.5mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 8:40:46 PM
2	49.02	196.9mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 8:43:53 PM
3	48.82	196.1mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 8:47:09 PM
4	47.54	190.9mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 8:50:15 PM

Mean Area 48.77
Mean Conc. 195.8mg/L



Sample

Sample Name: 280-176363-d-14
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

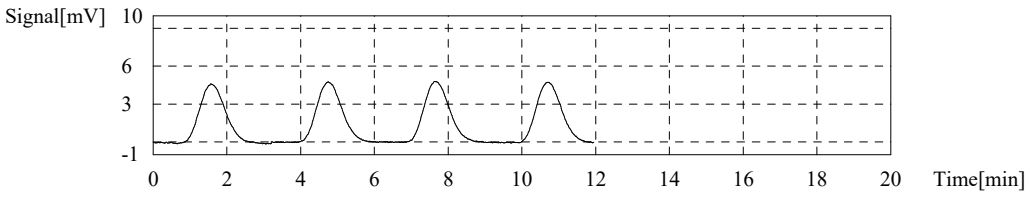
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.321mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	23.28	9.359mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 8:59:23 PM
2	23.12	9.295mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 9:02:35 PM
3	23.18	9.319mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 9:05:48 PM
4	23.16	9.311mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 9:08:47 PM

Mean Area 23.19
Mean Conc. 9.321mg/L



Sample

Sample Name: 280-176363-d-15
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

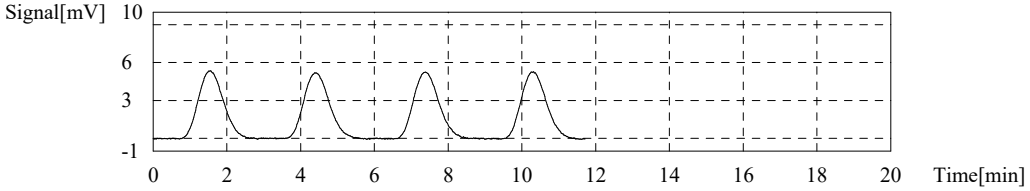
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	25.00	NPOC:257.6mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	26.04	261.7mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 9:17:34 PM
2	25.44	255.7mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 9:20:46 PM
3	25.32	254.4mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 9:23:58 PM
4	25.75	258.8mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 9:27:07 PM

Mean Area 25.64
Mean Conc. 257.6mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

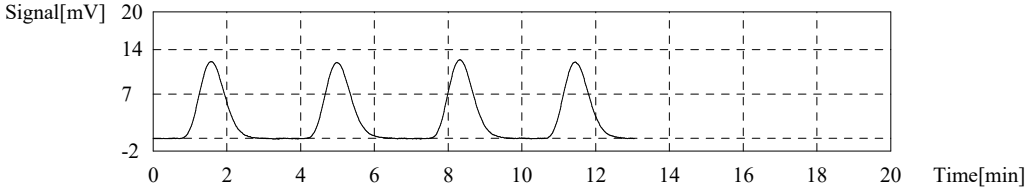
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.12mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	60.33	24.22mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 9:36:28 PM
2	59.91	24.06mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 9:40:01 PM
3	60.42	24.26mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 9:43:19 PM
4	59.61	23.93mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 9:46:41 PM

Mean Area 60.07
Mean Conc. 24.12mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

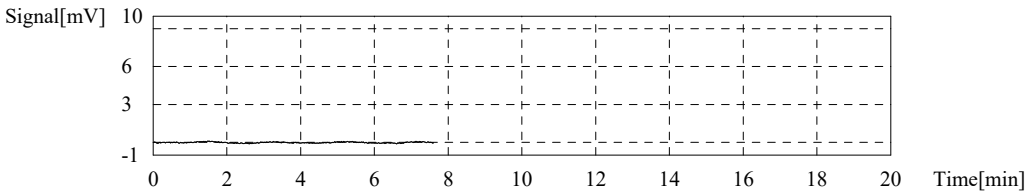
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1299mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.1531	0.08101mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 9:54:30 PM
2	0.3802	0.1721mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 9:56:35 PM
3	0.2730	0.1291mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 9:58:40 PM
4	0.2936	0.1374mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 10:00:46 PM

Mean Area 0.2750
Mean Conc. 0.1299mg/L



Sample

Sample Name: 280-176363-c-16
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

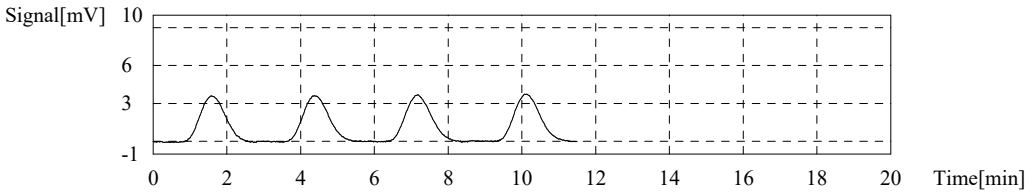
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.254mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	17.78	7.153mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 10:09:30 PM
2	17.70	7.121mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 10:12:28 PM
3	18.19	7.317mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 10:15:36 PM
4	18.46	7.426mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 10:18:53 PM

Mean Area 18.03
Mean Conc. 7.254mg/L



Sample

Sample Name: 280-176363-c-17
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

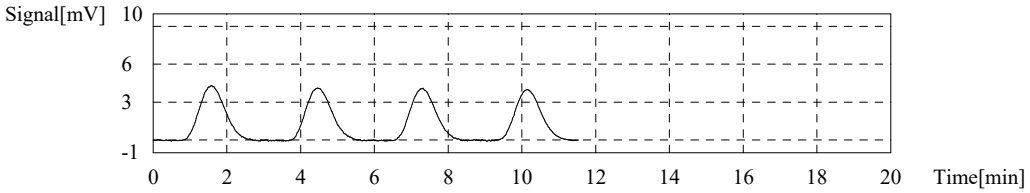
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	25.00	NPOC:207.6mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	21.53	216.4mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 10:27:44 PM
2	20.89	210.0mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 10:30:47 PM
3	20.29	204.0mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 10:33:49 PM
4	19.90	200.1mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 10:36:58 PM

Mean Area 20.65
Mean Conc. 207.6mg/L



Sample

Sample Name: 280-176363-d-18
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

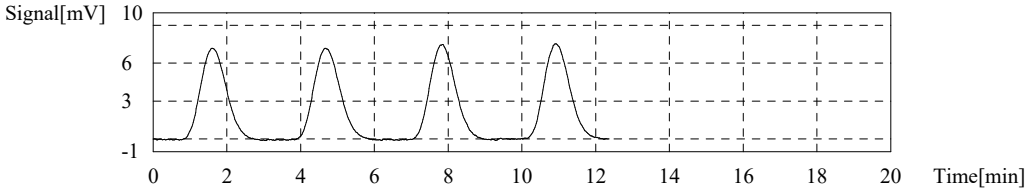
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:14.78mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	36.21	14.55mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 10:46:00 PM
2	36.86	14.81mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 10:49:24 PM
3	37.29	14.98mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 10:52:43 PM
4	36.84	14.80mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 10:55:56 PM

Mean Area 36.80
Mean Conc. 14.78mg/L



Sample

Sample Name: 280-176363-a-19
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

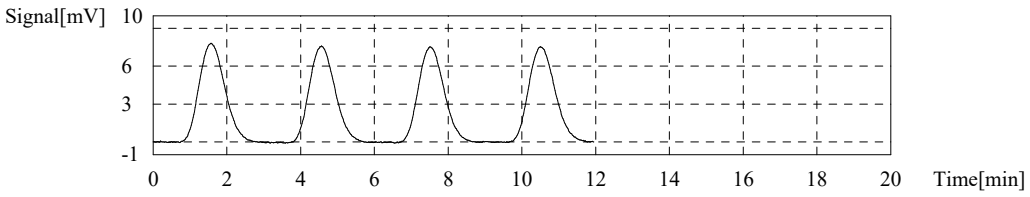
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.18mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	38.51	15.47mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 11:04:50 PM
2	37.70	15.14mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 11:07:59 PM
3	37.15	14.92mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 11:11:12 PM
4	37.77	15.17mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 11:14:25 PM

Mean Area 37.78
Mean Conc. 15.18mg/L



Sample

Sample Name: MS 280-176363-a-19
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

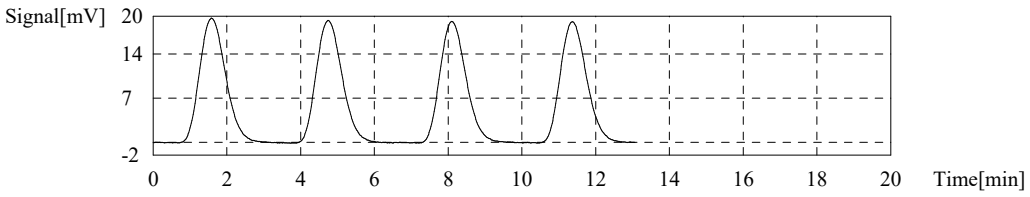
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:38.72mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	97.82	39.26mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 11:23:31 PM
2	96.31	38.66mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 11:27:03 PM
3	95.31	38.26mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 11:30:30 PM
4	96.37	38.68mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 11:33:58 PM

Mean Area 96.45
Mean Conc. 38.72mg/L



Sample

Sample Name: MSD 280-176363-a-19
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

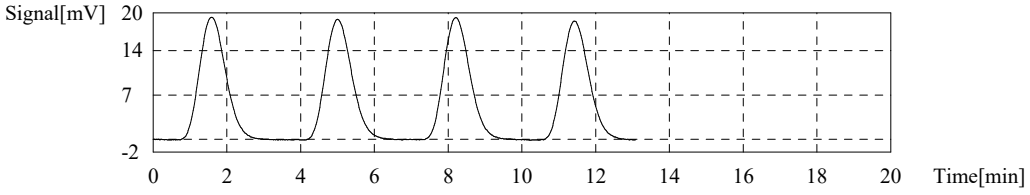
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:38.64mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	97.53	39.15mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 11:43:18 PM
2	96.32	38.66mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 11:46:41 PM
3	96.19	38.61mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 11:50:05 PM
4	95.03	38.15mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/23/2023 11:53:32 PM

Mean Area 96.27
Mean Conc. 38.64mg/L



Sample

Sample Name: 280-176363-d-20
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

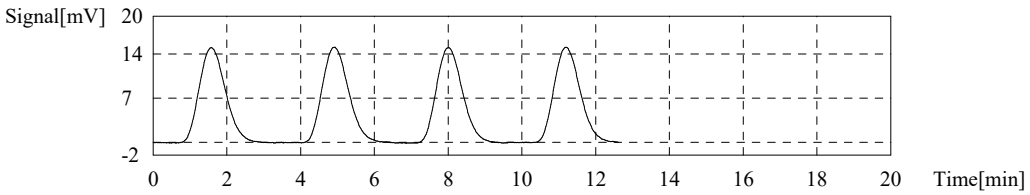
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:303.1mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	76.30	306.3mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 12:02:48 AM
2	75.74	304.1mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 12:06:08 AM
3	74.90	300.7mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 12:09:31 AM
4	75.10	301.5mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 12:12:42 AM

Mean Area 75.51
Mean Conc. 303.1mg/L



Sample

Sample Name: 280-176363-c-21
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

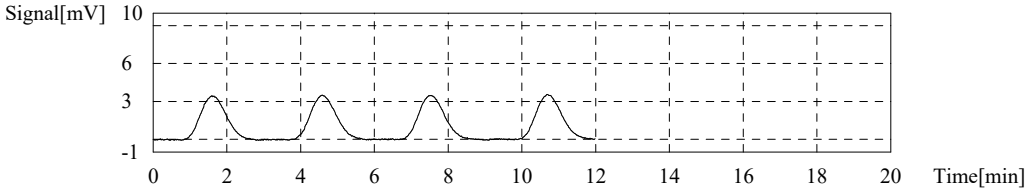
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.001mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	17.28	6.952mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 12:21:37 AM
2	17.45	7.020mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 12:24:47 AM
3	17.33	6.972mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 12:28:10 AM
4	17.55	7.061mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 12:31:17 AM

Mean Area 17.40
Mean Conc. 7.001mg/L



Sample

Sample Name: 280-176363-c-22
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

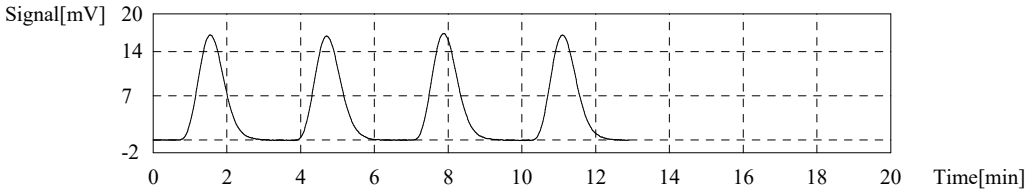
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:336.0mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	82.98	333.1mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 12:40:22 AM
2	83.38	334.7mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 12:43:44 AM
3	84.41	338.8mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 12:47:09 AM
4	84.04	337.4mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 12:50:43 AM

Mean Area 83.70
Mean Conc. 336.0mg/L



Sample

Sample Name: 280-176363-d-23
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

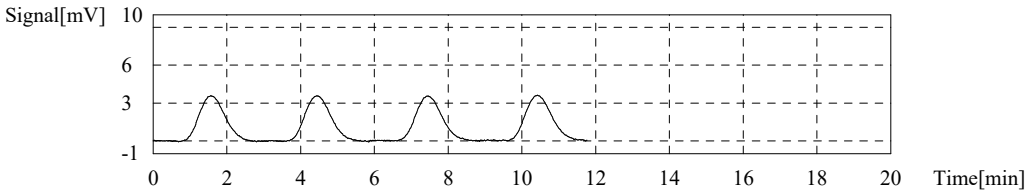
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.231mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	18.04	7.257mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 12:59:31 AM
2	18.22	7.329mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 1:02:46 AM
3	17.50	7.041mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 1:05:56 AM
4	18.14	7.297mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 1:09:03 AM

Mean Area 17.98
Mean Conc. 7.231mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

