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ANALYTICAL REPORT

PREPARED FOR

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JOB DESCRIPTION

RVAAP FWGW Spring 2023

JOB NUMBER

280-175997-1

Eurofins Denver
4955 Yarrow Street
Arvada CO 80002

See page two for job notes and contact information.

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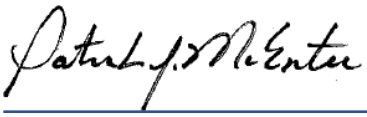
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Job Notes

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Authorization



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Qualifiers

HPLC/IC

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

General Chemistry

Qualifier	Qualifier Description
D	The reported value is from a dilution.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
M	Manual integrated compound.
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: 280-175997-1

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 5/4/2023 9:35 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.5º C, 1.5º C and 1.5º C.

Receipt Exceptions

The 500 mL Plastic sample container was received partially frozen. LL1mw-080-230401-GW (280-175997-1), LL1mw-083-230401-GW (280-175997-3) and LL1mw-084-230401-GW (280-175997-4)

EXPLOSIVES (HPLC)

Samples LL1mw-080-230401-GW (280-175997-1), LL1mw-081-230401-GW (280-175997-2), LL1mw-083-230401-GW (280-175997-3), LL1mw-084-230401-GW (280-175997-4), LL1mw-084-230402-GW (280-175997-5), LL1mw-087-230401-GW (280-175997-6) and LL1mw-087-230402-GW (280-175997-7) were analyzed for Explosives (HPLC) in accordance with 8330B. The samples were prepared on 05/10/2023 and analyzed on 05/13/2023, 05/14/2023 and 05/17/2023.

MNX was detected in method blank MB 280-611915/1-A at a level that was below one half the LOQ.

2,4-diamino-6-nitrotoluene failed the recovery criteria low for the MS of sample LL1mw-087-230401-GWMS (280-175997-6) in batch 280-612396. 2,4-diamino-6-nitrotoluene and 2,6-diamino-4-nitrotoluene failed the recovery criteria low for the MSD of sample LL1mw-087-230401-GWMSD (280-175997-6) in batch 280-612396.

The %RPD between the primary and confirmation column exceeded 40% for MNX, 2-Amino-4,6-dinitrotoluene and 1,3-Dinitrobenzene for the following samples: LL1mw-080-230401-GW (280-175997-1), LL1mw-081-230401-GW (280-175997-2), LL1mw-083-230401-GW (280-175997-3) and LL1mw-084-230401-GW (280-175997-4) in preparation batch 280-611915 and analytical batch 280-612396. The results from both columns has been qualified and reported in accordance with the laboratory's QAS.

In preparation batch 280-611915, the following sample required filtration to reduce matrix interferences: LL1mw-081-230401-GW (280-175997-2).

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

ALKALINITY

Samples LL1mw-080-230401-GW (280-175997-1), LL1mw-083-230401-GW (280-175997-3), LL1mw-084-230401-GW (280-175997-4) and LL1mw-084-230402-GW (280-175997-5) were analyzed for Alkalinity in accordance with SM20 2320B. The samples were analyzed on 05/09/2023.

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

SULFIDE

Samples LL1mw-080-230401-GW (280-175997-1), LL1mw-083-230401-GW (280-175997-3), LL1mw-084-230401-GW (280-175997-4) and LL1mw-084-230402-GW (280-175997-5) were analyzed for sulfide in accordance with EPA SW-846 Method 9034. The samples were prepared and analyzed on 05/09/2023.

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

ANIONS, ION CHROMATOGRAPHY

Samples LL1mw-080-230401-GW (280-175997-1), LL1mw-083-230401-GW (280-175997-3), LL1mw-084-230401-GW (280-175997-4) and LL1mw-084-230402-GW (280-175997-5) were analyzed for Anions, Ion Chromatography in accordance with 9056A (48 Hours). The samples were analyzed on 05/04/2023.

The concentration of the matrix spike reagent caused the results for the matrix spike and matrix spike duplicate (MS/MSD) to be above the highest point of the calibration range for nitrate. The results for the MS/MSD are still within the standard control limits of 80-120%. LL1mw-084-230401-GW (280-175997-4[MS]) and LL1mw-084-230401-GW (280-175997-4[MSD])

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

ANIONS (28 DAYS)

Samples LL1mw-080-230401-GW (280-175997-1), LL1mw-083-230401-GW (280-175997-3), LL1mw-084-230401-GW (280-175997-4) and LL1mw-084-230402-GW (280-175997-5) were analyzed for anions (28 days) in accordance with 9056A (28 Days). The samples were analyzed on 05/04/2023 and 05/18/2023.

Samples LL1mw-083-230401-GW (280-175997-3)[5X], LL1mw-084-230401-GW (280-175997-4)[5X] and LL1mw-084-230402-GW (280-175997-5)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The concentration of sulfate in the matrix spike and matrix spike duplicate (MS/MSD) parent sample is higher than the highest point of the calibration range. The recoveries for the MS/MSD are still within the recovery limits of 80-120%. LL1mw-084-230401-GW (280-175997-4[MS]) and LL1mw-084-230401-GW (280-175997-4[MSD])

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

TOTAL ORGANIC CARBON

Samples LL1mw-080-230401-GW (280-175997-1), LL1mw-083-230401-GW (280-175997-3) and LL1mw-084-230401-GW (280-175997-4) were analyzed for total organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 05/17/2023.

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

Detection Summary

Client: Leidos, Inc.
Project/Site: RVAAP FWGW Spring 2023

Job ID: 280-175997-1

Client Sample ID: LL1mw-080-230401-GW — Lab Sample ID: 280-175997-1

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
2,4,6-Trinitrotoluene	0.088	J	0.12	0.11	0.048	ug/L	1		8330B	Total/NA
2-Amino-4,6-dinitrotoluene	0.84		0.12	0.11	0.054	ug/L	1		8330B	Total/NA
3,5-Dinitroaniline	0.29	J	0.43	0.32	0.14	ug/L	1		8330B	Total/NA
4-Amino-2,6-dinitrotoluene	2.1		0.16	0.13	0.062	ug/L	1		8330B	Total/NA
HMX	1.6	M	0.22	0.21	0.094	ug/L	1		8330B	Total/NA
MNX	0.55	J1	0.53	0.31	0.099	ug/L	1		8330B	Total/NA
MNX	0.21	J J1	0.53	0.31	0.099	ug/L	1		8330B	Total/NA
RDX	12	M	0.22	0.21	0.055	ug/L	1		8330B	Total/NA
Sulfate	26		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	85		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: LL1mw-081-230401-GW — Lab Sample ID: 280-175997-2

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
2-Amino-4,6-dinitrotoluene	0.30	J1	0.12	0.11	0.054	ug/L	1		8330B	Total/NA
2-Amino-4,6-dinitrotoluene	0.72	J1	0.12	0.11	0.054	ug/L	1		8330B	Total/NA
RDX	1.2		0.22	0.21	0.055	ug/L	1		8330B	Total/NA

Client Sample ID: LL1mw-083-230401-GW — Lab Sample ID: 280-175997-3

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trinitrobenzene	4.1		0.21	0.20	0.085	ug/L	1		8330B	Total/NA
1,3-Dinitrobenzene	1.1	J1	0.11	0.10	0.037	ug/L	1		8330B	Total/NA
1,3-Dinitrobenzene	0.19	J1	0.11	0.10	0.037	ug/L	1		8330B	Total/NA
2,4,6-Trinitrotoluene	1.8	M	0.11	0.10	0.045	ug/L	1		8330B	Total/NA
2,4-Dinitrotoluene	2.9	M	0.10	0.081	0.028	ug/L	1		8330B	Total/NA
2-Amino-4,6-dinitrotoluene	8.7	M	0.11	0.10	0.051	ug/L	1		8330B	Total/NA
2-Nitrotoluene	0.13	J	0.21	0.20	0.086	ug/L	1		8330B	Total/NA
3,5-Dinitroaniline	2.7		0.40	0.30	0.13	ug/L	1		8330B	Total/NA
4-Amino-2,6-dinitrotoluene	13	M	0.15	0.12	0.058	ug/L	1		8330B	Total/NA
RDX	0.25		0.21	0.20	0.052	ug/L	1		8330B	Total/NA
Nitrate as N	0.18	J	0.50	0.20	0.090	mg/L	1		9056	Total/NA
Sulfate	23	J D	25	13	5.2	mg/L	5		9056A	Total/NA
Total Organic Carbon - Average	0.93	J	1.0	0.80	0.35	mg/L	1	☼	9060	Total/NA

Client Sample ID: LL1mw-084-230401-GW — Lab Sample ID: 280-175997-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trinitrobenzene	0.82		0.22	0.21	0.087	ug/L	1		8330B	Total/NA
1,3-Dinitrobenzene	1.4	J1	0.11	0.10	0.038	ug/L	1		8330B	Total/NA
1,3-Dinitrobenzene	0.16	J1	0.11	0.10	0.038	ug/L	1		8330B	Total/NA
2,4,6-Trinitrotoluene	2.1		0.11	0.10	0.047	ug/L	1		8330B	Total/NA
2-Amino-4,6-dinitrotoluene	6.2		0.11	0.10	0.053	ug/L	1		8330B	Total/NA
3,5-Dinitroaniline	0.99		0.42	0.31	0.14	ug/L	1		8330B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: LL1mw-084-230401-GW (Continued) Lab Sample ID: 280-175997-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
4-Amino-2,6-dinitrotoluene	16		0.16	0.12	0.060	ug/L	1		8330B	Total/NA
Nitrate as N	0.67		0.50	0.20	0.090	mg/L	1		9056	Total/NA
Sulfate	110	D	25	13	5.2	mg/L	5		9056A	Total/NA
Total Organic Carbon - Average	1.5		1.0	0.80	0.35	mg/L	1	☼	9060	Total/NA
Alkalinity	48		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: LL1mw-084-230402-GW Lab Sample ID: 280-175997-5

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trinitrobenzene	1.0		0.22	0.21	0.088	ug/L	1		8330B	Total/NA
1,3-Dinitrobenzene	1.6		0.11	0.10	0.038	ug/L	1		8330B	Total/NA
2,4,6-Trinitrotoluene	2.4		0.11	0.10	0.047	ug/L	1		8330B	Total/NA
2,4-diamino-6-nitrotoluene	0.73	J M	1.0	0.94	0.45	ug/L	1		8330B	Total/NA
2,4-Dinitrotoluene	0.97		0.10	0.083	0.029	ug/L	1		8330B	Total/NA
2-Amino-4,6-dinitrotoluene	6.8		0.11	0.10	0.053	ug/L	1		8330B	Total/NA
2-Nitrotoluene	0.21	J	0.22	0.21	0.089	ug/L	1		8330B	Total/NA
3,5-Dinitroaniline	1.2		0.42	0.31	0.14	ug/L	1		8330B	Total/NA
4-Amino-2,6-dinitrotoluene	18		0.16	0.13	0.060	ug/L	1		8330B	Total/NA
MNX	1.1	M	0.52	0.30	0.097	ug/L	1		8330B	Total/NA
RDX	0.78	M	0.22	0.21	0.054	ug/L	1		8330B	Total/NA
TNX	0.11	J M	0.52	0.26	0.083	ug/L	1		8330B	Total/NA
Nitrate as N	0.66		0.50	0.20	0.090	mg/L	1		9056	Total/NA
Alkalinity	50		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: LL1mw-087-230401-GW Lab Sample ID: 280-175997-6

No Detections.

Client Sample ID: LL1mw-087-230402-GW Lab Sample ID: 280-175997-7

No Detections.

This Detection Summary does not include radiochemical test results.

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

Client Sample ID: LL1mw-080-230401-GW
Lab Sample ID: 280-175997-1
Date Collected: 05/03/23 09:20
Matrix: Water
Date Received: 05/04/23 09:35

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U M	0.22	0.21	0.090	ug/L		05/13/23 22:00	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039	ug/L		05/17/23 08:53	1
2,4,6-Trinitrotoluene	**0.088**	**J**	0.12	0.11	0.048	ug/L		05/13/23 22:00	1
2,4-diamino-6-nitrotoluene	0.96	U	1.1	0.96	0.46	ug/L		05/13/23 22:00	1
2,4-Dinitrotoluene	0.085	U	0.11	0.085	0.029	ug/L		05/13/23 22:00	1
2,6-diamino-4-nitrotoluene	0.96	U M	1.1	0.96	0.24	ug/L		05/13/23 22:00	1
2,6-Dinitrotoluene	0.085	U	0.11	0.085	0.043	ug/L		05/13/23 22:00	1
2-Amino-4,6-dinitrotoluene	**0.84**		0.12	0.11	0.054	ug/L		05/13/23 22:00	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.091	ug/L		05/13/23 22:00	1
3,5-Dinitroaniline	**0.29**	**J**	0.43	0.32	0.14	ug/L		05/13/23 22:00	1
3-Nitrotoluene	0.37	U	0.43	0.37	0.21	ug/L		05/13/23 22:00	1
4-Amino-2,6-dinitrotoluene	**2.1**		0.16	0.13	0.062	ug/L		05/13/23 22:00	1
4-Nitrotoluene	0.43	U M	0.44	0.43	0.11	ug/L		05/13/23 22:00	1
DNX	0.27	U	0.53	0.27	0.10	ug/L		05/13/23 22:00	1
HMX	**1.6**	**M**	0.22	0.21	0.094	ug/L		05/13/23 22:00	1
MNX	**0.55**	**J1**	0.53	0.31	0.099	ug/L		05/13/23 22:00	1
MNX	**0.21**	**J J1**	0.53	0.31	0.099	ug/L		05/17/23 08:53	1
Nitrobenzene	0.21	U M	0.22	0.21	0.097	ug/L		05/13/23 22:00	1
Nitroglycerin	2.1	U	2.2	2.1	0.98	ug/L		05/13/23 22:00	1
PETN	1.1	U	1.2	1.1	0.48	ug/L		05/13/23 22:00	1
RDX	**12**	**M**	0.22	0.21	0.055	ug/L		05/13/23 22:00	1
Tetryl	0.11	U	0.12	0.11	0.034	ug/L		05/13/23 22:00	1
TNX	0.27	U	0.53	0.27	0.085	ug/L		05/13/23 22:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*96*	*M*	*83 - 119*	*05/10/23 13:48*	*05/13/23 22:00*	*1*
1,2-Dinitrobenzene	*96*		*83 - 119*	*05/10/23 13:48*	*05/17/23 08:53*	*1*

Client Sample ID: LL1mw-081-230401-GW
Lab Sample ID: 280-175997-2
Date Collected: 05/03/23 11:28
Matrix: Water
Date Received: 05/04/23 09:35

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U M	0.22	0.21	0.090	ug/L		05/13/23 22:23	1
1,3-Dinitrobenzene	0.11	U M	0.12	0.11	0.039	ug/L		05/13/23 22:23	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048	ug/L		05/13/23 22:23	1
2,4-Dinitrotoluene	0.085	U	0.11	0.085	0.029	ug/L		05/13/23 22:23	1
2,6-Dinitrotoluene	0.085	U	0.11	0.085	0.043	ug/L		05/13/23 22:23	1
2-Amino-4,6-dinitrotoluene	**0.30**	**J1**	0.12	0.11	0.054	ug/L		05/13/23 22:23	1
2-Amino-4,6-dinitrotoluene	**0.72**	**J1**	0.12	0.11	0.054	ug/L		05/17/23 09:28	1
2-Nitrotoluene	0.21	U M	0.22	0.21	0.091	ug/L		05/13/23 22:23	1
3-Nitrotoluene	0.37	U	0.43	0.37	0.21	ug/L		05/13/23 22:23	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.061	ug/L		05/17/23 09:28	1
4-Nitrotoluene	0.43	U	0.44	0.43	0.11	ug/L		05/13/23 22:23	1
HMX	0.21	U M	0.22	0.21	0.093	ug/L		05/13/23 22:23	1
Nitrobenzene	0.21	U	0.22	0.21	0.097	ug/L		05/13/23 22:23	1
Nitroglycerin	2.1	U	2.2	2.1	0.98	ug/L		05/13/23 22:23	1
PETN	1.1	U	1.2	1.1	0.48	ug/L		05/13/23 22:23	1
RDX	**1.2**		0.22	0.21	0.055	ug/L		05/13/23 22:23	1
Tetryl	0.11	U M	0.12	0.11	0.034	ug/L		05/13/23 22:23	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	*103*		*83 - 119*	*05/10/23 13:48*	*05/13/23 22:23*	*1*
1,2-Dinitrobenzene	*87*		*83 - 119*	*05/10/23 13:48*	*05/17/23 09:28*	*1*

Client Sample ID: LL1mw-083-230401-GW
Lab Sample ID: 280-175997-3
Date Collected: 05/03/23 14:31
Matrix: Water
Date Received: 05/04/23 09:35

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**4.1**		0.21	0.20	0.085	ug/L		05/13/23 22:46	1
1,3-Dinitrobenzene	**1.1**	**J1**	0.11	0.10	0.037	ug/L		05/13/23 22:46	1
1,3-Dinitrobenzene	**0.19**	**J1**	0.11	0.10	0.037	ug/L		05/17/23 10:03	1
2,4,6-Trinitrotoluene	**1.8**	**M**	0.11	0.10	0.045	ug/L		05/13/23 22:46	1
2,4-diamino-6-nitrotoluene	0.91	U	1.0	0.91	0.44	ug/L		05/13/23 22:46	1
2,4-Dinitrotoluene	**2.9**	**M**	0.10	0.081	0.028	ug/L		05/13/23 22:46	1
2,6-diamino-4-nitrotoluene	0.91	U M	1.0	0.91	0.22	ug/L		05/13/23 22:46	1
2,6-Dinitrotoluene	0.081	U	0.10	0.081	0.041	ug/L		05/13/23 22:46	1
2-Amino-4,6-dinitrotoluene	**8.7**	**M**	0.11	0.10	0.051	ug/L		05/13/23 22:46	1
2-Nitrotoluene	**0.13**	**J**	0.21	0.20	0.086	ug/L		05/13/23 22:46	1
3,5-Dinitroaniline	**2.7**		0.40	0.30	0.13	ug/L		05/13/23 22:46	1
3-Nitrotoluene	0.35	U	0.40	0.35	0.20	ug/L		05/13/23 22:46	1
4-Amino-2,6-dinitrotoluene	**13**	**M**	0.15	0.12	0.058	ug/L		05/13/23 22:46	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		05/13/23 22:46	1
DNX	0.25	U M	0.51	0.25	0.098	ug/L		05/13/23 22:46	1
HMX	0.20	U M	0.21	0.20	0.089	ug/L		05/13/23 22:46	1
MNX	0.29	U	0.51	0.29	0.094	ug/L		05/17/23 10:03	1
Nitrobenzene	0.20	U M	0.21	0.20	0.092	ug/L		05/13/23 22:46	1
Nitroglycerin	2.0	U	2.1	2.0	0.93	ug/L		05/13/23 22:46	1
PETN	1.0	U	1.1	1.0	0.45	ug/L		05/13/23 22:46	1
RDX	**0.25**		0.21	0.20	0.052	ug/L		05/13/23 22:46	1
Tetryl	0.10	U M	0.11	0.10	0.032	ug/L		05/13/23 22:46	1
TNX	0.25	U	0.51	0.25	0.080	ug/L		05/13/23 22:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	*89*		*83 - 119*	*05/10/23 13:48*	*05/13/23 22:46*	*1*
1,2-Dinitrobenzene	*92*	*M*	*83 - 119*	*05/10/23 13:48*	*05/17/23 10:03*	*1*

Client Sample ID: LL1mw-084-230401-GW
Lab Sample ID: 280-175997-4
Date Collected: 05/03/23 11:03
Matrix: Water
Date Received: 05/04/23 09:35

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**0.82**		0.22	0.21	0.087	ug/L		05/13/23 23:54	1
1,3-Dinitrobenzene	**1.4**	**J1**	0.11	0.10	0.038	ug/L		05/13/23 23:54	1
1,3-Dinitrobenzene	**0.16**	**J1**	0.11	0.10	0.038	ug/L		05/17/23 10:38	1
2,4,6-Trinitrotoluene	**2.1**		0.11	0.10	0.047	ug/L		05/13/23 23:54	1
2,4-diamino-6-nitrotoluene	0.93	U M	1.0	0.93	0.45	ug/L		05/17/23 10:38	1
2,4-Dinitrotoluene	0.083	U M	0.10	0.083	0.028	ug/L		05/17/23 10:38	1
2,6-diamino-4-nitrotoluene	0.93	U M	1.0	0.93	0.23	ug/L		05/13/23 23:54	1
2,6-Dinitrotoluene	0.083	U	0.10	0.083	0.042	ug/L		05/13/23 23:54	1
2-Amino-4,6-dinitrotoluene	**6.2**		0.11	0.10	0.053	ug/L		05/13/23 23:54	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.089	ug/L		05/17/23 10:38	1
3,5-Dinitroaniline	**0.99**		0.42	0.31	0.14	ug/L		05/13/23 23:54	1
3-Nitrotoluene	0.36	U	0.42	0.36	0.20	ug/L		05/13/23 23:54	1
4-Amino-2,6-dinitrotoluene	**16**		0.16	0.12	0.060	ug/L		05/13/23 23:54	1
4-Nitrotoluene	0.42	U M	0.43	0.42	0.10	ug/L		05/13/23 23:54	1

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

Client Sample ID: LL1mw-084-230401-GW **Lab Sample ID: 280-175997-4**
Date Collected: 05/03/23 11:03 **Matrix: Water**
Date Received: 05/04/23 09:35

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
DNX	0.26	U M	0.52	0.26	0.10	ug/L		05/13/23 23:54	1
HMX	0.21	U M	0.22	0.21	0.091	ug/L		05/13/23 23:54	1
MNX	0.30	U	0.52	0.30	0.096	ug/L		05/17/23 10:38	1
Nitrobenzene	0.21	U M	0.22	0.21	0.094	ug/L		05/13/23 23:54	1
Nitroglycerin	2.1	U	2.2	2.1	0.96	ug/L		05/13/23 23:54	1
PETN	1.0	U	1.1	1.0	0.46	ug/L		05/13/23 23:54	1
RDX	0.21	U M	0.22	0.21	0.053	ug/L		05/17/23 10:38	1
Tetryl	0.10	U M	0.11	0.10	0.033	ug/L		05/13/23 23:54	1
TNX	0.26	U	0.52	0.26	0.082	ug/L		05/17/23 10:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*101*		*83 - 119*	*05/10/23 13:48*	*05/13/23 23:54*	*1*
1,2-Dinitrobenzene	*99*	*M*	*83 - 119*	*05/10/23 13:48*	*05/17/23 10:38*	*1*

Client Sample ID: LL1mw-084-230402-GW **Lab Sample ID: 280-175997-5**
Date Collected: 05/03/23 11:03 **Matrix: Water**
Date Received: 05/04/23 09:35

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**1.0**		0.22	0.21	0.088	ug/L		05/14/23 00:17	1
1,3-Dinitrobenzene	**1.6**		0.11	0.10	0.038	ug/L		05/14/23 00:17	1
2,4,6-Trinitrotoluene	**2.4**		0.11	0.10	0.047	ug/L		05/14/23 00:17	1
2,4-diamino-6-nitrotoluene	**0.73**	**J M**	1.0	0.94	0.45	ug/L		05/14/23 00:17	1
2,4-Dinitrotoluene	**0.97**		0.10	0.083	0.029	ug/L		05/14/23 00:17	1
2,6-diamino-4-nitrotoluene	0.94	U M	1.0	0.94	0.23	ug/L		05/14/23 00:17	1
2,6-Dinitrotoluene	0.083	U	0.10	0.083	0.042	ug/L		05/14/23 00:17	1
2-Amino-4,6-dinitrotoluene	**6.8**		0.11	0.10	0.053	ug/L		05/14/23 00:17	1
2-Nitrotoluene	**0.21**	**J**	0.22	0.21	0.089	ug/L		05/14/23 00:17	1
3,5-Dinitroaniline	**1.2**		0.42	0.31	0.14	ug/L		05/14/23 00:17	1
3-Nitrotoluene	0.36	U	0.42	0.36	0.20	ug/L		05/14/23 00:17	1
4-Amino-2,6-dinitrotoluene	**18**		0.16	0.13	0.060	ug/L		05/14/23 00:17	1
4-Nitrotoluene	0.42	U M	0.43	0.42	0.10	ug/L		05/14/23 00:17	1
DNX	0.26	U M	0.52	0.26	0.10	ug/L		05/14/23 00:17	1
HMX	0.21	U M	0.22	0.21	0.091	ug/L		05/14/23 00:17	1
MNX	**1.1**	**M**	0.52	0.30	0.097	ug/L		05/14/23 00:17	1
Nitrobenzene	0.21	U M	0.22	0.21	0.095	ug/L		05/14/23 00:17	1
Nitroglycerin	2.1	U	2.2	2.1	0.96	ug/L		05/14/23 00:17	1
PETN	1.0	U	1.1	1.0	0.47	ug/L		05/14/23 00:17	1
RDX	**0.78**	**M**	0.22	0.21	0.054	ug/L		05/14/23 00:17	1
Tetryl	0.10	U M	0.11	0.10	0.033	ug/L		05/14/23 00:17	1
TNX	**0.11**	**J M**	0.52	0.26	0.083	ug/L		05/14/23 00:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*105*		*83 - 119*	*05/10/23 13:48*	*05/14/23 00:17*	*1*

Client Sample ID: LL1mw-087-230401-GW **Lab Sample ID: 280-175997-6**
Date Collected: 05/03/23 13:50 **Matrix: Water**
Date Received: 05/04/23 09:35

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.087	ug/L		05/14/23 00:40	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038	ug/L		05/14/23 00:40	1

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

Client Sample ID: LL1mw-087-230401-GW
Lab Sample ID: 280-175997-6
Date Collected: 05/03/23 13:50
Matrix: Water
Date Received: 05/04/23 09:35

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.046	ug/L		05/14/23 00:40	1
2,4-diamino-6-nitrotoluene	0.93	U J1	1.0	0.93	0.45	ug/L		05/14/23 00:40	1
2,4-Dinitrotoluene	0.082	U	0.10	0.082	0.028	ug/L		05/14/23 00:40	1
2,6-diamino-4-nitrotoluene	0.93	U J1 M	1.0	0.93	0.23	ug/L		05/14/23 00:40	1
2,6-Dinitrotoluene	0.082	U	0.10	0.082	0.041	ug/L		05/14/23 00:40	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.052	ug/L		05/14/23 00:40	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.088	ug/L		05/14/23 00:40	1
3,5-Dinitroaniline	0.31	U	0.41	0.31	0.14	ug/L		05/14/23 00:40	1
3-Nitrotoluene	0.36	U	0.41	0.36	0.20	ug/L		05/14/23 00:40	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.059	ug/L		05/14/23 00:40	1
4-Nitrotoluene	0.41	U	0.42	0.41	0.10	ug/L		05/14/23 00:40	1
DNX	0.26	U	0.52	0.26	0.10	ug/L		05/14/23 00:40	1
HMX	0.21	U	0.22	0.21	0.090	ug/L		05/14/23 00:40	1
MNX	0.30	U	0.52	0.30	0.096	ug/L		05/14/23 00:40	1
Nitrobenzene	0.21	U	0.22	0.21	0.094	ug/L		05/14/23 00:40	1
Nitroglycerin	2.1	U	2.2	2.1	0.95	ug/L		05/14/23 00:40	1
PETN	1.0	U	1.1	1.0	0.46	ug/L		05/14/23 00:40	1
RDX	0.21	U	0.22	0.21	0.053	ug/L		05/14/23 00:40	1
Tetryl	0.10	U	0.11	0.10	0.033	ug/L		05/14/23 00:40	1
TNX	0.26	U	0.52	0.26	0.082	ug/L		05/14/23 00:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*96*	*M*	*83 - 119*	*05/10/23 13:48*	*05/14/23 00:40*	*1*

Client Sample ID: LL1mw-087-230402-GW
Lab Sample ID: 280-175997-7
Date Collected: 05/03/23 13:50
Matrix: Water
Date Received: 05/04/23 09:35

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.090	ug/L		05/14/23 02:35	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039	ug/L		05/14/23 02:35	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048	ug/L		05/14/23 02:35	1
2,4-diamino-6-nitrotoluene	0.96	U	1.1	0.96	0.46	ug/L		05/14/23 02:35	1
2,4-Dinitrotoluene	0.086	U	0.11	0.086	0.029	ug/L		05/14/23 02:35	1
2,6-diamino-4-nitrotoluene	0.96	U M	1.1	0.96	0.24	ug/L		05/14/23 02:35	1
2,6-Dinitrotoluene	0.086	U	0.11	0.086	0.043	ug/L		05/14/23 02:35	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.054	ug/L		05/14/23 02:35	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.091	ug/L		05/14/23 02:35	1
3,5-Dinitroaniline	0.32	U	0.43	0.32	0.14	ug/L		05/14/23 02:35	1
3-Nitrotoluene	0.37	U	0.43	0.37	0.21	ug/L		05/14/23 02:35	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.062	ug/L		05/14/23 02:35	1
4-Nitrotoluene	0.43	U	0.44	0.43	0.11	ug/L		05/14/23 02:35	1
DNX	0.27	U	0.53	0.27	0.10	ug/L		05/14/23 02:35	1
HMX	0.21	U	0.22	0.21	0.094	ug/L		05/14/23 02:35	1
MNX	0.31	U	0.53	0.31	0.099	ug/L		05/14/23 02:35	1
Nitrobenzene	0.21	U	0.22	0.21	0.097	ug/L		05/14/23 02:35	1
Nitroglycerin	2.1	U	2.2	2.1	0.98	ug/L		05/14/23 02:35	1
PETN	1.1	U M	1.2	1.1	0.48	ug/L		05/14/23 02:35	1
RDX	0.21	U	0.22	0.21	0.055	ug/L		05/14/23 02:35	1
Tetryl	0.11	U	0.12	0.11	0.034	ug/L		05/14/23 02:35	1
TNX	0.27	U	0.53	0.27	0.085	ug/L		05/14/23 02:35	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	98	M	83 - 119	05/10/23 13:48	05/14/23 02:35	1

General Chemistry

Client Sample ID: LL1mw-080-230401-GW — **Lab Sample ID: 280-175997-1**
Date Collected: 05/03/23 09:20 — **Matrix: Water**
Date Received: 05/04/23 09:35

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		05/09/23 17:18	1
Nitrate as N (SW846 9056)	0.20	U	0.50	0.20	0.090	mg/L		05/04/23 16:54	1
Nitrite as N (SW846 9056)	0.10	U	0.50	0.10	0.049	mg/L		05/04/23 16:54	1
Sulfate (SW846 9056A)	**26**		5.0	2.5	1.0	mg/L		05/04/23 16:54	1
Total Organic Carbon - Average (SW846 9060)	**1.2**		1.0	0.80	0.35	mg/L	☼	05/17/23 01:53	1
Alkalinity (SM 2320B)	**85**		10	6.4	3.1	mg/L		05/09/23 18:50	1

Client Sample ID: LL1mw-083-230401-GW — **Lab Sample ID: 280-175997-3**
Date Collected: 05/03/23 14:31 — **Matrix: Water**
Date Received: 05/04/23 09:35

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		05/09/23 17:18	1
Nitrate as N (SW846 9056)	**0.18**	**J**	0.50	0.20	0.090	mg/L		05/04/23 22:40	1
Nitrite as N (SW846 9056)	0.10	U	0.50	0.10	0.049	mg/L		05/04/23 22:40	1
Sulfate (SW846 9056A)	**23**	**J D**	25	13	5.2	mg/L		05/18/23 02:19	5
Total Organic Carbon - Average (SW846 9060)	**0.93**	**J**	1.0	0.80	0.35	mg/L	☼	05/17/23 02:37	1
Alkalinity (SM 2320B)	6.4	U	10	6.4	3.1	mg/L		05/09/23 18:54	1

Client Sample ID: LL1mw-084-230401-GW — **Lab Sample ID: 280-175997-4**
Date Collected: 05/03/23 11:03 — **Matrix: Water**
Date Received: 05/04/23 09:35

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		05/09/23 17:18	1
Nitrate as N (SW846 9056)	**0.67**		0.50	0.20	0.090	mg/L		05/04/23 17:09	1
Nitrite as N (SW846 9056)	0.10	U	0.50	0.10	0.049	mg/L		05/04/23 17:09	1
Sulfate (SW846 9056A)	**110**	**D**	25	13	5.2	mg/L		05/18/23 02:31	5
Total Organic Carbon - Average (SW846 9060)	**1.5**		1.0	0.80	0.35	mg/L	☼	05/17/23 02:51	1
Alkalinity (SM 2320B)	**48**		10	6.4	3.1	mg/L		05/09/23 18:59	1

Client Sample ID: LL1mw-084-230402-GW — **Lab Sample ID: 280-175997-5**
Date Collected: 05/03/23 11:03 — **Matrix: Water**
Date Received: 05/04/23 09:35

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		05/09/23 17:18	1
Nitrate as N (SW846 9056)	**0.66**		0.50	0.20	0.090	mg/L		05/04/23 18:09	1
Nitrite as N (SW846 9056)	0.10	U	0.50	0.10	0.049	mg/L		05/04/23 18:09	1
Sulfate (SW846 9056A)	13	U M	25	13	5.2	mg/L		05/18/23 03:30	5
Alkalinity (SM 2320B)	**50**		10	6.4	3.1	mg/L		05/09/23 19:05	1

Default Detection Limits

Client: Leidos, Inc.
Project/Site: RVAAP FWGW Spring 2023

Job ID: 280-175997-1

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.
Project/Site: RVAAP FWGW Spring 2023

Job ID: 280-175997-1

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)
280-175997-1	LL1mw-080-230401-GW	96 M
280-175997-2	LL1mw-081-230401-GW	103
280-175997-3	LL1mw-083-230401-GW	89
280-175997-4	LL1mw-084-230401-GW	101
280-175997-5	LL1mw-084-230402-GW	105
280-175997-6	LL1mw-087-230401-GW	96 M
280-175997-6 MS	LL1mw-087-230401-GW	98 M
280-175997-6 MS	LL1mw-087-230401-GW	99 M
280-175997-6 MSD	LL1mw-087-230401-GW	94 M
280-175997-6 MSD	LL1mw-087-230401-GW	101 M
280-175997-7	LL1mw-087-230402-GW	98 M
LCS 280-611915/2-A	Lab Control Sample	100
LCS 280-611915/4-A	Lab Control Sample	101
LCSD 280-611915/3-A	Lab Control Sample Dup	103
LCSD 280-611915/5-A	Lab Control Sample Dup	101
MB 280-611915/1-A	Method Blank	114

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)
280-175997-1	LL1mw-080-230401-GW	96
280-175997-2	LL1mw-081-230401-GW	87
280-175997-3	LL1mw-083-230401-GW	92 M
280-175997-4	LL1mw-084-230401-GW	99 M

Surrogate Legend

12DNB = 1,2-Dinitrobenzene

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Lab Sample ID: MB 280-611915/1-A
Matrix: Water
Analysis Batch: 612396

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 611915

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.084	ug/L		05/13/23 20:05	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		05/13/23 20:05	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		05/13/23 20:05	1
2,4-diamino-6-nitrotoluene	0.90	U	1.0	0.90	0.43	ug/L		05/13/23 20:05	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027	ug/L		05/13/23 20:05	1
2,6-diamino-4-nitrotoluene	0.90	U	1.0	0.90	0.22	ug/L		05/13/23 20:05	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		05/13/23 20:05	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		05/13/23 20:05	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.086	ug/L		05/13/23 20:05	1
3,5-Dinitroaniline	0.30	U	0.40	0.30	0.13	ug/L		05/13/23 20:05	1
3-Nitrotoluene	0.35	U	0.40	0.35	0.20	ug/L		05/13/23 20:05	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		05/13/23 20:05	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		05/13/23 20:05	1
DNX	0.25	U	0.50	0.25	0.097	ug/L		05/13/23 20:05	1
HMX	0.20	U	0.21	0.20	0.088	ug/L		05/13/23 20:05	1
MNX	0.188	J M	0.50	0.29	0.093	ug/L		05/13/23 20:05	1
Nitrobenzene	0.20	U	0.21	0.20	0.091	ug/L		05/13/23 20:05	1
Nitroglycerin	2.0	U	2.1	2.0	0.92	ug/L		05/13/23 20:05	1
PETN	1.0	U	1.1	1.0	0.45	ug/L		05/13/23 20:05	1
RDX	0.20	U	0.21	0.20	0.052	ug/L		05/13/23 20:05	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		05/13/23 20:05	1
TNX	0.25	U	0.50	0.25	0.079	ug/L		05/13/23 20:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*114*		*83 - 119*	*05/10/23 13:48*	*05/13/23 20:05*	*1*

Lab Sample ID: LCS 280-611915/2-A
Matrix: Water
Analysis Batch: 612396

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 611915

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,3,5-Trinitrobenzene	2.00	1.99		ug/L		99	73 - 125
1,3-Dinitrobenzene	2.00	1.93		ug/L		96	78 - 120
2,4,6-Trinitrotoluene	2.00	1.84		ug/L		92	71 - 123
2,4-Dinitrotoluene	2.00	1.85		ug/L		93	78 - 120
2,6-Dinitrotoluene	2.00	1.91		ug/L		96	77 - 127
2-Amino-4,6-dinitrotoluene	2.00	1.74		ug/L		87	79 - 120
2-Nitrotoluene	2.00	1.54		ug/L		77	70 - 127
3,5-Dinitroaniline	2.00	1.71		ug/L		85	71 - 117
3-Nitrotoluene	2.00	1.51		ug/L		76	73 - 125
4-Amino-2,6-dinitrotoluene	2.00	1.65		ug/L		82	76 - 125
4-Nitrotoluene	2.00	1.50		ug/L		75	71 - 127
DNX	2.00	2.00	M	ug/L		100	66 - 119
HMX	2.00	1.78	M	ug/L		89	65 - 135
MNX	2.33	2.56		ug/L		110	57 - 132
Nitrobenzene	2.00	1.76		ug/L		88	65 - 134
Nitroglycerin	20.0	20.0		ug/L		100	74 - 127
PETN	20.0	20.8		ug/L		104	73 - 127

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

Lab Sample ID: LCS 280-611915/2-A
Matrix: Water
Analysis Batch: 612396

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 611915

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
RDX			2.00	1.92		ug/L		96	68 - 130		
Tetryl			2.00	1.97		ug/L		98	64 - 128		
TNX			2.01	1.96	M	ug/L		98	50 - 150		

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

Lab Sample ID: LCS 280-611915/4-A
Matrix: Water
Analysis Batch: 612396

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 611915

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
2,4-diamino-6-nitrotoluene			2.00	1.40	M	ug/L		70	68 - 122		
2,6-diamino-4-nitrotoluene			2.00	1.55	M	ug/L		78	72 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dinitrobenzene	*101*		*83 - 119*

Lab Sample ID: LCSD 280-611915/3-A
Matrix: Water
Analysis Batch: 612396

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 611915

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene			2.00	2.07		ug/L		104	73 - 125	4	20
1,3-Dinitrobenzene			2.00	2.00		ug/L		100	78 - 120	4	20
2,4,6-Trinitrotoluene			2.00	1.91		ug/L		95	71 - 123	4	20
2,4-Dinitrotoluene			2.00	1.92		ug/L		96	78 - 120	3	20
2,6-Dinitrotoluene			2.00	1.99		ug/L		100	77 - 127	4	20
2-Amino-4,6-dinitrotoluene			2.00	1.85		ug/L		92	79 - 120	6	20
2-Nitrotoluene			2.00	1.61		ug/L		81	70 - 127	5	20
3,5-Dinitroaniline			2.00	1.77		ug/L		89	71 - 117	4	20
3-Nitrotoluene			2.00	1.61		ug/L		80	73 - 125	6	20
4-Amino-2,6-dinitrotoluene			2.00	1.70		ug/L		85	76 - 125	3	20
4-Nitrotoluene			2.00	1.60		ug/L		80	71 - 127	6	20
DNX			2.00	2.10	M	ug/L		105	66 - 119	5	20
HMX			2.00	1.78	M	ug/L		89	65 - 135	0	20
MNX			2.33	2.67		ug/L		114	57 - 132	4	20
Nitrobenzene			2.00	1.82		ug/L		91	65 - 134	4	20
Nitroglycerin			20.0	20.0		ug/L		100	74 - 127	0	20
PETN			20.0	21.7		ug/L		109	73 - 127	4	20
RDX			2.00	1.96		ug/L		98	68 - 130	2	20
Tetryl			2.00	2.09		ug/L		104	64 - 128	6	20
TNX			2.01	1.96	M	ug/L		98	50 - 150	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dinitrobenzene	*103*		*83 - 119*

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

Lab Sample ID: LCSD 280-611915/5-A
Matrix: Water
Analysis Batch: 612396

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 611915

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-diamino-6-nitrotoluene			2.00	1.45	M	ug/L		72	68 - 122	3	20
2,6-diamino-4-nitrotoluene			2.00	1.58	M	ug/L		79	72 - 122	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dinitrobenzene	*101*		*83 - 119*

Lab Sample ID: 280-175997-6 MS
Matrix: Water
Analysis Batch: 612396

Client Sample ID: LL1mw-087-230401-GW
Prep Type: Total/NA
Prep Batch: 611915

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,3,5-Trinitrobenzene	0.21	U	2.02	2.02	M	ug/L		100	73 - 125
1,3-Dinitrobenzene	0.10	U	2.02	2.03		ug/L		100	78 - 120
2,4,6-Trinitrotoluene	0.10	U	2.02	1.85		ug/L		92	71 - 123
2,4-Dinitrotoluene	0.082	U	2.02	1.87		ug/L		93	78 - 120
2,6-Dinitrotoluene	0.082	U	2.02	1.95		ug/L		96	77 - 127
2-Amino-4,6-dinitrotoluene	0.10	U	2.02	1.77		ug/L		88	79 - 120
2-Nitrotoluene	0.21	U	2.02	1.71		ug/L		85	70 - 127
3,5-Dinitroaniline	0.31	U	2.02	1.68		ug/L		83	71 - 117
3-Nitrotoluene	0.36	U	2.02	1.65		ug/L		81	73 - 125
4-Amino-2,6-dinitrotoluene	0.12	U	2.02	1.64		ug/L		81	76 - 125
4-Nitrotoluene	0.41	U	2.02	1.71		ug/L		85	71 - 127
DNX	0.26	U	2.02	1.85	M	ug/L		91	66 - 119
HMX	0.21	U	2.02	1.59	M	ug/L		79	65 - 135
MNX	0.30	U	2.36	2.28	M	ug/L		97	57 - 132
Nitrobenzene	0.21	U	2.02	1.83		ug/L		90	65 - 134
Nitroglycerin	2.1	U	20.2	20.0		ug/L		99	74 - 127
PETN	1.0	U	20.2	20.6		ug/L		102	73 - 127
RDX	0.21	U	2.02	1.73	M	ug/L		86	68 - 130
Tetryl	0.10	U	2.02	1.98		ug/L		98	64 - 128
TNX	0.26	U	2.03	1.82	M	ug/L		90	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dinitrobenzene	*98*	*M*	*83 - 119*

Lab Sample ID: 280-175997-6 MS
Matrix: Water
Analysis Batch: 612396

Client Sample ID: LL1mw-087-230401-GW
Prep Type: Total/NA
Prep Batch: 611915

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-diamino-6-nitrotoluene	0.93	U J1	2.22	1.42	J1 M	ug/L		64	68 - 122
2,6-diamino-4-nitrotoluene	0.93	U J1 M	2.22	1.70	M	ug/L		77	72 - 122

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dinitrobenzene	*99*	*M*	*83 - 119*

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

Lab Sample ID: 280-175997-6 MSD **Client Sample ID: LL1mw-087-230401-GW**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 612396 **Prep Batch: 611915**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene	0.21	U	2.05	1.98	M	ug/L		97	73 - 125	2	20
1,3-Dinitrobenzene	0.10	U	2.05	2.03		ug/L		99	78 - 120	0	20
2,4,6-Trinitrotoluene	0.10	U	2.05	1.84		ug/L		90	71 - 123	1	20
2,4-Dinitrotoluene	0.082	U	2.05	1.82		ug/L		89	78 - 120	3	20
2,6-Dinitrotoluene	0.082	U	2.05	1.85		ug/L		90	77 - 127	5	20
2-Amino-4,6-dinitrotoluene	0.10	U	2.05	1.79		ug/L		88	79 - 120	1	20
2-Nitrotoluene	0.21	U	2.05	1.62		ug/L		79	70 - 127	5	20
3,5-Dinitroaniline	0.31	U	2.05	1.71		ug/L		84	71 - 117	2	20
3-Nitrotoluene	0.36	U	2.05	1.53		ug/L		75	73 - 125	7	20
4-Amino-2,6-dinitrotoluene	0.12	U	2.05	1.64		ug/L		80	76 - 125	0	20
4-Nitrotoluene	0.41	U	2.05	1.61		ug/L		79	71 - 127	6	20
DNX	0.26	U	2.05	1.87	M	ug/L		91	66 - 119	1	20
HMX	0.21	U	2.05	1.62	M	ug/L		79	65 - 135	2	20
MNX	0.30	U	2.39	2.15	M	ug/L		90	57 - 132	6	20
Nitrobenzene	0.21	U	2.05	1.79		ug/L		87	65 - 134	2	20
Nitroglycerin	2.1	U	20.5	19.1		ug/L		93	74 - 127	4	20
PETN	1.0	U	20.5	20.8		ug/L		101	73 - 127	1	20
RDX	0.21	U	2.05	1.73	M	ug/L		84	68 - 130	0	20
Tetryl	0.10	U	2.05	1.99		ug/L		97	64 - 128	1	20
TNX	0.26	U	2.05	1.82	M	ug/L		89	50 - 150	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dinitrobenzene	*94*	*M*	*83 - 119*

Lab Sample ID: 280-175997-6 MSD **Client Sample ID: LL1mw-087-230401-GW**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 612396 **Prep Batch: 611915**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-diamino-6-nitrotoluene	0.93	U J1	2.10	1.21	M J1	ug/L		58	68 - 122	16	20
2,6-diamino-4-nitrotoluene	0.93	U J1 M	2.10	1.42	M J1	ug/L		68	72 - 122	18	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dinitrobenzene	*101*	*M*	*83 - 119*

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

Lab Sample ID: MB 280-611794/2-A **Client Sample ID: Method Blank**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 611854 **Prep Batch: 611794**

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		05/09/23 17:18	1

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

Lab Sample ID: LCS 280-611794/1-A
Matrix: Water
Analysis Batch: 611854

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 611794

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Sulfide			19.2	16.0		mg/L		83	44 - 110		

Lab Sample ID: 280-175997-4 MS
Matrix: Water
Analysis Batch: 611854

Client Sample ID: LL1mw-084-230401-GW
Prep Type: Total/NA
Prep Batch: 611794

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Sulfide	2.0	U	19.2	16.8		mg/L		87	44 - 110		

Lab Sample ID: 280-175997-4 MSD
Matrix: Water
Analysis Batch: 611854

Client Sample ID: LL1mw-084-230401-GW
Prep Type: Total/NA
Prep Batch: 611794

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide	2.0	U	19.2	17.6		mg/L		92	44 - 110	5	20

Method: 9056 - Anions, Ion Chromatography

Lab Sample ID: MB 280-611205/6
Matrix: Water
Analysis Batch: 611205

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		05/04/23 10:30	1
Nitrite as N	0.10	U	0.50	0.10	0.049	mg/L		05/04/23 10:30	1

Lab Sample ID: LCS 280-611205/4
Matrix: Water
Analysis Batch: 611205

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	2.37		mg/L		95	88 - 111		
Nitrite as N			2.50	2.41		mg/L		96	87 - 111		

Lab Sample ID: LCSD 280-611205/5
Matrix: Water
Analysis Batch: 611205

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	2.37		mg/L		95	88 - 111	0	10
Nitrite as N			2.50	2.40		mg/L		96	87 - 111	0	10

Lab Sample ID: MRL 280-611205/3
Matrix: Water
Analysis Batch: 611205

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	0.244	J	mg/L		98	50 - 150		
Nitrite as N			0.250	0.254	J	mg/L		102	50 - 150		

Method: 9056 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 280-175997-4 MS
Client Sample ID: LL1mw-084-230401-GW
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 611205

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrate as N	0.67		5.00	5.86	J1	mg/L		104	88 - 111		
Nitrite as N	0.10	U	5.00	4.75		mg/L		95	87 - 111		

Lab Sample ID: 280-175997-4 MSD
Client Sample ID: LL1mw-084-230401-GW
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 611205

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate as N	0.67		5.00	5.83	J1	mg/L		103	88 - 111	1	10
Nitrite as N	0.10	U	5.00	4.75		mg/L		95	87 - 111	0	10

Lab Sample ID: 280-175997-4 DU
Client Sample ID: LL1mw-084-230401-GW
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 611205

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate as N	0.67		0.671		mg/L		0.1	10
Nitrite as N	0.10	U	0.10	U	mg/L		NC	10

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 280-611206/6
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 611206

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		05/04/23 10:30	1

Lab Sample ID: LCS 280-611206/4
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 611206

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Sulfate	50.0	49.3		mg/L		99	87 - 112		

Lab Sample ID: LCSD 280-611206/5
Client Sample ID: Lab Control Sample Dup
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 611206

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	50.0	49.2		mg/L		98	87 - 112	0	10

Lab Sample ID: MRL 280-611206/3
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 611206

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Sulfate	2.50	2.63	J	mg/L		105	50 - 150		

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

Lab Sample ID: 280-175997-4 MS
Client Sample ID: LL1mw-084-230401-GW
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 611206

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	110	J1	50.0	162	J1	mg/L		107	87 - 112

Lab Sample ID: 280-175997-4 MSD
Client Sample ID: LL1mw-084-230401-GW
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 611206

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	110	J1	50.0	160	J1	mg/L		103	87 - 112	1	10

Lab Sample ID: 280-175997-4 DU
Client Sample ID: LL1mw-084-230401-GW
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 611206

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate	110	J1	110	J1	mg/L		0.9	10

Lab Sample ID: MB 280-612833/56
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 612833

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		05/18/23 01:55	1

Lab Sample ID: LCS 280-612833/52
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 612833

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	50.0	48.6		mg/L		97	87 - 112

Lab Sample ID: LCSD 280-612833/55
Client Sample ID: Lab Control Sample Dup
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 612833

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	50.0	48.5		mg/L		97	87 - 112	0	10

Lab Sample ID: MRL 280-612833/3
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 612833

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	2.50	2.17	J	mg/L		87	50 - 150

Lab Sample ID: 280-175997-4 MS
Client Sample ID: LL1mw-084-230401-GW
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 612833

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	110	D	250	380	D	mg/L		109	87 - 112

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: 280-175997-4 MSD
Client Sample ID: LL1mw-084-230401-GW
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 612833

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	110	D	250	382	D	mg/L		110	87 - 112	0	10

Lab Sample ID: 280-175997-4 DU
Client Sample ID: LL1mw-084-230401-GW
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 612833

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate	110	D	106	D	mg/L		1	10

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-612889/4
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 612889

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	☼	05/16/23 20:23	1

Lab Sample ID: LCS 280-612889/3
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 612889

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon - Average	25.0	24.3		mg/L	☼	97	88 - 112

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-611910/58
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 611910

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Alkalinity	6.4	U	10	6.4	3.1	mg/L		05/09/23 18:23	1

Lab Sample ID: LCS 280-611910/57
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 611910

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	200	194		mg/L		97	89 - 110

HPLC/IC

Prep Batch: 611915

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-175997-1	LL1mw-080-230401-GW	Total/NA	Water	3535	
280-175997-2	LL1mw-081-230401-GW	Total/NA	Water	3535	
280-175997-3	LL1mw-083-230401-GW	Total/NA	Water	3535	
280-175997-4	LL1mw-084-230401-GW	Total/NA	Water	3535	
280-175997-5	LL1mw-084-230402-GW	Total/NA	Water	3535	
280-175997-6	LL1mw-087-230401-GW	Total/NA	Water	3535	
280-175997-7	LL1mw-087-230402-GW	Total/NA	Water	3535	
MB 280-611915/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-611915/2-A	Lab Control Sample	Total/NA	Water	3535	
LCS 280-611915/4-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 280-611915/3-A	Lab Control Sample Dup	Total/NA	Water	3535	
LCSD 280-611915/5-A	Lab Control Sample Dup	Total/NA	Water	3535	
280-175997-6 MS	LL1mw-087-230401-GW	Total/NA	Water	3535	
280-175997-6 MS	LL1mw-087-230401-GW	Total/NA	Water	3535	
280-175997-6 MSD	LL1mw-087-230401-GW	Total/NA	Water	3535	
280-175997-6 MSD	LL1mw-087-230401-GW	Total/NA	Water	3535	

Analysis Batch: 612396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-175997-1	LL1mw-080-230401-GW	Total/NA	Water	8330B	611915
280-175997-2	LL1mw-081-230401-GW	Total/NA	Water	8330B	611915
280-175997-3	LL1mw-083-230401-GW	Total/NA	Water	8330B	611915
280-175997-4	LL1mw-084-230401-GW	Total/NA	Water	8330B	611915
280-175997-5	LL1mw-084-230402-GW	Total/NA	Water	8330B	611915
280-175997-6	LL1mw-087-230401-GW	Total/NA	Water	8330B	611915
280-175997-7	LL1mw-087-230402-GW	Total/NA	Water	8330B	611915
MB 280-611915/1-A	Method Blank	Total/NA	Water	8330B	611915
LCS 280-611915/2-A	Lab Control Sample	Total/NA	Water	8330B	611915
LCS 280-611915/4-A	Lab Control Sample	Total/NA	Water	8330B	611915
LCSD 280-611915/3-A	Lab Control Sample Dup	Total/NA	Water	8330B	611915
LCSD 280-611915/5-A	Lab Control Sample Dup	Total/NA	Water	8330B	611915
280-175997-6 MS	LL1mw-087-230401-GW	Total/NA	Water	8330B	611915
280-175997-6 MS	LL1mw-087-230401-GW	Total/NA	Water	8330B	611915
280-175997-6 MSD	LL1mw-087-230401-GW	Total/NA	Water	8330B	611915
280-175997-6 MSD	LL1mw-087-230401-GW	Total/NA	Water	8330B	611915

Analysis Batch: 612692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-175997-1	LL1mw-080-230401-GW	Total/NA	Water	8330B	611915
280-175997-2	LL1mw-081-230401-GW	Total/NA	Water	8330B	611915
280-175997-3	LL1mw-083-230401-GW	Total/NA	Water	8330B	611915
280-175997-4	LL1mw-084-230401-GW	Total/NA	Water	8330B	611915

General Chemistry

Analysis Batch: 611205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-175997-1	LL1mw-080-230401-GW	Total/NA	Water	9056	
280-175997-3	LL1mw-083-230401-GW	Total/NA	Water	9056	
280-175997-4	LL1mw-084-230401-GW	Total/NA	Water	9056	
280-175997-5	LL1mw-084-230402-GW	Total/NA	Water	9056	

General Chemistry (Continued)

Analysis Batch: 611205 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-611205/6	Method Blank	Total/NA	Water	9056	
LCS 280-611205/4	Lab Control Sample	Total/NA	Water	9056	
LCSD 280-611205/5	Lab Control Sample Dup	Total/NA	Water	9056	
MRL 280-611205/3	Lab Control Sample	Total/NA	Water	9056	
280-175997-4 MS	LL1mw-084-230401-GW	Total/NA	Water	9056	
280-175997-4 MSD	LL1mw-084-230401-GW	Total/NA	Water	9056	
280-175997-4 DU	LL1mw-084-230401-GW	Total/NA	Water	9056	

Analysis Batch: 611206

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-175997-1	LL1mw-080-230401-GW	Total/NA	Water	9056A	
MB 280-611206/6	Method Blank	Total/NA	Water	9056A	
LCS 280-611206/4	Lab Control Sample	Total/NA	Water	9056A	
LCSD 280-611206/5	Lab Control Sample Dup	Total/NA	Water	9056A	
MRL 280-611206/3	Lab Control Sample	Total/NA	Water	9056A	
280-175997-4 MS	LL1mw-084-230401-GW	Total/NA	Water	9056A	
280-175997-4 MSD	LL1mw-084-230401-GW	Total/NA	Water	9056A	
280-175997-4 DU	LL1mw-084-230401-GW	Total/NA	Water	9056A	

Prep Batch: 611794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-175997-1	LL1mw-080-230401-GW	Total/NA	Water	9030B	
280-175997-3	LL1mw-083-230401-GW	Total/NA	Water	9030B	
280-175997-4	LL1mw-084-230401-GW	Total/NA	Water	9030B	
280-175997-5	LL1mw-084-230402-GW	Total/NA	Water	9030B	
MB 280-611794/2-A	Method Blank	Total/NA	Water	9030B	
LCS 280-611794/1-A	Lab Control Sample	Total/NA	Water	9030B	
280-175997-4 MS	LL1mw-084-230401-GW	Total/NA	Water	9030B	
280-175997-4 MSD	LL1mw-084-230401-GW	Total/NA	Water	9030B	

Analysis Batch: 611854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-175997-1	LL1mw-080-230401-GW	Total/NA	Water	9034	611794
280-175997-3	LL1mw-083-230401-GW	Total/NA	Water	9034	611794
280-175997-4	LL1mw-084-230401-GW	Total/NA	Water	9034	611794
280-175997-5	LL1mw-084-230402-GW	Total/NA	Water	9034	611794
MB 280-611794/2-A	Method Blank	Total/NA	Water	9034	611794
LCS 280-611794/1-A	Lab Control Sample	Total/NA	Water	9034	611794
280-175997-4 MS	LL1mw-084-230401-GW	Total/NA	Water	9034	611794
280-175997-4 MSD	LL1mw-084-230401-GW	Total/NA	Water	9034	611794

Analysis Batch: 611910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-175997-1	LL1mw-080-230401-GW	Total/NA	Water	SM 2320B	
280-175997-3	LL1mw-083-230401-GW	Total/NA	Water	SM 2320B	
280-175997-4	LL1mw-084-230401-GW	Total/NA	Water	SM 2320B	
280-175997-5	LL1mw-084-230402-GW	Total/NA	Water	SM 2320B	
MB 280-611910/58	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-611910/57	Lab Control Sample	Total/NA	Water	SM 2320B	

QC Association Summary

Client: Leidos, Inc.
Job ID: 280-175997-1
Project/Site: RVAAP FWGW Spring 2023

General Chemistry

Analysis Batch: 612833

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-175997-3	LL1mw-083-230401-GW	Total/NA	Water	9056A	
280-175997-4	LL1mw-084-230401-GW	Total/NA	Water	9056A	
280-175997-5	LL1mw-084-230402-GW	Total/NA	Water	9056A	
MB 280-612833/56	Method Blank	Total/NA	Water	9056A	
LCS 280-612833/52	Lab Control Sample	Total/NA	Water	9056A	
LCSD 280-612833/55	Lab Control Sample Dup	Total/NA	Water	9056A	
MRL 280-612833/3	Lab Control Sample	Total/NA	Water	9056A	
280-175997-4 MS	LL1mw-084-230401-GW	Total/NA	Water	9056A	
280-175997-4 MSD	LL1mw-084-230401-GW	Total/NA	Water	9056A	
280-175997-4 DU	LL1mw-084-230401-GW	Total/NA	Water	9056A	

Analysis Batch: 612889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-175997-1	LL1mw-080-230401-GW	Total/NA	Water	9060	
280-175997-3	LL1mw-083-230401-GW	Total/NA	Water	9060	
280-175997-4	LL1mw-084-230401-GW	Total/NA	Water	9060	
MB 280-612889/4	Method Blank	Total/NA	Water	9060	
LCS 280-612889/3	Lab Control Sample	Total/NA	Water	9060	

Client Sample ID: LL1mw-080-230401-GW — Lab Sample ID: 280-175997-1

Date Collected: 05/03/23 09:20 **Matrix: Water**
Date Received: 05/04/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			468 mL	5 mL	611915	05/10/23 13:48	DCL	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	612396	05/13/23 22:00	JZ	EET DEN
Total/NA	Prep	3535			468 mL	5 mL	611915	05/10/23 13:48	DCL	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	612692	05/17/23 08:53	JZ	EET DEN
Total/NA	Prep	9030B			50 mL	50 mL	611794	05/09/23 13:16	CAI	EET DEN
Total/NA	Analysis	9034		1			611854	05/09/23 17:18	CAI	EET DEN
Total/NA	Analysis	9056		1	10 mL	10 mL	611205	05/04/23 16:54	EJS	EET DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	611206	05/04/23 16:54	EJS	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	612889	05/17/23 01:53	ABW	EET DEN
Total/NA	Analysis	SM 2320B		1			611910	05/09/23 18:50	KEG	EET DEN

Client Sample ID: LL1mw-081-230401-GW — Lab Sample ID: 280-175997-2

Date Collected: 05/03/23 11:28 **Matrix: Water**
Date Received: 05/04/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			469.6 mL	5 mL	611915	05/10/23 13:48	DCL	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	612396	05/13/23 22:23	JZ	EET DEN
Total/NA	Prep	3535			469.6 mL	5 mL	611915	05/10/23 13:48	DCL	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	612692	05/17/23 09:28	JZ	EET DEN

Client Sample ID: LL1mw-083-230401-GW — Lab Sample ID: 280-175997-3

Date Collected: 05/03/23 14:31 **Matrix: Water**
Date Received: 05/04/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			494.6 mL	5 mL	611915	05/10/23 13:48	DCL	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	612396	05/13/23 22:46	JZ	EET DEN
Total/NA	Prep	3535			494.6 mL	5 mL	611915	05/10/23 13:48	DCL	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	612692	05/17/23 10:03	JZ	EET DEN
Total/NA	Prep	9030B			50 mL	50 mL	611794	05/09/23 13:16	CAI	EET DEN
Total/NA	Analysis	9034		1			611854	05/09/23 17:18	CAI	EET DEN
Total/NA	Analysis	9056		1	10 mL	10 mL	611205	05/04/23 22:40	EJS	EET DEN
Total/NA	Analysis	9056A		5	5 mL	5 mL	612833	05/18/23 02:19	MEC	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	612889	05/17/23 02:37	ABW	EET DEN
Total/NA	Analysis	SM 2320B		1			611910	05/09/23 18:54	KEG	EET DEN

Client Sample ID: LL1mw-084-230401-GW — Lab Sample ID: 280-175997-4

Date Collected: 05/03/23 11:03 **Matrix: Water**
Date Received: 05/04/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			481.8 mL	5 mL	611915	05/10/23 13:48	DCL	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	612396	05/13/23 23:54	JZ	EET DEN

Lab Chronicle

Client: Leidos, Inc.
Job ID: 280-175997-1
Project/Site: RVAAP FWGW Spring 2023

Client Sample ID: LL1mw-084-230401-GW
Lab Sample ID: 280-175997-4
Date Collected: 05/03/23 11:03
Matrix: Water
Date Received: 05/04/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			481.8 mL	5 mL	611915	05/10/23 13:48	DCL	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	612692	05/17/23 10:38	JZ	EET DEN
Total/NA	Prep	9030B			50 mL	50 mL	611794	05/09/23 13:16	CAI	EET DEN
Total/NA	Analysis	9034		1			611854	05/09/23 17:18	CAI	EET DEN
Total/NA	Analysis	9056		1	10 mL	10 mL	611205	05/04/23 17:09	EJS	EET DEN
Total/NA	Analysis	9056A		5	5 mL	5 mL	612833	05/18/23 02:31	MEC	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	612889	05/17/23 02:51	ABW	EET DEN
Total/NA	Analysis	SM 2320B		1			611910	05/09/23 18:59	KEG	EET DEN

Client Sample ID: LL1mw-084-230402-GW
Lab Sample ID: 280-175997-5
Date Collected: 05/03/23 11:03
Matrix: Water
Date Received: 05/04/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			479.6 mL	5 mL	611915	05/10/23 13:48	DCL	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	612396	05/14/23 00:17	JZ	EET DEN
Total/NA	Prep	9030B			50 mL	50 mL	611794	05/09/23 13:16	CAI	EET DEN
Total/NA	Analysis	9034		1			611854	05/09/23 17:18	CAI	EET DEN
Total/NA	Analysis	9056		1	10 mL	10 mL	611205	05/04/23 18:09	EJS	EET DEN
Total/NA	Analysis	9056A		5	5 mL	5 mL	612833	05/18/23 03:30	MEC	EET DEN
Total/NA	Analysis	SM 2320B		1			611910	05/09/23 19:05	KEG	EET DEN

Client Sample ID: LL1mw-087-230401-GW
Lab Sample ID: 280-175997-6
Date Collected: 05/03/23 13:50
Matrix: Water
Date Received: 05/04/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			485 mL	5 mL	611915	05/10/23 13:48	DCL	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	612396	05/14/23 00:40	JZ	EET DEN

Client Sample ID: LL1mw-087-230402-GW
Lab Sample ID: 280-175997-7
Date Collected: 05/03/23 13:50
Matrix: Water
Date Received: 05/04/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			467.8 mL	5 mL	611915	05/10/23 13:48	DCL	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	612396	05/14/23 02:35	JZ	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: 280-175997-1
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: 280-175997-1
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: 280-175997-1
Project/Site: RVAAP FWGW Spring 2023

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-175997-1	LL1mw-080-230401-GW	Water	05/03/23 09:20	05/04/23 09:35
280-175997-2	LL1mw-081-230401-GW	Water	05/03/23 11:28	05/04/23 09:35
280-175997-3	LL1mw-083-230401-GW	Water	05/03/23 14:31	05/04/23 09:35
280-175997-4	LL1mw-084-230401-GW	Water	05/03/23 11:03	05/04/23 09:35
280-175997-5	LL1mw-084-230402-GW	Water	05/03/23 11:03	05/04/23 09:35
280-175997-6	LL1mw-087-230401-GW	Water	05/03/23 13:50	05/04/23 09:35
280-175997-7	LL1mw-087-230402-GW	Water	05/03/23 13:50	05/04/23 09:35

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

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.: 280-175997-1

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.: 280-175997-1

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

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

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.: 280-175997-1

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.: 280-175997-1

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.: 280-175997-1

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.: 280-175997-1

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.: 280-175997-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 603284

Lab Sample ID: ICV 280-603284/19 Client Sample ID:

Date Analyzed: 02/24/23 18:04 Lab File ID: 02240019.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.45	Baseline	LV5D	02/28/23 11:45
DNX	6.77	Baseline	LV5D	02/28/23 11:45

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 612396

Lab Sample ID: CCV 280-612396/21 Client Sample ID:

Date Analyzed: 05/13/23 18:33 Lab File ID: 05130021.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.43	Baseline	K8YG	05/15/23 07:36
HMX	6.55	Baseline	K8YG	05/15/23 07:36
DNX	6.76	Baseline	LV5D	05/16/23 12:16
MNX	7.19	Baseline	K8YG	05/15/23 07:37

Lab Sample ID: CCV 280-612396/22 Client Sample ID:

Date Analyzed: 05/13/23 18:56 Lab File ID: 05130022.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	K8YG	05/15/23 07:42
2,4-diamino-6-nitrotoluene	6.62	Baseline	K8YG	05/15/23 07:42

Lab Sample ID: MB 280-611915/1-A Client Sample ID:

Date Analyzed: 05/13/23 20:05 Lab File ID: 05130025.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.21	Baseline	K8YG	05/15/23 07:51

Lab Sample ID: LCS 280-611915/2-A Client Sample ID:

Date Analyzed: 05/13/23 20:28 Lab File ID: 05130026.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.44	Baseline	K8YG	05/15/23 07:53
HMX	6.56	Baseline	K8YG	05/15/23 07:53
DNX	6.76	Baseline	LV5D	05/16/23 12:17

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 612396

Lab Sample ID: LCSD 280-611915/3-A Client Sample ID:

Date Analyzed: 05/13/23 20:51 Lab File ID: 05130027.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.43	Baseline	K8YG	05/15/23 07:57
HMX	6.55	Baseline	K8YG	05/15/23 07:57
DNX	6.75	Baseline	K8YG	05/15/23 07:57

Lab Sample ID: LCS 280-611915/4-A Client Sample ID:

Date Analyzed: 05/13/23 21:14 Lab File ID: 05130028.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	K8YG	05/15/23 07:58
2,4-diamino-6-nitrotoluene	6.61	Baseline	K8YG	05/15/23 07:58

Lab Sample ID: LCSD 280-611915/5-A Client Sample ID:

Date Analyzed: 05/13/23 21:37 Lab File ID: 05130029.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	K8YG	05/15/23 08:00
2,4-diamino-6-nitrotoluene	6.61	Baseline	K8YG	05/15/23 08:00

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 612396

Lab Sample ID: 280-175997-1 Client Sample ID: LL1mw-080-230401-GW

Date Analyzed: 05/13/23 22:00 Lab File ID: 05130030.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.55	Baseline	K8YG	05/15/23 08:01
RDX	7.58	Baseline	K8YG	05/15/23 08:01
1,2-Dinitrobenzene	8.52	Baseline	K8YG	05/15/23 08:01
1,3-Dinitrobenzene	9.26	Baseline	LV5D	05/16/23 12:17
1,3,5-Trinitrobenzene		Invalid Compound ID	LV5D	05/16/23 12:17
2,6-diamino-4-nitrotoluene		Invalid Compound ID	K8YG	05/15/23 08:00
4-Nitrotoluene		Invalid Compound ID	K8YG	05/15/23 08:02
Nitrobenzene		Invalid Compound ID	K8YG	05/15/23 08:02

Lab Sample ID: 280-175997-2 Client Sample ID: LL1mw-081-230401-GW

Date Analyzed: 05/13/23 22:23 Lab File ID: 05130031.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3,5-Trinitrobenzene		Invalid Compound ID	K8YG	05/15/23 08:03
1,3-Dinitrobenzene		Invalid Compound ID	K8YG	05/15/23 08:03
2-Nitrotoluene		Invalid Compound ID	K8YG	05/15/23 08:03
HMX		Invalid Compound ID	K8YG	05/15/23 08:02
Tetryl		Invalid Compound ID	LV5D	05/16/23 12:25

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 612396

Lab Sample ID: 280-175997-3 Client Sample ID: LL1mw-083-230401-GW

Date Analyzed: 05/13/23 22:46 Lab File ID: 05130032.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene		Invalid Compound ID	K8YG	05/15/23 08:07
DNX		Invalid Compound ID	K8YG	05/15/23 08:07
HMX		Invalid Compound ID	K8YG	05/15/23 08:07
Nitrobenzene		Invalid Compound ID	K8YG	05/15/23 08:07
Tetryl		Invalid Compound ID	K8YG	05/15/23 08:07
2,4,6-Trinitrotoluene	10.90	Baseline	K8YG	05/15/23 08:08
4-Amino-2,6-dinitrotoluene	11.10	Baseline	K8YG	05/15/23 08:08
2-Amino-4,6-dinitrotoluene	11.35	Baseline	LV5D	05/16/23 12:26
2,4-Dinitrotoluene	11.67	Baseline	K8YG	05/15/23 08:08

Lab Sample ID: CCV 280-612396/33 Client Sample ID:

Date Analyzed: 05/13/23 23:08 Lab File ID: 05130033.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.43	Baseline	K8YG	05/15/23 08:08
HMX	6.55	Baseline	K8YG	05/15/23 08:08
DNX	6.75	Baseline	K8YG	05/15/23 08:08
MNX	7.19	Baseline	K8YG	05/15/23 08:09

Lab Sample ID: CCV 280-612396/34 Client Sample ID:

Date Analyzed: 05/13/23 23:31 Lab File ID: 05130034.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	K8YG	05/15/23 08:10
2,4-diamino-6-nitrotoluene	6.61	Baseline	K8YG	05/15/23 08:10

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 612396

Lab Sample ID: 280-175997-4 Client Sample ID: LL1mw-084-230401-GW

Date Analyzed: 05/13/23 23:54 Lab File ID: 05130035.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.44	Baseline	K8YG	05/15/23 11:46
2,4-diamino-6-nitrotoluene	6.60	Baseline	K8YG	05/15/23 11:46
MNX	7.18	Baseline	K8YG	05/15/23 11:47
RDX	7.59	Baseline	K8YG	05/15/23 11:47
2,6-diamino-4-nitrotoluene		Invalid Compound ID	K8YG	05/15/23 11:46
4-Nitrotoluene		Invalid Compound ID	K8YG	05/15/23 11:48
DNX		Invalid Compound ID	K8YG	05/15/23 11:46
HMX		Invalid Compound ID	K8YG	05/15/23 11:46
Nitrobenzene		Invalid Compound ID	LV5D	05/16/23 12:27
Tetryl		Invalid Compound ID	K8YG	05/15/23 11:47

Lab Sample ID: 280-175997-5 Client Sample ID: LL1mw-084-230402-GW

Date Analyzed: 05/14/23 00:17 Lab File ID: 05130036.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.44	Baseline	K8YG	05/15/23 11:49
2,4-diamino-6-nitrotoluene	6.60	Baseline	K8YG	05/15/23 11:49
MNX	7.18	Baseline	K8YG	05/15/23 11:49
RDX	7.60	Baseline	K8YG	05/15/23 11:49
2,6-diamino-4-nitrotoluene		Invalid Compound ID	K8YG	05/15/23 11:48
4-Nitrotoluene		Invalid Compound ID	K8YG	05/15/23 11:50
DNX		Invalid Compound ID	K8YG	05/15/23 11:49
HMX		Invalid Compound ID	K8YG	05/15/23 11:49
Nitrobenzene		Invalid Compound ID	K8YG	05/15/23 11:50
Tetryl		Invalid Compound ID	K8YG	05/15/23 11:50

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 612396

Lab Sample ID: 280-175997-6 Client Sample ID: LL1mw-087-230401-GW

Date Analyzed: 05/14/23 00:40 Lab File ID: 05130037.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.53	Baseline	K8YG	05/15/23 11:53
2,6-diamino-4-nitrotoluene		Invalid Compound ID	K8YG	05/15/23 11:53

Lab Sample ID: 280-175997-6 MS Client Sample ID: LL1mw-087-230401-GW MS

Date Analyzed: 05/14/23 01:03 Lab File ID: 05130038.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.44	Baseline	K8YG	05/15/23 11:54
HMX	6.55	Baseline	K8YG	05/15/23 11:55
DNX	6.76	Baseline	K8YG	05/15/23 11:55
MNX	7.19	Baseline	K8YG	05/15/23 11:55
RDX	7.57	Baseline	K8YG	05/15/23 11:55
1,2-Dinitrobenzene	8.52	Baseline	K8YG	05/15/23 11:55
1,3,5-Trinitrobenzene	8.65	Baseline	K8YG	05/15/23 11:55

Lab Sample ID: 280-175997-6 MSD Client Sample ID: LL1mw-087-230401-GW MSD

Date Analyzed: 05/14/23 01:26 Lab File ID: 05130039.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.43	Baseline	K8YG	05/15/23 11:57
HMX	6.55	Baseline	K8YG	05/15/23 11:58
DNX	6.76	Baseline	K8YG	05/15/23 11:58
MNX	7.18	Baseline	K8YG	05/15/23 11:58
RDX	7.57	Baseline	K8YG	05/15/23 11:58
1,2-Dinitrobenzene	8.53	Baseline	K8YG	05/15/23 11:58
1,3,5-Trinitrobenzene	8.66	Baseline	K8YG	05/15/23 11:58

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 612396

Lab Sample ID: 280-175997-6 MS Client Sample ID: LL1mw-087-230401-GW MS

Date Analyzed: 05/14/23 01:49 Lab File ID: 05130040.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	K8YG	05/15/23 11:59
2,4-diamino-6-nitrotoluene	6.61	Baseline	K8YG	05/15/23 11:59
1,2-Dinitrobenzene	8.52	Baseline	K8YG	05/15/23 11:59

Lab Sample ID: 280-175997-6 MSD Client Sample ID: LL1mw-087-230401-GW MSD

Date Analyzed: 05/14/23 02:12 Lab File ID: 05130041.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	K8YG	05/15/23 12:01
2,4-diamino-6-nitrotoluene	6.60	Baseline	K8YG	05/15/23 12:01
1,2-Dinitrobenzene	8.53	Baseline	K8YG	05/15/23 12:01

Lab Sample ID: 280-175997-7 Client Sample ID: LL1mw-087-230402-GW

Date Analyzed: 05/14/23 02:35 Lab File ID: 05130042.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.52	Baseline	K8YG	05/15/23 12:02
2,6-diamino-4-nitrotoluene		Invalid Compound ID	K8YG	05/15/23 12:01
PETN		Invalid Compound ID	K8YG	05/15/23 12:02

Lab Sample ID: CCV 280-612396/45 Client Sample ID:

Date Analyzed: 05/14/23 03:44 Lab File ID: 05130045.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.43	Baseline	K8YG	05/15/23 12:04
HMX	6.55	Baseline	K8YG	05/15/23 12:04
DNX	6.75	Baseline	K8YG	05/15/23 12:05

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 612396

Lab Sample ID: CCV 280-612396/46 Client Sample ID:

Date Analyzed: 05/14/23 04:07 Lab File ID: 05130046.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	K8YG	05/15/23 12:06
2,4-diamino-6-nitrotoluene	6.61	Baseline	K8YG	05/15/23 12:06

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 610603

Lab Sample ID: IC 280-610603/10 Client Sample ID:

Date Analyzed: 04/28/23 18:24 Lab File ID: 04280010.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3,5-Dinitroaniline	14.37	Baseline Smoothing	LV5D	04/28/23 19:01
1,3-Dinitrobenzene	14.53	Baseline Smoothing	LV5D	04/28/23 19:01
2-Nitrotoluene	15.66	Baseline Smoothing	LV5D	04/28/23 19:01
4-Nitrotoluene	15.83	Baseline Smoothing	LV5D	04/28/23 19:01
4-Amino-2,6-dinitrotoluene	16.44	Baseline Smoothing	LV5D	04/28/23 19:01
3-Nitrotoluene	16.73	Baseline Smoothing	LV5D	04/28/23 19:01
1,3,5-Trinitrobenzene	17.37	Baseline Smoothing	LV5D	04/28/23 19:01
2-Amino-4,6-dinitrotoluene	17.37	Baseline Smoothing	LV5D	04/28/23 19:01
2,6-Dinitrotoluene	18.56	Baseline Smoothing	LV5D	04/28/23 19:01
2,4-Dinitrotoluene	19.02	Baseline Smoothing	LV5D	04/28/23 19:01

Lab Sample ID: IC 280-610603/11 Client Sample ID:

Date Analyzed: 04/28/23 18:59 Lab File ID: 04280011.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	17.40	Baseline Smoothing	LV5D	04/28/23 20:43
1,3,5-Trinitrobenzene	17.44	Baseline Smoothing	LV5D	04/28/23 20:43

Lab Sample ID: IC 280-610603/12 Client Sample ID:

Date Analyzed: 04/28/23 19:34 Lab File ID: 04280012.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	17.33	Baseline Smoothing	LV5D	04/28/23 20:43
1,3,5-Trinitrobenzene	17.39	Baseline Smoothing	LV5D	04/28/23 20:43

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 610603

Lab Sample ID: IC 280-610603/13 Client Sample ID:

Date Analyzed: 04/28/23 20:08 Lab File ID: 04280013.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	17.35	Baseline Smoothing	LV5D	04/28/23 20:52
1,3,5-Trinitrobenzene	17.41	Baseline Smoothing	LV5D	04/28/23 20:52

Lab Sample ID: IC 280-610603/14 Client Sample ID:

Date Analyzed: 04/28/23 20:43 Lab File ID: 04280014.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	17.36	Unspecified		
1,3,5-Trinitrobenzene	17.42	Baseline Smoothing	LV5D	04/29/23 10:22

Lab Sample ID: IC 280-610603/15 Client Sample ID:

Date Analyzed: 04/28/23 21:18 Lab File ID: 04280015.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	17.37	Unspecified		
1,3,5-Trinitrobenzene	17.42	Baseline Smoothing	LV5D	04/29/23 10:22

Lab Sample ID: IC 280-610603/16 Client Sample ID:

Date Analyzed: 04/28/23 21:53 Lab File ID: 04280016.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	17.38	Unspecified		
1,3,5-Trinitrobenzene	17.43	Baseline Smoothing	LV5D	04/29/23 10:22

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 610603

Lab Sample ID: IC 280-610603/17 Client Sample ID:

Date Analyzed: 04/28/23 22:28 Lab File ID: 04280017.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Nitrotoluene	15.77	Baseline Smoothing	LV5D	04/29/23 10:23
4-Nitrotoluene	16.00	Unspecified		
4-Amino-2,6-dinitrotoluene	16.56	Baseline Smoothing	LV5D	04/29/23 10:23
3-Nitrotoluene	16.84	Baseline Smoothing	LV5D	04/29/23 10:23
2-Amino-4,6-dinitrotoluene	17.41	Unspecified		
1,3,5-Trinitrobenzene	17.46	Baseline Smoothing	LV5D	04/29/23 10:23

Lab Sample ID: IC 280-610603/18 Client Sample ID:

Date Analyzed: 04/28/23 23:03 Lab File ID: 04280018.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Nitrotoluene	15.74	Baseline Smoothing	LV5D	04/29/23 10:24
4-Nitrotoluene	15.97	Unspecified		
4-Amino-2,6-dinitrotoluene	16.53	Baseline Smoothing	LV5D	04/29/23 13:01
3-Nitrotoluene	16.84	Baseline Smoothing	LV5D	04/29/23 13:01
2-Amino-4,6-dinitrotoluene	17.37	Unspecified		
1,3,5-Trinitrobenzene	17.44	Baseline Smoothing	LV5D	04/29/23 10:24

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 610603

Lab Sample ID: ICV 280-610603/19 Client Sample ID:

Date Analyzed: 04/28/23 23:38 Lab File ID: 04280019.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3,5-Dinitroaniline	14.32	Baseline Smoothing	LV5D	04/29/23 10:27
1,3-Dinitrobenzene	14.59	Baseline Smoothing	LV5D	04/29/23 10:27
2-Nitrotoluene	15.70	Baseline Smoothing	LV5D	04/29/23 10:27
4-Nitrotoluene	15.92	Baseline Smoothing	LV5D	04/29/23 10:27
4-Amino-2,6-dinitrotoluene	16.48	Baseline Smoothing	LV5D	04/29/23 10:27
3-Nitrotoluene	16.78	Baseline Smoothing	LV5D	04/29/23 10:27
2-Amino-4,6-dinitrotoluene	17.34	Unspecified		
1,3,5-Trinitrobenzene	17.42	Baseline Smoothing	LV5D	04/29/23 10:27

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 612692

Lab Sample ID: 280-175997-1 Client Sample ID: LL1mw-080-230401-GW

Date Analyzed: 05/17/23 08:53 Lab File ID: 05160025.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	3.88	Baseline Smoothing	LV5D	05/17/23 11:27

Lab Sample ID: 280-175997-2 Client Sample ID: LL1mw-081-230401-GW

Date Analyzed: 05/17/23 09:28 Lab File ID: 05160026.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.09	Baseline Smoothing	LV5D	05/17/23 11:27
Nitrobenzene		Invalid Compound ID	LV5D	05/17/23 11:27
Nitroglycerin		Invalid Compound ID	LV5D	05/17/23 11:27
2,6-Dinitrotoluene	17.34	Baseline Smoothing	LV5D	05/17/23 11:28

Lab Sample ID: 280-175997-3 Client Sample ID: LL1mw-083-230401-GW

Date Analyzed: 05/17/23 10:03 Lab File ID: 05160027.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.09	Baseline Smoothing	LV5D	05/17/23 11:28
2,4-diamino-6-nitrotoluene		Invalid Compound ID	LV5D	05/17/23 11:28
TNX		Invalid Compound ID	LV5D	05/17/23 11:28
1,2-Dinitrobenzene	11.42	Baseline Smoothing	LV5D	05/17/23 11:28
2-Nitrotoluene	14.49	Baseline Smoothing	LV5D	05/17/23 11:28

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 612692

Lab Sample ID: 280-175997-4 Client Sample ID: LL1mw-084-230401-GW

Date Analyzed: 05/17/23 10:38 Lab File ID: 05160028.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	3.95	Baseline Smoothing	LV5D	05/17/23 11:29
HMX	6.14	Baseline Smoothing	LV5D	05/17/23 11:29
2,4-diamino-6-nitrotoluene		Invalid Compound ID	LV5D	05/17/23 11:29
2,4-Dinitrotoluene		Invalid Compound ID	LV5D	05/17/23 11:29
Nitrobenzene		Invalid Compound ID	LV5D	05/17/23 11:29
RDX		Invalid Compound ID	LV5D	05/17/23 11:29
1,2-Dinitrobenzene	11.55	Baseline Smoothing	LV5D	05/17/23 11:29
2,4,6-Trinitrotoluene	21.76	Unspecified		

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

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.: 280-175997-1

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.: 280-175997-1

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.: 280-175997-1

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.: 280-175997-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Batch Number: 611206

Lab Sample ID: CCB 280-611206/2 Client Sample ID:

Date Analyzed: 05/04/23 09:30 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.56	Baseline Smoothing	XAY4	05/05/23 10:30

Lab Sample ID: MB 280-611206/6 Client Sample ID:

Date Analyzed: 05/04/23 10:30 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.54	Baseline Smoothing	XAY4	05/05/23 10:31

Lab Sample ID: CCB 280-611206/18 Client Sample ID:

Date Analyzed: 05/04/23 18:39 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.47	Baseline Smoothing	XAY4	05/05/23 10:31

Lab Sample ID: CCB 280-611206/30 Client Sample ID:

Date Analyzed: 05/04/23 21:40 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.48	Baseline Smoothing	XAY4	05/05/23 10:33

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: WC_IonChrom15 Analysis Batch Number: 607366

Lab Sample ID: STD 280-607366/1 IC Client Sample ID:

Date Analyzed: 04/03/23 16:42 Lab File ID: 280-0120028-002280-012008 GC Column: Ion Pac AS18 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloride	2.70	Baseline Smoothing	XAY4	04/04/23 10:06
Sulfate	6.54	Baseline Smoothing	XAY4	04/04/23 10:07

Lab Sample ID: STD 280-607366/2 IC Client Sample ID:

Date Analyzed: 04/03/23 16:54 Lab File ID: 280-0120083-002_04_ECD_1. GC Column: Ion Pac AS18 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	1.93	Baseline Smoothing	XAY4	04/04/23 10:07
Chloride	2.70	Baseline Smoothing	XAY4	04/04/23 10:09

Lab Sample ID: STD 280-607366/3 IC Client Sample ID:

Date Analyzed: 04/03/23 17:06 Lab File ID: 280-0120083-003_05_ECD_1. GC Column: Ion Pac AS18 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	1.92	Baseline Smoothing	XAY4	04/04/23 10:07
Chloride	2.70	Baseline Smoothing	XAY4	04/04/23 10:09

Lab Sample ID: STD 280-607366/4 IC Client Sample ID:

Date Analyzed: 04/03/23 17:18 Lab File ID: 280-0120083-004_06_ECD_1. GC Column: Ion Pac AS18 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	1.92	Baseline Smoothing	XAY4	04/04/23 10:07
Chloride	2.70	Baseline Smoothing	XAY4	04/04/23 10:10

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: WC_IonChrom15 Analysis Batch Number: 607366

Lab Sample ID: STD 280-607366/5 IC Client Sample ID:

Date Analyzed: 04/03/23 17:30 Lab File ID: 280-0120083-005_07_ECD_1. GC Column: Ion Pac AS18 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	1.92	Baseline Smoothing	XAY4	04/04/23 10:08
Chloride	2.71	Baseline Smoothing	XAY4	04/04/23 10:10

Lab Sample ID: STD 280-607366/6 IC Client Sample ID:

Date Analyzed: 04/03/23 17:42 Lab File ID: 280-0120083-006_08_ECD_1. GC Column: Ion Pac AS18 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	1.92	Baseline Smoothing	XAY4	04/04/23 10:08
Chloride	2.72	Baseline Smoothing	XAY4	04/04/23 10:10

Lab Sample ID: ICV 280-607366/7 Client Sample ID:

Date Analyzed: 04/03/23 17:54 Lab File ID: 280-0120083-007_09_ECD_1. GC Column: Ion Pac AS18 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	1.92	Baseline Smoothing	XAY4	04/04/23 10:08
Chloride	2.72	Baseline Smoothing	XAY4	04/04/23 10:13

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: WC_IonChrom15 Analysis Batch Number: 612833

Lab Sample ID: CCV 280-612833/41 Client Sample ID:

Date Analyzed: 05/17/23 22:56 Lab File ID: 280-0121553-041_42_ECD_1. GC Column: Ion Pac AS18 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	1.91	Baseline Smoothing	LVW8	05/18/23 09:40
Chloride	2.65	Baseline Smoothing	LVW8	05/18/23 09:41
Bromide	3.70	Baseline Smoothing	LVW8	05/18/23 09:41

Lab Sample ID: CCB 280-612833/42 Client Sample ID:

Date Analyzed: 05/17/23 23:08 Lab File ID: 280-0121553-042_43_ECD_1. GC Column: Ion Pac AS18 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	6.13	Baseline Smoothing	LVW8	05/18/23 09:41

Lab Sample ID: CCV 280-612833/53 Client Sample ID:

Date Analyzed: 05/18/23 01:19 Lab File ID: 280-0121553-053_54_ECD_1. GC Column: Ion Pac AS18 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	1.91	Baseline Smoothing	LVW8	05/18/23 09:43
Chloride	2.65	Baseline Smoothing	LVW8	05/18/23 09:43
Bromide	3.69	Baseline Smoothing	LVW8	05/18/23 09:43

Lab Sample ID: MB 280-612833/56 Client Sample ID:

Date Analyzed: 05/18/23 01:55 Lab File ID: 280-0121553-056_57_ECD_1. GC Column: Ion Pac AS18 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate		Unspecified		

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: WC_IonChrom15 Analysis Batch Number: 612833

Lab Sample ID: 280-175997-5 Client Sample ID: LL1mw-084-230402-GW

Date Analyzed: 05/18/23 03:30 Lab File ID: 280-0121553-064_65_ECD_1. GC Column: Ion Pac AS18 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate		Unspecified		

Lab Sample ID: CCV 280-612833/65 Client Sample ID:

Date Analyzed: 05/18/23 03:42 Lab File ID: 280-0121553-065_66_ECD_1. GC Column: Ion Pac AS18 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	1.91	Baseline Smoothing	LVW8	05/18/23 09:46
Chloride	2.65	Baseline Smoothing	LVW8	05/18/23 09:46
Bromide	3.70	Baseline Smoothing	LVW8	05/18/23 09:46

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

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_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
							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

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
					PicricARestek_00113	1 mL	2,4,6-Trinitrophenol	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
.PicricARestek_00113	04/03/24		Restek, Lot A0183202		(Purchased Reagent)		2,4,6-Trinitrophenol	1000 ug/mL
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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					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
.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
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_00036	07/13/23	03/29/23	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
.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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
8330_ADDs_00037	11/04/23	05/04/23	Acetonitrile, Lot ACN_237	5 mL	2,4Diamino6NT_00095	1 mL	2,4-diamino-6-nitrotoluene	20 ug/mL
					2,6Diamino4NT_00096	1 mL	2,6-diamino-4-nitrotoluene	20 ug/mL
.2,4Diamino6NT_00095	04/10/24	AccuStandard, Lot 220121267-01			(Purchased Reagent)		2,4-diamino-6-nitrotoluene	100 ug/mL
.2,6Diamino4NT_00096	05/04/24	AccuStandard, Lot 222051002			(Purchased Reagent)		2,6-diamino-4-nitrotoluene	100 ug/mL
8330_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
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
.2,6Diamino4NT_00102	06/03/24	AccuStandard, Lot 222051002			(Purchased Reagent)		2,6-diamino-4-nitrotoluene	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

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dinitrotoluene	10 ug/mL
							2,6-Dinitrotoluene	10 ug/mL
							2-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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
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_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
					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_01086	05/12/23	05/05/23	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_00473	04/05/23	03/29/23	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_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_00478	05/10/23	05/03/23	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 cl/so4_00480	05/24/23	05/18/23	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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
IC Cal low_00701	04/05/23	03/29/23	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 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 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_00707	05/10/23	05/03/23	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_01952	05/10/23	05/03/23	Di Water, Lot 27	200 mL	IC Cal low_00707	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_00707	05/10/23	05/03/23	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 SO4 Cal_00008	07/30/23		SPEX CertiPrep, Lot 5-160SO4-2X		(Purchased Reagent)		Sulfate	1000 mg/L
IC LCS_01954	05/24/23	05/18/23	Di Water, Lot 27	200 mL	IC SO4 Cal_00008	10 mL	Sulfate	50 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
ICMS/MSD WEEK_00817	05/10/23	05/03/23	Di Water, Lot NA	5 mL	IC SPK 6 ANIO_00028	2.5 mL	Nitrate as N	500.003 mg/L
							Sulfate	5000.51 mg/L
					IC SPK N02SOL_00021	2.5 mL	Nitrite as N	499.973 mg/L
.IC SPK 6 ANIO_00028	10/12/23	10/12/22	Di Water, Lot NA	1000 mL	IC MS/MSD N03_00006	6.068 g	Nitrate as N	1000.01 mg/L
					IC MS/MSD S04_00006	18.1408 g	Sulfate	10001 mg/L
..IC MS/MSD N03_00006	12/31/26		Spectrum, Lot 1LD0800		(Purchased Reagent)		Nitrate as N	0.1648 g/g
..IC MS/MSD S04_00006	09/29/23		FISHER, Lot 147276		(Purchased Reagent)		Sulfate	0.5513 g/g
.IC SPK N02SOL_00021	10/12/23	10/12/22	Di Water, Lot na	500 mL	IC MS/MSD N02_00005	2.4628 g	Nitrite as N	999.946 mg/L
..IC MS/MSD N02_00005	01/31/23		fisher, Lot 210979		(Purchased Reagent)		Nitrite as N	0.20301 g/g
ICMS/MSD WEEK_00819	05/24/23	05/18/23	Di Water, Lot NA	5 mL	IC SPK 6 ANIO_00028	2.5 mL	Sulfate	5000.51 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.IC SPK 6 ANIO_00028	10/12/23	10/12/22	Di Water, Lot NA	1000 mL	IC MS/MSD S04_00006	18.1408 g	Sulfate	10001 mg/L
..IC MS/MSD S04_00006	09/29/23	FISHER, Lot 147276			(Purchased Reagent)		Sulfate	0.5513 g/g
SFD CAL INT_02396	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	3.59551 g	Sulfide	960.001 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_00092

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-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.

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

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

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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

Reagent

2,4Diamino6NT_00094

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-12
Description: 2,4-Diamino-6-nitrotoluene
Lot: 220121267-01
Solvent: Acetonitrile
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

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

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

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

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

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

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

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

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

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

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

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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

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

Reagent

2,4Diamino6NT_00095

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www.AccuStandard.com

CERTIFICATE OF ANALYSIS

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



Signal Word: Danger

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

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

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

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

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

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

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

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

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

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

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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

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

Reagent

2,4Diamino6NT_00098

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-12
Description: 2,4-Diamino-6-nitrotoluene
Lot: 220121267-01
Solvent: Acetonitrile
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

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

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

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

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

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

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

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

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

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

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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

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

Reagent

2,4Diamino6NT_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.

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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_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.

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

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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

Reagent

2,6Diamino4NT_00096

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USA

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

CERTIFICATE OF ANALYSIS

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



Signal Word: Danger

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

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ILAC-MRA

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

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

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

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

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

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

2,6Diamino4NT_00099

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USA

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Fax (203)786-5287
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CERTIFICATE OF ANALYSIS

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



Signal Word: Danger

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

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

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

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

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

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

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

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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

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

AccuStandard

Reagent

2,6Diamino4NT_00100

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USA

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www.AccuStandard.com

CERTIFICATE OF ANALYSIS

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



Signal Word: Danger

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

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/FID)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
2,6-Diamino-4-nitrotoluene	59229-75-3	99.7	101.0	100.7

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

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

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

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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

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Rev. 7/20

AccuStandard

Reagent

2,6Diamino4NT_00102

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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.

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

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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

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Rev. 7/20

AccuStandard

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

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. : 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)

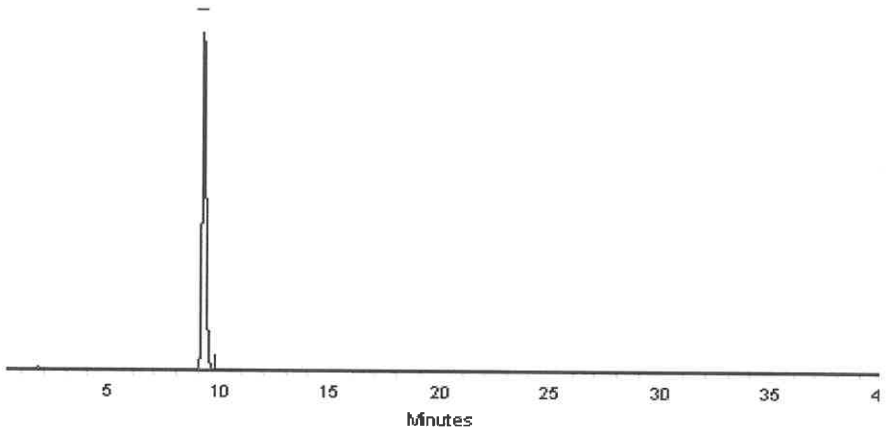
Flow Rate:
1.0 ml/min.

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

Certificate of Analysis

ACCREDITED
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Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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 **Purity** 99% (Lot 10311HS)	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)

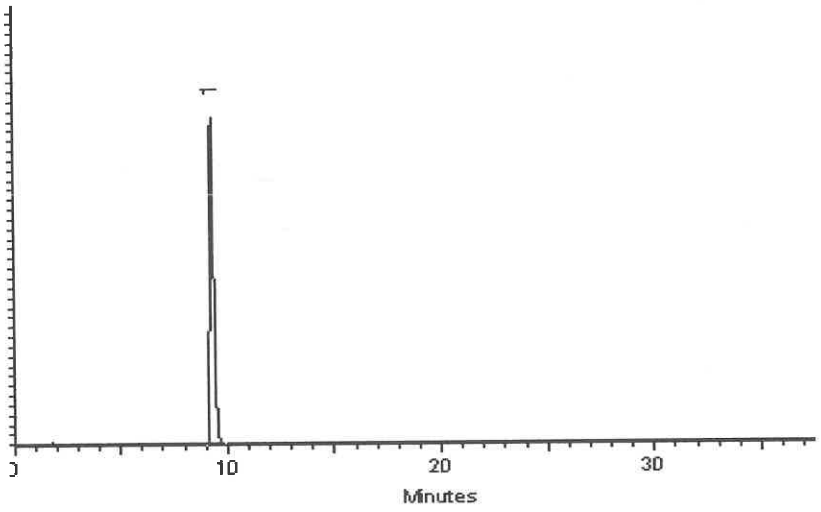
Flow Rate:
1.0 ml/min.

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

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

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. : 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)

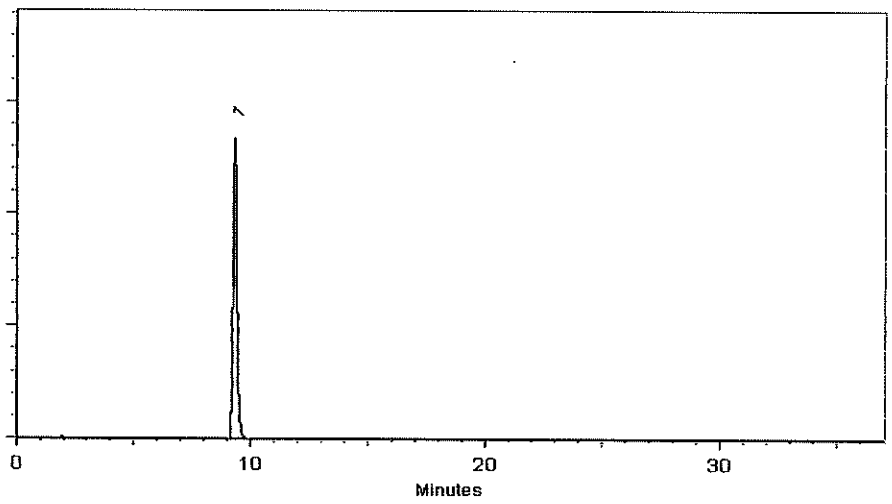
Flow Rate:
1.0 ml/min.

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

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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)

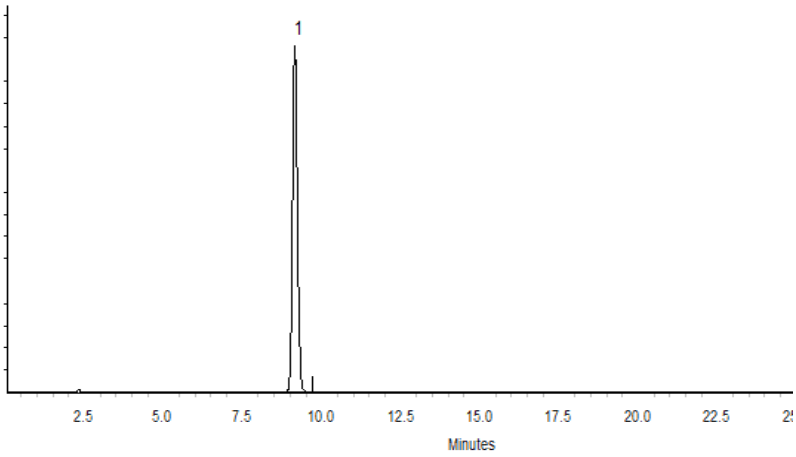
Flow Rate:
1.0 ml/min.

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_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_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)

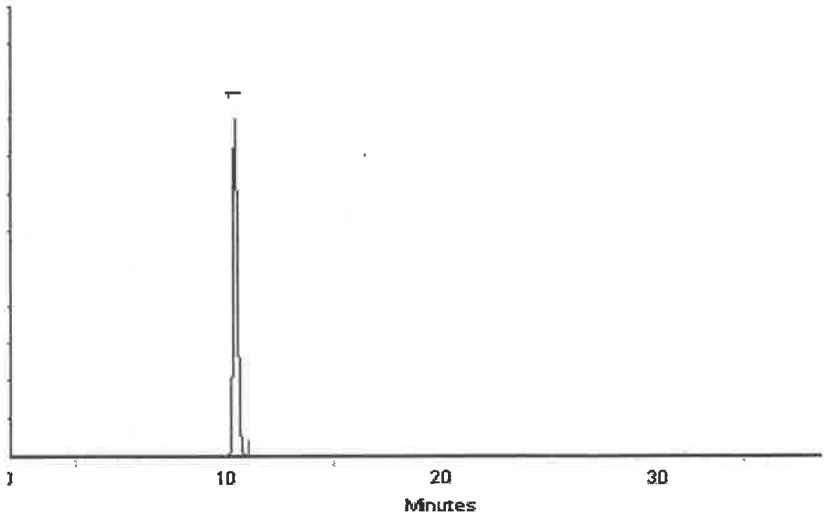
Flow Rate:
1.0 ml/min.

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)

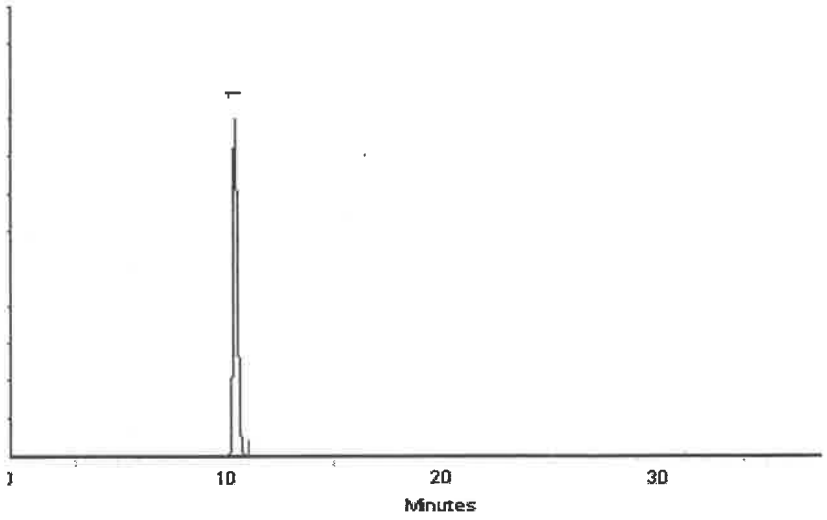
Flow Rate:
1.0 ml/min.

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.

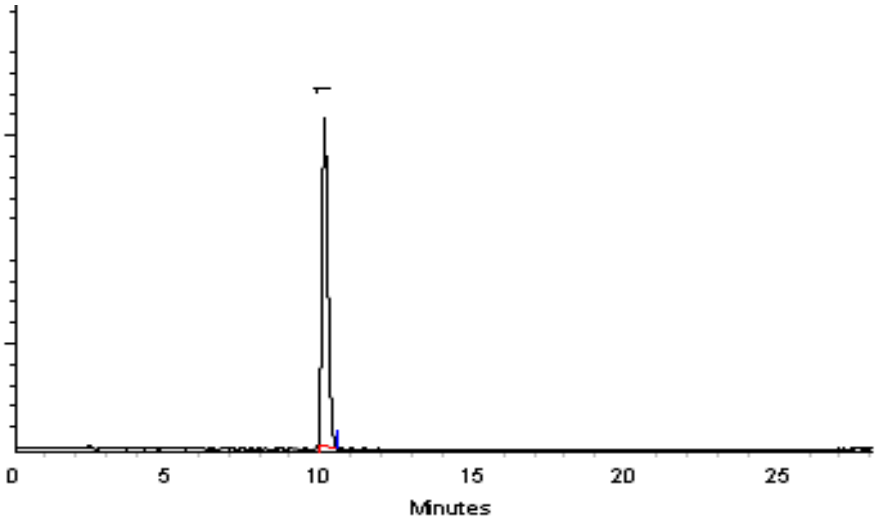
Mobile Phase A:
water:methanol (44:56 V/V)

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.

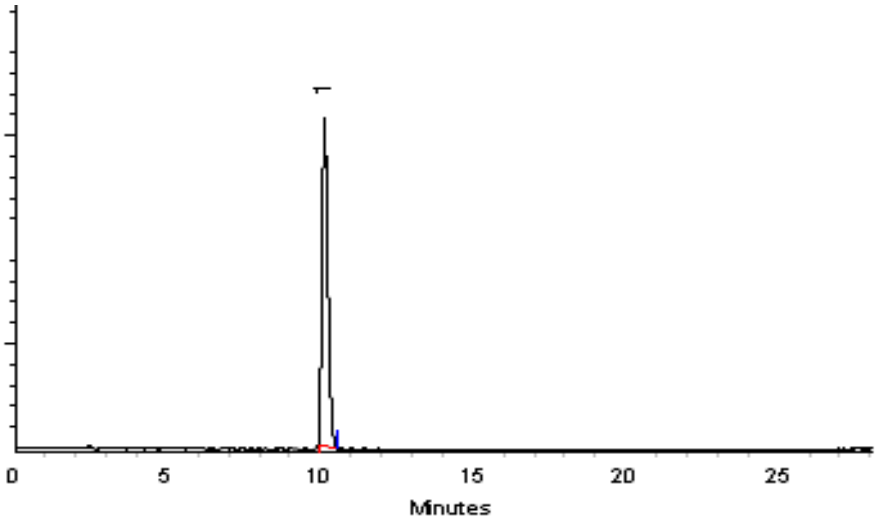
Mobile Phase A:
water:methanol (44:56 V/V)

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
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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.

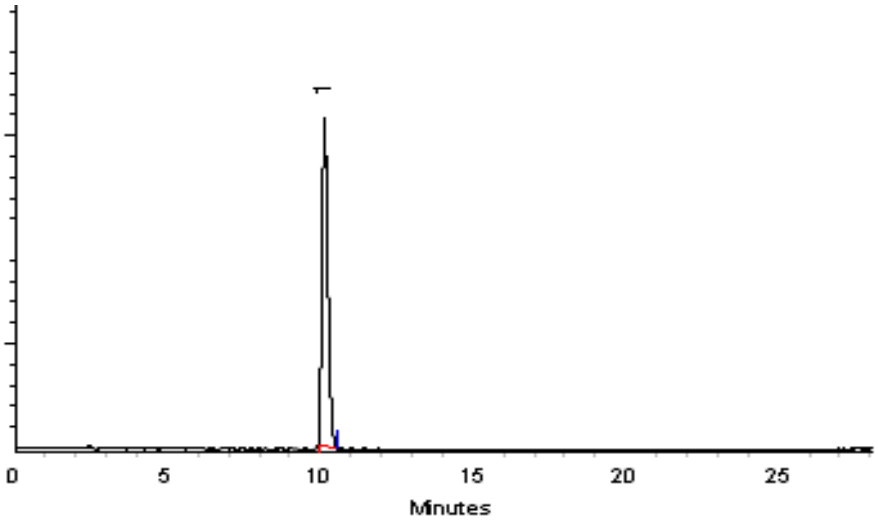
Mobile Phase A:
water:methanol (44:56 V/V)

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.

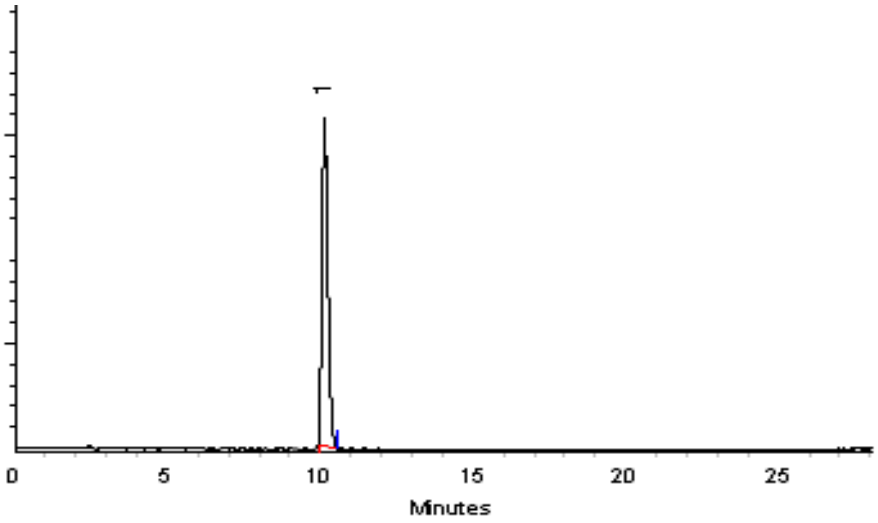
Mobile Phase A:
water:methanol (44:56 V/V)

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.

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- 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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  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
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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.:** 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 (Lot 200507JLM)	1,000.0 µg/mL	+/- 5.9397 µg/mL	Gravimetric
	CAS # 55-63-0		+/- 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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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_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)

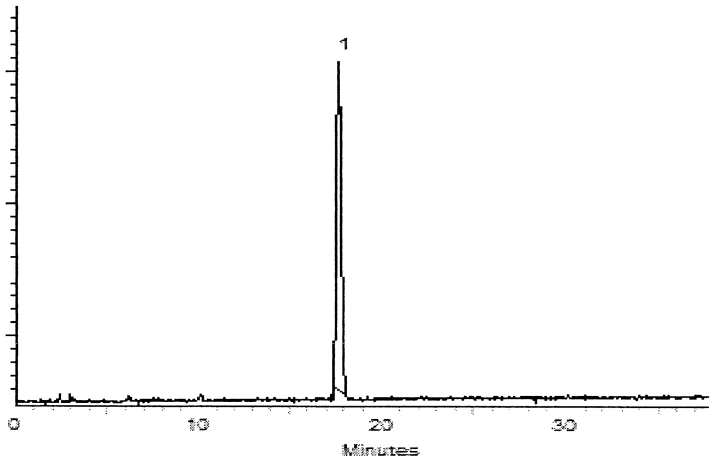
Flow Rate:
1.0 ml/min.

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

8330_PETN_Stk_00133

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568872 **Lot No.:** A0188550

Description : Custom PETN Standard

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

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

Expiration Date : August 31, 2025 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	PETN		5,000.0	µg/mL	+/- 46.4973	µg/mL	Gravimetric
	CAS # 78-11-5	(Lot 051108JLM)			+/- 276.2417	µg/mL	Unstressed
	Purity 99%				+/- 321.4093	µg/mL	Stressed

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

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

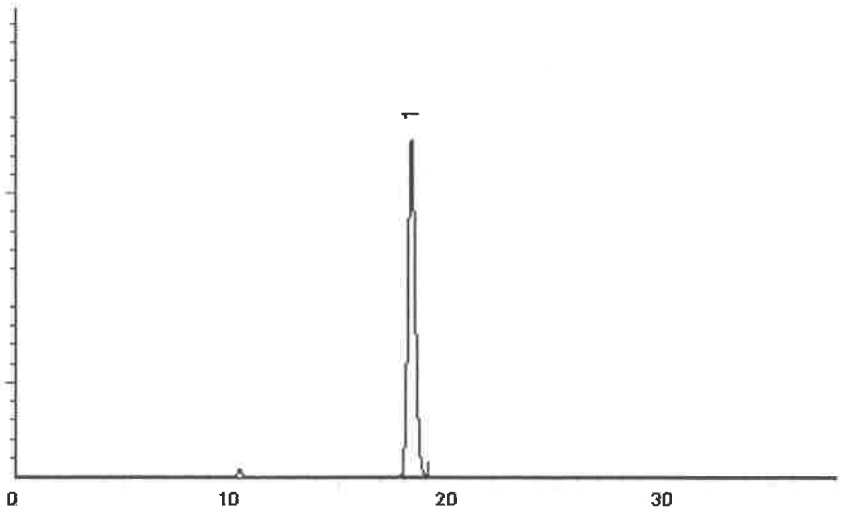
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Matt Fragassi - Mix Technician

Date Mixed: 15-Aug-2022 **Balance:** 1128353505

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 16-Aug-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

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

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Reagent

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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)

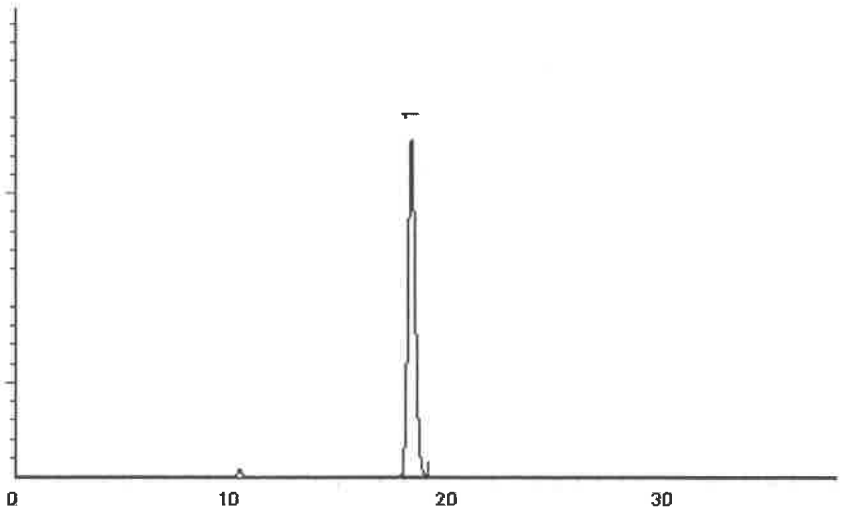
Flow Rate:
1.0 ml/min.

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.
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- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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- 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:

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Handling Notes:

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Reagent

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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)

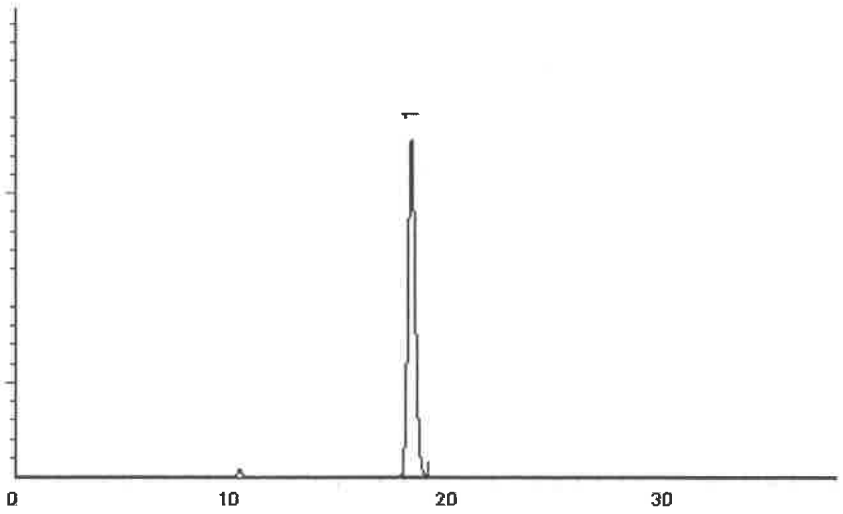
Flow Rate:
1.0 ml/min.

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

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. : 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)

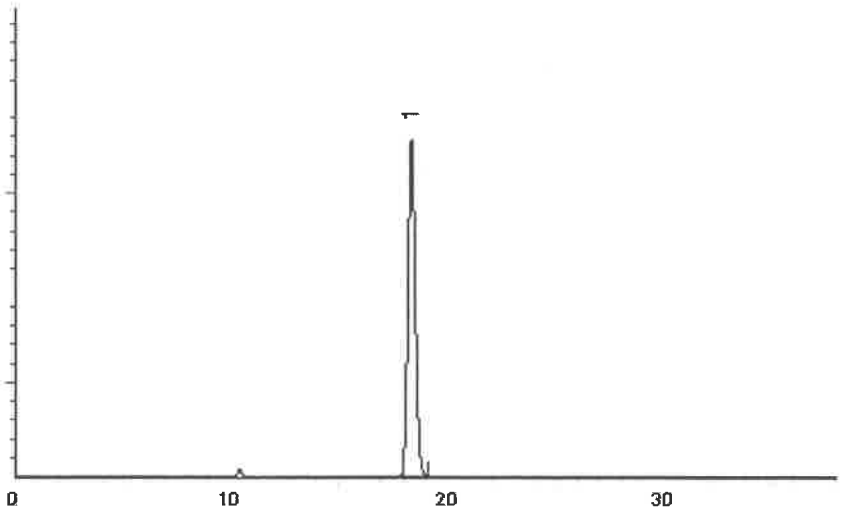
Flow Rate:
1.0 ml/min.

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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Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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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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_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.

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_00053

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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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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
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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.

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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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Bellefonte, PA 16823-8812
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Fax: (814)353-1309

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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. : 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)

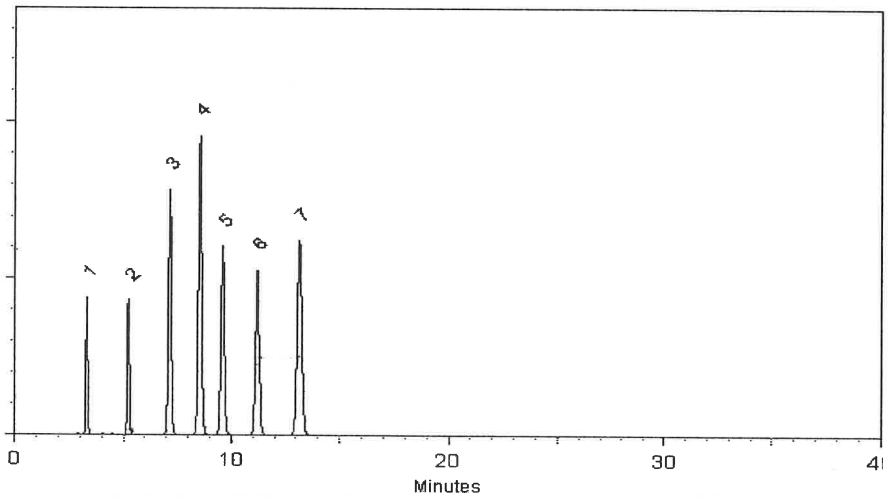
Flow Rate:
1.0 ml/min.

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.
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Reagent

8330LCSMix1_00140

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ilac-MRA

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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. : 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)

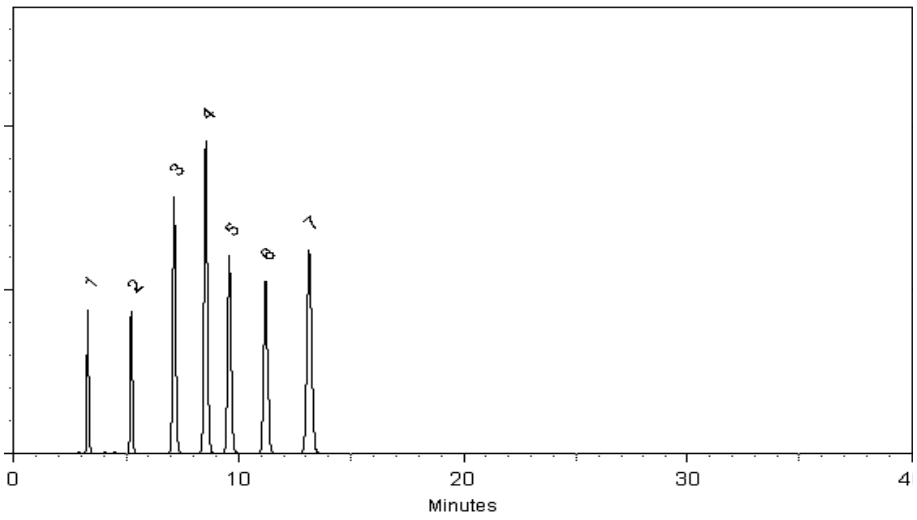
Flow Rate:
1.0 ml/min.

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

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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	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)

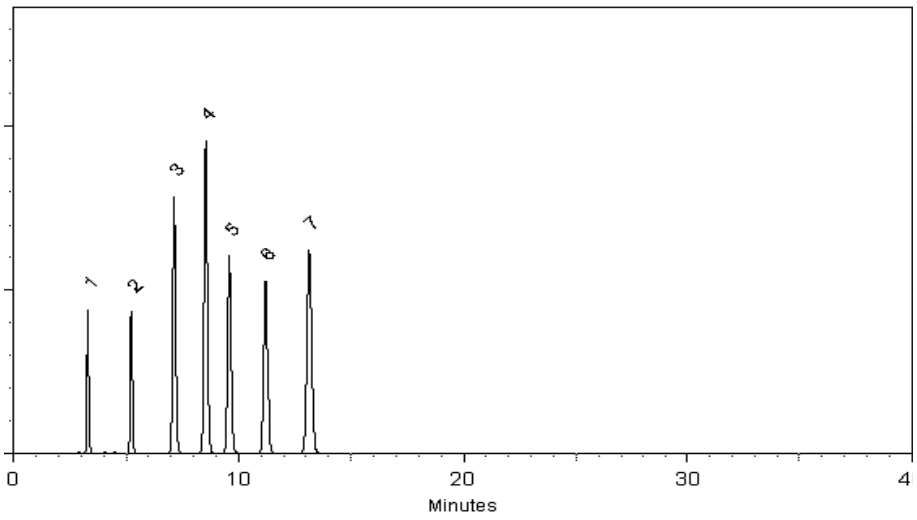
Flow Rate:
1.0 ml/min.

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

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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. : 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)

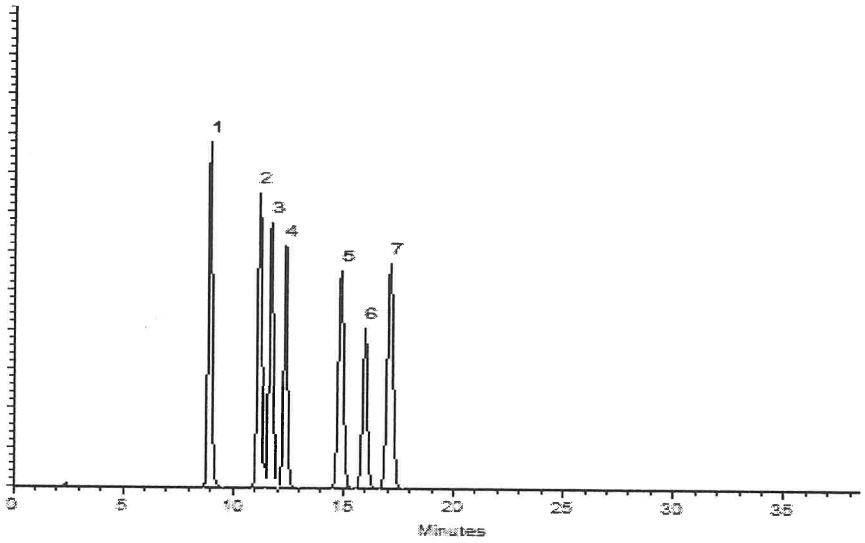
Flow Rate:
1.0 ml/min.

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

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Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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.

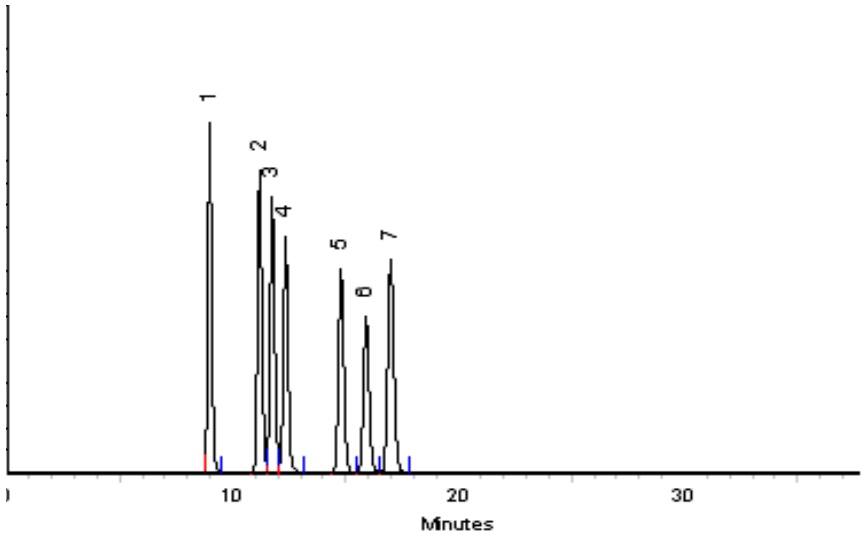
Mobile Phase A:
water:methanol (44:56 V/V)

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.

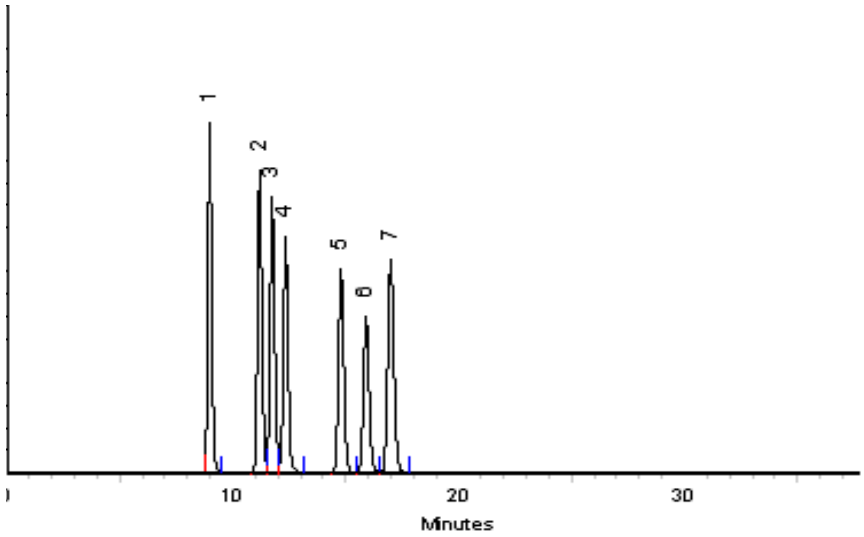
Mobile Phase A:
water:methanol (44:56 V/V)

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_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 ISO 17034 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.

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

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_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
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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.

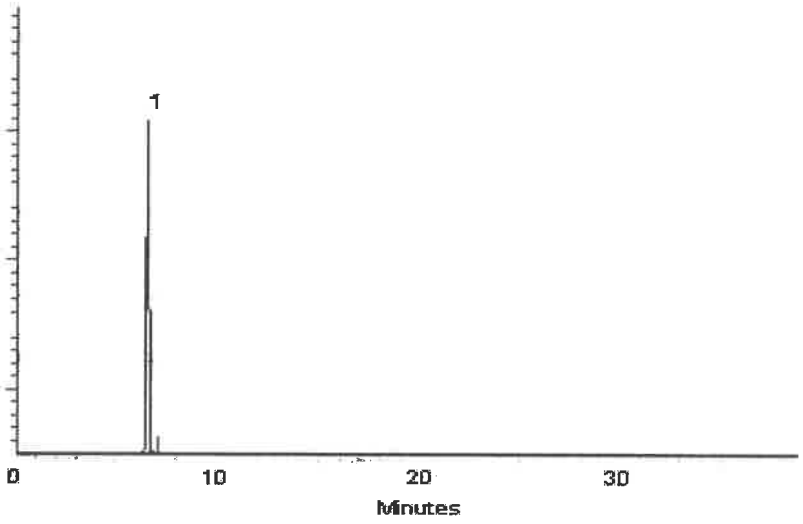
Mobile Phase A:
water:methanol (44:56 V/V)

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ilac-MRA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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.

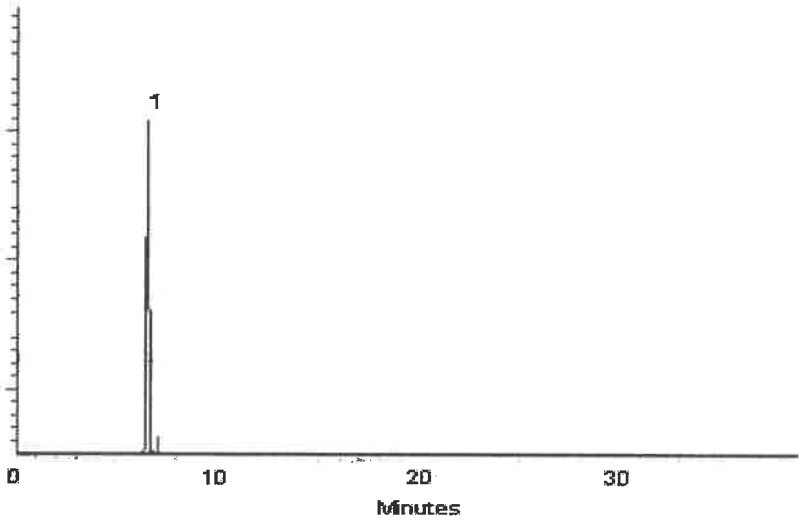
Mobile Phase A:
water:methanol (44:56 V/V)

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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.

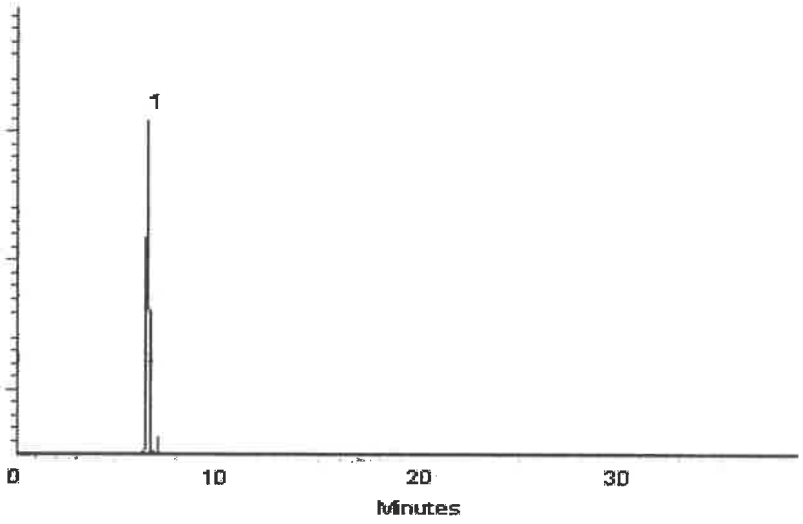
Mobile Phase A:
water:methanol (44:56 V/V)

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.

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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Handling Notes:

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- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330SurrStkSS_00248

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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.

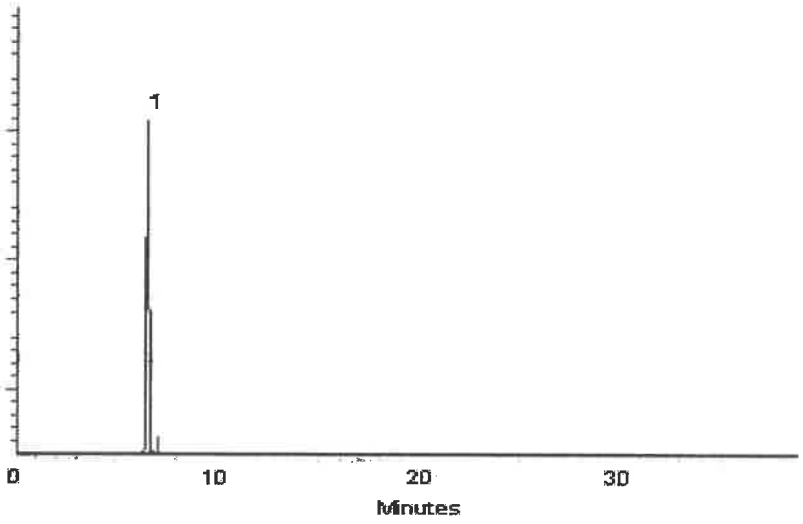
Mobile Phase A:
water:methanol (44:56 V/V)

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_00249

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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.

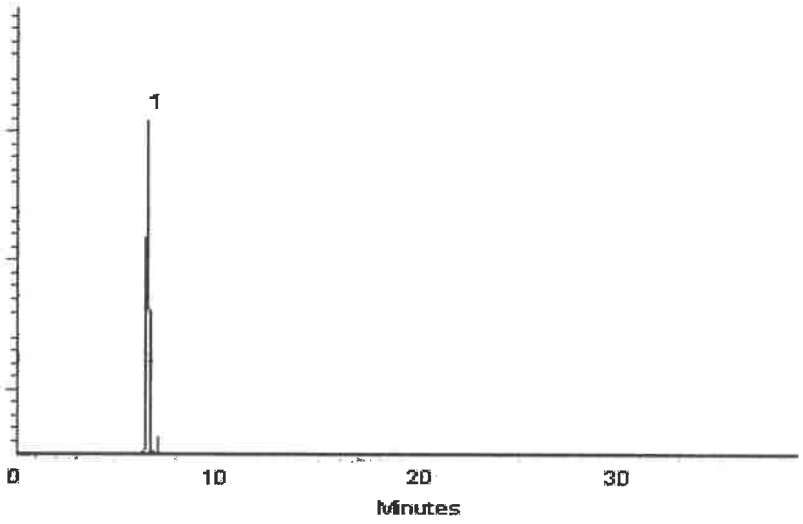
Mobile Phase A:
water:methanol (44:56 V/V)

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_00263

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.

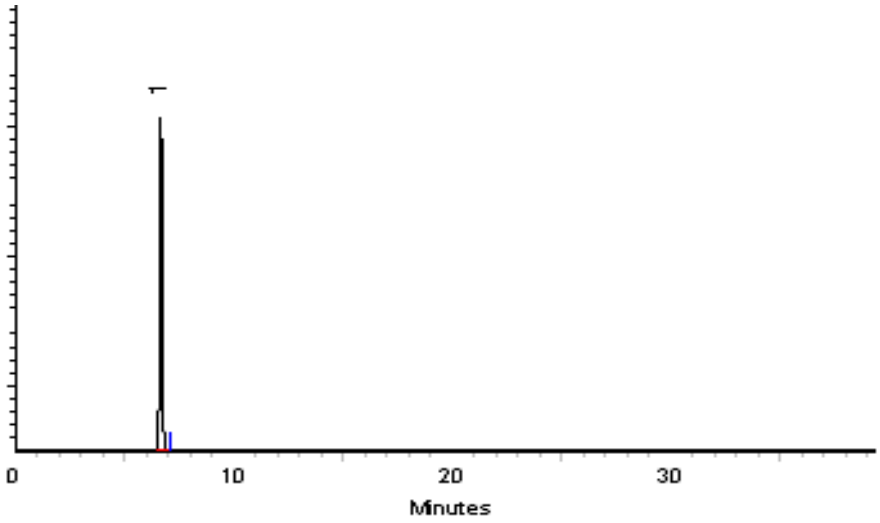
Mobile Phase A:
water:methanol (44:56 V/V)

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_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.

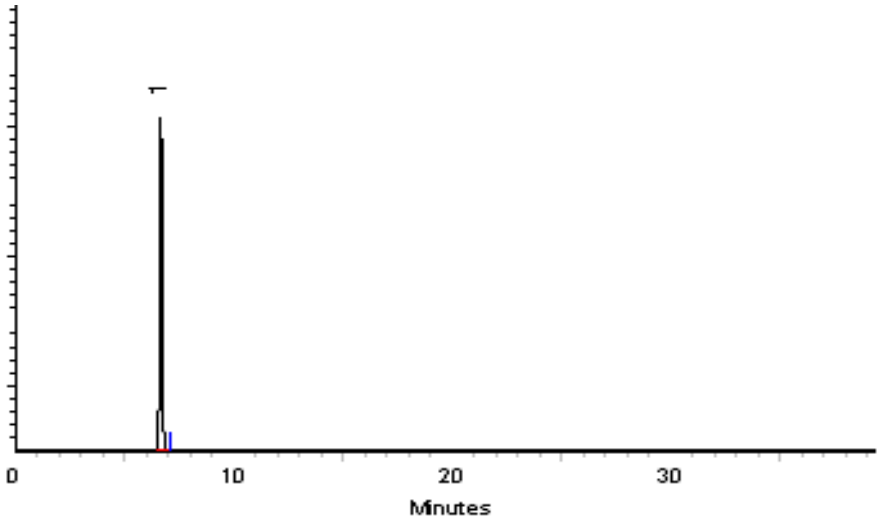
Mobile Phase A:
water:methanol (44:56 V/V)

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:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330SurrStkSS_00266

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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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.:** 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.

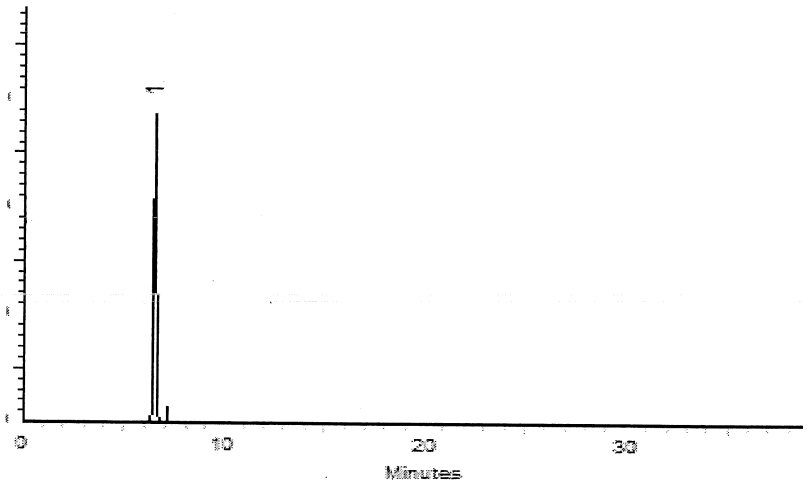
Mobile Phase A:
water:methanol (44:56 V/V)

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:

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330SurrStkSS_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.

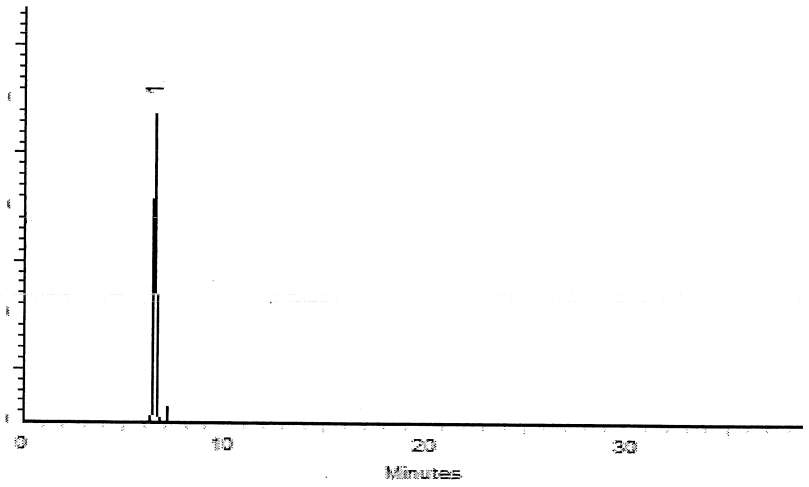
Mobile Phase A:
water:methanol (44:56 V/V)

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

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.:** 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.

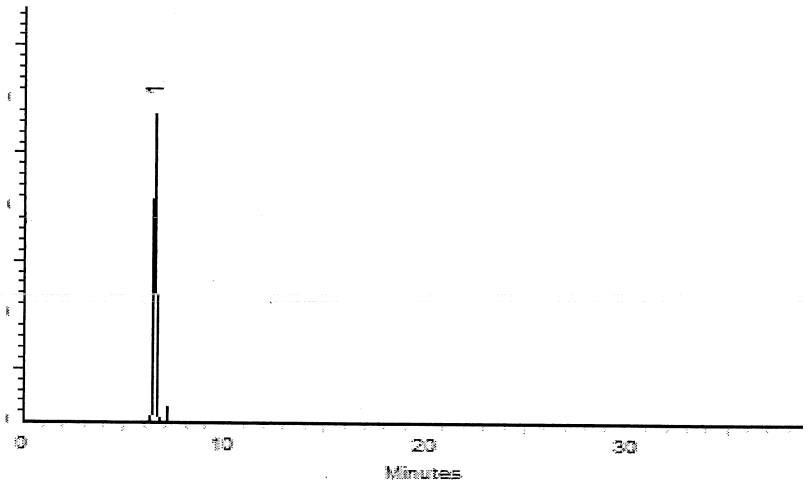
Mobile Phase A:
water:methanol (44:56 V/V)

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_00172

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

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

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-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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Reagent

IC BR ICV_00026

RICCA CHEMICAL COMPANY®

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Batesville, IN 47006
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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

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

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Pocomoke City, MD 21851
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Certificate of Analysis

Fluoride Standard, 1000 ppm F^-

Lot Number: 2207H13 **Product Number:** 3173

Manufacture Date: JUL 29, 2022
Expiration Date: JAN 2024

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.
The concentration is confirmed by Fluoride ISE and is certified traceable to NIST SRM 2203.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Sodium Fluoride	7681-49-4	High Purity

Test	Specification	Result
Appearance	Colorless liquid	Passed
Fluoride (F)	995-1005 ppm	1005 ppm

Specification	Reference
Fluoride Solution, Stock (1.00 mL = 1.00 mg F)	ASTM (D 5542)
Fluoride Stock Solution (1.00 mL = 1.00 mg F^-)	EPA (SW-846) (9056)
Fluoride Calibration Stock Solution (1,000 mg/L F^-)	EPA (SW-846) (9214)
Stock Solution, 1.0 mL = 1.0 mg F	EPA (340.3)
Fluoride Solution, Stock (1.00 mL = 1.00 mg F)	ASTM (D 5996)
Fluoride Stock Solution (1.00 mL = 1.00 mg F?)	ASTM (D 4327)
Fluoride Stock Standard Solution (1 mg of F in 1 mL)	ACS (N/A)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
3173-16	500 mL natural poly	18 months
3173-32	1 L natural poly	18 months

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



Myrlande Gilles (07/29/2022)
Quality Control
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Reagent

IC MS/MSD N02_00005

ThermoFisher SCIENTIFIC

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120632

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	S347	Quality Test / Release Date	03/26/2021
Lot Number	210979		
Description	SODIUM NITRITE, A.C.S.		
Country of Origin	India	Suggested Retest Date	Jan/2023
Chemical Origin	Inorganic-non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Yellow-white crystals
ASSAY	%	>= 97	100.9
CALCIUM	%	<= 0.01	<0.01
CHLORIDE	%	<= 0.005	<0.005
HEAVY METALS (as Pb)	%	<= 0.001	<0.001
IDENTIFICATION	PASS/FAIL	= PASS TEST	pass test
INSOLUBLE MATTER	%	<= 0.01	<0.01
IRON (Fe)	%	<= 0.001	<0.001
POTASSIUM (K)	%	<= 0.005	<0.005
SULFATE (SO4)	%	<= 0.01	<0.01



Julian Burton - Quality Control Manager – Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

Reagent

IC MS/MSD S04_00006

Fisher Scientific

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Certificate of Analysis

Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2008 standard by SAI Global Certificate Number CERT - 0064970

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Certain products (USP/FCC/NF/EP/BP/JP grades) are sold for use in food, drug, or medical device manufacturing. Fisher does not claim regulatory coverage under 21 CFR nor maintain DMF's with the FDA. The following are the actual analytical results obtained:

Catalog Number	**P304**	**Quality Test / Release Date 3/2/2015**	
Lot Number	**147276**		
Description	**POTASSIUM SULFATE, CRYSTAL, CERTIFIED, A.C.S.**		
Country of Origin	**India**	*** Suggested Retest Date**	**Feb-2020**
Chemical Origin	**Inorganic-non animal**		
BSE/TSE Comment	This product is not manufactured from, or with, any type of animal product, nor any derivative of an animal product. As such, this product should not be considered a vector for BSE or TSE.		

Result name	Units	Specifications	Test Value
APPEARANCE		REPORT	FINE WHITE CRYSTALS
ASSAY	%	>= 99	99.4
CALCIUM	%	<= 0.01	<0.010
CHLORIDE	%	<= 0.001	<0.0010
HEAVY METALS (as Pb)	ppm	<= 5	<5.0
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
INSOLUBLE MATTER	%	<= 0.01	<0.010
IRON (Fe)	ppm	<= 5	<5.0
MAGNESIUM	%	<= 0.005	<0.0050
NITROGEN COMPOUNDS	ppm	<= 5	<5
PH 5% SOLUTION @ 25 DEG C		Inclusive Between 5.5 - 8.5	5.5
SODIUM (Na)	%	<= 0.02	<0.020



Lab Manager Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as a extension of this catalog number listed above. If there are any questions with this certificate, please call Chemical Services at (800) 227-6701.
*Based on suggested storage condition.

Reagent

IC N03 cal_00028

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Certificate of Analysis

Nitrate Nitrogen Standard, 1000 ppm N (4427 ppm NO_3^-)

Lot Number: 2205B73 **Product Number:** 5459

Manufacture Date: MAY 11, 2022
Expiration Date: NOV 2023

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Potassium Nitrate	7757-79-1	High Purity
Chloroform	67-66-3	

Test	Specification	Result
Appearance	Colorless liquid	Passed
Nitrogen (N)	995-1005 ppm	1000 ppm

Specification	Reference
Nitrate Solution, Stock (1.0 mL = 1.0 mg NO3-N)	ASTM (D 3867 A)
Nitrate Solution, Stock (1.0 mL = 1.0 mg NO3-N)	ASTM (D 3867 B)
Stock Nitrate Solution: 1 mL = 1.0 mg NO3-N	EPA (353.2)
Stock Nitrate Solution: 1.0 mL = 1.00 mg NO3-N	EPA (353.3)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
5459-16	500 mL natural poly	18 months

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



Myrlande Gilles (05/11/2022)
Quality Control

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Reagent

IC NO2 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	-	-

16341 Table Mountain Pkwy ▪ Golden, CO 80403 ▪ 800.372.0122 ▪ 303.431.8454 ▪ fax 303.421.0159 ▪ www.eraqc.com

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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5/23/2023 8:16 PM

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.

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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 #15290

ISO/IEC 17025:2017 ACCREDITED Chemical Testing Laboratory CERT #15390

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Reagent

IC P04 cal_00030

RICCA CHEMICAL COMPANY®

1490 Lammers Pike
Batesville, IN 47006
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

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."

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

Reagent

IC SO4 Cal_00008

spex®
certiprep

ACCREDITED
Reference Materials Producer
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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Phone: +1.800.LAB.SPEX • +1.732.549.7144 • Fax: +1.732.603.9647

Reagent

IC SO4 ICV_00024

ERA
A Waters Company

Certified Reference Material

▪ Certificate of Analysis ▪

Product:	1000 mg/L Sulfate
Catalog Number:	062-125mL, 995-500mL
Lot No.	021221m
Starting Material:	Potassium Sulfate (K_2SO_4)
Matrix:	18 megohm deionized water
Density:	1.0002 ± 0.0005 g/mL 20.4 °C and 748 mm Hg
Verification Method:	Ion Chromatography
Certificate Issue Date:	December 22, 2021
Expiration Date:	December 1, 2023
Revision Number:	Original

CERTIFICATION

Parameter	Certified Value[1]	Uncertainty[2]	NIST Traceability	
	mg/L	%	SRM Number[3]	Recovery %
Sulfate	1000	0.994	3181	97.5

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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.

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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

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:
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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

PicricARestek_00113

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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)

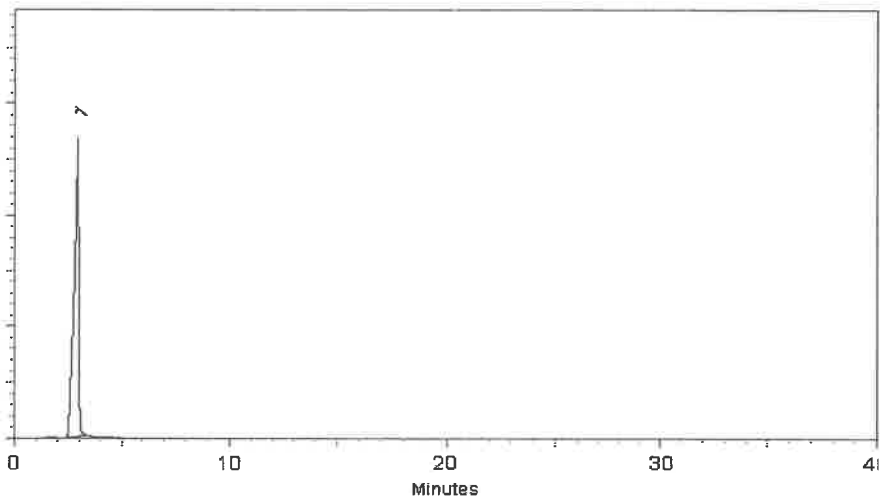
Flow Rate:
1.0 ml/min.

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.

Safety Data Sheet

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.

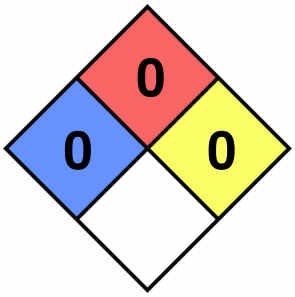
Dispose of contents in accordance with local, state, federal and international regulations.

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

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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.: 280-175997-1

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-080-230401-GW	280-175997-1	96 M	
LL1mw-080-230401-GW	280-175997-1		96
LL1mw-081-230401-GW	280-175997-2	103	
LL1mw-081-230401-GW	280-175997-2		87
LL1mw-083-230401-GW	280-175997-3	89	
LL1mw-083-230401-GW	280-175997-3		92 M
LL1mw-084-230401-GW	280-175997-4	101	
LL1mw-084-230401-GW	280-175997-4		99 M
LL1mw-084-230402-GW	280-175997-5	105	
LL1mw-087-230401-GW	280-175997-6	96 M	
LL1mw-087-230402-GW	280-175997-7	98 M	
	MB 280-611915/1-A	114	
	LCS 280-611915/2-A	100	
	LCS 280-611915/4-A	101	
	LCSD 280-611915/3-A	103	
	LCSD 280-611915/5-A	101	
LL1mw-087-230401-GW MS	280-175997-6 MS	98 M	
LL1mw-087-230401-GW MS	280-175997-6 MS	99 M	
LL1mw-087-230401-GW MSD	280-175997-6 MSD	94 M	
LL1mw-087-230401-GW MSD	280-175997-6 MSD	101 M	

	QC LIMITS
12DNB = 1,2-Dinitrobenzene	83-119

Column to be used to flag recovery values

FORM II 8330B

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05130026.D

Lab ID: LCS 280-611915/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	1.99	99	73-125	
1,3-Dinitrobenzene	2.00	1.93	96	78-120	
2,4,6-Trinitrotoluene	2.00	1.84	92	71-123	
2,4-Dinitrotoluene	2.00	1.85	93	78-120	
2,6-Dinitrotoluene	2.00	1.91	96	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.74	87	79-120	
2-Nitrotoluene	2.00	1.54	77	70-127	
3,5-Dinitroaniline	2.00	1.71	85	71-117	
3-Nitrotoluene	2.00	1.51	76	73-125	
4-Amino-2,6-dinitrotoluene	2.00	1.65	82	76-125	
4-Nitrotoluene	2.00	1.50	75	71-127	
DNX	2.00	2.00	100	66-119	M
HMX	2.00	1.78	89	65-135	M
MNX	2.33	2.56	110	57-132	
Nitrobenzene	2.00	1.76	88	65-134	
Nitroglycerin	20.0	20.0	100	74-127	
PETN	20.0	20.8	104	73-127	
RDX	2.00	1.92	96	68-130	
Tetryl	2.00	1.97	98	64-128	
TNX	2.01	1.96	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.: 280-175997-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05130028.D

Lab ID: LCS 280-611915/4-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
2,4-diamino-6-nitrotoluene	2.00	1.40	70	68-122	M
2,6-diamino-4-nitrotoluene	2.00	1.55	78	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.: 280-175997-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05130027.D

Lab ID: LCSD 280-611915/3-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	2.07	104	4	20	73-125	
1,3-Dinitrobenzene	2.00	2.00	100	4	20	78-120	
2,4,6-Trinitrotoluene	2.00	1.91	95	4	20	71-123	
2,4-Dinitrotoluene	2.00	1.92	96	3	20	78-120	
2,6-Dinitrotoluene	2.00	1.99	100	4	20	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.85	92	6	20	79-120	
2-Nitrotoluene	2.00	1.61	81	5	20	70-127	
3,5-Dinitroaniline	2.00	1.77	89	4	20	71-117	
3-Nitrotoluene	2.00	1.61	80	6	20	73-125	
4-Amino-2,6-dinitrotoluene	2.00	1.70	85	3	20	76-125	
4-Nitrotoluene	2.00	1.60	80	6	20	71-127	
DNX	2.00	2.10	105	5	20	66-119	M
HMX	2.00	1.78	89	0	20	65-135	M
MNX	2.33	2.67	114	4	20	57-132	
Nitrobenzene	2.00	1.82	91	4	20	65-134	
Nitroglycerin	20.0	20.0	100	0	20	74-127	
PETN	20.0	21.7	109	4	20	73-127	
RDX	2.00	1.96	98	2	20	68-130	
Tetryl	2.00	2.09	104	6	20	64-128	
TNX	2.01	1.96	98	0	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.: 280-175997-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05130029.D

Lab ID: LCSD 280-611915/5-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	1.45	72	3	20	68-122	M
2,6-diamino-4-nitrotoluene	2.00	1.58	79	2	20	72-122	M

Column to be used to flag recovery and RPD values

FORM III 8330B

FORM III
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05130038.D

Lab ID: 280-175997-6 MS Client ID: LL1mw-087-230401-GW MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.02	0.21 U	2.02	100	73-125	M
1,3-Dinitrobenzene	2.02	0.10 U	2.03	100	78-120	
2,4,6-Trinitrotoluene	2.02	0.10 U	1.85	92	71-123	
2,4-Dinitrotoluene	2.02	0.082 U	1.87	93	78-120	
2,6-Dinitrotoluene	2.02	0.082 U	1.95	96	77-127	
2-Amino-4,6-dinitrotoluene	2.02	0.10 U	1.77	88	79-120	
2-Nitrotoluene	2.02	0.21 U	1.71	85	70-127	
3,5-Dinitroaniline	2.02	0.31 U	1.68	83	71-117	
3-Nitrotoluene	2.02	0.36 U	1.65	81	73-125	
4-Amino-2,6-dinitrotoluene	2.02	0.12 U	1.64	81	76-125	
4-Nitrotoluene	2.02	0.41 U	1.71	85	71-127	
DNX	2.02	0.26 U	1.85	91	66-119	M
HMX	2.02	0.21 U	1.59	79	65-135	M
MNX	2.36	0.30 U	2.28	97	57-132	M
Nitrobenzene	2.02	0.21 U	1.83	90	65-134	
Nitroglycerin	20.2	2.1 U	20.0	99	74-127	
PETN	20.2	1.0 U	20.6	102	73-127	
RDX	2.02	0.21 U	1.73	86	68-130	M
Tetryl	2.02	0.10 U	1.98	98	64-128	
TNX	2.03	0.26 U	1.82	90	50-150	M

Column to be used to flag recovery and RPD values

FORM III 8330B

FORM III
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05130040.D

Lab ID: 280-175997-6 MS Client ID: LL1mw-087-230401-GW MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
2,4-diamino-6-nitrotoluene	2.22	0.93 U	1.42	64	68-122	J1 M
2,6-diamino-4-nitrotoluene	2.22	0.93 U	1.70	77	72-122	M

Column to be used to flag recovery and RPD values

FORM III 8330B

FORM III
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05130039.D

Lab ID: 280-175997-6 MSD Client ID: LL1mw-087-230401-GW MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.05	1.98	97	2	20	73-125	M
1,3-Dinitrobenzene	2.05	2.03	99	0	20	78-120	
2,4,6-Trinitrotoluene	2.05	1.84	90	1	20	71-123	
2,4-Dinitrotoluene	2.05	1.82	89	3	20	78-120	
2,6-Dinitrotoluene	2.05	1.85	90	5	20	77-127	
2-Amino-4,6-dinitrotoluene	2.05	1.79	88	1	20	79-120	
2-Nitrotoluene	2.05	1.62	79	5	20	70-127	
3,5-Dinitroaniline	2.05	1.71	84	2	20	71-117	
3-Nitrotoluene	2.05	1.53	75	7	20	73-125	
4-Amino-2,6-dinitrotoluene	2.05	1.64	80	0	20	76-125	
4-Nitrotoluene	2.05	1.61	79	6	20	71-127	
DNX	2.05	1.87	91	1	20	66-119	M
HMX	2.05	1.62	79	2	20	65-135	M
MNX	2.39	2.15	90	6	20	57-132	M
Nitrobenzene	2.05	1.79	87	2	20	65-134	
Nitroglycerin	20.5	19.1	93	4	20	74-127	
PETN	20.5	20.8	101	1	20	73-127	
RDX	2.05	1.73	84	0	20	68-130	M
Tetryl	2.05	1.99	97	1	20	64-128	
TNX	2.05	1.82	89	0	20	50-150	M

Column to be used to flag recovery and RPD values

FORM III 8330B

FORM III
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05130041.D

Lab ID: 280-175997-6 MSD Client ID: LL1mw-087-230401-GW MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
2,4-diamino-6-nitrotoluene	2.10	1.21	58	16	20	68-122	M J1
2,6-diamino-4-nitrotoluene	2.10	1.42	68	18	20	72-122	M J1

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.: 280-175997-1

SDG No.:

Lab Sample ID: MB 280-611915/1-A

Matrix: Water Date Extracted: 05/10/2023 13:48

Lab File ID:(1) 05130025.D Lab File ID:(2)

Date Analyzed:(1) 05/13/2023 20:05 Date Analyzed:(2)

Instrument ID:(1) CHHPLC_X3 Instrument ID:(2) CHHPLC_X5

GC Column:(1) UltraCarb5uO ID: 4.6(mm) GC Column:(2) Luna-phenylh ID: 4.6(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 280-611915/2-A	05/13/2023 20:28	
	LCSD 280-611915/3-A	05/13/2023 20:51	
	LCS 280-611915/4-A	05/13/2023 21:14	
	LCSD 280-611915/5-A	05/13/2023 21:37	
LL1mw-080-230401-GW	280-175997-1	05/13/2023 22:00	05/17/2023 08:53
LL1mw-081-230401-GW	280-175997-2	05/13/2023 22:23	05/17/2023 09:28
LL1mw-083-230401-GW	280-175997-3	05/13/2023 22:46	05/17/2023 10:03
LL1mw-084-230401-GW	280-175997-4	05/13/2023 23:54	05/17/2023 10:38
LL1mw-084-230402-GW	280-175997-5	05/14/2023 00:17	
LL1mw-087-230401-GW	280-175997-6	05/14/2023 00:40	
LL1mw-087-230401-GW MS	280-175997-6 MS	05/14/2023 01:03	
LL1mw-087-230401-GW MSD	280-175997-6 MSD	05/14/2023 01:26	
LL1mw-087-230401-GW MS	280-175997-6 MS	05/14/2023 01:49	
LL1mw-087-230401-GW MSD	280-175997-6 MSD	05/14/2023 02:12	
LL1mw-087-230402-GW	280-175997-7	05/14/2023 02:35	

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Client Sample ID: LL1mw-080-230401-GW Lab Sample ID: 280-175997-1

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 05/13/2023 22:00 Date Analyzed (2): 05/17/2023 08:53

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	
HMX	1		6.55	6.40	6.70	1.6		0.2
	2		6.08	5.93	6.23	1.6		
MNX	1		7.18	7.04	7.34	0.55		88.1
	2		6.92	6.77	7.07	0.21		
RDX	1		7.58	7.42	7.72	12		1.4
	2		8.22	8.07	8.37	13		
3,5-Dinitroaniline	1		9.88	9.74	10.04	0.29		12.6
	2		13.30	13.13	13.43	0.33		
2,4,6-Trinitrotoluene	1		10.90	10.81	11.01	0.088		6.1
	2		21.68	21.51	21.81	0.094		
4-Amino-2,6-dinitrotoluene	1		11.10	11.01	11.21	2.1		29.6
	2		15.27	15.10	15.40	2.8		
2-Amino-4,6-dinitrotoluene	1		11.36	11.27	11.47	0.84		10.1
	2		16.09	15.93	16.23	0.93		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Client Sample ID: LL1mw-081-230401-GW Lab Sample ID: 280-175997-2

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 05/13/2023 22:23 Date Analyzed (2): 05/17/2023 09:28

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	7.42	7.72	1.2		17.0
	2		8.20	8.07	8.37	1.0		
2-Amino-4,6-dinitrotoluene	1		11.36	11.27	11.47	0.30		82.0
	2		16.11	15.93	16.23	0.72		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Client Sample ID: LL1mw-083-230401-GW Lab Sample ID: 280-175997-3

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 05/13/2023 22:46 Date Analyzed (2): 05/17/2023 10:03

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		7.57	7.42	7.72	0.25		16.7
	2		8.19	8.07	8.37	0.29		
1,3,5-Trinitrobenzene	1		8.64	8.50	8.80	4.1		8.0
	2		16.36	16.23	16.53	4.4		
1,3-Dinitrobenzene	1		9.26	9.12	9.42	1.1		139.7
	2		13.60	13.46	13.76	0.19		
3,5-Dinitroaniline	1		9.88	9.74	10.04	2.7		2.7
	2		13.26	13.13	13.43	2.8		
2,4,6-Trinitrotoluene	1		10.90	10.81	11.01	1.8		5.9
	2		21.62	21.51	21.81	1.7		
4-Amino-2,6-dinitrotoluene	1		11.10	11.01	11.21	13		11.8
	2		15.22	15.10	15.40	15		
2-Amino-4,6-dinitrotoluene	1		11.35	11.27	11.47	8.7		7.1
	2		16.05	15.93	16.23	8.1		
2,4-Dinitrotoluene	1		11.67	11.59	11.79	2.9		4.0
	2		17.78	17.66	17.96	2.8		
2-Nitrotoluene	1		12.54	12.36	12.66	0.13		11.0
	2		14.49	14.37	14.67	0.12		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Client Sample ID: LL1mw-084-230401-GW Lab Sample ID: 280-175997-4

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 05/13/2023 23:54 Date Analyzed (2): 05/17/2023 10:38

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	
1,3,5-Trinitrobenzene	1		8.65	8.50	8.80	0.82		30.3
	2		16.46	16.23	16.53	1.1		
1,3-Dinitrobenzene	1		9.25	9.12	9.42	1.4		160.7
	2		13.70	13.46	13.76	0.16		
3,5-Dinitroaniline	1		9.89	9.74	10.04	0.99		11.4
	2		13.38	13.13	13.43	1.1		
2,4,6-Trinitrotoluene	1		10.90	10.81	11.01	2.1		9.0
	2		21.76	21.51	21.81	1.9		
4-Amino-2,6-dinitrotoluene	1		11.10	11.01	11.21	16		13.2
	2		15.35	15.10	15.40	18		
2-Amino-4,6-dinitrotoluene	1		11.35	11.27	11.47	6.2		12.5
	2		16.17	15.93	16.23	5.5		

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-175997-1

SDG No.:

Client Sample ID: LL1mw-080-230401-GW | Lab Sample ID: 280-175997-1

Matrix: Water | Lab File ID: 05130030.D

Analysis Method: 8330B | Date Collected: 05/03/2023 09:20

Extraction Method: 3535 | Date Extracted: 05/10/2023 13:48

Sample wt/vol: 468(mL) | Date Analyzed: 05/13/2023 22:00

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 612396 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U M	0.22	0.21	0.090
118-96-7	2,4,6-Trinitrotoluene	0.088	J	0.12	0.11	0.048
6629-29-4	2,4-diamino-6-nitrotoluene	0.96	U	1.1	0.96	0.46
121-14-2	2,4-Dinitrotoluene	0.085	U	0.11	0.085	0.029
59229-75-3	2,6-diamino-4-nitrotoluene	0.96	U M	1.1	0.96	0.24
606-20-2	2,6-Dinitrotoluene	0.085	U	0.11	0.085	0.043
35572-78-2	2-Amino-4,6-dinitrotoluene	0.84		0.12	0.11	0.054
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.091
618-87-1	3,5-Dinitroaniline	0.29	J	0.43	0.32	0.14
99-08-1	3-Nitrotoluene	0.37	U	0.43	0.37	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	2.1		0.16	0.13	0.062
99-99-0	4-Nitrotoluene	0.43	U M	0.44	0.43	0.11
80251-29-2	DNX	0.27	U	0.53	0.27	0.10
2691-41-0	HMX	1.6	M	0.22	0.21	0.094
5755-27-1	MNX	0.55	J1	0.53	0.31	0.099
98-95-3	Nitrobenzene	0.21	U M	0.22	0.21	0.097
55-63-0	Nitroglycerin	2.1	U	2.2	2.1	0.98
78-11-5	PETN	1.1	U	1.2	1.1	0.48
121-82-4	RDX	12	M	0.22	0.21	0.055
479-45-8	Tetryl	0.11	U	0.12	0.11	0.034
13980-04-6	TNX	0.27	U	0.53	0.27	0.085

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	96	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130030.D
Lims ID: 280-175997-A-1-A
Client ID: LL1mw-080-230401-GW
Sample Type: Client
Inject. Date: 13-May-2023 22:00:09 ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-175997-A-1-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:13 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: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 08:02:36

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	2 2,6-diamino-4-nitrotoluene	1		6.426			ND	U
	3 TNX	1		6.427			ND	
	4 HMX	1	6.551	6.547	0.004	14065	0.1504	M
	5 2,4-diamino-6-nitrotoluene	1		6.620			ND	
	6 DNX	1		6.754			ND	
	7 MNX	1	7.184	7.187	-0.003	6720	0.0512	
	8 RDX	1	7.578	7.574	0.004	123998	1.17	M
$	10 1,2-Dinitrobenzene	1	8.524	8.521	0.003	24265	0.1921	M
	11 1,3,5-Trinitrobenzene	1		8.647			ND	U
	12 1,3-Dinitrobenzene	1	9.257	9.274	-0.017	2075	0.007048	M
	13 Nitrobenzene	1		9.647			ND	U
	14 3,5-Dinitroaniline	1	9.877	9.887	-0.010	6015	0.0269	
	15 Tetryl	1		10.014			ND	
	16 Nitroglycerin	2		10.467			ND	
	17 2,4,6-Trinitrotoluene	1	10.904	10.914	-0.010	1737	0.008231	
	18 4-Amino-2,6-dinitrotoluene	1	11.104	11.114	-0.010	30314	0.1957	
	19 2-Amino-4,6-dinitrotoluene	1	11.357	11.367	-0.010	15767	0.0783	
	20 2,6-Dinitrotoluene	1		11.514			ND	
	21 2,4-Dinitrotoluene	1		11.687			ND	7
	22 o-Nitrotoluene	1		12.514			ND	
	23 p-Nitrotoluene	1		12.940			ND	U
	24 m-Nitrotoluene	1		13.514			ND	
	25 PETN	2		14.694			ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Review Flags
M - Manually Integrated
U - Marked Undetected

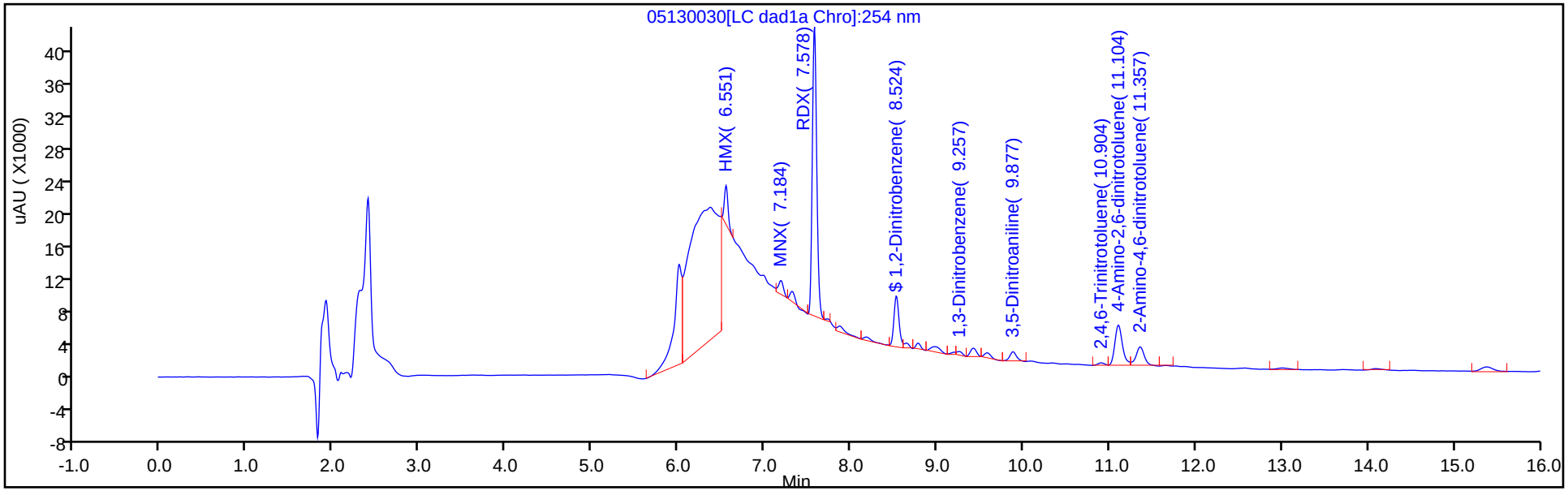
Report Date: 16-May-2023 12:37:19 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

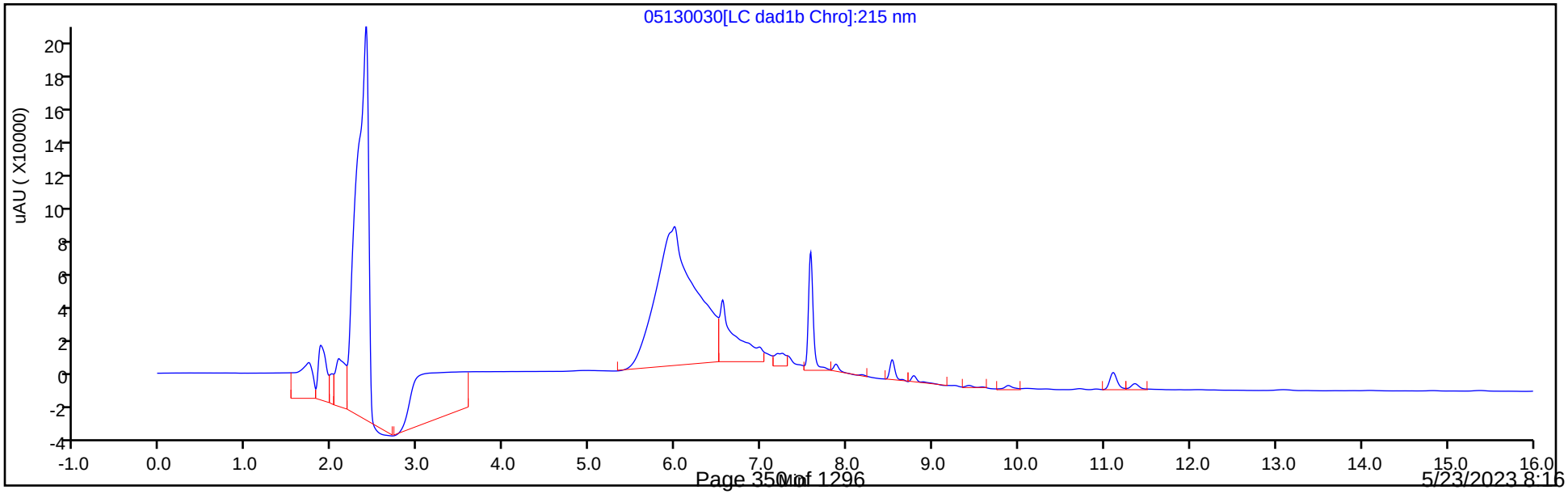
Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130030.d

Injection Date:	13-May-2023 22:00:09	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-175997-A-1-A	Lab Sample ID:	280-175997-1	Worklist Smp#:	30
Client ID:	LL1mw-080-230401-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130030.D				
Lims ID:	280-175997-A-1-A				
Client ID:	LL1mw-080-230401-GW				
Sample Type:	Client				
Inject. Date:	13-May-2023 22:00:09	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-175997-A-1-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-May-2023 12:37:13	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:	CTX1672				

First Level Reviewer: K8YG Date: 15-May-2023 08:02:36

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1921	96.05

Manual Integration/User Assign Peak Report

Eurofins Denver

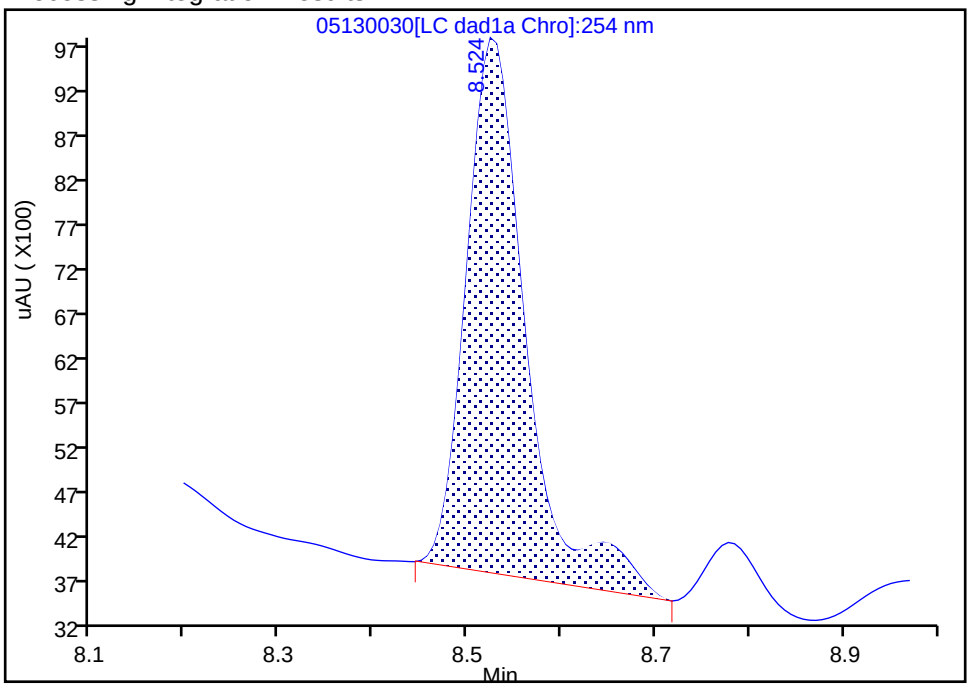
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130030.d				
Injection Date:	13-May-2023 22:00:09	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-A-1-A	Lab Sample ID:	280-175997-1		
Client ID:	LL1mw-080-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

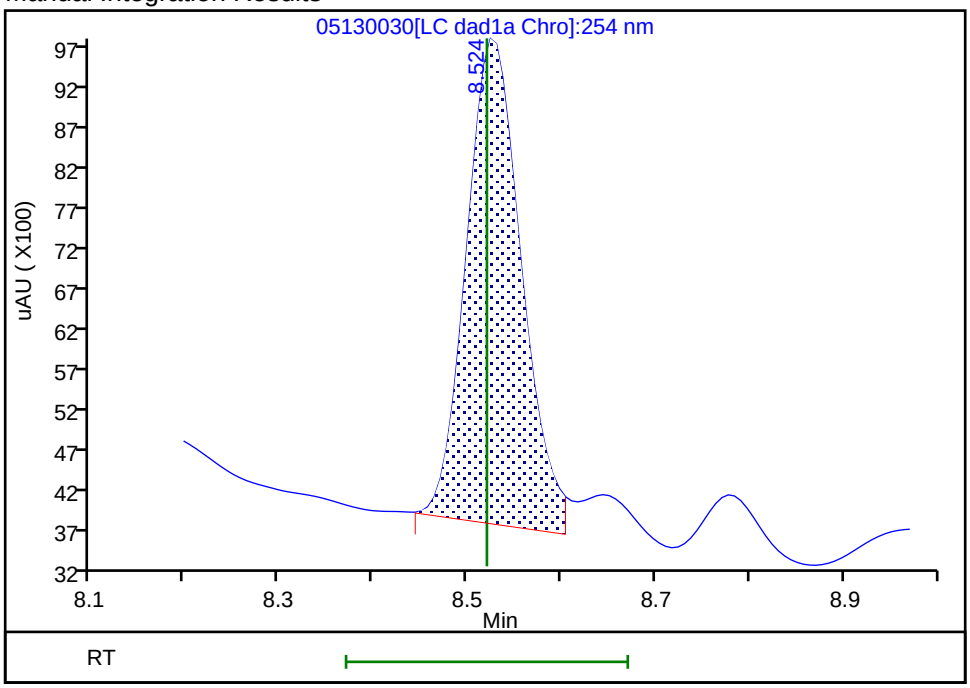
Processing Integration Results

RT: 8.52
Area: 26522
Amount: 0.209978
Amount Units: ug/mL



Manual Integration Results

RT: 8.52
Area: 24265
Amount: 0.192109
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 08:01:58

Audit Action: Split an Integrated Peak Audit Reason: Baseline

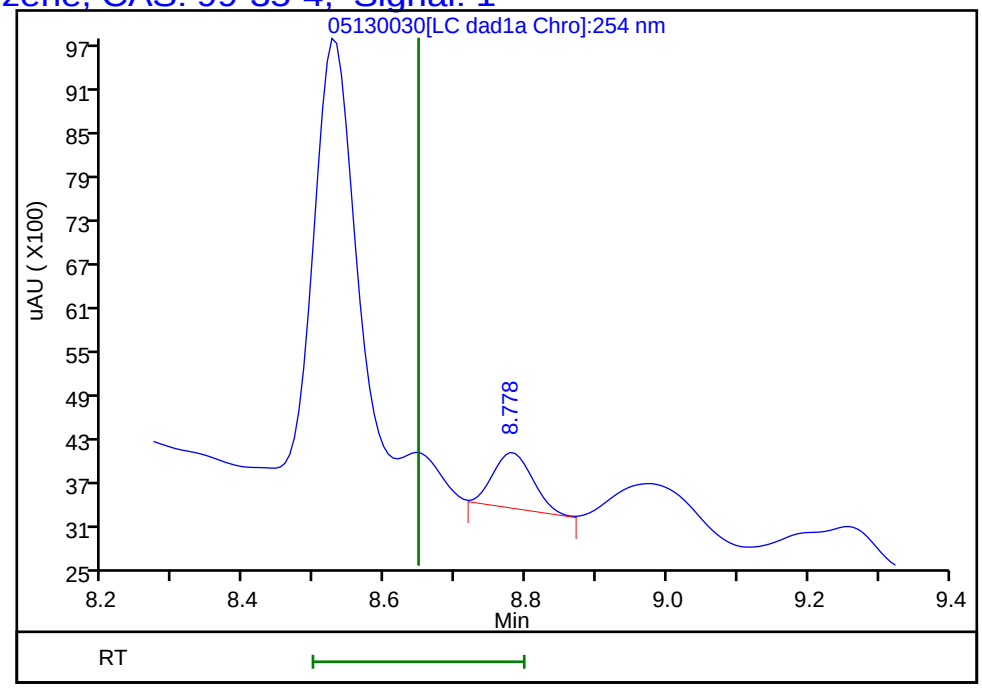
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130030.d				
Injection Date:	13-May-2023 22:00:09	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-A-1-A	Lab Sample ID:	280-175997-1		
Client ID:	LL1mw-080-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3,5-Trinitrobenzene, CAS: 99-35-4, Signal: 1

RT: 8.78
Response: 2847
Amount: 0.013111



Reviewer: LV5D, 16-May-2023 12:25:50
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins Denver

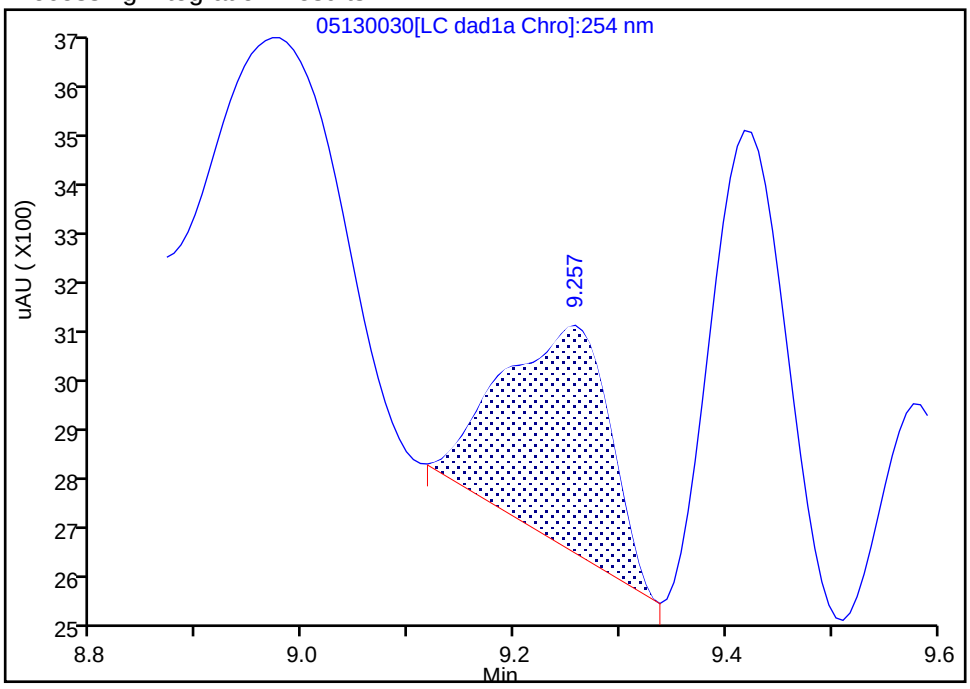
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Injection Date:	13-May-2023 22:00:09	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-A-1-A	Lab Sample ID:	280-175997-1		
Client ID:	LL1mw-080-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

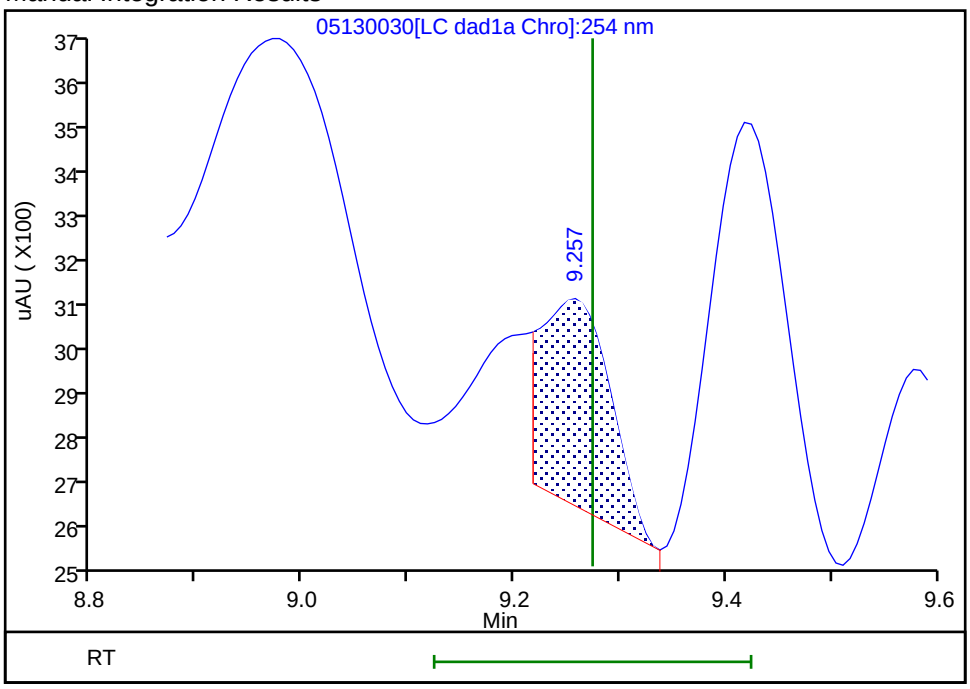
Processing Integration Results

RT: 9.26
Area: 3127
Amount: 0.010622
Amount Units: ug/mL



Manual Integration Results

RT: 9.26
Area: 2075
Amount: 0.007048
Amount Units: ug/mL



Reviewer: LV5D, 16-May-2023 12:17:55
Audit Action: Split an Integrated Peak Audit Reason: Baseline

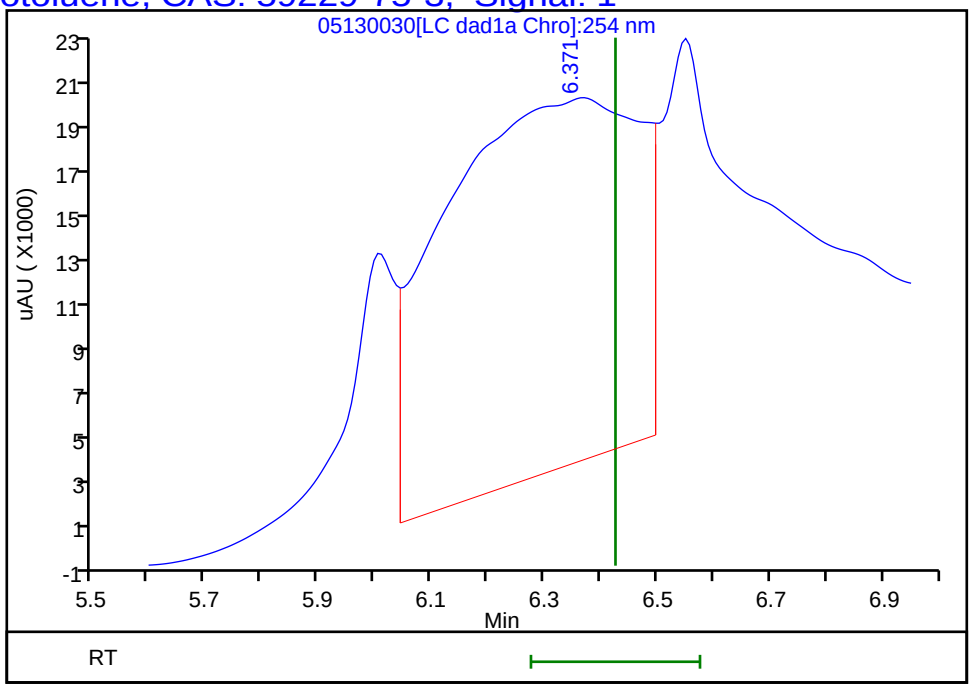
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130030.d				
Injection Date:	13-May-2023 22:00:09	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-A-1-A	Lab Sample ID:	280-175997-1		
Client ID:	LL1mw-080-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3, Signal: 1

RT: 6.37
Response: 394793
Amount: 1.715023



Reviewer: K8YG, 15-May-2023 08:02:36
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

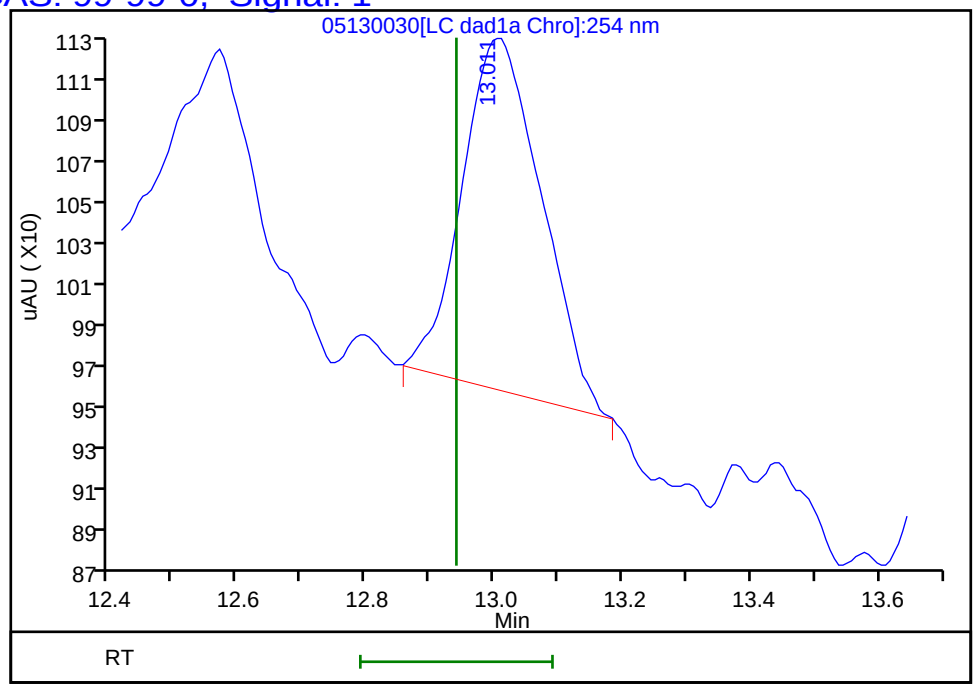
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130030.d				
Injection Date:	13-May-2023 22:00:09	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-A-1-A	Lab Sample ID:	280-175997-1		
Client ID:	LL1mw-080-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.01
Response: 1417
Amount: 0.012665



Reviewer: K8YG, 15-May-2023 08:02:36
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

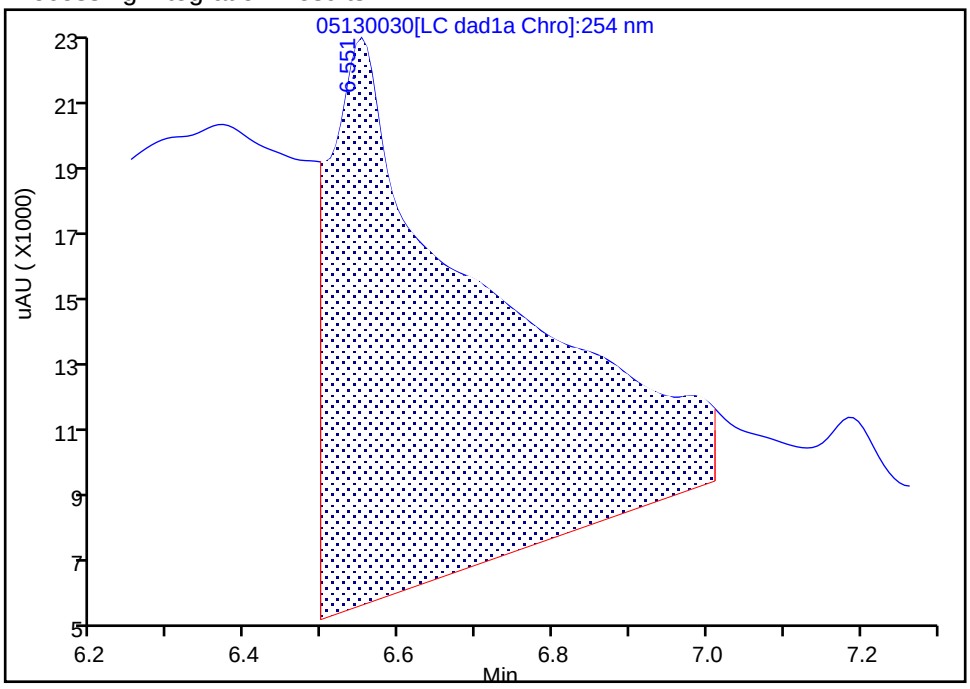
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130030.d				
Injection Date:	13-May-2023 22:00:09	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-A-1-A	Lab Sample ID:	280-175997-1		
Client ID:	LL1mw-080-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

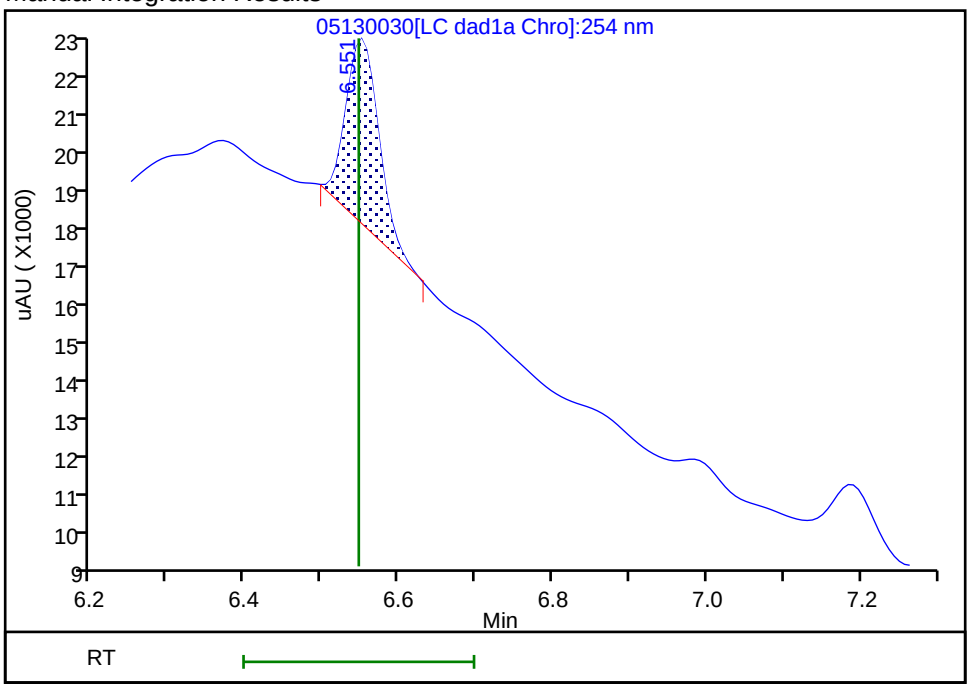
Processing Integration Results

RT: 6.55
Area: 243298
Amount: 2.601334
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 14065
Amount: 0.150383
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 08:01:18
Audit Action: Manually Integrated Audit Reason: Baseline

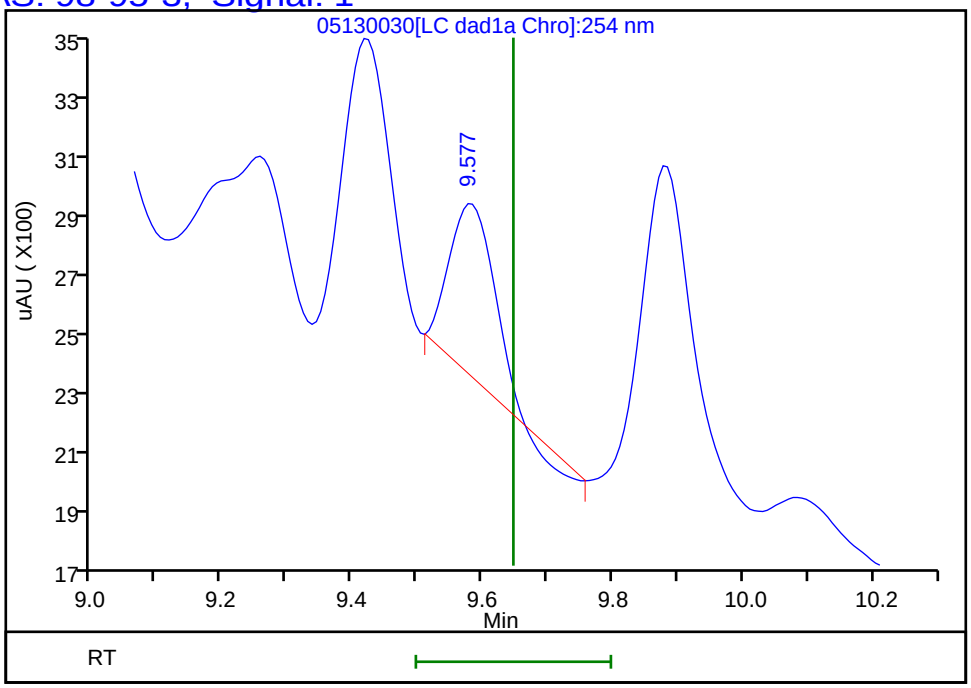
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130030.d				
Injection Date:	13-May-2023 22:00:09	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-A-1-A	Lab Sample ID:	280-175997-1		
Client ID:	LL1mw-080-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

13 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 9.58
Response: 3109
Amount: 0.016257



Reviewer: K8YG, 15-May-2023 08:02:36
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

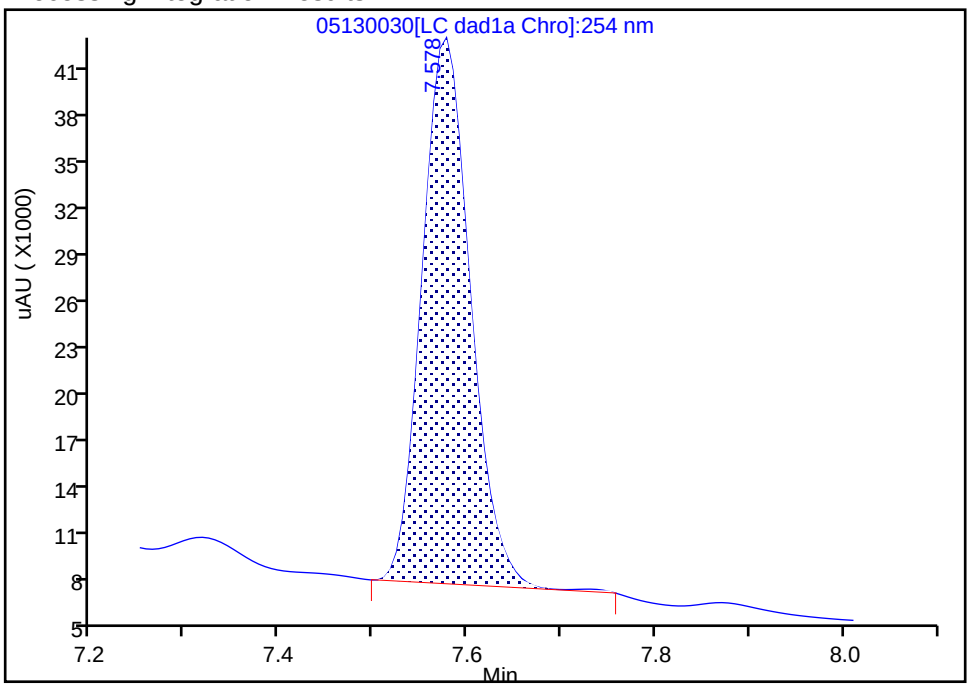
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130030.d				
Injection Date:	13-May-2023 22:00:09	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-A-1-A	Lab Sample ID:	280-175997-1		
Client ID:	LL1mw-080-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

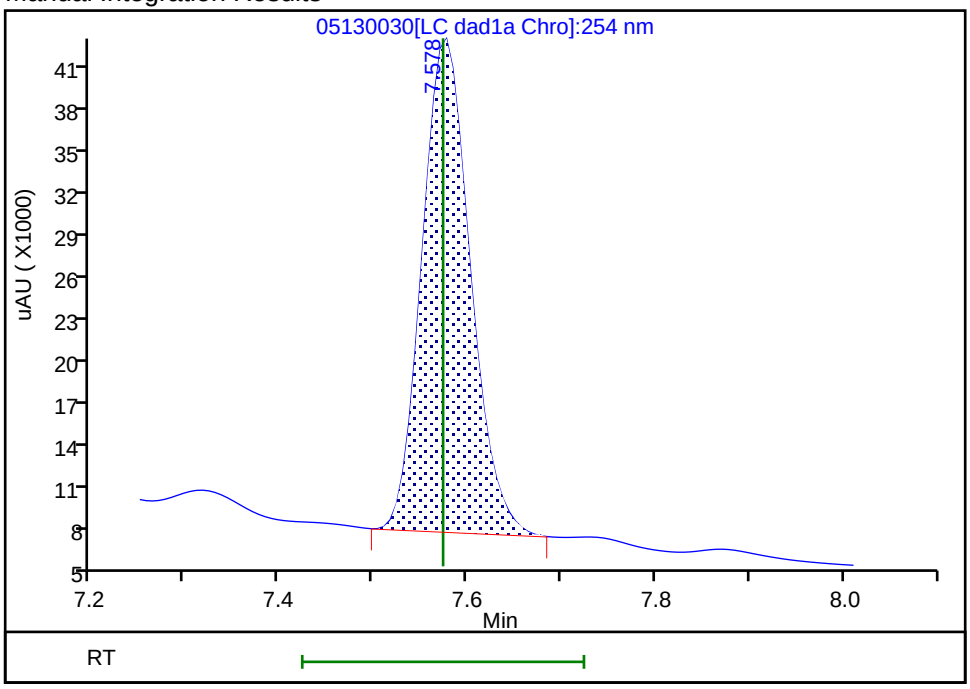
Processing Integration Results

RT: 7.58
Area: 124436
Amount: 1.169733
Amount Units: ug/mL



Manual Integration Results

RT: 7.58
Area: 123998
Amount: 1.165616
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 08:01:39

Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-175997-1

SDG No.:

Client Sample ID: LL1mw-080-230401-GW | Lab Sample ID: 280-175997-1

Matrix: Water | Lab File ID: 05160025.D

Analysis Method: 8330B | Date Collected: 05/03/2023 09:20

Extraction Method: 3535 | Date Extracted: 05/10/2023 13:48

Sample wt/vol: 468(mL) | Date Analyzed: 05/17/2023 08:53

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.: 612692 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039
5755-27-1	*MNX*	*0.21*	*J J1*	*0.53*	0.31	*0.099*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	96		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160025.D
Lims ID: 280-175997-A-1-A
Client ID: LL1mw-080-230401-GW
Sample Type: Client
Inject. Date: 17-May-2023 08:53:56 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-175997-A-1-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 17-May-2023 16:34:14 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1653

First Level Reviewer: LV5D Date: 17-May-2023 11:27:15

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1	3.875	3.896	-0.021	5758	0.0143	7M
	2 2,4-diamino-6-nitrotoluene	1		4.342			ND	
	3 TNX	1		4.822			ND	
	4 DNX	1		5.549			ND	
	5 HMX	1	6.075	6.082	-0.007	28759	0.1506	
	6 MNX	1	6.915	6.922	-0.007	5221	0.0199	
	8 RDX	1	8.215	8.222	-0.007	255514	1.18	
	9 Nitrobenzene	1		10.602			ND	
$	10 1,2-Dinitrobenzene	1	11.448	11.435	0.013	53744	0.1915	
	11 3,5-Dinitroaniline	1	13.295	13.275	0.020	14178	0.0305	
	12 1,3-Dinitrobenzene	1		13.609			ND	
	13 Nitroglycerin	2		13.982			ND	
	14 o-Nitrotoluene	1		14.522			ND	7
	16 p-Nitrotoluene	1		14.749			ND	
	17 4-Amino-2,6-dinitrotoluene	1	15.268	15.249	0.019	77566	0.2636	
	18 m-Nitrotoluene	1		15.582			ND	
	19 2-Amino-4,6-dinitrotoluene	1	16.088	16.075	0.013	37072	0.0866	
	20 1,3,5-Trinitrobenzene	1		16.375			ND	
	21 2,6-Dinitrotoluene	1		17.342			ND	
	22 2,4-Dinitrotoluene	1		17.809			ND	
	23 Tetryl	1		20.816			ND	
	24 2,4,6-Trinitrotoluene	1	21.681	21.662	0.019	3841	0.008752	
	25 PETN	2		22.669			ND	7

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated

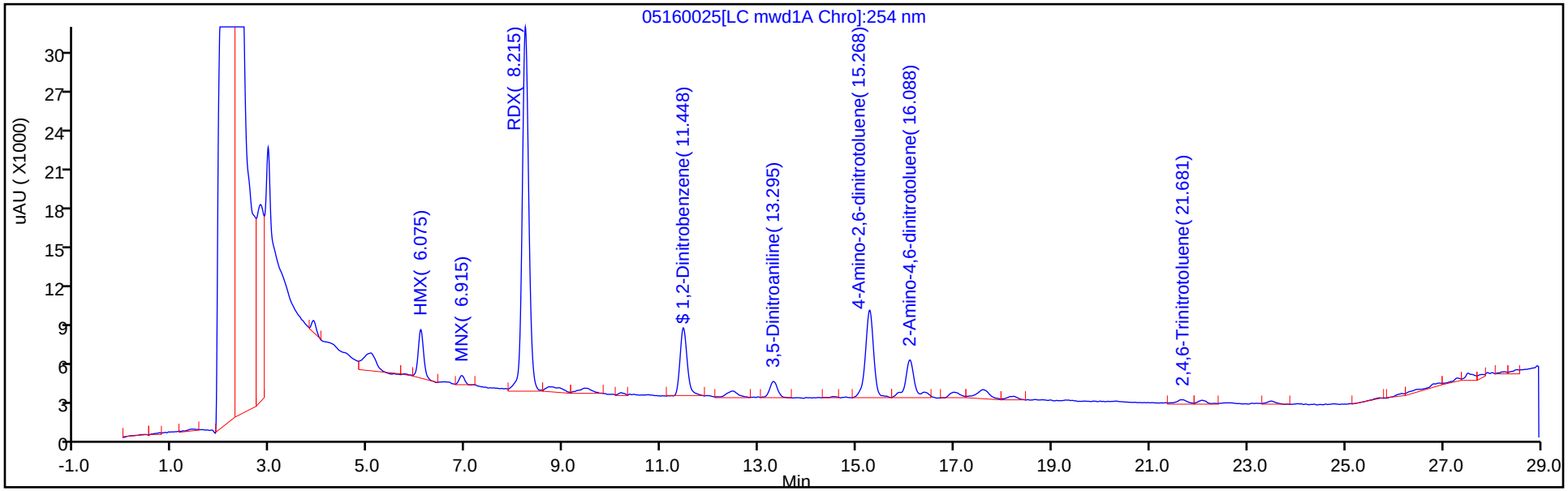
Report Date: 17-May-2023 16:34:19 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

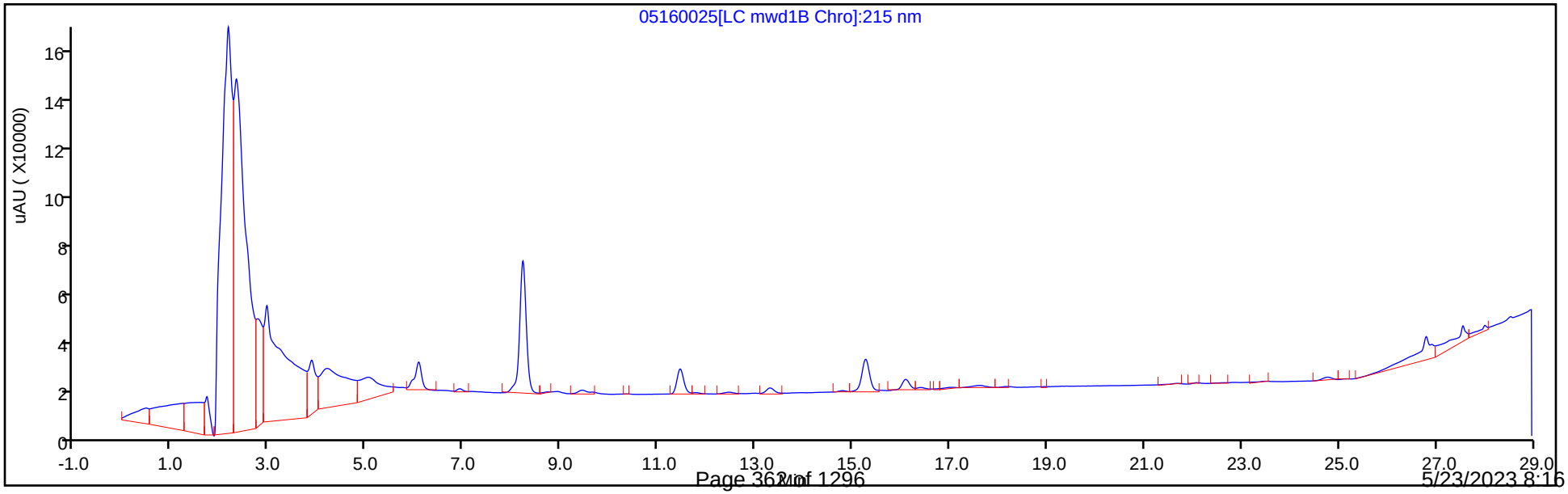
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160025.D

Injection Date:	17-May-2023 08:53:56	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	280-175997-A-1-A	Lab Sample ID:	280-175997-1	Worklist Smp#:	25
Client ID:	LL1mw-080-230401-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160025.D				
Lims ID:	280-175997-A-1-A				
Client ID:	LL1mw-080-230401-GW				
Sample Type:	Client				
Inject. Date:	17-May-2023 08:53:56	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-175997-A-1-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	17-May-2023 16:34:14	Calib Date:	29-Apr-2023 04:18:01		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1653				
First Level Reviewer: LV5D		Date:	17-May-2023 11:27:15		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1915	95.73

Manual Integration/User Assign Peak Report

Eurofins Denver

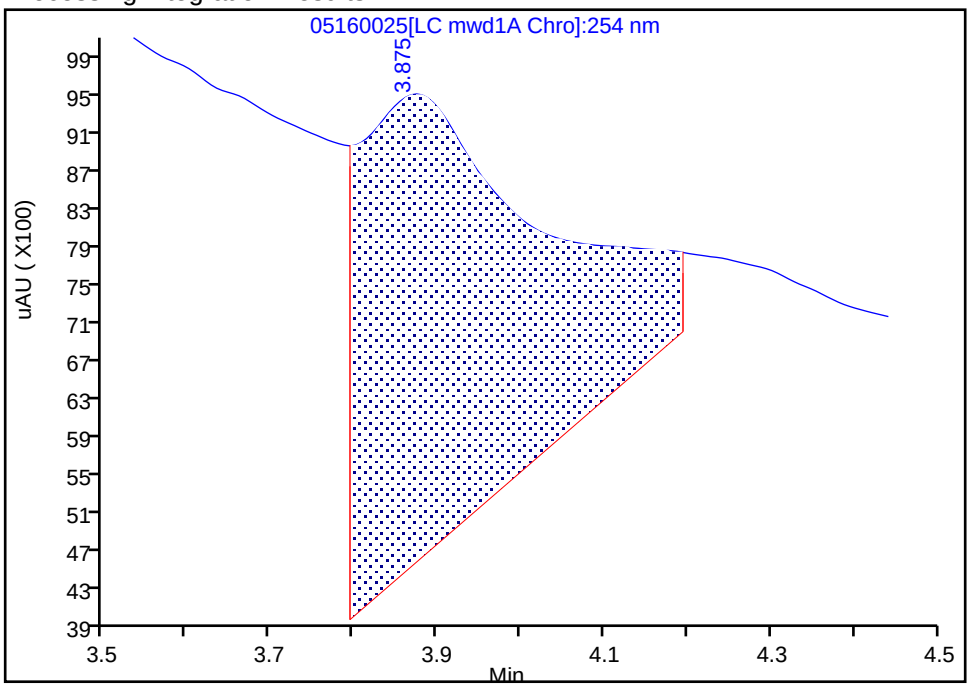
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160025.D				
Injection Date:	17-May-2023 08:53:56	Instrument ID:	CHHPLC_X5		
Lims ID:	280-175997-A-1-A	Lab Sample ID:	280-175997-1		
Client ID:	LL1mw-080-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

1 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

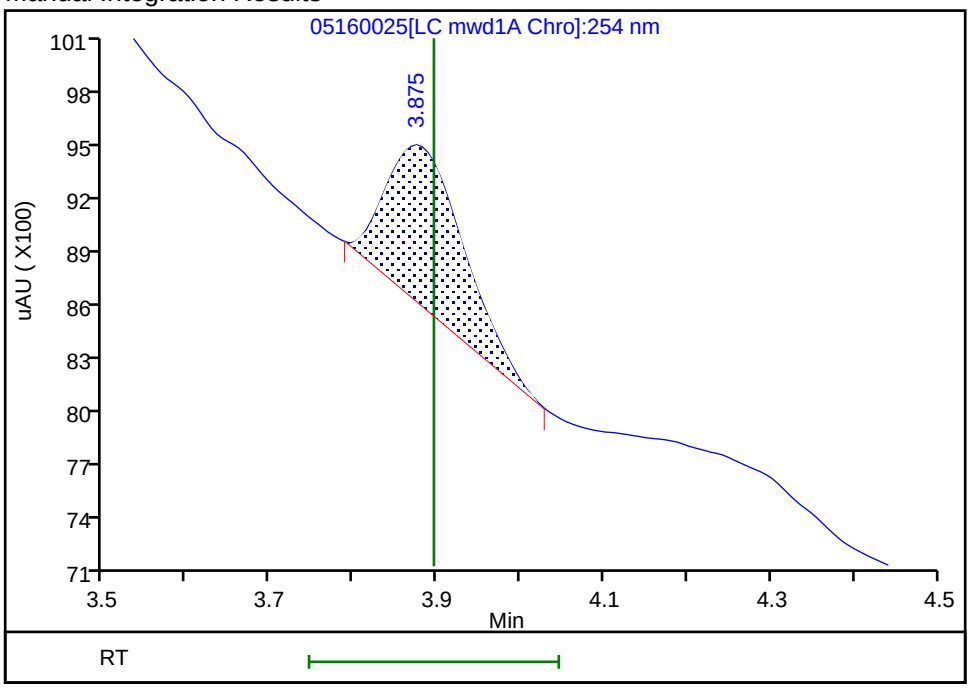
Processing Integration Results

RT: 3.87
Area: 71740
Amount: 0.177882
Amount Units: ug/ml



Manual Integration Results

RT: 3.87
Area: 5758
Amount: 0.014277
Amount Units: ug/ml



Reviewer: LV5D, 17-May-2023 11:27:14 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-175997-1

SDG No.:

Client Sample ID: LL1mw-081-230401-GW | Lab Sample ID: 280-175997-2

Matrix: Water | Lab File ID: 05130031.D

Analysis Method: 8330B | Date Collected: 05/03/2023 11:28

Extraction Method: 3535 | Date Extracted: 05/10/2023 13:48

Sample wt/vol: 469.6(mL) | Date Analyzed: 05/13/2023 22:23

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 612396 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U M	0.22	0.21	0.090
99-65-0	1,3-Dinitrobenzene	0.11	U M	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	0.043
35572-78-2	2-Amino-4,6-dinitrotoluene	0.30	J1	0.12	0.11	0.054
88-72-2	2-Nitrotoluene	0.21	U M	0.22	0.21	0.091
99-08-1	3-Nitrotoluene	0.37	U	0.43	0.37	0.21
99-99-0	4-Nitrotoluene	0.43	U	0.44	0.43	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	0.097
55-63-0	Nitroglycerin	2.1	U	2.2	2.1	0.98
78-11-5	PETN	1.1	U	1.2	1.1	0.48
121-82-4	RDX	1.2		0.22	0.21	0.055
479-45-8	Tetryl	0.11	U M	0.12	0.11	0.034

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	103		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130031.D
Lims ID: 280-175997-A-2-A
Client ID: LL1mw-081-230401-GW
Sample Type: Client
Inject. Date: 13-May-2023 22:23:07 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-175997-A-2-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:13 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: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 08:03:29

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.547			ND	U
8 RDX	1	7.589	7.574	0.015	11853	0.1114	
$ 10 1,2-Dinitrobenzene	1	8.529	8.521	0.008	26120	0.2068	
11 1,3,5-Trinitrobenzene	1		8.647			ND	U
12 1,3-Dinitrobenzene	1		9.274			ND	U
13 Nitrobenzene	1		9.647			ND	
15 Tetryl	1		10.014			ND	U
16 Nitroglycerin	2		10.467			ND	
17 2,4,6-Trinitrotoluene	1		10.914			ND	
18 4-Amino-2,6-dinitrotoluene	1	11.103	11.114	-0.011	6012	0.0388	
19 2-Amino-4,6-dinitrotoluene	1	11.363	11.367	-0.004	5719	0.0284	
20 2,6-Dinitrotoluene	1		11.514			ND	
21 2,4-Dinitrotoluene	1		11.687			ND	
22 o-Nitrotoluene	1		12.514			ND	U
23 p-Nitrotoluene	1		12.940			ND	
24 m-Nitrotoluene	1		13.514			ND	
25 PETN	2		14.694			ND	

QC Flag Legend

Processing Flags
Review Flags
U - Marked Undetected

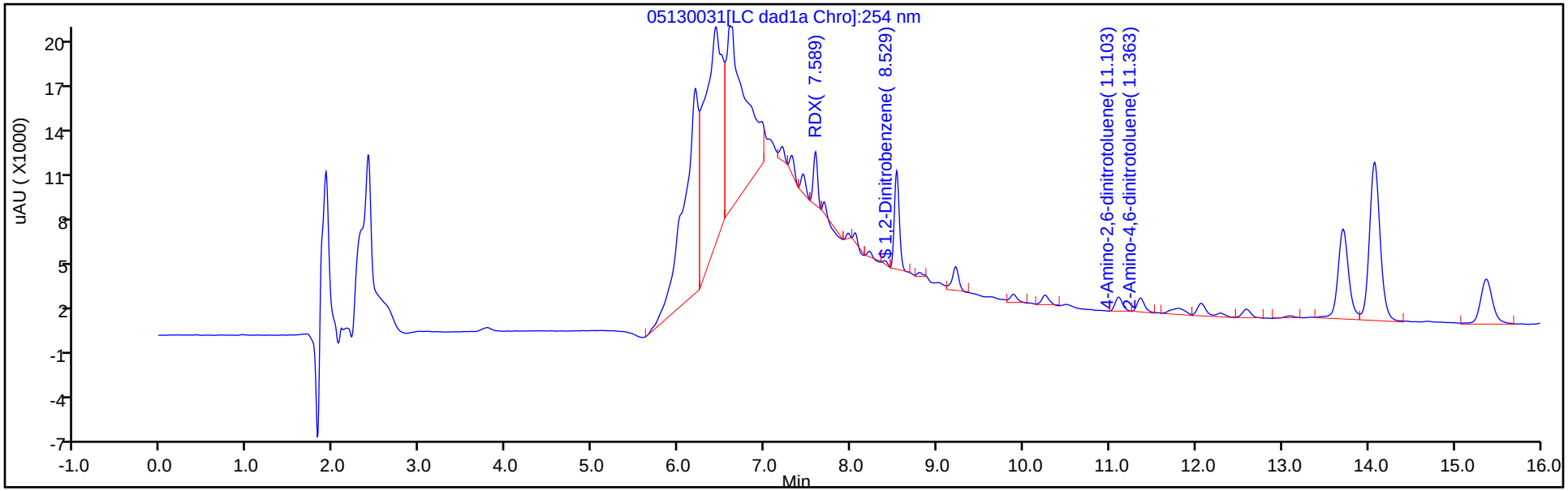
Report Date: 16-May-2023 12:37:19 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

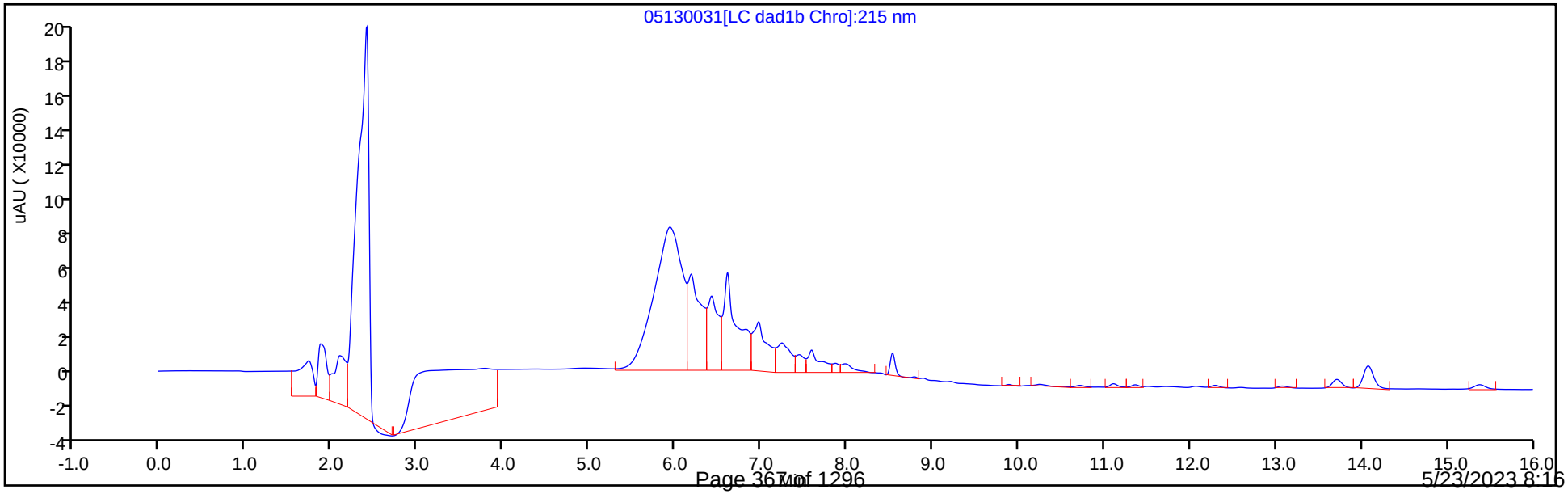
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Injection Date:	13-May-2023 22:23:07	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-175997-A-2-A	Lab Sample ID:	280-175997-2	Worklist Smp#:	31
Client ID:	LL1mw-081-230401-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130031.D				
Lims ID:	280-175997-A-2-A				
Client ID:	LL1mw-081-230401-GW				
Sample Type:	Client				
Inject. Date:	13-May-2023 22:23:07	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-175997-A-2-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-May-2023 12:37:13	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:	CTX1672				

First Level Reviewer: K8YG Date: 15-May-2023 08:03:29

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2068	103.40

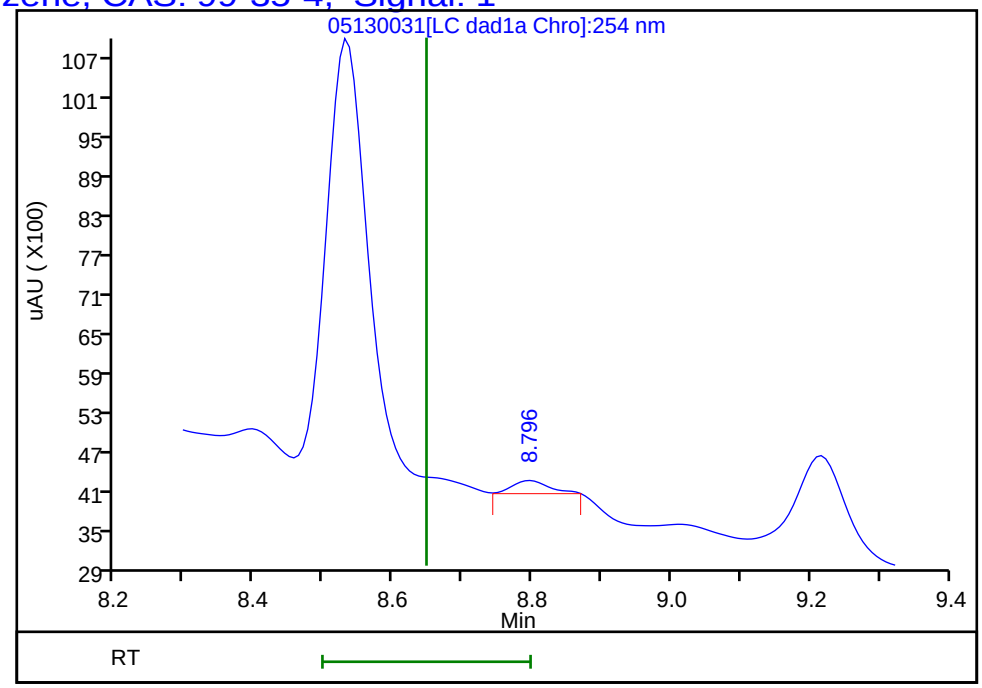
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130031.d				
Injection Date:	13-May-2023 22:23:07	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-A-2-A	Lab Sample ID:	280-175997-2		
Client ID:	LL1mw-081-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3,5-Trinitrobenzene, CAS: 99-35-4, Signal: 1

RT: 8.80
Response: 704
Amount: 0.003242



Reviewer: K8YG, 15-May-2023 08:03:29
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

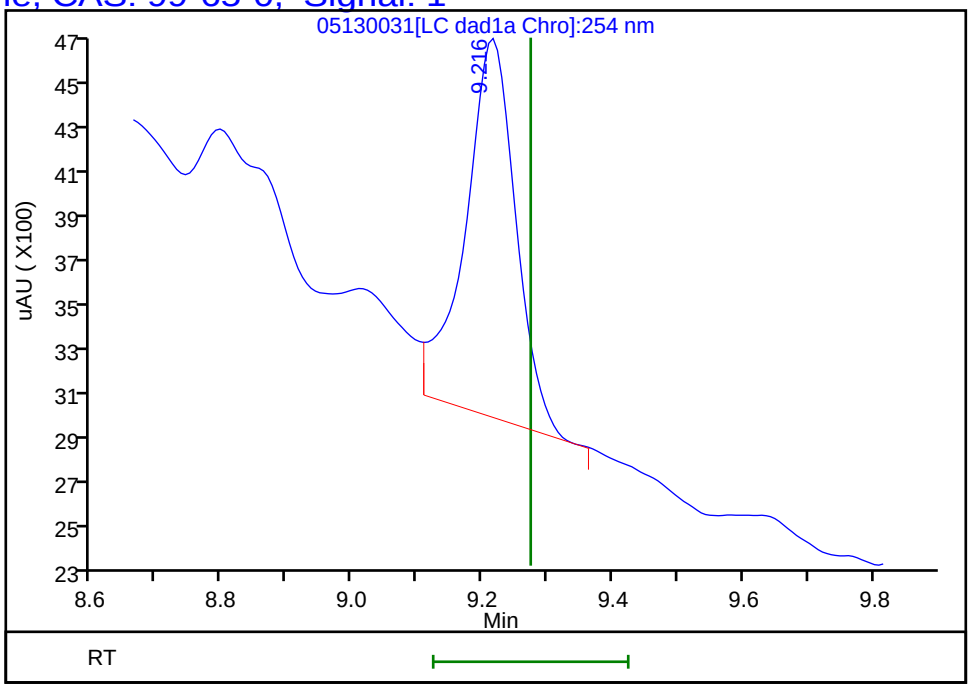
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130031.d				
Injection Date:	13-May-2023 22:23:07	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-A-2-A	Lab Sample ID:	280-175997-2		
Client ID:	LL1mw-081-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.22
Response: 8618
Amount: 0.029273



Reviewer: K8YG, 15-May-2023 08:03:29
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

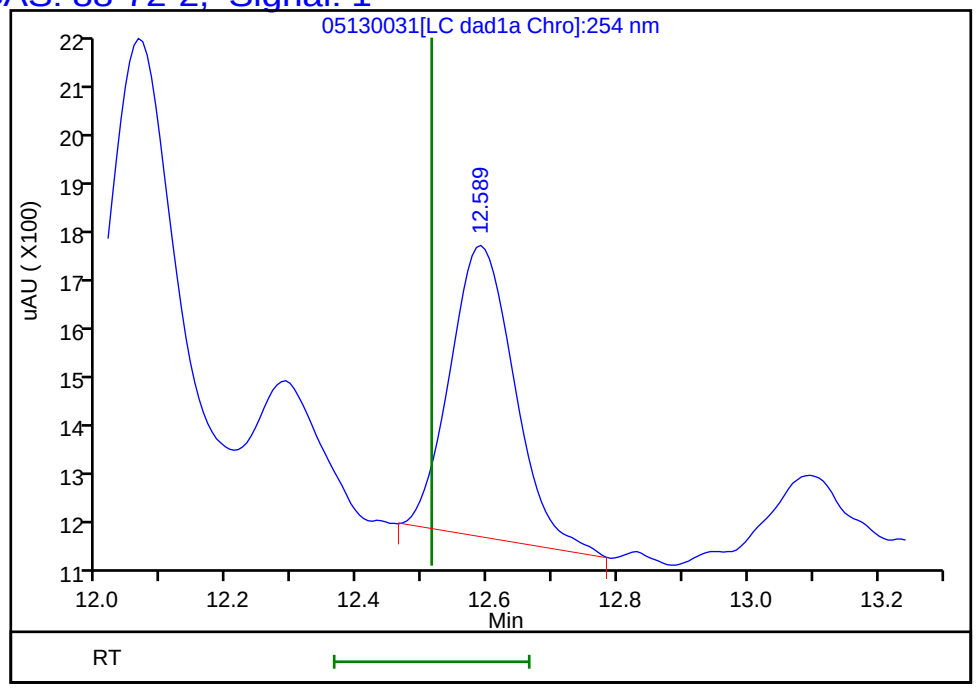
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130031.d				
Injection Date:	13-May-2023 22:23:07	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-A-2-A	Lab Sample ID:	280-175997-2		
Client ID:	LL1mw-081-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 12.59
Response: 3862
Amount: 0.030196



Reviewer: K8YG, 15-May-2023 08:03:29
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

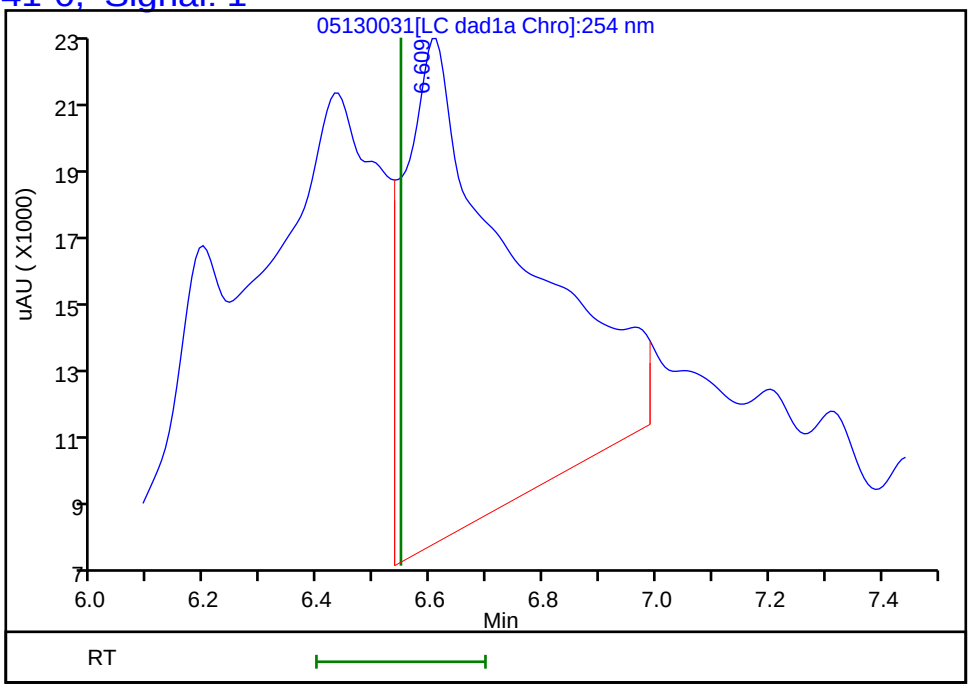
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130031.d
Injection Date: 13-May-2023 22:23:07 Instrument ID: CHHPLC_X3
Lims ID: 280-175997-A-2-A Lab Sample ID: 280-175997-2
Client ID: LL1mw-081-230401-GW
Operator ID: JZ/JG ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

4 HMX, CAS: 2691-41-0, Signal: 1

RT: 6.61
Response: 188252
Amount: 2.012784



Reviewer: K8YG, 15-May-2023 08:03:29
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

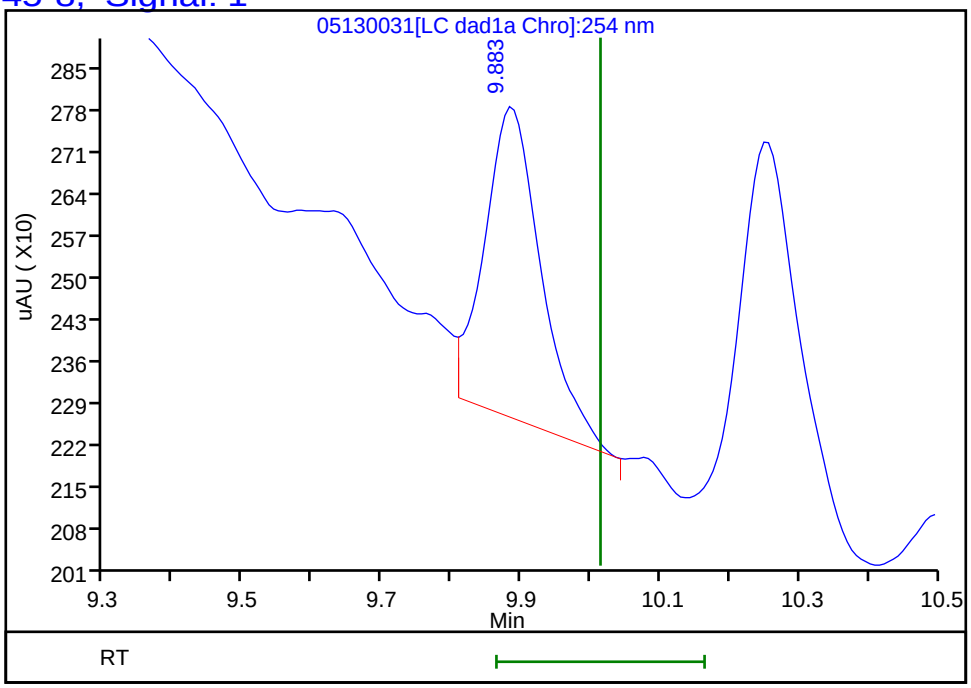
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130031.d				
Injection Date:	13-May-2023 22:23:07	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-A-2-A	Lab Sample ID:	280-175997-2		
Client ID:	LL1mw-081-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 9.88
Response: 2916
Amount: 0.017767



Reviewer: LV5D, 16-May-2023 12:26:05
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-175997-1

SDG No.:

Client Sample ID: LL1mw-081-230401-GW | Lab Sample ID: 280-175997-2

Matrix: Water | Lab File ID: 05160026.D

Analysis Method: 8330B | Date Collected: 05/03/2023 11:28

Extraction Method: 3535 | Date Extracted: 05/10/2023 13:48

Sample wt/vol: 469.6(mL) | Date Analyzed: 05/17/2023 09:28

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.: 612692 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
35572-78-2	*2-Amino-4,6-dinitrotoluene*	*0.72*	*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	87		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160026.D
Lims ID: 280-175997-A-2-A
Client ID: LL1mw-081-230401-GW
Sample Type: Client
Inject. Date: 17-May-2023 09:28:50 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-175997-A-2-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 17-May-2023 16:34:14 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1653

First Level Reviewer: LV5D Date: 17-May-2023 11:28:06

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
5	HMX	1	6.094	6.082	0.012	4419	0.0193	M
8	RDX	1	8.201	8.222	-0.021	20941	0.0940	
9	Nitrobenzene	1		10.602			ND	U
$ 10	1,2-Dinitrobenzene	1	11.480	11.435	0.045	48988	0.1745	
12	1,3-Dinitrobenzene	1		13.609			ND	7
13	Nitroglycerin	2		13.982			ND	U
14	o-Nitrotoluene	1	14.574	14.522	0.052	91505	0.3705	
16	p-Nitrotoluene	1		14.749			ND	
17	4-Amino-2,6-dinitrotoluene	1		15.249			ND	
18	m-Nitrotoluene	1		15.582			ND	
19	2-Amino-4,6-dinitrotoluene	1	16.114	16.075	0.039	29043	0.0679	
20	1,3,5-Trinitrobenzene	1		16.375			ND	
21	2,6-Dinitrotoluene	1	17.340	17.342	-0.002	5922	0.0203	M
22	2,4-Dinitrotoluene	1		17.809			ND	
23	Tetryl	1		20.816			ND	
24	2,4,6-Trinitrotoluene	1		21.662			ND	
25	PETN	2		22.669			ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

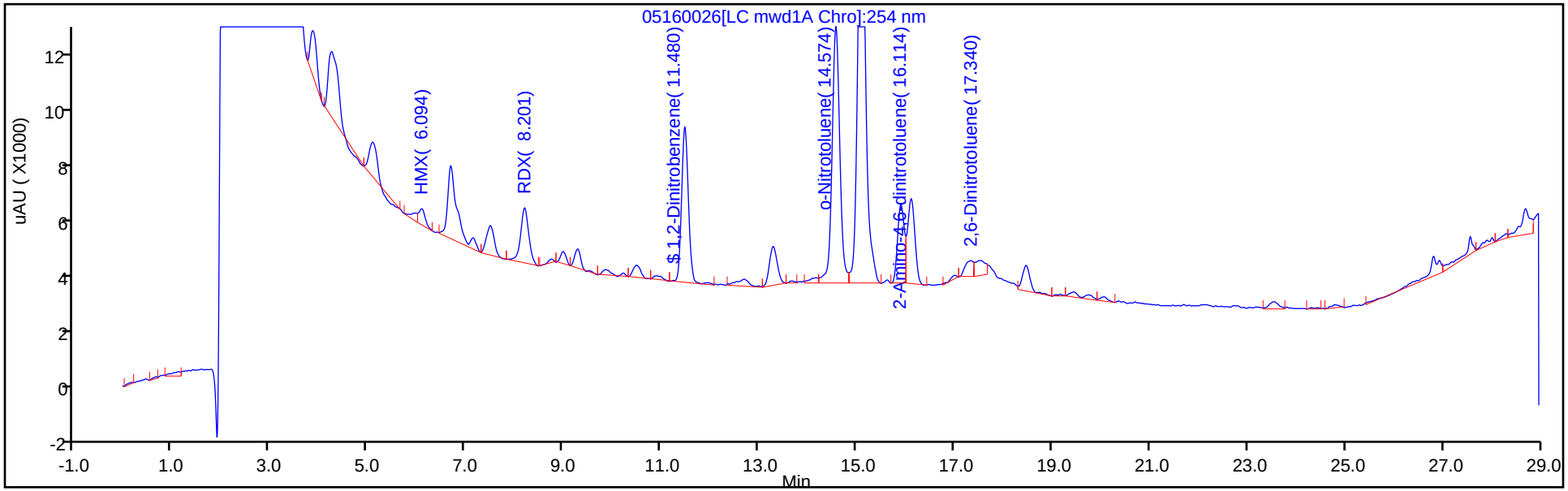
Report Date: 17-May-2023 16:34:20 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

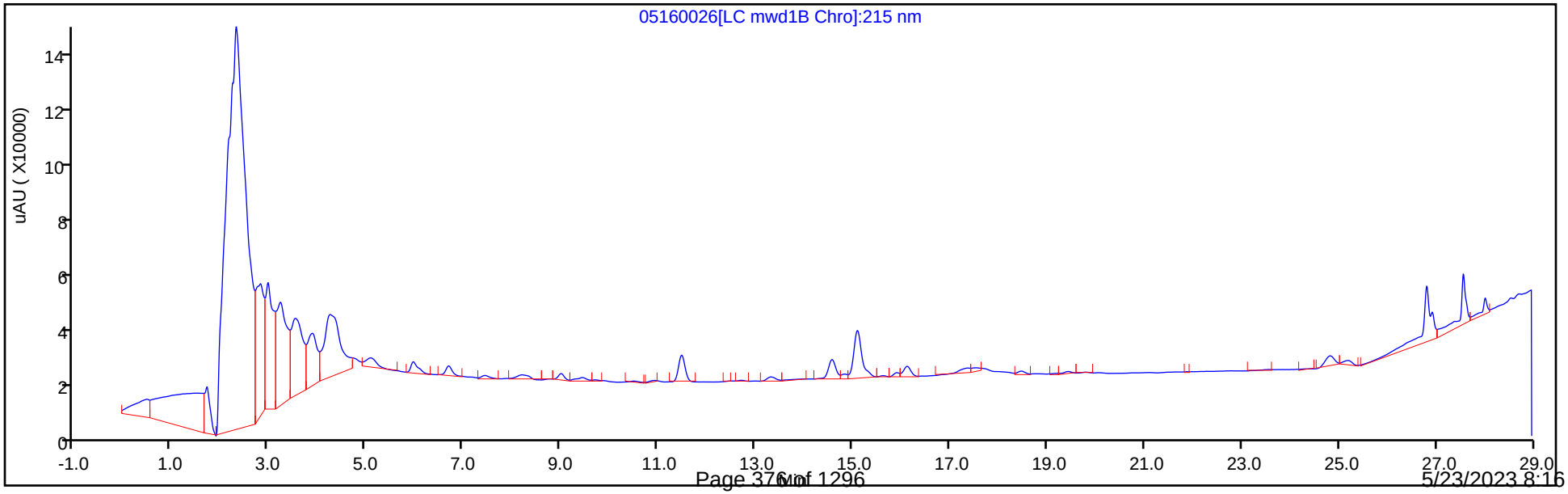
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160026.D

Injection Date:	17-May-2023 09:28:50	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	280-175997-A-2-A	Lab Sample ID:	280-175997-2	Worklist Smp#:	26
Client ID:	LL1mw-081-230401-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160026.D				
Lims ID:	280-175997-A-2-A				
Client ID:	LL1mw-081-230401-GW				
Sample Type:	Client				
Inject. Date:	17-May-2023 09:28:50	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-175997-A-2-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	17-May-2023 16:34:14	Calib Date:	29-Apr-2023 04:18:01		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1653				
First Level Reviewer: LV5D		Date:	17-May-2023 11:28:06		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1745	87.26

Manual Integration/User Assign Peak Report

Eurofins Denver

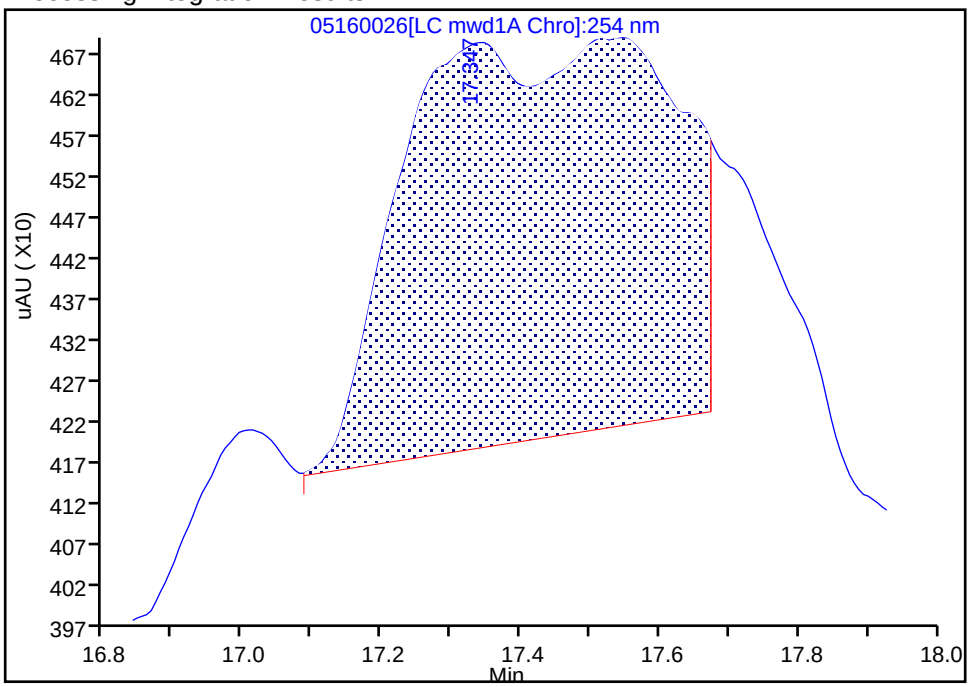
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Injection Date:	17-May-2023 09:28:50	Instrument ID:	CHHPLC_X5		
Lims ID:	280-175997-A-2-A	Lab Sample ID:	280-175997-2		
Client ID:	LL1mw-081-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

21 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

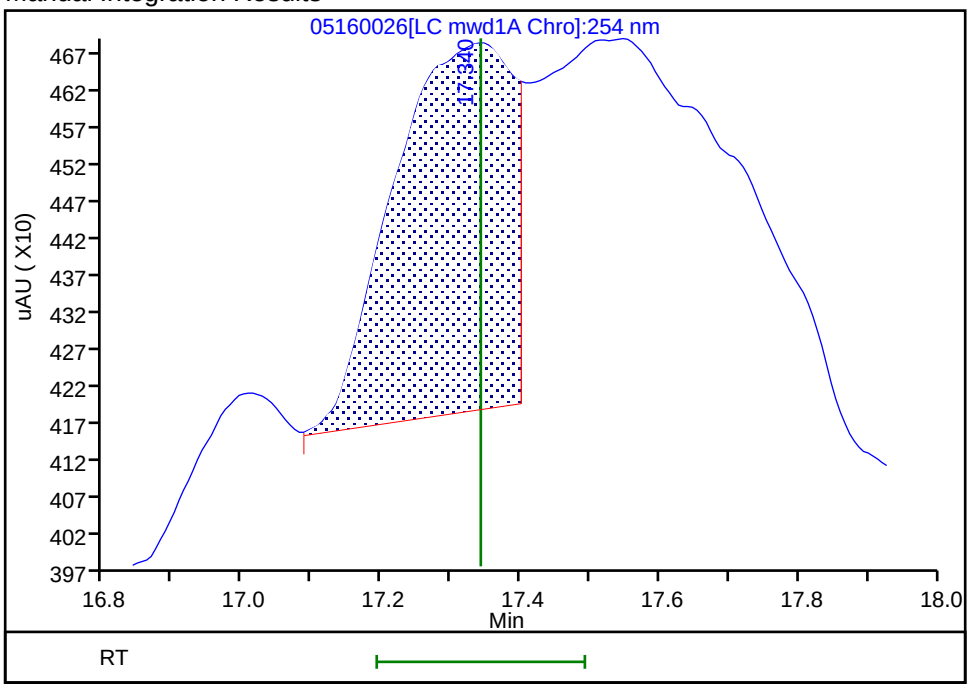
Processing Integration Results

RT: 17.35
Area: 13025
Amount: 0.044656
Amount Units: ug/ml



Manual Integration Results

RT: 17.34
Area: 5922
Amount: 0.020303
Amount Units: ug/ml



Reviewer: LV5D, 17-May-2023 11:28:04 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

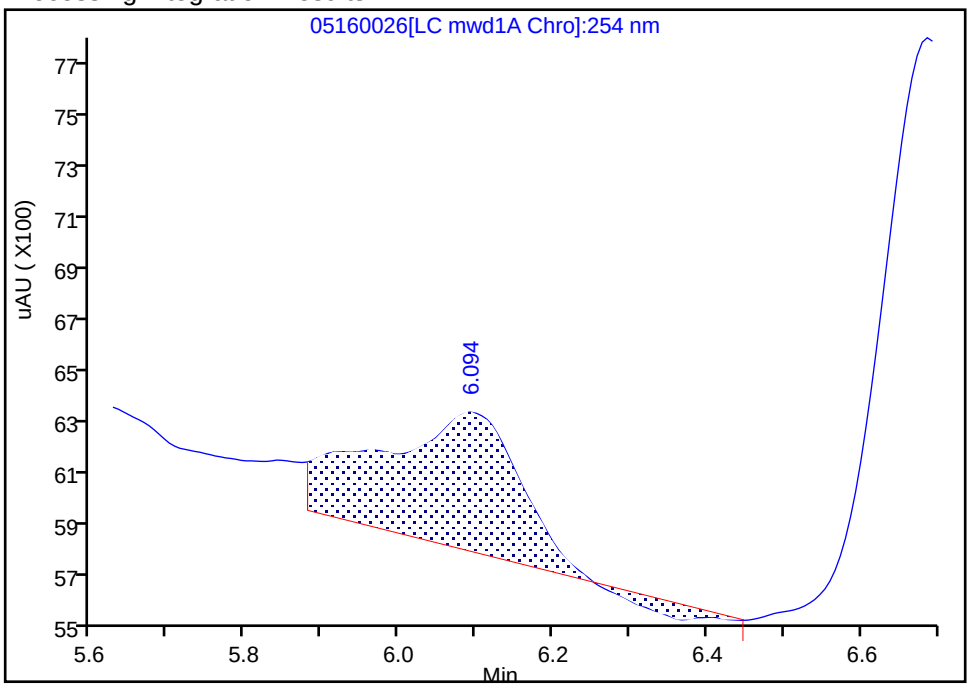
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160026.D				
Injection Date:	17-May-2023 09:28:50	Instrument ID:	CHHPLC_X5		
Lims ID:	280-175997-A-2-A	Lab Sample ID:	280-175997-2		
Client ID:	LL1mw-081-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

5 HMX, CAS: 2691-41-0

Signal: 1

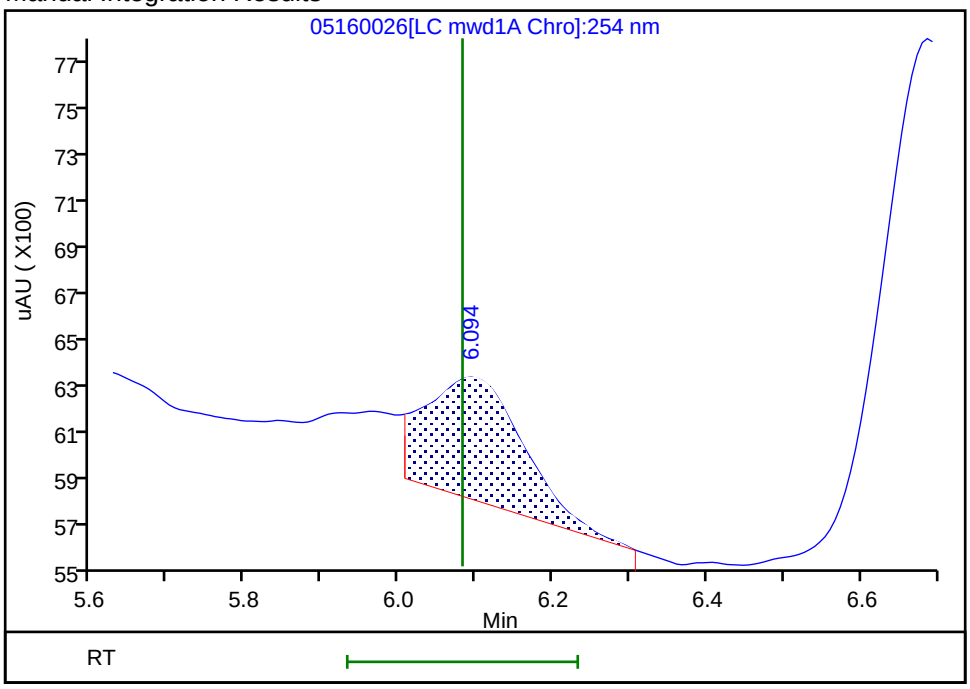
Processing Integration Results

RT: 6.09
Area: 7074
Amount: 0.033663
Amount Units: ug/ml



Manual Integration Results

RT: 6.09
Area: 4419
Amount: 0.019345
Amount Units: ug/ml



Reviewer: LV5D, 17-May-2023 11:27:46 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

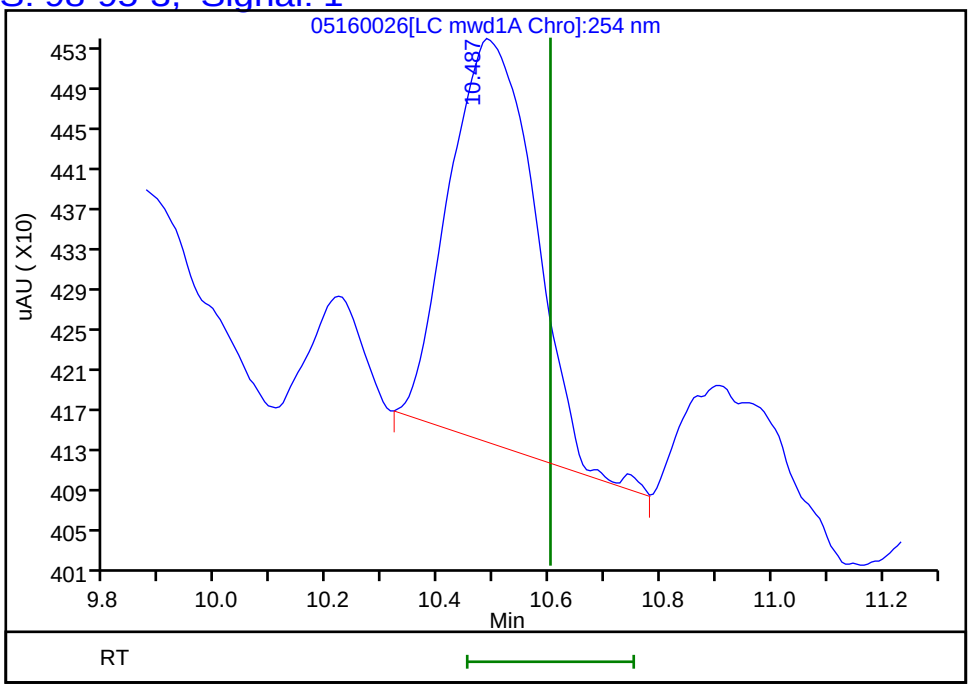
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160026.D				
Injection Date:	17-May-2023 09:28:50	Instrument ID:	CHHPLC_X5		
Lims ID:	280-175997-A-2-A	Lab Sample ID:	280-175997-2		
Client ID:	LL1mw-081-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

9 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 10.49
Response: 4279
Amount: 0.010729



Reviewer: LV5D, 17-May-2023 11:28:06
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-175997-1

SDG No.:

Client Sample ID: LL1mw-083-230401-GW | Lab Sample ID: 280-175997-3

Matrix: Water | Lab File ID: 05130032.D

Analysis Method: 8330B | Date Collected: 05/03/2023 14:31

Extraction Method: 3535 | Date Extracted: 05/10/2023 13:48

Sample wt/vol: 494.6(mL) | Date Analyzed: 05/13/2023 22:46

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 612396 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	4.1		0.21	0.20	0.085
99-65-0	1,3-Dinitrobenzene	1.1	J1	0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	1.8	M	0.11	0.10	0.045
6629-29-4	2,4-diamino-6-nitrotoluene	0.91	U	1.0	0.91	0.44
121-14-2	2,4-Dinitrotoluene	2.9	M	0.10	0.081	0.028
59229-75-3	2,6-diamino-4-nitrotoluene	0.91	U M	1.0	0.91	0.22
606-20-2	2,6-Dinitrotoluene	0.081	U	0.10	0.081	0.041
35572-78-2	2-Amino-4,6-dinitrotoluene	8.7	M	0.11	0.10	0.051
88-72-2	2-Nitrotoluene	0.13	J	0.21	0.20	0.086
618-87-1	3,5-Dinitroaniline	2.7		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	13	M	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 M	0.51	0.25	0.098
2691-41-0	HMX	0.20	U M	0.21	0.20	0.089
98-95-3	Nitrobenzene	0.20	U M	0.21	0.20	0.092
55-63-0	Nitroglycerin	2.0	U	2.1	2.0	0.93
78-11-5	PETN	1.0	U	1.1	1.0	0.45
121-82-4	RDX	0.25		0.21	0.20	0.052
479-45-8	Tetryl	0.10	U M	0.11	0.10	0.032
13980-04-6	TNX	0.25	U	0.51	0.25	0.080

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	89		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130032.D
Lims ID: 280-175997-B-3-A
Client ID: LL1mw-083-230401-GW
Sample Type: Client
Inject. Date: 13-May-2023 22:46:01 ALS Bottle#: 32 Worklist Smp#: 32
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-175997-B-3-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:13 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: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 08:08:11

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1		6.426			ND	U
3 TNX	1		6.427			ND	
4 HMX	1		6.547			ND	U
5 2,4-diamino-6-nitrotoluene	1		6.620			ND	
6 DNX	1		6.754			ND	U
7 MNX	1	7.170	7.187	-0.017	12601	0.0961	
8 RDX	1	7.570	7.574	-0.004	2612	0.0246	
$ 10 1,2-Dinitrobenzene	1	8.523	8.521	0.002	22425	0.1775	
11 1,3,5-Trinitrobenzene	1	8.643	8.647	-0.004	87564	0.4032	
12 1,3-Dinitrobenzene	1	9.263	9.274	-0.011	30894	0.1049	
13 Nitrobenzene	1		9.647			ND	U
14 3,5-Dinitroaniline	1	9.876	9.887	-0.011	62112	0.2717	
15 Tetryl	1		10.014			ND	U
16 Nitroglycerin	2		10.467			ND	
17 2,4,6-Trinitrotoluene	1	10.896	10.914	-0.018	37058	0.1756	M
18 4-Amino-2,6-dinitrotoluene	1	11.096	11.114	-0.018	202589	1.31	M
19 2-Amino-4,6-dinitrotoluene	1	11.350	11.367	-0.017	173040	0.8591	M
20 2,6-Dinitrotoluene	1		11.514			ND	
21 2,4-Dinitrotoluene	1	11.670	11.687	-0.017	85676	0.2888	M
22 o-Nitrotoluene	1	12.543	12.514	0.029	1650	0.0129	
23 p-Nitrotoluene	1		12.940			ND	
24 m-Nitrotoluene	1		13.514			ND	
25 PETN	2		14.694			ND	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
U - Marked Undetected

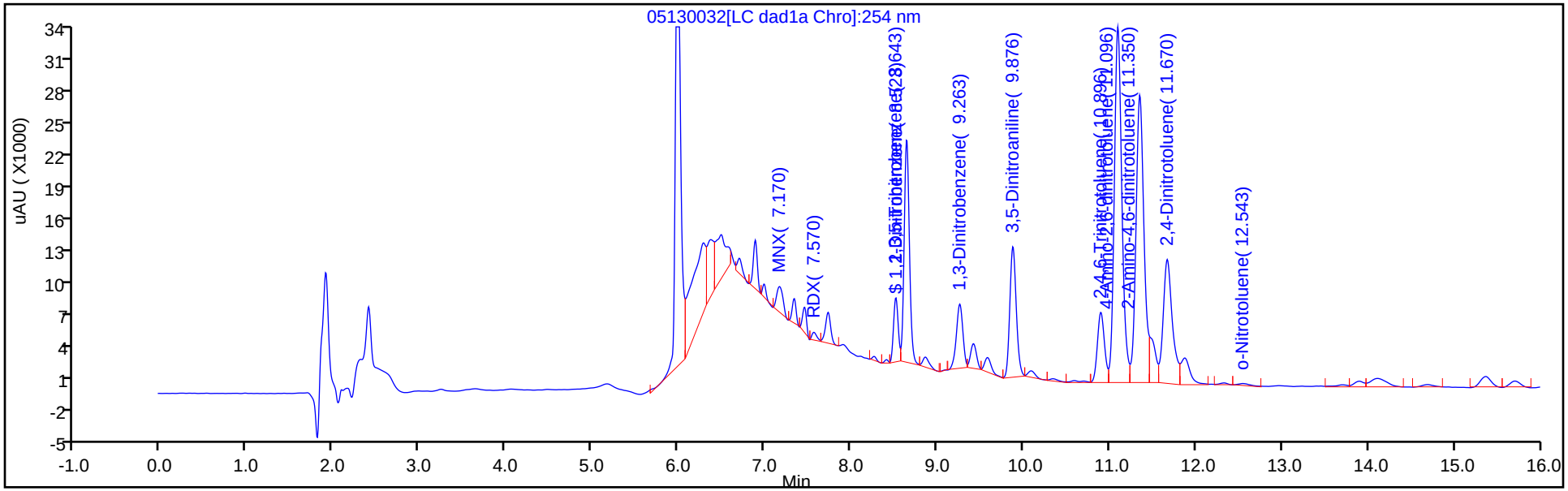
Report Date: 16-May-2023 12:37:20 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

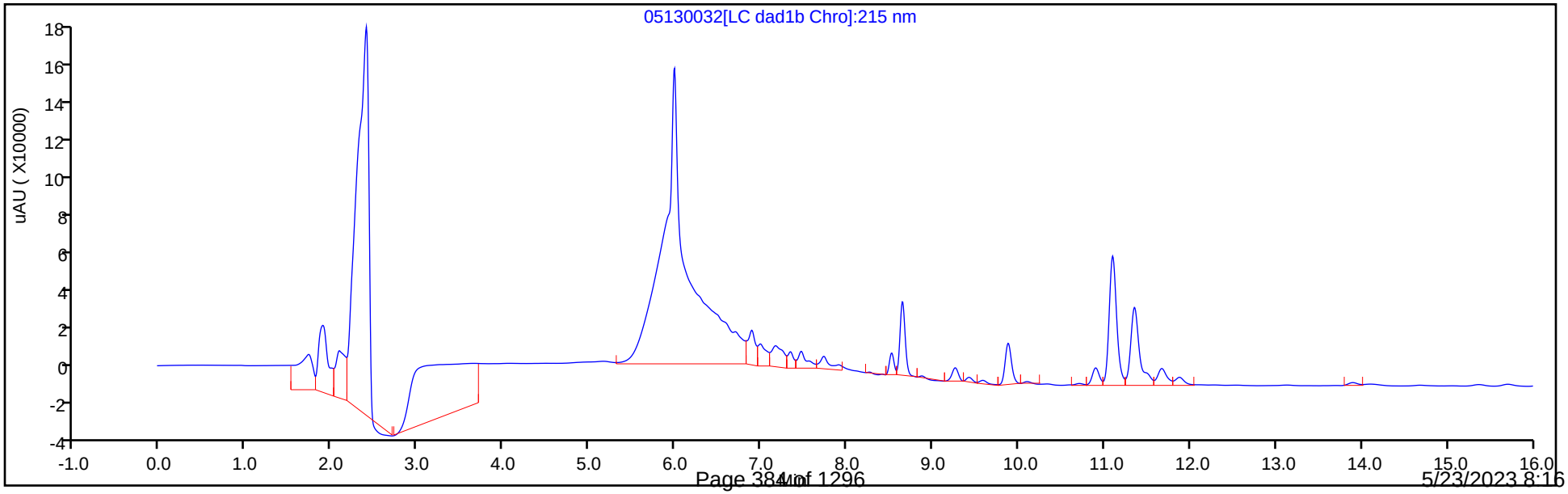
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Injection Date:	13-May-2023 22:46:01	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-175997-B-3-A	Lab Sample ID:	280-175997-3	Worklist Smp#:	32
Client ID:	LL1mw-083-230401-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130032.D				
Lims ID:	280-175997-B-3-A				
Client ID:	LL1mw-083-230401-GW				
Sample Type:	Client				
Inject. Date:	13-May-2023 22:46:01	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-175997-B-3-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-May-2023 12:37:13	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:	CTX1672				

First Level Reviewer: K8YG Date: 15-May-2023 08:08:11

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1775	88.77

Manual Integration/User Assign Peak Report

Eurofins Denver

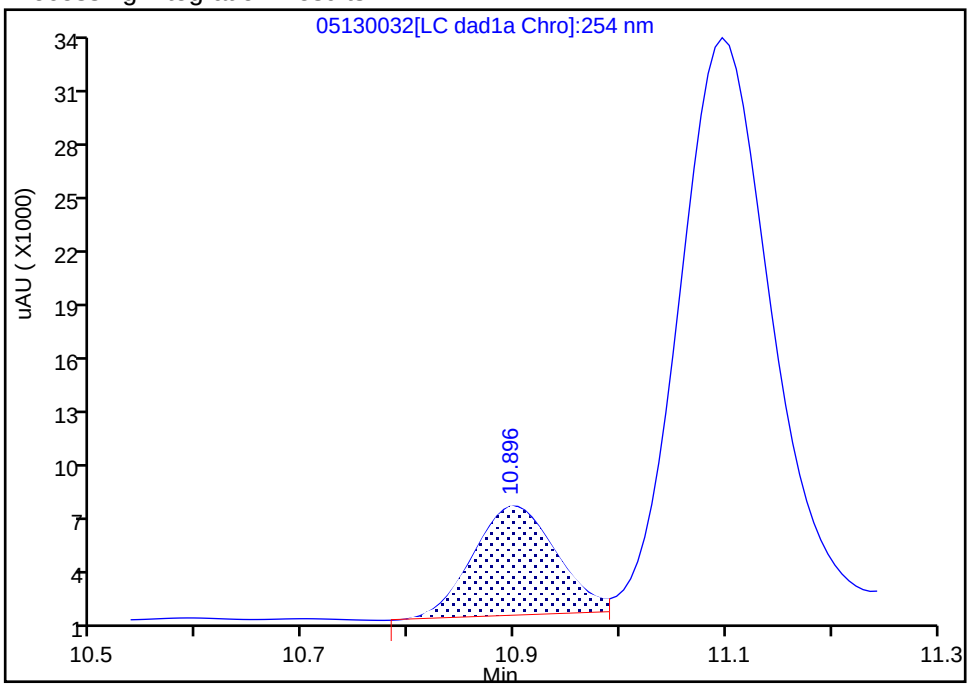
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Injection Date:	13-May-2023 22:46:01	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-B-3-A	Lab Sample ID:	280-175997-3		
Client ID:	LL1mw-083-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

17 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

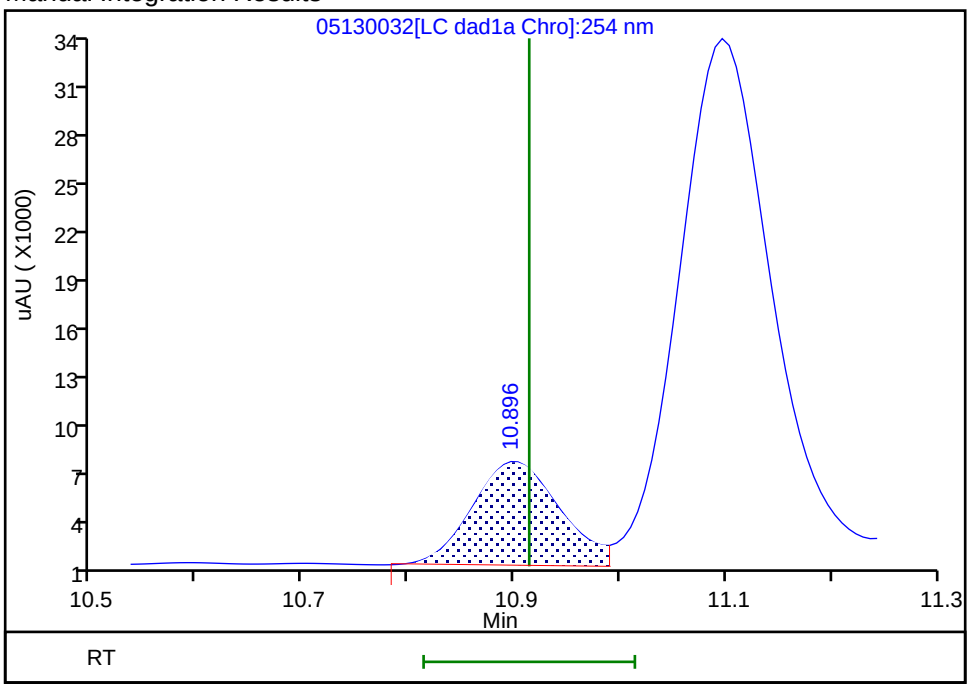
Processing Integration Results

RT: 10.90
Area: 33927
Amount: 0.160761
Amount Units: ug/mL



Manual Integration Results

RT: 10.90
Area: 37058
Amount: 0.175597
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 08:08:04
Audit Action: Assigned New Baseline Audit Reason: Baseline

Eurofins Denver

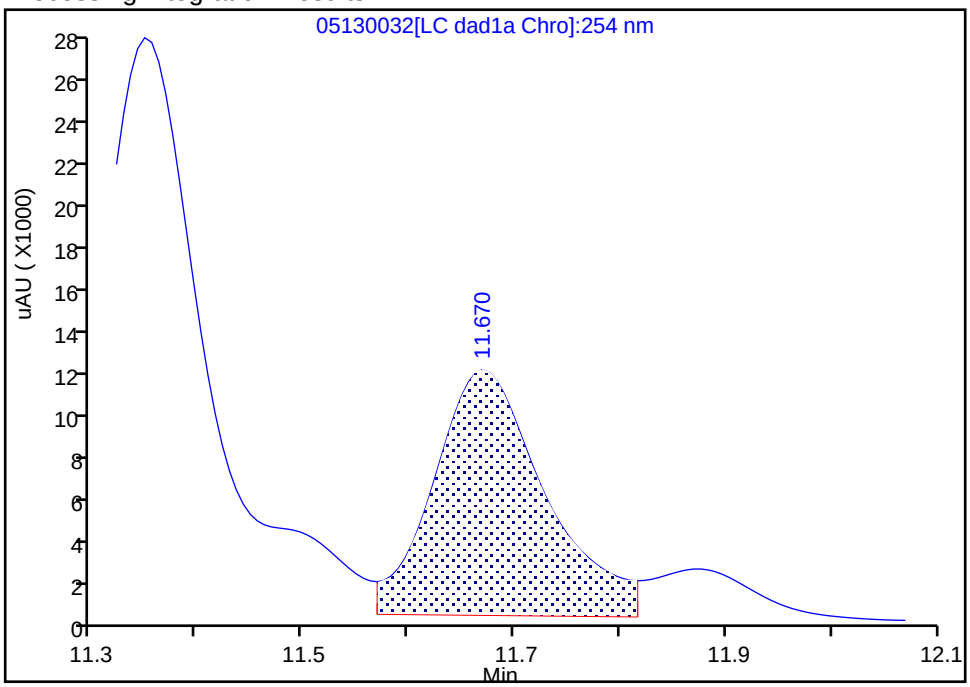
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Injection Date:	13-May-2023 22:46:01	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-B-3-A	Lab Sample ID:	280-175997-3		
Client ID:	LL1mw-083-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

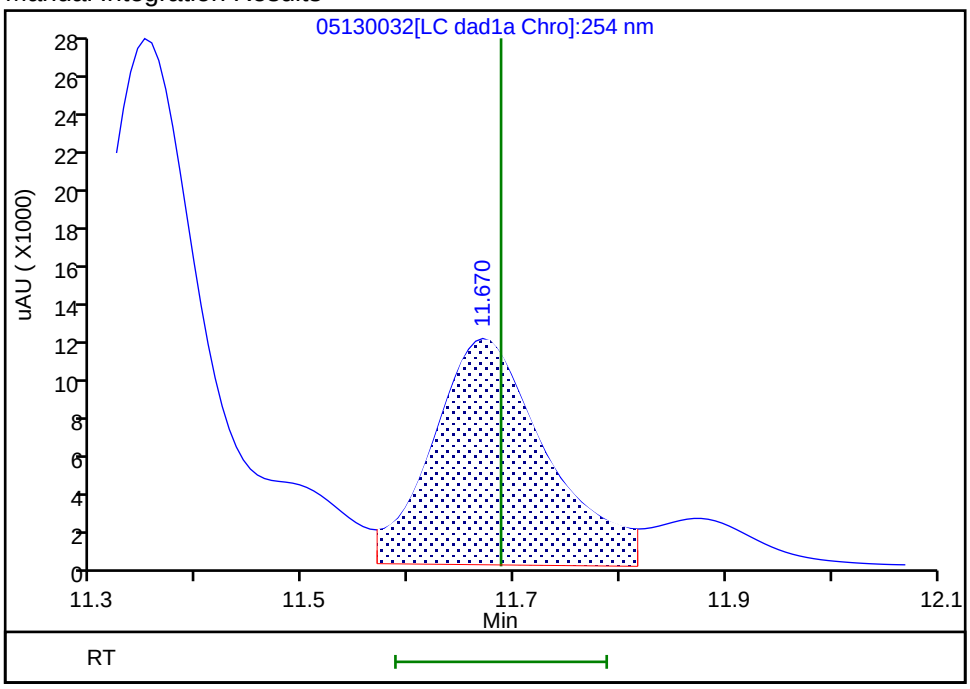
Processing Integration Results

RT: 11.67
Area: 82739
Amount: 0.278895
Amount Units: ug/mL



Manual Integration Results

RT: 11.67
Area: 85676
Amount: 0.288795
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 08:08:04
Audit Action: Assigned New Baseline Audit Reason: Baseline

User Disabled Compound Report

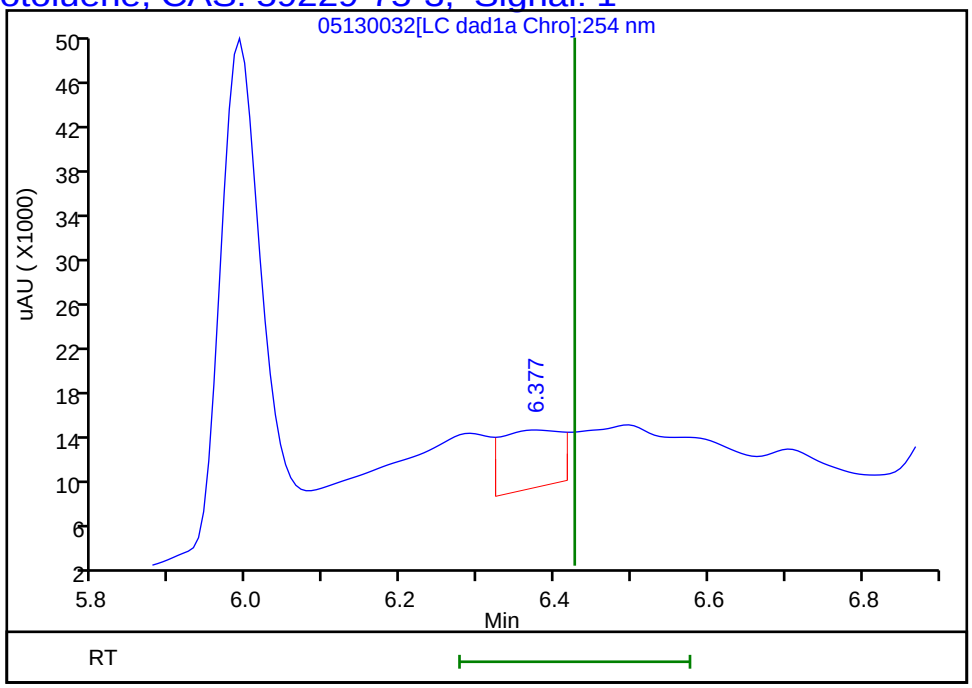
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130032.d
Injection Date: 13-May-2023 22:46:01 Instrument ID: CHHPLC_X3
Lims ID: 280-175997-B-3-A Lab Sample ID: 280-175997-3
Client ID: LL1mw-083-230401-GW
Operator ID: JZ/JG ALS Bottle#: 32 Worklist Smp#: 32
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3, Signal: 1

RT: 6.38
Response: 28579
Amount: 0.120660



Reviewer: K8YG, 15-May-2023 08:08:11
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

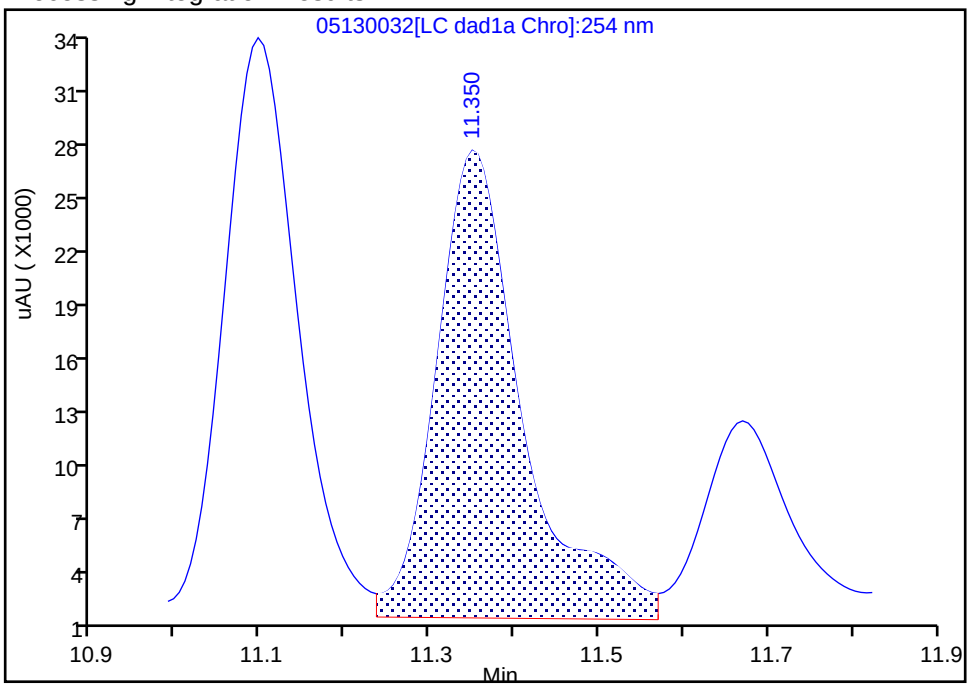
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Injection Date:	13-May-2023 22:46:01	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-B-3-A	Lab Sample ID:	280-175997-3		
Client ID:	LL1mw-083-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

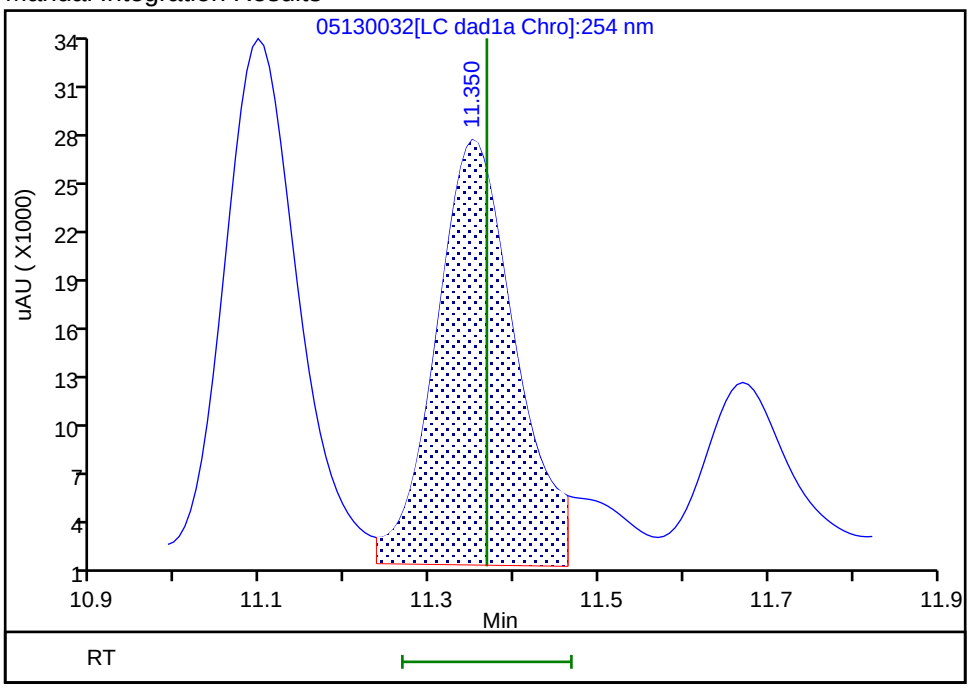
Processing Integration Results

RT: 11.35
Area: 187291
Amount: 0.929897
Amount Units: ug/mL



Manual Integration Results

RT: 11.35
Area: 173040
Amount: 0.859141
Amount Units: ug/mL



Reviewer: LV5D, 16-May-2023 12:26:27

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

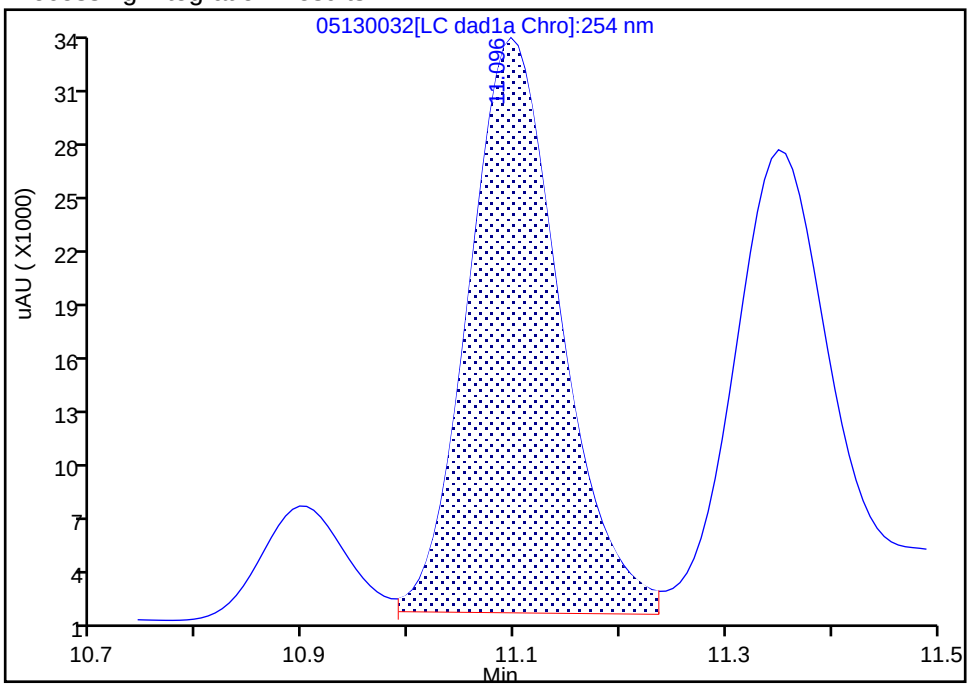
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130032.d				
Injection Date:	13-May-2023 22:46:01	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-B-3-A	Lab Sample ID:	280-175997-3		
Client ID:	LL1mw-083-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

18 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

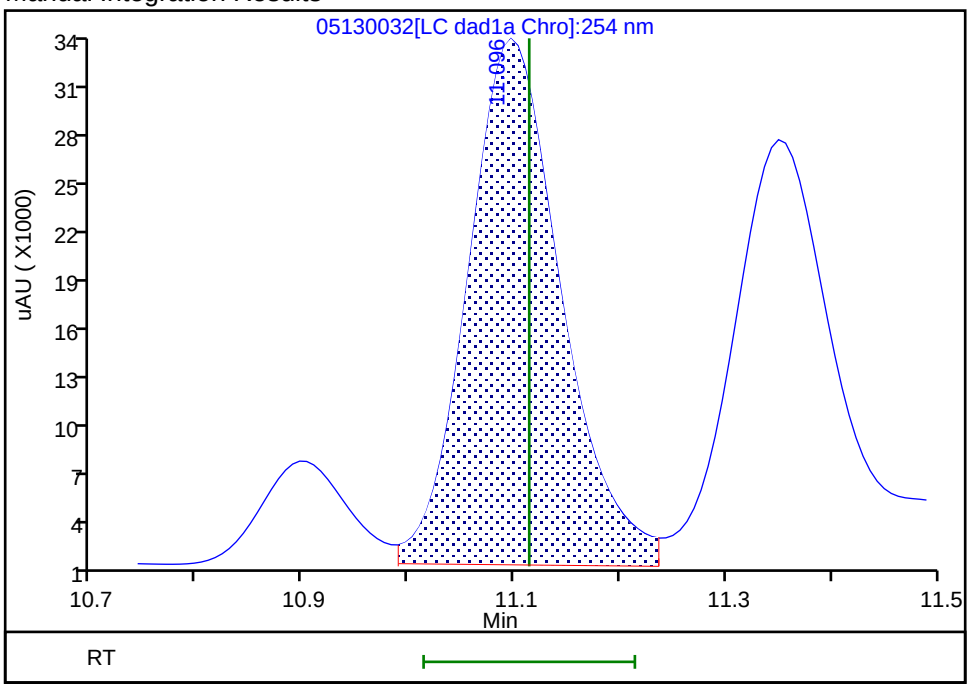
Processing Integration Results

RT: 11.10
Area: 195847
Amount: 1.264077
Amount Units: ug/mL



Manual Integration Results

RT: 11.10
Area: 202589
Amount: 1.307593
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 08:08:04
Audit Action: Assigned New Baseline Audit Reason: Baseline

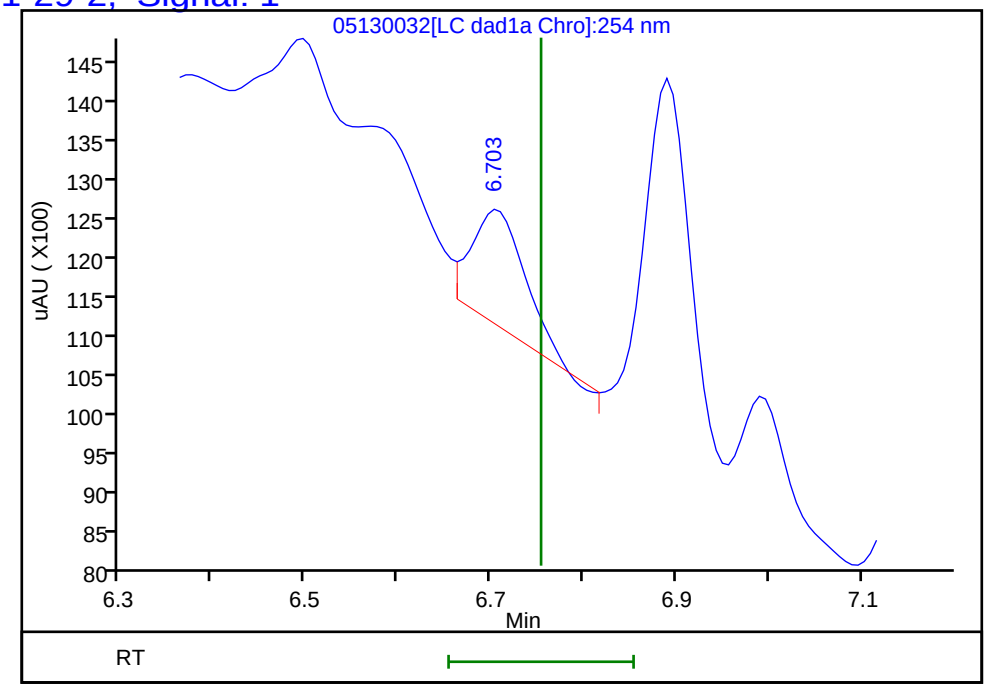
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130032.d				
Injection Date:	13-May-2023 22:46:01	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-B-3-A	Lab Sample ID:	280-175997-3		
Client ID:	LL1mw-083-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2, Signal: 1

RT: 6.70
Response: 6263
Amount: 0.043354



Reviewer: K8YG, 15-May-2023 08:08:11
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

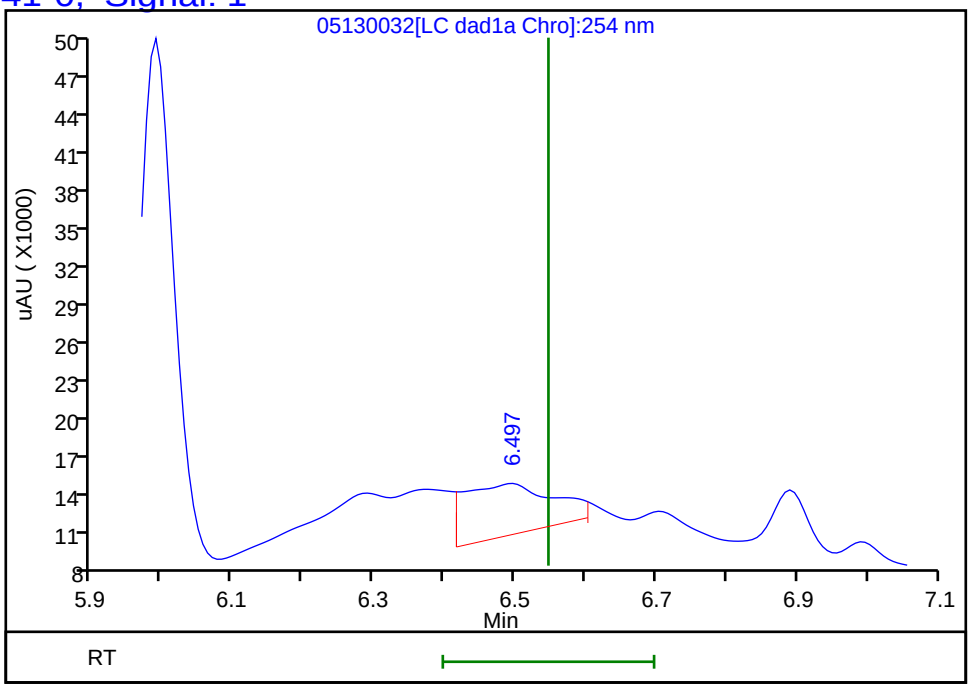
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130032.d
Injection Date: 13-May-2023 22:46:01 Instrument ID: CHHPLC_X3
Lims ID: 280-175997-B-3-A Lab Sample ID: 280-175997-3
Client ID: LL1mw-083-230401-GW
Operator ID: JZ/JG ALS Bottle#: 32 Worklist Smp#: 32
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

4 HMX, CAS: 2691-41-0, Signal: 1

RT: 6.50
Response: 35413
Amount: 0.378635



Reviewer: K8YG, 15-May-2023 08:08:11
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

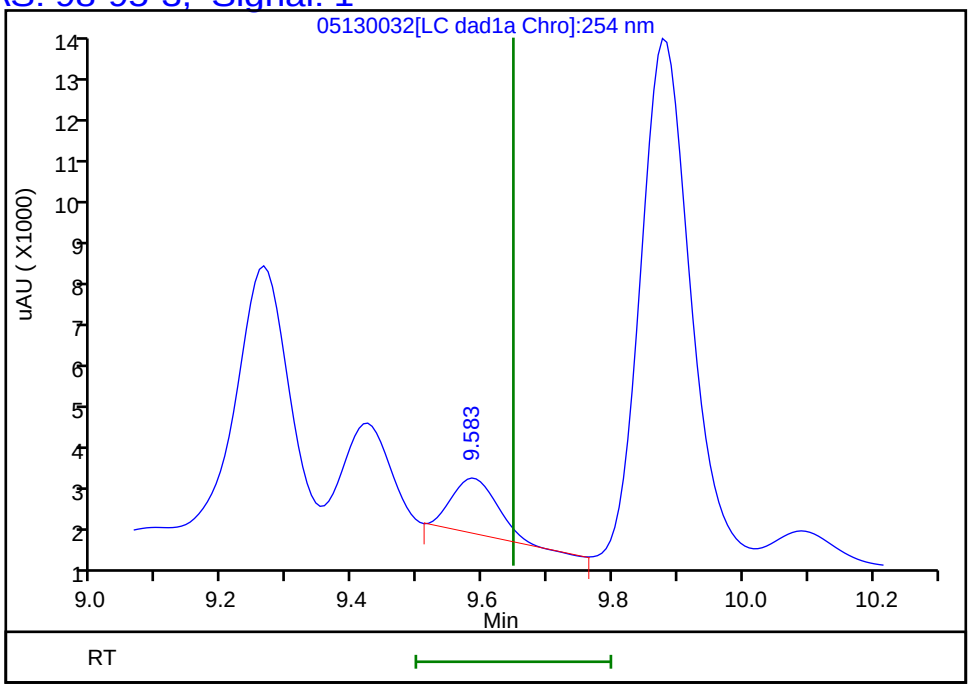
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130032.d				
Injection Date:	13-May-2023 22:46:01	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-B-3-A	Lab Sample ID:	280-175997-3		
Client ID:	LL1mw-083-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

13 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 9.58
Response: 6575
Amount: 0.034380



Reviewer: K8YG, 15-May-2023 08:08:11
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

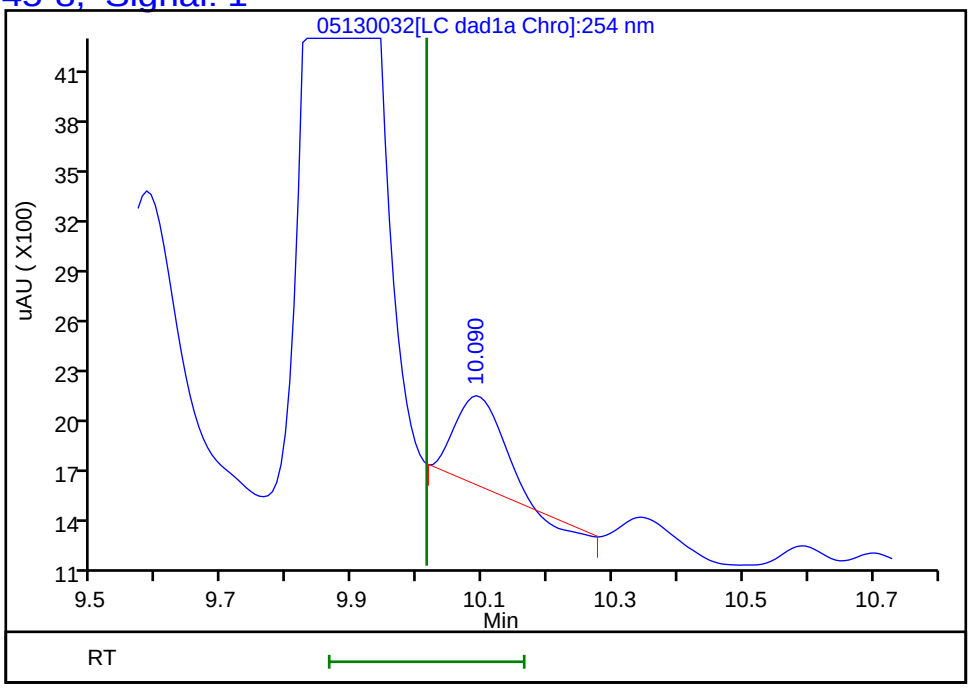
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130032.d				
Injection Date:	13-May-2023 22:46:01	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-B-3-A	Lab Sample ID:	280-175997-3		
Client ID:	LL1mw-083-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.09
Response: 3049
Amount: 0.018578



Reviewer: K8YG, 15-May-2023 08:08:11
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-175997-1

SDG No.:

Client Sample ID: LL1mw-083-230401-GW | Lab Sample ID: 280-175997-3

Matrix: Water | Lab File ID: 05160027.D

Analysis Method: 8330B | Date Collected: 05/03/2023 14:31

Extraction Method: 3535 | Date Extracted: 05/10/2023 13:48

Sample wt/vol: 494.6(mL) | Date Analyzed: 05/17/2023 10:03

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.: 612692 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	*1,3-Dinitrobenzene*	*0.19*	*J1*	*0.11*	0.10	*0.037*
5755-27-1	MNX	0.29	U	0.51	0.29	0.094

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	92	*M*	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160027.D
Lims ID: 280-175997-B-3-A
Client ID: LL1mw-083-230401-GW
Sample Type: Client
Inject. Date: 17-May-2023 10:03:46 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-175997-B-3-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 17-May-2023 16:34:14 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1653

First Level Reviewer: LV5D Date: 17-May-2023 11:28:51

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1	3.930	3.896	0.034	13727	0.0340	
	2 2,4-diamino-6-nitrotoluene	1		4.342			ND	U
	3 TNX	1		4.822			ND	U
	4 DNX	1		5.549			ND	
	5 HMX	1	6.090	6.082	0.008	15842	0.0809	M
	6 MNX	1		6.922			ND	
	8 RDX	1	8.190	8.222	-0.032	6933	0.0290	
	9 Nitrobenzene	1		10.602			ND	7
$	10 1,2-Dinitrobenzene	1	11.416	11.435	-0.019	51732	0.1843	M
	11 3,5-Dinitroaniline	1	13.256	13.275	-0.019	124691	0.2791	
	12 1,3-Dinitrobenzene	1	13.603	13.609	-0.006	11733	0.0186	
	13 Nitroglycerin	2		13.982			ND	
	14 o-Nitrotoluene	1	14.490	14.522	-0.032	2854	0.0116	M
	16 p-Nitrotoluene	1		14.749			ND	
	17 4-Amino-2,6-dinitrotoluene	1	15.223	15.249	-0.026	432992	1.47	
	18 m-Nitrotoluene	1	15.550	15.582	-0.032	17506	0.0594	
	19 2-Amino-4,6-dinitrotoluene	1	16.050	16.075	-0.025	342470	0.8003	
	20 1,3,5-Trinitrobenzene	1	16.356	16.375	-0.019	177176	0.4367	
	21 2,6-Dinitrotoluene	1	17.310	17.342	-0.032	39610	0.1358	
	22 2,4-Dinitrotoluene	1	17.776	17.809	-0.033	162220	0.2776	
	23 Tetryl	1		20.816			ND	
	24 2,4,6-Trinitrotoluene	1	21.623	21.662	-0.039	72667	0.1656	
	25 PETN	2		22.669			ND	7

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Review Flags
M - Manually Integrated
U - Marked Undetected

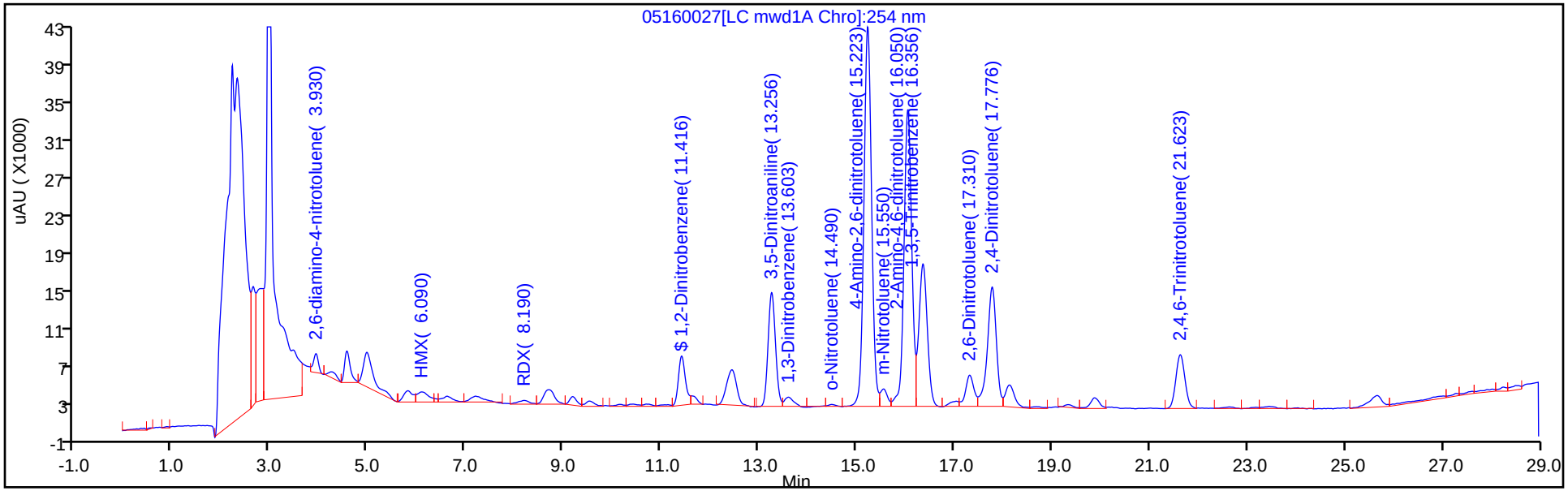
Report Date: 17-May-2023 16:34:20 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

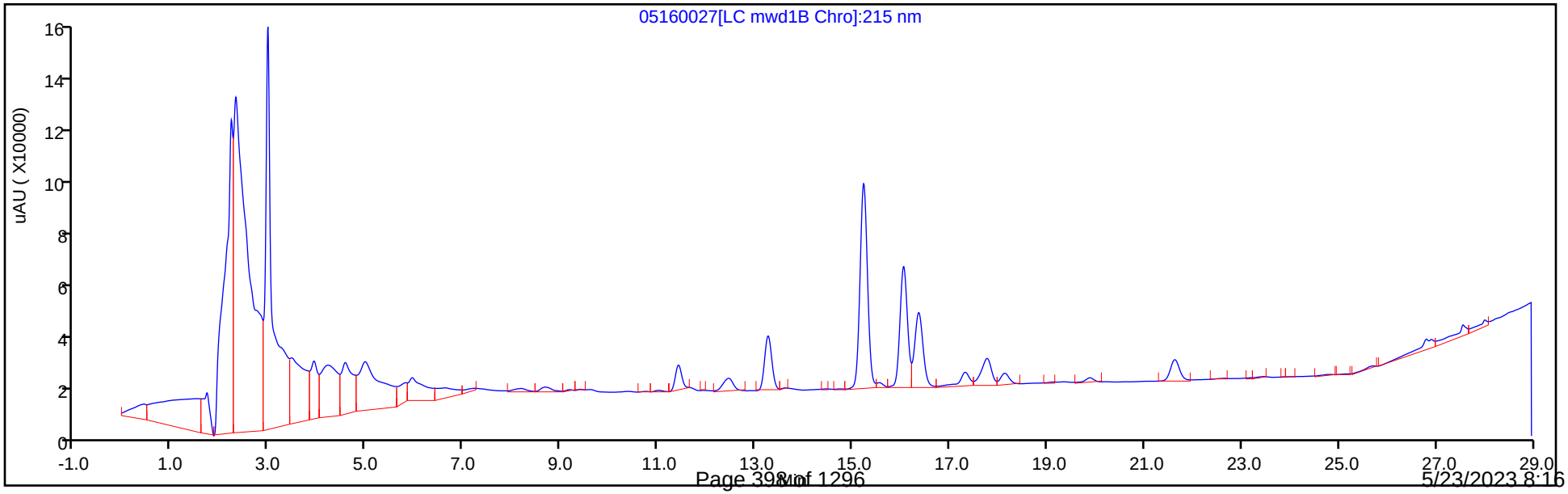
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160027.D

Injection Date:	17-May-2023 10:03:46	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	280-175997-B-3-A	Lab Sample ID:	280-175997-3	Worklist Smp#:	27
Client ID:	LL1mw-083-230401-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160027.D				
Lims ID:	280-175997-B-3-A				
Client ID:	LL1mw-083-230401-GW				
Sample Type:	Client				
Inject. Date:	17-May-2023 10:03:46	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-175997-B-3-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	17-May-2023 16:34:14	Calib Date:	29-Apr-2023 04:18:01		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1653				
First Level Reviewer: LV5D		Date:	17-May-2023 11:28:51		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1843	92.15

Manual Integration/User Assign Peak Report

Eurofins Denver

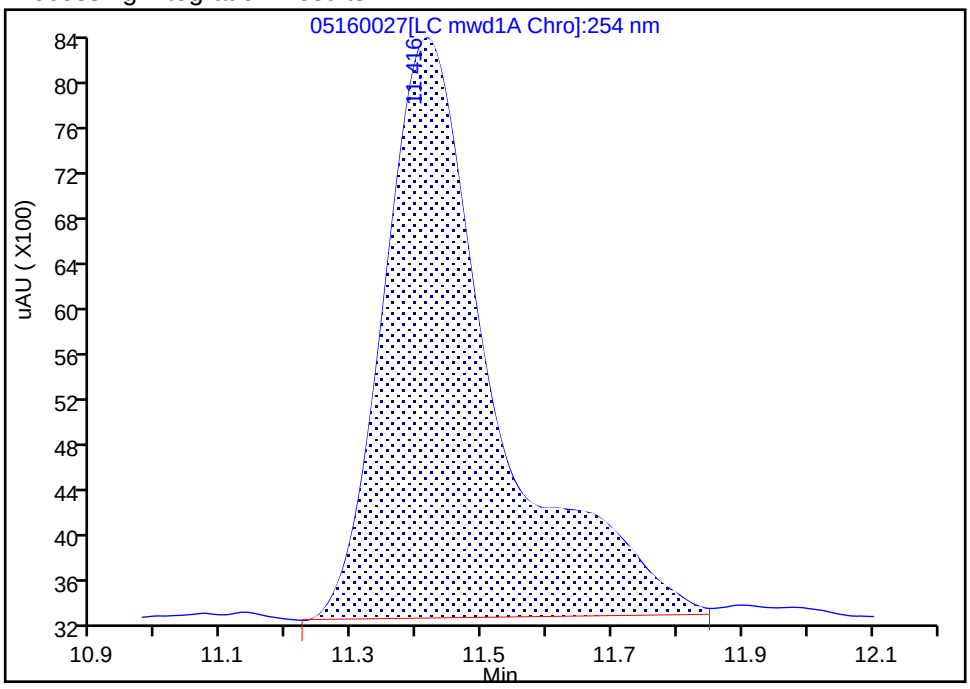
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160027.D				
Injection Date:	17-May-2023 10:03:46	Instrument ID:	CHHPLC_X5		
Lims ID:	280-175997-B-3-A	Lab Sample ID:	280-175997-3		
Client ID:	LL1mw-083-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

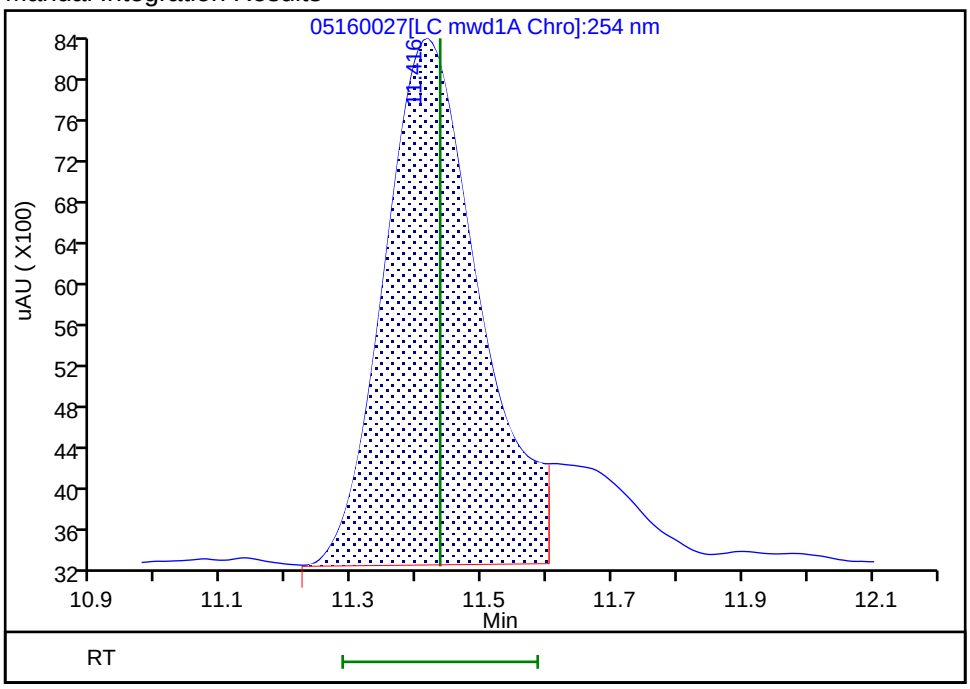
Processing Integration Results

RT: 11.42
Area: 60130
Amount: 0.214217
Amount Units: ug/ml



Manual Integration Results

RT: 11.42
Area: 51732
Amount: 0.184298
Amount Units: ug/ml



Reviewer: LV5D, 17-May-2023 11:28:31 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

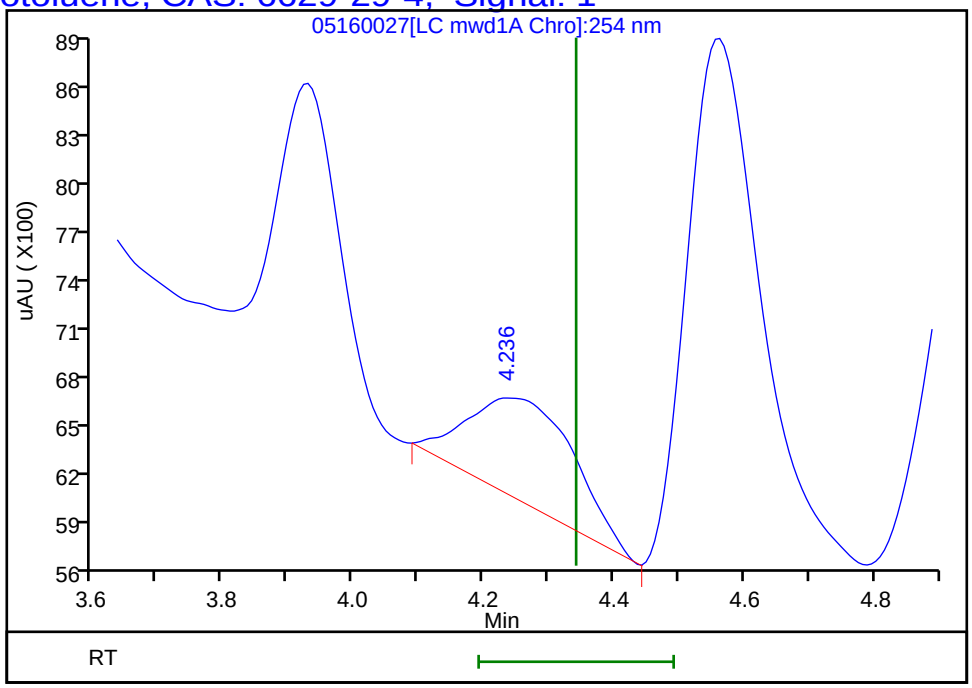
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160027.D				
Injection Date:	17-May-2023 10:03:46	Instrument ID:	CHHPLC_X5		
Lims ID:	280-175997-B-3-A	Lab Sample ID:	280-175997-3		
Client ID:	LL1mw-083-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

2 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4, Signal: 1

RT: 4.24
Response: 7137
Amount: 0.031681



Reviewer: LV5D, 17-May-2023 11:28:51
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

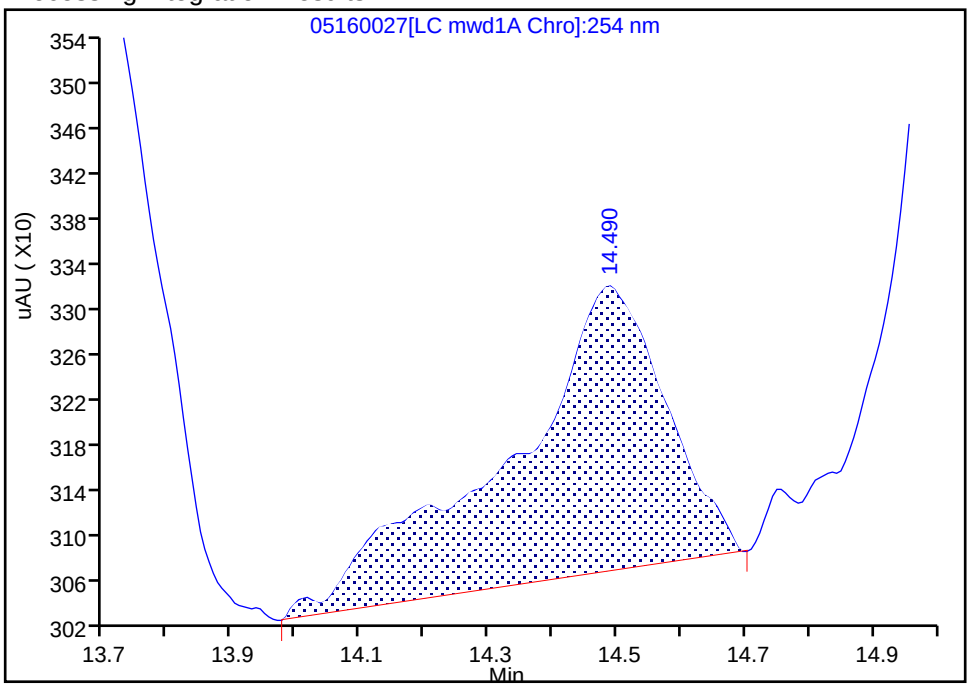
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160027.D				
Injection Date:	17-May-2023 10:03:46	Instrument ID:	CHHPLC_X5		
Lims ID:	280-175997-B-3-A	Lab Sample ID:	280-175997-3		
Client ID:	LL1mw-083-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

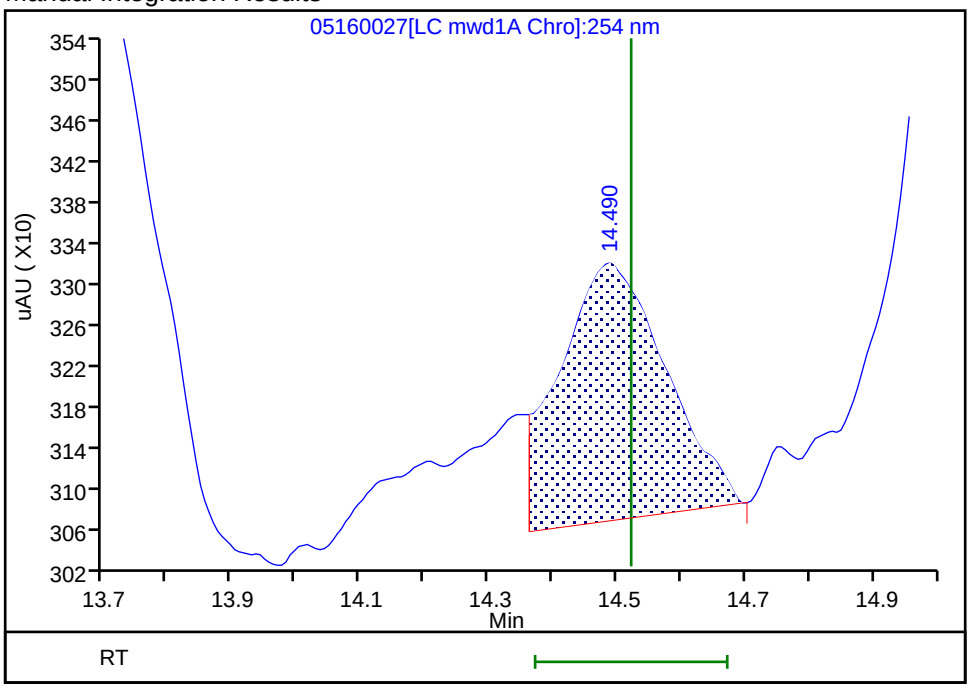
Processing Integration Results

RT: 14.49
Area: 4316
Amount: 0.017476
Amount Units: ug/ml



Manual Integration Results

RT: 14.49
Area: 2854
Amount: 0.011556
Amount Units: ug/ml



Reviewer: LV5D, 17-May-2023 11:28:42 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

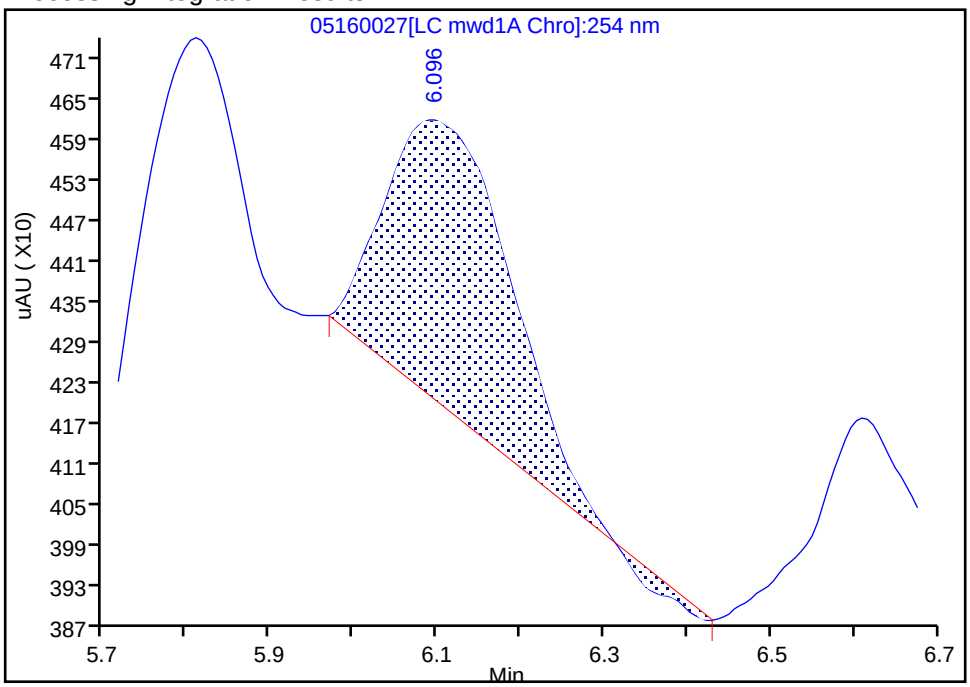
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160027.D				
Injection Date:	17-May-2023 10:03:46	Instrument ID:	CHHPLC_X5		
Lims ID:	280-175997-B-3-A	Lab Sample ID:	280-175997-3		
Client ID:	LL1mw-083-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

5 HMX, CAS: 2691-41-0

Signal: 1

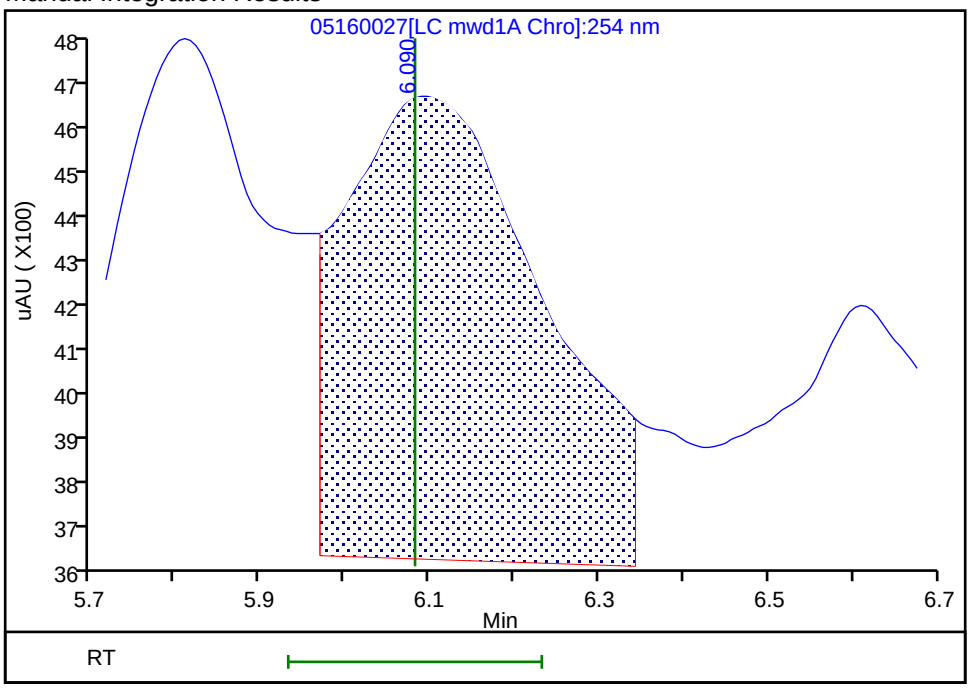
Processing Integration Results

RT: 6.10
Area: 4804
Amount: 0.021421
Amount Units: ug/ml



Manual Integration Results

RT: 6.09
Area: 15842
Amount: 0.080949
Amount Units: ug/ml



Reviewer: LV5D, 17-May-2023 11:28:25 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

