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ANALYTICAL REPORT

PREPARED FOR

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

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JOB DESCRIPTION

RVAAP FWGW

JOB NUMBER

280-176674-1

Eurofins Denver
4955 Yarrow Street
Arvada CO 80002

See page two for job notes and contact information.

Eurofins Denver

Job Notes

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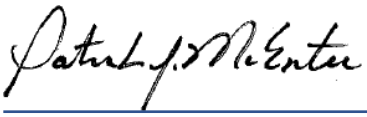

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Authorized for release by
Patrick J McEntee, Client Service Manager
Patrick.McEntee@et.eurofinsus.com
303 736-0107

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Qualifiers

HPLC/IC

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

General Chemistry

Qualifier	Qualifier Description
D	The reported value is from a dilution.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
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

Report Number: 280-176674-1

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 5/18/2023 9:45 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 0.2º C, 0.4º C and 3.3º C.

The results for sample FBQmw-180-230301-GW (280-176674-1) requested on a rush 5 BD TAT are reported under SDG 280-176674-2.

EXPLOSIVES (HPLC)

Samples FWGmw-015-230401-GW (280-176674-2), LL3mw-241-230401-GW (280-176674-4), FBQmw-173-230401-GW-R (280-176674-7), FBQmw-175-230401-GW-R (280-176674-10) and FBQmw-175-230402-GW-R (280-176674-11) were analyzed for Explosives (HPLC) in accordance with 8330B. The samples were prepared on 05/19/2023 and analyzed on 05/20/2023, 05/21/2023 and 05/24/2023.

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 280-613095 and analytical batch 280-613168 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits. The following samples are impacted: FWGmw-015-230401-GW (280-176674-2), LL3mw-241-230401-GW (280-176674-4), FBQmw-173-230401-GW-R (280-176674-7), FBQmw-175-230401-GW-R (280-176674-10), FBQmw-175-230401-GW-R (280-176674-10[MS]), FBQmw-175-230401-GW-R (280-176674-10[MSD]) and FBQmw-175-230402-GW-R (280-176674-11).

The %RPD between the primary and confirmation column exceeded 40% for 2,4-Dinitrotoluene and RDX for the following sample: LL3mw-241-230401-GW (280-176674-4) in preparation batch 280-613095 and analytical batch 280-613168. The results from both columns has been qualified and reported in accordance with the laboratory's QAS.

In preparation batch 280-613095, the following samples: LL3mw-241-230401-GW (280-176674-4) and FBQmw-173-230401-GW-R (280-176674-7) were decanted prior to preparation.

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

ALKALINITY

Samples FBQmw-173-230401-GW-R (280-176674-7) and FBQmw-173-230402-GW-R (280-176674-8) were analyzed for Alkalinity in accordance with SM20 2320B. The samples were analyzed on 05/19/2023.

Alkalinity was detected in method blank MB 280-613263/33 at a level that was below one half the LOQ.

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

AMMONIA

Samples LL12mw-187-230401-GW (280-176674-3), LL12mw-185-230401-GW (280-176674-5), LL12mw-185-230402-GW (280-176674-6) and LL12mw-245-230401-GW (280-176674-9) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 05/23/2023.

Sample LL12mw-187-230401-GW (280-176674-3)[200X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

SULFIDE

Samples FBQmw-173-230401-GW-R (280-176674-7) and FBQmw-173-230402-GW-R (280-176674-8) were analyzed for sulfide in accordance with EPA SW-846 Method 9034. The samples were prepared and analyzed on 05/19/2023.

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

ANIONS, ION CHROMATOGRAPHY

Samples LL12mw-187-230401-GW (280-176674-3), LL12mw-185-230401-GW (280-176674-5), LL12mw-185-230402-GW (280-176674-6), FBQmw-173-230401-GW-R (280-176674-7), FBQmw-173-230402-GW-R (280-176674-8) and LL12mw-245-230401-GW (280-176674-9) were analyzed for Anions, Ion Chromatography in accordance with 9056A (48 Hours). The samples were analyzed on 05/18/2023, 05/19/2023 and 05/22/2023.

Samples LL12mw-187-230401-GW (280-176674-3)[2000X], LL12mw-185-230401-GW (280-176674-5)[20X] and LL12mw-185-230402-GW (280-176674-6)[20X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Reanalysis of the following samples was performed outside of the analytical holding time due to the sample requiring a higher dilution for nitrate: LL12mw-187-230401-GW (280-176674-3).

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

ANIONS (28 DAYS)

Samples FBQmw-173-230401-GW-R (280-176674-7) and FBQmw-173-230402-GW-R (280-176674-8) were analyzed for anions (28 days) in accordance with 9056A (28 Days). The samples were analyzed on 05/18/2023.

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

TOTAL ORGANIC CARBON

Sample FBQmw-173-230401-GW-R (280-176674-7) was analyzed for total organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 05/19/2023.

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

Detection Summary

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

Job ID: 280-176674-1

Client Sample ID: FWGmw-015-230401-GW — Lab Sample ID: 280-176674-2

No Detections.

Client Sample ID: LL12mw-187-230401-GW — Lab Sample ID: 280-176674-3

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Ammonia as N	730		20	10	5.8	mg/L	200		350.1	Total/NA
Nitrate as N	1500	H D	1000	400	180	mg/L	2000		9056	Total/NA

Client Sample ID: LL3mw-241-230401-GW — Lab Sample ID: 280-176674-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trinitrobenzene	4.6		0.21	0.20	0.086	ug/L	1		8330B	Total/NA
2,4,6-Trinitrotoluene	2.0		0.11	0.10	0.046	ug/L	1		8330B	Total/NA
2,4-Dinitrotoluene	0.12	J1	0.10	0.082	0.028	ug/L	1		8330B	Total/NA
2,4-Dinitrotoluene	0.045	J J1	0.10	0.082	0.028	ug/L	1		8330B	Total/NA
3,5-Dinitroaniline	0.36	J	0.41	0.31	0.13	ug/L	1		8330B	Total/NA
4-Amino-2,6-dinitrotoluene	1.7		0.15	0.12	0.059	ug/L	1		8330B	Total/NA
HMX	0.14	J M	0.21	0.20	0.090	ug/L	1		8330B	Total/NA
RDX	1.0	J1	0.21	0.20	0.053	ug/L	1		8330B	Total/NA
RDX	0.49	J1	0.21	0.20	0.053	ug/L	1		8330B	Total/NA

Client Sample ID: LL12mw-185-230401-GW — Lab Sample ID: 280-176674-5

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Nitrate as N	67	D M	10	4.0	1.8	mg/L	20		9056	Total/NA

Client Sample ID: LL12mw-185-230402-GW — Lab Sample ID: 280-176674-6

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Nitrate as N	74	D M	10	4.0	1.8	mg/L	20		9056	Total/NA

Client Sample ID: FBQmw-173-230401-GW-R — Lab Sample ID: 280-176674-7

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
2,4,6-Trinitrotoluene	0.11		0.11	0.10	0.047	ug/L	1		8330B	Total/NA
2-Amino-4,6-dinitrotoluene	1.2		0.11	0.10	0.052	ug/L	1		8330B	Total/NA
3,5-Dinitroaniline	0.15	J	0.41	0.31	0.14	ug/L	1		8330B	Total/NA
4-Amino-2,6-dinitrotoluene	1.5		0.16	0.12	0.060	ug/L	1		8330B	Total/NA
Nitrate as N	0.20	J M	0.50	0.20	0.090	mg/L	1		9056	Total/NA
Sulfate	42	M	5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Organic Carbon - Average	0.85	J	1.0	0.80	0.35	mg/L	1	☼	9060	Total/NA
Alkalinity	18		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: FBQmw-173-230402-GW-R — Lab Sample ID: 280-176674-8

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Nitrate as N	0.21	J M	0.50	0.20	0.090	mg/L	1		9056	Total/NA
Sulfate	45		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Alkalinity	18		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: LL12mw-245-230401-GW — Lab Sample ID: 280-176674-9

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

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

Job ID: 280-176674-1

Client Sample ID: FBQmw-175-230401-GW-R — Lab Sample ID: 280-176674-10

No Detections.

Client Sample ID: FBQmw-175-230402-GW-R — Lab Sample ID: 280-176674-11

No Detections.

This Detection Summary does not include radiochemical test results.

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

Client Sample ID: FWGmw-015-230401-GW
Date Collected: 05/17/23 14:06
Date Received: 05/18/23 09:45

Lab Sample ID: 280-176674-2
Matrix: Water

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		05/20/23 02:53	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038	ug/L		05/20/23 02:53	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.047	ug/L		05/20/23 02:53	1
2,4-Dinitrotoluene	0.083	U	0.10	0.083	0.028	ug/L		05/20/23 02:53	1
2,6-Dinitrotoluene	0.083	U	0.10	0.083	0.042	ug/L		05/20/23 02:53	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.053	ug/L		05/20/23 02:53	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.089	ug/L		05/20/23 02:53	1
3-Nitrotoluene	0.36	U	0.42	0.36	0.20	ug/L		05/20/23 02:53	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.16	0.12	0.060	ug/L		05/20/23 02:53	1
4-Nitrotoluene	0.42	U	0.43	0.42	0.10	ug/L		05/20/23 02:53	1
HMX	0.21	U M	0.22	0.21	0.091	ug/L		05/20/23 02:53	1
Nitrobenzene	0.21	U	0.22	0.21	0.094	ug/L		05/20/23 02:53	1
Nitroglycerin	2.1	U	2.2	2.1	0.96	ug/L		05/20/23 02:53	1
PETN	1.0	U	1.1	1.0	0.46	ug/L		05/20/23 02:53	1
RDX	0.21	U	0.22	0.21	0.053	ug/L		05/20/23 02:53	1
Tetryl	0.10	U	0.11	0.10	0.033	ug/L		05/20/23 02:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*85*	*M*	*83 - 119*	*05/19/23 13:39*	*05/20/23 02:53*	*1*

Client Sample ID: LL3mw-241-230401-GW
Date Collected: 05/17/23 15:00
Date Received: 05/18/23 09:45

Lab Sample ID: 280-176674-4
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**4.6**		0.21	0.20	0.086	ug/L		05/20/23 04:02	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038	ug/L		05/24/23 19:48	1
2,4,6-Trinitrotoluene	**2.0**		0.11	0.10	0.046	ug/L		05/20/23 04:02	1
2,4-diamino-6-nitrotoluene	0.92	U	1.0	0.92	0.44	ug/L		05/20/23 04:02	1
2,4-Dinitrotoluene	**0.12**	**J1**	0.10	0.082	0.028	ug/L		05/20/23 04:02	1
2,4-Dinitrotoluene	**0.045**	**J J1**	0.10	0.082	0.028	ug/L		05/24/23 19:48	1
2,6-diamino-4-nitrotoluene	0.92	U M	1.0	0.92	0.23	ug/L		05/20/23 04:02	1
2,6-Dinitrotoluene	0.082	U	0.10	0.082	0.041	ug/L		05/20/23 04:02	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.052	ug/L		05/24/23 19:48	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.088	ug/L		05/20/23 04:02	1
3,5-Dinitroaniline	**0.36**	**J**	0.41	0.31	0.13	ug/L		05/20/23 04:02	1
3-Nitrotoluene	0.36	U	0.41	0.36	0.20	ug/L		05/20/23 04:02	1
4-Amino-2,6-dinitrotoluene	**1.7**		0.15	0.12	0.059	ug/L		05/20/23 04:02	1
4-Nitrotoluene	0.41	U M	0.42	0.41	0.10	ug/L		05/20/23 04:02	1
DNX	0.26	U M	0.51	0.26	0.10	ug/L		05/20/23 04:02	1
HMX	**0.14**	**J M**	0.21	0.20	0.090	ug/L		05/20/23 04:02	1
MNX	0.30	U M	0.51	0.30	0.095	ug/L		05/24/23 19:48	1
Nitrobenzene	0.20	U M	0.21	0.20	0.093	ug/L		05/20/23 04:02	1
Nitroglycerin	2.0	U	2.1	2.0	0.94	ug/L		05/20/23 04:02	1
PETN	1.0	U	1.1	1.0	0.46	ug/L		05/20/23 04:02	1
RDX	**1.0**	**J1**	0.21	0.20	0.053	ug/L		05/20/23 04:02	1
RDX	**0.49**	**J1**	0.21	0.20	0.053	ug/L		05/24/23 19:48	1
Tetryl	0.10	U M	0.11	0.10	0.033	ug/L		05/20/23 04:02	1
TNX	0.26	U	0.51	0.26	0.081	ug/L		05/20/23 04:02	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	*93*		*83 - 119*	*05/19/23 13:39*	*05/20/23 04:02*	*1*
1,2-Dinitrobenzene	*88*		*83 - 119*	*05/19/23 13:39*	*05/24/23 19:48*	*1*

Client Sample ID: FBQmw-173-230401-GW-R — **Lab Sample ID: 280-176674-7**
Date Collected: 05/17/23 11:47 — **Matrix: Water**
Date Received: 05/18/23 09:45

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.087	ug/L		05/20/23 04:25	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038	ug/L		05/21/23 00:31	1
2,4,6-Trinitrotoluene	**0.11**		0.11	0.10	0.047	ug/L		05/20/23 04:25	1
2,4-diamino-6-nitrotoluene	0.93	U	1.0	0.93	0.45	ug/L		05/20/23 04:25	1
2,4-Dinitrotoluene	0.083	U	0.10	0.083	0.028	ug/L		05/20/23 04:25	1
2,6-diamino-4-nitrotoluene	0.93	U	1.0	0.93	0.23	ug/L		05/20/23 04:25	1
2,6-Dinitrotoluene	0.083	U	0.10	0.083	0.041	ug/L		05/20/23 04:25	1
2-Amino-4,6-dinitrotoluene	**1.2**		0.11	0.10	0.052	ug/L		05/20/23 04:25	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.088	ug/L		05/20/23 04:25	1
3,5-Dinitroaniline	**0.15**	**J**	0.41	0.31	0.14	ug/L		05/20/23 04:25	1
3-Nitrotoluene	0.36	U	0.41	0.36	0.20	ug/L		05/20/23 04:25	1
4-Amino-2,6-dinitrotoluene	**1.5**		0.16	0.12	0.060	ug/L		05/20/23 04:25	1
4-Nitrotoluene	0.41	U	0.42	0.41	0.10	ug/L		05/20/23 04:25	1
DNX	0.26	U	0.52	0.26	0.10	ug/L		05/20/23 04:25	1
HMX	0.21	U	0.22	0.21	0.091	ug/L		05/20/23 04:25	1
MNX	0.30	U	0.52	0.30	0.096	ug/L		05/20/23 04:25	1
Nitrobenzene	0.21	U	0.22	0.21	0.094	ug/L		05/20/23 04:25	1
Nitroglycerin	2.1	U	2.2	2.1	0.95	ug/L		05/20/23 04:25	1
PETN	1.0	U	1.1	1.0	0.46	ug/L		05/20/23 04:25	1
RDX	0.21	U M	0.22	0.21	0.053	ug/L		05/20/23 04:25	1
Tetryl	0.10	U	0.11	0.10	0.033	ug/L		05/20/23 04:25	1
TNX	0.26	U M	0.52	0.26	0.082	ug/L		05/20/23 04:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	*91*	*M*	*83 - 119*	*05/19/23 13:39*	*05/20/23 04:25*	*1*
1,2-Dinitrobenzene	*85*		*83 - 119*	*05/19/23 13:39*	*05/21/23 00:31*	*1*

Client Sample ID: FBQmw-175-230401-GW-R — **Lab Sample ID: 280-176674-10**
Date Collected: 05/17/23 08:58 — **Matrix: Water**
Date Received: 05/18/23 09:45

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U J1	0.21	0.20	0.085	ug/L		05/20/23 04:48	1
1,3-Dinitrobenzene	0.10	U J1	0.11	0.10	0.037	ug/L		05/20/23 04:48	1
2,4,6-Trinitrotoluene	0.10	U J1	0.11	0.10	0.045	ug/L		05/20/23 04:48	1
2,4-diamino-6-nitrotoluene	0.90	U J1	1.0	0.90	0.44	ug/L		05/20/23 04:48	1
2,4-Dinitrotoluene	0.080	U J1	0.10	0.080	0.028	ug/L		05/20/23 04:48	1
2,6-diamino-4-nitrotoluene	0.90	U J1	1.0	0.90	0.22	ug/L		05/20/23 04:48	1
2,6-Dinitrotoluene	0.080	U J1	0.10	0.080	0.040	ug/L		05/20/23 04:48	1
2-Amino-4,6-dinitrotoluene	0.10	U J1	0.11	0.10	0.051	ug/L		05/20/23 04:48	1
2-Nitrotoluene	0.20	U J1	0.21	0.20	0.086	ug/L		05/20/23 04:48	1
3,5-Dinitroaniline	0.30	U J1	0.40	0.30	0.13	ug/L		05/20/23 04:48	1
3-Nitrotoluene	0.35	U J1	0.40	0.35	0.20	ug/L		05/20/23 04:48	1
4-Amino-2,6-dinitrotoluene	0.12	U J1	0.15	0.12	0.058	ug/L		05/20/23 04:48	1
4-Nitrotoluene	0.40	U J1	0.41	0.40	0.10	ug/L		05/20/23 04:48	1
DNX	0.25	U J1	0.50	0.25	0.098	ug/L		05/20/23 04:48	1
HMX	0.20	U	0.21	0.20	0.088	ug/L		05/20/23 04:48	1

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

Client Sample ID: FBQmw-175-230401-GW-R
Date Collected: 05/17/23 08:58
Date Received: 05/18/23 09:45

Lab Sample ID: 280-176674-10
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
MNX	0.29	U	0.50	0.29	0.093	ug/L		05/20/23 04:48	1
Nitrobenzene	0.20	U J1	0.21	0.20	0.091	ug/L		05/20/23 04:48	1
Nitroglycerin	2.0	U	2.1	2.0	0.93	ug/L		05/20/23 04:48	1
PETN	1.0	U J1	1.1	1.0	0.45	ug/L		05/20/23 04:48	1
RDX	0.20	U M J1	0.21	0.20	0.052	ug/L		05/20/23 04:48	1
Tetryl	0.10	U J1	0.11	0.10	0.032	ug/L		05/20/23 04:48	1
TNX	0.25	U M	0.50	0.25	0.080	ug/L		05/20/23 04:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*95*	*M*	*83 - 119*	*05/19/23 13:39*	*05/20/23 04:48*	*1*

Client Sample ID: FBQmw-175-230402-GW-R
Date Collected: 05/17/23 08:58
Date Received: 05/18/23 09:45

Lab Sample ID: 280-176674-11
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.085	ug/L		05/20/23 06:43	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		05/20/23 06:43	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		05/20/23 06:43	1
2,4-diamino-6-nitrotoluene	0.91	U	1.0	0.91	0.44	ug/L		05/20/23 06:43	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.028	ug/L		05/20/23 06:43	1
2,6-diamino-4-nitrotoluene	0.91	U	1.0	0.91	0.22	ug/L		05/20/23 06:43	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		05/20/23 06:43	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		05/20/23 06:43	1
2-Nitrotoluene	0.20	U M	0.21	0.20	0.086	ug/L		05/20/23 06:43	1
3,5-Dinitroaniline	0.30	U	0.40	0.30	0.13	ug/L		05/20/23 06:43	1
3-Nitrotoluene	0.35	U	0.40	0.35	0.20	ug/L		05/20/23 06:43	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		05/20/23 06:43	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		05/20/23 06:43	1
DNX	0.25	U	0.50	0.25	0.098	ug/L		05/20/23 06:43	1
HMX	0.20	U	0.21	0.20	0.088	ug/L		05/20/23 06:43	1
MNX	0.29	U	0.50	0.29	0.093	ug/L		05/20/23 06:43	1
Nitrobenzene	0.20	U	0.21	0.20	0.092	ug/L		05/20/23 06:43	1
Nitroglycerin	2.0	U	2.1	2.0	0.93	ug/L		05/20/23 06:43	1
PETN	1.0	U	1.1	1.0	0.45	ug/L		05/20/23 06:43	1
RDX	0.20	U M	0.21	0.20	0.052	ug/L		05/20/23 06:43	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		05/20/23 06:43	1
TNX	0.25	U M	0.50	0.25	0.080	ug/L		05/20/23 06:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*93*	*M*	*83 - 119*	*05/19/23 13:39*	*05/20/23 06:43*	*1*

General Chemistry

Client Sample ID: LL12mw-187-230401-GW
Date Collected: 05/17/23 13:40
Date Received: 05/18/23 09:45

Lab Sample ID: 280-176674-3
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia as N (EPA 350.1)	**730**		20	10	5.8	mg/L		05/23/23 17:04	200
Nitrate as N (SW846 9056)	**1500**	**H D**	1000	400	180	mg/L		05/22/23 18:59	2000

General Chemistry

Client Sample ID: LL12mw-185-230401-GW
Date Collected: 05/17/23 09:45
Date Received: 05/18/23 09:45

Lab Sample ID: 280-176674-5
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia as N (EPA 350.1)	0.050	U	0.10	0.050	0.029	mg/L		05/23/23 13:01	1
Nitrate as N (SW846 9056)	**67**	**D M**	10	4.0	1.8	mg/L		05/18/23 16:26	20

Client Sample ID: LL12mw-185-230402-GW
Date Collected: 05/17/23 09:45
Date Received: 05/18/23 09:45

Lab Sample ID: 280-176674-6
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia as N (EPA 350.1)	0.050	U	0.10	0.050	0.029	mg/L		05/23/23 13:25	1
Nitrate as N (SW846 9056)	**74**	**D M**	10	4.0	1.8	mg/L		05/18/23 16:41	20

Client Sample ID: FBQmw-173-230401-GW-R
Date Collected: 05/17/23 11:47
Date Received: 05/18/23 09:45

Lab Sample ID: 280-176674-7
Matrix: Water

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		05/19/23 17:27	1
Nitrate as N (SW846 9056)	**0.20**	**J M**	0.50	0.20	0.090	mg/L		05/18/23 19:26	1
Nitrite as N (SW846 9056)	0.10	U	0.50	0.10	0.049	mg/L		05/18/23 19:26	1
Sulfate (SW846 9056A)	**42**	**M**	5.0	2.5	1.0	mg/L		05/18/23 19:26	1
Total Organic Carbon - Average (SW846 9060)	**0.85**	**J**	1.0	0.80	0.35	mg/L	☼	05/19/23 19:17	1
Alkalinity (SM 2320B)	**18**		10	6.4	3.1	mg/L		05/19/23 17:16	1

Client Sample ID: FBQmw-173-230402-GW-R
Date Collected: 05/17/23 11:47
Date Received: 05/18/23 09:45

Lab Sample ID: 280-176674-8
Matrix: Water

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		05/19/23 17:27	1
Nitrate as N (SW846 9056)	**0.21**	**J M**	0.50	0.20	0.090	mg/L		05/18/23 19:41	1
Nitrite as N (SW846 9056)	0.10	U	0.50	0.10	0.049	mg/L		05/18/23 19:41	1
Sulfate (SW846 9056A)	**45**		5.0	2.5	1.0	mg/L		05/18/23 19:41	1
Alkalinity (SM 2320B)	**18**		10	6.4	3.1	mg/L		05/19/23 17:22	1

Client Sample ID: LL12mw-245-230401-GW
Date Collected: 05/17/23 14:26
Date Received: 05/18/23 09:45

Lab Sample ID: 280-176674-9
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia as N (EPA 350.1)	0.050	U	0.10	0.050	0.029	mg/L		05/23/23 13:28	1
Nitrate as N (SW846 9056)	0.20	U M	0.50	0.20	0.090	mg/L		05/19/23 06:42	1

Default Detection Limits

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

Job ID: 280-176674-1

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
Ammonia as N	0.10	0.029	mg/L
Nitrate as N	0.50	0.090	mg/L
Nitrite as N	0.50	0.049	mg/L
Sulfate	5.0	1.0	mg/L
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

Job ID: 280-176674-1

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)
280-176674-2	FWGmw-015-230401-GW	85 M
280-176674-4	LL3mw-241-230401-GW	93
280-176674-7	FBQmw-173-230401-GW-R	91 M
280-176674-10	FBQmw-175-230401-GW-R	95 M
280-176674-10 MS	FBQmw-175-230401-GW-R	82 Q
280-176674-10 MS	FBQmw-175-230401-GW-R	95 M
280-176674-10 MSD	FBQmw-175-230401-GW-R	98
280-176674-10 MSD	FBQmw-175-230401-GW-R	109
280-176674-11	FBQmw-175-230402-GW-R	93 M
LCS 280-613095/2-A	Lab Control Sample	93
LCS 280-613095/4-A	Lab Control Sample	98
LCSD 280-613095/3-A	Lab Control Sample Dup	94
LCSD 280-613095/5-A	Lab Control Sample Dup	98
MB 280-613095/1-A	Method Blank	102

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)
280-176674-4	LL3mw-241-230401-GW	88
280-176674-7	FBQmw-173-230401-GW-R	85

Surrogate Legend

12DNB = 1,2-Dinitrobenzene

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Lab Sample ID: MB 280-613095/1-A
Matrix: Water
Analysis Batch: 613168

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 613095

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U M	0.21	0.20	0.084	ug/L		05/19/23 23:27	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		05/19/23 23:27	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		05/19/23 23:27	1
2,4-diamino-6-nitrotoluene	0.90	U	1.0	0.90	0.43	ug/L		05/19/23 23:27	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027	ug/L		05/19/23 23:27	1
2,6-diamino-4-nitrotoluene	0.90	U M	1.0	0.90	0.22	ug/L		05/19/23 23:27	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		05/19/23 23:27	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		05/19/23 23:27	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.086	ug/L		05/19/23 23:27	1
3,5-Dinitroaniline	0.30	U	0.40	0.30	0.13	ug/L		05/19/23 23:27	1
3-Nitrotoluene	0.35	U	0.40	0.35	0.20	ug/L		05/19/23 23:27	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		05/19/23 23:27	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		05/19/23 23:27	1
DNX	0.25	U	0.50	0.25	0.097	ug/L		05/19/23 23:27	1
HMX	0.20	U	0.21	0.20	0.088	ug/L		05/19/23 23:27	1
MNX	0.29	U	0.50	0.29	0.093	ug/L		05/19/23 23:27	1
Nitrobenzene	0.20	U	0.21	0.20	0.091	ug/L		05/19/23 23:27	1
Nitroglycerin	2.0	U	2.1	2.0	0.92	ug/L		05/19/23 23:27	1
PETN	1.0	U	1.1	1.0	0.45	ug/L		05/19/23 23:27	1
RDX	0.20	U	0.21	0.20	0.052	ug/L		05/19/23 23:27	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		05/19/23 23:27	1
TNX	0.25	U	0.50	0.25	0.079	ug/L		05/19/23 23:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*102*		*83 - 119*	*05/19/23 13:39*	*05/19/23 23:27*	*1*

Lab Sample ID: LCS 280-613095/2-A
Matrix: Water
Analysis Batch: 613168

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 613095

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,3,5-Trinitrobenzene	2.00	1.98		ug/L		99	73 - 125
1,3-Dinitrobenzene	2.00	1.90		ug/L		95	78 - 120
2,4,6-Trinitrotoluene	2.00	1.83		ug/L		91	71 - 123
2,4-Dinitrotoluene	2.00	1.82		ug/L		91	78 - 120
2,6-Dinitrotoluene	2.00	1.84		ug/L		92	77 - 127
2-Amino-4,6-dinitrotoluene	2.00	1.80		ug/L		90	79 - 120
2-Nitrotoluene	2.00	1.56		ug/L		78	70 - 127
3,5-Dinitroaniline	2.00	1.73		ug/L		87	71 - 117
3-Nitrotoluene	2.00	1.54		ug/L		77	73 - 125
4-Amino-2,6-dinitrotoluene	2.00	1.78		ug/L		89	76 - 125
4-Nitrotoluene	2.00	1.56		ug/L		78	71 - 127
DNX	2.00	1.93	M	ug/L		96	66 - 119
HMX	2.00	1.62	M	ug/L		81	65 - 135
MNX	2.33	2.45		ug/L		105	57 - 132
Nitrobenzene	2.00	1.74		ug/L		87	65 - 134
Nitroglycerin	20.0	18.9		ug/L		95	74 - 127
PETN	20.0	20.5		ug/L		102	73 - 127

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

Lab Sample ID: LCS 280-613095/2-A
Matrix: Water
Analysis Batch: 613168

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 613095

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
RDX			2.00	1.79		ug/L		89	68 - 130		
Tetryl			2.00	2.07		ug/L		103	64 - 128		
TNX			2.01	1.88	M	ug/L		94	50 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dinitrobenzene	*93*		*83 - 119*

Lab Sample ID: LCS 280-613095/4-A
Matrix: Water
Analysis Batch: 613168

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 613095

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
2,4-diamino-6-nitrotoluene			2.00	1.61	M	ug/L		81	68 - 122		
2,6-diamino-4-nitrotoluene			2.00	1.68	M	ug/L		84	72 - 122		

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

Lab Sample ID: LCSD 280-613095/3-A
Matrix: Water
Analysis Batch: 613168

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 613095

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene			2.00	2.04		ug/L		102	73 - 125	3	20
1,3-Dinitrobenzene			2.00	1.96		ug/L		98	78 - 120	3	20
2,4,6-Trinitrotoluene			2.00	1.88		ug/L		94	71 - 123	3	20
2,4-Dinitrotoluene			2.00	1.87		ug/L		93	78 - 120	3	20
2,6-Dinitrotoluene			2.00	1.95		ug/L		98	77 - 127	6	20
2-Amino-4,6-dinitrotoluene			2.00	1.84		ug/L		92	79 - 120	2	20
2-Nitrotoluene			2.00	1.64		ug/L		82	70 - 127	5	20
3,5-Dinitroaniline			2.00	1.83		ug/L		91	71 - 117	5	20
3-Nitrotoluene			2.00	1.62		ug/L		81	73 - 125	5	20
4-Amino-2,6-dinitrotoluene			2.00	1.82		ug/L		91	76 - 125	2	20
4-Nitrotoluene			2.00	1.61		ug/L		80	71 - 127	3	20
DNX			2.00	1.95	M	ug/L		97	66 - 119	1	20
HMX			2.00	1.71	M	ug/L		86	65 - 135	6	20
MNX			2.33	2.47		ug/L		106	57 - 132	1	20
Nitrobenzene			2.00	1.81		ug/L		91	65 - 134	4	20
Nitroglycerin			20.0	19.5		ug/L		97	74 - 127	3	20
PETN			20.0	21.1		ug/L		106	73 - 127	3	20
RDX			2.00	1.84		ug/L		92	68 - 130	3	20
Tetryl			2.00	2.06		ug/L		103	64 - 128	0	20
TNX			2.01	1.91	M	ug/L		95	50 - 150	2	20

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

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

Lab Sample ID: LCSD 280-613095/5-A
Matrix: Water
Analysis Batch: 613168

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 613095

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-diamino-6-nitrotoluene			2.00	1.47	M	ug/L		74	68 - 122	9	20
2,6-diamino-4-nitrotoluene			2.00	1.56	M	ug/L		78	72 - 122	8	20

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

Lab Sample ID: 280-176674-10 MS
Matrix: Water
Analysis Batch: 613168

Client Sample ID: FBQmw-175-230401-GW-R
Prep Type: Total/NA
Prep Batch: 613095

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,3,5-Trinitrobenzene	0.20	U J1	2.00	1.75	Q	ug/L		87	73 - 125		
1,3-Dinitrobenzene	0.10	U J1	2.00	1.66	Q	ug/L		83	78 - 120		
2,4,6-Trinitrotoluene	0.10	U J1	2.00	1.56	Q	ug/L		78	71 - 123		
2,4-Dinitrotoluene	0.080	U J1	2.00	1.50	Q J1	ug/L		75	78 - 120		
2,6-Dinitrotoluene	0.080	U J1	2.00	1.58	Q	ug/L		79	77 - 127		
2-Amino-4,6-dinitrotoluene	0.10	U J1	2.00	1.46	Q J1	ug/L		73	79 - 120		
2-Nitrotoluene	0.20	U J1	2.00	1.34	Q J1	ug/L		67	70 - 127		
3,5-Dinitroaniline	0.30	U J1	2.00	1.46	Q	ug/L		73	71 - 117		
3-Nitrotoluene	0.35	U J1	2.00	1.23	Q J1	ug/L		61	73 - 125		
4-Amino-2,6-dinitrotoluene	0.12	U J1	2.00	1.44	Q J1	ug/L		72	76 - 125		
4-Nitrotoluene	0.40	U J1	2.00	1.30	Q J1	ug/L		65	71 - 127		
DNX	0.25	U J1	2.00	1.56	M Q	ug/L		78	66 - 119		
HMX	0.20	U	2.00	1.46	M Q	ug/L		73	65 - 135		
MNX	0.29	U	2.34	1.98	M Q	ug/L		85	57 - 132		
Nitrobenzene	0.20	U J1	2.00	1.47	Q	ug/L		73	65 - 134		
Nitroglycerin	2.0	U	20.0	17.5	Q	ug/L		87	74 - 127		
PETN	1.0	U J1	20.0	18.1	Q	ug/L		90	73 - 127		
RDX	0.20	U M J1	2.00	1.49	M Q	ug/L		74	68 - 130		
Tetryl	0.10	U J1	2.00	1.72	Q	ug/L		86	64 - 128		
TNX	0.25	U M	2.01	1.70	M Q	ug/L		85	50 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dinitrobenzene	*82*	*Q*	*83 - 119*

Lab Sample ID: 280-176674-10 MS
Matrix: Water
Analysis Batch: 613168

Client Sample ID: FBQmw-175-230401-GW-R
Prep Type: Total/NA
Prep Batch: 613095

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
2,4-diamino-6-nitrotoluene	0.90	U J1	2.01	1.25	M J1	ug/L		62	68 - 122		
2,6-diamino-4-nitrotoluene	0.90	U J1	2.01	1.60	M	ug/L		80	72 - 122		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dinitrobenzene	*95*	*M*	*83 - 119*

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

Lab Sample ID: 280-176674-10 MSD
Matrix: Water
Analysis Batch: 613168

Client Sample ID: FBQmw-175-230401-GW-R
Prep Type: Total/NA
Prep Batch: 613095

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene	0.20	U J1	2.19	2.21	J1	ug/L		101	73 - 125	23	20
1,3-Dinitrobenzene	0.10	U J1	2.19	2.13	J1	ug/L		97	78 - 120	25	20
2,4,6-Trinitrotoluene	0.10	U J1	2.19	2.00	J1	ug/L		92	71 - 123	25	20
2,4-Dinitrotoluene	0.080	U J1	2.19	2.00	J1	ug/L		92	78 - 120	29	20
2,6-Dinitrotoluene	0.080	U J1	2.19	2.02	J1	ug/L		93	77 - 127	25	20
2-Amino-4,6-dinitrotoluene	0.10	U J1	2.19	1.96	J1	ug/L		90	79 - 120	29	20
2-Nitrotoluene	0.20	U J1	2.19	1.78	J1	ug/L		82	70 - 127	28	20
3,5-Dinitroaniline	0.30	U J1	2.19	1.86	J1	ug/L		85	71 - 117	24	20
3-Nitrotoluene	0.35	U J1	2.19	1.67	J1	ug/L		76	73 - 125	30	20
4-Amino-2,6-dinitrotoluene	0.12	U J1	2.19	1.87	J1	ug/L		86	76 - 125	26	20
4-Nitrotoluene	0.40	U J1	2.19	1.75	J1	ug/L		80	71 - 127	29	20
DNX	0.25	U J1	2.19	1.93	M J1	ug/L		88	66 - 119	21	20
HMX	0.20	U	2.19	1.77	M	ug/L		81	65 - 135	19	20
MNX	0.29	U	2.55	2.37	M	ug/L		93	57 - 132	18	20
Nitrobenzene	0.20	U J1	2.19	1.94	J1	ug/L		89	65 - 134	28	20
Nitroglycerin	2.0	U	21.9	21.5		ug/L		98	74 - 127	20	20
PETN	1.0	U J1	21.9	22.4	J1	ug/L		102	73 - 127	21	20
RDX	0.20	U M J1	2.19	1.83	M J1	ug/L		84	68 - 130	21	20
Tetryl	0.10	U J1	2.19	2.23	J1	ug/L		102	64 - 128	26	20
TNX	0.25	U M	2.19	1.98	M	ug/L		90	50 - 150	15	20

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

Lab Sample ID: 280-176674-10 MSD
Matrix: Water
Analysis Batch: 613168

Client Sample ID: FBQmw-175-230401-GW-R
Prep Type: Total/NA
Prep Batch: 613095

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-diamino-6-nitrotoluene	0.90	U J1	2.00	1.03	M J1	ug/L		51	68 - 122	19	20
2,6-diamino-4-nitrotoluene	0.90	U J1	2.00	1.32	M J1	ug/L		66	72 - 122	19	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dinitrobenzene	*109*		*83 - 119*

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-613561/90
Matrix: Water
Analysis Batch: 613561

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia as N	0.050	U	0.10	0.050	0.029	mg/L		05/23/23 12:13	1

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCS 280-613561/89
Matrix: Water
Analysis Batch: 613561

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

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

Lab Sample ID: 280-176674-5 MS
Matrix: Water
Analysis Batch: 613561

Client Sample ID: LL12mw-185-230401-GW
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Ammonia as N	0.050	U	1.00	1.05		mg/L		105	90 - 110		

Lab Sample ID: 280-176674-5 MSD
Matrix: Water
Analysis Batch: 613561

Client Sample ID: LL12mw-185-230401-GW
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia as N	0.050	U	1.00	1.03		mg/L		103	90 - 110	1	10

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

Lab Sample ID: MB 280-613197/2-A
Matrix: Water
Analysis Batch: 613208

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 613197

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		05/19/23 17:27	1

Lab Sample ID: LCS 280-613197/1-A
Matrix: Water
Analysis Batch: 613208

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 613197

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Sulfide			19.0	16.0		mg/L		84	44 - 110		

Method: 9056 - Anions, Ion Chromatography

Lab Sample ID: MB 280-612961/13
Matrix: Water
Analysis Batch: 612961

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		05/18/23 14:55	1
Nitrite as N	0.10	U	0.50	0.10	0.049	mg/L		05/18/23 14:55	1

Lab Sample ID: MB 280-612961/55
Matrix: Water
Analysis Batch: 612961

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 M	0.50	0.20	0.090	mg/L		05/19/23 01:26	1

Method: 9056 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 280-612961/11
Matrix: Water
Analysis Batch: 612961

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	2.50	2.46		mg/L		98	88 - 111
Nitrite as N	2.50	2.42		mg/L		97	87 - 111

Lab Sample ID: LCS 280-612961/53
Matrix: Water
Analysis Batch: 612961

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	2.50		mg/L		100	88 - 111

Lab Sample ID: LCSD 280-612961/12
Matrix: Water
Analysis Batch: 612961

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	2.45		mg/L		98	88 - 111	0	10
Nitrite as N	2.50	2.41		mg/L		96	87 - 111	1	10

Lab Sample ID: LCSD 280-612961/54
Matrix: Water
Analysis Batch: 612961

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	2.45		mg/L		98	88 - 111	2	10

Lab Sample ID: MRL 280-612961/10
Matrix: Water
Analysis Batch: 612961

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	0.248	J	mg/L		99	50 - 150
Nitrite as N	0.250	0.221	J	mg/L		89	50 - 150

Lab Sample ID: MB 280-613351/6
Matrix: Water
Analysis Batch: 613351

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		05/22/23 17:14	1

Lab Sample ID: LCS 280-613351/4
Matrix: Water
Analysis Batch: 613351

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	2.41		mg/L		96	88 - 111

Method: 9056 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 280-613351/5
Matrix: Water
Analysis Batch: 613351

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	2.42		mg/L		97	88 - 111	0	10

Lab Sample ID: MRL 280-613351/3
Matrix: Water
Analysis Batch: 613351

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	0.239	J	mg/L		95	50 - 150

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 280-612962/13
Matrix: Water
Analysis Batch: 612962

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	2.5	U M	5.0	2.5	1.0	mg/L		05/18/23 14:55	1

Lab Sample ID: LCS 280-612962/11
Matrix: Water
Analysis Batch: 612962

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	50.0	50.5		mg/L		101	87 - 112

Lab Sample ID: LCSD 280-612962/12
Matrix: Water
Analysis Batch: 612962

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	50.0	50.0		mg/L		100	87 - 112	1	10

Lab Sample ID: MRL 280-612962/10
Matrix: Water
Analysis Batch: 612962

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	2.50	2.98	J	mg/L		119	50 - 150

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-613268/4
Matrix: Water
Analysis Batch: 613268

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Organic Carbon - Average	0.80	U	1.0	0.80	0.35	mg/L	☼	05/19/23 18:46	1

Method: 9060 - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: LCS 280-613268/3
Matrix: Water
Analysis Batch: 613268

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Organic Carbon - Average			25.0	24.8		mg/L	☼	99	88 - 112		

Lab Sample ID: 280-176674-7 MS
Matrix: Water
Analysis Batch: 613268

Client Sample ID: FBQmw-173-230401-GW-R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Organic Carbon - Average	0.85	J	25.0	25.0		mg/L	☼	97	88 - 112		

Lab Sample ID: 280-176674-7 MSD
Matrix: Water
Analysis Batch: 613268

Client Sample ID: FBQmw-173-230401-GW-R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Organic Carbon - Average	0.85	J	25.0	25.1		mg/L	☼	97	88 - 112	0	15

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-613263/33
Matrix: Water
Analysis Batch: 613263

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Alkalinity	3.58	J	10	6.4	3.1	mg/L		05/19/23 16:11	1

Lab Sample ID: LCS 280-613263/31
Matrix: Water
Analysis Batch: 613263

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Alkalinity			200	181		mg/L		91	89 - 110		

Lab Sample ID: LCSD 280-613263/32
Matrix: Water
Analysis Batch: 613263

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Alkalinity			200	183		mg/L		92	89 - 110	1	10

HPLC/IC

Prep Batch: 613095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176674-2	FWGmw-015-230401-GW	Total/NA	Water	3535	
280-176674-4	LL3mw-241-230401-GW	Total/NA	Water	3535	
280-176674-7	FBQmw-173-230401-GW-R	Total/NA	Water	3535	
280-176674-10	FBQmw-175-230401-GW-R	Total/NA	Water	3535	
280-176674-11	FBQmw-175-230402-GW-R	Total/NA	Water	3535	
MB 280-613095/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-613095/2-A	Lab Control Sample	Total/NA	Water	3535	
LCS 280-613095/4-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 280-613095/3-A	Lab Control Sample Dup	Total/NA	Water	3535	
LCSD 280-613095/5-A	Lab Control Sample Dup	Total/NA	Water	3535	
280-176674-10 MS	FBQmw-175-230401-GW-R	Total/NA	Water	3535	
280-176674-10 MS	FBQmw-175-230401-GW-R	Total/NA	Water	3535	
280-176674-10 MSD	FBQmw-175-230401-GW-R	Total/NA	Water	3535	
280-176674-10 MSD	FBQmw-175-230401-GW-R	Total/NA	Water	3535	

Analysis Batch: 613168

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176674-2	FWGmw-015-230401-GW	Total/NA	Water	8330B	613095
280-176674-4	LL3mw-241-230401-GW	Total/NA	Water	8330B	613095
280-176674-7	FBQmw-173-230401-GW-R	Total/NA	Water	8330B	613095
280-176674-10	FBQmw-175-230401-GW-R	Total/NA	Water	8330B	613095
280-176674-11	FBQmw-175-230402-GW-R	Total/NA	Water	8330B	613095
MB 280-613095/1-A	Method Blank	Total/NA	Water	8330B	613095
LCS 280-613095/2-A	Lab Control Sample	Total/NA	Water	8330B	613095
LCS 280-613095/4-A	Lab Control Sample	Total/NA	Water	8330B	613095
LCSD 280-613095/3-A	Lab Control Sample Dup	Total/NA	Water	8330B	613095
LCSD 280-613095/5-A	Lab Control Sample Dup	Total/NA	Water	8330B	613095
280-176674-10 MS	FBQmw-175-230401-GW-R	Total/NA	Water	8330B	613095
280-176674-10 MS	FBQmw-175-230401-GW-R	Total/NA	Water	8330B	613095
280-176674-10 MSD	FBQmw-175-230401-GW-R	Total/NA	Water	8330B	613095
280-176674-10 MSD	FBQmw-175-230401-GW-R	Total/NA	Water	8330B	613095

Analysis Batch: 613238

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176674-7	FBQmw-173-230401-GW-R	Total/NA	Water	8330B	613095

Analysis Batch: 613683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176674-4	LL3mw-241-230401-GW	Total/NA	Water	8330B	613095

General Chemistry

Analysis Batch: 612961

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176674-5	LL12mw-185-230401-GW	Total/NA	Water	9056	
280-176674-6	LL12mw-185-230402-GW	Total/NA	Water	9056	
280-176674-7	FBQmw-173-230401-GW-R	Total/NA	Water	9056	
280-176674-8	FBQmw-173-230402-GW-R	Total/NA	Water	9056	
280-176674-9	LL12mw-245-230401-GW	Total/NA	Water	9056	
MB 280-612961/13	Method Blank	Total/NA	Water	9056	
MB 280-612961/55	Method Blank	Total/NA	Water	9056	

General Chemistry (Continued)

Analysis Batch: 612961 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-612961/11	Lab Control Sample	Total/NA	Water	9056	
LCS 280-612961/53	Lab Control Sample	Total/NA	Water	9056	
LCSD 280-612961/12	Lab Control Sample Dup	Total/NA	Water	9056	
LCSD 280-612961/54	Lab Control Sample Dup	Total/NA	Water	9056	
MRL 280-612961/10	Lab Control Sample	Total/NA	Water	9056	

Analysis Batch: 612962

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176674-7	FBQmw-173-230401-GW-R	Total/NA	Water	9056A	
280-176674-8	FBQmw-173-230402-GW-R	Total/NA	Water	9056A	
MB 280-612962/13	Method Blank	Total/NA	Water	9056A	
LCS 280-612962/11	Lab Control Sample	Total/NA	Water	9056A	
LCSD 280-612962/12	Lab Control Sample Dup	Total/NA	Water	9056A	
MRL 280-612962/10	Lab Control Sample	Total/NA	Water	9056A	

Prep Batch: 613197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176674-7	FBQmw-173-230401-GW-R	Total/NA	Water	9030B	
280-176674-8	FBQmw-173-230402-GW-R	Total/NA	Water	9030B	
MB 280-613197/2-A	Method Blank	Total/NA	Water	9030B	
LCS 280-613197/1-A	Lab Control Sample	Total/NA	Water	9030B	

Analysis Batch: 613208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176674-7	FBQmw-173-230401-GW-R	Total/NA	Water	9034	613197
280-176674-8	FBQmw-173-230402-GW-R	Total/NA	Water	9034	613197
MB 280-613197/2-A	Method Blank	Total/NA	Water	9034	613197
LCS 280-613197/1-A	Lab Control Sample	Total/NA	Water	9034	613197

Analysis Batch: 613263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176674-7	FBQmw-173-230401-GW-R	Total/NA	Water	SM 2320B	
280-176674-8	FBQmw-173-230402-GW-R	Total/NA	Water	SM 2320B	
MB 280-613263/33	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-613263/31	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 280-613263/32	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Analysis Batch: 613268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176674-7	FBQmw-173-230401-GW-R	Total/NA	Water	9060	
MB 280-613268/4	Method Blank	Total/NA	Water	9060	
LCS 280-613268/3	Lab Control Sample	Total/NA	Water	9060	
280-176674-7 MS	FBQmw-173-230401-GW-R	Total/NA	Water	9060	
280-176674-7 MSD	FBQmw-173-230401-GW-R	Total/NA	Water	9060	

Analysis Batch: 613351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176674-3	LL12mw-187-230401-GW	Total/NA	Water	9056	
MB 280-613351/6	Method Blank	Total/NA	Water	9056	
LCS 280-613351/4	Lab Control Sample	Total/NA	Water	9056	
LCSD 280-613351/5	Lab Control Sample Dup	Total/NA	Water	9056	

General Chemistry (Continued)

Analysis Batch: 613351 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MRL 280-613351/3	Lab Control Sample	Total/NA	Water	9056	

Analysis Batch: 613561

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176674-3	LL12mw-187-230401-GW	Total/NA	Water	350.1	
280-176674-5	LL12mw-185-230401-GW	Total/NA	Water	350.1	
280-176674-6	LL12mw-185-230402-GW	Total/NA	Water	350.1	
280-176674-9	LL12mw-245-230401-GW	Total/NA	Water	350.1	
MB 280-613561/90	Method Blank	Total/NA	Water	350.1	
LCS 280-613561/89	Lab Control Sample	Total/NA	Water	350.1	
280-176674-5 MS	LL12mw-185-230401-GW	Total/NA	Water	350.1	
280-176674-5 MSD	LL12mw-185-230401-GW	Total/NA	Water	350.1	

Client Sample ID: FWGmw-015-230401-GW
Lab Sample ID: 280-176674-2

Date Collected: 05/17/23 14:06
Matrix: Water
Date Received: 05/18/23 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			481.7 mL	5 mL	613095	05/19/23 13:39	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	613168	05/20/23 02:53	JZ	EET DEN

Client Sample ID: LL12mw-187-230401-GW
Lab Sample ID: 280-176674-3

Date Collected: 05/17/23 13:40
Matrix: Water
Date Received: 05/18/23 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	350.1		200	10 mL	10 mL	613561	05/23/23 17:04	MMP	EET DEN
Total/NA	Analysis	9056		2000	10 mL	10 mL	613351	05/22/23 18:59	EJS	EET DEN

Client Sample ID: LL3mw-241-230401-GW
Lab Sample ID: 280-176674-4

Date Collected: 05/17/23 15:00
Matrix: Water
Date Received: 05/18/23 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			488.4 mL	5 mL	613095	05/19/23 13:39	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	613168	05/20/23 04:02	JZ	EET DEN
Total/NA	Prep	3535			488.4 mL	5 mL	613095	05/19/23 13:39	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	613683	05/24/23 19:48	JZ	EET DEN

Client Sample ID: LL12mw-185-230401-GW
Lab Sample ID: 280-176674-5

Date Collected: 05/17/23 09:45
Matrix: Water
Date Received: 05/18/23 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	350.1		1	10 mL	10 mL	613561	05/23/23 13:01	MMP	EET DEN
Total/NA	Analysis	9056		20	10 mL	10 mL	612961	05/18/23 16:26	MEC	EET DEN

Client Sample ID: LL12mw-185-230402-GW
Lab Sample ID: 280-176674-6

Date Collected: 05/17/23 09:45
Matrix: Water
Date Received: 05/18/23 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	350.1		1	10 mL	10 mL	613561	05/23/23 13:25	MMP	EET DEN
Total/NA	Analysis	9056		20	10 mL	10 mL	612961	05/18/23 16:41	MEC	EET DEN

Client Sample ID: FBQmw-173-230401-GW-R
Lab Sample ID: 280-176674-7

Date Collected: 05/17/23 11:47
Matrix: Water
Date Received: 05/18/23 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			483.2 mL	5 mL	613095	05/19/23 13:39	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	613168	05/20/23 04:25	JZ	EET DEN
Total/NA	Prep	3535			483.2 mL	5 mL	613095	05/19/23 13:39	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	613238	05/21/23 00:31	JZ	EET DEN

Client Sample ID: FBQmw-173-230401-GW-R
Lab Sample ID: 280-176674-7
Date Collected: 05/17/23 11:47
Matrix: Water
Date Received: 05/18/23 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9030B			50 mL	50 mL	613197	05/19/23 15:58	CAI	EET DEN
Total/NA	Analysis	9034		1			613208	05/19/23 17:27	CAI	EET DEN
Total/NA	Analysis	9056		1	10 mL	10 mL	612961	05/18/23 19:26	MEC	EET DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	612962	05/18/23 19:26	MEC	EET DEN
Total/NA	Analysis	9060		1	20 mL	20 mL	613268	05/19/23 19:17	ABW	EET DEN
Total/NA	Analysis	SM 2320B		1			613263	05/19/23 17:16	KEG	EET DEN

Client Sample ID: FBQmw-173-230402-GW-R
Lab Sample ID: 280-176674-8
Date Collected: 05/17/23 11:47
Matrix: Water
Date Received: 05/18/23 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9030B			50 mL	50 mL	613197	05/19/23 15:58	CAI	EET DEN
Total/NA	Analysis	9034		1			613208	05/19/23 17:27	CAI	EET DEN
Total/NA	Analysis	9056		1	10 mL	10 mL	612961	05/18/23 19:41	MEC	EET DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	612962	05/18/23 19:41	MEC	EET DEN
Total/NA	Analysis	SM 2320B		1			613263	05/19/23 17:22	KEG	EET DEN

Client Sample ID: LL12mw-245-230401-GW
Lab Sample ID: 280-176674-9
Date Collected: 05/17/23 14:26
Matrix: Water
Date Received: 05/18/23 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	350.1		1	10 mL	10 mL	613561	05/23/23 13:28	MMP	EET DEN
Total/NA	Analysis	9056		1	10 mL	10 mL	612961	05/19/23 06:42	MEC	EET DEN

Client Sample ID: FBQmw-175-230401-GW-R
Lab Sample ID: 280-176674-10
Date Collected: 05/17/23 08:58
Matrix: Water
Date Received: 05/18/23 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			497.5 mL	5 mL	613095	05/19/23 13:39	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	613168	05/20/23 04:48	JZ	EET DEN

Client Sample ID: FBQmw-175-230402-GW-R
Lab Sample ID: 280-176674-11
Date Collected: 05/17/23 08:58
Matrix: Water
Date Received: 05/18/23 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			497 mL	5 mL	613095	05/19/23 13:39	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	613168	05/20/23 06:43	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.
Project/Site: RVAAP FWGW

Job ID: 280-176674-1

Laboratory: Eurofins Denver

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

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

Method Summary

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

Job ID: 280-176674-1

Method	Method Description	Protocol	Laboratory
8330B	Nitroaromatics and Nitramines (HPLC)	EPA	EET DEN
350.1	Nitrogen, Ammonia	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.
Project/Site: RVAAP FWGW

Job ID: 280-176674-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-176674-2	FWGmw-015-230401-GW	Water	05/17/23 14:06	05/18/23 09:45
280-176674-3	LL12mw-187-230401-GW	Water	05/17/23 13:40	05/18/23 09:45
280-176674-4	LL3mw-241-230401-GW	Water	05/17/23 15:00	05/18/23 09:45
280-176674-5	LL12mw-185-230401-GW	Water	05/17/23 09:45	05/18/23 09:45
280-176674-6	LL12mw-185-230402-GW	Water	05/17/23 09:45	05/18/23 09:45
280-176674-7	FBQmw-173-230401-GW-R	Water	05/17/23 11:47	05/18/23 09:45
280-176674-8	FBQmw-173-230402-GW-R	Water	05/17/23 11:47	05/18/23 09:45
280-176674-9	LL12mw-245-230401-GW	Water	05/17/23 14:26	05/18/23 09:45
280-176674-10	FBQmw-175-230401-GW-R	Water	05/17/23 08:58	05/18/23 09:45
280-176674-11	FBQmw-175-230402-GW-R	Water	05/17/23 08:58	05/18/23 09:45

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176674-1

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.: 280-176674-1

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.: 280-176674-1

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.: 280-176674-1

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.: 280-176674-1

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.: 280-176674-1

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.: 280-176674-1

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.: 280-176674-1

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.: 280-176674-1

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.: 280-176674-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 613168

Lab Sample ID: CCV 280-613168/32 Client Sample ID:

Date Analyzed: 05/19/23 22:41 Lab File ID: 05190032.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.43	Baseline	LV5D	05/20/23 10:26
HMX	6.55	Baseline	LV5D	05/20/23 10:26
DNX	6.76	Baseline	LV5D	05/20/23 10:26

Lab Sample ID: CCV 280-613168/33 Client Sample ID:

Date Analyzed: 05/19/23 23:04 Lab File ID: 05190033.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.43	Baseline	LV5D	05/20/23 10:26
2,4-diamino-6-nitrotoluene	6.62	Baseline	LV5D	05/20/23 10:26

Lab Sample ID: MB 280-613095/1-A Client Sample ID:

Date Analyzed: 05/19/23 23:27 Lab File ID: 05190034.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3,5-Trinitrobenzene		Invalid Compound ID	LV5D	05/20/23 10:26
2,6-diamino-4-nitrotoluene		Invalid Compound ID	LV5D	05/20/23 10:26

Lab Sample ID: LCS 280-613095/2-A Client Sample ID:

Date Analyzed: 05/19/23 23:50 Lab File ID: 05190035.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.43	Baseline	LV5D	05/20/23 10:26
HMX	6.55	Baseline	LV5D	05/20/23 10:26
DNX	6.76	Baseline	LV5D	05/20/23 10:26

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 613168

Lab Sample ID: LCSD 280-613095/3-A Client Sample ID:

Date Analyzed: 05/20/23 00:13 Lab File ID: 05190036.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.43	Baseline	LV5D	05/20/23 10:26
HMX	6.55	Baseline	LV5D	05/20/23 10:26
DNX	6.76	Baseline	LV5D	05/20/23 10:26

Lab Sample ID: LCS 280-613095/4-A Client Sample ID:

Date Analyzed: 05/20/23 00:36 Lab File ID: 05190037.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.42	Baseline	LV5D	05/20/23 10:27
2,4-diamino-6-nitrotoluene	6.61	Baseline	LV5D	05/20/23 10:27

Lab Sample ID: LCSD 280-613095/5-A Client Sample ID:

Date Analyzed: 05/20/23 00:59 Lab File ID: 05190038.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.42	Baseline	LV5D	05/20/23 10:27
2,4-diamino-6-nitrotoluene	6.61	Baseline	LV5D	05/20/23 10:27

Lab Sample ID: 280-176674-2 Client Sample ID: FWGmw-015-230401-GW

Date Analyzed: 05/20/23 02:53 Lab File ID: 05190043.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.53	Baseline	LV5D	05/20/23 11:05
HMX		Invalid Compound ID	LV5D	05/20/23 11:05

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 613168

Lab Sample ID: CCV 280-613168/44 Client Sample ID:

Date Analyzed: 05/20/23 03:16 Lab File ID: 05190044.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.43	Baseline	LV5D	05/20/23 11:05
HMX	6.55	Baseline	LV5D	05/20/23 11:05
DNX	6.76	Baseline	LV5D	05/20/23 11:05

Lab Sample ID: CCV 280-613168/45 Client Sample ID:

Date Analyzed: 05/20/23 03:39 Lab File ID: 05190045.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.43	Baseline	LV5D	05/20/23 11:05
2,4-diamino-6-nitrotoluene	6.62	Baseline	LV5D	05/20/23 11:05

Lab Sample ID: 280-176674-4 Client Sample ID: LL3mw-241-230401-GW

Date Analyzed: 05/20/23 04:02 Lab File ID: 05190046.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.55	Baseline	LV5D	05/20/23 11:05
2,6-diamino-4-nitrotoluene		Invalid Compound ID	LV5D	05/20/23 11:05
4-Nitrotoluene		Invalid Compound ID	LV5D	05/20/23 11:06
DNX		Invalid Compound ID	LV5D	05/20/23 11:05
Nitrobenzene		Invalid Compound ID	LV5D	05/20/23 11:05
Tetryl		Invalid Compound ID	LV5D	05/20/23 11:05

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 613168

Lab Sample ID: 280-176674-7 Client Sample ID: FBQmw-173-230401-GW-R

Date Analyzed: 05/20/23 04:25 Lab File ID: 05190047.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.53	Baseline	LV5D	05/20/23 11:06
1,3-Dinitrobenzene	9.27	Baseline	LV5D	05/20/23 11:06
RDX		Invalid Compound ID	LV5D	05/20/23 11:06
TNX		Invalid Compound ID	LV5D	05/20/23 11:06

Lab Sample ID: 280-176674-10 Client Sample ID: FBQmw-175-230401-GW-R

Date Analyzed: 05/20/23 04:48 Lab File ID: 05190048.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.53	Baseline	LV5D	05/20/23 11:14
RDX		Invalid Compound ID	LV5D	05/20/23 11:14
TNX		Invalid Compound ID	LV5D	05/20/23 11:14

Lab Sample ID: 280-176674-10 MS Client Sample ID: FBQmw-175-230401-GW-R MS

Date Analyzed: 05/20/23 05:11 Lab File ID: 05190049.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.43	Baseline	LV5D	05/20/23 11:14
HMX	6.55	Baseline	LV5D	05/20/23 11:14
DNX	6.76	Baseline	LV5D	05/20/23 11:14
MNX	7.18	Baseline	LV5D	05/20/23 11:14
RDX	7.57	Baseline	LV5D	05/20/23 11:15

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 613168

Lab Sample ID: 280-176674-10 MSD Client Sample ID: FBQmw-175-230401-GW-R MSD

Date Analyzed: 05/20/23 05:34 Lab File ID: 05190050.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.43	Baseline	LV5D	05/20/23 11:15
HMX	6.55	Baseline	LV5D	05/20/23 11:15
DNX	6.75	Baseline	LV5D	05/20/23 11:15
MNX	7.18	Baseline	LV5D	05/20/23 11:15
RDX	7.57	Baseline	LV5D	05/20/23 11:15

Lab Sample ID: 280-176674-10 MS Client Sample ID: FBQmw-175-230401-GW-R MS

Date Analyzed: 05/20/23 05:57 Lab File ID: 05190051.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.42	Baseline	LV5D	05/20/23 11:15
2,4-diamino-6-nitrotoluene	6.60	Baseline	LV5D	05/20/23 11:15
1,2-Dinitrobenzene	8.52	Baseline	LV5D	05/20/23 11:15

Lab Sample ID: 280-176674-10 MSD Client Sample ID: FBQmw-175-230401-GW-R MSD

Date Analyzed: 05/20/23 06:20 Lab File ID: 05190052.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.42	Baseline	LV5D	05/20/23 11:15
2,4-diamino-6-nitrotoluene	6.60	Baseline	LV5D	05/20/23 11:15

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 613168

Lab Sample ID: 280-176674-11 Client Sample ID: FBQmw-175-230402-GW-R

Date Analyzed: 05/20/23 06:43 Lab File ID: 05190053.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.53	Baseline	LV5D	05/20/23 11:16
RDX		Invalid Compound ID	LV5D	05/20/23 11:16
TNX		Invalid Compound ID	LV5D	05/20/23 11:16
2-Nitrotoluene	12.50	Baseline	LV5D	05/20/23 11:16

Lab Sample ID: CCV 280-613168/56 Client Sample ID:

Date Analyzed: 05/20/23 07:52 Lab File ID: 05190056.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.43	Baseline	LV5D	05/20/23 11:16
HMX	6.55	Baseline	LV5D	05/20/23 11:16
DNX	6.76	Baseline	LV5D	05/20/23 11:16

Lab Sample ID: CCV 280-613168/57 Client Sample ID:

Date Analyzed: 05/20/23 08:15 Lab File ID: 05190057.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.43	Baseline	LV5D	05/20/23 11:16
2,4-diamino-6-nitrotoluene	6.62	Baseline	LV5D	05/20/23 11:16

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176674-1

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.: 280-176674-1

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.: 280-176674-1

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.: 280-176674-1

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.: 280-176674-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 613238

Lab Sample ID: CCV 280-613238/7 Client Sample ID:

Date Analyzed: 05/20/23 18:42 Lab File ID: 05200007.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3-Nitrotoluene	16.80	Split Peak	K8YG	05/22/23 11:10
2-Amino-4,6-dinitrotoluene	17.35	Split Peak	K8YG	05/22/23 11:11
1,3,5-Trinitrobenzene	17.40	Split Peak	K8YG	05/22/23 11:11
Tetryl	22.33	Split Peak	K8YG	05/22/23 11:11
2,4,6-Trinitrotoluene	23.13	Split Peak	K8YG	05/22/23 11:11

Lab Sample ID: 280-176674-7 Client Sample ID: FBQmw-173-230401-GW-R

Date Analyzed: 05/21/23 00:31 Lab File ID: 05200019.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-Dinitrotoluene		Invalid Compound ID	LV5D	05/23/23 13:11

Lab Sample ID: CCV 280-613238/20 Client Sample ID:

Date Analyzed: 05/21/23 01:06 Lab File ID: 05200020.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3,5-Dinitroaniline	14.32	Split Peak	K8YG	05/22/23 11:25
1,3-Dinitrobenzene	14.58	Split Peak	K8YG	05/22/23 11:25
2-Nitrotoluene	15.65	Split Peak	K8YG	05/22/23 11:25
4-Nitrotoluene	15.87	Split Peak	K8YG	05/22/23 11:25
4-Amino-2,6-dinitrotoluene	16.43	Split Peak	K8YG	05/22/23 11:25
3-Nitrotoluene	16.71	Split Peak	K8YG	05/22/23 11:27
2-Amino-4,6-dinitrotoluene	17.25	Unspecified	LV5D	05/23/23 12:44
1,3,5-Trinitrobenzene	17.37	Split Peak	K8YG	05/22/23 11:26

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 613683

Lab Sample ID: CCV 280-613683/8 Client Sample ID:

Date Analyzed: 05/24/23 19:13 Lab File ID: 05240008.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	17.24	Baseline Smoothing	LV5D	05/24/23 19:54
1,3,5-Trinitrobenzene	17.33	Unspecified		

Lab Sample ID: 280-176674-4 Client Sample ID: LL3mw-241-230401-GW

Date Analyzed: 05/24/23 19:48 Lab File ID: 05240010.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.73	Baseline	K8YG	05/25/23 08:40
MNX	7.56	Baseline	K8YG	05/25/23 08:41

Lab Sample ID: CCV 280-613683/18 Client Sample ID:

Date Analyzed: 05/25/23 00:28 Lab File ID: 05240018.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	17.12	Baseline	K8YG	05/25/23 09:17
1,3,5-Trinitrobenzene	17.26	Baseline	K8YG	05/25/23 09:17
Tetryl	22.08	Baseline	K8YG	05/25/23 09:17
PETN	24.11	Baseline	K8YG	05/25/23 09:17

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Batch Number: 612961

Lab Sample ID: 280-176674-5 Client Sample ID: LL12mw-185-230401-GW

Date Analyzed: 05/18/23 16:26 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrate as N	6.91	Baseline Smoothing	LVW8	05/19/23 11:58

Lab Sample ID: 280-176674-6 Client Sample ID: LL12mw-185-230402-GW

Date Analyzed: 05/18/23 16:41 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrate as N	6.90	Baseline Smoothing	LVW8	05/19/23 11:59

Lab Sample ID: CCB 280-612961/25 Client Sample ID:

Date Analyzed: 05/18/23 17:56 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

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

Lab Sample ID: 280-176674-7 Client Sample ID: FBQmw-173-230401-GW-R

Date Analyzed: 05/18/23 19:26 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrate as N	6.98	Baseline Smoothing	LVW8	05/19/23 12:01

Lab Sample ID: 280-176674-8 Client Sample ID: FBQmw-173-230402-GW-R

Date Analyzed: 05/18/23 19:41 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrate as N	6.98	Baseline Smoothing	LVW8	05/19/23 12:02

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Batch Number: 612961

Lab Sample ID: CCB 280-612961/37 Client Sample ID:

Date Analyzed: 05/18/23 20:57 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	5.00	Baseline Smoothing	LVW8	05/19/23 12:03
Nitrate as N	6.97	Baseline Smoothing	LVW8	05/19/23 12:03

Lab Sample ID: CCB 280-612961/49 Client Sample ID:

Date Analyzed: 05/18/23 23:56 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrate as N	6.98	Baseline Smoothing	LVW8	05/19/23 12:07

Lab Sample ID: MB 280-612961/55 Client Sample ID:

Date Analyzed: 05/19/23 01:26 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrate as N	6.98	Baseline Smoothing	LVW8	05/19/23 12:07

Lab Sample ID: CCV 280-612961/60 Client Sample ID:

Date Analyzed: 05/19/23 02:42 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrate as N	6.90	Baseline Smoothing	XAY4	05/19/23 09:48

Lab Sample ID: CCB 280-612961/61 Client Sample ID:

Date Analyzed: 05/19/23 02:57 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrate as N	7.01	Baseline Smoothing	LVW8	05/19/23 12:09

9056

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Batch Number: 612961

Lab Sample ID: CCV 280-612961/72 Client Sample ID:

Date Analyzed: 05/19/23 05:42 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	5.00	Baseline Smoothing	XAY4	05/19/23 09:48
Nitrate as N	6.91	Baseline Smoothing	LVW8	05/19/23 12:11

Lab Sample ID: CCB 280-612961/73 Client Sample ID:

Date Analyzed: 05/19/23 05:57 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrate as N	7.00	Baseline Smoothing	LVW8	05/19/23 12:12

Lab Sample ID: 280-176674-9 Client Sample ID: LL12mw-245-230401-GW

Date Analyzed: 05/19/23 06:42 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrate as N	7.09	Baseline Smoothing	LVW8	05/19/23 12:13

Lab Sample ID: CCV 280-612961/84 Client Sample ID:

Date Analyzed: 05/19/23 08:42 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrite as N	5.01	Baseline Smoothing	XAY4	05/19/23 09:48

Lab Sample ID: CCB 280-612961/85 Client Sample ID:

Date Analyzed: 05/19/23 08:57 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrate as N	7.00	Baseline Smoothing	LVW8	05/19/23 12:14

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Batch Number: 612962

Lab Sample ID: STD 280-612962/2 IC Client Sample ID:

Date Analyzed: 05/18/23 12:11 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.13	Baseline Smoothing	LVW8	05/18/23 12:58

Lab Sample ID: STD 280-612962/3 IC Client Sample ID:

Date Analyzed: 05/18/23 12:26 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.14	Baseline Smoothing	LVW8	05/18/23 12:58

Lab Sample ID: STD 280-612962/4 IC Client Sample ID:

Date Analyzed: 05/18/23 12:40 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.14	Baseline Smoothing	LVW8	05/18/23 13:29

Lab Sample ID: STD 280-612962/5 IC Client Sample ID:

Date Analyzed: 05/18/23 12:55 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.14	Baseline Smoothing	LVW8	05/18/23 13:29

Lab Sample ID: STD 280-612962/6 IC Client Sample ID:

Date Analyzed: 05/18/23 13:10 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.15	Baseline Smoothing	LVW8	05/18/23 13:30

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Batch Number: 612962

Lab Sample ID: ICB 280-612962/8 Client Sample ID:

Date Analyzed: 05/18/23 13:40 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.29	Baseline Smoothing	LVW8	05/19/23 11:57

Lab Sample ID: MB 280-612962/13 Client Sample ID:

Date Analyzed: 05/18/23 14:55 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.30	Baseline Smoothing	LVW8	05/19/23 11:57

Lab Sample ID: CCB 280-612962/25 Client Sample ID:

Date Analyzed: 05/18/23 17:56 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.31	Baseline Smoothing	LVW8	05/19/23 12:00

Lab Sample ID: 280-176674-7 Client Sample ID: FBQmw-173-230401-GW-R

Date Analyzed: 05/18/23 19:26 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.24	Baseline Smoothing	LVW8	05/19/23 12:02

Lab Sample ID: CCB 280-612962/37 Client Sample ID:

Date Analyzed: 05/18/23 20:57 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.25	Baseline Smoothing	LVW8	05/19/23 12:03

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176674-1

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
350.1 cal_00583	05/24/23	05/17/23	Di Water, Lot na	100 mL	NH3 CAL STD_00035	10 mL	Ammonia as N	100 mg/L
.NH3 CAL STD_00035	01/31/24		Ricca, Lot 4208D17		(Purchased Reagent)		Ammonia as N	1000 mg/L
350.1 ICV_00564	05/24/23	05/17/23	na, Lot na	100 mL	NH3 ICV STD_00034	10 mL	Ammonia as N	100.2 mg/L
.NH3 ICV STD_00034	01/25/25		Inorganic Ventures, Lot S2-NH700817		(Purchased Reagent)		Ammonia as N	1002 mg/L
8330 DMT_00013	08/24/23	02/24/23	Acetonitrile, Lot ACN_237	5 mL	MNX,TNX,DNX_00076	1 mL	DNX	20.02 ug/mL
							MNX	23.34 ug/mL
							TNX	20.06 ug/mL
.MNX,TNX,DNX_00076	02/29/24		Agilent, Lot 0006725091		(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.3 ug/mL
8330 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

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							Tetryl	1000 ug/mL
8330 LCS_00125	12/23/23	04/03/23	Acetonitrile, Lot Acetonitrile_00073	100 mL	3,5-DNA Stock_00040	1 mL	3,5-Dinitroaniline	10 ug/mL
					8330_NG_Stk_00128	1 mL	Nitroglycerin	100 ug/mL
					8330_NG_Stk_00129	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN_Stk_00133	1 mL	PETN	100 ug/mL
					8330_PETN_Stk_00134	1 mL	PETN	100 ug/mL
					8330LCSMix1_00140	1 mL	1,3,5-Trinitrobenzene	10 ug/mL
							1,3-Dinitrobenzene	10 ug/mL
							2,4,6-Trinitrotoluene	10 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10 ug/mL
							RDX	10 ug/mL
					8330LCSmix2_00038	1 mL	2,6-Dinitrotoluene	10 ug/mL
							2-Amino-4,6-dinitrotoluene	10 ug/mL
							2-Nitrotoluene	10 ug/mL
							3-Nitrotoluene	10 ug/mL
							4-Amino-2,6-dinitrotoluene	10 ug/mL
							4-Nitrotoluene	10 ug/mL
							Tetryl	10 ug/mL
					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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
8330 LCS_00126	04/26/24	04/26/23	Acetonitrile, Lot Acetonitrile_00077	100 mL	3,5-DNA Stock_00042	1 mL	3,5-Dinitroaniline	10 ug/mL
					8330_NG_Stk_00130	1 mL	Nitroglycerin	100 ug/mL
					8330_NG_Stk_00131	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN_Stk_00135	1 mL	PETN	100 ug/mL
					8330_PETN_Stk_00136	1 mL	PETN	100 ug/mL
					8330LCSMix1_00141	1 mL	1,3,5-Trinitrobenzene	10 ug/mL
							1,3-Dinitrobenzene	10 ug/mL
							2,4,6-Trinitrotoluene	10 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10 ug/mL
							RDX	10 ug/mL
					8330LCSmix2_00039	1 mL	2,6-Dinitrotoluene	10 ug/mL
							2-Amino-4,6-dinitrotoluene	10 ug/mL
							2-Nitrotoluene	10 ug/mL
							3-Nitrotoluene	10 ug/mL
							4-Amino-2,6-dinitrotoluene	10 ug/mL
							4-Nitrotoluene	10 ug/mL
							Tetryl	10 ug/mL
.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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					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
8330_ADDs_00037	11/04/23	05/04/23	Acetonitrile, Lot ACN_237	5 mL	2,4Diamino6NT_00095	1 mL	2,4-diamino-6-nitrotoluene	20 ug/mL
					2,6Diamino4NT_00096	1 mL	2,6-diamino-4-nitrotoluene	20 ug/mL
.2,4Diamino6NT_00095	04/10/24	AccuStandard, Lot 220121267-01			(Purchased Reagent)		2,4-diamino-6-nitrotoluene	100 ug/mL
.2,6Diamino4NT_00096	05/04/24	AccuStandard, Lot 222051002			(Purchased Reagent)		2,6-diamino-4-nitrotoluene	100 ug/mL
8330_OP_DMT_00016	02/28/23	12/30/22	Acetonitrile, Lot Acetonitrile_00073	10 mL	MNX,TNX,DNX_00069	1 mL	DNX	10.04 ug/mL
							MNX	11.7 ug/mL
							TNX	10 ug/mL
.MNX,TNX,DNX_00069	02/28/23	Agilent, Lot 0006659035			(Purchased Reagent)		DNX	100.4 ug/mL
							MNX	117 ug/mL
							TNX	100 ug/mL
8330_OP_DMT_00017	08/28/23	02/28/23	Acetonitrile, Lot Acetonitrile_00073	10 mL	MNX,TNX,DNX_00077	1 mL	DNX	10.01 ug/mL
							MNX	11.67 ug/mL
							TNX	10.03 ug/mL
.MNX,TNX,DNX_00077	02/29/24	Agilent, Lot 0006725091			(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.3 ug/mL
8330_OP_DMT_00020	02/29/24	05/09/23	Acetonitrile, Lot Acetonitrile_00077	10 mL	MNX,TNX,DNX_00079	1 mL	DNX	10.01 ug/mL
							MNX	11.67 ug/mL
							TNX	10.03 ug/mL
.MNX,TNX,DNX_00079	02/29/24	Agilent, Lot 0006725091			(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.3 ug/mL
8330DiaminLCS_00052	01/16/23	12/19/22	Acetonitrile, Lot Acetonitrile_00069	10 mL	2,4Diamino6NT_00092	1 mL	2,4-diamino-6-nitrotoluene	10 ug/mL
					2,6Diamino4NT_00099	1 mL	2,6-diamino-4-nitrotoluene	10 ug/mL
.2,4Diamino6NT_00092	01/16/23	AccuStandard, Lot 220121267			(Purchased Reagent)		2,4-diamino-6-nitrotoluene	100 ug/mL
.2,6Diamino4NT_00099	12/19/23	AccuStandard, Lot 222051002			(Purchased Reagent)		2,6-diamino-4-nitrotoluene	100 ug/mL
8330DiaminLCS_00056	01/19/24	01/27/23	Acetonitrile, Lot Acetonitrile_00074	20 mL	2,4Diamino6NT_00098	1 mL	2,4-diamino-6-nitrotoluene	10 ug/mL
					2,4Diamino6NT_00099	1 mL	2,4-diamino-6-nitrotoluene	10 ug/mL
					2,6Diamino4NT_00100	1 mL	2,6-diamino-4-nitrotoluene	10 ug/mL
					2,6Diamino4NT_00102	1 mL	2,6-diamino-4-nitrotoluene	10 ug/mL
.2,4Diamino6NT_00098	04/10/24	AccuStandard, Lot 220121267-01			(Purchased Reagent)		2,4-diamino-6-nitrotoluene	100 ug/mL
.2,4Diamino6NT_00099	04/10/24	AccuStandard, Lot 220121267-01			(Purchased Reagent)		2,4-diamino-6-nitrotoluene	100 ug/mL
.2,6Diamino4NT_00100	06/03/24	AccuStandard, Lot 222051002			(Purchased Reagent)		2,6-diamino-4-nitrotoluene	100 ug/mL
.2,6Diamino4NT_00102	06/03/24	AccuStandard, Lot 222051002			(Purchased Reagent)		2,6-diamino-4-nitrotoluene	100 ug/mL
8330DiaminLCS_00057	04/10/24	05/19/23	Acetonitrile, Lot Acetonitrile_00078	10 mL	2,4Diamino6NT_00100	1 mL	2,4-diamino-6-nitrotoluene	10 ug/mL
					2,6Diamino4NT_00105	1 mL	2,6-diamino-4-nitrotoluene	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.2,4Diamino6NT_00100	04/10/24	AccuStandard, Lot 220121267-01			(Purchased Reagent)		2,4-diamino-6-nitrotoluene	100 ug/mL
.2,6Diamino4NT_00105	05/19/24	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
							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

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
							Tetryl	1000 ug/mL
..8330SurrStock_00172	02/03/24	AccuStandard, Lot 219051500			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330PAStkPS_00070	08/07/23	AccuStandard, Lot 218031154-03			(Purchased Reagent)		2,4,6-Trinitrophenol	100 ug/mL
8330IntermStk_00076	09/23/23	03/23/23	Acetonitrile, Lot ACN_237	10 mL	8330_NG1000_00010	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN1000_00010	1 mL	PETN	100 ug/mL
					833035DNAStk_00054	1 mL	3,5-Dinitroaniline	10 ug/mL
					8330ICALStock_00034	1 mL	1,3,5-Trinitrobenzene	10 ug/mL
							1,3-Dinitrobenzene	10 ug/mL
							2,4,6-Trinitrotoluene	10 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							2,6-Dinitrotoluene	10 ug/mL
							2-Amino-4,6-dinitrotoluene	10 ug/mL
							2-Nitrotoluene	10 ug/mL
							3-Nitrotoluene	10 ug/mL
							4-Amino-2,6-dinitrotoluene	10 ug/mL
							4-Nitrotoluene	10 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10 ug/mL
							RDX	10 ug/mL
							Tetryl	10 ug/mL
							1,2-Dinitrobenzene	10 ug/mL
					8330PAStkPS_00071	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.8330_NG1000_00010	03/23/24	Restek, Lot A0187280			(Purchased Reagent)		Nitroglycerin	1000 ug/mL
.8330_PETN1000_00010	03/23/24	Restek, Lot A0187142			(Purchased Reagent)		PETN	1000 ug/mL
.833035DNAStk_00054	10/06/23	Accustandard, Lot 222011692-01			(Purchased Reagent)		3,5-Dinitroaniline	100 ug/mL
.8330ICALStock_00034	02/03/24	02/03/23	Acetonitrile, Lot ACN_238	10 mL	8330 Stock_TS_00023	1 mL	1,3,5-Trinitrobenzene	100 ug/mL
							1,3-Dinitrobenzene	100 ug/mL
							2,4,6-Trinitrotoluene	100 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dinitrotoluene	100 ug/mL
							2-Amino-4,6-dinitrotoluene	100 ug/mL
							2-Nitrotoluene	100 ug/mL
							3-Nitrotoluene	100 ug/mL
							4-Amino-2,6-dinitrotoluene	100 ug/mL
							4-Nitrotoluene	100 ug/mL
							HMX	100 ug/mL
							Nitrobenzene	100 ug/mL
							RDX	100 ug/mL
							Tetryl	100 ug/mL
					8330SurrStock_00172	1 mL	1,2-Dinitrobenzene	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..8330 Stock_TS_00023	02/03/24		Agilent, Lot 0006684308		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
							Tetryl	1000 ug/mL
..8330SurrStock_00172	02/03/24		AccuStandard, Lot 219051500		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330PAStkPS_00071	03/23/24		AccuStandard, Lot 218031154-04		(Purchased Reagent)		2,4,6-Trinitrophenol	100 ug/mL
8330Surrogate_00138	08/02/23	02/02/23	Acetonitrile, Lot Acetonitrile_00074	500 mL	8330SurrStkSS_00245	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00246	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00247	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00248	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00249	1 mL	1,2-Dinitrobenzene	10 ug/mL
.8330SurrStkSS_00245	02/02/24		Restek, Lot A0192220		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00246	02/02/24		Restek, Lot A0192220		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00247	02/02/24		Restek, Lot A0192220		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00248	02/02/24		Restek, Lot A0192220		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00249	02/02/24		Restek, Lot A0192220		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
8330Surrogate_00143	10/12/23	04/12/23	Acetonitrile, Lot Acetonitrile_00077	500 mL	8330SurrStkSS_00263	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00265	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00266	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00267	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00268	1 mL	1,2-Dinitrobenzene	10 ug/mL
.8330SurrStkSS_00263	04/12/24		Restek, Lot A0193444		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00265	04/12/24		Restek, Lot A0193444		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00266	04/12/24		Restek, Lot A0194831		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00267	04/12/24		Restek, Lot A0194831		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00268	04/12/24		Restek, Lot A0194831		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
8330Surrogate_00144	11/17/23	05/17/23	Acetonitrile, Lot Acetonitrile_00078	500 mL	8330SurrStkSS_00269	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00270	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00271	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00272	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					8330SurrStkSS_00273	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
.8330SurrStkSS_00269	05/17/24		Restek, Lot A0194831		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00270	05/17/24		Restek, Lot A0194831		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00271	05/17/24		Restek, Lot A0194831		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00272	05/17/24		Restek, Lot A0194831		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00273	05/17/24		Restek, Lot A0197062		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
Alk daily lcs_01088	05/26/23	05/19/23	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_00480	05/24/23	05/18/23	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 low_00709	05/24/23	05/18/23	Di Water, Lot NA	100 mL	IC BR ICV_00024	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_00024	10/31/23		ricca, Lot 1204B86		(Purchased Reagent)		Bromide	1000 mg/L
.IC FL cal_00023	01/31/24		Ricca, Lot 2207H13		(Purchased Reagent)		Fluoride	1000 mg/L
.IC N03 cal_00028	11/30/23		Ricca, Lot 2205B73		(Purchased Reagent)		Nitrate as N	1000 mg/L
.IC 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 ICV 5_00405	05/24/23	05/18/23	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_01954	05/24/23	05/18/23	Di Water, Lot 27	200 mL	IC Cal low_00709	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_00709	05/24/23	05/18/23	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 SO4 ICV_00024	12/01/23		ERA, Lot 021221m		(Purchased Reagent)		Sulfate	1000 mg/L
SFD CAL INT_02403	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	3.5656 g	Sulfide	952.015 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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

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

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CERTIFICATE OF ANALYSIS

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

Signal Word: Danger

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

Certified Reference Material

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

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

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

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

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

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

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.

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

Reagent

2,4Diamino6NT_00094

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

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

CERTIFICATE OF ANALYSIS

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

Signal Word: Danger

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

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

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

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

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

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

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

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.

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

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.

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

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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.

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

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

Reagent

2,4Diamino6NT_00099

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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.

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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.

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_00100

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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.

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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.

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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www.AccuStandard.com

CERTIFICATE OF ANALYSIS

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

Signal Word: Danger

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

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ILAC-MRA

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

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

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

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

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

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

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

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

Reagent

2,6Diamino4NT_00096

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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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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.

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

Reagent

2,6Diamino4NT_00099

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USA

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CERTIFICATE OF ANALYSIS

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

Signal Word: Danger

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

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

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

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

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

Reagent

2,6Diamino4NT_00100

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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

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

Reagent

2,6Diamino4NT_00102

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USA

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

Reagent

2,6Diamino4NT_00105

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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*

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

Reagent

3,5-DNA LCS_00042

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

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

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

Worklist ID: 280-0115900-002 Instrument: CHHPLC_X3

Method: 8330_X3

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

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

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

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

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

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

860-36027-C-1-A

Reagent

3,5-DNA Stock_00036

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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)

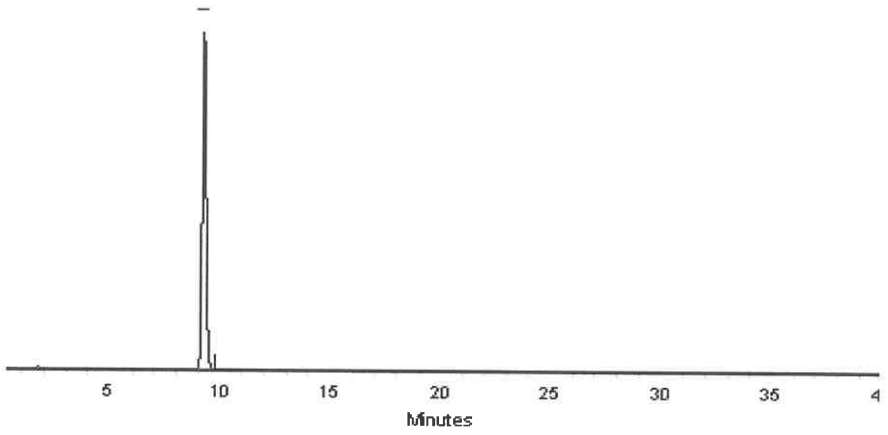
Flow Rate:
1.0 ml/min.

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
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.:** 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)

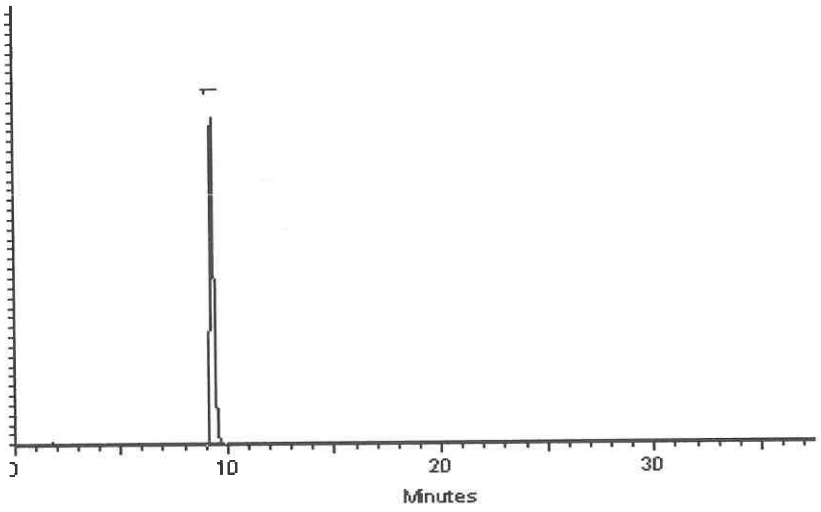
Flow Rate:
1.0 ml/min.

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 - 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)

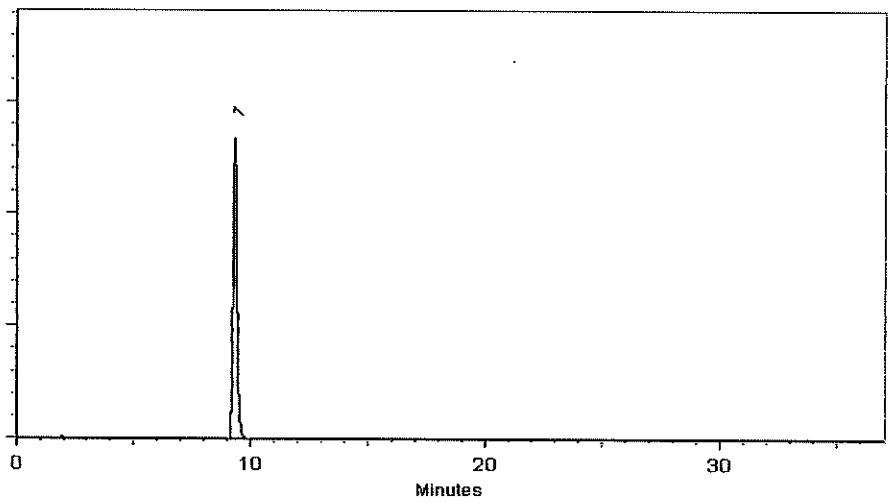
Flow Rate:
1.0 ml/min.

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

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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)

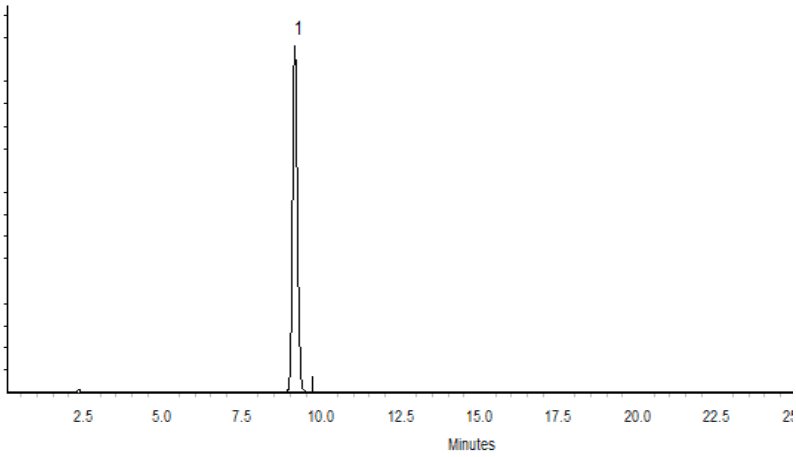
Flow Rate:
1.0 ml/min.

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.
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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

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."

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®
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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)

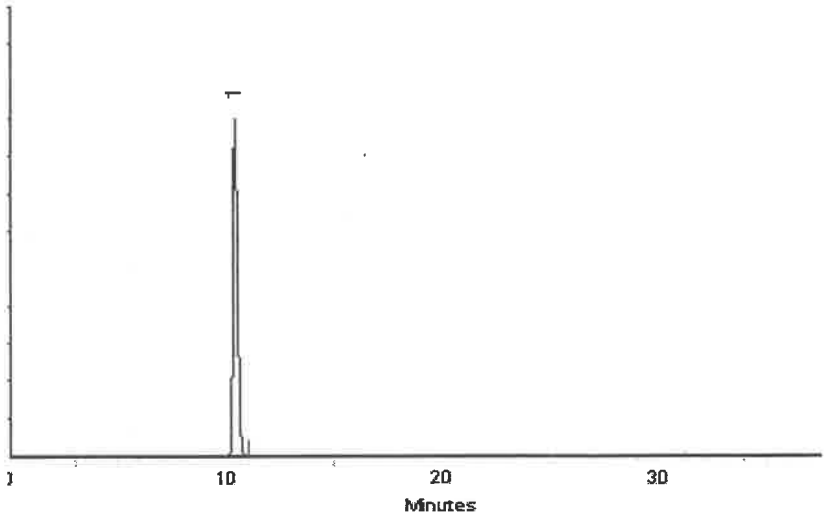
Flow Rate:
1.0 ml/min.

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

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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)

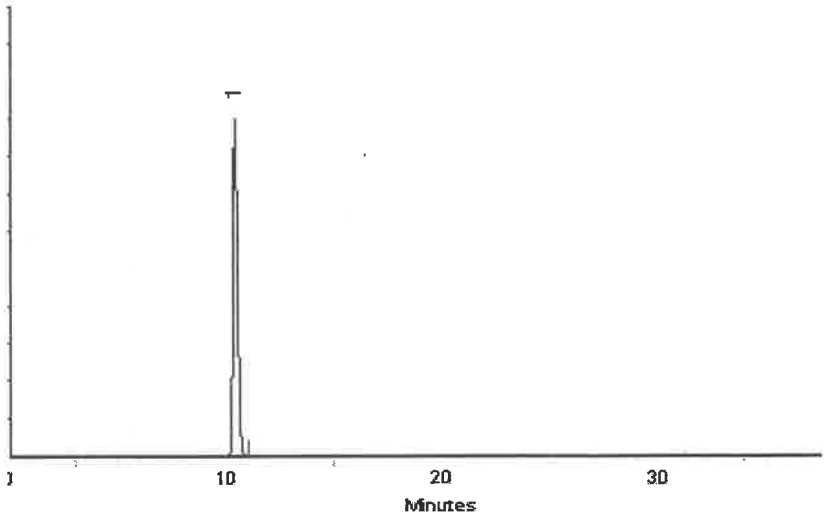
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Certified Uncertainty Value Notes:

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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_NG_Stk_00128

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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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.

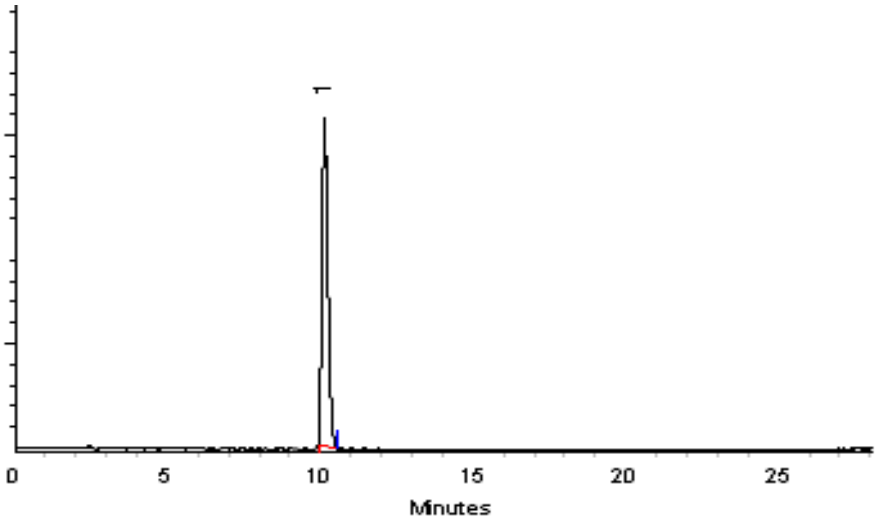
Mobile Phase A:
water:methanol (44:56 V/V)

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:

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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_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

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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.

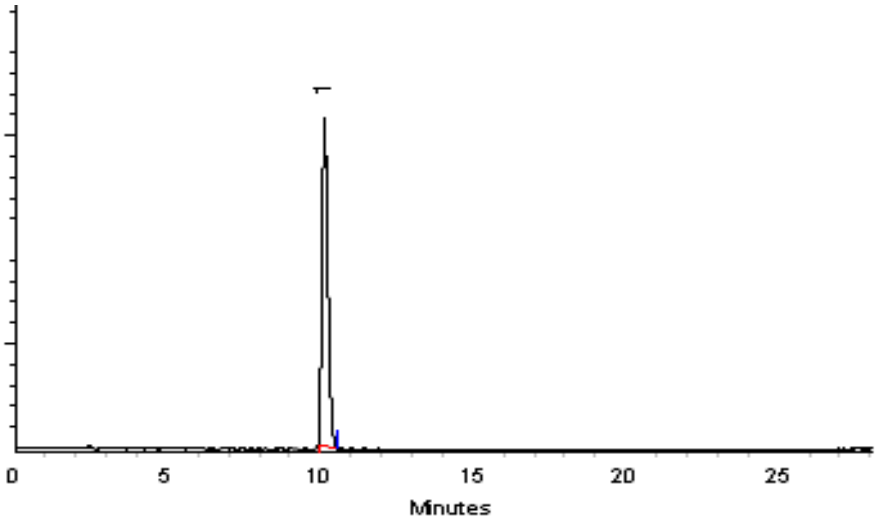
Mobile Phase A:
water:methanol (44:56 V/V)

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:

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Manufacturing Notes:

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Handling Notes:

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

Reagent

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

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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.

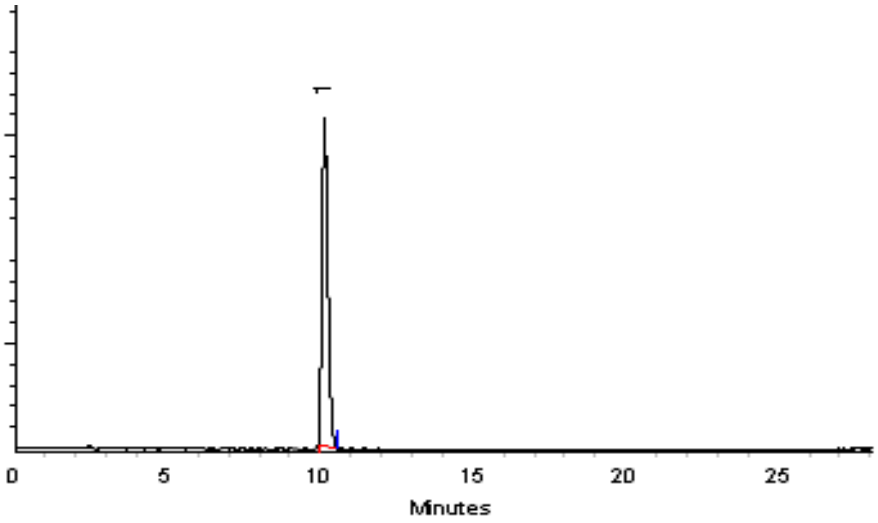
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
5µl



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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:

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Reagent

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

Quality Confirmation Test

Column:
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Mobile Phase Composition:
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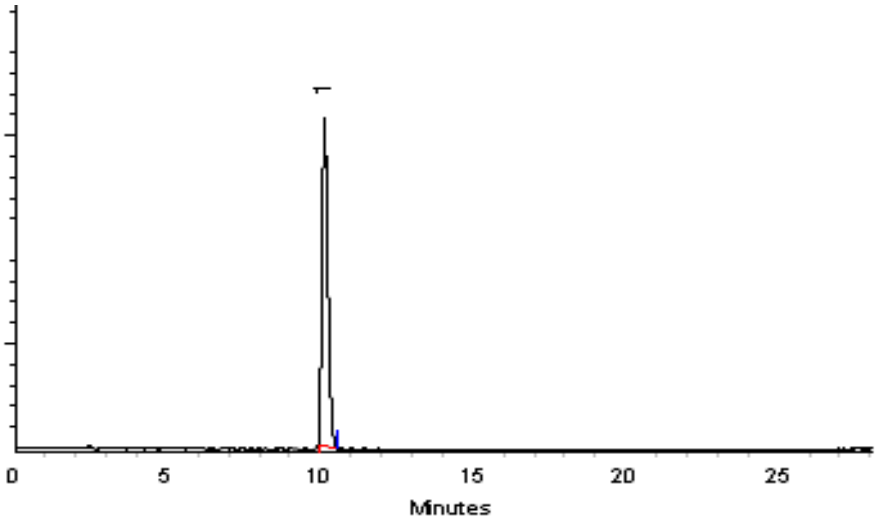
Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
5µl



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

Brandon Reish - Operations Technician II

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

Christie Mills - Operations Tech II - ARM QC

Date Passed: 31-Jan-2023

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330_NG1000_00007

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31498 **Lot No.:** A0175997

Description : Nitroglycerin Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Nitroglycerin (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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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31498 **Lot No.:** A0187280

Description : Nitroglycerin Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Nitroglycerin	1,004.0 µg/mL	+/- 5.9635	µg/mL	Gravimetric
	CAS # 55-63-0 (Lot 200507JLM)		+/- 55.0021	µg/mL	Unstressed
	Purity 99%		+/- 64.1379	µg/mL	Stressed

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

Reagent

8330_OP_DMT_00016

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

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

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

Worklist ID: 280-0117448-069 Instrument: CHHPLC_X3

Method: 8330_X3

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

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

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

Reagent

8330_OP_DMT_00020

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

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

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

Worklist ID: 280-0121258-011 Instrument: CHHPLC_X3

Method: 8330_X3

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

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

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

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

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

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

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

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

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

Reagent

8330_PETN_Stk_00128

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568872 **Lot No.:** 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)

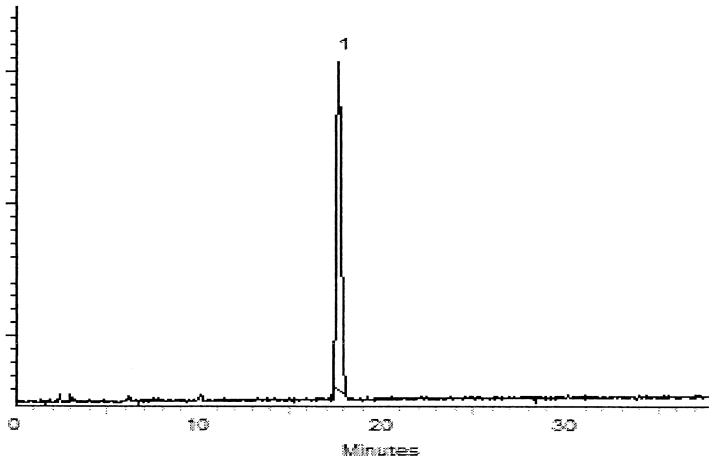
Flow Rate:
1.0 ml/min.