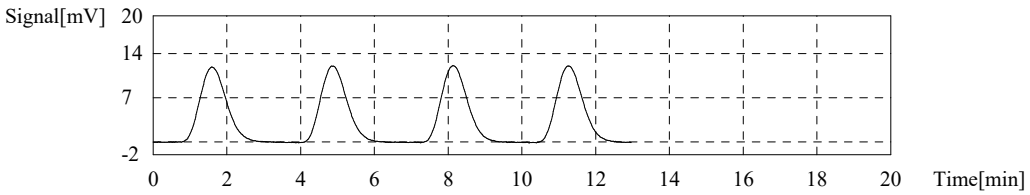
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.46mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	60.47	24.28mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 1:18:15 AM
2	61.27	24.60mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 1:21:43 AM
3	60.65	24.35mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 1:25:01 AM
4	61.26	24.60mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 1:28:30 AM

Mean Area 60.91
Mean Conc. 24.46mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

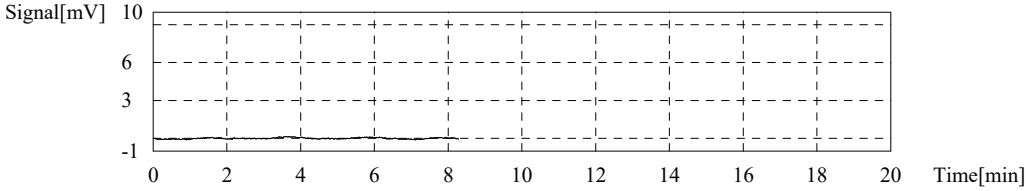
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2277mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6415	0.2770mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 1:36:35 AM
2	0.7449	0.3184mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 1:38:57 AM
3	0.2566	0.1225mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 1:41:07 AM
4	0.4318	0.1928mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 1:43:17 AM

Mean Area 0.5187
Mean Conc. 0.2277mg/L



Sample

Sample Name: 280-176363-a-24
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

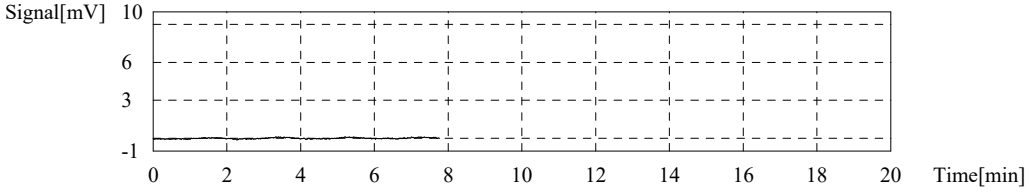
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1486mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.07490	0.04964mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 1:51:07 AM
2	0.4384	0.1955mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 1:53:14 AM
3	0.3116	0.1446mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 1:55:22 AM
4	0.4617	0.2048mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 1:57:33 AM

Mean Area 0.3216
Mean Conc. 0.1486mg/L



Sample

Sample Name: 280-176364-c-1
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

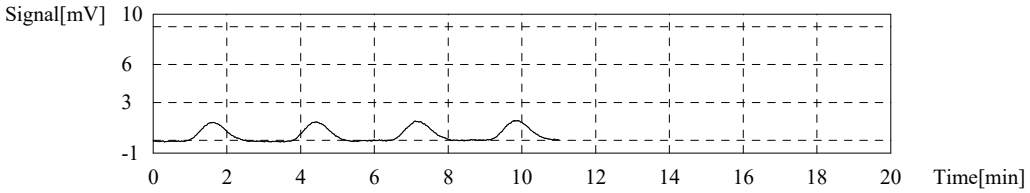
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.078mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.708	3.112mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 2:06:17 AM
2	7.506	3.031mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 2:09:15 AM
3	7.581	3.061mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 2:12:07 AM
4	7.699	3.108mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 2:15:04 AM

Mean Area 7.624
Mean Conc. 3.078mg/L



Sample

Sample Name: 280-176364-c-2
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

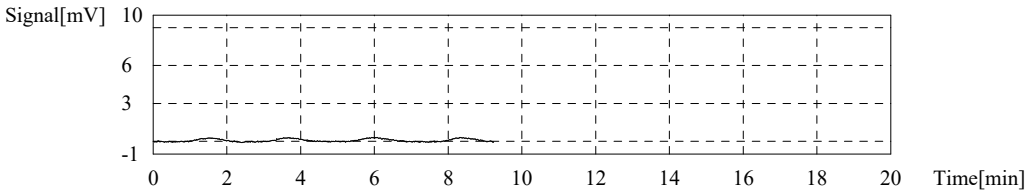
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.6021mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.250	0.5211mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 2:23:11 AM
2	1.349	0.5608mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 2:25:41 AM
3	1.481	0.6138mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 2:28:17 AM
4	1.728	0.7129mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 2:30:49 AM

Mean Area 1.452
Mean Conc. 0.6021mg/L



Sample

Sample Name: 280-176364-c-3
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

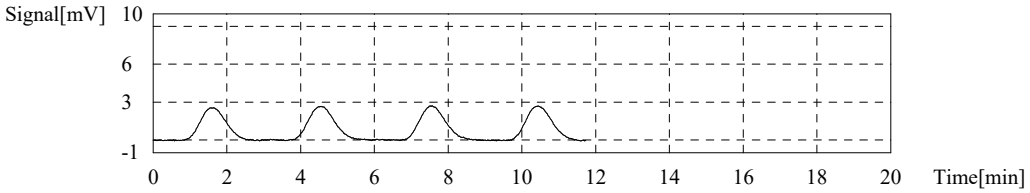
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.435mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.02	5.243mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 2:39:42 AM
2	13.74	5.532mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 2:42:53 AM
3	13.57	5.464mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 2:45:58 AM
4	13.66	5.500mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 2:49:03 AM

Mean Area 13.50
Mean Conc. 5.435mg/L



Sample

Sample Name: 280-176364-c-4
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

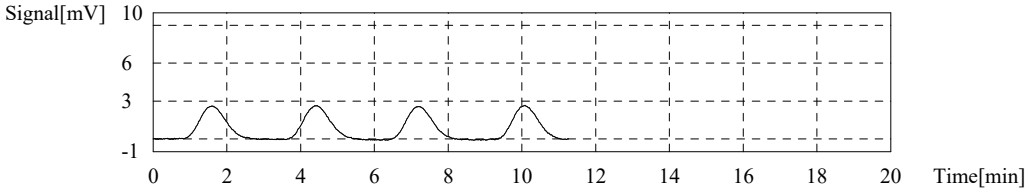
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.288mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.90	5.195mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 2:57:48 AM
2	13.37	5.384mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 3:00:46 AM
3	13.25	5.335mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 3:03:50 AM
4	13.01	5.239mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 3:06:49 AM

Mean Area 13.13
Mean Conc. 5.288mg/L



Sample

Sample Name: LCS
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

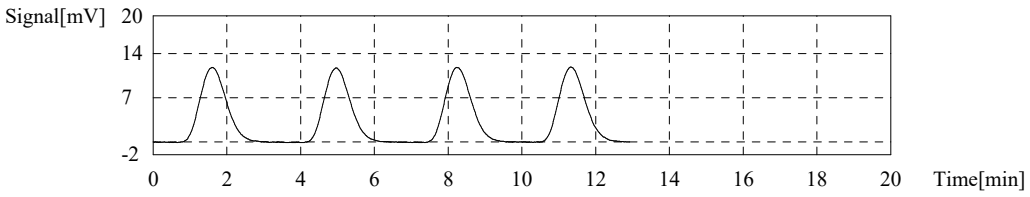
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.04mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	60.36	24.24mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 3:16:08 AM
2	59.28	23.80mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 3:19:36 AM
3	59.92	24.06mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 3:22:52 AM
4	59.89	24.05mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 3:26:14 AM

Mean Area 59.86
Mean Conc. 24.04mg/L



Sample

Sample Name: MB
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

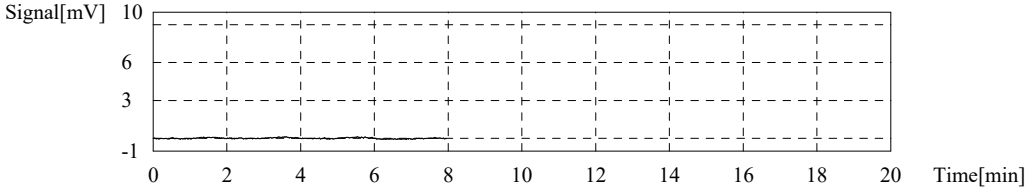
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1137mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3053	0.1421mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 3:34:11 AM
2	0.1972	0.09871mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 3:36:18 AM
3	0.4353	0.1942mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 3:38:36 AM
4	0.000	0.01959mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 3:40:44 AM

Mean Area 0.2345
Mean Conc. 0.1137mg/L



Sample

Sample Name: 280-176364-c-5
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

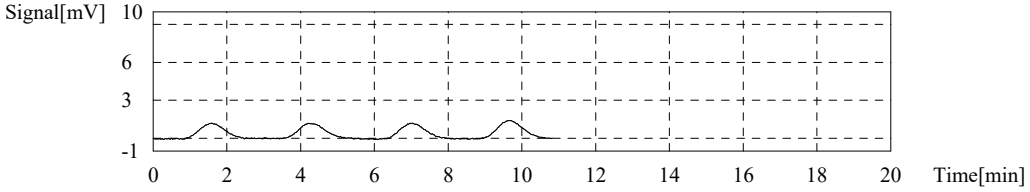
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.503mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.037	2.442mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 3:49:21 AM
2	5.862	2.371mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 3:52:16 AM
3	5.951	2.407mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 3:55:05 AM
4	6.908	2.791mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 3:58:03 AM

Mean Area 6.190
Mean Conc. 2.503mg/L



Sample

Sample Name: MS 280-176364-c-5
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

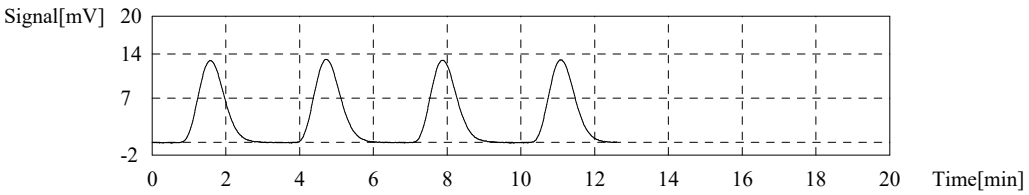
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.24mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	65.17	26.17mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 4:07:09 AM
2	66.54	26.72mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 4:10:29 AM
3	64.83	26.03mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 4:13:53 AM
4	64.84	26.03mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 4:17:10 AM

Mean Area 65.34
Mean Conc. 26.24mg/L



Sample

Sample Name: MSD 280-176364-c-5
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

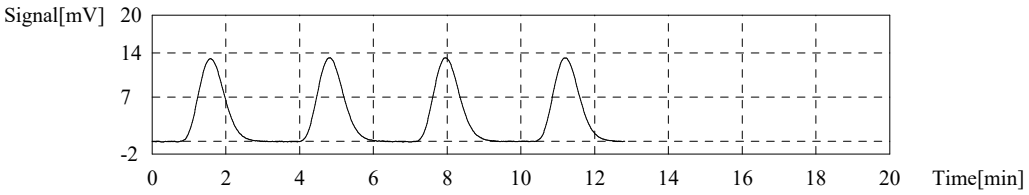
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.63mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	65.77	26.41mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 4:26:21 AM
2	66.36	26.64mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 4:29:42 AM
3	66.84	26.84mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 4:33:07 AM
4	66.37	26.65mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 4:36:30 AM

Mean Area 66.34
Mean Conc. 26.63mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

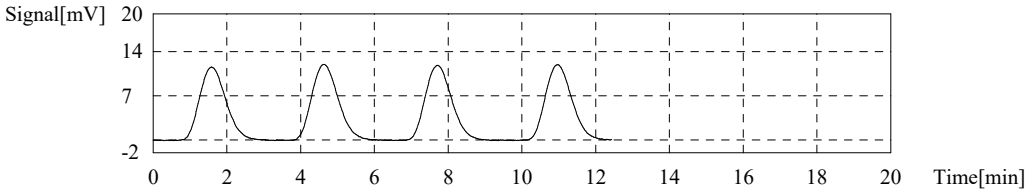
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.98mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	57.88	23.24mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 4:45:30 AM
2	60.55	24.31mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 4:48:50 AM
3	60.18	24.16mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 4:52:17 AM
4	60.31	24.22mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 4:55:32 AM

Mean Area 59.73
Mean Conc. 23.98mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

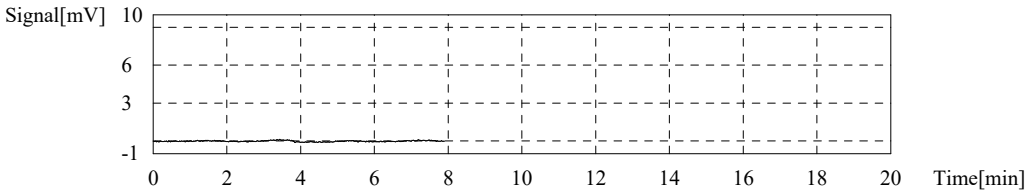
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1424mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.1472	0.07865mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 5:03:23 AM
2	0.3674	0.1670mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 5:05:29 AM
3	0.3360	0.1544mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 5:07:38 AM
4	0.3737	0.1695mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 5:09:57 AM

Mean Area 0.3061
Mean Conc. 0.1424mg/L



Sample

Sample Name: 280-176335-d-4
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

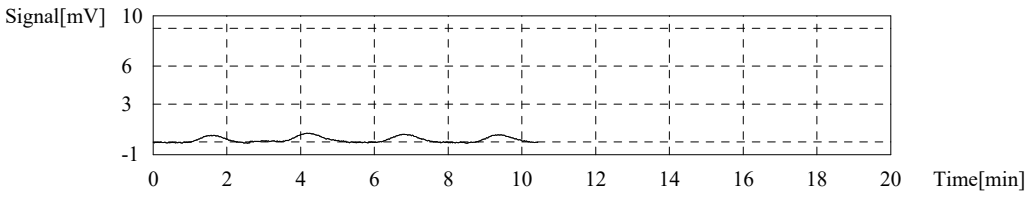
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.228mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.851	1.163mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 5:18:31 AM
2	3.088	1.258mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 5:21:19 AM
3	3.039	1.239mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 5:24:03 AM
4	3.068	1.250mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 5:26:53 AM

Mean Area 3.011
Mean Conc. 1.228mg/L



Sample

Sample Name: 280-176434-d-7
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