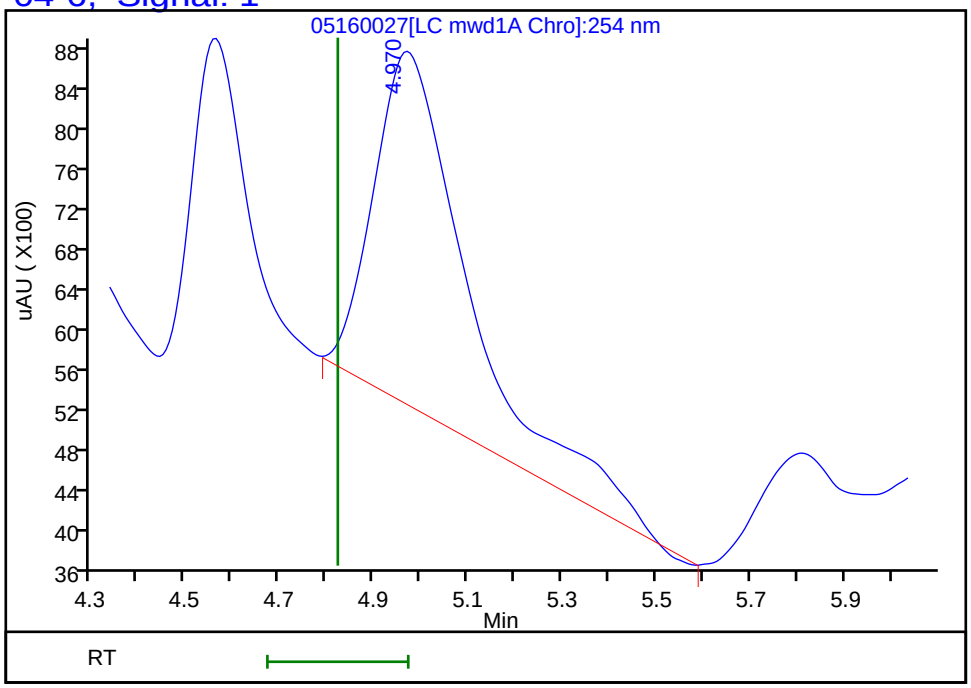
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160027.D				
Injection Date:	17-May-2023 10:03:46	Instrument ID:	CHHPLC_X5		
Lims ID:	280-175997-B-3-A	Lab Sample ID:	280-175997-3		
Client ID:	LL1mw-083-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

3 TNX, CAS: 13980-04-6, Signal: 1

RT: 4.97
Response: 50562
Amount: 0.128222



Reviewer: LV5D, 17-May-2023 11:28:51
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-175997-1

SDG No.:

Client Sample ID: LL1mw-084-230401-GW | Lab Sample ID: 280-175997-4

Matrix: Water | Lab File ID: 05130035.D

Analysis Method: 8330B | Date Collected: 05/03/2023 11:03

Extraction Method: 3535 | Date Extracted: 05/10/2023 13:48

Sample wt/vol: 481.8(mL) | Date Analyzed: 05/13/2023 23:54

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.: 612396 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.82		0.22	0.21	0.087
99-65-0	1,3-Dinitrobenzene	1.4	J1	0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	2.1		0.11	0.10	0.047
59229-75-3	2,6-diamino-4-nitrotoluene	0.93	U M	1.0	0.93	0.23
606-20-2	2,6-Dinitrotoluene	0.083	U	0.10	0.083	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	6.2		0.11	0.10	0.053
618-87-1	3,5-Dinitroaniline	0.99		0.42	0.31	0.14
99-08-1	3-Nitrotoluene	0.36	U	0.42	0.36	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	16		0.16	0.12	0.060
99-99-0	4-Nitrotoluene	0.42	U M	0.43	0.42	0.10
80251-29-2	DNX	0.26	U M	0.52	0.26	0.10
2691-41-0	HMX	0.21	U M	0.22	0.21	0.091
98-95-3	Nitrobenzene	0.21	U M	0.22	0.21	0.094
55-63-0	Nitroglycerin	2.1	U	2.2	2.1	0.96
78-11-5	PETN	1.0	U	1.1	1.0	0.46
479-45-8	Tetryl	0.10	U M	0.11	0.10	0.033

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\CHHPLC_X\20230513-121427.b\05130035.D
Lims ID: 280-175997-B-4-A
Client ID: LL1mw-084-230401-GW
Sample Type: Client
Inject. Date: 13-May-2023 23:54:53 ALS Bottle#: 35 Worklist Smp#: 35
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-175997-B-4-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:22 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: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 11:48:36

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1		6.426			ND	U
3 TNX	1	6.441	6.427	0.014	2235	0.0113	M
4 HMX	1		6.547			ND	U
5 2,4-diamino-6-nitrotoluene	1	6.601	6.620	-0.019	10139	0.0692	M
6 DNX	1		6.754			ND	U
7 MNX	1	7.181	7.187	-0.006	13922	0.1061	M
8 RDX	1	7.588	7.574	0.014	6346	0.0597	M
$ 10 1,2-Dinitrobenzene	1	8.528	8.521	0.007	25570	0.2024	
11 1,3,5-Trinitrobenzene	1	8.648	8.647	0.001	17214	0.0793	
12 1,3-Dinitrobenzene	1	9.254	9.274	-0.020	41043	0.1394	
13 Nitrobenzene	1		9.647			ND	U
14 3,5-Dinitroaniline	1	9.888	9.887	0.001	21730	0.0955	
15 Tetryl	1		10.014			ND	U
16 Nitroglycerin	2		10.467			ND	
17 2,4,6-Trinitrotoluene	1	10.901	10.914	-0.013	42070	0.1993	
18 4-Amino-2,6-dinitrotoluene	1	11.101	11.114	-0.013	239123	1.54	
19 2-Amino-4,6-dinitrotoluene	1	11.354	11.367	-0.013	121115	0.6013	
20 2,6-Dinitrotoluene	1		11.514			ND	
21 2,4-Dinitrotoluene	1	11.668	11.687	-0.019	24371	0.0821	
22 o-Nitrotoluene	1	12.541	12.514	0.027	2511	0.0196	
23 p-Nitrotoluene	1		12.940			ND	U
24 m-Nitrotoluene	1		13.514			ND	
25 PETN	2		14.694			ND	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
U - Marked Undetected

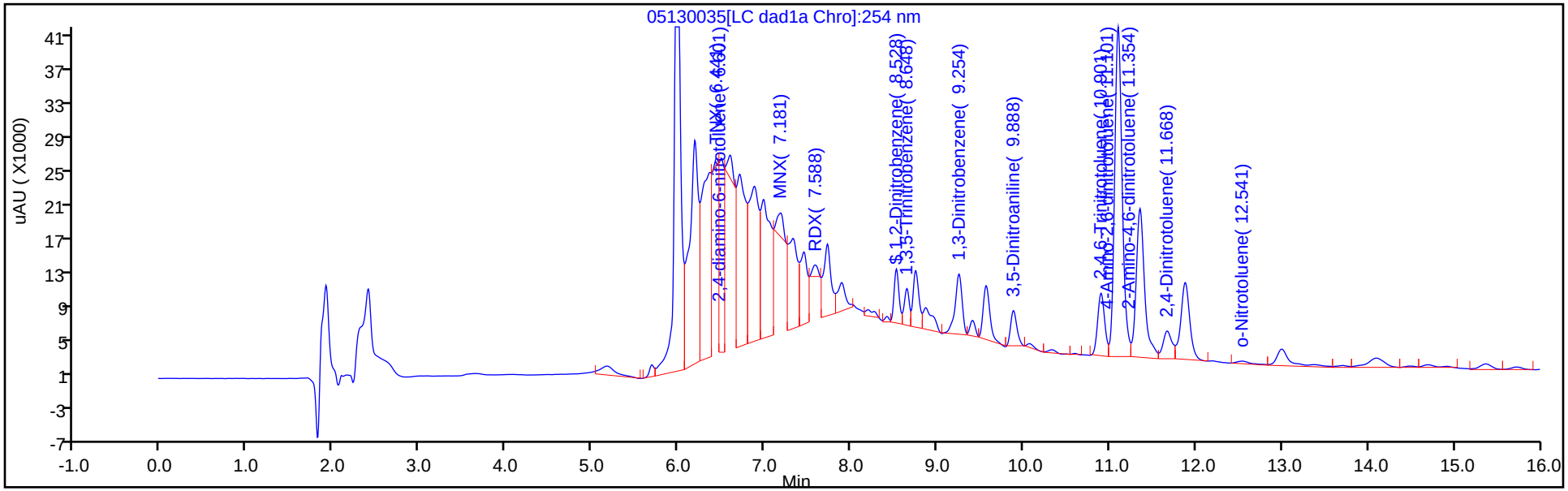
Report Date: 16-May-2023 12:37:23 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

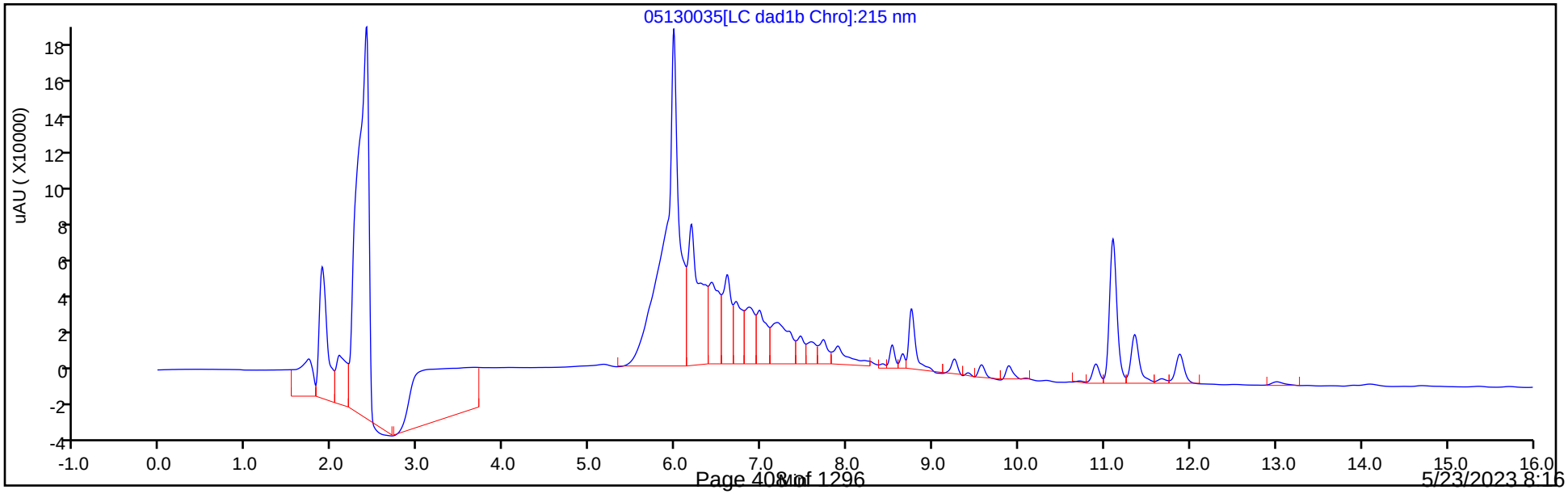
Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130035.d

Injection Date:	13-May-2023 23:54:53	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-175997-B-4-A	Lab Sample ID:	280-175997-4	Worklist Smp#:	35
Client ID:	LL1mw-084-230401-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	35
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\20230513-121427.b\05130035.D				
Lims ID:	280-175997-B-4-A				
Client ID:	LL1mw-084-230401-GW				
Sample Type:	Client				
Inject. Date:	13-May-2023 23:54:53	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-175997-B-4-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-May-2023 12:37:22	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:	CTX1672				

First Level Reviewer: K8YG Date: 15-May-2023 11:48:36

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2024	101.22

Manual Integration/User Assign Peak Report

Eurofins Denver

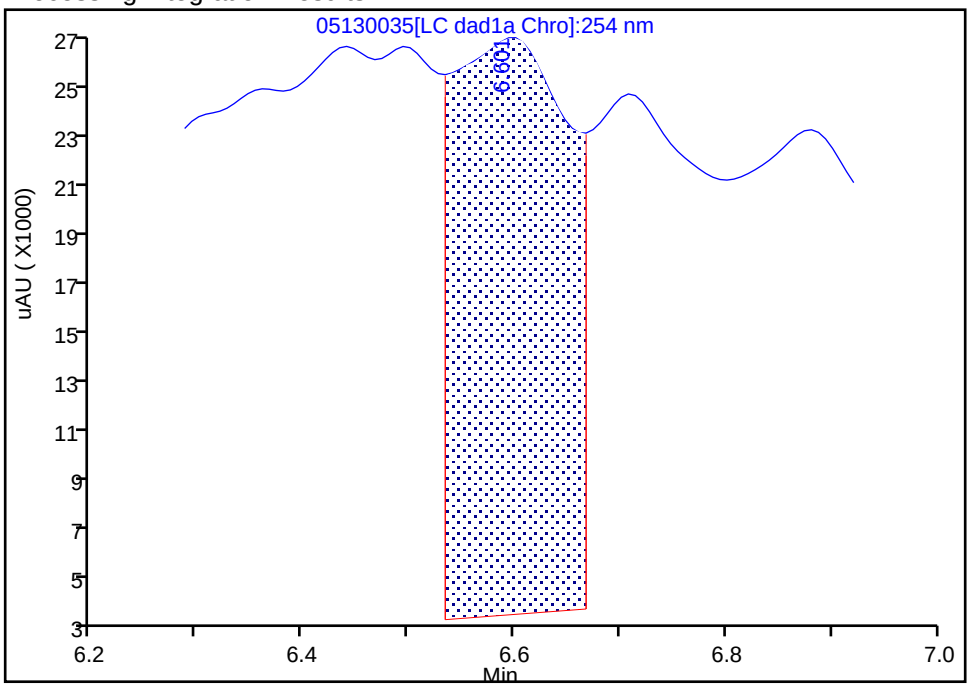
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130035.d				
Injection Date:	13-May-2023 23:54:53	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-B-4-A	Lab Sample ID:	280-175997-4		
Client ID:	LL1mw-084-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	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

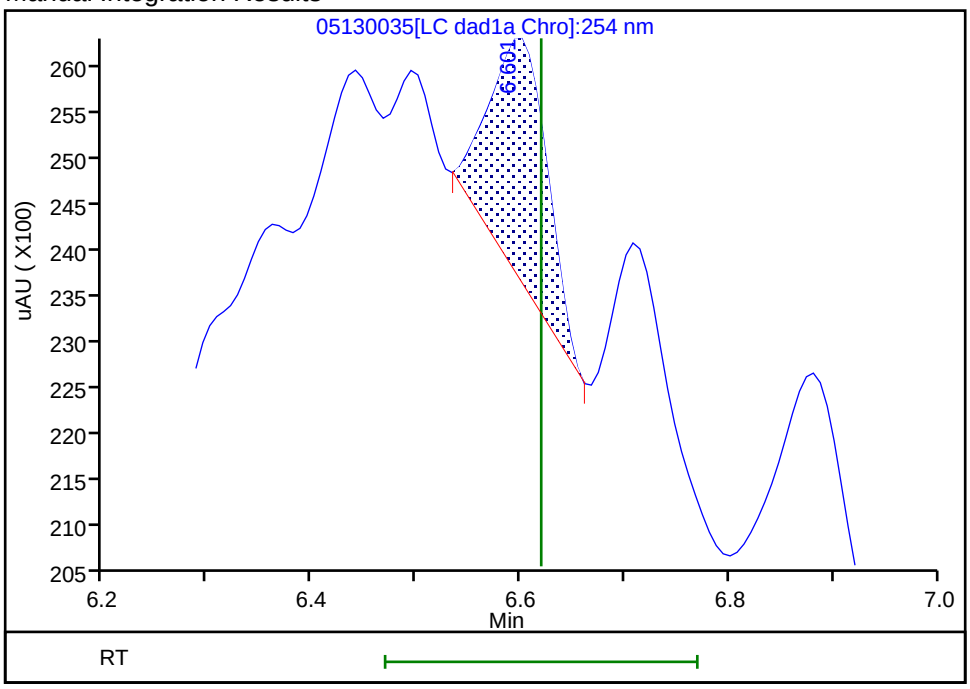
Processing Integration Results

RT: 6.60
Area: 171712
Amount: 1.172319
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 10139
Amount: 0.069221
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 11:46:38

Audit Action: Manually Integrated Audit Reason: Baseline

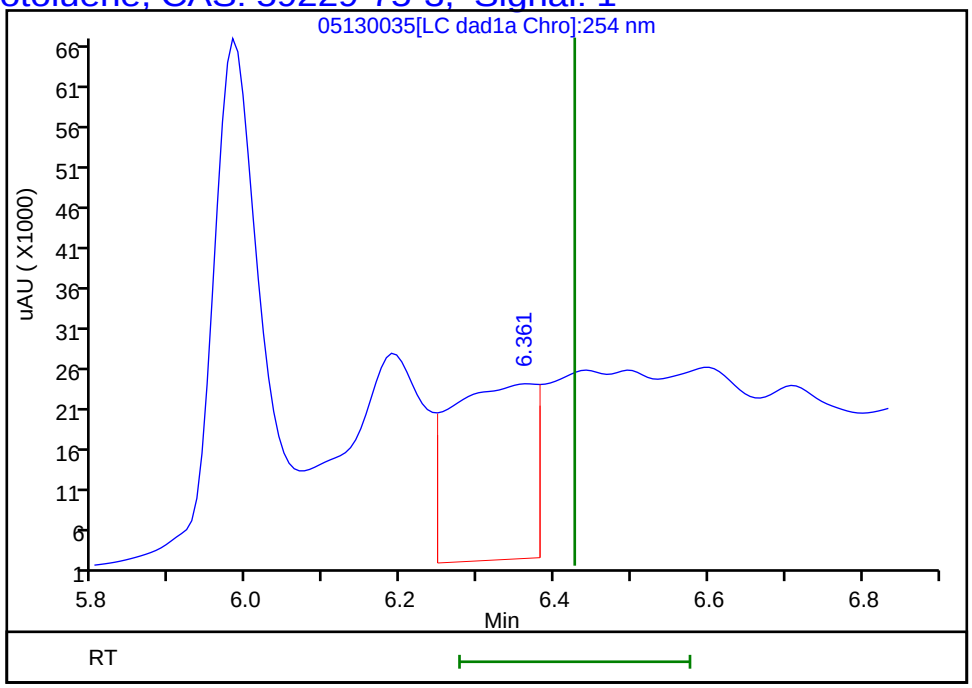
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130035.d				
Injection Date:	13-May-2023 23:54:53	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-B-4-A	Lab Sample ID:	280-175997-4		
Client ID:	LL1mw-084-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	35	Worklist Smp#:	35
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

RT: 6.36
Response: 165171
Amount: 0.715333



Reviewer: K8YG, 15-May-2023 11:48:36
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

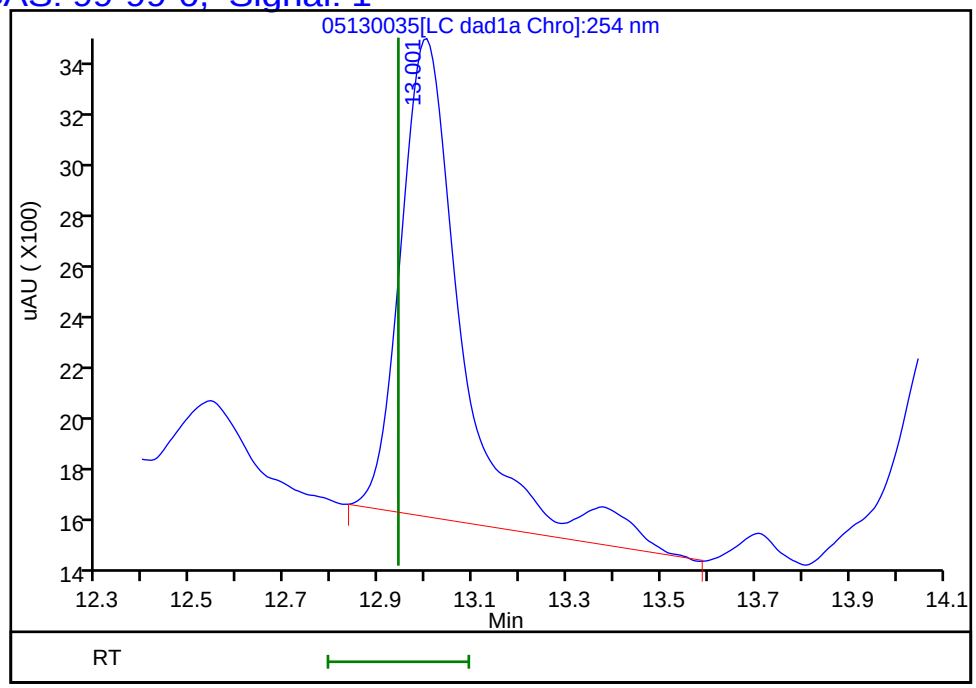
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130035.d				
Injection Date:	13-May-2023 23:54:53	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-B-4-A	Lab Sample ID:	280-175997-4		
Client ID:	LL1mw-084-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	35	Worklist Smp#:	35
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: 13.00
Response: 17320
Amount: 0.154809



Reviewer: K8YG, 15-May-2023 11:48:36
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

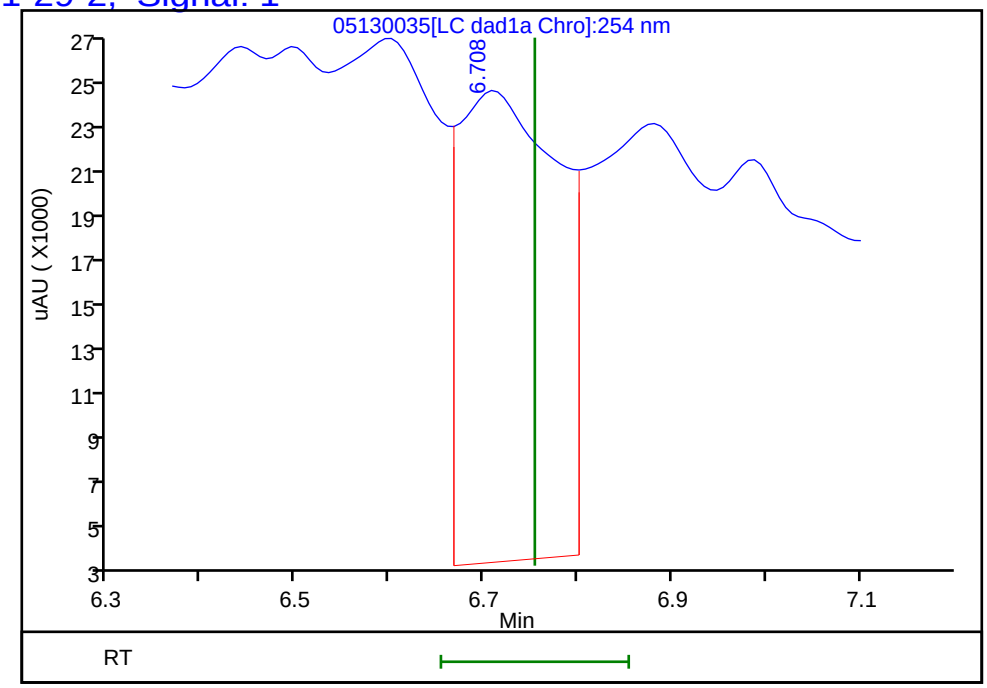
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130035.d
Injection Date: 13-May-2023 23:54:53 Instrument ID: CHHPLC_X3
Lims ID: 280-175997-B-4-A Lab Sample ID: 280-175997-4
Client ID: LL1mw-084-230401-GW
Operator ID: JZ/JG ALS Bottle#: 35 Worklist Smp#: 35
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

RT: 6.71
Response: 148206
Amount: 1.025913



Reviewer: K8YG, 15-May-2023 11:48:36
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

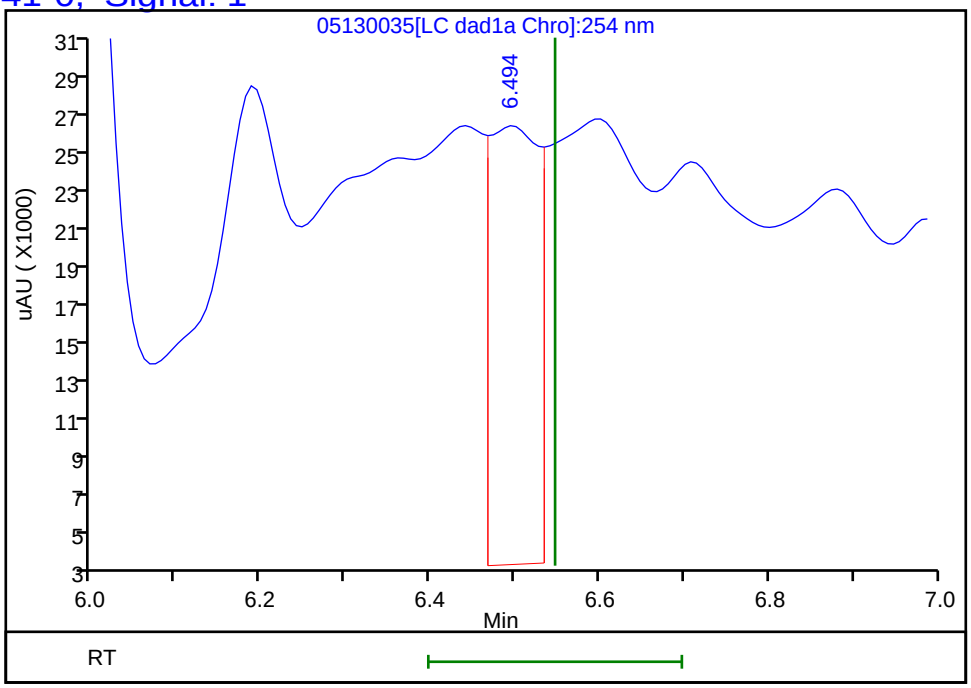
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130035.d				
Injection Date:	13-May-2023 23:54:53	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-B-4-A	Lab Sample ID:	280-175997-4		
Client ID:	LL1mw-084-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	35	Worklist Smp#:	35
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: 6.49
Response: 89509
Amount: 0.957027



Reviewer: K8YG, 15-May-2023 11:48:36
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

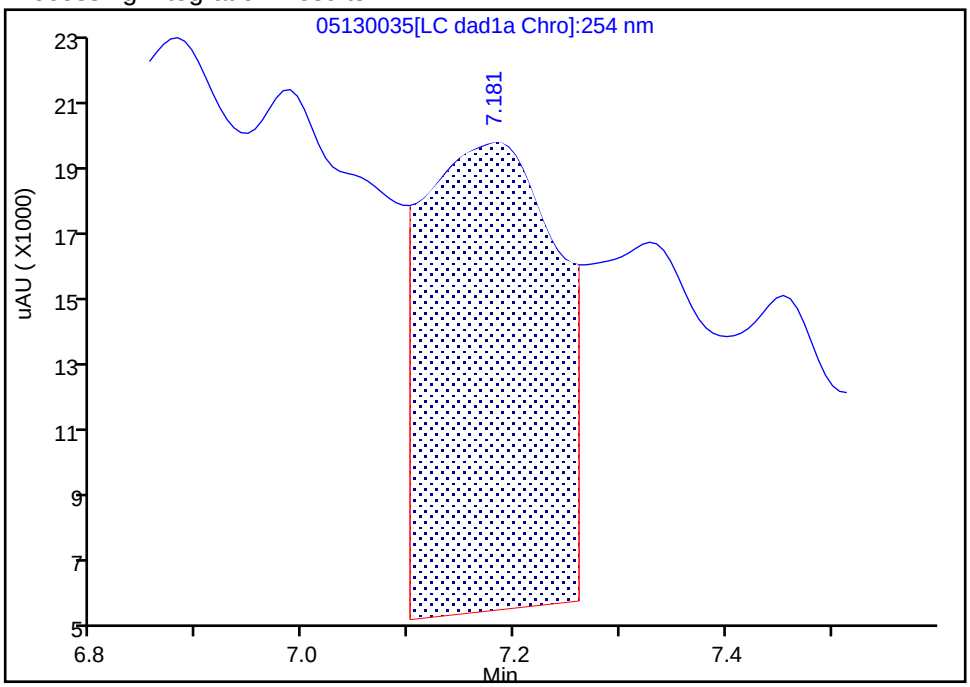
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Injection Date:	13-May-2023 23:54:53	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-B-4-A	Lab Sample ID:	280-175997-4		
Client ID:	LL1mw-084-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
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

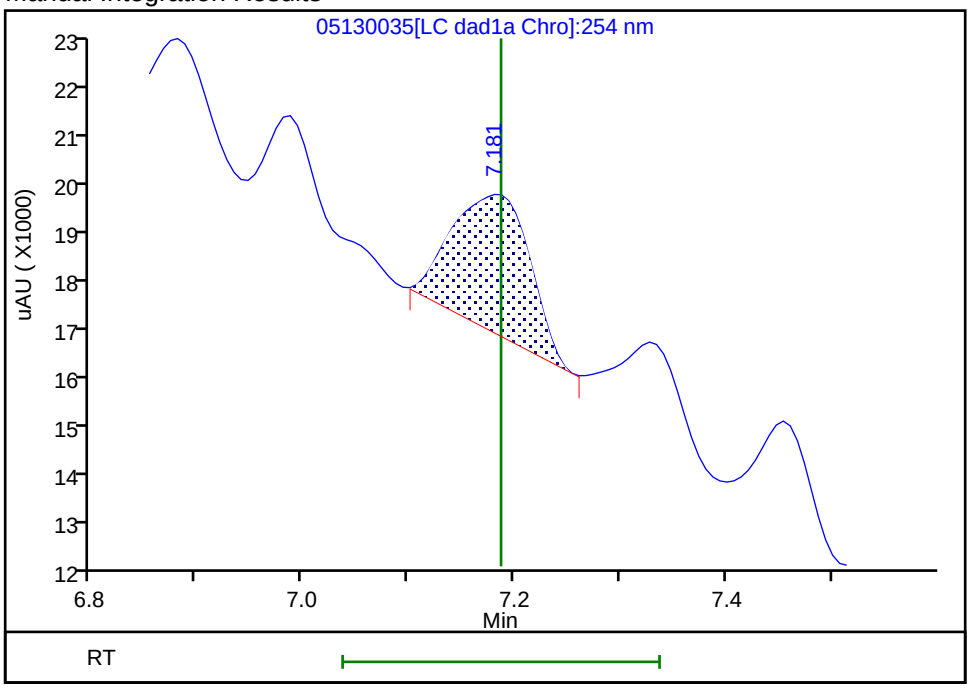
Processing Integration Results

RT: 7.18
Area: 122066
Amount: 0.930583
Amount Units: ug/mL



Manual Integration Results

RT: 7.18
Area: 13922
Amount: 0.106136
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 11:47:07

Audit Action: Manually Integrated Audit Reason: Baseline

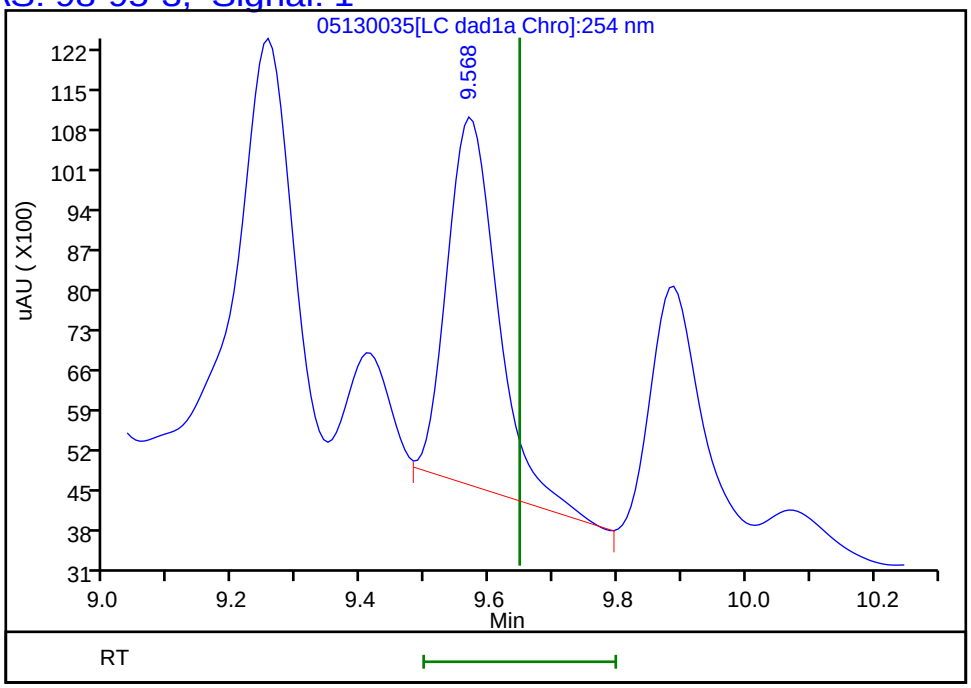
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130035.d				
Injection Date:	13-May-2023 23:54:53	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-B-4-A	Lab Sample ID:	280-175997-4		
Client ID:	LL1mw-084-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

13 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 9.57
Response: 35519
Amount: 0.185726



Reviewer: LV5D, 16-May-2023 12:27:21
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

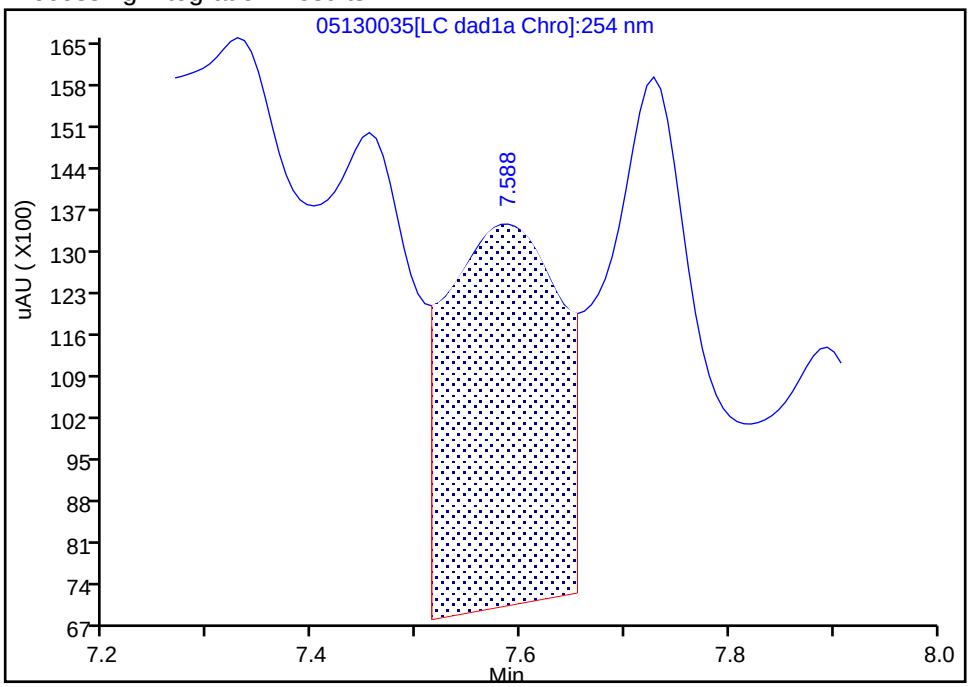
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130035.d				
Injection Date:	13-May-2023 23:54:53	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-B-4-A	Lab Sample ID:	280-175997-4		
Client ID:	LL1mw-084-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	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

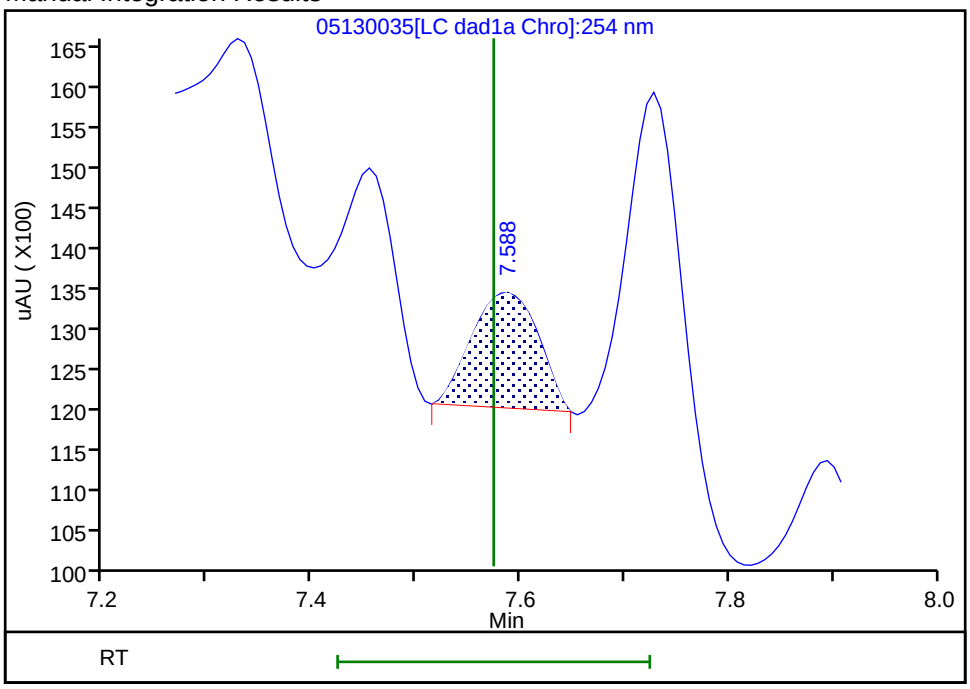
Processing Integration Results

RT: 7.59
Area: 48434
Amount: 0.455293
Amount Units: ug/mL



Manual Integration Results

RT: 7.59
Area: 6346
Amount: 0.059654
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 11:47:24
Audit Action: Manually Integrated Audit Reason: Baseline

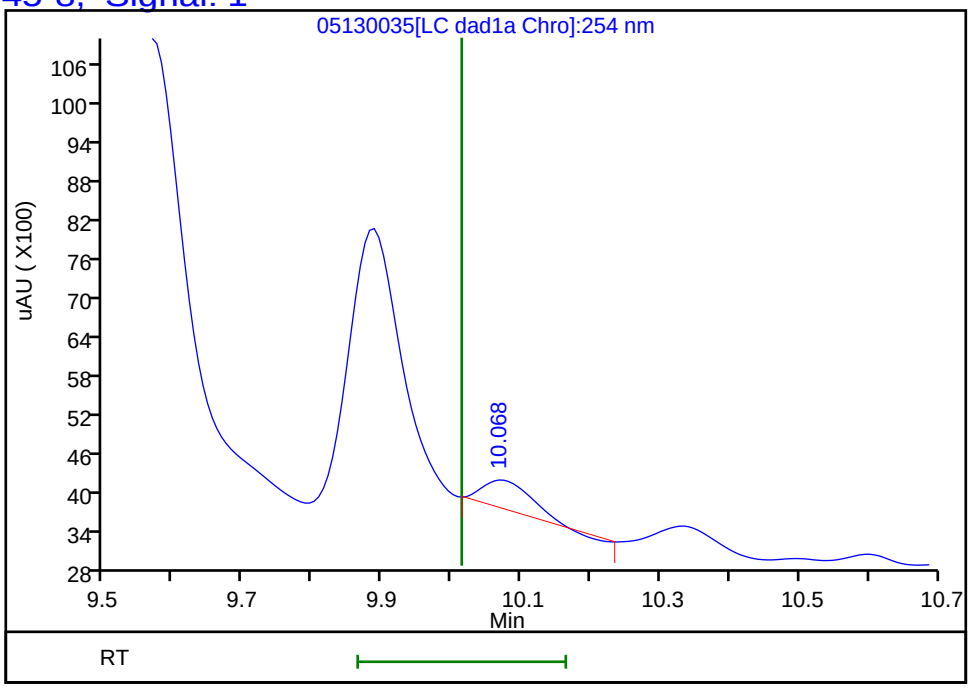
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130035.d				
Injection Date:	13-May-2023 23:54:53	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-B-4-A	Lab Sample ID:	280-175997-4		
Client ID:	LL1mw-084-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.07
Response: 2554
Amount: 0.015562



Reviewer: K8YG, 15-May-2023 11:48:36
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

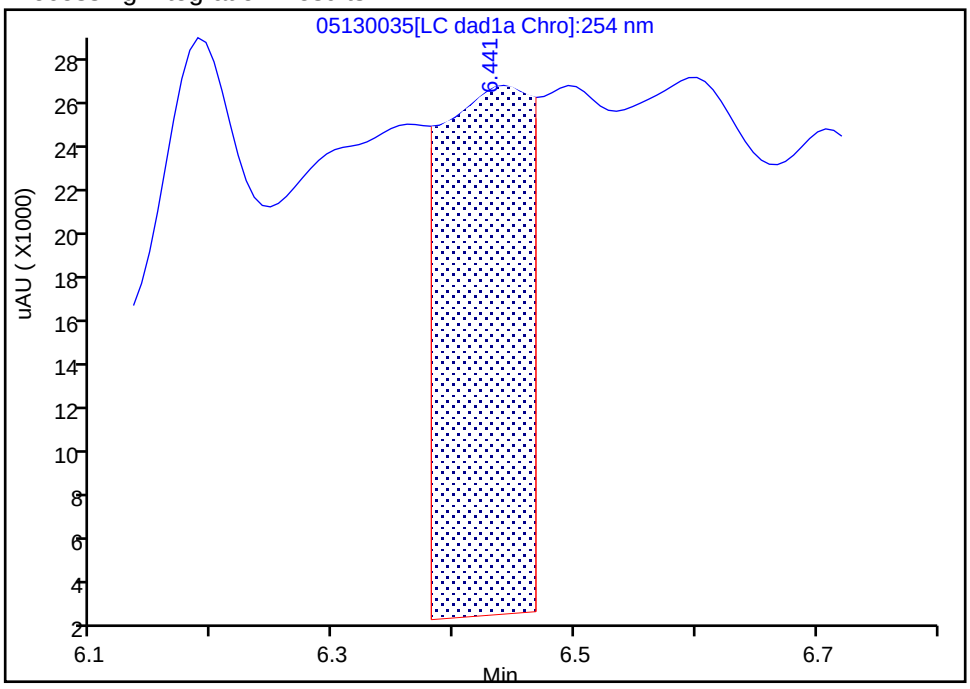
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130035.d				
Injection Date:	13-May-2023 23:54:53	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-B-4-A	Lab Sample ID:	280-175997-4		
Client ID:	LL1mw-084-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	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

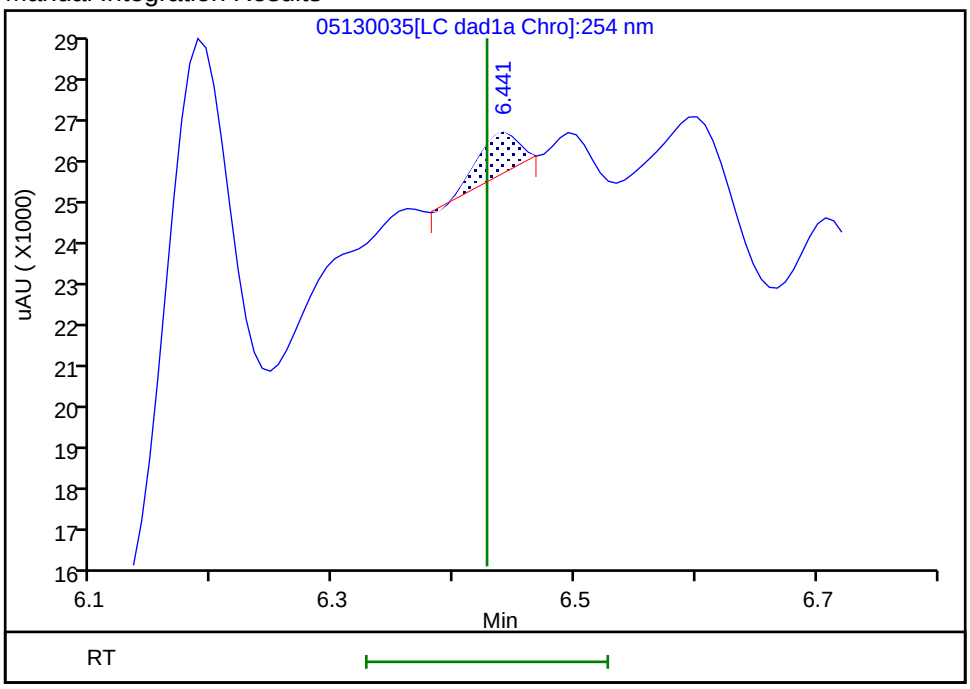
Processing Integration Results

RT: 6.44
Area: 116227
Amount: 0.587933
Amount Units: ug/mL



Manual Integration Results

RT: 6.44
Area: 2235
Amount: 0.011306
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 11:46:05

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-175997-1

SDG No.:

Client Sample ID: LL1mw-084-230401-GW | Lab Sample ID: 280-175997-4

Matrix: Water | Lab File ID: 05160028.D

Analysis Method: 8330B | Date Collected: 05/03/2023 11:03

Extraction Method: 3535 | Date Extracted: 05/10/2023 13:48

Sample wt/vol: 481.8(mL) | Date Analyzed: 05/17/2023 10:38

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.: 612692 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	*1,3-Dinitrobenzene*	*0.16*	*J1*	*0.11*	0.10	*0.038*
6629-29-4	2,4-diamino-6-nitrotoluene	0.93	U M	1.0	0.93	0.45
121-14-2	2,4-Dinitrotoluene	0.083	U M	0.10	0.083	0.028
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.089
5755-27-1	MNX	0.30	U	0.52	0.30	0.096
121-82-4	RDX	0.21	U M	0.22	0.21	0.053
13980-04-6	TNX	0.26	U	0.52	0.26	0.082

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	99	*M*	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160028.D
Lims ID: 280-175997-B-4-A
Client ID: LL1mw-084-230401-GW
Sample Type: Client
Inject. Date: 17-May-2023 10:38:42 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-175997-B-4-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 17-May-2023 16:34:14 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1653

First Level Reviewer: LV5D Date: 17-May-2023 11:30:14

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1	3.948	3.896	0.052	24521	0.0608	M
	2 2,4-diamino-6-nitrotoluene	1		4.342			ND	U
	3 TNX	1		4.822			ND	
	4 DNX	1		5.549			ND	
	5 HMX	1	6.142	6.082	0.060	12538	0.0631	M
	6 MNX	1		6.922			ND	
	8 RDX	1		8.222			ND	U
	9 Nitrobenzene	1		10.602			ND	U
$	10 1,2-Dinitrobenzene	1	11.548	11.435	0.113	55489	0.1977	M
	11 3,5-Dinitroaniline	1	13.381	13.275	0.106	48183	0.1070	
	12 1,3-Dinitrobenzene	1	13.695	13.609	0.086	9555	0.0152	
	13 Nitroglycerin	2		13.982			ND	
	14 o-Nitrotoluene	1		14.522			ND	7
	16 p-Nitrotoluene	1		14.749			ND	
	17 4-Amino-2,6-dinitrotoluene	1	15.348	15.249	0.099	518498	1.76	
	18 m-Nitrotoluene	1		15.582			ND	
	19 2-Amino-4,6-dinitrotoluene	1	16.168	16.075	0.093	227001	0.5305	
	20 1,3,5-Trinitrobenzene	1	16.461	16.375	0.086	43628	0.1075	
	21 2,6-Dinitrotoluene	1		17.342			ND	
	22 2,4-Dinitrotoluene	1		17.809			ND	U
	23 Tetryl	1		20.816			ND	
	24 2,4,6-Trinitrotoluene	1	21.755	21.662	0.093	79992	0.1823	M
	25 PETN	2		22.669			ND	7

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Review Flags
M - Manually Integrated
U - Marked Undetected

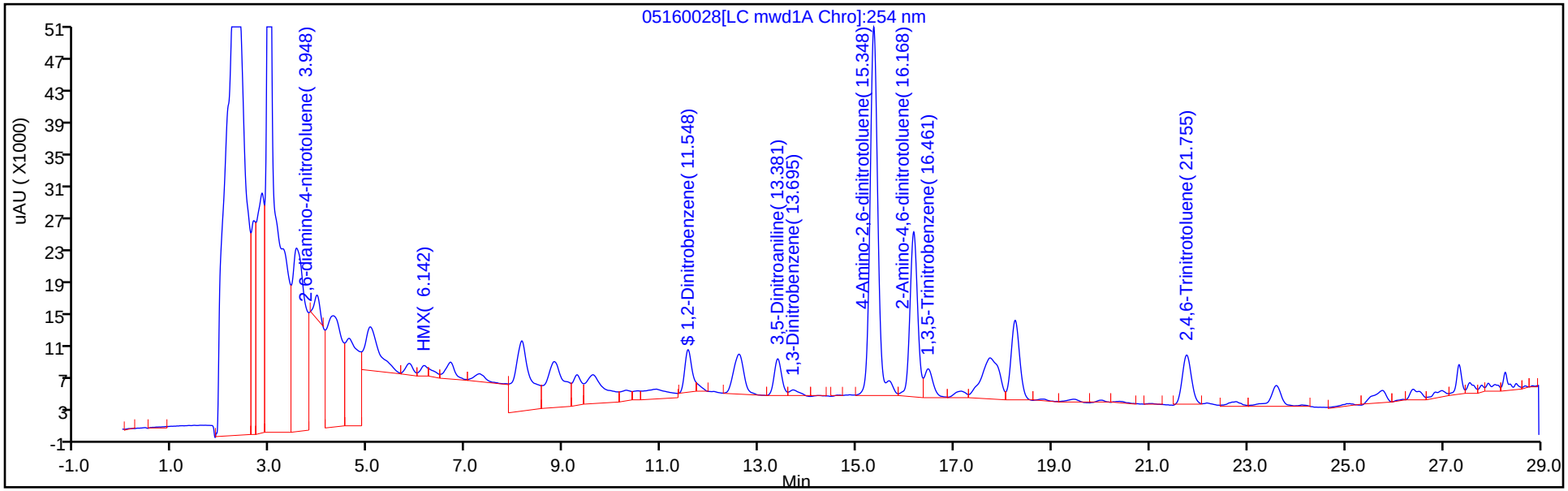
Report Date: 17-May-2023 16:34:21 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

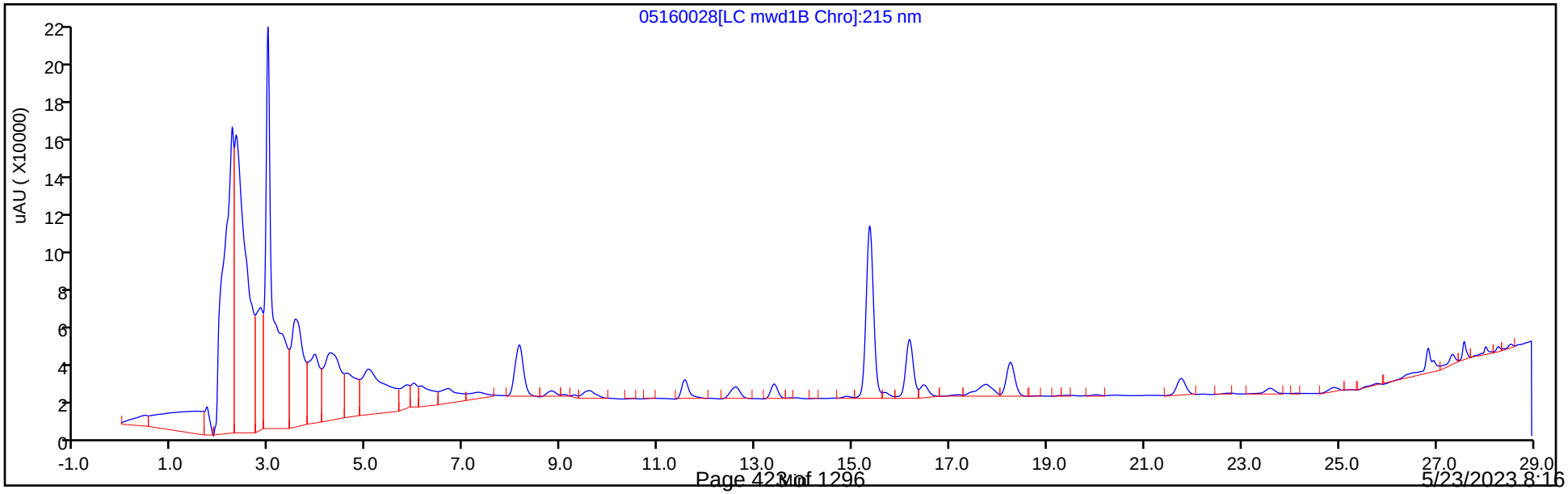
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160028.D

Injection Date:	17-May-2023 10:38:42	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	280-175997-B-4-A	Lab Sample ID:	280-175997-4	Worklist Smp#:	28
Client ID:	LL1mw-084-230401-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160028.D				
Lims ID:	280-175997-B-4-A				
Client ID:	LL1mw-084-230401-GW				
Sample Type:	Client				
Inject. Date:	17-May-2023 10:38:42	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-175997-B-4-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	17-May-2023 16:34:14	Calib Date:	29-Apr-2023 04:18:01		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1653				
First Level Reviewer: LV5D		Date:	17-May-2023 11:30:14		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1977	98.84

Manual Integration/User Assign Peak Report

Eurofins Denver

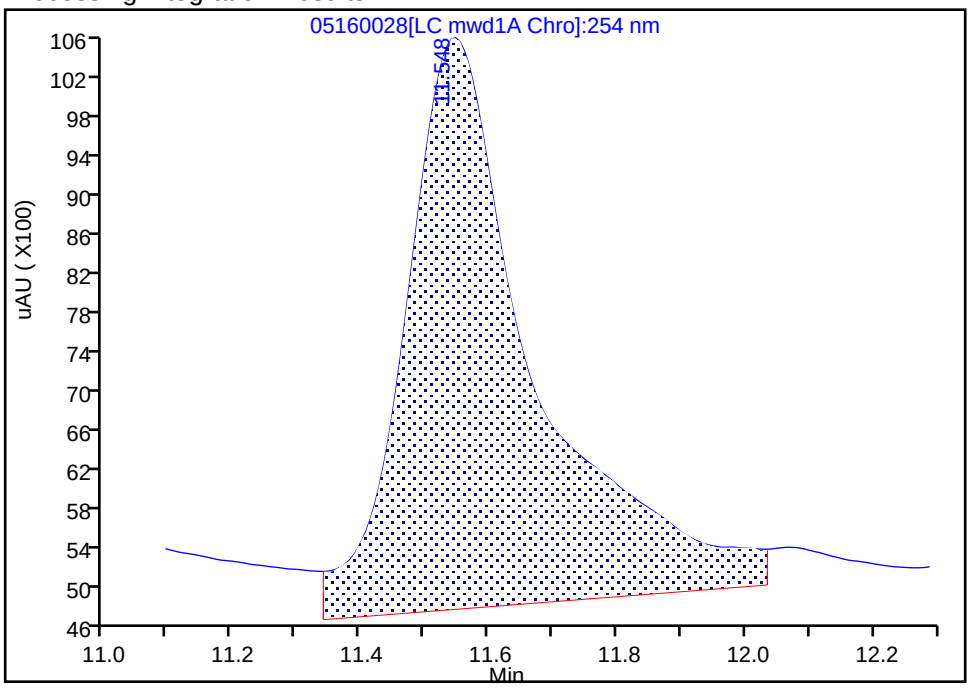
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160028.D				
Injection Date:	17-May-2023 10:38:42	Instrument ID:	CHHPLC_X5		
Lims ID:	280-175997-B-4-A	Lab Sample ID:	280-175997-4		
Client ID:	LL1mw-084-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

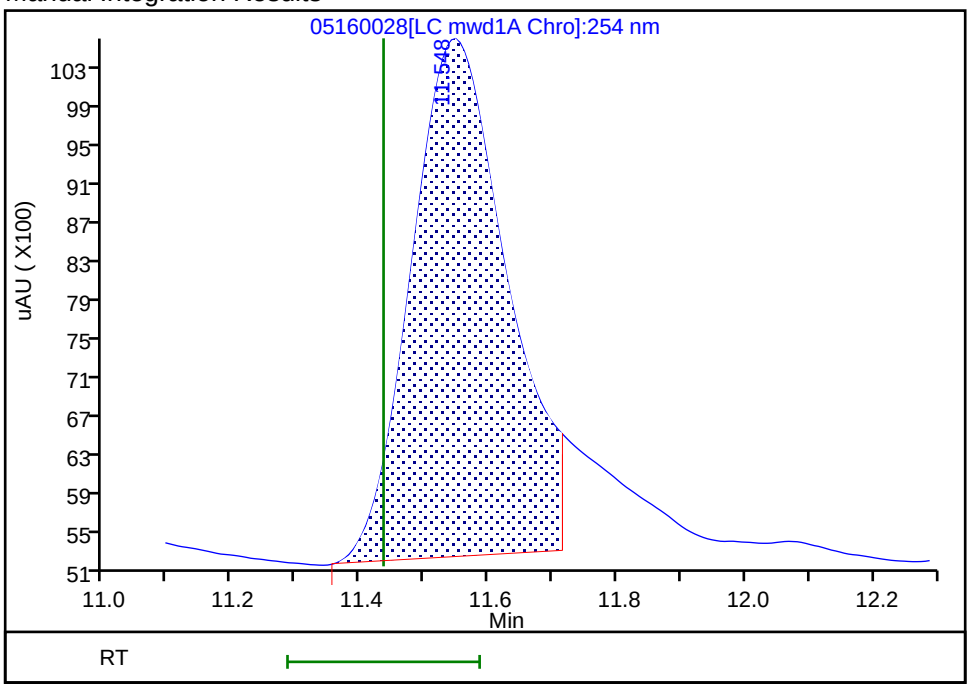
Processing Integration Results

RT: 11.55
Area: 81966
Amount: 0.292009
Amount Units: ug/ml



Manual Integration Results

RT: 11.55
Area: 55489
Amount: 0.197683
Amount Units: ug/ml



Reviewer: LV5D, 17-May-2023 11:29:12 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

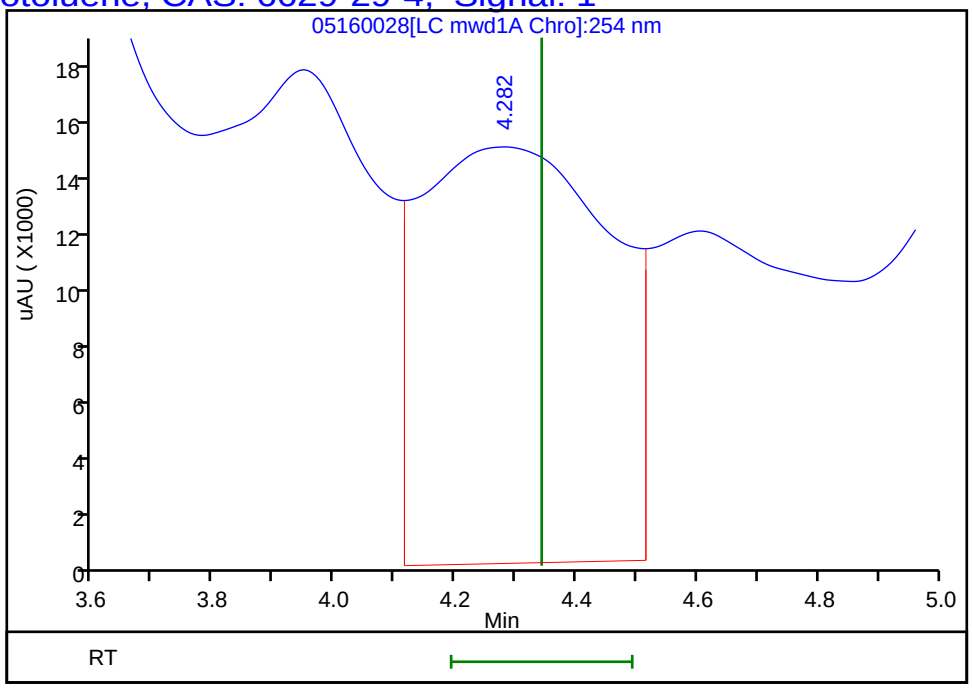
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160028.D				
Injection Date:	17-May-2023 10:38:42	Instrument ID:	CHHPLC_X5		
Lims ID:	280-175997-B-4-A	Lab Sample ID:	280-175997-4		
Client ID:	LL1mw-084-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

2 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4, Signal: 1

RT: 4.28
Response: 301310
Amount: 1.337488



Reviewer: LV5D, 17-May-2023 11:30:14
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

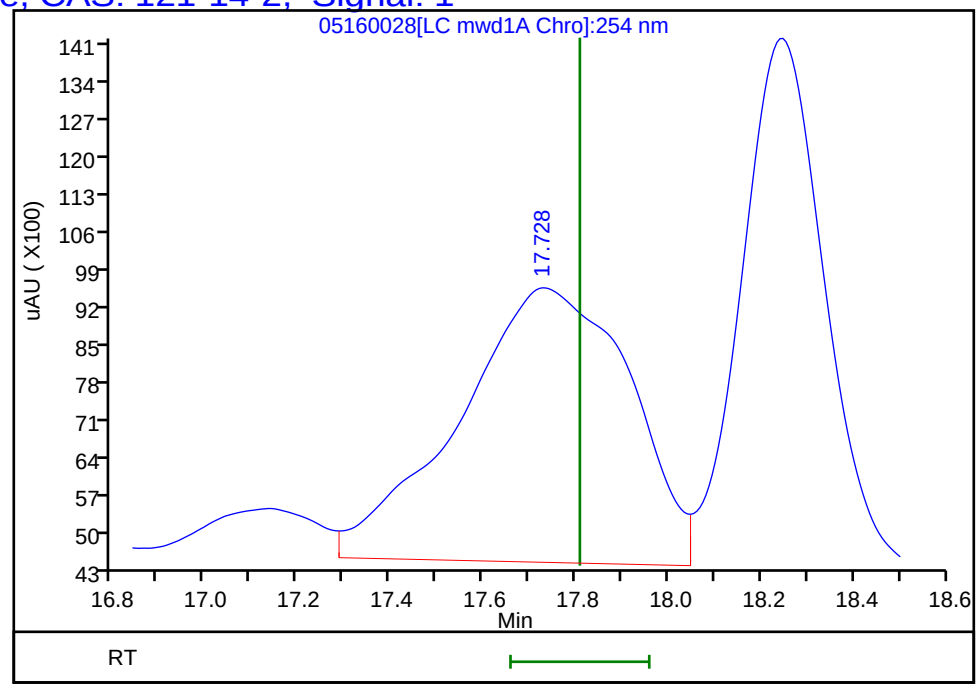
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160028.D				
Injection Date:	17-May-2023 10:38:42	Instrument ID:	CHHPLC_X5		
Lims ID:	280-175997-B-4-A	Lab Sample ID:	280-175997-4		
Client ID:	LL1mw-084-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

22 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 17.73
Response: 132118
Amount: 0.226050



Reviewer: LV5D, 17-May-2023 11:30:14
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

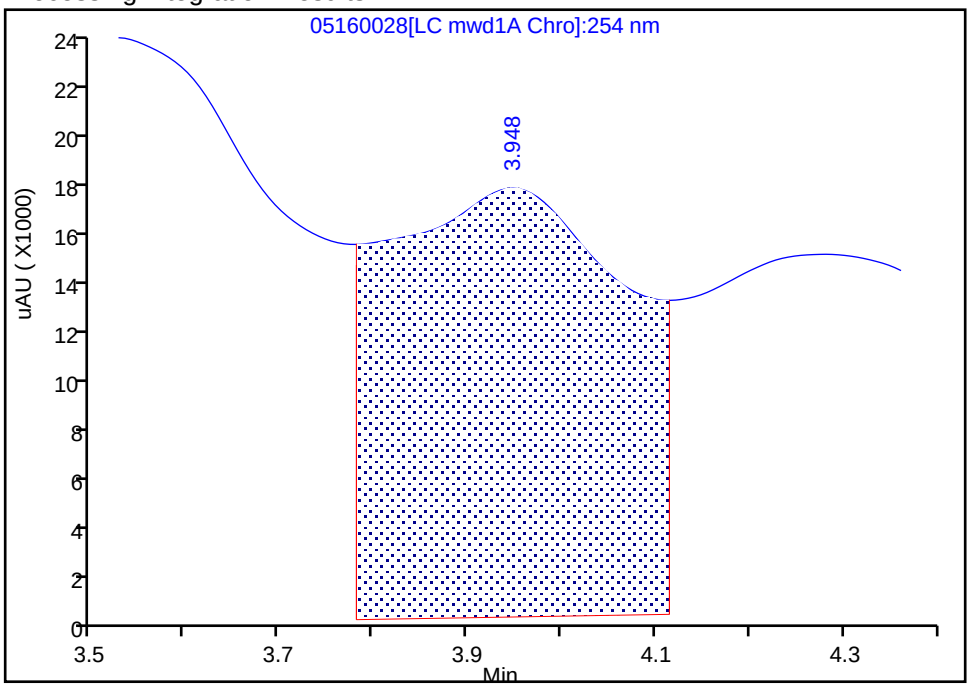
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Injection Date:	17-May-2023 10:38:42	Instrument ID:	CHHPLC_X5		
Lims ID:	280-175997-B-4-A	Lab Sample ID:	280-175997-4		
Client ID:	LL1mw-084-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

1 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

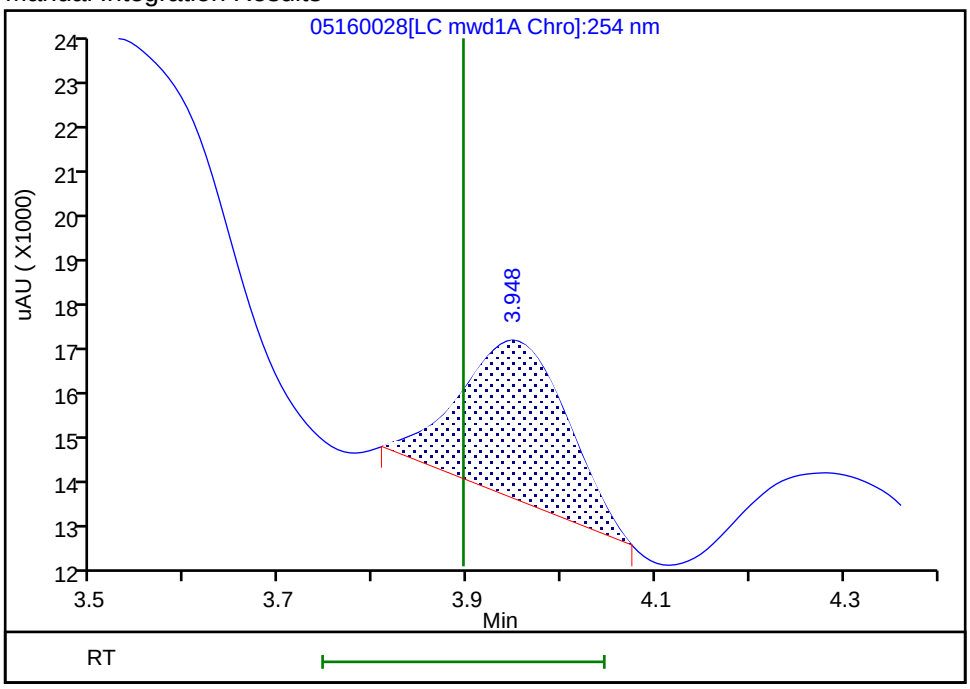
Processing Integration Results

RT: 3.95
Area: 294717
Amount: 0.730764
Amount Units: ug/ml



Manual Integration Results

RT: 3.95
Area: 24521
Amount: 0.060801
Amount Units: ug/ml



Reviewer: LV5D, 17-May-2023 11:29:20 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

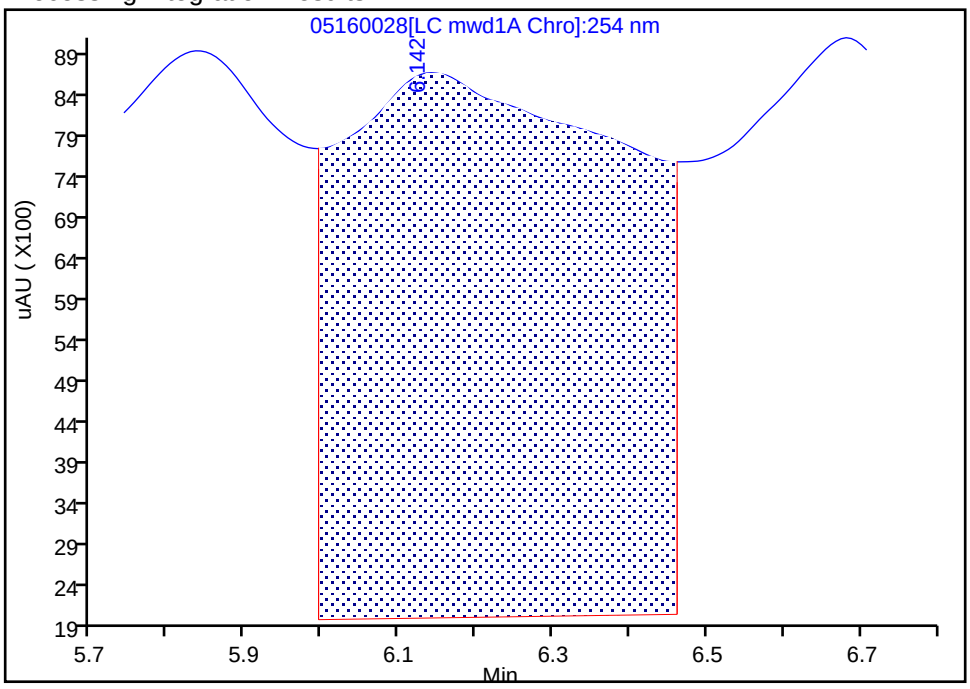
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160028.D				
Injection Date:	17-May-2023 10:38:42	Instrument ID:	CHHPLC_X5		
Lims ID:	280-175997-B-4-A	Lab Sample ID:	280-175997-4		
Client ID:	LL1mw-084-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

5 HMX, CAS: 2691-41-0

Signal: 1

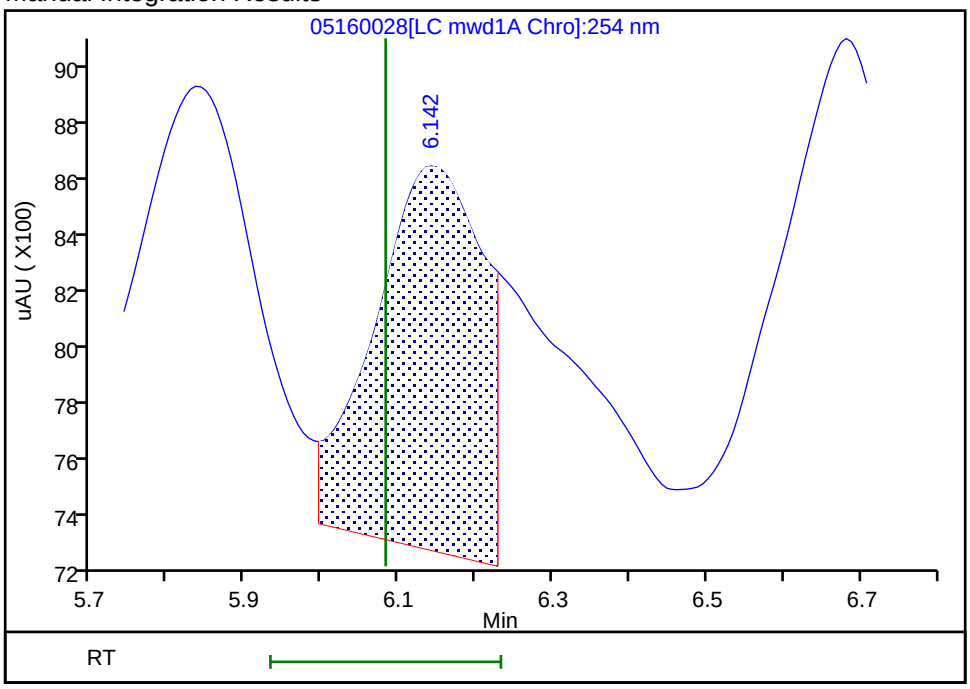
Processing Integration Results

RT: 6.14
Area: 169310
Amount: 0.908603
Amount Units: ug/ml



Manual Integration Results

RT: 6.14
Area: 12538
Amount: 0.063131
Amount Units: ug/ml



Reviewer: LV5D, 17-May-2023 11:29:36 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

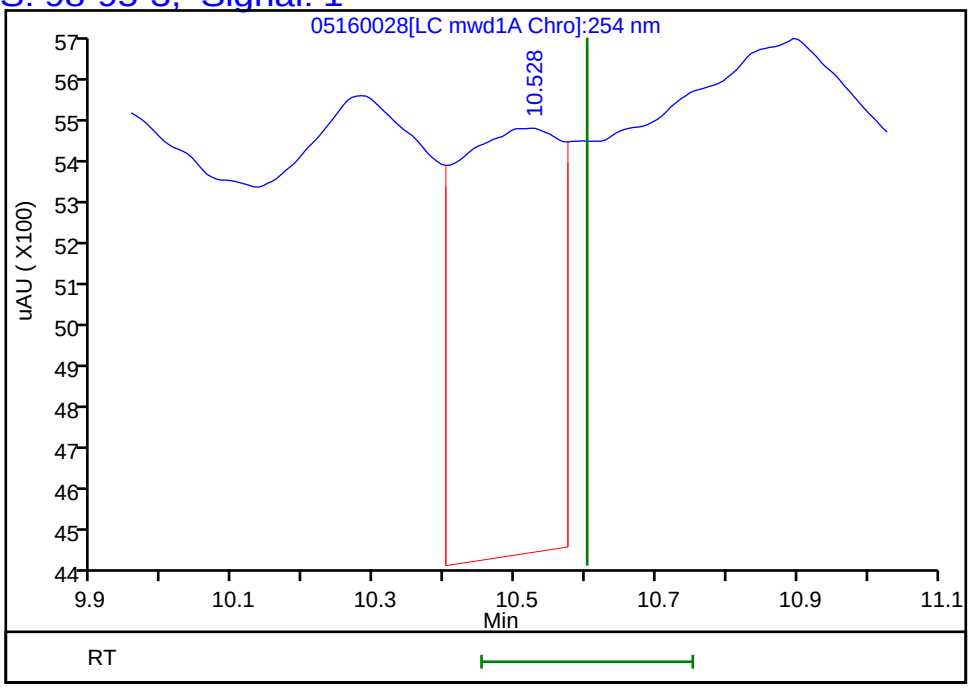
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160028.D				
Injection Date:	17-May-2023 10:38:42	Instrument ID:	CHHPLC_X5		
Lims ID:	280-175997-B-4-A	Lab Sample ID:	280-175997-4		
Client ID:	LL1mw-084-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

9 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 10.53
Response: 10339
Amount: 0.025923



Reviewer: LV5D, 17-May-2023 11:30:14
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

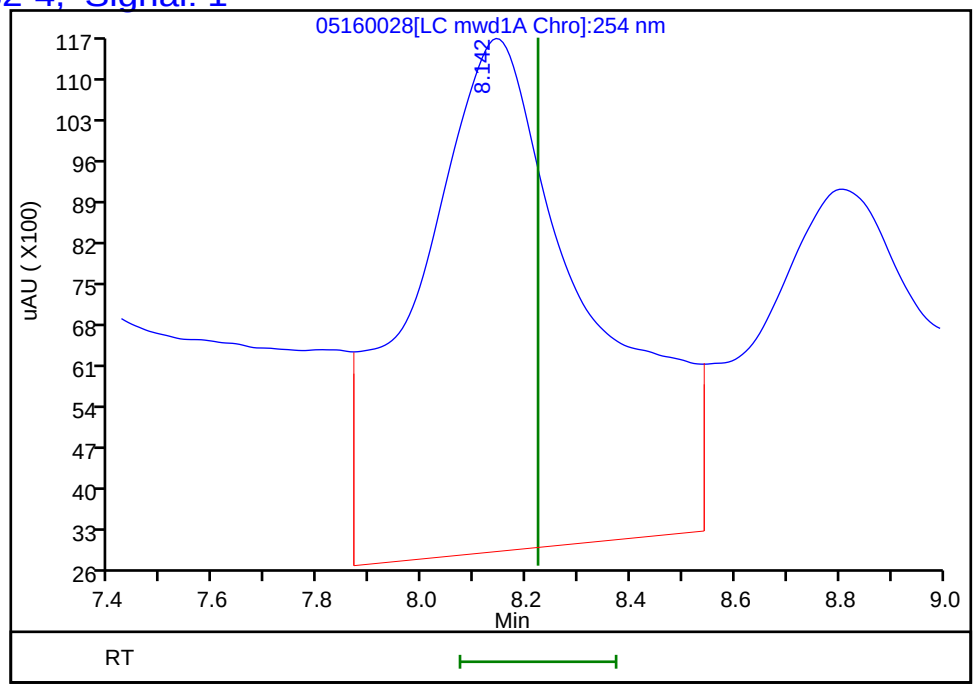
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160028.D				
Injection Date:	17-May-2023 10:38:42	Instrument ID:	CHHPLC_X5		
Lims ID:	280-175997-B-4-A	Lab Sample ID:	280-175997-4		
Client ID:	LL1mw-084-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

8 RDX, CAS: 121-82-4, Signal: 1

RT: 8.14
Response: 200804
Amount: 0.928084



Reviewer: LV5D, 17-May-2023 11:30:14
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-175997-1

SDG No.:

Client Sample ID: LL1mw-084-230402-GW | Lab Sample ID: 280-175997-5

Matrix: Water | Lab File ID: 05130036.D

Analysis Method: 8330B | Date Collected: 05/03/2023 11:03

Extraction Method: 3535 | Date Extracted: 05/10/2023 13:48

Sample wt/vol: 479.6(mL) | Date Analyzed: 05/14/2023 00:17

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.: 612396 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.0		0.22	0.21	0.088
99-65-0	1,3-Dinitrobenzene	1.6		0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	2.4		0.11	0.10	0.047
6629-29-4	2,4-diamino-6-nitrotoluene	0.73	J M	1.0	0.94	0.45
121-14-2	2,4-Dinitrotoluene	0.97		0.10	0.083	0.029
59229-75-3	2,6-diamino-4-nitrotoluene	0.94	U M	1.0	0.94	0.23
606-20-2	2,6-Dinitrotoluene	0.083	U	0.10	0.083	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	6.8		0.11	0.10	0.053
88-72-2	2-Nitrotoluene	0.21	J	0.22	0.21	0.089
618-87-1	3,5-Dinitroaniline	1.2		0.42	0.31	0.14
99-08-1	3-Nitrotoluene	0.36	U	0.42	0.36	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	18		0.16	0.13	0.060
99-99-0	4-Nitrotoluene	0.42	U M	0.43	0.42	0.10
80251-29-2	DNX	0.26	U M	0.52	0.26	0.10
2691-41-0	HMX	0.21	U M	0.22	0.21	0.091
5755-27-1	MNX	1.1	M	0.52	0.30	0.097
98-95-3	Nitrobenzene	0.21	U M	0.22	0.21	0.095
55-63-0	Nitroglycerin	2.1	U	2.2	2.1	0.96
78-11-5	PETN	1.0	U	1.1	1.0	0.47
121-82-4	RDX	0.78	M	0.22	0.21	0.054
479-45-8	Tetryl	0.10	U M	0.11	0.10	0.033
13980-04-6	TNX	0.11	J M	0.52	0.26	0.083

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	105		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130036.D
Lims ID: 280-175997-A-5-A
Client ID: LL1mw-084-230402-GW
Sample Type: Client
Inject. Date: 14-May-2023 00:17:53 ALS Bottle#: 36 Worklist Smp#: 36
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-175997-A-5-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:22 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: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 11:50:35

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1		6.426			ND	U
3 TNX	1	6.444	6.427	0.017	2141	0.0108	M
4 HMX	1		6.547			ND	U
5 2,4-diamino-6-nitrotoluene	1	6.598	6.620	-0.022	10317	0.0704	M
6 DNX	1		6.754			ND	U
7 MNX	1	7.184	7.187	-0.003	14337	0.1093	M
8 RDX	1	7.598	7.574	0.024	8003	0.0752	M
$ 10 1,2-Dinitrobenzene	1	8.518	8.521	-0.003	26474	0.2096	
11 1,3,5-Trinitrobenzene	1	8.644	8.647	-0.003	21171	0.0975	
12 1,3-Dinitrobenzene	1	9.244	9.274	-0.030	44715	0.1519	
13 Nitrobenzene	1		9.647			ND	U
14 3,5-Dinitroaniline	1	9.884	9.887	-0.003	25475	0.1118	
15 Tetryl	1		10.014			ND	U
16 Nitroglycerin	2		10.467			ND	
17 2,4,6-Trinitrotoluene	1	10.904	10.914	-0.010	48581	0.2302	
18 4-Amino-2,6-dinitrotoluene	1	11.104	11.114	-0.010	260644	1.68	
19 2-Amino-4,6-dinitrotoluene	1	11.358	11.367	-0.009	131897	0.6549	
20 2,6-Dinitrotoluene	1		11.514			ND	
21 2,4-Dinitrotoluene	1	11.678	11.687	-0.009	27685	0.0933	
22 o-Nitrotoluene	1	12.544	12.514	0.030	2588	0.0202	
23 p-Nitrotoluene	1		12.940			ND	U
24 m-Nitrotoluene	1		13.514			ND	
25 PETN	2		14.694			ND	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
U - Marked Undetected

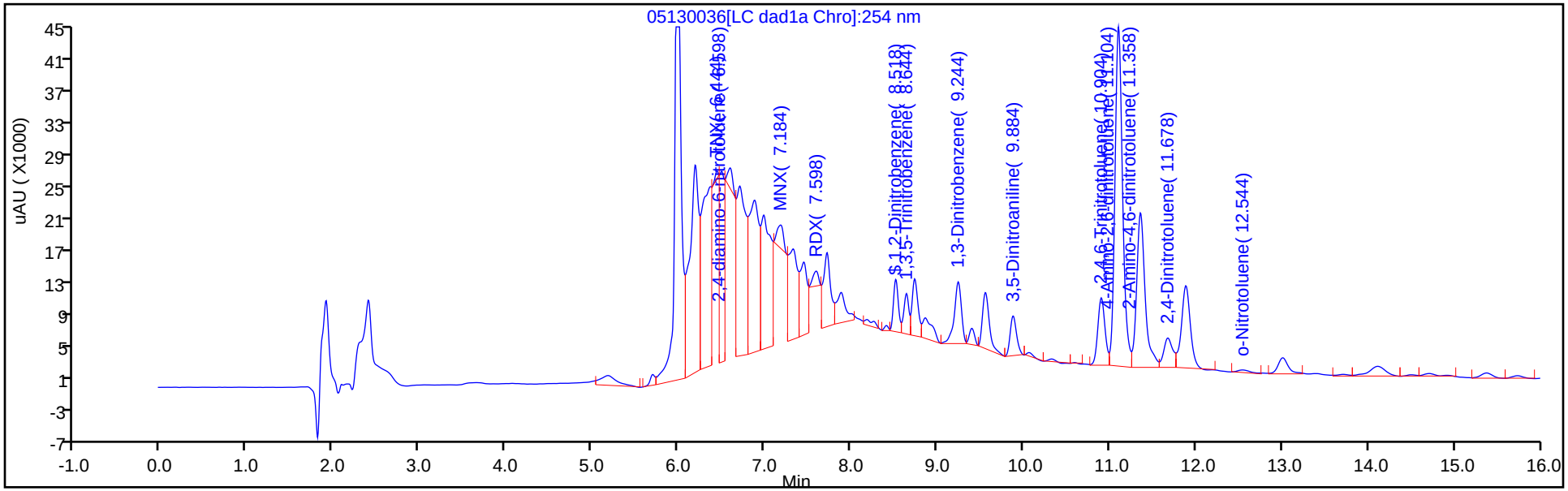
Report Date: 16-May-2023 12:37:24 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

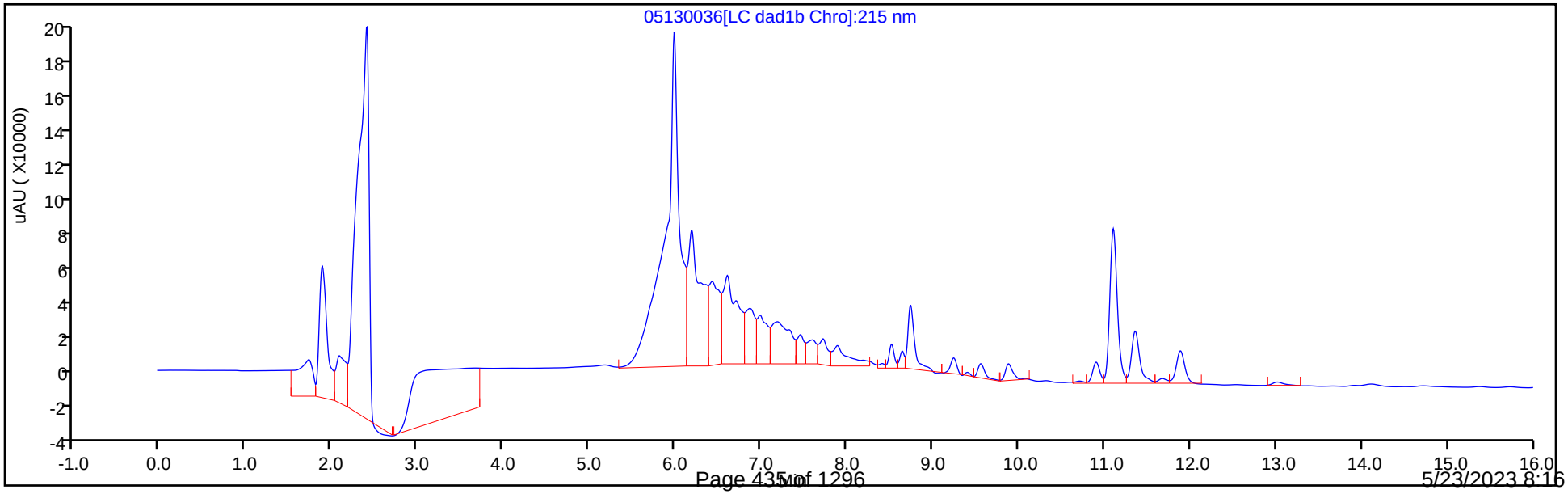
Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130036.d

Injection Date:	14-May-2023 00:17:53	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-175997-A-5-A	Lab Sample ID:	280-175997-5	Worklist Smp#:	36
Client ID:	LL1mw-084-230402-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	36
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\20230513-121427.b\05130036.D				
Lims ID:	280-175997-A-5-A				
Client ID:	LL1mw-084-230402-GW				
Sample Type:	Client				
Inject. Date:	14-May-2023 00:17:53	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-175997-A-5-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-May-2023 12:37:22	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:	CTX1672				

First Level Reviewer: K8YG Date: 15-May-2023 11:50:35

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2096	104.80

Manual Integration/User Assign Peak Report

Eurofins Denver

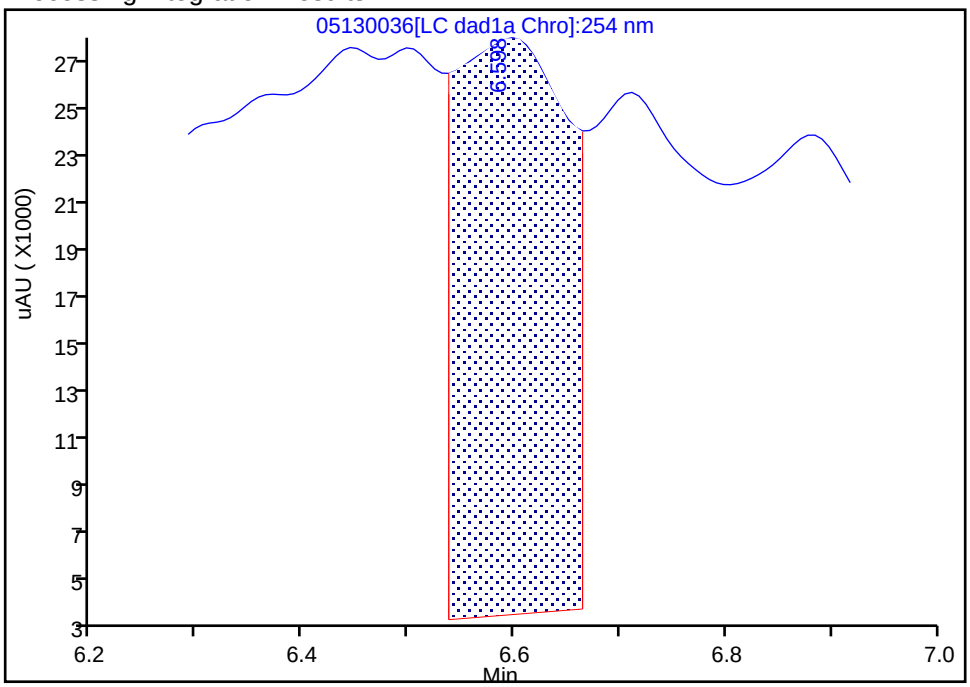
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130036.d				
Injection Date:	14-May-2023 00:17:53	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-A-5-A	Lab Sample ID:	280-175997-5		
Client ID:	LL1mw-084-230402-GW				
Operator ID:	JZ/JG	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	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

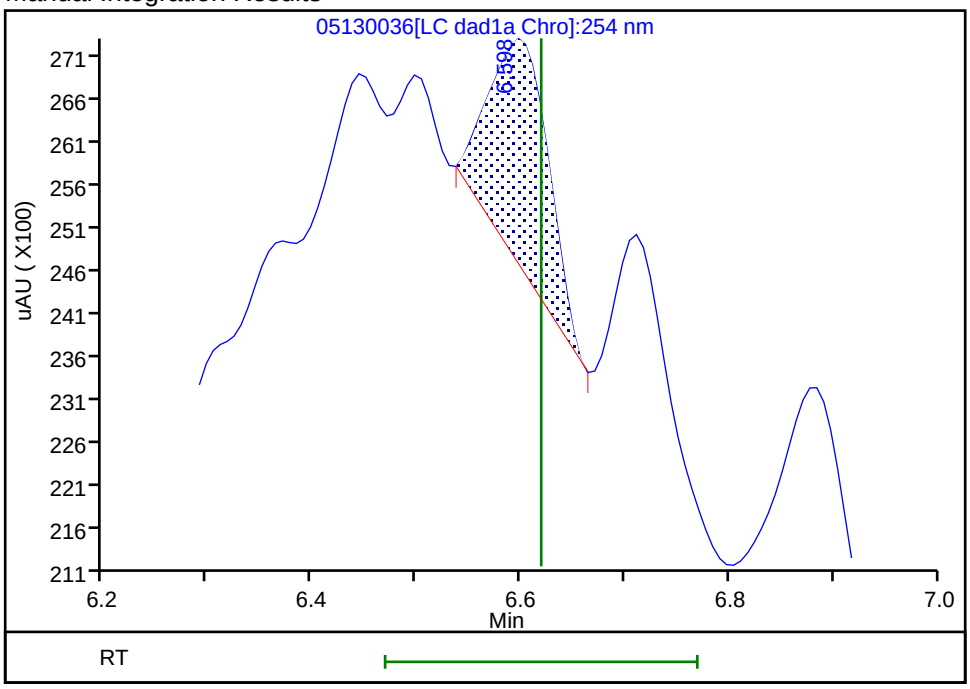
Processing Integration Results

RT: 6.60
Area: 170483
Amount: 1.163928
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 10317
Amount: 0.070437
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 11:49:26

Audit Action: Manually Integrated Audit Reason: Baseline

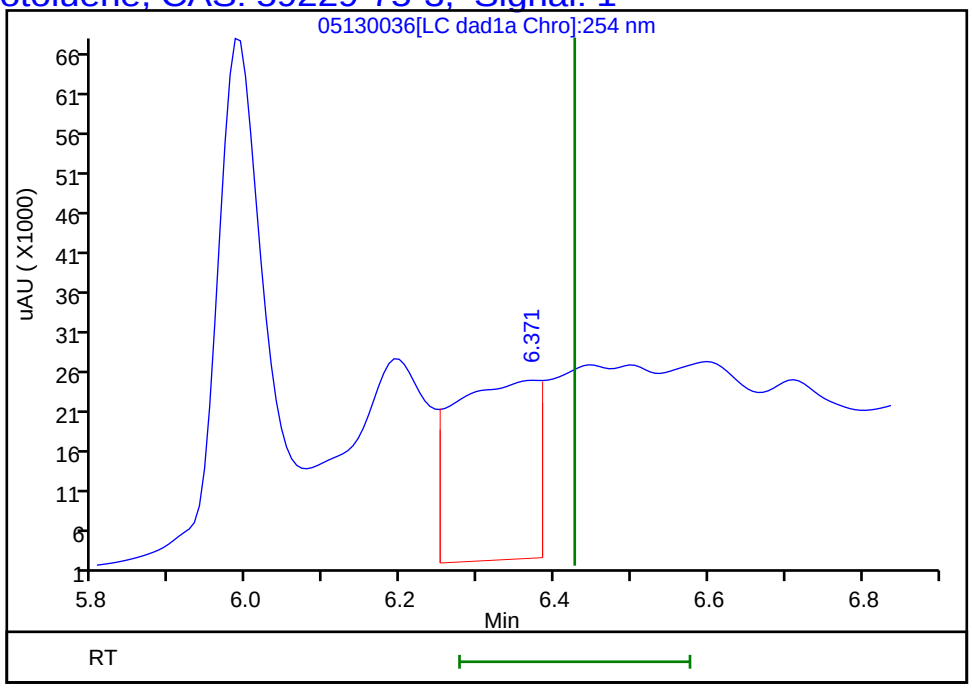
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130036.d				
Injection Date:	14-May-2023 00:17:53	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-A-5-A	Lab Sample ID:	280-175997-5		
Client ID:	LL1mw-084-230402-GW				
Operator ID:	JZ/JG	ALS Bottle#:	36	Worklist Smp#:	36
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

RT: 6.37
Response: 168901
Amount: 0.731572



Reviewer: K8YG, 15-May-2023 11:50:35
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

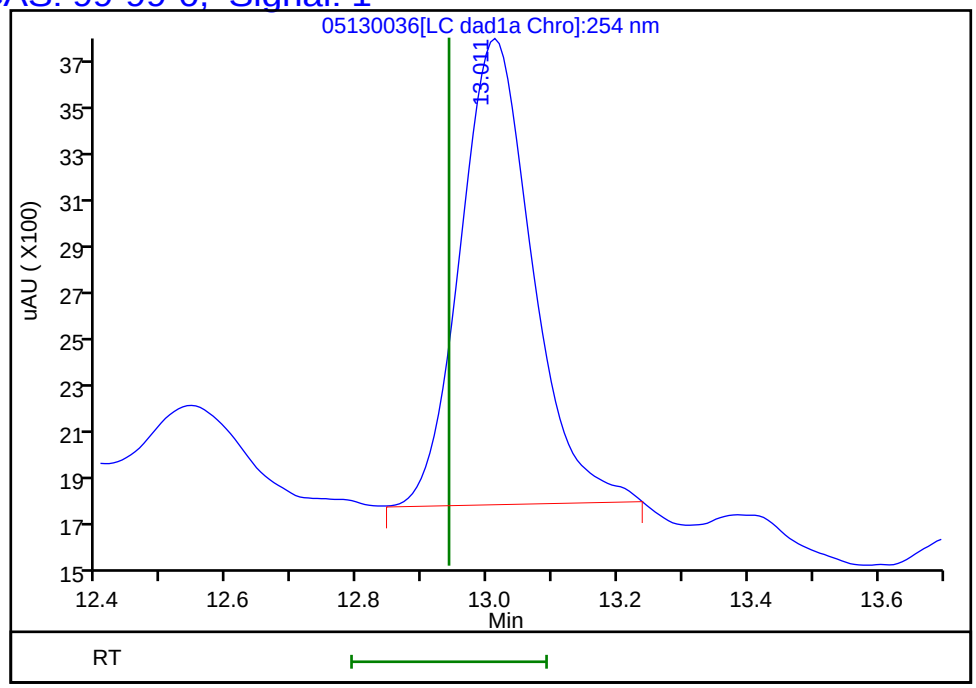
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130036.d				
Injection Date:	14-May-2023 00:17:53	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-A-5-A	Lab Sample ID:	280-175997-5		
Client ID:	LL1mw-084-230402-GW				
Operator ID:	JZ/JG	ALS Bottle#:	36	Worklist Smp#:	36
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: 13.01
Response: 14737
Amount: 0.131722



Reviewer: K8YG, 15-May-2023 11:50:35
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

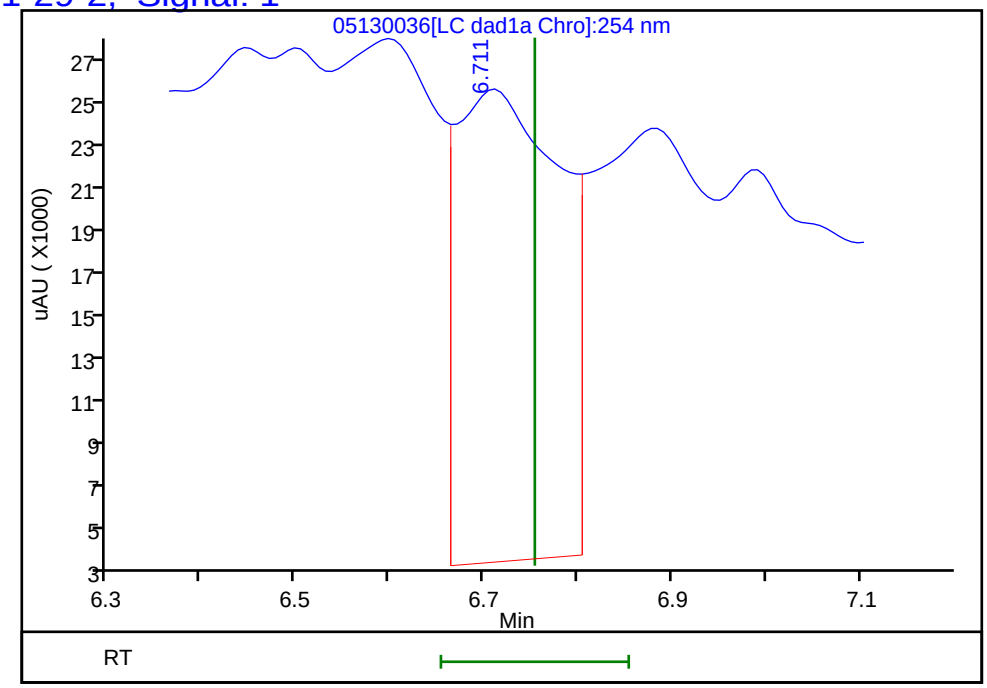
User Disabled Compound Report

Eurofins Denver

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Injection Date:	14-May-2023 00:17:53	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-A-5-A	Lab Sample ID:	280-175997-5		
Client ID:	LL1mw-084-230402-GW				
Operator ID:	JZ/JG	ALS Bottle#:	36	Worklist Smp#:	36
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

RT: 6.71
Response: 161005
Amount: 1.114511



Reviewer: K8YG, 15-May-2023 11:50:35
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

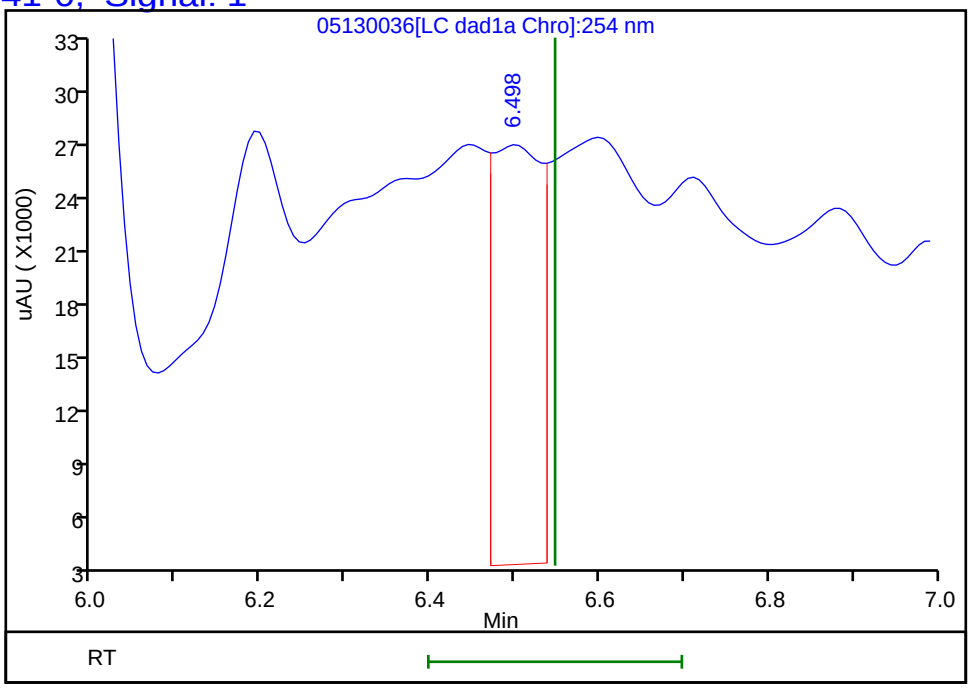
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130036.d				
Injection Date:	14-May-2023 00:17:53	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-A-5-A	Lab Sample ID:	280-175997-5		
Client ID:	LL1mw-084-230402-GW				
Operator ID:	JZ/JG	ALS Bottle#:	36	Worklist Smp#:	36
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: 92765
Amount: 0.991840



Reviewer: K8YG, 15-May-2023 11:50:35
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

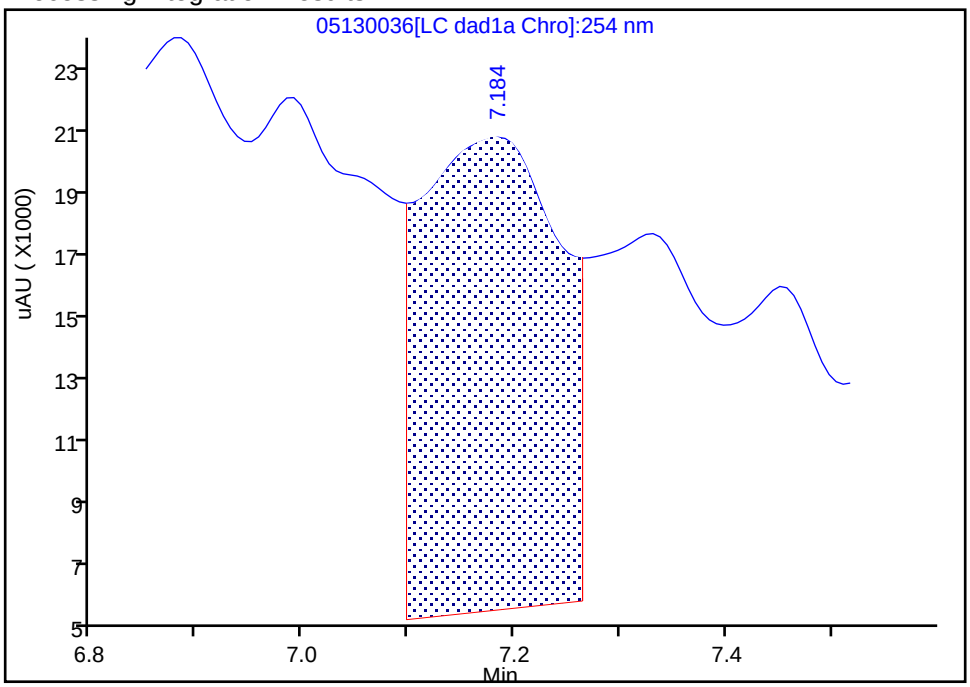
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Injection Date:	14-May-2023 00:17:53	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-A-5-A	Lab Sample ID:	280-175997-5		
Client ID:	LL1mw-084-230402-GW				
Operator ID:	JZ/JG	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
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

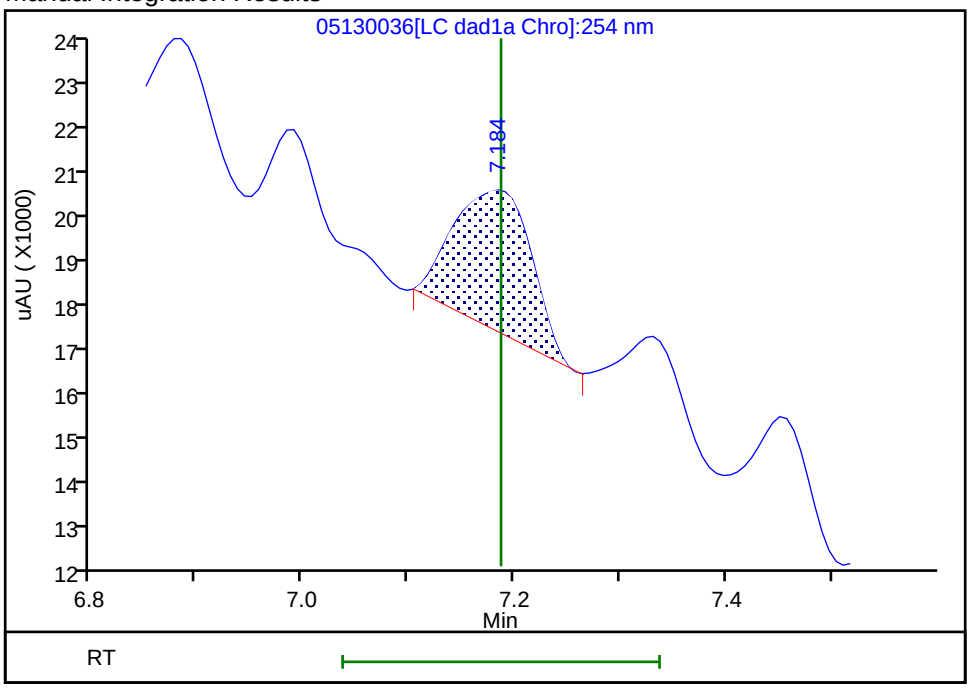
Processing Integration Results

RT: 7.18
Area: 132010
Amount: 1.006392
Amount Units: ug/mL



Manual Integration Results

RT: 7.18
Area: 14337
Amount: 0.109300
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 11:49:47
Audit Action: Manually Integrated Audit Reason: Baseline

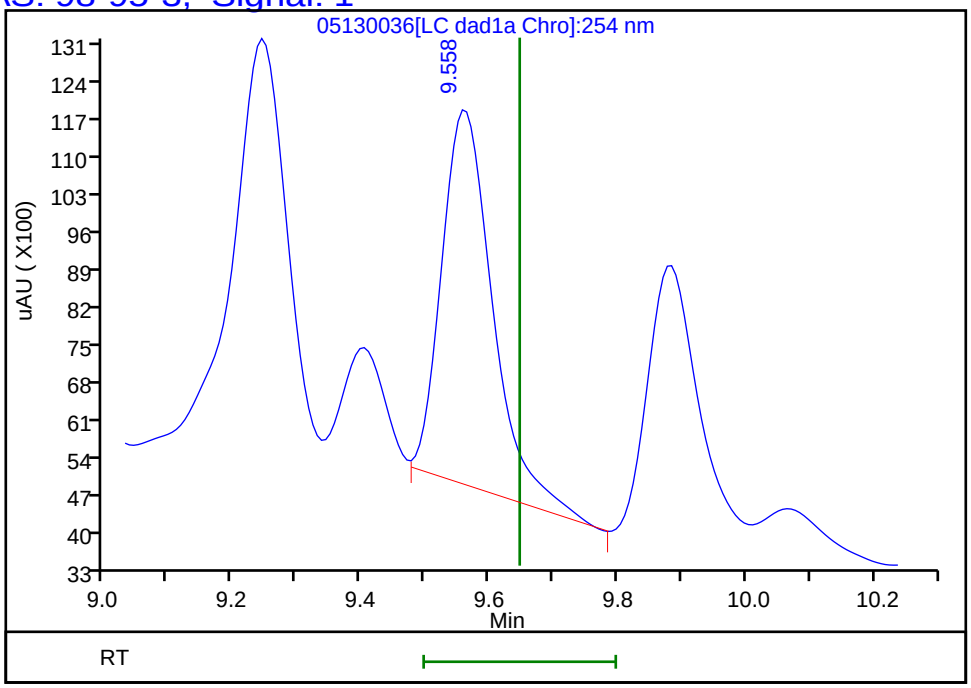
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130036.d				
Injection Date:	14-May-2023 00:17:53	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-A-5-A	Lab Sample ID:	280-175997-5		
Client ID:	LL1mw-084-230402-GW				
Operator ID:	JZ/JG	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

13 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 9.56
Response: 39176
Amount: 0.204848



Reviewer: K8YG, 15-May-2023 11:50:35
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

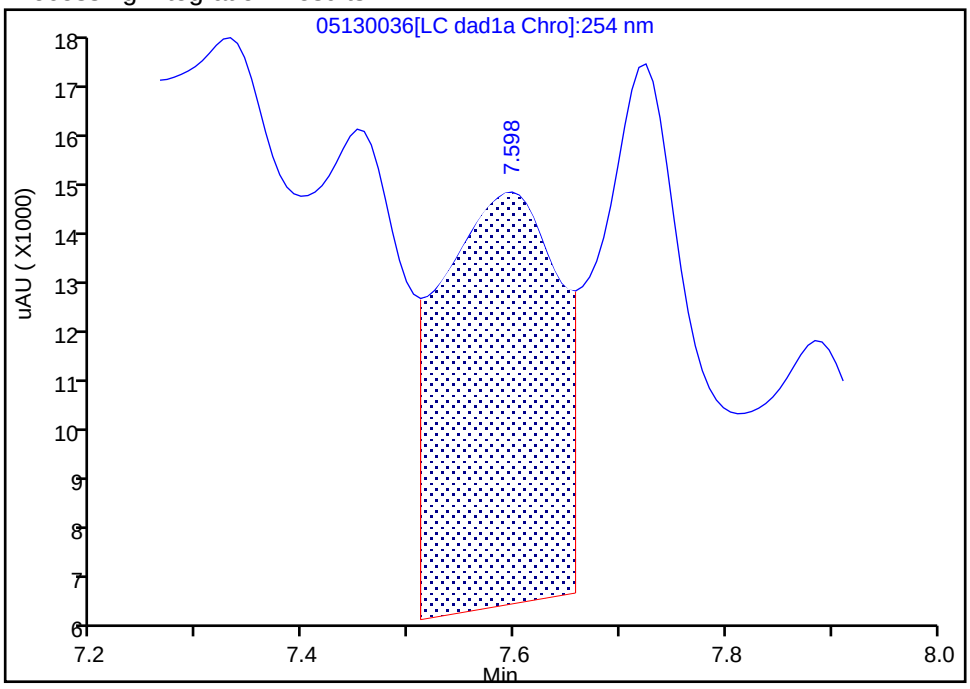
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Injection Date:	14-May-2023 00:17:53	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-A-5-A	Lab Sample ID:	280-175997-5		
Client ID:	LL1mw-084-230402-GW				
Operator ID:	JZ/JG	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

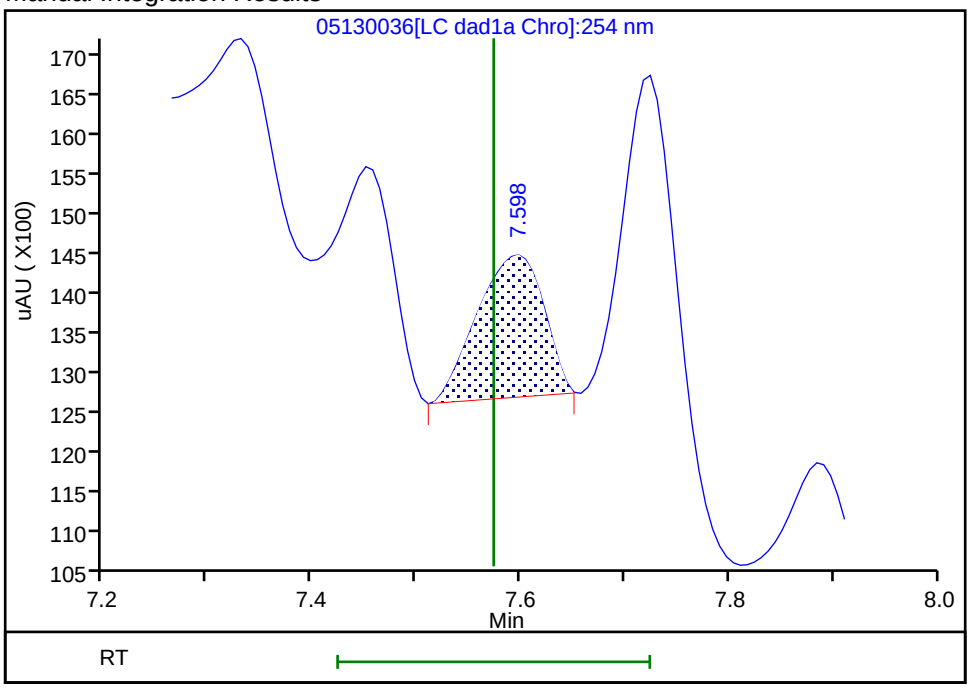
Processing Integration Results

RT: 7.60
Area: 57010
Amount: 0.535910
Amount Units: ug/mL



Manual Integration Results

RT: 7.60
Area: 8003
Amount: 0.075230
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 11:49:54
Audit Action: Manually Integrated Audit Reason: Baseline

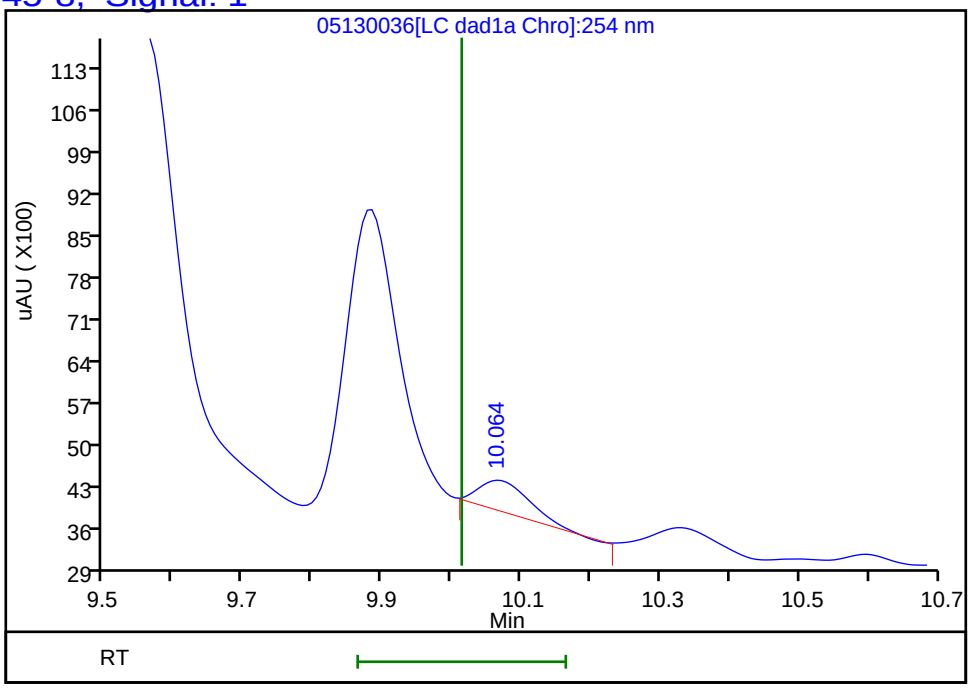
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130036.d				
Injection Date:	14-May-2023 00:17:53	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-A-5-A	Lab Sample ID:	280-175997-5		
Client ID:	LL1mw-084-230402-GW				
Operator ID:	JZ/JG	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.06
Response: 2661
Amount: 0.016214



Reviewer: K8YG, 15-May-2023 11:50:35
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

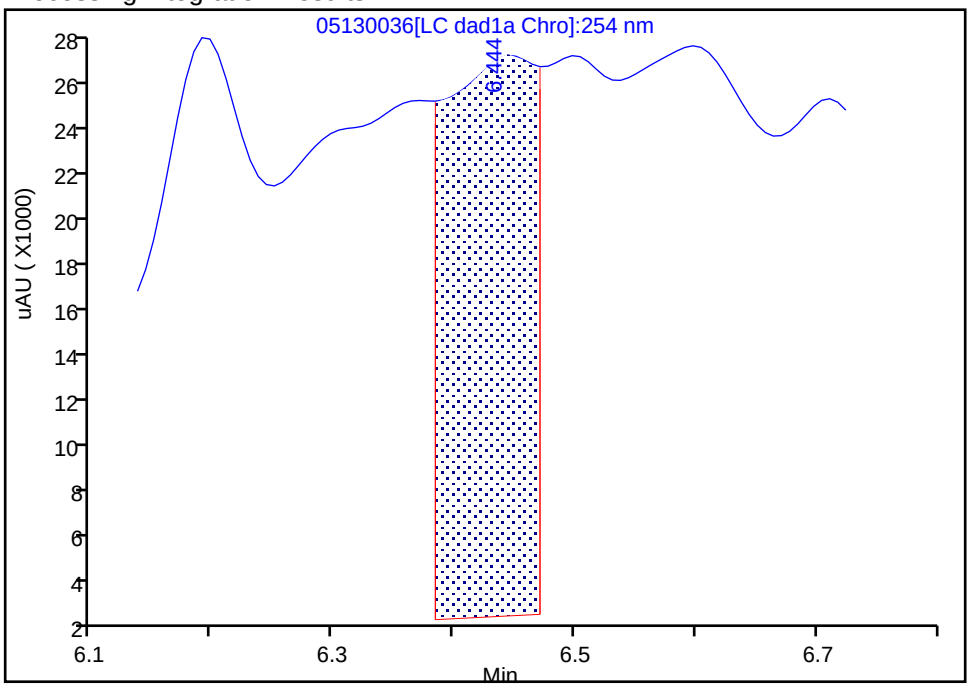
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Injection Date:	14-May-2023 00:17:53	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-A-5-A	Lab Sample ID:	280-175997-5		
Client ID:	LL1mw-084-230402-GW				
Operator ID:	JZ/JG	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
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

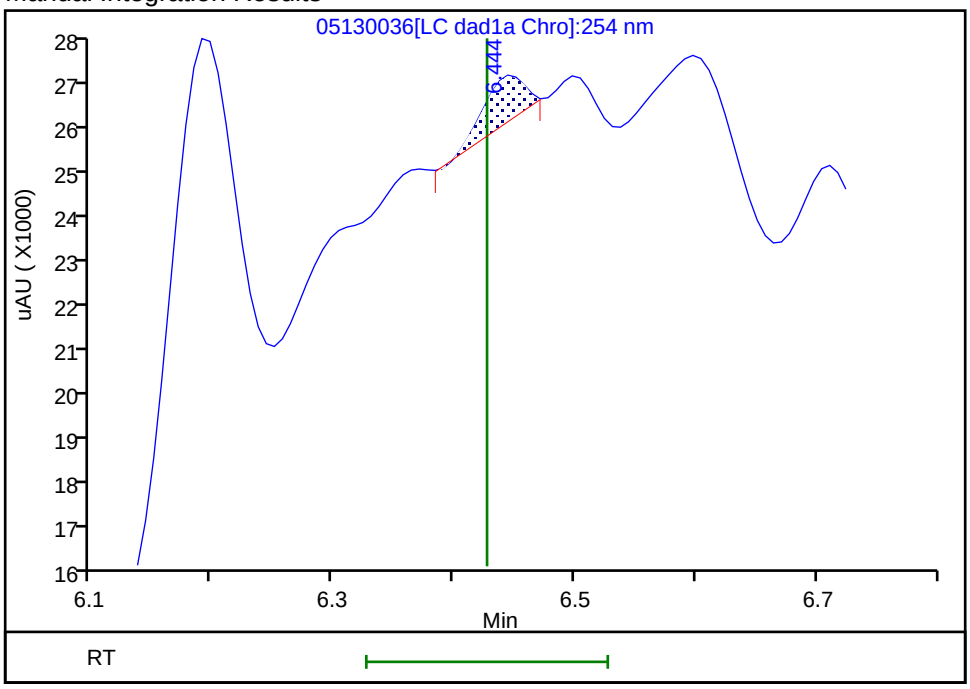
Processing Integration Results

RT: 6.44
Area: 119947
Amount: 0.606751
Amount Units: ug/mL



Manual Integration Results

RT: 6.44
Area: 2141
Amount: 0.010830
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 11:49:04

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-175997-1

SDG No.:

Client Sample ID: LL1mw-087-230401-GW | Lab Sample ID: 280-175997-6

Matrix: Water | Lab File ID: 05130037.D

Analysis Method: 8330B | Date Collected: 05/03/2023 13:50

Extraction Method: 3535 | Date Extracted: 05/10/2023 13:48

Sample wt/vol: 485(mL) | Date Analyzed: 05/14/2023 00:40

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.: 612396 | 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	0.087
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
6629-29-4	2,4-diamino-6-nitrotoluene	0.93	U J1	1.0	0.93	0.45
121-14-2	2,4-Dinitrotoluene	0.082	U	0.10	0.082	0.028
59229-75-3	2,6-diamino-4-nitrotoluene	0.93	U J1 M	1.0	0.93	0.23
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	0.21	U	0.22	0.21	0.088
618-87-1	3,5-Dinitroaniline	0.31	U	0.41	0.31	0.14
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
80251-29-2	DNX	0.26	U	0.52	0.26	0.10
2691-41-0	HMX	0.21	U	0.22	0.21	0.090
5755-27-1	MNX	0.30	U	0.52	0.30	0.096
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.094
55-63-0	Nitroglycerin	2.1	U	2.2	2.1	0.95
78-11-5	PETN	1.0	U	1.1	1.0	0.46
121-82-4	RDX	0.21	U	0.22	0.21	0.053
479-45-8	Tetryl	0.10	U	0.11	0.10	0.033
13980-04-6	TNX	0.26	U	0.52	0.26	0.082

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	96	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130037.D
Lims ID: 280-175997-A-6-A
Client ID: LL1mw-087-230401-GW
Sample Type: Client
Inject. Date: 14-May-2023 00:40:51 ALS Bottle#: 37 Worklist Smp#: 37
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-175997-A-6-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:22 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: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 11:53:42

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	1 Triamine Trinitrobenzene	1		2.444			ND	
	2 2,6-diamino-4-nitrotoluene	1		6.426			ND	U
	3 TNX	1		6.427			ND	
	4 HMX	1		6.547			ND	
	5 2,4-diamino-6-nitrotoluene	1		6.620			ND	
	6 DNX	1		6.754			ND	
	7 MNX	1		7.187			ND	
	8 RDX	1		7.574			ND	
	9 2,4,6-Trinitrophenol	1		7.974			ND	
$	10 1,2-Dinitrobenzene	1	8.525	8.521	0.004	24317	0.1925	M
	11 1,3,5-Trinitrobenzene	1		8.647			ND	
	12 1,3-Dinitrobenzene	1		9.274			ND	
	13 Nitrobenzene	1		9.647			ND	
	14 3,5-Dinitroaniline	1		9.887			ND	
	15 Tetryl	1		10.014			ND	
	16 Nitroglycerin	2		10.467			ND	
	17 2,4,6-Trinitrotoluene	1		10.914			ND	
	18 4-Amino-2,6-dinitrotoluene	1		11.114			ND	
	19 2-Amino-4,6-dinitrotoluene	1		11.367			ND	
	20 2,6-Dinitrotoluene	1		11.514			ND	
	21 2,4-Dinitrotoluene	1		11.687			ND	
	22 o-Nitrotoluene	1		12.514			ND	
	23 p-Nitrotoluene	1		12.940			ND	
	24 m-Nitrotoluene	1		13.514			ND	
	25 PETN	2		14.694			ND	
	26 Ammonium Picrate	1		0.000			ND	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
U - Marked Undetected

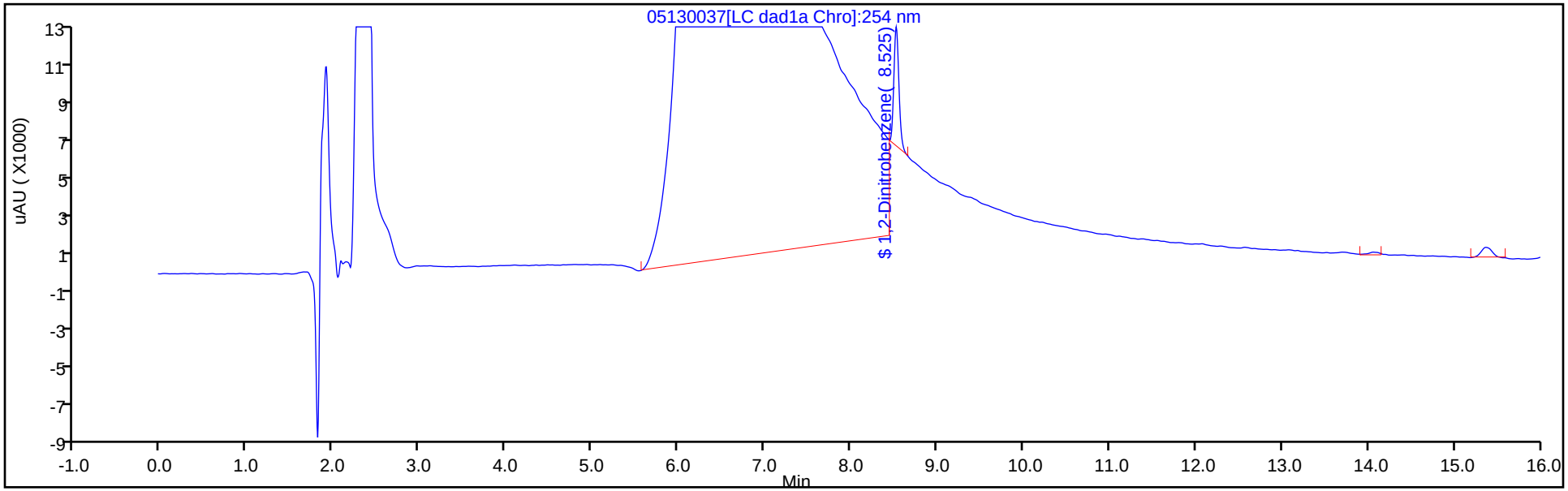
Report Date: 16-May-2023 12:37:25 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

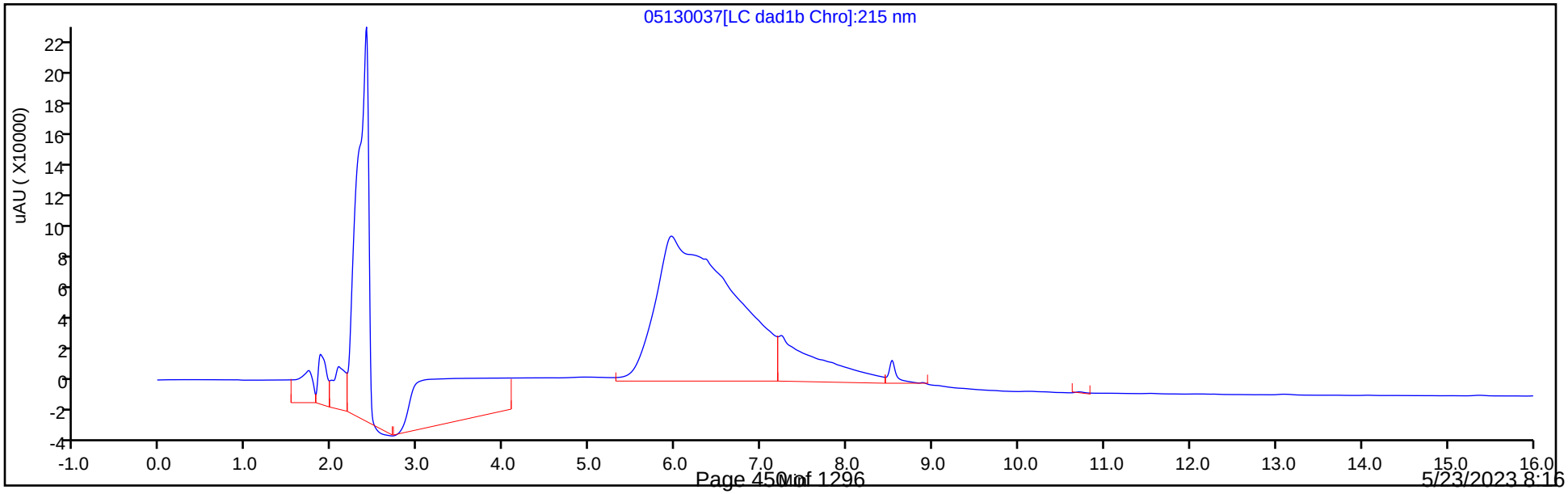
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Injection Date:	14-May-2023 00:40:51	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-175997-A-6-A	Lab Sample ID:	280-175997-6	Worklist Smp#:	37
Client ID:	LL1mw-087-230401-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	37
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\20230513-121427.b\05130037.D				
Lims ID:	280-175997-A-6-A				
Client ID:	LL1mw-087-230401-GW				
Sample Type:	Client				
Inject. Date:	14-May-2023 00:40:51	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-175997-A-6-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-May-2023 12:37:22	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:	CTX1672				

First Level Reviewer: K8YG Date: 15-May-2023 11:53:42

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1925	96.26

Manual Integration/User Assign Peak Report

Eurofins Denver

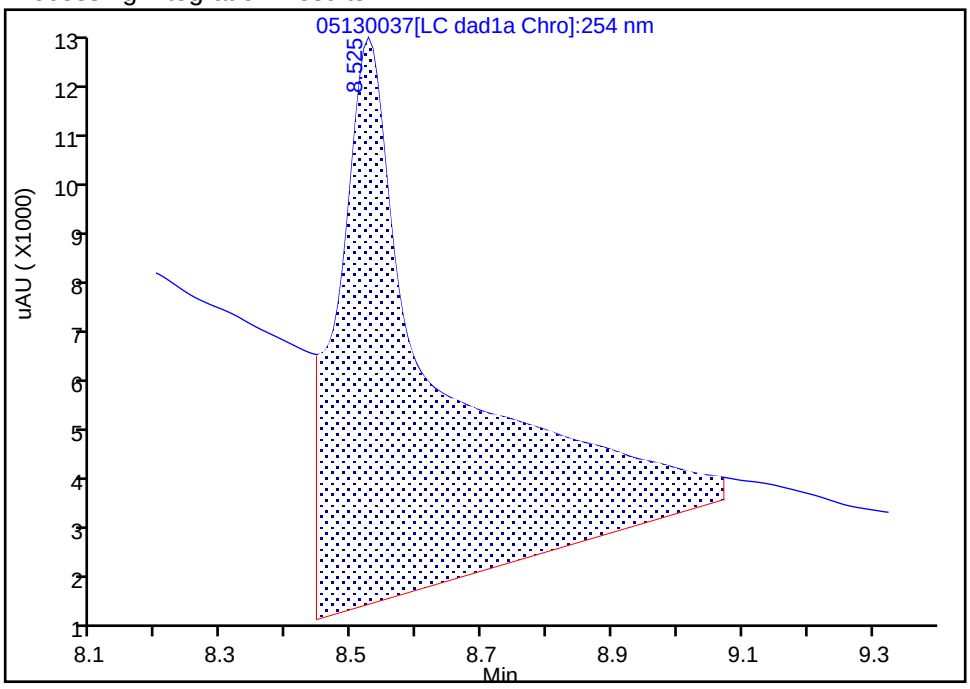
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130037.d				
Injection Date:	14-May-2023 00:40:51	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-A-6-A	Lab Sample ID:	280-175997-6		
Client ID:	LL1mw-087-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	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

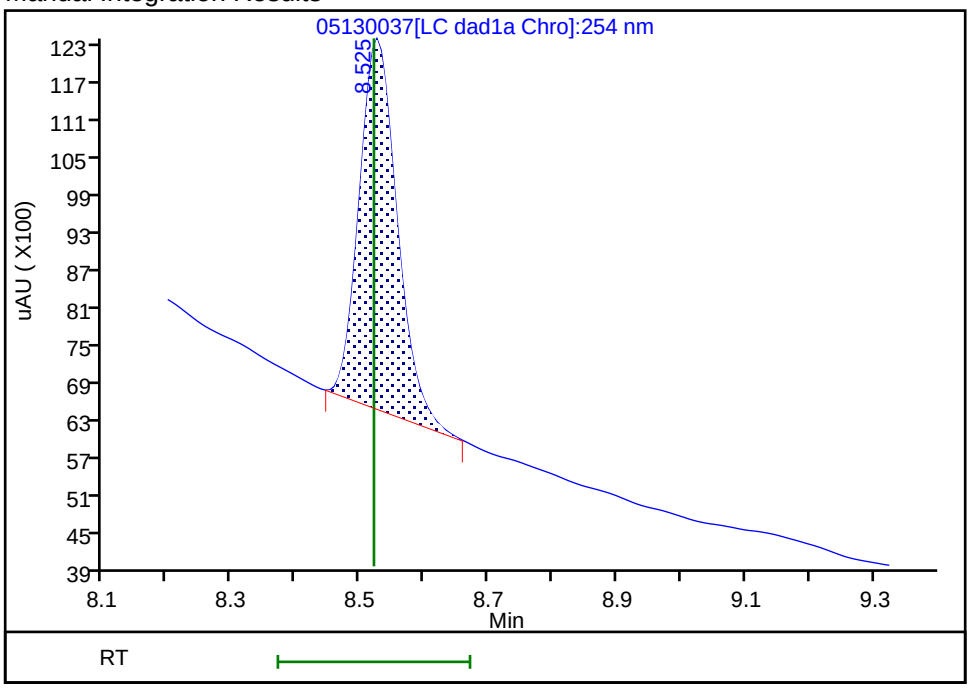
Processing Integration Results

RT: 8.53
Area: 117384
Amount: 0.929342
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 24317
Amount: 0.192520
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 11:53:38

Audit Action: Manually Integrated Audit Reason: Baseline

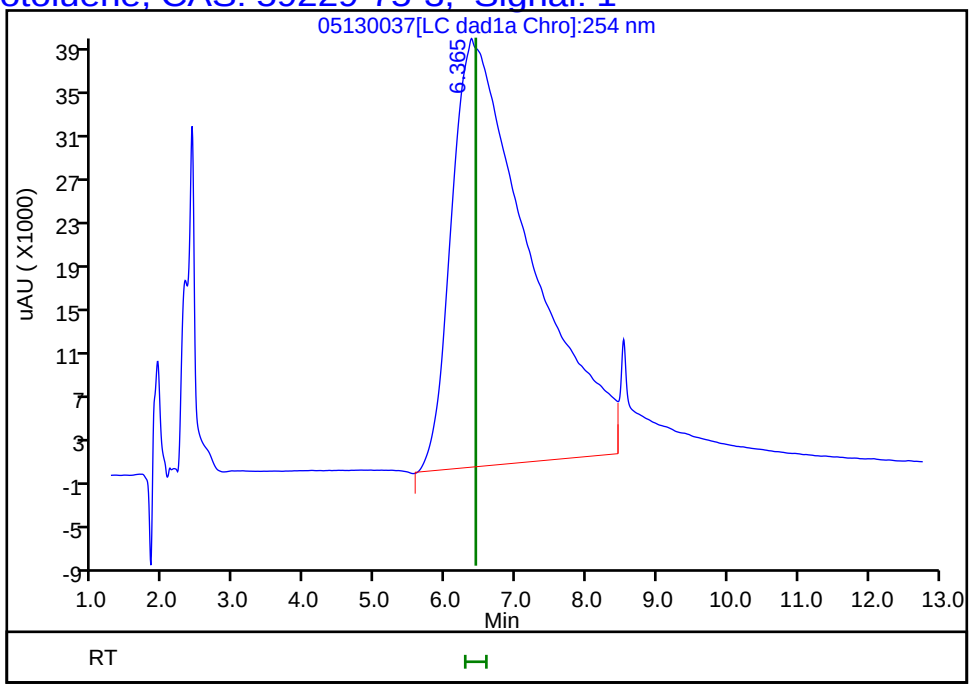
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130037.d				
Injection Date:	14-May-2023 00:40:51	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-A-6-A	Lab Sample ID:	280-175997-6		
Client ID:	LL1mw-087-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	37	Worklist Smp#:	37
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

RT: 6.37
Response: 2986754
Amount: 12.999482



Reviewer: K8YG, 15-May-2023 11:53:42
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-175997-1

SDG No.:

Client Sample ID: LL1mw-087-230402-GW | Lab Sample ID: 280-175997-7

Matrix: Water | Lab File ID: 05130042.D

Analysis Method: 8330B | Date Collected: 05/03/2023 13:50

Extraction Method: 3535 | Date Extracted: 05/10/2023 13:48

Sample wt/vol: 467.8(mL) | Date Analyzed: 05/14/2023 02:35

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.: 612396 | 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	0.090
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
6629-29-4	2,4-diamino-6-nitrotoluene	0.96	U	1.1	0.96	0.46
121-14-2	2,4-Dinitrotoluene	0.086	U	0.11	0.086	0.029
59229-75-3	2,6-diamino-4-nitrotoluene	0.96	U M	1.1	0.96	0.24
606-20-2	2,6-Dinitrotoluene	0.086	U	0.11	0.086	0.043
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.054
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.091
618-87-1	3,5-Dinitroaniline	0.32	U	0.43	0.32	0.14
99-08-1	3-Nitrotoluene	0.37	U	0.43	0.37	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.062
99-99-0	4-Nitrotoluene	0.43	U	0.44	0.43	0.11
80251-29-2	DNX	0.27	U	0.53	0.27	0.10
2691-41-0	HMX	0.21	U	0.22	0.21	0.094
5755-27-1	MNX	0.31	U	0.53	0.31	0.099
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.097
55-63-0	Nitroglycerin	2.1	U	2.2	2.1	0.98
78-11-5	PETN	1.1	U M	1.2	1.1	0.48
121-82-4	RDX	0.21	U	0.22	0.21	0.055
479-45-8	Tetryl	0.11	U	0.12	0.11	0.034
13980-04-6	TNX	0.27	U	0.53	0.27	0.085

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	98	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130042.D
Lims ID: 280-175997-A-7-A
Client ID: LL1mw-087-230402-GW
Sample Type: Client
Inject. Date: 14-May-2023 02:35:35 ALS Bottle#: 42 Worklist Smp#: 42
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-175997-A-7-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:22 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: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 12:02:18

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	2 2,6-diamino-4-nitrotoluene	1		6.426			ND	U
	3 TNX	1		6.427			ND	
	4 HMX	1		6.547			ND	
	5 2,4-diamino-6-nitrotoluene	1		6.620			ND	
	6 DNX	1		6.754			ND	
	7 MNX	1		7.187			ND	
	8 RDX	1		7.574			ND	
$	10 1,2-Dinitrobenzene	1	8.520	8.521	-0.001	24648	0.1951	M
	11 1,3,5-Trinitrobenzene	1		8.647			ND	
	12 1,3-Dinitrobenzene	1		9.274			ND	
	13 Nitrobenzene	1		9.647			ND	
	14 3,5-Dinitroaniline	1		9.887			ND	
	15 Tetryl	1		10.014			ND	
	16 Nitroglycerin	2		10.467			ND	
	17 2,4,6-Trinitrotoluene	1		10.914			ND	
	18 4-Amino-2,6-dinitrotoluene	1		11.114			ND	
	19 2-Amino-4,6-dinitrotoluene	1		11.367			ND	
	20 2,6-Dinitrotoluene	1		11.514			ND	
	21 2,4-Dinitrotoluene	1		11.687			ND	
	22 o-Nitrotoluene	1		12.514			ND	
	23 p-Nitrotoluene	1		12.940			ND	
	24 m-Nitrotoluene	1		13.514			ND	
	25 PETN	2		14.694			ND	U

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
U - Marked Undetected

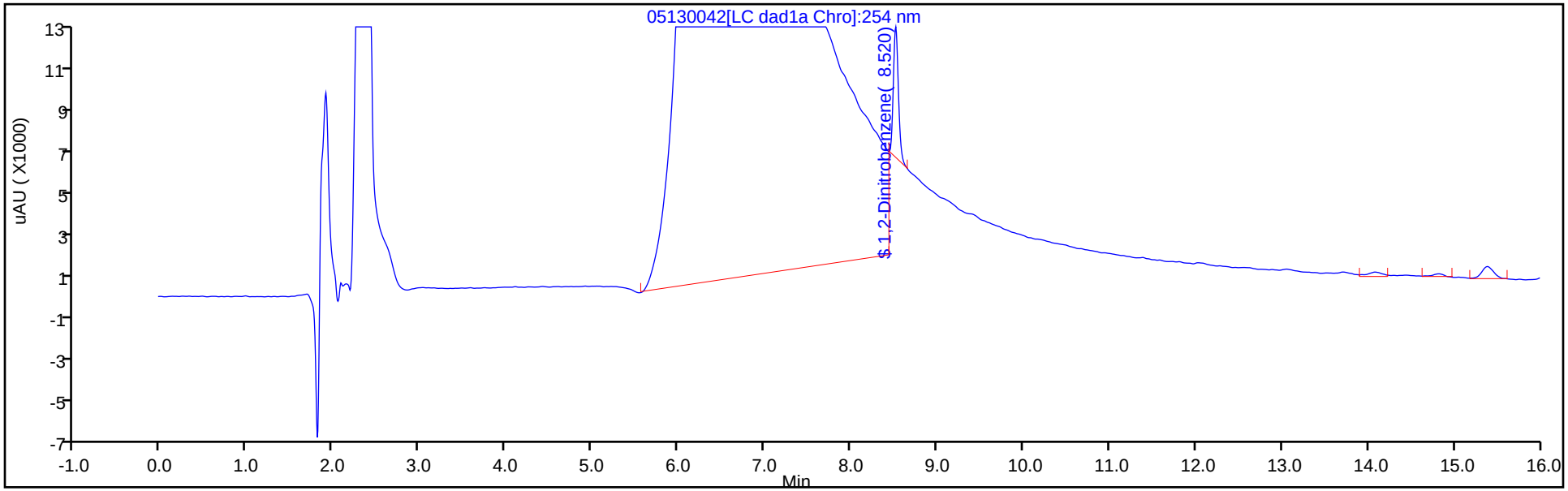
Report Date: 16-May-2023 12:37:28 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

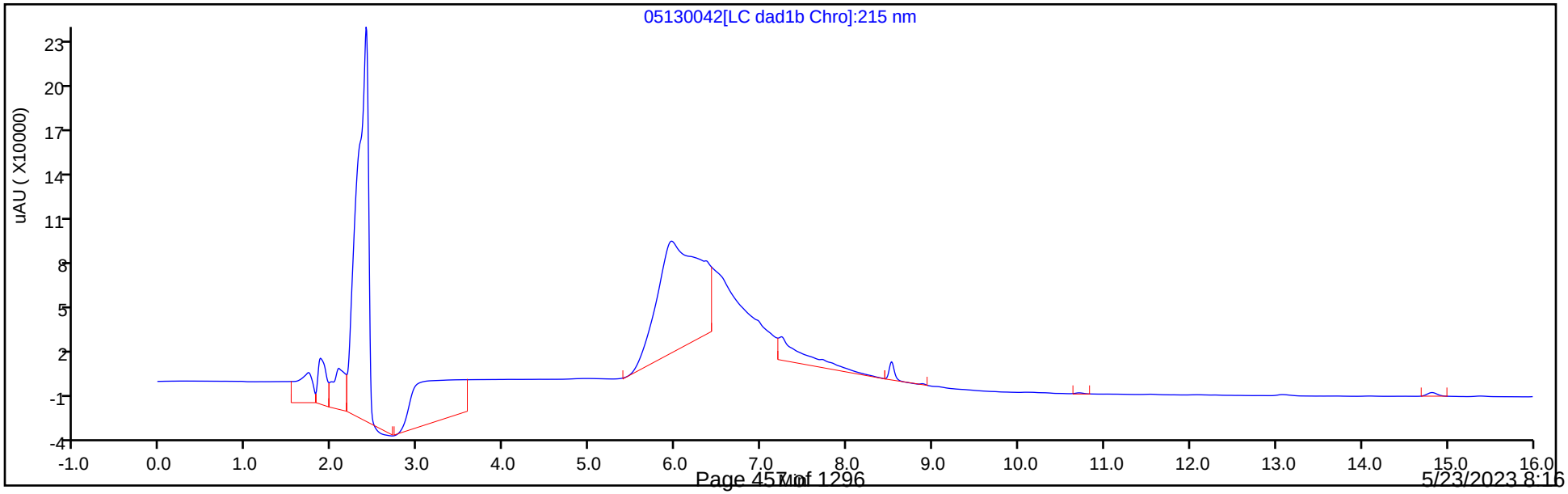
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Injection Date:	14-May-2023 02:35:35	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-175997-A-7-A	Lab Sample ID:	280-175997-7	Worklist Smp#:	42
Client ID:	LL1mw-087-230402-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	42
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130042.D				
Lims ID:	280-175997-A-7-A				
Client ID:	LL1mw-087-230402-GW				
Sample Type:	Client				
Inject. Date:	14-May-2023 02:35:35	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-175997-A-7-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-May-2023 12:37:22	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:	CTX1672				

First Level Reviewer: K8YG Date: 15-May-2023 12:02:18

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1951	97.57

Manual Integration/User Assign Peak Report

Eurofins Denver

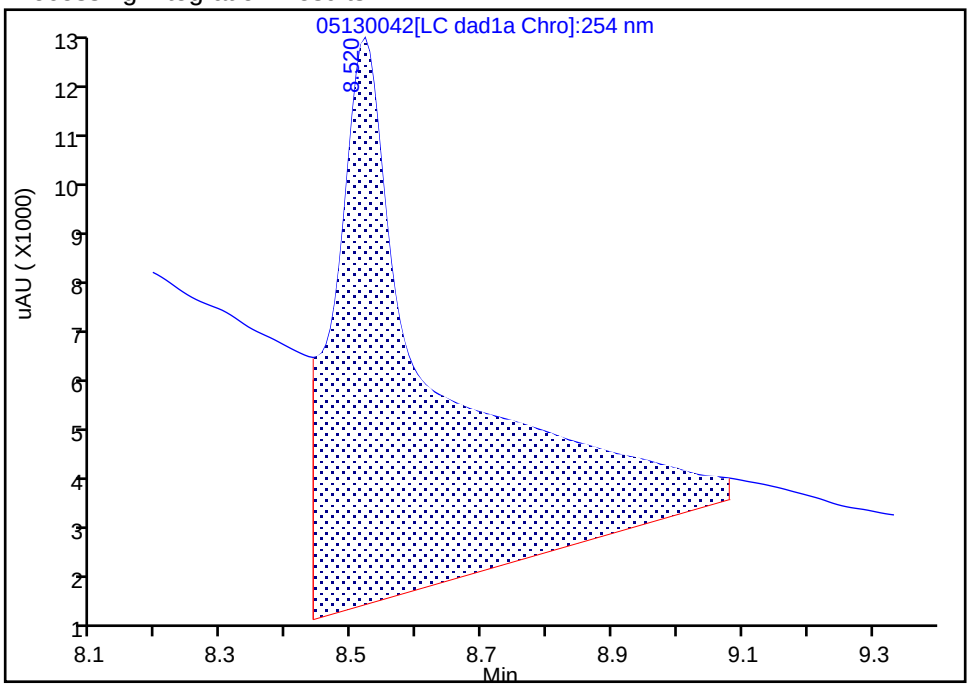
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130042.d				
Injection Date:	14-May-2023 02:35:35	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-A-7-A	Lab Sample ID:	280-175997-7		
Client ID:	LL1mw-087-230402-GW				
Operator ID:	JZ/JG	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	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

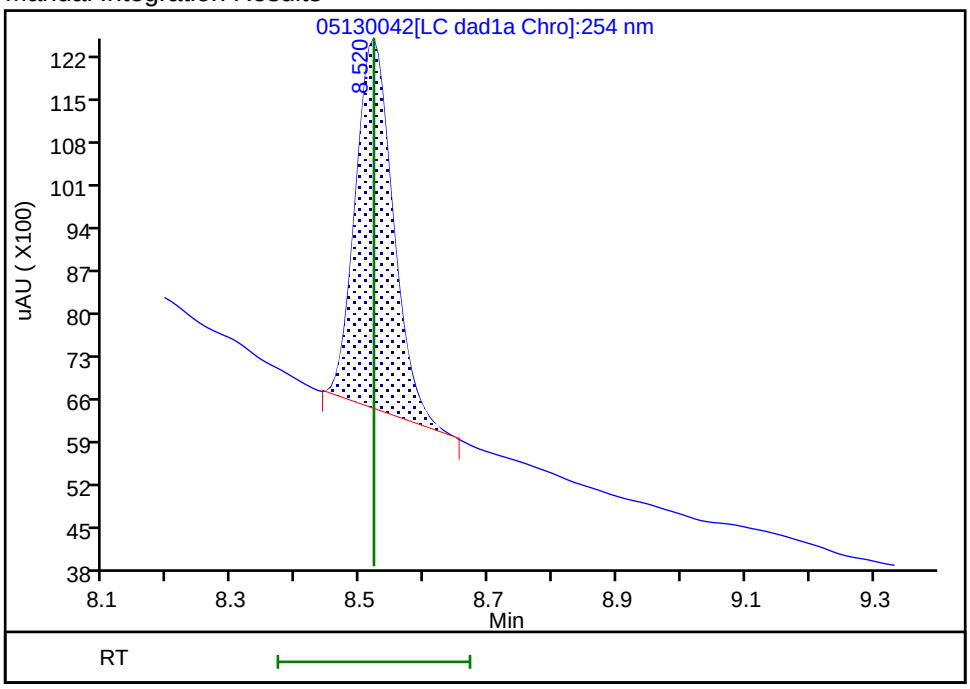
Processing Integration Results

RT: 8.52
Area: 119337
Amount: 0.944804
Amount Units: ug/mL



Manual Integration Results

RT: 8.52
Area: 24648
Amount: 0.195141
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 12:02:07

Audit Action: Manually Integrated Audit Reason: Baseline

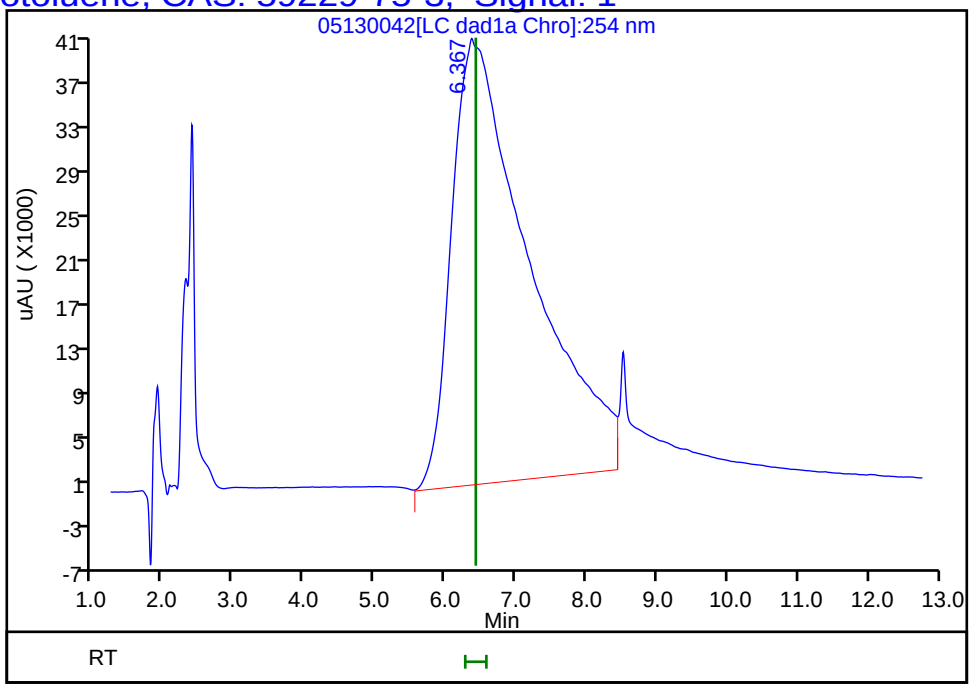
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130042.d				
Injection Date:	14-May-2023 02:35:35	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-A-7-A	Lab Sample ID:	280-175997-7		
Client ID:	LL1mw-087-230402-GW				
Operator ID:	JZ/JG	ALS Bottle#:	42	Worklist Smp#:	42
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

RT: 6.37
Response: 3011056
Amount: 13.105284



Reviewer: K8YG, 15-May-2023 12:02:18
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1 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.: 280-175997-1 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.: 280-175997-1 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

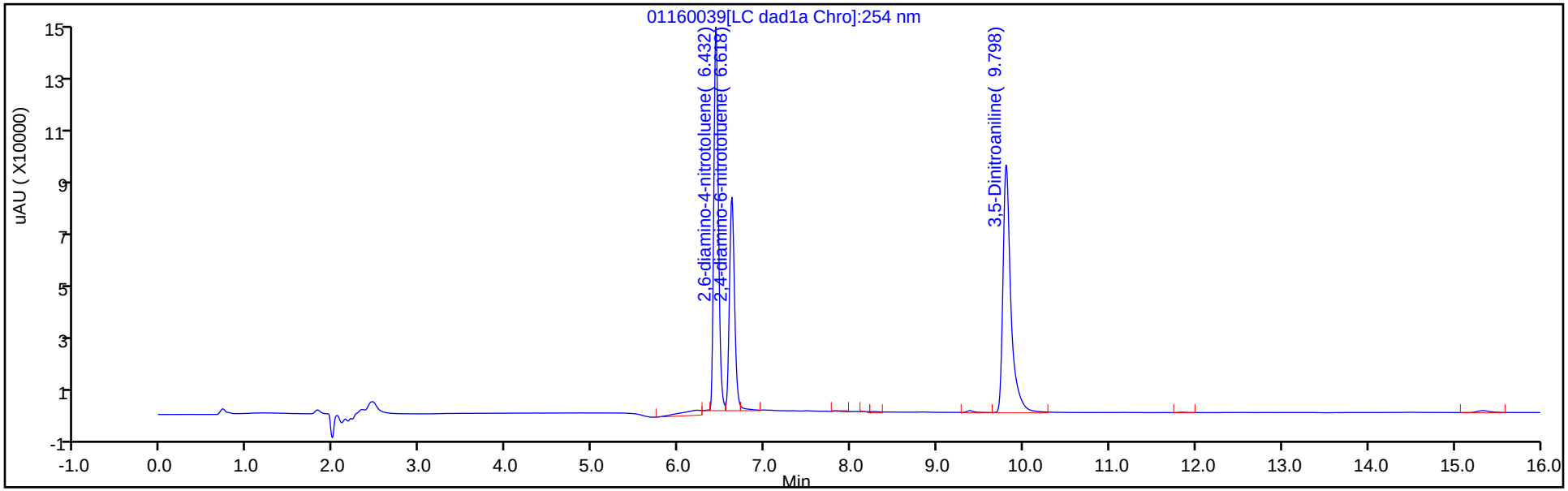
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Eurofins Denver

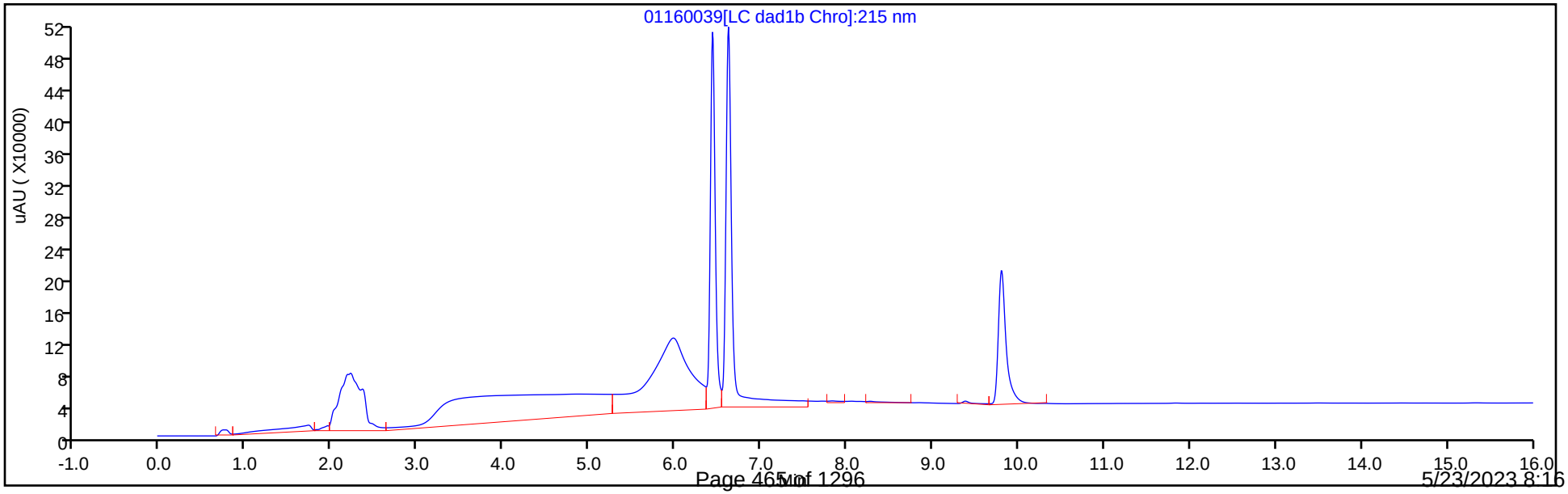
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Injection Date:	17-Jan-2023 00:33:01	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC ADD 8			Worklist Smp#:	11
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	42
Method:	8330_X3	Limit Group:	GCSV - 8330		

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

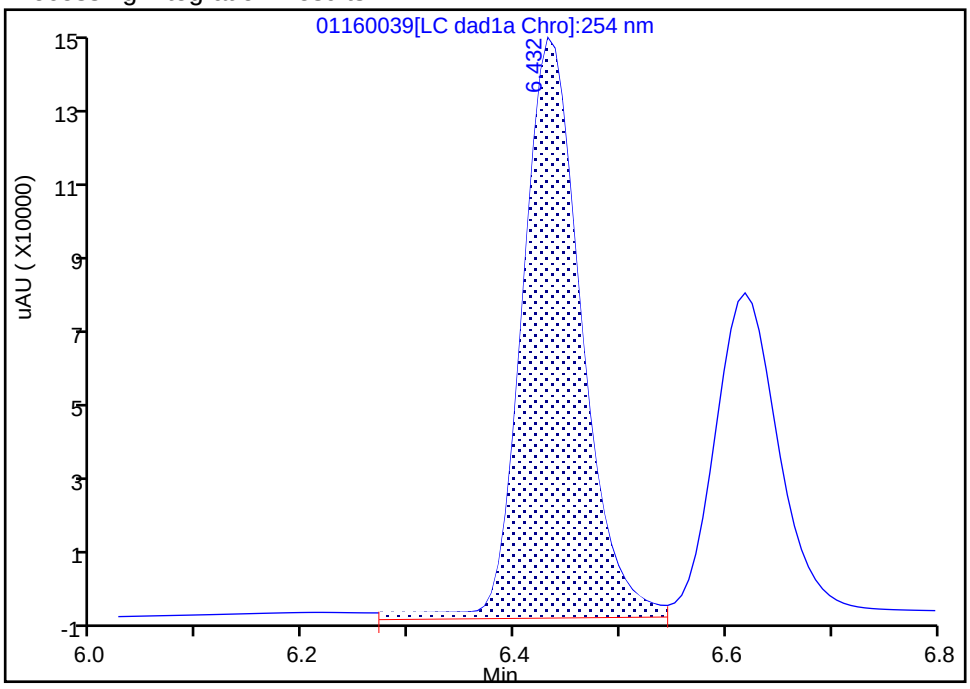
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160039.d				
Injection Date:	17-Jan-2023 00:33:01	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 8				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	42	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit 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

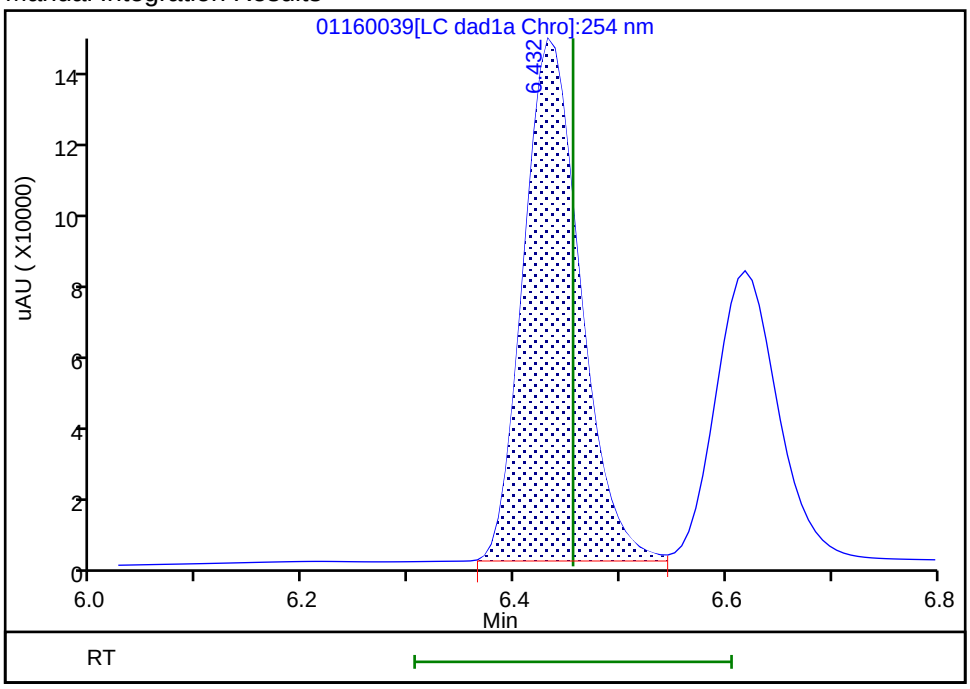
Processing Integration Results

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

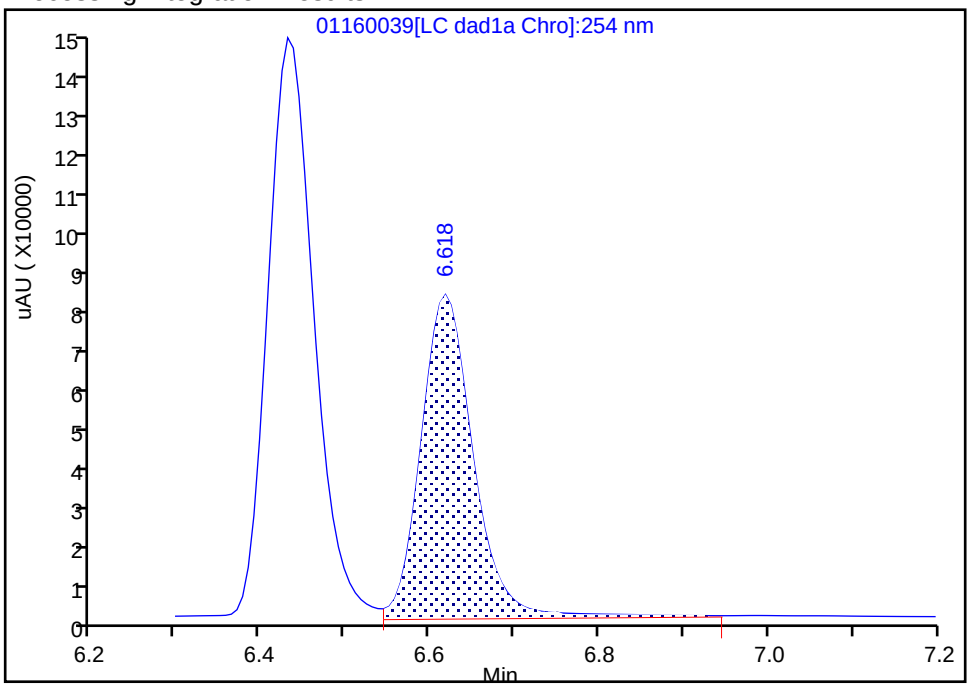
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160039.d				
Injection Date:	17-Jan-2023 00:33:01	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 8				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	42	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit 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

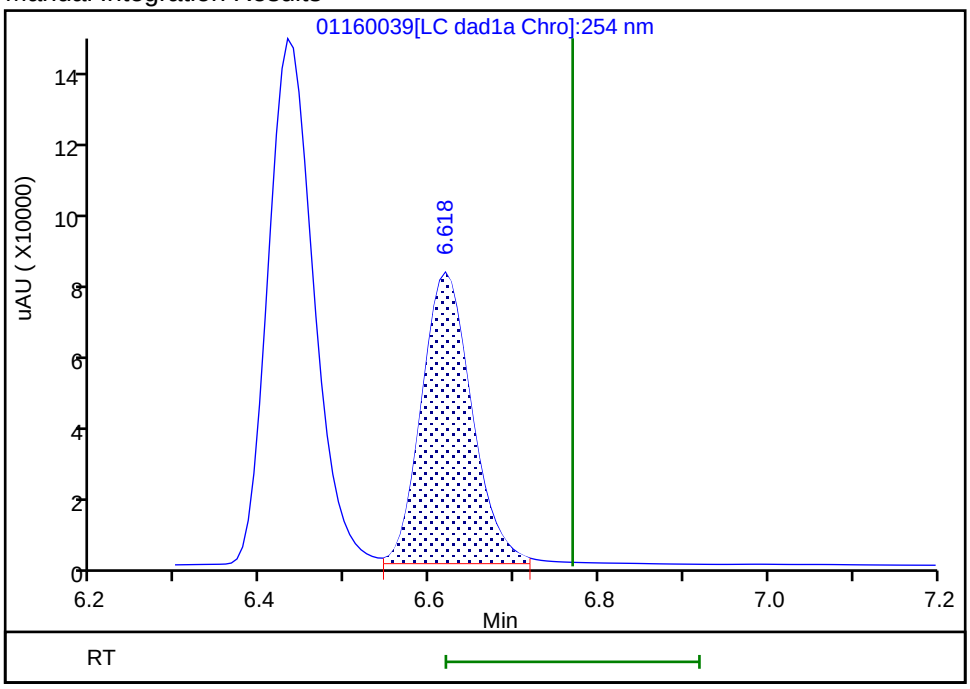
Processing Integration Results

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:

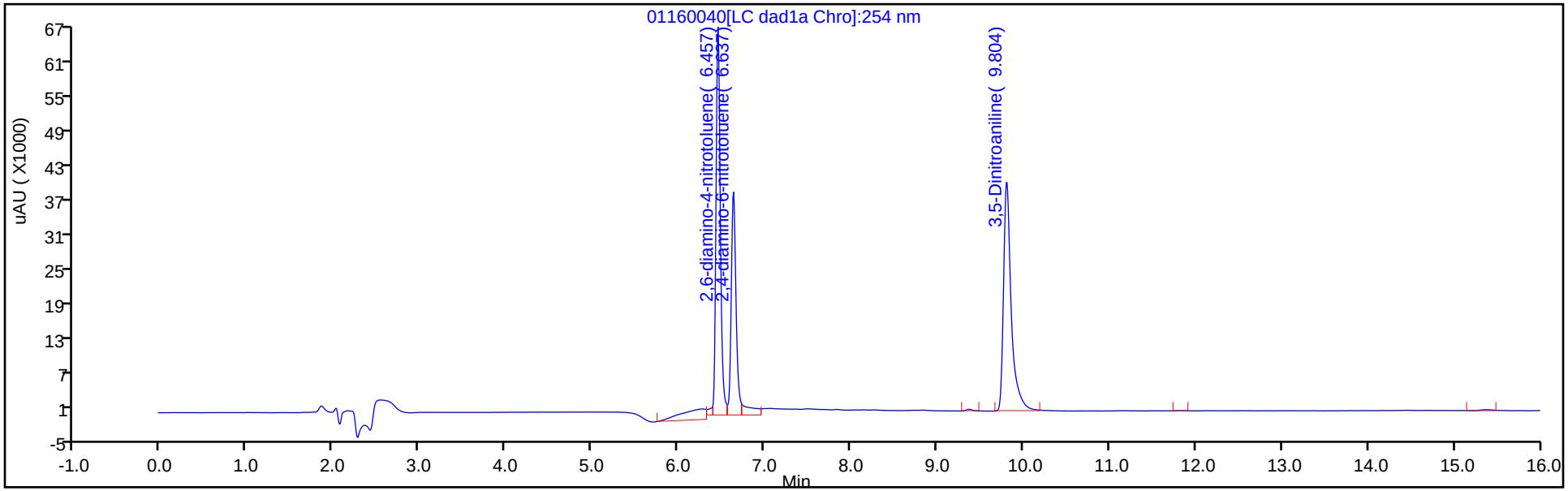
8330_ADDs_00035 Amount Added: 50.00 Units: uL

Report Date: 17-Jan-2023 12:50:39 Chrom Revision: 2.3 20-Dec-2022 14:14:06

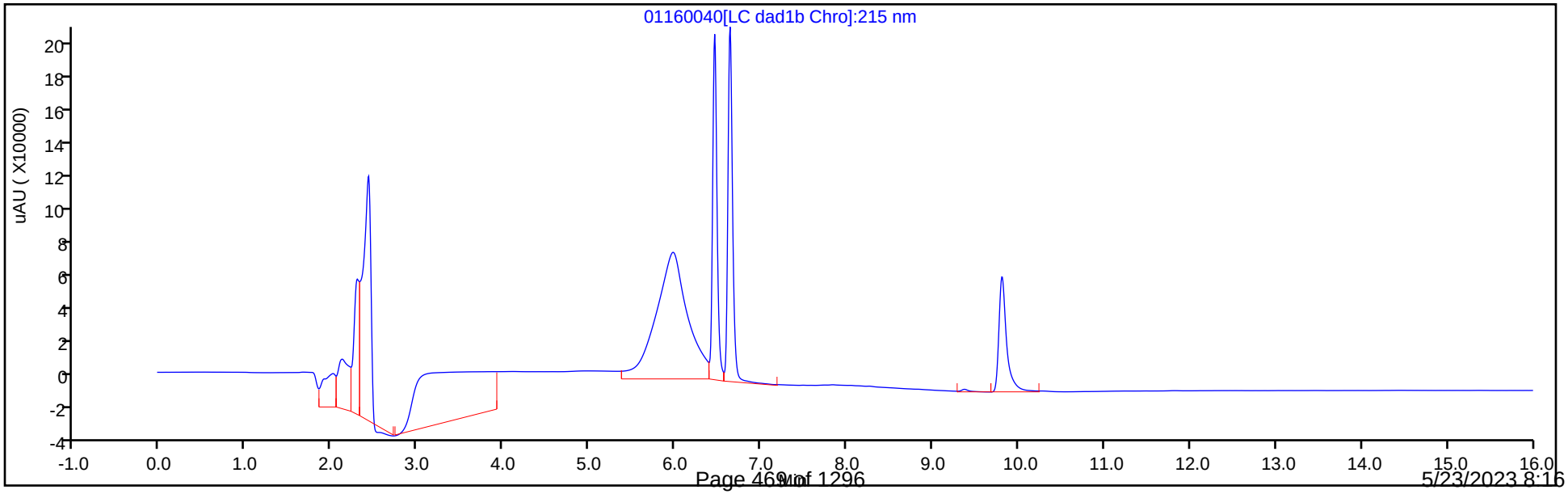
Eurofins Denver

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

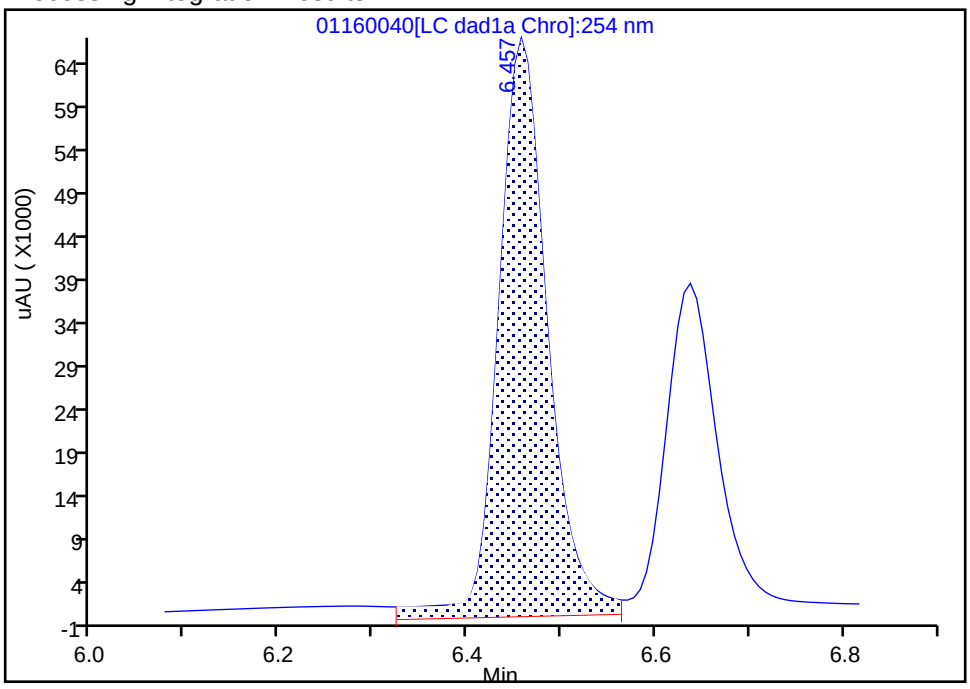
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160040.d
Injection Date: 17-Jan-2023 00:56:21 Instrument ID: CHHPLC_X3
Lims ID: IC ADD 7
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 43 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

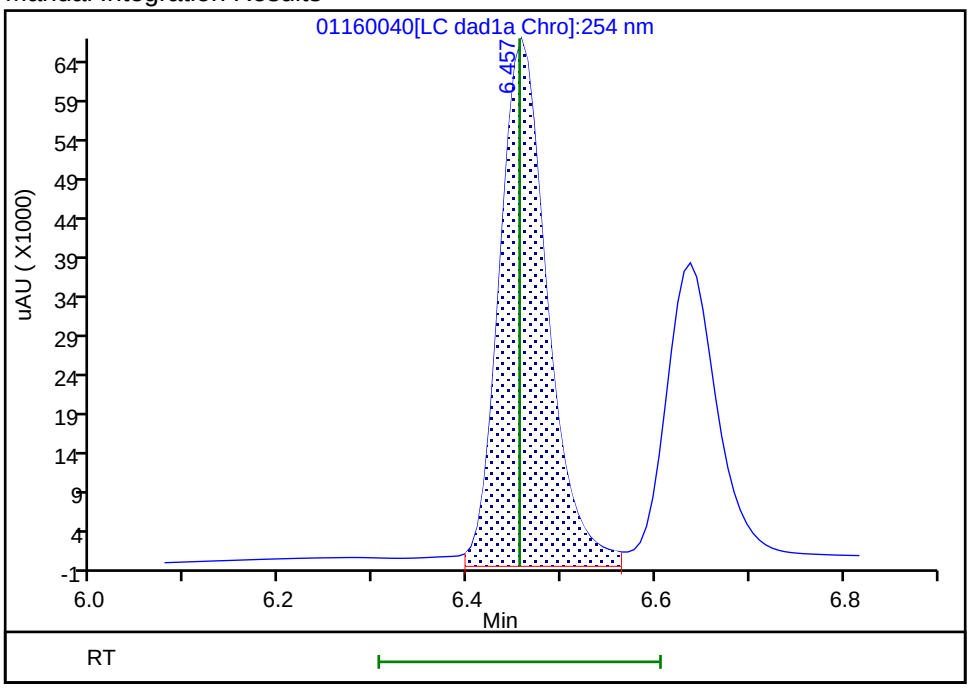
Processing Integration Results

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

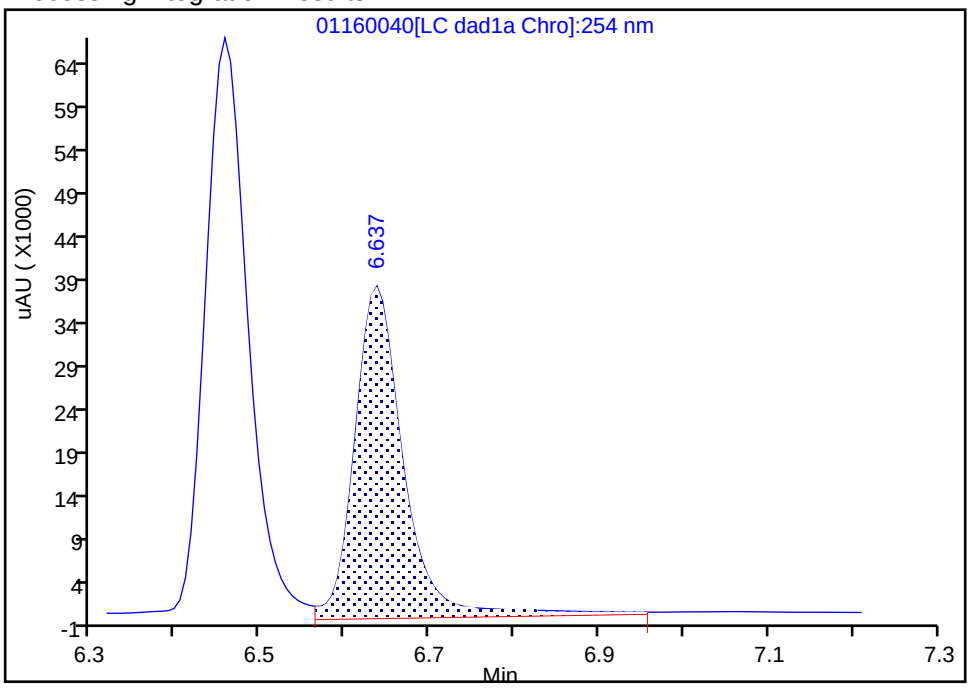
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160040.d				
Injection Date:	17-Jan-2023 00:56:21	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 7				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	43	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit 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

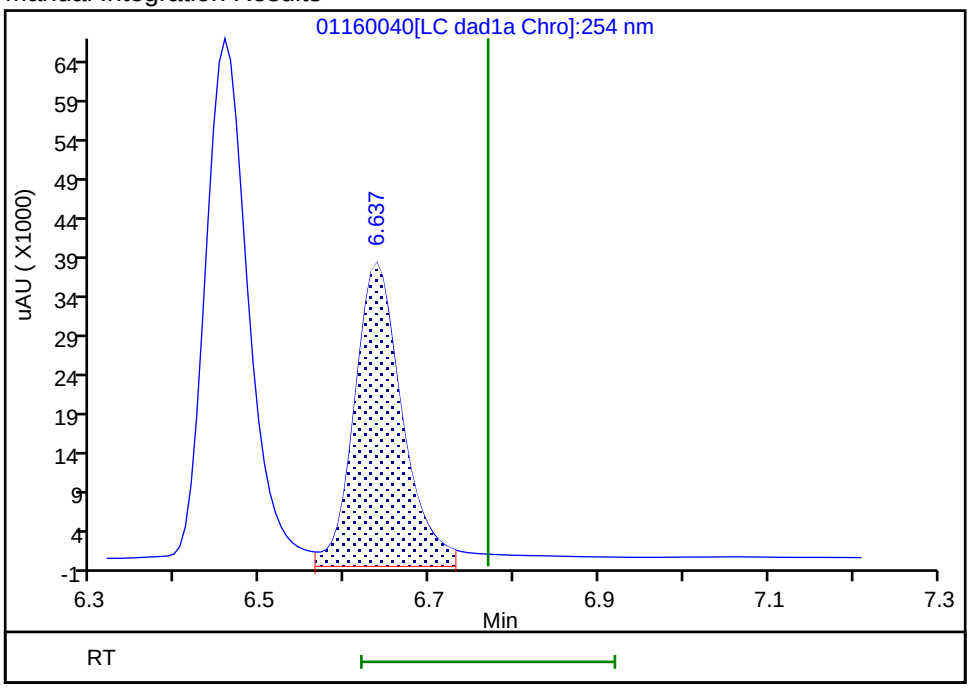
Processing Integration Results

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

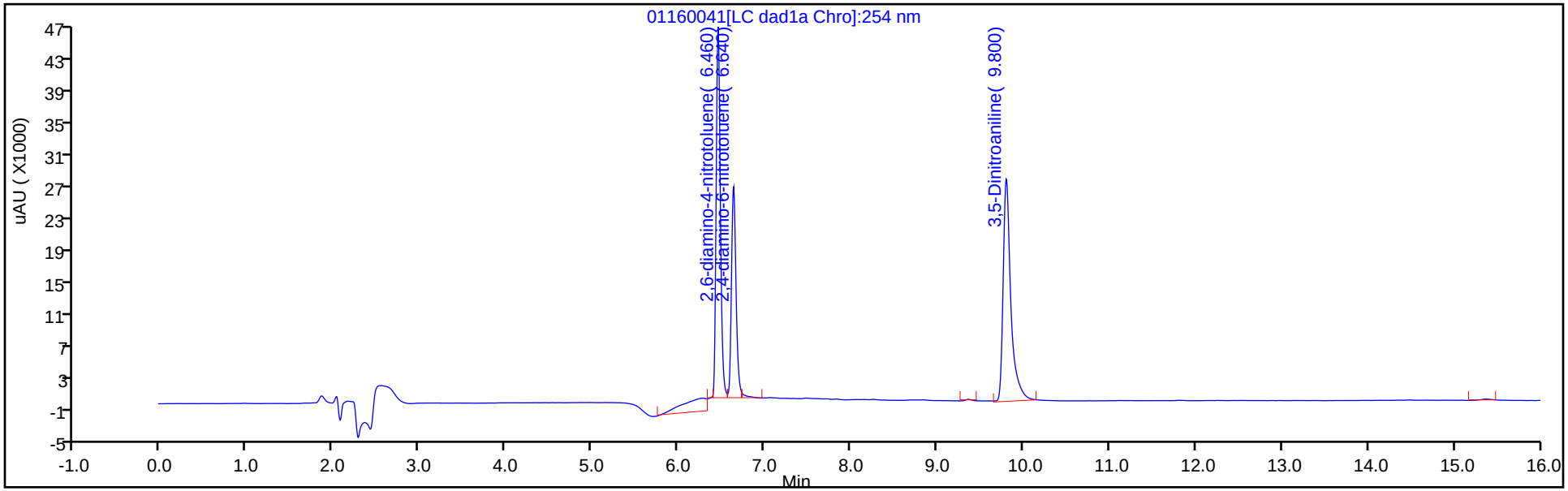
Report Date: 17-Jan-2023 12:50:39 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Denver

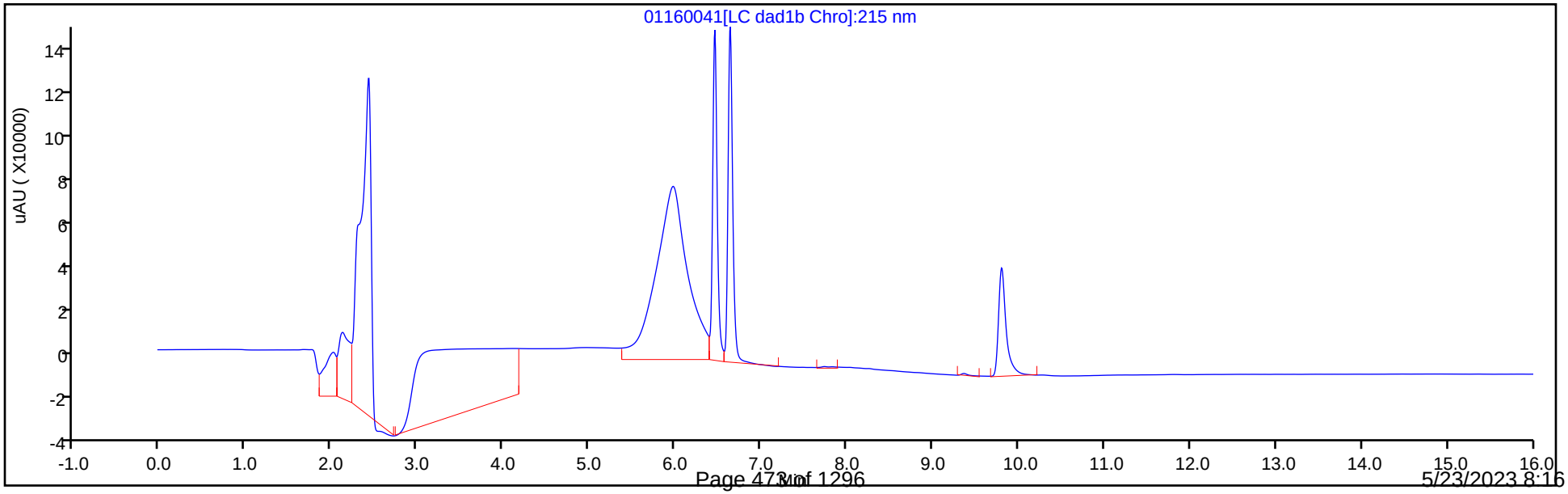
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160041.d

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

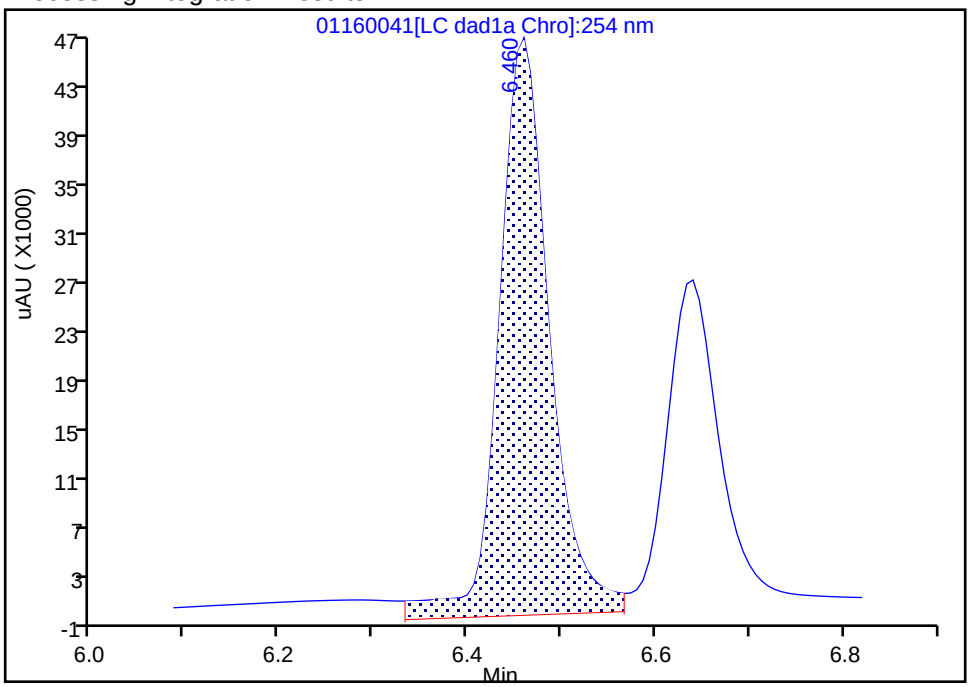
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160041.d
Injection Date: 17-Jan-2023 01:19:43 Instrument ID: CHHPLC_X3
Lims ID: IC ADD 6
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 44 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

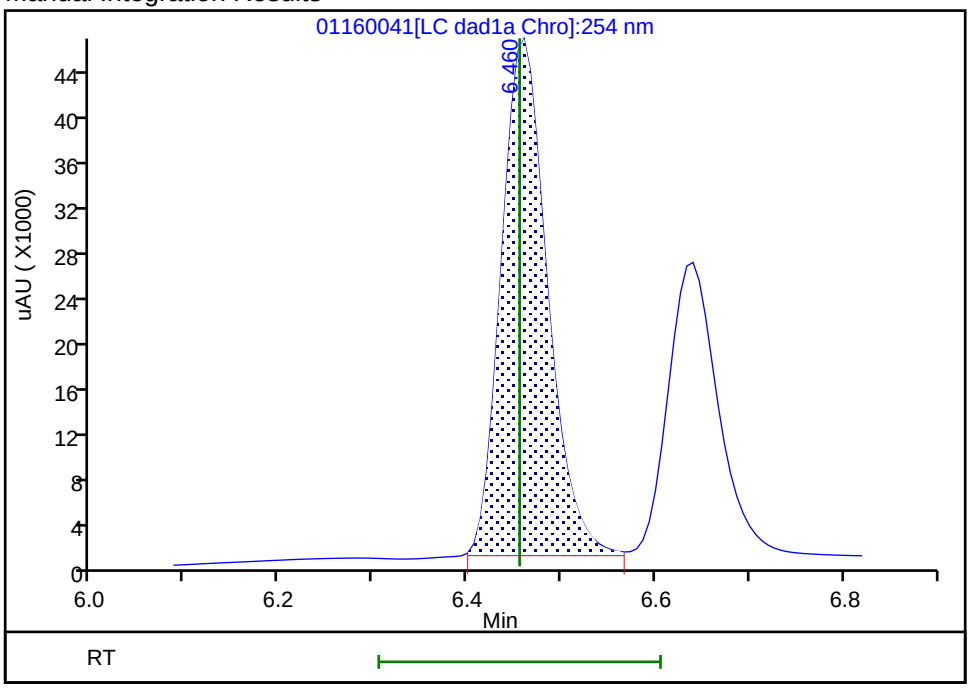
Processing Integration Results

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

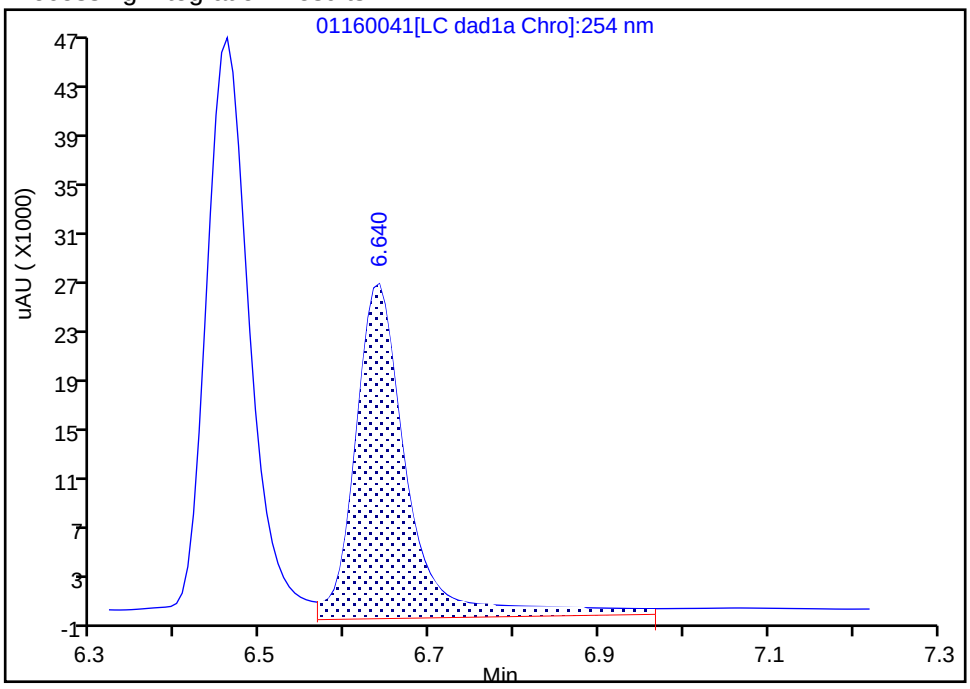
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160041.d				
Injection Date:	17-Jan-2023 01:19:43	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 6				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	44	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit 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

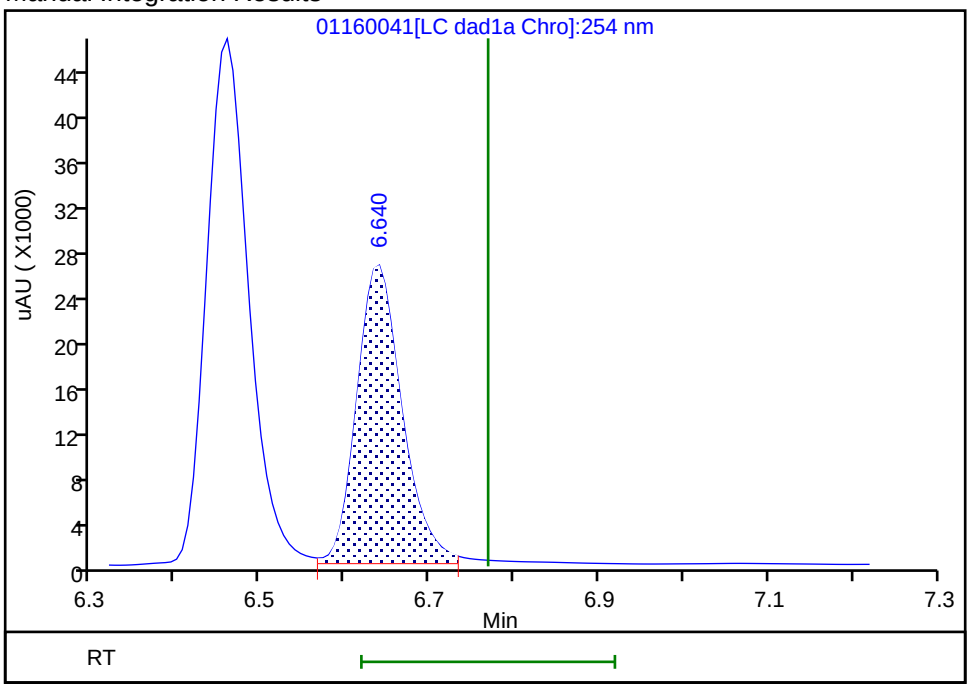
Processing Integration Results

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

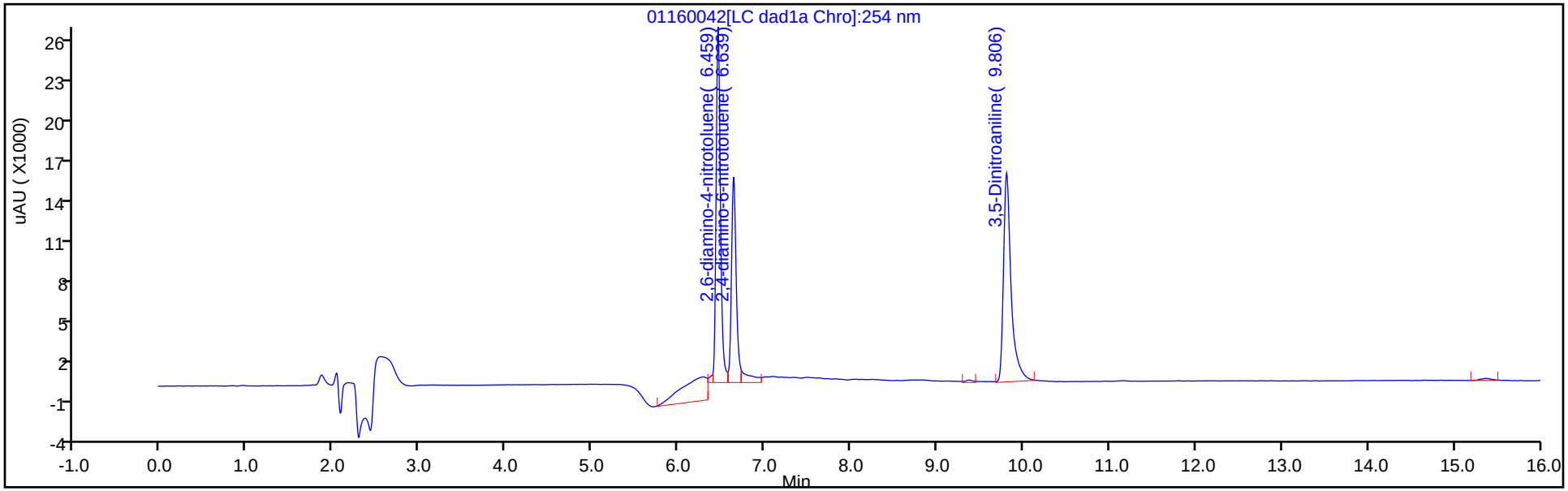
Report Date: 17-Jan-2023 12:50:40 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Denver

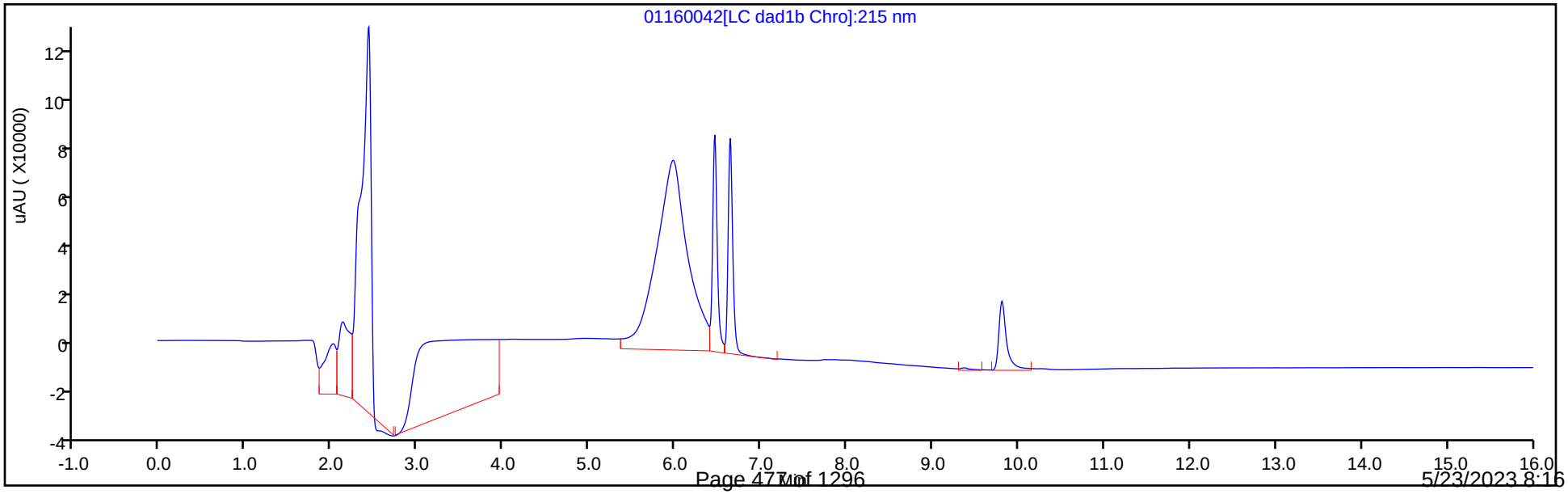
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160042.d

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

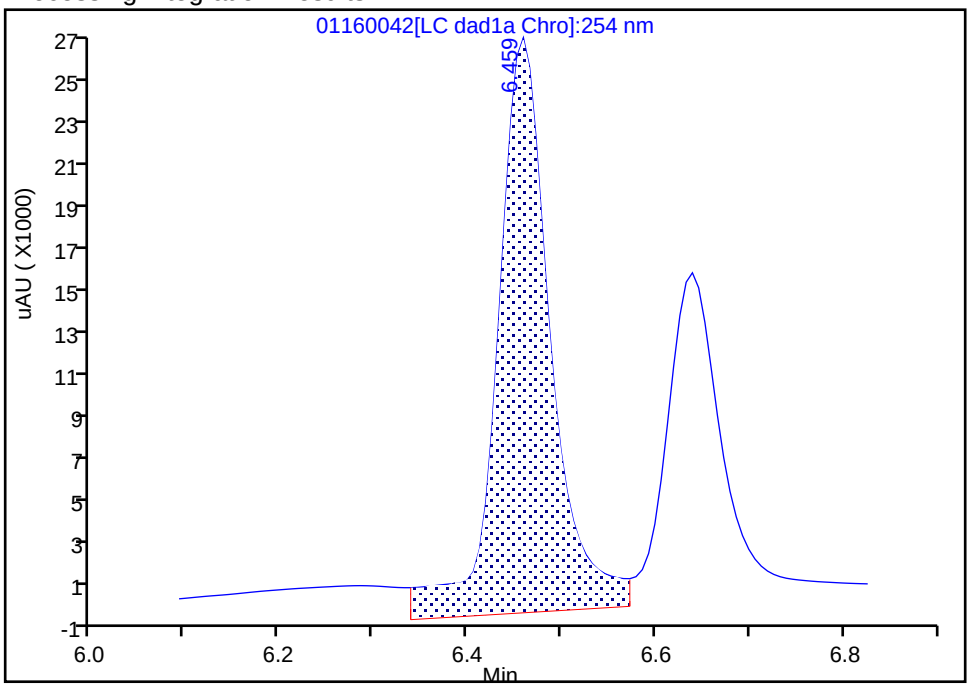
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160042.d				
Injection Date:	17-Jan-2023 01:43:11	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 5				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	45	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit 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

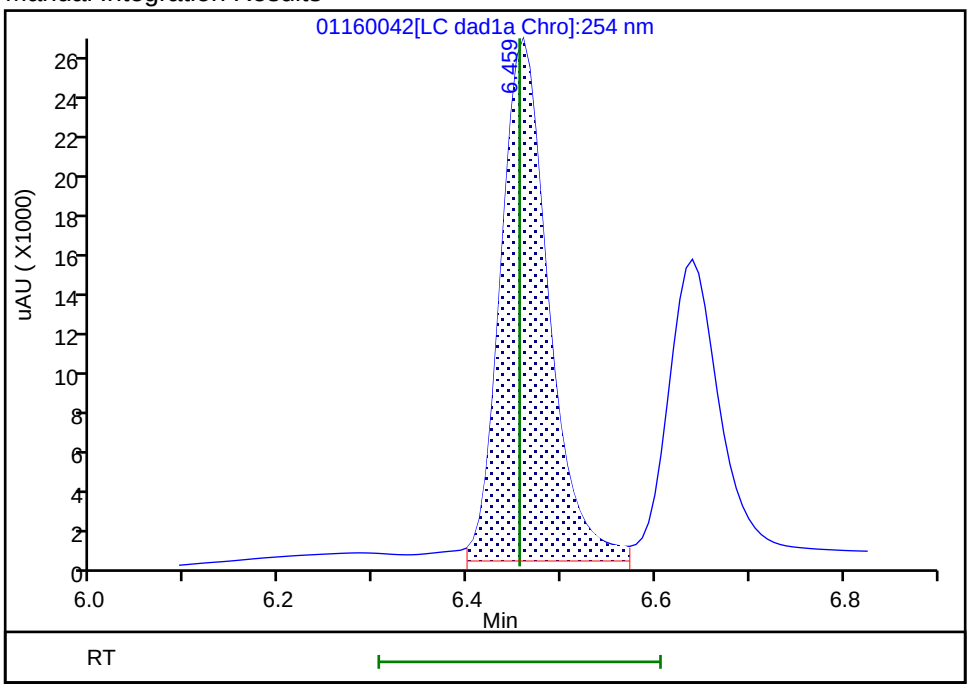
Processing Integration Results

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

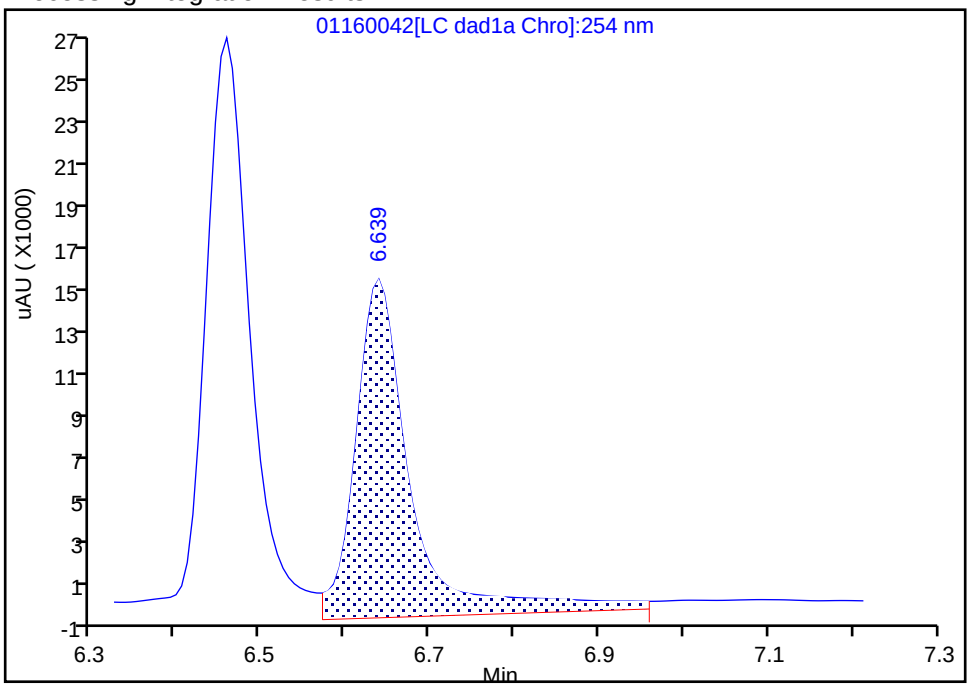
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160042.d				
Injection Date:	17-Jan-2023 01:43:11	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 5				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	45	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit 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

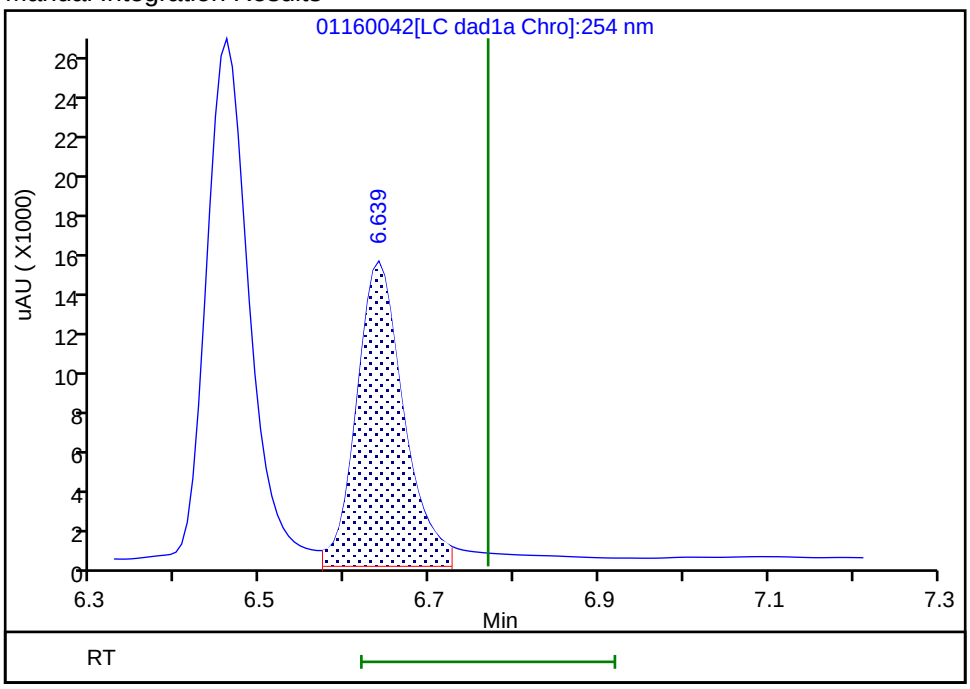
Processing Integration Results

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

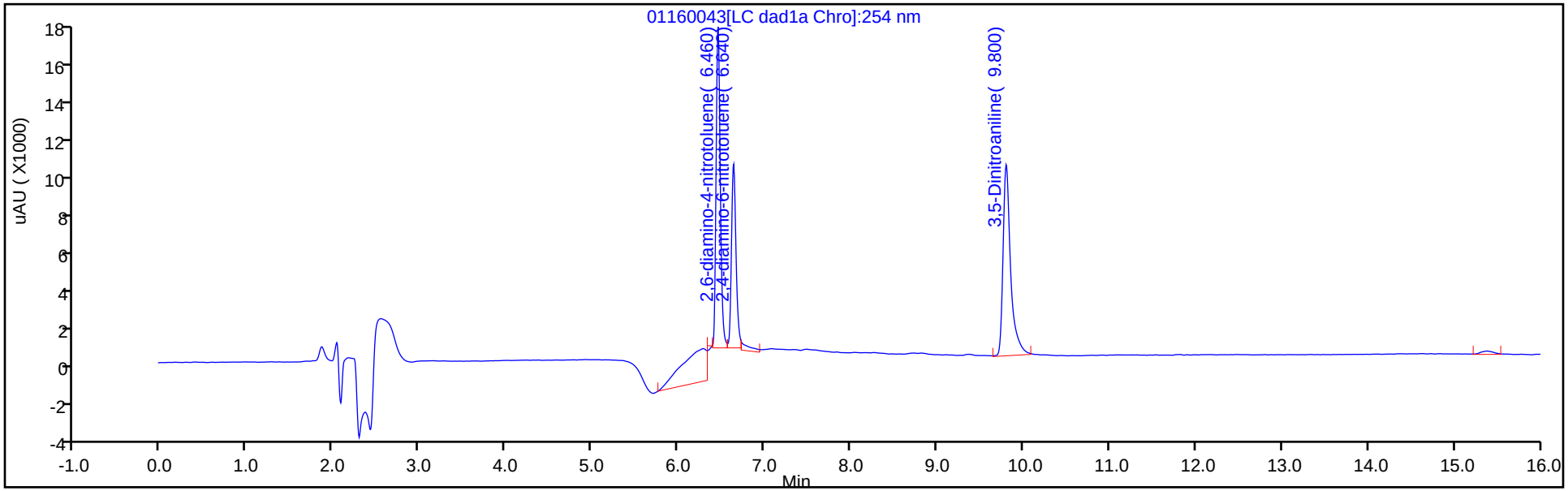
Report Date: 17-Jan-2023 12:50:41 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Denver

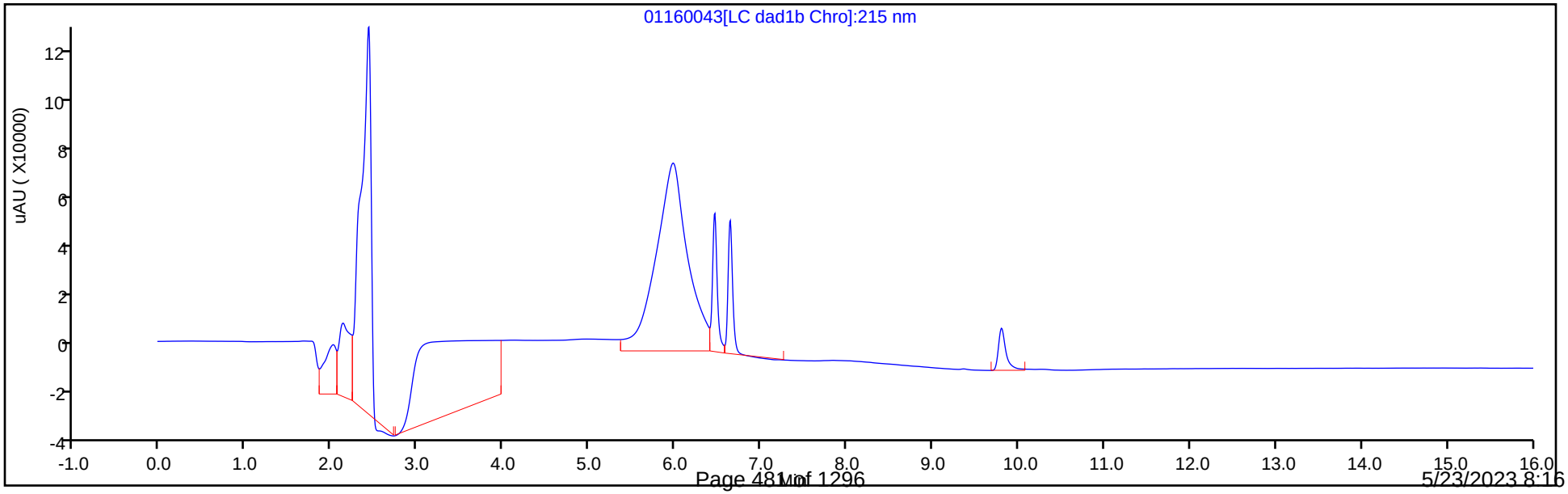
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160043.d

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

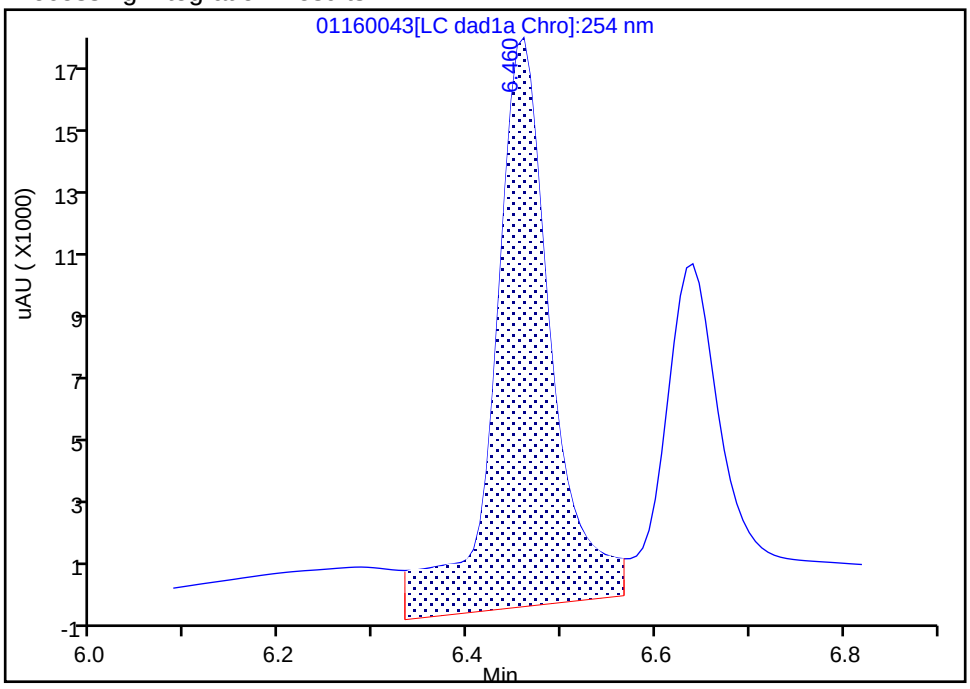
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Injection Date: 17-Jan-2023 02:06:34 Instrument ID: CHHPLC_X3
Lims ID: IC ADD 4
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 46 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

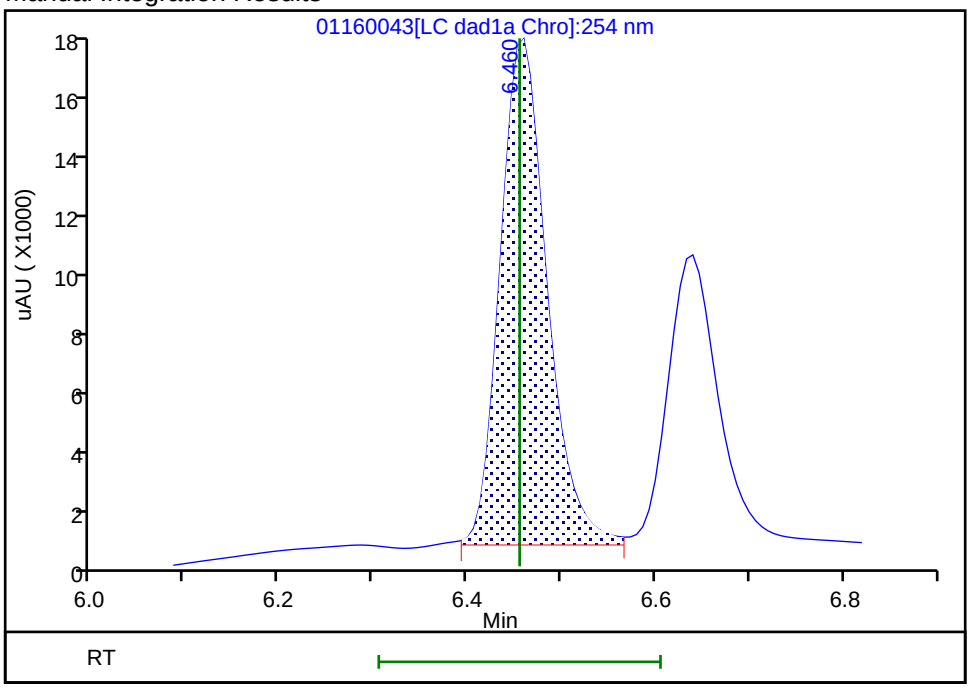
Processing Integration Results

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

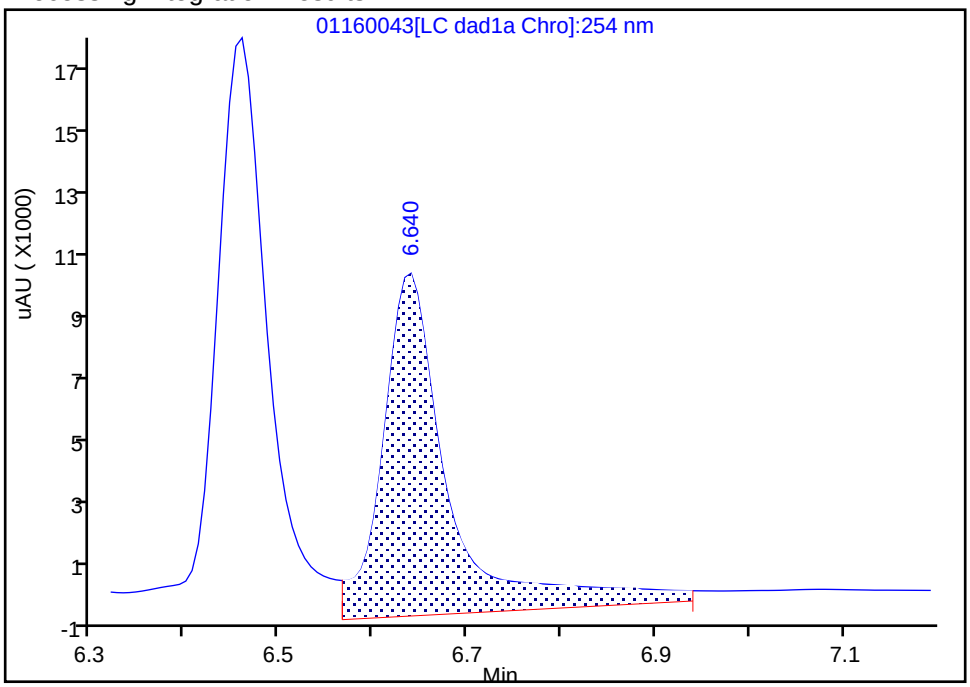
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160043.d				
Injection Date:	17-Jan-2023 02:06:34	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 4				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	46	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit 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

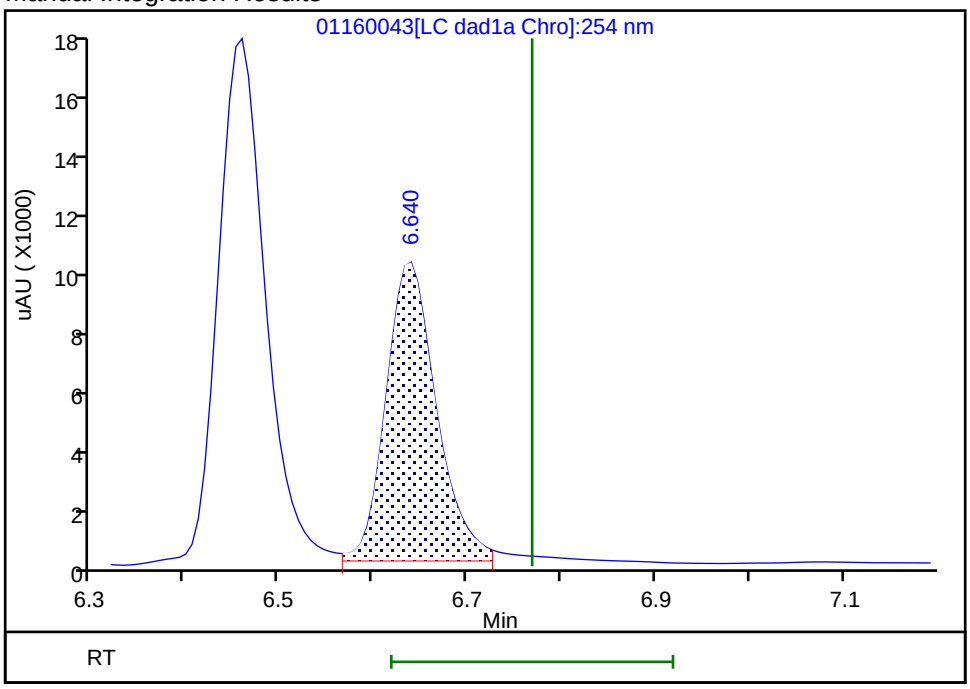
Processing Integration Results

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

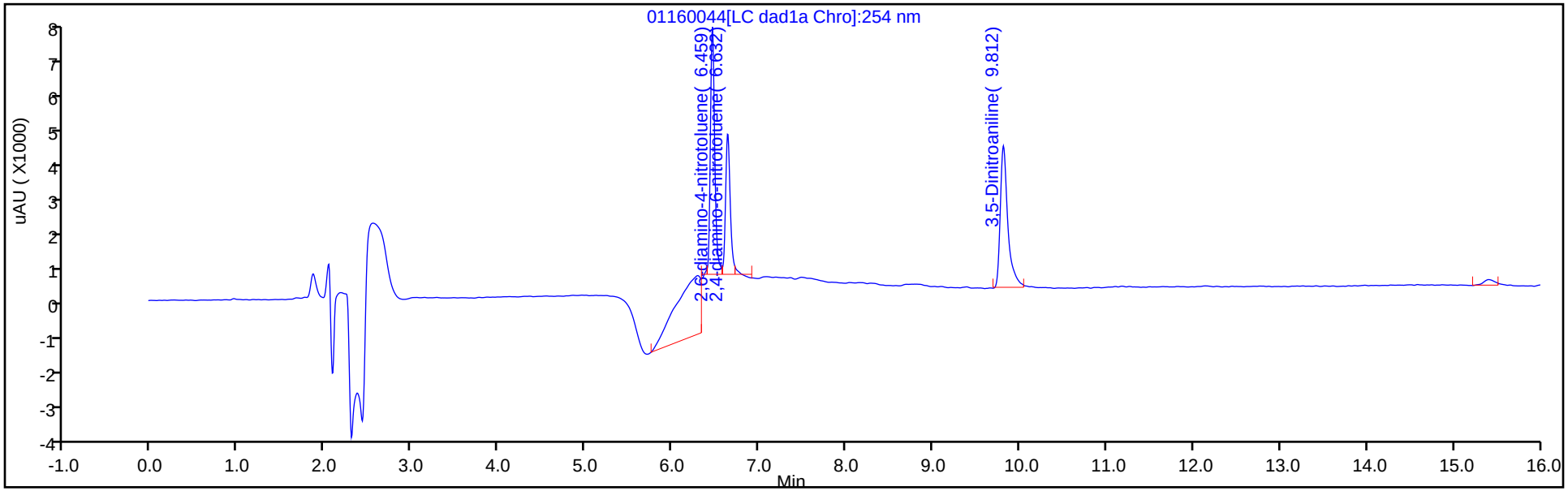
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Eurofins Denver

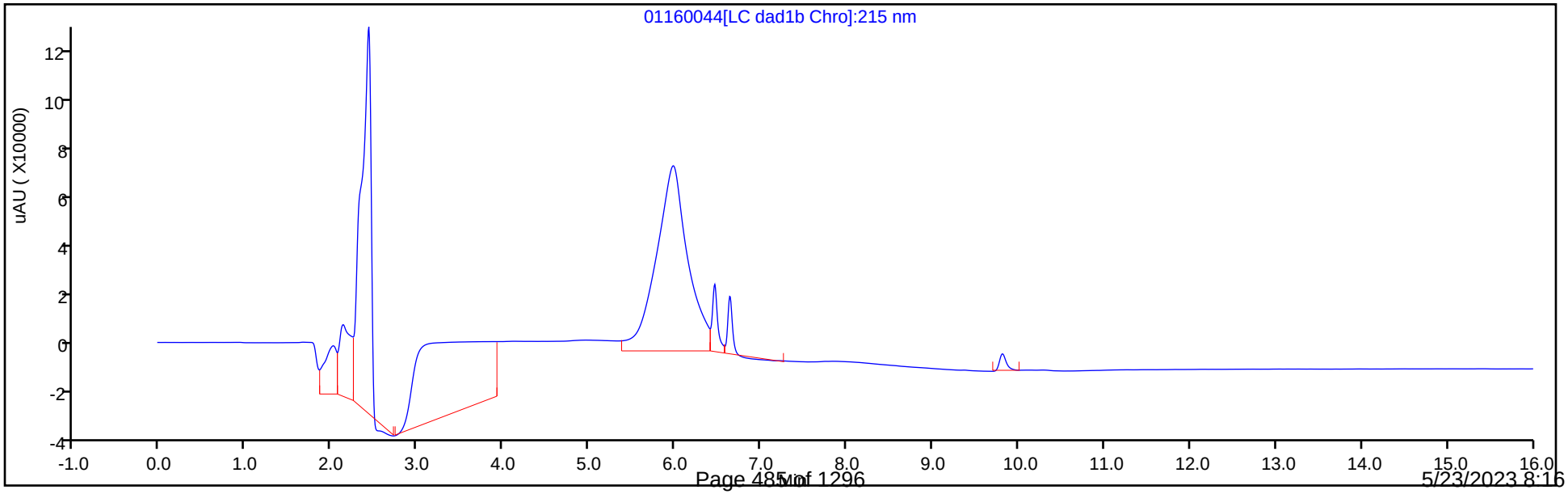
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160044.d

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

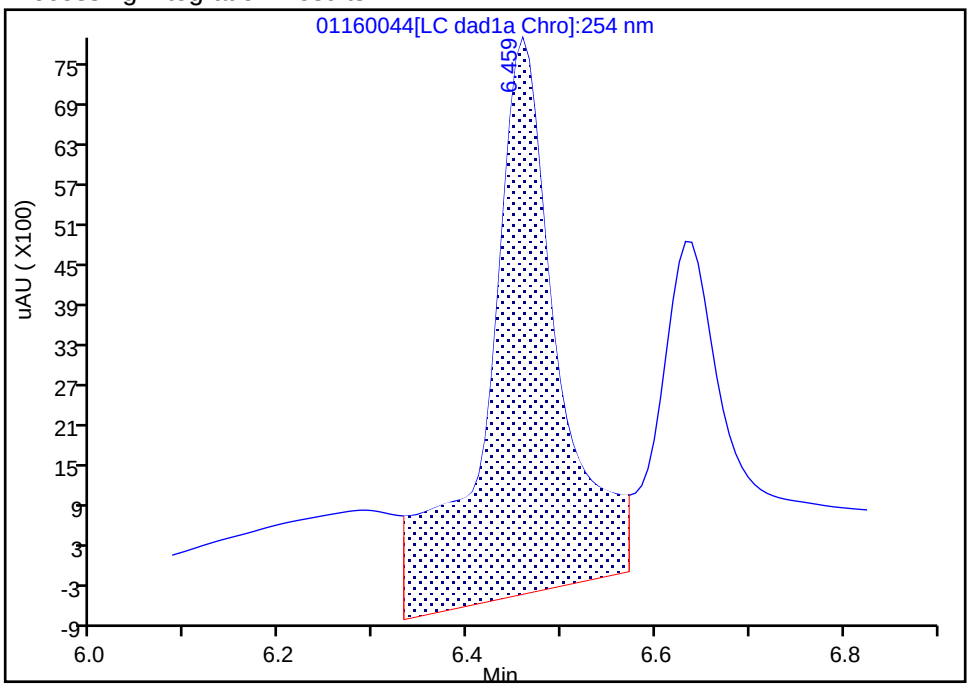
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160044.d
Injection Date: 17-Jan-2023 02:30:00 Instrument ID: CHHPLC_X3
Lims ID: IC ADD 3
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 47 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

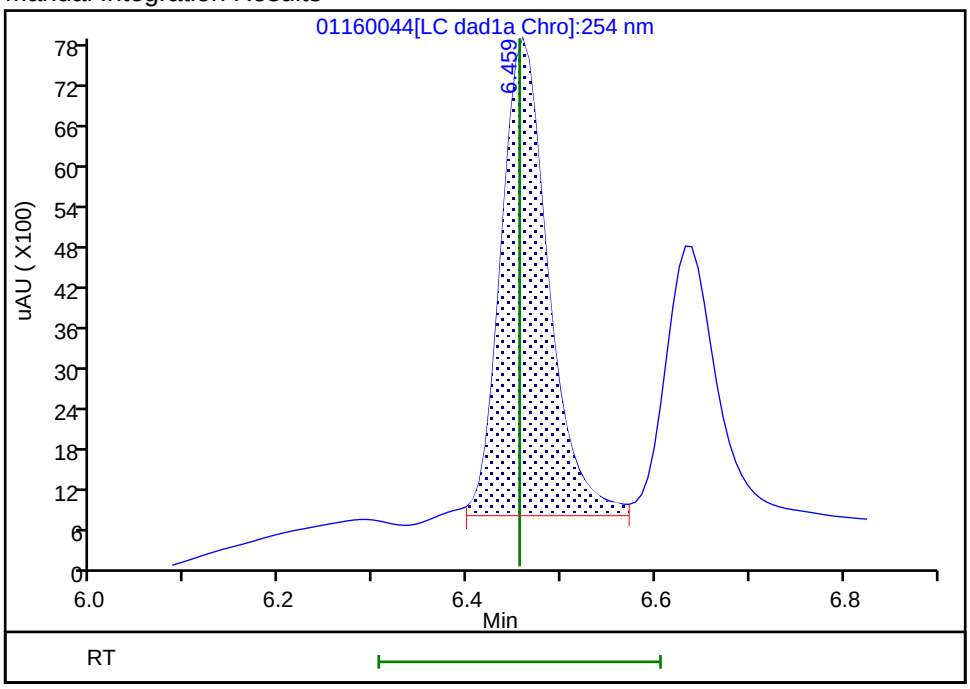
Processing Integration Results

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

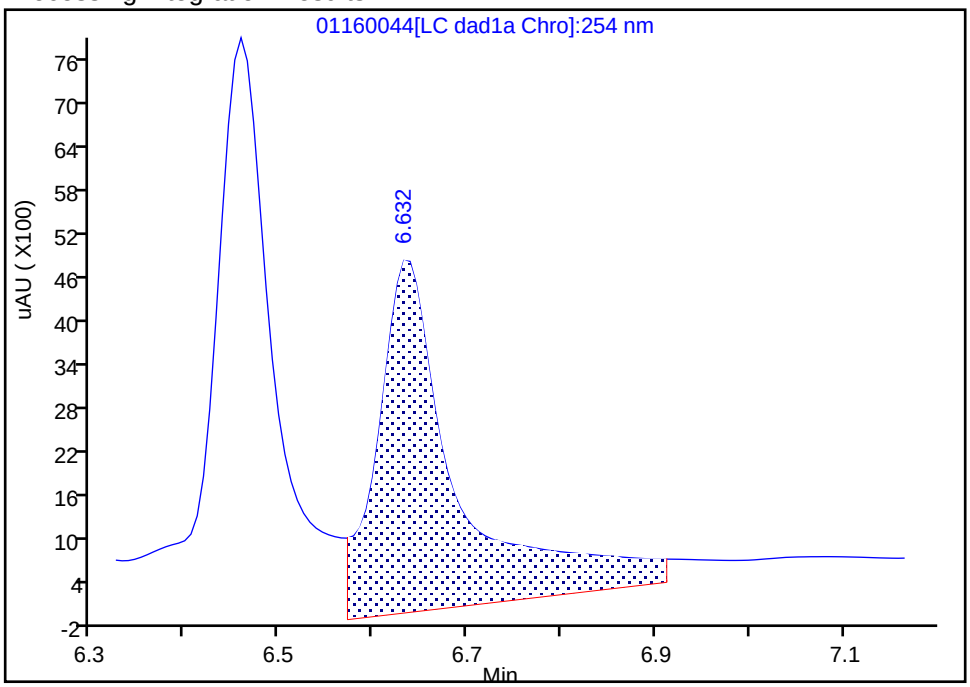
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160044.d				
Injection Date:	17-Jan-2023 02:30:00	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 3				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	47	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit 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

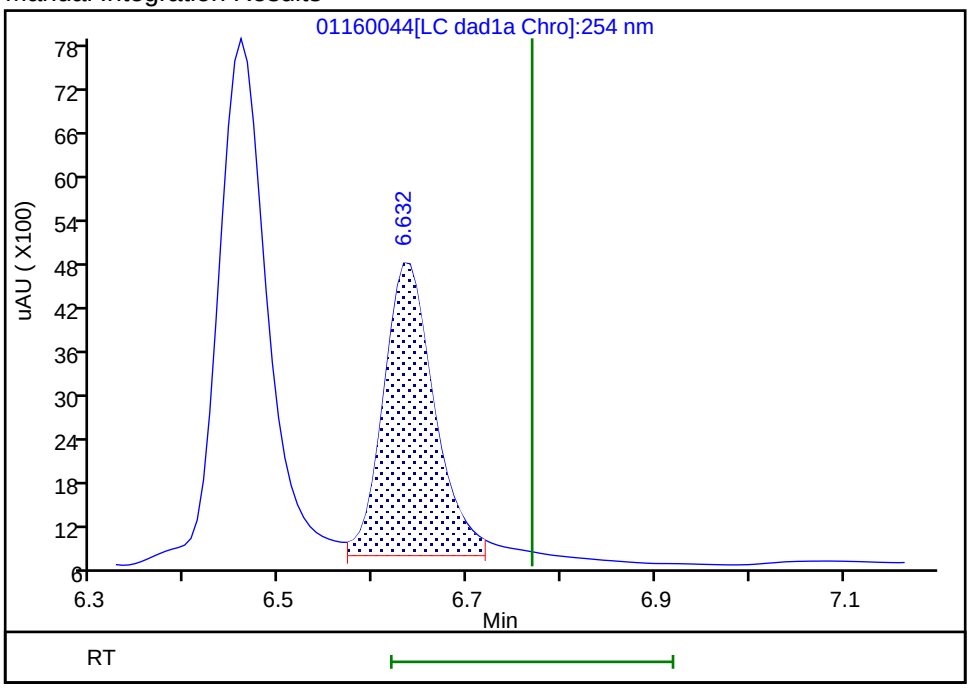
Processing Integration Results

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

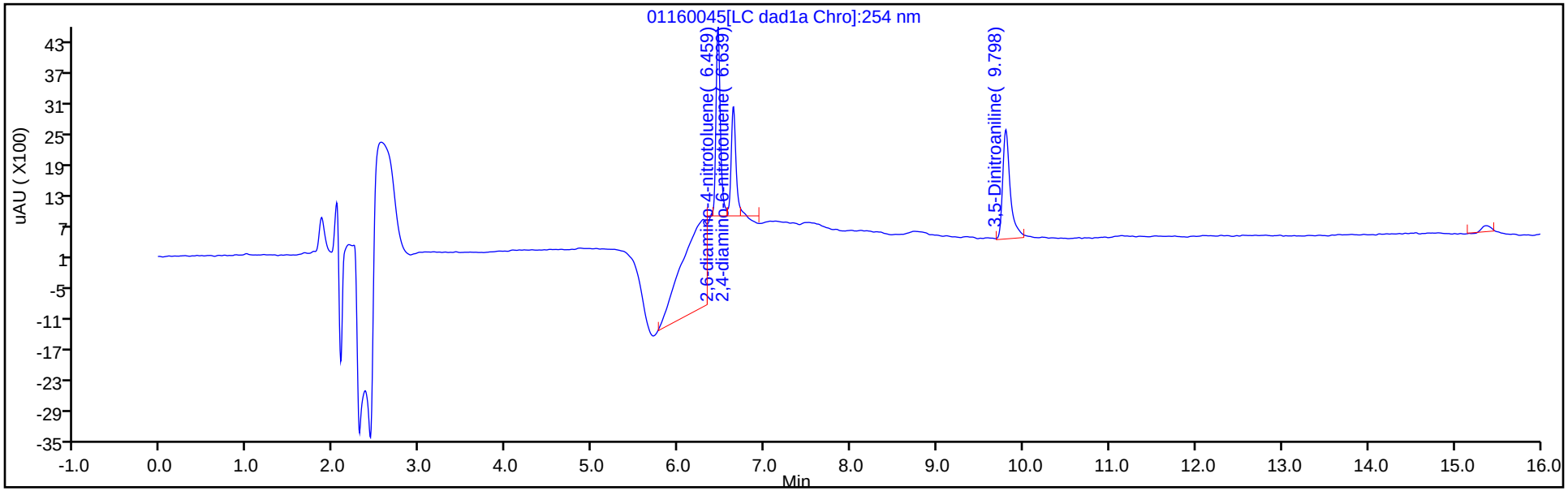
Report Date: 17-Jan-2023 12:50:42 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Denver

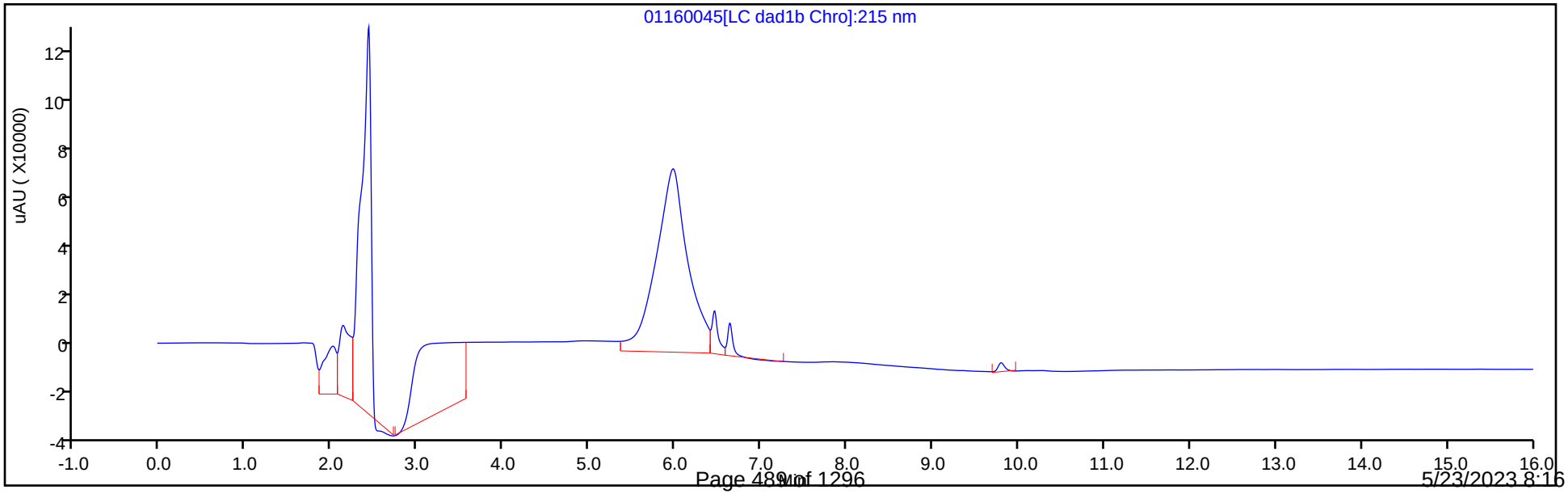
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160045.d

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



5/23/2023 8:16 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

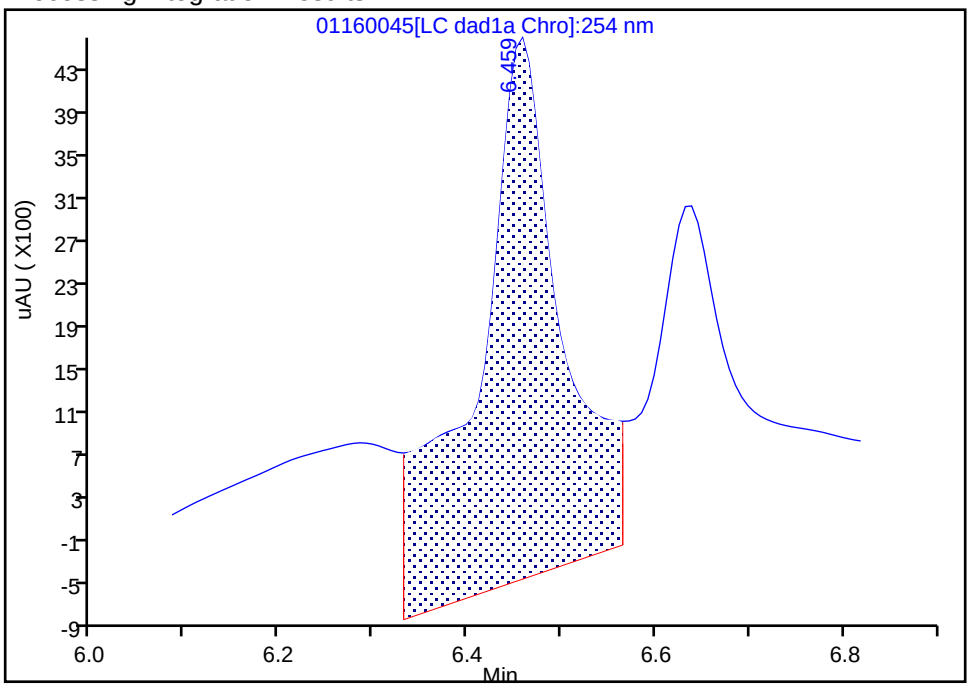
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160045.d
Injection Date: 17-Jan-2023 02:53:21 Instrument ID: CHHPLC_X3
Lims ID: IC ADD 2
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 48 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

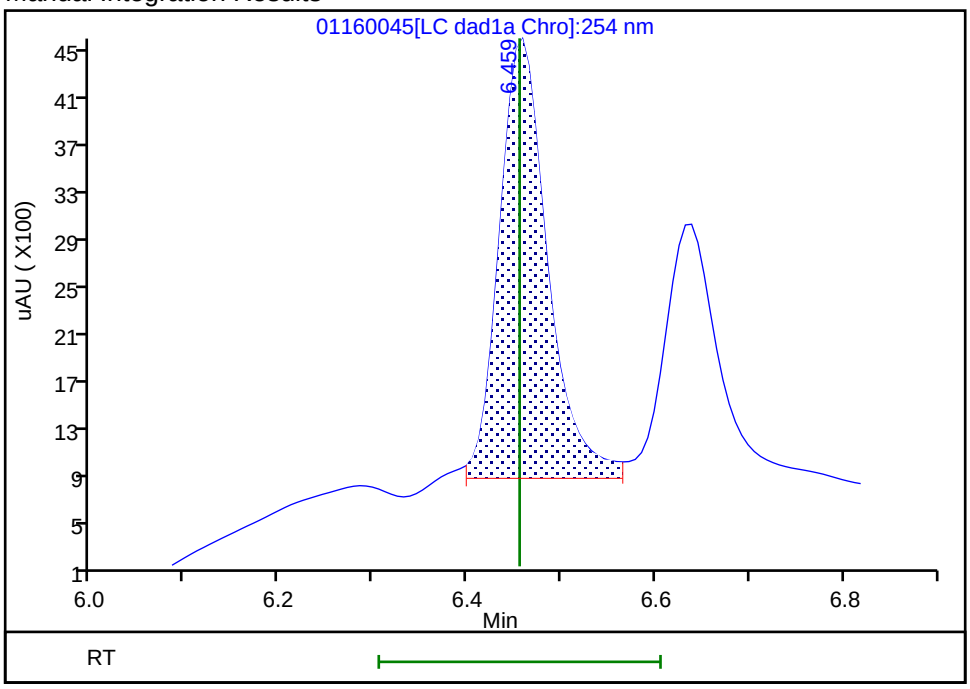
Processing Integration Results

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

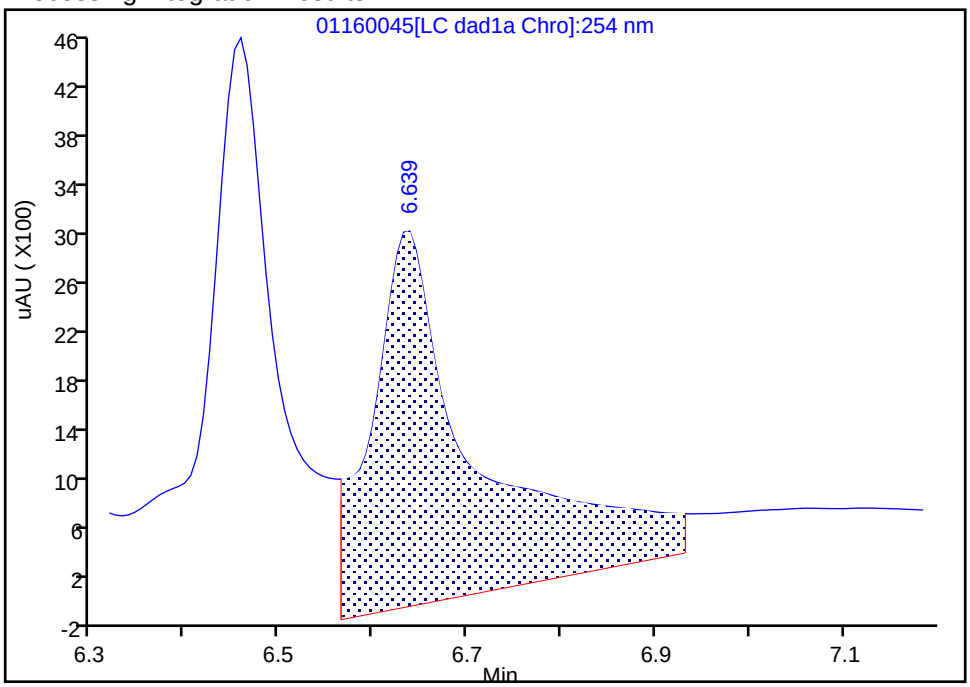
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160045.d				
Injection Date:	17-Jan-2023 02:53:21	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 2				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	48	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit 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

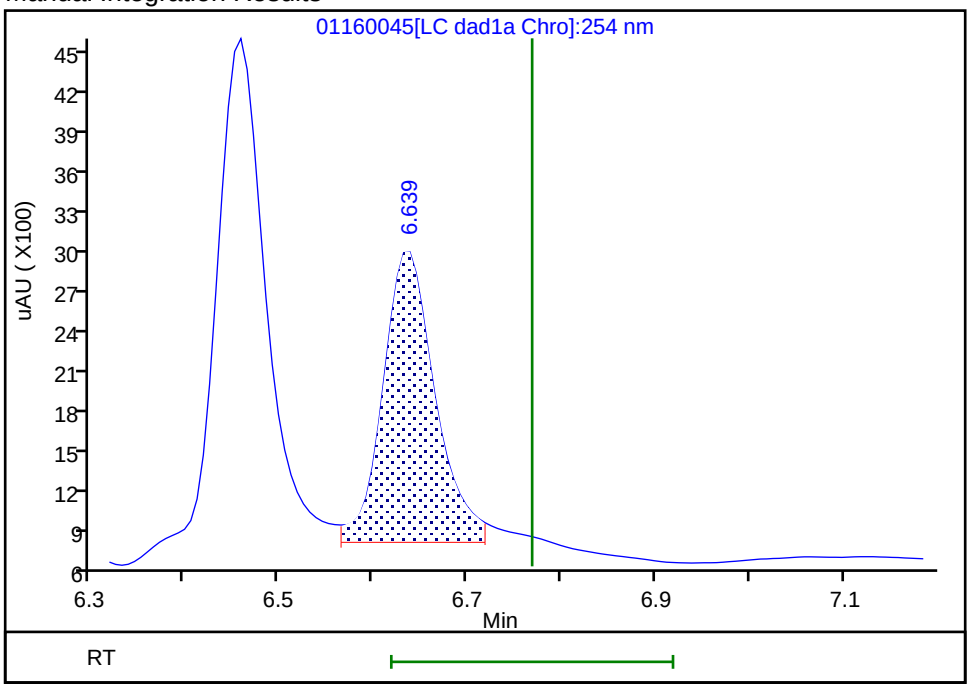
Processing Integration Results

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

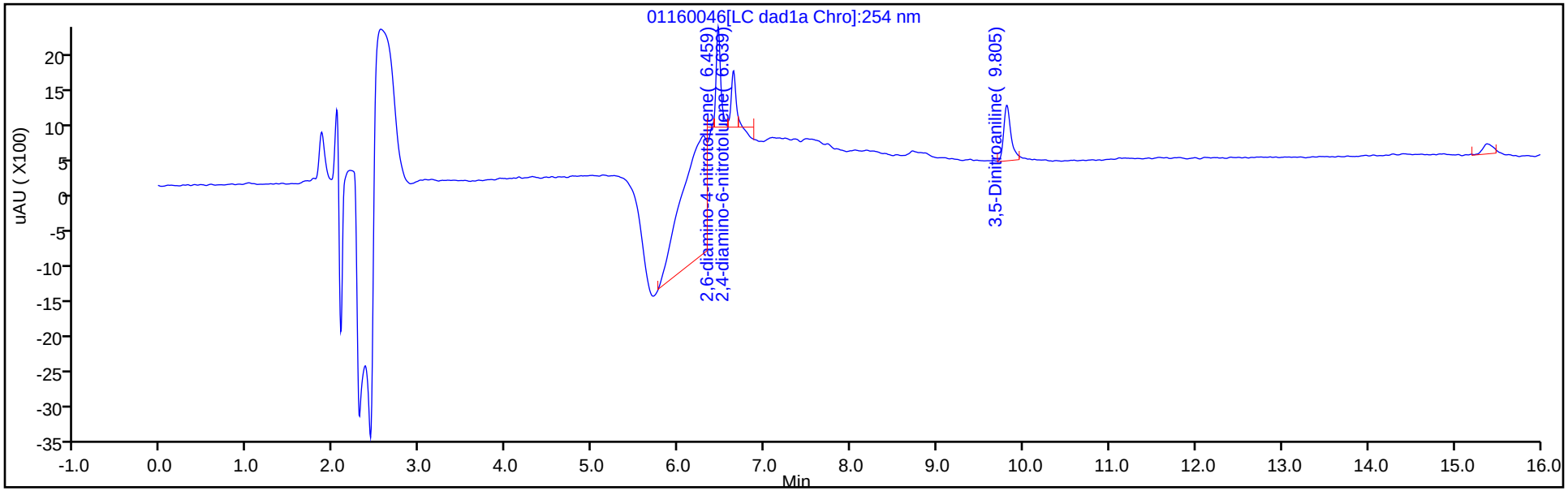
Report Date: 17-Jan-2023 12:50:42 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Denver

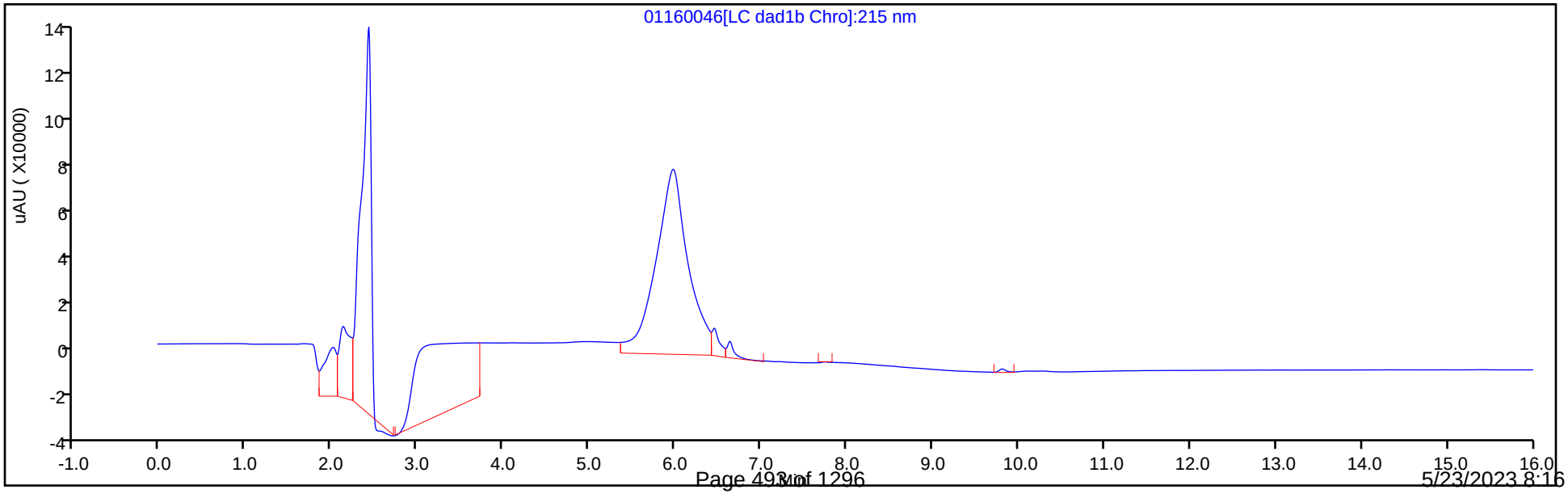
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160046.d

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

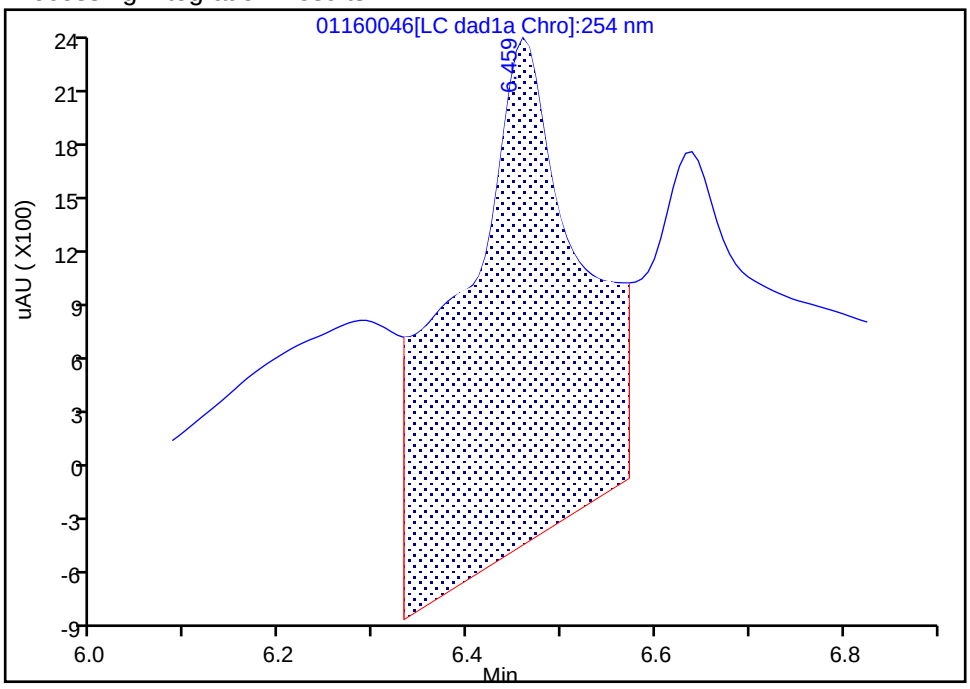
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160046.d
Injection Date: 17-Jan-2023 03:16:44 Instrument ID: CHHPLC_X3
Lims ID: IC ADD 1
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 49 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

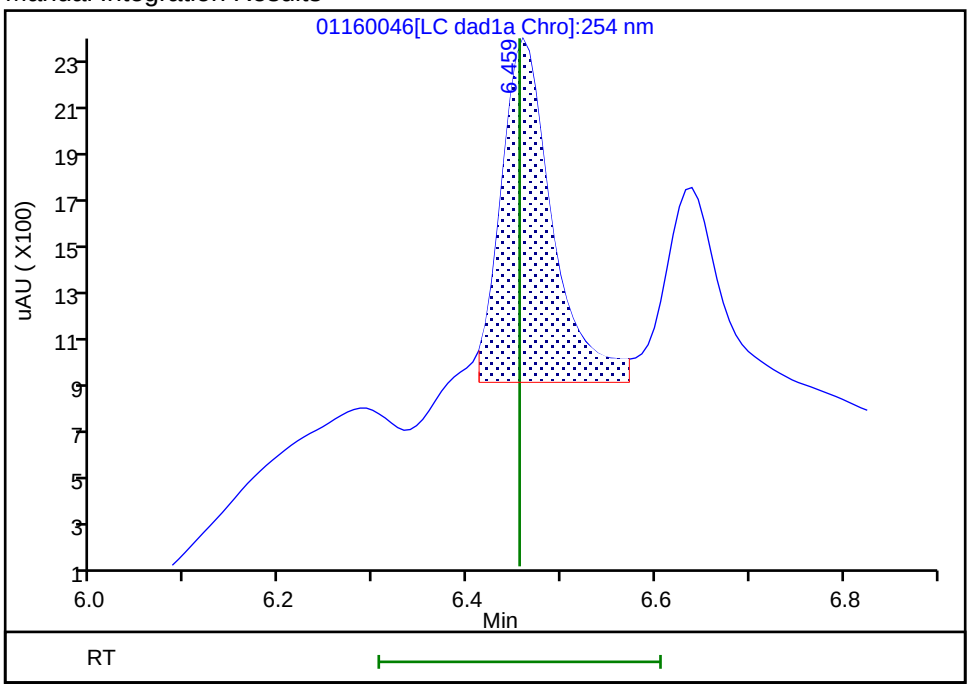
Processing Integration Results

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

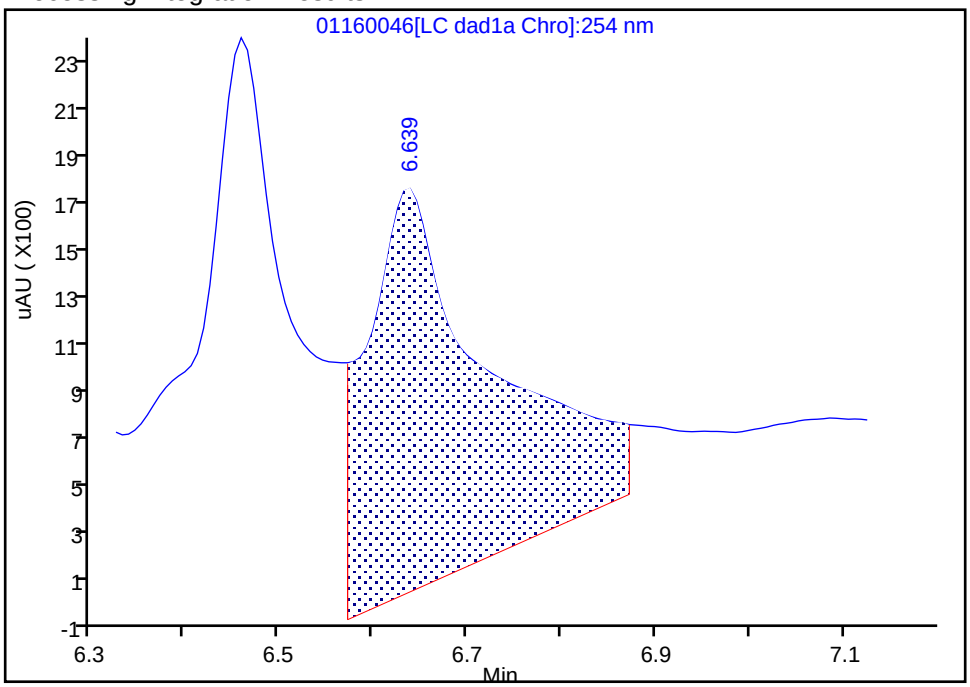
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160046.d				
Injection Date:	17-Jan-2023 03:16:44	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 1				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	49	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit 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

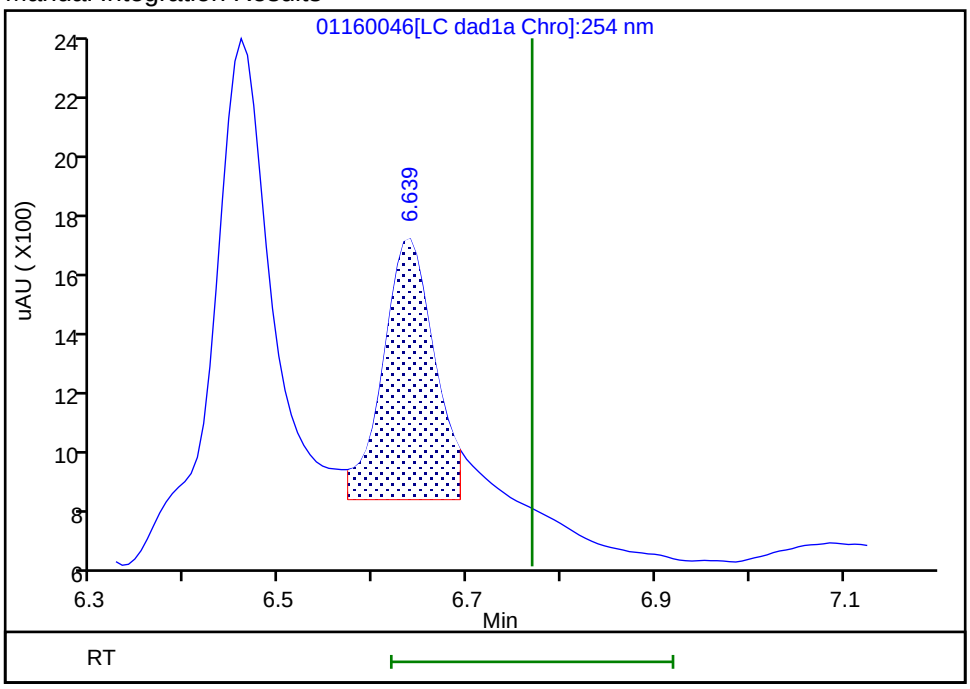
Processing Integration Results

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

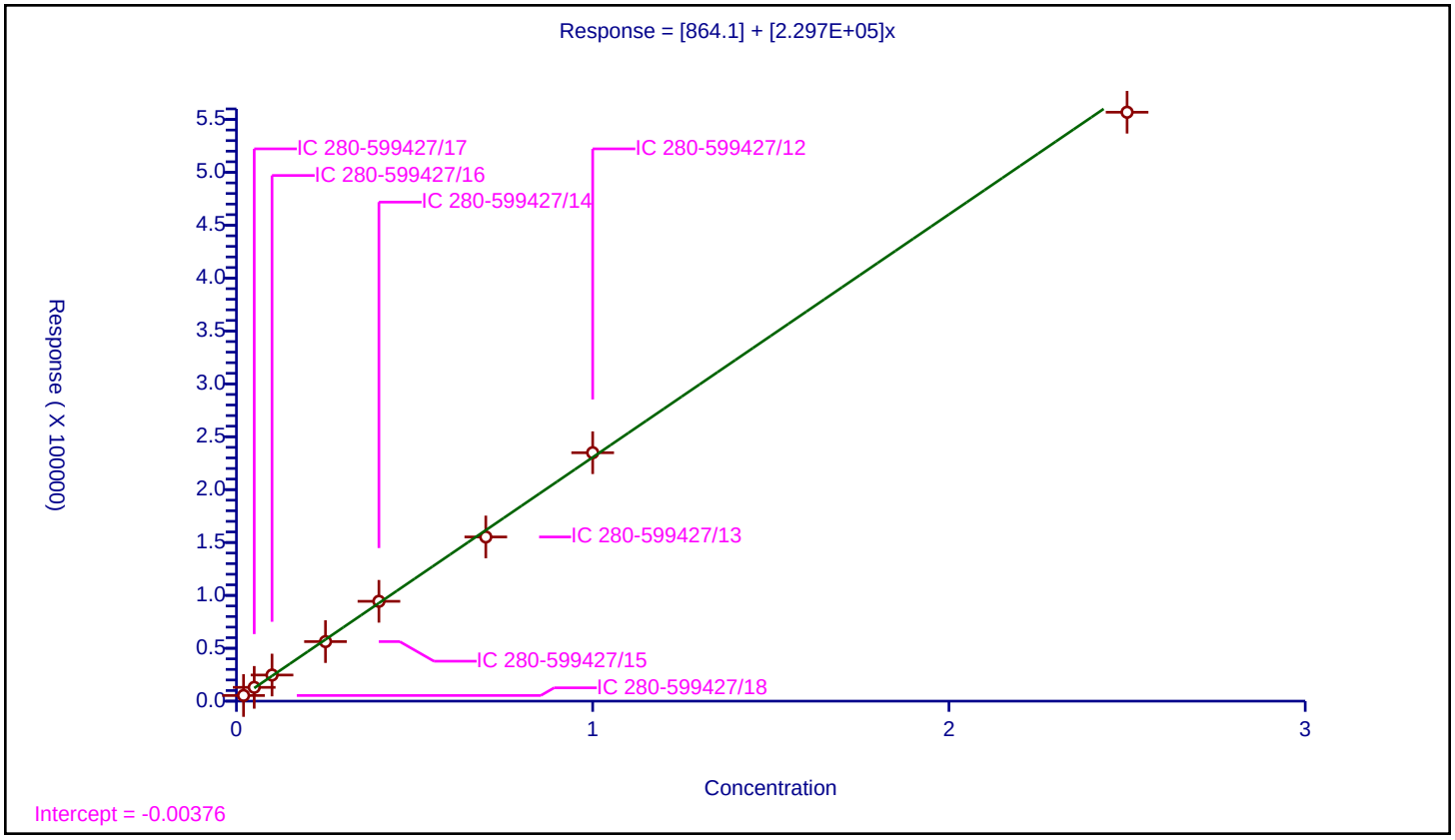
Curve Coefficients

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

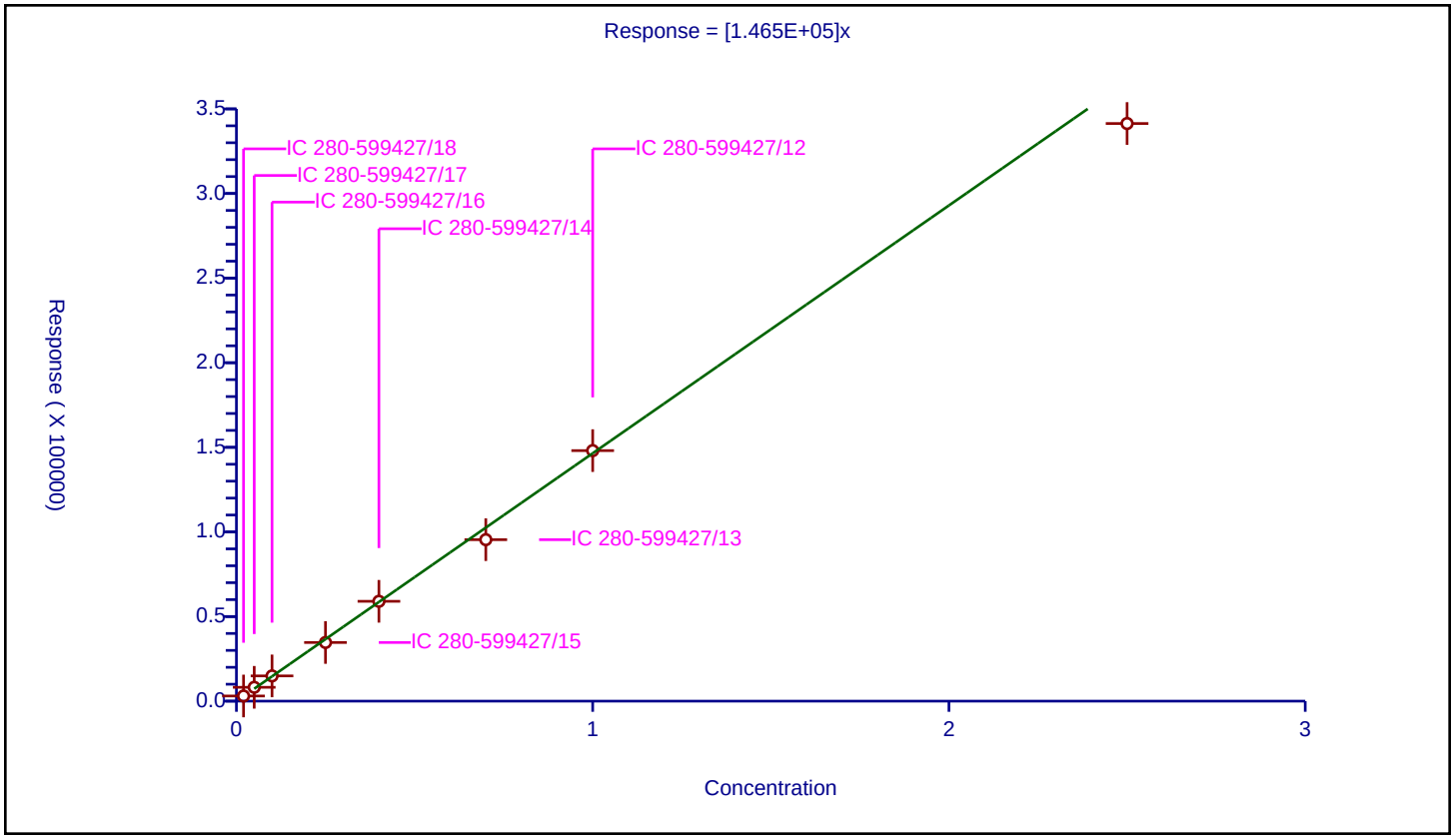
Curve Coefficients

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

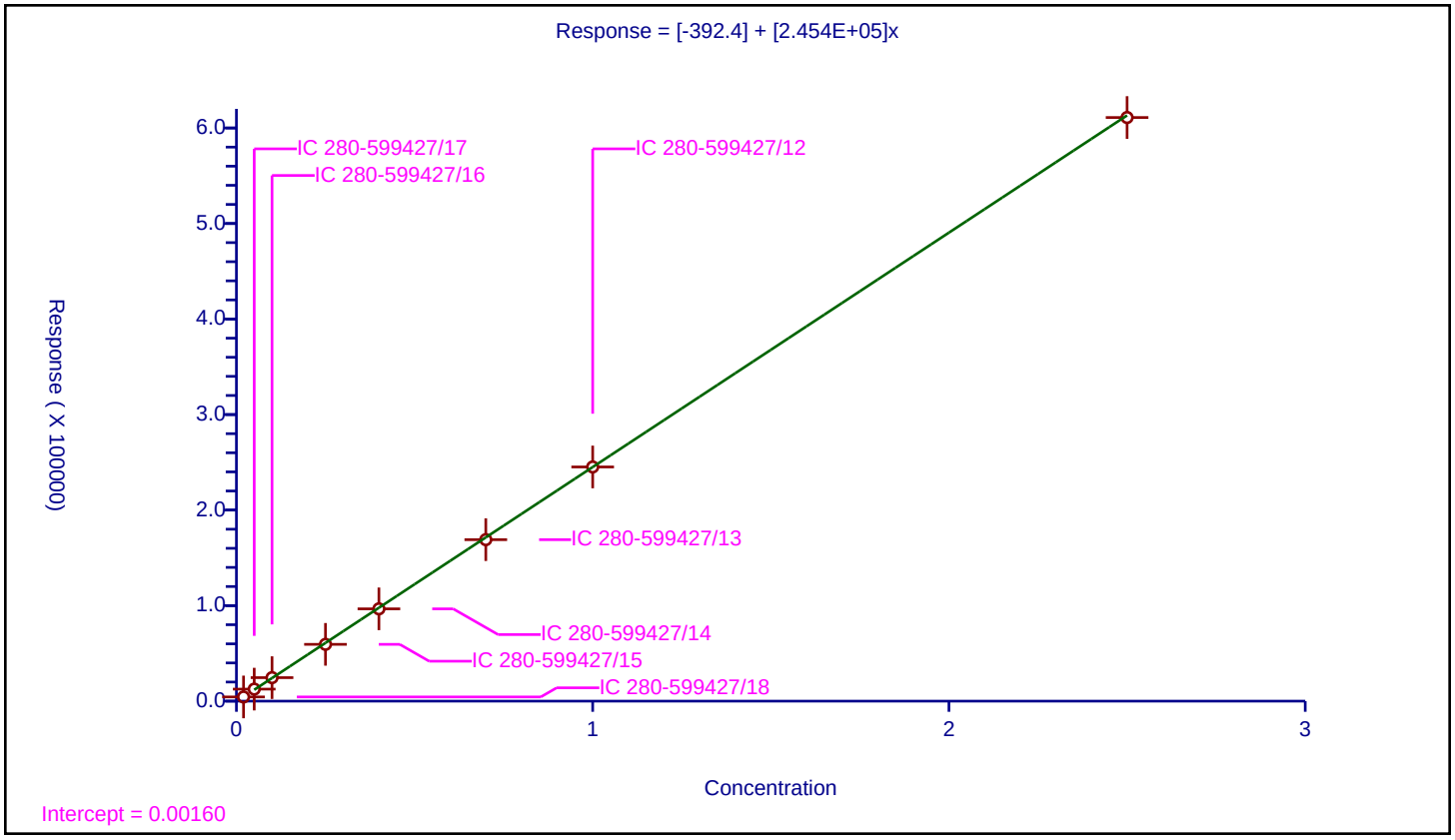
Curve Coefficients

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.: 280-175997-1 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.: 280-175997-1 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.: 280-175997-1 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		64069.924 3				3.7		20.0			
2,4,6-Trinitrotoluene	216700 210476 209648	213100 208335	214160 208960	207870 210110	Ave		211039.88 9				1.4		20.0			
4-Amino-2,6-dinitrotoluene	167000 152884 152878	155300 152868	157500 150916	154070 150980	Ave		154932.80 2				3.2		20.0			
2-Amino-4,6-dinitrotoluene	221400 198056 200205	201050 198963	201440 196574	197650 197356	Ave		201410.39 8				3.8		20.0			
2,6-Dinitrotoluene	148600 143452 140114	145550 140035	142180 142239	139670 142869	Ave		142745.39 7				2.0		20.0			
2,4-Dinitrotoluene	314100 293052 294340	299250 294023	297440 290757	295390 291656	Ave		296667.47 1				2.4		20.0			
2-Nitrotoluene	137700 124752 126235	130550 125108	132460 124116	125480 124668	Ave		127896.49 0				3.7		20.0			
4-Nitrotoluene	126300 108612 108849	119650 108228	111680 107359	108570 107671	Ave		111879.80 8				5.9		20.0			
3-Nitrotoluene	147300 137292 138526	153100 136790	141920 136640	136660 136203	Ave		140492.28 9				4.2		20.0			
PETN	72730 68498 68809	67310 68653	68114 68586	68161 68748	Ave		68845.425 1				2.2		20.0			
1,2-Dinitrobenzene	118800 127432 129675	124550 128775	125560 126837	127270 127879	Ave		126308.70 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.: 280-175997-1 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.: 280-175997-1 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

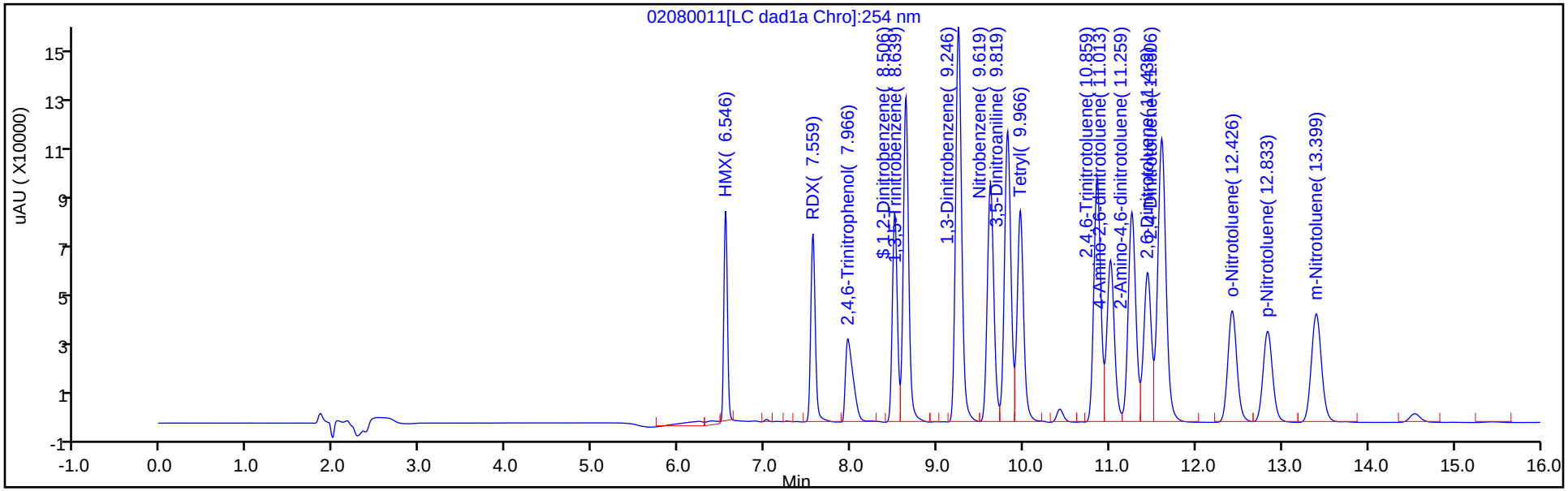
Report Date: 09-Feb-2023 12:48:02 Chrom Revision: 2.3 01-Feb-2023 13:23:06

Eurofins Denver

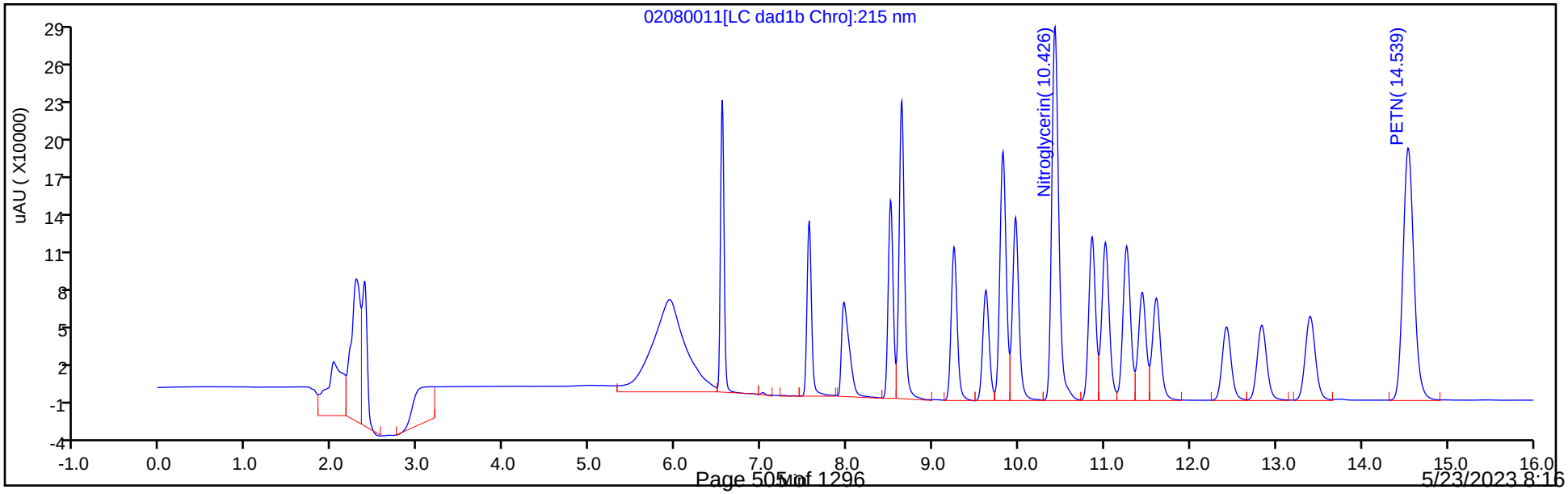
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Injection Date:	08-Feb-2023 15:38:53	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC INT 9			Worklist Smp#:	11
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Manual Integration/User Assign Peak Report

Eurofins Denver

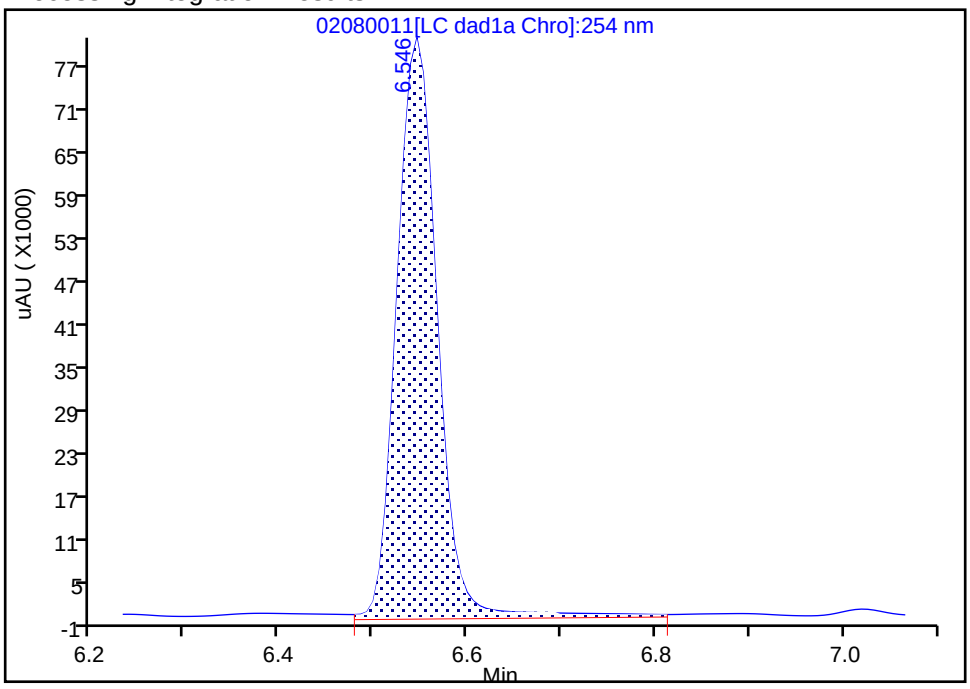
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Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

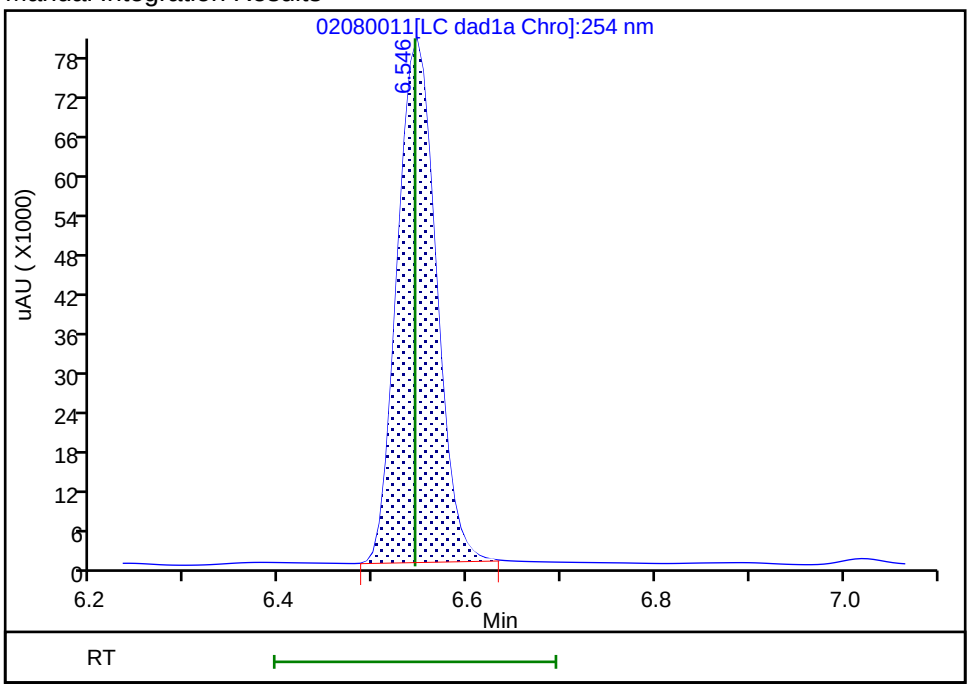
Processing Integration Results

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

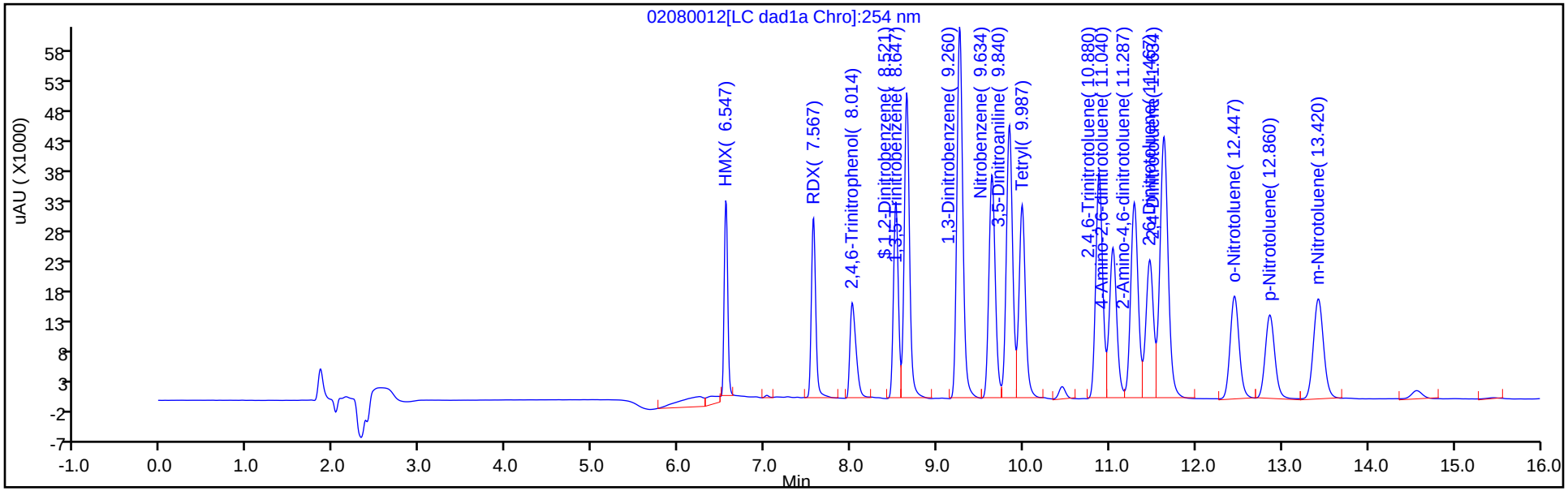
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Eurofins Denver

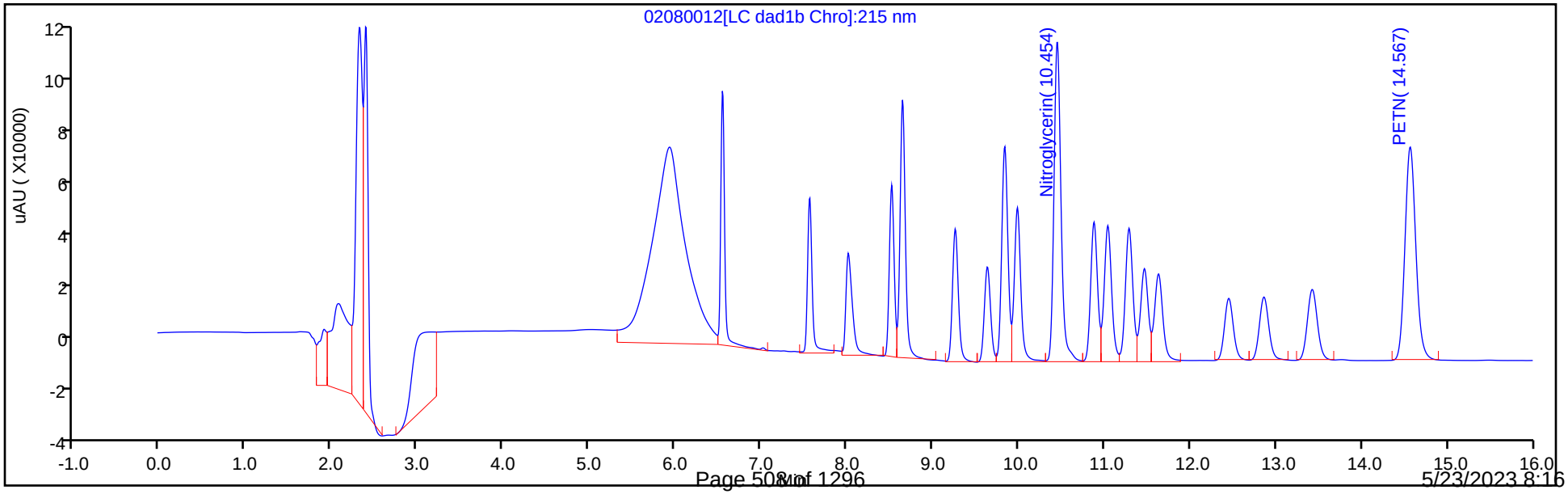
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Injection Date:	08-Feb-2023 16:01:51	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC INT 8			Worklist Smp#:	12
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8330_X3	Limit Group:	GCSV - 8330		

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

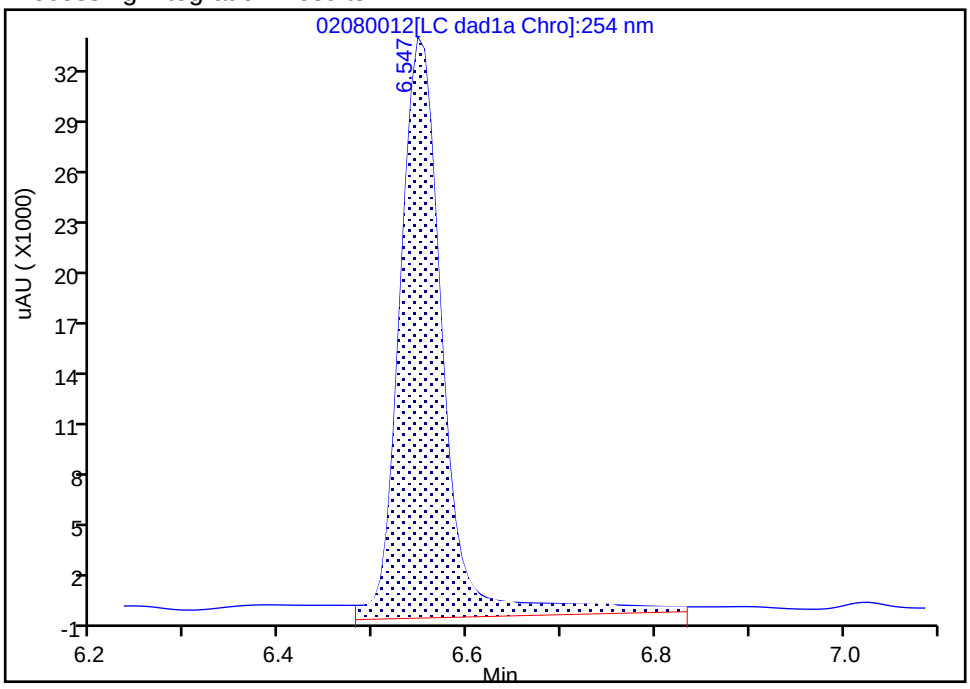
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Injection Date:	08-Feb-2023 16:01:51	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 8				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

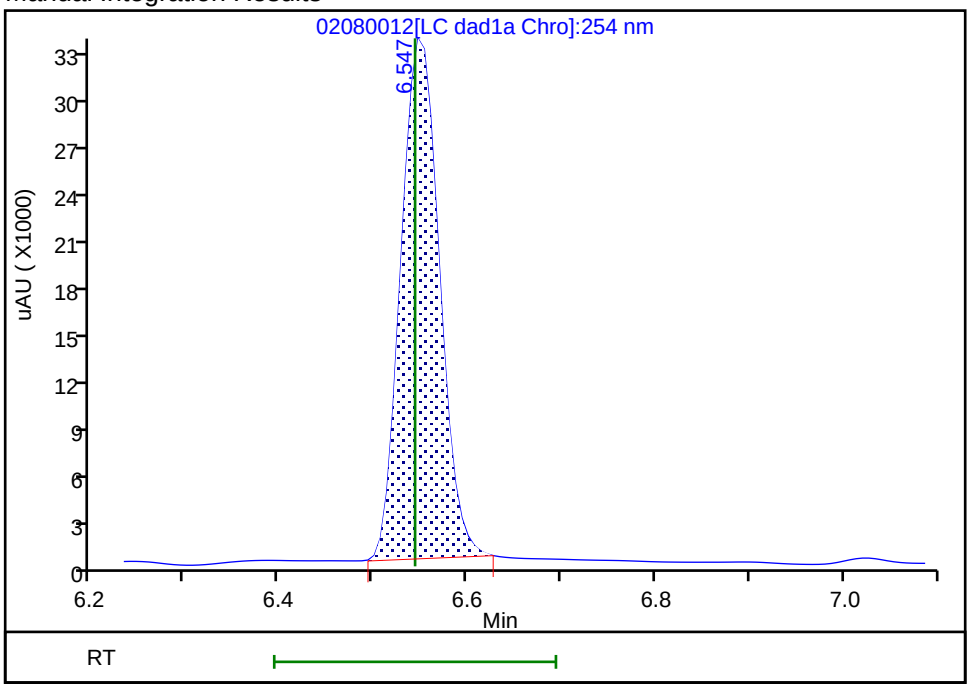
Processing Integration Results

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

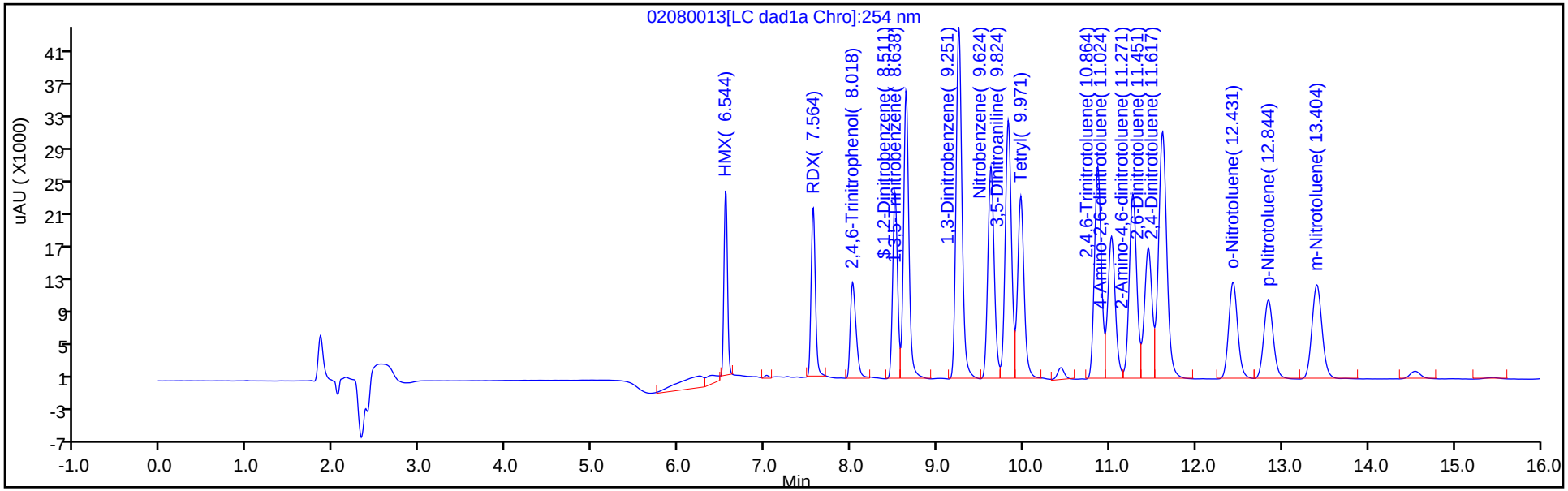
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Eurofins Denver

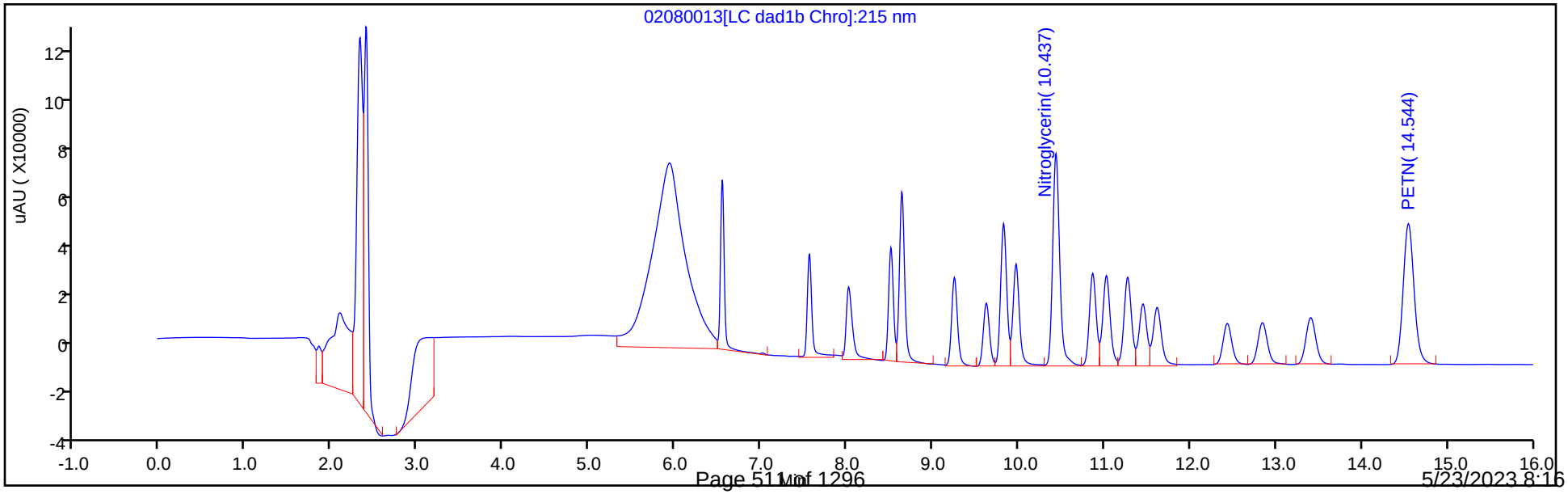
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Injection Date:	08-Feb-2023 16:24:45	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC INT 7			Worklist Smp#:	13
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8330_X3	Limit Group:	GCSV - 8330		

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

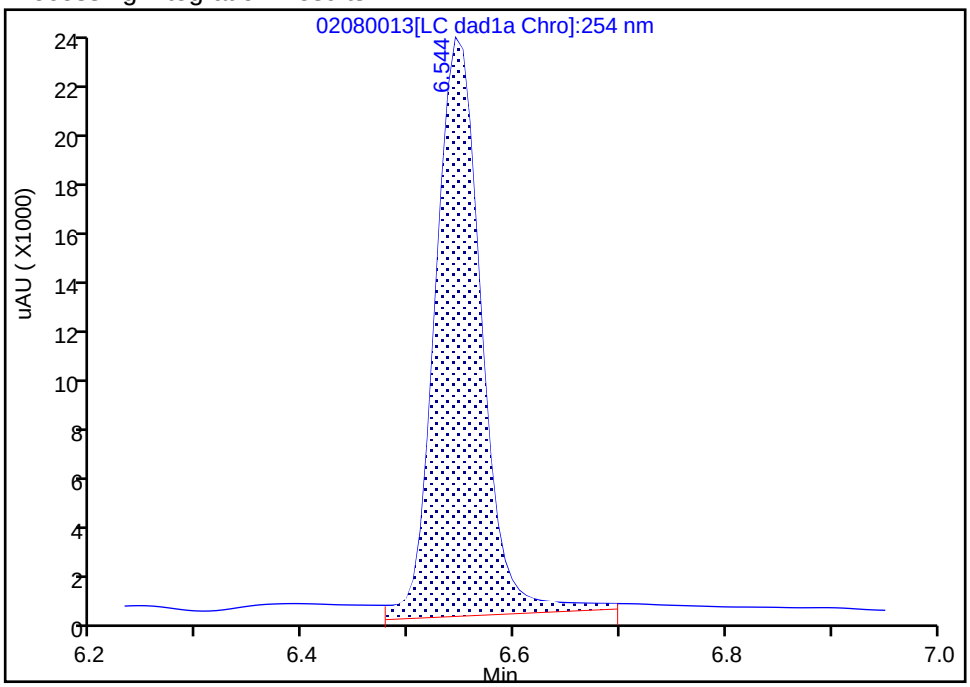
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Injection Date:	08-Feb-2023 16:24:45	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 7				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

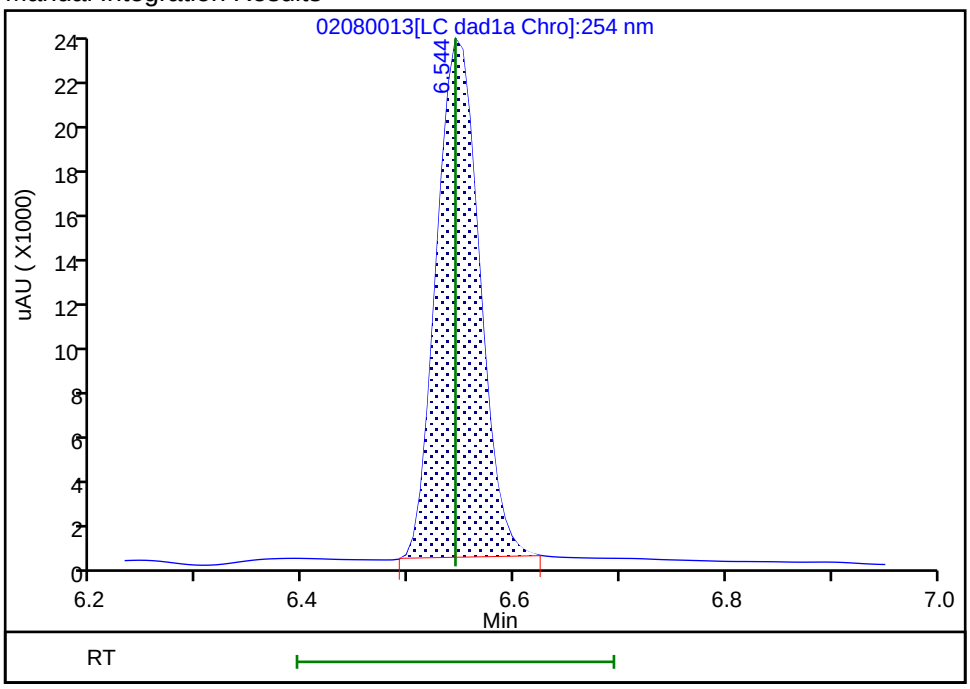
Processing Integration Results

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

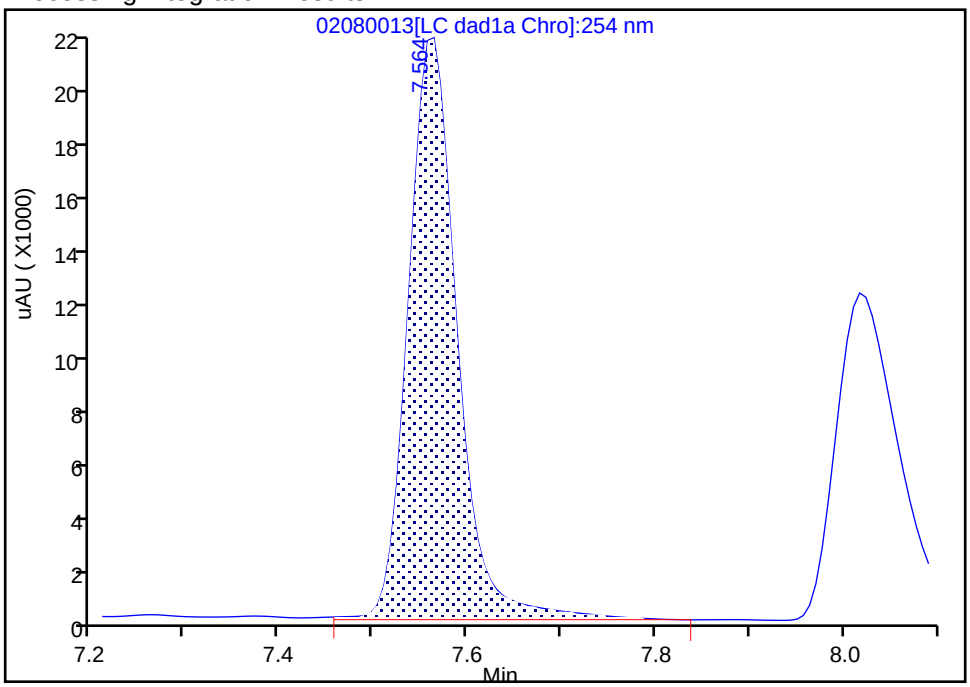
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Injection Date:	08-Feb-2023 16:24:45	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 7				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

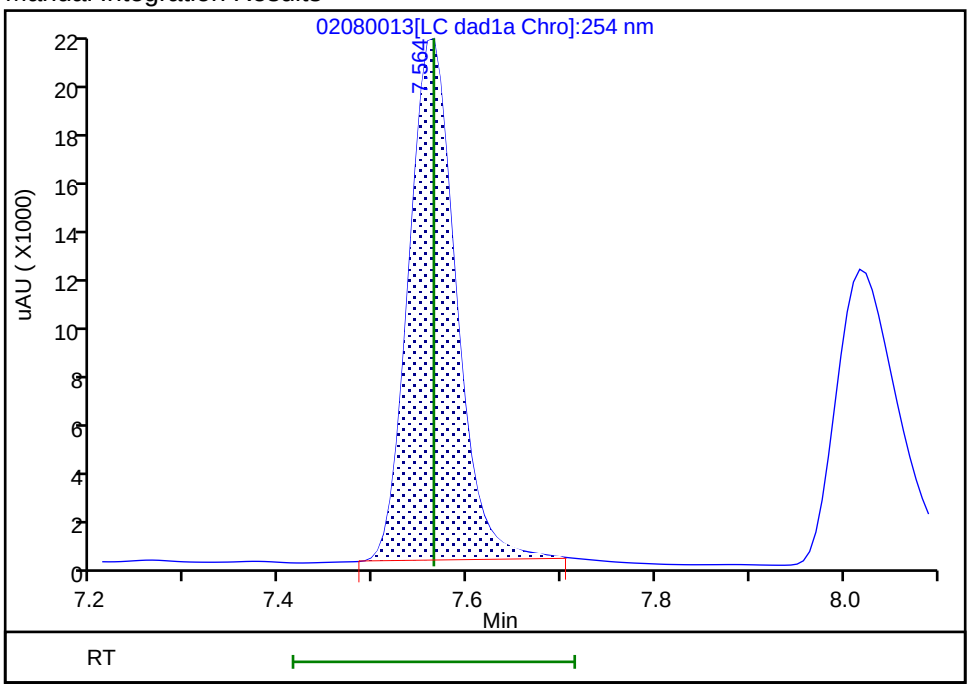
Processing Integration Results

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

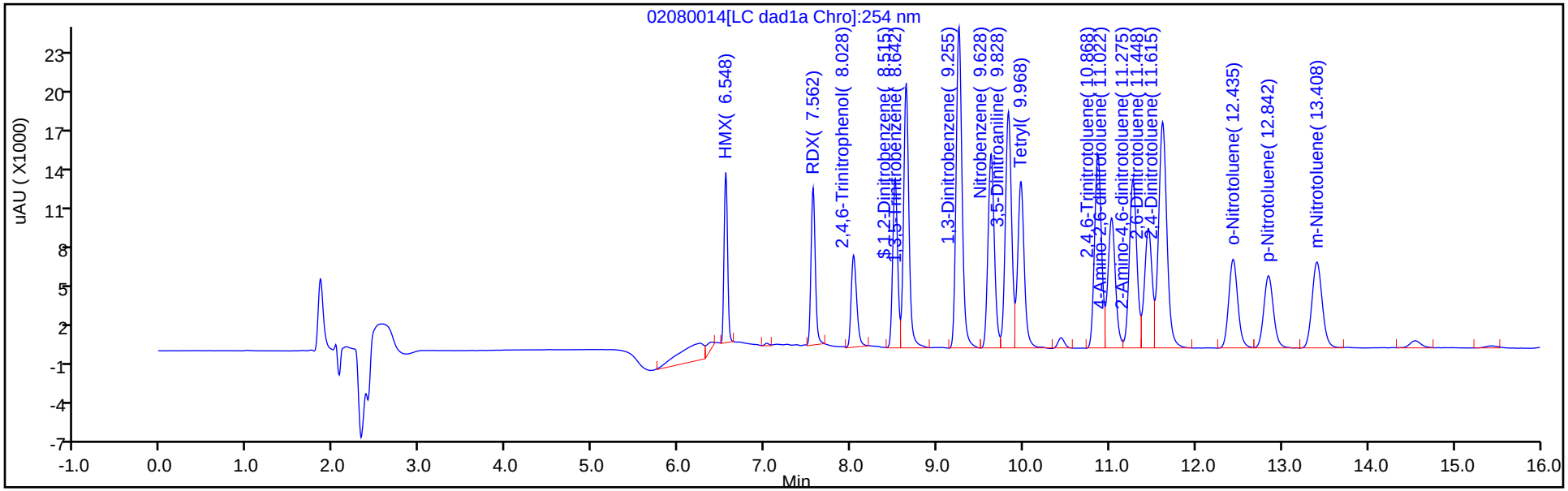
Report Date: 09-Feb-2023 12:48:05 Chrom Revision: 2.3 01-Feb-2023 13:23:06

Eurofins Denver

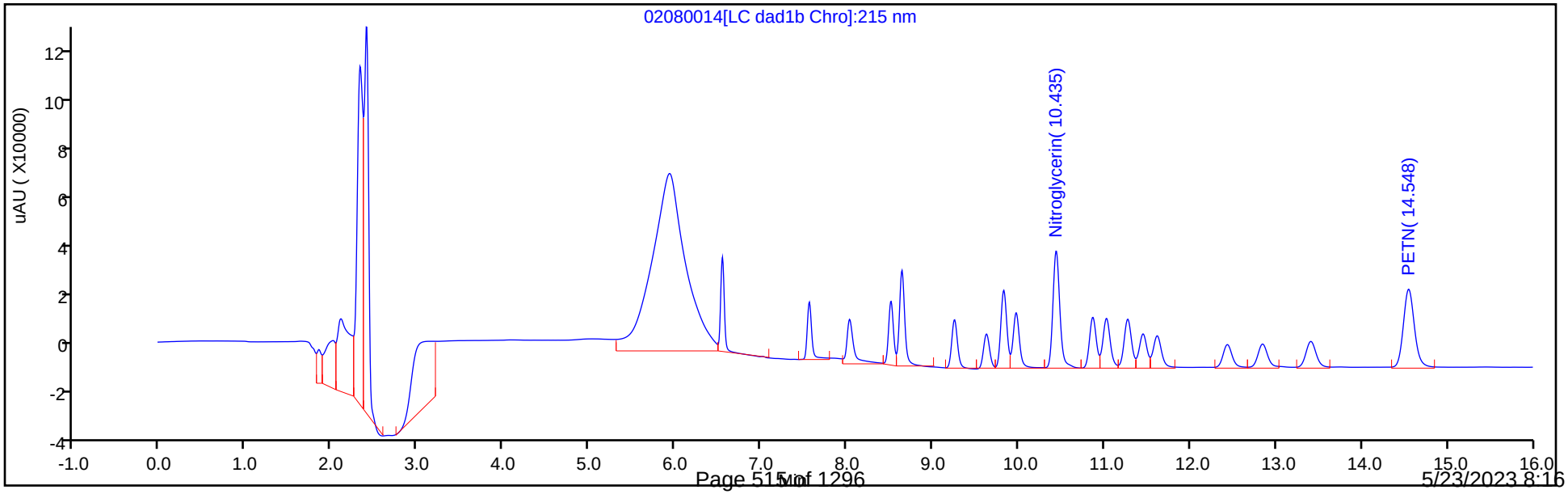
Data File: \\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080014.d

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

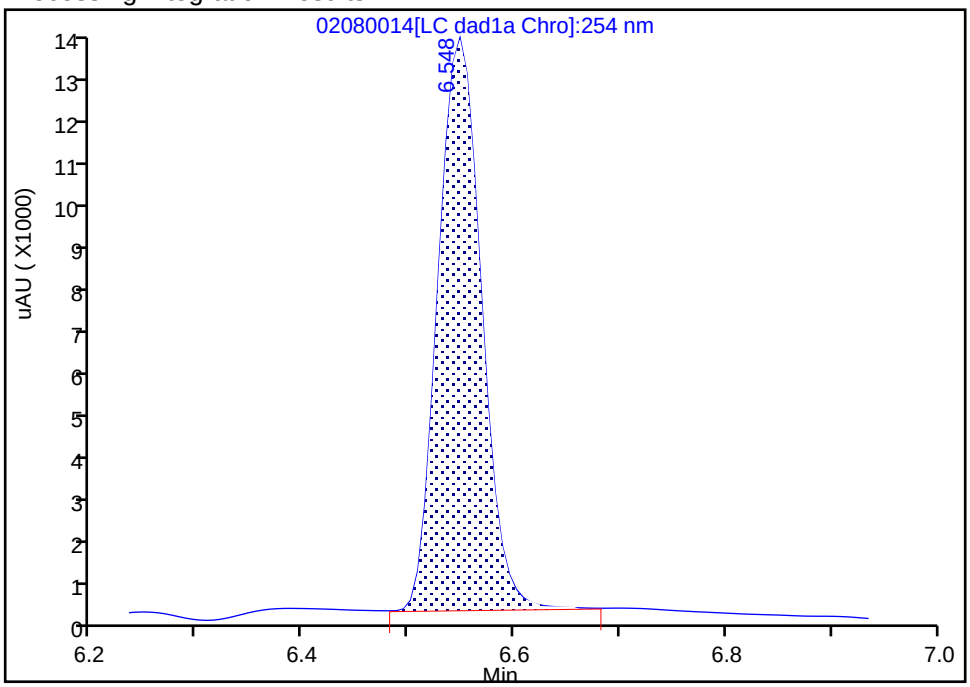
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Injection Date:	08-Feb-2023 16:47:39	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 6				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

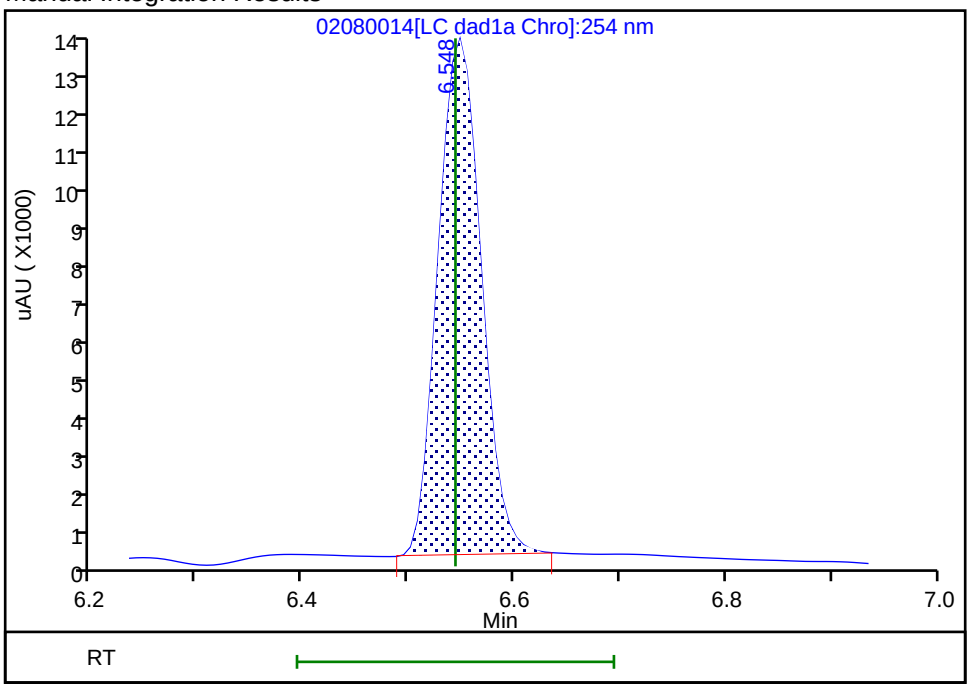
Processing Integration Results

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

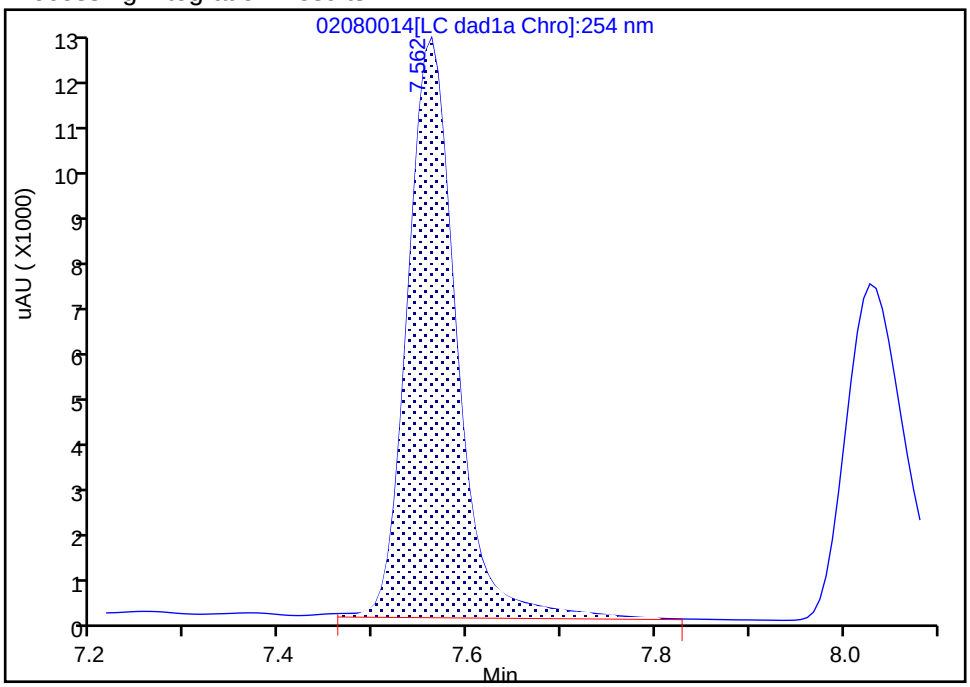
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080014.d				
Injection Date:	08-Feb-2023 16:47:39	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 6				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