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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CERTIFIED REFERENCE MATERIAL

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : Custom PETN Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

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

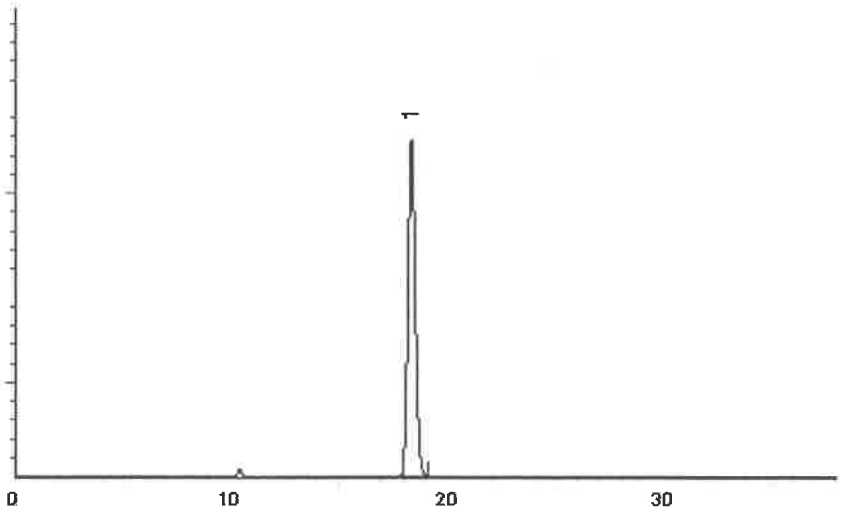
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Matt Fragassi - Mix Technician

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

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 16-Aug-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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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

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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)

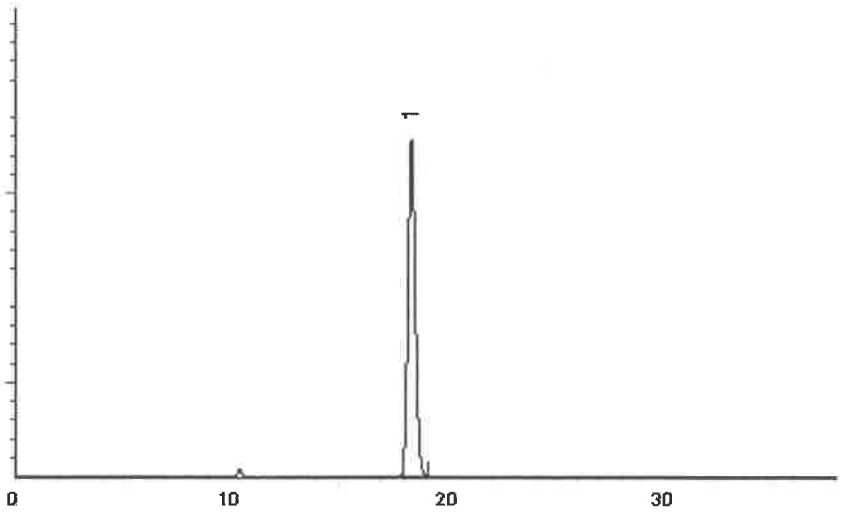
Flow Rate:
1.0 ml/min.

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330_PETN_Stk_00135

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CERTIFIED REFERENCE MATERIAL

Certificate of Composition

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : Custom PETN Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

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

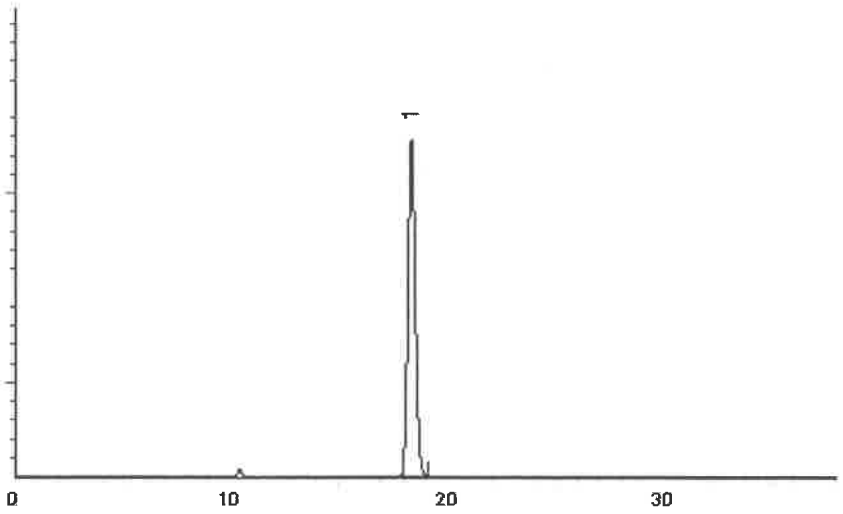
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Matt Fragassi - Mix Technician

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

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 16-Aug-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

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Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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)

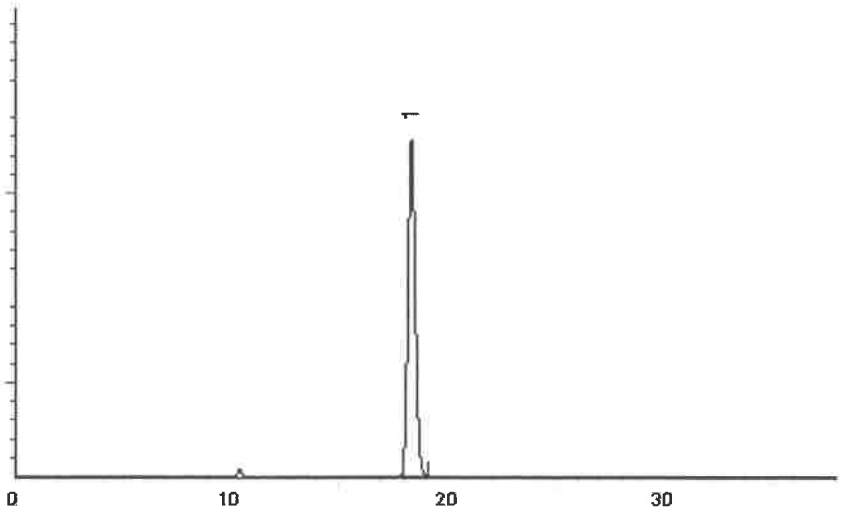
Flow Rate:
1.0 ml/min.

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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Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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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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.

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

Reagent

833035DNAStk_00053

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New Haven, CT 06513
USA

AccuStandard®

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

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-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

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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.

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

Reagent

833035DNAStk_00054

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-4
Description: 3,5-Dinitroaniline
Lot: 222011692-01
Solvent: Methanol (50%)
Acetonitrile (50%)
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Sep 6, 2022
Expiration: Oct 6, 2023
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
3,5-Dinitroaniline	618-87-1	100.0	100.6	100.6

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

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

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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.

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

Reagent

8330DiaminLCS_00052

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

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

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

Worklist ID: 280-0117211-014 Instrument: CHHPLC_X3

Method: 8330_X3

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

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

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

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

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

Reagent

8330LCSMix1_00136

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31450 **Lot No.:** A0183848

Description : 8330 Calibration Mix #1

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

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

Expiration Date : April 30, 2027 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

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

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

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

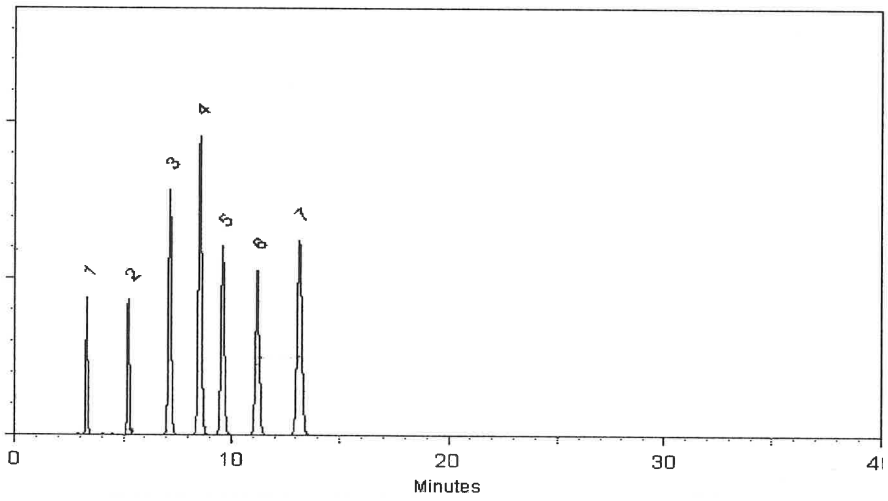
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Tom Suckar - Mix Technician

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

Feng-Yan Lo - QC Analyst

Date Passed: 13-Apr-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330LCSMix1_00140

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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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

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)

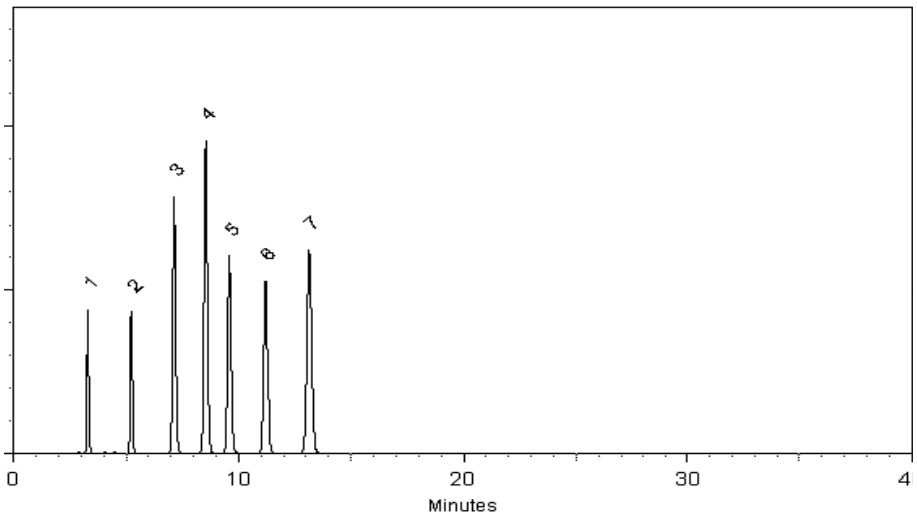
Flow Rate:
1.0 ml/min.

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.

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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:

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Handling Notes:

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Reagent

8330LCSMix1_00141

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31450 **Lot No.:** 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)

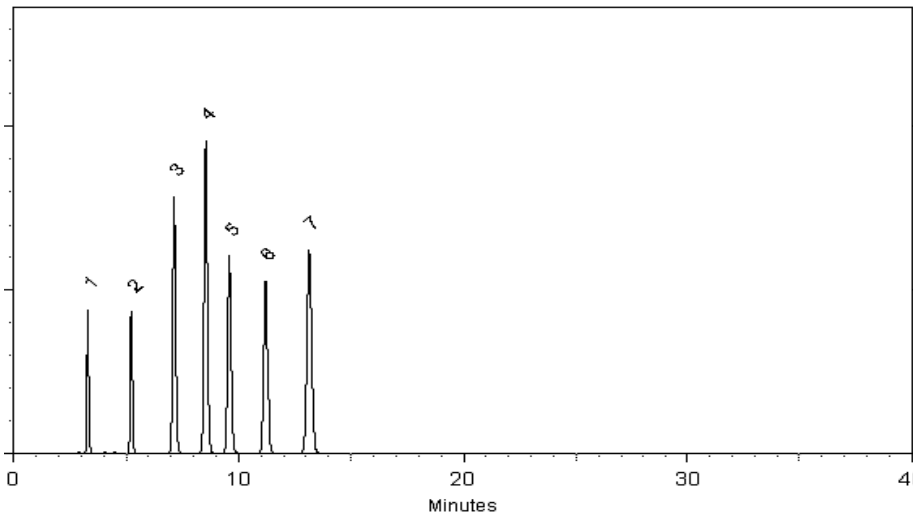
Flow Rate:
1.0 ml/min.

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:

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Certified Uncertainty Value Notes:

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

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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
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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:

- 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 #3222.02

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)

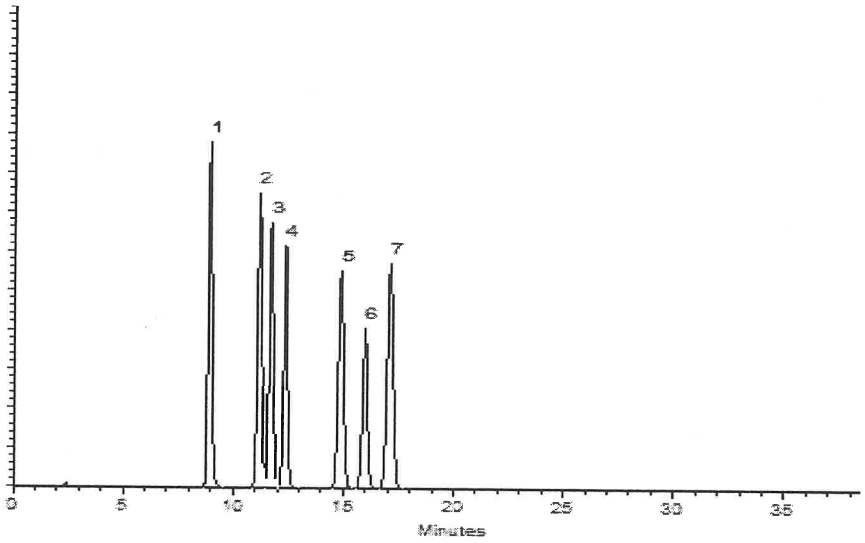
Flow Rate:
1.0 ml/min.

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

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Reagent

8330LCSmix2_00038

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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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.

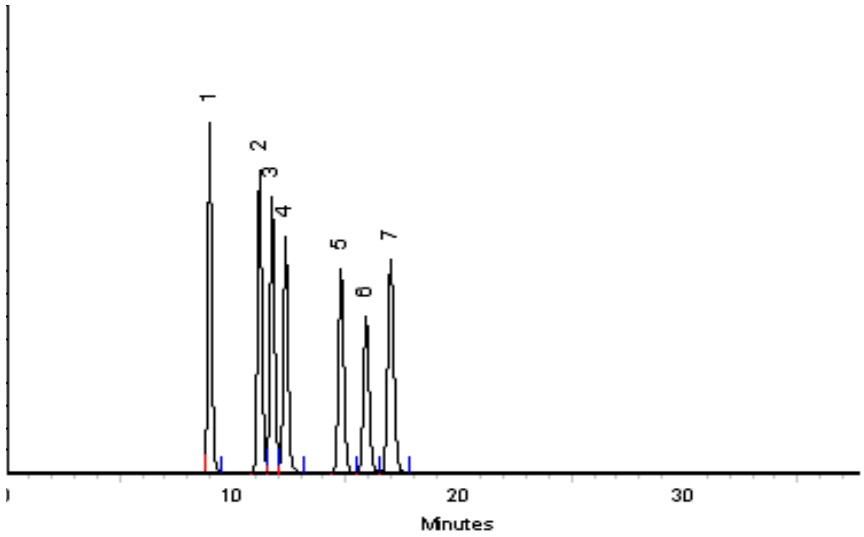
Mobile Phase A:
water:methanol (44:56 V/V)

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.

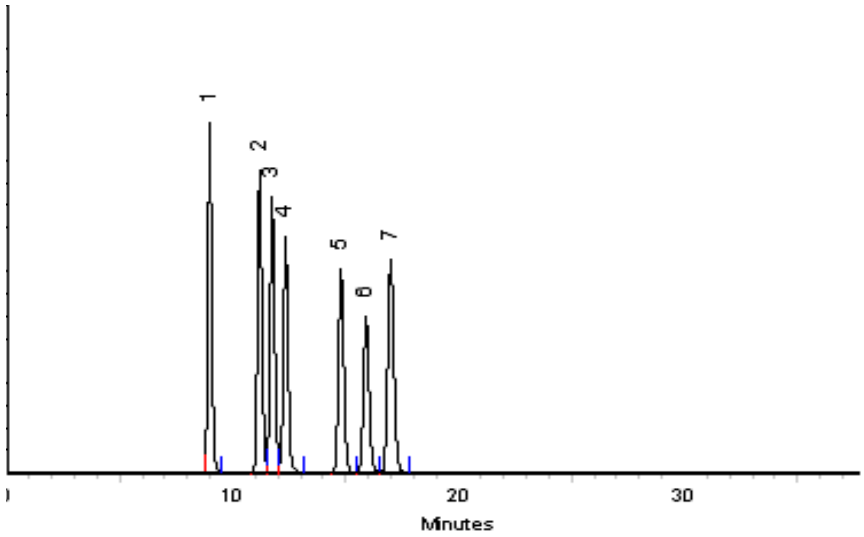
Mobile Phase A:
water:methanol (44:56 V/V)

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.

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330PAStkPS_00070

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-3
Description: Picric acid
Lot: 218031154-03
Solvent: Acetonitrile (50%)
Methanol (50%)
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Jul 7, 2021
Expiration: Aug 7, 2023
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (HPLC)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (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.

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.

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

Reagent

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

8330Surrogate_00144

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20230517-121556.b\05170006.D

Lims ID: C18column:B16162 Inj. Date: 17-May-2023 17:57:37

Worklist ID: 280-0121556-006 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535	Limits 2 3535	Limits 3 3535
$ 10 1,2-Dinitrobenzene	0.5000	0.5038	100.8	83-119	63-127	

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

280-176194-A-9-A	280-176284-C-2-A	280-176284-B-3-A
280-176284-C-5-A	280-176284-C-7-A	280-176434-I-1-A
280-176434-E-4-A	280-176434-B-7-A	280-176284-B-4-C
280-176434-H-2-A	280-176524-B-1-A	280-176524-A-2-A
280-176524-A-3-A	280-176524-A-4-A	280-176335-A-1-A
280-176335-A-2-A	280-176335-B-3-A	280-176335-A-4-A

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

570-137880-R-1-A	570-137880-S-2-A	570-137880-S-3-A
570-137880-R-4-A	570-138095-R-2-A	570-138095-S-3-A
570-138095-R-4-A	570-138095-S-5-A	550-201994-O-1-A
550-201994-O-3-A		

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

380-47016-AV-1-A	380-47022-Q-1-A	280-176543-B-1-A
280-176543-B-2-A		

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.

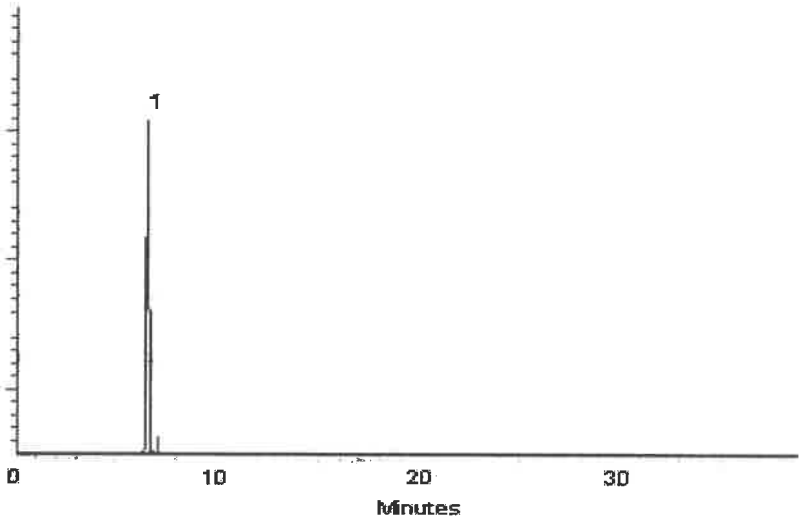
Mobile Phase A:
water:methanol (44:56 V/V)

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.
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Manufacturing Notes:

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Handling Notes:

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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 A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

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

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Catalog No. : 31453 **Lot No.:** A0192220

Description : 8330 Surrogate Mix

8330 Surrogate Mix 1000 µg/mL, Methanol, 1mL/ampul

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
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* Expanded Uncertainty displayed in same units as Grav. Conc.

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

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

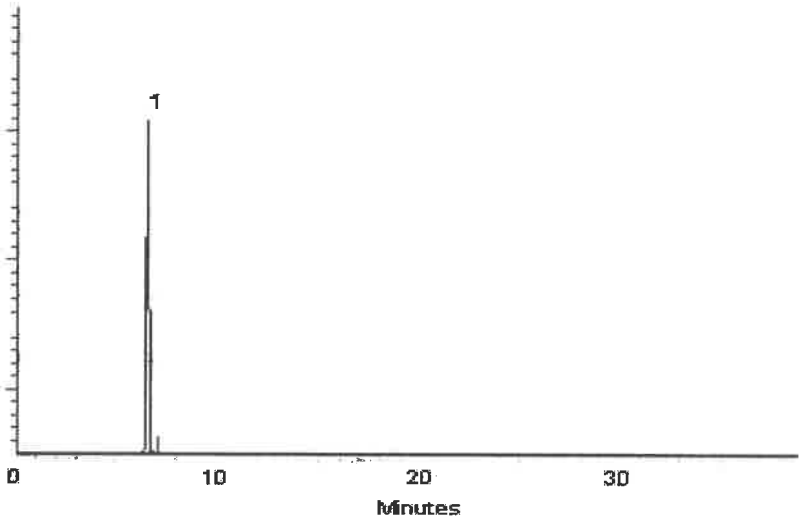
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
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:

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- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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- Purity of isomeric compounds is reported as the sum of the isomers.
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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

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Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330SurrStkSS_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.

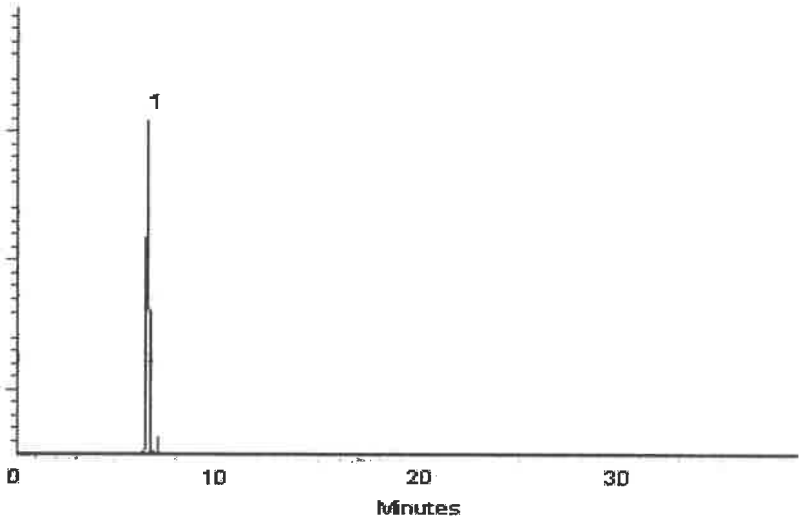
Mobile Phase A:
water:methanol (44:56 V/V)

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:

- 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_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.

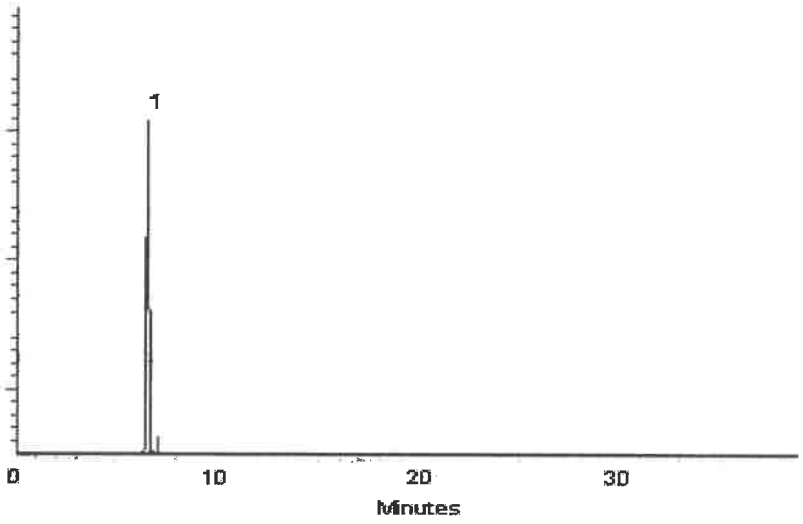
Mobile Phase A:
water:methanol (44:56 V/V)

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.

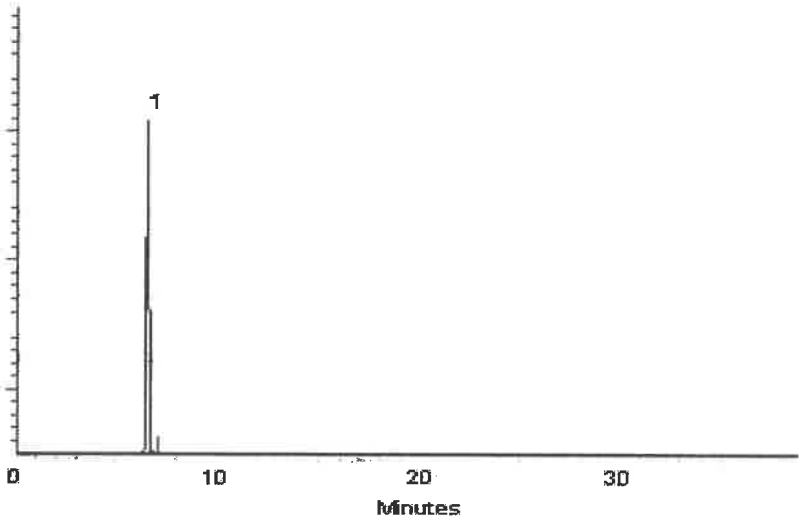
Mobile Phase A:
water:methanol (44:56 V/V)

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

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.

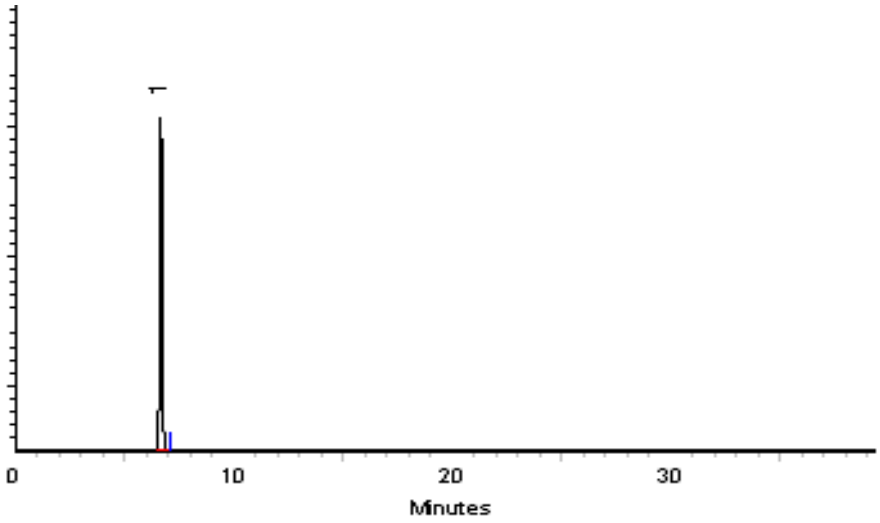
Mobile Phase A:
water:methanol (44:56 V/V)

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:

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

  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.

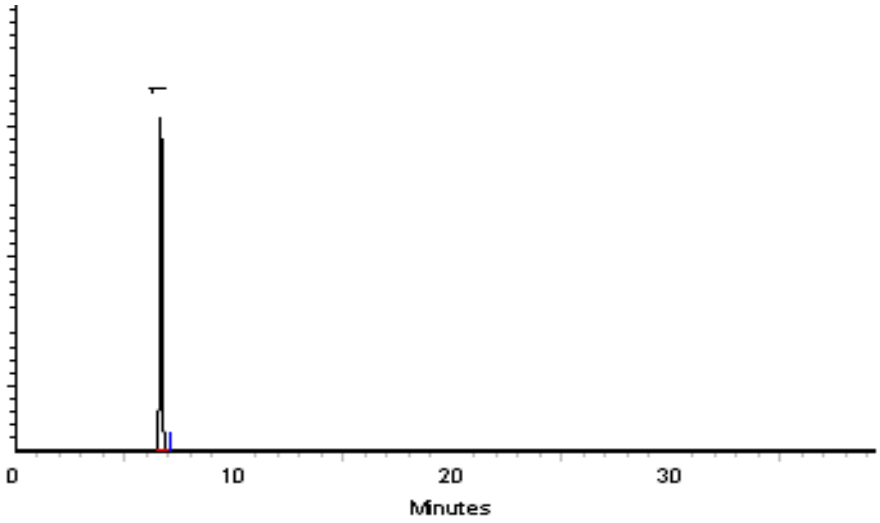
Mobile Phase A:
water:methanol (44:56 V/V)

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:

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

  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_00266

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.

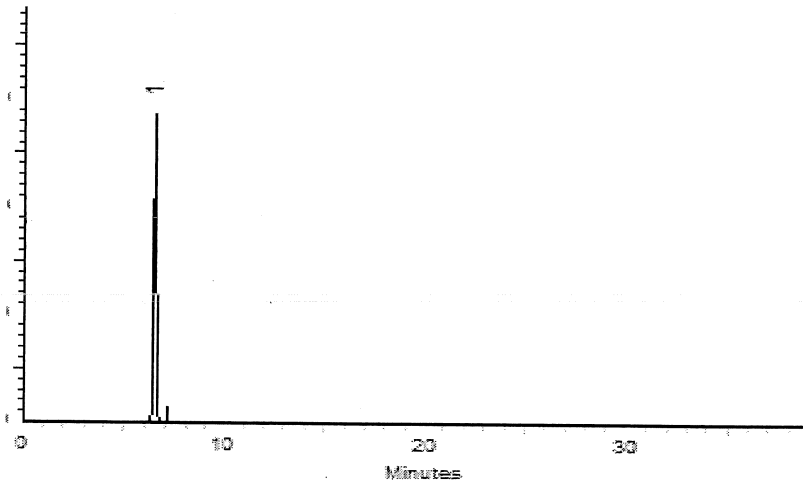
Mobile Phase A:
water:methanol (44:56 V/V)

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

8330SurrStkSS_00267

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

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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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.

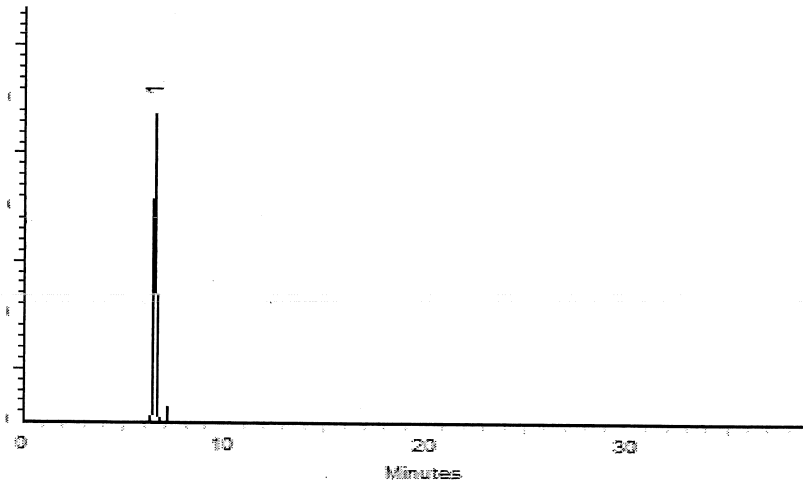
Mobile Phase A:
water:methanol (44:56 V/V)

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

8330SurrStkSS_00268

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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. : 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.

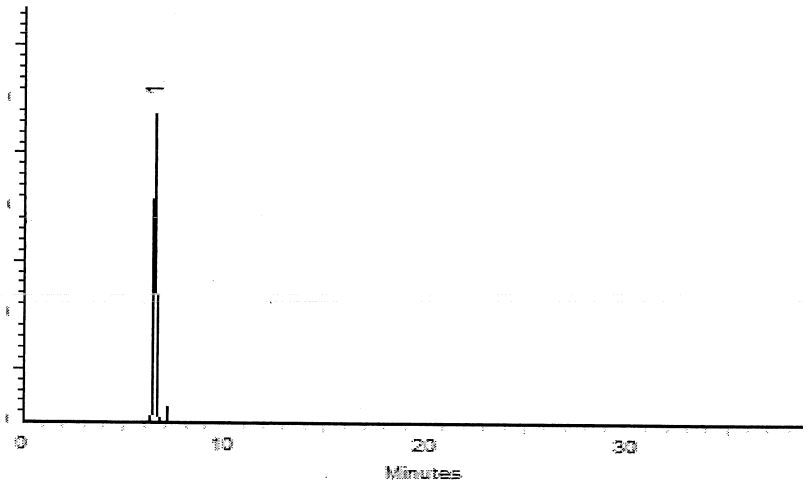
Mobile Phase A:
water:methanol (44:56 V/V)

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_00269

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Certificate of Analysis

chromatographic plus

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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.

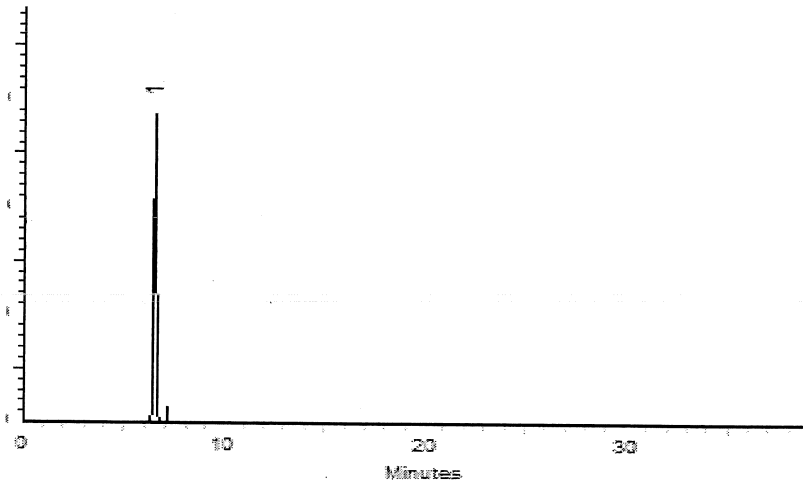
Mobile Phase A:
water:methanol (44:56 V/V)

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:

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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_00270

RESTEK

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

ilac-MRA

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ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

Certificate of Analysis

chromatographic plus

ilac-MRA

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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.

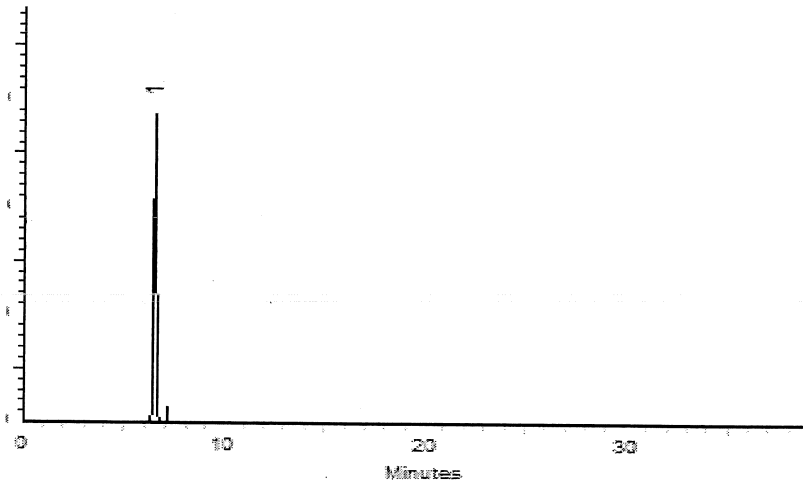
Mobile Phase A:
water:methanol (44:56 V/V)

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:

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Manufacturing Notes:

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

Handling Notes:

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Reagent

8330SurrStkSS_00271

RESTEK
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Tel: 1-814-353-1300
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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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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.

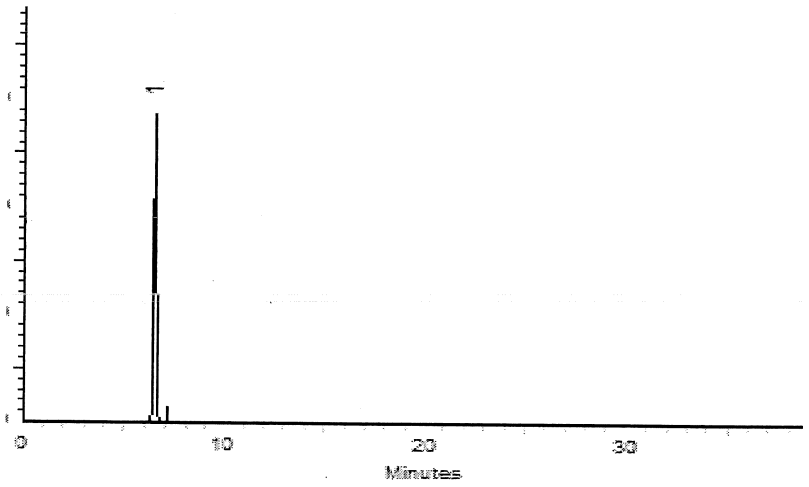
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2µl



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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.
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Purity Notes:

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Manufacturing Notes:

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Handling Notes:

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Reagent

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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.

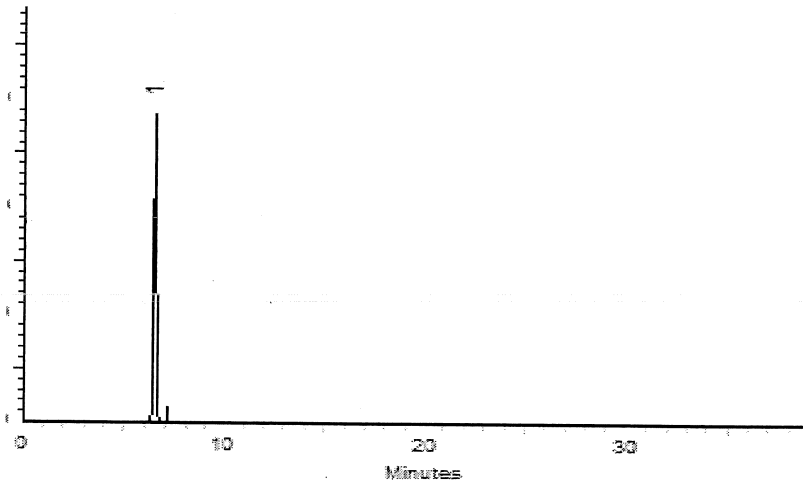
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2µl



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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:

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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_00273

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.:** A0197062

Description : 8330 Surrogate Mix

8330 Surrogate Mix 1000 µg/mL, Methanol, 1mL/ampul

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

Expiration Date : April 30, 2028 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dinitrobenzene	528-29-0	STBK9056	99%	1,001.6 µg/mL	+/- 56.2801

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methanol

CAS # 67-56-1

Purity 99%

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

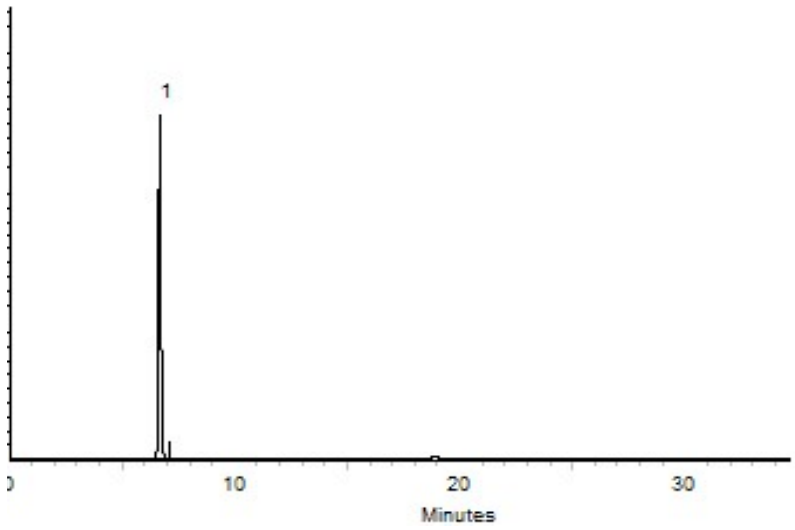
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2.0µl



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

Penelope Riglin - Operations Tech I

Date Mixed: 17-Apr-2023 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 19-Apr-2023

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330SurrStock_00172

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-SS
Description: 1,2-Dinitrobenzene
Lot: 219051500
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: May 22, 2019
Expiration: May 22, 2029
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/FID)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
1,2-Dinitrobenzene	528-29-0	100.0	1002	1002

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

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

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

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

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

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

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

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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www.spex.com • Email: USMet-CRMSales@antylia.com
Phone: +1.800.LAB.SPEX • +1.732.549.7144 • Fax: +1.732.603.9647

Reagent

IC BR ICV_00024

RICCA CHEMICAL COMPANY®

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

Certificate of Analysis

Bromide Standard, 1000 ppm Br^-

Lot Number: 1204B86 **Product Number:** 1180

Manufacture Date: APR 26, 2022

Expiration Date: OCT 2023

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

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Sodium Bromide	7647-15-6	High Purity

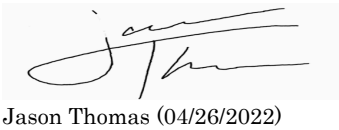
Test	Specification	Result
Appearance	Colorless liquid	Passed
Bromide (Br)	995-1005 ppm	1000 ppm

Specification	Reference
Bromide Solution, Standard (1 mL = 1 mg Br^-)	ASTM (D 3869 D)
Standard Bromide Solution, 1000 mg/L	APHA (4110 B)
Bromide Stock Solution (1.00 mL = 1.00 mg Br^-)	EPA (SW-846) (9056)
Sodium Bromide Standard Solution, 1000 mg/L	ASTM (D 1246)
Bromide Stock Solution (1.00 mL = 1.00 mg Br?)	ASTM (D 4327)

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

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1180-16	500 mL natural poly	18 months

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



Jason Thomas (04/26/2022)

Operations Manager

This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

Reagent

IC FL cal_00023

RICCA CHEMICAL COMPANY®

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Pocomoke City, MD 21851
http://www.riccachemical.com
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customerservice@riccachemical.com

Certificate of Analysis

Fluoride Standard, 1000 ppm F^-

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

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

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

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

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

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

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

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

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

Myrlande Gilles (07/29/2022)
Quality Control
This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

Reagent

IC N03 cal_00028

RICCA CHEMICAL COMPANY®

1841 Broad Street
Pocomoke City, MD 21851
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Certificate of Analysis

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

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

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

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

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

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

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

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

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

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

Myrlande Gilles (05/11/2022)
Quality Control

This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

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
This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

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:

Uexpanded = Expanded uncertainty.
k = Coverage factor.
Uchar = Combined standard uncertainty of the manufacturing and/or analytical verification assessment.
Uhomogen = Standard uncertainty of the homogeneity assessment.
ULTS = Standard uncertainty associated with long-term stability.
USTS = Standard uncertainty associated with short-term (transport) stability.
URSS = Standard uncertainty associated with repeated sampling of the product (where permitted by product use instructions).

3. Where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. **Analytical Traceability Recovery (%)** = [(% recovery ERA certified reference material)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing this ERA certified reference material and/or it's associated stock solution(s) against the applicable NIST SRMs.

4. **Metrological Traceability**. This certified reference material is metrologically traceable to NIST mass reference materials through an unbroken chain of comparisons.

5. **Storage**: 20-25°C

6. **Intended Use**: This standard is intended to be used to calibrate your analytical process and/or as a quality control check of the entire process for the analytes/matrix included in the standard.

7. **Minimum Sample Size**: ERA suggests that when subsampling this product prior to analysis, you use a minimum sample size of at least 1 mL. Using a smaller sample size may invalidate the assigned value and/or uncertainty shown.

8. **Repeat Sampling**: Repeated Sampling of this product is permitted, provided minimum sample sizes and storage instructions are adhered to.

9. **Safety**: ERA products may be hazardous and are intended for use by professional laboratory personnel trained in the competent handling of such materials. Responsibility for the safe use of these products rests entirely with the buyer and/or user. Safety Data Sheets (SDS) for all ERA products are available through our website: www.eraqc.com

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

Certifying Officer
Brian Miller

Brian Miller

Quality Officer
Matthew Seebeck

ISO 17034:2016
ACCREDITED
Reference Material Producer
CERT #1539.03

ISO/IEC 17025:2017
ACCREDITED
Chemical Testing Laboratory
CERT #1539.02

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Reagent

IC NO3 ICV_00019

ERA
A Waters Company

Certified Reference Material

▪ Certificate of Analysis ▪

Product:	1000 mg/L Nitrate as N (NO_3-N)
Catalog Number:	052-125mL, 991-500mL
Lot No.	011221m
Starting Material:	Potassium Nitrate (KNO_3)
Matrix:	18 megohm deionized water
Density:	1.0029 ± 0.0005 g/mL 20.2 °C and 749 mm Hg
Verification Method:	Ion Chromatography
Certificate Issue Date:	December 21, 2021
Expiration Date:	December 1, 2023
Revision Number:	Original

CERTIFICATION

Parameter	Certified Value[1]	Uncertainty[2]	NIST Traceability	
	mg/L	%	SRM Number[3]	Recovery %
Nitrate as N (NO_3-N)	1000	1.57	3185	101

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1. The **Certified Value** is the actual gravimetric/volumetric "made-to" concentration confirmed by ERA analytical verification. The certified value is monitored and the purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** represents an expanded uncertainty and approximates a 95% confidence interval. The uncertainty is based on the characterization, homogeneity and stability characteristics of the product, multiplied by a coverage factor (k=2). The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product. The formula used to calculate the expanded uncertainty is:
$U_{expanded} = k * SQRT((U_{char}^2) + (U_{homogen}^2) + (U_{LTS}^2) + (U_{STS}^2) + (U_{RSS}^2))$

Where:

$U_{expanded}$ = Expanded uncertainty.
k = Coverage factor.
U_{char} = Combined standard uncertainty of the manufacturing and/or analytical verification assessment.
$U_{homogen}$ = Standard uncertainty of the homogeneity assessment.
U_{LTS} = Standard uncertainty associated with long-term stability.
U_{STS} = Standard uncertainty associated with short-term (transport) stability.
U_{RSS} = Standard uncertainty associated with repeated sampling of the product (where permitted by product use instructions).

3. Where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. **Analytical Traceability Recovery (%)** = [(% recovery ERA certified reference material)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing this ERA certified reference material and/or it's associated stock solution(s) against the applicable NIST SRMs.

4. **Metrological Traceability.** This certified reference material is metrologically traceable to NIST mass reference materials through an unbroken chain of comparisons.

5. **Storage**: 20-25°C

6. **Intended Use**: This standard is intended to be used to calibrate your analytical process and/or as a quality control check of the entire process for the analytes/matrix included in the standard.

7. **Minimum Sample Size**: ERA suggests that when subsampling this product prior to analysis, you use a minimum sample size of at least 1 mL. Using a smaller sample size may invalidate the assigned value and/or uncertainty shown.

8. **Repeat Sampling**: Repeated Sampling of this product is permitted, provided minimum sample sizes and storage instructions are adhered to.

9. **Safety**: ERA products may be hazardous and are intended for use by professional laboratory personnel trained in the competent handling of such materials. Responsibility for the safe use of these products rests entirely with the buyer and/or user. Safety Data Sheets (SDS) for all ERA products are available through our website: www.eraqc.com

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

Certifying Officer
Brian Miller

Brian Miller

Quality Officer
Matthew Seebeck

ISO 17034:2016 ACCREDITED Reference Material Producer CERT #1529.03

ISO/IEC 17025:2017 ACCREDITED Chemical Testing Laboratory CERT #1539.07

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Reagent

IC P04 cal_00030

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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."

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

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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www.spex.com • Email: USMet-CRMSales@antylia.com
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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1. The **Certified Value** is the actual gravimetric/volumetric "made-to" concentration confirmed by ERA analytical verification. The certified value is monitored and the purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** represents an expanded uncertainty and approximates a 95% confidence interval. The uncertainty is based on the characterization, homogeneity and stability characteristics of the product, multiplied by a coverage factor (k=2). The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product. The formula used to calculate the expanded uncertainty is:
$U_{expanded} = k * SQRT((U_{char}^2) + (U_{homogen}^2) + (U_{LTS}^2) + (U_{STS}^2) + (U_{RSS}^2))$

Where:

$U_{expanded}$ = Expanded uncertainty.
k = Coverage factor.
U_{char} = Combined standard uncertainty of the manufacturing and/or analytical verification assessment.
$U_{homogen}$ = Standard uncertainty of the homogeneity assessment.
U_{LTS} = Standard uncertainty associated with long-term stability.
U_{STS} = Standard uncertainty associated with short-term (transport) stability.
U_{RSS} = Standard uncertainty associated with repeated sampling of the product (where permitted by product use instructions).

3. Where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. **Analytical Traceability Recovery (%)** = [(% recovery ERA certified reference material)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing this ERA certified reference material and/or it's associated stock solution(s) against the applicable NIST SRMs.

4. **Metrological Traceability.** This certified reference material is metrologically traceable to NIST mass reference materials through an unbroken chain of comparisons.

5. **Storage**: 20-25°C

6. **Intended Use**: This standard is intended to be used to calibrate your analytical process and/or as a quality control check of the entire process for the analytes/matrix included in the standard.

7. **Minimum Sample Size**: ERA suggests that when subsampling this product prior to analysis, you use a minimum sample size of at least 1 mL. Using a smaller sample size may invalidate the assigned value and/or uncertainty shown.

8. **Repeat Sampling**: Repeated Sampling of this product is permitted, provided minimum sample sizes and storage instructions are adhered to.

9. **Safety**: ERA products may be hazardous and are intended for use by professional laboratory personnel trained in the competent handling of such materials. Responsibility for the safe use of these products rests entirely with the buyer and/or user. Safety Data Sheets (SDS) for all ERA products are available through our website: www.eraqc.com

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

Certifying Officer
Brian Miller

Brian Miller

Quality Officer
Matthew Seebeck

ISO 17034:2016 ACCREDITED Reference Material Producer CERT #1539.03

ISO/IEC 17025:2017 ACCREDITED Chemical Testing Laboratory CERT #1539.02

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Reagent

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:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

Intended Use:
This analytical reference (RM) standard is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Expiration of Certification:

Reagent

MNX,TNX,DNX_00077

Agilent

Trusted Answers

ISO 17034

Reference Material Certificate

Product Information Sheet

Product Name: Custom Standard

Product Number: CUS-23984

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

Lot Number: 0006725091

Lot Issue Date: 31-Jan-2023

Expiration Date: 29-Feb-2024

Component Name	Concentration		Uncertainty	CAS#	Analyte Lot
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	100.3	±	0.5 µg/mL	N/A	RM12426
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	100.1	±	0.5 µg/mL	N/A	RM12428
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	116.7	±	0.6 µg/mL	N/A	RM12428

Matrix: acetonitrile

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material (RM) standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above. Purity values are taken from approved vendor raw material certificates.

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This analytical reference (RM) standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Safety:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

Intended Use:
This analytical reference (RM) standard is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Expiration of Certification:

Reagent

MNX,TNX,DNX_00079

Agilent

Trusted Answers

ISO 17034

Reference Material Certificate

Product Information Sheet

Product Name: Custom Standard

Product Number: CUS-23984

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

Lot Number: 0006725091

Lot Issue Date: 31-Jan-2023

Expiration Date: 29-Feb-2024

Component Name	Concentration		Uncertainty	CAS#	Analyte Lot
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	100.3	±	0.5 µg/mL	N/A	RM12426
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	100.1	±	0.5 µg/mL	N/A	RM12428
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	116.7	±	0.6 µg/mL	N/A	RM12428

Matrix: acetonitrile

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material (RM) standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above. Purity values are taken from approved vendor raw material certificates.

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This analytical reference (RM) standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Safety:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

Intended Use:
This analytical reference (RM) standard is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Expiration of Certification:

Reagent

NH3 CAL STD_00035

RICCA CHEMICAL COMPANY®

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

Certificate of Analysis

Ammonia Nitrogen Standard, 1000 ppm N (1216 ppm NH_3)

Lot Number: 4208D17 **Product Number:** 5455

Manufacture Date: AUG 05, 2022
Expiration Date: JAN 2024

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

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Ammonium Chloride	12125-02-9	High Purity

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

Specification	Reference
Ammonia Solution, Stock (1.0 mL = 1.0 mg ammonia nitrogen)	ASTM (D 3590 A)
Ammonia Solution, Stock (1.0 mL = 1.0 mg ammonium nitrogen)	ASTM (D 3590 B)
Stock Ammonium Chloride Solution	APHA (4500-CN- L)
Stock Ammonium Solution	APHA (4500-NH3 C)
Stock Ammonium chloride Solution	APHA (4500-NH3 D)
Stock Ammonium Solution	APHA (4500-NH3 F)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (351.2)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (350.2)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (350.3)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (351.4)
Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (350.1)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (351.3)

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

Part Number	Size / Package Type	Shelf Life (Unopened Container)
5455-16	500 mL natural poly	18 months

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

Paul Brandon (08/05/2022)

Production Manager

This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

Reagent

NH3 ICV STD_00034

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Ion Chromatography Solution
Catalog Number:	ICNNH41
Lot Number:	S2-NH700817
Matrix:	H2O
Value / Analyte(s):	1 000 µg/mL ea: Ammonium as N
Starting Material:	Ammonium chloride
Starting Material Lot#:	1736
Starting Material Purity:	99.8500%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 999 ± 4 µg/mL

Density: 0.999 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **995 ± 4 µg/mL**
Fajans NIST SRM 999c Lot Number: 999c

Assay Method #2 **1002 ± 4 µg/mL**
IC Assay NIST SRM 194a Lot Number: 194a

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

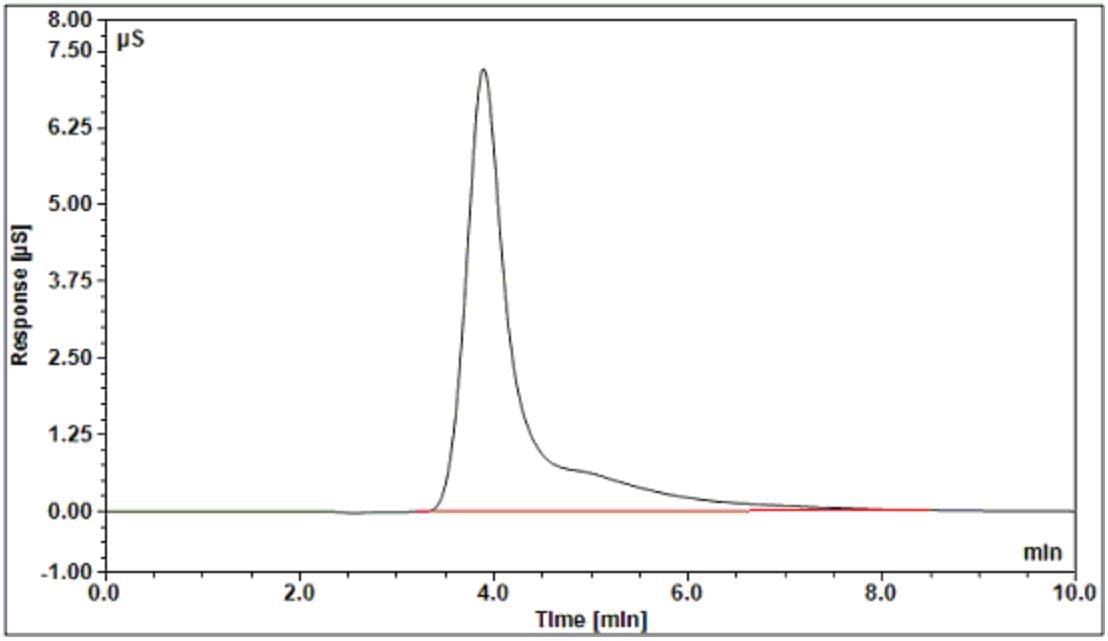
4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 CHROMATOGRAM



Dionex ICS-2000 Ion Chromatograph

Analytical Column:	IonPac CS18 2 x 250 mm	**Eluent:**	10 mM MSA
Guard Column:	IonPac CG18 2 x 50 mm	**Eluent Flow Rate:**	0.25 mL/min
Anion Self Regen Suppressor/ Chemical Suppression:	N/A	**Column Temp:**	30°C
		Cell Temp:	35°C
		Scale X-Axis:	minutes
Cation Self Regen Suppressor/ Chemical Suppression:	CERS 500 2mm	**Scale Y-Axis:**	8 µS/cm
		Concentration:	10 µg/g
Suppressor Current/ Chemical Suppressant:	8 mA		

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 25, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 25, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Reagent

PicricARestek_00113

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31499 **Lot No.:** A0183202

Description : Picric Acid Standard

Picric Acid Standard 1000µg/mL, Methanol, 1mL/1000µg/mL *PGI BOX REQUIRED* SHIP FED EX GROUND ONLY

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Picric Acid	1,004.0 µg/mL	+/- 5.9635	µg/mL	Gravimetric
	CAS # 88-89-1 (Lot 06130CU)		+/- 55.0021	µg/mL	Unstressed
	Purity 99%		+/- 64.1379	µg/mL	Stressed

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

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

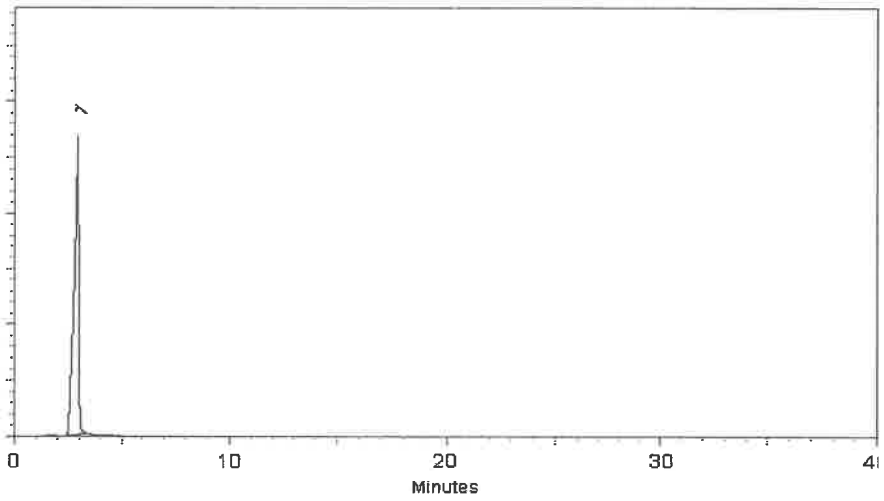
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Brandon Reish - Mix Technician

Date Mixed: 23-Mar-2022 **Balance:** 1128360905

Amanda Miller - Operations Tech-ARM QC

Date Passed: 28-Mar-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

SFD CAL STK_00010

ThermoFisher SCIENTIFIC

Version	02
Molecular weight	240.18
Quality Test / Release Date	08/28/2022
Molecular Formula	Na2 S . 9 H2 O
CAS No	1313-84-4
Linear Formula	Na2S.9H2O
Flash Point (°C)	

Certificate of Analysis

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."

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.

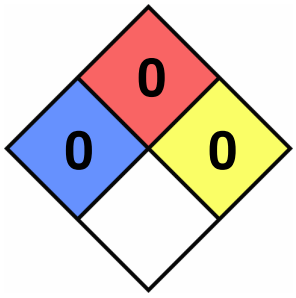
Dispose of contents in accordance with local, state, federal and international regulations.

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

Trusted Answers

Maintenance of Certification:

If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois

QMS Representative

ANAB

ANSI National Accreditation Board

ACCREDITED

ISO 17034

REFERENCE MATERIAL PRODUCER

ISO 17034 Cert No. AR-1936

RM was produced in accordance with the TUV/SUD registered ISO 9001:2015 Quality Management System. Cert# 951215321

www.agilent.com/quality/

CSD-QA-040.1

ISO 17025

8330B_DOD5

Nitroaromatics and Nitramines (HPLC)

FORM II
HPLC/IC SURROGATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): UltraCarb5u ID: 4.6 (mm) GC Column (2): Luna-phenyl 4.6 (mm)

Client Sample ID	Lab Sample ID	12DNB1 #	12DNB2 #
FWGmw-015-230401-GW	280-176674-2	85 M	
LL3mw-241-230401-GW	280-176674-4	93	
LL3mw-241-230401-GW	280-176674-4		88
FBQmw-173-230401-GW-R	280-176674-7	91 M	
FBQmw-173-230401-GW-R	280-176674-7		85
FBQmw-175-230401-GW-R	280-176674-10	95 M	
FBQmw-175-230402-GW-R	280-176674-11	93 M	
	MB 280-613095/1-A	102	
	LCS 280-613095/2-A	93	
	LCS 280-613095/4-A	98	
	LCSD 280-613095/3-A	94	
	LCSD 280-613095/5-A	98	
FBQmw-175-230401-GW-R MS	280-176674-10 MS	82 Q	
FBQmw-175-230401-GW-R MS	280-176674-10 MS	95 M	
FBQmw-175-230401-GW-R MSD	280-176674-10 MSD	98	
FBQmw-175-230401-GW-R MSD	280-176674-10 MSD	109	

	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.: 280-176674-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05190035.D

Lab ID: LCS 280-613095/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	1.98	99	73-125	
1,3-Dinitrobenzene	2.00	1.90	95	78-120	
2,4,6-Trinitrotoluene	2.00	1.83	91	71-123	
2,4-Dinitrotoluene	2.00	1.82	91	78-120	
2,6-Dinitrotoluene	2.00	1.84	92	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.80	90	79-120	
2-Nitrotoluene	2.00	1.56	78	70-127	
3,5-Dinitroaniline	2.00	1.73	87	71-117	
3-Nitrotoluene	2.00	1.54	77	73-125	
4-Amino-2,6-dinitrotoluene	2.00	1.78	89	76-125	
4-Nitrotoluene	2.00	1.56	78	71-127	
DNX	2.00	1.93	96	66-119	M
HMX	2.00	1.62	81	65-135	M
MNX	2.33	2.45	105	57-132	
Nitrobenzene	2.00	1.74	87	65-134	
Nitroglycerin	20.0	18.9	95	74-127	
PETN	20.0	20.5	102	73-127	
RDX	2.00	1.79	89	68-130	
Tetryl	2.00	2.07	103	64-128	
TNX	2.01	1.88	94	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.: 280-176674-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05190037.D

Lab ID: LCS 280-613095/4-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
2,4-diamino-6-nitrotoluene	2.00	1.61	81	68-122	M
2,6-diamino-4-nitrotoluene	2.00	1.68	84	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.: 280-176674-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05190036.D

Lab ID: LCSD 280-613095/3-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	2.04	102	3	20	73-125	
1,3-Dinitrobenzene	2.00	1.96	98	3	20	78-120	
2,4,6-Trinitrotoluene	2.00	1.88	94	3	20	71-123	
2,4-Dinitrotoluene	2.00	1.87	93	3	20	78-120	
2,6-Dinitrotoluene	2.00	1.95	98	6	20	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.84	92	2	20	79-120	
2-Nitrotoluene	2.00	1.64	82	5	20	70-127	
3,5-Dinitroaniline	2.00	1.83	91	5	20	71-117	
3-Nitrotoluene	2.00	1.62	81	5	20	73-125	
4-Amino-2,6-dinitrotoluene	2.00	1.82	91	2	20	76-125	
4-Nitrotoluene	2.00	1.61	80	3	20	71-127	
DNX	2.00	1.95	97	1	20	66-119	M
HMX	2.00	1.71	86	6	20	65-135	M
MNX	2.33	2.47	106	1	20	57-132	
Nitrobenzene	2.00	1.81	91	4	20	65-134	
Nitroglycerin	20.0	19.5	97	3	20	74-127	
PETN	20.0	21.1	106	3	20	73-127	
RDX	2.00	1.84	92	3	20	68-130	
Tetryl	2.00	2.06	103	0	20	64-128	
TNX	2.01	1.91	95	2	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.: 280-176674-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05190038.D

Lab ID: LCSD 280-613095/5-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	1.47	74	9	20	68-122	M
2,6-diamino-4-nitrotoluene	2.00	1.56	78	8	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.: 280-176674-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05190049.D

Lab ID: 280-176674-10 MS Client ID: FBQmw-175-230401-GW-R MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	0.20 U	1.75	87	73-125	Q
1,3-Dinitrobenzene	2.00	0.10 U	1.66	83	78-120	Q
2,4,6-Trinitrotoluene	2.00	0.10 U	1.56	78	71-123	Q
2,4-Dinitrotoluene	2.00	0.080 U	1.50	75	78-120	Q J1
2,6-Dinitrotoluene	2.00	0.080 U	1.58	79	77-127	Q
2-Amino-4,6-dinitrotoluene	2.00	0.10 U	1.46	73	79-120	Q J1
2-Nitrotoluene	2.00	0.20 U	1.34	67	70-127	Q J1
3,5-Dinitroaniline	2.00	0.30 U	1.46	73	71-117	Q
3-Nitrotoluene	2.00	0.35 U	1.23	61	73-125	Q J1
4-Amino-2,6-dinitrotoluene	2.00	0.12 U	1.44	72	76-125	Q J1
4-Nitrotoluene	2.00	0.40 U	1.30	65	71-127	Q J1
DNX	2.00	0.25 U	1.56	78	66-119	M Q
HMX	2.00	0.20 U	1.46	73	65-135	M Q
MNX	2.34	0.29 U	1.98	85	57-132	M Q
Nitrobenzene	2.00	0.20 U	1.47	73	65-134	Q
Nitroglycerin	20.0	2.0 U	17.5	87	74-127	Q
PETN	20.0	1.0 U	18.1	90	73-127	Q
RDX	2.00	0.20 U	1.49	74	68-130	M Q
Tetryl	2.00	0.10 U	1.72	86	64-128	Q
TNX	2.01	0.25 U	1.70	85	50-150	M Q

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.: 280-176674-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05190051.D

Lab ID: 280-176674-10 MS Client ID: FBQmw-175-230401-GW-R MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
2,4-diamino-6-nitrotoluene	2.01	0.90 U	1.25	62	68-122	M J1
2,6-diamino-4-nitrotoluene	2.01	0.90 U	1.60	80	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.: 280-176674-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05190050.D

Lab ID: 280-176674-10 MSD Client ID: FBQmw-175-230401-GW-R MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.19	2.21	101	23	20	73-125	J1
1,3-Dinitrobenzene	2.19	2.13	97	25	20	78-120	J1
2,4,6-Trinitrotoluene	2.19	2.00	92	25	20	71-123	J1
2,4-Dinitrotoluene	2.19	2.00	92	29	20	78-120	J1
2,6-Dinitrotoluene	2.19	2.02	93	25	20	77-127	J1
2-Amino-4,6-dinitrotoluene	2.19	1.96	90	29	20	79-120	J1
2-Nitrotoluene	2.19	1.78	82	28	20	70-127	J1
3,5-Dinitroaniline	2.19	1.86	85	24	20	71-117	J1
3-Nitrotoluene	2.19	1.67	76	30	20	73-125	J1
4-Amino-2,6-dinitrotoluene	2.19	1.87	86	26	20	76-125	J1
4-Nitrotoluene	2.19	1.75	80	29	20	71-127	J1
DNX	2.19	1.93	88	21	20	66-119	M J1
HMX	2.19	1.77	81	19	20	65-135	M
MNX	2.55	2.37	93	18	20	57-132	M
Nitrobenzene	2.19	1.94	89	28	20	65-134	J1
Nitroglycerin	21.9	21.5	98	20	20	74-127	
PETN	21.9	22.4	102	21	20	73-127	J1
RDX	2.19	1.83	84	21	20	68-130	M J1
Tetryl	2.19	2.23	102	26	20	64-128	J1
TNX	2.19	1.98	90	15	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.: 280-176674-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05190052.D

Lab ID: 280-176674-10 MSD Client ID: FBQmw-175-230401-GW-R MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
2,4-diamino-6-nitrotoluene	2.00	1.03	51	19	20	68-122	M J1
2,6-diamino-4-nitrotoluene	2.00	1.32	66	19	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.: 280-176674-1

SDG No.:

Lab Sample ID: MB 280-613095/1-A

Matrix: Water Date Extracted: 05/19/2023 13:39

Lab File ID:(1) 05190034.D Lab File ID:(2)

Date Analyzed:(1) 05/19/2023 23:27 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 280-613095/2-A	05/19/2023 23:50	
	LCSD 280-613095/3-A	05/20/2023 00:13	
	LCS 280-613095/4-A	05/20/2023 00:36	
	LCSD 280-613095/5-A	05/20/2023 00:59	
FWGmw-015-230401-GW	280-176674-2	05/20/2023 02:53	
LL3mw-241-230401-GW	280-176674-4	05/20/2023 04:02	05/24/2023 19:48
FBQmw-173-230401-GW-R	280-176674-7	05/20/2023 04:25	05/21/2023 00:31
FBQmw-175-230401-GW-R	280-176674-10	05/20/2023 04:48	
FBQmw-175-230401-GW-R MS	280-176674-10 MS	05/20/2023 05:11	
FBQmw-175-230401-GW-R MSD	280-176674-10 MSD	05/20/2023 05:34	
FBQmw-175-230401-GW-R MS	280-176674-10 MS	05/20/2023 05:57	
FBQmw-175-230401-GW-R MSD	280-176674-10 MSD	05/20/2023 06:20	
FBQmw-175-230402-GW-R	280-176674-11	05/20/2023 06:43	

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Client Sample ID: LL3mw-241-230401-GW Lab Sample ID: 280-176674-4

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

Date Analyzed (1): 05/20/2023 04:02 Date Analyzed (2): 05/24/2023 19:48

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	0.14		6.6
	2		6.73	6.54	6.84	0.15		
RDX	1		7.57	7.42	7.72	1.0		72.2
	2		8.97	8.80	9.10	0.49		
1,3,5-Trinitrobenzene	1		8.65	8.50	8.80	4.6		29.0
	2		17.34	17.18	17.48	6.1		
3,5-Dinitroaniline	1		9.88	9.73	10.03	0.36		3.0
	2		14.28	14.14	14.44	0.37		
2,4,6-Trinitrotoluene	1		10.91	10.81	11.01	2.0		8.5
	2		23.01	22.89	23.19	1.8		
4-Amino-2,6-dinitrotoluene	1		11.11	11.02	11.22	1.7		0.2
	2		16.37	16.26	16.56	1.7		
2,4-Dinitrotoluene	1		11.67	11.58	11.78	0.12		89.4
	2		18.91	18.80	19.10	0.045		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Client Sample ID: FBQmw-173-230401-GW-R Lab Sample ID: 280-176674-7

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

Date Analyzed (1): 05/20/2023 04:25 Date Analyzed (2): 05/21/2023 00:31

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	
3,5-Dinitroaniline	1		9.89	9.73	10.03	0.15		0.4
	2		14.34	14.23	14.53	0.15		
2,4,6-Trinitrotoluene	1		10.91	10.81	11.01	0.11		0.1
	2		23.08	22.98	23.28	0.11		
4-Amino-2,6-dinitrotoluene	1		11.11	11.02	11.22	1.5		14.0
	2		16.43	16.36	16.66	1.8		
2-Amino-4,6-dinitrotoluene	1		11.37	11.27	11.47	1.2		9.0
	2		17.24	17.20	17.50	1.3		

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176674-1

SDG No.:

Client Sample ID: FWGmw-015-230401-GW | Lab Sample ID: 280-176674-2

Matrix: Water | Lab File ID: 05190043.D

Analysis Method: 8330B | Date Collected: 05/17/2023 14:06

Extraction Method: 3535 | Date Extracted: 05/19/2023 13:39

Sample wt/vol: 481.7(mL) | Date Analyzed: 05/20/2023 02:53

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.: 613168 | 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	0.047
121-14-2	2,4-Dinitrotoluene	0.083	U	0.10	0.083	0.028
606-20-2	2,6-Dinitrotoluene	0.083	U	0.10	0.083	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.053
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.089
99-08-1	3-Nitrotoluene	0.36	U	0.42	0.36	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.16	0.12	0.060
99-99-0	4-Nitrotoluene	0.42	U	0.43	0.42	0.10
2691-41-0	HMX	0.21	U M	0.22	0.21	0.091
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.094
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
121-82-4	RDX	0.21	U	0.22	0.21	0.053
479-45-8	Tetryl	0.10	U	0.11	0.10	0.033

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	85	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\05190043.D
Lims ID: 280-176674-B-2-A
Client ID: FWGmw-015-230401-GW
Sample Type: Client
Inject. Date: 20-May-2023 02:53:48 ALS Bottle#: 43 Worklist Smp#: 43
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-176674-B-2-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 20-May-2023 11:22:00 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: CTX1663

First Level Reviewer: LV5D Date: 20-May-2023 11:05:10

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.550			ND	U
8 RDX	1		7.570			ND	
$ 10 1,2-Dinitrobenzene	1	8.529	8.523	0.006	21540	0.1705	M
11 1,3,5-Trinitrobenzene	1		8.650			ND	
12 1,3-Dinitrobenzene	1		9.277			ND	
13 Nitrobenzene	1		9.643			ND	
15 Tetryl	1		10.017			ND	
16 Nitroglycerin	2		10.470			ND	
17 2,4,6-Trinitrotoluene	1		10.910			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.117			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.370			ND	
20 2,6-Dinitrotoluene	1		11.517			ND	
21 2,4-Dinitrotoluene	1		11.683			ND	
22 o-Nitrotoluene	1		12.517			ND	
23 p-Nitrotoluene	1		12.937			ND	
24 m-Nitrotoluene	1		13.517			ND	
25 PETN	2		14.697			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

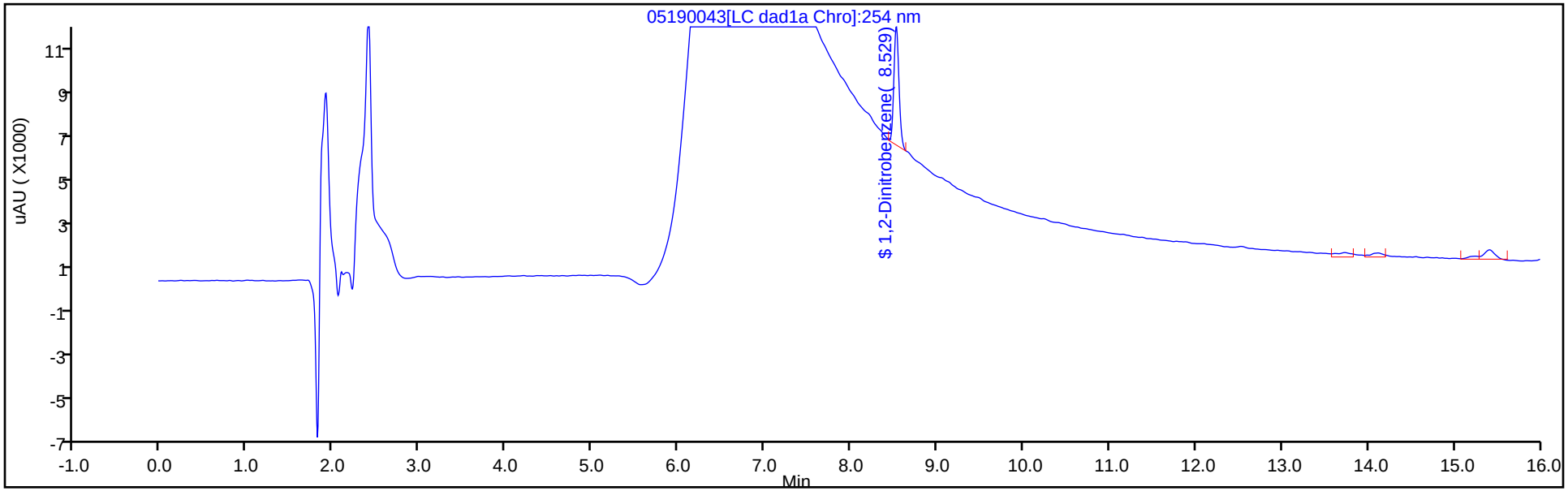
Report Date: 20-May-2023 11:22:12 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

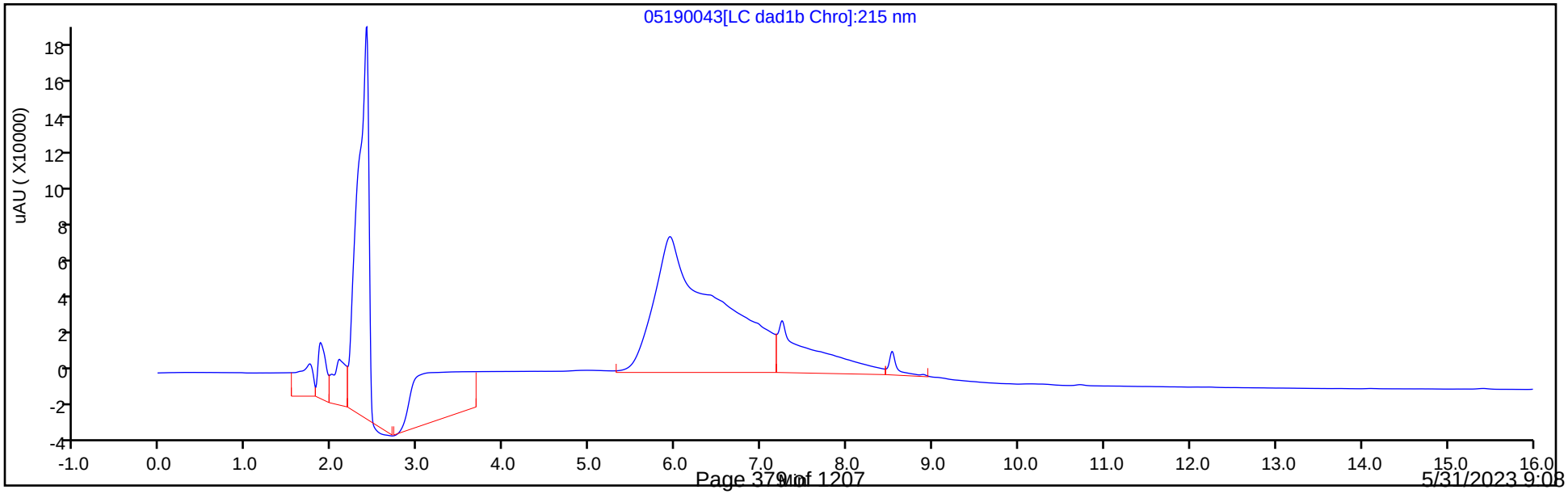
Data File: \\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190043.d

Injection Date:	20-May-2023 02:53:48	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-176674-B-2-A	Lab Sample ID:	280-176674-2	Worklist Smp#:	43
Client ID:	FWGmw-015-230401-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	43
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\05190043.D				
Lims ID:	280-176674-B-2-A				
Client ID:	FWGmw-015-230401-GW				
Sample Type:	Client				
Inject. Date:	20-May-2023 02:53:48	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-176674-B-2-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	20-May-2023 11:22:00	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:	CTX1663				

First Level Reviewer: LV5D Date: 20-May-2023 11:05:10

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1705	85.27

Eurofins Denver

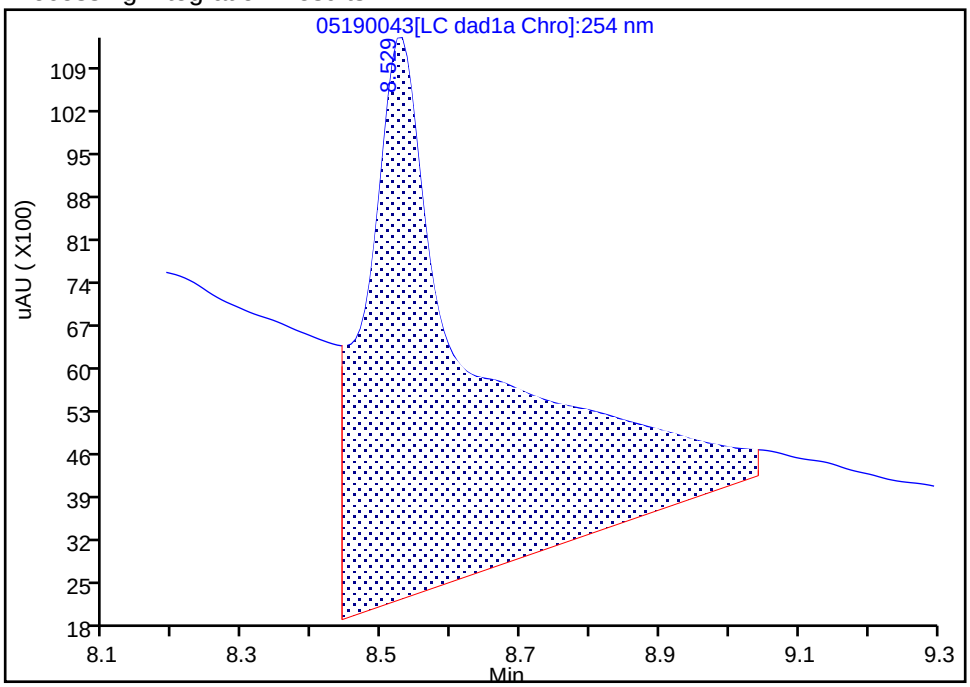
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190043.d				
Injection Date:	20-May-2023 02:53:48	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176674-B-2-A	Lab Sample ID:	280-176674-2		
Client ID:	FWGmw-015-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

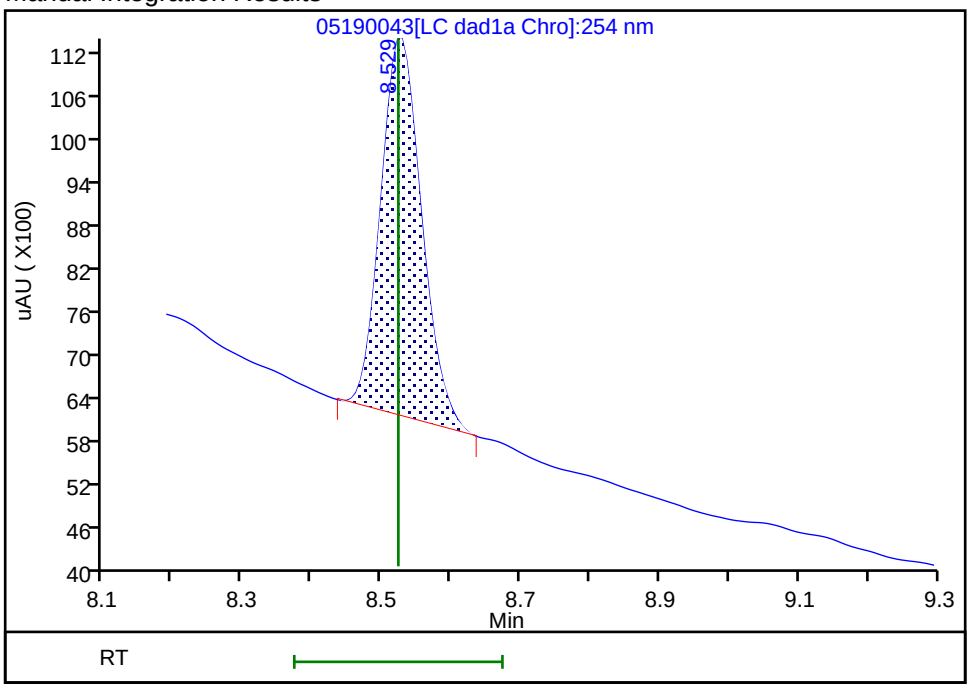
Processing Integration Results

RT: 8.53
Area: 108785
Amount: 0.861263
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 21540
Amount: 0.170535
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 11:05:09 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

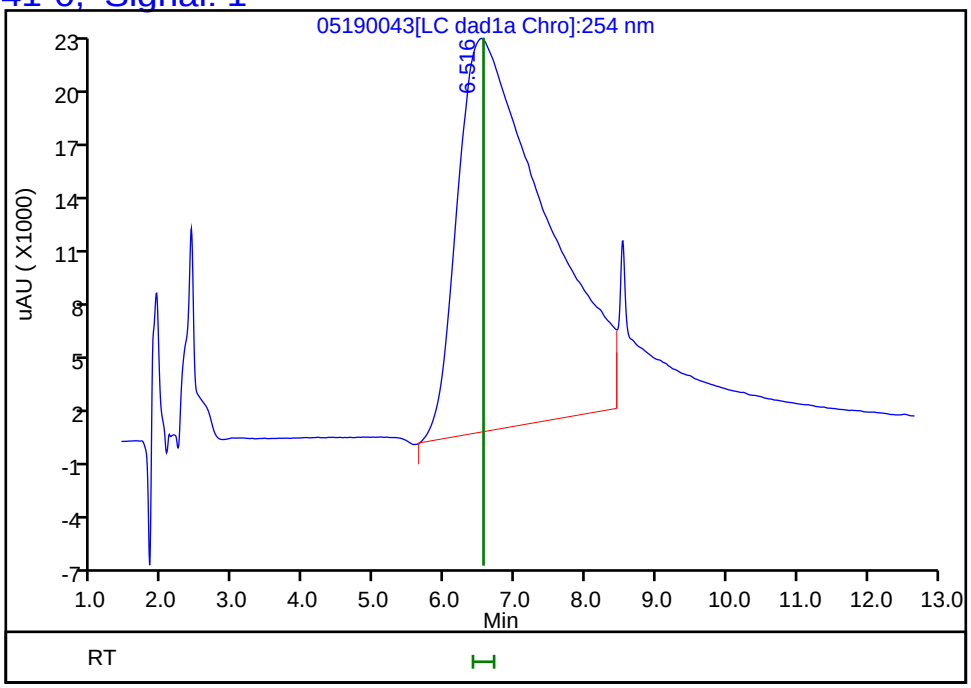
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190043.d				
Injection Date:	20-May-2023 02:53:48	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176674-B-2-A	Lab Sample ID:	280-176674-2		
Client ID:	FWGmw-015-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 6.52
Response: 1924031
Amount: 20.571678



Reviewer: LV5D, 20-May-2023 11:05:10
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176674-1

SDG No.:

Client Sample ID: LL3mw-241-230401-GW | Lab Sample ID: 280-176674-4

Matrix: Water | Lab File ID: 05190046.D

Analysis Method: 8330B | Date Collected: 05/17/2023 15:00

Extraction Method: 3535 | Date Extracted: 05/19/2023 13:39

Sample wt/vol: 488.4(mL) | Date Analyzed: 05/20/2023 04:02

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

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

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

Cleanup Factor:

Analysis Batch No.: 613168 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	4.6		0.21	0.20	0.086
118-96-7	2,4,6-Trinitrotoluene	2.0		0.11	0.10	0.046
6629-29-4	2,4-diamino-6-nitrotoluene	0.92	U	1.0	0.92	0.44
121-14-2	2,4-Dinitrotoluene	0.12	J1	0.10	0.082	0.028
59229-75-3	2,6-diamino-4-nitrotoluene	0.92	U M	1.0	0.92	0.23
606-20-2	2,6-Dinitrotoluene	0.082	U	0.10	0.082	0.041
88-72-2	2-Nitrotoluene	0.20	U	0.21	0.20	0.088
618-87-1	3,5-Dinitroaniline	0.36	J	0.41	0.31	0.13
99-08-1	3-Nitrotoluene	0.36	U	0.41	0.36	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.7		0.15	0.12	0.059
99-99-0	4-Nitrotoluene	0.41	U M	0.42	0.41	0.10
80251-29-2	DNX	0.26	U M	0.51	0.26	0.10
2691-41-0	HMX	0.14	J M	0.21	0.20	0.090
98-95-3	Nitrobenzene	0.20	U M	0.21	0.20	0.093
55-63-0	Nitroglycerin	2.0	U	2.1	2.0	0.94
78-11-5	PETN	1.0	U	1.1	1.0	0.46
121-82-4	RDX	1.0	J1	0.21	0.20	0.053
479-45-8	Tetryl	0.10	U M	0.11	0.10	0.033
13980-04-6	TNX	0.26	U	0.51	0.26	0.081

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	93		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\05190046.D
Lims ID: 280-176674-A-4-A
Client ID: LL3mw-241-230401-GW
Sample Type: Client
Inject. Date: 20-May-2023 04:02:40 ALS Bottle#: 46 Worklist Smp#: 46
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-176674-A-4-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 20-May-2023 11:22:13 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: CTX1663

First Level Reviewer: LV5D Date: 20-May-2023 11:06:03

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 TNX	1		6.430			ND	
2 2,6-diamino-4-nitrotoluene	1		6.431			ND	U
4 HMX	1	6.549	6.550	-0.001	1277	0.0137	M
5 2,4-diamino-6-nitrotoluene	1		6.618			ND	
6 DNX	1		6.757			ND	U
7 MNX	1	7.162	7.190	-0.028	3472	0.0265	
8 RDX	1	7.569	7.570	-0.001	10823	0.1017	
$ 10 1,2-Dinitrobenzene	1	8.522	8.523	-0.001	23545	0.1864	
11 1,3,5-Trinitrobenzene	1	8.649	8.650	-0.001	96646	0.4451	
12 1,3-Dinitrobenzene	1	9.262	9.277	-0.015	7703	0.0262	
13 Nitrobenzene	1		9.643			ND	U
14 3,5-Dinitroaniline	1	9.882	9.883	-0.001	7908	0.0352	
15 Tetryl	1		10.017			ND	U
16 Nitroglycerin	2		10.470			ND	
17 2,4,6-Trinitrotoluene	1	10.909	10.910	-0.001	41127	0.1949	
18 4-Amino-2,6-dinitrotoluene	1	11.109	11.117	-0.008	26325	0.1699	
19 2-Amino-4,6-dinitrotoluene	1	11.369	11.370	-0.001	34224	0.1699	
20 2,6-Dinitrotoluene	1		11.517			ND	
21 2,4-Dinitrotoluene	1	11.669	11.683	-0.014	3431	0.0116	
22 o-Nitrotoluene	1		12.517			ND	
23 p-Nitrotoluene	1		12.937			ND	U
24 m-Nitrotoluene	1		13.517			ND	
25 PETN	2		14.697			ND	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
U - Marked Undetected

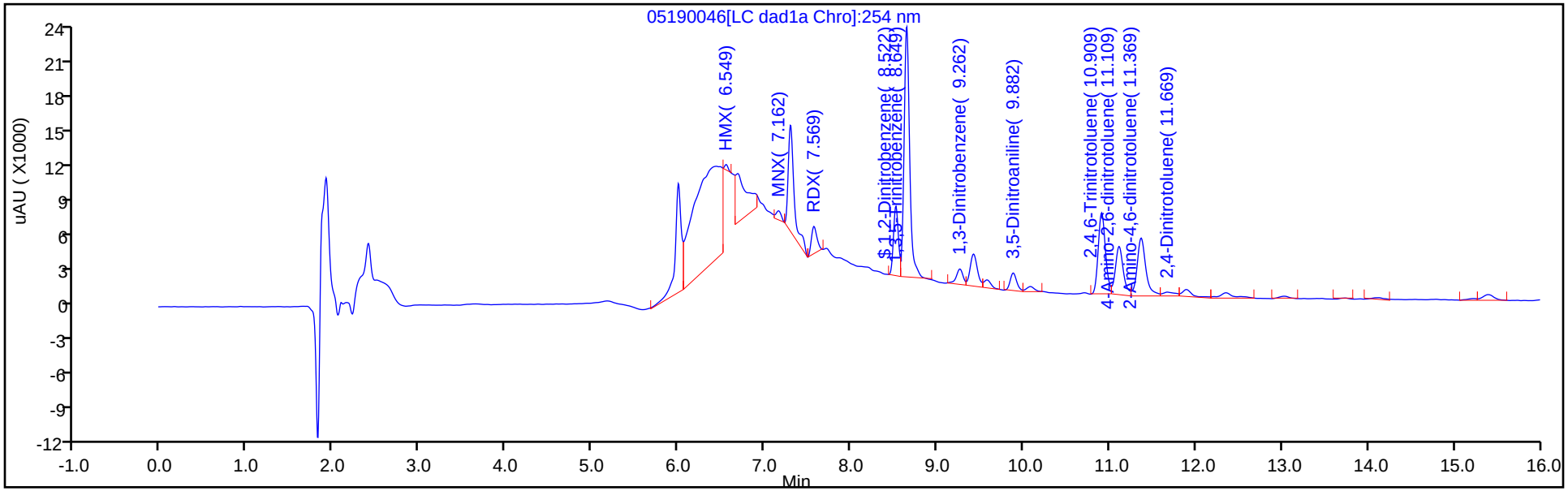
Report Date: 20-May-2023 11:22:13 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

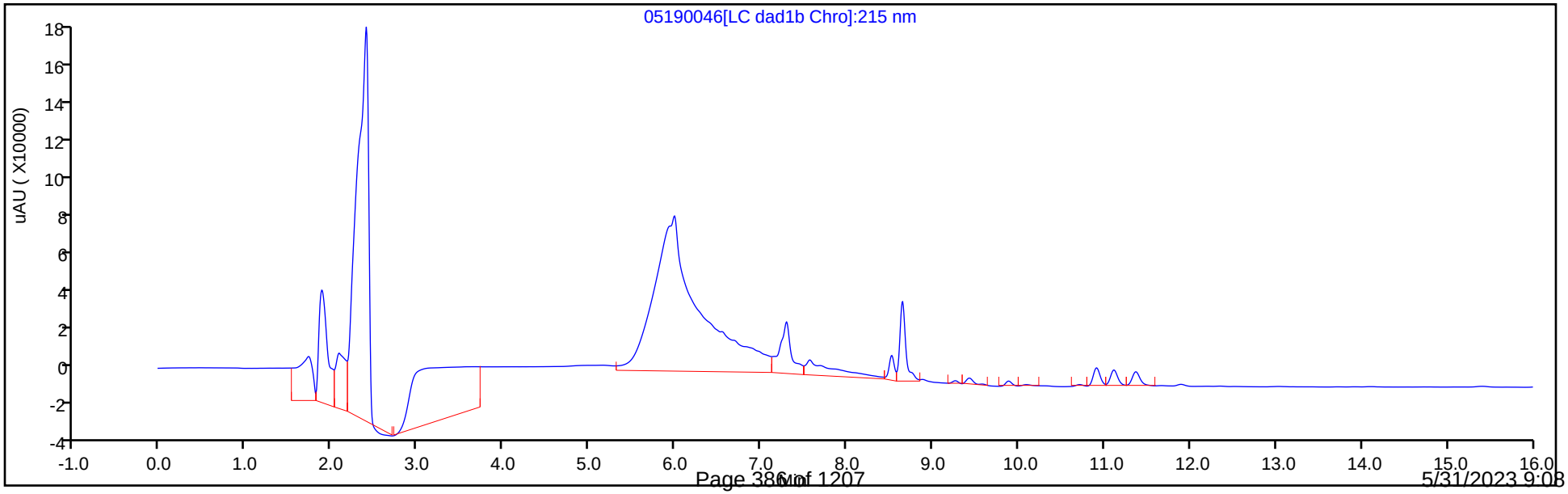
Data File: \\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190046.d

Injection Date:	20-May-2023 04:02:40	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-176674-A-4-A	Lab Sample ID:	280-176674-4	Worklist Smp#:	46
Client ID:	LL3mw-241-230401-GW				
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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\05190046.D				
Lims ID:	280-176674-A-4-A				
Client ID:	LL3mw-241-230401-GW				
Sample Type:	Client				
Inject. Date:	20-May-2023 04:02:40	ALS Bottle#:	46	Worklist Smp#:	46
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-176674-A-4-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	20-May-2023 11:22:13	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:	CTX1663				

First Level Reviewer: LV5D Date: 20-May-2023 11:06:03

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1864	93.20

User Disabled Compound Report

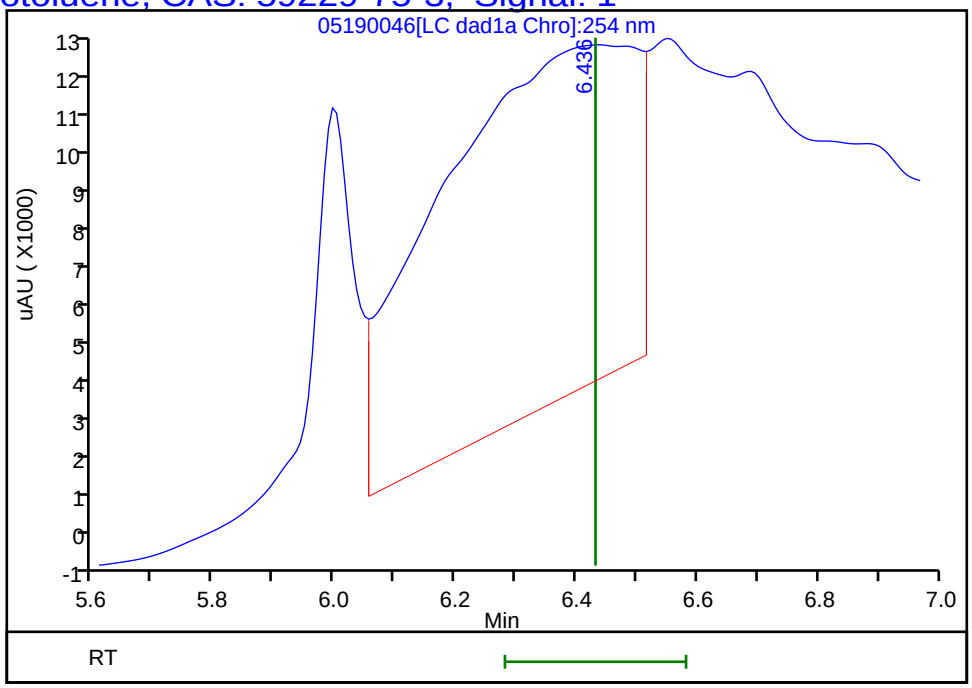
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190046.d
Injection Date: 20-May-2023 04:02:40 Instrument ID: CHHPLC_X3
Lims ID: 280-176674-A-4-A Lab Sample ID: 280-176674-4
Client ID: LL3mw-241-230401-GW
Operator ID: JZ/JG ALS Bottle#: 46 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

RT: 6.44
Response: 190824
Amount: 0.827016



Reviewer: LV5D, 20-May-2023 11:06:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