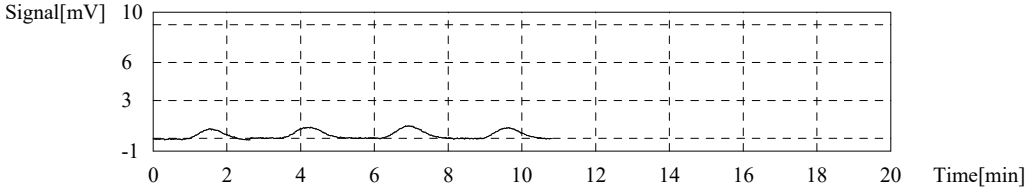
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.733mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.959	1.608mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 5:35:27 AM
2	4.033	1.638mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 5:38:23 AM
3	4.912	1.990mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 5:41:13 AM
4	4.183	1.698mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 5:44:11 AM

Mean Area 4.272
Mean Conc. 1.733mg/L



Sample

Sample Name: 280-176441-c-1
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

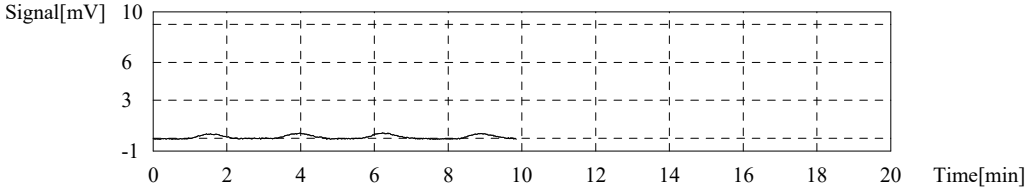
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.7541mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.717	0.7084mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 5:52:30 AM
2	1.698	0.7008mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 5:55:00 AM
3	1.948	0.8011mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 5:57:49 AM
4	1.960	0.8059mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 6:00:32 AM

Mean Area 1.831
Mean Conc. 0.7541mg/L



Sample

Sample Name: 280-176441-c-4
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

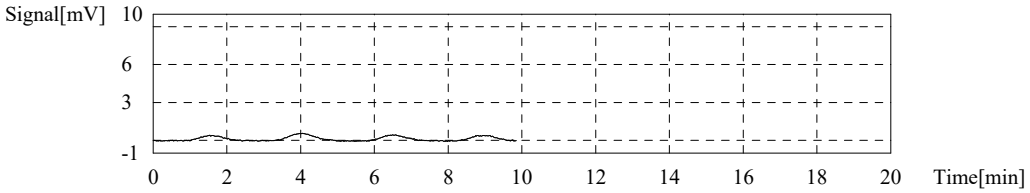
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.9082mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.987	0.8168mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 6:08:57 AM
2	2.695	1.101mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 6:11:38 AM
3	2.063	0.8473mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 6:14:14 AM
4	2.115	0.8681mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 6:16:53 AM

Mean Area 2.215
Mean Conc. 0.9082mg/L



Sample

Sample Name: 280-176456-a-1
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

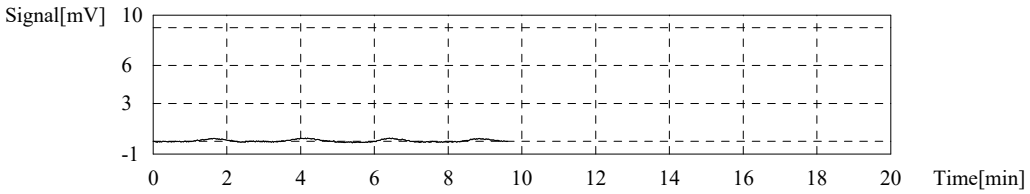
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4854mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.124	0.4705mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 6:25:20 AM
2	1.108	0.4641mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 6:27:55 AM
3	1.300	0.5411mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 6:30:29 AM
4	1.112	0.4657mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 6:33:00 AM

Mean Area 1.161
Mean Conc. 0.4854mg/L



Sample

Sample Name: 280-176456-a-2
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

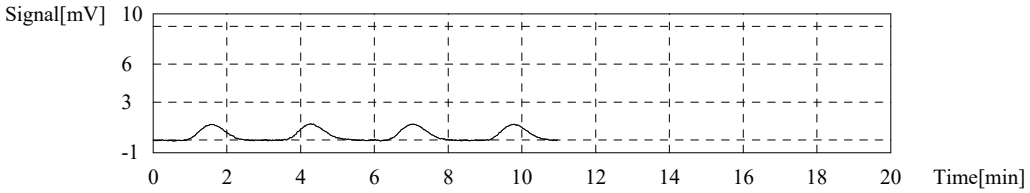
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.544mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.326	2.558mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 6:41:38 AM
2	6.277	2.538mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 6:44:34 AM
3	6.418	2.594mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 6:47:30 AM
4	6.143	2.484mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 6:50:28 AM

Mean Area 6.291
Mean Conc. 2.544mg/L



Sample

Sample Name: 280-176456-a-3
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

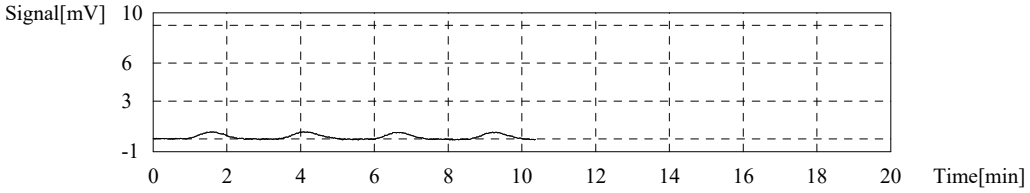
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.109mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.730	1.115mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 6:58:57 AM
2	2.534	1.036mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 7:01:39 AM
3	2.771	1.131mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 7:04:25 AM
4	2.827	1.154mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 7:07:20 AM

Mean Area 2.716
Mean Conc. 1.109mg/L



Sample

Sample Name: 280-176588-b-1
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

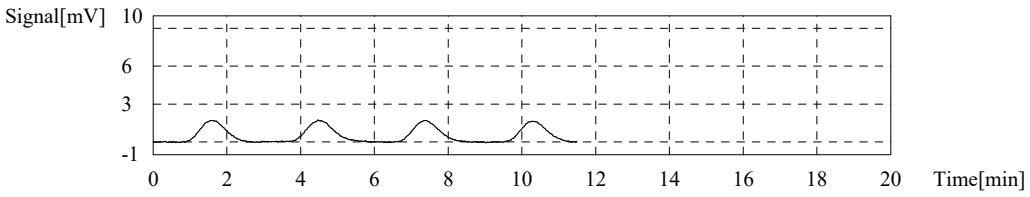
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.450mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.549	3.449mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 7:16:11 AM
2	8.274	3.339mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 7:19:20 AM
3	8.731	3.522mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 7:22:28 AM
4	8.650	3.490mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 7:25:28 AM

Mean Area 8.551
Mean Conc. 3.450mg/L



Sample

Sample Name: 280-176588-b-2
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

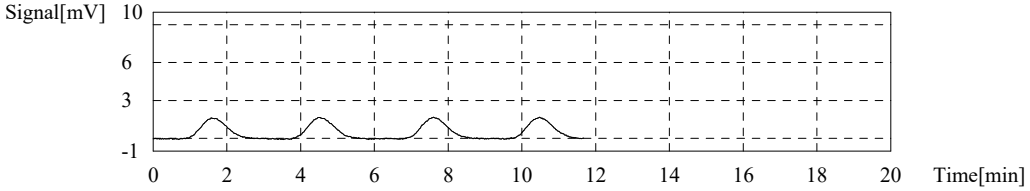
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.424mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.285	3.344mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 7:34:20 AM
2	8.845	3.568mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 7:37:36 AM
3	8.454	3.411mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 7:40:40 AM
4	8.355	3.372mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 7:43:39 AM

Mean Area 8.485
Mean Conc. 3.424mg/L



Sample

Sample Name: 280-176081-j-10
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

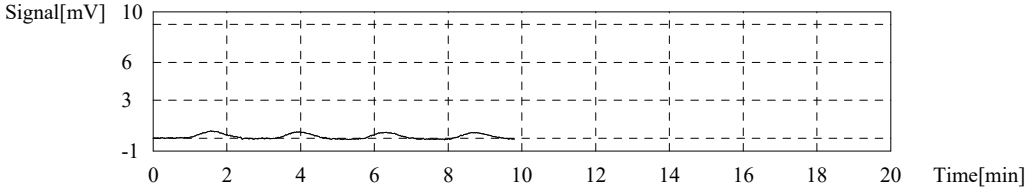
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.016mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.452	1.003mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 7:51:59 AM
2	2.273	0.9315mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 7:54:29 AM
3	2.373	0.9716mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 7:57:06 AM
4	2.836	1.157mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 7:59:57 AM

Mean Area 2.484
Mean Conc. 1.016mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

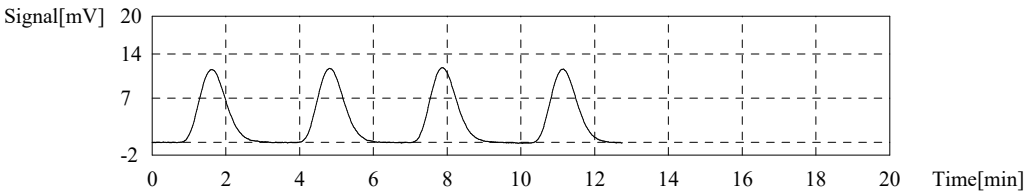
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.13mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	59.99	24.09mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 8:09:06 AM
2	59.97	24.08mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 8:12:24 AM
3	60.71	24.38mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 8:15:51 AM
4	59.74	23.99mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 8:19:16 AM

Mean Area 60.10
Mean Conc. 24.13mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

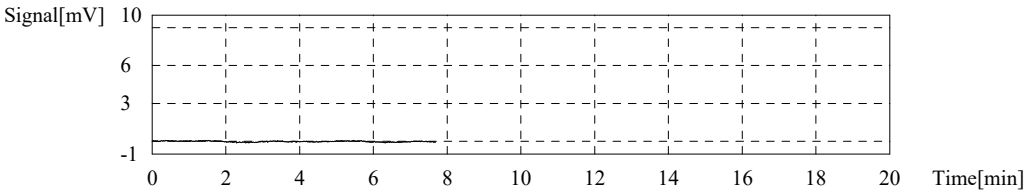
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.05500mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.07020	0.04776mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 8:27:08 AM
2	0.1574	0.08274mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 8:29:13 AM
3	0.1254	0.06990mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 8:31:23 AM
4	0.000	0.01959mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 8:33:28 AM

Mean Area 0.08825
Mean Conc. 0.05500mg/L



Sample

Sample Name: MS 280-176081-j-10
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

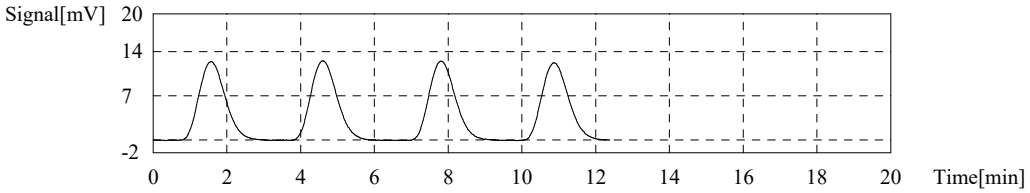
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.11mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	62.00	24.89mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 8:42:27 AM
2	63.15	25.36mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 8:45:51 AM
3	62.50	25.09mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 8:49:05 AM
4	62.54	25.11mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 8:52:22 AM

Mean Area 62.55
Mean Conc. 25.11mg/L



Sample

Sample Name: MSD 280-176081-j-10
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

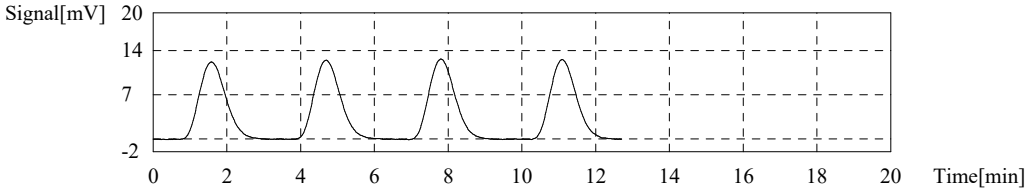
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.14mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	62.10	24.93mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 9:01:26 AM
2	62.38	25.05mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 9:04:43 AM
3	63.53	25.51mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 9:08:12 AM
4	62.48	25.09mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 9:11:34 AM

Mean Area 62.62
Mean Conc. 25.14mg/L



Sample

Sample Name: 280-176588-b-3
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

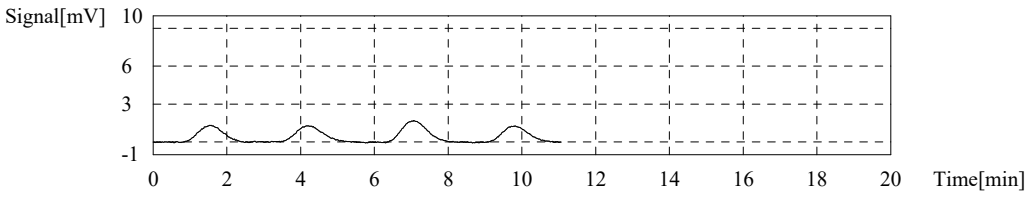
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.875mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.459	2.611mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 9:20:10 AM
2	6.760	2.732mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 9:23:14 AM
3	8.734	3.524mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 9:26:09 AM
4	6.512	2.632mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 9:29:09 AM

Mean Area 7.116
Mean Conc. 2.875mg/L



Sample

Sample Name: 280-176588-b-4
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

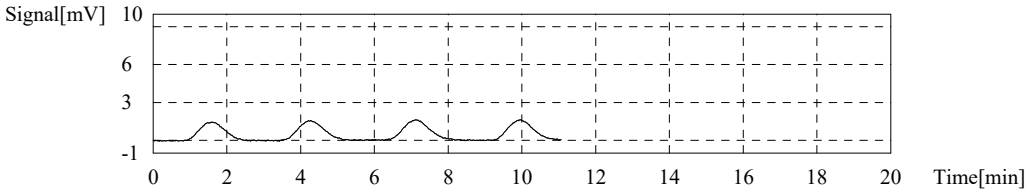
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.041mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.203	2.909mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 9:37:46 AM
2	7.680	3.101mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 9:40:50 AM
3	7.618	3.076mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 9:43:50 AM
4	7.623	3.078mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 9:46:44 AM