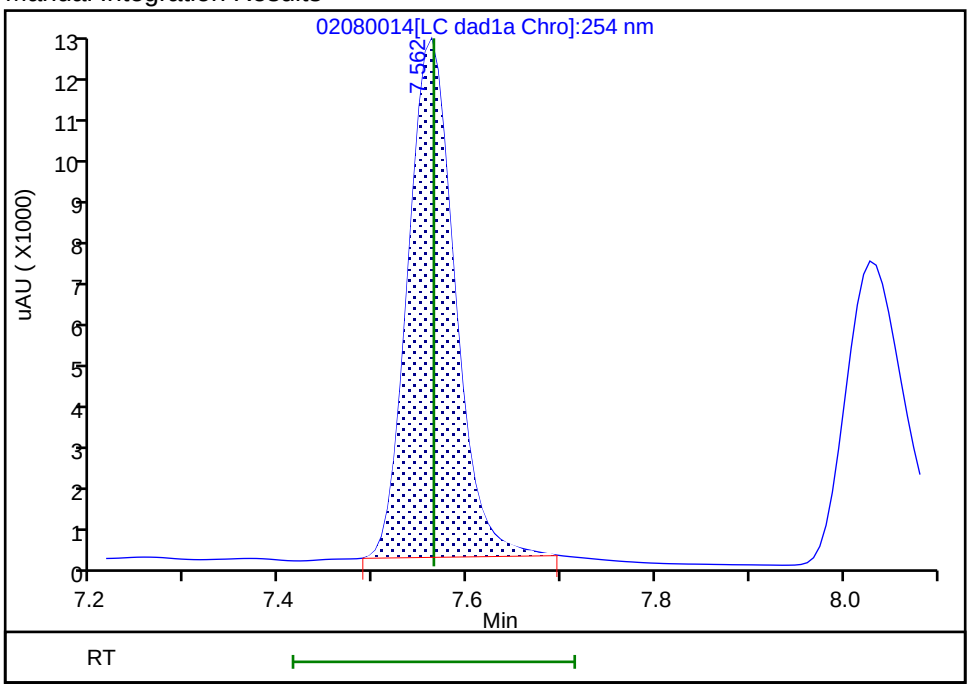
Processing Integration Results

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

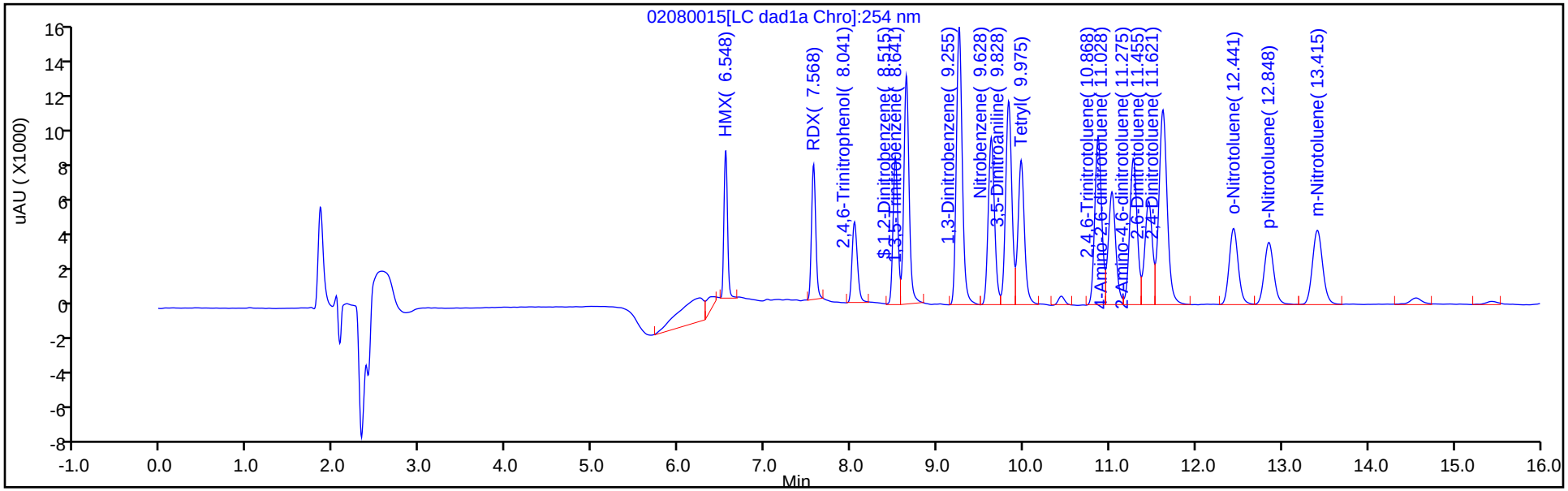
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Eurofins Denver

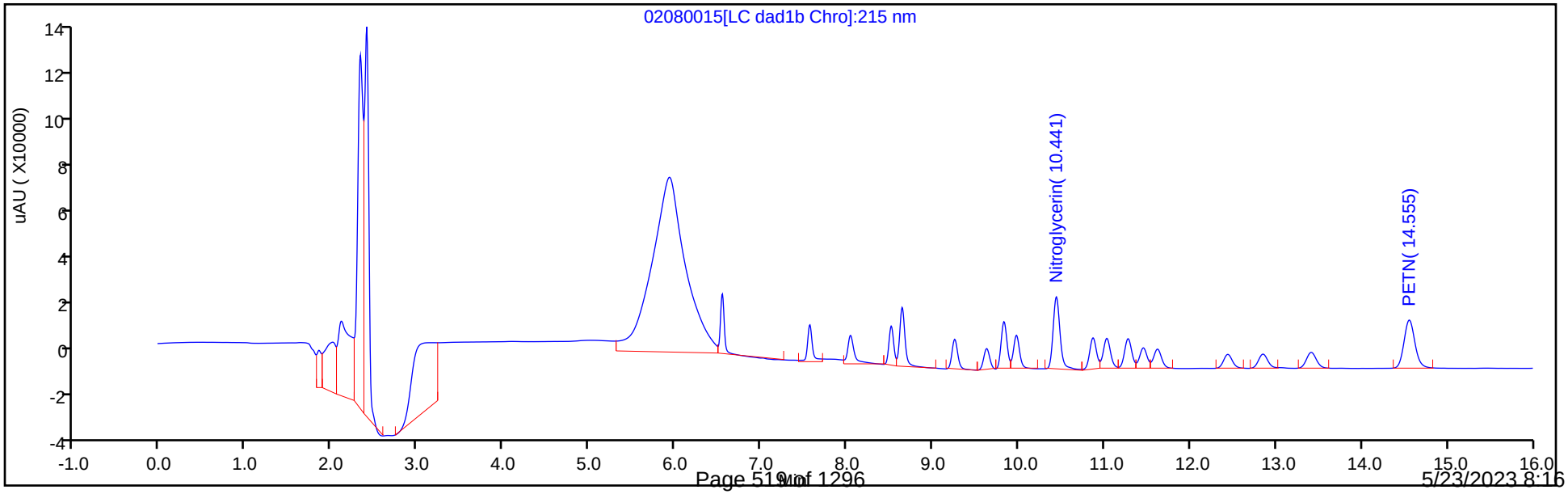
Data File: \\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080015.d

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

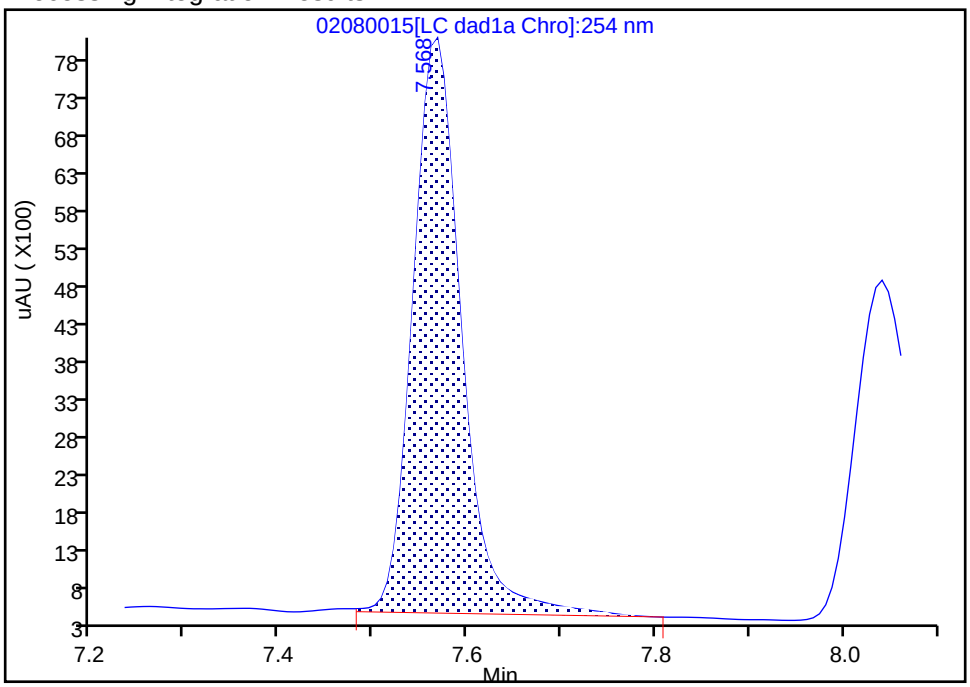
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080015.d				
Injection Date:	08-Feb-2023 17:10:30	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 5				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

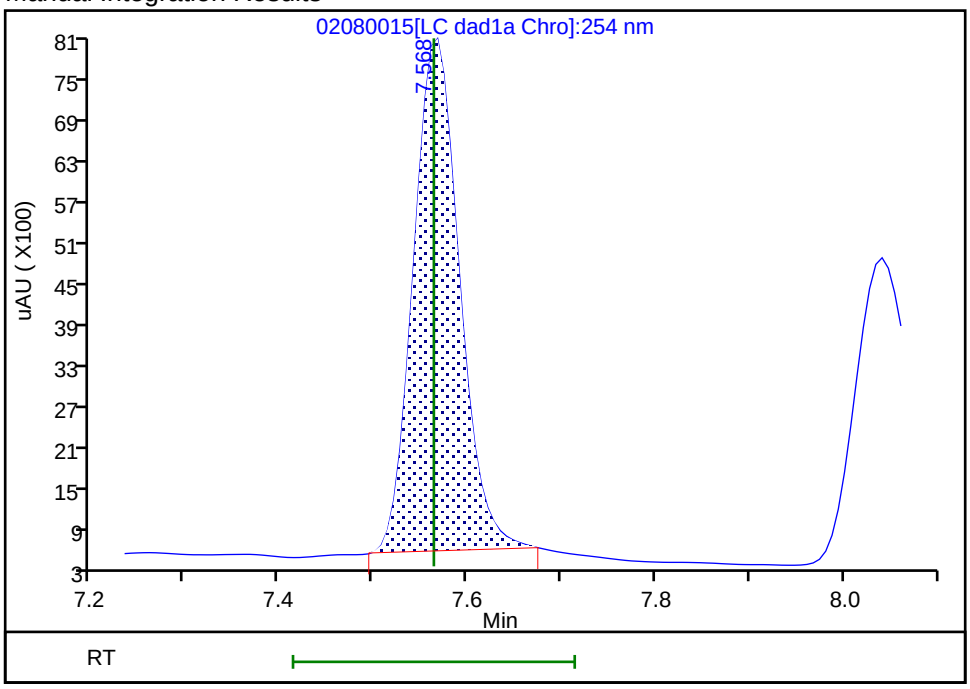
Processing Integration Results

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

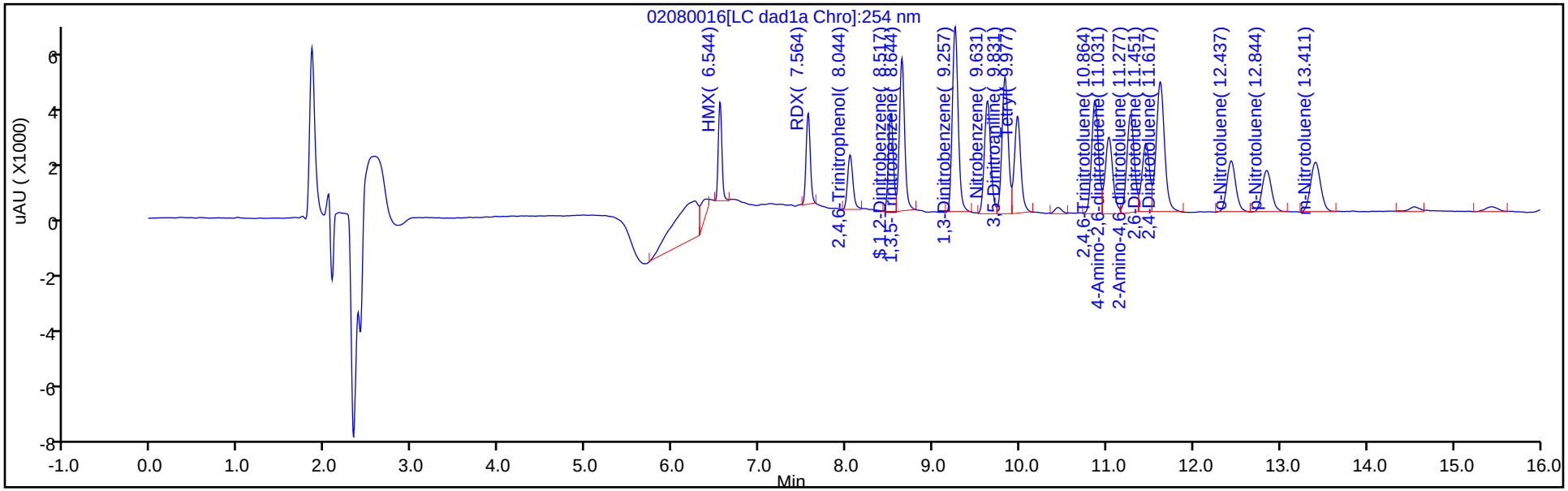
Report Date: 09-Feb-2023 12:48:06 Chrom Revision: 2.3 01-Feb-2023 13:23:06

Eurofins Denver

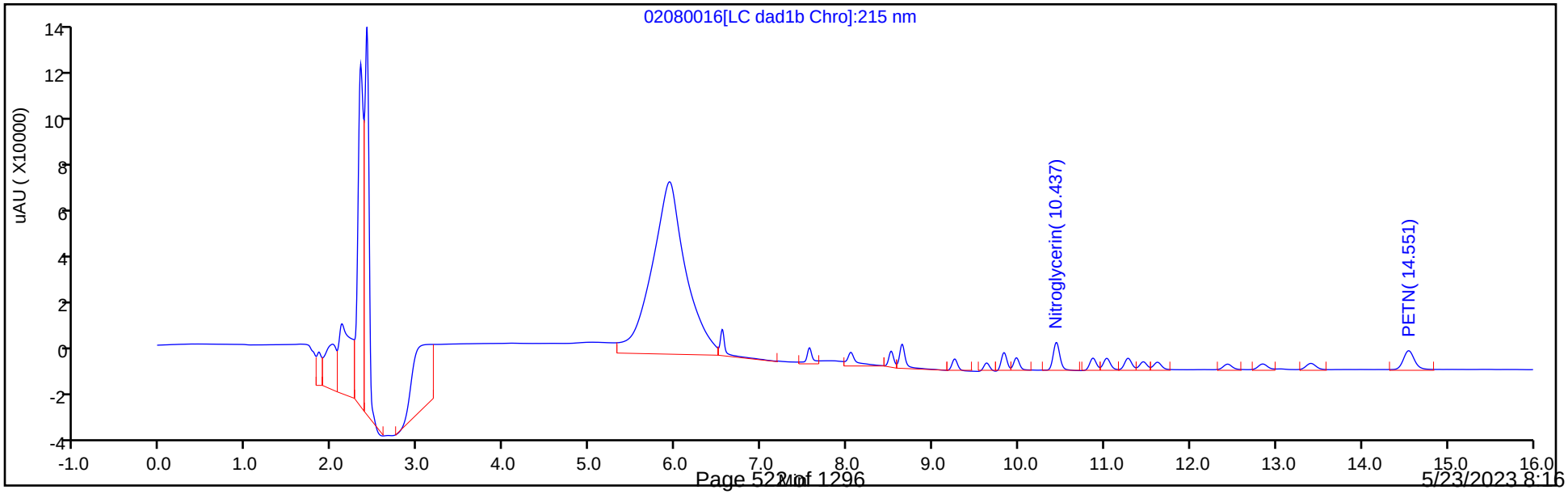
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Injection Date:	08-Feb-2023 17:33:25	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC INT 4			Worklist Smp#:	16
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8330_X3	Limit Group:	GCSV - 8330		

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

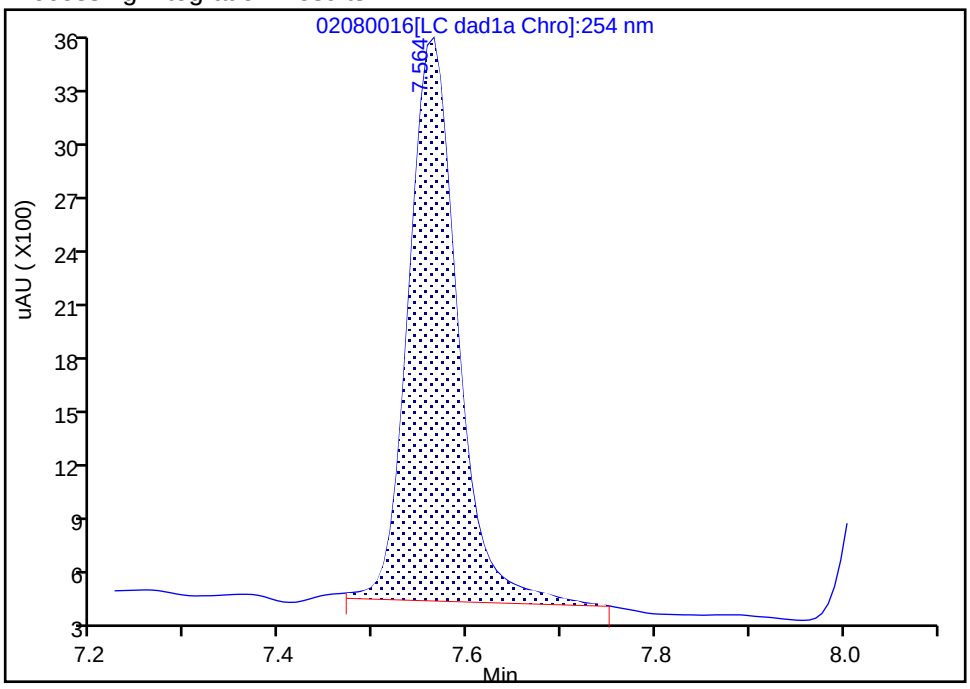
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080016.d				
Injection Date:	08-Feb-2023 17:33:25	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

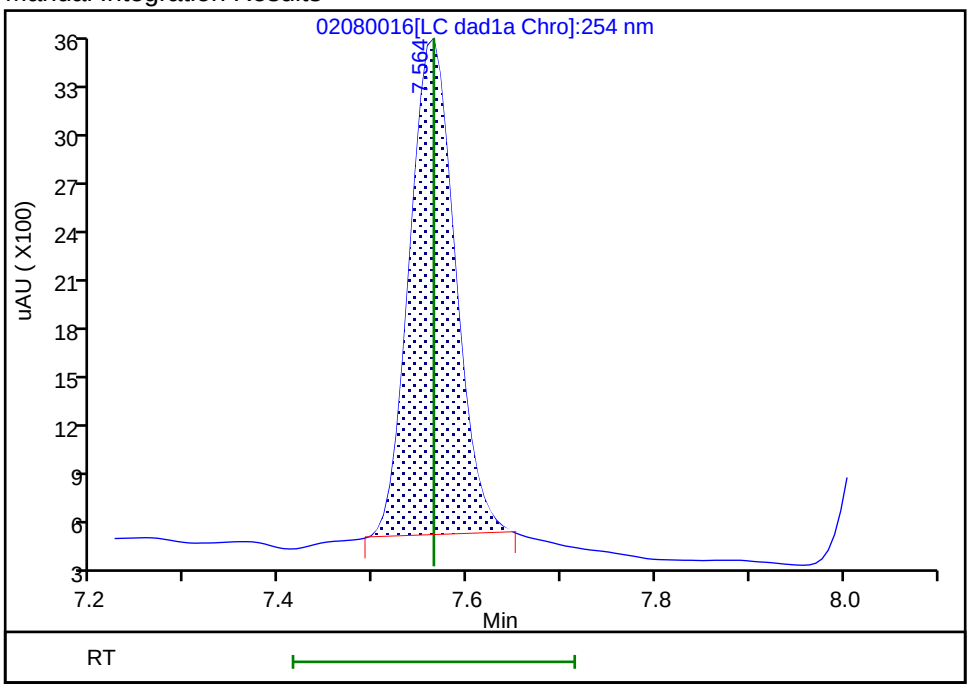
Processing Integration Results

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

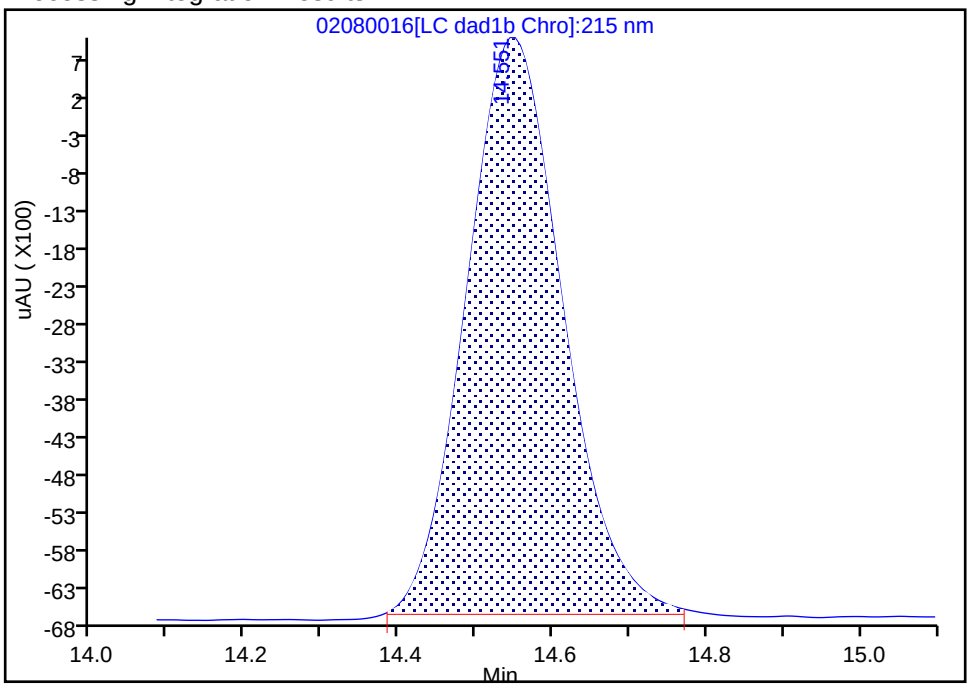
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080016.d				
Injection Date:	08-Feb-2023 17:33:25	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1C, 215 nm		

25 PETN, CAS: 78-11-5

Signal: 1

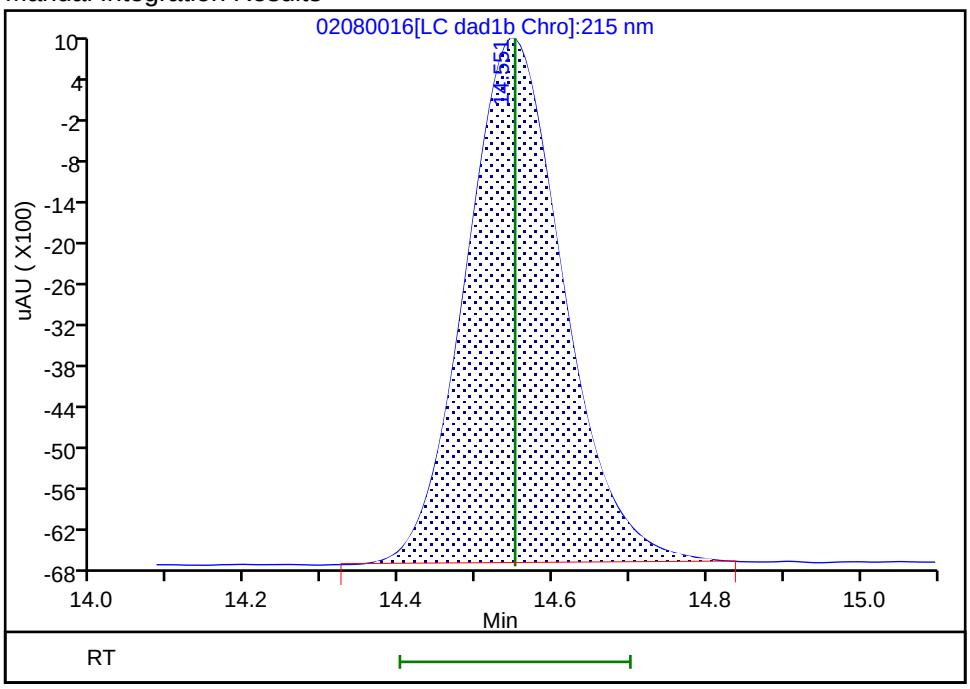
Processing Integration Results

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

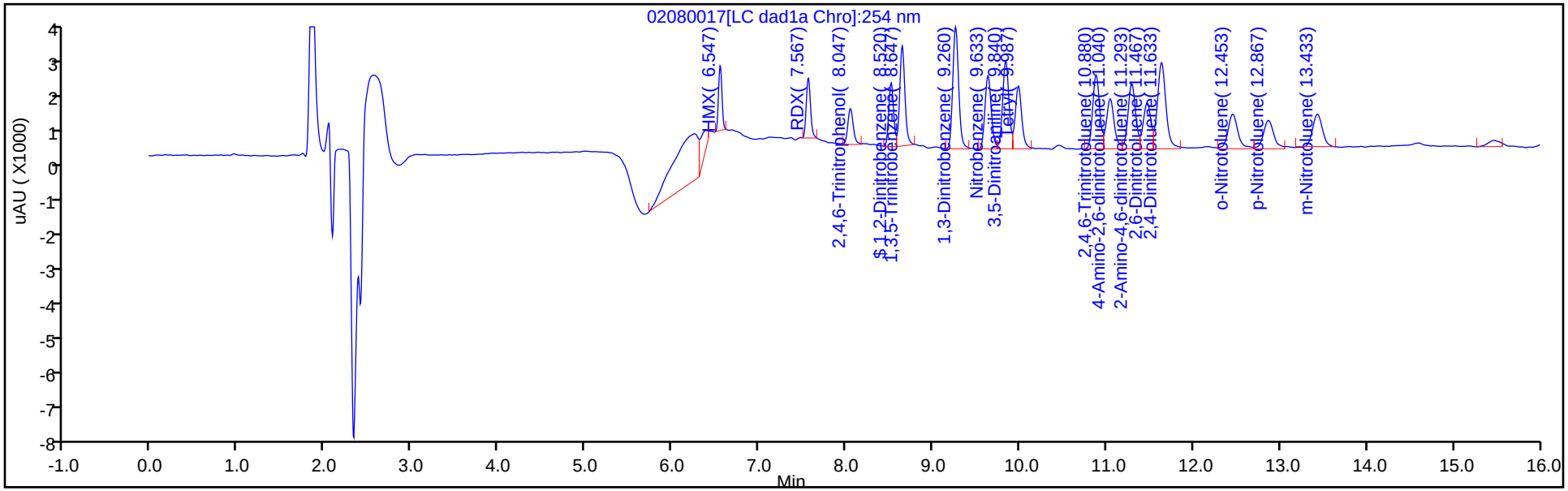
Report Date: 09-Feb-2023 12:48:07 Chrom Revision: 2.3 01-Feb-2023 13:23:06

Eurofins Denver

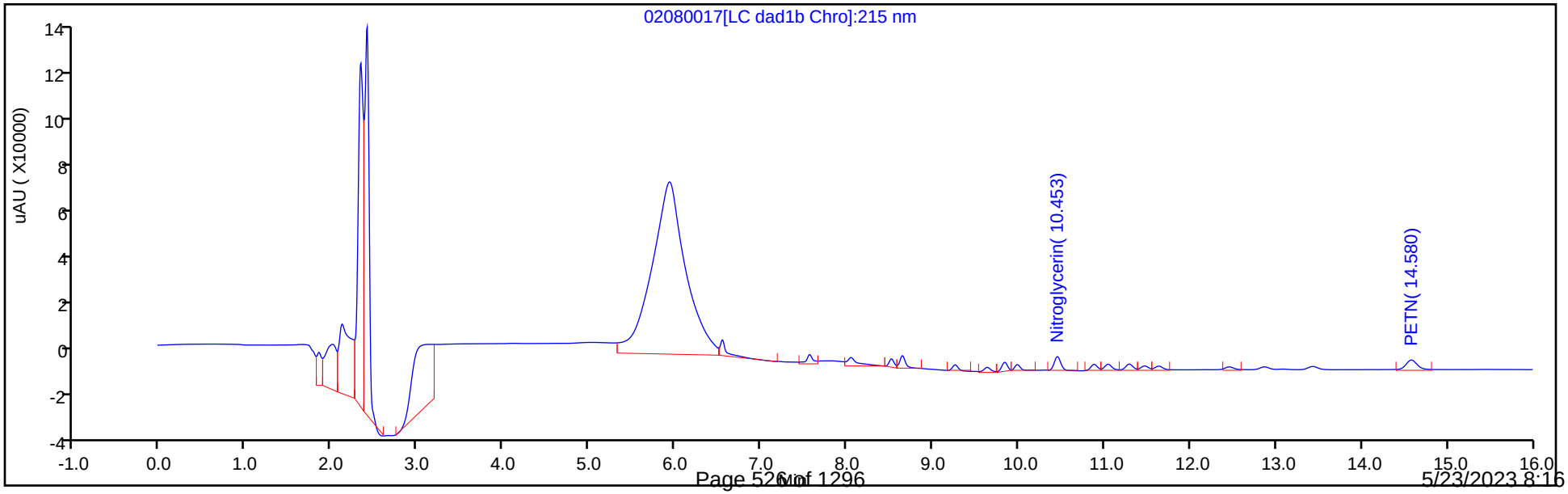
Data File: \\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080017.d

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

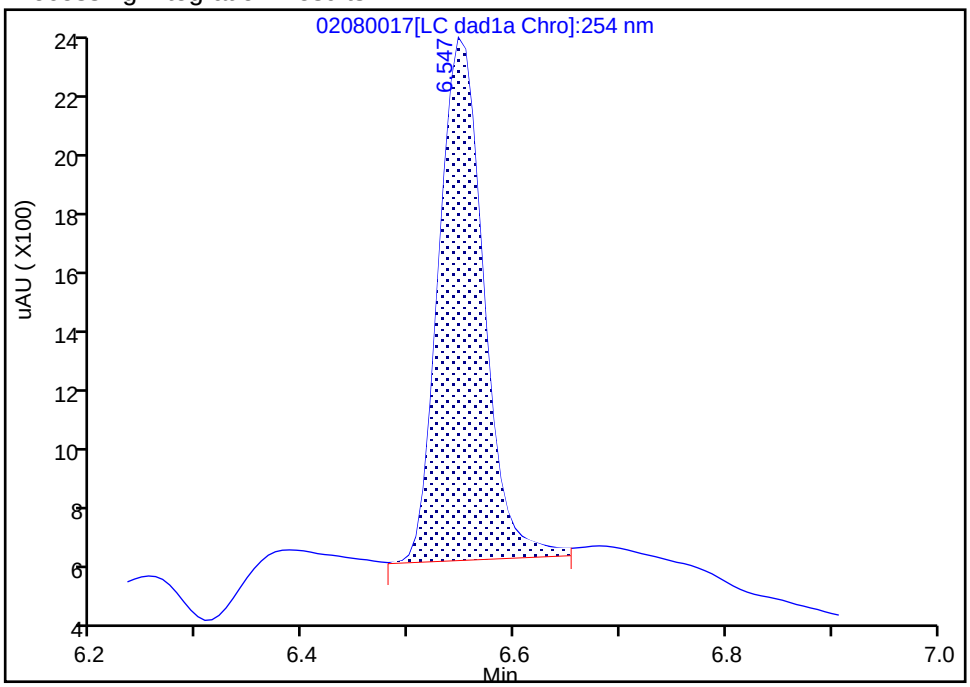
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Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

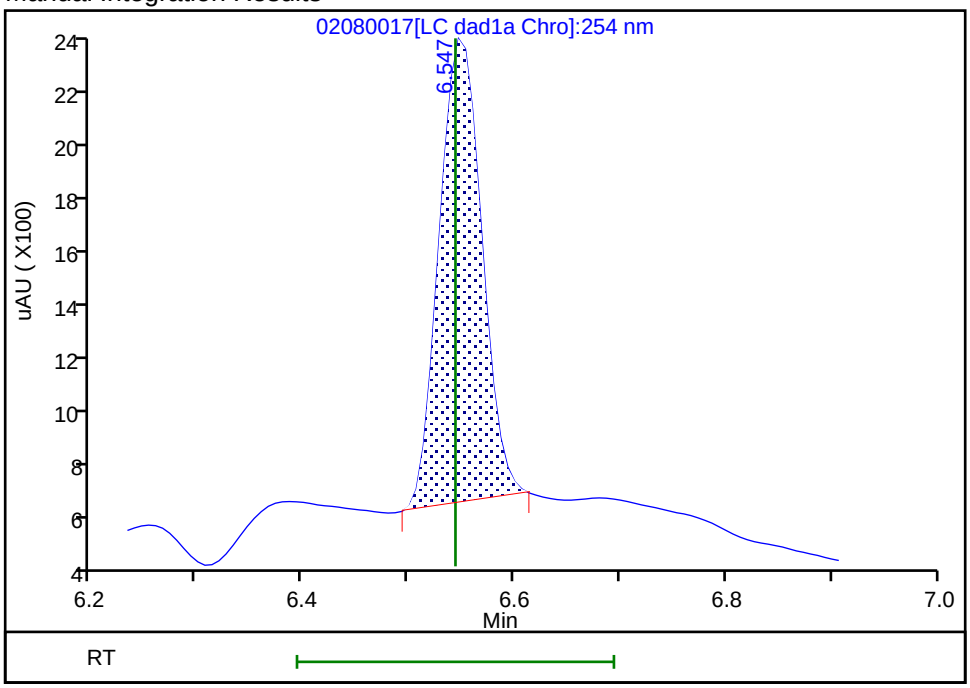
Processing Integration Results

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

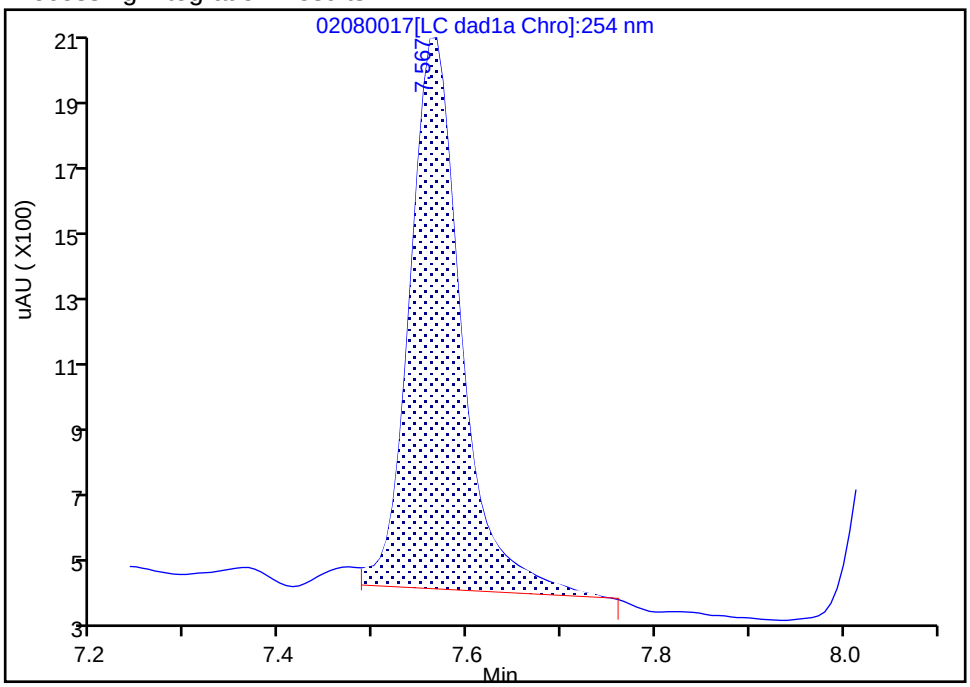
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Injection Date:	08-Feb-2023 17:56:21	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

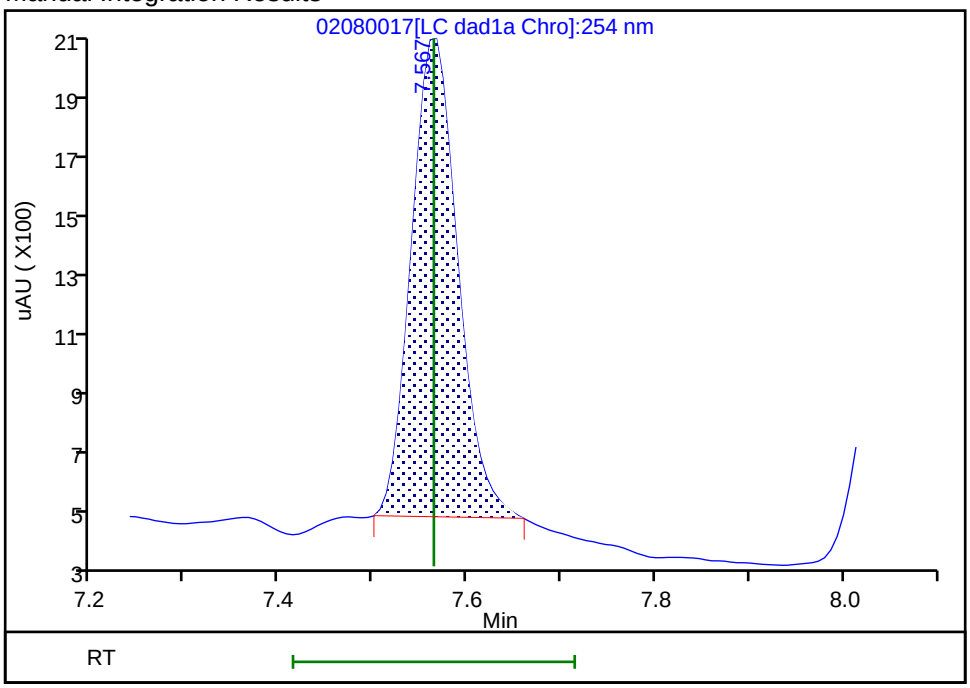
Processing Integration Results

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

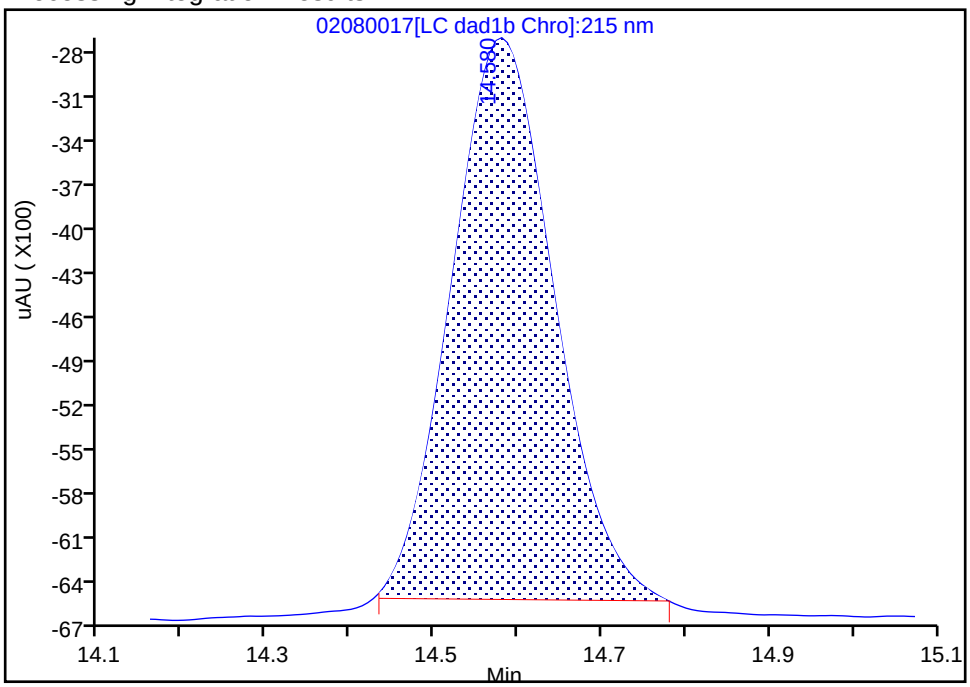
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080017.d				
Injection Date:	08-Feb-2023 17:56:21	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1C, 215 nm		

25 PETN, CAS: 78-11-5

Signal: 1

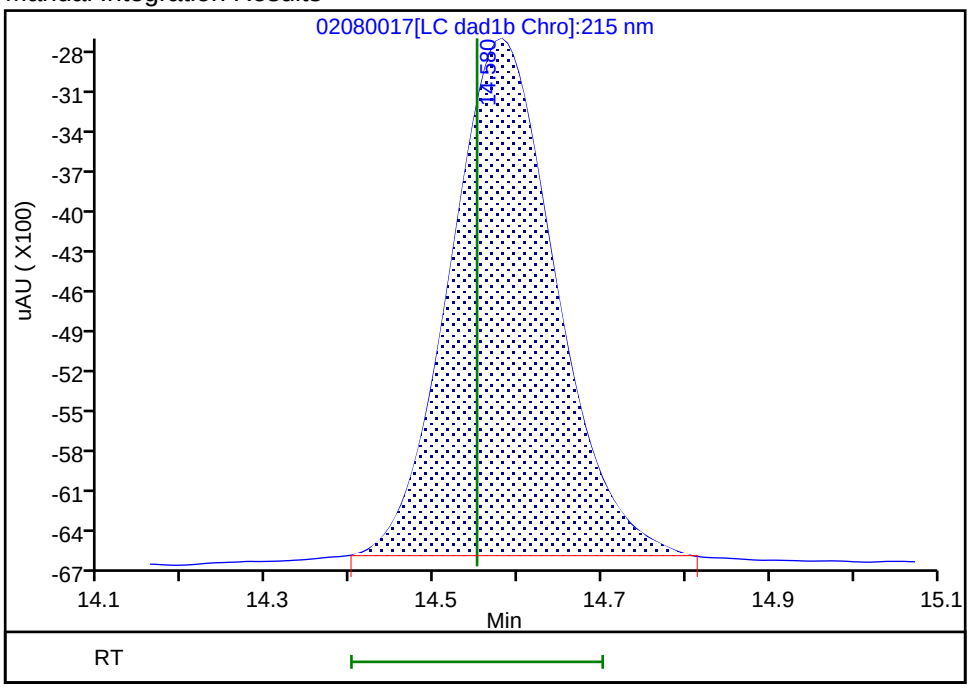
Processing Integration Results

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

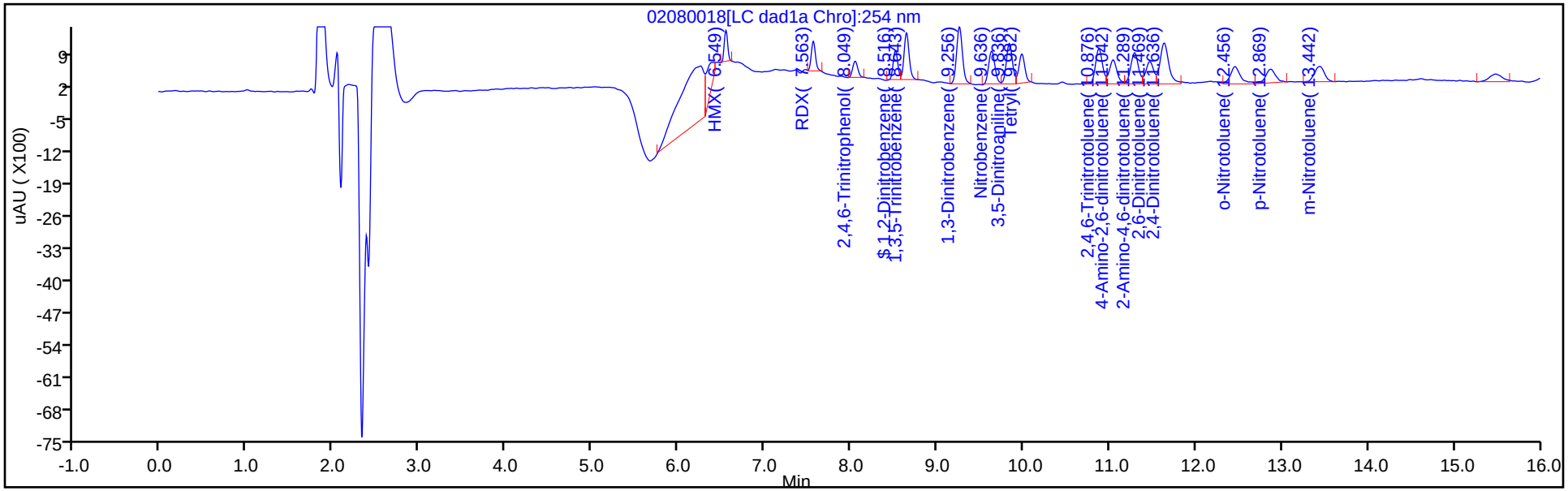
Report Date: 09-Feb-2023 12:48:08 Chrom Revision: 2.3 01-Feb-2023 13:23:06

Eurofins Denver

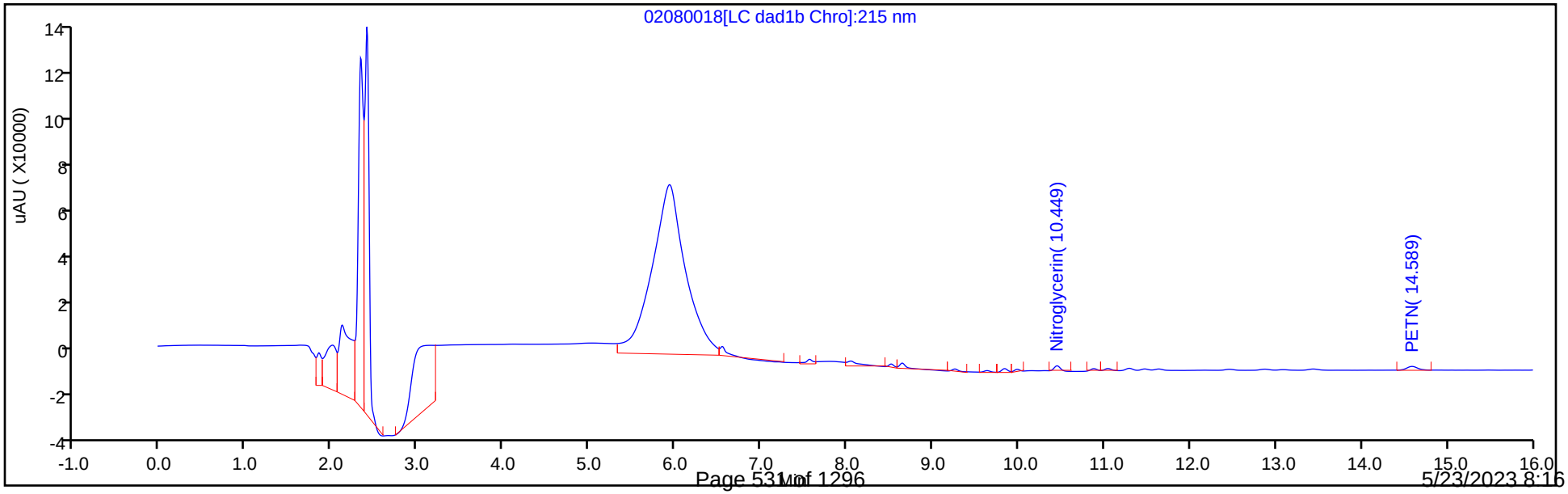
Data File: \\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080018.d

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

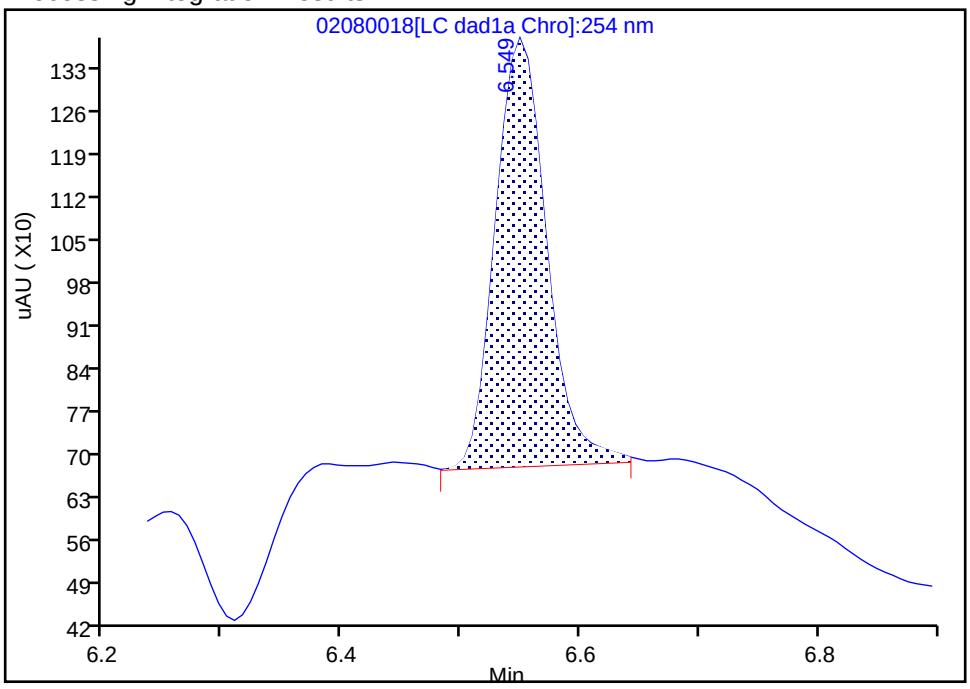
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080018.d				
Injection Date:	08-Feb-2023 18:19:14	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

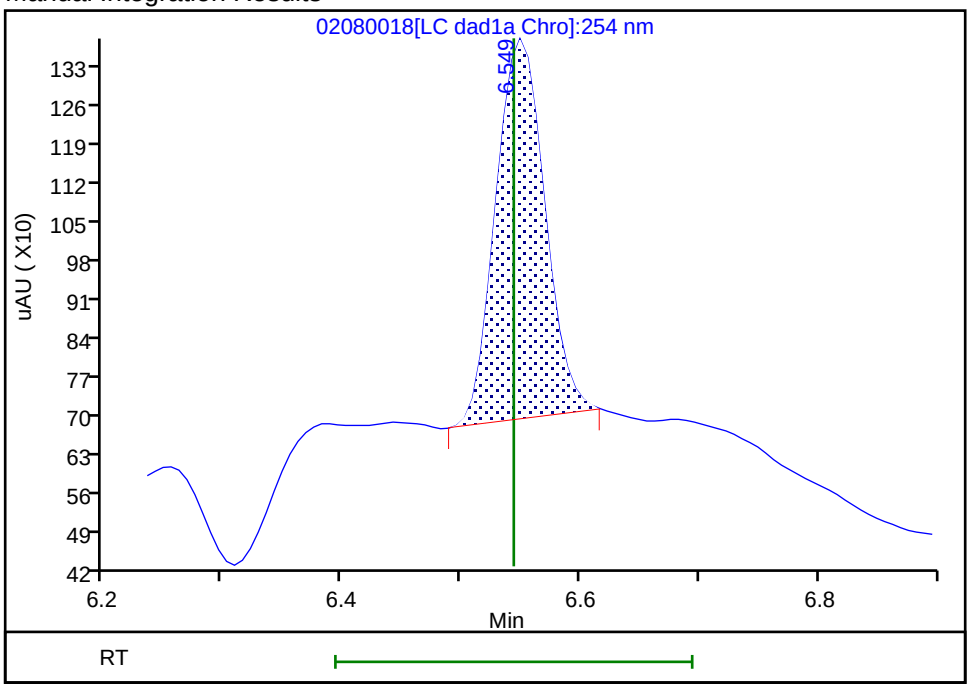
Processing Integration Results

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

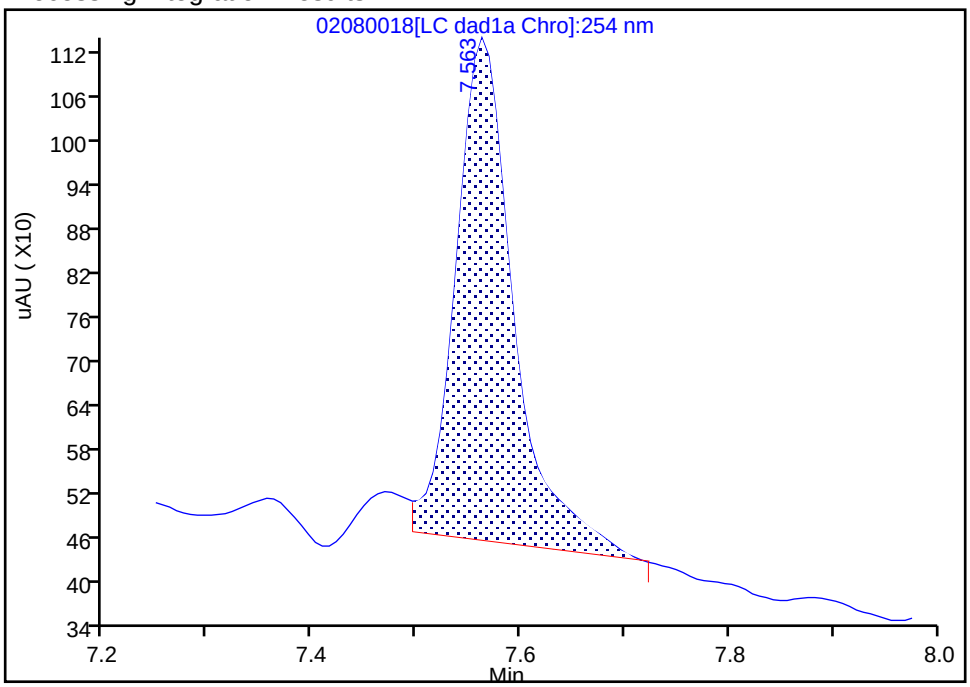
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080018.d				
Injection Date:	08-Feb-2023 18:19:14	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

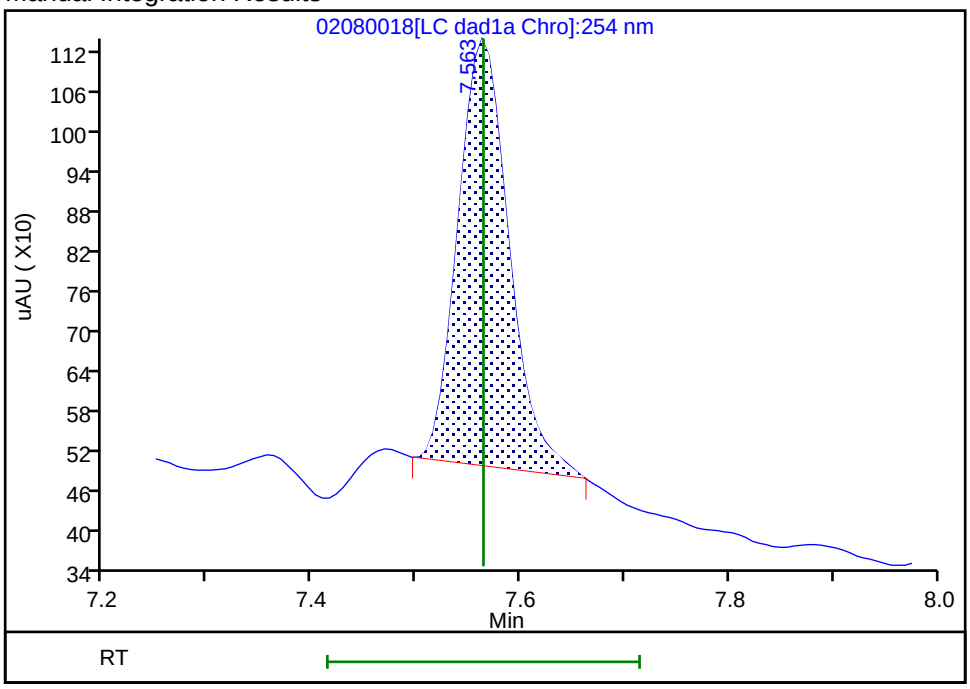
Processing Integration Results

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

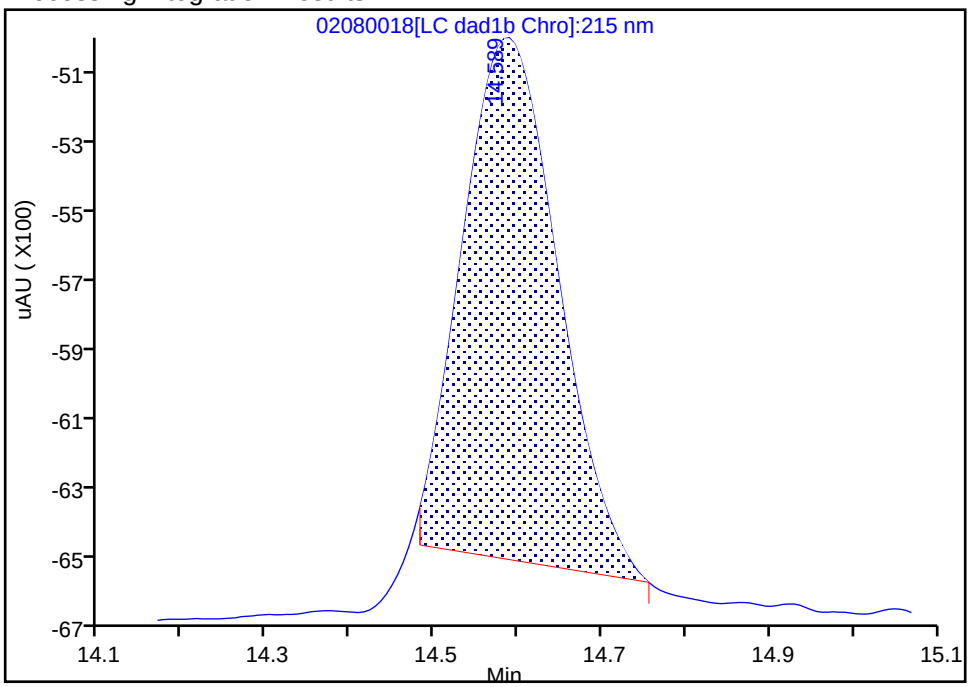
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080018.d				
Injection Date:	08-Feb-2023 18:19:14	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1C, 215 nm		

25 PETN, CAS: 78-11-5

Signal: 1

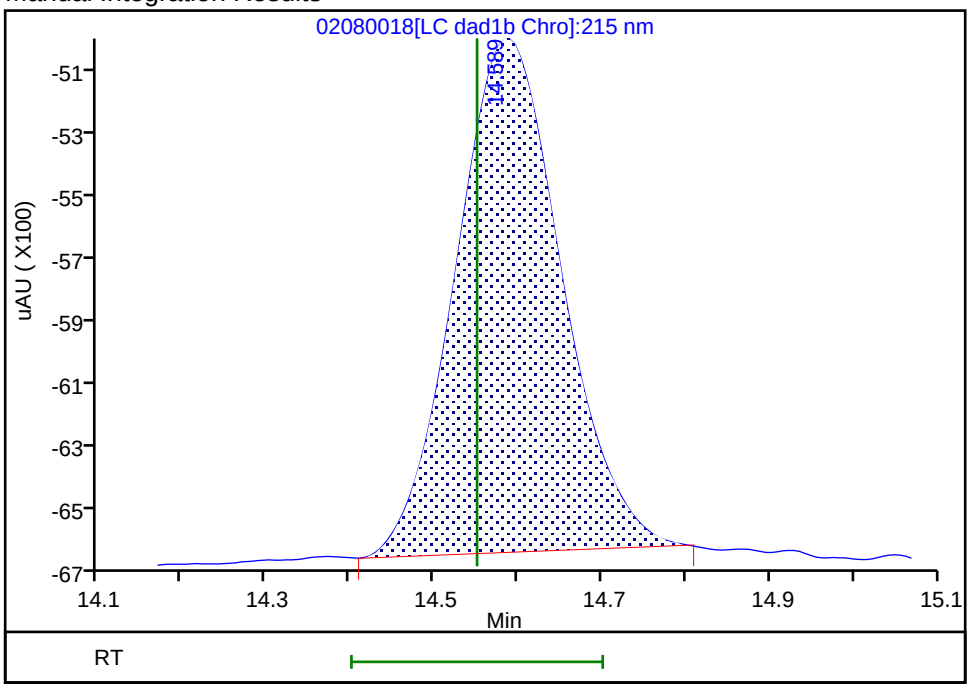
Processing Integration Results

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

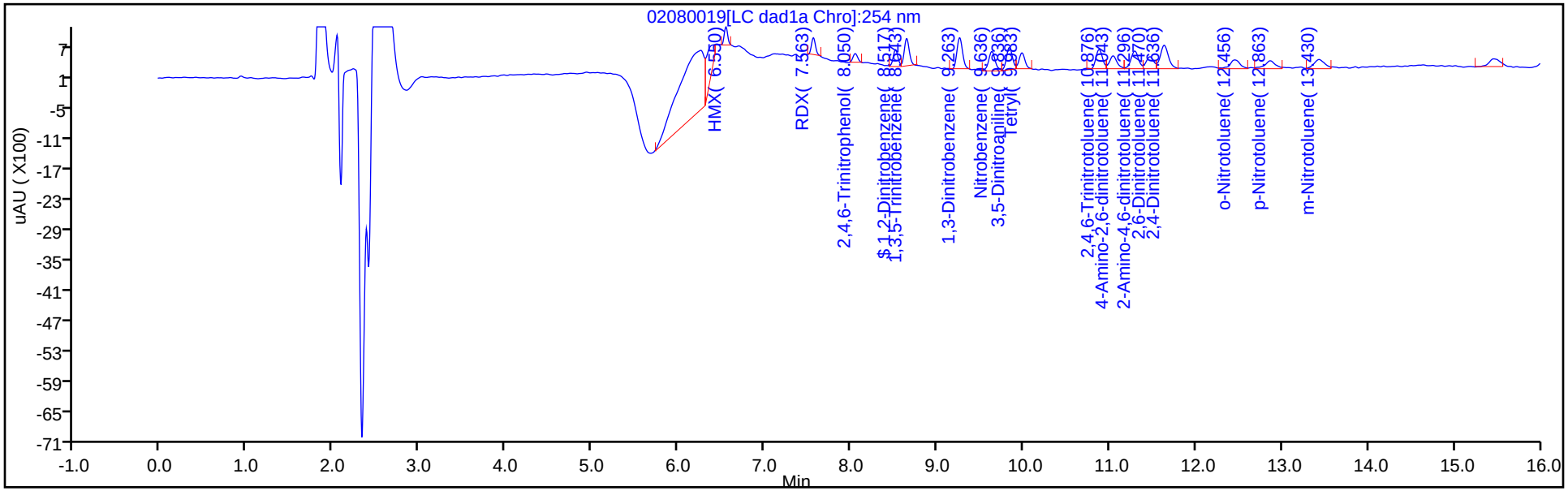
Report Date: 09-Feb-2023 12:48:08 Chrom Revision: 2.3 01-Feb-2023 13:23:06

Eurofins Denver

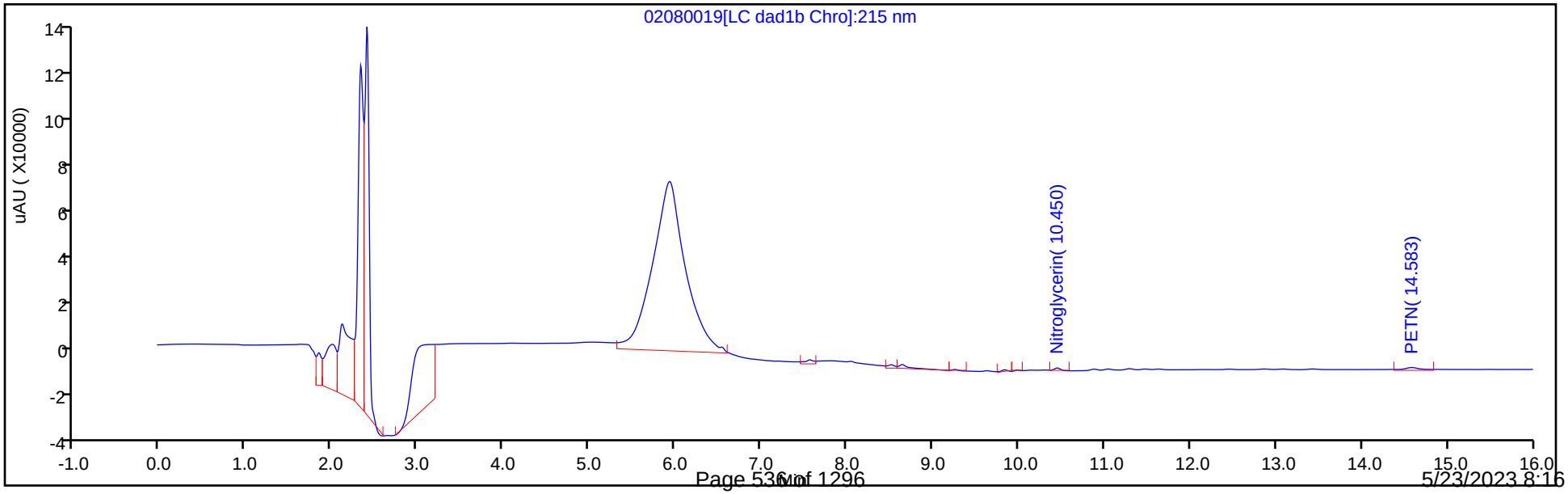
Data File: \\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080019.d

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



5/23/2023 8:16 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

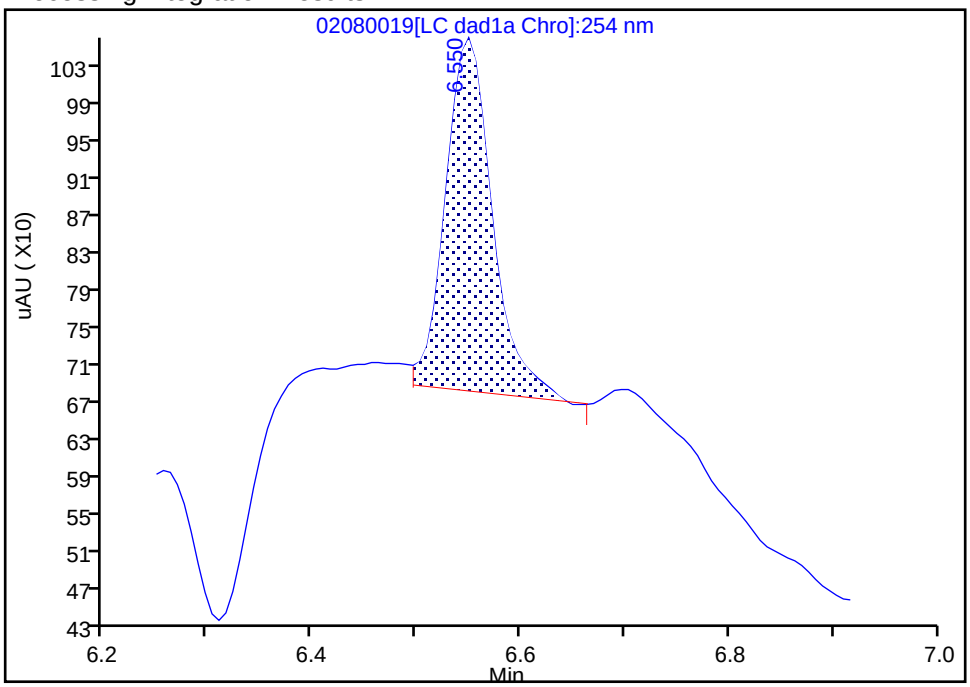
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080019.d				
Injection Date:	08-Feb-2023 18:42:13	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

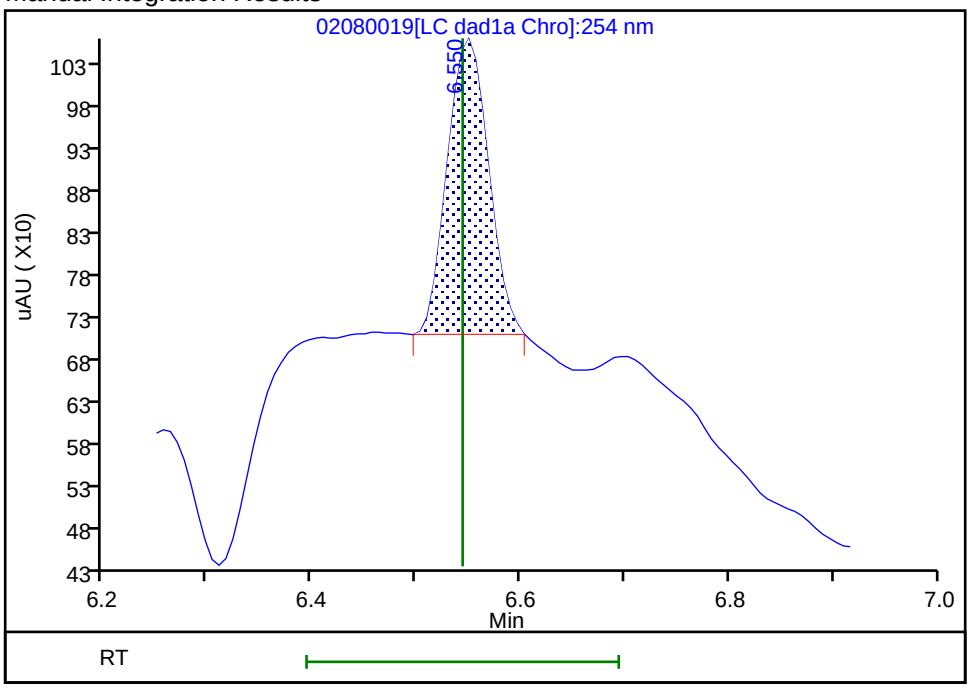
Processing Integration Results

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

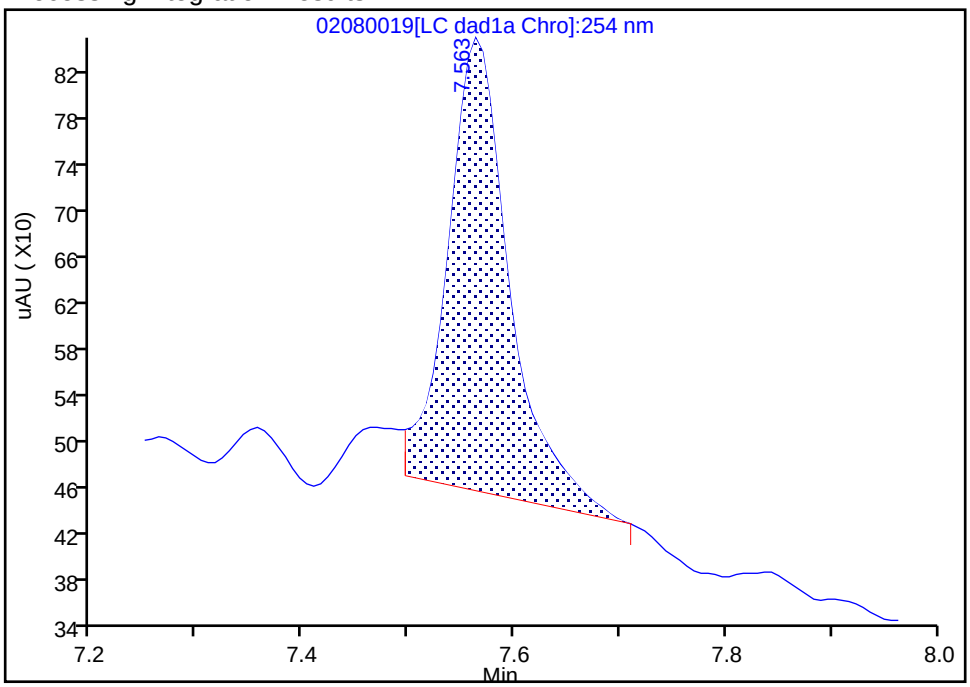
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080019.d				
Injection Date:	08-Feb-2023 18:42:13	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

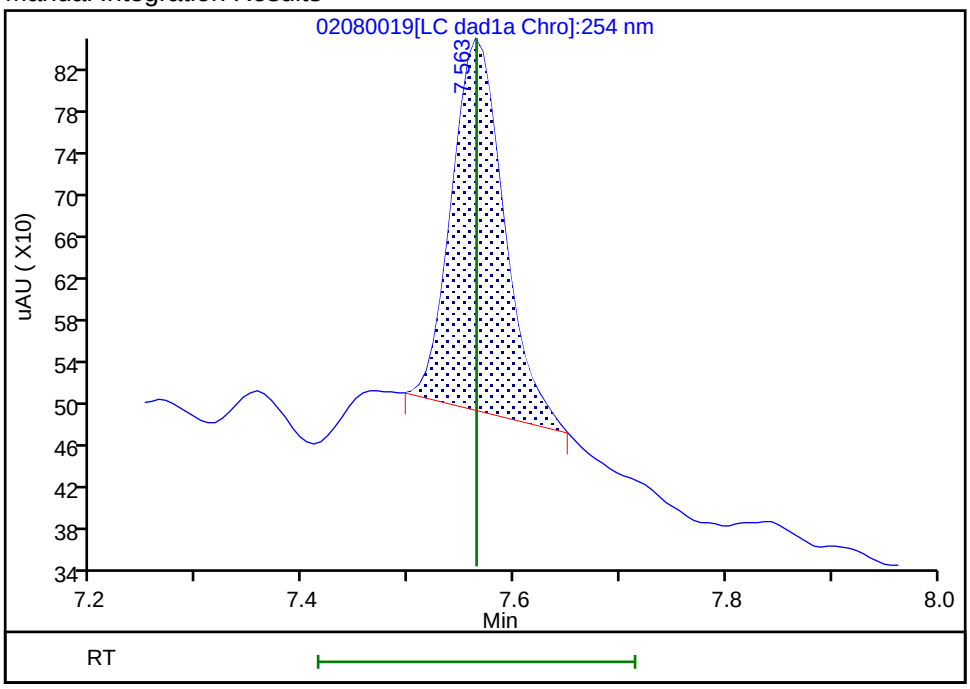
Processing Integration Results

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.: 280-175997-1 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.: 280-175997-1 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.: 280-175997-1 | 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

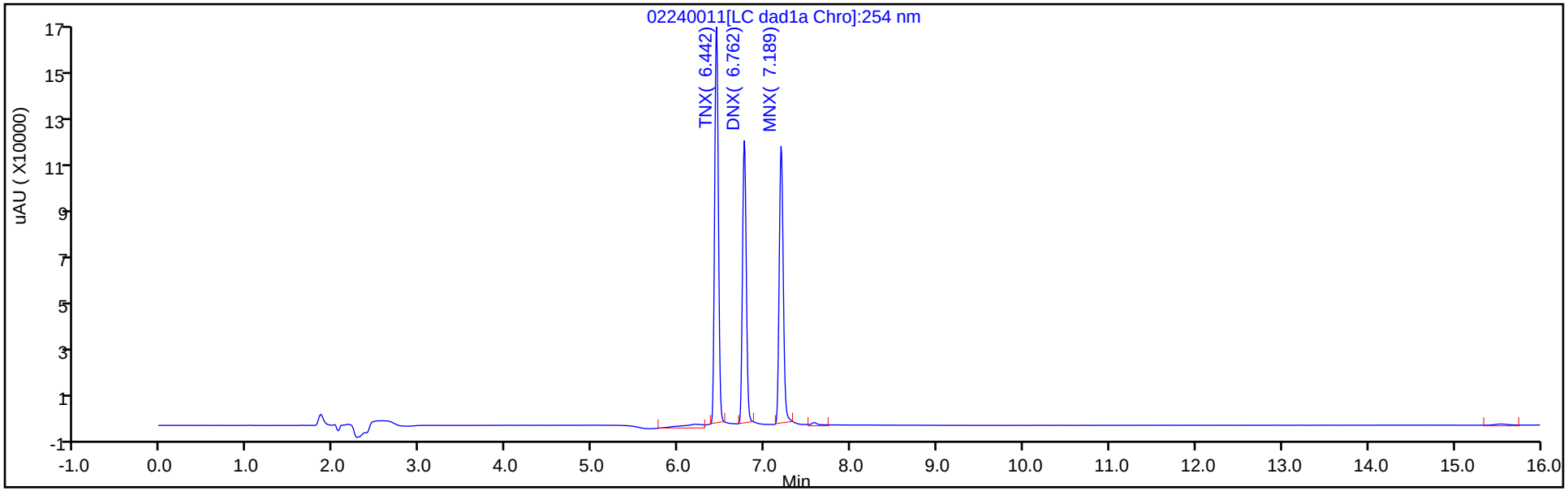
Report Date: 28-Feb-2023 13:17:26 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Denver

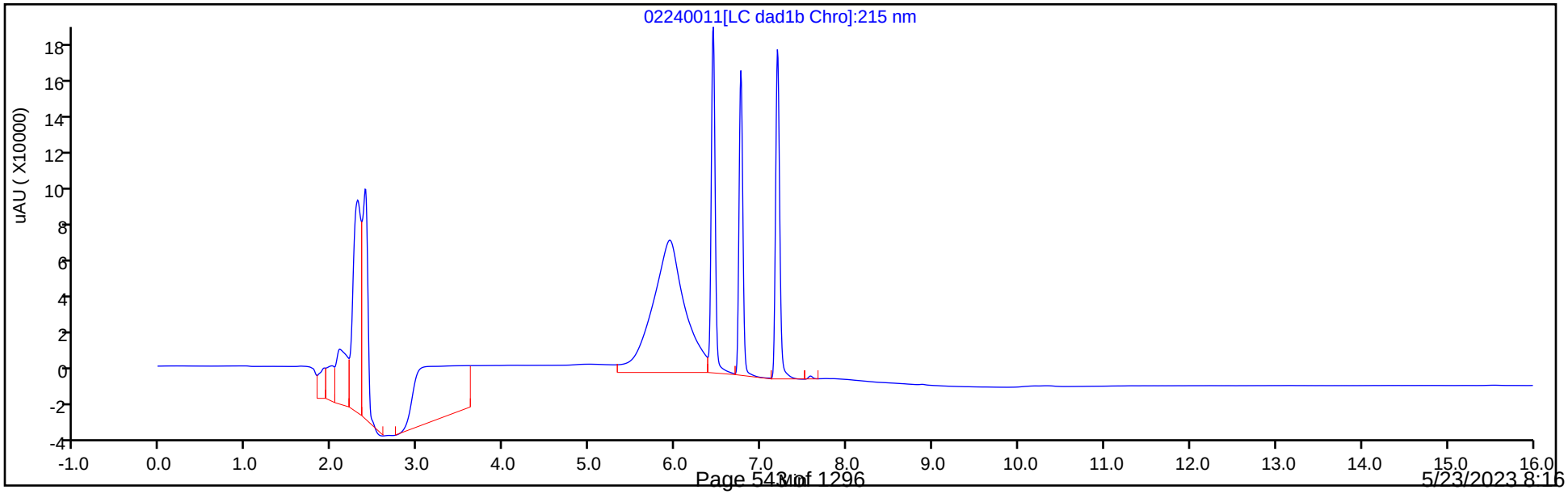
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240011.d

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

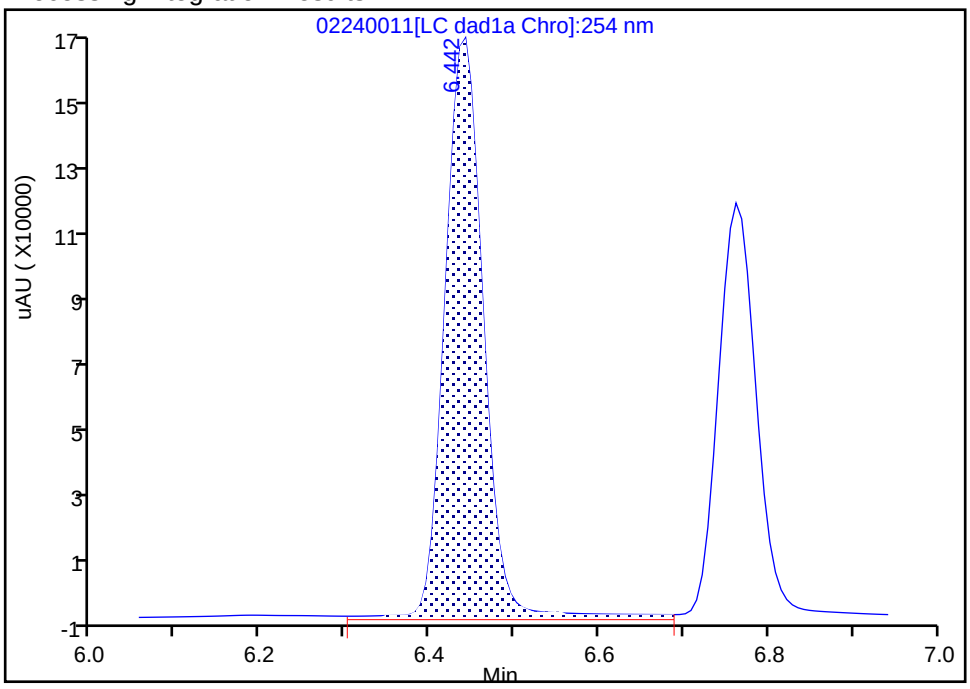
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240011.d
Injection Date: 24-Feb-2023 15:00:10 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 8
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

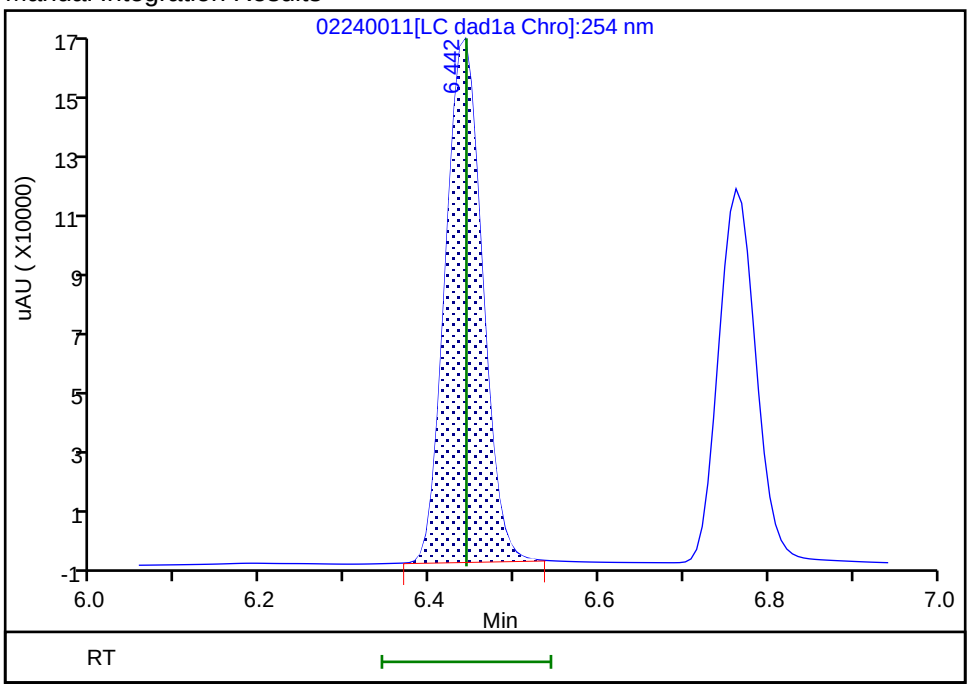
Processing Integration Results

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

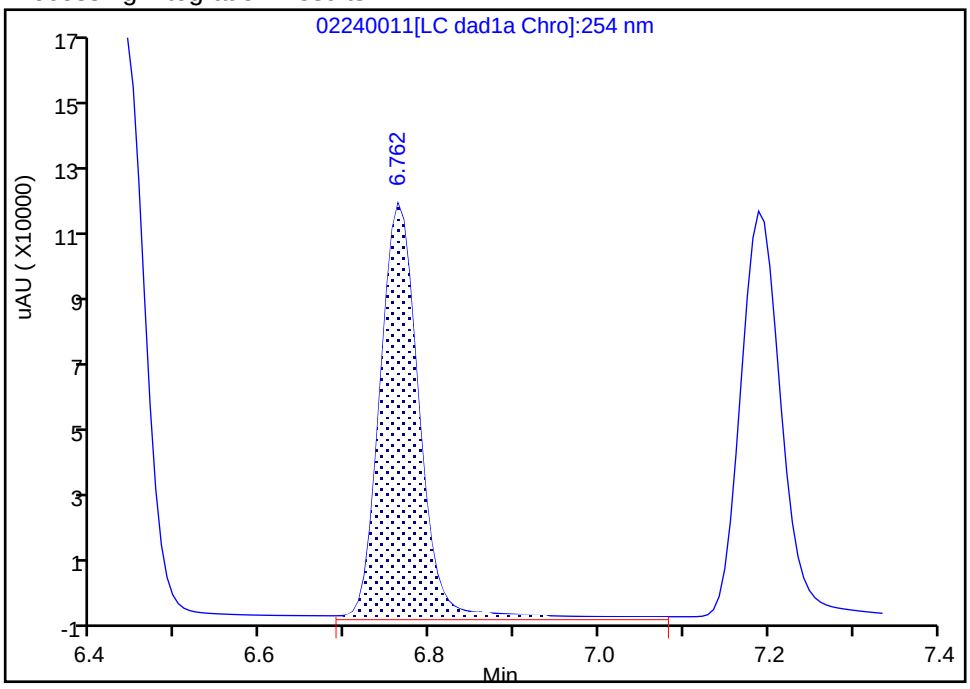
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240011.d
Injection Date: 24-Feb-2023 15:00:10 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 8
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 DNX, CAS: 80251-29-2

Signal: 1

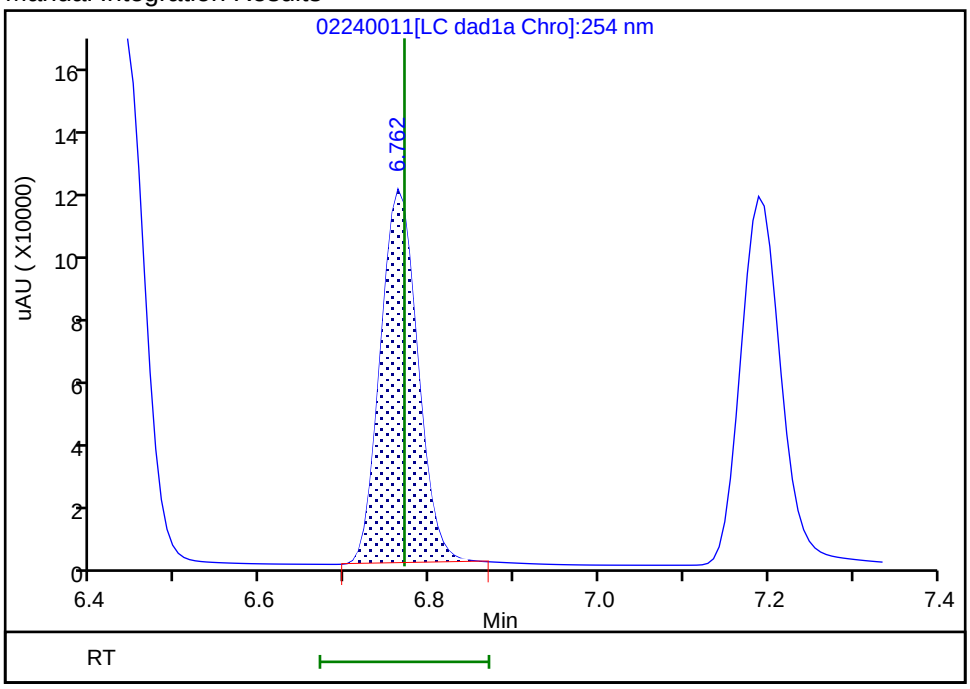
Processing Integration Results

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

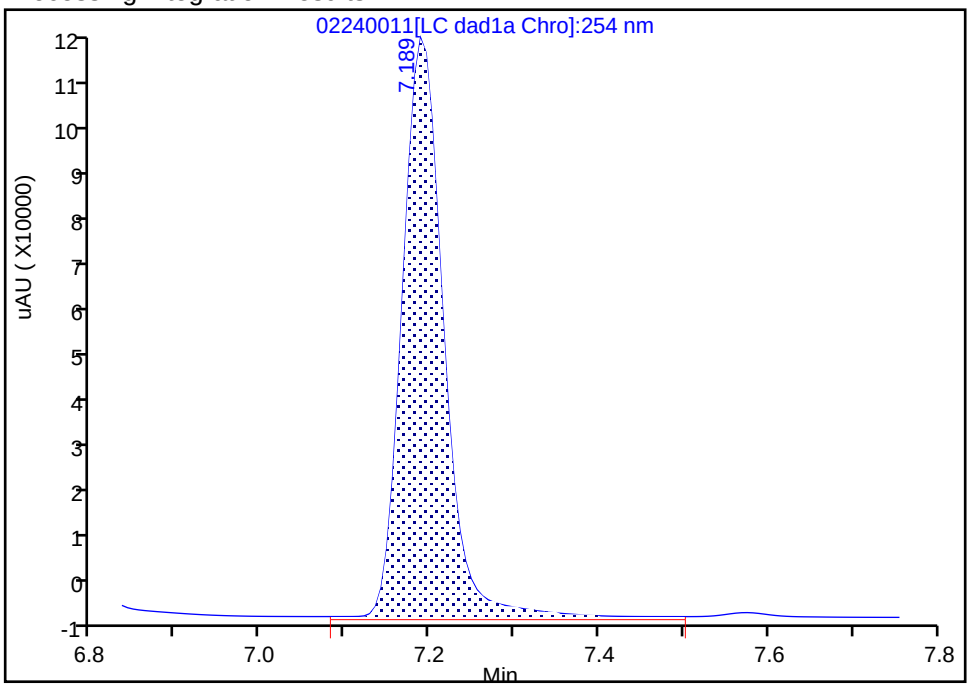
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240011.d				
Injection Date:	24-Feb-2023 15:00:10	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 8				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

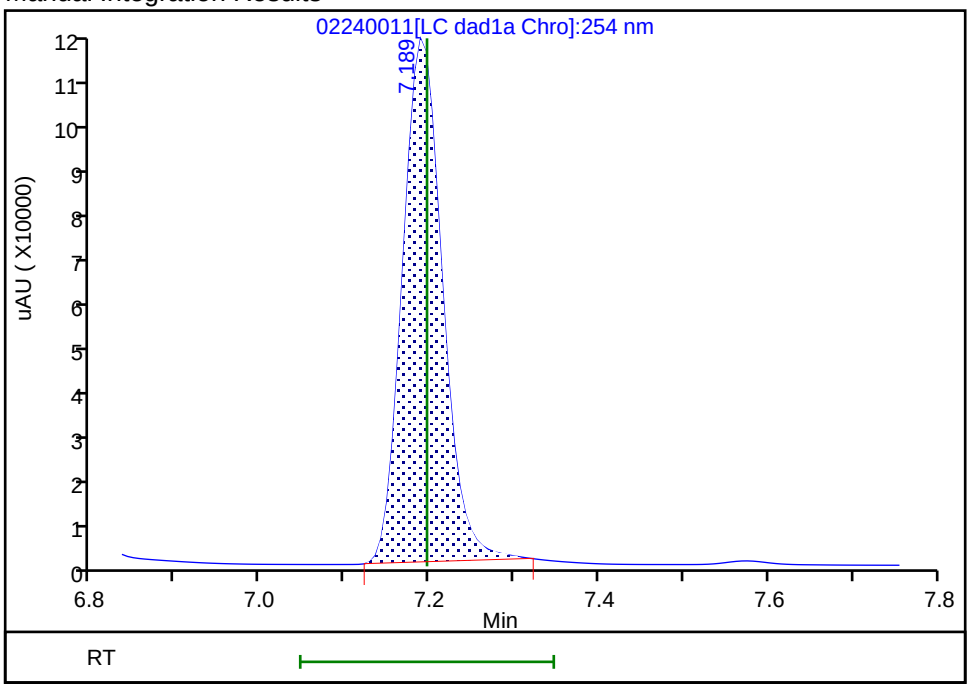
Processing Integration Results

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

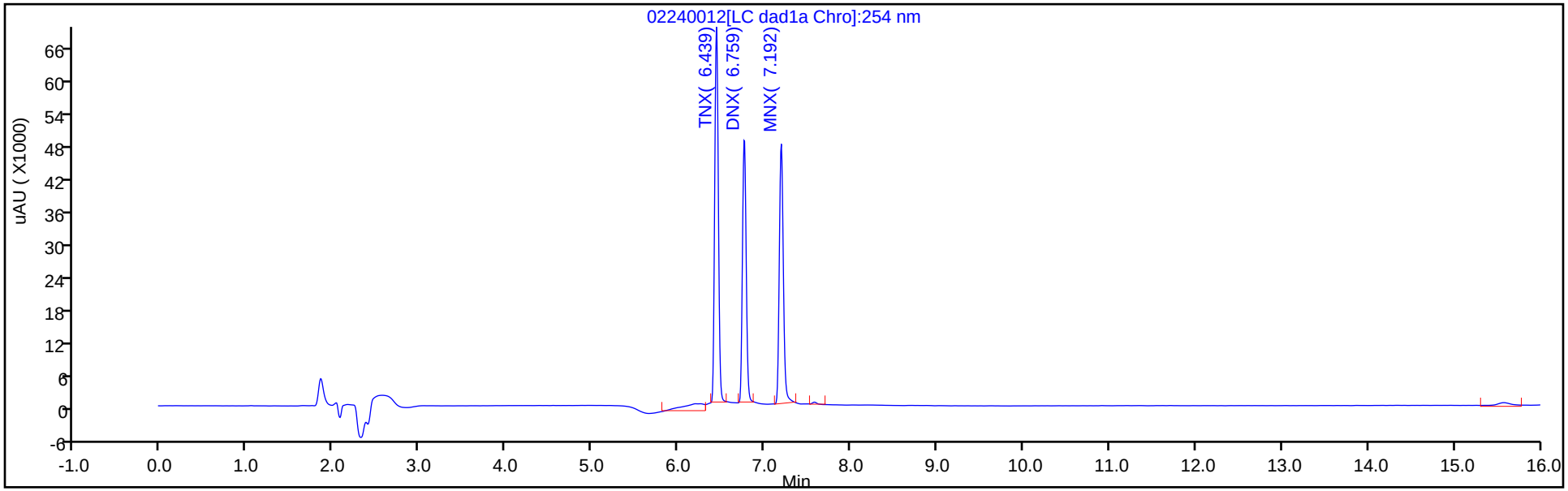
Report Date: 28-Feb-2023 13:17:26 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Denver

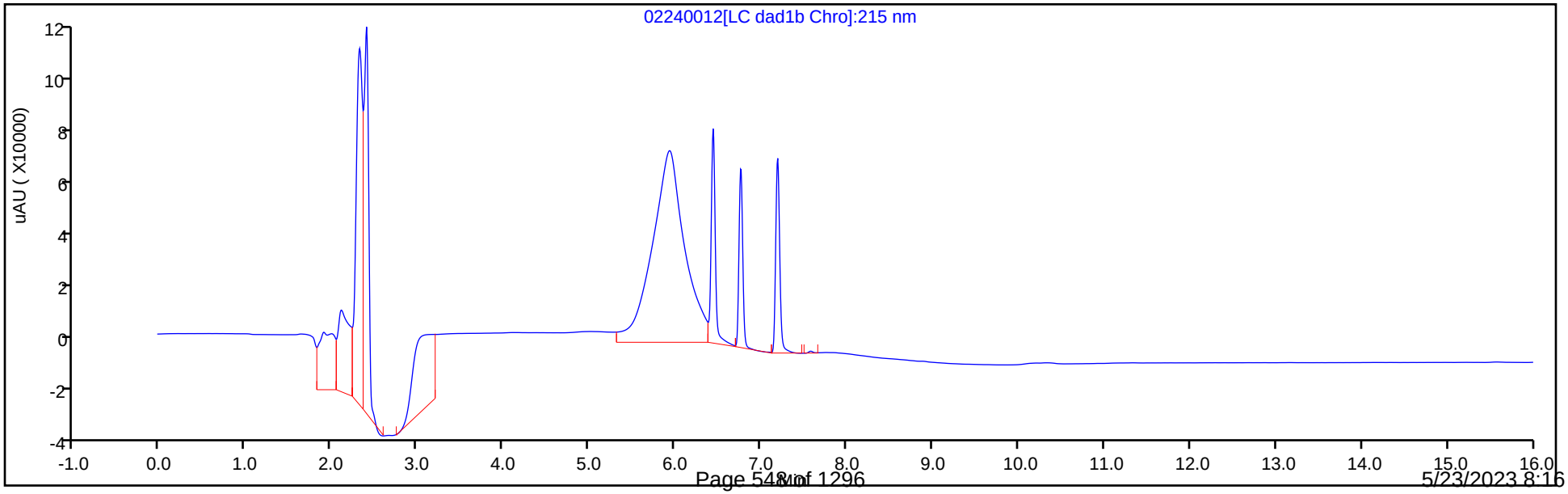
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240012.d

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

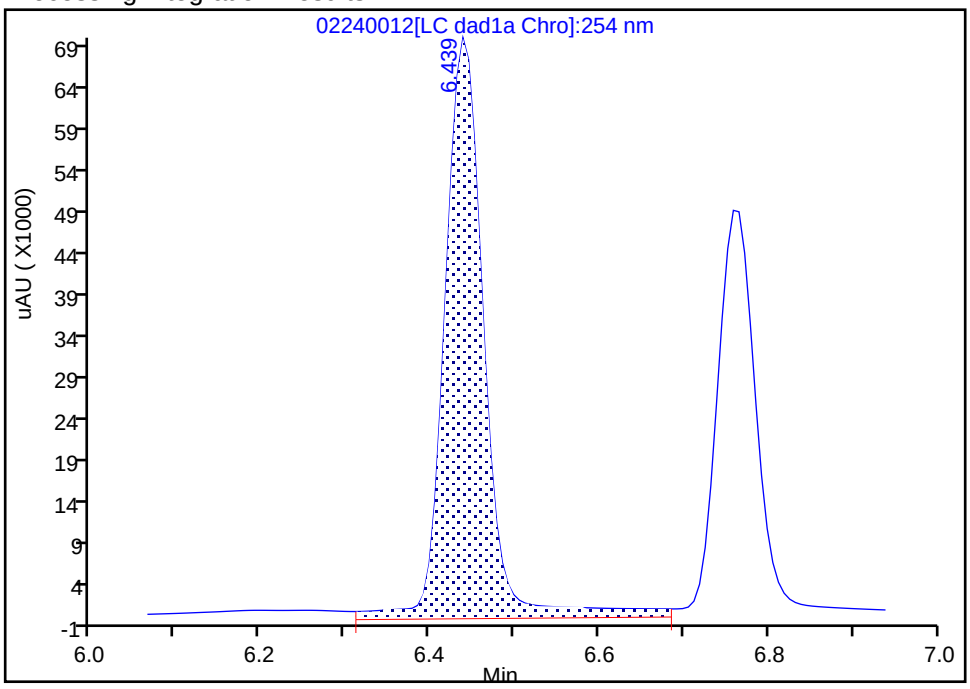
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240012.d				
Injection Date:	24-Feb-2023 15:23:08	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

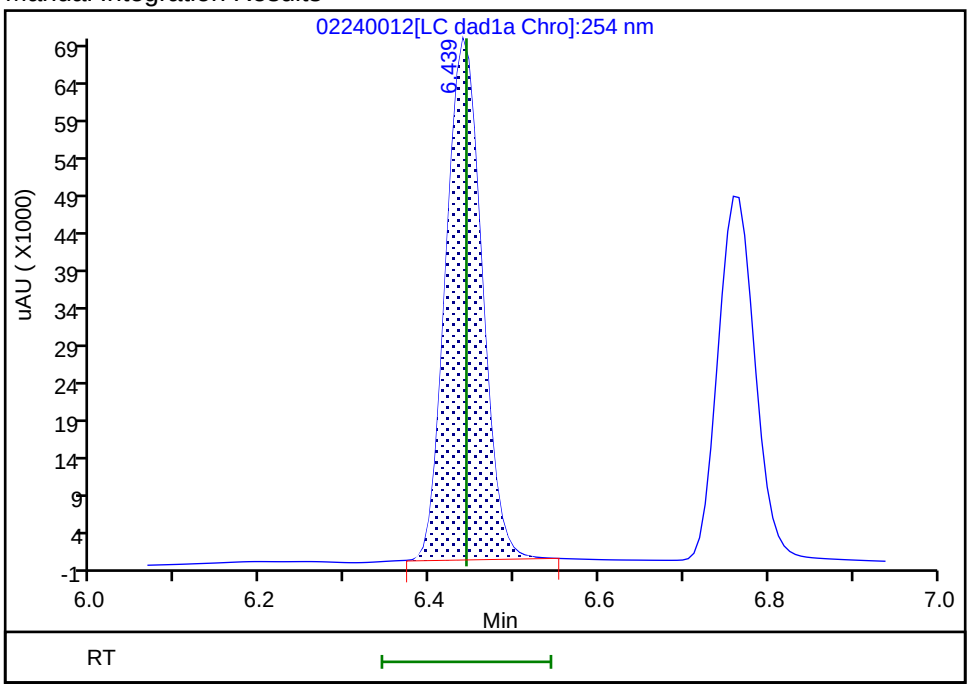
Processing Integration Results

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

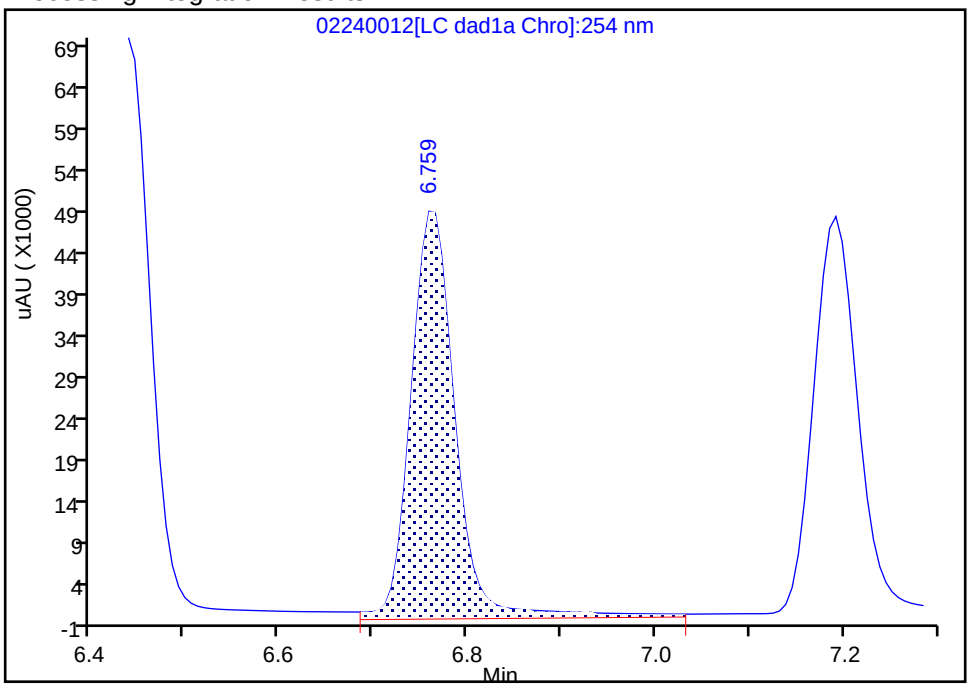
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240012.d				
Injection Date:	24-Feb-2023 15:23:08	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

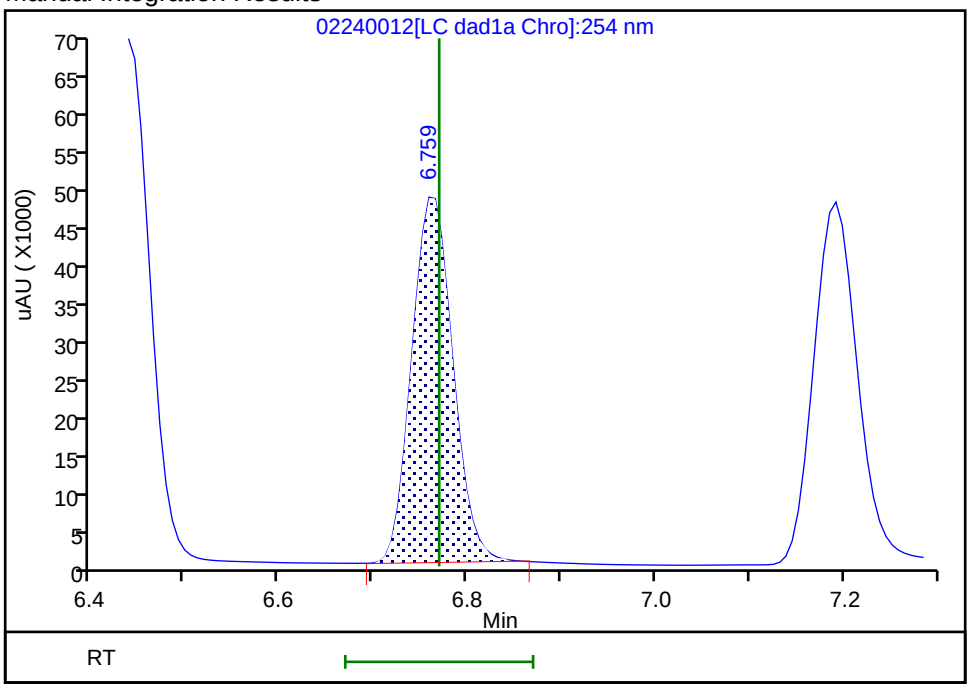
Processing Integration Results

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

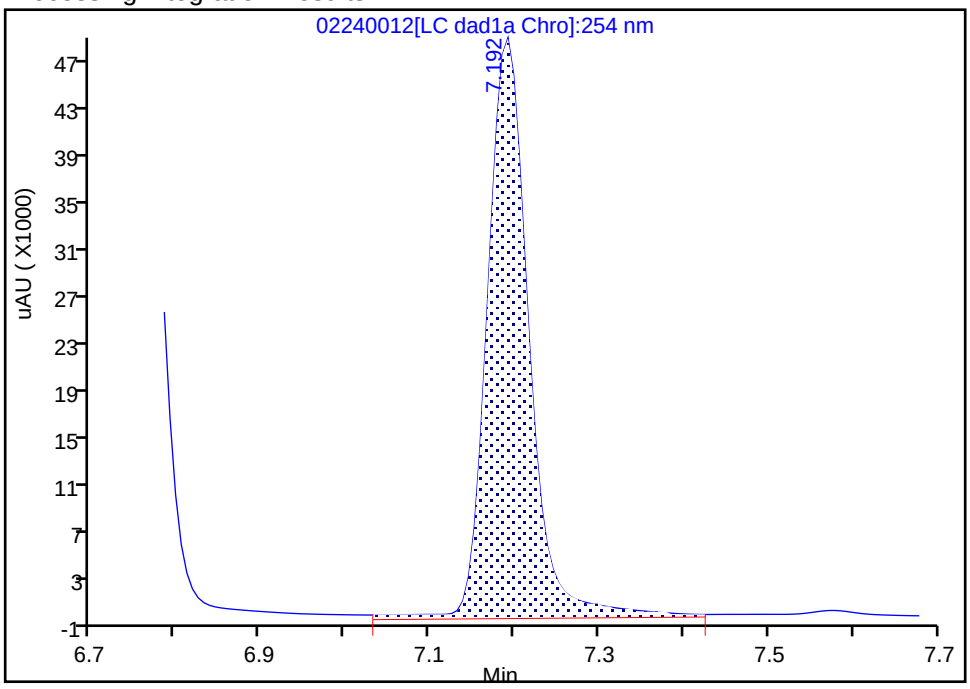
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240012.d
Injection Date: 24-Feb-2023 15:23:08 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 7
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

7 MNX, CAS: 5755-27-1

Signal: 1

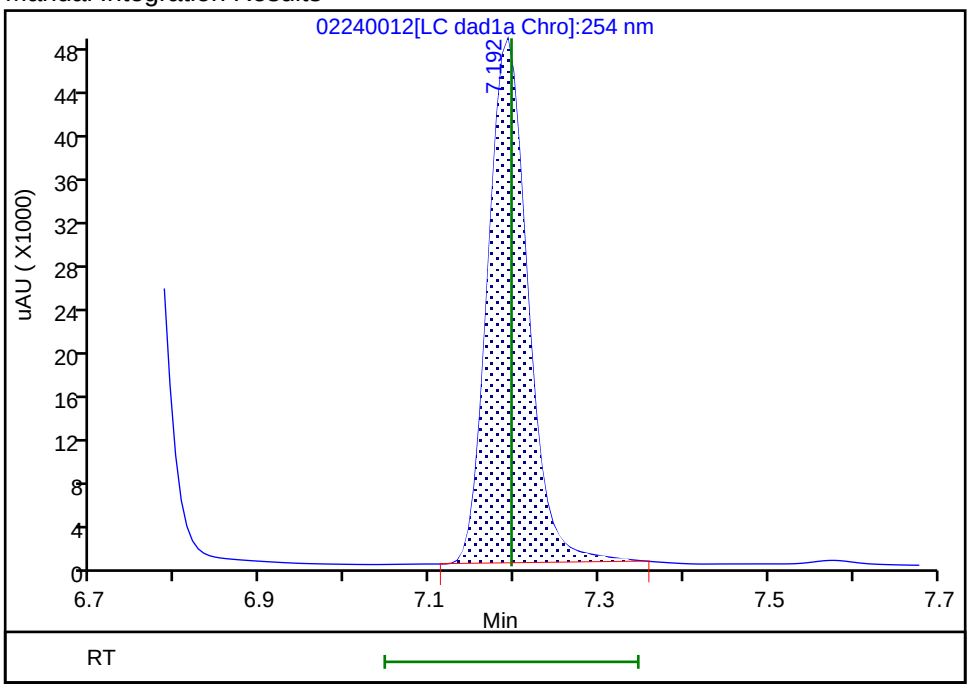
Processing Integration Results

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

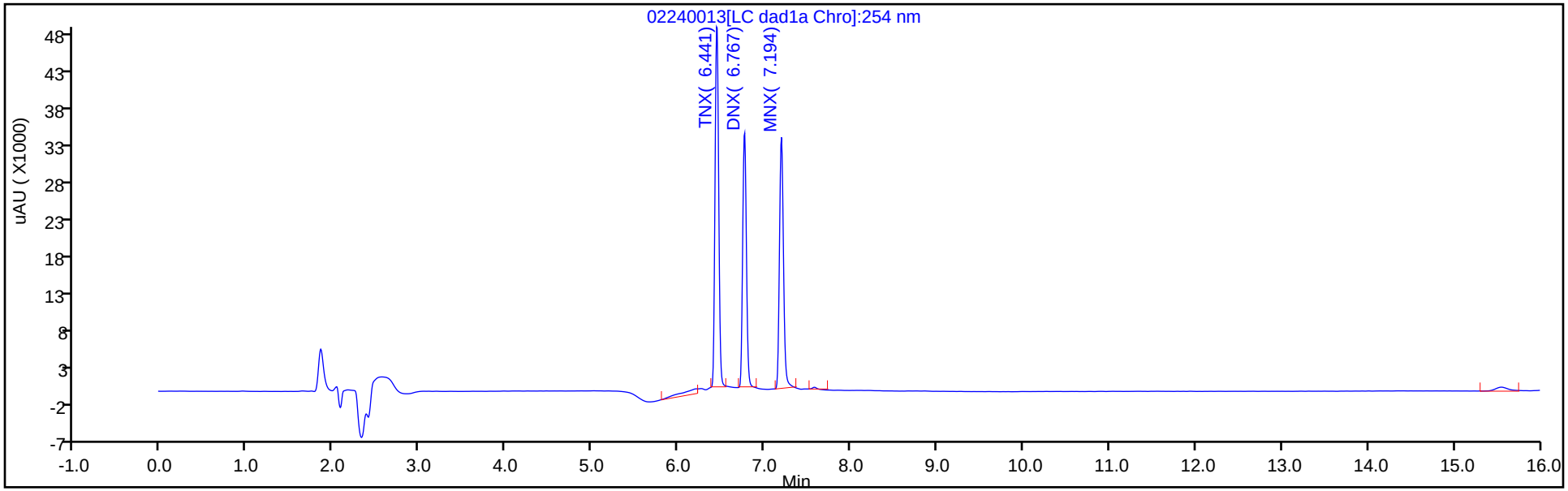
Report Date: 28-Feb-2023 13:17:27 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Denver

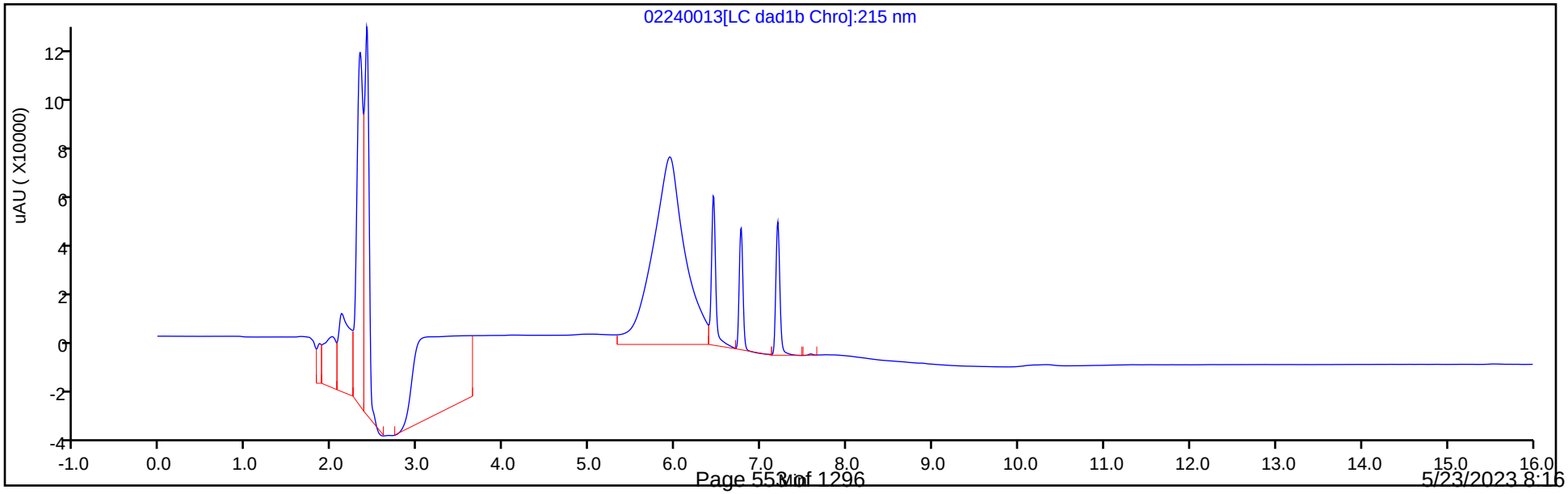
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240013.d

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

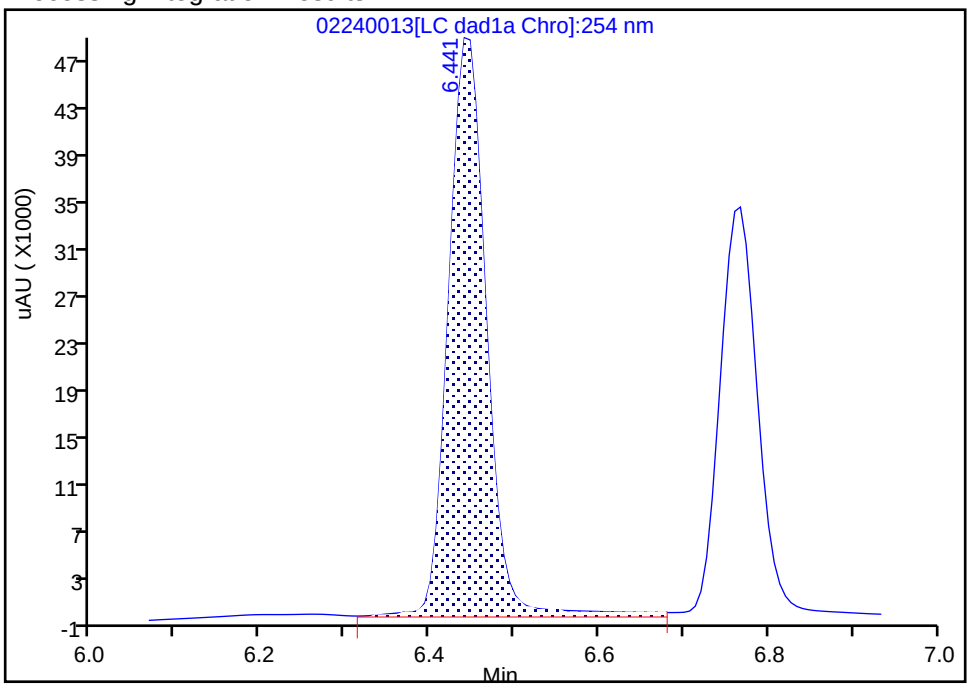
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240013.d
Injection Date: 24-Feb-2023 15:46:11 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 6
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

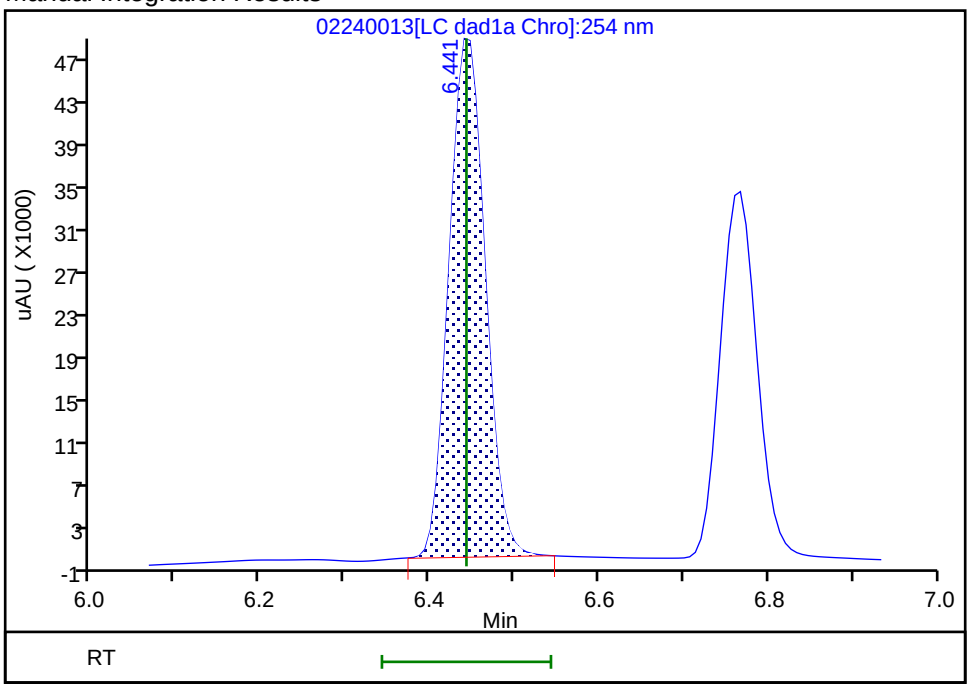
Processing Integration Results

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

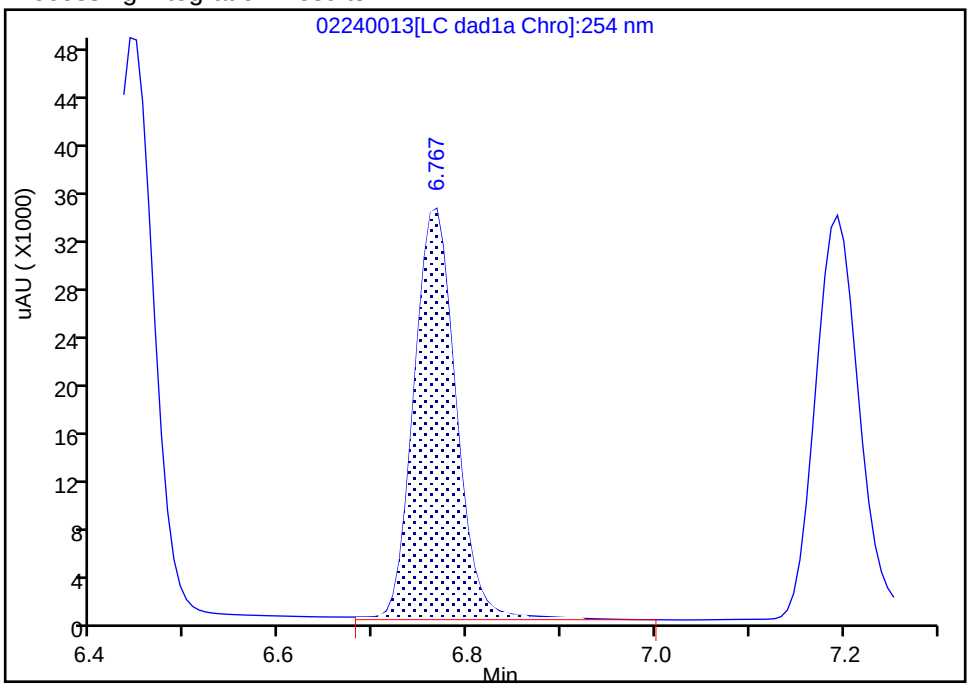
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240013.d				
Injection Date:	24-Feb-2023 15:46:11	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

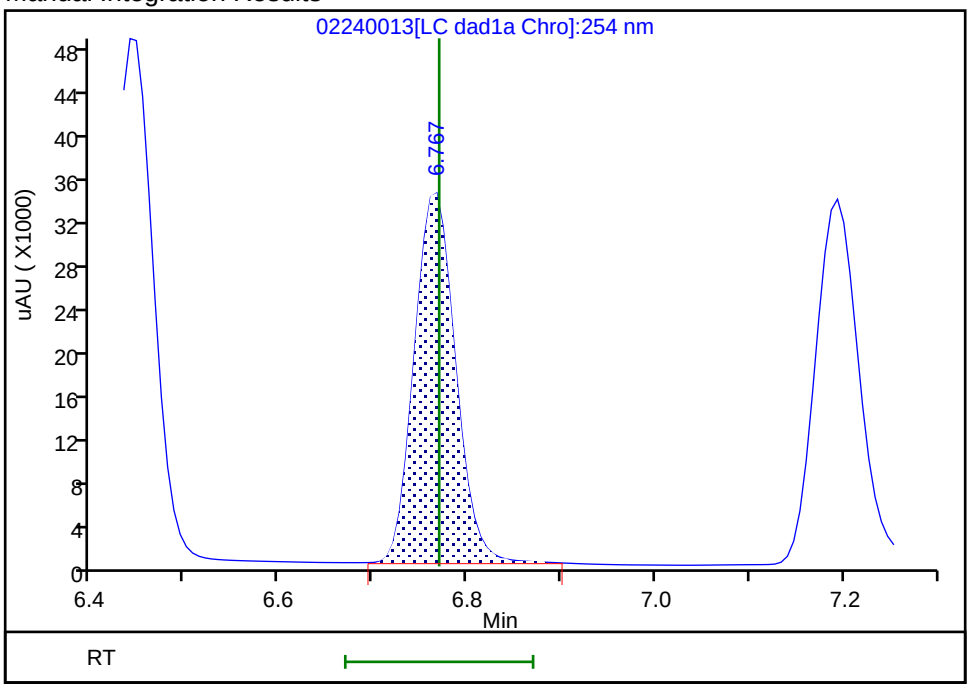
Processing Integration Results

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

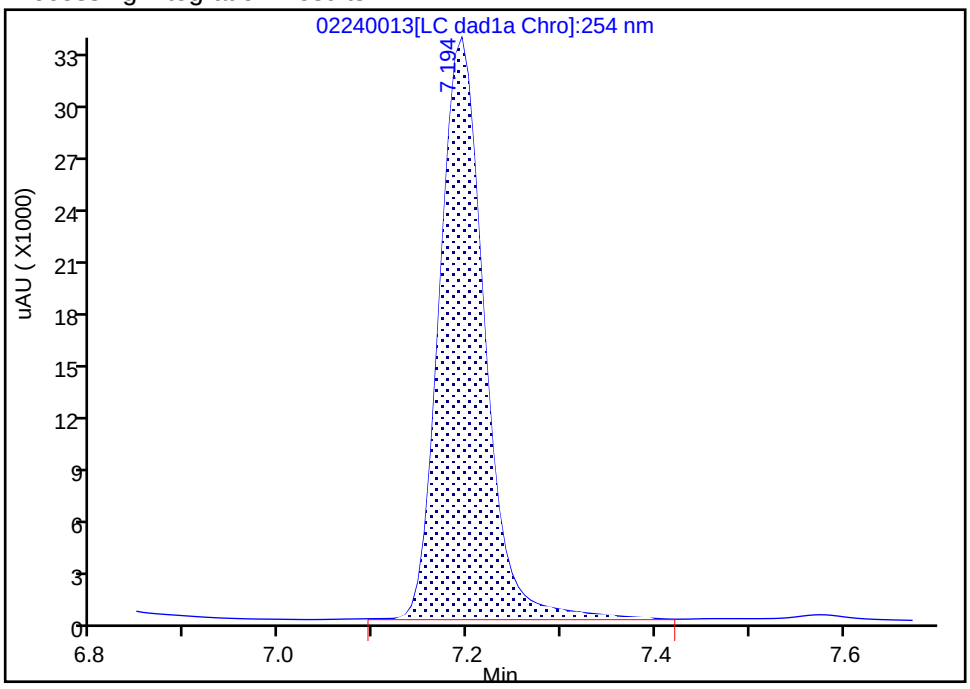
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240013.d
Injection Date: 24-Feb-2023 15:46:11 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 6
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

7 MNX, CAS: 5755-27-1

Signal: 1

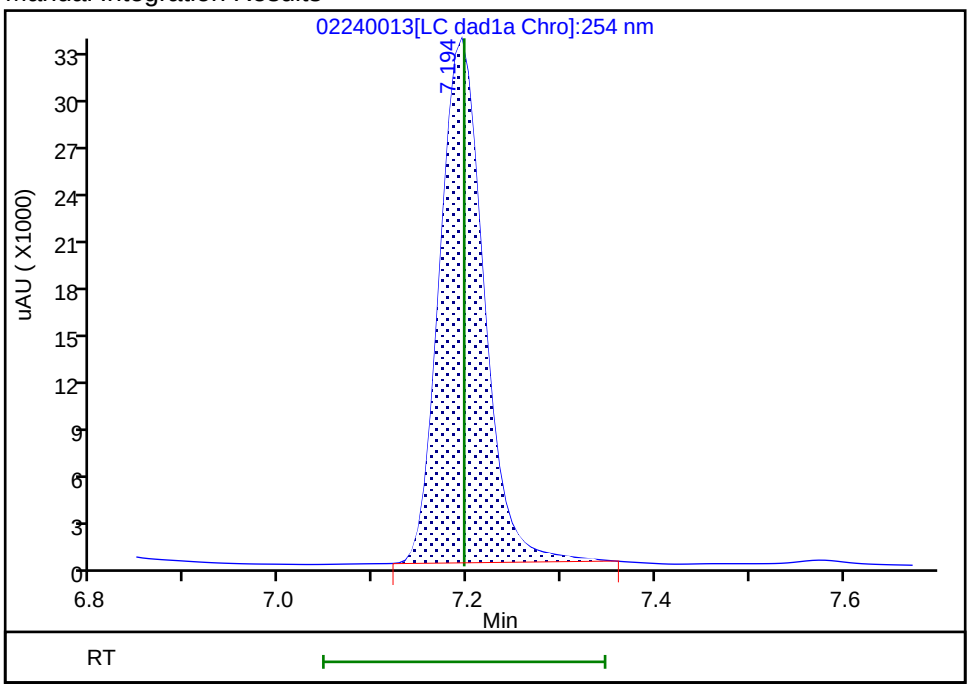
Processing Integration Results

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

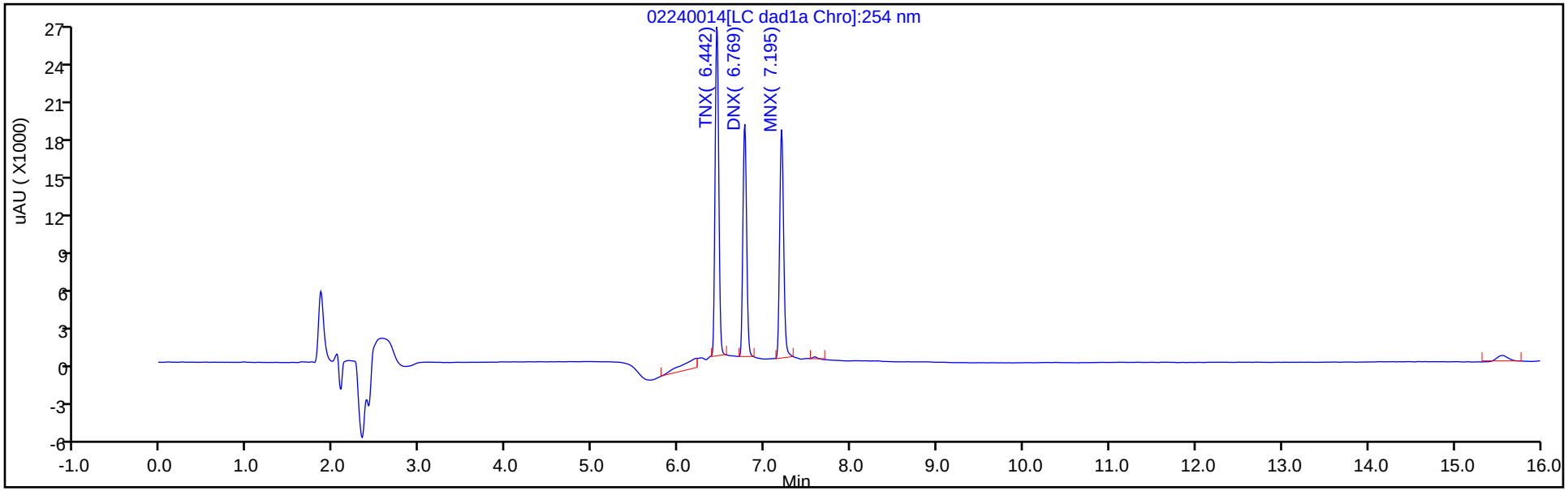
Report Date: 28-Feb-2023 13:17:27 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Denver

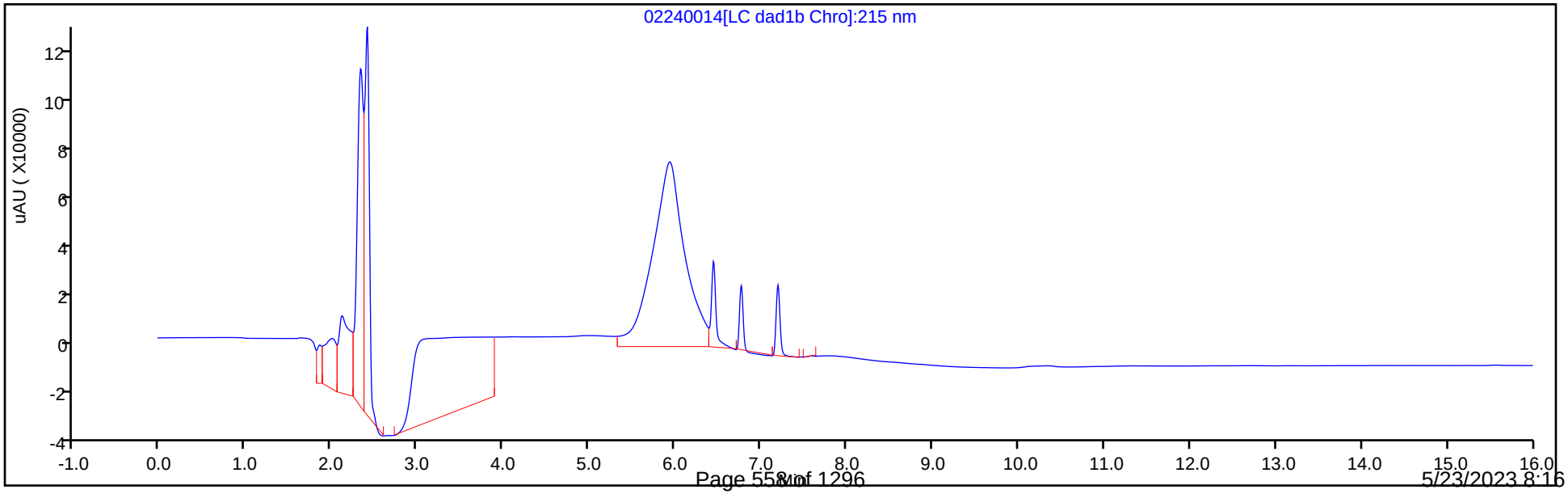
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240014.d

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

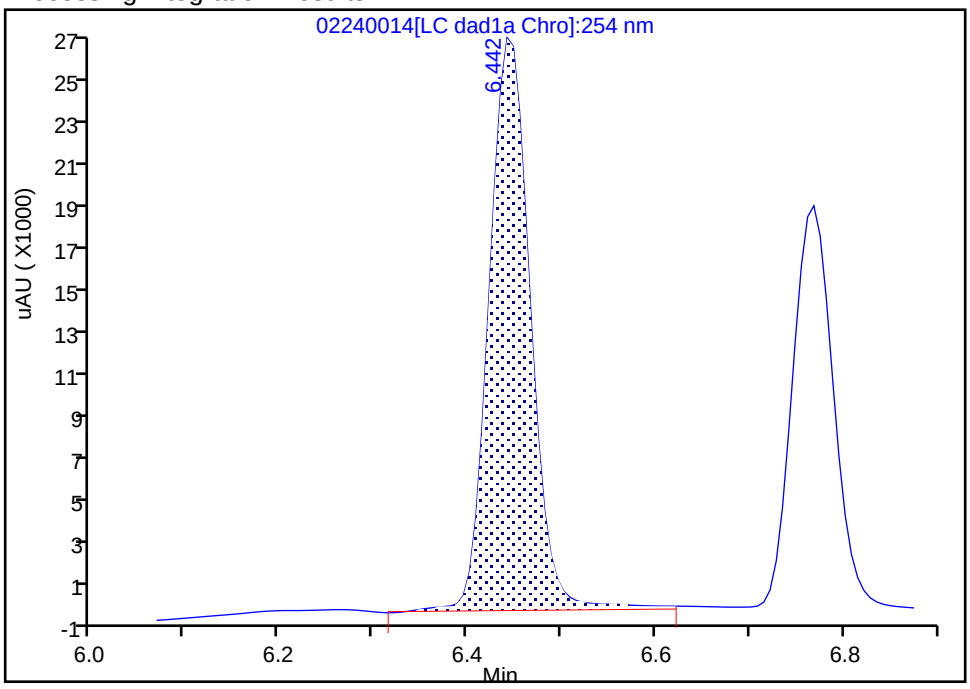
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240014.d
Injection Date: 24-Feb-2023 16:09:13 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 5
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

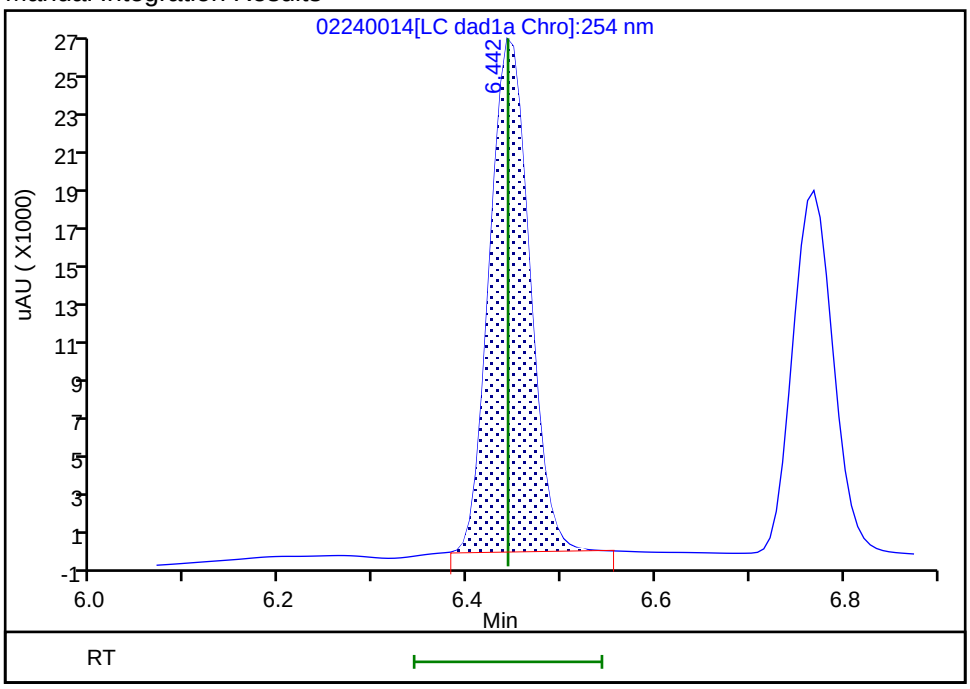
Processing Integration Results

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

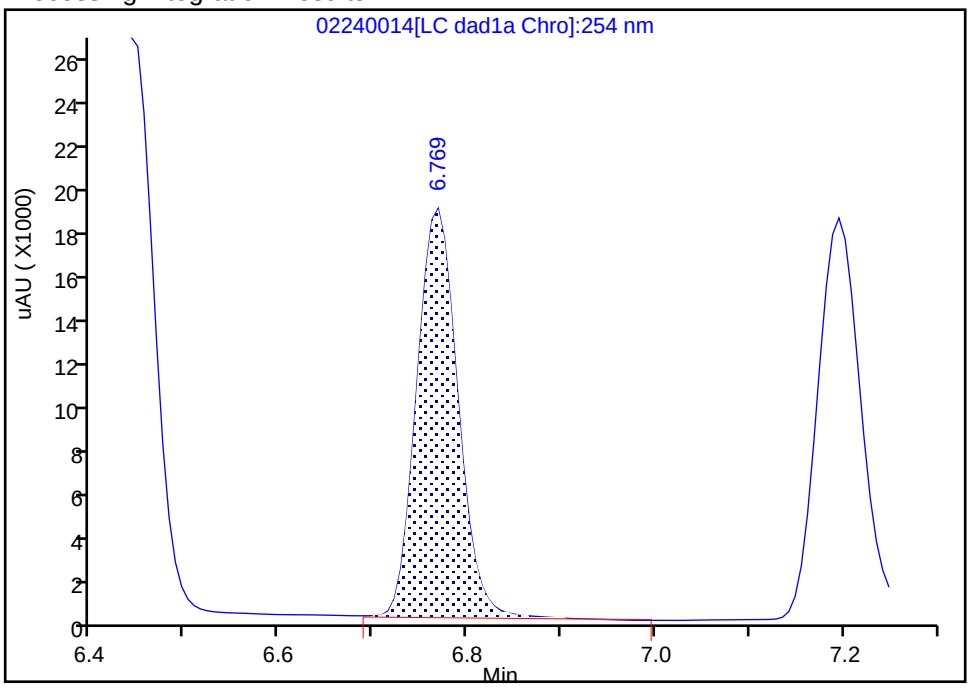
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240014.d
Injection Date: 24-Feb-2023 16:09:13 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 5
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 DNX, CAS: 80251-29-2

Signal: 1

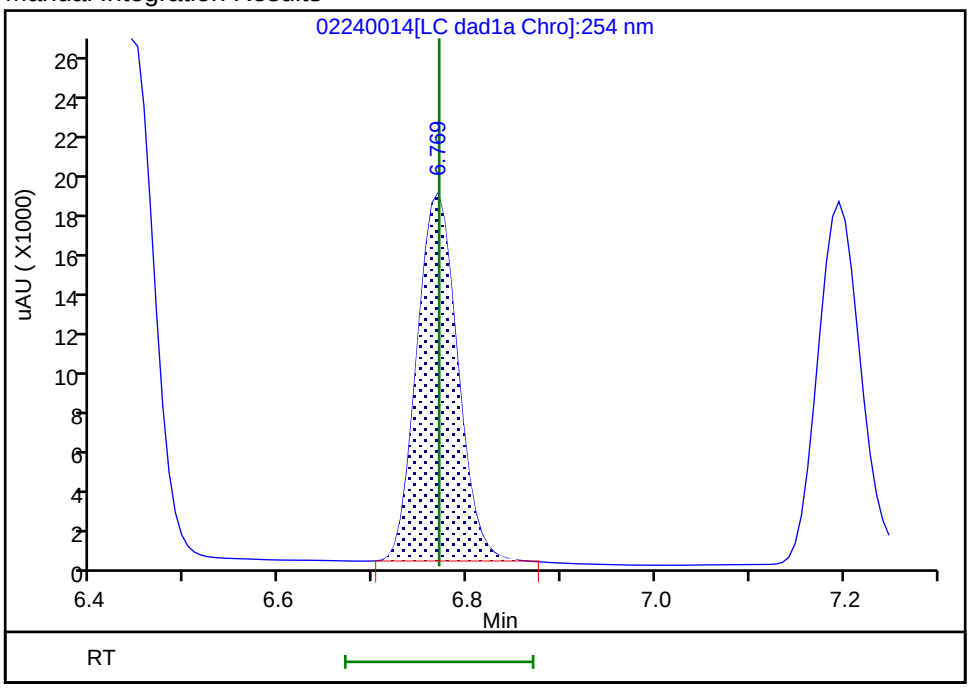
Processing Integration Results

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

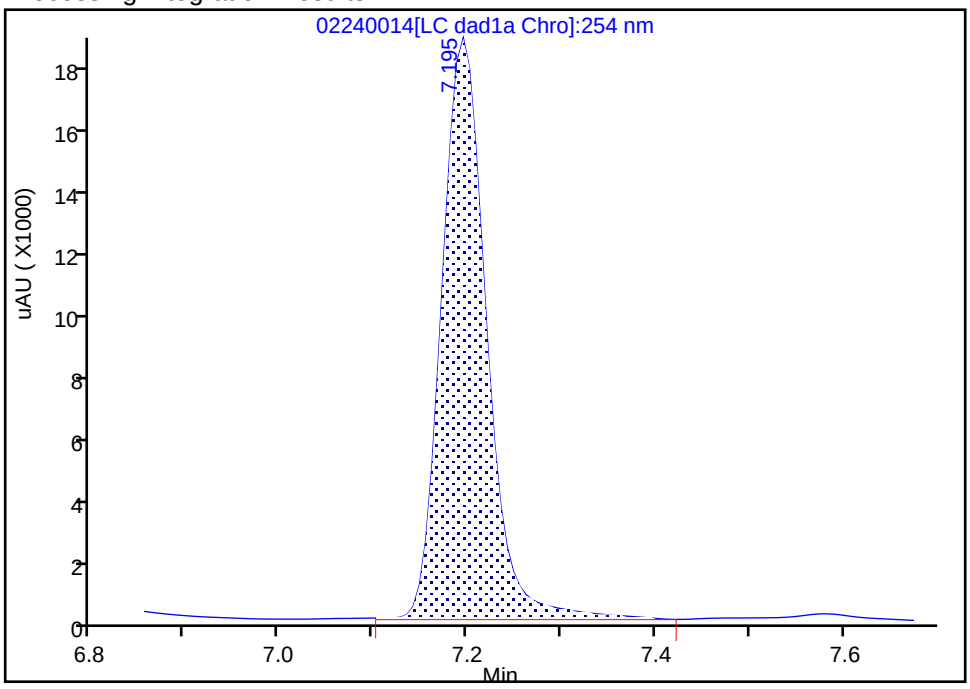
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240014.d				
Injection Date:	24-Feb-2023 16:09:13	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 5				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

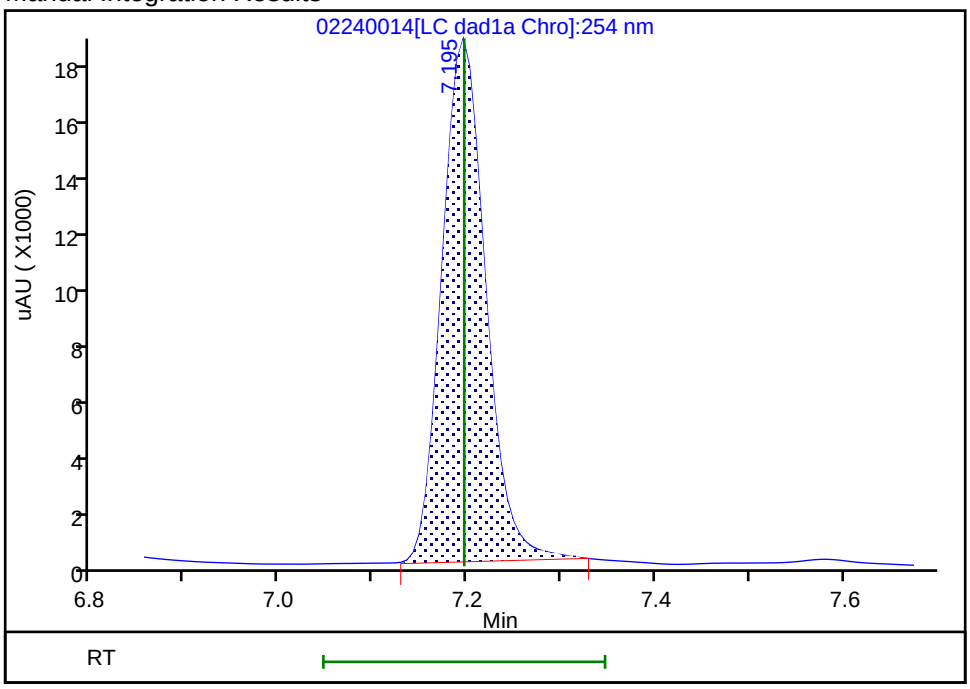
Processing Integration Results

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

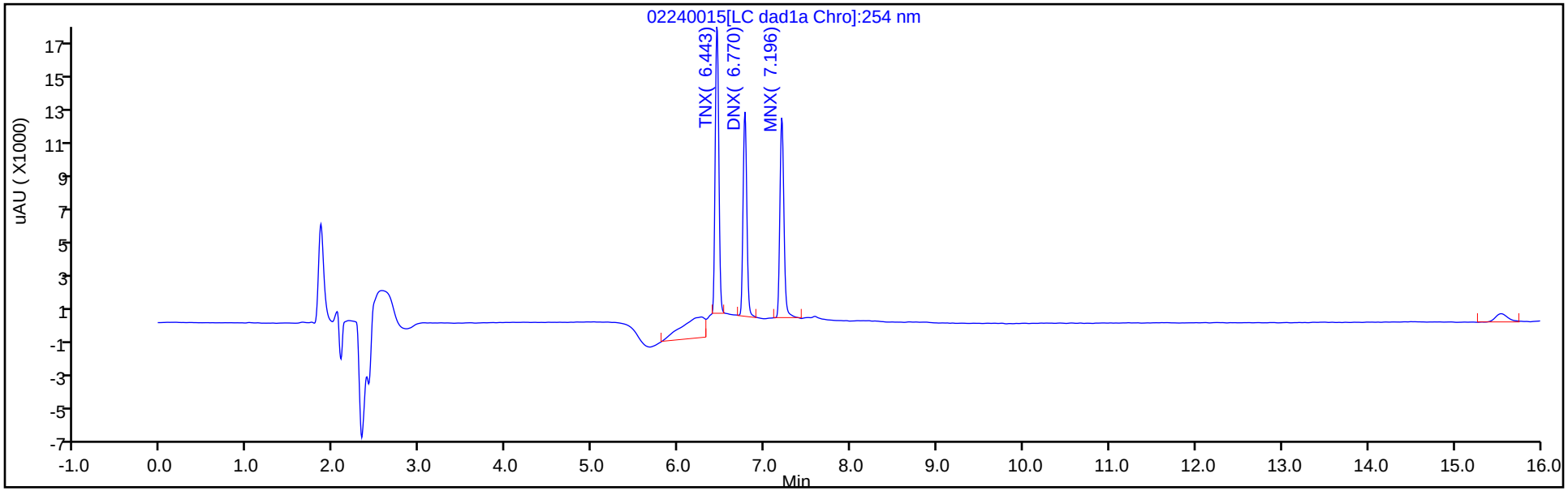
Report Date: 28-Feb-2023 13:17:28 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Denver

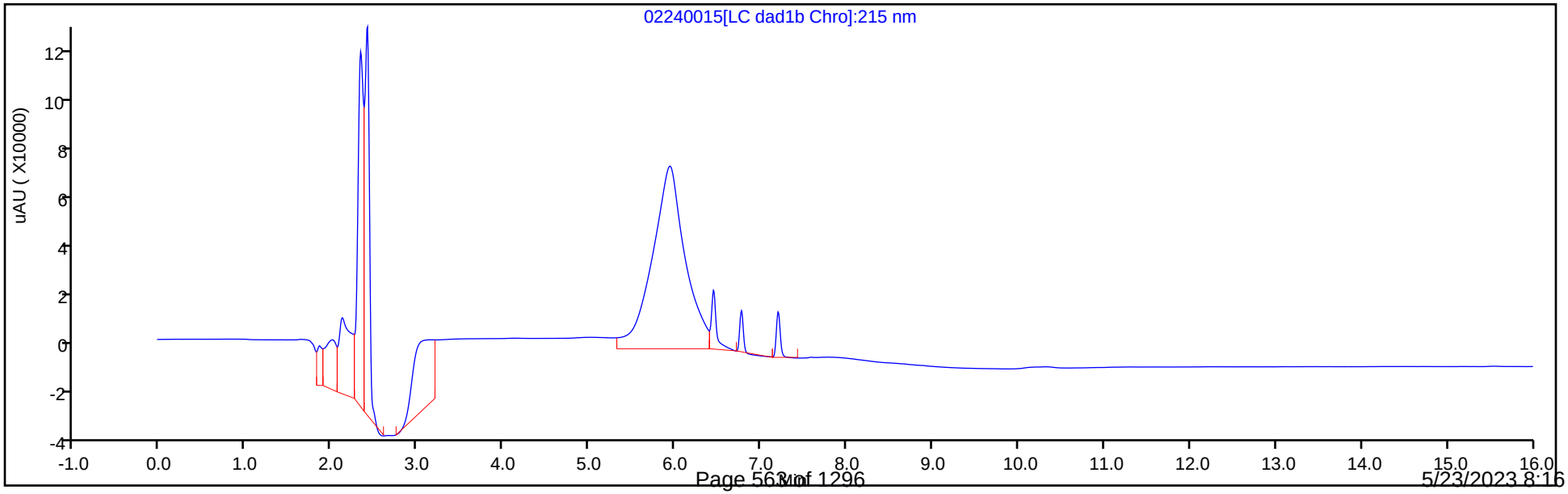
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240015.d

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

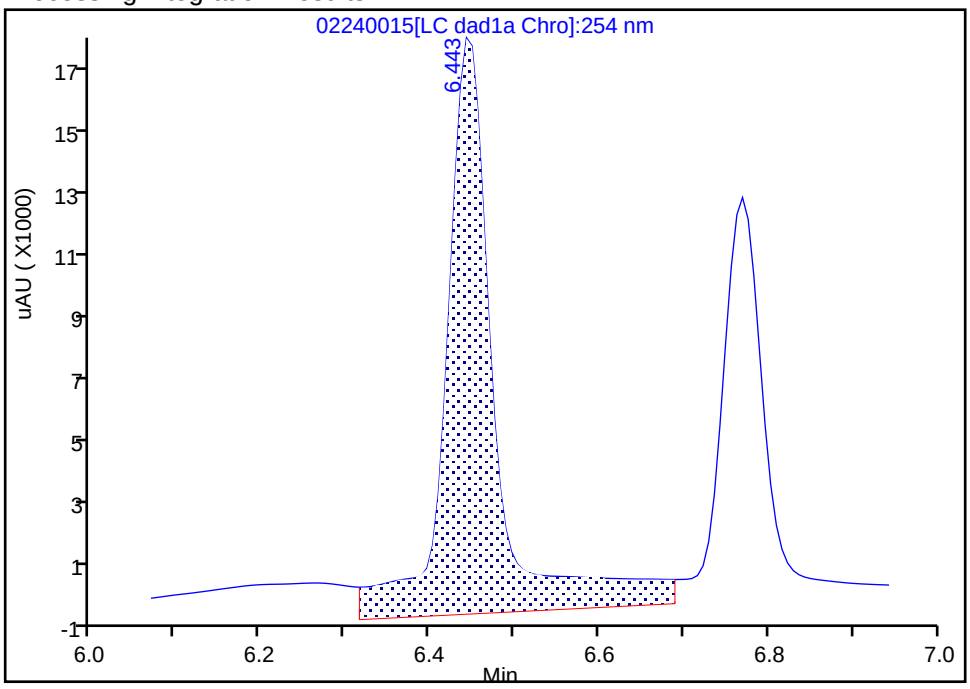
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240015.d				
Injection Date:	24-Feb-2023 16:32:12	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 4				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

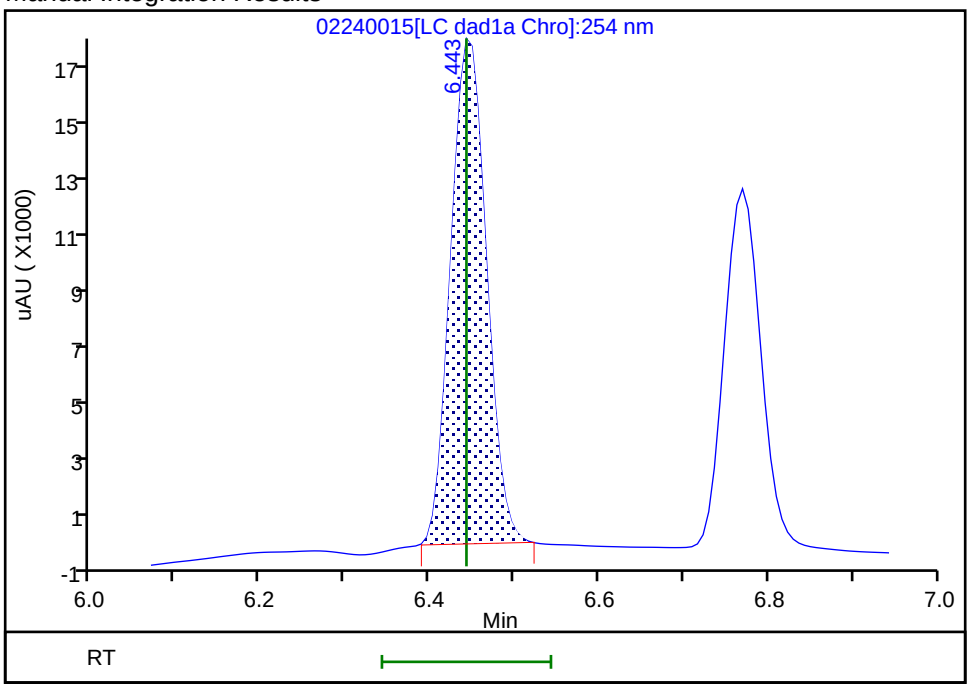
Processing Integration Results

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

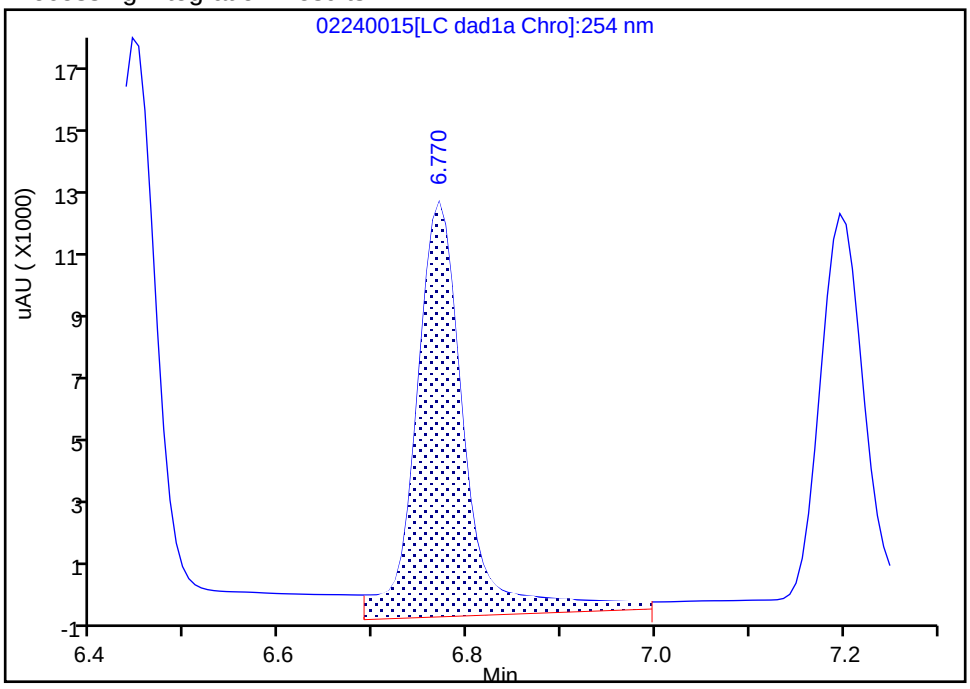
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240015.d				
Injection Date:	24-Feb-2023 16:32:12	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 4				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

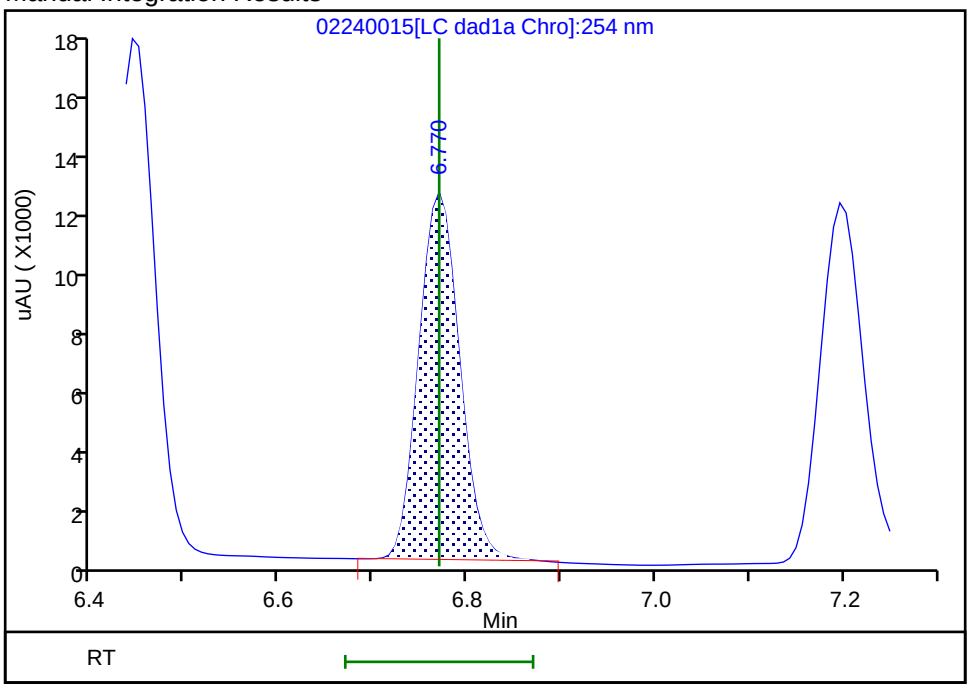
Processing Integration Results

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

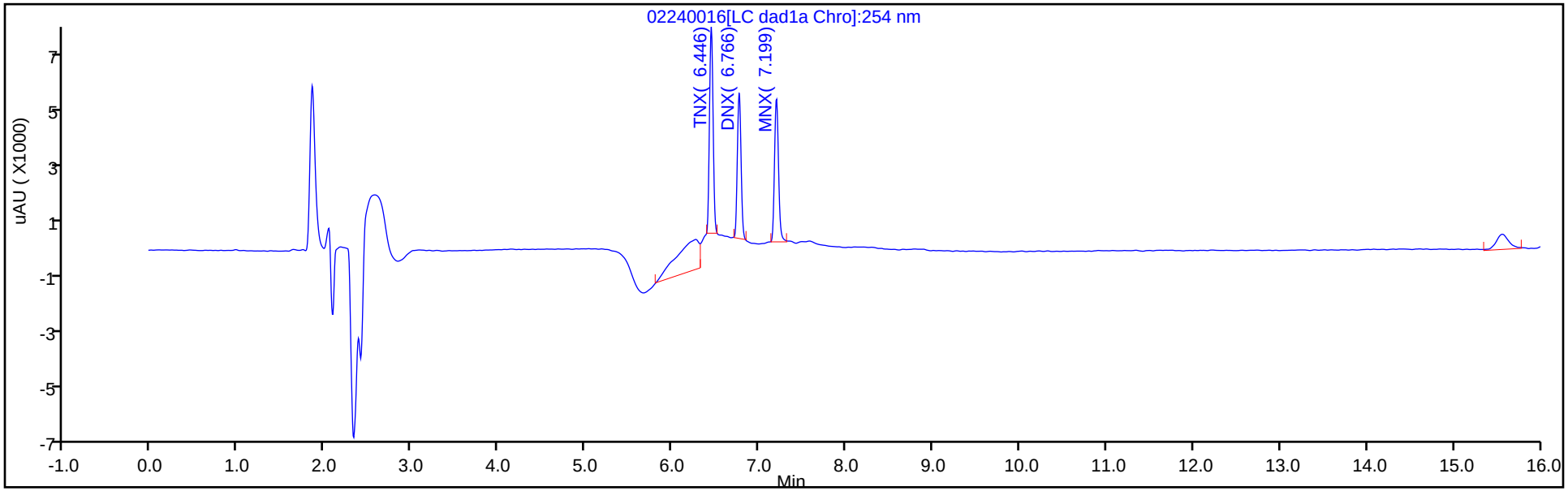
Report Date: 28-Feb-2023 13:17:28 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Denver

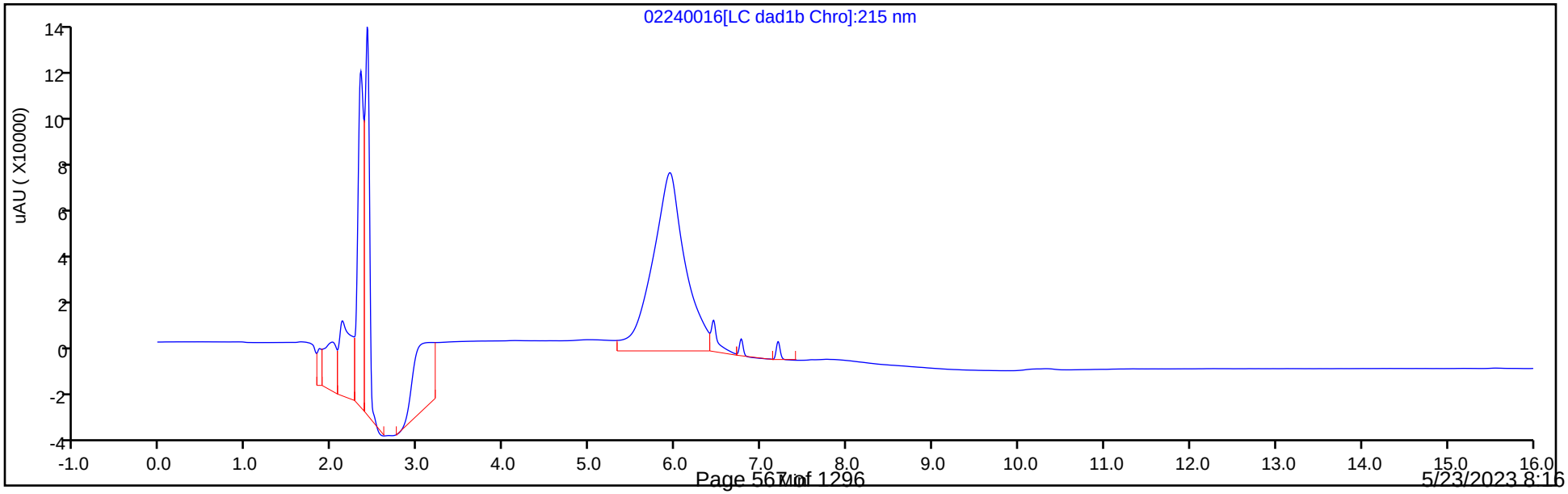
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240016.d

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

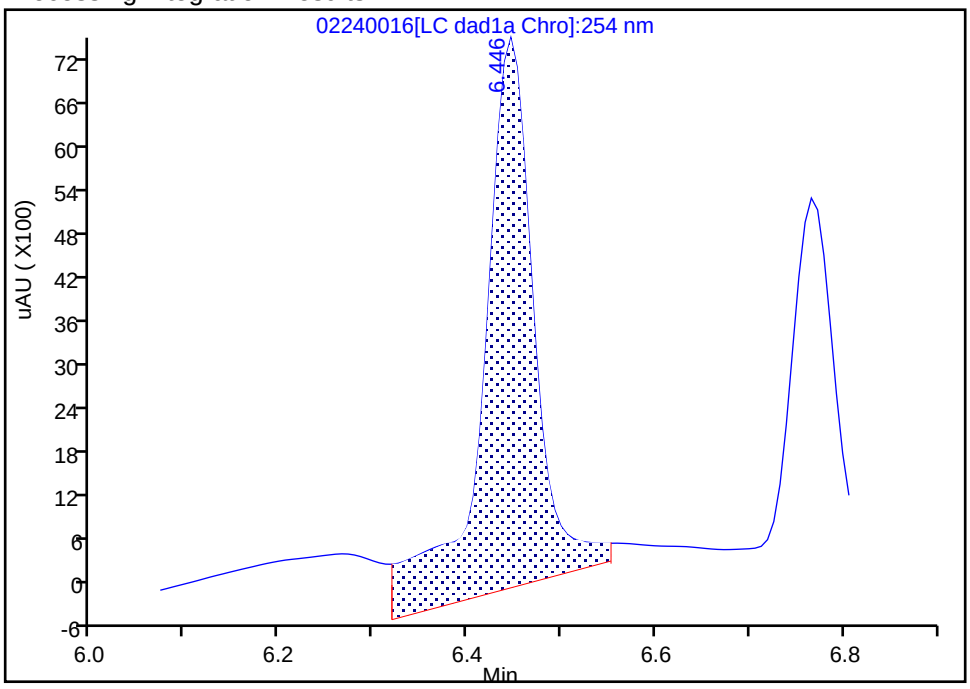
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240016.d				
Injection Date:	24-Feb-2023 16:55:16	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 3				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

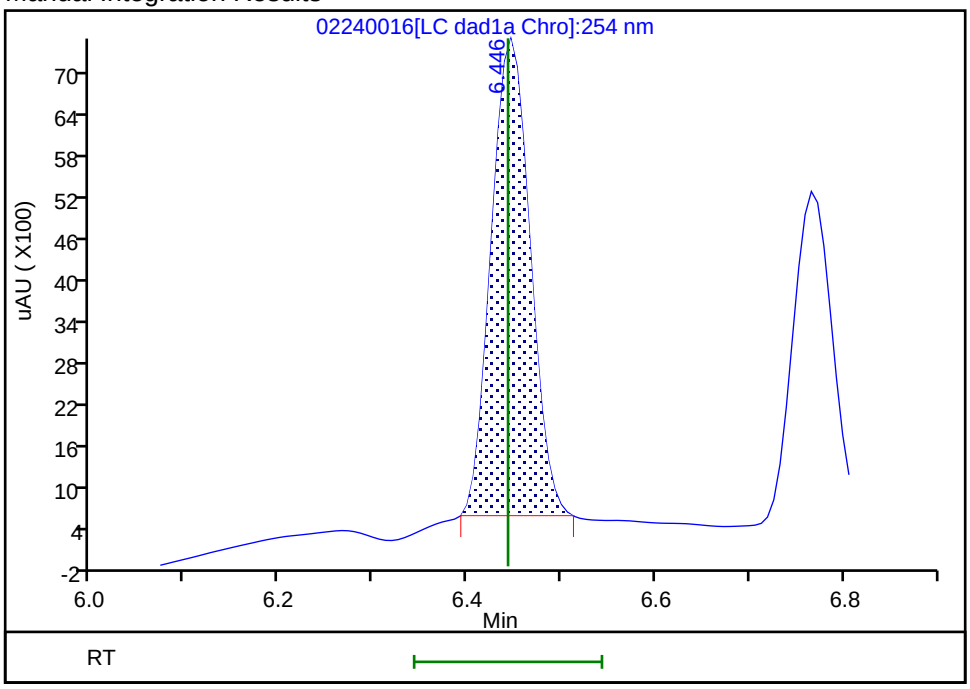
Processing Integration Results

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

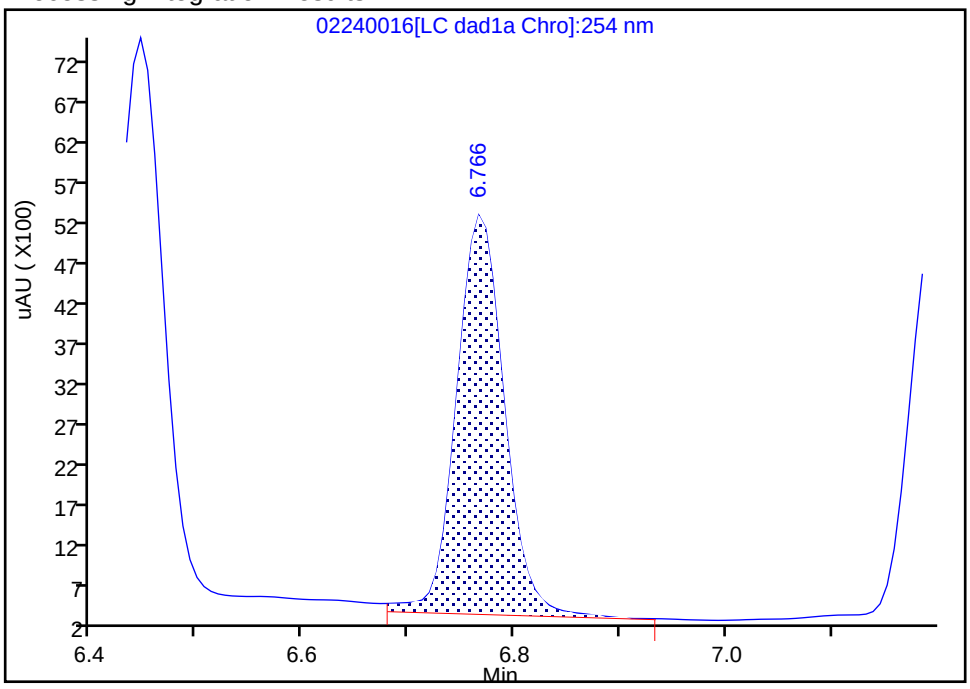
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240016.d				
Injection Date:	24-Feb-2023 16:55:16	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 3				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

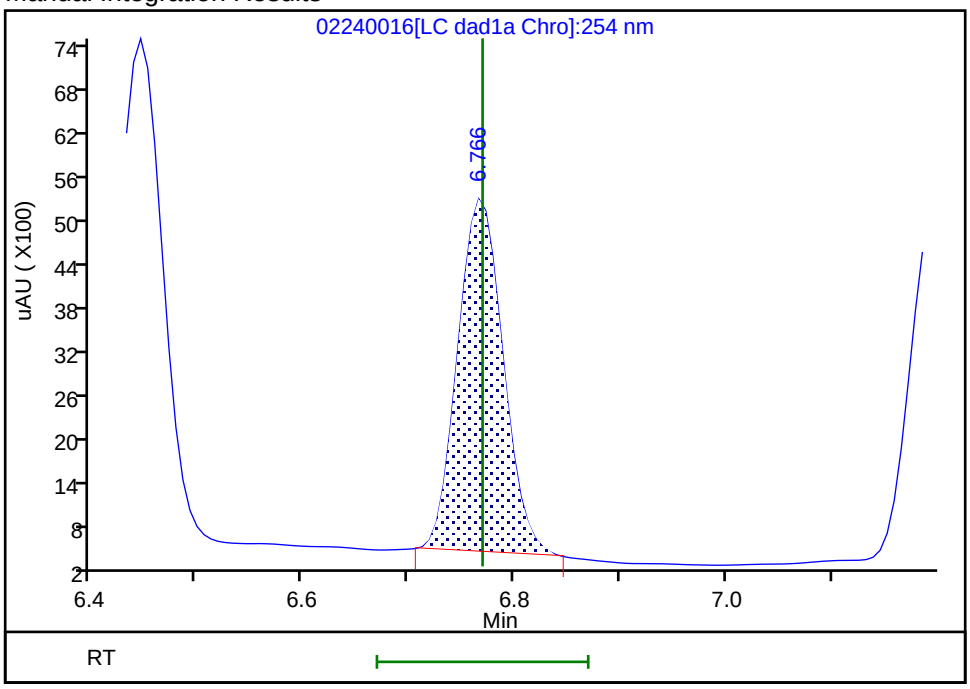
Processing Integration Results

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

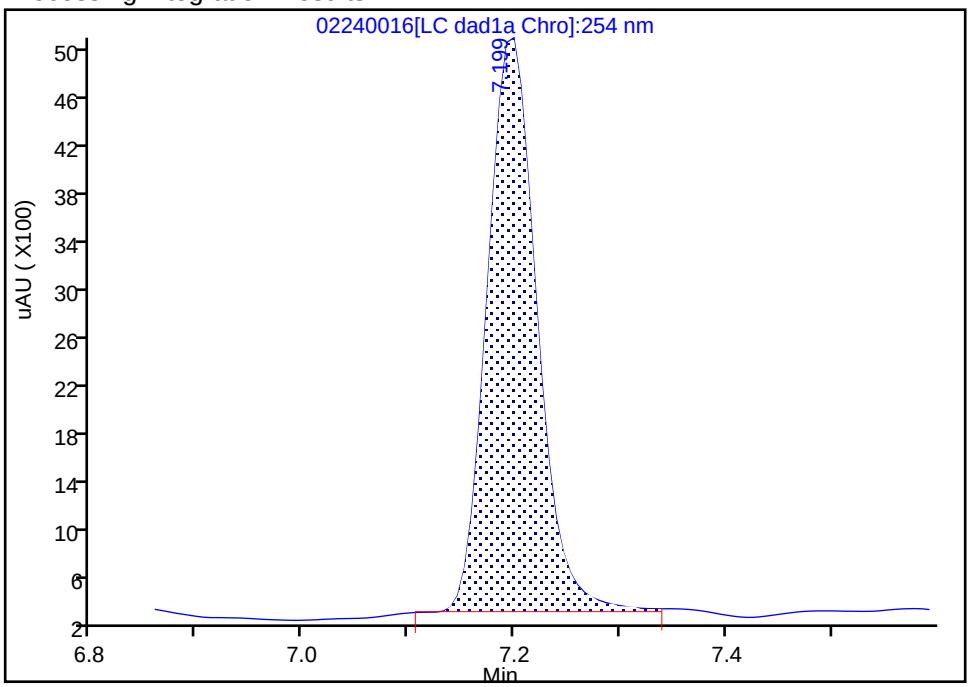
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240016.d				
Injection Date:	24-Feb-2023 16:55:16	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 3				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

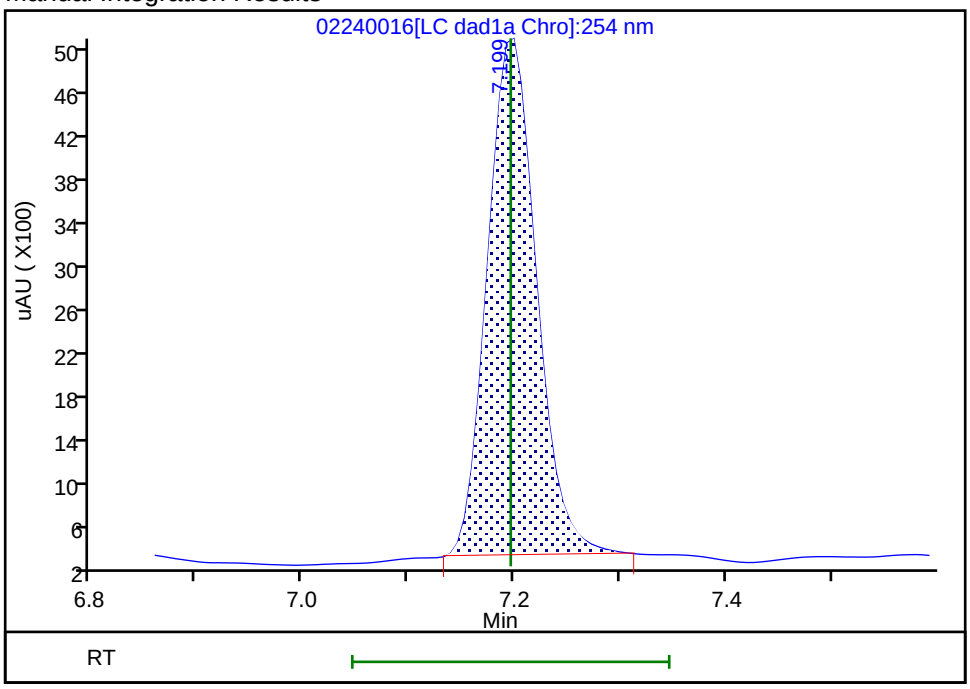
Processing Integration Results

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

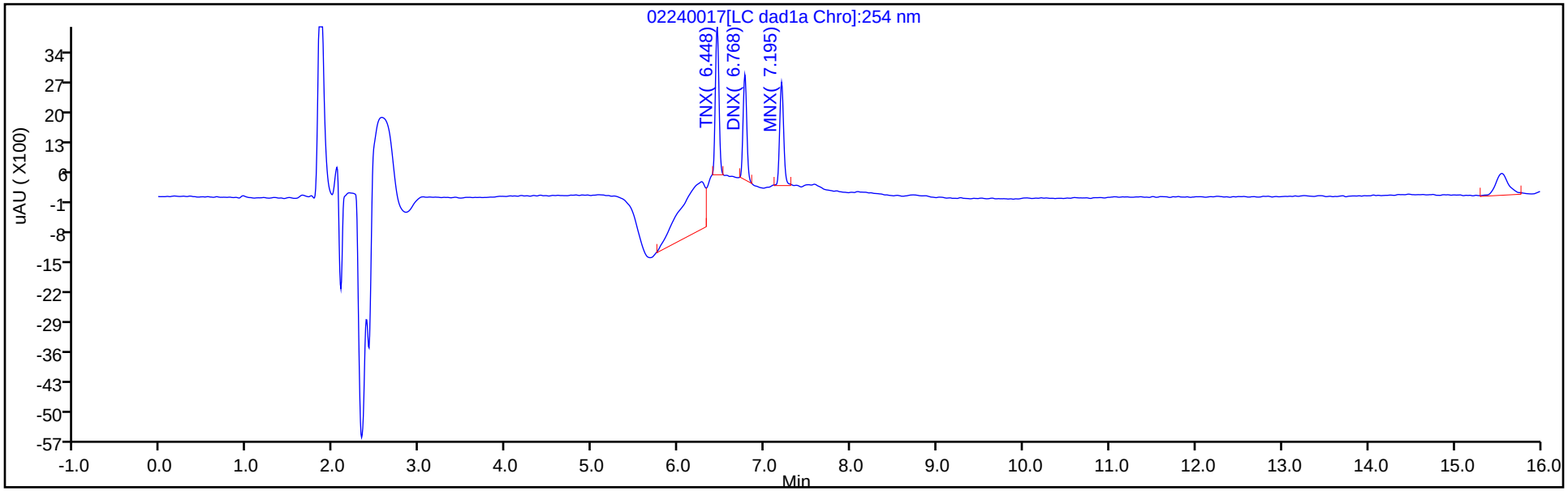
Report Date: 28-Feb-2023 13:17:29 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Denver

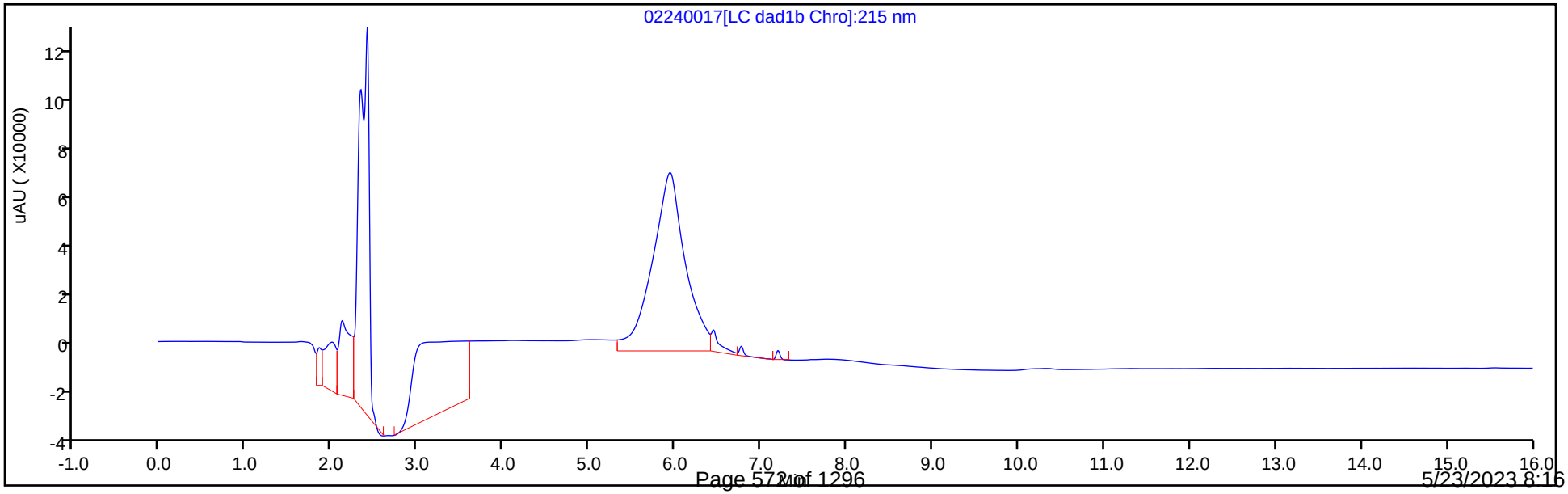
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240017.d

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

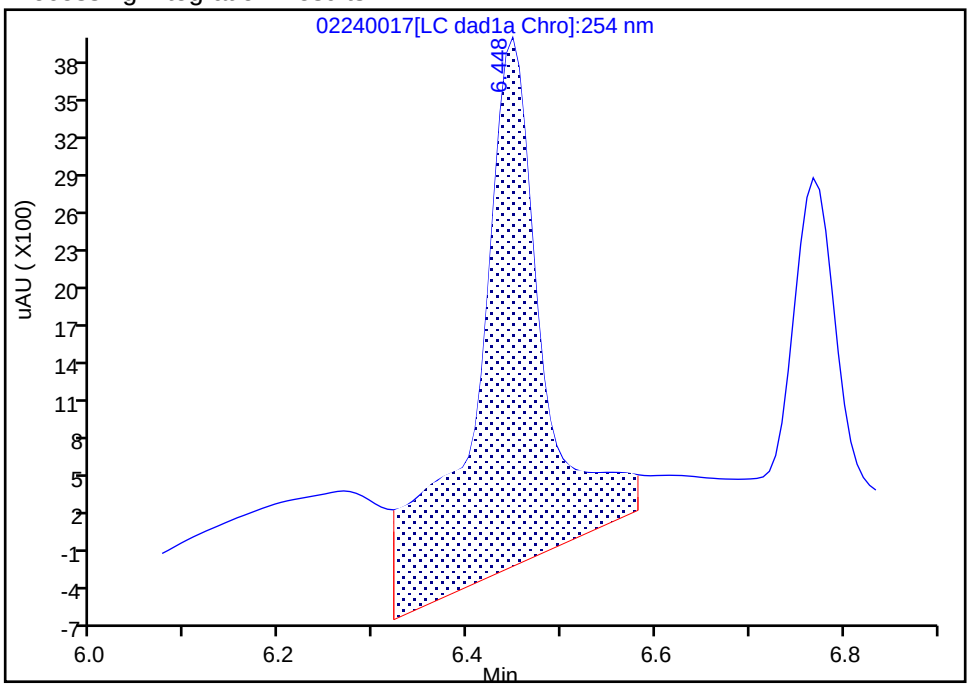
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240017.d				
Injection Date:	24-Feb-2023 17:18:19	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 2				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

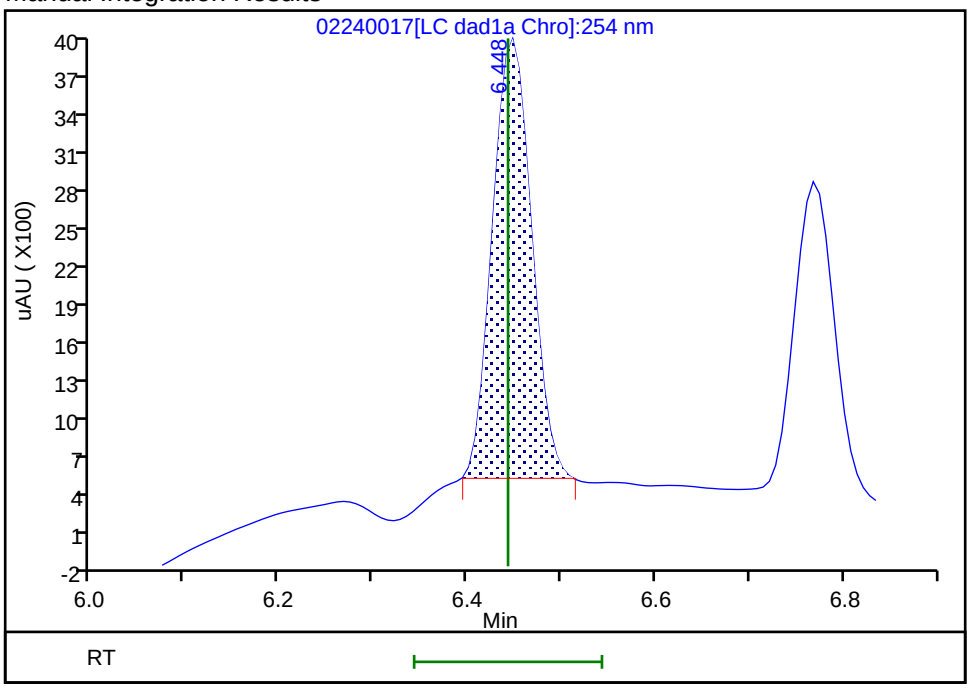
Processing Integration Results

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

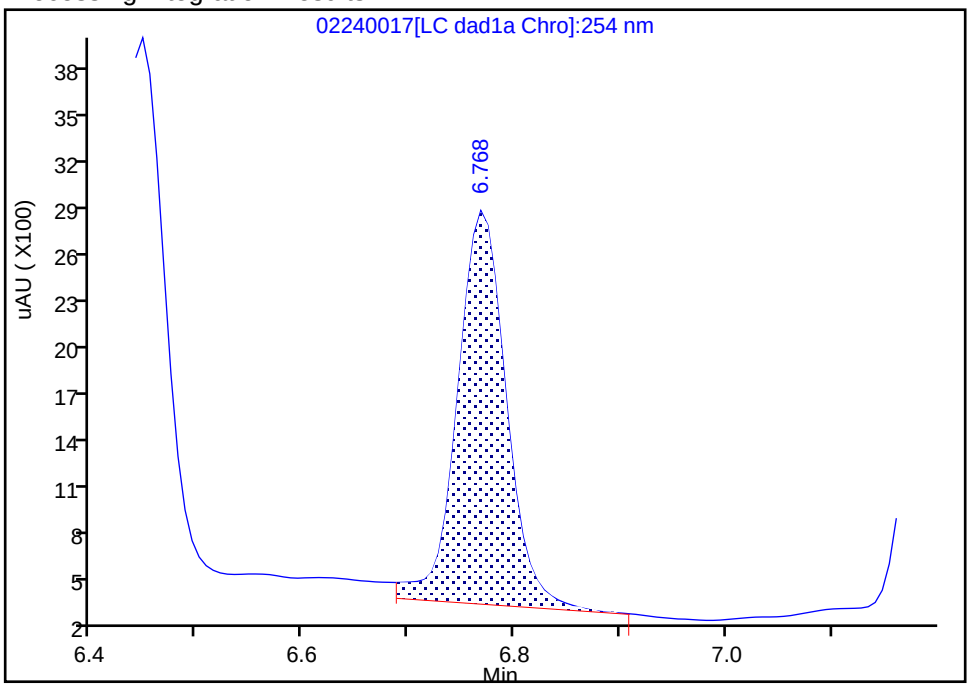
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240017.d				
Injection Date:	24-Feb-2023 17:18:19	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 2				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

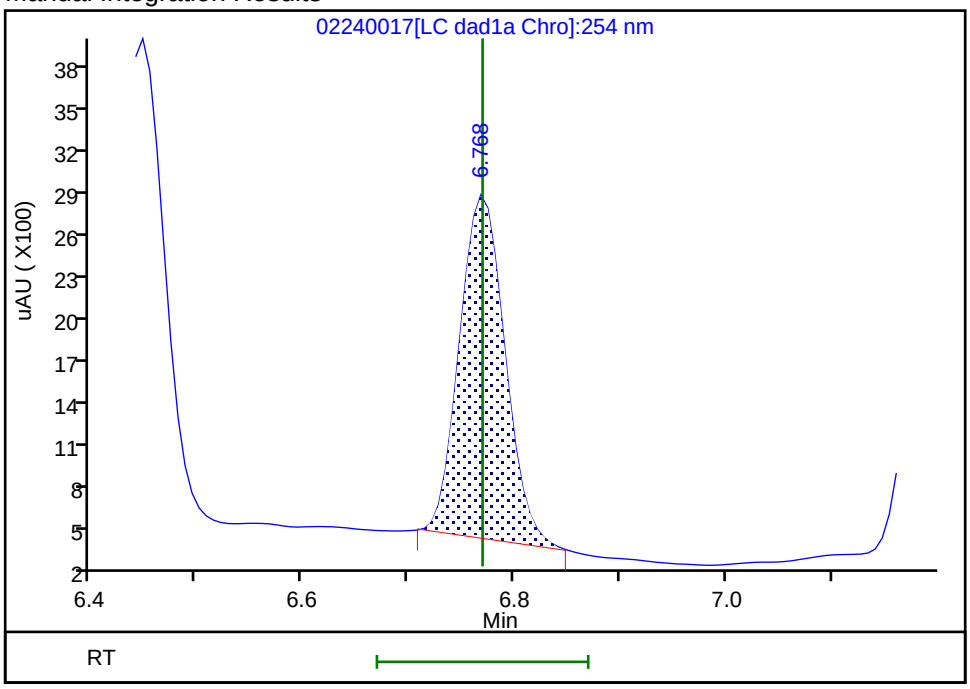
Processing Integration Results

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

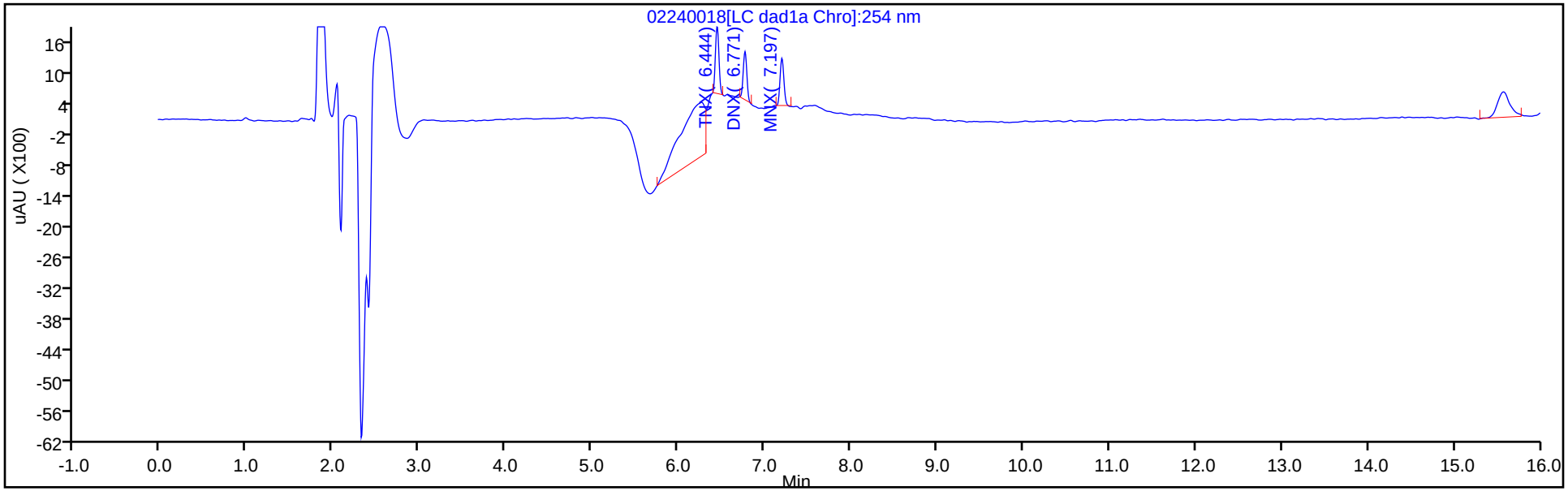
Report Date: 28-Feb-2023 13:17:30 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Denver

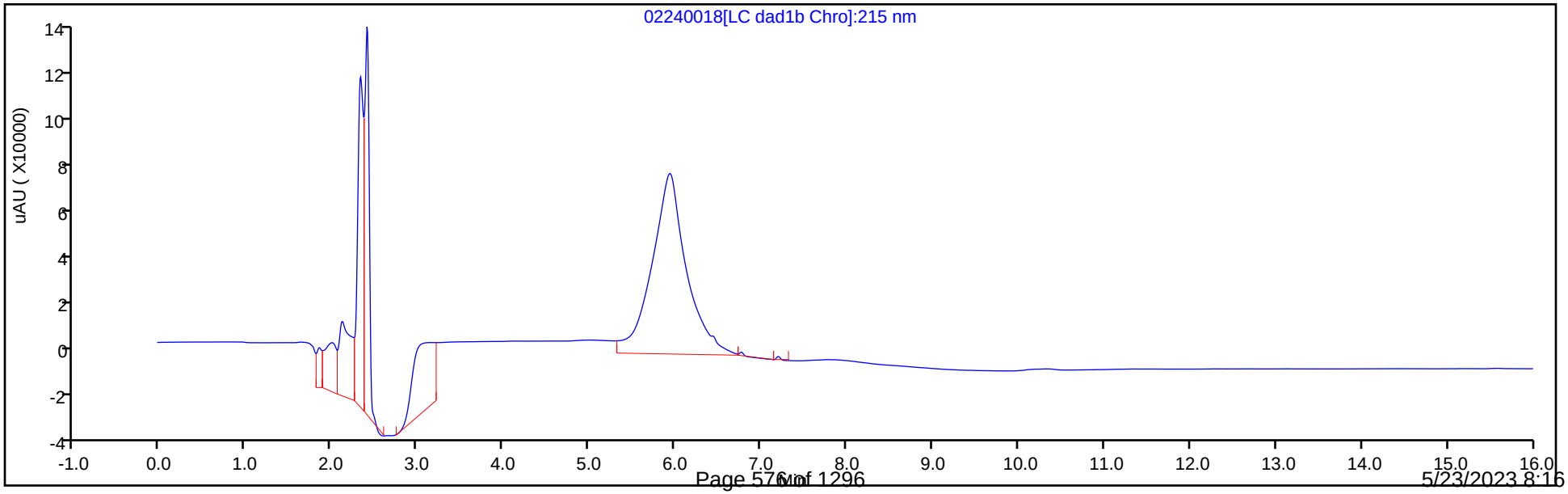
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240018.d

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

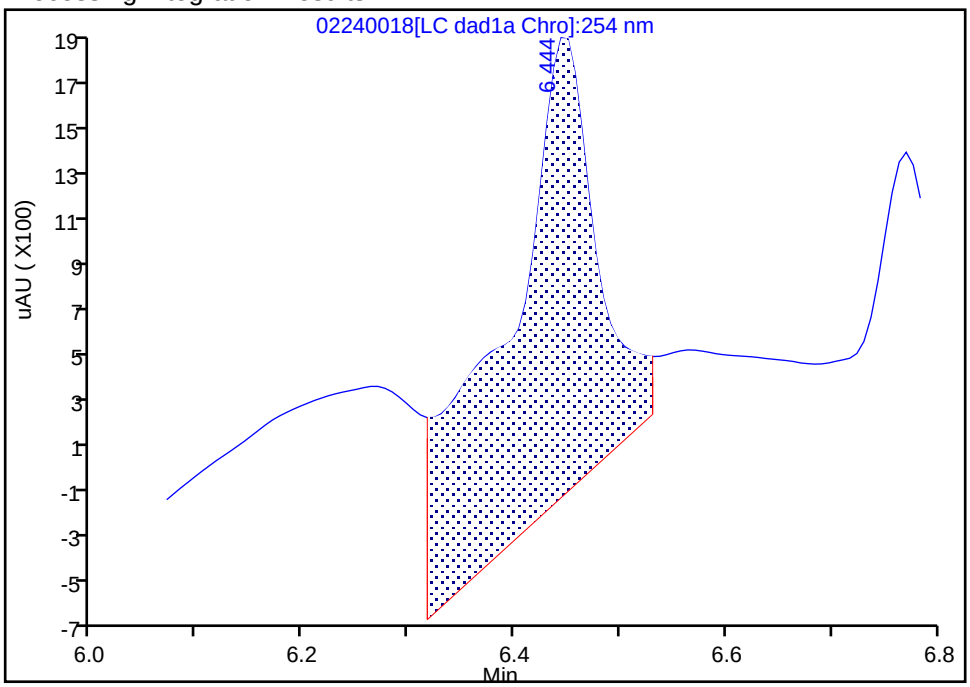
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240018.d
Injection Date: 24-Feb-2023 17:41:20 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 1
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

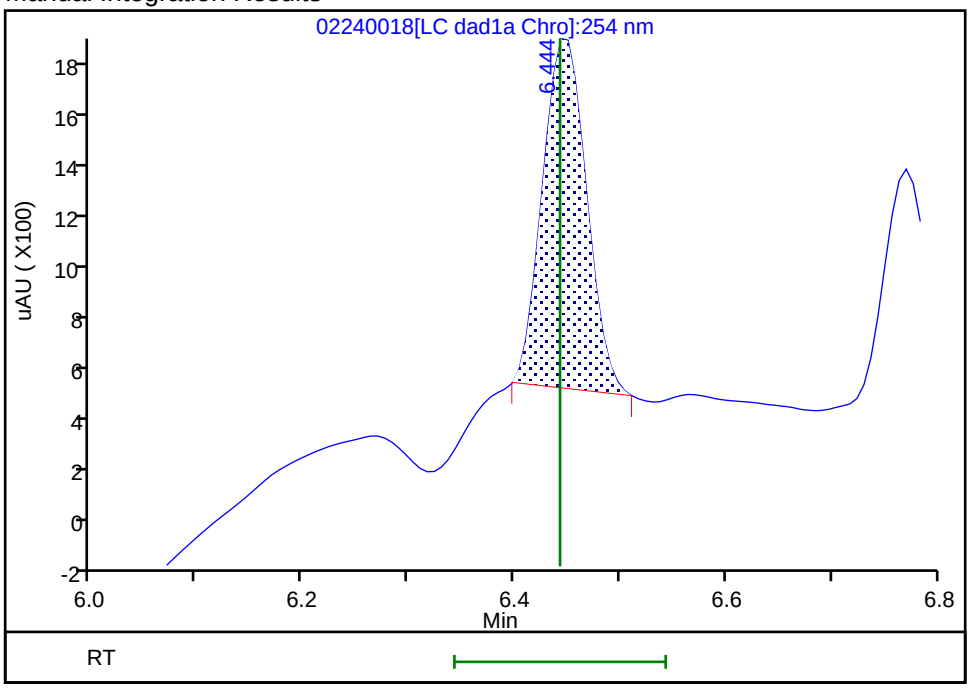
Processing Integration Results

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

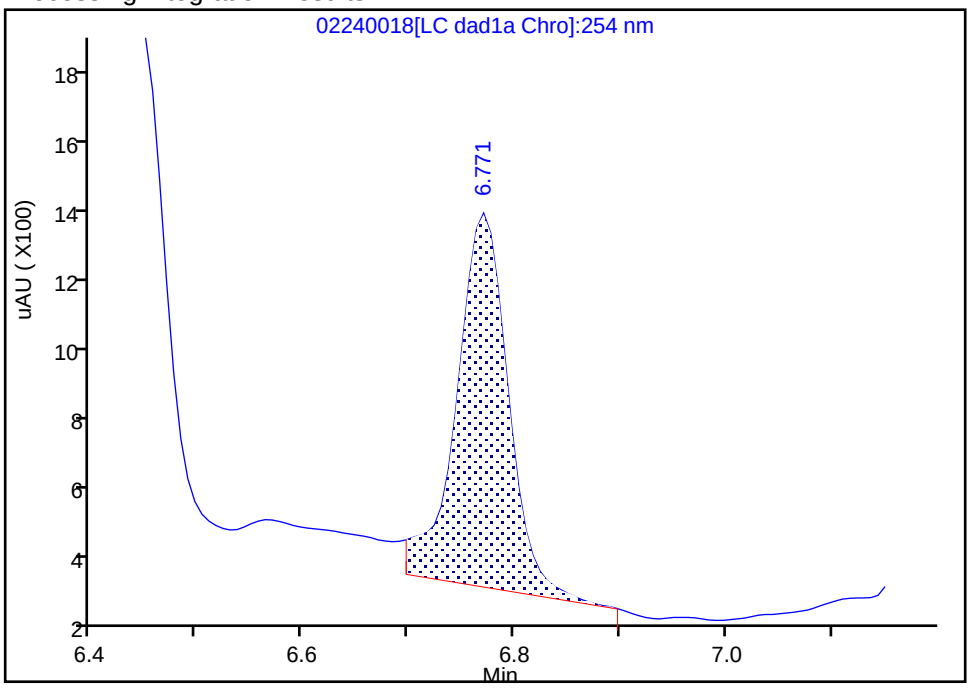
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240018.d				
Injection Date:	24-Feb-2023 17:41:20	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 1				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

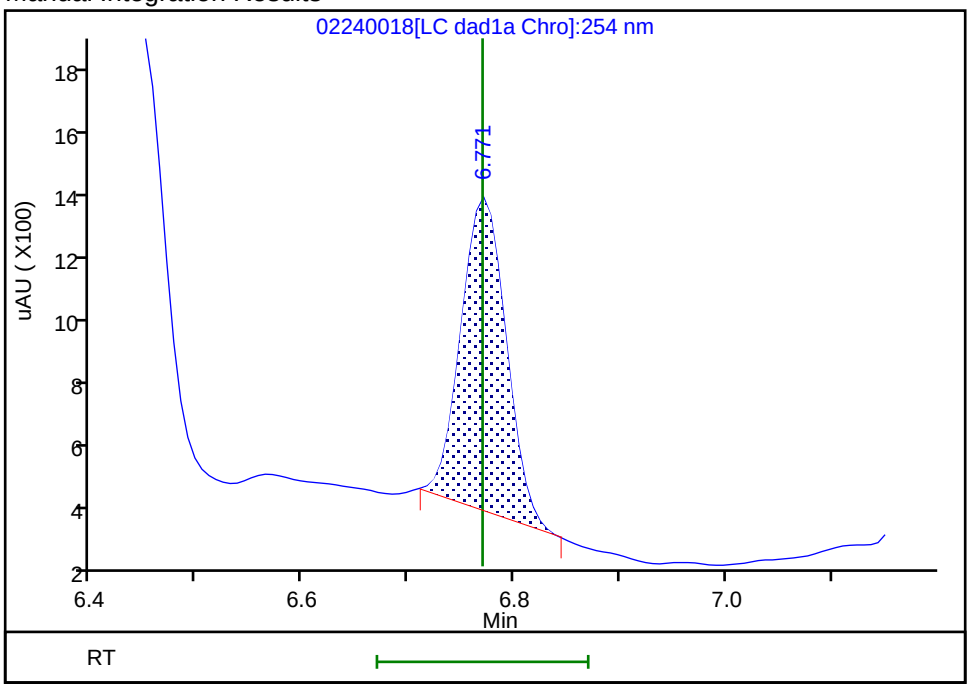
Processing Integration Results

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

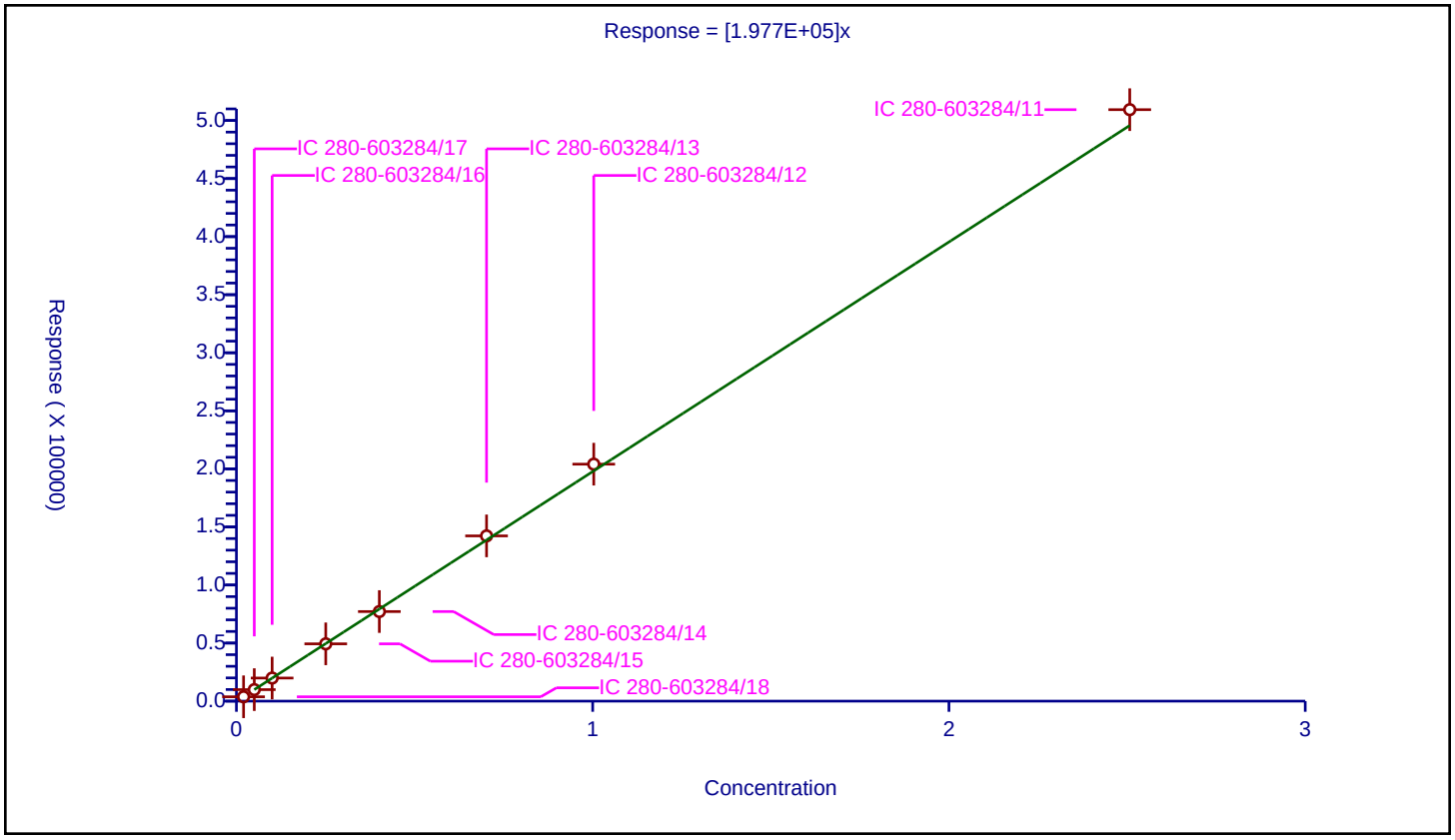
Curve Coefficients

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

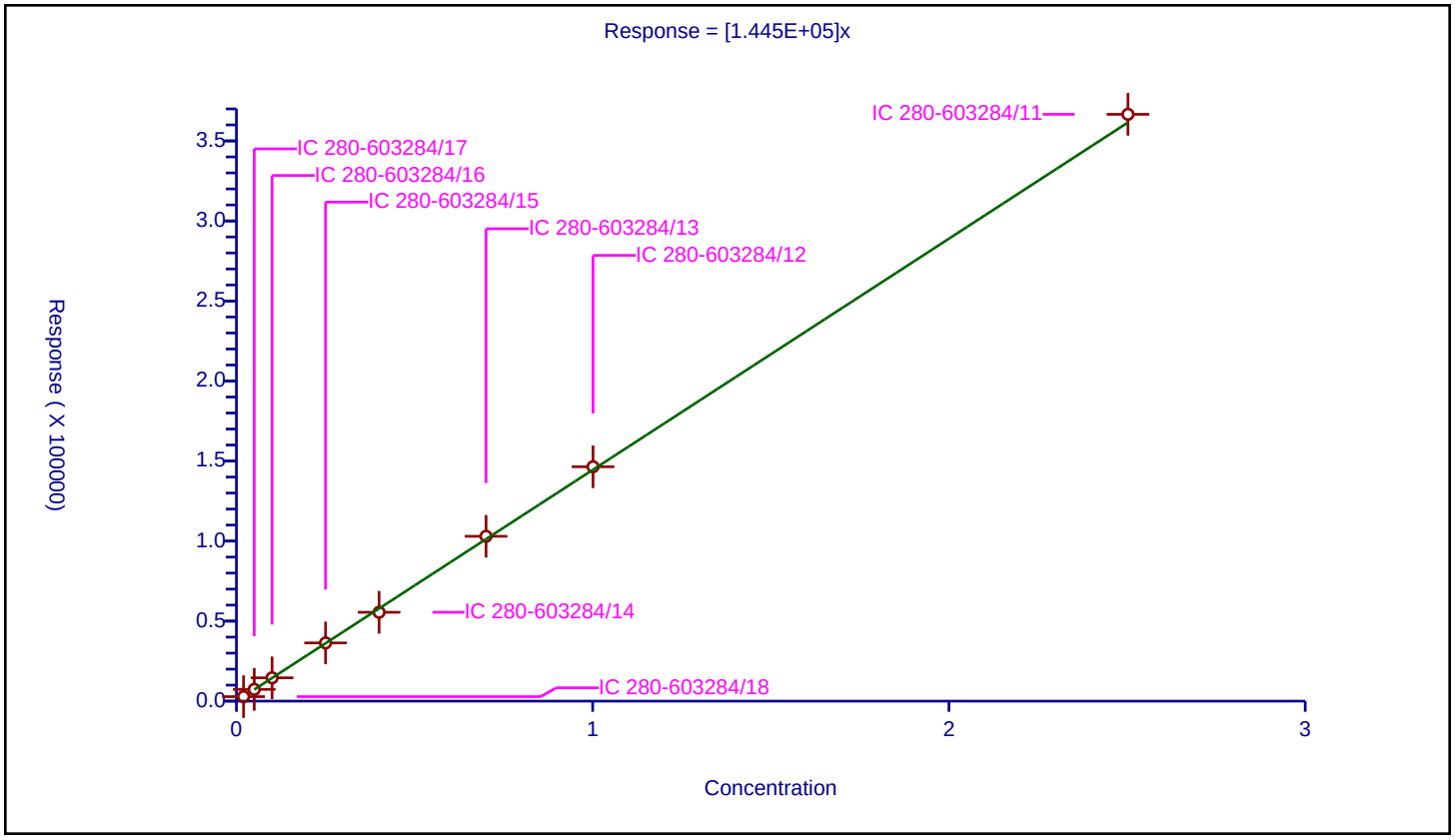
Curve Coefficients

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



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

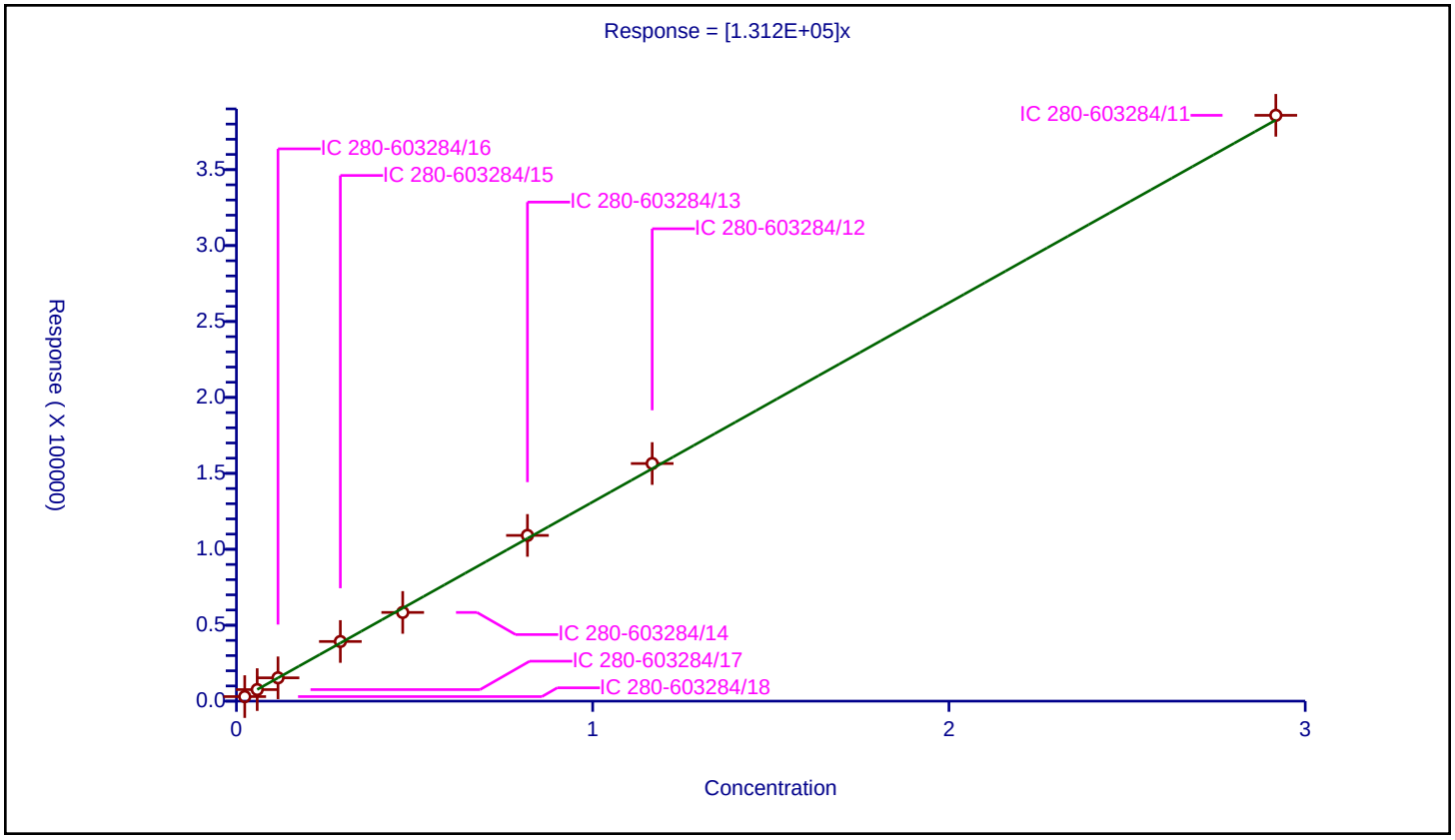
Curve Coefficients

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 VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1 Analy Batch No.: 610603

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/28/2023 18:24 Calibration End Date: 04/28/2023 23:03 Calibration ID: 79725

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-610603/18	04280018.D
Level 2	IC 280-610603/17	04280017.D
Level 3	IC 280-610603/16	04280016.D
Level 4	IC 280-610603/15	04280015.D
Level 5	IC 280-610603/14	04280014.D
Level 6	IC 280-610603/13	04280013.D
Level 7	IC 280-610603/12	04280012.D
Level 8	IC 280-610603/11	04280011.D
Level 9	IC 280-610603/10	04280010.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	5.116	5.136	5.116	5.116	5.115	5.108	5.096	5.095	5.014		4.965 - 5.265	5.101
DNX	5.963	5.983	5.969	5.963	5.955	5.954	5.943	5.942	5.854		5.805 - 6.105	5.947
HMX	+++++	6.630	6.603	6.603	6.595	6.594	6.589	6.588	6.521		6.445 - 6.745	6.590
MNX	7.496	7.523	7.503	7.496	7.489	7.488	7.476	7.475	7.387		7.339 - 7.639	7.481
Picric acid	8.063	8.116	8.076	8.056	8.029	8.008	7.956	7.935	+++++		7.879 - 8.179	8.030
RDX	8.923	8.956	8.929	8.923	8.915	8.908	8.903	8.902	8.814		8.765 - 9.065	8.908
Nitrobenzene	11.489	11.523	11.489	11.483	11.482	11.461	11.462	11.462	11.374		11.332 - 11.632	11.469
3,5-Dinitroaniline	14.376	14.410	14.369	14.363	14.355	14.334	14.329	14.355	14.367		14.205 - 14.505	14.362
1,3-Dinitrobenzene	14.636	14.663	14.629	14.623	14.622	14.601	14.596	14.615	14.527		14.472 - 14.772	14.612
Nitroglycerin	15.196	15.216	15.176	15.176	15.182	15.154	15.149	15.175	15.121		15.032 - 15.332	15.172
2-Nitrotoluene	15.736	15.770	15.723	15.730	15.729	15.708	15.696	15.722	15.661		15.579 - 15.879	15.719
4-Nitrotoluene	15.969	15.996	15.956	15.956	15.955	15.934	15.922	15.948	15.834		15.805 - 16.105	15.941
4-Amino-2,6-dinitrotoluene	16.529	16.556	16.523	16.523	16.515	16.501	16.482	16.528	16.441		16.365 - 16.665	16.511
3-Nitrotoluene	16.843	16.843	16.816	16.816	16.815	16.801	16.782	16.828	16.734		16.665 - 16.965	16.809
2-Amino-4,6-dinitrotoluene	17.369	17.410	17.376	17.370	17.362	17.354	17.329	17.402	17.367		17.212 - 17.512	17.371
1,3,5-Trinitrobenzene	17.443	17.456	17.429	17.423	17.422	17.414	17.389	17.442	17.367		17.272 - 17.572	17.421
2,6-Dinitrotoluene	18.643	18.670	18.643	18.636	18.629	18.628	18.622	18.675	18.561		18.479 - 18.779	18.634
2,4-Dinitrotoluene	19.096	19.123	19.096	19.090	19.082	19.081	19.076	19.128	19.021		18.932 - 19.232	19.088
Tetryl	22.363	22.396	22.369	22.363	22.389	22.361	22.389	22.442	22.341		22.239 - 22.539	22.379
2,4,6-Trinitrotoluene	23.176	23.196	23.163	23.156	23.182	23.154	23.183	23.228	23.134		23.032 - 23.332	23.175
PETN	24.430	24.450	24.423	24.416	24.475	24.428	24.469	24.508	24.421		24.325 - 24.625	24.447
1,2-Dinitrobenzene	12.483	12.516	12.476	12.470	12.469	12.448	12.442	12.455	12.374		12.319 - 12.619	12.459

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-175997-1 Analy Batch No.: 610603

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/28/2023 18:24 Calibration End Date: 04/28/2023 23:03 Calibration ID: 79725

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-610603/18	04280018.D
Level 2	IC 280-610603/17	04280017.D
Level 3	IC 280-610603/16	04280016.D
Level 4	IC 280-610603/15	04280015.D
Level 5	IC 280-610603/14	04280014.D
Level 6	IC 280-610603/13	04280013.D
Level 7	IC 280-610603/12	04280012.D
Level 8	IC 280-610603/11	04280011.D
Level 9	IC 280-610603/10	04280010.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	453838 343462 370331	407727 368303	404407 394444	416291 390186	Ave		394332.075				8.1		20.0			
DNX	280120 247976 265367	286114 268282	294366 283929	286124 281374	Ave		277072.290				5.1		20.0			
HMX	+++++ 184440 193632	222450 169983	215220 187240	195730 189027	Lin2	831.975634	185425.338							0.9970		0.9900
MNX	312425 228103 265422	263710 245259	268963 258928	261611 255982	Ave		262267.073				8.6		20.0			
Picric acid	219700 160808 +++++	172650 149730	179000 163827	170600 165319	Lin2	546.111079	159807.270							0.9960		0.9900
RDX	285200 214572 225981	243150 197783	232420 219114	228270 221588	Lin2	672.503491	215639.318							0.9980		0.9900
Nitrobenzene	426900 386724 401056	393550 354198	417660 395110	415850 398454	Ave		398833.544				5.3		20.0			
3,5-Dinitroaniline	505300 452216 407228	461050 414810	483520 461404	469800 460771	Lin2	607.261331	444569.707							0.9970		0.9900

Note: The M1 coefficient is the same as Ave CF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-175997-1 Analy Batch No.: 610603

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/28/2023 18:24 Calibration End Date: 04/28/2023 23:03 Calibration ID: 79725

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	694600 610632 687042	615350 554495	629180 616069	625960 630835	Ave		629351.397				6.6		20.0			
Nitroglycerin	146030 130878 134334	137045 120030	142168 132805	134661 134666	Ave		134735.154				5.4		20.0			
2-Nitrotoluene	233600 242696 244772	264050 225665	259020 249076	252900 250892	Ave		246963.368				4.8		20.0			
4-Nitrotoluene	220600 226220 241286	223300 203570	243580 227886	230020 230951	Ave		227490.302				5.2		20.0			
4-Amino-2,6-dinitrotoluene	327500 286712 289176	303200 260730	305300 288184	294720 292369	Ave		294210.143				6.1		20.0			
3-Nitrotoluene	326900 284164 298841	291150 260845	310920 290920	295690 292277	Ave		294634.089				6.1		20.0			
2-Amino-4,6-dinitrotoluene	391200 434020 467007	412850 397298	463240 420357	439480 426004	Ave		427939.494				6.1		20.0			
1,3,5-Trinitrobenzene	443800 392672 378606	389950 354488	441180 413963	419460 417113	Ave		405692.417				7.2		20.0			
2,6-Dinitrotoluene	309300 283472 290190	285800 257870	317520 287934	302600 290390	Ave		291675.187				5.9		20.0			
2,4-Dinitrotoluene	598700 572392 588866	612050 519843	608140 580639	594330 585209	Ave		584463.075				4.7		20.0			
Tetryl	328200 273308 283850	317400 246538	284660 274789	275340 278494	Ave		284730.941				8.6		20.0			
2,4,6-Trinitrotoluene	491900 418244 436729	496250 380470	443680 421144	431360 430103	Ave		438875.565				8.2		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-175997-1 Analy Batch No.: 610603

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/28/2023 18:24 Calibration End Date: 04/28/2023 23:03 Calibration ID: 79725

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	163440 140765 142965	144025 128148	145886 141788	146450 141973	Ave		143937.770				6.3		20.0			
1,2-Dinitrobenzene	316900 269384 276674	301900 245698	287580 273104	278930 276103	Ave		280697.021				7.2		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-175997-1 Analy Batch No.: 610603

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/28/2023 18:24 Calibration End Date: 04/28/2023 23:03 Calibration ID: 79725

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-610603/18	04280018.D
Level 2	IC 280-610603/17	04280017.D
Level 3	IC 280-610603/16	04280016.D
Level 4	IC 280-610603/15	04280015.D
Level 5	IC 280-610603/14	04280014.D
Level 6	IC 280-610603/13	04280013.D
Level 7	IC 280-610603/12	04280012.D
Level 8	IC 280-610603/11	04280011.D
Level 9	IC 280-610603/10	04280010.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	4552 147763	8179 276939	20281 391357	41754 928605	86123	0.0100 0.401	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251
DNX	Ave	2804 107420	5728 198949	14733 281655	28641 664081	62056	0.0100 0.400	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250
HMX	Lin2	+++++ 67993	4449 131068	10761 189027	19573 484081	46110	+++++ 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
MNX	Ave	3646 114487	6155 211518	15694 298731	30530 774370	66549	0.0117 0.467	0.0233 0.817	0.0584 1.17	0.117 2.92	0.292
Picric acid	Lin2	2197 59892	3453 114679	8950 165319	17060 +++++	40202	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 +++++	0.250
RDX	Lin2	2852 79113	4863 153380	11621 221588	22827 564953	53643	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Nitrobenzene	Ave	4269 141679	7871 276577	20883 398454	41585 1002641	96681	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
3,5-Dinitroaniline	Lin2	5053 165924	9221 322983	24176 460771	46980 1018070	113054	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
1,3-Dinitrobenzene	Ave	6946 221798	12307 431248	31459 630835	62596 1717605	152658	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Nitroglycerin	Ave	14603 480119	27409 929634	71084 1346659	134661 3358347	327195	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
2-Nitrotoluene	Ave	2336 90266	5281 174353	12951 250892	25290 611929	60674	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
4-Nitrotoluene	Ave	2206 81428	4466 159520	12179 230951	23002 603215	56555	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
4-Amino-2,6-dinitrotoluene	Ave	3275	6064	15265	29472	71678	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.: 280-175997-1 Analy Batch No.: 610603

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/28/2023 18:24 Calibration End Date: 04/28/2023 23:03 Calibration ID: 79725

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
		104292	201729	292369	722940		0.400	0.700	1.00	2.50	
3-Nitrotoluene	Ave	3269	5823	15546	29569	71041	0.0100	0.0200	0.0500	0.100	0.250
		104338	203644	292277	747102		0.400	0.700	1.00	2.50	
2-Amino-4,6-dinitrotoluene	Ave	3912	8257	23162	43948	108505	0.0100	0.0200	0.0500	0.100	0.250
		158919	294250	426004	1167517		0.400	0.700	1.00	2.50	
1,3,5-Trinitrobenzene	Ave	4438	7799	22059	41946	98168	0.0100	0.0200	0.0500	0.100	0.250
		141795	289774	417113	946516		0.400	0.700	1.00	2.50	
2,6-Dinitrotoluene	Ave	3093	5716	15876	30260	70868	0.0100	0.0200	0.0500	0.100	0.250
		103148	201554	290390	725476		0.400	0.700	1.00	2.50	
2,4-Dinitrotoluene	Ave	5987	12241	30407	59433	143098	0.0100	0.0200	0.0500	0.100	0.250
		207937	406447	585209	1472164		0.400	0.700	1.00	2.50	
Tetryl	Ave	3282	6348	14233	27534	68327	0.0100	0.0200	0.0500	0.100	0.250
		98615	192352	278494	709626		0.400	0.700	1.00	2.50	
2,4,6-Trinitrotoluene	Ave	4919	9925	22184	43136	104561	0.0100	0.0200	0.0500	0.100	0.250
		152188	294801	430103	1091822		0.400	0.700	1.00	2.50	
PETN	Ave	16344	28805	72943	146450	351913	0.100	0.200	0.500	1.00	2.50
		512590	992519	1419730	3574120		4.00	7.00	10.0	25.0	
1,2-Dinitrobenzene	Ave	3169	6038	14379	27893	67346	0.0100	0.0200	0.0500	0.100	0.250
		98279	191173	276103	691686		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_X5\20230428-120896.b\04280010.D
Lims ID: IC INT 9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 28-Apr-2023 18:24:11 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 9
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub6

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 29-Apr-2023 13:04:16 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1621

First Level Reviewer: LV5D Date: 29-Apr-2023 13:01:46

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.014	5.115	-0.101	928605	2.51	2.35	
4 DNX	1	5.854	5.955	-0.101	664081	2.50	2.40	
5 HMX	1	6.521	6.595	-0.074	484081	2.50	2.61	
6 MNX	1	7.387	7.489	-0.102	774370	2.92	2.95	
7 2,4,6-Trinitrophenol	1	7.867	8.029	-0.162	285146	2.50	1.78	
8 RDX	1	8.814	8.915	-0.101	564953	2.50	2.62	
9 Nitrobenzene	1	11.374	11.482	-0.108	1002641	2.50	2.51	
$ 10 1,2-Dinitrobenzene	1	12.374	12.469	-0.095	691686	2.50	2.46	
11 3,5-Dinitroaniline	1	14.367	14.355	0.012	1018070	2.50	2.29	Ma
12 1,3-Dinitrobenzene	1	14.527	14.622	-0.095	1717605	2.50	2.73	M
13 Nitroglycerin	2	15.121	15.182	-0.061	3358347	25.0	24.9	
14 o-Nitrotoluene	1	15.661	15.729	-0.068	611929	2.50	2.48	M
16 p-Nitrotoluene	1	15.834	15.955	-0.121	603215	2.50	2.65	M
17 4-Amino-2,6-dinitrotoluene	1	16.441	16.515	-0.074	722940	2.50	2.46	M
18 m-Nitrotoluene	1	16.734	16.815	-0.081	747102	2.50	2.54	M
19 2-Amino-4,6-dinitrotoluene	1	17.367	17.362	0.005	1167517	2.50	2.73	M
20 1,3,5-Trinitrobenzene	1	17.367	17.422	-0.055	946516	2.50	2.33	M
21 2,6-Dinitrotoluene	1	18.561	18.629	-0.068	725476	2.50	2.49	M
22 2,4-Dinitrotoluene	1	19.021	19.082	-0.061	1472164	2.50	2.52	M
23 Tetryl	1	22.341	22.389	-0.048	709626	2.50	2.49	
24 2,4,6-Trinitrotoluene	1	23.134	23.182	-0.048	1091822	2.50	2.49	
25 PETN	2	24.421	24.475	-0.054	3574120	25.0	24.8	

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

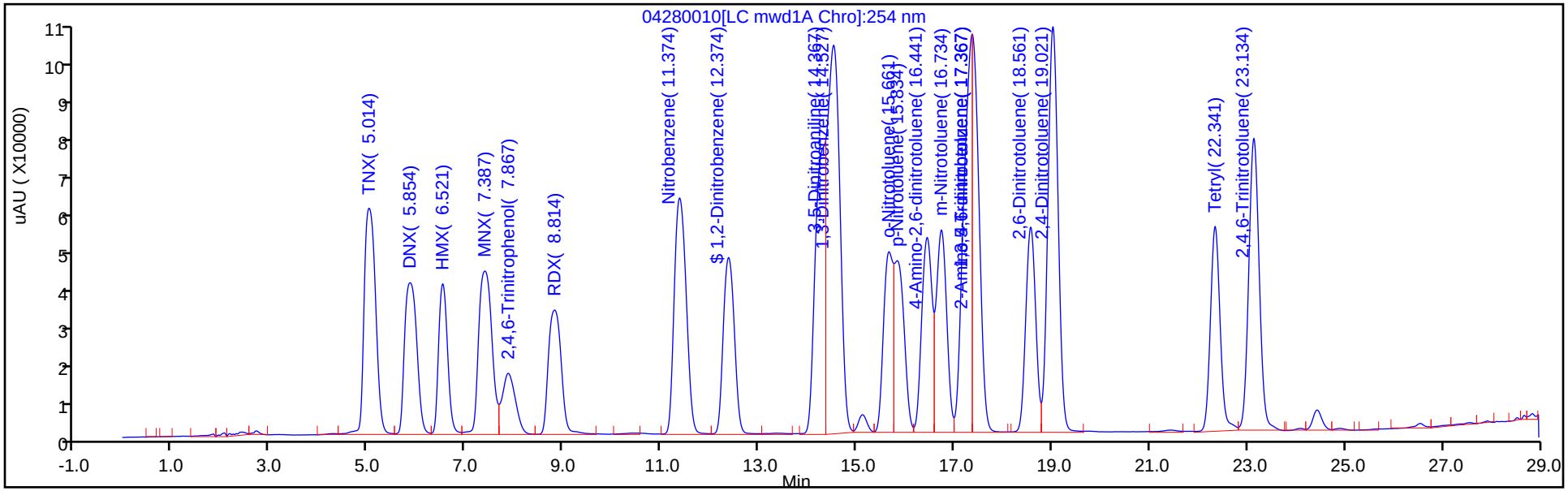
Report Date: 29-Apr-2023 13:04:16 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

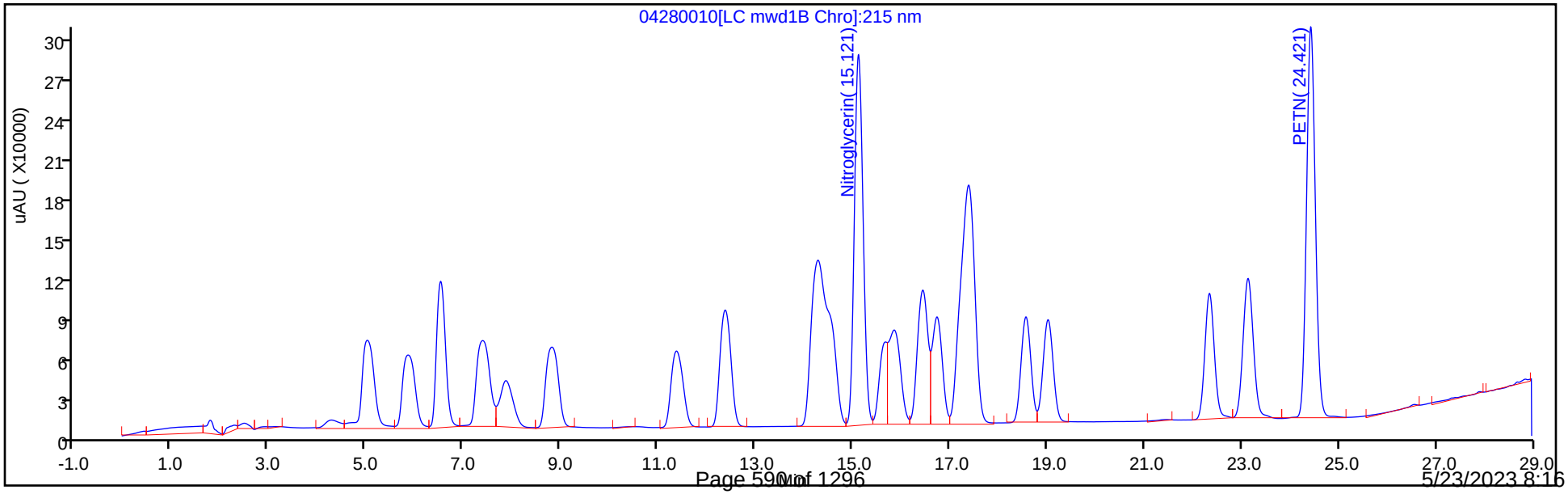
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Injection Date:	28-Apr-2023 18:24:11	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC INT 9			Worklist Smp#:	10
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

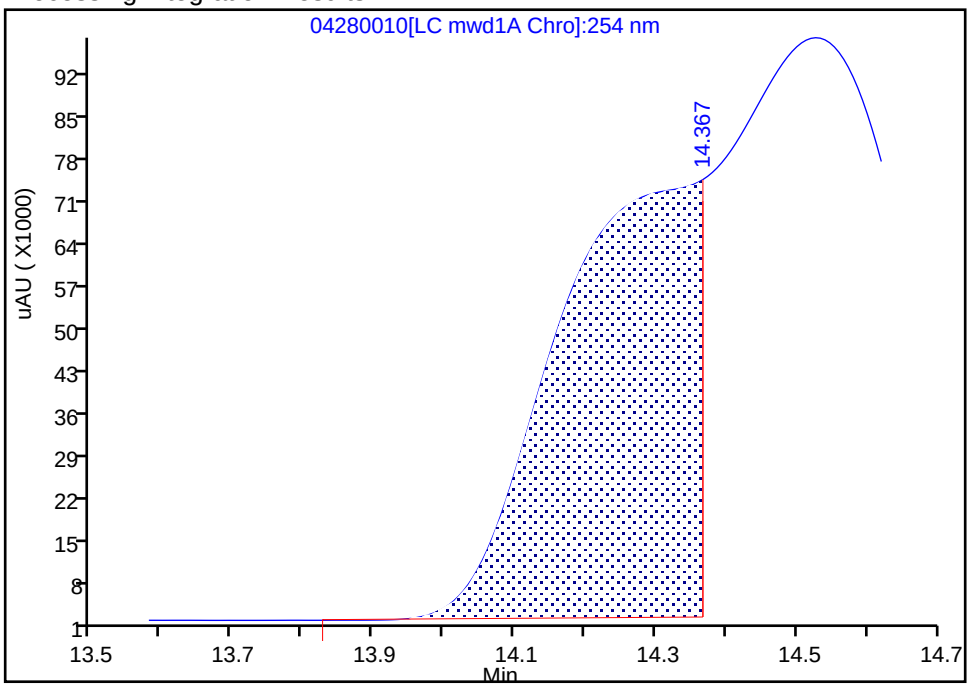
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Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

11 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

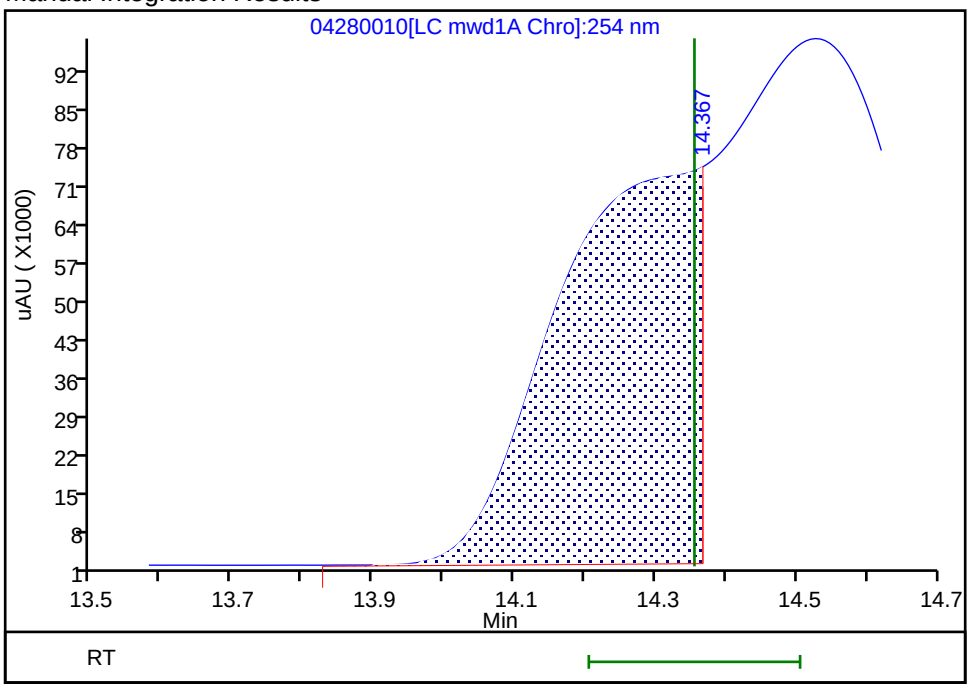
Processing Integration Results

RT: 14.37
Area: 1013469
Amount: 2.724745
Amount Units: ug/ml



Manual Integration Results

RT: 14.37
Area: 1018070
Amount: 2.288646
Amount Units: ug/ml



Reviewer: LV5D, 28-Apr-2023 19:01:40
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

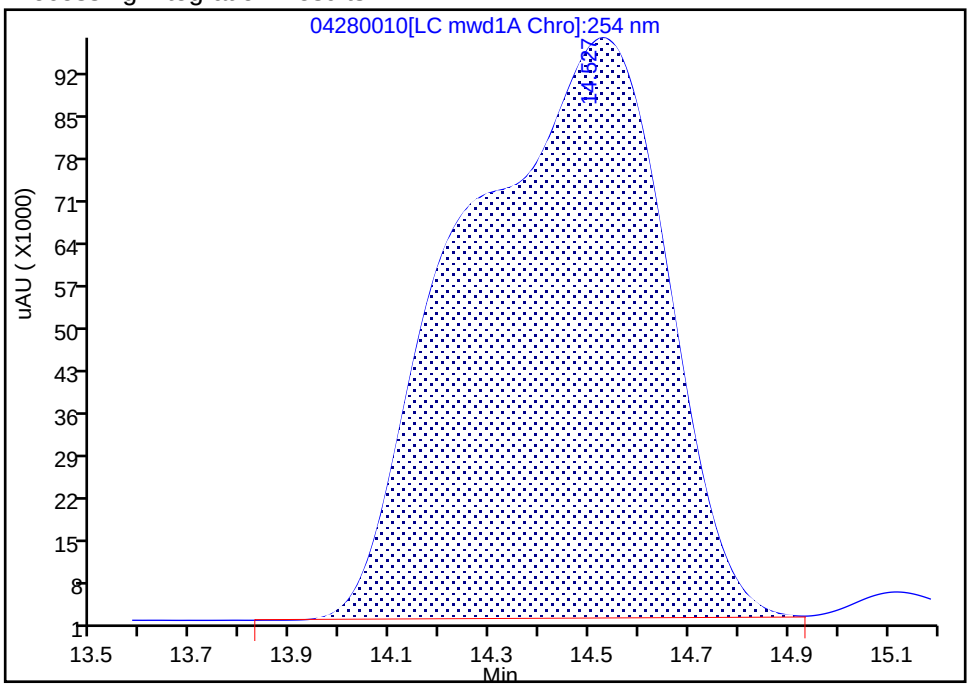
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Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

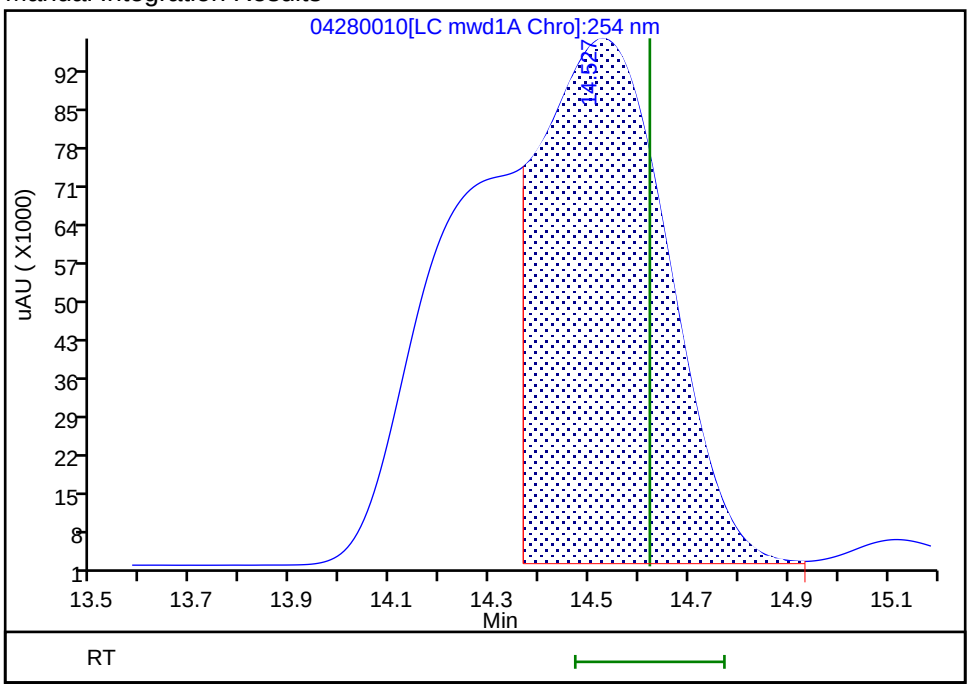
Processing Integration Results

RT: 14.53
Area: 2715993
Amount: 3.616571
Amount Units: ug/ml



Manual Integration Results

RT: 14.53
Area: 1717605
Amount: 2.729167
Amount Units: ug/ml



Reviewer: LV5D, 28-Apr-2023 19:01:40
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

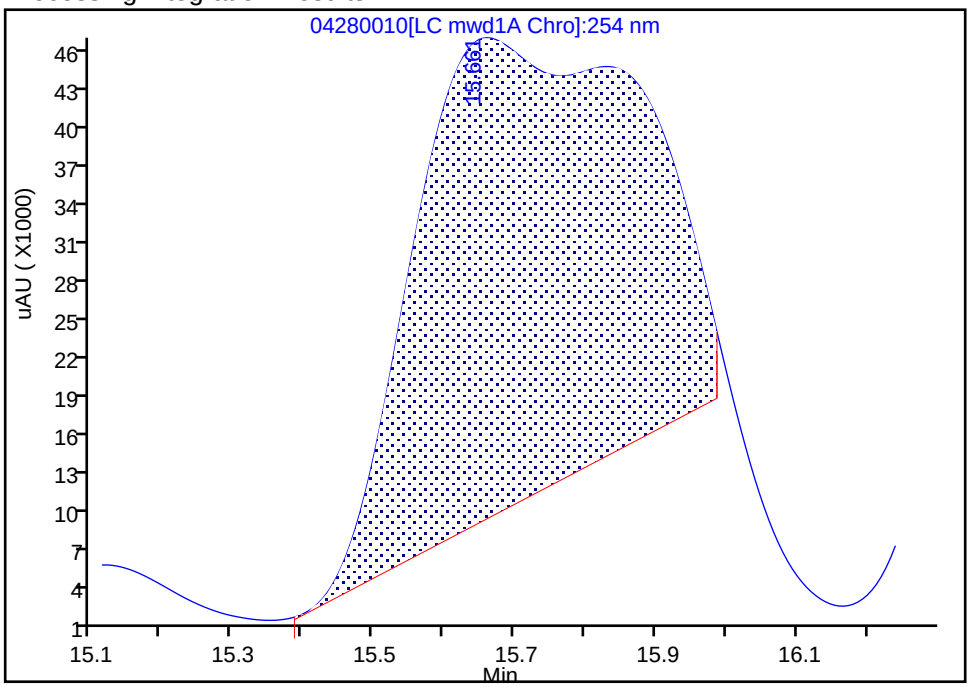
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Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

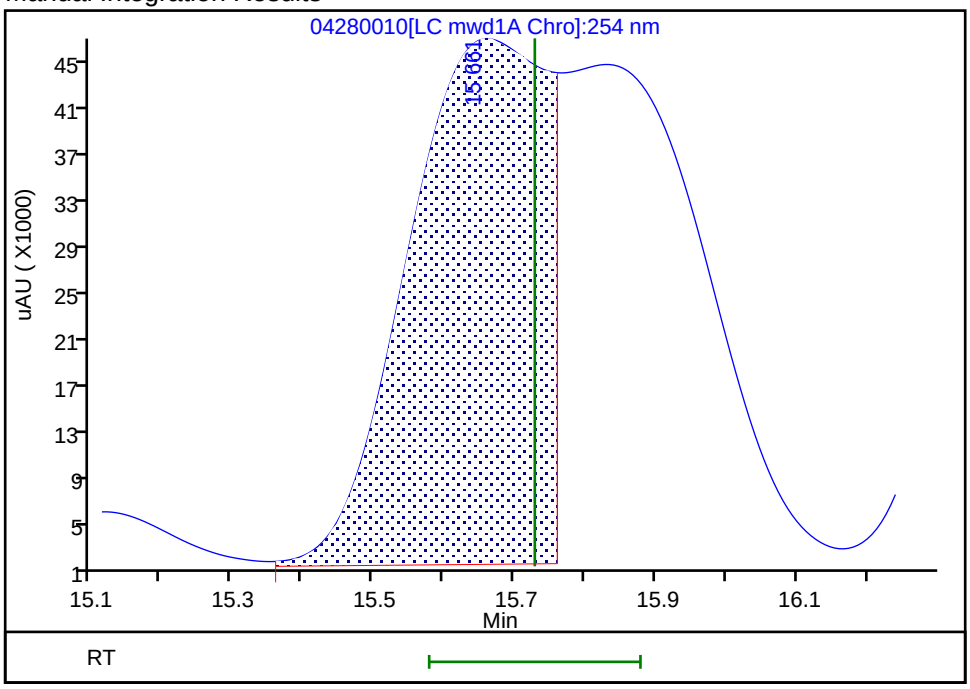
Processing Integration Results

RT: 15.66
Area: 811716
Amount: 3.605542
Amount Units: ug/ml



Manual Integration Results

RT: 15.66
Area: 611929
Amount: 2.477813
Amount Units: ug/ml



Reviewer: LV5D, 28-Apr-2023 19:01:40
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

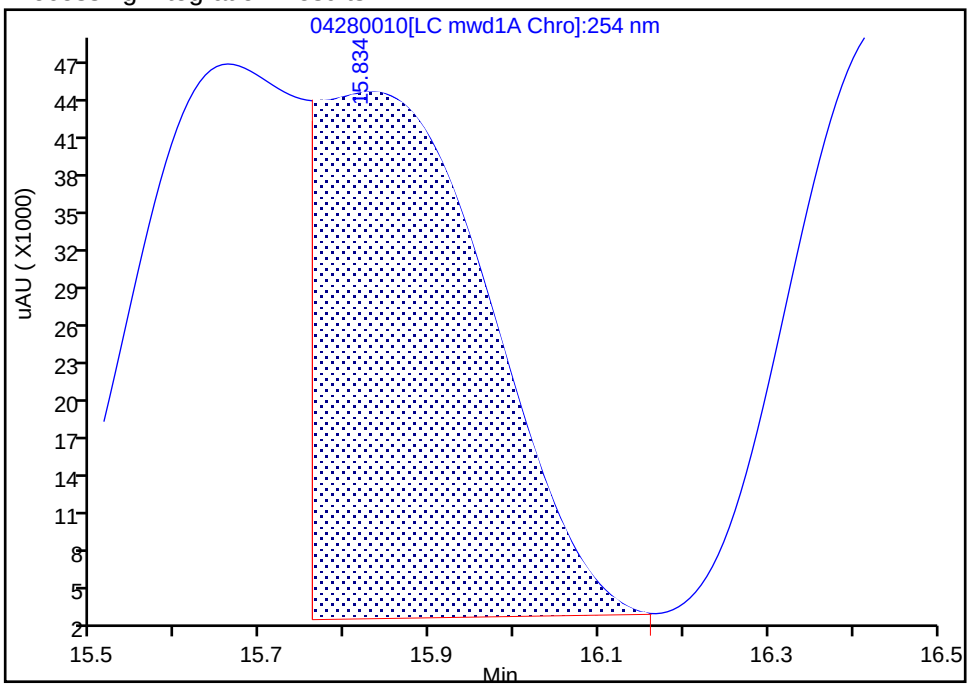
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Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

16 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

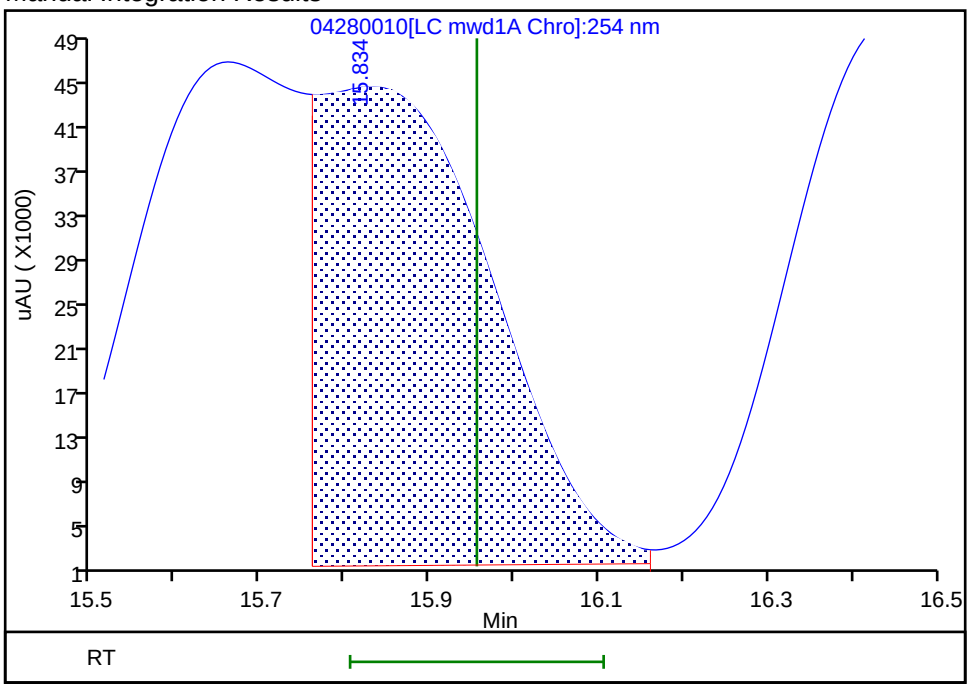
Processing Integration Results

RT: 15.83
Area: 577007
Amount: 2.272934
Amount Units: ug/ml



Manual Integration Results

RT: 15.83
Area: 603215
Amount: 2.651608
Amount Units: ug/ml



Reviewer: LV5D, 28-Apr-2023 19:01:40
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

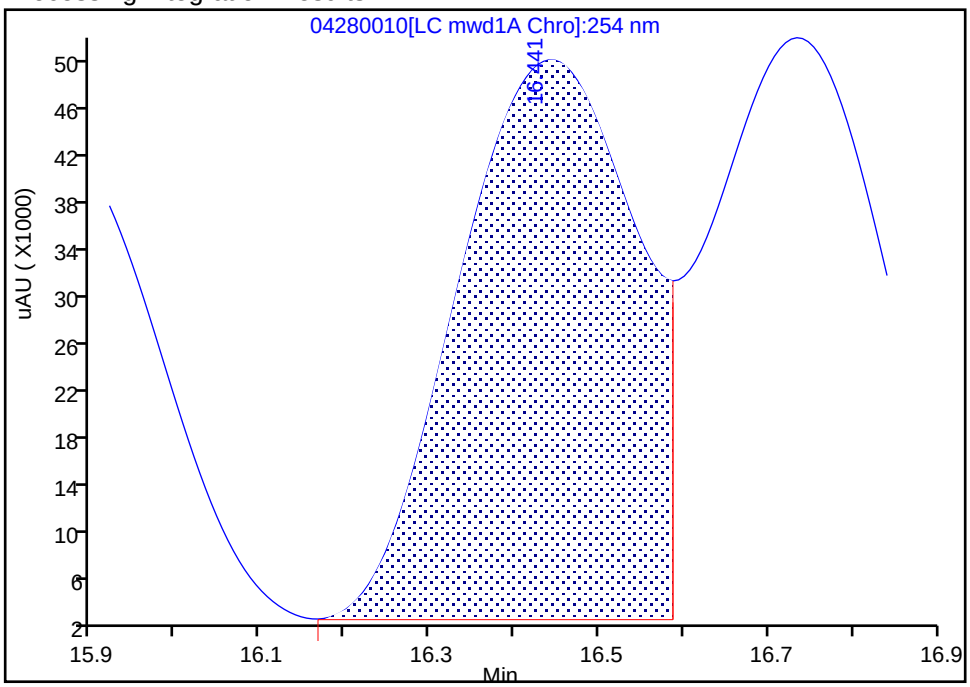
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Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

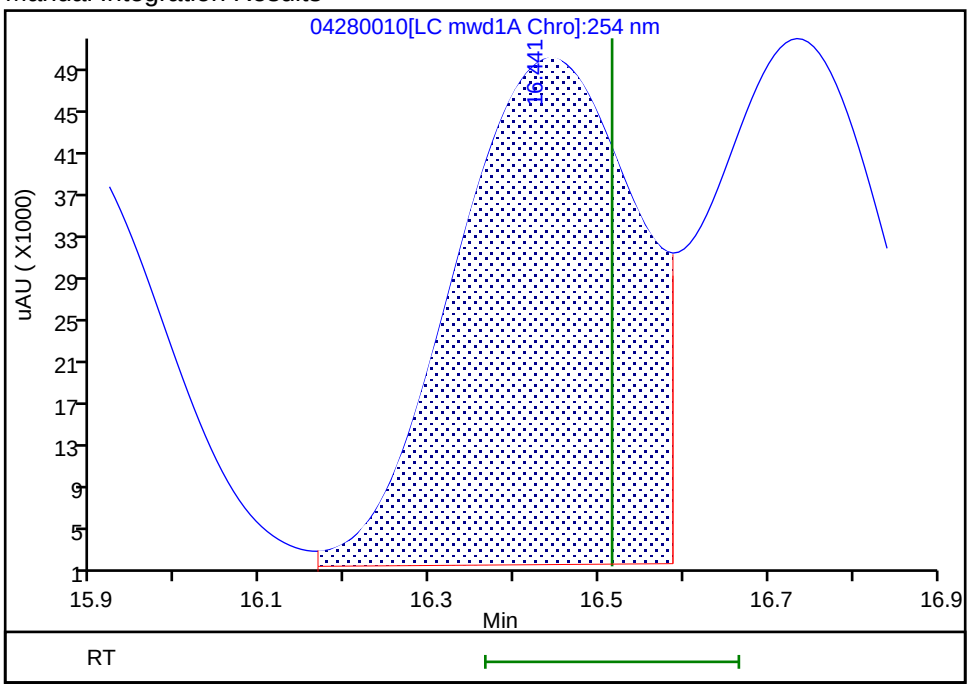
Processing Integration Results

RT: 16.44
Area: 691163
Amount: 2.645631
Amount Units: ug/ml



Manual Integration Results

RT: 16.44
Area: 722940
Amount: 2.457223
Amount Units: ug/ml



Reviewer: LV5D, 28-Apr-2023 19:01:40
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

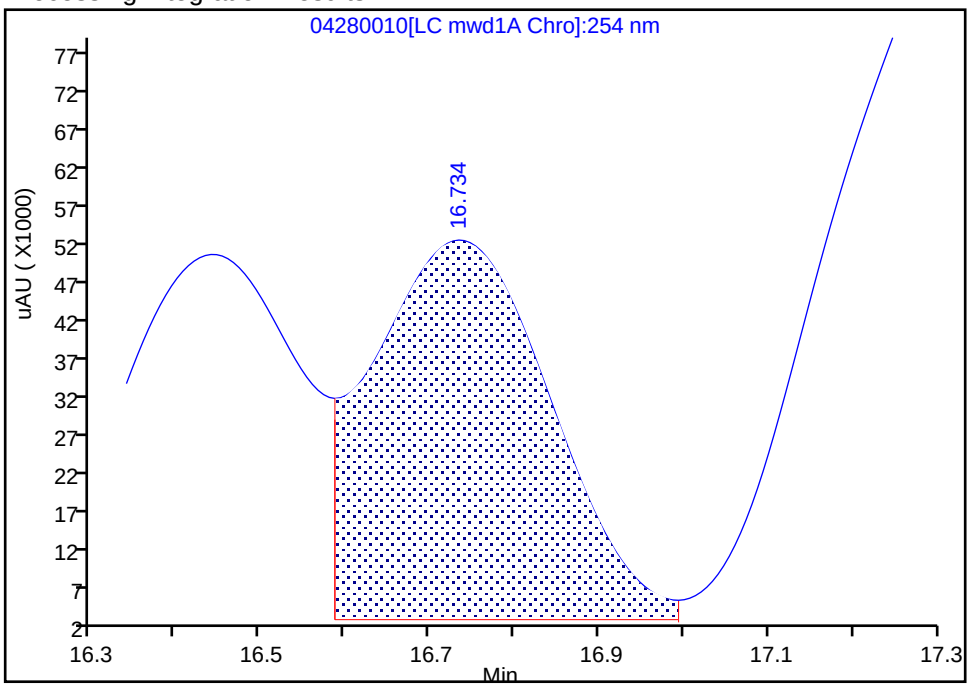
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Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

18 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

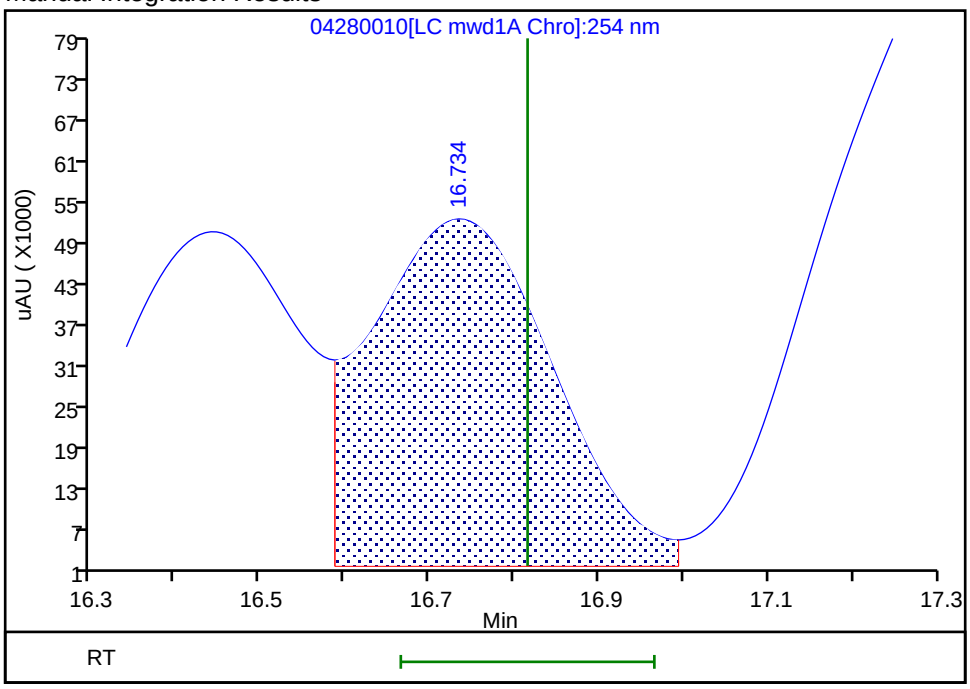
Processing Integration Results

RT: 16.73
Area: 719908
Amount: 2.277668
Amount Units: ug/ml



Manual Integration Results

RT: 16.73
Area: 747102
Amount: 2.535694
Amount Units: ug/ml



Reviewer: LV5D, 28-Apr-2023 19:01:40
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

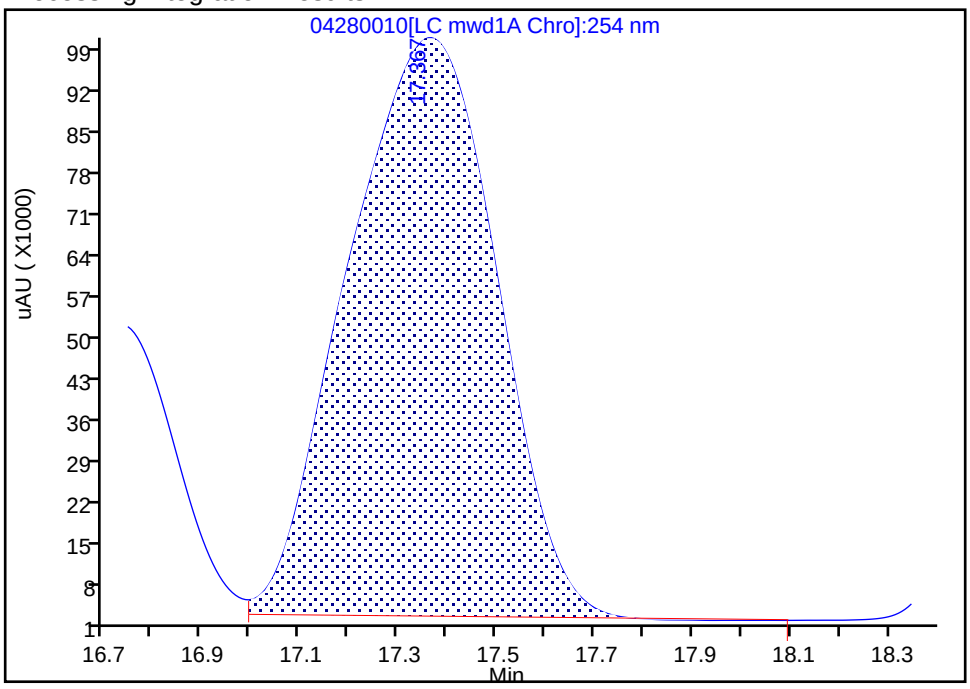
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Injection Date:	28-Apr-2023 18:24:11	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

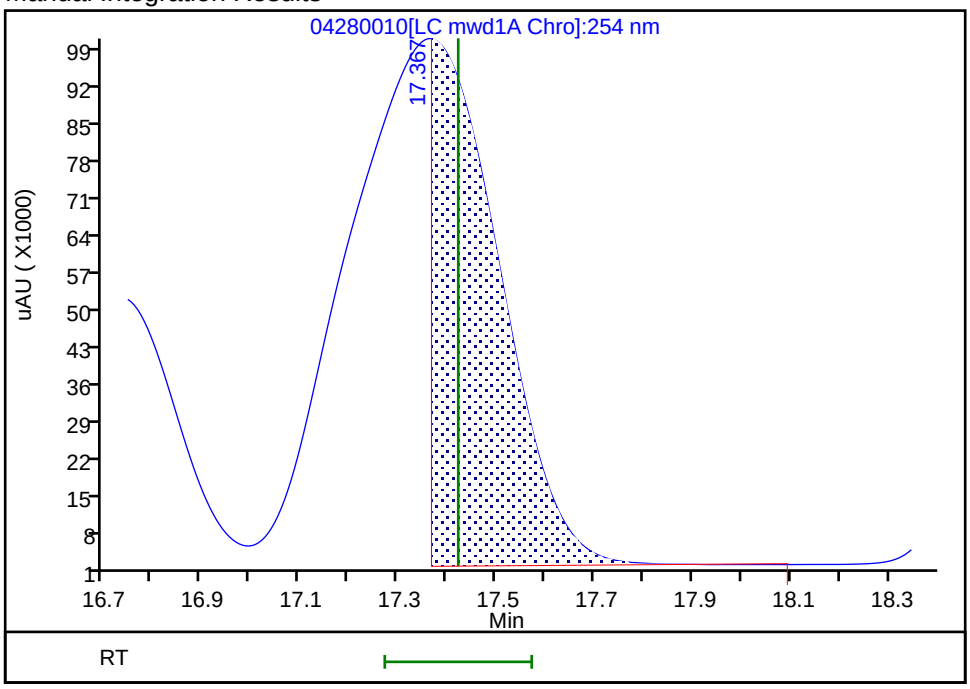
Processing Integration Results

RT: 17.37
Area: 2081660
Amount: 3.645357
Amount Units: ug/ml



Manual Integration Results

RT: 17.37
Area: 946516
Amount: 2.333088
Amount Units: ug/ml



Reviewer: LV5D, 28-Apr-2023 19:01:40

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

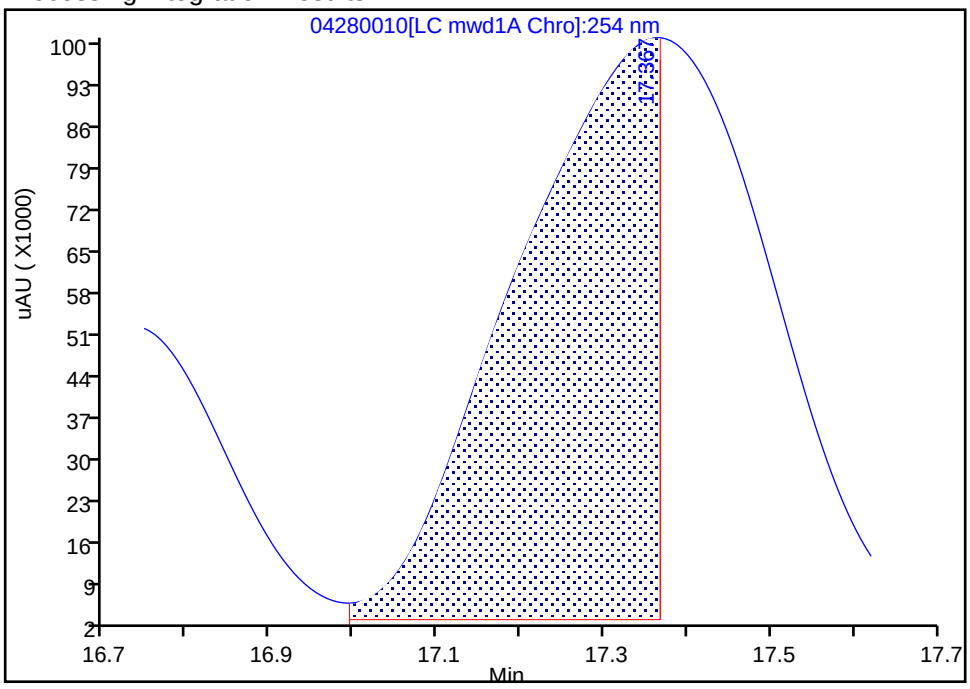
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Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

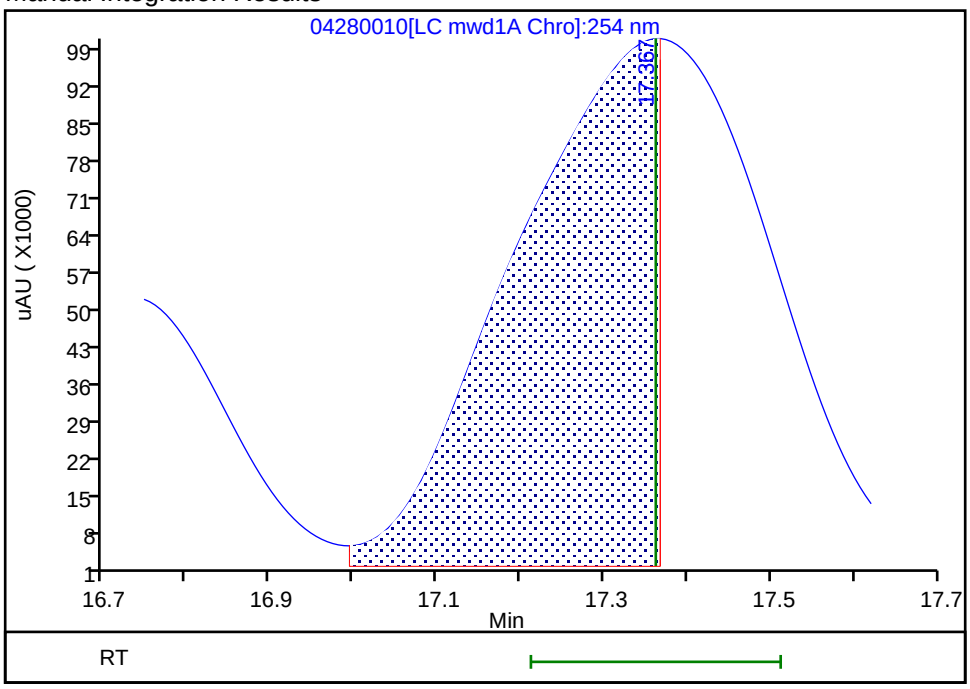
Processing Integration Results

RT: 17.37
Area: 1147839
Amount: 3.846971
Amount Units: ug/ml



Manual Integration Results

RT: 17.37
Area: 1167517
Amount: 2.728229
Amount Units: ug/ml



Reviewer: LV5D, 28-Apr-2023 19:01:40
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

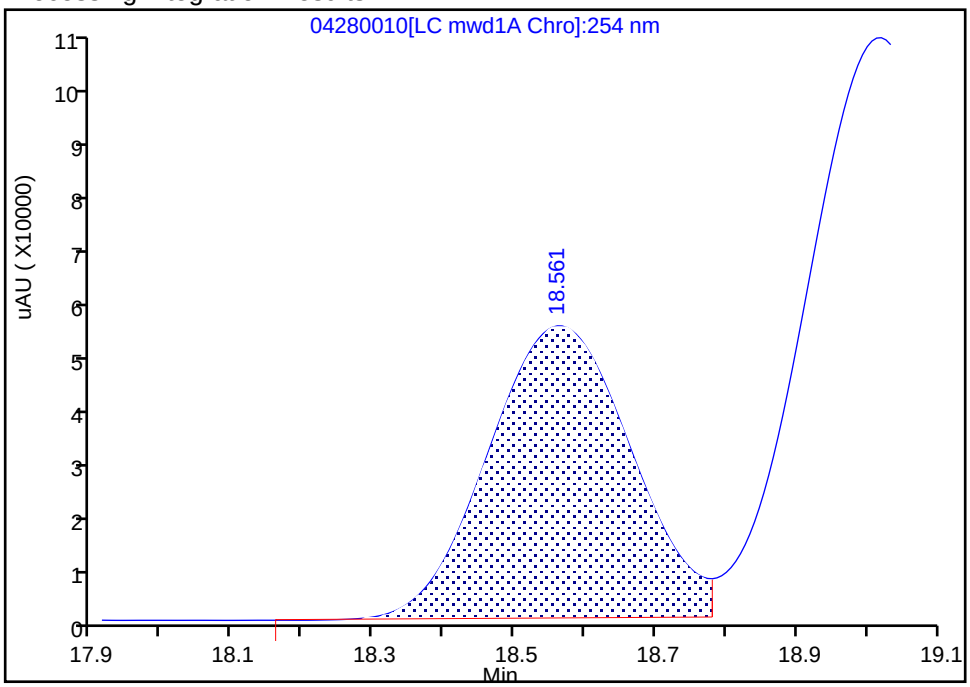
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Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

21 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

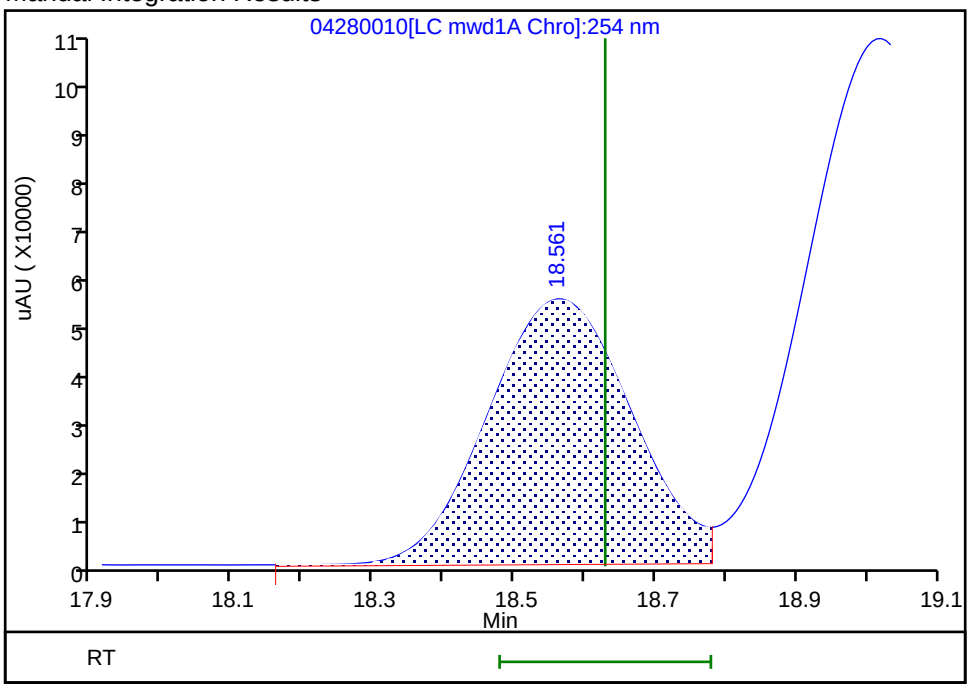
Processing Integration Results

RT: 18.56
Area: 716752
Amount: 2.903314
Amount Units: ug/ml



Manual Integration Results

RT: 18.56
Area: 725476
Amount: 2.487274
Amount Units: ug/ml



Reviewer: LV5D, 28-Apr-2023 19:01:40
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

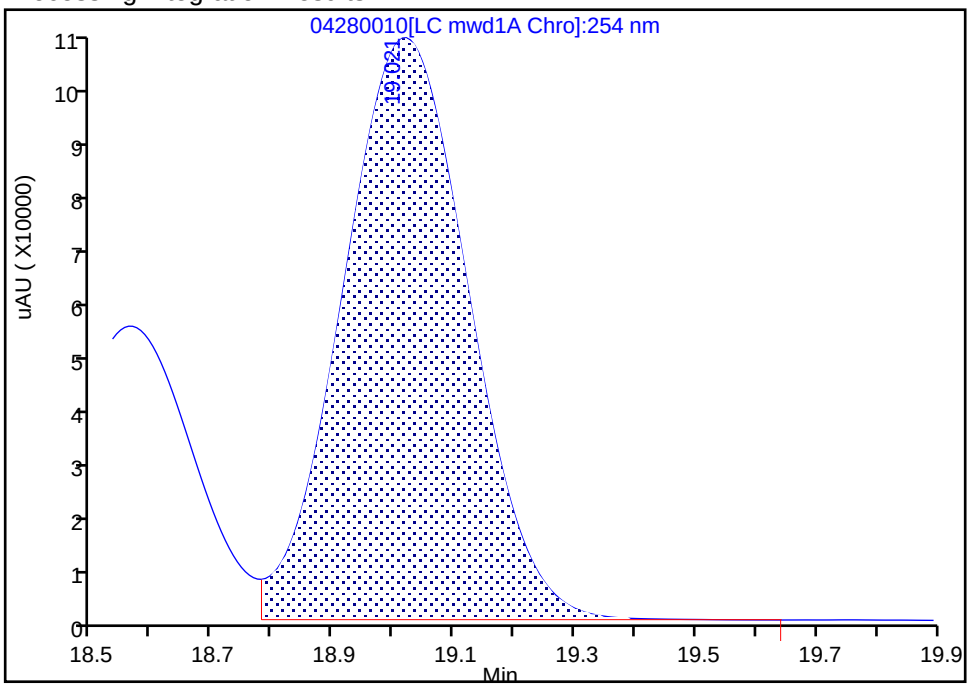
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Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

22 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

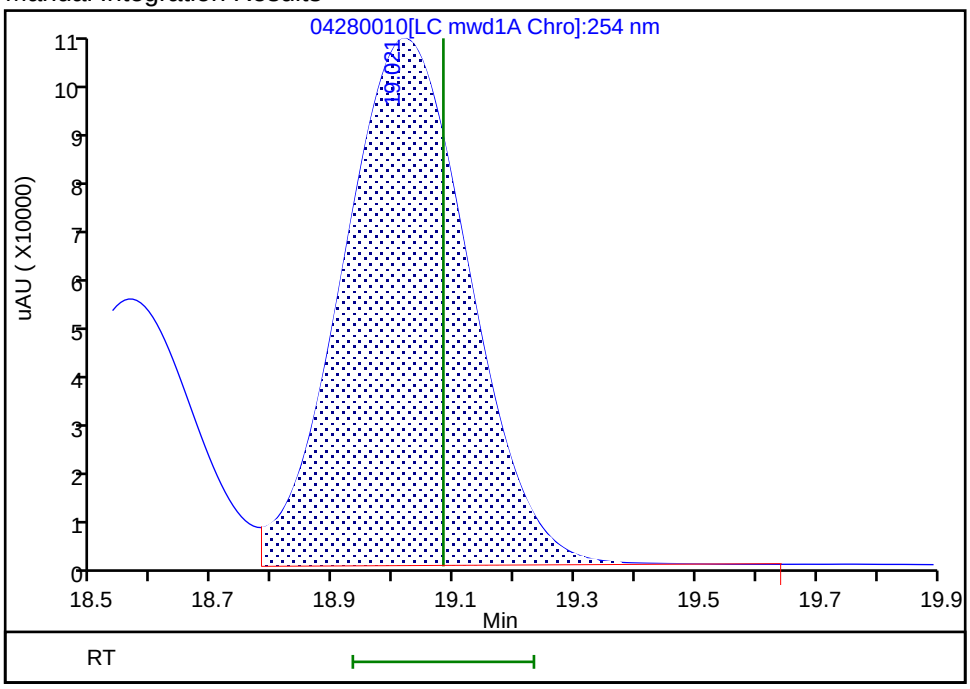
Processing Integration Results

RT: 19.02
Area: 1458826
Amount: 2.601930
Amount Units: ug/ml



Manual Integration Results

RT: 19.02
Area: 1472164
Amount: 2.518831
Amount Units: ug/ml



Reviewer: LV5D, 28-Apr-2023 19:01:40

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280011.D
Lims ID: IC INT 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 28-Apr-2023 18:59:07 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 8
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub6

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 29-Apr-2023 13:04:17 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1621

First Level Reviewer: LV5D Date: 28-Apr-2023 20:43:46

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.095	5.115	-0.020	391357	1.00	0.99	
4 DNX	1	5.942	5.955	-0.013	281655	1.00	1.02	
5 HMX	1	6.588	6.595	-0.007	189027	1.00	1.01	
6 MNX	1	7.475	7.489	-0.014	298731	1.17	1.14	
7 2,4,6-Trinitrophenol	1	7.935	8.029	-0.094	165319	1.00	1.03	
8 RDX	1	8.902	8.915	-0.013	221588	1.00	1.02	
9 Nitrobenzene	1	11.462	11.482	-0.020	398454	1.00	1.00	
$ 10 1,2-Dinitrobenzene	1	12.455	12.469	-0.014	276103	1.00	0.9836	
11 3,5-Dinitroaniline	1	14.355	14.355	0.000	460771	1.00	1.04	
12 1,3-Dinitrobenzene	1	14.615	14.622	-0.007	630835	1.00	1.00	
13 Nitroglycerin	2	15.175	15.182	-0.007	1346659	10.0	10.0	
14 o-Nitrotoluene	1	15.722	15.729	-0.007	250892	1.00	1.02	
16 p-Nitrotoluene	1	15.948	15.955	-0.007	230951	1.00	1.02	
17 4-Amino-2,6-dinitrotoluene	1	16.528	16.515	0.013	292369	1.00	0.99	
18 m-Nitrotoluene	1	16.828	16.815	0.013	292277	1.00	0.99	
19 2-Amino-4,6-dinitrotoluene	1	17.402	17.362	0.040	426004	1.00	1.00	Ma
20 1,3,5-Trinitrobenzene	1	17.442	17.422	0.020	417113	1.00	1.03	M
21 2,6-Dinitrotoluene	1	18.675	18.629	0.046	290390	1.00	1.00	
22 2,4-Dinitrotoluene	1	19.128	19.082	0.046	585209	1.00	1.00	
23 Tetryl	1	22.442	22.389	0.053	278494	1.00	0.9781	
24 2,4,6-Trinitrotoluene	1	23.228	23.182	0.046	430103	1.00	0.9800	
25 PETN	2	24.508	24.475	0.033	1419730	10.0	9.86	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00076	Amount Added: 100.00	Units: uL
8330 DMT_00013	Amount Added: 50.00	Units: uL

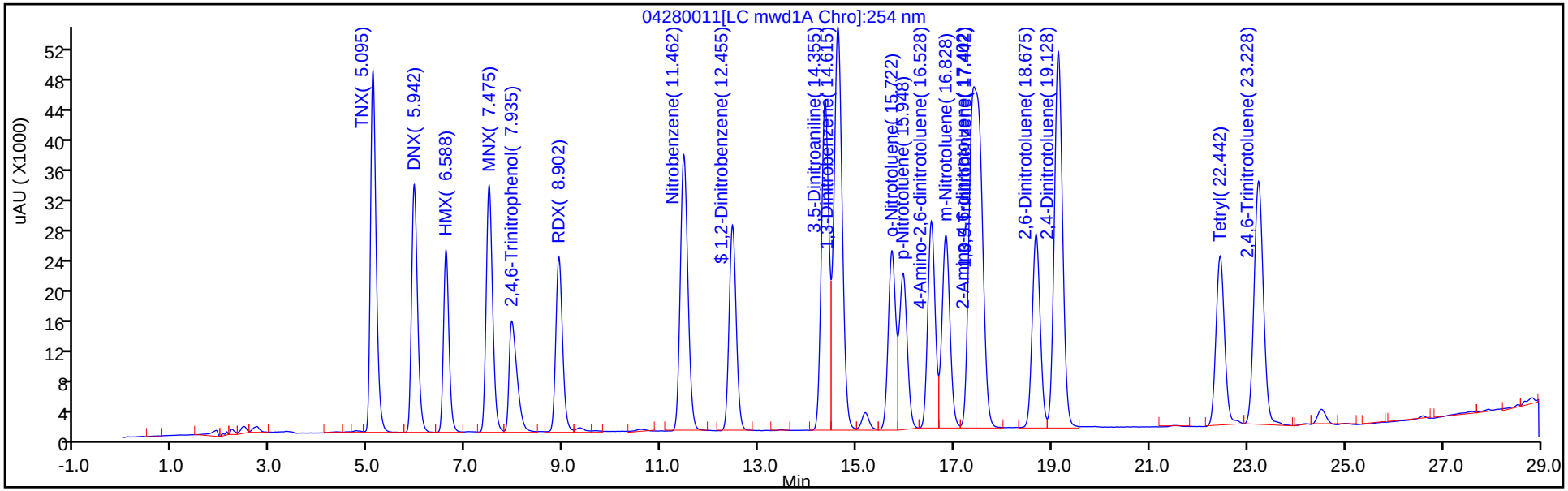
Report Date: 29-Apr-2023 13:04:17 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

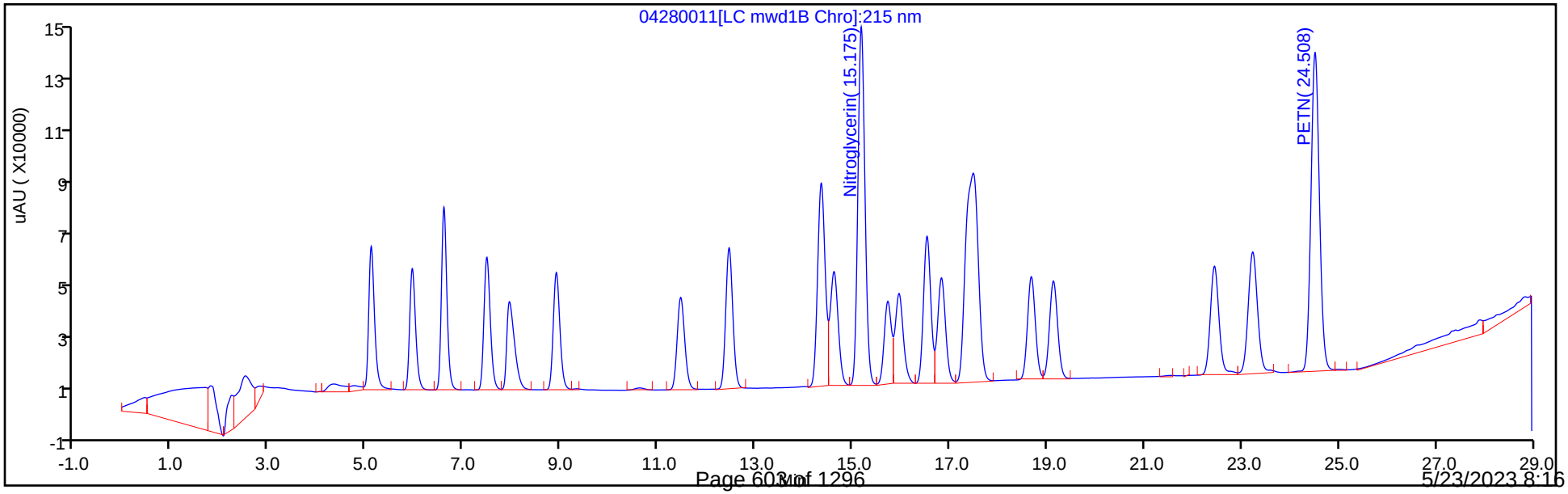
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Injection Date:	28-Apr-2023 18:59:07	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC INT 8			Worklist Smp#:	11
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



5/23/2023 8:16 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

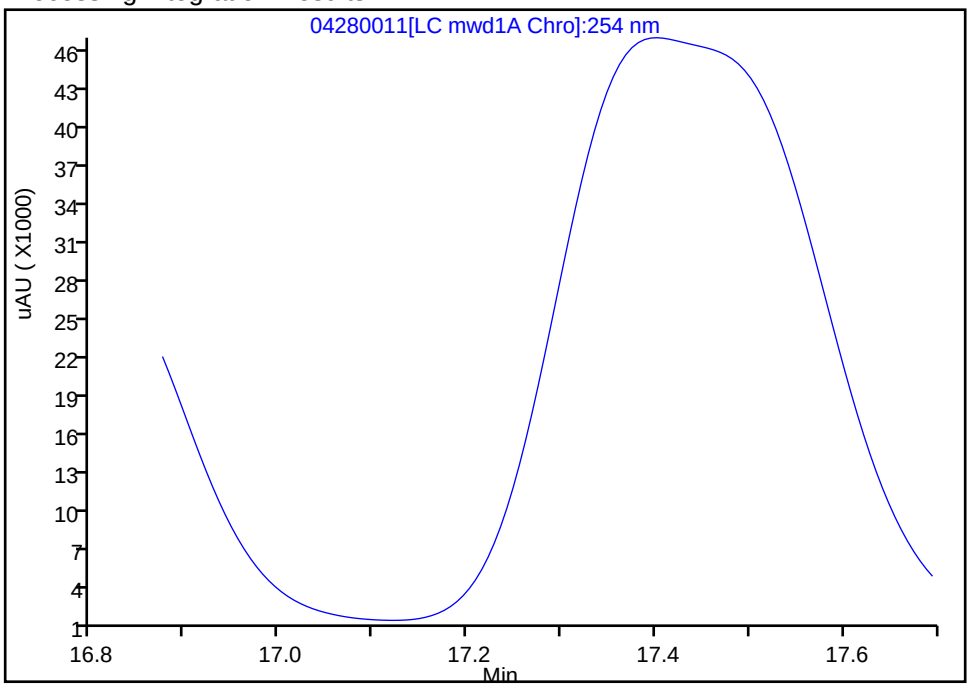
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Injection Date:	28-Apr-2023 18:59:07	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 8				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

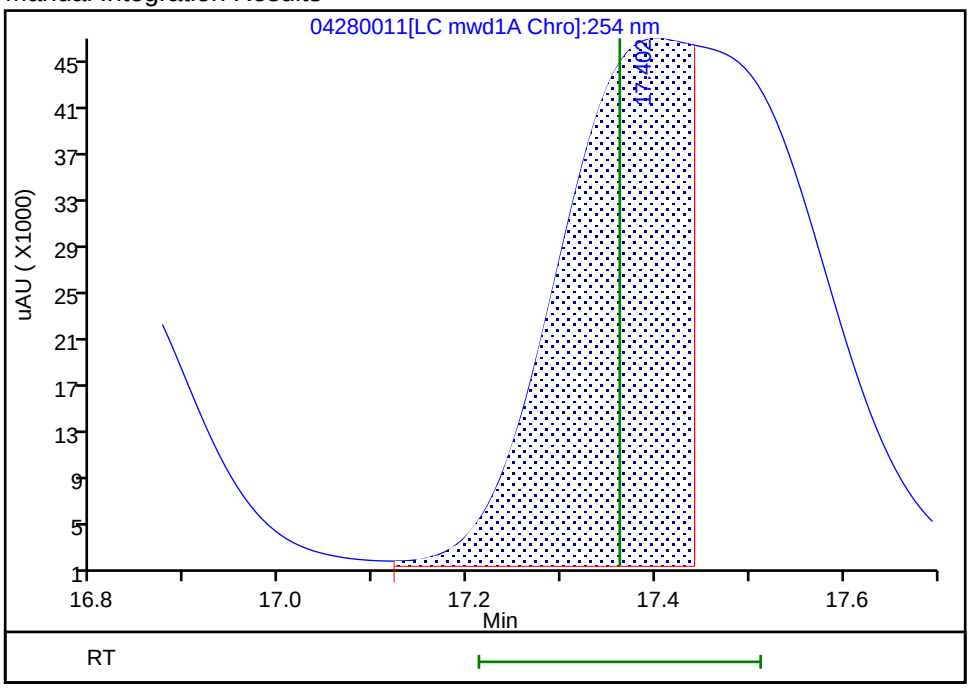
Not Detected
Expected RT: 17.36

Processing Integration Results



Manual Integration Results

RT: 17.40
Area: 426004
Amount: 0.995477
Amount Units: ug/ml



Reviewer: LV5D, 28-Apr-2023 20:43:43
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

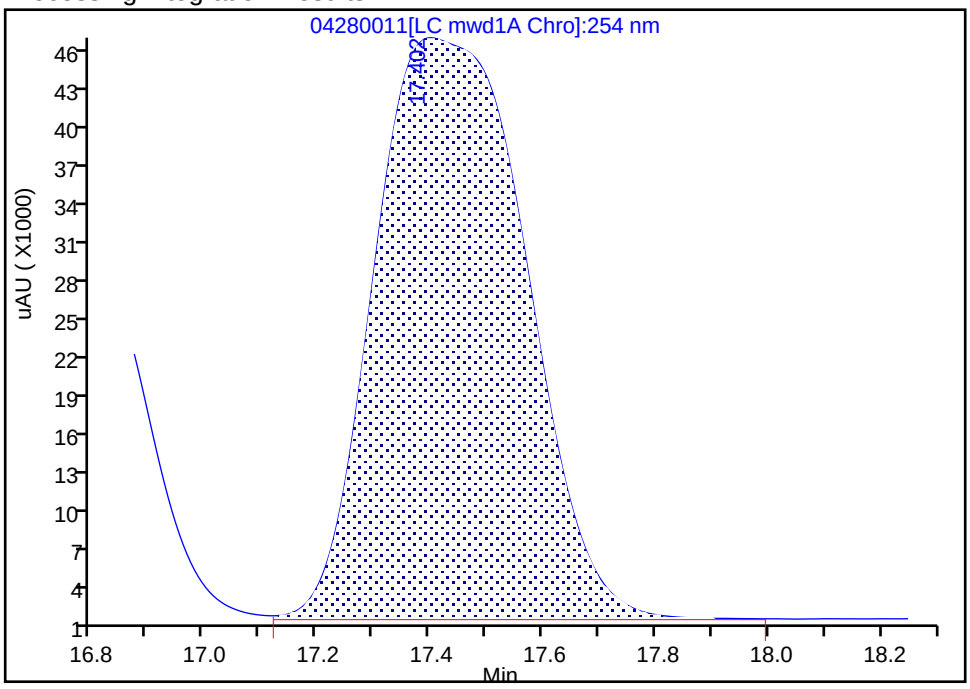
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Injection Date:	28-Apr-2023 18:59:07	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 8				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

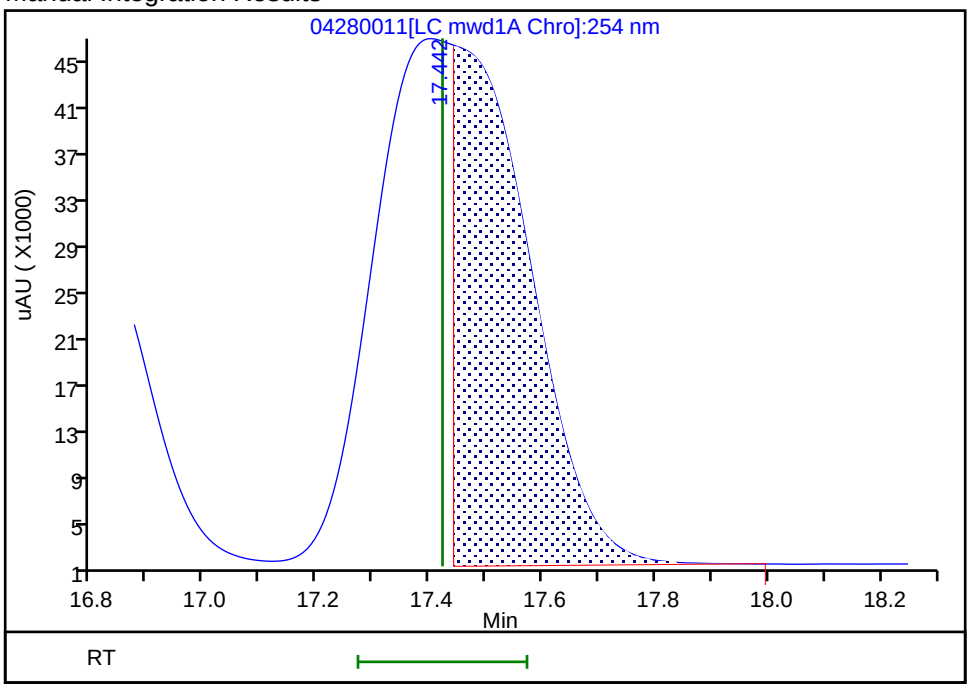
Processing Integration Results

RT: 17.40
Area: 843108
Amount: 1.537916
Amount Units: ug/ml



Manual Integration Results

RT: 17.44
Area: 417113
Amount: 1.028151
Amount Units: ug/ml



Reviewer: LV5D, 28-Apr-2023 20:43:40

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280012.D
Lims ID: IC INT 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 28-Apr-2023 19:34:01 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 7
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub6

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 29-Apr-2023 13:04:17 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1621

First Level Reviewer: LV5D Date: 28-Apr-2023 20:44:11

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.096	5.115	-0.019	276939	0.7021	0.7023	
4 DNX	1	5.943	5.955	-0.012	198949	0.7007	0.7180	
5 HMX	1	6.589	6.595	-0.006	131068	0.7000	0.7024	
6 MNX	1	7.476	7.489	-0.013	211518	0.8169	0.8065	
7 2,4,6-Trinitrophenol	1	7.956	8.029	-0.073	114679	0.7000	0.7142	
8 RDX	1	8.903	8.915	-0.012	153380	0.7000	0.7082	
9 Nitrobenzene	1	11.462	11.482	-0.020	276577	0.7000	0.6935	
$ 10 1,2-Dinitrobenzene	1	12.442	12.469	-0.027	191173	0.7000	0.6811	
11 3,5-Dinitroaniline	1	14.329	14.355	-0.026	322983	0.7000	0.7251	
12 1,3-Dinitrobenzene	1	14.596	14.622	-0.026	431248	0.7000	0.6852	
13 Nitroglycerin	2	15.149	15.182	-0.033	929634	7.00	6.90	
14 o-Nitrotoluene	1	15.696	15.729	-0.033	174353	0.7000	0.7060	
16 p-Nitrotoluene	1	15.922	15.955	-0.033	159520	0.7000	0.7012	
17 4-Amino-2,6-dinitrotoluene	1	16.482	16.515	-0.033	201729	0.7000	0.6857	
18 m-Nitrotoluene	1	16.782	16.815	-0.033	203644	0.7000	0.6912	
19 2-Amino-4,6-dinitrotoluene	1	17.329	17.362	-0.033	294250	0.7000	0.6876	M
20 1,3,5-Trinitrobenzene	1	17.389	17.422	-0.033	289774	0.7000	0.7143	Ma
21 2,6-Dinitrotoluene	1	18.622	18.629	-0.007	201554	0.7000	0.6910	
22 2,4-Dinitrotoluene	1	19.076	19.082	-0.006	406447	0.7000	0.6954	
23 Tetryl	1	22.389	22.389	0.000	192352	0.7000	0.6756	
24 2,4,6-Trinitrotoluene	1	23.183	23.182	0.001	294801	0.7000	0.6717	
25 PETN	2	24.469	24.475	-0.006	992519	7.00	6.90	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00076	Amount Added:	70.00	Units: uL
8330 DMT_00013	Amount Added:	35.00	Units: uL

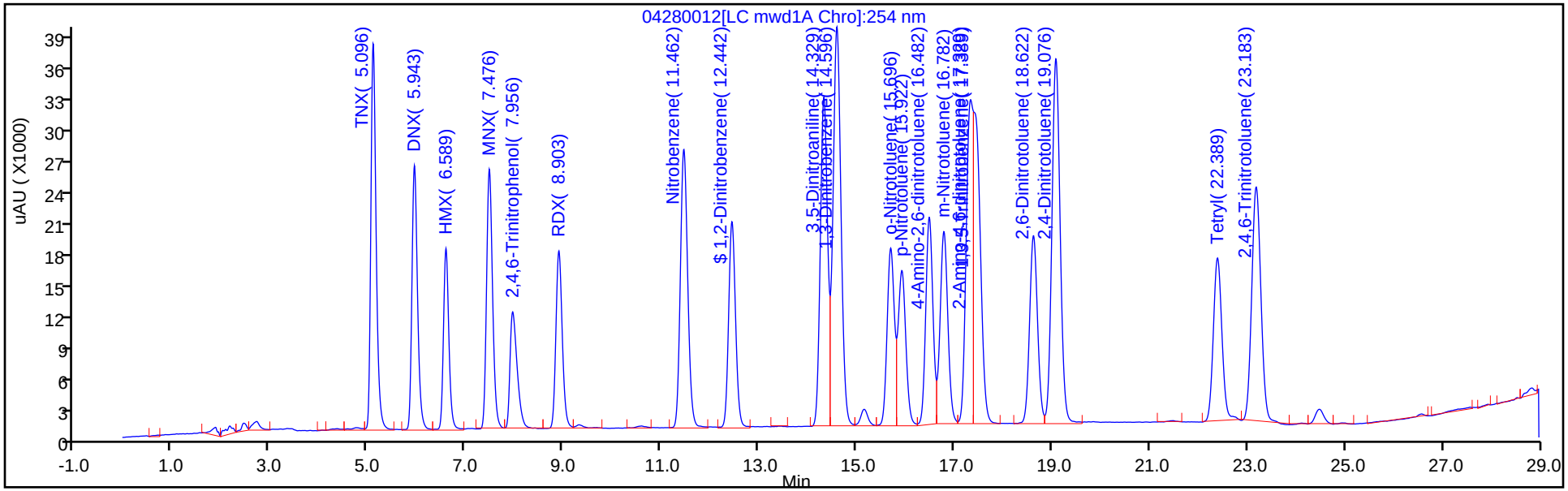
Report Date: 29-Apr-2023 13:04:17 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

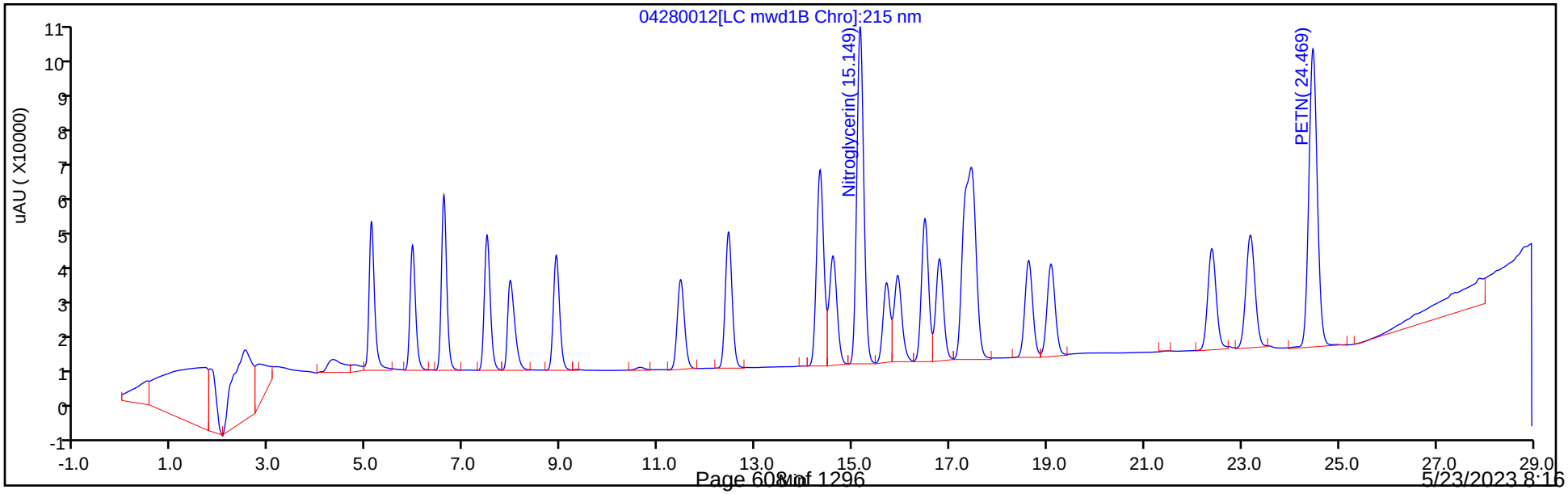
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280012.D

Injection Date:	28-Apr-2023 19:34:01	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC INT 7			Worklist Smp#:	12
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

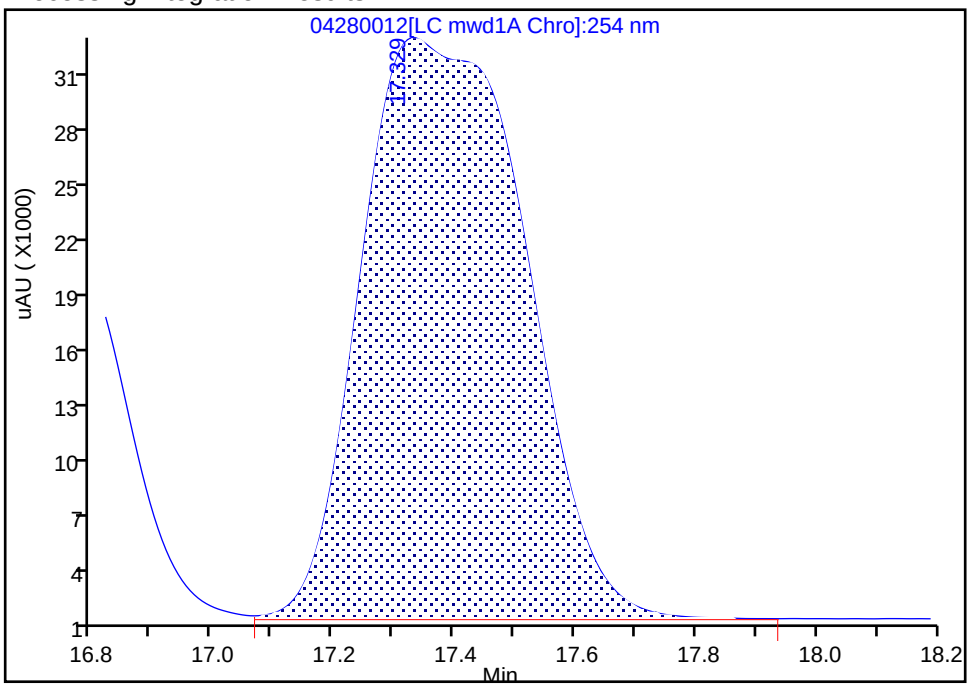
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Injection Date:	28-Apr-2023 19:34:01	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 7				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

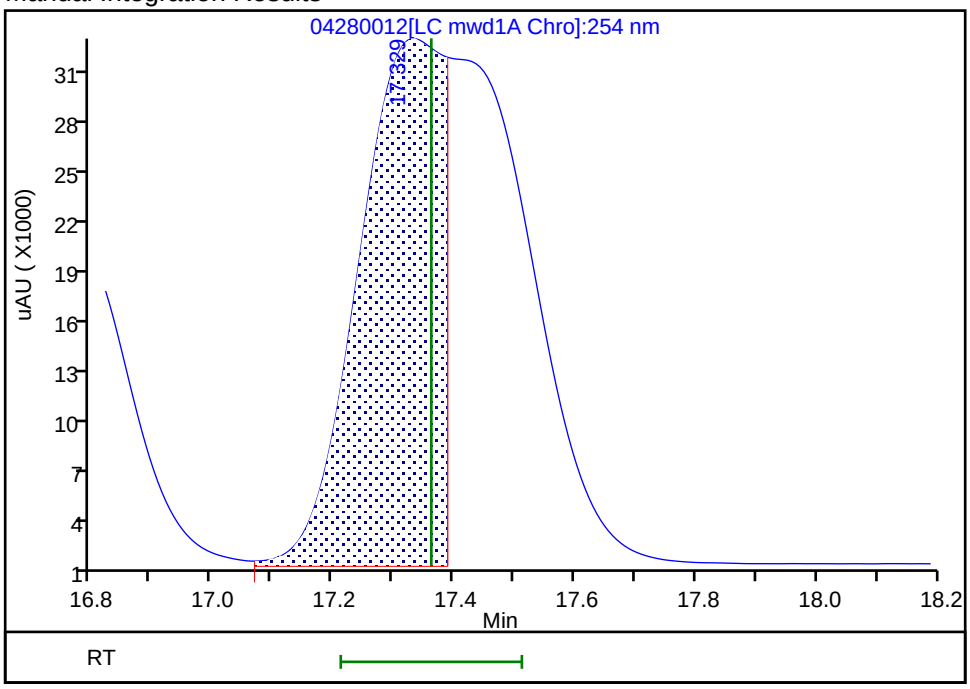
Processing Integration Results

RT: 17.33
Area: 584005
Amount: 1.540308
Amount Units: ug/ml



Manual Integration Results

RT: 17.33
Area: 294250
Amount: 0.687597
Amount Units: ug/ml



Reviewer: LV5D, 28-Apr-2023 20:43:51

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

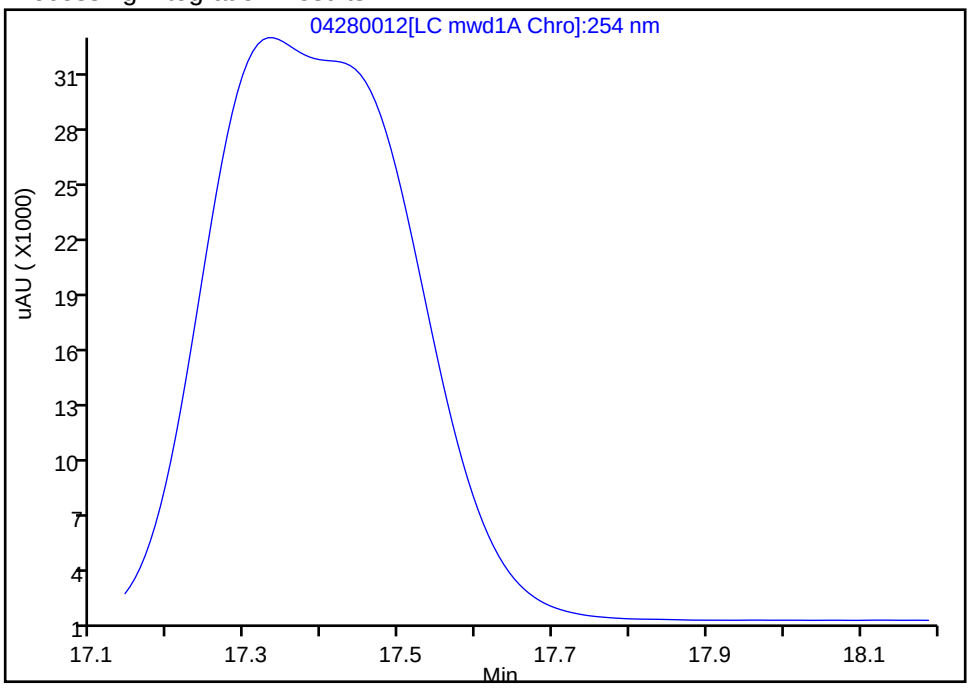
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Injection Date:	28-Apr-2023 19:34:01	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 7				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

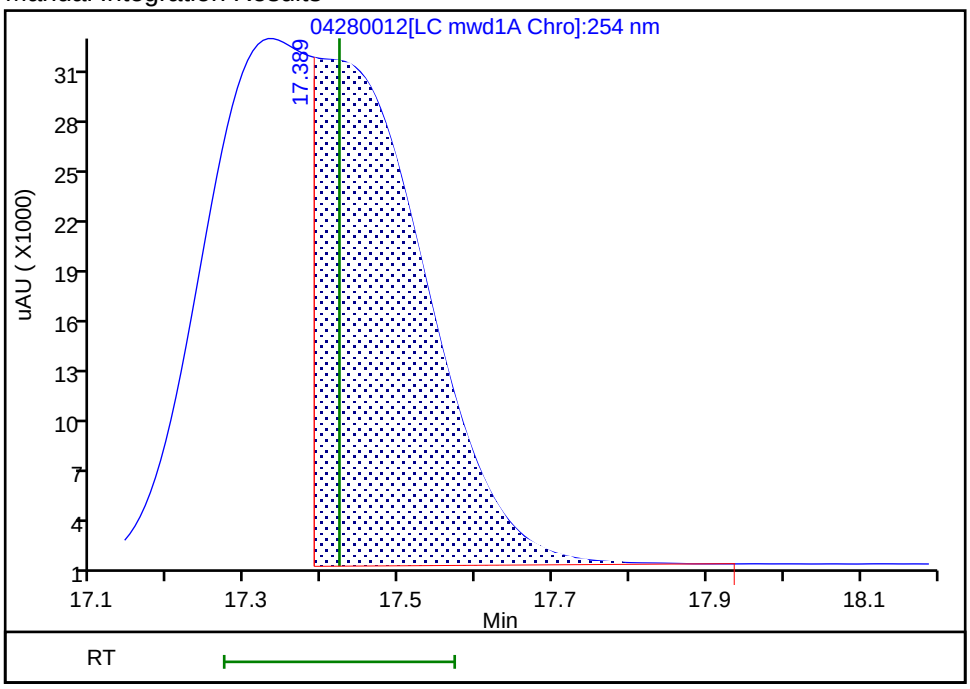
Not Detected
Expected RT: 17.42

Processing Integration Results



Manual Integration Results

RT: 17.39
Area: 289774
Amount: 0.714270
Amount Units: ug/ml



Reviewer: LV5D, 28-Apr-2023 20:43:53
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280013.D
Lims ID: IC INT 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 28-Apr-2023 20:08:59 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 6
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub6

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 29-Apr-2023 13:04:18 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1621

First Level Reviewer: LV5D Date: 28-Apr-2023 20:52:44

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.108	5.115	-0.007	147763	0.4012	0.3747	
4 DNX	1	5.954	5.955	-0.001	107420	0.4004	0.3877	
5 HMX	1	6.594	6.595	-0.001	67993	0.4000	0.3622	
6 MNX	1	7.488	7.489	-0.001	114487	0.4668	0.4365	
7 2,4,6-Trinitrophenol	1	8.008	8.029	-0.021	59892	0.4000	0.3714	
8 RDX	1	8.908	8.915	-0.007	79113	0.4000	0.3638	
9 Nitrobenzene	1	11.461	11.482	-0.021	141679	0.4000	0.3552	
$ 10 1,2-Dinitrobenzene	1	12.448	12.469	-0.021	98279	0.4000	0.3501	
11 3,5-Dinitroaniline	1	14.334	14.355	-0.021	165924	0.4000	0.3719	
12 1,3-Dinitrobenzene	1	14.601	14.622	-0.021	221798	0.4000	0.3524	
13 Nitroglycerin	2	15.154	15.182	-0.028	480119	4.00	3.56	
14 o-Nitrotoluene	1	15.708	15.729	-0.021	90266	0.4000	0.3655	
16 p-Nitrotoluene	1	15.934	15.955	-0.021	81428	0.4000	0.3579	
17 4-Amino-2,6-dinitrotoluene	1	16.501	16.515	-0.014	104292	0.4000	0.3545	
18 m-Nitrotoluene	1	16.801	16.815	-0.014	104338	0.4000	0.3541	
19 2-Amino-4,6-dinitrotoluene	1	17.354	17.362	-0.008	158919	0.4000	0.3714	Ma
20 1,3,5-Trinitrobenzene	1	17.414	17.422	-0.008	141795	0.4000	0.3495	Ma
21 2,6-Dinitrotoluene	1	18.628	18.629	-0.001	103148	0.4000	0.3536	
22 2,4-Dinitrotoluene	1	19.081	19.082	-0.001	207937	0.4000	0.3558	
23 Tetryl	1	22.361	22.389	-0.028	98615	0.4000	0.3463	
24 2,4,6-Trinitrotoluene	1	23.154	23.182	-0.028	152188	0.4000	0.3468	
25 PETN	2	24.428	24.475	-0.047	512590	4.00	3.56	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00076	Amount Added:	40.00	Units: uL
8330 DMT_00013	Amount Added:	20.00	Units: uL

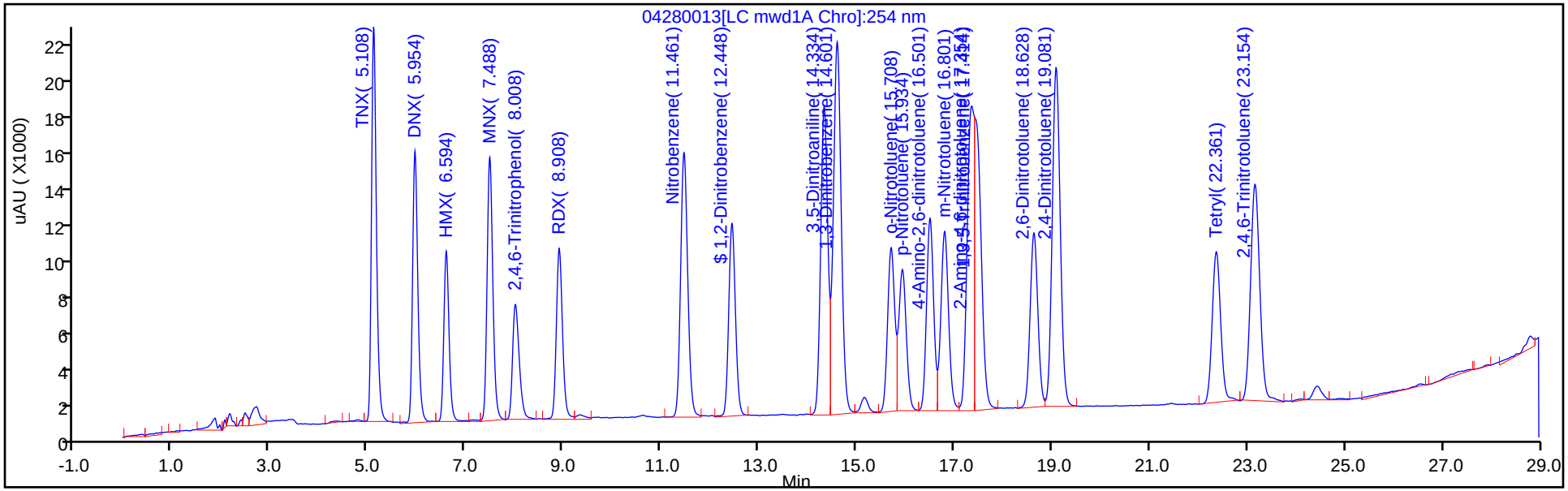
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Eurofins Denver