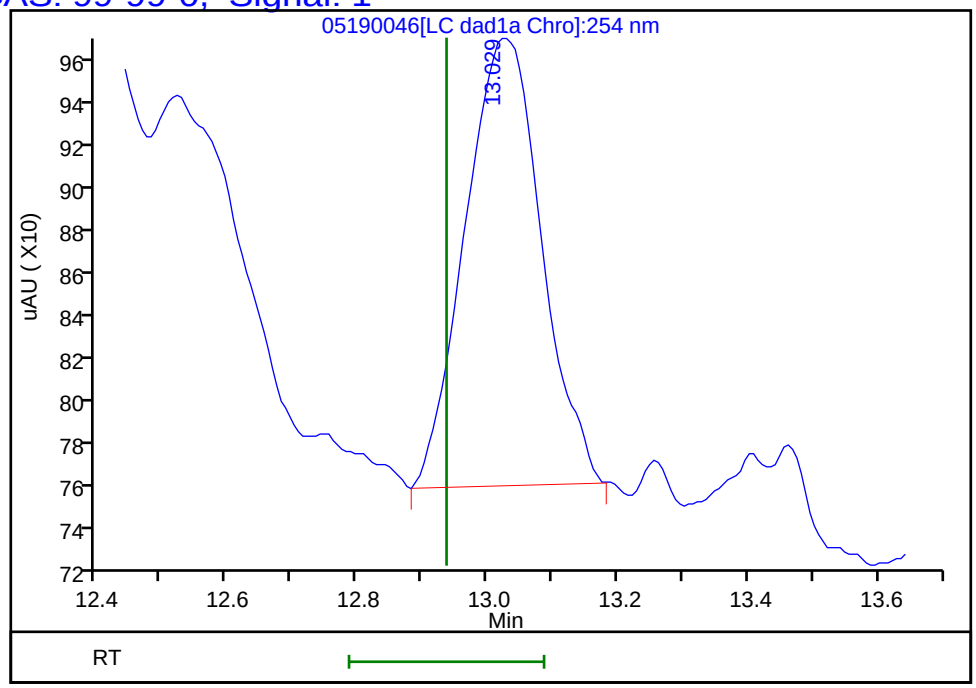
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190046.d				
Injection Date:	20-May-2023 04:02:40	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176674-A-4-A	Lab Sample ID:	280-176674-4		
Client ID:	LL3mw-241-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	46	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		

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

RT: 13.03
Response: 1671
Amount: 0.014936



Reviewer: LV5D, 20-May-2023 11:06:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

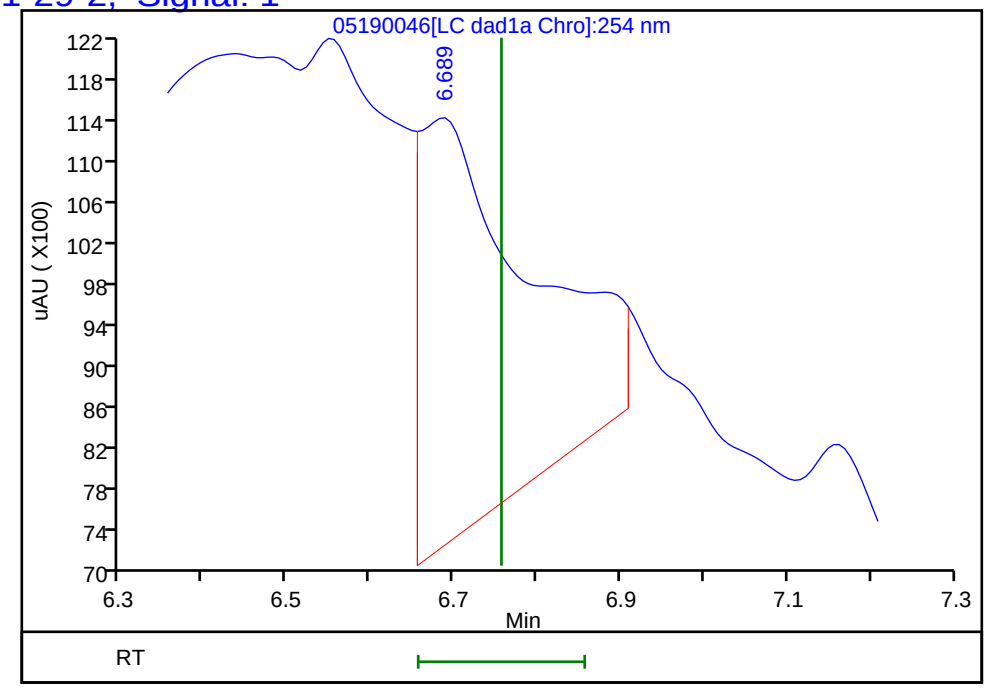
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190046.d				
Injection Date:	20-May-2023 04:02:40	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176674-A-4-A	Lab Sample ID:	280-176674-4		
Client ID:	LL3mw-241-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	46	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		

6 DNX, CAS: 80251-29-2, Signal: 1

RT: 6.69
Response: 36624
Amount: 0.253519



Reviewer: LV5D, 20-May-2023 11:06:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

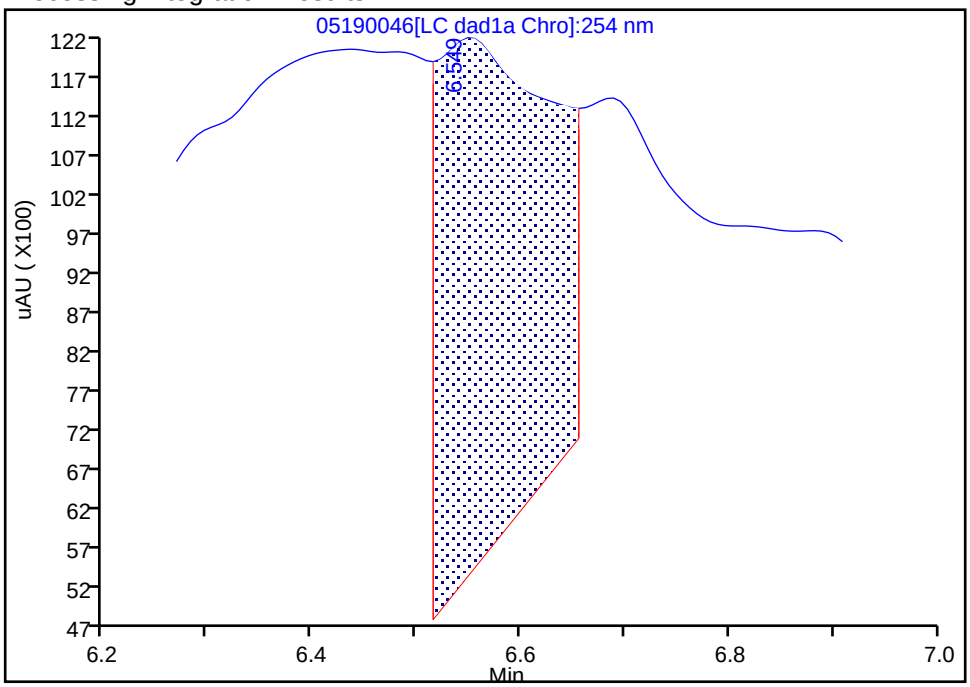
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190046.d				
Injection Date:	20-May-2023 04:02:40	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176674-A-4-A	Lab Sample ID:	280-176674-4		
Client ID:	LL3mw-241-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	46	Worklist Smp#:	46
Injection Vol:	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		

4 HMX, CAS: 2691-41-0

Signal: 1

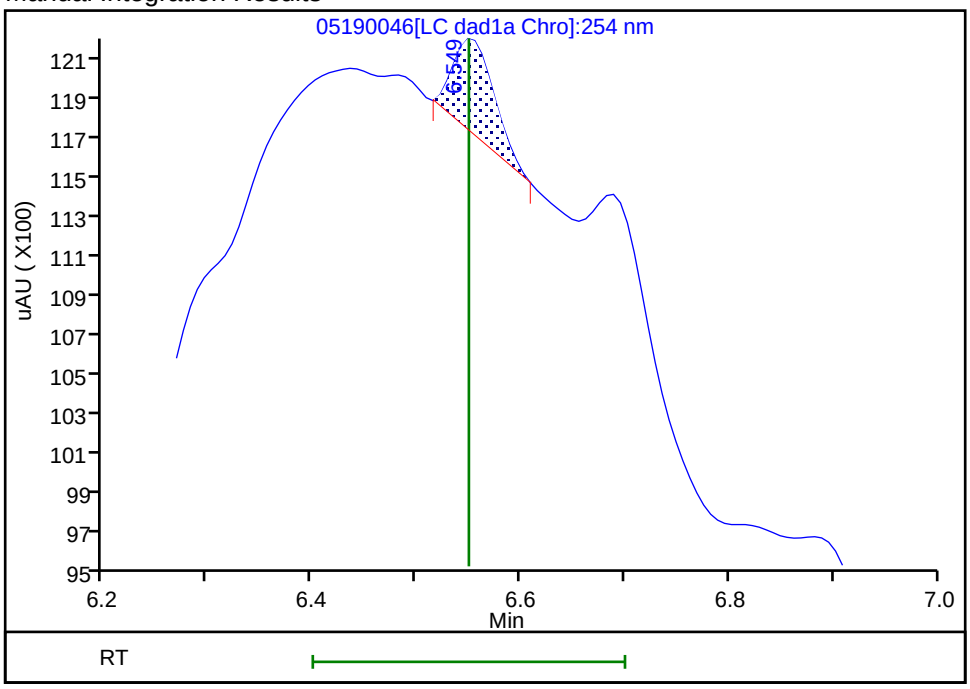
Processing Integration Results

RT: 6.55
Area: 48805
Amount: 0.521822
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 1277
Amount: 0.013654
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 11:05:44 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

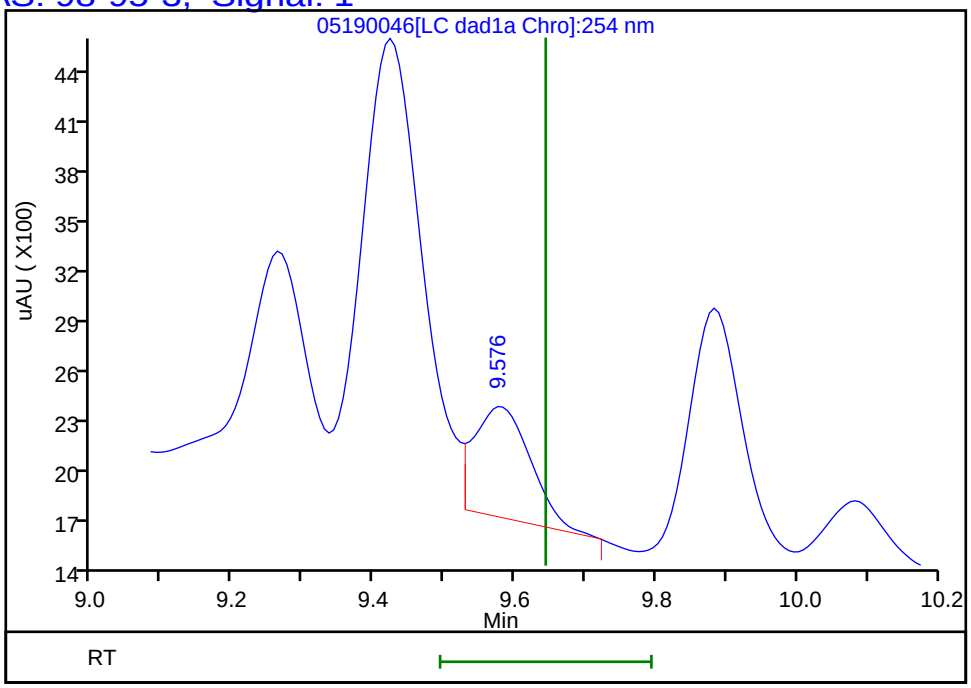
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190046.d				
Injection Date:	20-May-2023 04:02:40	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176674-A-4-A	Lab Sample ID:	280-176674-4		
Client ID:	LL3mw-241-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	46	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		

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

RT: 9.58
Response: 3658
Amount: 0.019127



Reviewer: LV5D, 20-May-2023 11:06:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

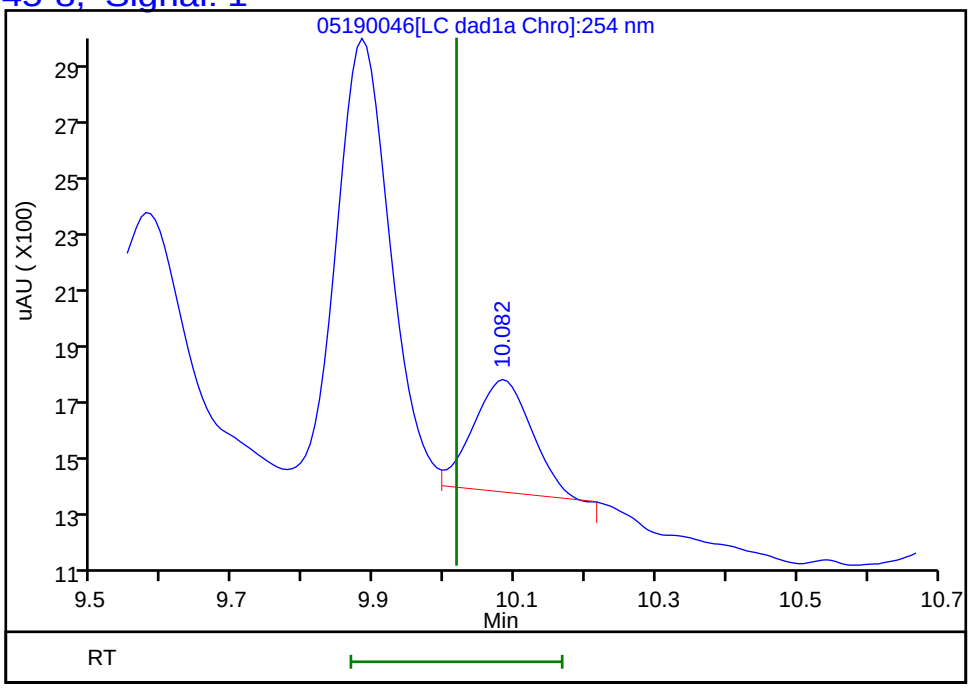
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190046.d				
Injection Date:	20-May-2023 04:02:40	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176674-A-4-A	Lab Sample ID:	280-176674-4		
Client ID:	LL3mw-241-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	46	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		

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

RT: 10.08
Response: 2214
Amount: 0.013490



Reviewer: LV5D, 20-May-2023 11:06:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176674-1

SDG No.:

Client Sample ID: LL3mw-241-230401-GW | Lab Sample ID: 280-176674-4

Matrix: Water | Lab File ID: 05240010.D

Analysis Method: 8330B | Date Collected: 05/17/2023 15:00

Extraction Method: 3535 | Date Extracted: 05/19/2023 13:39

Sample wt/vol: 488.4(mL) | Date Analyzed: 05/24/2023 19:48

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.: 613683 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038
121-14-2	*2,4-Dinitrotoluene*	*0.045*	*J J1*	*0.10*	0.082	*0.028*
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.052
5755-27-1	MNX	0.30	U M	0.51	0.30	0.095
121-82-4	*RDX*	*0.49*	*J1*	*0.21*	0.20	*0.053*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	88		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230524-121801.b\05240010.D
Lims ID: 280-176674-A-4-A
Client ID: LL3mw-241-230401-GW
Sample Type: Client
Inject. Date: 24-May-2023 19:48:22 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-176674-A-4-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230524-121801.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 25-May-2023 13:06:09 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: CTX1654

First Level Reviewer: LV5D Date: 24-May-2023 20:24:45

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1		4.214			ND	
2 2,4-diamino-6-nitrotoluene	1		4.767			ND	
3 TNX	1		5.206			ND	
4 DNX	1		6.046			ND	
5 HMX	1	6.731	6.686	0.045	3536	0.0146	M
6 MNX	1	7.557	7.546	0.011	2363	0.009010	M
8 RDX	1	8.971	8.946	0.025	10969	0.0477	
9 Nitrobenzene	1		11.459			ND	
$ 10 1,2-Dinitrobenzene	1	12.437	12.426	0.011	49455	0.1762	
11 3,5-Dinitroaniline	1	14.277	14.292	-0.015	16722	0.0362	
12 1,3-Dinitrobenzene	1		14.552			ND	
13 Nitroglycerin	2		15.066			ND	
14 o-Nitrotoluene	1	15.511	15.619	-0.108	3979	0.0161	
16 p-Nitrotoluene	1		15.846			ND	
17 4-Amino-2,6-dinitrotoluene	1	16.371	16.406	-0.035	50092	0.1703	
18 m-Nitrotoluene	1	16.764	16.692	0.072	34294	0.1164	
19 2-Amino-4,6-dinitrotoluene	1		17.239			ND	
20 1,3,5-Trinitrobenzene	1	17.337	17.332	0.005	241842	0.5961	
21 2,6-Dinitrotoluene	1		18.492			ND	
22 2,4-Dinitrotoluene	1	18.911	18.952	-0.041	2584	0.004421	
23 Tetryl	1		22.239			ND	7
24 2,4,6-Trinitrotoluene	1	23.011	23.039	-0.028	78556	0.1790	
25 PETN	2		24.279			ND	

QC Flag Legend

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

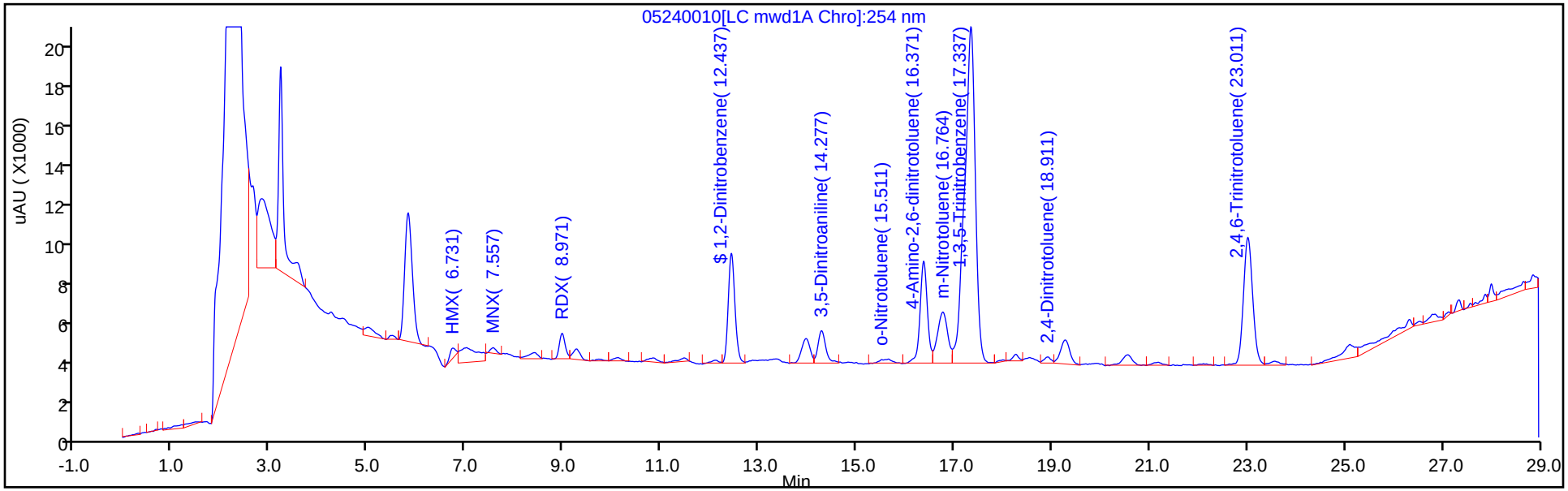
Report Date: 25-May-2023 13:06:10 Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Denver

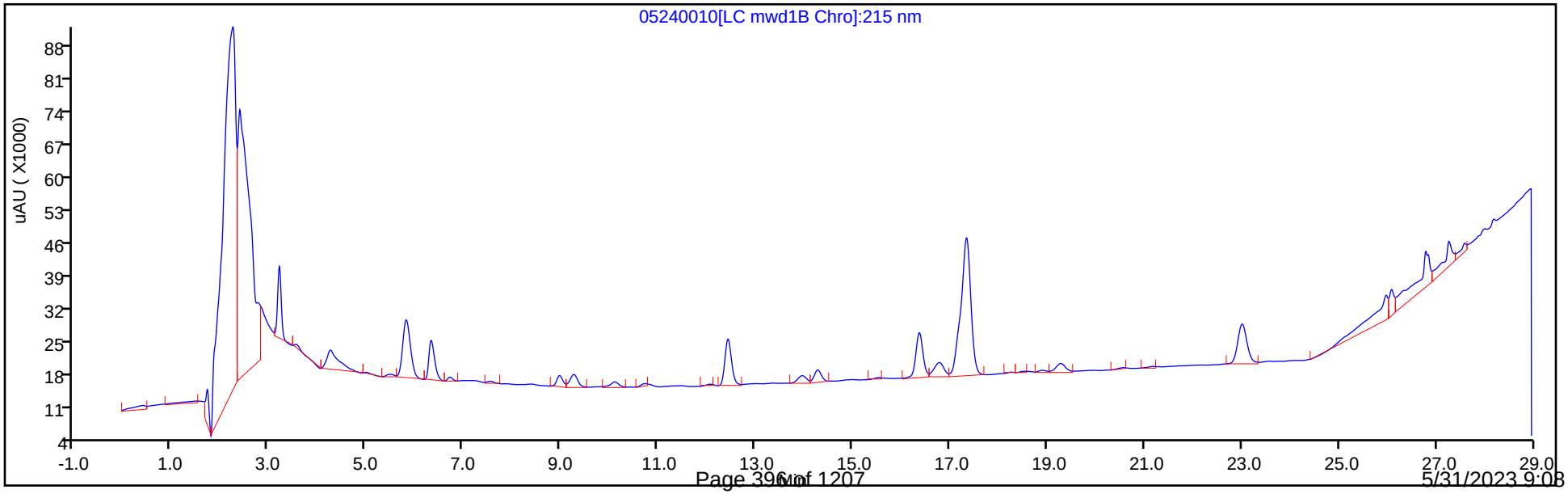
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230524-121801.b\05240010.D

Injection Date:	24-May-2023 19:48:22	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	280-176674-A-4-A	Lab Sample ID:	280-176674-4	Worklist Smp#:	10
Client ID:	LL3mw-241-230401-GW				
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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230524-121801.b\05240010.D				
Lims ID:	280-176674-A-4-A				
Client ID:	LL3mw-241-230401-GW				
Sample Type:	Client				
Inject. Date:	24-May-2023 19:48:22	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-176674-A-4-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230524-121801.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	25-May-2023 13:06:09	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:	CTX1654				
First Level Reviewer: LV5D		Date:	24-May-2023 20:24:45		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1762	88.09

Manual Integration/User Assign Peak Report

Eurofins Denver

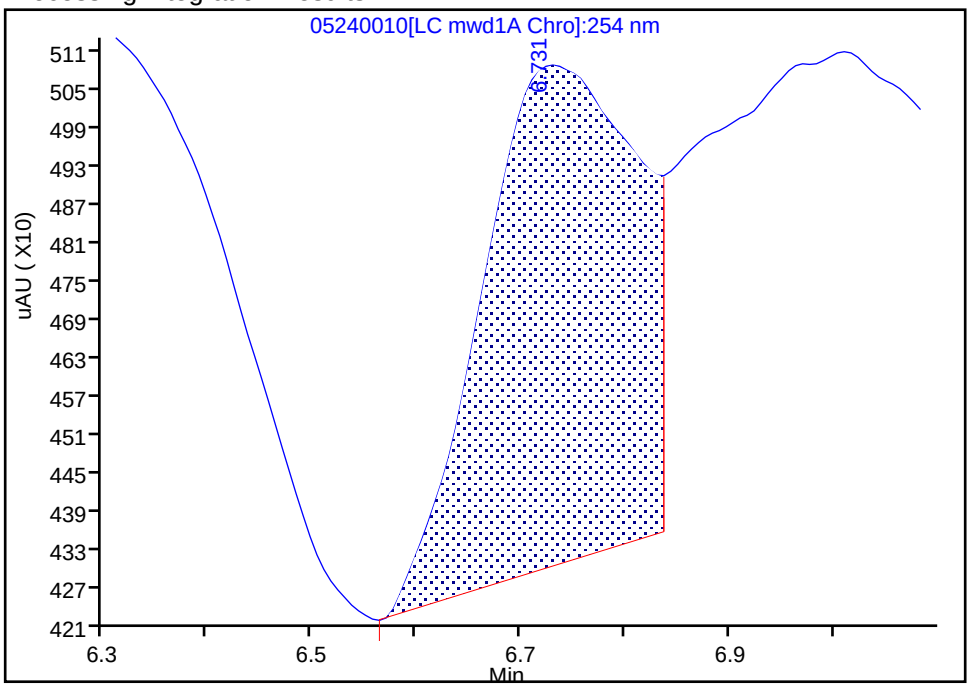
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230524-121801.b\05240010.D				
Injection Date:	24-May-2023 19:48:22	Instrument ID:	CHHPLC_X5		
Lims ID:	280-176674-A-4-A	Lab Sample ID:	280-176674-4		
Client ID:	LL3mw-241-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	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		

5 HMX, CAS: 2691-41-0

Signal: 1

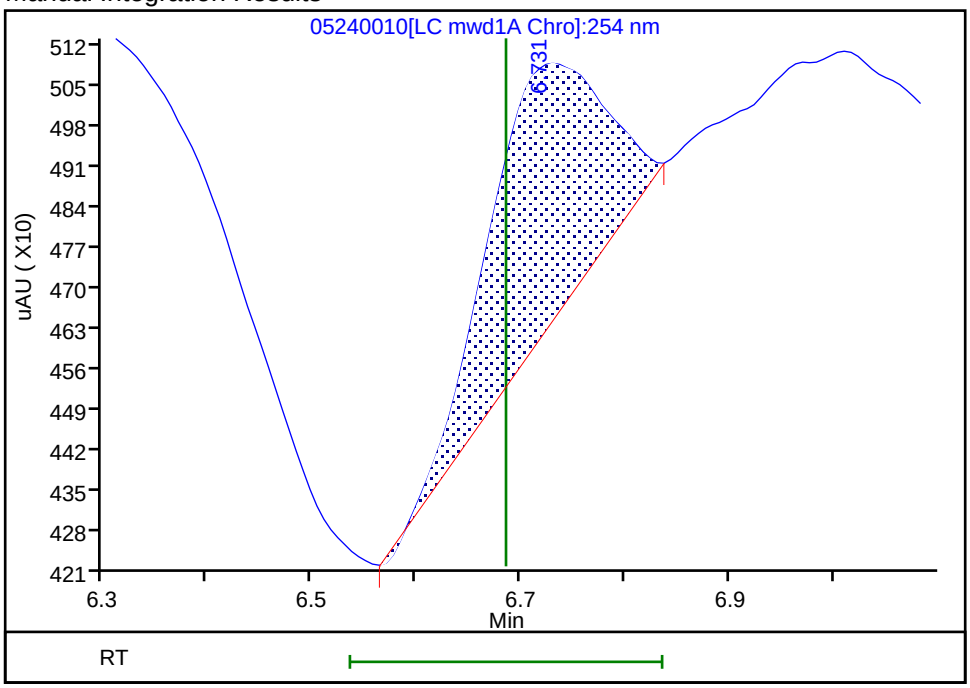
Processing Integration Results

RT: 6.73
Area: 8111
Amount: 0.039256
Amount Units: ug/ml



Manual Integration Results

RT: 6.73
Area: 3536
Amount: 0.014583
Amount Units: ug/ml



Reviewer: K8YG, 25-May-2023 08:40:59 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

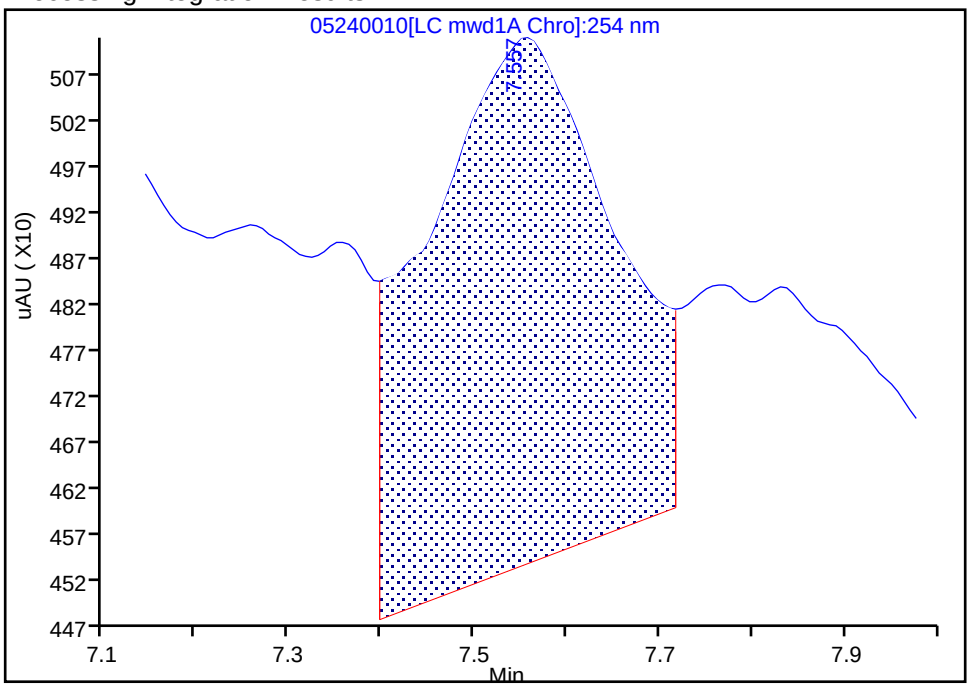
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230524-121801.b\05240010.D				
Injection Date:	24-May-2023 19:48:22	Instrument ID:	CHHPLC_X5		
Lims ID:	280-176674-A-4-A	Lab Sample ID:	280-176674-4		
Client ID:	LL3mw-241-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	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		

6 MNX, CAS: 5755-27-1

Signal: 1

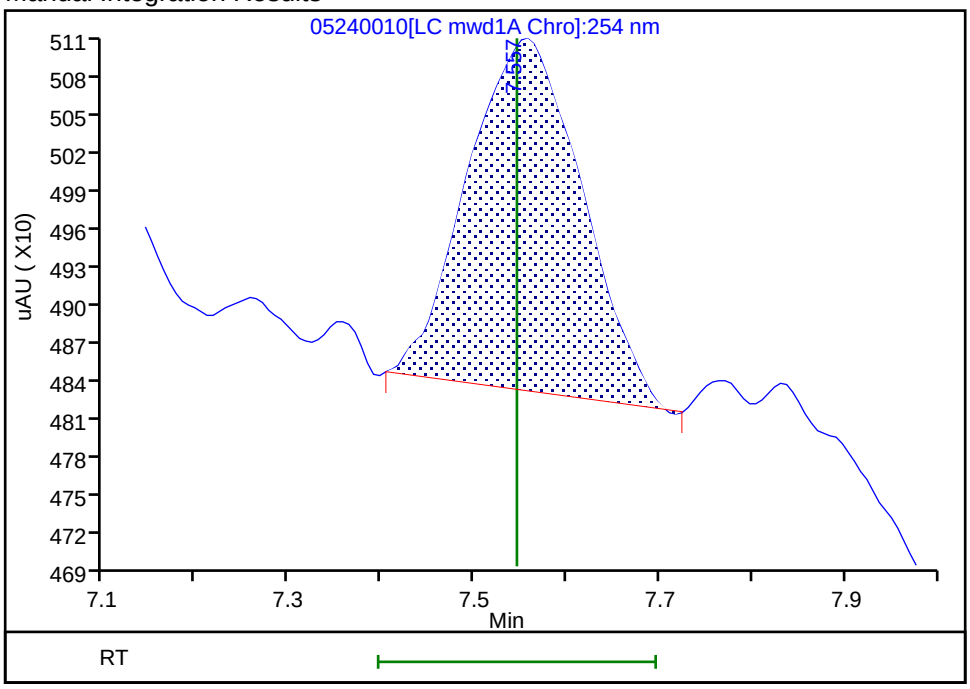
Processing Integration Results

RT: 7.56
Area: 7992
Amount: 0.030473
Amount Units: ug/ml



Manual Integration Results

RT: 7.56
Area: 2363
Amount: 0.009010
Amount Units: ug/ml



Reviewer: K8YG, 25-May-2023 08:41:04 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176674-1

SDG No.:

Client Sample ID: FBQmw-173-230401-GW-R | Lab Sample ID: 280-176674-7

Matrix: Water | Lab File ID: 05190047.D

Analysis Method: 8330B | Date Collected: 05/17/2023 11:47

Extraction Method: 3535 | Date Extracted: 05/19/2023 13:39

Sample wt/vol: 483.2(mL) | Date Analyzed: 05/20/2023 04:25

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.: 613168 | 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
118-96-7	2,4,6-Trinitrotoluene	0.11		0.11	0.10	0.047
6629-29-4	2,4-diamino-6-nitrotoluene	0.93	U	1.0	0.93	0.45
121-14-2	2,4-Dinitrotoluene	0.083	U	0.10	0.083	0.028
59229-75-3	2,6-diamino-4-nitrotoluene	0.93	U	1.0	0.93	0.23
606-20-2	2,6-Dinitrotoluene	0.083	U	0.10	0.083	0.041
35572-78-2	2-Amino-4,6-dinitrotoluene	1.2		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	0.15	J	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	1.5		0.16	0.12	0.060
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	0.091
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 M	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 M	0.52	0.26	0.082

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	91	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\05190047.D
Lims ID: 280-176674-C-7-A
Client ID: FBQmw-173-230401-GW-R
Sample Type: Client
Inject. Date: 20-May-2023 04:25:37 ALS Bottle#: 47 Worklist Smp#: 47
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-176674-C-7-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 20-May-2023 11:22:13 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: CTX1663

First Level Reviewer: LV5D Date: 20-May-2023 11:06:24

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 TNX	1		6.430			ND	U
	2 2,6-diamino-4-nitrotoluene	1		6.431			ND	
	4 HMX	1		6.550			ND	
	5 2,4-diamino-6-nitrotoluene	1		6.618			ND	
	6 DNX	1		6.757			ND	
	7 MNX	1		7.190			ND	
	8 RDX	1		7.570			ND	U
$	10 1,2-Dinitrobenzene	1	8.527	8.523	0.004	23003	0.1821	M
	11 1,3,5-Trinitrobenzene	1		8.650			ND	
	12 1,3-Dinitrobenzene	1	9.273	9.277	-0.004	1111	0.003774	7M
	13 Nitrobenzene	1		9.643			ND	7
	14 3,5-Dinitroaniline	1	9.887	9.883	0.004	3120	0.0143	
	15 Tetryl	1		10.017			ND	
	16 Nitroglycerin	2		10.470			ND	
	17 2,4,6-Trinitrotoluene	1	10.907	10.910	-0.003	2156	0.0102	
	18 4-Amino-2,6-dinitrotoluene	1	11.113	11.117	-0.004	22844	0.1474	
	19 2-Amino-4,6-dinitrotoluene	1	11.367	11.370	-0.003	23618	0.1173	
	20 2,6-Dinitrotoluene	1		11.517			ND	
	21 2,4-Dinitrotoluene	1		11.683			ND	7
	22 o-Nitrotoluene	1		12.517			ND	
	23 p-Nitrotoluene	1		12.937			ND	
	24 m-Nitrotoluene	1		13.517			ND	
	25 PETN	2		14.697			ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

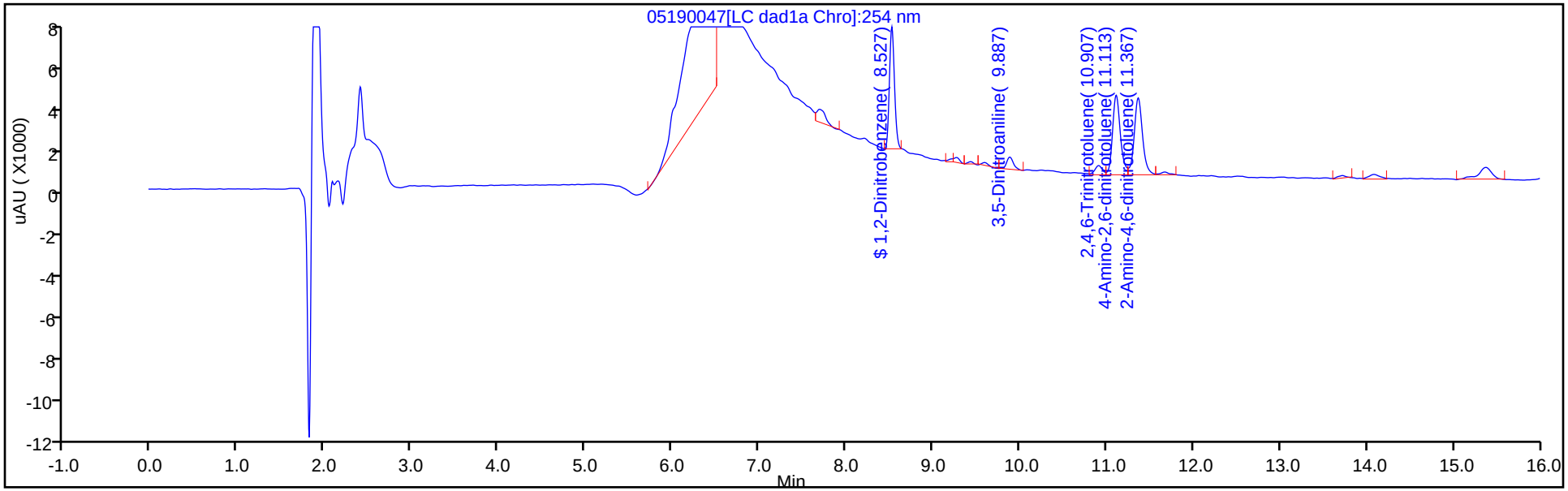
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 20-May-2023 11:22:14 Chrom Revision: 2.3 16-May-2023 16:37:30

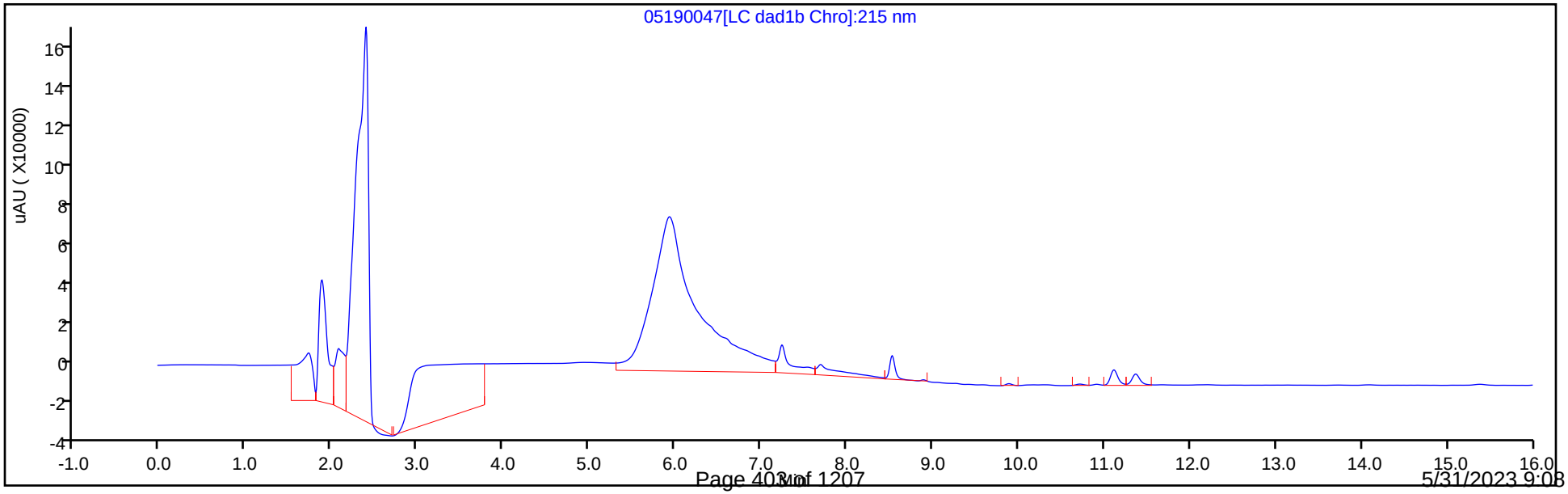
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190047.d				
Injection Date:	20-May-2023 04:25:37	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-176674-C-7-A	Lab Sample ID:	280-176674-7	Worklist Smp#:	47
Client ID:	FBQmw-173-230401-GW-R				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	47
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\05190047.D				
Lims ID:	280-176674-C-7-A				
Client ID:	FBQmw-173-230401-GW-R				
Sample Type:	Client				
Inject. Date:	20-May-2023 04:25:37	ALS Bottle#:	47	Worklist Smp#:	47
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-176674-C-7-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	20-May-2023 11:22:13	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:	CTX1663				

First Level Reviewer: LV5D Date: 20-May-2023 11:06:24

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1821	91.06

Eurofins Denver

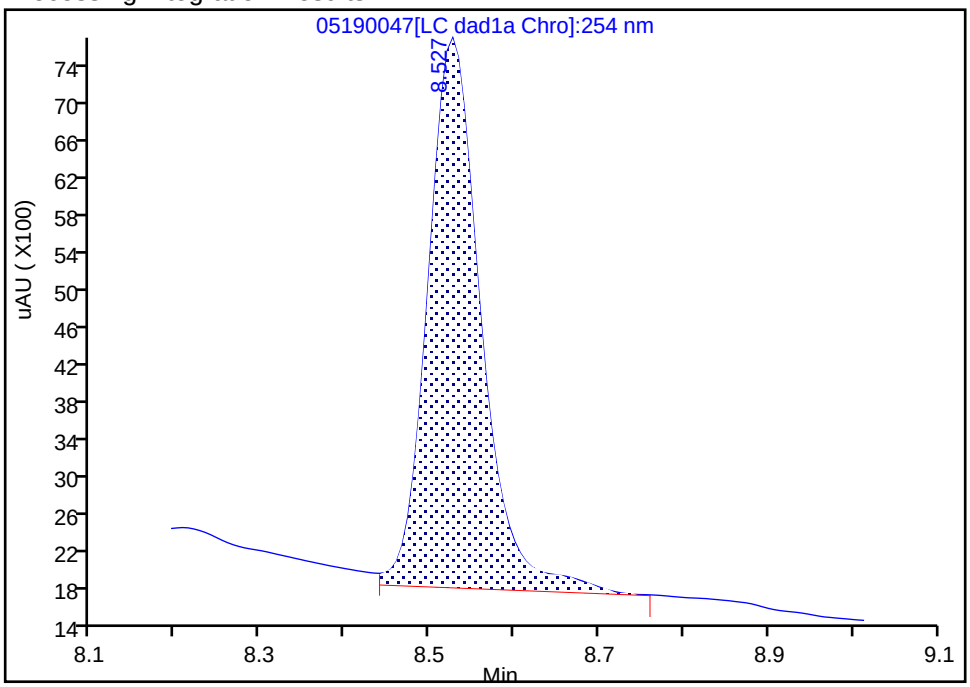
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190047.d				
Injection Date:	20-May-2023 04:25:37	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176674-C-7-A	Lab Sample ID:	280-176674-7		
Client ID:	FBQmw-173-230401-GW-R				
Operator ID:	JZ/JG	ALS Bottle#:	47	Worklist Smp#:	47
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

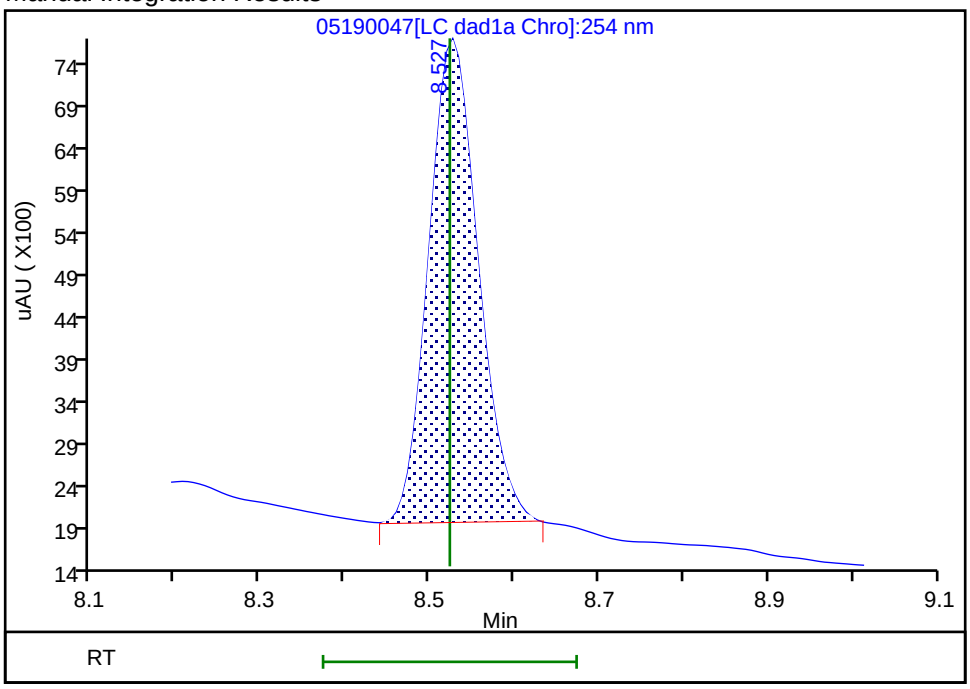
Processing Integration Results

RT: 8.53
Area: 25403
Amount: 0.201118
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 23003
Amount: 0.182117
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 11:06:13 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

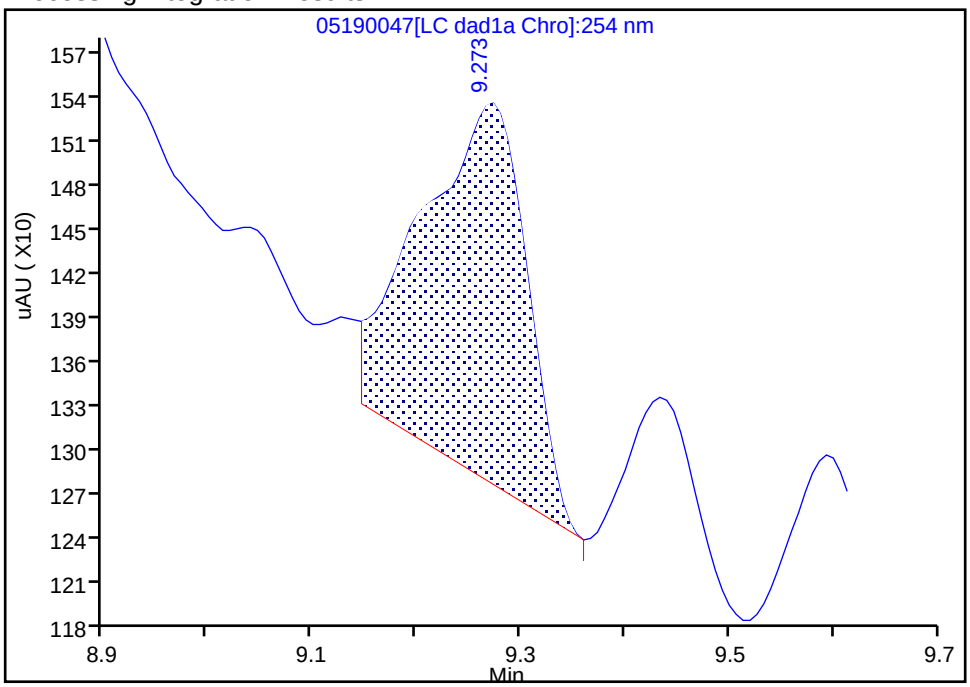
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190047.d				
Injection Date:	20-May-2023 04:25:37	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176674-C-7-A	Lab Sample ID:	280-176674-7		
Client ID:	FBQmw-173-230401-GW-R				
Operator ID:	JZ/JG	ALS Bottle#:	47	Worklist Smp#:	47
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

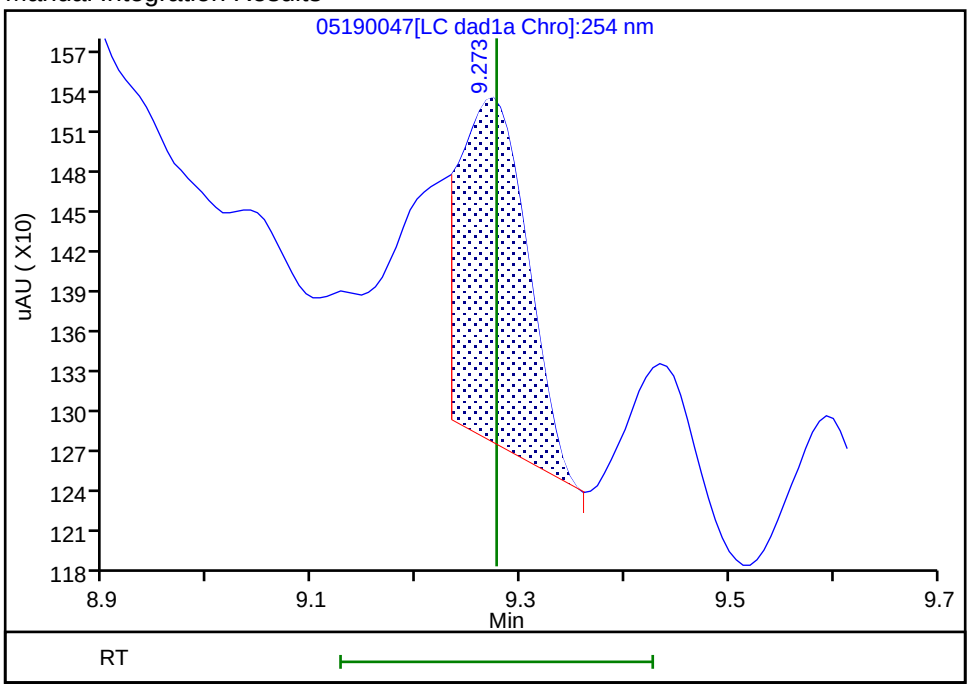
Processing Integration Results

RT: 9.27
Area: 1740
Amount: 0.005910
Amount Units: ug/mL



Manual Integration Results

RT: 9.27
Area: 1111
Amount: 0.003774
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 11:06:19 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

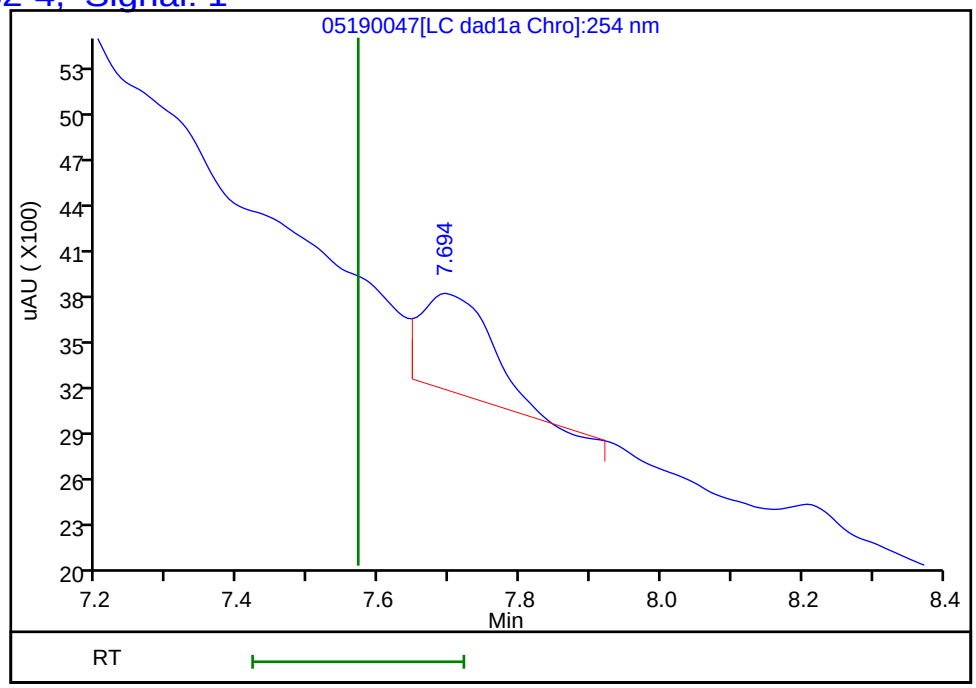
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190047.d				
Injection Date:	20-May-2023 04:25:37	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176674-C-7-A	Lab Sample ID:	280-176674-7		
Client ID:	FBQmw-173-230401-GW-R				
Operator ID:	JZ/JG	ALS Bottle#:	47	Worklist Smp#:	47
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4, Signal: 1

RT: 7.69
Response: 4608
Amount: 0.043316



Reviewer: LV5D, 20-May-2023 11:06:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

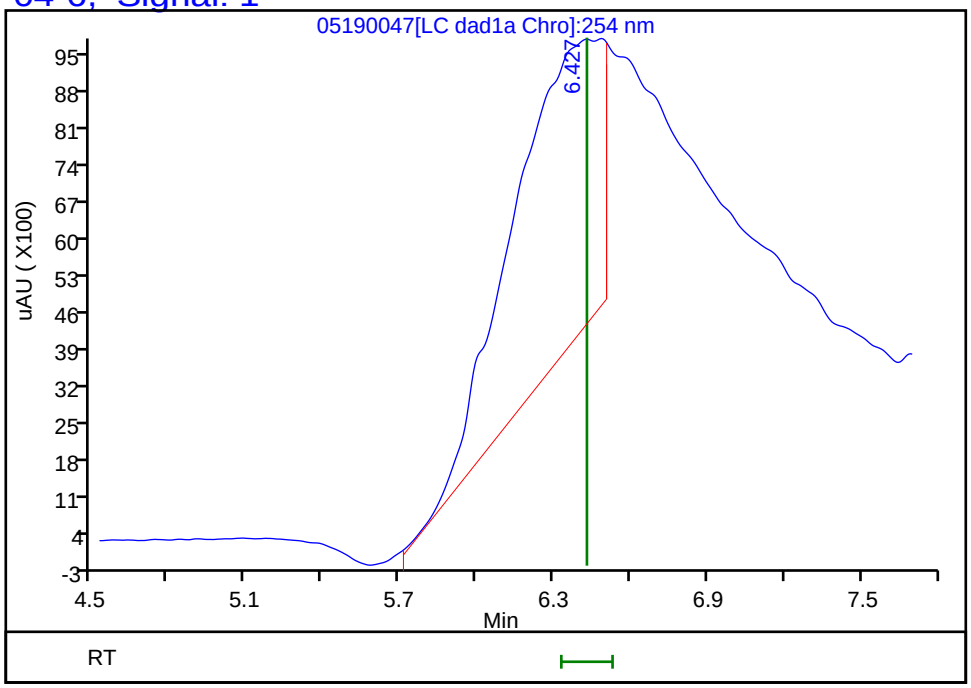
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190047.d
Injection Date: 20-May-2023 04:25:37 Instrument ID: CHHPLC_X3
Lims ID: 280-176674-C-7-A Lab Sample ID: 280-176674-7
Client ID: FBQmw-173-230401-GW-R
Operator ID: JZ/JG ALS Bottle#: 47 Worklist Smp#: 47
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

3 TNX, CAS: 13980-04-6, Signal: 1

RT: 6.43
Response: 140600
Amount: 0.711224



Reviewer: LV5D, 20-May-2023 11:06:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176674-1

SDG No.:

Client Sample ID: FBQmw-173-230401-GW-R | Lab Sample ID: 280-176674-7

Matrix: Water | Lab File ID: 05200019.D

Analysis Method: 8330B | Date Collected: 05/17/2023 11:47

Extraction Method: 3535 | Date Extracted: 05/19/2023 13:39

Sample wt/vol: 483.2(mL) | Date Analyzed: 05/21/2023 00:31

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.: 613238 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	85		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230520-121670.b\05200019.D
Lims ID: 280-176674-C-7-A
Client ID: FBQmw-173-230401-GW-R
Sample Type: Client
Inject. Date: 21-May-2023 00:31:28 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-176674-C-7-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230520-121670.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 23-May-2023 13:12:40 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: CTX1626

First Level Reviewer: K8YG Date: 22-May-2023 11:24:46

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1		4.214			ND	7
	2 2,4-diamino-6-nitrotoluene	1		4.767			ND	
	3 TNX	1		5.221			ND	
	4 DNX	1		6.067			ND	
	5 HMX	1		6.758			ND	
	6 MNX	1		7.567			ND	
	8 RDX	1		9.005			ND	
	9 Nitrobenzene	1		11.531			ND	
$	10 1,2-Dinitrobenzene	1	12.484	12.511	-0.027	47511	0.1693	
	11 3,5-Dinitroaniline	1	14.344	14.378	-0.034	6984	0.0143	
	12 1,3-Dinitrobenzene	1		14.638			ND	
	13 Nitroglycerin	2		15.158			ND	
	14 o-Nitrotoluene	1	15.711	15.718	-0.007	2921	0.0118	
	16 p-Nitrotoluene	1		15.945			ND	
	17 4-Amino-2,6-dinitrotoluene	1	16.431	16.505	-0.074	49909	0.1696	
	18 m-Nitrotoluene	1		16.798			ND	
	19 2-Amino-4,6-dinitrotoluene	1	17.244	17.351	-0.107	54929	0.1284	
	20 1,3,5-Trinitrobenzene	1		17.398			ND	
	21 2,6-Dinitrotoluene	1		18.605			ND	U
	22 2,4-Dinitrotoluene	1		19.051			ND	7
	23 Tetryl	1		22.331			ND	
	24 2,4,6-Trinitrotoluene	1	23.077	23.125	-0.048	4488	0.0102	
	25 PETN	2		24.365			ND	

QC Flag Legend

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

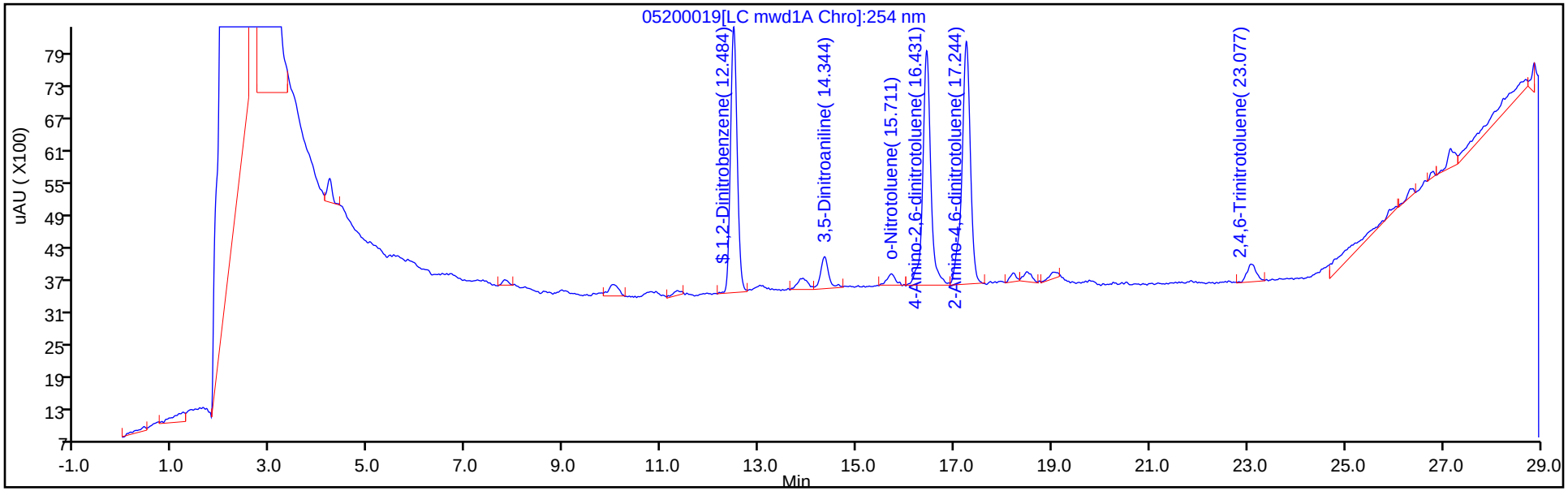
Report Date: 23-May-2023 13:12:53 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

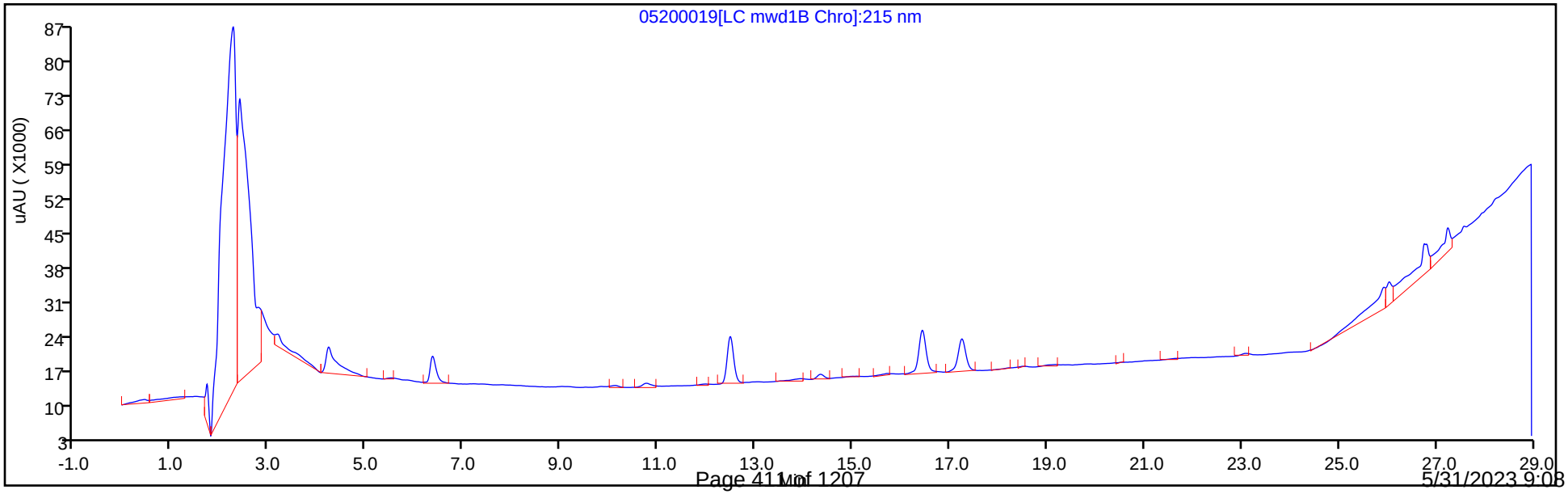
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230520-121670.b\05200019.D

Injection Date:	21-May-2023 00:31:28	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	280-176674-C-7-A	Lab Sample ID:	280-176674-7	Worklist Smp#:	19
Client ID:	FBQmw-173-230401-GW-R				
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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230520-121670.b\05200019.D				
Lims ID:	280-176674-C-7-A				
Client ID:	FBQmw-173-230401-GW-R				
Sample Type:	Client				
Inject. Date:	21-May-2023 00:31:28	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-176674-C-7-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230520-121670.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	23-May-2023 13:12:40	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:	CTX1626				
First Level Reviewer: K8YG		Date:	22-May-2023 11:24:46		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1693	84.63

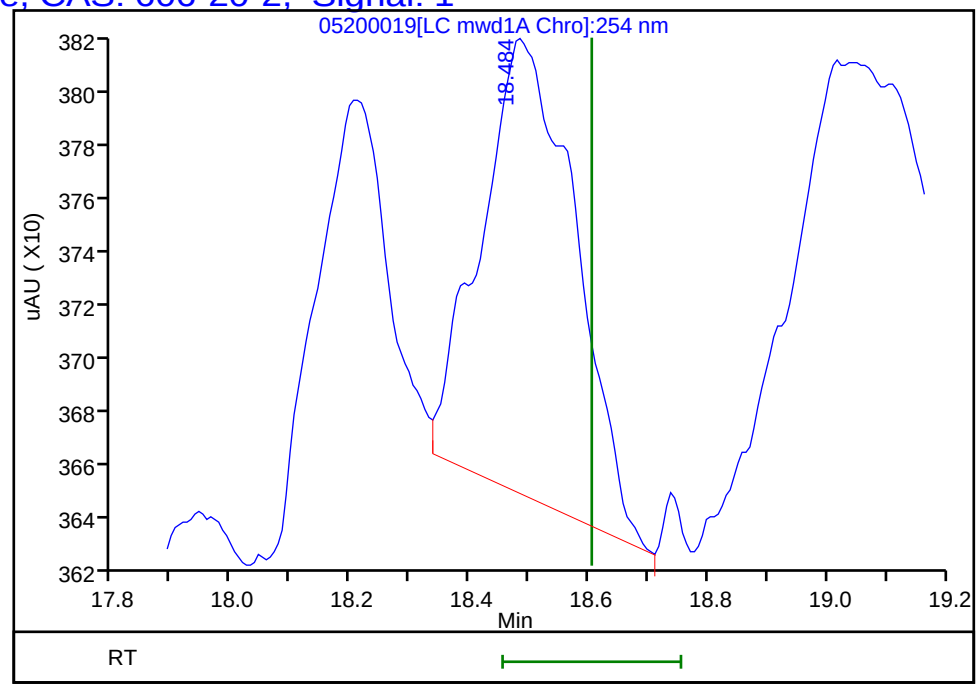
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230520-121670.b\05200019.D				
Injection Date:	21-May-2023 00:31:28	Instrument ID:	CHHPLC_X5		
Lims ID:	280-176674-C-7-A	Lab Sample ID:	280-176674-7		
Client ID:	FBQmw-173-230401-GW-R				
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		

21 2,6-Dinitrotoluene, CAS: 606-20-2, Signal: 1

RT: 18.48
Response: 1888
Amount: 0.006473



Reviewer: LV5D, 23-May-2023 13:11:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176674-1

SDG No.:

Client Sample ID: FBQmw-175-230401-GW-R | Lab Sample ID: 280-176674-10

Matrix: Water | Lab File ID: 05190048.D

Analysis Method: 8330B | Date Collected: 05/17/2023 08:58

Extraction Method: 3535 | Date Extracted: 05/19/2023 13:39

Sample wt/vol: 497.5(mL) | Date Analyzed: 05/20/2023 04:48

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.: 613168 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U J1	0.21	0.20	0.085
99-65-0	1,3-Dinitrobenzene	0.10	U J1	0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	0.10	U J1	0.11	0.10	0.045
6629-29-4	2,4-diamino-6-nitrotoluene	0.90	U J1	1.0	0.90	0.44
121-14-2	2,4-Dinitrotoluene	0.080	U J1	0.10	0.080	0.028
59229-75-3	2,6-diamino-4-nitrotoluene	0.90	U J1	1.0	0.90	0.22
606-20-2	2,6-Dinitrotoluene	0.080	U J1	0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U J1	0.11	0.10	0.051
88-72-2	2-Nitrotoluene	0.20	U J1	0.21	0.20	0.086
618-87-1	3,5-Dinitroaniline	0.30	U J1	0.40	0.30	0.13
99-08-1	3-Nitrotoluene	0.35	U J1	0.40	0.35	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U J1	0.15	0.12	0.058
99-99-0	4-Nitrotoluene	0.40	U J1	0.41	0.40	0.10
80251-29-2	DNX	0.25	U J1	0.50	0.25	0.098
2691-41-0	HMX	0.20	U	0.21	0.20	0.088
5755-27-1	MNX	0.29	U	0.50	0.29	0.093
98-95-3	Nitrobenzene	0.20	U J1	0.21	0.20	0.091
55-63-0	Nitroglycerin	2.0	U	2.1	2.0	0.93
78-11-5	PETN	1.0	U J1	1.1	1.0	0.45
121-82-4	RDX	0.20	U M J1	0.21	0.20	0.052
479-45-8	Tetryl	0.10	U J1	0.11	0.10	0.032
13980-04-6	TNX	0.25	U M	0.50	0.25	0.080

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	95	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\05190048.D
Lims ID: 280-176674-A-10-A
Client ID: FBQmw-175-230401-GW-R
Sample Type: Client
Inject. Date: 20-May-2023 04:48:36 ALS Bottle#: 48 Worklist Smp#: 48
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-176674-A-10-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 20-May-2023 11:22:13 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: CTX1663

First Level Reviewer: LV5D Date: 20-May-2023 11:14:43

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	1 Triamine Trinitrobenzene	1		2.444			ND	
	3 TNX	1		6.430			ND	U
	2 2,6-diamino-4-nitrotoluene	1		6.431			ND	
	4 HMX	1		6.550			ND	
	5 2,4-diamino-6-nitrotoluene	1		6.618			ND	
	6 DNX	1		6.757			ND	
	7 MNX	1		7.190			ND	
	8 RDX	1		7.570			ND	U
	9 2,4,6-Trinitrophenol	1		7.963			ND	
$	10 1,2-Dinitrobenzene	1	8.527	8.523	0.004	23925	0.1894	M
	11 1,3,5-Trinitrobenzene	1		8.650			ND	
	12 1,3-Dinitrobenzene	1		9.277			ND	
	13 Nitrobenzene	1		9.643			ND	
	14 3,5-Dinitroaniline	1		9.883			ND	
	15 Tetryl	1		10.017			ND	
	16 Nitroglycerin	2		10.470			ND	
	17 2,4,6-Trinitrotoluene	1		10.910			ND	
	18 4-Amino-2,6-dinitrotoluene	1		11.117			ND	
	19 2-Amino-4,6-dinitrotoluene	1		11.370			ND	
	20 2,6-Dinitrotoluene	1		11.517			ND	
	21 2,4-Dinitrotoluene	1		11.683			ND	
	22 o-Nitrotoluene	1		12.517			ND	
	23 p-Nitrotoluene	1		12.937			ND	
	24 m-Nitrotoluene	1		13.517			ND	
	25 PETN	2		14.697			ND	
	26 Ammonium Picrate	1		0.000			ND	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
U - Marked Undetected

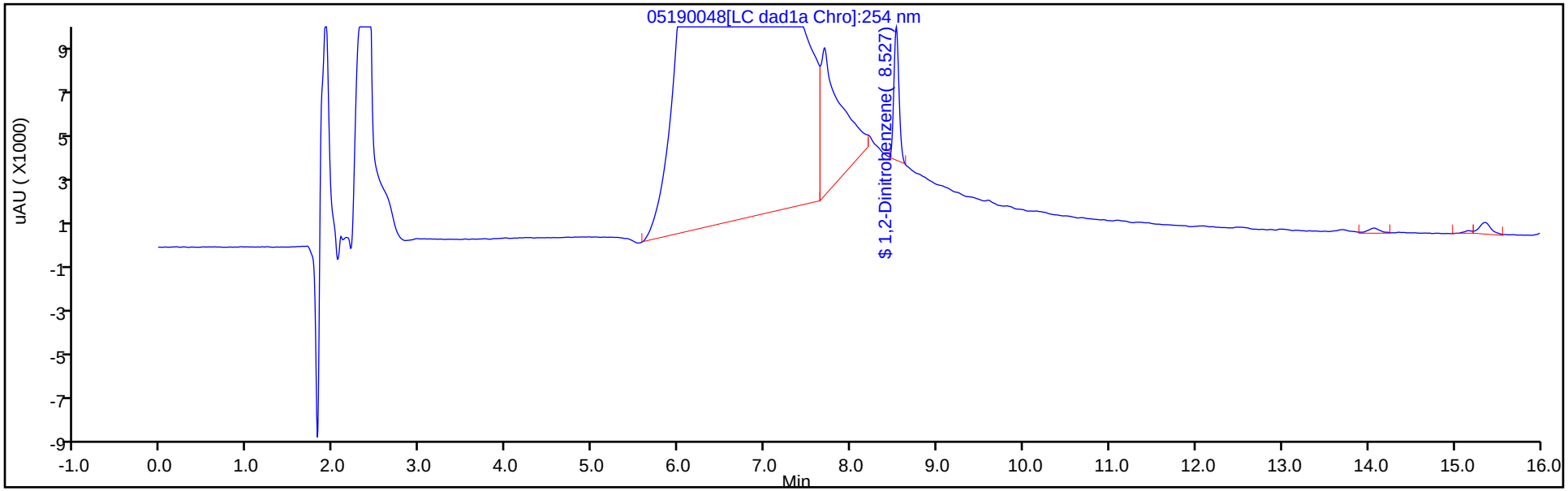
Report Date: 20-May-2023 11:22:14 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

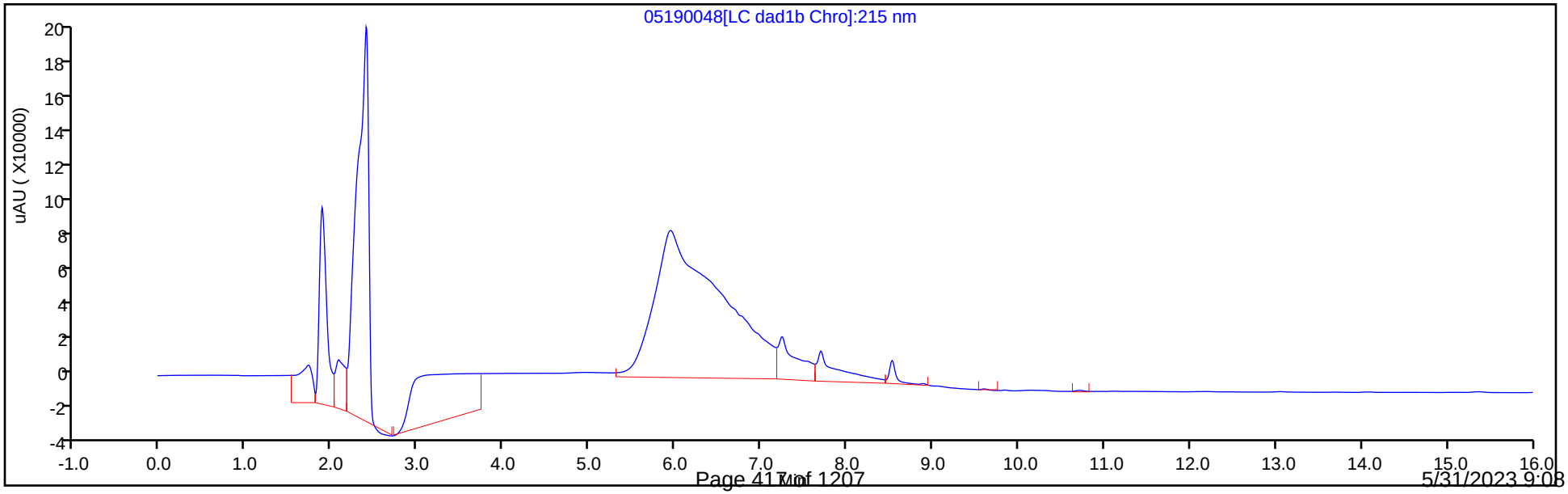
Data File: \\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190048.d

Injection Date:	20-May-2023 04:48:36	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-176674-A-10-A	Lab Sample ID:	280-176674-10	Worklist Smp#:	48
Client ID:	FBQmw-175-230401-GW-R				
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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\05190048.D				
Lims ID:	280-176674-A-10-A				
Client ID:	FBQmw-175-230401-GW-R				
Sample Type:	Client				
Inject. Date:	20-May-2023 04:48:36	ALS Bottle#:	48	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-176674-A-10-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	20-May-2023 11:22:13	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:	CTX1663				
First Level Reviewer: LV5D		Date:	20-May-2023 11:14:43		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1894	94.71

Eurofins Denver

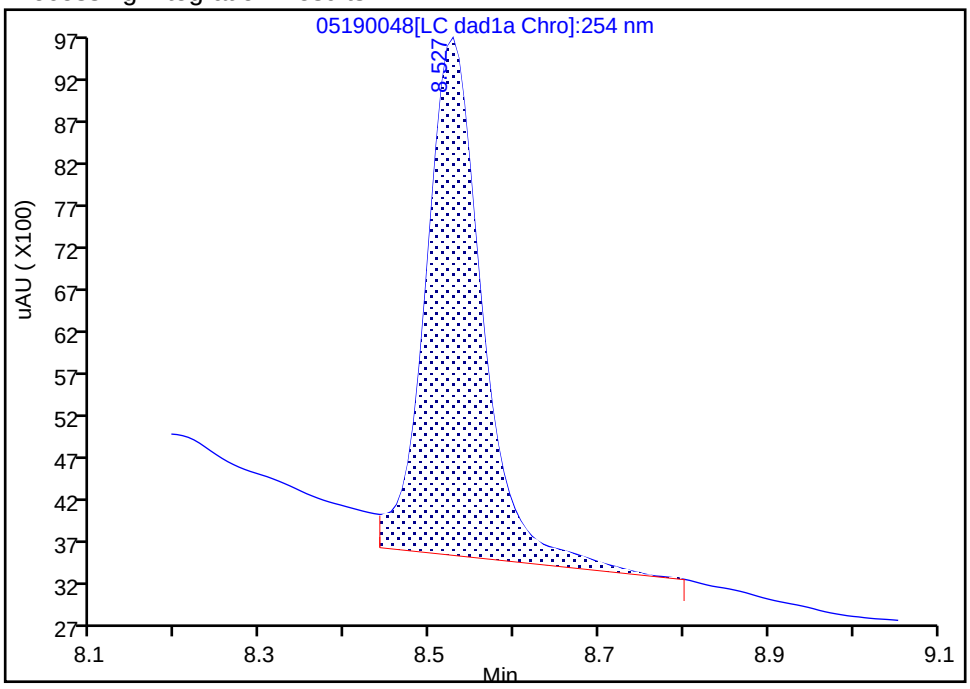
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190048.d				
Injection Date:	20-May-2023 04:48:36	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176674-A-10-A	Lab Sample ID:	280-176674-10		
Client ID:	FBQmw-175-230401-GW-R				
Operator ID:	JZ/JG	ALS Bottle#:	48	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

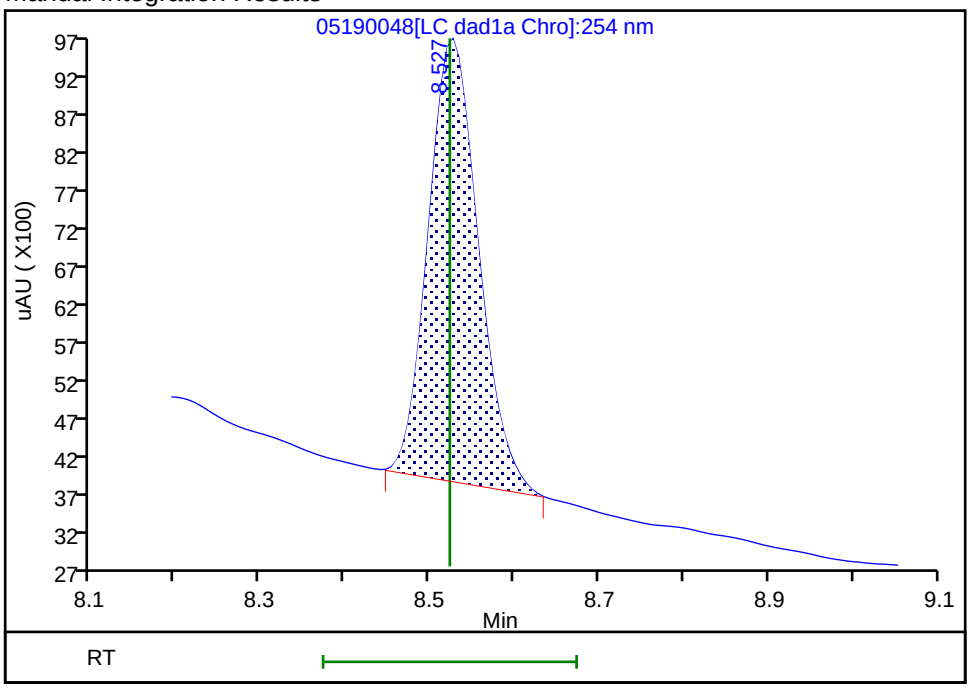
Processing Integration Results

RT: 8.53
Area: 28479
Amount: 0.225471
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 23925
Amount: 0.189417
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 11:14:42 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

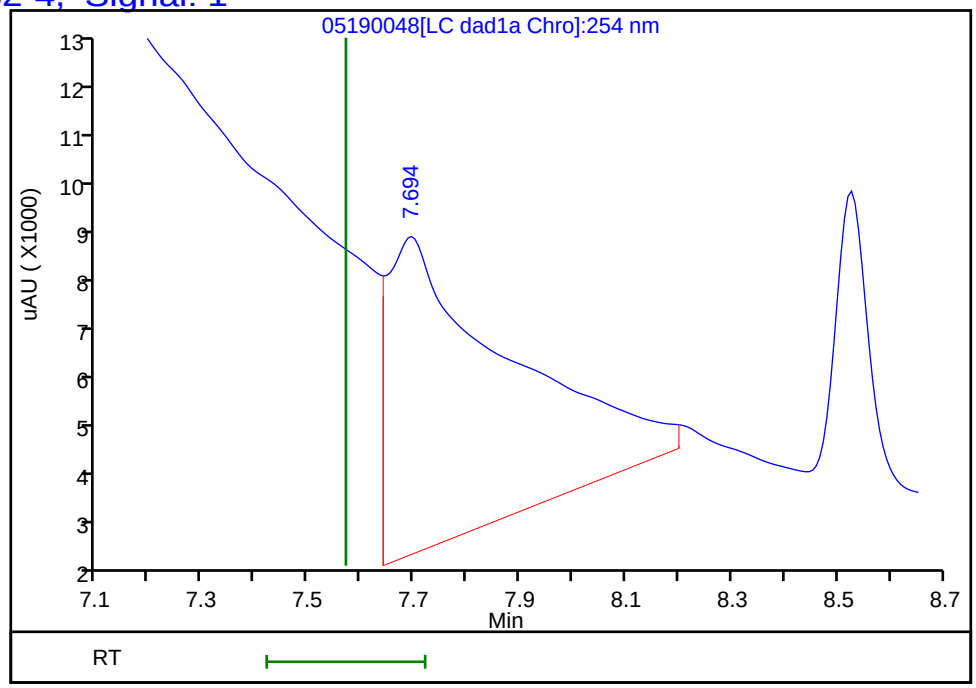
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190048.d				
Injection Date:	20-May-2023 04:48:36	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176674-A-10-A	Lab Sample ID:	280-176674-10		
Client ID:	FBQmw-175-230401-GW-R				
Operator ID:	JZ/JG	ALS Bottle#:	48	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4, Signal: 1

RT: 7.69
Response: 101948
Amount: 0.958340



Reviewer: LV5D, 20-May-2023 11:14:43
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

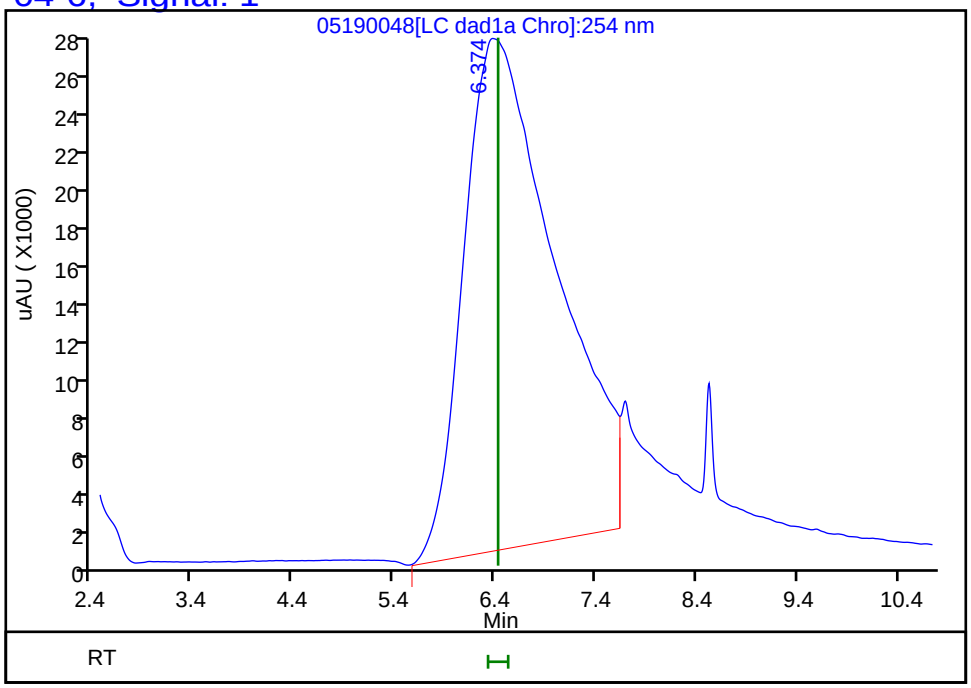
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190048.d				
Injection Date:	20-May-2023 04:48:36	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176674-A-10-A	Lab Sample ID:	280-176674-10		
Client ID:	FBQmw-175-230401-GW-R				
Operator ID:	JZ/JG	ALS Bottle#:	48	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6, Signal: 1

RT: 6.37
Response: 1691772
Amount: 8.557817



Reviewer: LV5D, 20-May-2023 11:14:43
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176674-1

SDG No.:

Client Sample ID: FBQmw-175-230402-GW-R | Lab Sample ID: 280-176674-11

Matrix: Water | Lab File ID: 05190053.D

Analysis Method: 8330B | Date Collected: 05/17/2023 08:58

Extraction Method: 3535 | Date Extracted: 05/19/2023 13:39

Sample wt/vol: 497(mL) | Date Analyzed: 05/20/2023 06:43

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.: 613168 | 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	0.085
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	0.91	U	1.0	0.91	0.44
121-14-2	2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.028
59229-75-3	2,6-diamino-4-nitrotoluene	0.91	U	1.0	0.91	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 M	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	0.098
2691-41-0	HMX	0.20	U	0.21	0.20	0.088
5755-27-1	MNX	0.29	U	0.50	0.29	0.093
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.092
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	0.20	U M	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 M	0.50	0.25	0.080

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	93	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\05190053.D
Lims ID: 280-176674-A-11-A
Client ID: FBQmw-175-230402-GW-R
Sample Type: Client
Inject. Date: 20-May-2023 06:43:26 ALS Bottle#: 53 Worklist Smp#: 53
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-176674-A-11-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 20-May-2023 11:22:13 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: CTX1663

First Level Reviewer: LV5D Date: 20-May-2023 11:16:13

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 TNX	1		6.430			ND	U
	2 2,6-diamino-4-nitrotoluene	1		6.431			ND	
	4 HMX	1		6.550			ND	
	5 2,4-diamino-6-nitrotoluene	1		6.618			ND	
	6 DNX	1		6.757			ND	
	7 MNX	1		7.190			ND	
	8 RDX	1		7.570			ND	U
$	10 1,2-Dinitrobenzene	1	8.530	8.523	0.007	23513	0.1862	M
	11 1,3,5-Trinitrobenzene	1		8.650			ND	
	12 1,3-Dinitrobenzene	1		9.277			ND	
	13 Nitrobenzene	1		9.643			ND	
	14 3,5-Dinitroaniline	1		9.883			ND	
	15 Tetryl	1		10.017			ND	
	16 Nitroglycerin	2		10.470			ND	
	17 2,4,6-Trinitrotoluene	1		10.910			ND	
	18 4-Amino-2,6-dinitrotoluene	1		11.117			ND	
	19 2-Amino-4,6-dinitrotoluene	1		11.370			ND	
	20 2,6-Dinitrotoluene	1		11.517			ND	
	21 2,4-Dinitrotoluene	1		11.683			ND	
	22 o-Nitrotoluene	1	12.503	12.517	-0.014	881	0.006888	7M
	23 p-Nitrotoluene	1		12.937			ND	
	24 m-Nitrotoluene	1		13.517			ND	
	25 PETN	2		14.697			ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

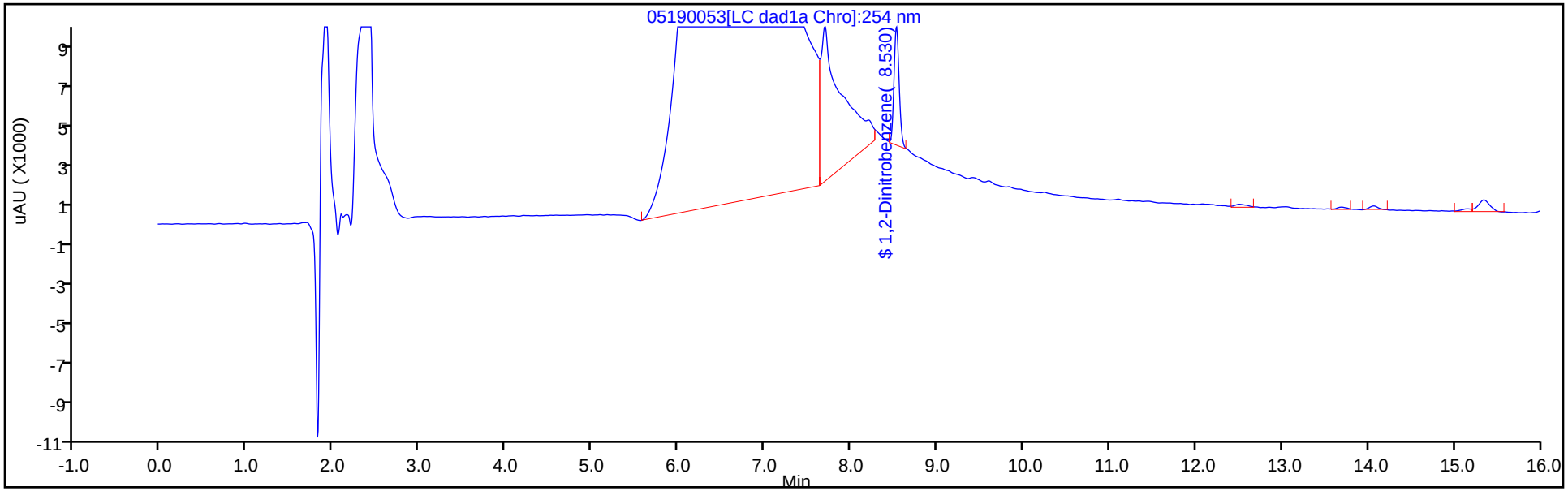
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 20-May-2023 11:22:17 Chrom Revision: 2.3 16-May-2023 16:37:30

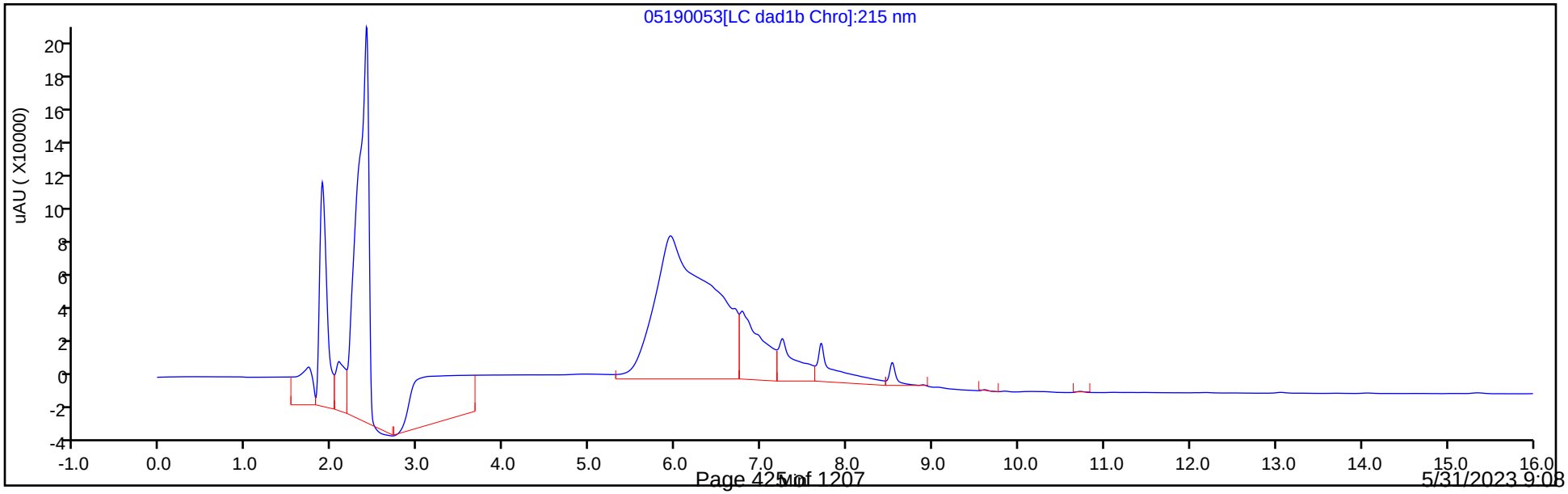
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190053.d				
Injection Date:	20-May-2023 06:43:26	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-176674-A-11-A	Lab Sample ID:	280-176674-11	Worklist Smp#:	53
Client ID:	FBQmw-175-230402-GW-R				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	53
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\05190053.D				
Lims ID:	280-176674-A-11-A				
Client ID:	FBQmw-175-230402-GW-R				
Sample Type:	Client				
Inject. Date:	20-May-2023 06:43:26	ALS Bottle#:	53	Worklist Smp#:	53
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-176674-A-11-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	20-May-2023 11:22:13	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:	CTX1663				

First Level Reviewer: LV5D Date: 20-May-2023 11:16:13

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1862	93.08

Eurofins Denver

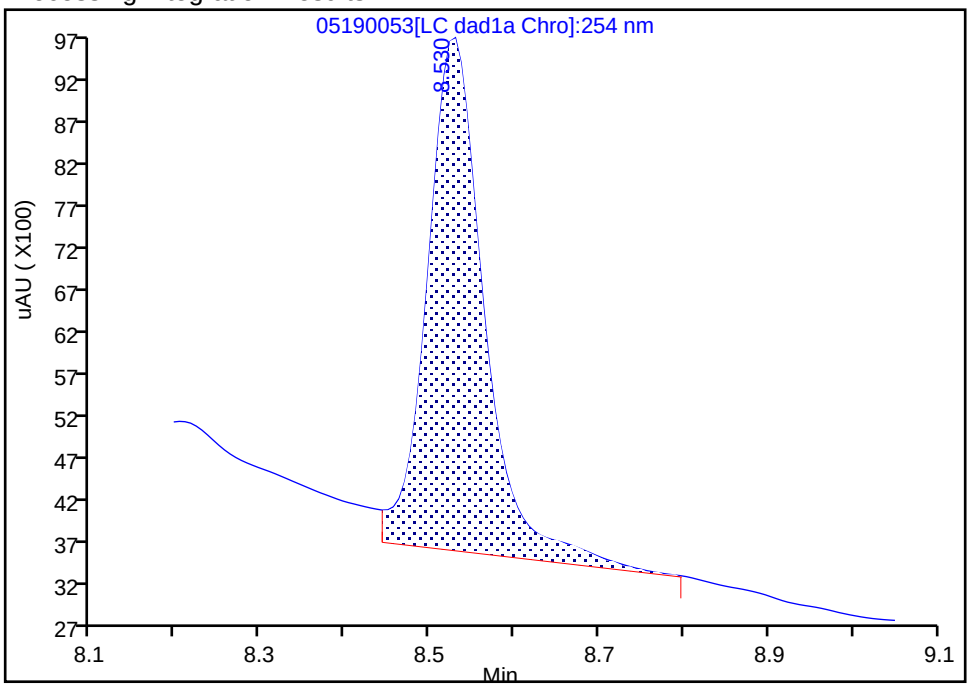
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190053.d				
Injection Date:	20-May-2023 06:43:26	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176674-A-11-A	Lab Sample ID:	280-176674-11		
Client ID:	FBQmw-175-230402-GW-R				
Operator ID:	JZ/JG	ALS Bottle#:	53	Worklist Smp#:	53
Injection Vol:	100.0 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

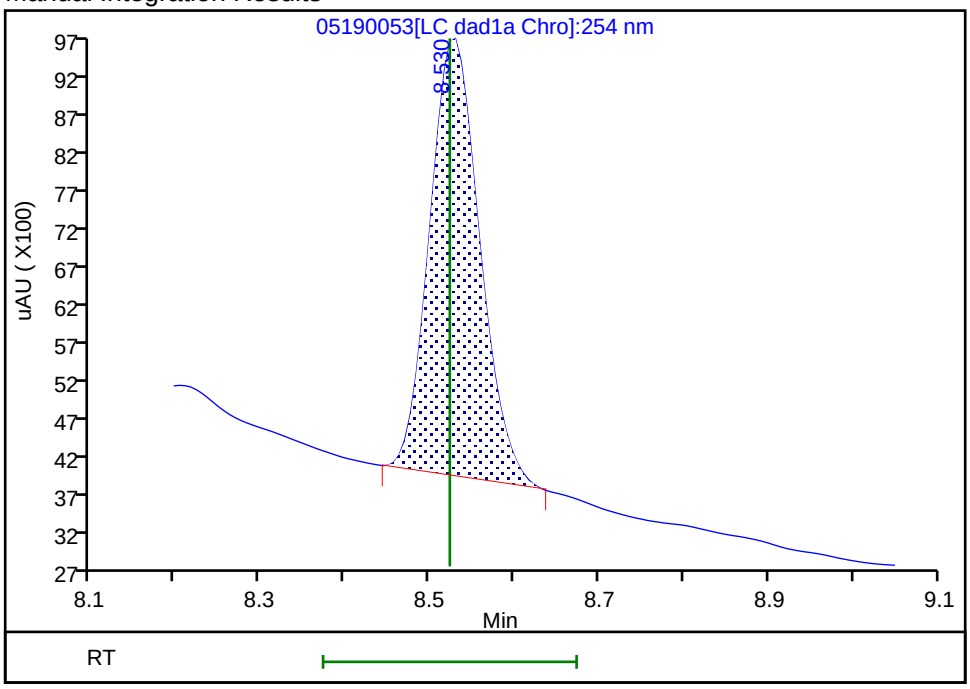
Processing Integration Results

RT: 8.53
Area: 28365
Amount: 0.224569
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 23513
Amount: 0.186155
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 11:16:08 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

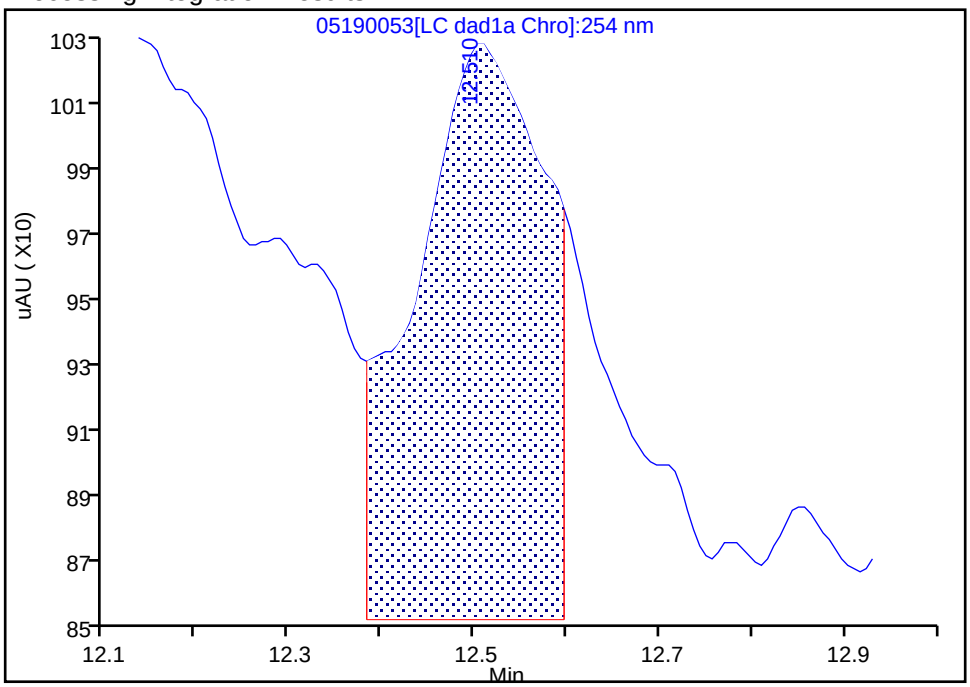
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190053.d				
Injection Date:	20-May-2023 06:43:26	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176674-A-11-A	Lab Sample ID:	280-176674-11		
Client ID:	FBQmw-175-230402-GW-R				
Operator ID:	JZ/JG	ALS Bottle#:	53	Worklist Smp#:	53
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