Mean Area 7.531
Mean Conc. 3.041mg/L



Sample

Sample Name: 280-176588-b-5
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

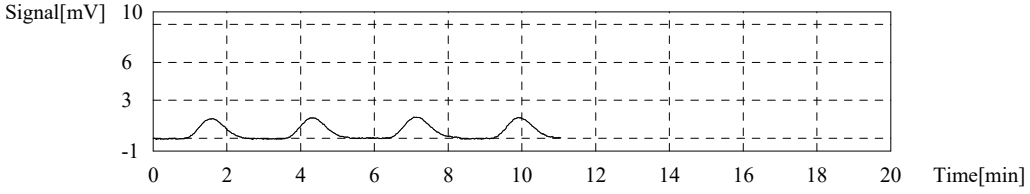
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.348mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.337	3.364mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 9:55:25 AM
2	8.250	3.329mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 9:58:25 AM
3	8.630	3.482mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 10:01:24 AM
4	7.963	3.214mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 10:04:18 AM

Mean Area 8.295
Mean Conc. 3.348mg/L



Sample

Sample Name: 280-176588-b-6
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

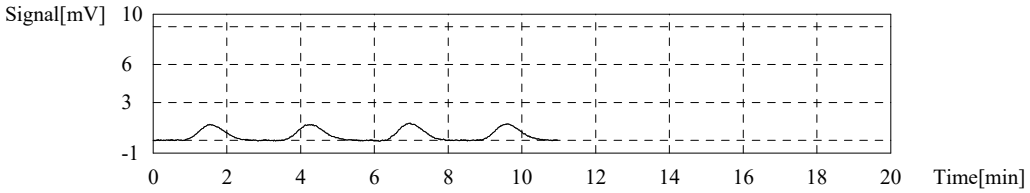
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.544mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.165	2.493mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 10:12:56 AM
2	6.238	2.522mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 10:15:51 AM
3	6.420	2.595mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 10:18:38 AM
4	6.342	2.564mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 10:21:47 AM

Mean Area 6.291
Mean Conc. 2.544mg/L



Sample

Sample Name: 280-176210-a-2
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

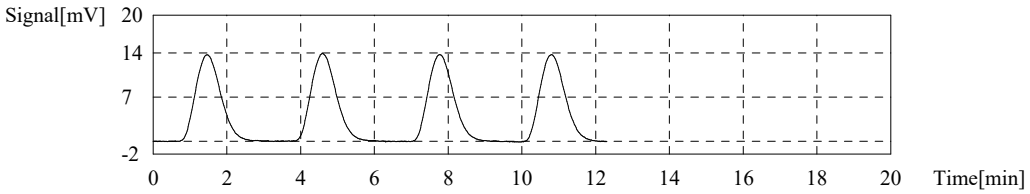
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	100.0	NPOC:2656mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	65.75	2640mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 10:30:53 AM
2	66.79	2682mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 10:34:18 AM
3	65.80	2642mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 10:37:31 AM
4	66.24	2659mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 10:40:40 AM

Mean Area 66.15
Mean Conc. 2656mg/L



Sample

Sample Name: 280-176326-b-3
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

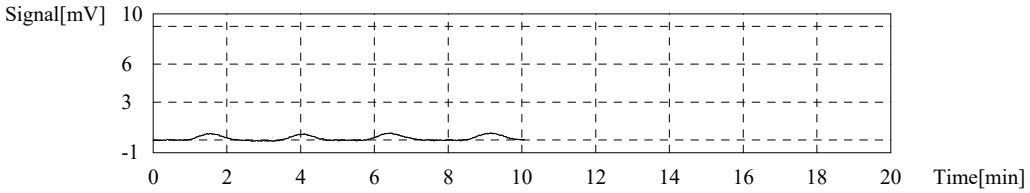
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.043mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.513	1.028mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 10:49:08 AM
2	2.292	0.9391mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 10:51:42 AM
3	2.803	1.144mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 10:54:35 AM
4	2.598	1.062mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 10:57:15 AM

Mean Area 2.551
Mean Conc. 1.043mg/L



Sample

Sample Name: 280-176580-a-1
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

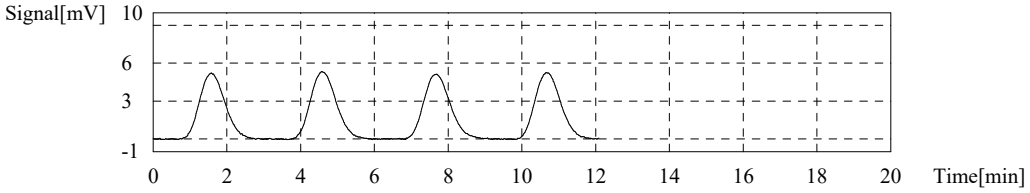
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.48mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	25.88	10.40mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 11:06:12 AM
2	26.67	10.72mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 11:09:29 AM
3	25.74	10.35mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 11:12:40 AM
4	25.99	10.45mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 11:15:51 AM

Mean Area 26.07
Mean Conc. 10.48mg/L



Sample

Sample Name: 280-176580-a-2
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

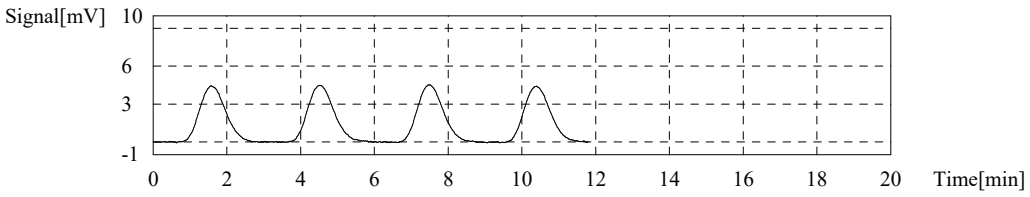
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.009mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	22.12	8.894mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 11:24:44 AM
2	22.67	9.115mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 11:27:54 AM
3	22.28	8.958mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 11:30:58 AM
4	22.56	9.071mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 11:34:11 AM

Mean Area 22.41
Mean Conc. 9.009mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

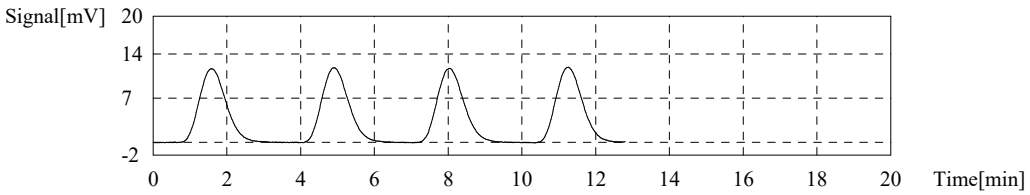
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.08mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	60.05	24.11mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 11:43:28 AM
2	59.86	24.04mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 11:46:46 AM
3	60.05	24.11mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 11:50:10 AM
4	59.96	24.08mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 11:53:30 AM

Mean Area 59.98
Mean Conc. 24.08mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

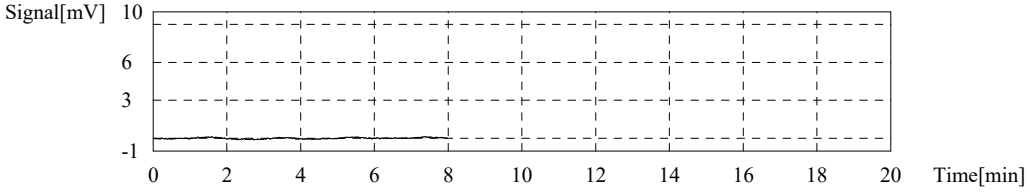
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1791mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3472	0.1589mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 12:01:25 PM
2	0.1944	0.09758mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 12:03:30 PM
3	0.7251	0.3105mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 12:05:48 PM
4	0.3240	0.1496mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 12:08:00 PM

Mean Area 0.3977
Mean Conc. 0.1791mg/L



Sample

Sample Name: 280-176425-a-1
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

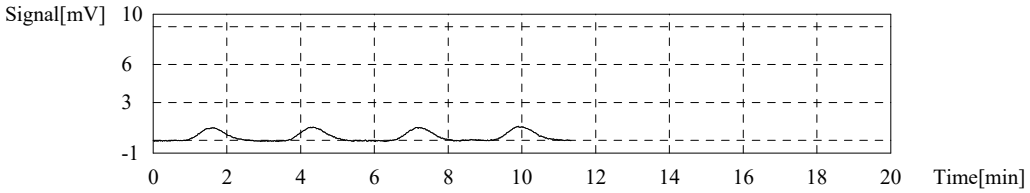
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.200mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.872	1.974mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 12:16:41 PM
2	5.312	2.151mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 12:19:45 PM
3	5.671	2.295mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 12:22:42 PM
4	5.880	2.379mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 12:25:54 PM

Mean Area 5.434
Mean Conc. 2.200mg/L



Sample

Sample Name: LCS
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

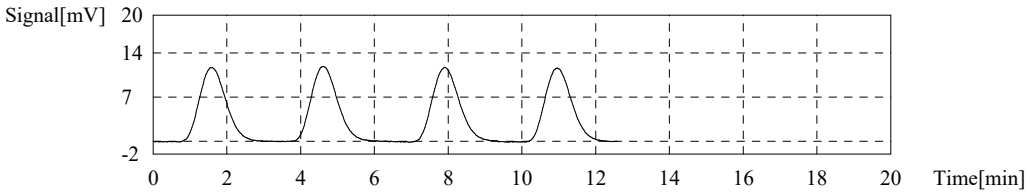
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.03mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	59.17	23.76mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 12:34:52 PM
2	60.08	24.12mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 12:38:25 PM
3	60.59	24.33mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 12:41:39 PM
4	59.55	23.91mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 12:45:04 PM

Mean Area 59.85
Mean Conc. 24.03mg/L



Sample

Sample Name: LCSD
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

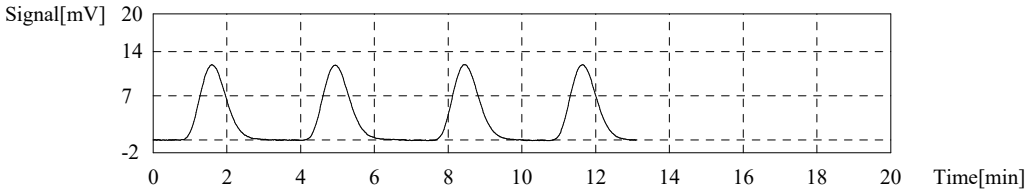
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.27mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	60.01	24.10mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 12:54:22 PM
2	60.77	24.40mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 12:58:04 PM
3	60.60	24.33mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 1:01:26 PM
4	60.45	24.27mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 1:04:41 PM

Mean Area 60.46
Mean Conc. 24.27mg/L



Sample

Sample Name: MB
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

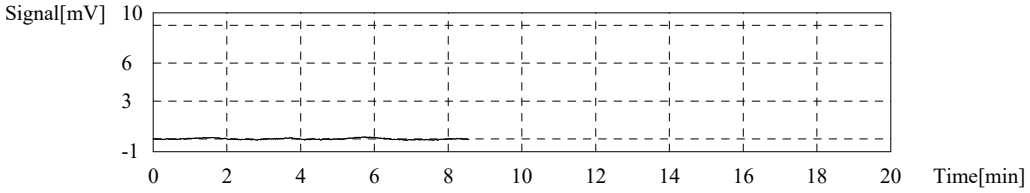
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2103mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.1878	0.09494mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 1:12:39 PM
2	0.5679	0.2474mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 1:15:04 PM
3	0.8534	0.3620mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 1:17:39 PM
4	0.2918	0.1367mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 1:19:46 PM

Mean Area 0.4752
Mean Conc. 0.2103mg/L



Sample

Sample Name: TIC
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

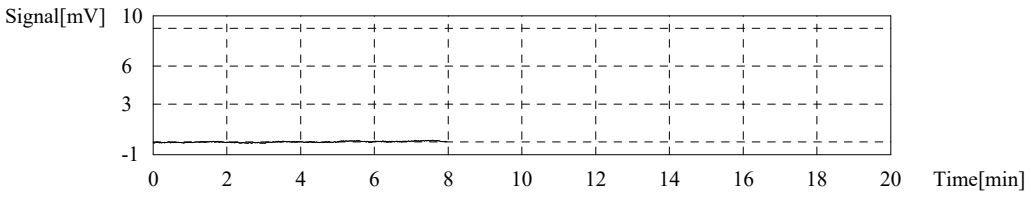
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1223mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3234	0.1493mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 1:27:43 PM
2	0.1835	0.09321mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 1:29:48 PM
3	0.4069	0.1828mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 1:32:01 PM
4	0.1105	0.06392mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 1:34:15 PM

Mean Area 0.2561
Mean Conc. 0.1223mg/L



Sample

Sample Name: 280-176361-g-3
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

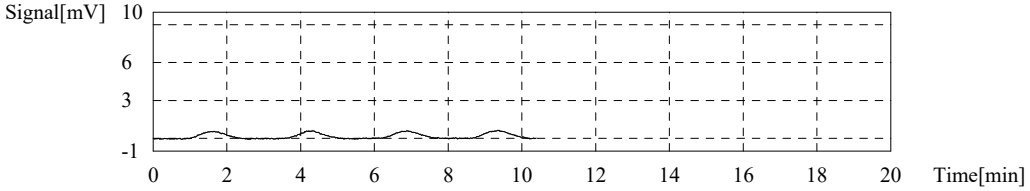
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.157mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.137	1.278mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 1:42:52 PM
2	2.637	1.078mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 1:45:38 PM
3	2.537	1.037mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 1:48:18 PM
4	3.034	1.237mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 1:51:13 PM

Mean Area 2.836
Mean Conc. 1.157mg/L



Sample

Sample Name: MS 280-176361-g-3
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