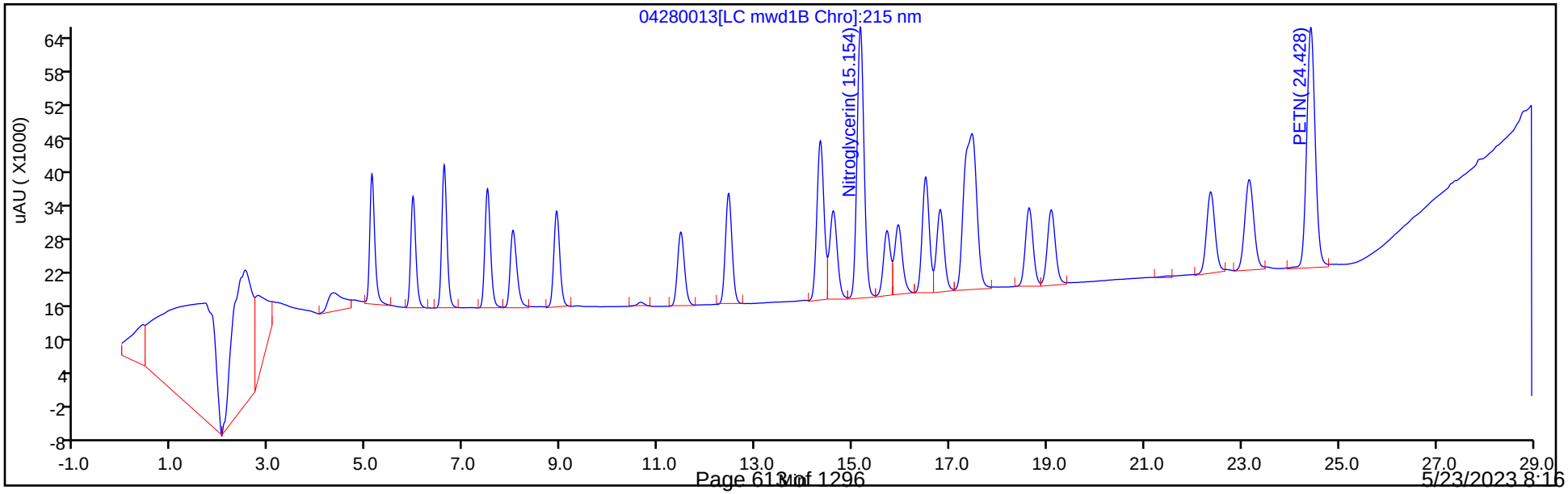
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280013.D

Injection Date:	28-Apr-2023 20:08:59	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC INT 6			Worklist Smp#:	13
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

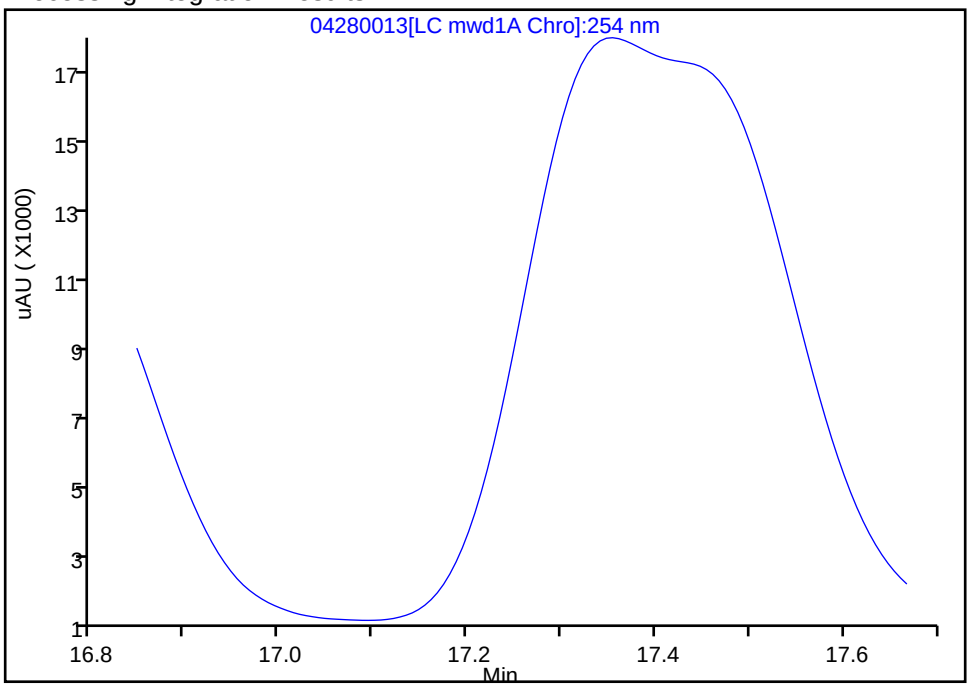
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Injection Date:	28-Apr-2023 20:08:59	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 6				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

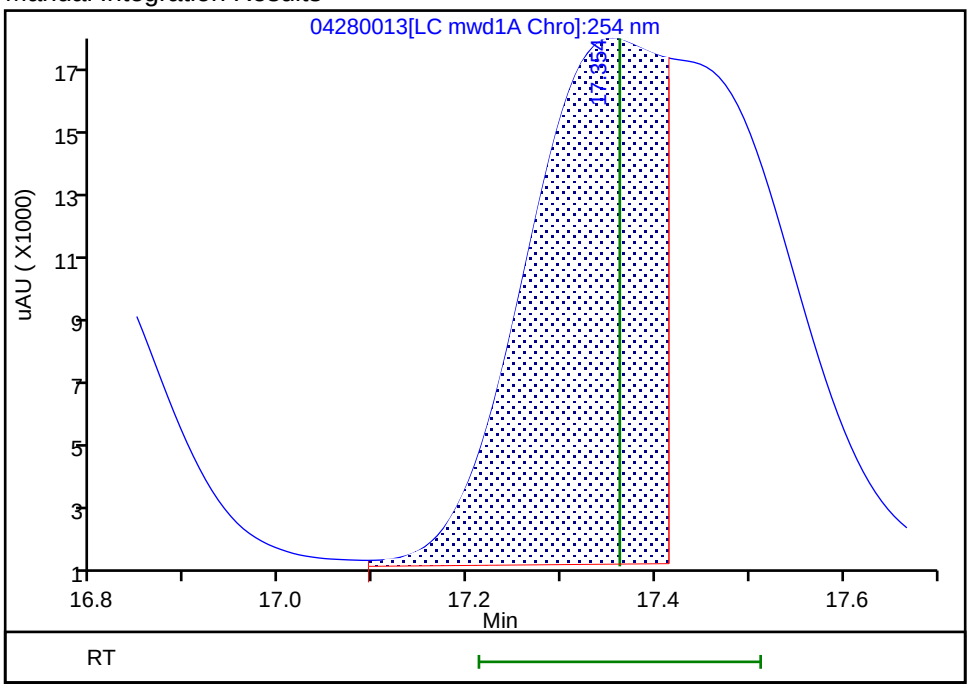
Not Detected
Expected RT: 17.36

Processing Integration Results



Manual Integration Results

RT: 17.35
Area: 158919
Amount: 0.371359
Amount Units: ug/ml



Reviewer: LV5D, 28-Apr-2023 20:52:42
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

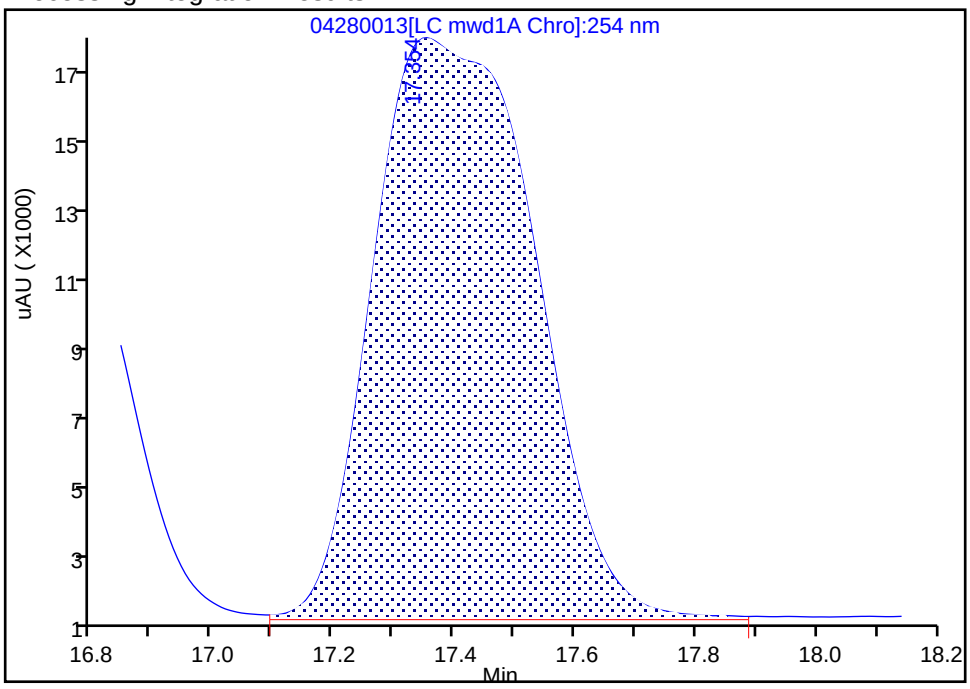
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280013.D				
Injection Date:	28-Apr-2023 20:08:59	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 6				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

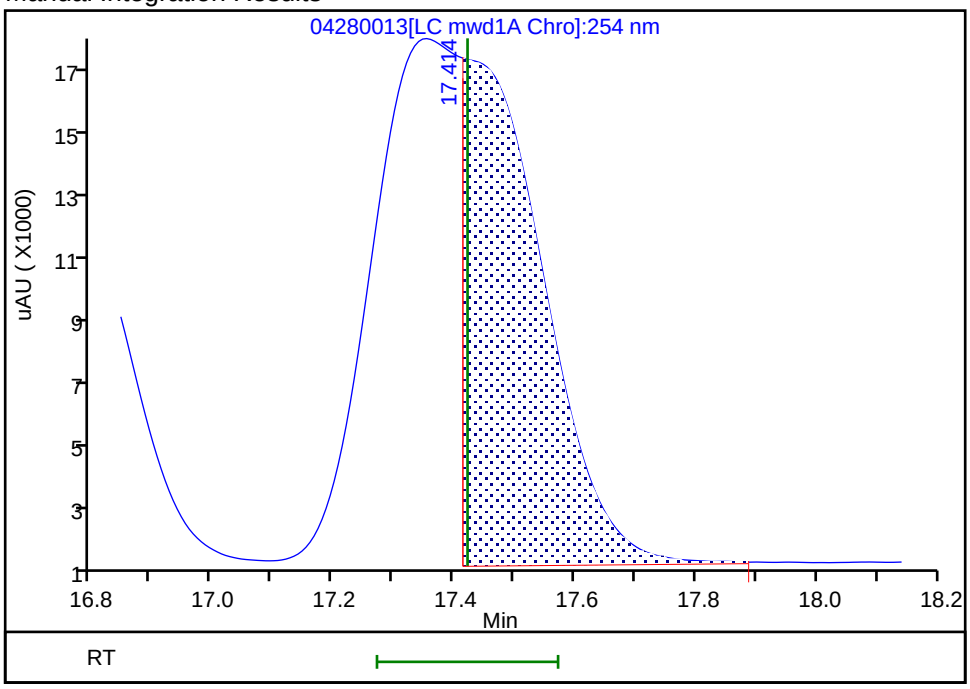
Processing Integration Results

RT: 17.35
Area: 300702
Amount: 0.613228
Amount Units: ug/ml



Manual Integration Results

RT: 17.41
Area: 141795
Amount: 0.349514
Amount Units: ug/ml



Reviewer: LV5D, 28-Apr-2023 20:52:40

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280014.D
Lims ID: IC INT 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 28-Apr-2023 20:43:54 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 5
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub6

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 29-Apr-2023 13:04:18 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1621

First Level Reviewer: LV5D Date: 29-Apr-2023 10:22:21

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.115	5.115	0.000	86123	0.2508	0.2184	
4 DNX	1	5.955	5.955	0.000	62056	0.2503	0.2240	
5 HMX	1	6.595	6.595	0.000	46110	0.2500	0.2442	
6 MNX	1	7.489	7.489	0.000	66549	0.2918	0.2537	
7 2,4,6-Trinitrophenol	1	8.029	8.029	0.000	40202	0.2500	0.2481	
8 RDX	1	8.915	8.915	0.000	53643	0.2500	0.2456	
9 Nitrobenzene	1	11.482	11.482	0.000	96681	0.2500	0.2424	
$ 10 1,2-Dinitrobenzene	1	12.469	12.469	0.000	67346	0.2500	0.2399	
11 3,5-Dinitroaniline	1	14.355	14.355	0.000	113054	0.2500	0.2529	
12 1,3-Dinitrobenzene	1	14.622	14.622	0.000	152658	0.2500	0.2426	
13 Nitroglycerin	2	15.182	15.182	0.000	327195	2.50	2.43	
14 o-Nitrotoluene	1	15.729	15.729	0.000	60674	0.2500	0.2457	
16 p-Nitrotoluene	1	15.955	15.955	0.000	56555	0.2500	0.2486	
17 4-Amino-2,6-dinitrotoluene	1	16.515	16.515	0.000	71678	0.2500	0.2436	
18 m-Nitrotoluene	1	16.815	16.815	0.000	71041	0.2500	0.2411	
19 2-Amino-4,6-dinitrotoluene	1	17.362	17.362	0.000	108505	0.2500	0.2536	M
20 1,3,5-Trinitrobenzene	1	17.422	17.422	0.000	98168	0.2500	0.2420	M
21 2,6-Dinitrotoluene	1	18.629	18.629	0.000	70868	0.2500	0.2430	
22 2,4-Dinitrotoluene	1	19.082	19.082	0.000	143098	0.2500	0.2448	
23 Tetryl	1	22.389	22.389	0.000	68327	0.2500	0.2400	
24 2,4,6-Trinitrotoluene	1	23.182	23.182	0.000	104561	0.2500	0.2382	
25 PETN	2	24.475	24.475	0.000	351913	2.50	2.44	

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

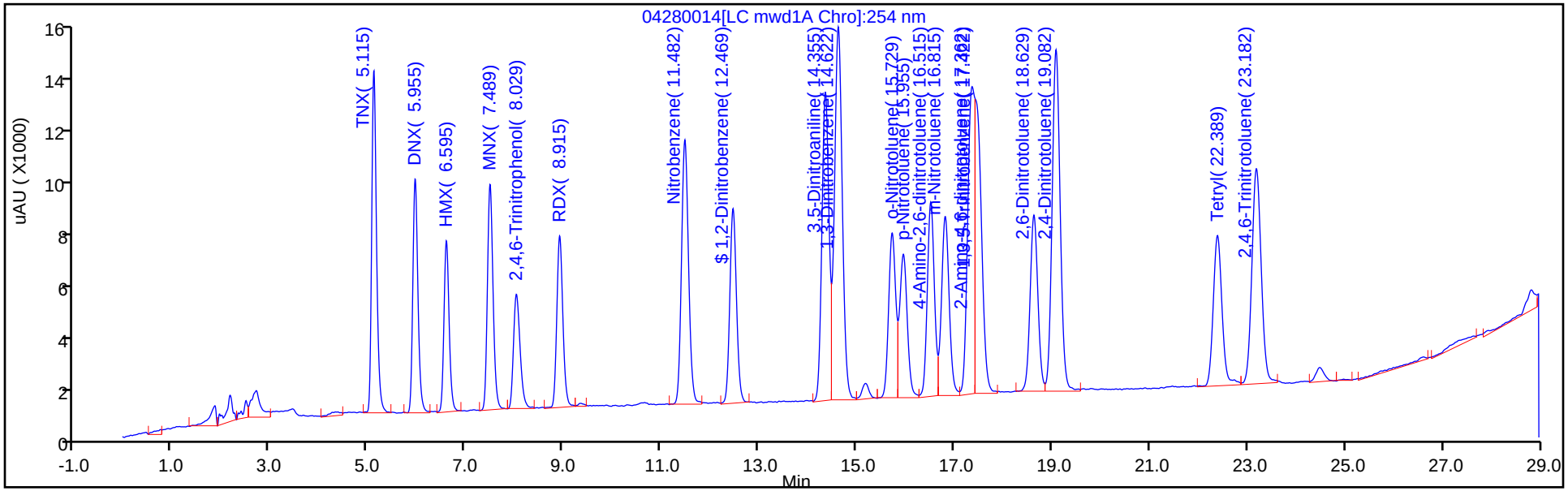
Report Date: 29-Apr-2023 13:04:18 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

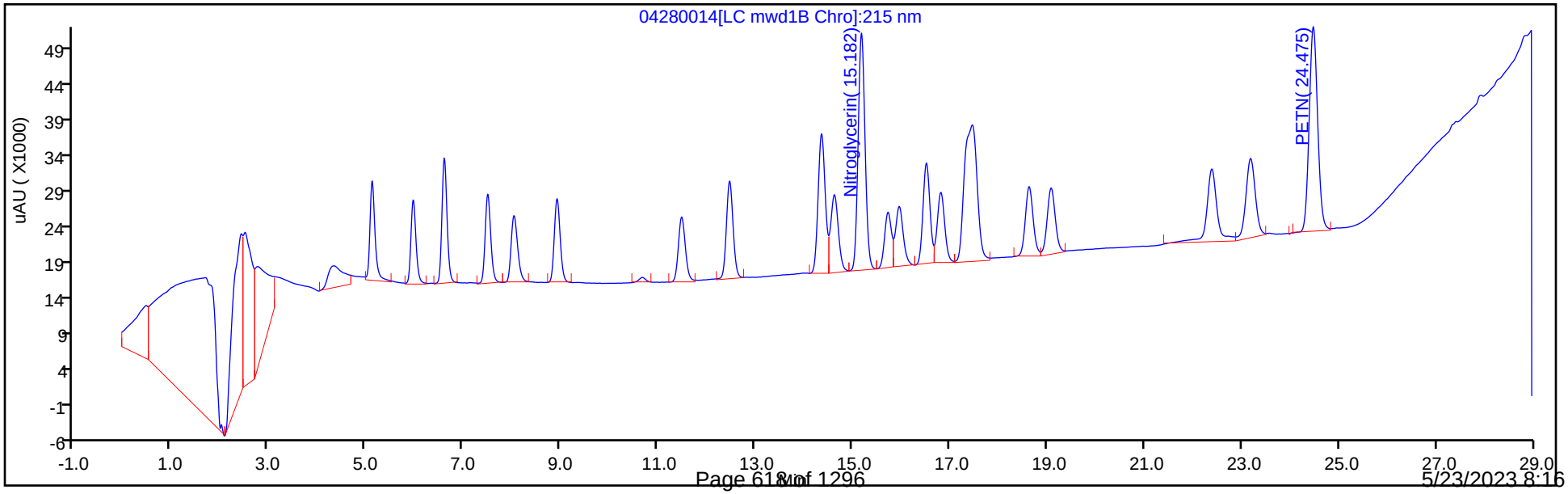
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280014.D

Injection Date:	28-Apr-2023 20:43:54	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC INT 5			Worklist Smp#:	14
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

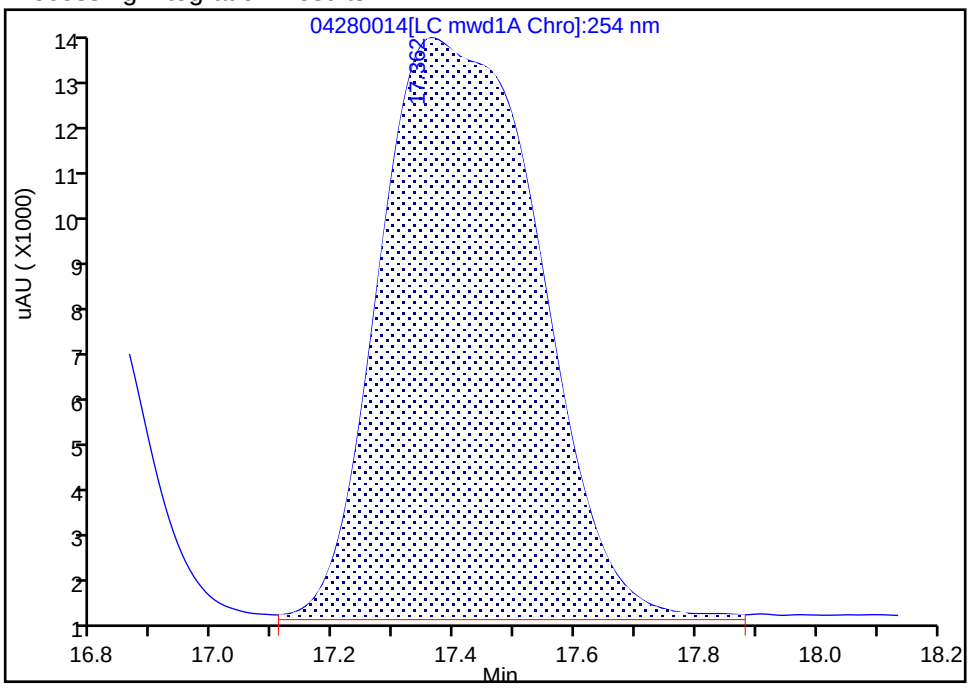
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280014.D				
Injection Date:	28-Apr-2023 20:43:54	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 5				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

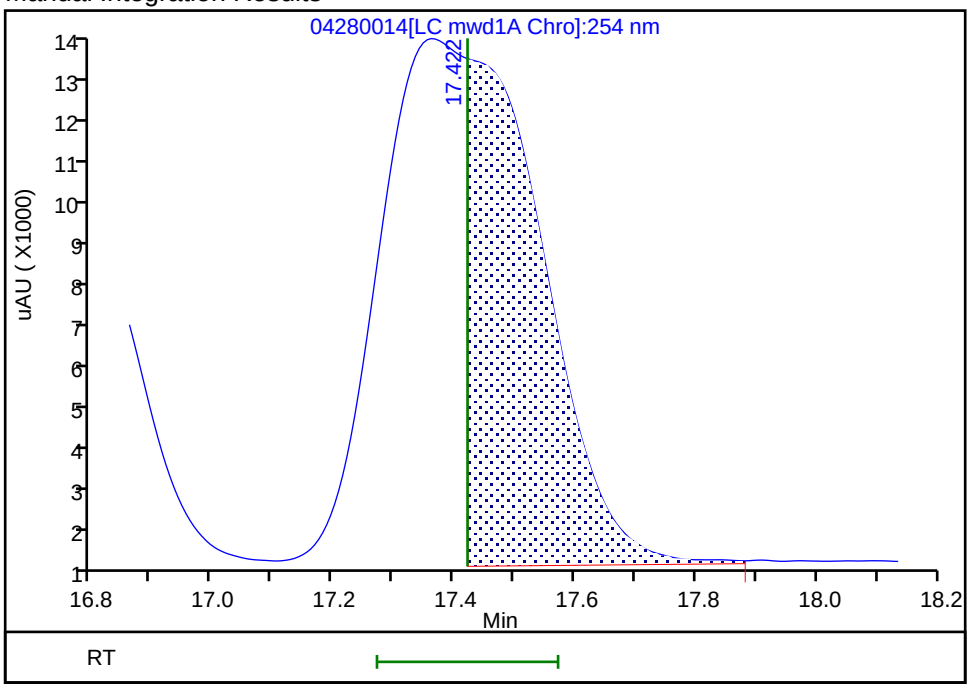
Processing Integration Results

RT: 17.36
Area: 206659
Amount: 0.382644
Amount Units: ug/ml



Manual Integration Results

RT: 17.42
Area: 98168
Amount: 0.241976
Amount Units: ug/ml



Reviewer: LV5D, 29-Apr-2023 10:22:17

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280015.D
Lims ID: IC INT 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 28-Apr-2023 21:18:48 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 4
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub6

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 29-Apr-2023 13:04:19 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1621

First Level Reviewer: LV5D Date: 29-Apr-2023 10:22:33

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.116	5.115	0.001	41754	0.1003	0.1059	
4 DNX	1	5.963	5.955	0.008	28641	0.1001	0.1034	
5 HMX	1	6.603	6.595	0.008	19573	0.1000	0.1011	
6 MNX	1	7.496	7.489	0.007	30530	0.1167	0.1164	
7 2,4,6-Trinitrophenol	1	8.056	8.029	0.027	17060	0.1000	0.1033	
8 RDX	1	8.923	8.915	0.008	22827	0.1000	0.1027	
9 Nitrobenzene	1	11.483	11.482	0.001	41585	0.1000	0.1043	
$ 10 1,2-Dinitrobenzene	1	12.470	12.469	0.001	27893	0.1000	0.0994	
11 3,5-Dinitroaniline	1	14.363	14.355	0.008	46980	0.1000	0.1043	
12 1,3-Dinitrobenzene	1	14.623	14.622	0.001	62596	0.1000	0.0995	
13 Nitroglycerin	2	15.176	15.182	-0.006	134661	1.00	1.00	
14 o-Nitrotoluene	1	15.730	15.729	0.001	25290	0.1000	0.1024	
16 p-Nitrotoluene	1	15.956	15.955	0.001	23002	0.1000	0.1011	
17 4-Amino-2,6-dinitrotoluene	1	16.523	16.515	0.008	29472	0.1000	0.1002	
18 m-Nitrotoluene	1	16.816	16.815	0.001	29569	0.1000	0.1004	
19 2-Amino-4,6-dinitrotoluene	1	17.370	17.362	0.008	43948	0.1000	0.1027	M
20 1,3,5-Trinitrobenzene	1	17.423	17.422	0.001	41946	0.1000	0.1034	M
21 2,6-Dinitrotoluene	1	18.636	18.629	0.007	30260	0.1000	0.1037	
22 2,4-Dinitrotoluene	1	19.090	19.082	0.008	59433	0.1000	0.1017	
23 Tetryl	1	22.363	22.389	-0.026	27534	0.1000	0.0967	
24 2,4,6-Trinitrotoluene	1	23.156	23.182	-0.026	43136	0.1000	0.0983	
25 PETN	2	24.416	24.475	-0.059	146450	1.00	1.02	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00076	Amount Added: 10.00	Units: uL
8330 DMT_00013	Amount Added: 5.00	Units: uL

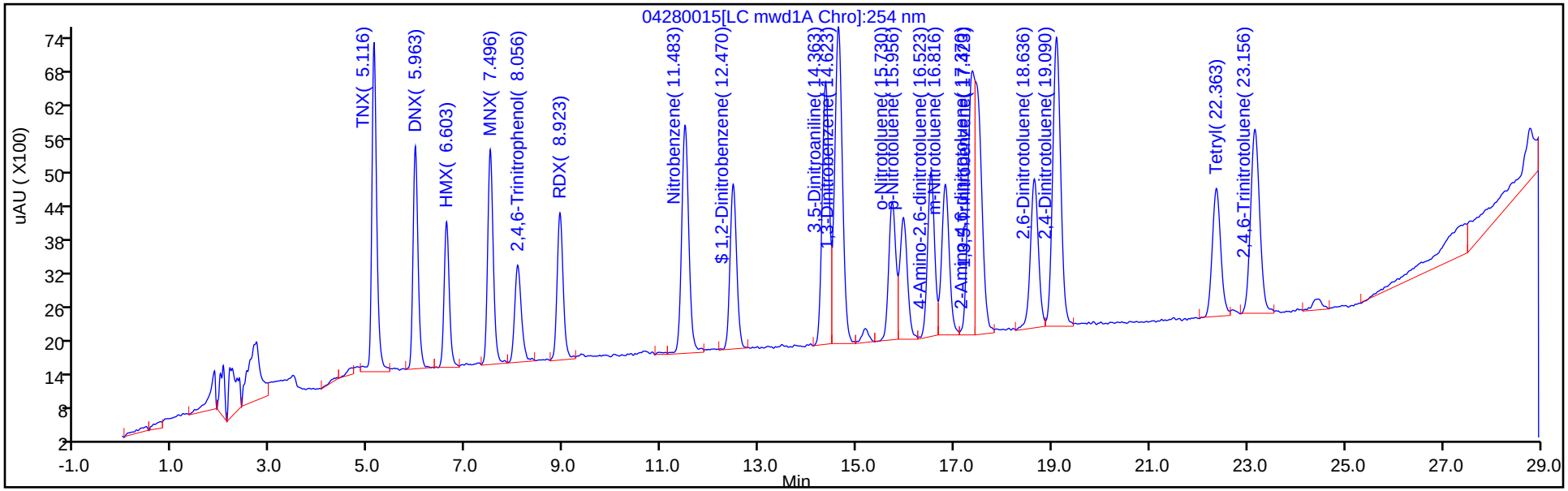
Report Date: 29-Apr-2023 13:04:19 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

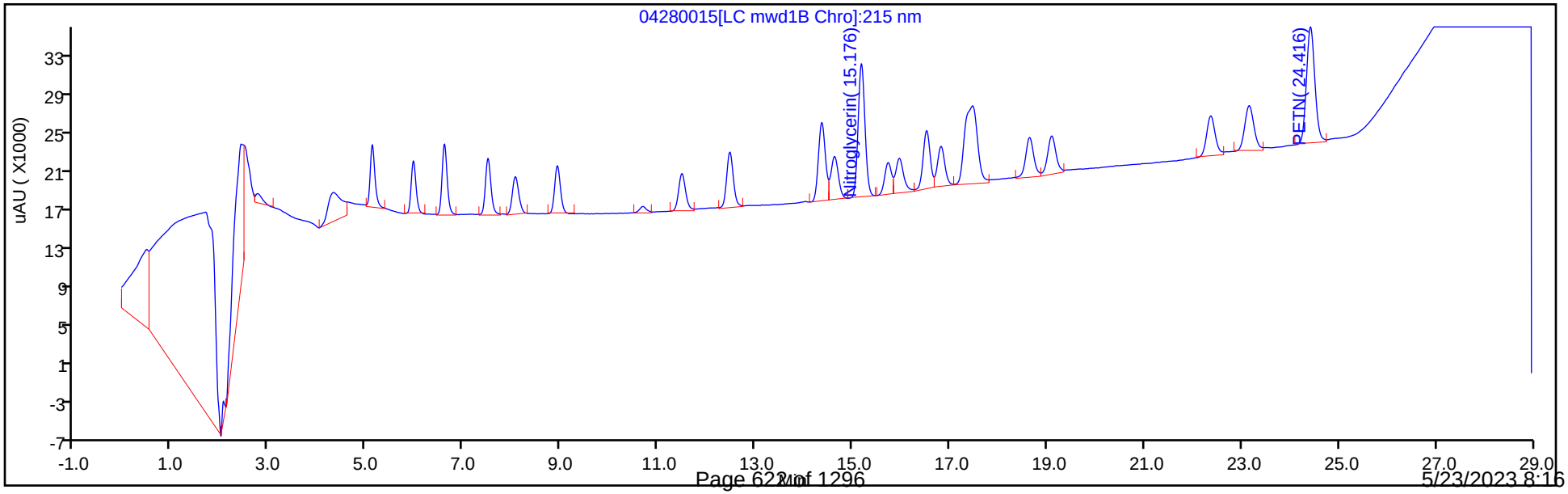
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280015.D

Injection Date:	28-Apr-2023 21:18:48	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC INT 4			Worklist Smp#:	15
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

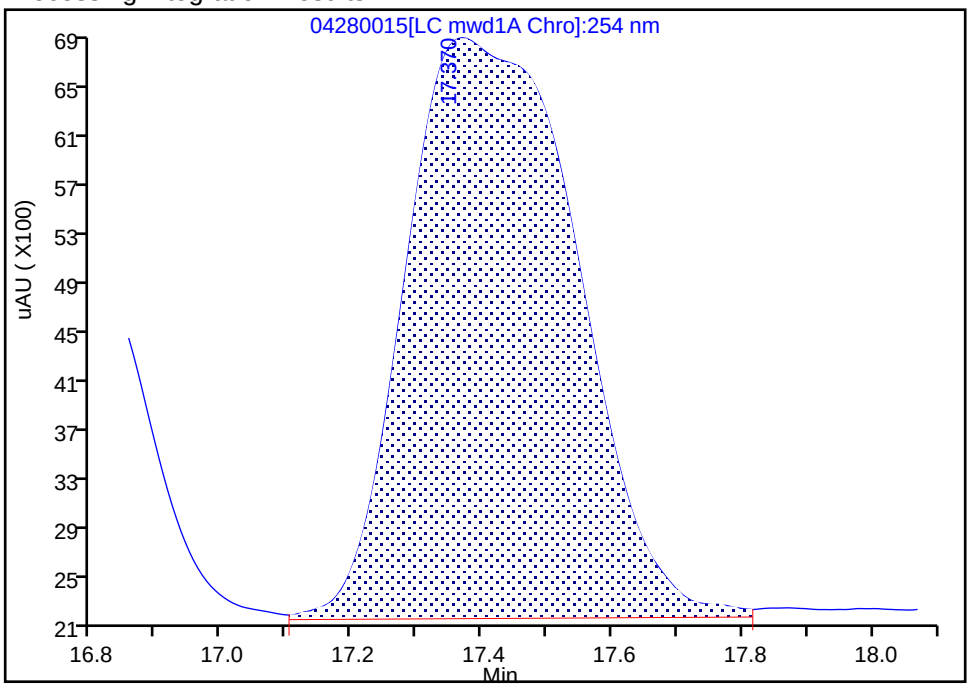
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280015.D				
Injection Date:	28-Apr-2023 21:18:48	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

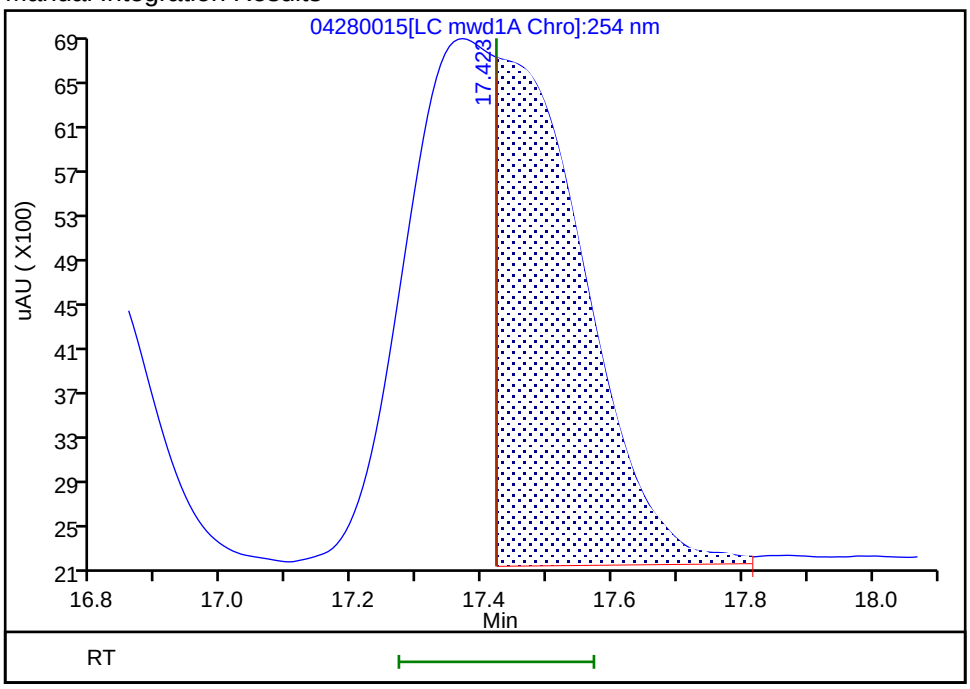
Processing Integration Results

RT: 17.37
Area: 85885
Amount: 0.174611
Amount Units: ug/ml



Manual Integration Results

RT: 17.42
Area: 41946
Amount: 0.103394
Amount Units: ug/ml



Reviewer: LV5D, 29-Apr-2023 10:22:30

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280016.D
Lims ID: IC INT 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 28-Apr-2023 21:53:46 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 3
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub6

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 29-Apr-2023 13:04:19 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1621

First Level Reviewer: LV5D Date: 29-Apr-2023 10:22:43

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.116	5.115	0.001	20281	0.0502	0.0514	
4 DNX	1	5.969	5.955	0.014	14733	0.0501	0.0532	
5 HMX	1	6.603	6.595	0.008	10761	0.0500	0.0535	
6 MNX	1	7.503	7.489	0.014	15694	0.0584	0.0598	
7 2,4,6-Trinitrophenol	1	8.076	8.029	0.047	8950	0.0500	0.0526	
8 RDX	1	8.929	8.915	0.014	11621	0.0500	0.0508	
9 Nitrobenzene	1	11.489	11.482	0.007	20883	0.0500	0.0524	
$ 10 1,2-Dinitrobenzene	1	12.476	12.469	0.007	14379	0.0500	0.0512	
11 3,5-Dinitroaniline	1	14.369	14.355	0.014	24176	0.0500	0.0530	
12 1,3-Dinitrobenzene	1	14.629	14.622	0.007	31459	0.0500	0.0500	
13 Nitroglycerin	2	15.176	15.182	-0.006	71084	0.5000	0.5276	
14 o-Nitrotoluene	1	15.723	15.729	-0.006	12951	0.0500	0.0524	
16 p-Nitrotoluene	1	15.956	15.955	0.001	12179	0.0500	0.0535	
17 4-Amino-2,6-dinitrotoluene	1	16.523	16.515	0.008	15265	0.0500	0.0519	
18 m-Nitrotoluene	1	16.816	16.815	0.001	15546	0.0500	0.0528	
19 2-Amino-4,6-dinitrotoluene	1	17.376	17.362	0.014	23162	0.0500	0.0541	M
20 1,3,5-Trinitrobenzene	1	17.429	17.422	0.007	22059	0.0500	0.0544	M
21 2,6-Dinitrotoluene	1	18.643	18.629	0.014	15876	0.0500	0.0544	
22 2,4-Dinitrotoluene	1	19.096	19.082	0.014	30407	0.0500	0.0520	
23 Tetryl	1	22.369	22.389	-0.020	14233	0.0500	0.0500	
24 2,4,6-Trinitrotoluene	1	23.163	23.182	-0.019	22184	0.0500	0.0505	
25 PETN	2	24.423	24.475	-0.052	72943	0.5000	0.5068	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00076	Amount Added:	5.00	Units: uL
8330 DMT_00013	Amount Added:	2.50	Units: uL

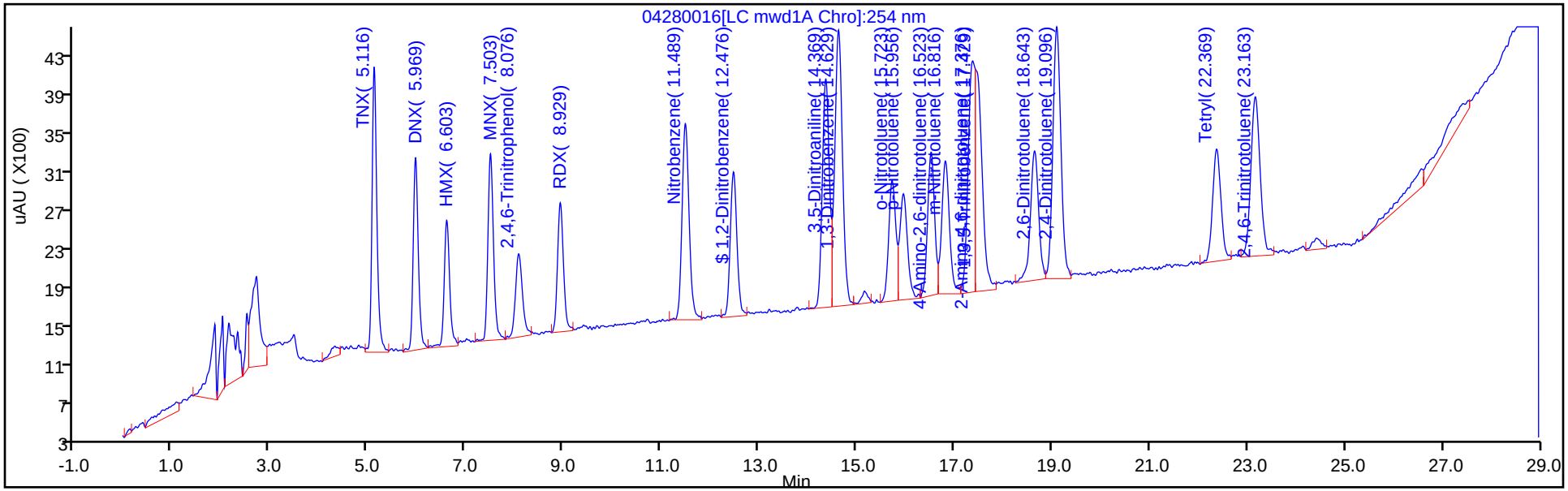
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Eurofins Denver

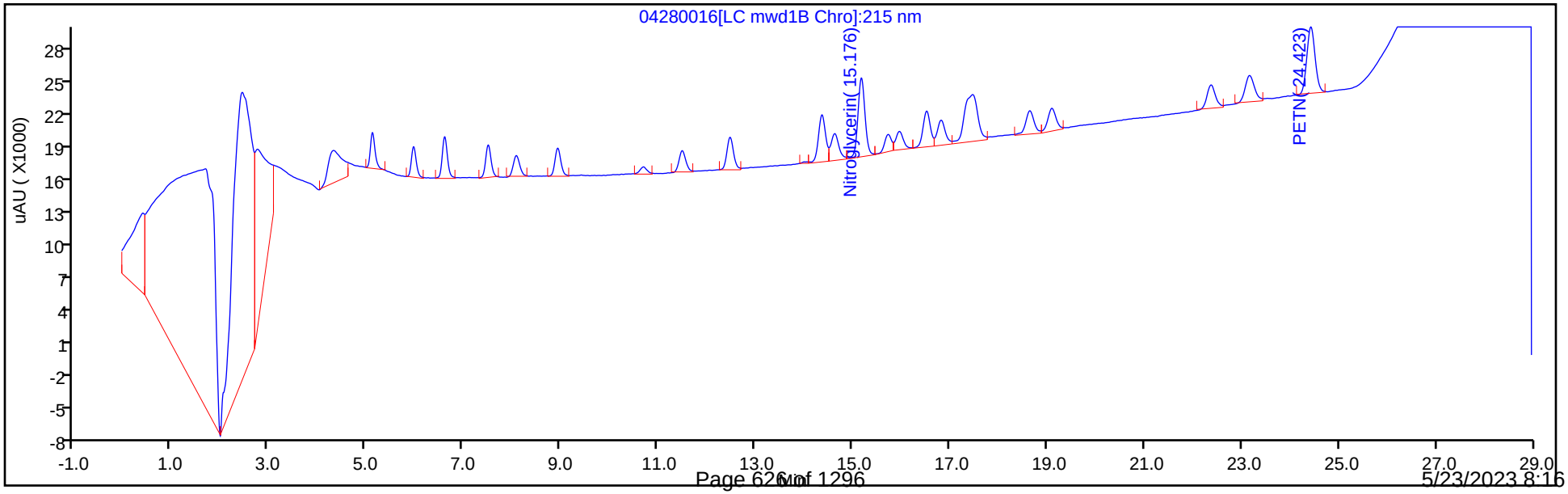
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280016.D

Injection Date:	28-Apr-2023 21:53:46	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC INT 3			Worklist Smp#:	16
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



5/23/2023 8:16 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

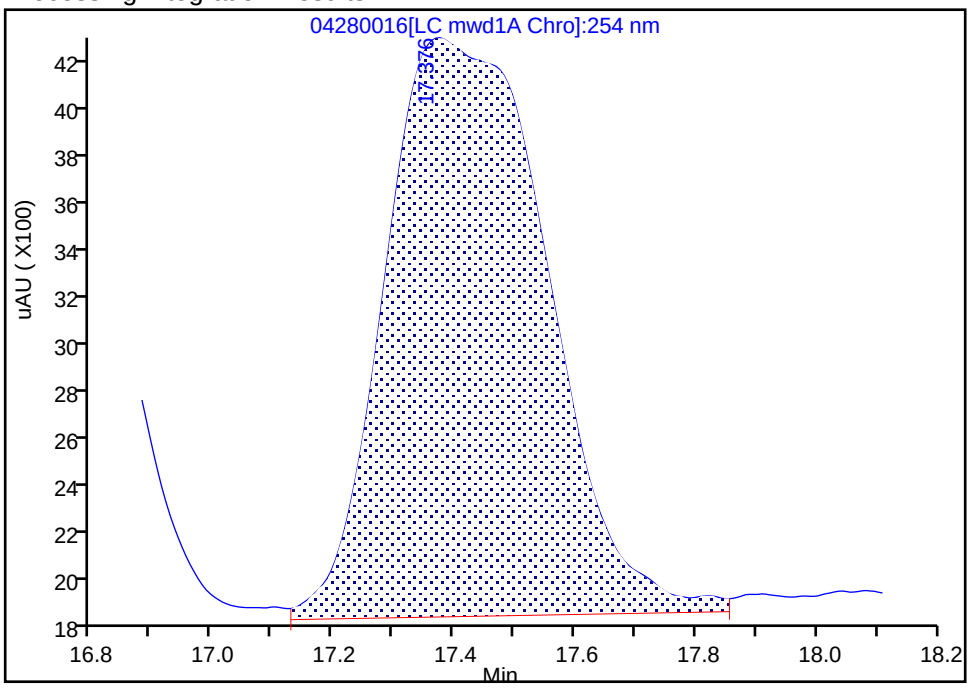
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280016.D				
Injection Date:	28-Apr-2023 21:53:46	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

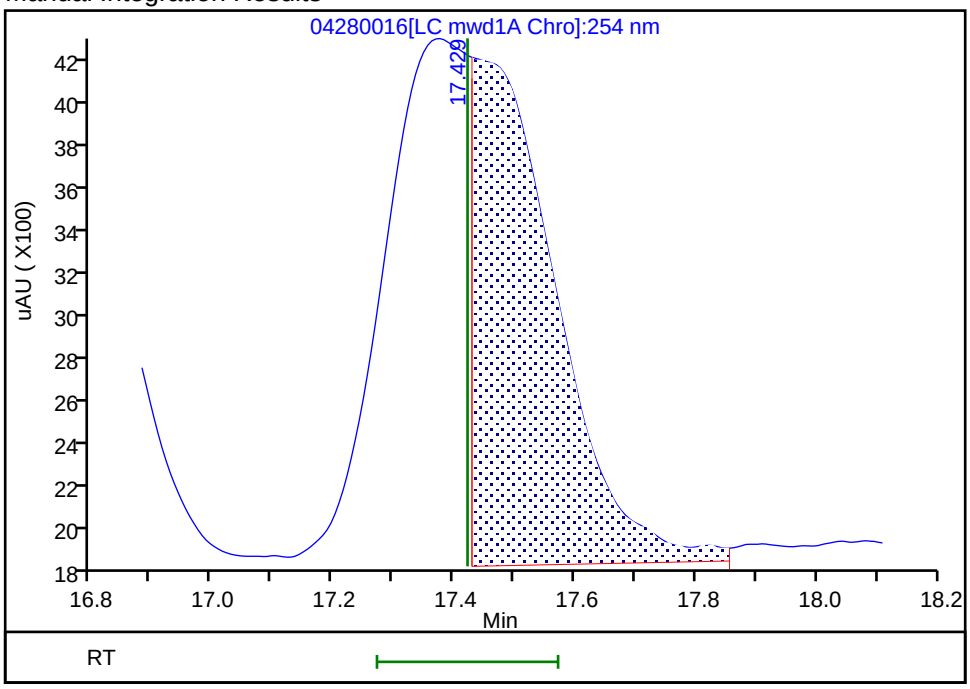
Processing Integration Results

RT: 17.38
Area: 45204
Amount: 0.102031
Amount Units: ug/ml



Manual Integration Results

RT: 17.43
Area: 22059
Amount: 0.054374
Amount Units: ug/ml



Reviewer: LV5D, 29-Apr-2023 10:22:40

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280017.D
Lims ID: IC INT 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 28-Apr-2023 22:28:39 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 2
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub6

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 29-Apr-2023 13:04:20 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1621

First Level Reviewer: LV5D Date: 29-Apr-2023 10:23:35

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.136	5.115	0.021	8179	0.0201	0.0207	
4 DNX	1	5.983	5.955	0.028	5728	0.0200	0.0207	
5 HMX	1	6.630	6.595	0.035	4449	0.0200	0.0195	
6 MNX	1	7.523	7.489	0.034	6155	0.0233	0.0235	
7 2,4,6-Trinitrophenol	1	8.116	8.029	0.087	3453	0.0200	0.0182	
8 RDX	1	8.956	8.915	0.041	4863	0.0200	0.0194	
9 Nitrobenzene	1	11.523	11.482	0.041	7871	0.0200	0.0197	
$ 10 1,2-Dinitrobenzene	1	12.516	12.469	0.047	6038	0.0200	0.0215	
11 3,5-Dinitroaniline	1	14.410	14.355	0.055	9221	0.0200	0.0194	
12 1,3-Dinitrobenzene	1	14.663	14.622	0.041	12307	0.0200	0.0196	
13 Nitroglycerin	2	15.216	15.182	0.034	27409	0.2000	0.2034	
14 o-Nitrotoluene	1	15.770	15.729	0.041	5281	0.0200	0.0214	M
16 p-Nitrotoluene	1	15.996	15.955	0.041	4466	0.0200	0.0196	M
17 4-Amino-2,6-dinitrotoluene	1	16.556	16.515	0.041	6064	0.0200	0.0206	M
18 m-Nitrotoluene	1	16.843	16.815	0.028	5823	0.0200	0.0198	M
19 2-Amino-4,6-dinitrotoluene	1	17.410	17.362	0.048	8257	0.0200	0.0193	M
20 1,3,5-Trinitrobenzene	1	17.456	17.422	0.034	7799	0.0200	0.0192	M
21 2,6-Dinitrotoluene	1	18.670	18.629	0.041	5716	0.0200	0.0196	
22 2,4-Dinitrotoluene	1	19.123	19.082	0.041	12241	0.0200	0.0209	
23 Tetryl	1	22.396	22.389	0.007	6348	0.0200	0.0223	
24 2,4,6-Trinitrotoluene	1	23.196	23.182	0.014	9925	0.0200	0.0226	
25 PETN	2	24.450	24.475	-0.025	28805	0.2000	0.2001	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00076	Amount Added:	2.00	Units: uL
8330 DMT_00013	Amount Added:	1.00	Units: uL

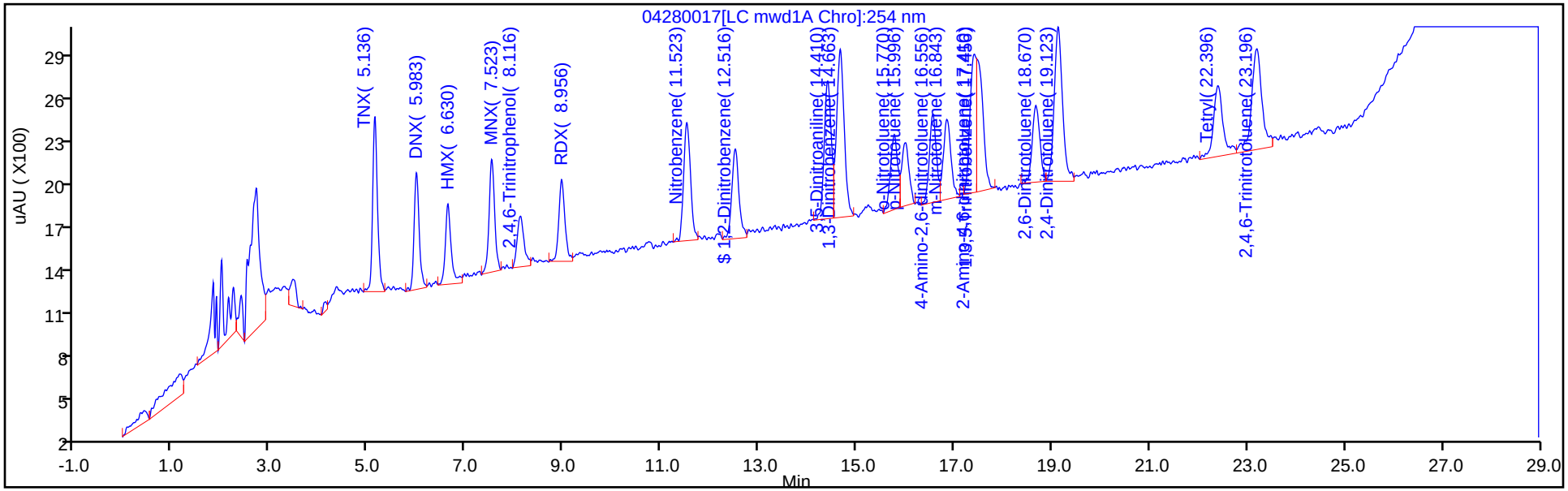
Report Date: 29-Apr-2023 13:04:20 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

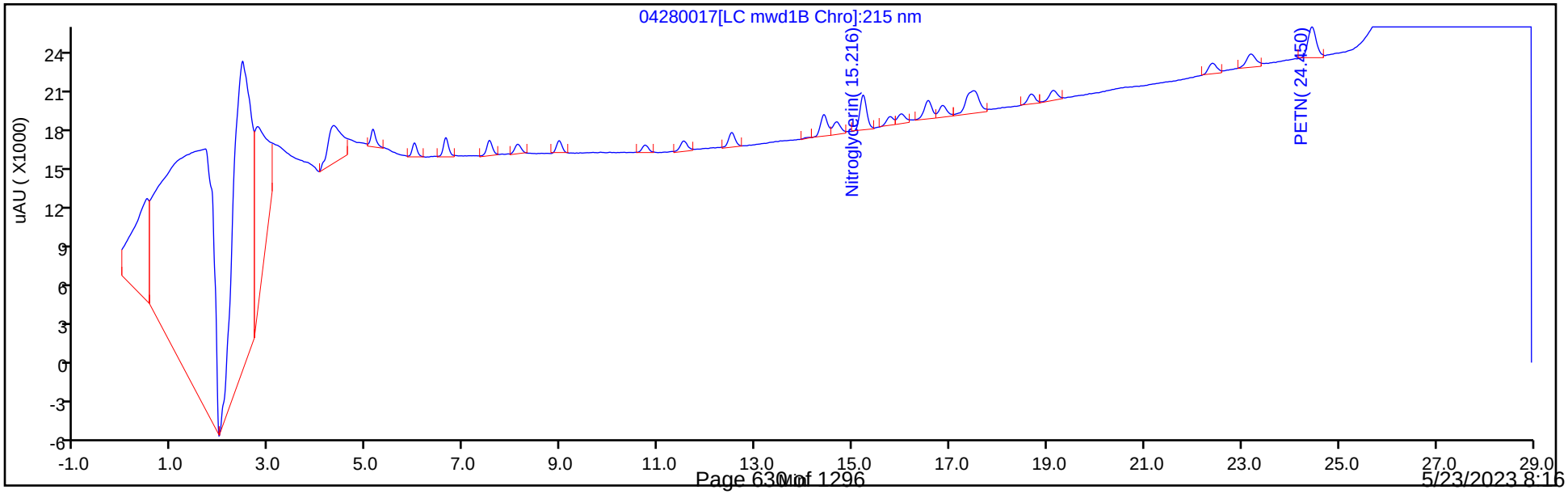
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280017.D

Injection Date:	28-Apr-2023 22:28:39	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC INT 2			Worklist Smp#:	17
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



5/23/2023 8:16 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

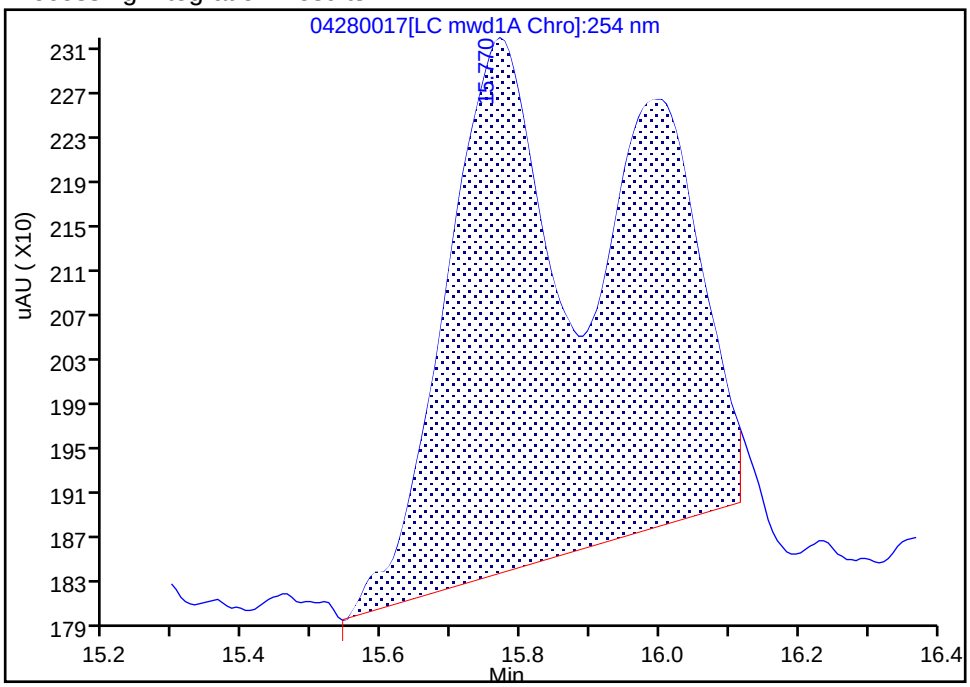
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280017.D				
Injection Date:	28-Apr-2023 22:28:39	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

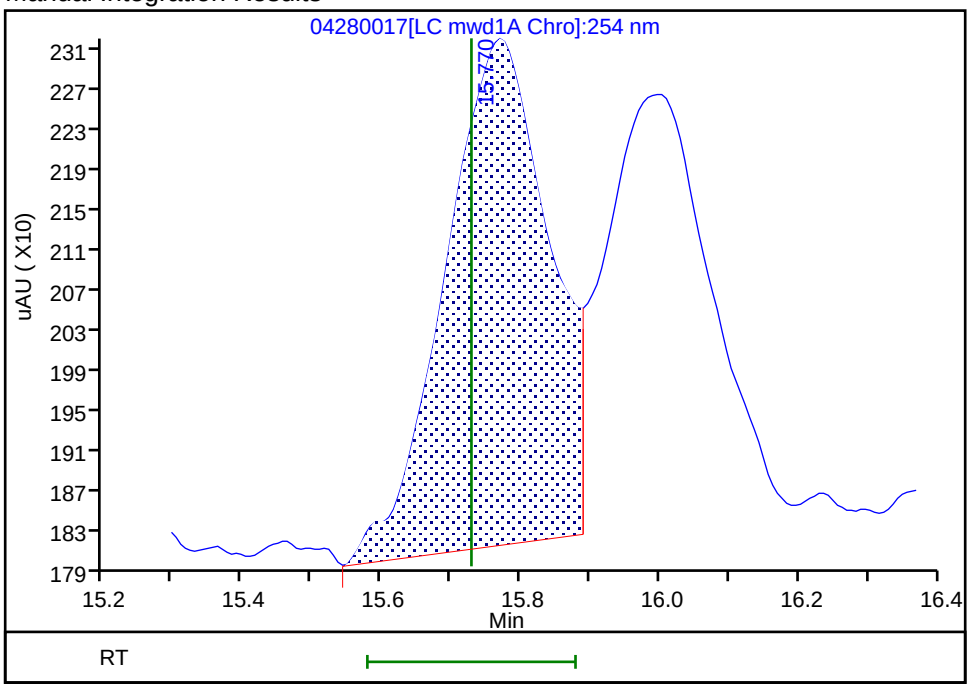
Processing Integration Results

RT: 15.77
Area: 8594
Amount: 0.026168
Amount Units: ug/ml



Manual Integration Results

RT: 15.77
Area: 5281
Amount: 0.021384
Amount Units: ug/ml



Reviewer: LV5D, 29-Apr-2023 10:23:05

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

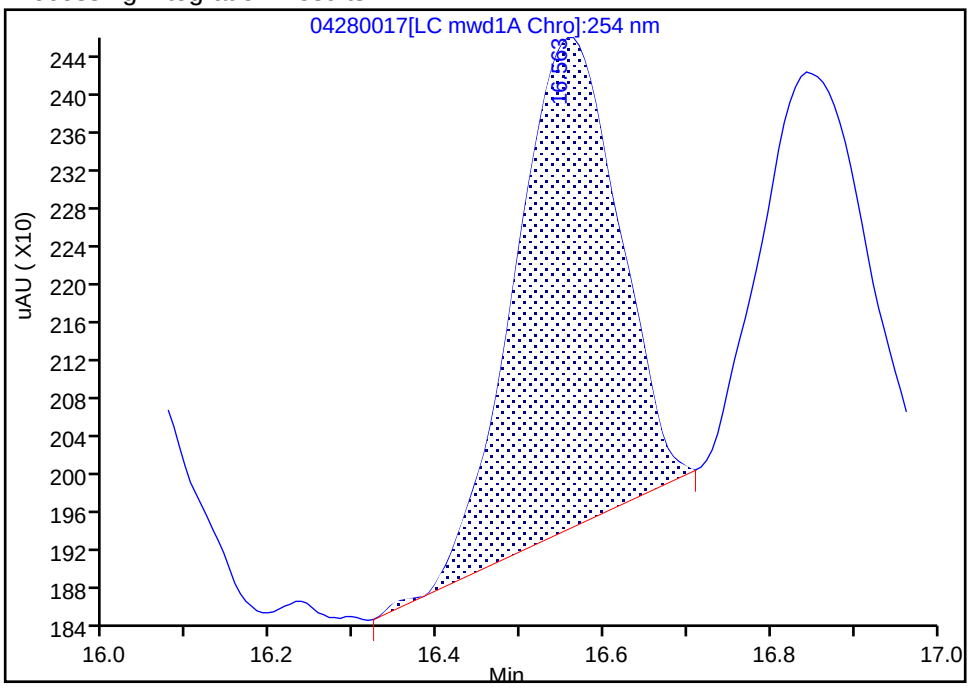
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280017.D				
Injection Date:	28-Apr-2023 22:28:39	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

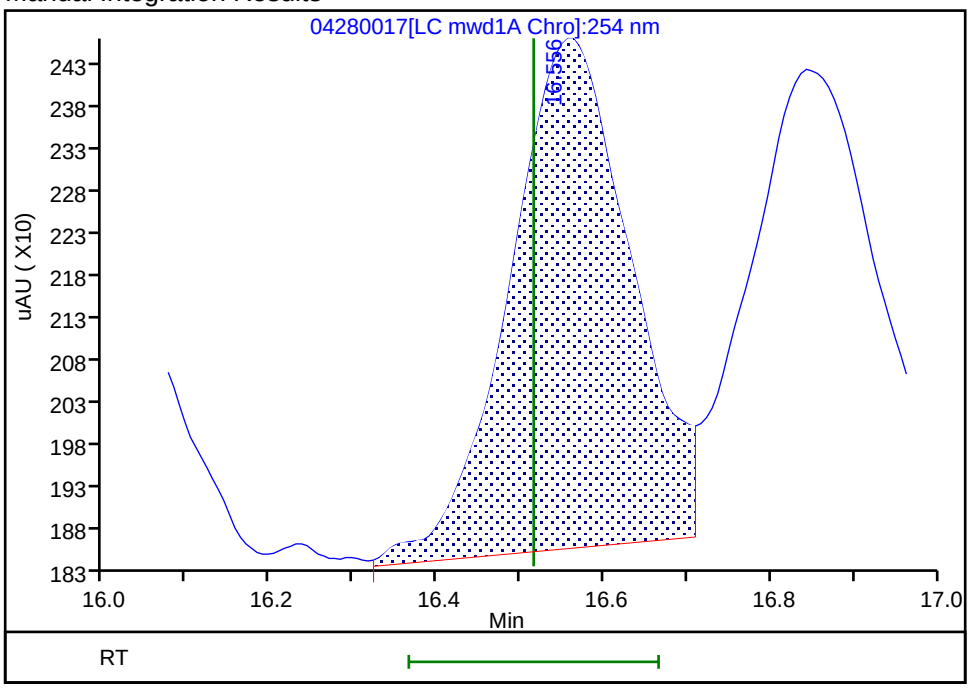
Processing Integration Results

RT: 16.56
Area: 4498
Amount: 0.016304
Amount Units: ug/ml



Manual Integration Results

RT: 16.56
Area: 6064
Amount: 0.020611
Amount Units: ug/ml



Reviewer: LV5D, 29-Apr-2023 10:23:33

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

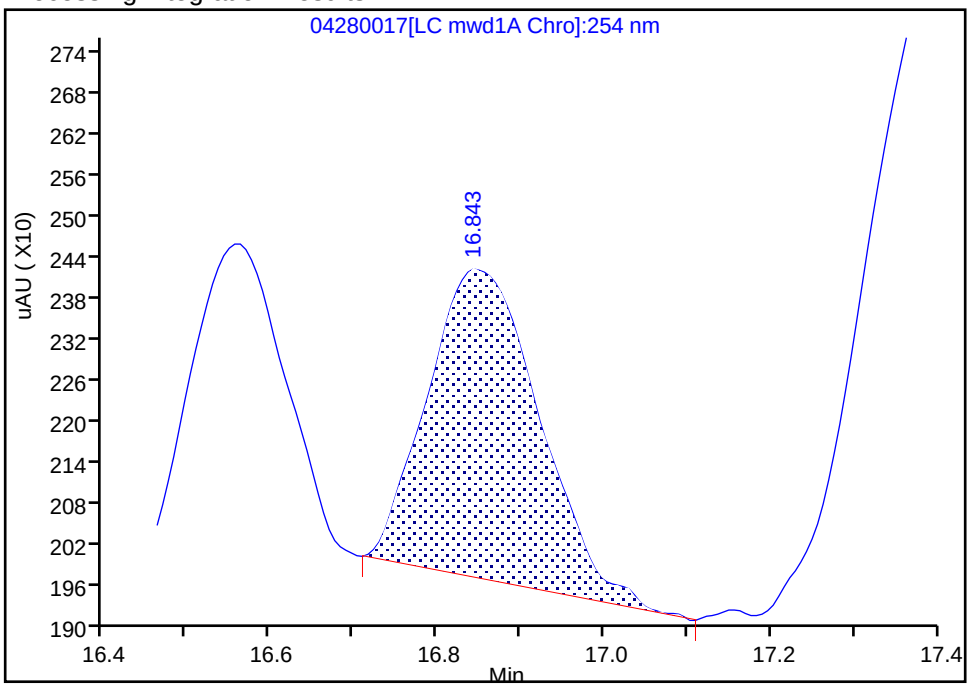
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280017.D				
Injection Date:	28-Apr-2023 22:28:39	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

18 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

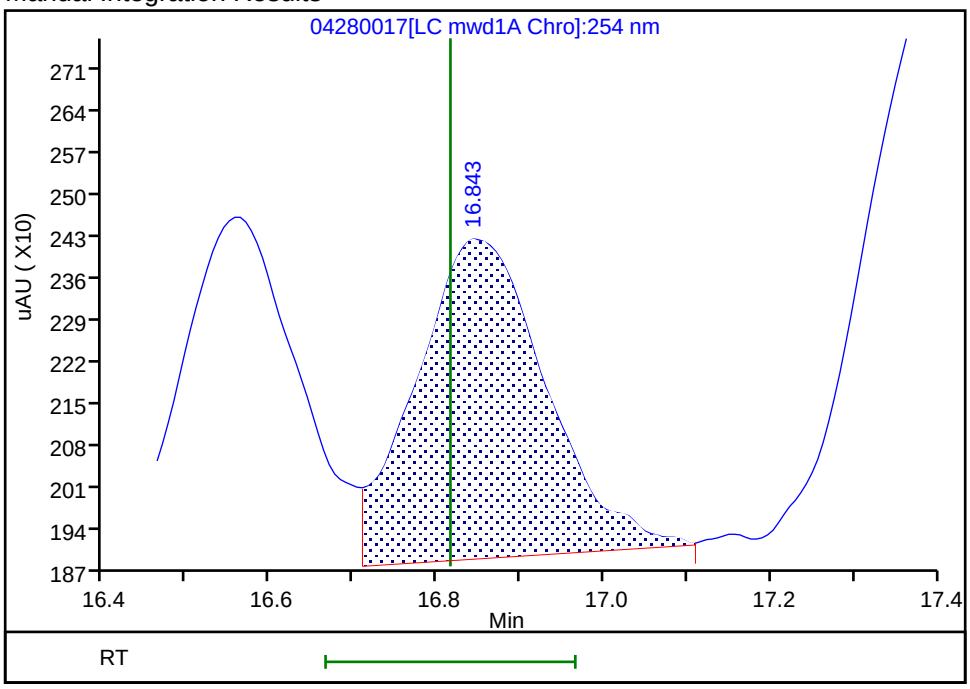
Processing Integration Results

RT: 16.84
Area: 4234
Amount: 0.015427
Amount Units: ug/ml



Manual Integration Results

RT: 16.84
Area: 5823
Amount: 0.019763
Amount Units: ug/ml



Reviewer: LV5D, 29-Apr-2023 10:23:33
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

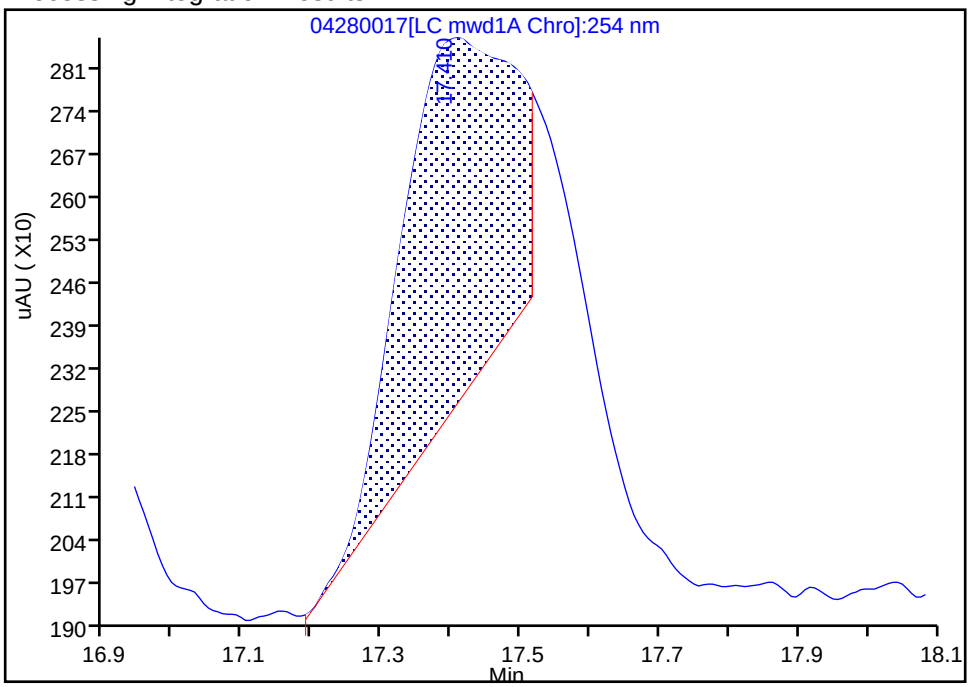
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280017.D				
Injection Date:	28-Apr-2023 22:28:39	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

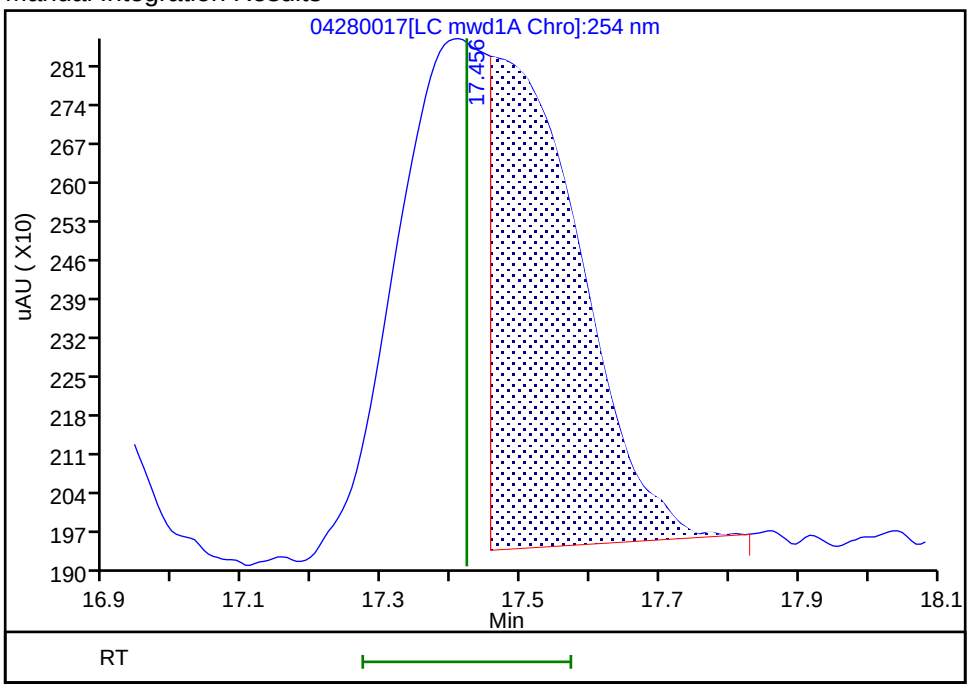
Processing Integration Results

RT: 17.41
Area: 6616
Amount: 0.016894
Amount Units: ug/ml



Manual Integration Results

RT: 17.46
Area: 7799
Amount: 0.019224
Amount Units: ug/ml



Reviewer: LV5D, 29-Apr-2023 10:23:23

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280018.D
Lims ID: IC INT 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 28-Apr-2023 23:03:35 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 1
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub6

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 29-Apr-2023 13:04:20 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1621

First Level Reviewer: LV5D Date: 29-Apr-2023 10:24:45

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.116	5.115	0.001	4552	0.0100	0.0115	
4 DNX	1	5.963	5.955	0.008	2804	0.0100	0.0101	
5 HMX	1	6.596	6.595	0.001	2178	0.0100	0.007259	
6 MNX	1	7.496	7.489	0.007	3646	0.0117	0.0139	
7 2,4,6-Trinitrophenol	1	8.063	8.029	0.034	2197	0.0100	0.0103	
8 RDX	1	8.923	8.915	0.008	2852	0.0100	0.0101	
9 Nitrobenzene	1	11.489	11.482	0.007	4269	0.0100	0.0107	
$ 10 1,2-Dinitrobenzene	1	12.483	12.469	0.014	3169	0.0100	0.0113	
11 3,5-Dinitroaniline	1	14.376	14.355	0.021	5053	0.0100	0.0100	
12 1,3-Dinitrobenzene	1	14.636	14.622	0.014	6946	0.0100	0.0110	
13 Nitroglycerin	2	15.196	15.182	0.014	14603	0.1000	0.1084	
14 o-Nitrotoluene	1	15.736	15.729	0.007	2336	0.0100	0.009459	M
16 p-Nitrotoluene	1	15.969	15.955	0.014	2206	0.0100	0.009697	M
17 4-Amino-2,6-dinitrotoluene	1	16.529	16.515	0.014	3275	0.0100	0.0111	M
18 m-Nitrotoluene	1	16.843	16.815	0.028	3269	0.0100	0.0111	M
19 2-Amino-4,6-dinitrotoluene	1	17.369	17.362	0.007	3912	0.0100	0.009141	M
20 1,3,5-Trinitrobenzene	1	17.443	17.422	0.021	4438	0.0100	0.0109	M
21 2,6-Dinitrotoluene	1	18.643	18.629	0.014	3093	0.0100	0.0106	
22 2,4-Dinitrotoluene	1	19.096	19.082	0.014	5987	0.0100	0.0102	
23 Tetryl	1	22.363	22.389	-0.026	3282	0.0100	0.0115	
24 2,4,6-Trinitrotoluene	1	23.176	23.182	-0.006	4919	0.0100	0.0112	
25 PETN	2	24.430	24.475	-0.045	16344	0.1000	0.1135	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00076	Amount Added:	1.00	Units: uL
8330 DMT_00013	Amount Added:	0.50	Units: uL

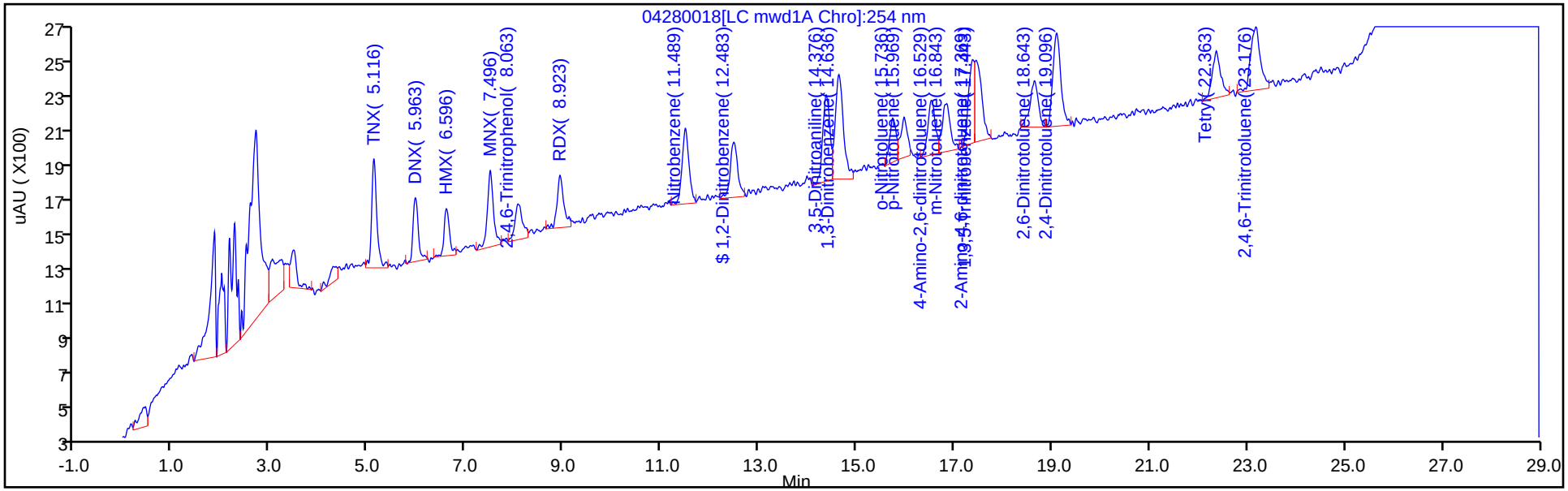
Report Date: 29-Apr-2023 13:04:20 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

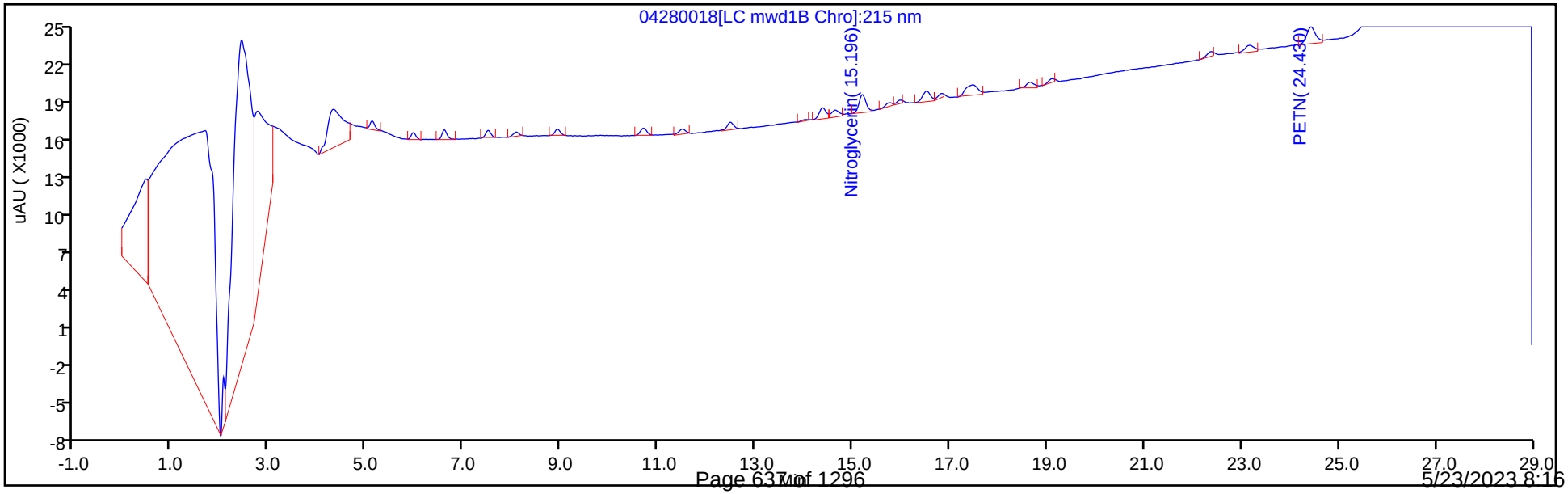
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280018.D

Injection Date:	28-Apr-2023 23:03:35	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC INT 1			Worklist Smp#:	18
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



5/23/2023 8:16 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

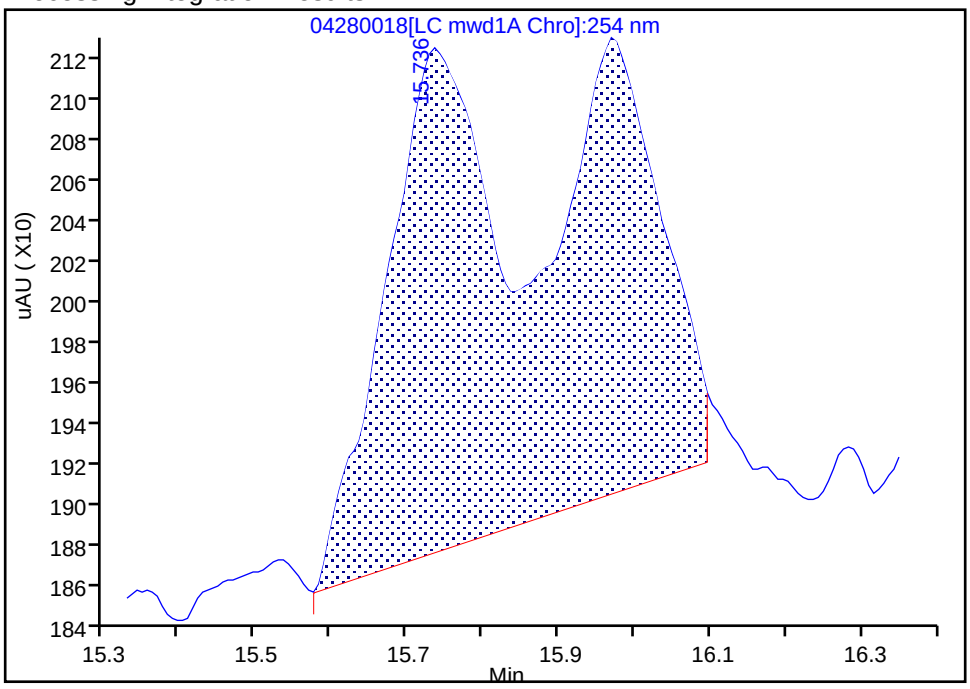
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280018.D				
Injection Date:	28-Apr-2023 23:03:35	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

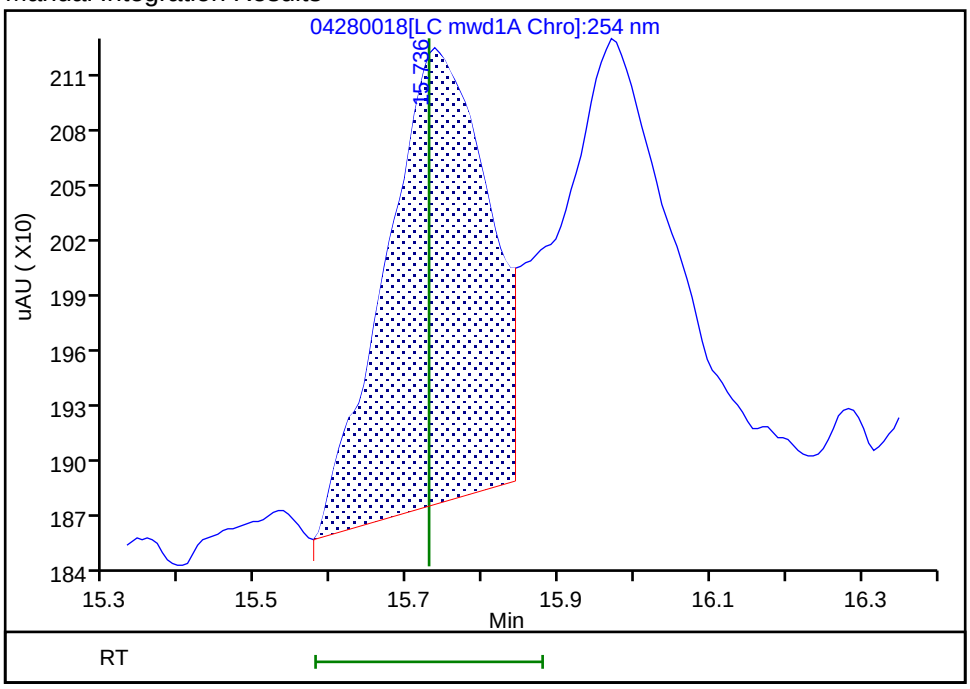
Processing Integration Results

RT: 15.74
Area: 4530
Amount: 0.013152
Amount Units: ug/ml



Manual Integration Results

RT: 15.74
Area: 2336
Amount: 0.009459
Amount Units: ug/ml



Reviewer: LV5D, 29-Apr-2023 10:24:06

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

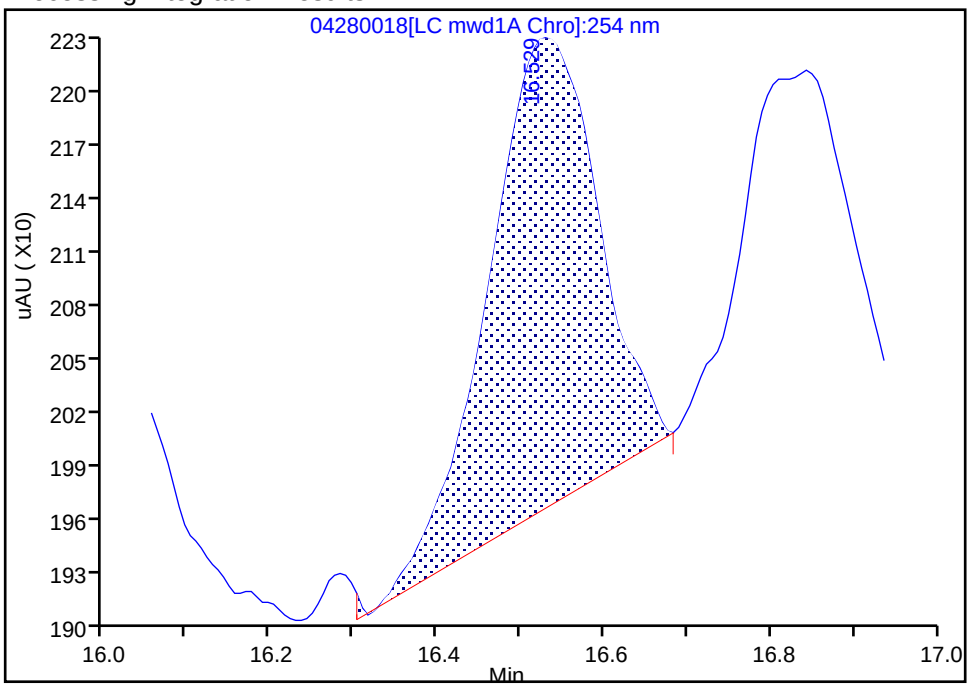
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280018.D				
Injection Date:	28-Apr-2023 23:03:35	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

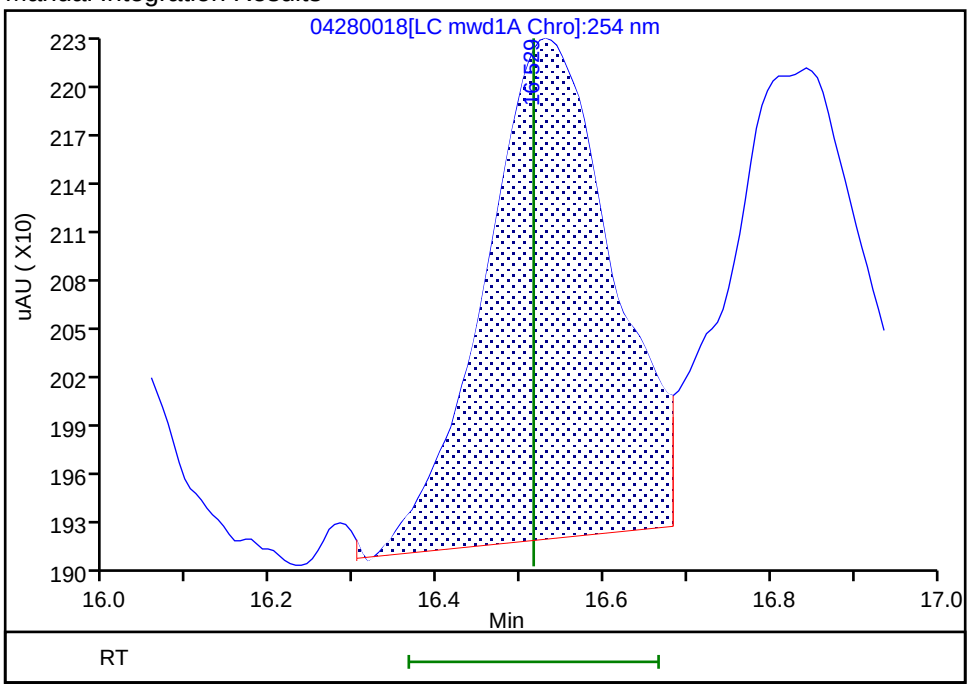
Processing Integration Results

RT: 16.53
Area: 2409
Amount: 0.008465
Amount Units: ug/ml



Manual Integration Results

RT: 16.53
Area: 3275
Amount: 0.011131
Amount Units: ug/ml



Reviewer: LV5D, 29-Apr-2023 13:01:58
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

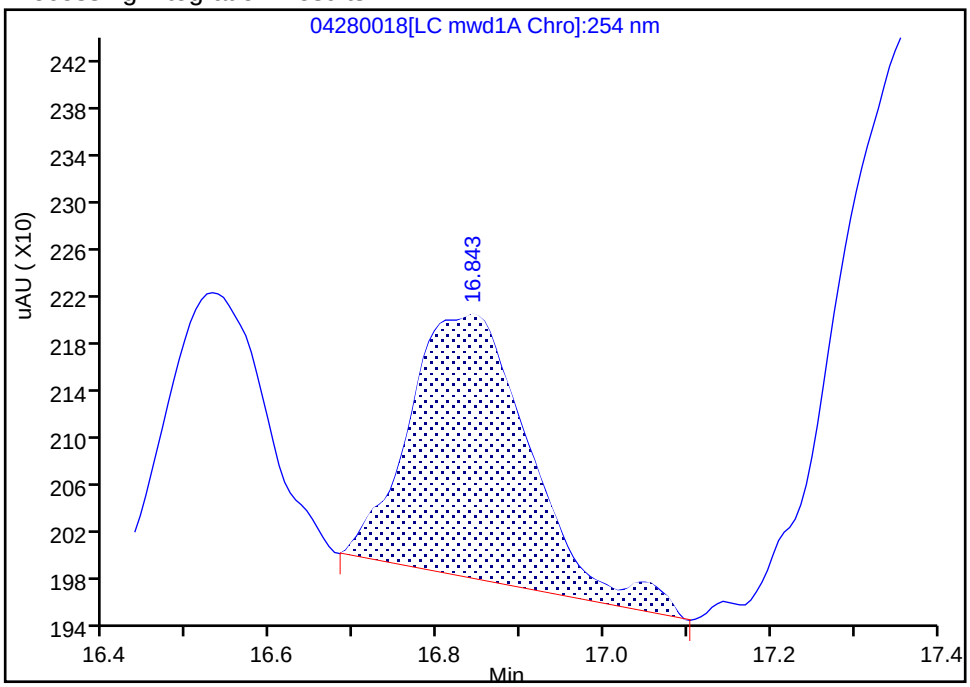
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280018.D				
Injection Date:	28-Apr-2023 23:03:35	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

18 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

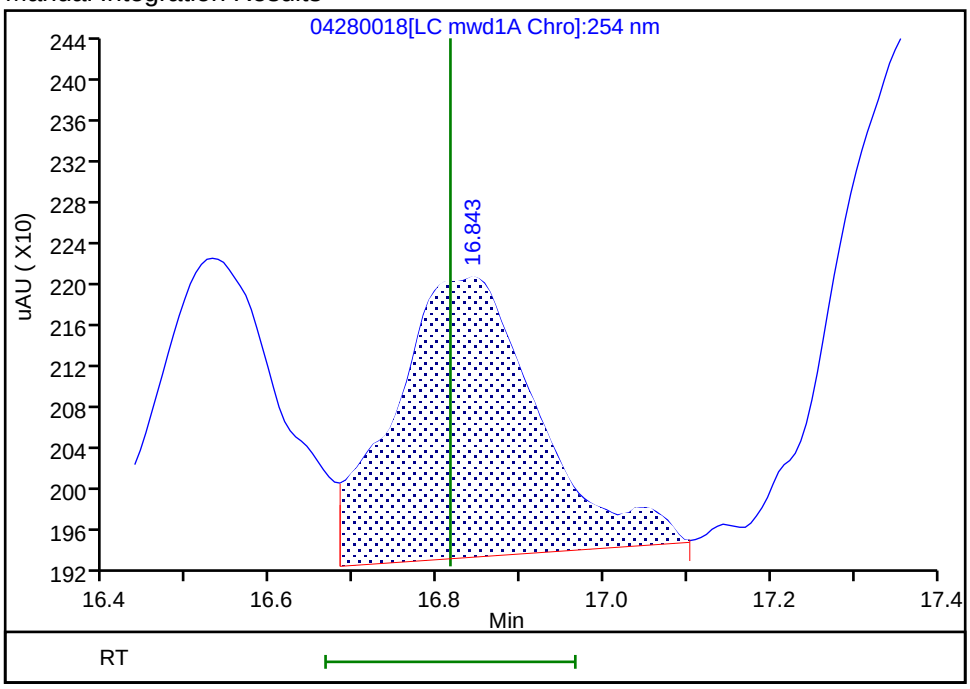
Processing Integration Results

RT: 16.84
Area: 2248
Amount: 0.007935
Amount Units: ug/ml



Manual Integration Results

RT: 16.84
Area: 3269
Amount: 0.011095
Amount Units: ug/ml



Reviewer: LV5D, 29-Apr-2023 13:01:58
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

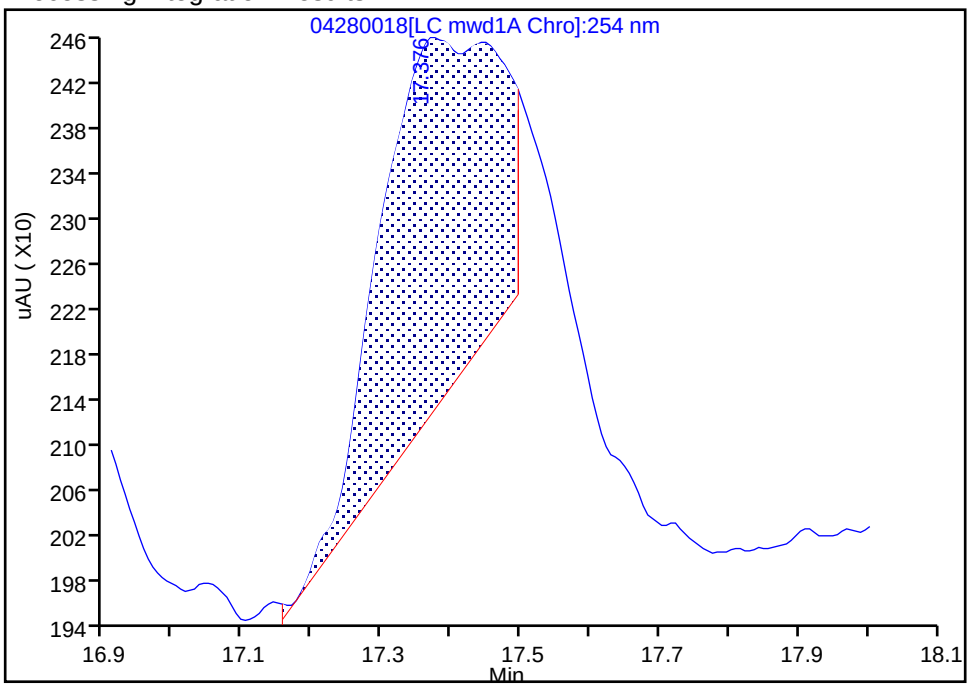
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280018.D				
Injection Date:	28-Apr-2023 23:03:35	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

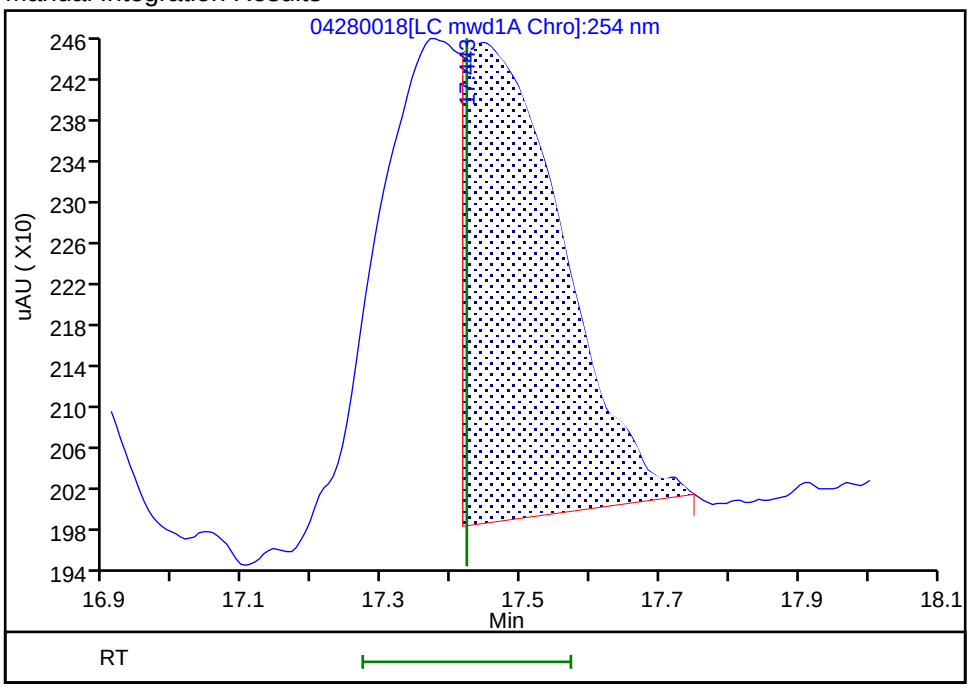
Processing Integration Results

RT: 17.38
Area: 3762
Amount: 0.009448
Amount Units: ug/ml



Manual Integration Results

RT: 17.44
Area: 4438
Amount: 0.010939
Amount Units: ug/ml



Reviewer: LV5D, 29-Apr-2023 10:24:15

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Calibration / TNX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

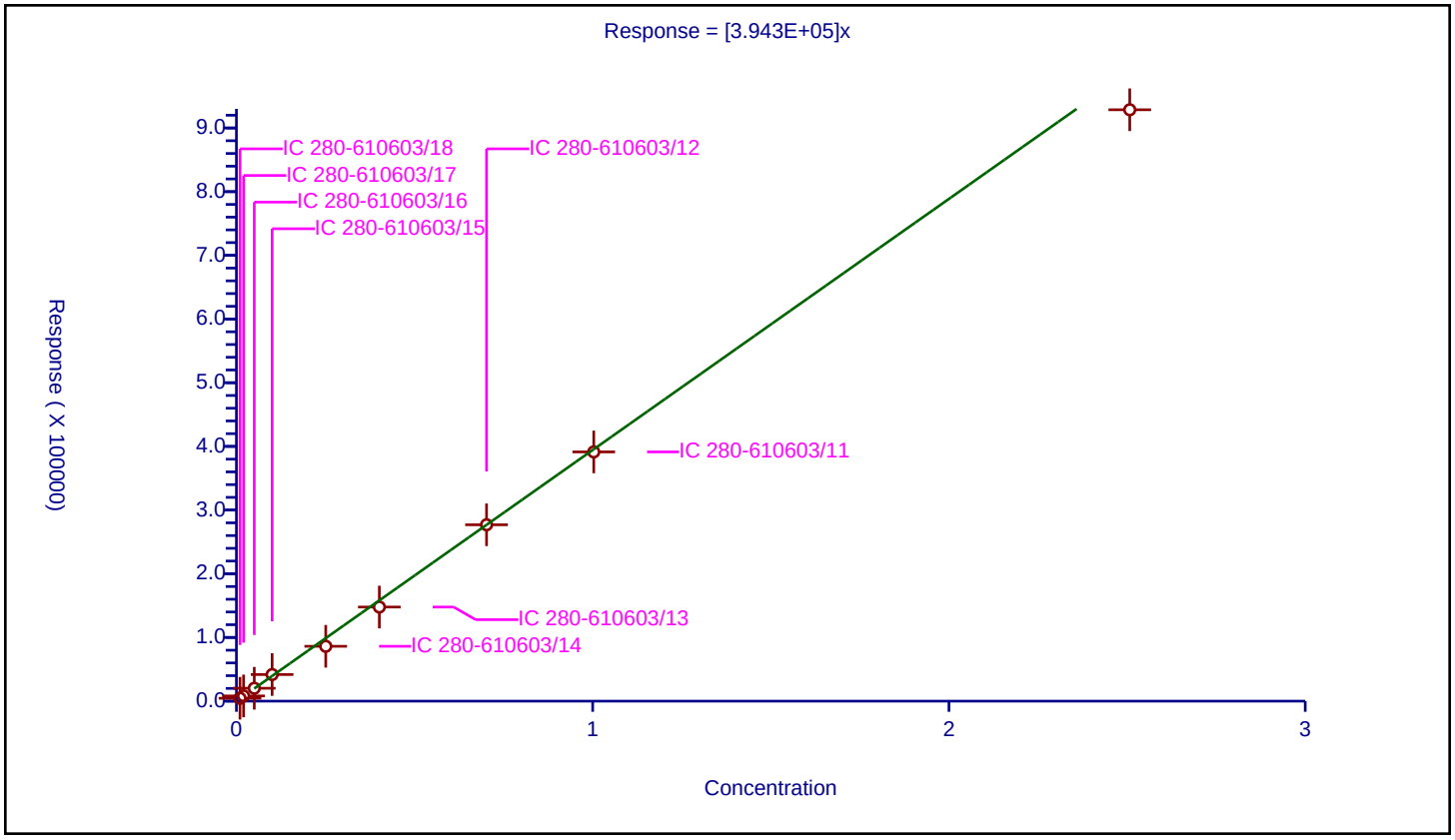
Curve Coefficients

Intercept:	0
Slope:	3.943E+05

Error Coefficients

Standard Error:	22100
Relative Standard Error:	8.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01003	4552.0			453838.484546	Y
2	IC 280-610603/17	0.02006	8179.0			407726.819541	Y
3	IC 280-610603/16	0.05015	20281.0			404406.779661	Y
4	IC 280-610603/15	0.1003	41754.0			416291.12662	Y
5	IC 280-610603/14	0.25075	86123.0			343461.615155	Y
6	IC 280-610603/13	0.4012	147763.0			368302.592223	Y
7	IC 280-610603/12	0.7021	276939.0			394443.811423	Y
8	IC 280-610603/11	1.003	391357.0			390186.440678	Y
9	IC 280-610603/10	2.5075	928605.0			370331.006979	Y



Calibration / DNX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

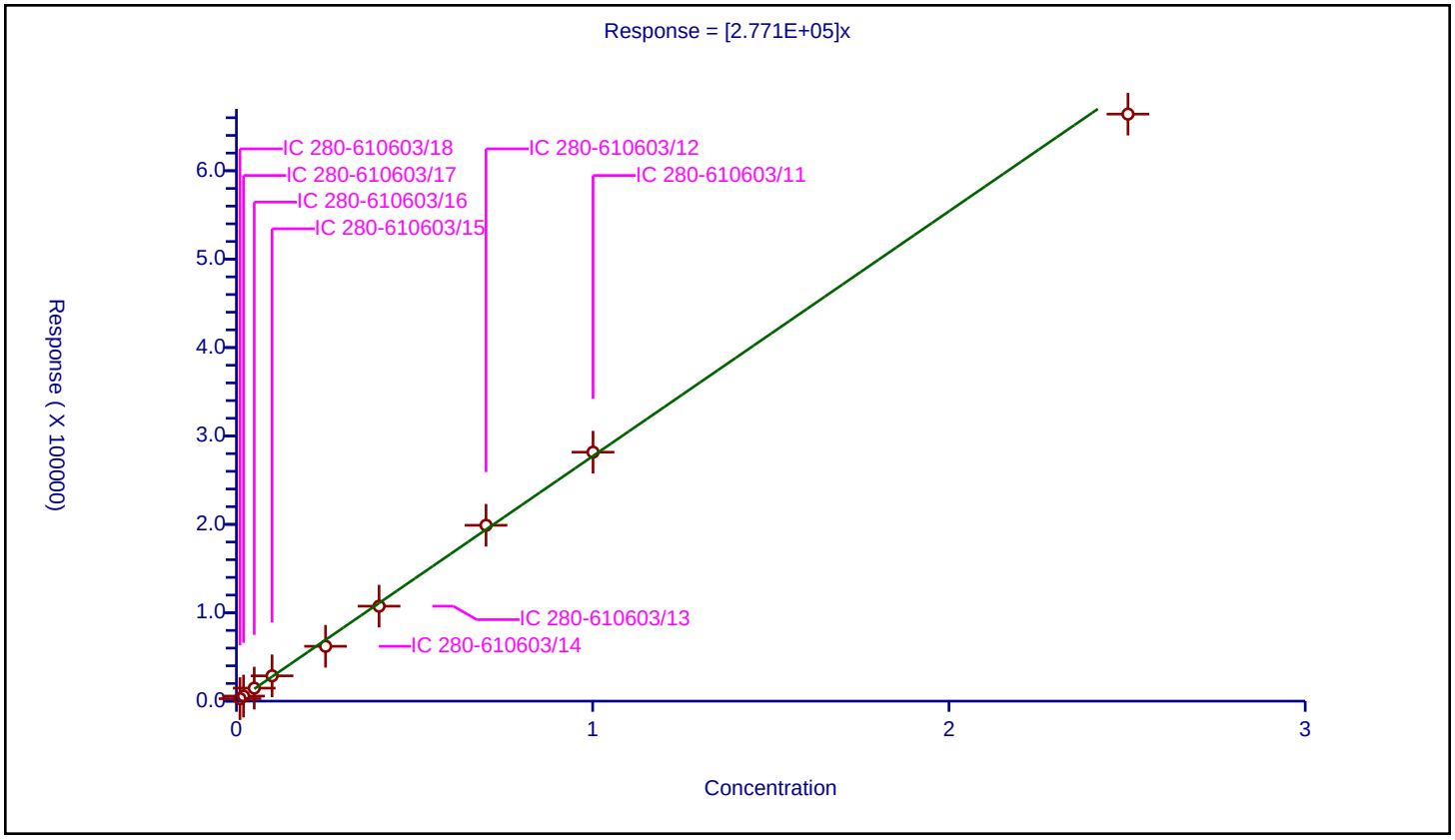
Curve Coefficients

Intercept:	0
Slope:	2.771E+05

Error Coefficients

Standard Error:	11000
Relative Standard Error:	5.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01001	2804.0			280119.88012	Y
2	IC 280-610603/17	0.02002	5728.0			286113.886114	Y
3	IC 280-610603/16	0.05005	14733.0			294365.634366	Y
4	IC 280-610603/15	0.1001	28641.0			286123.876124	Y
5	IC 280-610603/14	0.25025	62056.0			247976.023976	Y
6	IC 280-610603/13	0.4004	107420.0			268281.718282	Y
7	IC 280-610603/12	0.7007	198949.0			283928.928215	Y
8	IC 280-610603/11	1.001	281655.0			281373.626374	Y
9	IC 280-610603/10	2.5025	664081.0			265367.032967	Y



Calibration / HMX

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

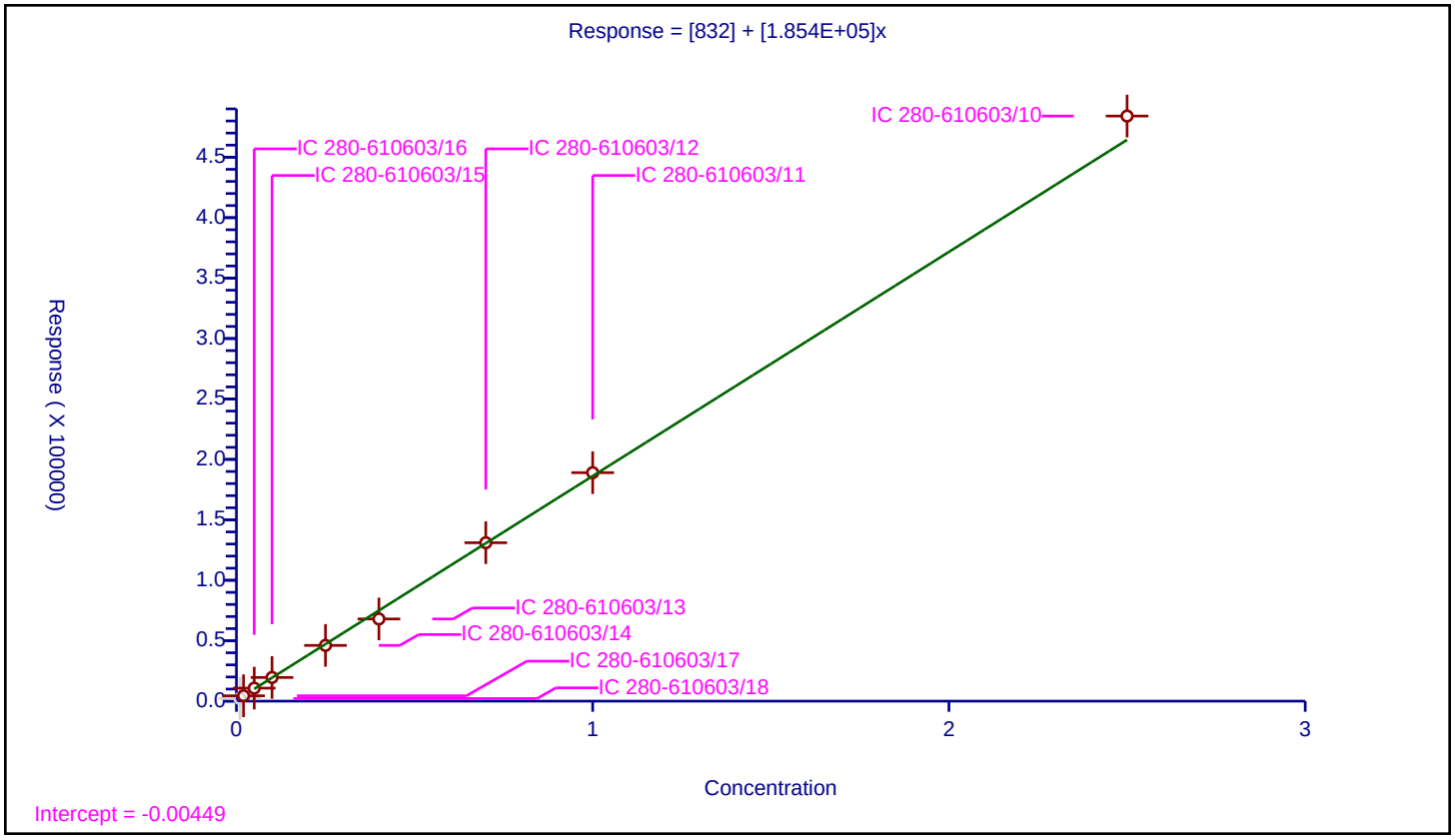
Curve Coefficients

Intercept:	832
Slope:	1.854E+05

Error Coefficients

Standard Error:	8620
Relative Standard Error:	5.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01	2178.0			217800.0	N
2	IC 280-610603/17	0.02	4449.0			222450.0	Y
3	IC 280-610603/16	0.05	10761.0			215220.0	Y
4	IC 280-610603/15	0.1	19573.0			195730.0	Y
5	IC 280-610603/14	0.25	46110.0			184440.0	Y
6	IC 280-610603/13	0.4	67993.0			169982.5	Y
7	IC 280-610603/12	0.7	131068.0			187240.0	Y
8	IC 280-610603/11	1.0	189027.0			189027.0	Y
9	IC 280-610603/10	2.5	484081.0			193632.4	Y



Calibration / MNX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

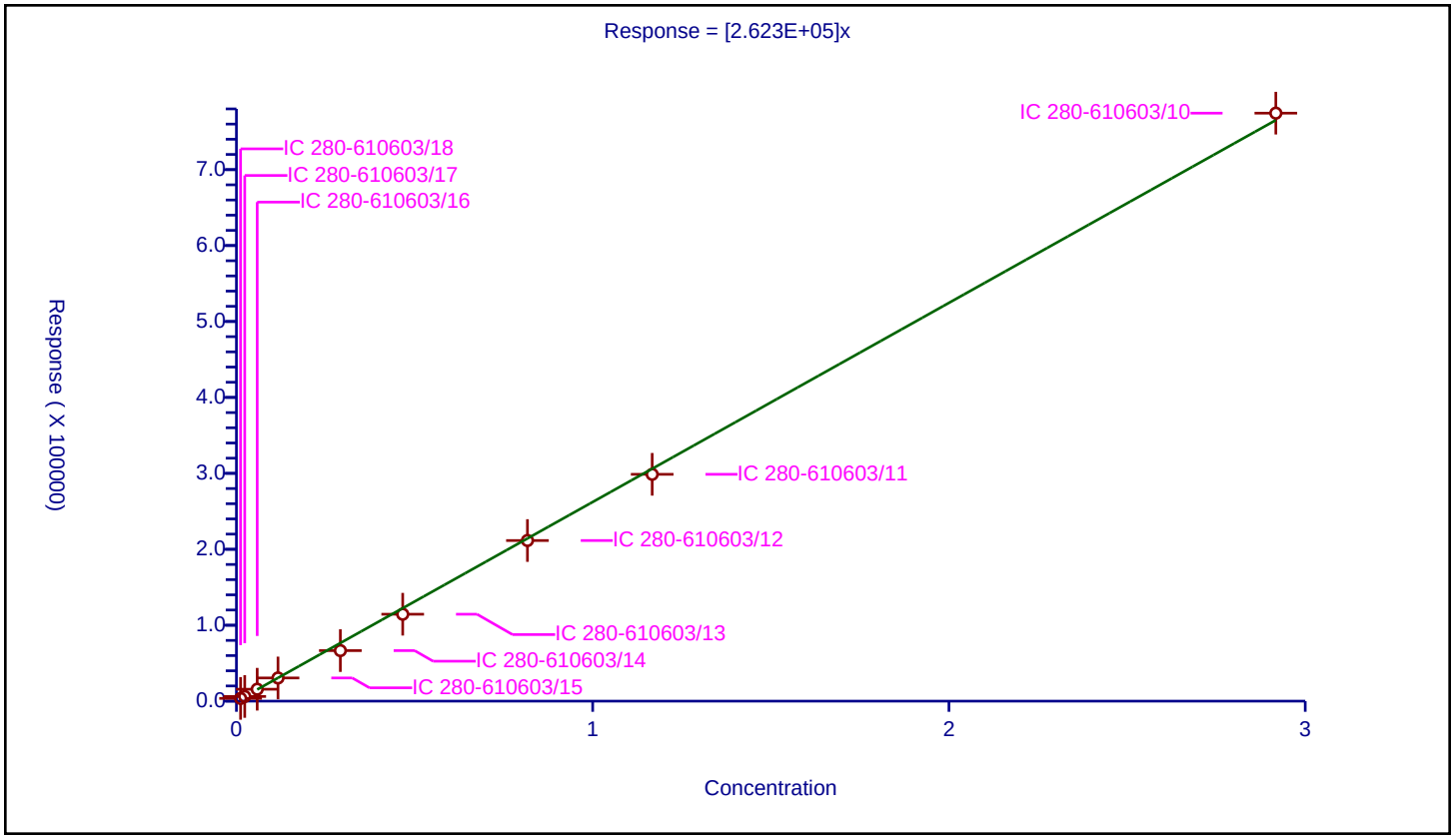
Curve Coefficients

Intercept:	0
Slope:	2.623E+05

Error Coefficients

Standard Error:	6210
Relative Standard Error:	8.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01167	3646.0			312425.021422	Y
2	IC 280-610603/17	0.02334	6155.0			263710.368466	Y
3	IC 280-610603/16	0.05835	15694.0			268963.153385	Y
4	IC 280-610603/15	0.1167	30530.0			261610.968295	Y
5	IC 280-610603/14	0.29175	66549.0			228102.827763	Y
6	IC 280-610603/13	0.4668	114487.0			245259.211654	Y
7	IC 280-610603/12	0.8169	211518.0			258927.653324	Y
8	IC 280-610603/11	1.167	298731.0			255982.005141	Y
9	IC 280-610603/10	2.9175	774370.0			265422.450728	Y



Calibration / 2,4,6-Trinitrophenol

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

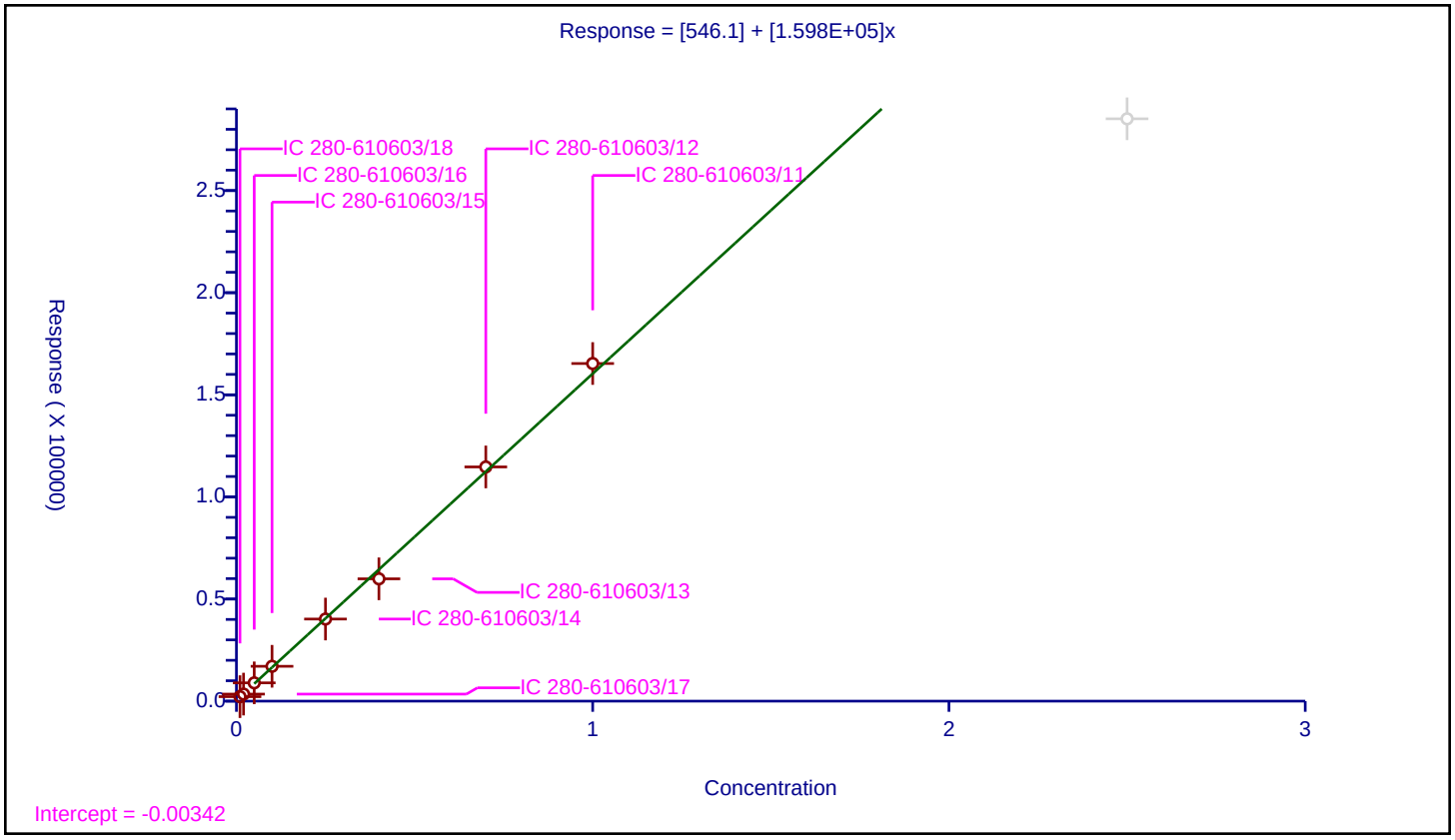
Curve Coefficients

Intercept:	546.1
Slope:	1.598E+05

Error Coefficients

Standard Error:	2930
Relative Standard Error:	5.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01	2197.0			219700.0	Y
2	IC 280-610603/17	0.02	3453.0			172650.0	Y
3	IC 280-610603/16	0.05	8950.0			179000.0	Y
4	IC 280-610603/15	0.1	17060.0			170600.0	Y
5	IC 280-610603/14	0.25	40202.0			160808.0	Y
6	IC 280-610603/13	0.4	59892.0			149730.0	Y
7	IC 280-610603/12	0.7	114679.0			163827.142857	Y
8	IC 280-610603/11	1.0	165319.0			165319.0	Y
9	IC 280-610603/10	2.5	285146.0			114058.4	N



Calibration / RDX

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

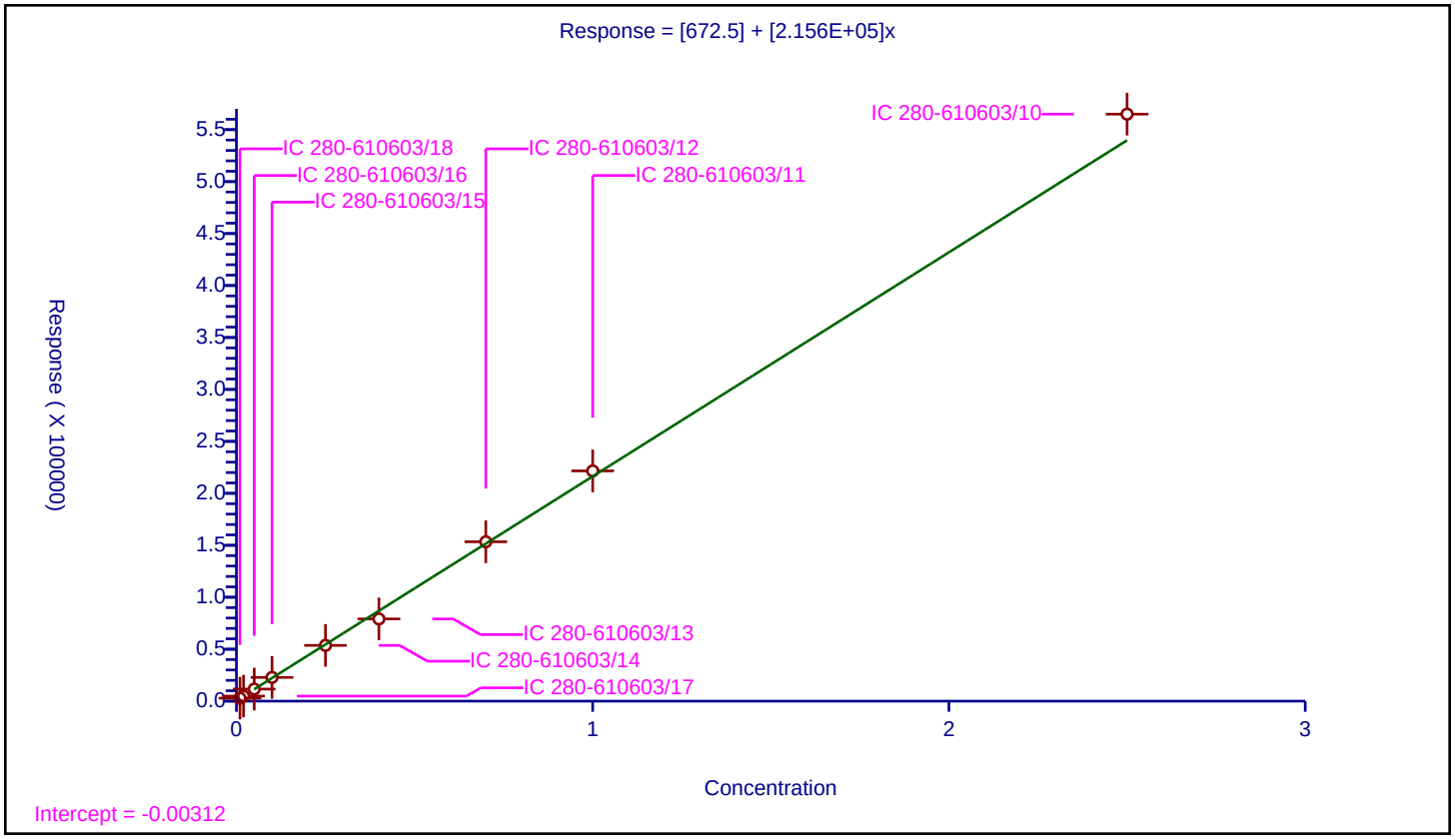
Curve Coefficients

Intercept:	672.5
Slope:	2.156E+05

Error Coefficients

Standard Error:	10200
Relative Standard Error:	4.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01	2852.0			285200.0	Y
2	IC 280-610603/17	0.02	4863.0			243150.0	Y
3	IC 280-610603/16	0.05	11621.0			232420.0	Y
4	IC 280-610603/15	0.1	22827.0			228270.0	Y
5	IC 280-610603/14	0.25	53643.0			214572.0	Y
6	IC 280-610603/13	0.4	79113.0			197782.5	Y
7	IC 280-610603/12	0.7	153380.0			219114.285714	Y
8	IC 280-610603/11	1.0	221588.0			221588.0	Y
9	IC 280-610603/10	2.5	564953.0			225981.2	Y



Calibration / Nitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

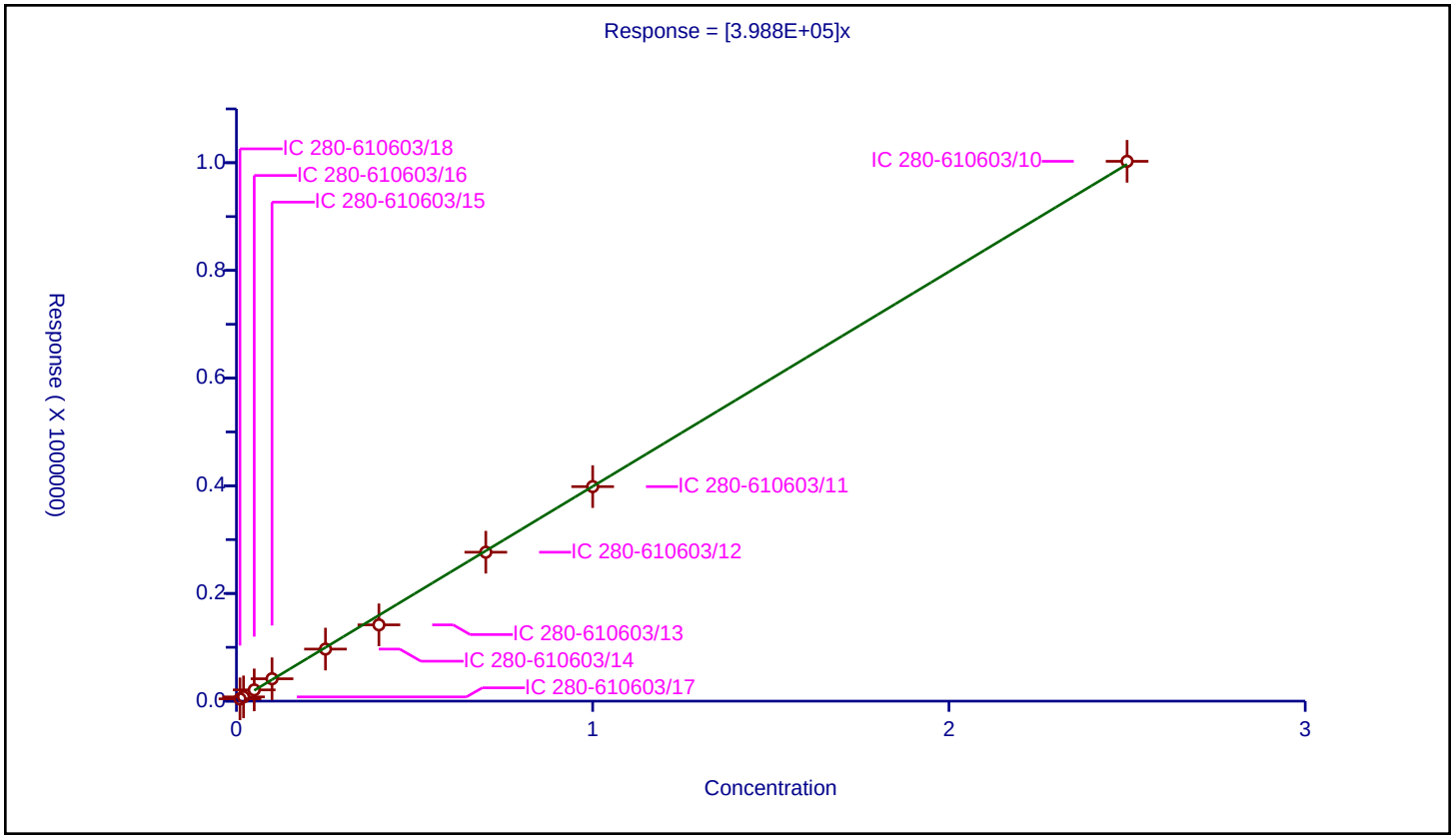
Curve Coefficients

Intercept:	0
Slope:	3.988E+05

Error Coefficients

Standard Error:	6800
Relative Standard Error:	5.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01	4269.0			426900.0	Y
2	IC 280-610603/17	0.02	7871.0			393550.0	Y
3	IC 280-610603/16	0.05	20883.0			417660.0	Y
4	IC 280-610603/15	0.1	41585.0			415850.0	Y
5	IC 280-610603/14	0.25	96681.0			386724.0	Y
6	IC 280-610603/13	0.4	141679.0			354197.5	Y
7	IC 280-610603/12	0.7	276577.0			395110.0	Y
8	IC 280-610603/11	1.0	398454.0			398454.0	Y
9	IC 280-610603/10	2.5	1002641.0			401056.4	Y



Calibration / 1,2-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

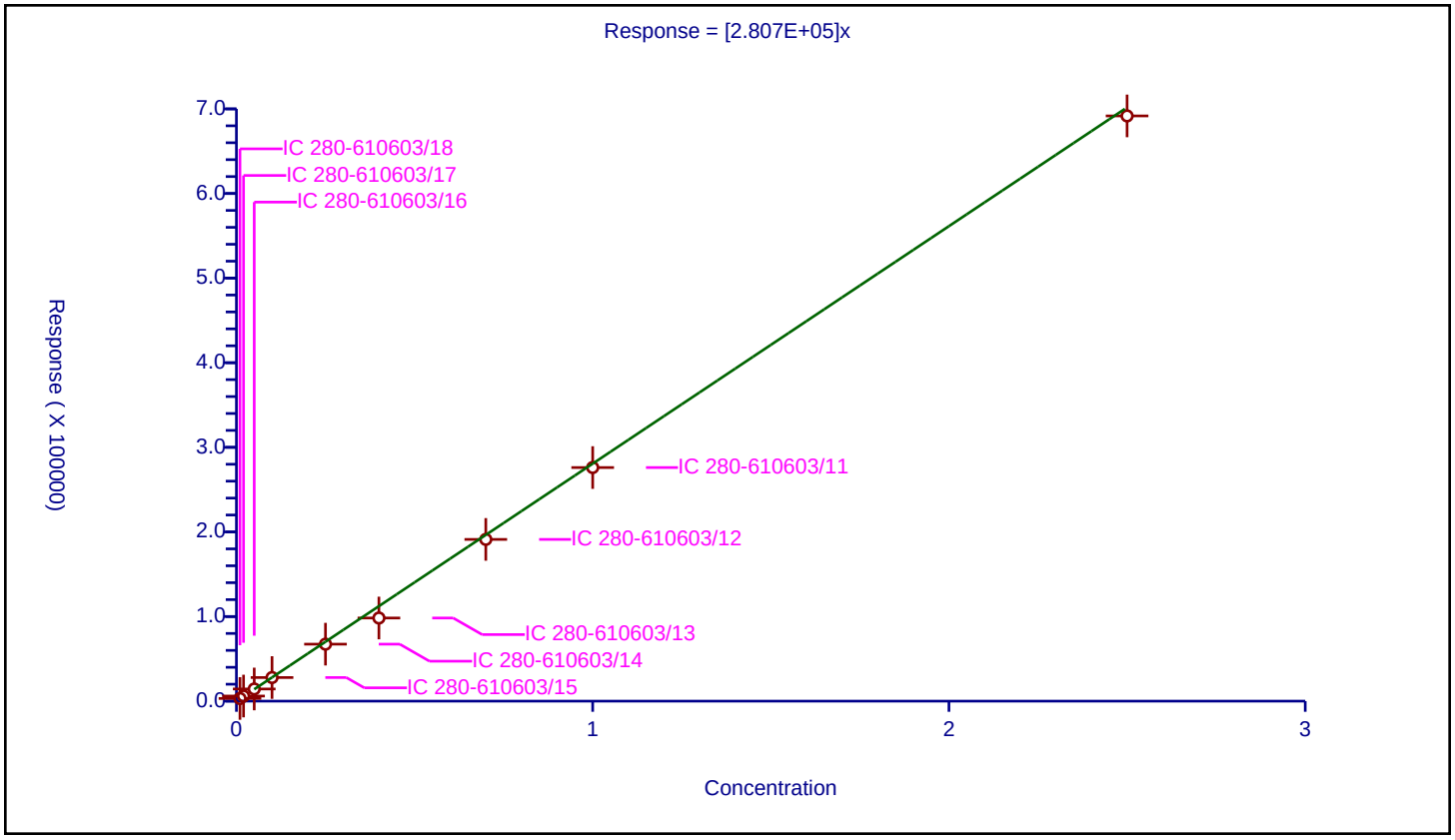
Curve Coefficients

Intercept:	0
Slope:	2.807E+05

Error Coefficients

Standard Error:	6660
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 280-610603/18	0.01	3169.0			316900.0	Y
2	IC 280-610603/17	0.02	6038.0			301900.0	Y
3	IC 280-610603/16	0.05	14379.0			287580.0	Y
4	IC 280-610603/15	0.1	27893.0			278930.0	Y
5	IC 280-610603/14	0.25	67346.0			269384.0	Y
6	IC 280-610603/13	0.4	98279.0			245697.5	Y
7	IC 280-610603/12	0.7	191173.0			273104.285714	Y
8	IC 280-610603/11	1.0	276103.0			276103.0	Y
9	IC 280-610603/10	2.5	691686.0			276674.4	Y



Calibration / 3,5-Dinitroaniline

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

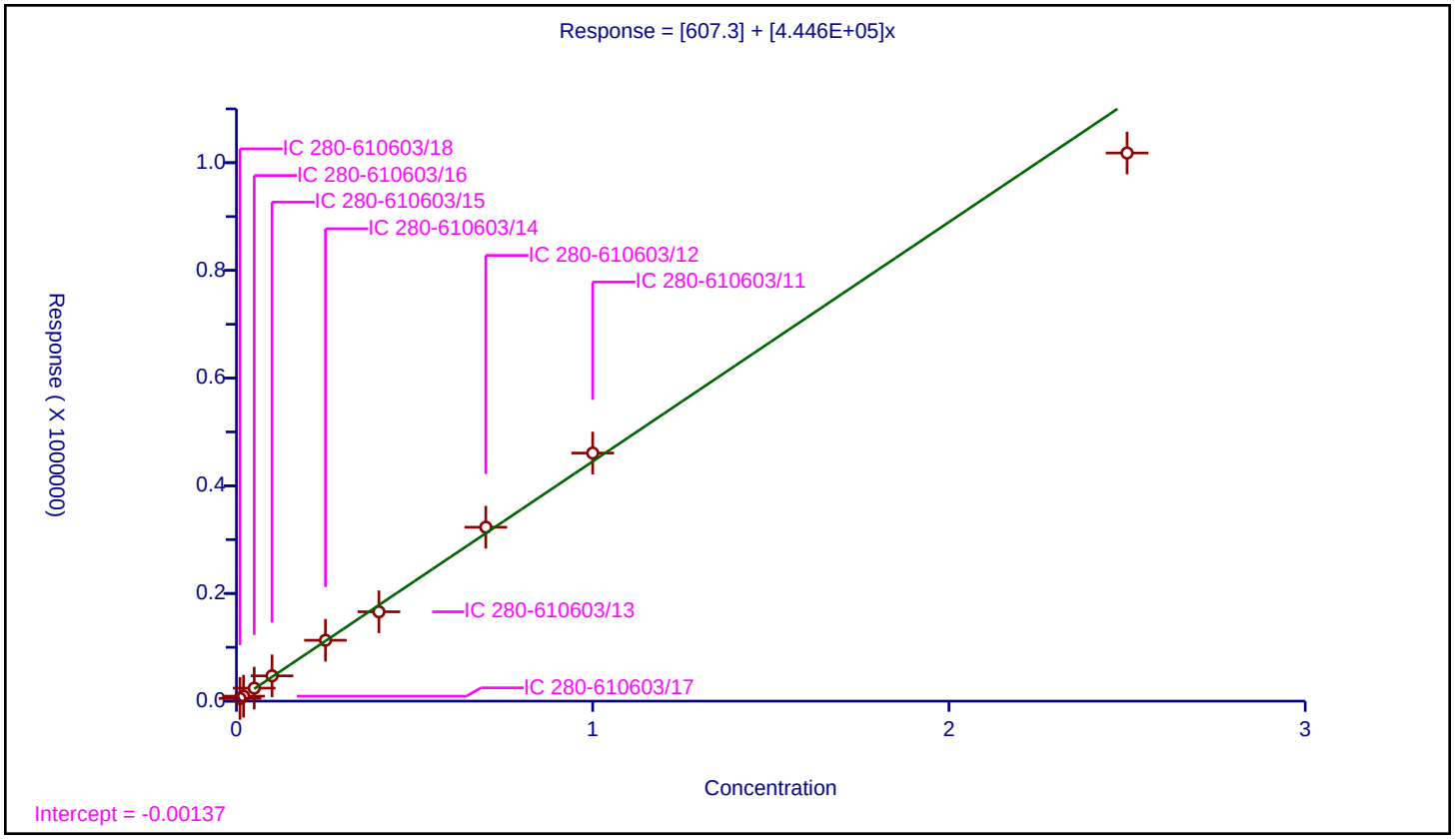
Curve Coefficients

Intercept:	607.3
Slope:	4.446E+05

Error Coefficients

Standard Error:	36600
Relative Standard Error:	5.5
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01	5053.0			505300.0	Y
2	IC 280-610603/17	0.02	9221.0			461050.0	Y
3	IC 280-610603/16	0.05	24176.0			483520.0	Y
4	IC 280-610603/15	0.1	46980.0			469800.0	Y
5	IC 280-610603/14	0.25	113054.0			452216.0	Y
6	IC 280-610603/13	0.4	165924.0			414810.0	Y
7	IC 280-610603/12	0.7	322983.0			461404.285714	Y
8	IC 280-610603/11	1.0	460771.0			460771.0	Y
9	IC 280-610603/10	2.5	1018070.0			407228.0	Y



Calibration / 1,3-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

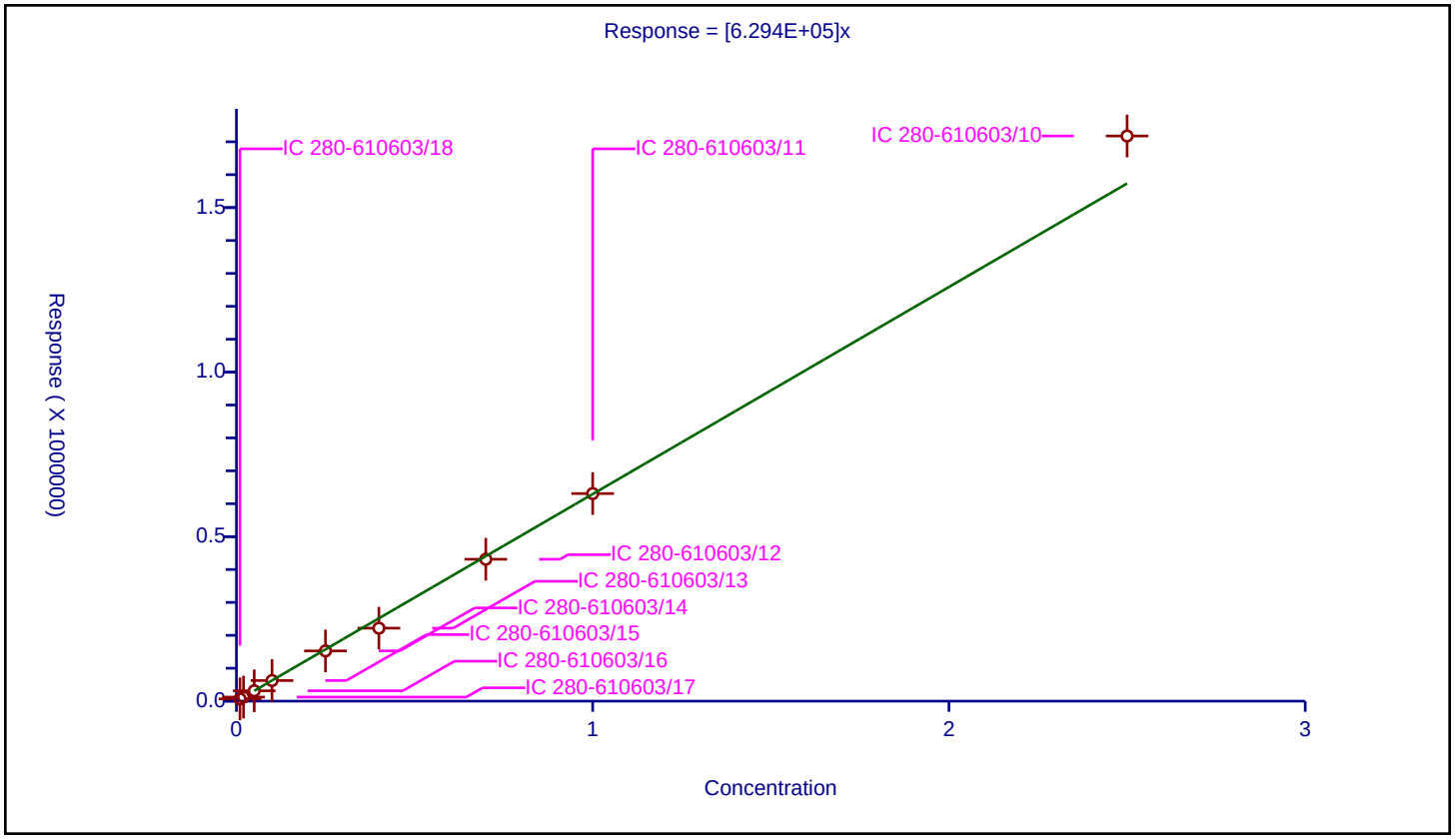
Curve Coefficients

Intercept:	0
Slope:	6.294E+05

Error Coefficients

Standard Error:	52200
Relative Standard Error:	6.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01	6946.0			694600.0	Y
2	IC 280-610603/17	0.02	12307.0			615350.0	Y
3	IC 280-610603/16	0.05	31459.0			629180.0	Y
4	IC 280-610603/15	0.1	62596.0			625960.0	Y
5	IC 280-610603/14	0.25	152658.0			610632.0	Y
6	IC 280-610603/13	0.4	221798.0			554495.0	Y
7	IC 280-610603/12	0.7	431248.0			616068.571429	Y
8	IC 280-610603/11	1.0	630835.0			630835.0	Y
9	IC 280-610603/10	2.5	1717605.0			687042.0	Y



Calibration / Nitroglycerin

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

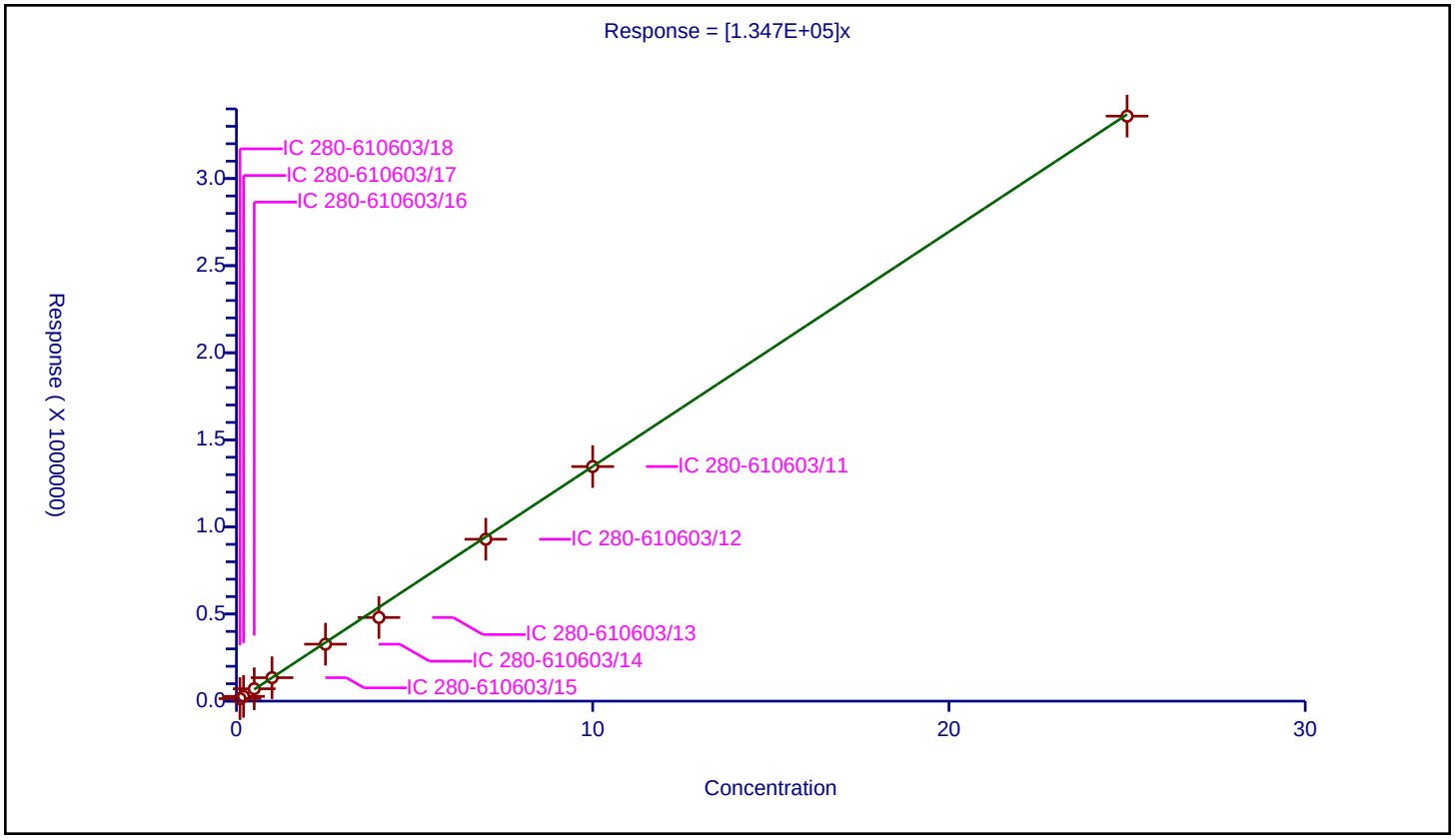
Curve Coefficients

Intercept:	0
Slope:	1.347E+05

Error Coefficients

Standard Error:	21900
Relative Standard Error:	5.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.1	14603.0			146030.0	Y
2	IC 280-610603/17	0.2	27409.0			137045.0	Y
3	IC 280-610603/16	0.5	71084.0			142168.0	Y
4	IC 280-610603/15	1.0	134661.0			134661.0	Y
5	IC 280-610603/14	2.5	327195.0			130878.0	Y
6	IC 280-610603/13	4.0	480119.0			120029.75	Y
7	IC 280-610603/12	7.0	929634.0			132804.857143	Y
8	IC 280-610603/11	10.0	1346659.0			134665.9	Y
9	IC 280-610603/10	25.0	3358347.0			134333.88	Y



Calibration / o-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

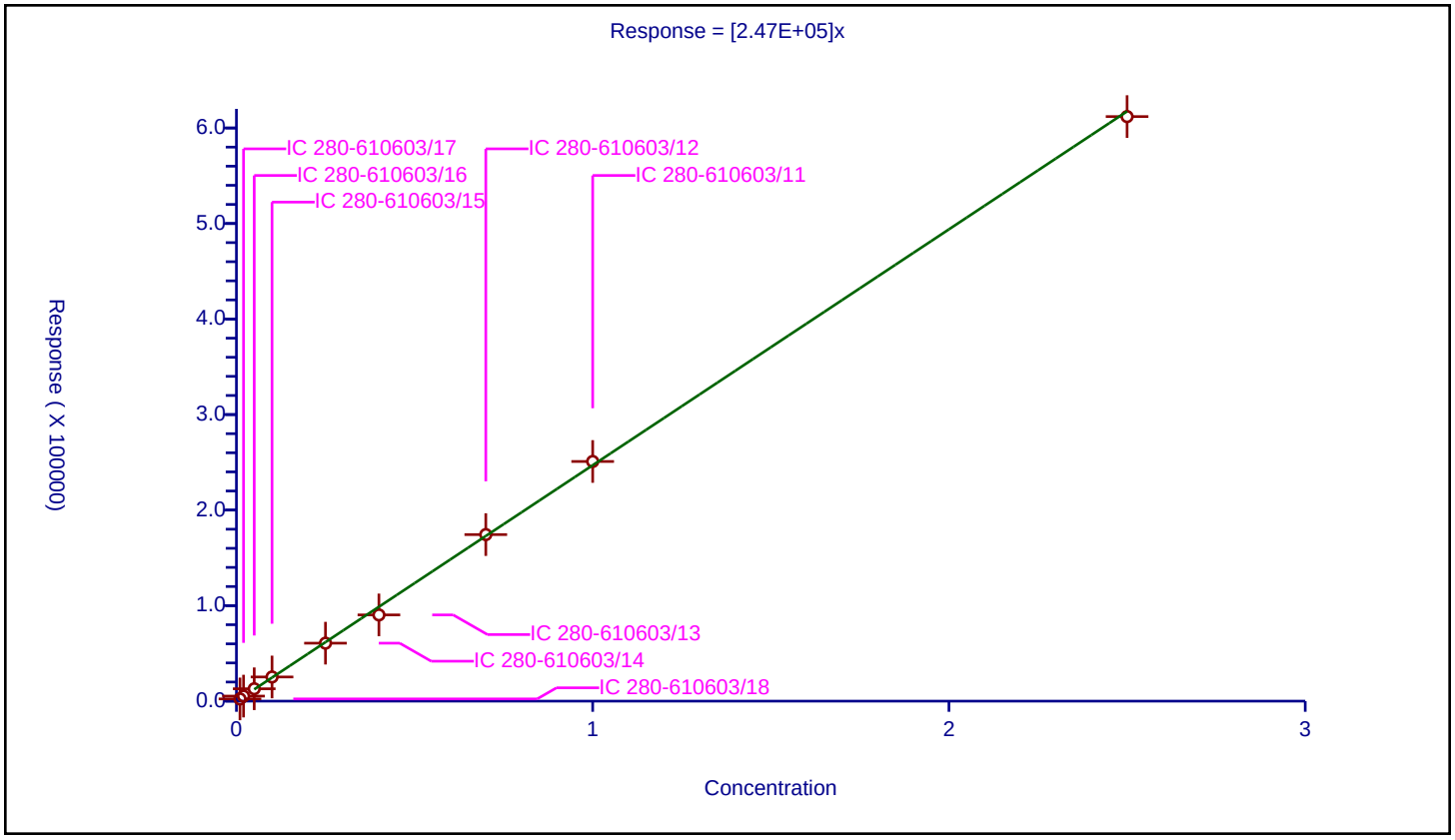
Curve Coefficients

Intercept:	0
Slope:	2.47E+05

Error Coefficients

Standard Error:	3910
Relative Standard Error:	4.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01	2336.0			233600.0	Y
2	IC 280-610603/17	0.02	5281.0			264050.0	Y
3	IC 280-610603/16	0.05	12951.0			259020.0	Y
4	IC 280-610603/15	0.1	25290.0			252900.0	Y
5	IC 280-610603/14	0.25	60674.0			242696.0	Y
6	IC 280-610603/13	0.4	90266.0			225665.0	Y
7	IC 280-610603/12	0.7	174353.0			249075.714286	Y
8	IC 280-610603/11	1.0	250892.0			250892.0	Y
9	IC 280-610603/10	2.5	611929.0			244771.6	Y



Calibration / p-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

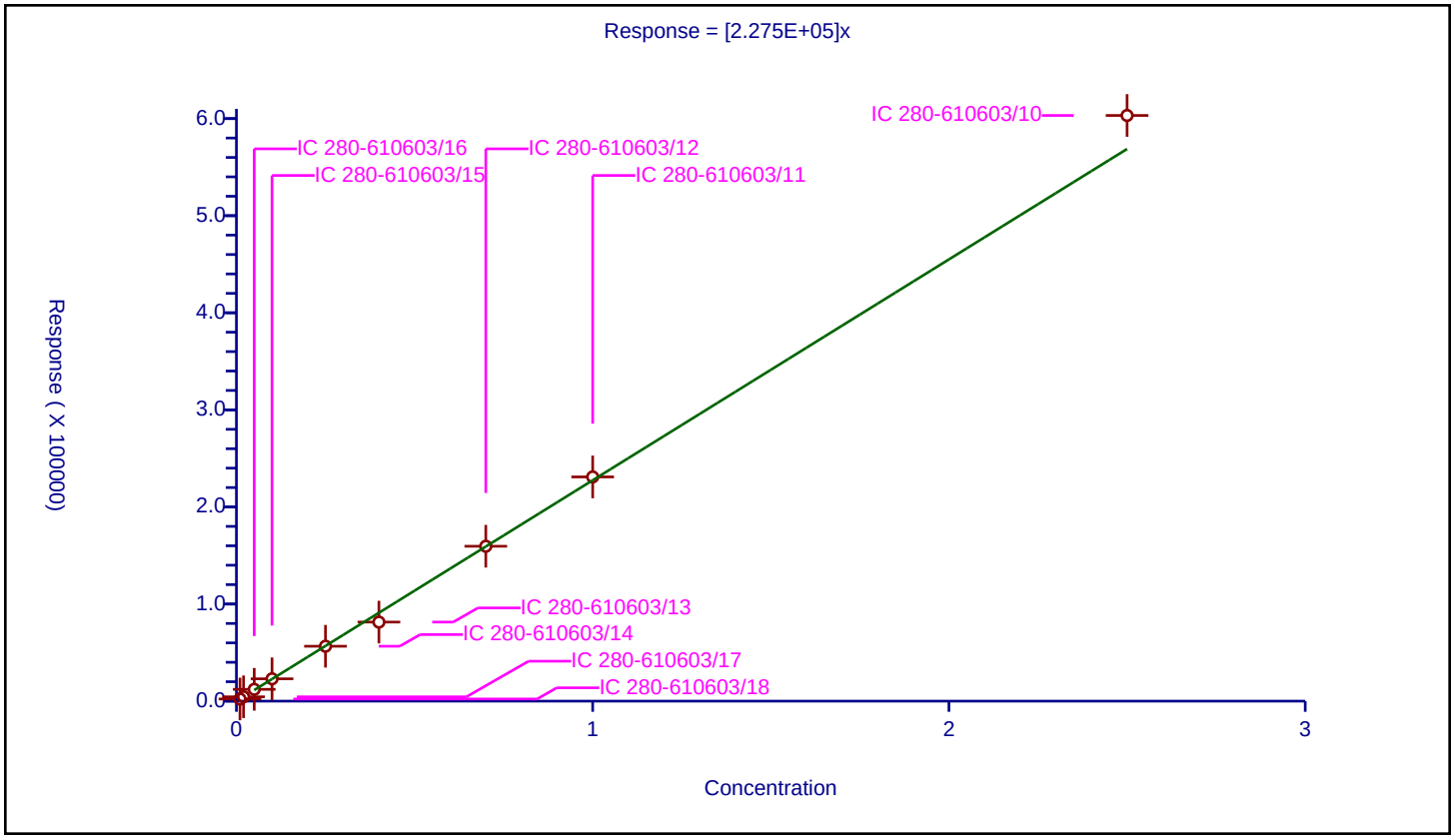
Curve Coefficients

Intercept:	0
Slope:	2.275E+05

Error Coefficients

Standard Error:	12700
Relative Standard Error:	5.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01	2206.0			220600.0	Y
2	IC 280-610603/17	0.02	4466.0			223300.0	Y
3	IC 280-610603/16	0.05	12179.0			243580.0	Y
4	IC 280-610603/15	0.1	23002.0			230020.0	Y
5	IC 280-610603/14	0.25	56555.0			226220.0	Y
6	IC 280-610603/13	0.4	81428.0			203570.0	Y
7	IC 280-610603/12	0.7	159520.0			227885.714286	Y
8	IC 280-610603/11	1.0	230951.0			230951.0	Y
9	IC 280-610603/10	2.5	603215.0			241286.0	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

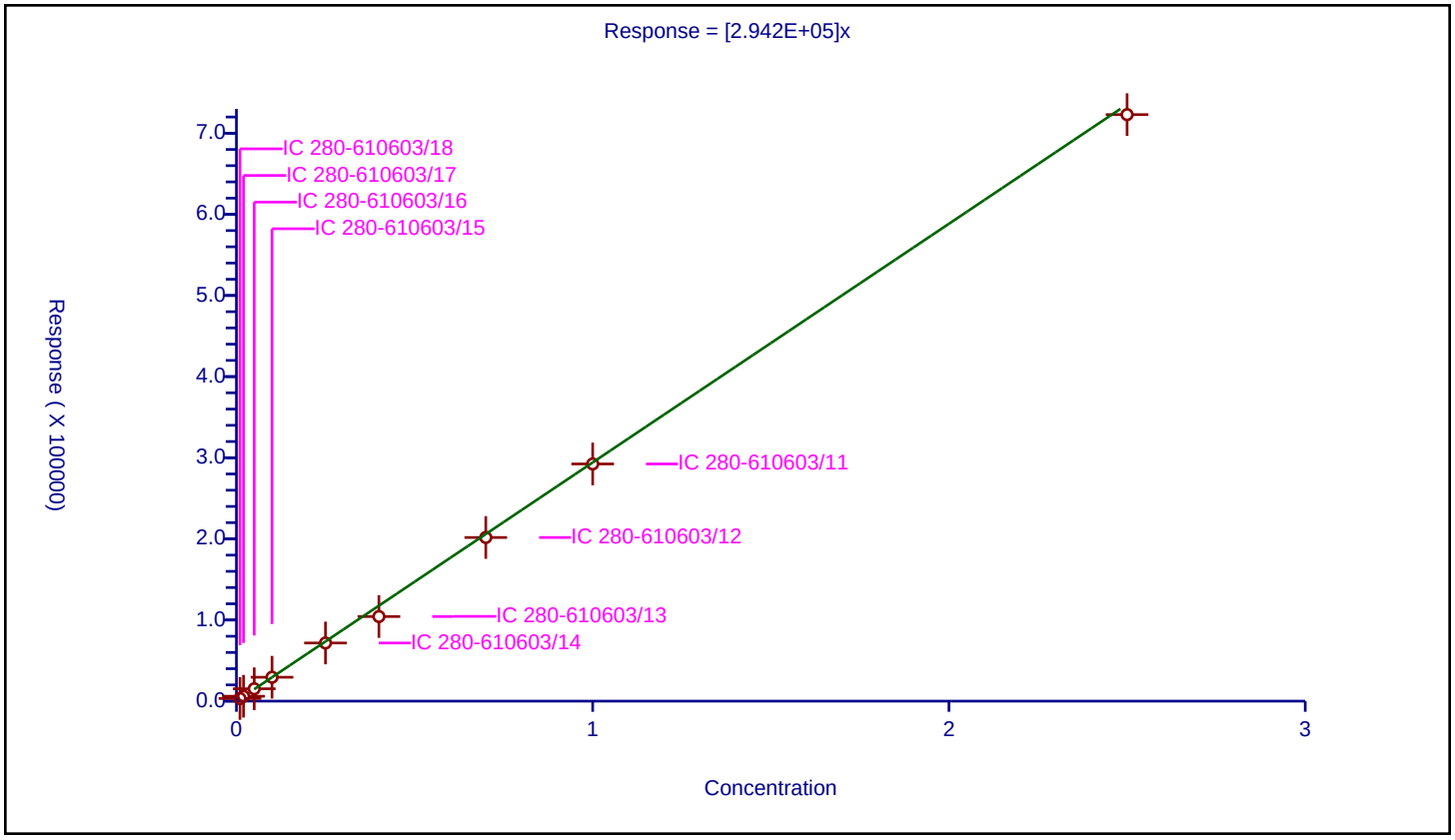
Curve Coefficients

Intercept:	0
Slope:	2.942E+05

Error Coefficients

Standard Error:	6740
Relative Standard Error:	6.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01	3275.0			327500.0	Y
2	IC 280-610603/17	0.02	6064.0			303200.0	Y
3	IC 280-610603/16	0.05	15265.0			305300.0	Y
4	IC 280-610603/15	0.1	29472.0			294720.0	Y
5	IC 280-610603/14	0.25	71678.0			286712.0	Y
6	IC 280-610603/13	0.4	104292.0			260730.0	Y
7	IC 280-610603/12	0.7	201729.0			288184.285714	Y
8	IC 280-610603/11	1.0	292369.0			292369.0	Y
9	IC 280-610603/10	2.5	722940.0			289176.0	Y



Calibration / m-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

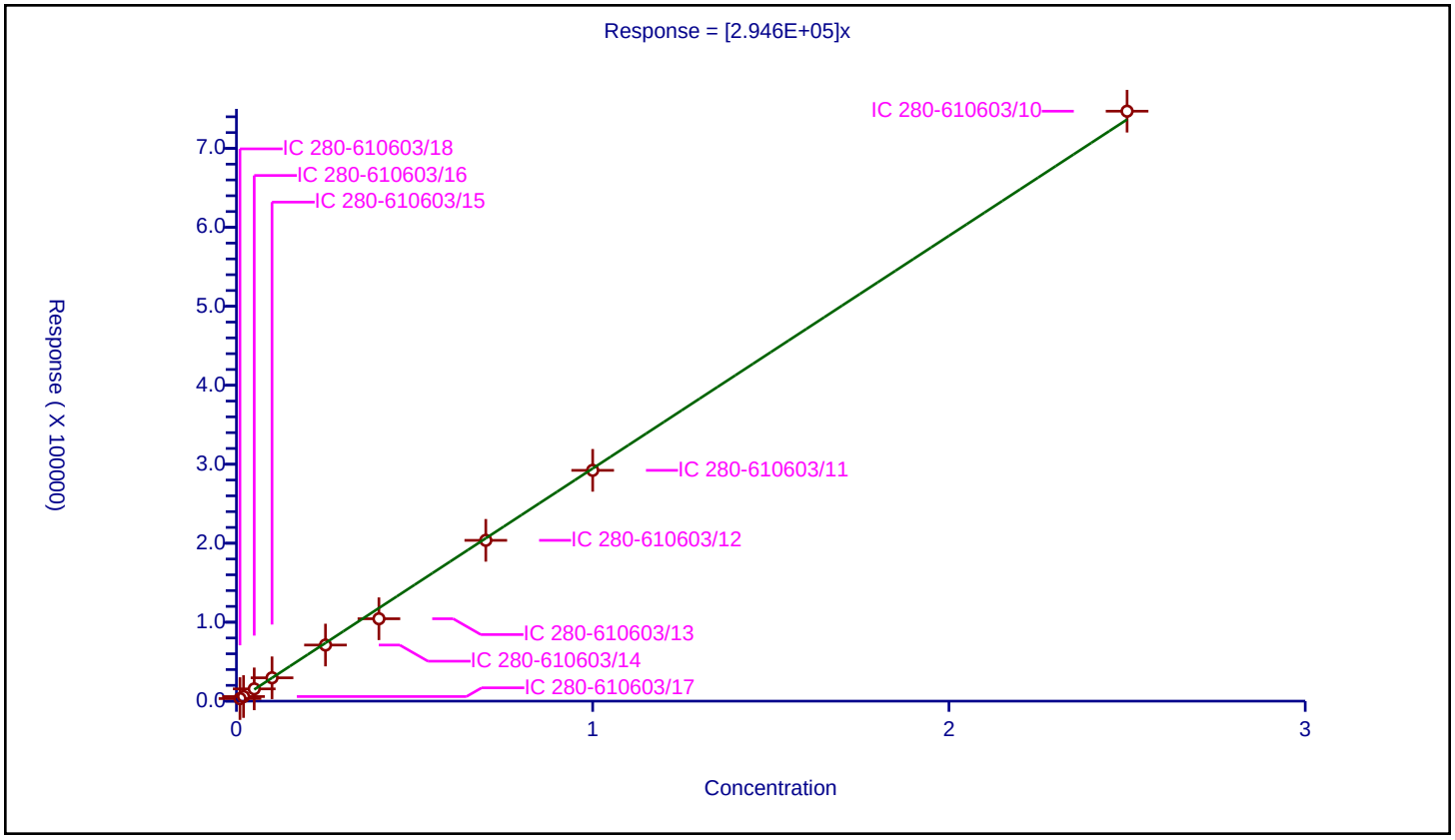
Curve Coefficients

Intercept:	0
Slope:	2.946E+05

Error Coefficients

Standard Error:	6260
Relative Standard Error:	6.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01	3269.0			326900.0	Y
2	IC 280-610603/17	0.02	5823.0			291150.0	Y
3	IC 280-610603/16	0.05	15546.0			310920.0	Y
4	IC 280-610603/15	0.1	29569.0			295690.0	Y
5	IC 280-610603/14	0.25	71041.0			284164.0	Y
6	IC 280-610603/13	0.4	104338.0			260845.0	Y
7	IC 280-610603/12	0.7	203644.0			290920.0	Y
8	IC 280-610603/11	1.0	292277.0			292277.0	Y
9	IC 280-610603/10	2.5	747102.0			298840.8	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

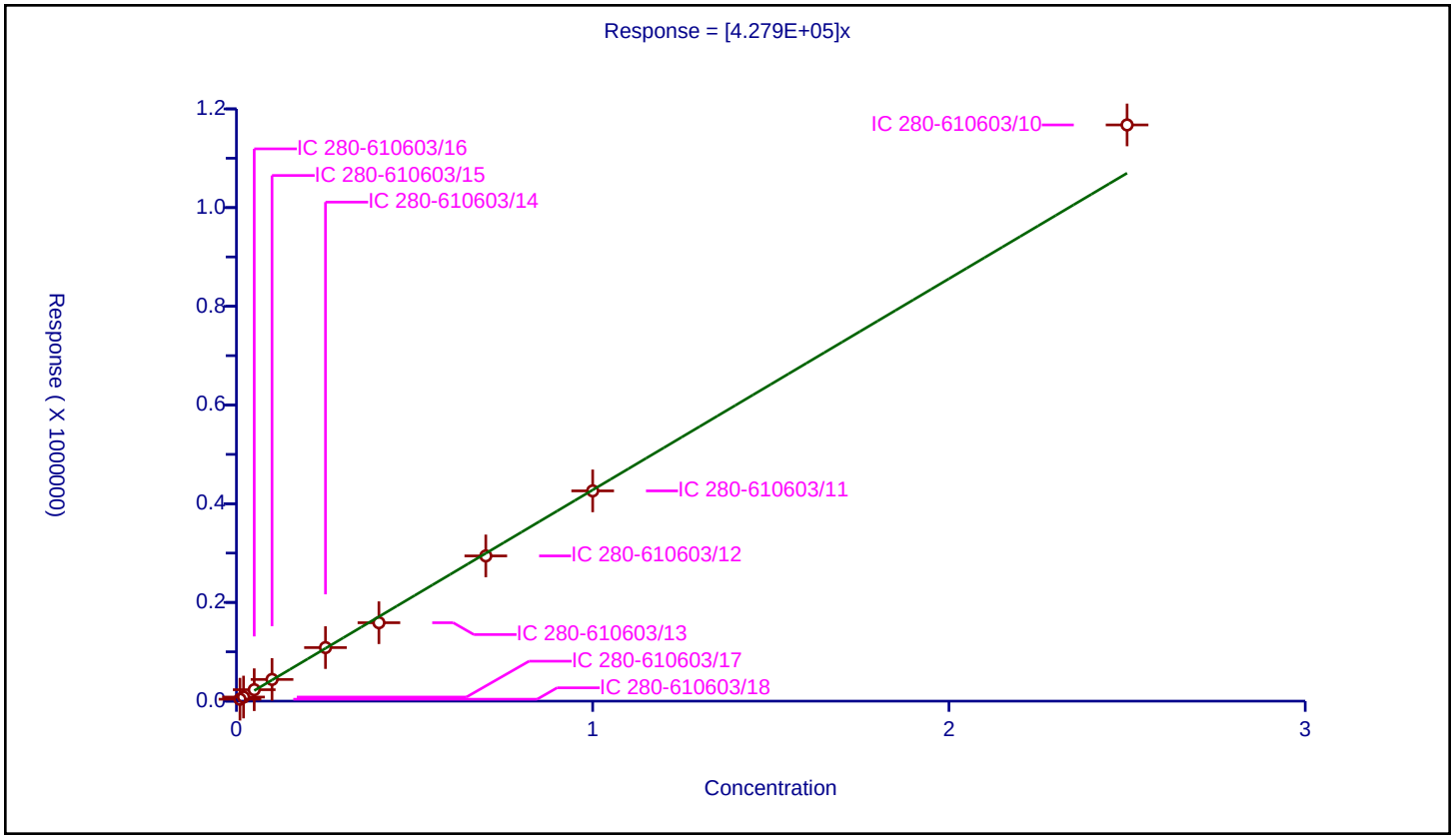
Curve Coefficients

Intercept:	0
Slope:	4.279E+05

Error Coefficients

Standard Error:	34900
Relative Standard Error:	6.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01	3912.0			391200.0	Y
2	IC 280-610603/17	0.02	8257.0			412850.0	Y
3	IC 280-610603/16	0.05	23162.0			463240.0	Y
4	IC 280-610603/15	0.1	43948.0			439480.0	Y
5	IC 280-610603/14	0.25	108505.0			434020.0	Y
6	IC 280-610603/13	0.4	158919.0			397297.5	Y
7	IC 280-610603/12	0.7	294250.0			420357.142857	Y
8	IC 280-610603/11	1.0	426004.0			426004.0	Y
9	IC 280-610603/10	2.5	1167517.0			467006.8	Y



Calibration / 1,3,5-Trinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

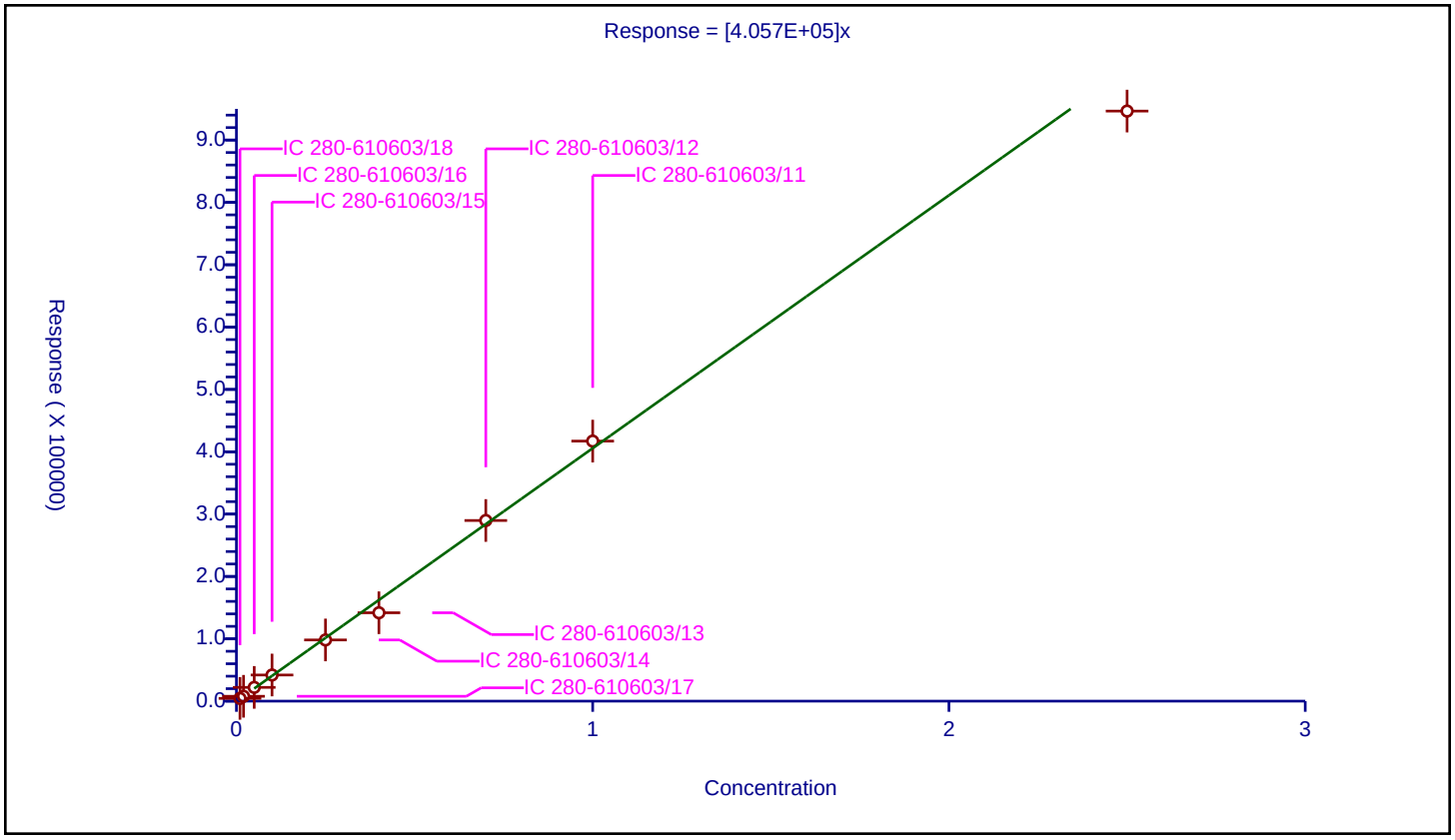
Curve Coefficients

Intercept:	0
Slope:	4.057E+05

Error Coefficients

Standard Error:	25500
Relative Standard Error:	7.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01	4438.0			443800.0	Y
2	IC 280-610603/17	0.02	7799.0			389950.0	Y
3	IC 280-610603/16	0.05	22059.0			441180.0	Y
4	IC 280-610603/15	0.1	41946.0			419460.0	Y
5	IC 280-610603/14	0.25	98168.0			392672.0	Y
6	IC 280-610603/13	0.4	141795.0			354487.5	Y
7	IC 280-610603/12	0.7	289774.0			413962.857143	Y
8	IC 280-610603/11	1.0	417113.0			417113.0	Y
9	IC 280-610603/10	2.5	946516.0			378606.4	Y



Calibration / 2,6-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

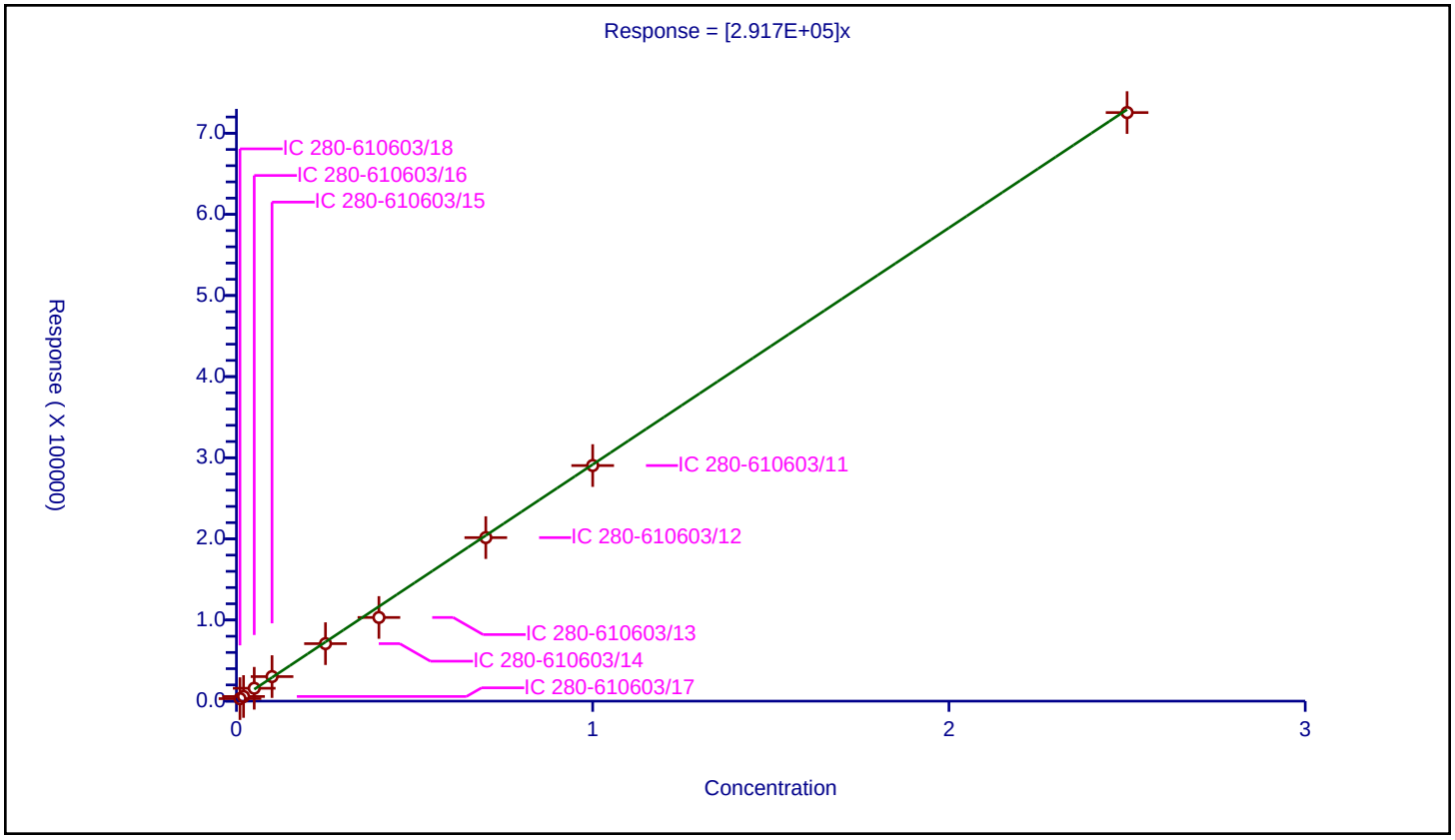
Curve Coefficients

Intercept:	0
Slope:	2.917E+05

Error Coefficients

Standard Error:	5150
Relative Standard Error:	5.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01	3093.0			309300.0	Y
2	IC 280-610603/17	0.02	5716.0			285800.0	Y
3	IC 280-610603/16	0.05	15876.0			317520.0	Y
4	IC 280-610603/15	0.1	30260.0			302600.0	Y
5	IC 280-610603/14	0.25	70868.0			283472.0	Y
6	IC 280-610603/13	0.4	103148.0			257870.0	Y
7	IC 280-610603/12	0.7	201554.0			287934.285714	Y
8	IC 280-610603/11	1.0	290390.0			290390.0	Y
9	IC 280-610603/10	2.5	725476.0			290190.4	Y



Calibration / 2,4-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

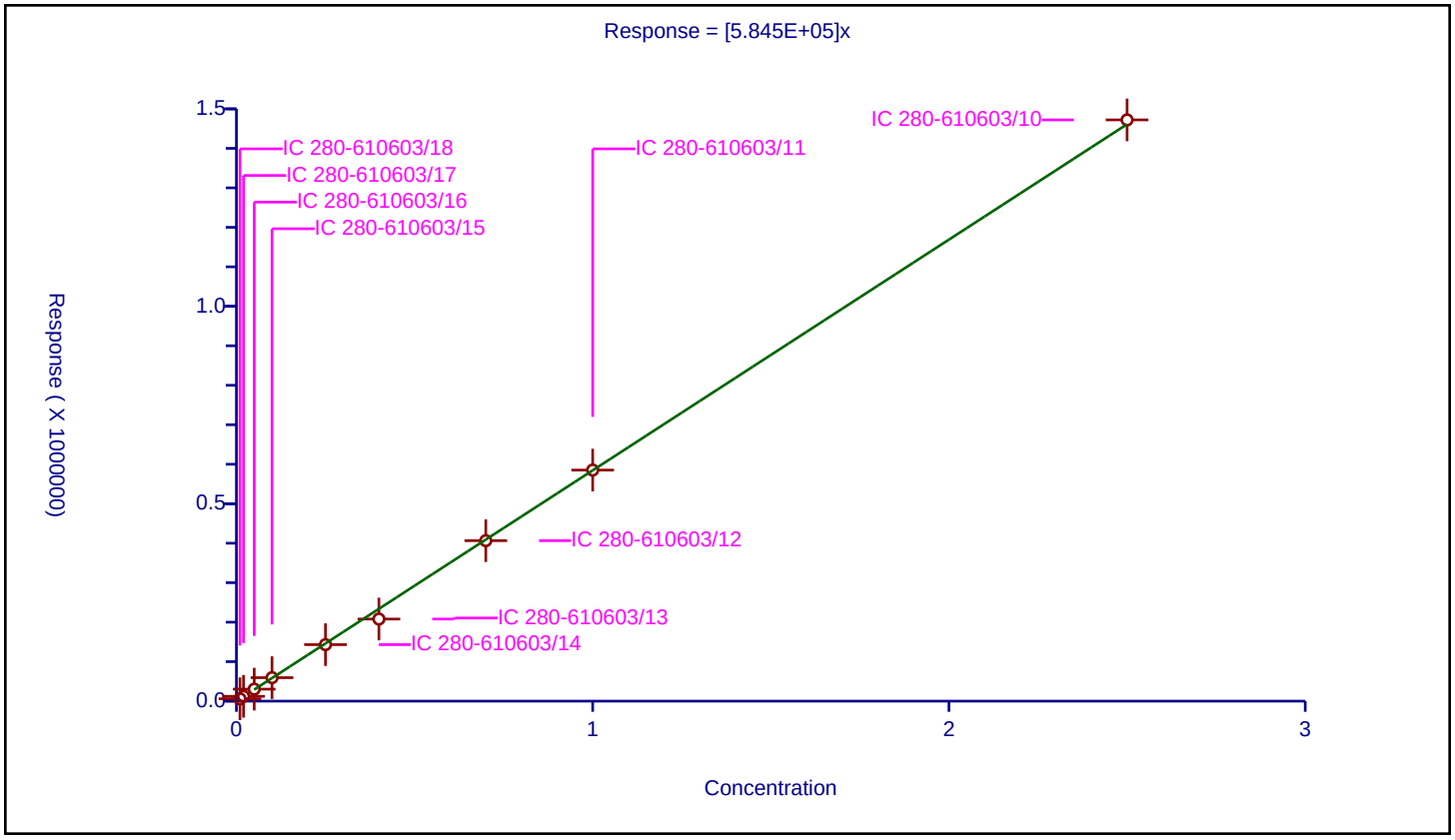
Curve Coefficients

Intercept:	0
Slope:	5.845E+05

Error Coefficients

Standard Error:	10100
Relative Standard Error:	4.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01	5987.0			598700.0	Y
2	IC 280-610603/17	0.02	12241.0			612050.0	Y
3	IC 280-610603/16	0.05	30407.0			608140.0	Y
4	IC 280-610603/15	0.1	59433.0			594330.0	Y
5	IC 280-610603/14	0.25	143098.0			572392.0	Y
6	IC 280-610603/13	0.4	207937.0			519842.5	Y
7	IC 280-610603/12	0.7	406447.0			580638.571429	Y
8	IC 280-610603/11	1.0	585209.0			585209.0	Y
9	IC 280-610603/10	2.5	1472164.0			588865.6	Y



Calibration / Tetryl

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

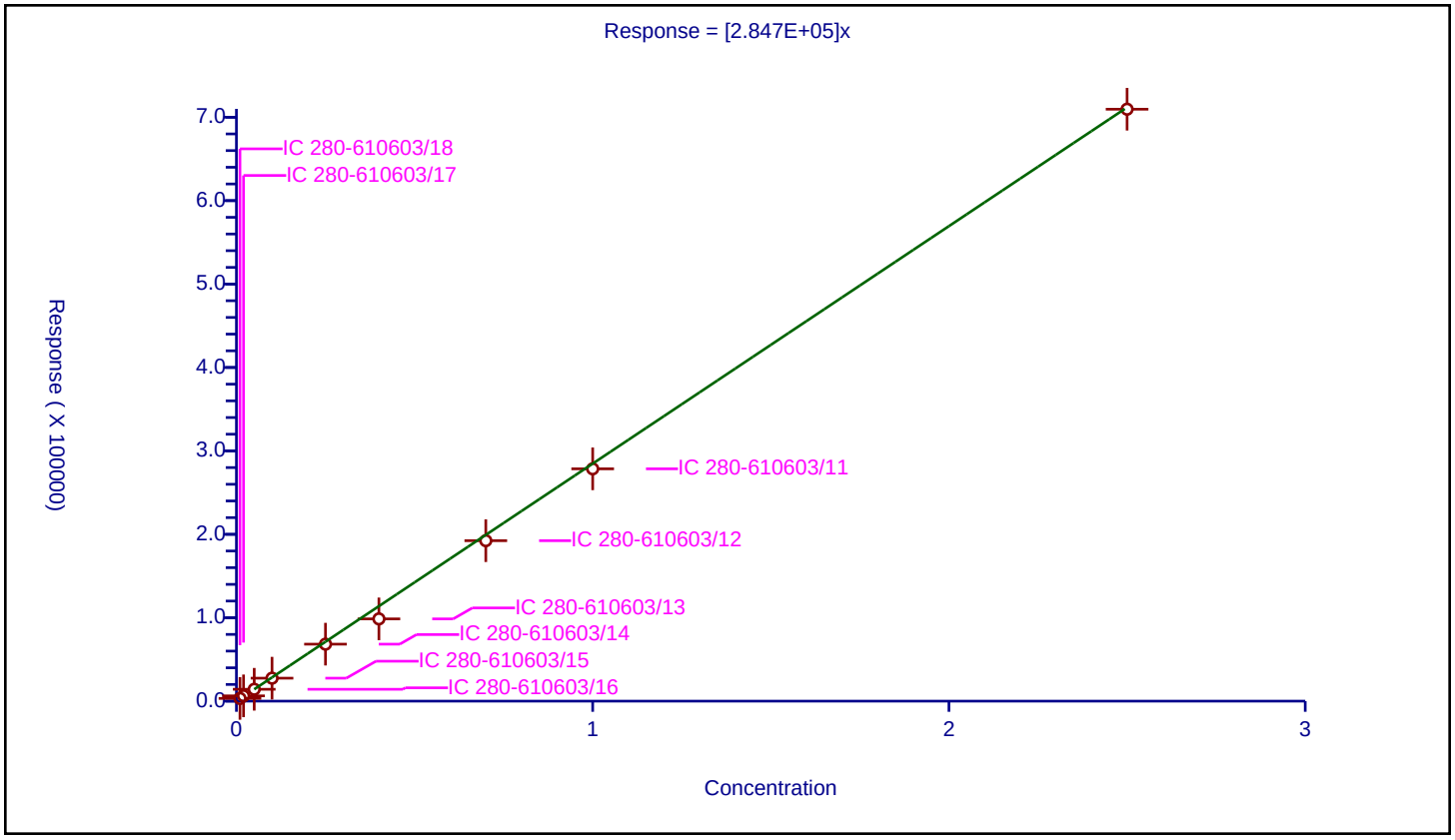
Curve Coefficients

Intercept:	0
Slope:	2.847E+05

Error Coefficients

Standard Error:	6470
Relative Standard Error:	8.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01	3282.0			328200.0	Y
2	IC 280-610603/17	0.02	6348.0			317400.0	Y
3	IC 280-610603/16	0.05	14233.0			284660.0	Y
4	IC 280-610603/15	0.1	27534.0			275340.0	Y
5	IC 280-610603/14	0.25	68327.0			273308.0	Y
6	IC 280-610603/13	0.4	98615.0			246537.5	Y
7	IC 280-610603/12	0.7	192352.0			274788.571429	Y
8	IC 280-610603/11	1.0	278494.0			278494.0	Y
9	IC 280-610603/10	2.5	709626.0			283850.4	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

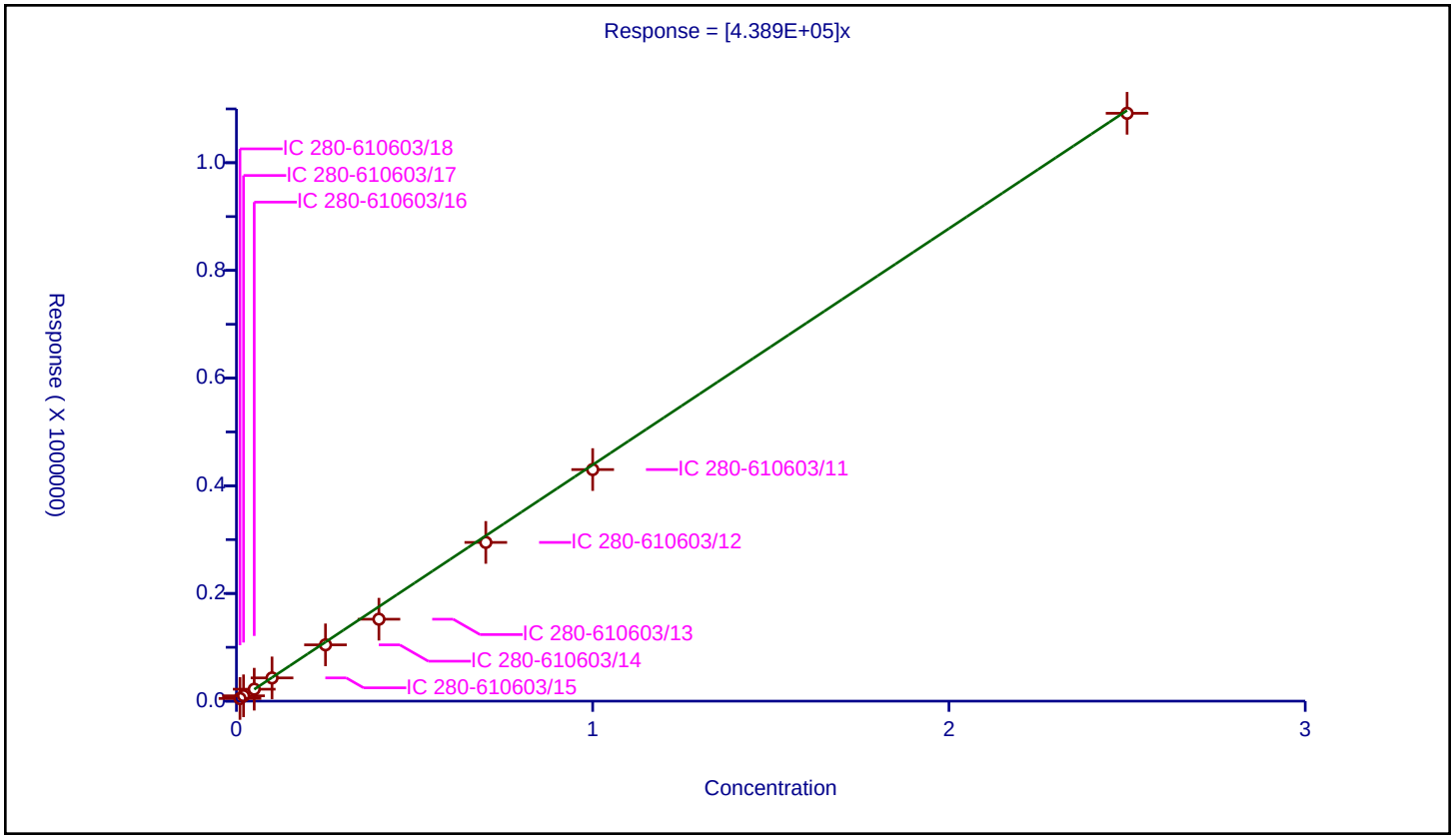
Curve Coefficients

Intercept:	0
Slope:	4.389E+05

Error Coefficients

Standard Error:	10200
Relative Standard Error:	8.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01	4919.0			491900.0	Y
2	IC 280-610603/17	0.02	9925.0			496250.0	Y
3	IC 280-610603/16	0.05	22184.0			443680.0	Y
4	IC 280-610603/15	0.1	43136.0			431360.0	Y
5	IC 280-610603/14	0.25	104561.0			418244.0	Y
6	IC 280-610603/13	0.4	152188.0			380470.0	Y
7	IC 280-610603/12	0.7	294801.0			421144.285714	Y
8	IC 280-610603/11	1.0	430103.0			430103.0	Y
9	IC 280-610603/10	2.5	1091822.0			436728.8	Y



Calibration / PETN

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

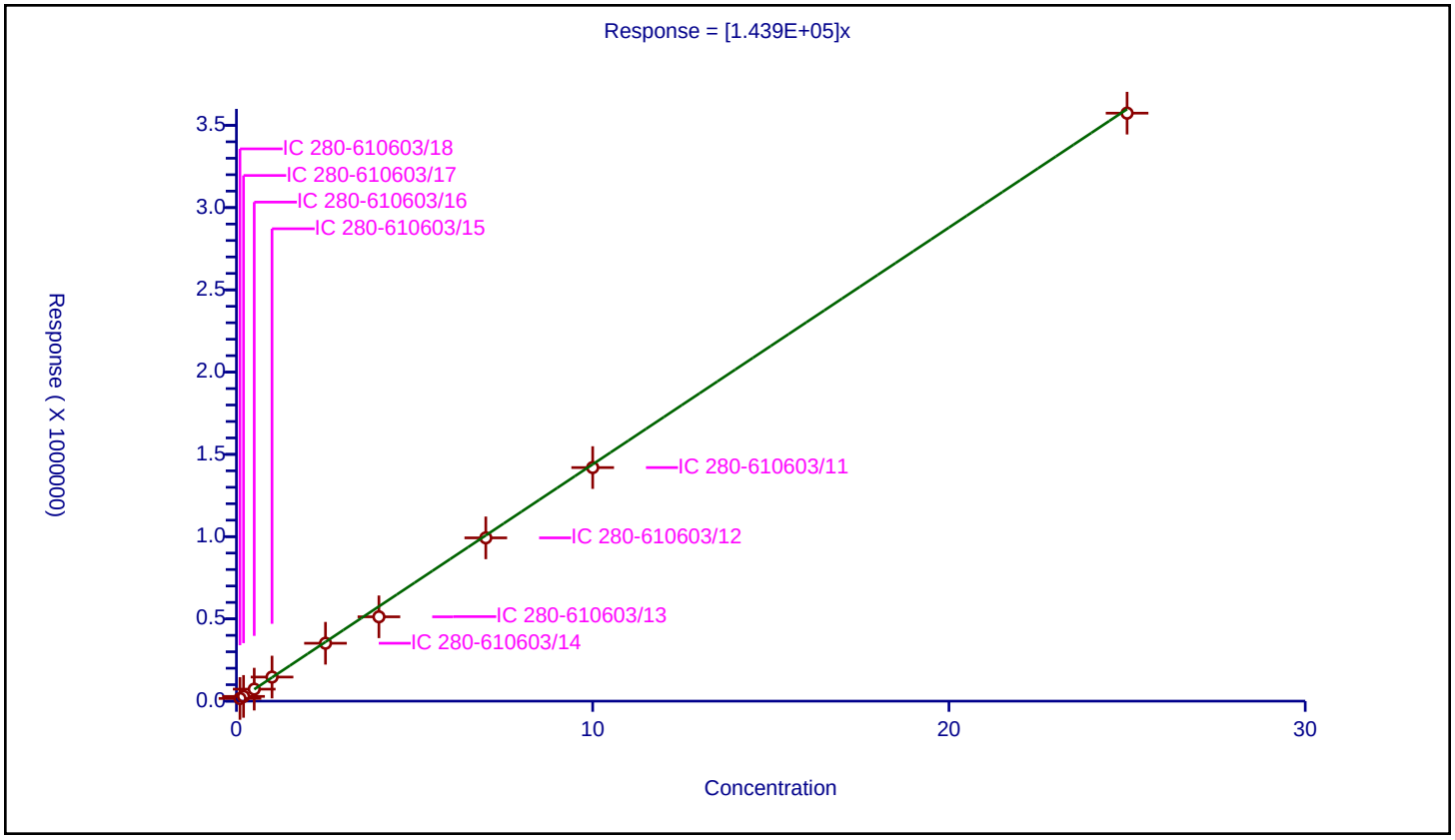
Curve Coefficients

Intercept:	0
Slope:	1.439E+05

Error Coefficients

Standard Error:	25700
Relative Standard Error:	6.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.1	16344.0			163440.0	Y
2	IC 280-610603/17	0.2	28805.0			144025.0	Y
3	IC 280-610603/16	0.5	72943.0			145886.0	Y
4	IC 280-610603/15	1.0	146450.0			146450.0	Y
5	IC 280-610603/14	2.5	351913.0			140765.2	Y
6	IC 280-610603/13	4.0	512590.0			128147.5	Y
7	IC 280-610603/12	7.0	992519.0			141788.428571	Y
8	IC 280-610603/11	10.0	1419730.0			141973.0	Y
9	IC 280-610603/10	25.0	3574120.0			142964.8	Y



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1 Analy Batch No.: 610603

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2023 00:13 Calibration End Date: 04/29/2023 04:18 Calibration ID: 79726

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-610603/27	04280027.D
Level 2	IC 280-610603/26	04280026.D
Level 3	IC 280-610603/25	04280025.D
Level 4	IC 280-610603/24	04280024.D
Level 5	IC 280-610603/23	04280023.D
Level 6	IC 280-610603/22	04280022.D
Level 7	IC 280-610603/21	04280021.D
Level 8	IC 280-610603/20	04280020.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
2,6-diamino-4-nitrotoluene	+++++	+++++	4.112	4.109	4.113	4.111	4.105	4.080			3.963 - 4.263	4.105
2,4-diamino-6-nitrotoluene	+++++	+++++	4.652	4.643	4.653	4.651	4.638	4.620			4.503 - 4.803	4.643

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-175997-1 Analy Batch No.: 610603

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2023 00:13 Calibration End Date: 04/29/2023 04:18 Calibration ID: 79726

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-610603/27	04280027.D
Level 2	IC 280-610603/26	04280026.D
Level 3	IC 280-610603/25	04280025.D
Level 4	IC 280-610603/24	04280024.D
Level 5	IC 280-610603/23	04280023.D
Level 6	IC 280-610603/22	04280022.D
Level 7	IC 280-610603/21	04280021.D
Level 8	IC 280-610603/20	04280020.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	+++++ 404133	+++++ 405346	414510 402965	401736 391111	Ave		403300.002				1.9		20.0			
2,4-diamino-6-nitrotoluene	+++++ 219290	+++++ 221550	230940 222678	231676 225549	Ave		225280.533				2.3		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-175997-1 Analy Batch No.: 610603

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2023 00:13 Calibration End Date: 04/29/2023 04:18 Calibration ID: 79726

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-610603/27	04280027.D
Level 2	IC 280-610603/26	04280026.D
Level 3	IC 280-610603/25	04280025.D
Level 4	IC 280-610603/24	04280024.D
Level 5	IC 280-610603/23	04280023.D
Level 6	IC 280-610603/22	04280022.D
Level 7	IC 280-610603/21	04280021.D
Level 8	IC 280-610603/20	04280020.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
2,6-diamino-4-nitrotoluene	Ave	+++++ 283742	+++++ 402965	41451 977777	100434	161653	+++++ 0.700	+++++ 1.00	0.100 2.50	0.250	0.400
2,4-diamino-6-nitrotoluene	Ave	+++++ 155085	+++++ 222678	23094 563873	57919	87716	+++++ 0.700	+++++ 1.00	0.100 2.50	0.250	0.400

Curve Type Legend
Ave = Average

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280020.D				
Lims ID:	IC ADD 8				
Client ID:					
Sample Type:	IC	Calib Level:	8		
Inject. Date:	29-Apr-2023 00:13:27	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC ADD 8				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub10				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	29-Apr-2023 13:04:21	Calib Date:	29-Apr-2023 04:18:01		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1621				
First Level Reviewer: LV5D		Date:	29-Apr-2023 10:25:00		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.080	4.113	-0.033	977777	2.50	2.42	
2 2,4-diamino-6-nitrotoluene	1	4.620	4.653	-0.033	563873	2.50	2.50	

QC Flag Legend

Processing Flags

Reagents:

8330_ADDs_00036 Amount Added: 125.00 Units: uL

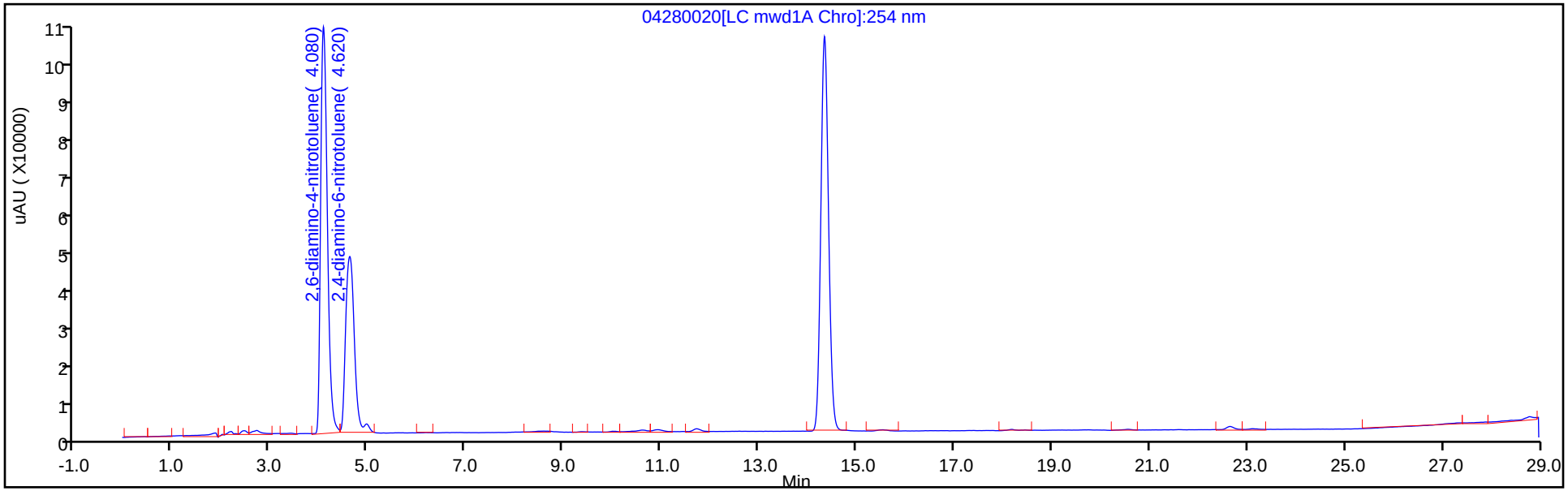
Report Date: 29-Apr-2023 13:04:21 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

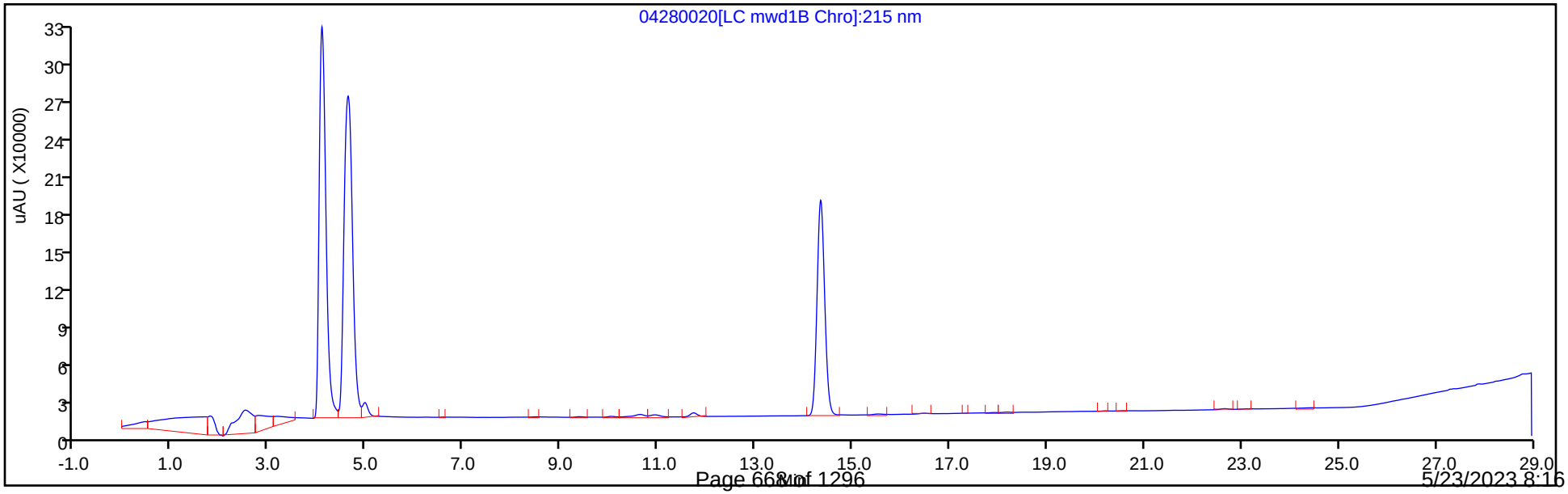
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280020.D

Injection Date:	29-Apr-2023 00:13:27	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC ADD 8			Worklist Smp#:	20
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280021.D				
Lims ID:	IC ADD 7				
Client ID:					
Sample Type:	IC	Calib Level:	7		
Inject. Date:	29-Apr-2023 00:48:26	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC ADD 7				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub10				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	29-Apr-2023 13:04:21	Calib Date:	29-Apr-2023 04:18:01		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1621				

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	4.105	4.113	-0.008	402965	1.00	1.00	
2 2,4-diamino-6-nitrotoluene	1	4.638	4.653	-0.015	222678	1.00	0.9884	

Reagents:

8330_ADDs_00036 Amount Added: 50.00 Units: uL

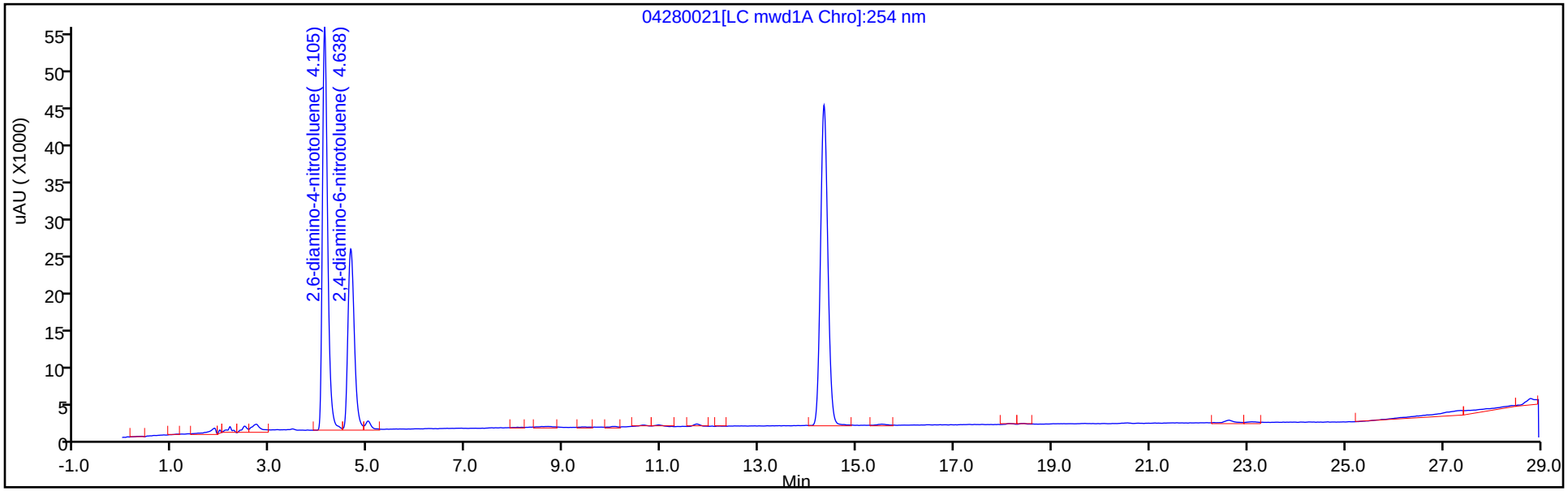
Report Date: 29-Apr-2023 13:04:21 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

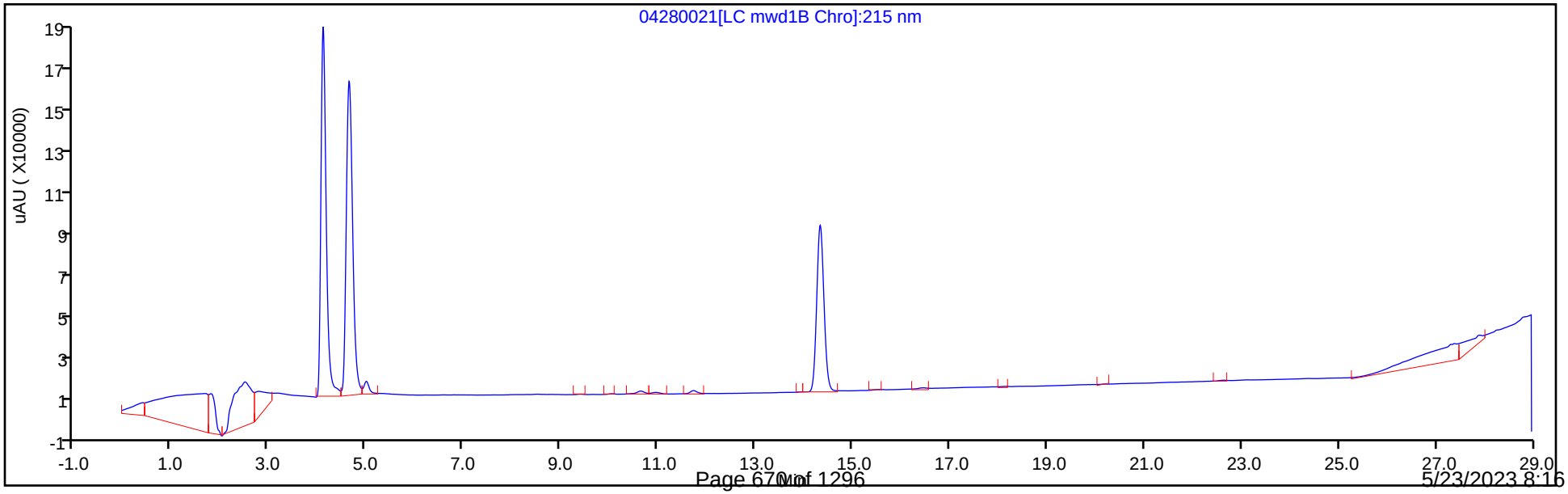
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280021.D

Injection Date:	29-Apr-2023 00:48:26	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC ADD 7			Worklist Smp#:	21
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280022.D
Lims ID: IC ADD 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 29-Apr-2023 01:23:20 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC ADD 6
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub10

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 29-Apr-2023 13:04:22 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1621

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	4.111	4.113	-0.002	283742	0.7000	0.7036	
2 2,4-diamino-6-nitrotoluene	1	4.651	4.653	-0.002	155085	0.7000	0.6884	

Reagents:

8330_ADDs_00036 Amount Added: 35.00 Units: uL

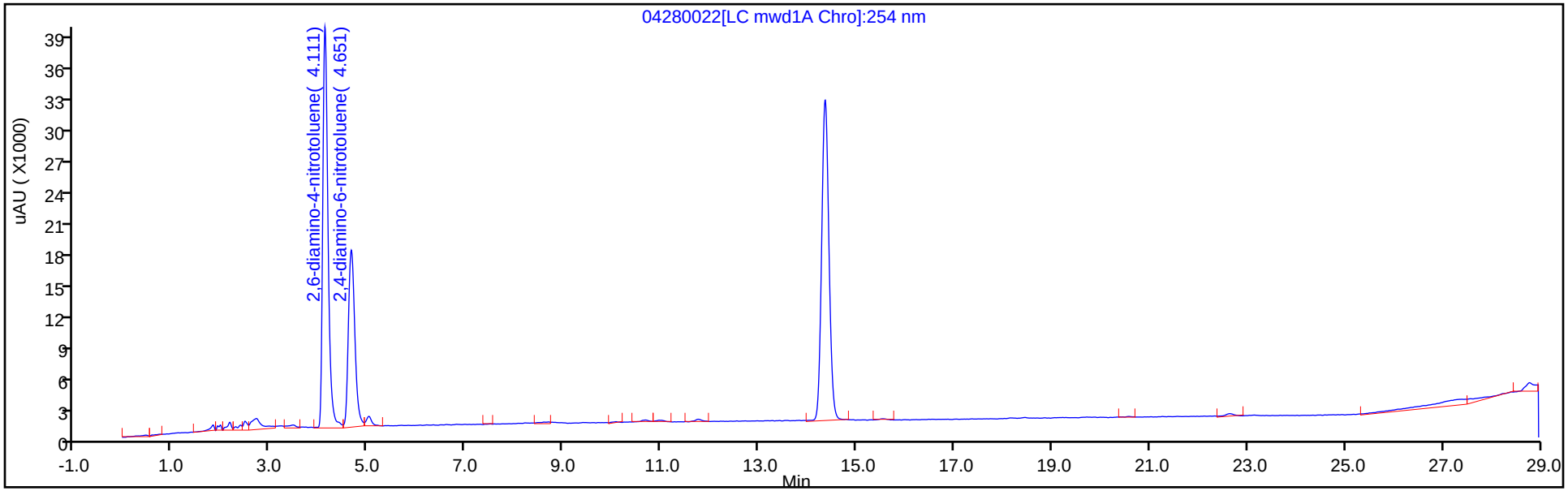
Report Date: 29-Apr-2023 13:04:22 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

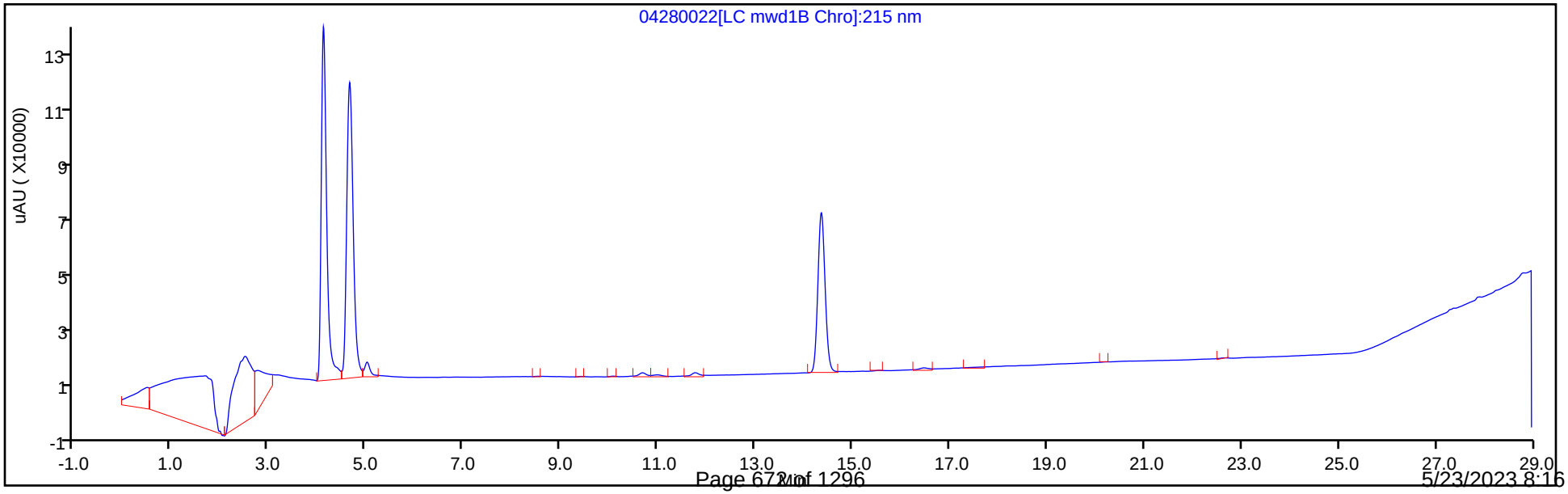
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280022.D

Injection Date:	29-Apr-2023 01:23:20	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC ADD 6			Worklist Smp#:	22
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280023.D				
Lims ID:	IC ADD 5				
Client ID:					
Sample Type:	IC	Calib Level:	5		
Inject. Date:	29-Apr-2023 01:58:17	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC ADD 5				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub10				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	29-Apr-2023 13:04:22	Calib Date:	29-Apr-2023 04:18:01		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1621				

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	4.113	4.113	0.000	161653	0.4000	0.4008	
2 2,4-diamino-6-nitrotoluene	1	4.653	4.653	0.000	87716	0.4000	0.3894	

Reagents:

8330_ADDs_00036 Amount Added: 20.00 Units: uL

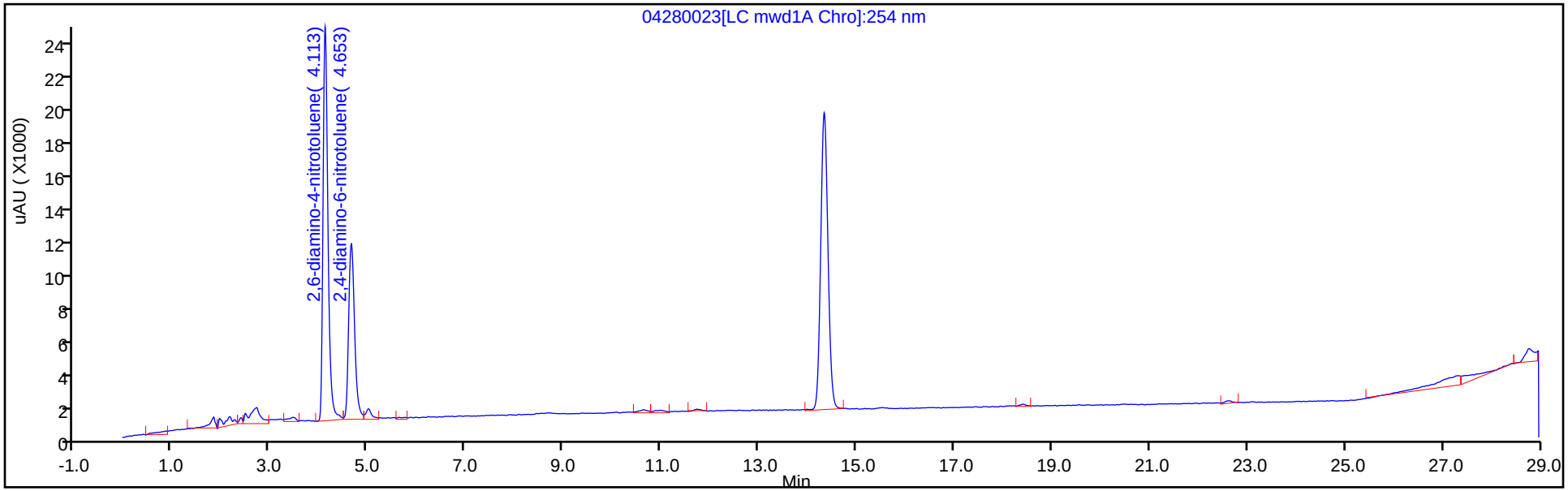
Report Date: 29-Apr-2023 13:04:22 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

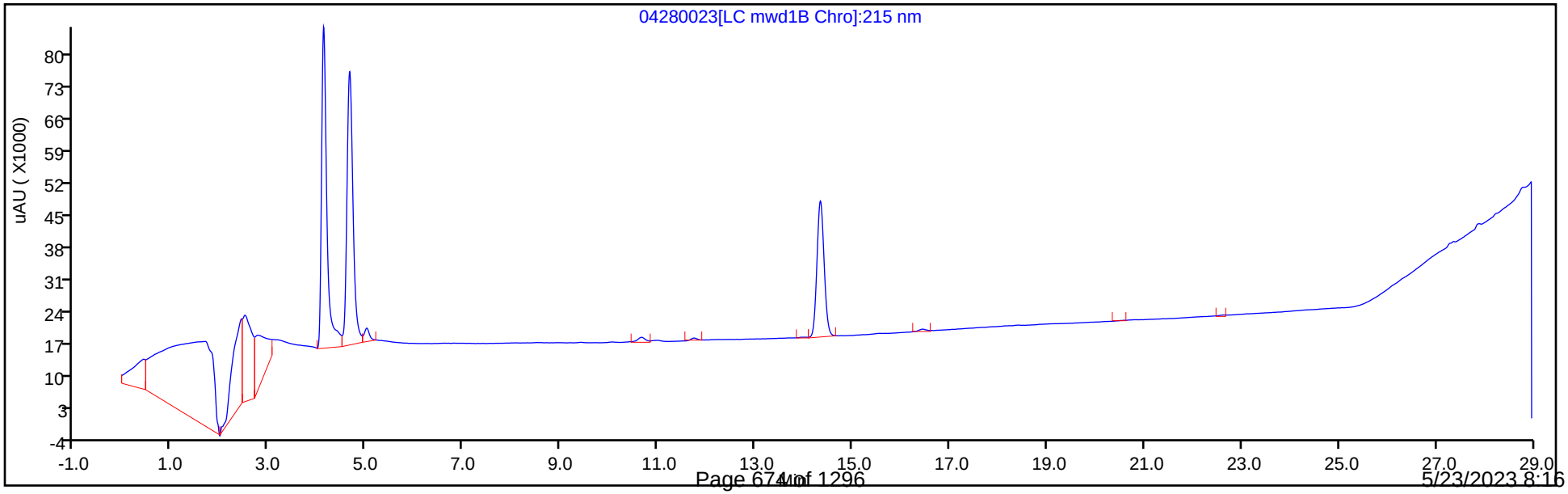
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280023.D

Injection Date:	29-Apr-2023 01:58:17	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC ADD 5			Worklist Smp#:	23
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280024.D
Lims ID: IC ADD 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 29-Apr-2023 02:33:12 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC ADD 4
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub10

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 29-Apr-2023 13:04:22 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1621

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	4.109	4.113	-0.004	100434	0.2500	0.2490	
2 2,4-diamino-6-nitrotoluene	1	4.643	4.653	-0.010	57919	0.2500	0.2571	

Reagents:

8330_ADDs_00036 Amount Added: 12.50 Units: uL

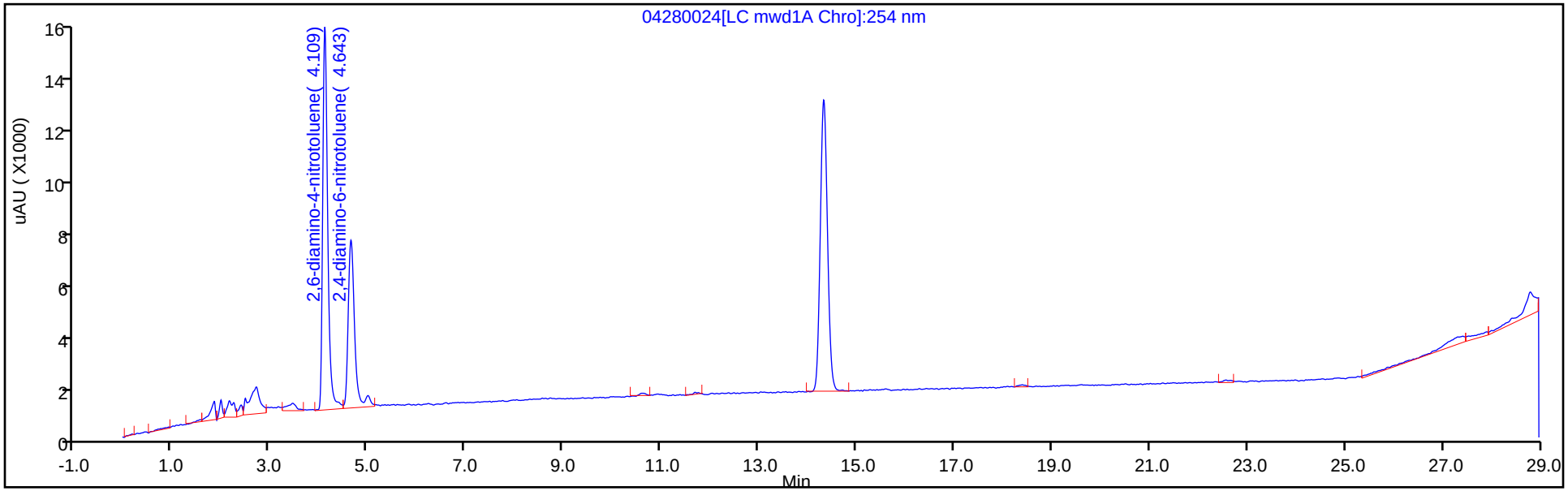
Report Date: 29-Apr-2023 13:04:22 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

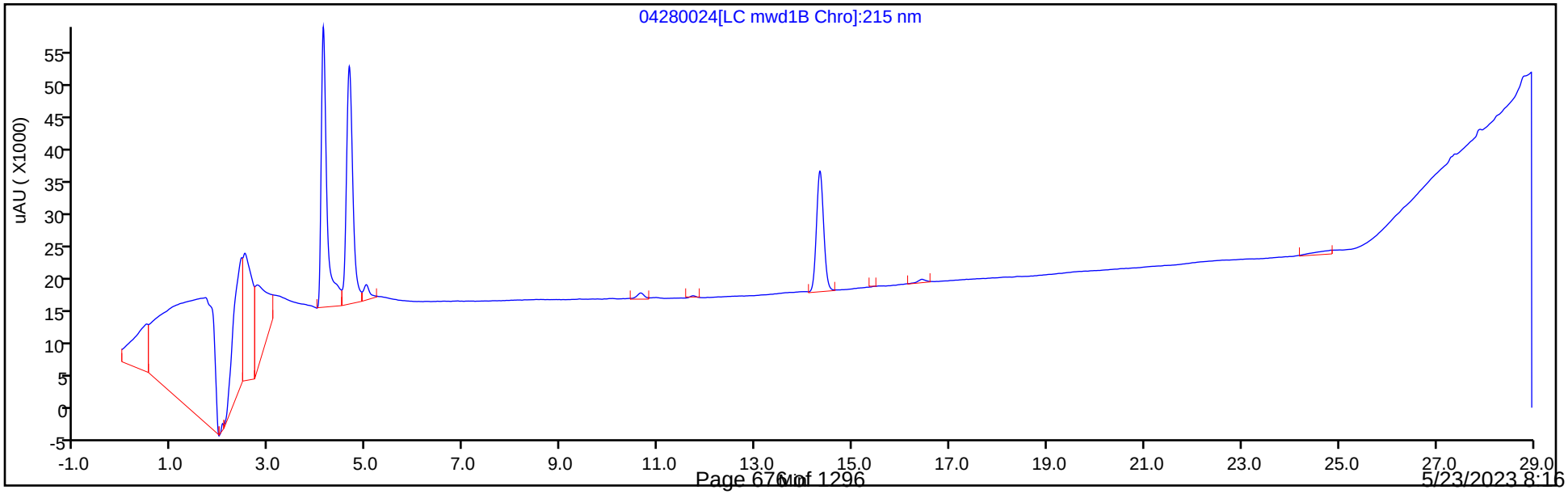
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280024.D

Injection Date:	29-Apr-2023 02:33:12	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC ADD 4			Worklist Smp#:	24
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280025.D				
Lims ID:	IC ADD 3				
Client ID:					
Sample Type:	IC	Calib Level:	3		
Inject. Date:	29-Apr-2023 03:08:08	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC ADD 3				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub10				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	29-Apr-2023 13:04:23	Calib Date:	29-Apr-2023 04:18:01		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1621				

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	4.112	4.113	-0.001	41451	0.1000	0.1028	
2 2,4-diamino-6-nitrotoluene	1	4.652	4.653	-0.001	23094	0.1000	0.1025	

Reagents:

8330_ADDs_00036 Amount Added: 5.00 Units: uL

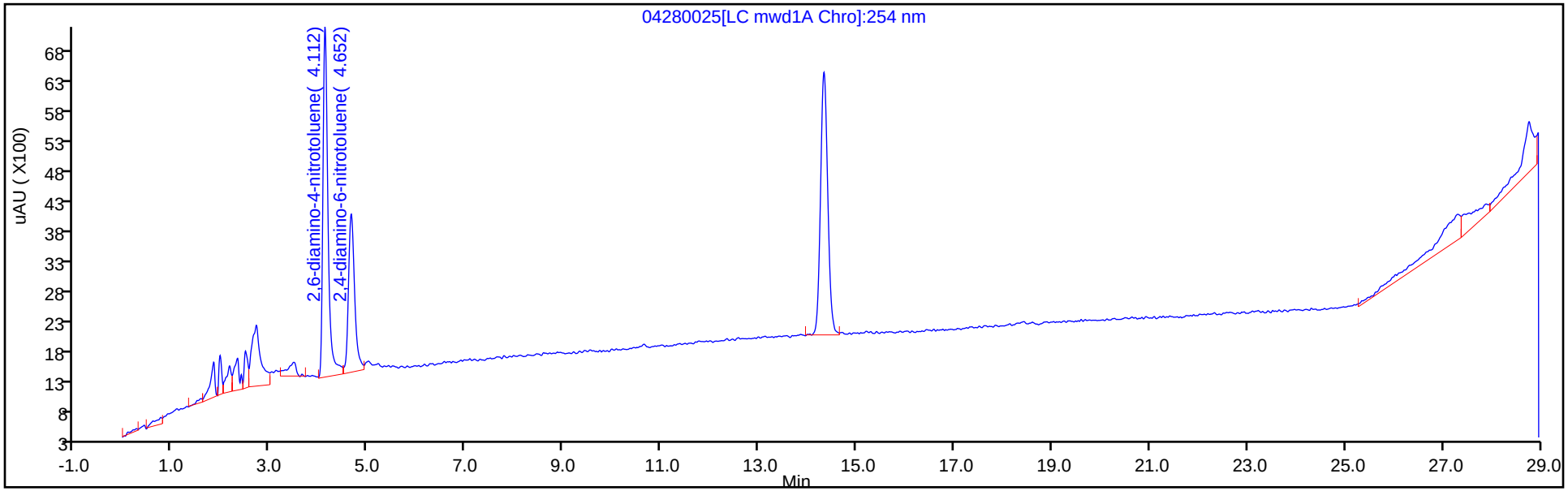
Report Date: 29-Apr-2023 13:04:23 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

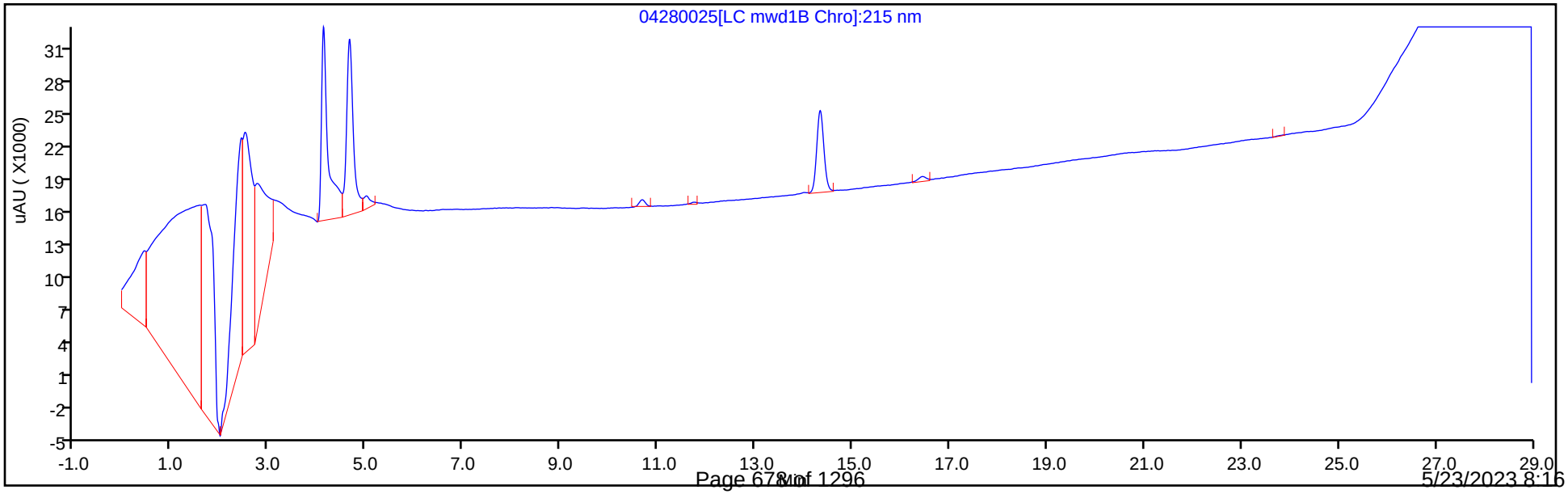
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280025.D

Injection Date:	29-Apr-2023 03:08:08	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC ADD 3			Worklist Smp#:	25
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280026.D				
Lims ID:	IC ADD 2				
Client ID:					
Sample Type:	IC	Calib Level:	2		
Inject. Date:	29-Apr-2023 03:43:02	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC ADD 2				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub10				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	29-Apr-2023 13:04:23	Calib Date:	29-Apr-2023 04:18:01		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1621				

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	4.113	4.113	0.000	21691	0.0400	0.0538	
2 2,4-diamino-6-nitrotoluene	1	4.653	4.653	0.000	12626	0.0400	0.0560	

Reagents:

8330_ADDs_00036 Amount Added: 2.00 Units: uL

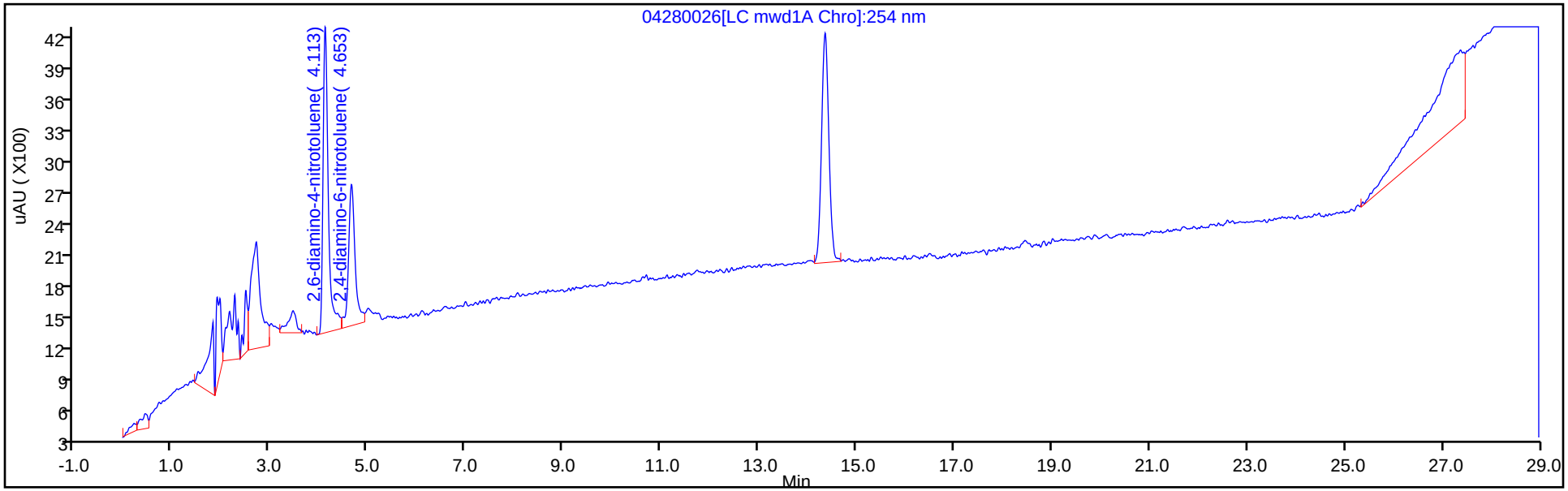
Report Date: 29-Apr-2023 13:04:23 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

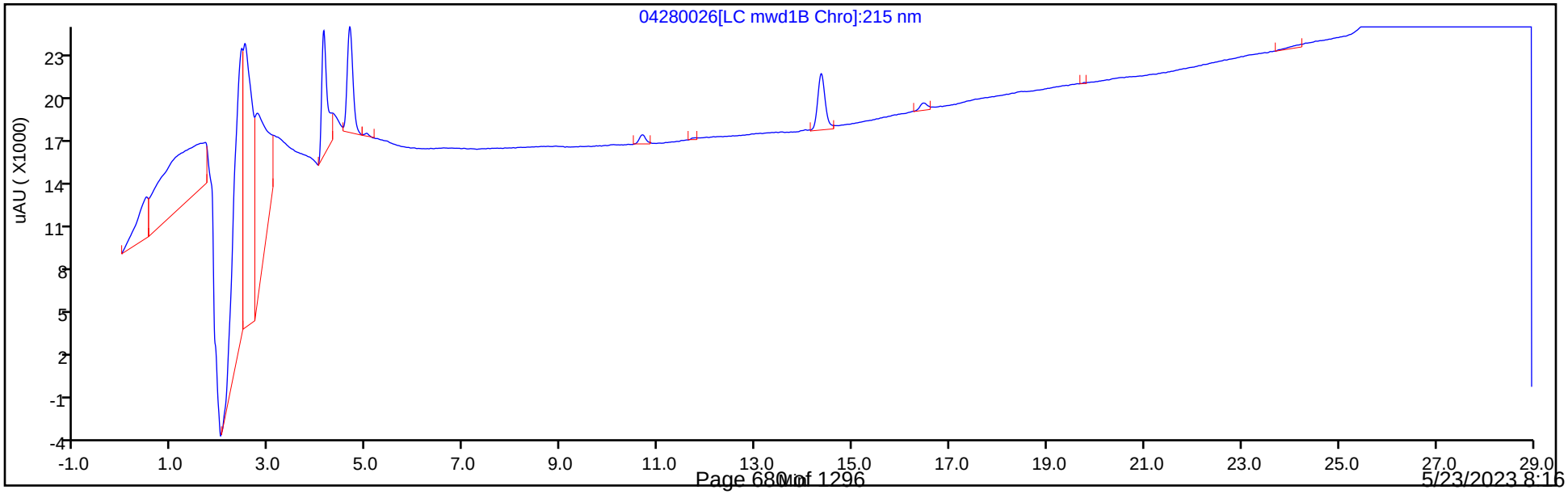
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280026.D

Injection Date:	29-Apr-2023 03:43:02	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC ADD 2			Worklist Smp#:	26
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D				
Lims ID:	IC ADD 1				
Client ID:					
Sample Type:	IC	Calib Level:	1		
Inject. Date:	29-Apr-2023 04:18:01	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC ADD 1				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub10				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	29-Apr-2023 13:04:23	Calib Date:	29-Apr-2023 04:18:01		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1621				

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	4.113	4.113	0.000	8084	0.0200	0.0200	
2 2,4-diamino-6-nitrotoluene	1	4.653	4.653	0.000	5388	0.0200	0.0239	

Reagents:

8330_ADDs_00036 Amount Added: 1.00 Units: uL

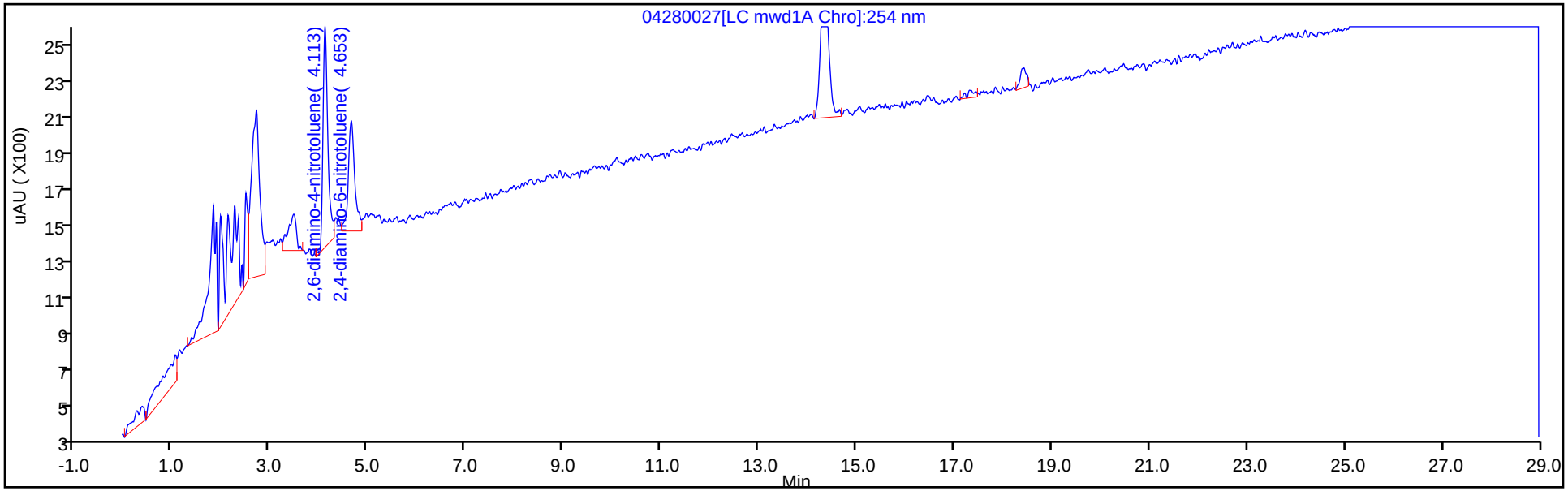
Report Date: 29-Apr-2023 13:04:24 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

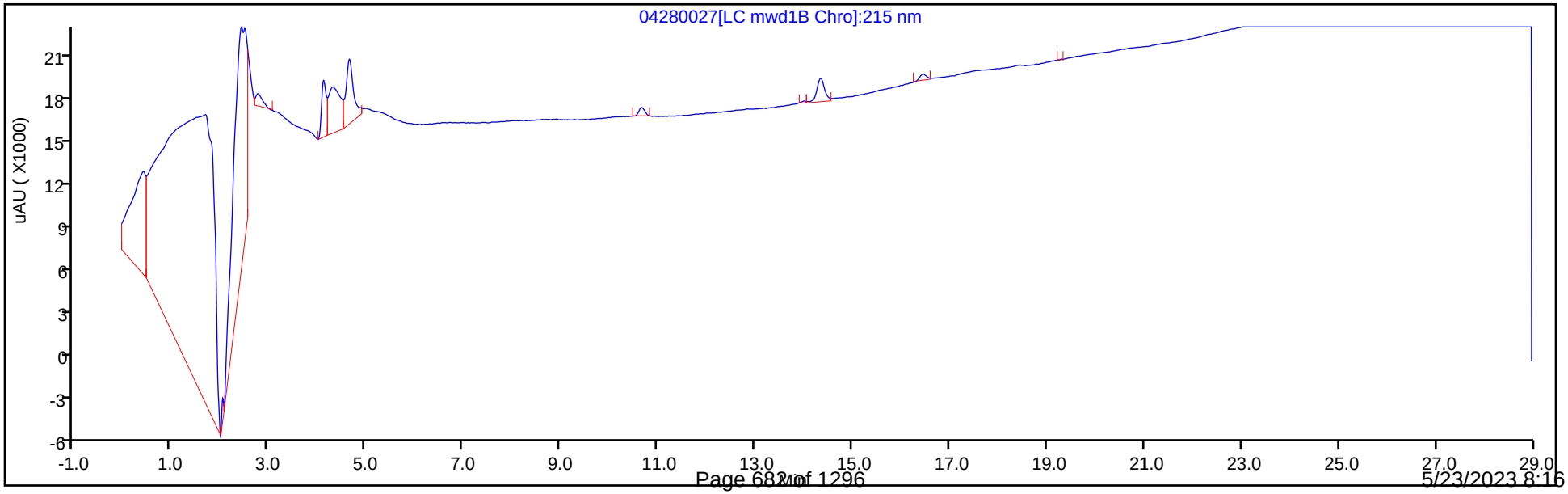
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Injection Date:	29-Apr-2023 04:18:01	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC ADD 1			Worklist Smp#:	27
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Calibration / 2,6-diamino-4-nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

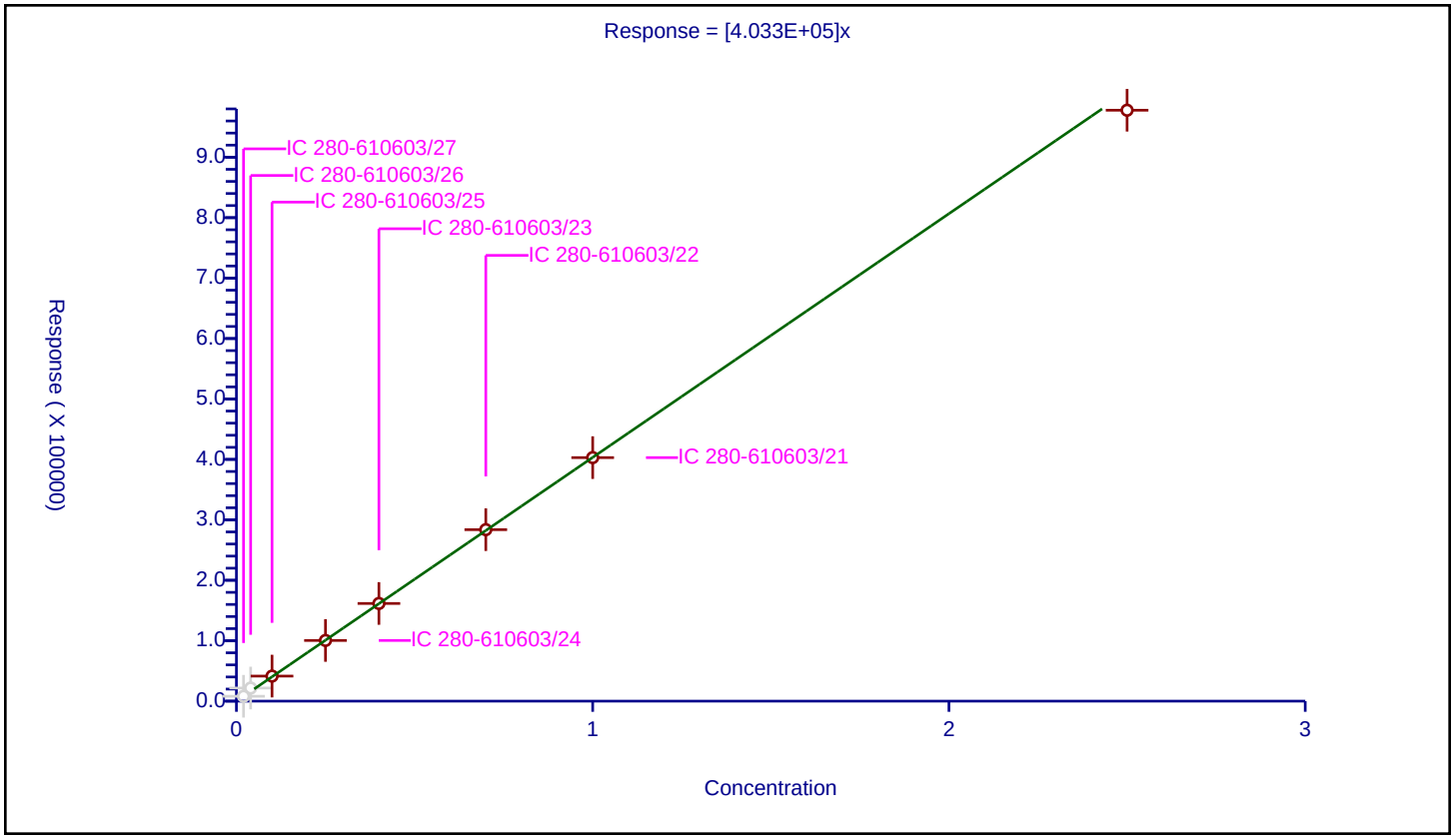
Curve Coefficients

Intercept:	0
Slope:	4.033E+05

Error Coefficients

Standard Error:	13700
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/27	0.02	8084.0			404200.0	N
2	IC 280-610603/26	0.04	21691.0			542275.0	N
3	IC 280-610603/25	0.1	41451.0			414510.0	Y
4	IC 280-610603/24	0.25	100434.0			401736.0	Y
5	IC 280-610603/23	0.4	161653.0			404132.5	Y
6	IC 280-610603/22	0.7	283742.0			405345.714286	Y
7	IC 280-610603/21	1.0	402965.0			402965.0	Y
8	IC 280-610603/20	2.5	977777.0			391110.8	Y



Calibration / 2,4-diamino-6-nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

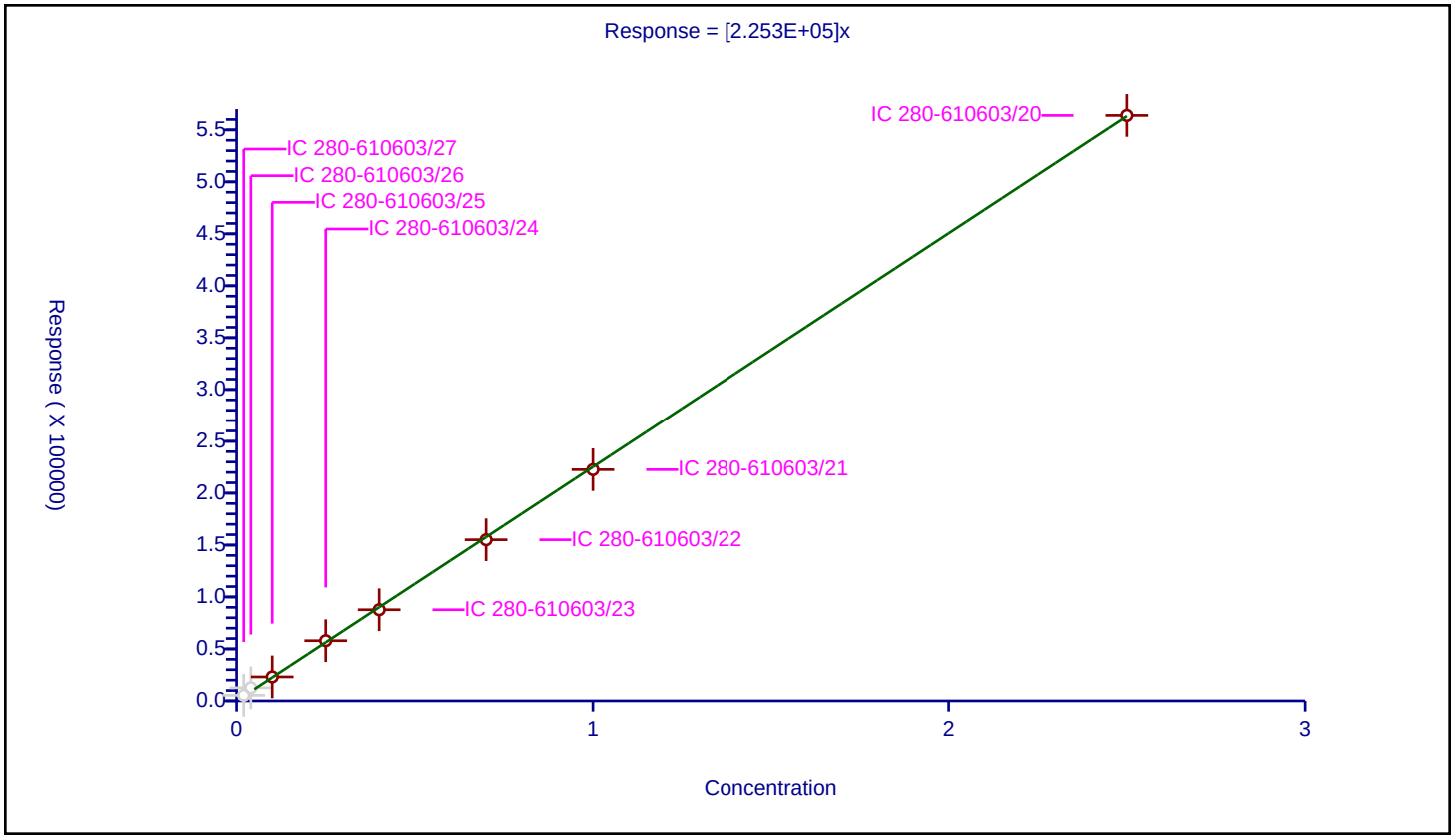
Curve Coefficients

Intercept:	0
Slope:	2.253E+05

Error Coefficients

Standard Error:	2130
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 280-610603/27	0.02	5388.0			269400.0	N
2	IC 280-610603/26	0.04	12626.0			315650.0	N
3	IC 280-610603/25	0.1	23094.0			230940.0	Y
4	IC 280-610603/24	0.25	57919.0			231676.0	Y
5	IC 280-610603/23	0.4	87716.0			219290.0	Y
6	IC 280-610603/22	0.7	155085.0			221550.0	Y
7	IC 280-610603/21	1.0	222678.0			222678.0	Y
8	IC 280-610603/20	2.5	563873.0			225549.2	Y



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-175997-1

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.: 280-175997-1

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

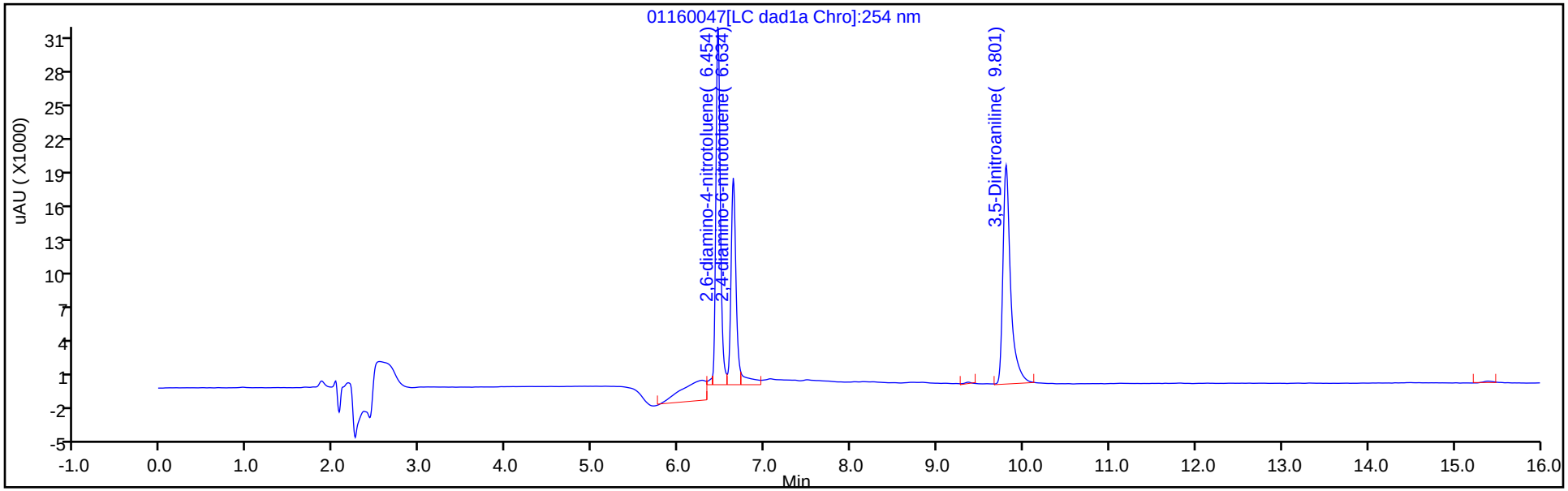
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Eurofins Denver

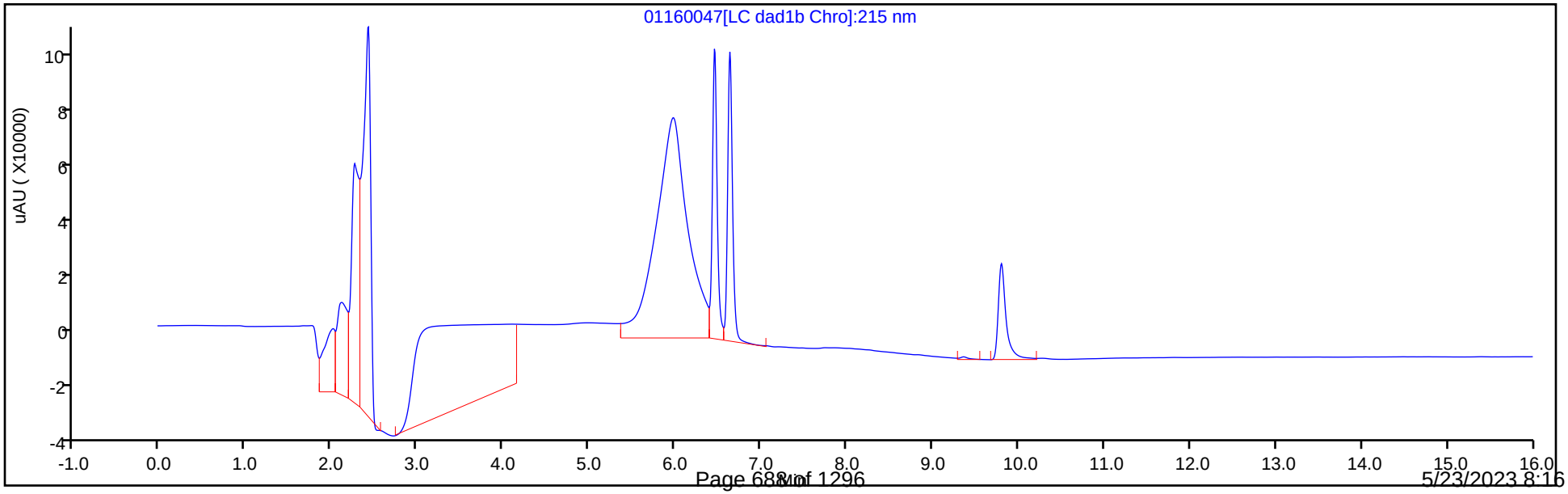
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160047.d

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

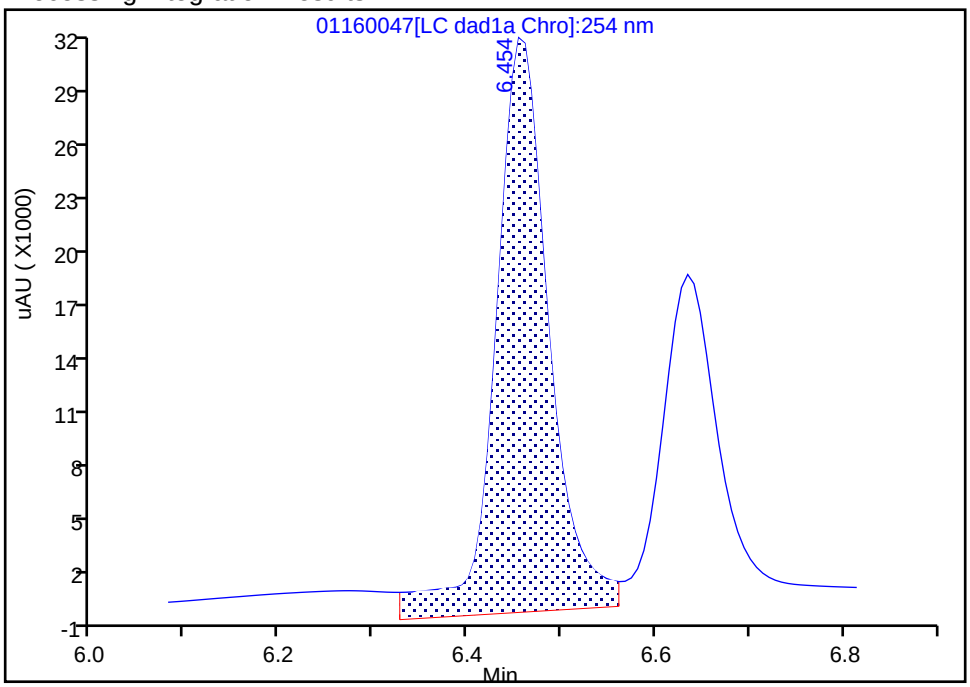
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160047.d				
Injection Date:	17-Jan-2023 03:40:08	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV ADD				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	50	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit 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

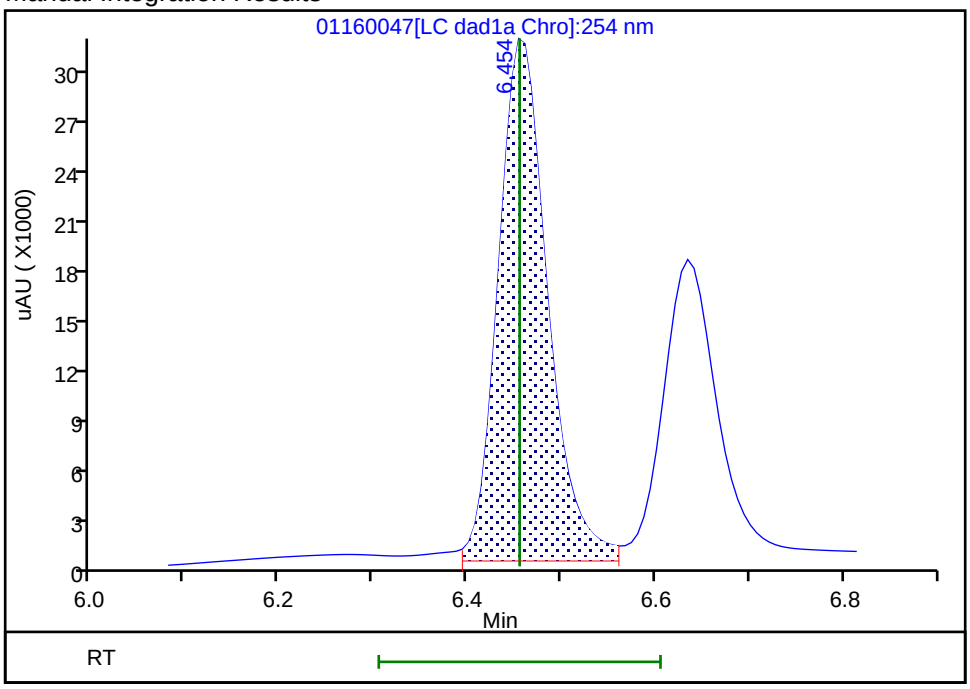
Processing Integration Results

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

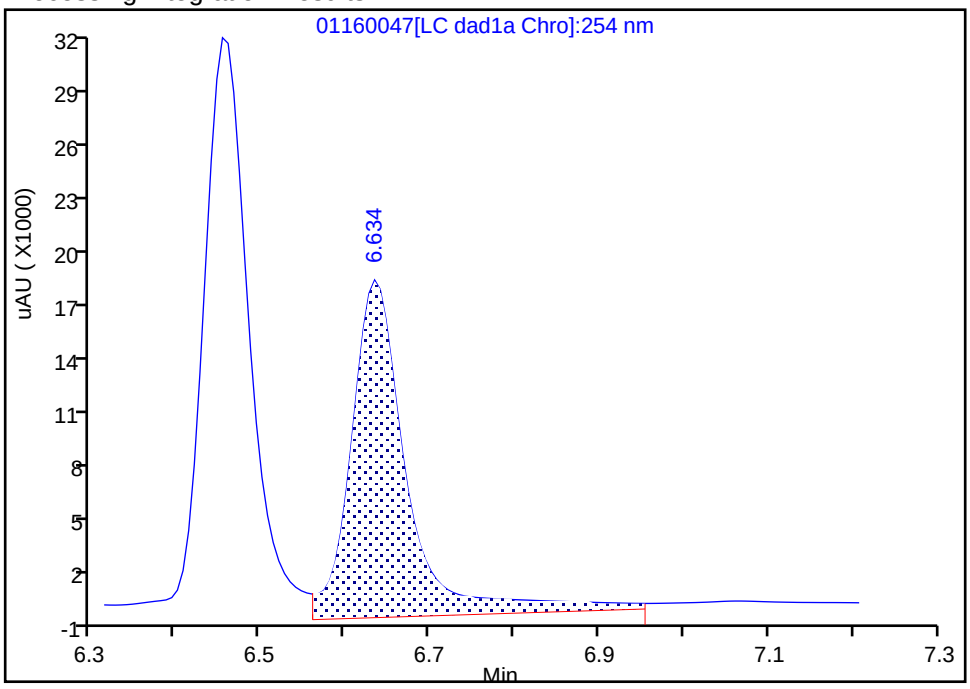
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160047.d				
Injection Date:	17-Jan-2023 03:40:08	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV ADD				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	50	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit 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

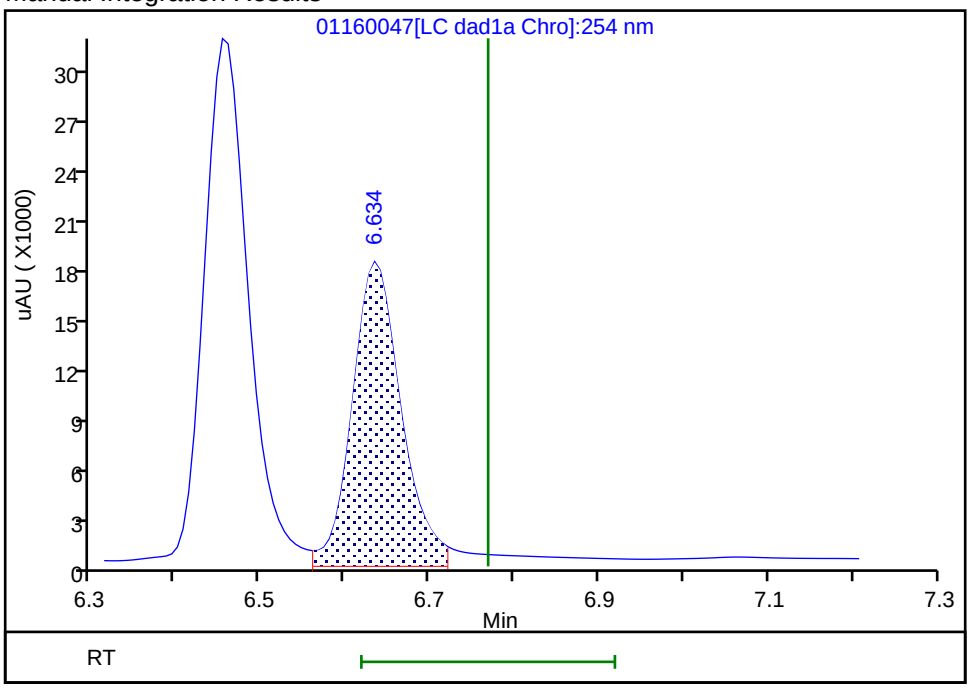
Processing Integration Results

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.: 280-175997-1

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.: 280-175997-1

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

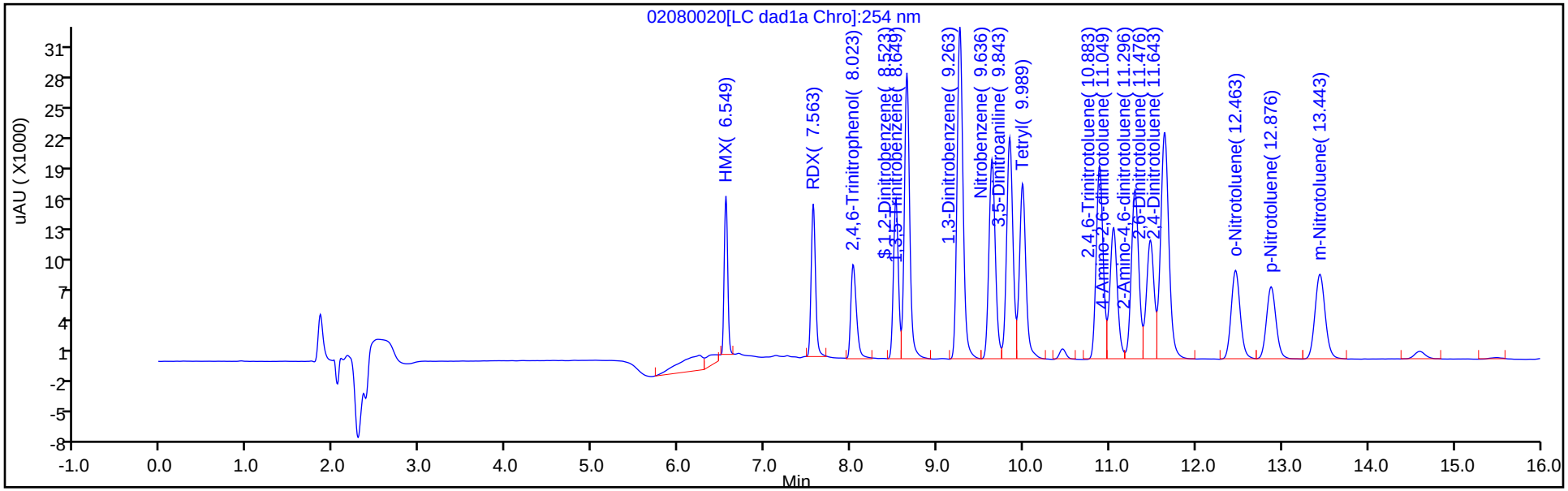
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Eurofins Denver

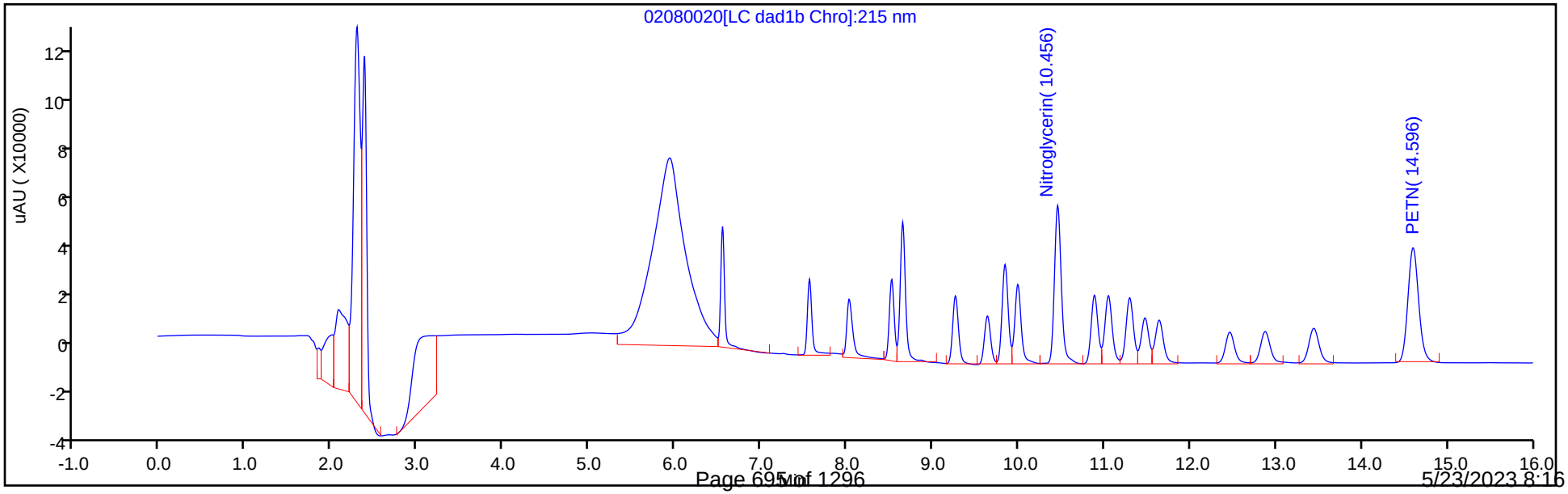
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Injection Date:	08-Feb-2023 19:05:10	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	ICV INT			Worklist Smp#:	20
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Manual Integration/User Assign Peak Report

Eurofins Denver

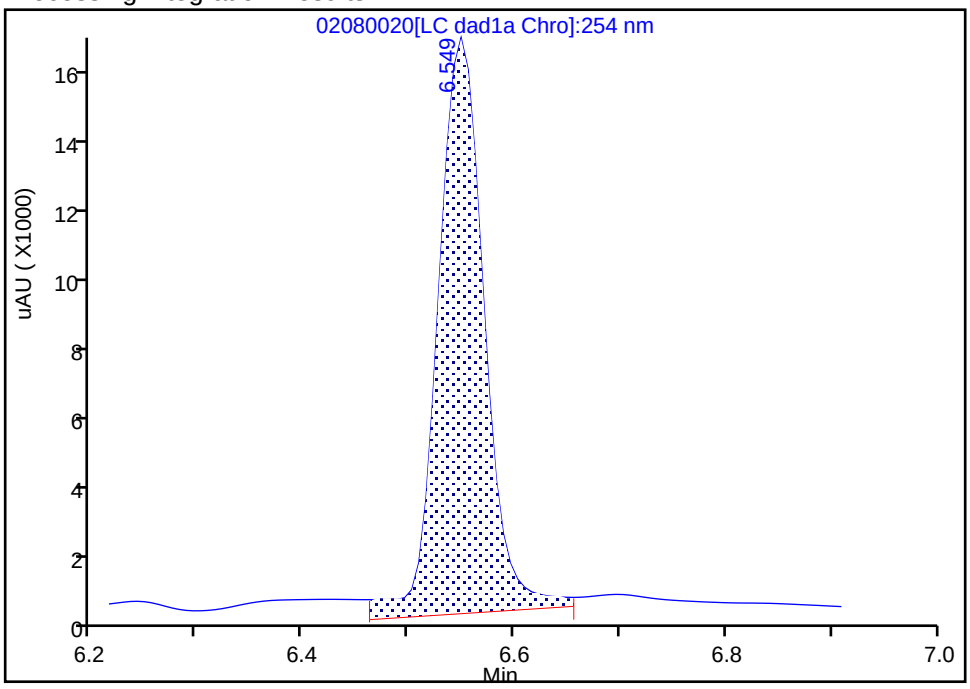
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Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

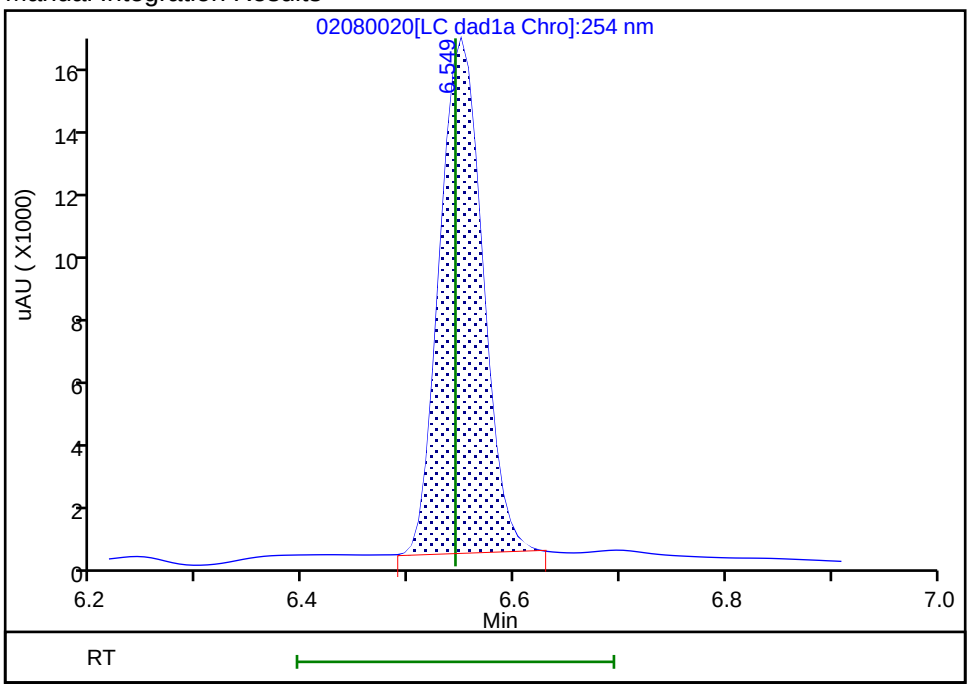
Processing Integration Results

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

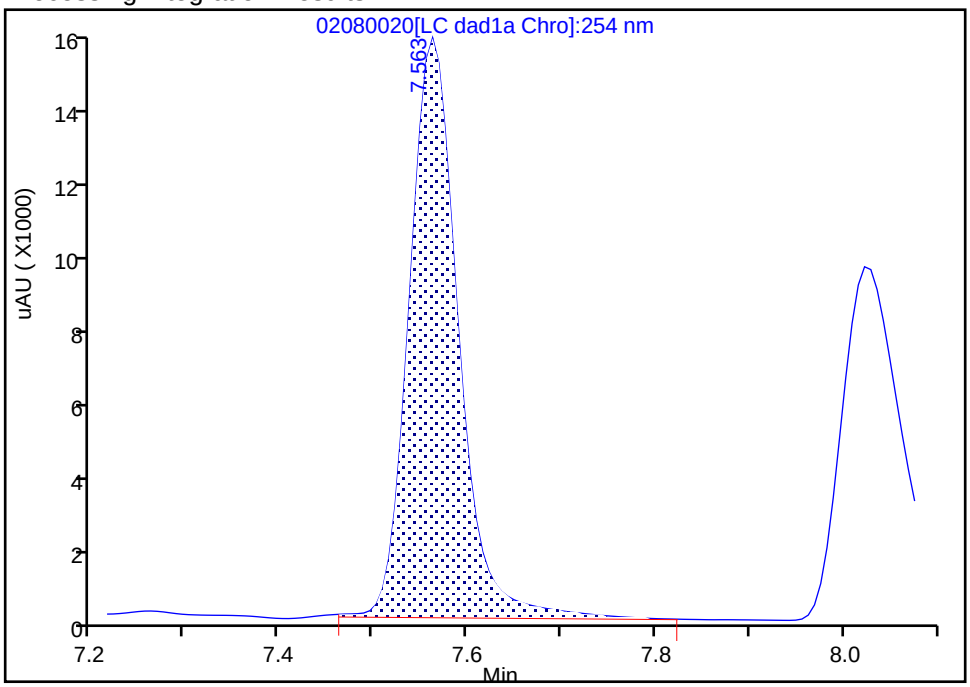
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Injection Date:	08-Feb-2023 19:05:10	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

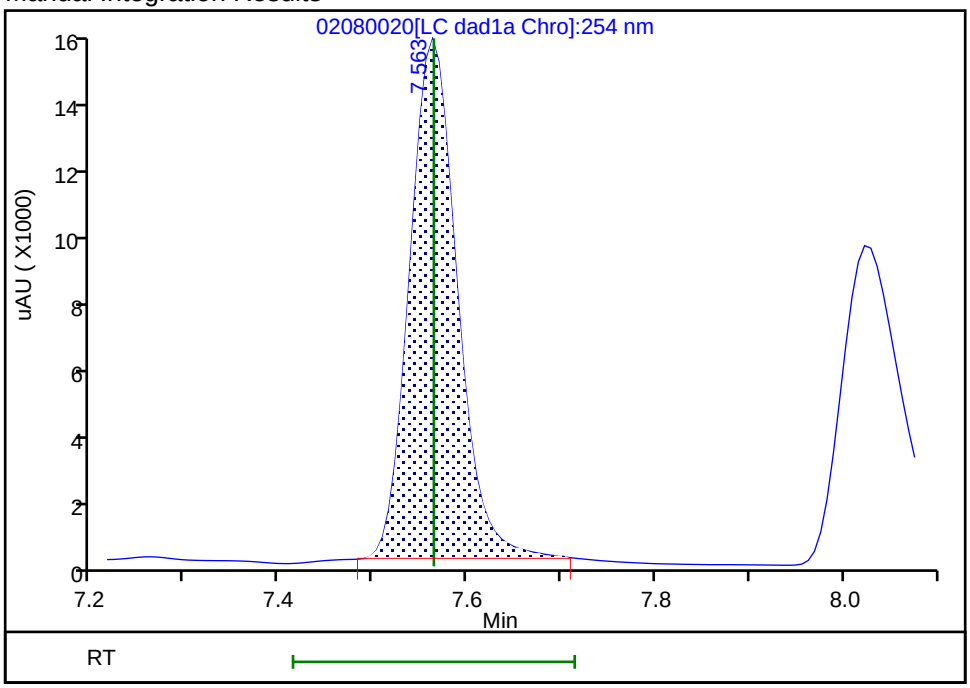
Processing Integration Results

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.: 280-175997-1

SDG No.:

Lab Sample ID: ICV 280-603284/19 | Calibration Date: 02/24/2023 18:04

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: 02240019.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	197687	197288		499	500	-0.2	20.0
DNX	Ave	144462	141211		491	502	-2.3	20.0
MNX	Ave	131172	134903		602	585	2.8	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Lab Sample ID: ICV 280-603284/19 Calibration Date: 02/24/2023 18:04

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: 02240019.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.45	6.34	6.54
DNX	6.77	6.67	6.87
MNX	7.20	7.05	7.35

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240019.D
Lims ID: ICV DMT
Client ID:
Sample Type: ICV
Inject. Date: 24-Feb-2023 18:04:21 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV DMT
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist:

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-Feb-2023 13:33:34 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: 28-Feb-2023 11:45:18

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.446	6.443	0.003	98644	0.5000	0.4990	M
6 DNX	1	6.772	6.770	0.002	70888	0.5020	0.4907	M
7 MNX	1	7.199	7.196	0.003	78918	0.5850	0.6016	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330_OP_DMT_00016 Amount Added: 50.00 Units: uL

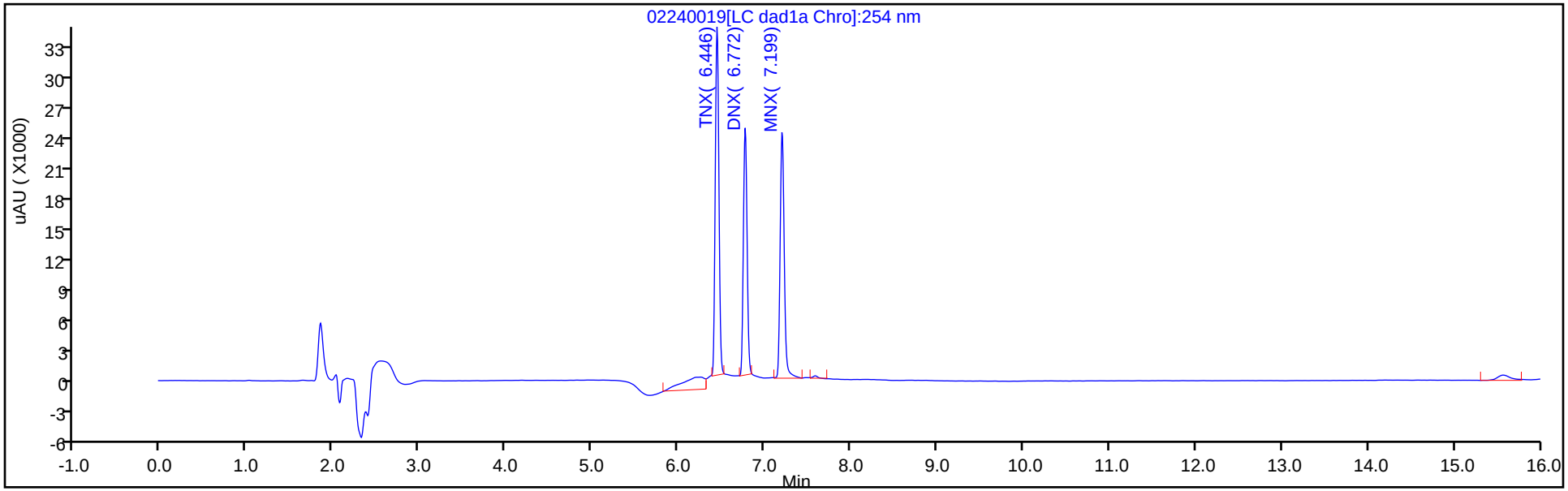
Report Date: 28-Feb-2023 13:33:59 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Denver

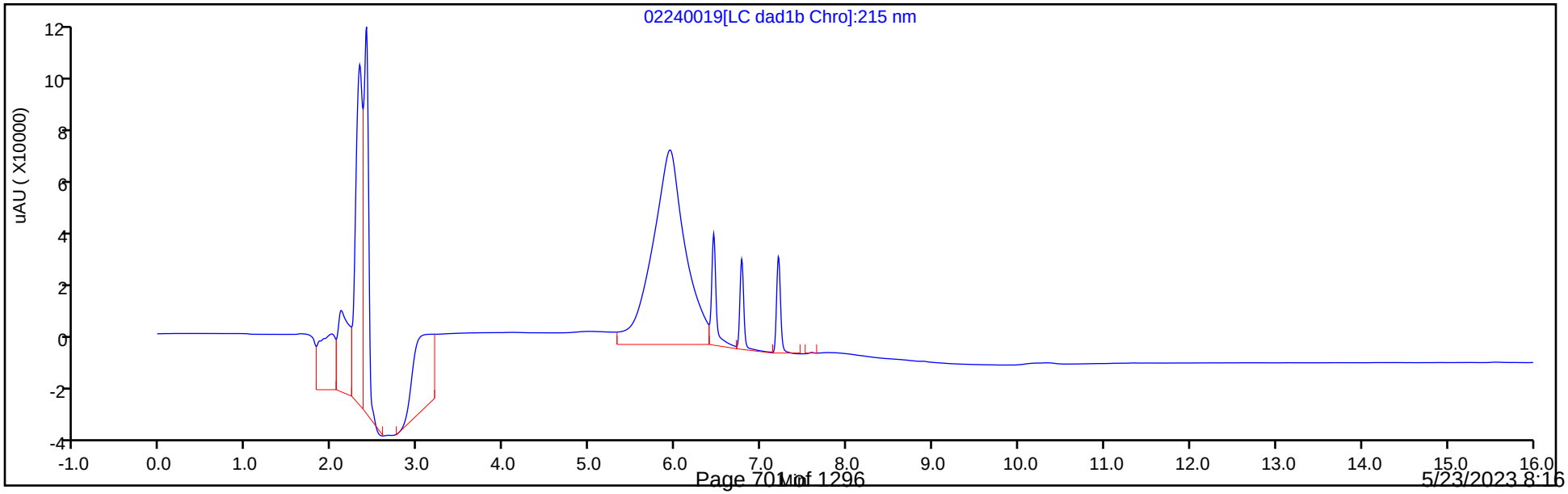
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240019.d

Injection Date:	24-Feb-2023 18:04:21	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	ICV DMT			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



Manual Integration/User Assign Peak Report

Eurofins Denver

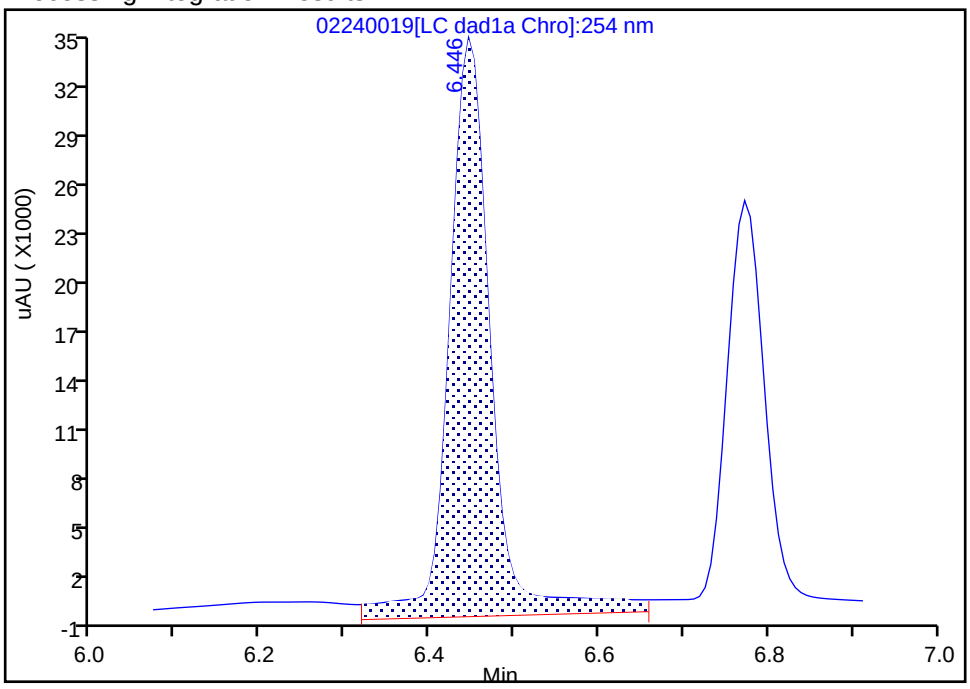
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240019.d
Injection Date: 24-Feb-2023 18:04:21 Instrument ID: CHHPLC_X3
Lims ID: ICV DMT
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

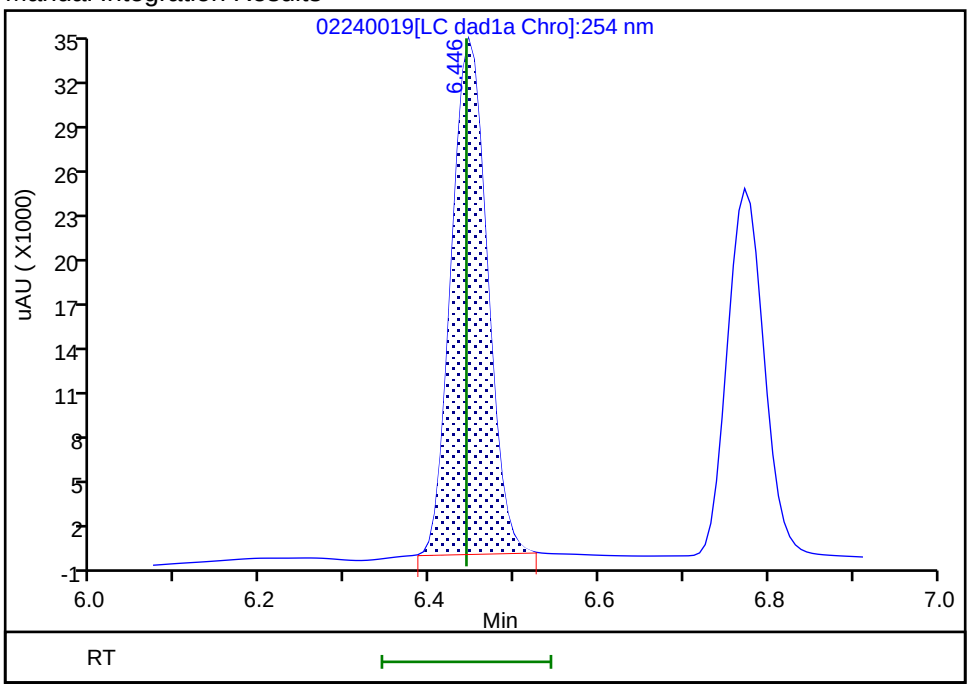
Processing Integration Results

RT: 6.45
Area: 120613
Amount: 0.610120
Amount Units: ug/mL



Manual Integration Results

RT: 6.45
Area: 98644
Amount: 0.498990
Amount Units: ug/mL



Reviewer: LV5D, 28-Feb-2023 11:45:12
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

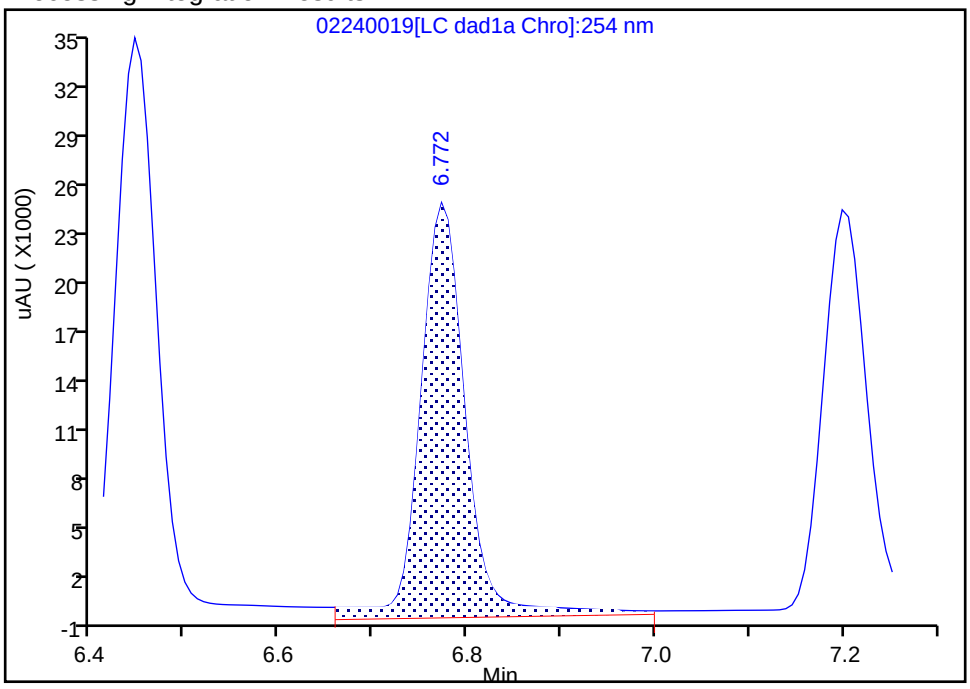
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Injection Date:	24-Feb-2023 18:04:21	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

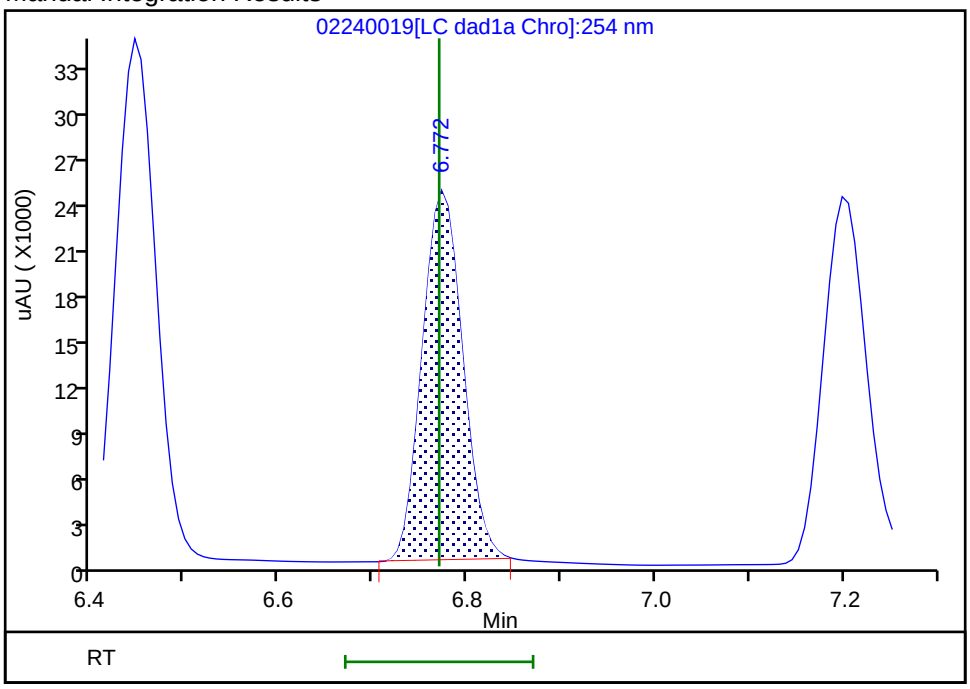
Processing Integration Results

RT: 6.77
Area: 83407
Amount: 0.577361
Amount Units: ug/mL



Manual Integration Results

RT: 6.77
Area: 70888
Amount: 0.490702
Amount Units: ug/mL



Reviewer: LV5D, 28-Feb-2023 11:45:16

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Lab Sample ID: CCV 280-612396/21 Calibration Date: 05/13/2023 18:33

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: 05130021.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	93528	100076		268	250	7.0	20.0
RDX	Ave	106380	115876		272	250	8.9	20.0
Picric acid	Ave	75830	84112		277	250	10.9	20.0
1,3,5-Trinitrobenzene	Ave	217147	232544		268	250	7.1	20.0
1,3-Dinitrobenzene	Ave	294397	315648		268	250	7.2	20.0
Nitrobenzene	Ave	191245	199952		261	250	4.6	20.0
3,5-Dinitroaniline	Lin2		239196		262	250	4.6	20.0
Tetryl	Ave	164121	152296		232	250	-7.2	20.0
Nitroglycerin	Ave	64070	68671		2680	2500	7.2	20.0
2,4,6-Trinitrotoluene	Ave	211040	218208		258	250	3.4	20.0
4-Amino-2,6-dinitrotoluene	Ave	154933	160728		259	250	3.7	20.0
2-Amino-4,6-dinitrotoluene	Ave	201410	205756		255	250	2.2	20.0
2,6-Dinitrotoluene	Ave	142745	155876		273	250	9.2	20.0
2,4-Dinitrotoluene	Ave	296667	317384		267	250	7.0	20.0
2-Nitrotoluene	Ave	127896	129404		253	250	1.2	20.0
4-Nitrotoluene	Ave	111880	110232		246	250	-1.5	20.0
3-Nitrotoluene	Ave	140492	141756		252	250	0.9	20.0
PETN	Ave	68845	74366		2700	2500	8.0	20.0
1,2-Dinitrobenzene	Ave	126309	139472		276	250	10.4	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Lab Sample ID: CCV 280-612396/21 Calibration Date: 05/13/2023 18:33

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: 05130021.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.55	6.40	6.70
RDX	7.58	7.42	7.72
Picric acid	7.98	7.82	8.12
1,3,5-Trinitrobenzene	8.66	8.50	8.80
1,3-Dinitrobenzene	9.28	9.12	9.42
Nitrobenzene	9.65	9.50	9.80
3,5-Dinitroaniline	9.88	9.74	10.04
Tetryl	10.02	9.86	10.16
Nitroglycerin	10.47	10.32	10.62
2,4,6-Trinitrotoluene	10.91	10.81	11.01
4-Amino-2,6-dinitrotoluene	11.10	11.01	11.21
2-Amino-4,6-dinitrotoluene	11.36	11.27	11.47
2,6-Dinitrotoluene	11.51	11.41	11.61
2,4-Dinitrotoluene	11.68	11.59	11.79
2-Nitrotoluene	12.50	12.36	12.66
4-Nitrotoluene	12.92	12.79	13.09
3-Nitrotoluene	13.50	13.36	13.66
PETN	14.66	14.54	14.84
1,2-Dinitrobenzene	8.53	8.37	8.67

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130021.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 13-May-2023 18:33:40 ALS Bottle#: 7 Worklist Smp#: 21
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:11 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: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 07:41:38

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3	TNX	1	6.428	6.427	0.001	50995	0.2508	0.2580	M
4	HMX	1	6.548	6.547	0.001	25019	0.2500	0.2675	M
6	DNX	1	6.755	6.754	0.001	36975	0.2503	0.2559	M
7	MNX	1	7.188	7.187	0.001	39998	0.2918	0.3049	M
8	RDX	1	7.575	7.574	0.001	28969	0.2500	0.2723	
9	2,4,6-Trinitrophenol	1	7.981	7.974	0.007	21028	0.2500	0.2773	
$ 10	1,2-Dinitrobenzene	1	8.528	8.521	0.007	34868	0.2500	0.2761	
11	1,3,5-Trinitrobenzene	1	8.655	8.647	0.008	58136	0.2500	0.2677	
12	1,3-Dinitrobenzene	1	9.275	9.274	0.001	78912	0.2500	0.2680	
13	Nitrobenzene	1	9.648	9.647	0.001	49988	0.2500	0.2614	
14	3,5-Dinitroaniline	1	9.881	9.887	-0.006	59799	0.2500	0.2616	
15	Tetryl	1	10.015	10.014	0.001	38074	0.2500	0.2320	
16	Nitroglycerin	2	10.468	10.467	0.001	171677	2.50	2.68	
17	2,4,6-Trinitrotoluene	1	10.908	10.914	-0.006	54552	0.2500	0.2585	
18	4-Amino-2,6-dinitrotoluene	1	11.101	11.114	-0.013	40182	0.2500	0.2594	
19	2-Amino-4,6-dinitrotoluene	1	11.355	11.367	-0.012	51439	0.2500	0.2554	
20	2,6-Dinitrotoluene	1	11.508	11.514	-0.006	38969	0.2500	0.2730	
21	2,4-Dinitrotoluene	1	11.675	11.687	-0.012	79346	0.2500	0.2675	
22	o-Nitrotoluene	1	12.501	12.514	-0.013	32351	0.2500	0.2529	
23	p-Nitrotoluene	1	12.921	12.940	-0.019	27558	0.2500	0.2463	
24	m-Nitrotoluene	1	13.495	13.514	-0.019	35439	0.2500	0.2522	
25	PETN	2	14.661	14.694	-0.033	185914	2.50	2.70	

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

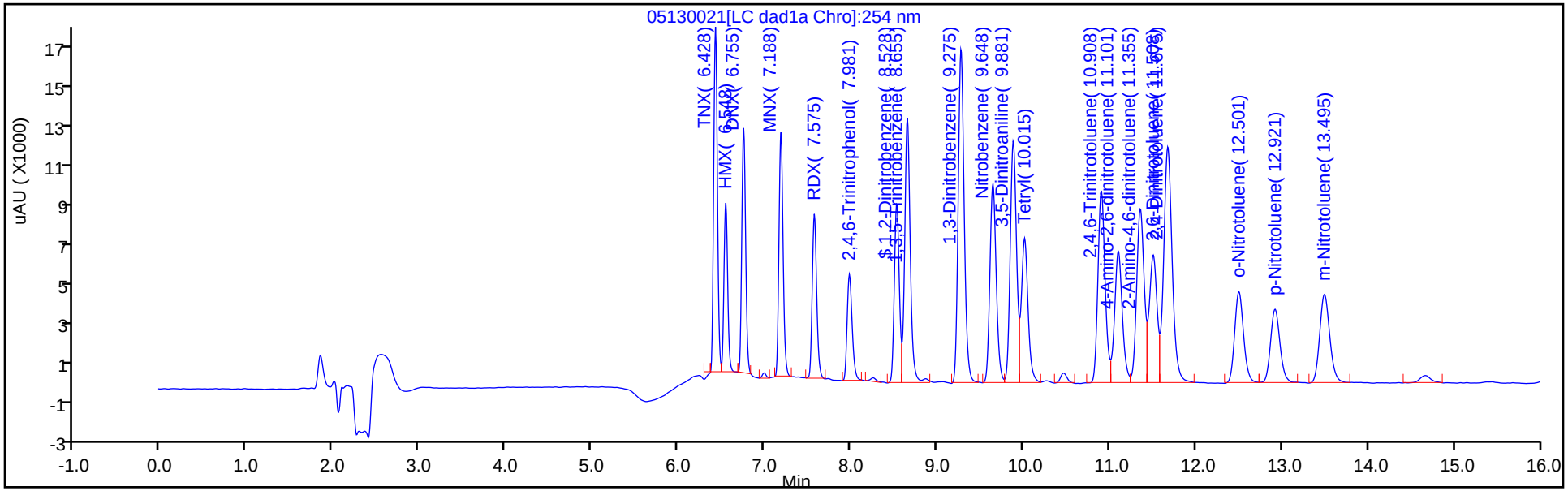
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Eurofins Denver

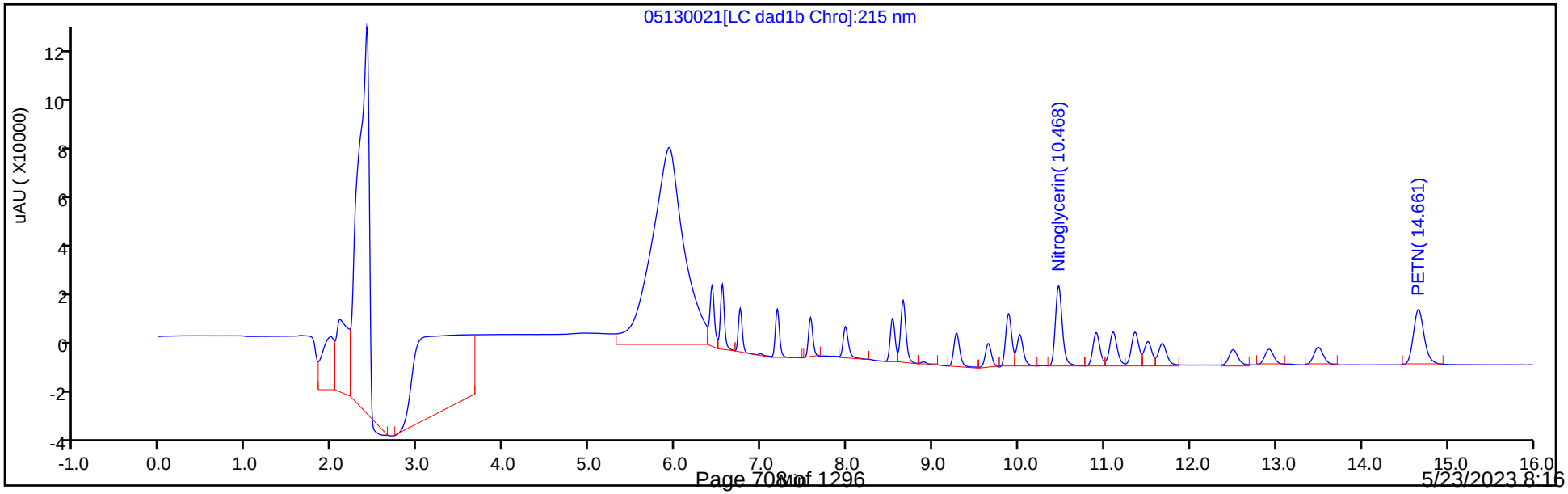
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Injection Date:	13-May-2023 18:33:40	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	21
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

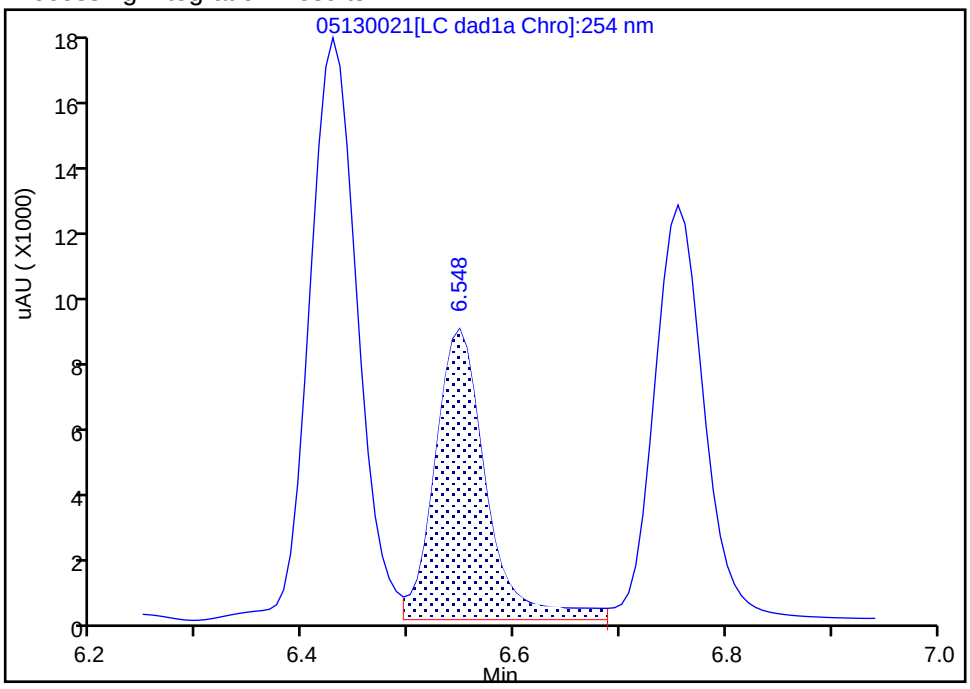
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Injection Date:	13-May-2023 18:33:40	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

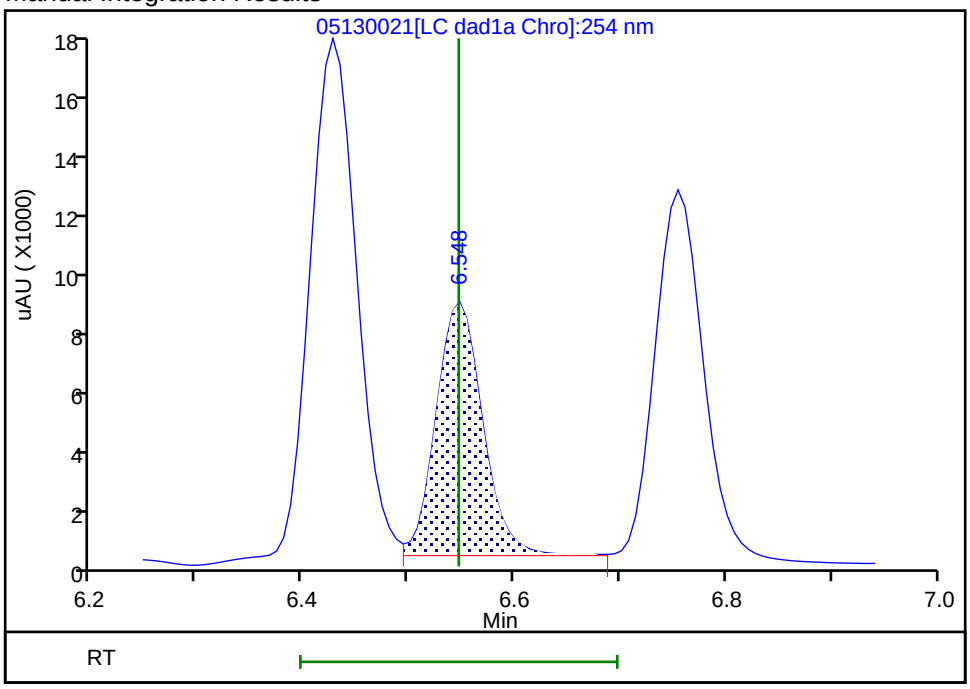
Processing Integration Results

RT: 6.55
Area: 28818
Amount: 0.308121
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 25019
Amount: 0.267502
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 07:36:44
Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Lab Sample ID: CCV 280-612396/21 Calibration Date: 05/13/2023 18:33

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: 05130021.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	197687	203370		258	251	2.9	20.0
DNX	Ave	144462	147752		256	250	2.3	20.0
MNX	Ave	131172	137097		305	292	4.5	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Lab Sample ID: CCV 280-612396/21 Calibration Date: 05/13/2023 18:33

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: 05130021.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.43	6.33	6.53
DNX	6.76	6.65	6.85
MNX	7.19	7.04	7.34

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130021.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 13-May-2023 18:33:40 ALS Bottle#: 7 Worklist Smp#: 21
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:11 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: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 07:41:38

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3	TNX	1	6.428	6.427	0.001	50995	0.2508	0.2580	M
4	HMX	1	6.548	6.547	0.001	25019	0.2500	0.2675	M
6	DNX	1	6.755	6.754	0.001	36975	0.2503	0.2559	M
7	MNX	1	7.188	7.187	0.001	39998	0.2918	0.3049	M
8	RDX	1	7.575	7.574	0.001	28969	0.2500	0.2723	
9	2,4,6-Trinitrophenol	1	7.981	7.974	0.007	21028	0.2500	0.2773	
$ 10	1,2-Dinitrobenzene	1	8.528	8.521	0.007	34868	0.2500	0.2761	
11	1,3,5-Trinitrobenzene	1	8.655	8.647	0.008	58136	0.2500	0.2677	
12	1,3-Dinitrobenzene	1	9.275	9.274	0.001	78912	0.2500	0.2680	
13	Nitrobenzene	1	9.648	9.647	0.001	49988	0.2500	0.2614	
14	3,5-Dinitroaniline	1	9.881	9.887	-0.006	59799	0.2500	0.2616	
15	Tetryl	1	10.015	10.014	0.001	38074	0.2500	0.2320	
16	Nitroglycerin	2	10.468	10.467	0.001	171677	2.50	2.68	
17	2,4,6-Trinitrotoluene	1	10.908	10.914	-0.006	54552	0.2500	0.2585	
18	4-Amino-2,6-dinitrotoluene	1	11.101	11.114	-0.013	40182	0.2500	0.2594	
19	2-Amino-4,6-dinitrotoluene	1	11.355	11.367	-0.012	51439	0.2500	0.2554	
20	2,6-Dinitrotoluene	1	11.508	11.514	-0.006	38969	0.2500	0.2730	
21	2,4-Dinitrotoluene	1	11.675	11.687	-0.012	79346	0.2500	0.2675	
22	o-Nitrotoluene	1	12.501	12.514	-0.013	32351	0.2500	0.2529	
23	p-Nitrotoluene	1	12.921	12.940	-0.019	27558	0.2500	0.2463	
24	m-Nitrotoluene	1	13.495	13.514	-0.019	35439	0.2500	0.2522	
25	PETN	2	14.661	14.694	-0.033	185914	2.50	2.70	

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

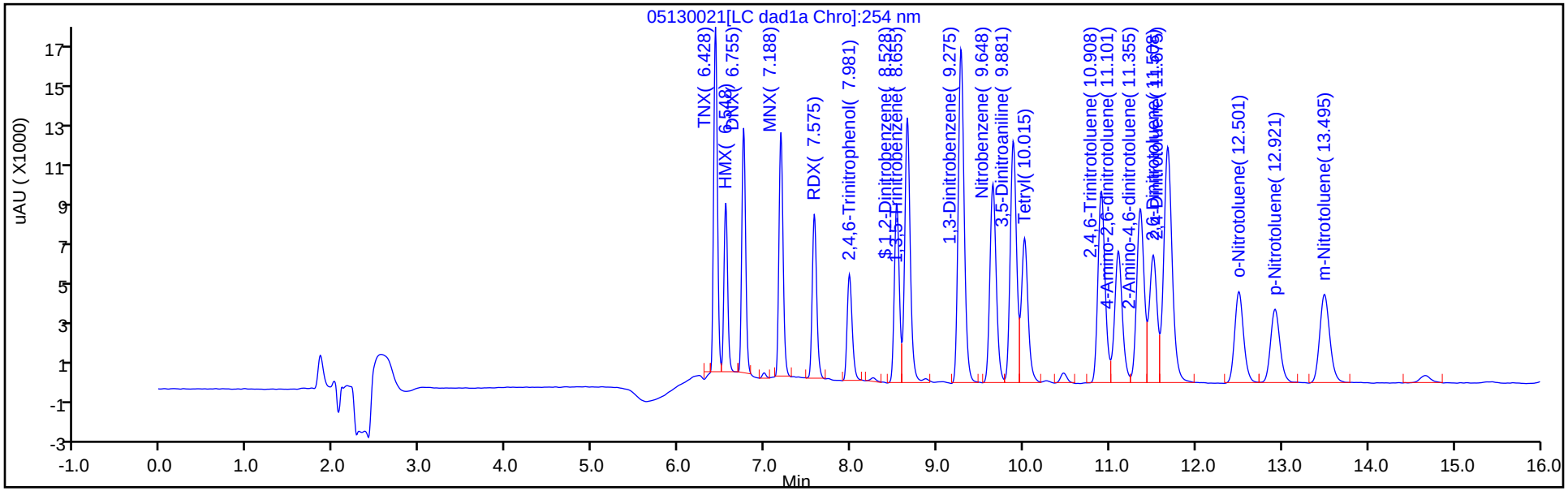
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Eurofins Denver

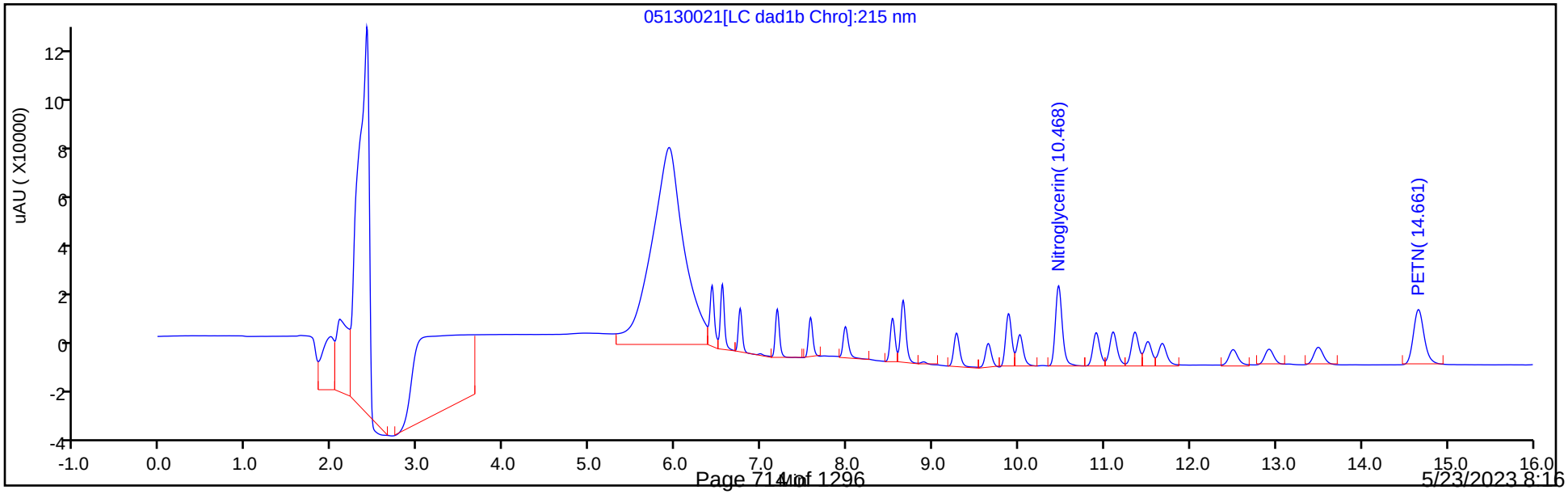
Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130021.d