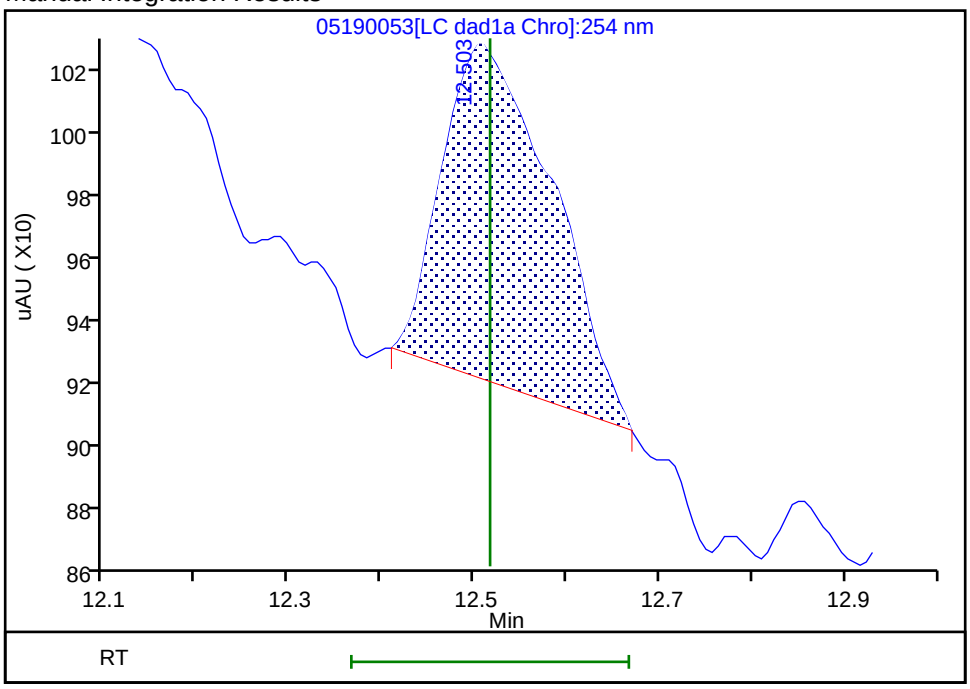
Processing Integration Results

RT: 12.51
Area: 1718
Amount: 0.013433
Amount Units: ug/mL



Manual Integration Results

RT: 12.50
Area: 881
Amount: 0.006888
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 11:16:12 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

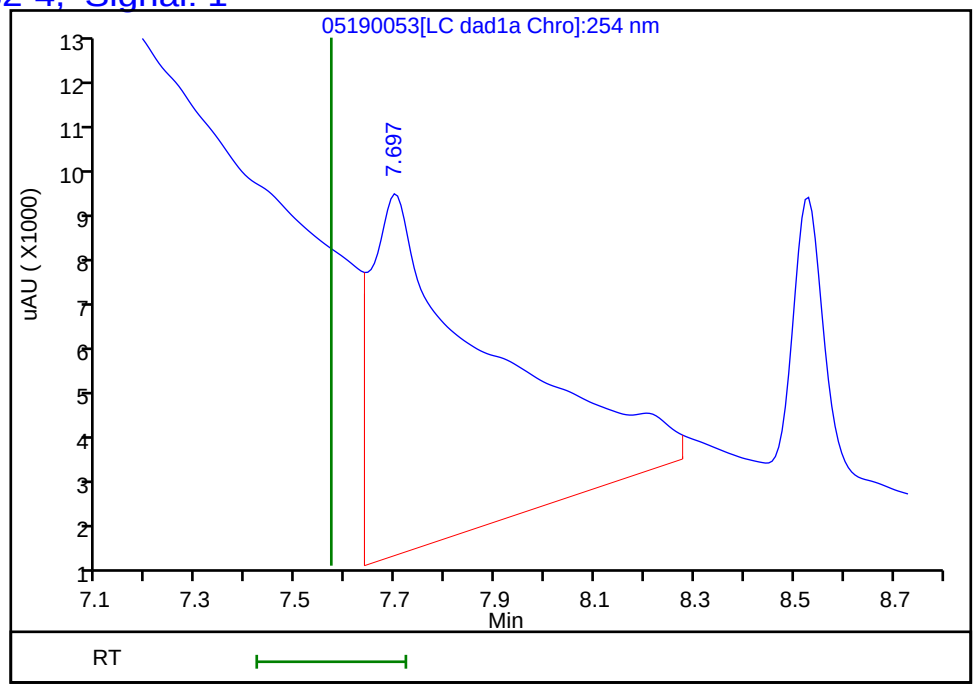
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190053.d				
Injection Date:	20-May-2023 06:43:26	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176674-A-11-A	Lab Sample ID:	280-176674-11		
Client ID:	FBQmw-175-230402-GW-R				
Operator ID:	JZ/JG	ALS Bottle#:	53	Worklist Smp#:	53
Injection Vol:	100.0 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

RT: 7.70
Response: 127518
Amount: 1.198705



Reviewer: LV5D, 20-May-2023 11:16:13
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

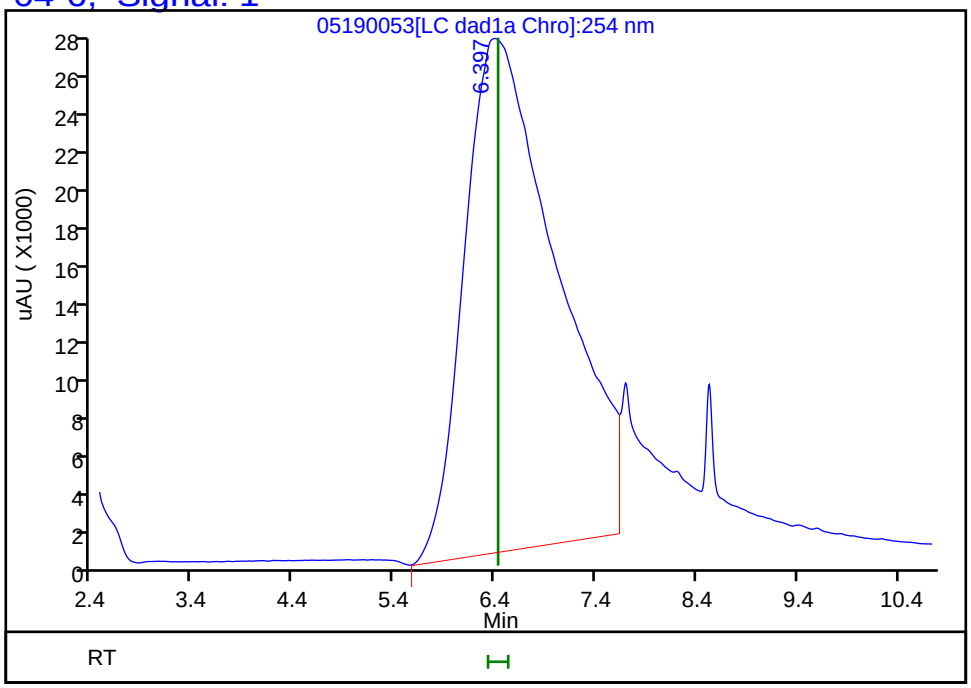
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190053.d
Injection Date: 20-May-2023 06:43:26 Instrument ID: CHHPLC_X3
Lims ID: 280-176674-A-11-A Lab Sample ID: 280-176674-11
Client ID: FBQmw-175-230402-GW-R
Operator ID: JZ/JG ALS Bottle#: 53 Worklist Smp#: 53
Injection Vol: 100.0 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

RT: 6.40
Response: 1704684
Amount: 8.623132



Reviewer: LV5D, 20-May-2023 11:16:13
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.: 280-176674-1 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.: 280-176674-1 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.: 280-176674-1 Analy Batch No.: 599427

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/17/2023 00:33 Calibration End Date: 01/17/2023 03:16 Calibration ID: 75939

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-599427/18	01160046.D
Level 2	IC 280-599427/17	01160045.D
Level 3	IC 280-599427/16	01160044.D
Level 4	IC 280-599427/15	01160043.D
Level 5	IC 280-599427/14	01160042.D
Level 6	IC 280-599427/13	01160041.D
Level 7	IC 280-599427/12	01160040.D
Level 8	IC 280-599427/11	01160039.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
2,6-diamino-4-nitrotoluene	Lin2	5326 155237	13039 234891	24702 556860	56309	94399	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
2,4-diamino-6-nitrotoluene	Ave	3042 95423	8175 148050	14908 341365	34670	59001	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
3,5-Dinitroaniline	Lin2	4397 169039	12600 245164	24604 610953	59459	96632	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400

Curve Type Legend

Ave = Average
Lin2 = Linear 1/conc^2

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160039.D
Lims ID: IC ADD 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 17-Jan-2023 00:33:01 ALS Bottle#: 42 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICADD8
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub10

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jan-2023 12:50:38 Calib Date: 17-Jan-2023 06:47:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160055.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: NQH7 Date: 17-Jan-2023 08:20:12

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1	6.432	6.455	-0.023	556860	2.50	2.42	M
5 2,4-diamino-6-nitrotoluene	1	6.618	6.769	-0.151	341365	2.50	2.33	M
14 3,5-Dinitroaniline	1	9.798	9.800	-0.002	610953	2.50	2.49	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00035 Amount Added: 125.00 Units: uL

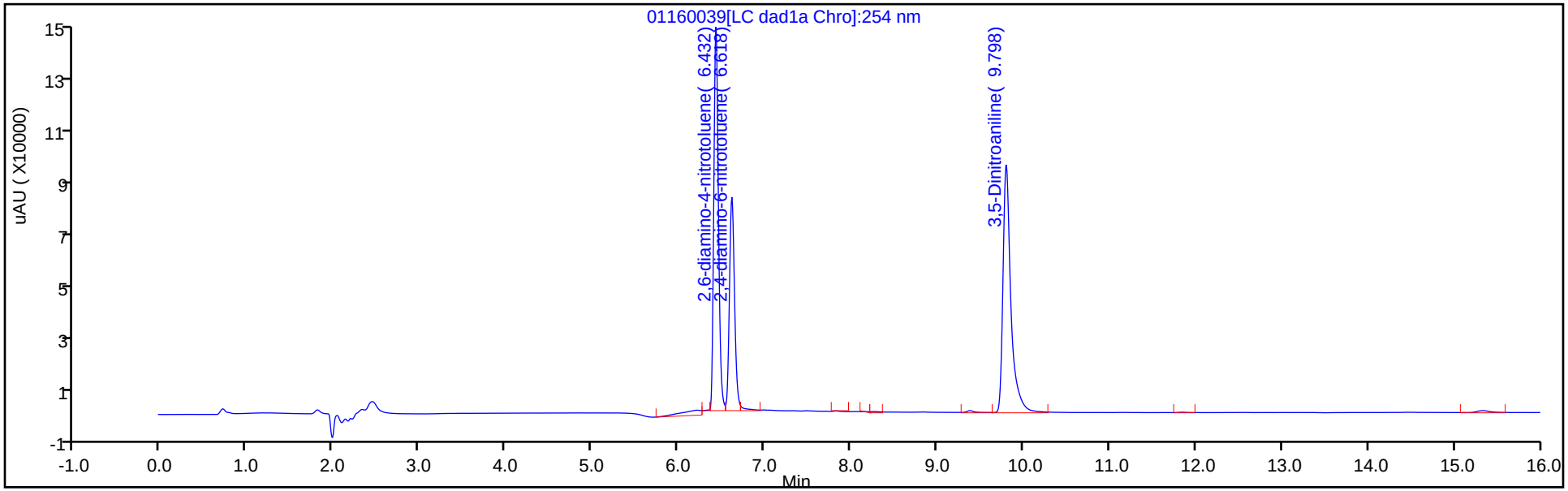
Report Date: 17-Jan-2023 12:50:38 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Denver

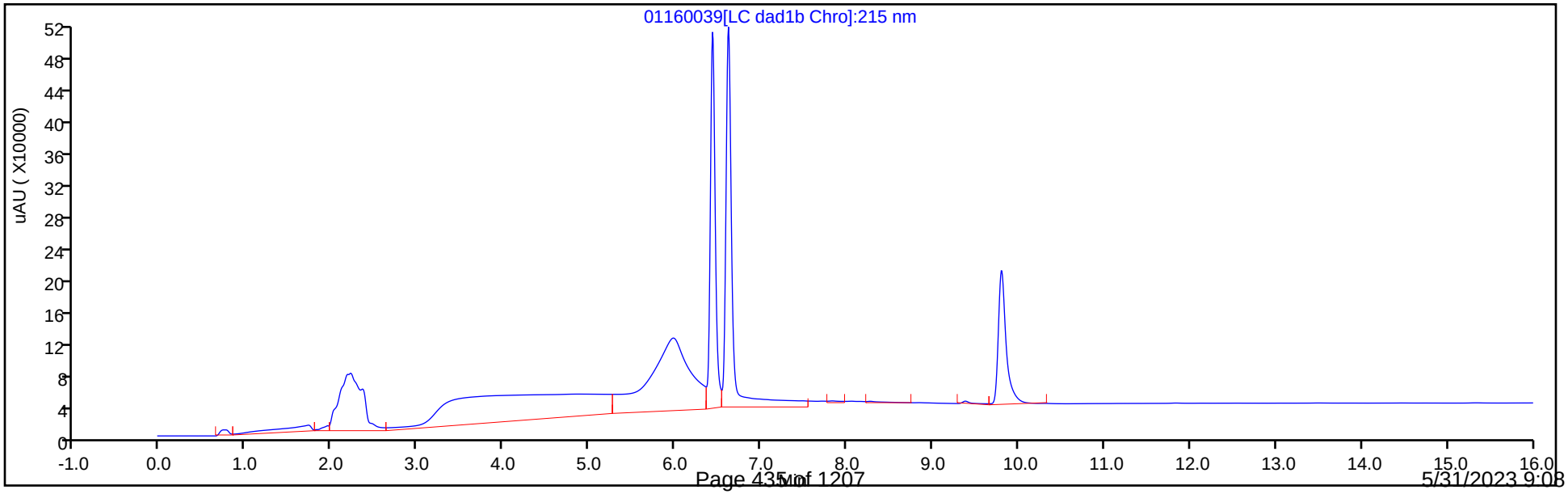
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160039.d

Injection Date:	17-Jan-2023 00:33:01	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC ADD 8			Worklist Smp#:	11
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	42
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins Denver

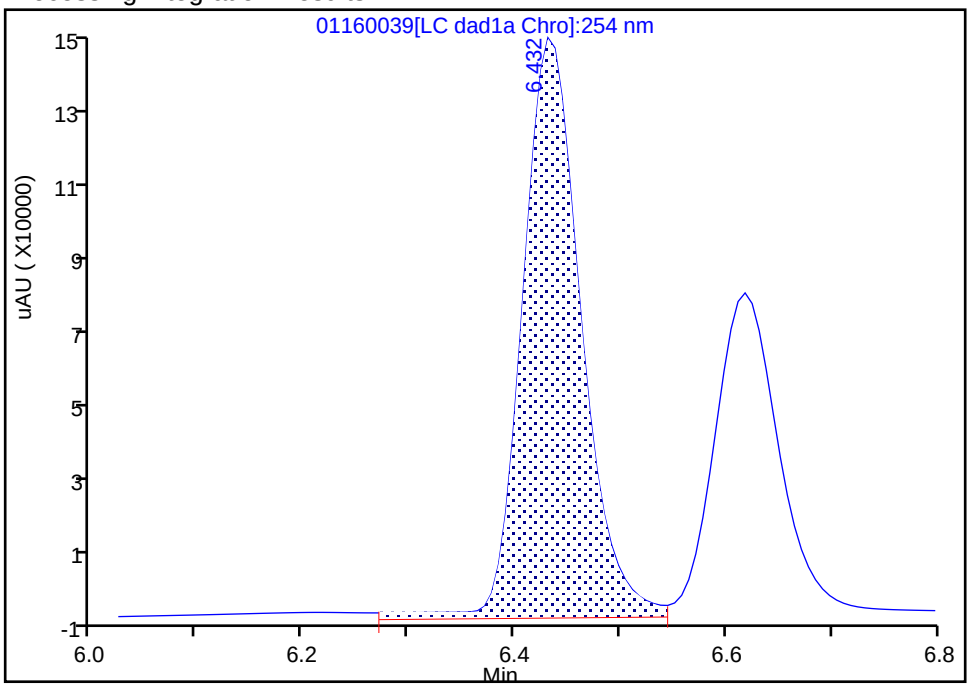
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160039.d
Injection Date: 17-Jan-2023 00:33:01 Instrument ID: CHHPLC_X3
Lims ID: IC ADD 8
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 42 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

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

Signal: 1

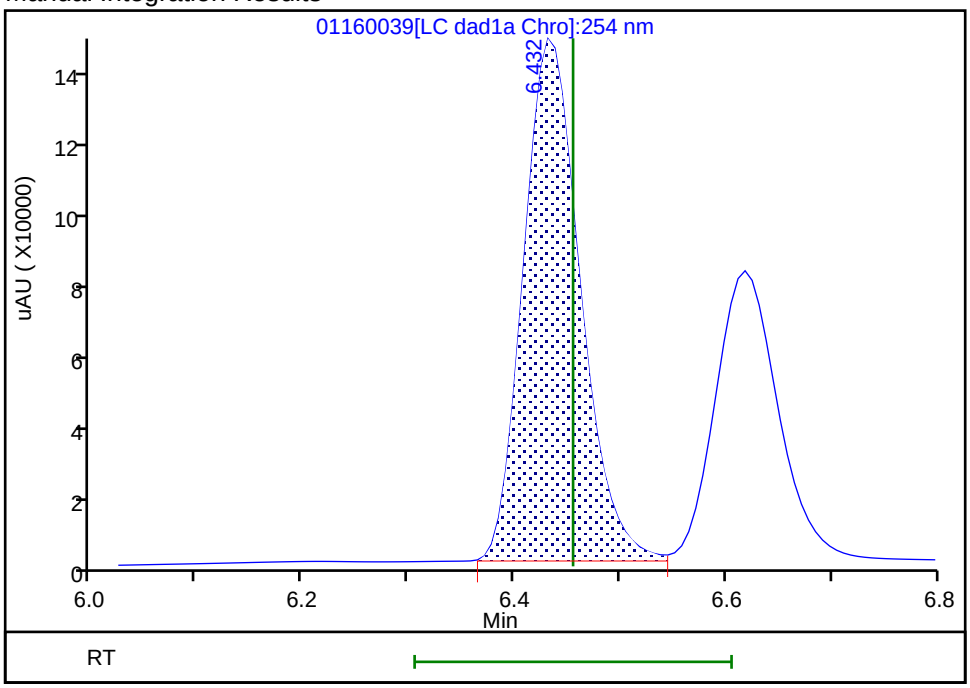
Processing Integration Results

RT: 6.43
Area: 581780
Amount: 2.370843
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 556860
Amount: 2.420604
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:22:46
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

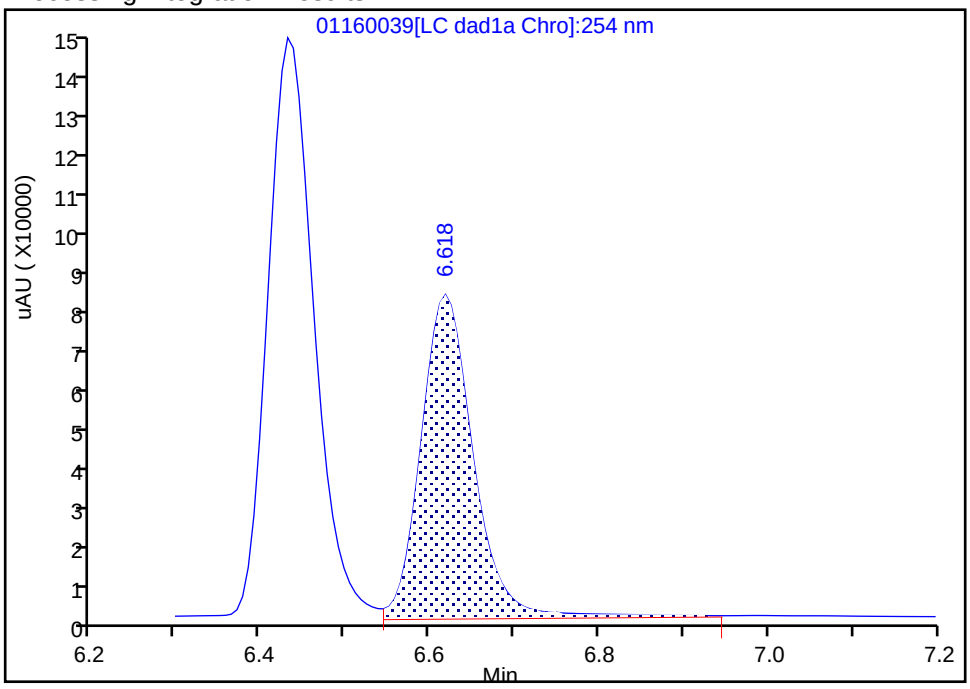
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160039.d				
Injection Date:	17-Jan-2023 00:33:01	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 8				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	42	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

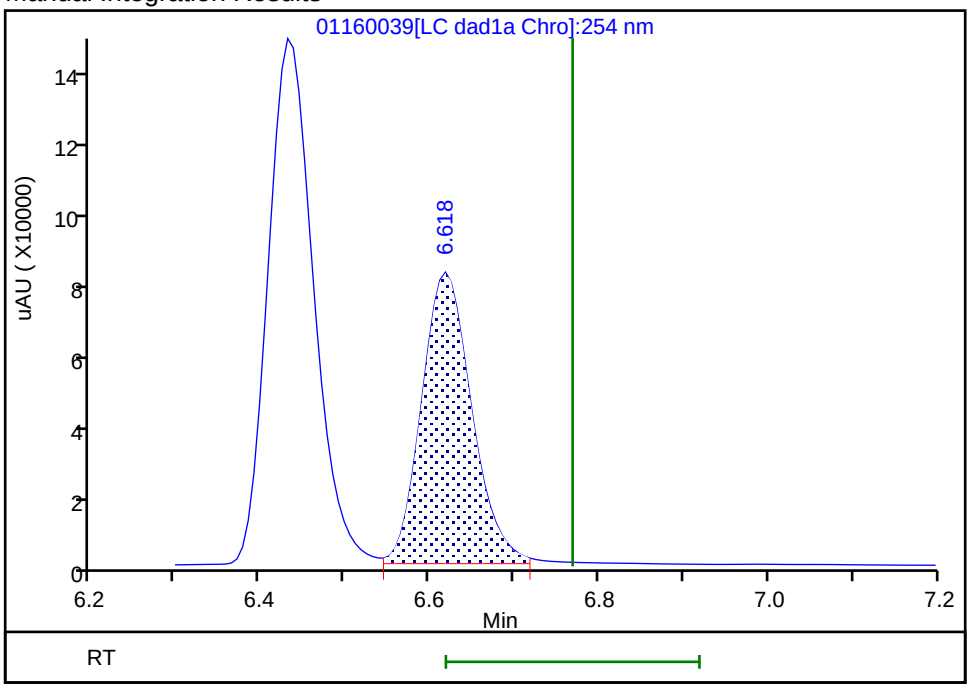
Processing Integration Results

RT: 6.62
Area: 364706
Amount: 2.146312
Amount Units: ug/mL



Manual Integration Results

RT: 6.62
Area: 341365
Amount: 2.330580
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:22:47
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160040.D
Lims ID: IC ADD 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 17-Jan-2023 00:56:21 ALS Bottle#: 43 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICADD7
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub10

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jan-2023 12:50:39 Calib Date: 17-Jan-2023 06:47:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160055.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: LV5D Date: 17-Jan-2023 12:23:10

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1	6.457	6.455	0.002	234891	1.00	1.02	M
5 2,4-diamino-6-nitrotoluene	1	6.637	6.769	-0.132	148050	1.00	1.01	M
14 3,5-Dinitroaniline	1	9.804	9.800	0.004	245164	1.00	1.00	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

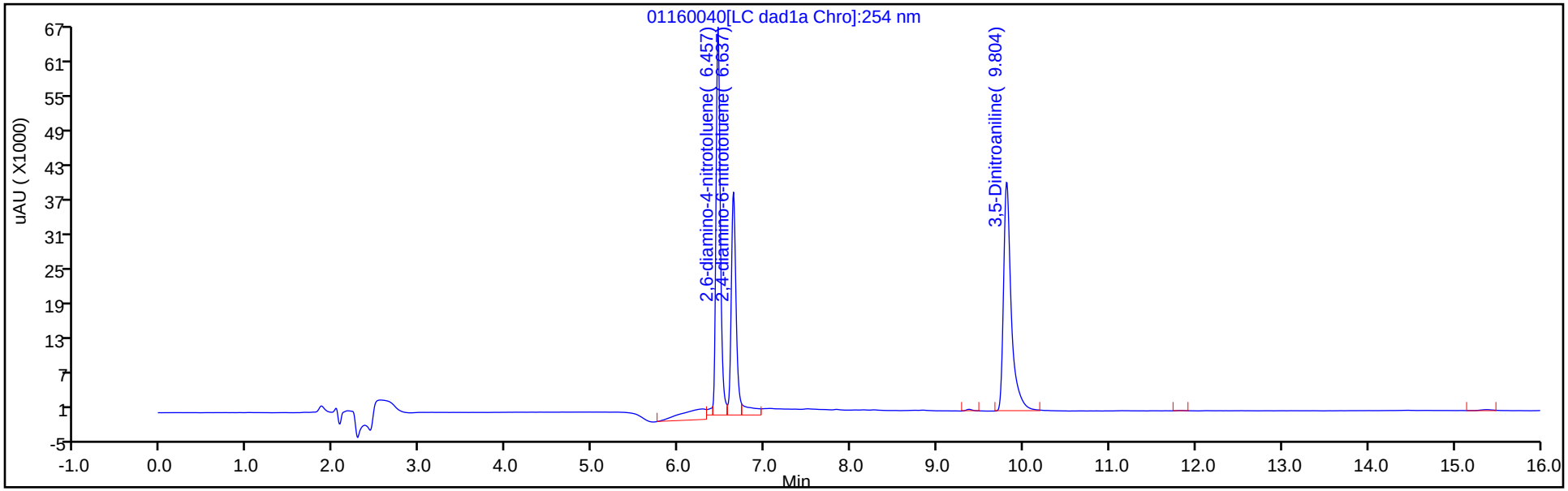
8330_ADDs_00035 Amount Added: 50.00 Units: uL

Report Date: 17-Jan-2023 12:50:39 Chrom Revision: 2.3 20-Dec-2022 14:14:06

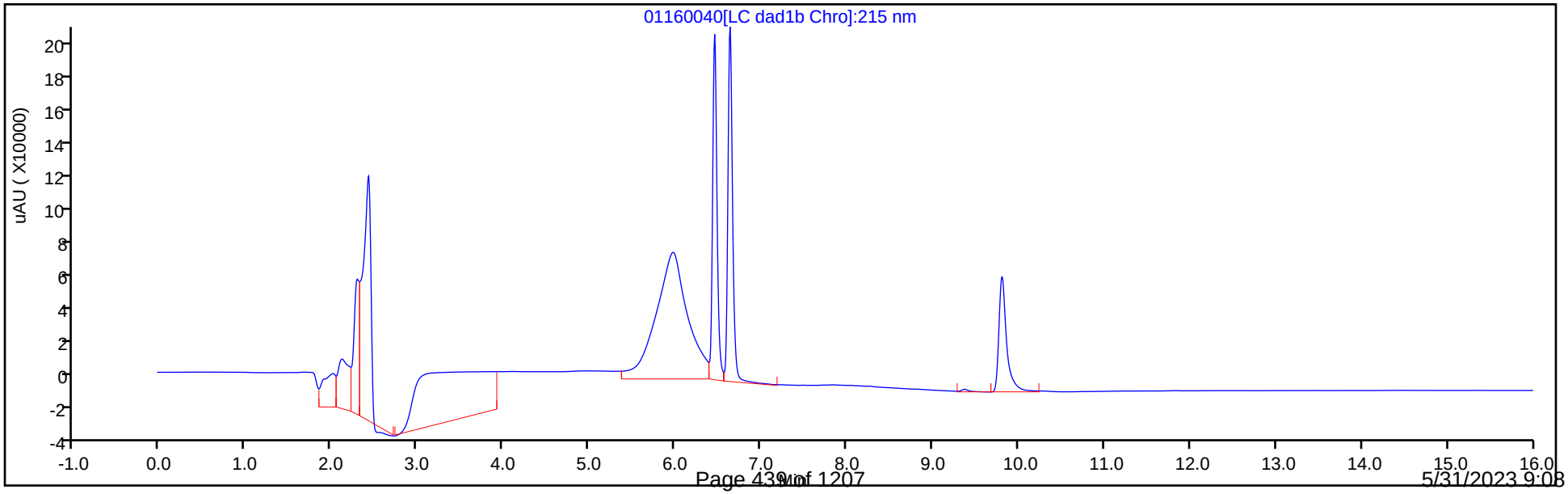
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160040.d				
Injection Date:	17-Jan-2023 00:56:21	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC ADD 7			Worklist Smp#:	12
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	43
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins Denver

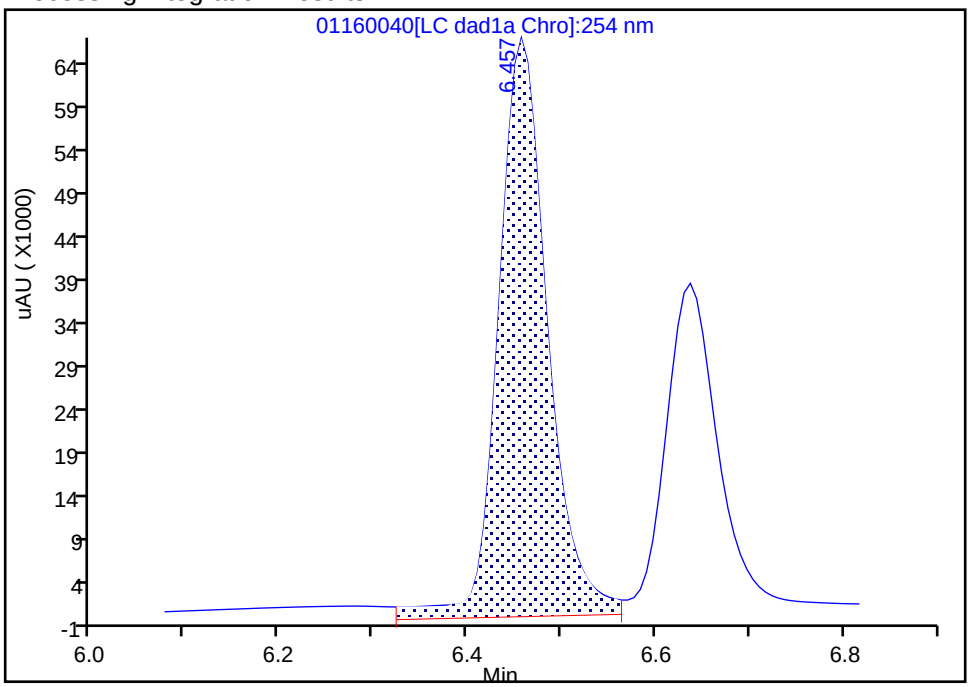
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160040.d				
Injection Date:	17-Jan-2023 00:56:21	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 7				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	43	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit 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

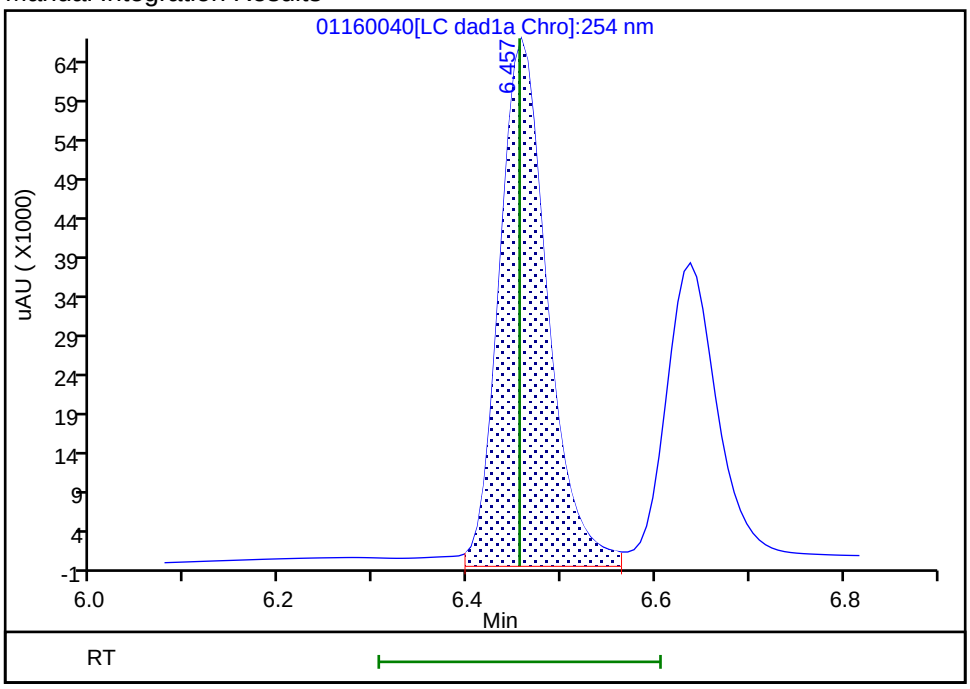
Processing Integration Results

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

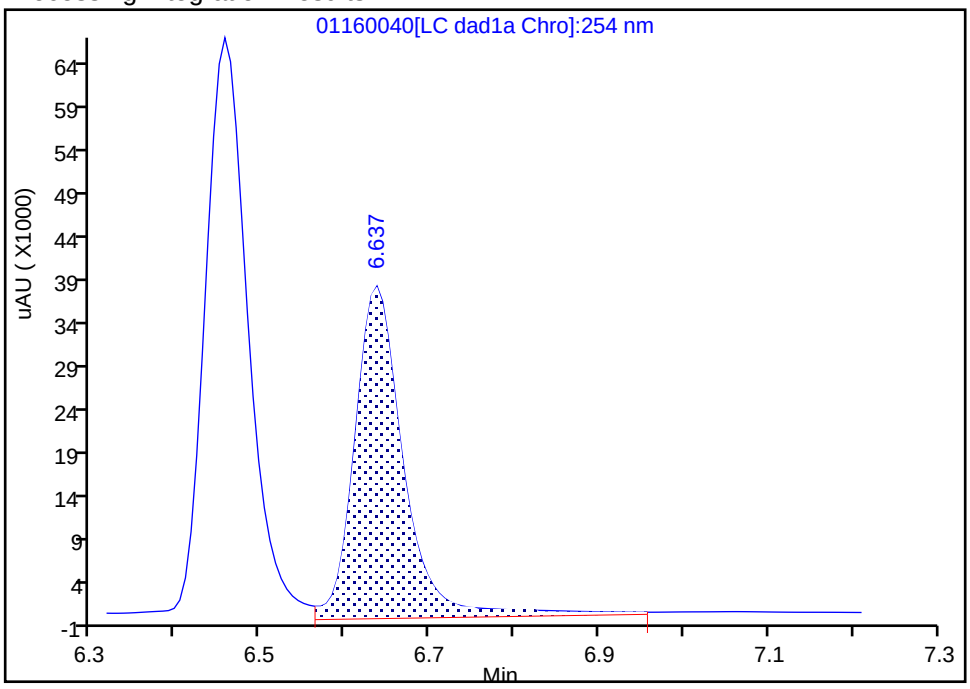
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160040.d				
Injection Date:	17-Jan-2023 00:56:21	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 7				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	43	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit 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

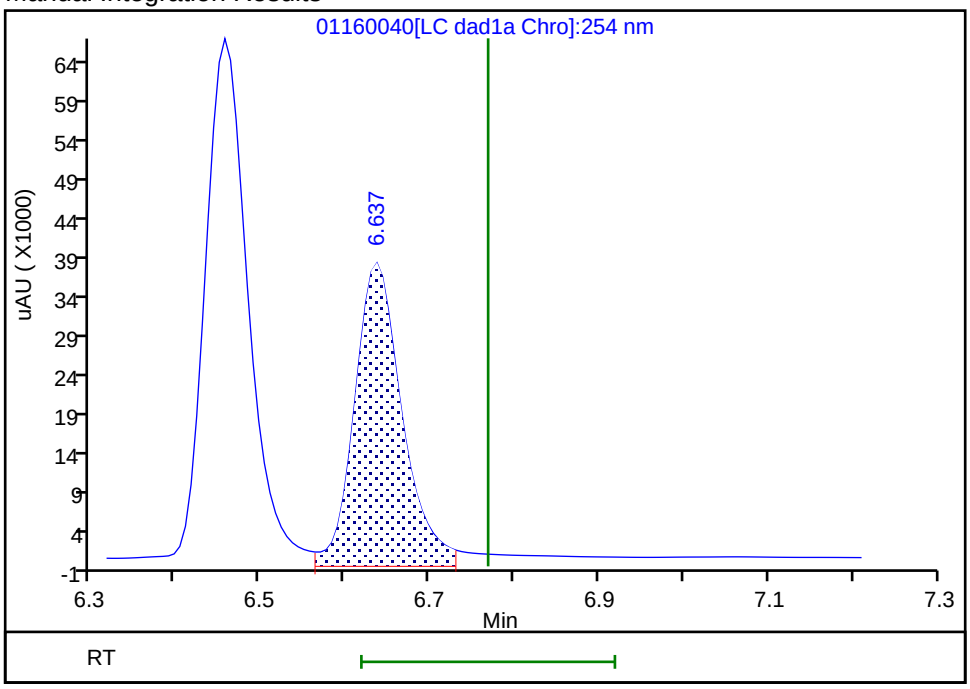
Processing Integration Results

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

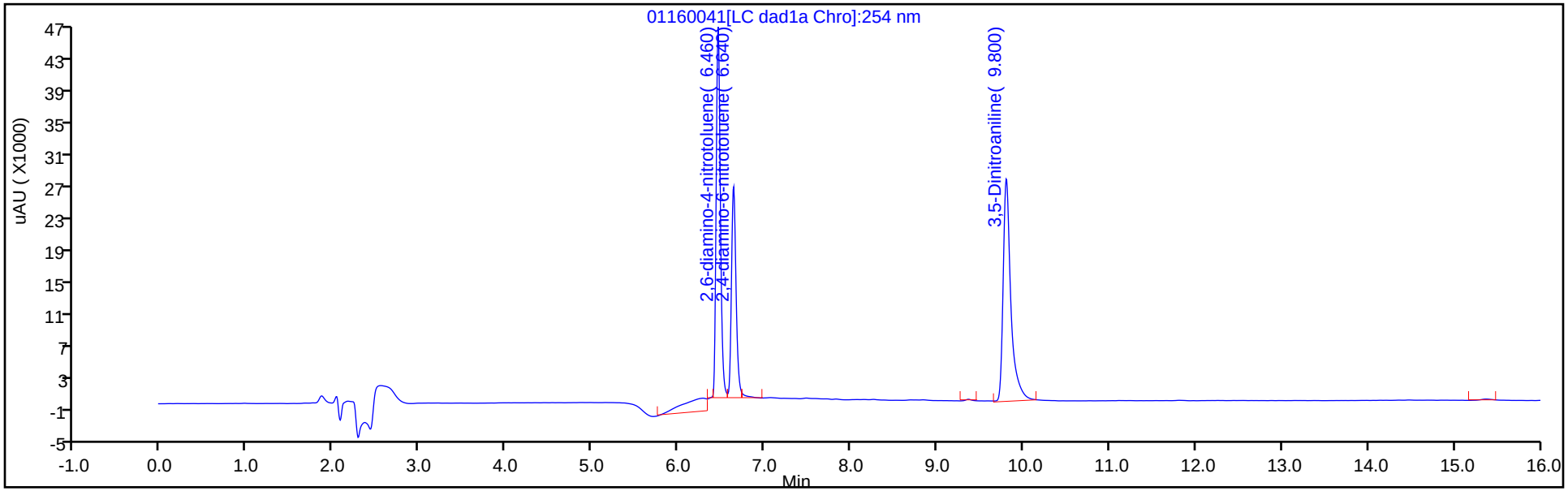
Report Date: 17-Jan-2023 12:50:39 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Denver

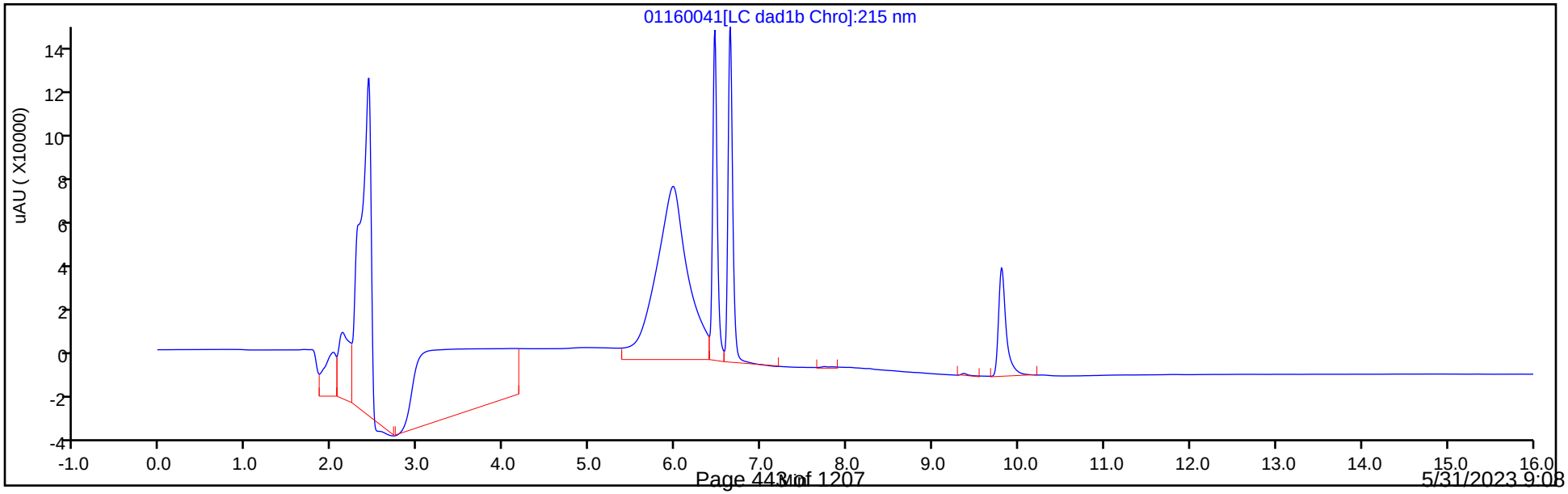
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160041.d

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

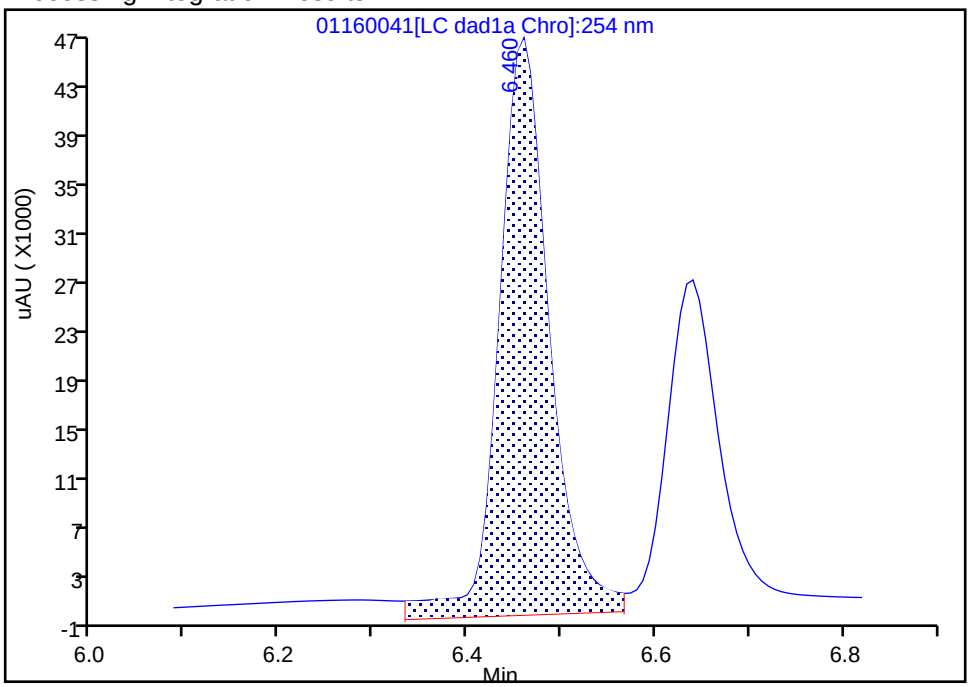
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160041.d
Injection Date: 17-Jan-2023 01:19:43 Instrument ID: CHHPLC_X3
Lims ID: IC ADD 6
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 44 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

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

Signal: 1

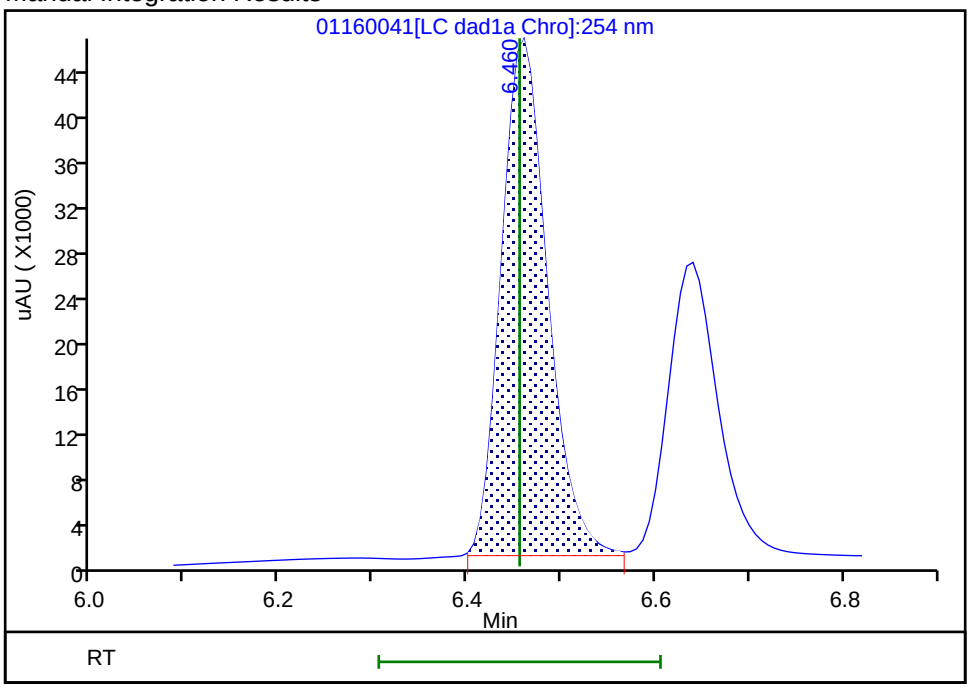
Processing Integration Results

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

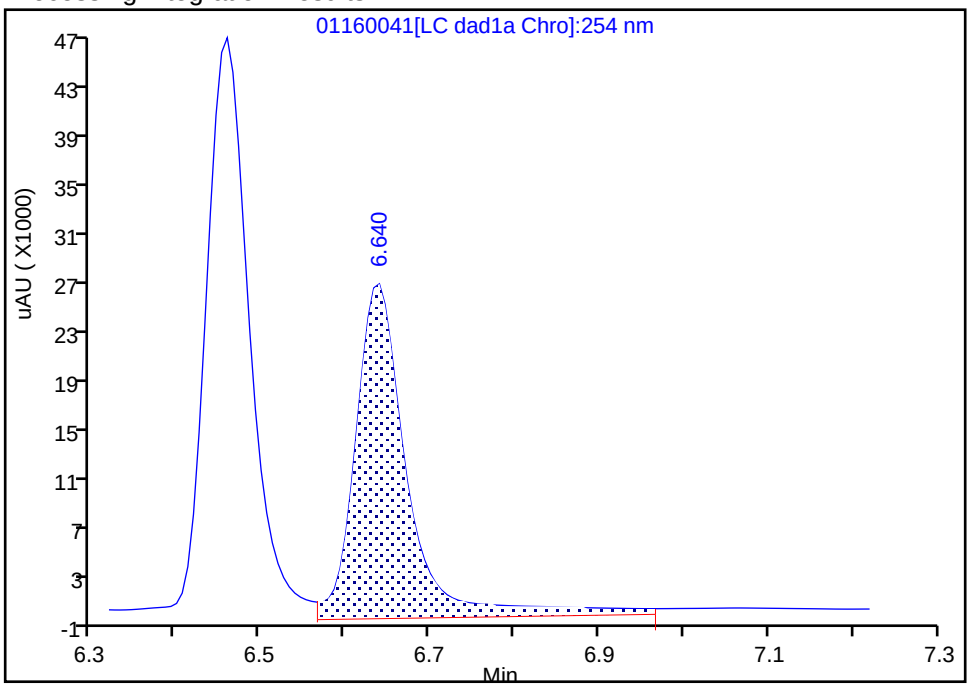
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160041.d				
Injection Date:	17-Jan-2023 01:19:43	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 6				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	44	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit 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

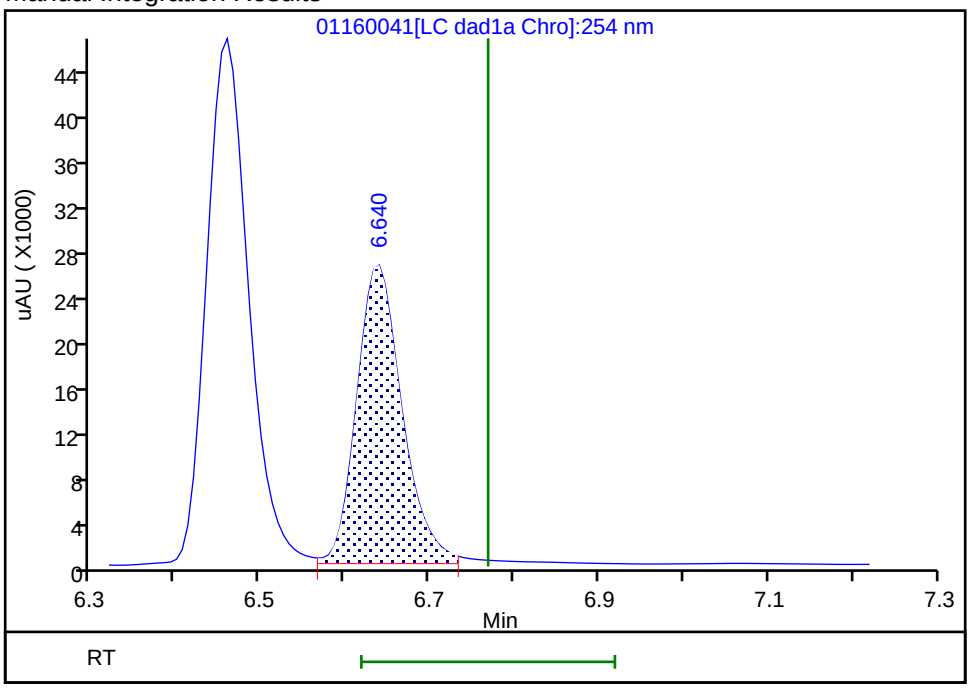
Processing Integration Results

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:

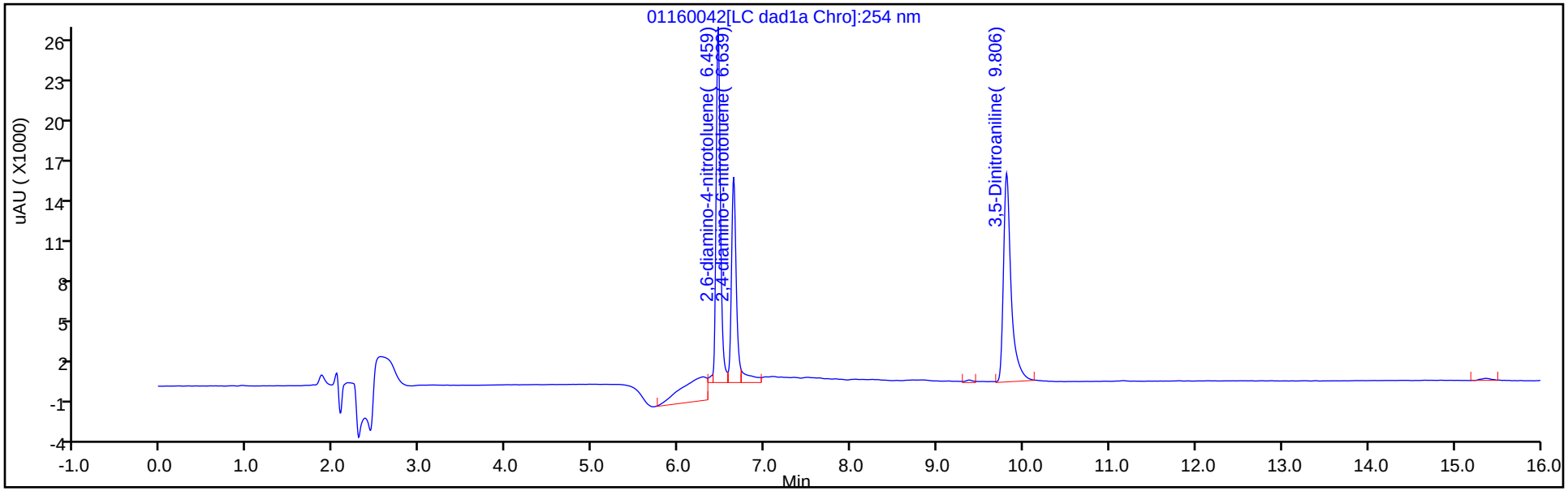
8330_ADDs_00035 Amount Added: 20.00 Units: uL

Report Date: 17-Jan-2023 12:50:40 Chrom Revision: 2.3 20-Dec-2022 14:14:06

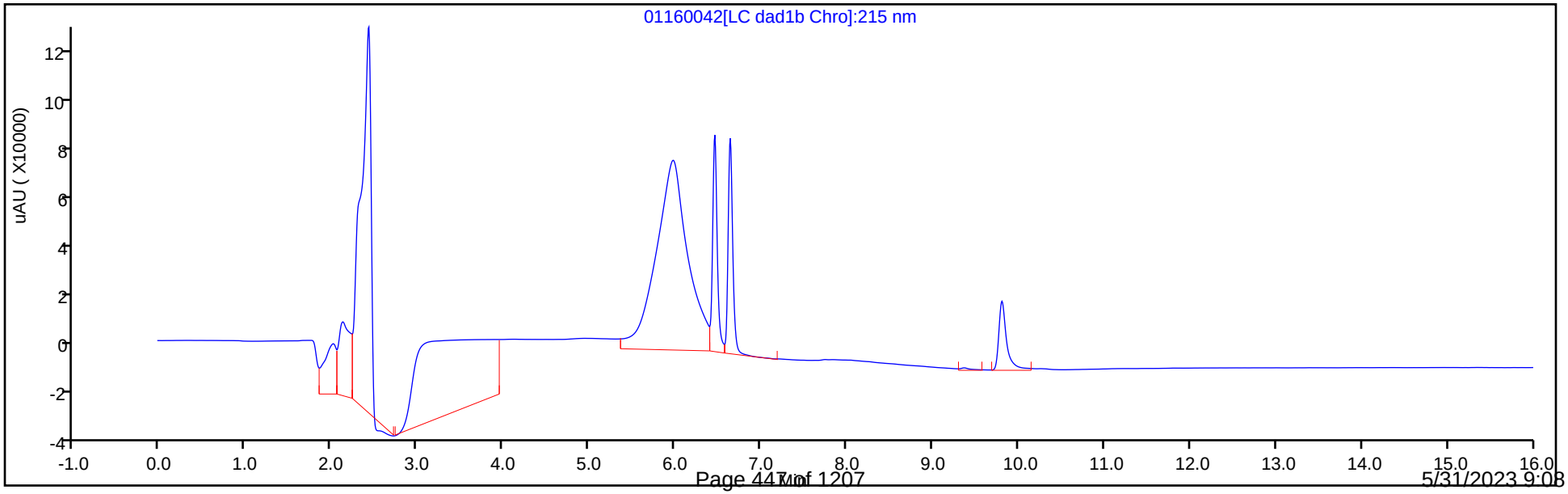
Eurofins Denver

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

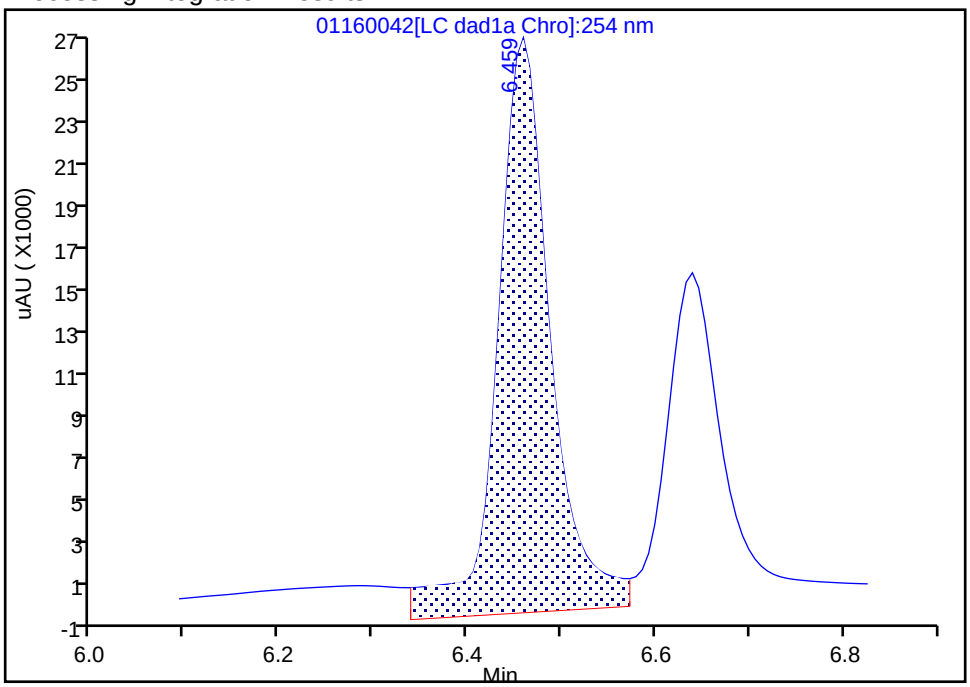
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160042.d				
Injection Date:	17-Jan-2023 01:43:11	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 5				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	45	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit 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

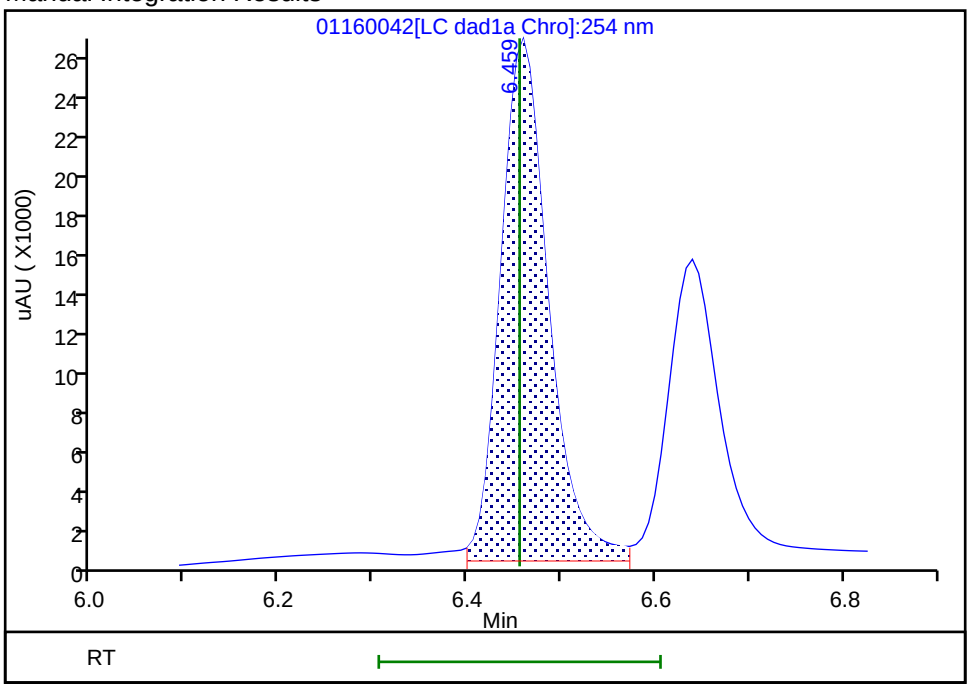
Processing Integration Results

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

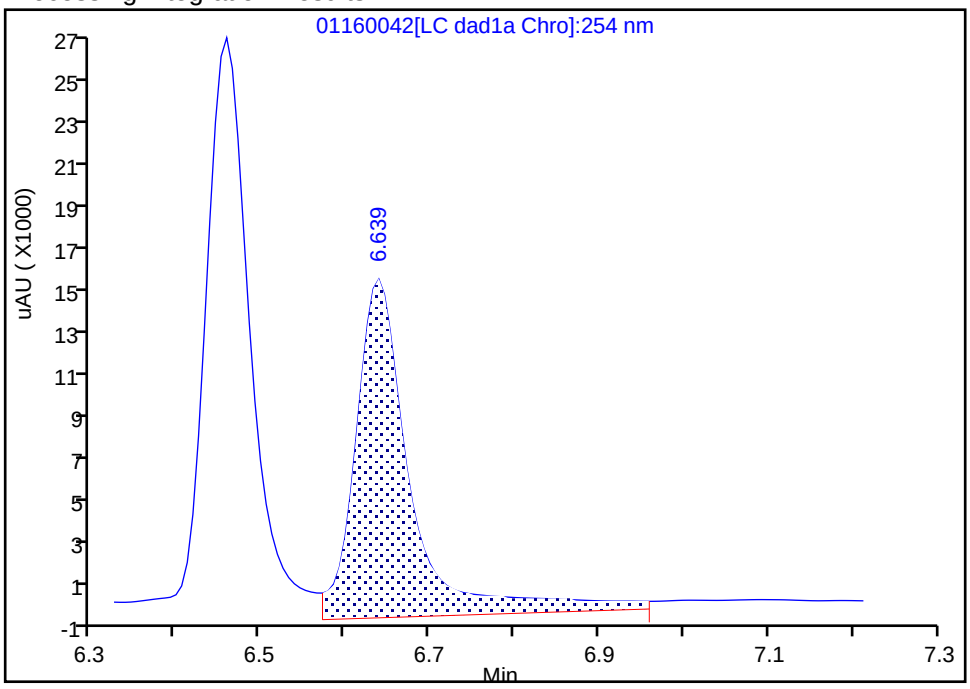
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160042.d				
Injection Date:	17-Jan-2023 01:43:11	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 5				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	45	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit 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

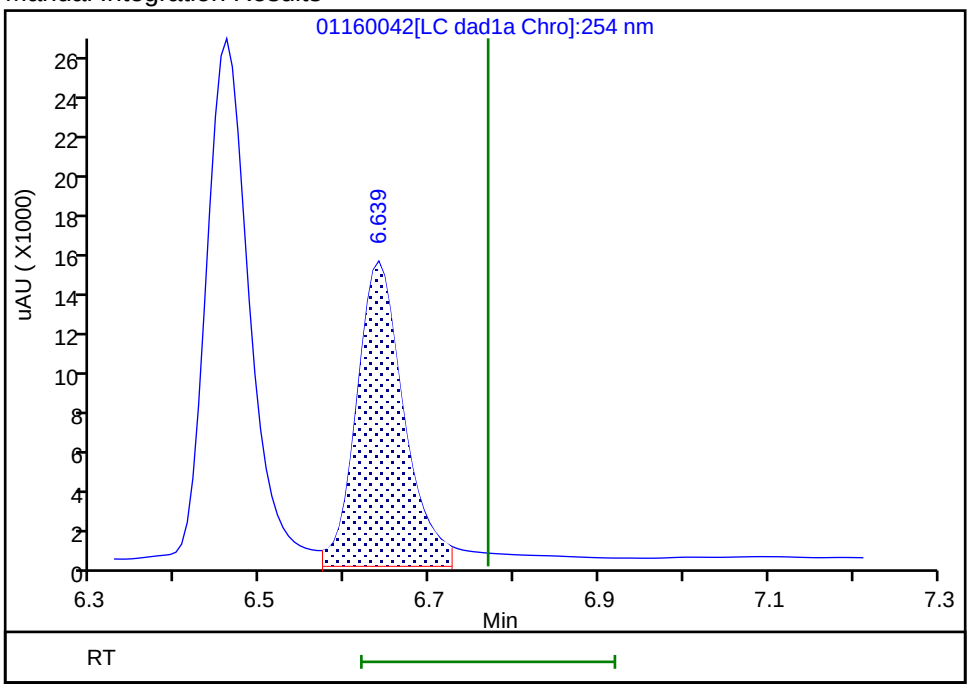
Processing Integration Results

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

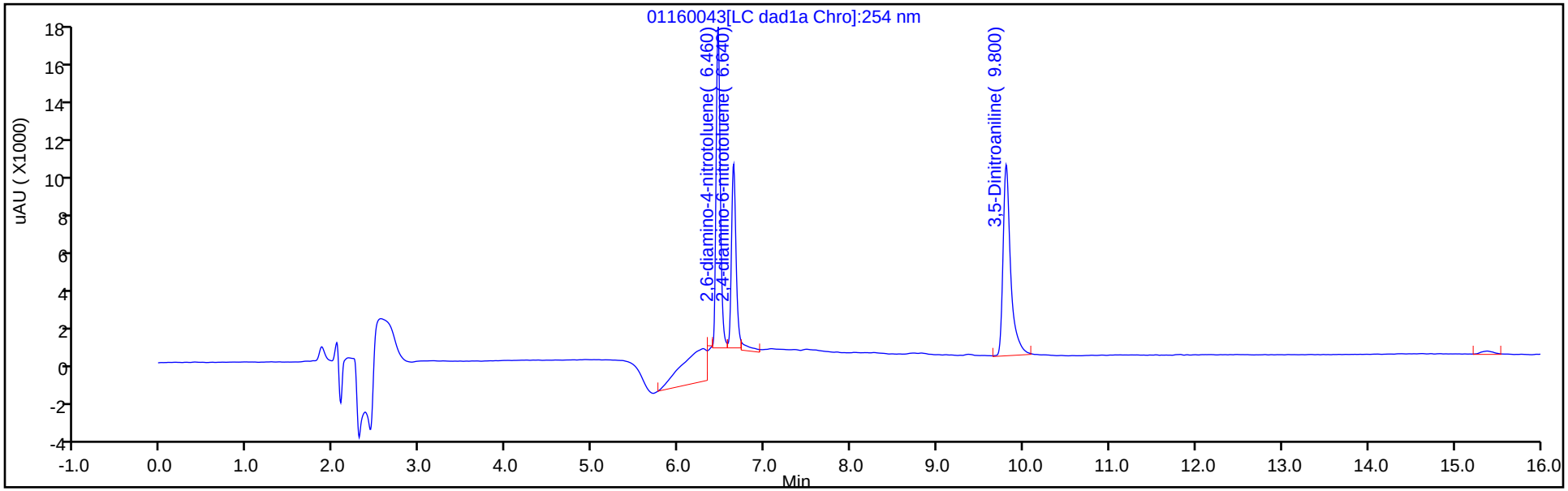
Report Date: 17-Jan-2023 12:50:41 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Denver

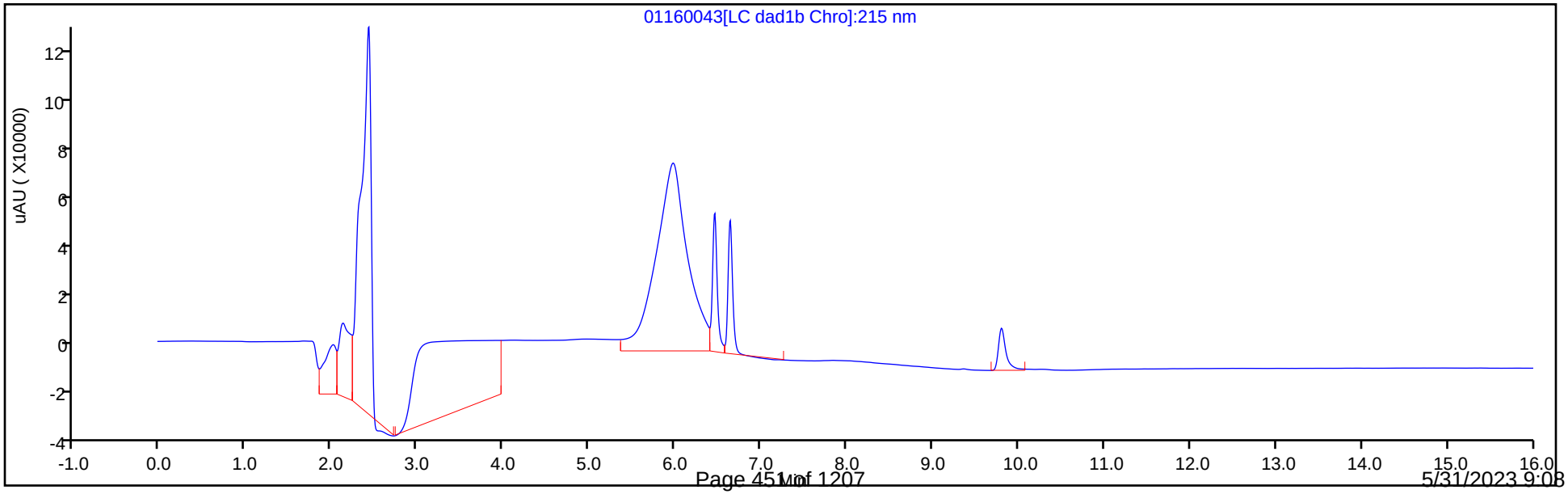
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160043.d

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

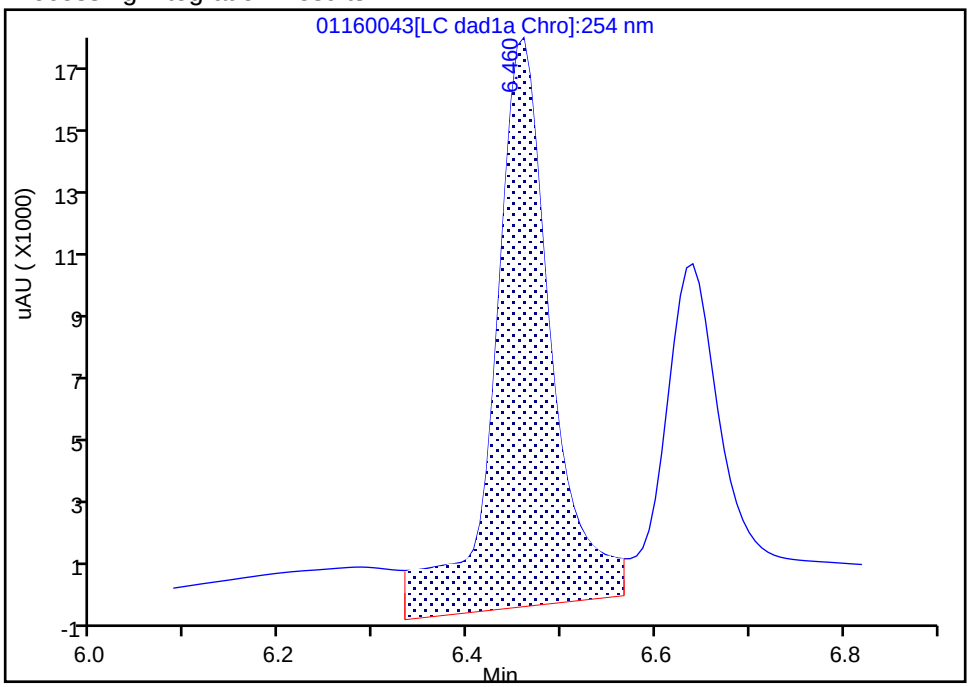
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160043.d				
Injection Date:	17-Jan-2023 02:06:34	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 4				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	46	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

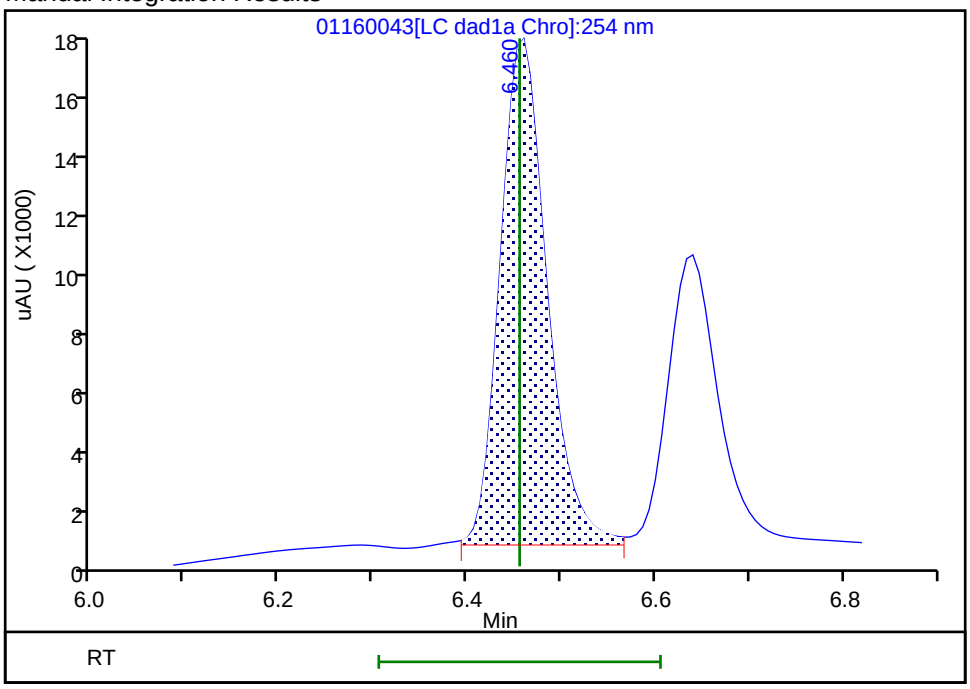
Processing Integration Results

RT: 6.46
Area: 74424
Amount: 0.275328
Amount Units: ug/mL



Manual Integration Results

RT: 6.46
Area: 56309
Amount: 0.241387
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:31:11
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

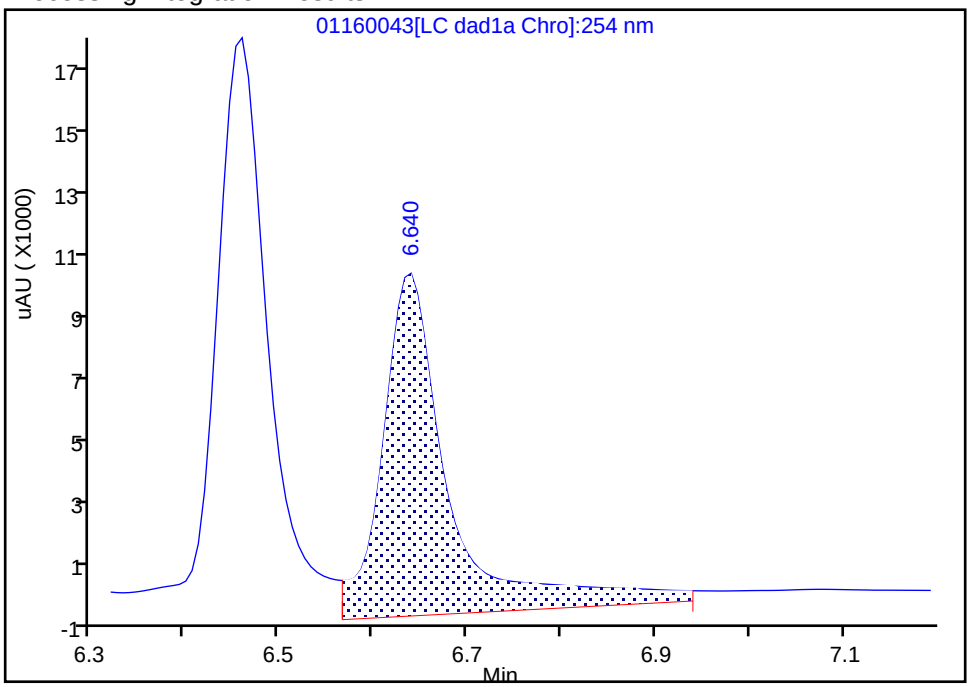
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160043.d				
Injection Date:	17-Jan-2023 02:06:34	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 4				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	46	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

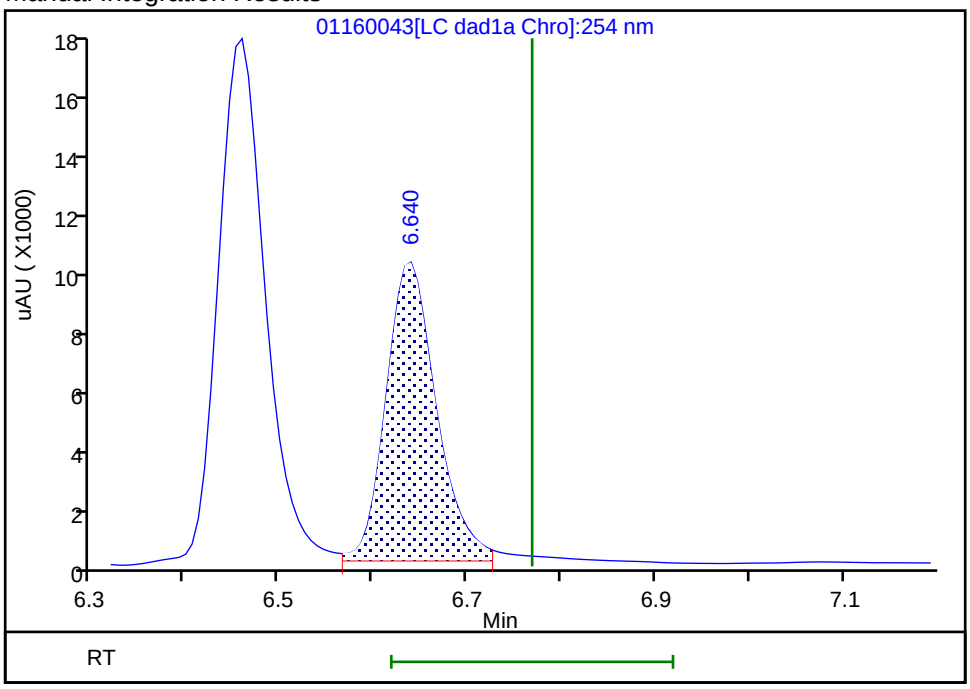
Processing Integration Results

RT: 6.64
Area: 50478
Amount: 0.310727
Amount Units: ug/mL



Manual Integration Results

RT: 6.64
Area: 34670
Amount: 0.236700
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:31:11
Audit Action: Assigned New Baseline Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160044.D
Lims ID: IC ADD 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 17-Jan-2023 02:30:00 ALS Bottle#: 47 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICADD3
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub10

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jan-2023 12:50:41 Calib Date: 17-Jan-2023 06:47:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160055.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: LV5D Date: 17-Jan-2023 12:31:24

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1	6.459	6.455	0.004	24702	0.1000	0.1038	M
5 2,4-diamino-6-nitrotoluene	1	6.632	6.769	-0.137	14908	0.1000	0.1018	M
14 3,5-Dinitroaniline	1	9.812	9.800	0.012	24604	0.1000	0.1019	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00035 Amount Added: 5.00 Units: uL

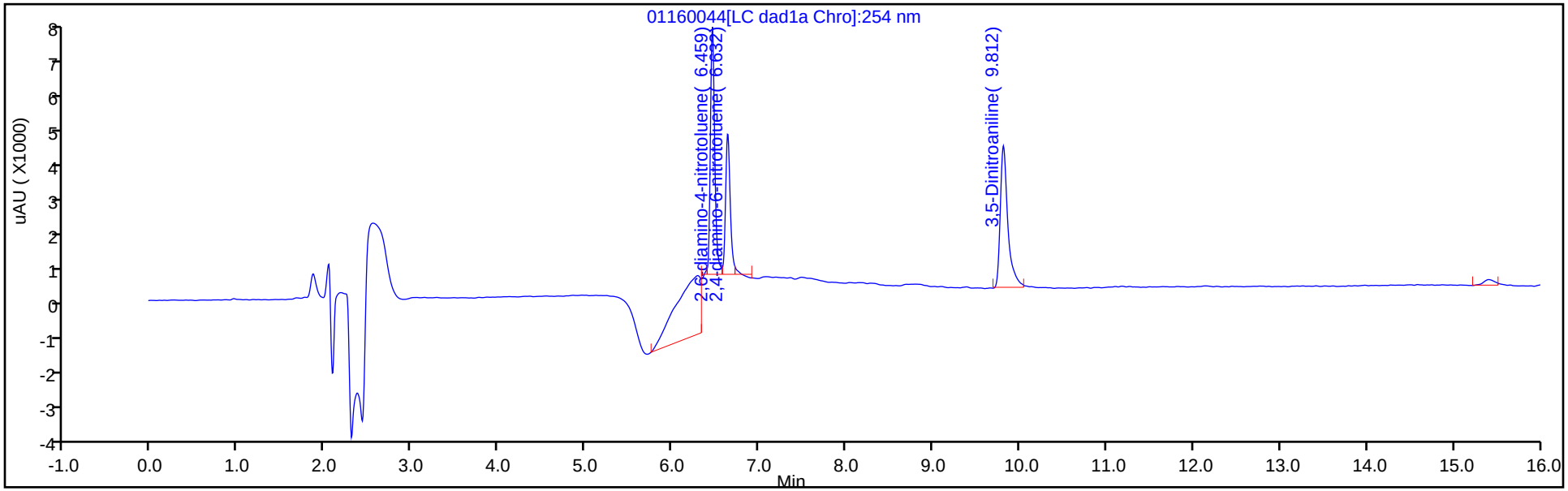
Report Date: 17-Jan-2023 12:50:41 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Denver

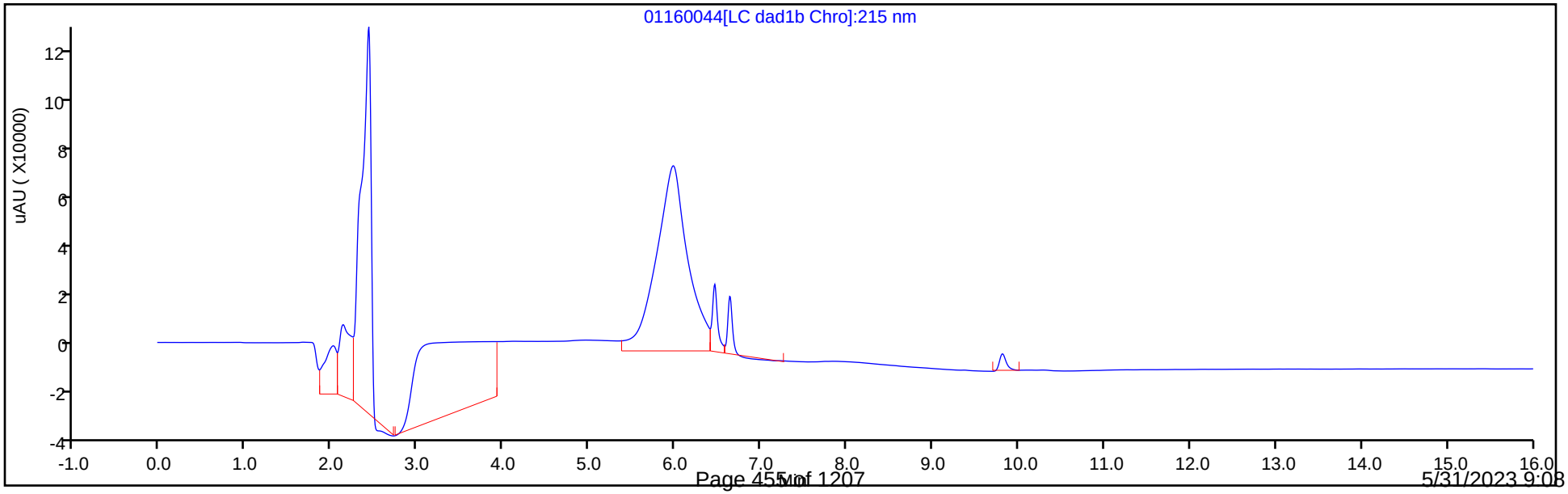
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160044.d

Injection Date:	17-Jan-2023 02:30:00	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC ADD 3			Worklist Smp#:	16
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	47
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins Denver

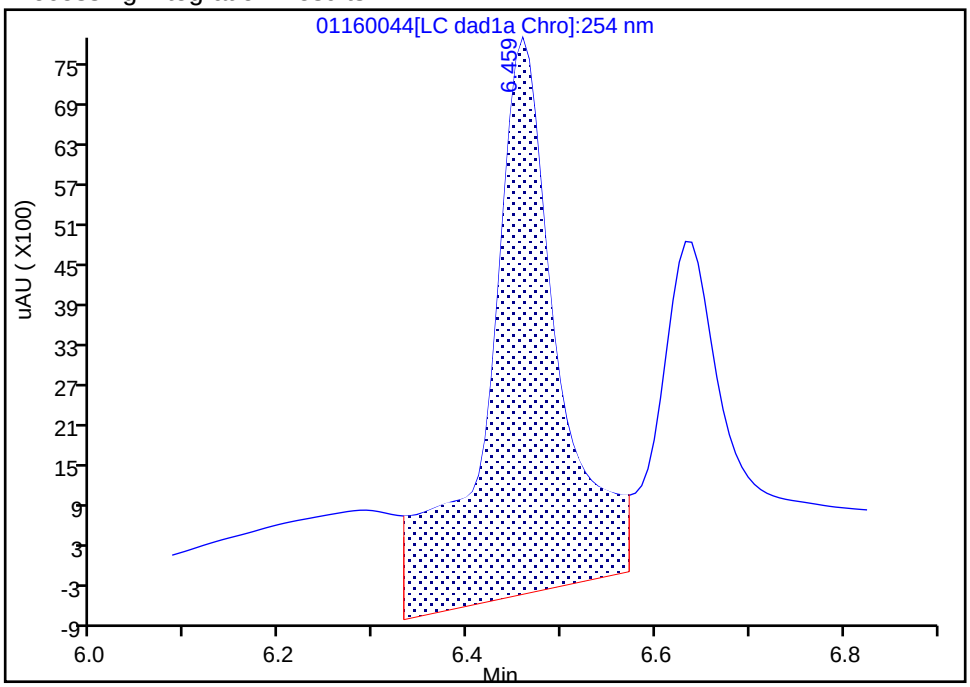
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160044.d				
Injection Date:	17-Jan-2023 02:30:00	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 3				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	47	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

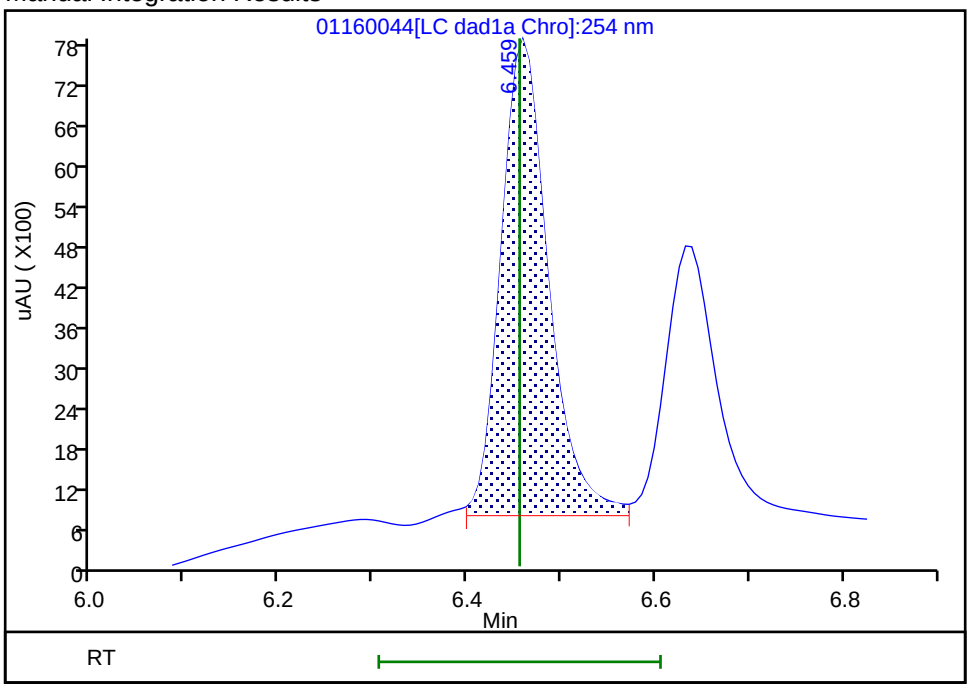
Processing Integration Results

RT: 6.46
Area: 43811
Amount: 0.142153
Amount Units: ug/mL



Manual Integration Results

RT: 6.46
Area: 24702
Amount: 0.103781
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:31:22
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

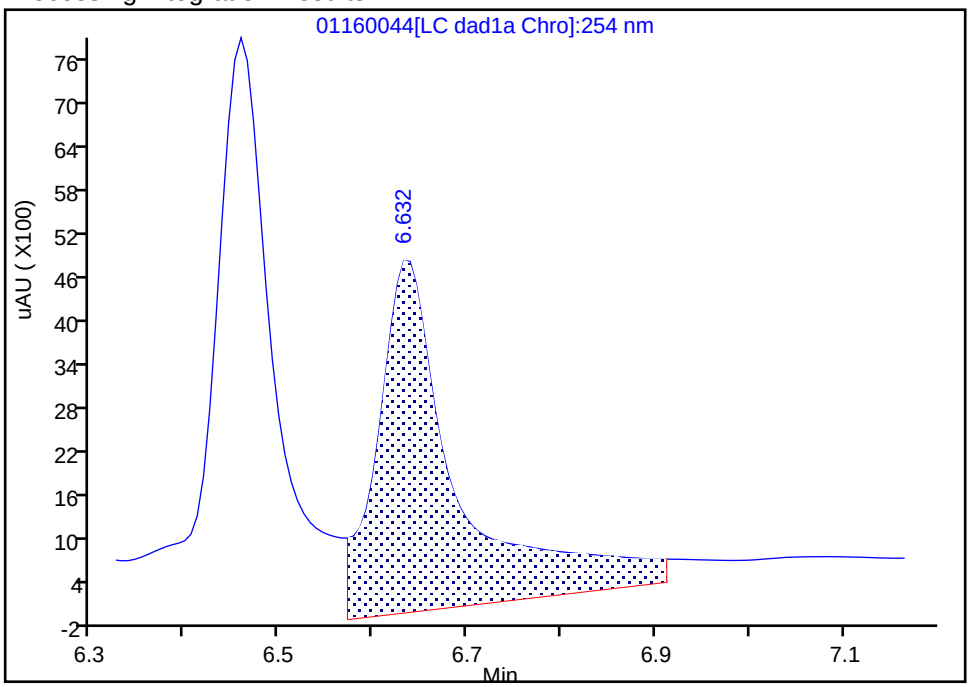
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160044.d				
Injection Date:	17-Jan-2023 02:30:00	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 3				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	47	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

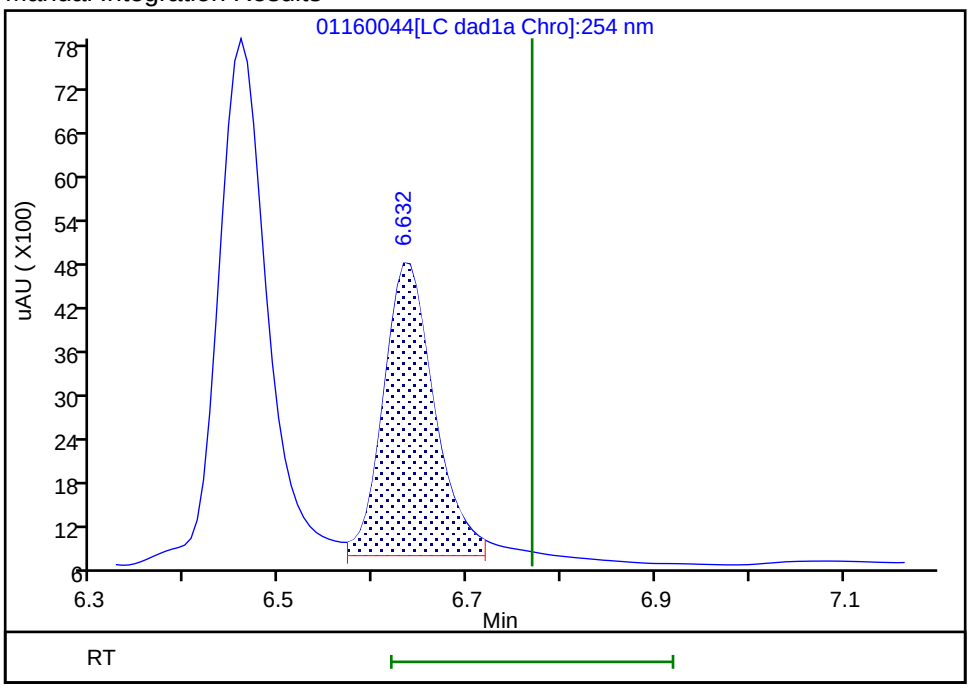
Processing Integration Results

RT: 6.63
Area: 28852
Amount: 0.169920
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 14908
Amount: 0.101780
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:31:22
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160045.D
Lims ID: IC ADD 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 17-Jan-2023 02:53:21 ALS Bottle#: 48 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICADD2
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub10

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jan-2023 12:50:42 Calib Date: 17-Jan-2023 06:47:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160055.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: LV5D Date: 17-Jan-2023 12:31:36

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1	6.459	6.455	0.004	13039	0.0500	0.0530	M
5 2,4-diamino-6-nitrotoluene	1	6.639	6.769	-0.130	8175	0.0500	0.0558	M
14 3,5-Dinitroaniline	1	9.798	9.800	-0.002	12600	0.0500	0.0529	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00035 Amount Added: 2.50 Units: uL

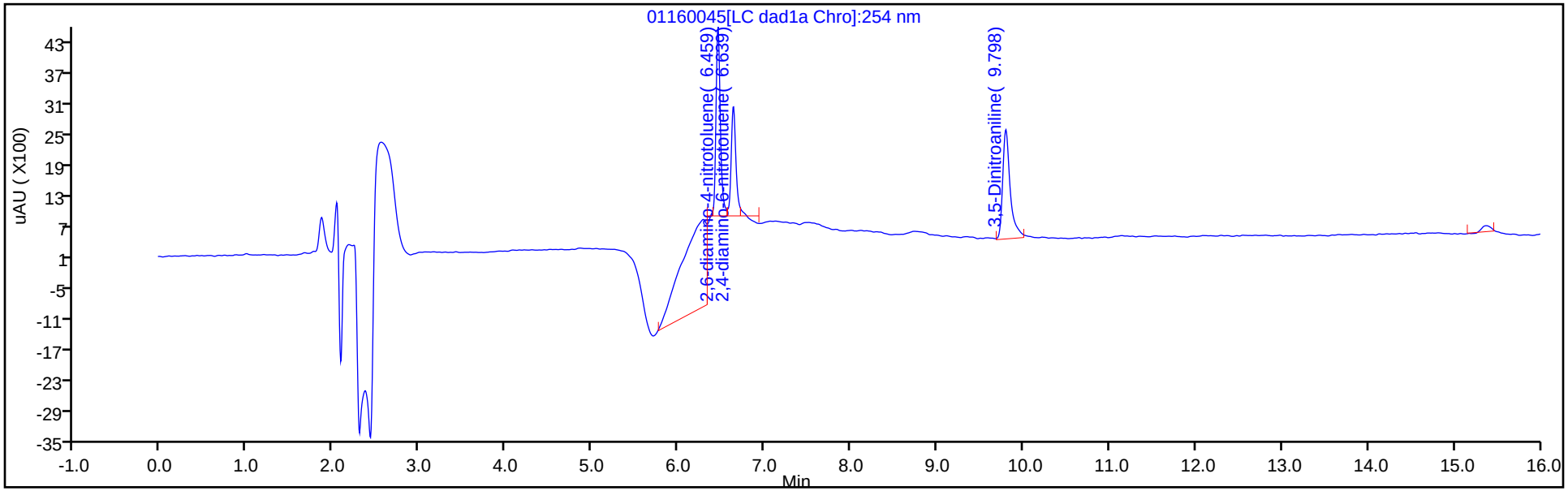
Report Date: 17-Jan-2023 12:50:42 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Denver

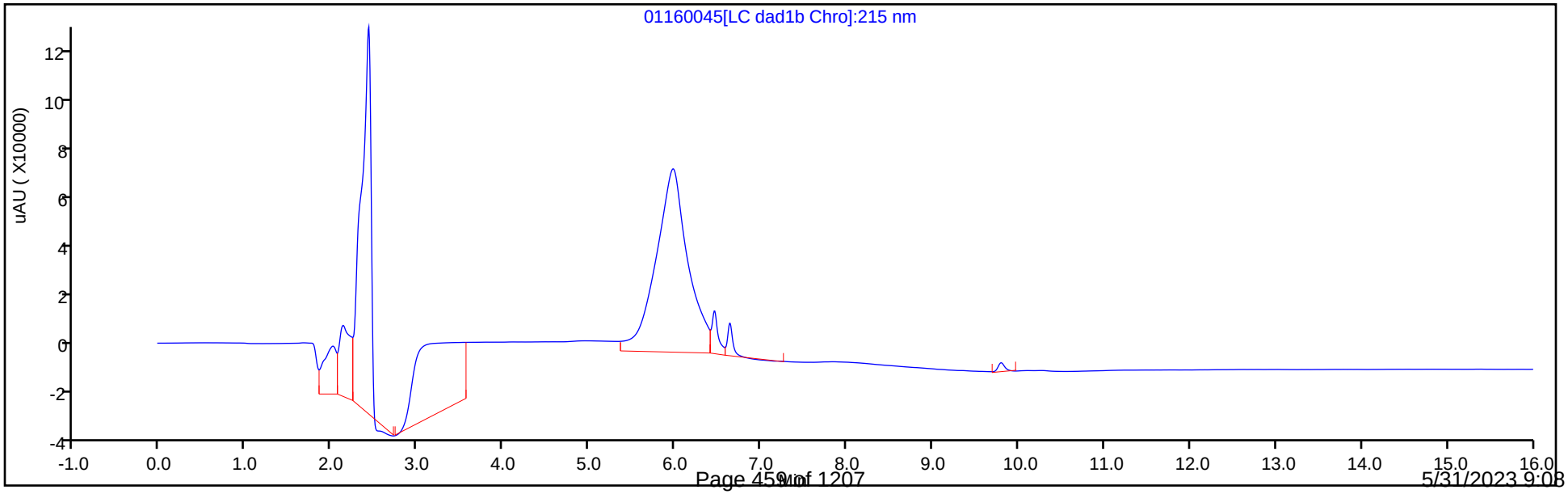
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160045.d

Injection Date:	17-Jan-2023 02:53:21	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC ADD 2			Worklist Smp#:	17
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	48
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins Denver

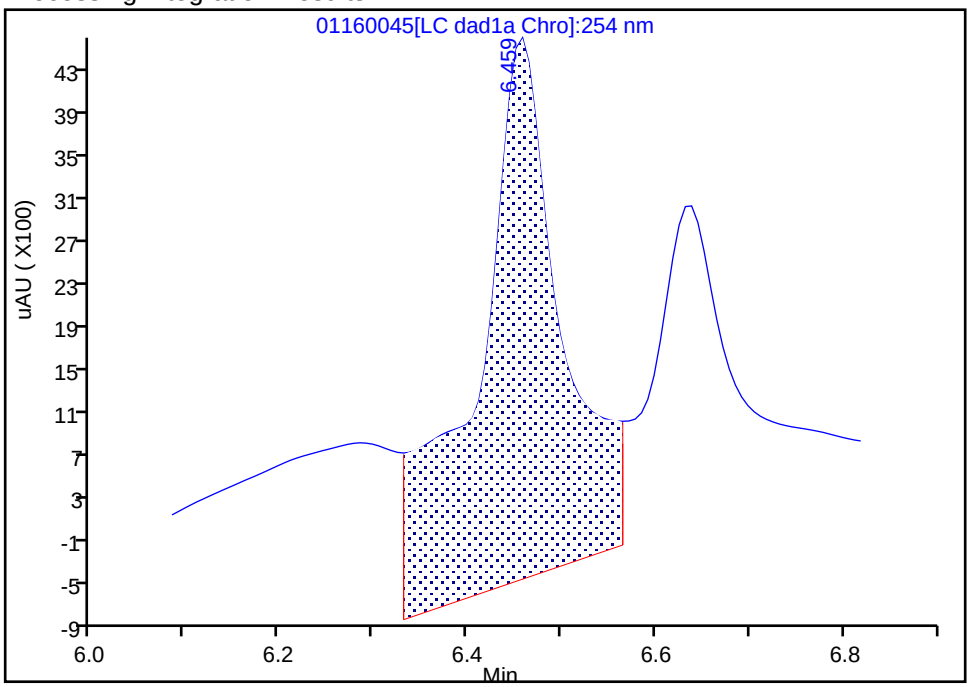
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160045.d
Injection Date: 17-Jan-2023 02:53:21 Instrument ID: CHHPLC_X3
Lims ID: IC ADD 2
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 48 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