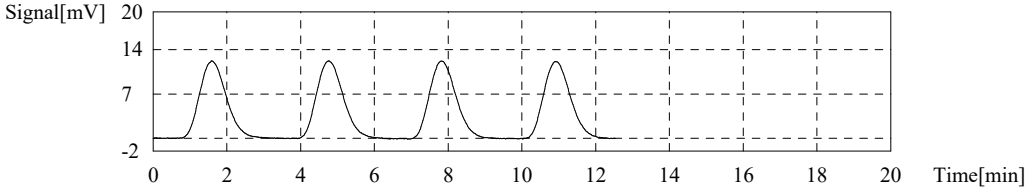
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.91mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	61.61	24.74mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 2:00:20 PM
2	62.01	24.90mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 2:03:35 PM
3	62.48	25.09mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 2:06:52 PM
4	62.08	24.93mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 2:10:16 PM

Mean Area 62.05
Mean Conc. 24.91mg/L



Sample

Sample Name: MSD 280-176361-g-3
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

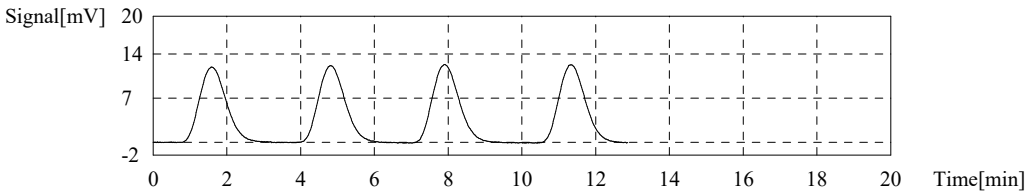
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.89mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	60.65	24.35mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 2:19:26 PM
2	61.71	24.78mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 2:22:44 PM
3	63.26	25.40mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 2:26:23 PM
4	62.30	25.01mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 2:29:42 PM

Mean Area 61.98
Mean Conc. 24.89mg/L



Sample

Sample Name: 280-176361-g-4
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

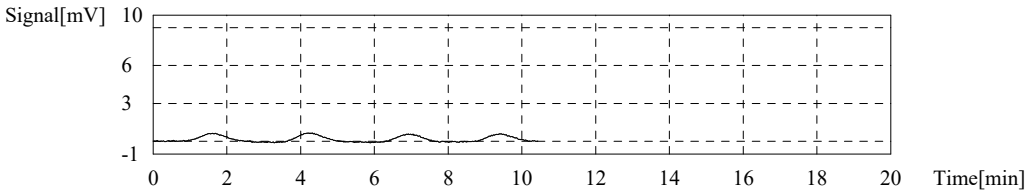
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.258mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.033	1.236mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 2:38:20 PM
2	3.547	1.443mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 2:41:12 PM
3	2.893	1.180mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 2:43:51 PM
4	2.874	1.173mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 2:46:41 PM

Mean Area 3.087
Mean Conc. 1.258mg/L



Sample

Sample Name: 280-176361-g-5
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

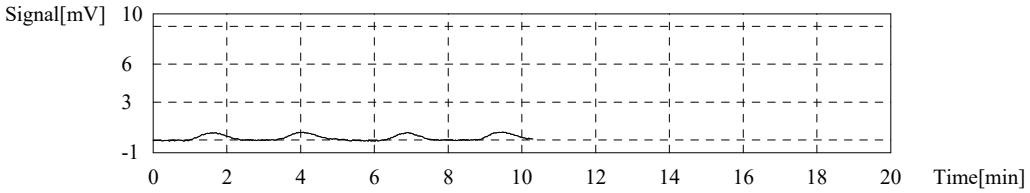
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.202mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.877	1.174mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 2:55:04 PM
2	3.357	1.366mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 2:58:11 PM
3	2.956	1.206mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 3:00:55 PM
4	2.603	1.064mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 3:03:35 PM

Mean Area 2.948
Mean Conc. 1.202mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

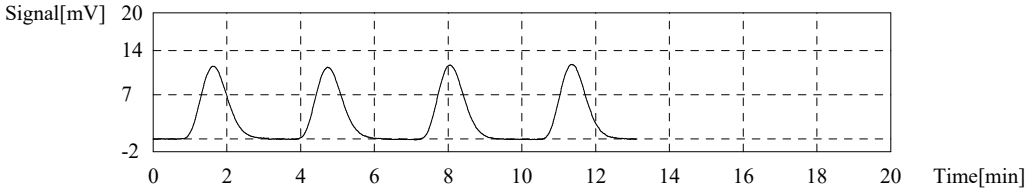
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.91mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	58.95	23.67mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 3:12:41 PM
2	58.70	23.57mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 3:16:14 PM
3	59.97	24.08mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 3:19:44 PM
4	60.57	24.32mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 3:23:21 PM

Mean Area 59.55
Mean Conc. 23.91mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

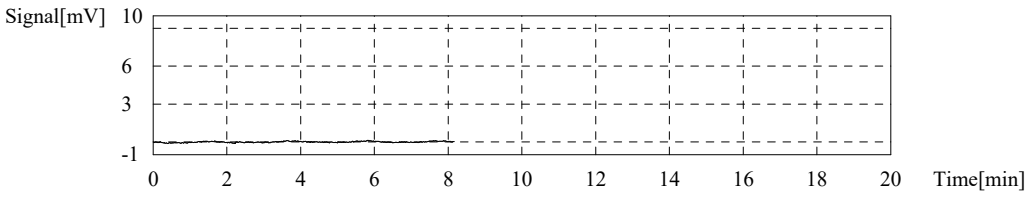
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1601mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3581	0.1633mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 3:31:32 PM
2	0.4185	0.1875mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 3:33:44 PM
3	0.3151	0.1460mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 3:35:53 PM
4	0.3092	0.1436mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 3:38:01 PM

Mean Area 0.3502
Mean Conc. 0.1601mg/L



Sample

Sample Name: 280-176361-g-6
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

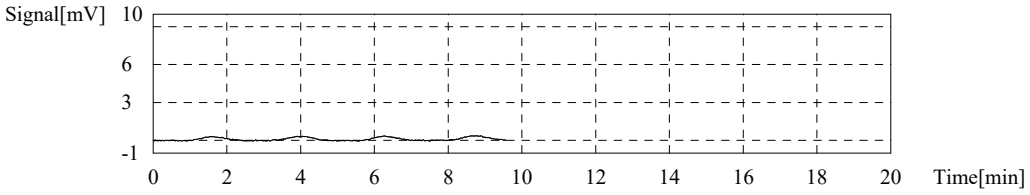
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.6286mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.340	0.5572mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 3:46:23 PM
2	1.122	0.4697mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 3:48:53 PM
3	1.837	0.7566mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 3:51:28 PM
4	1.773	0.7309mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 3:54:06 PM

Mean Area 1.518
Mean Conc. 0.6286mg/L



Sample

Sample Name: 280-176361-g-7
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

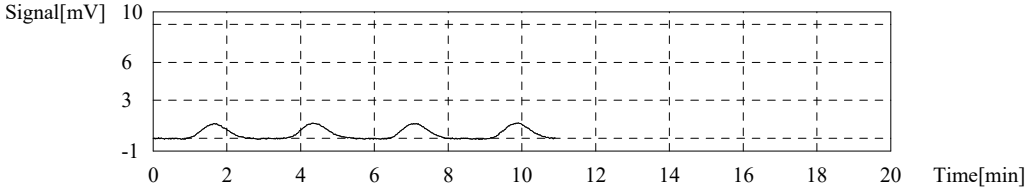
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.425mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.865	2.373mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 4:02:47 PM
2	5.972	2.416mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 4:05:46 PM
3	5.938	2.402mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 4:08:43 PM
4	6.212	2.512mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 4:11:36 PM

Mean Area 5.997
Mean Conc. 2.425mg/L



Sample

Sample Name: 280-176361-g-8
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

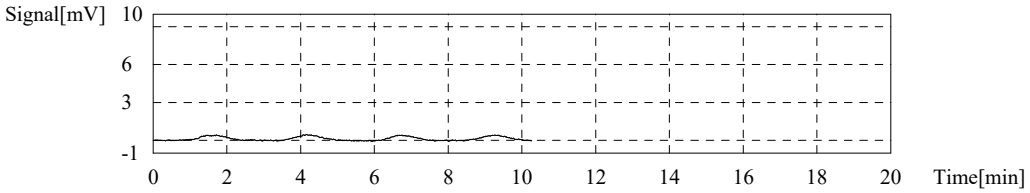
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.8743mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.031	0.8344mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 4:20:09 PM
2	2.136	0.8765mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 4:22:53 PM
3	2.066	0.8485mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 4:25:33 PM
4	2.289	0.9379mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 4:28:23 PM

Mean Area 2.131
Mean Conc. 0.8743mg/L



Sample

Sample Name: 280-176361-g-9
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

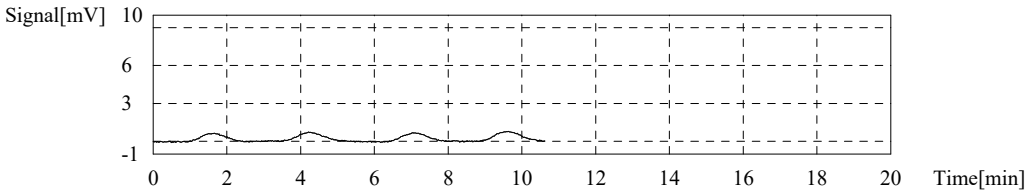
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.461mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.677	1.495mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 4:36:58 PM
2	3.517	1.431mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 4:39:59 PM
3	3.259	1.327mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 4:42:43 PM
4	3.923	1.593mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 4:45:31 PM

Mean Area 3.594
Mean Conc. 1.461mg/L



Sample

Sample Name: 280-176420-n-1
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

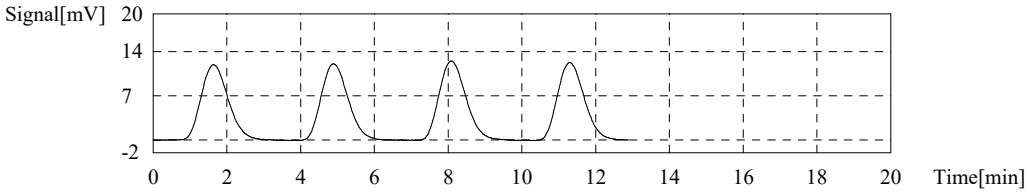
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	25.00	NPOC:628.4mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	61.52	617.5mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 4:54:46 PM
2	62.11	623.4mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 4:58:11 PM
3	63.84	640.8mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 5:01:40 PM
4	62.95	631.9mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 5:05:08 PM

Mean Area 62.61
Mean Conc. 628.4mg/L



Sample

Sample Name: 280-176420-l-2
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

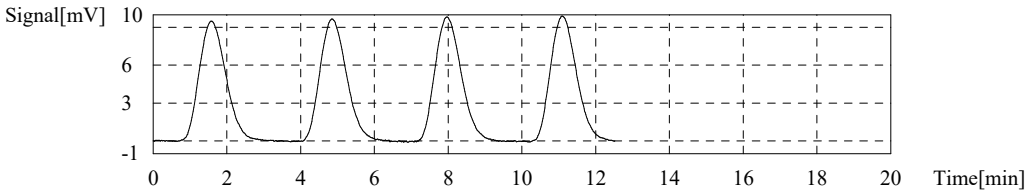
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	25.00	NPOC:492.5mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	48.17	483.6mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 5:14:22 PM
2	48.53	487.2mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 5:17:40 PM
3	49.95	501.5mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 5:20:59 PM
4	49.58	497.8mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 5:24:10 PM

Mean Area 49.06
Mean Conc. 492.5mg/L



Sample

Sample Name: 280-176296-g-4
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

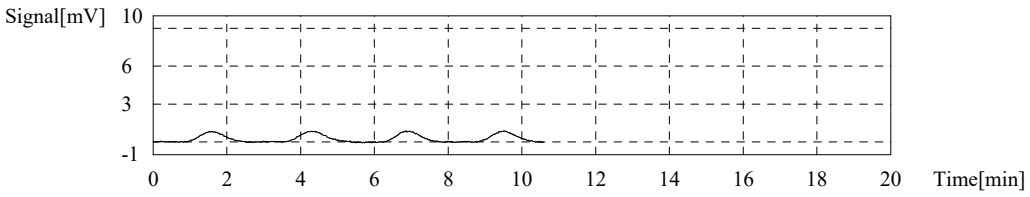
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.631mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.855	1.566mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 5:32:51 PM
2	3.969	1.612mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 5:35:39 PM
3	4.097	1.663mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 5:38:26 PM
4	4.143	1.682mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 5:41:16 PM

Mean Area 4.016
Mean Conc. 1.631mg/L



Sample

Sample Name: 280-176425-a-2
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

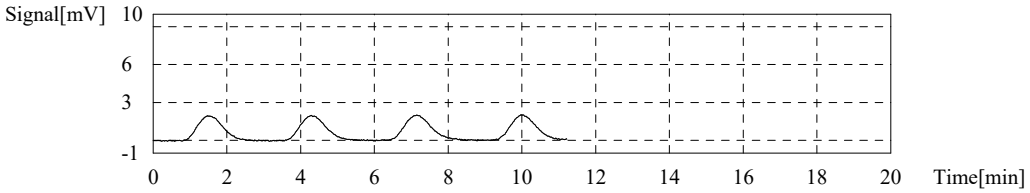
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	100.0	NPOC:391.2mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.425	380.1mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 5:49:58 PM
2	9.810	395.5mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 5:53:02 PM
3	10.19	410.8mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 5:56:04 PM
4	9.379	378.2mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 5:59:00 PM

Mean Area 9.701
Mean Conc. 391.2mg/L



Sample

Sample Name: MS 280-176425-a-2
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

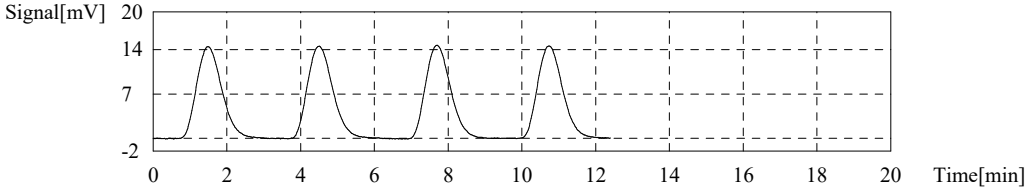
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	100.0	NPOC:2804mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	69.45	2788mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 6:07:59 PM
2	70.42	2827mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 6:11:22 PM
3	69.96	2809mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 6:14:34 PM
4	69.54	2792mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 6:17:55 PM

Mean Area 69.84
Mean Conc. 2804mg/L



Sample

Sample Name: MSD 280-176425-a-2
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