Injection Date:	13-May-2023 18:33:40	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	21
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

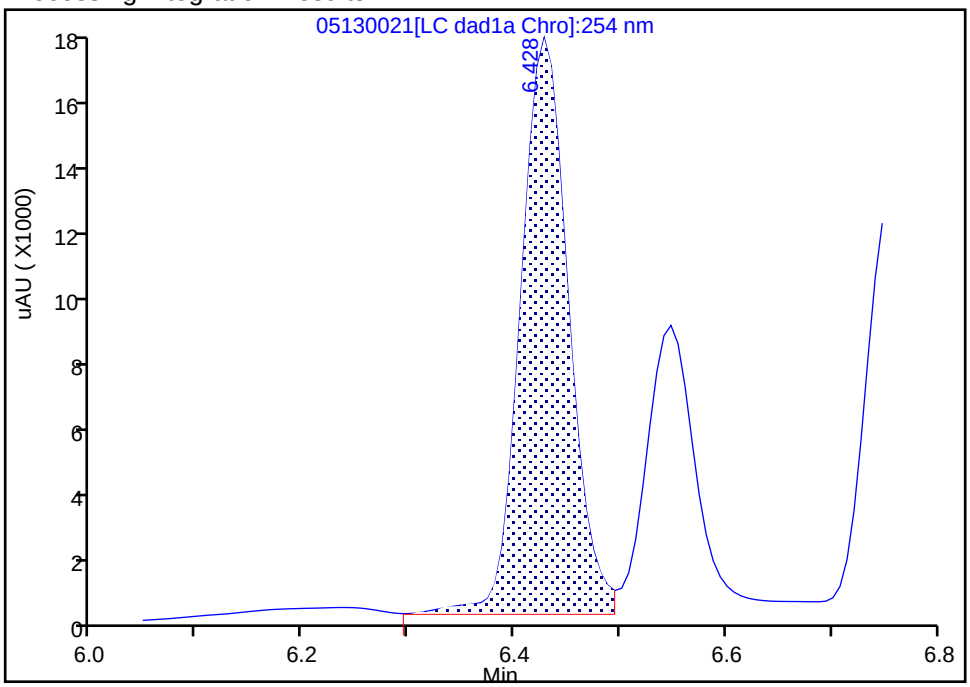
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Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

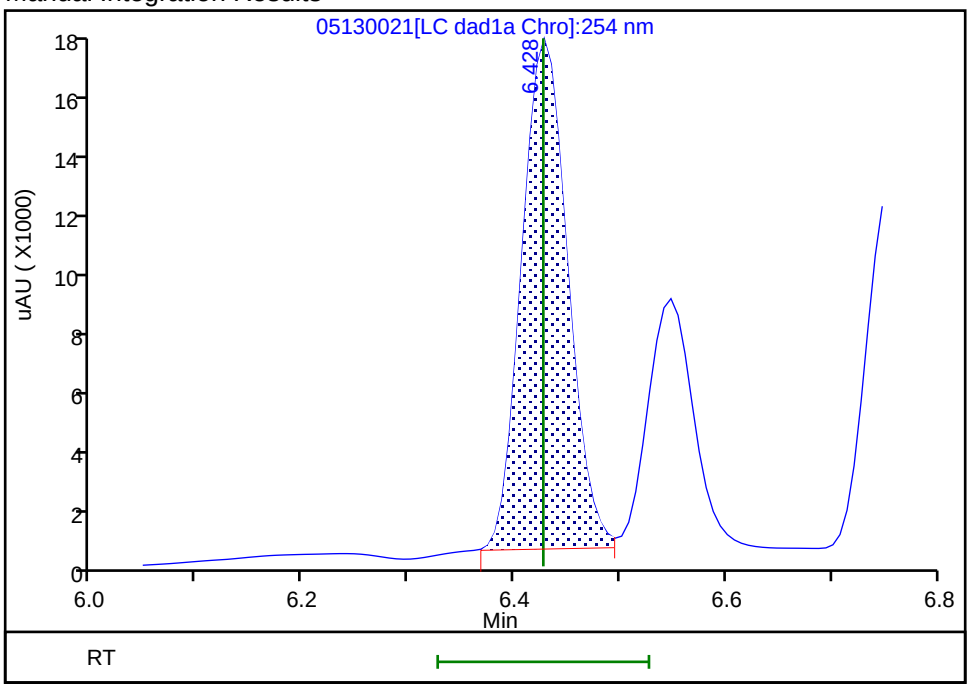
Processing Integration Results

RT: 6.43
Area: 54181
Amount: 0.274074
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 50995
Amount: 0.257958
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 07:36:55

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

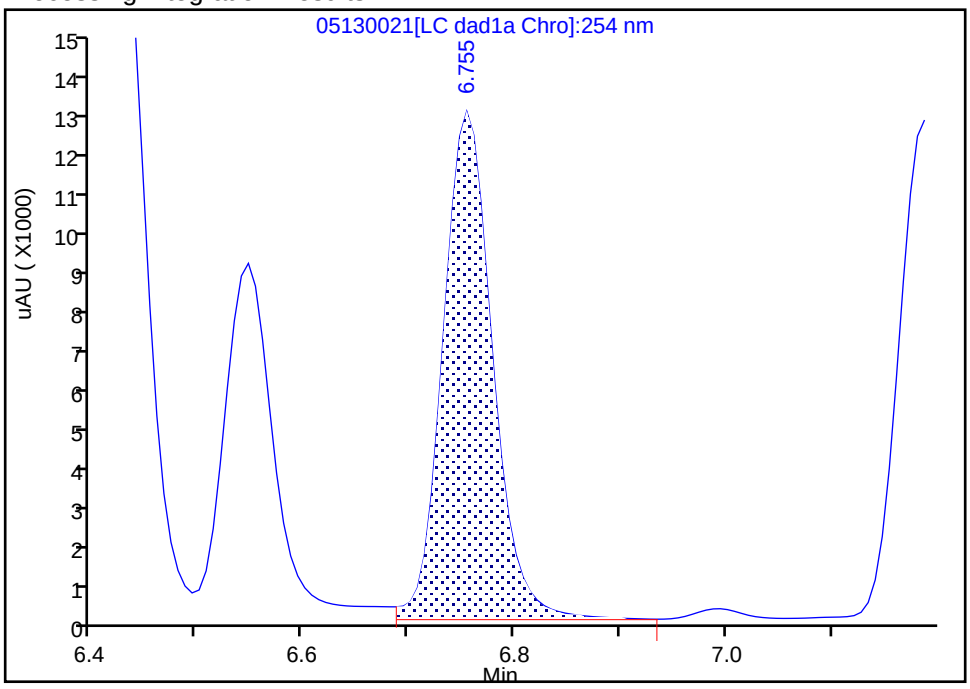
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Injection Date:	13-May-2023 18:33:40	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

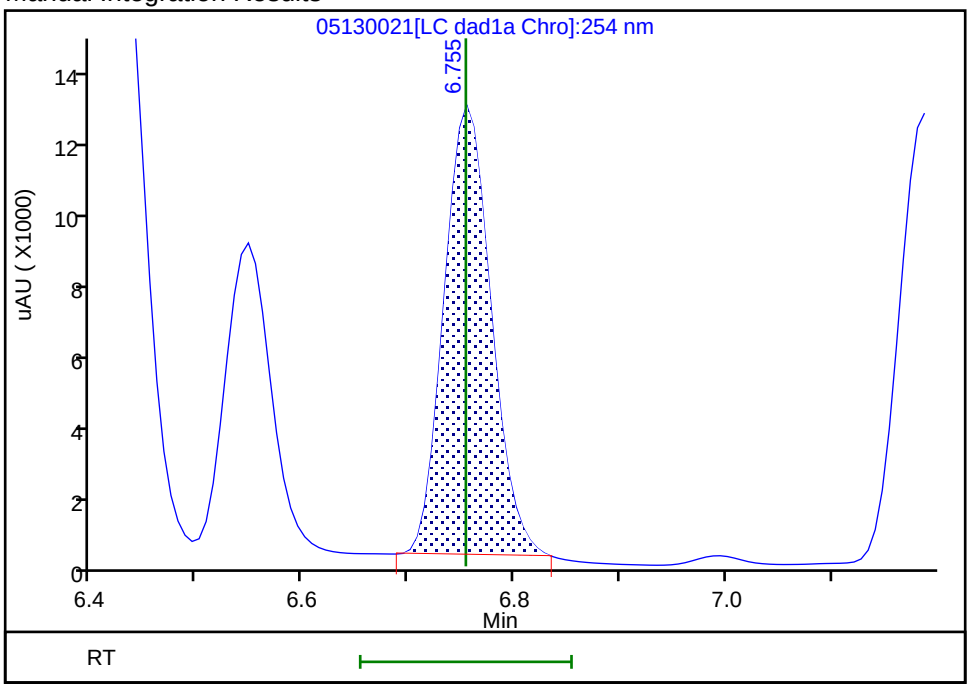
Processing Integration Results

RT: 6.75
Area: 39984
Amount: 0.276778
Amount Units: ug/mL



Manual Integration Results

RT: 6.75
Area: 36975
Amount: 0.255949
Amount Units: ug/mL



Reviewer: LV5D, 16-May-2023 12:16:47
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

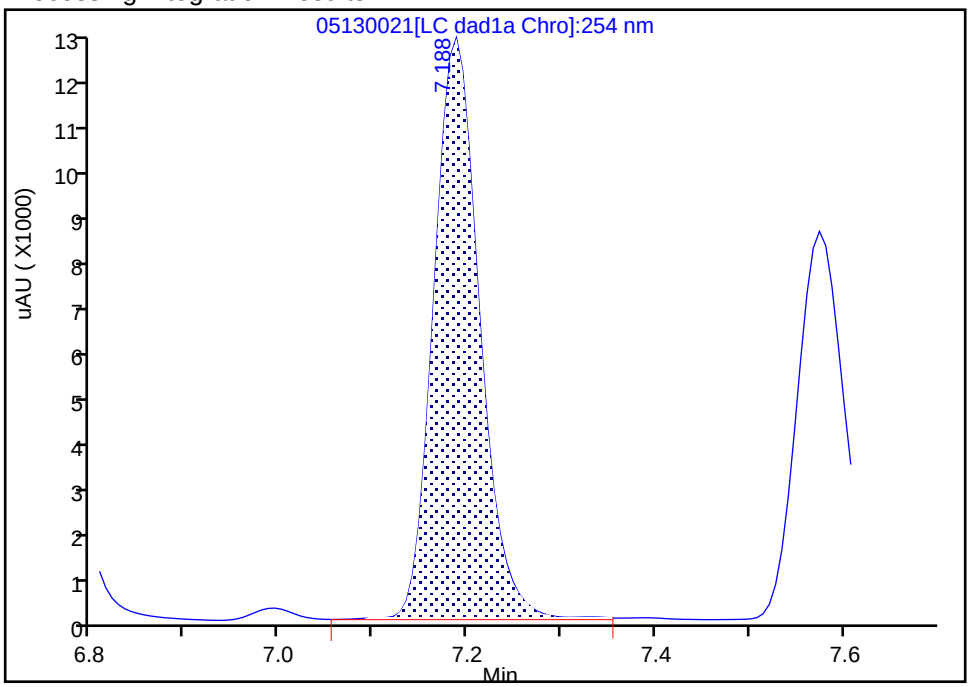
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Injection Date:	13-May-2023 18:33:40	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

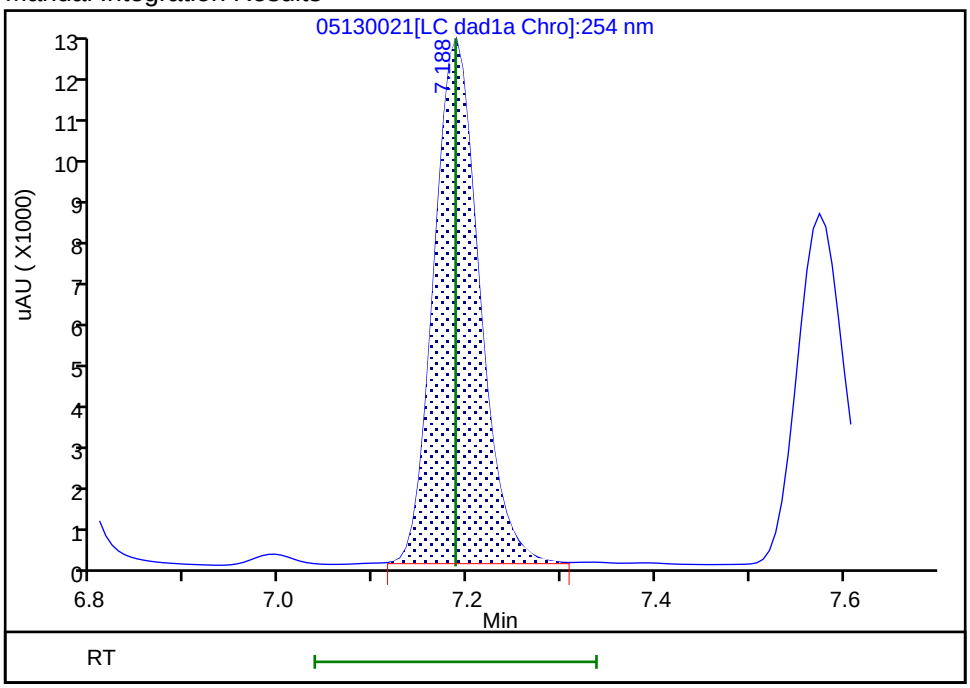
Processing Integration Results

RT: 7.19
Area: 40601
Amount: 0.309526
Amount Units: ug/mL



Manual Integration Results

RT: 7.19
Area: 39998
Amount: 0.304929
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 07:37:12

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Lab Sample ID: CCV 280-612396/22 Calibration Date: 05/13/2023 18:56

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: 05130022.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		206504		221	250	-11.6	20.0
2,4-diamino-6-nitrotoluene	Ave	146472	124436		212	250	-15.0	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Lab Sample ID: CCV 280-612396/22 Calibration Date: 05/13/2023 18:56

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: 05130022.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\20230513-121427.b\05130022.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 13-May-2023 18:56:38 ALS Bottle#: 8 Worklist Smp#: 22
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub28

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:13 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: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 07:42:47

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1	6.425	6.426	-0.001	51626	0.2500	0.2210	M
5 2,4-diamino-6-nitrotoluene	1	6.619	6.620	-0.001	31109	0.2500	0.2124	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00037 Amount Added: 12.50 Units: uL

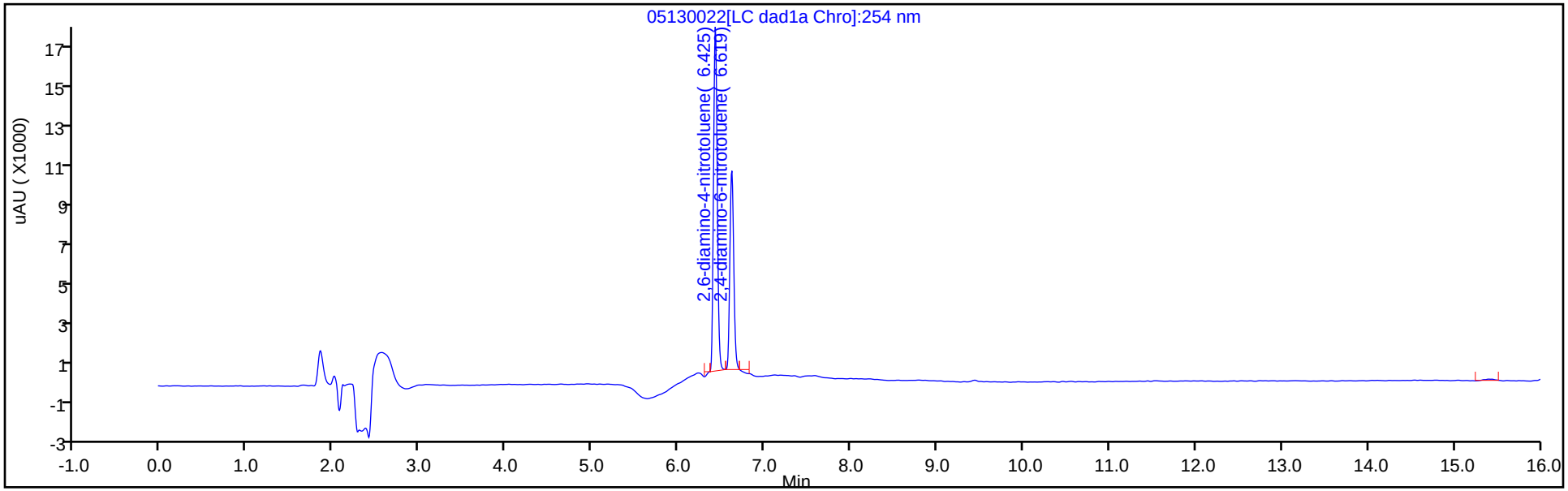
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Eurofins Denver

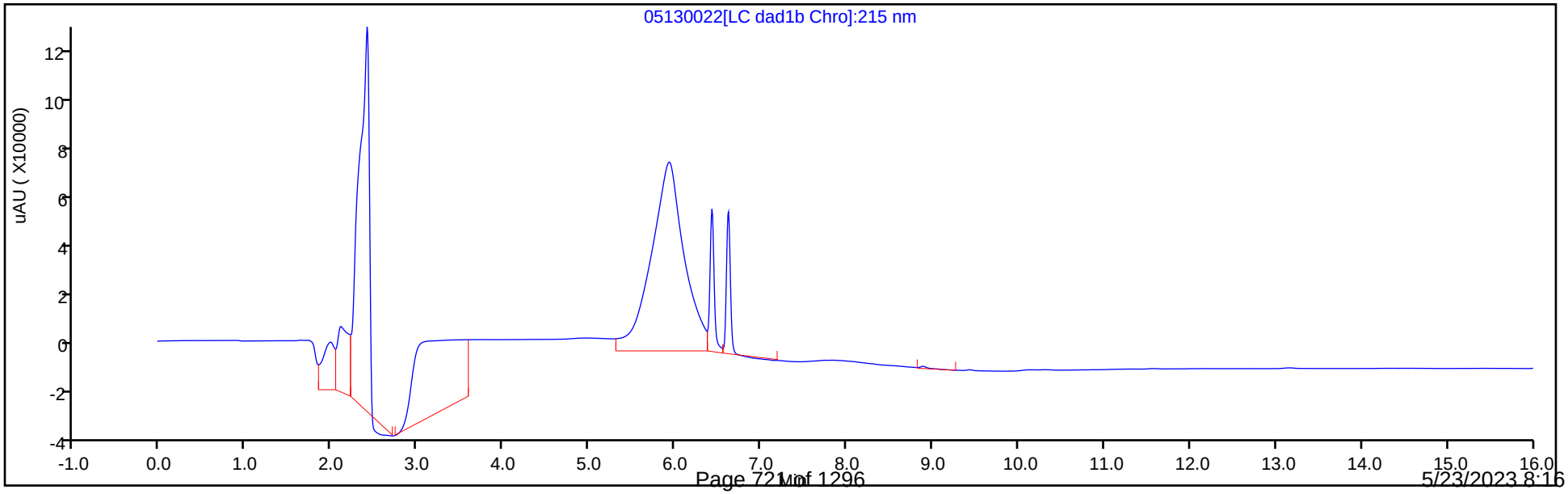
Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130022.d

Injection Date:	13-May-2023 18:56:38	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	22
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

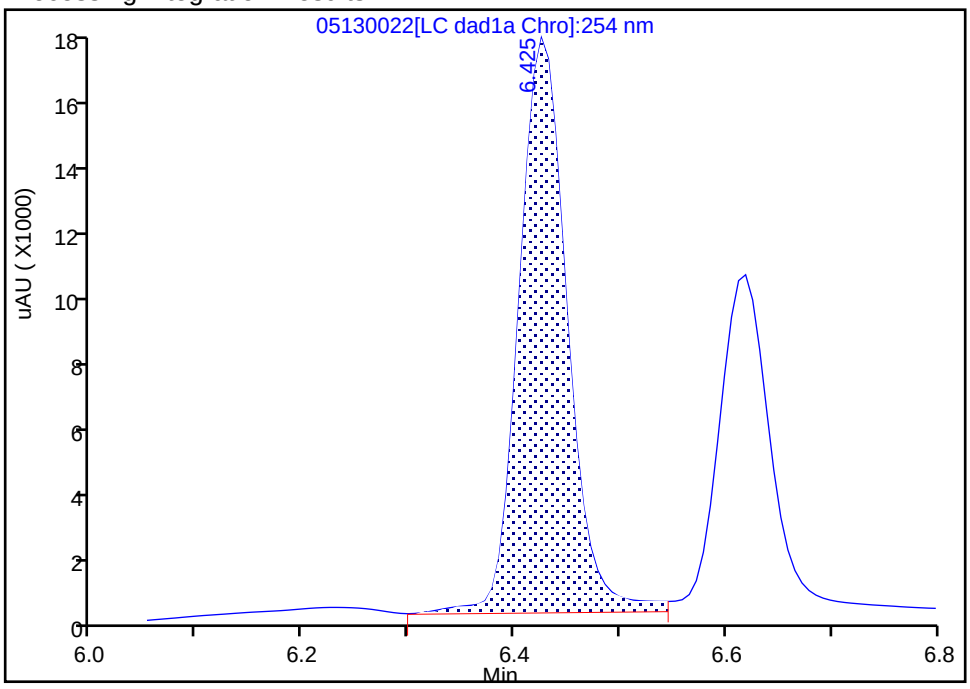
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130022.d				
Injection Date:	13-May-2023 18:56:38	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

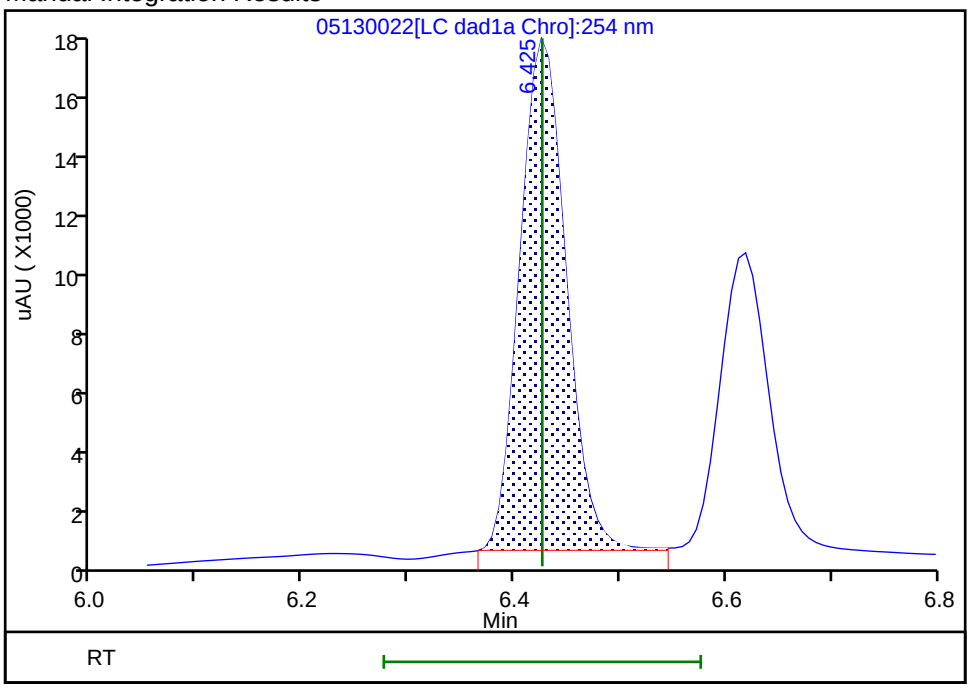
Processing Integration Results

RT: 6.43
Area: 55178
Amount: 0.236463
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 51626
Amount: 0.220999
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 07:42:42

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

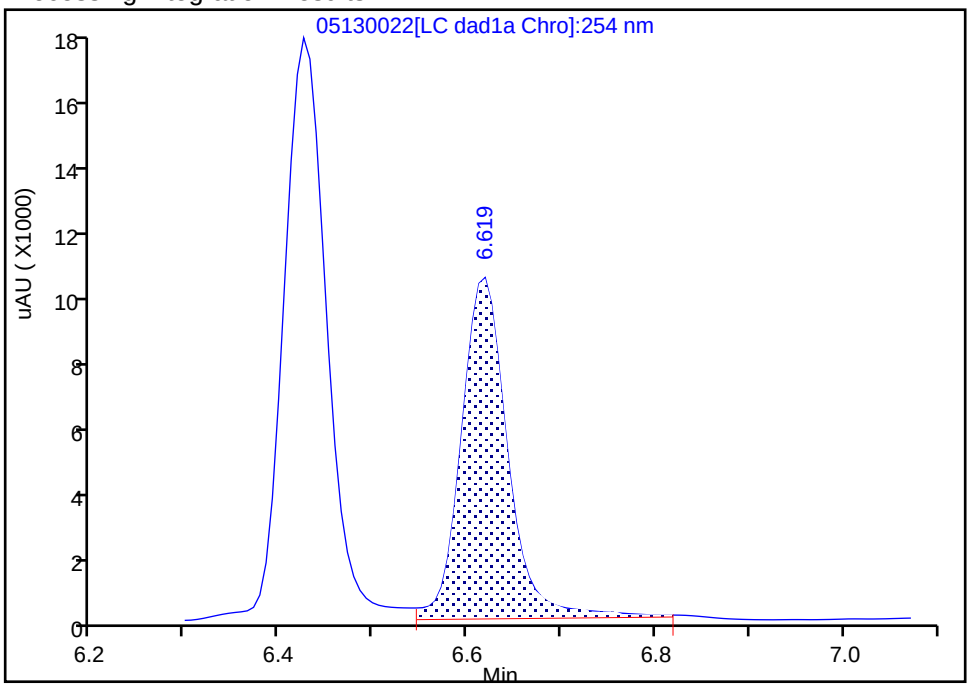
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130022.d				
Injection Date:	13-May-2023 18:56:38	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

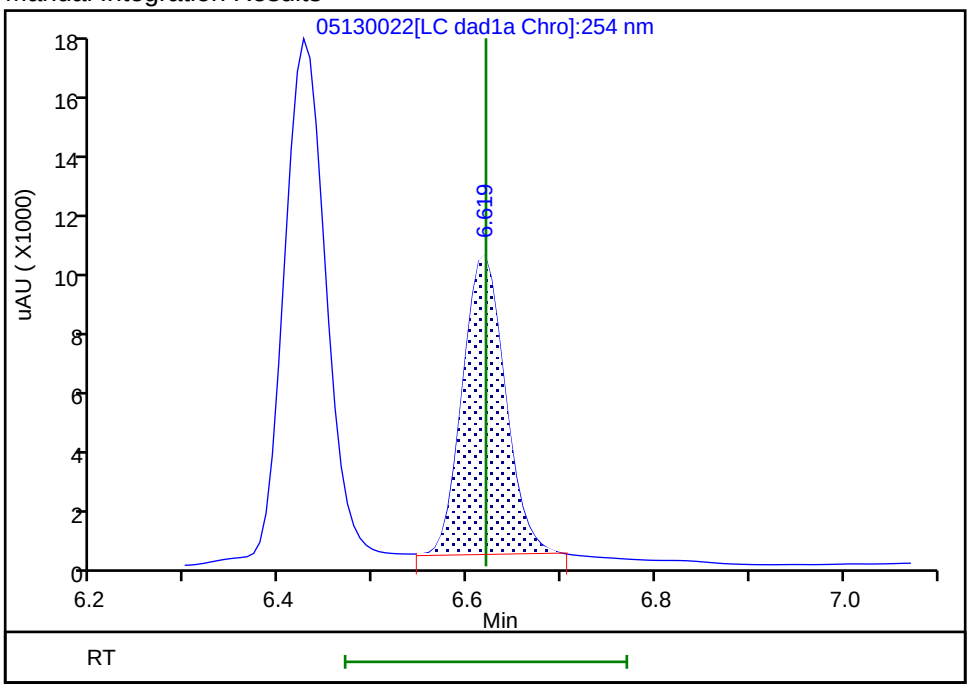
Processing Integration Results

RT: 6.62
Area: 34751
Amount: 0.237253
Amount Units: ug/mL



Manual Integration Results

RT: 6.62
Area: 31109
Amount: 0.212389
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 07:42:39
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Lab Sample ID: CCV 280-612396/33 Calibration Date: 05/13/2023 23:08

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: 05130033.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	93528	98060		262	250	4.8	20.0
RDX	Ave	106380	116660		274	250	9.7	20.0
Picric acid	Ave	75830	85960		283	250	13.4	20.0
1,3,5-Trinitrobenzene	Ave	217147	229216		264	250	5.6	20.0
1,3-Dinitrobenzene	Ave	294397	318348		270	250	8.1	20.0
Nitrobenzene	Ave	191245	198760		260	250	3.9	20.0
3,5-Dinitroaniline	Lin2		243856		267	250	6.7	20.0
Tetryl	Ave	164121	148276		226	250	-9.7	20.0
Nitroglycerin	Ave	64070	68846		2690	2500	7.5	20.0
2,4,6-Trinitrotoluene	Ave	211040	219440		260	250	4.0	20.0
4-Amino-2,6-dinitrotoluene	Ave	154933	160896		260	250	3.8	20.0
2-Amino-4,6-dinitrotoluene	Ave	201410	208272		259	250	3.4	20.0
2,6-Dinitrotoluene	Ave	142745	157092		275	250	10.1	20.0
2,4-Dinitrotoluene	Ave	296667	314648		265	250	6.1	20.0
2-Nitrotoluene	Ave	127896	127804		250	250	-0.0	20.0
4-Nitrotoluene	Ave	111880	109696		245	250	-2.0	20.0
3-Nitrotoluene	Ave	140492	139436		248	250	-0.8	20.0
PETN	Ave	68845	74801		2720	2500	8.7	20.0
1,2-Dinitrobenzene	Ave	126309	141668		280	250	12.2	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Lab Sample ID: CCV 280-612396/33 Calibration Date: 05/13/2023 23:08

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: 05130033.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.55	6.40	6.70
RDX	7.57	7.42	7.72
Picric acid	7.98	7.82	8.12
1,3,5-Trinitrobenzene	8.65	8.50	8.80
1,3-Dinitrobenzene	9.28	9.12	9.42
Nitrobenzene	9.65	9.50	9.80
3,5-Dinitroaniline	9.89	9.74	10.04
Tetryl	10.02	9.86	10.16
Nitroglycerin	10.47	10.32	10.62
2,4,6-Trinitrotoluene	10.91	10.81	11.01
4-Amino-2,6-dinitrotoluene	11.11	11.01	11.21
2-Amino-4,6-dinitrotoluene	11.36	11.27	11.47
2,6-Dinitrotoluene	11.51	11.41	11.61
2,4-Dinitrotoluene	11.67	11.59	11.79
2-Nitrotoluene	12.49	12.36	12.66
4-Nitrotoluene	12.91	12.79	13.09
3-Nitrotoluene	13.49	13.36	13.66
PETN	14.65	14.54	14.84
1,2-Dinitrobenzene	8.53	8.37	8.67

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130033.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 13-May-2023 23:08:57 ALS Bottle#: 7 Worklist Smp#: 33
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:21 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: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 08:09:20

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3	TNX	1	6.425	6.427	-0.002	50523	0.2508	0.2556	M
4	HMX	1	6.545	6.547	-0.002	24515	0.2500	0.2621	M
6	DNX	1	6.752	6.754	-0.002	37985	0.2503	0.2629	M
7	MNX	1	7.185	7.187	-0.002	40140	0.2918	0.3060	M
8	RDX	1	7.572	7.574	-0.002	29165	0.2500	0.2742	
9	2,4,6-Trinitrophenol	1	7.979	7.974	0.005	21490	0.2500	0.2834	
$ 10	1,2-Dinitrobenzene	1	8.532	8.521	0.011	35417	0.2500	0.2804	
11	1,3,5-Trinitrobenzene	1	8.652	8.647	0.005	57304	0.2500	0.2639	
12	1,3-Dinitrobenzene	1	9.279	9.274	0.005	79587	0.2500	0.2703	
13	Nitrobenzene	1	9.652	9.647	0.005	49690	0.2500	0.2598	
14	3,5-Dinitroaniline	1	9.885	9.887	-0.002	60964	0.2500	0.2667	
15	Tetryl	1	10.019	10.014	0.005	37069	0.2500	0.2259	
16	Nitroglycerin	2	10.472	10.467	0.005	172116	2.50	2.69	
17	2,4,6-Trinitrotoluene	1	10.905	10.914	-0.009	54860	0.2500	0.2600	
18	4-Amino-2,6-dinitrotoluene	1	11.105	11.114	-0.009	40224	0.2500	0.2596	
19	2-Amino-4,6-dinitrotoluene	1	11.359	11.367	-0.008	52068	0.2500	0.2585	
20	2,6-Dinitrotoluene	1	11.505	11.514	-0.009	39273	0.2500	0.2751	
21	2,4-Dinitrotoluene	1	11.672	11.687	-0.015	78662	0.2500	0.2652	
22	o-Nitrotoluene	1	12.492	12.514	-0.022	31951	0.2500	0.2498	
23	p-Nitrotoluene	1	12.912	12.940	-0.028	27424	0.2500	0.2451	
24	m-Nitrotoluene	1	13.485	13.514	-0.029	34859	0.2500	0.2481	
25	PETN	2	14.645	14.694	-0.049	187003	2.50	2.72	

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

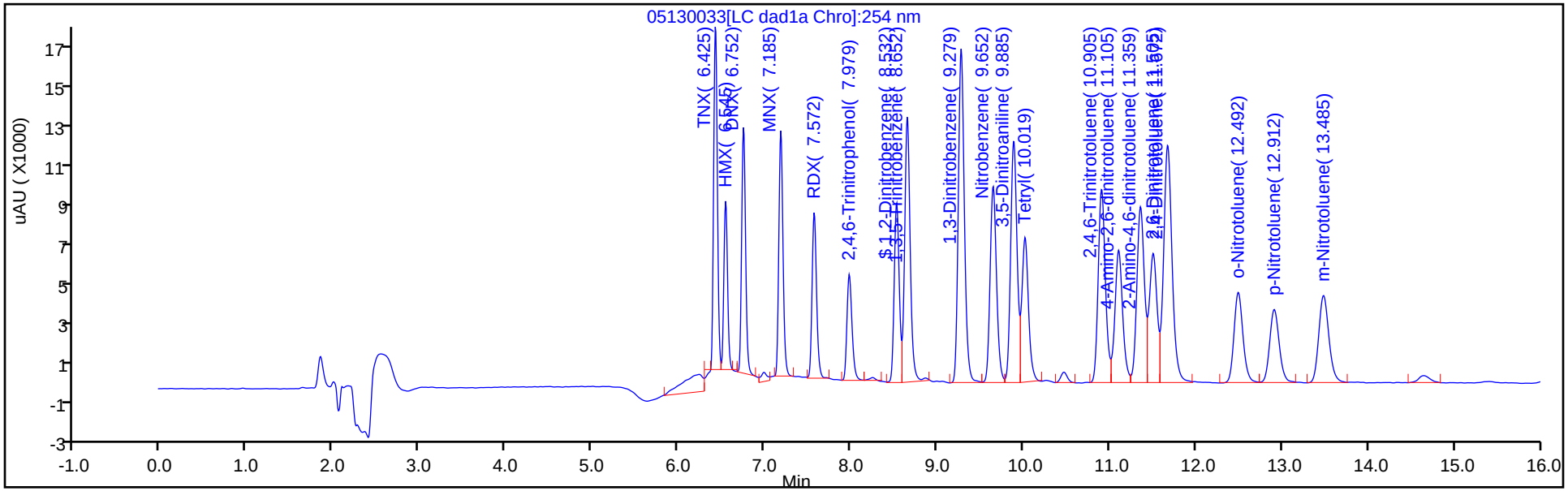
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Eurofins Denver

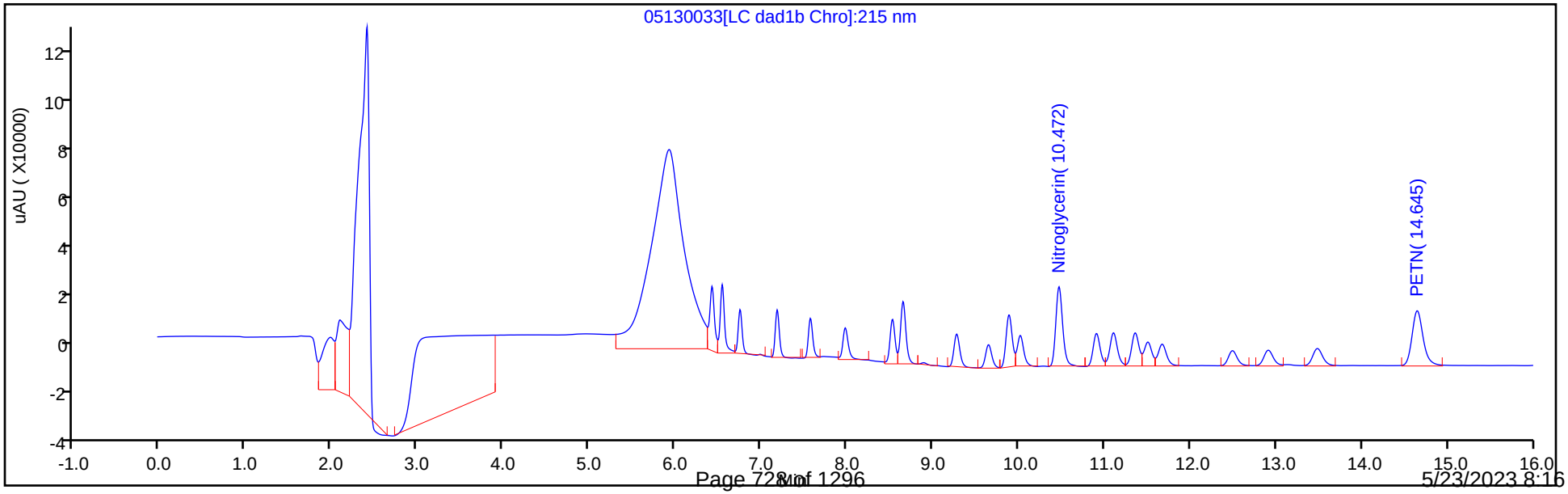
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Injection Date:	13-May-2023 23:08:57	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	33
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

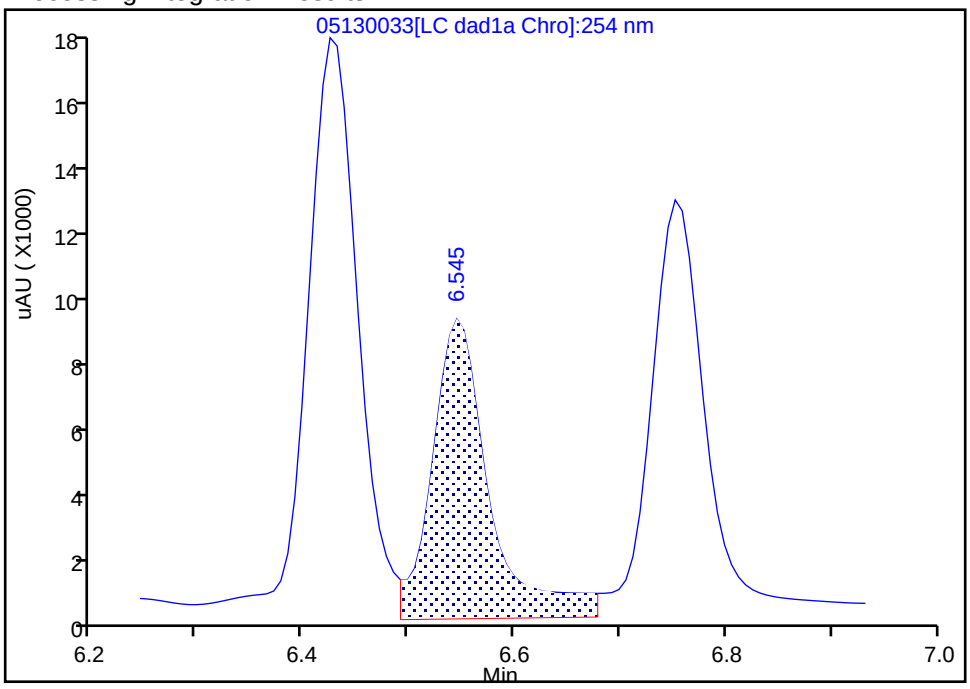
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130033.d				
Injection Date:	13-May-2023 23:08:57	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

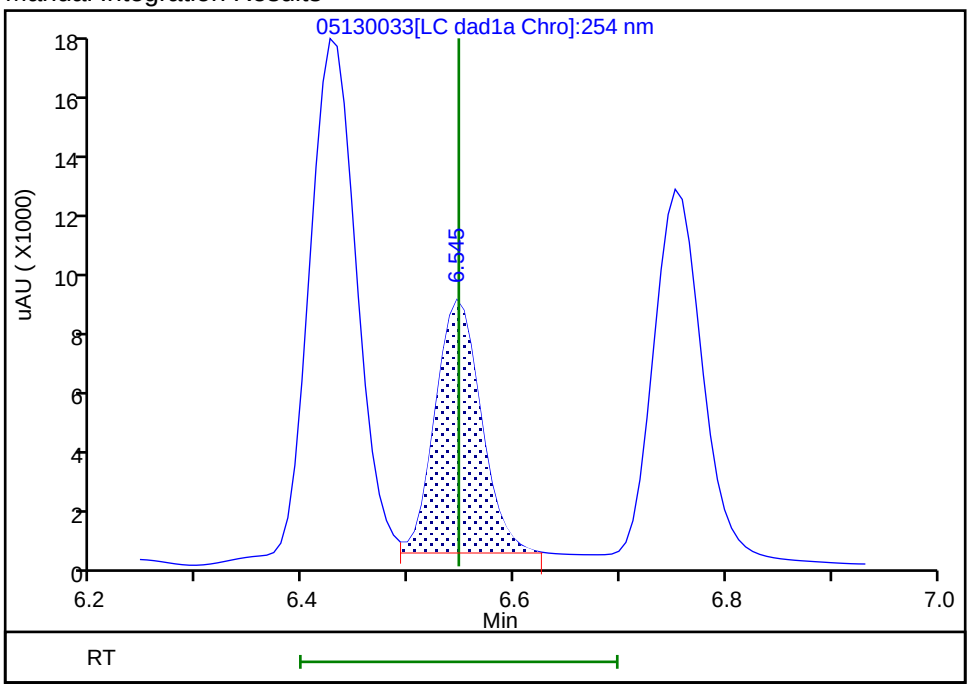
Processing Integration Results

RT: 6.55
Area: 33687
Amount: 0.360180
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 24515
Amount: 0.262114
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 08:08:37
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-175997-1

SDG No.:

Lab Sample ID: CCV 280-612396/33 | Calibration Date: 05/13/2023 23:08

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: 05130033.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	197687	201488		256	251	1.9	20.0
DNX	Ave	144462	151788		263	250	5.1	20.0
MNX	Ave	131172	137584		306	292	4.9	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Lab Sample ID: CCV 280-612396/33 Calibration Date: 05/13/2023 23:08

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: 05130033.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.43	6.33	6.53
DNX	6.75	6.65	6.85
MNX	7.19	7.04	7.34

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130033.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 13-May-2023 23:08:57 ALS Bottle#: 7 Worklist Smp#: 33
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:21 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: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 08:09:20

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3	TNX	1	6.425	6.427	-0.002	50523	0.2508	0.2556	M
4	HMX	1	6.545	6.547	-0.002	24515	0.2500	0.2621	M
6	DNX	1	6.752	6.754	-0.002	37985	0.2503	0.2629	M
7	MNX	1	7.185	7.187	-0.002	40140	0.2918	0.3060	M
8	RDX	1	7.572	7.574	-0.002	29165	0.2500	0.2742	
9	2,4,6-Trinitrophenol	1	7.979	7.974	0.005	21490	0.2500	0.2834	
$ 10	1,2-Dinitrobenzene	1	8.532	8.521	0.011	35417	0.2500	0.2804	
11	1,3,5-Trinitrobenzene	1	8.652	8.647	0.005	57304	0.2500	0.2639	
12	1,3-Dinitrobenzene	1	9.279	9.274	0.005	79587	0.2500	0.2703	
13	Nitrobenzene	1	9.652	9.647	0.005	49690	0.2500	0.2598	
14	3,5-Dinitroaniline	1	9.885	9.887	-0.002	60964	0.2500	0.2667	
15	Tetryl	1	10.019	10.014	0.005	37069	0.2500	0.2259	
16	Nitroglycerin	2	10.472	10.467	0.005	172116	2.50	2.69	
17	2,4,6-Trinitrotoluene	1	10.905	10.914	-0.009	54860	0.2500	0.2600	
18	4-Amino-2,6-dinitrotoluene	1	11.105	11.114	-0.009	40224	0.2500	0.2596	
19	2-Amino-4,6-dinitrotoluene	1	11.359	11.367	-0.008	52068	0.2500	0.2585	
20	2,6-Dinitrotoluene	1	11.505	11.514	-0.009	39273	0.2500	0.2751	
21	2,4-Dinitrotoluene	1	11.672	11.687	-0.015	78662	0.2500	0.2652	
22	o-Nitrotoluene	1	12.492	12.514	-0.022	31951	0.2500	0.2498	
23	p-Nitrotoluene	1	12.912	12.940	-0.028	27424	0.2500	0.2451	
24	m-Nitrotoluene	1	13.485	13.514	-0.029	34859	0.2500	0.2481	
25	PETN	2	14.645	14.694	-0.049	187003	2.50	2.72	

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

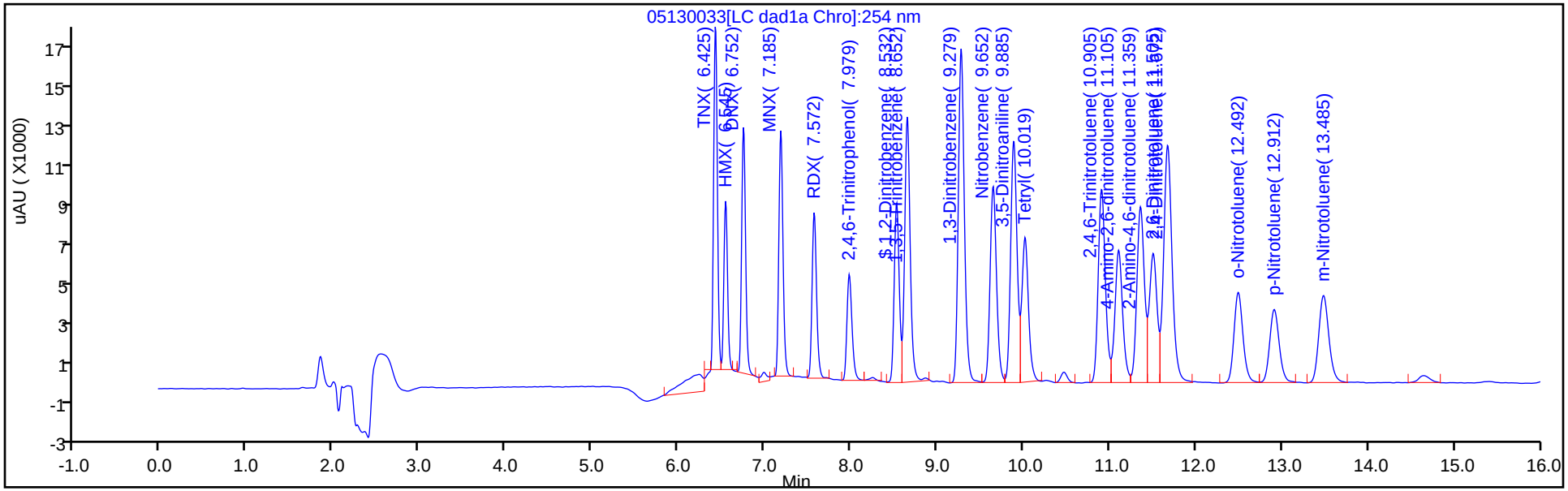
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Eurofins Denver

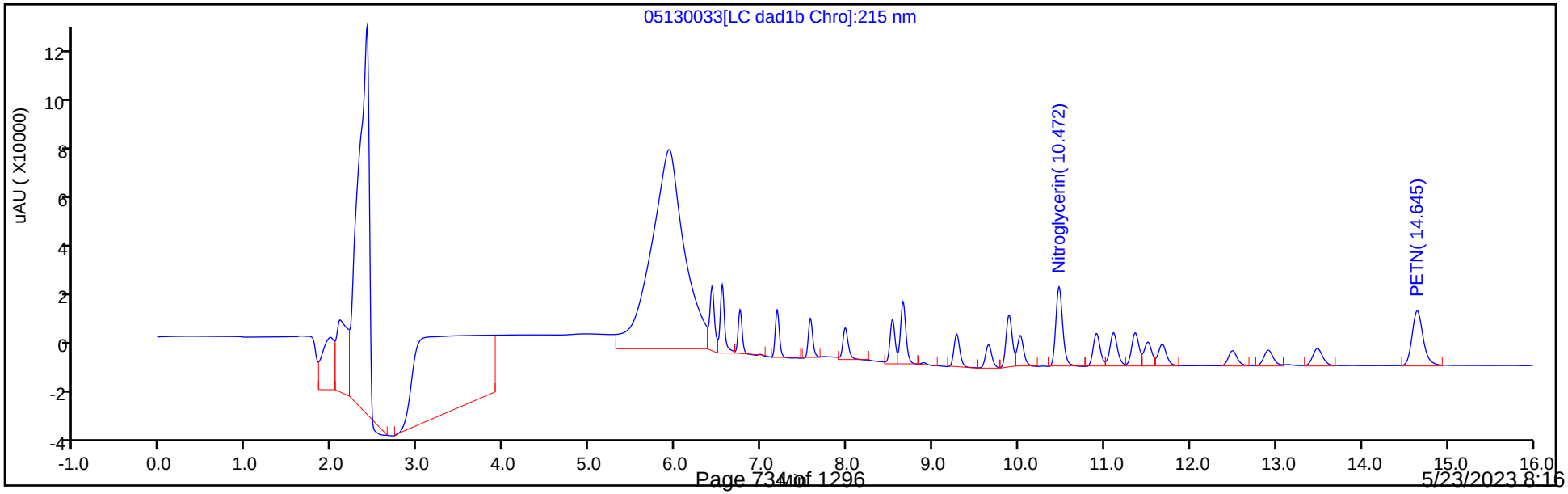
Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130033.d

Injection Date:	13-May-2023 23:08:57	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	33
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

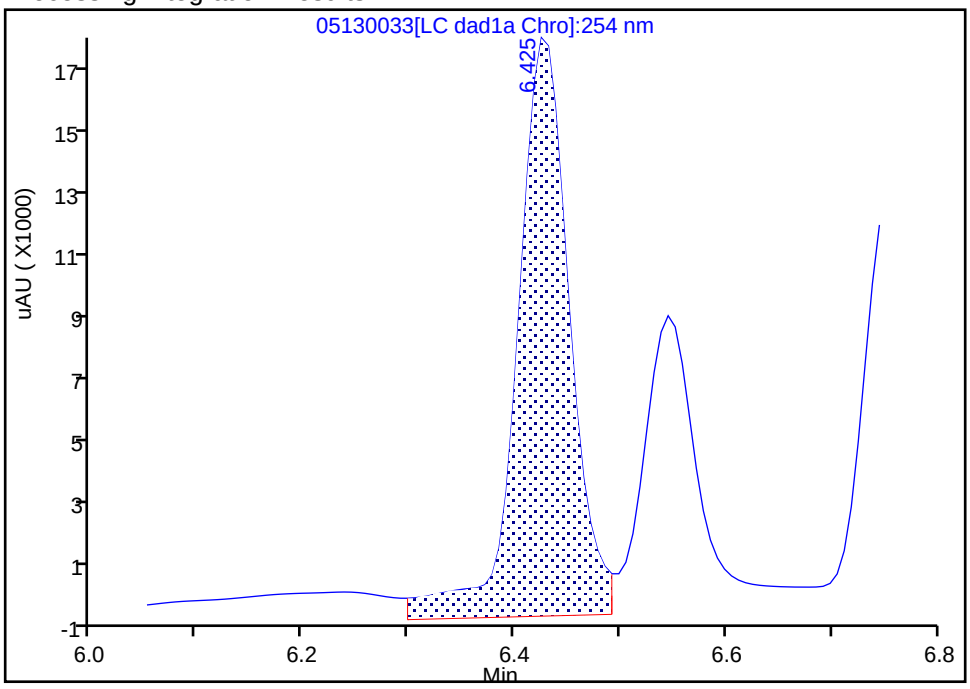
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Injection Date:	13-May-2023 23:08:57	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

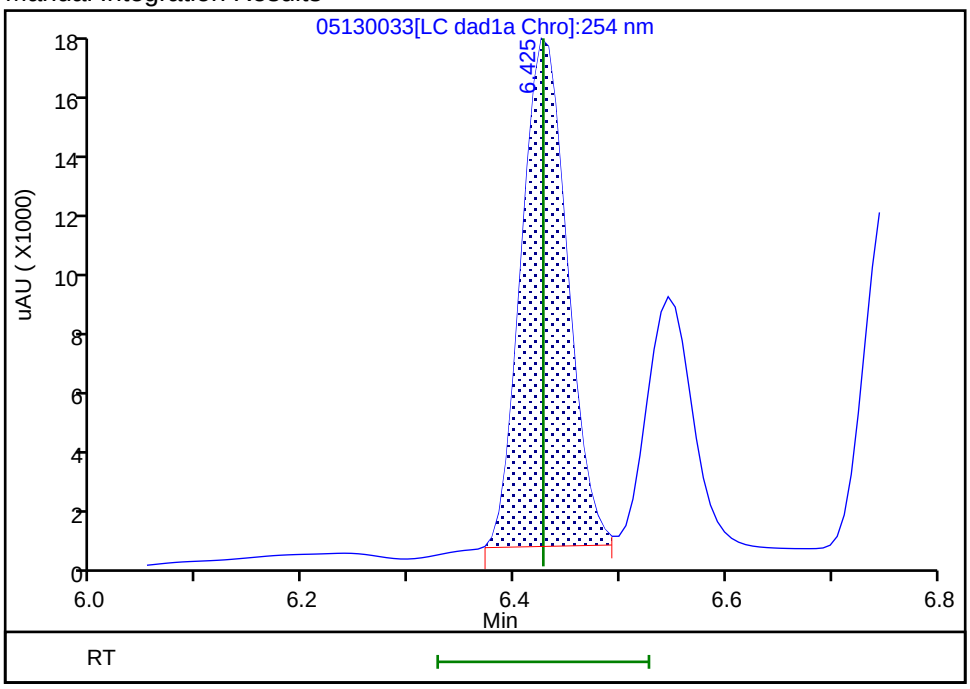
Processing Integration Results

RT: 6.43
Area: 60941
Amount: 0.308270
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 50523
Amount: 0.255570
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 08:08:39
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

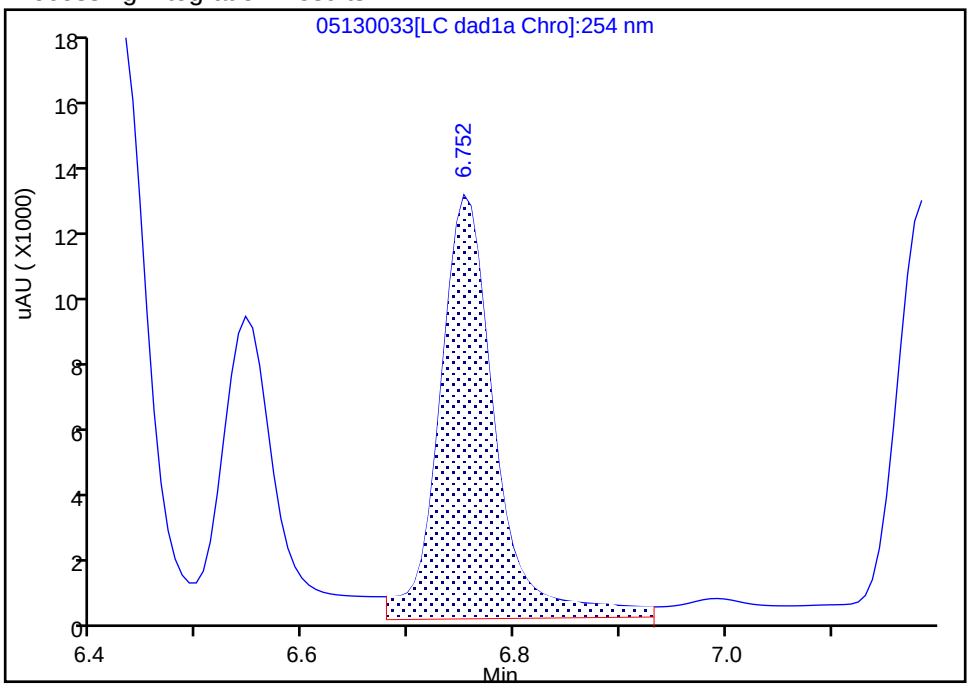
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Injection Date:	13-May-2023 23:08:57	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

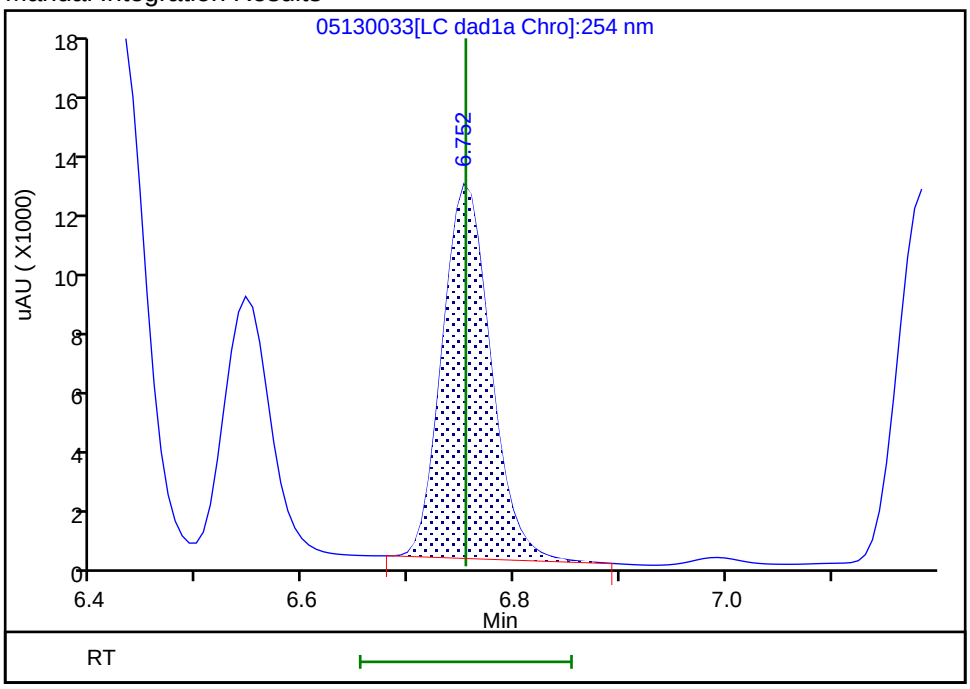
Processing Integration Results

RT: 6.75
Area: 45355
Amount: 0.313957
Amount Units: ug/mL



Manual Integration Results

RT: 6.75
Area: 37985
Amount: 0.262940
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 08:08:47

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

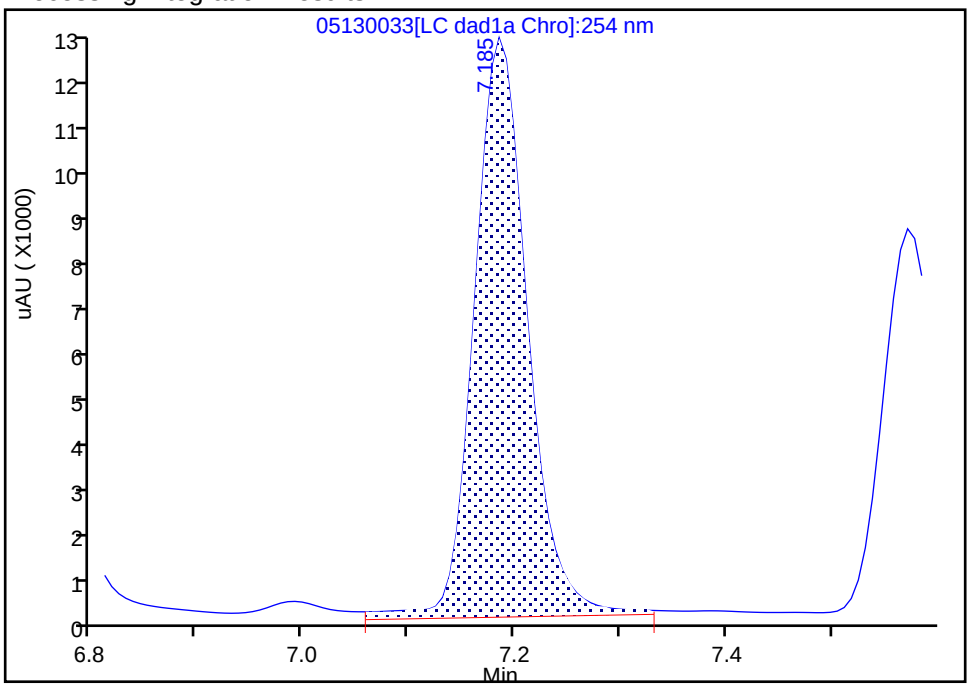
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Injection Date:	13-May-2023 23:08:57	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

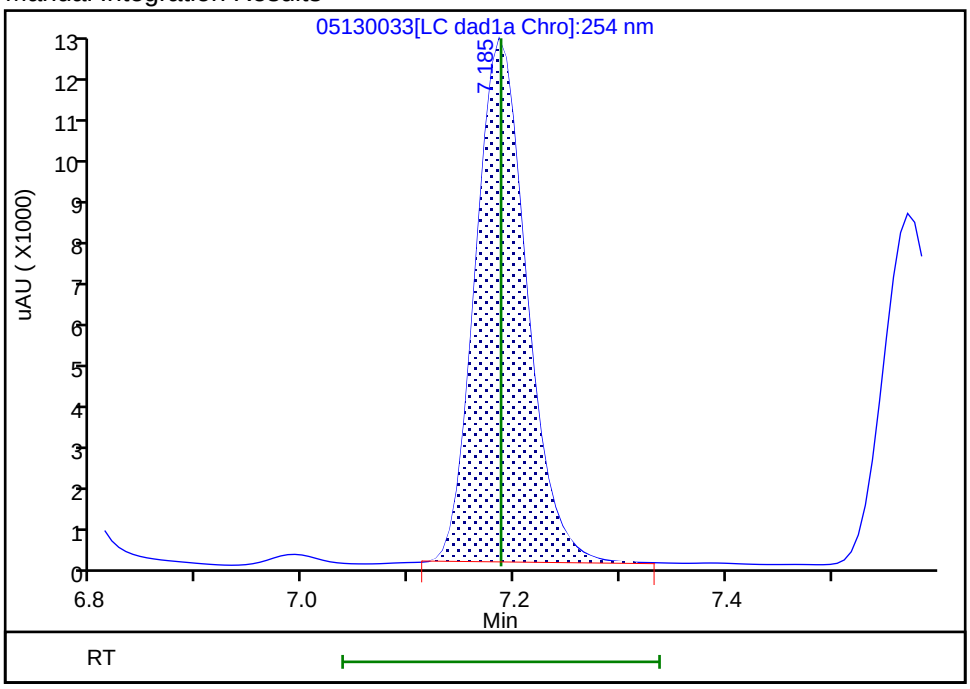
Processing Integration Results

RT: 7.19
Area: 42561
Amount: 0.324468
Amount Units: ug/mL



Manual Integration Results

RT: 7.19
Area: 40140
Amount: 0.306011
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 08:09:36
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-175997-1

SDG No.:

Lab Sample ID: CCV 280-612396/34 | Calibration Date: 05/13/2023 23:31

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: 05130034.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		208096		223	250	-10.9	20.0
2,4-diamino-6-nitrotoluene	Ave	146472	126496		216	250	-13.6	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Lab Sample ID: CCV 280-612396/34 Calibration Date: 05/13/2023 23:31

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: 05130034.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	6.43	6.28	6.58
2,4-diamino-6-nitrotoluene	6.61	6.47	6.77

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130034.D				
Lims ID:	CCV ADD				
Client ID:					
Sample Type:	CCV				
Inject. Date:	13-May-2023 23:31:55	ALS Bottle#:	8	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV ADD				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub28				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-May-2023 12:37:22	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:	CTX1672				
First Level Reviewer: K8YG		Date:	15-May-2023 08:10:17		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1	6.428	6.426	0.002	52024	0.2500	0.2227	M
5 2,4-diamino-6-nitrotoluene	1	6.614	6.620	-0.006	31624	0.2500	0.2159	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

8330_ADDs_00037 Amount Added: 12.50 Units: uL

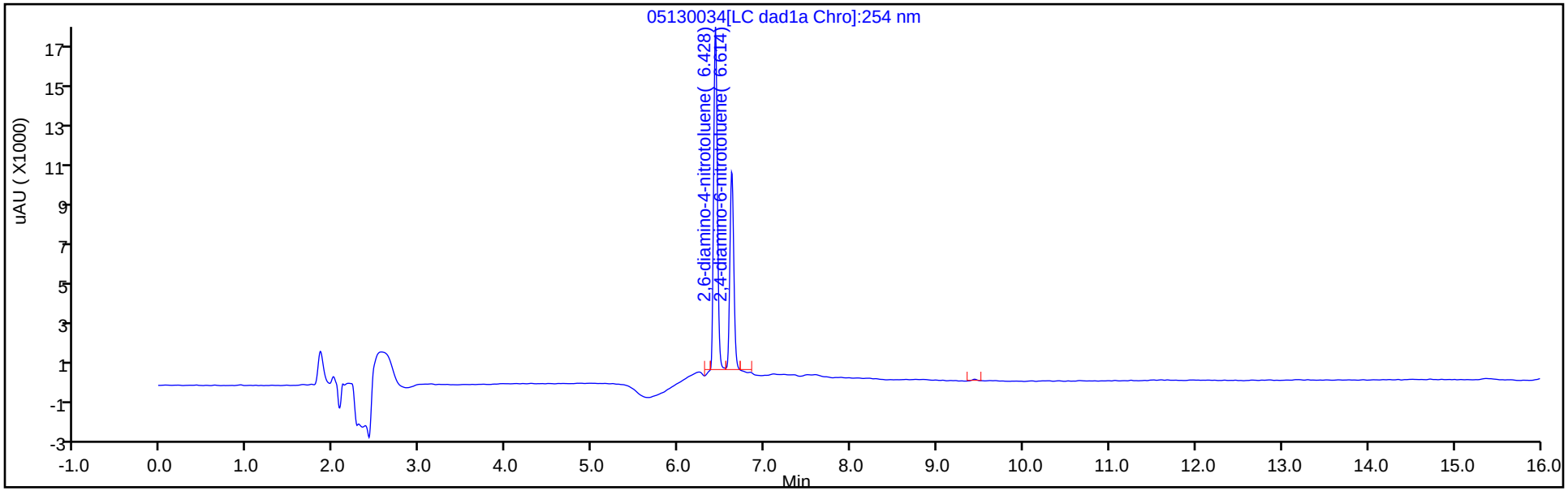
Report Date: 16-May-2023 12:37:22 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

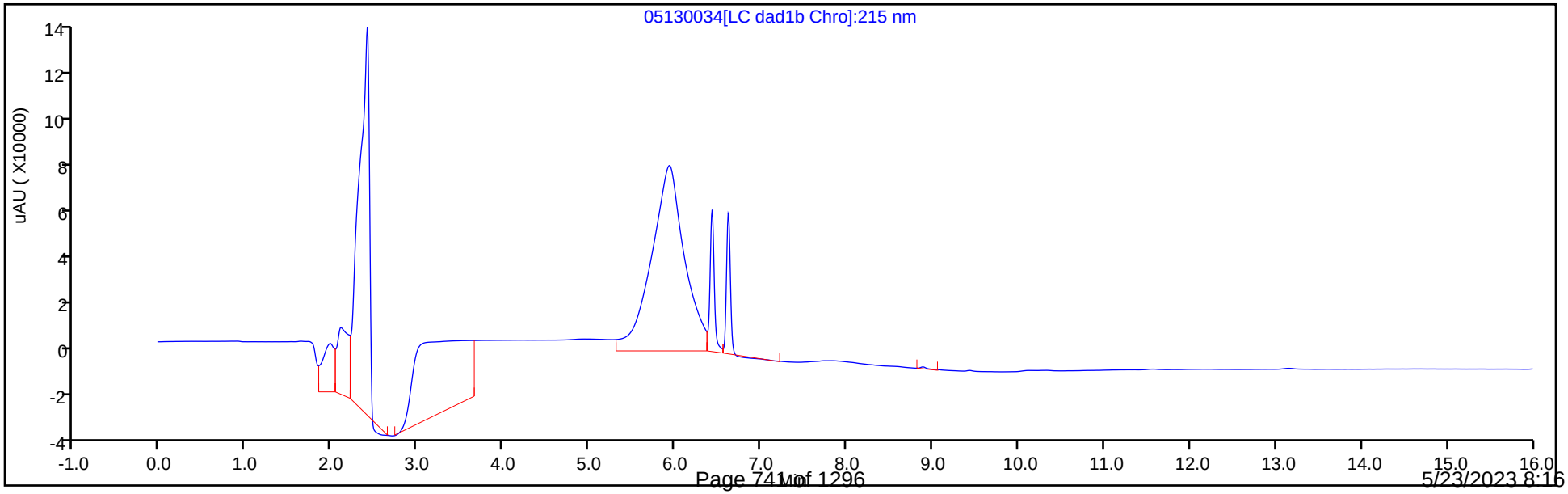
Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130034.d

Injection Date:	13-May-2023 23:31:55	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	34
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

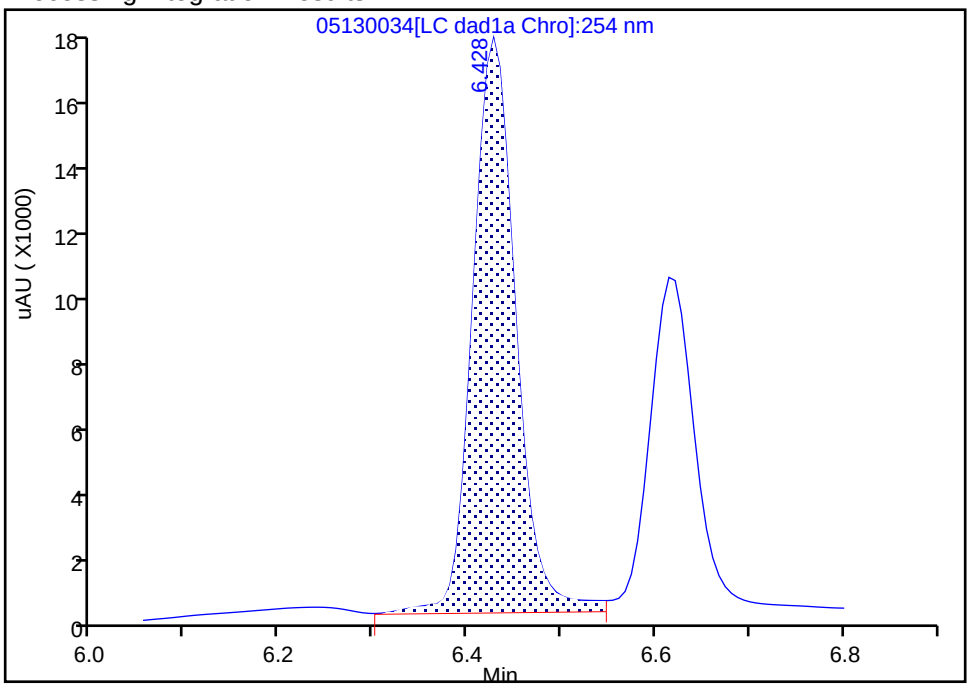
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130034.d				
Injection Date:	13-May-2023 23:31:55	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

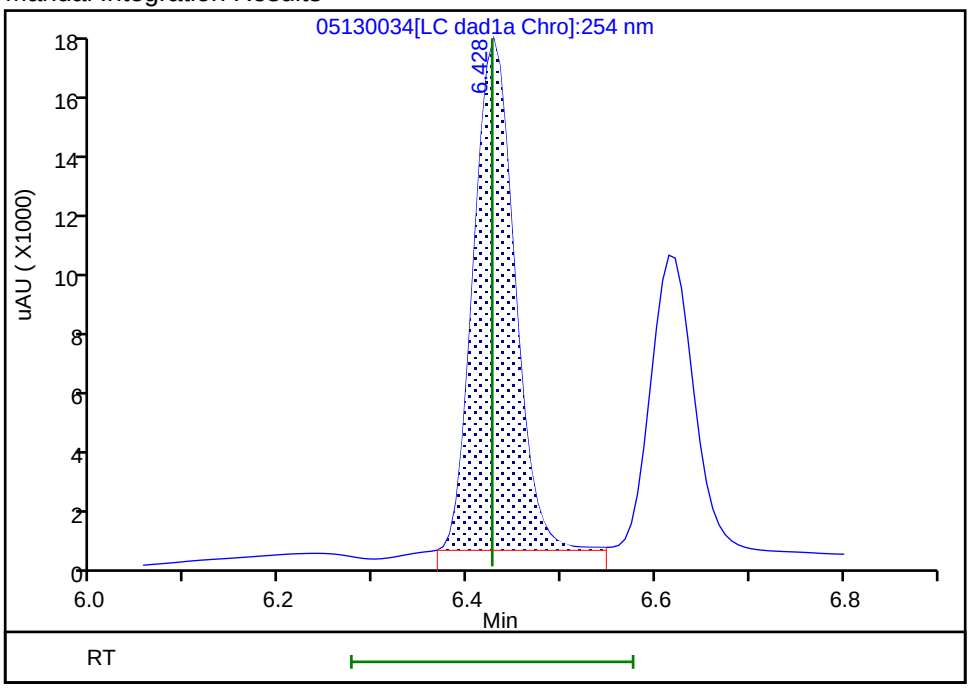
Processing Integration Results

RT: 6.43
Area: 55617
Amount: 0.238374
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 52024
Amount: 0.222732
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 08:10:08

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

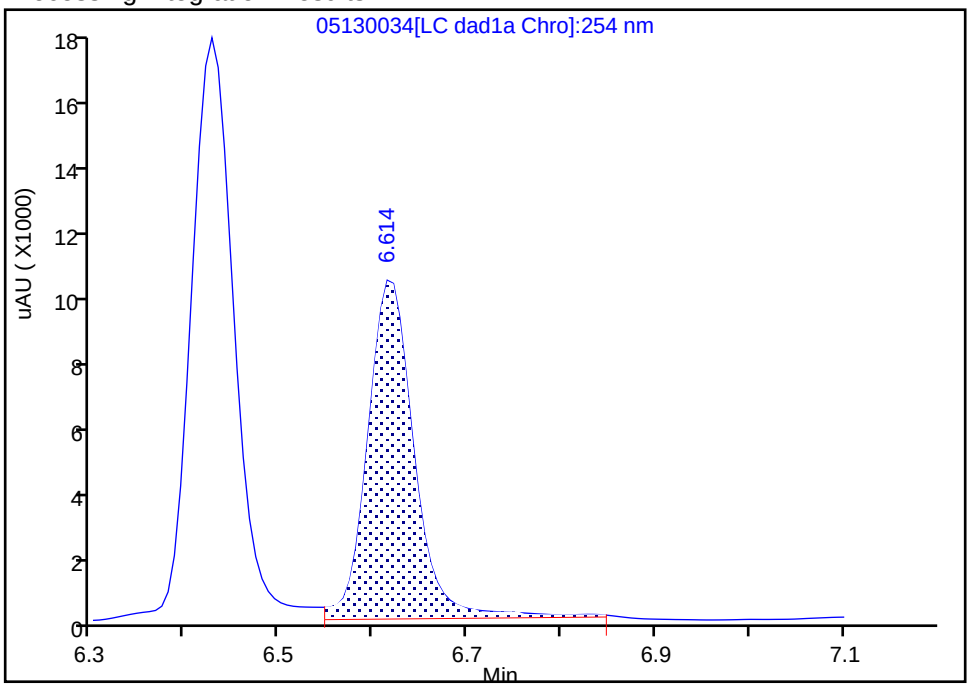
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Injection Date:	13-May-2023 23:31:55	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

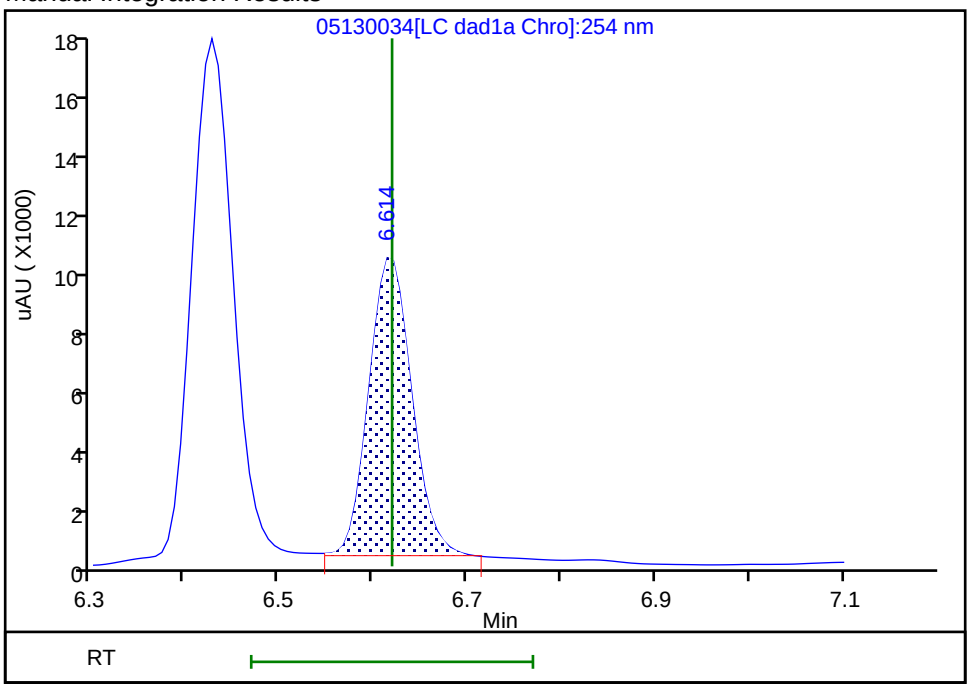
Processing Integration Results

RT: 6.61
Area: 34838
Amount: 0.237847
Amount Units: ug/mL



Manual Integration Results

RT: 6.61
Area: 31624
Amount: 0.215905
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 08:10:11
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Lab Sample ID: CCV 280-612396/45 Calibration Date: 05/14/2023 03:44

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: 05130045.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	93528	101912		272	250	9.0	20.0
RDX	Ave	106380	116324		273	250	9.3	20.0
Picric acid	Ave	75830	84736		279	250	11.7	20.0
1,3,5-Trinitrobenzene	Ave	217147	228096		263	250	5.0	20.0
1,3-Dinitrobenzene	Ave	294397	317104		269	250	7.7	20.0
Nitrobenzene	Ave	191245	195016		255	250	2.0	20.0
3,5-Dinitroaniline	Lin2		242828		266	250	6.2	20.0
Tetryl	Ave	164121	150212		229	250	-8.5	20.0
Nitroglycerin	Ave	64070	69342		2710	2500	8.2	20.0
2,4,6-Trinitrotoluene	Ave	211040	220252		261	250	4.4	20.0
4-Amino-2,6-dinitrotoluene	Ave	154933	161928		261	250	4.5	20.0
2-Amino-4,6-dinitrotoluene	Ave	201410	209352		260	250	3.9	20.0
2,6-Dinitrotoluene	Ave	142745	154376		270	250	8.1	20.0
2,4-Dinitrotoluene	Ave	296667	317860		268	250	7.1	20.0
2-Nitrotoluene	Ave	127896	124956		244	250	-2.3	20.0
4-Nitrotoluene	Ave	111880	107944		241	250	-3.5	20.0
3-Nitrotoluene	Ave	140492	138008		246	250	-1.8	20.0
PETN	Ave	68845	74740		2710	2500	8.6	20.0
1,2-Dinitrobenzene	Ave	126309	141308		280	250	11.9	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Lab Sample ID: CCV 280-612396/45 Calibration Date: 05/14/2023 03:44

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: 05130045.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.55	6.40	6.70
RDX	7.57	7.42	7.72
Picric acid	7.98	7.82	8.12
1,3,5-Trinitrobenzene	8.65	8.50	8.80
1,3-Dinitrobenzene	9.28	9.12	9.42
Nitrobenzene	9.65	9.50	9.80
3,5-Dinitroaniline	9.89	9.74	10.04
Tetryl	10.02	9.86	10.16
Nitroglycerin	10.47	10.32	10.62
2,4,6-Trinitrotoluene	10.91	10.81	11.01
4-Amino-2,6-dinitrotoluene	11.11	11.01	11.21
2-Amino-4,6-dinitrotoluene	11.37	11.27	11.47
2,6-Dinitrotoluene	11.51	11.41	11.61
2,4-Dinitrotoluene	11.68	11.59	11.79
2-Nitrotoluene	12.50	12.36	12.66
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	8.53	8.37	8.67

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130045.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 14-May-2023 03:44:17 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\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:30 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: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 12:05:39

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.428	6.427	0.001	51314	0.2508	0.2596	M
4 HMX	1	6.548	6.547	0.001	25478	0.2500	0.2724	M
6 DNX	1	6.754	6.754	0.000	37981	0.2503	0.2629	M
7 MNX	1	7.181	7.187	-0.006	40892	0.2918	0.3117	
8 RDX	1	7.568	7.574	-0.006	29081	0.2500	0.2734	
9 2,4,6-Trinitrophenol	1	7.981	7.974	0.007	21184	0.2500	0.2794	
$ 10 1,2-Dinitrobenzene	1	8.528	8.521	0.007	35327	0.2500	0.2797	
11 1,3,5-Trinitrobenzene	1	8.648	8.647	0.001	57024	0.2500	0.2626	
12 1,3-Dinitrobenzene	1	9.281	9.274	0.007	79276	0.2500	0.2693	
13 Nitrobenzene	1	9.648	9.647	0.001	48754	0.2500	0.2549	
14 3,5-Dinitroaniline	1	9.894	9.887	0.007	60707	0.2500	0.2655	
15 Tetryl	1	10.021	10.014	0.007	37553	0.2500	0.2288	
16 Nitroglycerin	2	10.474	10.467	0.007	173355	2.50	2.71	
17 2,4,6-Trinitrotoluene	1	10.908	10.914	-0.006	55063	0.2500	0.2609	
18 4-Amino-2,6-dinitrotoluene	1	11.114	11.114	0.000	40482	0.2500	0.2613	
19 2-Amino-4,6-dinitrotoluene	1	11.368	11.367	0.001	52338	0.2500	0.2599	
20 2,6-Dinitrotoluene	1	11.514	11.514	0.000	38594	0.2500	0.2704	
21 2,4-Dinitrotoluene	1	11.681	11.687	-0.006	79465	0.2500	0.2679	
22 o-Nitrotoluene	1	12.501	12.514	-0.013	31239	0.2500	0.2443	
23 p-Nitrotoluene	1	12.921	12.940	-0.019	26986	0.2500	0.2412	
24 m-Nitrotoluene	1	13.494	13.514	-0.020	34502	0.2500	0.2456	
25 PETN	2	14.661	14.694	-0.033	186850	2.50	2.71	

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

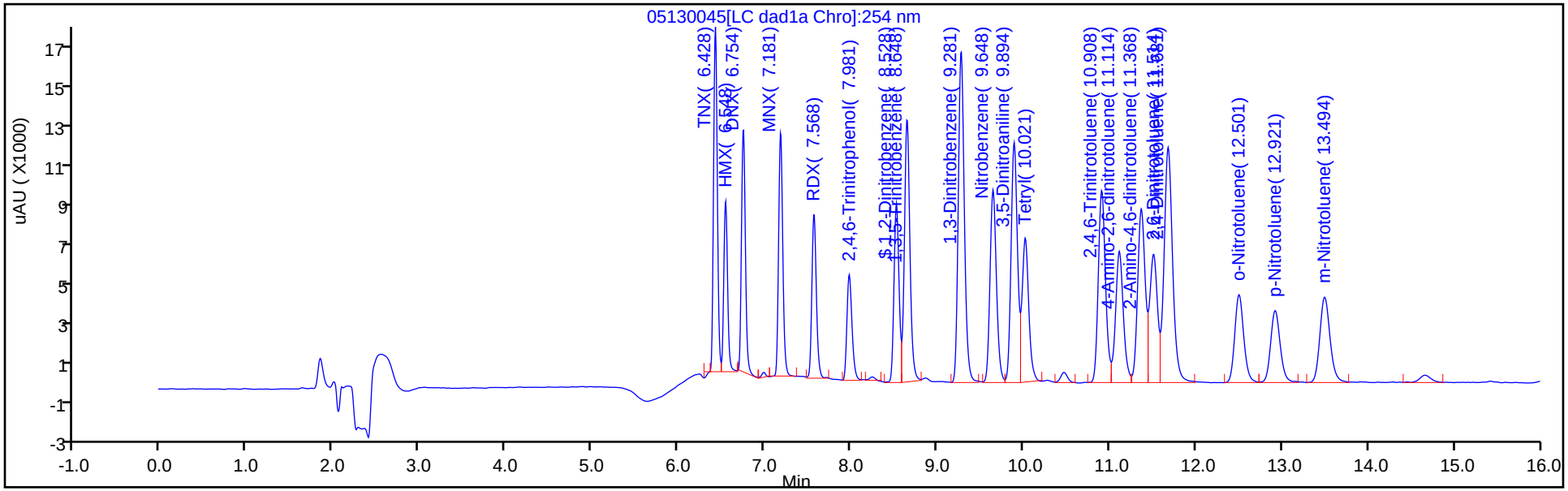
Report Date: 16-May-2023 12:37:30 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

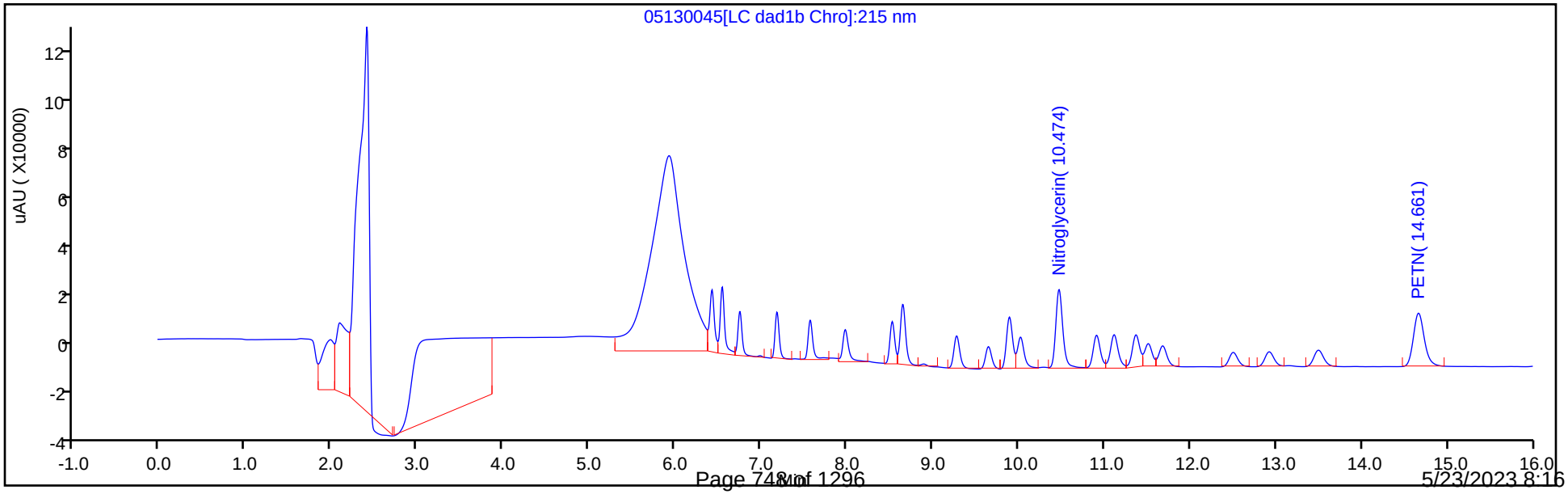
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Injection Date:	14-May-2023 03:44:17	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	45
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

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

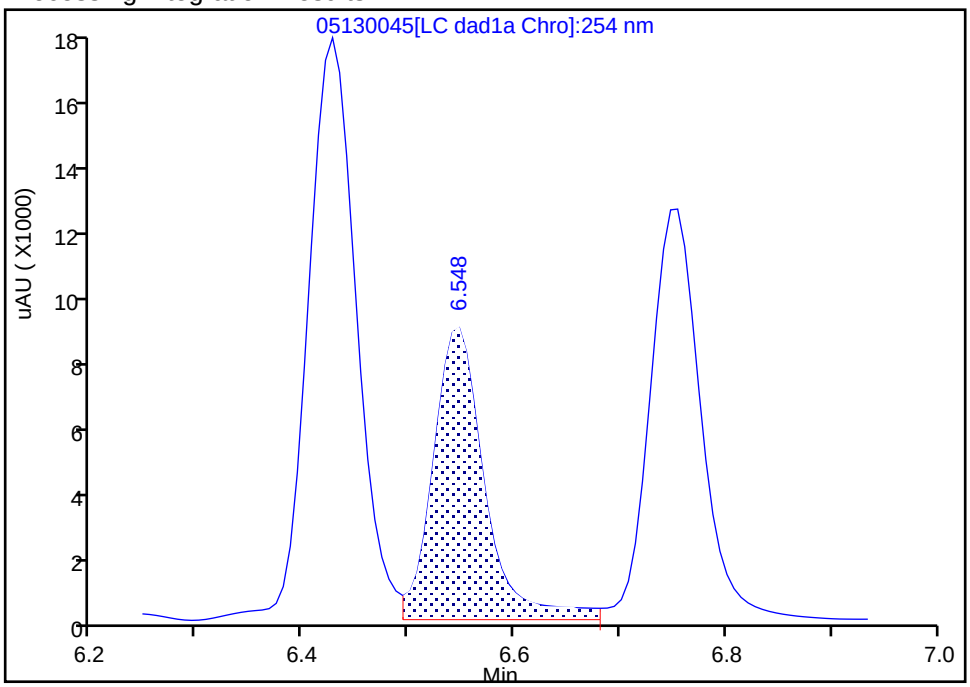
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Injection Date:	14-May-2023 03:44:17	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

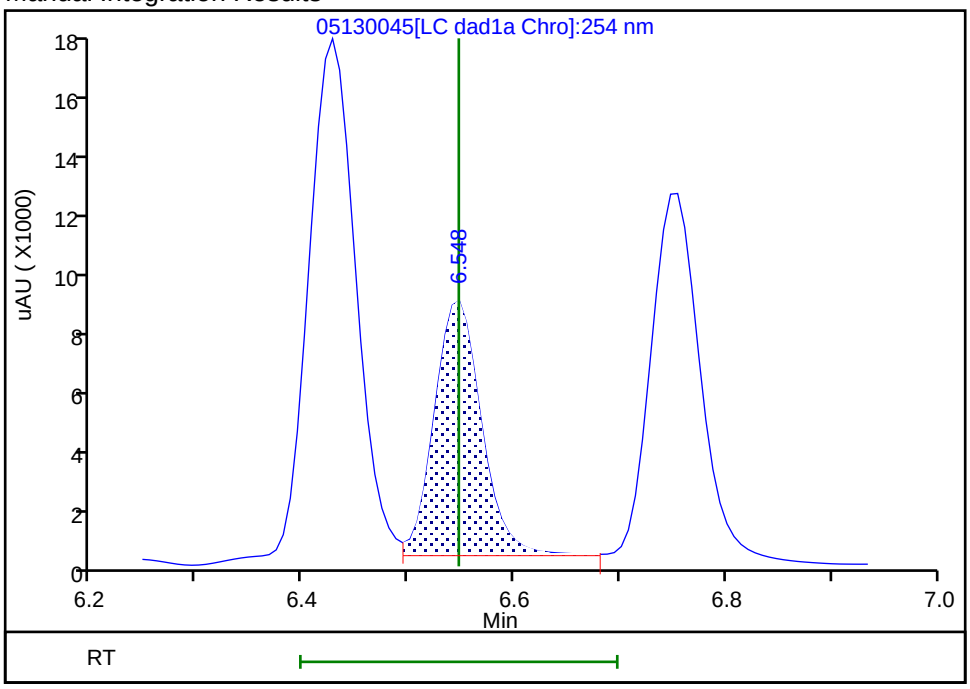
Processing Integration Results

RT: 6.55
Area: 29235
Amount: 0.312580
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 25478
Amount: 0.272410
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 12:04:51
Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Lab Sample ID: CCV 280-612396/45 Calibration Date: 05/14/2023 03:44

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: 05130045.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	197687	204642		260	251	3.5	20.0
DNX	Ave	144462	151772		263	250	5.1	20.0
MNX	Ave	131172	140161		312	292	6.9	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Lab Sample ID: CCV 280-612396/45 Calibration Date: 05/14/2023 03:44

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: 05130045.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.43	6.33	6.53
DNX	6.75	6.65	6.85
MNX	7.18	7.04	7.34

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130045.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 14-May-2023 03:44:17 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\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:30 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: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 12:05:39

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.428	6.427	0.001	51314	0.2508	0.2596	M
4 HMX	1	6.548	6.547	0.001	25478	0.2500	0.2724	M
6 DNX	1	6.754	6.754	0.000	37981	0.2503	0.2629	M
7 MNX	1	7.181	7.187	-0.006	40892	0.2918	0.3117	
8 RDX	1	7.568	7.574	-0.006	29081	0.2500	0.2734	
9 2,4,6-Trinitrophenol	1	7.981	7.974	0.007	21184	0.2500	0.2794	
$ 10 1,2-Dinitrobenzene	1	8.528	8.521	0.007	35327	0.2500	0.2797	
11 1,3,5-Trinitrobenzene	1	8.648	8.647	0.001	57024	0.2500	0.2626	
12 1,3-Dinitrobenzene	1	9.281	9.274	0.007	79276	0.2500	0.2693	
13 Nitrobenzene	1	9.648	9.647	0.001	48754	0.2500	0.2549	
14 3,5-Dinitroaniline	1	9.894	9.887	0.007	60707	0.2500	0.2655	
15 Tetryl	1	10.021	10.014	0.007	37553	0.2500	0.2288	
16 Nitroglycerin	2	10.474	10.467	0.007	173355	2.50	2.71	
17 2,4,6-Trinitrotoluene	1	10.908	10.914	-0.006	55063	0.2500	0.2609	
18 4-Amino-2,6-dinitrotoluene	1	11.114	11.114	0.000	40482	0.2500	0.2613	
19 2-Amino-4,6-dinitrotoluene	1	11.368	11.367	0.001	52338	0.2500	0.2599	
20 2,6-Dinitrotoluene	1	11.514	11.514	0.000	38594	0.2500	0.2704	
21 2,4-Dinitrotoluene	1	11.681	11.687	-0.006	79465	0.2500	0.2679	
22 o-Nitrotoluene	1	12.501	12.514	-0.013	31239	0.2500	0.2443	
23 p-Nitrotoluene	1	12.921	12.940	-0.019	26986	0.2500	0.2412	
24 m-Nitrotoluene	1	13.494	13.514	-0.020	34502	0.2500	0.2456	
25 PETN	2	14.661	14.694	-0.033	186850	2.50	2.71	

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

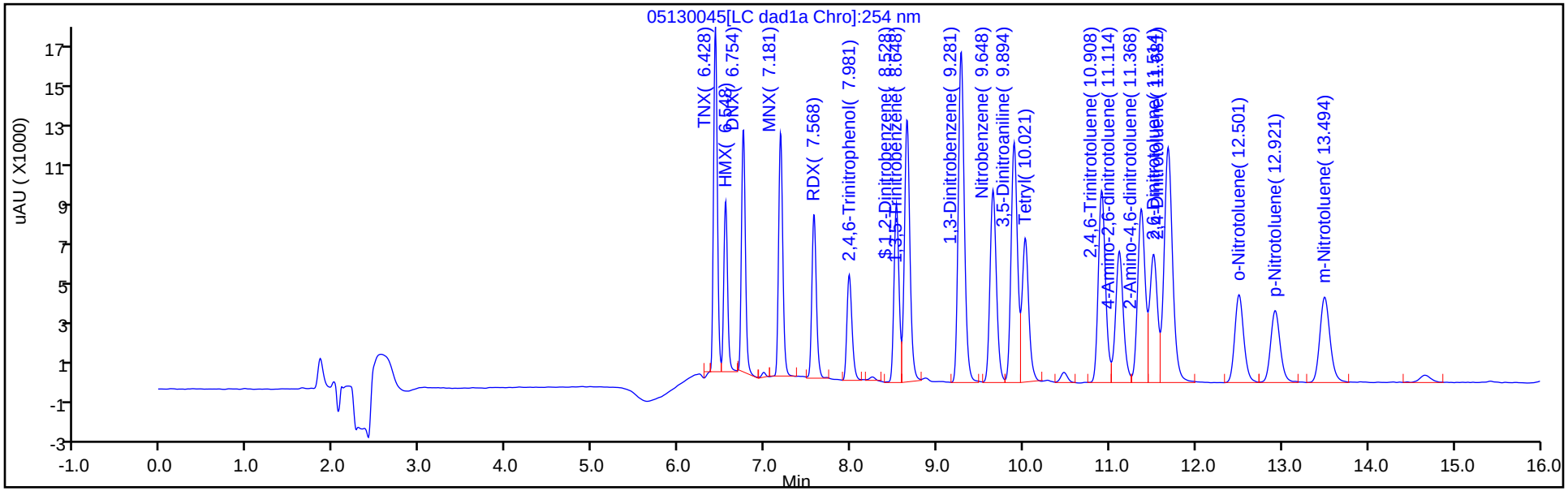
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Eurofins Denver

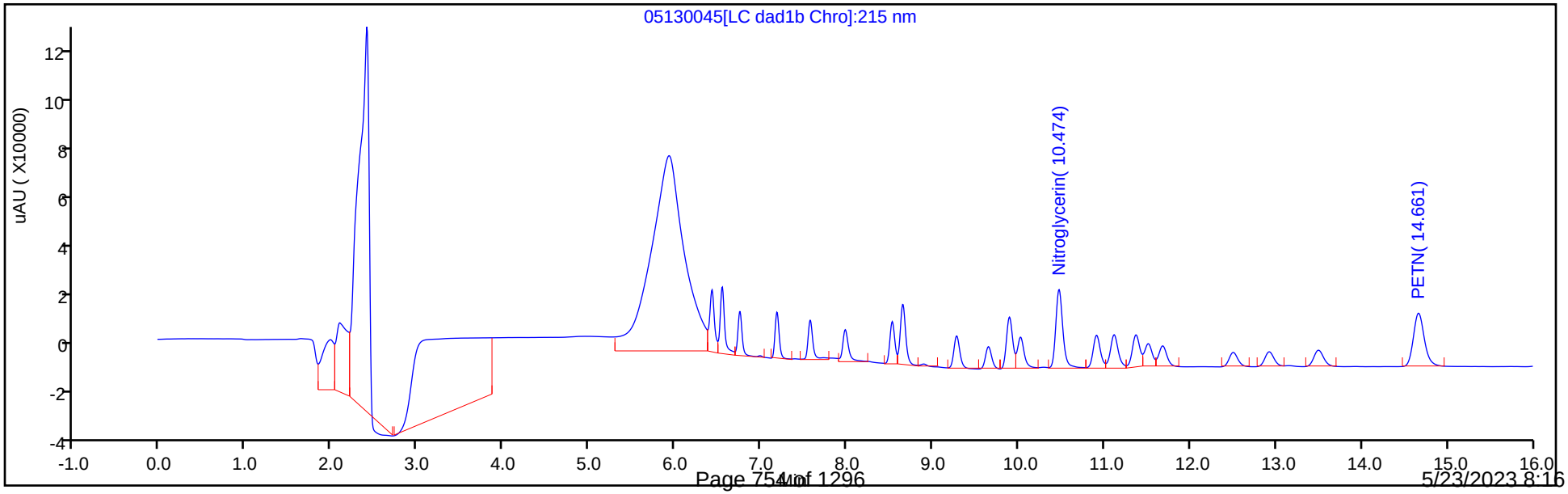
Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130045.d

Injection Date:	14-May-2023 03:44:17	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

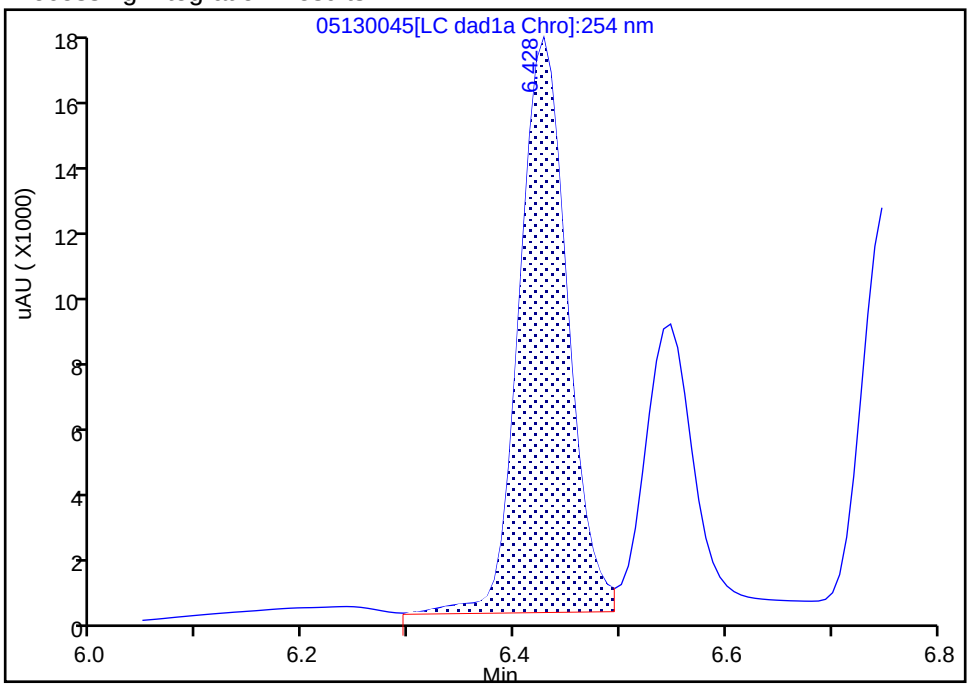
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Injection Date:	14-May-2023 03:44:17	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

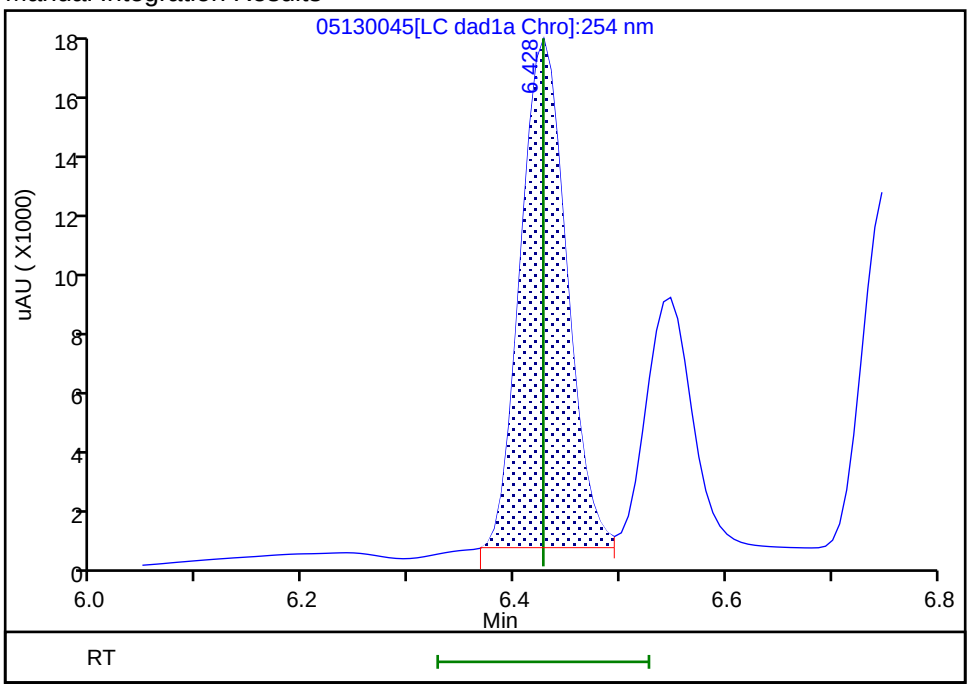
Processing Integration Results

RT: 6.43
Area: 54591
Amount: 0.276148
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 51314
Amount: 0.259572
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 12:04:58
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

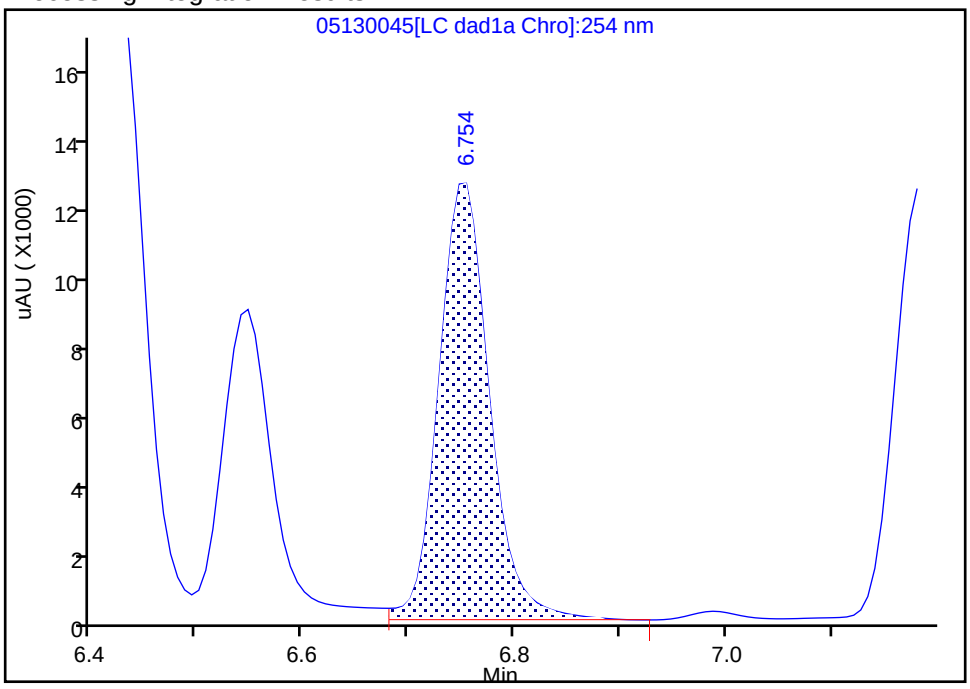
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Injection Date:	14-May-2023 03:44:17	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

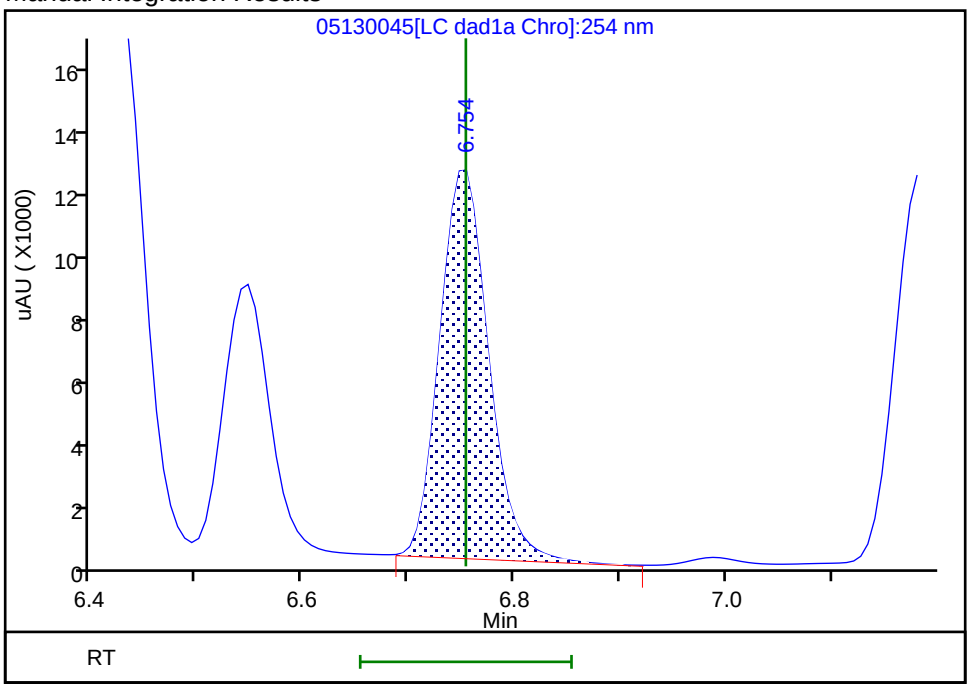
Processing Integration Results

RT: 6.75
Area: 40511
Amount: 0.280426
Amount Units: ug/mL



Manual Integration Results

RT: 6.75
Area: 37981
Amount: 0.262913
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 12:05:16
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Lab Sample ID: CCV 280-612396/46 Calibration Date: 05/14/2023 04:07

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: 05130046.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		209156		224	250	-10.4	20.0
2,4-diamino-6-nitrotoluene	Ave	146472	128500		219	250	-12.3	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Lab Sample ID: CCV 280-612396/46 Calibration Date: 05/14/2023 04:07

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: 05130046.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	6.43	6.28	6.58
2,4-diamino-6-nitrotoluene	6.61	6.47	6.77

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130046.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 14-May-2023 04:07:22 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\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:31 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: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 12:07:00

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	6.427	6.426	0.001	52289	0.2500	0.2239	M
5 2,4-diamino-6-nitrotoluene	1	6.613	6.620	-0.007	32125	0.2500	0.2193	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00037 Amount Added: 12.50 Units: uL

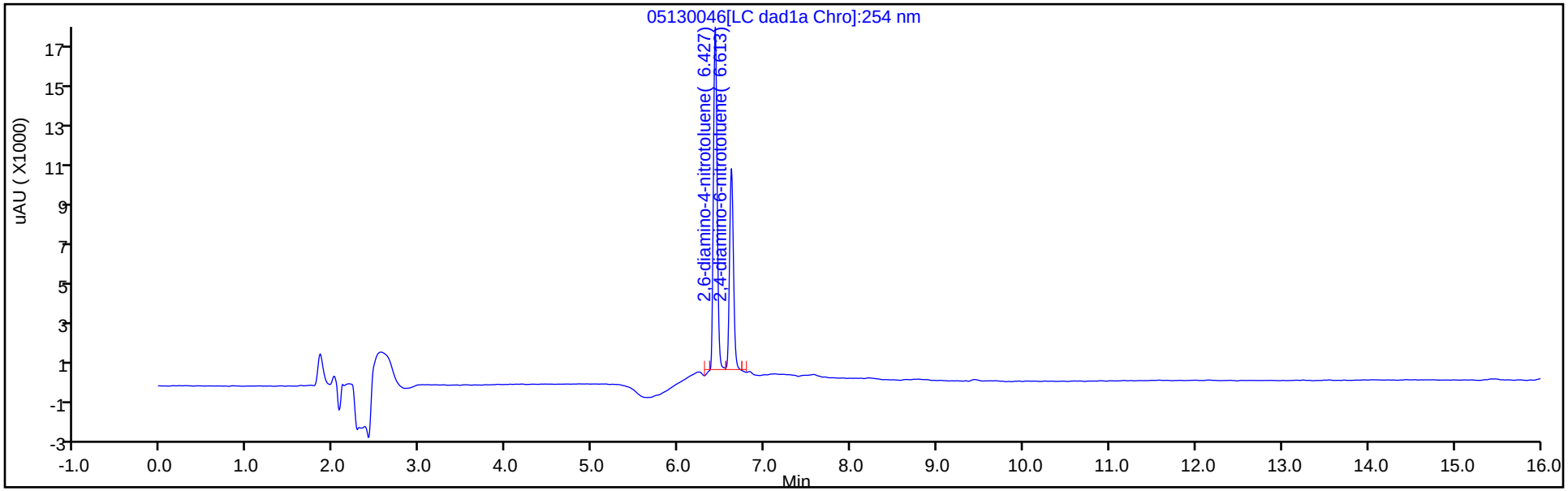
Report Date: 16-May-2023 12:37:31 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

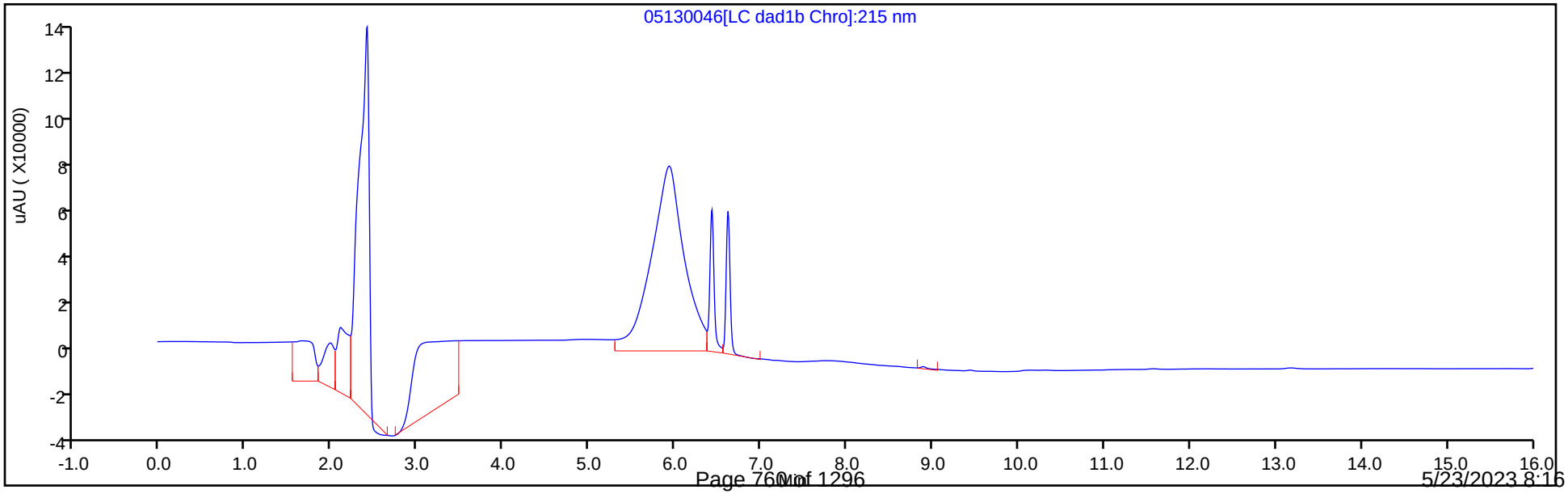
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Injection Date:	14-May-2023 04:07:22	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	46
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8330_X3	Limit Group:	GCSV - 8330		

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

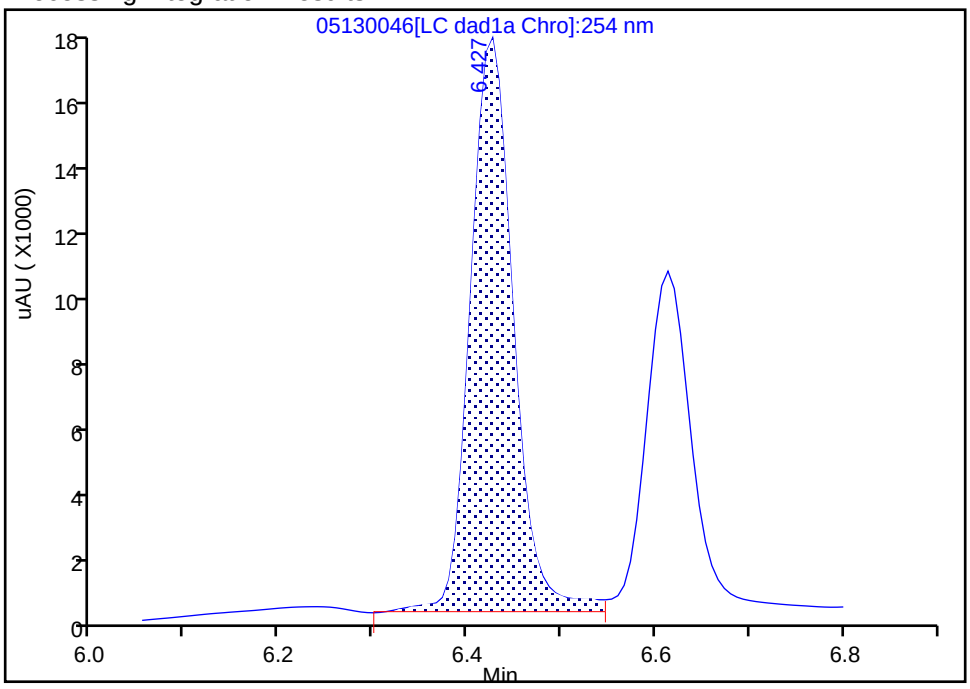
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Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	46
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

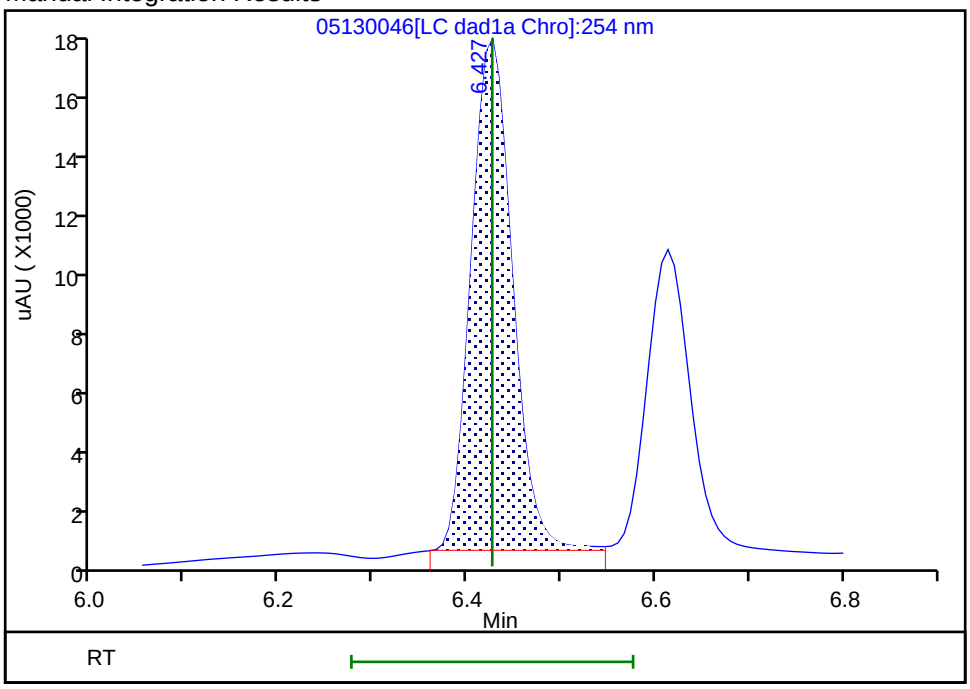
Processing Integration Results

RT: 6.43
Area: 55350
Amount: 0.237212
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 52289
Amount: 0.223885
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 12:06:39
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

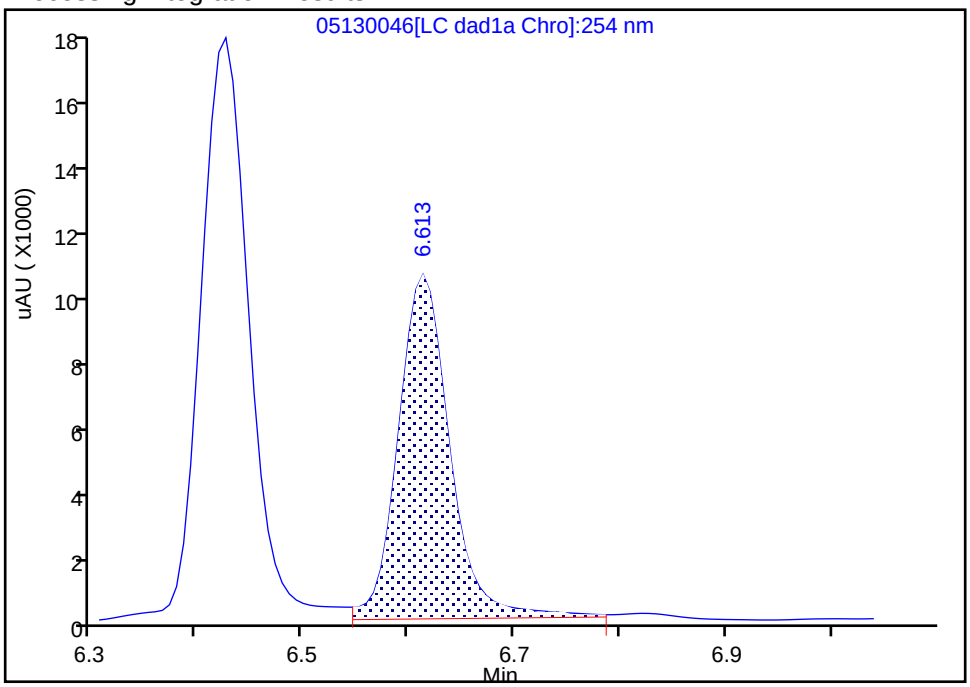
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Injection Date:	14-May-2023 04:07:22	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	46
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

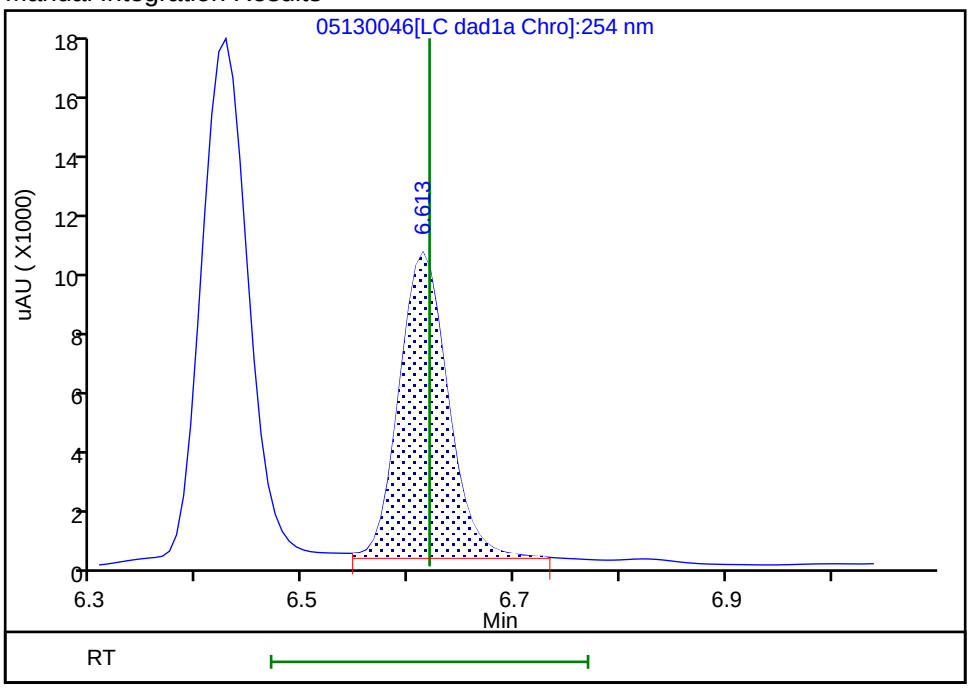
Processing Integration Results

RT: 6.61
Area: 34486
Amount: 0.235444
Amount Units: ug/mL



Manual Integration Results

RT: 6.61
Area: 32125
Amount: 0.219325
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 12:06:45
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-175997-1

SDG No.:

Lab Sample ID: ICV 280-610603/19 | Calibration Date: 04/28/2023 23:38

Instrument ID: CHHPLC_X5 | Calib Start Date: 04/28/2023 18:24

GC Column: Luna-phenylhex ID: 4.60(mm) | Calib End Date: 04/28/2023 23:03

Lab File ID: 04280019.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	394332	392929		500	502	-0.4	20.0
DNX	Ave	277072	289930		524	501	4.6	20.0
HMX	Lin2		156404		417	500	-16.5	20.0
MNX	Ave	262267	264334		588	584	0.8	20.0
Picric acid	Lin2		156686		487	500	-2.6	20.0
RDX	Lin2		195166		449	500	-10.1	20.0
Nitrobenzene	Ave	398834	373736		469	500	-6.3	20.0
3,5-Dinitroaniline	Lin2		425372		477	500	-4.6	20.0
1,3-Dinitrobenzene	Ave	629351	577162		459	500	-8.3	20.0
Nitroglycerin	Ave	134735	124537		4620	5000	-7.6	20.0
2-Nitrotoluene	Ave	246963	231686		469	500	-6.2	20.0
4-Nitrotoluene	Ave	227490	217326		478	500	-4.5	20.0
4-Amino-2,6-dinitrotoluene	Ave	294210	272862		464	500	-7.3	20.0
3-Nitrotoluene	Ave	294634	265188		450	500	-10.0	20.0
2-Amino-4,6-dinitrotoluene	Ave	427939	400432		468	500	-6.4	20.0
1,3,5-Trinitrobenzene	Ave	405692	392558		484	500	-3.2	20.0
2,6-Dinitrotoluene	Ave	291675	264938		454	500	-9.2	20.0
2,4-Dinitrotoluene	Ave	584463	526892		451	500	-9.9	20.0
Tetryl	Ave	284731	322214		566	500	13.2	20.0
2,4,6-Trinitrotoluene	Ave	438876	392624		447	500	-10.5	20.0
PETN	Ave	143938	138644		4820	5000	-3.7	20.0
1,2-Dinitrobenzene	Ave	280697	261152		465	500	-7.0	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Lab Sample ID: ICV 280-610603/19 Calibration Date: 04/28/2023 23:38

Instrument ID: CHHPLC_X5 Calib Start Date: 04/28/2023 18:24

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 04/28/2023 23:03

Lab File ID: 04280019.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.08	4.97	5.27
DNX	5.92	5.81	6.11
HMX	6.58	6.45	6.75
MNX	7.46	7.34	7.64
Picric acid	7.94	7.88	8.18
RDX	8.88	8.77	9.07
Nitrobenzene	11.45	11.33	11.63
3,5-Dinitroaniline	14.32	14.21	14.51
1,3-Dinitrobenzene	14.59	14.47	14.77
Nitroglycerin	15.16	15.03	15.33
2-Nitrotoluene	15.70	15.58	15.88
4-Nitrotoluene	15.92	15.81	16.11
4-Amino-2,6-dinitrotoluene	16.48	16.37	16.67
3-Nitrotoluene	16.78	16.67	16.97
2-Amino-4,6-dinitrotoluene	17.34	17.21	17.51
1,3,5-Trinitrobenzene	17.42	17.27	17.57
2,6-Dinitrotoluene	18.60	18.48	18.78
2,4-Dinitrotoluene	19.06	18.93	19.23
Tetryl	22.33	22.24	22.54
2,4,6-Trinitrotoluene	23.12	23.03	23.33
PETN	24.39	24.33	24.63
1,2-Dinitrobenzene	12.44	12.32	12.62

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280019.D
Lims ID: ICV INT
Client ID:
Sample Type: ICV
Inject. Date: 28-Apr-2023 23:38:32 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV INT
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist:

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 29-Apr-2023 13:04:23 Calib Date: 28-Apr-2023 23:03:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280018.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1621

First Level Reviewer: LV5D Date: 29-Apr-2023 10:26:41

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.082	5.115	-0.033	197054	0.5015	0.4997	
4 DNX	1	5.922	5.955	-0.033	145110	0.5005	0.5237	
5 HMX	1	6.576	6.595	-0.019	78202	0.5000	0.4173	
6 MNX	1	7.456	7.489	-0.033	154239	0.5835	0.5881	
7 2,4,6-Trinitrophenol	1	7.936	8.029	-0.093	78343	0.5000	0.4868	
8 RDX	1	8.882	8.915	-0.033	97583	0.5000	0.4494	
9 Nitrobenzene	1	11.449	11.482	-0.033	186868	0.5000	0.4685	
$ 10 1,2-Dinitrobenzene	1	12.436	12.469	-0.033	130576	0.5000	0.4652	
11 3,5-Dinitroaniline	1	14.322	14.355	-0.033	212686	0.5000	0.4770	M
12 1,3-Dinitrobenzene	1	14.589	14.622	-0.033	288581	0.5000	0.4585	M
13 Nitroglycerin	2	15.156	15.182	-0.026	622685	5.00	4.62	
14 o-Nitrotoluene	1	15.696	15.729	-0.033	115843	0.5000	0.4691	M
16 p-Nitrotoluene	1	15.922	15.955	-0.033	108663	0.5000	0.4777	M
17 4-Amino-2,6-dinitrotoluene	1	16.482	16.515	-0.033	136431	0.5000	0.4637	M
18 m-Nitrotoluene	1	16.782	16.815	-0.033	132594	0.5000	0.4500	M
19 2-Amino-4,6-dinitrotoluene	1	17.342	17.362	-0.020	200216	0.5000	0.4679	M
20 1,3,5-Trinitrobenzene	1	17.422	17.422	0.000	196279	0.5000	0.4838	M
21 2,6-Dinitrotoluene	1	18.602	18.629	-0.027	132469	0.5000	0.4542	
22 2,4-Dinitrotoluene	1	19.056	19.082	-0.026	263446	0.5000	0.4507	
23 Tetryl	1	22.329	22.389	-0.060	161107	0.5000	0.5658	
24 2,4,6-Trinitrotoluene	1	23.122	23.182	-0.060	196312	0.5000	0.4473	
25 PETN	2	24.389	24.475	-0.086	693219	5.00	4.82	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330Surrogate_00143	Amount Added:	50.00	Units: uL
8330_OP_DMT_00017	Amount Added:	50.00	Units: uL
8330 LCS_00126	Amount Added:	50.00	Units: uL

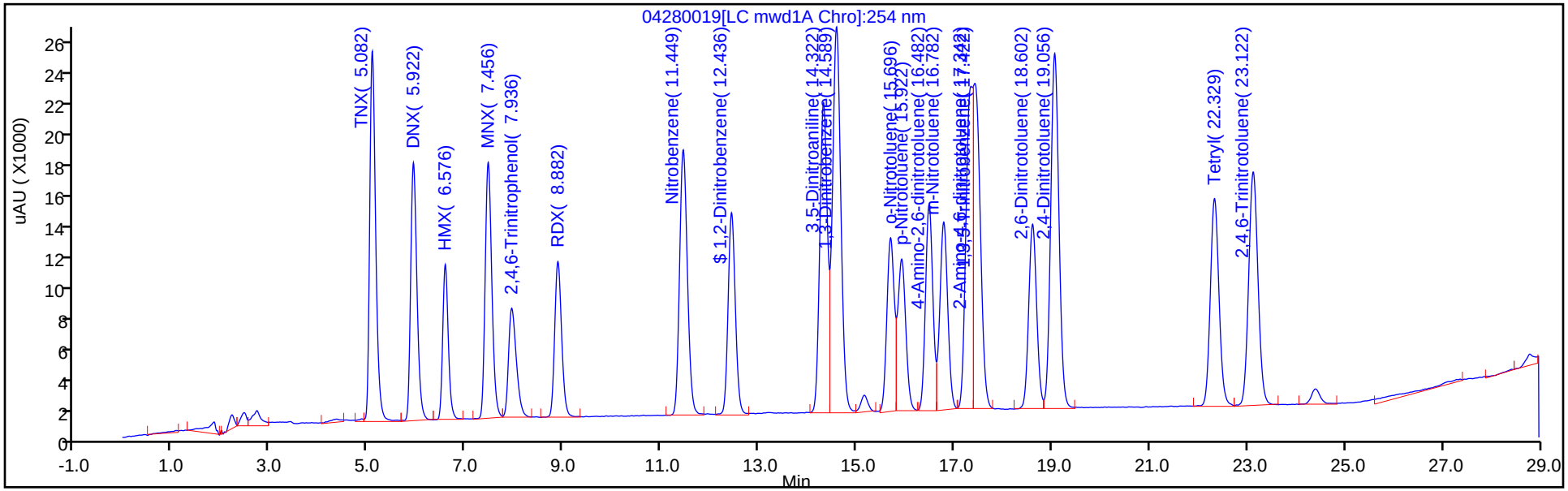
Report Date: 29-Apr-2023 13:06:04 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

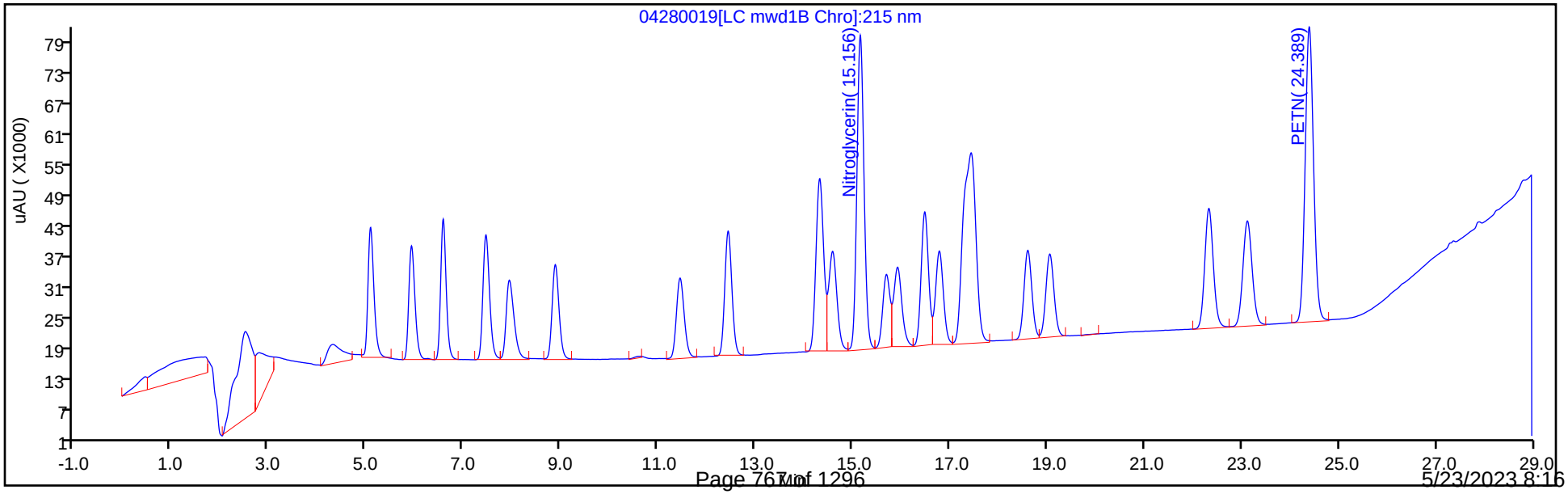
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Injection Date:	28-Apr-2023 23:38:32	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	ICV INT			Worklist Smp#:	19
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

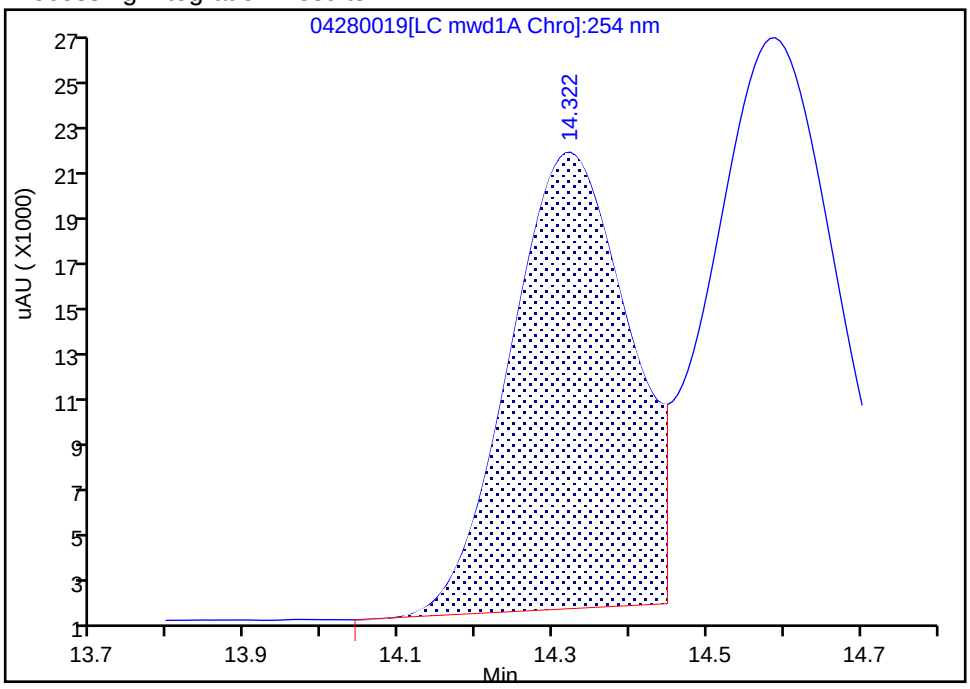
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Injection Date: 28-Apr-2023 23:38:32 Instrument ID: CHHPLC_X5
Lims ID: ICV INT
Client ID:
Operator ID: JZ/JG ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC mwd1A, 254 nm

11 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

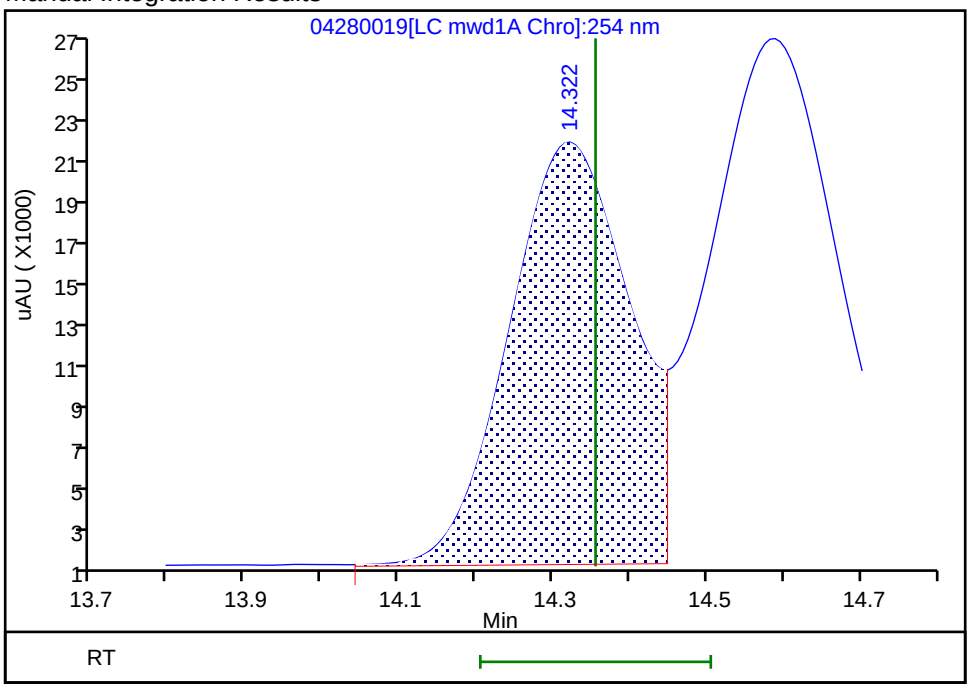
Processing Integration Results

RT: 14.32
Area: 204903
Amount: 0.459536
Amount Units: ug/ml



Manual Integration Results

RT: 14.32
Area: 212686
Amount: 0.477043
Amount Units: ug/ml



Reviewer: LV5D, 29-Apr-2023 10:27:10
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

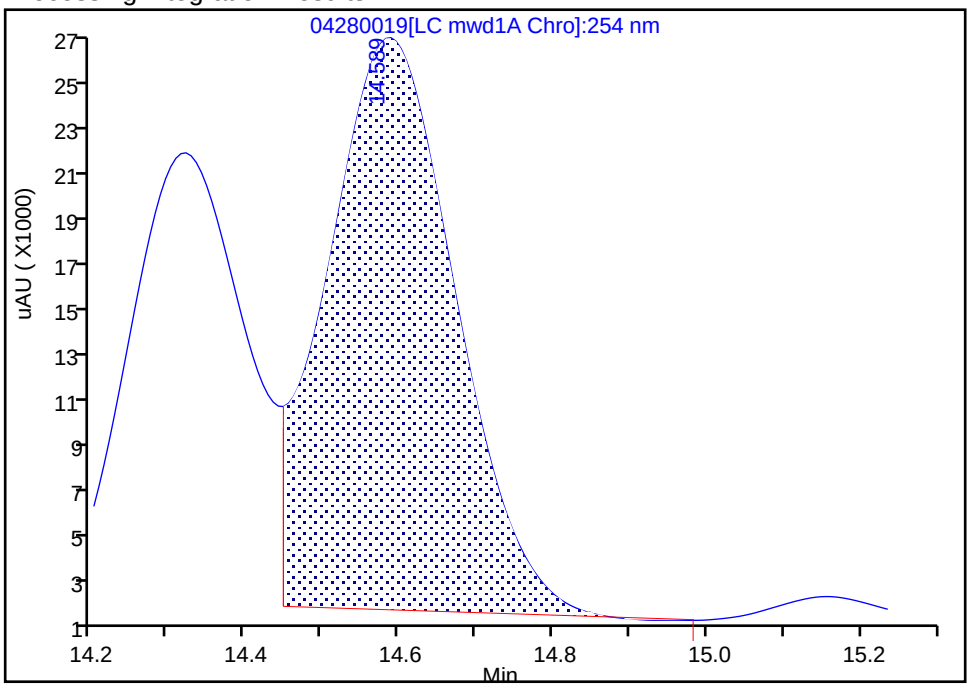
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Injection Date:	28-Apr-2023 23:38:32	Instrument ID:	CHHPLC_X5		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

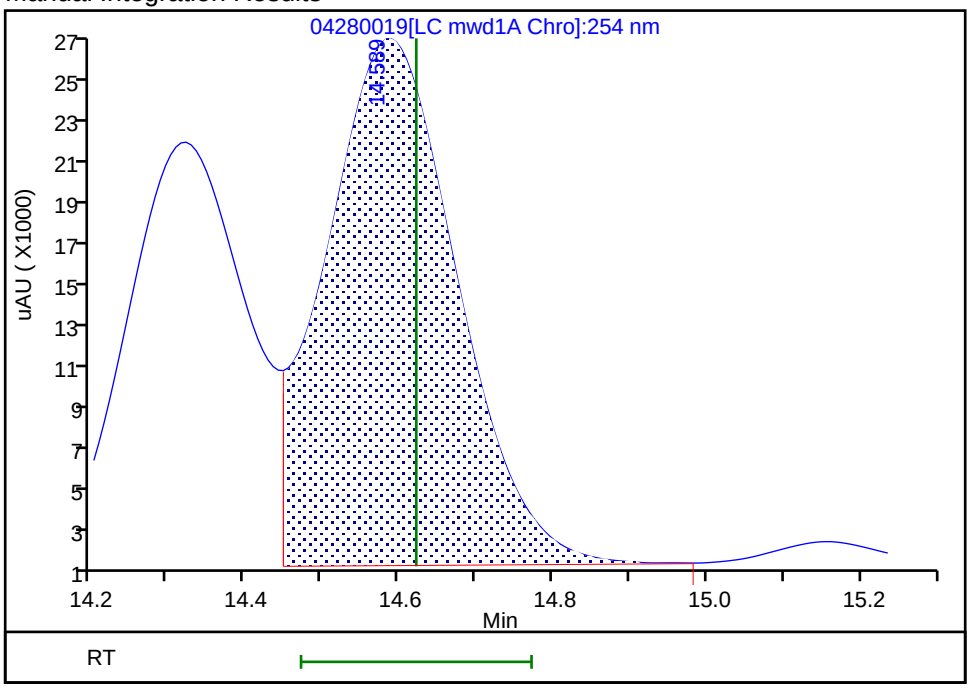
Processing Integration Results

RT: 14.59
Area: 278067
Amount: 0.441831
Amount Units: ug/ml



Manual Integration Results

RT: 14.59
Area: 288581
Amount: 0.458537
Amount Units: ug/ml



Reviewer: LV5D, 29-Apr-2023 10:27:10
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

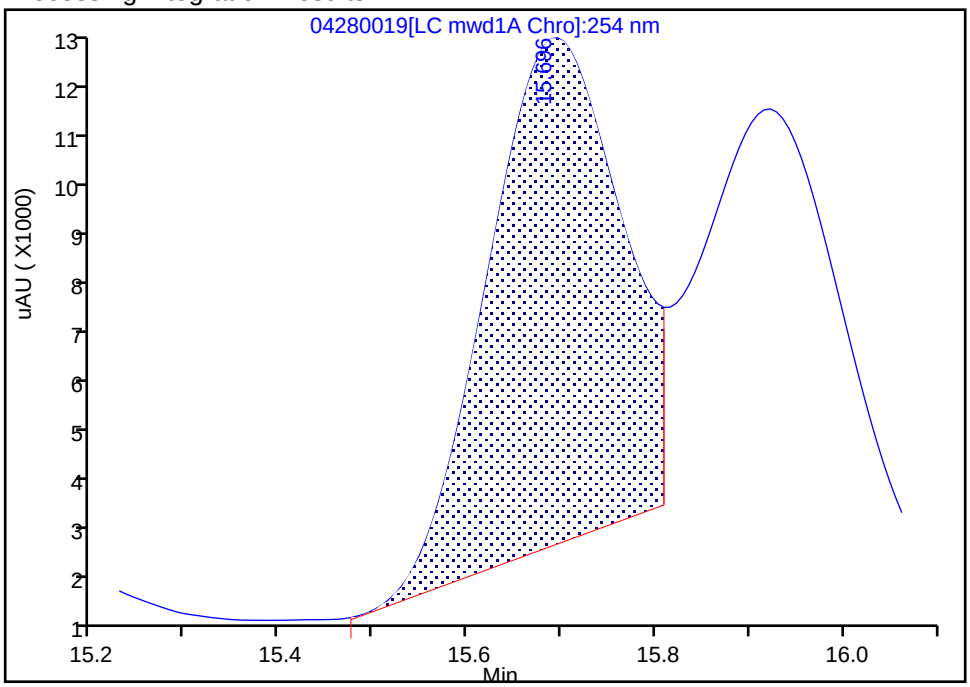
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Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

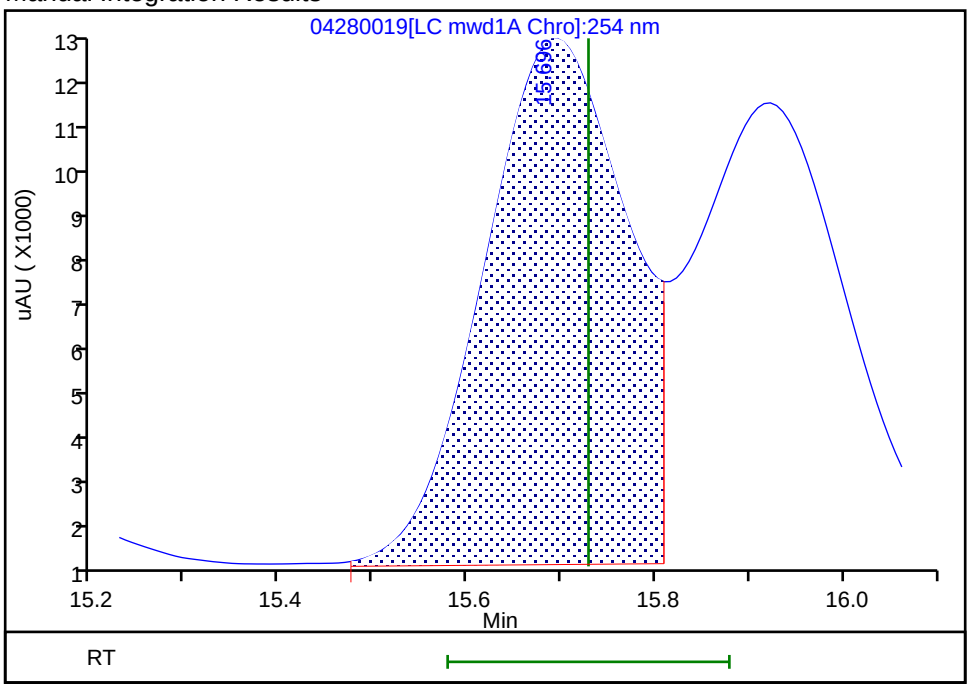
Processing Integration Results

RT: 15.70
Area: 94233
Amount: 0.381567
Amount Units: ug/ml



Manual Integration Results

RT: 15.70
Area: 115843
Amount: 0.469070
Amount Units: ug/ml



Reviewer: LV5D, 29-Apr-2023 10:27:13
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

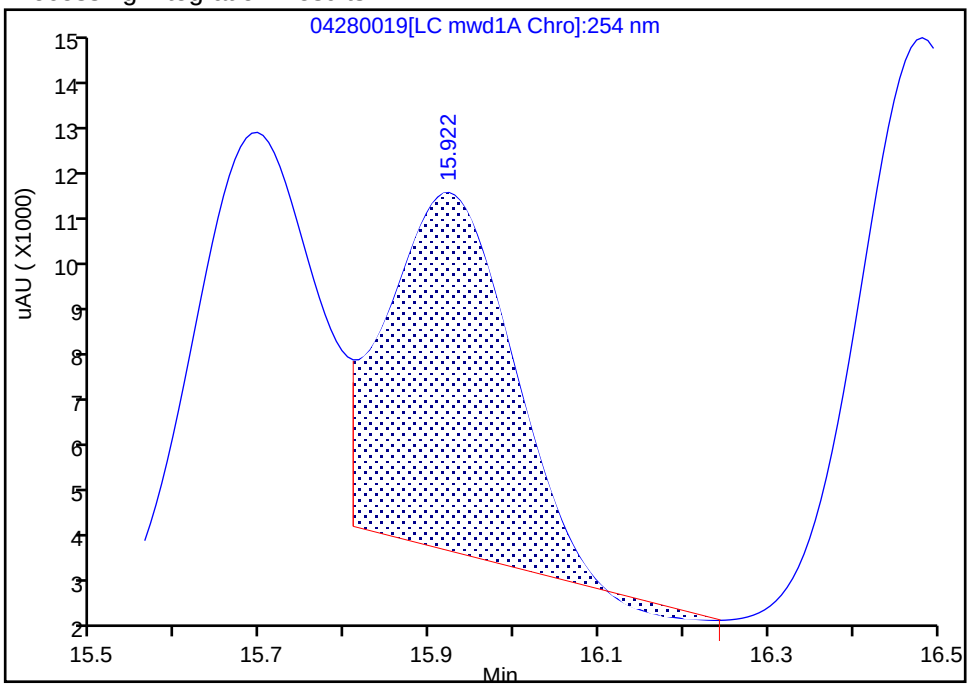
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Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

16 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

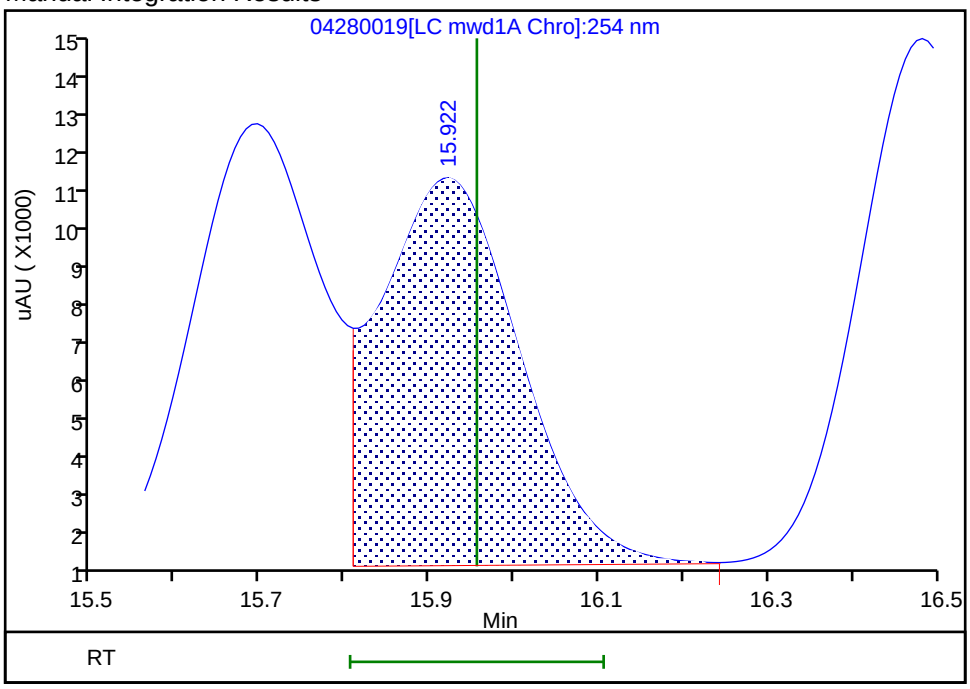
Processing Integration Results

RT: 15.92
Area: 83952
Amount: 0.369036
Amount Units: ug/ml



Manual Integration Results

RT: 15.92
Area: 108663
Amount: 0.477660
Amount Units: ug/ml



Reviewer: LV5D, 29-Apr-2023 10:27:13
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

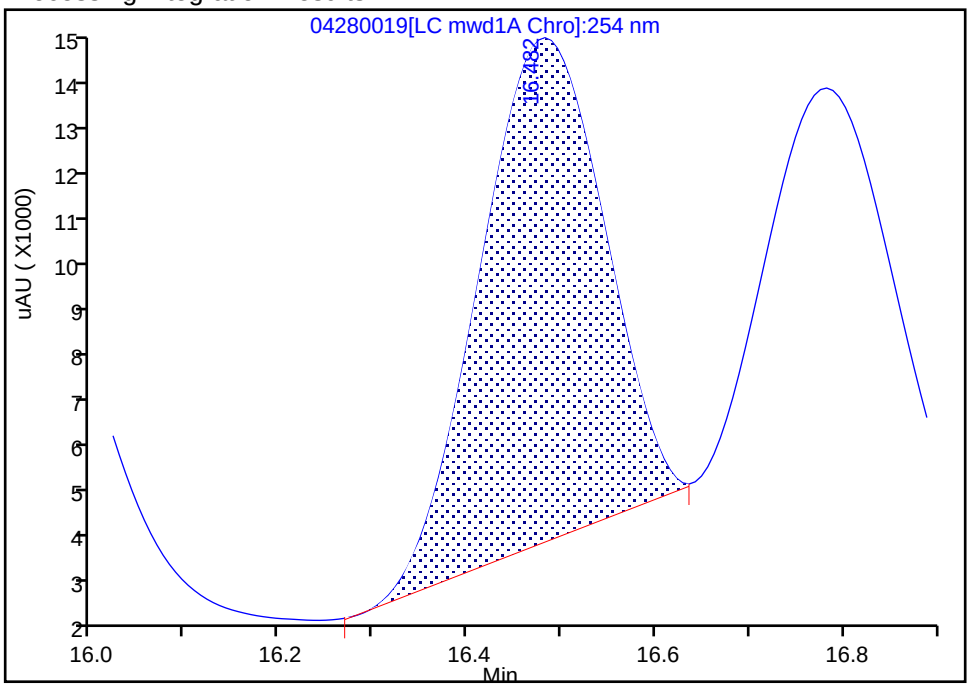
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280019.D				
Injection Date:	28-Apr-2023 23:38:32	Instrument ID:	CHHPLC_X5		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

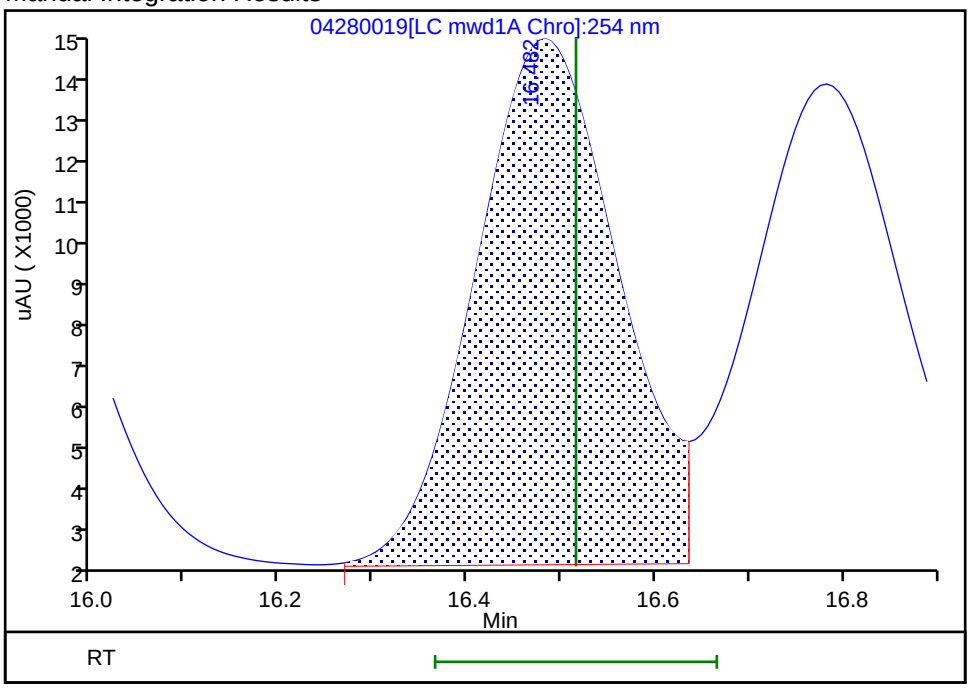
Processing Integration Results

RT: 16.48
Area: 103981
Amount: 0.365374
Amount Units: ug/ml



Manual Integration Results

RT: 16.48
Area: 136431
Amount: 0.463720
Amount Units: ug/ml



Reviewer: LV5D, 29-Apr-2023 10:27:13
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

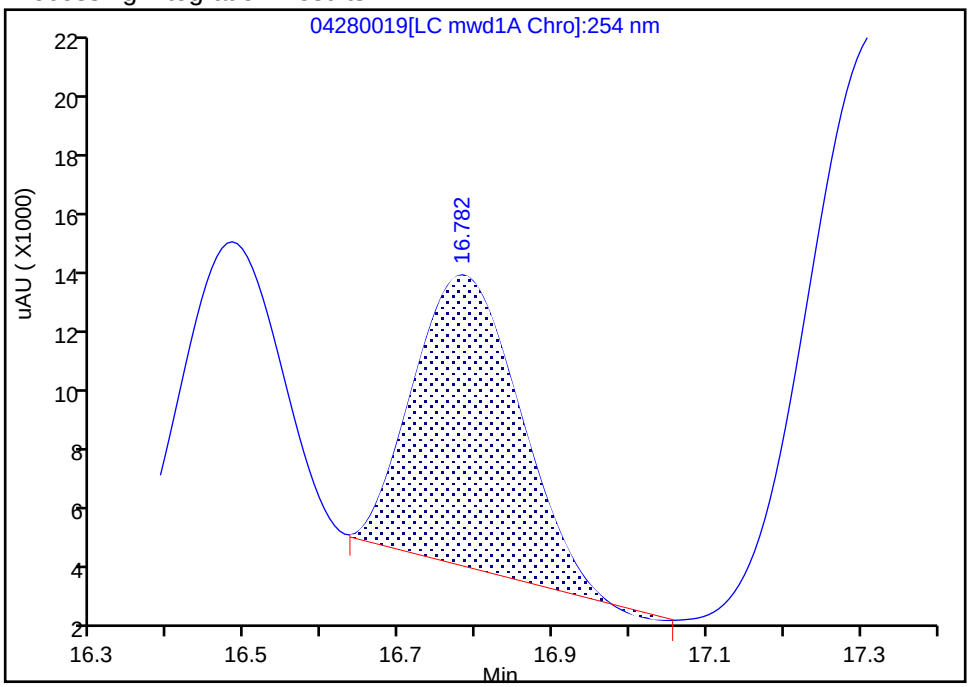
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280019.D				
Injection Date:	28-Apr-2023 23:38:32	Instrument ID:	CHHPLC_X5		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

18 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

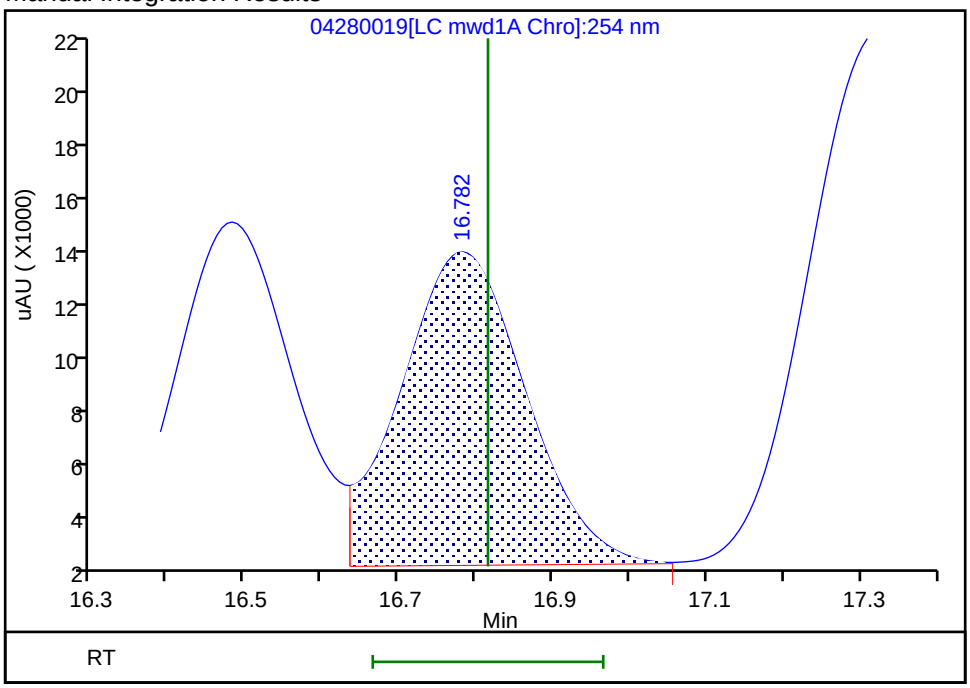
Processing Integration Results

RT: 16.78
Area: 97090
Amount: 0.342723
Amount Units: ug/ml



Manual Integration Results

RT: 16.78
Area: 132594
Amount: 0.450029
Amount Units: ug/ml



Reviewer: LV5D, 29-Apr-2023 10:27:13
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

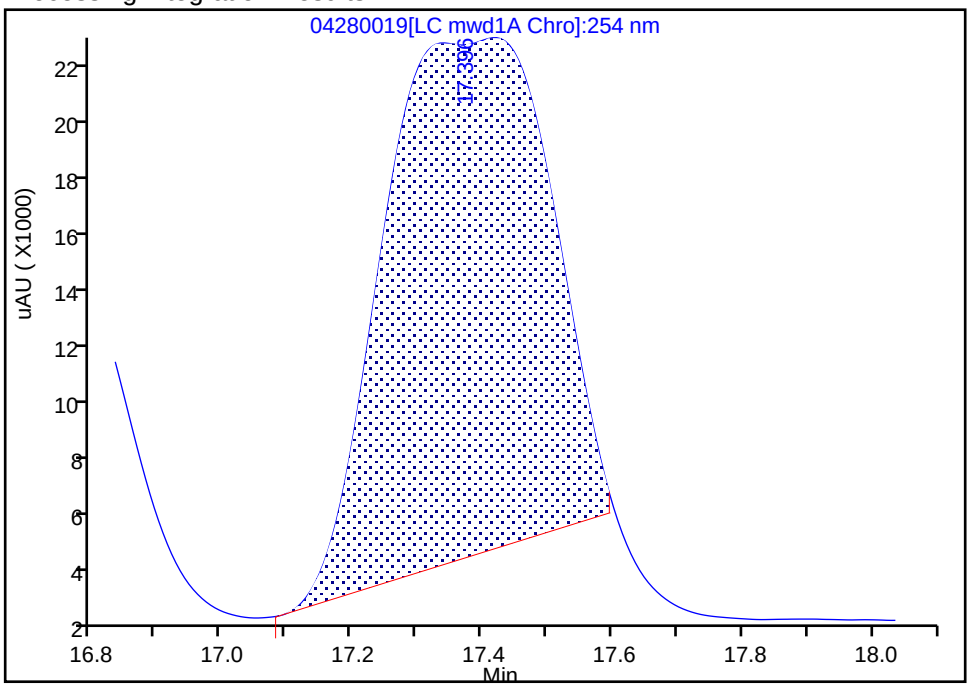
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280019.D				
Injection Date:	28-Apr-2023 23:38:32	Instrument ID:	CHHPLC_X5		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

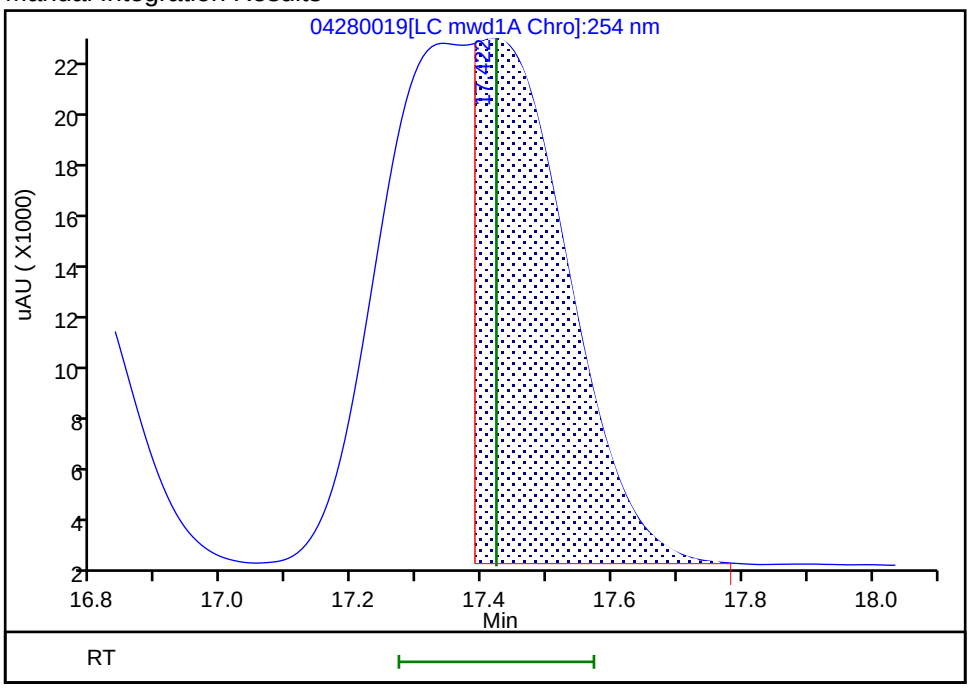
Processing Integration Results

RT: 17.40
Area: 328214
Amount: 0.809022
Amount Units: ug/ml



Manual Integration Results

RT: 17.42
Area: 196279
Amount: 0.483812
Amount Units: ug/ml



Reviewer: LV5D, 29-Apr-2023 10:27:01

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Lab Sample ID: ICV 280-610603/28 Calibration Date: 04/29/2023 04:52

Instrument ID: CHHPLC_X5 Calib Start Date: 04/29/2023 00:13

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 04/29/2023 04:18

Lab File ID: 04280028.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,6-diamino-4-nitrotoluene	Ave	403300	412518		511	500	2.3	20.0
2,4-diamino-6-nitrotoluene	Ave	225281	220158		489	500	-2.3	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Lab Sample ID: ICV 280-610603/28 Calibration Date: 04/29/2023 04:52

Instrument ID: CHHPLC_X5 Calib Start Date: 04/29/2023 00:13

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 04/29/2023 04:18

Lab File ID: 04280028.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	4.10	3.96	4.26
2,4-diamino-6-nitrotoluene	4.64	4.50	4.80

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280028.D
Lims ID: ICV ADD
Client ID:
Sample Type: ICV
Inject. Date: 29-Apr-2023 04:52:55 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist:

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 29-Apr-2023 13:04:23 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1621

First Level Reviewer: LV5D Date: 29-Apr-2023 10:31:01

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.102	4.113	-0.011	206259	0.5000	0.5114	
2 2,4-diamino-6-nitrotoluene	1	4.635	4.653	-0.018	110079	0.5000	0.4886	

QC Flag Legend

Processing Flags

Reagents:

8330DiaminLCS_00056 Amount Added: 50.00 Units: uL

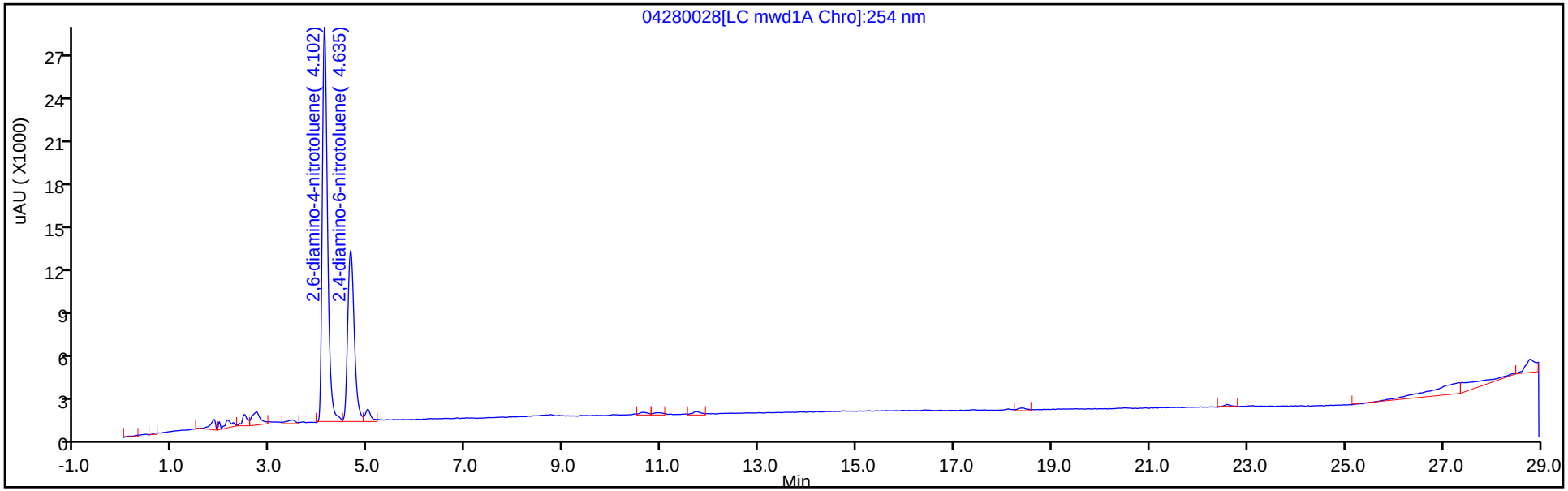
Report Date: 29-Apr-2023 13:06:04 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

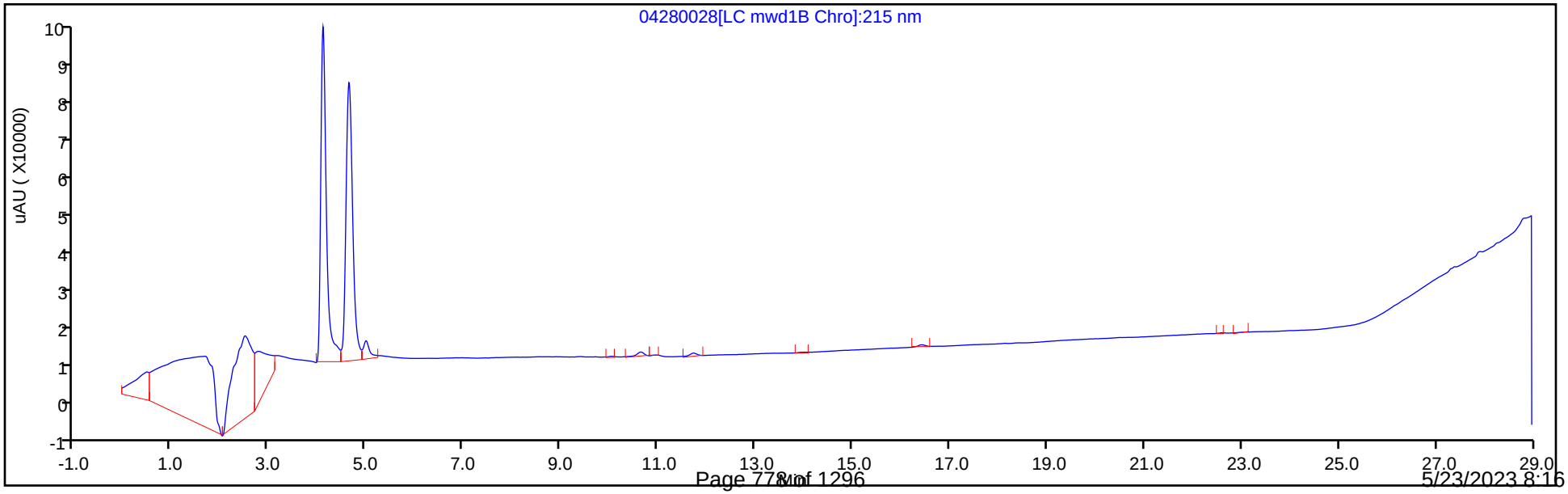
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280028.D

Injection Date:	29-Apr-2023 04:52:55	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	ICV ADD			Worklist Smp#:	28
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-175997-1

SDG No.:

Lab Sample ID: CCV 280-612692/19 | Calibration Date: 05/17/2023 05:24

Instrument ID: CHHPLC_X5 | Calib Start Date: 04/28/2023 18:24

GC Column: Luna-phenylhex ID: 4.60(mm) | Calib End Date: 04/28/2023 23:03

Lab File ID: 05160019.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	394332	400187		254	251	1.5	20.0
DNX	Ave	277072	286741		259	250	3.5	20.0
HMX	Lin2		191452		254	250	1.5	20.0
MNX	Ave	262267	259503		289	292	-1.1	20.0
Picric acid	Lin2		167516		259	250	3.5	20.0
RDX	Lin2		232700		267	250	6.7	20.0
Nitrobenzene	Ave	398834	378624		237	250	-5.1	20.0
3,5-Dinitroaniline	Lin2		470976		263	250	5.4	20.0
1,3-Dinitrobenzene	Ave	629351	603036		240	250	-4.2	20.0
Nitroglycerin	Ave	134735	132661		2460	2500	-1.5	20.0
2-Nitrotoluene	Ave	246963	243532		247	250	-1.4	20.0
4-Nitrotoluene	Ave	227490	226156		249	250	-0.6	20.0
4-Amino-2,6-dinitrotoluene	Ave	294210	297348		253	250	1.1	20.0
3-Nitrotoluene	Ave	294634	285436		242	250	-3.1	20.0
2-Amino-4,6-dinitrotoluene	Ave	427939	415592		243	250	-2.9	20.0
1,3,5-Trinitrobenzene	Ave	405692	427972		264	250	5.5	20.0
2,6-Dinitrotoluene	Ave	291675	290980		249	250	-0.2	20.0
2,4-Dinitrotoluene	Ave	584463	578836		248	250	-1.0	20.0
Tetryl	Ave	284731	279596		245	250	-1.8	20.0
2,4,6-Trinitrotoluene	Ave	438876	426148		243	250	-2.9	20.0
PETN	Ave	143938	141435		2460	2500	-1.7	20.0
1,2-Dinitrobenzene	Ave	280697	273808		244	250	-2.5	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Lab Sample ID: CCV 280-612692/19 Calibration Date: 05/17/2023 05:24

Instrument ID: CHHPLC_X5 Calib Start Date: 04/28/2023 18:24

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 04/28/2023 23:03

Lab File ID: 05160019.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	4.82	4.67	4.97
DNX	5.55	5.40	5.70
HMX	6.08	5.93	6.23
MNX	6.92	6.77	7.07
Picric acid	7.44	7.29	7.59
RDX	8.22	8.07	8.37
Nitrobenzene	10.60	10.45	10.75
3,5-Dinitroaniline	13.28	13.13	13.43
1,3-Dinitrobenzene	13.61	13.46	13.76
Nitroglycerin	13.98	13.83	14.13
2-Nitrotoluene	14.52	14.37	14.67
4-Nitrotoluene	14.75	14.60	14.90
4-Amino-2,6-dinitrotoluene	15.25	15.10	15.40
3-Nitrotoluene	15.58	15.43	15.73
2-Amino-4,6-dinitrotoluene	16.08	15.93	16.23
1,3,5-Trinitrobenzene	16.38	16.23	16.53
2,6-Dinitrotoluene	17.34	17.19	17.49
2,4-Dinitrotoluene	17.81	17.66	17.96
Tetryl	20.82	20.67	20.97
2,4,6-Trinitrotoluene	21.66	21.51	21.81
PETN	22.67	22.52	22.82
1,2-Dinitrobenzene	11.44	11.29	11.59

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160019.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 17-May-2023 05:24:23 ALS Bottle#: 7 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub11

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 17-May-2023 16:34:14 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1653

First Level Reviewer: LV5D Date: 17-May-2023 11:14:34

	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	3.896	3.896	0.000	91220	0.2500	0.2262	
	2 2,4-diamino-6-nitrotoluene	1	4.342	4.342	0.000	55517	0.2500	0.2464	
	3 TNX	1	4.822	4.822	0.000	100347	0.2508	0.2545	
	4 DNX	1	5.549	5.549	0.000	71757	0.2503	0.2590	
	5 HMX	1	6.082	6.082	0.000	47863	0.2500	0.2536	
	6 MNX	1	6.922	6.922	0.000	75710	0.2918	0.2887	
	7 2,4,6-Trinitrophenol	1	7.436	7.436	0.000	41879	0.2500	0.2586	
	8 RDX	1	8.222	8.222	0.000	58175	0.2500	0.2667	
	9 Nitrobenzene	1	10.602	10.602	0.000	94656	0.2500	0.2373	
$	10 1,2-Dinitrobenzene	1	11.435	11.435	0.000	68452	0.2500	0.2439	
	11 3,5-Dinitroaniline	1	13.275	13.275	0.000	117744	0.2500	0.2635	
	12 1,3-Dinitrobenzene	1	13.609	13.609	0.000	150759	0.2500	0.2395	
	13 Nitroglycerin	2	13.982	13.982	0.000	331652	2.50	2.46	
	14 o-Nitrotoluene	1	14.522	14.522	0.000	60883	0.2500	0.2465	
	16 p-Nitrotoluene	1	14.749	14.749	0.000	56539	0.2500	0.2485	
	17 4-Amino-2,6-dinitrotoluene	1	15.249	15.249	0.000	74337	0.2500	0.2527	
	18 m-Nitrotoluene	1	15.582	15.582	0.000	71359	0.2500	0.2422	
	19 2-Amino-4,6-dinitrotoluene	1	16.075	16.075	0.000	103898	0.2500	0.2428	
	20 1,3,5-Trinitrobenzene	1	16.375	16.375	0.000	106993	0.2500	0.2637	
	21 2,6-Dinitrotoluene	1	17.342	17.342	0.000	72745	0.2500	0.2494	
	22 2,4-Dinitrotoluene	1	17.809	17.809	0.000	144709	0.2500	0.2476	
	23 Tetryl	1	20.816	20.816	0.000	69899	0.2500	0.2455	
	24 2,4,6-Trinitrotoluene	1	21.662	21.662	0.000	106537	0.2500	0.2427	
	25 PETN	2	22.669	22.669	0.000	353587	2.50	2.46	

QC Flag Legend
Processing Flags

Reagents:

8330 DMT_00013	Amount Added:	12.50	Units: uL
8330IntermStk_00076	Amount Added:	25.00	Units: uL
8330_ADDs_00037	Amount Added:	12.50	Units: uL

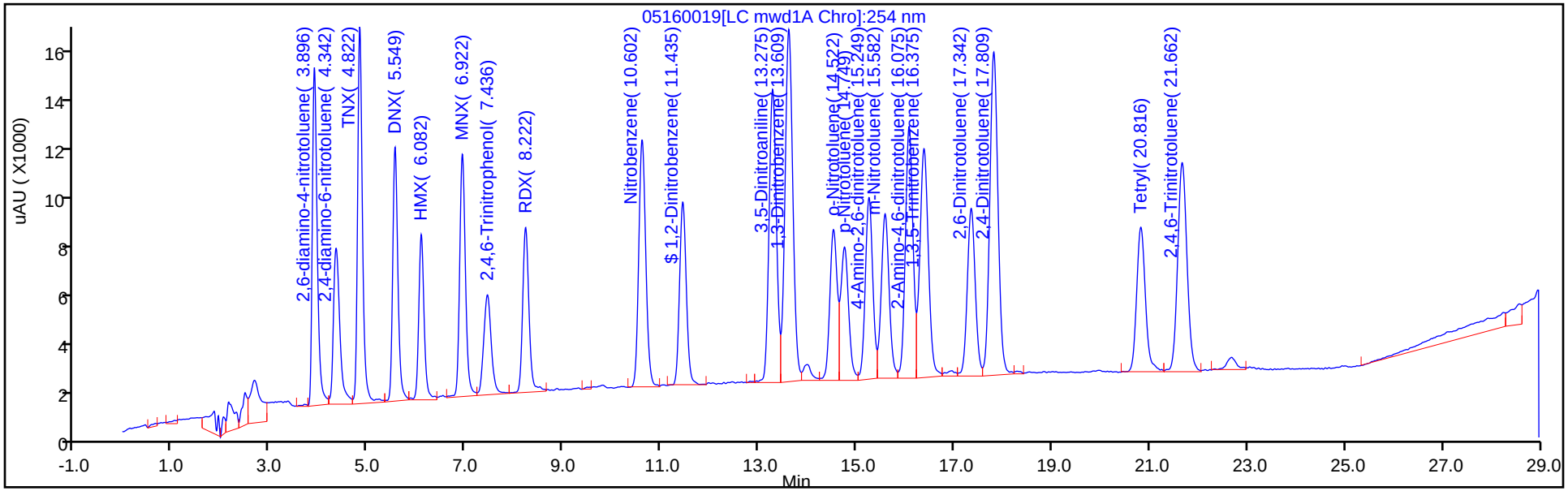
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Eurofins Denver

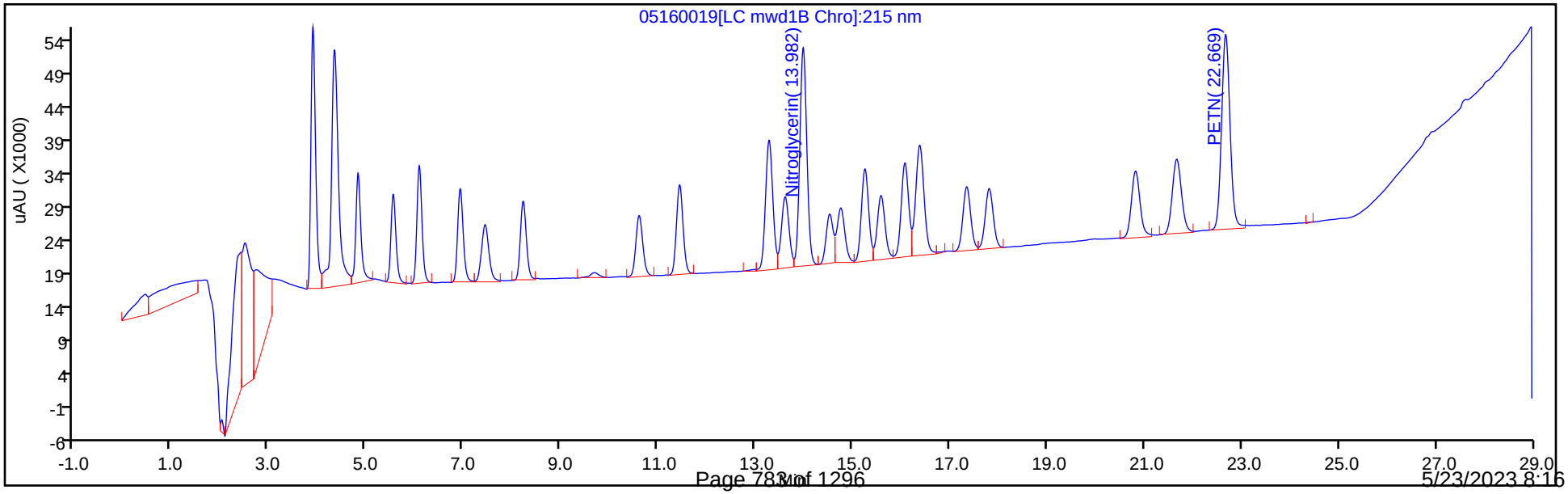
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160019.D

Injection Date:	17-May-2023 05:24:23	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	19
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Lab Sample ID: CCV 280-612692/19 Calibration Date: 05/17/2023 05:24

Instrument ID: CHHPLC_X5 Calib Start Date: 04/29/2023 00:13

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 04/29/2023 04:18

Lab File ID: 05160019.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,6-diamino-4-nitrotoluene	Ave	403300	364880		226	250	-9.5	20.0
2,4-diamino-6-nitrotoluene	Ave	225281	222068		246	250	-1.4	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Lab Sample ID: CCV 280-612692/19 Calibration Date: 05/17/2023 05:24

Instrument ID: CHHPLC_X5 Calib Start Date: 04/29/2023 00:13

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 04/29/2023 04:18

Lab File ID: 05160019.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	3.90	3.75	4.05
2,4-diamino-6-nitrotoluene	4.34	4.19	4.49

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160019.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 17-May-2023 05:24:23 ALS Bottle#: 7 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub11

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 17-May-2023 16:34:14 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1653

First Level Reviewer: LV5D Date: 17-May-2023 11:14:34

	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	3.896	3.896	0.000	91220	0.2500	0.2262	
	2 2,4-diamino-6-nitrotoluene	1	4.342	4.342	0.000	55517	0.2500	0.2464	
	3 TNX	1	4.822	4.822	0.000	100347	0.2508	0.2545	
	4 DNX	1	5.549	5.549	0.000	71757	0.2503	0.2590	
	5 HMX	1	6.082	6.082	0.000	47863	0.2500	0.2536	
	6 MNX	1	6.922	6.922	0.000	75710	0.2918	0.2887	
	7 2,4,6-Trinitrophenol	1	7.436	7.436	0.000	41879	0.2500	0.2586	
	8 RDX	1	8.222	8.222	0.000	58175	0.2500	0.2667	
	9 Nitrobenzene	1	10.602	10.602	0.000	94656	0.2500	0.2373	
$	10 1,2-Dinitrobenzene	1	11.435	11.435	0.000	68452	0.2500	0.2439	
	11 3,5-Dinitroaniline	1	13.275	13.275	0.000	117744	0.2500	0.2635	
	12 1,3-Dinitrobenzene	1	13.609	13.609	0.000	150759	0.2500	0.2395	
	13 Nitroglycerin	2	13.982	13.982	0.000	331652	2.50	2.46	
	14 o-Nitrotoluene	1	14.522	14.522	0.000	60883	0.2500	0.2465	
	16 p-Nitrotoluene	1	14.749	14.749	0.000	56539	0.2500	0.2485	
	17 4-Amino-2,6-dinitrotoluene	1	15.249	15.249	0.000	74337	0.2500	0.2527	
	18 m-Nitrotoluene	1	15.582	15.582	0.000	71359	0.2500	0.2422	
	19 2-Amino-4,6-dinitrotoluene	1	16.075	16.075	0.000	103898	0.2500	0.2428	
	20 1,3,5-Trinitrobenzene	1	16.375	16.375	0.000	106993	0.2500	0.2637	
	21 2,6-Dinitrotoluene	1	17.342	17.342	0.000	72745	0.2500	0.2494	
	22 2,4-Dinitrotoluene	1	17.809	17.809	0.000	144709	0.2500	0.2476	
	23 Tetryl	1	20.816	20.816	0.000	69899	0.2500	0.2455	
	24 2,4,6-Trinitrotoluene	1	21.662	21.662	0.000	106537	0.2500	0.2427	
	25 PETN	2	22.669	22.669	0.000	353587	2.50	2.46	

QC Flag Legend
Processing Flags

Reagents:

8330 DMT_00013	Amount Added:	12.50	Units: uL
8330IntermStk_00076	Amount Added:	25.00	Units: uL
8330_ADDs_00037	Amount Added:	12.50	Units: uL

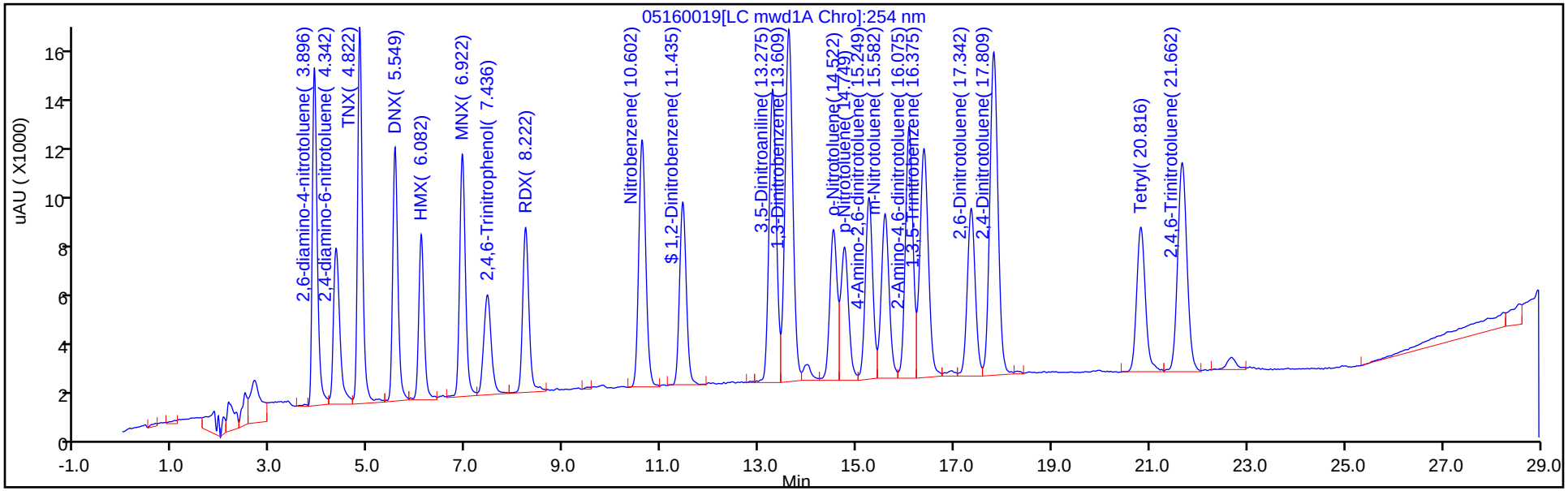
Report Date: 17-May-2023 16:34:14 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

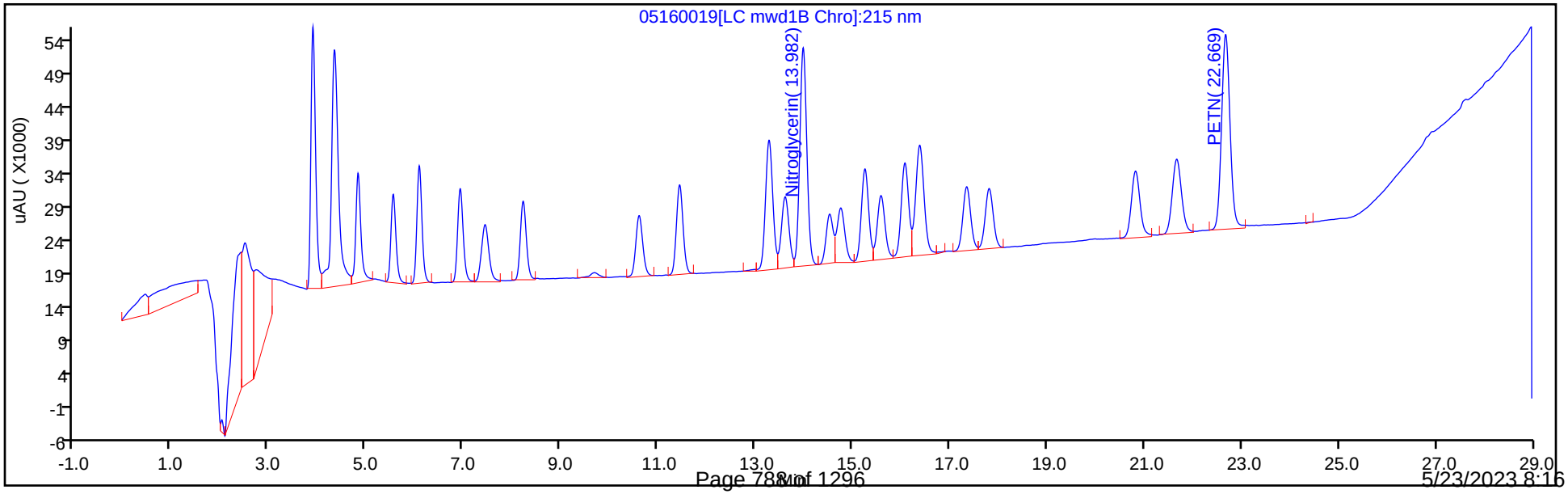
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160019.D

Injection Date:	17-May-2023 05:24:23	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	19
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-175997-1

SDG No.:

Lab Sample ID: CCV 280-612692/30 | Calibration Date: 05/17/2023 11:48

Instrument ID: CHHPLC_X5 | Calib Start Date: 04/28/2023 18:24

GC Column: Luna-phenylhex ID: 4.60(mm) | Calib End Date: 04/28/2023 23:03

Lab File ID: 05160030.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	394332	390835		249	251	-0.9	20.0
DNX	Ave	277072	283481		256	250	2.3	20.0
HMX	Lin2		193224		256	250	2.4	20.0
MNX	Ave	262267	259225		288	292	-1.2	20.0
Picric acid	Lin2		164220		253	250	1.4	20.0
RDX	Lin2		222696		255	250	2.0	20.0
Nitrobenzene	Ave	398834	375656		235	250	-5.8	20.0
3,5-Dinitroaniline	Lin2		468004		262	250	4.7	20.0
1,3-Dinitrobenzene	Ave	629351	601488		239	250	-4.4	20.0
Nitroglycerin	Ave	134735	132198		2450	2500	-1.9	20.0
2-Nitrotoluene	Ave	246963	235840		239	250	-4.5	20.0
4-Nitrotoluene	Ave	227490	222248		244	250	-2.3	20.0
4-Amino-2,6-dinitrotoluene	Ave	294210	293456		249	250	-0.3	20.0
3-Nitrotoluene	Ave	294634	279412		237	250	-5.2	20.0
2-Amino-4,6-dinitrotoluene	Ave	427939	416528		243	250	-2.7	20.0
1,3,5-Trinitrobenzene	Ave	405692	420412		259	250	3.6	20.0
2,6-Dinitrotoluene	Ave	291675	284848		244	250	-2.3	20.0
2,4-Dinitrotoluene	Ave	584463	572588		245	250	-2.0	20.0
Tetryl	Ave	284731	278604		245	250	-2.2	20.0
2,4,6-Trinitrotoluene	Ave	438876	426428		243	250	-2.8	20.0
PETN	Ave	143938	142854		2480	2500	-0.8	20.0
1,2-Dinitrobenzene	Ave	280697	277672		247	250	-1.1	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Lab Sample ID: CCV 280-612692/30 Calibration Date: 05/17/2023 11:48

Instrument ID: CHHPLC_X5 Calib Start Date: 04/28/2023 18:24

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 04/28/2023 23:03

Lab File ID: 05160030.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	4.83	4.67	4.97
DNX	5.55	5.40	5.70
HMX	6.08	5.93	6.23
MNX	6.92	6.77	7.07
Picric acid	7.43	7.29	7.59
RDX	8.21	8.07	8.37
Nitrobenzene	10.61	10.45	10.75
3,5-Dinitroaniline	13.29	13.13	13.43
1,3-Dinitrobenzene	13.62	13.46	13.76
Nitroglycerin	13.99	13.83	14.13
2-Nitrotoluene	14.53	14.37	14.67
4-Nitrotoluene	14.76	14.60	14.90
4-Amino-2,6-dinitrotoluene	15.25	15.10	15.40
3-Nitrotoluene	15.59	15.43	15.73
2-Amino-4,6-dinitrotoluene	16.07	15.93	16.23
1,3,5-Trinitrobenzene	16.39	16.23	16.53
2,6-Dinitrotoluene	17.35	17.19	17.49
2,4-Dinitrotoluene	17.81	17.66	17.96
Tetryl	20.82	20.67	20.97
2,4,6-Trinitrotoluene	21.67	21.51	21.81
PETN	22.67	22.52	22.82
1,2-Dinitrobenzene	11.45	11.29	11.59

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160030.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 17-May-2023 11:48:38 ALS Bottle#: 7 Worklist Smp#: 30
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub11

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 17-May-2023 16:34:23 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1653

First Level Reviewer: LV5D Date: 17-May-2023 12:28:30

	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	3.898	3.896	0.002	91479	0.2500	0.2268	
2	2,4-diamino-6-nitrotoluene	1	4.338	4.342	-0.004	54397	0.2500	0.2415	
3	TNX	1	4.825	4.822	0.003	98002	0.2508	0.2485	
4	DNX	1	5.545	5.549	-0.004	70941	0.2503	0.2560	
5	HMX	1	6.078	6.082	-0.004	48306	0.2500	0.2560	
6	MNX	1	6.918	6.922	-0.004	75629	0.2918	0.2884	
7	2,4,6-Trinitrophenol	1	7.432	7.436	-0.004	41055	0.2500	0.2535	
8	RDX	1	8.212	8.222	-0.010	55674	0.2500	0.2551	
9	Nitrobenzene	1	10.611	10.602	0.009	93914	0.2500	0.2355	
$ 10	1,2-Dinitrobenzene	1	11.445	11.435	0.010	69418	0.2500	0.2473	
11	3,5-Dinitroaniline	1	13.285	13.275	0.010	117001	0.2500	0.2618	
12	1,3-Dinitrobenzene	1	13.618	13.609	0.009	150372	0.2500	0.2389	
13	Nitroglycerin	2	13.985	13.982	0.003	330495	2.50	2.45	
14	o-Nitrotoluene	1	14.531	14.522	0.009	58960	0.2500	0.2387	
16	p-Nitrotoluene	1	14.758	14.749	0.009	55562	0.2500	0.2442	
17	4-Amino-2,6-dinitrotoluene	1	15.251	15.249	0.002	73364	0.2500	0.2494	
18	m-Nitrotoluene	1	15.585	15.582	0.003	69853	0.2500	0.2371	
19	2-Amino-4,6-dinitrotoluene	1	16.071	16.075	-0.004	104132	0.2500	0.2433	
20	1,3,5-Trinitrobenzene	1	16.385	16.375	0.010	105103	0.2500	0.2591	
21	2,6-Dinitrotoluene	1	17.345	17.342	0.003	71212	0.2500	0.2441	
22	2,4-Dinitrotoluene	1	17.805	17.809	-0.004	143147	0.2500	0.2449	
23	Tetryl	1	20.818	20.816	0.002	69651	0.2500	0.2446	
24	2,4,6-Trinitrotoluene	1	21.665	21.662	0.003	106607	0.2500	0.2429	
25	PETN	2	22.665	22.669	-0.004	357136	2.50	2.48	

QC Flag Legend
Processing Flags

Reagents:

8330 DMT_00013	Amount Added:	12.50	Units: uL
8330IntermStk_00076	Amount Added:	25.00	Units: uL
8330_ADDs_00037	Amount Added:	12.50	Units: uL

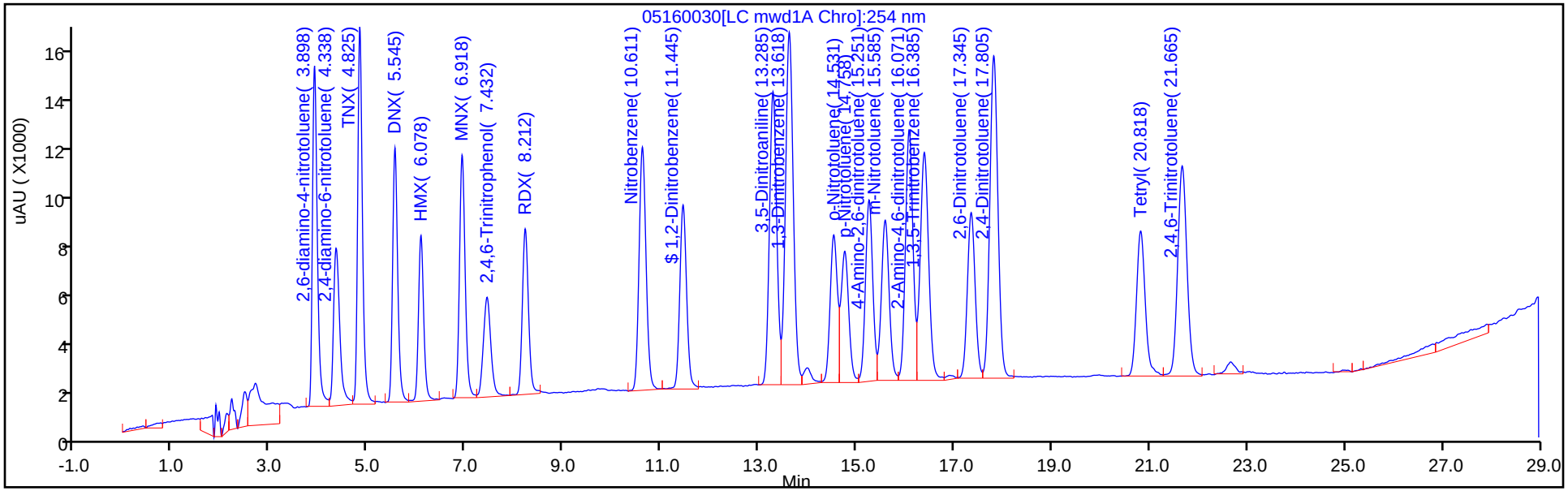
Report Date: 17-May-2023 16:34:23 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

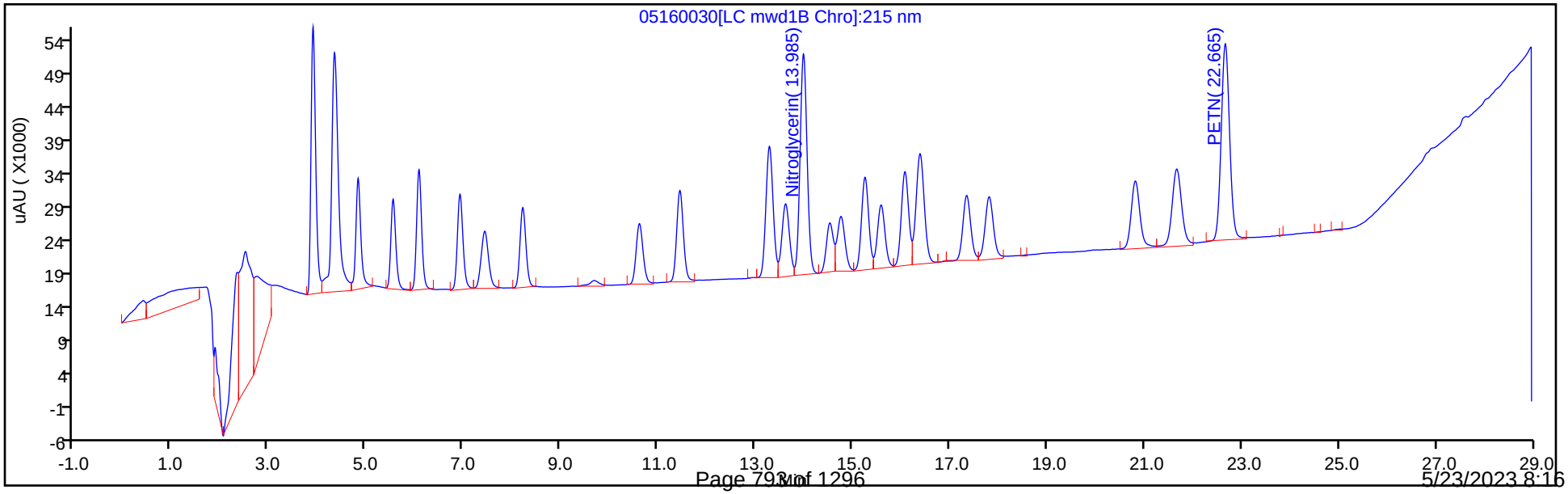
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160030.D

Injection Date:	17-May-2023 11:48:38	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	30
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Lab Sample ID: CCV 280-612692/30 Calibration Date: 05/17/2023 11:48

Instrument ID: CHHPLC_X5 Calib Start Date: 04/29/2023 00:13

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 04/29/2023 04:18

Lab File ID: 05160030.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,6-diamino-4-nitrotoluene	Ave	403300	365916		227	250	-9.3	20.0
2,4-diamino-6-nitrotoluene	Ave	225281	217588		241	250	-3.4	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Lab Sample ID: CCV 280-612692/30 Calibration Date: 05/17/2023 11:48

Instrument ID: CHHPLC_X5 Calib Start Date: 04/29/2023 00:13

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 04/29/2023 04:18

Lab File ID: 05160030.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	3.90	3.75	4.05
2,4-diamino-6-nitrotoluene	4.34	4.19	4.49

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160030.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 17-May-2023 11:48:38 ALS Bottle#: 7 Worklist Smp#: 30
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub11

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 17-May-2023 16:34:23 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1653

First Level Reviewer: LV5D Date: 17-May-2023 12:28:30

	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	3.898	3.896	0.002	91479	0.2500	0.2268	
	2 2,4-diamino-6-nitrotoluene	1	4.338	4.342	-0.004	54397	0.2500	0.2415	
	3 TNX	1	4.825	4.822	0.003	98002	0.2508	0.2485	
	4 DNX	1	5.545	5.549	-0.004	70941	0.2503	0.2560	
	5 HMX	1	6.078	6.082	-0.004	48306	0.2500	0.2560	
	6 MNX	1	6.918	6.922	-0.004	75629	0.2918	0.2884	
	7 2,4,6-Trinitrophenol	1	7.432	7.436	-0.004	41055	0.2500	0.2535	
	8 RDX	1	8.212	8.222	-0.010	55674	0.2500	0.2551	
	9 Nitrobenzene	1	10.611	10.602	0.009	93914	0.2500	0.2355	
$	10 1,2-Dinitrobenzene	1	11.445	11.435	0.010	69418	0.2500	0.2473	
	11 3,5-Dinitroaniline	1	13.285	13.275	0.010	117001	0.2500	0.2618	
	12 1,3-Dinitrobenzene	1	13.618	13.609	0.009	150372	0.2500	0.2389	
	13 Nitroglycerin	2	13.985	13.982	0.003	330495	2.50	2.45	
	14 o-Nitrotoluene	1	14.531	14.522	0.009	58960	0.2500	0.2387	
	16 p-Nitrotoluene	1	14.758	14.749	0.009	55562	0.2500	0.2442	
	17 4-Amino-2,6-dinitrotoluene	1	15.251	15.249	0.002	73364	0.2500	0.2494	
	18 m-Nitrotoluene	1	15.585	15.582	0.003	69853	0.2500	0.2371	
	19 2-Amino-4,6-dinitrotoluene	1	16.071	16.075	-0.004	104132	0.2500	0.2433	
	20 1,3,5-Trinitrobenzene	1	16.385	16.375	0.010	105103	0.2500	0.2591	
	21 2,6-Dinitrotoluene	1	17.345	17.342	0.003	71212	0.2500	0.2441	
	22 2,4-Dinitrotoluene	1	17.805	17.809	-0.004	143147	0.2500	0.2449	
	23 Tetryl	1	20.818	20.816	0.002	69651	0.2500	0.2446	
	24 2,4,6-Trinitrotoluene	1	21.665	21.662	0.003	106607	0.2500	0.2429	
	25 PETN	2	22.665	22.669	-0.004	357136	2.50	2.48	

QC Flag Legend
Processing Flags

Reagents:

8330 DMT_00013	Amount Added:	12.50	Units: uL
8330IntermStk_00076	Amount Added:	25.00	Units: uL
8330_ADDs_00037	Amount Added:	12.50	Units: uL

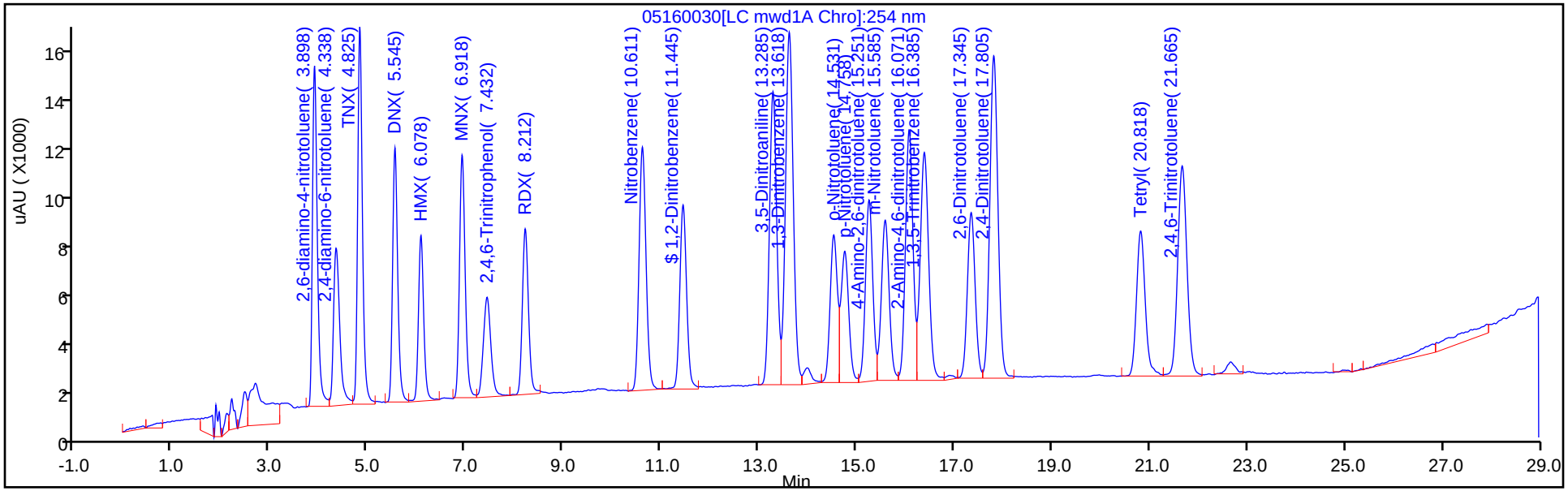
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Eurofins Denver

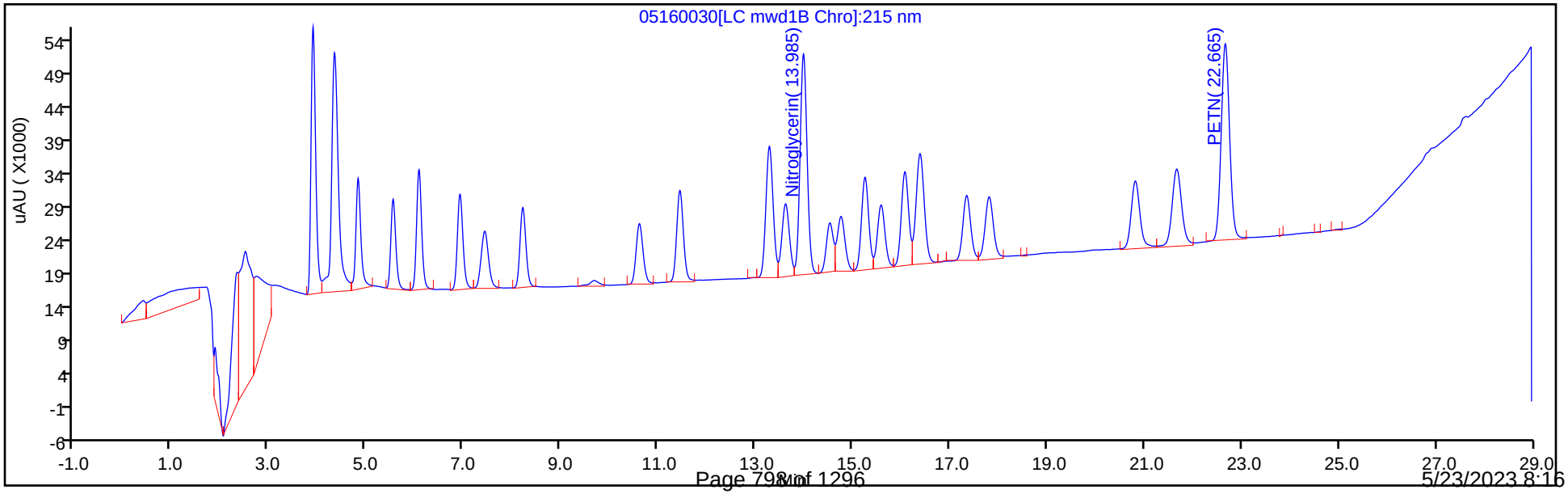
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160030.D

Injection Date:	17-May-2023 11:48:38	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	30
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-175997-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-611915/1-A

Matrix: Water | Lab File ID: 05130025.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/10/2023 13:48

Sample wt/vol: 500(mL) | Date Analyzed: 05/13/2023 20:05

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.: 612396 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045
6629-29-4	2,4-diamino-6-nitrotoluene	0.90	U	1.0	0.90	0.43
121-14-2	2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027
59229-75-3	2,6-diamino-4-nitrotoluene	0.90	U	1.0	0.90	0.22
606-20-2	2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051
88-72-2	2-Nitrotoluene	0.20	U	0.21	0.20	0.086
618-87-1	3,5-Dinitroaniline	0.30	U	0.40	0.30	0.13
99-08-1	3-Nitrotoluene	0.35	U	0.40	0.35	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058
99-99-0	4-Nitrotoluene	0.40	U	0.41	0.40	0.10
80251-29-2	DNX	0.25	U	0.50	0.25	0.097
2691-41-0	HMX	0.20	U	0.21	0.20	0.088
5755-27-1	MNX	0.188	J M	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	114		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130025.D
Lims ID: MB 280-611915/1-A
Client ID:
Sample Type: MB
Inject. Date: 13-May-2023 20:05:20 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-611915/1-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:13 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: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 07:51:27

	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		6.426				ND	7
3	TNX	1		6.427				ND	
4	HMX	1		6.547				ND	
5	2,4-diamino-6-nitrotoluene	1		6.620				ND	
6	DNX	1		6.754				ND	
7	MNX	1	7.205	7.187	0.018	2463		0.0188	M
8	RDX	1		7.574				ND	
9	2,4,6-Trinitrophenol	1		7.974				ND	
$ 10	1,2-Dinitrobenzene	1	8.525	8.521	0.004	28854	0.2000	0.2284	
11	1,3,5-Trinitrobenzene	1		8.647				ND	7
12	1,3-Dinitrobenzene	1		9.274				ND	
13	Nitrobenzene	1		9.647				ND	
14	3,5-Dinitroaniline	1		9.887				ND	
15	Tetryl	1		10.014				ND	
16	Nitroglycerin	2		10.467				ND	
17	2,4,6-Trinitrotoluene	1		10.914				ND	
18	4-Amino-2,6-dinitrotoluene	1		11.114				ND	
19	2-Amino-4,6-dinitrotoluene	1		11.367				ND	
20	2,6-Dinitrotoluene	1		11.514				ND	
21	2,4-Dinitrotoluene	1		11.687				ND	
22	o-Nitrotoluene	1		12.514				ND	7
23	p-Nitrotoluene	1		12.940				ND	
24	m-Nitrotoluene	1		13.514				ND	
25	PETN	2		14.694				ND	
26	Ammonium Picrate	1		0.000				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Review Flags
M - Manually Integrated

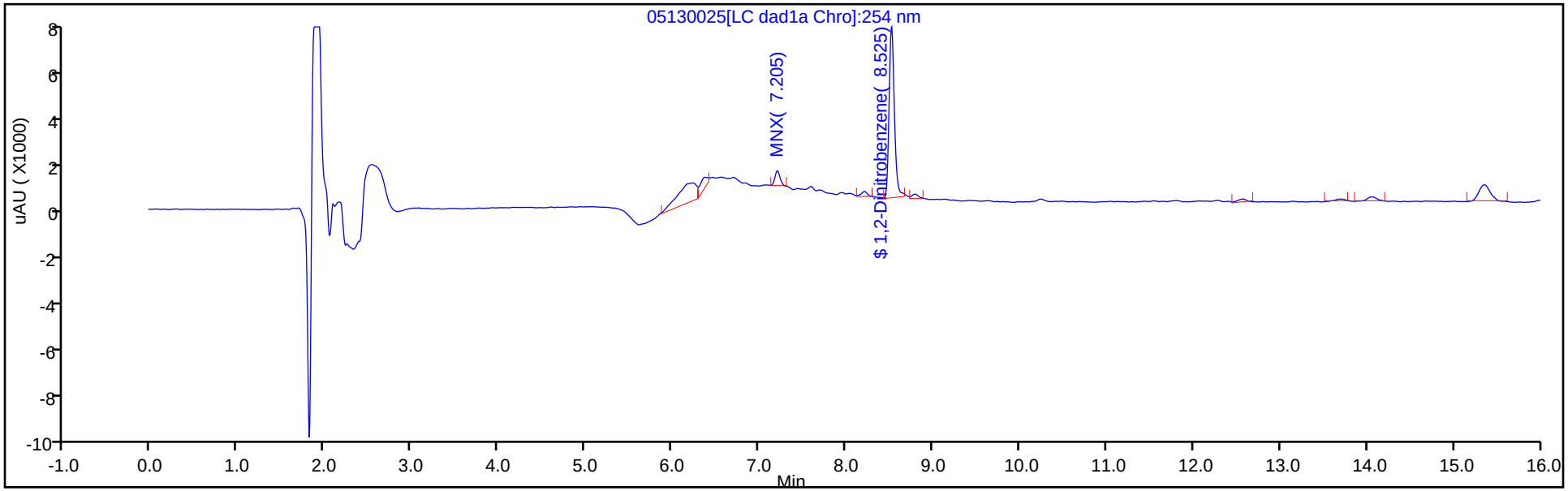
Report Date: 16-May-2023 12:37:15 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

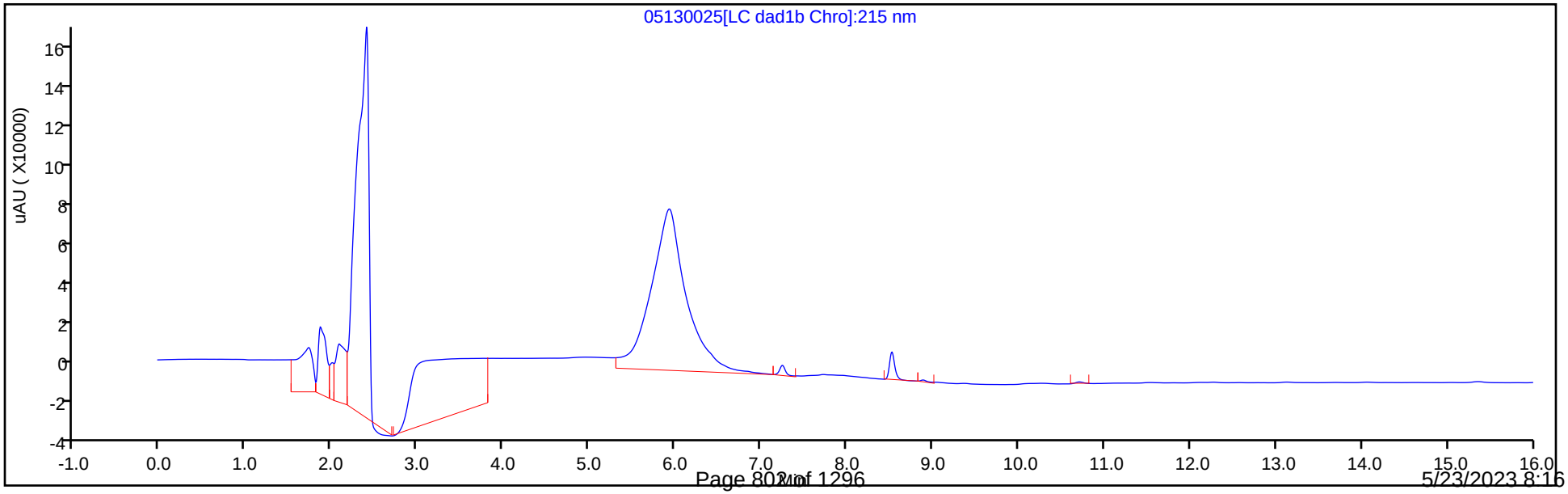
Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130025.d

Injection Date:	13-May-2023 20:05:20	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	MB 280-611915/1-A			Worklist Smp#:	25
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130025.D				
Lims ID:	MB 280-611915/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	13-May-2023 20:05:20	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	MB 280-611915/1-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-May-2023 12:37:13	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:	CTX1672				

First Level Reviewer: K8YG Date: 15-May-2023 07:51:27

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2284	114.22

Manual Integration/User Assign Peak Report

Eurofins Denver

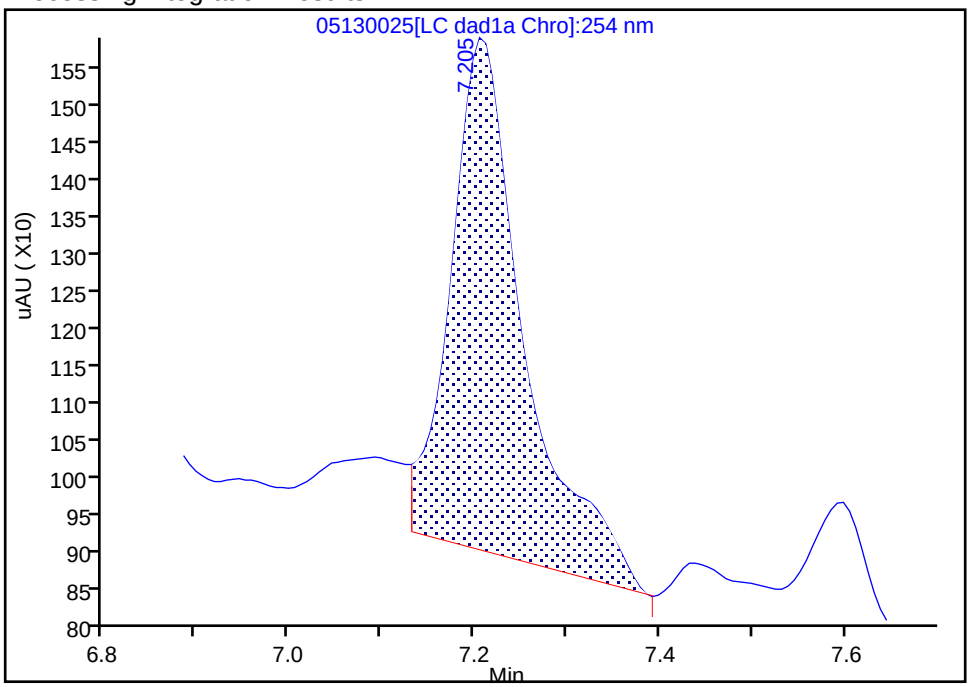
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Injection Date:	13-May-2023 20:05:20	Instrument ID:	CHHPLC_X3		
Lims ID:	MB 280-611915/1-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

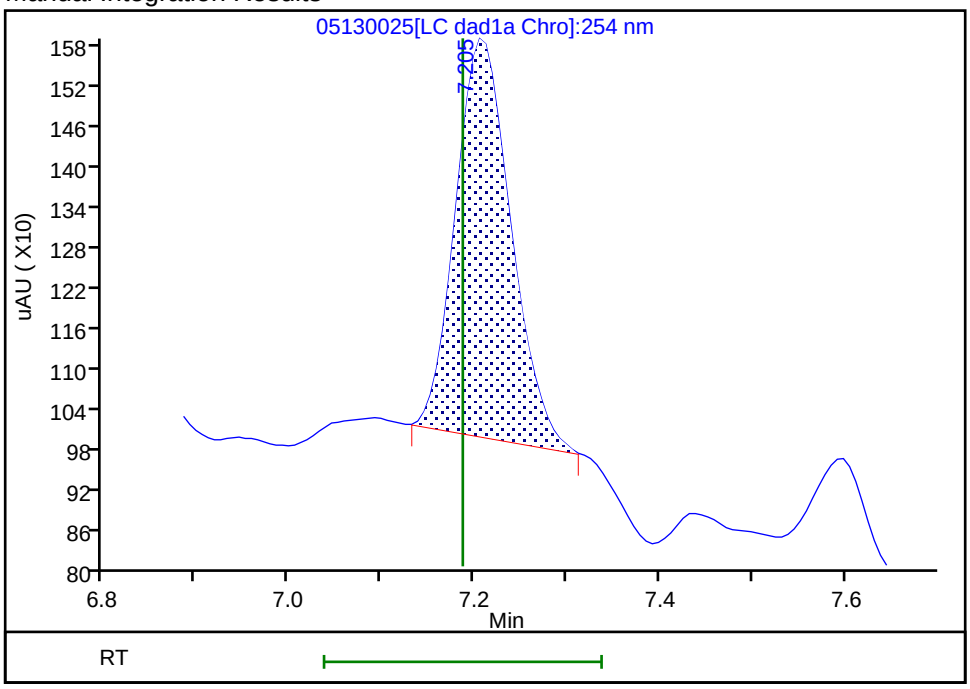
Processing Integration Results

RT: 7.21
Area: 3802
Amount: 0.028985
Amount Units: ug/mL



Manual Integration Results

RT: 7.21
Area: 2463
Amount: 0.018777
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 07:51:14

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-175997-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-611915/2-A

Matrix: Water | Lab File ID: 05130026.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/10/2023 13:48

Sample wt/vol: 500(mL) | Date Analyzed: 05/13/2023 20:28

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.: 612396 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.99		0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	1.93		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	1.84		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	1.85		0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	1.91		0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.74		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.54		0.21	0.20	0.086
618-87-1	3,5-Dinitroaniline	1.71		0.40	0.30	0.13
99-08-1	3-Nitrotoluene	1.51		0.40	0.35	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.65		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.50		0.41	0.40	0.10
80251-29-2	DNX	2.00	M	0.50	0.25	0.097
2691-41-0	HMX	1.78	M	0.21	0.20	0.088
5755-27-1	MNX	2.56		0.50	0.29	0.093
98-95-3	Nitrobenzene	1.76		0.21	0.20	0.091
55-63-0	Nitroglycerin	20.0		2.1	2.0	0.92
78-11-5	PETN	20.8		1.1	1.0	0.45
121-82-4	RDX	1.92		0.21	0.20	0.052
479-45-8	Tetryl	1.97		0.11	0.10	0.032
13980-04-6	TNX	1.96	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\20230513-121427.b\05130026.D
Lims ID: LCS 280-611915/2-A
Client ID:
Sample Type: LCS
Inject. Date: 13-May-2023 20:28:14 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-611915/2-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:13 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: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 07:53:32

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.435	6.427	0.008	38722	0.2006	0.1959	M
4 HMX	1	6.555	6.547	0.008	16658	0.2000	0.1781	M
6 DNX	1	6.762	6.754	0.008	28858	0.2002	0.1998	M
7 MNX	1	7.189	7.187	0.002	33621	0.2334	0.2563	
8 RDX	1	7.575	7.574	0.001	20372	0.2000	0.1915	
9 2,4,6-Trinitrophenol	1	7.969	7.974	-0.005	17416	0.2000	0.2297	
$ 10 1,2-Dinitrobenzene	1	8.522	8.521	0.001	25221	0.2000	0.1997	
11 1,3,5-Trinitrobenzene	1	8.649	8.647	0.002	43153	0.2000	0.1987	
12 1,3-Dinitrobenzene	1	9.268	9.274	-0.006	56803	0.2000	0.1929	
13 Nitrobenzene	1	9.642	9.647	-0.005	33588	0.2000	0.1756	
14 3,5-Dinitroaniline	1	9.875	9.887	-0.012	39015	0.2000	0.1709	
15 Tetryl	1	10.008	10.014	-0.006	32318	0.2000	0.1969	
16 Nitroglycerin	2	10.462	10.467	-0.005	128443	2.00	2.00	
17 2,4,6-Trinitrotoluene	1	10.902	10.914	-0.012	38841	0.2000	0.1840	
18 4-Amino-2,6-dinitrotoluene	1	11.095	11.114	-0.019	25506	0.2000	0.1646	
19 2-Amino-4,6-dinitrotoluene	1	11.348	11.367	-0.019	35005	0.2000	0.1738	
20 2,6-Dinitrotoluene	1	11.502	11.514	-0.012	27275	0.2000	0.1911	
21 2,4-Dinitrotoluene	1	11.668	11.687	-0.019	54956	0.2000	0.1852	
22 o-Nitrotoluene	1	12.495	12.514	-0.019	19699	0.2000	0.1540	
23 p-Nitrotoluene	1	12.915	12.940	-0.025	16778	0.2000	0.1500	
24 m-Nitrotoluene	1	13.488	13.514	-0.026	21228	0.2000	0.1511	
25 PETN	2	14.648	14.694	-0.046	143103	2.00	2.08	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

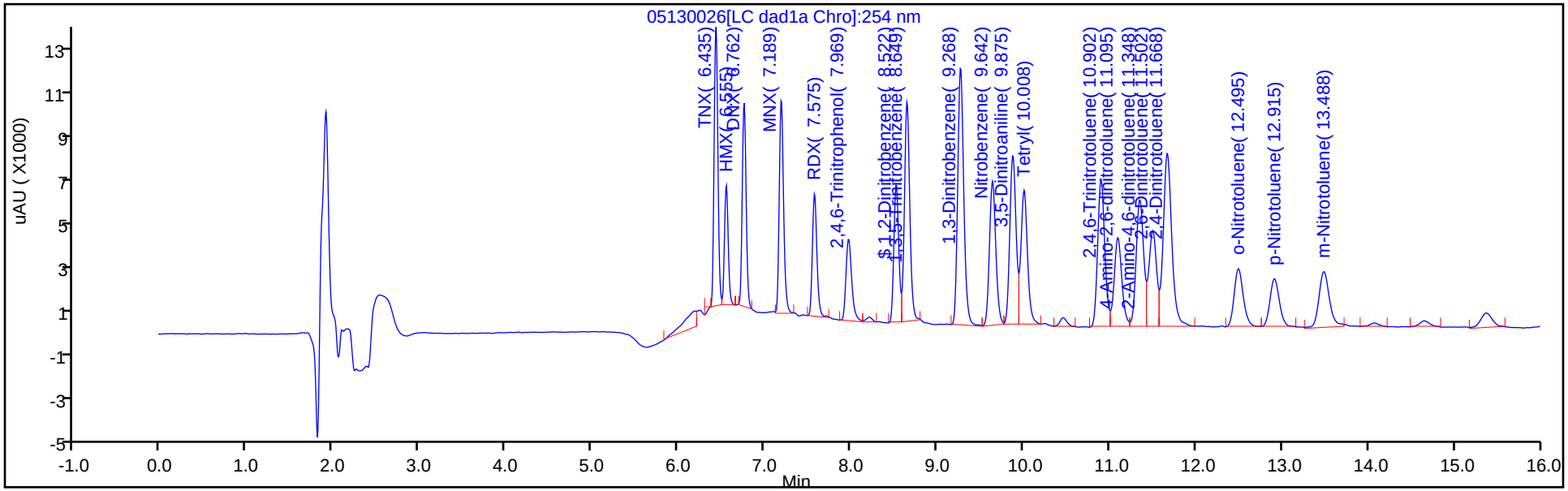
Report Date: 16-May-2023 12:37:16 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

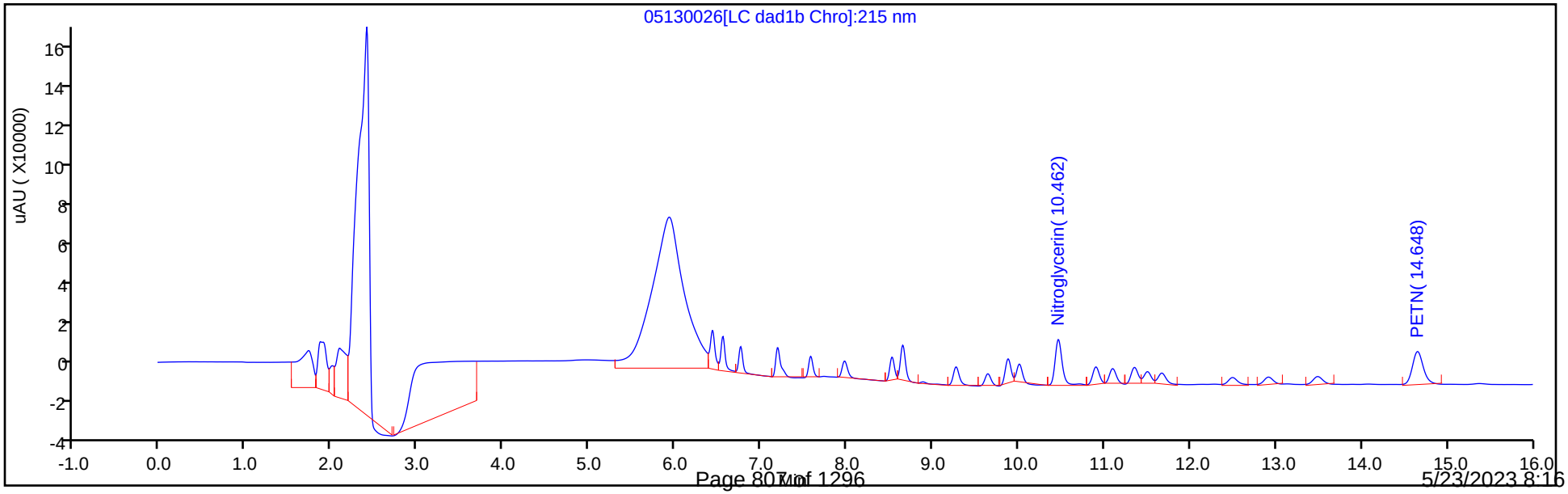
Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130026.d

Injection Date:	13-May-2023 20:28:14	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	LCS 280-611915/2-A			Worklist Smp#:	26
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130026.D				
Lims ID:	LCS 280-611915/2-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	13-May-2023 20:28:14	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-611915/2-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-May-2023 12:37:13	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:	CTX1672				

First Level Reviewer: K8YG Date: 15-May-2023 07:53:32

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1997	99.84

Manual Integration/User Assign Peak Report

Eurofins Denver

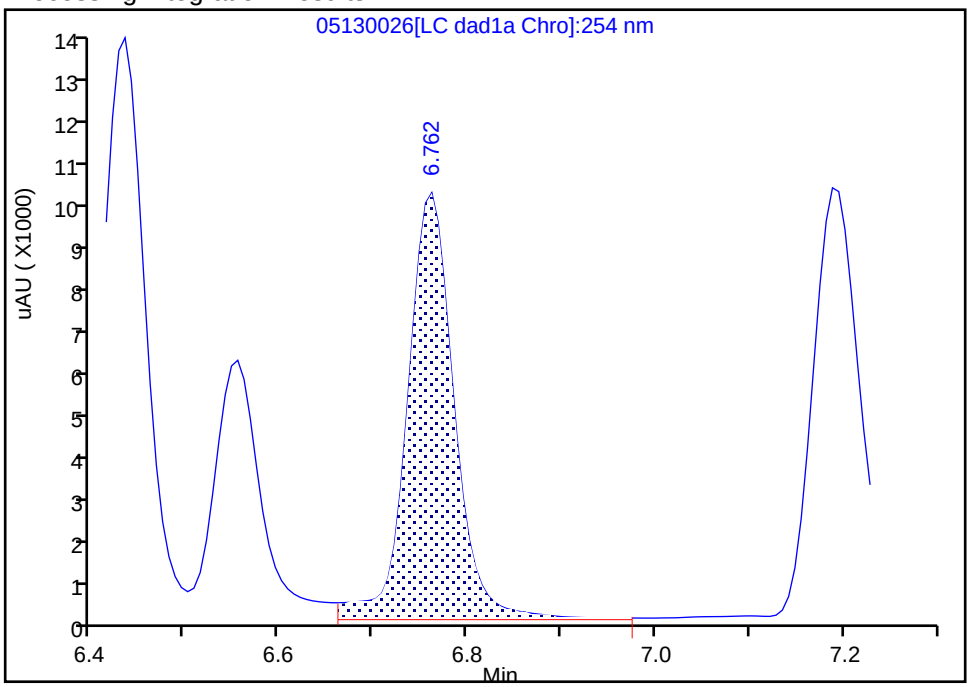
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Injection Date:	13-May-2023 20:28:14	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-611915/2-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

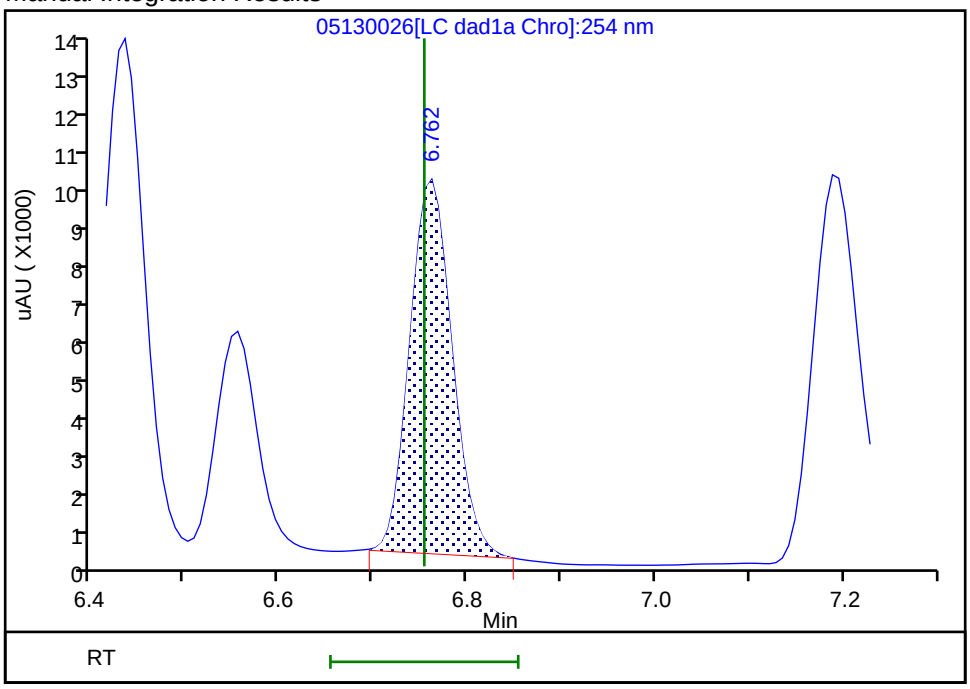
Processing Integration Results

RT: 6.76
Area: 33227
Amount: 0.230004
Amount Units: ug/mL



Manual Integration Results

RT: 6.76
Area: 28858
Amount: 0.199761
Amount Units: ug/mL



Reviewer: LV5D, 16-May-2023 12:17:19
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

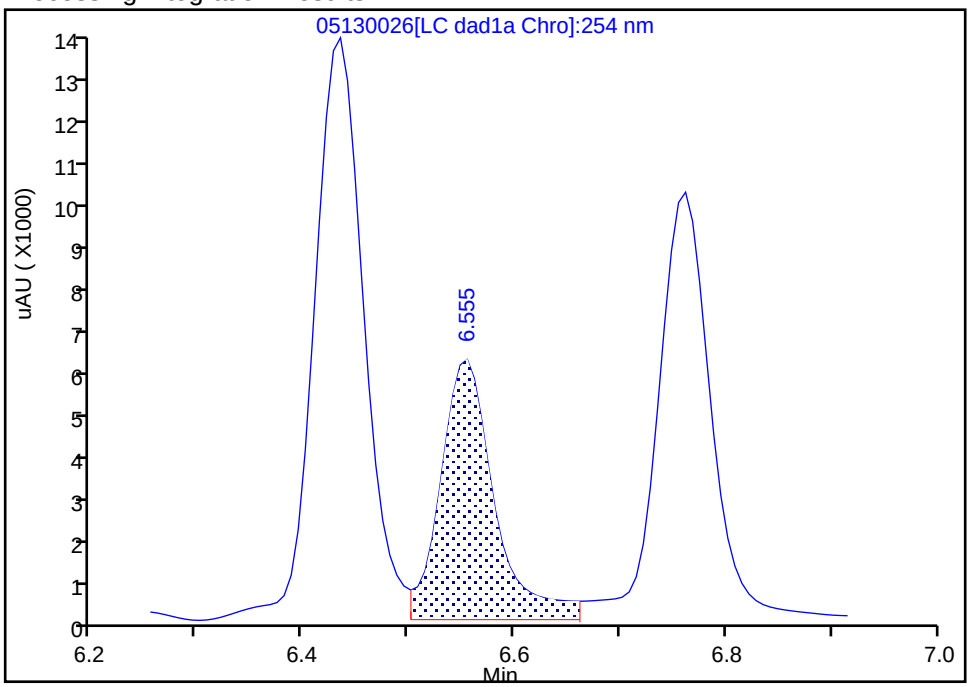
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130026.d				
Injection Date:	13-May-2023 20:28:14	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-611915/2-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

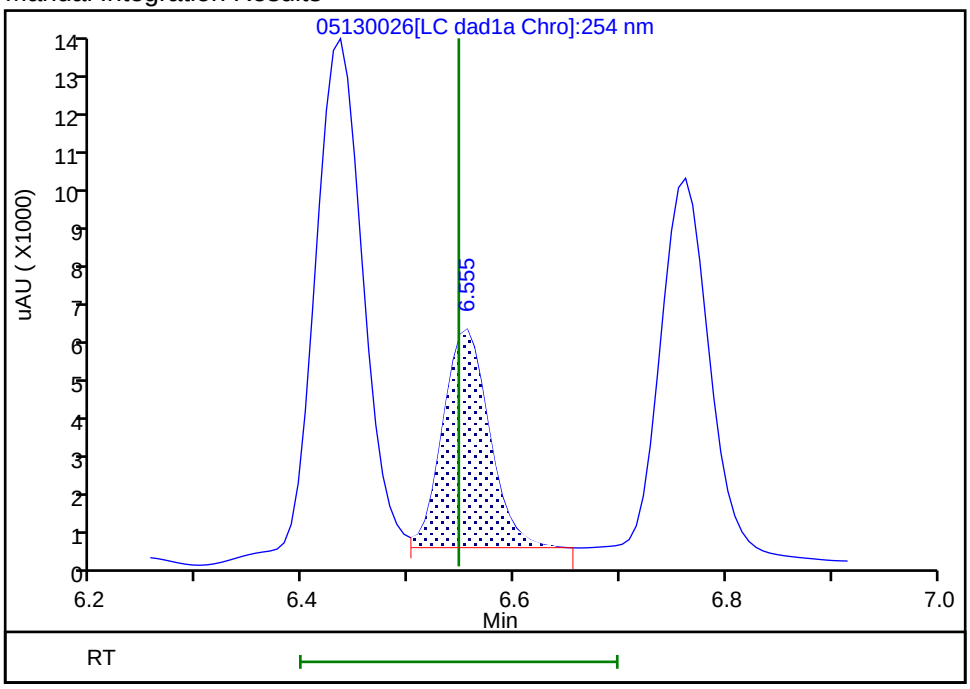
Processing Integration Results

RT: 6.56
Area: 20491
Amount: 0.219089
Amount Units: ug/mL



Manual Integration Results

RT: 6.56
Area: 16658
Amount: 0.178107
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 07:53:10
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

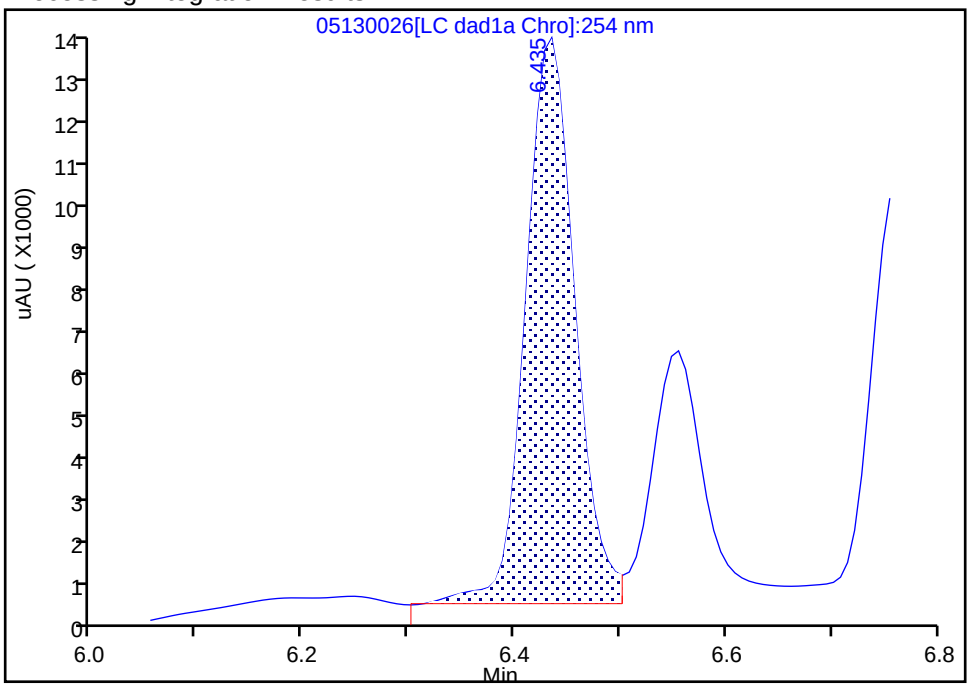
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130026.d				
Injection Date:	13-May-2023 20:28:14	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-611915/2-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

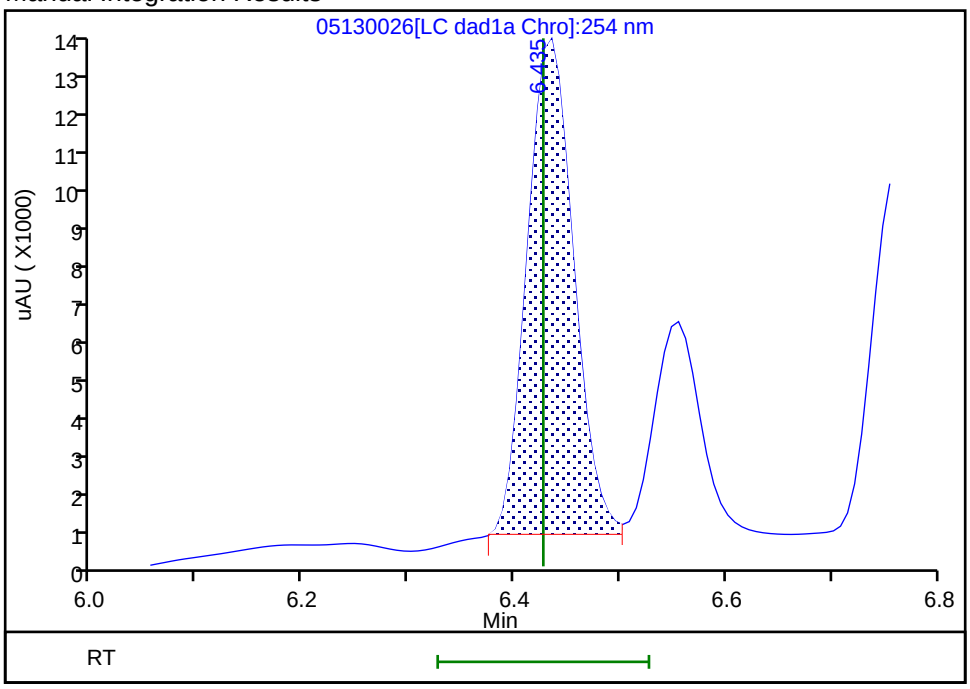
Processing Integration Results

RT: 6.44
Area: 42560
Amount: 0.215289
Amount Units: ug/mL



Manual Integration Results

RT: 6.44
Area: 38722
Amount: 0.195875
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 07:53:06
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-175997-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-611915/4-A

Matrix: Water | Lab File ID: 05130028.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/10/2023 13:48

Sample wt/vol: 500(mL) | Date Analyzed: 05/13/2023 21:14

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.: 612396 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
6629-29-4	2,4-diamino-6-nitrotoluene	1.40	M	1.0	0.90	0.43
59229-75-3	2,6-diamino-4-nitrotoluene	1.55	M	1.0	0.90	0.22

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\CHHPLC_X\20230513-121427.b\05130028.D
Lims ID: LCS 280-611915/4-A
Client ID:
Sample Type: LCS
Inject. Date: 13-May-2023 21:14:09 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-611915/4-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:13 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: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 07:58:32

	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	6.426	-0.006	36495	0.2000	0.1551	M
	5 2,4-diamino-6-nitrotoluene	1	6.613	6.620	-0.007	20520	0.2000	0.1401	M
$	10 1,2-Dinitrobenzene	1	8.527	8.521	0.006	25509	0.2000	0.2020	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

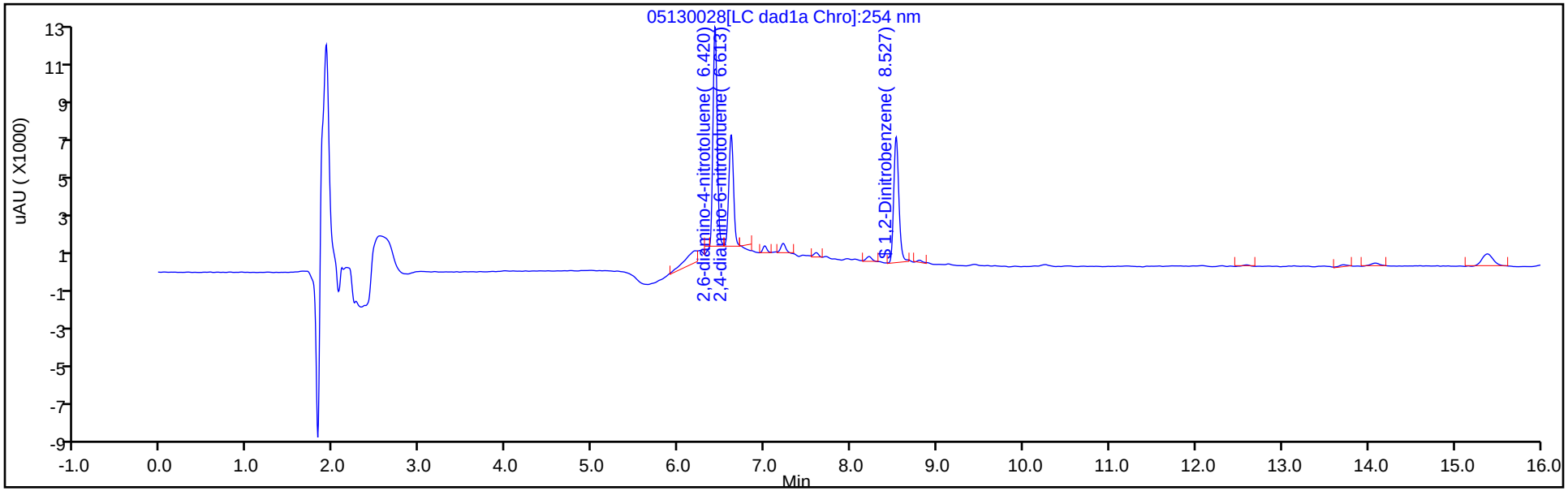
Report Date: 16-May-2023 12:37:17 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

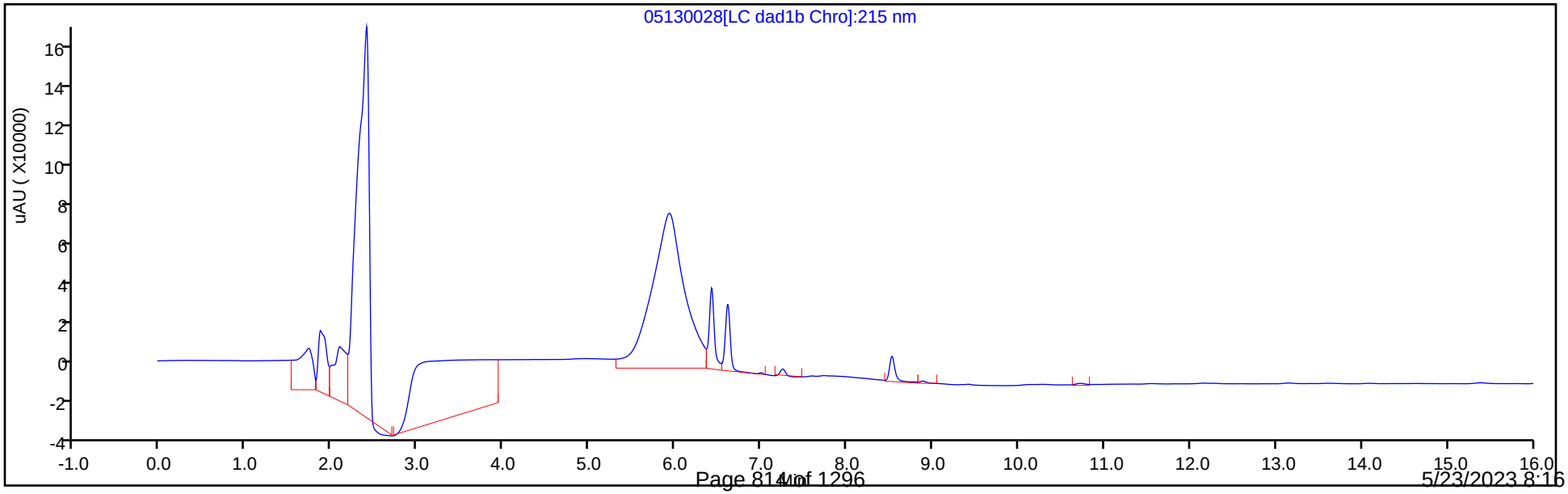
Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130028.d

Injection Date:	13-May-2023 21:14:09	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	LCS 280-611915/4-A			Worklist Smp#:	28
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130028.D				
Lims ID:	LCS 280-611915/4-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	13-May-2023 21:14:09	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-611915/4-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-May-2023 12:37:13	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:	CTX1672				

First Level Reviewer: K8YG Date: 15-May-2023 07:58:32

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2020	100.98

Manual Integration/User Assign Peak Report

Eurofins Denver

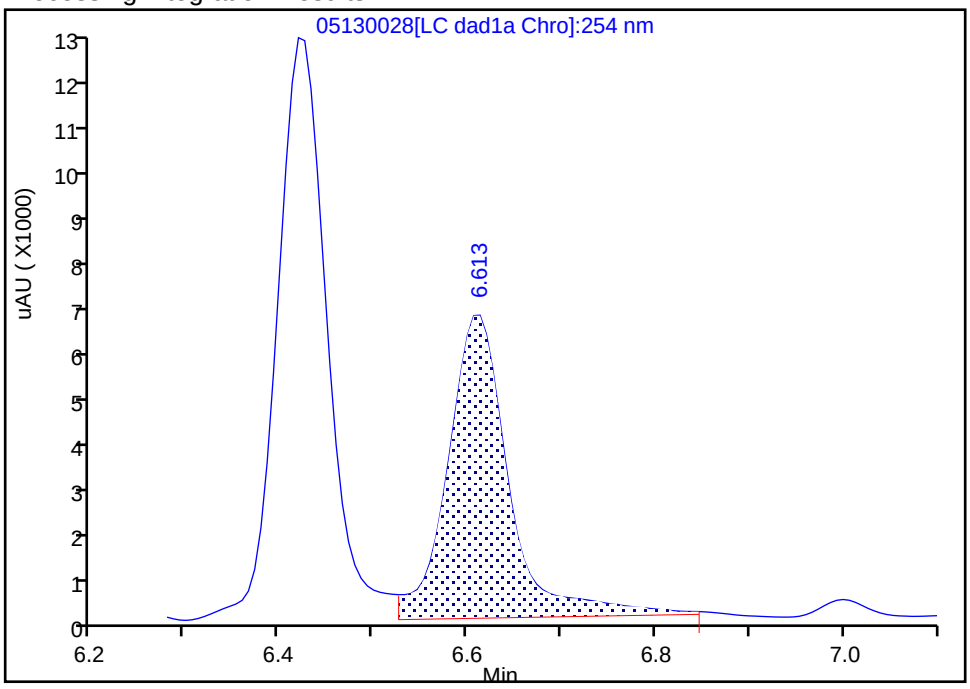
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Injection Date:	13-May-2023 21:14:09	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-611915/4-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

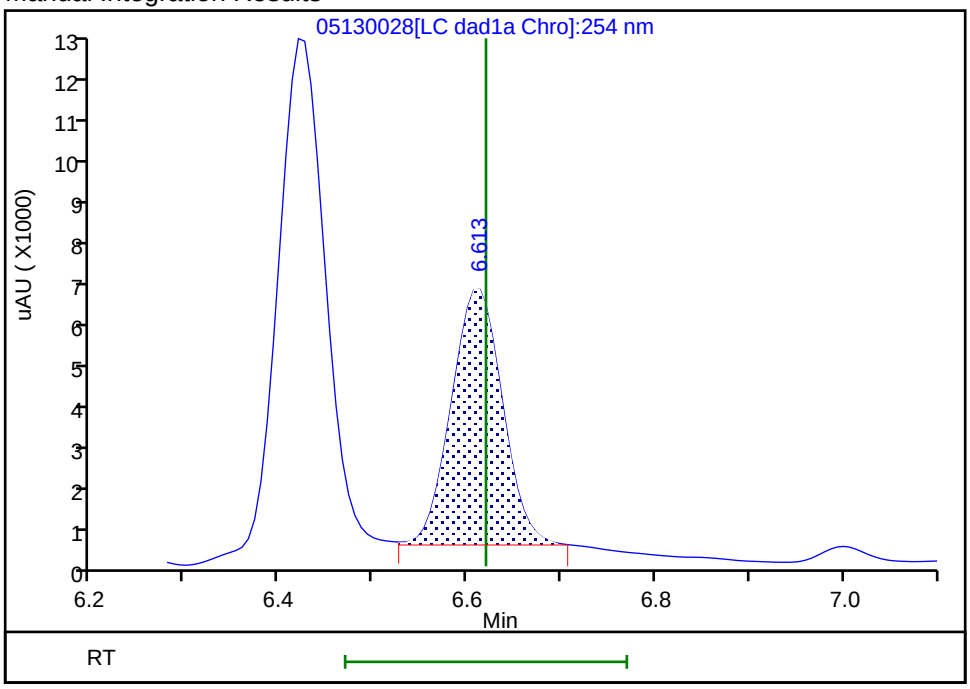
Processing Integration Results

RT: 6.61
Area: 25866
Amount: 0.176593
Amount Units: ug/mL



Manual Integration Results

RT: 6.61
Area: 20520
Amount: 0.140095
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 07:58:25
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

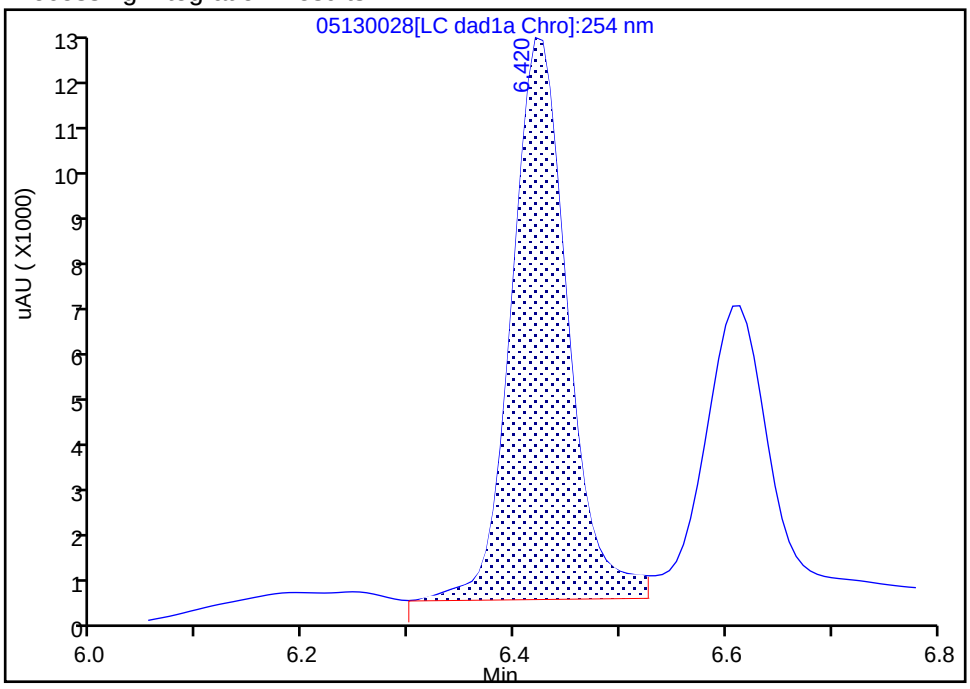
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Injection Date:	13-May-2023 21:14:09	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-611915/4-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

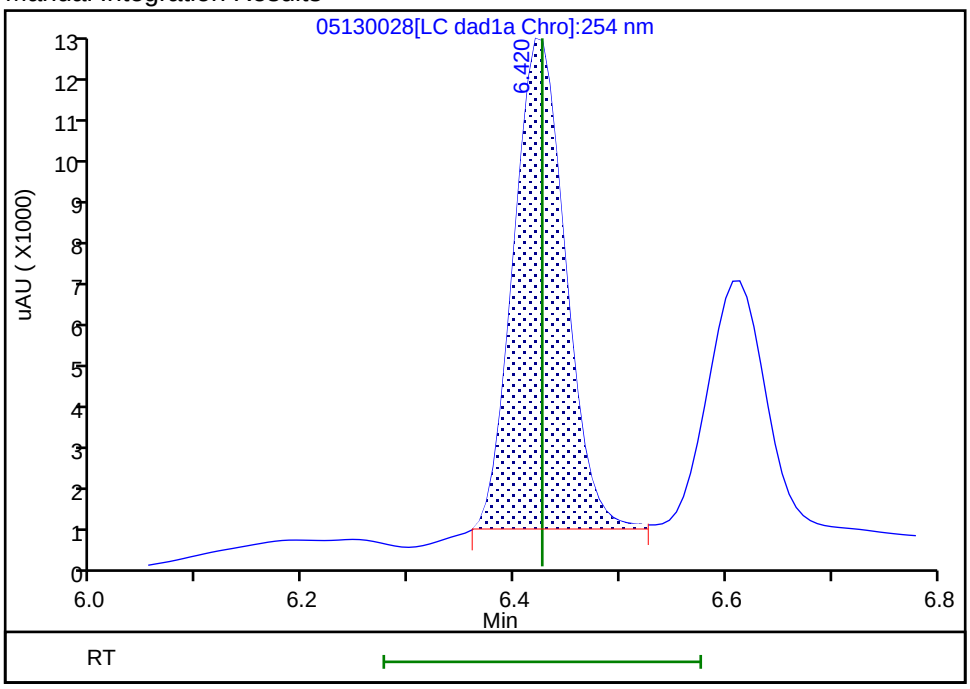
Processing Integration Results

RT: 6.42
Area: 40746
Amount: 0.173631
Amount Units: ug/mL



Manual Integration Results

RT: 6.42
Area: 36495
Amount: 0.155124
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 07:58:23
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-175997-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 280-611915/3-A

Matrix: Water | Lab File ID: 05130027.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/10/2023 13:48

Sample wt/vol: 500(mL) | Date Analyzed: 05/13/2023 20:51

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.: 612396 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.07		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	1.91		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	1.92		0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	1.99		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	1.61		0.21	0.20	0.086
618-87-1	3,5-Dinitroaniline	1.77		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	1.70		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.60		0.41	0.40	0.10
80251-29-2	DNX	2.10	M	0.50	0.25	0.097
2691-41-0	HMX	1.78	M	0.21	0.20	0.088
5755-27-1	MNX	2.67		0.50	0.29	0.093
98-95-3	Nitrobenzene	1.82		0.21	0.20	0.091
55-63-0	Nitroglycerin	20.0		2.1	2.0	0.92
78-11-5	PETN	21.7		1.1	1.0	0.45
121-82-4	RDX	1.96		0.21	0.20	0.052
479-45-8	Tetryl	2.09		0.11	0.10	0.032
13980-04-6	TNX	1.96	M	0.50	0.25	0.079

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	103		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130027.D
Lims ID: LCSD 280-611915/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 13-May-2023 20:51:12 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-611915/3-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:13 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: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 07:58:00

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.427	6.427	0.000	38703	0.2006	0.1958	M
4 HMX	1	6.547	6.547	0.000	16693	0.2000	0.1785	M
6 DNX	1	6.754	6.754	0.000	30271	0.2002	0.2095	M
7 MNX	1	7.187	7.187	0.000	34972	0.2334	0.2666	
8 RDX	1	7.574	7.574	0.000	20862	0.2000	0.1961	
9 2,4,6-Trinitrophenol	1	7.974	7.974	0.000	17687	0.2000	0.2332	
$ 10 1,2-Dinitrobenzene	1	8.534	8.521	0.013	25942	0.2000	0.2054	
11 1,3,5-Trinitrobenzene	1	8.654	8.647	0.007	44997	0.2000	0.2072	
12 1,3-Dinitrobenzene	1	9.280	9.274	0.006	58840	0.2000	0.1999	
13 Nitrobenzene	1	9.647	9.647	0.000	34868	0.2000	0.1823	
14 3,5-Dinitroaniline	1	9.887	9.887	0.000	40486	0.2000	0.1773	
15 Tetryl	1	10.014	10.014	0.000	34237	0.2000	0.2086	
16 Nitroglycerin	2	10.467	10.467	0.000	128160	2.00	2.00	
17 2,4,6-Trinitrotoluene	1	10.907	10.914	-0.007	40267	0.2000	0.1908	
18 4-Amino-2,6-dinitrotoluene	1	11.107	11.114	-0.007	26315	0.2000	0.1698	
19 2-Amino-4,6-dinitrotoluene	1	11.360	11.367	-0.007	37195	0.2000	0.1847	
20 2,6-Dinitrotoluene	1	11.507	11.514	-0.007	28411	0.2000	0.1990	
21 2,4-Dinitrotoluene	1	11.680	11.687	-0.007	56868	0.2000	0.1917	
22 o-Nitrotoluene	1	12.500	12.514	-0.014	20620	0.2000	0.1612	
23 p-Nitrotoluene	1	12.920	12.940	-0.020	17900	0.2000	0.1600	
24 m-Nitrotoluene	1	13.494	13.514	-0.020	22561	0.2000	0.1606	
25 PETN	2	14.660	14.694	-0.034	149491	2.00	2.17	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

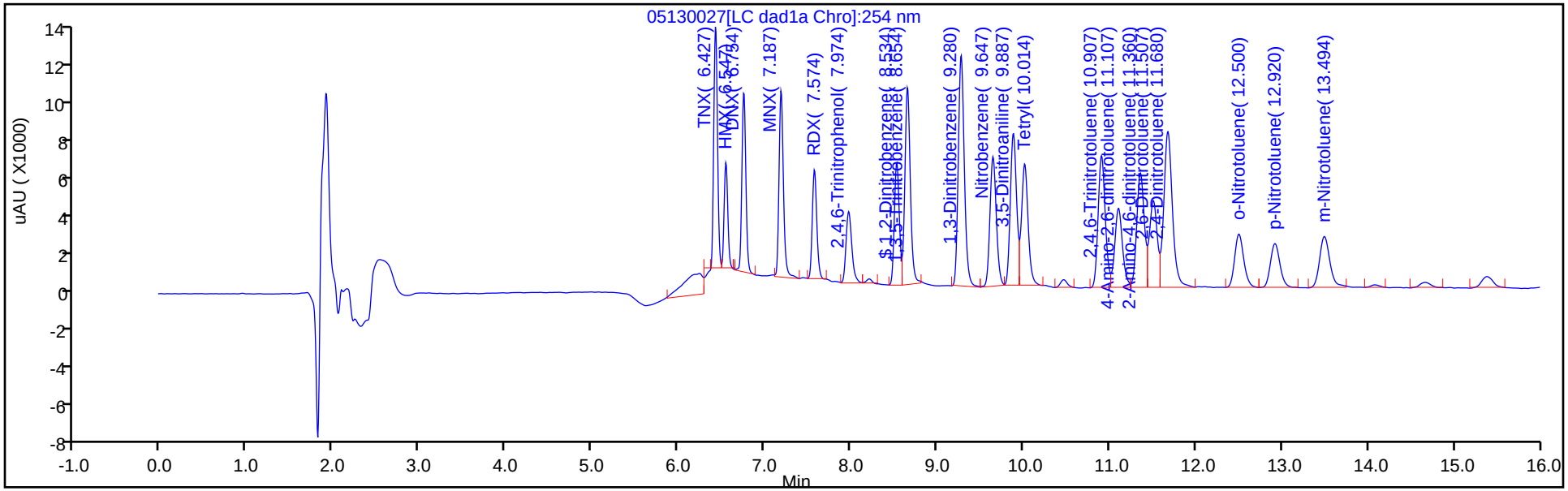
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Eurofins Denver

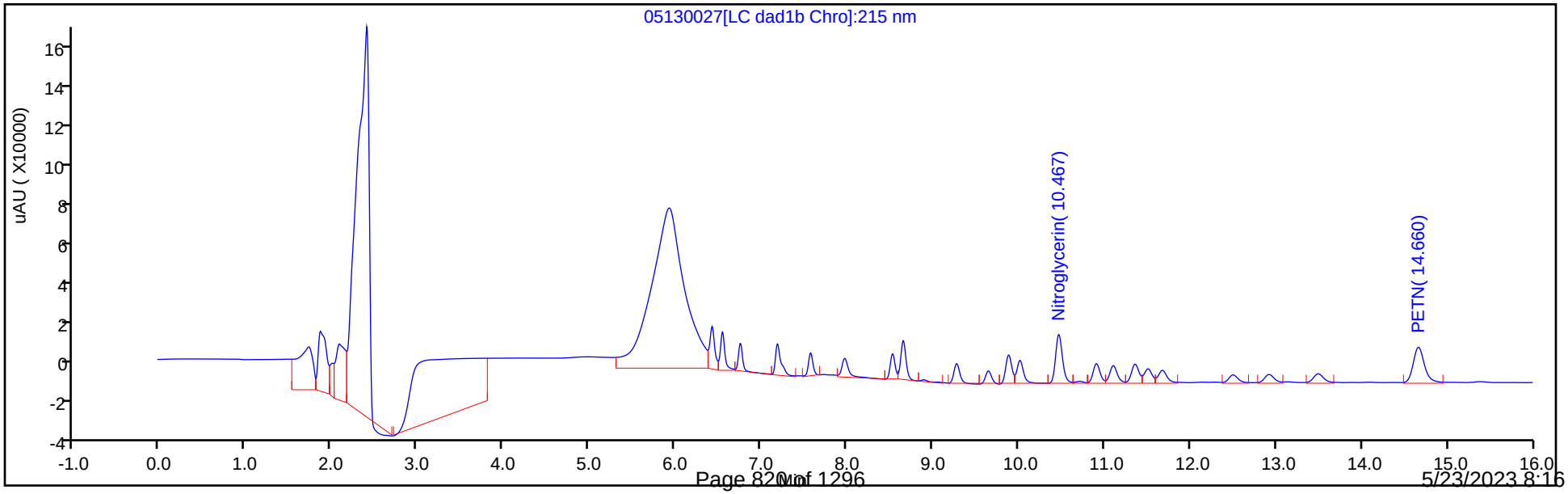
Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130027.d

Injection Date:	13-May-2023 20:51:12	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	LCSD 280-611915/3-A			Worklist Smp#:	27
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130027.D				
Lims ID:	LCSD 280-611915/3-A				
Client ID:					
Sample Type:	LCSD				
Inject. Date:	13-May-2023 20:51:12	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCSD 280-611915/3-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-May-2023 12:37:13	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:	CTX1672				

First Level Reviewer: K8YG Date: 15-May-2023 07:58:00

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2054	102.69

Manual Integration/User Assign Peak Report

Eurofins Denver

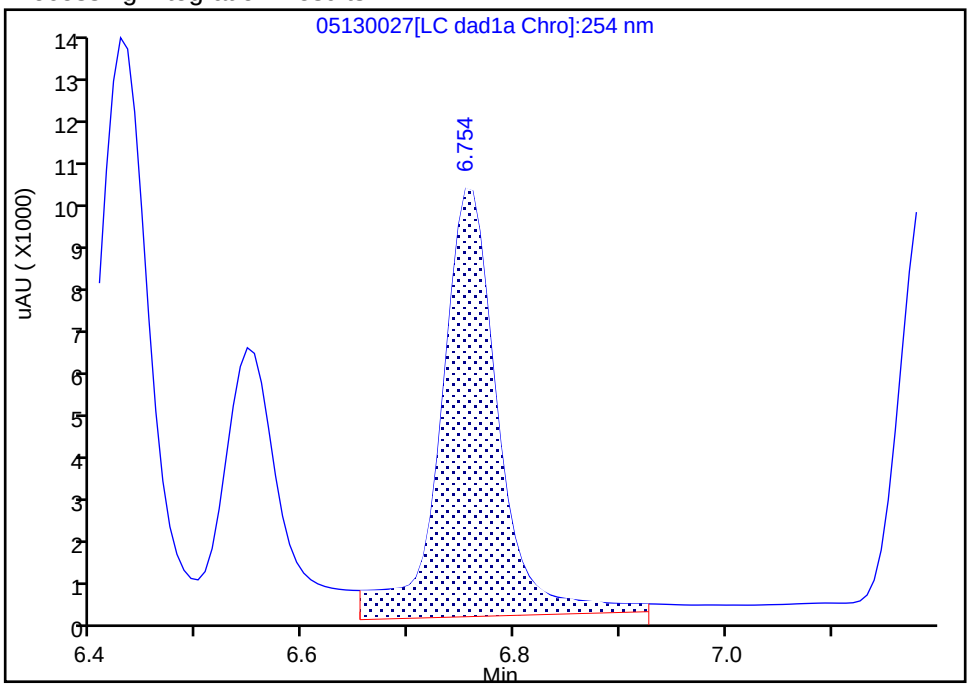
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Injection Date:	13-May-2023 20:51:12	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-611915/3-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

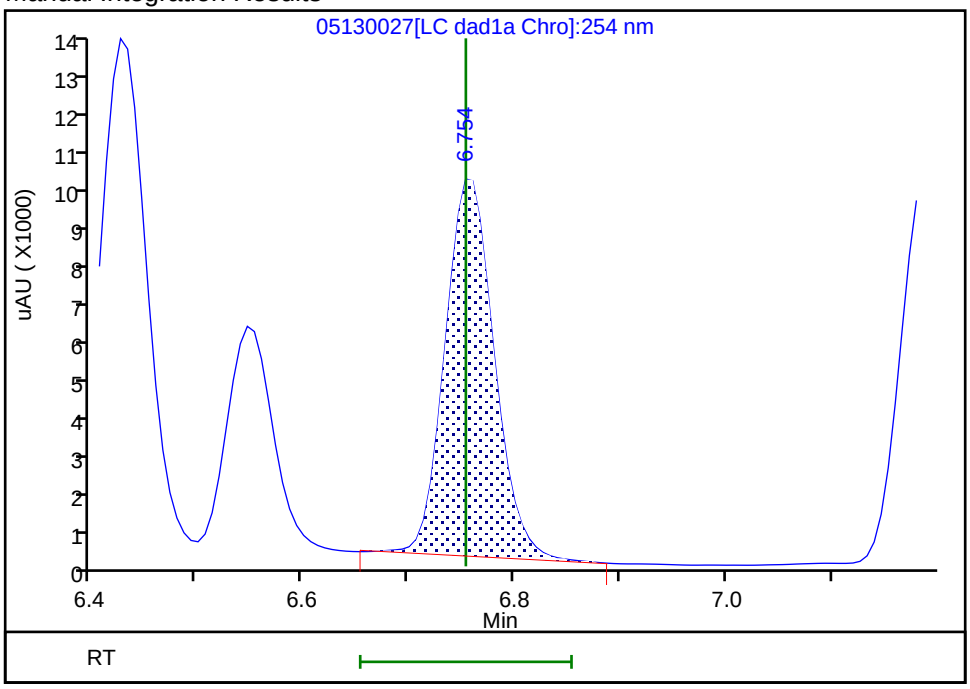
Processing Integration Results

RT: 6.75
Area: 36911
Amount: 0.255506
Amount Units: ug/mL



Manual Integration Results

RT: 6.75
Area: 30271
Amount: 0.209542
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 07:57:48
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

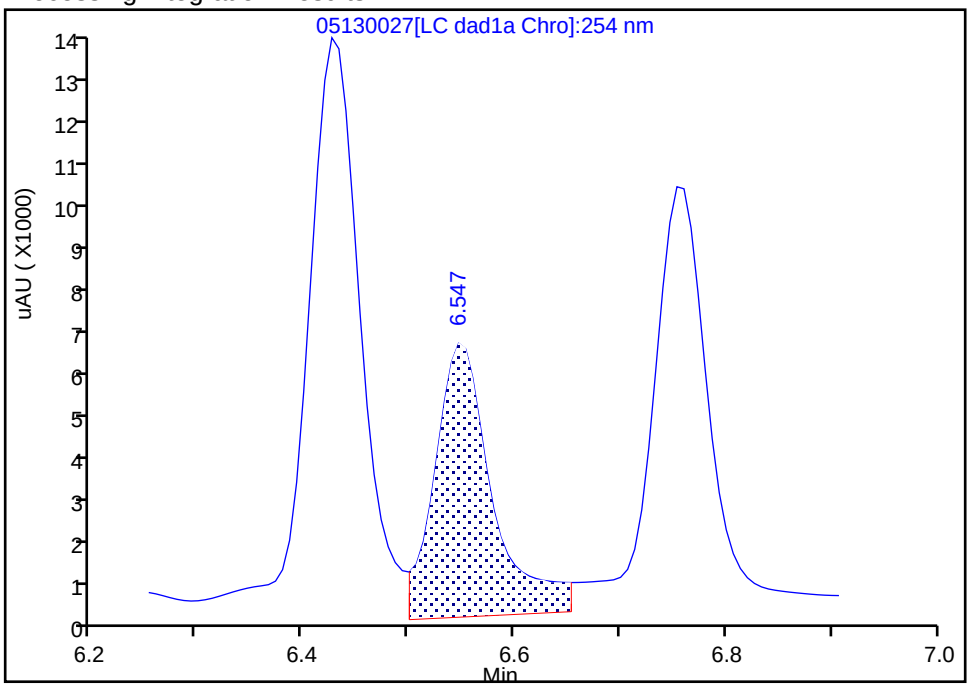
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Injection Date:	13-May-2023 20:51:12	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-611915/3-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

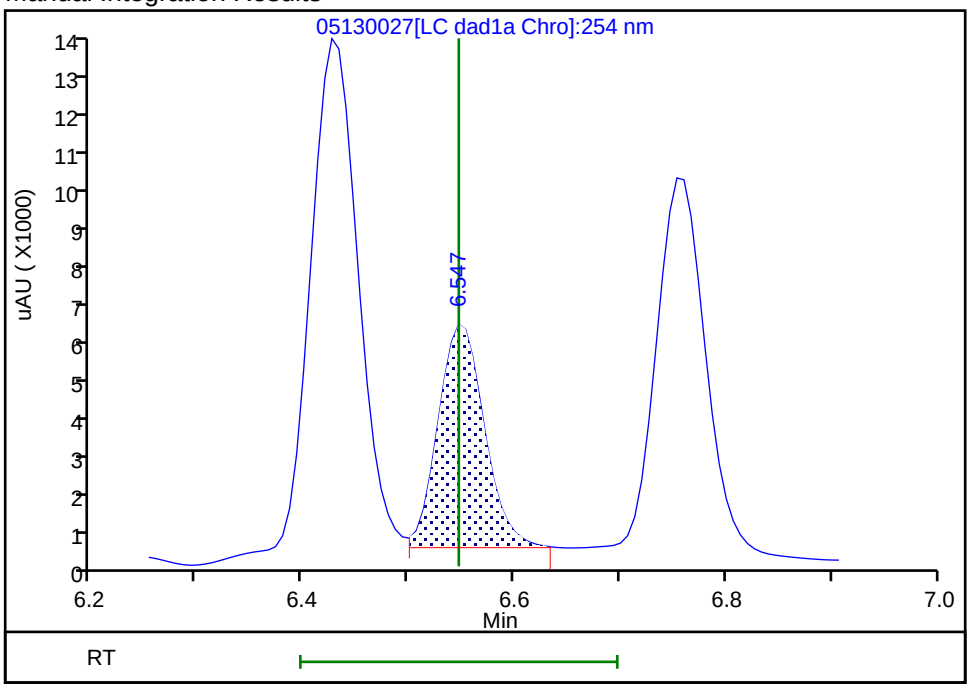
Processing Integration Results

RT: 6.55
Area: 24144
Amount: 0.258147
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 16693
Amount: 0.178481
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 07:57:22
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

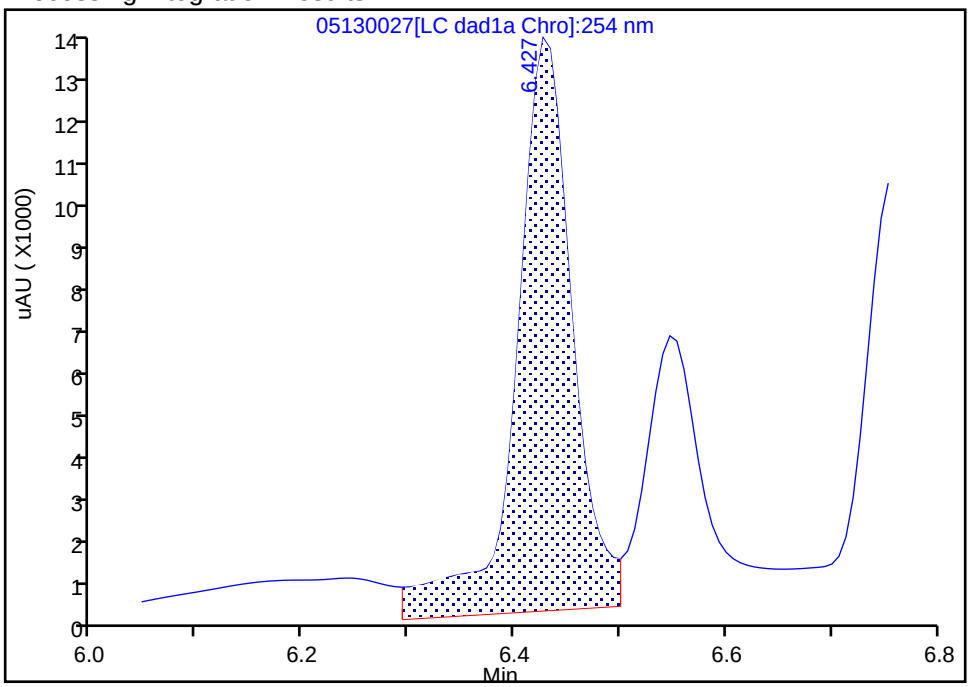
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130027.d				
Injection Date:	13-May-2023 20:51:12	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-611915/3-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

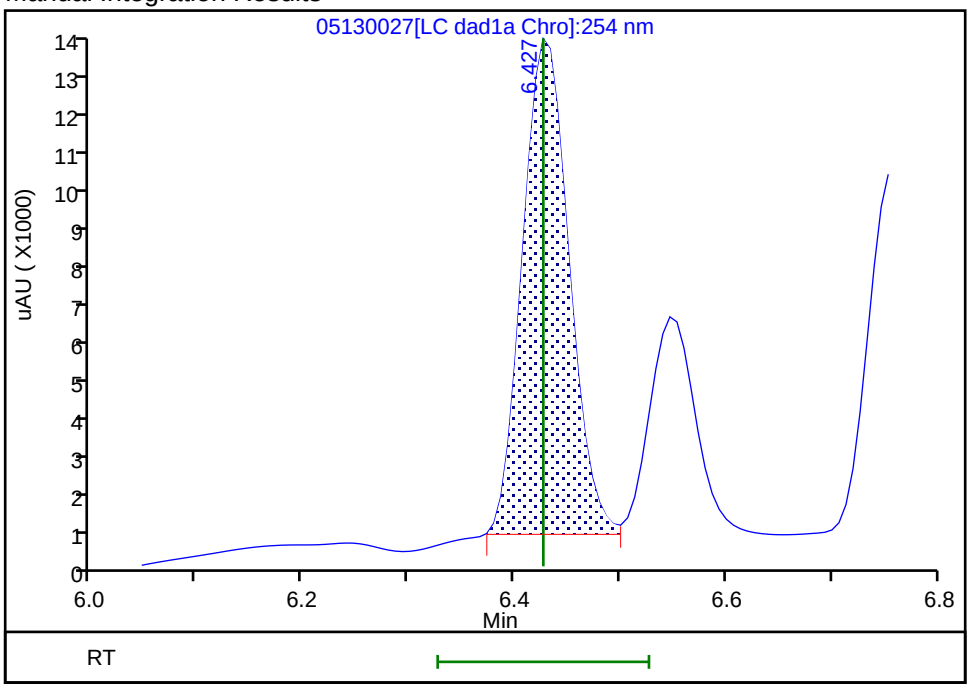
Processing Integration Results

RT: 6.43
Area: 50873
Amount: 0.257341
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 38703
Amount: 0.195779
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 07:57:18
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-175997-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 280-611915/5-A

Matrix: Water | Lab File ID: 05130029.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/10/2023 13:48

Sample wt/vol: 500(mL) | Date Analyzed: 05/13/2023 21:37

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.: 612396 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
6629-29-4	2,4-diamino-6-nitrotoluene	1.45	M	1.0	0.90	0.43
59229-75-3	2,6-diamino-4-nitrotoluene	1.58	M	1.0	0.90	0.22

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\CHHPLC_X\20230513-121427.b\05130029.D
Lims ID: LCSD 280-611915/5-A
Client ID:
Sample Type: LCSD
Inject. Date: 13-May-2023 21:37:09 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-611915/5-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:13 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: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 08:00:35

	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	6.426	-0.006	37256	0.2000	0.1584	M
5	2,4-diamino-6-nitrotoluene	1	6.607	6.620	-0.013	21185	0.2000	0.1446	M
$ 10	1,2-Dinitrobenzene	1	8.534	8.521	0.013	25625	0.2000	0.2029	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

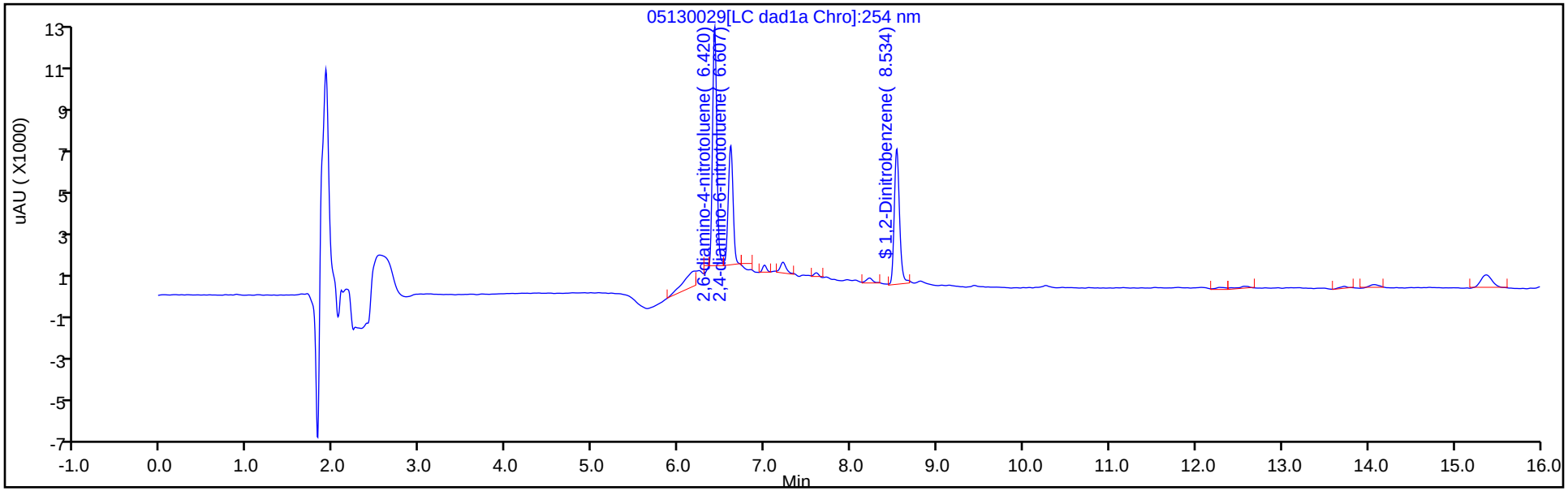
Report Date: 16-May-2023 12:37:18 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

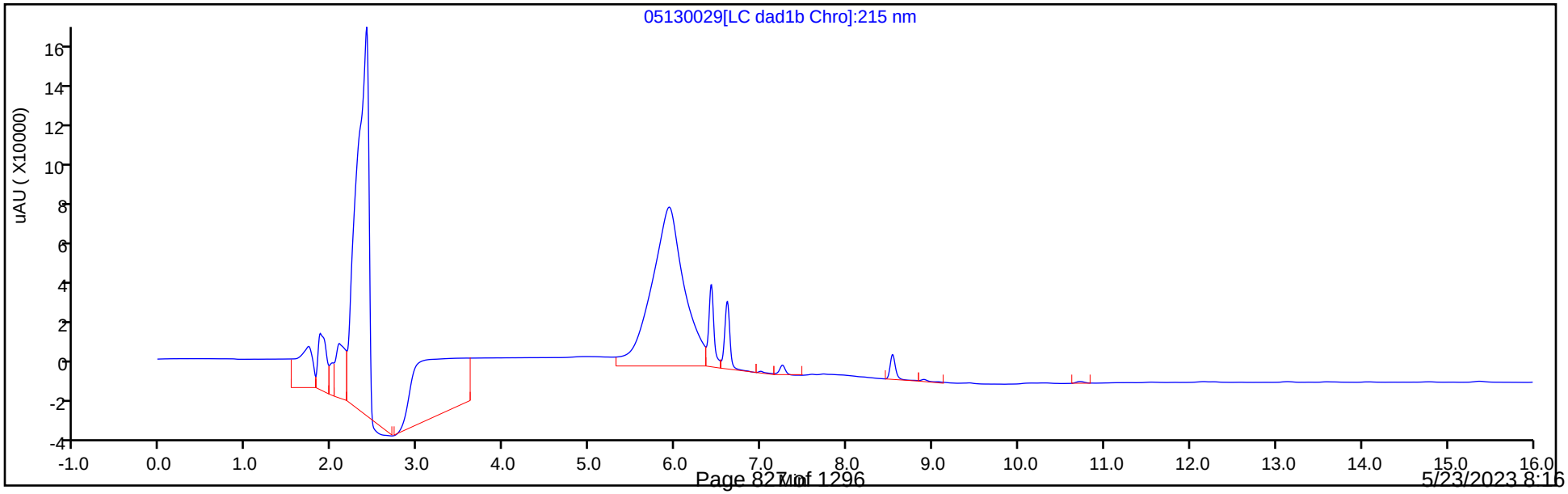
Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130029.d

Injection Date:	13-May-2023 21:37:09	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	LCSD 280-611915/5-A			Worklist Smp#:	29
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130029.D				
Lims ID:	LCSD 280-611915/5-A				
Client ID:					
Sample Type:	LCSD				
Inject. Date:	13-May-2023 21:37:09	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCSD 280-611915/5-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-May-2023 12:37:13	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:	CTX1672				

First Level Reviewer: K8YG Date: 15-May-2023 08:00:35

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2029	101.44

Manual Integration/User Assign Peak Report

Eurofins Denver

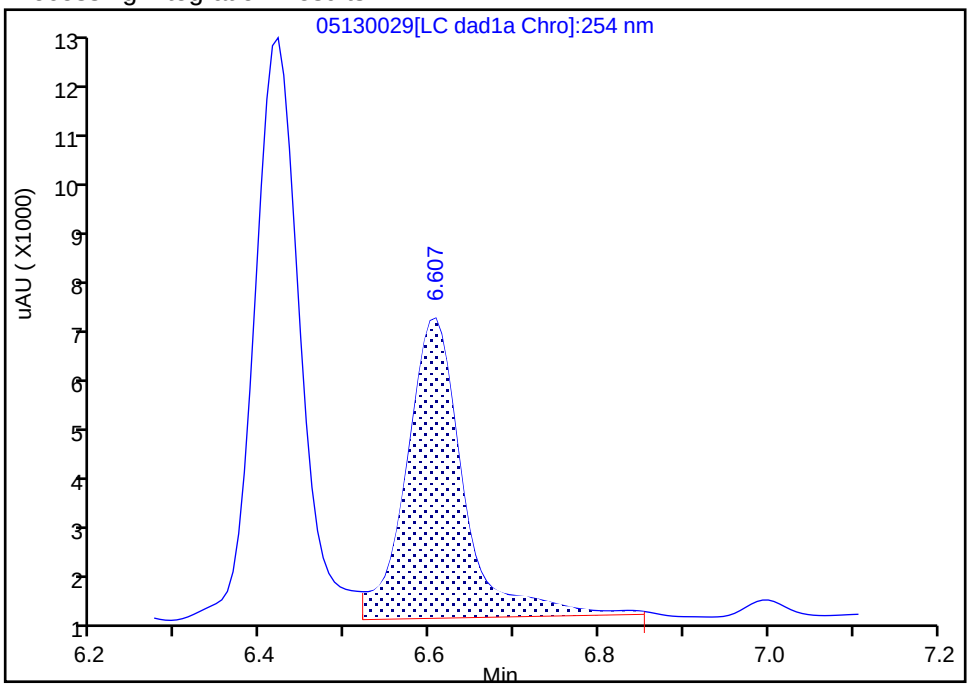
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Injection Date:	13-May-2023 21:37:09	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-611915/5-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

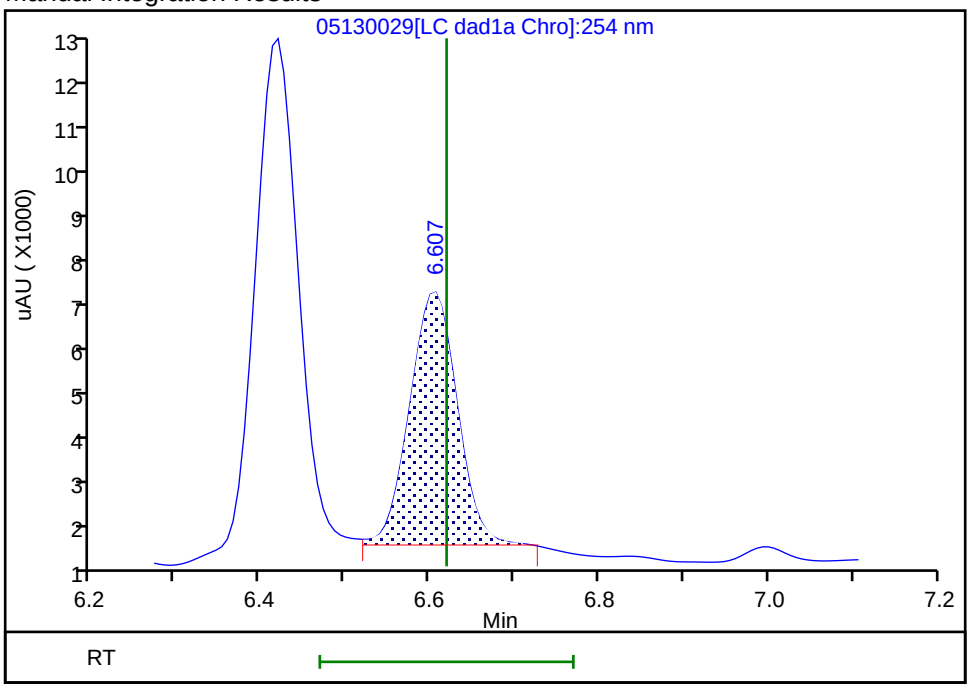
Processing Integration Results

RT: 6.61
Area: 26609
Amount: 0.181666
Amount Units: ug/mL



Manual Integration Results

RT: 6.61
Area: 21185
Amount: 0.144635
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 08:00:26
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

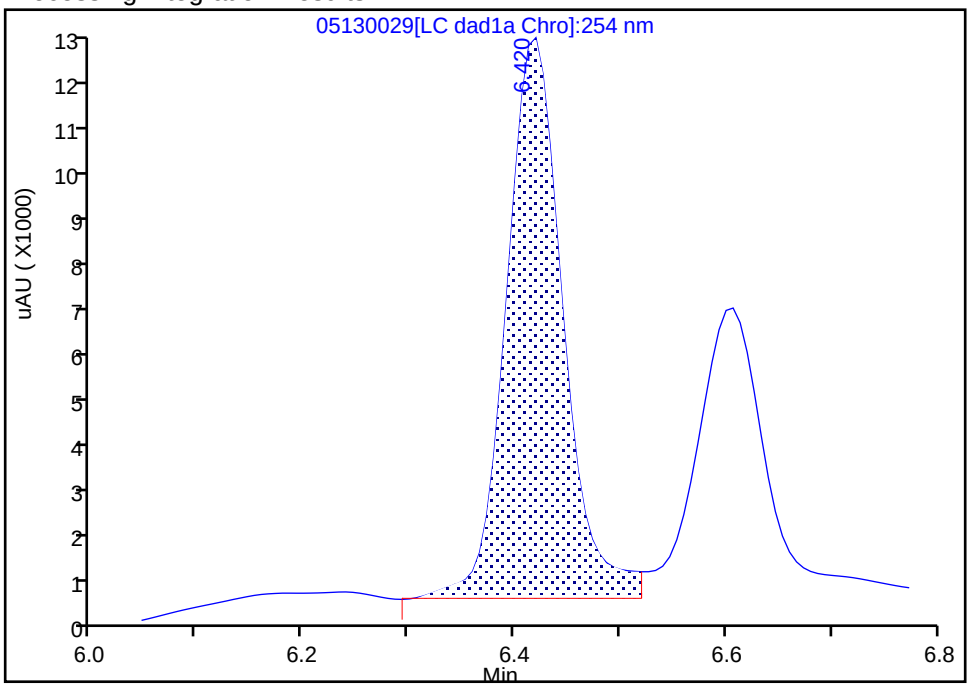
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130029.d				
Injection Date:	13-May-2023 21:37:09	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-611915/5-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

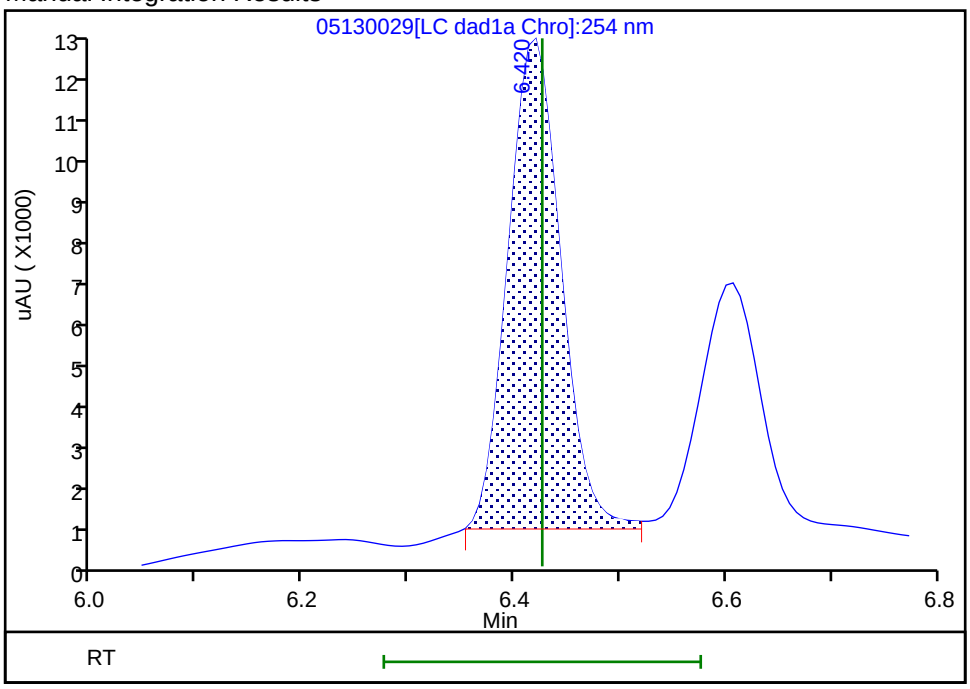
Processing Integration Results

RT: 6.42
Area: 41577
Amount: 0.177249
Amount Units: ug/mL



Manual Integration Results

RT: 6.42
Area: 37256
Amount: 0.158437
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 08:00:22

Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-175997-1

SDG No.:

Client Sample ID: LL1mw-087-230401-GW MS | Lab Sample ID: 280-175997-6 MS

Matrix: Water | Lab File ID: 05130038.D

Analysis Method: 8330B | Date Collected: 05/03/2023 13:50

Extraction Method: 3535 | Date Extracted: 05/10/2023 13:48

Sample wt/vol: 494.9(mL) | Date Analyzed: 05/14/2023 01:03

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.: 612396 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.02	M	0.21	0.20	0.085
99-65-0	1,3-Dinitrobenzene	2.03		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	1.85		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	1.87		0.10	0.081	0.028
606-20-2	2,6-Dinitrotoluene	1.95		0.10	0.081	0.041
35572-78-2	2-Amino-4,6-dinitrotoluene	1.77		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.71		0.21	0.20	0.086
618-87-1	3,5-Dinitroaniline	1.68		0.40	0.30	0.13
99-08-1	3-Nitrotoluene	1.65		0.40	0.35	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.64		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.71		0.41	0.40	0.10
80251-29-2	DNX	1.85	M	0.51	0.25	0.098
2691-41-0	HMX	1.59	M	0.21	0.20	0.089
5755-27-1	MNX	2.28	M	0.51	0.29	0.094
98-95-3	Nitrobenzene	1.83		0.21	0.20	0.092
55-63-0	Nitroglycerin	20.0		2.1	2.0	0.93
78-11-5	PETN	20.6		1.1	1.0	0.45
121-82-4	RDX	1.73	M	0.21	0.20	0.052
479-45-8	Tetryl	1.98		0.11	0.10	0.032
13980-04-6	TNX	1.82	M	0.51	0.25	0.080

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	98	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130038.D
Lims ID: 280-175997-B-6-A MS
Client ID: LL1mw-087-230401-GW
Sample Type: MS
Inject. Date: 14-May-2023 01:03:48 ALS Bottle#: 38 Worklist Smp#: 38
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-175997-B-6-A MS
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:22 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: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 11:56:15

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.436	6.427	0.009	35661	0.2006	0.1804	M
4 HMX	1	6.549	6.547	0.002	14763	0.2000	0.1578	M
6 DNX	1	6.756	6.754	0.002	26442	0.2002	0.1830	M
7 MNX	1	7.189	7.187	0.002	29648	0.2334	0.2260	M
8 RDX	1	7.569	7.574	-0.005	18250	0.2000	0.1716	M
9 2,4,6-Trinitrophenol	1	7.936	7.974	-0.038	15233	0.2000	0.2009	M
$ 10 1,2-Dinitrobenzene	1	8.522	8.521	0.001	24869	0.2000	0.1969	M
11 1,3,5-Trinitrobenzene	1	8.649	8.647	0.002	43321	0.2000	0.1995	M
12 1,3-Dinitrobenzene	1	9.269	9.274	-0.005	59117	0.2000	0.2008	
13 Nitrobenzene	1	9.642	9.647	-0.005	34567	0.2000	0.1807	
14 3,5-Dinitroaniline	1	9.882	9.887	-0.005	37966	0.2000	0.1663	
15 Tetryl	1	10.009	10.014	-0.005	32101	0.2000	0.1956	
16 Nitroglycerin	2	10.462	10.467	-0.005	126704	2.00	1.98	
17 2,4,6-Trinitrotoluene	1	10.902	10.914	-0.012	38737	0.2000	0.1836	
18 4-Amino-2,6-dinitrotoluene	1	11.102	11.114	-0.012	25208	0.2000	0.1627	
19 2-Amino-4,6-dinitrotoluene	1	11.356	11.367	-0.011	35358	0.2000	0.1756	
20 2,6-Dinitrotoluene	1	11.509	11.514	-0.005	27510	0.2000	0.1927	
21 2,4-Dinitrotoluene	1	11.676	11.687	-0.011	55002	0.2000	0.1854	
22 o-Nitrotoluene	1	12.502	12.514	-0.012	21655	0.2000	0.1693	
23 p-Nitrotoluene	1	12.922	12.940	-0.018	18931	0.2000	0.1692	
24 m-Nitrotoluene	1	13.496	13.514	-0.018	22897	0.2000	0.1630	
25 PETN	2	14.656	14.694	-0.038	140525	2.00	2.04	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

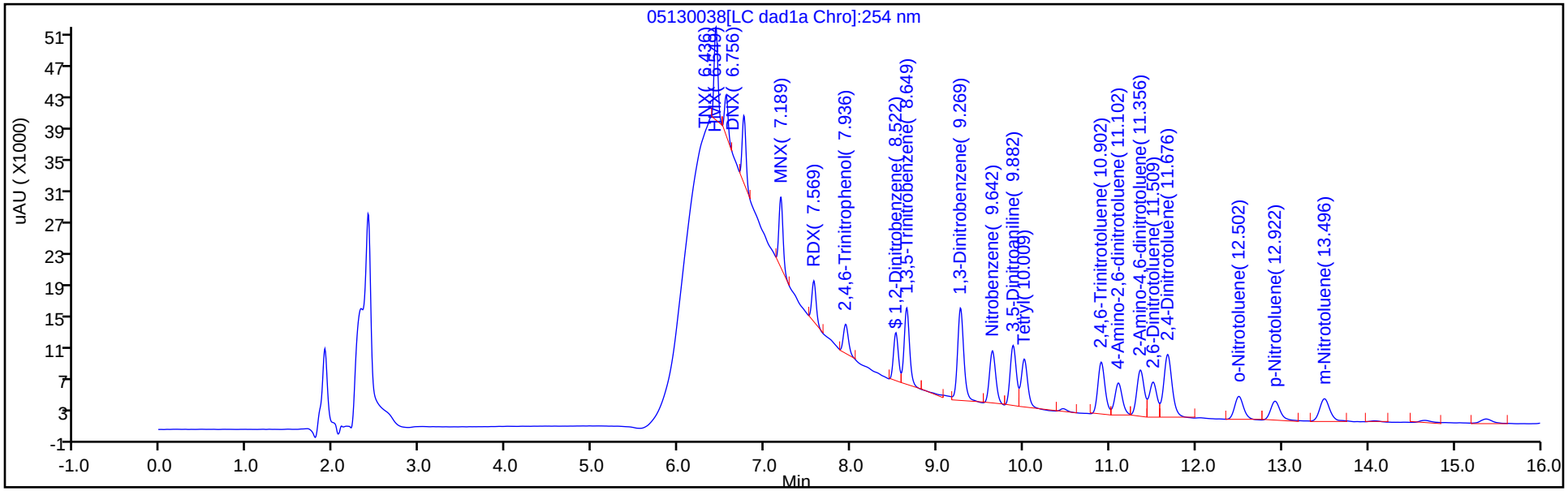
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Eurofins Denver

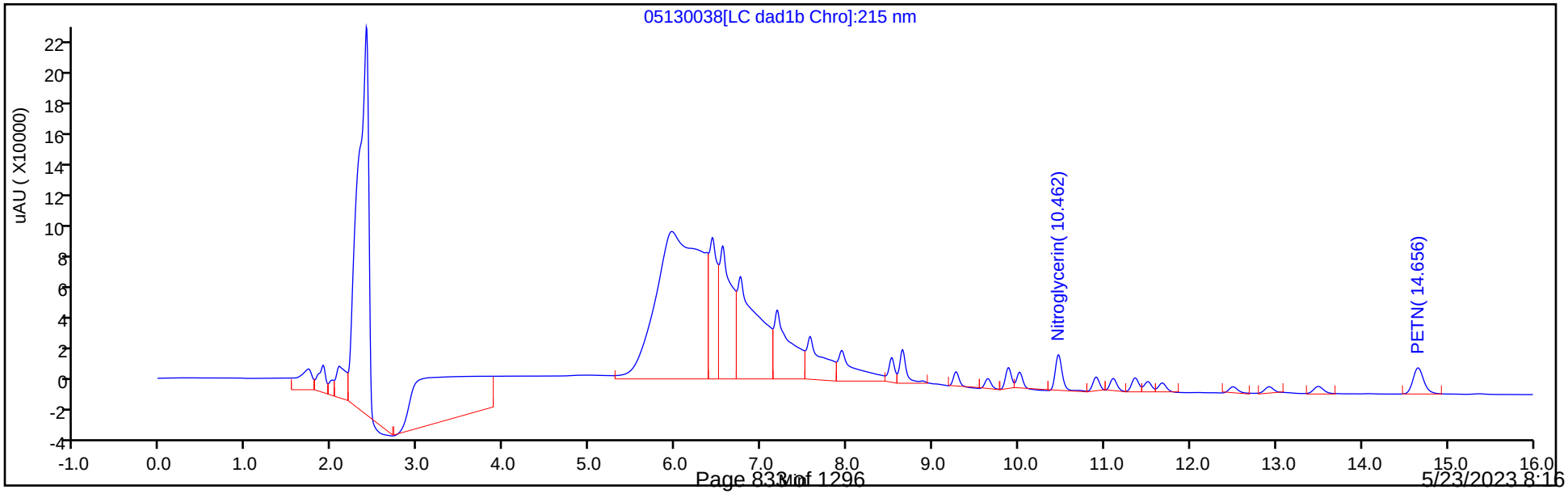
Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130038.d

Injection Date:	14-May-2023 01:03:48	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-175997-B-6-A MS			Worklist Smp#:	38
Client ID:	LL1mw-087-230401-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	38
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\20230513-121427.b\05130038.D				
Lims ID:	280-175997-B-6-A MS				
Client ID:	LL1mw-087-230401-GW				
Sample Type:	MS				
Inject. Date:	14-May-2023 01:03:48	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-175997-B-6-A MS				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-May-2023 12:37:22	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:	CTX1672				

First Level Reviewer: K8YG Date: 15-May-2023 11:56:15

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1969	98.45

Manual Integration/User Assign Peak Report

Eurofins Denver

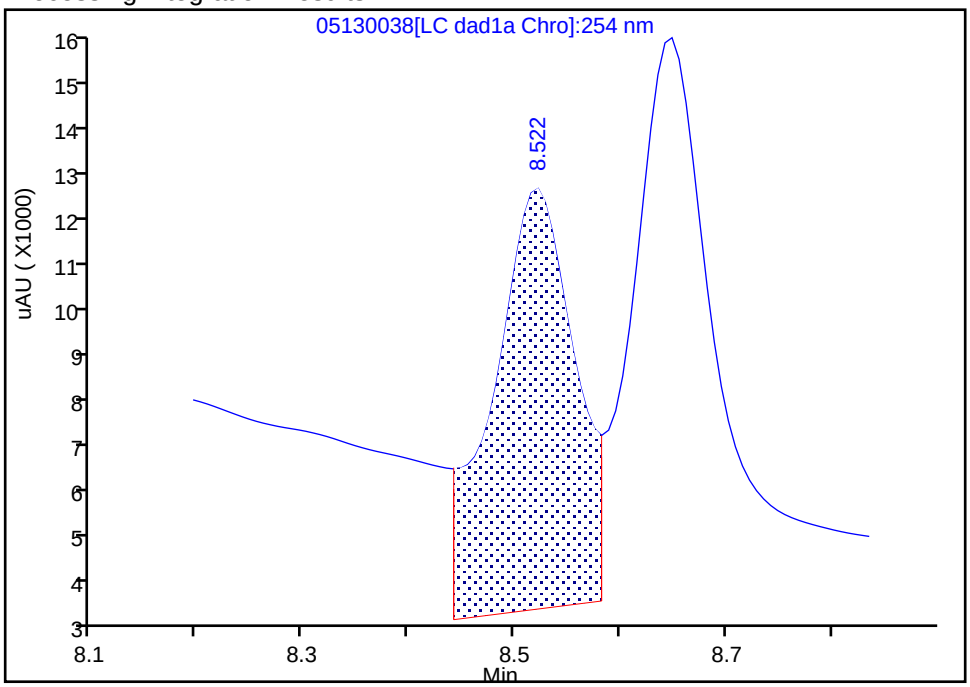
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Injection Date:	14-May-2023 01:03:48	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-B-6-A MS				
Client ID:	LL1mw-087-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

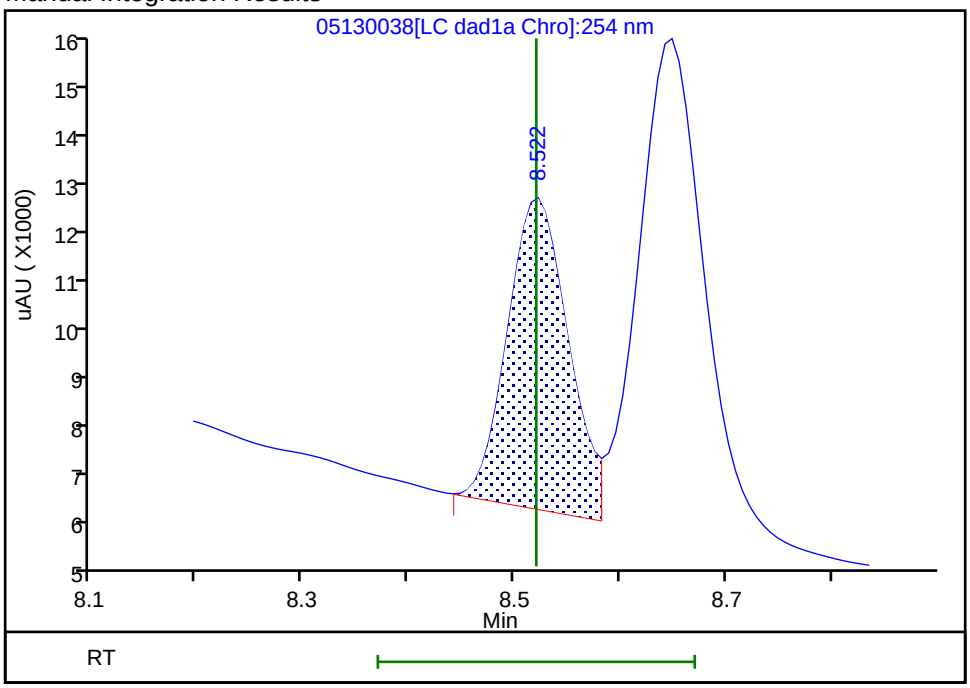
Processing Integration Results

RT: 8.52
Area: 47696
Amount: 0.377615
Amount Units: ug/mL



Manual Integration Results

RT: 8.52
Area: 24869
Amount: 0.196891
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 11:55:50
Audit Action: Assigned New Baseline Audit Reason: Baseline

Eurofins Denver

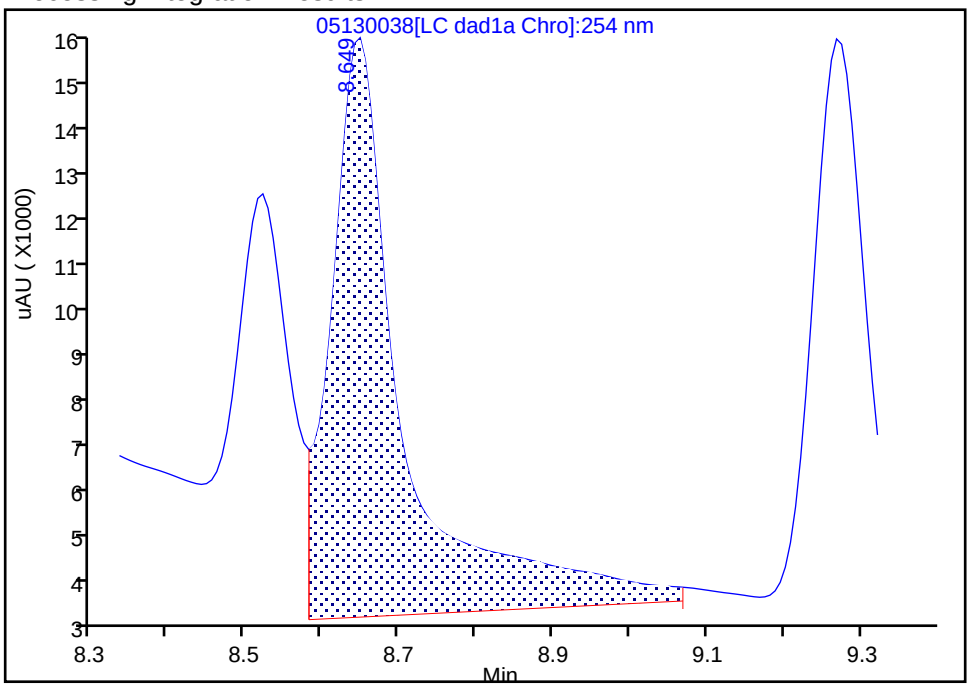
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130038.d				
Injection Date:	14-May-2023 01:03:48	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-B-6-A MS				
Client ID:	LL1mw-087-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	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

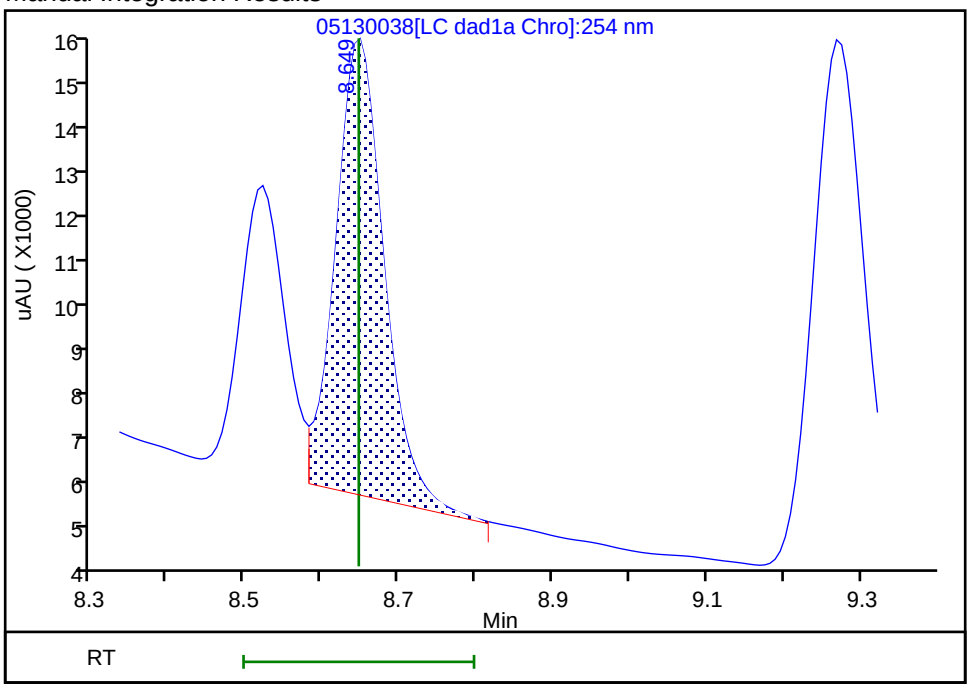
Processing Integration Results

RT: 8.65
Area: 78270
Amount: 0.360447
Amount Units: ug/mL



Manual Integration Results

RT: 8.65
Area: 43321
Amount: 0.199501
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 11:55:58
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