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

Signal: 1

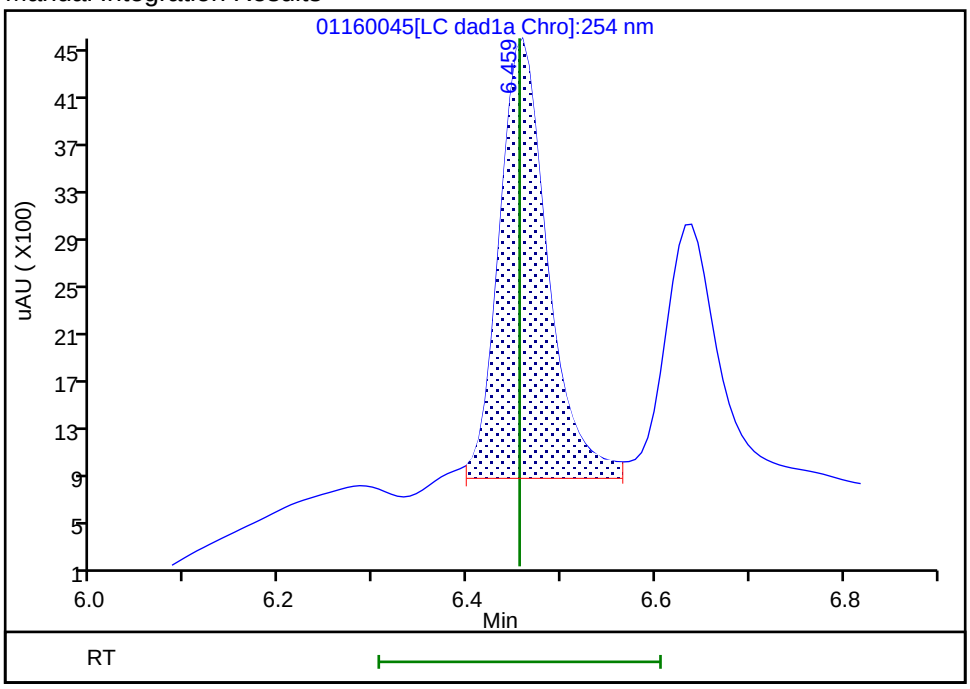
Processing Integration Results

RT: 6.46
Area: 31801
Amount: 0.089109
Amount Units: ug/mL



Manual Integration Results

RT: 6.46
Area: 13039
Amount: 0.053005
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:31:33
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

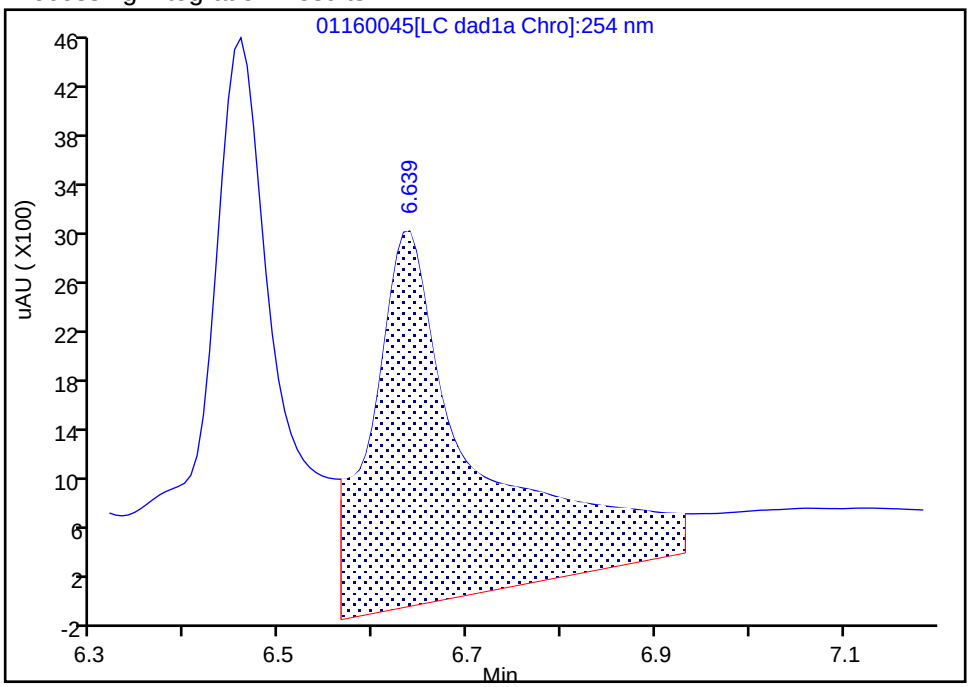
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160045.d				
Injection Date:	17-Jan-2023 02:53:21	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 2				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	48	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

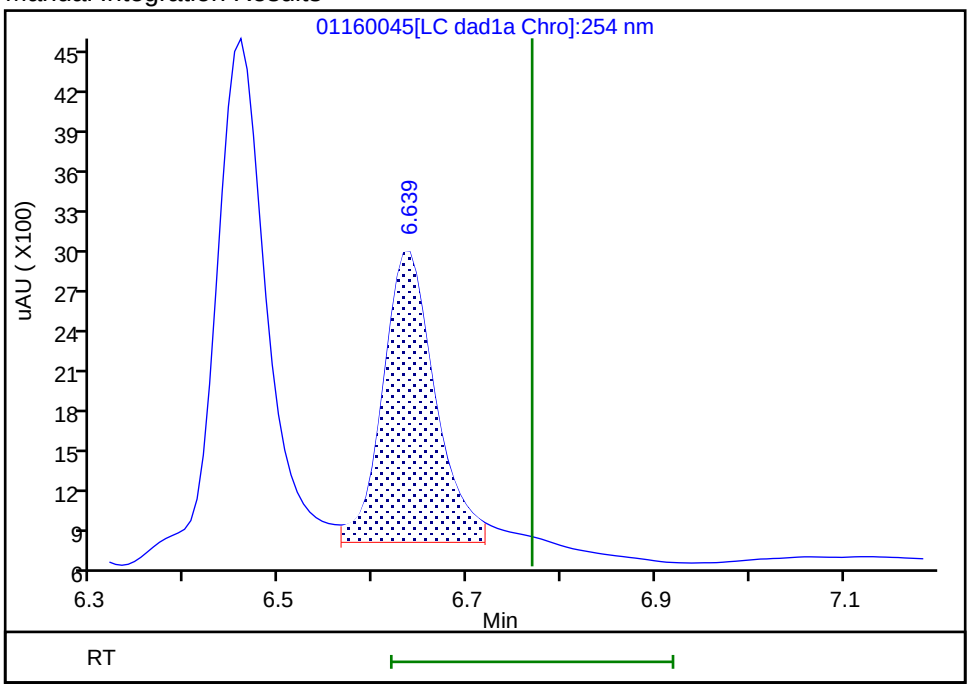
Processing Integration Results

RT: 6.64
Area: 23838
Amount: 0.125460
Amount Units: ug/mL



Manual Integration Results

RT: 6.64
Area: 8175
Amount: 0.055813
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:31:34
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160046.D
Lims ID: IC ADD 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 17-Jan-2023 03:16:44 ALS Bottle#: 49 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICADD1
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub10

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jan-2023 12:50:42 Calib Date: 17-Jan-2023 06:47:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160055.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: LV5D Date: 17-Jan-2023 12:31:50

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1	6.459	6.455	0.004	5326	0.0200	0.0194	M
5 2,4-diamino-6-nitrotoluene	1	6.639	6.769	-0.130	3042	0.0200	0.0208	M
14 3,5-Dinitroaniline	1	9.805	9.800	0.005	4397	0.0200	0.0195	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00035 Amount Added: 1.00 Units: uL

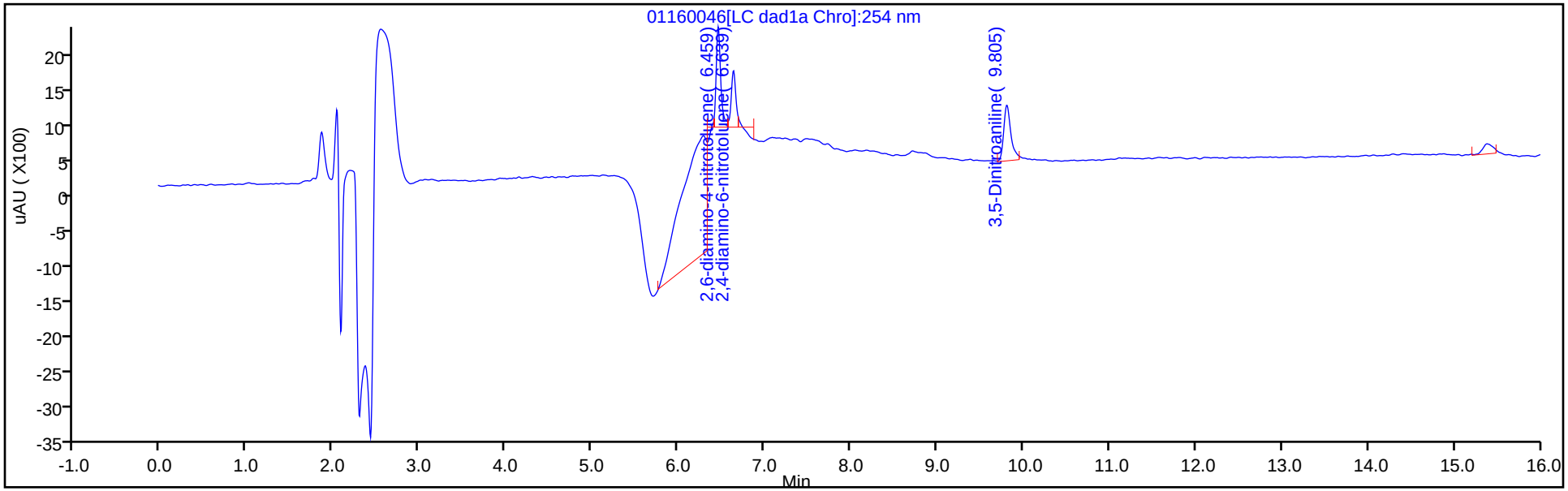
Report Date: 17-Jan-2023 12:50:42 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Denver

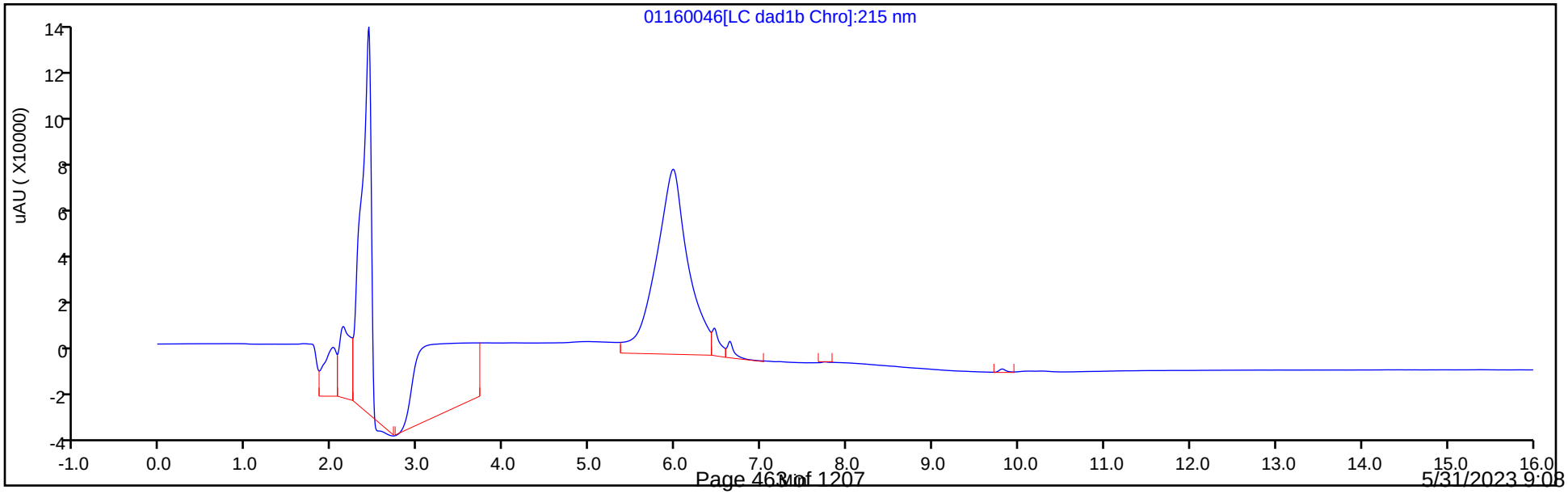
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160046.d

Injection Date:	17-Jan-2023 03:16:44	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC ADD 1			Worklist Smp#:	18
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	49
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins Denver

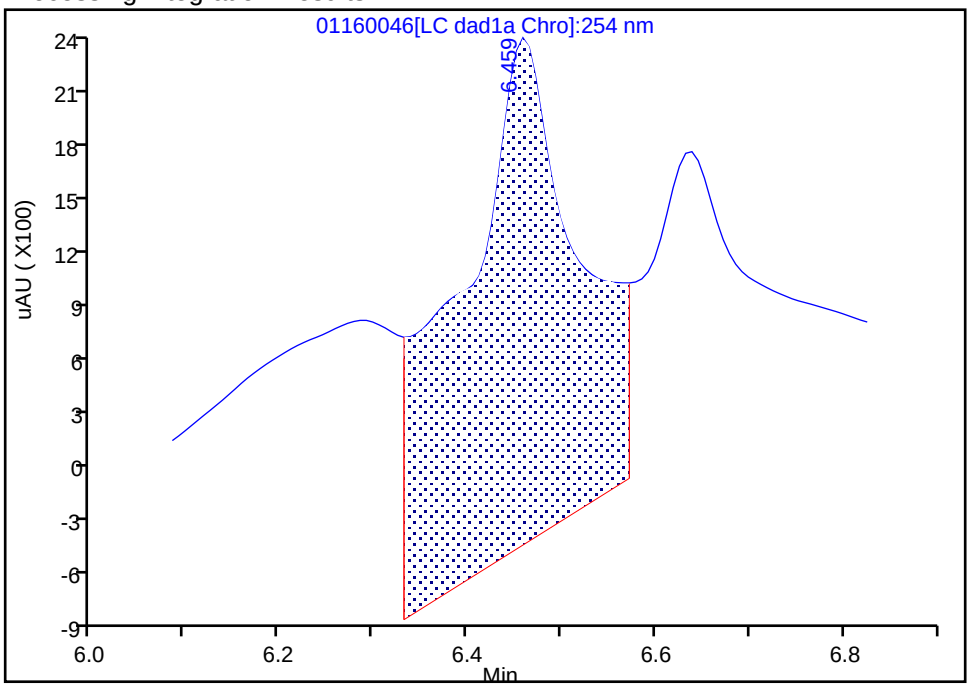
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160046.d
Injection Date: 17-Jan-2023 03:16:44 Instrument ID: CHHPLC_X3
Lims ID: IC ADD 1
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 49 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

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

Signal: 1

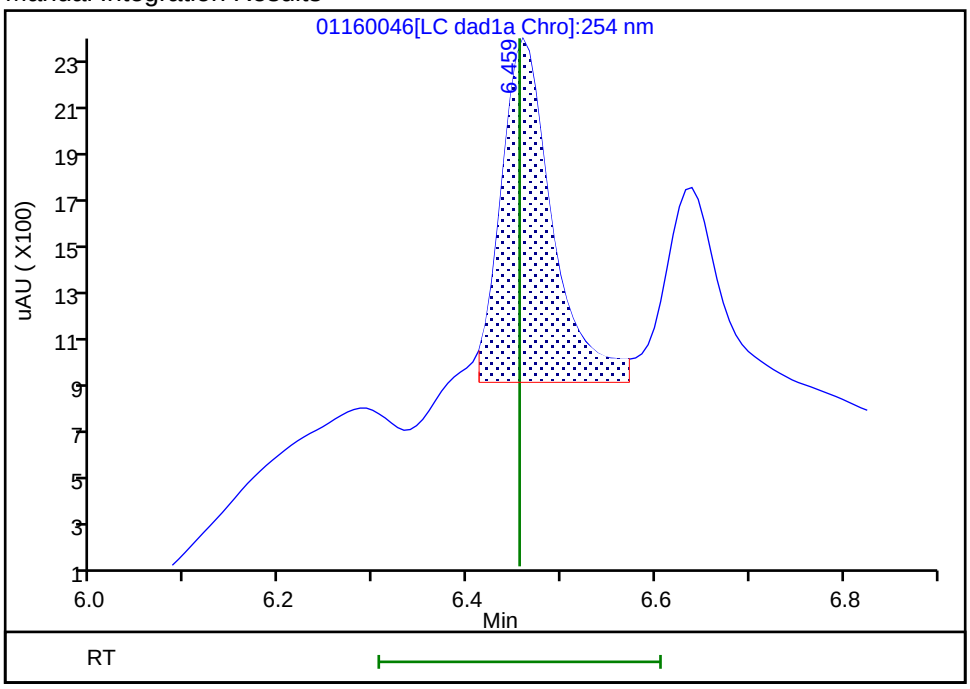
Processing Integration Results

RT: 6.46
Area: 24501
Amount: 0.068213
Amount Units: ug/mL



Manual Integration Results

RT: 6.46
Area: 5326
Amount: 0.019425
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:31:46
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

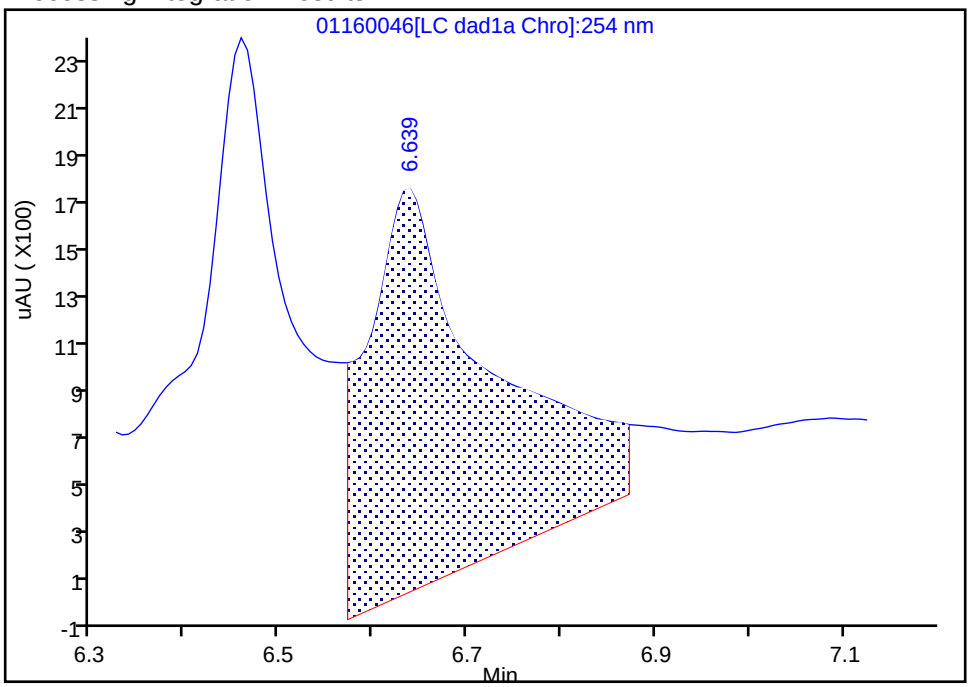
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160046.d				
Injection Date:	17-Jan-2023 03:16:44	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 1				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	49	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

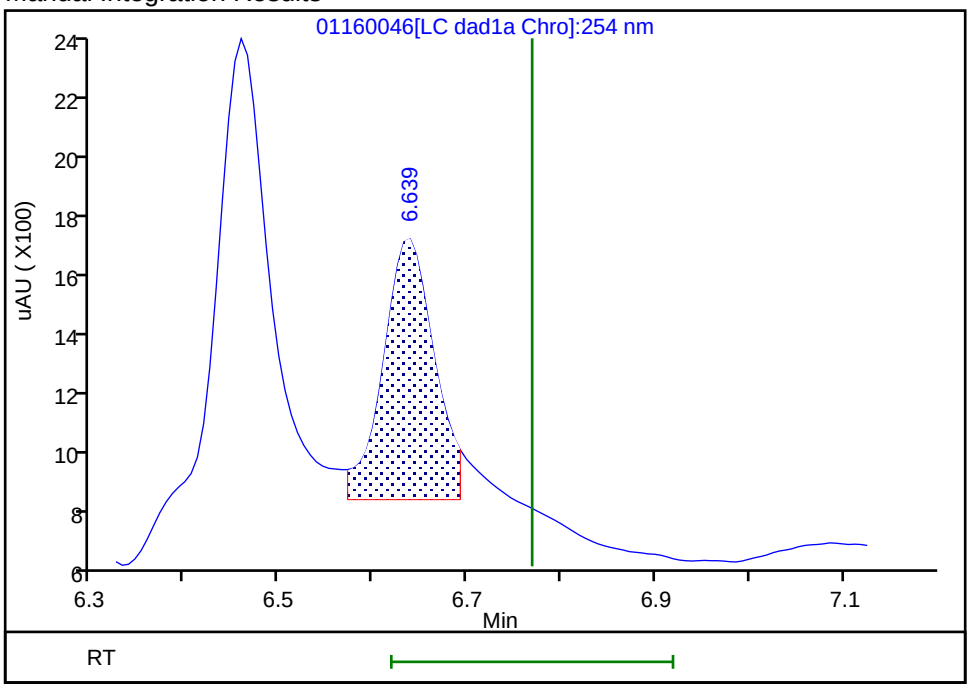
Processing Integration Results

RT: 6.64
Area: 15283
Amount: 0.068540
Amount Units: ug/mL



Manual Integration Results

RT: 6.64
Area: 3042
Amount: 0.020768
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:31:48
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Calibration / 2,6-diamino-4-nitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

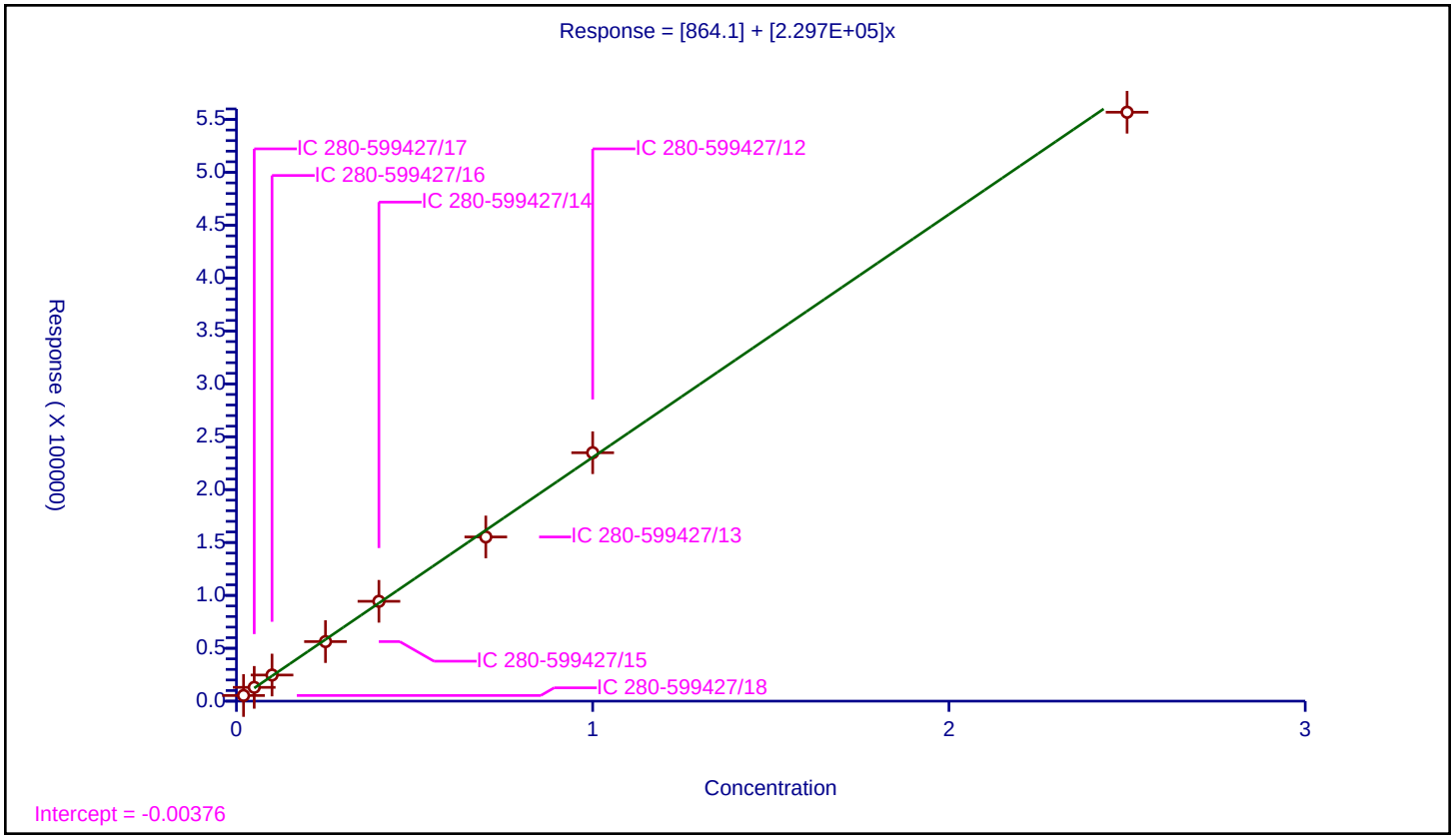
Curve Coefficients

Intercept:	864.1
Slope:	2.297E+05

Error Coefficients

Standard Error:	8170
Relative Standard Error:	4.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-599427/18	0.02	5326.0			266300.0	Y
2	IC 280-599427/17	0.05	13039.0			260780.0	Y
3	IC 280-599427/16	0.1	24702.0			247020.0	Y
4	IC 280-599427/15	0.25	56309.0			225236.0	Y
5	IC 280-599427/14	0.4	94399.0			235997.5	Y
6	IC 280-599427/13	0.7	155237.0			221767.142857	Y
7	IC 280-599427/12	1.0	234891.0			234891.0	Y
8	IC 280-599427/11	2.5	556860.0			222744.0	Y



Calibration / 2,4-diamino-6-nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

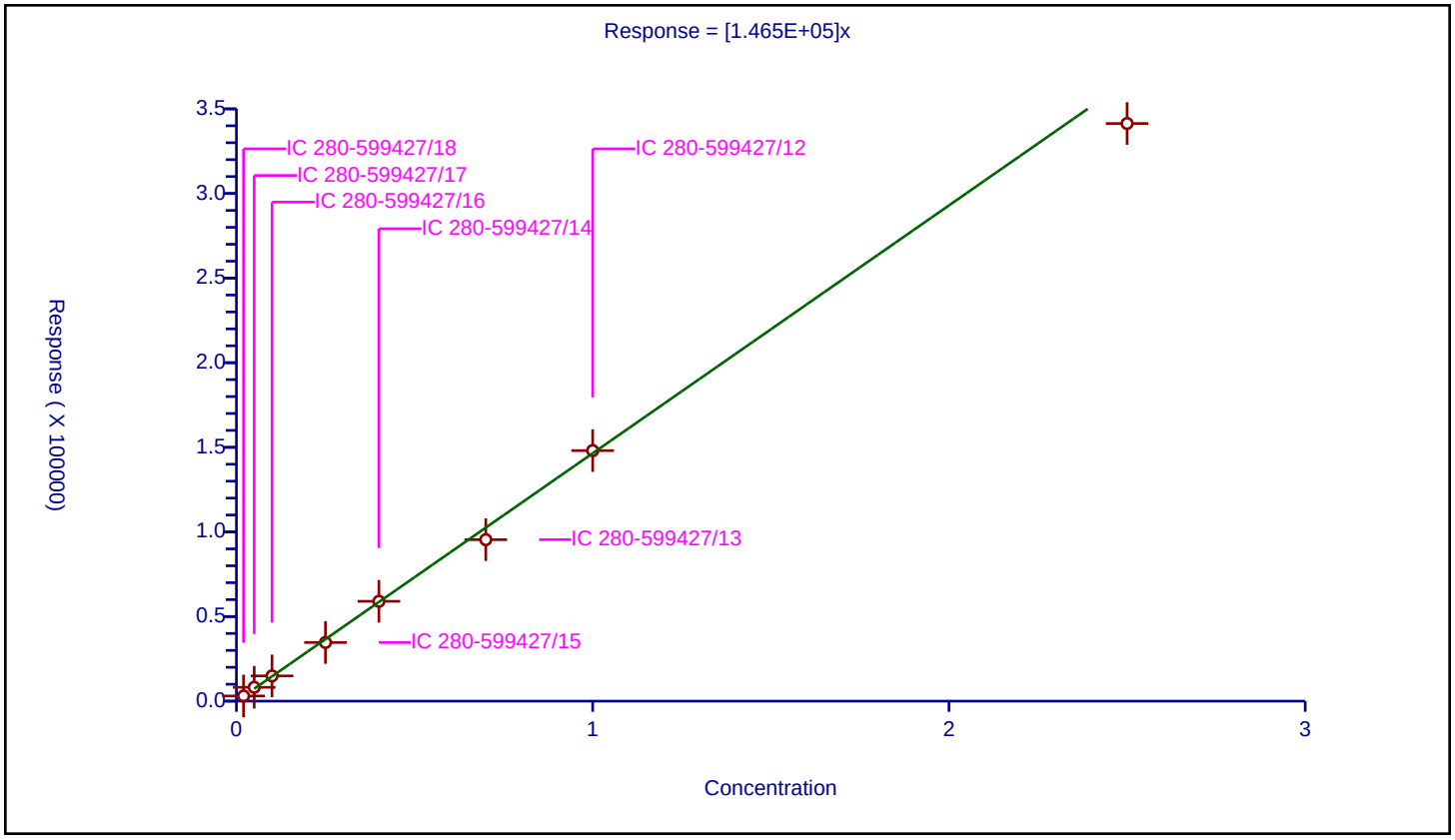
Curve Coefficients

Intercept:	0
Slope:	1.465E+05

Error Coefficients

Standard Error:	9810
Relative Standard Error:	6.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-599427/18	0.02	3042.0			152100.0	Y
2	IC 280-599427/17	0.05	8175.0			163500.0	Y
3	IC 280-599427/16	0.1	14908.0			149080.0	Y
4	IC 280-599427/15	0.25	34670.0			138680.0	Y
5	IC 280-599427/14	0.4	59001.0			147502.5	Y
6	IC 280-599427/13	0.7	95423.0			136318.571429	Y
7	IC 280-599427/12	1.0	148050.0			148050.0	Y
8	IC 280-599427/11	2.5	341365.0			136546.0	Y



Calibration / 3,5-Dinitroaniline

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

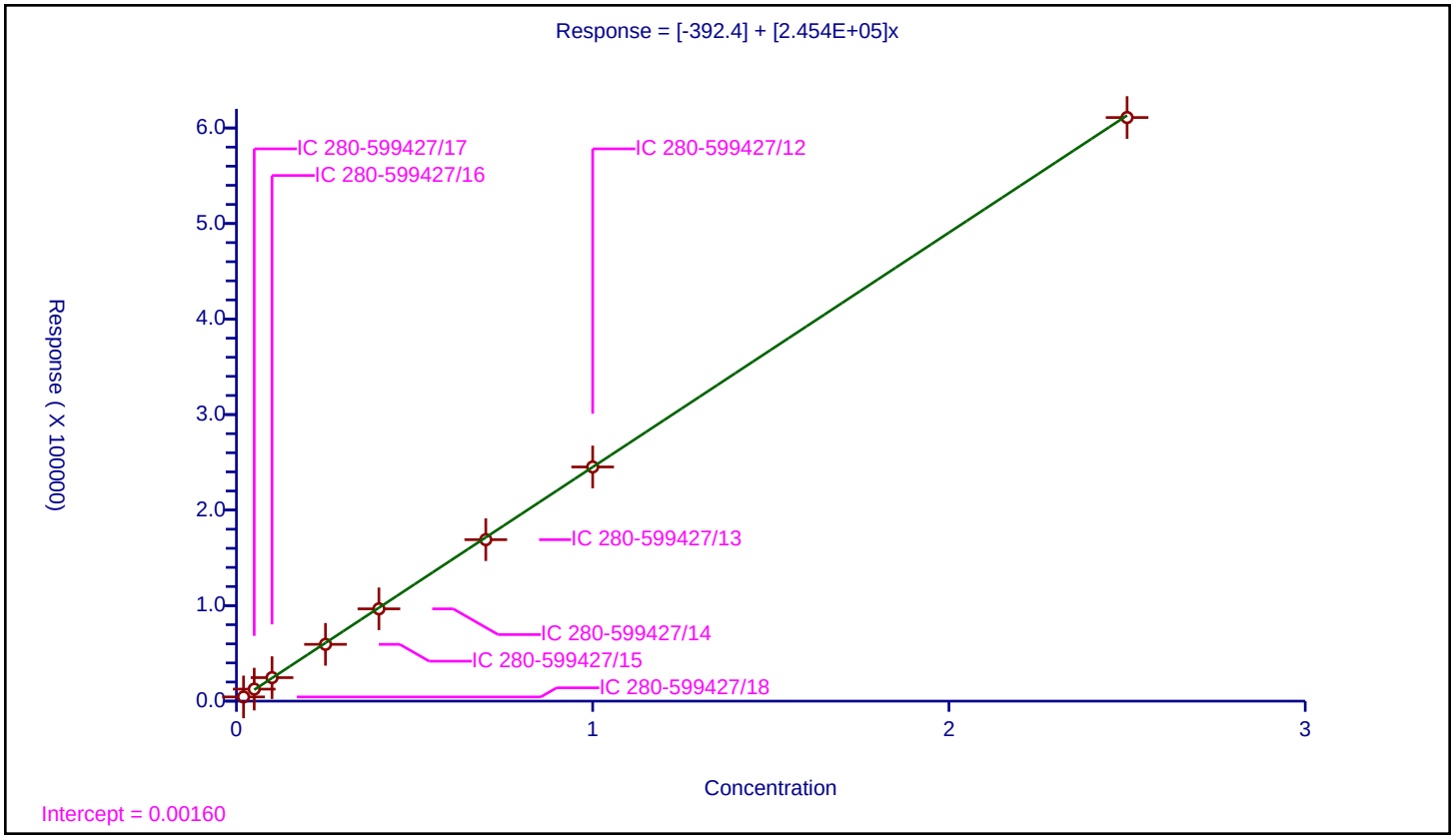
Curve Coefficients

Intercept:	-392.4
Slope:	2.454E+05

Error Coefficients

Standard Error:	1570
Relative Standard Error:	3.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-599427/18	0.02	4397.0			219850.0	Y
2	IC 280-599427/17	0.05	12600.0			252000.0	Y
3	IC 280-599427/16	0.1	24604.0			246040.0	Y
4	IC 280-599427/15	0.25	59459.0			237836.0	Y
5	IC 280-599427/14	0.4	96632.0			241580.0	Y
6	IC 280-599427/13	0.7	169039.0			241484.285714	Y
7	IC 280-599427/12	1.0	245164.0			245164.0	Y
8	IC 280-599427/11	2.5	610953.0			244381.2	Y



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176674-1 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.: 280-176674-1 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.: 280-176674-1 Analy Batch No.: 601664

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/08/2023 15:38 Calibration End Date: 02/08/2023 18:42 Calibration ID: 76877

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
Nitroglycerin	61590 64985 65842	59395 66398	63298 66047	63170 65903	Ave		64069.9243				3.7		20.0			
2,4,6-Trinitrotoluene	216700 210476 209648	213100 208335	214160 208960	207870 210110	Ave		211039.889				1.4		20.0			
4-Amino-2,6-dinitrotoluene	167000 152884 152878	155300 152868	157500 150916	154070 150980	Ave		154932.802				3.2		20.0			
2-Amino-4,6-dinitrotoluene	221400 198056 200205	201050 198963	201440 196574	197650 197356	Ave		201410.398				3.8		20.0			
2,6-Dinitrotoluene	148600 143452 140114	145550 140035	142180 142239	139670 142869	Ave		142745.397				2.0		20.0			
2,4-Dinitrotoluene	314100 293052 294340	299250 294023	297440 290757	295390 291656	Ave		296667.471				2.4		20.0			
2-Nitrotoluene	137700 124752 126235	130550 125108	132460 124116	125480 124668	Ave		127896.490				3.7		20.0			
4-Nitrotoluene	126300 108612 108849	119650 108228	111680 107359	108570 107671	Ave		111879.808				5.9		20.0			
3-Nitrotoluene	147300 137292 138526	153100 136790	141920 136640	136660 136203	Ave		140492.289				4.2		20.0			
PETN	72730 68498 68809	67310 68653	68114 68586	68161 68748	Ave		68845.4251				2.2		20.0			
1,2-Dinitrobenzene	118800 127432 129675	124550 128775	125560 126837	127270 127879	Ave		126308.705				2.5		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-176674-1 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	1961	4648	9387	23490	0.0100	0.0200	0.0500	0.100	0.250
		36852	63922	91529	229343		0.400	0.700	1.00	2.50	
RDX	Ave	1203	2196	5236	10112	25542	0.0100	0.0200	0.0500	0.100	0.250
		41299	71812	106983	266228		0.400	0.700	1.00	2.50	
Picric acid	Ave	673	1492	3768	7640	19359	0.0100	0.0200	0.0500	0.100	0.250
		30993	54237	77676	196834		0.400	0.700	1.00	2.50	
1,3,5-Trinitrobenzene	Ave	2196	4313	10679	21399	54382	0.0100	0.0200	0.0500	0.100	0.250
		87378	153058	219038	544595		0.400	0.700	1.00	2.50	
1,3-Dinitrobenzene	Ave	2902	5849	14664	29249	74049	0.0100	0.0200	0.0500	0.100	0.250
		118511	206375	296615	743106		0.400	0.700	1.00	2.50	
Nitrobenzene	Ave	1905	3816	9605	19019	47590	0.0100	0.0200	0.0500	0.100	0.250
		77064	132989	191651	482389		0.400	0.700	1.00	2.50	
3,5-Dinitroaniline	Lin2	2147	4377	11426	22723	57053	0.0100	0.0200	0.0500	0.100	0.250
		90999	159712	229927	576276		0.400	0.700	1.00	2.50	
Tetryl	Ave	1611	3073	8153	16438	41420	0.0100	0.0200	0.0500	0.100	0.250
		68663	115964	165416	416200		0.400	0.700	1.00	2.50	
Nitroglycerin	Ave	6159	11879	31649	63170	162463	0.100	0.200	0.500	1.00	2.50
		265593	462332	659032	1646056		4.00	7.00	10.0	25.0	
2,4,6-Trinitrotoluene	Ave	2167	4262	10708	20787	52619	0.0100	0.0200	0.0500	0.100	0.250
		83334	146272	210110	524120		0.400	0.700	1.00	2.50	
4-Amino-2,6-dinitrotoluene	Ave	1670	3106	7875	15407	38221	0.0100	0.0200	0.0500	0.100	0.250
		61147	105641	150980	382195		0.400	0.700	1.00	2.50	
2-Amino-4,6-dinitrotoluene	Ave	2214	4021	10072	19765	49514	0.0100	0.0200	0.0500	0.100	0.250
		79585	137602	197356	500512		0.400	0.700	1.00	2.50	
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.: 280-176674-1 Analy Batch No.: 601664

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/08/2023 15:38 Calibration End Date: 02/08/2023 18:42 Calibration ID: 76877

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
		56014	99567	142869	350285		0.400	0.700	1.00	2.50	
2,4-Dinitrotoluene	Ave	3141	5985	14872	29539	73263	0.0100	0.0200	0.0500	0.100	0.250
		117609	203530	291656	735849		0.400	0.700	1.00	2.50	
2-Nitrotoluene	Ave	1377	2611	6623	12548	31188	0.0100	0.0200	0.0500	0.100	0.250
		50043	86881	124668	315588		0.400	0.700	1.00	2.50	
4-Nitrotoluene	Ave	1263	2393	5584	10857	27153	0.0100	0.0200	0.0500	0.100	0.250
		43291	75151	107671	272123		0.400	0.700	1.00	2.50	
3-Nitrotoluene	Ave	1473	3062	7096	13666	34323	0.0100	0.0200	0.0500	0.100	0.250
		54716	95648	136203	346314		0.400	0.700	1.00	2.50	
PETN	Ave	7273	13462	34057	68161	171245	0.100	0.200	0.500	1.00	2.50
		274612	480104	687477	1720221		4.00	7.00	10.0	25.0	
1,2-Dinitrobenzene	Ave	1188	2491	6278	12727	31858	0.0100	0.0200	0.0500	0.100	0.250
		51510	88786	127879	324188		0.400	0.700	1.00	2.50	

Curve Type Legend
Ave = Average
Lin2 = Linear 1/conc^2

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080011.D
Lims ID: IC INT 9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 08-Feb-2023 15:38:53 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 9
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub26

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Feb-2023 12:48:02 Calib Date: 08-Feb-2023 18:42:13
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 08-Feb-2023 16:28:55

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.546	6.544	0.002	229343	2.50	2.45	M
8 RDX	1	7.559	7.564	-0.005	266228	2.50	2.50	
9 2,4,6-Trinitrophenol	1	7.966	8.044	-0.078	196834	2.50	2.60	
$ 10 1,2-Dinitrobenzene	1	8.506	8.517	-0.011	324188	2.50	2.57	
11 1,3,5-Trinitrobenzene	1	8.639	8.644	-0.005	544595	2.50	2.51	
12 1,3-Dinitrobenzene	1	9.246	9.257	-0.011	743106	2.50	2.52	
13 Nitrobenzene	1	9.619	9.631	-0.012	482389	2.50	2.52	
14 3,5-Dinitroaniline	1	9.819	9.831	-0.012	576276	2.50	2.51	
15 Tetryl	1	9.966	9.977	-0.011	416200	2.50	2.54	
16 Nitroglycerin	2	10.426	10.437	-0.011	1646056	25.0	25.7	
17 2,4,6-Trinitrotoluene	1	10.859	10.864	-0.005	524120	2.50	2.48	
18 4-Amino-2,6-dinitrotoluene	1	11.013	11.031	-0.018	382195	2.50	2.47	
19 2-Amino-4,6-dinitrotoluene	1	11.259	11.277	-0.018	500512	2.50	2.49	
20 2,6-Dinitrotoluene	1	11.439	11.451	-0.012	350285	2.50	2.45	
21 2,4-Dinitrotoluene	1	11.606	11.617	-0.011	735849	2.50	2.48	
22 o-Nitrotoluene	1	12.426	12.437	-0.011	315588	2.50	2.47	
23 p-Nitrotoluene	1	12.833	12.844	-0.011	272123	2.50	2.43	
24 m-Nitrotoluene	1	13.399	13.411	-0.012	346314	2.50	2.47	
25 PETN	2	14.539	14.551	-0.012	1720221	25.0	25.0	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00075 Amount Added: 250.00 Units: uL

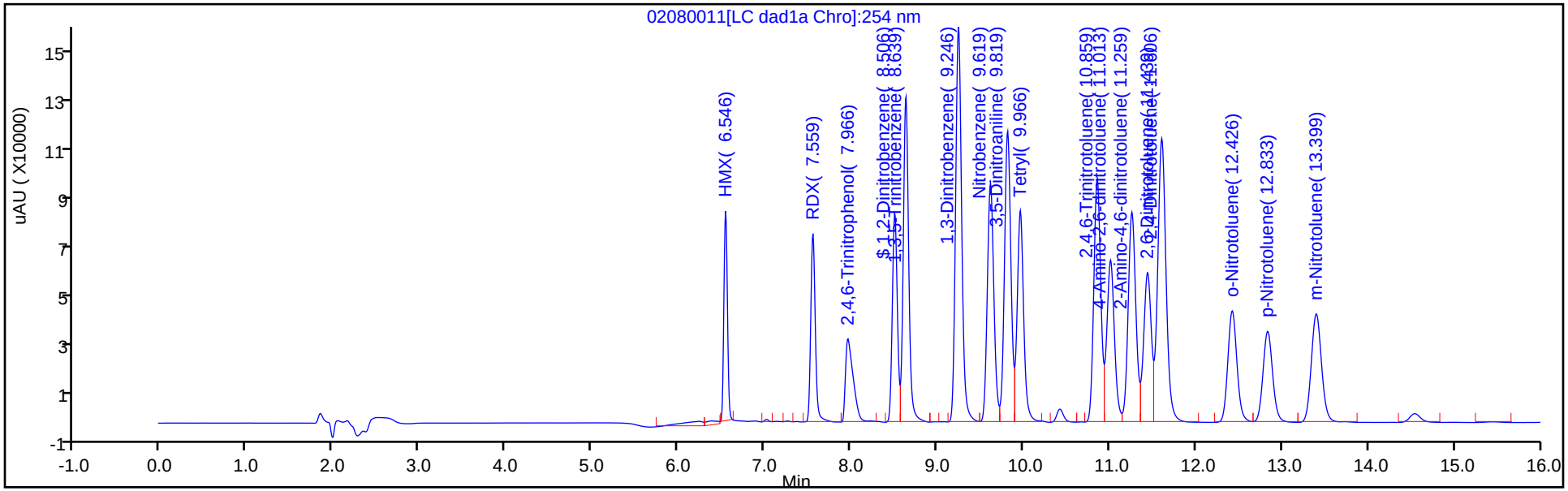
Report Date: 09-Feb-2023 12:48:02 Chrom Revision: 2.3 01-Feb-2023 13:23:06

Eurofins Denver

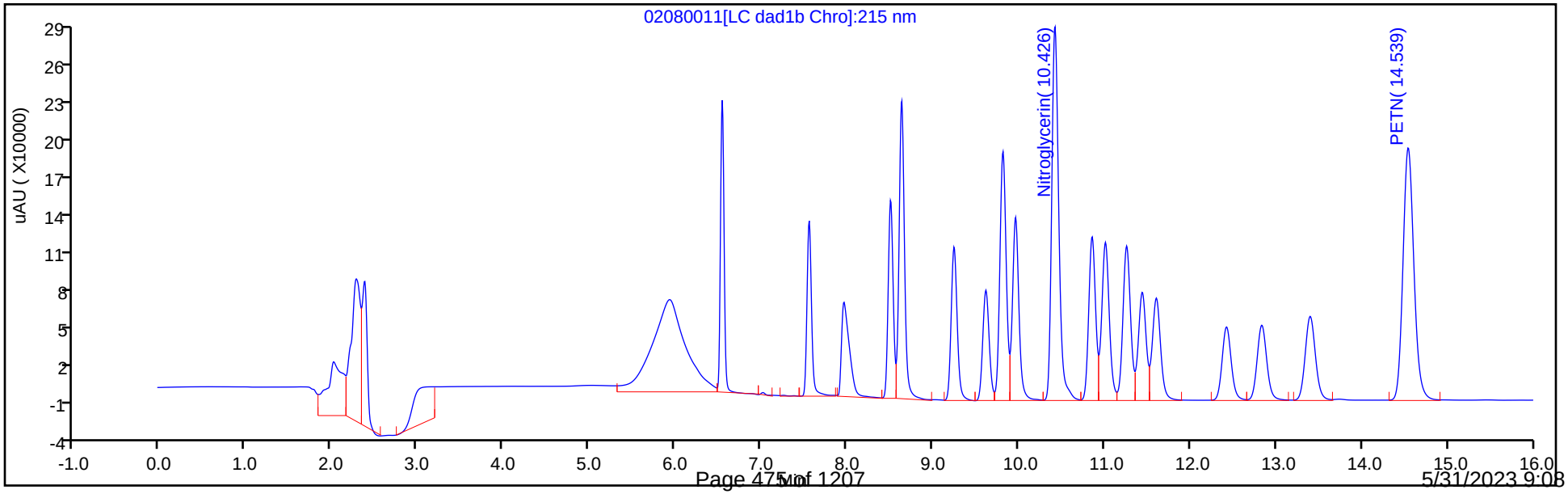
Data File: \\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080011.d

Injection Date:	08-Feb-2023 15:38:53	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC INT 9			Worklist Smp#:	11
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins Denver

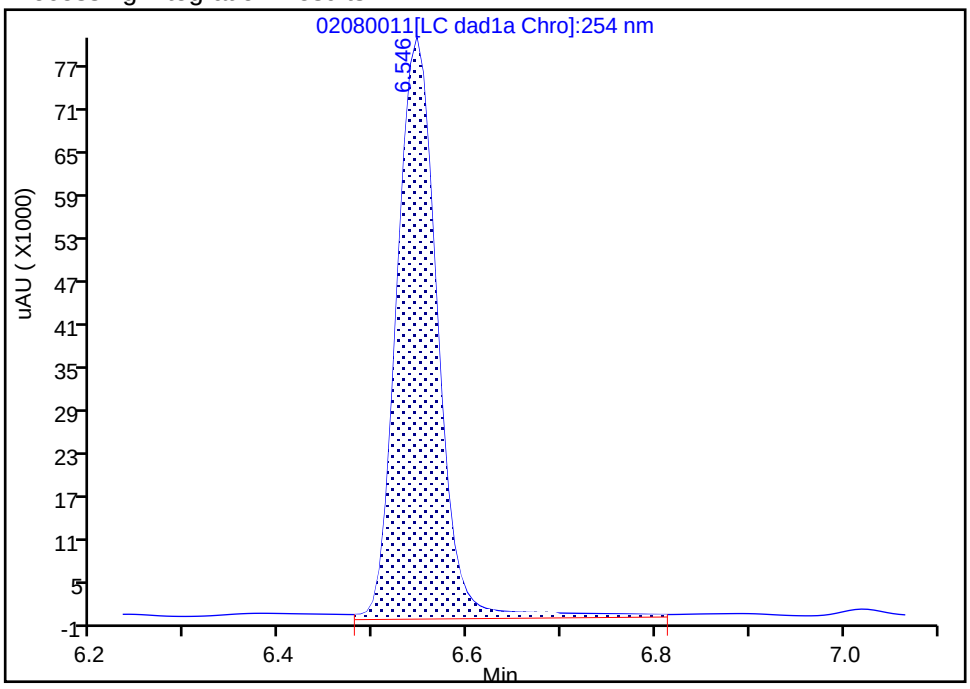
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080011.d				
Injection Date:	08-Feb-2023 15:38:53	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

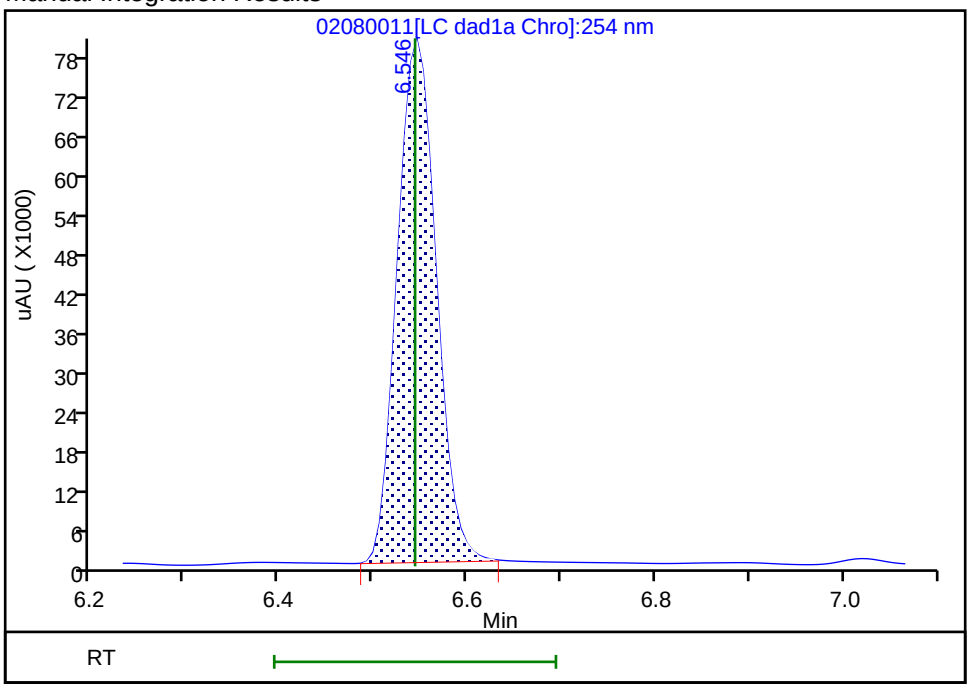
Processing Integration Results

RT: 6.55
Area: 245170
Amount: 2.586222
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 229343
Amount: 2.452128
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 16:28:37
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080012.D
Lims ID: IC INT 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 08-Feb-2023 16:01:51 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 8
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub26

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Feb-2023 12:48:03 Calib Date: 08-Feb-2023 18:42:13
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 08-Feb-2023 16:28:33

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.547	6.544	0.003	91529	1.00	0.9786	M
8 RDX	1	7.567	7.564	0.003	106983	1.00	1.01	
9 2,4,6-Trinitrophenol	1	8.014	8.044	-0.030	77676	1.00	1.02	
$ 10 1,2-Dinitrobenzene	1	8.521	8.517	0.004	127879	1.00	1.01	
11 1,3,5-Trinitrobenzene	1	8.647	8.644	0.003	219038	1.00	1.01	
12 1,3-Dinitrobenzene	1	9.260	9.257	0.003	296615	1.00	1.01	
13 Nitrobenzene	1	9.634	9.631	0.003	191651	1.00	1.00	
14 3,5-Dinitroaniline	1	9.840	9.831	0.009	229927	1.00	1.00	
15 Tetryl	1	9.987	9.977	0.010	165416	1.00	1.01	
16 Nitroglycerin	2	10.454	10.437	0.017	659032	10.0	10.3	
17 2,4,6-Trinitrotoluene	1	10.880	10.864	0.016	210110	1.00	1.00	
18 4-Amino-2,6-dinitrotoluene	1	11.040	11.031	0.009	150980	1.00	0.9745	
19 2-Amino-4,6-dinitrotoluene	1	11.287	11.277	0.010	197356	1.00	0.9799	
20 2,6-Dinitrotoluene	1	11.467	11.451	0.016	142869	1.00	1.00	
21 2,4-Dinitrotoluene	1	11.634	11.617	0.017	291656	1.00	0.9831	
22 o-Nitrotoluene	1	12.447	12.437	0.010	124668	1.00	0.9748	
23 p-Nitrotoluene	1	12.860	12.844	0.016	107671	1.00	0.9624	
24 m-Nitrotoluene	1	13.420	13.411	0.009	136203	1.00	0.9695	
25 PETN	2	14.567	14.551	0.016	687477	10.0	9.99	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00075 Amount Added: 100.00 Units: uL

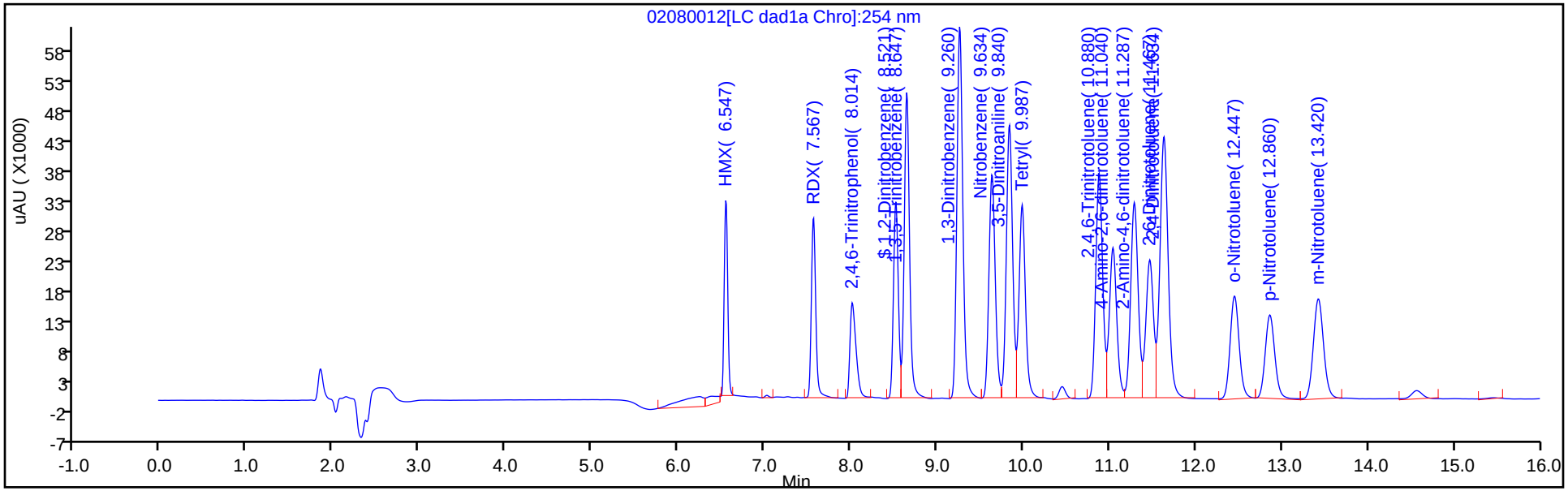
Report Date: 09-Feb-2023 12:48:03 Chrom Revision: 2.3 01-Feb-2023 13:23:06

Eurofins Denver

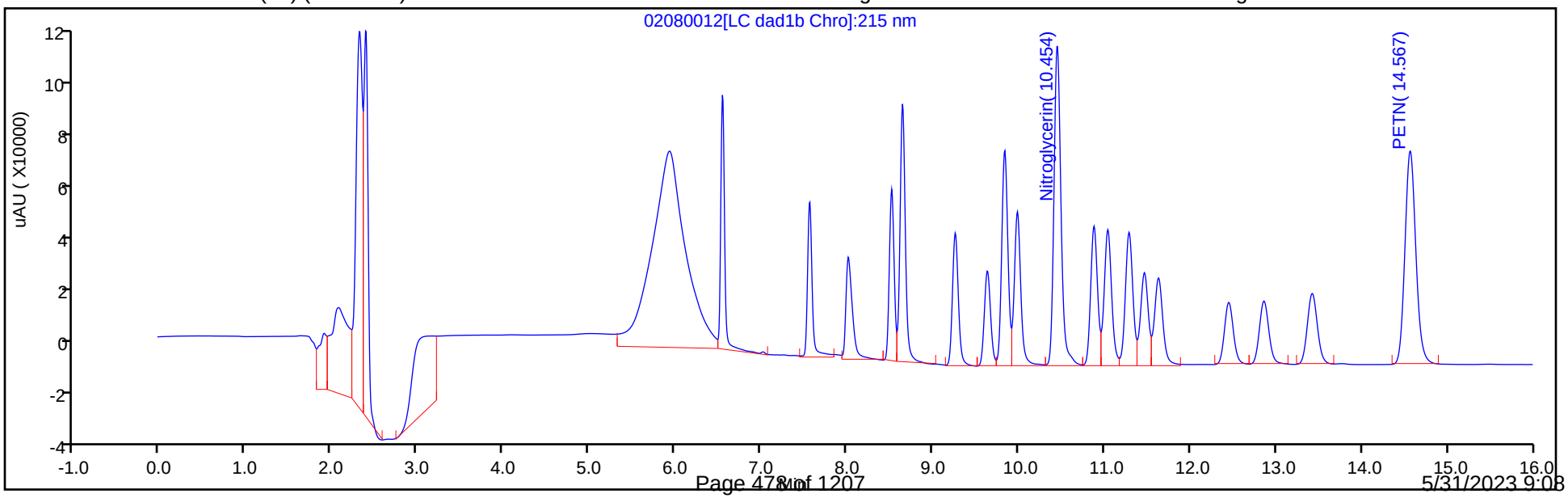
Data File: \\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080012.d

Injection Date:	08-Feb-2023 16:01:51	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC INT 8			Worklist Smp#:	12
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins Denver

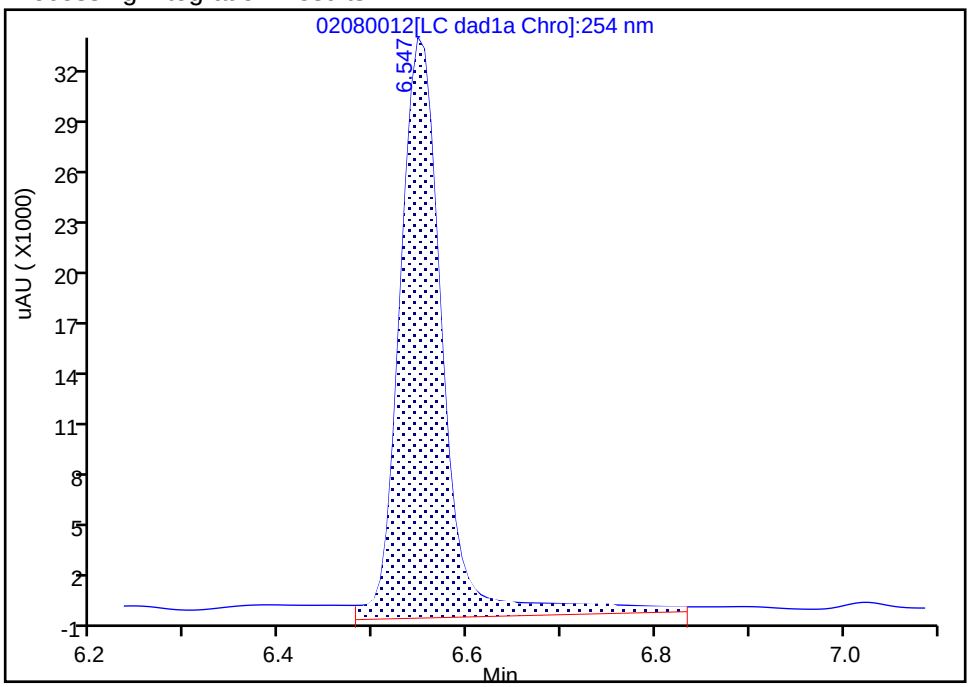
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080012.d				
Injection Date:	08-Feb-2023 16:01:51	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 8				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

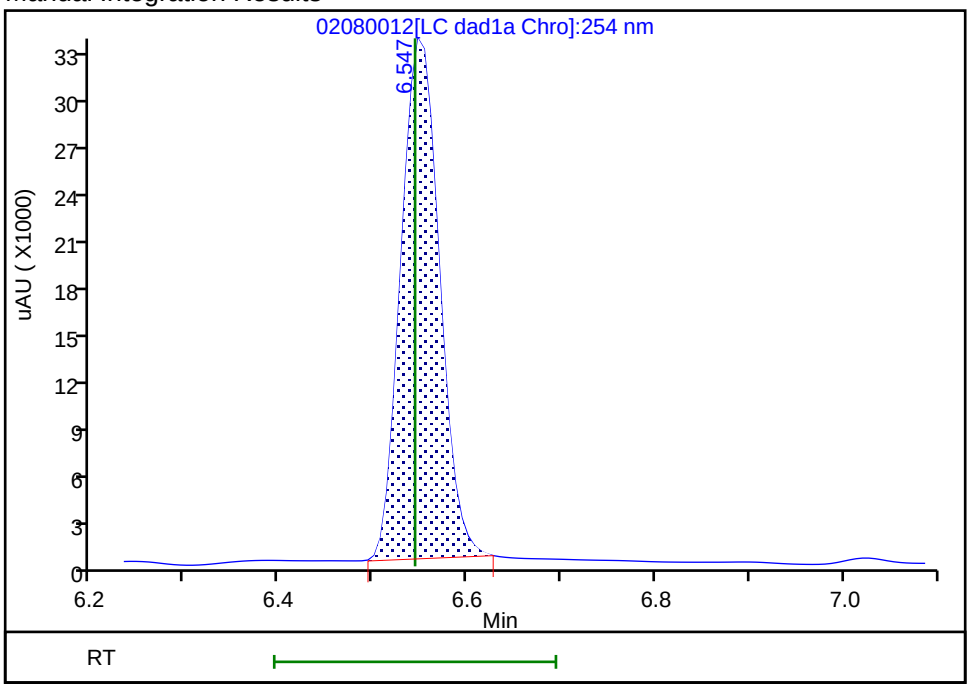
Processing Integration Results

RT: 6.55
Area: 107005
Amount: 1.043580
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 91529
Amount: 0.978625
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 16:28:16
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080013.D
Lims ID: IC INT 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 08-Feb-2023 16:24:45 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 7
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub26

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Feb-2023 12:48:04 Calib Date: 08-Feb-2023 18:42:13
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 08-Feb-2023 16:55:38

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.544	6.544	0.000	63922	0.7000	0.6835	M
8 RDX	1	7.564	7.564	0.000	71812	0.7000	0.6751	M
9 2,4,6-Trinitrophenol	1	8.018	8.044	-0.026	54237	0.7000	0.7152	
$ 10 1,2-Dinitrobenzene	1	8.511	8.517	-0.006	88786	0.7000	0.7029	
11 1,3,5-Trinitrobenzene	1	8.638	8.644	-0.006	153058	0.7000	0.7049	
12 1,3-Dinitrobenzene	1	9.251	9.257	-0.006	206375	0.7000	0.7010	
13 Nitrobenzene	1	9.624	9.631	-0.007	132989	0.7000	0.6954	
14 3,5-Dinitroaniline	1	9.824	9.831	-0.007	159712	0.7000	0.6975	
15 Tetryl	1	9.971	9.977	-0.006	115964	0.7000	0.7066	
16 Nitroglycerin	2	10.437	10.437	0.000	462332	7.00	7.22	
17 2,4,6-Trinitrotoluene	1	10.864	10.864	0.000	146272	0.7000	0.6931	
18 4-Amino-2,6-dinitrotoluene	1	11.024	11.031	-0.007	105641	0.7000	0.6819	
19 2-Amino-4,6-dinitrotoluene	1	11.271	11.277	-0.006	137602	0.7000	0.6832	
20 2,6-Dinitrotoluene	1	11.451	11.451	0.000	99567	0.7000	0.6975	
21 2,4-Dinitrotoluene	1	11.617	11.617	0.000	203530	0.7000	0.6861	
22 o-Nitrotoluene	1	12.431	12.437	-0.006	86881	0.7000	0.6793	
23 p-Nitrotoluene	1	12.844	12.844	0.000	75151	0.7000	0.6717	
24 m-Nitrotoluene	1	13.404	13.411	-0.007	95648	0.7000	0.6808	
25 PETN	2	14.544	14.551	-0.007	480104	7.00	6.97	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00075 Amount Added: 70.00 Units: uL

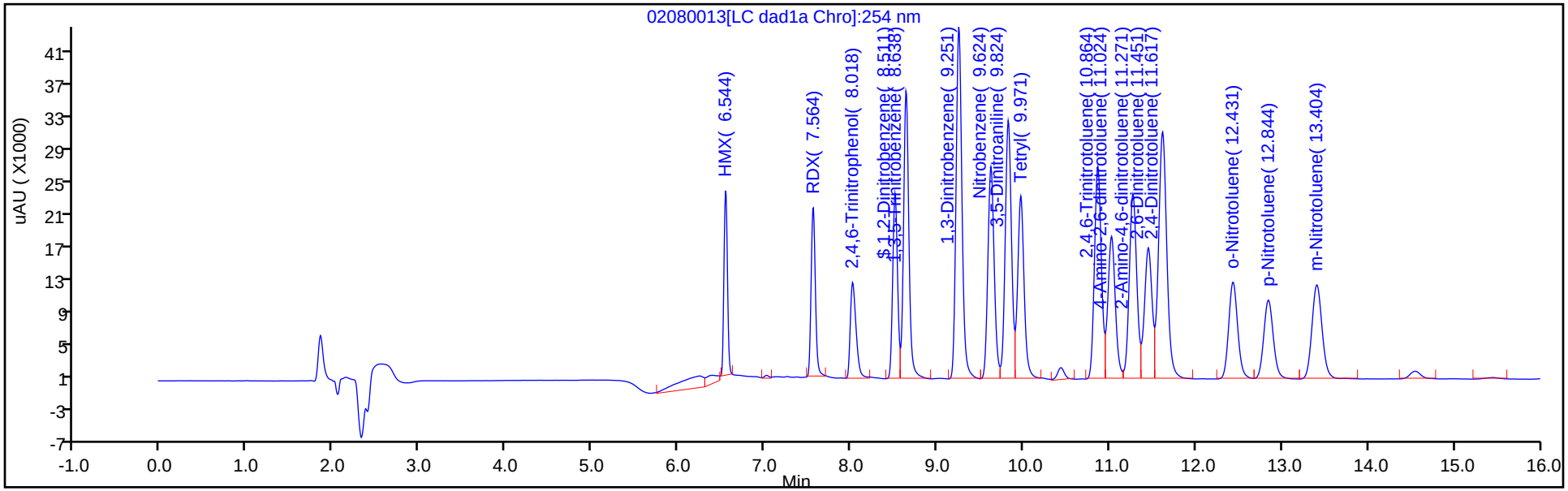
Report Date: 09-Feb-2023 12:48:04 Chrom Revision: 2.3 01-Feb-2023 13:23:06

Eurofins Denver

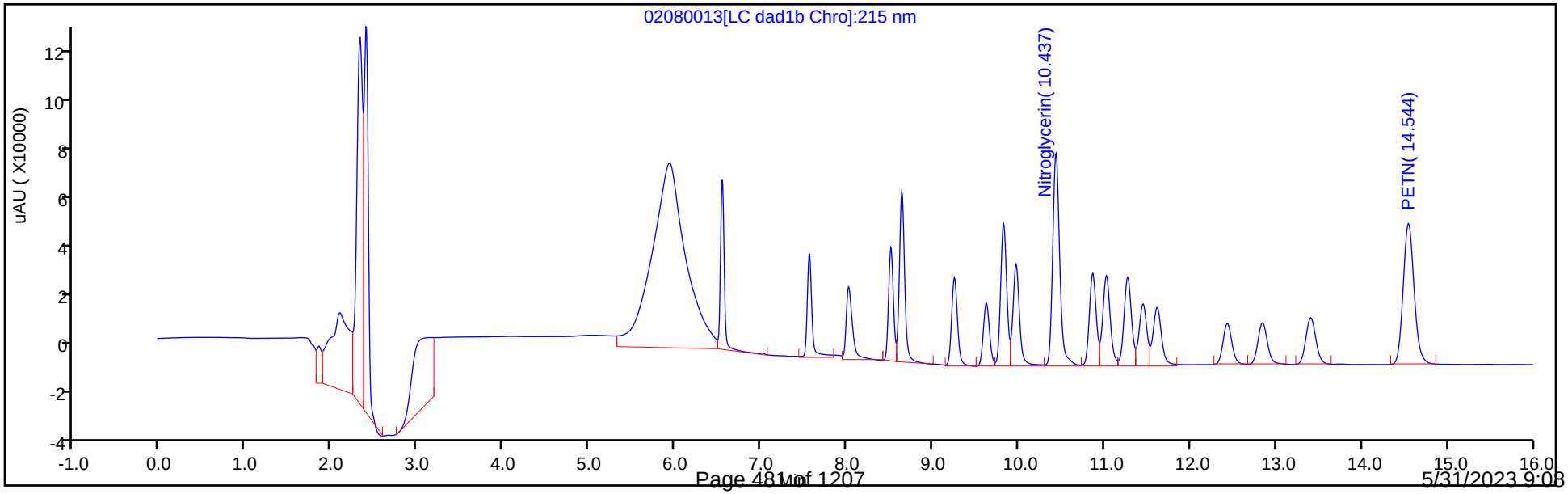
Data File: \\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080013.d

Injection Date:	08-Feb-2023 16:24:45	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC INT 7			Worklist Smp#:	13
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins Denver

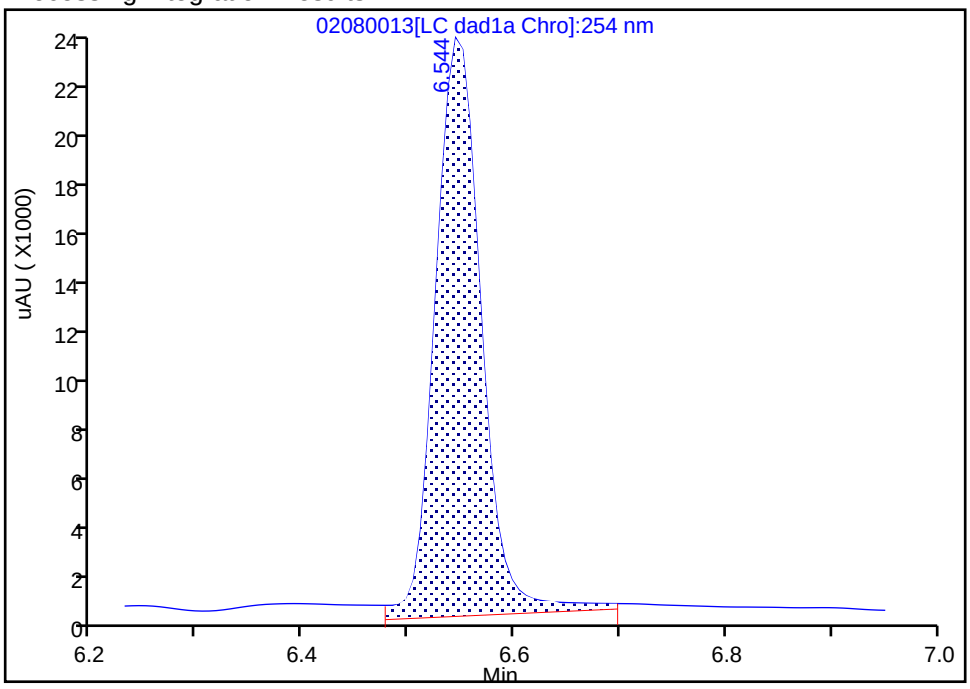
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080013.d				
Injection Date:	08-Feb-2023 16:24:45	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 7				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

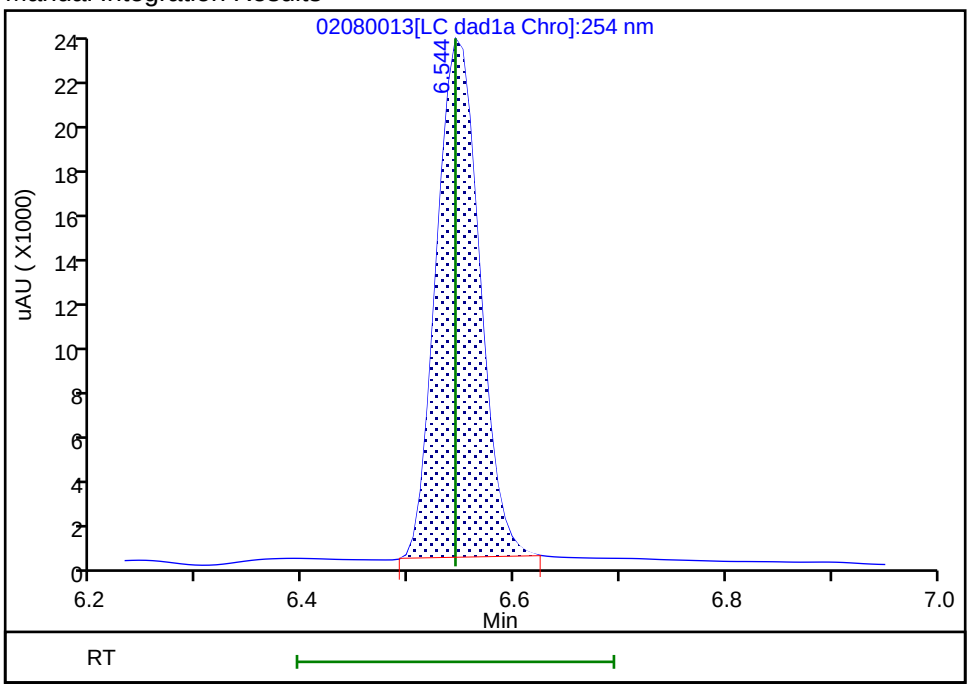
Processing Integration Results

RT: 6.54
Area: 70424
Amount: 0.744251
Amount Units: ug/mL



Manual Integration Results

RT: 6.54
Area: 63922
Amount: 0.683452
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 16:55:19

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

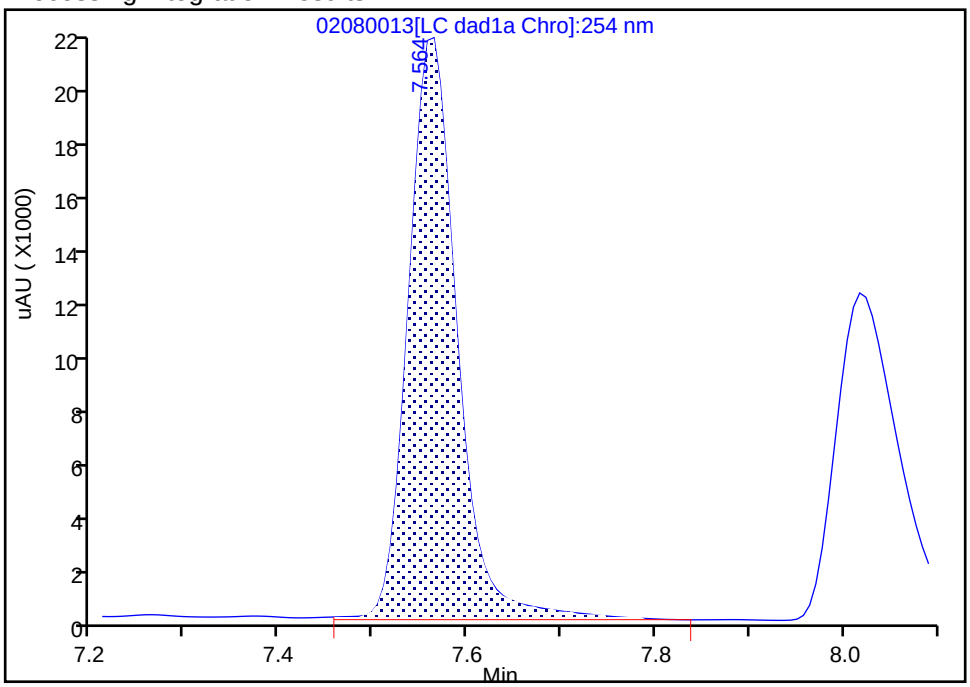
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080013.d				
Injection Date:	08-Feb-2023 16:24:45	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 7				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

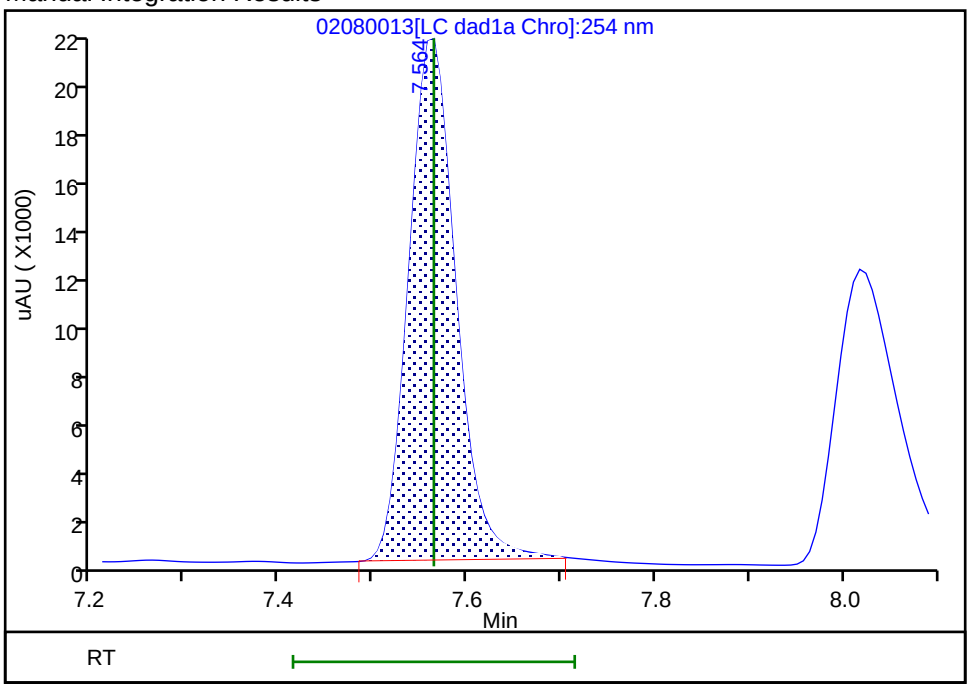
Processing Integration Results

RT: 7.56
Area: 75013
Amount: 0.701791
Amount Units: ug/mL



Manual Integration Results

RT: 7.56
Area: 71812
Amount: 0.675053
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:09:56
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080014.D
Lims ID: IC INT 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 08-Feb-2023 16:47:39 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 6
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub26

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Feb-2023 12:48:05 Calib Date: 08-Feb-2023 18:42:13
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 08-Feb-2023 17:11:22

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.548	6.544	0.004	36852	0.4000	0.3940	M
8 RDX	1	7.562	7.564	-0.002	41299	0.4000	0.3882	M
9 2,4,6-Trinitrophenol	1	8.028	8.044	-0.016	30993	0.4000	0.4087	
$ 10 1,2-Dinitrobenzene	1	8.515	8.517	-0.002	51510	0.4000	0.4078	
11 1,3,5-Trinitrobenzene	1	8.642	8.644	-0.002	87378	0.4000	0.4024	
12 1,3-Dinitrobenzene	1	9.255	9.257	-0.002	118511	0.4000	0.4026	
13 Nitrobenzene	1	9.628	9.631	-0.003	77064	0.4000	0.4030	
14 3,5-Dinitroaniline	1	9.828	9.831	-0.003	90999	0.4000	0.3977	
15 Tetryl	1	9.968	9.977	-0.009	68663	0.4000	0.4184	
16 Nitroglycerin	2	10.435	10.437	-0.002	265593	4.00	4.15	
17 2,4,6-Trinitrotoluene	1	10.868	10.864	0.004	83334	0.4000	0.3949	
18 4-Amino-2,6-dinitrotoluene	1	11.022	11.031	-0.009	61147	0.4000	0.3947	
19 2-Amino-4,6-dinitrotoluene	1	11.275	11.277	-0.002	79585	0.4000	0.3951	
20 2,6-Dinitrotoluene	1	11.448	11.451	-0.003	56014	0.4000	0.3924	
21 2,4-Dinitrotoluene	1	11.615	11.617	-0.002	117609	0.4000	0.3964	
22 o-Nitrotoluene	1	12.435	12.437	-0.002	50043	0.4000	0.3913	
23 p-Nitrotoluene	1	12.842	12.844	-0.002	43291	0.4000	0.3869	
24 m-Nitrotoluene	1	13.408	13.411	-0.003	54716	0.4000	0.3895	
25 PETN	2	14.548	14.551	-0.003	274612	4.00	3.99	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00075 Amount Added: 40.00 Units: uL

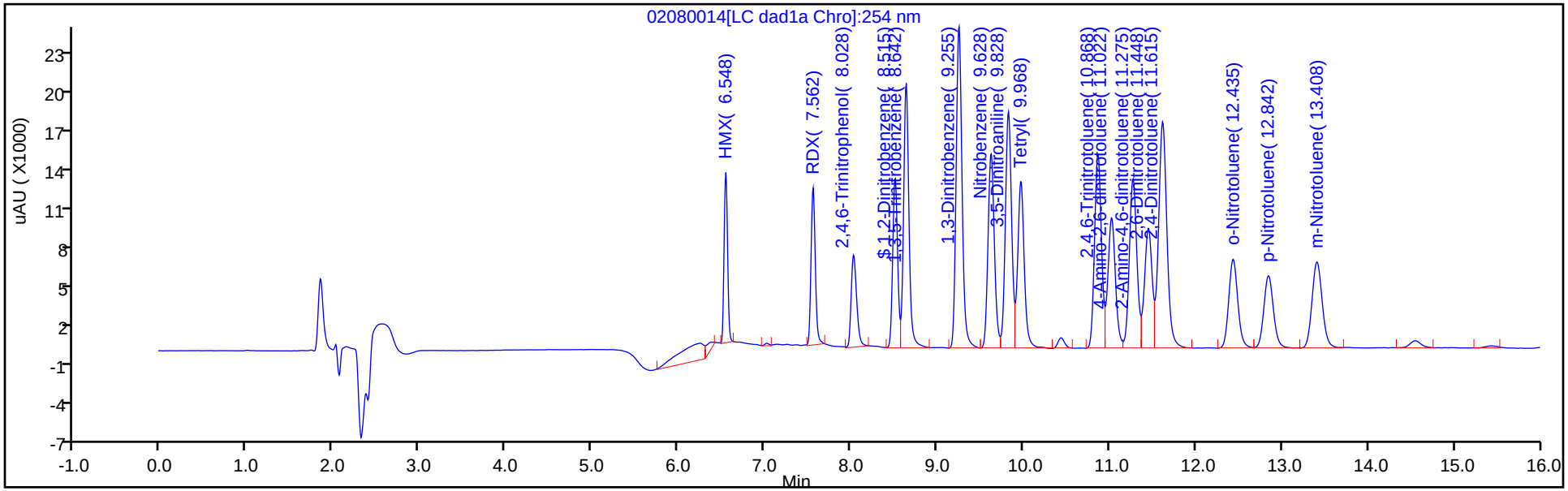
Report Date: 09-Feb-2023 12:48:05 Chrom Revision: 2.3 01-Feb-2023 13:23:06

Eurofins Denver

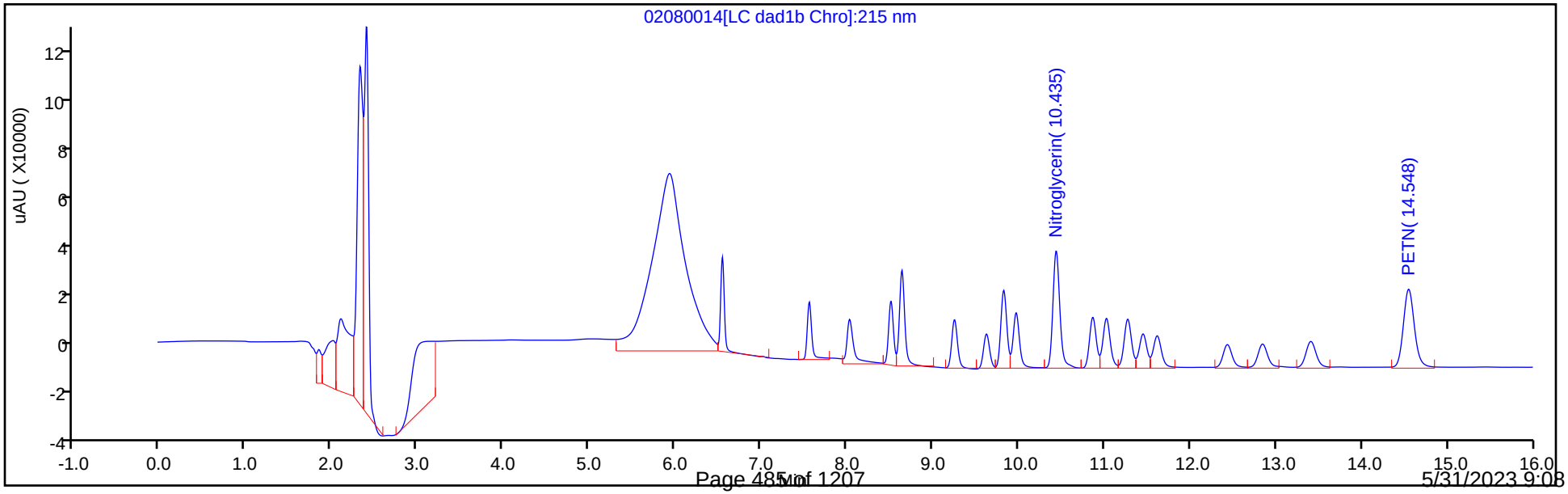
Data File: \\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080014.d

Injection Date:	08-Feb-2023 16:47:39	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC INT 6			Worklist Smp#:	14
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins Denver

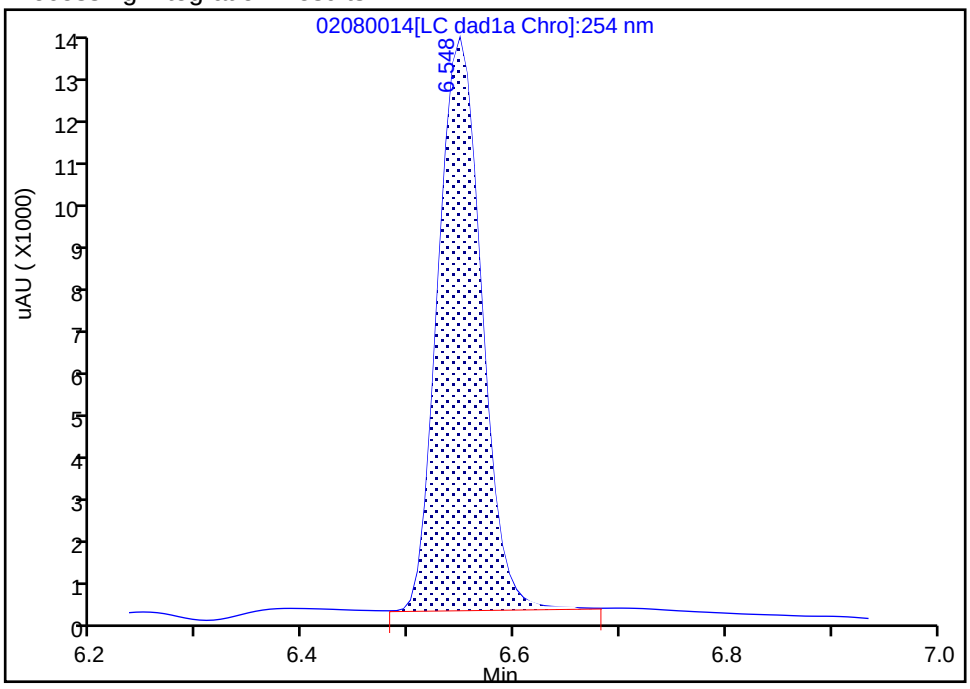
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080014.d				
Injection Date:	08-Feb-2023 16:47:39	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 6				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

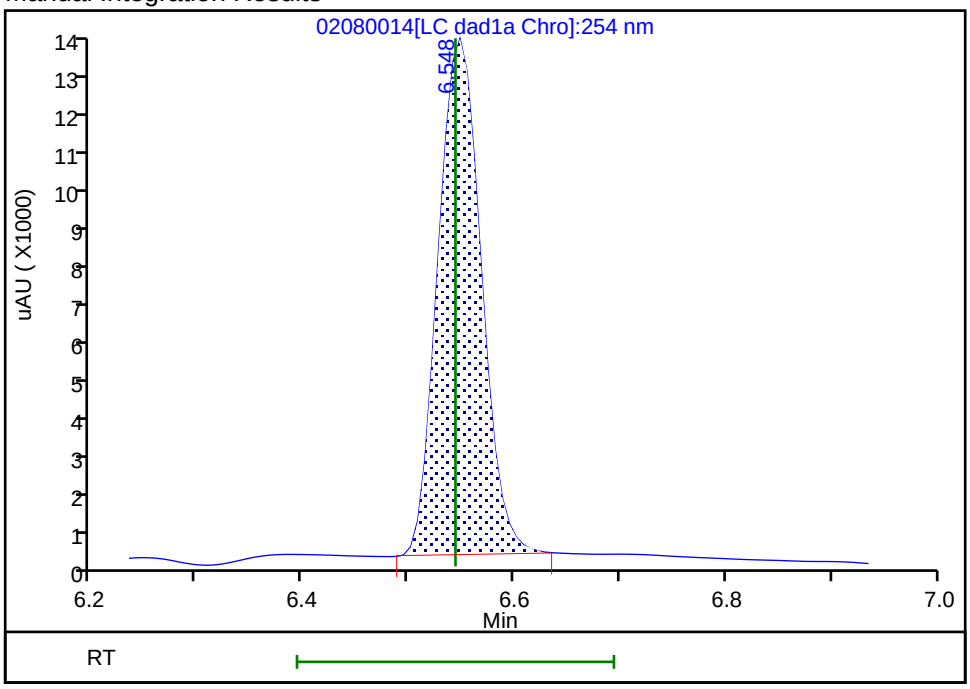
Processing Integration Results

RT: 6.55
Area: 37332
Amount: 0.405878
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 36852
Amount: 0.394020
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 17:11:10
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

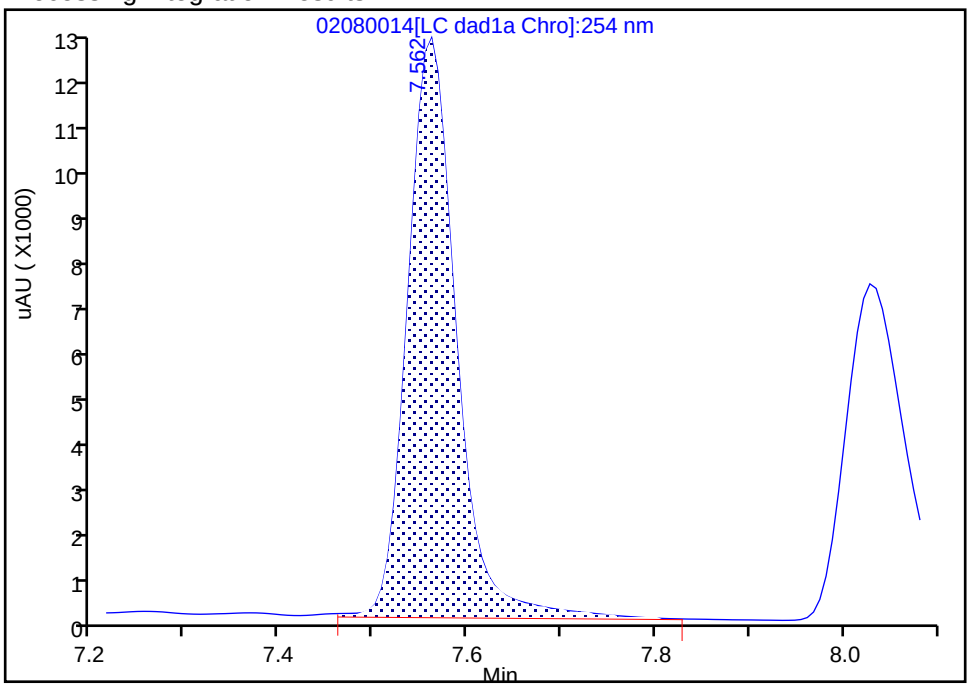
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080014.d				
Injection Date:	08-Feb-2023 16:47:39	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 6				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

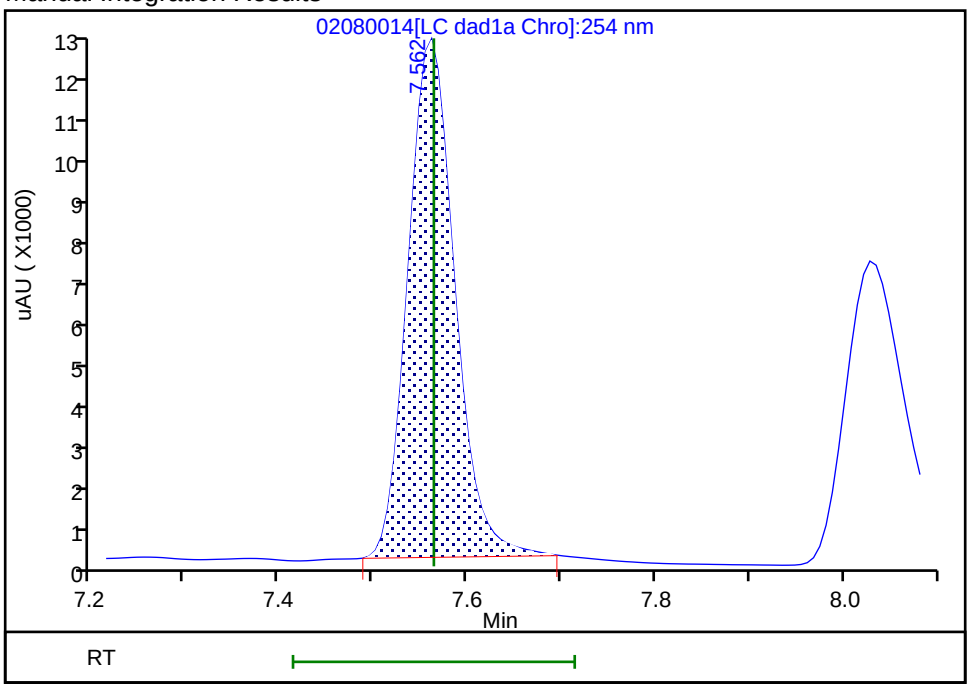
Processing Integration Results

RT: 7.56
Area: 43581
Amount: 0.405322
Amount Units: ug/mL



Manual Integration Results

RT: 7.56
Area: 41299
Amount: 0.388222
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:09:51
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080015.D
Lims ID: IC INT 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 08-Feb-2023 17:10:30 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 5
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub26

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Feb-2023 12:48:05 Calib Date: 08-Feb-2023 18:42:13
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 08-Feb-2023 17:44:54

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.548	6.544	0.004	23490	0.2500	0.2512	
8 RDX	1	7.568	7.564	0.004	25542	0.2500	0.2401	M
9 2,4,6-Trinitrophenol	1	8.041	8.044	-0.003	19359	0.2500	0.2553	
$ 10 1,2-Dinitrobenzene	1	8.515	8.517	-0.002	31858	0.2500	0.2522	
11 1,3,5-Trinitrobenzene	1	8.641	8.644	-0.003	54382	0.2500	0.2504	
12 1,3-Dinitrobenzene	1	9.255	9.257	-0.002	74049	0.2500	0.2515	
13 Nitrobenzene	1	9.628	9.631	-0.003	47590	0.2500	0.2488	
14 3,5-Dinitroaniline	1	9.828	9.831	-0.003	57053	0.2500	0.2496	
15 Tetryl	1	9.975	9.977	-0.002	41420	0.2500	0.2524	
16 Nitroglycerin	2	10.441	10.437	0.004	162463	2.50	2.54	
17 2,4,6-Trinitrotoluene	1	10.868	10.864	0.004	52619	0.2500	0.2493	
18 4-Amino-2,6-dinitrotoluene	1	11.028	11.031	-0.003	38221	0.2500	0.2467	
19 2-Amino-4,6-dinitrotoluene	1	11.275	11.277	-0.002	49514	0.2500	0.2458	
20 2,6-Dinitrotoluene	1	11.455	11.451	0.004	35863	0.2500	0.2512	
21 2,4-Dinitrotoluene	1	11.621	11.617	0.004	73263	0.2500	0.2470	
22 o-Nitrotoluene	1	12.441	12.437	0.004	31188	0.2500	0.2439	
23 p-Nitrotoluene	1	12.848	12.844	0.004	27153	0.2500	0.2427	
24 m-Nitrotoluene	1	13.415	13.411	0.004	34323	0.2500	0.2443	
25 PETN	2	14.555	14.551	0.004	171245	2.50	2.49	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00075 Amount Added: 25.00 Units: uL

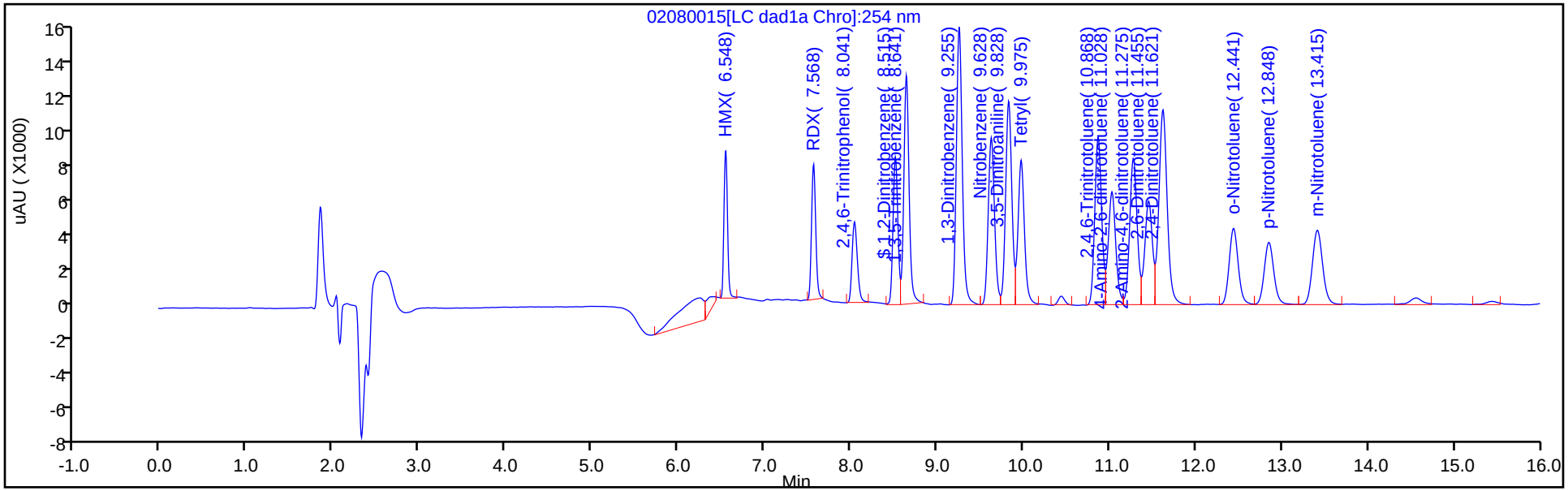
Report Date: 09-Feb-2023 12:48:06 Chrom Revision: 2.3 01-Feb-2023 13:23:06