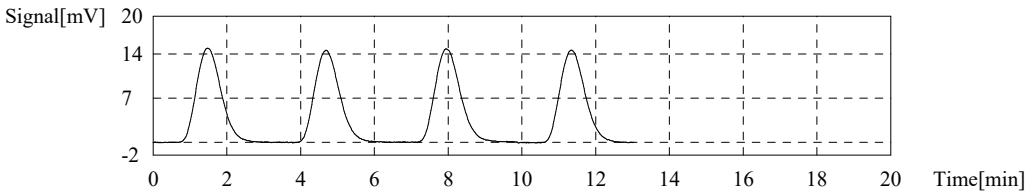
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	100.0	NPOC:2825mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	70.41	2827mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 6:27:06 PM
2	69.82	2803mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 6:30:33 PM
3	71.37	2865mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 6:34:08 PM
4	69.91	2807mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 6:37:33 PM

Mean Area 70.38
Mean Conc. 2825mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

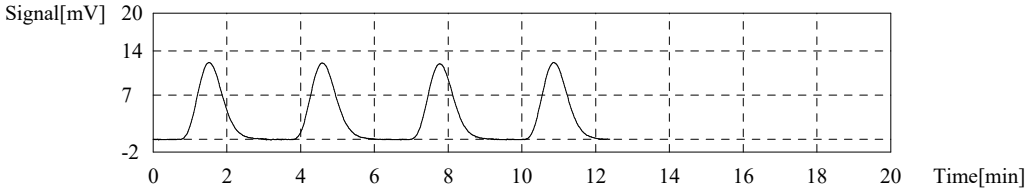
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.86mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	59.16	23.75mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 6:46:36 PM
2	59.81	24.02mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 6:50:00 PM
3	59.00	23.69mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 6:53:17 PM
4	59.71	23.98mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 6:56:32 PM

Mean Area 59.42
Mean Conc. 23.86mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

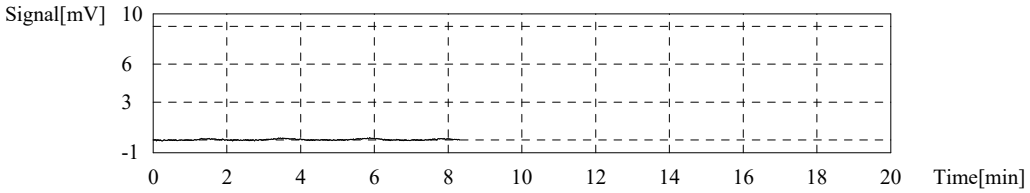
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2009mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3443	0.1577mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 7:04:31 PM
2	0.6991	0.3001mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 7:07:00 PM
3	0.5090	0.2238mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 7:09:16 PM
4	0.2550	0.1219mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 7:11:23 PM

Mean Area 0.4518
Mean Conc. 0.2009mg/L



Sample

Sample Name: 280-176425-a-3
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

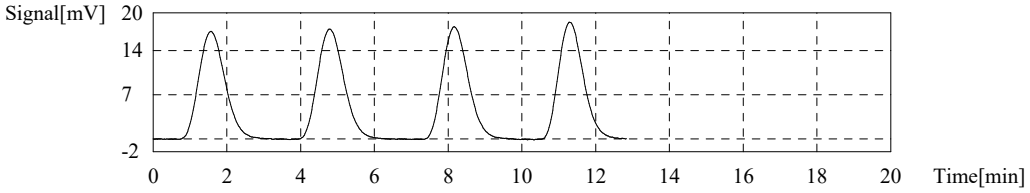
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	25.00	NPOC:876.2mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	84.90	852.0mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 7:20:36 PM
2	88.20	885.1mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 7:24:17 PM
3	88.12	884.3mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 7:27:40 PM
4	88.00	883.1mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 7:30:52 PM

Mean Area 87.31
Mean Conc. 876.2mg/L



Sample

Sample Name: 280-176425-a-4
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

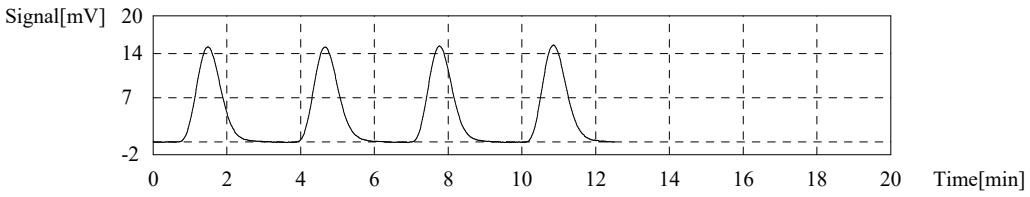
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	25.00	NPOC:712.7mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	70.78	710.4mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 7:40:02 PM
2	71.32	715.8mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 7:43:28 PM
3	70.23	704.9mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 7:46:45 PM
4	71.70	719.6mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 7:50:01 PM

Mean Area 71.01
Mean Conc. 712.7mg/L



Sample

Sample Name: 280-176437-g-3
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

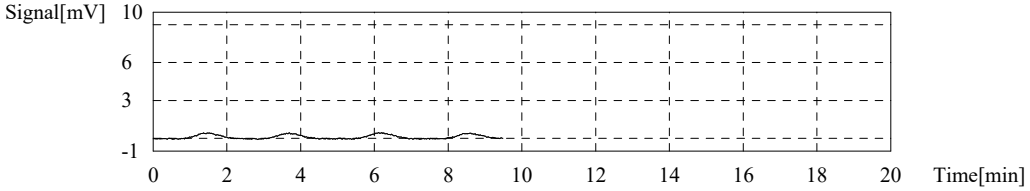
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.8302mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.868	0.7690mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 7:58:11 PM
2	2.045	0.8400mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 8:00:52 PM
3	2.460	1.007mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 8:03:27 PM
4	1.709	0.7052mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 8:06:05 PM

Mean Area 2.021
Mean Conc. 0.8302mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

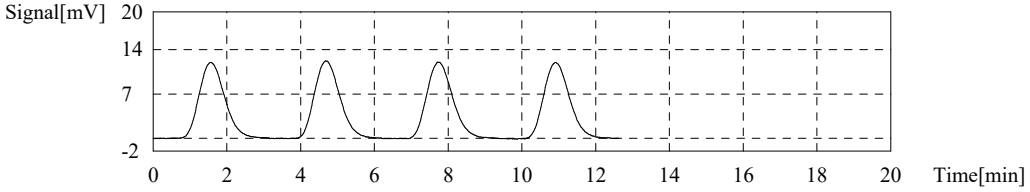
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.73mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	58.51	23.49mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 8:15:13 PM
2	59.22	23.78mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 8:18:32 PM
3	60.06	24.12mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 8:21:57 PM
4	58.63	23.54mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 8:25:24 PM

Mean Area 59.11
Mean Conc. 23.73mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1479mg/L

1. Det

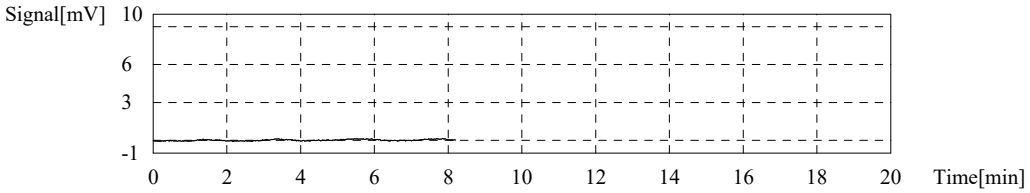
Anal.: NPOC

TOC-Control L Report

ABW
2023_05_23_001.tlx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.07030	0.04780mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 8:33:17 PM
2	0.4484	0.1995mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 8:35:37 PM
3	0.3863	0.1746mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 8:37:55 PM
4	0.3744	0.1698mg/L	50uL	1.000		NPOC_Calibration_10_31_2022.2023_03_20_14_43_51.cal	5/24/2023 8:40:08 PM

Mean Area 0.3199
Mean Conc. 0.1479mg/L



Shi 7 TOC

9060

	Analysis	Sample Name	Result	Comment	Vial
1*	NPOC	ICV			1
2*	NPOC	ICB			2
3*	NPOC	LCS			3
4*	NPOC	MB			4
5*	NPOC	TIC			5
6*	NPOC	280-176363-c-9			6
7*	NPOC	MS 280-176363-c-9			7
8*	NPOC	MSD 280-176363-c-9			8
9*	NPOC	280-176363-a-10			9
10*	NPOC	280-176363-c-11		2x	10
11*	NPOC	280-176363-c-12			11
12*	NPOC	280-176363-c-13		10x	12
13*	NPOC	280-176363-d-14			13
14*	NPOC	280-176363-d-15		25x	14
15*	NPOC	CCV			15
16*	NPOC	CCB			16
17*	NPOC	280-176363-c-16			17
18*	NPOC	280-176363-c-17		25x	18
19*	NPOC	280-176363-d-18			19
20*	NPOC	280-176363-a-19			20
21*	NPOC	MS 280-176363-a-19			21
22*	NPOC	MSD 280-176363-a-19			22
23*	NPOC	280-176363-d-20		10x odor	23
24*	NPOC	280-176363-c-21			24
25*	NPOC	280-176363-c-22		10x odor	25
26*	NPOC	280-176363-d-23			26
27*	NPOC	CCV			27
28*	NPOC	CCB			28
29*	NPOC	280-176363-a-24			29
30*	NPOC	280-176364-c-1			30
31*	NPOC	280-176364-c-2			31
32*	NPOC	280-176364-c-3			32
33*	NPOC	280-176364-c-4			33
34*	NPOC	LCS			34
35*	NPOC	MB			35
36*	NPOC	280-176364-c-5			36
37*	NPOC	MS 280-176364-c-5			37
38*	NPOC	MSD 280-176364-c-5			38
39*	NPOC	CCV			39
40*	NPOC	CCB			40
41*	NPOC	280-176335-d-4			41
42*	NPOC	280-176434-d-7			42
43*	NPOC	280-176441-c-1			43
44*	NPOC	280-176441-c-4			44
45*	NPOC	280-176456-a-1		H3PO4 Preserved	45
46*	NPOC	280-176456-a-2		↓	46
47*	NPOC	280-176456-a-3			47
48*	NPOC	280-176588-b-1			48
49*	NPOC	280-176588-b-2			49
50*	NPOC	280-176081-j-10		RR 1x DOC	50
51*	NPOC	CCV			51
52*	NPOC	CCB			52
53*	NPOC	MS 280-176081-j-10		RR 1x	53

Shi 7 TOC

	Analysis	Sample Name	Result	Comment	Vial
54*	NPOC	MSD 280-176081-j-10	pH<2	RR 1x	54
55*	NPOC	280-176588-b-3	—		55
56*	NPOC	280-176588-b-4	—	DOC	56
57*	NPOC	280-176588-b-5	—		57
58*	NPOC	280-176588-b-6	—		58
59*	NPOC	280-176210-a-2	X >2	RR 100x Unpreserved	59
60*	NPOC	280-176326-b-3	—		60
61*	NPOC	280-176580-a-1	—		61
62*	NPOC	280-176580-a-2	—		62
63*	NPOC	CCV	—		63
64*	NPOC	CCB	—		64
65*	NPOC	280-176425-a-1	—		65
66*	NPOC	LCS	—		66
67*	NPOC	LCSD	—		67
68*	NPOC	MB	—		68
69*	NPOC	TIC	—		69
70*	NPOC	280-176361-g-3	—		70
71*	NPOC	MS 280-176361-g-3	—		71
72*	NPOC	MSD 280-176361-g-3	—		72
73*	NPOC	280-176361-g-4	—		73
74*	NPOC	280-176361-g-5	—		74
75*	NPOC	CCV	—		75
76*	NPOC	CCB	—		76
77*	NPOC	280-176361-g-6	—		77
78*	NPOC	280-176361-g-7	—		78
79*	NPOC	280-176361-g-8	—		79
80*	NPOC	280-176361-g-9	—		80
81*	NPOC	280-176420-n-1	—	25x color & odor	81
82*	NPOC	280-176420-l-2	—	25x ↓	82
83*	NPOC	280-176296-g-4	—		83
84*	NPOC	280-176425-a-2	—	100x odor & color	84
85*	NPOC	MS 280-176425-a-2	—	100x ↓	85
86*	NPOC	MSD 280-176425-a-2	—	100x	86
87*	NPOC	CCV	—		87
88*	NPOC	CCB	—		88
89*	NPOC	280-176425-a-3	—	25x odor & color	89
90*	NPOC	280-176425-a-4	—	25x ↓	90
91*	NPOC	280-176437-g-3	—		91
92*	NPOC	CCV	—		92
93*	NPOC	CCB	—		93

ABW 5/24/23

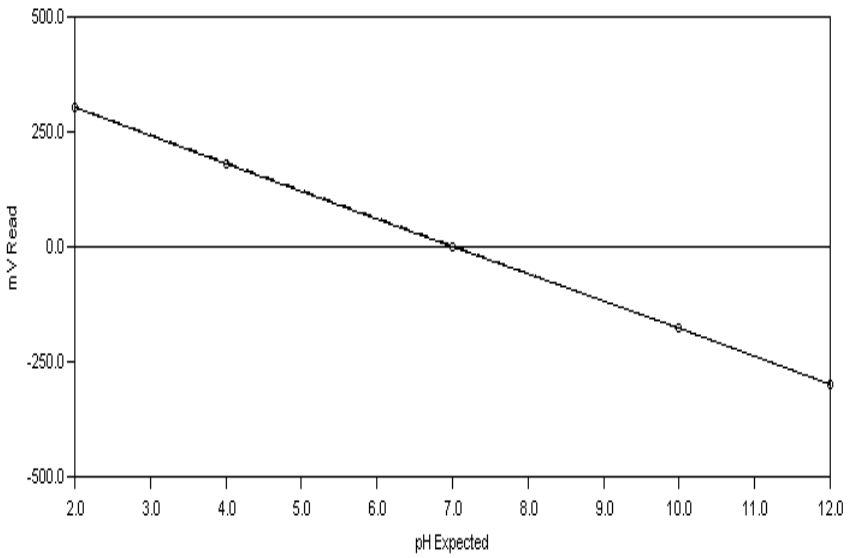
5310

BWH 5000, 4000 MS

MANTECH INC.