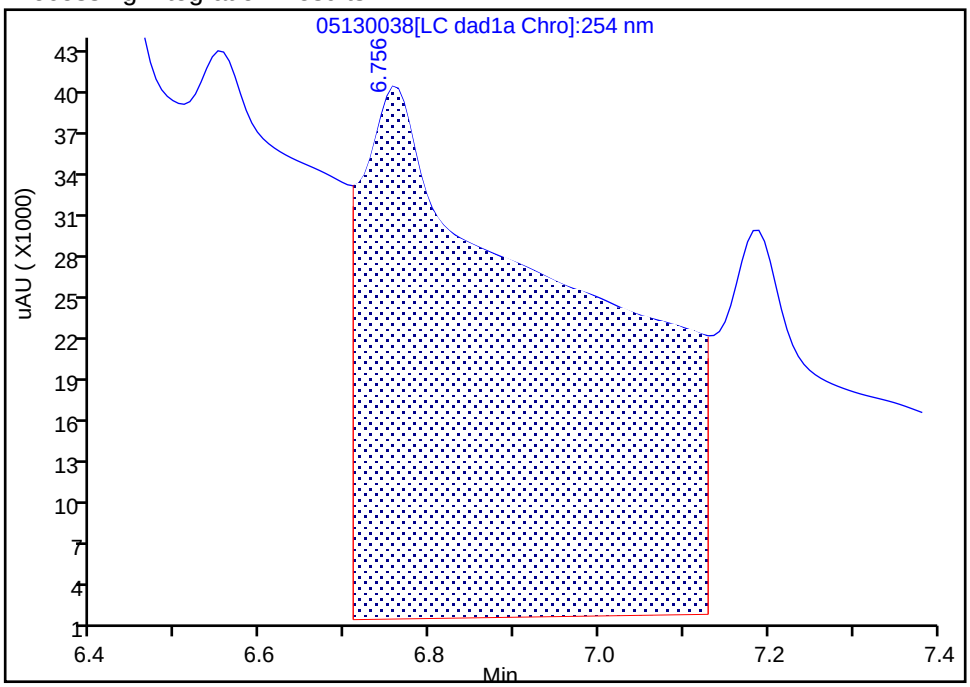
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Injection Date:	14-May-2023 01:03:48	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-B-6-A MS				
Client ID:	LL1mw-087-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

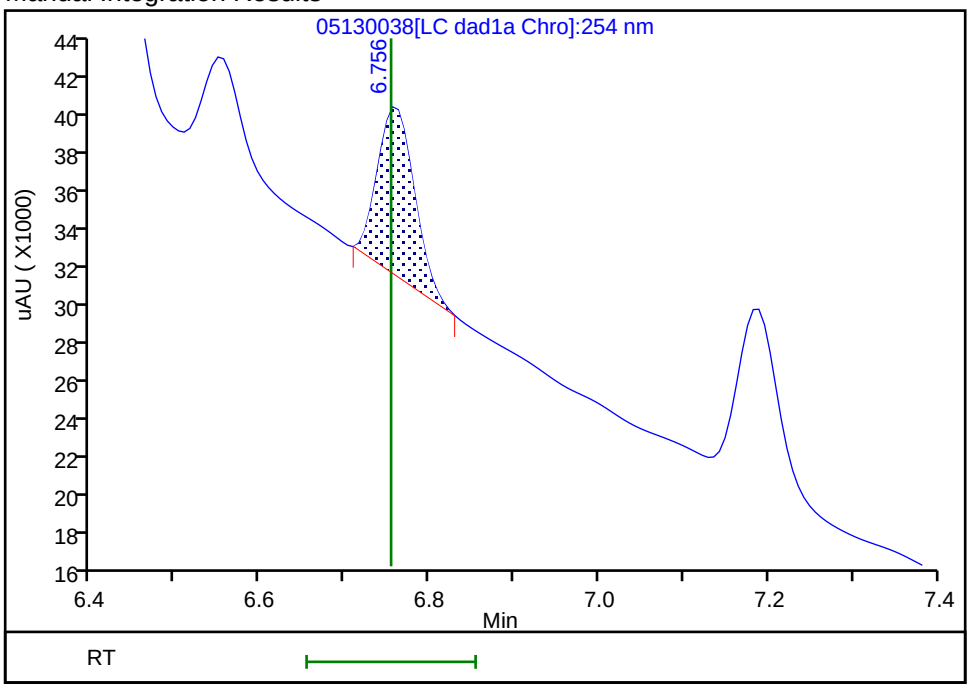
Processing Integration Results

RT: 6.76
Area: 669676
Amount: 4.635639
Amount Units: ug/mL



Manual Integration Results

RT: 6.76
Area: 26442
Amount: 0.183037
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 11:55:06
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver

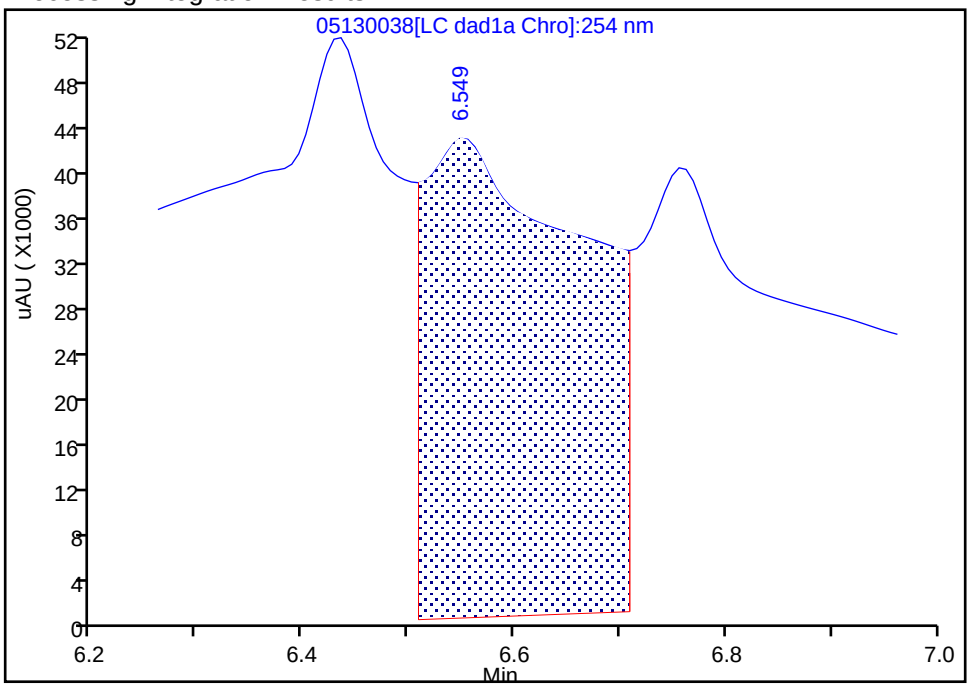
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130038.d				
Injection Date:	14-May-2023 01:03:48	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-B-6-A MS				
Client ID:	LL1mw-087-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	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

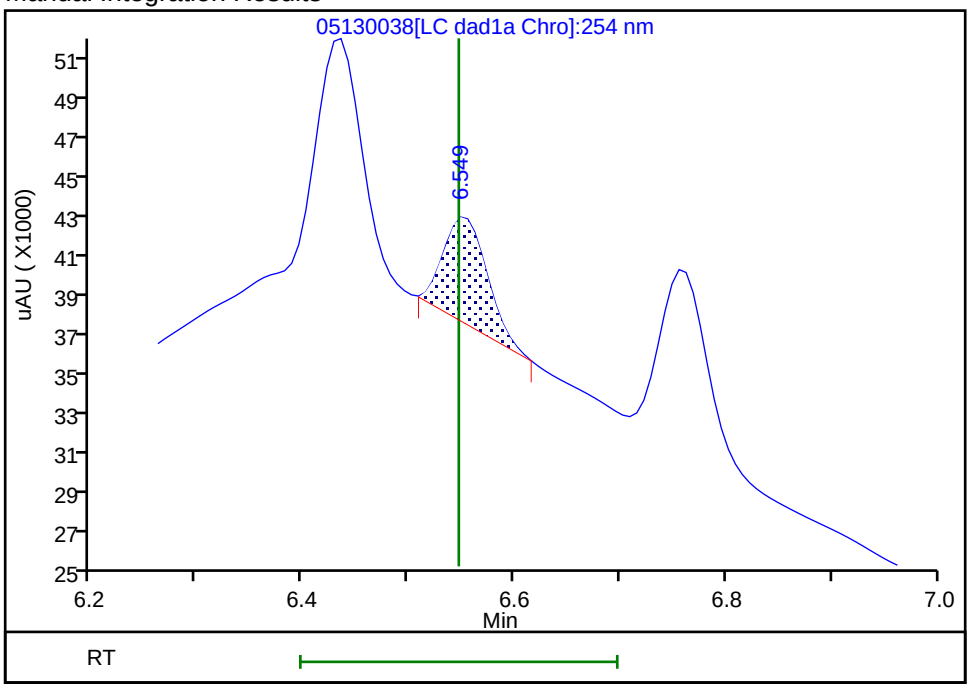
Processing Integration Results

RT: 6.55
Area: 433152
Amount: 4.631247
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 14763
Amount: 0.157846
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 11:55:01
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

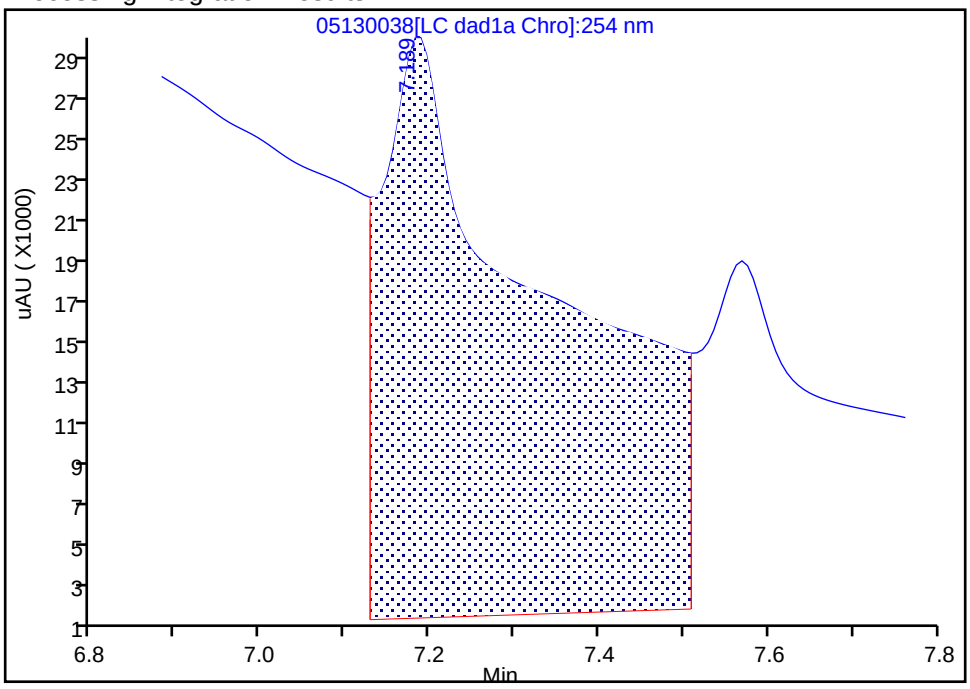
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Injection Date:	14-May-2023 01:03:48	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-B-6-A MS				
Client ID:	LL1mw-087-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

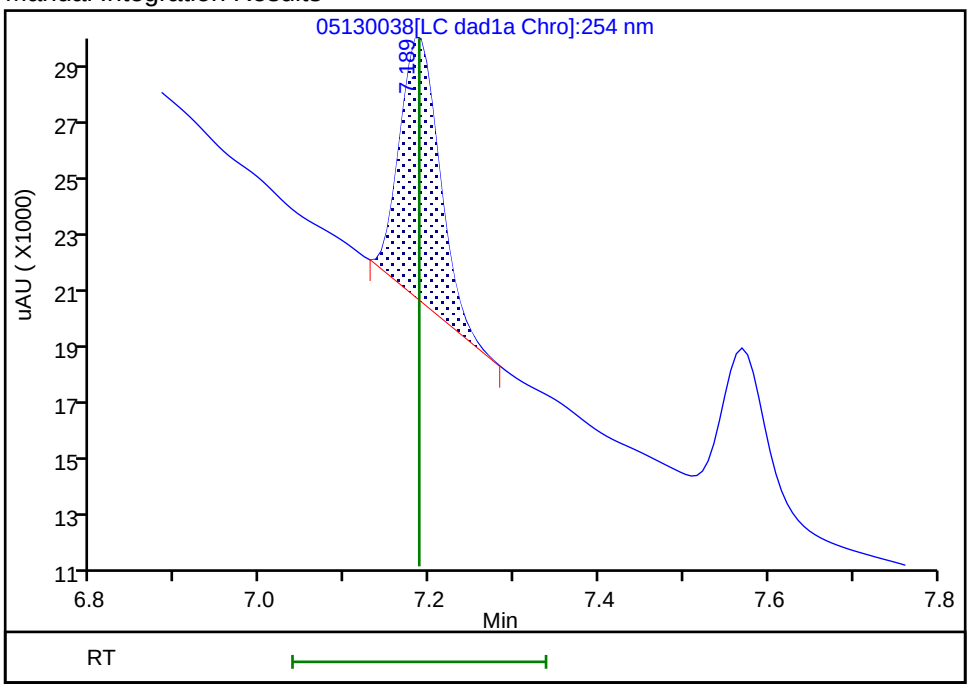
Processing Integration Results

RT: 7.19
Area: 392614
Amount: 2.993133
Amount Units: ug/mL



Manual Integration Results

RT: 7.19
Area: 29648
Amount: 0.226025
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 11:55:10
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

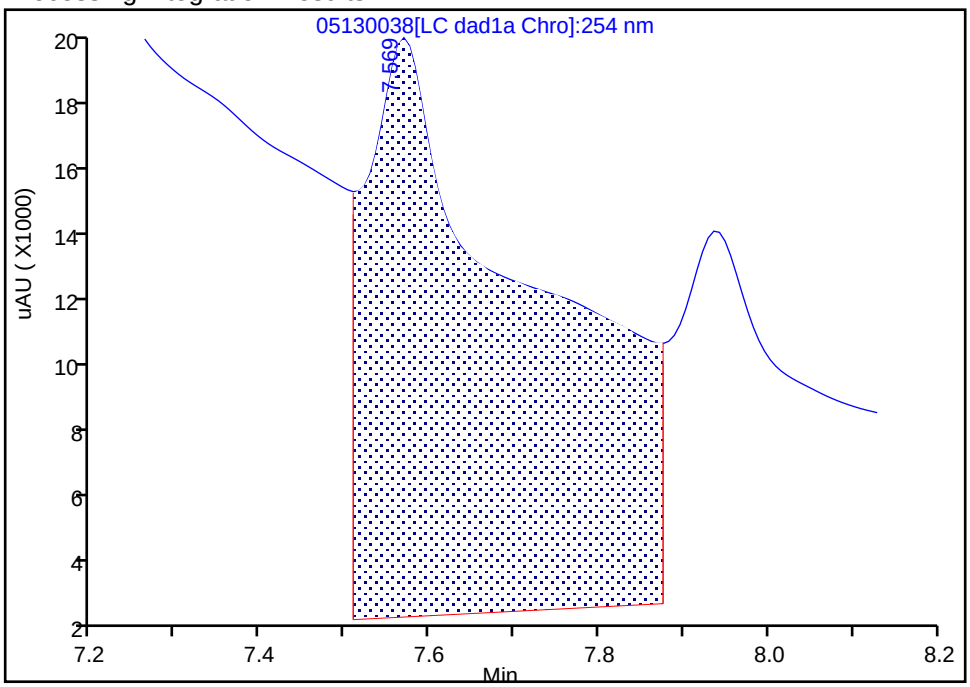
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Injection Date:	14-May-2023 01:03:48	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-B-6-A MS				
Client ID:	LL1mw-087-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

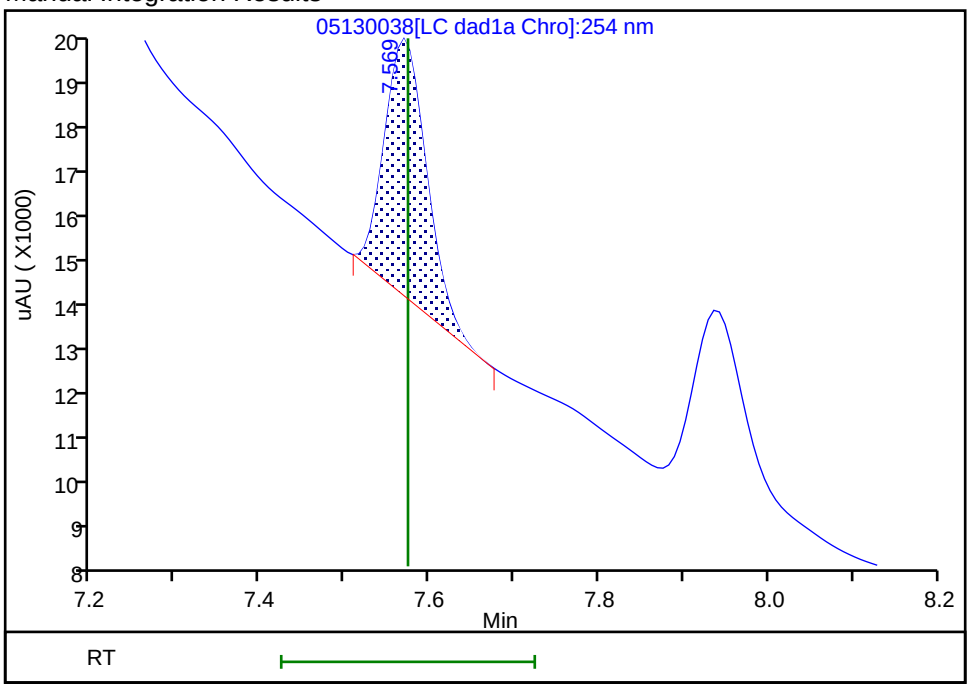
Processing Integration Results

RT: 7.57
Area: 233454
Amount: 2.194533
Amount Units: ug/mL



Manual Integration Results

RT: 7.57
Area: 18250
Amount: 0.171555
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 11:55:16
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

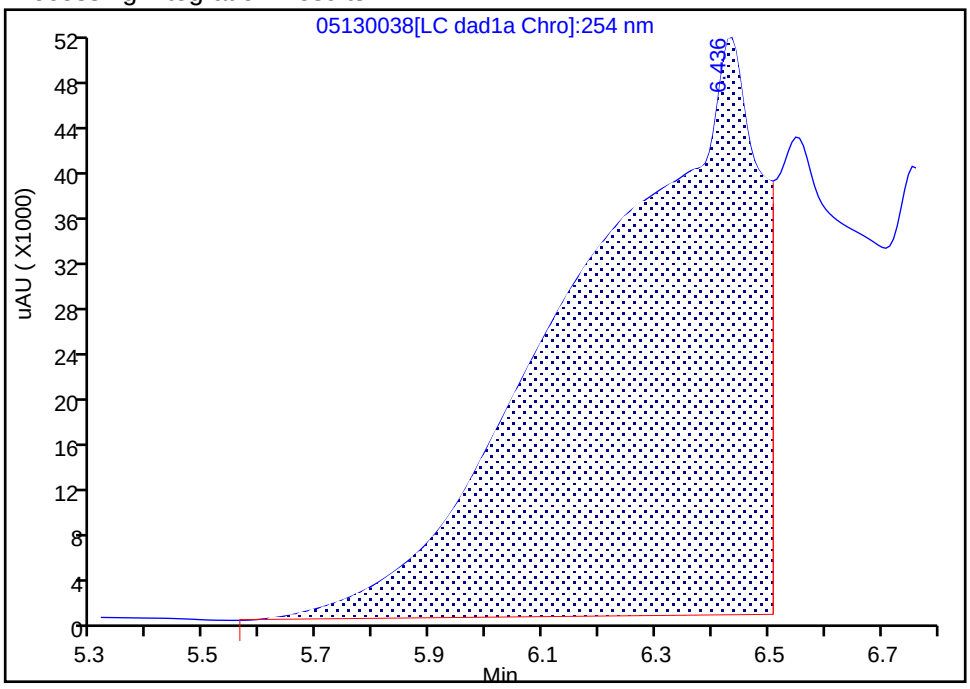
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Injection Date:	14-May-2023 01:03:48	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-B-6-A MS				
Client ID:	LL1mw-087-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

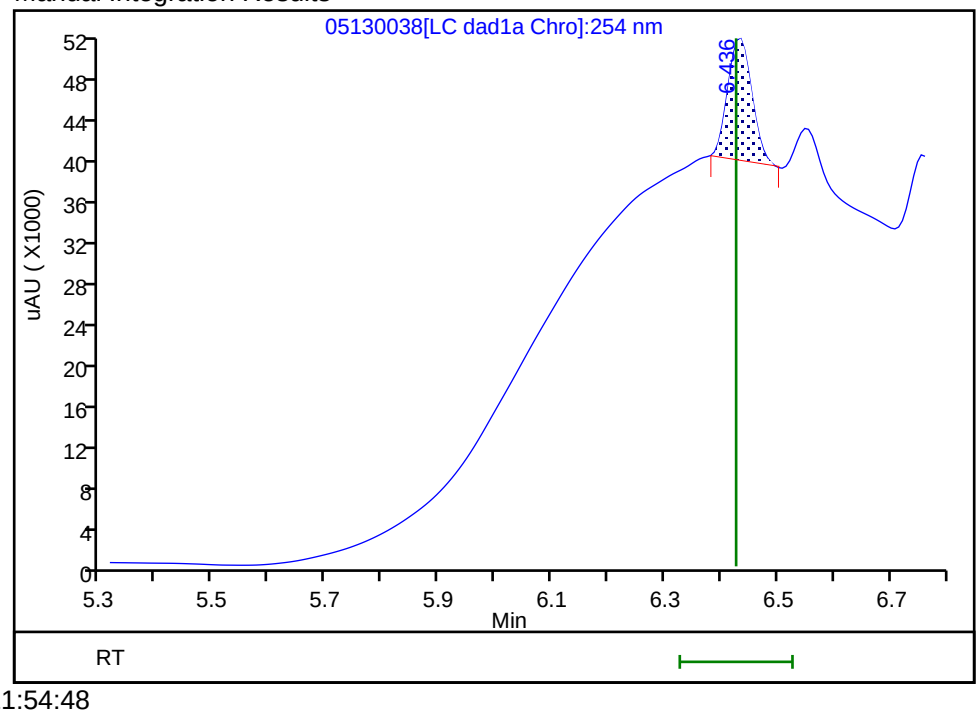
Processing Integration Results

RT: 6.44
Area: 1130365
Amount: 5.717944
Amount Units: ug/mL



Manual Integration Results

RT: 6.44
Area: 35661
Amount: 0.180391
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 11:54:48

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-175997-1

SDG No.:

Client Sample ID: LL1mw-087-230401-GW MS | Lab Sample ID: 280-175997-6 MS

Matrix: Water | Lab File ID: 05130040.D

Analysis Method: 8330B | Date Collected: 05/03/2023 13:50

Extraction Method: 3535 | Date Extracted: 05/10/2023 13:48

Sample wt/vol: 451.1(mL) | Date Analyzed: 05/14/2023 01:49

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.: 612396 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
6629-29-4	2,4-diamino-6-nitrotoluene	1.42	J1 M	1.1	1.0	0.48
59229-75-3	2,6-diamino-4-nitrotoluene	1.70	M	1.1	1.0	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	99	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130040.D
Lims ID: 280-175997-C-6-A MS
Client ID: LL1mw-087-230401-GW
Sample Type: MS
Inject. Date: 14-May-2023 01:49:43 ALS Bottle#: 40 Worklist Smp#: 40
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-175997-C-6-A MS
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:22 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: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 11:59:43

	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	6.418	6.426	-0.008	36129	0.2000	0.1535	M
	5 2,4-diamino-6-nitrotoluene	1	6.605	6.620	-0.015	18821	0.2000	0.1285	M
$	10 1,2-Dinitrobenzene	1	8.518	8.521	-0.003	24943	0.2000	0.1975	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

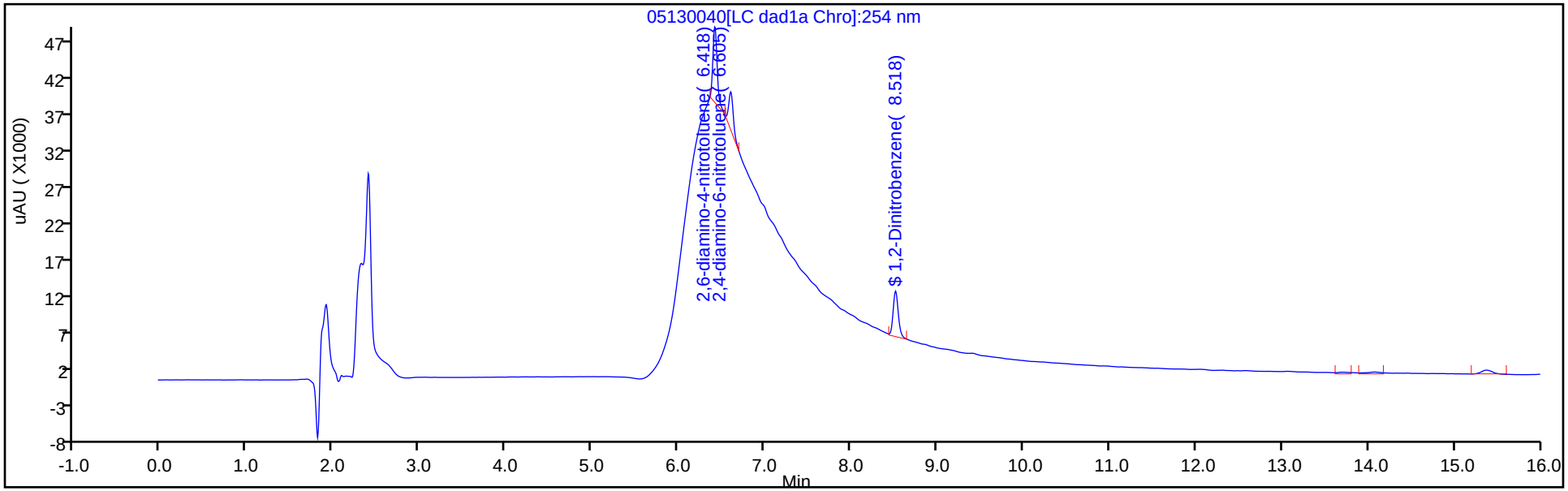
Report Date: 16-May-2023 12:37:27 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

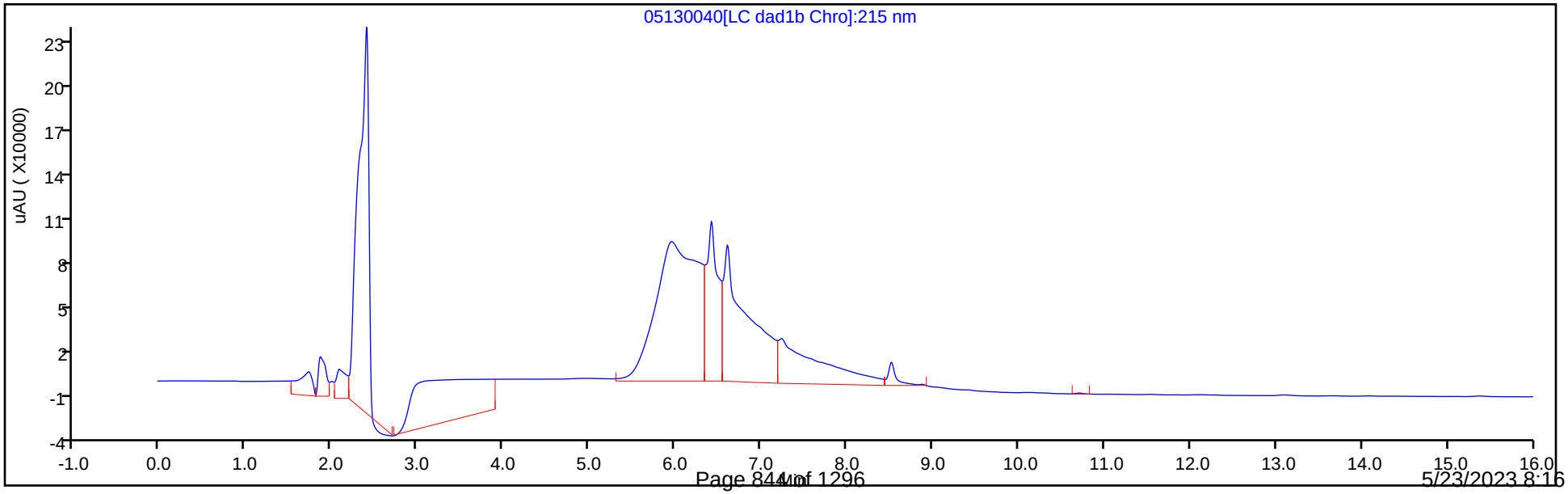
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Injection Date:	14-May-2023 01:49:43	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-175997-C-6-A MS			Worklist Smp#:	40
Client ID:	LL1mw-087-230401-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	40
Method:	8330_X3	Limit Group:	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\20230513-121427.b\05130040.D				
Lims ID:	280-175997-C-6-A MS				
Client ID:	LL1mw-087-230401-GW				
Sample Type:	MS				
Inject. Date:	14-May-2023 01:49:43	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-175997-C-6-A MS				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-May-2023 12:37:22	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:	CTX1672				

First Level Reviewer: K8YG Date: 15-May-2023 11:59:43

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1975	98.74

Manual Integration/User Assign Peak Report

Eurofins Denver

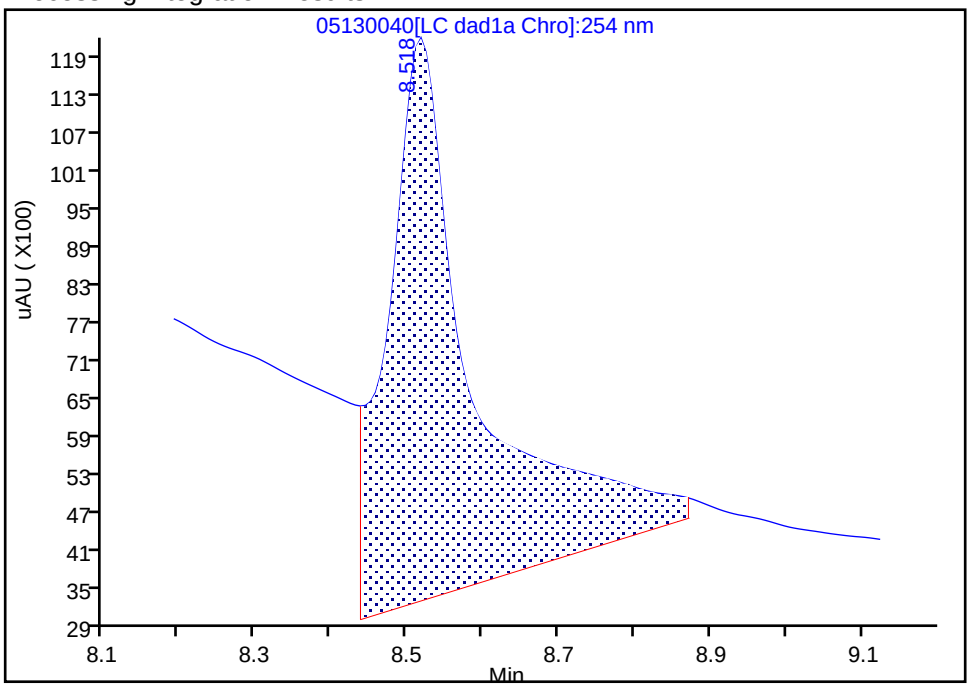
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Injection Date:	14-May-2023 01:49:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-C-6-A MS				
Client ID:	LL1mw-087-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

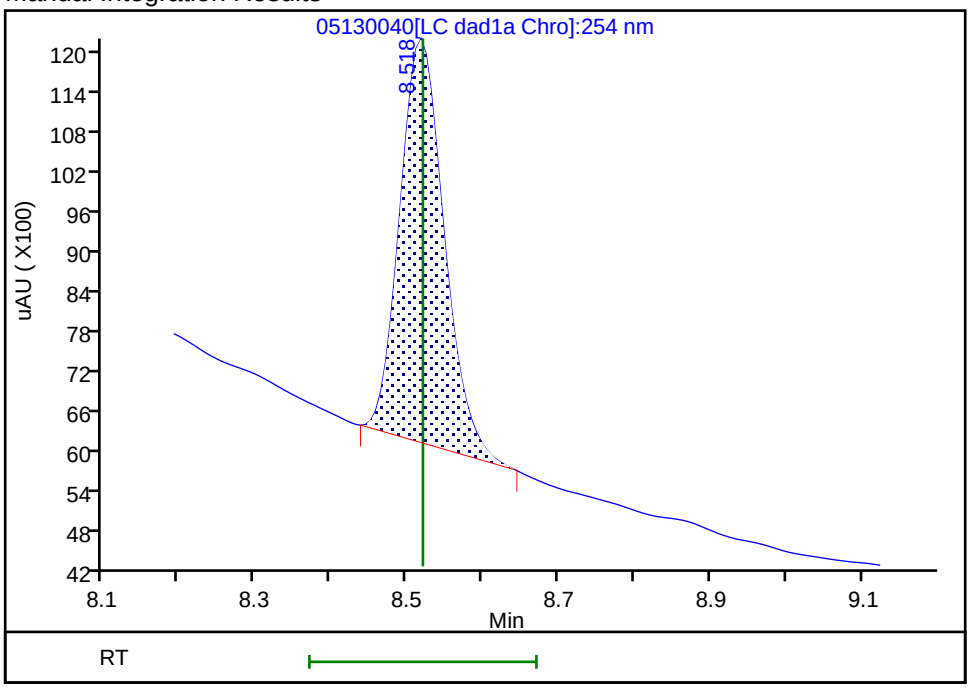
Processing Integration Results

RT: 8.52
Area: 72626
Amount: 0.574988
Amount Units: ug/mL



Manual Integration Results

RT: 8.52
Area: 24943
Amount: 0.197476
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 11:59:38
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

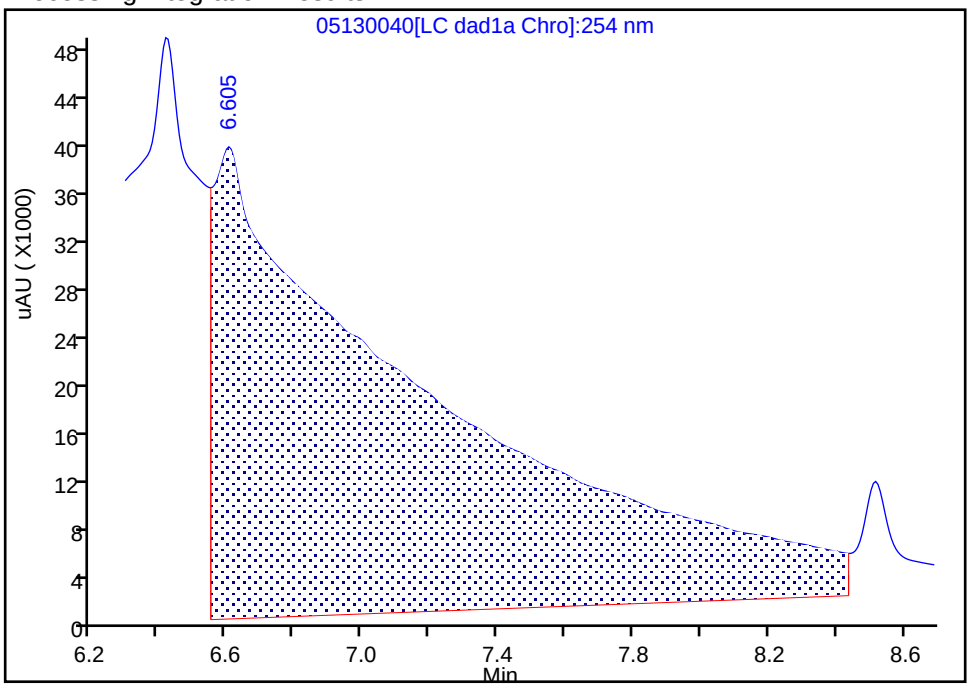
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130040.d				
Injection Date:	14-May-2023 01:49:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-C-6-A MS				
Client ID:	LL1mw-087-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

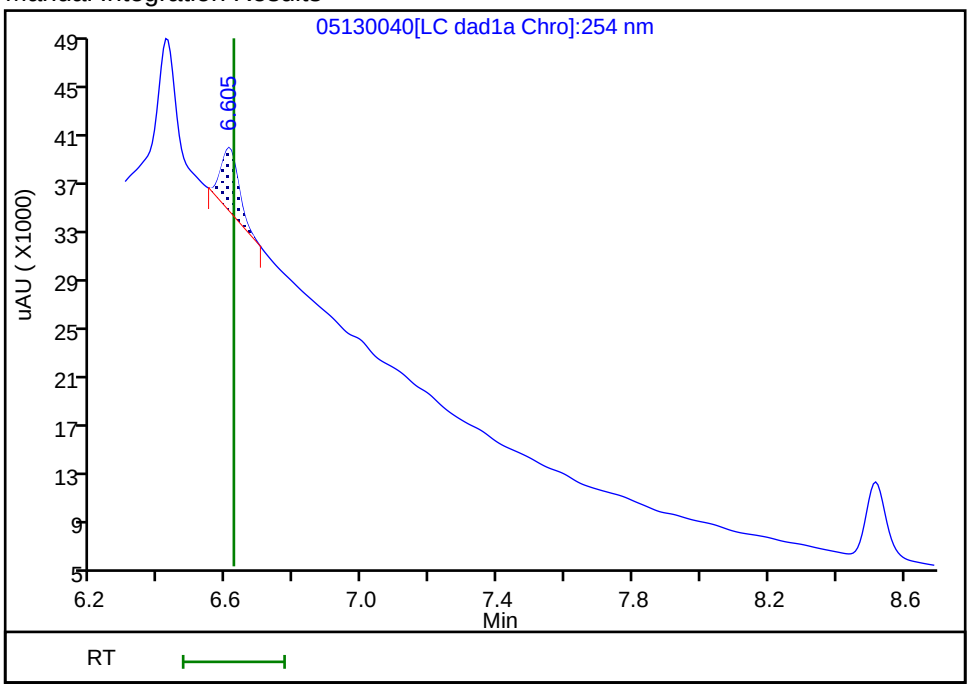
Processing Integration Results

RT: 6.60
Area: 1676697
Amount: 11.447208
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 18821
Amount: 0.128495
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 11:59:32

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

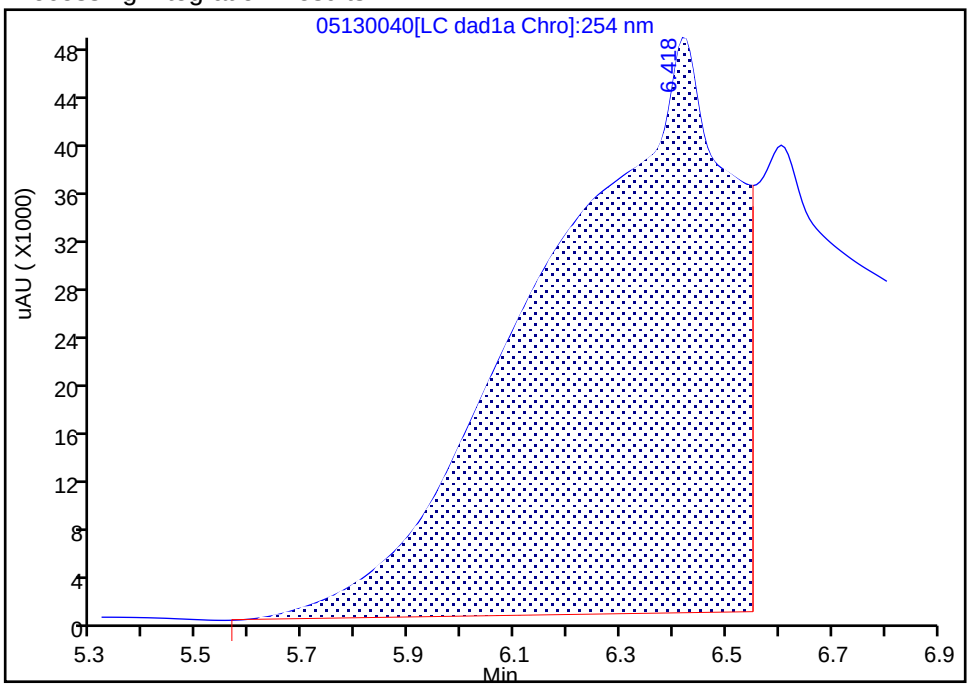
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Injection Date:	14-May-2023 01:49:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-C-6-A MS				
Client ID:	LL1mw-087-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

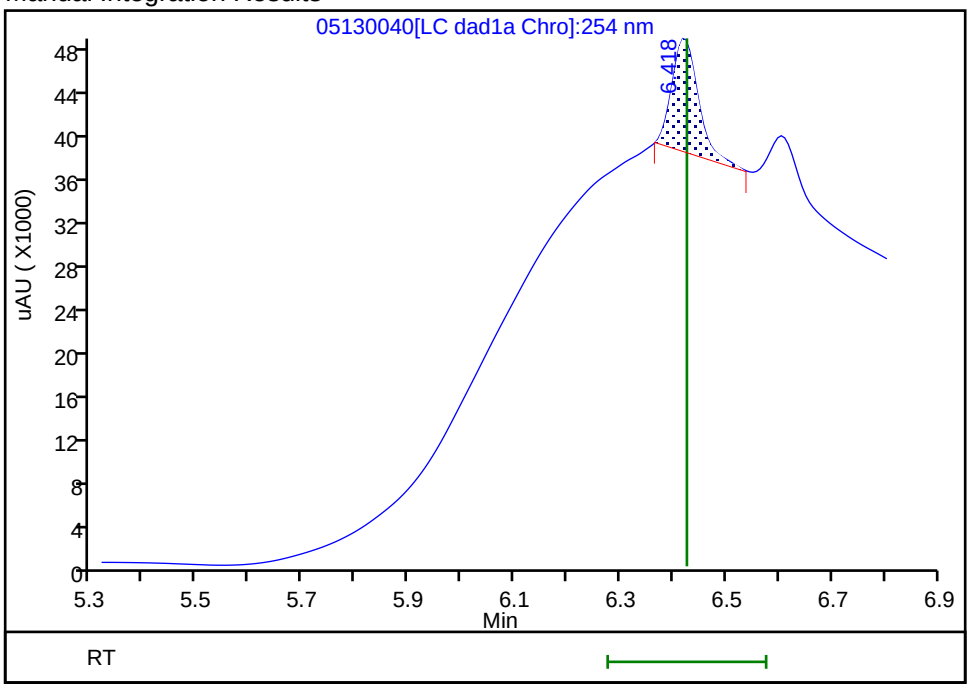
Processing Integration Results

RT: 6.42
Area: 1181169
Amount: 5.138619
Amount Units: ug/mL



Manual Integration Results

RT: 6.42
Area: 36129
Amount: 0.153530
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 11:59:27
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-175997-1

SDG No.:

Client Sample ID: LL1mw-087-230401-GW MSD | Lab Sample ID: 280-175997-6 MSD

Matrix: Water | Lab File ID: 05130039.D

Analysis Method: 8330B | Date Collected: 05/03/2023 13:50

Extraction Method: 3535 | Date Extracted: 05/10/2023 13:48

Sample wt/vol: 488.4(mL) | Date Analyzed: 05/14/2023 01:26

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.: 612396 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.98	M	0.21	0.20	0.086
99-65-0	1,3-Dinitrobenzene	2.03		0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	1.84		0.11	0.10	0.046
121-14-2	2,4-Dinitrotoluene	1.82		0.10	0.082	0.028
606-20-2	2,6-Dinitrotoluene	1.85		0.10	0.082	0.041
35572-78-2	2-Amino-4,6-dinitrotoluene	1.79		0.11	0.10	0.052
88-72-2	2-Nitrotoluene	1.62		0.21	0.20	0.088
618-87-1	3,5-Dinitroaniline	1.71		0.41	0.31	0.13
99-08-1	3-Nitrotoluene	1.53		0.41	0.36	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.64		0.15	0.12	0.059
99-99-0	4-Nitrotoluene	1.61		0.42	0.41	0.10
80251-29-2	DNX	1.87	M	0.51	0.26	0.10
2691-41-0	HMX	1.62	M	0.21	0.20	0.090
5755-27-1	MNX	2.15	M	0.51	0.30	0.095
98-95-3	Nitrobenzene	1.79		0.21	0.20	0.093
55-63-0	Nitroglycerin	19.1		2.1	2.0	0.94
78-11-5	PETN	20.8		1.1	1.0	0.46
121-82-4	RDX	1.73	M	0.21	0.20	0.053
479-45-8	Tetryl	1.99		0.11	0.10	0.033
13980-04-6	TNX	1.82	M	0.51	0.26	0.081

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	94	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130039.D
Lims ID: 280-175997-A-6-B MSD
Client ID: LL1mw-087-230401-GW
Sample Type: MSD
Inject. Date: 14-May-2023 01:26:44 ALS Bottle#: 39 Worklist Smp#: 39
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-175997-A-6-B MSD
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:22 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: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 11:59:11

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.428	6.427	0.001	35104	0.2006	0.1776	M
4 HMX	1	6.548	6.547	0.001	14805	0.2000	0.1583	M
6 DNX	1	6.755	6.754	0.001	26360	0.2002	0.1825	M
7 MNX	1	7.181	7.187	-0.006	27609	0.2334	0.2105	M
8 RDX	1	7.568	7.574	-0.006	17970	0.2000	0.1689	M
9 2,4,6-Trinitrophenol	1	7.948	7.974	-0.026	14671	0.2000	0.1935	M
$ 10 1,2-Dinitrobenzene	1	8.528	8.521	0.007	23820	0.2000	0.1886	M
11 1,3,5-Trinitrobenzene	1	8.655	8.647	0.008	41916	0.2000	0.1930	M
12 1,3-Dinitrobenzene	1	9.274	9.274	0.000	58391	0.2000	0.1983	
13 Nitrobenzene	1	9.641	9.647	-0.006	33371	0.2000	0.1745	
14 3,5-Dinitroaniline	1	9.881	9.887	-0.006	38239	0.2000	0.1675	
15 Tetryl	1	10.014	10.014	0.000	31921	0.2000	0.1945	
16 Nitroglycerin	2	10.468	10.467	0.001	119775	2.00	1.87	
17 2,4,6-Trinitrotoluene	1	10.901	10.914	-0.013	38010	0.2000	0.1801	
18 4-Amino-2,6-dinitrotoluene	1	11.101	11.114	-0.013	24849	0.2000	0.1604	
19 2-Amino-4,6-dinitrotoluene	1	11.361	11.367	-0.006	35269	0.2000	0.1751	
20 2,6-Dinitrotoluene	1	11.508	11.514	-0.006	25784	0.2000	0.1806	
21 2,4-Dinitrotoluene	1	11.674	11.687	-0.013	52808	0.2000	0.1780	
22 o-Nitrotoluene	1	12.494	12.514	-0.020	20236	0.2000	0.1582	
23 p-Nitrotoluene	1	12.914	12.940	-0.026	17577	0.2000	0.1571	
24 m-Nitrotoluene	1	13.488	13.514	-0.026	20976	0.2000	0.1493	
25 PETN	2	14.654	14.694	-0.040	139644	2.00	2.03	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

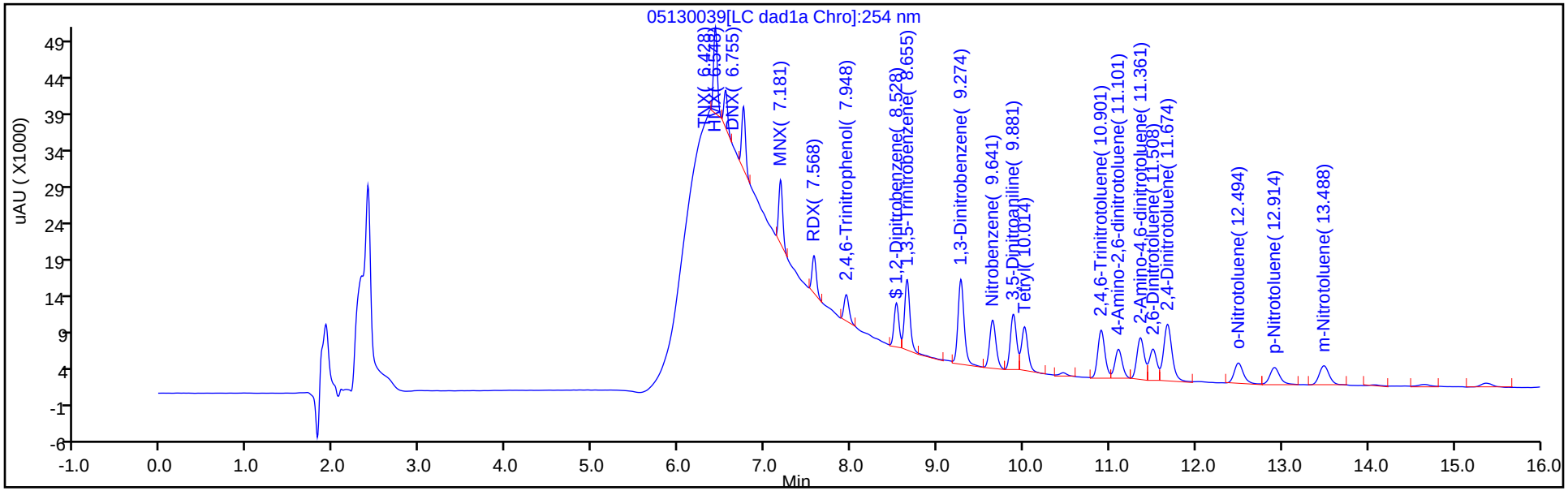
Report Date: 16-May-2023 12:37:26 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

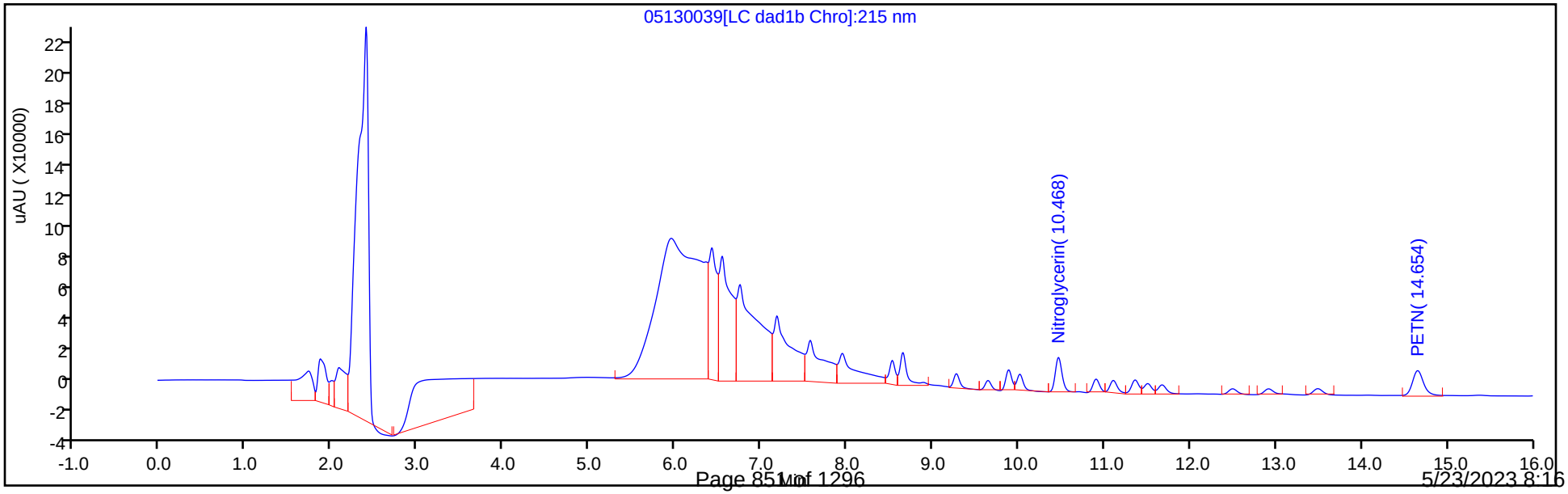
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Injection Date:	14-May-2023 01:26:44	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-175997-A-6-B MSD			Worklist Smp#:	39
Client ID:	LL1mw-087-230401-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	39
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130039.D				
Lims ID:	280-175997-A-6-B MSD				
Client ID:	LL1mw-087-230401-GW				
Sample Type:	MSD				
Inject. Date:	14-May-2023 01:26:44	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-175997-A-6-B MSD				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-May-2023 12:37:22	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:	CTX1672				

First Level Reviewer: K8YG Date: 15-May-2023 11:59:11

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1886	94.29

Manual Integration/User Assign Peak Report

Eurofins Denver

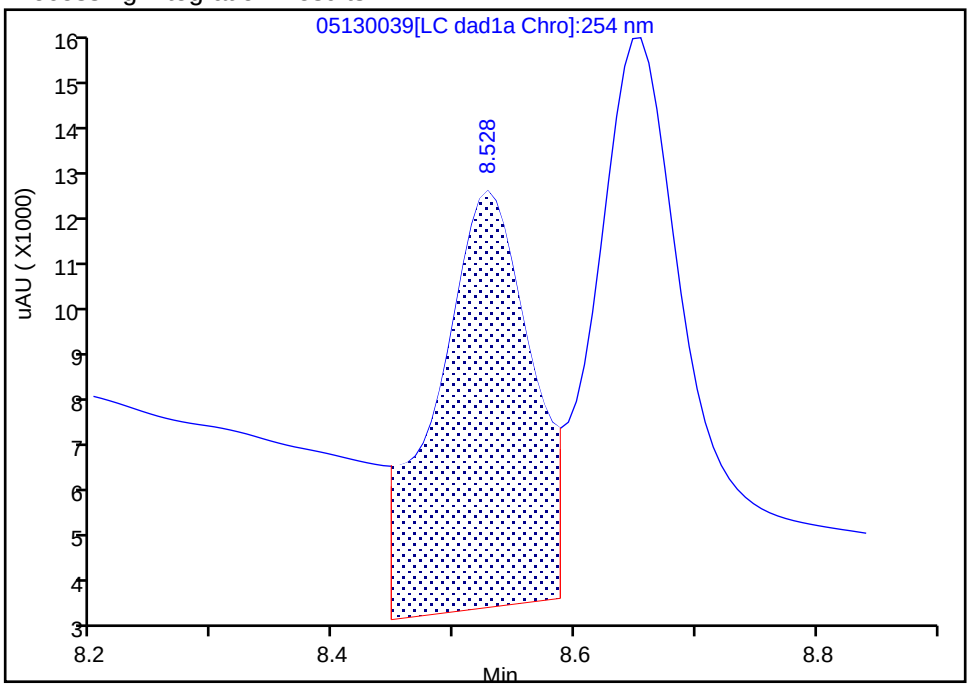
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Injection Date:	14-May-2023 01:26:44	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-A-6-B MSD				
Client ID:	LL1mw-087-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

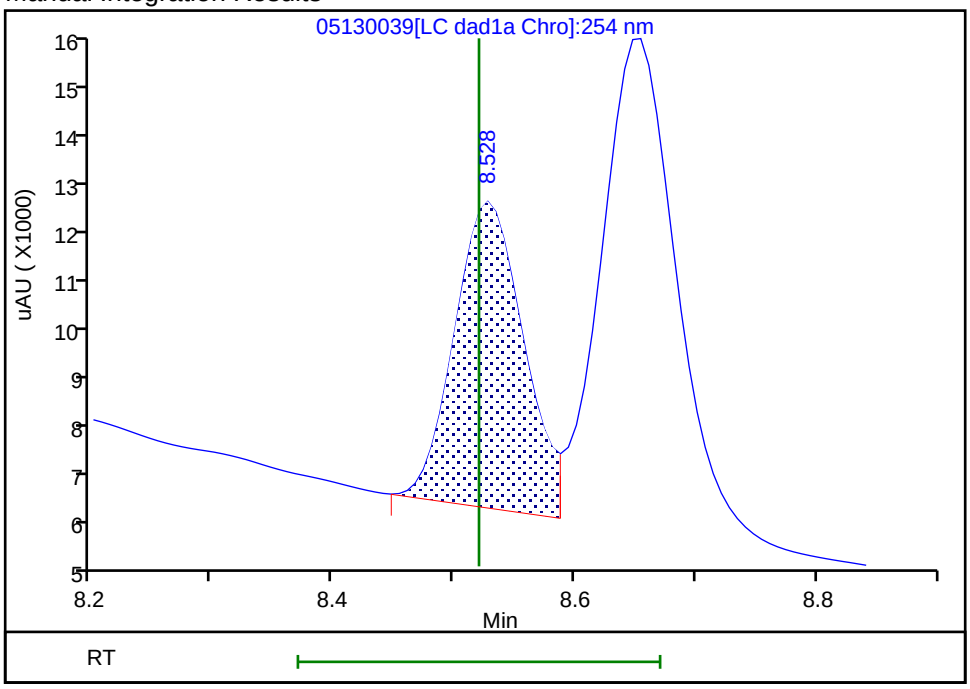
Processing Integration Results

RT: 8.53
Area: 46916
Amount: 0.371439
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 23820
Amount: 0.188586
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 11:58:34
Audit Action: Assigned New Baseline Audit Reason: Baseline

Eurofins Denver

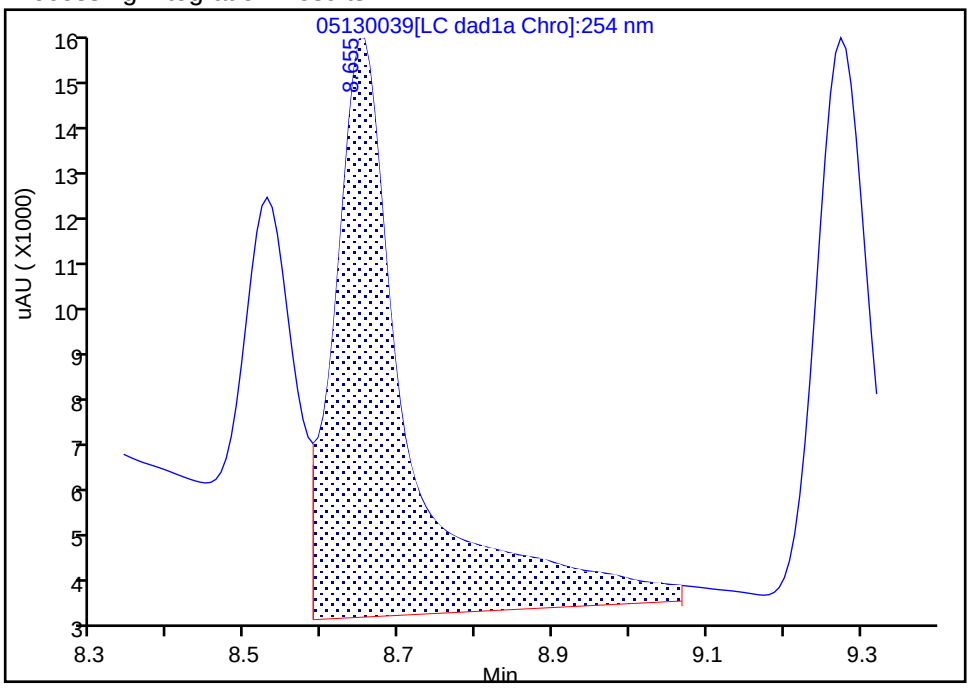
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Lims ID:	280-175997-A-6-B MSD				
Client ID:	LL1mw-087-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

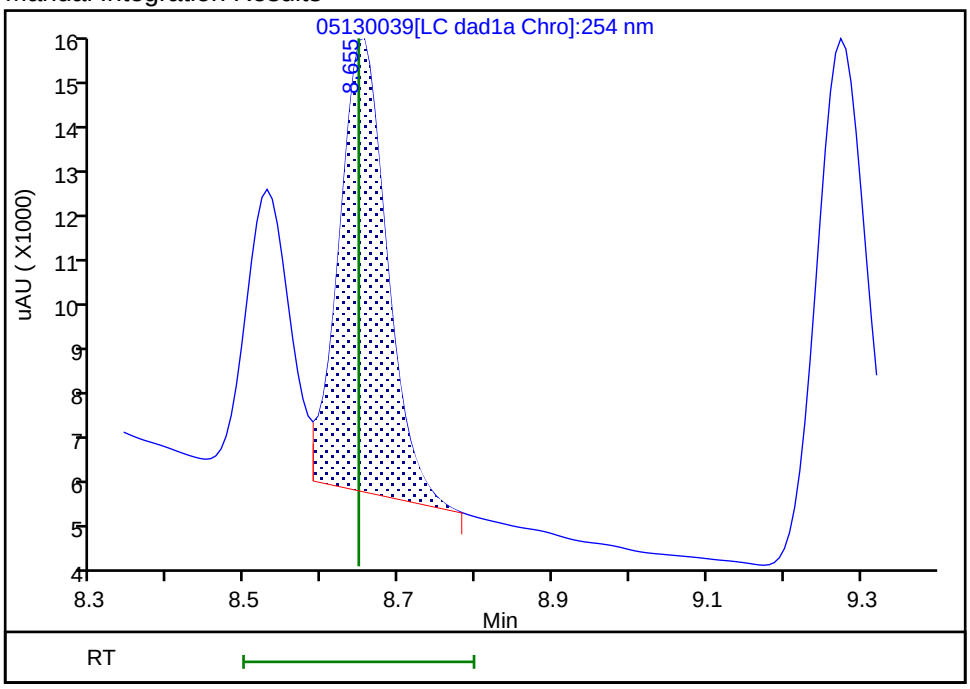
Processing Integration Results

RT: 8.65
Area: 77562
Amount: 0.357187
Amount Units: ug/mL



Manual Integration Results

RT: 8.65
Area: 41916
Amount: 0.193030
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 11:58:40
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

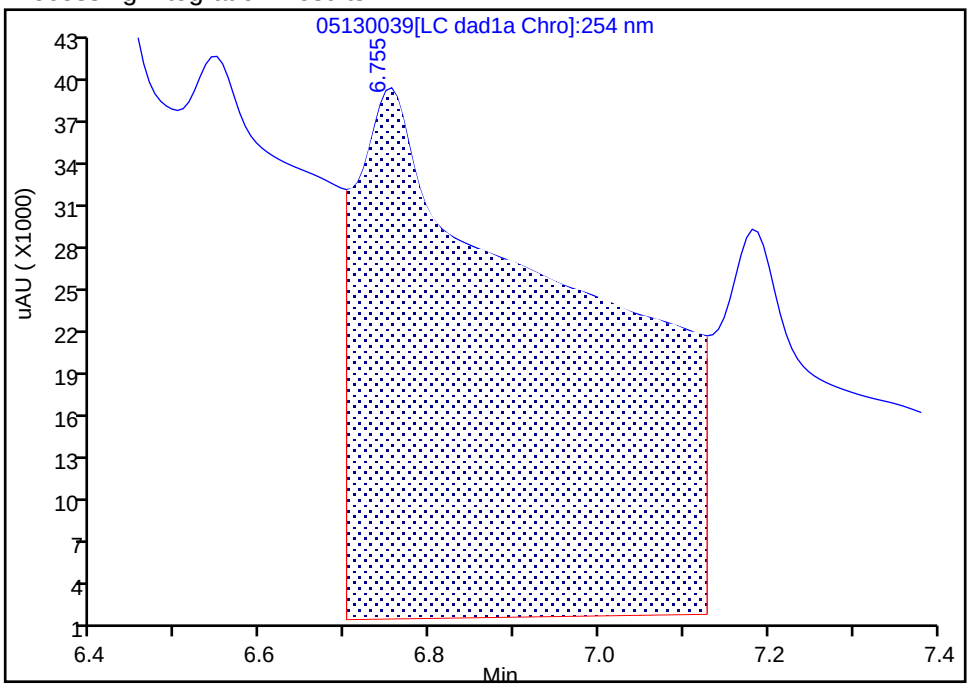
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Injection Date:	14-May-2023 01:26:44	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-A-6-B MSD				
Client ID:	LL1mw-087-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

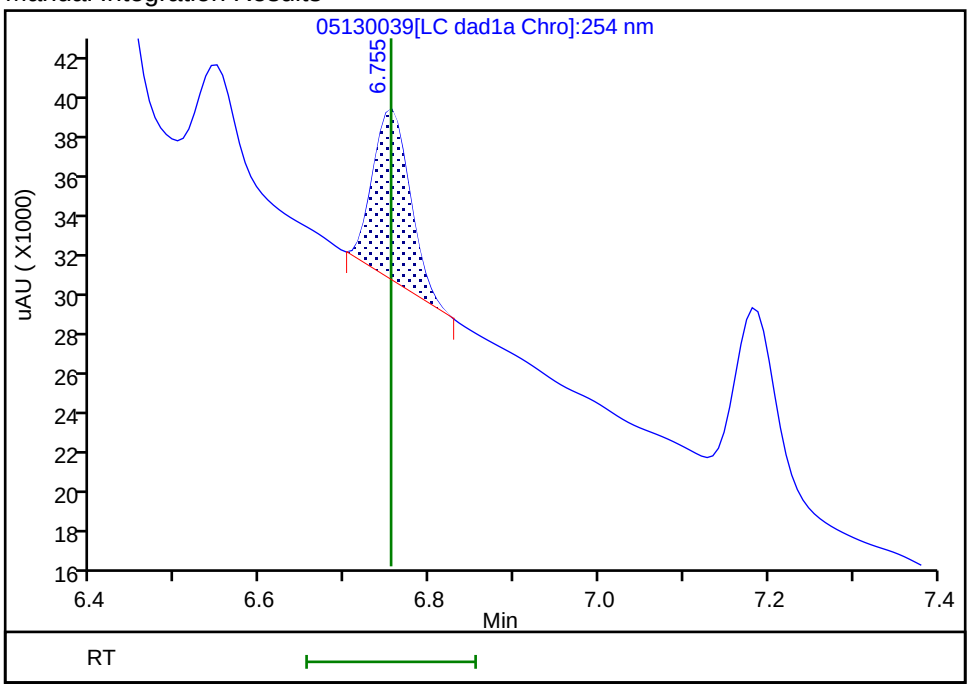
Processing Integration Results

RT: 6.75
Area: 662611
Amount: 4.586734
Amount Units: ug/mL



Manual Integration Results

RT: 6.75
Area: 26360
Amount: 0.182470
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 11:58:08
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

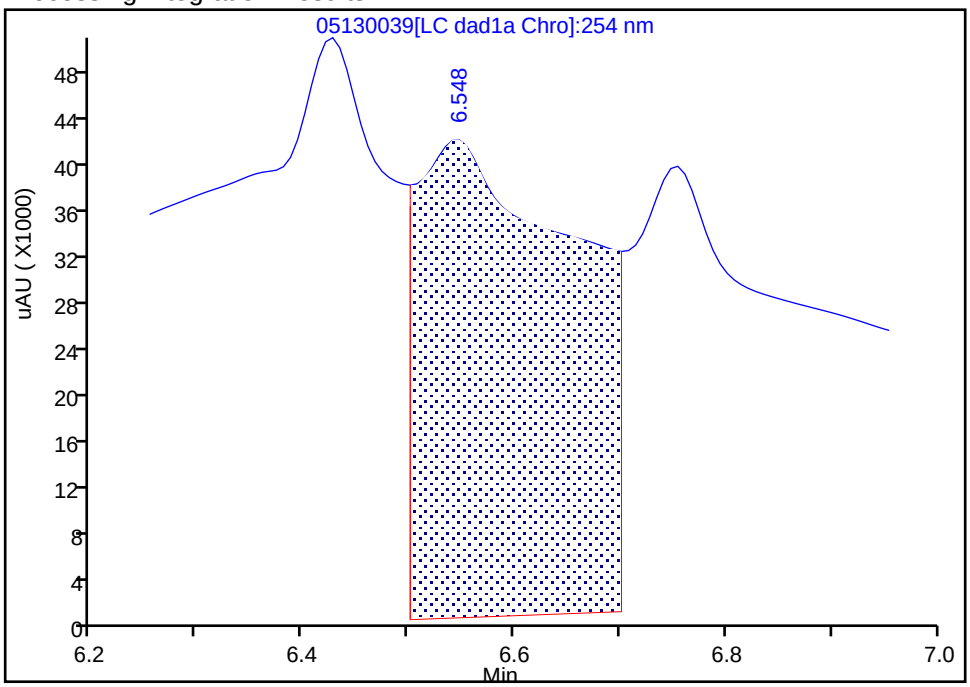
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Injection Date:	14-May-2023 01:26:44	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-A-6-B MSD				
Client ID:	LL1mw-087-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

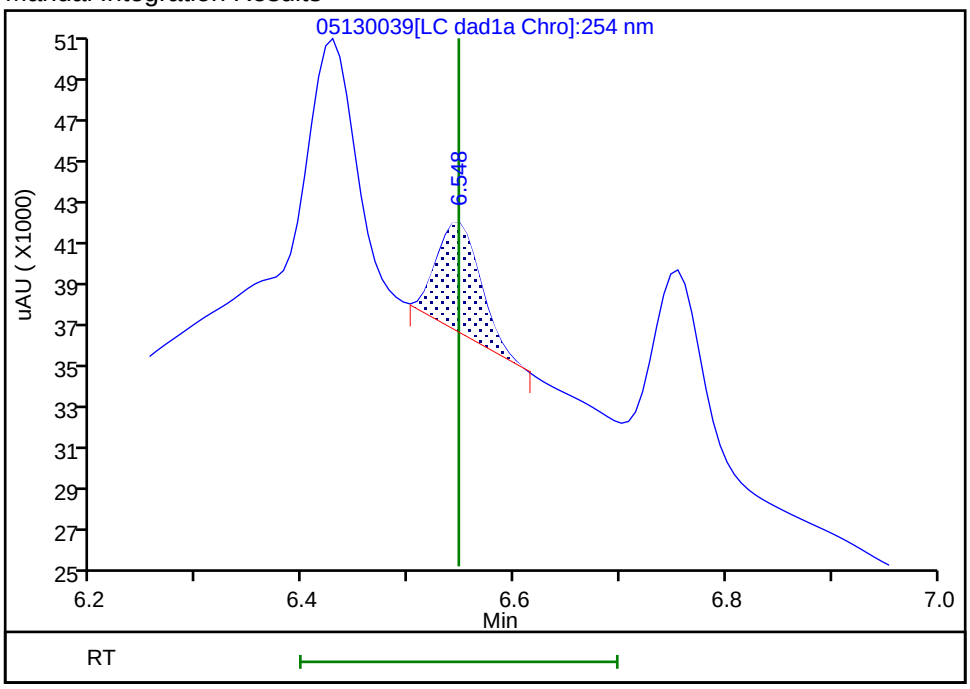
Processing Integration Results

RT: 6.55
Area: 418769
Amount: 4.477465
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 14805
Amount: 0.158295
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 11:58:02
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

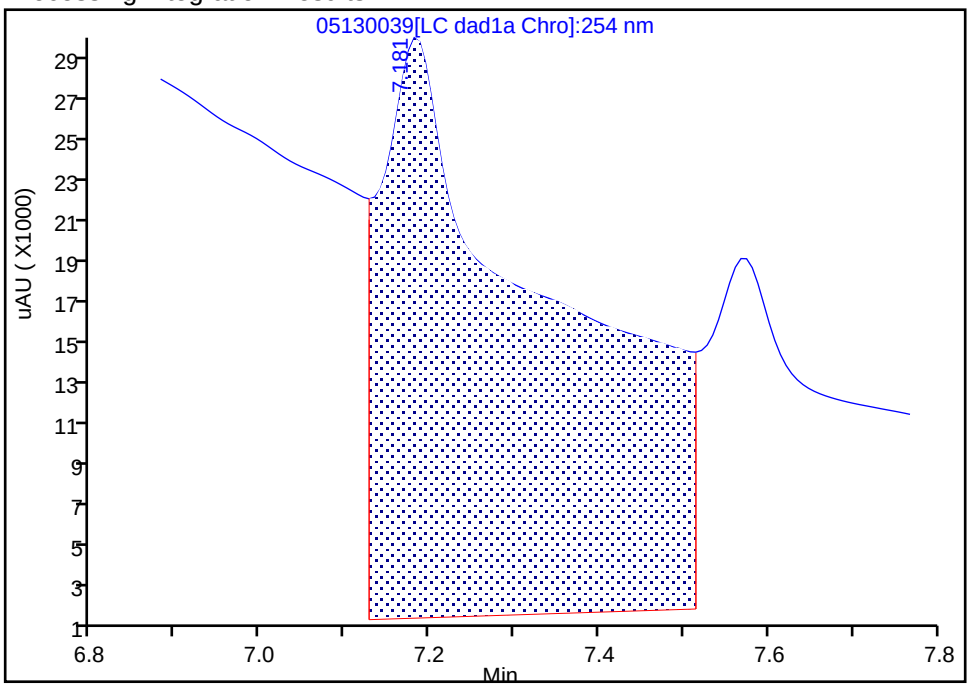
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Injection Date:	14-May-2023 01:26:44	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-A-6-B MSD				
Client ID:	LL1mw-087-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

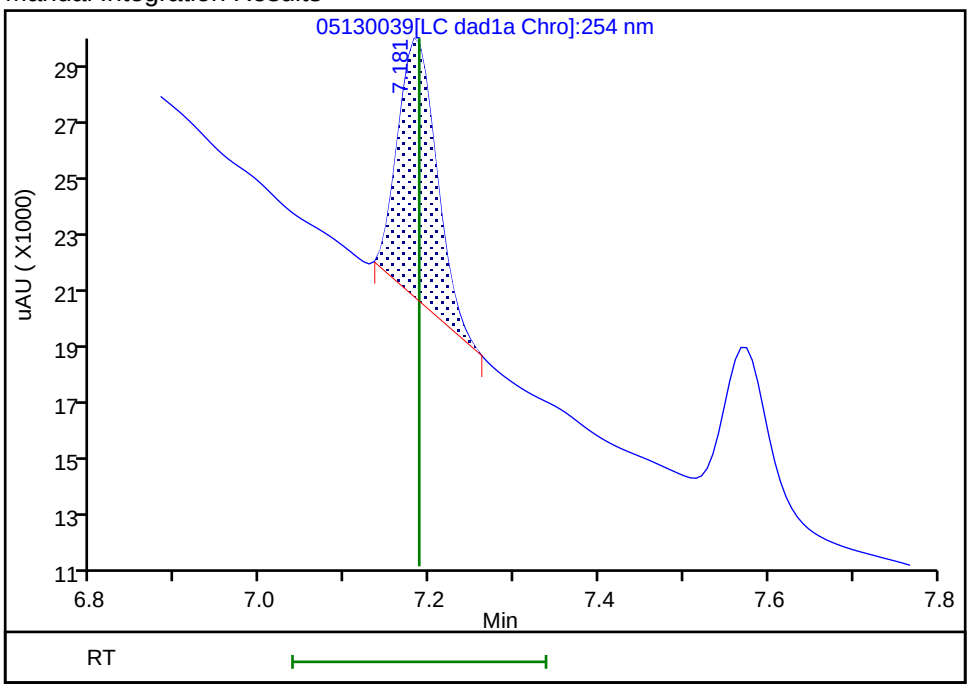
Processing Integration Results

RT: 7.18
Area: 386321
Amount: 2.945158
Amount Units: ug/mL



Manual Integration Results

RT: 7.18
Area: 27609
Amount: 0.210480
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 11:58:12
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

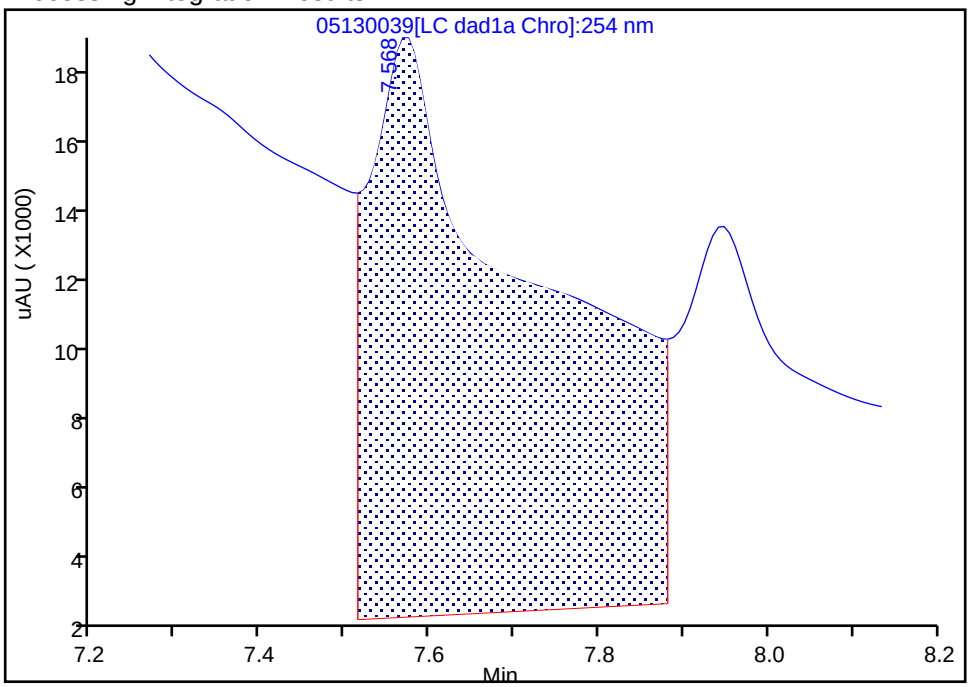
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Injection Date:	14-May-2023 01:26:44	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-A-6-B MSD				
Client ID:	LL1mw-087-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

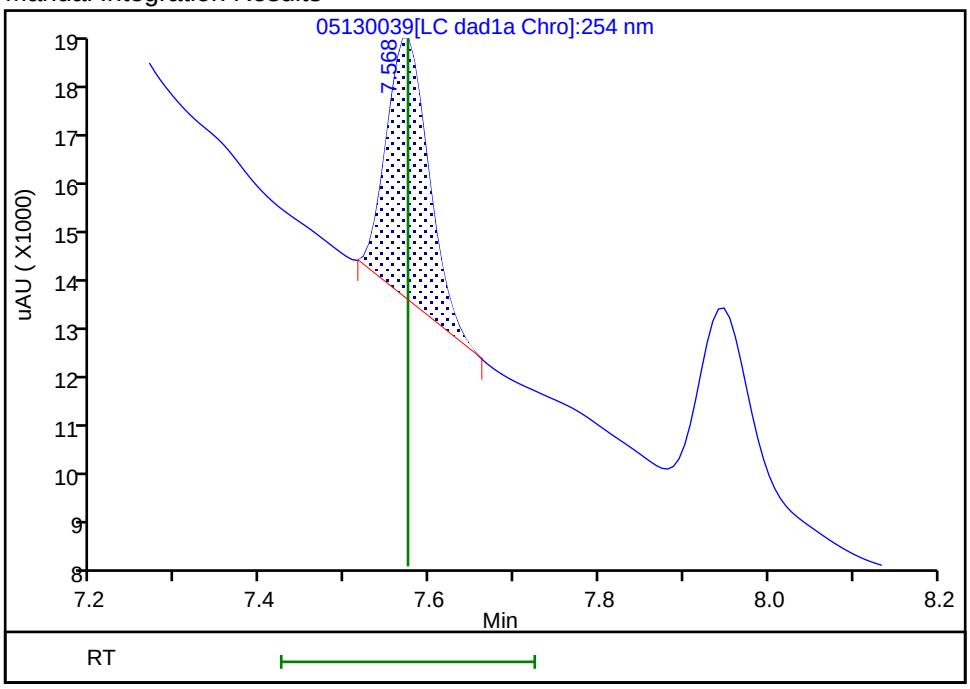
Processing Integration Results

RT: 7.57
Area: 229484
Amount: 2.157214
Amount Units: ug/mL



Manual Integration Results

RT: 7.57
Area: 17970
Amount: 0.168923
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 11:58:17

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

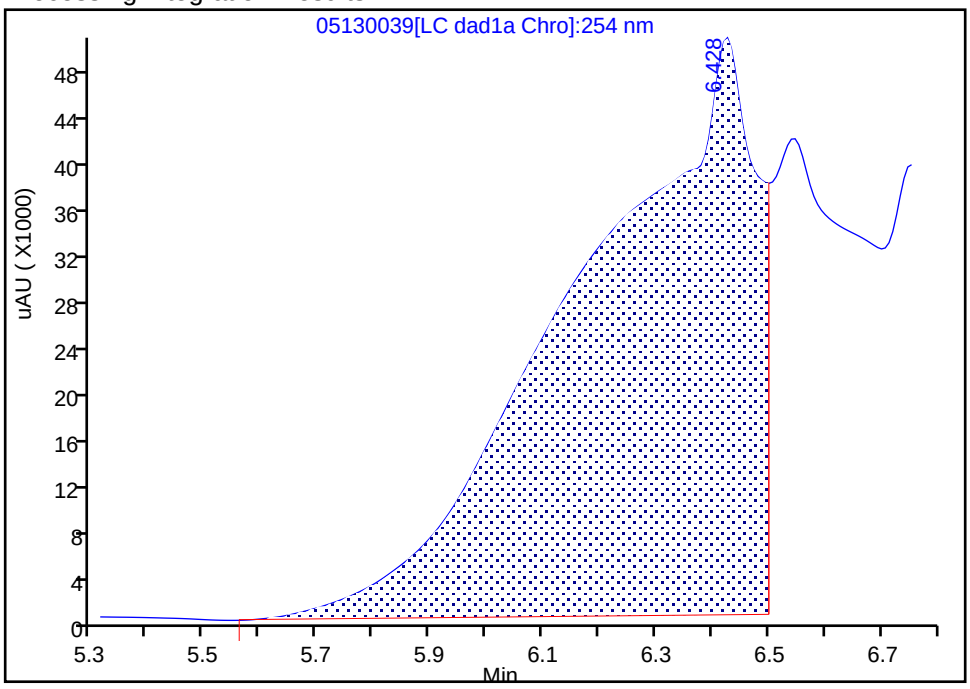
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Injection Date:	14-May-2023 01:26:44	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-A-6-B MSD				
Client ID:	LL1mw-087-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

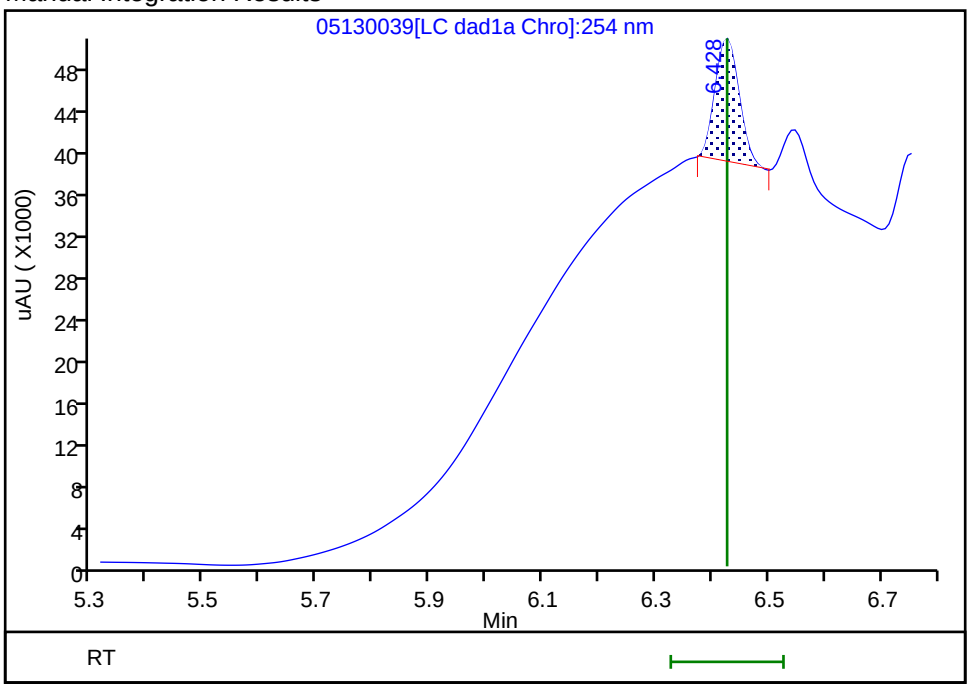
Processing Integration Results

RT: 6.43
Area: 1081279
Amount: 5.469642
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 35104
Amount: 0.177573
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 11:57:57
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-175997-1

SDG No.:

Client Sample ID: LL1mw-087-230401-GW MSD | Lab Sample ID: 280-175997-6 MSD

Matrix: Water | Lab File ID: 05130041.D

Analysis Method: 8330B | Date Collected: 05/03/2023 13:50

Extraction Method: 3535 | Date Extracted: 05/10/2023 13:48

Sample wt/vol: 475.7(mL) | Date Analyzed: 05/14/2023 02:12

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.: 612396 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
6629-29-4	2,4-diamino-6-nitrotoluene	1.21	M J1	1.1	0.95	0.46
59229-75-3	2,6-diamino-4-nitrotoluene	1.42	M J1	1.1	0.95	0.23

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	101	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130041.D				
Lims ID:	280-175997-C-6-B MSD				
Client ID:	LL1mw-087-230401-GW				
Sample Type:	MSD				
Inject. Date:	14-May-2023 02:12:41	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-175997-C-6-B MSD				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-May-2023 12:37:22	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:	CTX1672				
First Level Reviewer: K8YG		Date:	15-May-2023 12:01:52		

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	2 2,6-diamino-4-nitrotoluene	1	6.416	6.426	-0.010	31938	0.2000	0.1353	M
	5 2,4-diamino-6-nitrotoluene	1	6.603	6.620	-0.017	16922	0.2000	0.1155	M
$	10 1,2-Dinitrobenzene	1	8.530	8.521	0.009	25526	0.2000	0.2021	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

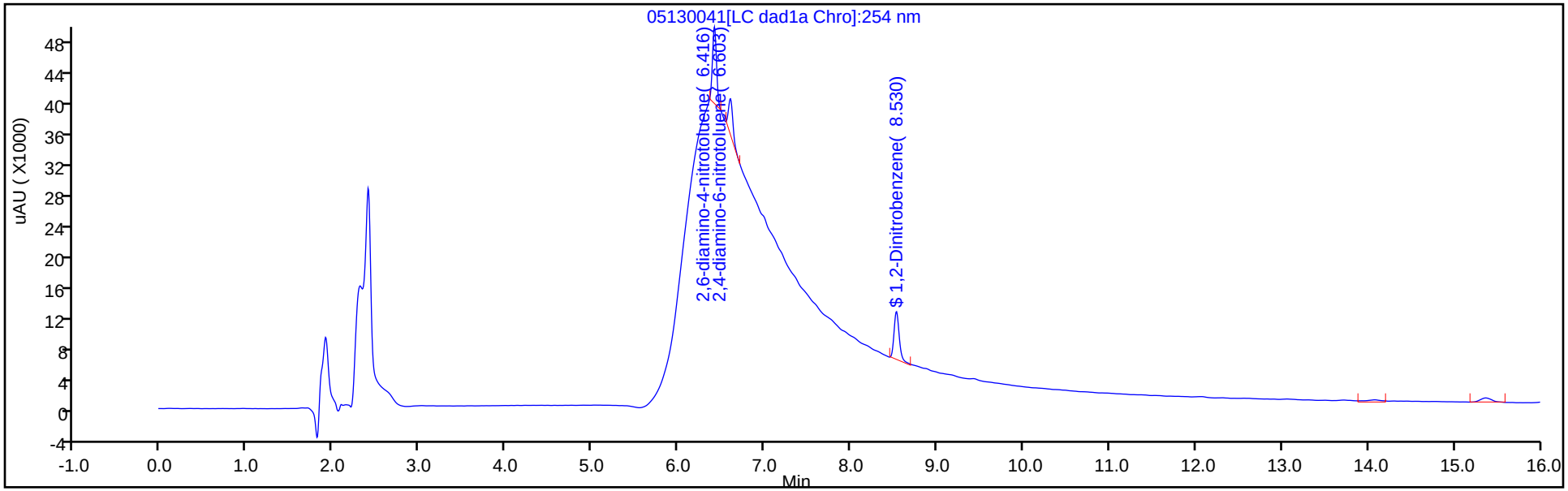
Report Date: 16-May-2023 12:37:27 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

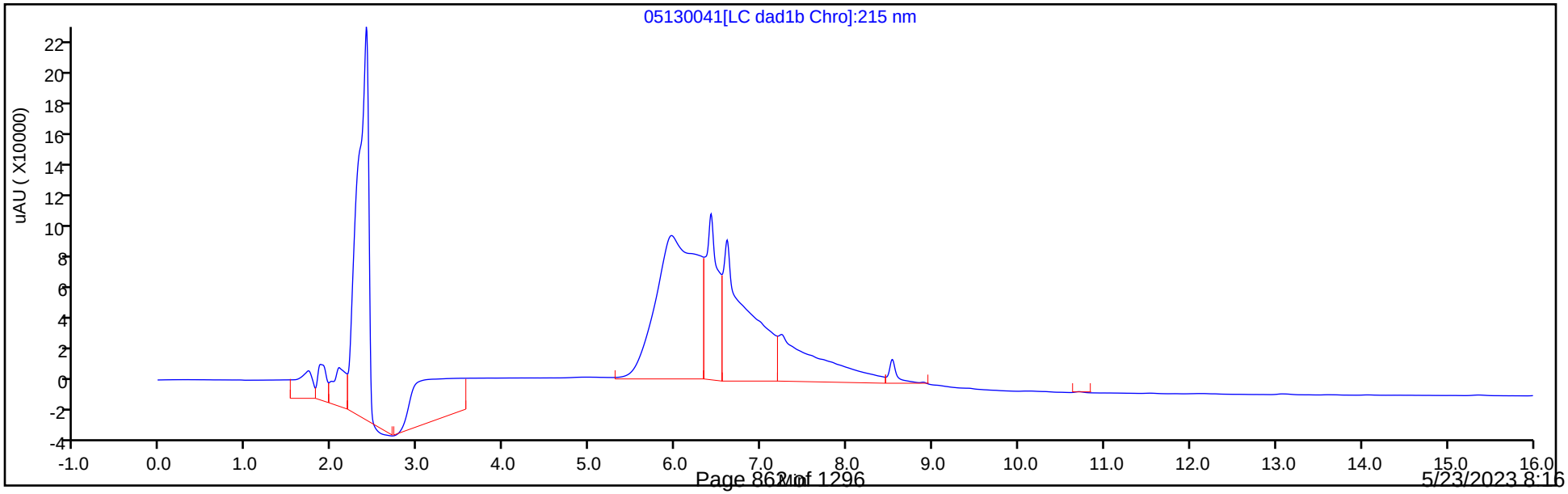
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Injection Date:	14-May-2023 02:12:41	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-175997-C-6-B MSD			Worklist Smp#:	41
Client ID:	LL1mw-087-230401-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	41
Method:	8330_X3	Limit 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\20230513-121427.b\05130041.D				
Lims ID:	280-175997-C-6-B MSD				
Client ID:	LL1mw-087-230401-GW				
Sample Type:	MSD				
Inject. Date:	14-May-2023 02:12:41	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-175997-C-6-B MSD				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-May-2023 12:37:22	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:	CTX1672				

First Level Reviewer: K8YG Date: 15-May-2023 12:01:52

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2021	101.05

Manual Integration/User Assign Peak Report

Eurofins Denver

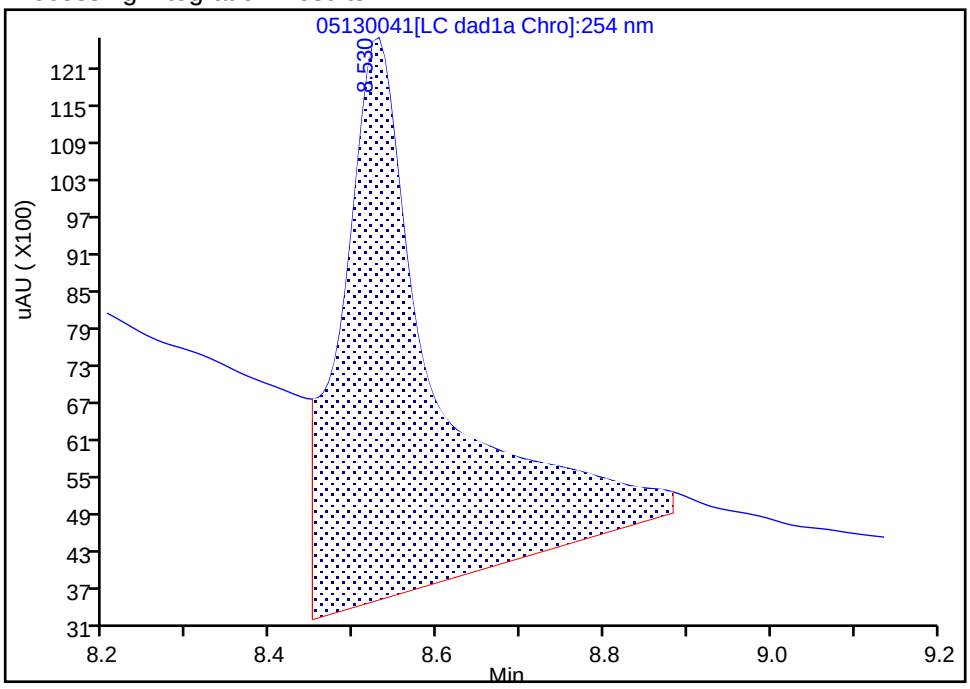
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Injection Date:	14-May-2023 02:12:41	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-C-6-B MSD				
Client ID:	LL1mw-087-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	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

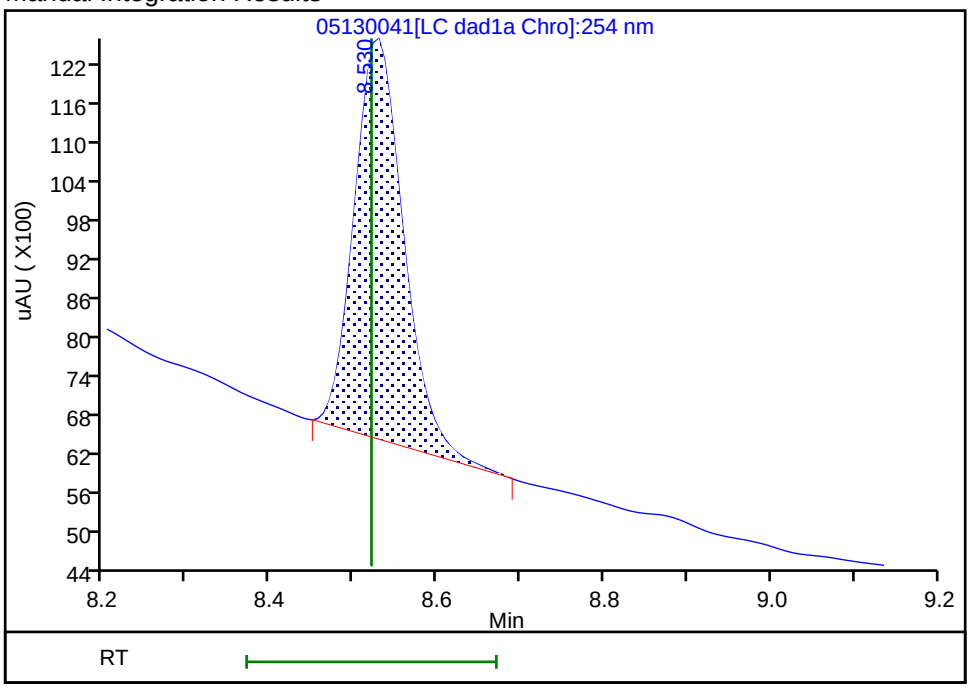
Processing Integration Results

RT: 8.53
Area: 75372
Amount: 0.596728
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 25526
Amount: 0.202092
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 12:01:48
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

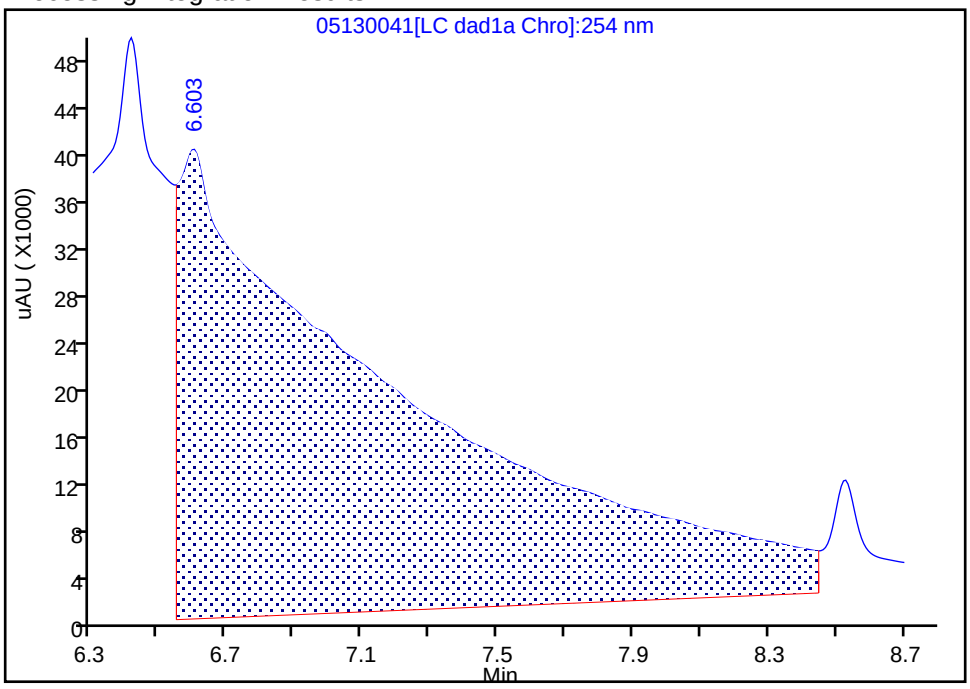
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130041.d				
Injection Date:	14-May-2023 02:12:41	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-C-6-B MSD				
Client ID:	LL1mw-087-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	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

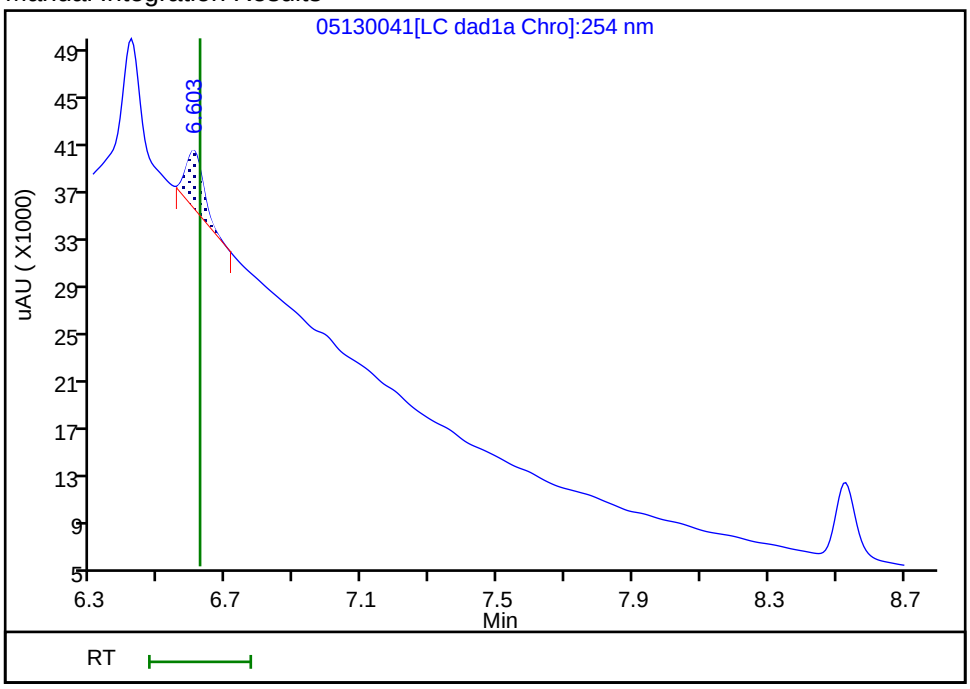
Processing Integration Results

RT: 6.60
Area: 1745877
Amount: 11.919516
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 16922
Amount: 0.115531
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 12:01:42

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

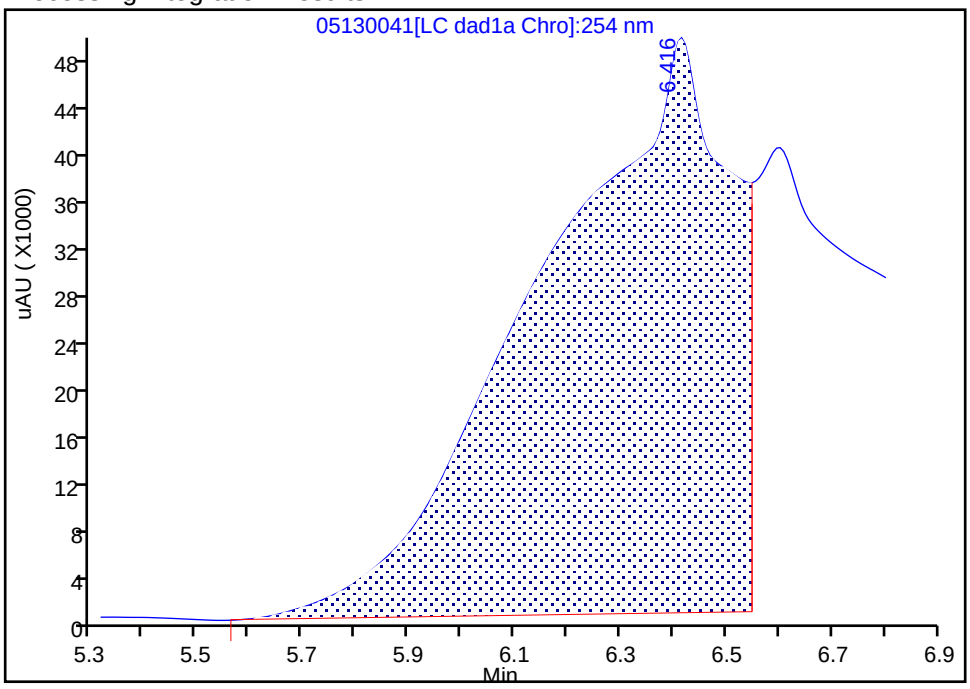
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130041.d				
Injection Date:	14-May-2023 02:12:41	Instrument ID:	CHHPLC_X3		
Lims ID:	280-175997-C-6-B MSD				
Client ID:	LL1mw-087-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	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

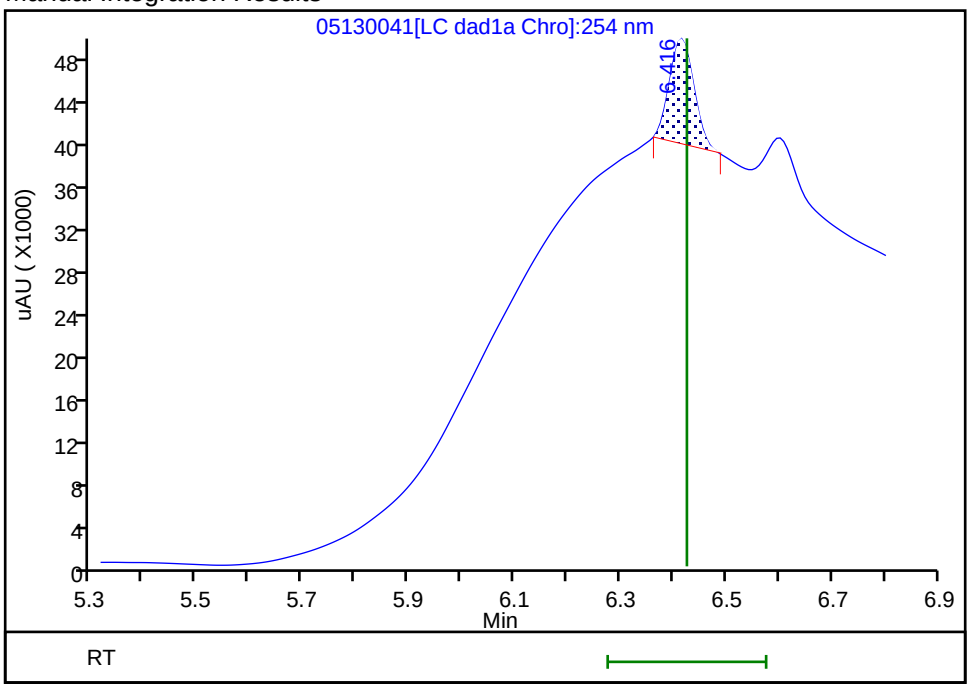
Processing Integration Results

RT: 6.42
Area: 1217565
Amount: 5.297074
Amount Units: ug/mL



Manual Integration Results

RT: 6.42
Area: 31938
Amount: 0.135284
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 12:01:38
Audit Action: Manually Integrated Audit Reason: Baseline

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-175997-1

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		UltraCarb5uODS 4.6(mm)
IC 280-599427/21		01/17/2023 04:27	1		UltraCarb5uODS 4.6(mm)
IC 280-599427/22		01/17/2023 04:50	1		UltraCarb5uODS 4.6(mm)
IC 280-599427/23		01/17/2023 05:13	1		UltraCarb5uODS 4.6(mm)
IC 280-599427/24		01/17/2023 05:37	1		UltraCarb5uODS 4.6(mm)
IC 280-599427/25		01/17/2023 06:00	1		UltraCarb5uODS 4.6(mm)
IC 280-599427/26		01/17/2023 06:24	1		UltraCarb5uODS 4.6(mm)
IC 280-599427/27		01/17/2023 06:47	1		UltraCarb5uODS 4.6(mm)
ICV 280-599427/28		01/17/2023 07:10	1		UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-175997-1

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.: 280-175997-1

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	02240019.D	UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: CHHPLC_X5 Start Date: 04/28/2023 18:24

Analysis Batch Number: 610603 End Date: 04/29/2023 04:52

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-610603/10		04/28/2023 18:24	1	04280010.D	Luna-phenylhex 4.6(mm)
IC 280-610603/11		04/28/2023 18:59	1	04280011.D	Luna-phenylhex 4.6(mm)
IC 280-610603/12		04/28/2023 19:34	1	04280012.D	Luna-phenylhex 4.6(mm)
IC 280-610603/13		04/28/2023 20:08	1	04280013.D	Luna-phenylhex 4.6(mm)
IC 280-610603/14		04/28/2023 20:43	1	04280014.D	Luna-phenylhex 4.6(mm)
IC 280-610603/15		04/28/2023 21:18	1	04280015.D	Luna-phenylhex 4.6(mm)
IC 280-610603/16		04/28/2023 21:53	1	04280016.D	Luna-phenylhex 4.6(mm)
IC 280-610603/17		04/28/2023 22:28	1	04280017.D	Luna-phenylhex 4.6(mm)
IC 280-610603/18		04/28/2023 23:03	1	04280018.D	Luna-phenylhex 4.6(mm)
ICV 280-610603/19		04/28/2023 23:38	1	04280019.D	Luna-phenylhex 4.6(mm)
IC 280-610603/20		04/29/2023 00:13	1	04280020.D	Luna-phenylhex 4.6(mm)
IC 280-610603/21		04/29/2023 00:48	1	04280021.D	Luna-phenylhex 4.6(mm)
IC 280-610603/22		04/29/2023 01:23	1	04280022.D	Luna-phenylhex 4.6(mm)
IC 280-610603/23		04/29/2023 01:58	1	04280023.D	Luna-phenylhex 4.6(mm)
IC 280-610603/24		04/29/2023 02:33	1	04280024.D	Luna-phenylhex 4.6(mm)
IC 280-610603/25		04/29/2023 03:08	1	04280025.D	Luna-phenylhex 4.6(mm)
IC 280-610603/26		04/29/2023 03:43	1	04280026.D	Luna-phenylhex 4.6(mm)
IC 280-610603/27		04/29/2023 04:18	1	04280027.D	Luna-phenylhex 4.6(mm)
ICV 280-610603/28		04/29/2023 04:52	1	04280028.D	Luna-phenylhex 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 05/13/2023 13:58

Analysis Batch Number: 612396 End Date: 05/14/2023 08:19

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-612396/8		05/13/2023 13:58	1		UltraCarb5uODS 4.6(mm)
CCV 280-612396/9		05/13/2023 14:21	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/13/2023 14:44	5		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/13/2023 15:07	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/13/2023 15:30	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/13/2023 15:53	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/13/2023 16:16	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/13/2023 16:39	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/13/2023 17:02	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/13/2023 17:24	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/13/2023 17:47	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/13/2023 18:10	1		UltraCarb5uODS 4.6(mm)
CCV 280-612396/21		05/13/2023 18:33	1	05130021.D	UltraCarb5uODS 4.6(mm)
CCV 280-612396/22		05/13/2023 18:56	1	05130022.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		05/13/2023 19:19	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/13/2023 19:42	1		UltraCarb5uODS 4.6(mm)
MB 280-611915/1-A		05/13/2023 20:05	1	05130025.D	UltraCarb5uODS 4.6(mm)
LCS 280-611915/2-A		05/13/2023 20:28	1	05130026.D	UltraCarb5uODS 4.6(mm)
LCSD 280-611915/3-A		05/13/2023 20:51	1	05130027.D	UltraCarb5uODS 4.6(mm)
LCS 280-611915/4-A		05/13/2023 21:14	1	05130028.D	UltraCarb5uODS 4.6(mm)
LCSD 280-611915/5-A		05/13/2023 21:37	1	05130029.D	UltraCarb5uODS 4.6(mm)
280-175997-1	LL1mw-080-230401-GW	05/13/2023 22:00	1	05130030.D	UltraCarb5uODS 4.6(mm)
280-175997-2	LL1mw-081-230401-GW	05/13/2023 22:23	1	05130031.D	UltraCarb5uODS 4.6(mm)
280-175997-3	LL1mw-083-230401-GW	05/13/2023 22:46	1	05130032.D	UltraCarb5uODS 4.6(mm)
CCV 280-612396/33		05/13/2023 23:08	1	05130033.D	UltraCarb5uODS 4.6(mm)
CCV 280-612396/34		05/13/2023 23:31	1	05130034.D	UltraCarb5uODS 4.6(mm)
280-175997-4	LL1mw-084-230401-GW	05/13/2023 23:54	1	05130035.D	UltraCarb5uODS 4.6(mm)
280-175997-5	LL1mw-084-230402-GW	05/14/2023 00:17	1	05130036.D	UltraCarb5uODS 4.6(mm)
280-175997-6	LL1mw-087-230401-GW	05/14/2023 00:40	1	05130037.D	UltraCarb5uODS 4.6(mm)
280-175997-6 MS	LL1mw-087-230401-GW MS	05/14/2023 01:03	1	05130038.D	UltraCarb5uODS 4.6(mm)
280-175997-6 MSD	LL1mw-087-230401-GW MSD	05/14/2023 01:26	1	05130039.D	UltraCarb5uODS 4.6(mm)
280-175997-6 MS	LL1mw-087-230401-GW MS	05/14/2023 01:49	1	05130040.D	UltraCarb5uODS 4.6(mm)
280-175997-6 MSD	LL1mw-087-230401-GW MSD	05/14/2023 02:12	1	05130041.D	UltraCarb5uODS 4.6(mm)
280-175997-7	LL1mw-087-230402-GW	05/14/2023 02:35	1	05130042.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		05/14/2023 02:58	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/14/2023 03:21	1		UltraCarb5uODS 4.6(mm)
CCV 280-612396/45		05/14/2023 03:44	1	05130045.D	UltraCarb5uODS 4.6(mm)
CCV 280-612396/46		05/14/2023 04:07	1	05130046.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		05/14/2023 04:30	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/14/2023 04:53	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/14/2023 05:16	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/14/2023 05:39	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/14/2023 06:02	1		UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 05/13/2023 13:58

Analysis Batch Number: 612396 End Date: 05/14/2023 08:19

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		05/14/2023 06:25	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/14/2023 06:48	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/14/2023 07:11	500		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/14/2023 07:33	200		UltraCarb5uODS 4.6(mm)
CCV 280-612396/56		05/14/2023 07:56	1		UltraCarb5uODS 4.6(mm)
CCV 280-612396/57		05/14/2023 08:19	1		UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: CHHPLC_X5 Start Date: 05/17/2023 05:24

Analysis Batch Number: 612692 End Date: 05/17/2023 15:53

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-612692/19		05/17/2023 05:24	1	05160019.D	Luna-phenylhex 4.6(mm)
ZZZZZ		05/17/2023 05:59	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/17/2023 06:34	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/17/2023 07:09	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/17/2023 07:44	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/17/2023 08:19	1		Luna-phenylhex 4.6(mm)
280-175997-1	LL1mw-080-230401-GW	05/17/2023 08:53	1	05160025.D	Luna-phenylhex 4.6(mm)
280-175997-2	LL1mw-081-230401-GW	05/17/2023 09:28	1	05160026.D	Luna-phenylhex 4.6(mm)
280-175997-3	LL1mw-083-230401-GW	05/17/2023 10:03	1	05160027.D	Luna-phenylhex 4.6(mm)
280-175997-4	LL1mw-084-230401-GW	05/17/2023 10:38	1	05160028.D	Luna-phenylhex 4.6(mm)
ZZZZZ		05/17/2023 11:13	1		Luna-phenylhex 4.6(mm)
CCV 280-612692/30		05/17/2023 11:48	1	05160030.D	Luna-phenylhex 4.6(mm)
ZZZZZ		05/17/2023 12:23	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/17/2023 12:58	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/17/2023 13:33	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/17/2023 14:08	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/17/2023 14:43	500		Luna-phenylhex 4.6(mm)
CCV 280-612692/37		05/17/2023 15:53	1		Luna-phenylhex 4.6(mm)

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-175997-1

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_ADDs 00035	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		

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.: 280-175997-1

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.: 280-175997-1

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	8330_OP_DMT 00016			
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				
ICV 280-603284/19		8330B		1 mL		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.: 280-175997-1

SDG No.:

Batch Number: 610603 Batch Start Date: 04/28/23 18:24 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 00126	8330_ADDs 00036	8330_OP_DMT 00017	8330DiaminLCS 00056
IC 280-610603/10		8330B		1 mL	125 uL				
IC 280-610603/11		8330B		1 mL	50 uL				
IC 280-610603/12		8330B		1 mL	35 uL				
IC 280-610603/13		8330B		1 mL	20 uL				
IC 280-610603/14		8330B		1 mL	12.5 uL				
IC 280-610603/15		8330B		1 mL	5 uL				
IC 280-610603/16		8330B		1 mL	2.5 uL				
IC 280-610603/17		8330B		1 mL	1 uL				
IC 280-610603/18		8330B		1 mL	0.5 uL				
ICV 280-610603/19		8330B		1 mL		50 uL		50 uL	
IC 280-610603/20		8330B		1 mL			125 uL		
IC 280-610603/21		8330B		1 mL			50 uL		
IC 280-610603/22		8330B		1 mL			35 uL		
IC 280-610603/23		8330B		1 mL			20 uL		
IC 280-610603/24		8330B		1 mL			12.5 uL		
IC 280-610603/25		8330B		1 mL			5 uL		
IC 280-610603/26		8330B		1 mL			2 uL		
IC 280-610603/27		8330B		1 mL			1 uL		
ICV 280-610603/28		8330B		1 mL					50 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330IntermStk 00076	8330Surrogate 00143				

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.: 280-175997-1

SDG No.:

Batch Number: 610603 Batch Start Date: 04/28/23 18:24 Batch Analyst: Zhang, Jian

Batch Method: 8330B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330IntermStk 00076	8330Surrogate 00143				
IC 280-610603/10		8330B		250 uL					
IC 280-610603/11		8330B		100 uL					
IC 280-610603/12		8330B		70 uL					
IC 280-610603/13		8330B		40 uL					
IC 280-610603/14		8330B		25 uL					
IC 280-610603/15		8330B		10 uL					
IC 280-610603/16		8330B		5 uL					
IC 280-610603/17		8330B		2 uL					
IC 280-610603/18		8330B		1 uL					
ICV 280-610603/19		8330B			50 uL				
IC 280-610603/20		8330B							
IC 280-610603/21		8330B							
IC 280-610603/22		8330B							
IC 280-610603/23		8330B							
IC 280-610603/24		8330B							
IC 280-610603/25		8330B							
IC 280-610603/26		8330B							
IC 280-610603/27		8330B							
ICV 280-610603/28		8330B							

Batch Notes	
Methanol ID	221056

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.: 280-175997-1

SDG No.:

Batch Number: 610603 Batch Start Date: 04/28/23 18:24 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.: 280-175997-1

SDG No.:

Batch Number: 611915 Batch Start Date: 05/10/23 13:48 Batch Analyst: Lee, David C

Batch Method: 3535 Batch End Date: 05/10/23 16:59

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	8330 LCS 00125	8330_OP_DMT 00017
MB 280-611915/1		3535, 8330B				500 mL	5 mL		
LCS 280-611915/2		3535, 8330B				500 mL	5 mL	0.1 mL	0.1 mL
LCSD 280-611915/3		3535, 8330B				500 mL	5 mL	0.1 mL	0.1 mL
LCS 280-611915/4		3535, 8330B				500 mL	5 mL		
LCSD 280-611915/5		3535, 8330B				500 mL	5 mL		
280-175997-A-1	LL1mw-080-230401-GW	3535, 8330B	T	752.0 g	284.0 g	468 mL	5 mL		
280-175997-A-2	LL1mw-081-230401-GW	3535, 8330B	T	756.5 g	286.9 g	469.6 mL	5 mL		
280-175997-B-3	LL1mw-083-230401-GW	3535, 8330B	T	783.5 g	288.9 g	494.6 mL	5 mL		
280-175997-B-4	LL1mw-084-230401-GW	3535, 8330B	T	766.7 g	284.9 g	481.8 mL	5 mL		
280-175997-A-5	LL1mw-084-230402-GW	3535, 8330B	T	767.6 g	288.0 g	479.6 mL	5 mL		
280-175997-A-6	LL1mw-087-230401-GW	3535, 8330B	T	768.6 g	283.6 g	485 mL	5 mL		
280-175997-B-6 MS	LL1mw-087-230401-GW	3535, 8330B	T	783.5 g	288.6 g	494.9 mL	5 mL	0.1 mL	0.1 mL
280-175997-A-6 MSD	LL1mw-087-230401-GW	3535, 8330B	T	770.8 g	282.4 g	488.4 mL	5 mL	0.1 mL	0.1 mL
280-175997-C-6 MS	LL1mw-087-230401-GW	3535, 8330B	T	735.7 g	284.6 g	451.1 mL	5 mL		
280-175997-C-6 MSD	LL1mw-087-230401-GW	3535, 8330B	T	763.0 g	287.3 g	475.7 mL	5 mL		
280-175997-A-7	LL1mw-087-230402-GW	3535, 8330B	T	754.3 g	286.5 g	467.8 mL	5 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330DiaminLCS 00056	8330Surrogate 00143	AnalysisComment			
MB 280-611915/1		3535, 8330B			0.1 mL				
LCS 280-611915/2		3535, 8330B			0.1 mL	DMT			
LCSD 280-611915/3		3535, 8330B			0.1 mL	DMT			
LCS 280-611915/4		3535, 8330B		0.1 mL	0.1 mL	Diamino			

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.: 280-175997-1

SDG No.:

Batch Number: 611915 Batch Start Date: 05/10/23 13:48 Batch Analyst: Lee, David C

Batch Method: 3535 Batch End Date: 05/10/23 16:59

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330DiaminLCS 00056	8330Surrogate 00143	AnalysisComment			
LCSD 280-611915/5		3535, 8330B		0.1 mL	0.1 mL	Diamino			
280-175997-A-1	LL1mw-080-230401-GW	3535, 8330B	T		0.1 mL				
280-175997-A-2	LL1mw-081-230401-GW	3535, 8330B	T		0.1 mL				
280-175997-B-3	LL1mw-083-230401-GW	3535, 8330B	T		0.1 mL				
280-175997-B-4	LL1mw-084-230401-GW	3535, 8330B	T		0.1 mL				
280-175997-A-5	LL1mw-084-230402-GW	3535, 8330B	T		0.1 mL				
280-175997-A-6	LL1mw-087-230401-GW	3535, 8330B	T		0.1 mL				
280-175997-B-6 MS	LL1mw-087-230401-GW	3535, 8330B	T		0.1 mL	DMT			
280-175997-A-6 MSD	LL1mw-087-230401-GW	3535, 8330B	T		0.1 mL	DMT			
280-175997-C-6 MS	LL1mw-087-230401-GW	3535, 8330B	T	0.1 mL	0.1 mL	Diamino			
280-175997-C-6 MSD	LL1mw-087-230401-GW	3535, 8330B	T	0.1 mL	0.1 mL	Diamino			
280-175997-A-7	LL1mw-087-230402-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.: 280-175997-1

SDG No.:

Batch Number: 611915 Batch Start Date: 05/10/23 13:48 Batch Analyst: Lee, David C

Batch Method: 3535 Batch End Date: 05/10/23 16:59

Batch Notes	
First Start time	05/10/2023 14:06
First End time	05/10/2023 16:34
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_00084
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: AA
Batch Comment	DV-OP-0017

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-175997-1

SDG No.:

Project: RVAAP FWGW Spring 2023

Client Sample ID	Lab Sample ID
LL1mw-080-230401-GW	280-175997-1
LL1mw-083-230401-GW	280-175997-3
LL1mw-084-230401-GW	280-175997-4
LL1mw-084-230402-GW	280-175997-5

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: LL1mw-080-230401-GW
Lab Sample ID: 280-175997-1
Lab Name: Eurofins Denver
Job No.: 280-175997-1
SDG ID.:
Matrix: Water
Date Sampled: 05/03/2023 09:20
Reporting Basis: WET
Date Received: 05/04/2023 09:35

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	0.20	0.50	0.20	0.090	mg/L	U		1	9056
Nitrite as N	0.10	0.50	0.10	0.049	mg/L	U		1	9056
Sulfate	26	5.0	2.5	1.0	mg/L			1	9056A
Total Organic Carbon - Average	1.2	1.0	0.80	0.35	mg/L			1	9060
Alkalinity	85	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: LL1mw-083-230401-GW
Lab Sample ID: 280-175997-3
Lab Name: Eurofins Denver
Job No.: 280-175997-1
SDG ID.:
Matrix: Water
Date Sampled: 05/03/2023 14:31
Reporting Basis: WET
Date Received: 05/04/2023 09:35

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	0.18	0.50	0.20	0.090	mg/L	J		1	9056
Nitrite as N	0.10	0.50	0.10	0.049	mg/L	U		1	9056
Sulfate	23	25	13	5.2	mg/L	J	D	5	9056A
Total Organic Carbon - Average	0.93	1.0	0.80	0.35	mg/L	J		1	9060
Alkalinity	6.4	10	6.4	3.1	mg/L	U		1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: LL1mw-084-230401-GW
Lab Sample ID: 280-175997-4
Lab Name: Eurofins Denver
Job No.: 280-175997-1
SDG ID.:
Matrix: Water
Date Sampled: 05/03/2023 11:03
Reporting Basis: WET
Date Received: 05/04/2023 09:35

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	0.67	0.50	0.20	0.090	mg/L			1	9056
Nitrite as N	0.10	0.50	0.10	0.049	mg/L	U		1	9056
Sulfate	110	25	13	5.2	mg/L		D	5	9056A
Total Organic Carbon - Average	1.5	1.0	0.80	0.35	mg/L			1	9060
Alkalinity	48	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: LL1mw-084-230402-GW
Lab Sample ID: 280-175997-5
Lab Name: Eurofins Denver
Job No.: 280-175997-1
SDG ID.:
Matrix: Water
Date Sampled: 05/03/2023 11:03
Reporting Basis: WET
Date Received: 05/04/2023 09:35

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	0.66	0.50	0.20	0.090	mg/L			1	9056
Nitrite as N	0.10	0.50	0.10	0.049	mg/L	U		1	9056
Sulfate	13	25	13	5.2	mg/L	U	M	5	9056A
Alkalinity	50	10	6.4	3.1	mg/L			1	SM 2320B

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-175997-1

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.: 280-175997-1

SDG No.:

Analyst: EJS Batch Start Date: 05/04/2023

Reporting Units: mg/L Analytical Batch No.: 611205

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	09:15	Nitrate as N	2.40	2.50	96	90-110		IC LCS_01952
			Nitrite as N	2.41	2.50	96	90-110		IC LCS_01952
2	CCB	09:30	Nitrate as N	0.20				U	
			Nitrite as N	0.10				U	
17	CCV	18:24	Nitrate as N	2.41	2.50	96	90-110		IC LCS_01952
			Nitrite as N	2.44	2.50	98	90-110		IC LCS_01952
18	CCB	18:39	Nitrate as N	0.20				U	
			Nitrite as N	0.10				U	
29	CCV	21:25	Nitrate as N	2.43	2.50	97	90-110		IC LCS_01952
			Nitrite as N	2.46	2.50	98	90-110		IC LCS_01952
30	CCB	21:40	Nitrate as N	0.20				U	
			Nitrite as N	0.10				U	
41	CCV	00:25	Nitrate as N	2.41	2.50	96	90-110		IC LCS_01952
			Nitrite as N	2.45	2.50	98	90-110		IC LCS_01952
42	CCB	00:40	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.: 280-175997-1

SDG No.:

Analyst: EJS Batch Start Date: 04/03/2023

Reporting Units: mg/L Analytical Batch No.: 607366

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
7	ICV	17:54	Sulfate	85.7	80.0	107	90-110		IC SO4 ICV_00024
8	ICB	18:06	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.: 280-175997-1

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.: 280-175997-1

SDG No.:

Analyst: EJS Batch Start Date: 05/04/2023

Reporting Units: mg/L Analytical Batch No.: 611206

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	09:15	Sulfate	49.6	50.0	99	90-110		IC LCS_01952
2	CCB	09:30	Sulfate	2.5				U	
17	CCV	18:24	Sulfate	50.0	50.0	100	90-110		IC LCS_01952
18	CCB	18:39	Sulfate	2.5				U	
29	CCV	21:25	Sulfate	51.1	50.0	102	90-110		IC LCS_01952
30	CCB	21:40	Sulfate	2.5				U	
41	CCV	00:25	Sulfate	51.5	50.0	103	90-110		IC LCS_01952
42	CCB	00:40	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.: 280-175997-1

SDG No.:

Analyst: MEC Batch Start Date: 05/17/2023

Reporting Units: mg/L Analytical Batch No.: 612833

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
41	CCV	22:56	Sulfate	48.8	50.0	98	90-110		IC LCS_01954
42	CCB	23:08	Sulfate	2.5				U	
53	CCV	01:19	Sulfate	48.6	50.0	97	90-110		IC LCS_01954
54	CCB	01:31	Sulfate	2.5				U	
65	CCV	03:42	Sulfate	48.7	50.0	97	90-110		IC LCS_01954
66	CCB	03:54	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.: 280-175997-1

SDG No.:

Analyst: ABW Batch Start Date: 05/16/2023

Reporting Units: mg/L Analytical Batch No.: 612889

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	19:40	Total Organic Carbon - Average	20.3	20.0	102	90-110		TOC ICV Std_00051
2	ICB	19:54	Total Organic Carbon - Average	0.80				U	
15	CCV	23:12	Total Organic Carbon - Average	24.9	25.0	99	90-110		TOC LCS Std_00057
16	CCB	23:26	Total Organic Carbon - Average	0.80				U	
27	CCV	02:08	Total Organic Carbon - Average	24.6	25.0	98	90-110		TOC LCS Std_00057
28	CCB	02:23	Total Organic Carbon - Average	0.80				U	
39	CCV	05:06	Total Organic Carbon - Average	25.2	25.0	101	90-110		TOC LCS Std_00057
40	CCB	05:22	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.: 280-175997-1

SDG No.:

Analyst: KEG Batch Start Date: 05/09/2023

Reporting Units: mg/L Analytical Batch No.: 611910

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
55	CCV	18:02	Alkalinity	198	200	99	90-110		Alk daily lcs 01086
56	CCB	18:08	Alkalinity	3.89				J	
69	CCV	19:24	Alkalinity	195	200	98	90-110		Alk daily lcs 01086
70	CCB	19:30	Alkalinity	3.22				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.: 280-175997-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	LOQ	Dil
Batch ID: 611854 Date: 05/09/2023 17:18 Prep Batch: 611794 Date: 05/09/2023 13:16							
9034	MB 280-611794/2-A	Sulfide	2.0	U	mg/L	4.0	1
Batch ID: 611205 Date: 05/04/2023 10:30							
9056	MB 280-611205/6	Nitrate as N	0.20	U	mg/L	0.50	1
9056	MB 280-611205/6	Nitrite as N	0.10	U	mg/L	0.50	1
Batch ID: 611206 Date: 05/04/2023 10:30							
9056A	MB 280-611206/6	Sulfate	2.5	U M	mg/L	5.0	1
Batch ID: 612833 Date: 05/18/2023 01:55							
9056A	MB 280-612833/56	Sulfate	2.5	U M	mg/L	5.0	1
Batch ID: 612889 Date: 05/16/2023 20:23							
9060	MB 280-612889/4	Total Organic Carbon - Average	0.80	U	mg/L	1.0	1
Batch ID: 611910 Date: 05/09/2023 18:23							
SM 2320B	MB 280-611910/58	Alkalinity	6.4	U	mg/L	10	1

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 611854	Date: 05/09/2023 17:18		Prep Batch: 611794		Date: 05/09/2023 13:16						
9034	280-175997-4	Sulfide	2.0	U	mg/L						
9034	280-175997-4 MS	Sulfide	16.8		mg/L	19.2	87	44-110			
Batch ID: 611205	Date: 05/04/2023 17:39										
9056	280-175997-4	Nitrate as N	0.67		mg/L						
9056	280-175997-4 MS	Nitrate as N	5.86		mg/L	5.00	104	88-111			J1
9056	280-175997-4	Nitrite as N	0.10	U	mg/L						
9056	280-175997-4 MS	Nitrite as N	4.75		mg/L	5.00	95	87-111			
Batch ID: 611206	Date: 05/04/2023 17:39										
9056A	280-175997-4	Sulfate	110		mg/L						J1
9056A	280-175997-4 MS	Sulfate	162		mg/L	50.0	107	87-112			J1
Batch ID: 612833	Date: 05/18/2023 03:07										
9056A	280-175997-4	Sulfate	110		mg/L						D
9056A	280-175997-4 MS	Sulfate	380		mg/L	250	109	87-112			D

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

FORM V-IN

5-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 611854 Date: 05/09/2023 17:18 Prep Batch: 611794 Date: 05/09/2023 13:16											
9034	280-175997-4 MSD	Sulfide	17.6		mg/L	19.2	92	44-110	5	20	
Batch ID: 611205 Date: 05/04/2023 17:54											
9056	280-175997-4 MSD	Nitrate as N	5.83		mg/L	5.00	103	88-111	1	10	J1
9056	280-175997-4 MSD	Nitrite as N	4.75		mg/L	5.00	95	87-111	0	10	
Batch ID: 611206 Date: 05/04/2023 17:54											
9056A	280-175997-4 MSD	Sulfate	160		mg/L	50.0	103	87-112	1	10	J1
Batch ID: 612833 Date: 05/18/2023 03:18											
9056A	280-175997-4 MSD	Sulfate	382		mg/L	250	110	87-112	0	10	D

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

FORM V-IN

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Matrix: Water

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 611205 Date: 05/04/2023 17:24								
9056	LL1mw-084-230401-GW	280-175997-4	Nitrate as N	0.67	mg/L			
9056	LL1mw-084-230401-GW	280-175997-4 DU	Nitrate as N	0.671	mg/L	0.1	10	
9056	LL1mw-084-230401-GW	280-175997-4	Nitrite as N	0.10	mg/L			U
9056	LL1mw-084-230401-GW	280-175997-4 DU	Nitrite as N	0.10	mg/L	NC	10	U
Batch ID: 611206 Date: 05/04/2023 17:24								
9056A	LL1mw-084-230401-GW	280-175997-4	Sulfate	110	mg/L			
9056A	LL1mw-084-230401-GW	280-175997-4 DU	Sulfate	110	mg/L	0.9	10	J1
Batch ID: 612833 Date: 05/18/2023 02:43								
9056A	LL1mw-084-230401-GW	280-175997-4	Sulfate	110	mg/L			
9056A	LL1mw-084-230401-GW	280-175997-4 DU	Sulfate	106	mg/L	1	10	D

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

FORM VI-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 611854	Date: 05/09/2023 17:18		Prep Batch: 611794		Date: 05/09/2023 13:16						
					LCS Source: SFD CAL INT_02396						
9034	LCS 280-611794/1-A	Sulfide	16.0		mg/L	19.2	83	44-110			
Batch ID: 611205	Date: 05/04/2023 10:00										
					LCS Source: IC LCS_01952						
9056	LCS 280-611205/4	Nitrate as N	2.37		mg/L	2.50	95	88-111	0	10	
9056	LCS 280-611205/4	Nitrite as N	2.41		mg/L	2.50	96	87-111	0	10	
Batch ID: 611206	Date: 05/04/2023 10:00										
					LCS Source: IC LCS_01952						
9056A	LCS 280-611206/4	Sulfate	49.3		mg/L	50.0	99	87-112	0	10	
Batch ID: 612833	Date: 05/18/2023 01:07										
					LCS Source: IC LCS_01954						
9056A	LCS 280-612833/52	Sulfate	48.6		mg/L	50.0	97	87-112	0	10	
Batch ID: 612889	Date: 05/16/2023 20:08										
					LCS Source: TOC LCS Std_00057						
9060	LCS 280-612889/3	Total Organic Carbon - Average	24.3		mg/L	25.0	97	88-112			
Batch ID: 611910	Date: 05/09/2023 18:16										
					LCS Source: Alk daily lcs_01086						
SM 2320B	LCS 280-611910/57	Alkalinity	194		mg/L	200	97	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.: 280-175997-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 611205	Date: 05/04/2023 10:15										
						LCSD Source: IC LCS_01952					
9056	LCSD 280-611205/5	Nitrate as N	2.37		mg/L	2.50	95	88-111	0	10	
9056	LCSD 280-611205/5	Nitrite as N	2.40		mg/L	2.50	96	87-111	0	10	
Batch ID: 611206	Date: 05/04/2023 10:15										
						LCSD Source: IC LCS_01952					
9056A	LCSD 280-611206/5	Sulfate	49.2		mg/L	50.0	98	87-112	0	10	
Batch ID: 612833	Date: 05/18/2023 01:43										
						LCSD Source: IC LCS_01954					
9056A	LCSD 280-612833/55	Sulfate	48.5		mg/L	50.0	97	87-112	0	10	

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

FORM VIIA-IN

7A-IN
METHOD REPORTING LIMIT CHECK
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 611205	Date: 05/04/2023 09:45										
						LCS Source: IC Cal low_00707					
9056	MRL 280-611205/3	Nitrate as N	0.244	J	mg/L	0.250	98	50-150			
9056	MRL 280-611205/3	Nitrite as N	0.254	J	mg/L	0.250	102	50-150			
Batch ID: 611206	Date: 05/04/2023 09:45										
						LCS Source: IC CAL cl/so4_00478					
9056A	MRL 280-611206/3	Sulfate	2.63	J	mg/L	2.50	105	50-150			
Batch ID: 612833	Date: 05/17/2023 14:23										
						LCS Source: IC CAL cl/so4_00480					
9056A	MRL 280-612833/3	Sulfate	2.17	J	mg/L	2.50	87	50-150			

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

FORM VIIA-IN

16A-IN
INITIAL CALIBRATION SUMMARY

Lab Name: Eurofins Denver Job No: 280-175997-1

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: 280-175997-1

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: 280-175997-1

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: 280-175997-1

SDG No.: Analysis Batch No.: 607366

Instrument ID: WC_IonChrom15 Calibration ID: 78779

Start Date: 04/03/2023 16:42 End Date: 04/03/2023 17:42

Analytical Method: 9056A

Analyte	Corr. Coeff.	Slope	Intercept	Calib. Type	Weighting
Sulfate	0.9995	2660000	-588000	WLR	Inverse Conc

16B-IN
INITIAL CALIBRATION

Lab Name: Eurofins Denver Job No: 280-175997-1

SDG No.: Analysis Batch No.: 607366

Instrument ID: WC_IonChrom15 Calibration ID: 78779

Start Date: 04/03/2023 16:42 End Date: 04/03/2023 17:42

Analytical Method: 9056A Concentration Units: ug/mL

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Sulfate	0.50	0.61	21	1.3	1.1	-9	2.5	2.3	-9

16B-IN
INITIAL CALIBRATION

Lab Name: Eurofins Denver Job No: 280-175997-1

SDG No.: Analysis Batch No.: 607366

Instrument ID: WC_IonChrom15 Calibration ID: 78779

Start Date: 04/03/2023 16:42 End Date: 04/03/2023 17:42

Analytical Method: 9056A Concentration Units: ug/mL

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Sulfate	30.0	28.5	-5	60.0	58.7	-2	100	103	3

16A-IN
INITIAL CALIBRATION SUMMARY

Lab Name: Eurofins Denver Job No: 280-175997-1

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: 280-175997-1

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: 280-175997-1

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: 280-175997-1

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: 280-175997-1

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: 280-175997-1

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: 280-175997-1

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: 280-175997-1

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: 280-175997-1

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: 280-175997-1

SDG Number:

Matrix: Water Instrument ID: WC_IonChrom15

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: 280-175997-1

SDG Number:

Matrix: Water Instrument ID: WC_IonChrom15

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: 280-175997-1

SDG Number:

Matrix: Water Instrument ID: WC_SHI5

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: 280-175997-1

SDG Number:

Matrix: Water Instrument ID: WC_SHI5

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: 280-175997-1

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: 280-175997-1

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.: 280-175997-1

SDG No.:

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-611794/1-A	05/09/2023 13:16	611794		50	50
MB 280-611794/2-A	05/09/2023 13:16	611794		50	50
280-175997-4	05/09/2023 13:16	611794		50	50
280-175997-4 MS	05/09/2023 13:16	611794		50	50
280-175997-4 MSD	05/09/2023 13:16	611794		50	50
280-175997-1	05/09/2023 13:16	611794		50	50
280-175997-3	05/09/2023 13:16	611794		50	50
280-175997-5	05/09/2023 13:16	611794		50	50

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: 9034

Start Date: 05/09/2023 17:18 End Date: 05/09/2023 17:18

Lab Sample Id	D/F	Type	Time	Analytes																								
				S2																								
LCS 280-611794/1-A	1	T	17:18	X																								
MB 280-611794/2-A	1	T	17:18	X																								
280-175997-4	1	T	17:18	X																								
280-175997-4 MS	1	T	17:18	X																								
280-175997-4 MSD	1	T	17:18	X																								
280-175997-1	1	T	17:18	X																								
280-175997-3	1	T	17:18	X																								
280-175997-5	1	T	17:18	X																								
ZZZZZZ			17:18																									
ZZZZZZ			17:18																									
ZZZZZZ			17:18																									
ZZZZZZ			17:18																									
ZZZZZZ			17:18																									
ZZZZZZ			17:18																									
ZZZZZZ			17:18																									
ZZZZZZ			17:18																									
ZZZZZZ			17:18																									

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-175997-1

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.: 280-175997-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056

Start Date: 05/04/2023 09:15 End Date: 05/05/2023 05:40

Lab Sample Id	D/F	Type	Time	Analytes																										
				NO2-N	NO3																									
CCV 280-611205/1	1		09:15	X	X																									
CCB 280-611205/2	1		09:30	X	X																									
MRL 280-611205/3	1	T	09:45	X	X																									
LCS 280-611205/4	1	T	10:00	X	X																									
LCSD 280-611205/5	1	T	10:15	X	X																									
MB 280-611205/6	1	T	10:30	X	X																									
ZZZZZZ			10:51																											
ZZZZZZ			11:06																											
ZZZZZZ			16:24																											
ZZZZZZ			16:39																											
280-175997-1	1	T	16:54	X	X																									
280-175997-4	1	T	17:09	X	X																									
280-175997-4 DU	1	T	17:24	X	X																									
280-175997-4 MS	1	T	17:39	X	X																									
280-175997-4 MSD	1	T	17:54	X	X																									
280-175997-5	1	T	18:09	X	X																									
CCV 280-611205/17	1		18:24	X	X																									
CCB 280-611205/18	1		18:39	X	X																									
ZZZZZZ			18:54																											
ZZZZZZ			19:09																											
ZZZZZZ			19:24																											
ZZZZZZ			19:39																											
ZZZZZZ			19:55																											
ZZZZZZ			20:10																											
ZZZZZZ			20:25																											
ZZZZZZ			20:40																											
ZZZZZZ			20:55																											
ZZZZZZ			21:10																											
CCV 280-611205/29	1		21:25	X	X																									
CCB 280-611205/30	1		21:40	X	X																									
ZZZZZZ			21:55																											
ZZZZZZ			22:10																											
ZZZZZZ			22:25																											
280-175997-3	1	T	22:40	X	X																									
ZZZZZZ			22:55																											
ZZZZZZ			23:10																											
ZZZZZZ			23:25																											
ZZZZZZ			23:40																											
ZZZZZZ			23:55																											

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056

Start Date: 05/04/2023 09:15 End Date: 05/05/2023 05:40

Lab Sample Id	D/F	Type	Time	Analytes																									
				NO2-N	NO3																								
ZZZZZZ			00:10																										
CCV 280-611205/41	1		00:25	X	X																								
CCB 280-611205/42	1		00:40	X	X																								
ZZZZZZ			00:55																										
ZZZZZZ			01:10																										
ZZZZZZ			01:25																										
ZZZZZZ			01:40																										
ZZZZZZ			01:55																										
ZZZZZZ			02:10																										
ZZZZZZ			02:25																										
ZZZZZZ			02:40																										
ZZZZZZ			02:55																										
ZZZZZZ			03:10																										
CCV 280-611205/53			03:25																										
CCB 280-611205/54			03:40																										
ZZZZZZ			03:55																										
ZZZZZZ			04:10																										
ZZZZZZ			04:25																										
ZZZZZZ			04:40																										
ZZZZZZ			04:55																										
ZZZZZZ			05:10																										
CCV 280-611205/61			05:25																										
CCB 280-611205/62			05:40																										

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-175997-1

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:
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FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056A

Start Date: 05/04/2023 09:15 End Date: 05/05/2023 03:40

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
CCV 280-611206/1	1		09:15	X																								
CCB 280-611206/2	1		09:30	X																								
MRL 280-611206/3	1	T	09:45	X																								
LCS 280-611206/4	1	T	10:00	X																								
LCSD 280-611206/5	1	T	10:15	X																								
MB 280-611206/6	1	T	10:30	X																								
ZZZZZZ			11:06																									
ZZZZZZ			16:24																									
ZZZZZZ			16:39																									
280-175997-1	1	T	16:54	X																								
ZZZZZZ			17:09																									
280-175997-4 DU	1	T	17:24	X																								
280-175997-4 MS	1	T	17:39	X																								
280-175997-4 MSD	1	T	17:54	X																								
ZZZZZZ			18:09																									
CCV 280-611206/17	1		18:24	X																								
CCB 280-611206/18	1		18:39	X																								
ZZZZZZ			18:54																									
ZZZZZZ			19:09																									
ZZZZZZ			19:24																									
ZZZZZZ			19:39																									
ZZZZZZ			19:55																									
ZZZZZZ			20:10																									
ZZZZZZ			20:25																									
ZZZZZZ			20:40																									
ZZZZZZ			20:55																									
CCV 280-611206/29	1		21:25	X																								
CCB 280-611206/30	1		21:40	X																								
ZZZZZZ			22:10																									
ZZZZZZ			22:25																									
ZZZZZZ			22:40																									
ZZZZZZ			22:55																									
ZZZZZZ			23:10																									
ZZZZZZ			23:25																									
ZZZZZZ			23:40																									
ZZZZZZ			23:55																									
ZZZZZZ			00:10																									
CCV 280-611206/41	1		00:25	X																								
CCB 280-611206/42	1		00:40	X																								
ZZZZZZ			00:55																									
ZZZZZZ			01:10																									

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056A

Start Date: 05/04/2023 09:15 End Date: 05/05/2023 03:40

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
ZZZZZZ			01:25																									
ZZZZZZ			01:40																									
ZZZZZZ			01:55																									
ZZZZZZ			02:10																									
CCV 280-611206/53			03:25																									
CCB 280-611206/54			03:40																									

Prep Types:
T = Total/NA

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: WC_IonChrom15 Analysis Method: 9056A

Start Date: 04/03/2023 16:42 End Date: 04/04/2023 19:35

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
STD 280-607366/1 IC	1		16:42	X																								
STD 280-607366/2 IC	1		16:54	X																								
STD 280-607366/3 IC	1		17:06	X																								
STD 280-607366/4 IC	1		17:18	X																								
STD 280-607366/5 IC	1		17:30	X																								
STD 280-607366/6 IC	1		17:42	X																								
ICV 280-607366/7	1		17:54	X																								
ICB 280-607366/8	1		18:06	X																								
RTC 280-607366/9			18:18																									
ZZZZZZ			18:30																									
ZZZZZZ			18:42																									
ZZZZZZ			18:54																									
ZZZZZZ			19:06																									
ZZZZZZ			19:17																									
ZZZZZZ			19:29																									
ZZZZZZ			19:41																									
ZZZZZZ			19:54																									
ZZZZZZ			20:05																									
ZZZZZZ			20:17																									
ZZZZZZ			20:29																									
ZZZZZZ			20:41																									
ZZZZZZ			20:53																									
ZZZZZZ			21:05																									
CCV 280-607366/24			21:17																									
CCB 280-607366/25			21:29																									
ZZZZZZ			21:41																									
ZZZZZZ			21:53																									
ZZZZZZ			22:05																									
ZZZZZZ			22:17																									
ZZZZZZ			22:29																									
ZZZZZZ			22:41																									
ZZZZZZ			22:53																									
ZZZZZZ			23:05																									
ZZZZZZ			23:17																									
ZZZZZZ			23:28																									
CCV 280-607366/36			23:40																									
CCB 280-607366/37			23:52																									
ZZZZZZ			00:04																									
ZZZZZZ			00:16																									
ZZZZZZ			00:28																									
ZZZZZZ			00:40																									

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: WC_IonChrom15 Analysis Method: 9056A

Start Date: 04/03/2023 16:42 End Date: 04/04/2023 19:35

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
ZZZZZZ			00:52																									
ZZZZZZ			01:04																									
ZZZZZZ			01:16																									
ZZZZZZ			01:28																									
ZZZZZZ			01:40																									
ZZZZZZ			01:52																									
CCV 280-607366/48			02:04																									
CCB 280-607366/49			02:16																									
ZZZZZZ			02:28																									
ZZZZZZ			02:40																									
ZZZZZZ			02:52																									
ZZZZZZ			03:03																									
ZZZZZZ			03:15																									
ZZZZZZ			03:27																									
ZZZZZZ			03:39																									
ZZZZZZ			03:51																									
ZZZZZZ			04:03																									
ZZZZZZ			04:15																									
CCV 280-607366/60			04:27																									
CCB 280-607366/61			04:39																									
ZZZZZZ			04:51																									
ZZZZZZ			05:03																									
ZZZZZZ			05:15																									
ZZZZZZ			05:27																									
ZZZZZZ			05:39																									
ZZZZZZ			05:51																									
ZZZZZZ			06:03																									
ZZZZZZ			06:14																									
ZZZZZZ			06:26																									
ZZZZZZ			09:25																									
CCV 280-607366/72			10:25																									
CCB 280-607366/73			10:37																									
ZZZZZZ			10:49																									
ZZZZZZ			11:01																									
ZZZZZZ			11:13																									
ZZZZZZ			11:25																									
ZZZZZZ			11:37																									
ZZZZZZ			11:49																									
ZZZZZZ			12:01																									
ZZZZZZ			12:13																									
ZZZZZZ			12:25																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: WC_IonChrom15 Analysis Method: 9056A

Start Date: 04/03/2023 16:42 End Date: 04/04/2023 19:35

Lab Sample Id	D/F	Type	Time	Analytes																									
				SO4																									
ZZZZZZ			12:37																										
CCV 280-607366/84			12:49																										
CCB 280-607366/85			13:00																										
ZZZZZZ			13:12																										
ZZZZZZ			13:24																										
ZZZZZZ			13:36																										
ZZZZZZ			13:48																										
ZZZZZZ			14:00																										
ZZZZZZ			14:12																										
ZZZZZZ			14:24																										
ZZZZZZ			14:36																										
ZZZZZZ			14:48																										
ZZZZZZ			15:00																										
CCV 280-607366/96			15:12																										
CCB 280-607366/97			15:24																										
ZZZZZZ			15:36																										
ZZZZZZ			15:48																										
ZZZZZZ			16:00																										
ZZZZZZ			16:12																										
ZZZZZZ			16:24																										
ZZZZZZ			16:36																										
ZZZZZZ			16:48																										
ZZZZZZ			17:00																										
ZZZZZZ			17:12																										
ZZZZZZ			17:24																										
CCV 280-607366/108			17:36																										
CCB 280-607366/109			17:48																										
ZZZZZZ			18:00																										
ZZZZZZ			18:12																										
ZZZZZZ			18:24																										
ZZZZZZ			18:35																										
ZZZZZZ			18:47																										
ZZZZZZ			18:59																										
ZZZZZZ			19:11																										
CCV 280-607366/117			19:23																										
CCB 280-607366/118			19:35																										

Prep Types:
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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: WC_IonChrom15 Analysis Method: 9056A

Start Date: 05/17/2023 13:59 End Date: 05/18/2023 08:18

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
CCV 280-612833/1			13:59																									
CCB 280-612833/2			14:11																									
MRL 280-612833/3	1	T	14:23	X																								
ZZZZZZ			14:35																									
ZZZZZZ			14:47																									
ZZZZZZ			14:59																									
ZZZZZZ			16:09																									
ZZZZZZ			16:21																									
ZZZZZZ			16:33																									
ZZZZZZ			16:46																									
ZZZZZZ			16:57																									
ZZZZZZ			17:09																									
ZZZZZZ			17:21																									
ZZZZZZ			17:33																									
ZZZZZZ			17:45																									
ZZZZZZ			17:57																									
CCV 280-612833/17			18:09																									
CCB 280-612833/18			18:21																									
ZZZZZZ			18:33																									
ZZZZZZ			18:45																									
ZZZZZZ			18:57																									
ZZZZZZ			19:09																									
ZZZZZZ			19:21																									
ZZZZZZ			19:33																									
ZZZZZZ			19:45																									
ZZZZZZ			19:57																									
ZZZZZZ			20:09																									
ZZZZZZ			20:21																									
CCV 280-612833/29			20:32																									
CCB 280-612833/30			20:44																									
ZZZZZZ			20:56																									
ZZZZZZ			21:08																									
ZZZZZZ			21:20																									
ZZZZZZ			21:32																									
ZZZZZZ			21:44																									
ZZZZZZ			21:56																									
ZZZZZZ			22:08																									
ZZZZZZ			22:20																									
ZZZZZZ			22:32																									
ZZZZZZ			22:44																									
CCV 280-612833/41	1		22:56	X																								

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: WC_IonChrom15 Analysis Method: 9056A

Start Date: 05/17/2023 13:59 End Date: 05/18/2023 08:18

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
CCB 280-612833/42	1		23:08	X																								
ZZZZZZ			23:20																									
ZZZZZZ			23:32																									
ZZZZZZ			23:44																									
ZZZZZZ			23:55																									
ZZZZZZ			00:07																									
ZZZZZZ			00:19																									
ZZZZZZ			00:31																									
ZZZZZZ			00:43																									
ZZZZZZ			00:55																									
LCS 280-612833/52	1	T	01:07	X																								
CCV 280-612833/53	1		01:19	X																								
CCB 280-612833/54	1		01:31	X																								
LCSD 280-612833/55	1	T	01:43	X																								
MB 280-612833/56	1	T	01:55	X																								
ZZZZZZ			02:07																									
280-175997-3	5	T	02:19	X																								
280-175997-4	5	T	02:31	X																								
280-175997-4 DU	5	T	02:43	X																								
280-175997-4 MS	5	T	03:07	X																								
280-175997-4 MSD	5	T	03:18	X																								
280-175997-5	5	T	03:30	X																								
CCV 280-612833/65	1		03:42	X																								
CCB 280-612833/66	1		03:54	X																								
ZZZZZZ			04:06																									
ZZZZZZ			04:18																									
ZZZZZZ			04:30																									
ZZZZZZ			04:42																									
ZZZZZZ			04:54																									
ZZZZZZ			05:06																									
ZZZZZZ			05:18																									
ZZZZZZ			05:30																									
ZZZZZZ			05:42																									
ZZZZZZ			05:54																									
CCV 280-612833/77			06:06																									
CCB 280-612833/78			06:18																									
ZZZZZZ			06:30																									
ZZZZZZ			06:42																									
ZZZZZZ			06:53																									
ZZZZZZ			07:05																									
ZZZZZZ			07:18																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: WC_IonChrom15 Analysis Method: 9056A

Start Date: 05/17/2023 13:59 End Date: 05/18/2023 08:18

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
ZZZZZZ			07:30																									
ZZZZZZ			07:41																									
ZZZZZZ			07:53																									
CCV 280-612833/87			08:05																									
CCB 280-612833/88			08:18																									

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: WC_SHI5 Analysis Method: 9060

Start Date: 05/16/2023 19:40 End Date: 05/17/2023 18:27

Lab Sample Id	D/F	Type	Time	Analytes
				TOCQ
ICV 280-612889/1	1		19:40	X
ICB 280-612889/2	1		19:54	X
LCS 280-612889/3	1	T	20:08	X
MB 280-612889/4	1	T	20:23	X
ZZZZZZ			20:37	
ZZZZZZ			20:51	
ZZZZZZ			21:08	
ZZZZZZ			21:22	
ZZZZZZ			21:39	
ZZZZZZ			21:53	
ZZZZZZ			22:09	
ZZZZZZ			22:23	
ZZZZZZ			22:39	
ZZZZZZ			22:57	
CCV 280-612889/15	1		23:12	X
CCB 280-612889/16	1		23:26	X
ZZZZZZ			23:40	
ZZZZZZ			23:55	
ZZZZZZ			00:09	
ZZZZZZ			00:23	
ZZZZZZ			00:37	
ZZZZZZ			00:51	
ZZZZZZ			01:06	
ZZZZZZ			01:22	
ZZZZZZ			01:36	
280-175997-1	1	T	01:53	X
CCV 280-612889/27	1		02:08	X
CCB 280-612889/28	1		02:23	X
280-175997-3	1	T	02:37	X
280-175997-4	1	T	02:51	X
ZZZZZZ			03:07	
ZZZZZZ			03:21	
ZZZZZZ			03:36	
ZZZZZZ			03:50	
ZZZZZZ			04:04	
ZZZZZZ			04:18	
ZZZZZZ			04:32	
ZZZZZZ			04:47	
CCV 280-612889/39	1		05:06	X
CCB 280-612889/40	1		05:22	X

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: WC_SHI5 Analysis Method: 9060

Start Date: 05/16/2023 19:40 End Date: 05/17/2023 18:27

Lab Sample Id	D/F	Type	Time	Analytes																									
				TOCQ																									
ZZZZZZ			05:36																										
ZZZZZZ			05:50																										
ZZZZZZ			06:07																										
ZZZZZZ			06:23																										
ZZZZZZ			06:39																										
ZZZZZZ			06:55																										
ZZZZZZ			07:10																										
ZZZZZZ			07:24																										
ZZZZZZ			07:40																										
ZZZZZZ			07:54																										
CCV 280-612889/51			08:09																										
CCB 280-612889/52			08:23																										
ZZZZZZ			08:37																										
ZZZZZZ			08:52																										
ZZZZZZ			09:06																										
ZZZZZZ			09:22																										
ZZZZZZ			09:36																										
ZZZZZZ			09:51																										
ZZZZZZ			10:07																										
ZZZZZZ			10:23																										
ZZZZZZ			10:39																										
ZZZZZZ			10:55																										
CCV 280-612889/63			11:10																										
CCB 280-612889/64			11:24																										
ZZZZZZ			11:39																										
ZZZZZZ			11:53																										
ZZZZZZ			12:07																										
ZZZZZZ			12:21																										
ZZZZZZ			12:36																										
ZZZZZZ			12:50																										
ZZZZZZ			13:04																										
ZZZZZZ			13:18																										
ZZZZZZ			13:33																										
ZZZZZZ			13:47																										
CCV 280-612889/75			14:01																										
CCB 280-612889/76			14:16																										
ZZZZZZ			14:32																										
ZZZZZZ			14:48																										
ZZZZZZ			15:03																										
ZZZZZZ			15:19																										

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: WC_SHI5 Analysis Method: 9060

Start Date: 05/16/2023 19:40 End Date: 05/17/2023 18:27

Lab Sample Id	D/F	Type	Time	Analytes																									
				TOCQ																									
ZZZZZZ			15:33																										
ZZZZZZ			15:48																										
ZZZZZZ			16:02																										
ZZZZZZ			16:16																										
ZZZZZZ			16:31																										
ZZZZZZ			16:45																										
CCV 280-612889/87			16:59																										
CCB 280-612889/88			17:14																										
ZZZZZZ			17:28																										
ZZZZZZ			17:42																										
ZZZZZZ			17:56																										
CCV 280-612889/92			18:13																										
CCB 280-612889/93			18:27																										

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 05/09/2023 11:03 End Date: 05/10/2023 05:18

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
RINSE 280-611910/1			11:03																									
ZZZZZZ			11:11																									
ZZZZZZ			11:14																									
ZZZZZZ			11:22																									
ZZZZZZ			11:30																									
ZZZZZZ			11:36																									
ZZZZZZ			11:41																									
ZZZZZZ			11:47																									
ZZZZZZ			11:52																									
ZZZZZZ			11:58																									
ZZZZZZ			12:03																									
ZZZZZZ			12:10																									
ZZZZZZ			12:18																									
ZZZZZZ			12:26																									
ZZZZZZ			12:32																									
ZZZZZZ			12:41																									
CCV 280-611910/17			12:49																									
CCB 280-611910/18			12:55																									
ZZZZZZ			13:03																									
ZZZZZZ			13:13																									
ZZZZZZ			13:21																									
ZZZZZZ			13:29																									
ZZZZZZ			13:37																									
ZZZZZZ			13:45																									
ZZZZZZ			13:53																									
ZZZZZZ			14:01																									
ZZZZZZ			14:08																									
ZZZZZZ			14:16																									
CCV 280-611910/29			14:24																									
CCB 280-611910/30			14:30																									
ZZZZZZ			14:38																									
ZZZZZZ			14:44																									
ZZZZZZ			14:51																									
ZZZZZZ			14:58																									
ZZZZZZ			15:06																									
ZZZZZZ			15:13																									
ZZZZZZ			15:19																									
ZZZZZZ			15:25																									
ZZZZZZ			15:32																									
ZZZZZZ			15:40																									
ZZZZZZ			15:46																									

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 05/09/2023 11:03 End Date: 05/10/2023 05:18

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
ZZZZZZ			15:55																									
CCV 280-611910/43			16:03																									
CCB 280-611910/44			16:10																									
ZZZZZZ			16:16																									
ZZZZZZ			16:23																									
ZZZZZZ			16:29																									
ZZZZZZ			16:36																									
ZZZZZZ			16:50																									
ZZZZZZ			17:08																									
ZZZZZZ			17:15																									
ZZZZZZ			17:21																									
ZZZZZZ			17:36																									
ZZZZZZ			17:53																									
CCV 280-611910/55	1		18:02	X																								
CCB 280-611910/56	1		18:08	X																								
LCS 280-611910/57	1	T	18:16	X																								
MB 280-611910/58	1	T	18:23	X																								
ZZZZZZ			18:27																									
ZZZZZZ			18:33																									
ZZZZZZ			18:38																									
ZZZZZZ			18:44																									
280-175997-1	1	T	18:50	X																								
280-175997-3	1	T	18:54	X																								
280-175997-4	1	T	18:59	X																								
280-175997-5	1	T	19:05	X																								
ZZZZZZ			19:10																									
ZZZZZZ			19:16																									
CCV 280-611910/69	1		19:24	X																								
CCB 280-611910/70	1		19:30	X																								
ZZZZZZ			19:40																									
ZZZZZZ			19:48																									
ZZZZZZ			19:58																									
ZZZZZZ			20:05																									
ZZZZZZ			20:13																									
ZZZZZZ			20:20																									
ZZZZZZ			20:25																									
ZZZZZZ			20:31																									
ZZZZZZ			20:36																									
ZZZZZZ			20:43																									
CCV 280-611910/81			20:51																									
CCB 280-611910/82			20:58																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 05/09/2023 11:03 End Date: 05/10/2023 05:18

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
ZZZZZZ			21:05																									
ZZZZZZ			21:12																									
ZZZZZZ			21:18																									
ZZZZZZ			21:25																									
ZZZZZZ			21:33																									
ZZZZZZ			21:40																									
ZZZZZZ			21:48																									
ZZZZZZ			21:55																									
ZZZZZZ			22:02																									
ZZZZZZ			22:09																									
ZZZZZZ			22:15																									
ZZZZZZ			22:27																									
CCV 280-611910/95			22:36																									
CCB 280-611910/96			22:42																									
ZZZZZZ			22:54																									
ZZZZZZ			23:00																									
ZZZZZZ			23:06																									
ZZZZZZ			23:16																									
ZZZZZZ			23:28																									
ZZZZZZ			23:40																									
ZZZZZZ			23:47																									
ZZZZZZ			23:55																									
ZZZZZZ			00:03																									
ZZZZZZ			00:12																									
CCV 280-611910/107			00:20																									
CCB 280-611910/108			00:26																									
ZZZZZZ			00:34																									
ZZZZZZ			00:41																									
ZZZZZZ			00:49																									
ZZZZZZ			00:57																									
ZZZZZZ			01:04																									
ZZZZZZ			01:17																									
ZZZZZZ			01:27																									
ZZZZZZ			01:40																									
ZZZZZZ			01:53																									
ZZZZZZ			02:00																									
ZZZZZZ			02:11																									
ZZZZZZ			02:26																									
CCV 280-611910/121			02:35																									
CCB 280-611910/122			02:41																									
ZZZZZZ			02:48																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 05/09/2023 11:03 End Date: 05/10/2023 05:18

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
ZZZZZZ			03:08																									
ZZZZZZ			03:24																									
ZZZZZZ			03:33																									
ZZZZZZ			03:40																									
ZZZZZZ			03:53																									
ZZZZZZ			04:09																									
ZZZZZZ			04:32																									
ZZZZZZ			04:55																									
RINSE 280-611910/132			05:03																									
CCV 280-611910/133			05:11																									
CCB 280-611910/134			05:18																									

Prep Types:
T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Batch Number: 611794 Batch Start Date: 05/09/23 13:16 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 280-611794/1		9030B, 9034		50 mL	50 mL	1	7 SU	<2 SU	5 mL
MB 280-611794/2		9030B, 9034		50 mL	50 mL	2	7 SU	<2 SU	5 mL
280-175997-E-4	LL1mw-084-230401-GW	9030B, 9034	T	50 mL	50 mL	3	12+ SU	<2 SU	5 mL
280-175997-E-4 MS	LL1mw-084-230401-GW	9030B, 9034	T	50 mL	50 mL	4	12+ SU	<2 SU	5 mL
280-175997-E-4 MSD	LL1mw-084-230401-GW	9030B, 9034	T	50 mL	50 mL	5	12+ SU	<2 SU	5 mL
280-175997-E-1	LL1mw-080-230401-GW	9030B, 9034	T	50 mL	50 mL	6	12+ SU	<2 SU	5 mL
280-175997-E-3	LL1mw-083-230401-GW	9030B, 9034	T	50 mL	50 mL	7	12+ SU	<2 SU	5 mL
280-175997-D-5	LL1mw-084-230402-GW	9030B, 9034	T	50 mL	50 mL	8	12+ SU	<2 SU	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD CAL INT 02396					
LCS 280-611794/1		9030B, 9034		1 mL					
MB 280-611794/2		9030B, 9034							
280-175997-E-4	LL1mw-084-230401-GW	9030B, 9034	T						
280-175997-E-4 MS	LL1mw-084-230401-GW	9030B, 9034	T	1 mL					
280-175997-E-4 MSD	LL1mw-084-230401-GW	9030B, 9034	T	1 mL					
280-175997-E-1	LL1mw-080-230401-GW	9030B, 9034	T						
280-175997-E-3	LL1mw-083-230401-GW	9030B, 9034	T						
280-175997-D-5	LL1mw-084-230402-GW	9030B, 9034	T						

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.: 280-175997-1

SDG No.:

Batch Number: 611794 Batch Start Date: 05/09/23 13:16 Batch Analyst: Ince, Connor A

Batch Method: 9030B Batch End Date:

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	05/09/2023 12:30
Uncorrected Temperature 2	80 Degrees C
Oven, Bath or Block Temperature 2	80 Degrees C
Distillation End Time	05/09/2023 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.: 280-175997-1

SDG No.:

Batch Number: 611854 Batch Start Date: 05/09/23 17:18 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 280-611794/1-A		9034		0.0 mL	3.0 mL	1.25 mL	3 mL	50 mL	
MB 280-611794/2-A		9034		3.0 mL	4.0 mL	0.25 mL	1 mL	50 mL	
280-175997-E-4-A	LL1mw-084-230401-GW	9034	T	4.0 mL	5.0 mL	0.25 mL	1 mL	50 mL	
280-175997-E-4-B MS	LL1mw-084-230401-GW	9034	T	5.0 mL	7.9 mL	1.25 mL	2.9 mL	50 mL	
280-175997-E-4-C MSD	LL1mw-084-230401-GW	9034	T	7.9 mL	10.7 mL	1.25 mL	2.8 mL	50 mL	
280-175997-E-1-A	LL1mw-080-230401-GW	9034	T	10.7 mL	11.6 mL	0.25 mL	0.9 mL	50 mL	
280-175997-E-3-A	LL1mw-083-230401-GW	9034	T	11.6 mL	12.5 mL	0.25 mL	0.9 mL	50 mL	
280-175997-D-5-A	LL1mw-084-230402-GW	9034	T	12.5 mL	13.4 mL	0.25 mL	0.9 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.: 280-175997-1

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.: 280-175997-1

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.: 280-175997-1

SDG No.:

Batch Number: 611205 Batch Start Date: 05/04/23 09:15 Batch Analyst: Sherman, Erik J

Batch Method: 9056 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CAL cl/so4 00478	IC Cal low 00707	IC LCS 01952	ICMS/MSD WEEK 00817
CCV 280-611205/1		9056		10 mL	10 mL			10 mL	
CCB 280-611205/2		9056		10 mL	10 mL				
MRL 280-611205/3		9056		10 mL	10 mL	0.2 mL	0.1 mL		
LCS 280-611205/4		9056		10 mL	10 mL			10 mL	
LCSD 280-611205/5		9056		10 mL	10 mL			10 mL	
MB 280-611205/6		9056		10 mL	10 mL				
280-175997-C-1	LL1mw-080-230401-GW	9056	T	10 mL	10 mL				
280-175997-C-4	LL1mw-084-230401-GW	9056	T	10 mL	10 mL				
280-175997-C-4 DU	LL1mw-084-230401-GW	9056	T	10 mL	10 mL				
280-175997-C-4 MS	LL1mw-084-230401-GW	9056	T	10 mL	10 mL				0.1 mL
280-175997-C-4 MSD	LL1mw-084-230401-GW	9056	T	10 mL	10 mL				0.1 mL
280-175997-C-5	LL1mw-084-230402-GW	9056	T	10 mL	10 mL				
CCV 280-611205/17		9056		10 mL	10 mL			10 mL	
CCB 280-611205/18		9056		10 mL	10 mL				
CCV 280-611205/29		9056		10 mL	10 mL			10 mL	
CCB 280-611205/30		9056		10 mL	10 mL				
280-175997-C-3	LL1mw-083-230401-GW	9056	T	10 mL	10 mL				
CCV 280-611205/41		9056		10 mL	10 mL			10 mL	
CCB 280-611205/42		9056		10 mL	10 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Batch Number: 611205 Batch Start Date: 05/04/23 09:15 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	RUN BY MEC, REVIEWED BY EJS

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Batch Number: 607366 Batch Start Date: 04/03/23 16:42 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 00473	IC Cal low 00701	IC ICV 5 00402
STD 280-607366/1 IC		9056A		10 mL	10 mL		0.04 mL		
STD 280-607366/2 IC		9056A		10 mL	10 mL		0.1 mL	0.08 mL	
STD 280-607366/3 IC		9056A		10 mL	10 mL		0.2 mL	0.2 mL	
STD 280-607366/4 IC		9056A		10 mL	10 mL		2.4 mL	0.4 mL	
STD 280-607366/5 IC		9056A		10 mL	10 mL		4.8 mL	1 mL	
STD 280-607366/6 IC		9056A		10 mL	10 mL		8 mL	2 mL	
ICV 280-607366/7		9056A		10 mL	10 mL	0.8 mL			0.8 mL
ICB 280-607366/8		9056A		10 mL	10 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	IC SO4 ICV 00024					
STD 280-607366/1 IC		9056A							
STD 280-607366/2 IC		9056A							
STD 280-607366/3 IC		9056A							
STD 280-607366/4 IC		9056A							
STD 280-607366/5 IC		9056A							
STD 280-607366/6 IC		9056A							
ICV 280-607366/7		9056A		0.8 mL					
ICB 280-607366/8		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.: 280-175997-1

SDG No.:

Batch Number: 607366 Batch Start Date: 04/03/23 16:42 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	AS22 ELUENT_00004
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.: 280-175997-1

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.: 280-175997-1

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.: 280-175997-1

SDG No.:

Batch Number: 611206 Batch Start Date: 05/04/23 09:15 Batch Analyst: Sherman, Erik J

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CAL cl/so4 00478	IC Cal low 00707	IC LCS 01952	ICMS/MSD WEEK 00817
CCV 280-611206/1		9056A		10 mL	10 mL			10 mL	
CCB 280-611206/2		9056A		10 mL	10 mL				
MRL 280-611206/3		9056A		10 mL	10 mL	0.2 mL	0.1 mL		
LCS 280-611206/4		9056A		10 mL	10 mL			10 mL	
LCSD 280-611206/5		9056A		10 mL	10 mL			10 mL	
MB 280-611206/6		9056A		10 mL	10 mL				
280-175997-C-1	LL1mw-080-230401-GW	9056A	T	10 mL	10 mL				
280-175997-C-4	LL1mw-084-230401-GW	9056A	T	10 mL	10 mL				
280-175997-C-4 DU	LL1mw-084-230401-GW	9056A	T	10 mL	10 mL				
280-175997-C-4 MS	LL1mw-084-230401-GW	9056A	T	10 mL	10 mL				0.1 mL
280-175997-C-4 MSD	LL1mw-084-230401-GW	9056A	T	10 mL	10 mL				0.1 mL
280-175997-C-5	LL1mw-084-230402-GW	9056A	T	10 mL	10 mL				
CCV 280-611206/17		9056A		10 mL	10 mL			10 mL	
CCB 280-611206/18		9056A		10 mL	10 mL				
CCV 280-611206/29		9056A		10 mL	10 mL			10 mL	
CCB 280-611206/30		9056A		10 mL	10 mL				
280-175997-C-3	LL1mw-083-230401-GW	9056A	T	10 mL	10 mL				
CCV 280-611206/41		9056A		10 mL	10 mL			10 mL	
CCB 280-611206/42		9056A		10 mL	10 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Batch Number: 611206 Batch Start Date: 05/04/23 09:15 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	RUN BY MEC, REVIEWED BY EJS

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-175997-1

SDG No.:

Batch Number: 612833 Batch Start Date: 05/17/23 13:59 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 00480	IC Cal low 00709	IC LCS 01954	ICMS/MSD WEEK 00819
MRL 280-612833/3		9056A		5 mL	5 mL	0.2 mL	0.1 mL		
CCV 280-612833/41		9056A		5 mL	5 mL			10 mL	
CCB 280-612833/42		9056A		5 mL	5 mL				
LCS 280-612833/52		9056A		5 mL	5 mL			10 mL	
CCV 280-612833/53		9056A		5 mL	5 mL			10 mL	
CCB 280-612833/54		9056A		5 mL	5 mL				
LCSD 280-612833/55		9056A		5 mL	5 mL			10 mL	
MB 280-612833/56		9056A		5 mL	5 mL				
280-175997-C-3	LL1mw-083-230401-GW	9056A	T	5 mL	5 mL				
280-175997-C-4	LL1mw-084-230401-GW	9056A	T	5 mL	5 mL				
280-175997-C-4 DU	LL1mw-084-230401-GW	9056A	T	5 mL	5 mL				
280-175997-C-4 MS	LL1mw-084-230401-GW	9056A	T	5 mL	5 mL				0.1 mL
280-175997-C-4 MSD	LL1mw-084-230401-GW	9056A	T	5 mL	5 mL				0.1 mL
280-175997-C-5	LL1mw-084-230402-GW	9056A	T	5 mL	5 mL				
CCV 280-612833/65		9056A		5 mL	5 mL			10 mL	
CCB 280-612833/66		9056A		5 mL	5 mL				

Batch Notes	
Filter ID	SF020E
Pipette/Syringe/Dispenser ID	ARM5000, 1000HEX, 200CJ, 100IC
Sufficient Volume for Batch QC	yes
Eluent 1 ID	AS22 Eluent_00007
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.: 280-175997-1

SDG No.:

Batch Number: 612833 Batch Start Date: 05/17/23 13:59 Batch Analyst: Collins, Michael E

Batch Method: 9056A 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.: 280-175997-1

SDG No.:

Batch Number: 612889 Batch Start Date: 05/16/23 19:40 Batch Analyst: Wondimu, Akewak B

Batch Method: 9060 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	TOC ICV Std 00051	TOC LCS Std 00057	AnalysisComment
ICV 280-612889/1		9060		50 mL	50 mL	<2 SU	1 mL		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
ICB 280-612889/2		9060		20 mL	20 mL	<2 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
LCS 280-612889/3		9060		200 mL	200 mL	<2 SU		5 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
MB 280-612889/4		9060		20 mL	20 mL	<2 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
CCV 280-612889/15		9060		200 mL	200 mL	<2 SU		5 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
CCB 280-612889/16		9060		20 mL	20 mL	<2 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-175997-D-1	LL1mw-080-230401-GW	9060	T	20 mL	20 mL	<2 SU			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.: 280-175997-1

SDG No.:

Batch Number: 612889 Batch Start Date: 05/16/23 19:40 Batch Analyst: Wondimu, Akewak B

Batch Method: 9060 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	TOC ICV Std 00051	TOC LCS Std 00057	AnalysisComment
CCV 280-612889/27		9060		200 mL	200 mL	<2 SU		5 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
CCB 280-612889/28		9060		20 mL	20 mL	<2 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-175997-D-3	LL1mw-083-230401-GW	9060	T	20 mL	20 mL	<2 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-175997-D-4	LL1mw-084-230401-GW	9060	T	20 mL	20 mL	<2 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
CCV 280-612889/39		9060		200 mL	200 mL	<2 SU		5 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
CCB 280-612889/40		9060		20 mL	20 mL	<2 SU			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.: 280-175997-1

SDG No.:

Batch Number: 612889 Batch Start Date: 05/16/23 19:40 Batch Analyst: Wondimu, Akewak B

Batch Method: 9060 Batch End Date:

Batch Notes	
Acid ID	0.2% H2SO4_00461, H2SO4_00214
Combustion Catylyst ID	S638-92069-02
Pipette/Syringe/Dispenser ID	BWH 5000,1000 MS
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.: 280-175997-1

SDG No.:

Batch Number: 611910 Batch Start Date: 05/09/23 11:03 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 01086				
CCV 280-611910/55		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-611910/56		SM 2320B		InitialAmount is blank					
LCS 280-611910/57		SM 2320B		InitialAmount is blank	10 mL				
MB 280-611910/58		SM 2320B		InitialAmount is blank					
280-175997-C-1	LL1mw-080-230401-GW	SM 2320B	T	InitialAmount is blank					
280-175997-C-3	LL1mw-083-230401-GW	SM 2320B	T	InitialAmount is blank					
280-175997-C-4	LL1mw-084-230401-GW	SM 2320B	T	InitialAmount is blank					
280-175997-C-5	LL1mw-084-230402-GW	SM 2320B	T	InitialAmount is blank					
CCV 280-611910/69		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-611910/70		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_00210
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.: 280-175997-1

SDG No.:

Batch Number: 611910 Batch Start Date: 05/09/23 11:03 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: 280-175997-1

Batch: 611854 **Analyst Initials: CAI**

Method: 9034 **Instrument: No Equipment Used for this Test**

Lab Sample ID: LCS 280-611794/1-A

Analysis Date: May 09, 2023 17:18

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	16	mg/L	50 mL	50 mL

Lab Sample ID: MB 280-611794/2-A

Analysis Date: May 09, 2023 17:18

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-175997-E-4-A

Analysis Date: May 09, 2023 17:18

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-175997-E-4-B MS

Analysis Date: May 09, 2023 17:18

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	16.8	mg/L	50 mL	50 mL

Lab Sample ID: 280-175997-E-4-C MSD

Analysis Date: May 09, 2023 17:18

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	17.6	mg/L	50 mL	50 mL

Lab Sample ID: 280-175997-E-1-A

Analysis Date: May 09, 2023 17:18

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.8	mg/L	50 mL	50 mL

Lab Sample ID: 280-175997-E-3-A

Analysis Date: May 09, 2023 17:18

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.8	mg/L	50 mL	50 mL

Lab Sample ID: 280-175997-D-5-A

Analysis Date: May 09, 2023 17:18

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.8	mg/L	50 mL	50 mL

Sulfide by Titration

Analyst:	slr	SOP Information:	
Date:	5/9/2023	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:	960
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	8.00	5	8.00	960.000
CAL	5	0.00	8.00	5	8.00	960.000

ICV Information	
Source/Ver-Lot#:	INT_02291
Prep Date:	4/26/2023
Made By:	CAI
Concentration:	924
Expiration Date:	7/26/2023

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
ICV	5	0.00	8.50	5	8.50	920.000
ICV	5	0.00	8.40	5	8.40	928.000

TALS Raw Data Report

Job Number: 280-175856-1
LIMS Batch: 611854
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-611794/1-A** Inj Date: 5/9/2023 5:18:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16 mg/L	mg/L	83	44 110		
Sulfide as H2S		17 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-611794/2-A** Inj Date: 5/9/2023 5:18:00PM 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: **280-175997-E-4-A** Inj Date: 5/9/2023 5:18:00PM 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: **280-175997-E-4-B MS** Inj Date: 5/9/2023 5:18:00PM 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	87	44 110		
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 5 Lab ID: **280-175997-E-4-C MSD** Inj Date: 5/9/2023 5:18:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		17.6 mg/L	mg/L	92	44 110	5	20
Sulfide as H2S		18.7 mg/L	mg/L				

RS# 9 Lab ID: **280-175856-A-4-A** Inj Date: 5/9/2023 5:18:00PM 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# 10 Lab ID: **280-175856-A-5-A** Inj Date: 5/9/2023 5:18:00PM 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# 11 Lab ID: **280-175856-A-6-A** Inj Date: 5/9/2023 5:18:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16 mg/L	mg/L				
Sulfide as H2S		17 mg/L	mg/L				

TALS Raw Data Report

Job Number: 280-175906-1
LIMS Batch: 611854
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-611794/1-A** Inj Date: 5/9/2023 5:18:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16 mg/L	mg/L	83	44 110		
Sulfide as H2S		17 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-611794/2-A** Inj Date: 5/9/2023 5:18:00PM 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: **280-175997-E-4-A** Inj Date: 5/9/2023 5:18:00PM 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: **280-175997-E-4-B MS** Inj Date: 5/9/2023 5:18:00PM 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	87	44 110		
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 5 Lab ID: **280-175997-E-4-C MSD** Inj Date: 5/9/2023 5:18:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		17.6 mg/L	mg/L	92	44 110	5	20
Sulfide as H2S		18.7 mg/L	mg/L				

RS# 12 Lab ID: **280-175906-F-1-A** Inj Date: 5/9/2023 5:18:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		999999968 mg/L	mg/L				
Sulfide as H2S		999999966 mg/L	mg/L				

RS# 13 Lab ID: **280-175906-F-2-A** Inj Date: 5/9/2023 5:18:00PM 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				

RS# 14 Lab ID: **280-175906-F-3-A** Inj Date: 5/9/2023 5:18:00PM 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: 280-175997-1
LIMS Batch: 611854
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-611794/1-A** Inj Date: 5/9/2023 5:18:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16 mg/L	mg/L	83	44 110		
Sulfide as H2S		17 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-611794/2-A** Inj Date: 5/9/2023 5:18:00PM 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: **280-175997-E-4-A** Inj Date: 5/9/2023 5:18:00PM 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: **280-175997-E-4-B MS** Inj Date: 5/9/2023 5:18:00PM 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	87	44 110		
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 5 Lab ID: **280-175997-E-4-C MSD** Inj Date: 5/9/2023 5:18:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		17.6 mg/L	mg/L	92	44 110	5	20
Sulfide as H2S		18.7 mg/L	mg/L				

RS# 6 Lab ID: **280-175997-E-1-A** Inj Date: 5/9/2023 5:18:00PM 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# 7 Lab ID: **280-175997-E-3-A** Inj Date: 5/9/2023 5:18:00PM 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# 8 Lab ID: **280-175997-D-5-A** Inj Date: 5/9/2023 5:18:00PM 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

Job Number: 280-176143-1
LIMS Batch: 611854
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-611794/1-A** Inj Date: 5/9/2023 5:18:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16 mg/L	mg/L	83	44 110		
Sulfide as H2S		17 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-611794/2-A** Inj Date: 5/9/2023 5:18:00PM 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: **280-175997-E-4-A** Inj Date: 5/9/2023 5:18:00PM 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: **280-175997-E-4-B MS** Inj Date: 5/9/2023 5:18:00PM 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	87	44 110		
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 5 Lab ID: **280-175997-E-4-C MSD** Inj Date: 5/9/2023 5:18:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		17.6 mg/L	mg/L	92	44 110	5	20
Sulfide as H2S		18.7 mg/L	mg/L				

RS# 15 Lab ID: **280-176143-B-1-A** Inj Date: 5/9/2023 5:18:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		999999968 mg/L	mg/L				
Sulfide as H2S		999999966 mg/L	mg/L				

RS# 16 Lab ID: **280-176143-B-2-A** Inj Date: 5/9/2023 5:18:00PM 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: 280-176144-1
LIMS Batch: 611854
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-611794/1-A** Inj Date: 5/9/2023 5:18:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16 mg/L	mg/L	83	44 110		
Sulfide as H2S		17 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-611794/2-A** Inj Date: 5/9/2023 5:18:00PM 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: **280-175997-E-4-A** Inj Date: 5/9/2023 5:18:00PM 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: **280-175997-E-4-B MS** Inj Date: 5/9/2023 5:18:00PM 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	87	44 110		
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 5 Lab ID: **280-175997-E-4-C MSD** Inj Date: 5/9/2023 5:18:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		17.6 mg/L	mg/L	92	44 110	5	20
Sulfide as H2S		18.7 mg/L	mg/L				

RS# 17 Lab ID: **280-176144-C-1-A** Inj Date: 5/9/2023 5:18:00PM 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				

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:

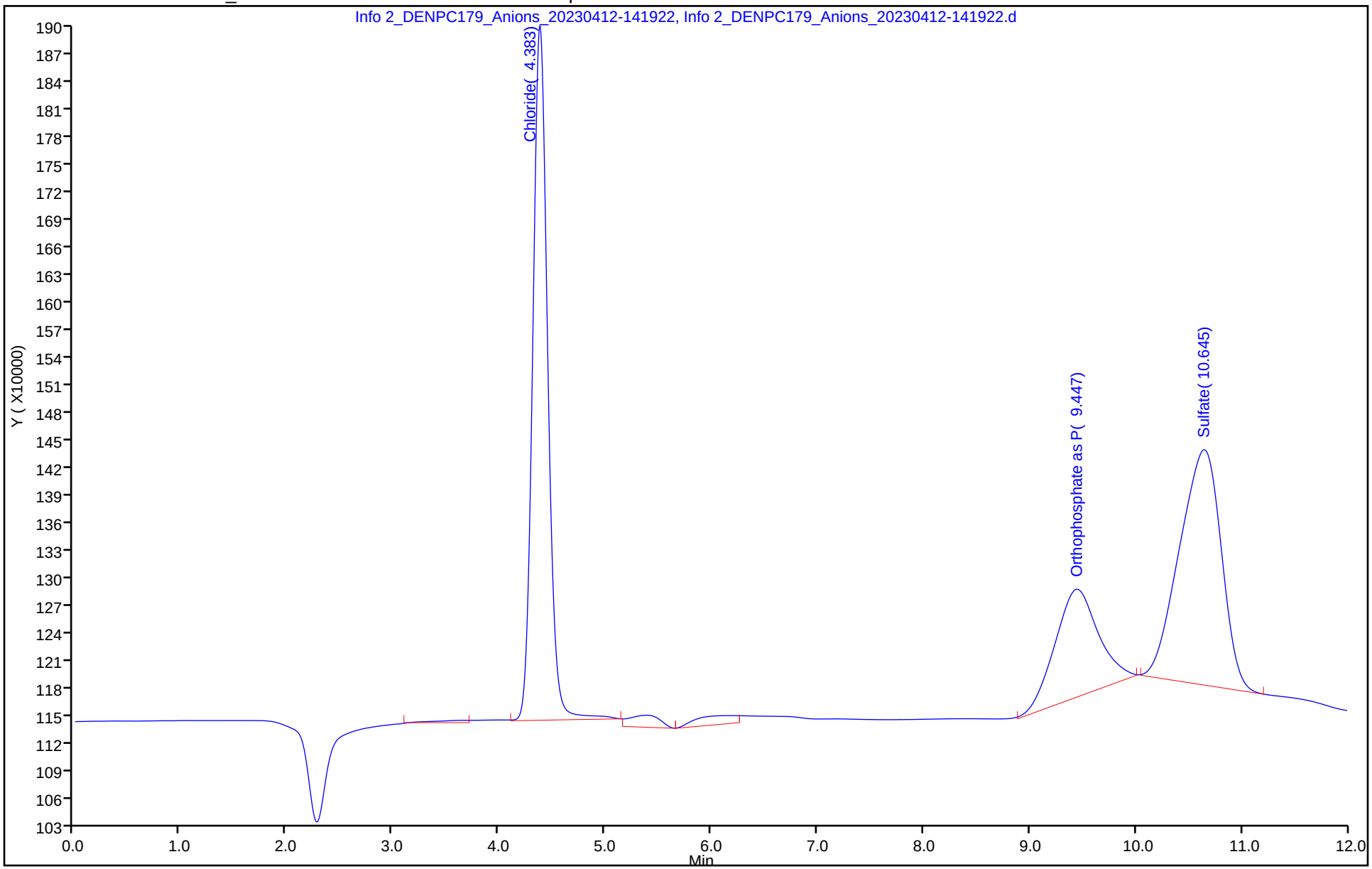
IC CAL cl/so4_00475 Amount Added: 0.04 Units: mL
IC Cal low_00703 Amount Added: 0.00 Units: mL

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		



5/23/2023 8:16 PM

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

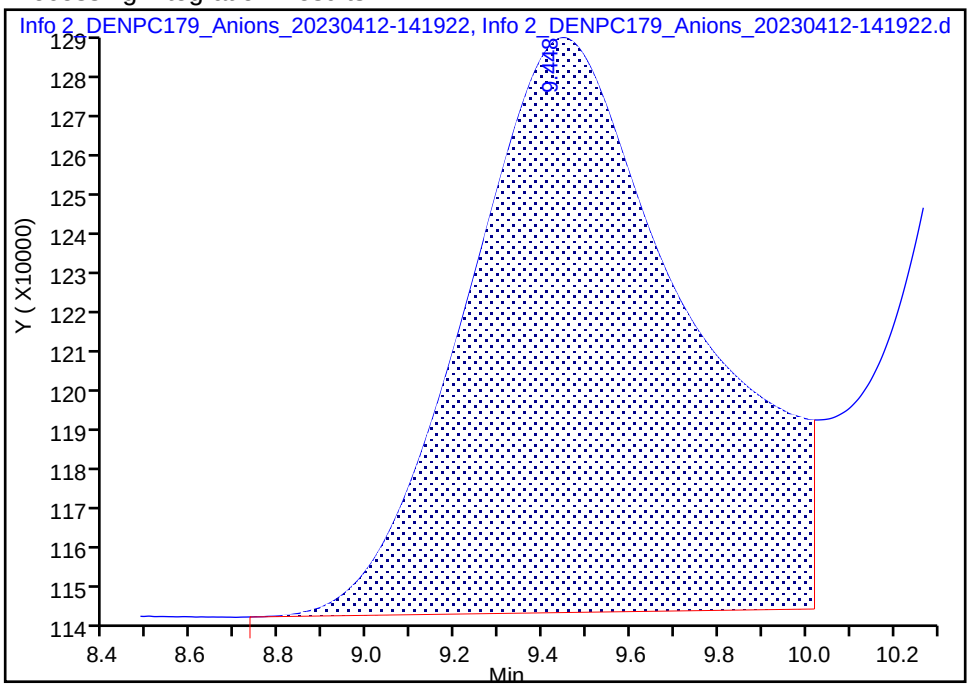
Column: Detector Info 2_091554_1

6 Orthophosphate as P, CAS: STL00599

Signal: 1

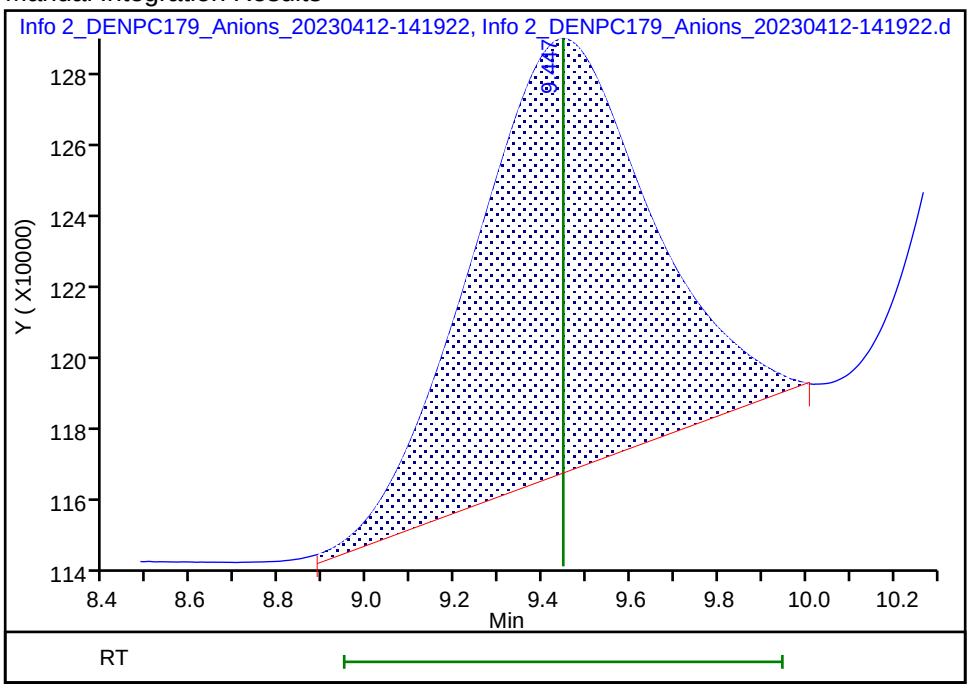
Processing Integration Results

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:

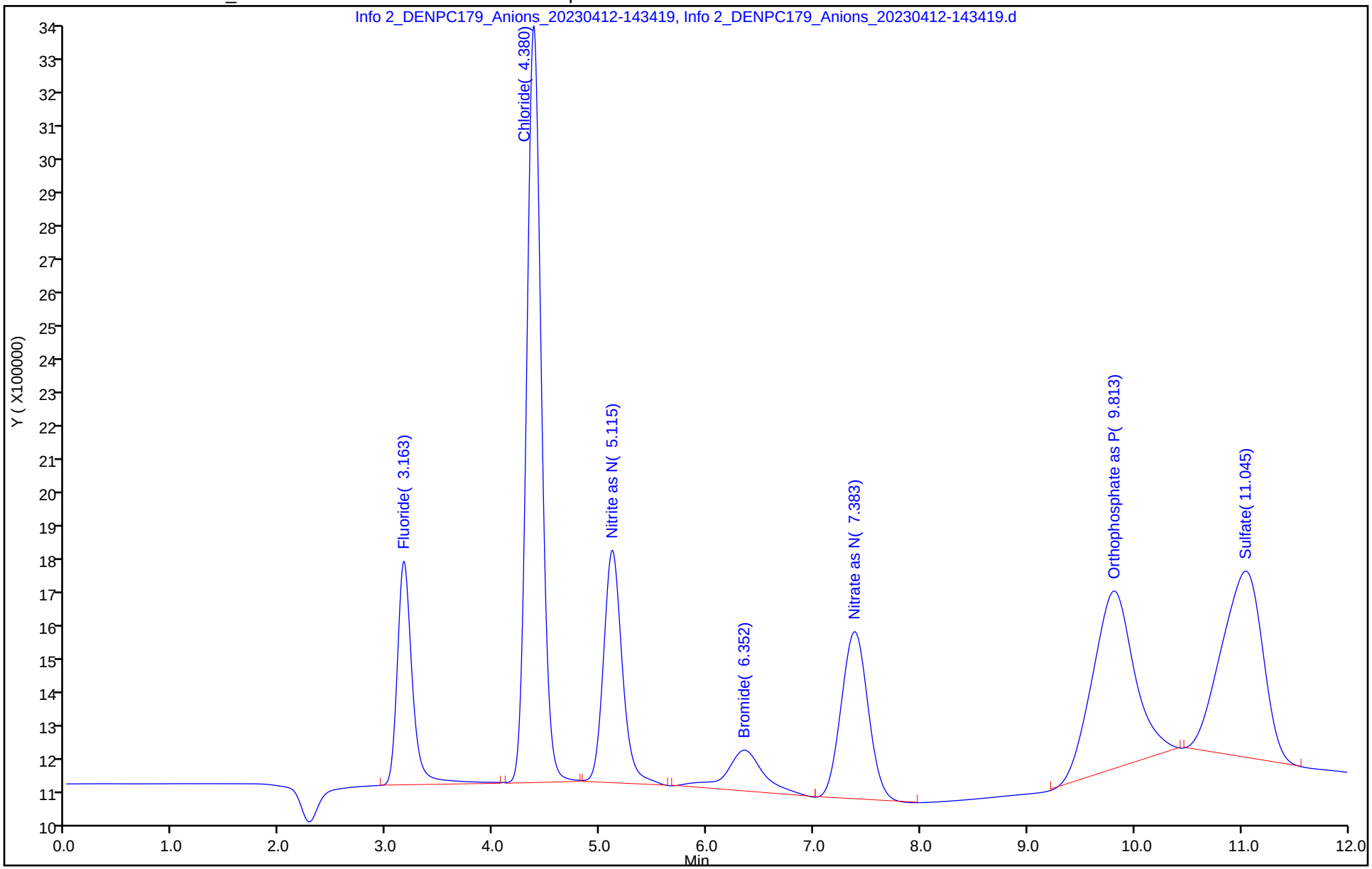
IC CAL cl/so4_00475	Amount Added:	0.10	Units: mL
IC Cal low_00703	Amount Added:	0.08	Units: mL

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		



5/23/2023 8:16 PM

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

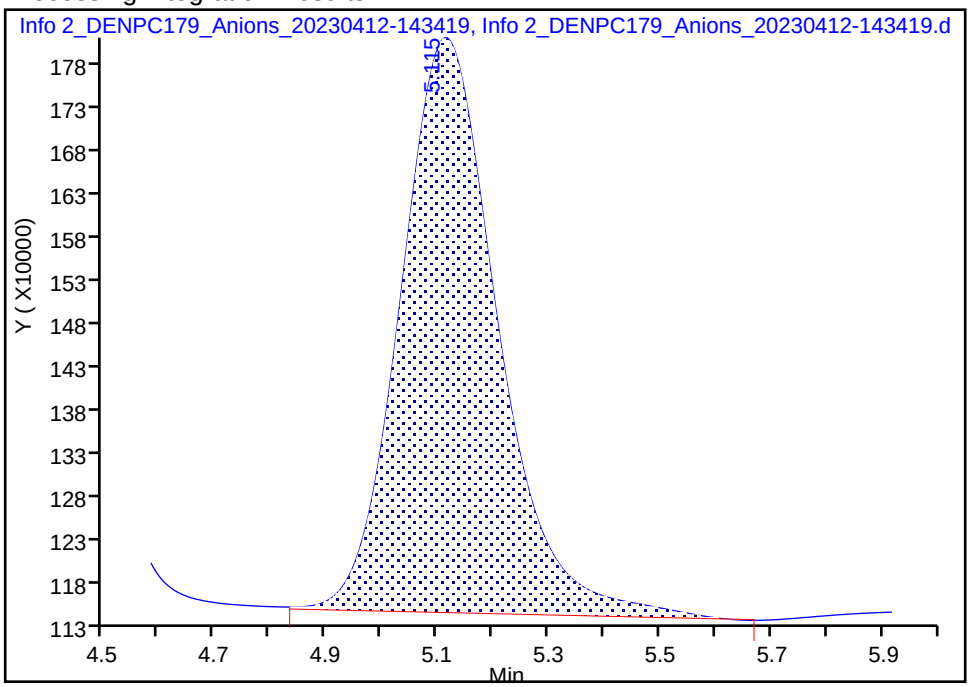
Column: Detector Info 2_091554_1

3 Nitrite as N, CAS: 14797-65-0

Signal: 1

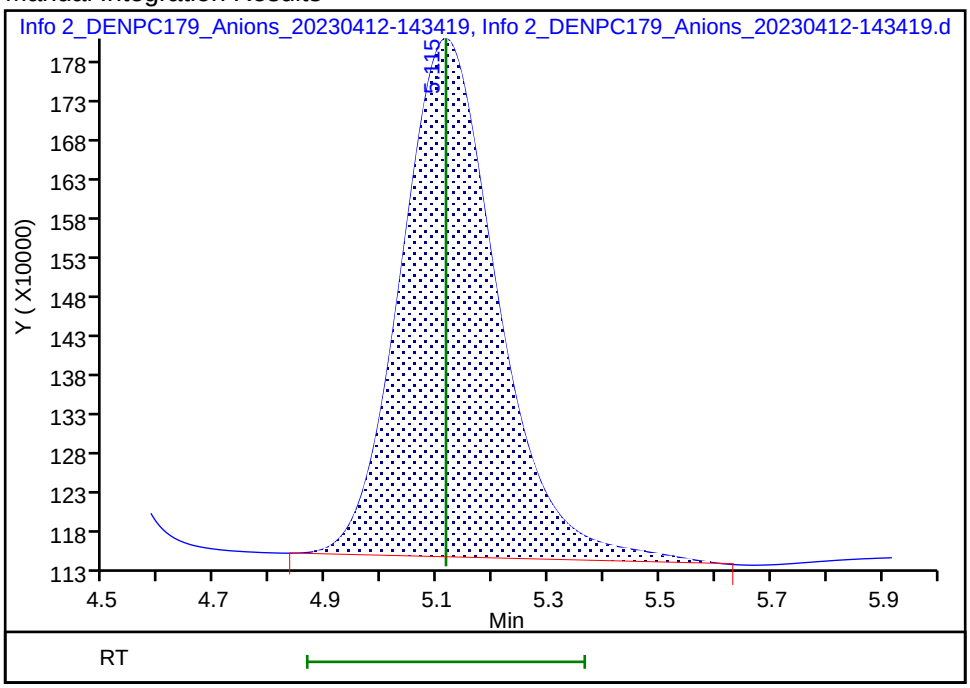
Processing Integration Results

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

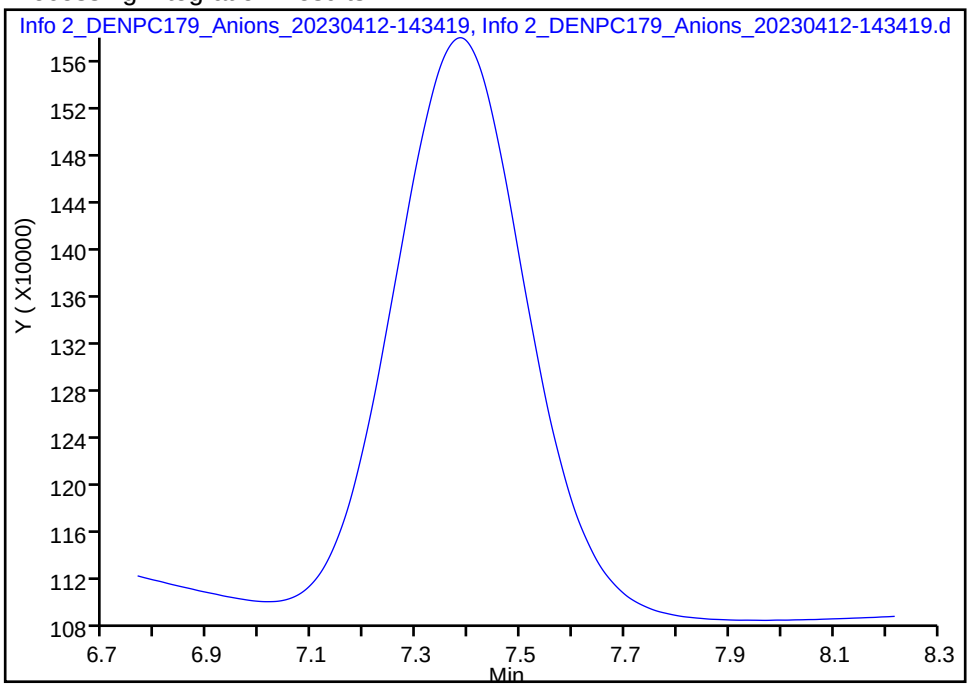
5 Nitrate as N, CAS: 14797-55-8

Signal: 1

Not Detected

Expected RT: 7.38

Processing Integration Results



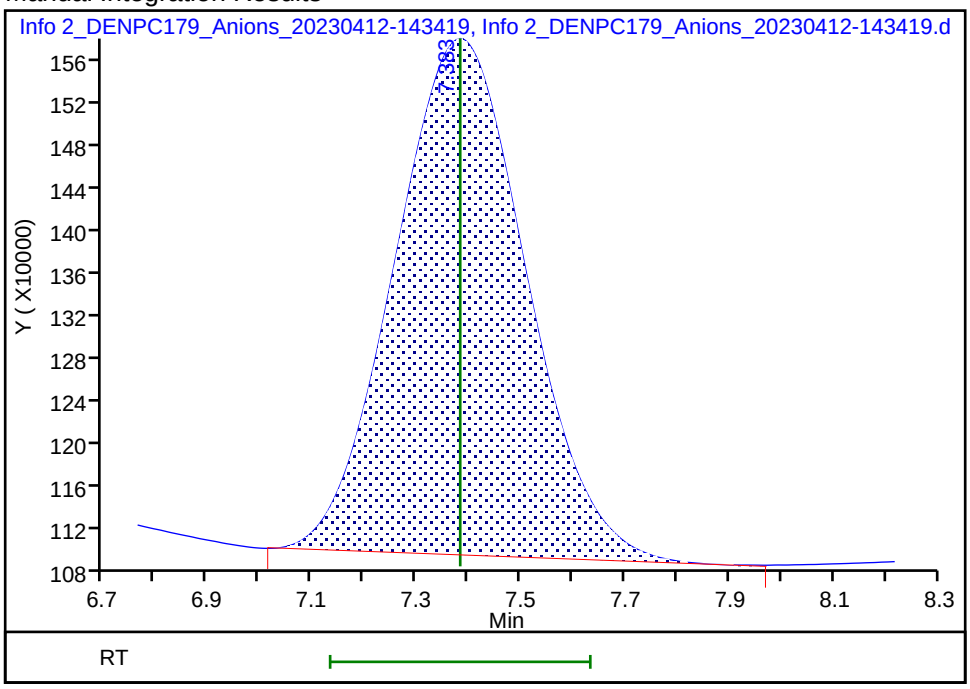
Manual Integration Results

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

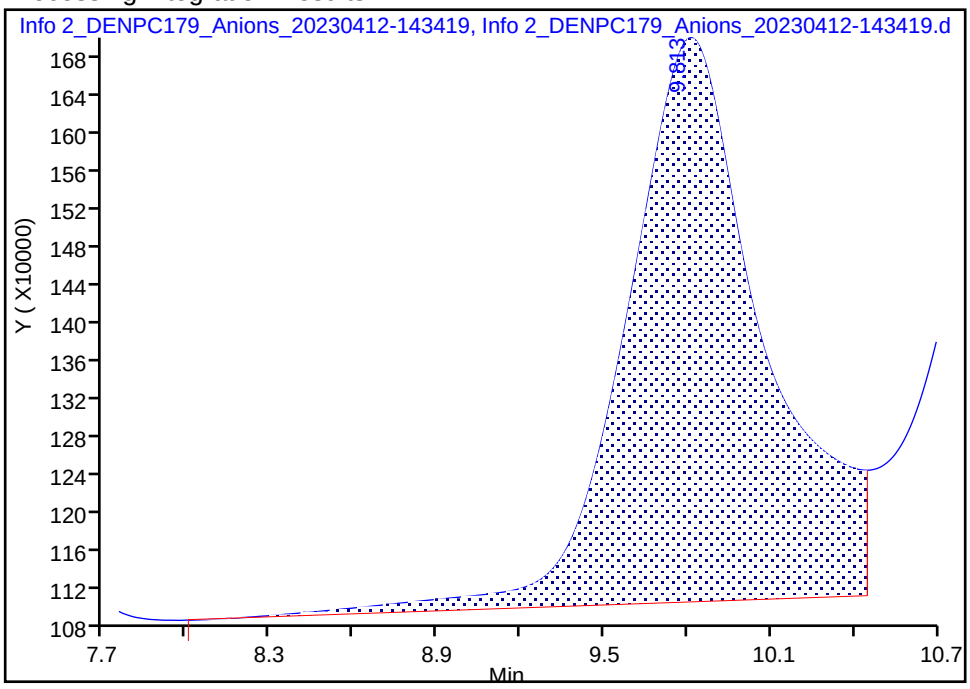
Column: Detector Info 2_091554_1

6 Orthophosphate as P, CAS: STL00599

Signal: 1

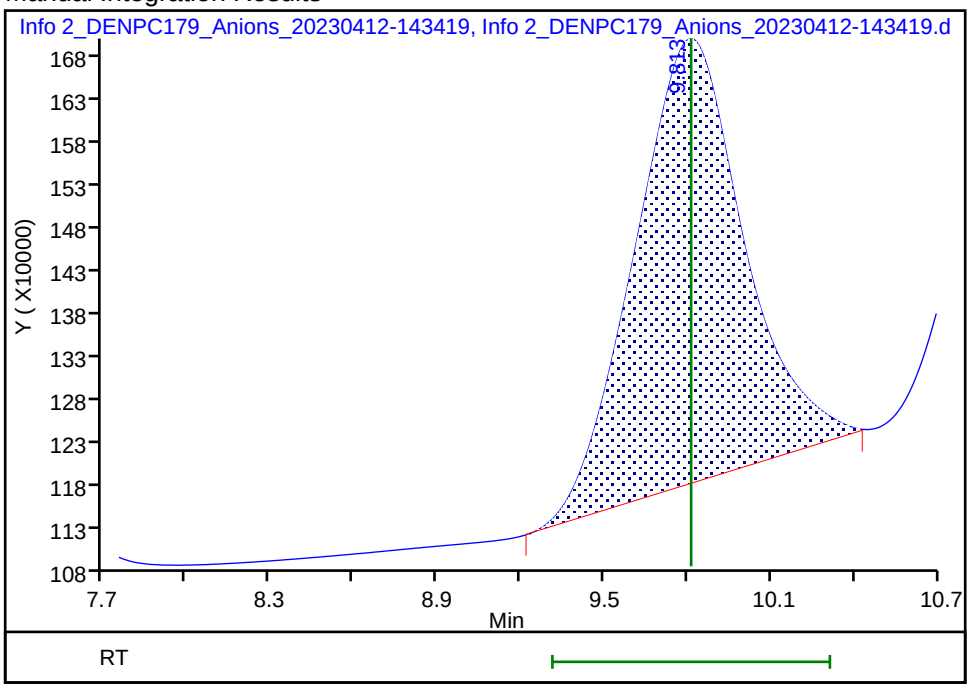
Processing Integration Results

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

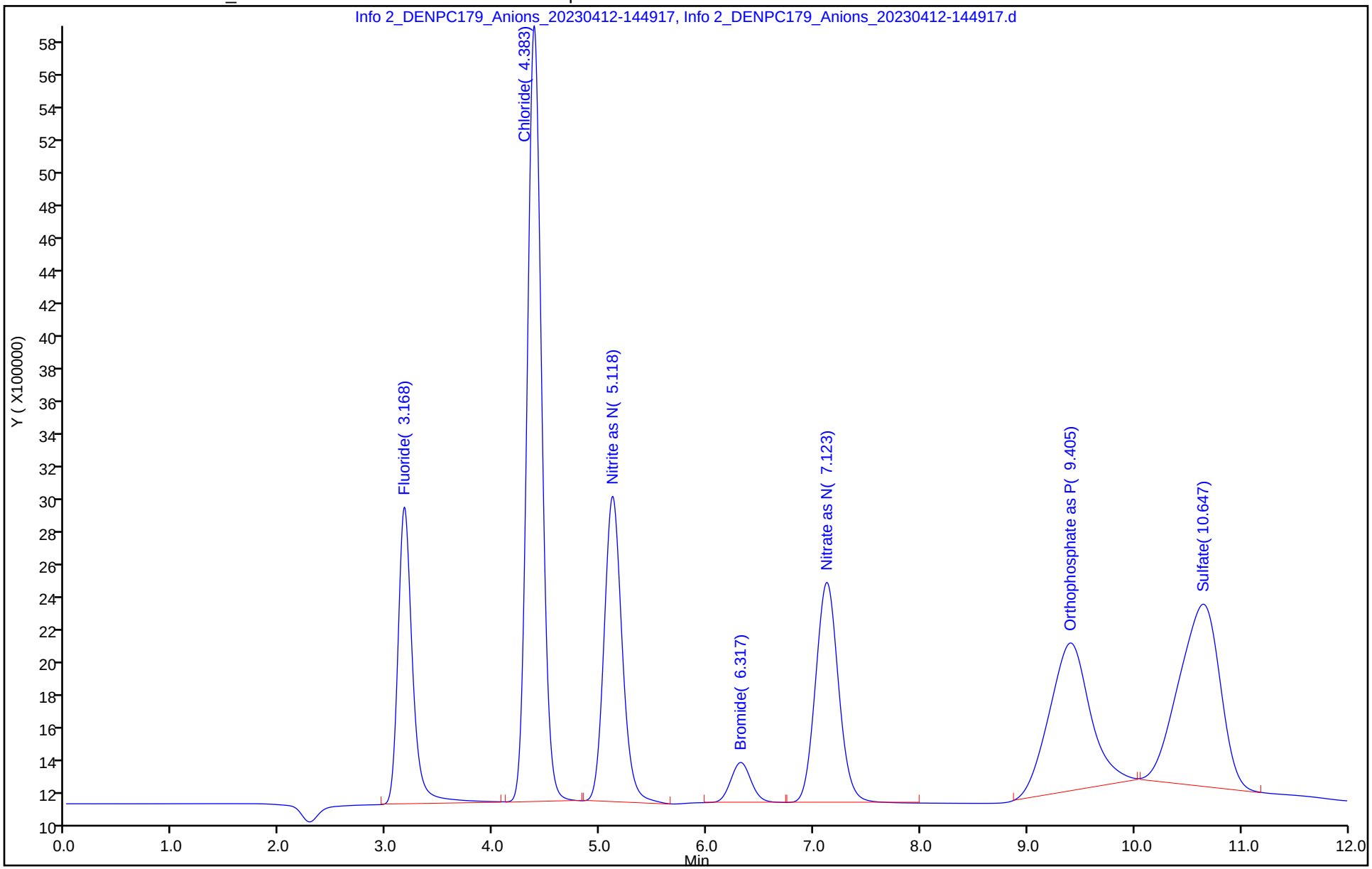
Reagents:

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		



5/23/2023 8:16 PM

Eurofins Denver

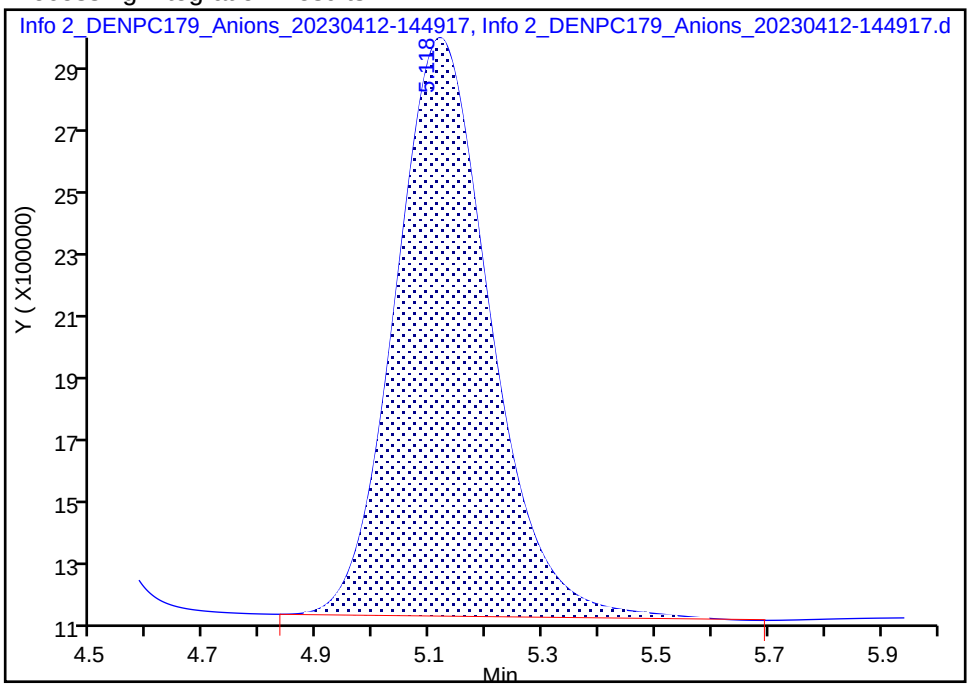
Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-144
Injection Date: 12-Apr-2023 14:34:00 Instrument ID: WC_IonChrom10
Lims ID: STD L3
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions_IC10 Limit Group: Wet - Anions
Column: Detector Info 2_091554_1

3 Nitrite as N, CAS: 14797-65-0

Signal: 1

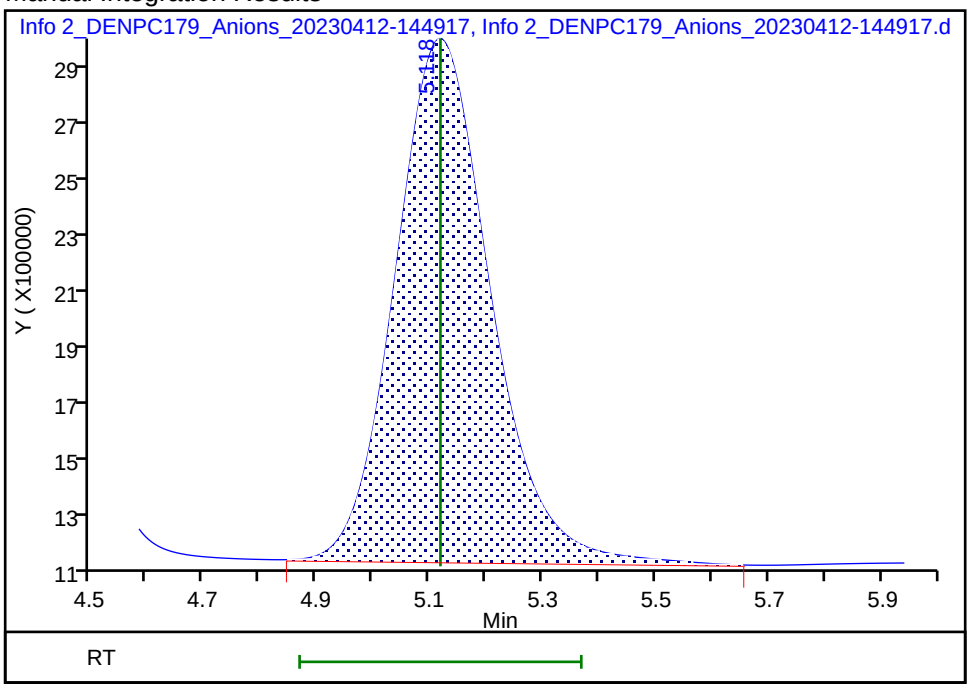
Processing Integration Results

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

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

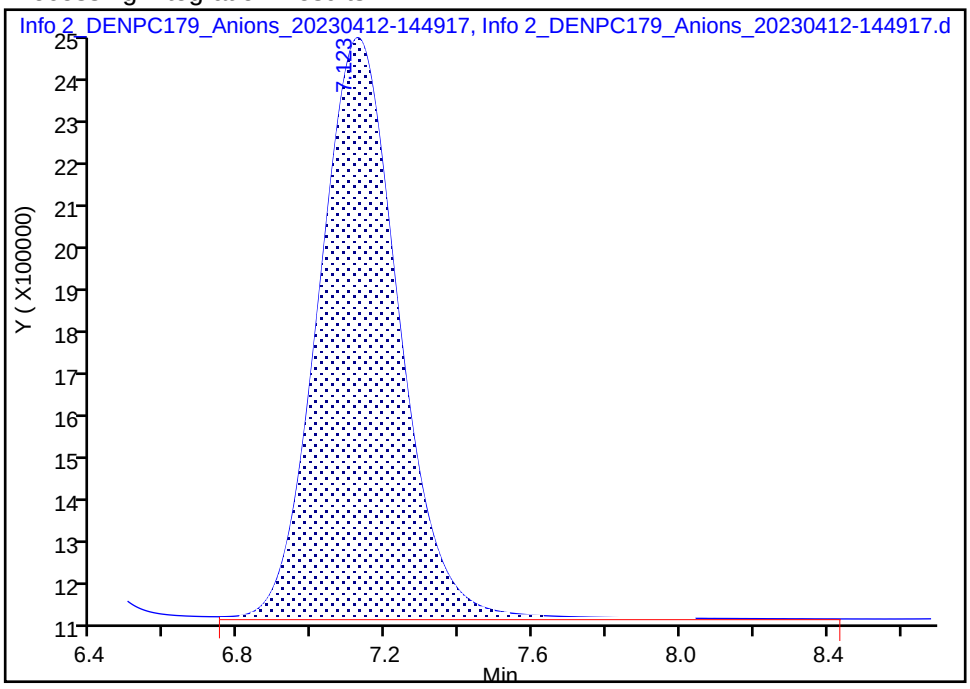
Column: Detector Info 2_091554_1

5 Nitrate as N, CAS: 14797-55-8

Signal: 1

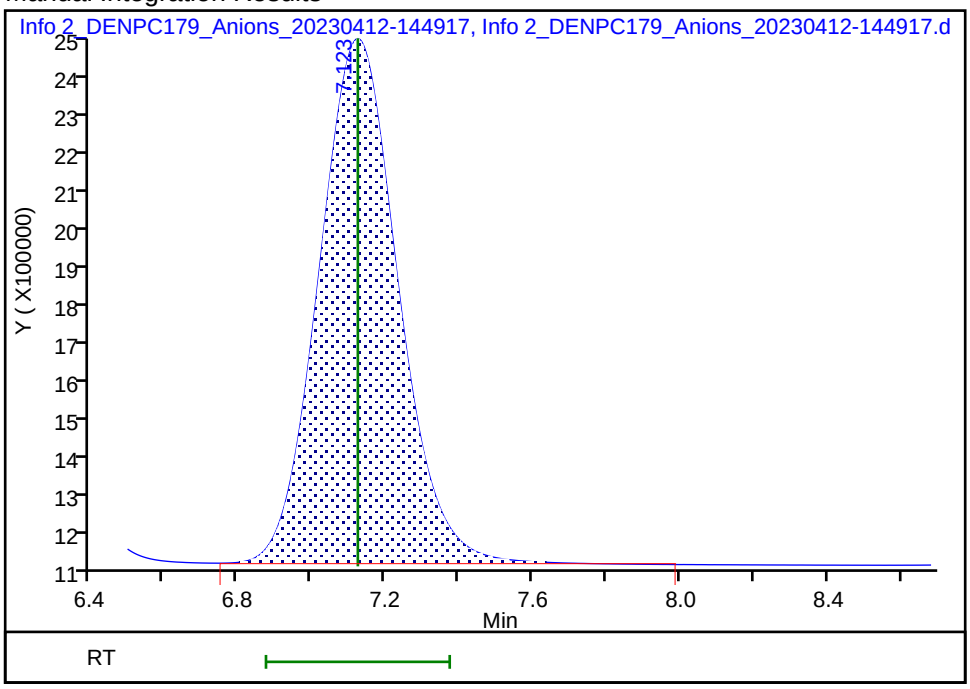
Processing Integration Results

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

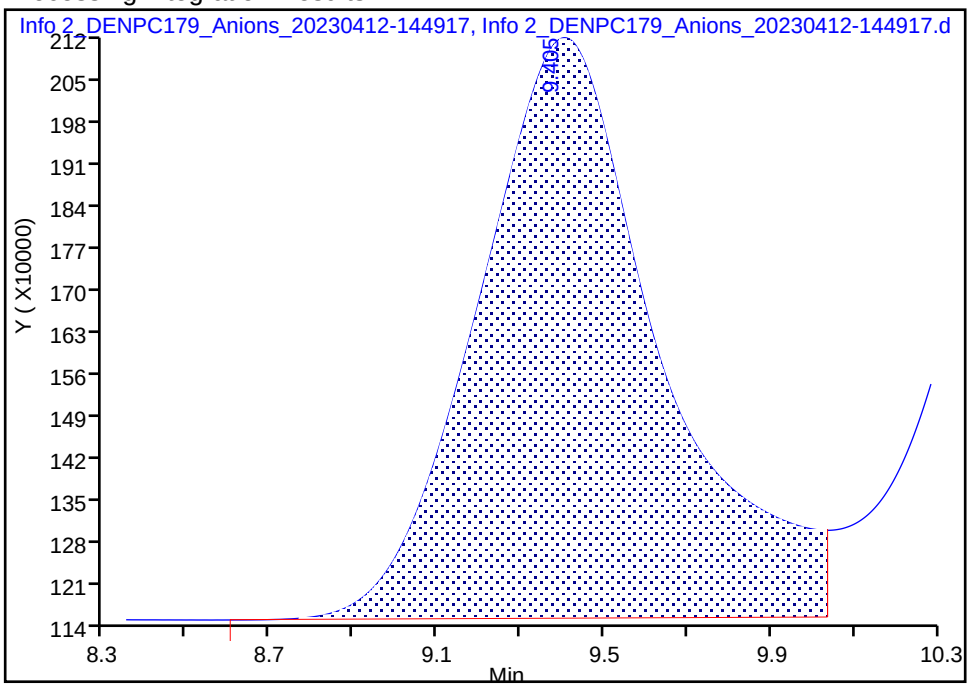
Column: Detector Info 2_091554_1

6 Orthophosphate as P, CAS: STL00599

Signal: 1

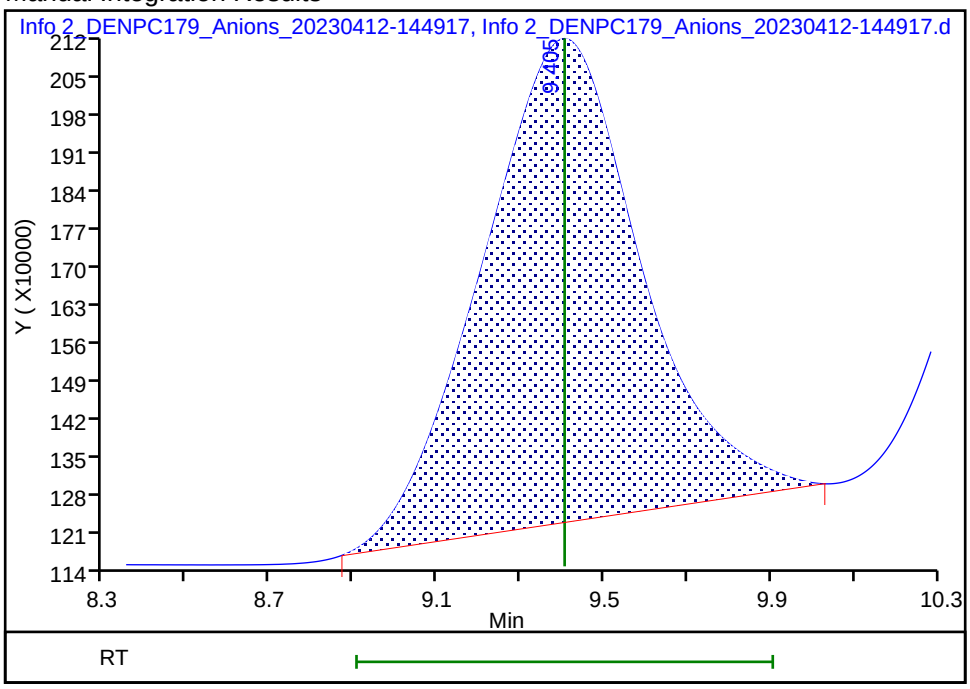
Processing Integration Results

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:

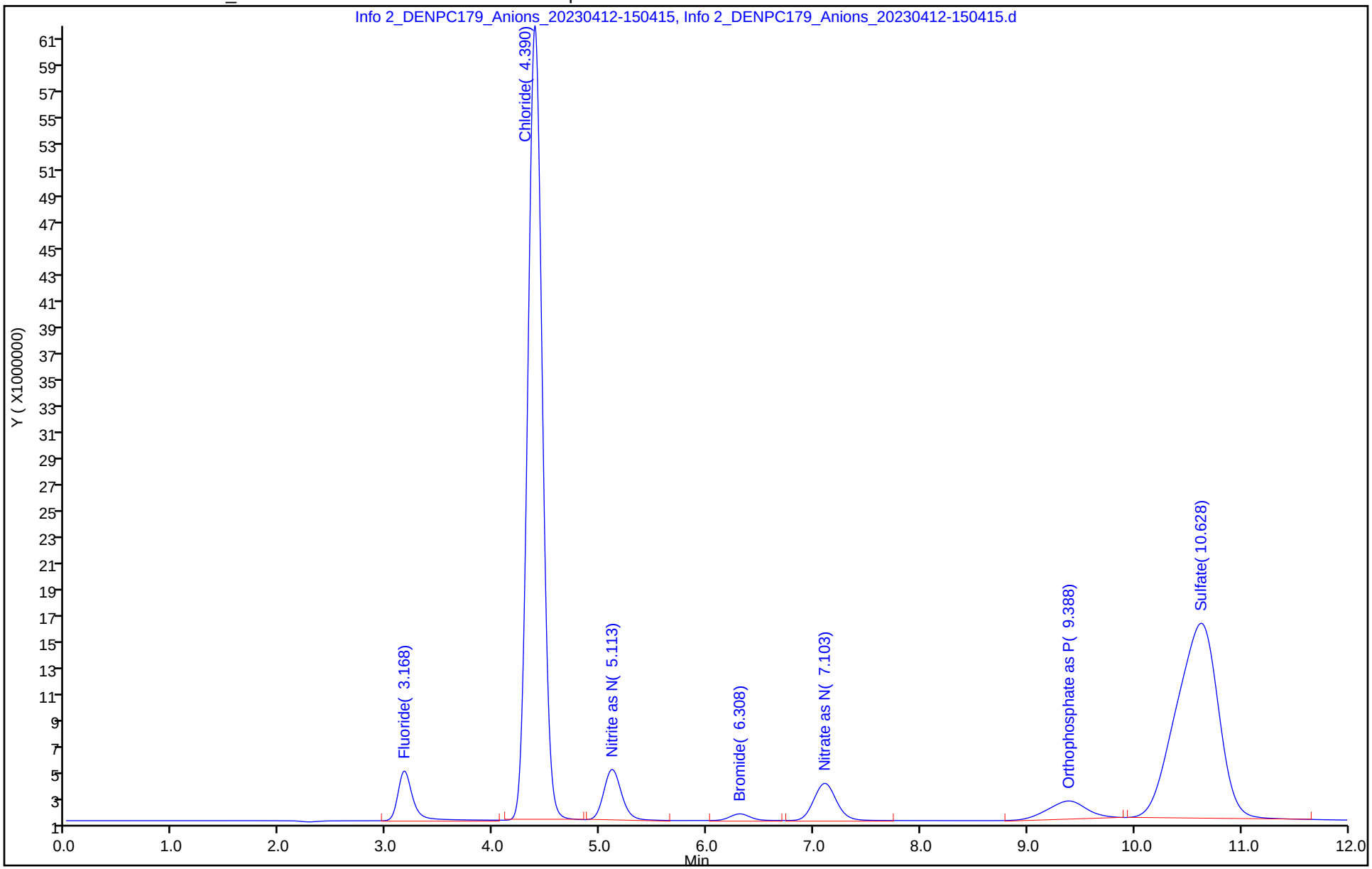
IC CAL cl/so4_00475	Amount Added:	2.40	Units: mL
IC Cal low_00703	Amount Added:	0.40	Units: mL

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		



5/23/2023 8:16 PM

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

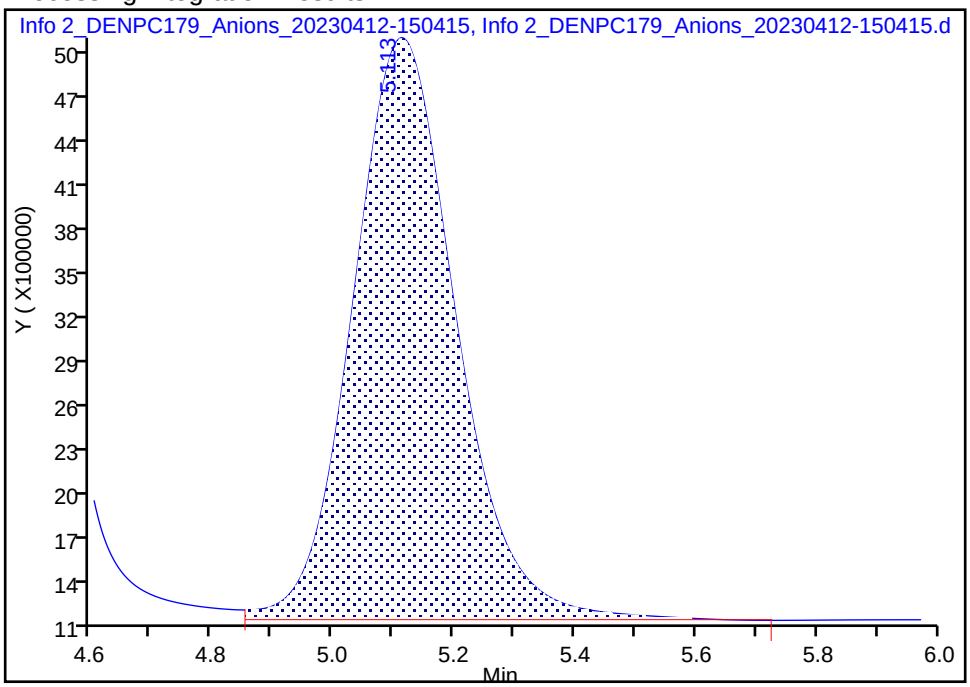
Column: Detector Info 2_091554_1

3 Nitrite as N, CAS: 14797-65-0

Signal: 1

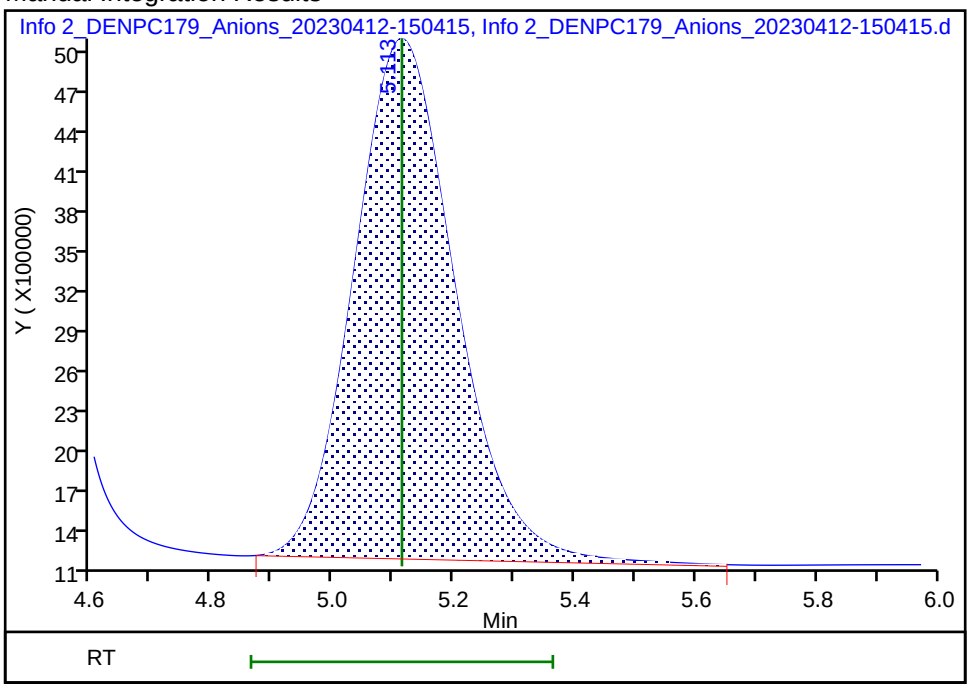
Processing Integration Results

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

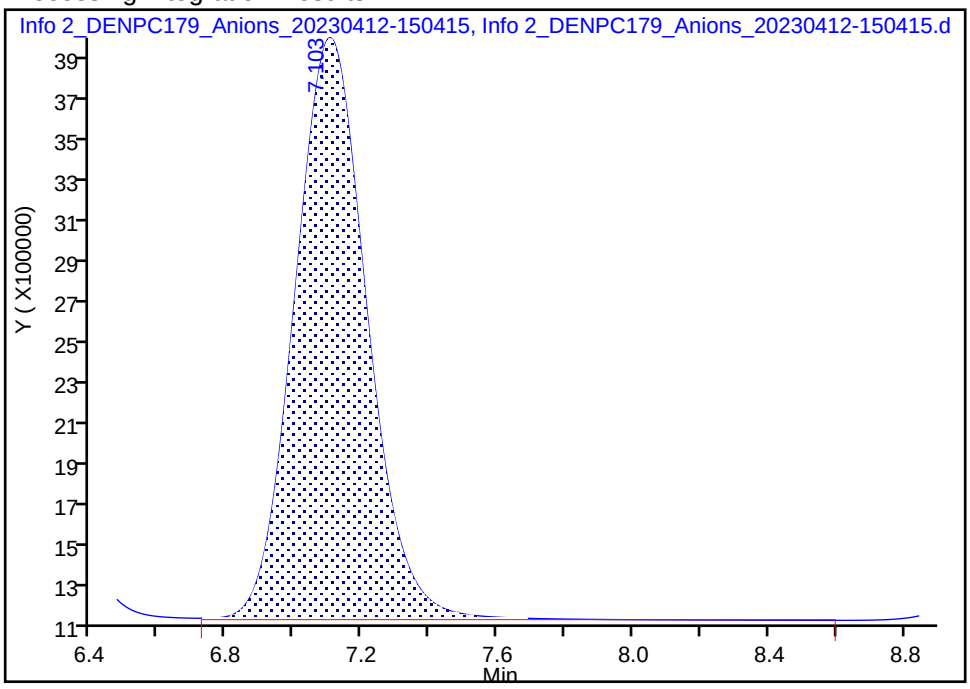
Column: Detector Info 2_091554_1

5 Nitrate as N, CAS: 14797-55-8

Signal: 1

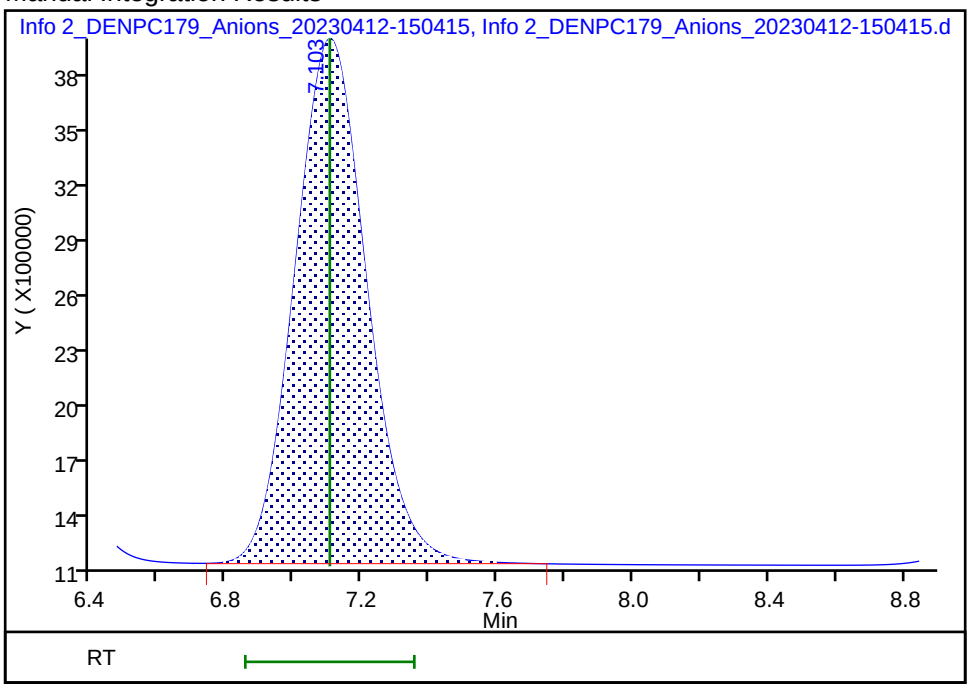
Processing Integration Results

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

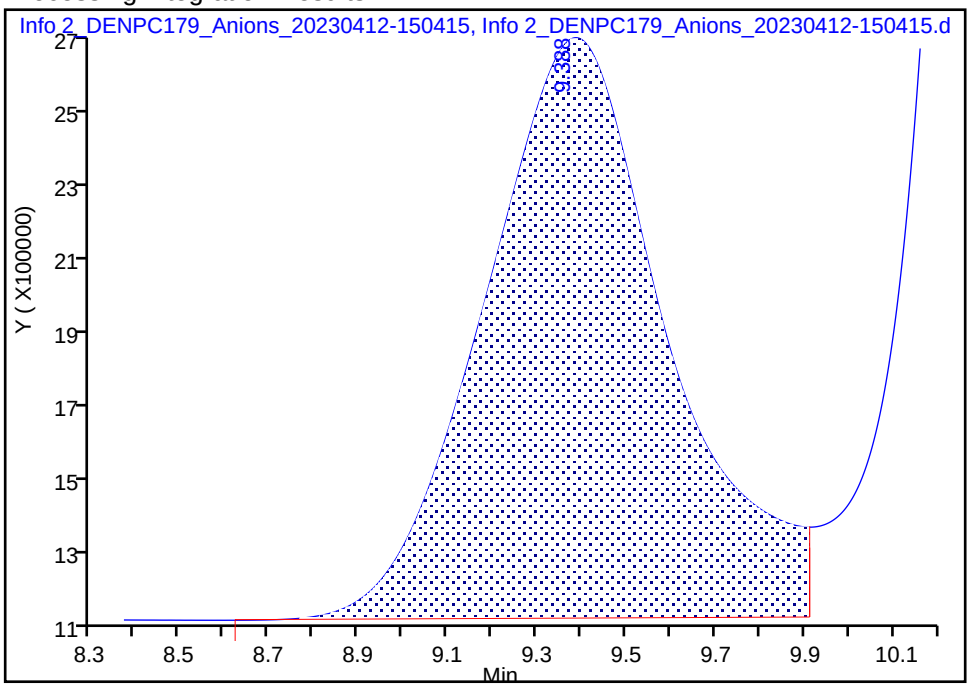
Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-150
Injection Date: 12-Apr-2023 14:49:00 Instrument ID: WC_IonChrom10
Lims ID: STD L4
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions_IC10 Limit Group: Wet - Anions
Column: Detector Info 2_091554_1

6 Orthophosphate as P, CAS: STL00599

Signal: 1

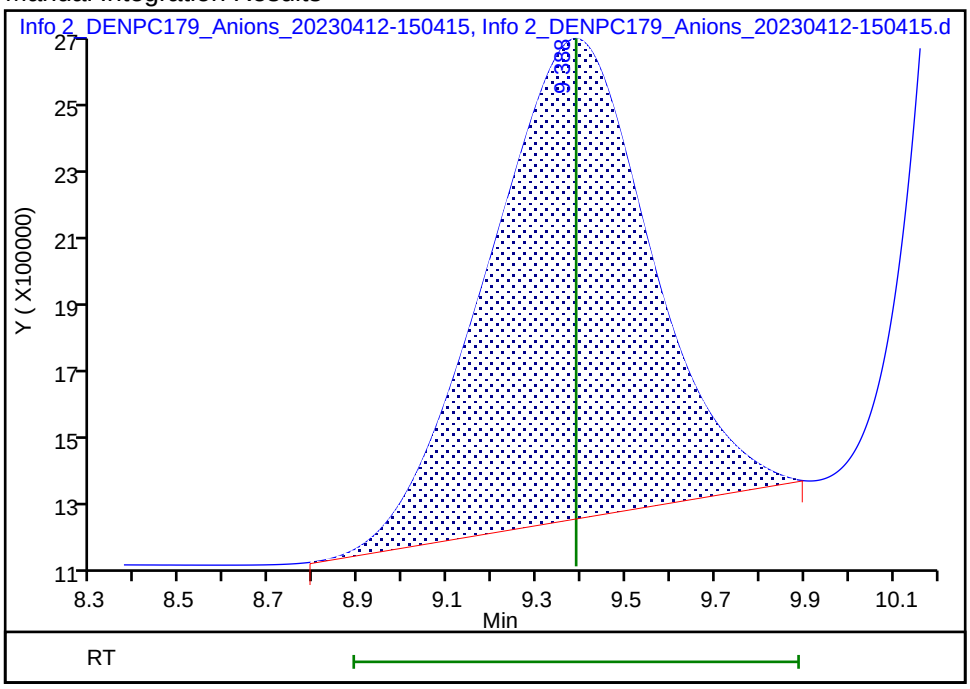
RT: 9.39
Area: 42806166
Amount: 0
Amount Units: ug/ml

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:

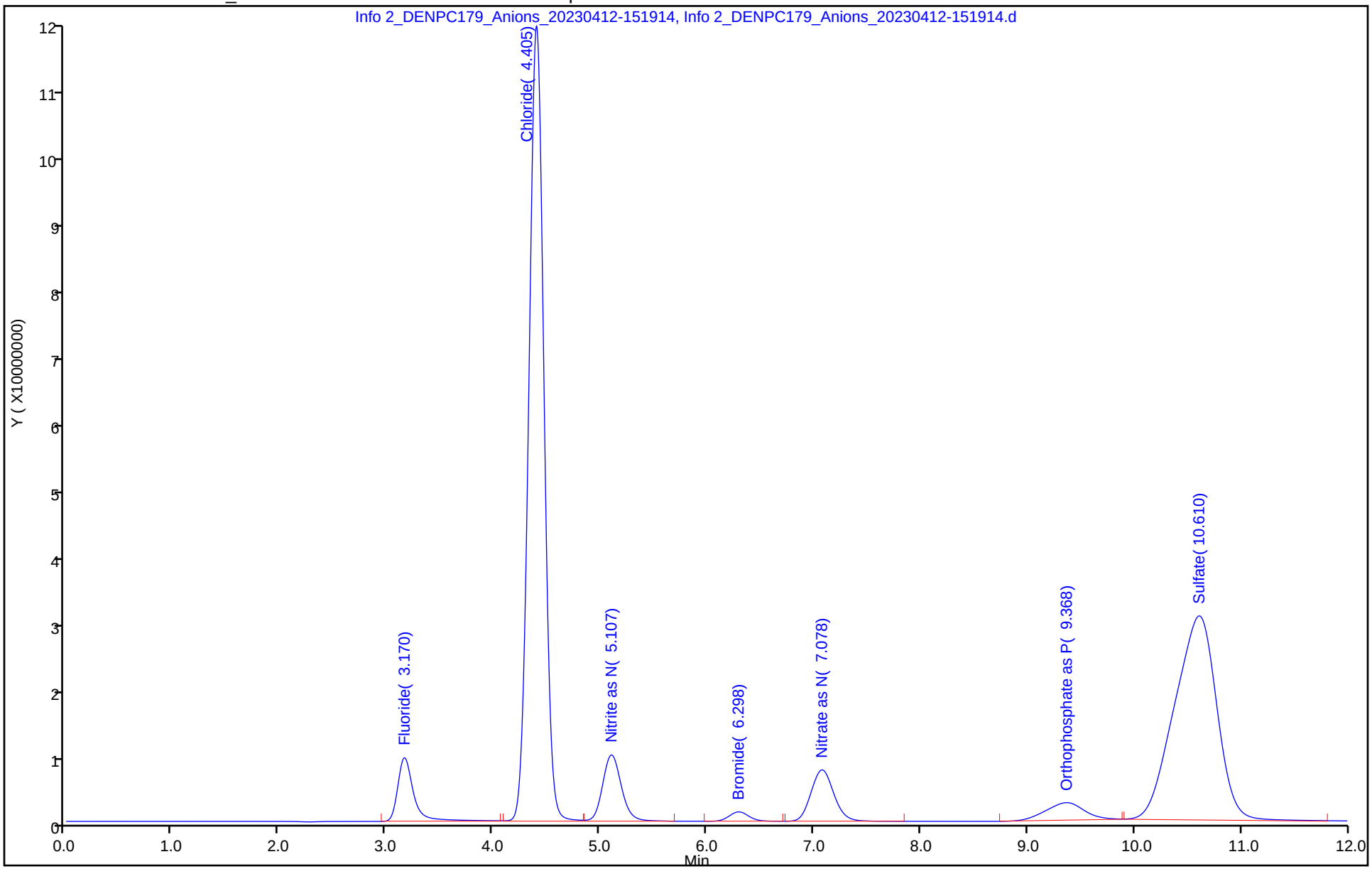
IC CAL cl/so4_00475 Amount Added: 4.80 Units: mL
IC Cal low_00703 Amount Added: 1.00 Units: mL

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		



5/23/2023 8:16 PM

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

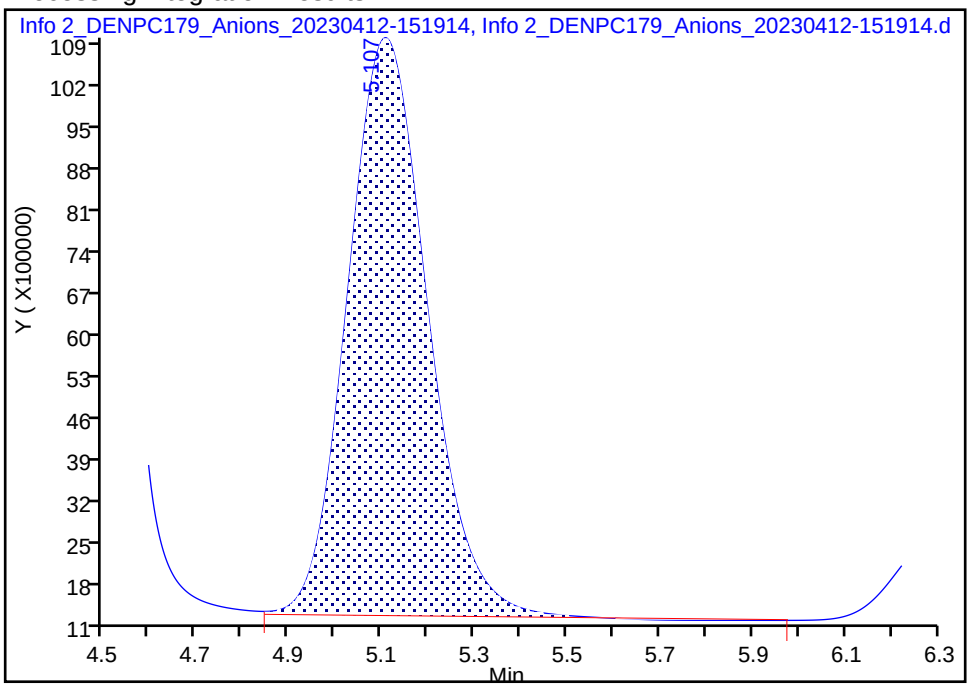
Column: Detector Info 2_091554_1

3 Nitrite as N, CAS: 14797-65-0

Signal: 1

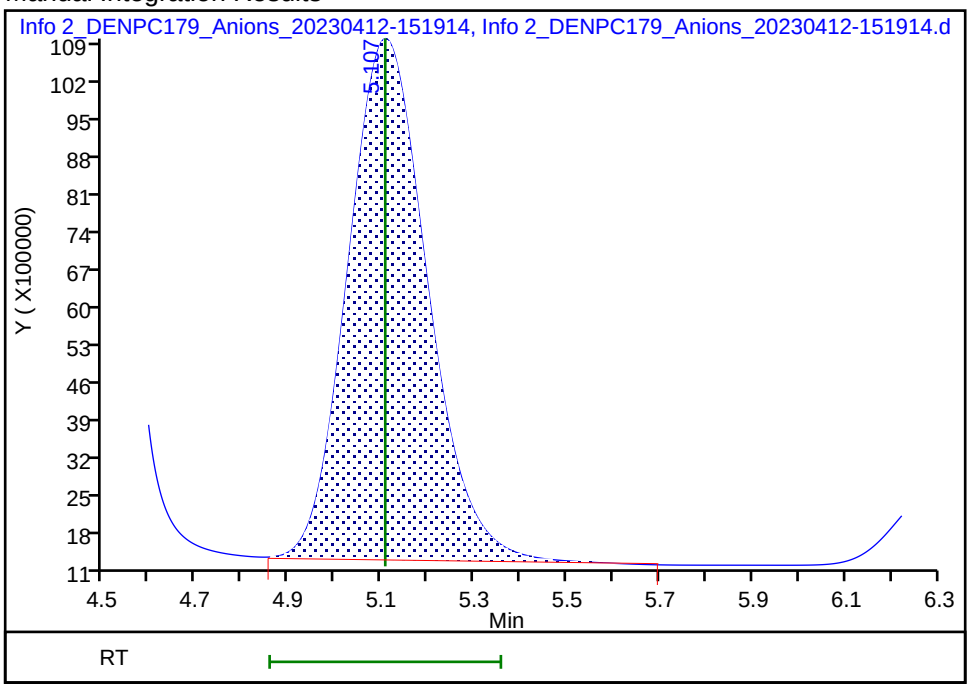
Processing Integration Results

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

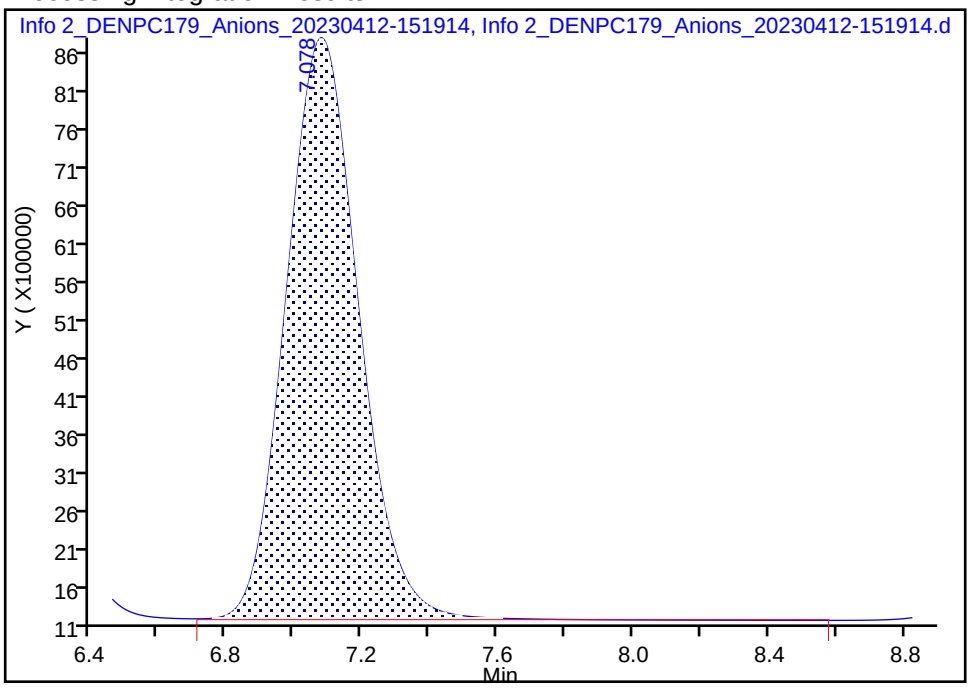
Column: Detector Info 2_091554_1

5 Nitrate as N, CAS: 14797-55-8

Signal: 1

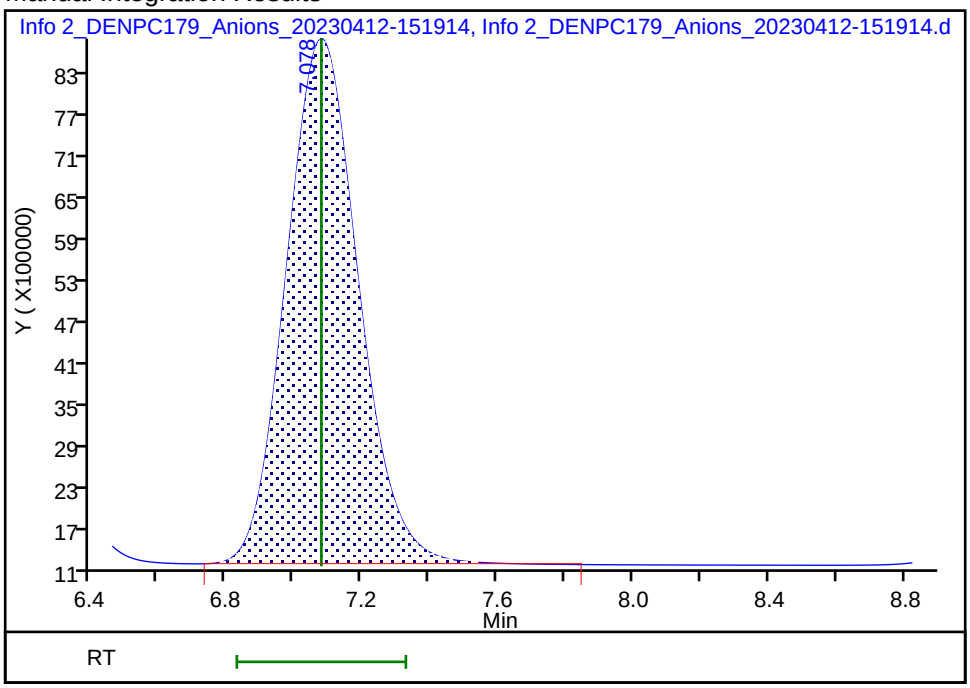
Processing Integration Results

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

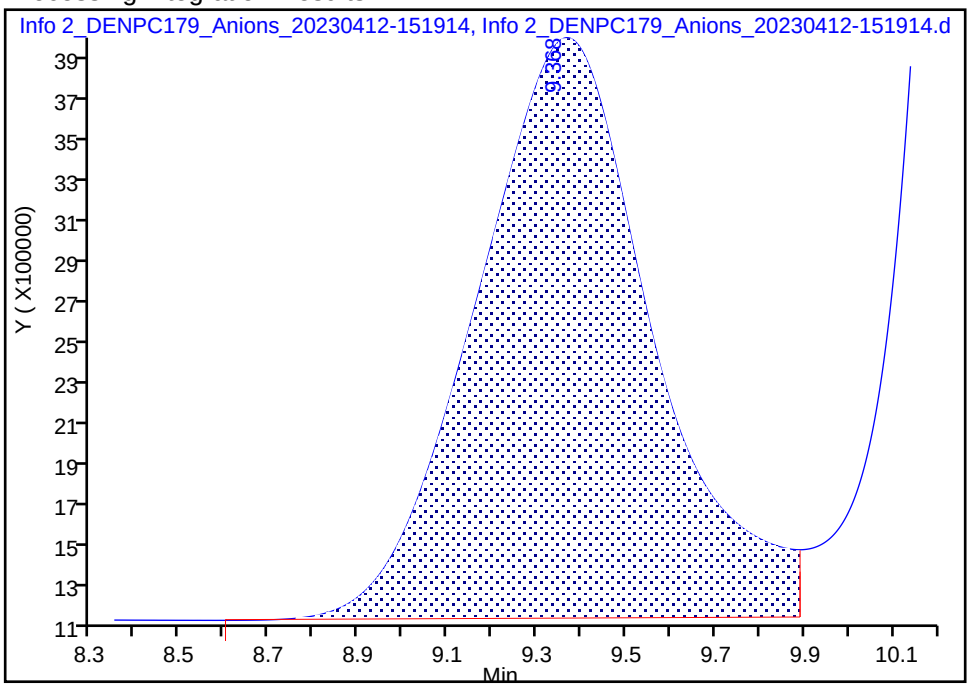
Column: Detector Info 2_091554_1

6 Orthophosphate as P, CAS: STL00599

Signal: 1

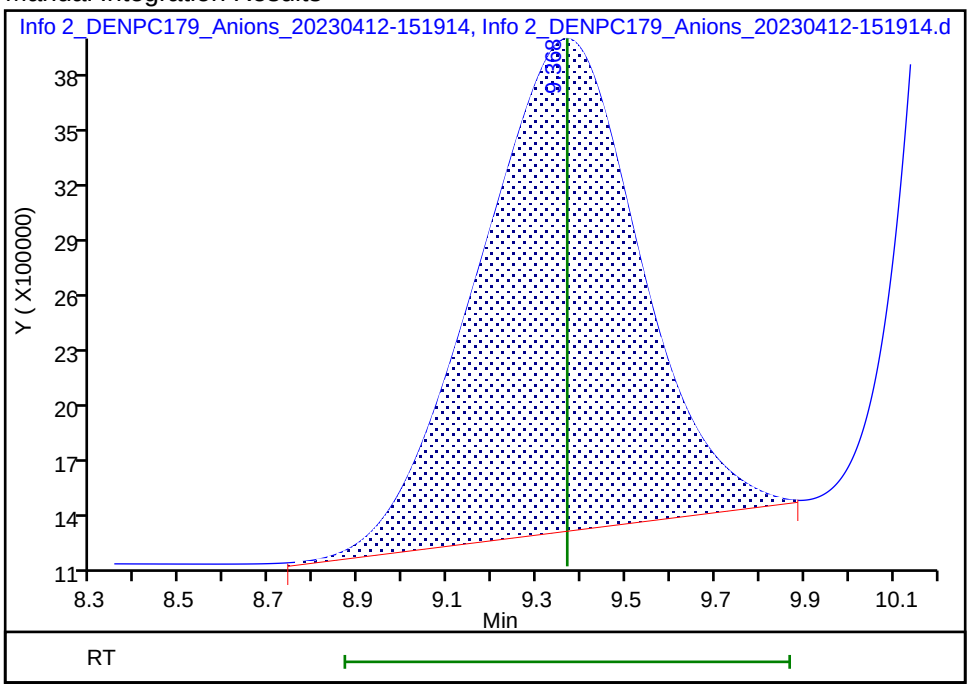
Processing Integration Results

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

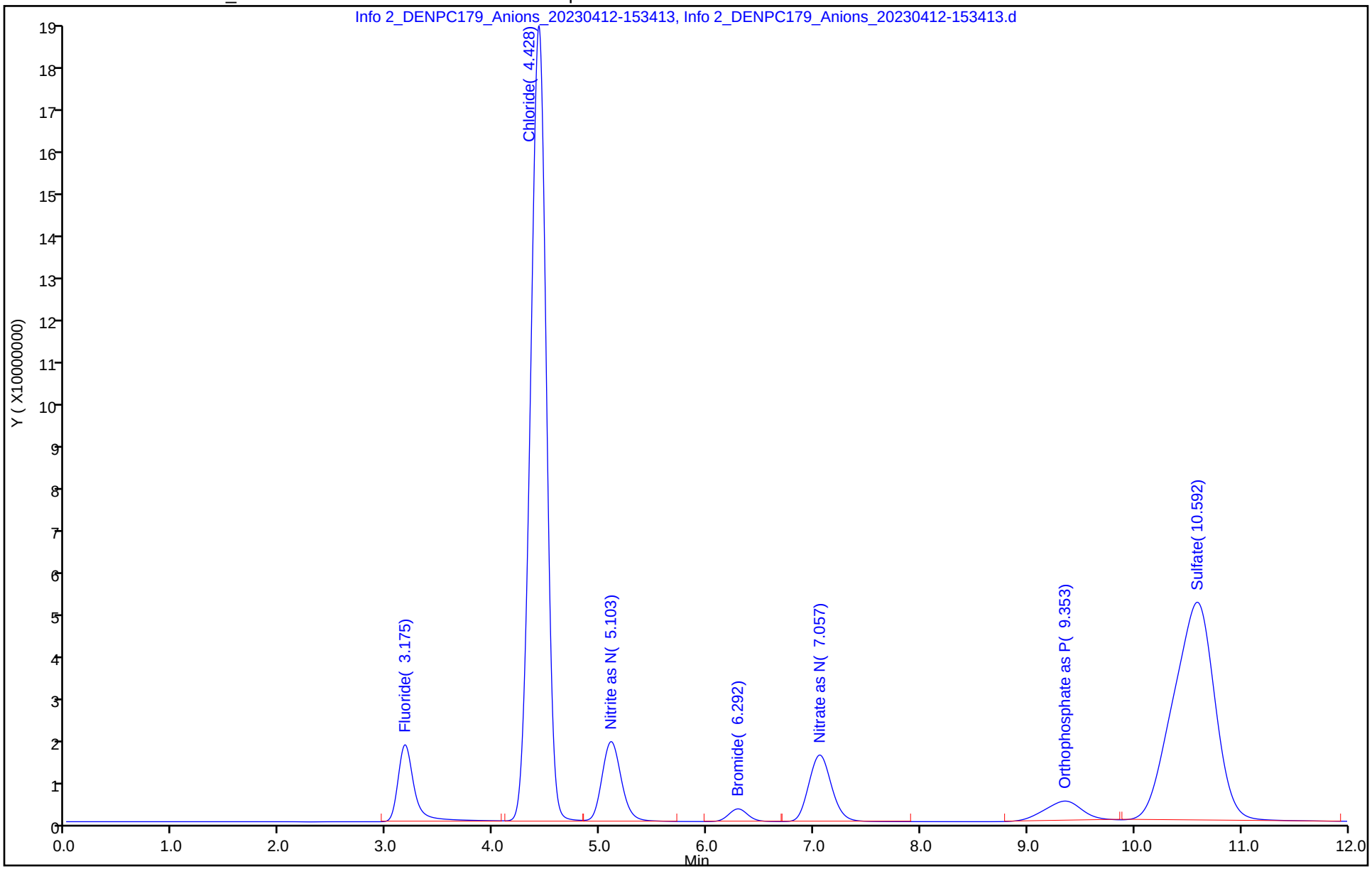
Reagents:

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		



5/23/2023 8:16 PM

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

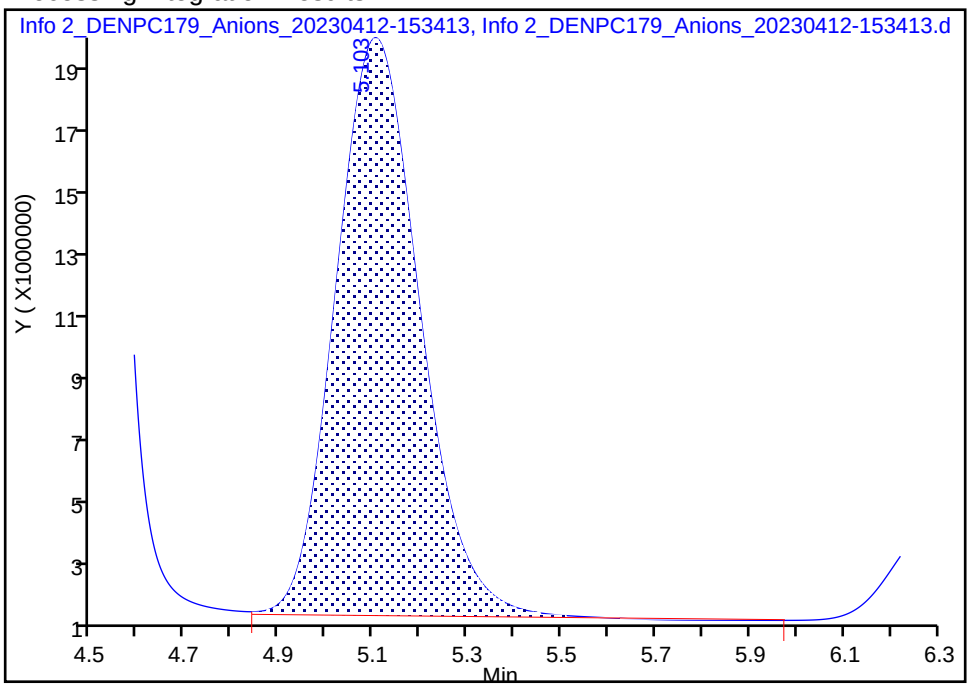
Column: Detector Info 2_091554_1

3 Nitrite as N, CAS: 14797-65-0

Signal: 1

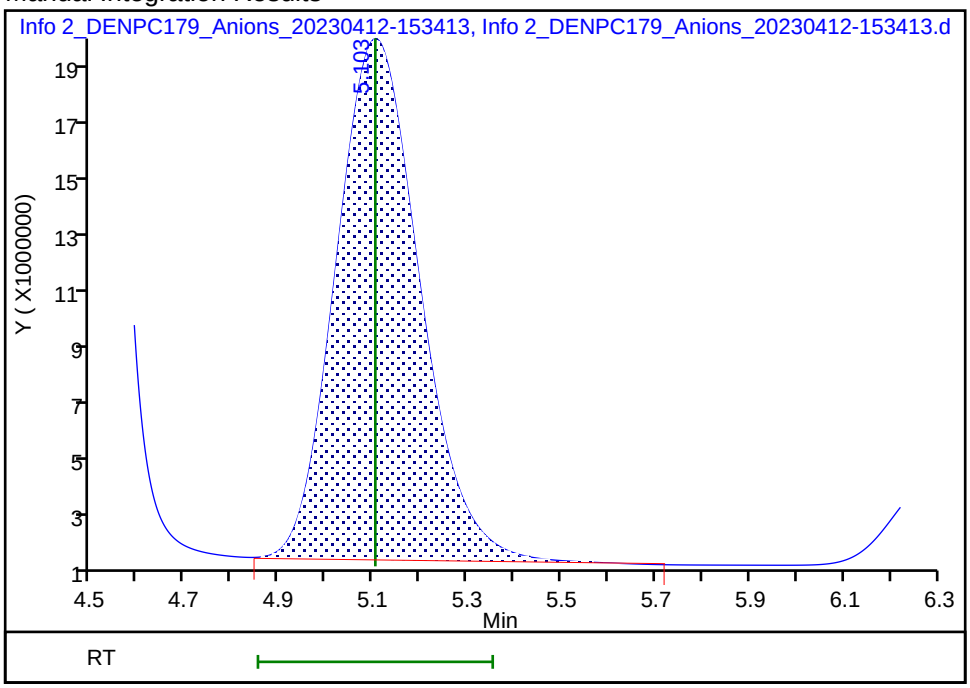
Processing Integration Results

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

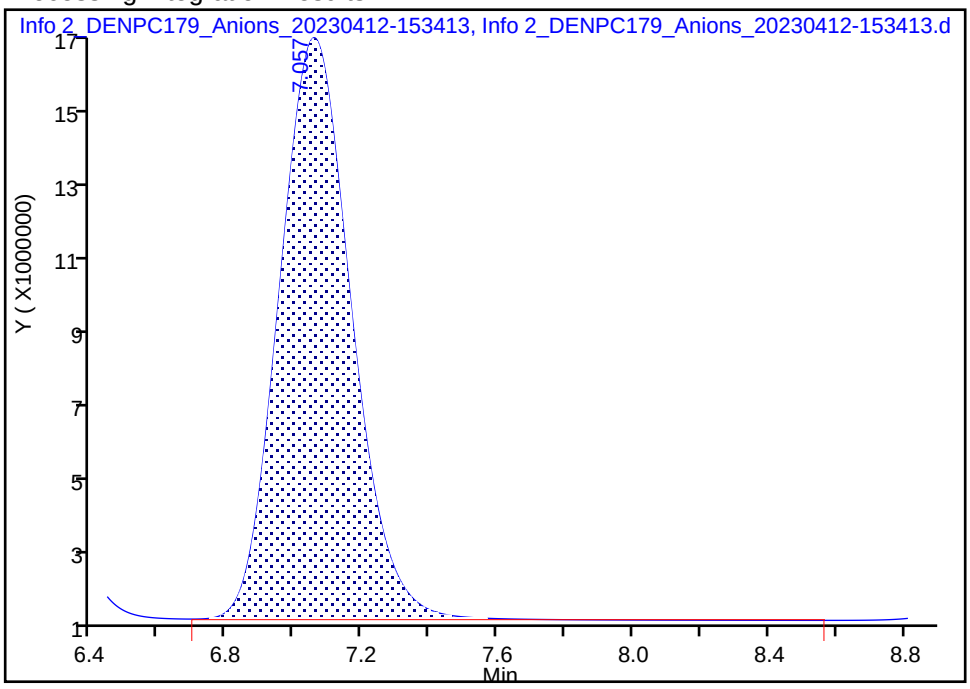
Column: Detector Info 2_091554_1

5 Nitrate as N, CAS: 14797-55-8

Signal: 1

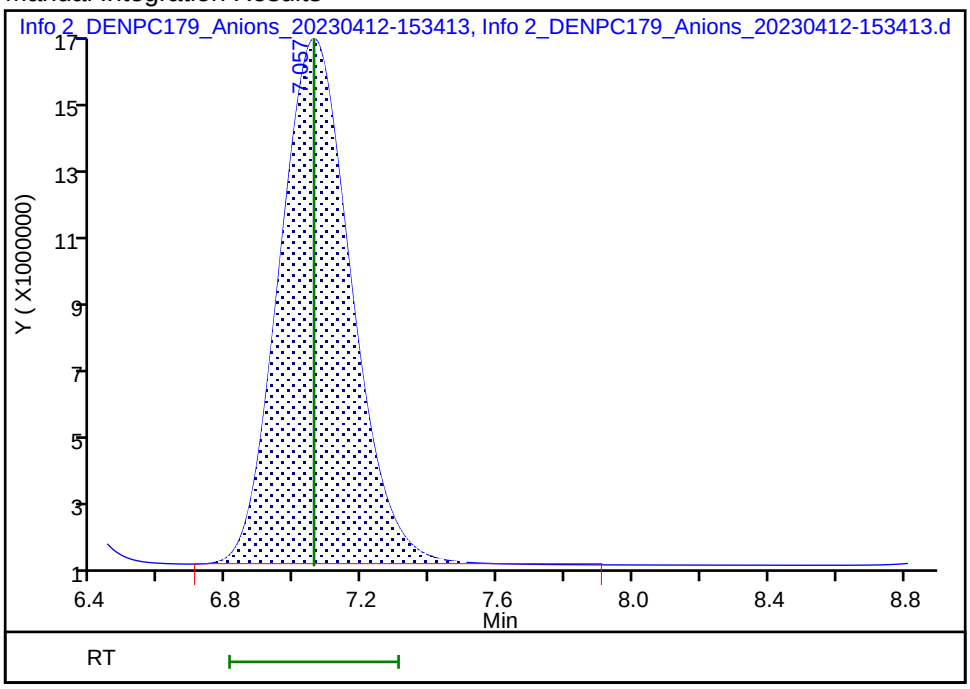
Processing Integration Results

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

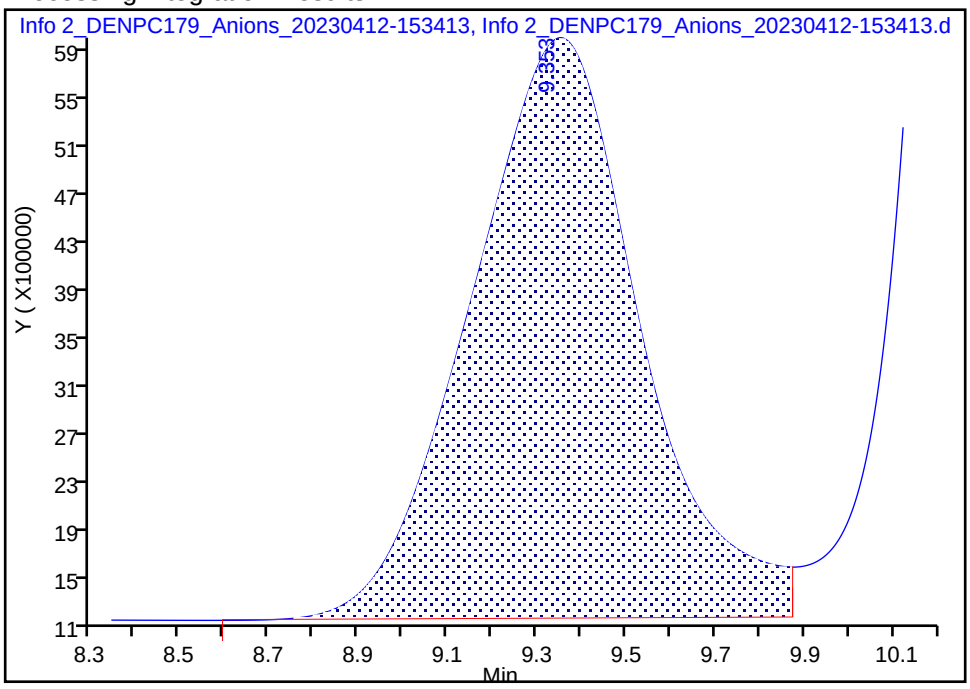
Column: Detector Info 2_091554_1

6 Orthophosphate as P, CAS: STL00599

Signal: 1

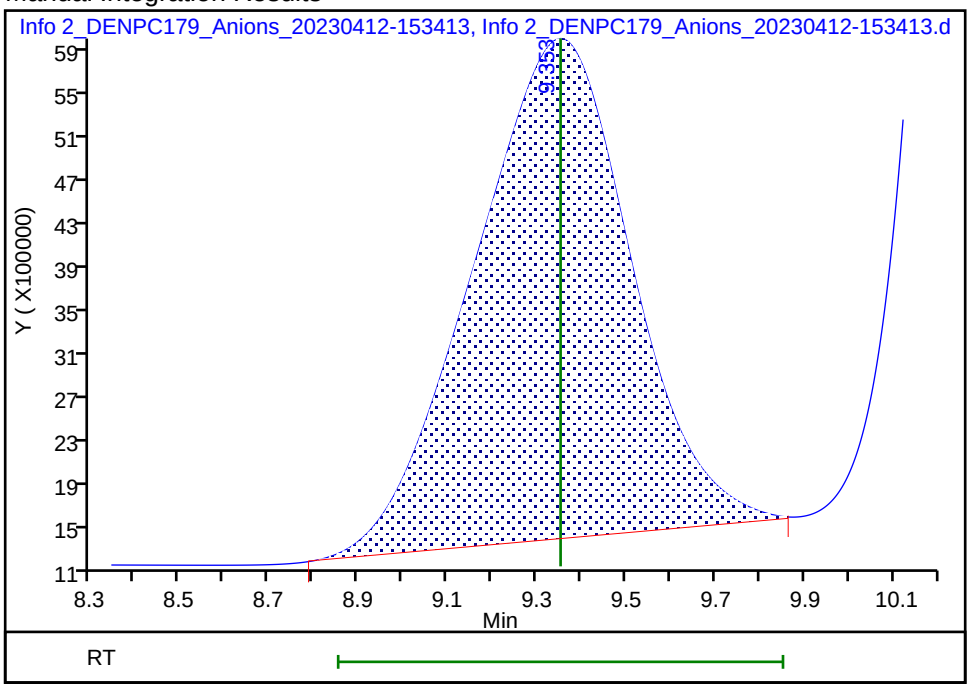
Processing Integration Results

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

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:

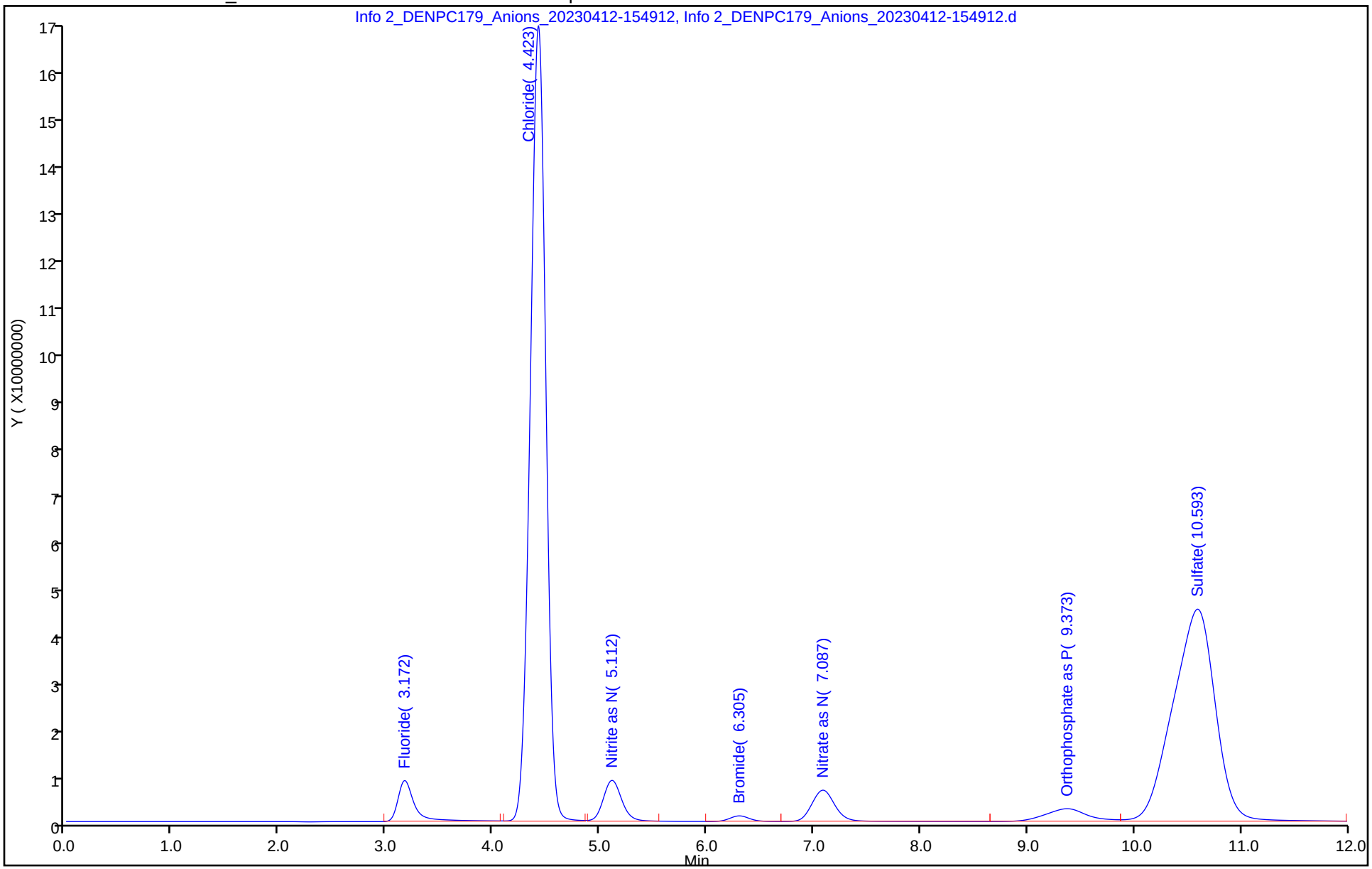
IC SO4 ICV_00024	Amount Added:	0.80	Units: mL
Cl ICV Std_00006	Amount Added:	0.80	Units: mL
IC ICV 5_00403	Amount Added:	0.80	Units: mL

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		



5/23/2023 8:16 PM

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

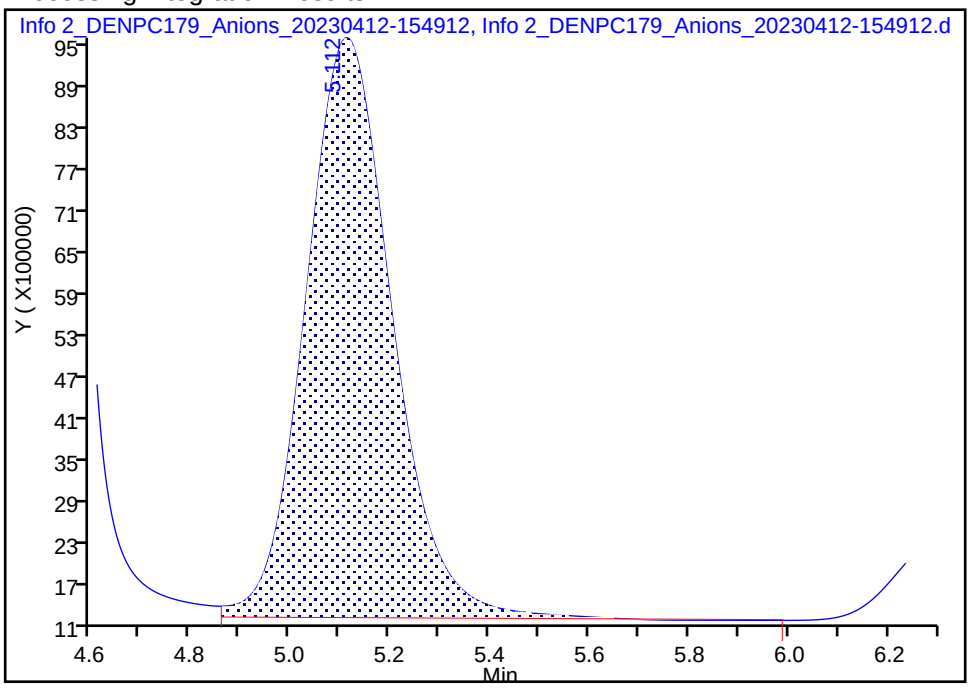
Column: Detector Info 2_091554_1

3 Nitrite as N, CAS: 14797-65-0

Signal: 1

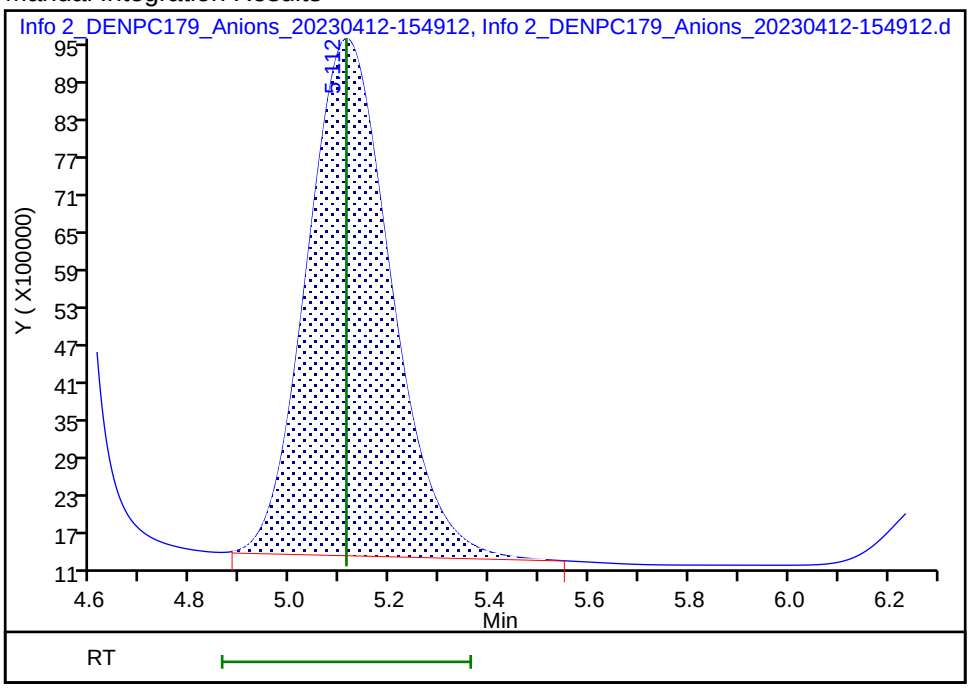
Processing Integration Results

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

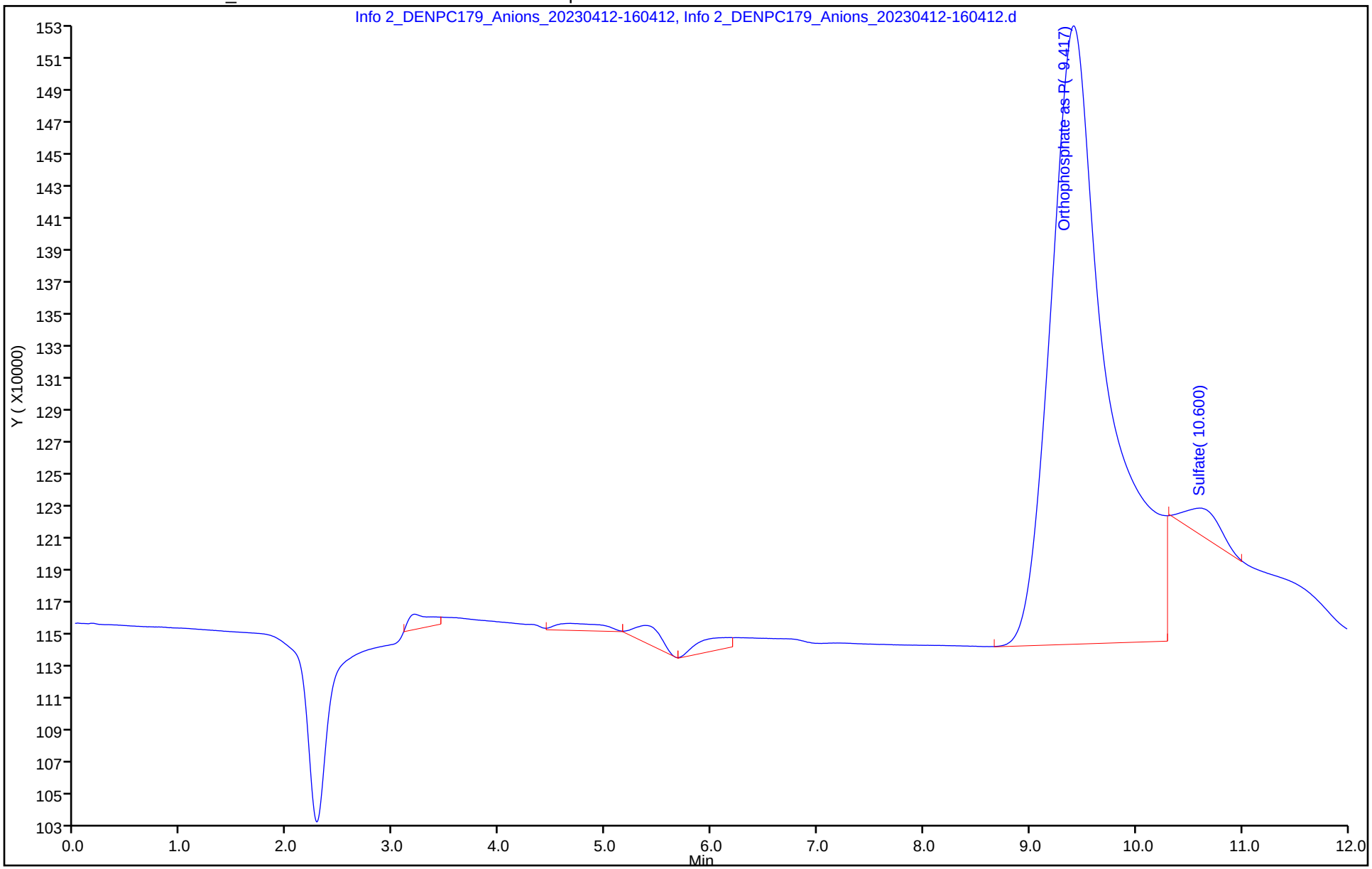
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

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		



5/23/2023 8:16 PM

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

IC Instrument Information

WL: 121069 **Inst ID:** DC10 **Analysis Date:** 5/4/23 **Analyst:** MEC

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	175900	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	~~175919~~ 175991	4	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	175919	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	175997	3	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	175993	3	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	175999	2	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	175985	3	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	176001	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	
☐			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	

GJ5 175991 5/4/23

GJ5714

Dilutions

Job No.	Samples	Anions	Dilution	Reason
900	1	F Cl NO2 Br NO3 PO4 SO4	2x	test
991	4	F Cl NO2 Br NO3 PO4 SO4	2x	test
919	1	F Cl NO2 Br NO3 PO4 SO4	5x	test
999	2	F Cl NO2 Br NO3 PO4 SO4	5x	test
985	3	F Cl NO2 Br NO3 PO4 SO4	20,50,200x	test
		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\20230504-121069.b\Info 2_DENPC179_Anions_20230504-093				
Lims ID:	ccv				
Client ID:					
Sample Type:	CCV				
Inject. Date:	04-May-2023 09:15:00	ALS Bottle#:	0	Worklist Smp#:	1
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0121069-001				
Misc. Info.:	280-0121069-001				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Sublist:	chrom-Anions_IC10*sub5				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Anions_IC10.m				
Limit Group:	Wet - Anions				
Last Update:	05-May-2023 10:37:11	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:	CTX1608				
First Level Reviewer: LVW8		Date:	04-May-2023 09:43:35		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.152			ND	ND	
2 Chloride	4.348	4.348	0.000	933133586	NC	NC	
3 Nitrite as N	5.035	5.035	0.000	110580577	2.50	2.41	
4 Bromide	6.197	6.197	0.000	17932775	NC	NC	
5 Nitrate as N	6.960	6.960	0.000	108327080	2.50	2.40	
6 Orthophosphate as P	9.188	9.188	0.000	59993116	2.50	2.32	
7 Sulfate	10.433	10.433	0.000	683343302	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

Reagents:

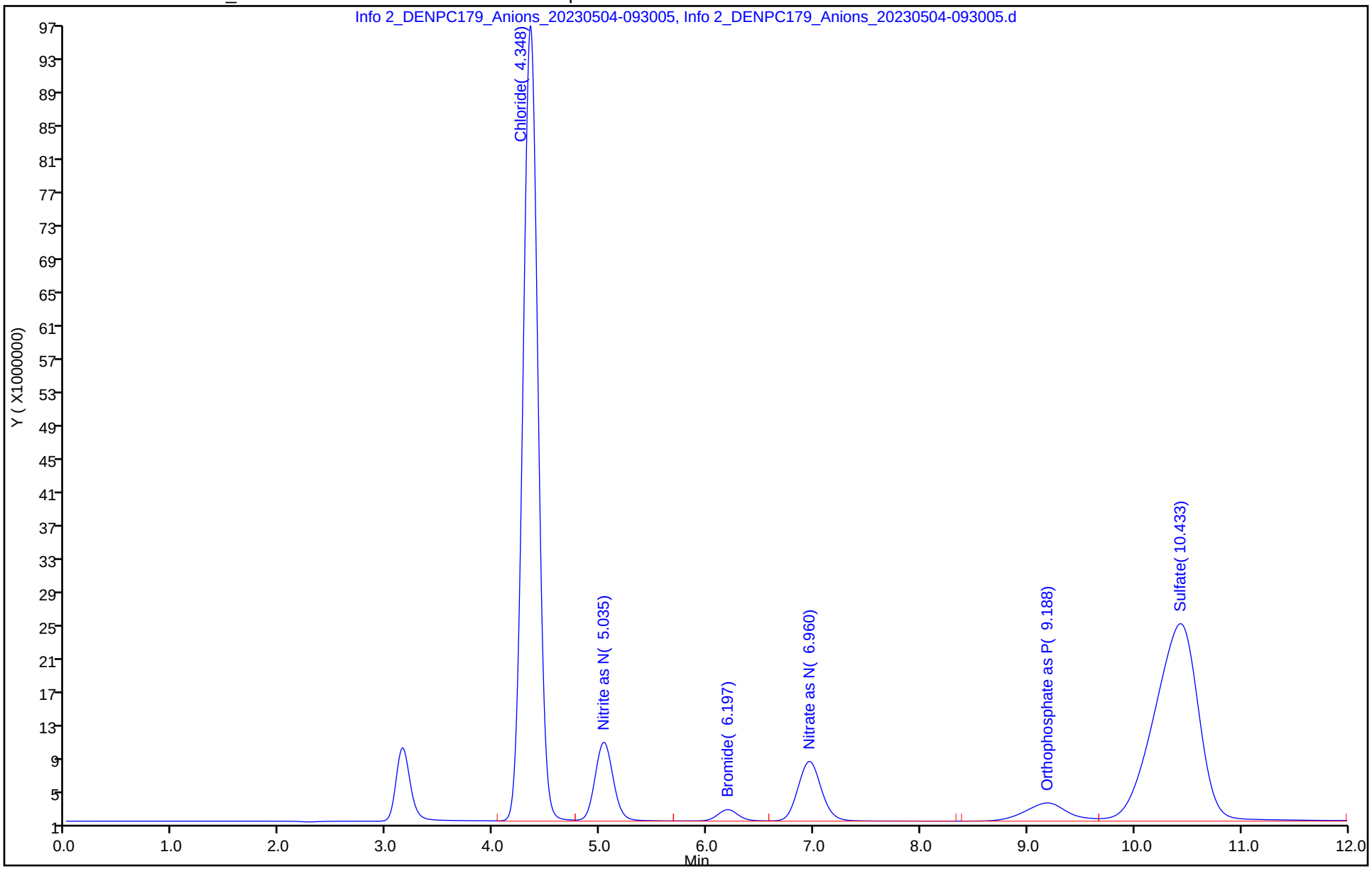
IC LCS_01952 Amount Added: 10.00 Units: mL

Report Date: 05-May-2023 10:37:11 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-093005.d

Injection Date:	04-May-2023 09:15:00	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		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-094
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 04-May-2023 09:30:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121069-002
Misc. Info.: 280-0121069-002
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 05-May-2023 10:37:12 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: CTX1608

First Level Reviewer: XAY4 Date: 05-May-2023 10:30:55

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.152				ND	
2 Chloride		4.348				ND	
3 Nitrite as N		5.035				ND	
4 Bromide		6.197				ND	U
5 Nitrate as N		6.960				ND	
6 Orthophosphate as P	9.268	9.268	0.000	4692406		-0.2974	
7 Sulfate	10.557	10.557	0.000	1451402		NC	M

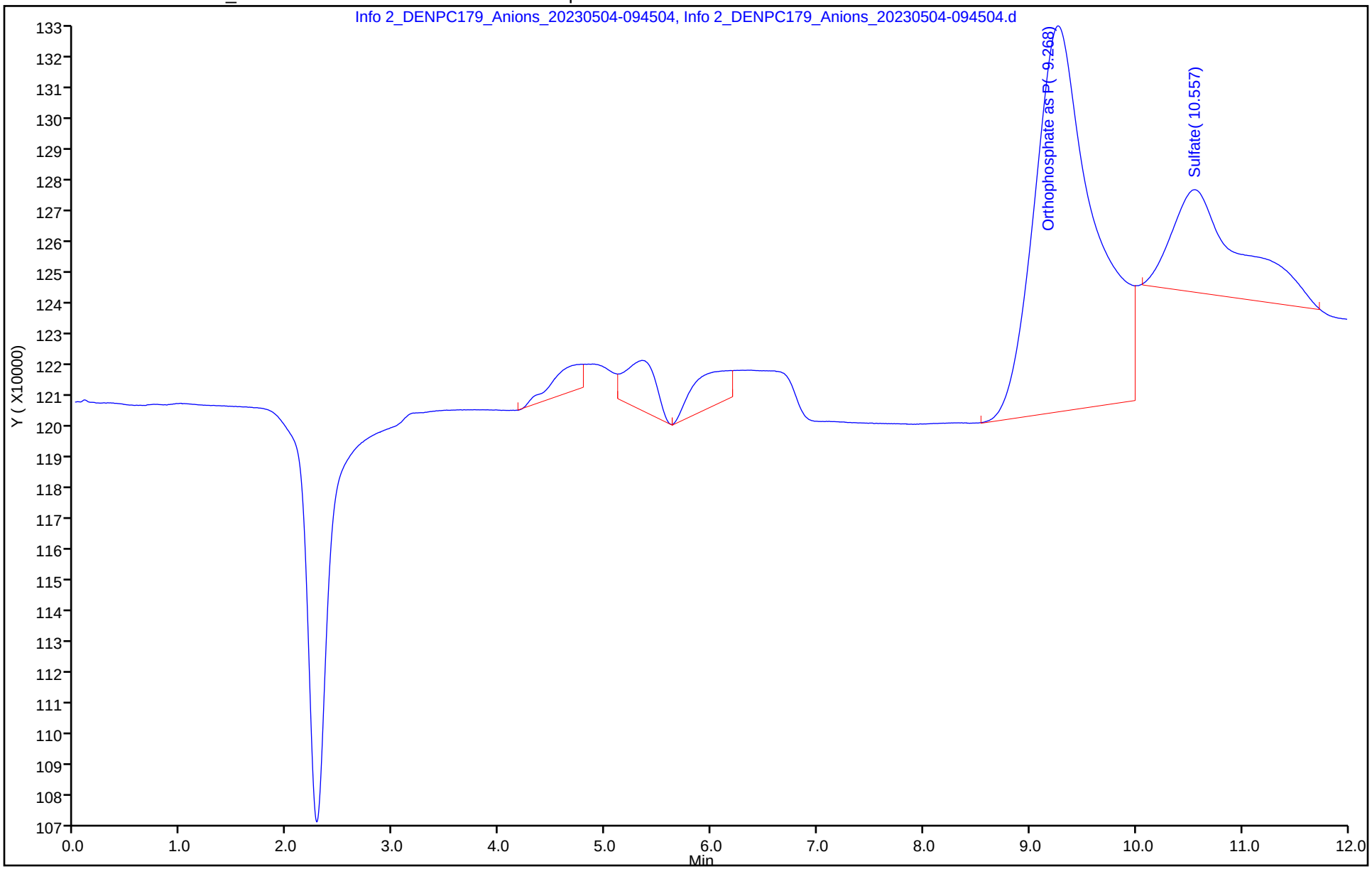
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 05-May-2023 10:37:12 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-094504.d				
Injection Date:	04-May-2023 09:30:00	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		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-100
Lims ID: mrl
Client ID:
Sample Type: MRL
Inject. Date: 04-May-2023 09:45:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121069-003
Misc. Info.: 280-0121069-003
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 05-May-2023 10:37:13 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: CTX1608

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.152			ND	ND	
2 Chloride	4.337	4.337	0.000	43241373	NC	NC	
3 Nitrite as N	5.047	5.047	0.000	10500363	0.2500	0.2539	
4 Bromide	6.223	6.223	0.000	2426422	NC	NC	
5 Nitrate as N	7.017	7.017	0.000	9549539	0.2500	0.2438	
6 Orthophosphate as P	9.242	9.242	0.000	10871607	0.2500	-0.005293	
7 Sulfate	10.468	10.468	0.000	34990325	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

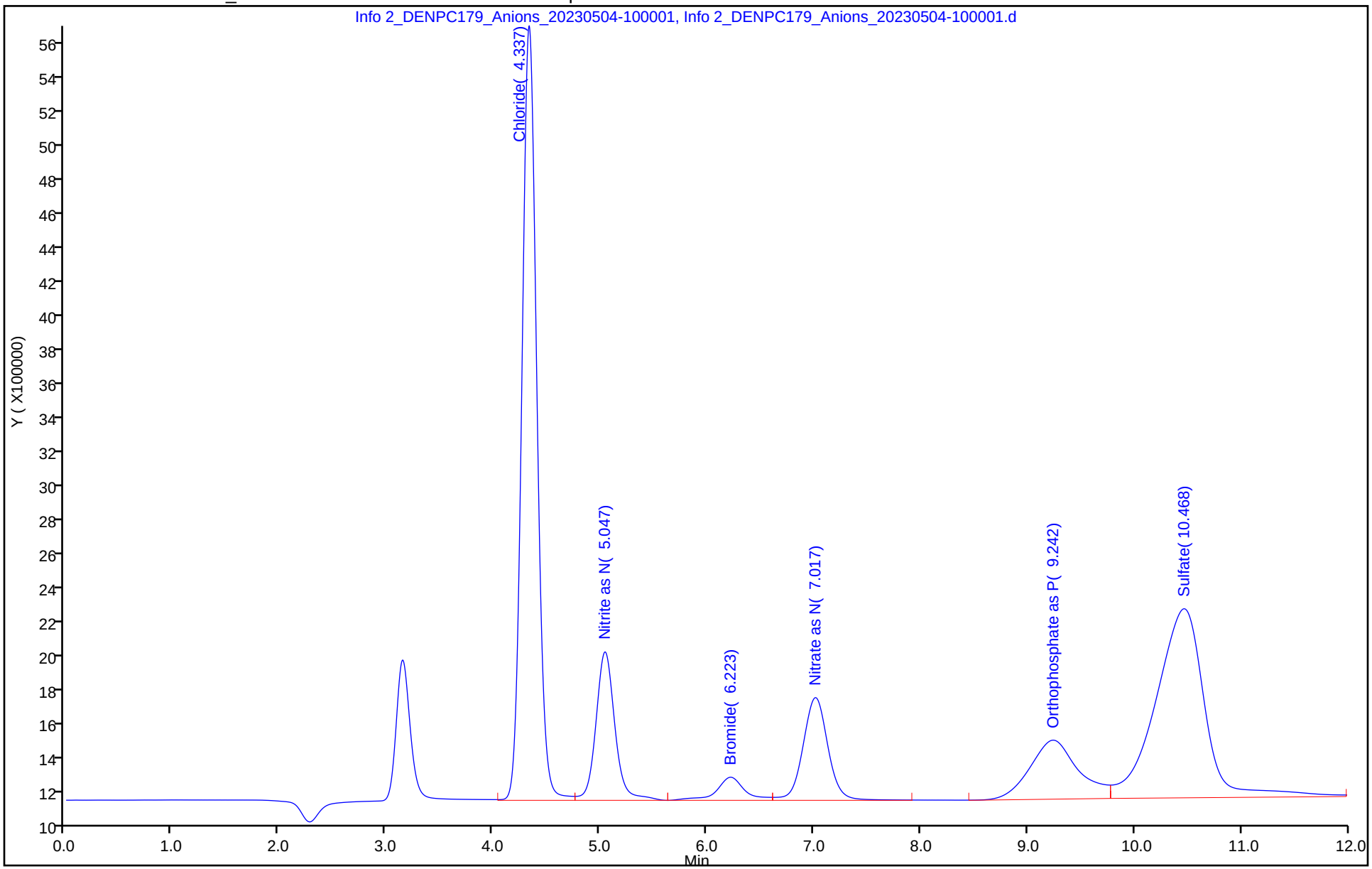
Reagents:

IC CAL cl/so4_00478 Amount Added: 0.20 Units: mL
IC Cal low_00707 Amount Added: 0.10 Units: mL

Report Date: 05-May-2023 10:37:13 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-100001.d				
Injection Date:	04-May-2023 09:45:00	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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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-101
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 04-May-2023 10:00:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121069-004
Misc. Info.: 280-0121069-004
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 05-May-2023 10:37:13 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: CTX1608

First Level Reviewer: LVW8 Date: 04-May-2023 10:43:00

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.152			ND	ND	
2 Chloride	4.350	4.350	0.000	925797404	NC	NC	
3 Nitrite as N	5.037	5.037	0.000	110454692	2.50	2.41	
4 Bromide	6.202	6.202	0.000	17746023	NC	NC	
5 Nitrate as N	6.965	6.965	0.000	107279988	2.50	2.37	
6 Orthophosphate as P	9.202	9.202	0.000	64502489	2.50	2.53	
7 Sulfate	10.448	10.448	0.000	679783670	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

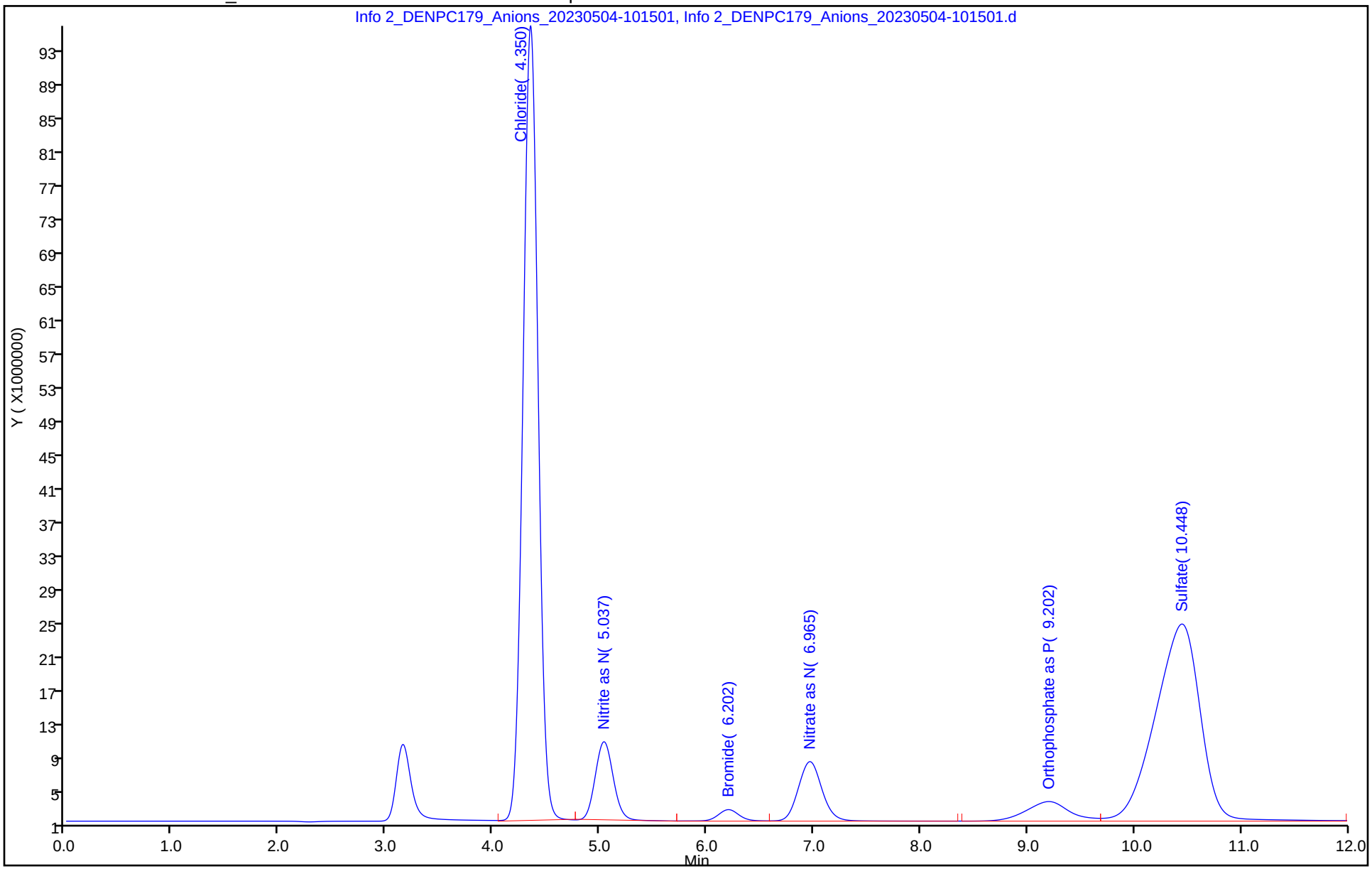
Reagents:

IC LCS_01952 Amount Added: 10.00 Units: mL

Report Date: 05-May-2023 10:37:13 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-101501.d				
Injection Date:	04-May-2023 10:00:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	lcs			Worklist Smp#:	4
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-103
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 04-May-2023 10:15:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121069-005
Misc. Info.: 280-0121069-005
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 05-May-2023 10:37:14 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: CTX1608

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.152			ND	ND	
2 Chloride	4.352	4.352	0.000	925409845	NC	NC	
3 Nitrite as N	5.040	5.040	0.000	110028350	2.50	2.40	
4 Bromide	6.207	6.207	0.000	17760536	NC	NC	
5 Nitrate as N	6.968	6.968	0.000	107273534	2.50	2.37	
6 Orthophosphate as P	9.205	9.205	0.000	64140069	2.50	2.51	
7 Sulfate	10.453	10.453	0.000	678517681	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

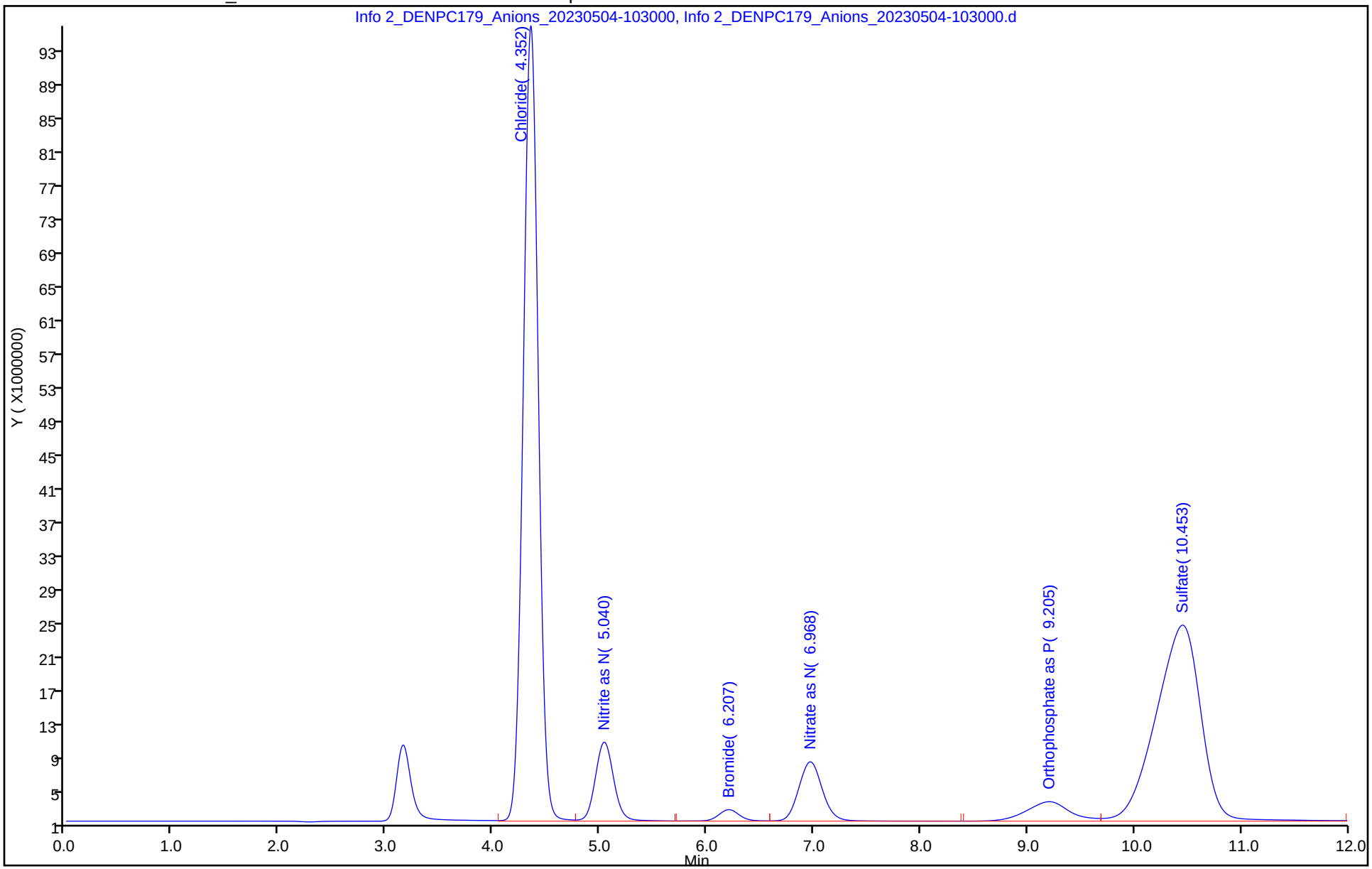
Reagents:

IC LCS_01952 Amount Added: 10.00 Units: mL

Report Date: 05-May-2023 10:37:14 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-103000.d				
Injection Date:	04-May-2023 10:15:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	lcsd			Worklist Smp#:	5
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-104
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 04-May-2023 10:30:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121069-006
Misc. Info.: 280-0121069-006
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 05-May-2023 10:37:14 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: CTX1608

First Level Reviewer: XAY4 Date: 05-May-2023 10:31:15

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.152				ND	
2 Chloride		4.352				ND	
3 Nitrite as N		5.040				ND	
4 Bromide	6.157	6.157	0.000	264846		NC	
5 Nitrate as N		6.968				ND	
6 Orthophosphate as P	9.273	9.273	0.000	6799369		-0.1978	
7 Sulfate	10.543	10.543	0.000	687210		NC	M

QC Flag Legend

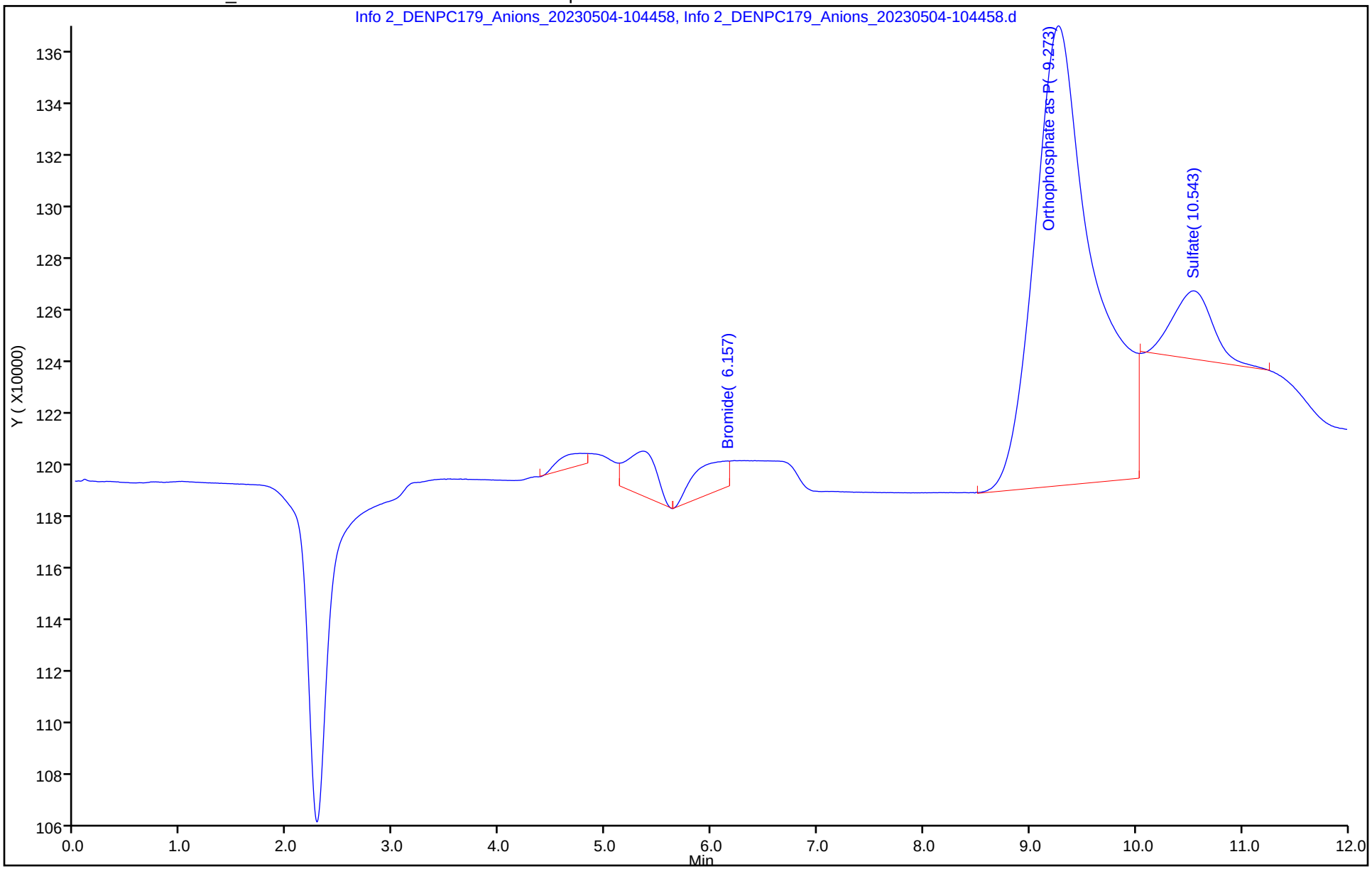
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 05-May-2023 10:37:14 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-104458.d

Injection Date:	04-May-2023 10:30:00	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		



5/23/2023 8:16 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-170
Lims ID: 280-175997-C-1
Client ID: LL1mw-080-230401-GW
Sample Type: Client
Inject. Date: 04-May-2023 16:54:00 ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121069-011
Misc. Info.: 280-0121069-011
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 05-May-2023 10:37:14 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: CTX1608

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		3.152			ND	
2 Chloride	4.325	4.352	-0.027	5850847	NC	
3 Nitrite as N		5.040			ND	
4 Bromide	6.218	6.157	0.061	1092979	NC	
5 Nitrate as N	7.027	6.968	0.059	1846079	0.0759	
6 Orthophosphate as P	9.293	9.273	0.020	1061265	-0.4690	
7 Sulfate	10.412	10.543	-0.131	356045525	NC	