Eurofins Denver

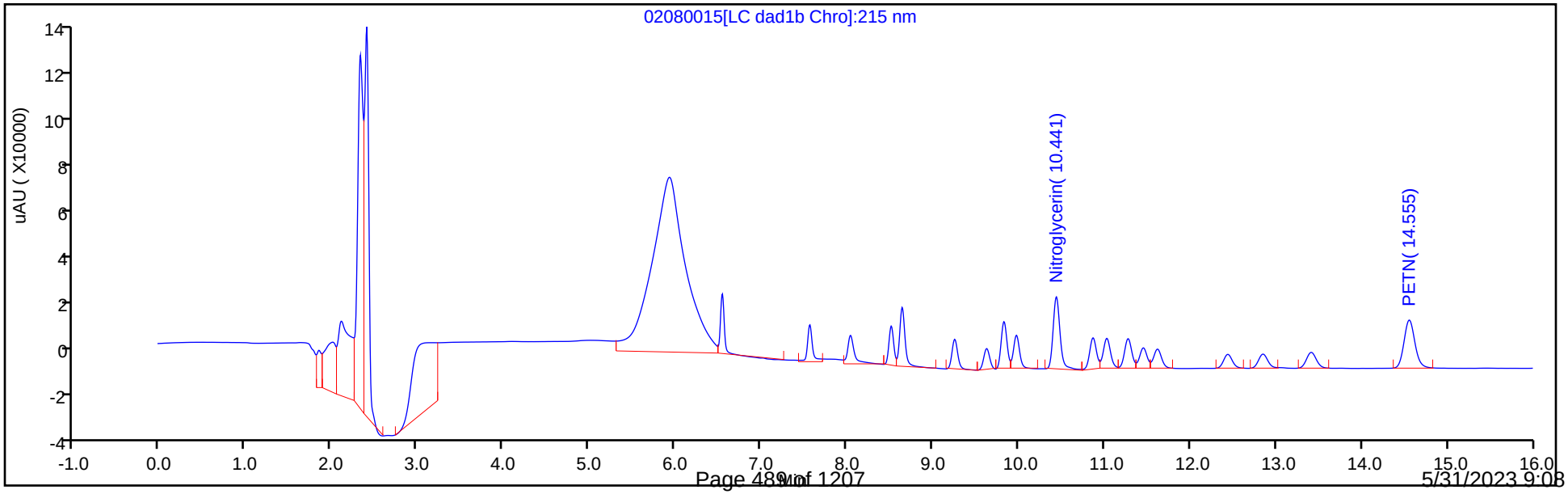
Data File: \\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080015.d

Injection Date:	08-Feb-2023 17:10:30	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC INT 5			Worklist Smp#:	15
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins Denver

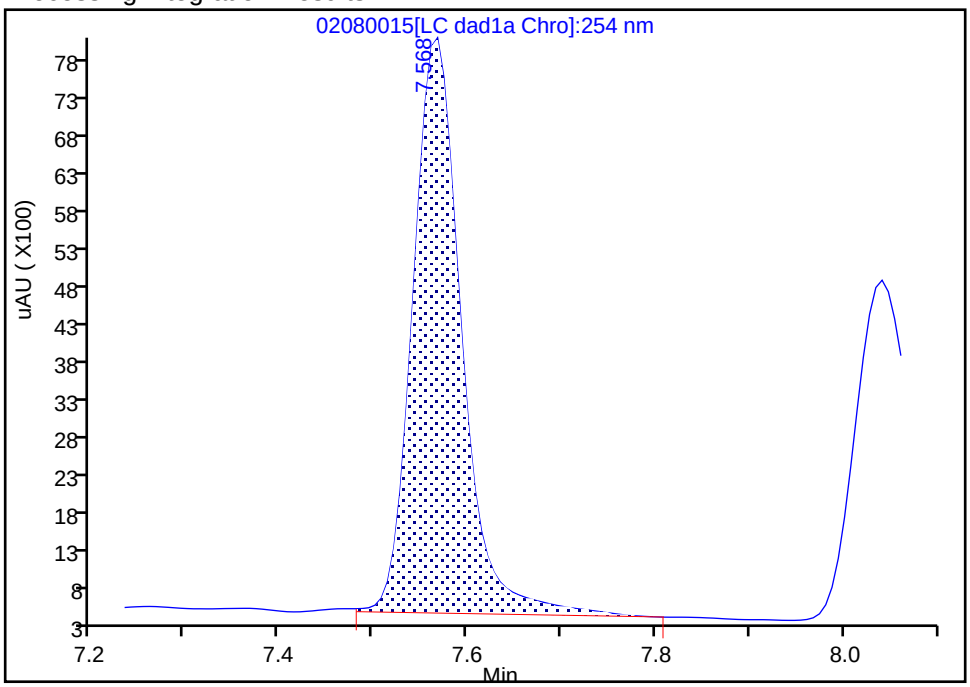
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080015.d				
Injection Date:	08-Feb-2023 17:10:30	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 5				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

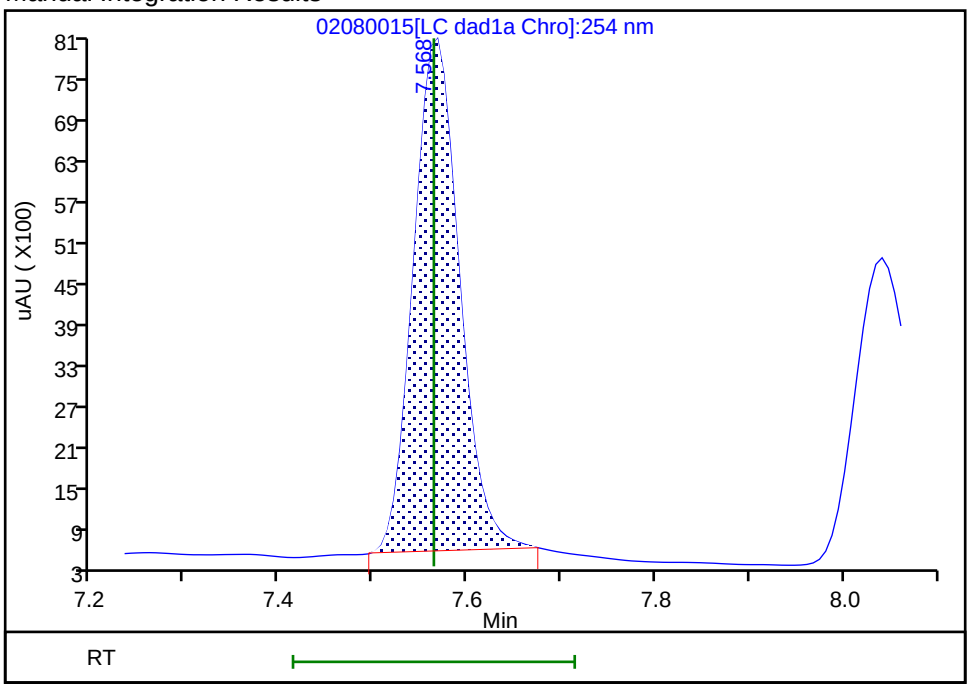
Processing Integration Results

RT: 7.57
Area: 27559
Amount: 0.254192
Amount Units: ug/mL



Manual Integration Results

RT: 7.57
Area: 25542
Amount: 0.240102
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:09:46
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080016.D
Lims ID: IC INT 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 08-Feb-2023 17:33:25 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 4
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub26

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Feb-2023 12:48:06 Calib Date: 08-Feb-2023 18:42:13
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 08-Feb-2023 18:05:31

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.544	6.544	0.000	9387	0.1000	0.1004	
8 RDX	1	7.564	7.564	0.000	10112	0.1000	0.0951	M
9 2,4,6-Trinitrophenol	1	8.044	8.044	0.000	7640	0.1000	0.1008	
$ 10 1,2-Dinitrobenzene	1	8.517	8.517	0.000	12727	0.1000	0.1008	
11 1,3,5-Trinitrobenzene	1	8.644	8.644	0.000	21399	0.1000	0.0985	
12 1,3-Dinitrobenzene	1	9.257	9.257	0.000	29249	0.1000	0.0994	
13 Nitrobenzene	1	9.631	9.631	0.000	19019	0.1000	0.0994	
14 3,5-Dinitroaniline	1	9.831	9.831	0.000	22723	0.1000	0.0998	
15 Tetryl	1	9.977	9.977	0.000	16438	0.1000	0.1002	
16 Nitroglycerin	2	10.437	10.437	0.000	63170	1.00	0.9860	
17 2,4,6-Trinitrotoluene	1	10.864	10.864	0.000	20787	0.1000	0.0985	
18 4-Amino-2,6-dinitrotoluene	1	11.031	11.031	0.000	15407	0.1000	0.0994	
19 2-Amino-4,6-dinitrotoluene	1	11.277	11.277	0.000	19765	0.1000	0.0981	
20 2,6-Dinitrotoluene	1	11.451	11.451	0.000	13967	0.1000	0.0978	
21 2,4-Dinitrotoluene	1	11.617	11.617	0.000	29539	0.1000	0.0996	
22 o-Nitrotoluene	1	12.437	12.437	0.000	12548	0.1000	0.0981	
23 p-Nitrotoluene	1	12.844	12.844	0.000	10857	0.1000	0.0970	
24 m-Nitrotoluene	1	13.411	13.411	0.000	13666	0.1000	0.0973	
25 PETN	2	14.551	14.551	0.000	68161	1.00	0.99	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00075 Amount Added: 10.00 Units: uL

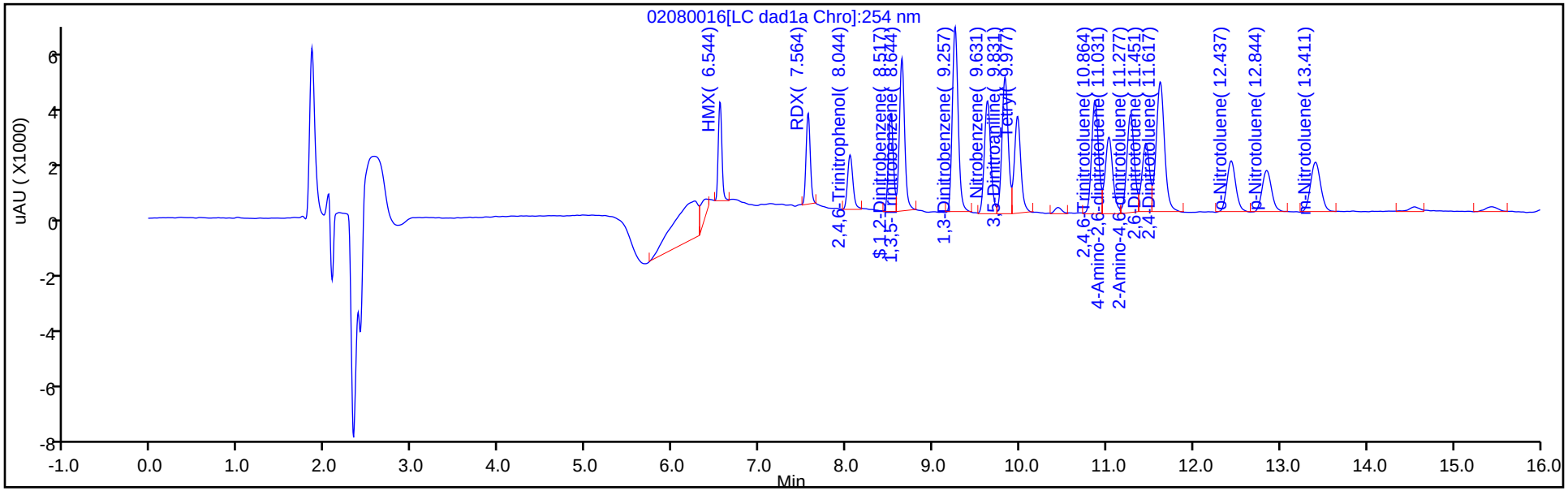
Report Date: 09-Feb-2023 12:48:06 Chrom Revision: 2.3 01-Feb-2023 13:23:06

Eurofins Denver

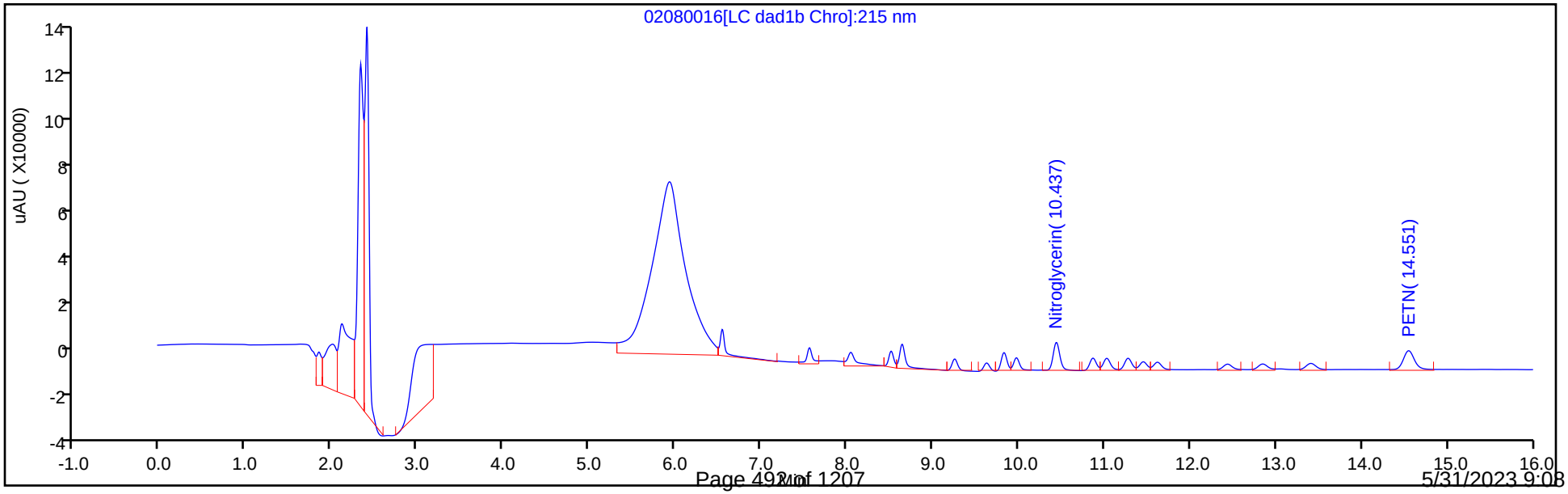
Data File: \\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080016.d

Injection Date:	08-Feb-2023 17:33:25	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC INT 4			Worklist Smp#:	16
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins Denver

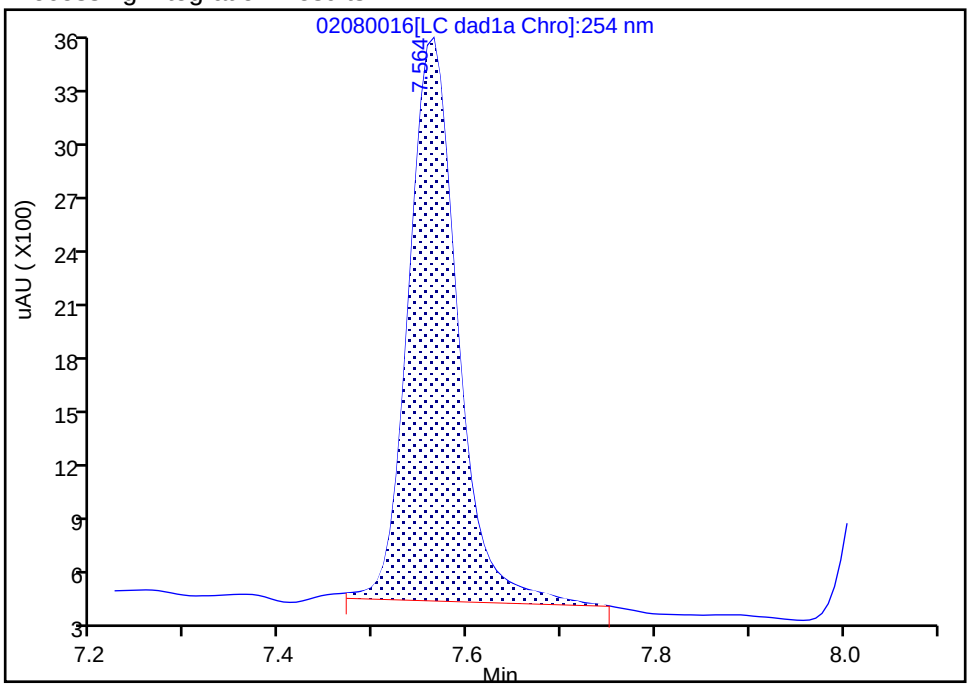
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080016.d				
Injection Date:	08-Feb-2023 17:33:25	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

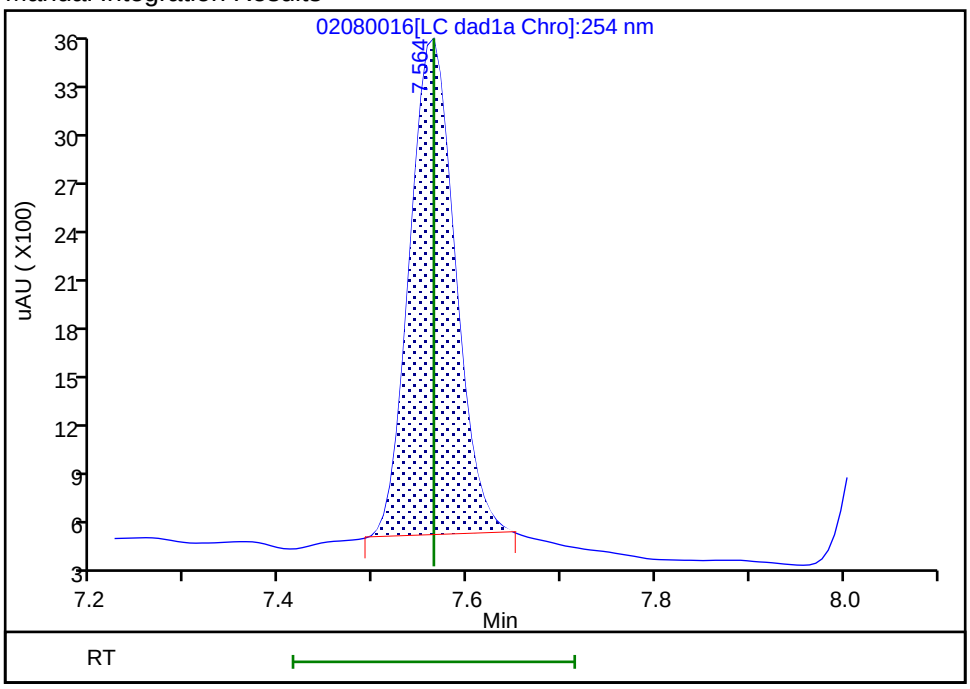
Processing Integration Results

RT: 7.56
Area: 11152
Amount: 0.101776
Amount Units: ug/mL



Manual Integration Results

RT: 7.56
Area: 10112
Amount: 0.095056
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:09:38
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

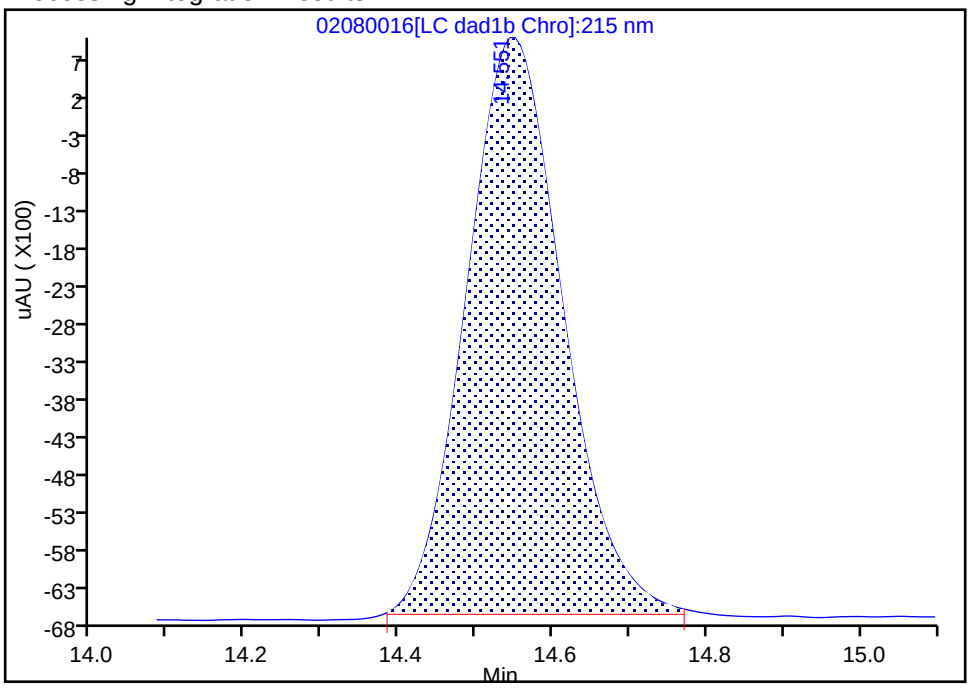
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080016.d				
Injection Date:	08-Feb-2023 17:33:25	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1C, 215 nm		

25 PETN, CAS: 78-11-5

Signal: 1

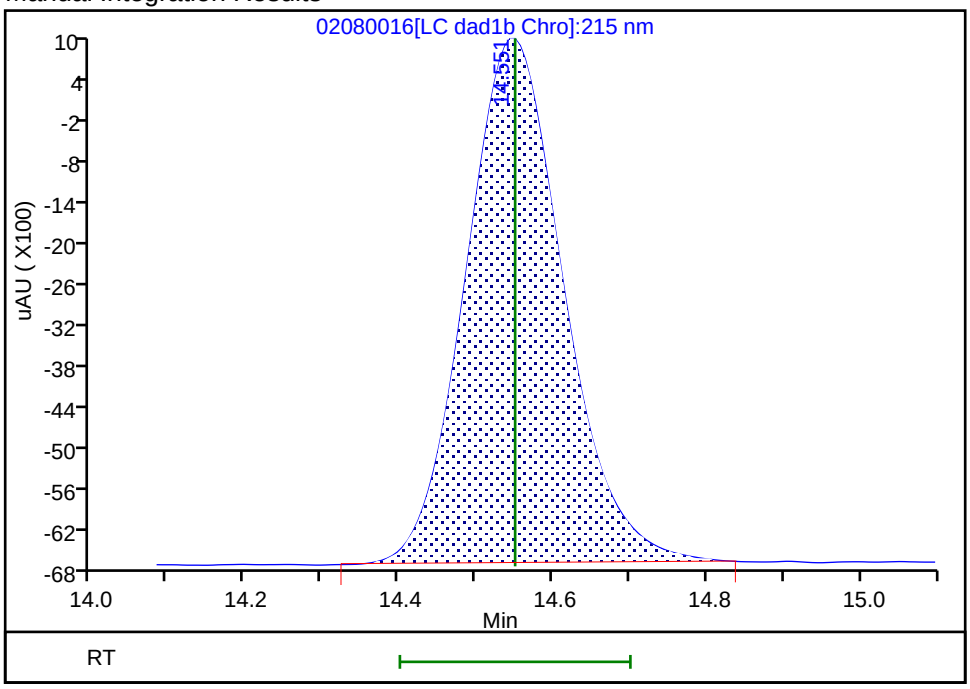
Processing Integration Results

RT: 14.55
Area: 66752
Amount: 0.971802
Amount Units: ug/mL



Manual Integration Results

RT: 14.55
Area: 68161
Amount: 0.990059
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:08:31
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080017.D
Lims ID: IC INT 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 08-Feb-2023 17:56:21 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 3
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub26

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Feb-2023 12:48:07 Calib Date: 08-Feb-2023 18:42:13
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 08-Feb-2023 19:07:50

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.547	6.544	0.003	4648	0.0500	0.0497	M
8 RDX	1	7.567	7.564	0.003	5236	0.0500	0.0492	M
9 2,4,6-Trinitrophenol	1	8.047	8.044	0.003	3768	0.0500	0.0497	
$ 10 1,2-Dinitrobenzene	1	8.520	8.517	0.003	6278	0.0500	0.0497	
11 1,3,5-Trinitrobenzene	1	8.647	8.644	0.003	10679	0.0500	0.0492	
12 1,3-Dinitrobenzene	1	9.260	9.257	0.003	14664	0.0500	0.0498	
13 Nitrobenzene	1	9.633	9.631	0.002	9605	0.0500	0.0502	
14 3,5-Dinitroaniline	1	9.840	9.831	0.009	11426	0.0500	0.0505	
15 Tetryl	1	9.987	9.977	0.010	8153	0.0500	0.0497	
16 Nitroglycerin	2	10.453	10.437	0.016	31649	0.5000	0.4940	
17 2,4,6-Trinitrotoluene	1	10.880	10.864	0.016	10708	0.0500	0.0507	
18 4-Amino-2,6-dinitrotoluene	1	11.040	11.031	0.009	7875	0.0500	0.0508	
19 2-Amino-4,6-dinitrotoluene	1	11.293	11.277	0.016	10072	0.0500	0.0500	
20 2,6-Dinitrotoluene	1	11.467	11.451	0.016	7109	0.0500	0.0498	
21 2,4-Dinitrotoluene	1	11.633	11.617	0.016	14872	0.0500	0.0501	
22 o-Nitrotoluene	1	12.453	12.437	0.016	6623	0.0500	0.0518	
23 p-Nitrotoluene	1	12.867	12.844	0.023	5584	0.0500	0.0499	
24 m-Nitrotoluene	1	13.433	13.411	0.022	7096	0.0500	0.0505	
25 PETN	2	14.580	14.551	0.029	34057	0.5000	0.4947	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00075 Amount Added: 5.00 Units: uL

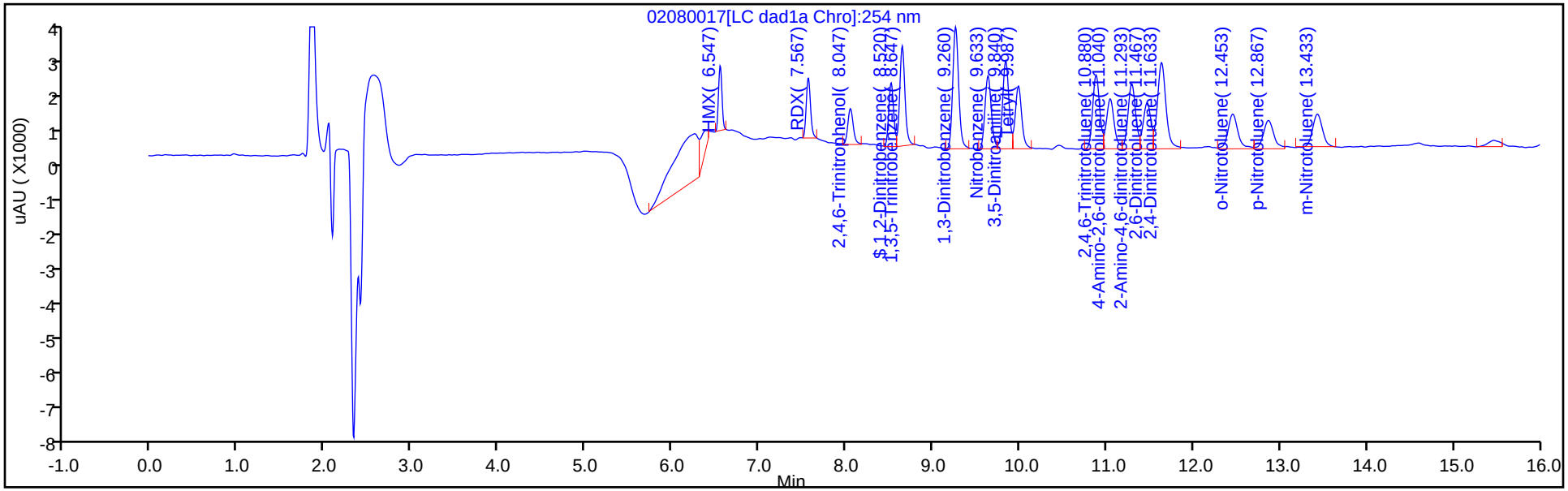
Report Date: 09-Feb-2023 12:48:07 Chrom Revision: 2.3 01-Feb-2023 13:23:06

Eurofins Denver

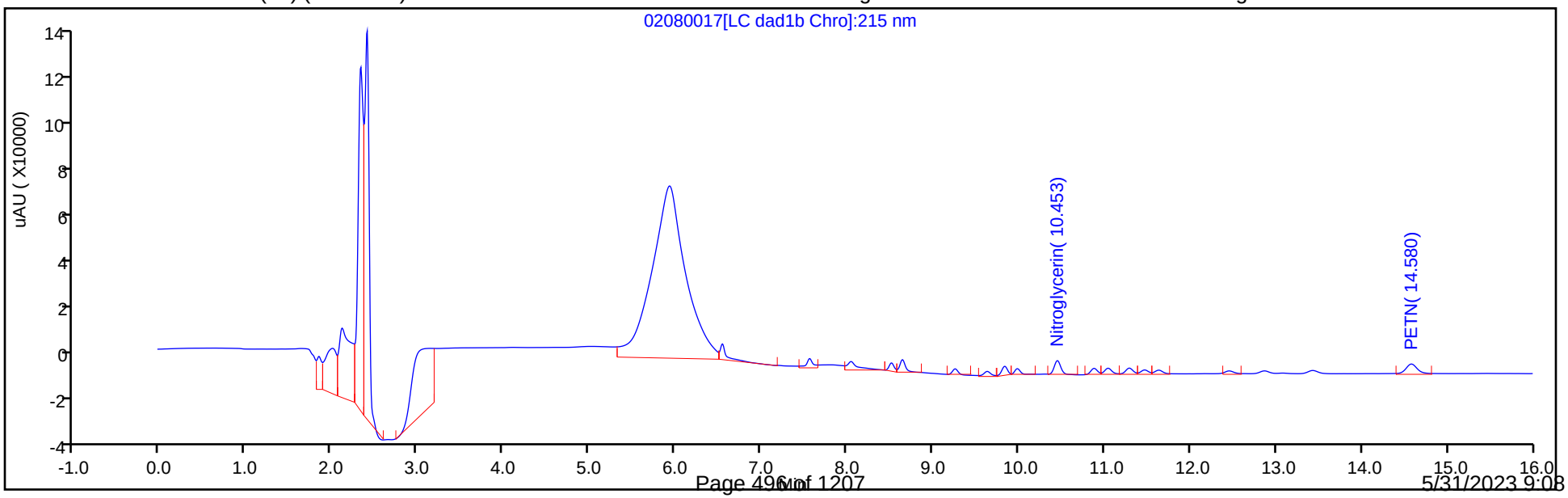
Data File: \\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080017.d

Injection Date:	08-Feb-2023 17:56:21	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC INT 3			Worklist Smp#:	17
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins Denver

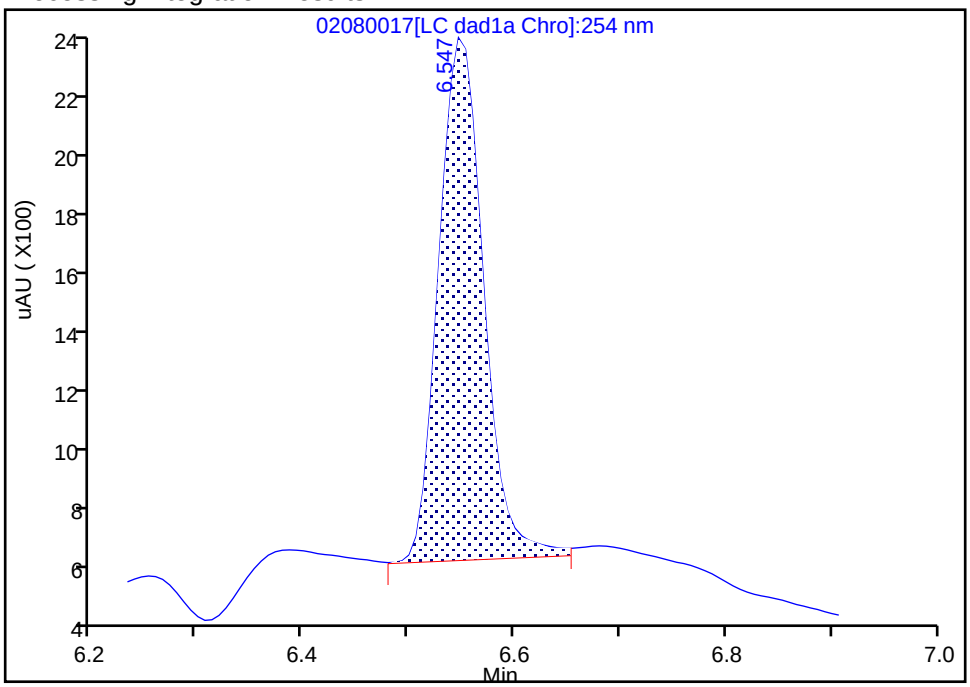
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080017.d				
Injection Date:	08-Feb-2023 17:56:21	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

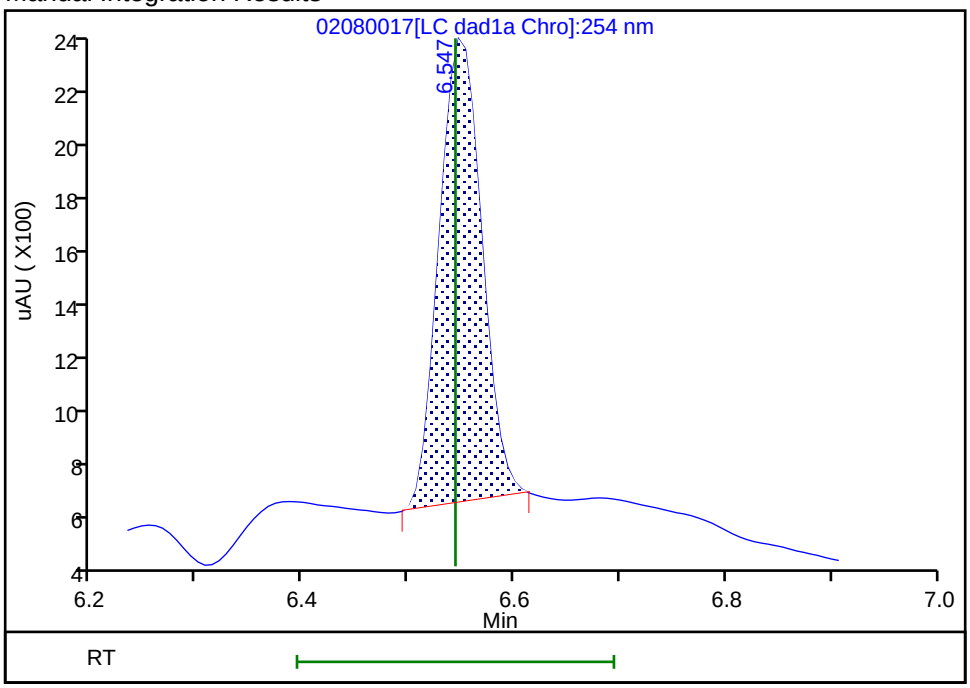
Processing Integration Results

RT: 6.55
Area: 4942
Amount: 0.050700
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 4648
Amount: 0.049696
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:07:46
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

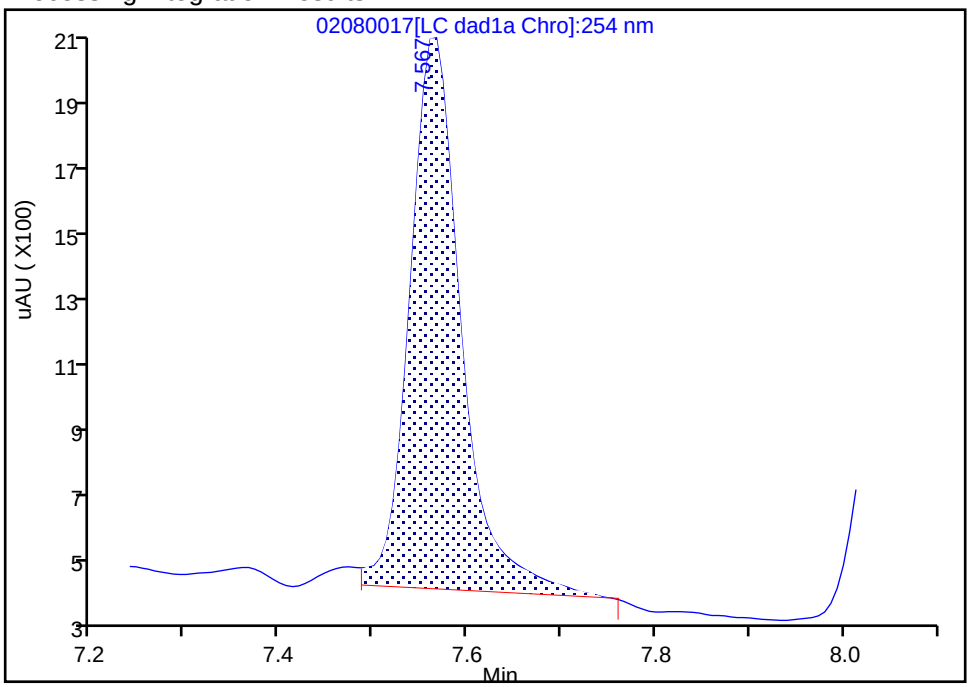
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080017.d				
Injection Date:	08-Feb-2023 17:56:21	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

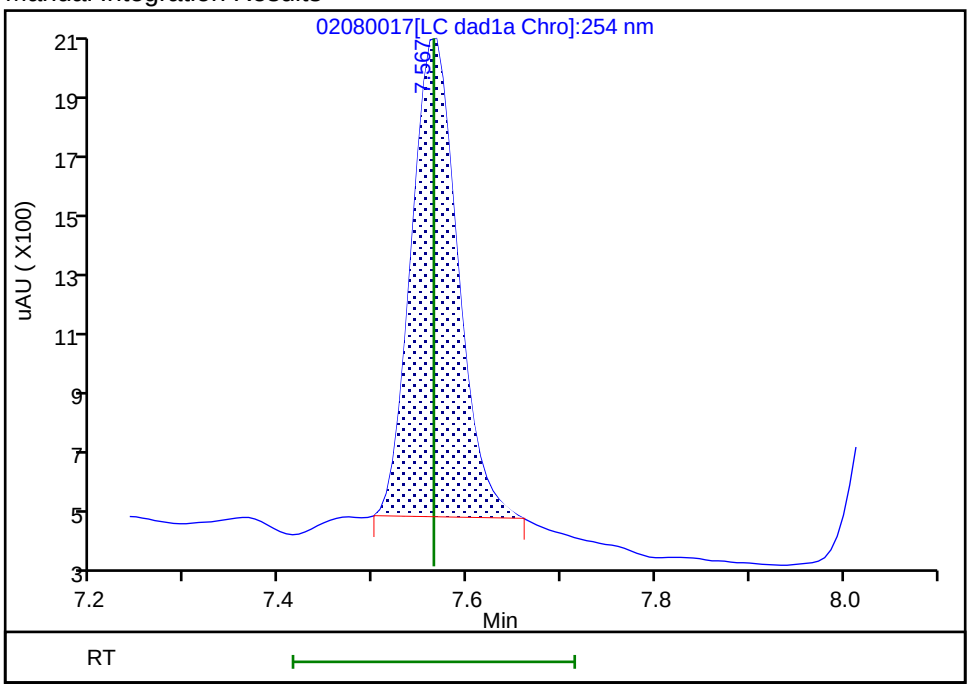
Processing Integration Results

RT: 7.57
Area: 6041
Amount: 0.054246
Amount Units: ug/mL



Manual Integration Results

RT: 7.57
Area: 5236
Amount: 0.049220
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:09:26
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

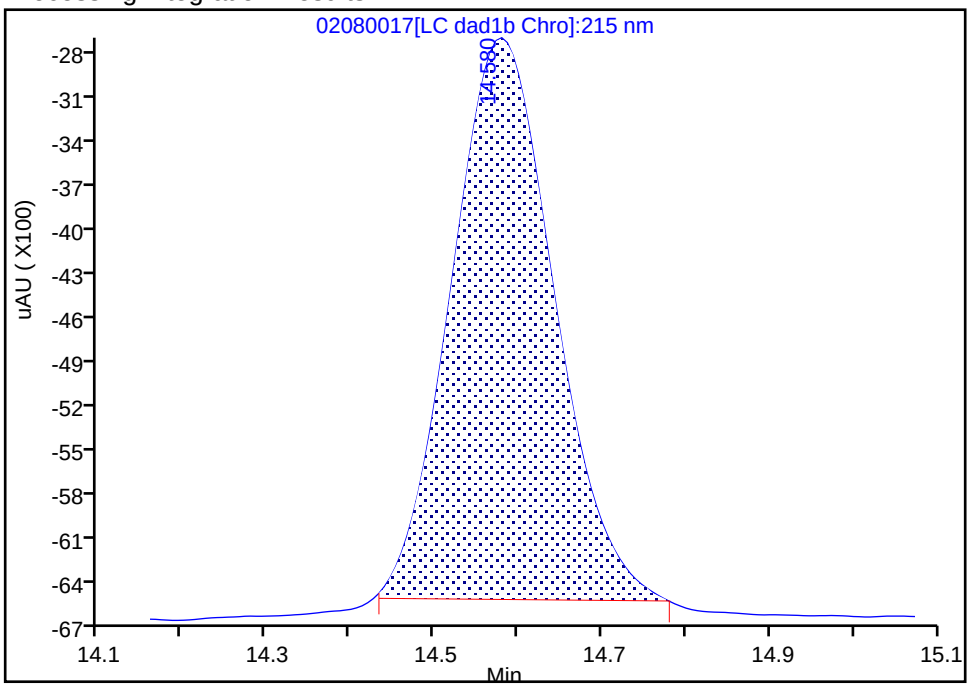
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080017.d				
Injection Date:	08-Feb-2023 17:56:21	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1C, 215 nm		

25 PETN, CAS: 78-11-5

Signal: 1

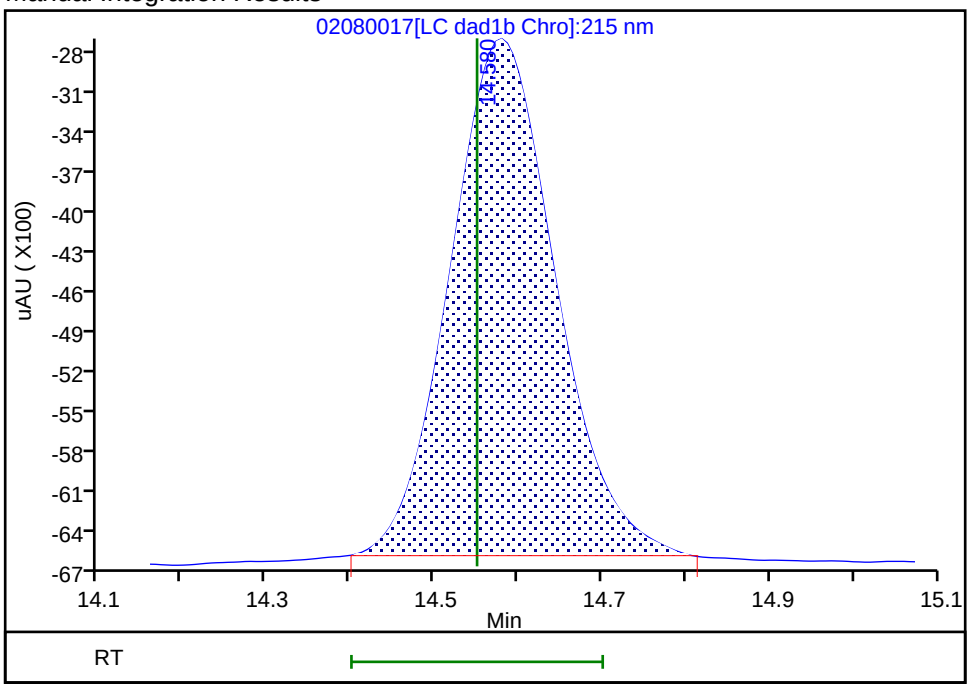
Processing Integration Results

RT: 14.58
Area: 32403
Amount: 0.474274
Amount Units: ug/mL



Manual Integration Results

RT: 14.58
Area: 34057
Amount: 0.494688
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:08:23

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080018.D
Lims ID: IC INT 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 08-Feb-2023 18:19:14 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 2
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub26

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Feb-2023 12:48:08 Calib Date: 08-Feb-2023 18:42:13
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 08-Feb-2023 19:08:08

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.549	6.544	0.005	1961	0.0200	0.0210	M
8 RDX	1	7.563	7.564	-0.001	2196	0.0200	0.0206	M
9 2,4,6-Trinitrophenol	1	8.049	8.044	0.005	1492	0.0200	0.0197	
$ 10 1,2-Dinitrobenzene	1	8.516	8.517	-0.001	2491	0.0200	0.0197	
11 1,3,5-Trinitrobenzene	1	8.643	8.644	-0.001	4313	0.0200	0.0199	
12 1,3-Dinitrobenzene	1	9.256	9.257	-0.001	5849	0.0200	0.0199	
13 Nitrobenzene	1	9.636	9.631	0.005	3816	0.0200	0.0200	
14 3,5-Dinitroaniline	1	9.836	9.831	0.005	4377	0.0200	0.0198	
15 Tetryl	1	9.982	9.977	0.005	3073	0.0200	0.0187	
16 Nitroglycerin	2	10.449	10.437	0.012	11879	0.2000	0.1854	
17 2,4,6-Trinitrotoluene	1	10.876	10.864	0.012	4262	0.0200	0.0202	
18 4-Amino-2,6-dinitrotoluene	1	11.042	11.031	0.011	3106	0.0200	0.0200	
19 2-Amino-4,6-dinitrotoluene	1	11.289	11.277	0.012	4021	0.0200	0.0200	
20 2,6-Dinitrotoluene	1	11.469	11.451	0.018	2911	0.0200	0.0204	
21 2,4-Dinitrotoluene	1	11.636	11.617	0.019	5985	0.0200	0.0202	
22 o-Nitrotoluene	1	12.456	12.437	0.019	2611	0.0200	0.0204	
23 p-Nitrotoluene	1	12.869	12.844	0.025	2393	0.0200	0.0214	
24 m-Nitrotoluene	1	13.442	13.411	0.031	3062	0.0200	0.0218	
25 PETN	2	14.589	14.551	0.038	13462	0.2000	0.1955	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00075 Amount Added: 2.00 Units: uL

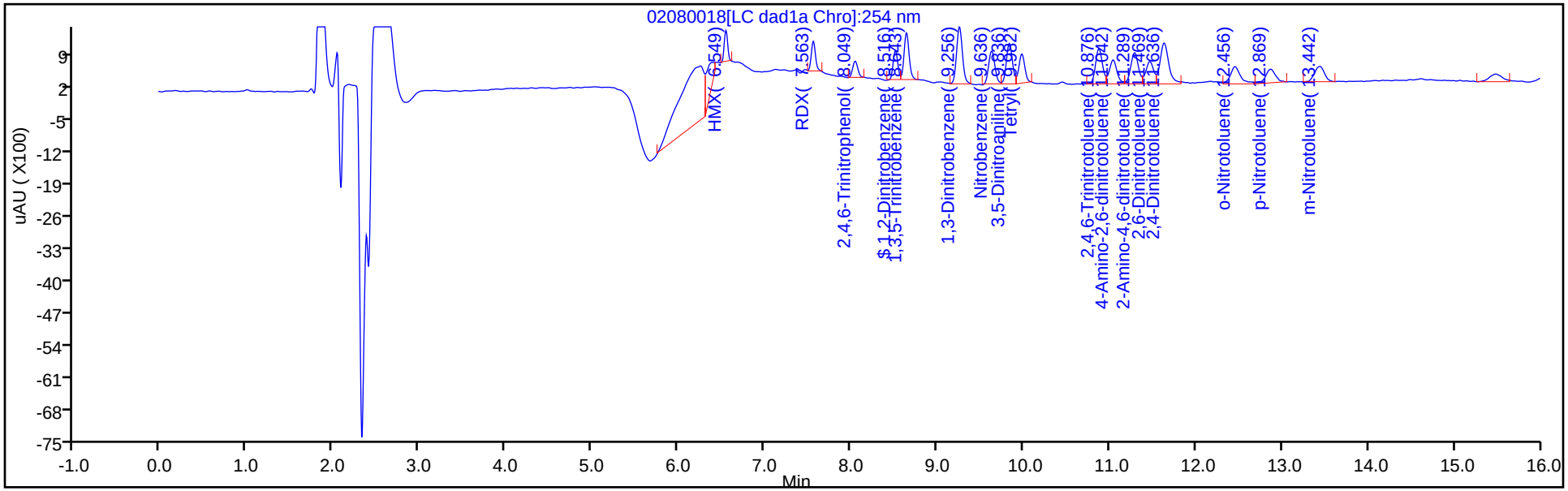
Report Date: 09-Feb-2023 12:48:08 Chrom Revision: 2.3 01-Feb-2023 13:23:06

Eurofins Denver

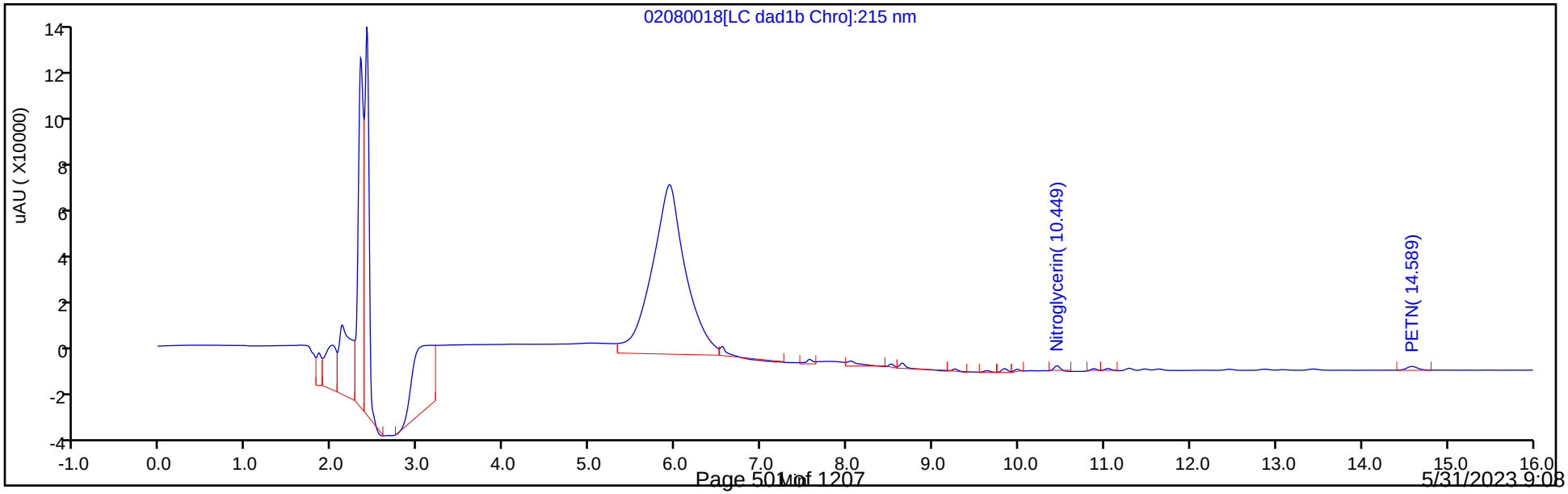
Data File: \\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080018.d

Injection Date:	08-Feb-2023 18:19:14	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC INT 2			Worklist Smp#:	18
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins Denver

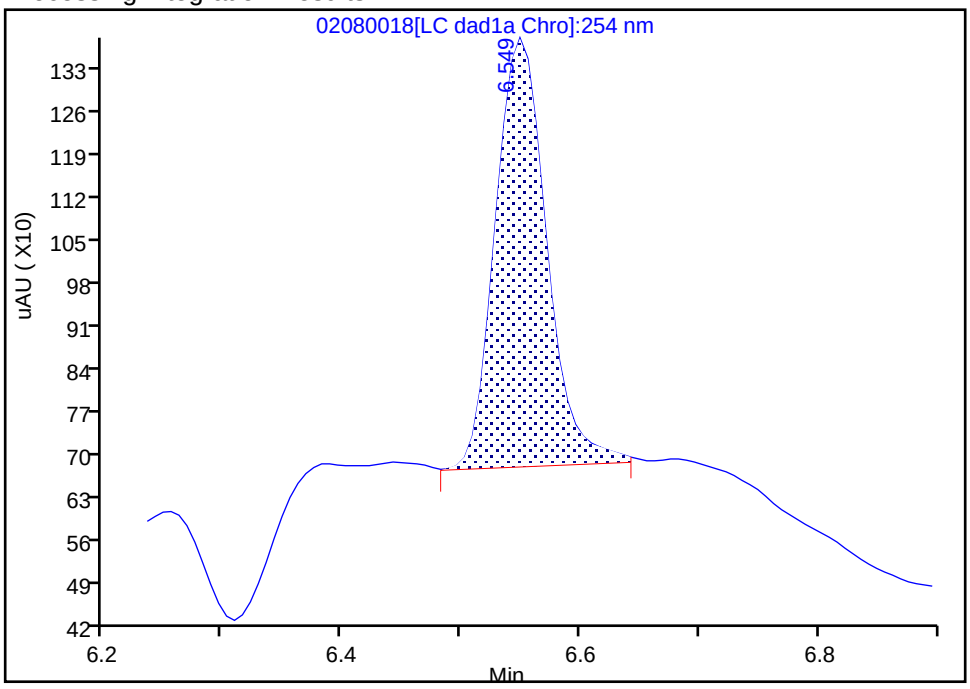
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080018.d				
Injection Date:	08-Feb-2023 18:19:14	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

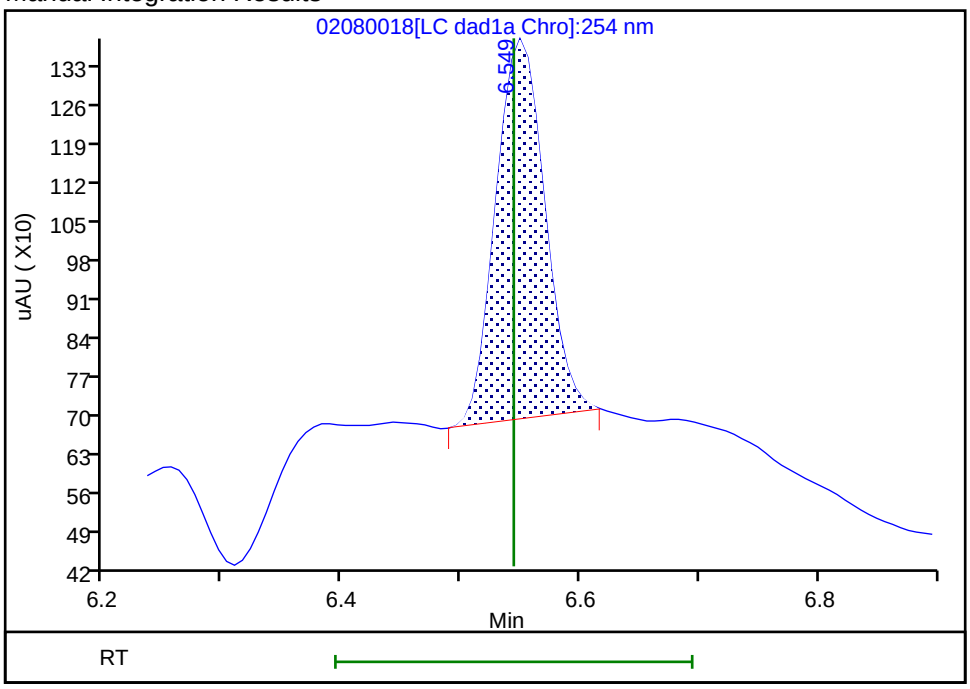
Processing Integration Results

RT: 6.55
Area: 2102
Amount: 0.022288
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 1961
Amount: 0.020967
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:09:07
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

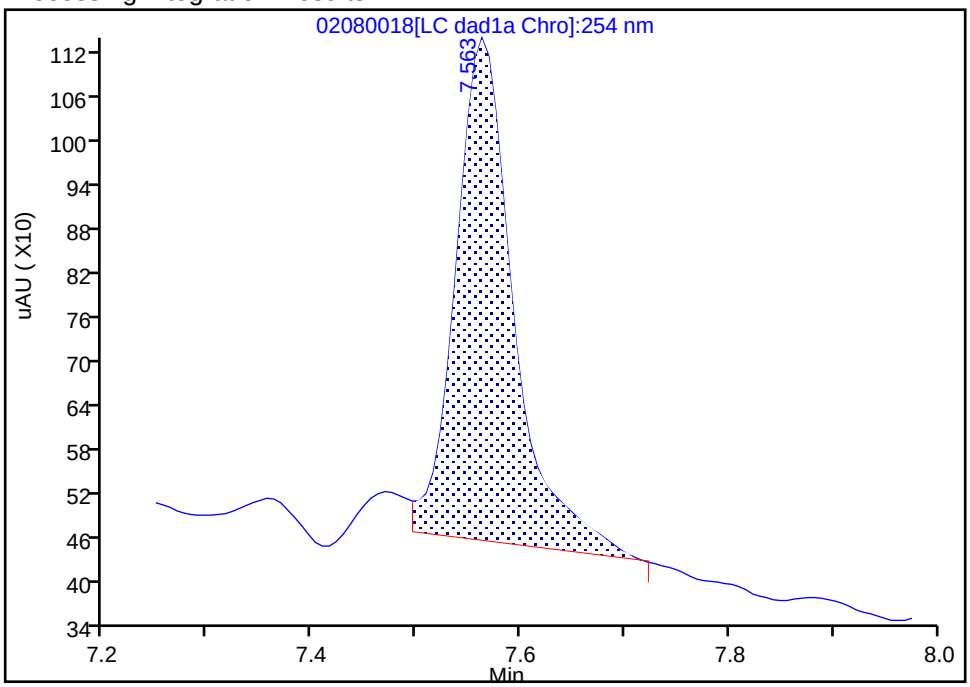
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080018.d				
Injection Date:	08-Feb-2023 18:19:14	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

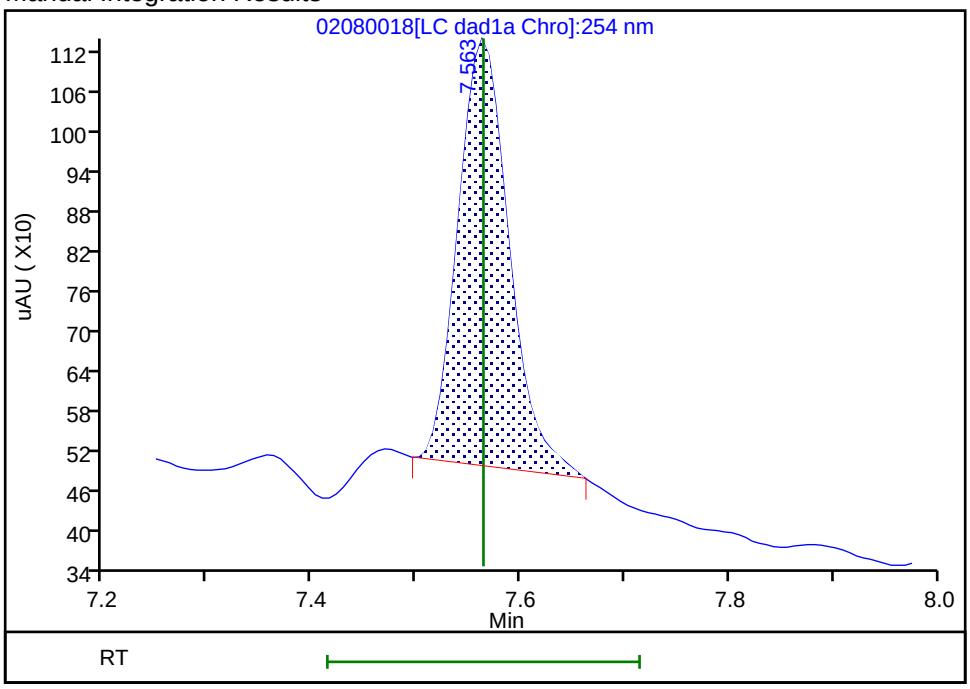
Processing Integration Results

RT: 7.56
Area: 2668
Amount: 0.023407
Amount Units: ug/mL



Manual Integration Results

RT: 7.56
Area: 2196
Amount: 0.020643
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:09:19
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

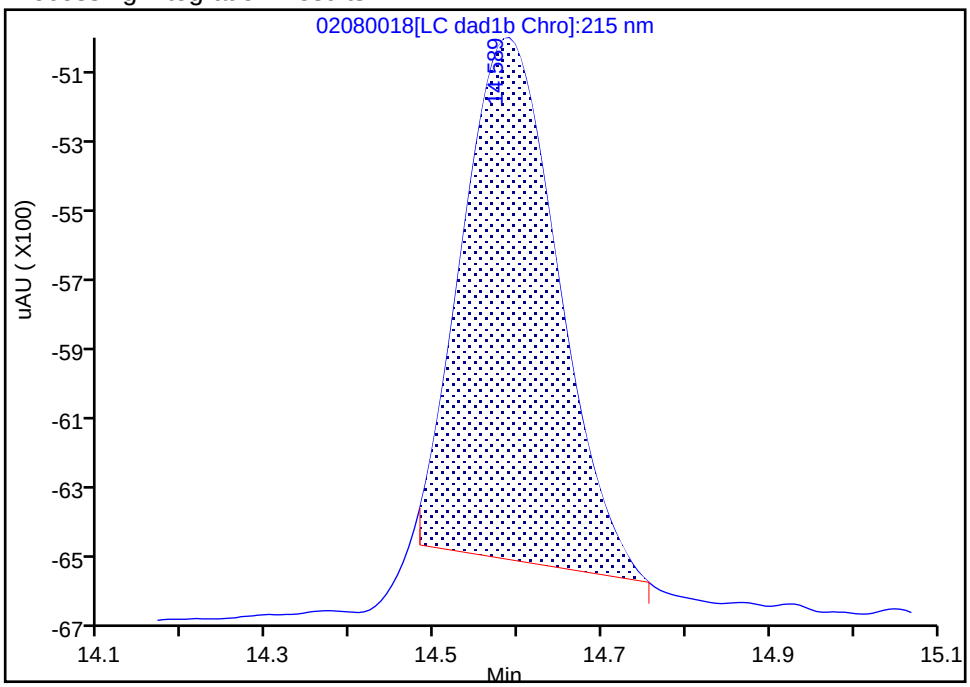
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080018.d				
Injection Date:	08-Feb-2023 18:19:14	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1C, 215 nm		

25 PETN, CAS: 78-11-5

Signal: 1

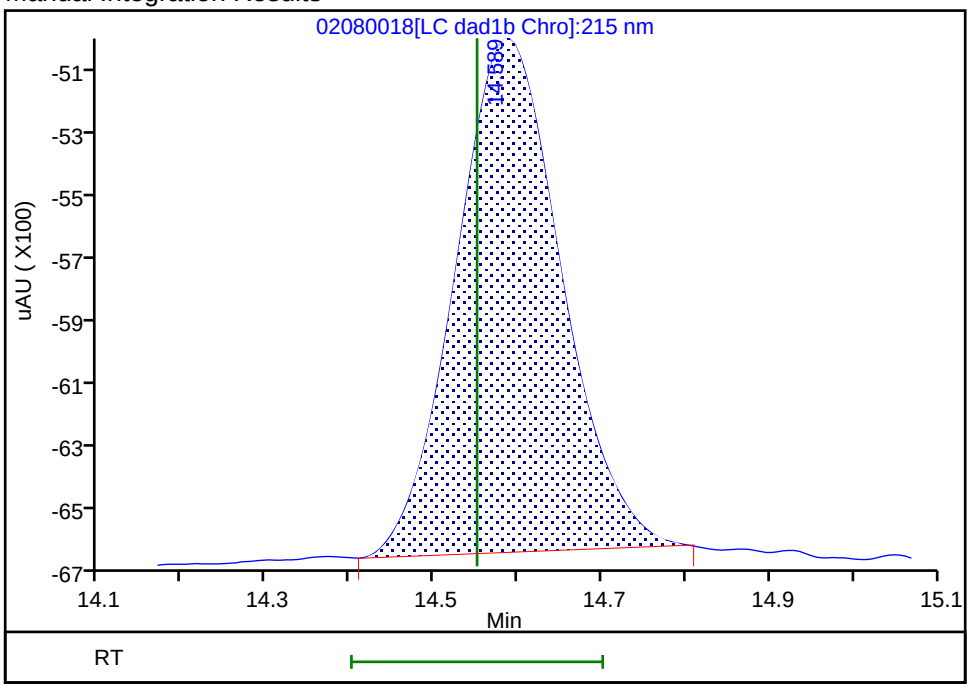
Processing Integration Results

RT: 14.59
Area: 11186
Amount: 0.166814
Amount Units: ug/mL



Manual Integration Results

RT: 14.59
Area: 13462
Amount: 0.195540
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:08:19
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080019.D
Lims ID: IC INT 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 08-Feb-2023 18:42:13 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 1
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub26

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Feb-2023 12:48:08 Calib Date: 08-Feb-2023 18:42:13
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 08-Feb-2023 19:08:17

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	4 HMX	1	6.550	6.544	0.006	962	0.0100	0.0103	M
	8 RDX	1	7.563	7.564	-0.001	1203	0.0100	0.0113	M
	9 2,4,6-Trinitrophenol	1	8.050	8.044	0.006	673	0.0100	0.008875	
$	10 1,2-Dinitrobenzene	1	8.517	8.517	0.000	1188	0.0100	0.009406	
	11 1,3,5-Trinitrobenzene	1	8.643	8.644	-0.001	2196	0.0100	0.0101	
	12 1,3-Dinitrobenzene	1	9.263	9.257	0.006	2902	0.0100	0.009857	
	13 Nitrobenzene	1	9.636	9.631	0.005	1905	0.0100	0.0100	
	14 3,5-Dinitroaniline	1	9.836	9.831	0.005	2147	0.0100	0.0100	
	15 Tetryl	1	9.983	9.977	0.006	1611	0.0100	0.009816	
	16 Nitroglycerin	2	10.450	10.437	0.013	6159	0.1000	0.0961	
	17 2,4,6-Trinitrotoluene	1	10.876	10.864	0.012	2167	0.0100	0.0103	
	18 4-Amino-2,6-dinitrotoluene	1	11.043	11.031	0.012	1670	0.0100	0.0108	
	19 2-Amino-4,6-dinitrotoluene	1	11.296	11.277	0.019	2214	0.0100	0.0110	
	20 2,6-Dinitrotoluene	1	11.470	11.451	0.019	1486	0.0100	0.0104	
	21 2,4-Dinitrotoluene	1	11.636	11.617	0.019	3141	0.0100	0.0106	
	22 o-Nitrotoluene	1	12.456	12.437	0.019	1377	0.0100	0.0108	
	23 p-Nitrotoluene	1	12.863	12.844	0.019	1263	0.0100	0.0113	
	24 m-Nitrotoluene	1	13.430	13.411	0.019	1473	0.0100	0.0105	
	25 PETN	2	14.583	14.551	0.032	7273	0.1000	0.1056	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00075 Amount Added: 1.00 Units: uL

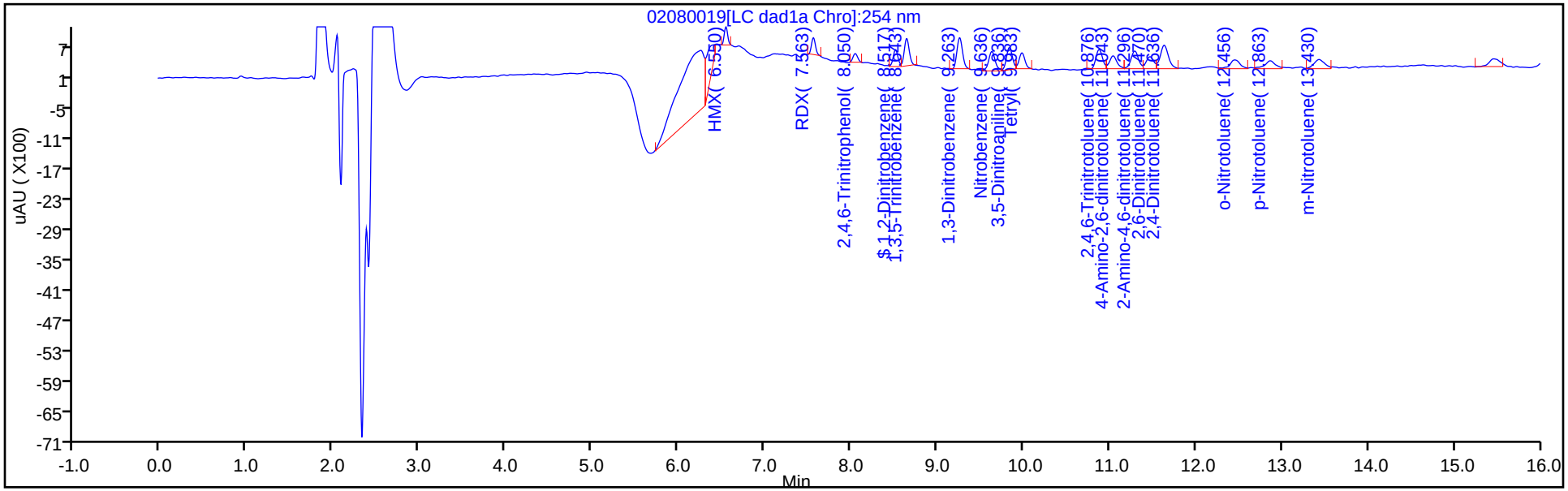
Report Date: 09-Feb-2023 12:48:08 Chrom Revision: 2.3 01-Feb-2023 13:23:06

Eurofins Denver

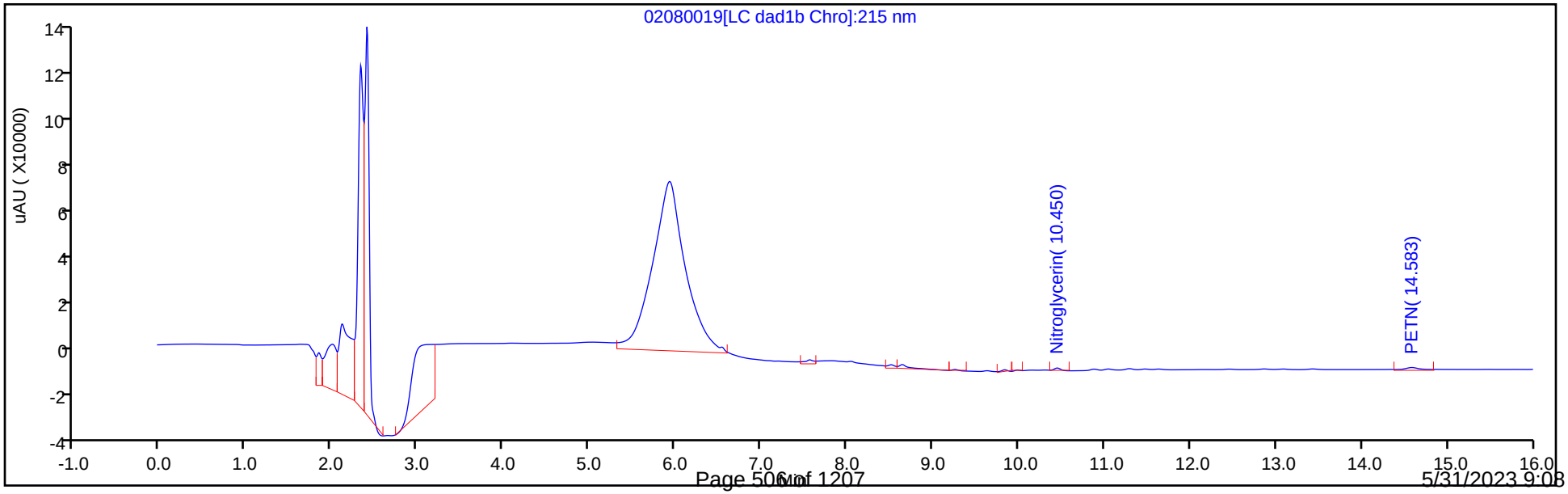
Data File: \\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080019.d

Injection Date:	08-Feb-2023 18:42:13	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC INT 1			Worklist Smp#:	19
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins Denver

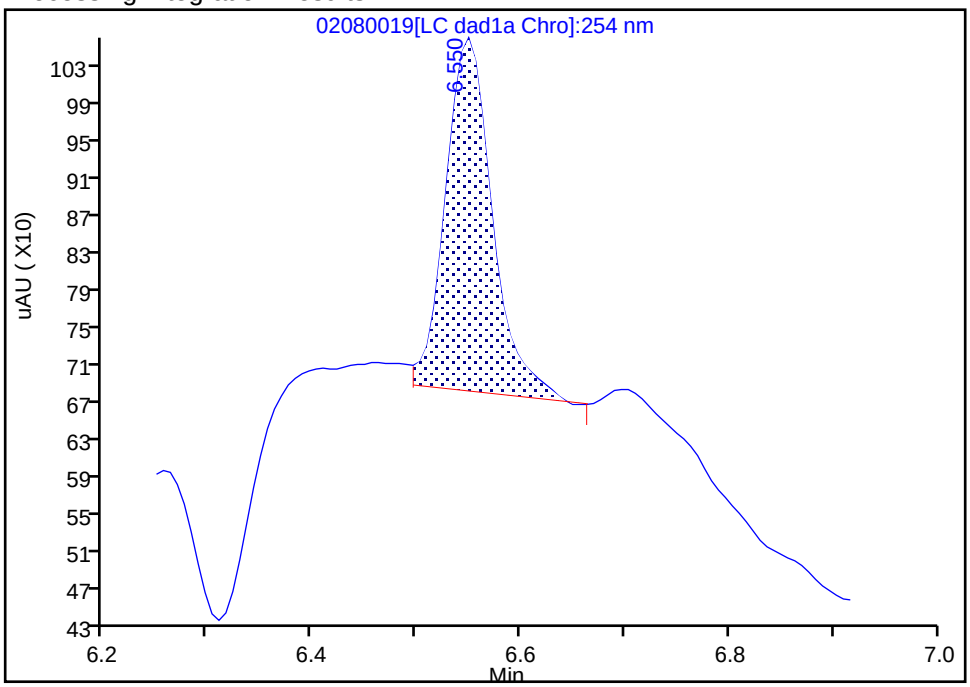
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080019.d				
Injection Date:	08-Feb-2023 18:42:13	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

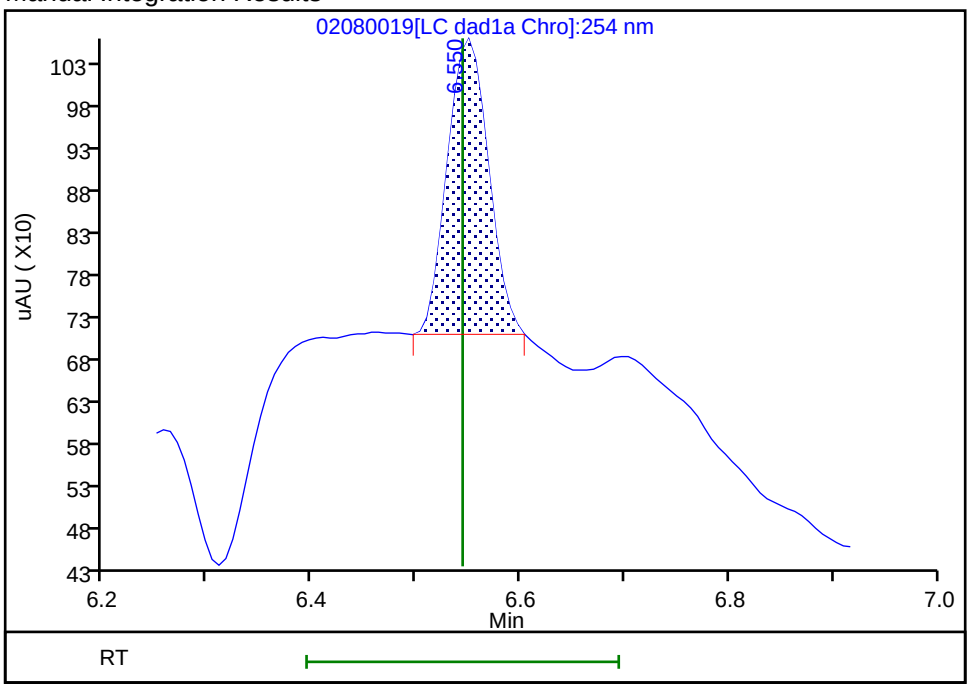
Processing Integration Results

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

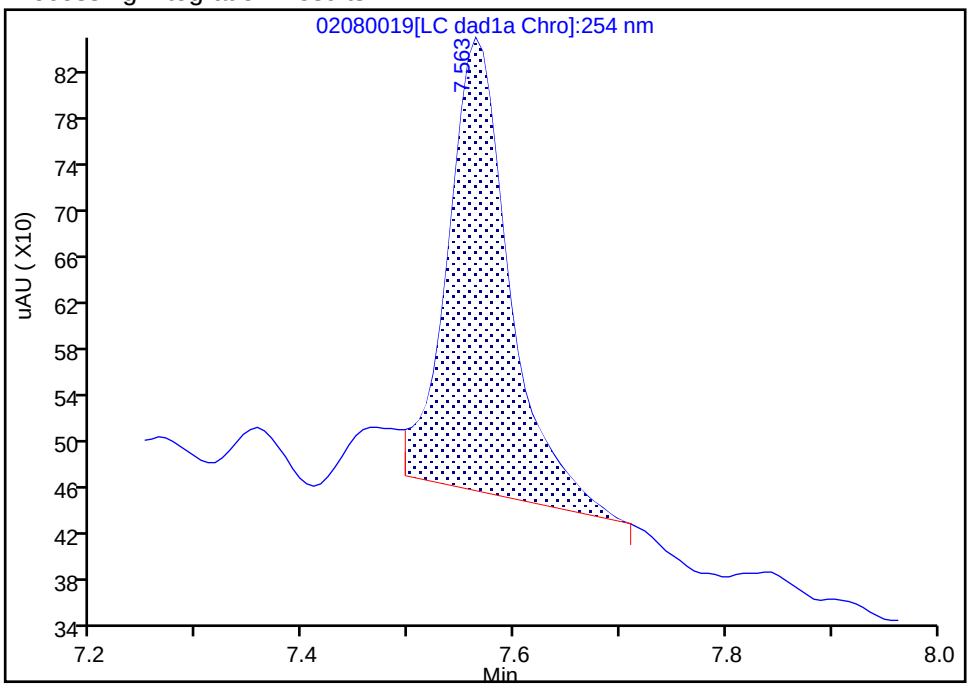
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080019.d				
Injection Date:	08-Feb-2023 18:42:13	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

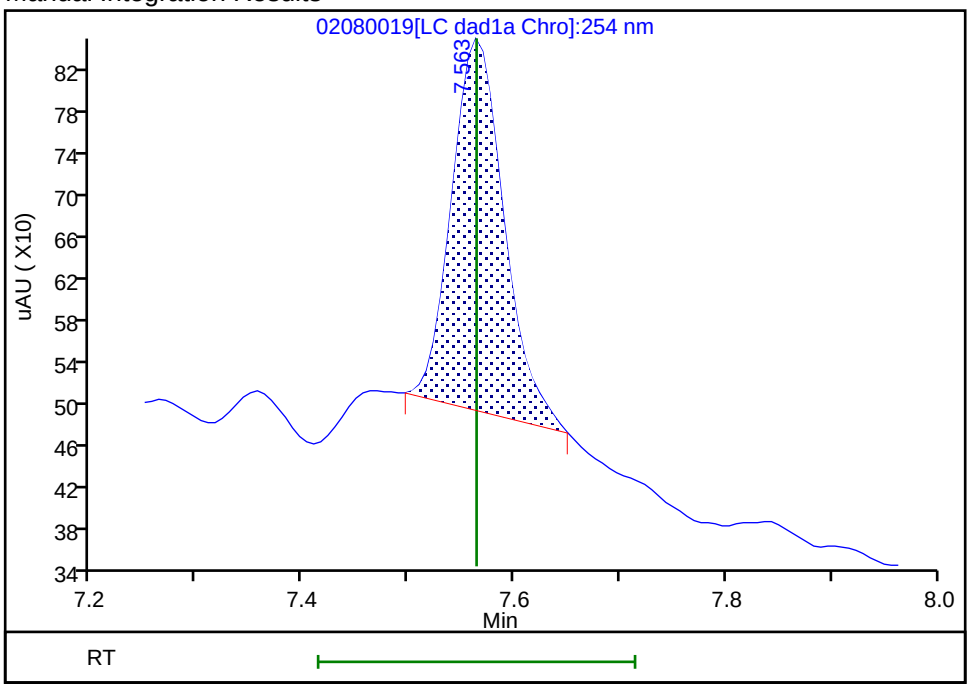
Processing Integration Results

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.: 280-176674-1 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.: 280-176674-1 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		197687.331				2.9		20.0			
DNX	139760 138674	146613 146977	145554 146290	145335 146496	Ave		144462.486				2.3		20.0			
MNX	127763 125139	130334 133592	131602 134086	134629 132227	Ave		131171.565				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.: 280-176674-1 | 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

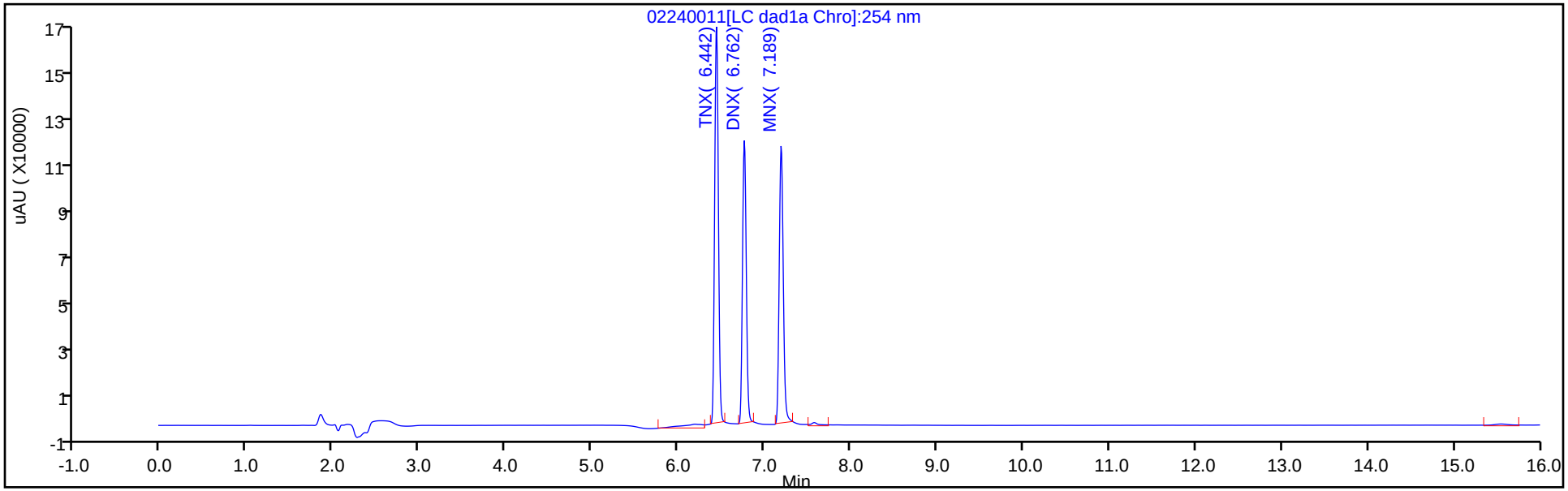
Report Date: 28-Feb-2023 13:17:26 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Denver

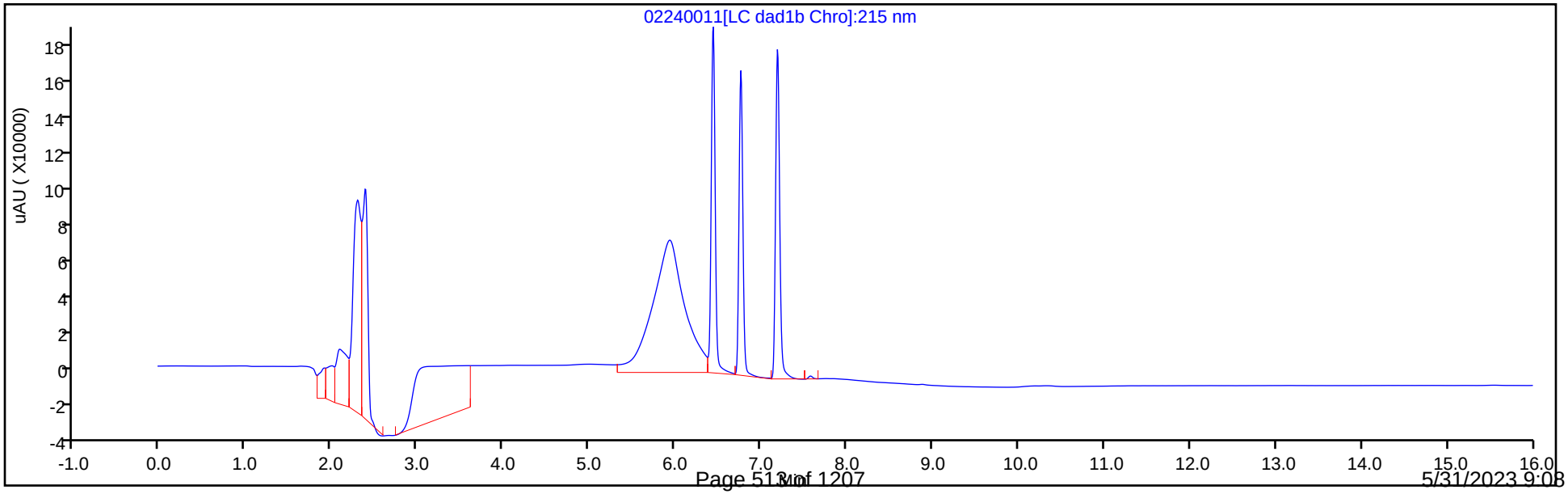
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240011.d

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

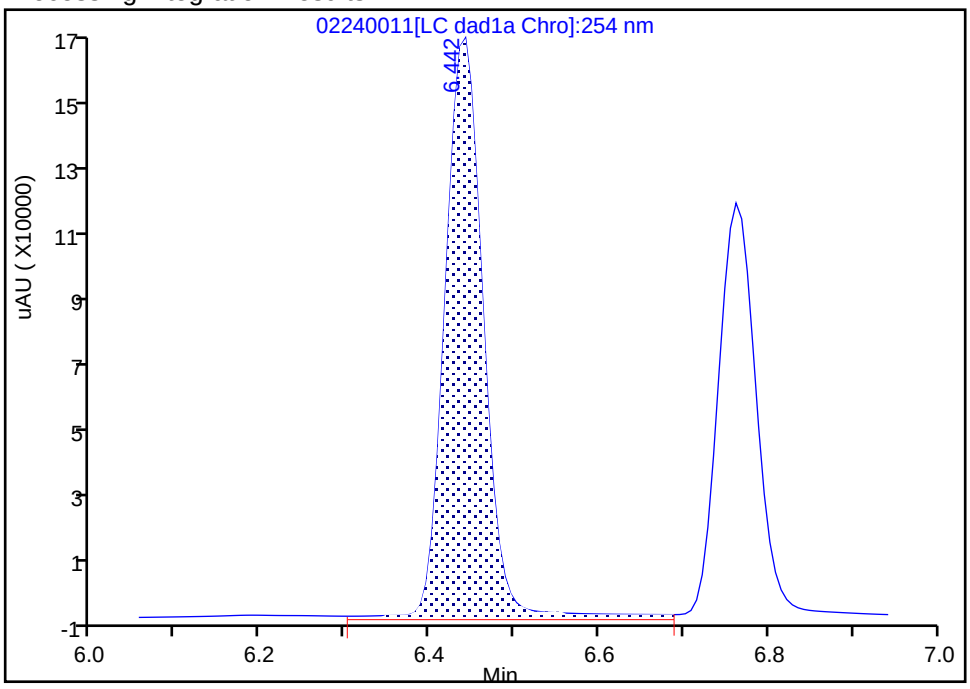
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240011.d
Injection Date: 24-Feb-2023 15:00:10 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 8
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

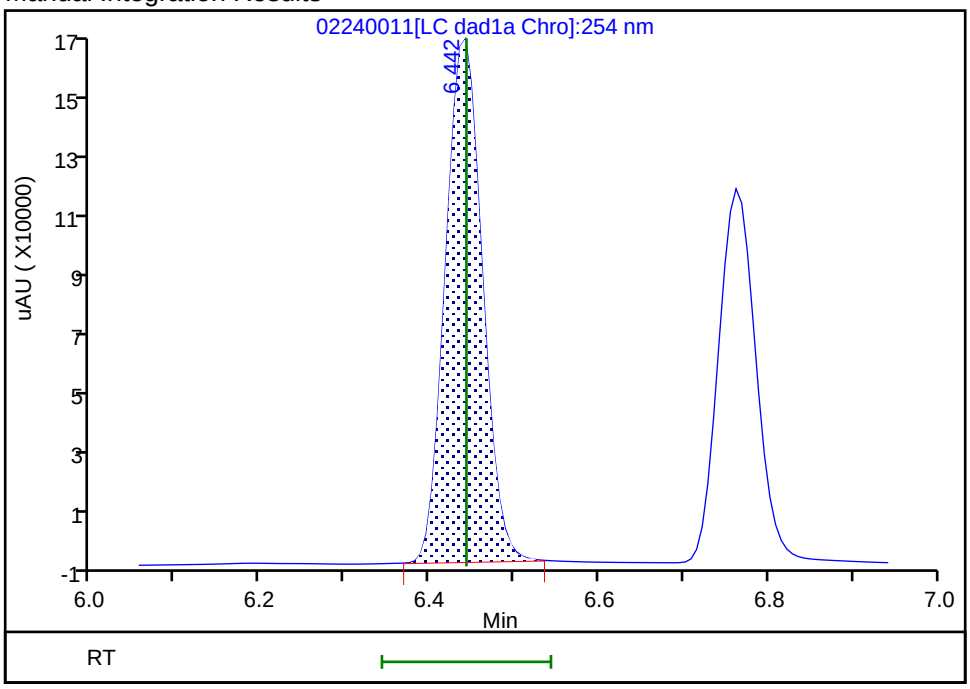
Processing Integration Results

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

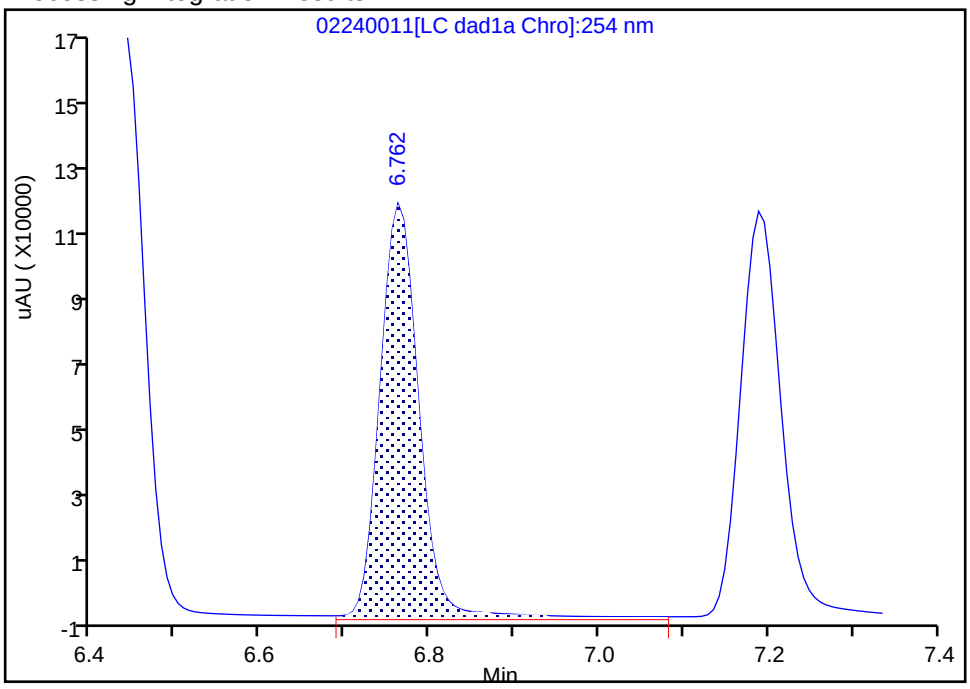
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240011.d
Injection Date: 24-Feb-2023 15:00:10 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 8
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 DNX, CAS: 80251-29-2

Signal: 1

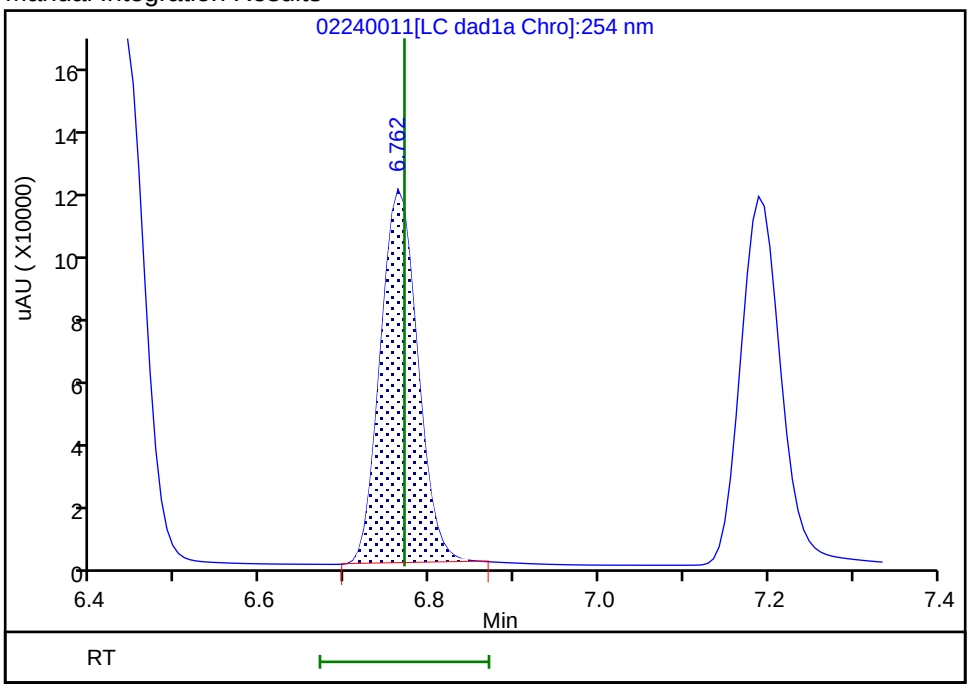
Processing Integration Results

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

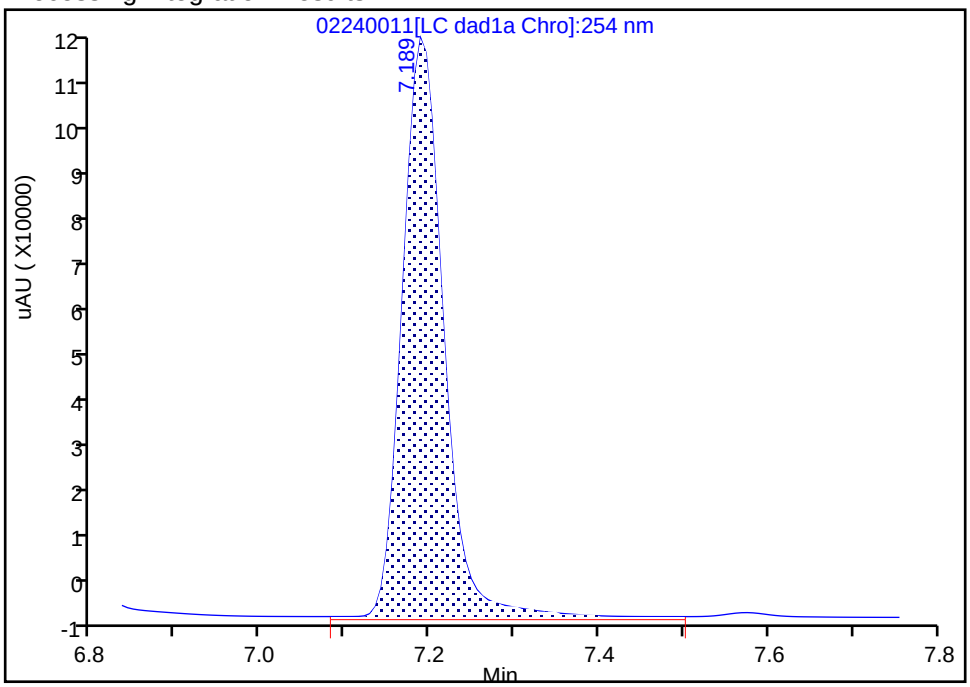
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240011.d				
Injection Date:	24-Feb-2023 15:00:10	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 8				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

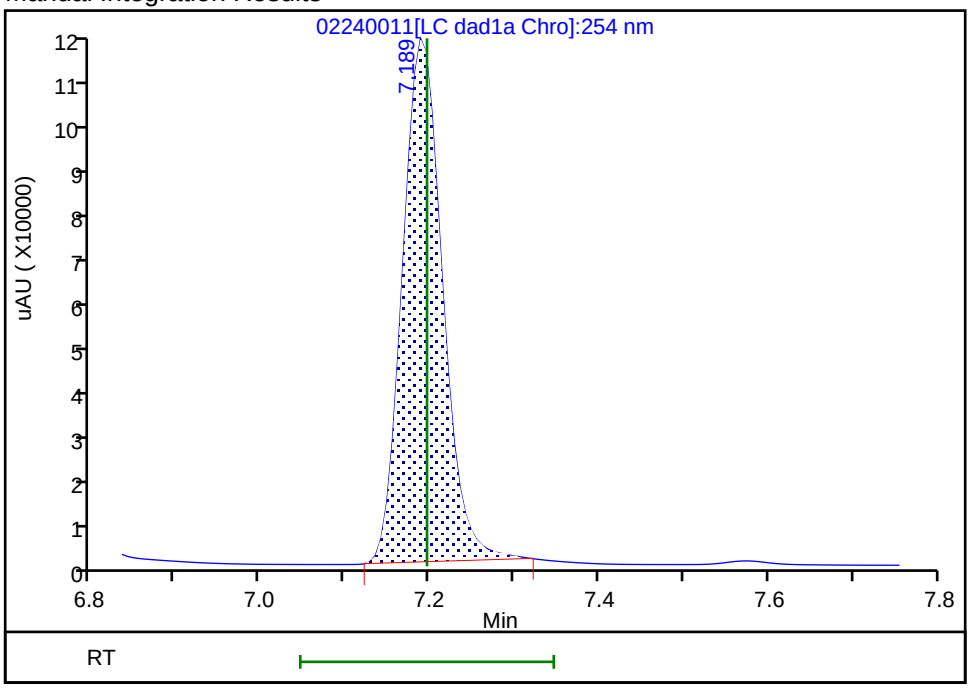
Processing Integration Results

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

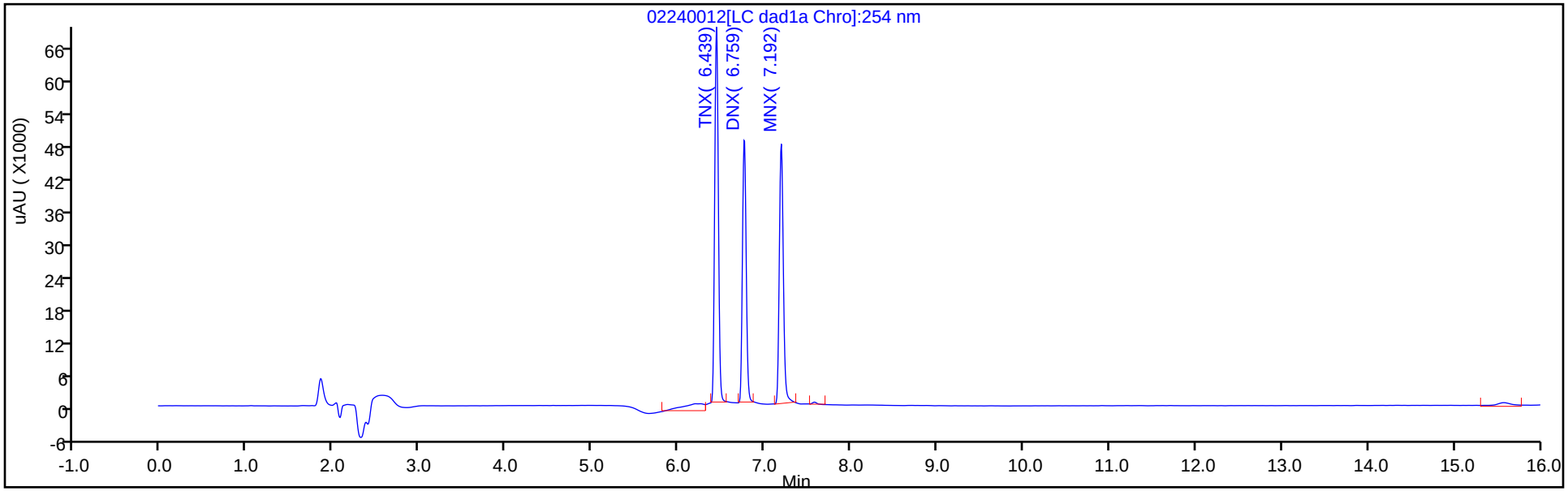
Report Date: 28-Feb-2023 13:17:26 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Denver