Calibration Report

Calibration Record # 663



Calibration Settings

Calibration ID	PH	Date	5/17/2023	
Channel	1	Time	11:31 AM	
Probe Type	pH	Temperature	295.14 K	21.99 C
Probe ID	PH ELECTRODE	Analysis Type	Single Line Fit	

Calibration Results

Slope	-60.020	CorrCoeff	1.0000
Intercept	1.732	Equation:	Y = (-60.020) X + (1.732)

Calibration Validity **True** Operator

	Result	Minimum	Maximum
Slope	-60.020	-65.00	-53.00
Intercept	1.732	-100.00	100.00
Correlation Coefficient	1.0000	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	301.51
	4.00	181.88
	7.00	0.97
	10.00	-175.17
	12.00	-300.53

Test America

AT4 Analyst:_____

Water Analysis Report

Run Number 1900 **Order Number** 20230517-2

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	5/17/2023	1:30 PM	21.82	-1.00	5.31	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
INITIAL CHECK	5/17/2023	1:38 PM	21.50	-1.00	10.44	142.41	198.01	.00	111.21	86.81	1.42	1.98	-1.00	.02
BUFFER 7	5/17/2023	1:41 PM	21.09	-1.00	7.03	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
LCS	5/17/2023	1:49 PM	21.19	-1.00	10.50	138.45	201.20	.00	125.50	75.70	1.38	2.01	-1.00	.02
LCSD	5/17/2023	1:57 PM	21.24	-1.00	10.52	140.53	201.82	.00	122.57	79.25	1.41	2.02	-1.00	.02
MB	5/17/2023	2:03 PM	21.16	-1.00	8.88	1.74	3.38	.00	3.28	.10	.02	.05	.07	.02
280-176446-a-5	5/17/2023	2:09 PM	21.06	-1.00	6.07	.00	125.15	125.15	.00	.00	.00	1.25	-1.00	.02
DU 280-176446-a-5	5/17/2023	2:14 PM	21.05	-1.00	6.20	.00	125.88	125.88	.00	.00	.00	1.26	-1.00	.02
280-176449-a-3	5/17/2023	2:20 PM	21.24	-1.00	6.23	.00	84.31	84.31	.00	.00	.00	.84	-1.00	.02
280-176449-a-14	5/17/2023	2:25 PM	21.60	-1.00	6.25	.00	79.75	79.75	.00	.00	.00	.80	-1.00	.02
280-176449-a-22	5/17/2023	2:31 PM	21.66	-1.00	6.10	.00	45.47	45.47	.00	.00	.00	.45	-1.00	.02
280-176452-a-4	5/17/2023	2:40 PM	21.40	-1.00	6.82	.00	702.76	702.76	.00	.00	.00	7.03	-1.00	.02
280-176452-a-12	5/17/2023	2:47 PM	21.44	-1.00	6.59	.00	208.79	208.79	.00	.00	.00	2.09	-1.00	.02
280-176508-a-3	5/17/2023	2:52 PM	21.40	-1.00	6.19	.00	23.05	23.05	.00	.00	.00	.23	-1.00	.02
280-176508-a-14	5/17/2023	3:01 PM	21.32	-1.00	7.01	.00	464.96	464.96	.00	.00	.00	4.65	-1.00	.02
280-176510-a-3	5/17/2023	3:07 PM	21.48	-1.00	6.81	.00	139.56	139.56	.00	.00	.00	1.40	-1.00	.02
CCV	5/17/2023	3:15 PM	21.48	-1.00	10.53	139.41	195.34	.00	111.84	83.49	1.39	1.95	-1.00	.02
CCB	5/17/2023	3:21 PM	21.66	-1.00	8.68	1.14	2.93	.65	2.28	.00	.01	.05	.07	.02
280-176510-a-11	5/17/2023	3:28 PM	21.73	-1.00	6.58	.00	305.75	305.75	.00	.00	.00	3.06	-1.00	.02
280-176510-a-20	5/17/2023	3:35 PM	22.05	-1.00	8.68	30.51	151.19	90.17	61.02	.00	.31	1.51	-1.00	.02
280-176523-a-3	5/17/2023	3:40 PM	21.86	-1.00	6.05	.00	40.05	40.05	.00	.00	.00	.40	-1.00	.02
280-176523-a-12	5/17/2023	3:45 PM	21.57	-1.00	6.05	.00	43.17	43.17	.00	.00	.00	.43	-1.00	.02
280-176383-f-1	5/17/2023	3:51 PM	21.43	-1.00	6.38	.00	59.50	59.50	.00	.00	.00	.59	-1.00	.02
280-176383-f-2	5/17/2023	3:57 PM	21.38	-1.00	6.53	.00	59.86	59.86	.00	.00	.00	.60	-1.00	.02
280-176383-f-7	5/17/2023	4:03 PM	21.32	-1.00	7.07	.00	182.99	182.99	.00	.00	.00	1.83	-1.00	.02
280-176406-a-1	5/17/2023	4:11 PM	21.38	-1.00	7.04	.00	417.39	417.39	.00	.00	.00	4.17	-1.00	.02
280-176412-b-1	5/17/2023	4:22 PM	21.51	-1.00	7.40	.00	780.39	780.39	.00	.00	.00	7.80	-1.00	.02

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Run Number 1900 **Order Number** 20230517-2

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)
280-176412-b-2	5/17/2023	4:29 PM	21.67	-1.00	7.36	.00	2.74	2.74	.00	.00	.00	.05	.07	.02
CCV	5/17/2023	4:36 PM	21.85	-1.00	10.51	145.98	199.45	.00	106.94	92.51	1.46	1.99	-1.00	.02
CCB	5/17/2023	4:42 PM	22.13	-1.00	8.55	.90	3.19	1.40	1.79	.00	.01	.05	.07	.02
LCS	5/17/2023	4:50 PM	22.03	-1.00	10.51	144.56	198.84	.00	108.57	90.28	1.45	1.99	-1.00	.02
MB	5/17/2023	4:57 PM	21.83	-1.00	8.61	.96	2.90	.99	1.92	.00	.01	.05	.07	.02
280-176414-c-2	5/17/2023	5:02 PM	21.66	-1.00	5.75	.00	.49	.49	.00	.00	.00	.03	.05	.02
DU 280-176414-c-2	5/17/2023	5:08 PM	21.56	-1.00	5.57	.00	.22	.22	.00	.00	.00	.02	.05	.02
280-176414-c-1	5/17/2023	5:18 PM	21.57	-1.00	7.38	.00	775.45	775.45	.00	.00	.00	7.75	-1.00	.02
280-176416-e-1	5/17/2023	5:30 PM	21.70	-1.00	7.23	.00	952.26	952.26	.00	.00	.00	9.52	-1.00	.02
280-176416-e-2	5/17/2023	5:43 PM	21.80	-1.00	7.22	.00	904.35	904.35	.00	.00	.00	9.04	-1.00	.02
280-176441-f-1	5/17/2023	5:50 PM	21.92	-1.00	7.29	.00	201.95	201.95	.00	.00	.00	2.02	-1.00	.02
280-176441-f-4	5/17/2023	5:57 PM	21.99	-1.00	7.31	.00	163.81	163.81	.00	.00	.00	1.64	-1.00	.02
280-176448-f-1	5/17/2023	6:05 PM	22.16	-1.00	7.90	.00	464.64	464.64	.00	.00	.00	4.65	-1.00	.02
280-176290-f-1	5/17/2023	6:12 PM	22.26	-1.00	7.29	.00	223.45	223.45	.00	.00	.00	2.23	-1.00	.02
280-176335-c-4	5/17/2023	6:18 PM	21.99	-1.00	6.62	.00	111.30	111.30	.00	.00	.00	1.11	-1.00	.02
CCV	5/17/2023	6:26 PM	21.82	-1.00	10.45	146.47	197.23	.00	101.52	95.70	1.46	1.97	-1.00	.02
CCB	5/17/2023	6:32 PM	21.70	-1.00	8.66	1.12	3.10	.85	2.25	.00	.01	.05	.07	.02
280-176434-c-7	5/17/2023	6:38 PM	21.58	-1.00	5.74	.00	8.34	8.34	.00	.00	.00	.11	.13	.02
280-176524-c-1	5/17/2023	6:43 PM	21.53	-1.00	6.25	.00	53.30	53.30	.00	.00	.00	.53	-1.00	.02
280-176524-c-4	5/17/2023	6:49 PM	21.51	-1.00	6.67	.00	142.43	142.43	.00	.00	.00	1.42	-1.00	.02
280-176326-a-1	5/17/2023	6:56 PM	21.58	-1.00	7.10	.00	285.58	285.58	.00	.00	.00	2.86	-1.00	.02
280-176326-a-2	5/17/2023	7:04 PM	21.71	-1.00	7.21	.00	357.33	357.33	.00	.00	.00	3.57	-1.00	.02
280-176326-a-3	5/17/2023	7:11 PM	21.93	-1.00	7.15	.00	269.50	269.50	.00	.00	.00	2.70	-1.00	.02
280-176326-a-4	5/17/2023	7:18 PM	22.19	-1.00	7.25	.00	166.04	166.04	.00	.00	.00	1.66	-1.00	.02
280-176359-f-1	5/17/2023	7:24 PM	22.31	-1.00	6.63	.00	2.02	2.02	.00	.00	.00	.04	.06	.02
280-176359-e-2	5/17/2023	7:30 PM	22.03	-1.00	5.98	.00	.92	.92	.00	.00	.00	.03	.05	.02
280-176359-e-3	5/17/2023	7:41 PM	21.79	-1.00	7.12	.00	789.87	789.87	.00	.00	.00	7.90	-1.00	.02
CCV	5/17/2023	7:49 PM	21.85	-1.00	10.44	152.72	201.73	.00	98.03	103.70	1.53	2.02	-1.00	.02
CCB	5/17/2023	7:55 PM	21.71	-1.00	8.51	1.03	3.41	1.36	2.05	.00	.01	.05	.07	.02
LCS	5/17/2023	8:03 PM	21.66	-1.00	10.43	140.27	199.09	.00	117.64	81.44	1.40	1.99	-1.00	.02

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Run Number 1900 **Order Number** 20230517-2

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)
MB	5/17/2023	8:09 PM	21.61	-1.00	8.64	1.23	3.48	1.01	2.47	.00	.01	.05	.07	.02
280-176359-e-4	5/17/2023	8:18 PM	21.57	-1.00	7.57	.00	485.17	485.17	.00	.00	.00	4.85	-1.00	.02
DU 280-176359-e-4	5/17/2023	8:26 PM	21.73	-1.00	7.62	.00	492.70	492.70	.00	.00	.00	4.93	-1.00	.02
280-176359-e-5	5/17/2023	8:37 PM	21.82	-1.00	7.17	.00	796.20	796.20	.00	.00	.00	7.96	-1.00	.02
280-176363-b-1	5/17/2023	8:49 PM	22.08	-1.00	6.93	.00	907.70	907.70	.00	.00	.00	9.08	-1.00	.02
280-176363-b-2	5/17/2023	8:55 PM	22.43	-1.00	6.83	.00	3.02	3.02	.00	.00	.00	.05	.08	.02
280-176363-a-3	5/17/2023	9:16 PM	22.10	-1.00	7.71	.00	.00	.00	.00	.00	.00	.00	.00	.02
280-176363-a-5	5/17/2023	9:37 PM	21.80	-1.00	7.71	.00	2,237.66	2,237.66	.00	.00	.00	22.38	-1.00	.02
280-176363-a-6	5/17/2023	9:44 PM	21.57	-1.00	7.49	.00	5.76	5.76	.00	.00	.00	.08	.10	.02
280-176363-b-7	5/17/2023	9:54 PM	21.35	-1.00	6.74	.00	853.37	853.37	.00	.00	.00	8.53	-1.00	.02
280-176363-a-8	5/17/2023	10:15 PM	21.30	-1.00	7.72	.00	.00	.00	.00	.00	.00	.00	.00	.02
CCV	5/17/2023	10:23 PM	21.30	-1.00	10.38	149.33	201.82	.00	104.98	96.84	1.49	2.02	-1.00	.02
CCB	5/17/2023	10:29 PM	21.19	-1.00	8.36	.00	2.98	2.98	.00	.00	.00	.05	.07	.02
280-176363-a-9	5/17/2023	10:40 PM	21.12	-1.00	6.84	.00	823.95	823.95	.00	.00	.00	8.24	-1.00	.02
280-176363-c-10	5/17/2023	10:50 PM	21.22	-1.00	6.92	.00	817.10	817.10	.00	.00	.00	8.17	-1.00	.02
280-176363-a-11	5/17/2023	11:11 PM	21.34	-1.00	7.76	.00	.00	.00	.00	.00	.00	.00	.00	.02
280-176363-b-12	5/17/2023	11:24 PM	21.54	-1.00	7.35	.00	1,025.80	1,025.80	.00	.00	.00	10.26	-1.00	.02
280-176363-b-13	5/17/2023	11:45 PM	21.77	-1.00	7.79	.00	.00	.00	.00	.00	.00	.00	.00	.02
280-176363-a-14	5/17/2023	11:58 PM	21.69	-1.00	7.31	.00	926.46	926.46	.00	.00	.00	9.26	-1.00	.02
280-176363-b-15	5/18/2023	12:18 AM	21.63	-1.00	7.81	.00	.00	.00	.00	.00	.00	.00	.00	.02
280-176363-b-16	5/18/2023	12:27 AM	21.53	-1.00	7.08	.00	633.96	633.96	.00	.00	.00	6.34	-1.00	.02
280-176363-a-17	5/18/2023	12:47 AM	21.60	-1.00	7.88	.00	.00	.00	.00	.00	.00	.00	.00	.02
280-176363-b-18	5/18/2023	1:00 AM	21.70	-1.00	7.32	.00	895.39	895.39	.00	.00	.00	8.95	-1.00	.02
CCV	5/18/2023	1:08 AM	21.71	-1.00	10.29	146.66	201.87	.00	110.42	91.45	1.47	2.02	-1.00	.02
CCB	5/18/2023	1:14 AM	21.71	-1.00	8.25	.00	2.88	2.88	.00	.00	.00	.05	.07	.02
LCS	5/18/2023	1:22 AM	21.71	-1.00	10.31	145.35	202.49	.00	114.29	88.21	1.45	2.02	-1.00	.02
MB	5/18/2023	1:28 AM	21.82	-1.00	8.30	.00	4.48	4.48	.00	.00	.00	.07	.09	.02
280-176363-b-19	5/18/2023	1:40 AM	21.93	-1.00	7.27	.00	931.37	931.37	.00	.00	.00	9.31	-1.00	.02
DU 280-176363-b-19	5/18/2023	1:52 AM	22.29	-1.00	7.42	.00	942.81	942.81	.00	.00	.00	9.43	-1.00	.02
280-176363-b-20	5/18/2023	2:13 AM	22.07	-1.00	7.68	.00	2,369.07	2,369.07	.00	.00	.00	23.69	-1.00	.02