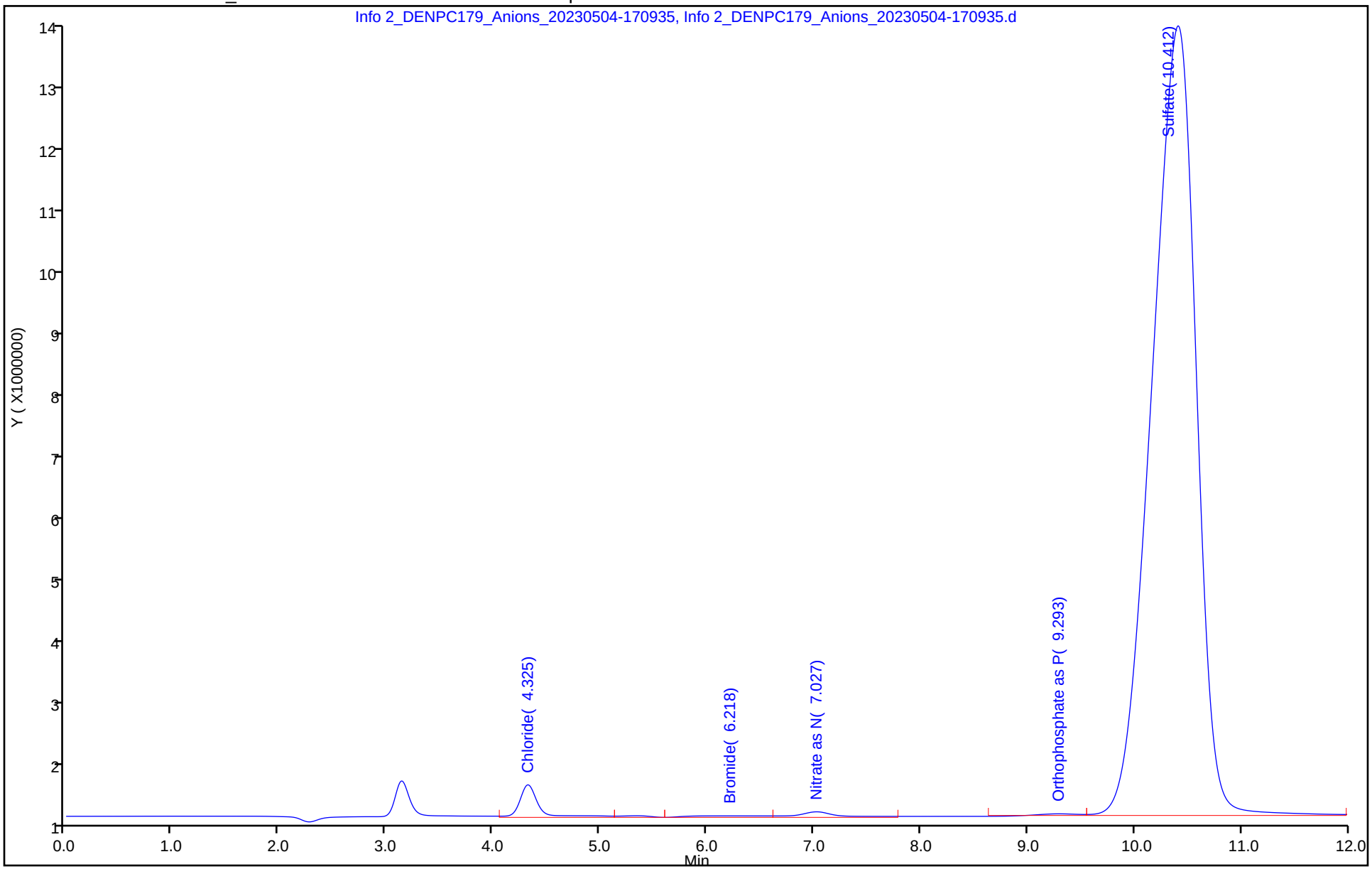
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 05-May-2023 10:37:17 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-170935.d				
Injection Date:	04-May-2023 16:54:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-175997-C-1	Lab Sample ID:	280-175997-1	Worklist Smp#:	11
Client ID:	LL1mw-080-230401-GW				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/23/2023 8:16 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-172
Lims ID: 280-175997-C-4
Client ID: LL1mw-084-230401-GW
Sample Type: Client
Inject. Date: 04-May-2023 17:09:00 ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121069-012
Misc. Info.: 280-0121069-012
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 05-May-2023 10:37:14 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: CTX1608

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		3.152			ND	
2 Chloride	4.327	4.352	-0.025	10798351	NC	
3 Nitrite as N		5.040			ND	
4 Bromide	6.245	6.157	0.088	1153219	NC	
5 Nitrate as N	7.003	6.968	0.035	29111289	0.6703	
6 Orthophosphate as P	9.307	9.273	0.034	648476	-0.4885	
7 Sulfate	10.395	10.543	-0.148	1500315321	NC	

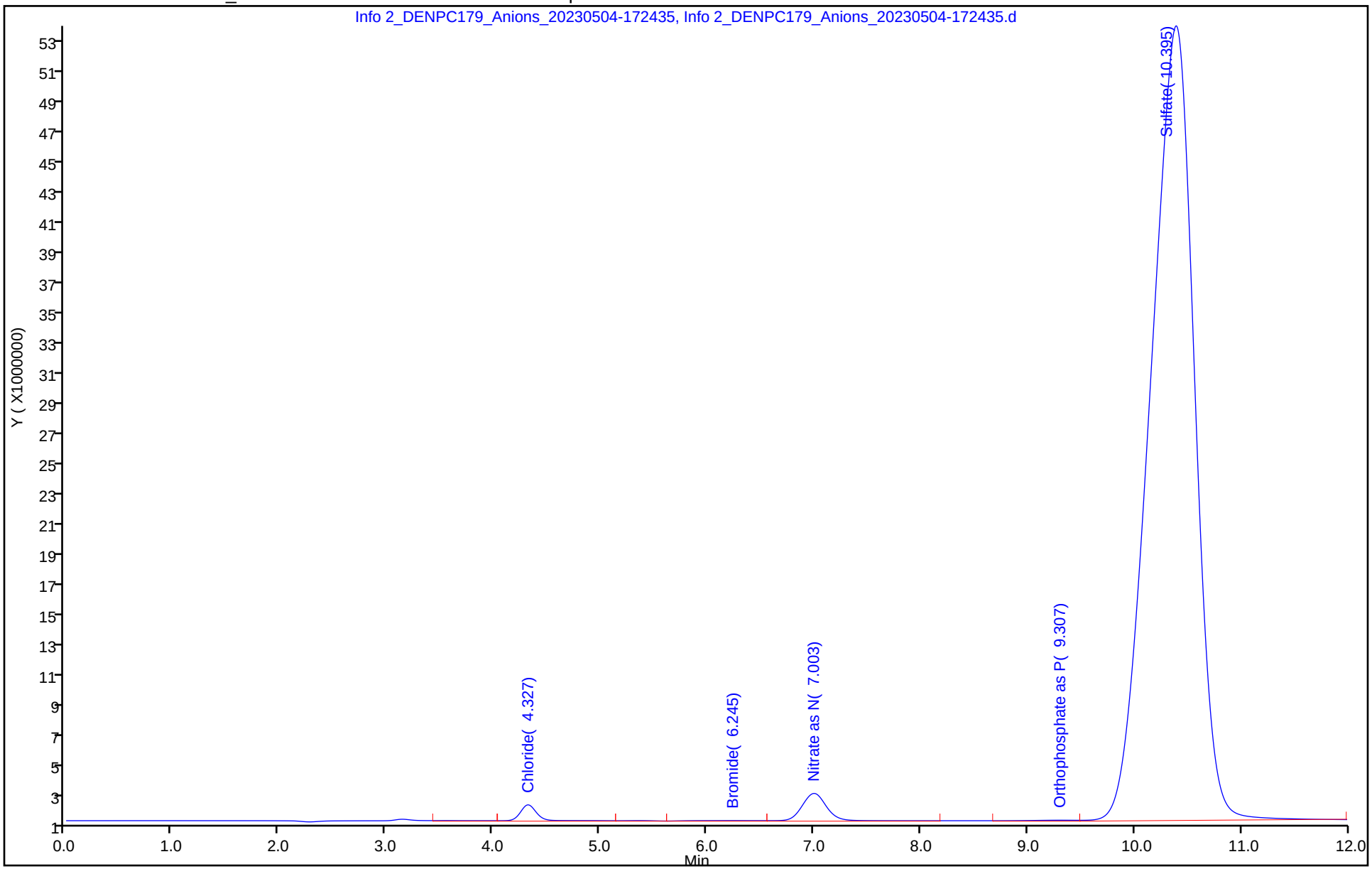
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 05-May-2023 10:37:18 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-172435.d				
Injection Date:	04-May-2023 17:09:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-175997-C-4	Lab Sample ID:	280-175997-4	Worklist Smp#:	12
Client ID:	LL1mw-084-230401-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\20230504-121069.b\Info 2_DENPC179_Anions_20230504-173
Lims ID: 280-175997-C-4 DU
Client ID:
Sample Type: DU
Inject. Date: 04-May-2023 17:24:00 ALS Bottle#: 0 Worklist Smp#: 13
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121069-013
Misc. Info.: 280-0121069-013
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 05-May-2023 10:37:14 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: CTX1608

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.152				ND	
2 Chloride	4.327	4.352	-0.025	10778452		NC	
3 Nitrite as N		5.040				ND	
4 Bromide	6.247	6.157	0.090	1154924		NC	
5 Nitrate as N	7.007	6.968	0.039	29150791		0.6712	
6 Orthophosphate as P	9.325	9.273	0.052	596298		-0.4910	
7 Sulfate	10.395	10.543	-0.148	1513999984		NC	

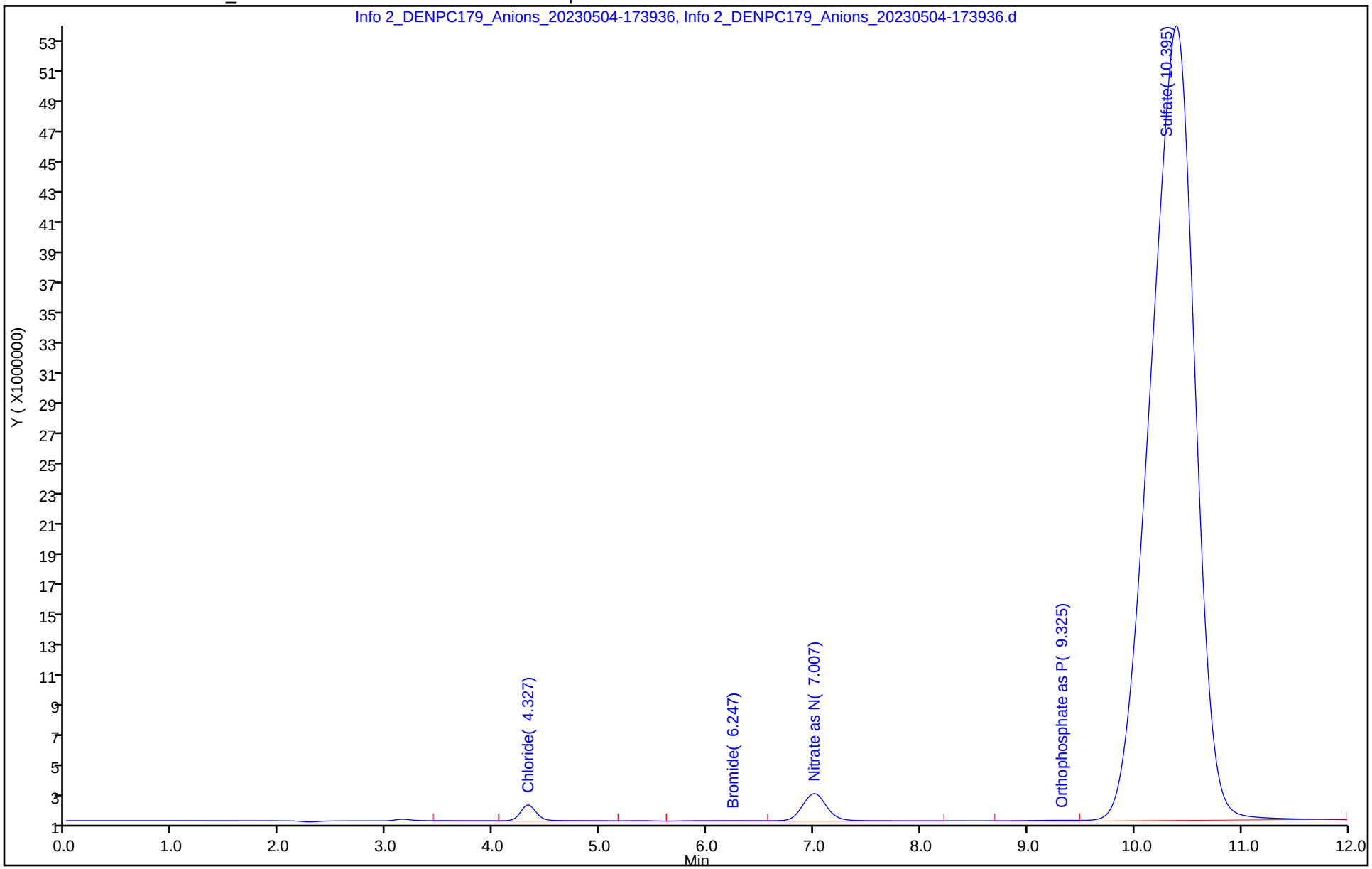
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 05-May-2023 10:37:18 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-173936.d				
Injection Date:	04-May-2023 17:24:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-175997-C-4 DU			Worklist Smp#:	13
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/23/2023 8:16 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-175
Lims ID: 280-175997-C-4 MS
Client ID: LL1mw-084-230401-GW
Sample Type: MS
Inject. Date: 04-May-2023 17:39:00 ALS Bottle#: 0 Worklist Smp#: 14
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121069-014
Misc. Info.: 280-0121069-014
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 05-May-2023 10:37:14 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: CTX1608

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.152			ND	ND	
2 Chloride	4.338	4.352	-0.014	993100885	NC	NC	
3 Nitrite as N	5.025	5.040	-0.015	219126061	5.00	4.75	
4 Bromide	6.217	6.157	0.060	36304047	NC	NC	
5 Nitrate as N	6.953	6.968	-0.015	266989106	5.00	5.86	E
6 Orthophosphate as P	9.208	9.273	-0.065	118461746	5.00	5.08	E
7 Sulfate	10.378	10.543	-0.165	2240026766	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND
E - Exceeded Maximum Amount

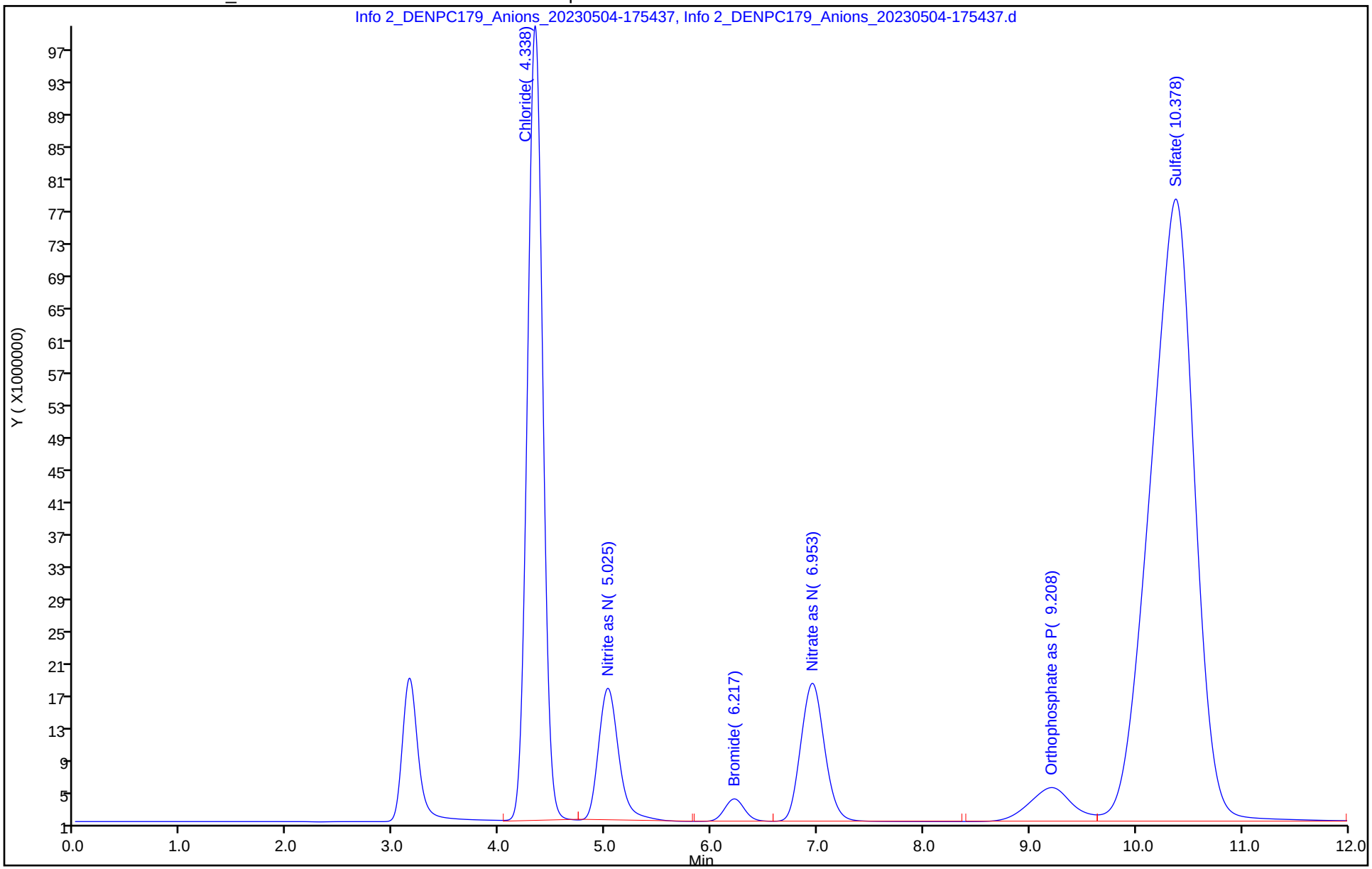
Reagents:

ICMS/MSD WEEK_00817 Amount Added: 0.10 Units: mL

Report Date: 05-May-2023 10:37:18 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-175437.d				
Injection Date:	04-May-2023 17:39:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-175997-C-4 MS			Worklist Smp#:	14
Client ID:	LL1mw-084-230401-GW				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/23/2023 8:16 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-180
Lims ID: 280-175997-C-4 MSD
Client ID: LL1mw-084-230401-GW
Sample Type: MSD
Inject. Date: 04-May-2023 17:54:00 ALS Bottle#: 0 Worklist Smp#: 15
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121069-015
Misc. Info.: 280-0121069-015
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 05-May-2023 10:37:14 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: CTX1608

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.152			ND	ND	
2 Chloride	4.338	4.352	-0.014	988697326	NC	NC	
3 Nitrite as N	5.025	5.040	-0.015	218894685	5.00	4.75	
4 Bromide	6.217	6.157	0.060	36136455	NC	NC	
5 Nitrate as N	6.952	6.968	-0.016	265578314	5.00	5.83	E
6 Orthophosphate as P	9.208	9.273	-0.065	121178216	5.00	5.21	E
7 Sulfate	10.380	10.543	-0.163	2212544388	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND
E - Exceeded Maximum Amount

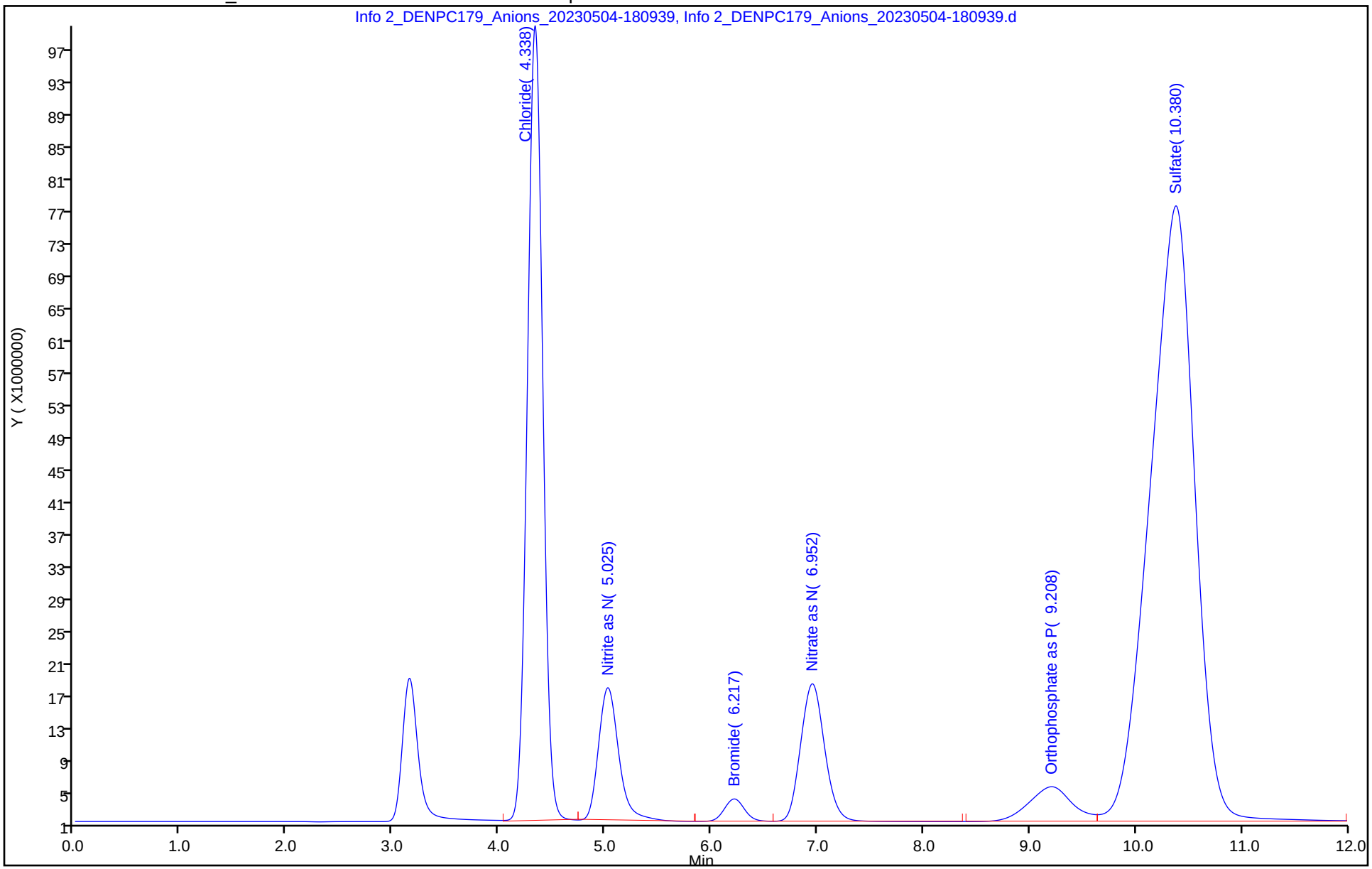
Reagents:

ICMS/MSD WEEK_00817 Amount Added: 0.10 Units: mL

Report Date: 05-May-2023 10:37:19 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-180939.d				
Injection Date:	04-May-2023 17:54:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-175997-C-4 MSD			Worklist Smp#:	15
Client ID:	LL1mw-084-230401-GW				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/23/2023 8:16 PM

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-182				
Lims ID:	280-175997-C-5				
Client ID:	LL1mw-084-230402-GW				
Sample Type:	Client				
Inject. Date:	04-May-2023 18:09:00	ALS Bottle#:	0	Worklist Smp#:	16
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0121069-016				
Misc. Info.:	280-0121069-016				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Anions_IC10.m				
Limit Group:	Wet - Anions				
Last Update:	05-May-2023 10:37:14	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:	CTX1608				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		3.152			ND	
2 Chloride	4.328	4.352	-0.024	10808605	NC	
3 Nitrite as N		5.040			ND	
4 Bromide	6.233	6.157	0.076	810770	NC	
5 Nitrate as N	7.012	6.968	0.044	28498581	0.6569	
6 Orthophosphate as P	9.298	9.273	0.025	8855882	-0.1006	
7 Sulfate	10.407	10.543	-0.136	1505913038	NC	

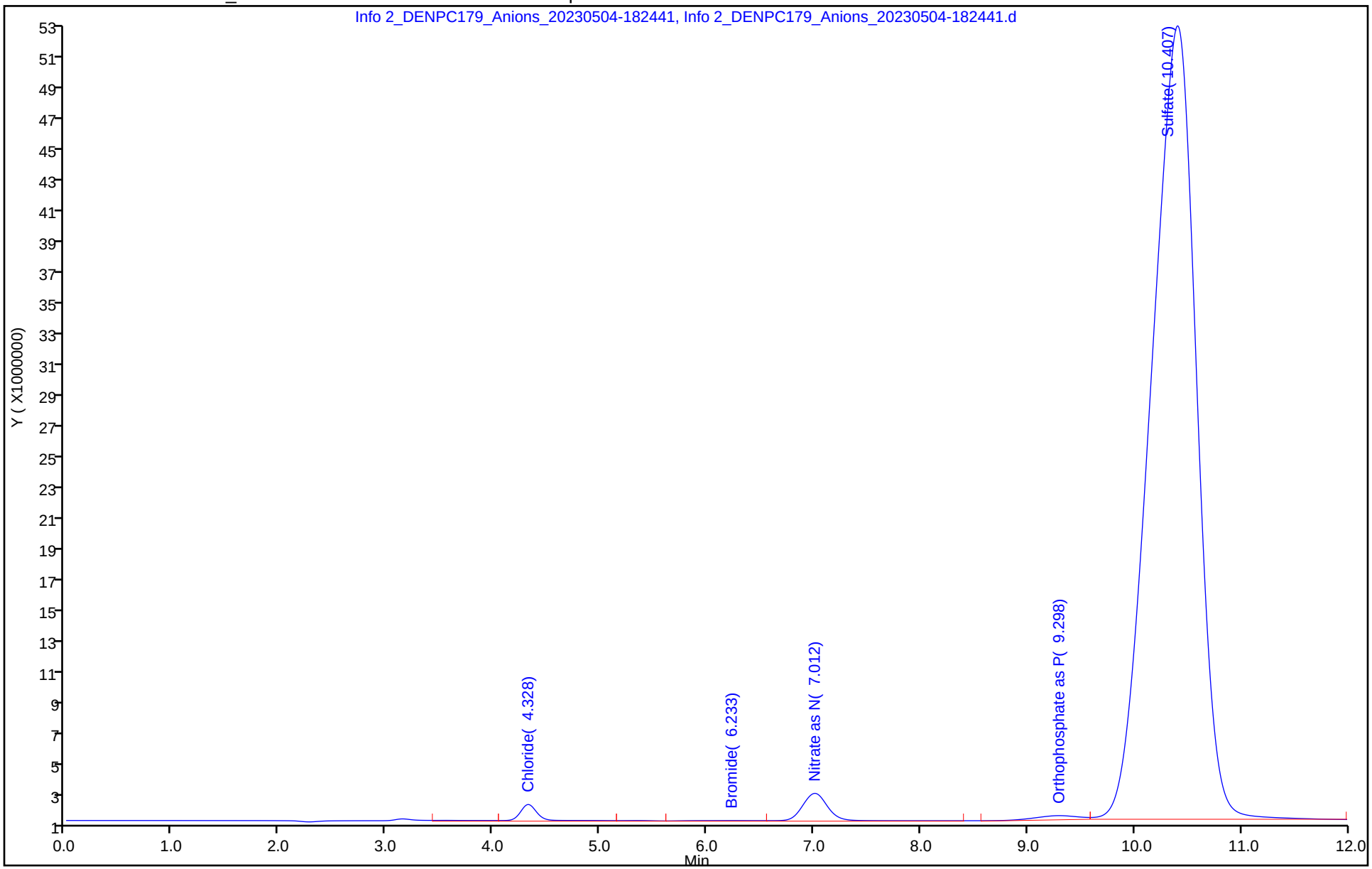
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 05-May-2023 10:37:20 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-182441.d				
Injection Date:	04-May-2023 18:09:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-175997-C-5	Lab Sample ID:	280-175997-5	Worklist Smp#:	16
Client ID:	LL1mw-084-230402-GW				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/23/2023 8:16 PM

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-183				
Lims ID:	ccv				
Client ID:					
Sample Type:	CCV				
Inject. Date:	04-May-2023 18:24:00	ALS Bottle#:	0	Worklist Smp#:	17
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0121069-017				
Misc. Info.:	280-0121069-017				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Sublist:	chrom-Anions_IC10*sub5				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Anions_IC10.m				
Limit Group:	Wet - Anions				
Last Update:	05-May-2023 10:37:20	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:	CTX1608				
First Level Reviewer: LVW8		Date:	05-May-2023 08:34:35		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.152			ND	ND	
2 Chloride	4.348	4.352	-0.004	938266374	NC	NC	
3 Nitrite as N	5.035	5.040	-0.005	111883118	2.50	2.44	
4 Bromide	6.193	6.157	0.036	17679125	NC	NC	
5 Nitrate as N	6.958	6.968	-0.010	108971412	2.50	2.41	
6 Orthophosphate as P	9.202	9.273	-0.071	66917333	2.50	2.64	
7 Sulfate	10.418	10.543	-0.125	689496548	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

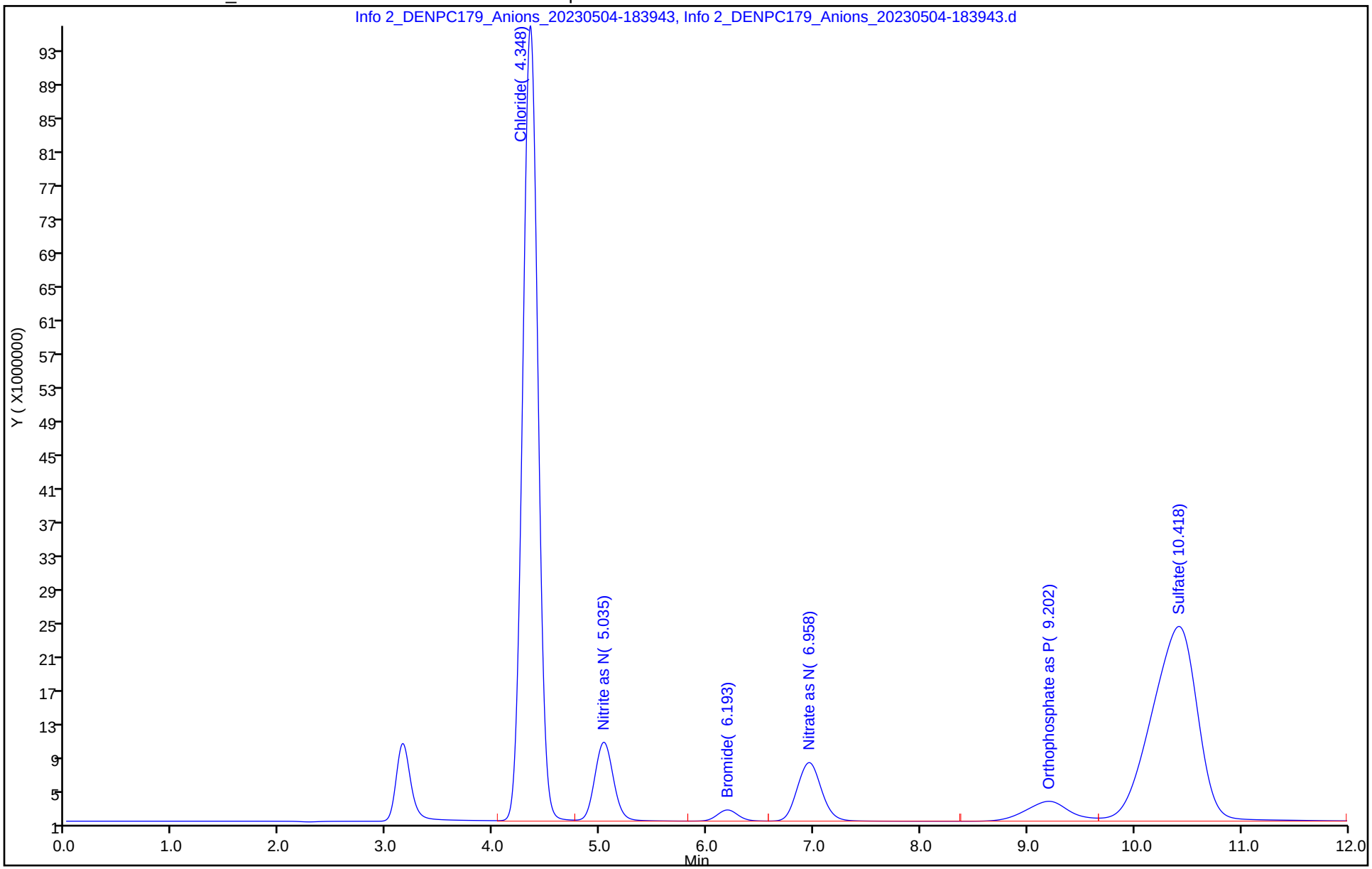
Reagents:

IC LCS_01952 Amount Added: 10.00 Units: mL

Report Date: 05-May-2023 10:37:20 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-183943.d				
Injection Date:	04-May-2023 18:24:00	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		



5/23/2023 8:16 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-185
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 04-May-2023 18:39:00 ALS Bottle#: 0 Worklist Smp#: 18
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121069-018
Misc. Info.: 280-0121069-018
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 05-May-2023 10:37:20 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: CTX1608

First Level Reviewer: XAY4 Date: 05-May-2023 10:31:46

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.152				ND	
2 Chloride		4.352				ND	
3 Nitrite as N		5.040				ND	
4 Bromide	6.167	6.157	0.010	203049		NC	
5 Nitrate as N		6.968				ND	
6 Orthophosphate as P	9.273	9.273	0.000	8955754		-0.0958	
7 Sulfate	10.465	10.543	-0.078	418594		NC	M

QC Flag Legend

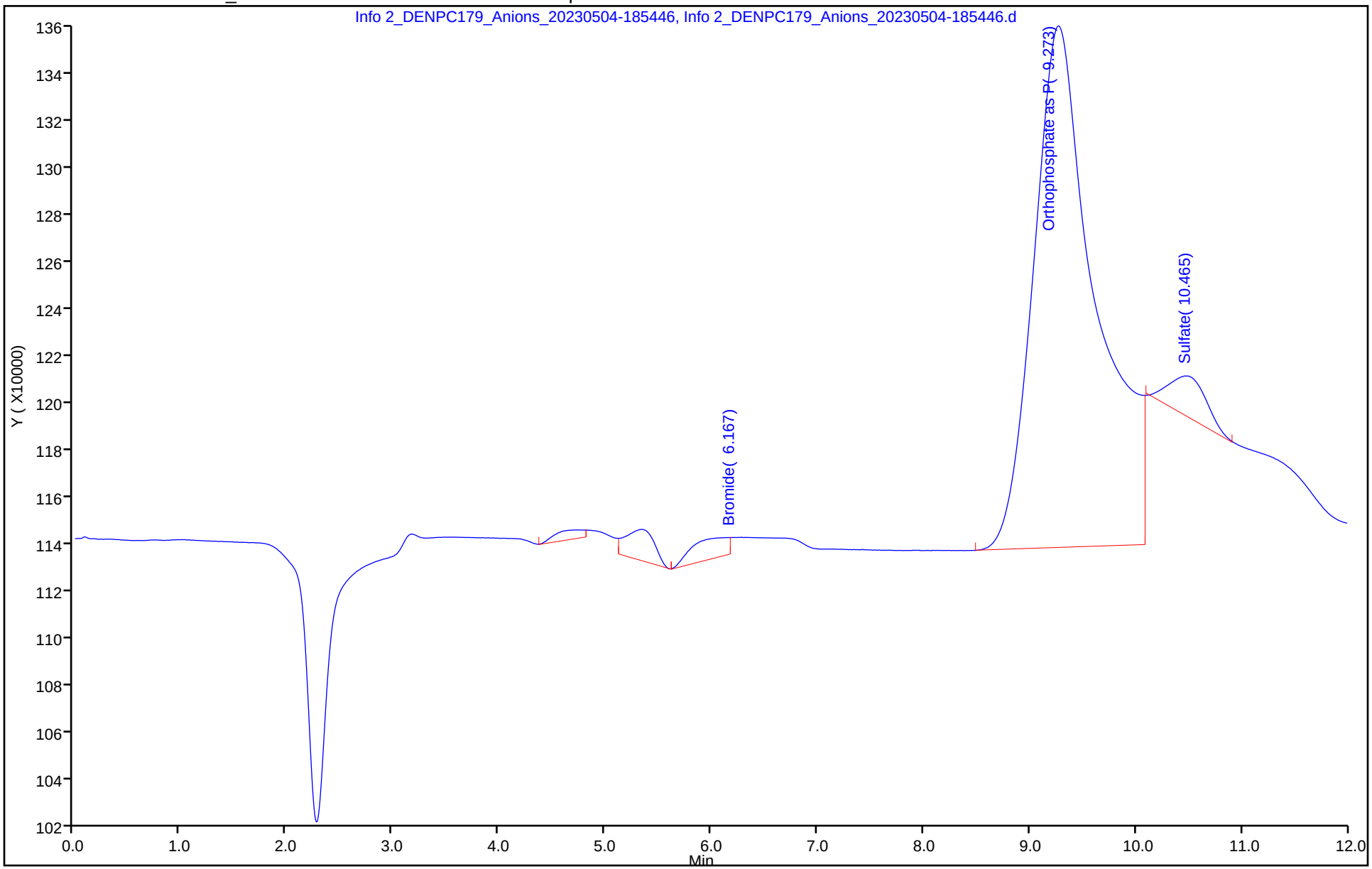
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 05-May-2023 10:37:21 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-185446.d

Injection Date:	04-May-2023 18:39:00	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\20230504-121069.b\Info 2_DENPC179_Anions_20230504-214
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 04-May-2023 21:25:00 ALS Bottle#: 0 Worklist Smp#: 29
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121069-029
Misc. Info.: 280-0121069-029
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 05-May-2023 10:37:26 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: CTX1608

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.152			ND	ND	
2 Chloride	4.348	4.352	-0.004	946388401	NC	NC	
3 Nitrite as N	5.042	5.040	0.002	112701588	2.50	2.46	
4 Bromide	6.198	6.157	0.041	17769227	NC	NC	
5 Nitrate as N	6.973	6.968	0.005	109724496	2.50	2.43	
6 Orthophosphate as P	9.208	9.273	-0.065	63777992	2.50	2.50	
7 Sulfate	10.418	10.543	-0.125	703673552	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

Reagents:

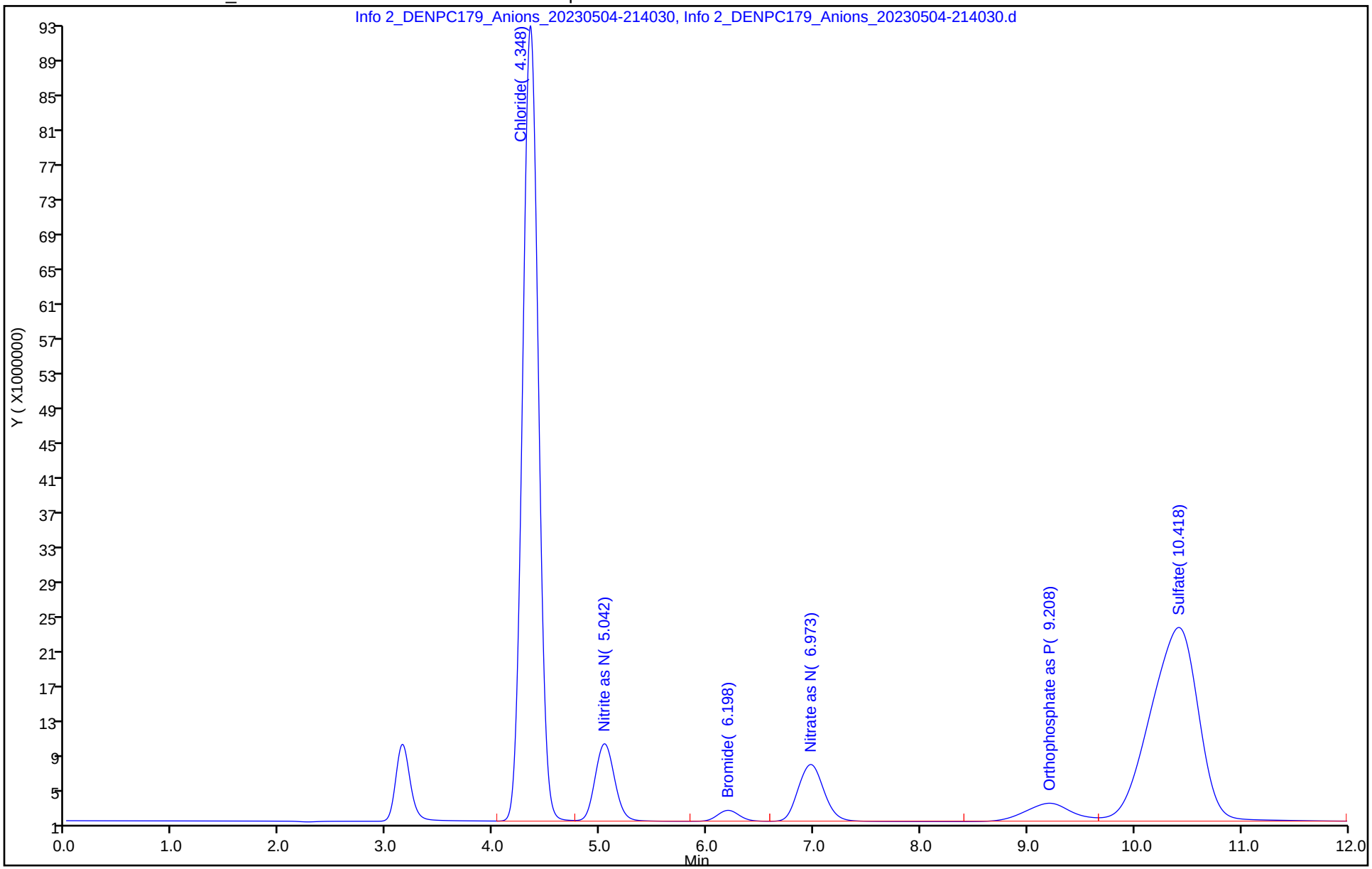
IC LCS_01952 Amount Added: 10.00 Units: mL

Report Date: 05-May-2023 10:37:26 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-214030.d

Injection Date:	04-May-2023 21:25:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	29
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-215
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 04-May-2023 21:40:00 ALS Bottle#: 0 Worklist Smp#: 30
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121069-030
Misc. Info.: 280-0121069-030
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 05-May-2023 10:37:26 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: CTX1608

First Level Reviewer: XAY4 Date: 05-May-2023 10:33:13

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.152				ND	
2 Chloride		4.352				ND	
3 Nitrite as N		5.040				ND	
4 Bromide	6.018	6.157	-0.139	113981		NC	
5 Nitrate as N		6.968				ND	
6 Orthophosphate as P	9.292	9.273	0.019	7898985		-0.1458	
7 Sulfate	10.477	10.543	-0.066	414079		NC	M

QC Flag Legend

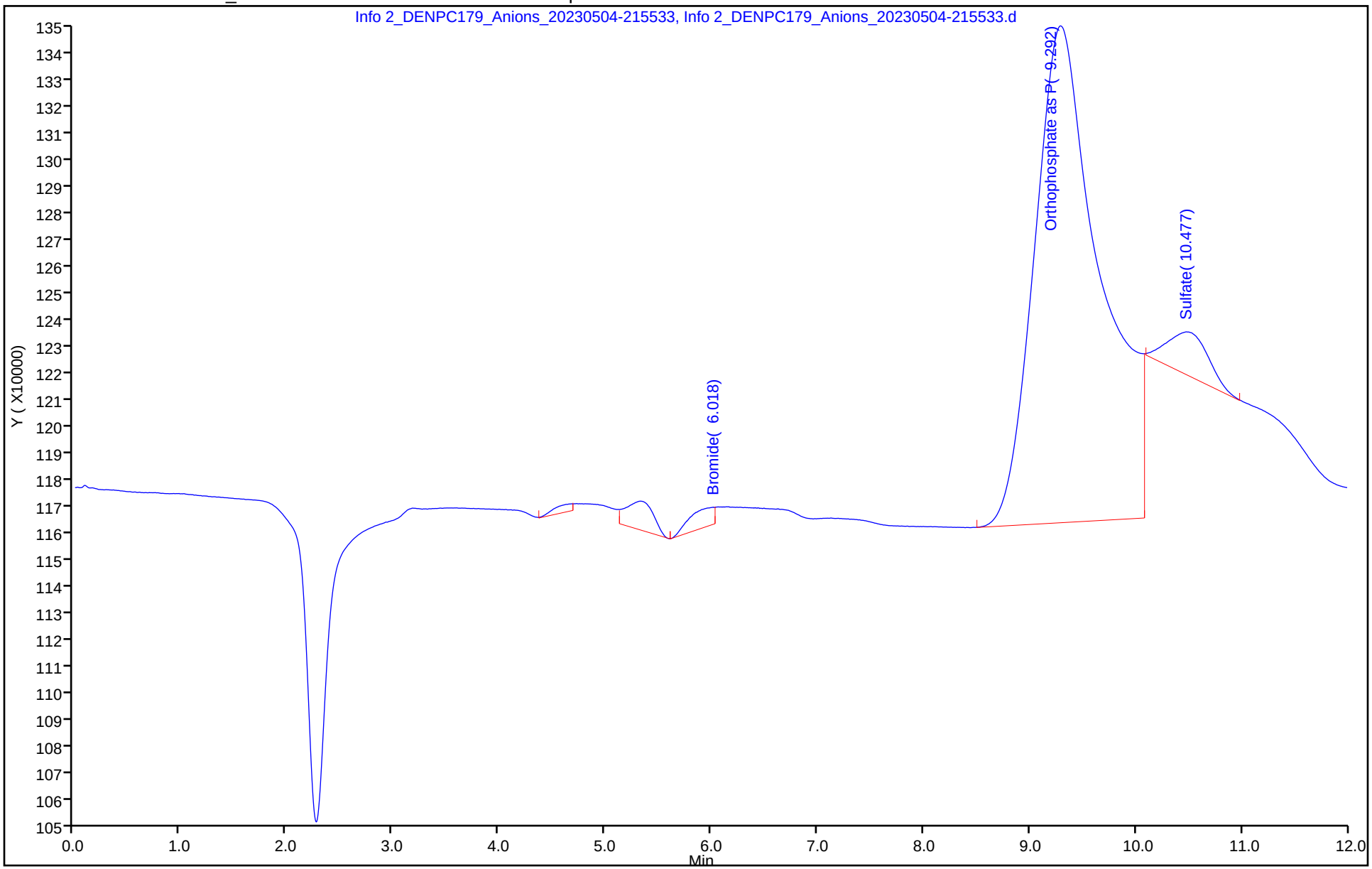
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 05-May-2023 10:37:27 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-215533.d

Injection Date:	04-May-2023 21:40:00	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\20230504-121069.b\Info 2_DENPC179_Anions_20230504-225
Lims ID: 280-175997-C-3
Client ID: LL1mw-083-230401-GW
Sample Type: Client
Inject. Date: 04-May-2023 22:40:00 ALS Bottle#: 0 Worklist Smp#: 34
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121069-034
Misc. Info.: 280-0121069-034
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 05-May-2023 10:37:26 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: CTX1608

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		3.152			ND	
2 Chloride	4.328	4.352	-0.024	34870064	NC	
3 Nitrite as N		5.040			ND	
4 Bromide	6.230	6.157	0.073	947535	NC	
5 Nitrate as N	7.030	6.968	0.062	6717650	0.1821	
6 Orthophosphate as P	9.303	9.273	0.030	928361	-0.4753	
7 Sulfate	10.390	10.543	-0.153	1862395454	NC	

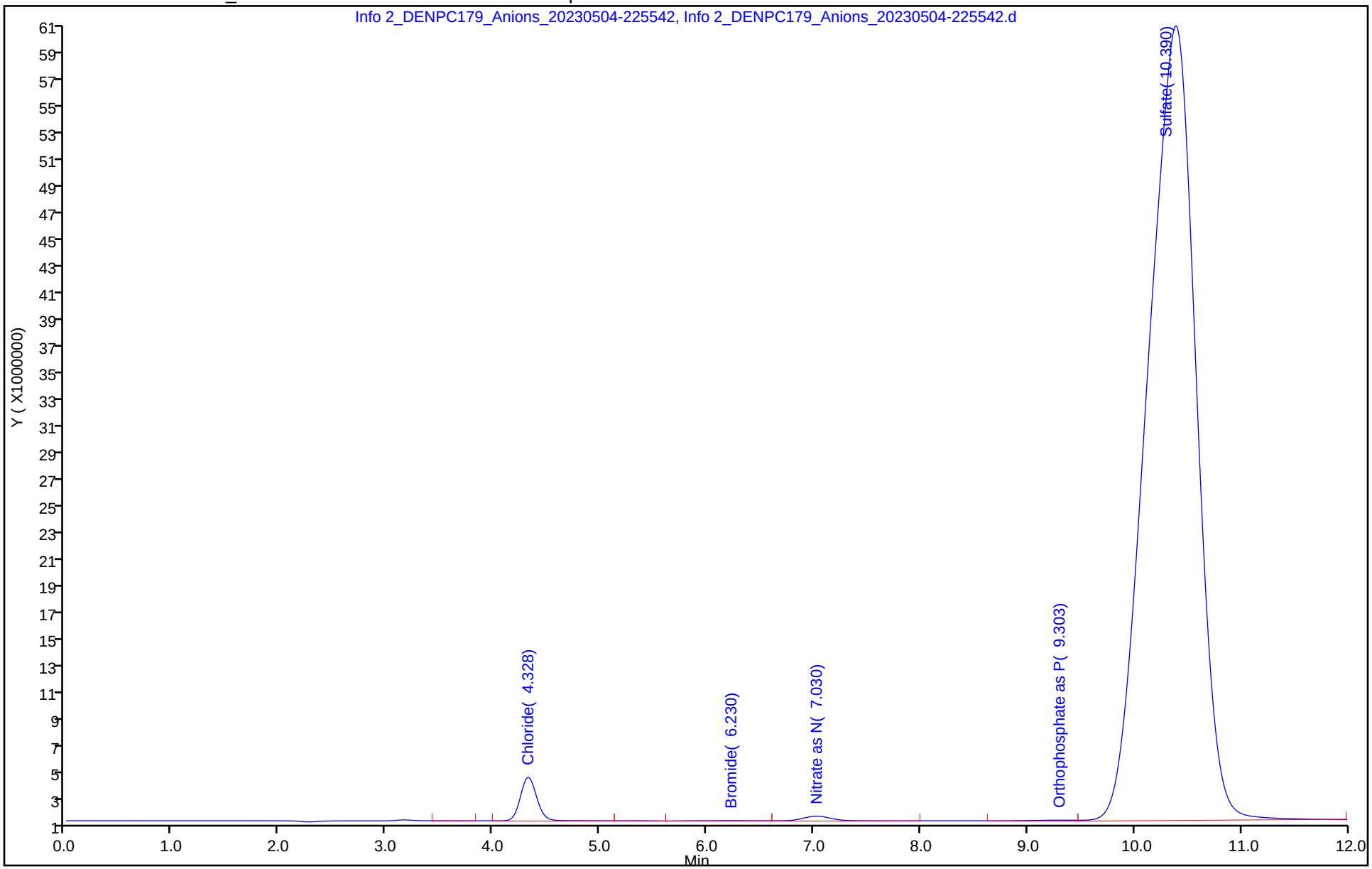
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 05-May-2023 10:37:29 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-225542.d				
Injection Date:	04-May-2023 22:40:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-175997-C-3	Lab Sample ID:	280-175997-3	Worklist Smp#:	34
Client ID:	LL1mw-083-230401-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\20230504-121069.b\Info 2_DENPC179_Anions_20230505-004
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 05-May-2023 00:25:00 ALS Bottle#: 0 Worklist Smp#: 41
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121069-041
Misc. Info.: 280-0121069-041
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 05-May-2023 10:37:33 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: CTX1608

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.152			ND	ND	
2 Chloride	4.348	4.352	-0.004	942613770	NC	NC	
3 Nitrite as N	5.043	5.040	0.003	112217819	2.50	2.45	
4 Bromide	6.213	6.157	0.056	17621806	NC	NC	
5 Nitrate as N	6.985	6.968	0.017	108839613	2.50	2.41	
6 Orthophosphate as P	9.237	9.273	-0.036	72396196	2.50	2.90	
7 Sulfate	10.428	10.543	-0.115	709594813	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

Reagents:

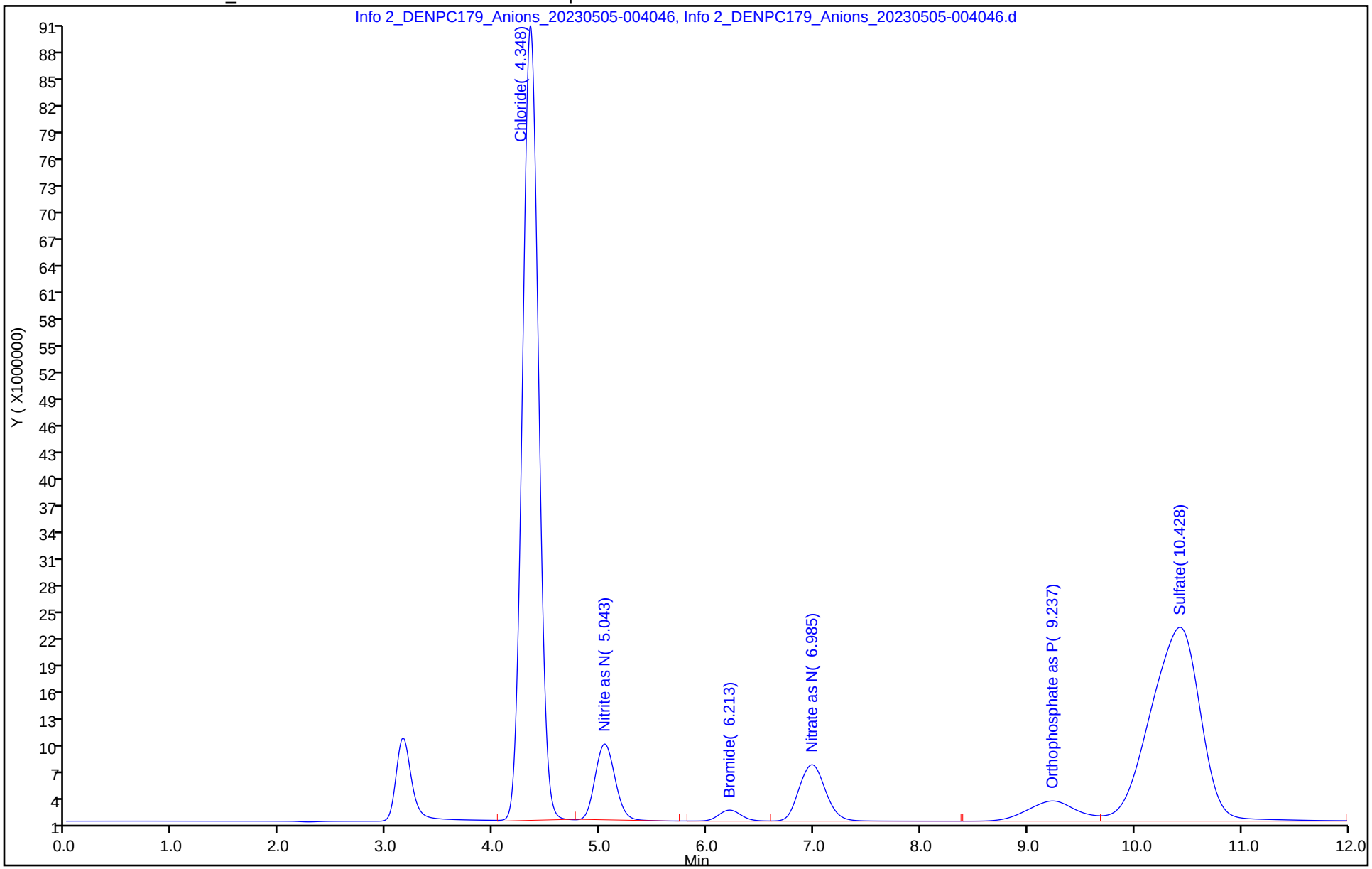
IC LCS_01952 Amount Added: 10.00 Units: mL

Report Date: 05-May-2023 10:37:33 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230505-004046.d

Injection Date:	05-May-2023 00:25:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	41
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230505-005				
Lims ID:	ccb				
Client ID:					
Sample Type:	CCB				
Inject. Date:	05-May-2023 00:40:00	ALS Bottle#:	0	Worklist Smp#:	42
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0121069-042				
Misc. Info.:	280-0121069-042				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Anions_IC10.m				
Limit Group:	Wet - Anions				
Last Update:	05-May-2023 10:37:33	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:	CTX1608				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.152				ND	
2 Chloride		4.352				ND	
3 Nitrite as N		5.040				ND	
4 Bromide	6.135	6.157	-0.022	189462		NC	
5 Nitrate as N		6.968				ND	
6 Orthophosphate as P	9.293	9.273	0.020	25125315		0.6684	
7 Sulfate		10.543				ND	

QC Flag Legend

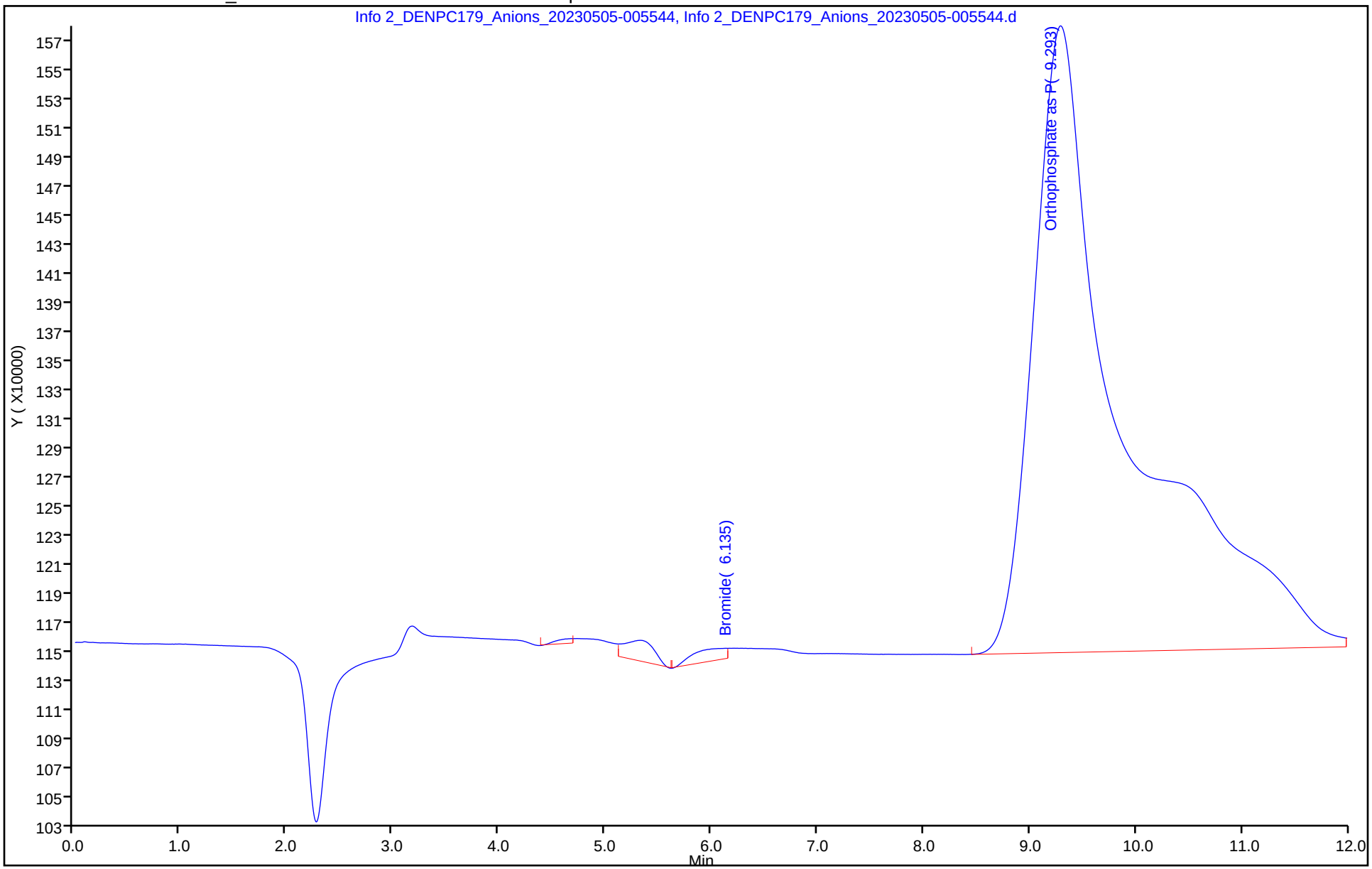
Processing Flags
NC - Not Calibrated

Report Date: 05-May-2023 10:37:33 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230505-005544.d

Injection Date:	05-May-2023 00:40:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	42
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\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:

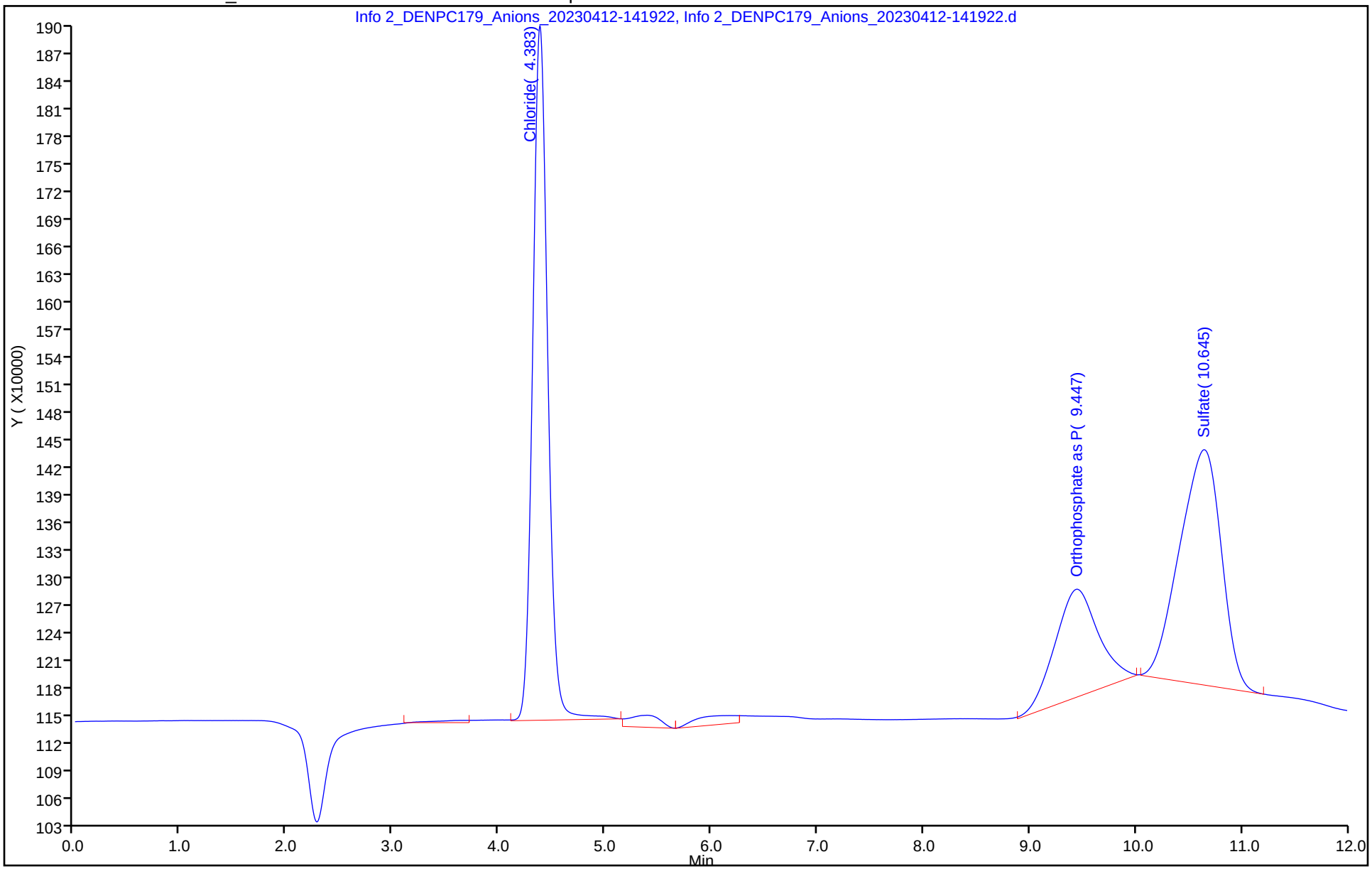
IC CAL cl/so4_00475 Amount Added: 0.04 Units: mL
IC Cal low_00703 Amount Added: 0.00 Units: mL

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

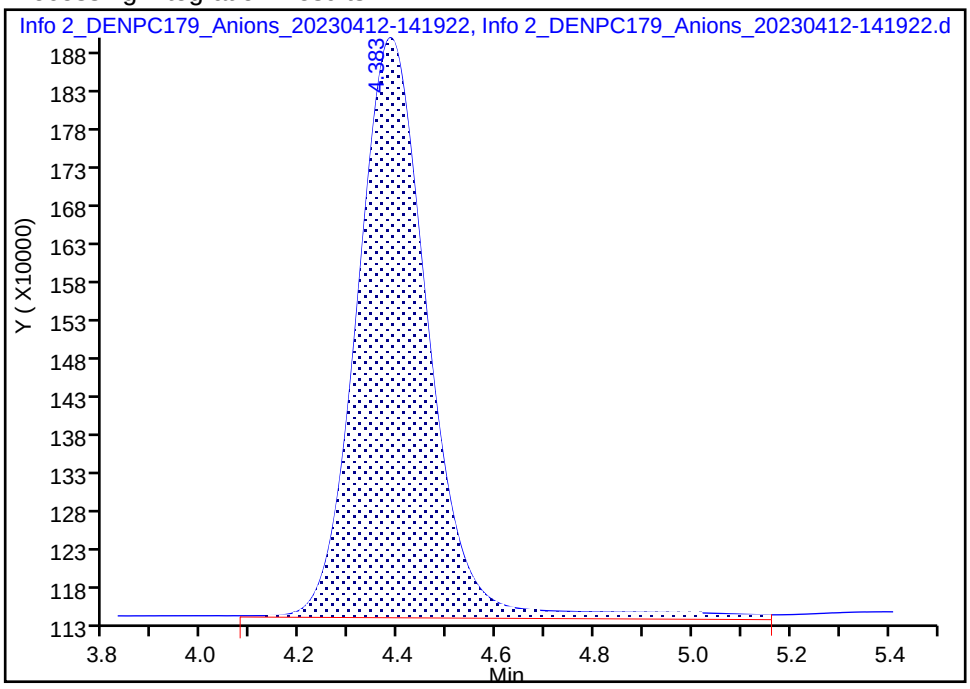
Column: Detector Info 2_091554_1

2 Chloride, CAS: 16887-00-6

Signal: 1

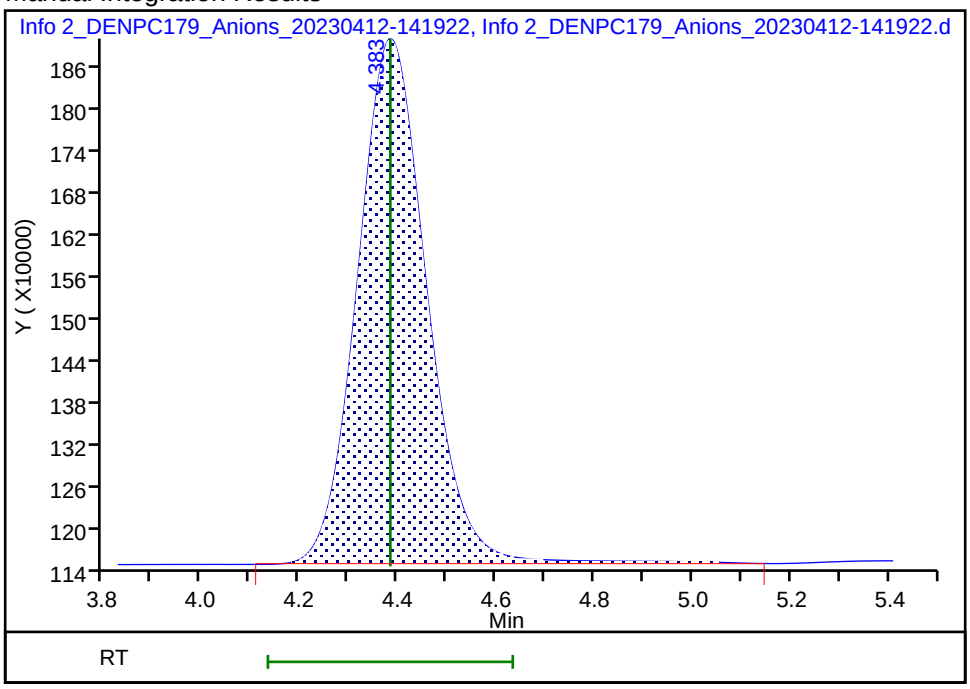
Processing Integration Results

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

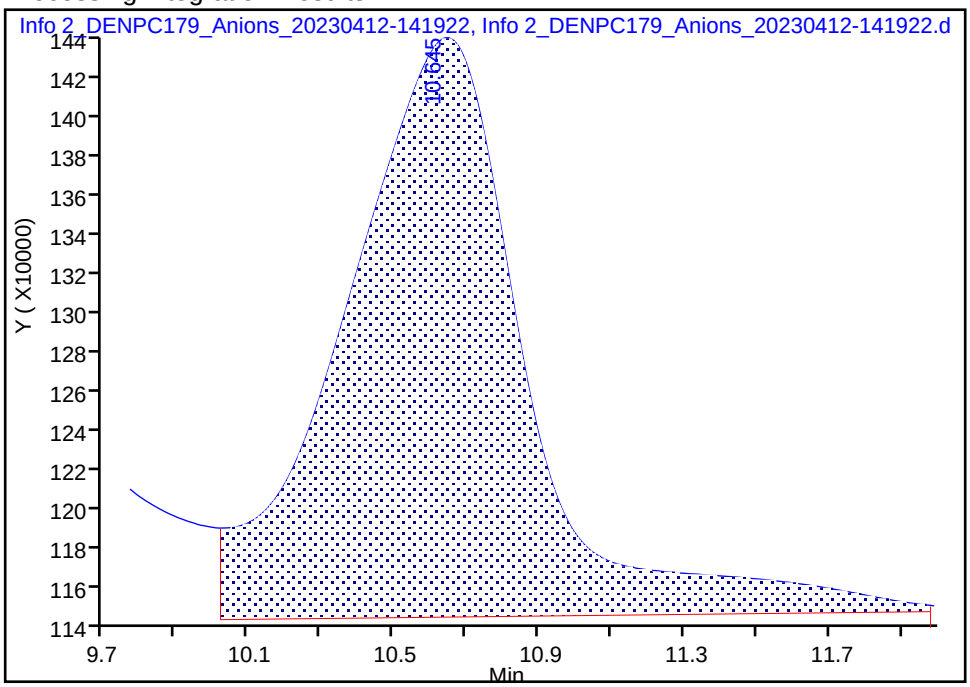
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

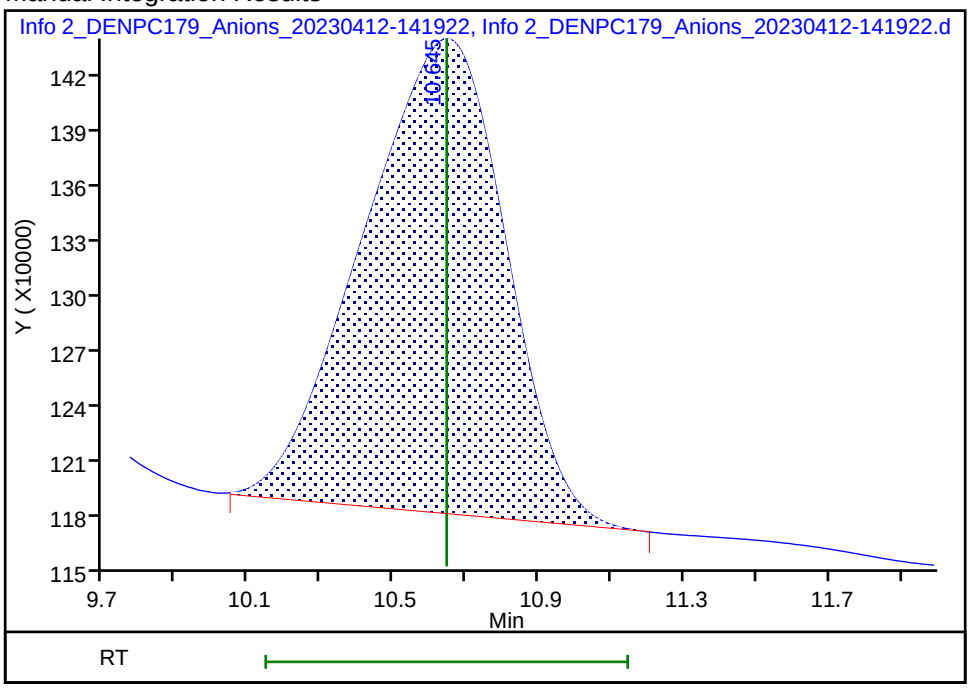
Processing Integration Results

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:

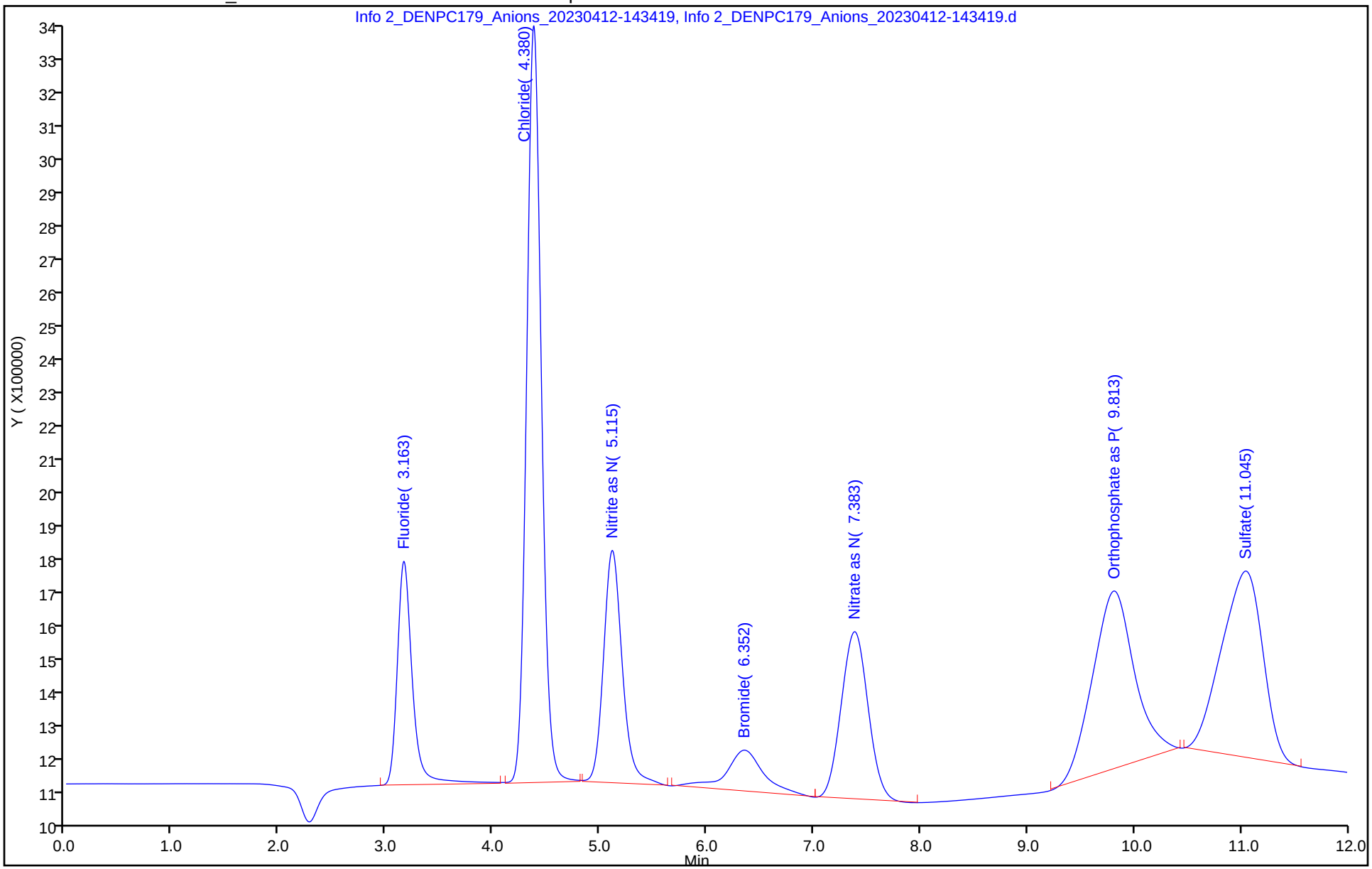
IC CAL cl/so4_00475 Amount Added: 0.10 Units: mL
IC Cal low_00703 Amount Added: 0.08 Units: mL

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		



5/23/2023 8:16 PM

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

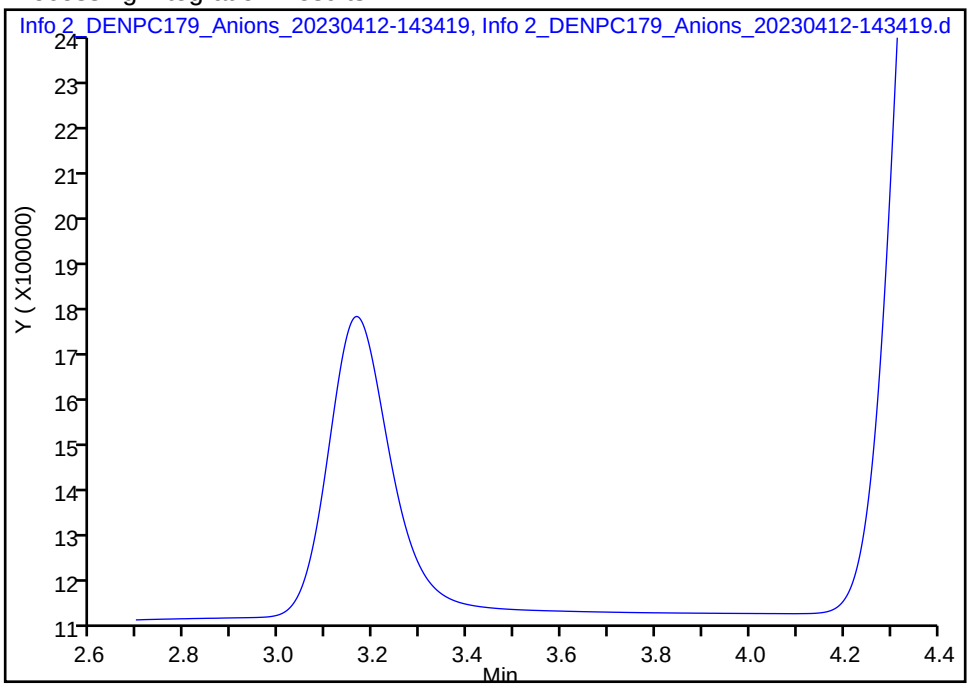
1 Fluoride, CAS: 16984-48-8

Signal: 1

Not Detected

Expected RT: 3.16

Processing Integration Results



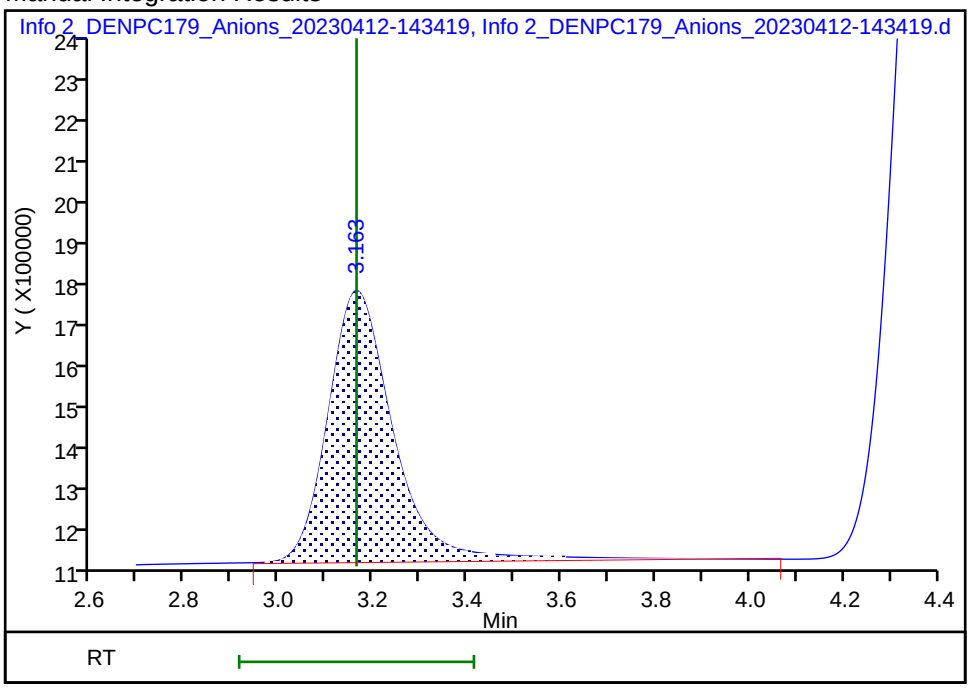
Manual Integration Results

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

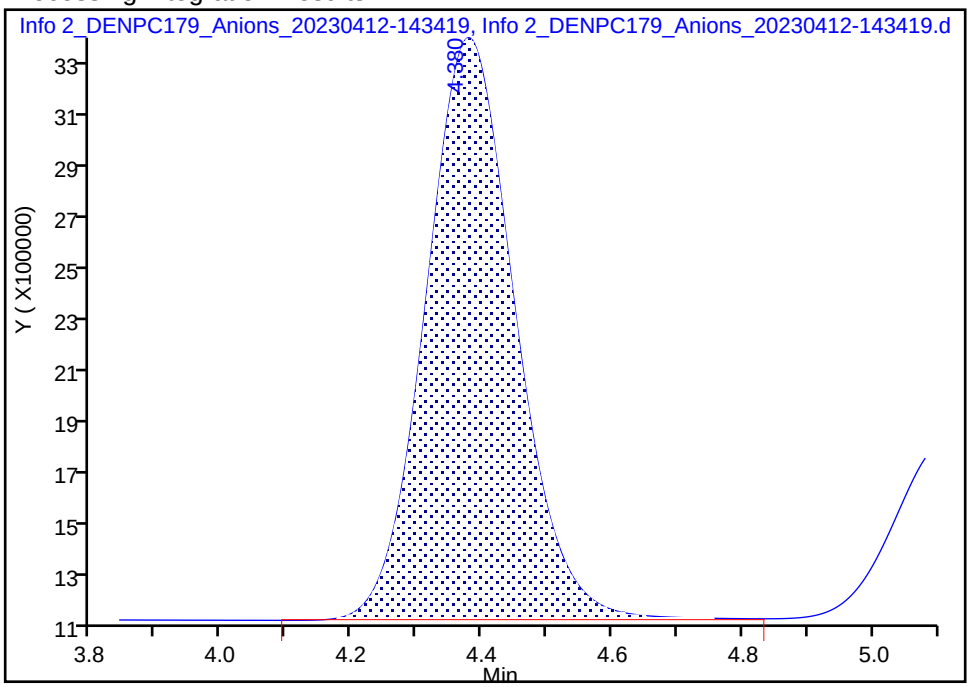
Column: Detector Info 2_091554_1

2 Chloride, CAS: 16887-00-6

Signal: 1

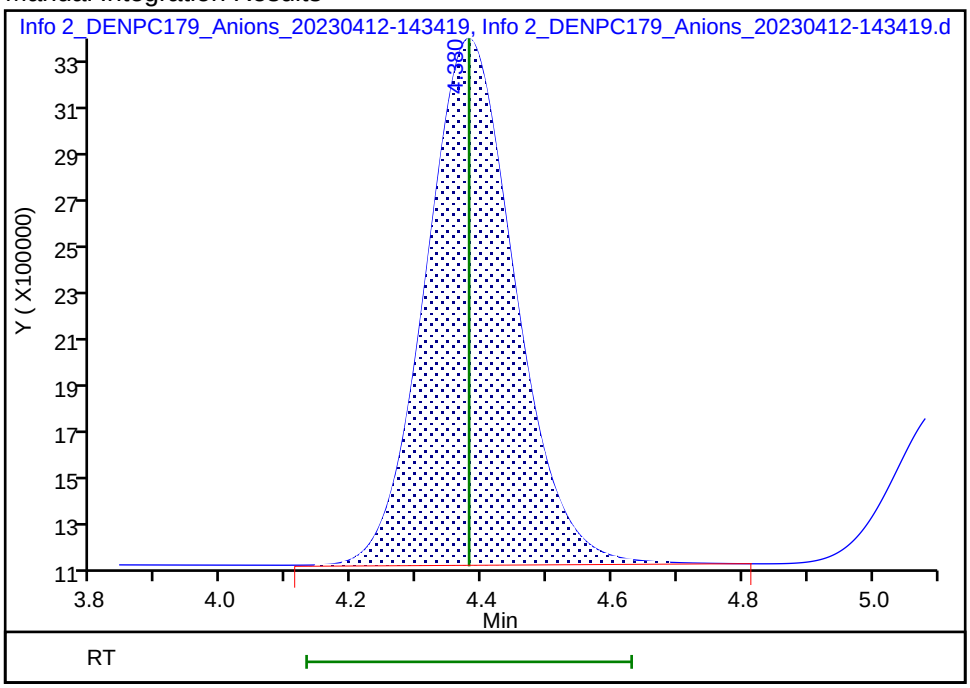
Processing Integration Results

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

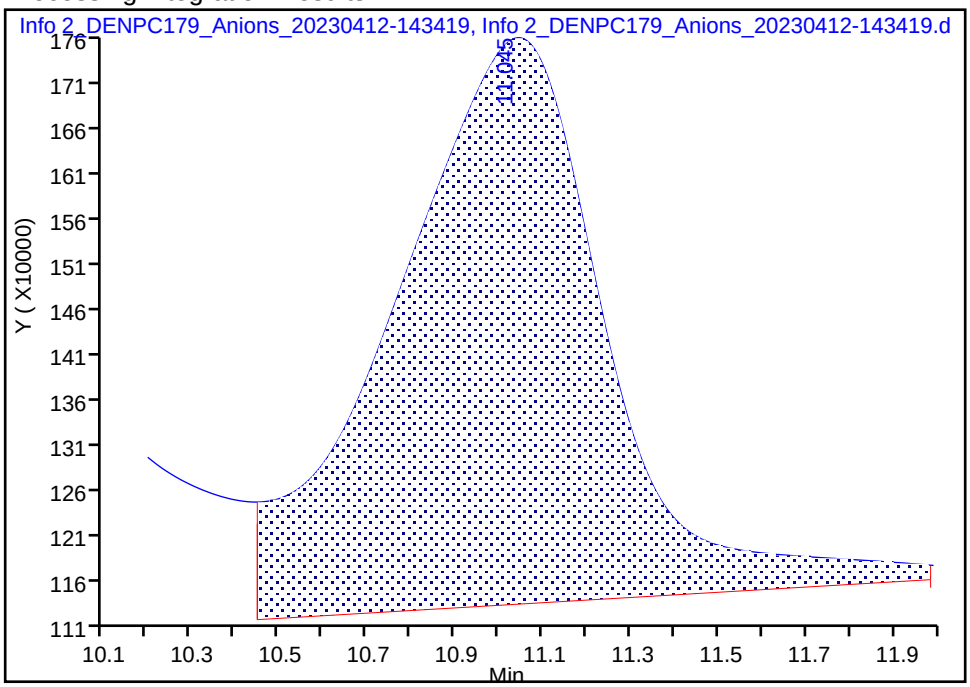
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

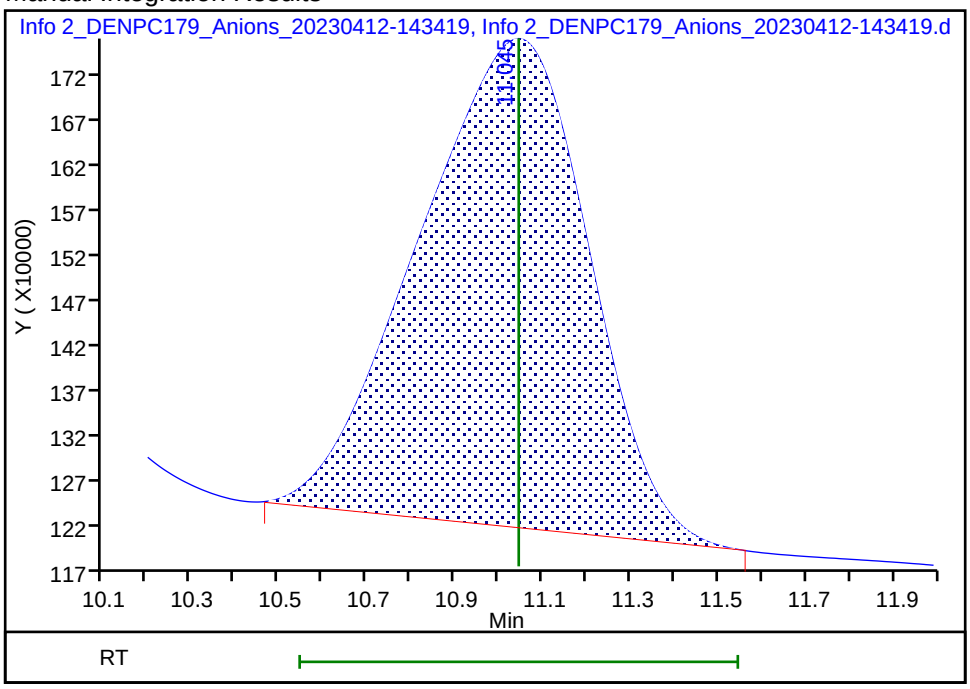
RT: 11.05
Area: 21000030
Amount: 0
Amount Units: ug/ml

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

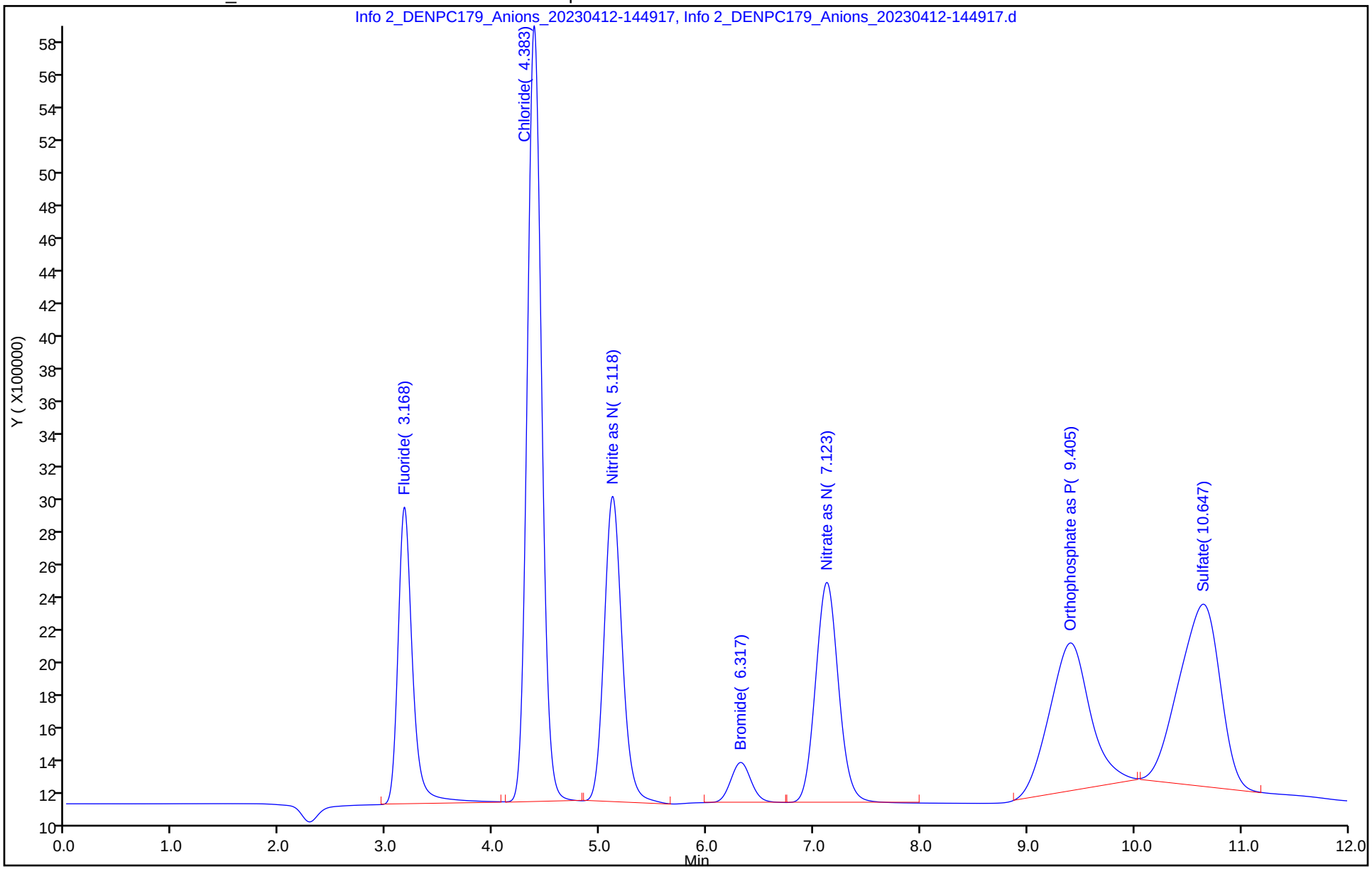
Reagents:

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		



5/23/2023 8:16 PM

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

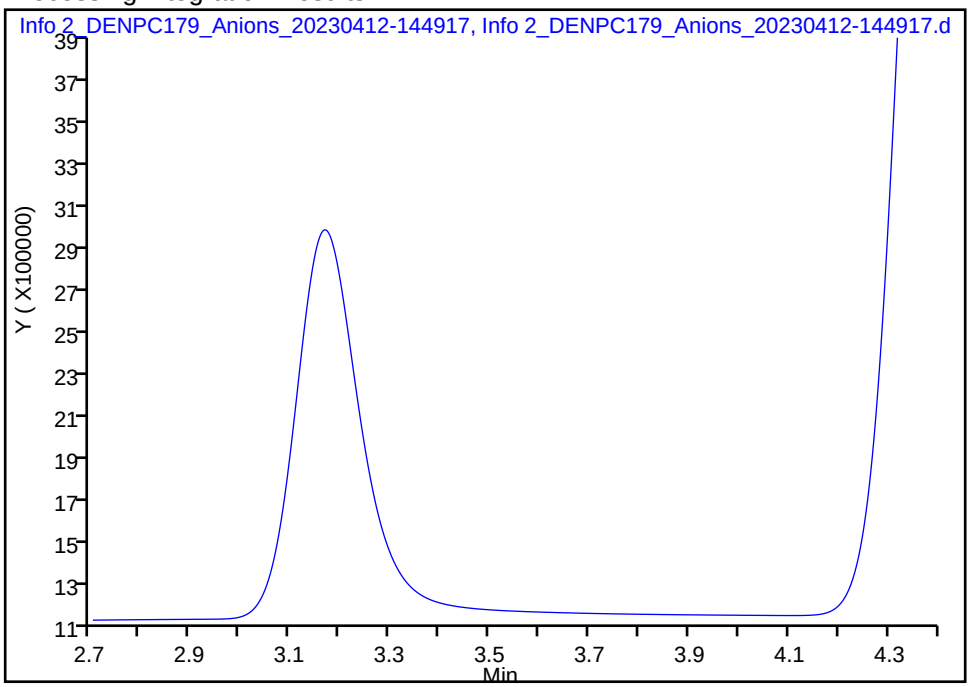
1 Fluoride, CAS: 16984-48-8

Signal: 1

Not Detected

Expected RT: 3.17

Processing Integration Results



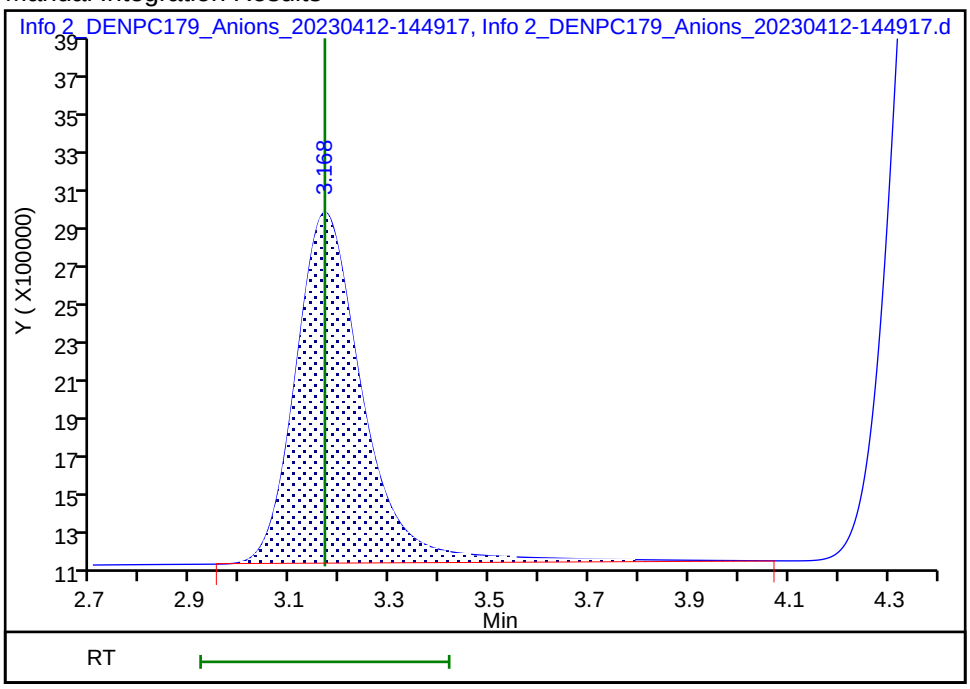
Manual Integration Results

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

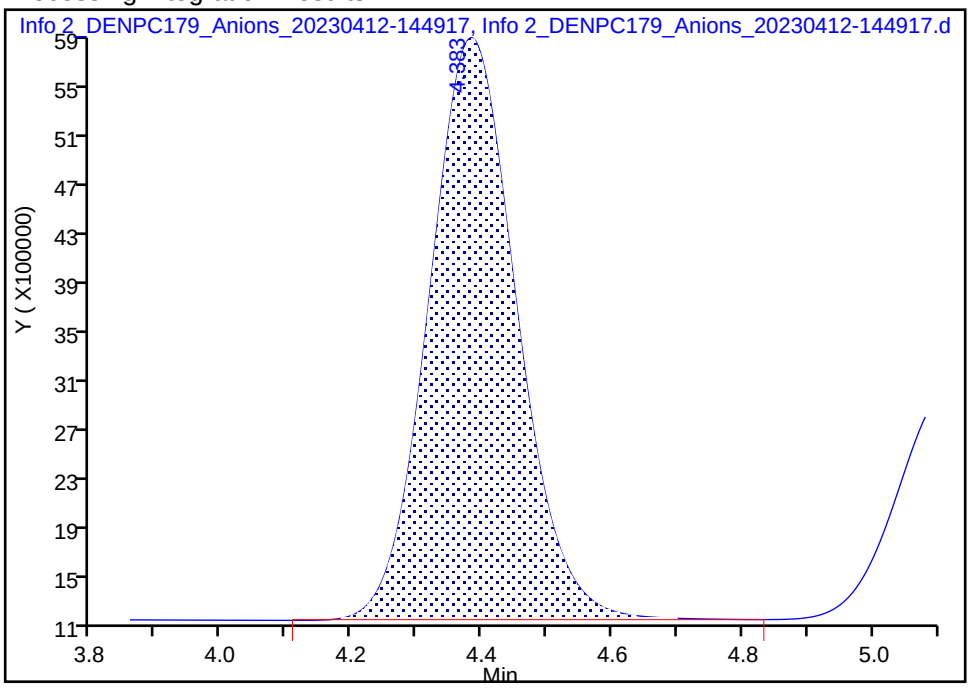
Column: Detector Info 2_091554_1

2 Chloride, CAS: 16887-00-6

Signal: 1

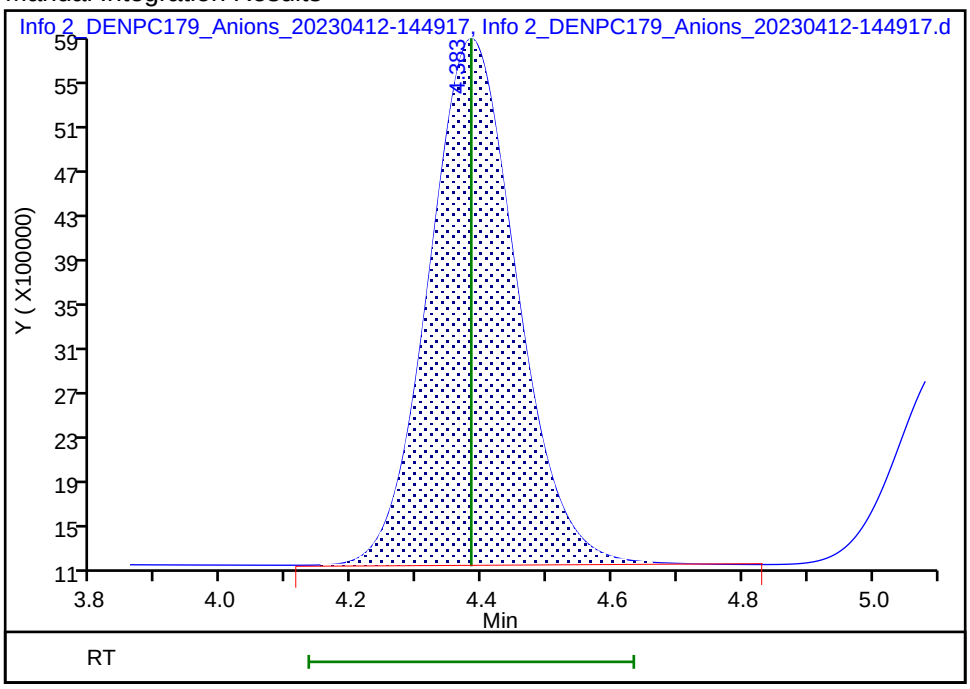
Processing Integration Results

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

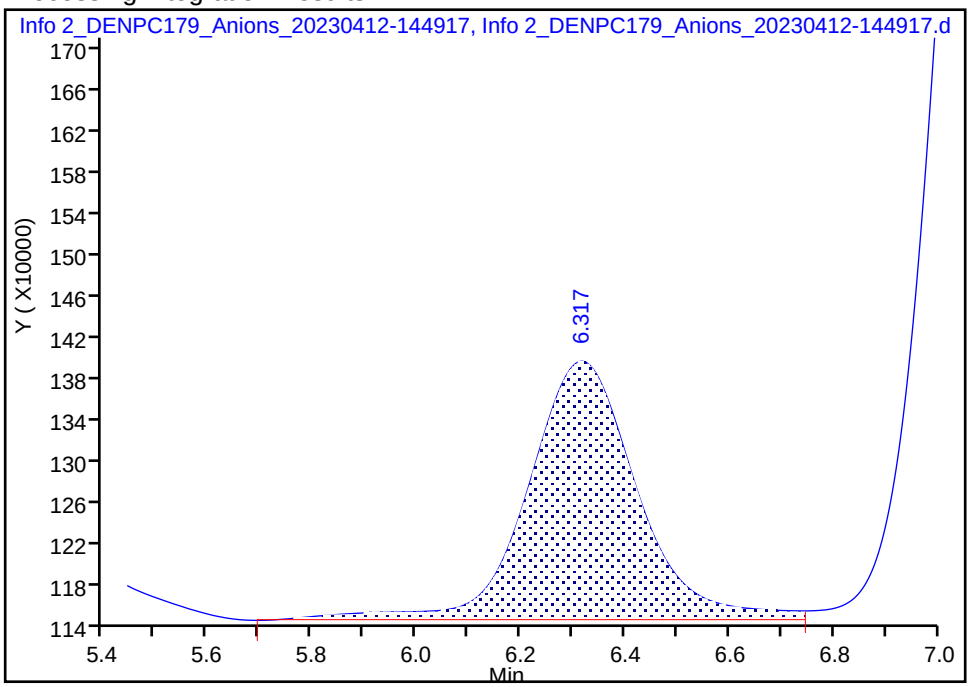
Column: Detector Info 2_091554_1

4 Bromide, CAS: 24959-67-9

Signal: 1

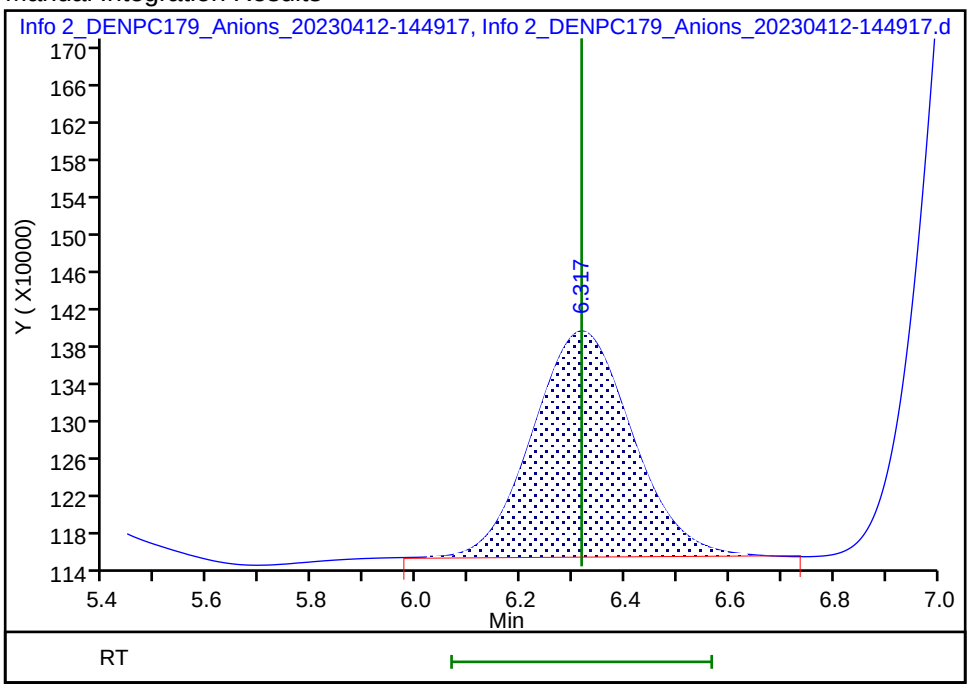
Processing Integration Results

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

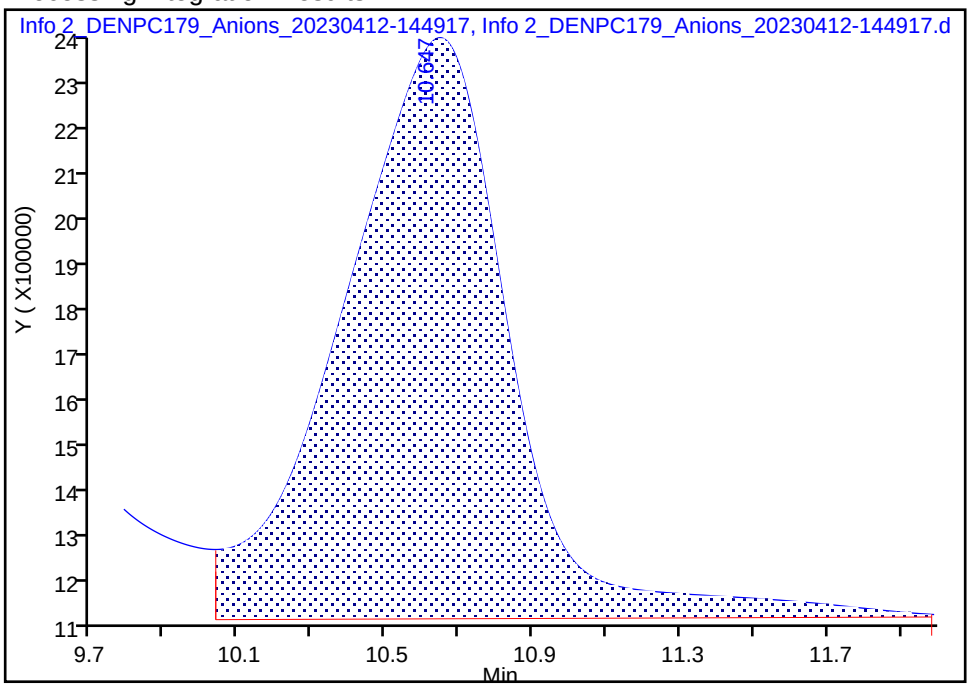
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

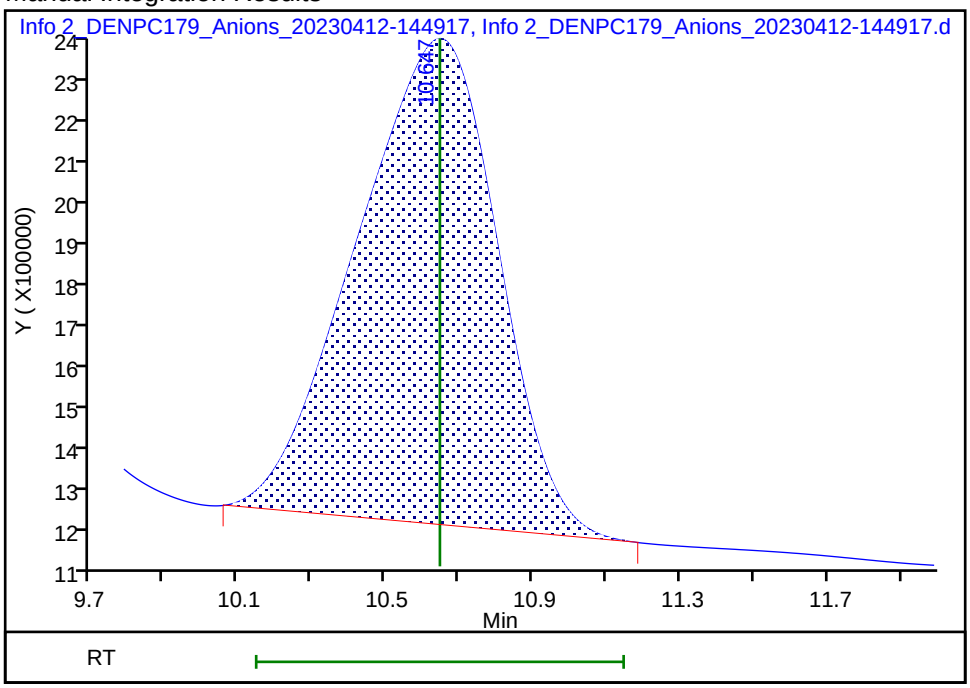
Processing Integration Results

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:

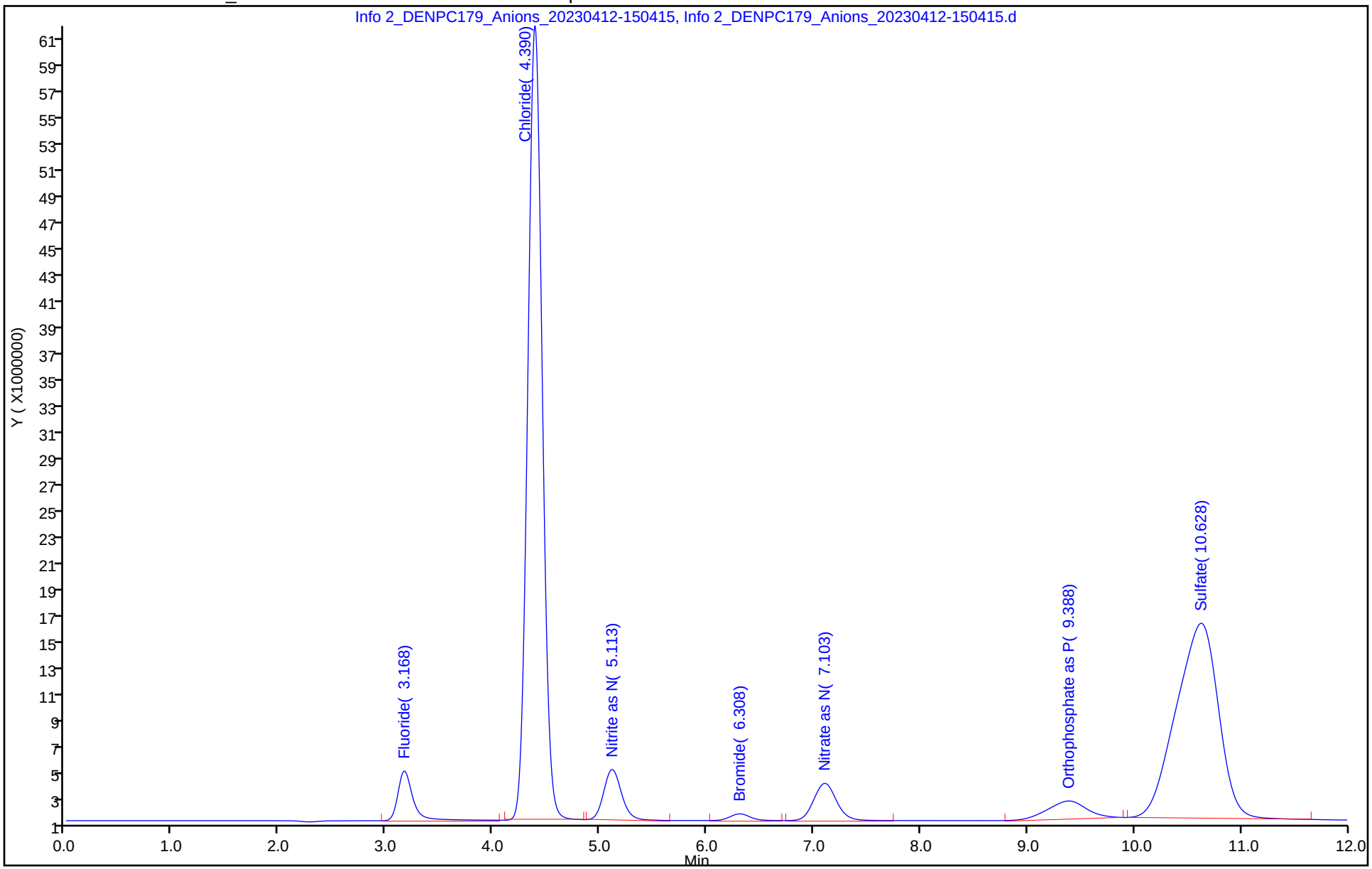
IC CAL cl/so4_00475 Amount Added: 2.40 Units: mL
IC Cal low_00703 Amount Added: 0.40 Units: mL

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		



5/23/2023 8:16 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

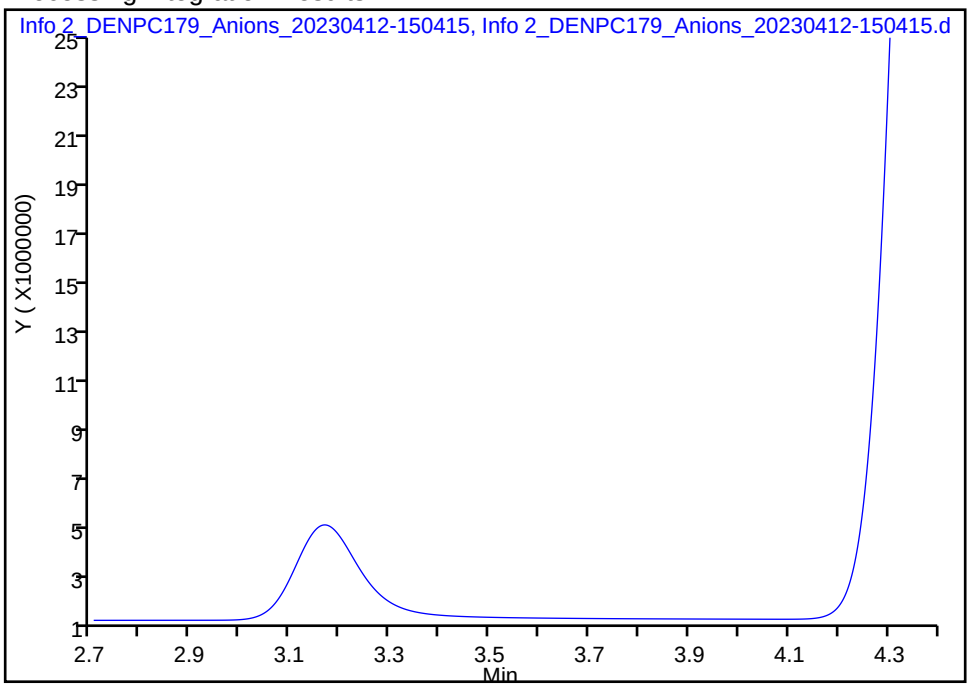
Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-150
Injection Date: 12-Apr-2023 14:49:00 Instrument ID: WC_IonChrom10
Lims ID: STD L4
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions_IC10 Limit Group: Wet - Anions 28D
Column: Detector Info 2_091554_1

1 Fluoride, CAS: 16984-48-8

Signal: 1

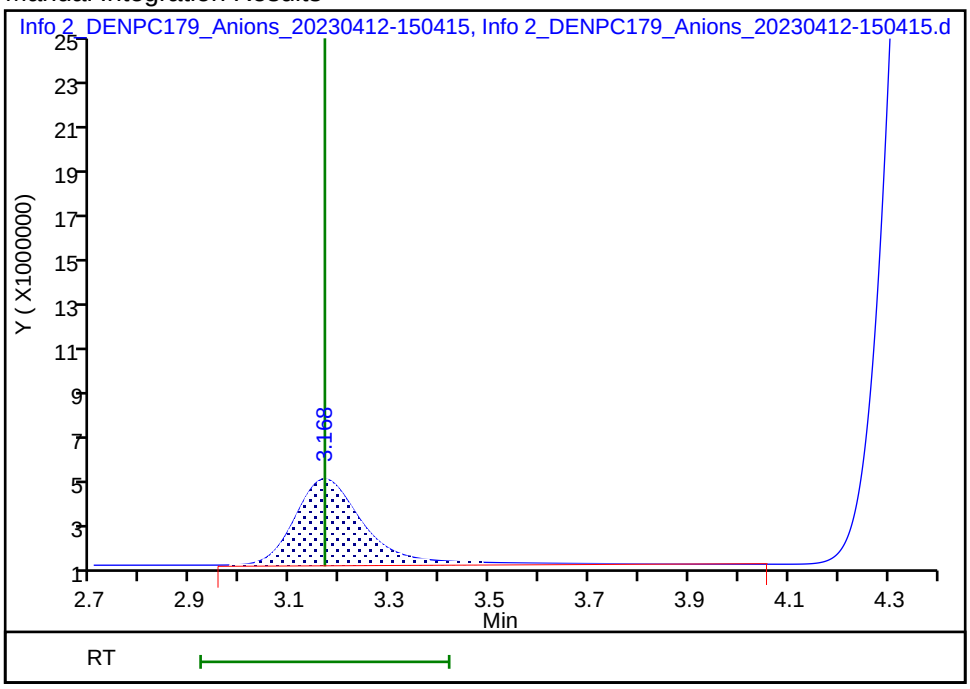
Not Detected
Expected RT: 3.17

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

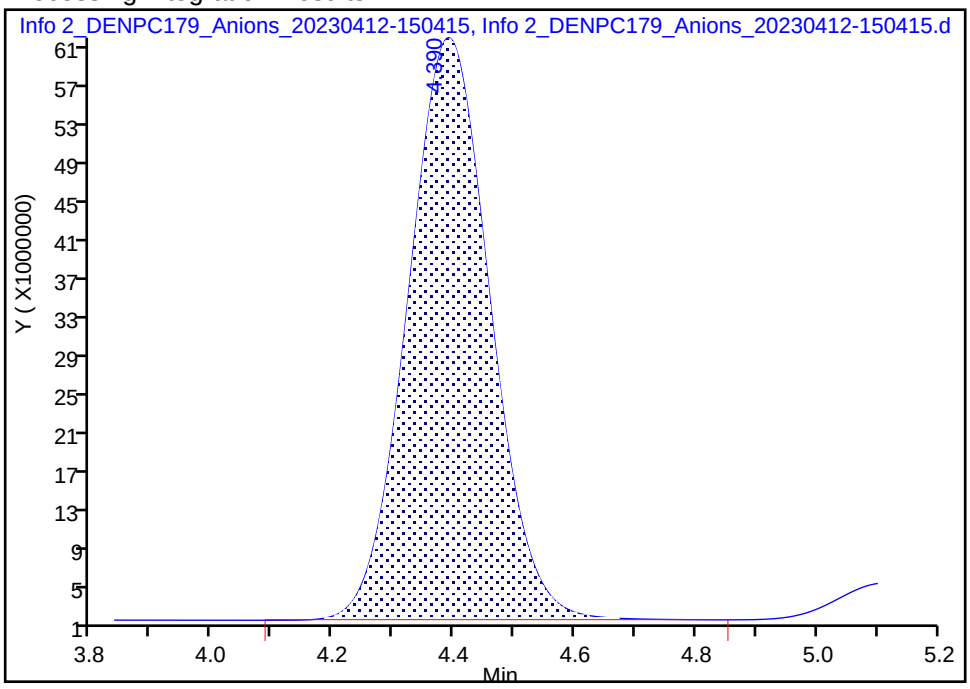
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-150				
Injection Date:	12-Apr-2023 14:49:00	Instrument ID:	WC_IonChrom10		
Lims ID:	STD L4				
Client ID:					
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	4
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		
Column:		Detector	Info 2_091554_1		

2 Chloride, CAS: 16887-00-6

Signal: 1

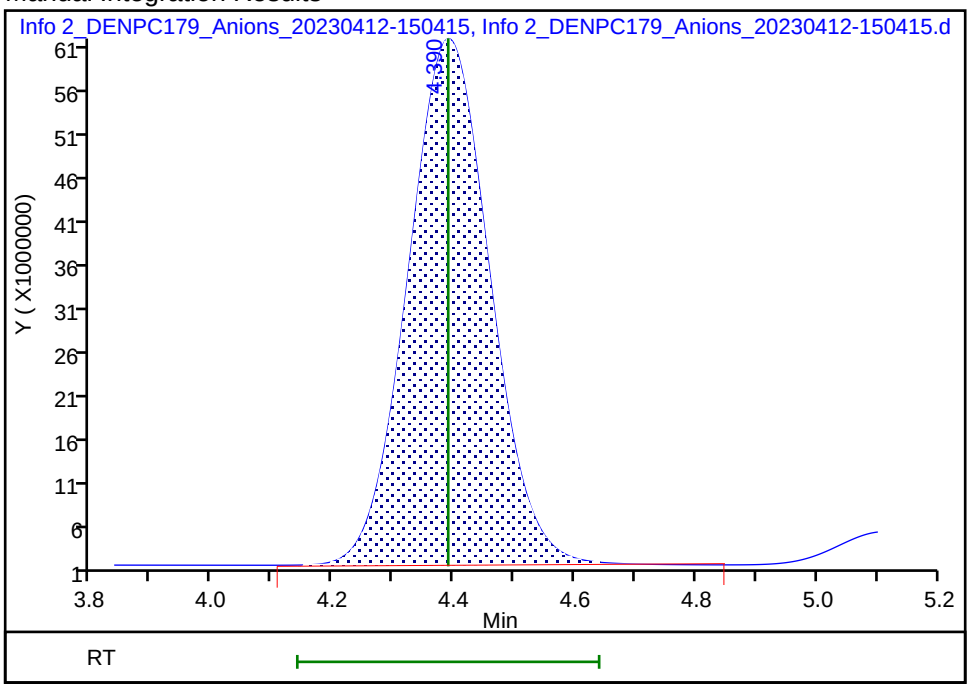
Processing Integration Results

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

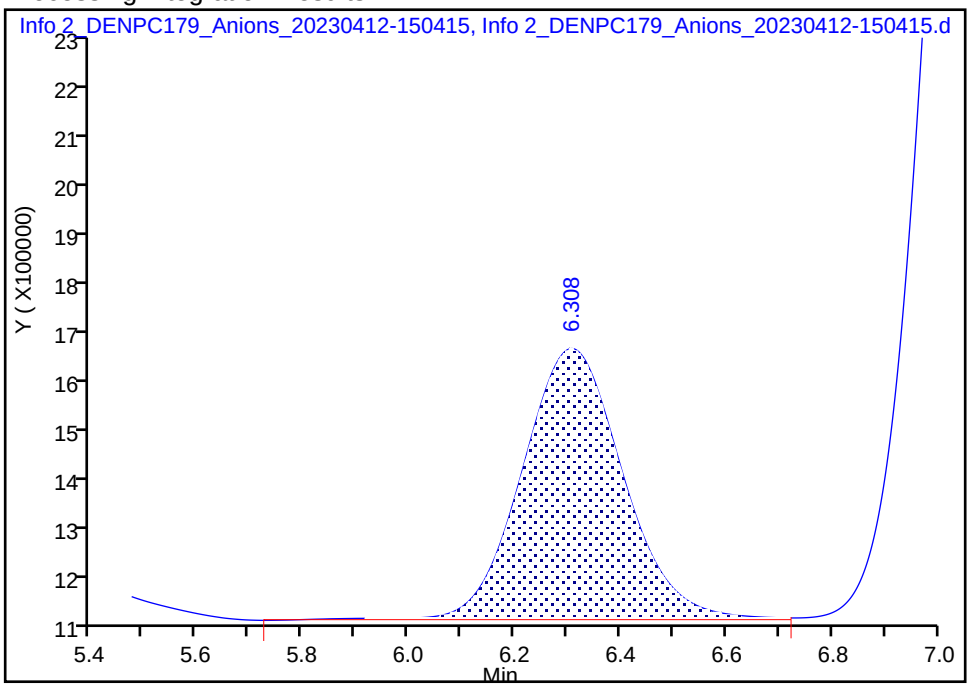
Column: Detector Info 2_091554_1

4 Bromide, CAS: 24959-67-9

Signal: 1

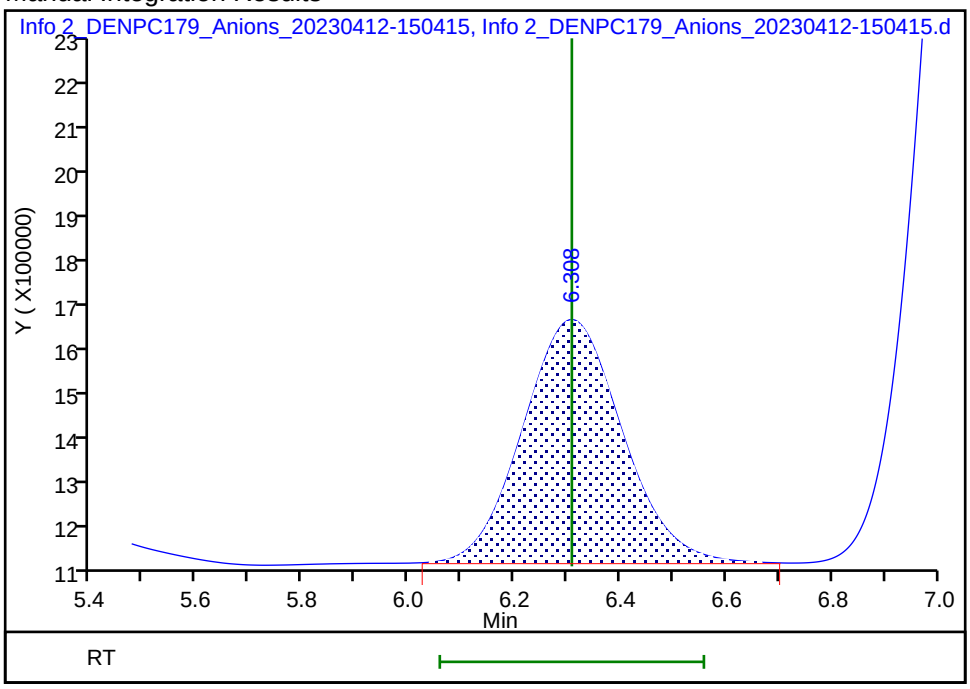
Processing Integration Results

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

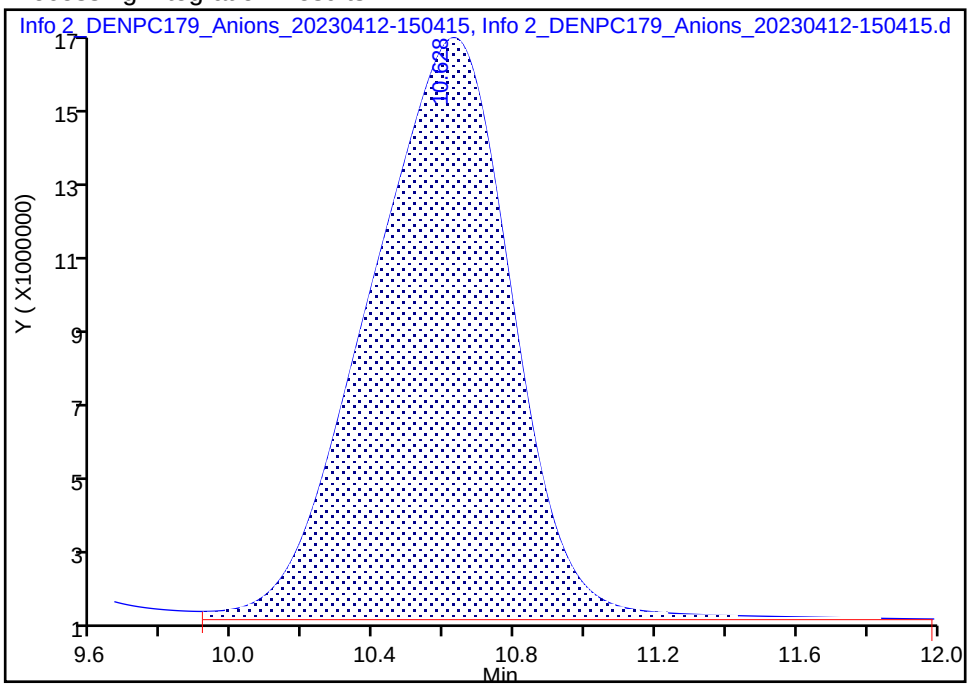
Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-150
Injection Date: 12-Apr-2023 14:49:00 Instrument ID: WC_IonChrom10
Lims ID: STD L4
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions_IC10 Limit Group: Wet - Anions 28D
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

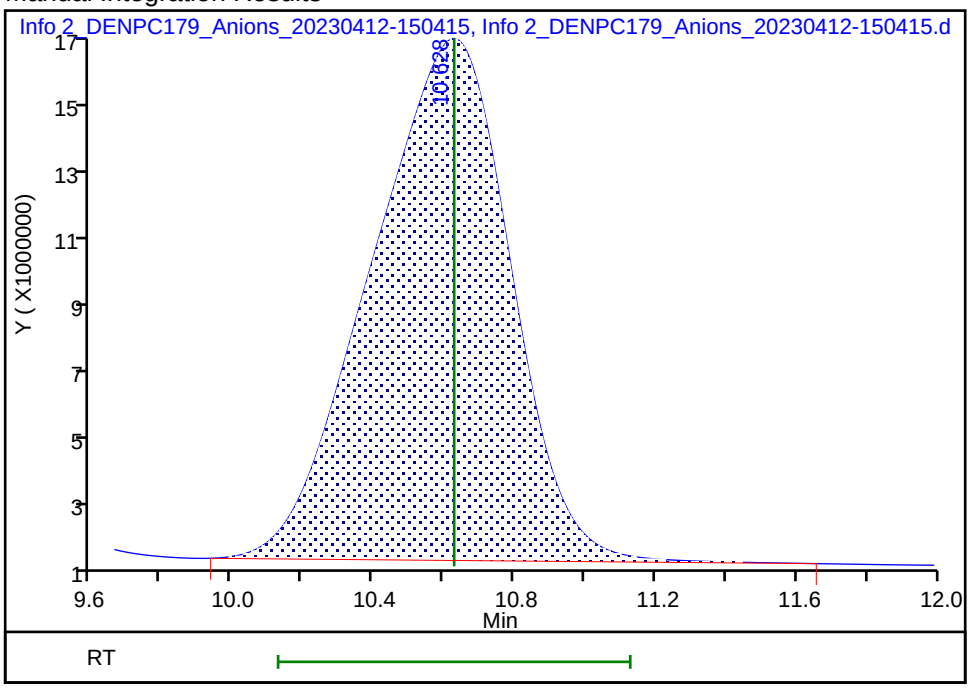
Processing Integration Results

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:

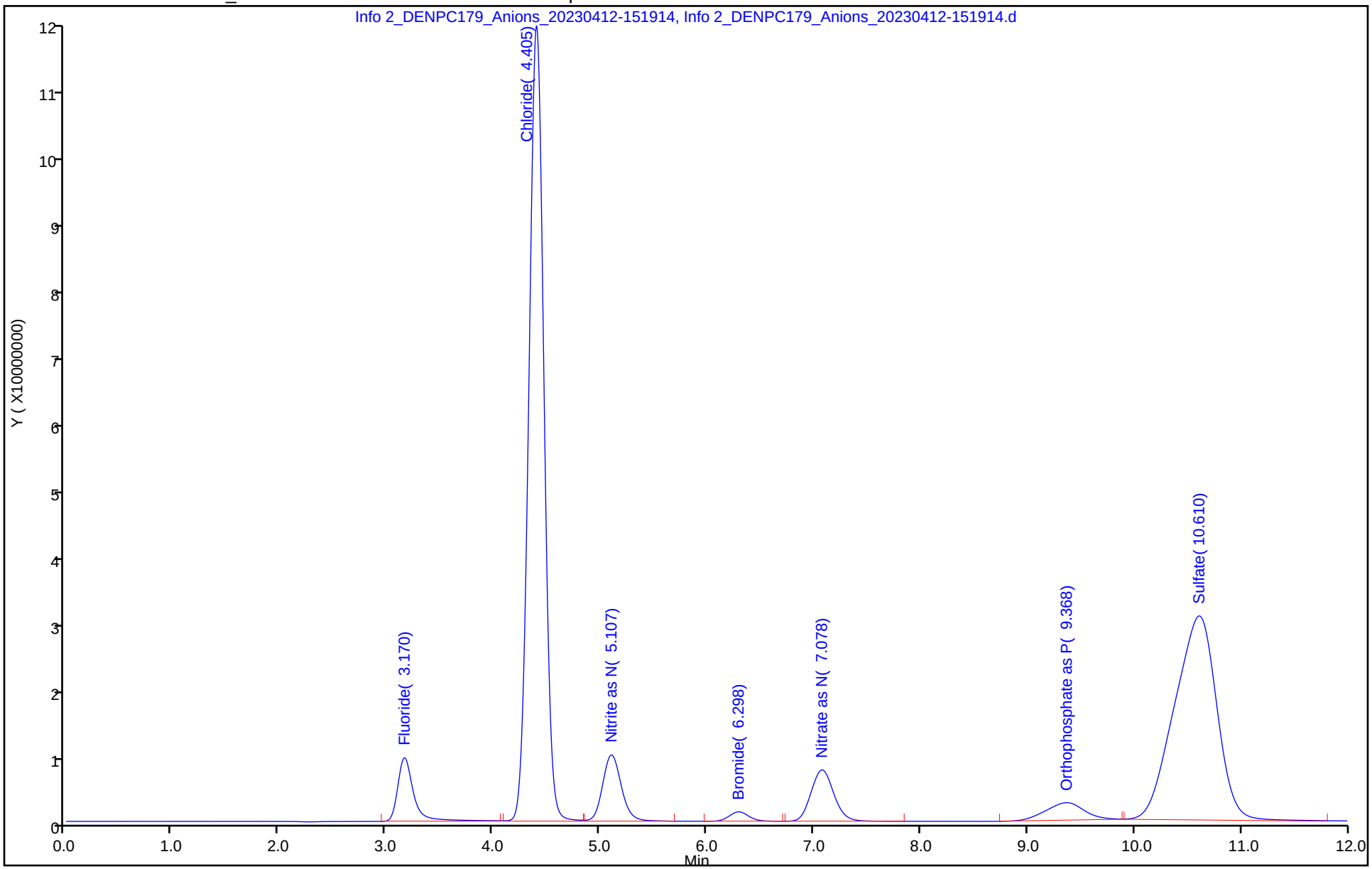
IC CAL cl/so4_00475 Amount Added: 4.80 Units: mL
IC Cal low_00703 Amount Added: 1.00 Units: mL

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		



5/23/2023 8:16 PM

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

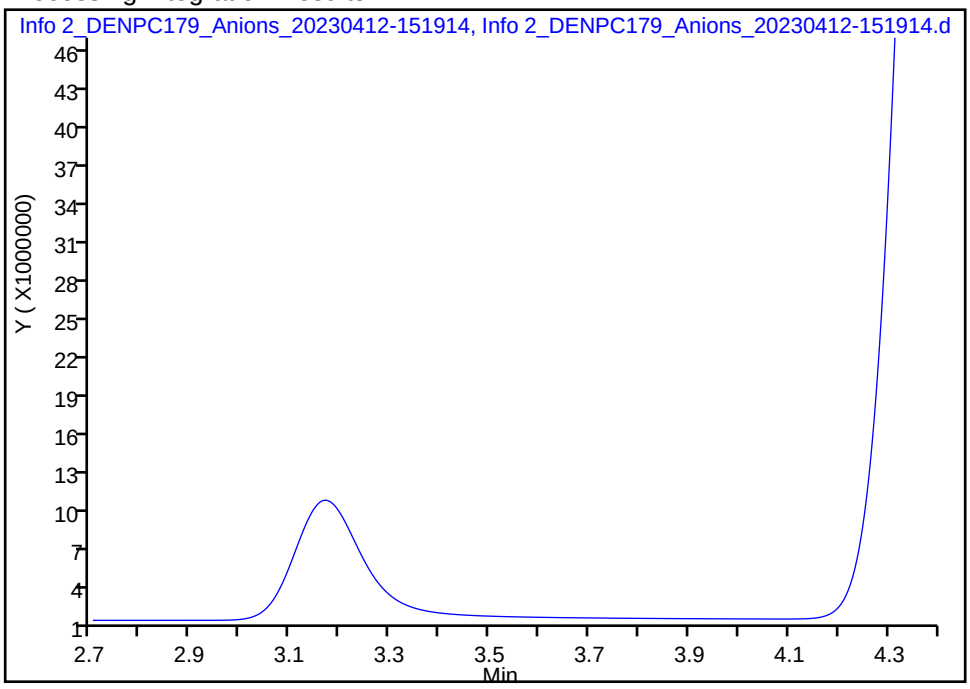
1 Fluoride, CAS: 16984-48-8

Signal: 1

Not Detected

Expected RT: 3.17

Processing Integration Results



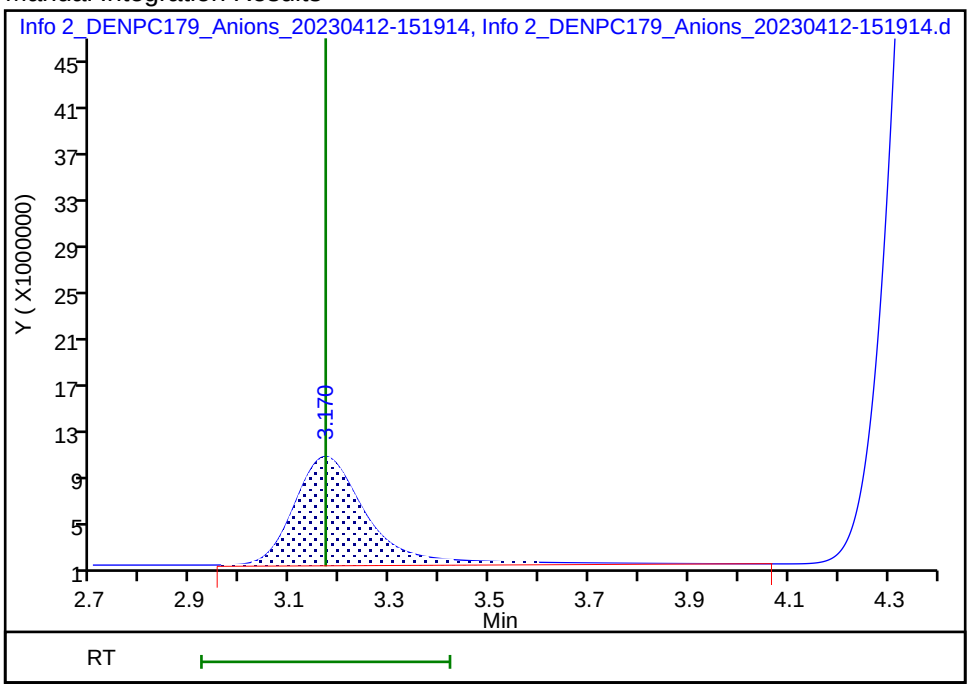
Manual Integration Results

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

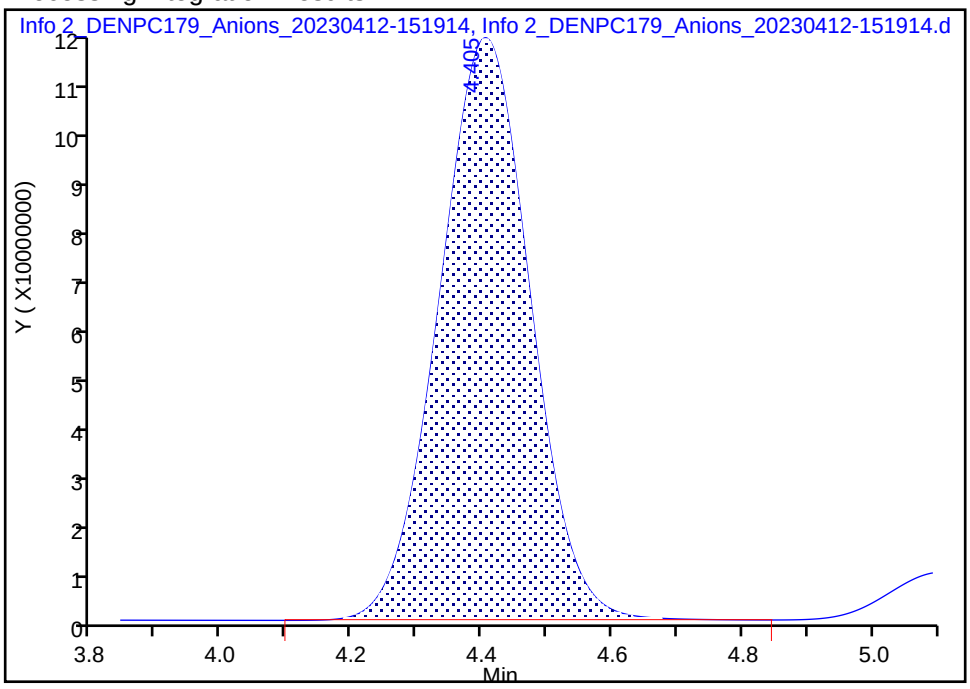
Column: Detector Info 2_091554_1

2 Chloride, CAS: 16887-00-6

Signal: 1

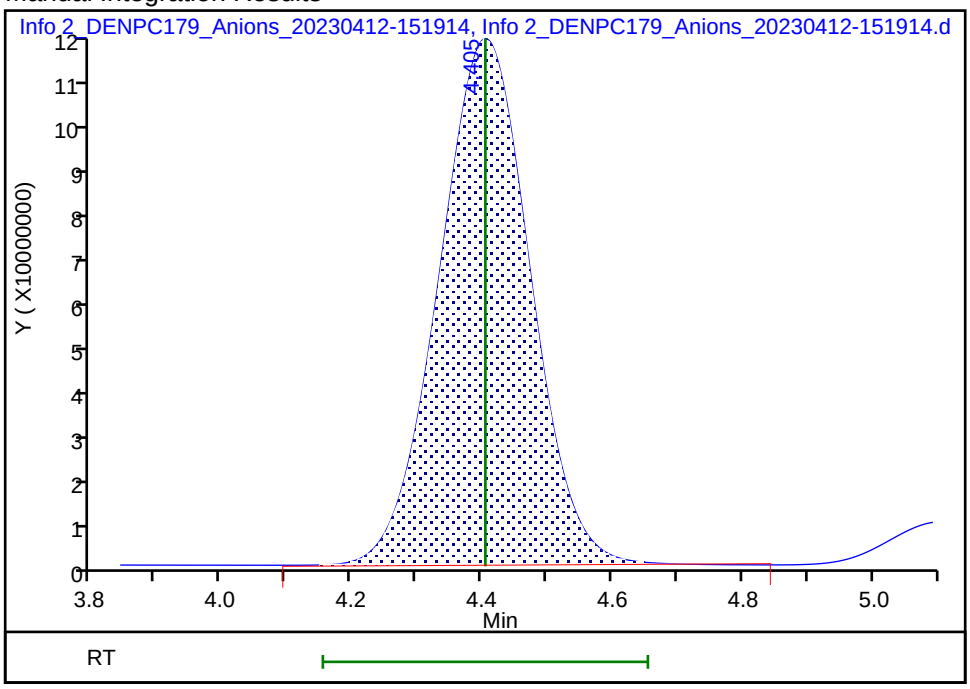
Processing Integration Results

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

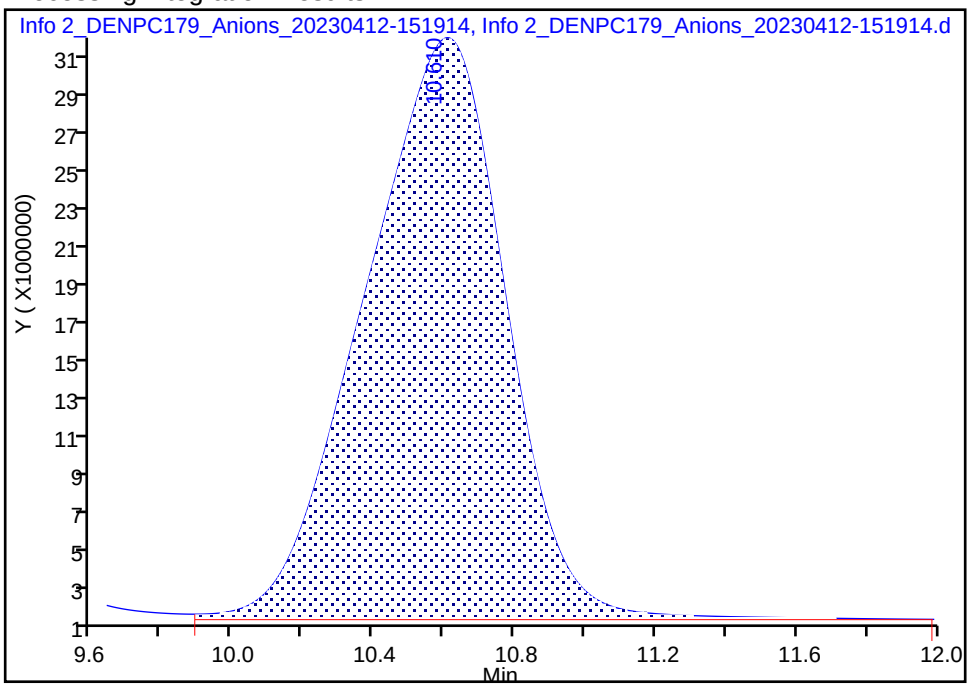
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

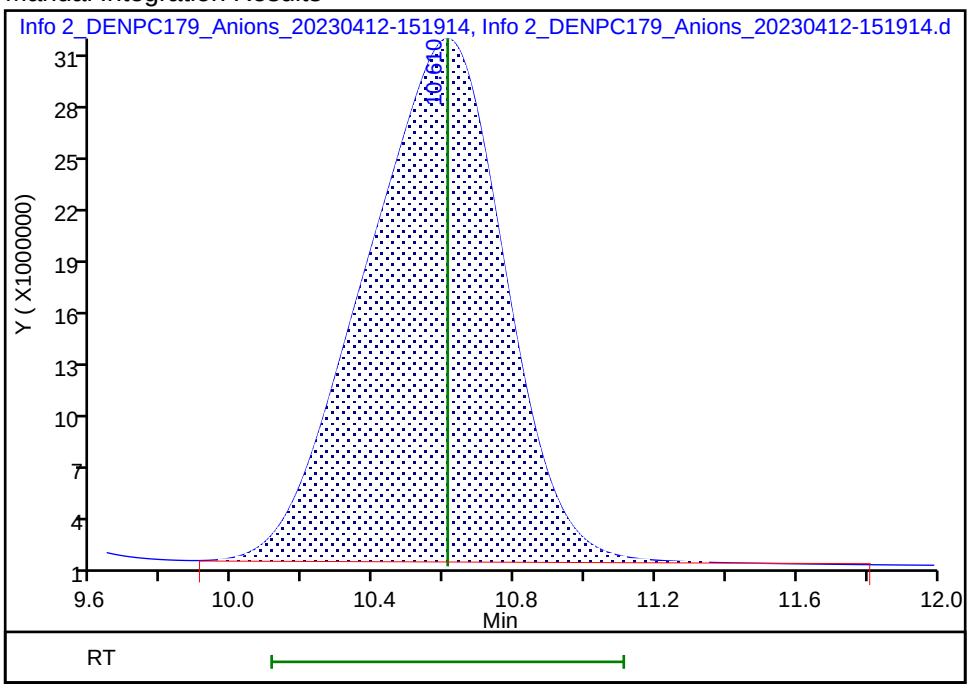
Processing Integration Results

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

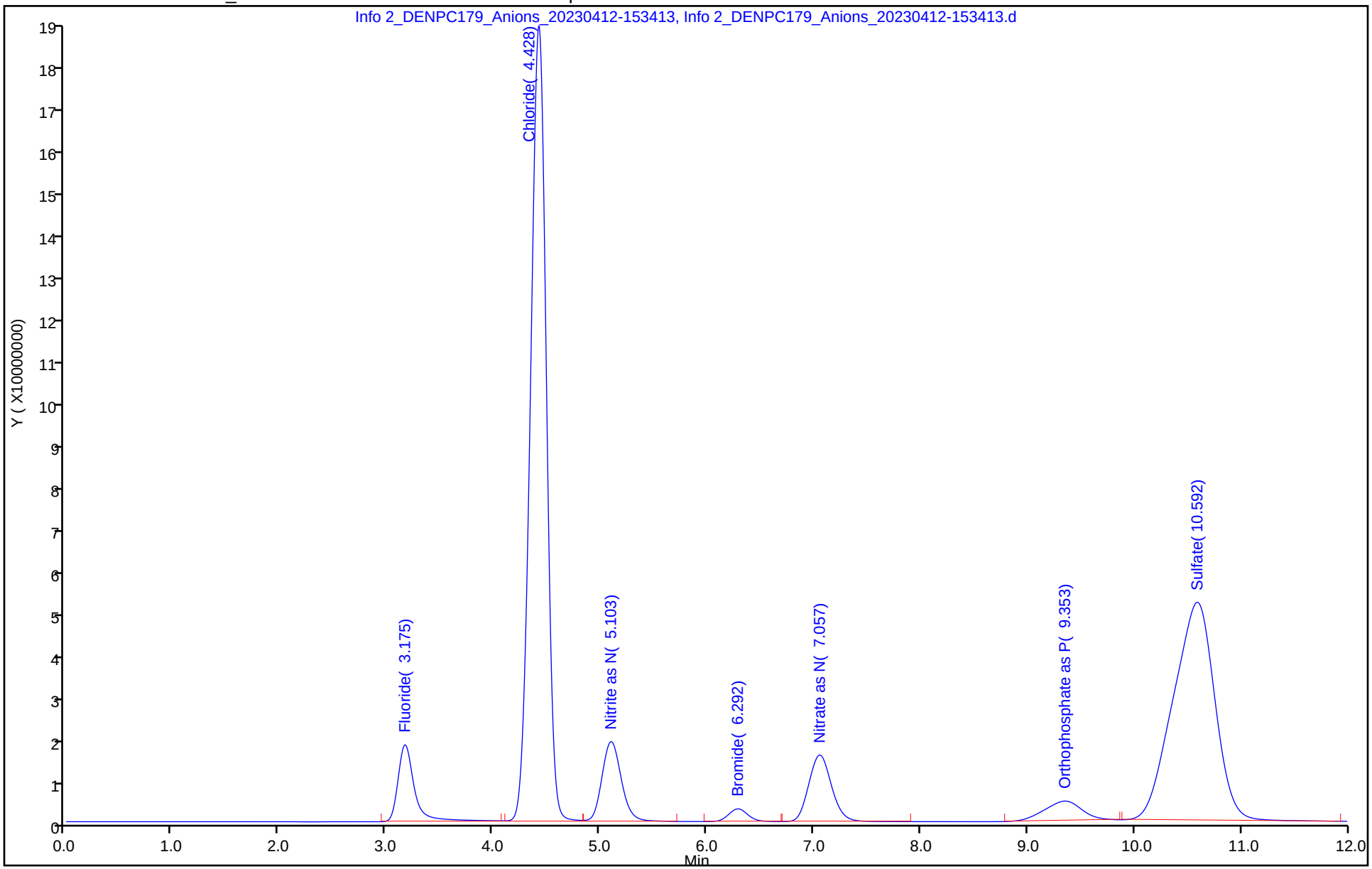
Reagents:

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		



5/23/2023 8:16 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

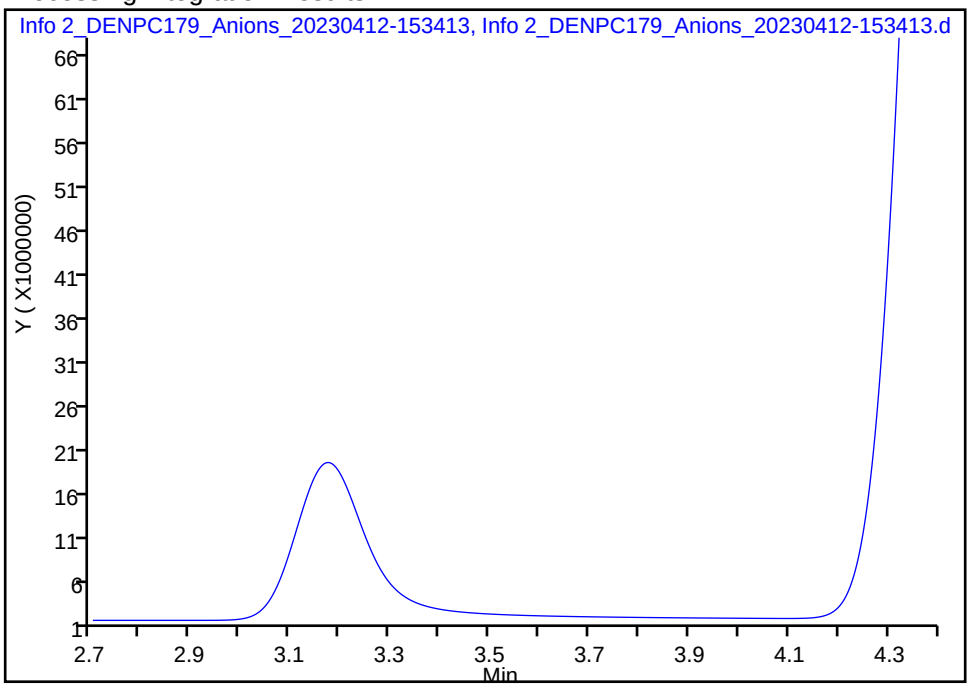
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230412-120345.b\Info 2_DENPC179_Anions_20230412-153				
Injection Date:	12-Apr-2023 15:19:00	Instrument ID:	WC_IonChrom10		
Lims ID:	STD L6				
Client ID:					
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	6
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		
Column:		Detector	Info 2_091554_1		

1 Fluoride, CAS: 16984-48-8

Signal: 1

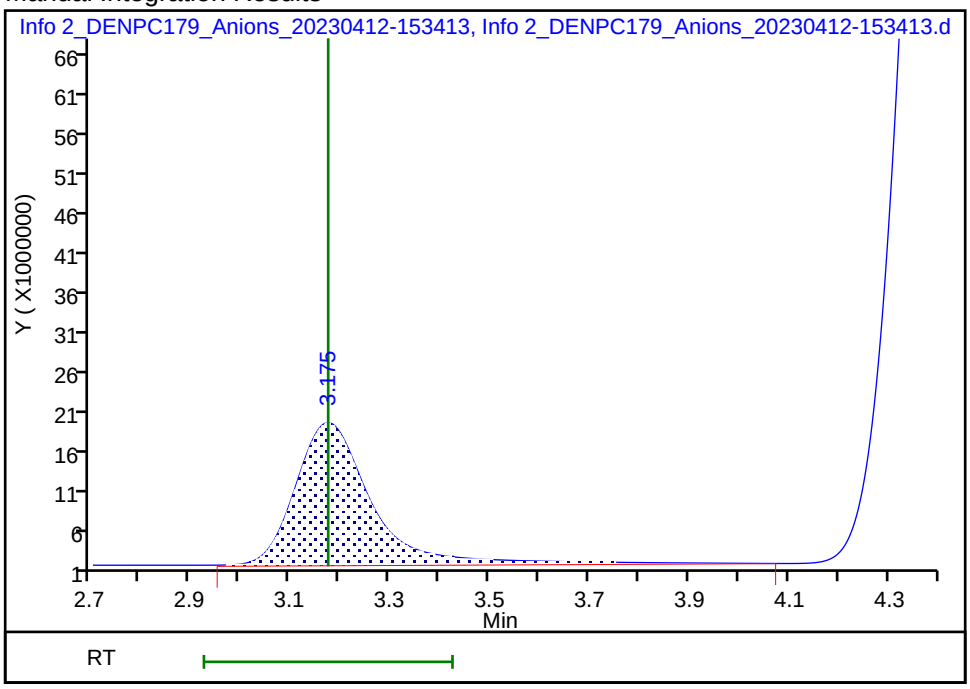
Not Detected
Expected RT: 3.18

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

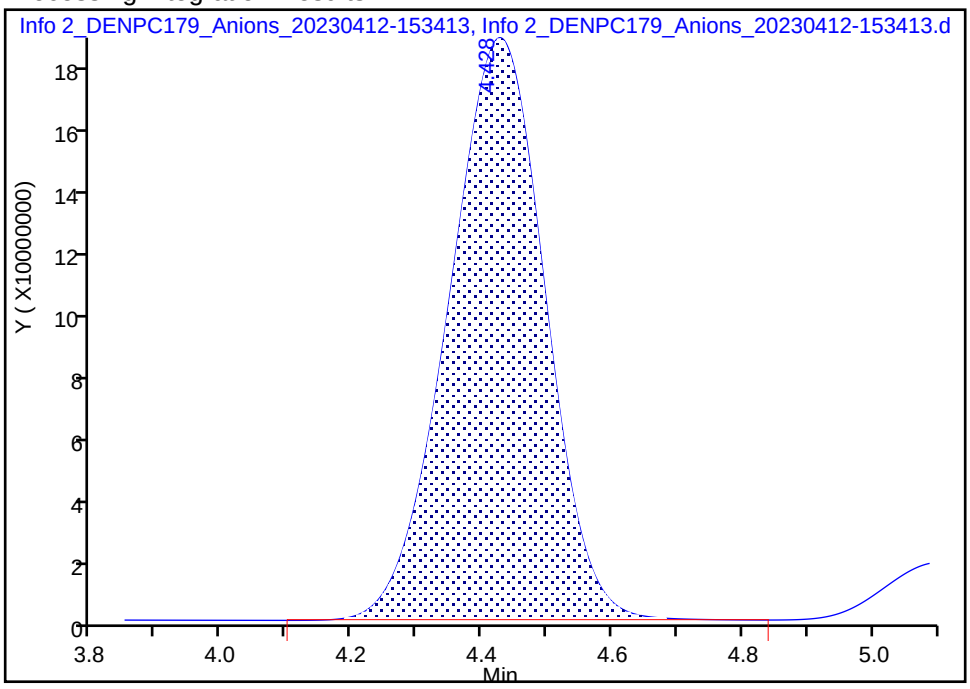
Column: Detector Info 2_091554_1

2 Chloride, CAS: 16887-00-6

Signal: 1

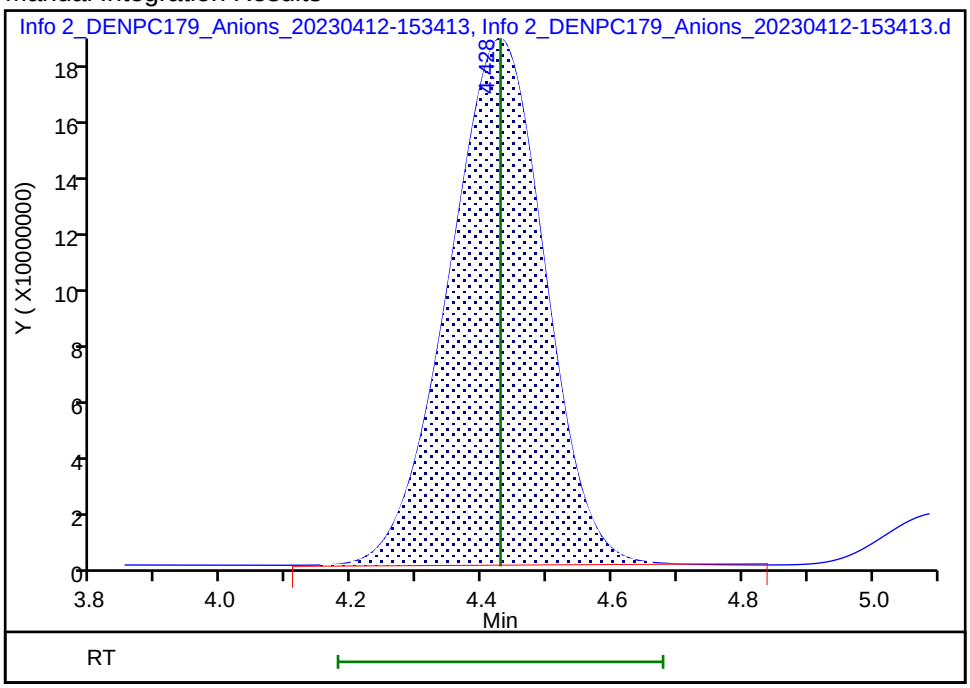
Processing Integration Results

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

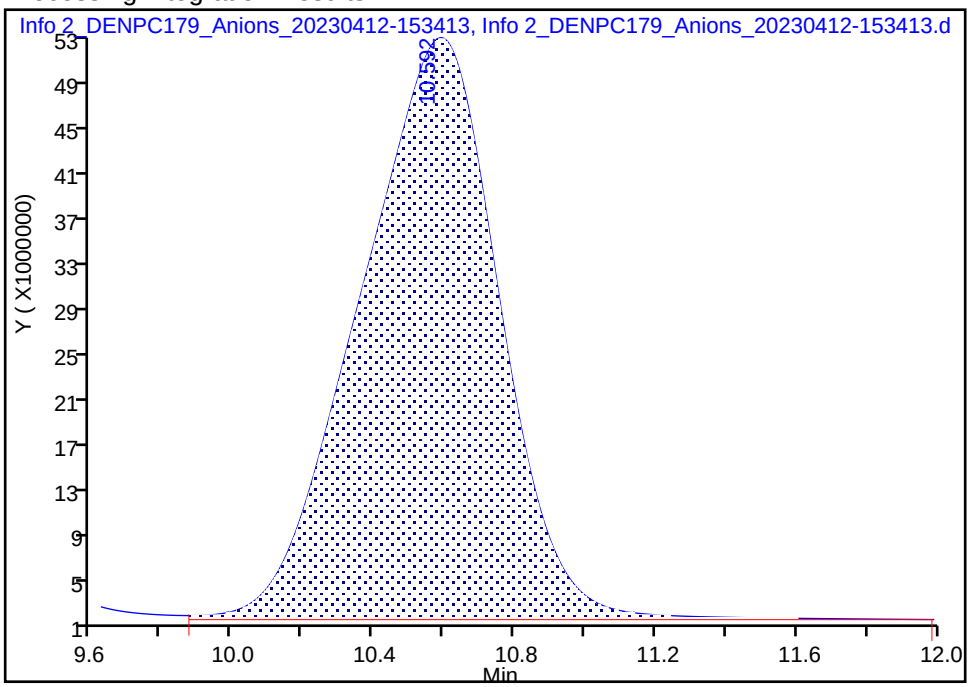
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

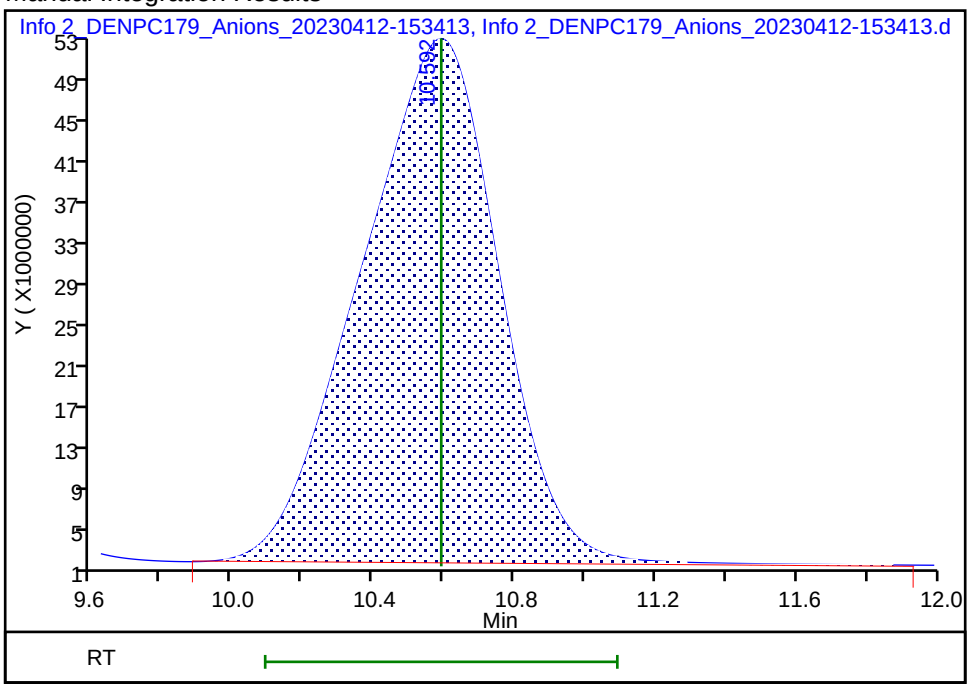
Processing Integration Results

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

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	
☐			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:

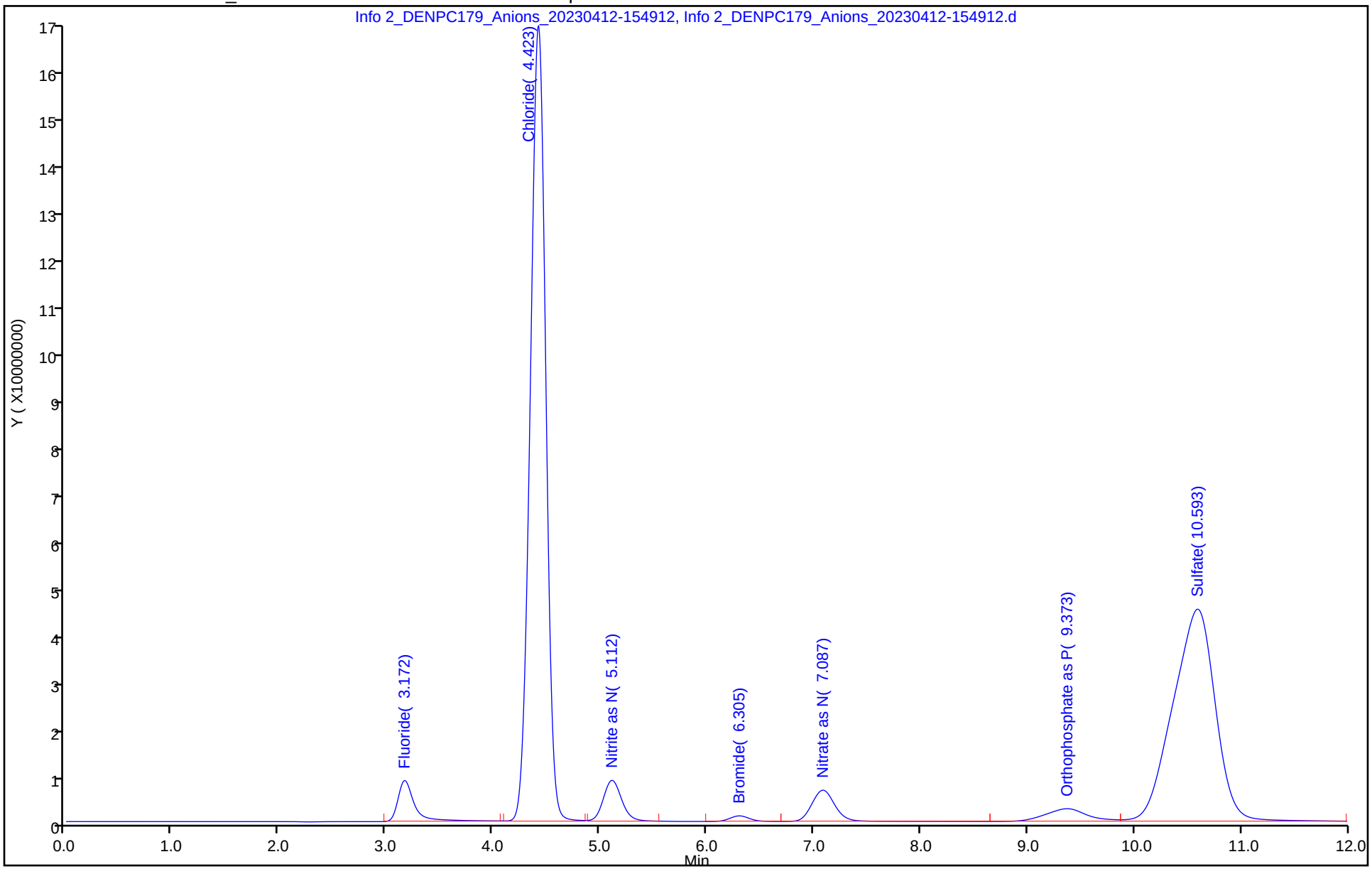
IC SO4 ICV_00024	Amount Added:	0.80	Units: mL
Cl ICV Std_00006	Amount Added:	0.80	Units: mL
IC ICV 5_00403	Amount Added:	0.80	Units: mL

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		



5/23/2023 8:16 PM

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

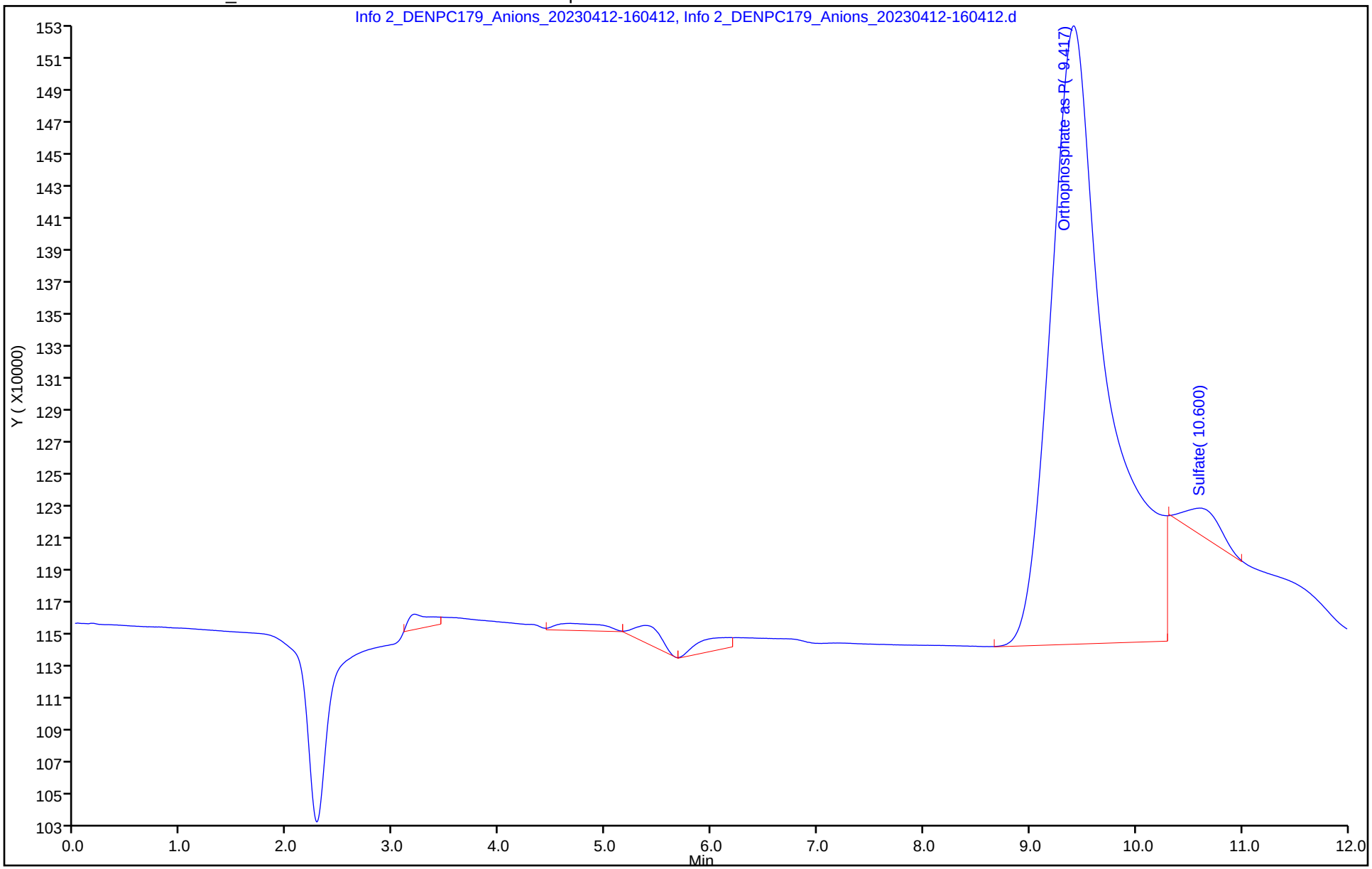
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

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		



5/23/2023 8:16 PM

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

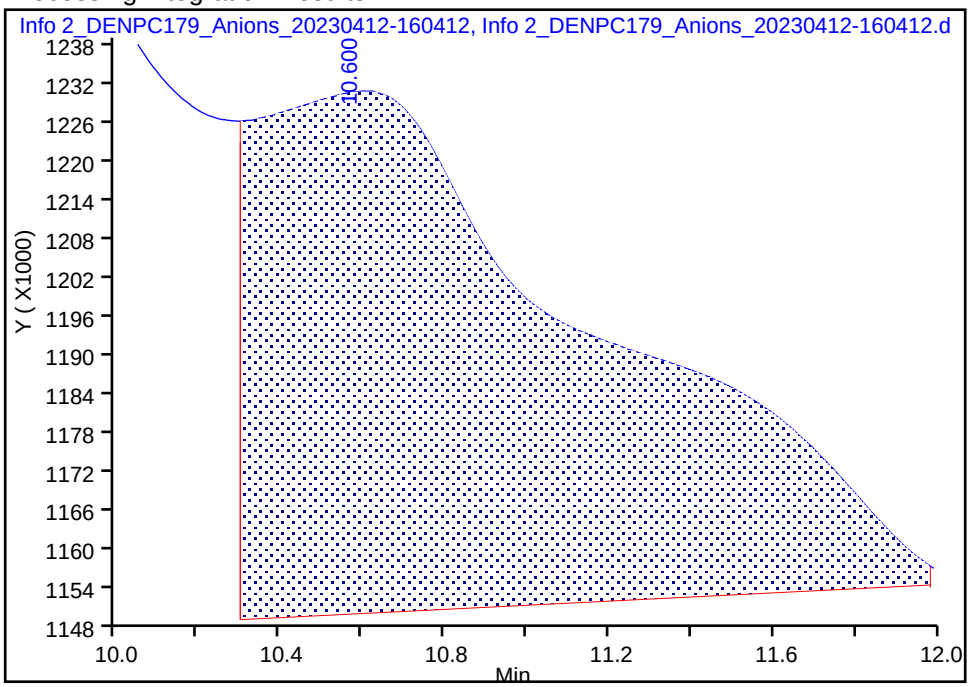
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

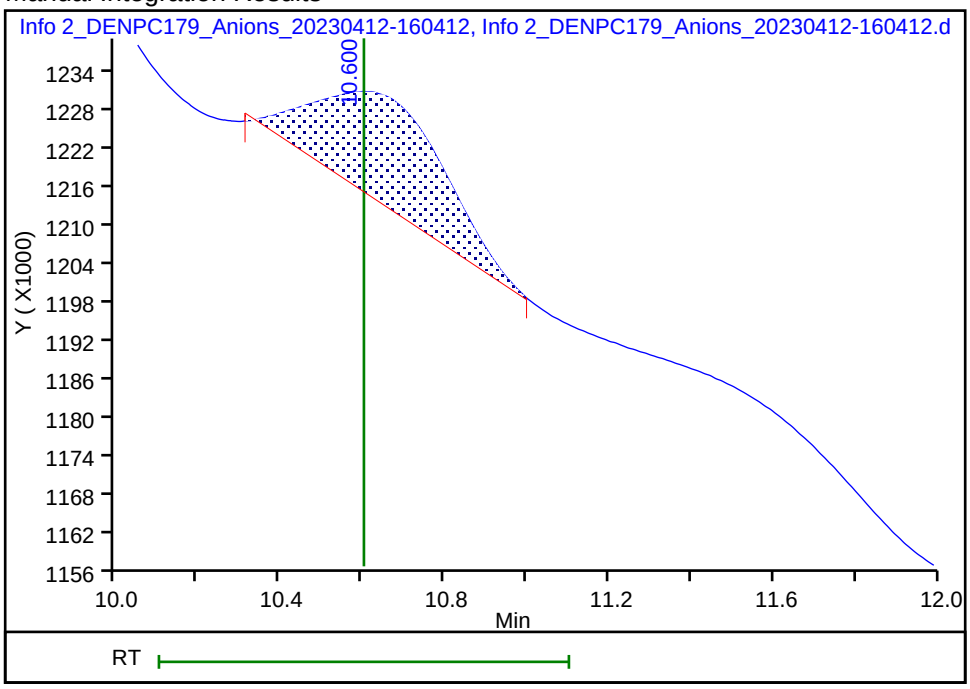
Processing Integration Results

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: 121069 **Inst ID:** DC10 **Analysis Date:** 5/4/23 **Analyst:** MEC

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	175900	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	~~175919~~ 175991	4	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	175919	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	175997	3	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	175993	3	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	175999	2	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	175985	3	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	176001	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	
☐			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	

GJ5714

GJ5 175991 5/4/23

Dilutions

Job No.	Samples	Anions	Dilution	Reason
900	1	F Cl NO2 Br NO3 PO4 SO4	2x	test
991	4	F Cl NO2 Br NO3 PO4 SO4	2x	test
919	1	F Cl NO2 Br NO3 PO4 SO4	5x	test
999	2	F Cl NO2 Br NO3 PO4 SO4	5x	test
985	3	F Cl NO2 Br NO3 PO4 SO4	20,50,200x	test
		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\20230504-121069.b\Info 2_DENPC179_Anions_20230504-093
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 04-May-2023 09:15:00 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121069-001
Misc. Info.: 280-0121069-001
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-May-2023 10:37:11 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: CTX1608

First Level Reviewer: LVW8 Date: 04-May-2023 09:43:35

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.152			ND	ND	
2 Chloride	4.348	4.348	0.000	933133586	50.0	48.8	
3 Nitrite as N	5.035	5.035	0.000	110580577	NC	NC	
4 Bromide	6.197	6.197	0.000	17932775	2.50	2.49	
5 Nitrate as N	6.960	6.960	0.000	108327080	NC	NC	
6 Orthophosphate as P	9.188	9.188	0.000	59993116	NC	NC	
7 Sulfate	10.433	10.433	0.000	683343302	50.0	49.6	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

Reagents:

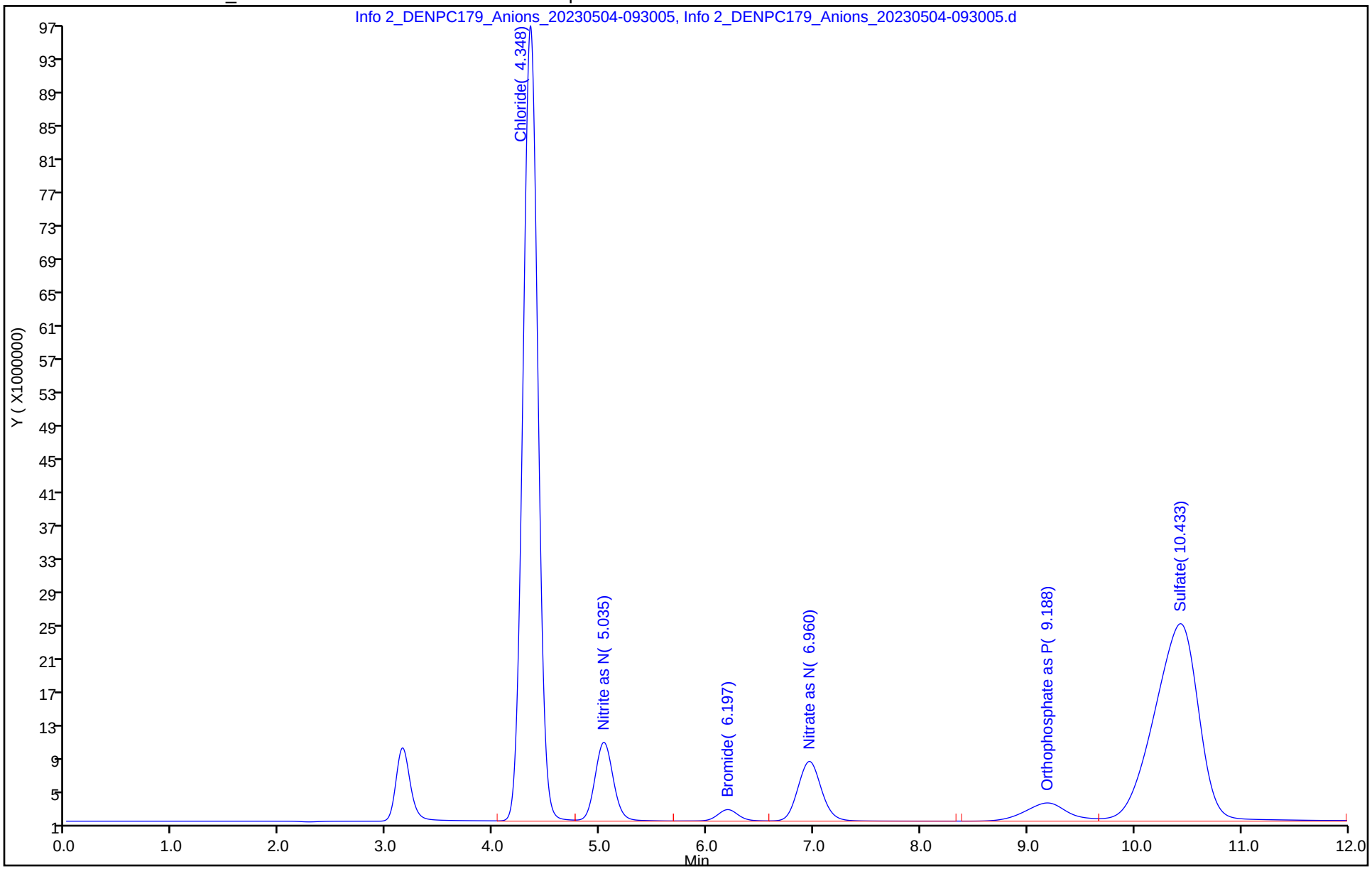
IC LCS_01952 Amount Added: 10.00 Units: mL

Report Date: 05-May-2023 10:37:12 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-093005.d

Injection Date:	04-May-2023 09:15:00	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		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-094
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 04-May-2023 09:30:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121069-002
Misc. Info.: 280-0121069-002
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-May-2023 10:37:12 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: CTX1608

First Level Reviewer: XAY4 Date: 05-May-2023 10:30:55

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.152				ND	
2 Chloride		4.348				ND	
3 Nitrite as N		5.035				ND	
4 Bromide		6.197				ND	U
5 Nitrate as N		6.960				ND	
6 Orthophosphate as P	9.268	9.268	0.000	4692406		NC	
7 Sulfate	10.557	10.557	0.000	1451402		0.1982	M

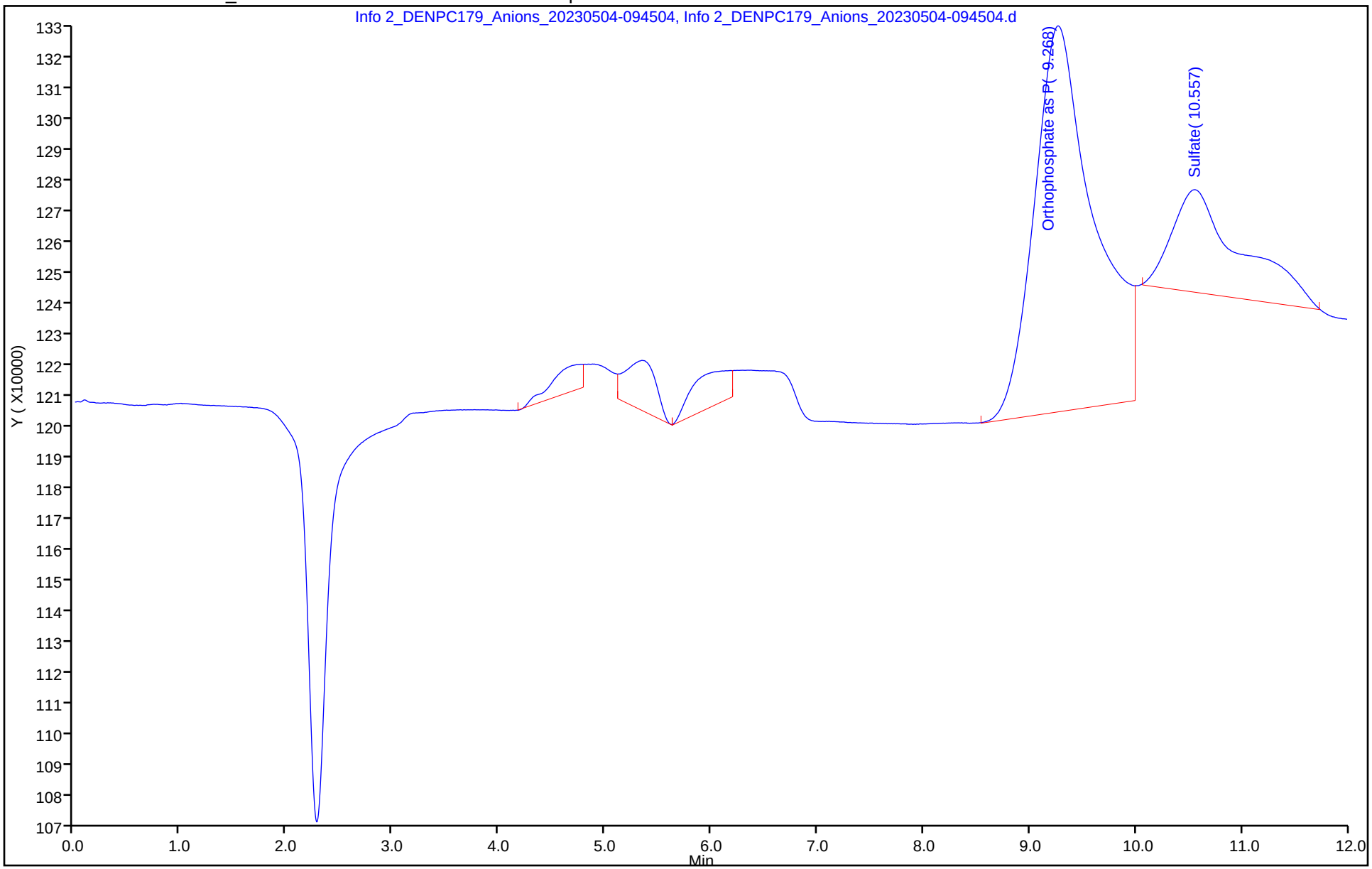
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 05-May-2023 10:37:12 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-094504.d				
Injection Date:	04-May-2023 09:30:00	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		



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Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-094

Injection Date: 04-May-2023 09:30:00 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

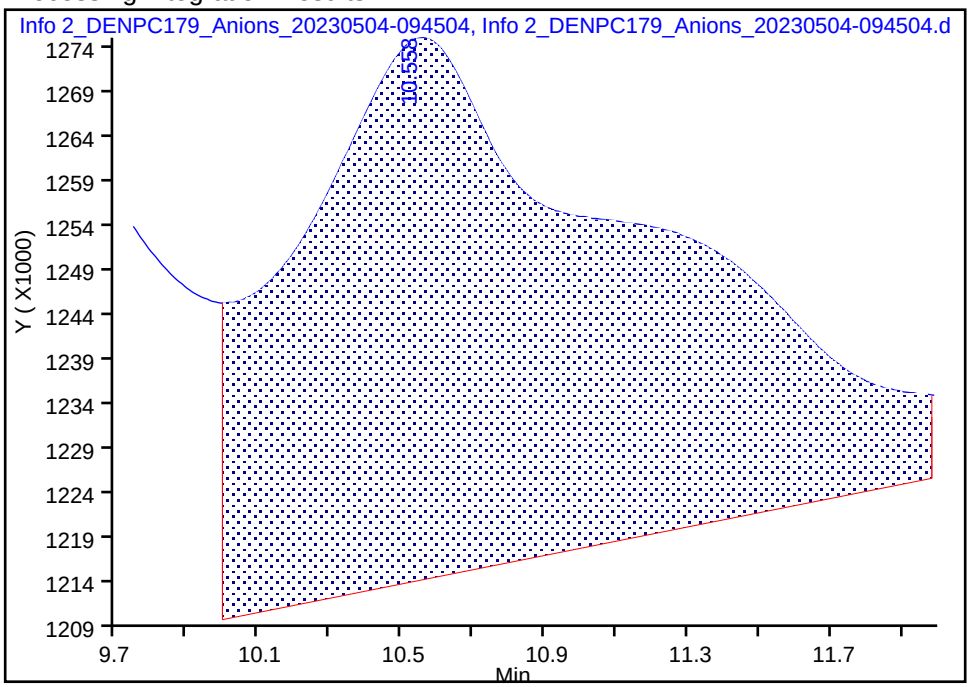
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

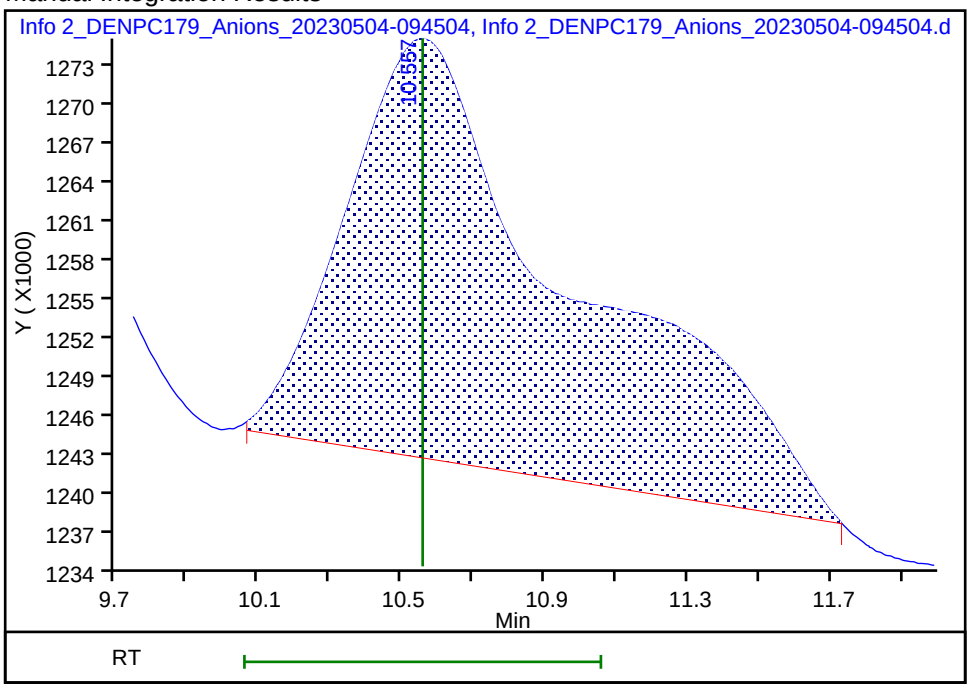
Processing Integration Results

RT: 10.56
Area: 4270037
Amount: 0.402373
Amount Units: ug/ml



Manual Integration Results

RT: 10.56
Area: 1451402
Amount: 0.198170
Amount Units: ug/ml



Reviewer: XAY4, 05-May-2023 10:30:50

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-100
Lims ID: mrl
Client ID:
Sample Type: MRL
Inject. Date: 04-May-2023 09:45:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121069-003
Misc. Info.: 280-0121069-003
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-May-2023 10:37:13 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: CTX1608

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.152			ND	ND	
2 Chloride	4.337	4.337	0.000	43241373	2.50	2.39	
3 Nitrite as N	5.047	5.047	0.000	10500363	NC	NC	
4 Bromide	6.223	6.223	0.000	2426422	0.2500	0.2153	
5 Nitrate as N	7.017	7.017	0.000	9549539	NC	NC	
6 Orthophosphate as P	9.242	9.242	0.000	10871607	NC	NC	
7 Sulfate	10.468	10.468	0.000	34990325	2.50	2.63	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

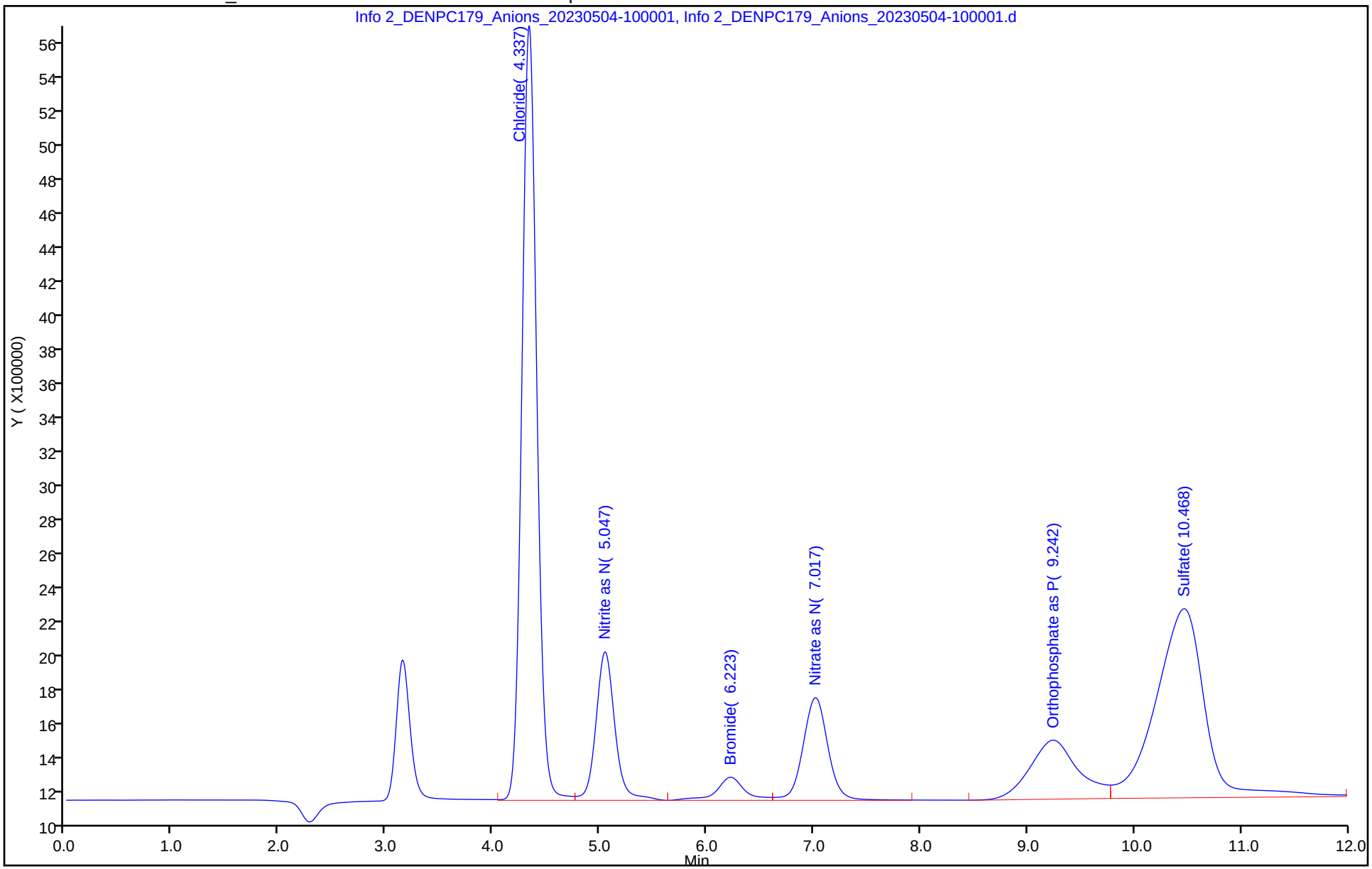
Reagents:

IC CAL cl/so4_00478 Amount Added: 0.20 Units: mL
IC Cal low_00707 Amount Added: 0.10 Units: mL

Report Date: 05-May-2023 10:37:13 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-100001.d				
Injection Date:	04-May-2023 09:45:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	mrl			Worklist Smp#:	3
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-101
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 04-May-2023 10:00:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121069-004
Misc. Info.: 280-0121069-004
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-May-2023 10:37:13 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: CTX1608

First Level Reviewer: LVW8 Date: 04-May-2023 10:43:00

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.152			ND	ND	
2 Chloride	4.350	4.350	0.000	925797404	50.0	48.4	
3 Nitrite as N	5.037	5.037	0.000	110454692	NC	NC	
4 Bromide	6.202	6.202	0.000	17746023	2.50	2.46	
5 Nitrate as N	6.965	6.965	0.000	107279988	NC	NC	
6 Orthophosphate as P	9.202	9.202	0.000	64502489	NC	NC	
7 Sulfate	10.448	10.448	0.000	679783670	50.0	49.3	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

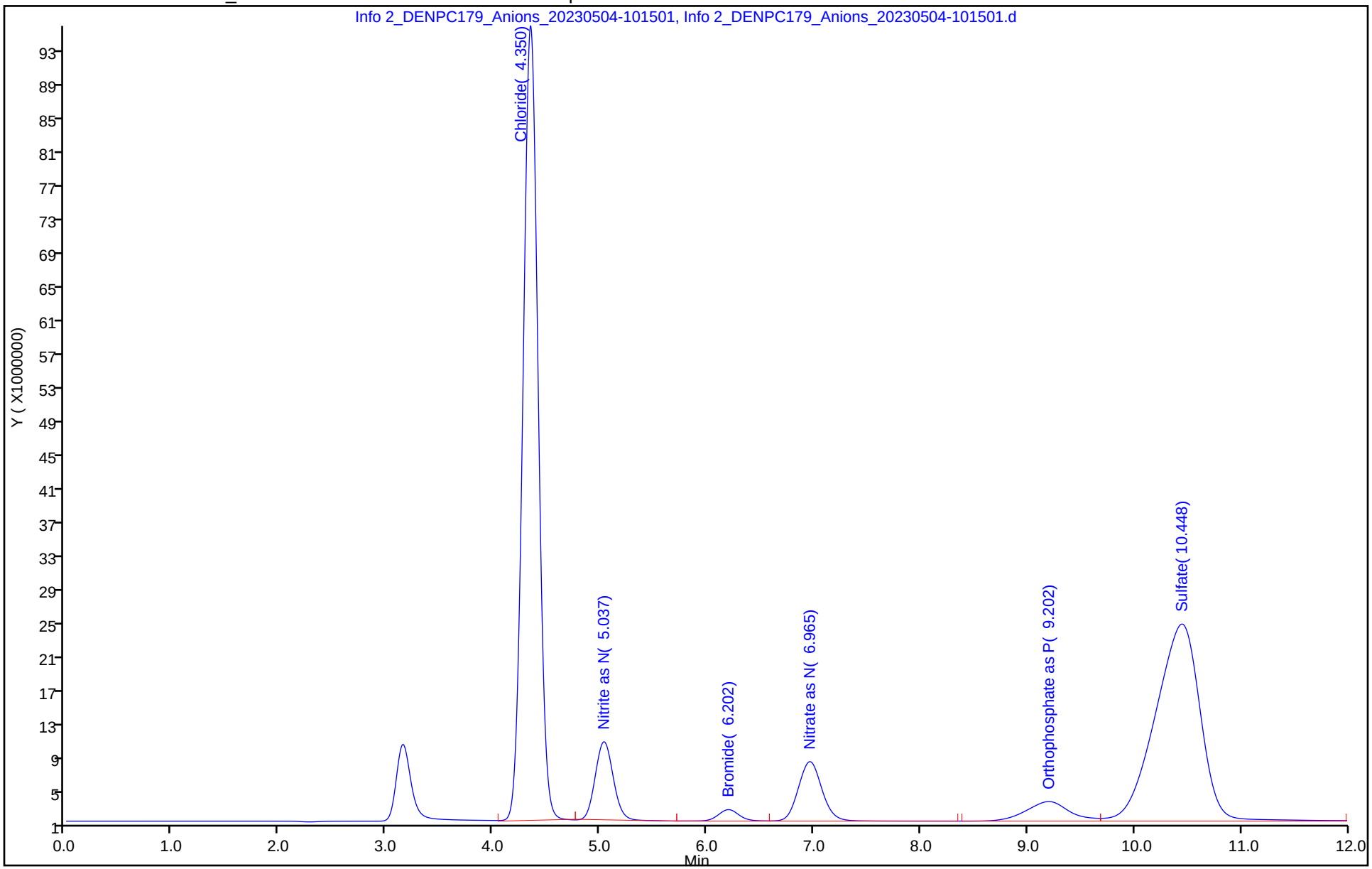
Reagents:

IC LCS_01952 Amount Added: 10.00 Units: mL

Report Date: 05-May-2023 10:37:13 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-101501.d				
Injection Date:	04-May-2023 10:00:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	lcs			Worklist Smp#:	4
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-103
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 04-May-2023 10:15:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121069-005
Misc. Info.: 280-0121069-005
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-May-2023 10:37:14 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: CTX1608

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.152			ND	ND	
2 Chloride	4.352	4.352	0.000	925409845	50.0	48.4	
3 Nitrite as N	5.040	5.040	0.000	110028350	NC	NC	
4 Bromide	6.207	6.207	0.000	17760536	2.50	2.46	
5 Nitrate as N	6.968	6.968	0.000	107273534	NC	NC	
6 Orthophosphate as P	9.205	9.205	0.000	64140069	NC	NC	
7 Sulfate	10.453	10.453	0.000	678517681	50.0	49.2	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

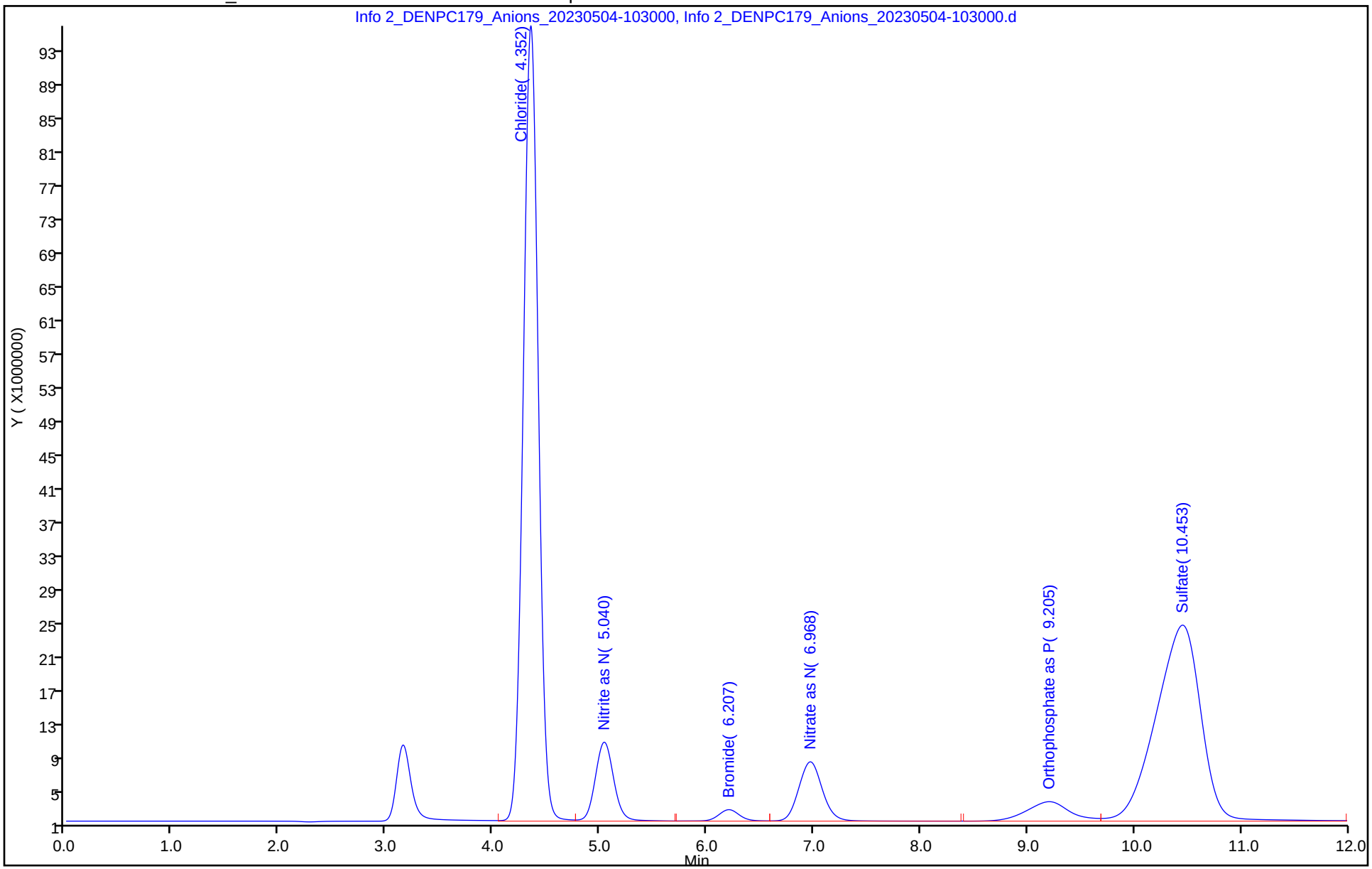
Reagents:

IC LCS_01952 Amount Added: 10.00 Units: mL

Report Date: 05-May-2023 10:37:14 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-103000.d				
Injection Date:	04-May-2023 10:15:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	lcsd			Worklist Smp#:	5
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-104
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 04-May-2023 10:30:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121069-006
Misc. Info.: 280-0121069-006
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-May-2023 10:37:14 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: CTX1608

First Level Reviewer: XAY4 Date: 05-May-2023 10:31:15

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.152				ND	
2 Chloride		4.352				ND	
3 Nitrite as N		5.040				ND	
4 Bromide	6.157	6.157	0.000	264846		-0.1018	
5 Nitrate as N		6.968				ND	
6 Orthophosphate as P	9.273	9.273	0.000	6799369		NC	
7 Sulfate	10.543	10.543	0.000	687210		0.1428	M

QC Flag Legend

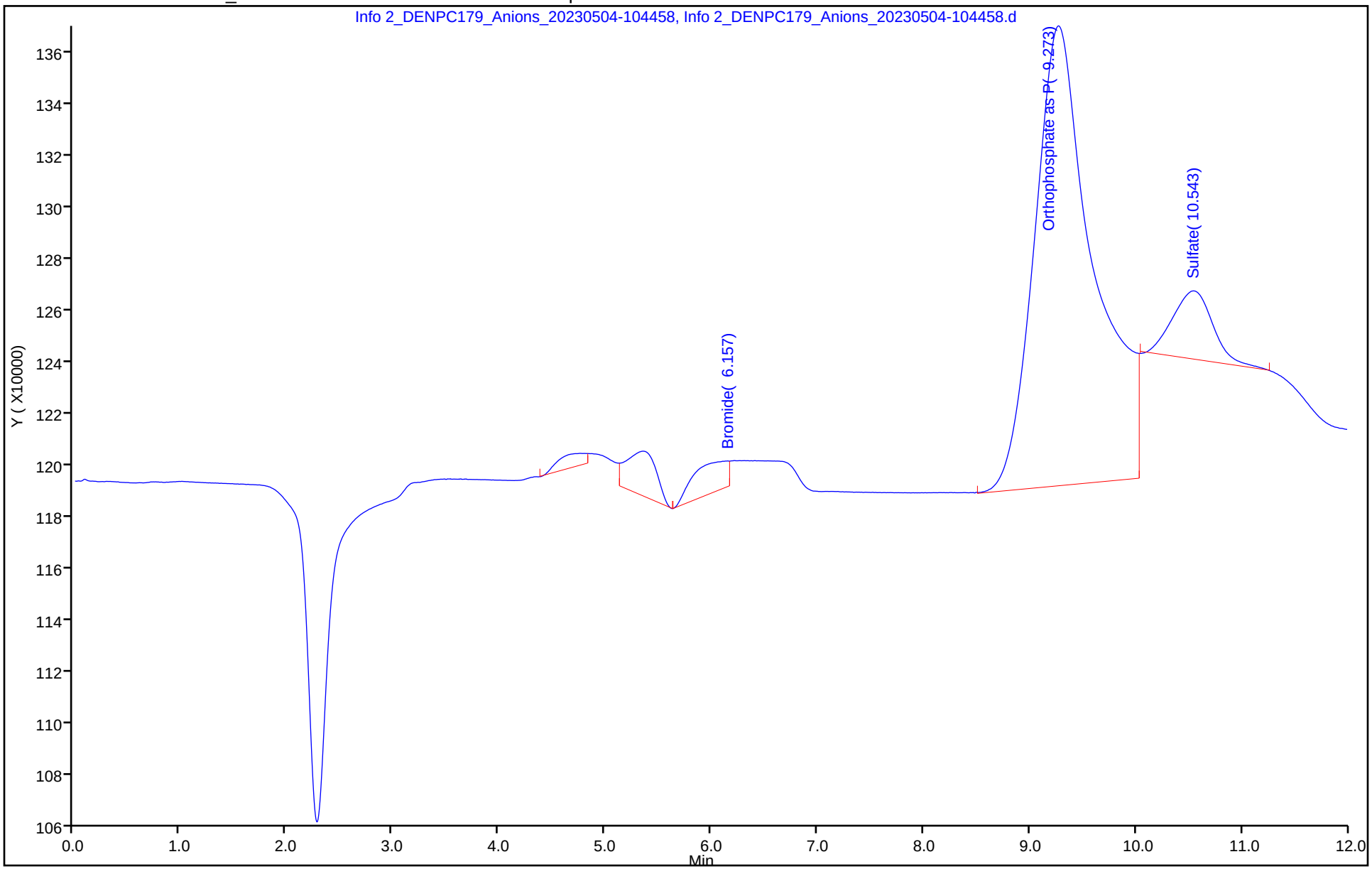
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 05-May-2023 10:37:15 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-104458.d

Injection Date:	04-May-2023 10:30:00	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\20230504-121069.b\Info 2_DENPC179_Anions_20230504-104

Injection Date: 04-May-2023 10:30:00 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

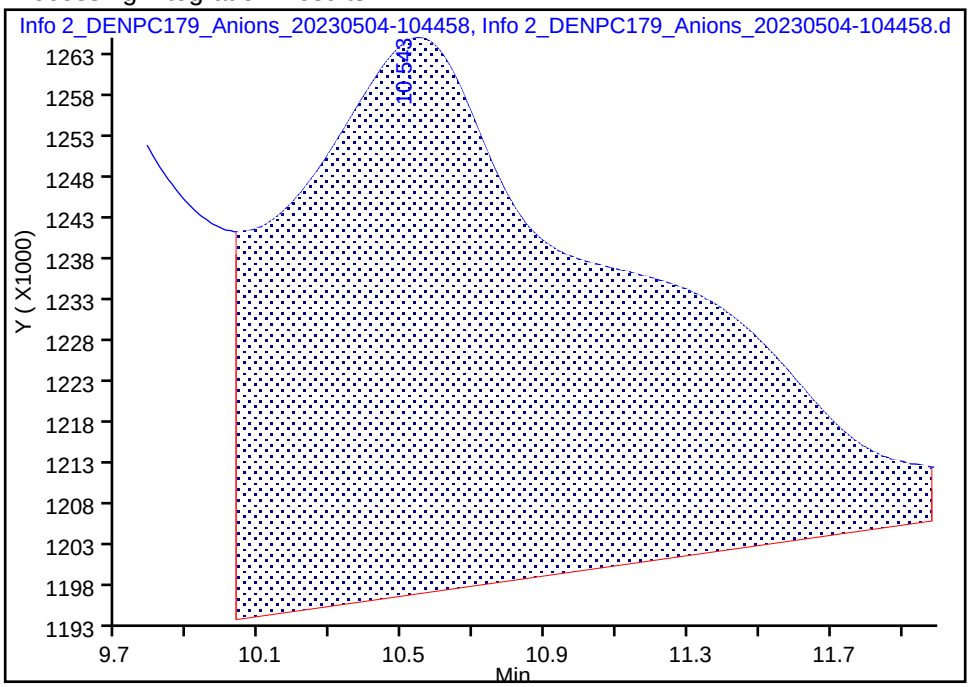
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

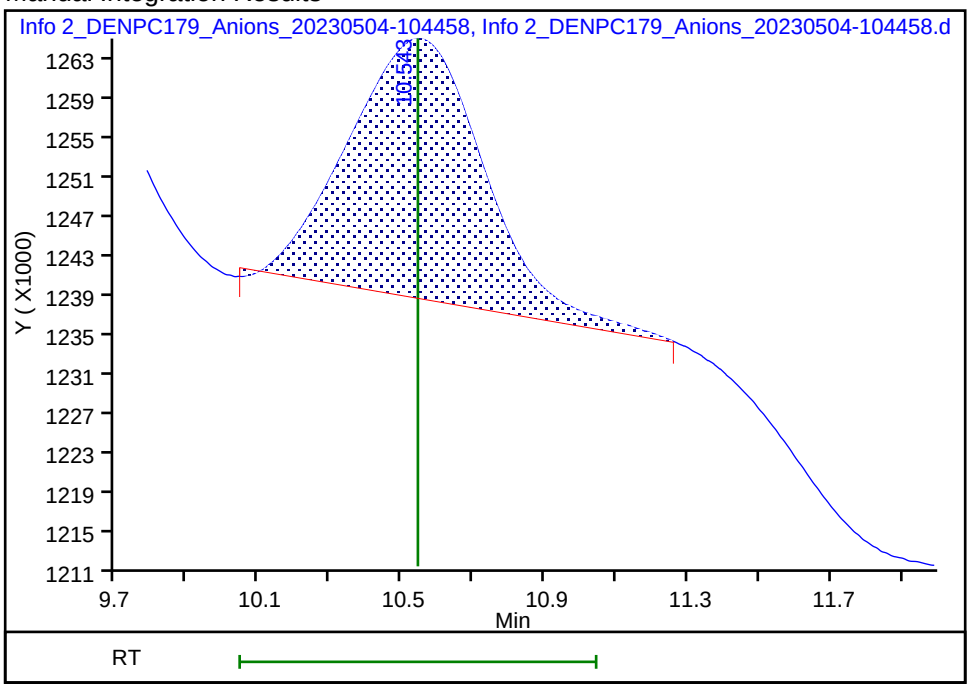
Processing Integration Results

RT: 10.54
Area: 4553285
Amount: 0.422893
Amount Units: ug/ml



Manual Integration Results

RT: 10.54
Area: 687210
Amount: 0.142807
Amount Units: ug/ml



Reviewer: XAY4, 05-May-2023 10:31:10

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-170				
Lims ID:	280-175997-C-1				
Client ID:	LL1mw-080-230401-GW				
Sample Type:	Client				
Inject. Date:	04-May-2023 16:54:00	ALS Bottle#:	0	Worklist Smp#:	11
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0121069-011				
Misc. Info.:	280-0121069-011				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Anions_IC10.m				
Limit Group:	Wet - Anions 28D				
Last Update:	05-May-2023 10:37:14	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:	CTX1608				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		3.152			ND	
2 Chloride	4.325	4.352	-0.027	5850847	0.4420	
3 Nitrite as N		5.040			ND	
4 Bromide	6.218	6.157	0.061	1092979	0.0197	
5 Nitrate as N	7.027	6.968	0.059	1846079	NC	
6 Orthophosphate as P	9.293	9.273	0.020	1061265	NC	
7 Sulfate	10.412	10.543	-0.131	356045525	25.9	

QC Flag Legend

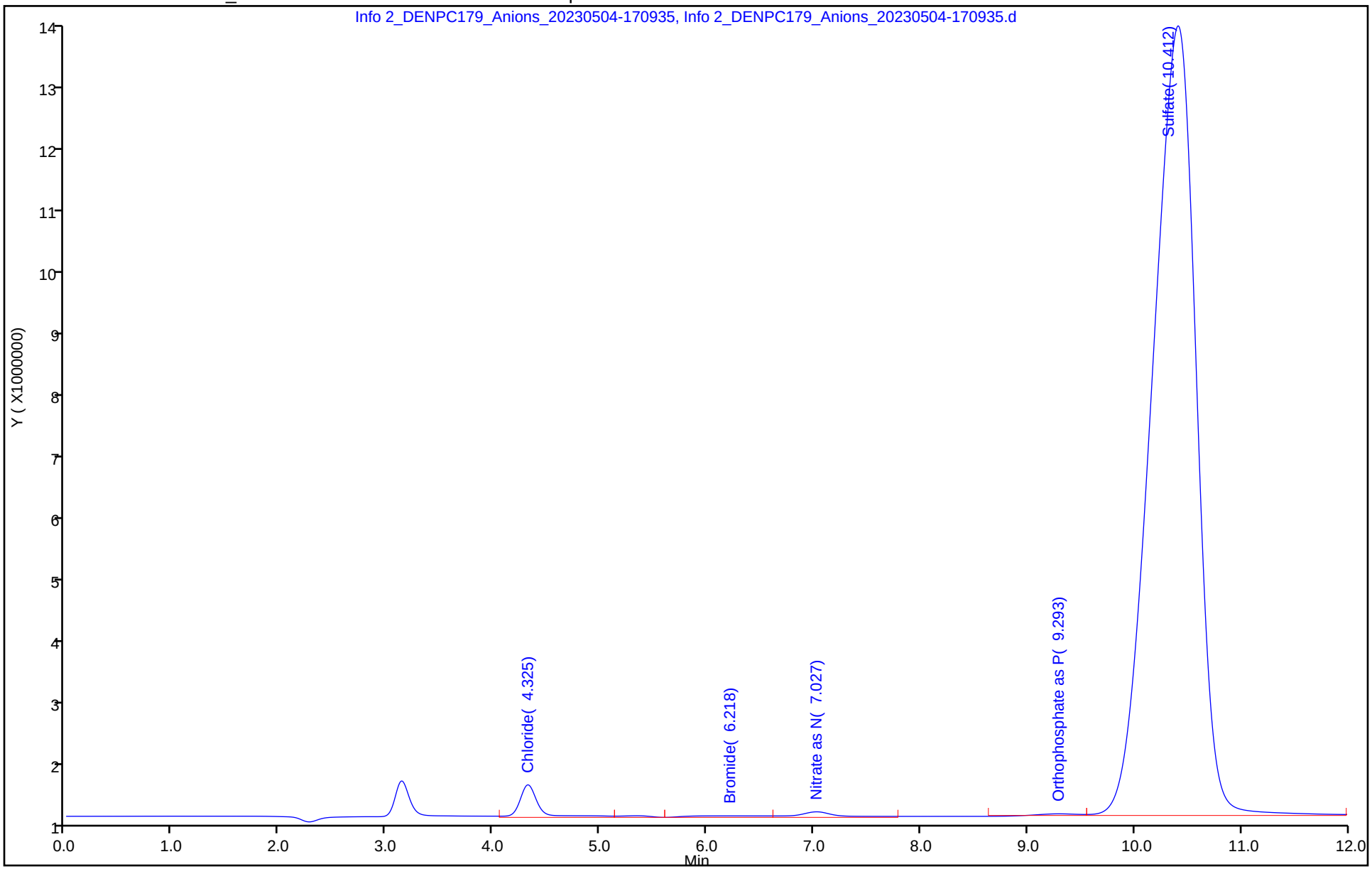
Processing Flags

NC - Not Calibrated

Report Date: 05-May-2023 10:37:17 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-170935.d				
Injection Date:	04-May-2023 16:54:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-175997-C-1	Lab Sample ID:	280-175997-1	Worklist Smp#:	11
Client ID:	LL1mw-080-230401-GW				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



5/23/2023 8:16 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-173
Lims ID: 280-175997-C-4 DU
Client ID:
Sample Type: DU
Inject. Date: 04-May-2023 17:24:00 ALS Bottle#: 0 Worklist Smp#: 13
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121069-013
Misc. Info.: 280-0121069-013
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-May-2023 10:37:14 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: CTX1608

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.152				ND	
2 Chloride	4.327	4.352	-0.025	10778452		0.6988	
3 Nitrite as N		5.040				ND	
4 Bromide	6.247	6.157	0.090	1154924		0.0288	
5 Nitrate as N	7.007	6.968	0.039	29150791		NC	
6 Orthophosphate as P	9.325	9.273	0.052	596298		NC	
7 Sulfate	10.395	10.543	-0.148	1513999984		109.8	E

QC Flag Legend

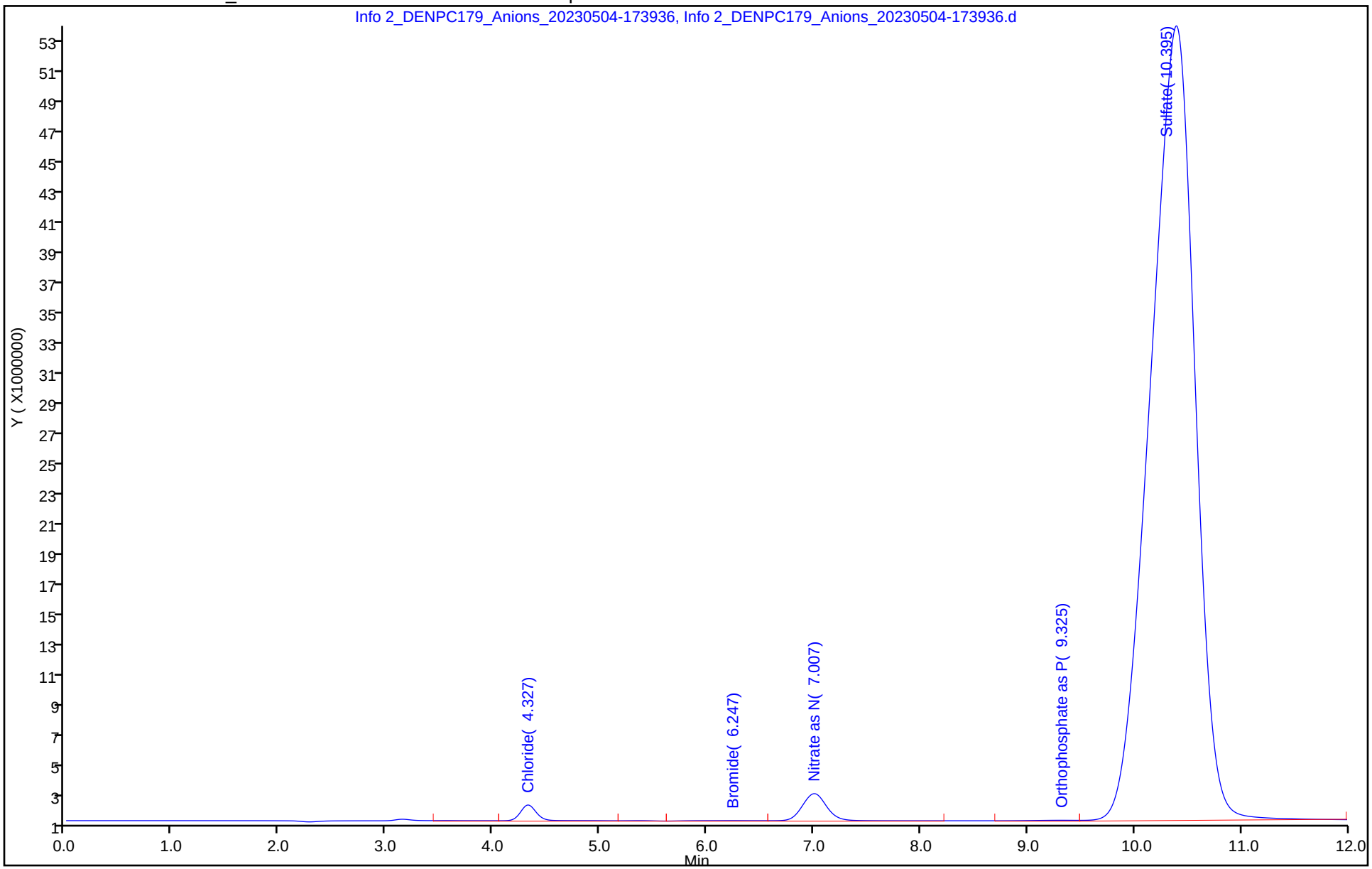
Processing Flags
NC - Not Calibrated
E - Exceeded Maximum Amount

Report Date: 05-May-2023 10:37:18 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-173936.d

Injection Date:	04-May-2023 17:24:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-175997-C-4 DU			Worklist Smp#:	13
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



5/23/2023 8:16 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-175
Lims ID: 280-175997-C-4 MS
Client ID: LL1mw-084-230401-GW
Sample Type: MS
Inject. Date: 04-May-2023 17:39:00 ALS Bottle#: 0 Worklist Smp#: 14
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121069-014
Misc. Info.: 280-0121069-014
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-May-2023 10:37:14 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: CTX1608

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.152			ND	ND	
2 Chloride	4.338	4.352	-0.014	993100885	50.0	51.9	
3 Nitrite as N	5.025	5.040	-0.015	219126061	NC	NC	
4 Bromide	6.217	6.157	0.060	36304047	5.00	5.18	E
5 Nitrate as N	6.953	6.968	-0.015	266989106	NC	NC	
6 Orthophosphate as P	9.208	9.273	-0.065	118461746	NC	NC	
7 Sulfate	10.378	10.543	-0.165	2240026766	50.0	162.4	E

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND
E - Exceeded Maximum Amount

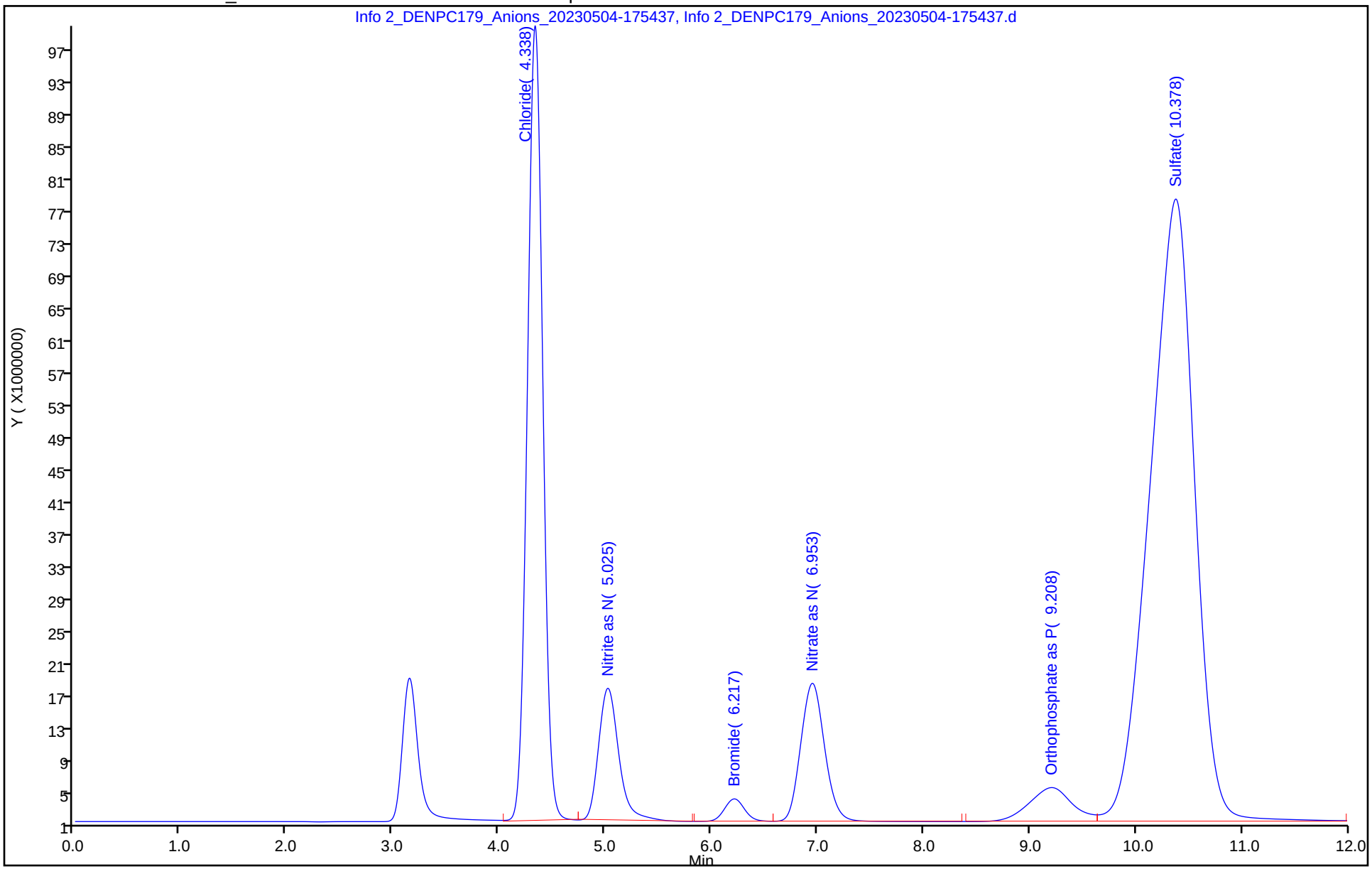
Reagents:

ICMS/MSD WEEK_00817 Amount Added: 0.10 Units: mL

Report Date: 05-May-2023 10:37:19 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-175437.d				
Injection Date:	04-May-2023 17:39:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-175997-C-4 MS			Worklist Smp#:	14
Client ID:	LL1mw-084-230401-GW				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-180
Lims ID: 280-175997-C-4 MSD
Client ID: LL1mw-084-230401-GW
Sample Type: MSD
Inject. Date: 04-May-2023 17:54:00 ALS Bottle#: 0 Worklist Smp#: 15
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121069-015
Misc. Info.: 280-0121069-015
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-May-2023 10:37:14 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: CTX1608

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.152			ND	ND	
2 Chloride	4.338	4.352	-0.014	988697326	50.0	51.7	
3 Nitrite as N	5.025	5.040	-0.015	218894685	NC	NC	
4 Bromide	6.217	6.157	0.060	36136455	5.00	5.16	E
5 Nitrate as N	6.952	6.968	-0.016	265578314	NC	NC	
6 Orthophosphate as P	9.208	9.273	-0.065	121178216	NC	NC	
7 Sulfate	10.380	10.543	-0.163	2212544388	50.0	160.4	E

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND
E - Exceeded Maximum Amount

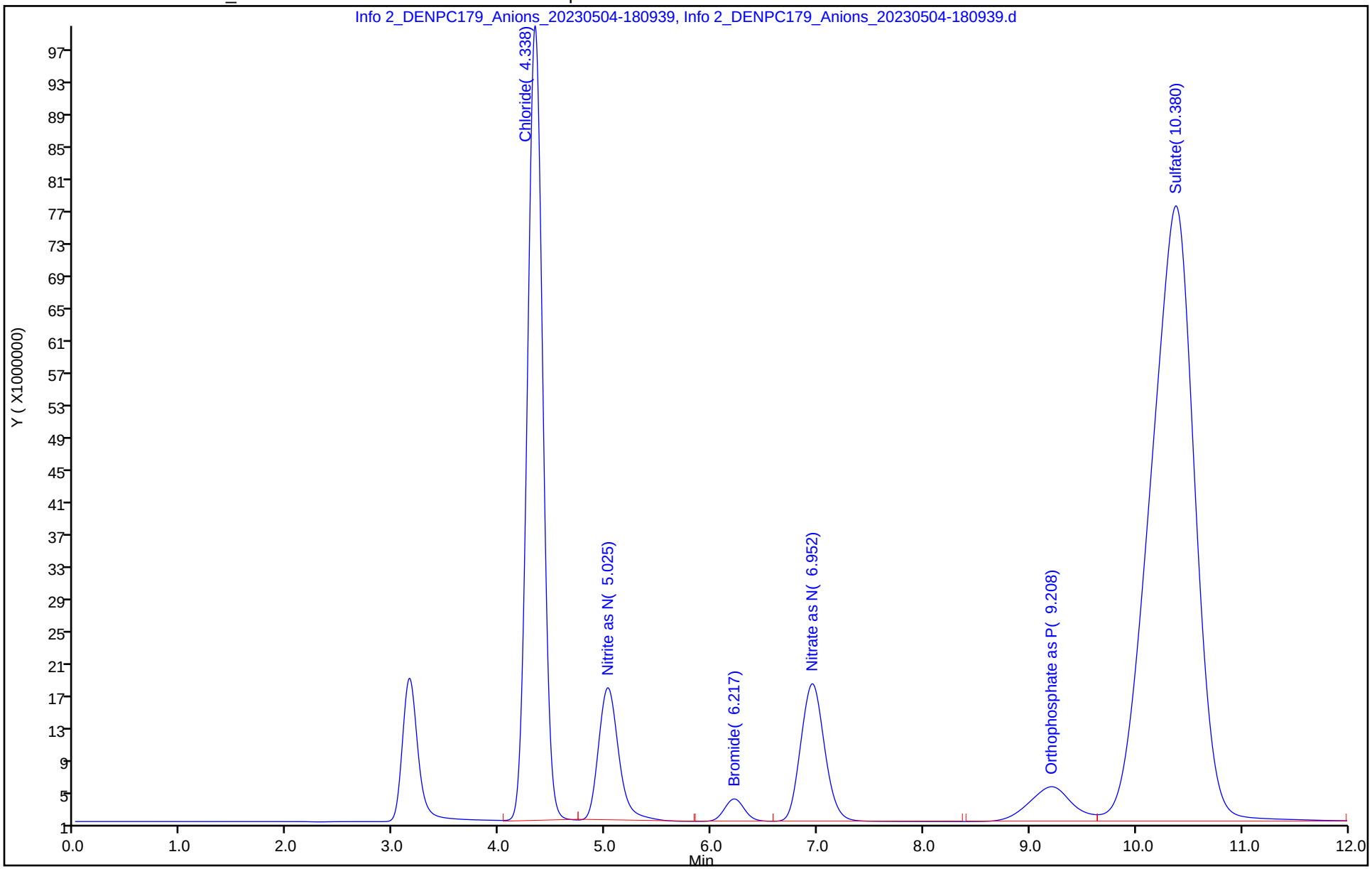
Reagents:

ICMS/MSD WEEK_00817 Amount Added: 0.10 Units: mL

Report Date: 05-May-2023 10:37:19 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-180939.d				
Injection Date:	04-May-2023 17:54:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-175997-C-4 MSD			Worklist Smp#:	15
Client ID:	LL1mw-084-230401-GW				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



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Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-183				
Lims ID:	ccv				
Client ID:					
Sample Type:	CCV				
Inject. Date:	04-May-2023 18:24:00	ALS Bottle#:	0	Worklist Smp#:	17
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0121069-017				
Misc. Info.:	280-0121069-017				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Sublist:	chrom-Anions_IC10*sub5				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Anions_IC10.m				
Limit Group:	Wet - Anions 28D				
Last Update:	05-May-2023 10:37:20	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:	CTX1608				
First Level Reviewer: LVW8		Date:	05-May-2023 08:34:35		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.152			ND	ND	
2 Chloride	4.348	4.352	-0.004	938266374	50.0	49.0	
3 Nitrite as N	5.035	5.040	-0.005	111883118	NC	NC	
4 Bromide	6.193	6.157	0.036	17679125	2.50	2.45	
5 Nitrate as N	6.958	6.968	-0.010	108971412	NC	NC	
6 Orthophosphate as P	9.202	9.273	-0.071	66917333	NC	NC	
7 Sulfate	10.418	10.543	-0.125	689496548	50.0	50.0	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

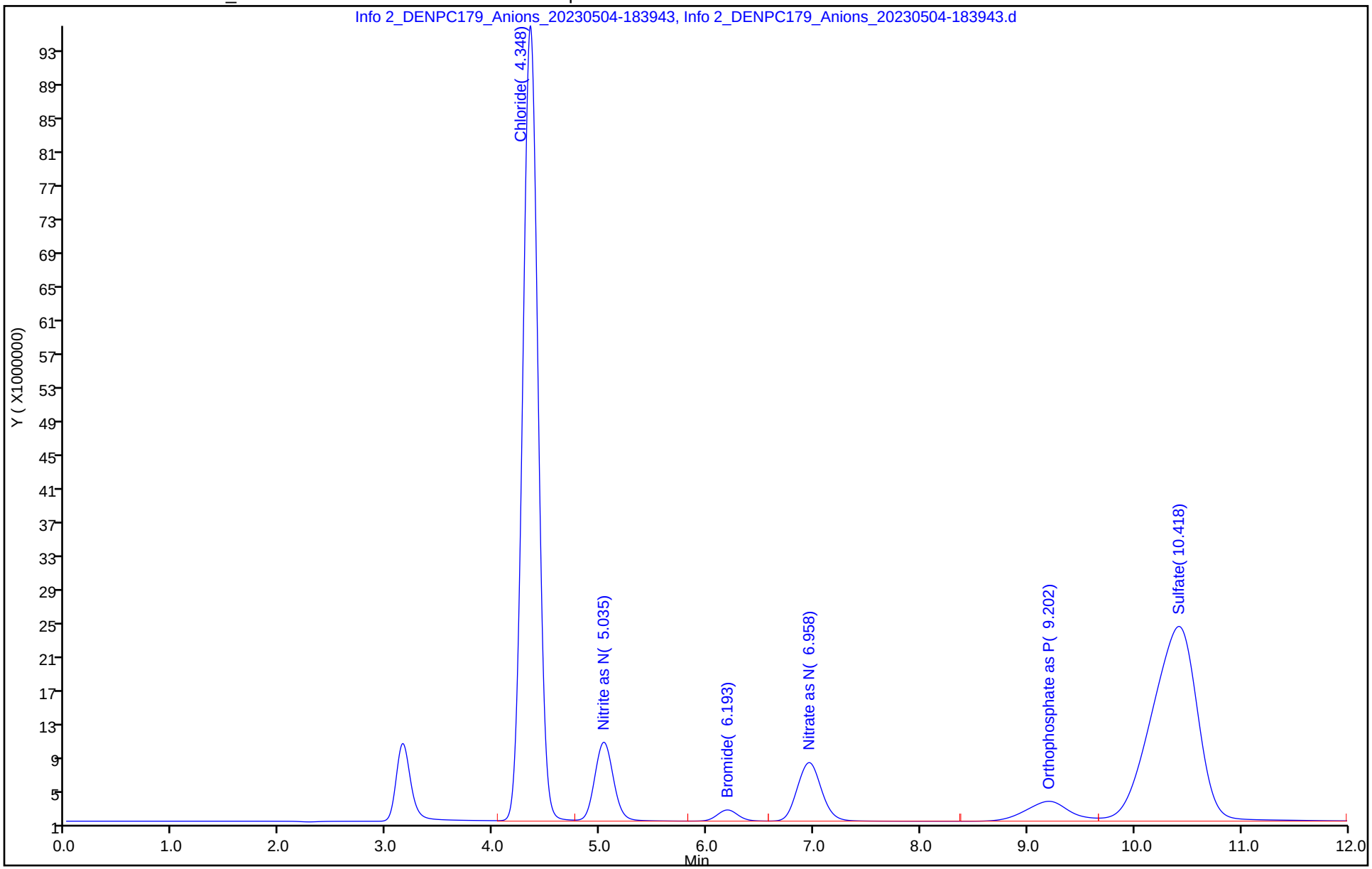
Reagents:

IC LCS_01952 Amount Added: 10.00 Units: mL

Report Date: 05-May-2023 10:37:20 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-183943.d				
Injection Date:	04-May-2023 18:24:00	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		



5/23/2023 8:16 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-185
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 04-May-2023 18:39:00 ALS Bottle#: 0 Worklist Smp#: 18
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121069-018
Misc. Info.: 280-0121069-018
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-May-2023 10:37:20 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: CTX1608

First Level Reviewer: XAY4 Date: 05-May-2023 10:31:46

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.152				ND	
2 Chloride		4.352				ND	
3 Nitrite as N		5.040				ND	
4 Bromide	6.167	6.157	0.010	203049		-0.1108	
5 Nitrate as N		6.968				ND	
6 Orthophosphate as P	9.273	9.273	0.000	8955754		NC	
7 Sulfate	10.465	10.543	-0.078	418594		0.1233	M

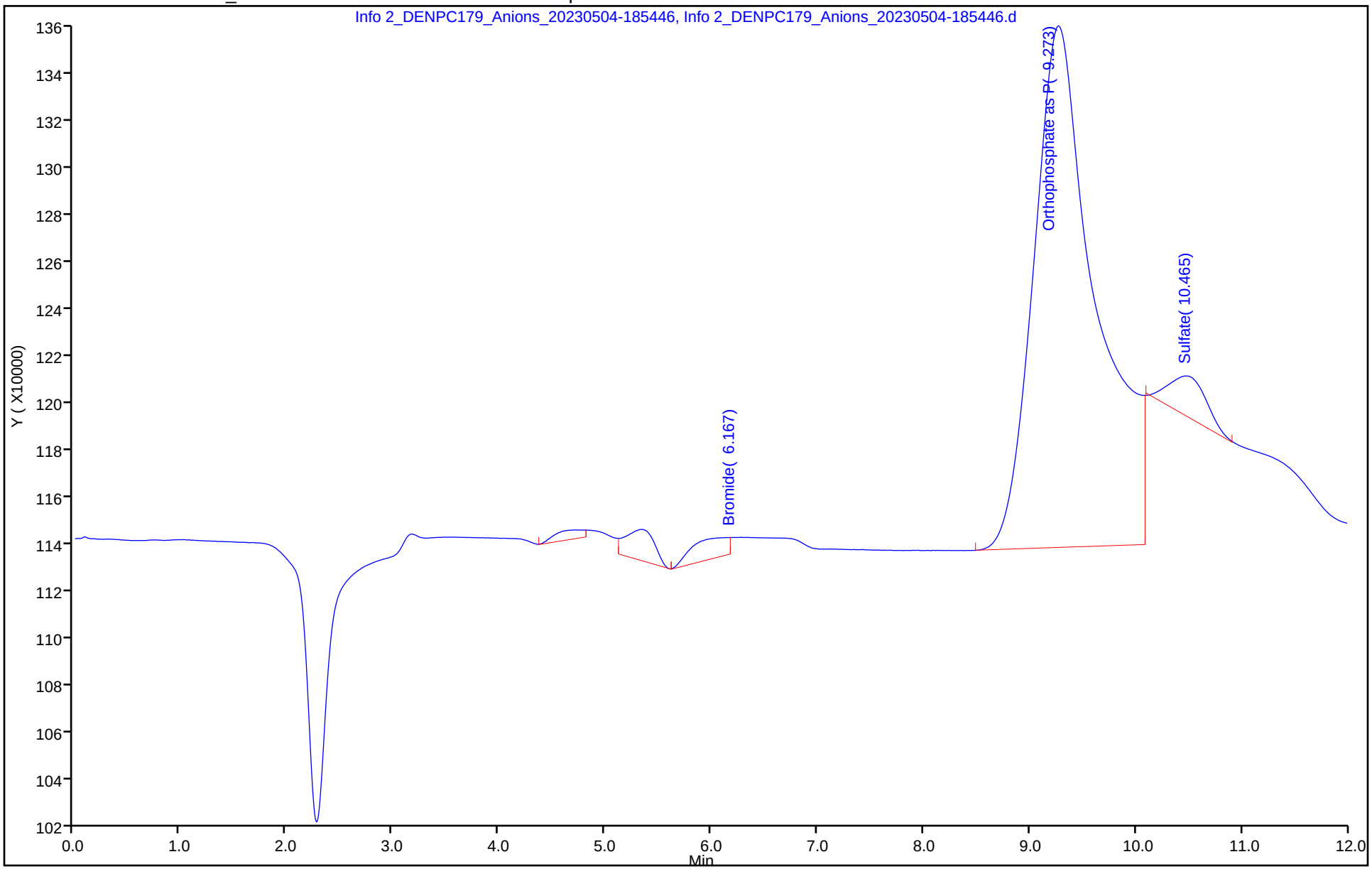
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 05-May-2023 10:37:21 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-185446.d				
Injection Date:	04-May-2023 18:39:00	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		



5/23/2023 8:16 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-185

Injection Date: 04-May-2023 18:39:00 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

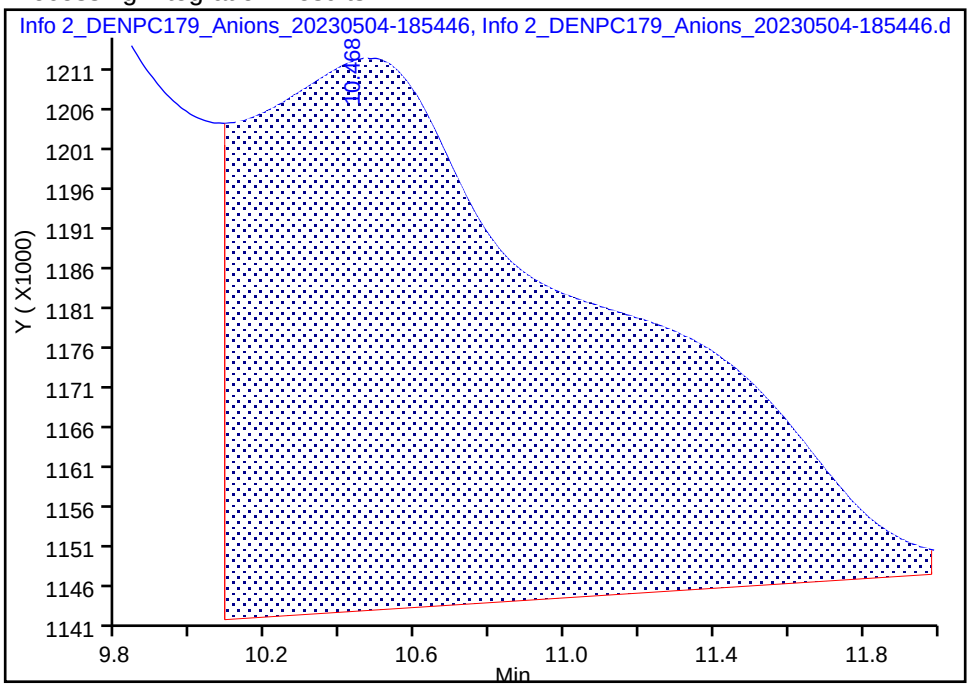
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

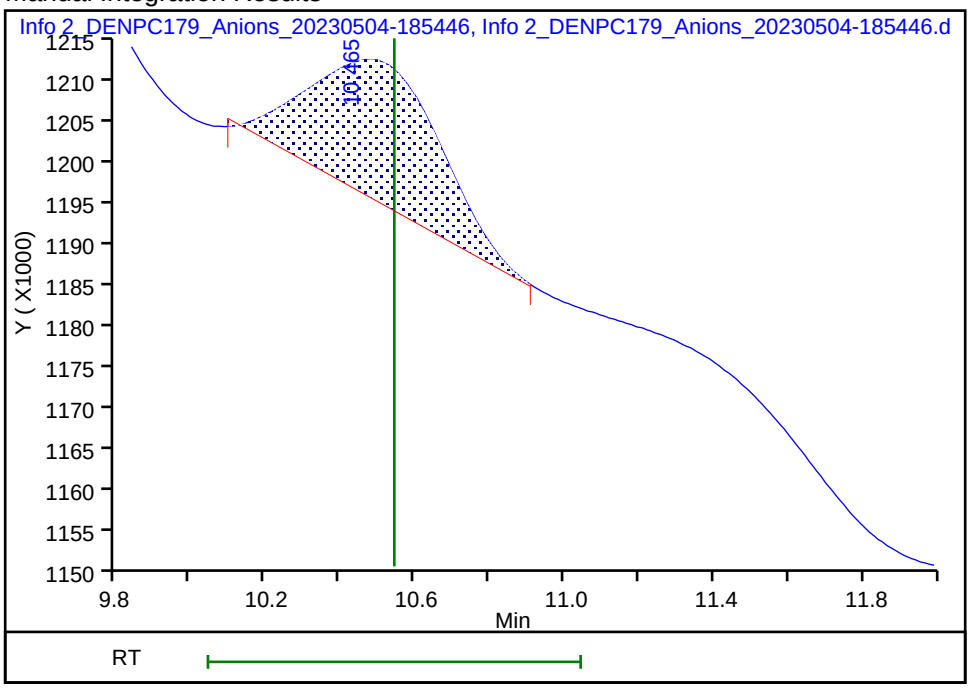
Processing Integration Results

RT: 10.47
Area: 4542274
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 10.47
Area: 418594
Amount: 0.123346
Amount Units: ug/ml



Reviewer: XAY4, 05-May-2023 10:31:42

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-214
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 04-May-2023 21:25:00 ALS Bottle#: 0 Worklist Smp#: 29
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121069-029
Misc. Info.: 280-0121069-029
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-May-2023 10:37:26 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: CTX1608

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.152			ND	ND	
2 Chloride	4.348	4.352	-0.004	946388401	50.0	49.5	
3 Nitrite as N	5.042	5.040	0.002	112701588	NC	NC	
4 Bromide	6.198	6.157	0.041	17769227	2.50	2.47	
5 Nitrate as N	6.973	6.968	0.005	109724496	NC	NC	
6 Orthophosphate as P	9.208	9.273	-0.065	63777992	NC	NC	
7 Sulfate	10.418	10.543	-0.125	703673552	50.0	51.1	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

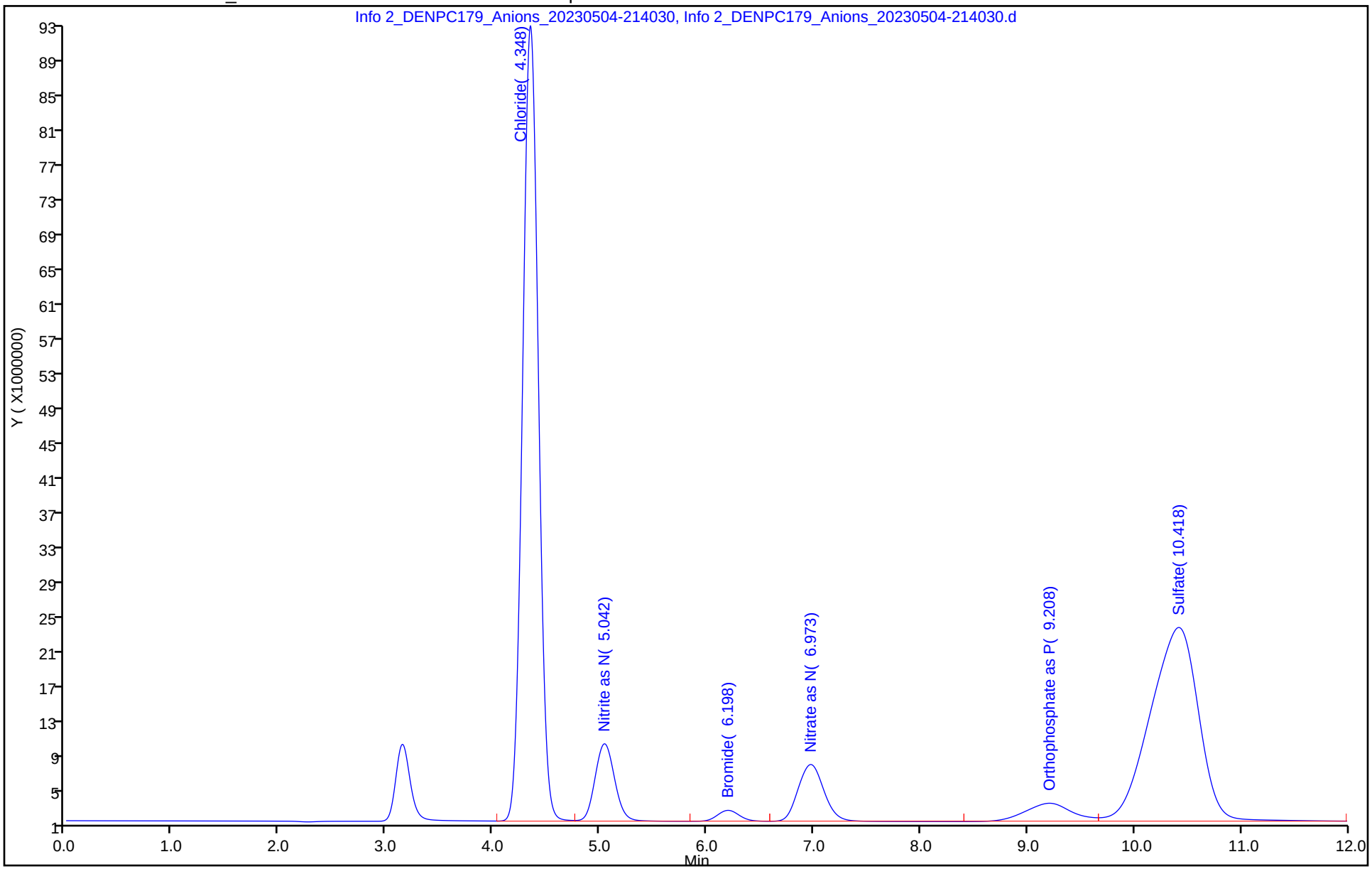
Reagents:

IC LCS_01952 Amount Added: 10.00 Units: mL

Report Date: 05-May-2023 10:37:26 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-214030.d				
Injection Date:	04-May-2023 21:25:00	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		



5/23/2023 8:16 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-215
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 04-May-2023 21:40:00 ALS Bottle#: 0 Worklist Smp#: 30
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121069-030
Misc. Info.: 280-0121069-030
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 05-May-2023 10:37:26 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: CTX1608

First Level Reviewer: XAY4 Date: 05-May-2023 10:33:13

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.152				ND	
2 Chloride		4.352				ND	
3 Nitrite as N		5.040				ND	
4 Bromide	6.018	6.157	-0.139	113981		-0.1239	
5 Nitrate as N		6.968				ND	
6 Orthophosphate as P	9.292	9.273	0.019	7898985		NC	
7 Sulfate	10.477	10.543	-0.066	414079		0.1230	M

QC Flag Legend

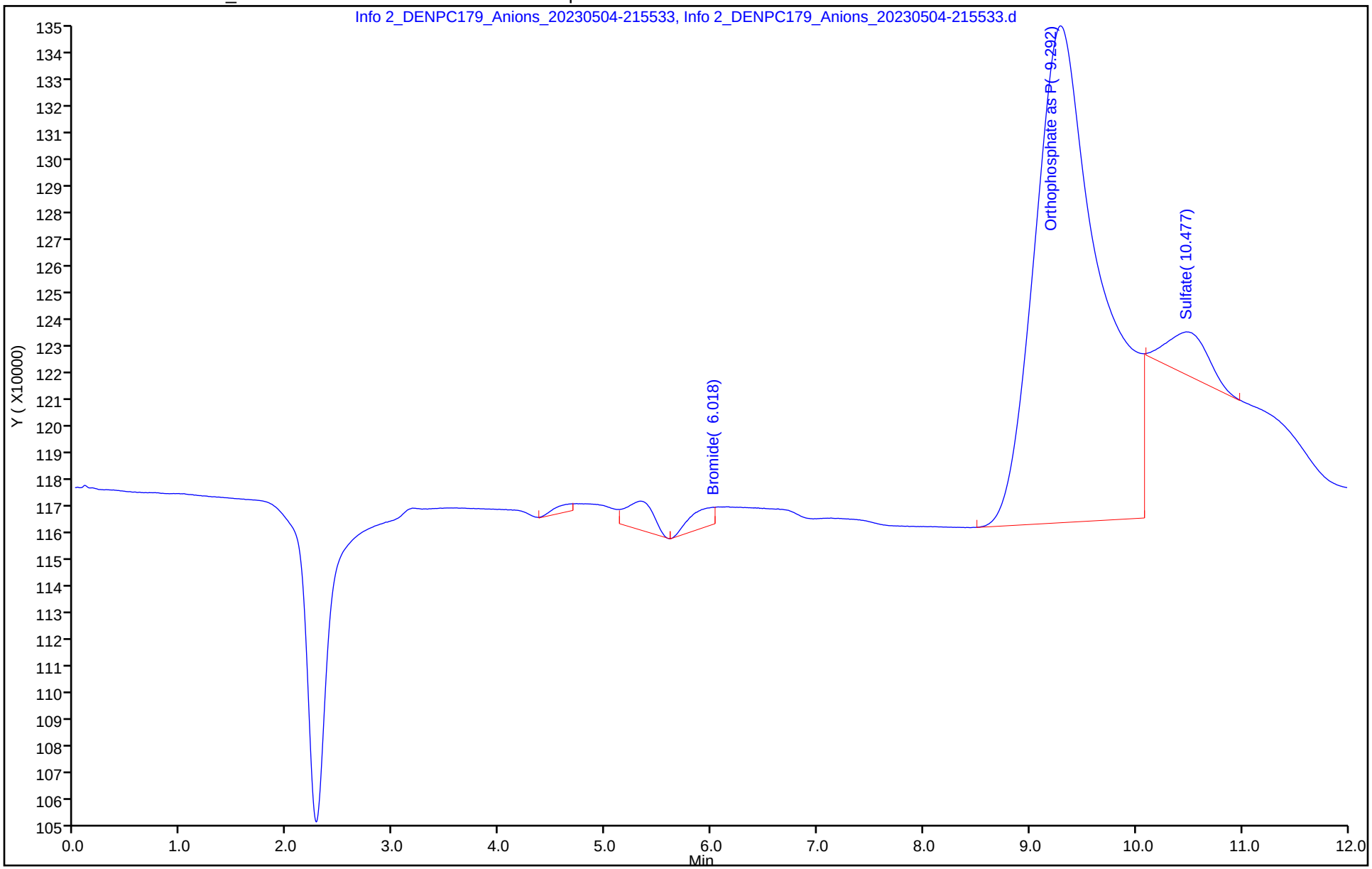
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 05-May-2023 10:37:27 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-215533.d

Injection Date:	04-May-2023 21:40:00	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		



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Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230504-215

Injection Date: 04-May-2023 21:40:00 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

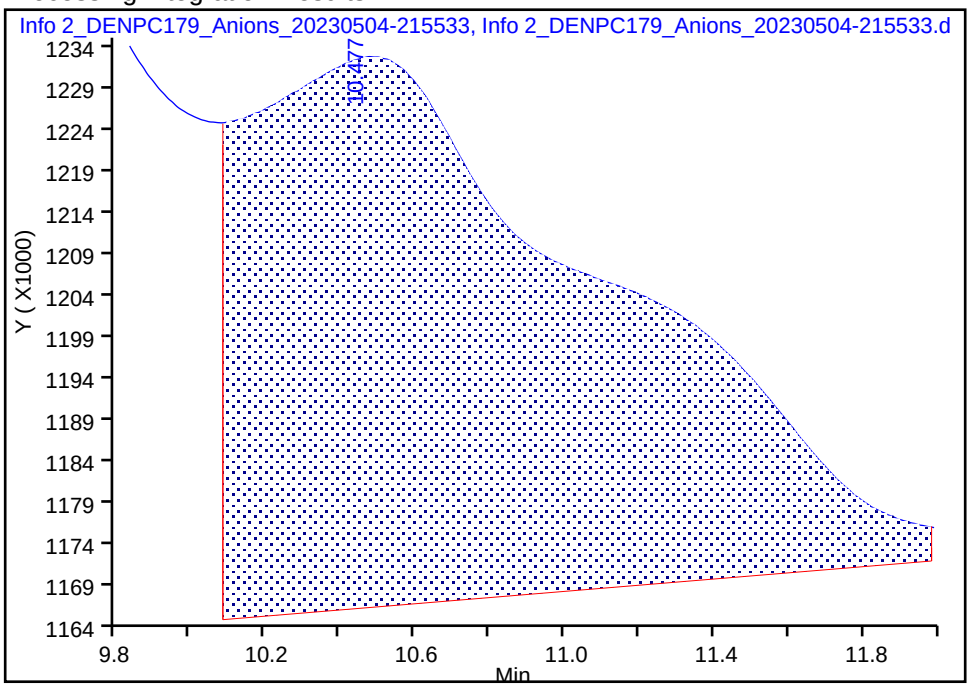
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

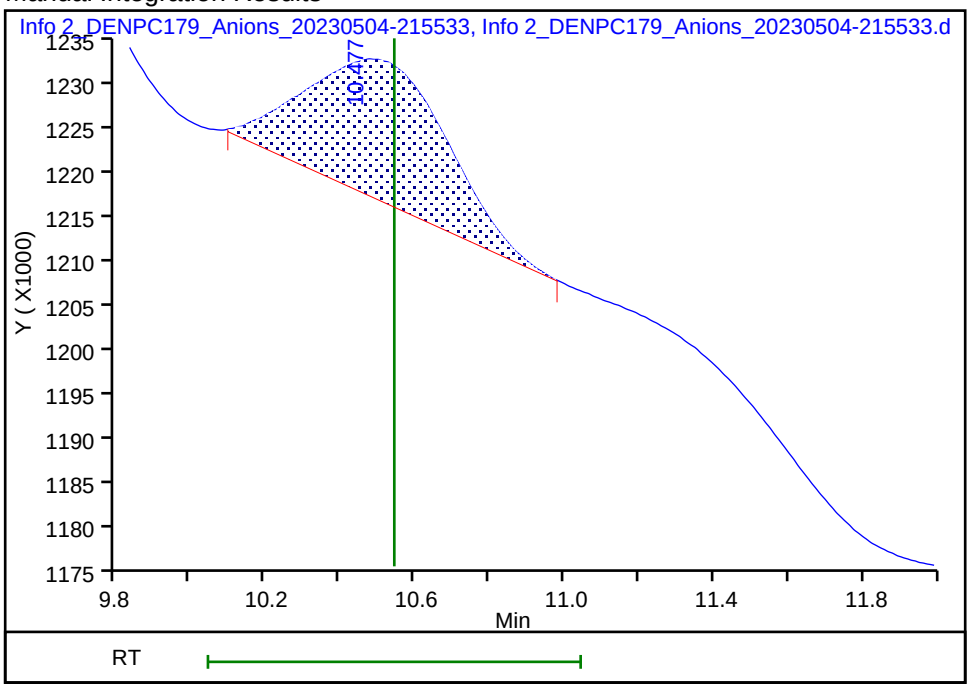
Processing Integration Results

RT: 10.48
Area: 4498652
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 10.48
Area: 414079
Amount: 0.123019
Amount Units: ug/ml



Reviewer: XAY4, 05-May-2023 10:33:09

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230505-004				
Lims ID:	ccv				
Client ID:					
Sample Type:	CCV				
Inject. Date:	05-May-2023 00:25:00	ALS Bottle#:	0	Worklist Smp#:	41
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0121069-041				
Misc. Info.:	280-0121069-041				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Sublist:	chrom-Anions_IC10*sub5				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Anions_IC10.m				
Limit Group:	Wet - Anions 28D				
Last Update:	05-May-2023 10:37:33	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:	CTX1608				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.152			ND	ND	
2 Chloride	4.348	4.352	-0.004	942613770	50.0	49.3	
3 Nitrite as N	5.043	5.040	0.003	112217819	NC	NC	
4 Bromide	6.213	6.157	0.056	17621806	2.50	2.44	
5 Nitrate as N	6.985	6.968	0.017	108839613	NC	NC	
6 Orthophosphate as P	9.237	9.273	-0.036	72396196	NC	NC	
7 Sulfate	10.428	10.543	-0.115	709594813	50.0	51.5	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

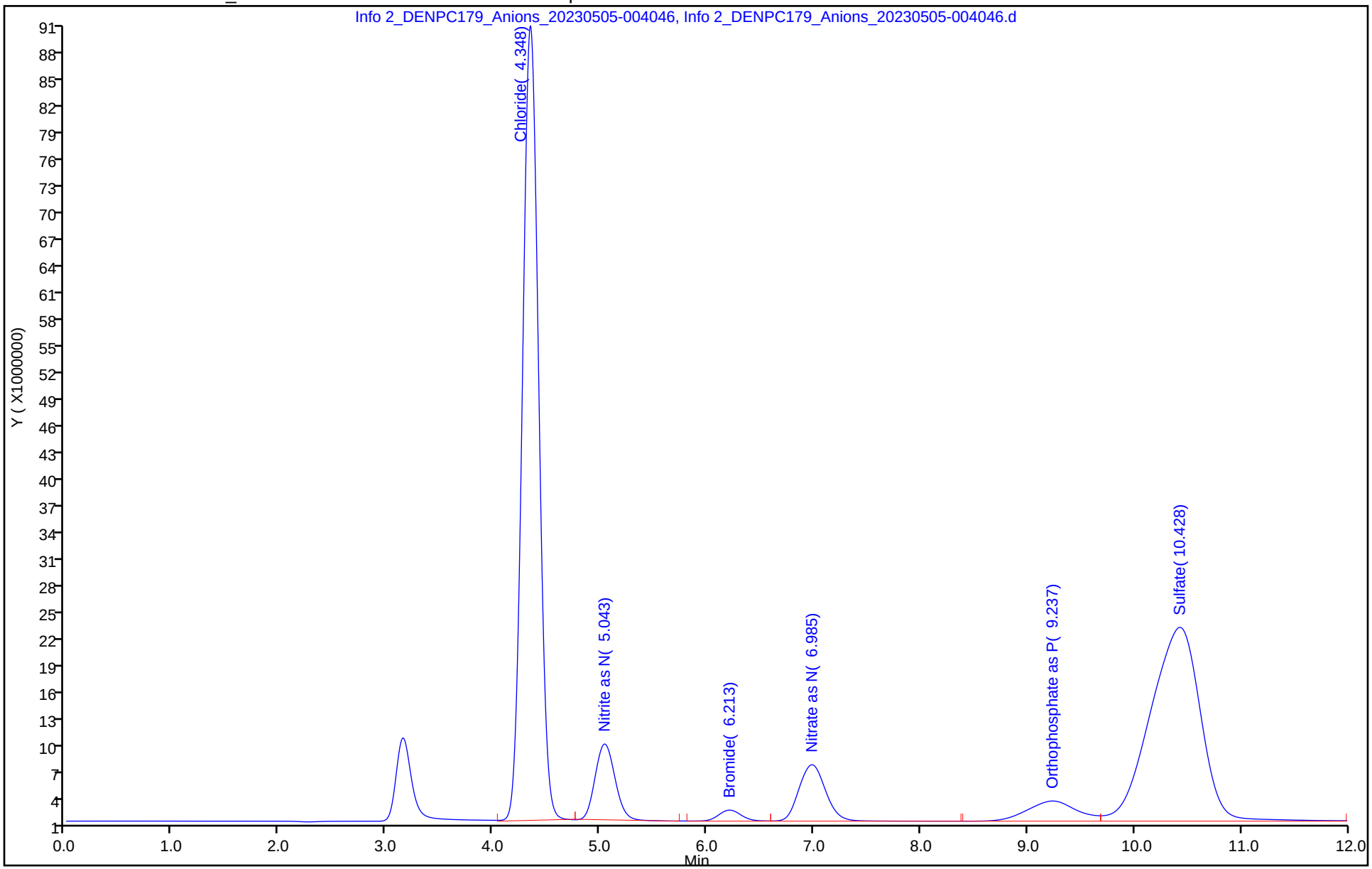
Reagents:

IC LCS_01952 Amount Added: 10.00 Units: mL

Report Date: 05-May-2023 10:37:33 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230505-004046.d				
Injection Date:	05-May-2023 00:25:00	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		



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Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230505-005				
Lims ID:	ccb				
Client ID:					
Sample Type:	CCB				
Inject. Date:	05-May-2023 00:40:00	ALS Bottle#:	0	Worklist Smp#:	42
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0121069-042				
Misc. Info.:	280-0121069-042				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Anions_IC10.m				
Limit Group:	Wet - Anions 28D				
Last Update:	05-May-2023 10:37:33	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:	CTX1608				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.152				ND	
2 Chloride		4.352				ND	
3 Nitrite as N		5.040				ND	
4 Bromide	6.135	6.157	-0.022	189462		-0.1128	
5 Nitrate as N		6.968				ND	
6 Orthophosphate as P	9.293	9.273	0.020	25125315		NC	
7 Sulfate		10.543				ND	

QC Flag Legend

Processing Flags

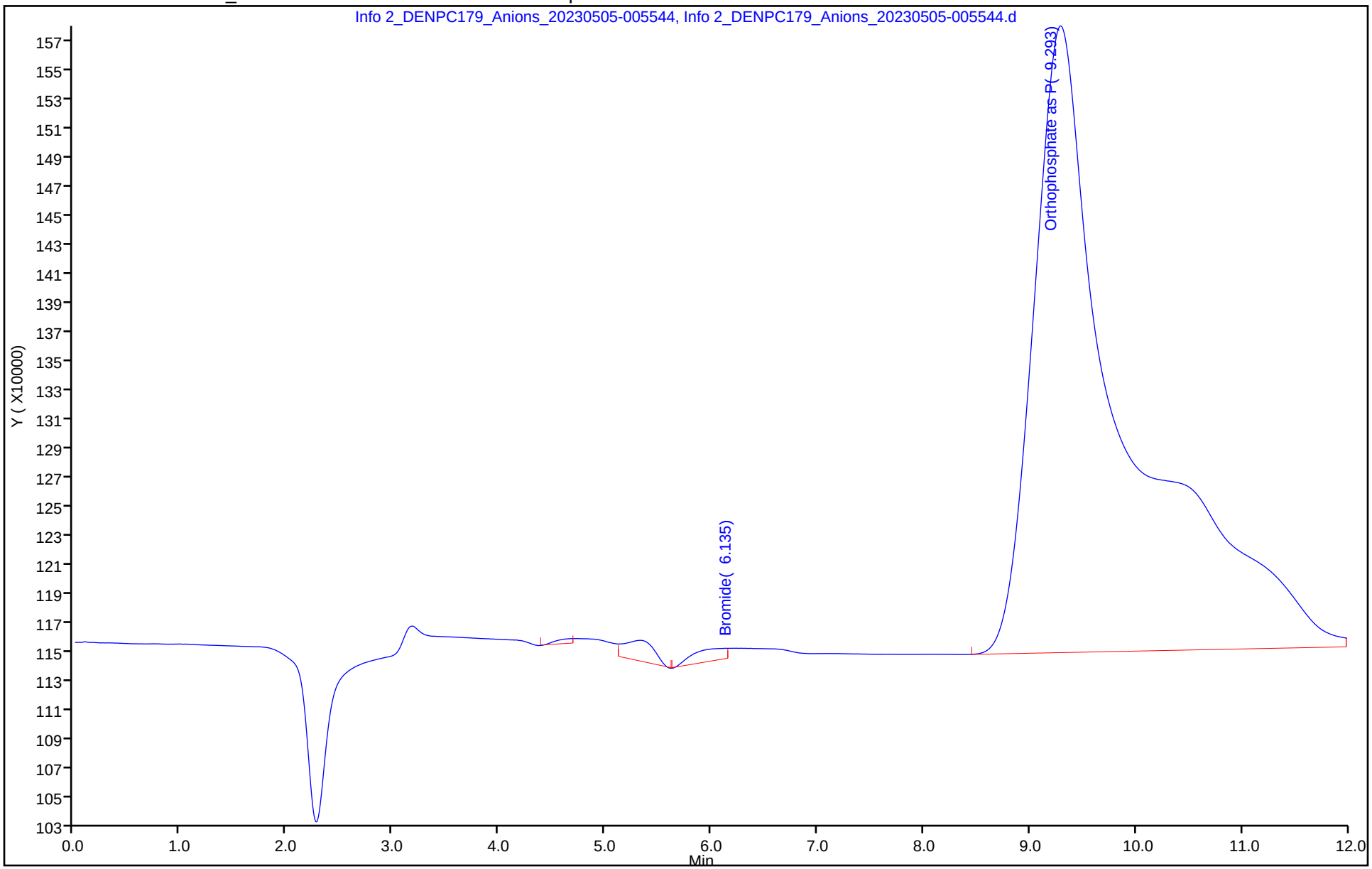
NC - Not Calibrated

Report Date: 05-May-2023 10:37:34 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230504-121069.b\Info 2_DENPC179_Anions_20230505-005544.d

Injection Date:	05-May-2023 00:40:00	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		



5/23/2023 8:16 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120028-002280-0120083-001_03_E
Lims ID: STD L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 03-Apr-2023 16:42:00 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0120028-002280-0120083-001
Misc. Info.: STD L1
Operator ID: Instrument ID: WC_IonChrom15
Sublist: chrom-IC_15 Anions*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\IC_15 Anions.m
Limit Group: Wet - Anions 28D
Last Update: 04-Apr-2023 11:17:57 Calib Date: 03-Apr-2023 17:42:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-006_08_ECD_1.d

Column 1 : Ion Pac AS18 - Fast (0.00 mm) Det: 0005
Process Host: CTX1646

First Level Reviewer: XAY4 Date: 04-Apr-2023 10:07:06

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		1.920				ND	U
2 Chloride	2.700	2.700	0.000	1651846	0.5000	0.6109	M
3 Nitrite as N		3.230				ND	M
4 Bromide		3.823				ND	U
5 Nitrate as N		4.297				ND	U
7 Orthophosphate as P		5.763				ND	U
6 Sulfate	6.540	6.540	0.000	1025703	0.5000	0.6073	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Reagents:

IC CAL cl/so4_00473 Amount Added: 0.04 Units: mL
IC Cal low_00701 Amount Added: 0.00 Units: mL

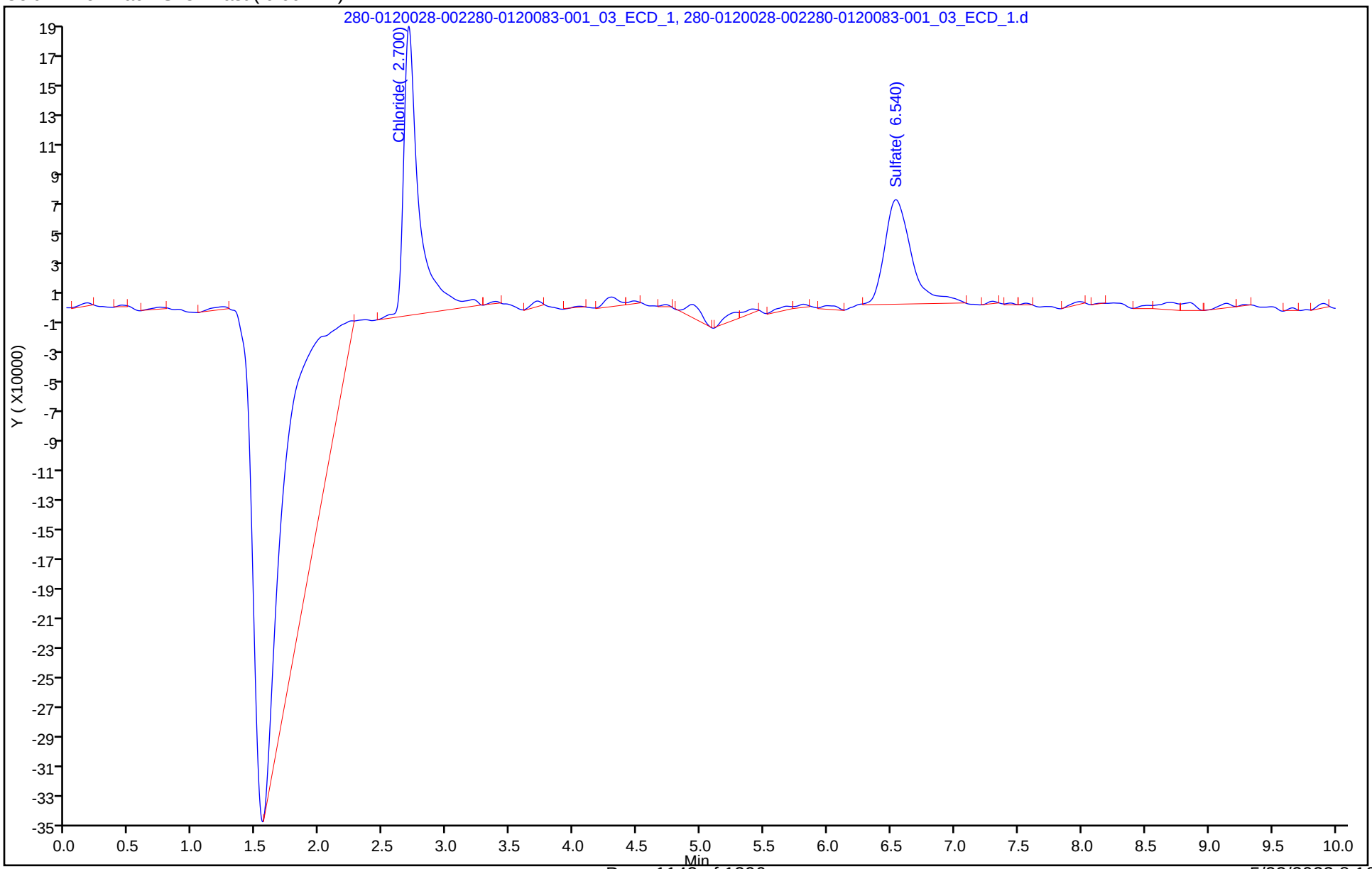
Report Date: 04-Apr-2023 11:17:57 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120028-002280-0120083-001_03_ECD_1.d

Injection Date:	03-Apr-2023 16:42:00	Instrument ID:	WC_IonChrom15	Operator ID:	
Lims ID:	STD L1			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	IC_15 Anions	Limit Group:	Wet - Anions 28D		

Column: Ion Pac AS18 - Fast (0.00 mm)



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Manual Integration/User Assign Peak Report

Eurofins Denver

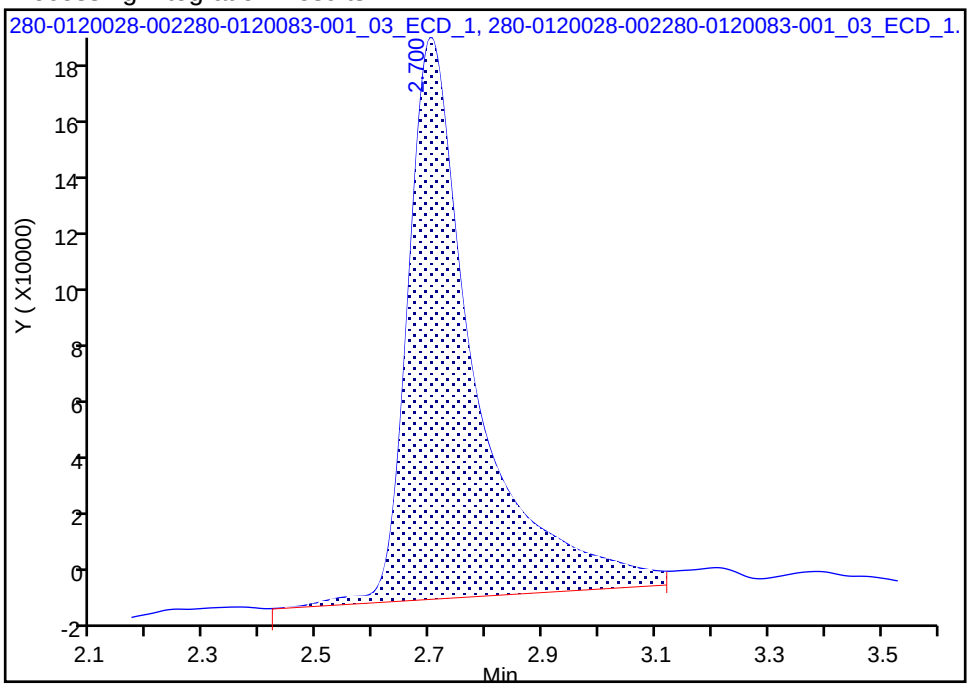
Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120028-002280-0120083-001_03_E
Injection Date: 03-Apr-2023 16:42:00 Instrument ID: WC_IonChrom15
Lims ID: STD L1
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: IC_15 Anions Limit Group: Wet - Anions 28D
Column: Ion Pac AS18 - Fast (0.00 mm) Detector 0005

2 Chloride, CAS: 16887-00-6

Signal: 1

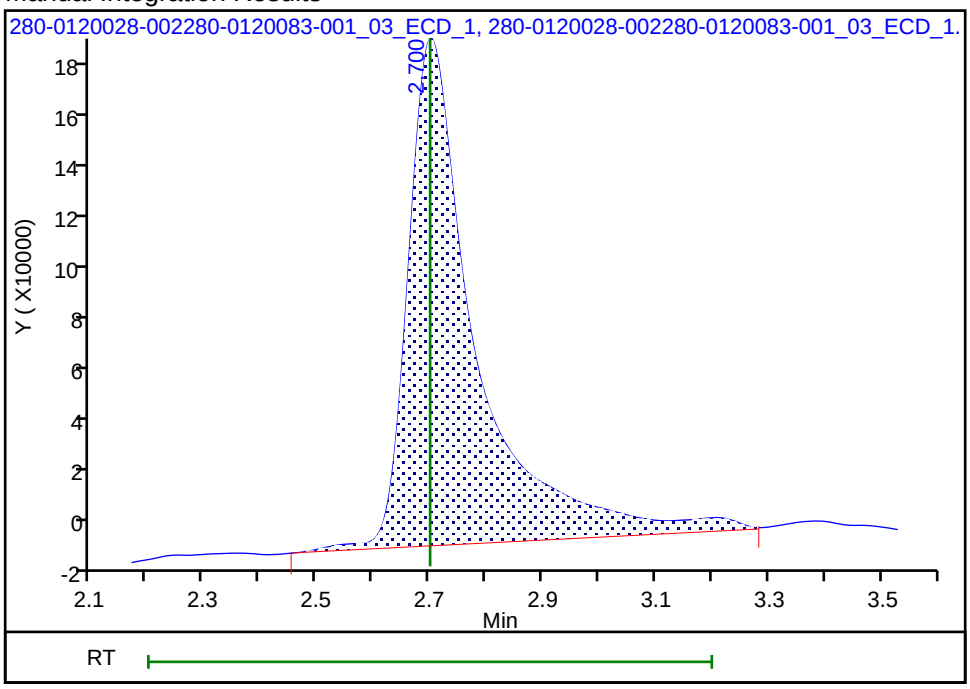
Processing Integration Results

RT: 2.70
Area: 1622548
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 2.70
Area: 1651846
Amount: 0.610935
Amount Units: ug/ml



Reviewer: XAY4, 04-Apr-2023 10:06:44
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

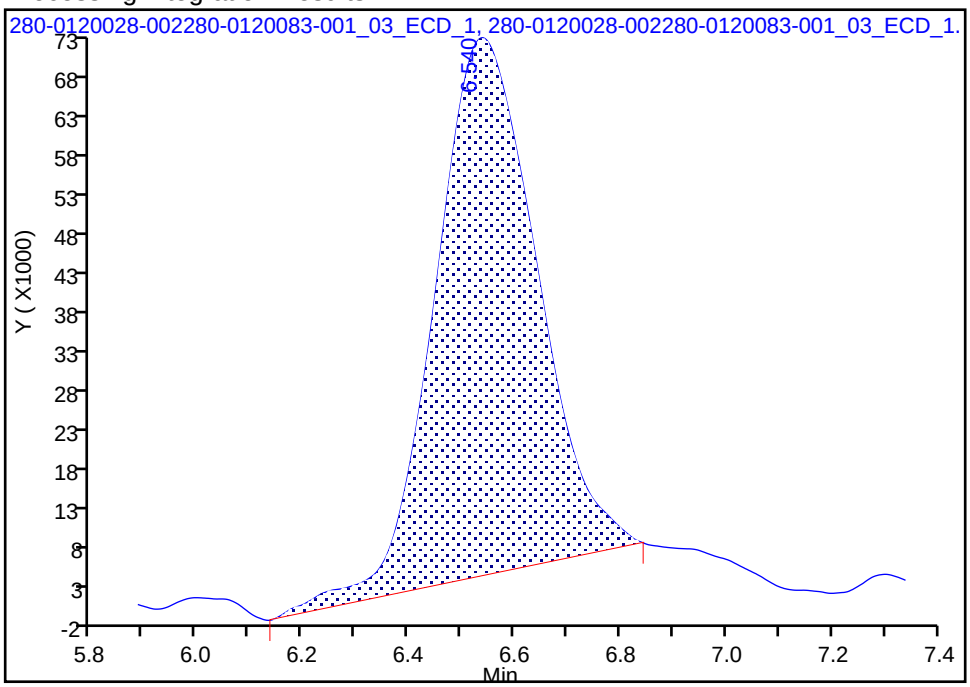
Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120028-002280-0120083-001_03_E
Injection Date: 03-Apr-2023 16:42:00 Instrument ID: WC_IonChrom15
Lims ID: STD L1
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: IC_15 Anions Limit Group: Wet - Anions 28D
Column: Ion Pac AS18 - Fast (0.00 mm) Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

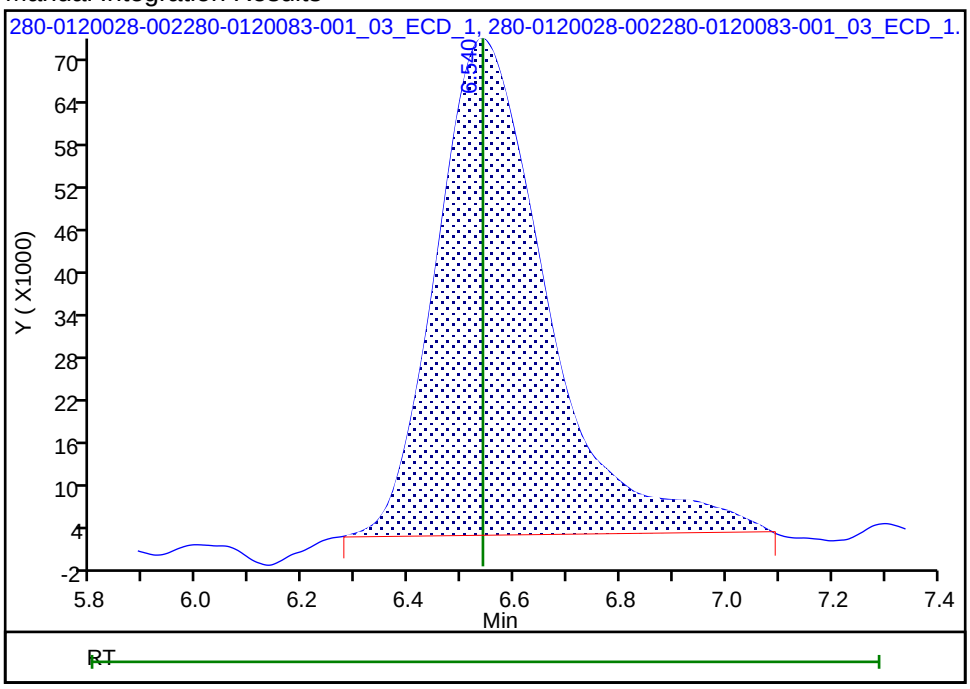
Processing Integration Results

RT: 6.54
Area: 926322
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 6.54
Area: 1025703
Amount: 0.607346
Amount Units: ug/ml



Reviewer: XAY4, 04-Apr-2023 10:07:02
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-002_04_ECD_1.d
Lims ID: STD L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 03-Apr-2023 16:54:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0120083-002
Misc. Info.: STD L2
Operator ID: Instrument ID: WC_IonChrom15
Sublist: chrom-IC_15 Anions*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\IC_15 Anions.m
Limit Group: Wet - Anions 28D
Last Update: 04-Apr-2023 11:17:57 Calib Date: 03-Apr-2023 17:42:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-006_08_ECD_1.d

Column 1 : Ion Pac AS18 - Fast (0.00 mm) Det: 0005
Process Host: CTX1646

First Level Reviewer: XAY4 Date: 04-Apr-2023 10:07:29

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	1.927	1.927	0.000	514755	0.2000	0.2028	Ma
2 Chloride	2.700	2.700	0.000	4009670	1.25	1.22	M
3 Nitrite as N	3.230	3.230	0.000	1566723	NC	NC	M
4 Bromide	3.833	3.833	0.000	220121	0.2000	0.2066	
5 Nitrate as N	4.303	4.303	0.000	1304923	NC	NC	
7 Orthophosphate as P	5.760	5.760	0.000	446882	NC	NC	
6 Sulfate	6.540	6.540	0.000	2443469	1.25	1.14	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

IC CAL cl/so4_00473 Amount Added: 0.10 Units: mL
IC Cal low_00701 Amount Added: 0.08 Units: mL

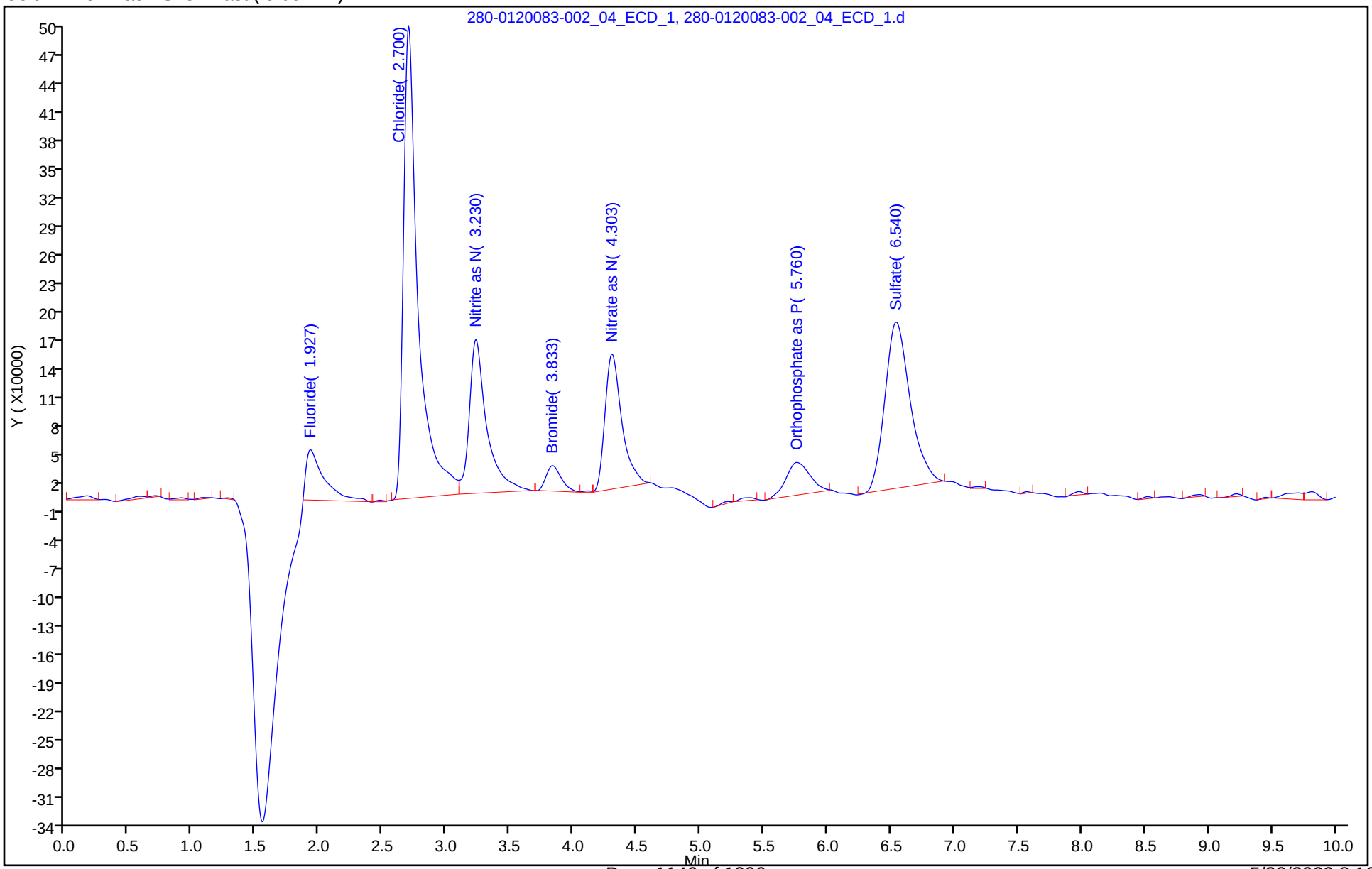
Report Date: 04-Apr-2023 11:17:58 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-002_04_ECD_1.d

Injection Date:	03-Apr-2023 16:54:00	Instrument ID:	WC_IonChrom15	Operator ID:	
Lims ID:	STD L2			Worklist Smp#:	2
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	IC_15 Anions	Limit Group:	Wet - Anions 28D		

Column: Ion Pac AS18 - Fast (0.00 mm)



5/23/2023 8:16 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

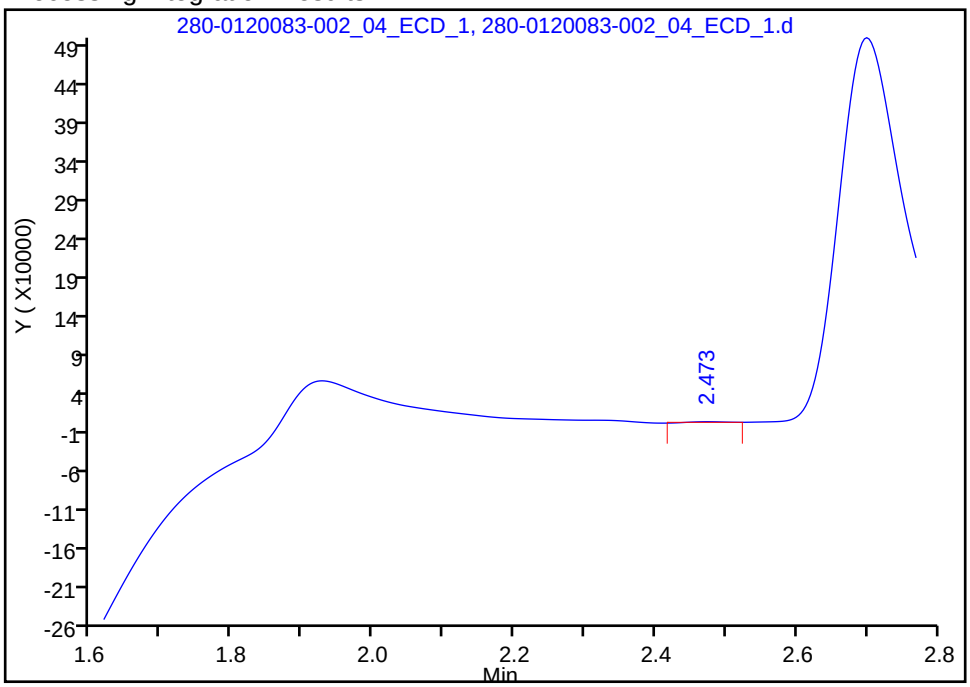
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-002_04_ECD_1.d				
Injection Date:	03-Apr-2023 16:54:00	Instrument ID:	WC_IonChrom15		
Lims ID:	STD L2				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	2
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	IC_15 Anions	Limit Group:	Wet - Anions 28D		
Column:	Ion Pac AS18 - Fast (0.00 mm)	Detector	0005		

1 Fluoride, CAS: 16984-48-8

Signal: 1

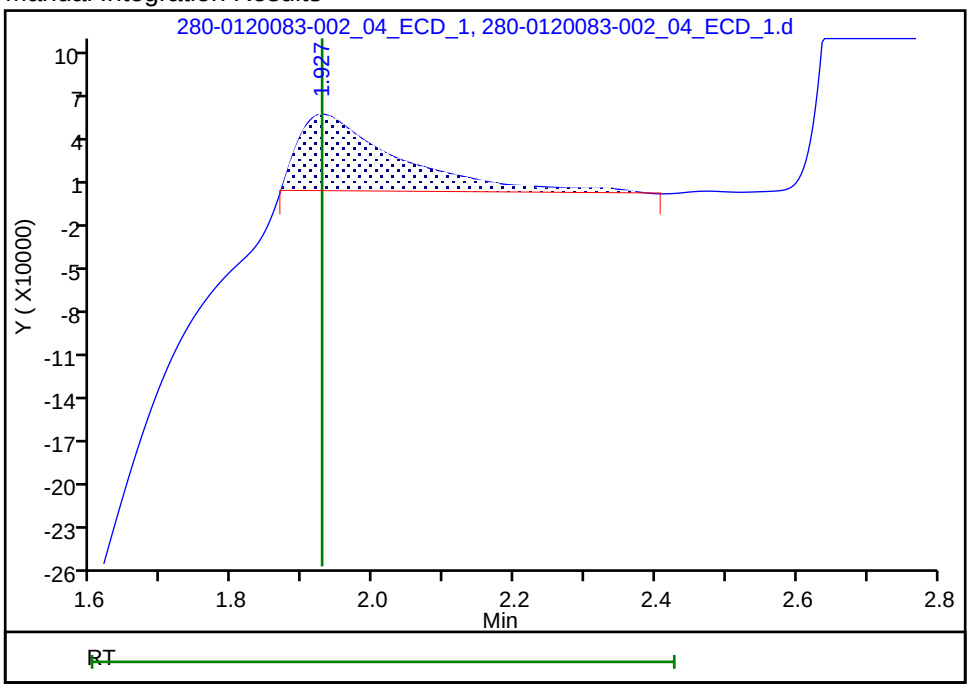
RT: 2.47
Area: 4318
Amount: 0
Amount Units: ug/ml

Processing Integration Results



RT: 1.93
Area: 514755
Amount: 0.202821
Amount Units: ug/ml

Manual Integration Results



Reviewer: XAY4, 04-Apr-2023 10:07:17

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

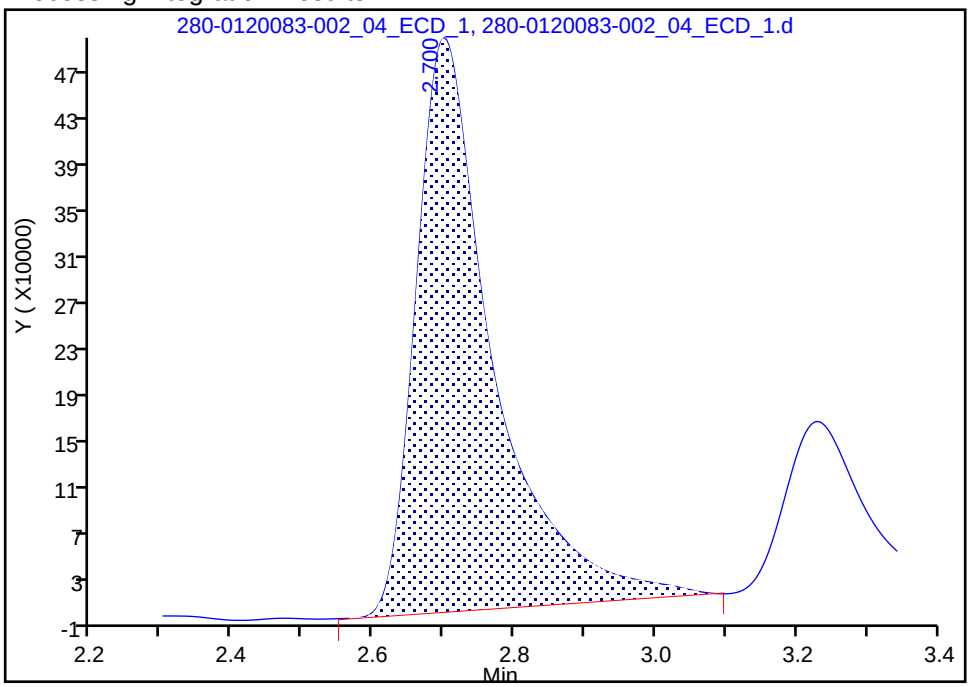
Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-002_04_ECD_1.d
Injection Date: 03-Apr-2023 16:54:00 Instrument ID: WC_IonChrom15
Lims ID: STD L2
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: IC_15 Anions Limit Group: Wet - Anions 28D
Column: Ion Pac AS18 - Fast (0.00 mm) Detector 0005

2 Chloride, CAS: 16887-00-6

Signal: 1

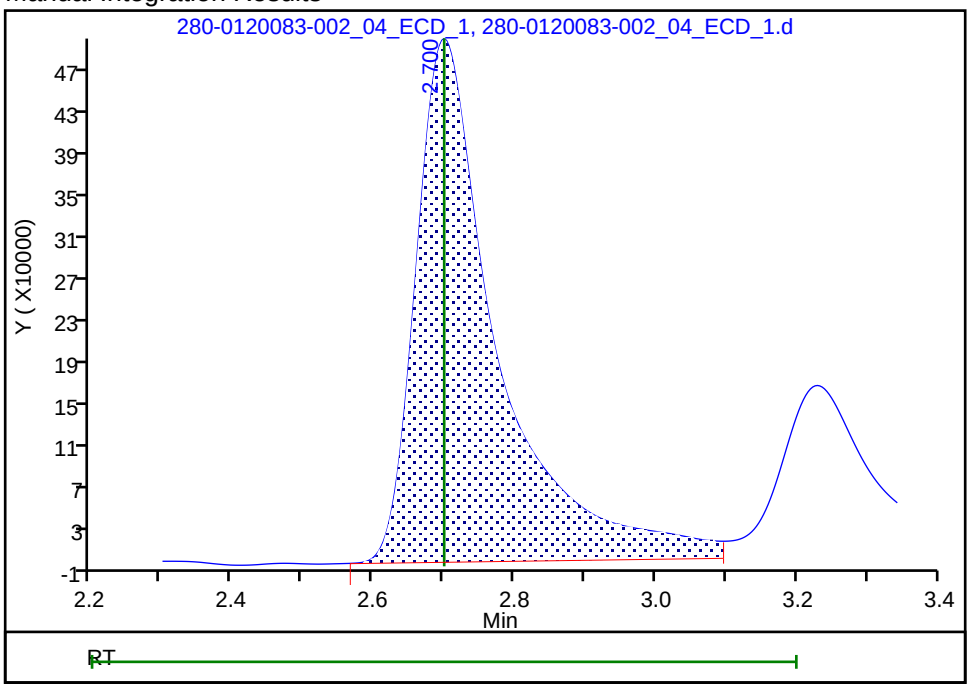
Processing Integration Results

RT: 2.70
Area: 3768322
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 2.70
Area: 4009670
Amount: 1.216005
Amount Units: ug/ml



Reviewer: XAY4, 04-Apr-2023 10:09:23
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-003_05_ECD_1.d
Lims ID: STD L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 03-Apr-2023 17:06:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0120083-003
Misc. Info.: STD L3
Operator ID: Instrument ID: WC_IonChrom15
Sublist: chrom-IC_15 Anions*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\IC_15 Anions.m
Limit Group: Wet - Anions 28D
Last Update: 04-Apr-2023 11:17:58 Calib Date: 03-Apr-2023 17:42:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-006_08_ECD_1.d

Column 1 : Ion Pac AS18 - Fast (0.00 mm) Det: 0005
Process Host: CTX1646

First Level Reviewer: XAY4 Date: 04-Apr-2023 10:07:49

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	1.923	1.923	0.000	1716859	0.5000	0.4463	M
2 Chloride	2.700	2.700	0.000	7890362	2.50	2.21	M
3 Nitrite as N	3.230	3.230	0.000	3703597	NC	NC	M
4 Bromide	3.830	3.830	0.000	543772	0.5000	0.4965	
5 Nitrate as N	4.303	4.303	0.000	3752523	NC	NC	
7 Orthophosphate as P	5.767	5.767	0.000	1406263	NC	NC	
6 Sulfate	6.543	6.543	0.000	5485179	2.50	2.29	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

IC CAL cl/so4_00473 Amount Added: 0.20 Units: mL
IC Cal low_00701 Amount Added: 0.20 Units: mL

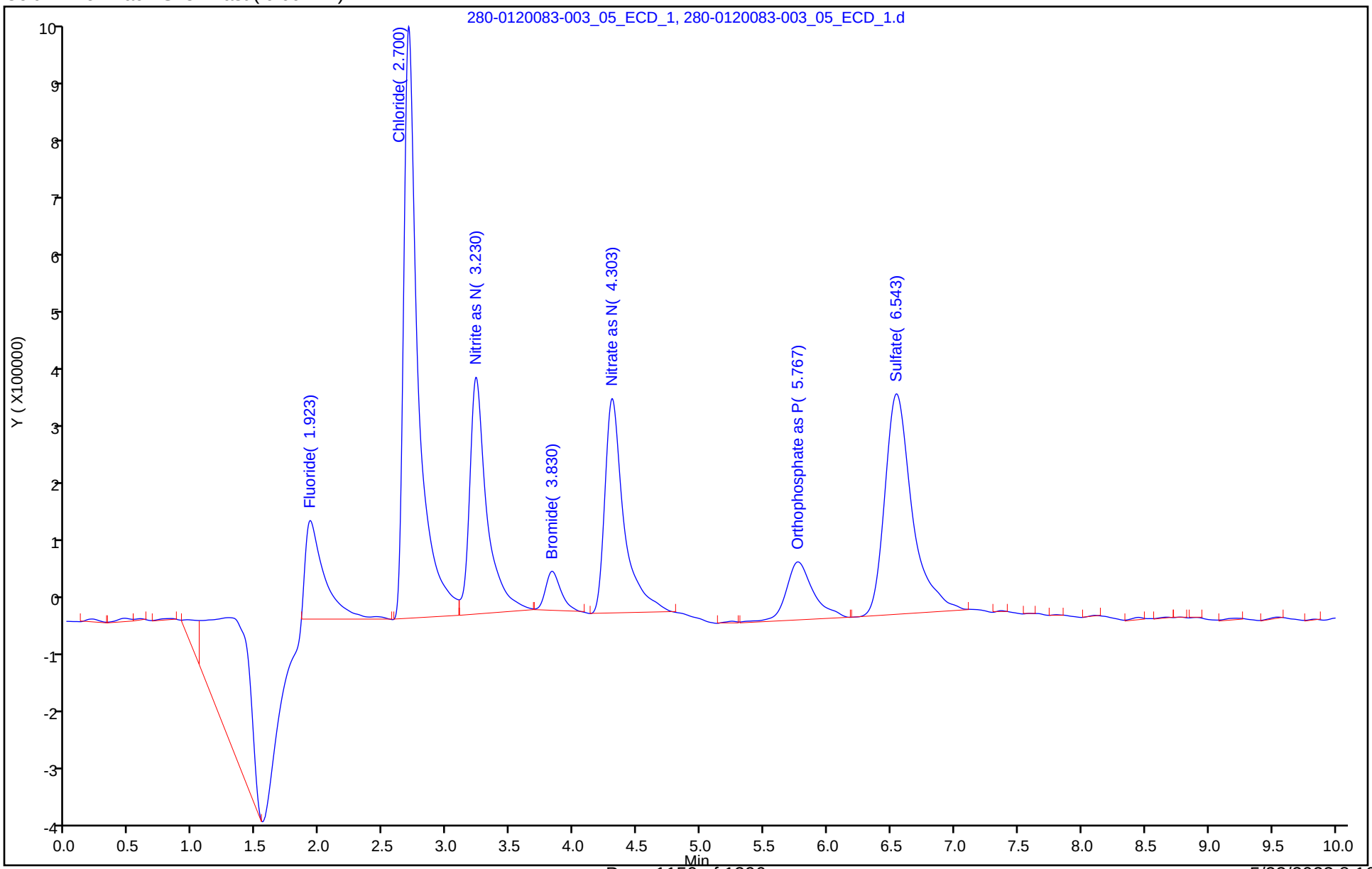
Report Date: 04-Apr-2023 11:17:58 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-003_05_ECD_1.d

Injection Date:	03-Apr-2023 17:06:00	Instrument ID:	WC_IonChrom15	Operator ID:	
Lims ID:	STD L3			Worklist Smp#:	3
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	IC_15 Anions	Limit Group:	Wet - Anions 28D		

Column: Ion Pac AS18 - Fast (0.00 mm)



5/23/2023 8:16 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

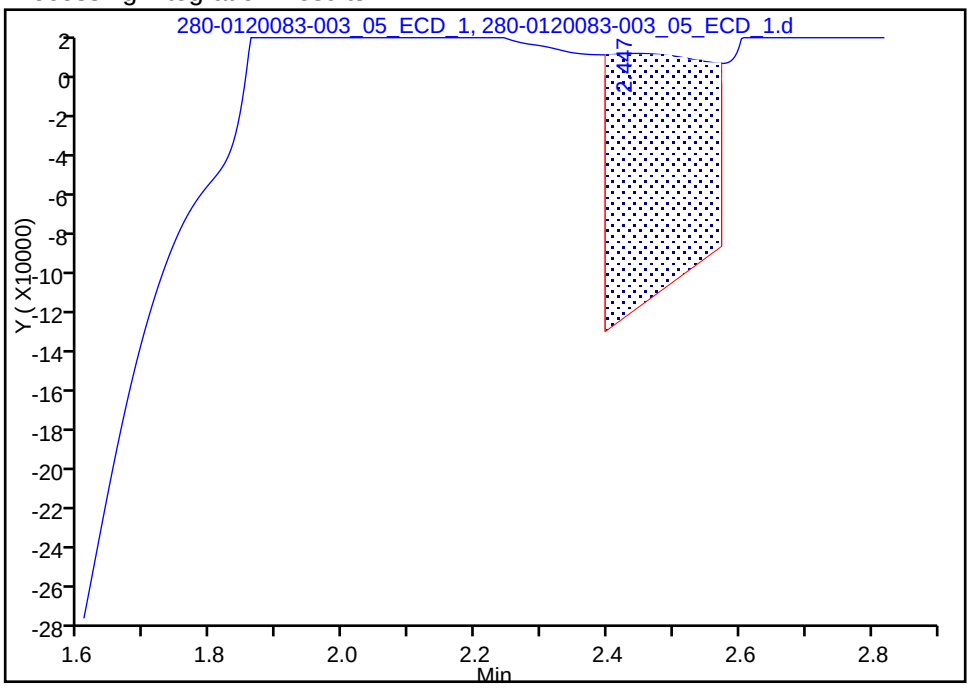
Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-003_05_ECD_1.d
Injection Date: 03-Apr-2023 17:06:00 Instrument ID: WC_IonChrom15
Lims ID: STD L3
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: IC_15 Anions Limit Group: Wet - Anions 28D
Column: Ion Pac AS18 - Fast (0.00 mm) Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

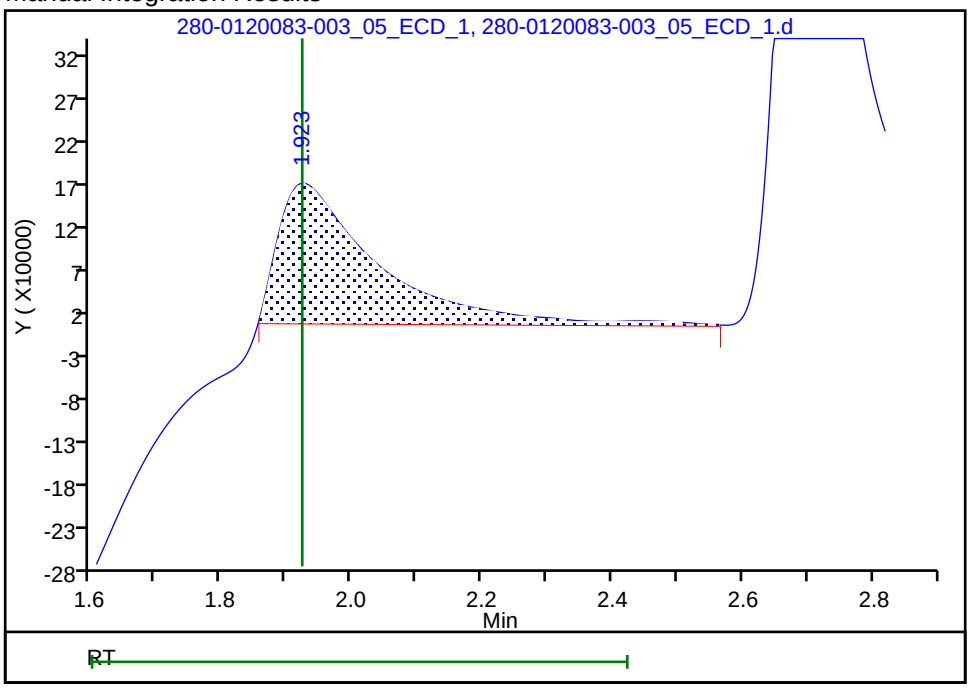
Processing Integration Results

RT: 2.45
Area: 1236234
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 1.92
Area: 1716859
Amount: 0.446324
Amount Units: ug/ml



Reviewer: XAY4, 04-Apr-2023 10:07:36
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

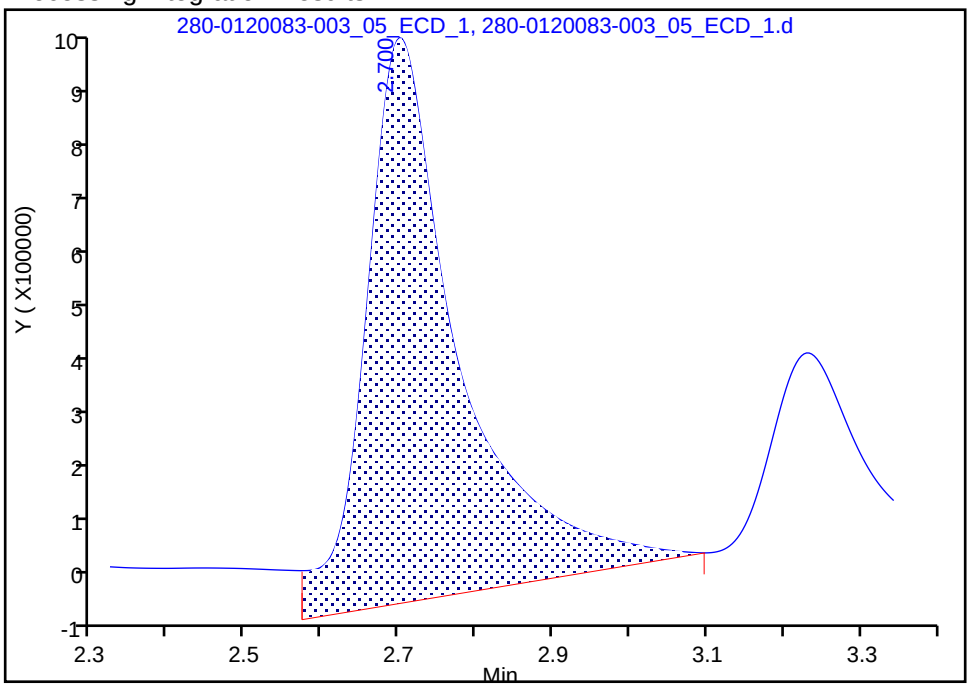
Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-003_05_ECD_1.d
Injection Date: 03-Apr-2023 17:06:00 Instrument ID: WC_IonChrom15
Lims ID: STD L3
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: IC_15 Anions Limit Group: Wet - Anions 28D
Column: Ion Pac AS18 - Fast (0.00 mm) Detector 0005

2 Chloride, CAS: 16887-00-6

Signal: 1

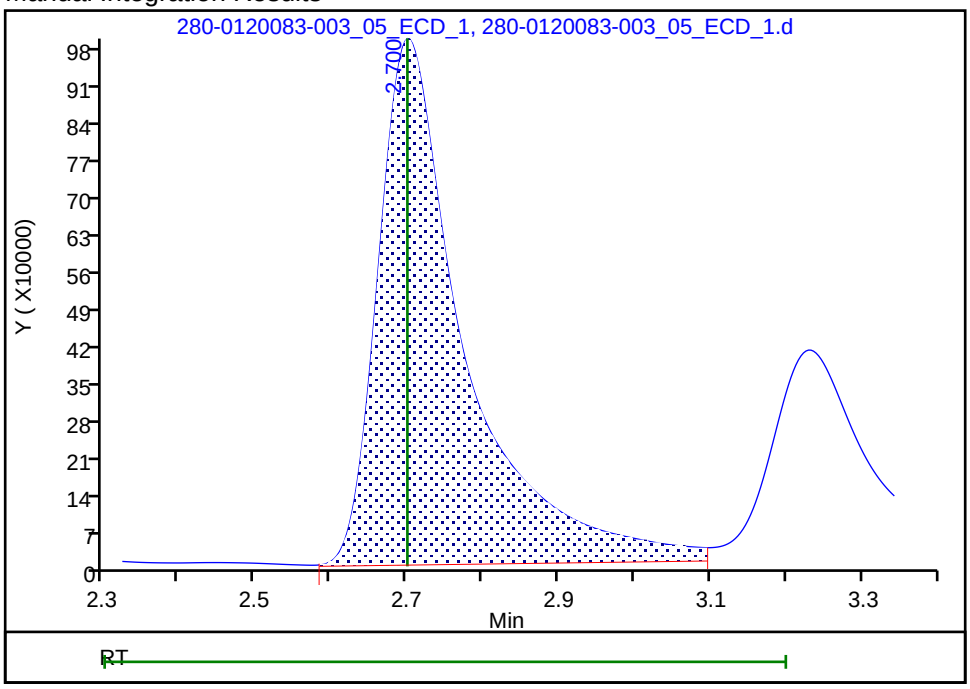
Processing Integration Results

RT: 2.70
Area: 8952138
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 2.70
Area: 7890362
Amount: 2.211878
Amount Units: ug/ml