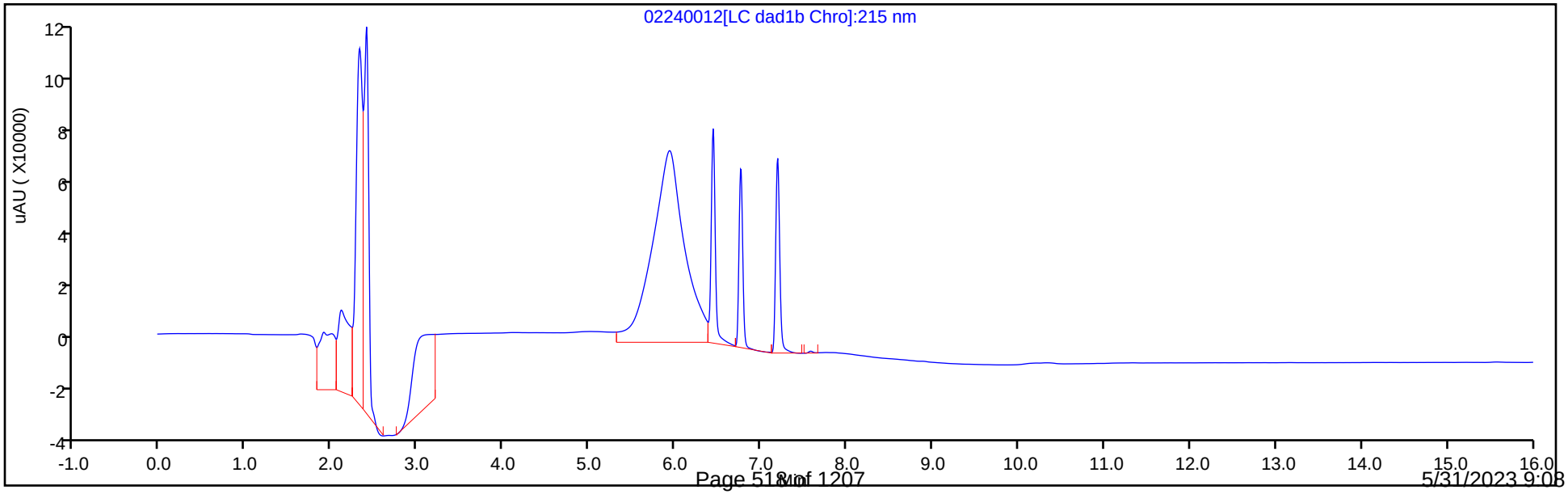
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240012.d

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



Eurofins Denver

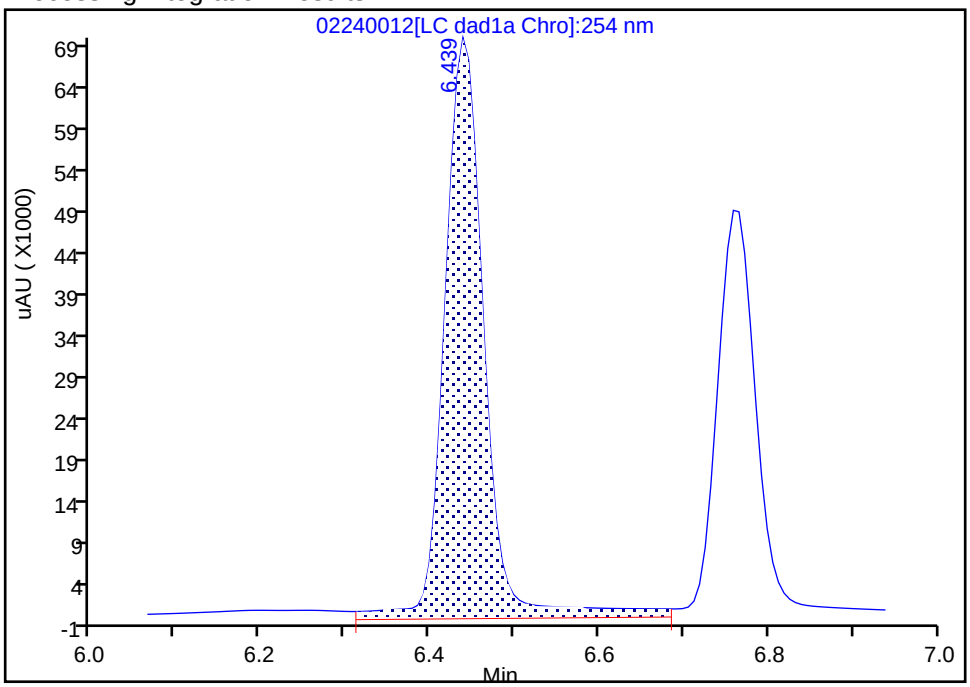
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240012.d				
Injection Date:	24-Feb-2023 15:23:08	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

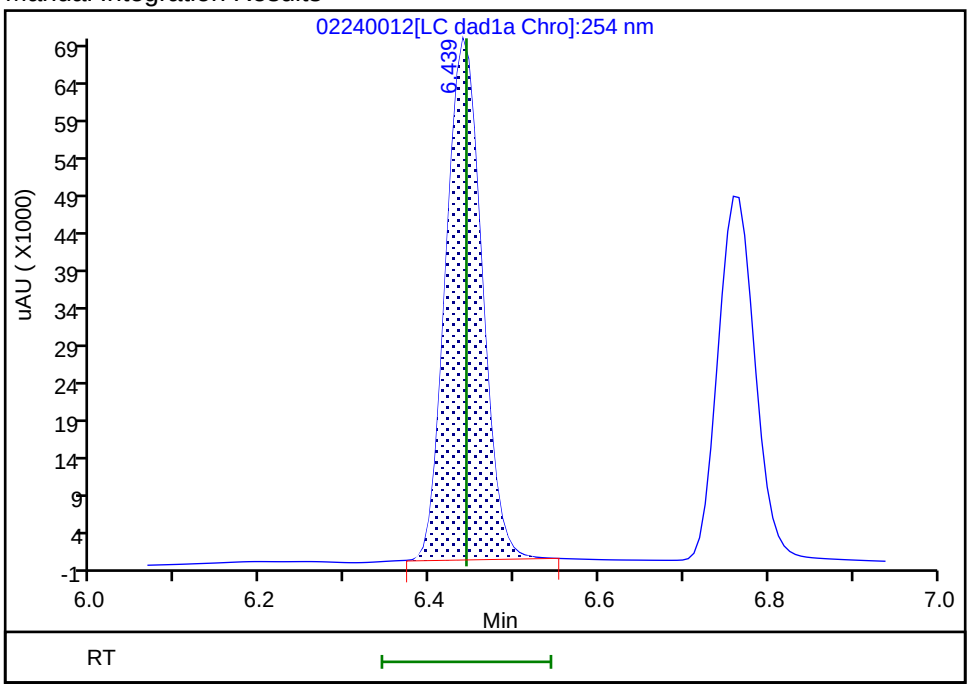
Processing Integration Results

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

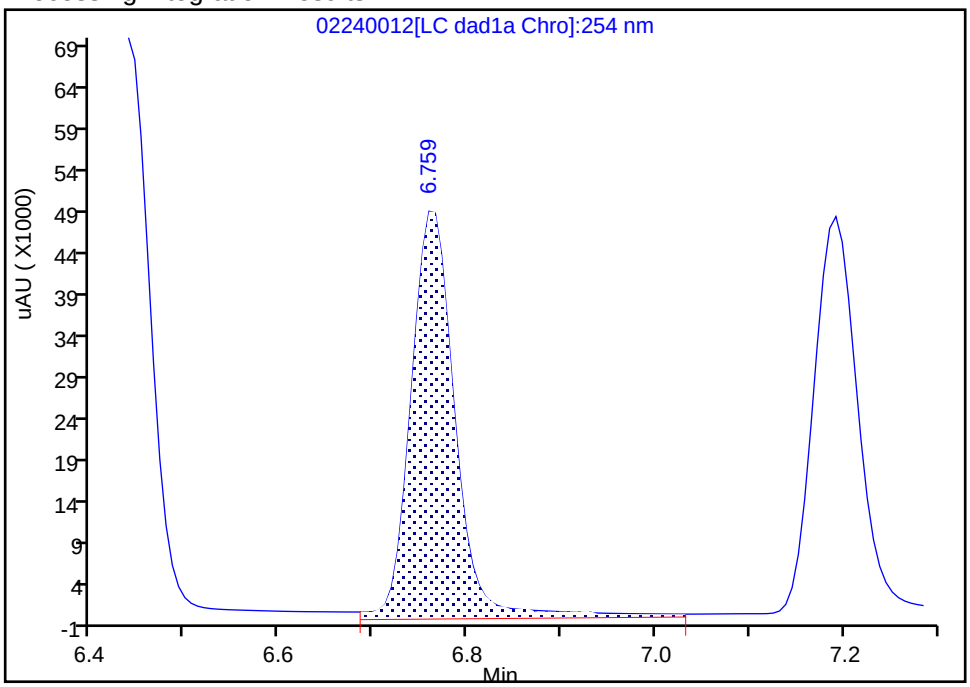
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240012.d
Injection Date: 24-Feb-2023 15:23:08 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 7
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 DNX, CAS: 80251-29-2

Signal: 1

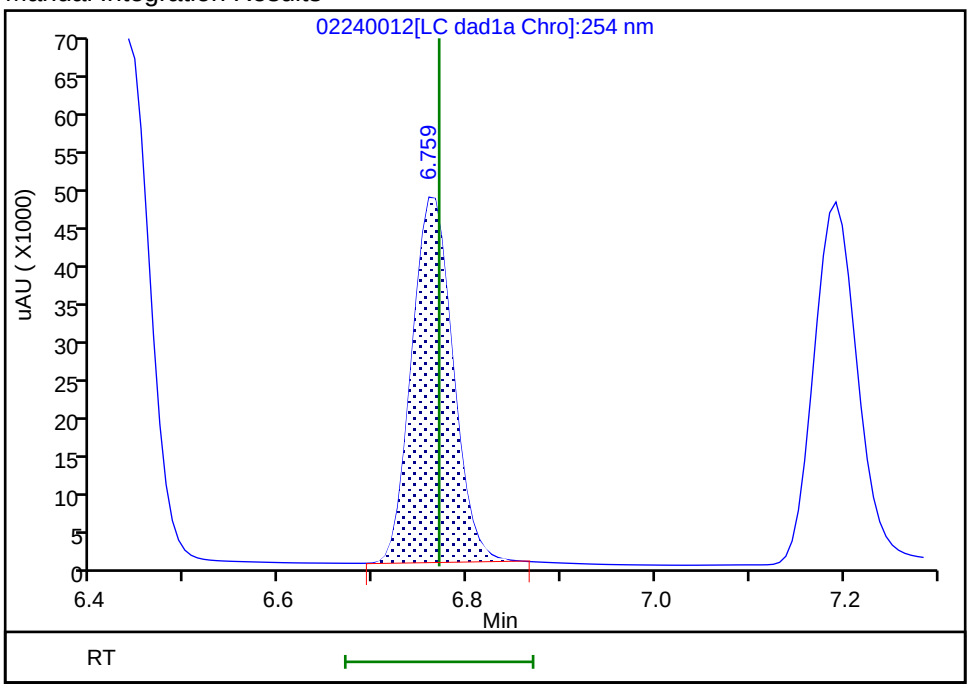
Processing Integration Results

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

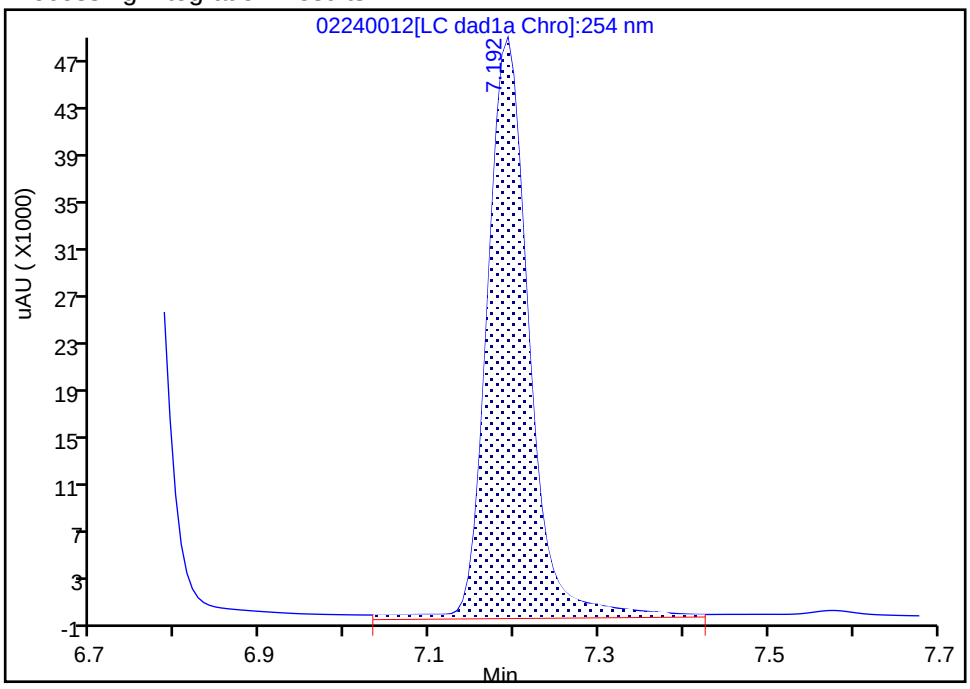
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240012.d				
Injection Date:	24-Feb-2023 15:23:08	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

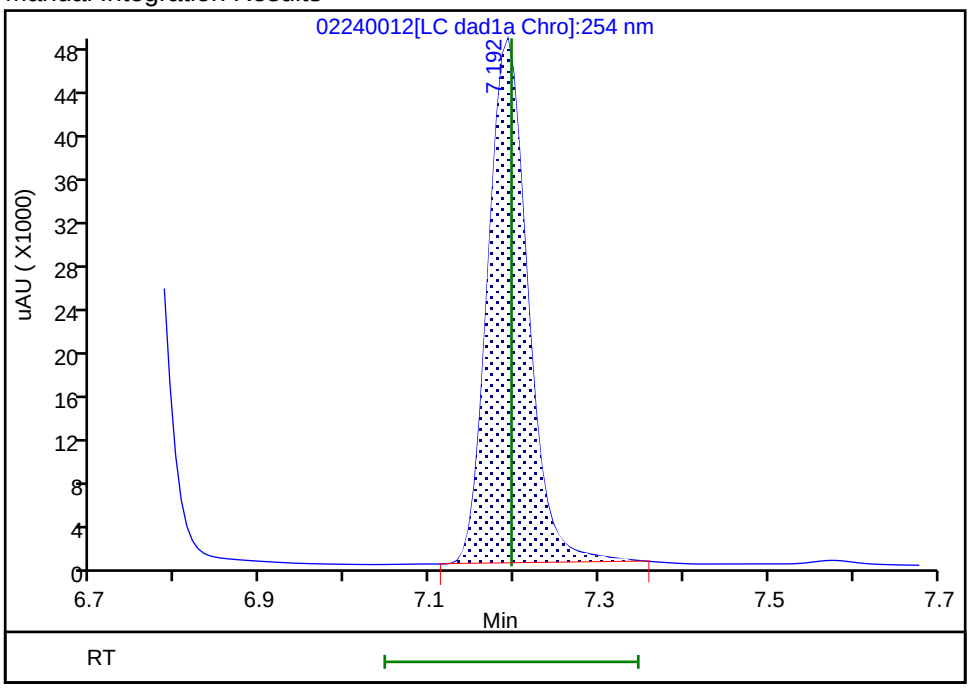
Processing Integration Results

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

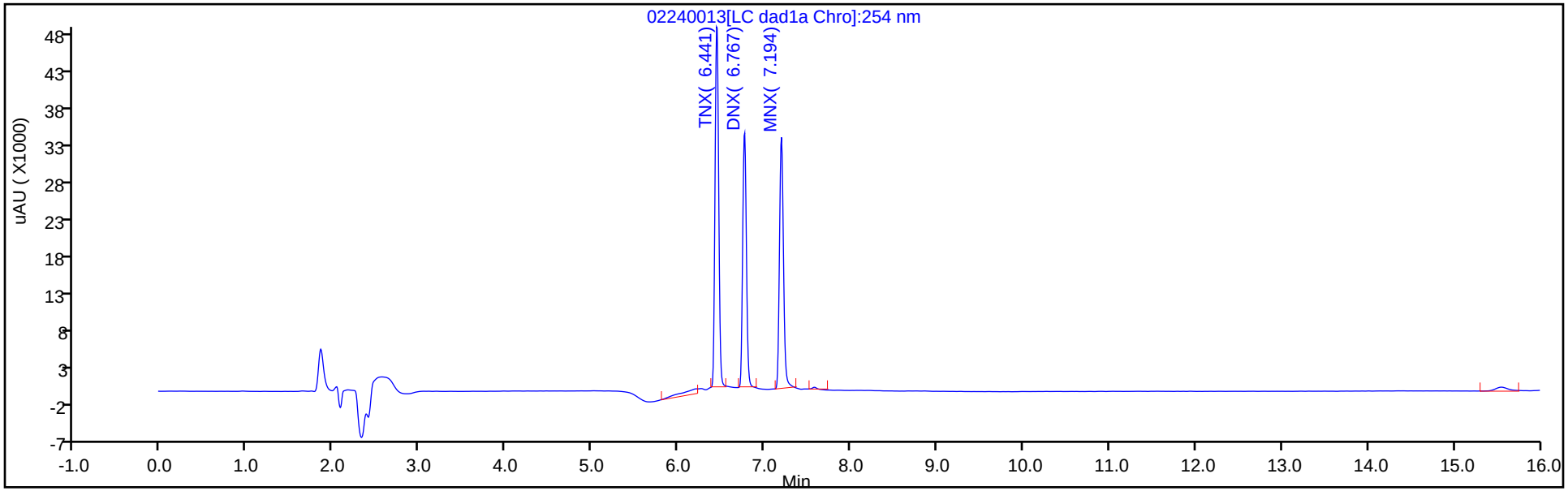
Report Date: 28-Feb-2023 13:17:27 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Denver

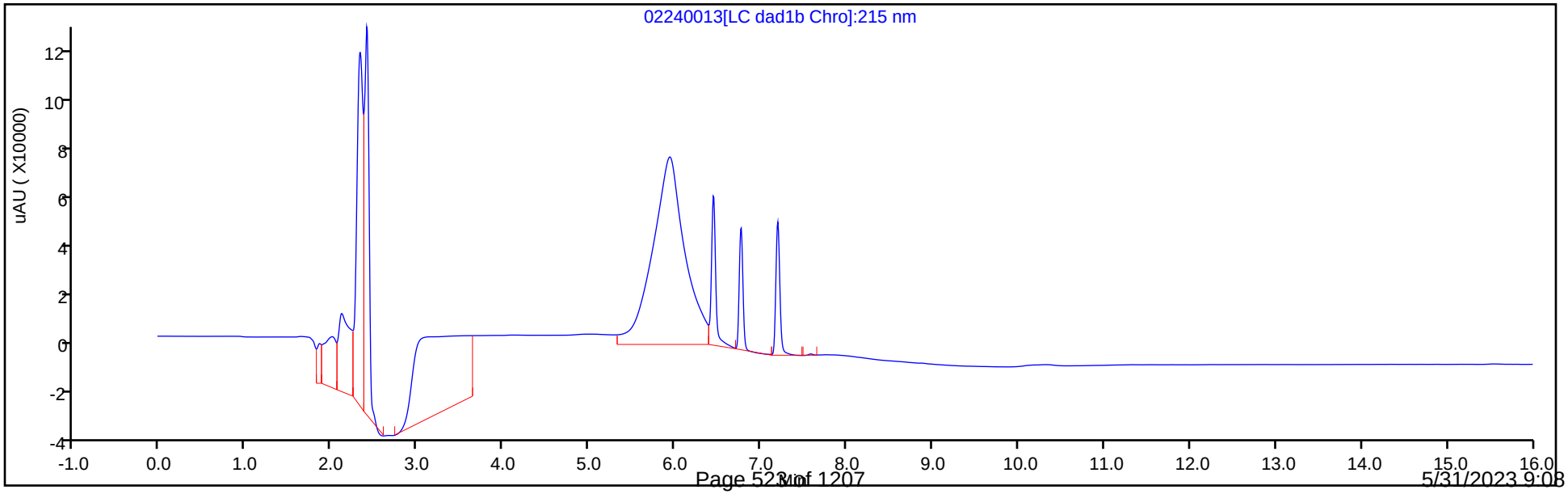
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240013.d

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

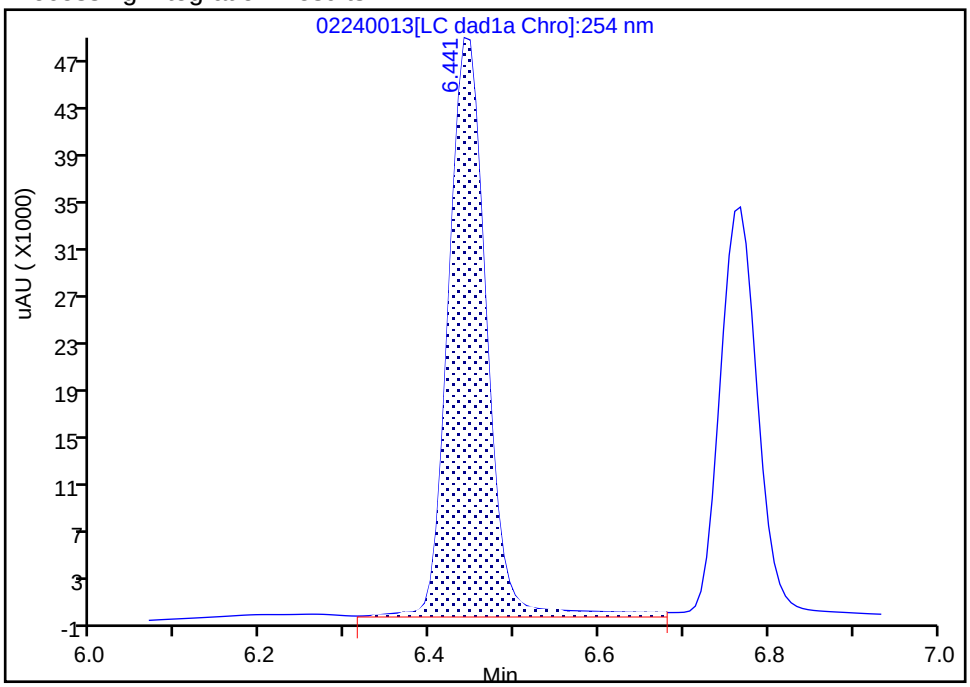
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240013.d
Injection Date: 24-Feb-2023 15:46:11 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 6
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

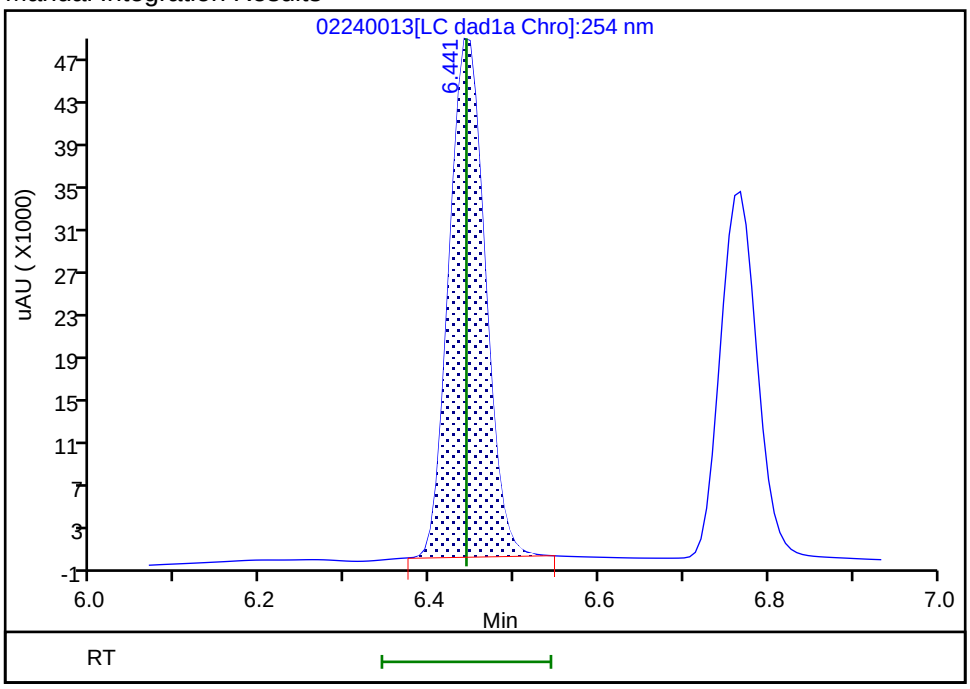
Processing Integration Results

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

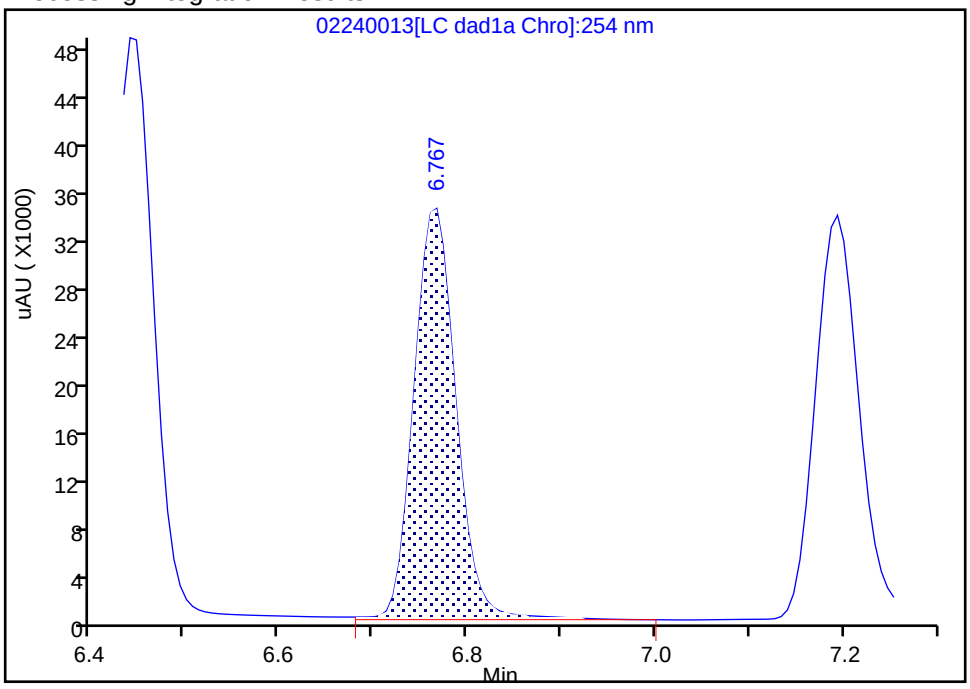
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240013.d				
Injection Date:	24-Feb-2023 15:46:11	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

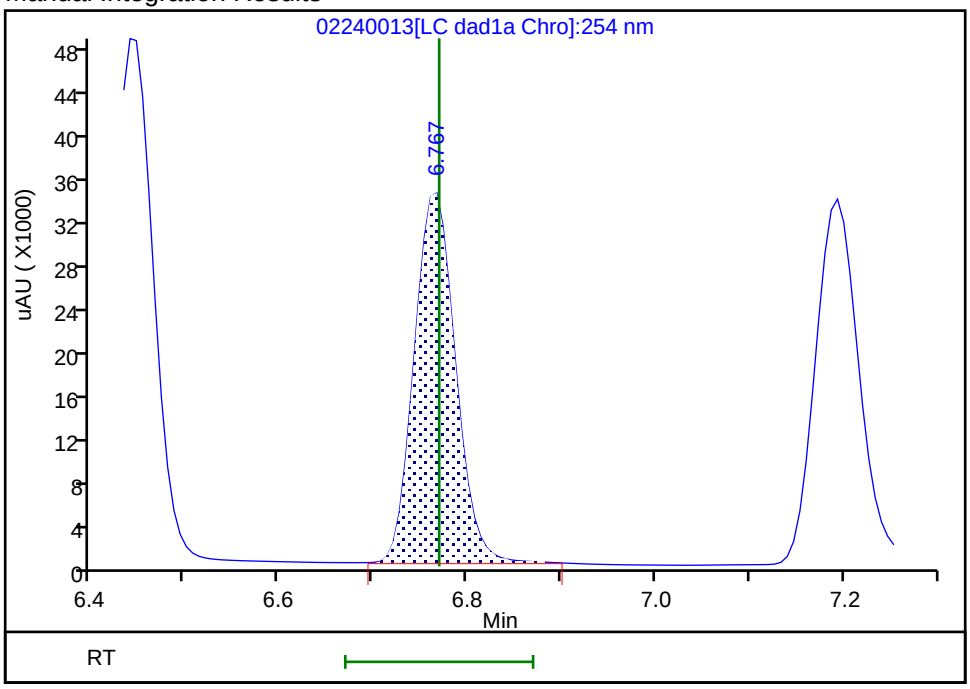
Processing Integration Results

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

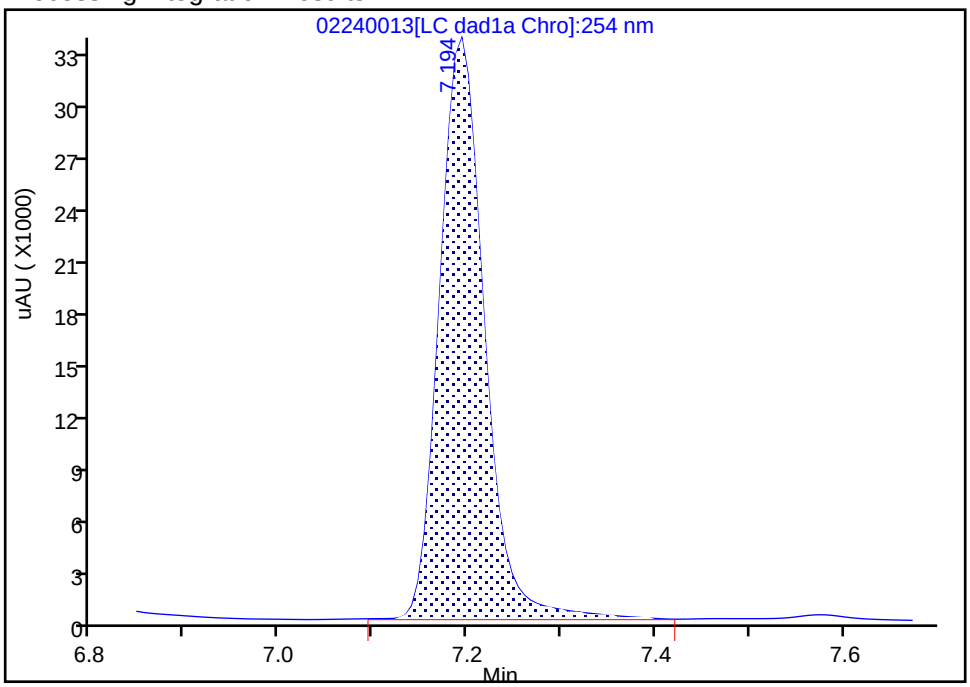
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240013.d
Injection Date: 24-Feb-2023 15:46:11 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 6
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

7 MNX, CAS: 5755-27-1

Signal: 1

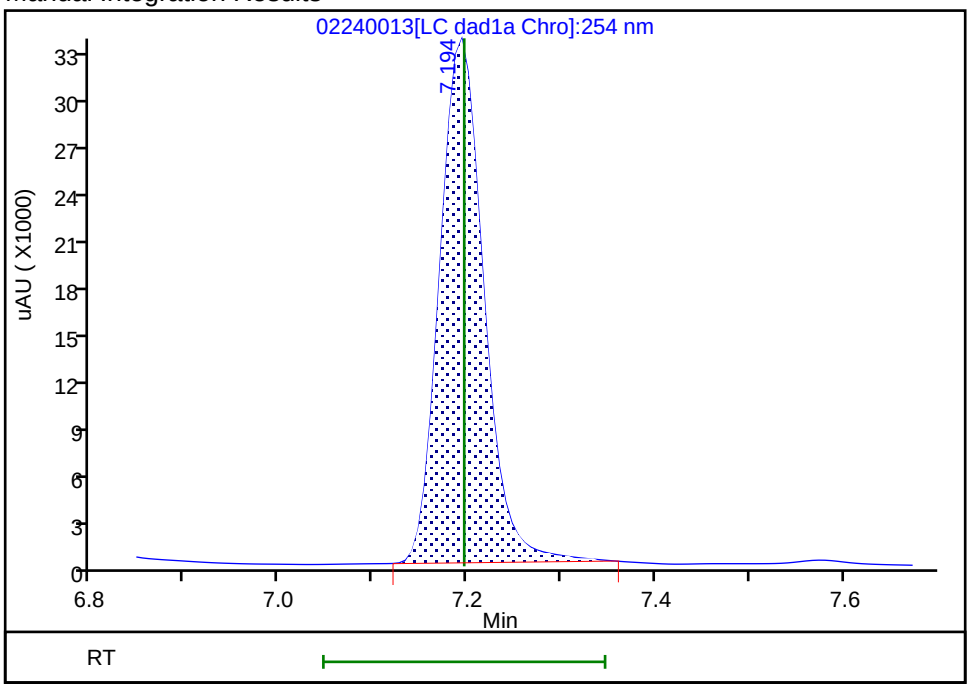
Processing Integration Results

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

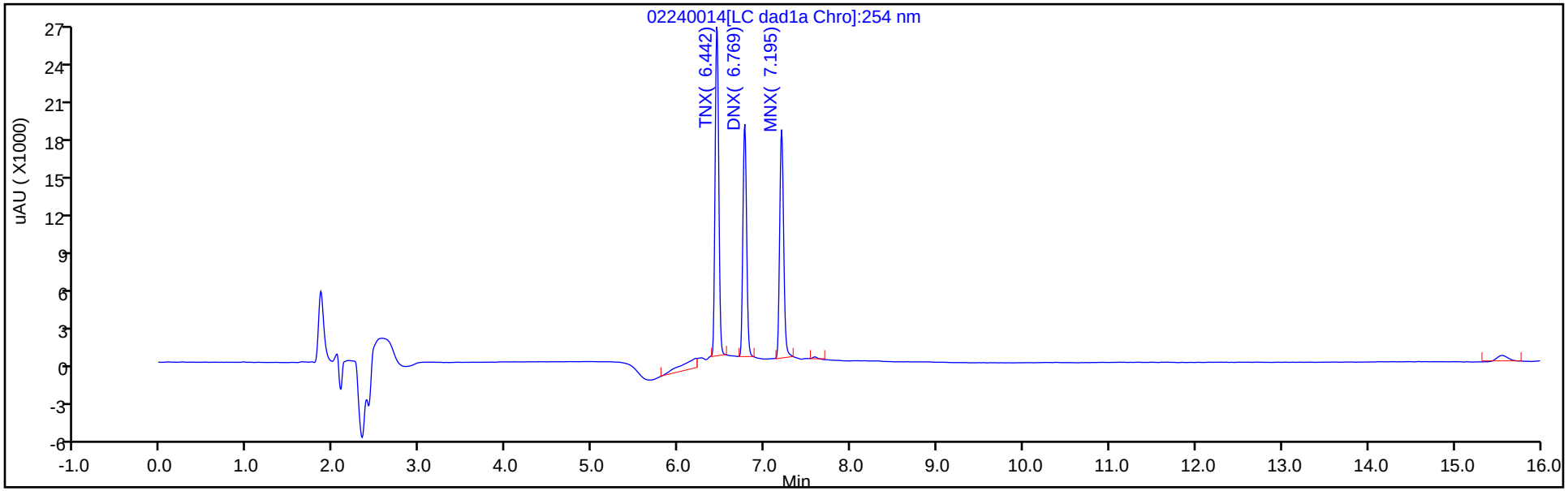
Report Date: 28-Feb-2023 13:17:27 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Denver

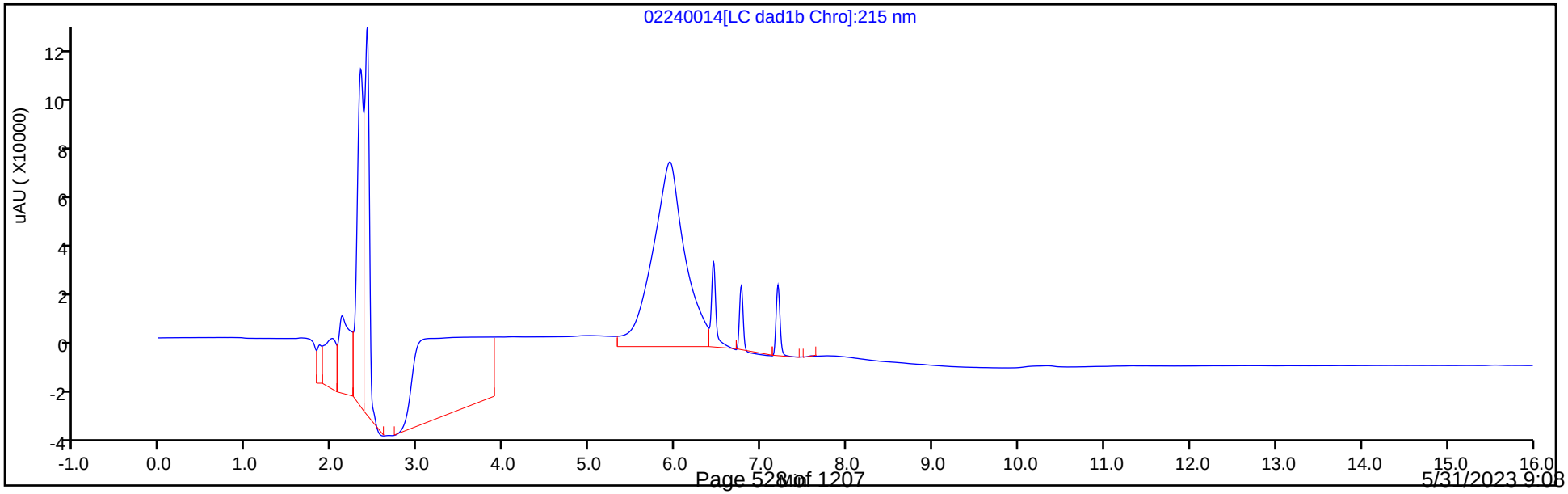
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240014.d

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

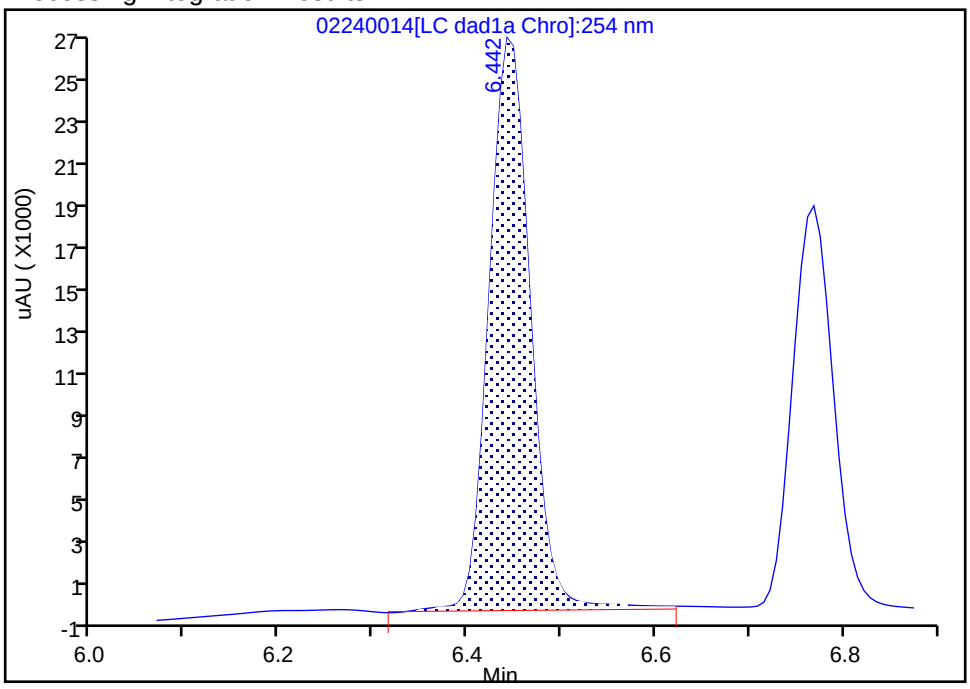
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240014.d				
Injection Date:	24-Feb-2023 16:09:13	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 5				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

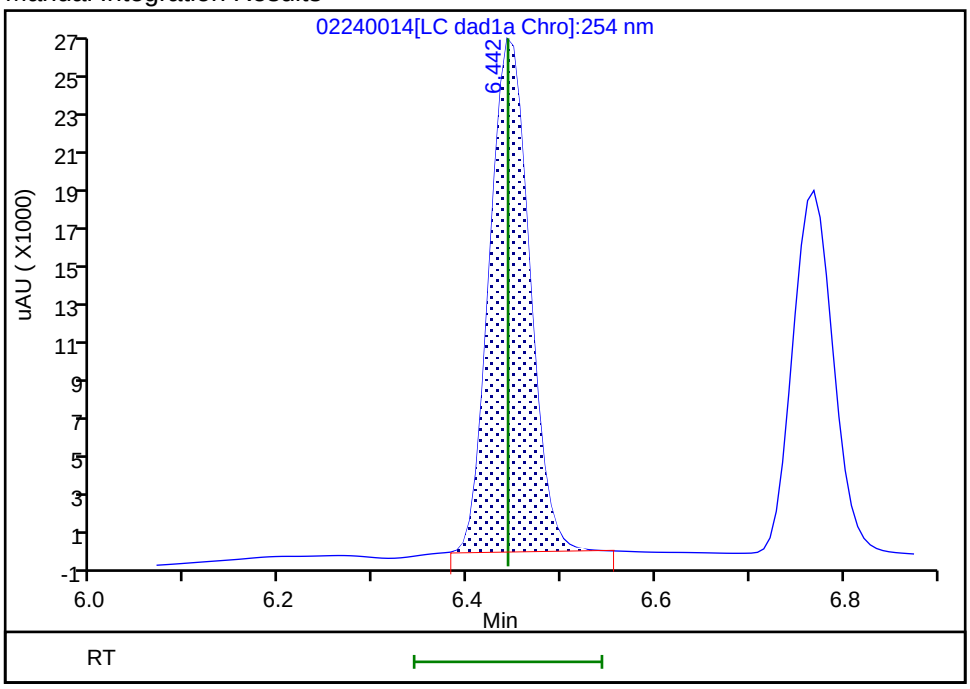
Processing Integration Results

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

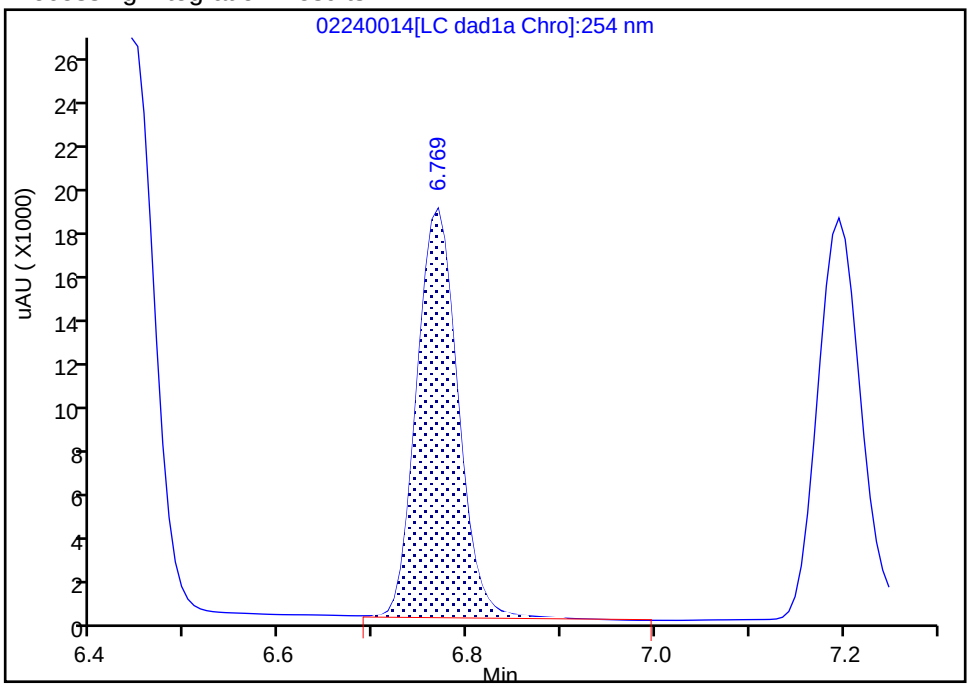
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240014.d				
Injection Date:	24-Feb-2023 16:09:13	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 5				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

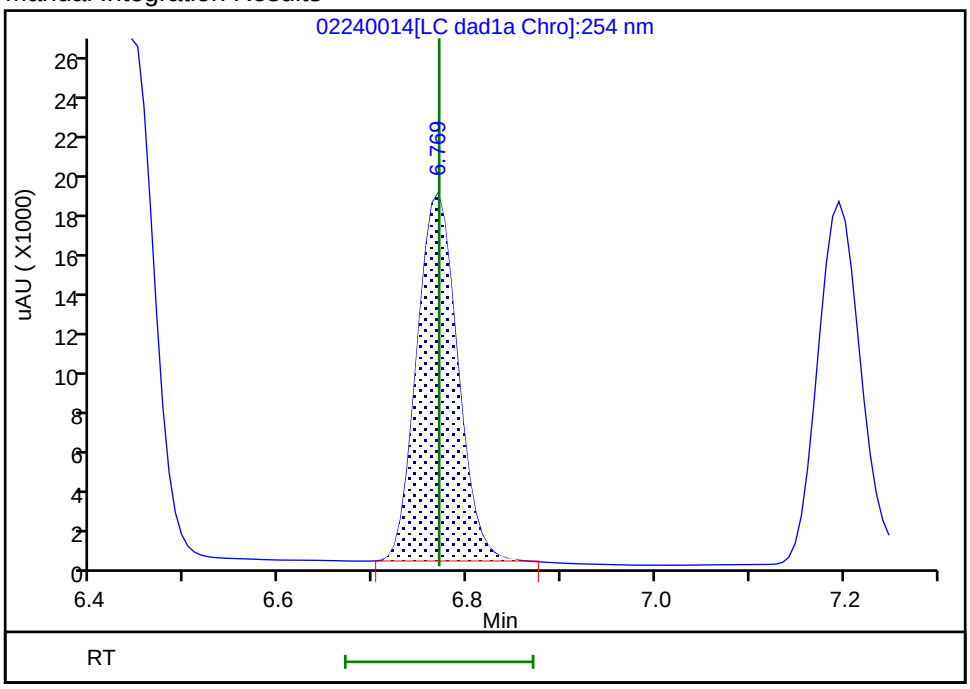
Processing Integration Results

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

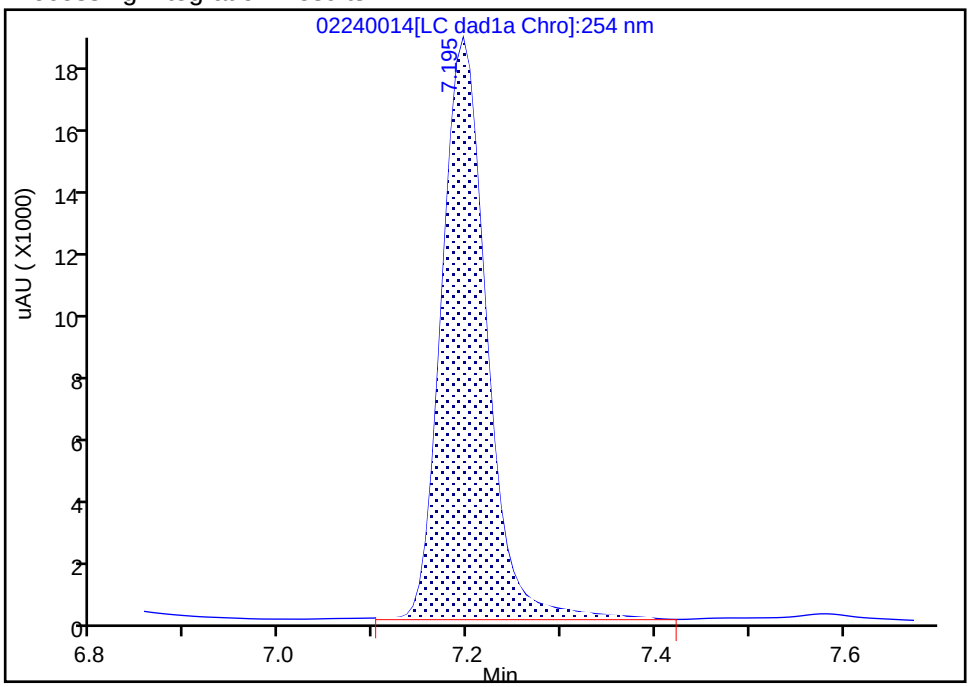
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240014.d				
Injection Date:	24-Feb-2023 16:09:13	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 5				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

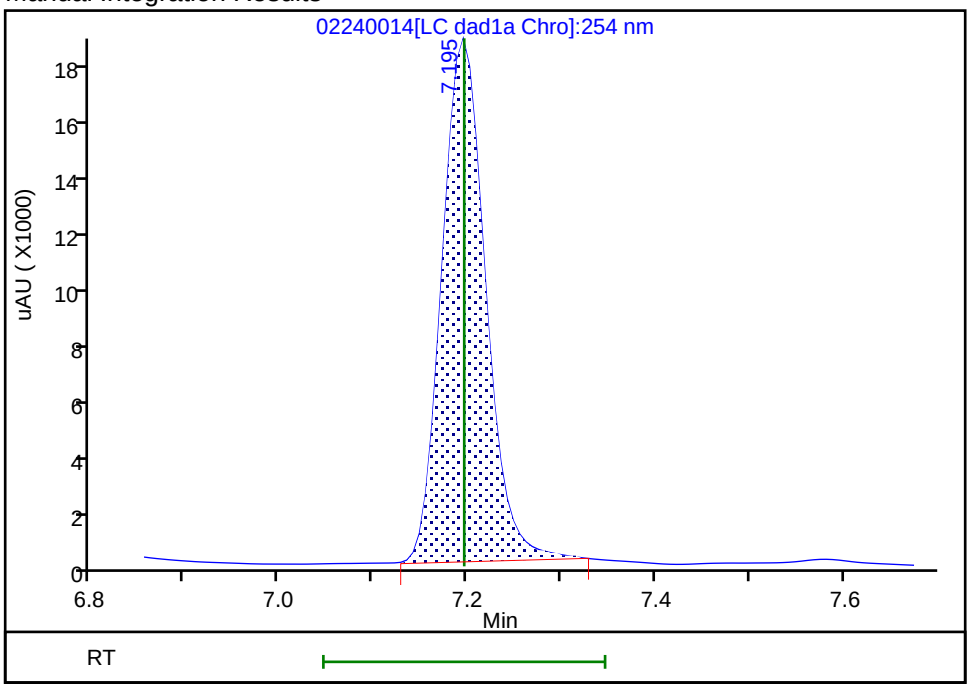
Processing Integration Results

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

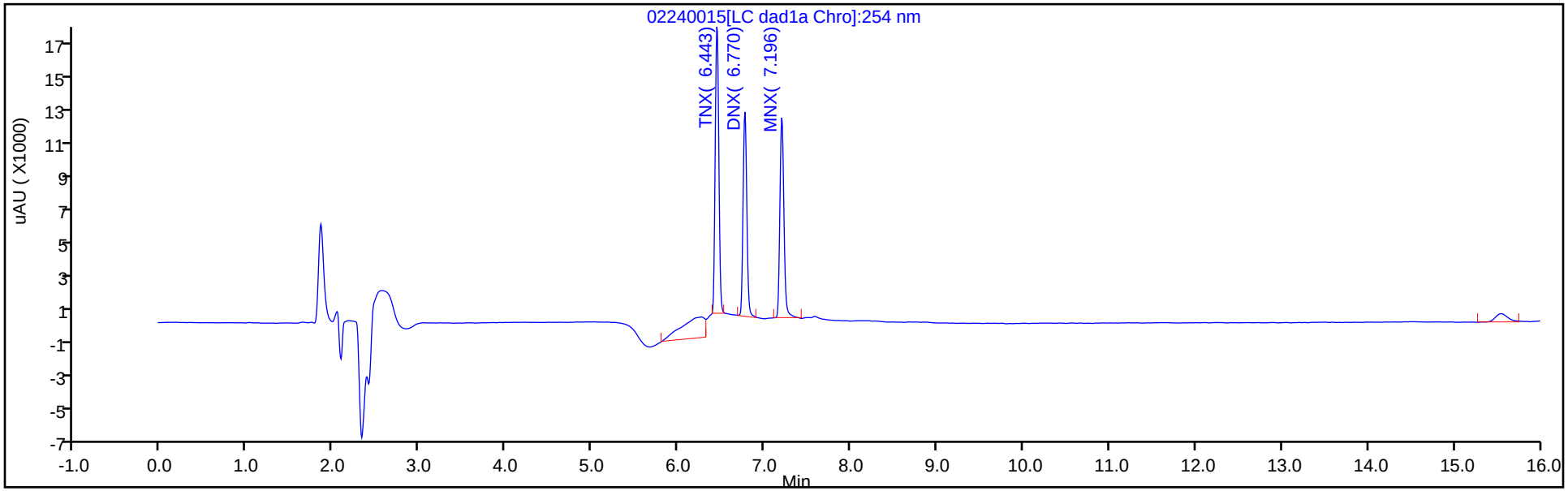
Report Date: 28-Feb-2023 13:17:28 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Denver

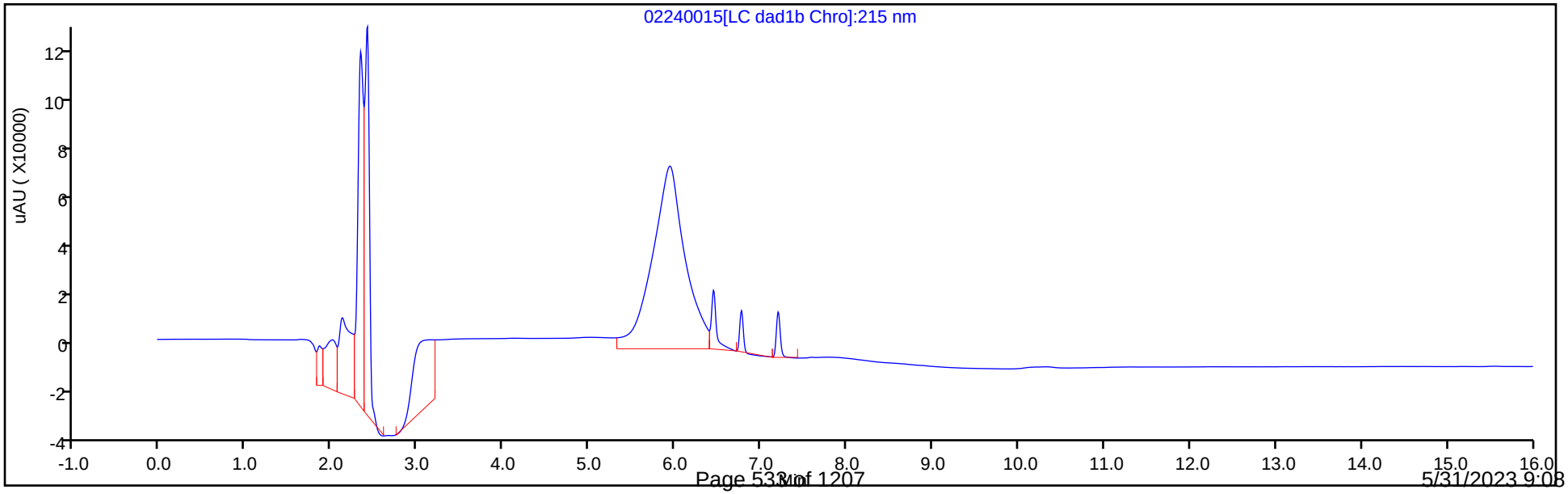
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240015.d

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



Manual Integration/User Assign Peak Report

Eurofins Denver

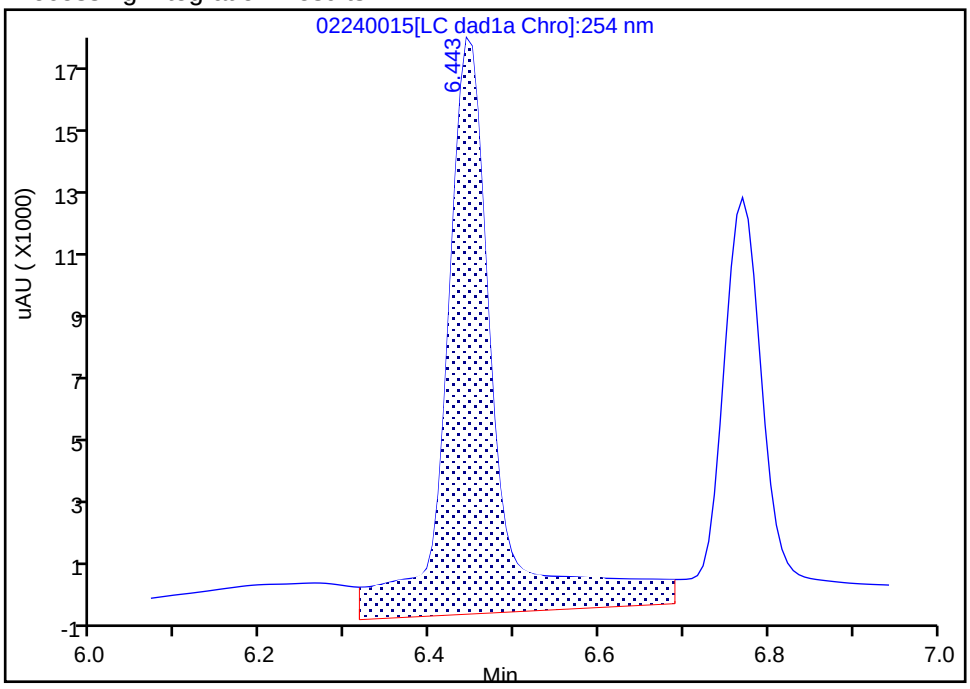
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240015.d				
Injection Date:	24-Feb-2023 16:32:12	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 4				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

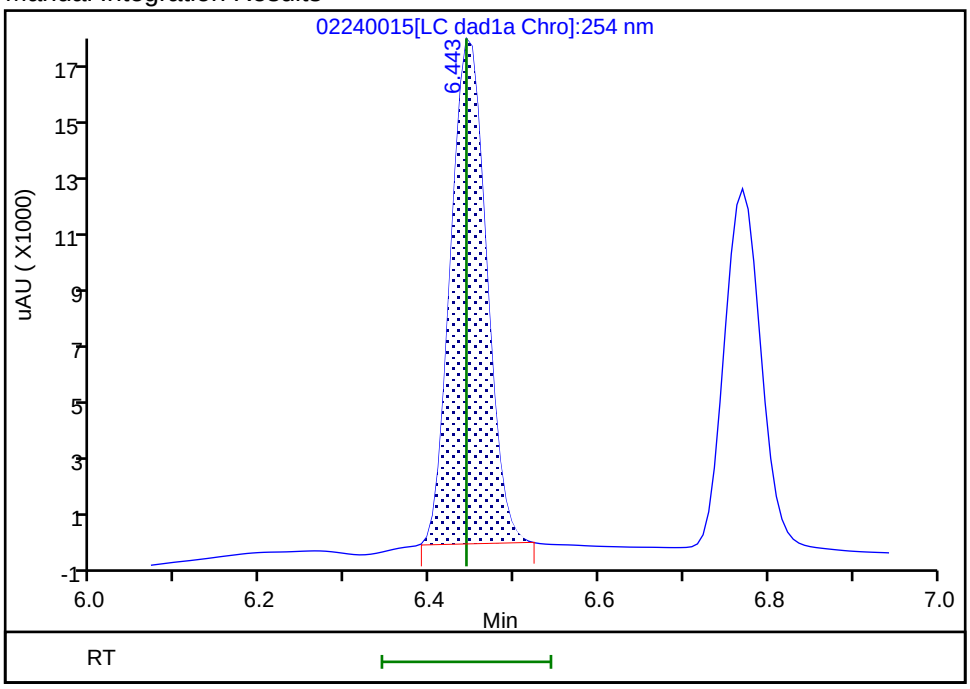
Processing Integration Results

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

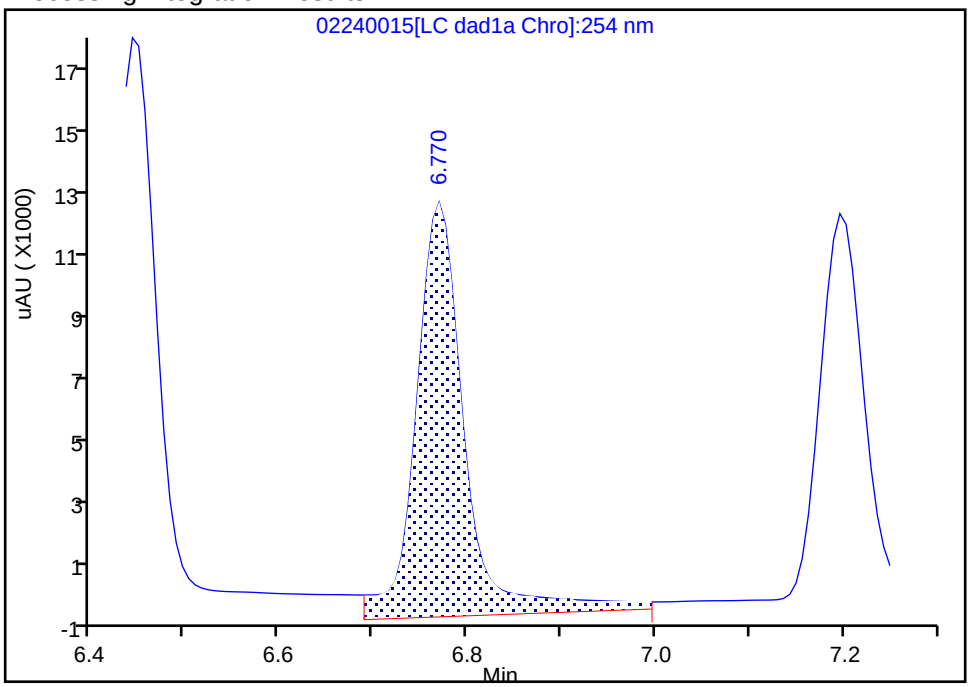
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240015.d				
Injection Date:	24-Feb-2023 16:32:12	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 4				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

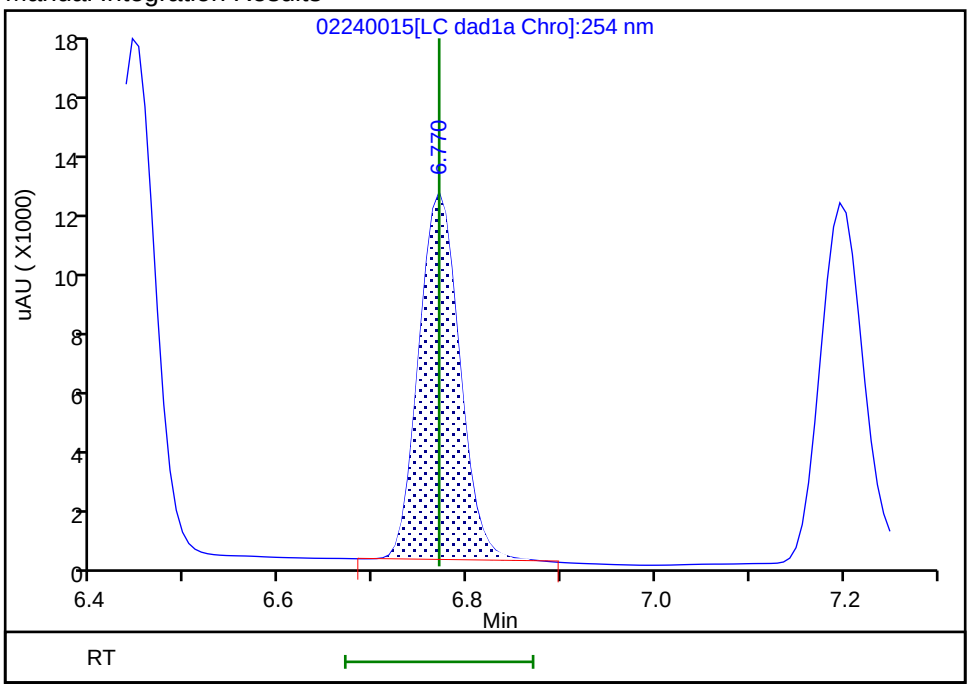
Processing Integration Results

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

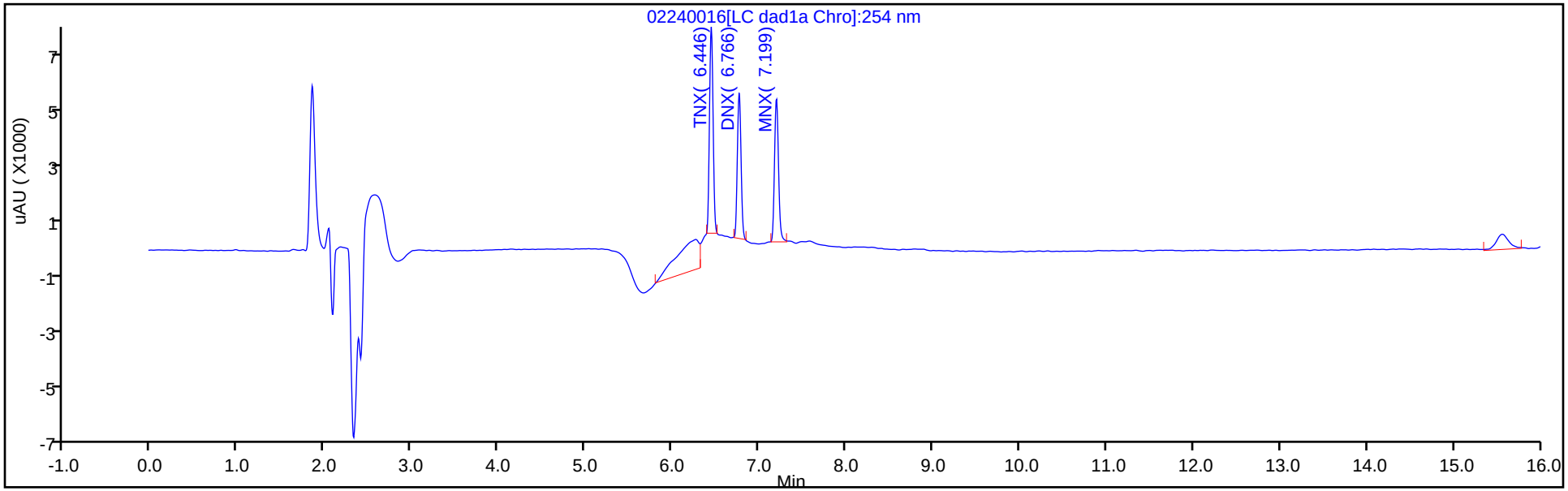
Report Date: 28-Feb-2023 13:17:28 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Denver

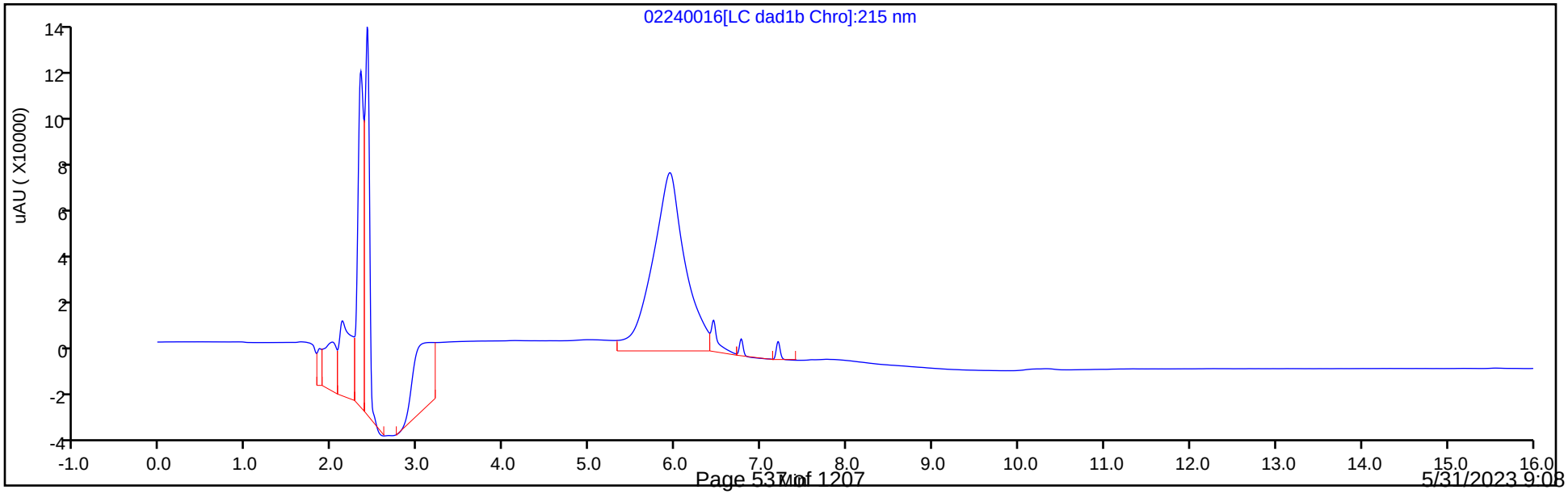
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240016.d

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



5/31/2023 9:08 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

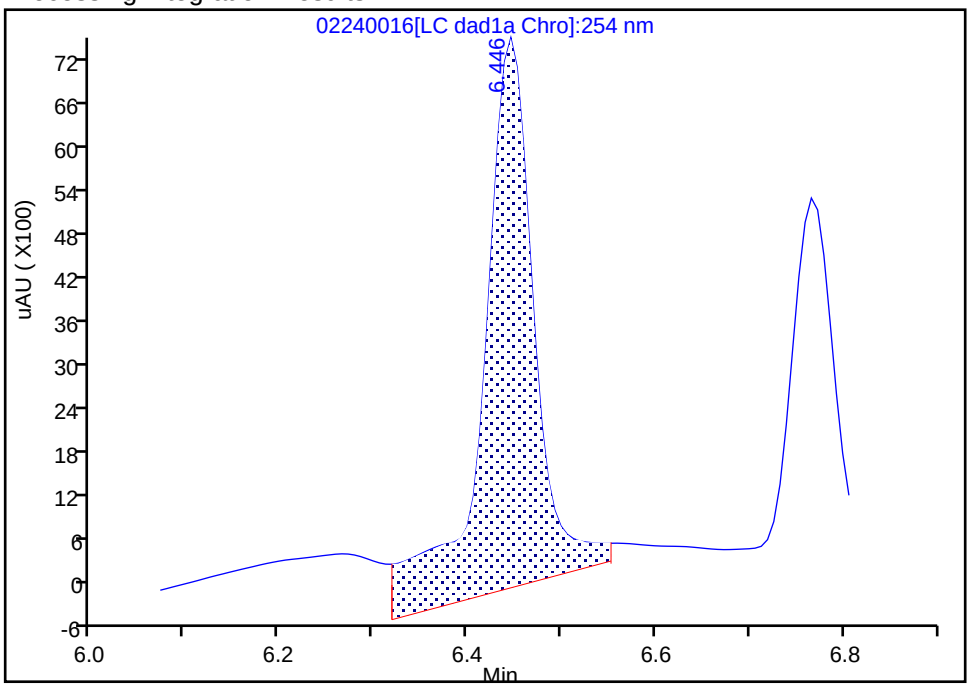
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240016.d				
Injection Date:	24-Feb-2023 16:55:16	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 3				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

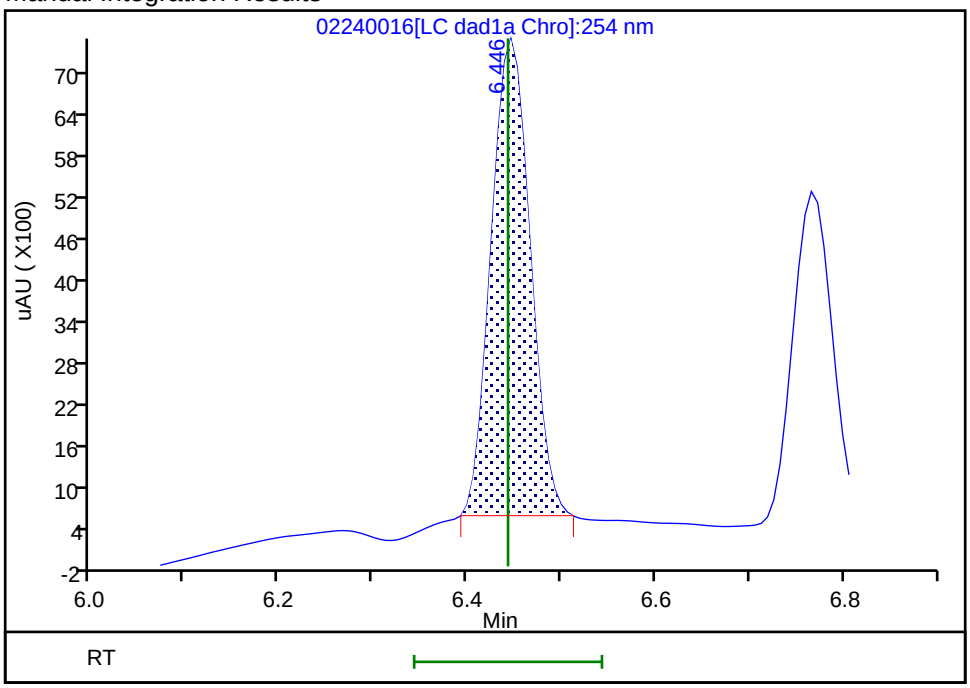
Processing Integration Results

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

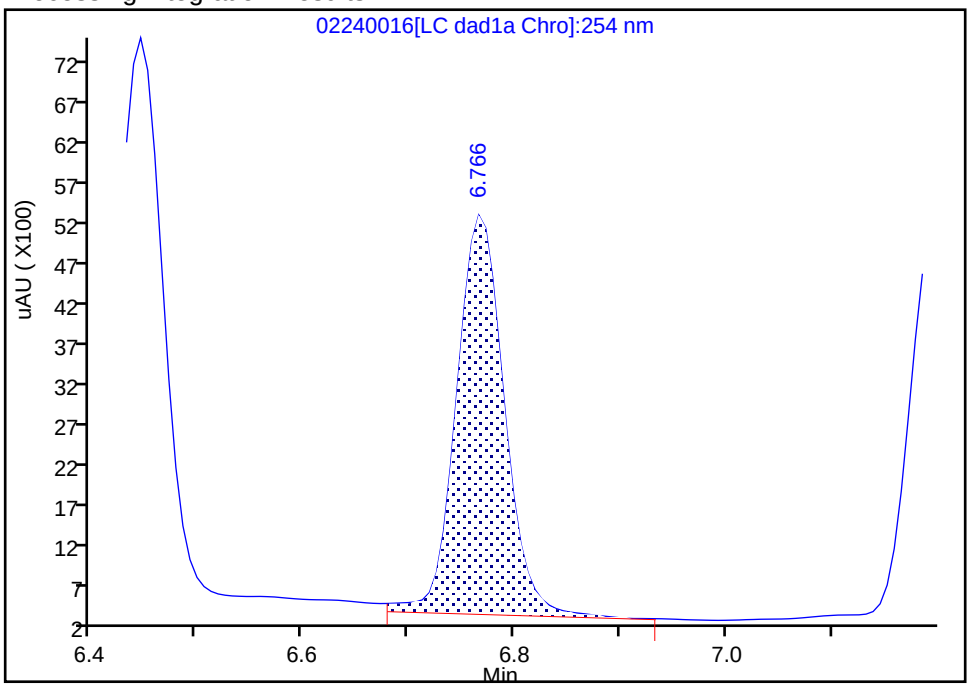
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240016.d				
Injection Date:	24-Feb-2023 16:55:16	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 3				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

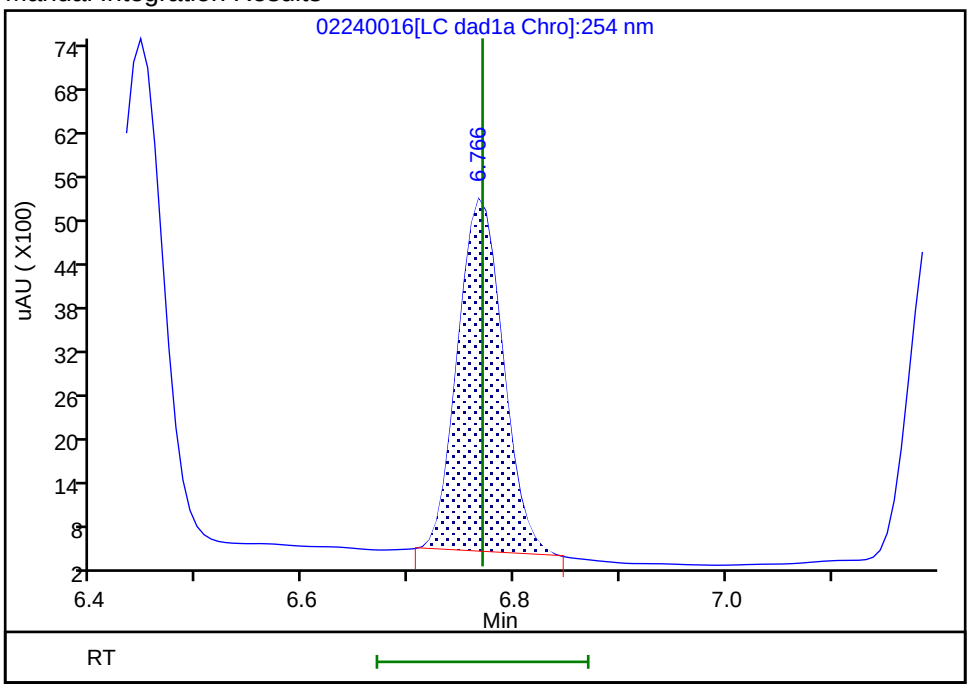
Processing Integration Results

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

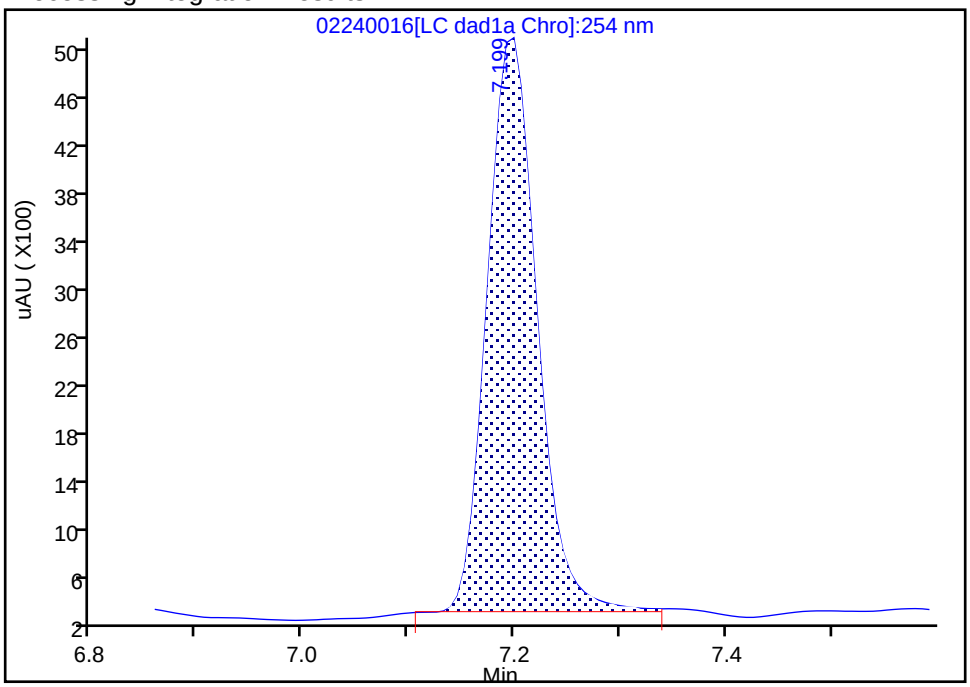
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240016.d
Injection Date: 24-Feb-2023 16:55:16 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 3
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

7 MNX, CAS: 5755-27-1

Signal: 1

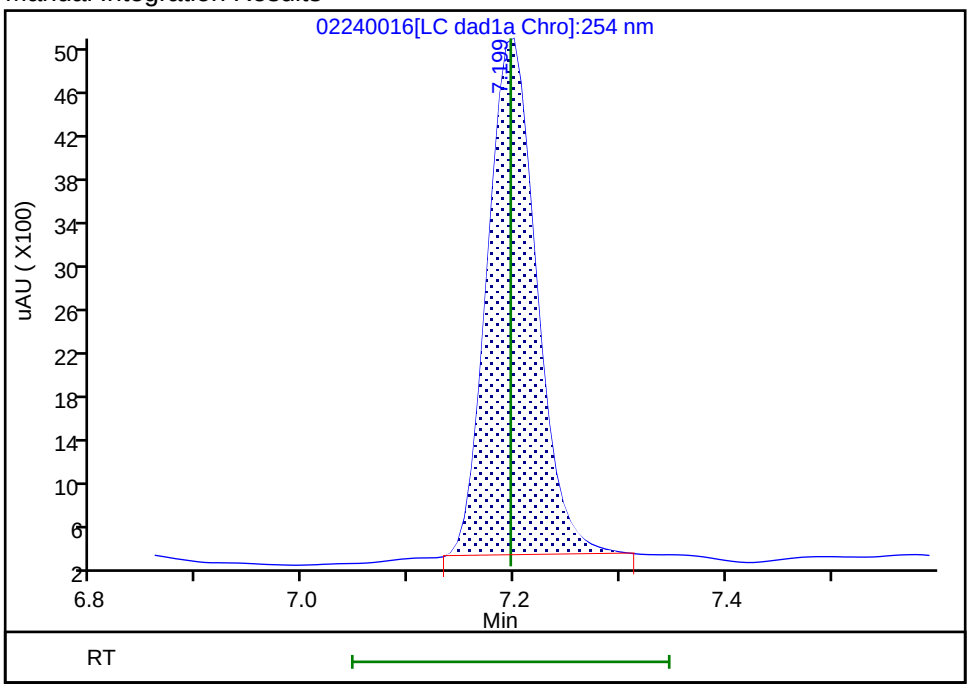
Processing Integration Results

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

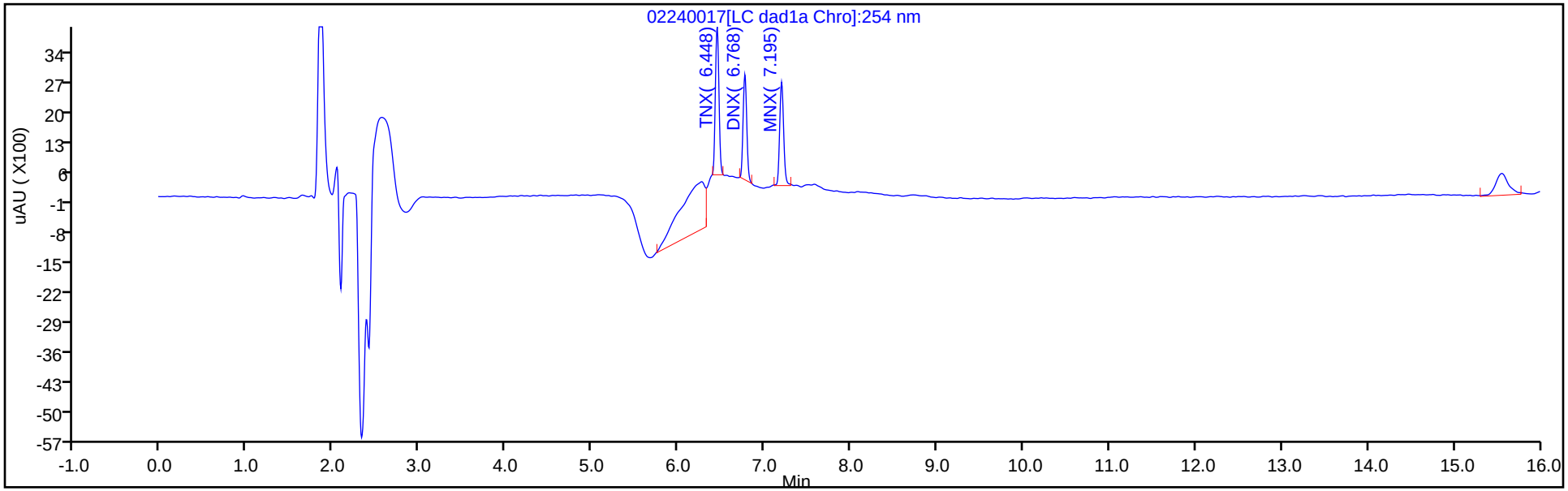
Report Date: 28-Feb-2023 13:17:29 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Denver

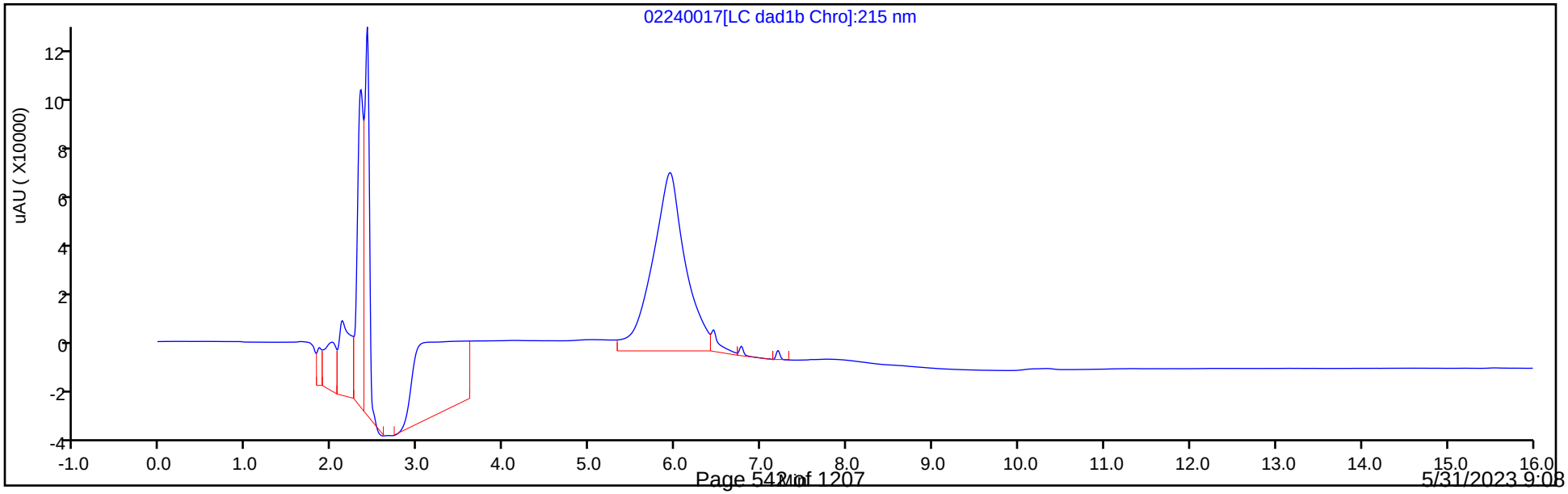
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240017.d

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

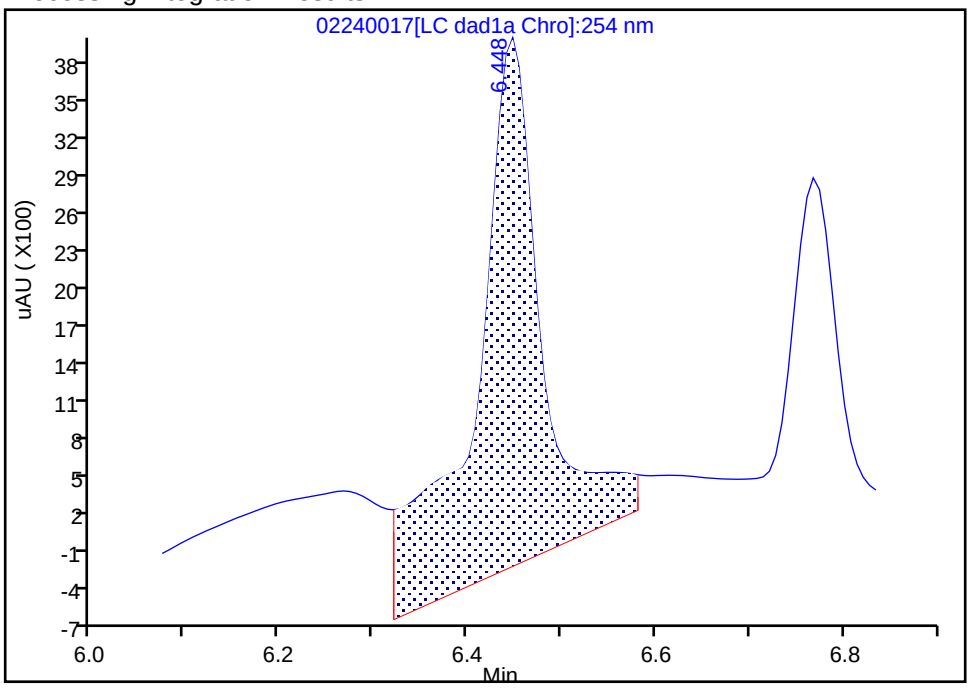
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240017.d				
Injection Date:	24-Feb-2023 17:18:19	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 2				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

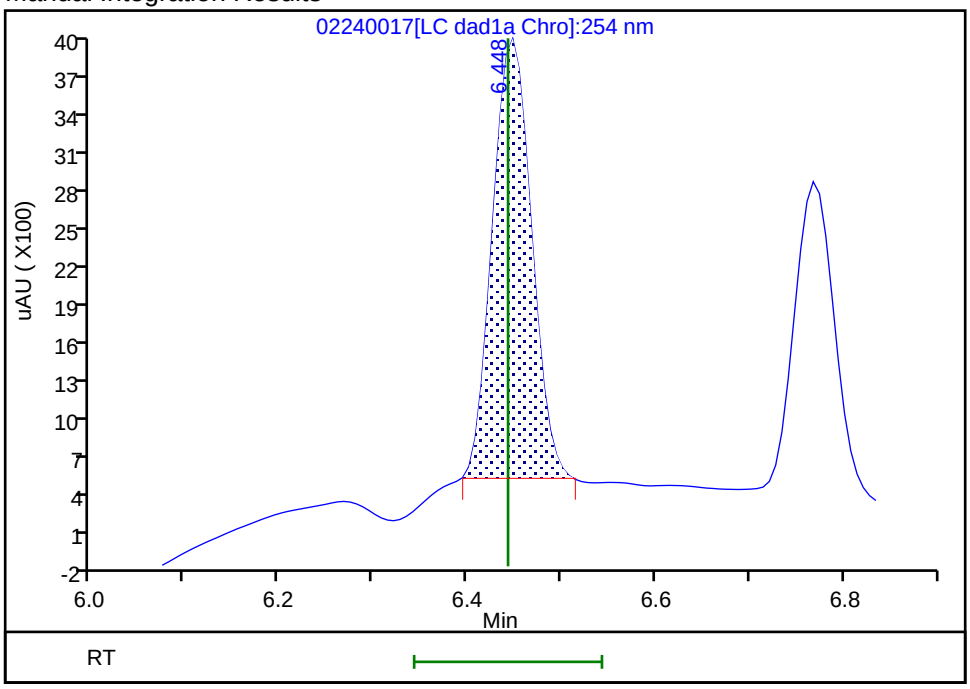
Processing Integration Results

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

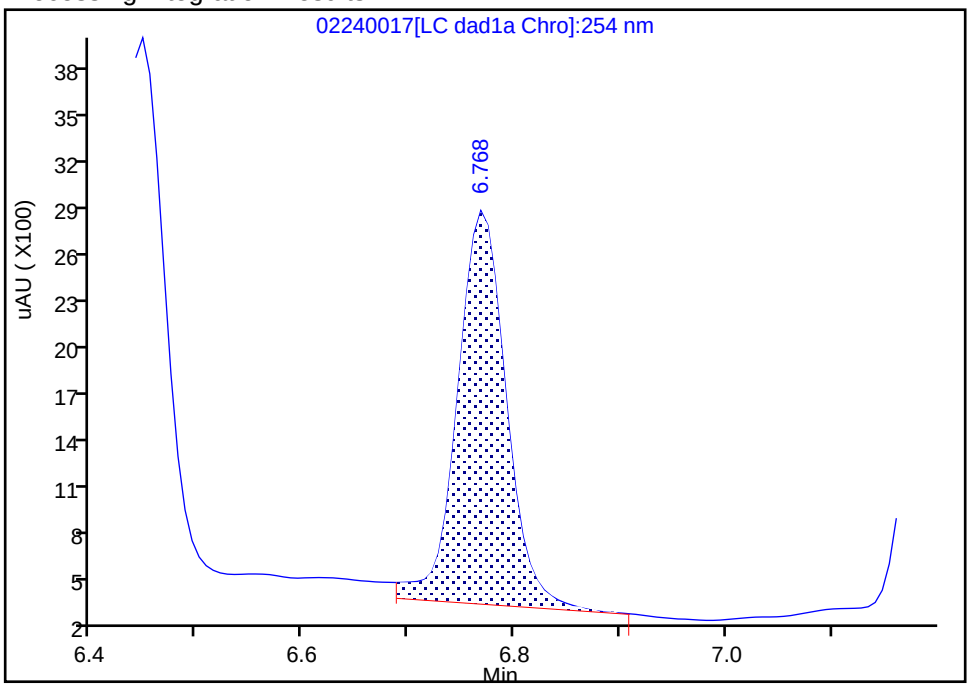
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240017.d				
Injection Date:	24-Feb-2023 17:18:19	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 2				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

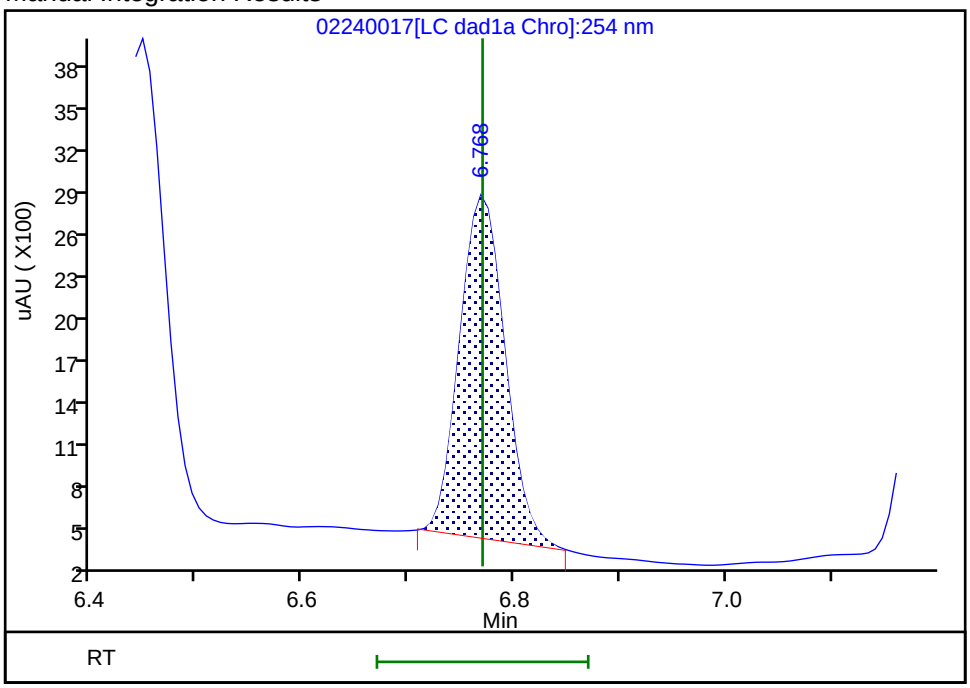
Processing Integration Results

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

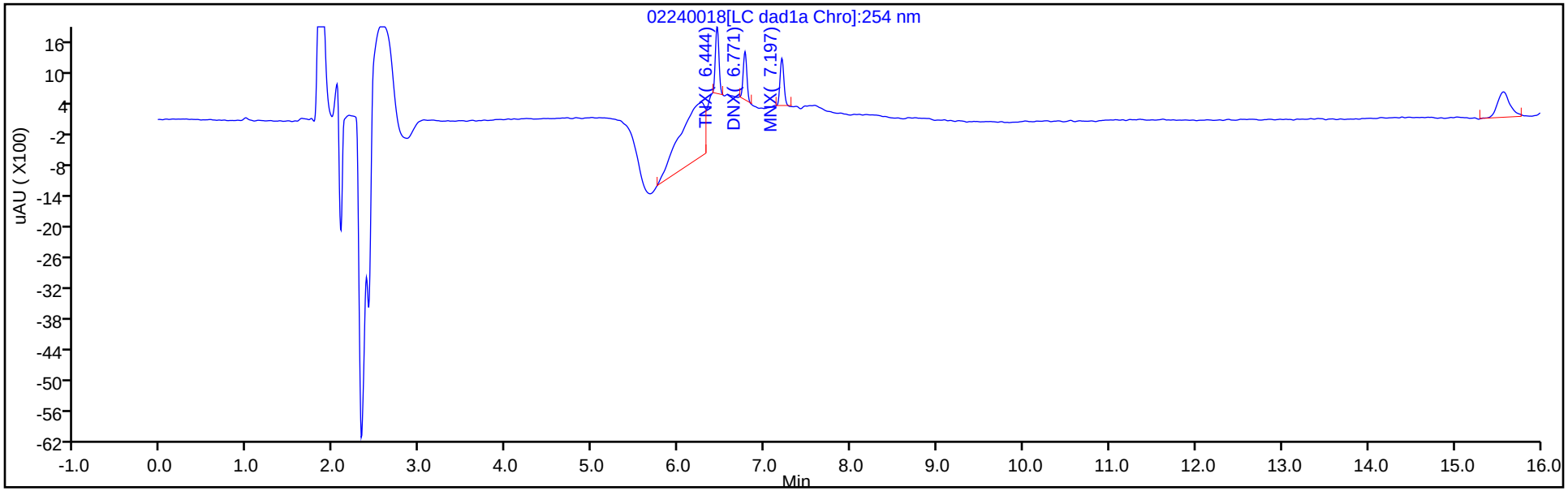
Report Date: 28-Feb-2023 13:17:30 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Denver