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Run Number 1900 **Order Number** 20230517-2

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)
280-176363-a-21	5/18/2023	2:22 AM	21.85	-1.00	7.12	.00	463.59	463.59	.00	.00	.00	4.64	-1.00	.02
280-176363-a-22	5/18/2023	2:42 AM	21.67	-1.00	7.36	.00	.00	.00	.00	.00	.00	.00	.00	.02
280-176363-b-23	5/18/2023	2:54 AM	21.58	-1.00	7.59	.00	814.91	814.91	.00	.00	.00	8.15	-1.00	.02
280-176363-c-24	5/18/2023	2:59 AM	21.48	-1.00	7.00	.00	6.02	6.02	.00	.00	.00	.08	.10	.02
280-176395-e-1	5/18/2023	3:14 AM	21.41	-1.00	8.42	49.19	1,335.42	1,237.04	98.38	.00	.49	13.35	-1.00	.02
280-176395-e-2	5/18/2023	3:29 AM	21.41	-1.00	8.21	.00	1,223.65	1,223.65	.00	.00	.00	12.24	-1.00	.02
280-176395-f-3	5/18/2023	3:44 AM	21.41	-1.00	8.24	.00	1,142.49	1,142.49	.00	.00	.00	11.42	-1.00	.02
CCV	5/18/2023	3:52 AM	21.43	-1.00	10.27	147.91	205.22	.00	114.62	90.59	1.48	2.05	-1.00	.02
CCB	5/18/2023	3:59 AM	21.43	-1.00	8.36	.00	3.23	3.23	.00	.00	.00	.05	.08	.02
280-176400-b-1	5/18/2023	4:12 AM	21.48	-1.00	8.60	69.49	1,101.04	962.06	138.98	.00	.69	11.01	-1.00	.02
280-176439-c-1	5/18/2023	4:25 AM	21.71	-1.00	7.62	.00	871.27	871.27	.00	.00	.00	8.71	-1.00	.02
280-176439-c-2	5/18/2023	4:36 AM	21.53	-1.00	9.12	169.95	803.45	463.55	339.90	.00	1.70	8.03	-1.00	.02
280-176443-a-1	5/18/2023	4:43 AM	21.37	-1.00	7.10	.00	176.84	176.84	.00	.00	.00	1.77	-1.00	.02
280-176443-a-2	5/18/2023	4:48 AM	21.27	-1.00	6.47	.00	109.15	109.15	.00	.00	.00	1.09	-1.00	.02
280-176443-a-3	5/18/2023	4:54 AM	21.18	-1.00	6.06	.00	43.11	43.11	.00	.00	.00	.43	-1.00	.02
280-176443-a-4	5/18/2023	5:01 AM	21.15	-1.00	7.07	.00	290.64	290.64	.00	.00	.00	2.91	-1.00	.02
280-176443-a-5	5/18/2023	5:07 AM	21.12	-1.00	6.95	.00	138.28	138.28	.00	.00	.00	1.38	-1.00	.02
280-176478-c-1	5/18/2023	5:19 AM	21.12	-1.00	7.62	.00	847.66	847.66	.00	.00	.00	8.48	-1.00	.02
280-176515-b-2	5/18/2023	5:26 AM	21.16	-1.00	7.73	.00	199.48	199.48	.00	.00	.00	1.99	-1.00	.02
CCV	5/18/2023	5:34 AM	21.18	-1.00	10.21	150.48	203.00	.00	105.05	97.95	1.50	2.03	-1.00	.02
CCB	5/18/2023	5:40 AM	21.21	-1.00	8.32	.00	2.77	2.77	.00	.00	.00	.05	.08	.02
LCS	5/18/2023	5:48 AM	21.56	-1.00	10.19	141.73	205.68	.00	127.91	77.77	1.42	2.06	-1.00	.02
MB	5/18/2023	5:54 AM	21.45	-1.00	8.17	.00	3.95	3.95	.00	.00	.00	.06	.09	.02
280-176518-e-1	5/18/2023	6:00 AM	21.32	-1.00	7.11	.00	142.89	142.89	.00	.00	.00	1.43	-1.00	.02
DU 280-176518-e-1	5/18/2023	6:07 AM	21.22	-1.00	7.33	.00	144.99	144.99	.00	.00	.00	1.45	-1.00	.02
280-176518-e-2	5/18/2023	6:13 AM	21.16	-1.00	7.41	.00	157.21	157.21	.00	.00	.00	1.57	-1.00	.02
280-176518-e-3	5/18/2023	6:20 AM	21.15	-1.00	7.29	.00	148.80	148.80	.00	.00	.00	1.49	-1.00	.02
280-176518-e-4	5/18/2023	6:26 AM	21.16	-1.00	7.54	.00	183.12	183.12	.00	.00	.00	1.83	-1.00	.02
280-176518-e-5	5/18/2023	6:32 AM	21.18	-1.00	6.65	.00	6.11	6.11	.00	.00	.00	.08	.11	.02
280-176544-b-1	5/18/2023	6:40 AM	21.18	-1.00	7.50	.00	334.60	334.60	.00	.00	.00	3.35	-1.00	.02

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Run Number 1900 **Order Number** 20230517-2

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)
280-176544-b-2	5/18/2023	6:48 AM	21.22	-1.00	7.61	.00	339.77	339.77	.00	.00	.00	3.40	-1.00	.02
280-176544-b-3	5/18/2023	6:56 AM	21.27	-1.00	7.81	.00	405.70	405.70	.00	.00	.00	4.06	-1.00	.02
280-176544-b-4	5/18/2023	7:04 AM	21.35	-1.00	7.96	.00	397.24	397.24	.00	.00	.00	3.97	-1.00	.02
CCV	5/18/2023	7:12 AM	21.63	-1.00	10.15	143.10	208.98	.00	131.76	77.22	1.43	2.09	-1.00	.02
CCB	5/18/2023	7:18 AM	21.56	-1.00	8.09	.00	3.35	3.35	.00	.00	.00	.06	.09	.02
280-176553-e-1	5/18/2023	7:25 AM	21.48	-1.00	7.33	.00	155.40	155.40	.00	.00	.00	1.55	-1.00	.02
280-176553-e-2	5/18/2023	7:31 AM	21.47	-1.00	7.51	.00	152.69	152.69	.00	.00	.00	1.53	-1.00	.02
280-176425-c-1	5/18/2023	7:39 AM	21.47	-1.00	7.87	.00	408.28	408.28	.00	.00	.00	4.08	-1.00	.02
280-176425-b-2	5/18/2023	8:00 AM	21.54	-1.00	8.16	.00	.00	.00	.00	.00	.00	.00	.00	.02
280-176425-b-3	5/18/2023	8:21 AM	21.71	-1.00	8.39	214.38	.00	-428.76	428.76	.00	2.14	.00	.00	.02
280-176425-b-4	5/18/2023	8:41 AM	21.85	-1.00	8.31	83.43	.00	-166.86	166.86	.00	.83	.00	.00	.02
280-176333-c-1	5/18/2023	8:56 AM	22.03	-1.00	5.55	.00	1,320.09	1,320.09	.00	.00	.00	13.20	-1.00	.02
280-176333-c-2	5/18/2023	9:06 AM	22.08	-1.00	4.89	.00	790.49	790.49	.00	.00	.00	7.90	-1.00	.02
280-176420-h-1	5/18/2023	9:25 AM	22.20	-1.00	8.19	.00	.00	.00	.00	.00	.00	.00	.00	.02
280-176420-g-2	5/18/2023	9:45 AM	22.49	-1.00	8.10	.00	.00	.00	.00	.00	.00	.00	.00	.02
RINSE	5/18/2023	9:53 AM	22.35	-1.00	8.14	.00	9.82	9.82	.00	.00	.00	.12	.15	.02
CCV	5/18/2023	10:01 AM	22.26	-1.00	10.09	143.06	204.19	.00	122.26	81.92	1.43	2.04	-1.00	.02
CCB	5/18/2023	10:07 AM	22.25	-1.00	7.93	.00	5.73	5.73	.00	.00	.00	.08	.11	.02

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Shipping and Receiving Documents

Chain of Custody Record

leidos

Page 1 of 1

COC No.: RVAAP-316-TA

Date: 5/10/23

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 Spring 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: Expanded Explosives (6)(A)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	LL1mw-082-230401-GW	NA	NA	5/10/23	1120	W	2		2	

MR 5/10/23

Relinquished by	Date	Received by	Date	Notes: Total Number of Containers: 2	Shipment Method: Courier
Signature	5/10/23	Signature	5/11/23	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: 1700	Printed Name: ETADEN	Time: 0945	1. SW 8260B Notes: 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	9179 3164 8940
Company		Company			
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

1.7 IR14 CF0.1

280-176335 Chain of Custody

leidos

Chain of Custody Record

Page 1 of 1

COC No.: RVAAP-518 -TA

Date: 5/10/2023

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 Spring 2023
Job/P.O. No.: P010216426
Sampler (Signature) [signature] (Printed Name) Katie Lee

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-021-230401-GW	NA	NA	5/10/23	1411	W	2		2	

Relinquished by
Signature: [signature]
Printed Name: Ryan Laughlin
Company: Leidos
Date: 5/10/2023
Time: 1701

Received by
Signature: [signature]
Printed Name: Matt Little
Company: ETADEN
Date: 5/11/23
Time: 0945

Relinquished by
Signature:
Printed Name:
Company:
Date:
Time:

Received by
Signature:
Printed Name:
Company:
Date:
Time:

Notes: Total Number of Containers: 2

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

8179 3164 8940

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

5/31/2023 7:23 AM

leidos

Chain of Custody Record

Page 1 of 1

COC No.: RVAAP-317-TA

Date: 5/10/2023

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 Spring 2023
Job/P.O. No.: P010216426
Sampler (Signature) Katie Lee (Printed Name) Katie Lee

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-024-230401-GW	NA	NA	5/10/23	1346	W	2		2	

Relinquished by: Signature; Printed Name: Leidos; Company — Date: 5/10/23 — Time: 1700

Received by: Signature; Printed Name; Company — Date: 5/11/23 — Time: 0945

Relinquished by: Signature; Printed Name; Company — Date; Time

Received by: Signature; Printed Name; Company — Date; Time

Notes: Total Number of Containers: 2

A. Cool, 4C
B. HCl, pH<2, Cool, 4C
C. HNO3, pH<2, Cool, 4C
D. NaOH, pH>12, Cool 4C

Notes:
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

Shipment Method: Courier

8179 3167 8940

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

5/31/2023 7:23 AM

leidos

Chain of Custody Record

Page 1 of 1

COC No.: RVAAP-310-TA

Date: 5/10/2023

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 Spring 2023
Job/P.O. No.: P010216426
Sampler (Signature) Melissa Reger (Printed Name) Melissa Reger

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
	LL2mw-059-230401-GW	NA	NA	5/10/23	1451	W	2	1	1		1		5	

MR 5/10/23

Relinquished by
Signature
Printed Name
Company

Date 5/10/2023
Time 1700

Received by
Signature
Printed Name
Company

Date 5/11/23
Time 0945

Relinquished by
Signature
Printed Name
Company

Date
Time

Received by
Signature
Printed Name
Company

Date
Time

Notes: Total Number of Containers: 5

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

8179 3164 8940

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

5/31/2023 7:23 AM

leidos

Chain of Custody Record

COC No.: RVAAP-315-TA

Date: 05/10/2023

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 Spring 2023
Job/P.O. No.: P010216426
Sampler (Signature) Melissa Riege (Printed Name) Melissa Riege

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-020-230401-GW	NA	NA	5/10/23	0929	W	1		1	

Requested Parameters

MR 5/10/23

Relinquished by	Date	Received by	Date	Time
Signature: Melissa Riege	5/10/23	Signature: Matt Little	5/11/23	0945
Printed Name: Leidos	Time: 1700	Printed Name: ETADEN	Time	
Company		Company		
Relinquished by	Date	Received by	Date	
Signature		Signature		
Printed Name	Time	Printed Name	Time	
Company		Company		

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

8179 5164 8940

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

5/31/2023 7:23 AM

leidos

Chain of Custody Record

Page 1 of 1

COC No.: RVAAP-314-TA

Date: 5/10/23

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 Spring 2023
Job/P.O. No.: P010216426
Sampler (Signature) [signature] (Printed Name) Katie Lee

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: VOCs (1)(B)	Nitrate (10)(A)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	FWGmw-018-230401-GW	NA	NA	5/10/23	0915	W		1		1	

Relinquished by
Signature [signature]
Printed Name
Leidos
Company
Date 5/11/23
Time 1700

Received by
Signature [signature]
Printed Name [signature]
Company ETADEN
Date 5/11/23
Time 0945

Relinquished by
Signature
Printed Name
Company
Date
Time

Received by
Signature
Printed Name
Company
Date
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

8179 3164 8940

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

5/31/2023 7:23 AM

[redacted]

SIGNATURE

DATE

Custody

eurofins | Environment Testing TestAmerica

2171241

8179316489 40

8179316489 40

FedEx Express

Expanded Billable Stamp

Use only for shipments within the U.S.
Saturday delivery available.

1 From *See optional release signature below.*

ORDER: 00871190

DECLARED VALUE **$100**

PACKAGE WEIGHT

( ) ____ - ____

2 To *Shipment will not be accepted if address below is altered.*

SAMPLE RECEIVING
EUROFINS DENVER
4955 YARROW STREET
ARVADA CO 80002
(303) 736-0100

FedEx Priority Overnight®

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NONREDEEMABLE

Please see back for declared value information and important terms and conditions.

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Shipments tendered on Friday are delivered on Saturday to most locations.

REF:

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→ Sign within this area. Please do not remove.

By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.

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Employee Number	Base Charges
Other	Total Charges

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280-176335 Waybill

Login Sample Receipt Checklist

Client: Leidos, Inc.

Job Number: 280-176335-1

Login Number: 176335
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.	True	
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.	N/A	
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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	