Reviewer: XAY4, 04-Apr-2023 10:09:49
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-004_06_ECD_1.d
Lims ID: STD L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 03-Apr-2023 17:18:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0120083-004
Misc. Info.: STD L4
Operator ID: Instrument ID: WC_IonChrom15
Sublist: chrom-IC_15 Anions*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\IC_15 Anions.m
Limit Group: Wet - Anions 28D
Last Update: 04-Apr-2023 11:17:59 Calib Date: 03-Apr-2023 17:42:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-006_08_ECD_1.d

Column 1 : Ion Pac AS18 - Fast (0.00 mm) Det: 0005
Process Host: CTX1646

First Level Reviewer: XAY4 Date: 04-Apr-2023 10:08:06

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	1.920	1.920	0.000	5002458	1.00	1.11	Ma
2 Chloride	2.703	2.703	0.000	104633916	30.0	27.0	M
3 Nitrite as N	3.227	3.227	0.000	9946553	NC	NC	Ma
4 Bromide	3.827	3.827	0.000	1082846	1.00	0.9794	
5 Nitrate as N	4.300	4.300	0.000	7262541	NC	NC	
7 Orthophosphate as P	5.763	5.763	0.000	2563153	NC	NC	
6 Sulfate	6.550	6.550	0.000	75166700	30.0	28.5	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

IC CAL cl/so4_00473 Amount Added: 2.40 Units: mL
IC Cal low_00701 Amount Added: 0.40 Units: mL

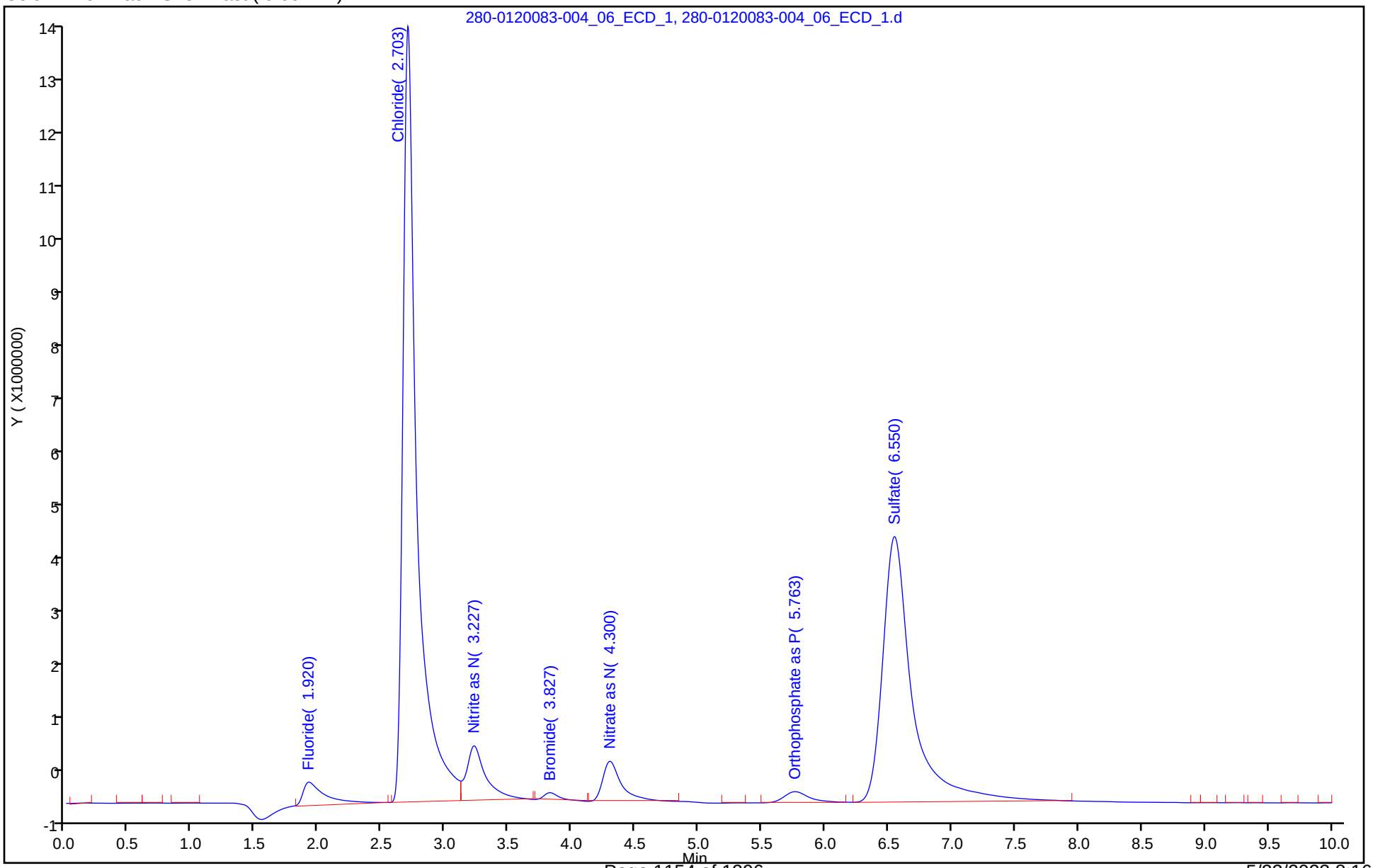
Report Date: 04-Apr-2023 11:17:59 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-004_06_ECD_1.d

Injection Date:	03-Apr-2023 17:18:00	Instrument ID:	WC_IonChrom15	Operator ID:	
Lims ID:	STD L4			Worklist Smp#:	4
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	IC_15 Anions	Limit Group:	Wet - Anions 28D		

Column: Ion Pac AS18 - Fast (0.00 mm)



5/23/2023 8:16 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

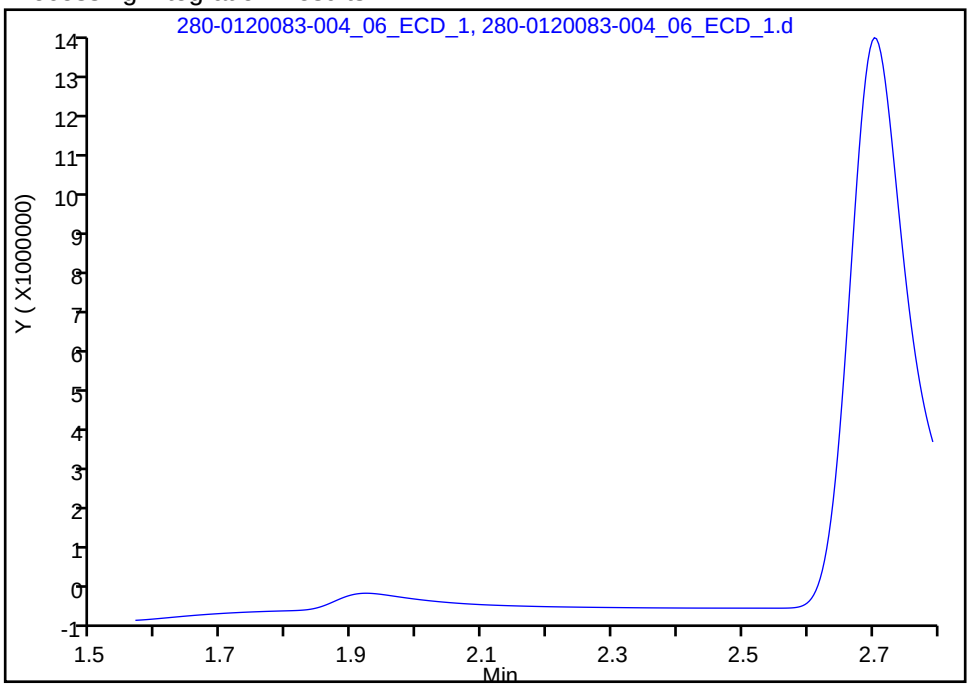
Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-004_06_ECD_1.d
Injection Date: 03-Apr-2023 17:18:00 Instrument ID: WC_IonChrom15
Lims ID: STD L4
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: IC_15 Anions Limit Group: Wet - Anions 28D
Column: Ion Pac AS18 - Fast (0.00 mm) Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

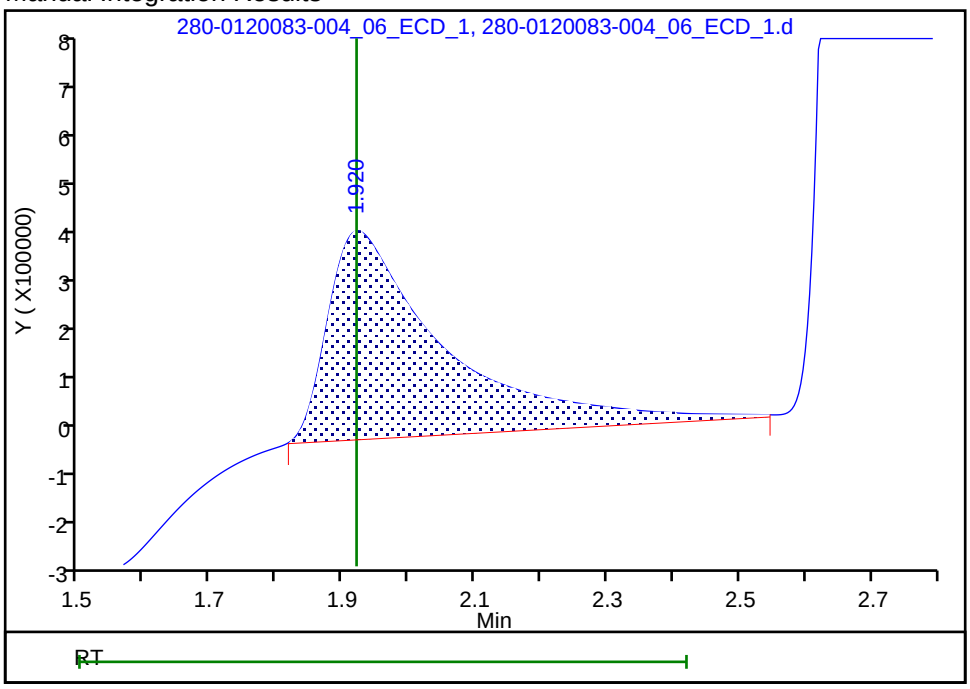
Not Detected
Expected RT: 1.92

Processing Integration Results



Manual Integration Results

RT: 1.92
Area: 5002458
Amount: 1.111870
Amount Units: ug/ml



Reviewer: XAY4, 04-Apr-2023 10:07:59
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

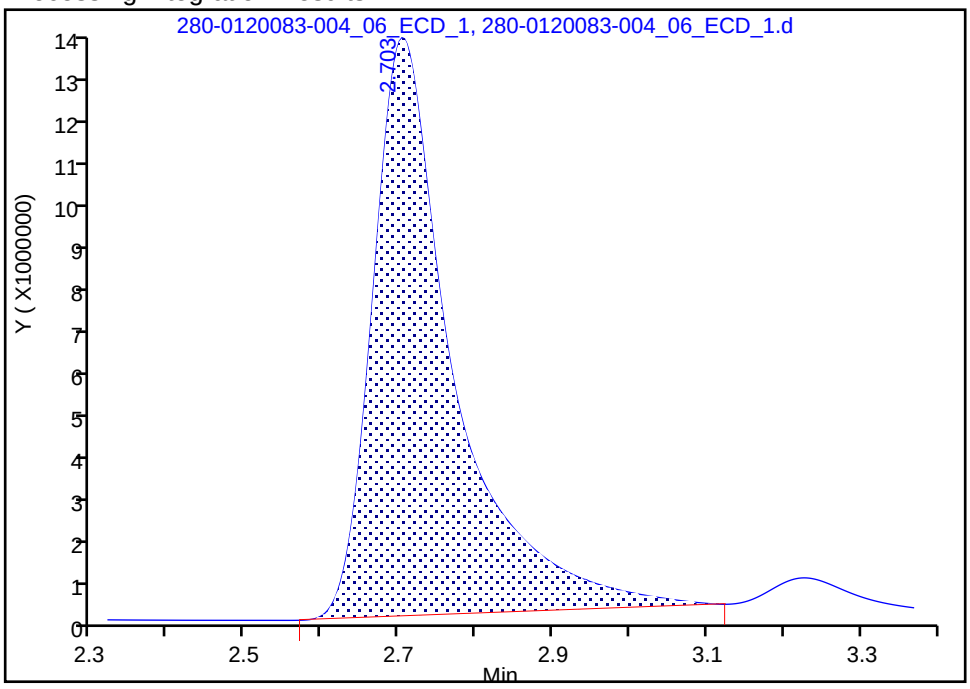
Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-004_06_ECD_1.d
Injection Date: 03-Apr-2023 17:18:00 Instrument ID: WC_IonChrom15
Lims ID: STD L4
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: IC_15 Anions Limit Group: Wet - Anions 28D
Column: Ion Pac AS18 - Fast (0.00 mm) Detector 0005

2 Chloride, CAS: 16887-00-6

Signal: 1

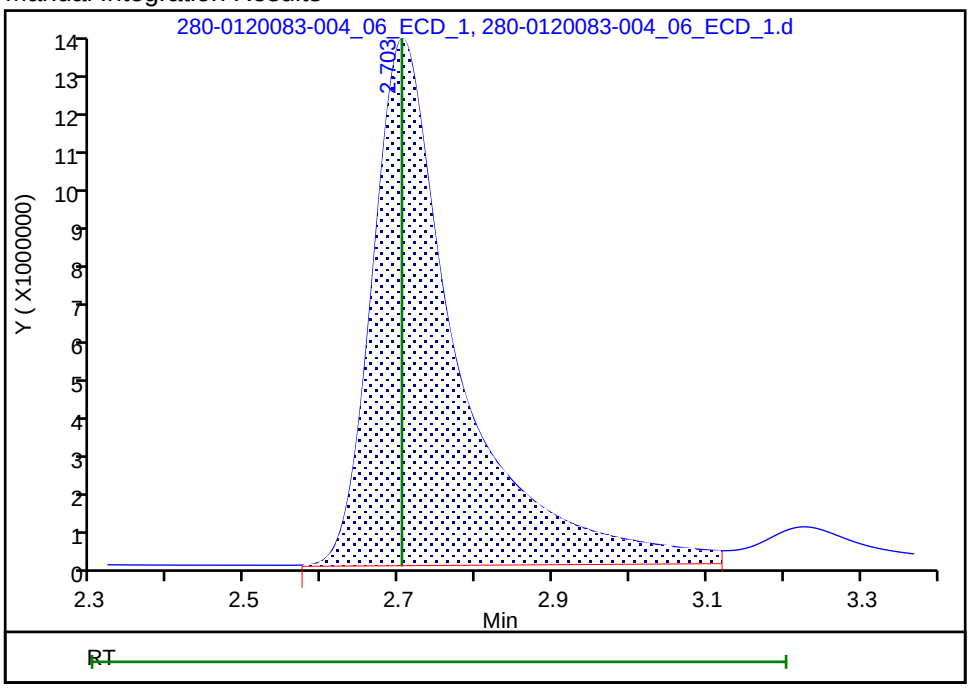
Processing Integration Results

RT: 2.70
Area: 99363161
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 2.70
Area: 104633916
Amount: 27.038454
Amount Units: ug/ml



Reviewer: XAY4, 04-Apr-2023 10:10:01
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-005_07_ECD_1.d
Lims ID: STD L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 03-Apr-2023 17:30:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0120083-005
Misc. Info.: STD L5
Operator ID: Instrument ID: WC_IonChrom15
Sublist: chrom-IC_15 Anions*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\IC_15 Anions.m
Limit Group: Wet - Anions 28D
Last Update: 04-Apr-2023 11:17:59 Calib Date: 03-Apr-2023 17:42:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-006_08_ECD_1.d

Column 1 : Ion Pac AS18 - Fast (0.00 mm) Det: 0005
Process Host: CTX1646

First Level Reviewer: XAY4 Date: 04-Apr-2023 10:08:21

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	1.920	1.920	0.000	11696825	2.50	2.47	Ma
2 Chloride	2.710	2.710	0.000	225809574	60.0	58.1	M
3 Nitrite as N	3.230	3.230	0.000	22727090	NC	NC	Ma
4 Bromide	3.827	3.827	0.000	2730351	2.50	2.46	
5 Nitrate as N	4.300	4.300	0.000	19732616	NC	NC	
7 Orthophosphate as P	5.763	5.763	0.000	6654551	NC	NC	
6 Sulfate	6.557	6.557	0.000	155347554	60.0	58.7	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

IC CAL cl/so4_00473 Amount Added: 4.80 Units: mL
IC Cal low_00701 Amount Added: 1.00 Units: mL

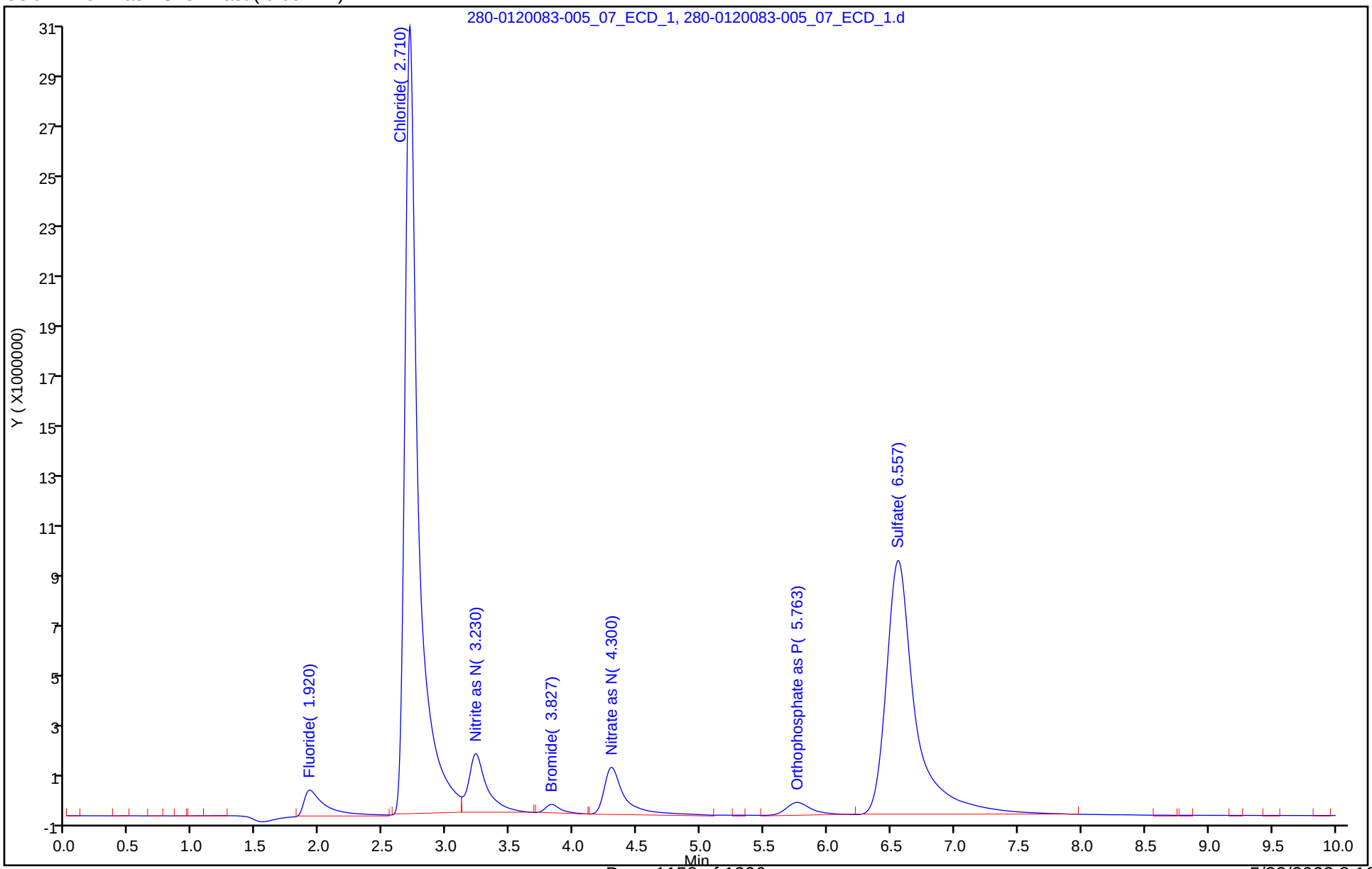
Report Date: 04-Apr-2023 11:17:59 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-005_07_ECD_1.d

Injection Date:	03-Apr-2023 17:30:00	Instrument ID:	WC_IonChrom15	Operator ID:	
Lims ID:	STD L5			Worklist Smp#:	5
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	IC_15 Anions	Limit Group:	Wet - Anions 28D		

Column: Ion Pac AS18 - Fast (0.00 mm)



5/23/2023 8:16 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

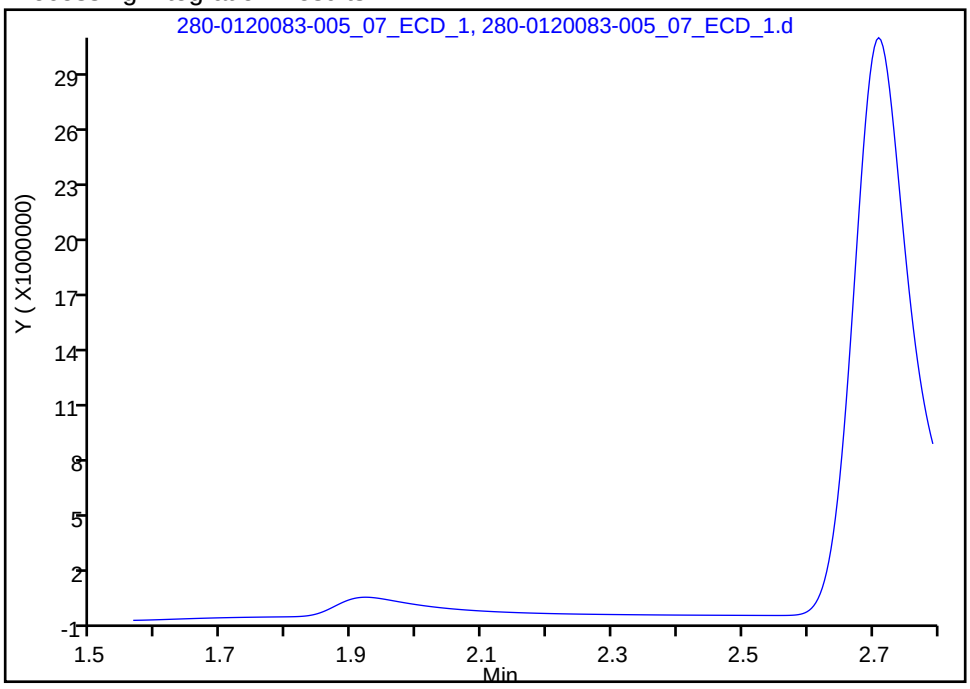
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-005_07_ECD_1.d				
Injection Date:	03-Apr-2023 17:30:00	Instrument ID:	WC_IonChrom15		
Lims ID:	STD L5				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	5
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	IC_15 Anions	Limit Group:	Wet - Anions 28D		
Column:	Ion Pac AS18 - Fast (0.00 mm)	Detector	0005		

1 Fluoride, CAS: 16984-48-8

Signal: 1

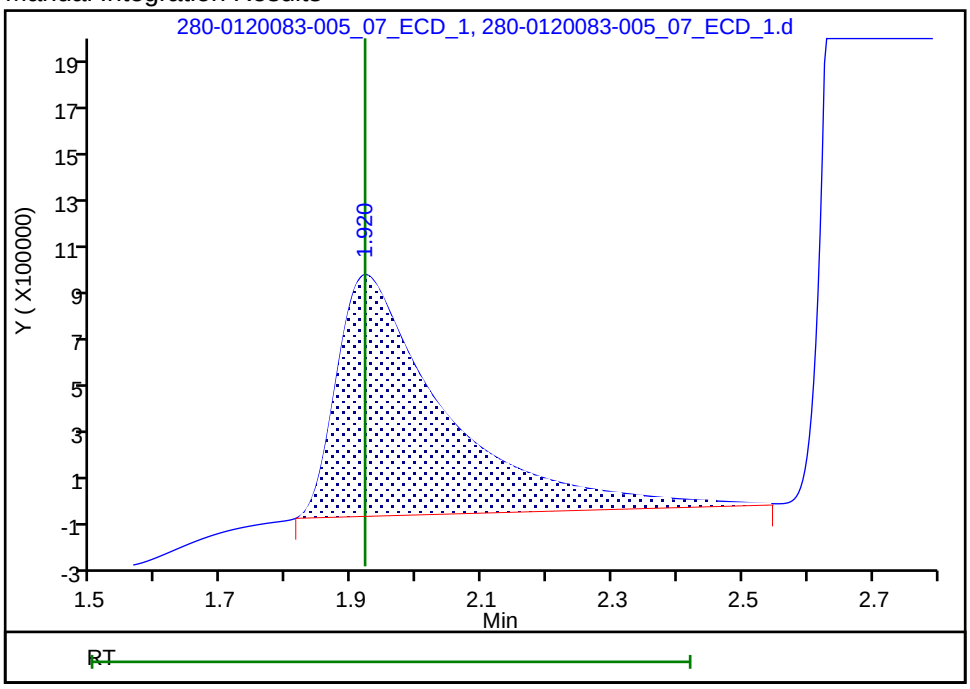
Not Detected
Expected RT: 1.92

Processing Integration Results



Manual Integration Results

RT: 1.92
Area: 11696825
Amount: 2.467911
Amount Units: ug/ml



Reviewer: XAY4, 04-Apr-2023 10:08:15
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

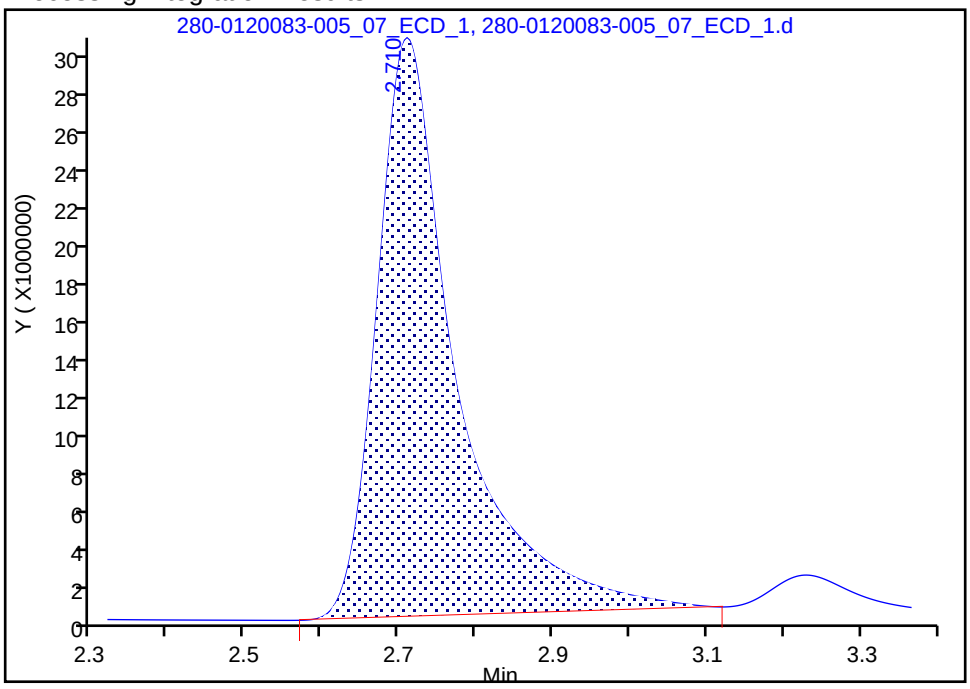
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-005_07_ECD_1.d				
Injection Date:	03-Apr-2023 17:30:00	Instrument ID:	WC_IonChrom15		
Lims ID:	STD L5				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	5
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	IC_15 Anions	Limit Group:	Wet - Anions 28D		
Column:	Ion Pac AS18 - Fast (0.00 mm)	Detector	0005		

2 Chloride, CAS: 16887-00-6

Signal: 1

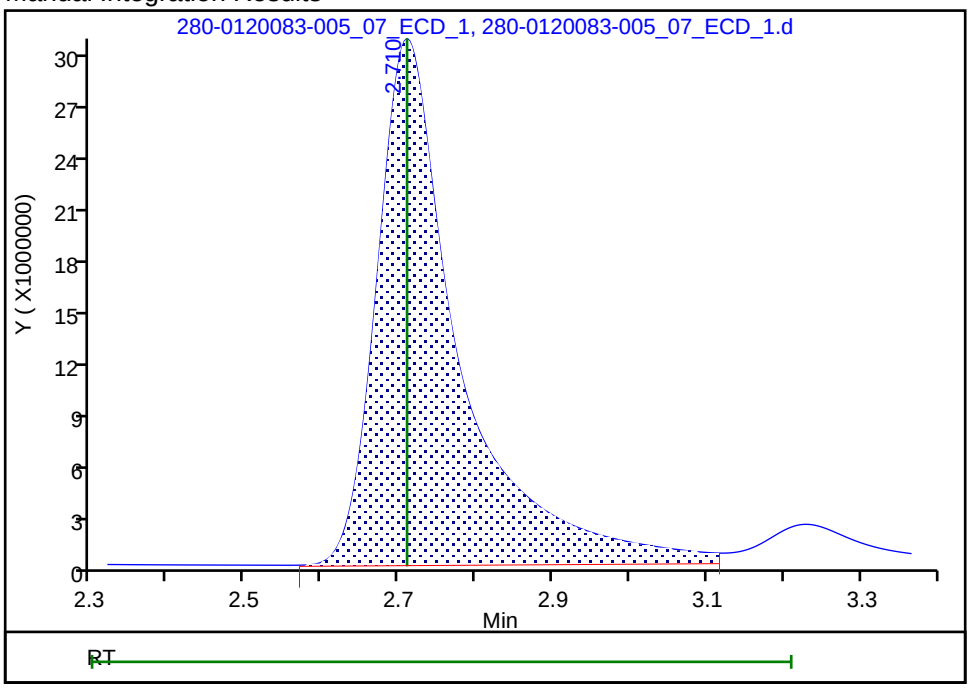
Processing Integration Results

RT: 2.71
Area: 216176281
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 2.71
Area: 225809574
Amount: 58.134858
Amount Units: ug/ml



Reviewer: XAY4, 04-Apr-2023 10:10:25

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-006_08_ECD_1.d
Lims ID: STD L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 03-Apr-2023 17:42:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0120083-006
Misc. Info.: STD L6
Operator ID: Instrument ID: WC_IonChrom15
Sublist: chrom-IC_15 Anions*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\IC_15 Anions.m
Limit Group: Wet - Anions 28D
Last Update: 04-Apr-2023 11:18:00 Calib Date: 03-Apr-2023 17:42:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-006_08_ECD_1.d

Column 1 : Ion Pac AS18 - Fast (0.00 mm) Det: 0005
Process Host: CTX1646

First Level Reviewer: XAY4 Date: 04-Apr-2023 10:08:35

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	1.920	1.920	0.000	24054194	5.00	4.97	Ma
2 Chloride	2.717	2.717	0.000	408580005	100.0	105.0	M
3 Nitrite as N	3.230	3.230	0.000	45521852	NC	NC	Ma
4 Bromide	3.823	3.823	0.000	5641478	5.00	5.06	
5 Nitrate as N	4.293	4.293	0.000	41136324	NC	NC	
7 Orthophosphate as P	5.757	5.757	0.000	13790470	NC	NC	
6 Sulfate	6.563	6.563	0.000	273226252	100.0	103.0	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

IC CAL cl/so4_00473 Amount Added: 8.00 Units: mL
IC Cal low_00701 Amount Added: 2.00 Units: mL

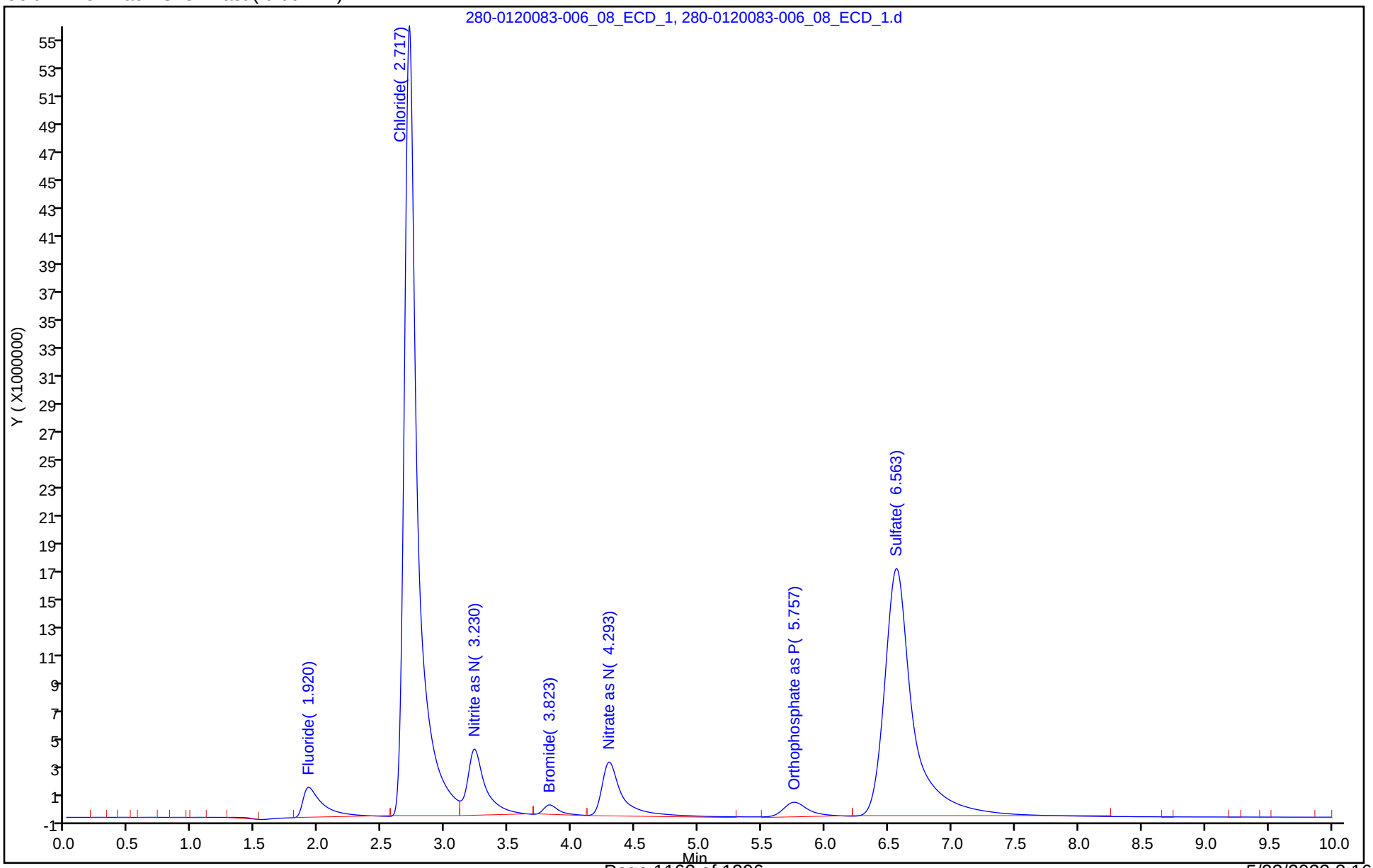
Report Date: 04-Apr-2023 11:18:00 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-006_08_ECD_1.d

Injection Date:	03-Apr-2023 17:42:00	Instrument ID:	WC_IonChrom15	Operator ID:	
Lims ID:	STD L6			Worklist Smp#:	6
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	IC_15 Anions	Limit Group:	Wet - Anions 28D		

Column: Ion Pac AS18 - Fast (0.00 mm)



5/23/2023 8:16 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

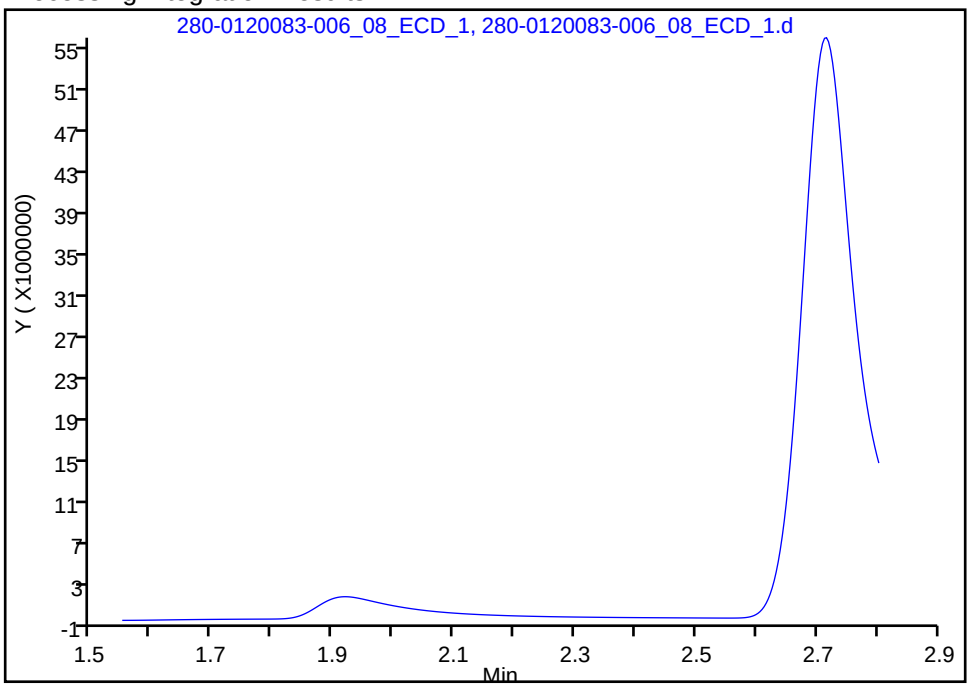
Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-006_08_ECD_1.d
Injection Date: 03-Apr-2023 17:42:00 Instrument ID: WC_IonChrom15
Lims ID: STD L6
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: IC_15 Anions Limit Group: Wet - Anions 28D
Column: Ion Pac AS18 - Fast (0.00 mm) Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

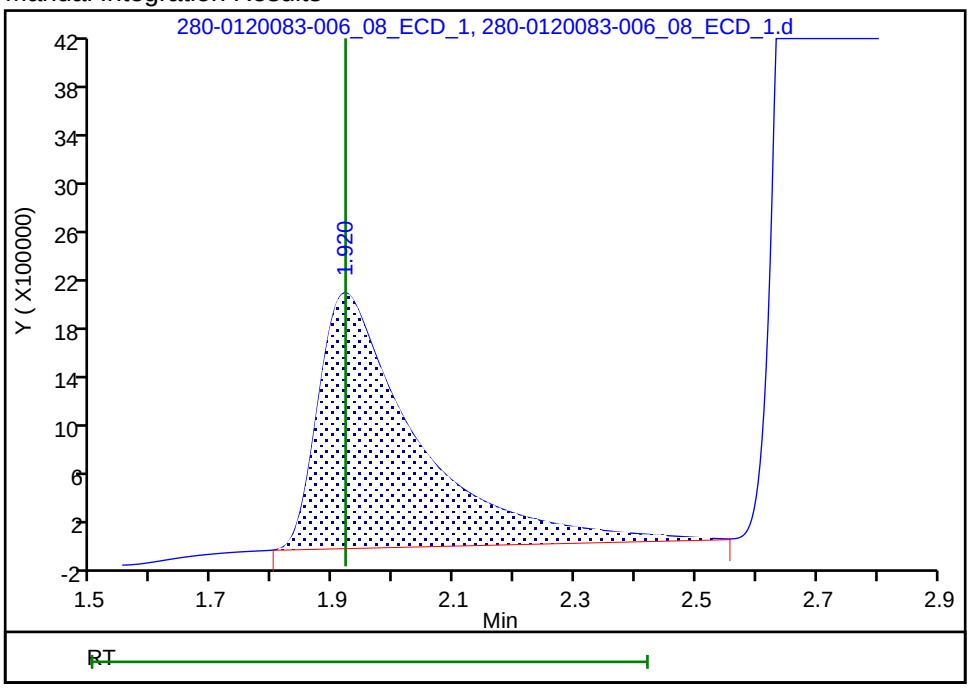
Not Detected
Expected RT: 1.92

Processing Integration Results



Manual Integration Results

RT: 1.92
Area: 24054194
Amount: 4.971075
Amount Units: ug/ml



Reviewer: XAY4, 04-Apr-2023 10:08:29
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

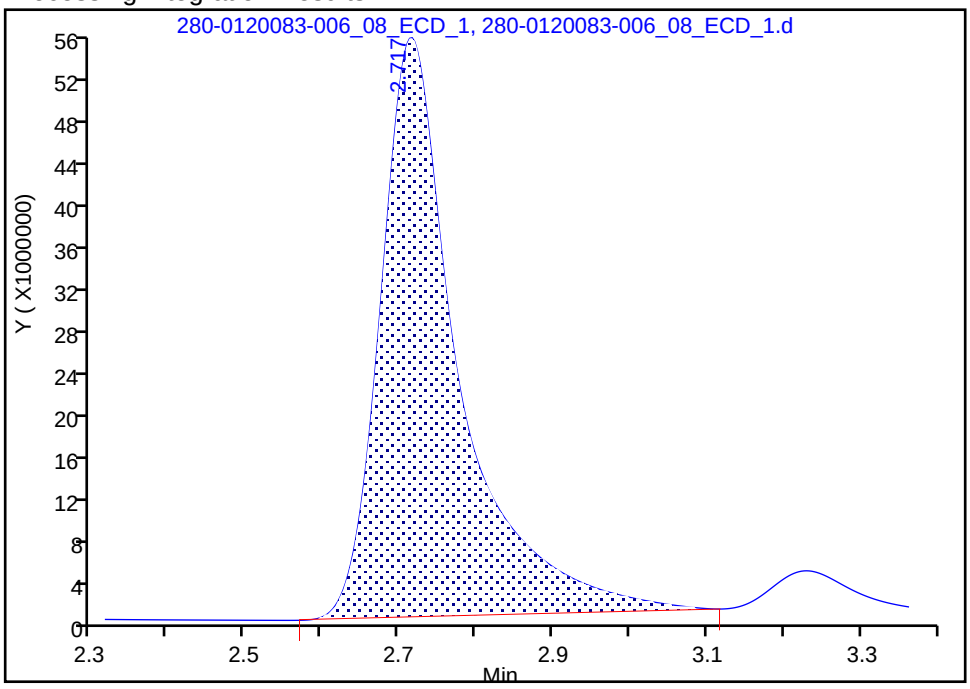
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-006_08_ECD_1.d				
Injection Date:	03-Apr-2023 17:42:00	Instrument ID:	WC_IonChrom15		
Lims ID:	STD L6				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	6
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	IC_15 Anions	Limit Group:	Wet - Anions 28D		
Column:	Ion Pac AS18 - Fast (0.00 mm)	Detector	0005		

2 Chloride, CAS: 16887-00-6

Signal: 1

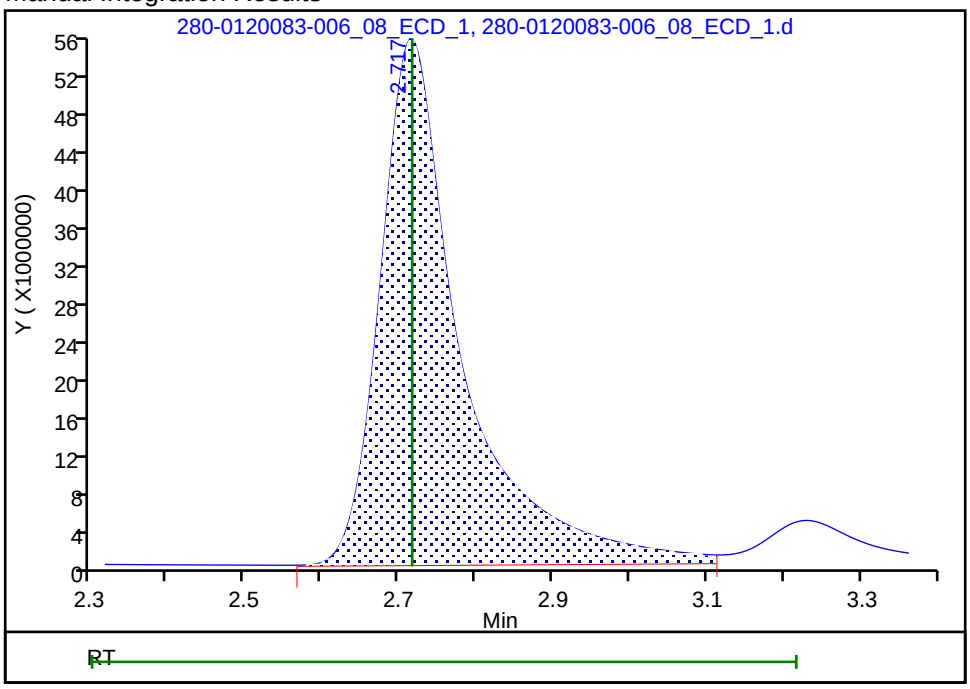
Processing Integration Results

RT: 2.72
Area: 393078326
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 2.72
Area: 408580005
Amount: 105.0379
Amount Units: ug/ml



Reviewer: XAY4, 04-Apr-2023 10:10:51
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

IC Instrument Information

WL: 120083 **Inst ID:** IC15 **Analysis Date:** 4/4/23 **Analyst:** EJS

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	173969	1	(F) (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	173607	15	(F) (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	173854	21	(F) (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	173760	1	(F) (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	49218	8	(F) Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	173855	2	(F) (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	49222	2	(F) Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	49221	1	(F) Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	174060	7	(F) (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	~~173607~~ EJS 4/4		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	
969	1	(F) (Cl) NO2 Br NO3 PO4 (SO4)	200x	rerun	
607	15	(F) (Cl) NO2 Br NO3 PO4 (SO4)	5,500,200x	rerun	
~~854~~ EJS 4/4	~~21~~	F Cl NO2 Br NO3 PO4 SO4	~~100x~~	~~reran~~	EJS 4/4
855	2	(F) (Cl) NO2 Br NO3 PO4 (SO4)	100x	rerun	
		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_IonChrom15\20230403-120083.b\IC_15 Anions.m
Instrument: WC_IonChrom15 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 04-Apr-2023 11:52:16
No.Compounds:7
Sublist: chrom-IC_15 Anions*sub1
Limit Group: Wet - Anions 28D

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-10.000 No. Points: 1561

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120028-002280-0120083-001_03_ECD
Inj Date: 03-Apr-2023 16:42:00 Worklist: 120083 Sample#: 1
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-002_04_ECD_1.d
Inj Date: 03-Apr-2023 16:54:00 Worklist: 120083 Sample#: 2
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-003_05_ECD_1.d
Inj Date: 03-Apr-2023 17:06:00 Worklist: 120083 Sample#: 3
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-004_06_ECD_1.d
Inj Date: 03-Apr-2023 17:18:00 Worklist: 120083 Sample#: 4
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-005_07_ECD_1.d
Inj Date: 03-Apr-2023 17:30:00 Worklist: 120083 Sample#: 5
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-006_08_ECD_1.d
Inj Date: 03-Apr-2023 17:42:00 Worklist: 120083 Sample#: 6

Start Cal Date: 01-Apr-2023 08:01:00 End Cal Date: 03-Apr-2023 17:42:00

Individual Compound Calibration Parameters

Quant Method: ESTD RF Calibration: Replace
Rule Name: Linear1 Curve: Linear Weighting: Conc
Origin: None Error: CorrCoef Error Limit: 1.00
RF %Dif: 0.0 SPCC Limit: 0.0 CCC Limit: 0.0
Dependent Variable: Resp

Number of Compounds: 4

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
1 Fluoride			Signal: 1						
Error: raw_COD									
2573775	3433718	5002458	4678730	4810839		-486509			0.997
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			4936700		
M514755	M1716859	M5002458	M11696825	M24054194					
120083(2)	120083(3)	120083(4)	120083(5)	120083(6)					
2 Chloride			Signal: 1						
3303692	3207736	3156145	3487797	3763493	4085800	-728828			0.997
0.500000(1)	1.2500 (2)	2.5000 (3)	30.0 (4)	60.0 (5)	100.0 (6)		3896774		
M1651846	M4009670	M7890362	M104633916	M225809574	M408580005				
120083(1)	120083(2)	120083(3)	120083(4)	120083(5)	120083(6)				
4 Bromide			Signal: 1						
1100605	1087544	1082846	1092140	1128296		-10563			1.000
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			1116455		
220121	543772	1082846	2730351	5641478					
120083(2)	120083(3)	120083(4)	120083(5)	120083(6)					
6 Sulfate			Signal: 1						
Error: raw_COD									
2051406	1954775	2194072	2505557	2589126	2732263	-588335			0.999
0.500000(1)	1.2500 (2)	2.5000 (3)	30.0 (4)	60.0 (5)	100.0 (6)		2657528		
M1025703	2443469	5485179	75166700	155347554	273226252				
120083(1)	120083(2)	120083(3)	120083(4)	120083(5)	120083(6)				

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\IC_15 Anions.m
Instrument: WC_IonChrom15 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 04-Apr-2023 11:52:16
No.Compounds:7
Sublist: chrom-IC_15 Anions*sub1
Limit Group: Wet - Anions

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-10.000 No. Points: 1561

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120028-002280-0120083-001_03_ECD
Inj Date: 03-Apr-2023 16:42:00 Worklist: 120083 Sample#: 1
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-002_04_ECD_1.d
Inj Date: 03-Apr-2023 16:54:00 Worklist: 120083 Sample#: 2
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-003_05_ECD_1.d
Inj Date: 03-Apr-2023 17:06:00 Worklist: 120083 Sample#: 3
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-004_06_ECD_1.d
Inj Date: 03-Apr-2023 17:18:00 Worklist: 120083 Sample#: 4
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-005_07_ECD_1.d
Inj Date: 03-Apr-2023 17:30:00 Worklist: 120083 Sample#: 5
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-006_08_ECD_1.d
Inj Date: 03-Apr-2023 17:42:00 Worklist: 120083 Sample#: 6

Start Cal Date: 01-Apr-2023 08:01:00 End Cal Date: 03-Apr-2023 17:42:00

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					
7833615	7407194	9946553	9090836	9104370		-336464			0.997
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			9255232		
M1566723	M3703597	M9946553	M22727090	M45521852					
120083(2)	120083(3)	120083(4)	120083(5)	120083(6)					
5 Nitrate as N				Signal: 1					
Error: CorrCoef									
6524615	7505046	7262541	7893046	8227265		-401876			1.000
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			8173729		
1304923	3752523	7262541	19732616	41136324					
120083(2)	120083(3)	120083(4)	120083(5)	120083(6)					
7 Orthophosphate as P				Signal: 1					
2234410	2812526	2563153	2661820	2758094		-81866			0.999
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			2746809		
446882	1406263	2563153	6654551	13790470					
120083(2)	120083(3)	120083(4)	120083(5)	120083(6)					

Preliminary Report

Eurofins Denver
ICV, ICal Verification Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-007_09_ECD_1.d				
Lims ID:	ICV				
Client ID:					
Sample Type:	ICV				
Inject. Date:	03-Apr-2023 17:54:00	ALS Bottle#:	0	Worklist Smp#:	7
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0120083-007				
Misc. Info.:	ICV				
Operator ID:		Instrument ID:	WC_IonChrom15		
Sublist:	chrom-Anions_IC7*sub4				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\IC_15 Anions.m				
Limit Group:	Wet - Anions 28D				
Last Update:	04-Apr-2023 11:53:33	Calib Date:	03-Apr-2023 17:42:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-006_08_ECD_1.d				
Column 1 :	Ion Pac AS18 - Fast (0.00 mm)		Det: 0005		
Process Host:	CTX1646				
First Level Reviewer: XAY4		Date:	04-Apr-2023 10:06:27		
Start Cal Date:	03-Apr-2023 16:42:00				
End Cal Date:	03-Apr-2023 17:42:00				

Compound	Amount Added	Amount Detected	%Drift	Max. %Drift	%Rec	%Rec Limits
1 Fluoride	2.00	1.98	-1.1	10.0	98.9	
2 Chloride	80.0	84.5	5.6	10.0	105.6	
4 Bromide	2.00	1.92	-3.8	10.0	96.2	
6 Sulfate	80.0	85.7	7.1	10.0	107.1	

Preliminary Report

Eurofins Denver

ICV, ICal Verification Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-007_09_ECD_1.d
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 03-Apr-2023 17:54:00 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0120083-007
Misc. Info.: ICV
Operator ID: Instrument ID: WC_IonChrom15
Sublist: chrom-Anions_IC7*sub4

Method: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\IC_15 Anions.m
Limit Group: Wet - Anions
Last Update: 04-Apr-2023 11:53:48 Calib Date: 03-Apr-2023 17:42:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-006_08_ECD_1.d

Column 1 : Ion Pac AS18 - Fast (0.00 mm) Det: 0005
Process Host: CTX1646

First Level Reviewer: XAY4 Date: 04-Apr-2023 10:06:27

Start Cal Date: 03-Apr-2023 16:42:00
End Cal Date: 03-Apr-2023 17:42:00

Compound	Amount Added	Amount Detected	%Drift	Max. %Drift	%Rec	%Rec Limits
3 Nitrite as N	2.00	2.29	* 14.7	10.0	114.7	
5 Nitrate as N	2.00	1.99	-0.6	10.0	99.4	
7 Orthophosphate as	2.00	1.98	-1.1	10.0	98.9	

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-007_09_ECD_1.d
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 03-Apr-2023 17:54:00 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0120083-007
Misc. Info.: ICV
Operator ID: Instrument ID: WC_IonChrom15
Sublist: chrom-Anions_IC7*sub4

Method: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\IC_15 Anions.m
Limit Group: Wet - Anions 28D
Last Update: 04-Apr-2023 11:53:48 Calib Date: 03-Apr-2023 17:42:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-006_08_ECD_1.d

Column 1 : Ion Pac AS18 - Fast (0.00 mm) Det: 0005
Process Host: CTX1646

First Level Reviewer: XAY4 Date: 04-Apr-2023 10:06:27

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	1.920	1.920	0.000	9279739	2.00	1.98	M
2 Chloride	2.717	2.717	0.000	328549047	80.0	84.5	M
3 Nitrite as N	3.227	3.227	0.000	20889847	NC	NC	Ma
4 Bromide	3.827	3.827	0.000	2137744	2.00	1.92	
5 Nitrate as N	4.300	4.300	0.000	15854770	NC	NC	
7 Orthophosphate as P	5.763	5.763	0.000	5351617	NC	NC	
6 Sulfate	6.563	6.563	0.000	227136614	80.0	85.7	

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_00402	Amount Added:	0.80	Units: mL

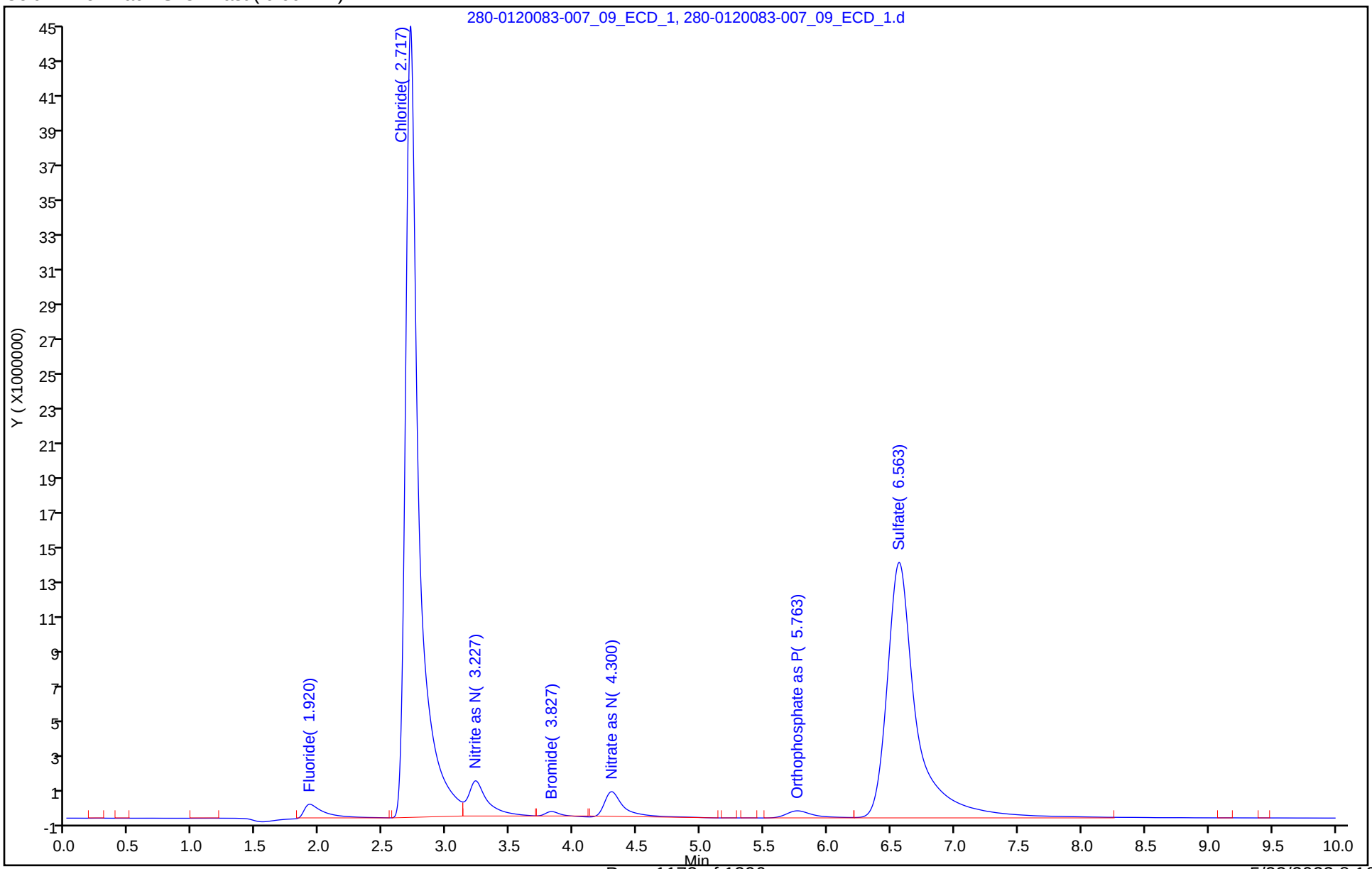
Report Date: 04-Apr-2023 11:53:49 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-007_09_ECD_1.d

Injection Date:	03-Apr-2023 17:54:00	Instrument ID:	WC_IonChrom15	Operator ID:	
Lims ID:	ICV			Worklist Smp#:	7
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	IC_15 Anions	Limit Group:	Wet - Anions 28D		

Column: Ion Pac AS18 - Fast (0.00 mm)



5/23/2023 8:16 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-008_10_ECD_1.d
Lims ID: ICB
Client ID:
Sample Type: ICB
Inject. Date: 03-Apr-2023 18:06:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0120083-008
Misc. Info.: ICB
Operator ID: Instrument ID: WC_IonChrom15

Method: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\IC_15 Anions.m
Limit Group: Wet - Anions 28D
Last Update: 04-Apr-2023 11:52:16 Calib Date: 03-Apr-2023 17:42:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-006_08_ECD_1.d

Column 1 : Ion Pac AS18 - Fast (0.00 mm) Det: 0005
Process Host: CTX1646

First Level Reviewer: XAY4 Date: 04-Apr-2023 11:51:11

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		1.920				ND	U
2 Chloride	2.707	2.707	0.000	90380		0.2102	M
3 Nitrite as N	3.270	3.230	0.040	16278		NC	
4 Bromide	3.710	3.823	-0.113	7406		0.0161	
5 Nitrate as N	4.310	4.297	0.013	15246		NC	
7 Orthophosphate as P	5.837	5.763	0.074	23300		NC	
6 Sulfate	6.507	6.557	-0.050	10924		0.2255	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

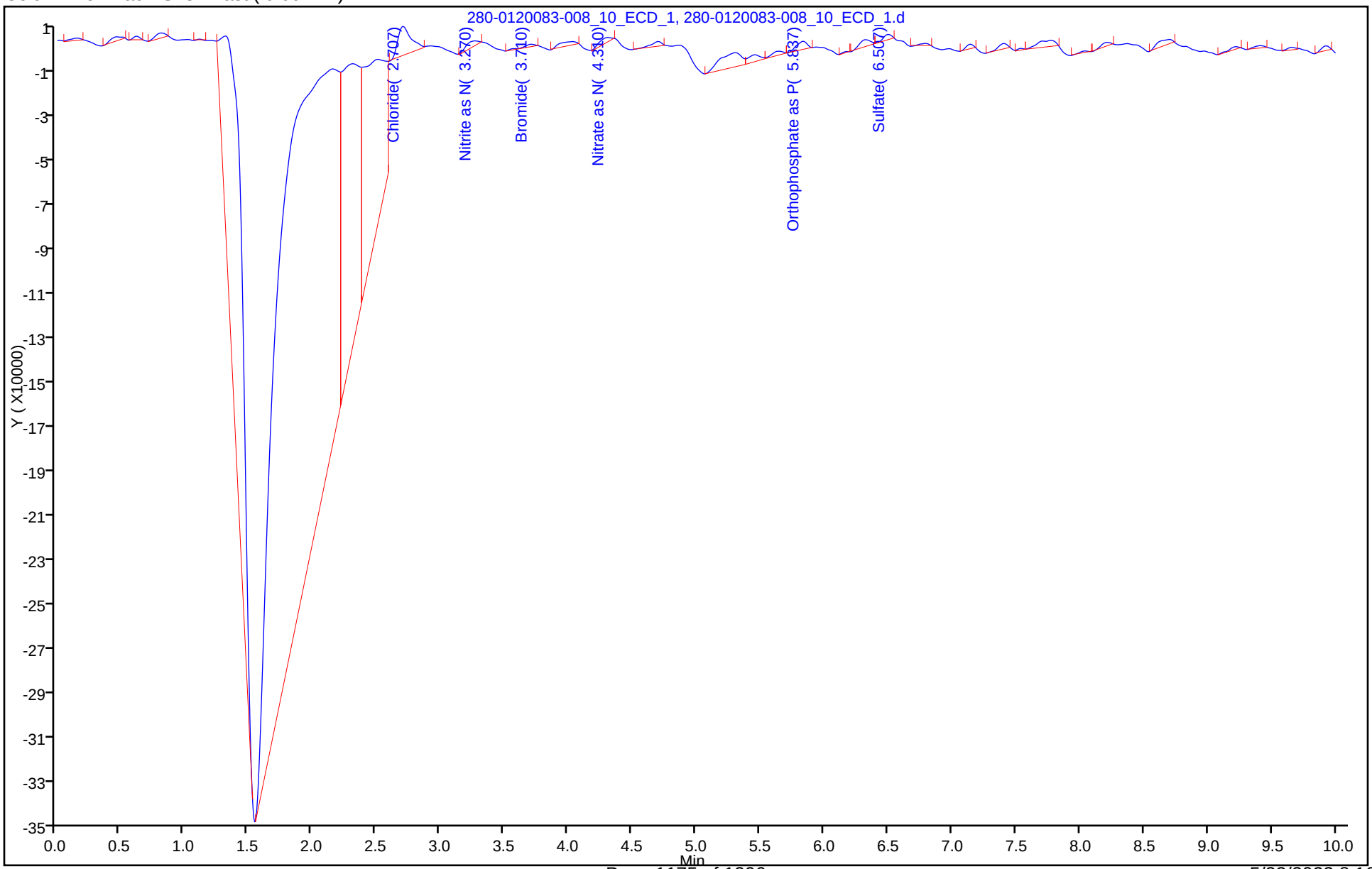
Report Date: 04-Apr-2023 11:52:18 Chrom Revision: 2.3 16-Mar-2023 15:40:40

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-008_10_ECD_1.d

Injection Date:	03-Apr-2023 18:06:00	Instrument ID:	WC_IonChrom15	Operator ID:	
Lims ID:	ICB			Worklist Smp#:	8
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	IC_15 Anions	Limit Group:	Wet - Anions 28D		

Column: Ion Pac AS18 - Fast (0.00 mm)



5/23/2023 8:16 PM

IC Instrument Information

WL: 121553 **Inst ID:** IC15 **Analysis Date:** 5/17/23 **Analyst:** MEC

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	176014	9	F (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	176215	6	F (Cl) NO2 (Br) NO3 PO4 (SO4)	MS/D	
☐	176584	1	(F) (Cl) NO2 Br NO3 PO4 SO4	MS/D	
☐	175919	5	(F) Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	175997	3	F Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐	176007	9	F (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	175800	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	
☐			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		
		F Cl NO2 Br NO3 PO4 SO4		

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\IC_15 Anions.m
Instrument: WC_IonChrom15 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 04-Apr-2023 11:52:16
No.Compounds:7
Sublist: chrom-IC_15 Anions*sub1
Limit Group: Wet - Anions 28D

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-10.000 No. Points: 1561

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120028-002280-0120083-001_03_ECD
Inj Date: 03-Apr-2023 16:42:00 Worklist: 120083 Sample#: 1
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-002_04_ECD_1.d
Inj Date: 03-Apr-2023 16:54:00 Worklist: 120083 Sample#: 2
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-003_05_ECD_1.d
Inj Date: 03-Apr-2023 17:06:00 Worklist: 120083 Sample#: 3
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-004_06_ECD_1.d
Inj Date: 03-Apr-2023 17:18:00 Worklist: 120083 Sample#: 4
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-005_07_ECD_1.d
Inj Date: 03-Apr-2023 17:30:00 Worklist: 120083 Sample#: 5
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-006_08_ECD_1.d
Inj Date: 03-Apr-2023 17:42:00 Worklist: 120083 Sample#: 6

Start Cal Date: 01-Apr-2023 08:01:00 End Cal Date: 03-Apr-2023 17:42:00

Individual Compound Calibration Parameters

Quant Method: ESTD RF Calibration: Replace
Rule Name: Linear1 Curve: Linear Weighting: Conc
Origin: None Error: CorrCoef Error Limit: 1.00
RF %Dif: 0.0 SPCC Limit: 0.0 CCC Limit: 0.0
Dependent Variable: Resp

Number of Compounds: 4

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
1 Fluoride			Signal: 1						
Error: raw_COD									
2573775	3433718	5002458	4678730	4810839		-486509			0.997
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			4936700		
M514755	M1716859	M5002458	M11696825	M24054194					
120083(2)	120083(3)	120083(4)	120083(5)	120083(6)					
2 Chloride			Signal: 1						
3303692	3207736	3156145	3487797	3763493	4085800	-728828			0.997
0.500000(1)	1.2500 (2)	2.5000 (3)	30.0 (4)	60.0 (5)	100.0 (6)		3896774		
M1651846	M4009670	M7890362	M104633916	M225809574	M408580005				
120083(1)	120083(2)	120083(3)	120083(4)	120083(5)	120083(6)				
4 Bromide			Signal: 1						
1100605	1087544	1082846	1092140	1128296		-10563			1.000
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			1116455		
220121	543772	1082846	2730351	5641478					
120083(2)	120083(3)	120083(4)	120083(5)	120083(6)					
6 Sulfate			Signal: 1						
Error: raw_COD									
2051406	1954775	2194072	2505557	2589126	2732263	-588335			0.999
0.500000(1)	1.2500 (2)	2.5000 (3)	30.0 (4)	60.0 (5)	100.0 (6)		2657528		
M1025703	2443469	5485179	75166700	155347554	273226252				
120083(1)	120083(2)	120083(3)	120083(4)	120083(5)	120083(6)				

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\IC_15 Anions.m
Instrument: WC_IonChrom15 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 04-Apr-2023 11:52:16
No.Compounds:7
Sublist: chrom-IC_15 Anions*sub1
Limit Group: Wet - Anions

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-10.000 No. Points: 1561

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120028-002280-0120083-001_03_ECD
Inj Date: 03-Apr-2023 16:42:00 Worklist: 120083 Sample#: 1
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-002_04_ECD_1.d
Inj Date: 03-Apr-2023 16:54:00 Worklist: 120083 Sample#: 2
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-003_05_ECD_1.d
Inj Date: 03-Apr-2023 17:06:00 Worklist: 120083 Sample#: 3
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-004_06_ECD_1.d
Inj Date: 03-Apr-2023 17:18:00 Worklist: 120083 Sample#: 4
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-005_07_ECD_1.d
Inj Date: 03-Apr-2023 17:30:00 Worklist: 120083 Sample#: 5
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-006_08_ECD_1.d
Inj Date: 03-Apr-2023 17:42:00 Worklist: 120083 Sample#: 6

Start Cal Date: 01-Apr-2023 08:01:00 End Cal Date: 03-Apr-2023 17:42:00

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					
7833615	7407194	9946553	9090836	9104370		-336464			0.997
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			9255232		
M1566723	M3703597	M9946553	M22727090	M45521852					
120083(2)	120083(3)	120083(4)	120083(5)	120083(6)					
5 Nitrate as N				Signal: 1					
Error: CorrCoef									
6524615	7505046	7262541	7893046	8227265		-401876			1.000
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			8173729		
1304923	3752523	7262541	19732616	41136324					
120083(2)	120083(3)	120083(4)	120083(5)	120083(6)					
7 Orthophosphate as P				Signal: 1					
2234410	2812526	2563153	2661820	2758094		-81866			0.999
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			2746809		
446882	1406263	2563153	6654551	13790470					
120083(2)	120083(3)	120083(4)	120083(5)	120083(6)					

Preliminary Report

Eurofins Denver
ICV, ICal Verification Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-007_09_ECD_1.d				
Lims ID:	ICV				
Client ID:					
Sample Type:	ICV				
Inject. Date:	03-Apr-2023 17:54:00	ALS Bottle#:	0	Worklist Smp#:	7
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0120083-007				
Misc. Info.:	ICV				
Operator ID:		Instrument ID:	WC_IonChrom15		
Sublist:	chrom-Anions_IC7*sub4				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\IC_15 Anions.m				
Limit Group:	Wet - Anions 28D				
Last Update:	04-Apr-2023 11:53:33	Calib Date:	03-Apr-2023 17:42:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-006_08_ECD_1.d				
Column 1 :	Ion Pac AS18 - Fast (0.00 mm)		Det: 0005		
Process Host:	CTX1646				
First Level Reviewer: XAY4		Date:	04-Apr-2023 10:06:27		
Start Cal Date:	03-Apr-2023 16:42:00				
End Cal Date:	03-Apr-2023 17:42:00				

Compound	Amount Added	Amount Detected	%Drift	Max. %Drift	%Rec	%Rec Limits
1 Fluoride	2.00	1.98	-1.1	10.0	98.9	
2 Chloride	80.0	84.5	5.6	10.0	105.6	
4 Bromide	2.00	1.92	-3.8	10.0	96.2	
6 Sulfate	80.0	85.7	7.1	10.0	107.1	

Preliminary Report

Eurofins Denver
ICV, ICal Verification Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-007_09_ECD_1.d
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 03-Apr-2023 17:54:00 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0120083-007
Misc. Info.: ICV
Operator ID: Instrument ID: WC_IonChrom15
Sublist: chrom-Anions_IC7*sub4

Method: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\IC_15 Anions.m
Limit Group: Wet - Anions
Last Update: 04-Apr-2023 11:53:48 Calib Date: 03-Apr-2023 17:42:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-006_08_ECD_1.d

Column 1 : Ion Pac AS18 - Fast (0.00 mm) Det: 0005
Process Host: CTX1646

First Level Reviewer: XAY4 Date: 04-Apr-2023 10:06:27

Start Cal Date: 03-Apr-2023 16:42:00
End Cal Date: 03-Apr-2023 17:42:00

Compound	Amount Added	Amount Detected	%Drift	Max. %Drift	%Rec	%Rec Limits
3 Nitrite as N	2.00	2.29	* 14.7	10.0	114.7	
5 Nitrate as N	2.00	1.99	-0.6	10.0	99.4	
7 Orthophosphate as	2.00	1.98	-1.1	10.0	98.9	

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\280-0121553-003_04_ECD_1.d
Lims ID: mrl
Client ID:
Sample Type: MRL
Inject. Date: 17-May-2023 14:23:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121553-003
Misc. Info.: MRL
Operator ID: Instrument ID: WC_IonChrom15

Method: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\IC_15 Anions.m
Limit Group: Wet - Anions 28D
Last Update: 18-May-2023 09:50:14 Calib Date: 03-Apr-2023 17:42:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-006_08_ECD_1.d

Column 1 : Ion Pac AS18 - Fast (0.00 mm) Det: 0005
Process Host: CTX1647

First Level Reviewer: LVW8 Date: 18-May-2023 09:30:55

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	1.920	1.920	0.000	664211	0.2500	0.2331	M
2 Chloride	2.640	2.640	0.000	7091233	2.50	2.01	
3 Nitrite as N	3.130	3.130	0.000	1535746	NC	NC	
4 Bromide	3.690	3.690	0.000	236972	0.2500	0.2217	
5 Nitrate as N	4.117	4.117	0.000	1685885	NC	NC	
7 Orthophosphate as P	5.397	5.397	0.000	536689	NC	NC	
6 Sulfate	6.127	6.127	0.000	5186628	2.50	2.17	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

IC Cal low_00709 Amount Added: 0.10 Units: mL
IC CAL cl/so4_00480 Amount Added: 0.20 Units: mL

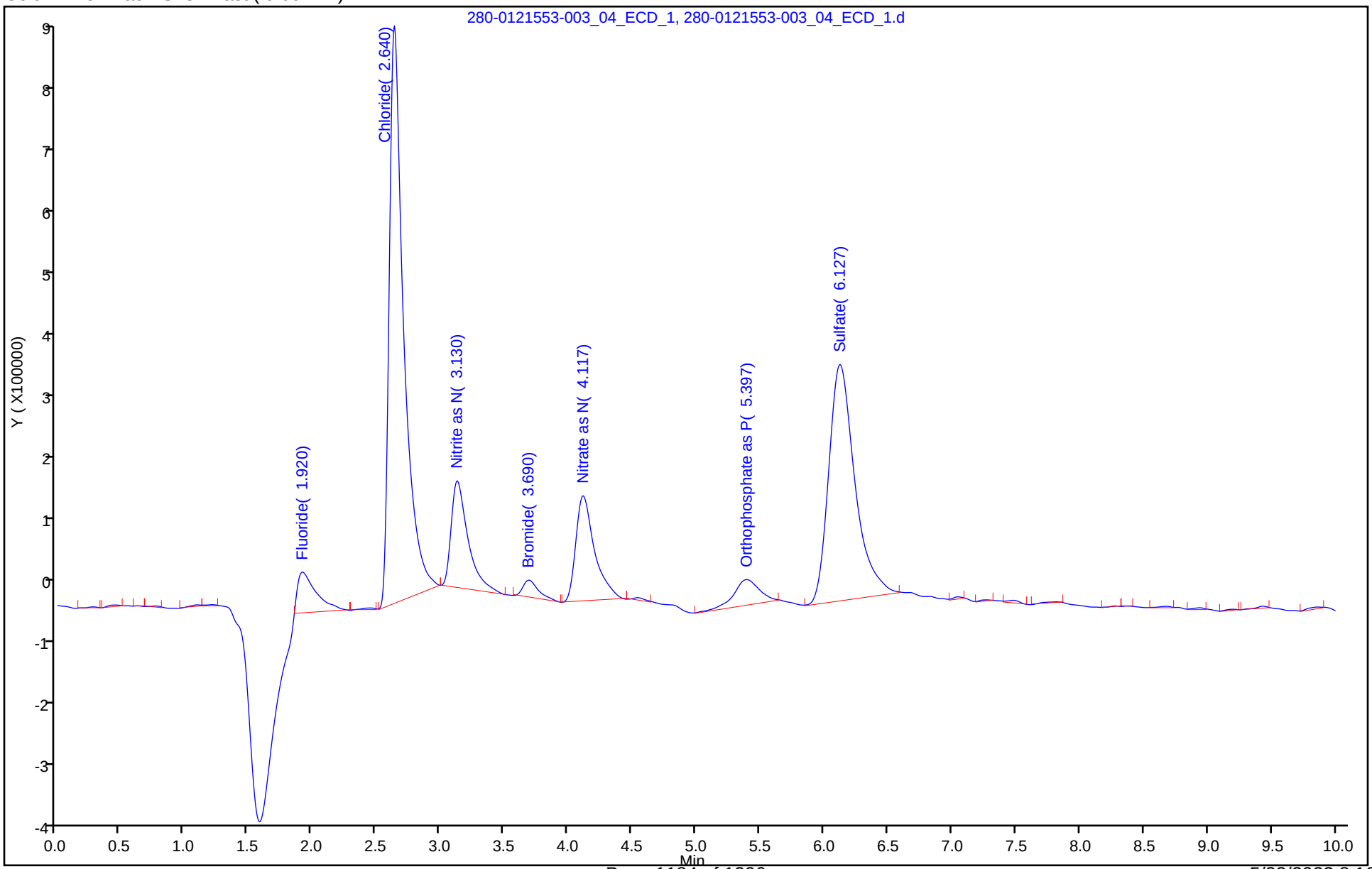
Report Date: 18-May-2023 09:50:14 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\280-0121553-003_04_ECD_1.d

Injection Date:	17-May-2023 14:23:00	Instrument ID:	WC_IonChrom15	Operator ID:	
Lims ID:	mrl			Worklist Smp#:	3
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	IC_15 Anions	Limit Group:	Wet - Anions 28D		

Column: Ion Pac AS18 - Fast (0.00 mm)



5/23/2023 8:16 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\280-0121553-041_42_ECD_1.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 17-May-2023 22:56:00 ALS Bottle#: 0 Worklist Smp#: 41
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121553-041
Misc. Info.: CCV
Operator ID: Instrument ID: WC_IonChrom15
Sublist: chrom-IC_15 Anions*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\IC_15 Anions.m
Limit Group: Wet - Anions 28D
Last Update: 18-May-2023 09:50:39 Calib Date: 03-Apr-2023 17:42:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-006_08_ECD_1.d

Column 1 : Ion Pac AS18 - Fast (0.00 mm) Det: 0005
Process Host: CTX1647

First Level Reviewer: LVW8 Date: 18-May-2023 09:41:18

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	1.913	1.913	0.000	11269127	2.50	2.38	M
2 Chloride	2.653	2.657	-0.004	179604588	50.0	46.3	M
3 Nitrite as N	3.137	3.197	-0.060	24506354	NC	NC	M
4 Bromide	3.700	3.533	0.167	2806553	2.50	2.52	M
5 Nitrate as N	4.123	4.083	0.040	19389724	NC	NC	
7 Orthophosphate as P	5.430	5.293	0.137	6052476	NC	NC	
6 Sulfate	6.153	6.123	0.030	129199542	50.0	48.8	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

IC LCS_01954 Amount Added: 10.00 Units: mL

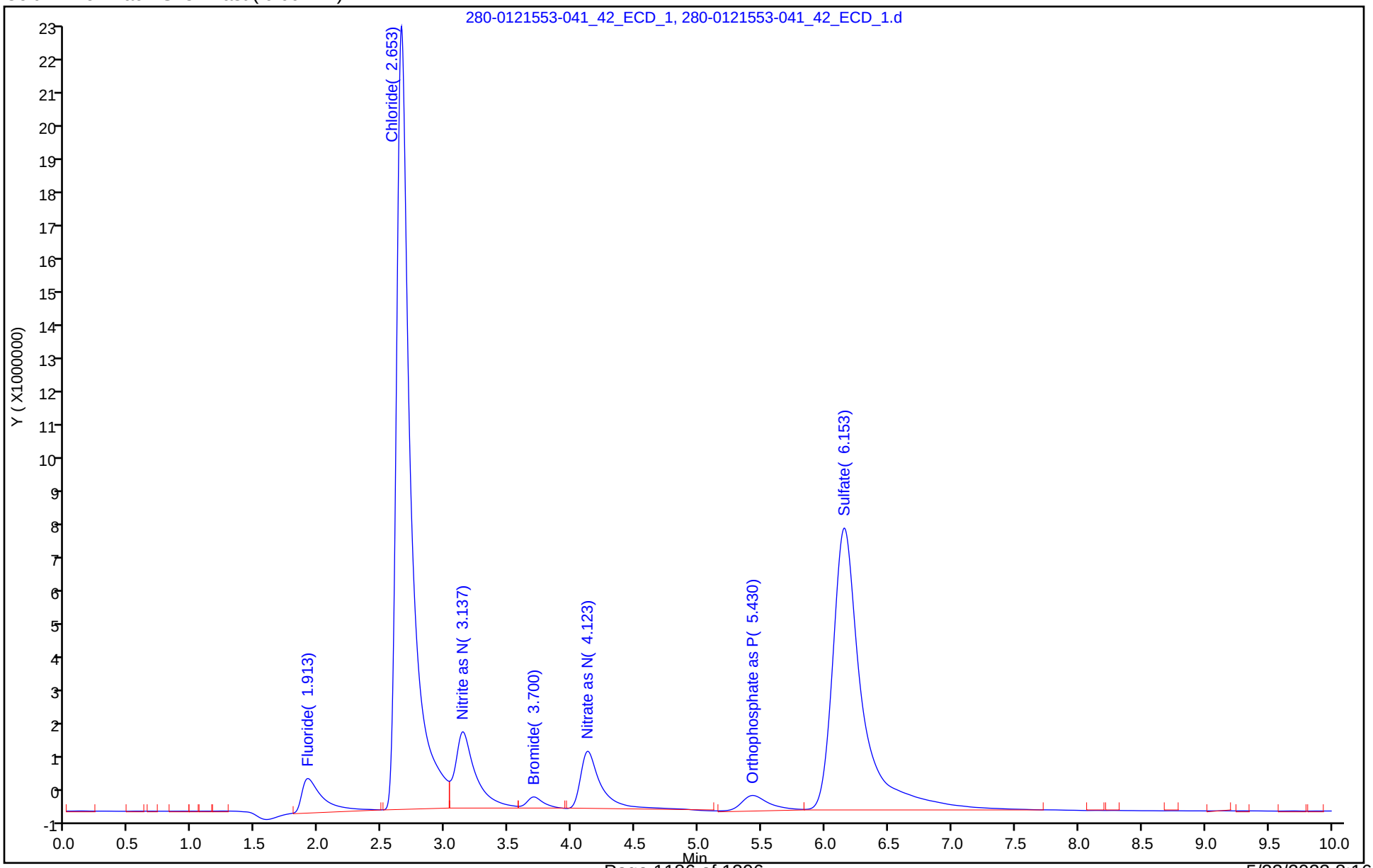
Report Date: 18-May-2023 09:50:39 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\280-0121553-041_42_ECD_1.d

Injection Date:	17-May-2023 22:56:00	Instrument ID:	WC_IonChrom15	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	41
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	IC_15 Anions	Limit Group:	Wet - Anions 28D		

Column: Ion Pac AS18 - Fast (0.00 mm)



5/23/2023 8:16 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\280-0121553-042_43_ECD_1.d
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 17-May-2023 23:08:00 ALS Bottle#: 0 Worklist Smp#: 42
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121553-042
Misc. Info.: CCB
Operator ID: Instrument ID: WC_IonChrom15

Method: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\IC_15 Anions.m
Limit Group: Wet - Anions 28D
Last Update: 18-May-2023 09:50:39 Calib Date: 03-Apr-2023 17:42:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-006_08_ECD_1.d

Column 1 : Ion Pac AS18 - Fast (0.00 mm) Det: 0005
Process Host: CTX1647

First Level Reviewer: LVW8 Date: 18-May-2023 09:41:33

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		1.913				ND	U
2 Chloride	2.720	2.657	0.063	1866		0.1875	
3 Nitrite as N	3.287	3.197	0.090	9333		NC	
4 Bromide	3.813	3.533	0.280	24509		0.0314	
5 Nitrate as N	3.980	4.083	-0.103	6167		NC	
7 Orthophosphate as P	5.207	5.293	-0.086	10839		NC	
6 Sulfate	6.127	6.123	0.004	877044		0.5514	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

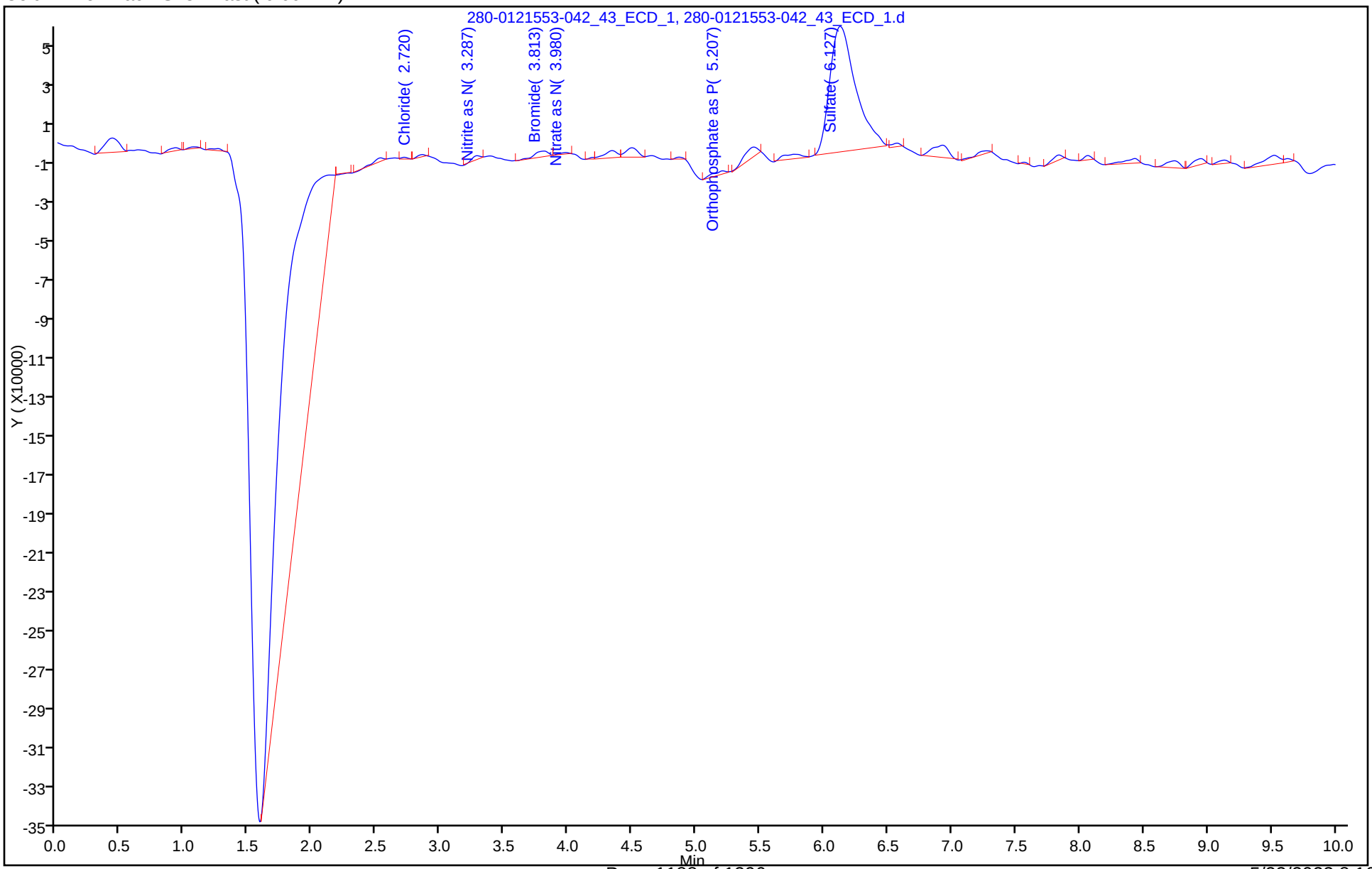
Report Date: 18-May-2023 09:50:40 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\280-0121553-042_43_ECD_1.d

Injection Date:	17-May-2023 23:08:00	Instrument ID:	WC_IonChrom15	Operator ID:	
Lims ID:	ccb			Worklist Smp#:	42
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	IC_15 Anions	Limit Group:	Wet - Anions 28D		

Column: Ion Pac AS18 - Fast (0.00 mm)



5/23/2023 8:16 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

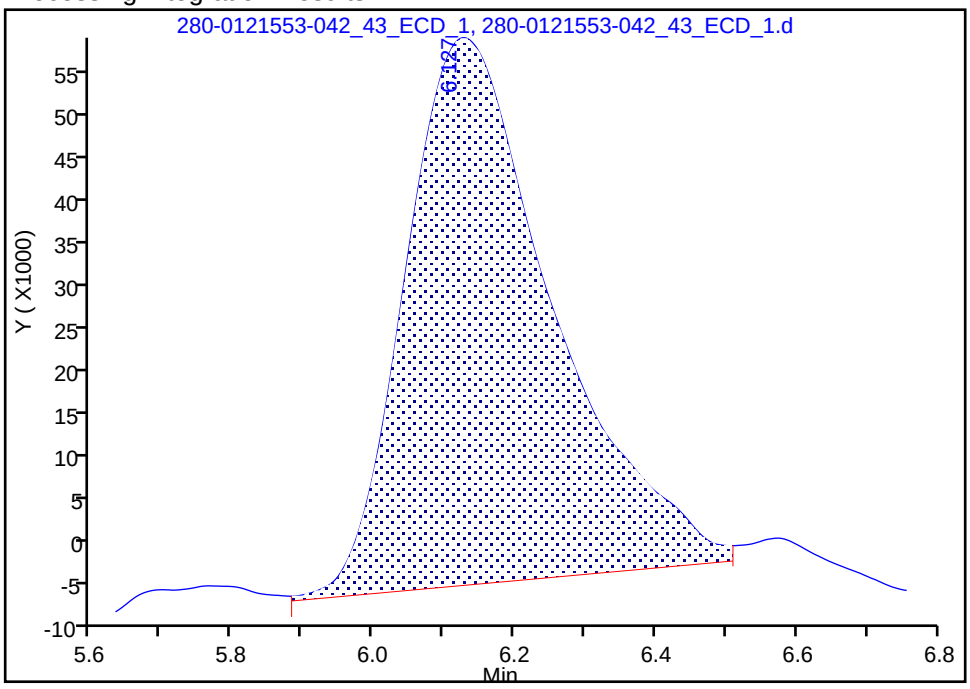
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\280-0121553-042_43_ECD_1.d				
Injection Date:	17-May-2023 23:08:00	Instrument ID:	WC_IonChrom15		
Lims ID:	ccb				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	42
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	IC_15 Anions	Limit Group:	Wet - Anions 28D		
Column:	Ion Pac AS18 - Fast (0.00 mm)	Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

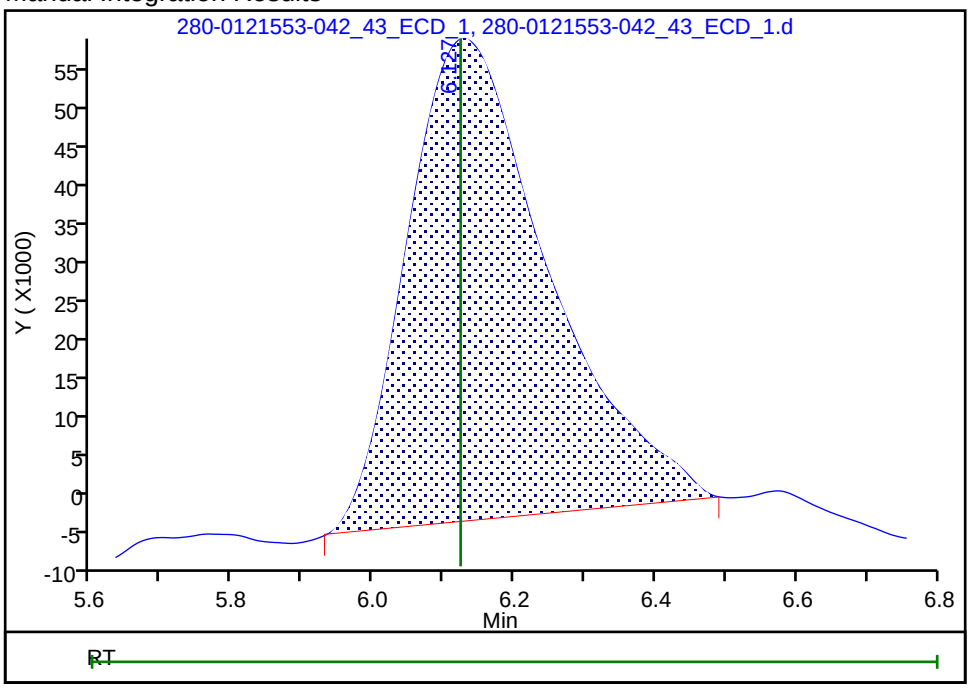
Processing Integration Results

RT: 6.13
Area: 932950
Amount: 0.572444
Amount Units: ug/ml



Manual Integration Results

RT: 6.13
Area: 877044
Amount: 0.551407
Amount Units: ug/ml



Reviewer: LVW8, 18-May-2023 09:41:27 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\280-0121553-052_53_ECD_1.d
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 18-May-2023 01:07:00 ALS Bottle#: 0 Worklist Smp#: 52
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121553-052
Misc. Info.: LCS
Operator ID: Instrument ID: WC_IonChrom15

Method: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\IC_15 Anions.m
Limit Group: Wet - Anions 28D
Last Update: 18-May-2023 09:50:39 Calib Date: 03-Apr-2023 17:42:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-006_08_ECD_1.d

Column 1 : Ion Pac AS18 - Fast (0.00 mm) Det: 0005
Process Host: CTX1647

First Level Reviewer: LVW8 Date: 18-May-2023 09:43:17

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	1.910	1.913	-0.003	11394868	2.50	2.41	M
2 Chloride	2.650	2.657	-0.007	179573466	50.0	46.3	M
3 Nitrite as N	3.133	3.197	-0.064	24141260	NC	NC	M
4 Bromide	3.690	3.533	0.157	2721832	2.50	2.45	M
5 Nitrate as N	4.117	4.083	0.034	19020846	NC	NC	
7 Orthophosphate as P	5.427	5.293	0.134	6108921	NC	NC	
6 Sulfate	6.150	6.123	0.027	128692400	50.0	48.6	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

IC LCS_01954 Amount Added: 10.00 Units: mL

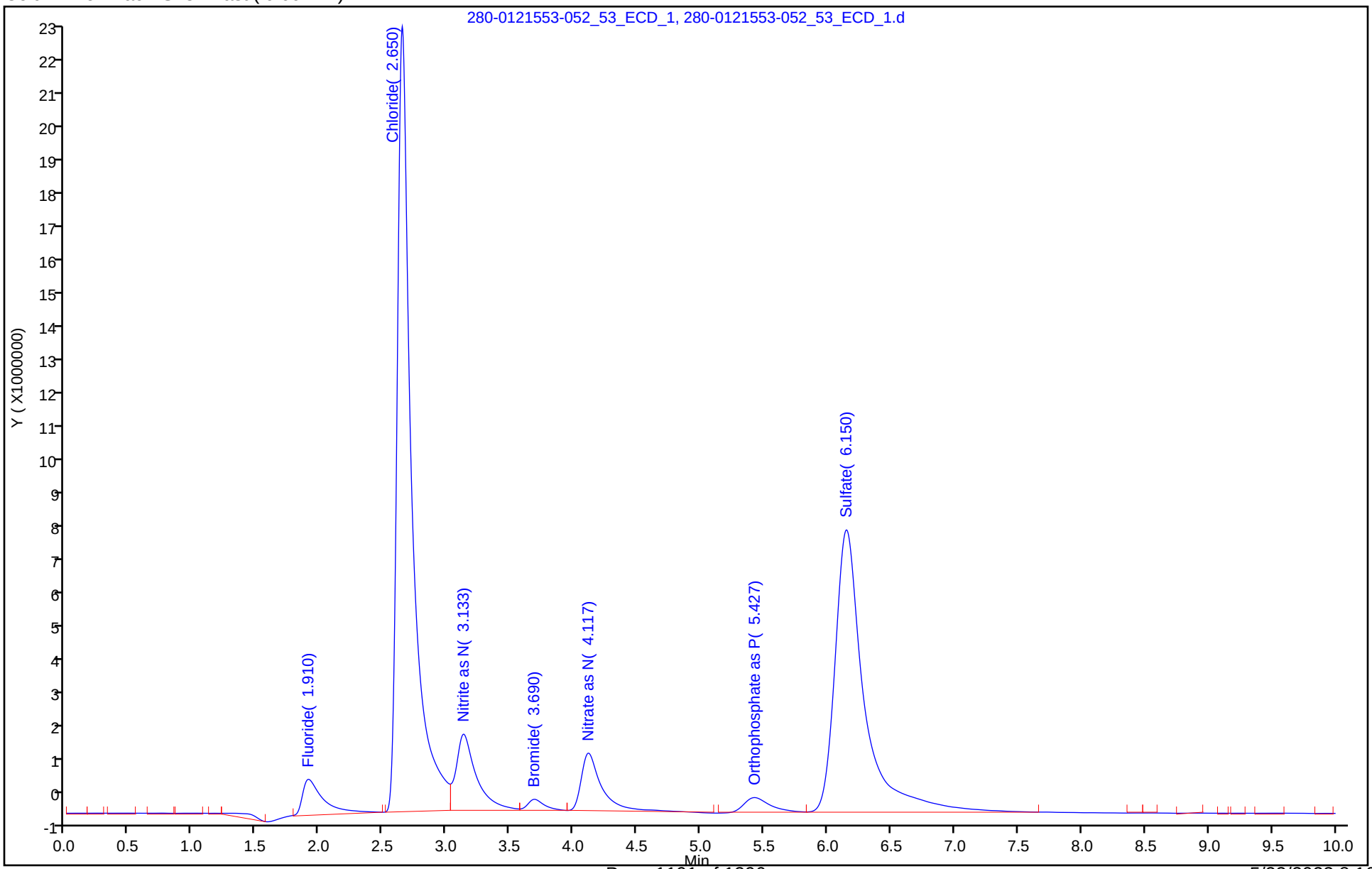
Report Date: 18-May-2023 09:50:46 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\280-0121553-052_53_ECD_1.d

Injection Date:	18-May-2023 01:07:00	Instrument ID:	WC_IonChrom15	Operator ID:	
Lims ID:	lcs			Worklist Smp#:	52
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	IC_15 Anions	Limit Group:	Wet - Anions 28D		

Column: Ion Pac AS18 - Fast (0.00 mm)



5/23/2023 8:16 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\280-0121553-053_54_ECD_1.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 18-May-2023 01:19:00 ALS Bottle#: 0 Worklist Smp#: 53
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121553-053
Misc. Info.: CCV
Operator ID: Instrument ID: WC_IonChrom15
Sublist: chrom-IC_15 Anions*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\IC_15 Anions.m
Limit Group: Wet - Anions 28D
Last Update: 18-May-2023 09:50:46 Calib Date: 03-Apr-2023 17:42:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-006_08_ECD_1.d

Column 1 : Ion Pac AS18 - Fast (0.00 mm) Det: 0005
Process Host: CTX1647

First Level Reviewer: LVW8 Date: 18-May-2023 09:43:47

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	1.910	1.913	-0.003	11513859	2.50	2.43	M
2 Chloride	2.650	2.657	-0.007	179634699	50.0	46.3	M
3 Nitrite as N	3.133	3.197	-0.064	24390580	NC	NC	M
4 Bromide	3.690	3.533	0.157	2852219	2.50	2.56	M
5 Nitrate as N	4.117	4.083	0.034	19343744	NC	NC	
7 Orthophosphate as P	5.427	5.293	0.134	6320450	NC	NC	
6 Sulfate	6.150	6.123	0.027	128603210	50.0	48.6	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

IC LCS_01954 Amount Added: 10.00 Units: mL

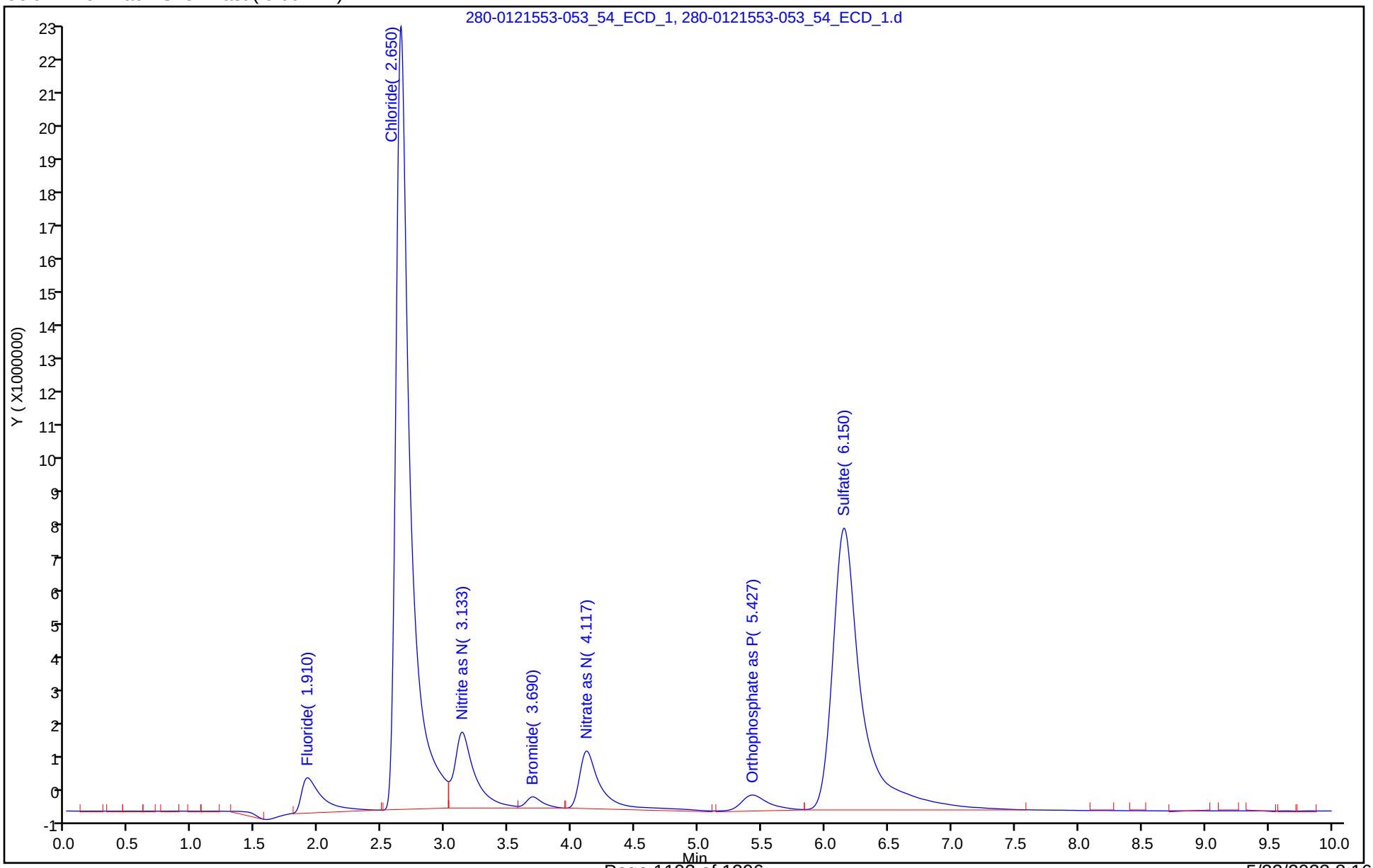
Report Date: 18-May-2023 09:50:47 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\280-0121553-053_54_ECD_1.d

Injection Date:	18-May-2023 01:19:00	Instrument ID:	WC_IonChrom15	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	53
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	IC_15 Anions	Limit Group:	Wet - Anions 28D		

Column: Ion Pac AS18 - Fast (0.00 mm)



5/23/2023 8:16 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\280-0121553-054_55_ECD_1.d
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 18-May-2023 01:31:00 ALS Bottle#: 0 Worklist Smp#: 54
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121553-054
Misc. Info.: CCB
Operator ID: Instrument ID: WC_IonChrom15

Method: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\IC_15 Anions.m
Limit Group: Wet - Anions 28D
Last Update: 18-May-2023 09:50:46 Calib Date: 03-Apr-2023 17:42:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-006_08_ECD_1.d

Column 1 : Ion Pac AS18 - Fast (0.00 mm) Det: 0005
Process Host: CTX1647

First Level Reviewer: LVW8 Date: 18-May-2023 09:44:00

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		1.913				ND	U
2 Chloride	2.763	2.657	0.106	25505		0.1936	
3 Nitrite as N	3.263	3.197	0.066	8130		NC	
4 Bromide	3.473	3.533	-0.060	8863		0.0174	
5 Nitrate as N	4.033	4.083	-0.050	6905		NC	
7 Orthophosphate as P	5.360	5.293	0.067	29141		NC	
6 Sulfate	6.000	6.123	-0.123	7127		0.2241	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected

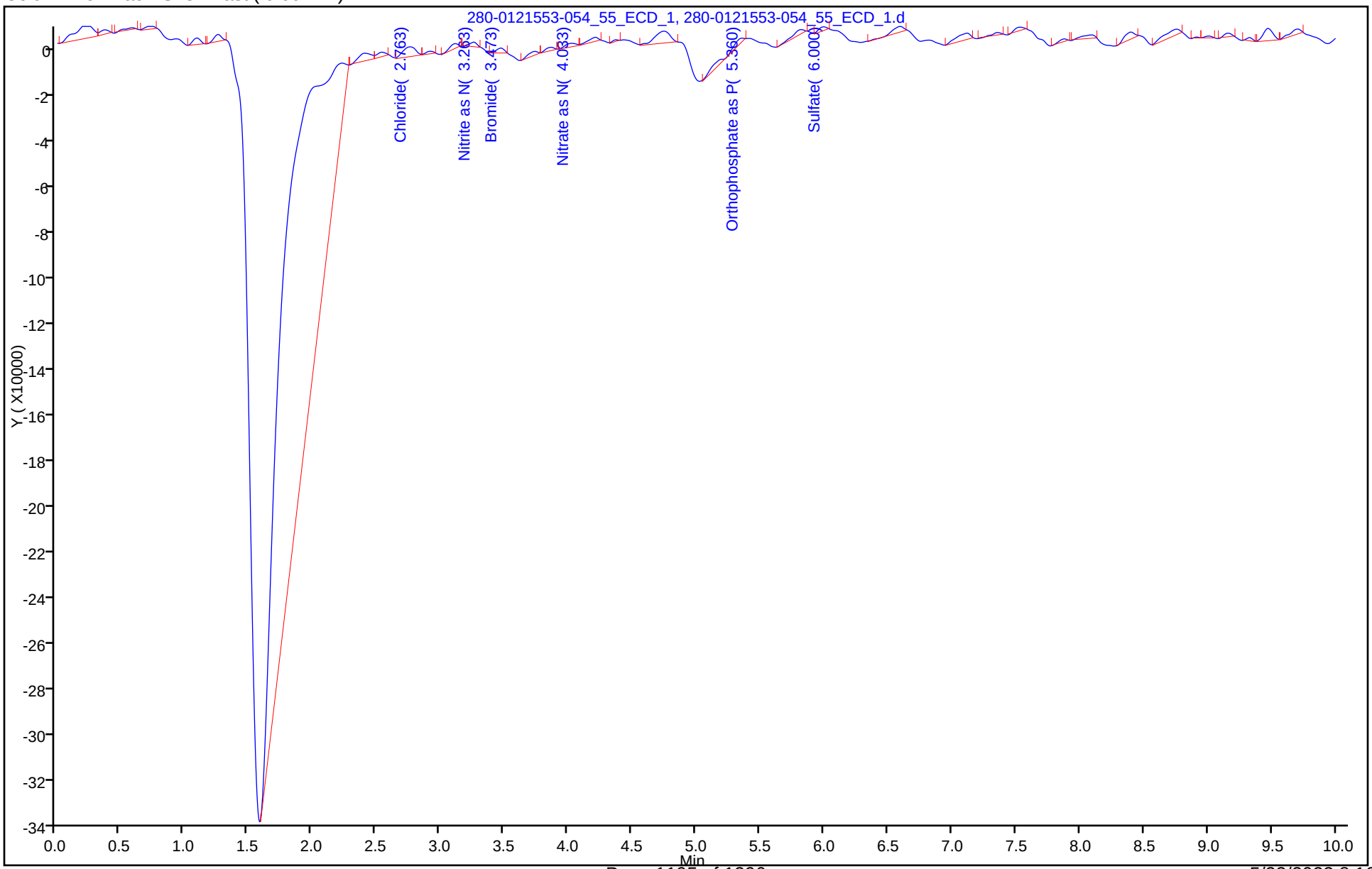
Report Date: 18-May-2023 09:50:47 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\280-0121553-054_55_ECD_1.d

Injection Date:	18-May-2023 01:31:00	Instrument ID:	WC_IonChrom15	Operator ID:	
Lims ID:	ccb			Worklist Smp#:	54
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	IC_15 Anions	Limit Group:	Wet - Anions 28D		

Column: Ion Pac AS18 - Fast (0.00 mm)



5/23/2023 8:16 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\280-0121553-055_56_ECD_1.d
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 18-May-2023 01:43:00 ALS Bottle#: 0 Worklist Smp#: 55
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121553-055
Misc. Info.: LCSD
Operator ID: Instrument ID: WC_IonChrom15

Method: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\IC_15 Anions.m
Limit Group: Wet - Anions 28D
Last Update: 18-May-2023 09:50:46 Calib Date: 03-Apr-2023 17:42:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-006_08_ECD_1.d

Column 1 : Ion Pac AS18 - Fast (0.00 mm) Det: 0005
Process Host: CTX1647

First Level Reviewer: LVW8 Date: 18-May-2023 09:44:34

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	1.910	1.913	-0.003	11343260	2.50	2.40	M
2 Chloride	2.650	2.657	-0.007	179869876	50.0	46.3	M
3 Nitrite as N	3.133	3.197	-0.064	24504039	NC	NC	M
4 Bromide	3.693	3.533	0.160	2890338	2.50	2.60	M
5 Nitrate as N	4.117	4.083	0.034	19065060	NC	NC	
7 Orthophosphate as P	5.423	5.293	0.130	6071860	NC	NC	
6 Sulfate	6.150	6.123	0.027	128251799	50.0	48.5	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

IC LCS_01954 Amount Added: 10.00 Units: mL

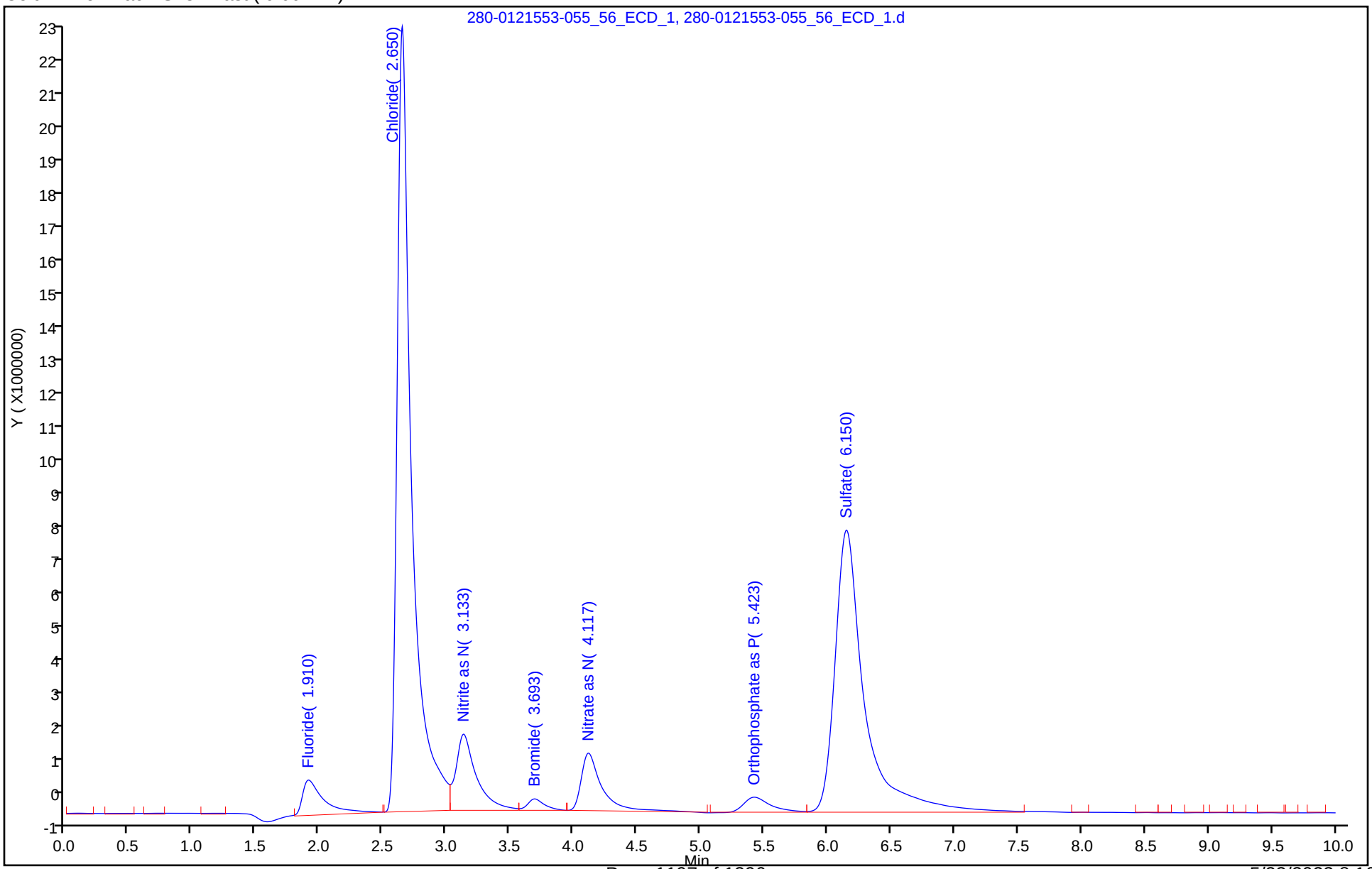
Report Date: 18-May-2023 09:50:48 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\280-0121553-055_56_ECD_1.d

Injection Date:	18-May-2023 01:43:00	Instrument ID:	WC_IonChrom15	Operator ID:	
Lims ID:	lcsd			Worklist Smp#:	55
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	IC_15 Anions	Limit Group:	Wet - Anions 28D		

Column: Ion Pac AS18 - Fast (0.00 mm)



5/23/2023 8:16 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\280-0121553-056_57_ECD_1.d
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 18-May-2023 01:55:00 ALS Bottle#: 0 Worklist Smp#: 56
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121553-056
Misc. Info.: MB
Operator ID: Instrument ID: WC_IonChrom15

Method: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\IC_15 Anions.m
Limit Group: Wet - Anions 28D
Last Update: 18-May-2023 09:50:46 Calib Date: 03-Apr-2023 17:42:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-006_08_ECD_1.d

Column 1 : Ion Pac AS18 - Fast (0.00 mm) Det: 0005
Process Host: CTX1647

First Level Reviewer: LVW8 Date: 18-May-2023 09:44:49

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		1.913				ND	U
2 Chloride	2.620	2.657	-0.037	16913		0.1914	M
3 Nitrite as N	3.137	3.197	-0.060	3045		NC	
4 Bromide	3.570	3.533	0.037	47122		0.0517	
5 Nitrate as N	4.117	4.083	0.034	14768		NC	
7 Orthophosphate as P	5.540	5.293	0.247	87669		NC	
6 Sulfate		6.123				ND	U

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

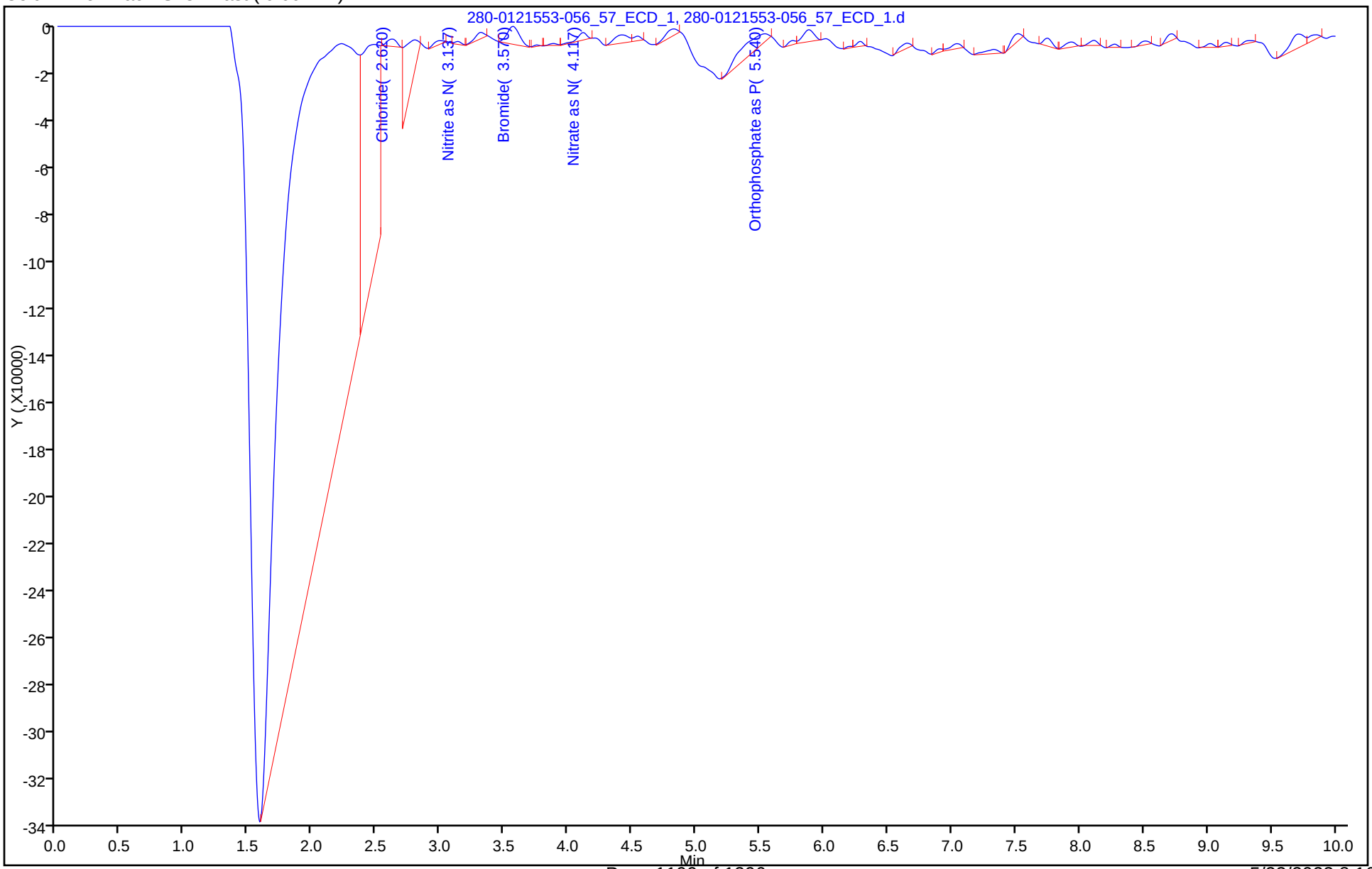
Report Date: 18-May-2023 09:50:49 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\280-0121553-056_57_ECD_1.d

Injection Date:	18-May-2023 01:55:00	Instrument ID:	WC_IonChrom15	Operator ID:	
Lims ID:	mb			Worklist Smp#:	56
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	IC_15 Anions	Limit Group:	Wet - Anions 28D		

Column: Ion Pac AS18 - Fast (0.00 mm)



5/23/2023 8:16 PM

User Disabled Compound Report

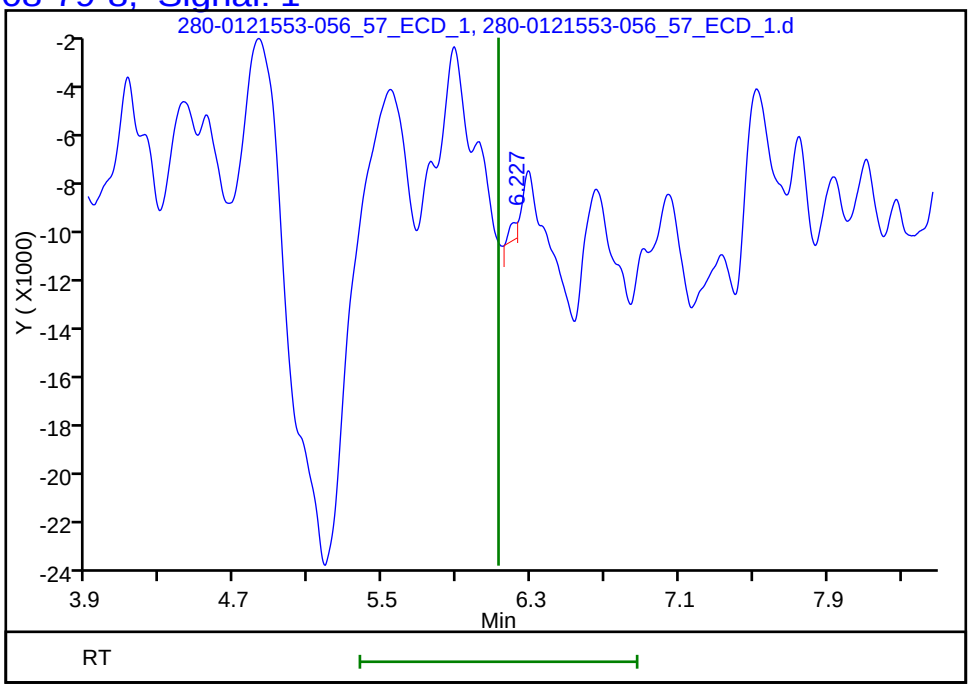
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\280-0121553-056_57_ECD_1.d
Injection Date: 18-May-2023 01:55:00 Instrument ID: WC_IonChrom15
Lims ID: mb
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 56
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: IC_15 Anions Limit Group: Wet - Anions 28D

Column: Ion Pac AS18 - Fast (0.00 mm) Detector 0005

6 Sulfate, CAS: 14808-79-8, Signal: 1

RT: 6.23
Response: 2044
Amount: 0.222153



Reviewer: LVW8, 18-May-2023 09:44:49
Audit Action: Manually Integrated Audit Reason:

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\280-0121553-058_59_ECD_1.d
Lims ID: 280-175997-C-3
Client ID: LL1mw-083-230401-GW
Sample Type: Client
Inject. Date: 18-May-2023 02:19:00 ALS Bottle#: 0 Worklist Smp#: 58
Injection Vol: 10.0 ul Dil. Factor: 5.0000
Sample Info: 280-0121553-058
Misc. Info.: 280-175997-C-3
Operator ID: Instrument ID: WC_IonChrom15

Method: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\IC_15 Anions.m
Limit Group: Wet - Anions 28D
Last Update: 18-May-2023 09:50:46 Calib Date: 03-Apr-2023 17:42:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-006_08_ECD_1.d

Column 1 : Ion Pac AS18 - Fast (0.00 mm) Det: 0005
Process Host: CTX1647

First Level Reviewer: LVW8 Date: 18-May-2023 09:45:22

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	1.913	1.913	0.000	7944548	1.71	M
2 Chloride	2.643	2.657	-0.014	15185119	4.08	M
3 Nitrite as N	3.207	3.197	0.010	690203	NC	
4 Bromide	3.687	3.533	0.154	4315	0.0133	
5 Nitrate as N	4.120	4.083	0.037	948125	NC	
7 Orthophosphate as P	5.253	5.293	-0.040	6889	NC	
6 Sulfate	6.137	6.123	0.014	11379843	4.50	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

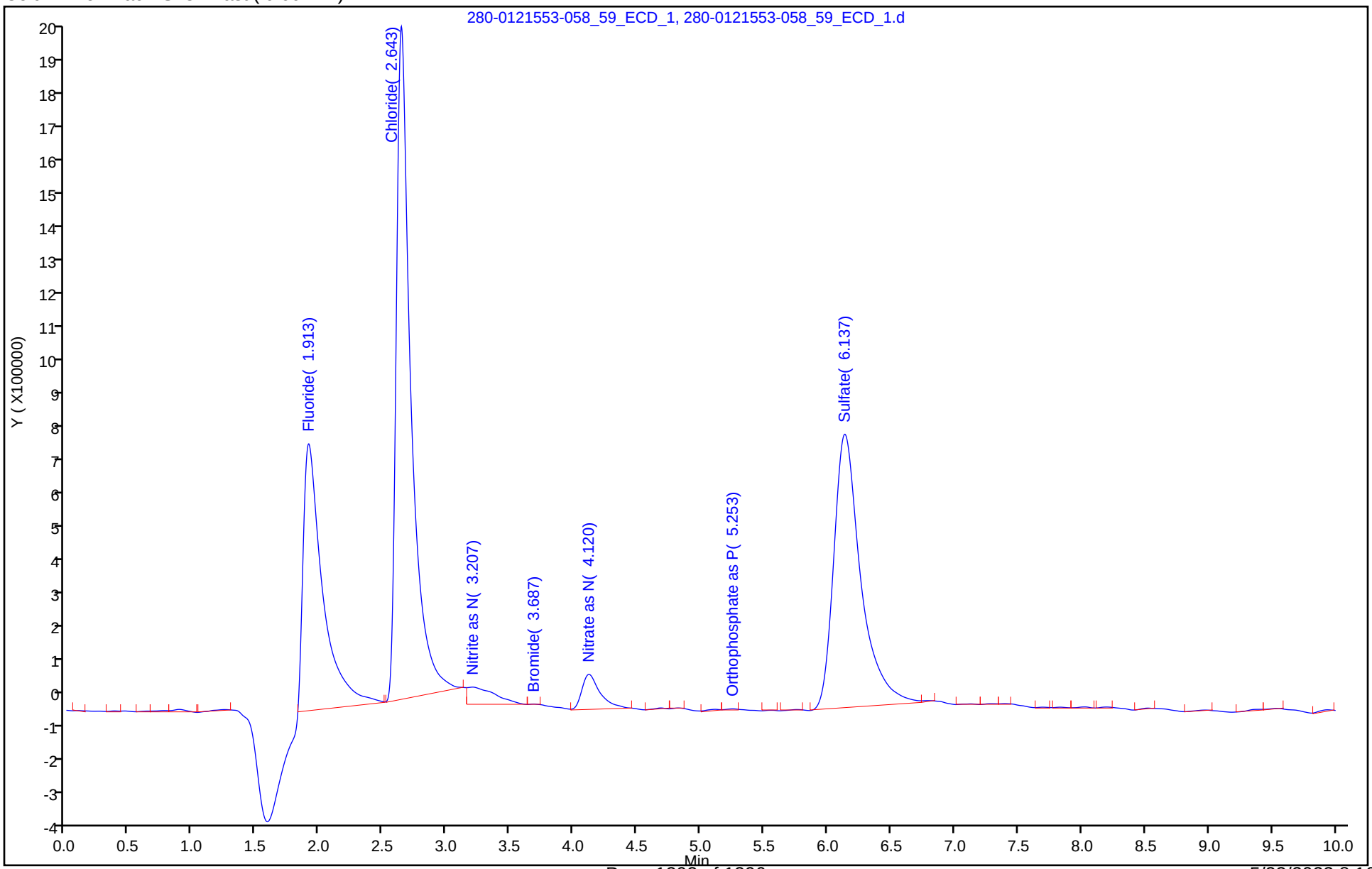
Report Date: 18-May-2023 09:50:51 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\280-0121553-058_59_ECD_1.d

Injection Date:	18-May-2023 02:19:00	Instrument ID:	WC_IonChrom15	Operator ID:	
Lims ID:	280-175997-C-3	Lab Sample ID:	280-175997-3	Worklist Smp#:	58
Client ID:	LL1mw-083-230401-GW				
Injection Vol:	10.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	IC_15 Anions	Limit Group:	Wet - Anions 28D		

Column: Ion Pac AS18 - Fast (0.00 mm)



5/23/2023 8:16 PM

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\280-0121553-059_60_ECD_1.d				
Lims ID:	280-175997-C-4				
Client ID:	LL1mw-084-230401-GW				
Sample Type:	Client				
Inject. Date:	18-May-2023 02:31:00	ALS Bottle#:	0	Worklist Smp#:	59
Injection Vol:	10.0 ul	Dil. Factor:	5.0000		
Sample Info:	280-0121553-059				
Misc. Info.:	280-175997-C-4				
Operator ID:		Instrument ID:	WC_IonChrom15		
Method:	\\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\IC_15 Anions.m				
Limit Group:	Wet - Anions 28D				
Last Update:	18-May-2023 09:50:46	Calib Date:	03-Apr-2023 17:42:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-006_08_ECD_1.d				
Column 1 :	Ion Pac AS18 - Fast (0.00 mm)		Det: 0005		
Process Host:	CTX1647				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.477	1.913	0.564	16967	0.1020	
2 Chloride	2.643	2.657	-0.014	1063818	0.4600	
3 Nitrite as N	3.463	3.197	0.266	28484	NC	
4 Bromide	3.590	3.533	0.057	10542	0.0189	
5 Nitrate as N	4.137	4.083	0.054	284307	NC	
7 Orthophosphate as P	5.360	5.293	0.067	26812	NC	
6 Sulfate	6.147	6.123	0.024	56556851	21.5	

QC Flag Legend

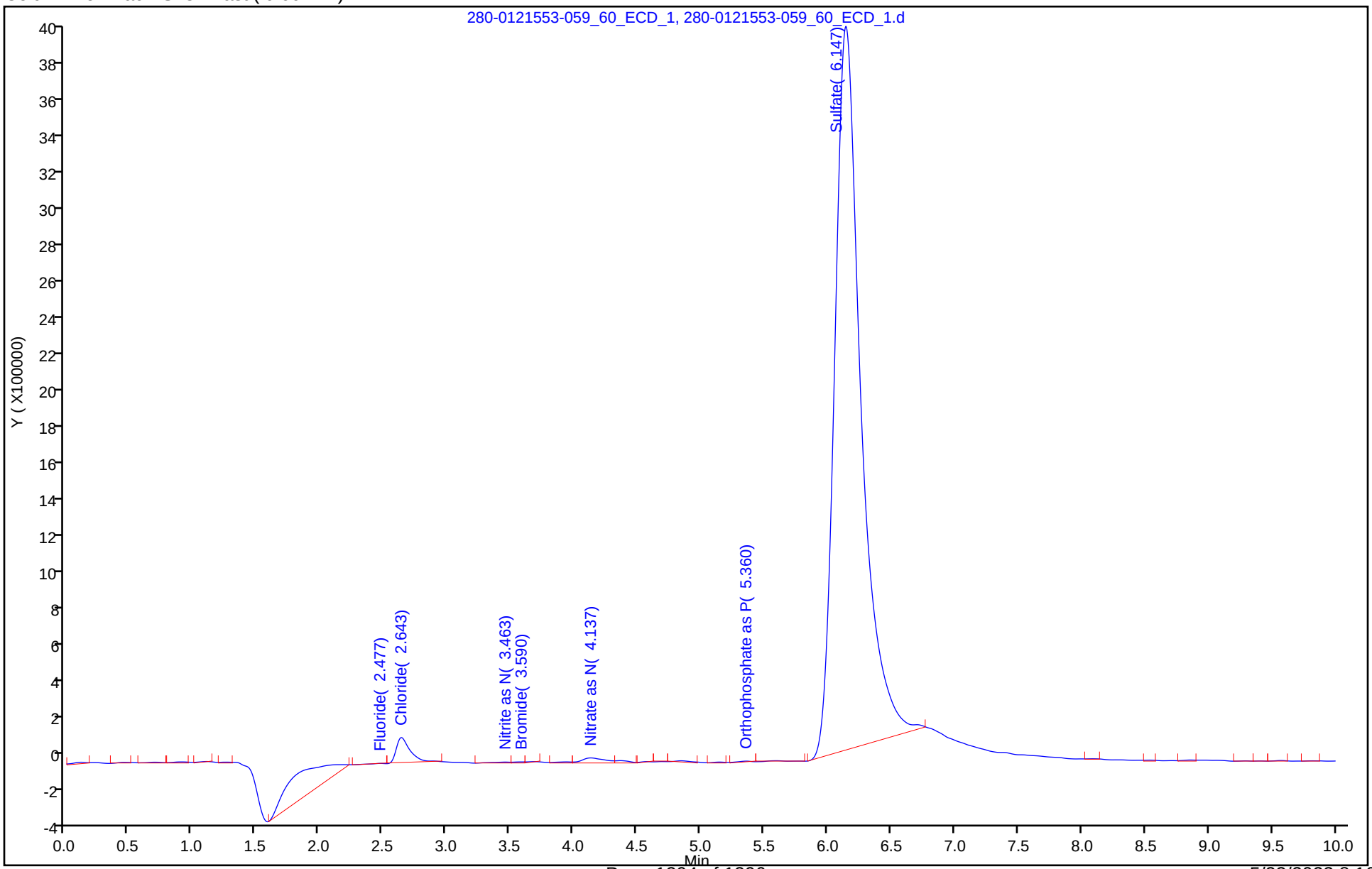
Processing Flags
NC - Not Calibrated

Report Date: 18-May-2023 09:50:52 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\280-0121553-059_60_ECD_1.d				
Injection Date:	18-May-2023 02:31:00	Instrument ID:	WC_IonChrom15	Operator ID:	
Lims ID:	280-175997-C-4	Lab Sample ID:	280-175997-4	Worklist Smp#:	59
Client ID:	LL1mw-084-230401-GW				
Injection Vol:	10.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	IC_15 Anions	Limit Group:	Wet - Anions 28D		

Column: Ion Pac AS18 - Fast (0.00 mm)



5/23/2023 8:16 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\280-0121553-060_61_ECD_1.d
Lims ID: 280-175997-C-4 DU
Client ID:
Sample Type: DU
Inject. Date: 18-May-2023 02:43:00 ALS Bottle#: 0 Worklist Smp#: 60
Injection Vol: 10.0 ul Dil. Factor: 5.0000
Sample Info: 280-0121553-060
Misc. Info.: 280-175997-C-4 DU
Operator ID: Instrument ID: WC_IonChrom15

Method: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\IC_15 Anions.m
Limit Group: Wet - Anions 28D
Last Update: 18-May-2023 09:50:46 Calib Date: 03-Apr-2023 17:42:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-006_08_ECD_1.d

Column 1 : Ion Pac AS18 - Fast (0.00 mm) Det: 0005
Process Host: CTX1647

First Level Reviewer: LVW8 Date: 18-May-2023 08:45:53

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.237	1.913	0.324	3657017		0.8393	
2 Chloride	2.643	2.657	-0.014	381395		0.2849	
3 Nitrite as N	3.220	3.197	0.023	13751		NC	
4 Bromide	3.490	3.533	-0.043	61673		0.0647	
5 Nitrate as N	4.127	4.083	0.044	895146		NC	
7 Orthophosphate as P	5.430	5.293	0.137	23318		NC	
6 Sulfate	6.143	6.123	0.020	55951435		21.3	

QC Flag Legend

Processing Flags
NC - Not Calibrated

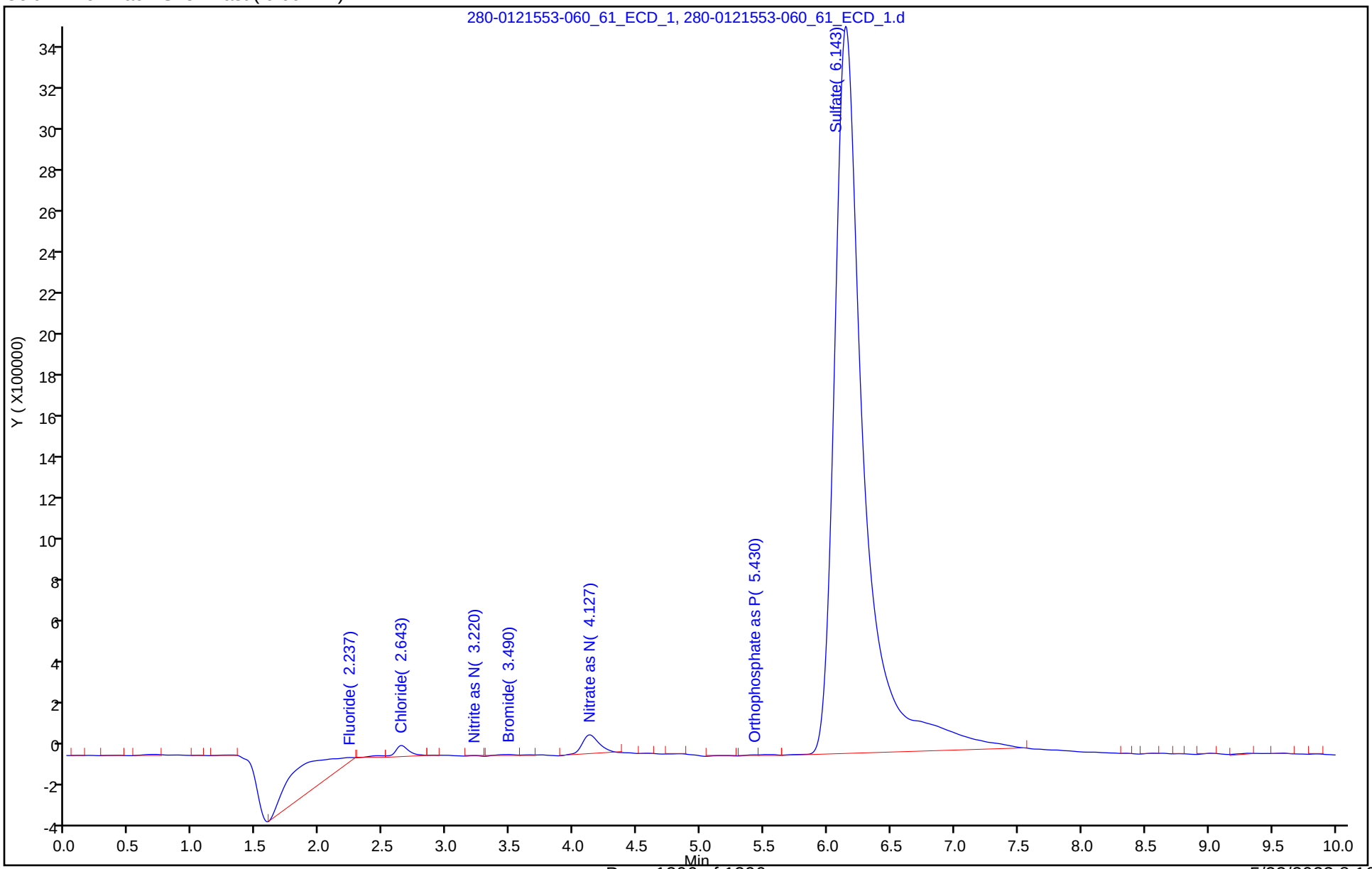
Report Date: 18-May-2023 09:50:52 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\280-0121553-060_61_ECD_1.d

Injection Date:	18-May-2023 02:43:00	Instrument ID:	WC_IonChrom15	Operator ID:	
Lims ID:	280-175997-C-4 DU			Worklist Smp#:	60
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	IC_15 Anions	Limit Group:	Wet - Anions 28D		

Column: Ion Pac AS18 - Fast (0.00 mm)



5/23/2023 8:16 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\280-0121553-062_63_ECD_1.d
Lims ID: 280-175997-C-4 MS
Client ID: LL1mw-084-230401-GW
Sample Type: MS
Inject. Date: 18-May-2023 03:07:00 ALS Bottle#: 0 Worklist Smp#: 61
Injection Vol: 10.0 ul Dil. Factor: 5.0000
Sample Info: 280-0121553-061
Misc. Info.: 280-175997-C-4 MS
Operator ID: Instrument ID: WC_IonChrom15

Method: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\IC_15 Anions.m
Limit Group: Wet - Anions 28D
Last Update: 18-May-2023 09:50:46 Calib Date: 03-Apr-2023 17:42:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-006_08_ECD_1.d

Column 1 : Ion Pac AS18 - Fast (0.00 mm) Det: 0005
Process Host: CTX1647

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	1.913	1.913	0.000	23662877	1.00	4.89	
2 Chloride	2.653	2.657	-0.004	183743805	10.0	47.3	
3 Nitrite as N	3.140	3.197	-0.057	29671936	NC	NC	
4 Bromide	3.700	3.533	0.167	5232799	1.00	4.70	
5 Nitrate as N	4.123	4.083	0.040	47572803	NC	NC	
7 Orthophosphate as P	5.427	5.293	0.134	12947684	NC	NC	
6 Sulfate	6.163	6.123	0.040	201311366	10.0	76.0	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

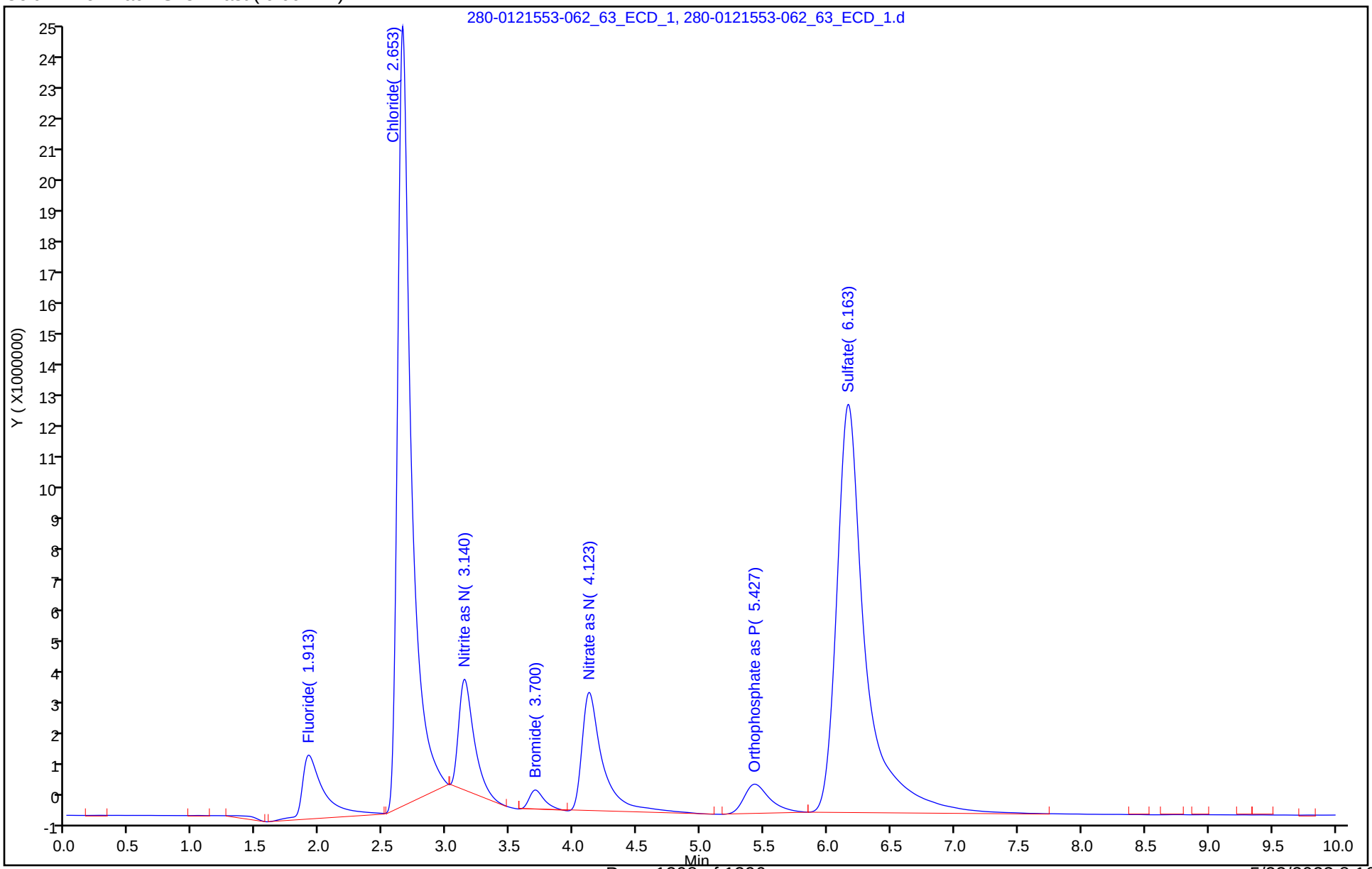
ICMS/MSD WEEK_00819 Amount Added: 0.10 Units: mL

Report Date: 18-May-2023 09:50:53 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\280-0121553-062_63_ECD_1.d				
Injection Date:	18-May-2023 03:07:00	Instrument ID:	WC_IonChrom15	Operator ID:	
Lims ID:	280-175997-C-4 MS			Worklist Smp#:	61
Client ID:	LL1mw-084-230401-GW				
Injection Vol:	10.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	IC_15 Anions	Limit Group:	Wet - Anions 28D		

Column: Ion Pac AS18 - Fast (0.00 mm)



5/23/2023 8:16 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\280-0121553-063_64_ECD_1.d
Lims ID: 280-175997-C-4 MSD
Client ID: LL1mw-084-230401-GW
Sample Type: MSD
Inject. Date: 18-May-2023 03:18:00 ALS Bottle#: 0 Worklist Smp#: 62
Injection Vol: 10.0 ul Dil. Factor: 5.0000
Sample Info: 280-0121553-062
Misc. Info.: 280-175997-C-4 MSD
Operator ID: Instrument ID: WC_IonChrom15

Method: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\IC_15 Anions.m
Limit Group: Wet - Anions 28D
Last Update: 18-May-2023 09:50:46 Calib Date: 03-Apr-2023 17:42:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-006_08_ECD_1.d

Column 1 : Ion Pac AS18 - Fast (0.00 mm) Det: 0005
Process Host: CTX1647

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	1.910	1.913	-0.003	23611697	1.00	4.88	
2 Chloride	2.653	2.657	-0.004	183941862	10.0	47.4	
3 Nitrite as N	3.140	3.197	-0.057	29648310	NC	NC	
4 Bromide	3.697	3.533	0.164	5288377	1.00	4.75	
5 Nitrate as N	4.120	4.083	0.037	43215654	NC	NC	
7 Orthophosphate as P	5.427	5.293	0.134	13231214	NC	NC	
6 Sulfate	6.163	6.123	0.040	202283922	10.0	76.3	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

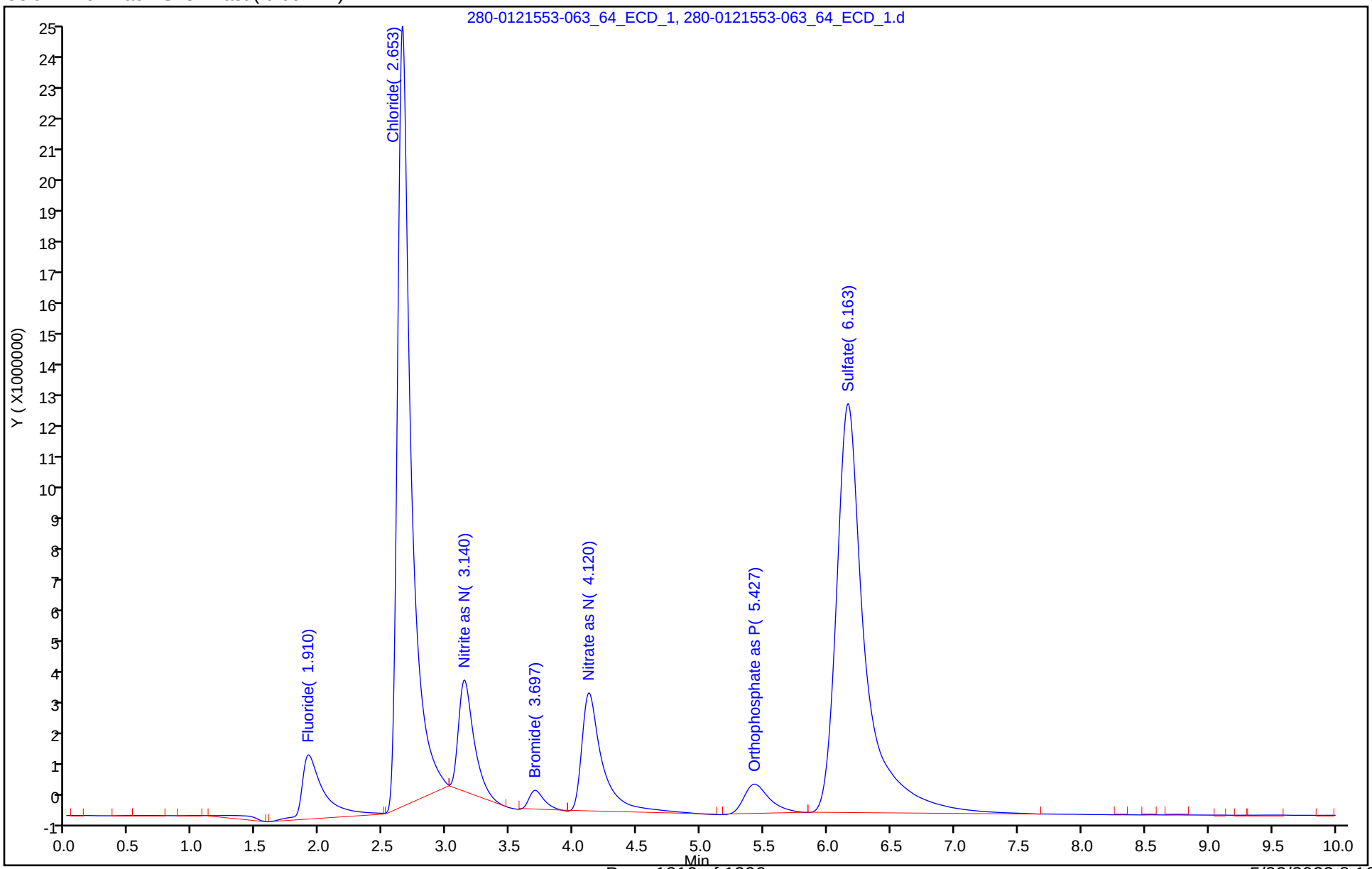
ICMS/MSD WEEK_00819 Amount Added: 0.10 Units: mL

Report Date: 18-May-2023 09:50:54 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\280-0121553-063_64_ECD_1.d				
Injection Date:	18-May-2023 03:18:00	Instrument ID:	WC_IonChrom15	Operator ID:	
Lims ID:	280-175997-C-4 MSD			Worklist Smp#:	62
Client ID:	LL1mw-084-230401-GW				
Injection Vol:	10.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	IC_15 Anions	Limit Group:	Wet - Anions 28D		

Column: Ion Pac AS18 - Fast (0.00 mm)



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\280-0121553-064_65_ECD_1.d
Lims ID: 280-175997-C-5
Client ID: LL1mw-084-230402-GW
Sample Type: Client
Inject. Date: 18-May-2023 03:30:00 ALS Bottle#: 0 Worklist Smp#: 63
Injection Vol: 10.0 ul Dil. Factor: 5.0000
Sample Info: 280-0121553-063
Misc. Info.: 280-175997-C-5
Operator ID: Instrument ID: WC_IonChrom15

Method: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\IC_15 Anions.m
Limit Group: Wet - Anions 28D
Last Update: 18-May-2023 09:50:46 Calib Date: 03-Apr-2023 17:42:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-006_08_ECD_1.d

Column 1 : Ion Pac AS18 - Fast (0.00 mm) Det: 0005
Process Host: CTX1647

First Level Reviewer: LVW8 Date: 18-May-2023 08:46:40

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.170	1.913	0.257	4748514	1.06	
2 Chloride	2.647	2.657	-0.010	347530	0.2762	
3 Nitrite as N	3.173	3.197	-0.024	12117	NC	
4 Bromide	3.613	3.533	0.080	1149	0.0105	
5 Nitrate as N	4.127	4.083	0.044	960810	NC	
7 Orthophosphate as P	5.483	5.293	0.190	78379	NC	
6 Sulfate		6.123			ND	U

QC Flag Legend

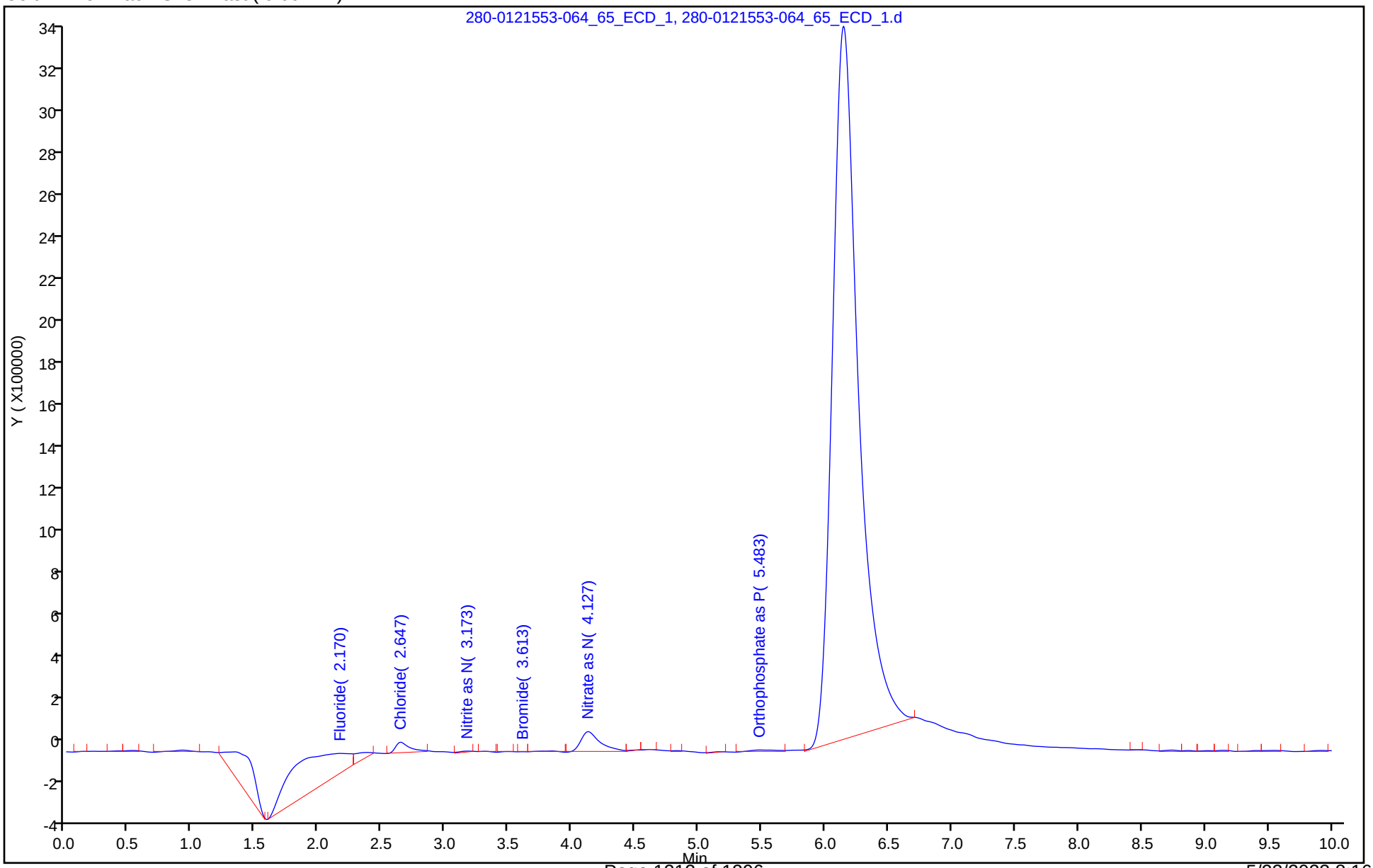
Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected

Report Date: 18-May-2023 09:50:54 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\280-0121553-064_65_ECD_1.d				
Injection Date:	18-May-2023 03:30:00	Instrument ID:	WC_IonChrom15	Operator ID:	
Lims ID:	280-175997-C-5	Lab Sample ID:	280-175997-5	Worklist Smp#:	63
Client ID:	LL1mw-084-230402-GW				
Injection Vol:	10.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	IC_15 Anions	Limit Group:	Wet - Anions 28D		

Column: Ion Pac AS18 - Fast (0.00 mm)



5/23/2023 8:16 PM

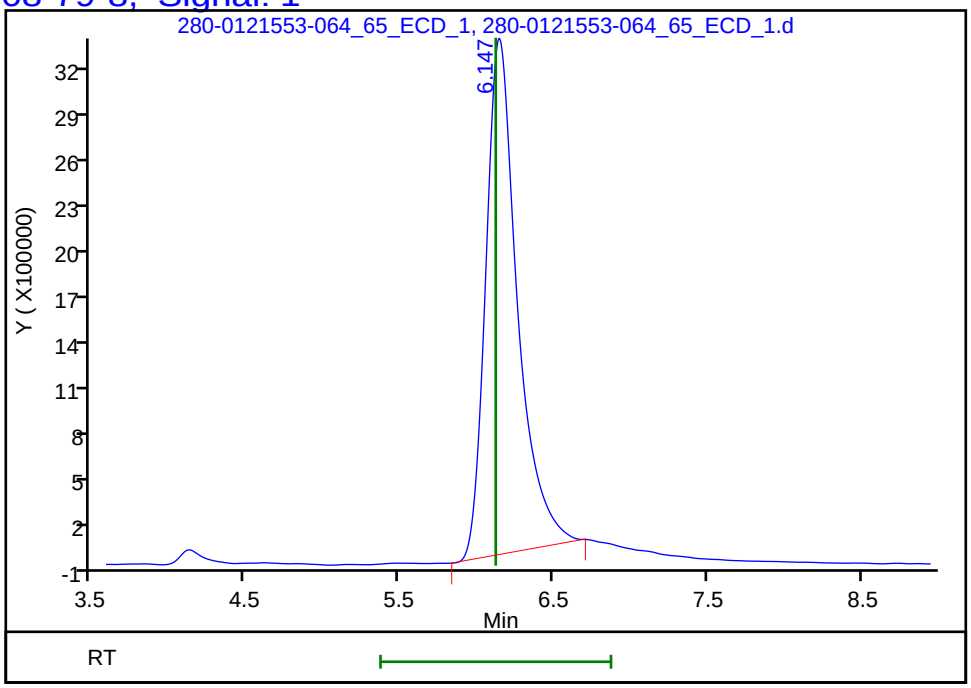
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\280-0121553-064_65_ECD_1.d				
Injection Date:	18-May-2023 03:30:00	Instrument ID:	WC_IonChrom15		
Lims ID:	280-175997-C-5	Lab Sample ID:	280-175997-5		
Client ID:	LL1mw-084-230402-GW				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	63
Injection Vol:	10.0 ul	Dil. Factor:	5.0000		
Method:	IC_15 Anions	Limit Group:	Wet - Anions 28D		
Column:	Ion Pac AS18 - Fast (0.00 mm)	Detector	0005		

6 Sulfate, CAS: 14808-79-8, Signal: 1

RT: 6.15
Response: 47961319
Amount: 18.268725



Reviewer: LVW8, 18-May-2023 08:46:40
Audit Action: Manually Integrated Audit Reason:

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\280-0121553-065_66_ECD_1.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 18-May-2023 03:42:00 ALS Bottle#: 0 Worklist Smp#: 65
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121553-065
Misc. Info.: CCV
Operator ID: Instrument ID: WC_IonChrom15
Sublist: chrom-IC_15 Anions*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\IC_15 Anions.m
Limit Group: Wet - Anions 28D
Last Update: 18-May-2023 09:50:55 Calib Date: 03-Apr-2023 17:42:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-006_08_ECD_1.d

Column 1 : Ion Pac AS18 - Fast (0.00 mm) Det: 0005
Process Host: CTX1647

First Level Reviewer: LVW8 Date: 18-May-2023 09:46:31

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	1.913	1.913	0.000	11353568	2.50	2.40	M
2 Chloride	2.653	2.657	-0.004	180033330	50.0	46.4	M
3 Nitrite as N	3.137	3.197	-0.060	24497473	NC	NC	M
4 Bromide	3.697	3.533	0.164	2801790	2.50	2.52	M
5 Nitrate as N	4.123	4.083	0.040	19264828	NC	NC	
7 Orthophosphate as P	5.427	5.293	0.134	6246017	NC	NC	
6 Sulfate	6.150	6.123	0.027	128717023	50.0	48.7	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

IC LCS_01954 Amount Added: 10.00 Units: mL

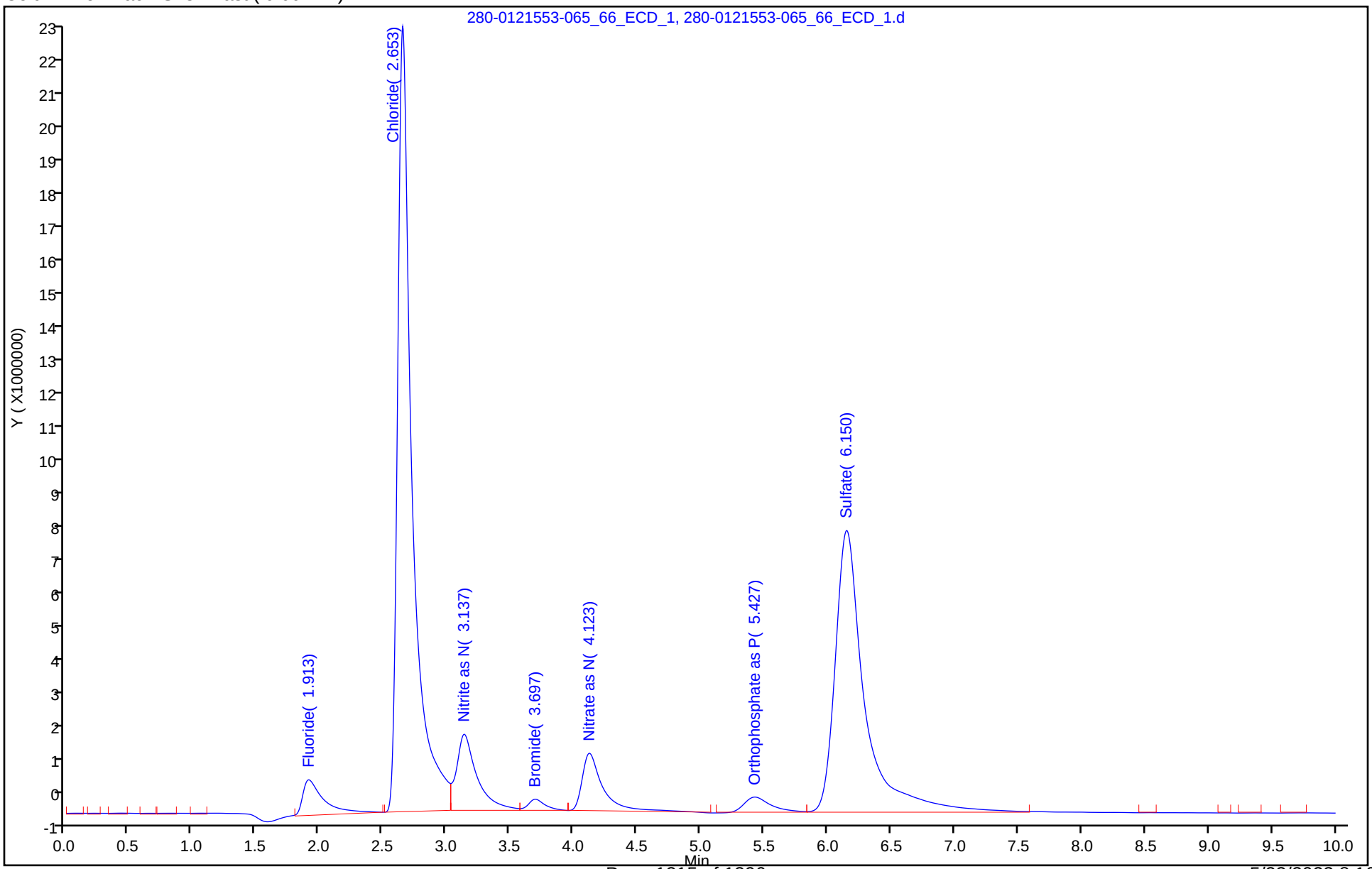
Report Date: 18-May-2023 09:50:55 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\280-0121553-065_66_ECD_1.d

Injection Date:	18-May-2023 03:42:00	Instrument ID:	WC_IonChrom15	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	65
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	IC_15 Anions	Limit Group:	Wet - Anions 28D		

Column: Ion Pac AS18 - Fast (0.00 mm)



5/23/2023 8:16 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\280-0121553-066_67_ECD_1.d
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 18-May-2023 03:54:00 ALS Bottle#: 0 Worklist Smp#: 66
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121553-066
Misc. Info.: CCB
Operator ID: Instrument ID: WC_IonChrom15

Method: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\IC_15 Anions.m
Limit Group: Wet - Anions 28D
Last Update: 18-May-2023 09:50:55 Calib Date: 03-Apr-2023 17:42:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230403-120083.b\280-0120083-006_08_ECD_1.d

Column 1 : Ion Pac AS18 - Fast (0.00 mm) Det: 0005
Process Host: CTX1647

First Level Reviewer: LVW8 Date: 18-May-2023 09:46:43

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		1.913				ND	U
2 Chloride		2.657				ND	U
3 Nitrite as N	3.203	3.197	0.006	8080		NC	
4 Bromide	3.563	3.533	0.030	1853		0.0111	
5 Nitrate as N	4.073	4.083	-0.010	129036		NC	
7 Orthophosphate as P	5.157	5.293	-0.136	2381		NC	
6 Sulfate	6.200	6.123	0.077	4706		0.2232	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected

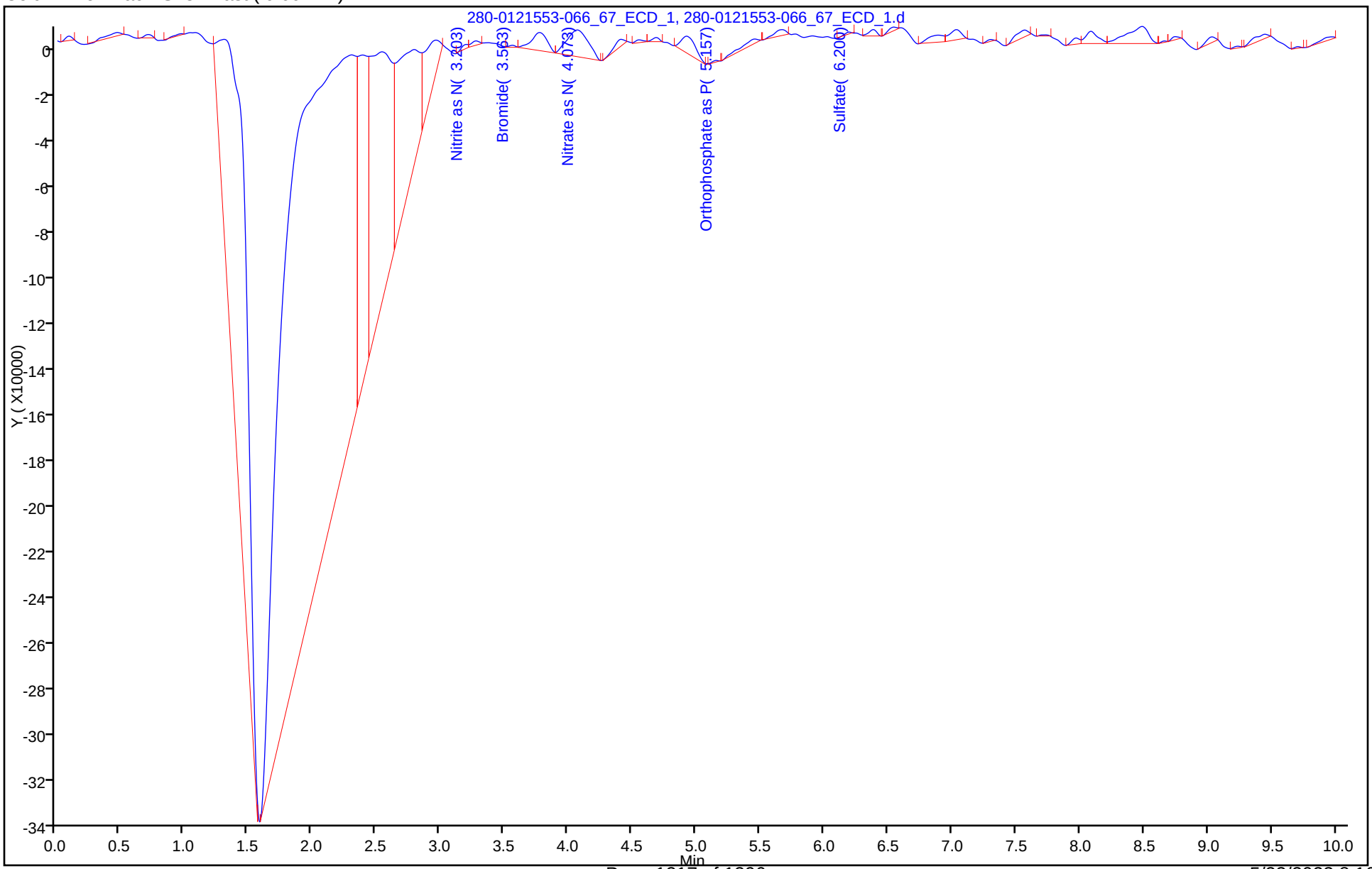
Report Date: 18-May-2023 09:50:56 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom15\20230517-121553.b\280-0121553-066_67_ECD_1.d

Injection Date:	18-May-2023 03:54:00	Instrument ID:	WC_IonChrom15	Operator ID:	
Lims ID:	ccb			Worklist Smp#:	66
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	IC_15 Anions	Limit Group:	Wet - Anions 28D		

Column: Ion Pac AS18 - Fast (0.00 mm)



5/23/2023 8:16 PM

	Analysis	Sample Name	ObjectID
1	NPOC	ICV	0L-10900100866-10101000-134B1741BDDB-0000
2	NPOC	ICB	0L-10900100866-10101000-134B1741BDDB-0001
3	NPOC	LCS	0L-10900100866-10101000-134B1741BDDB-0002
4	NPOC	MB	0L-10900100866-10101000-134B1741BDDB-0003
5	NPOC	TIC	0L-10900100866-10101000-134B1741BDDB-0004
6	NPOC	280-176258-d-1	0L-10900100866-10101000-134B1741BDDB-0005
7	NPOC	MS 280-176258-d-1	0L-10900100866-10101000-134B1741BDDB-0006
8	NPOC	MSD 280-176258-d-1	0L-10900100866-10101000-134B1741BDDB-0007
9	NPOC	280-176258-c-2	0L-10900100866-10101000-134B1741BDDB-0008
10	NPOC	280-176258-c-3	0L-10900100866-10101000-134B1741BDDC-0000
11	NPOC	280-176258-e-4	0L-10900100866-10101000-134B1741BDDC-0001
12	NPOC	280-176258-e-5	0L-10900100866-10101000-134B1741BDDC-0002
13	NPOC	280-176258-e-6	0L-10900100866-10101000-134B1741BDDC-0003
14	NPOC	280-176258-e-7	0L-10900100866-10101000-134B1741BDDC-0004
15	NPOC	CCV	0L-10900100866-10101000-134B1741BDDC-0005
16	NPOC	CCB	0L-10900100866-10101000-134B1741BDDC-0006
17	NPOC	280-176205-b-1	0L-10900100866-10101000-134B1741BDDC-0007
18	NPOC	280-176205-a-2	0L-10900100866-10101000-134B1741BDDC-0008
19	NPOC	280-176205-b-3	0L-10900100866-10101000-134B1741BDDC-0009
20	NPOC	280-176205-b-4	0L-10900100866-10101000-134B1741BDDC-000A
21	NPOC	MS 280-176205-b-4	0L-10900100866-10101000-134B1741BDDC-000B
22	NPOC	MSD 280-176205-b-4	0L-10900100866-10101000-134B1741BDDC-000C
23	NPOC	280-176205-b-5	0L-10900100866-10101000-134B1741BDDC-000D
24	NPOC	280-176205-b-6	0L-10900100866-10101000-134B1741BDDC-000E
25	NPOC	280-176205-a-7	0L-10900100866-10101000-134B1741BDDC-000F
26	NPOC	280-175997-d-1	0L-10900100866-10101000-134B1741BDDC-0010
27	NPOC	CCV	0L-10900100866-10101000-134B1741BDDC-0011
28	NPOC	CCB	0L-10900100866-10101000-134B1741BDDC-0012
29	NPOC	280-175997-d-3	0L-10900100866-10101000-134B1741BDDC-0013
30	NPOC	280-175997-d-4	0L-10900100866-10101000-134B1741BDDC-0014
31	NPOC	280-176036-a-1	0L-10900100866-10101000-134B1741BDDC-0015
32	NPOC	280-176036-a-2	0L-10900100866-10101000-134B1741BDDC-0016
33	NPOC	280-176036-a-3	0L-10900100866-10101000-134B1741BDDC-0017
34	NPOC	LCS	0L-10900100866-10101000-134B1741BDDC-0018
35	NPOC	MB	0L-10900100866-10101000-134B1741BDDC-0019
36	NPOC	TIC	0L-10900100866-10101000-134B1741BDDC-001A
37	NPOC	280-176293-c-2	0L-10900100866-10101000-134B1741BDDC-001B
38	NPOC	MS 280-176293-c-2	0L-10900100866-10101000-134B1741BDDC-001C
39	NPOC	CCV	0L-10900100866-10101000-134B1741BDDC-001D
40	NPOC	CCB	0L-10900100866-10101000-134B1741BDDC-001E
41	NPOC	MSD 280-176293-c-2	0L-10900100866-10101000-134B1741BDDC-001F
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43	NPOC	280-176293-c-4	0L-10900100866-10101000-134B1741BDDC-0021
44	NPOC	280-176293-c-5	0L-10900100866-10101000-134B1741BDDC-0022
45	NPOC	280-176293-c-6	0L-10900100866-10101000-134B1741BDDC-0023
46	NPOC	280-176293-c-7	0L-10900100866-10101000-134B1741BDDC-0024
47	NPOC	280-176293-c-8	0L-10900100866-10101000-134B1741BDDC-0025
48	NPOC	280-176293-c-9	0L-10900100866-10101000-134B1741BDDC-0026
49	NPOC	280-176293-c-10	0L-10900100866-10101000-134B1741BDDC-0027
50	NPOC	280-176007-b-8	0L-10900100866-10101000-134B1741BDDC-0028
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52	NPOC	CCB	0L-10900100866-10101000-134B1741C0FA-0001
53	NPOC	280-176007-b-9	0L-10900100866-10101000-134B1741C1D5-0000

	Origin	Manual Dilution	Result	Commen
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2	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.1983mg/L	
3	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:24.29mg/L	
4	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.1974mg/L	
5	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.2300mg/L	
6	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.8772mg/L	
7	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:24.69mg/L	
8	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:25.26mg/L	
9	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.7231mg/L	
10	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.8092mg/L	
11	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.7321mg/L	
12	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.7804mg/L	
13	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.7499mg/L	
14	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.6641mg/L	
15	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:24.86mg/L	
16	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.2313mg/L	
17	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	500.0	NPOC:6323mg/L	
18	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	500.0	NPOC:7798mg/L	
19	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	100.0	NPOC:308.0mg/L	
20	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	100.0	NPOC:358.1mg/L	
21	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	100.0	NPOC:2750mg/L	
22	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	100.0	NPOC:2707mg/L	
23	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	500.0	NPOC:18060mg/L	
24	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	20.00	NPOC:1980mg/L	
25	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	20.00	NPOC:1440mg/L	
26	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:1.225mg/L	
27	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:24.58mg/L	
28	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.2399mg/L	
29	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.9315mg/L	
30	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:1.492mg/L	
31	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:5.215mg/L	
32	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:5.138mg/L	
33	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:3.874mg/L	
34	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:24.23mg/L	
35	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.2402mg/L	
36	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.2601mg/L	
37	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	10.00	NPOC:180.7mg/L	
38	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	10.00	NPOC:422.5mg/L	
39	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:25.25mg/L	
40	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.2555mg/L	
41	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	10.00	NPOC:430.5mg/L	
42	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	2.000	NPOC:42.36mg/L	
43	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:8.998mg/L	
44	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:29.45mg/L	
45	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	2.000	NPOC:29.12mg/L	
46	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	2.000	NPOC:50.47mg/L	
47	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	2.000	NPOC:18.69mg/L	
48	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	2.000	NPOC:52.09mg/L	
49	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.4879mg/L	
50	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:1.995mg/L	
51	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:24.76mg/L	
52	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.2564mg/L	
53	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:1.497mg/L	

	Status	Action	Date / Time	Vial
1	Completed		5/16/2023 7:46:32 PM	1
2	Completed		5/16/2023 8:00:45 PM	2
3	Completed		5/16/2023 8:15:41 PM	3
4	Completed		5/16/2023 8:29:50 PM	4
5	Completed		5/16/2023 8:43:59 PM	5
6	Completed		5/16/2023 9:00:22 PM	6
7	Completed		5/16/2023 9:14:45 PM	7
8	Completed		5/16/2023 9:29:12 PM	8
9	Completed		5/16/2023 9:45:26 PM	9
10	Completed		5/16/2023 9:59:30 PM	10
11	Completed		5/16/2023 10:15:45 PM	11
12	Completed		5/16/2023 10:31:54 PM	12
13	Completed		5/16/2023 10:48:03 PM	13
14	Completed		5/16/2023 11:04:20 PM	14
15	Completed		5/16/2023 11:18:48 PM	15
16	Completed		5/16/2023 11:32:57 PM	16
17	Completed		5/16/2023 11:47:07 PM	17
18	Completed		5/17/2023 12:01:28 AM	18
19	Completed		5/17/2023 12:15:37 AM	19
20	Completed		5/17/2023 12:29:47 AM	20
21	Completed		5/17/2023 12:43:57 AM	21
22	Completed		5/17/2023 12:58:10 AM	22
23	Completed		5/17/2023 1:12:38 AM	23
24	Completed		5/17/2023 1:28:56 AM	24
25	Completed		5/17/2023 1:43:58 AM	25
26	Completed		5/17/2023 2:00:13 AM	26
27	Completed		5/17/2023 2:15:13 AM	27
28	Completed		5/17/2023 2:29:24 AM	28
29	Completed		5/17/2023 2:43:34 AM	29
30	Completed		5/17/2023 2:57:42 AM	30
31	Completed		5/17/2023 3:14:00 AM	31
32	Completed		5/17/2023 3:28:21 AM	32
33	Completed		5/17/2023 3:42:30 AM	33
34	Completed		5/17/2023 3:56:40 AM	34
35	Completed		5/17/2023 4:10:49 AM	35
36	Completed		5/17/2023 4:24:58 AM	36
37	Completed		5/17/2023 4:39:08 AM	37
38	Completed		5/17/2023 4:53:29 AM	38
39	Completed		5/17/2023 5:14:15 AM	39
40	Completed		5/17/2023 5:28:22 AM	40
41	Completed		5/17/2023 5:42:42 AM	41
42	Completed		5/17/2023 5:57:00 AM	42
43	Completed		5/17/2023 6:13:19 AM	43
44	Completed		5/17/2023 6:29:42 AM	44
45	Completed		5/17/2023 6:45:52 AM	45
46	Completed		5/17/2023 7:02:24 AM	46
47	Completed		5/17/2023 7:16:29 AM	47
48	Completed		5/17/2023 7:30:53 AM	48
49	Completed		5/17/2023 7:47:08 AM	49
50	Completed		5/17/2023 8:01:13 AM	50
51	Completed		5/17/2023 8:15:49 AM	51
52	Completed		5/17/2023 8:29:59 AM	52
53	Completed		5/17/2023 8:44:10 AM	53

	Analysis	Sample Name	ObjectID
54	NPOC	MS 280-176007-b-9	0L-10900100866-10101000-134B1741C1D5-0001
55	NPOC	MSD 280-176007-b-9	0L-10900100866-10101000-134B1741C1D6-0000
56	NPOC	280-176007-b-10	0L-10900100866-10101000-134B1742606A-0000
57	NPOC	280-176007-b-2	0L-10900100866-10101000-134B1742606A-0001
58	NPOC	280-176007-b-3	0L-10900100866-10101000-134B1742606A-0002
59	NPOC	280-176007-b-4	0L-10900100866-10101000-134B1742606A-0003
60	NPOC	280-176007-b-5	0L-10900100866-10101000-134B1742606A-0004
61	NPOC	280-176007-b-6	0L-10900100866-10101000-134B1742606A-0005
62	NPOC	280-176007-b-7	0L-10900100866-10101000-134B1742606A-0006
63	NPOC	CCV	0L-10900100866-10101000-134B1742606A-0007
64	NPOC	CCB	0L-10900100866-10101000-134B1742606A-0008
65	NPOC	280-175907-b-2	0L-10900100866-10101000-134B1742606A-0009
66	NPOC	280-175907-b-3	0L-10900100866-10101000-134B1742606A-000A
67	NPOC	LCS	0L-10900100866-10101000-134B1742606A-000B
68	NPOC	MB	0L-10900100866-10101000-134B1742606A-000C
69	NPOC	280-175907-b-4	0L-10900100866-10101000-134B1742606A-000D
70	NPOC	MS 280-175907-b-4	0L-10900100866-10101000-134B1742606A-000E
71	NPOC	MSD 280-175907-b-4	0L-10900100866-10101000-134B1742606A-000F
72	NPOC	280-175907-b-5	0L-10900100866-10101000-134B1742606A-0010
73	NPOC	280-175907-b-6	0L-10900100866-10101000-134B1742606A-0011
74	NPOC	280-176256-d-1	0L-10900100866-10101000-134B1742606A-0012
75	NPOC	CCV	0L-10900100866-10101000-134B1742606A-0013
76	NPOC	CCB	0L-10900100866-10101000-134B1742606A-0014
77	NPOC	280-175906-e-1	0L-10900100866-10101000-134B1742606A-0015
78	NPOC	280-175906-e-2	0L-10900100866-10101000-134B1742606A-0016
79	NPOC	280-175906-d-3	0L-10900100866-10101000-134B1742606A-0017
80	NPOC	280-175907-b-7	0L-10900100866-10101000-134B1742606A-0018
81	NPOC	280-175976-a-1	0L-10900100866-10101000-134B1742606A-0019
82	NPOC	280-175976-a-2	0L-10900100866-10101000-134B1742606A-001A
83	NPOC	280-176036-a-4	0L-10900100866-10101000-134B1742606A-001B
84	NPOC	MS 280-176036-a-4	0L-10900100866-10101000-134B1742606A-001C
85	NPOC	MSD 280-176036-a-4	0L-10900100866-10101000-134B1742606A-001D
86	NPOC	280-175976-a-3	0L-10900100866-10101000-134B1742606A-001E
87	NPOC	CCV	0L-10900100866-10101000-134B1742606A-001F
88	NPOC	CCB	0L-10900100866-10101000-134B1742606A-0020
89	NPOC	580-127036-q-1	0L-10900100866-10101000-134B1742606A-0021
90	NPOC	580-127036-q-5	0L-10900100866-10101000-134B1742606A-0022
91	NPOC	580-127036-q-7	0L-10900100866-10101000-134B1742606A-0023
92	NPOC	CCV	0L-10900100866-10101000-134B1742606A-0024
93	NPOC	CCB	0L-10900100866-10101000-134B1742606A-0025

	Origin	Manual Dilution	Result	Commen
54	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:25.14mg/L	
55	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:25.85mg/L	
56	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:1.882mg/L	
57	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.5648mg/L	
58	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:3.124mg/L	
59	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:5.645mg/L	
60	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:3.096mg/L	
61	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:3.000mg/L	
62	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:1.064mg/L	
63	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:25.32mg/L	
64	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.2600mg/L	
65	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:1.380mg/L	
66	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:1.333mg/L	
67	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:24.82mg/L	
68	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.2817mg/L	
69	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:1.191mg/L	
70	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:26.06mg/L	
71	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:26.21mg/L	
72	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:1.060mg/L	
73	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:1.202mg/L	
74	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	50.00	NPOC:173.0mg/L	
75	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:25.17mg/L	
76	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.2556mg/L	
77	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:2.458mg/L	
78	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:1.477mg/L	
79	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:2.058mg/L	
80	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:1.932mg/L	
81	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:8.018mg/L	
82	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	2.000	NPOC:73.98mg/L	
83	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:10.19mg/L	
84	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:35.08mg/L	
85	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:34.15mg/L	
86	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:10.84mg/L	
87	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:25.14mg/L	
88	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.3269mg/L	
89	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.5804mg/L	
90	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.5755mg/L	
91	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:1.830mg/L	
92	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:25.17mg/L	
93	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.2822mg/L	

	Status	Action	Date / Time	Vial
54	Completed		5/17/2023 8:58:28 AM	54
55	Completed		5/17/2023 9:12:43 AM	55
56	Completed		5/17/2023 9:28:59 AM	56
57	Completed		5/17/2023 9:43:14 AM	57
58	Completed		5/17/2023 9:59:30 AM	58
59	Completed		5/17/2023 10:13:36 AM	59
60	Completed		5/17/2023 10:29:52 AM	60
61	Completed		5/17/2023 10:46:03 AM	61
62	Completed		5/17/2023 11:02:14 AM	62
63	Completed		5/17/2023 11:16:58 AM	63
64	Completed		5/17/2023 11:31:09 AM	64
65	Completed		5/17/2023 11:45:20 AM	65
66	Completed		5/17/2023 11:59:31 AM	66
67	Completed		5/17/2023 12:14:03 PM	67
68	Completed		5/17/2023 12:28:14 PM	68
69	Completed		5/17/2023 12:42:35 PM	69
70	Completed		5/17/2023 12:56:47 PM	70
71	Completed		5/17/2023 1:11:03 PM	71
72	Completed		5/17/2023 1:25:14 PM	72
73	Completed		5/17/2023 1:39:25 PM	73
74	Completed		5/17/2023 1:53:42 PM	74
75	Completed		5/17/2023 2:08:24 PM	75
76	Completed		5/17/2023 2:22:37 PM	76
77	Completed		5/17/2023 2:38:54 PM	77
78	Completed		5/17/2023 2:55:11 PM	78
79	Completed		5/17/2023 3:09:18 PM	79
80	Completed		5/17/2023 3:25:43 PM	80
81	Completed		5/17/2023 3:39:51 PM	81
82	Completed		5/17/2023 3:54:31 PM	82
83	Completed		5/17/2023 4:08:43 PM	83
84	Completed		5/17/2023 4:23:19 PM	84
85	Completed		5/17/2023 4:37:40 PM	85
86	Completed		5/17/2023 4:51:53 PM	86
87	Completed		5/17/2023 5:06:17 PM	87
88	Completed		5/17/2023 5:20:30 PM	88
89	Completed		5/17/2023 5:34:43 PM	89
90	Completed		5/17/2023 5:49:01 PM	90
91	Completed		5/17/2023 6:05:20 PM	91
92	Completed		5/17/2023 6:19:56 PM	92
93	Completed		5/17/2023 6:34:09 PM	93

TOC-L Cal Curve Information
C:\TOC-L\CalCurves\Calibration 10 31 22 Auto Dilution Cal.2023 05 04 14 32 31.cal

Date of Creation	5/4/2023 3:58:47 PM
User	ABW
System	TOC-LCSN

Cal. Curve

Sample Name:	SHI5_NPOC Auto Dilution Calibration_05_04_2023
Sample ID:	SHI5_NPOC Auto Dilution Calibration_05_04_2023
Object ID	0L-10900100866-10101000-134B16820239-0000
Cal. Curve:	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status	Completed
Comment:	

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.000	50uL	1.000	*******		5/4/2023 2:40:33 PM
2	0.000	50uL	1.000	*******		5/4/2023 2:42:44 PM
3	0.000	50uL	1.000	*******		5/4/2023 2:44:53 PM
4	0.000	50uL	1.000	*******		5/4/2023 2:47:01 PM

Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	0.000
SD Area	0.000
CV Area	0.00%
Vial	92
No Washes	2

Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	1.771	50uL	50.00	*******		5/4/2023 2:55:42 PM
2	1.714	50uL	50.00	*******		5/4/2023 2:57:50 PM
3	1.595	50uL	50.00	*******		5/4/2023 2:59:59 PM
4	1.786	50uL	50.00	*******		5/4/2023 3:02:12 PM

Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	1.716
SD Area	0.08674
CV Area	5.05%
Vial	93
No Washes	2

Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	10.60	50uL	10.00	*******		5/4/2023 3:09:45 PM
2	10.29	50uL	10.00	*******		5/4/2023 3:11:54 PM
3	10.25	50uL	10.00	*******		5/4/2023 3:14:04 PM
4	10.32	50uL	10.00	*******		5/4/2023 3:16:14 PM

Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	10.37
SD Area	0.1593
CV Area	1.54%
Vial	93
No Washes	2

Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	20.19	50uL	5.000	*******		5/4/2023 3:23:47 PM
2	19.43	50uL	5.000	*******		5/4/2023 3:25:57 PM
3	19.44	50uL	5.000	*******		5/4/2023 3:28:06 PM
4	19.84	50uL	5.000	*******		5/4/2023 3:30:14 PM

Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 90.00sec
Mean Area 19.73
SD Area 0.3641
CV Area 1.85%
Vial 93
No Washes 2

Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	51.32	50uL	2.000	*******		5/4/2023 3:38:03 PM
2	49.72	50uL	2.000	*******		5/4/2023 3:40:19 PM
3	49.18	50uL	2.000	*******		5/4/2023 3:42:38 PM
4	50.28	50uL	2.000	*******		5/4/2023 3:45:02 PM

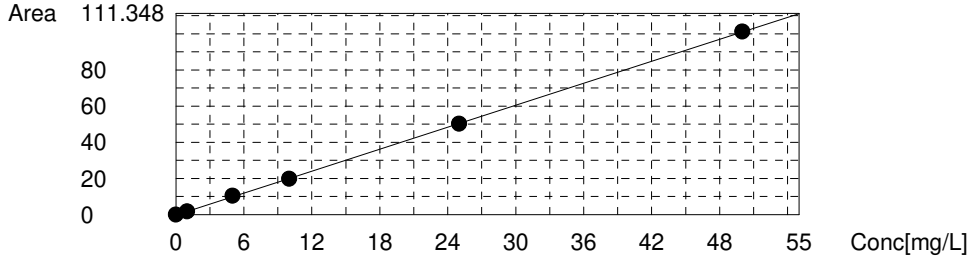
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 90.00sec
Mean Area 50.13
SD Area 0.9145
CV Area 1.82%
Vial 93
No Washes 2

Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	103.1	50uL	1.000	*******		5/4/2023 3:51:58 PM
2	100.5	50uL	1.000	*******		5/4/2023 3:54:13 PM
3	99.70	50uL	1.000	*******		5/4/2023 3:56:25 PM
4	101.6	50uL	1.000	*******		5/4/2023 3:58:47 PM

Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 90.00sec
Mean Area 101.2
SD Area 1.473
CV Area 1.45%
Vial 93
No Washes 2

Slope: 2.024
Intercept -0.1771
r^2 0.9999
r 1.0000
RSE(%) N/A
Zero Shift No



TOC-Control L Report

Instr.Information

Instrument Options TOC/ASI/
Catalyst Regular Sensitivity

Sample

Sample Name: ICV
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

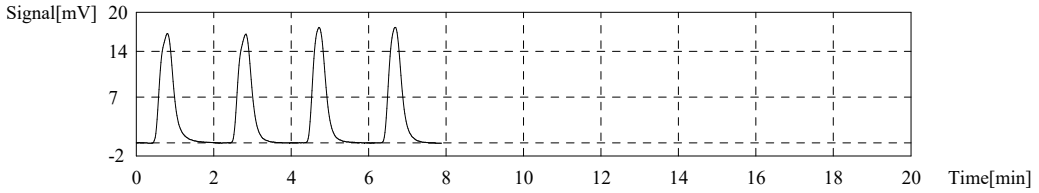
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:20.31mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	41.82	20.75mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 7:40:03 PM
2	40.38	20.03mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 7:42:14 PM
3	40.66	20.17mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 7:44:22 PM
4	40.88	20.28mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 7:46:32 PM

Mean Area 40.94
Mean Conc. 20.31mg/L



Sample

Sample Name: ICB
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

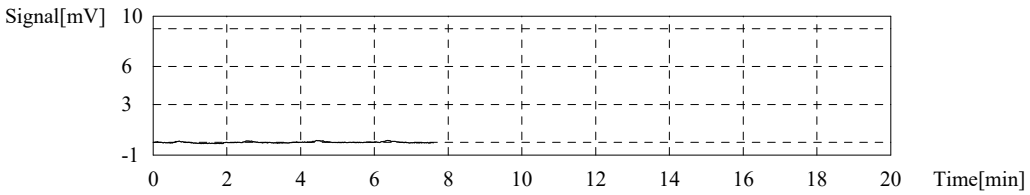
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1983mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2409	0.2065mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 7:54:26 PM
2	0.1412	0.1573mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 7:56:35 PM
3	0.2770	0.2243mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 7:58:40 PM
4	0.2377	0.2049mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 8:00:45 PM

Mean Area 0.2242
Mean Conc. 0.1983mg/L



Sample

Sample Name: LCS
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

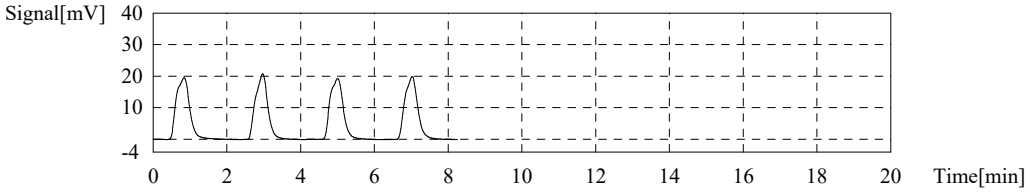
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.29mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	49.87	24.72mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 8:08:53 PM
2	48.82	24.20mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 8:11:10 PM
3	48.32	23.96mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 8:13:22 PM
4	48.94	24.26mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 8:15:41 PM

Mean Area 48.99
Mean Conc. 24.29mg/L



Sample

Sample Name: MB
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

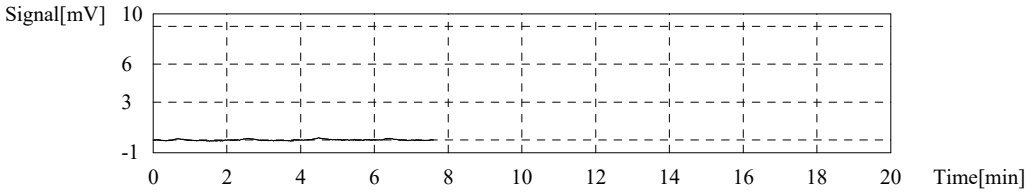
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1974mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2654	0.2186mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 8:23:35 PM
2	0.2184	0.1954mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 8:25:40 PM
3	0.1822	0.1775mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 8:27:45 PM
4	0.2241	0.1982mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 8:29:50 PM

Mean Area 0.2225
Mean Conc. 0.1974mg/L



Sample

Sample Name: TIC
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

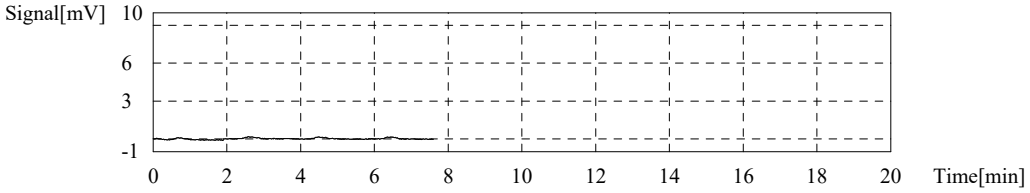
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2300mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2631	0.2175mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 8:37:44 PM
2	0.2599	0.2159mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 8:39:49 PM
3	0.2788	0.2252mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 8:41:54 PM
4	0.3519	0.2613mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 8:43:59 PM

Mean Area 0.2884
Mean Conc. 0.2300mg/L



Sample

Sample Name: 280-176258-d-1
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

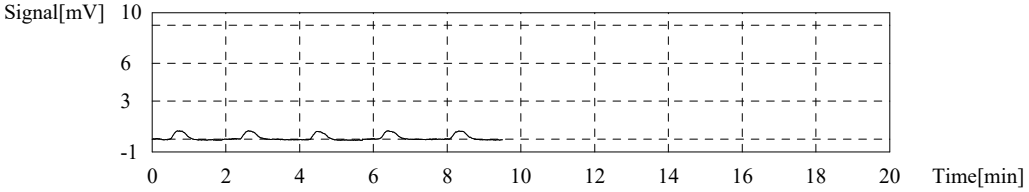
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.8772mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.605	0.8803mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 8:51:53 PM
2	1.286	0.7228mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 8:54:02 PM
3	1.497	0.8270mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 8:56:11 PM
4	1.589	0.8724mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 8:58:16 PM
5	1.704	0.9292mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 9:00:22 PM

Mean Area 1.599
Mean Conc. 0.8772mg/L



Sample

Sample Name: MS 280-176258-d-1
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

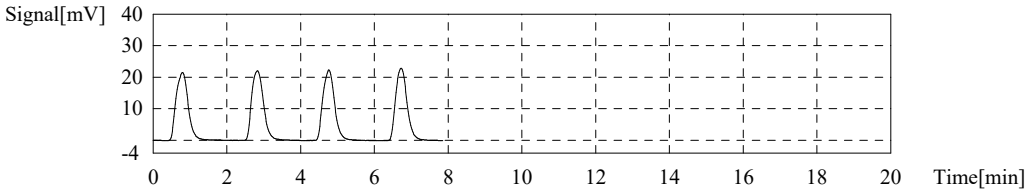
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.69mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	49.78	24.68mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 9:08:21 PM
2	49.73	24.65mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 9:10:30 PM
3	49.97	24.77mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 9:12:40 PM
4	49.74	24.66mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 9:14:45 PM

Mean Area 49.81
Mean Conc. 24.69mg/L



Sample

Sample Name: MSD 280-176258-d-1
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

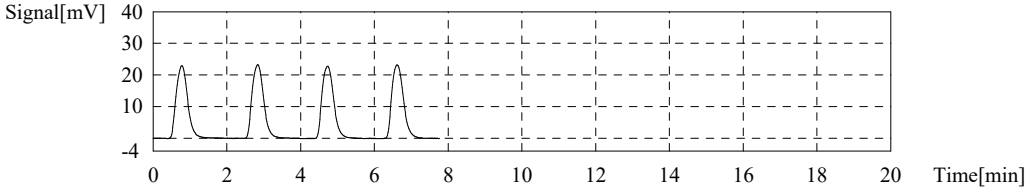
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.26mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	50.32	24.94mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 9:22:49 PM
2	51.17	25.36mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 9:25:02 PM
3	50.73	25.15mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 9:27:07 PM
4	51.61	25.58mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 9:29:12 PM

Mean Area 50.96
Mean Conc. 25.26mg/L



Sample

Sample Name: 280-176258-c-2
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

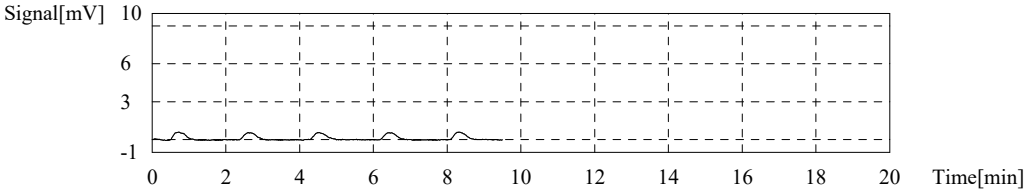
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.7231mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.519	0.8379mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 9:37:06 PM
2	1.221	0.6906mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 9:39:11 PM
3	1.264	0.7119mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 9:41:16 PM
4	1.352	0.7554mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 9:43:21 PM
5	1.310	0.7346mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 9:45:26 PM

Mean Area 1.287
Mean Conc. 0.7231mg/L



Sample

Sample Name: 280-176258-c-3
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

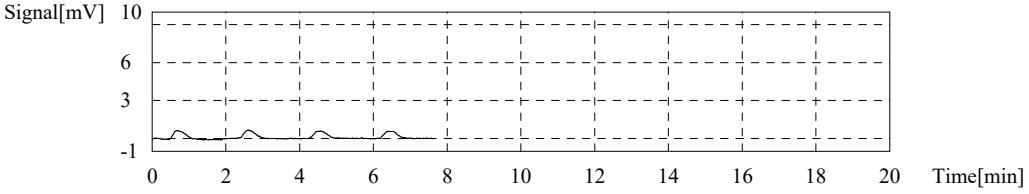
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.8092mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.489	0.8230mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 9:53:15 PM
2	1.369	0.7638mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 9:55:20 PM
3	1.413	0.7855mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 9:57:25 PM
4	1.573	0.8645mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 9:59:30 PM

Mean Area 1.461
Mean Conc. 0.8092mg/L



Sample

Sample Name: 280-176258-e-4
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

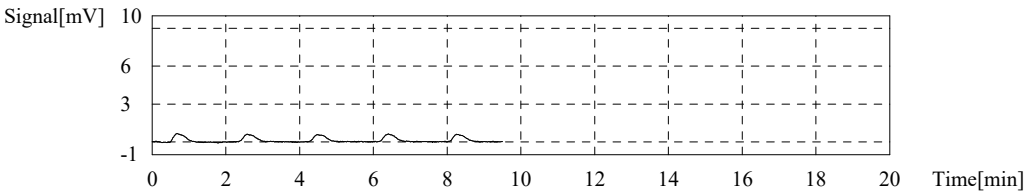
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.7321mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.598	0.8769mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 10:07:24 PM
2	1.359	0.7588mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 10:09:29 PM
3	1.272	0.7158mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 10:11:34 PM
4	1.322	0.7405mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 10:13:39 PM
5	1.267	0.7134mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 10:15:45 PM

Mean Area 1.305
Mean Conc. 0.7321mg/L



Sample

Sample Name: 280-176258-e-5
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

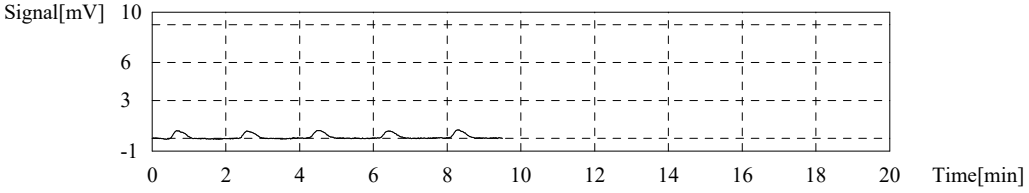
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.7804mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.434	0.7959mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 10:23:34 PM
2	1.237	0.6986mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 10:25:39 PM
3	1.449	0.8033mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 10:27:44 PM
4	1.304	0.7316mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 10:29:49 PM
5	1.424	0.7909mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 10:31:54 PM

Mean Area 1.403
Mean Conc. 0.7804mg/L



Sample

Sample Name: 280-176258-e-6
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

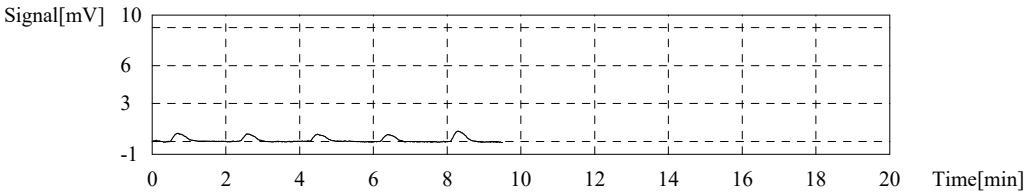
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.7499mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.649	0.9021mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 10:39:43 PM
2	1.294	0.7267mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 10:41:48 PM
3	1.225	0.6926mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 10:43:53 PM
4	1.196	0.6783mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 10:45:58 PM
5	1.859	1.006mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 10:48:03 PM

Mean Area 1.341
Mean Conc. 0.7499mg/L



Sample

Sample Name: 280-176258-e-7
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

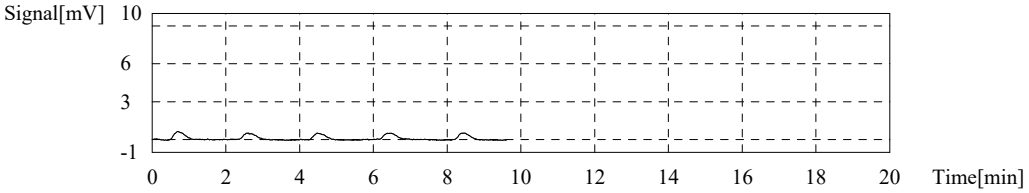
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.6641mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.368	0.7633mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 10:55:52 PM
2	1.182	0.6714mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 10:57:57 PM
3	1.132	0.6467mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 11:00:02 PM
4	1.181	0.6709mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 11:02:15 PM
5	1.174	0.6674mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 11:04:20 PM

Mean Area 1.167
Mean Conc. 0.6641mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

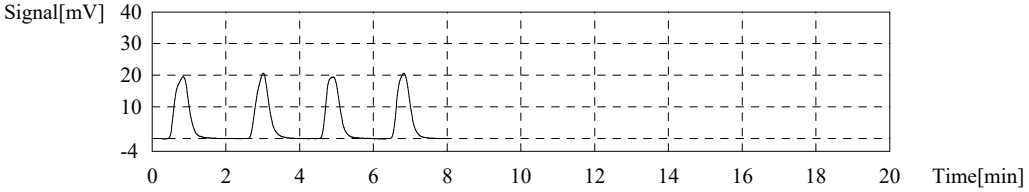
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.86mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	51.43	25.49mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 11:12:26 PM
2	49.84	24.71mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 11:14:37 PM
3	49.28	24.43mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 11:16:43 PM
4	50.01	24.79mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 11:18:48 PM

Mean Area 50.14
Mean Conc. 24.86mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

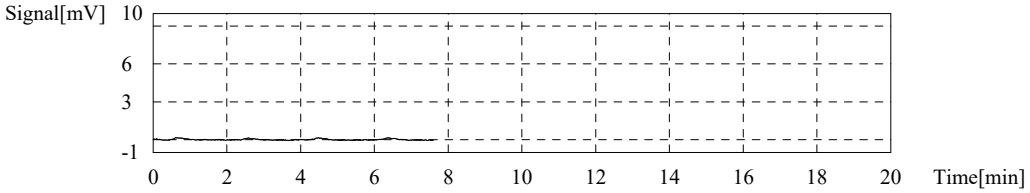
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2313mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4121	0.2911mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 11:26:42 PM
2	0.2064	0.1895mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 11:28:47 PM
3	0.3110	0.2411mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 11:30:52 PM
4	0.2353	0.2037mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 11:32:57 PM

Mean Area 0.2912
Mean Conc. 0.2313mg/L



Sample

Sample Name: 280-176205-b-1
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

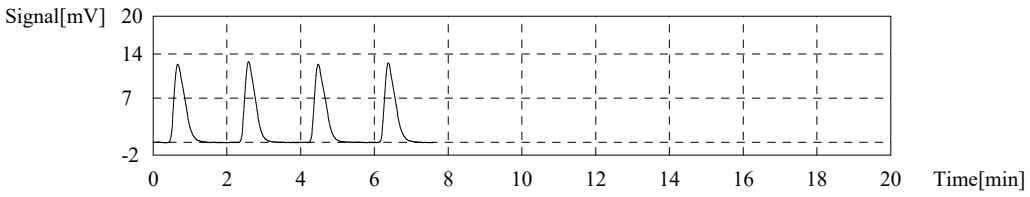
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	500.0	NPOC:6323mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	25.79	6414mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 11:40:52 PM
2	25.31	6295mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 11:42:57 PM
3	25.29	6290mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 11:45:02 PM
4	25.31	6295mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 11:47:07 PM

Mean Area 25.43
Mean Conc. 6323mg/L



Sample

Sample Name: 280-176205-a-2
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

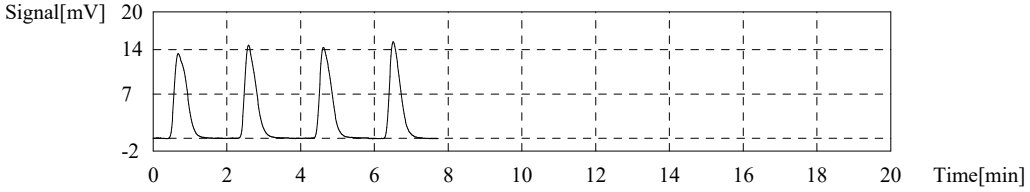
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	500.0	NPOC:7798mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	31.43	7807mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 11:55:01 PM
2	31.53	7831mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 11:57:14 PM
3	31.33	7782mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/16/2023 11:59:19 PM
4	31.29	7772mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 12:01:28 AM

Mean Area 31.40
Mean Conc. 7798mg/L



Sample

Sample Name: 280-176205-b-3
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

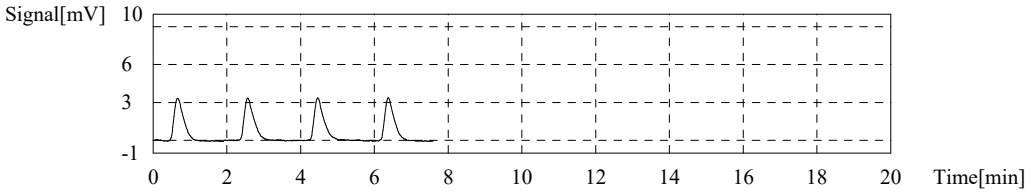
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	100.0	NPOC:308.0mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.131	311.6mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 12:09:22 AM
2	6.075	308.8mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 12:11:27 AM
3	6.030	306.6mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 12:13:32 AM
4	5.993	304.8mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 12:15:37 AM

Mean Area 6.057
Mean Conc. 308.0mg/L



Sample

Sample Name: 280-176205-b-4
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

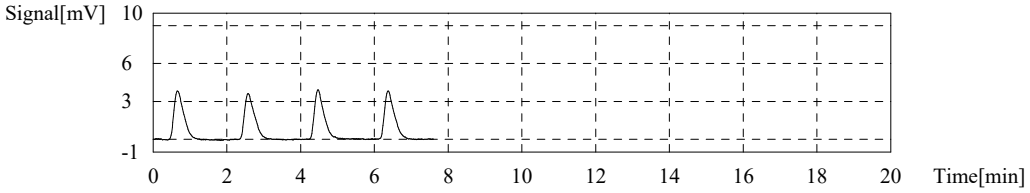
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	100.0	NPOC:358.1mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.194	364.1mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 12:23:32 AM
2	7.037	356.4mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 12:25:37 AM
3	6.954	352.3mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 12:27:42 AM
4	7.104	359.7mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 12:29:47 AM

Mean Area 7.072
Mean Conc. 358.1mg/L



Sample

Sample Name: MS 280-176205-b-4
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

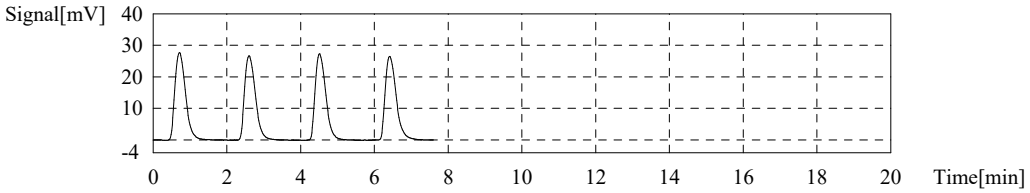
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	100.0	NPOC:2750mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	56.29	2789mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 12:37:41 AM
2	54.99	2725mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 12:39:47 AM
3	55.16	2734mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 12:41:52 AM
4	55.51	2751mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 12:43:57 AM

Mean Area 55.49
Mean Conc. 2750mg/L



Sample

Sample Name: MSD 280-176205-b-4
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

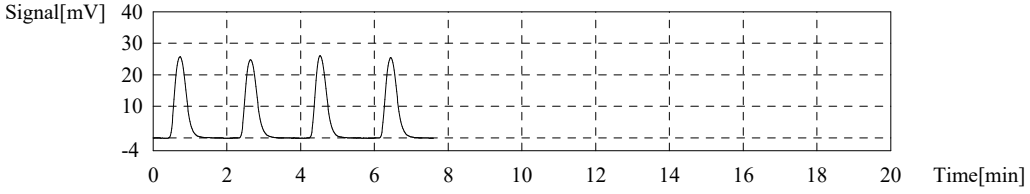
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	100.0	NPOC:2707mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	55.73	2762mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 12:51:52 AM
2	53.83	2668mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 12:54:00 AM
3	54.26	2689mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 12:56:05 AM
4	54.69	2710mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 12:58:10 AM

Mean Area 54.63
Mean Conc. 2707mg/L



Sample

Sample Name: 280-176205-b-5
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

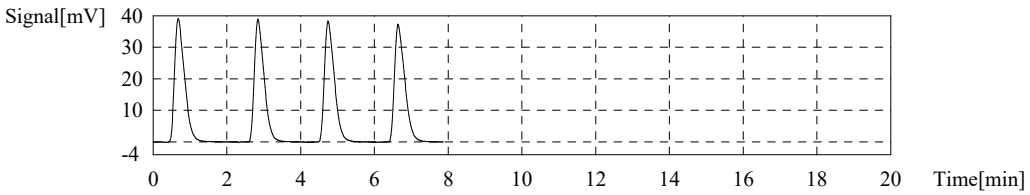
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	500.0	NPOC:18060mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	74.54	18454mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 1:06:20 AM
2	72.15	17864mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 1:08:28 AM
3	72.32	17906mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 1:10:33 AM
4	72.76	18015mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 1:12:38 AM

Mean Area 72.94
Mean Conc. 18060mg/L



Sample

Sample Name: 280-176205-b-6
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

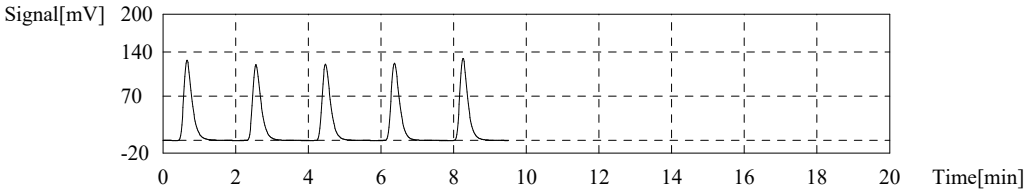
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	20.00	NPOC:1980mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	207.2	2049mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 1:20:32 AM
2	197.3	1951mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 1:22:41 AM
3	198.0	1958mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 1:24:46 AM
4	201.0	1988mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 1:26:51 AM
5	204.8	2025mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 1:28:56 AM

Mean Area 200.3
Mean Conc. 1980mg/L



Sample

Sample Name: 280-176205-a-7
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

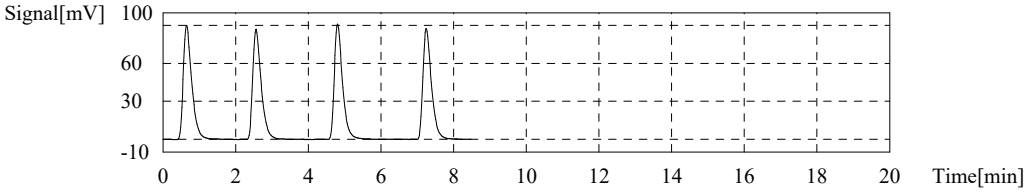
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	20.00	NPOC:1440mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	148.5	1469mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 1:36:44 AM
2	144.1	1425mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 1:39:16 AM
3	145.0	1434mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 1:41:53 AM
4	144.8	1432mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 1:43:58 AM

Mean Area 145.6
Mean Conc. 1440mg/L



Sample

Sample Name: 280-175997-d-1
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

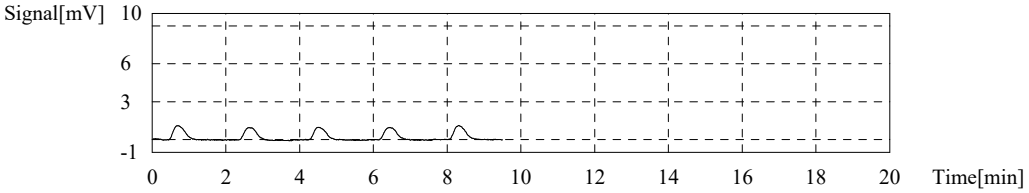
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.225mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.532	1.338mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 1:51:53 AM
2	2.289	1.218mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 1:53:58 AM
3	2.331	1.239mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 1:56:03 AM
4	2.230	1.189mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 1:58:08 AM
5	2.364	1.255mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 2:00:13 AM

Mean Area 2.304
Mean Conc. 1.225mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

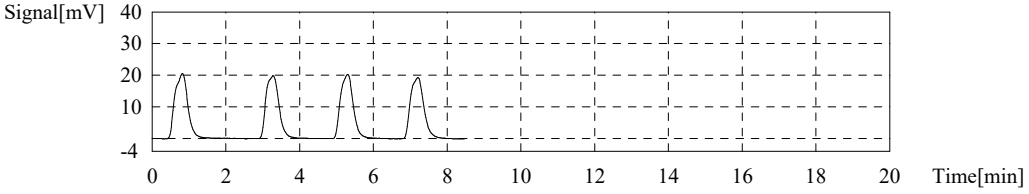
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.58mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	50.92	25.24mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 2:08:37 AM
2	49.09	24.34mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 2:10:52 AM
3	48.97	24.28mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 2:12:57 AM
4	49.38	24.48mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 2:15:13 AM

Mean Area 49.59
Mean Conc. 24.58mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

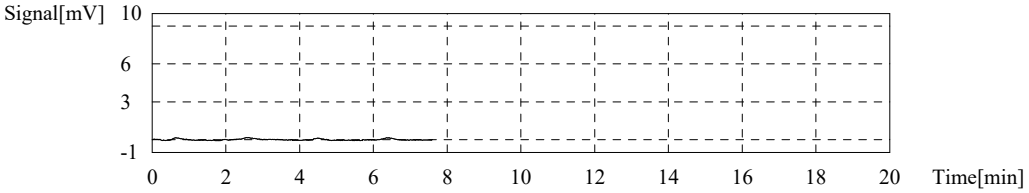
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2399mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2960	0.2337mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 2:23:09 AM
2	0.3504	0.2606mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 2:25:14 AM
3	0.2682	0.2200mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 2:27:19 AM
4	0.3197	0.2454mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 2:29:24 AM

Mean Area 0.3086
Mean Conc. 0.2399mg/L



Sample

Sample Name: 280-175997-d-3
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

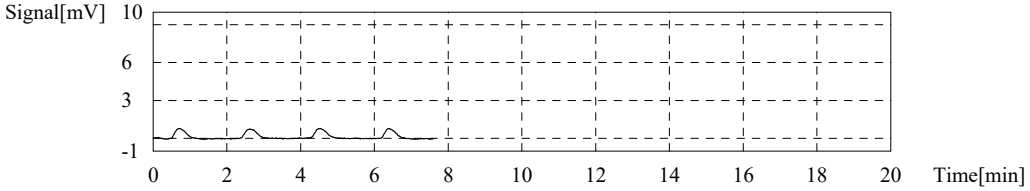
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.9315mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.826	0.9895mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 2:37:18 AM
2	1.707	0.9307mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 2:39:23 AM
3	1.637	0.8961mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 2:41:28 AM
4	1.664	0.9095mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 2:43:34 AM

Mean Area 1.708
Mean Conc. 0.9315mg/L



Sample

Sample Name: 280-175997-d-4
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

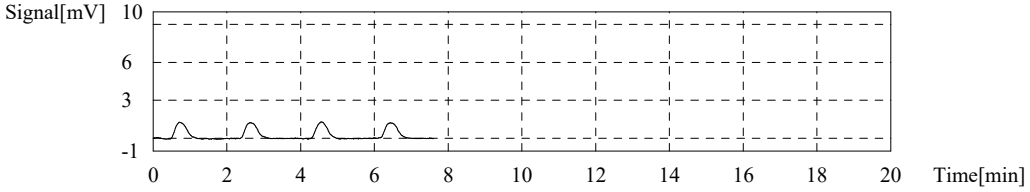
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.492mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.883	1.512mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 2:51:27 AM
2	2.780	1.461mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 2:53:32 AM
3	2.823	1.482mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 2:55:37 AM
4	2.891	1.516mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 2:57:42 AM

Mean Area 2.844
Mean Conc. 1.492mg/L



Sample

Sample Name: 280-176036-a-1
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

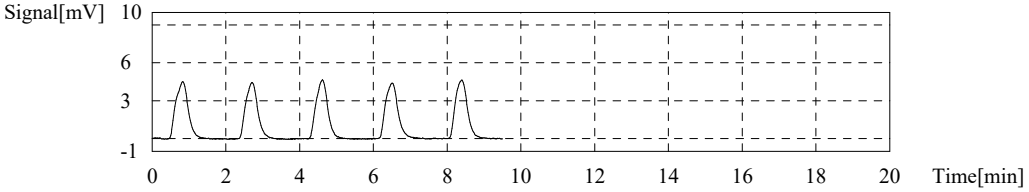
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.215mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.83	5.437mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 3:05:36 AM
2	10.31	5.180mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 3:07:41 AM
3	10.27	5.161mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 3:09:50 AM
4	10.46	5.254mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 3:11:55 AM
5	10.48	5.264mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 3:14:00 AM

Mean Area 10.38
Mean Conc. 5.215mg/L



Sample

Sample Name: 280-176036-a-2
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

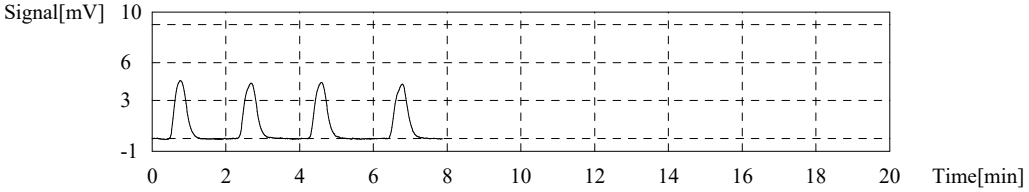
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.138mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.39	5.220mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 3:21:50 AM
2	10.24	5.146mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 3:23:55 AM
3	10.02	5.037mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 3:26:16 AM
4	10.25	5.151mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 3:28:21 AM

Mean Area 10.23
Mean Conc. 5.138mg/L



Sample

Sample Name: 280-176036-a-3
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

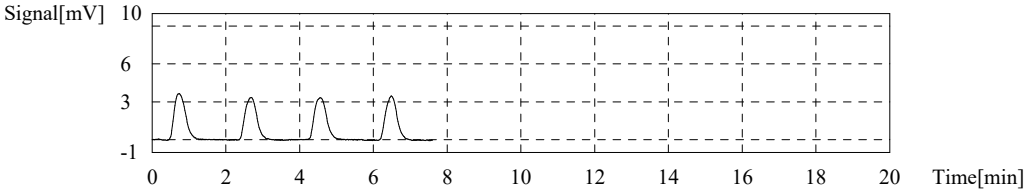
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.874mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.839	3.960mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 3:36:15 AM
2	7.551	3.818mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 3:38:20 AM
3	7.596	3.840mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 3:40:25 AM
4	7.676	3.879mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 3:42:30 AM

Mean Area 7.665
Mean Conc. 3.874mg/L



Sample

Sample Name: LCS
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

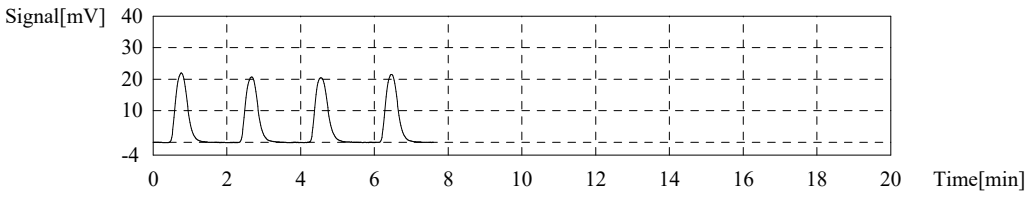
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.23mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	49.65	24.61mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 3:50:24 AM
2	48.13	23.86mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 3:52:30 AM
3	48.57	24.08mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 3:54:35 AM
4	49.13	24.36mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 3:56:40 AM

Mean Area 48.87
Mean Conc. 24.23mg/L



Sample

Sample Name: MB
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

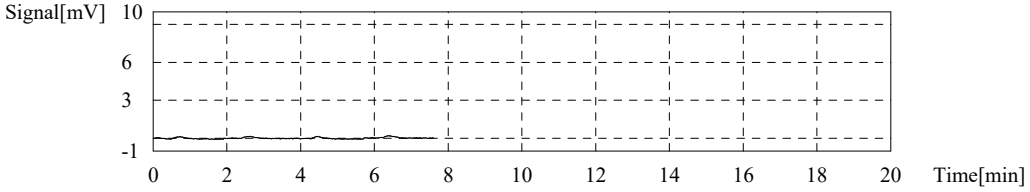
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2402mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2684	0.2201mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 4:04:33 AM
2	0.3494	0.2601mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 4:06:38 AM
3	0.2697	0.2207mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 4:08:43 AM
4	0.3489	0.2599mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 4:10:49 AM

Mean Area 0.3091
Mean Conc. 0.2402mg/L



Sample

Sample Name: TIC
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

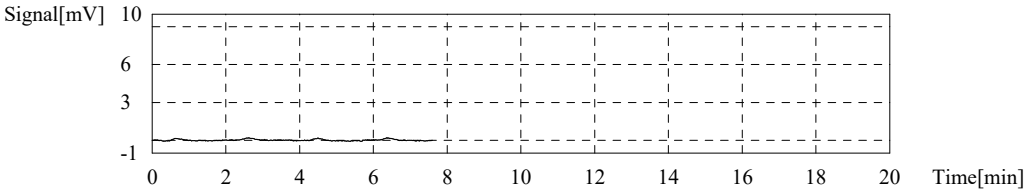
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2601mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4084	0.2892mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 4:18:43 AM
2	0.3866	0.2785mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 4:20:48 AM
3	0.3018	0.2366mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 4:22:53 AM
4	0.3009	0.2361mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 4:24:58 AM

Mean Area 0.3494
Mean Conc. 0.2601mg/L



Sample

Sample Name: 280-176293-c-2
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

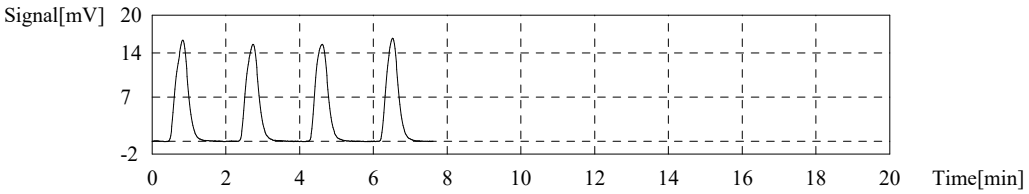
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:180.7mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	37.12	184.2mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 4:32:53 AM
2	35.99	178.7mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 4:34:58 AM
3	36.08	179.1mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 4:37:03 AM
4	36.46	181.0mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 4:39:08 AM

Mean Area 36.41
Mean Conc. 180.7mg/L



Sample

Sample Name: MS 280-176293-c-2
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

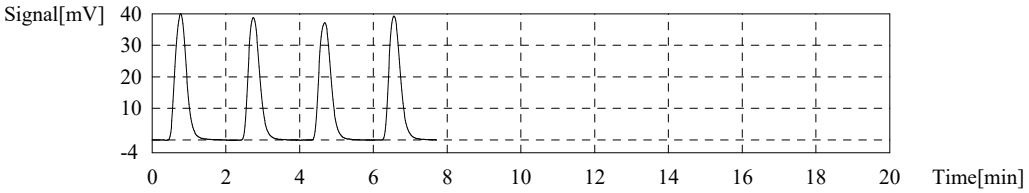
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:422.5mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	87.18	431.5mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 4:47:10 AM
2	84.45	418.0mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 4:49:19 AM
3	84.22	416.9mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 4:51:24 AM
4	85.55	423.5mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 4:53:29 AM

Mean Area 85.35
Mean Conc. 422.5mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

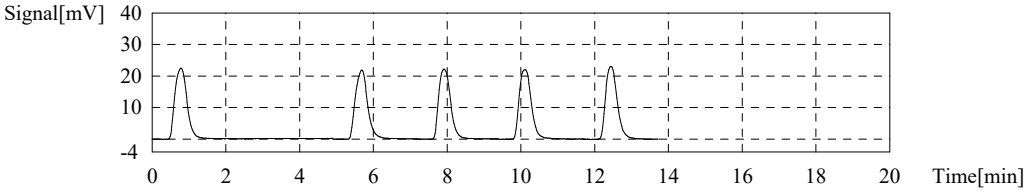
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.25mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	53.18	26.36mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 5:04:24 AM
2	50.88	25.22mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 5:06:57 AM
3	50.23	24.90mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 5:09:24 AM
4	51.18	25.37mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 5:11:59 AM
5	51.44	25.50mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 5:14:15 AM

Mean Area 50.93
Mean Conc. 25.25mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

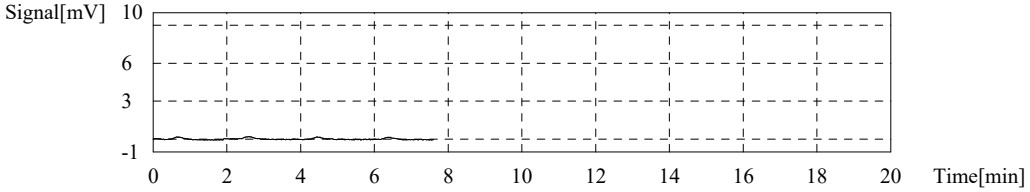
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2555mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4196	0.2948mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 5:22:04 AM
2	0.3147	0.2430mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 5:24:09 AM
3	0.3288	0.2499mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 5:26:17 AM
4	0.2976	0.2345mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 5:28:22 AM

Mean Area 0.3402
Mean Conc. 0.2555mg/L



Sample

Sample Name: MSD 280-176293-c-2
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

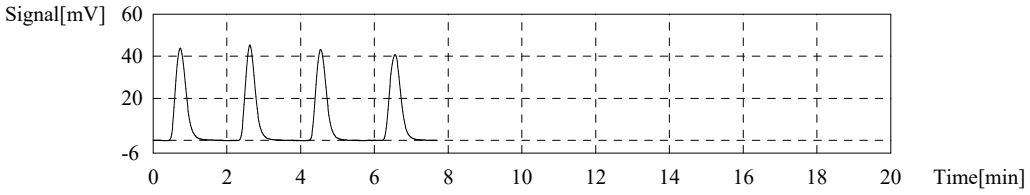
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:430.5mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	88.15	436.3mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 5:36:17 AM
2	85.89	425.2mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 5:38:27 AM
3	86.75	429.4mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 5:40:37 AM
4	87.07	431.0mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 5:42:42 AM

Mean Area 86.97
Mean Conc. 430.5mg/L



Sample

Sample Name: 280-176293-c-3
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

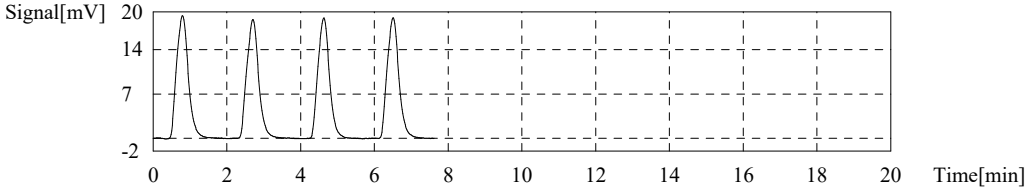
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:42.36mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	43.81	43.46mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 5:50:37 AM
2	42.74	42.40mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 5:52:47 AM
3	41.79	41.46mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 5:54:52 AM
4	42.45	42.11mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 5:57:00 AM

Mean Area 42.70
Mean Conc. 42.36mg/L



Sample

Sample Name: 280-176293-c-4
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

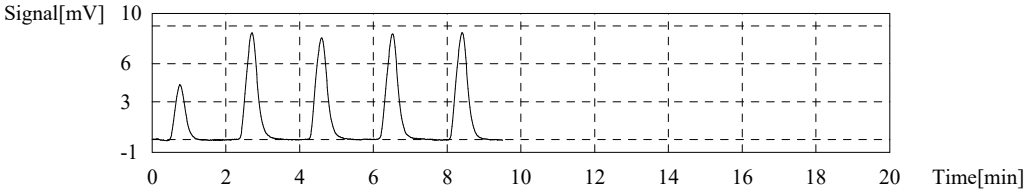
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:8.998mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.525	4.299mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 6:04:55 AM
2	18.13	9.043mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 6:07:04 AM
3	17.72	8.841mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 6:09:09 AM
4	17.86	8.910mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 6:11:14 AM
5	18.44	9.196mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 6:13:19 AM

Mean Area 18.04
Mean Conc. 8.998mg/L



Sample

Sample Name: 280-176293-c-5
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

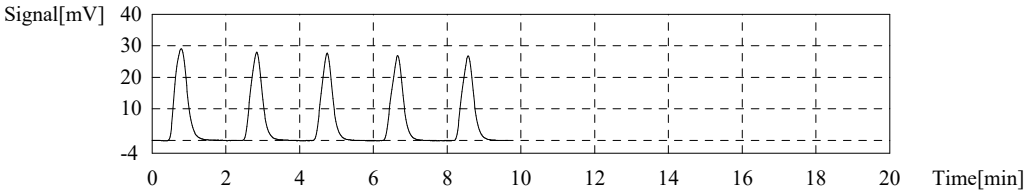
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:29.45mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	67.97	33.66mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 6:21:16 AM
2	61.06	30.25mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 6:23:25 AM
3	58.57	29.02mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 6:25:30 AM
4	59.07	29.27mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 6:27:37 AM
5	59.10	29.28mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 6:29:42 AM

Mean Area 59.45
Mean Conc. 29.45mg/L



Sample

Sample Name: 280-176293-c-6
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

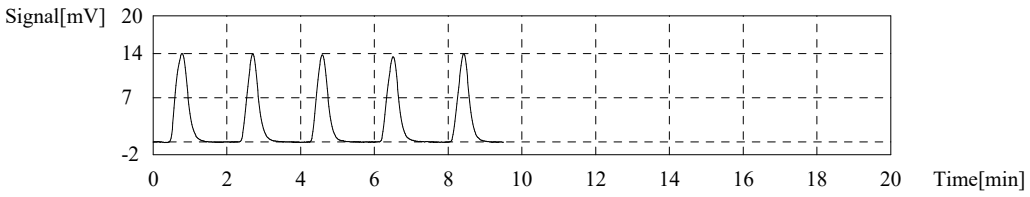
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:29.12mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	32.46	32.24mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 6:37:32 AM
2	29.32	29.14mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 6:39:37 AM
3	29.04	28.87mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 6:41:42 AM
4	29.39	29.21mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 6:43:47 AM
5	29.44	29.26mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 6:45:52 AM

Mean Area 29.30
Mean Conc. 29.12mg/L



Sample

Sample Name: 280-176293-c-7
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

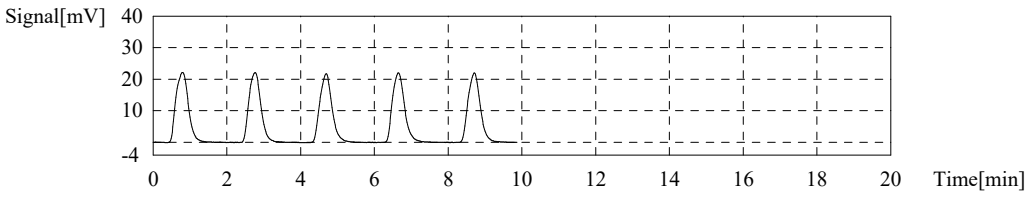
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:50.47mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	52.92	52.46mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 6:53:46 AM
2	50.62	50.19mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 6:55:51 AM
3	50.54	50.11mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 6:58:01 AM
4	50.98	50.54mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 7:00:14 AM
5	51.49	51.04mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 7:02:24 AM

Mean Area 50.91
Mean Conc. 50.47mg/L



Sample

Sample Name: 280-176293-c-8
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

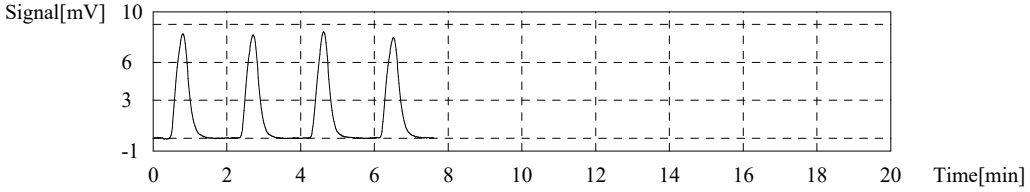
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:18.69mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	19.19	19.13mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 7:10:14 AM
2	18.47	18.42mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 7:12:19 AM
3	18.48	18.43mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 7:14:24 AM
4	18.81	18.76mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 7:16:29 AM

Mean Area 18.74
Mean Conc. 18.69mg/L



Sample

Sample Name: 280-176293-c-9
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

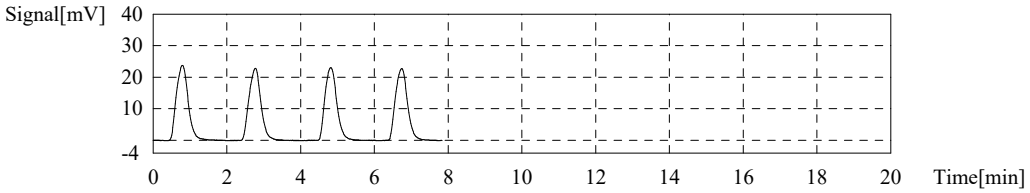
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:52.09mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	53.84	53.37mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 7:24:27 AM
2	52.14	51.69mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 7:26:43 AM
3	51.89	51.44mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 7:28:48 AM
4	52.34	51.88mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 7:30:53 AM

Mean Area 52.55
Mean Conc. 52.09mg/L



Sample

Sample Name: 280-176293-c-10
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

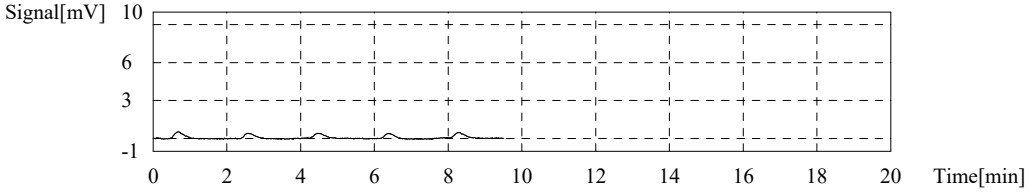
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4879mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.048	0.6052mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 7:38:48 AM
2	0.8796	0.5220mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 7:40:53 AM
3	0.8283	0.4967mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 7:42:58 AM
4	0.7391	0.4526mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 7:45:03 AM
5	0.7951	0.4803mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 7:47:08 AM

Mean Area 0.8105
Mean Conc. 0.4879mg/L



Sample

Sample Name: 280-176007-b-8
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

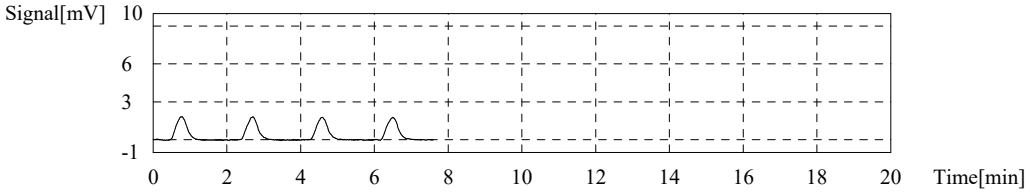
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.995mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.927	2.027mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 7:54:58 AM
2	3.883	2.006mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 7:57:03 AM
3	3.772	1.951mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 7:59:08 AM
4	3.867	1.998mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 8:01:13 AM

Mean Area 3.862
Mean Conc. 1.995mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

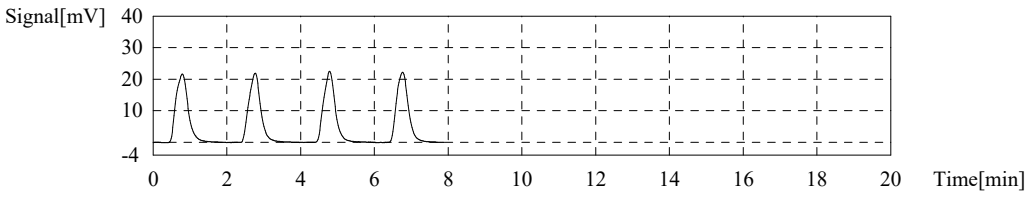
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.76mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	50.92	25.24mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 8:09:11 AM
2	49.27	24.43mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 8:11:27 AM
3	49.44	24.51mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 8:13:42 AM
4	50.19	24.88mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 8:15:49 AM

Mean Area 49.95
Mean Conc. 24.76mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

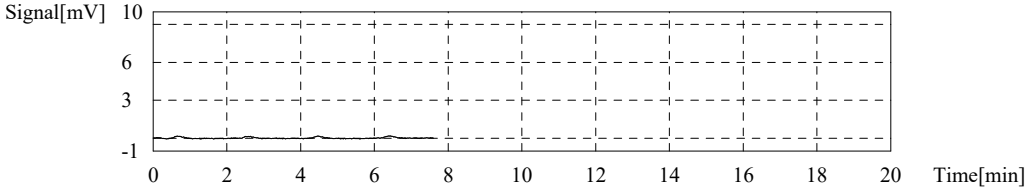
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2564mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3839	0.2771mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 8:23:44 AM
2	0.3971	0.2837mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 8:25:49 AM
3	0.3021	0.2367mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 8:27:54 AM
4	0.2842	0.2279mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 8:29:59 AM

Mean Area 0.3418
Mean Conc. 0.2564mg/L



Sample

Sample Name: 280-176007-b-9
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

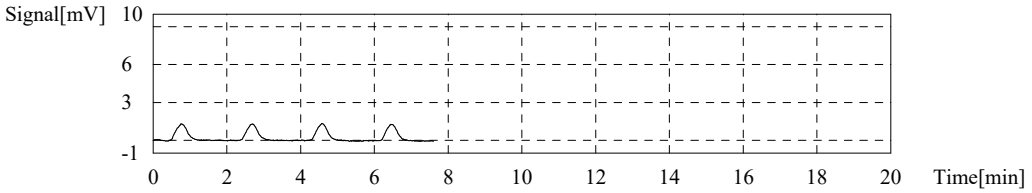
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.497mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.860	1.500mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 8:37:54 AM
2	2.868	1.504mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 8:39:59 AM
3	2.932	1.536mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 8:42:04 AM
4	2.751	1.446mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 8:44:10 AM

Mean Area 2.853
Mean Conc. 1.497mg/L



Sample

Sample Name: MS 280-176007-b-9
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

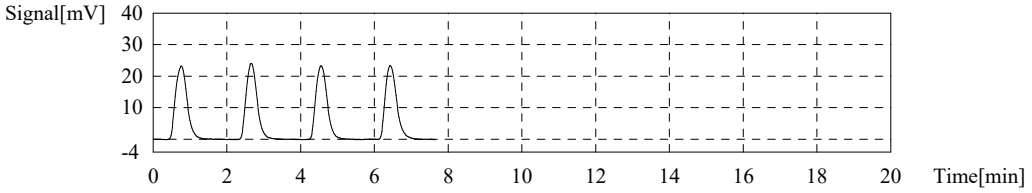
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.14mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	51.57	25.56mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 8:52:05 AM
2	50.40	24.98mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 8:54:10 AM
3	50.22	24.89mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 8:56:15 AM
4	50.71	25.14mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 8:58:28 AM

Mean Area 50.73
Mean Conc. 25.14mg/L



Sample

Sample Name: MSD 280-176007-b-9
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

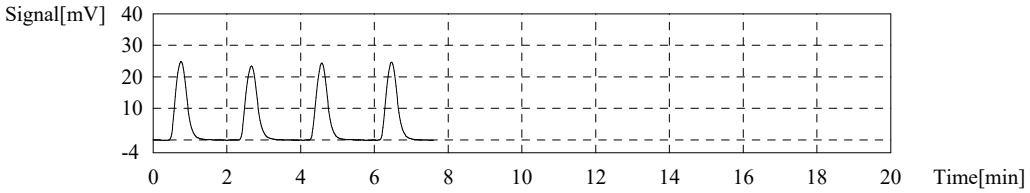
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.85mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	53.31	26.42mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 9:06:24 AM
2	51.33	25.44mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 9:08:33 AM
3	51.62	25.59mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 9:10:38 AM
4	52.38	25.96mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 9:12:43 AM

Mean Area 52.16
Mean Conc. 25.85mg/L



Sample

Sample Name: 280-176007-b-10
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

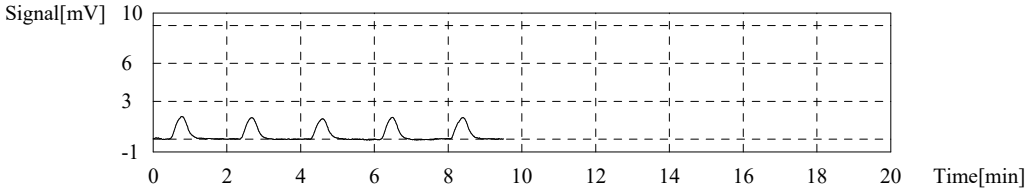
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.882mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.915	2.021mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 9:20:39 AM
2	3.513	1.823mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 9:22:44 AM
3	3.567	1.850mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 9:24:49 AM
4	3.759	1.944mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 9:26:54 AM
5	3.688	1.909mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 9:28:59 AM

Mean Area 3.632
Mean Conc. 1.882mg/L



Sample

Sample Name: 280-176007-b-2
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

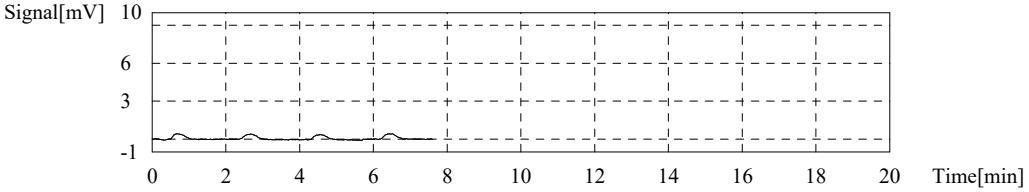
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5648mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.076	0.6190mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 9:36:50 AM
2	0.9346	0.5492mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 9:38:55 AM
3	0.9542	0.5589mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 9:41:04 AM
4	0.9001	0.5321mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 9:43:14 AM

Mean Area 0.9662
Mean Conc. 0.5648mg/L



Sample

Sample Name: 280-176007-b-3
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

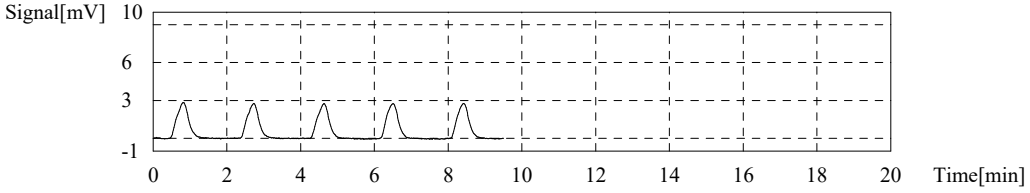
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.124mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.397	3.247mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 9:51:10 AM
2	6.110	3.106mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 9:53:15 AM
3	6.024	3.063mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 9:55:20 AM
4	6.054	3.078mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 9:57:25 AM
5	6.408	3.253mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 9:59:30 AM

Mean Area 6.146
Mean Conc. 3.124mg/L



Sample

Sample Name: 280-176007-b-4
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

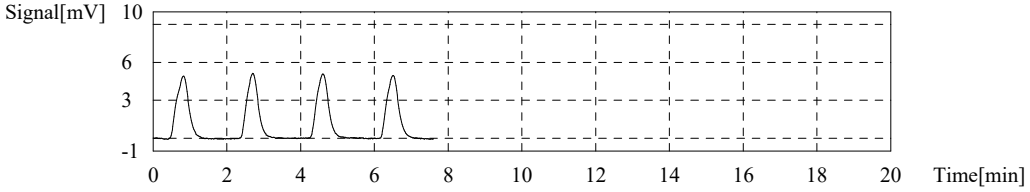
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.645mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.52	5.778mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 10:07:21 AM
2	11.15	5.595mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 10:09:26 AM
3	11.13	5.585mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 10:11:31 AM
4	11.20	5.620mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 10:13:36 AM

Mean Area 11.25
Mean Conc. 5.645mg/L



Sample

Sample Name: 280-176007-b-5
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

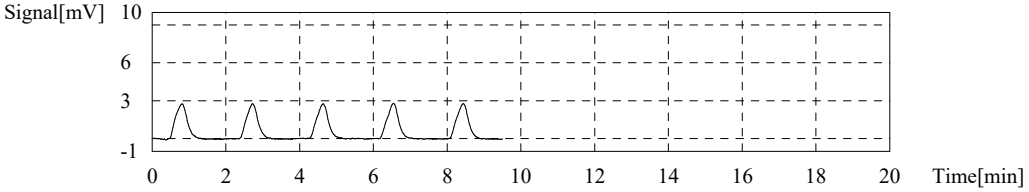
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.096mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.306	3.203mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 10:21:32 AM
2	6.085	3.093mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 10:23:37 AM
3	6.001	3.052mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 10:25:42 AM
4	6.064	3.083mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 10:27:47 AM
5	6.214	3.157mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 10:29:52 AM

Mean Area 6.091
Mean Conc. 3.096mg/L



Sample

Sample Name: 280-176007-b-6
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

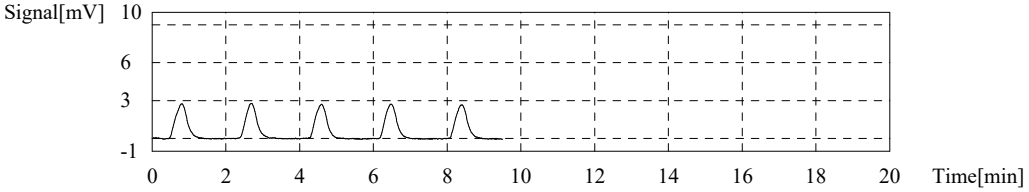
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.000mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.351	3.225mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 10:37:43 AM
2	5.854	2.979mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 10:39:48 AM
3	5.836	2.970mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 10:41:53 AM
4	5.893	2.999mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 10:43:58 AM
5	5.999	3.051mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 10:46:03 AM

Mean Area 5.896
Mean Conc. 3.000mg/L



Sample

Sample Name: 280-176007-b-7
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

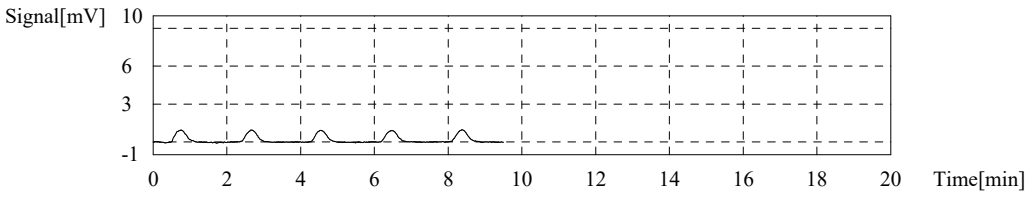
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.064mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.222	1.185mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 10:53:54 AM
2	2.008	1.079mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 10:55:59 AM
3	1.997	1.074mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 10:58:04 AM
4	1.917	1.034mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 11:00:09 AM
5	1.984	1.068mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 11:02:14 AM

Mean Area 1.976
Mean Conc. 1.064mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

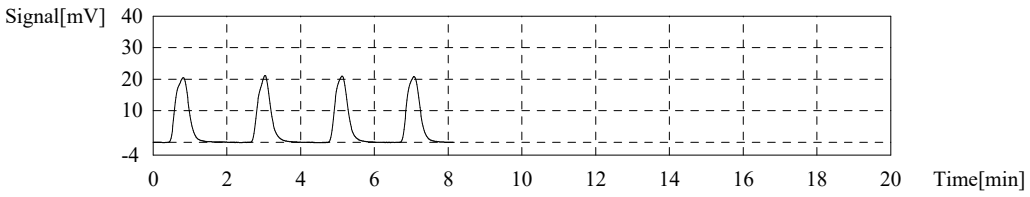
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.32mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	52.04	25.79mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 11:10:24 AM
2	50.89	25.23mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 11:12:45 AM
3	50.54	25.05mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 11:14:53 AM
4	50.87	25.22mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 11:16:58 AM

Mean Area 51.09
Mean Conc. 25.32mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

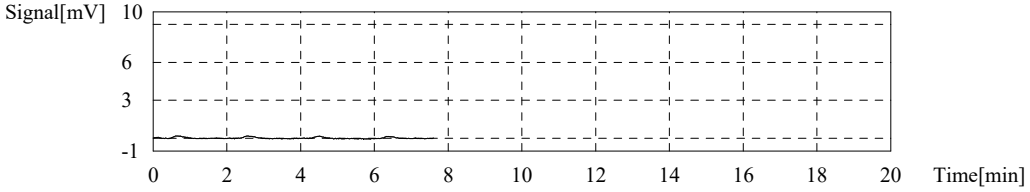
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2600mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4337	0.3017mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 11:24:54 AM
2	0.3337	0.2523mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 11:26:59 AM
3	0.3063	0.2388mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 11:29:04 AM
4	0.3235	0.2473mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 11:31:09 AM

Mean Area 0.3493
Mean Conc. 0.2600mg/L



Sample

Sample Name: 280-175907-b-2
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

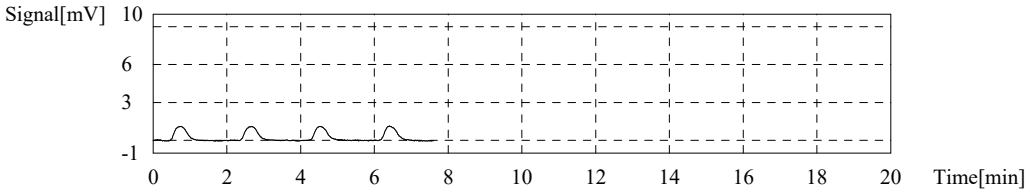
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.380mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.654	1.399mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 11:39:05 AM
2	2.606	1.375mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 11:41:10 AM
3	2.507	1.326mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 11:43:15 AM
4	2.697	1.420mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 11:45:20 AM

Mean Area 2.616
Mean Conc. 1.380mg/L



Sample

Sample Name: 280-175907-b-3
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

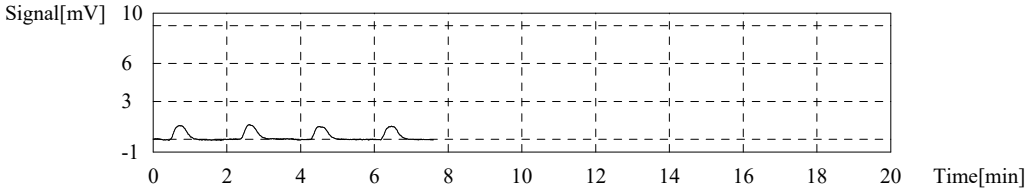
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.333mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.571	1.358mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 11:53:16 AM
2	2.538	1.341mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 11:55:21 AM
3	2.462	1.304mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 11:57:26 AM
4	2.516	1.330mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 11:59:31 AM

Mean Area 2.522
Mean Conc. 1.333mg/L



Sample

Sample Name: LCS
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

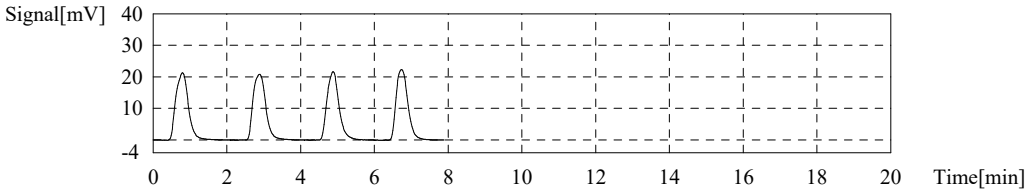
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.82mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	50.94	25.25mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 12:07:39 PM
2	49.98	24.78mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 12:09:53 PM
3	49.30	24.44mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 12:11:58 PM
4	50.04	24.81mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 12:14:03 PM

Mean Area 50.07
Mean Conc. 24.82mg/L



Sample

Sample Name: MB
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

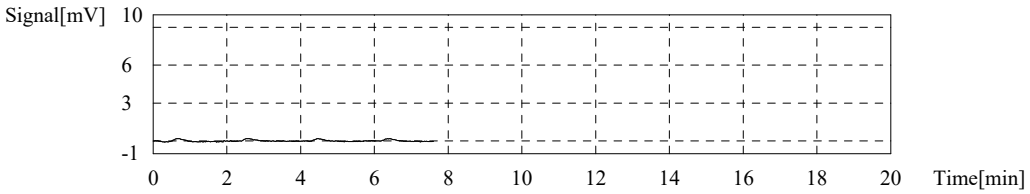
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2817mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4884	0.3288mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 12:21:59 PM
2	0.4035	0.2868mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 12:24:04 PM
3	0.3518	0.2613mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 12:26:09 PM
4	0.3292	0.2501mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 12:28:14 PM

Mean Area 0.3932
Mean Conc. 0.2817mg/L



Sample

Sample Name: 280-175907-b-4
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

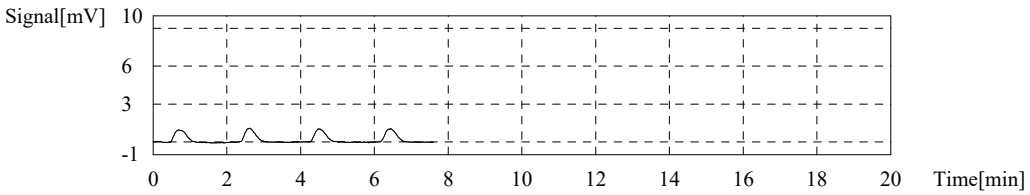
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.191mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.271	1.209mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 12:36:10 PM
2	2.256	1.202mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 12:38:18 PM
3	2.141	1.145mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 12:40:30 PM
4	2.269	1.208mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 12:42:35 PM

Mean Area 2.234
Mean Conc. 1.191mg/L



Sample

Sample Name: MS 280-175907-b-4
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

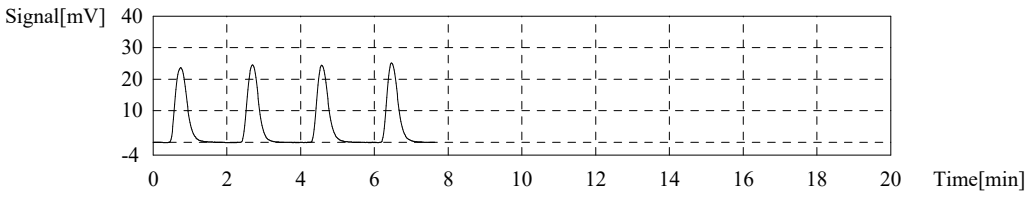
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.06mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	53.27	26.40mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 12:50:32 PM
2	52.23	25.89mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 12:52:37 PM
3	51.98	25.76mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 12:54:42 PM
4	52.84	26.19mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 12:56:47 PM

Mean Area 52.58
Mean Conc. 26.06mg/L



Sample

Sample Name: MSD 280-175907-b-4
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

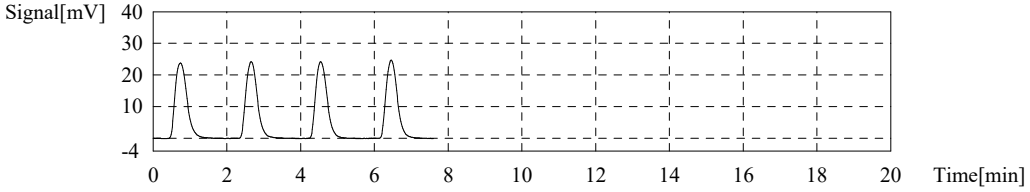
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.21mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	53.83	26.68mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 1:04:43 PM
2	52.41	25.98mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 1:06:53 PM
3	52.35	25.95mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 1:08:58 PM
4	52.93	26.23mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 1:11:03 PM

Mean Area 52.88
Mean Conc. 26.21mg/L



Sample

Sample Name: 280-175907-b-5
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

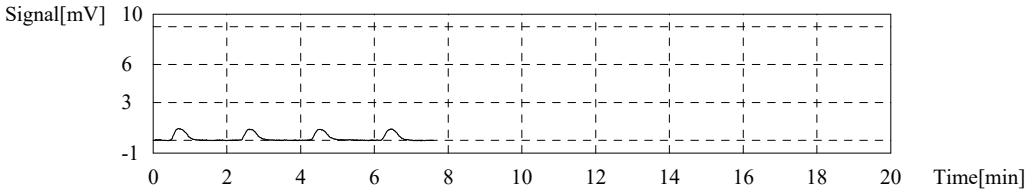
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.060mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.028	1.089mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 1:18:59 PM
2	1.906	1.029mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 1:21:04 PM
3	1.938	1.045mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 1:23:09 PM
4	1.999	1.075mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 1:25:14 PM

Mean Area 1.968
Mean Conc. 1.060mg/L



Sample

Sample Name: 280-175907-b-6
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

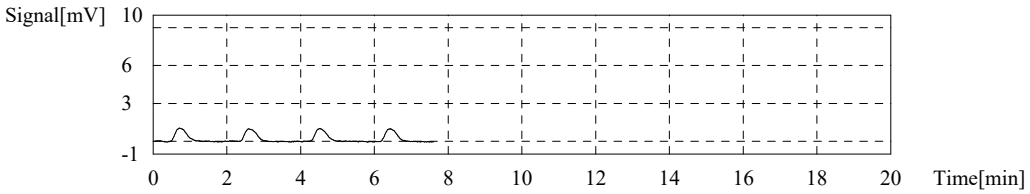
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.202mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.340	1.243mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 1:33:10 PM
2	2.154	1.152mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 1:35:15 PM
3	2.244	1.196mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 1:37:20 PM
4	2.287	1.217mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 1:39:25 PM

Mean Area 2.256
Mean Conc. 1.202mg/L



Sample

Sample Name: 280-176256-d-1
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

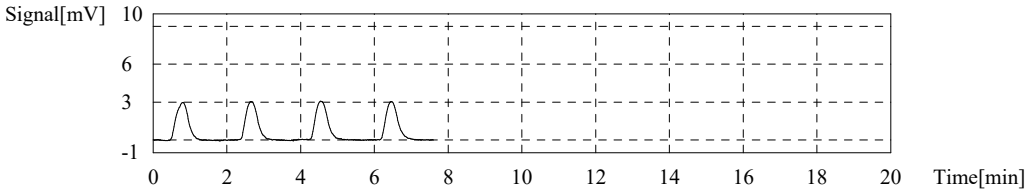
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	50.00	NPOC:173.0mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.957	176.2mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 1:47:22 PM
2	6.844	173.4mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 1:49:27 PM
3	6.767	171.5mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 1:51:37 PM
4	6.739	170.8mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 1:53:42 PM

Mean Area 6.827
Mean Conc. 173.0mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

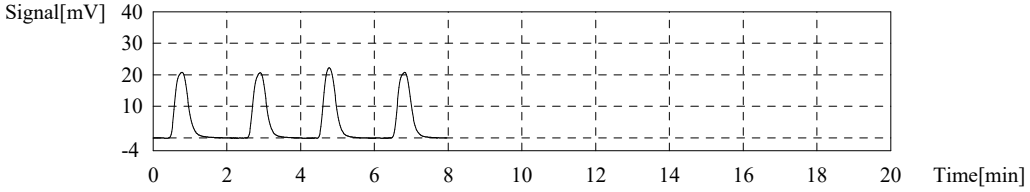
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.17mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	51.71	25.63mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 2:01:52 PM
2	50.07	24.82mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 2:04:02 PM
3	50.47	25.02mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 2:06:17 PM
4	50.82	25.19mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 2:08:24 PM

Mean Area 50.77
Mean Conc. 25.17mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

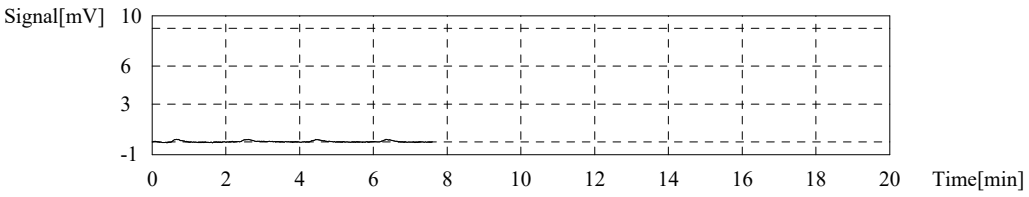
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2556mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3665	0.2685mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 2:16:21 PM
2	0.2737	0.2227mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 2:18:27 PM
3	0.3506	0.2607mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 2:20:32 PM
4	0.3703	0.2704mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 2:22:37 PM

Mean Area 0.3403
Mean Conc. 0.2556mg/L



Sample

Sample Name: 280-175906-e-1
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

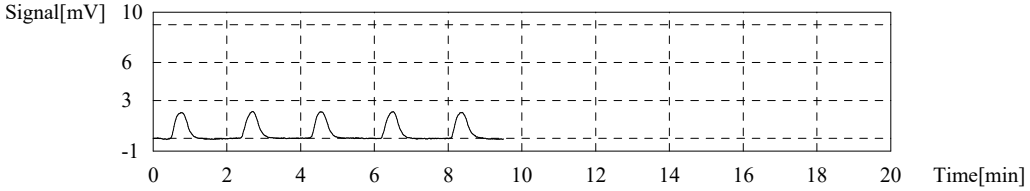
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.458mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.998	2.556mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 2:30:34 PM
2	4.801	2.459mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 2:32:39 PM
3	4.700	2.409mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 2:34:44 PM
4	4.878	2.497mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 2:36:49 PM
5	4.820	2.468mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 2:38:54 PM

Mean Area 4.800
Mean Conc. 2.458mg/L



Sample

Sample Name: 280-175906-e-2
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

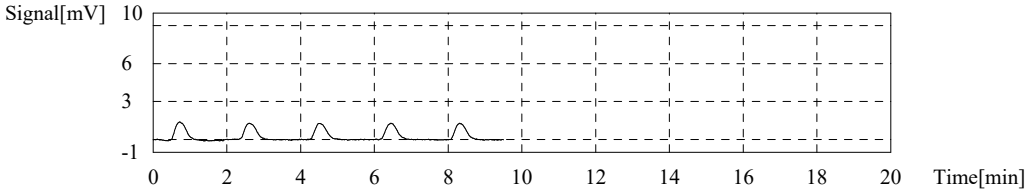
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.477mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.151	1.644mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 2:46:46 PM
2	2.817	1.479mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 2:48:55 PM
3	2.773	1.457mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 2:51:00 PM
4	2.802	1.472mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 2:53:06 PM
5	2.861	1.501mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 2:55:11 PM

Mean Area 2.813
Mean Conc. 1.477mg/L



Sample

Sample Name: 280-175906-d-3
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

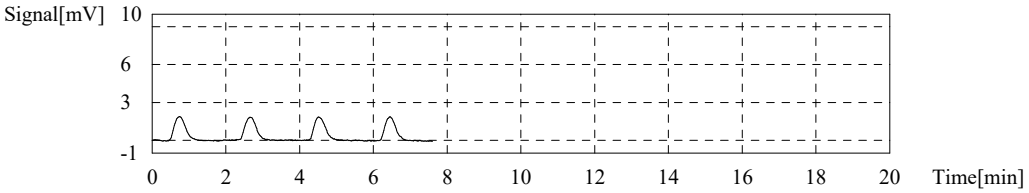
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.058mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.104	2.115mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 3:03:03 PM
2	3.950	2.039mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 3:05:08 PM
3	3.991	2.059mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 3:07:13 PM
4	3.909	2.018mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 3:09:18 PM

Mean Area 3.989
Mean Conc. 2.058mg/L



Sample

Sample Name: 280-175907-b-7
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

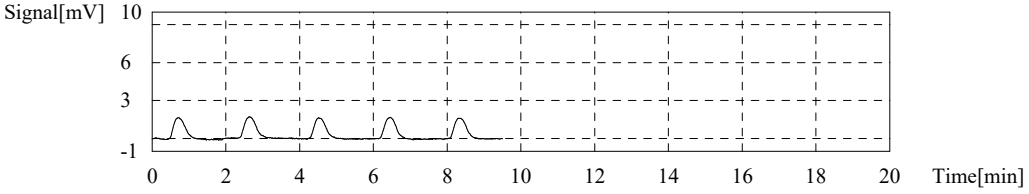
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.932mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.907	2.017mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 3:17:15 PM
2	3.825	1.977mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 3:19:28 PM
3	3.666	1.898mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 3:21:33 PM
4	3.662	1.896mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 3:23:38 PM
5	3.783	1.956mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 3:25:43 PM

Mean Area 3.734
Mean Conc. 1.932mg/L



Sample

Sample Name: 280-175976-a-1
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

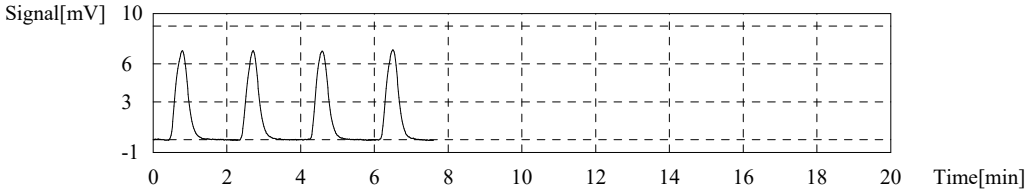
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:8.018mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	16.30	8.139mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 3:33:35 PM
2	15.86	7.922mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 3:35:40 PM
3	15.80	7.892mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 3:37:45 PM
4	16.26	8.120mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 3:39:51 PM

Mean Area 16.06
Mean Conc. 8.018mg/L



Sample

Sample Name: 280-175976-a-2
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

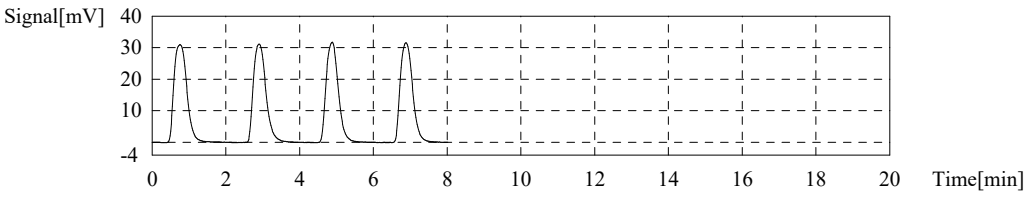
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:73.98mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	76.40	75.65mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 3:48:02 PM
2	74.47	73.75mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 3:50:14 PM
3	73.79	73.08mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 3:52:26 PM
4	74.16	73.44mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 3:54:31 PM

Mean Area 74.71
Mean Conc. 73.98mg/L



Sample

Sample Name: 280-176036-a-4
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

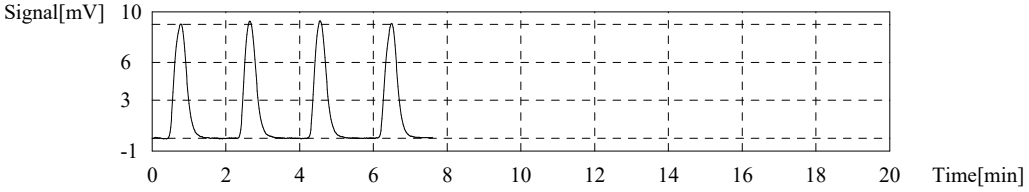
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.19mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	20.93	10.43mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 4:02:28 PM
2	20.09	10.01mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 4:04:33 PM
3	20.39	10.16mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 4:06:38 PM
4	20.42	10.17mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 4:08:43 PM

Mean Area 20.46
Mean Conc. 10.19mg/L



Sample

Sample Name: MS 280-176036-a-4
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

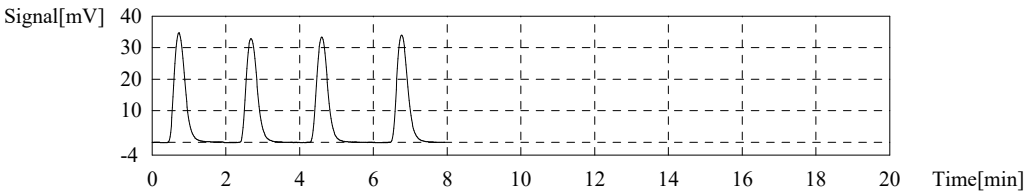
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:35.08mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	72.30	35.80mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 4:16:43 PM
2	69.98	34.66mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 4:18:52 PM
3	70.07	34.70mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 4:21:14 PM
4	70.99	35.15mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 4:23:19 PM

Mean Area 70.84
Mean Conc. 35.08mg/L



Sample

Sample Name: MSD 280-176036-a-4
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

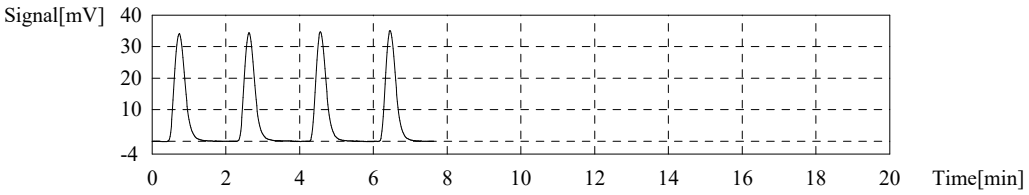
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:34.15mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	70.50	34.91mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 4:31:16 PM
2	68.72	34.03mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 4:33:27 PM
3	67.80	33.58mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 4:35:32 PM
4	68.84	34.09mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 4:37:40 PM

Mean Area 68.97
Mean Conc. 34.15mg/L



Sample

Sample Name: 280-175976-a-3
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

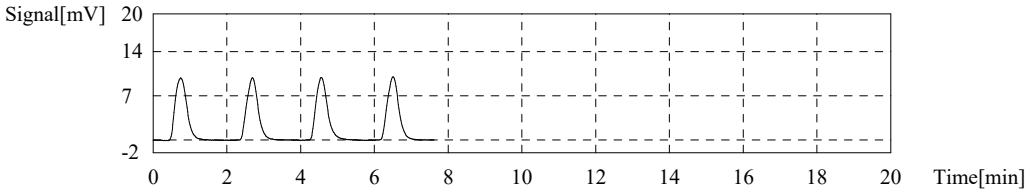
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.84mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	22.05	10.98mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 4:45:37 PM
2	21.40	10.66mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 4:47:42 PM
3	21.75	10.83mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 4:49:48 PM
4	21.86	10.89mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 4:51:53 PM

Mean Area 21.77
Mean Conc. 10.84mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

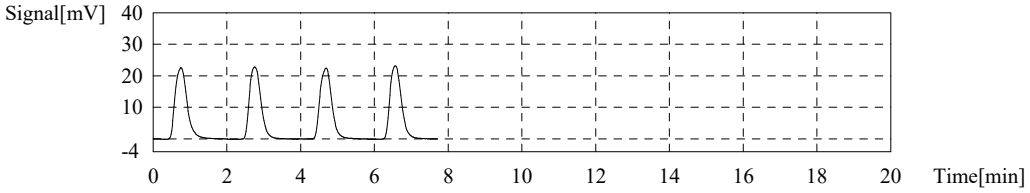
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.14mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	51.77	25.66mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 4:59:58 PM
2	50.12	24.85mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 5:02:07 PM
3	50.35	24.96mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 5:04:12 PM
4	50.63	25.10mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 5:06:17 PM

Mean Area 50.72
Mean Conc. 25.14mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

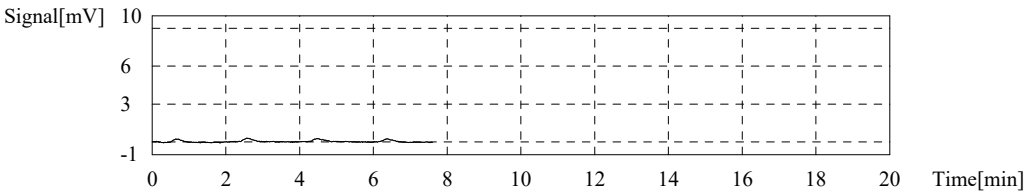
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3269mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4808	0.3250mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 5:14:15 PM
2	0.4853	0.3272mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 5:16:20 PM
3	0.4560	0.3128mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 5:18:25 PM
4	0.5164	0.3426mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 5:20:30 PM

Mean Area 0.4846
Mean Conc. 0.3269mg/L



Sample

Sample Name: 580-127036-q-1
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

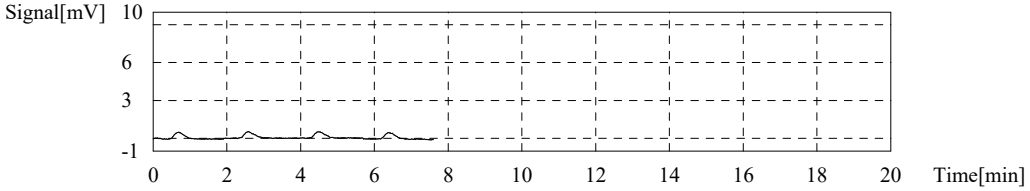
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5804mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.9911	0.5771mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 5:28:28 PM
2	0.9378	0.5508mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 5:30:33 PM
3	1.011	0.5869mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 5:32:38 PM
4	1.051	0.6067mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 5:34:43 PM

Mean Area 0.9977
Mean Conc. 0.5804mg/L



Sample

Sample Name: 580-127036-q-5
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

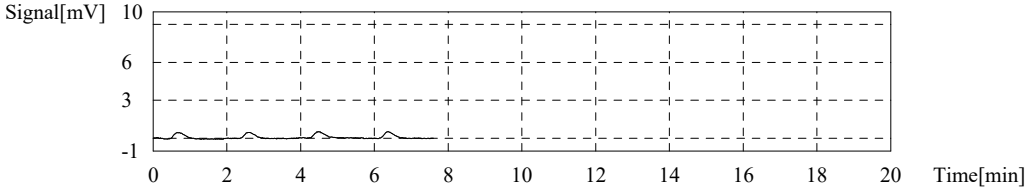
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5755mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.085	0.6235mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 5:42:41 PM
2	0.9484	0.5560mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 5:44:50 PM
3	0.9572	0.5603mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 5:46:56 PM
4	0.9611	0.5623mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 5:49:01 PM

Mean Area 0.9879
Mean Conc. 0.5755mg/L



Sample

Sample Name: 580-127036-q-7
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

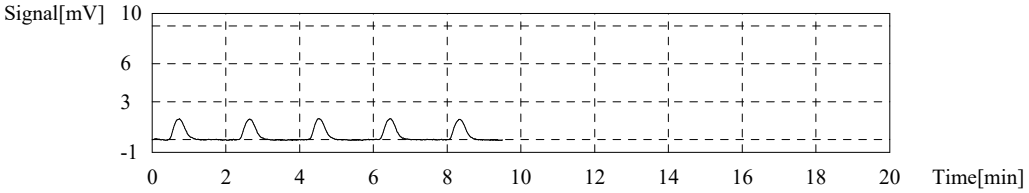
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.830mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.587	1.859mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 5:56:59 PM
2	3.621	1.876mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 5:59:04 PM
3	3.403	1.769mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 6:01:09 PM
4	3.248	1.692mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 6:03:15 PM
5	3.498	1.815mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 6:05:20 PM

Mean Area 3.527
Mean Conc. 1.830mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

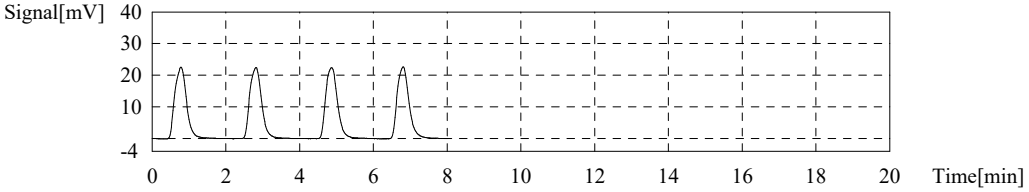
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.17mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	50.81	25.19mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 6:13:21 PM
2	50.84	25.20mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 6:15:39 PM
3	50.27	24.92mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 6:17:46 PM
4	51.21	25.38mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 6:19:56 PM

Mean Area 50.78
Mean Conc. 25.17mg/L



Sample

TOC-Control L Report

abw
2023_05_16_001.tlx

Sample Name: CCB
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

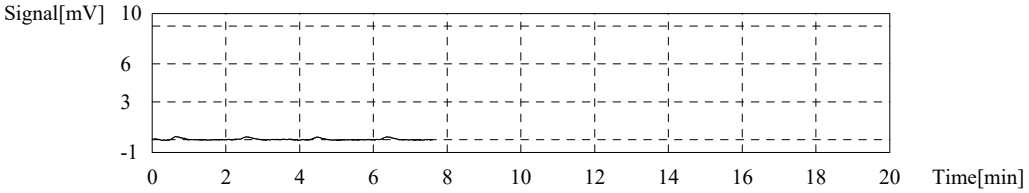
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2822mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4582	0.3138mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 6:27:54 PM
2	0.3577	0.2642mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 6:29:59 PM
3	0.3880	0.2792mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 6:32:04 PM
4	0.3730	0.2718mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/17/2023 6:34:09 PM

Mean Area 0.3942
Mean Conc. 0.2822mg/L



SHIS TOC

4060

5310

	Analysis	Sample Name	Result	Notes	Vial
1*	NPOC	ICV	✓		1
2*	NPOC	ICB	–		2
3*	NPOC	LCS	–		3
4*	NPOC	MB	–		4
5*	NPOC	TIC	–		5
6*	NPOC	280-176258-d-1	–		6
7*	NPOC	MS 280-176258-d-1	–		7
8*	NPOC	MSD 280-176258-d-1	–		8
9*	NPOC	280-176258-c-2	–		9
10*	NPOC	280-176258-c-3	–		10
11*	NPOC	280-176258-e-4	–		11
12*	NPOC	280-176258-e-5	–		12
13*	NPOC	280-176258-e-6	–		13
14*	NPOC	280-176258-e-7	–		14
15*	NPOC	CCV	✓		15
16*	NPOC	CCB	–		16
17*	NPOC	280-176205-b-1	>2	500x color & odor ✓	17
18*	NPOC	280-176205-a-2	>2	500x ↓	18
19*	NPOC	280-176205-b-3	✓	100x color & odor	19
20*	NPOC	280-176205-b-4	–	100x odor	20
21*	NPOC	MS 280-176205-b-4	✓	100x ↓	21
22*	NPOC	MSD 280-176205-b-4	✓	100x ↓	22
23*	NPOC	280-176205-b-5	>2	500x color & odor	23
24*	NPOC	280-176205-b-6	✓	20x odor	24
25*	NPOC	280-176205-a-7	✓	20x ↓	25
26*	NPOC	280-175997-d-1	–		26
27*	NPOC	CCV	✓		27
28*	NPOC	CCB	–		28
29*	NPOC	280-175997-d-3	✓		29
30*	NPOC	280-175997-d-4	–		30
31*	NPOC	280-176036-a-1	✓		31
32*	NPOC	280-176036-a-2	–		32
33*	NPOC	280-176036-a-3	–		33
34*	NPOC	LCS	✓		34
35*	NPOC	MB	✓		35
36*	NPOC	TIC	✓		36
37*	NPOC	280-176293-c-2	✓	10x odor	37
38*	NPOC	MS 280-176293-c-2	–	10x ↓	38
39*	NPOC	CCV	✓		39
40*	NPOC	CCB	–		40
41*	NPOC	MSD 280-176293-c-2	✓	1ot odor	41
42*	NPOC	280-176293-c-3	–	2x	42
43*	NPOC	280-176293-c-4	–		43
44*	NPOC	280-176293-c-5	–		44
45*	NPOC	280-176293-c-6	✓	2x color	45
46*	NPOC	280-176293-c-7	–	2x ↓	46
47*	NPOC	280-176293-c-8	✓	2x	47
48*	NPOC	280-176293-c-9	–	2x	48
49*	NPOC	280-176293-c-10	✓		49
50*	NPOC	280-176007-b-8	–		50
51*	NPOC	CCV	✓		51
					52

Shi 5 TOC

5310

	Analysis	Sample Name	Result	Notes	Vial
54*	NPOC	MS 280-176007-b-9	PHC2		54
55*	NPOC	MSD 280-176007-b-9			55
56*	NPOC	280-176007-b-10			56
57*	NPOC	280-176007-b-2			57
58*	NPOC	280-176007-b-3			58
59*	NPOC	280-176007-b-4			59
60*	NPOC	280-176007-b-5			60
61*	NPOC	280-176007-b-6			61
62*	NPOC	280-176007-b-7			62
63*	NPOC	CCV			63
64*	NPOC	CCB			64
65*	NPOC	280-175907-b-2			65
66*	NPOC	280-175907-b-3			66
67*	NPOC	LCS			67
68*	NPOC	MB			68
69*	NPOC	280-175907-b-4			69
70*	NPOC	MS 280-175907-b-4			70
71*	NPOC	MSD 280-175907-b-4			71
72*	NPOC	280-175907-b-5			72
73*	NPOC	280-175907-b-6			73
74*	NPOC	280-176256-d-1		50X color	74
75*	NPOC	CCV			75
76*	NPOC	CCB			76
77*	NPOC	280-175906-e-1			77
78*	NPOC	280-175906-e-2			78
79*	NPOC	280-175906-d-3			79
80*	NPOC	280-175907-b-7			80
81*	NPOC	280-175976-a-1			81
82*	NPOC	280-175976-a-2		2X color	82
83*	NPOC	280-176036-a-4			83
84*	NPOC	MS 280-176036-a-4			84
85*	NPOC	MSD 280-176036-a-4			85
86*	NPOC	280-175976-a-3			86
87*	NPOC	CCV			87
88*	NPOC	CCB			88
89*	NPOC	580-127036-q-1			89
90*	NPOC	580-127036-q-5			90
91*	NPOC	580-127036-q-7			91
92*	NPOC	CCV			92
93*	NPOC	CCB			93

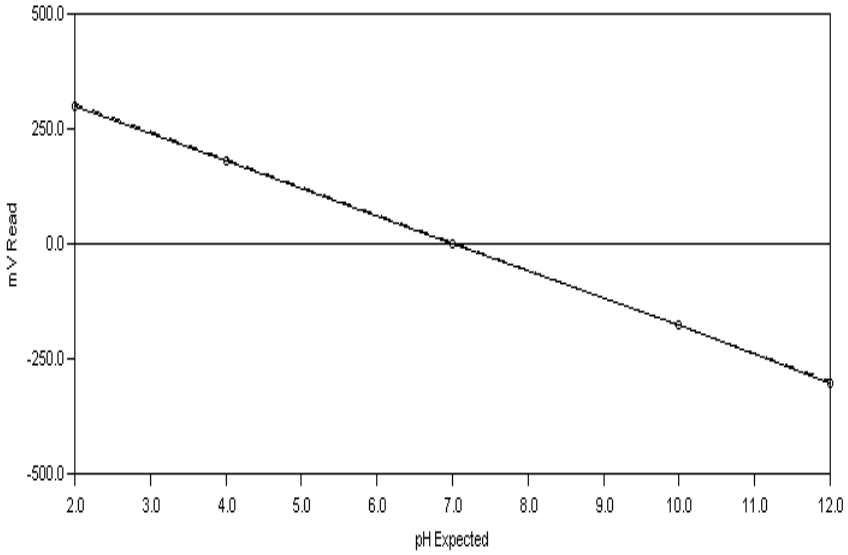
9060

BWH 5000.1000 MS

MANTECH INC.

Calibration Report

Calibration Record # 659



Calibration Settings

Calibration ID	PH	Date	5/9/2023	
Channel	1	Time	9:06 AM	
Probe Type	pH	Temperature	294.34 K	21.19 C
Probe ID	PH ELECTRODE	Analysis Type	Single Line Fit	

Calibration Results

Slope	-60.065	CorrCoeff	1.0000
Intercept	1.098	Equation:	Y = (-60.065) X + (1.098)

Calibration Validity **True** Operator

	Result	Minimum	Maximum
Slope	-60.065	-65.00	-53.00
Intercept	1.098	-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	300.29
	4.00	181.64
	7.00	1.58
	10.00	-176.02
	12.00	-302.00

Test America

AT4 Analyst:_____

Water Analysis Report

Run Number 1891 **Order Number** 20230509-2

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	5/9/2023	11:03 AM	21.28	-1.00	5.24	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
INITIAL CHECK	5/9/2023	11:11 AM	20.95	-1.00	10.34	124.53	191.34	.00	133.62	57.72	1.25	1.91	-1.00	.02
BUFFER 7	5/9/2023	11:14 AM	20.65	-1.00	7.01	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
LCS	5/9/2023	11:22 AM	20.77	-1.00	10.44	123.94	195.69	.00	143.51	52.18	1.24	1.96	-1.00	.02
LCSD	5/9/2023	11:30 AM	20.87	-1.00	10.50	121.79	194.25	.00	144.92	49.33	1.22	1.94	-1.00	.02
MB	5/9/2023	11:36 AM	20.96	-1.00	8.68	1.56	4.02	.90	3.12	.00	.02	.06	.08	.02
280-176114-a-7	5/9/2023	11:41 AM	20.91	-1.00	6.10	.00	75.82	75.82	.00	.00	.00	.76	-1.00	.02
DU 280-176114-a-7	5/9/2023	11:47 AM	20.95	-1.00	6.18	.00	76.00	76.00	.00	.00	.00	.76	-1.00	.02
280-176114-a-15	5/9/2023	11:52 AM	21.06	-1.00	5.67	.00	11.42	11.42	.00	.00	.00	.14	.17	.02
280-176114-a-22	5/9/2023	11:58 AM	21.32	-1.00	4.99	.00	-.44	-.44	.00	.00	.00	.02	.04	.02
280-176117-a-12	5/9/2023	12:03 PM	21.43	-1.00	5.17	.00	1.58	1.58	.00	.00	.00	.04	.06	.02
280-176119-a-6	5/9/2023	12:10 PM	21.19	-1.00	6.96	.00	213.90	213.90	.00	.00	.00	2.14	-1.00	.02
280-175967-c-1	5/9/2023	12:18 PM	21.12	-1.00	7.14	.00	364.49	364.49	.00	.00	.00	3.64	-1.00	.02
280-175967-c-2	5/9/2023	12:26 PM	21.15	-1.00	7.20	.00	396.80	396.80	.00	.00	.00	3.97	-1.00	.02
280-175967-c-3	5/9/2023	12:32 PM	21.16	-1.00	6.73	.00	2.98	2.98	.00	.00	.00	.05	.08	.02
280-175967-c-4	5/9/2023	12:41 PM	21.15	-1.00	7.16	.00	592.97	592.97	.00	.00	.00	5.93	-1.00	.02
CCV	5/9/2023	12:49 PM	21.30	-1.00	10.41	128.27	195.85	.00	135.15	60.70	1.28	1.96	-1.00	.02
CCB	5/9/2023	12:55 PM	21.38	-1.00	8.45	.31	2.63	2.01	.62	.00	.00	.05	.07	.02
280-175967-c-5	5/9/2023	1:03 PM	21.45	-1.00	7.09	.00	453.74	453.74	.00	.00	.00	4.54	-1.00	.02
280-175967-c-6	5/9/2023	1:13 PM	21.79	-1.00	7.23	.00	683.52	683.52	.00	.00	.00	6.84	-1.00	.02
280-175967-c-7	5/9/2023	1:21 PM	21.93	-1.00	7.19	.00	487.24	487.24	.00	.00	.00	4.87	-1.00	.02
280-175967-c-8	5/9/2023	1:29 PM	21.74	-1.00	7.23	.00	323.40	323.40	.00	.00	.00	3.23	-1.00	.02
280-175967-c-10	5/9/2023	1:37 PM	21.60	-1.00	7.21	.00	396.19	396.19	.00	.00	.00	3.96	-1.00	.02
280-175967-c-11	5/9/2023	1:45 PM	21.56	-1.00	7.03	.00	490.43	490.43	.00	.00	.00	4.90	-1.00	.02
280-175967-c-12	5/9/2023	1:53 PM	21.58	-1.00	7.42	.00	464.09	464.09	.00	.00	.00	4.64	-1.00	.02
280-175970-a-1	5/9/2023	2:01 PM	21.54	-1.00	7.24	.00	314.82	314.82	.00	.00	.00	3.15	-1.00	.02
280-175970-a-2	5/9/2023	2:08 PM	21.63	-1.00	7.20	.00	314.60	314.60	.00	.00	.00	3.15	-1.00	.02

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Run Number 1891 **Order Number** 20230509-2

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)
280-175970-a-5	5/9/2023	2:16 PM	21.57	-1.00	7.17	.00	350.98	350.98	.00	.00	.00	3.51	-1.00	.02
CCV	5/9/2023	2:24 PM	21.74	-1.00	10.39	129.57	193.08	.00	127.03	66.05	1.30	1.93	-1.00	.02
CCB	5/9/2023	2:30 PM	22.07	-1.00	8.46	.46	3.01	2.09	.91	.00	.00	.05	.08	.02
LCS	5/9/2023	2:38 PM	21.99	-1.00	10.42	126.28	192.94	.00	133.33	59.61	1.26	1.93	-1.00	.02
MB	5/9/2023	2:44 PM	21.73	-1.00	8.57	.93	3.14	1.28	1.86	.00	.01	.05	.07	.02
280-175970-a-6	5/9/2023	2:51 PM	21.57	-1.00	6.98	.00	266.14	266.14	.00	.00	.00	2.66	-1.00	.02
DU 280-175970-a-6	5/9/2023	2:58 PM	21.50	-1.00	7.13	.00	265.71	265.71	.00	.00	.00	2.66	-1.00	.02
280-176054-a-1	5/9/2023	3:06 PM	21.47	-1.00	7.00	.00	305.07	305.07	.00	.00	.00	3.05	-1.00	.02
280-176054-a-2	5/9/2023	3:13 PM	21.44	-1.00	6.90	.00	229.09	229.09	.00	.00	.00	2.29	-1.00	.02
280-176072-d-1	5/9/2023	3:19 PM	21.58	-1.00	6.74	.00	204.75	204.75	.00	.00	.00	2.05	-1.00	.02
280-176077-d-1	5/9/2023	3:25 PM	21.76	-1.00	6.69	.00	123.05	123.05	.00	.00	.00	1.23	-1.00	.02
280-176077-d-2	5/9/2023	3:32 PM	21.92	-1.00	6.79	.00	213.24	213.24	.00	.00	.00	2.13	-1.00	.02
280-176077-d-3	5/9/2023	3:40 PM	22.26	-1.00	7.30	.00	450.82	450.82	.00	.00	.00	4.51	-1.00	.02
280-176077-d-4	5/9/2023	3:46 PM	22.42	-1.00	6.81	.00	87.64	87.64	.00	.00	.00	.88	-1.00	.02
280-176077-d-5	5/9/2023	3:55 PM	22.11	-1.00	7.48	.00	635.65	635.65	.00	.00	.00	6.36	-1.00	.02
CCV	5/9/2023	4:03 PM	22.10	-1.00	10.34	121.07	195.31	.00	148.48	46.83	1.21	1.95	-1.00	.02
CCB	5/9/2023	4:10 PM	22.00	-1.00	8.45	.30	2.86	2.26	.59	.00	.00	.05	.08	.02
280-176077-d-6	5/9/2023	4:16 PM	21.86	-1.00	6.58	.00	161.59	161.59	.00	.00	.00	1.62	-1.00	.02
280-176077-c-7	5/9/2023	4:23 PM	21.82	-1.00	6.87	.00	295.72	295.72	.00	.00	.00	2.96	-1.00	.02
280-176104-a-1	5/9/2023	4:29 PM	21.90	-1.00	6.89	.00	143.42	143.42	.00	.00	.00	1.43	-1.00	.02
280-176104-a-2	5/9/2023	4:36 PM	21.96	-1.00	6.87	.00	144.03	144.03	.00	.00	.00	1.44	-1.00	.02
280-176104-a-3	5/9/2023	4:50 PM	22.03	-1.00	7.40	.00	1,422.95	1,422.95	.00	.00	.00	14.23	-1.00	.02
280-176104-a-4	5/9/2023	5:08 PM	22.42	-1.00	7.39	.00	1,790.64	1,790.64	.00	.00	.00	17.91	-1.00	.02
280-176105-c-1	5/9/2023	5:15 PM	22.72	-1.00	7.15	.00	148.31	148.31	.00	.00	.00	1.48	-1.00	.02
280-176105-c-2	5/9/2023	5:21 PM	22.63	-1.00	6.99	.00	146.51	146.51	.00	.00	.00	1.47	-1.00	.02
280-176105-c-3	5/9/2023	5:36 PM	22.25	-1.00	7.35	.00	1,438.56	1,438.56	.00	.00	.00	14.39	-1.00	.02
280-176105-c-4	5/9/2023	5:53 PM	22.14	-1.00	7.38	.00	1,730.54	1,730.54	.00	.00	.00	17.31	-1.00	.02
CCV	5/9/2023	6:02 PM	22.02	-1.00	10.26	136.31	197.81	.00	123.00	74.82	1.36	1.98	-1.00	.02
CCB	5/9/2023	6:08 PM	22.00	-1.00	7.92	.00	3.89	3.89	.00	.00	.00	.06	.09	.02
LCS	5/9/2023	6:16 PM	21.96	-1.00	10.35	120.06	194.48	.00	148.85	45.63	1.20	1.94	-1.00	.02

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Run Number 1891 **Order Number** 20230509-2

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	5/9/2023	6:23 PM	21.98	-1.00	8.29	.00	2.95	2.95	.00	.00	.00	.06	.08	.02
280-176115-d-3	5/9/2023	6:27 PM	21.92	-1.00	6.41	.00	37.97	37.97	.00	.00	.00	.38	-1.00	.02
DU 280-176115-d-3	5/9/2023	6:33 PM	21.90	-1.00	6.55	.00	38.42	38.42	.00	.00	.00	.38	-1.00	.02
280-176115-d-4	5/9/2023	6:38 PM	22.00	-1.00	6.69	.00	123.99	123.99	.00	.00	.00	1.24	-1.00	.02
280-176115-d-5	5/9/2023	6:44 PM	22.23	-1.00	6.65	.00	129.56	129.56	.00	.00	.00	1.30	-1.00	.02
280-175997-c-1	5/9/2023	6:50 PM	22.66	-1.00	6.63	.00	85.05	85.05	.00	.00	.00	.85	-1.00	.02
280-175997-c-3	5/9/2023	6:54 PM	22.34	-1.00	5.06	.00	.93	.93	.00	.00	.00	.04	.07	.02
280-175997-c-4	5/9/2023	6:59 PM	22.25	-1.00	6.18	.00	48.12	48.12	.00	.00	.00	.48	-1.00	.02
280-175997-c-5	5/9/2023	7:05 PM	22.16	-1.00	6.25	.00	49.81	49.81	.00	.00	.00	.50	-1.00	.02
280-176001-c-1	5/9/2023	7:10 PM	22.07	-1.00	6.32	.00	31.22	31.22	.00	.00	.00	.31	-1.00	.02
280-175902-j-1	5/9/2023	7:16 PM	22.02	-1.00	5.91	.00	65.10	65.10	.00	.00	.00	.65	-1.00	.02
CCV	5/9/2023	7:24 PM	22.03	-1.00	10.25	121.65	195.22	.00	147.13	48.09	1.22	1.95	-1.00	.02
CCB	5/9/2023	7:30 PM	22.13	-1.00	8.43	.35	3.22	2.52	.70	.00	.00	.05	.08	.02
280-175906-a-1	5/9/2023	7:40 PM	22.14	-1.00	7.48	.00	722.42	722.42	.00	.00	.00	7.22	-1.00	.02
280-175906-a-2	5/9/2023	7:48 PM	22.29	-1.00	7.75	.00	349.26	349.26	.00	.00	.00	3.49	-1.00	.02
280-175906-a-3	5/9/2023	7:58 PM	22.45	-1.00	7.82	.00	671.04	671.04	.00	.00	.00	6.71	-1.00	.02
280-175907-a-2	5/9/2023	8:05 PM	22.64	-1.00	7.64	.00	270.64	270.64	.00	.00	.00	2.71	-1.00	.02
280-175907-a-3	5/9/2023	8:13 PM	22.69	-1.00	7.31	.00	337.94	337.94	.00	.00	.00	3.38	-1.00	.02
280-175907-a-4	5/9/2023	8:20 PM	22.42	-1.00	7.52	.00	224.08	224.08	.00	.00	.00	2.24	-1.00	.02
280-175907-a-5	5/9/2023	8:25 PM	22.22	-1.00	6.41	.00	29.14	29.14	.00	.00	.00	.29	-1.00	.02
280-175907-a-6	5/9/2023	8:31 PM	22.08	-1.00	6.65	.00	77.31	77.31	.00	.00	.00	.77	-1.00	.02
280-175907-a-7	5/9/2023	8:36 PM	22.00	-1.00	6.52	.00	72.66	72.66	.00	.00	.00	.73	-1.00	.02
280-176007-a-2	5/9/2023	8:43 PM	21.96	-1.00	6.96	.00	211.12	211.12	.00	.00	.00	2.11	-1.00	.02
CCV	5/9/2023	8:51 PM	21.98	-1.00	10.27	124.26	197.16	.00	145.81	51.35	1.24	1.97	-1.00	.02
CCB	5/9/2023	8:58 PM	22.03	-1.00	8.39	.00	2.57	2.57	.00	.00	.00	.05	.08	.02
LCS	5/9/2023	9:05 PM	22.08	-1.00	10.28	120.64	196.05	.00	150.81	45.24	1.21	1.96	-1.00	.02
MB	5/9/2023	9:12 PM	22.17	-1.00	8.44	.21	2.76	2.34	.42	.00	.00	.05	.07	.02
280-176007-a-3	5/9/2023	9:18 PM	22.34	-1.00	7.13	.00	235.93	235.93	.00	.00	.00	2.36	-1.00	.02
DU 280-176007-a-3	5/9/2023	9:25 PM	22.69	-1.00	7.28	.00	237.47	237.47	.00	.00	.00	2.37	-1.00	.02
280-176007-a-4	5/9/2023	9:33 PM	22.48	-1.00	7.32	.00	301.83	301.83	.00	.00	.00	3.02	-1.00	.02

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Run Number 1891 **Order Number** 20230509-2

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)
280-176007-a-5	5/9/2023	9:40 PM	22.28	-1.00	7.37	.00	289.32	289.32	.00	.00	.00	2.89	-1.00	.02
280-176007-a-6	5/9/2023	9:48 PM	22.14	-1.00	7.15	.00	335.66	335.66	.00	.00	.00	3.36	-1.00	.02
280-176007-a-7	5/9/2023	9:55 PM	22.08	-1.00	6.96	.00	209.99	209.99	.00	.00	.00	2.10	-1.00	.02
280-176007-a-8	5/9/2023	10:02 PM	22.02	-1.00	7.15	.00	266.94	266.94	.00	.00	.00	2.67	-1.00	.02
280-176007-a-9	5/9/2023	10:09 PM	21.98	-1.00	7.27	.00	232.24	232.24	.00	.00	.00	2.32	-1.00	.02
280-176007-a-10	5/9/2023	10:15 PM	21.99	-1.00	7.16	.00	225.74	225.74	.00	.00	.00	2.26	-1.00	.02
280-176068-f-1	5/9/2023	10:27 PM	22.00	-1.00	8.20	.00	965.53	965.53	.00	.00	.00	9.66	-1.00	.02
CCV	5/9/2023	10:36 PM	22.13	-1.00	10.23	117.87	197.81	.00	159.88	37.93	1.18	1.98	-1.00	.02
CCB	5/9/2023	10:42 PM	22.22	-1.00	8.33	.00	2.77	2.77	.00	.00	.00	.05	.07	.02
280-176068-f-2	5/9/2023	10:54 PM	22.32	-1.00	8.41	41.66	966.60	883.29	83.32	.00	.42	9.67	-1.00	.02
280-176069-a-1	5/9/2023	11:00 PM	22.54	-1.00	6.99	.00	110.24	110.24	.00	.00	.00	1.10	-1.00	.02
280-176070-a-1	5/9/2023	11:06 PM	22.32	-1.00	6.97	.00	142.81	142.81	.00	.00	.00	1.43	-1.00	.02
280-176078-c-1	5/9/2023	11:16 PM	22.17	-1.00	7.24	.00	788.51	788.51	.00	.00	.00	7.89	-1.00	.02
280-176078-a-2	5/9/2023	11:28 PM	22.13	-1.00	7.50	.00	918.82	918.82	.00	.00	.00	9.19	-1.00	.02
280-176078-a-3	5/9/2023	11:40 PM	22.08	-1.00	7.55	.00	1,025.87	1,025.87	.00	.00	.00	10.26	-1.00	.02
280-176079-a-1	5/9/2023	11:47 PM	22.07	-1.00	7.27	.00	312.57	312.57	.00	.00	.00	3.13	-1.00	.02
280-176079-a-2	5/9/2023	11:55 PM	21.99	-1.00	7.53	.00	309.55	309.55	.00	.00	.00	3.10	-1.00	.02
280-176079-a-4	5/10/2023	12:03 AM	21.99	-1.00	7.89	.00	440.48	440.48	.00	.00	.00	4.40	-1.00	.02
280-176079-a-5	5/10/2023	12:12 AM	22.00	-1.00	7.88	.00	438.62	438.62	.00	.00	.00	4.39	-1.00	.02
CCV	5/10/2023	12:20 AM	22.08	-1.00	10.18	125.59	200.12	.00	149.07	51.05	1.26	2.00	-1.00	.02
CCB	5/10/2023	12:26 AM	22.19	-1.00	8.23	.00	2.71	2.71	.00	.00	.00	.05	.08	.02
LCS	5/10/2023	12:34 AM	22.52	-1.00	10.20	114.22	201.39	.00	174.35	27.04	1.14	2.01	-1.00	.02
MB	5/10/2023	12:41 AM	22.39	-1.00	8.35	.00	2.64	2.64	.00	.00	.00	.05	.07	.02
280-176079-a-6	5/10/2023	12:49 AM	22.23	-1.00	7.55	.00	438.02	438.02	.00	.00	.00	4.38	-1.00	.02
DU 280-176079-a-6	5/10/2023	12:57 AM	22.17	-1.00	7.61	.00	438.84	438.84	.00	.00	.00	4.39	-1.00	.02
280-176079-a-7	5/10/2023	1:04 AM	22.11	-1.00	7.36	.00	250.56	250.56	.00	.00	.00	2.51	-1.00	.02
280-176086-a-1	5/10/2023	1:17 AM	22.07	-1.00	8.54	56.96	1,104.83	990.91	113.92	.00	.57	11.05	-1.00	.02
280-176086-a-2	5/10/2023	1:27 AM	22.11	-1.00	8.52	42.74	702.76	617.28	85.49	.00	.43	7.03	-1.00	.02
280-176086-a-3	5/10/2023	1:40 AM	22.14	-1.00	8.56	62.11	1,131.50	1,007.28	124.22	.00	.62	11.31	-1.00	.02
280-176086-a-4	5/10/2023	1:53 AM	22.16	-1.00	8.62	65.26	1,062.45	931.93	130.52	.00	.65	10.62	-1.00	.02

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Run Number 1891 **Order Number** 20230509-2

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)
280-176111-k-1	5/10/2023	2:00 AM	22.19	-1.00	6.58	.00	257.99	257.99	.00	.00	.00	2.58	-1.00	.02
280-176111-k-2	5/10/2023	2:11 AM	22.17	-1.00	7.19	.00	901.80	901.80	.00	.00	.00	9.02	-1.00	.02
280-176111-k-3	5/10/2023	2:26 AM	22.28	-1.00	7.94	.00	1,393.52	1,393.52	.00	.00	.00	13.94	-1.00	.02
CCV	5/10/2023	2:35 AM	22.57	-1.00	10.14	122.76	204.20	.00	162.87	41.33	1.23	2.04	-1.00	.02
CCB	5/10/2023	2:41 AM	22.45	-1.00	8.07	.00	3.17	3.17	.00	.00	.00	.06	.08	.02
280-176111-k-5	5/10/2023	2:48 AM	22.42	-1.00	6.86	.00	260.78	260.78	.00	.00	.00	2.61	-1.00	.02
280-176111-k-4	5/10/2023	3:08 AM	22.40	-1.00	7.80	.00	1,943.39	1,943.39	.00	.00	.00	19.43	-1.00	.02
280-175905-e-1	5/10/2023	3:24 AM	22.52	-1.00	7.74	.00	1,822.78	1,822.78	.00	.00	.00	18.23	-1.00	.02
280-175905-e-2	5/10/2023	3:33 AM	22.54	-1.00	6.59	.00	368.14	368.14	.00	.00	.00	3.68	-1.00	.02
280-175905-e-3	5/10/2023	3:40 AM	22.49	-1.00	6.42	.00	322.70	322.70	.00	.00	.00	3.23	-1.00	.02
280-175905-e-4	5/10/2023	3:53 AM	22.45	-1.00	7.39	.00	1,083.24	1,083.24	.00	.00	.00	10.83	-1.00	.02
280-175905-e-5	5/10/2023	4:09 AM	22.45	-1.00	7.57	.00	1,431.67	1,431.67	.00	.00	.00	14.32	-1.00	.02
280-175905-e-6	5/10/2023	4:32 AM	22.45	-1.00	7.97	.00	.00	.00	.00	.00	.00	.00	.00	.02
280-175905-e-7	5/10/2023	4:55 AM	22.45	-1.00	8.16	.00	.00	.00	.00	.00	.00	.00	.00	.02
RINSE	5/10/2023	5:03 AM	22.66	-1.00	8.22	.00	7.97	7.97	.00	.00	.00	.13	.17	.02
CCV	5/10/2023	5:11 AM	22.54	-1.00	10.02	112.32	204.16	.00	183.68	20.48	1.12	2.04	-1.00	.02
CCB	5/10/2023	5:18 AM	22.43	-1.00	8.08	.00	3.93	3.93	.00	.00	.00	.07	.10	.02

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Shipping and Receiving Documents

leidos

Chain of Custody Record

Page 1 of 1

COC No.: RVAAP-300-TA
Date: 5/3/23

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	Expanded Explosives (6)(A)	Sulfide (9)(F)	Nitrate/Nitrite/Sulfate (10)(A)	Alkalinity (14)(A)	TOC (13)(E)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	LL1mw-080-230401-GW	NA	NA	5/3/23	0920	W	2	1	1		1		5	

Requested Parameters

[signature] 5/3/2023

Relinquished by	Date	Received by	Date
[signature]	5/5/2023	[signature]	5/4/23
Signature: [signature]	Time: 1760	Signature: [signature]	Time: 0935
Printed Name: Leidos		Printed Name:	
Company		Company	
Relinquished by	Date	Received by	Date
Signature	Time	Signature	Time
Printed Name		Printed Name	
Company		Company	

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

8178 1968 1604

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

1,5 1,5 1,5 IRM CP0.1

280-175997 Chain of Custody

leidos

Chain of Custody Record

Page 1 of 1

COC No.: RVAAP-SGS-TA

Date: 5/3/23

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

Requested Parameters

Laboratory No.	Sample ID	Site Type	Depth	Date	Time	Matrix	Explosives (6)(A)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	LL1mw-081-230401-GW	NA	NA	5/3/23	1128	W	2		2	

5/3/2023

Relinquished by: Signature: Printed Name: Company: Leidos — Date: 5/3/2023 — Time: 1700

Received by: Signature: Printed Name: Company: — Date: 5/4/23 — Time: 0935

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

8178 1968 1589

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

5/23/2023 8:16 PM

Chain of Custody Record

leidos

Page 1 of 1

COC No.: RVAAP-~~304~~-TA

Date: 5/3/23

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	Expanded Explosives (6)(A)	Sulfide (9)(F)	Nitrate/Nitrite/Sulfate (10)(A)	Alkalinity (14)(A)	TOC (13)(E)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	LL1mw-083-230401-GW	NA	NA	5/3/23	1431	W	2	1	1		1		5	

Requested Parameters

Relinquished by: Ryan Lavelle — Date: 5/4/2023 — Time: 1700 — Company: Leidos

Received by: CC — Date: 5/4/23 — Time: 0935 — Company:

Relinquished by — Date — Time — Company

Received by — Date — Time — Company

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
E. NaOH/Zn Acetate, pH>9, 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

8178 1968 1589

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

leidos

Chain of Custody Record

Page 1 of 1

COC No.: RVAAP-501-TA

Date: 5/3/23

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) KATHLEEN

Laboratory Name: TA- Denver
Address: 4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0107
Contact: Patrick McEntee

Laboratory No.	Sample ID	Site Type	Depth	Date	Time	Matrix	Expanded Explosives (6)(A)	Sulfide (9)(F)	Nitrate/Nitrite/Sulfate (10)(A)	Alkalinity (14)(A)	TOC (13)(E)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	LL1mw-084-230401-GW	NS	NA	5/3/23	1183	W	2	1	1		1		5	
	LL1mw-084-230401-GWMSD	↓	↓	5/3/23	1103	W		1	1				2	extra volume for MS/MSD
	LL1mw-084-230402-GW			~~5/2/23~~ 5/3/23	1103	W	2	1	1				4	
				5/3/23										
				~ 5/3/2023										

PC 5/3/2023

Requested Parameters

Relinquished by	Date	Received by	Date	Notes: Total Number of Containers: 11	Shipment Method: Courier
Signature [signature]	5/3/2023	Signature [signature]	5/4/23	A. Cool, 4C; B. HCl, pH<2, Cool, 4C; C. HNO3, pH<2, Cool, 4C; D. NaOH, pH>12, Cool 4C; E. H2SO4, pH<2, Cool, 4C; F. NaOH/Zn, pH>12, Cool 4C	
Printed Name [signature]	Time 1700	Printed Name	Time 0935	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 350.1; 12. EPA 353.2; 13. SW 9060A; 14. SM2320B	8178 1968 1604
Leidos Company		Company		Notes:	Temperature Blank
Relinquished by	Date	Received by	Date		Lab: Leidos, 8866 Commons Drive, Twinsburg, OH 44087, (330) 405-5802
Signature	Time	Signature	Time		
Printed Name		Printed Name			
Company		Company			

Leidos

White Laboratory Pink Project Manager Yellow Project QAO Goldenrod Field Project Manager

Chain of Custody Record

leidos

Page 1 of 1

COC No.: RVAAP-502-TA

Date: 5/3/2023

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) Jc Krivetz

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-087-230401-GW	NA	NA	5/3/2023	13:50	W	2		2	
	LL1mw-087-230401-GWMSD			↓	↓	W	8		8	extra volume for MS/MSD
	LL1mw-087-230402-GW			↓	↓	W	2		2	

[signature] 5/3/2023

Relinquished by	Date	Received by	Date	Notes: Total Number of Containers: 12	Shipment Method: Courier
Signature [signature]	5/3/2023	Signature [signature]	5/4/23	A. Cool, 4C B. HCl, pH<2, Cool, 4C C. HNO3, pH<2, Cool, 4C D. NaOH, pH>12, Cool 4C	
Printed Name Ryan Lanyon	Time 1700	Printed Name	Time 0935	1. SW 8260B Notes: 2. SW 8270D 3. SW 8270D SIM 4. SW 8082A 5. SW 8081B	
Company Leidos		Company		6. SW 8330 7. SW 6010/6020/7470 8. SW 9012B 9. SW 9034 10. SW 9056/9056A	8178 1968 1590
Relinquished by	Date	Received by	Date	11. SW 6860 12. EPA 353.2 13. SW 7196 14. SM2320B	Temperature Blank
Signature		Signature			Lab:
Printed Name	Time	Printed Name	Time		Leidos 8866 Commons Drive Twinsburg, OH 44087 (330) 405-5802
Company		Company			

Leidos White Laboratory Pink Project Manager Yellow Project QAO Goldenrod Field Project Manager

5/23/2023 8:16 PM



ORIGIN ID:CAKA (330) 998-4246
RYAN LAURICH
LEIDOS
8866 COMMONS BLVD

TWINSBURG, OH 44087
UNITED STATES US

SHIP DATE: 03MAY23
ACTWGT: 57.80 LB
CAD: 6993880/SSFE2420
DIMS: 25x13x14 IN

BILL RECIPIENT

TO EUOFINS ENVIRONMENT TE
TESTAMERICA DENVER LA
4955 YARROW ST

ARVADA CO 80002
(303) 736-0100
INV:
PO:
REF:
DEPT:

Eurofins | Environment Testing | TestAmerica

2171249

FedEx Express

J232023040501uv

3 of 3
MPS# 0681 3978 3964 0150
Mstr# 8178 1968 1590

0215

THU - 04 MAY 10:30A
PRIORITY OVERNIGHT
DSR
80002
CO-US DEN

NX LAAA 1.5

ORIGIN ID:CAKA (330) 998-4246
RYAN LAURICH
LEIDOS
8866 COMMONS BLVD

TWINSBURG, OH 44087
UNITED STATES US

SHIP DATE: 03MAY23
ACTWGT: 55.90 LB
CAD: 6993880/SSFE2420
DIMS: 25x13x14 IN

BILL RECIPIENT

TO EUOFINS ENVIRONMENT TE
TESTAMERICA DENVER LA
4955 YARROW ST

ARVADA CO 80002
(303) 736-0100
INV:
PO:
REF:
DEPT:

Environment Testi
TestAmerica

2171247

FedEx Express

J232023040501uv

1 of 3
MPS# 0215 8178 1968 1590
MASTER ##

THU - 04 MAY 10:30A
PRIORITY OVERNIGHT
DSR AHS
80002
CO-US DEN

NX LAAA 1.5

2 of 3
MPS# 0681 3978 3964 0140
Mstr# 8178 1968 1590

0215

THU - 04 MAY 10:30A
PRIORITY OVERNIGHT
DSR
80002
CO-US DEN

NX LAAA 1.5

ORIGIN ID:CAKA (330) 998-4246
RYAN LAURICH
LEIDOS
8866 COMMONS BLVD

TWINSBURG, OH 44087
UNITED STATES US

SHIP DATE: 03MAY23
ACTWGT: 35.40 LB
CAD: 6993880/SSFE2420
DIMS: 18x12x15 IN

BILL RECIPIENT

TO EUOFINS ENVIRONMENT TE
TESTAMERICA DENVER LA
4955 YARROW ST

ARVADA CO 80002
(303) 736-0100
INV:
PO:
REF:
DEPT:

Eurofins | Environment Testing | TestAmerica

2171236

FedEx Express

J232023040501uv

280-175997 Waybill

Login Sample Receipt Checklist

Client: Leidos, Inc.

Job Number: 280-175997-1

Login Number: 175997
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.	False	Refer to Job Narrative for details.
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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	