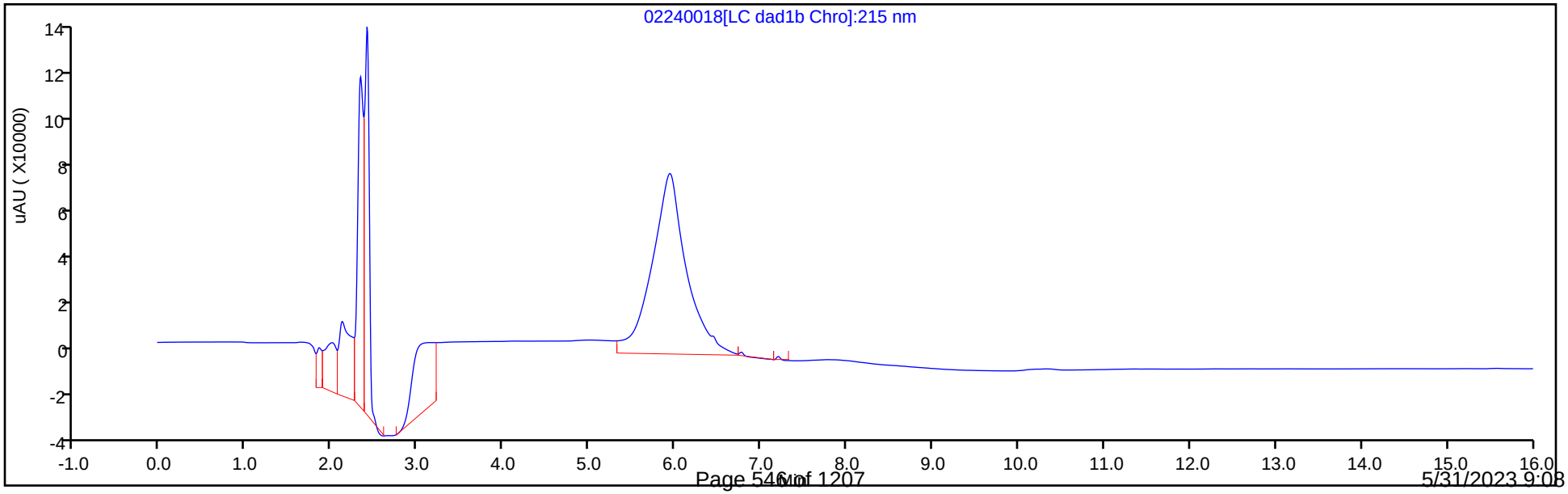
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240018.d

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



5/31/2023 9:08 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

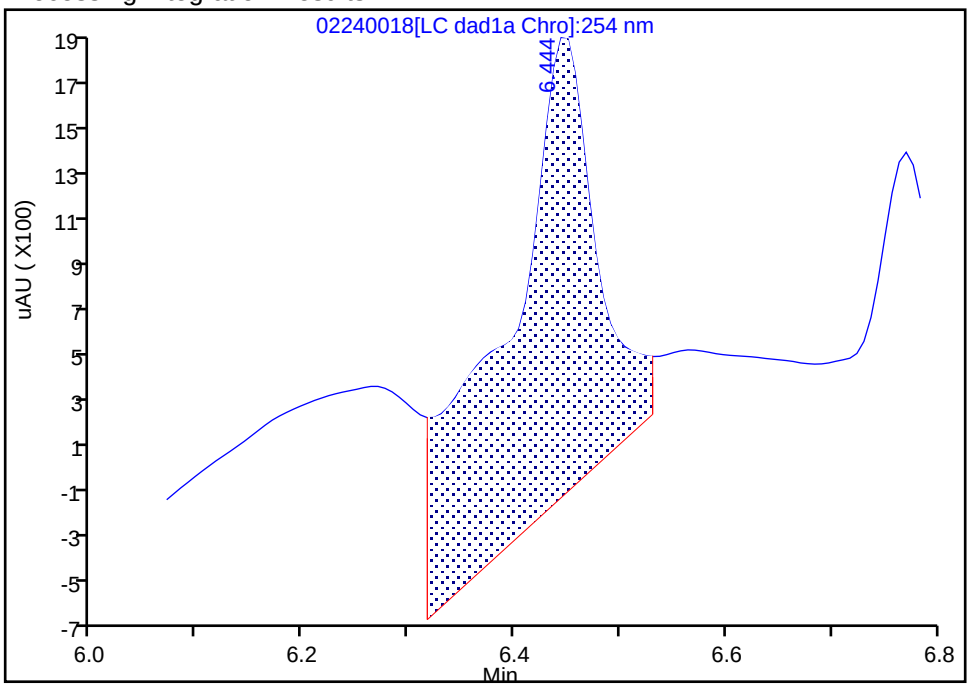
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240018.d
Injection Date: 24-Feb-2023 17:41:20 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 1
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

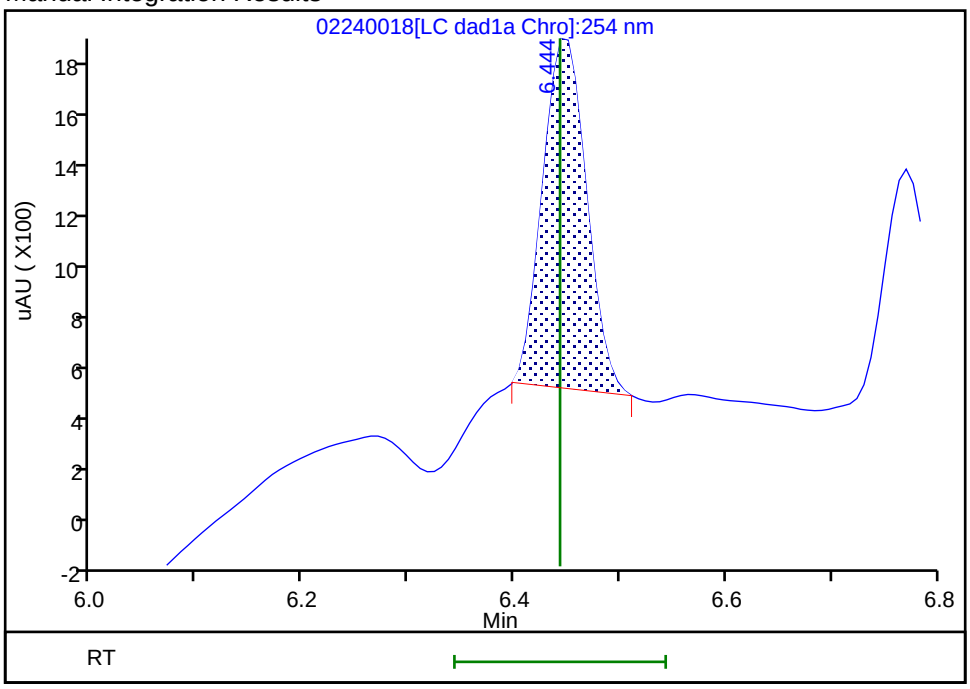
Processing Integration Results

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

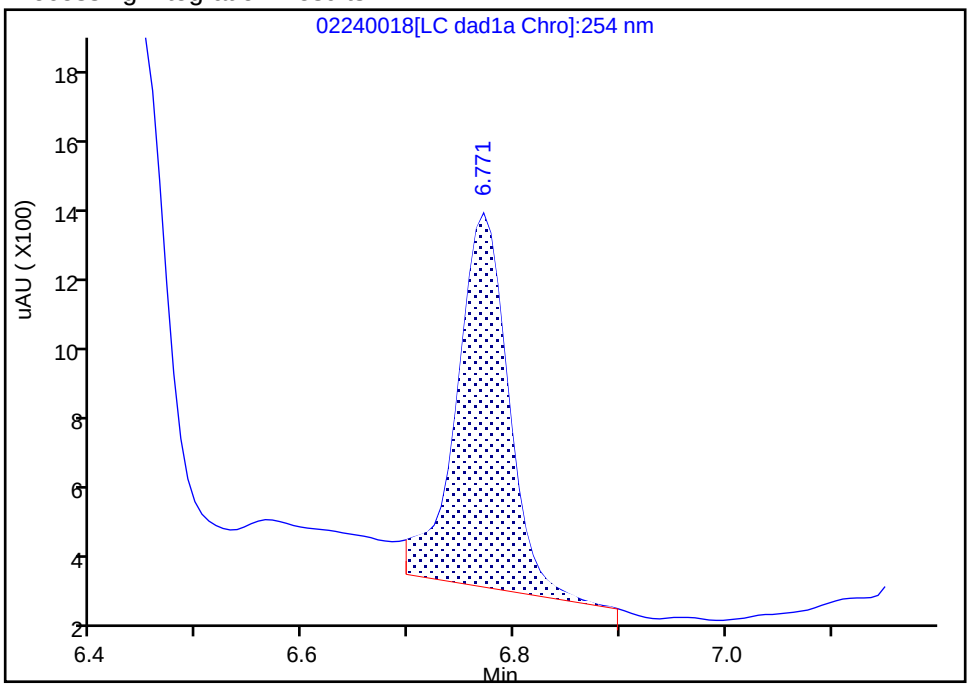
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240018.d				
Injection Date:	24-Feb-2023 17:41:20	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 1				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

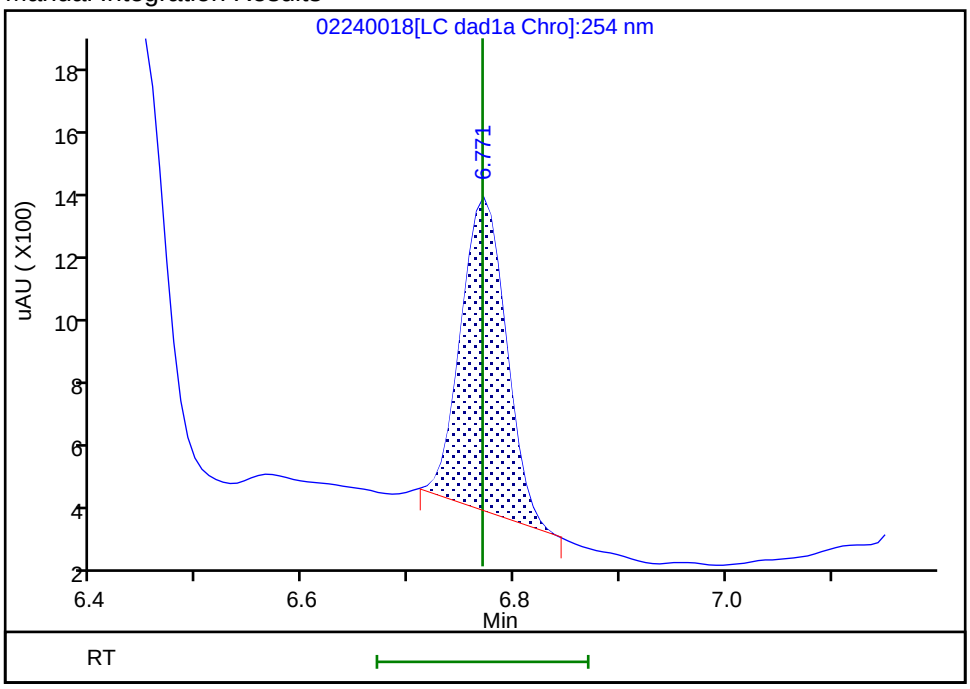
Processing Integration Results

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

Calibration / TNX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

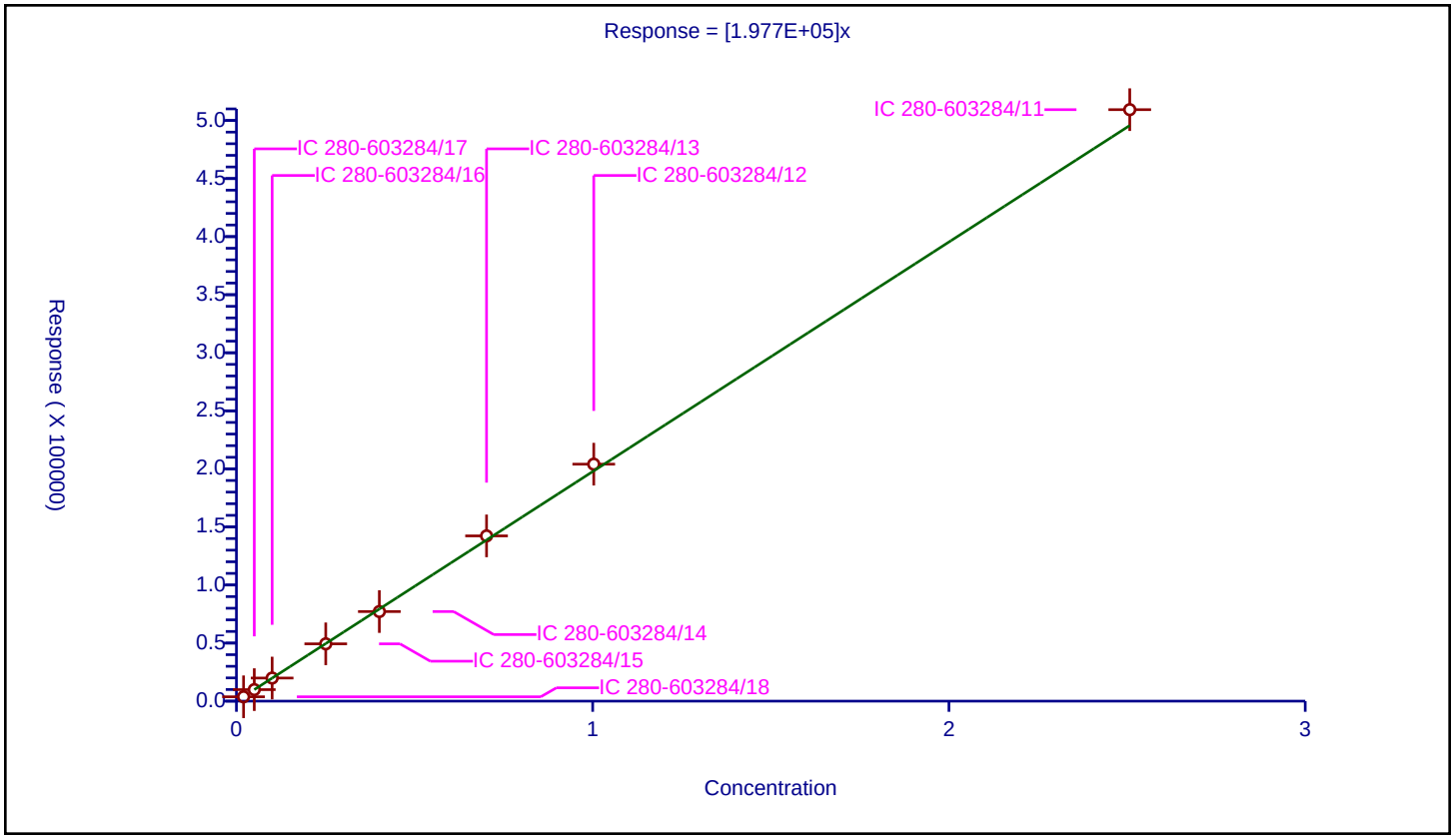
Curve Coefficients

Intercept:	0
Slope:	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



Calibration / DNX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

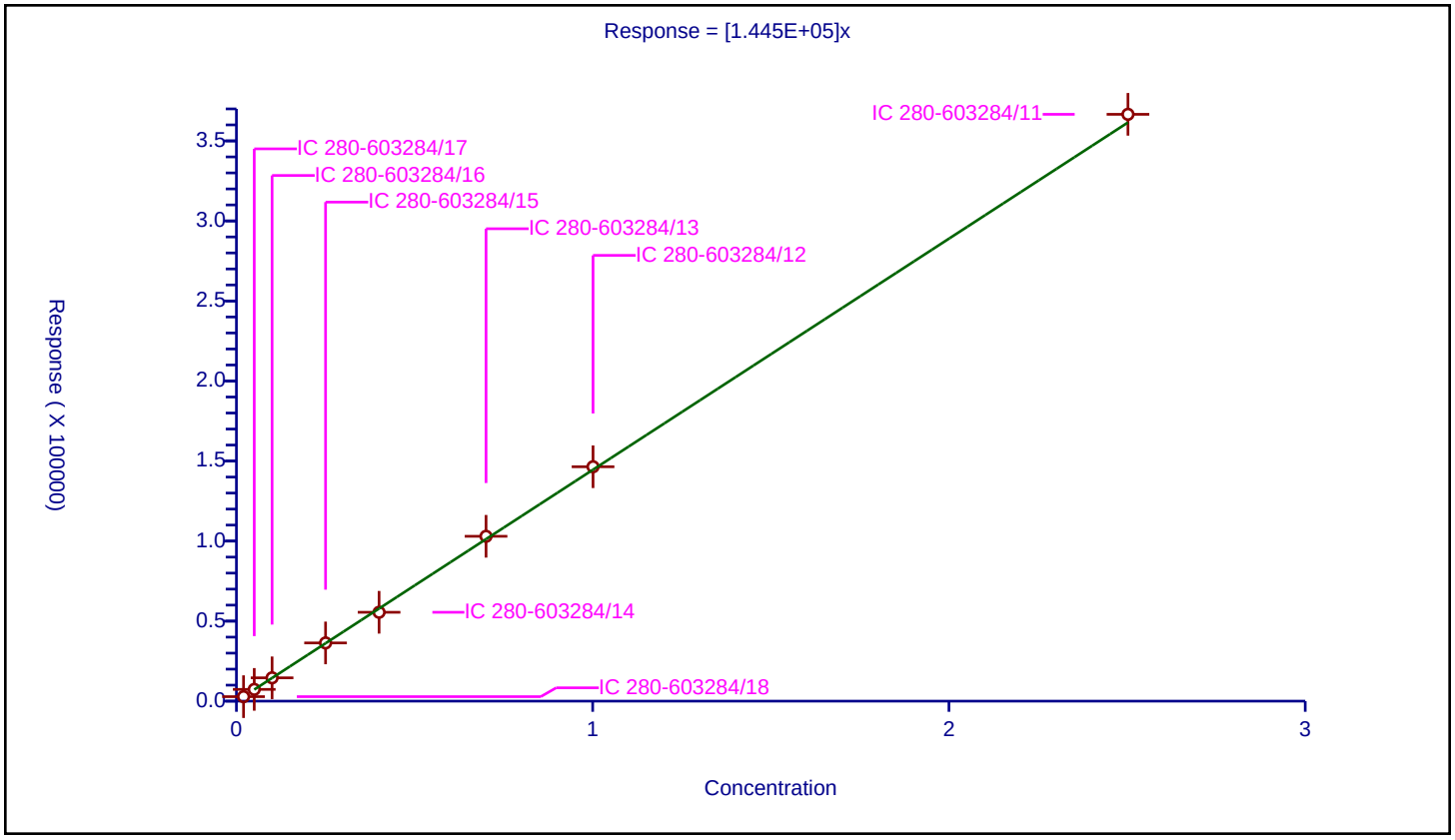
Curve Coefficients

Intercept:	0
Slope:	1.445E+05

Error Coefficients

Standard Error:	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

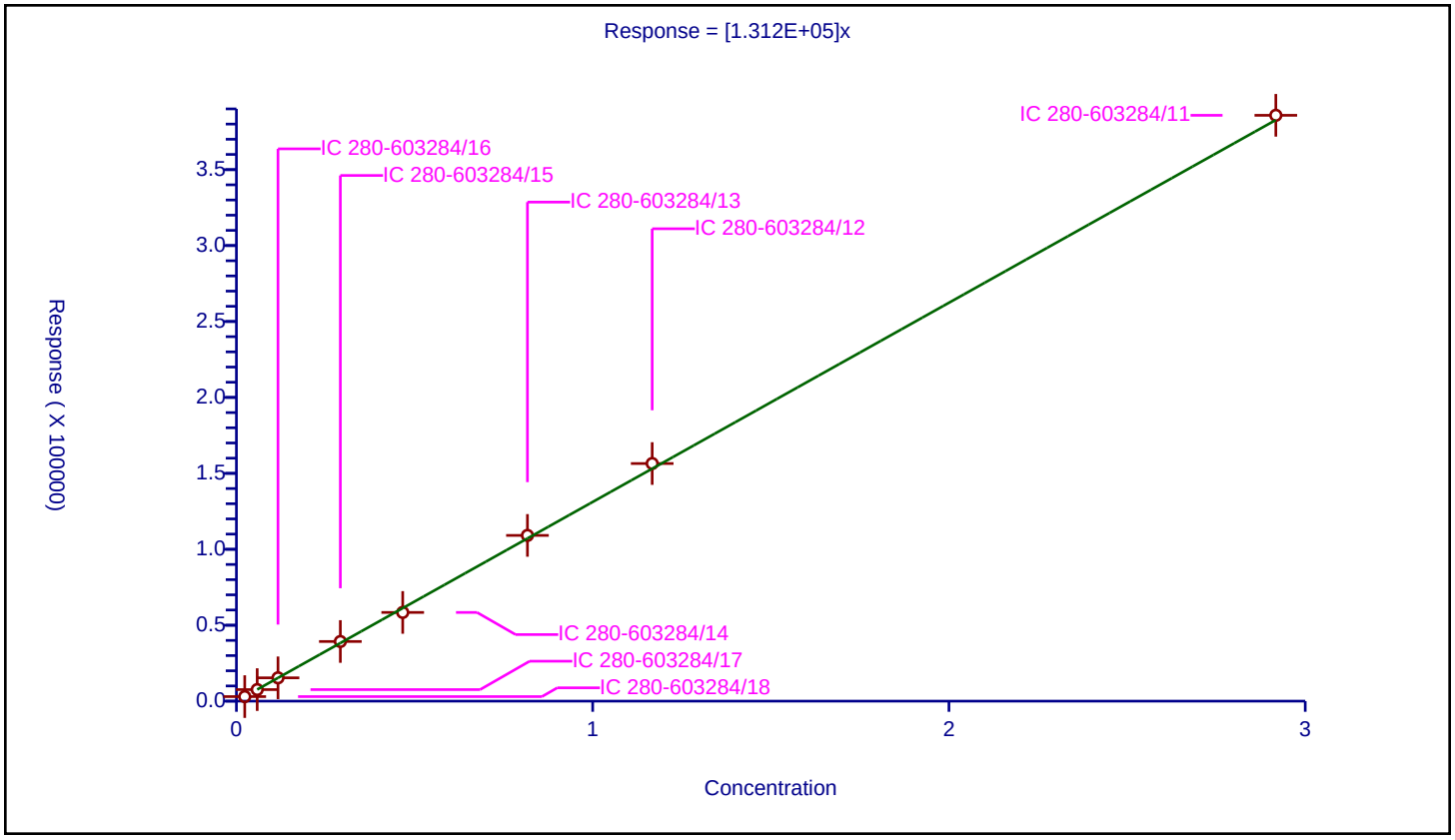
Curve Coefficients

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.: 280-176674-1 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.: 280-176674-1 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.: 280-176674-1 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.: 280-176674-1 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.: 280-176674-1 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.: 280-176674-1 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

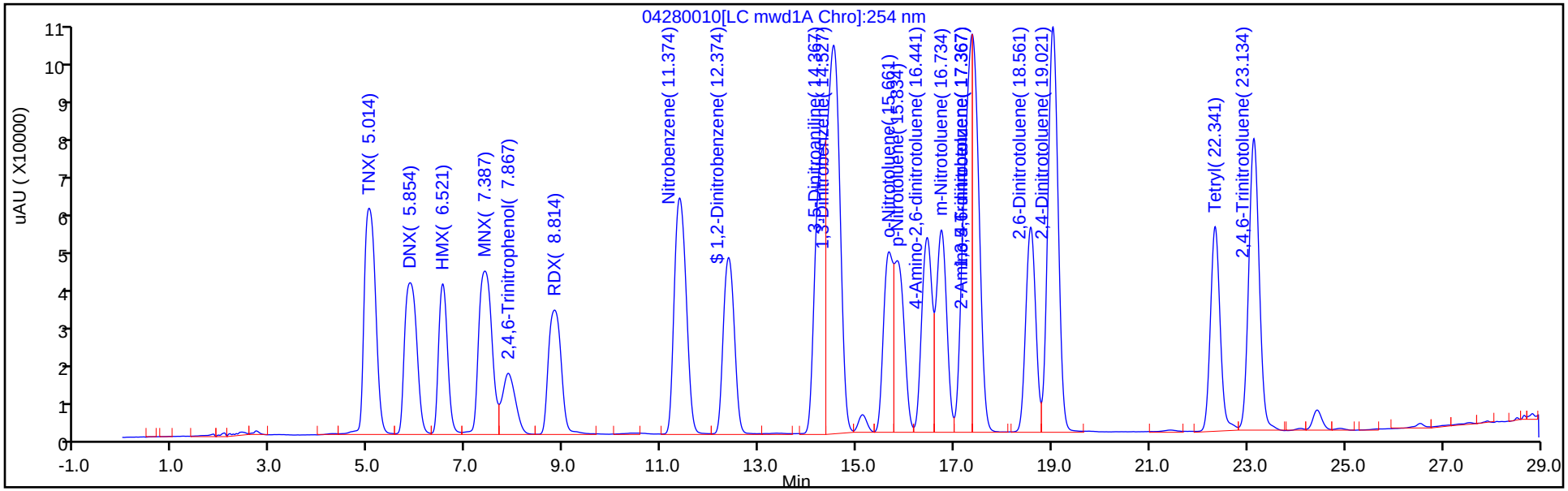
Report Date: 29-Apr-2023 13:04:16 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

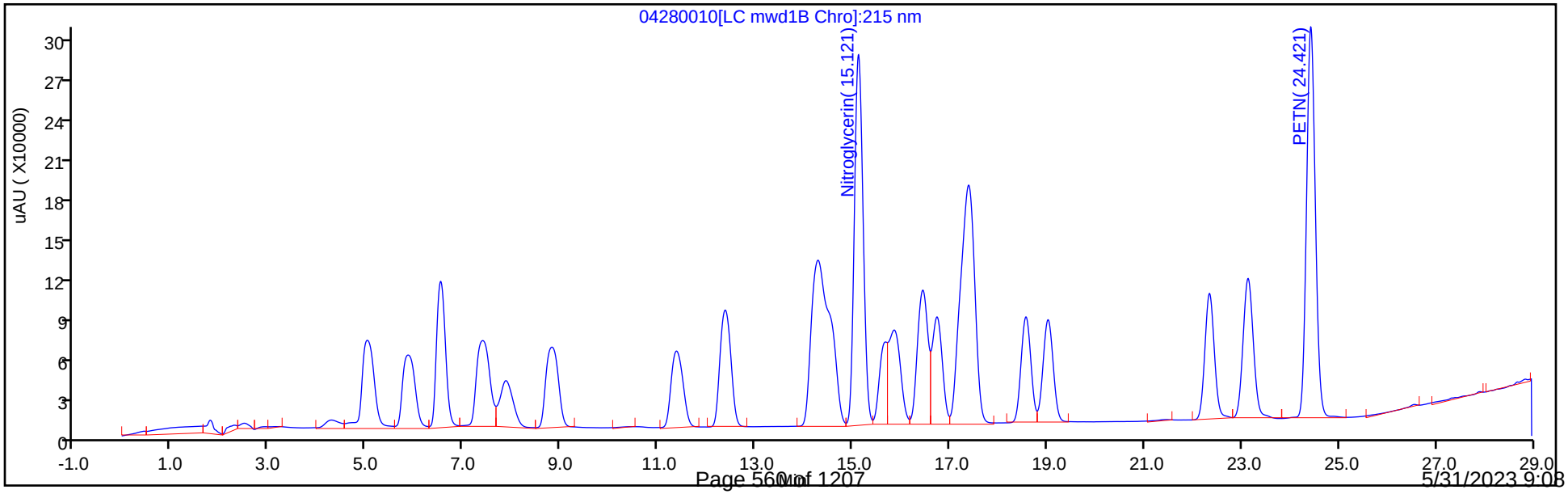
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280010.D

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

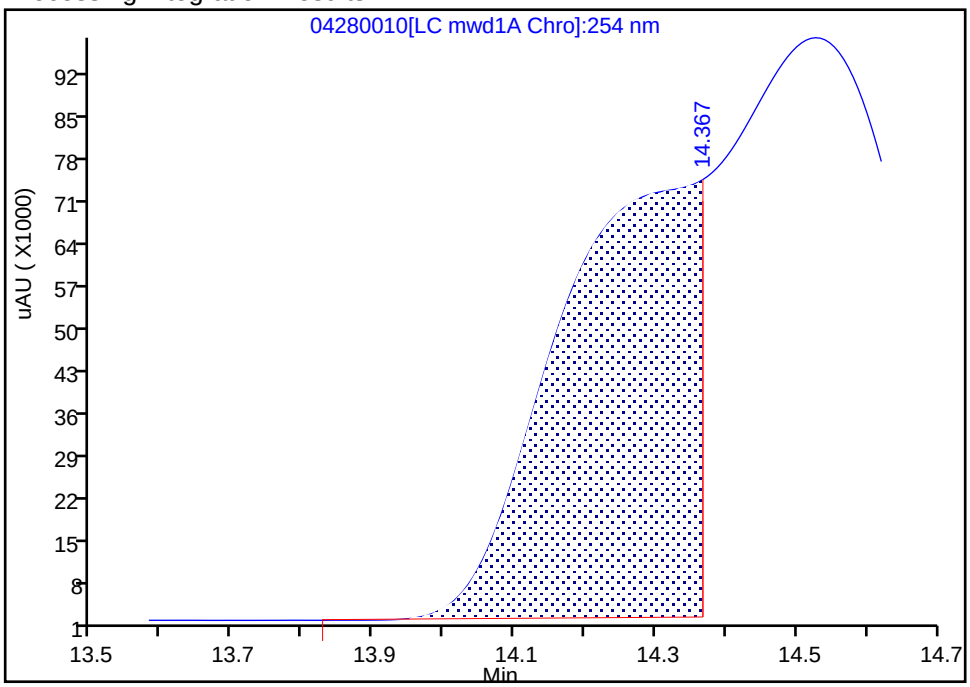
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280010.D				
Injection Date:	28-Apr-2023 18:24:11	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

11 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

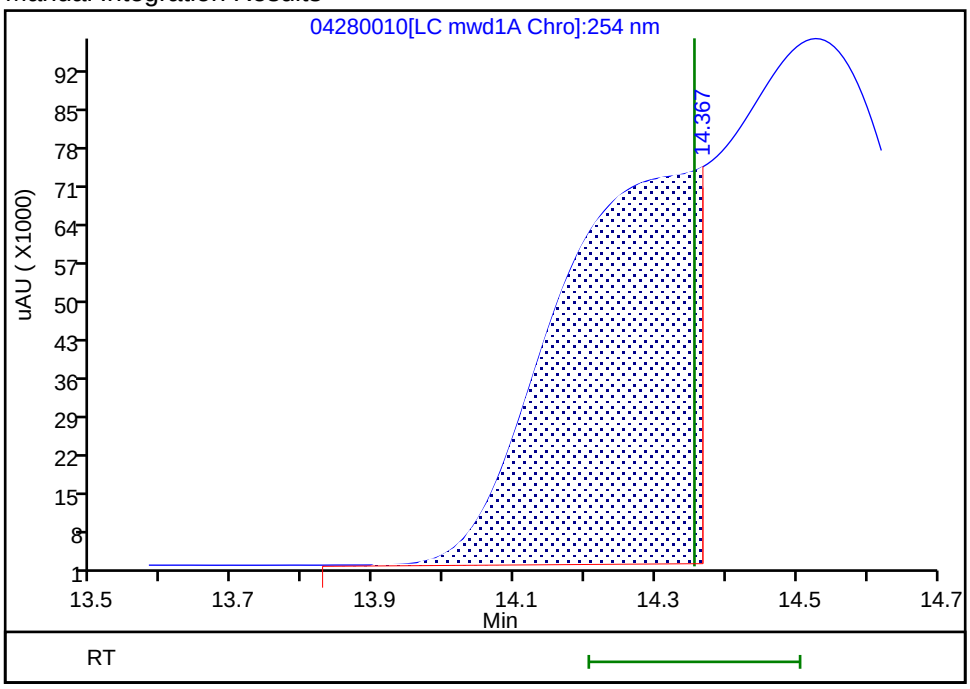
Processing Integration Results

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

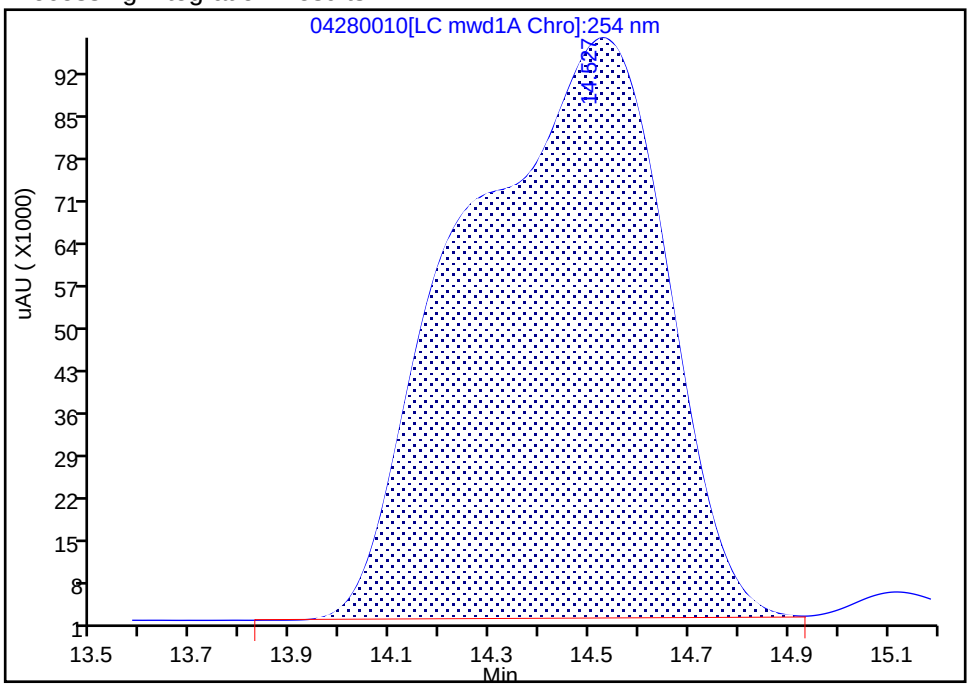
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280010.D				
Injection Date:	28-Apr-2023 18:24:11	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

Signal: 1

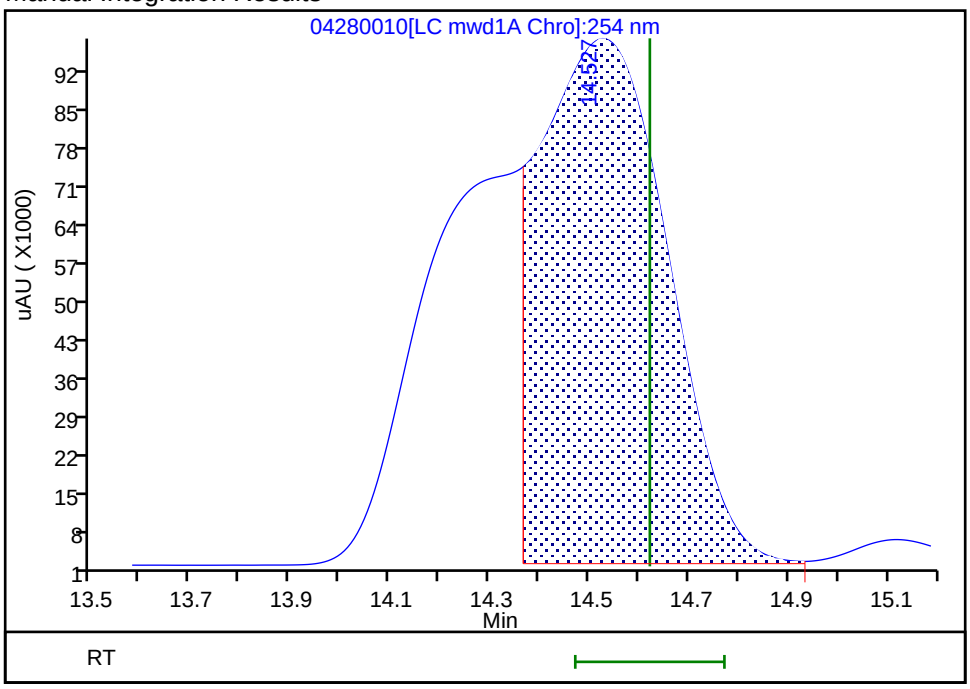
Processing Integration Results

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

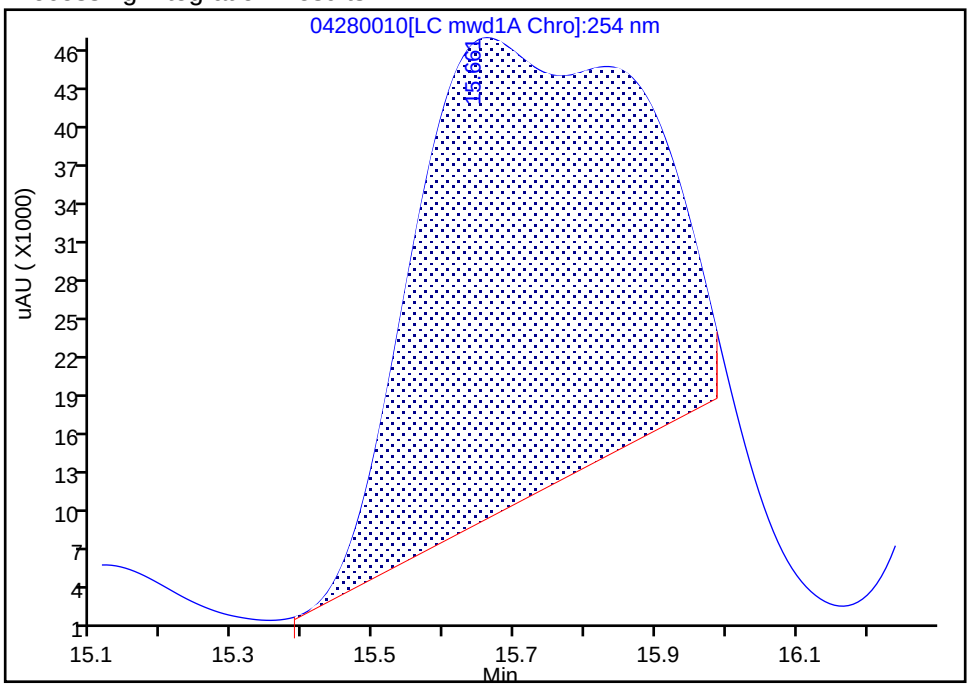
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280010.D				
Injection Date:	28-Apr-2023 18:24:11	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

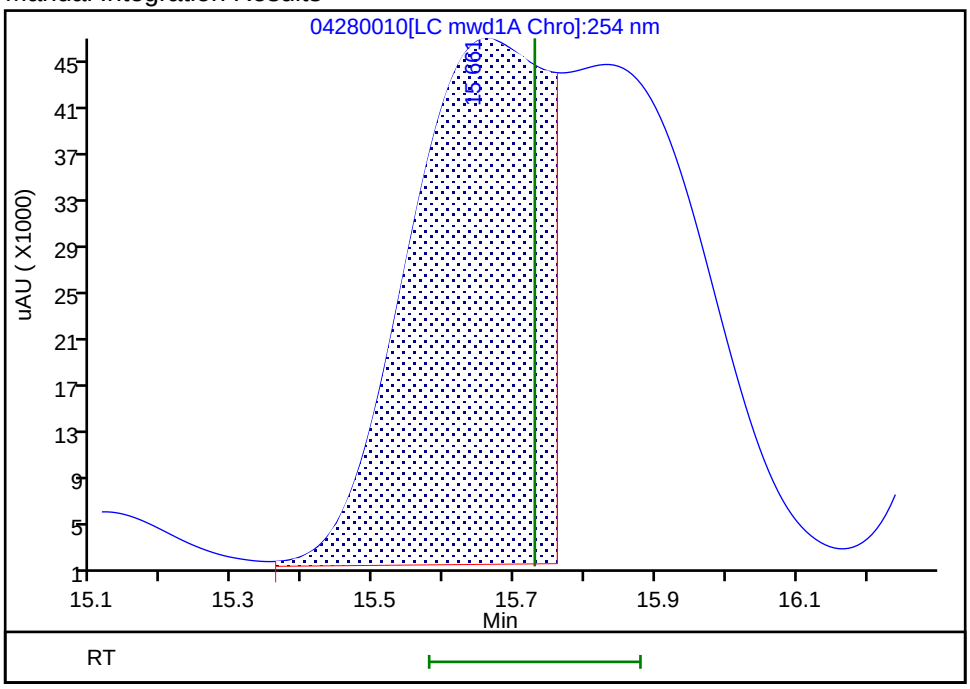
Processing Integration Results

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

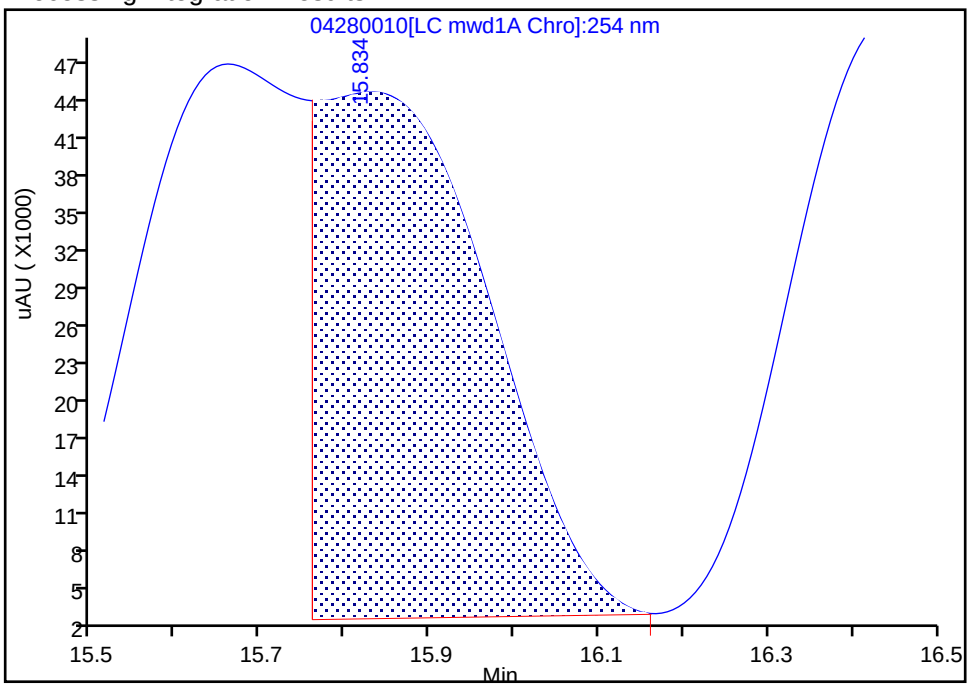
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280010.D				
Injection Date:	28-Apr-2023 18:24:11	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

16 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

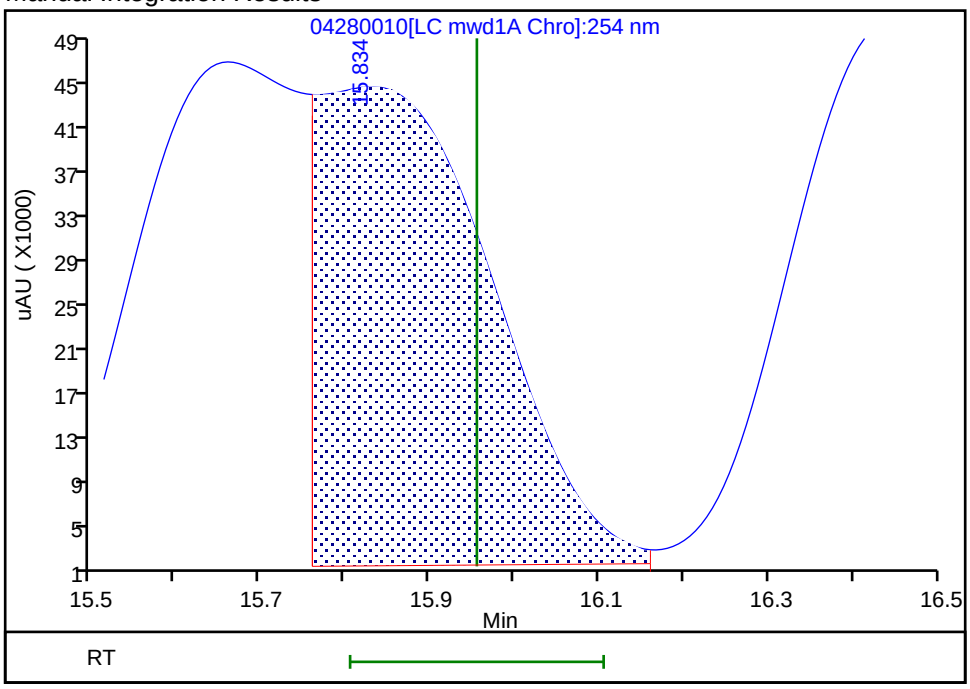
Processing Integration Results

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

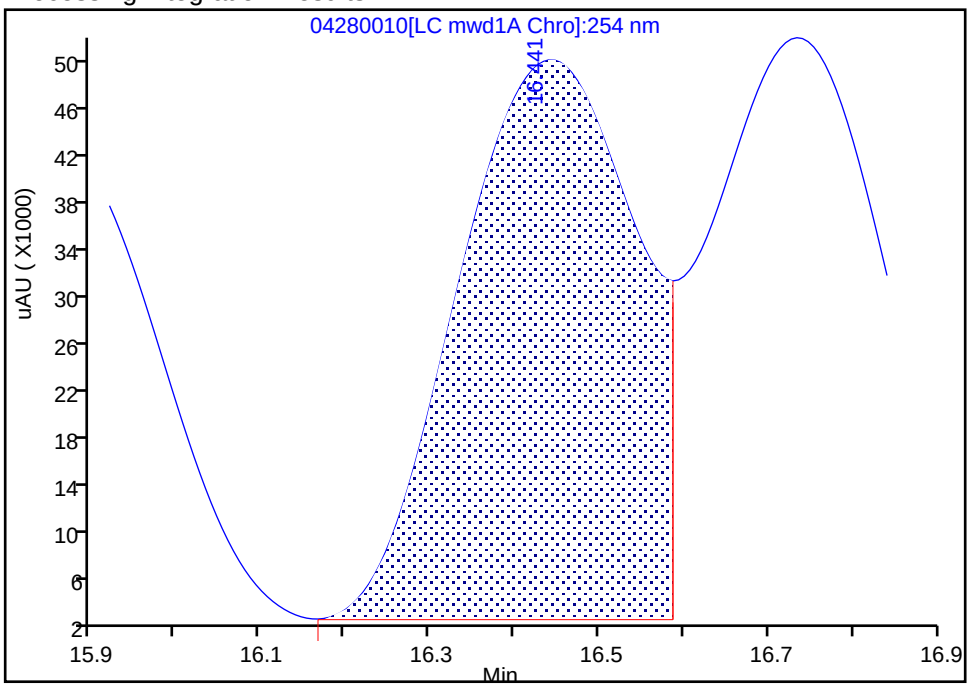
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280010.D				
Injection Date:	28-Apr-2023 18:24:11	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

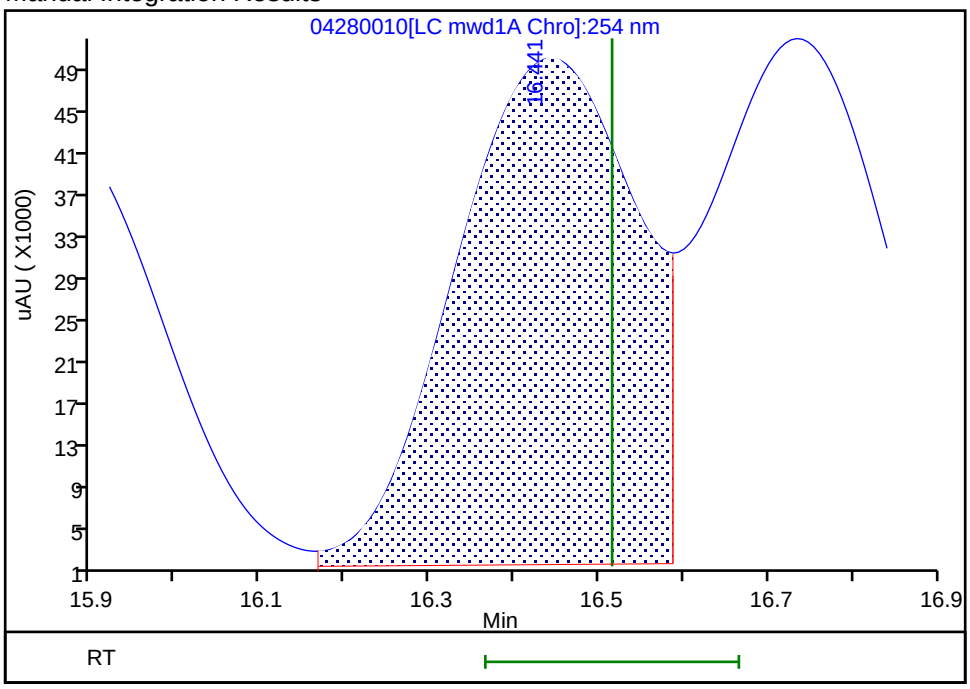
Processing Integration Results

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

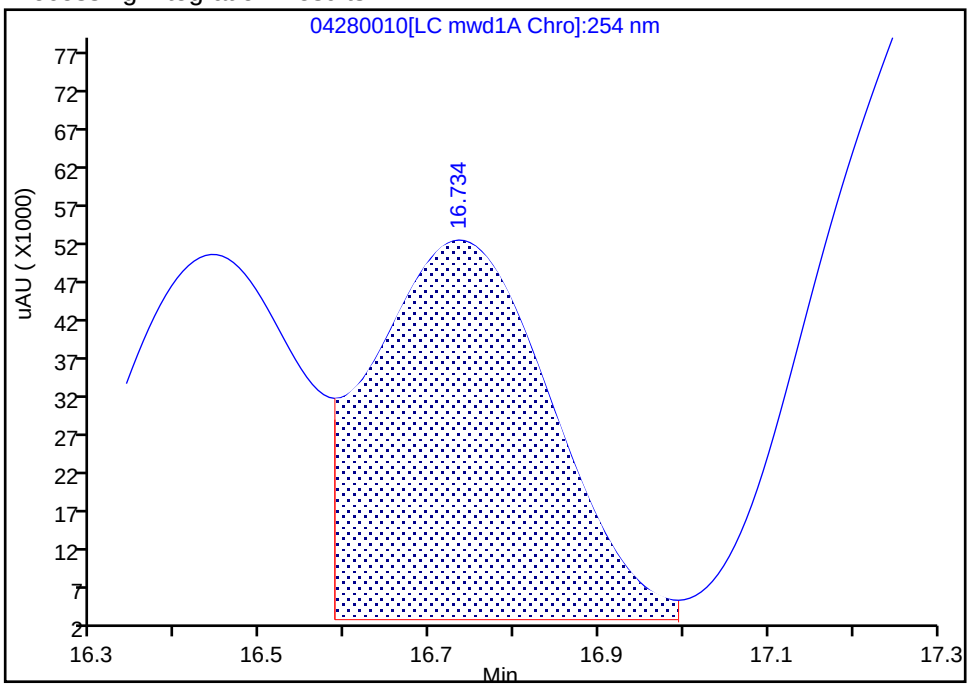
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280010.D
Injection Date: 28-Apr-2023 18:24:11 Instrument ID: CHHPLC_X5
Lims ID: IC INT 9
Client ID:
Operator ID: JZ/JG ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC mwd1A, 254 nm

18 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

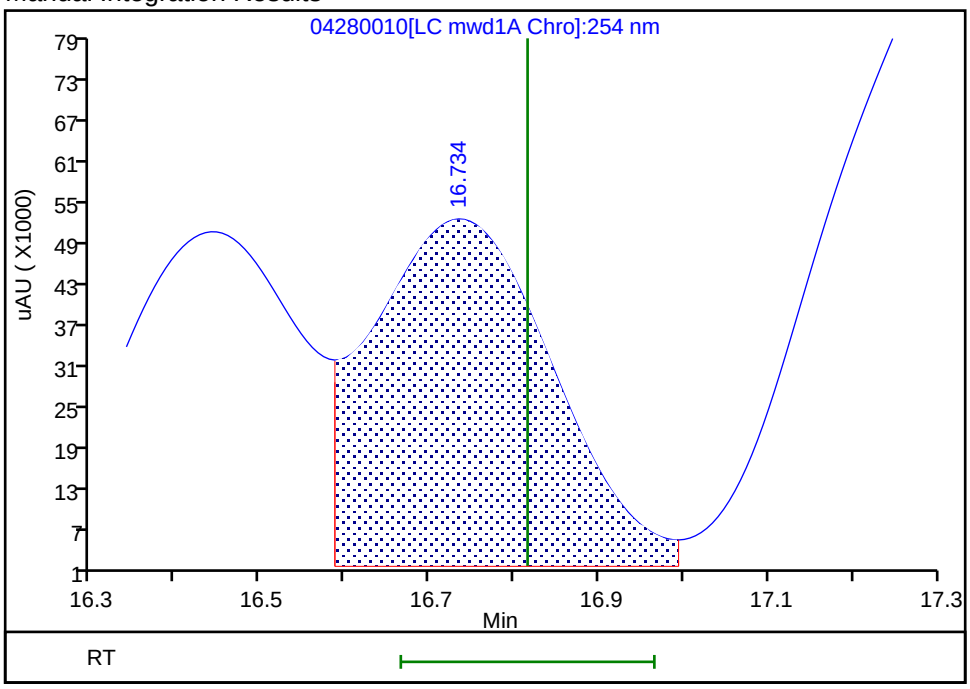
Processing Integration Results

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

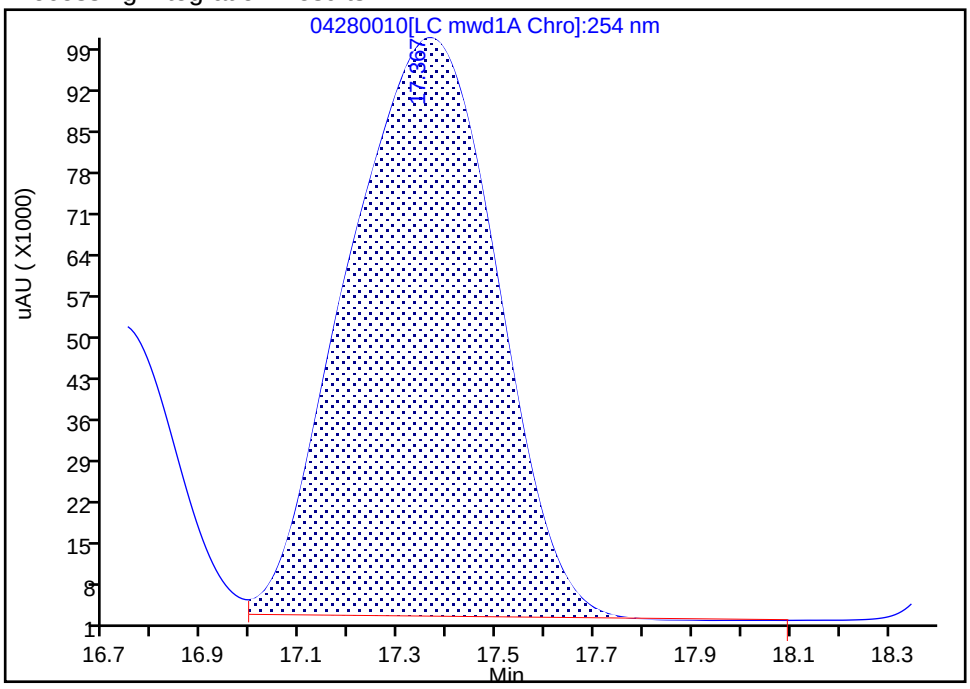
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280010.D				
Injection Date:	28-Apr-2023 18:24:11	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	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

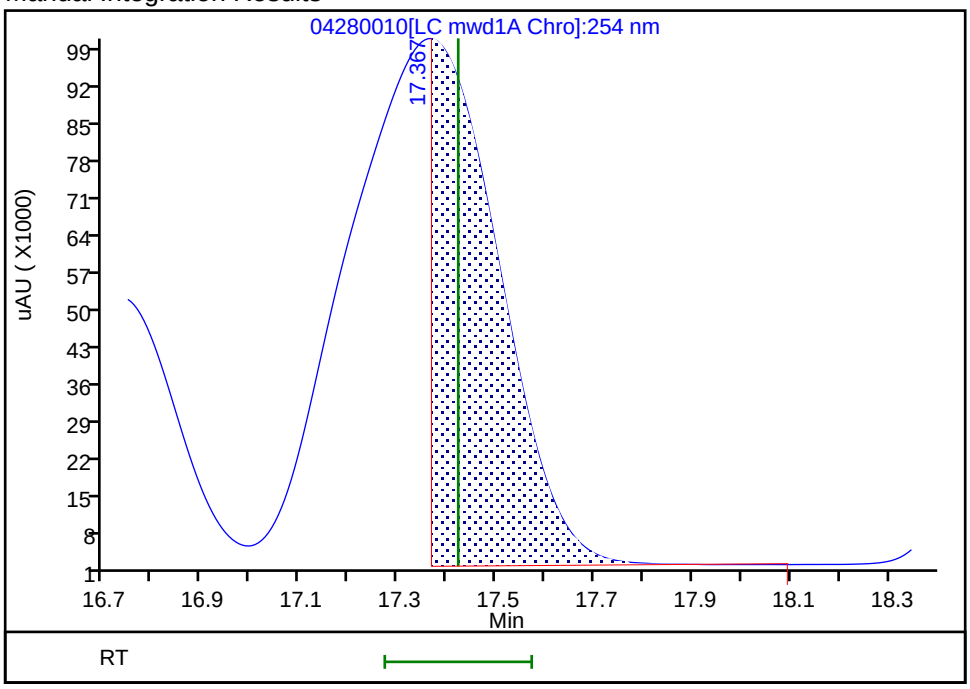
Processing Integration Results

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

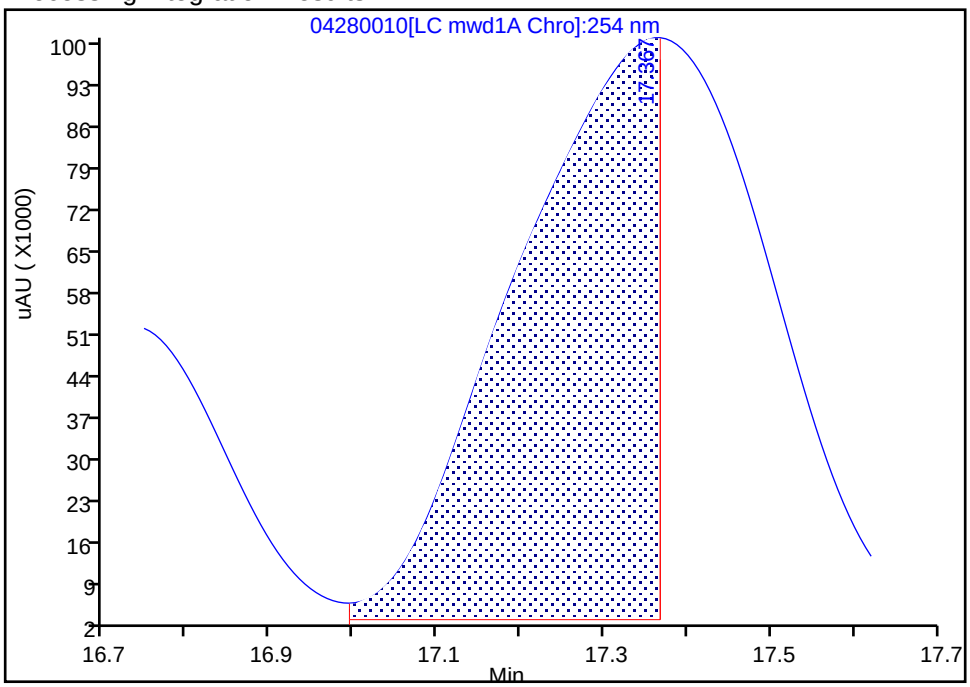
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280010.D				
Injection Date:	28-Apr-2023 18:24:11	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

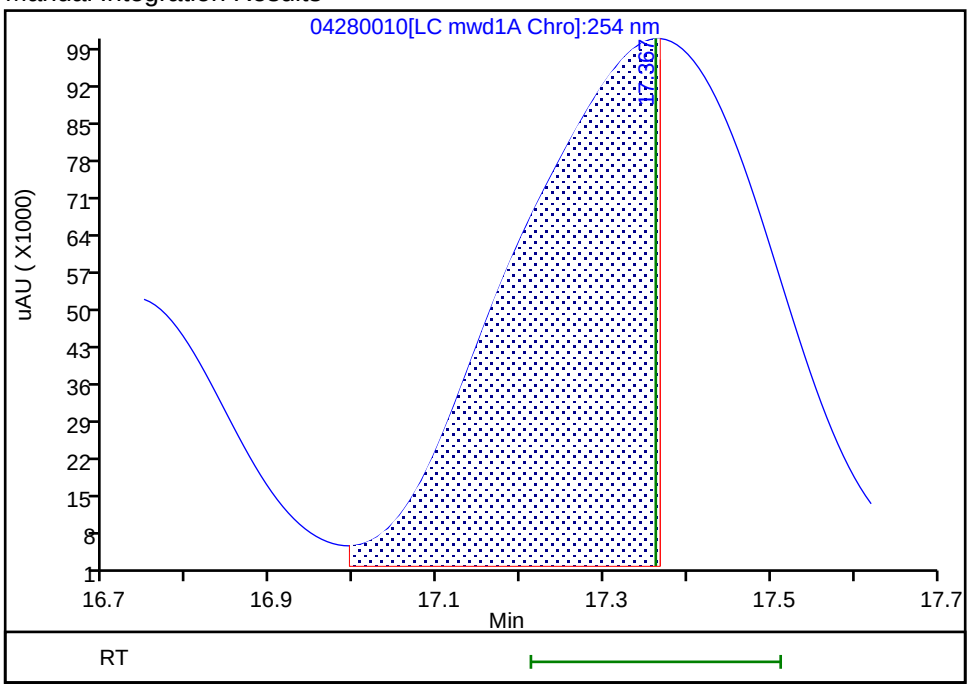
Processing Integration Results

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

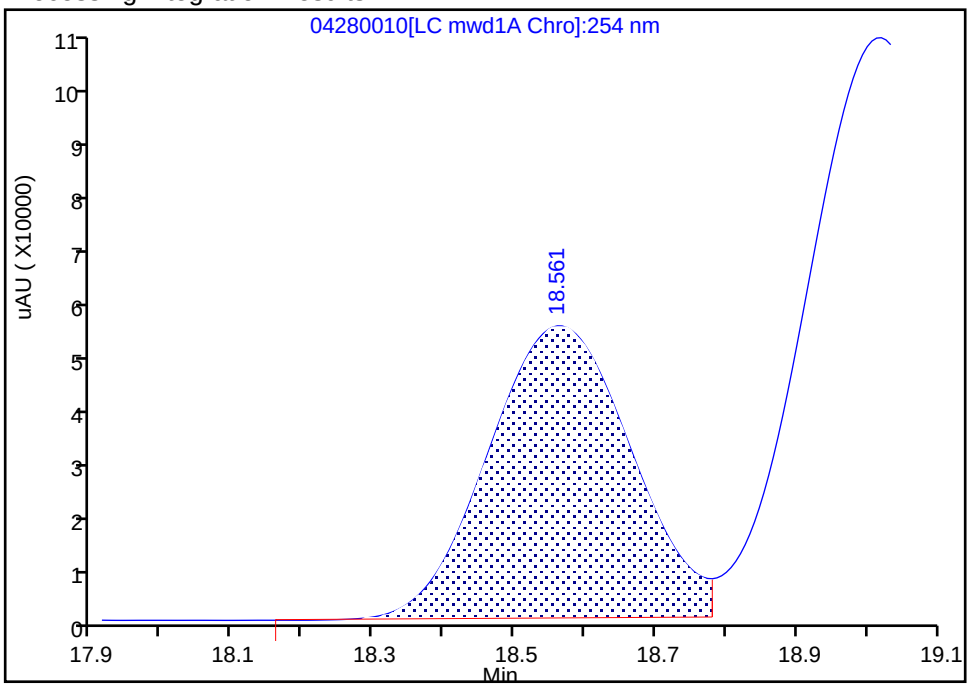
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280010.D				
Injection Date:	28-Apr-2023 18:24:11	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

Signal: 1

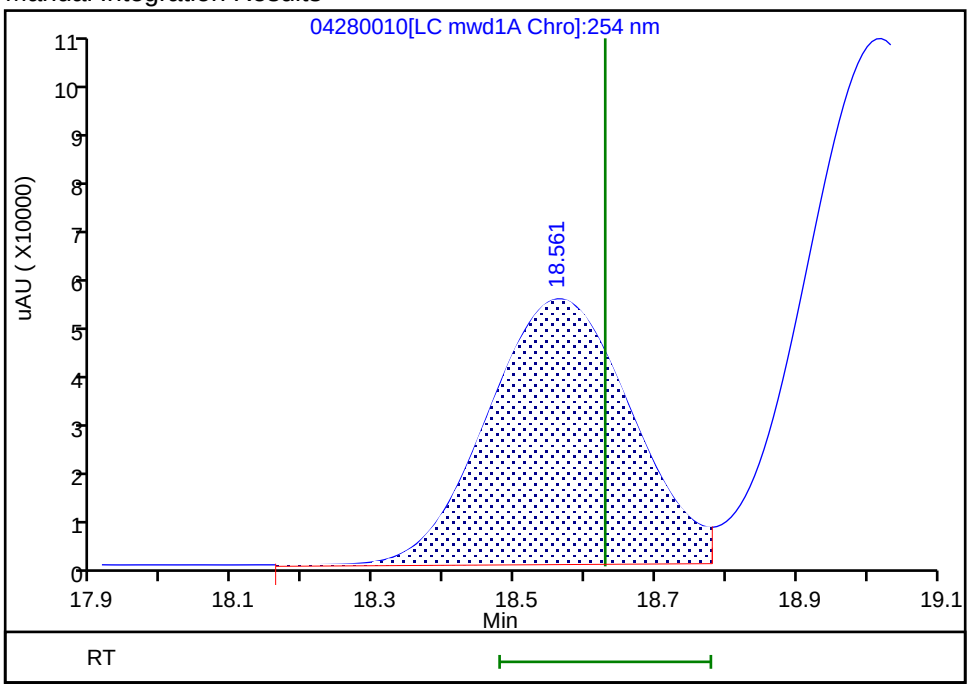
Processing Integration Results

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

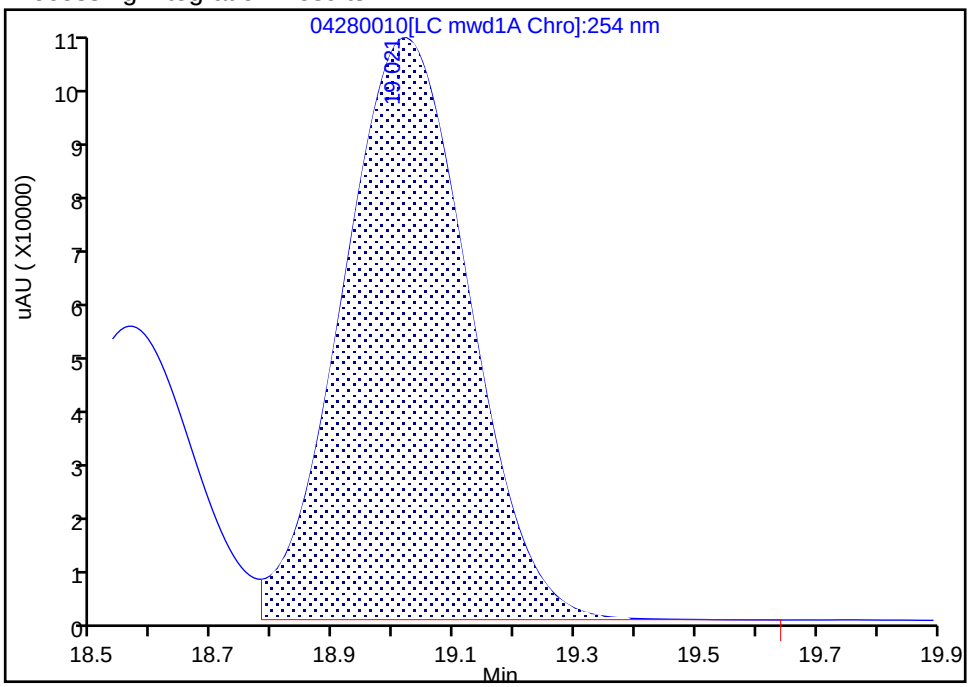
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280010.D				
Injection Date:	28-Apr-2023 18:24:11	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

22 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

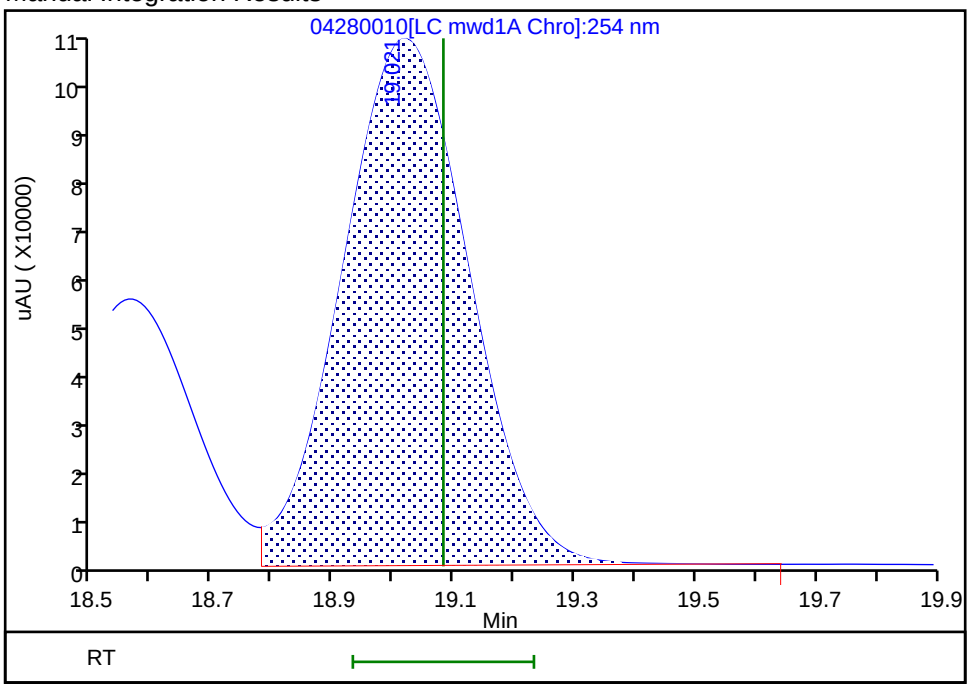
Processing Integration Results

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

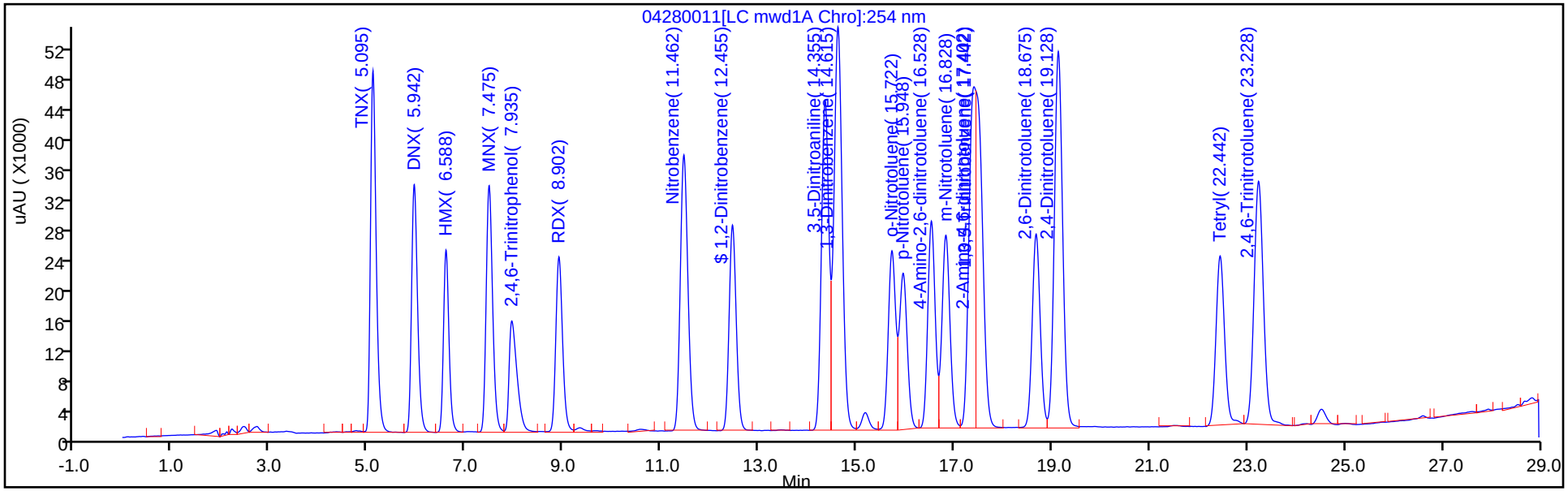
Report Date: 29-Apr-2023 13:04:17 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

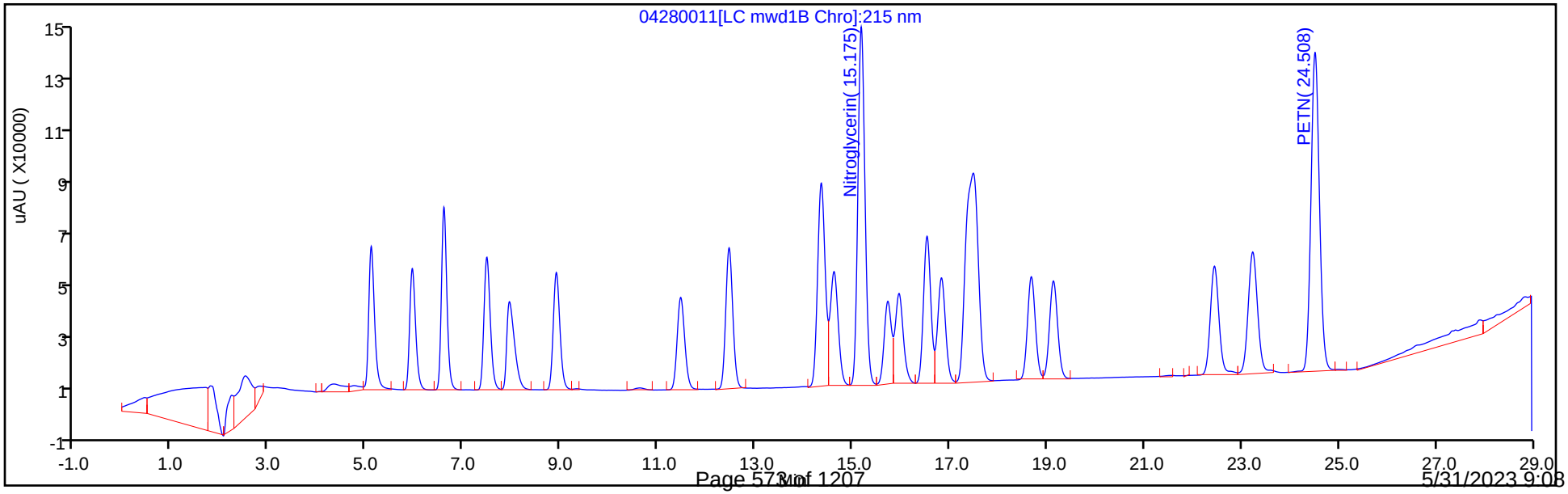
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280011.D

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



Manual Integration/User Assign Peak Report

Eurofins Denver

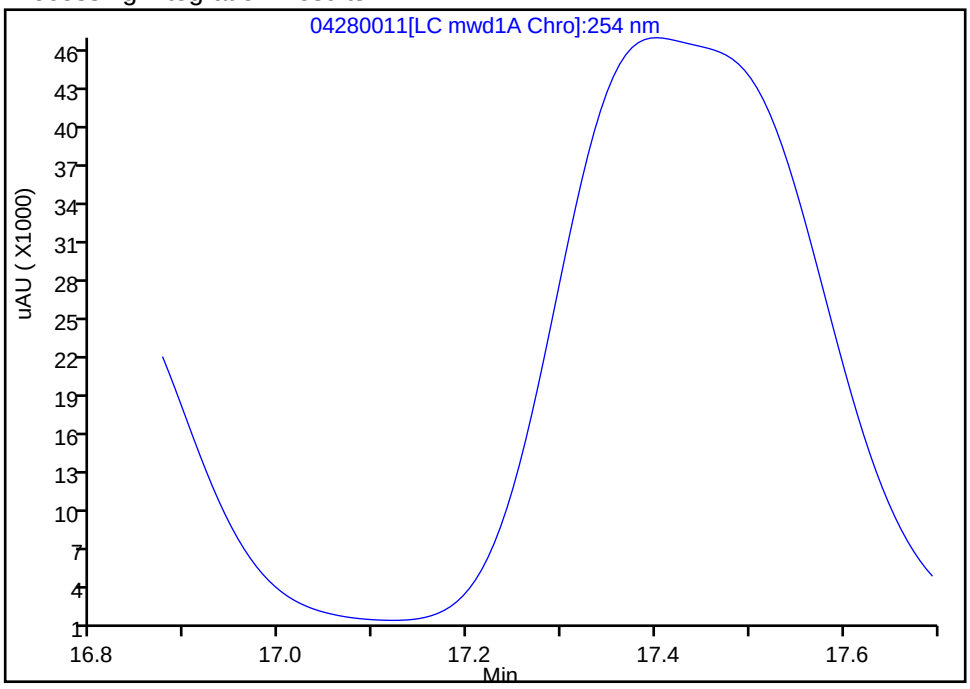
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280011.D				
Injection Date:	28-Apr-2023 18:59:07	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 8				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	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

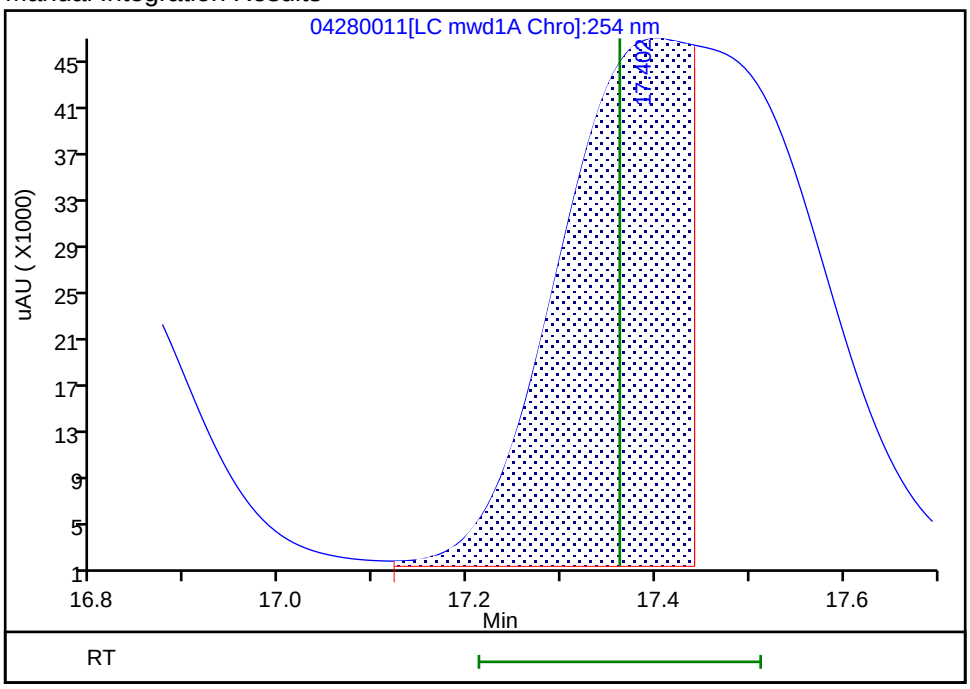
Not Detected
Expected RT: 17.36

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

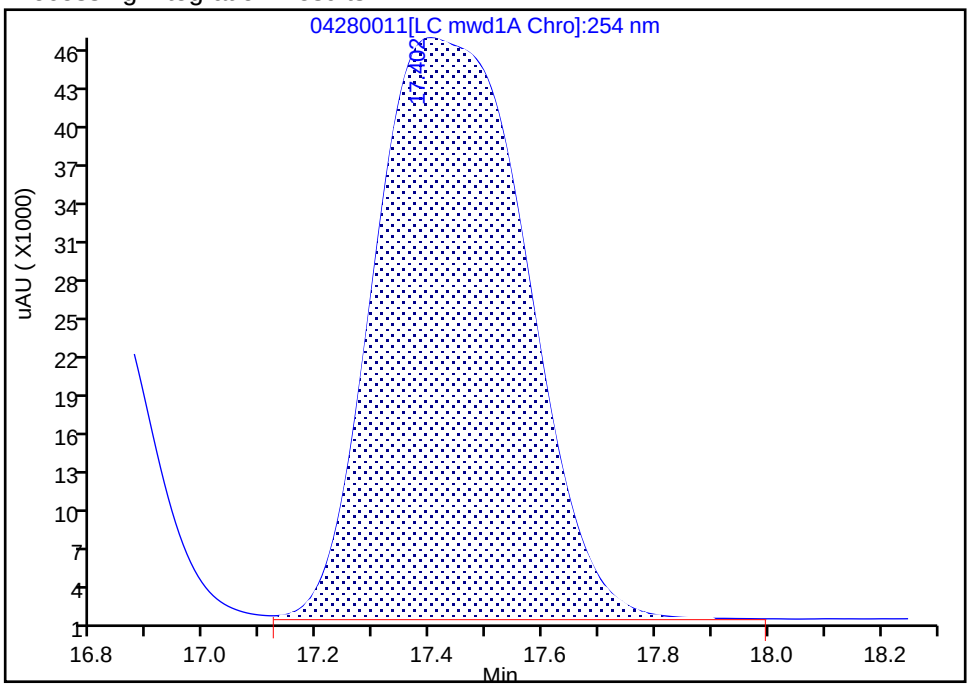
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280011.D				
Injection Date:	28-Apr-2023 18:59:07	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 8				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	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

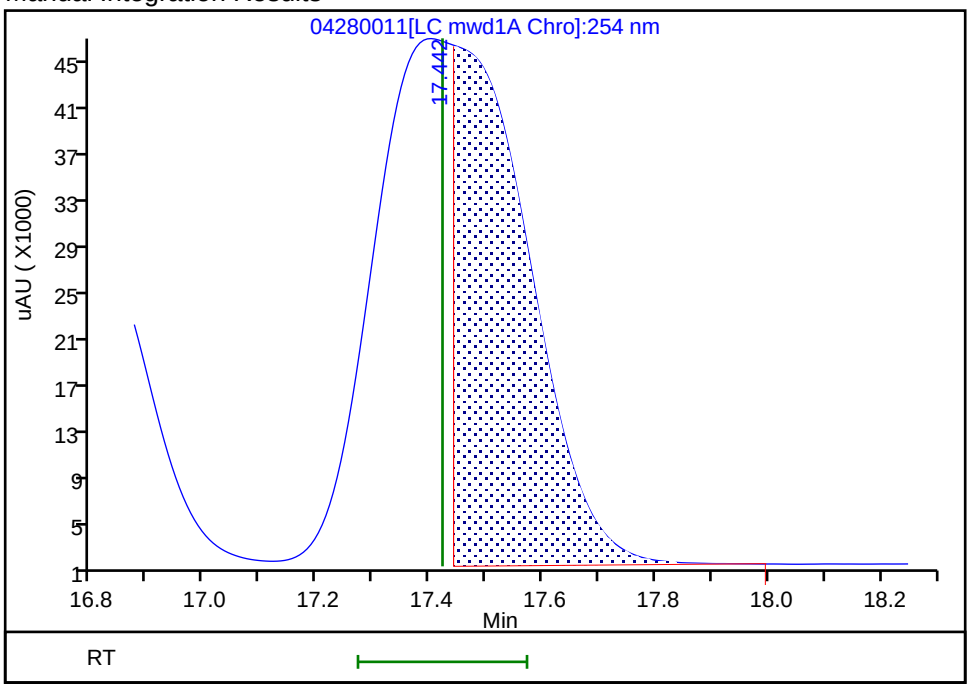
Processing Integration Results

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

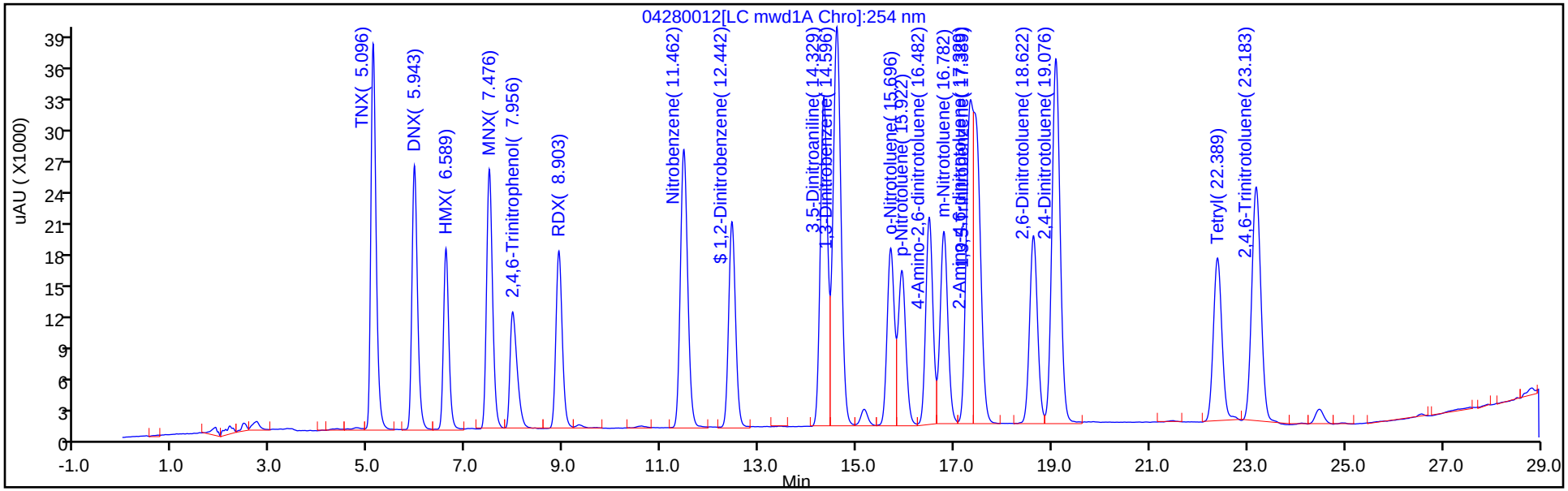
Report Date: 29-Apr-2023 13:04:17 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

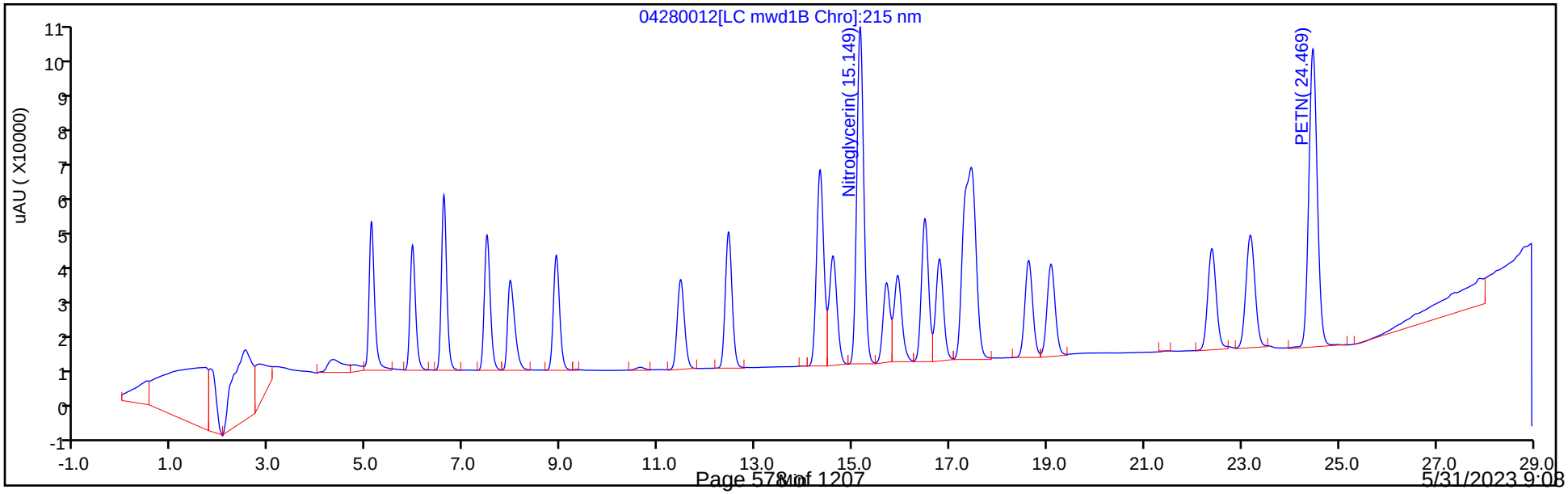
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280012.D

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

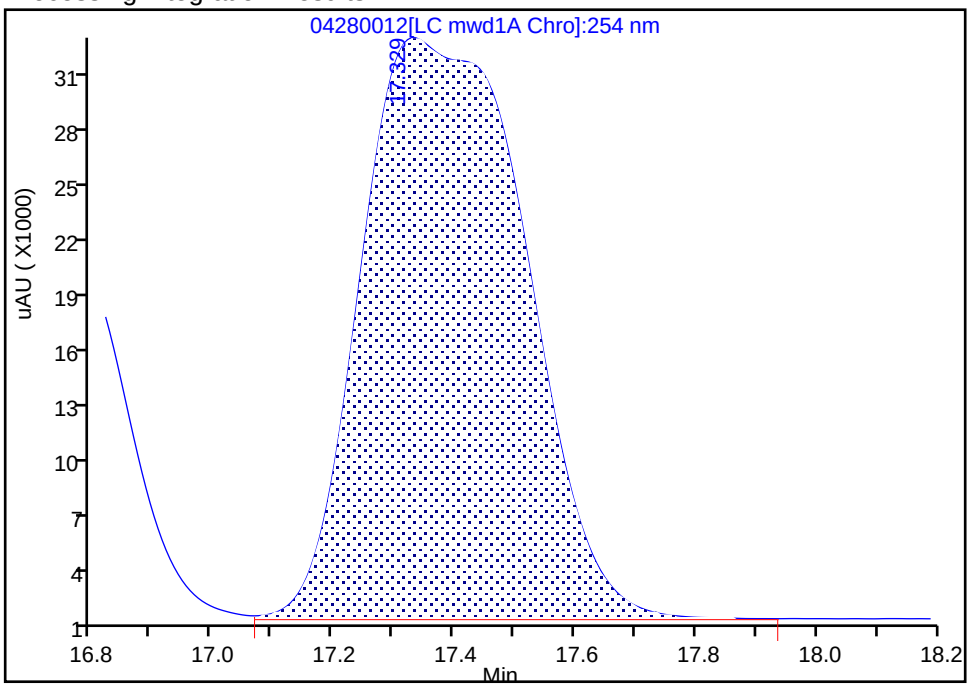
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280012.D				
Injection Date:	28-Apr-2023 19:34:01	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 7				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	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

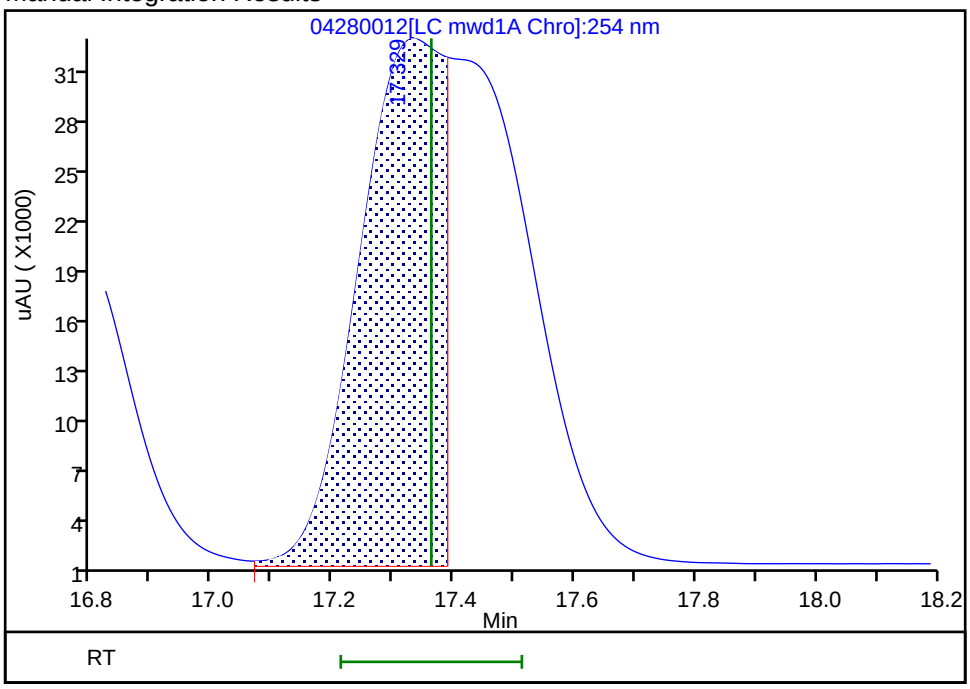
Processing Integration Results

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

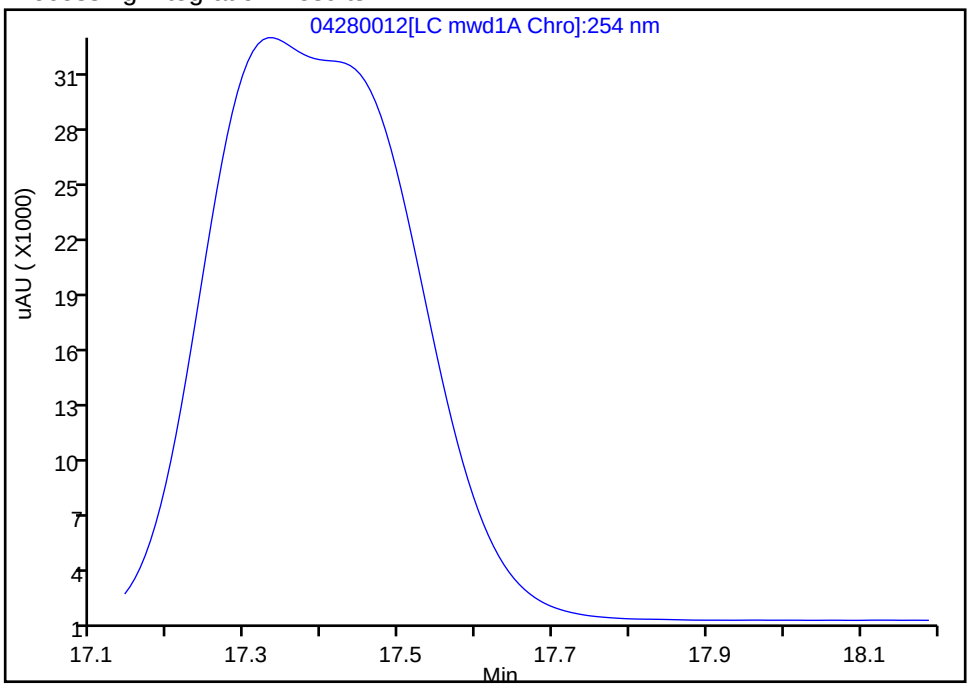
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280012.D				
Injection Date:	28-Apr-2023 19:34:01	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 7				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	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

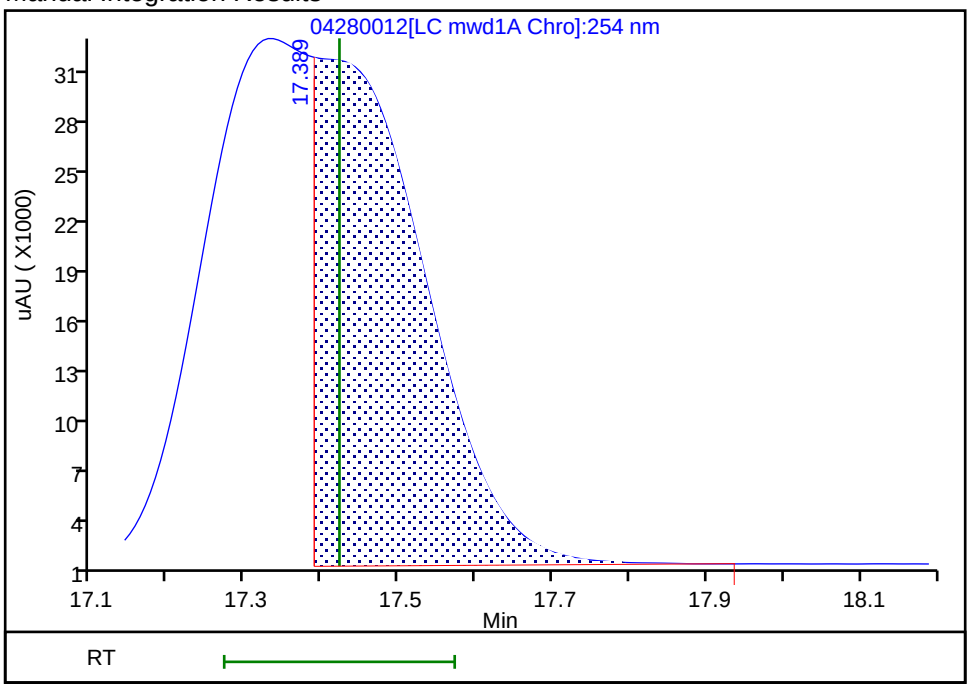
Not Detected
Expected RT: 17.42

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

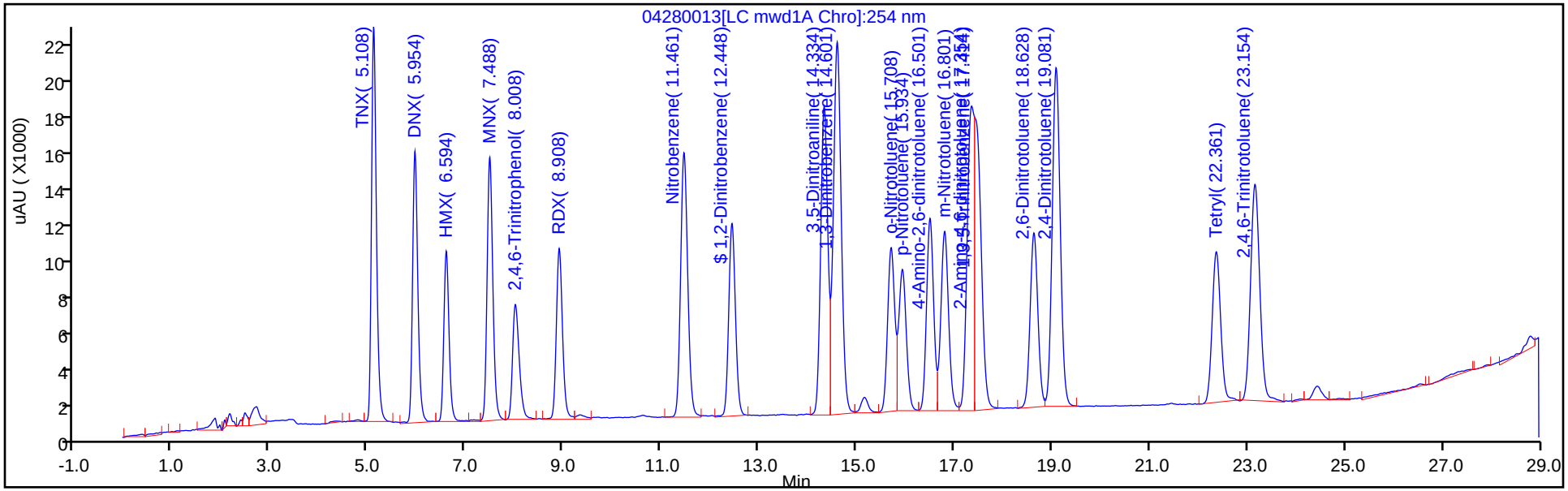
Report Date: 29-Apr-2023 13:04:18 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

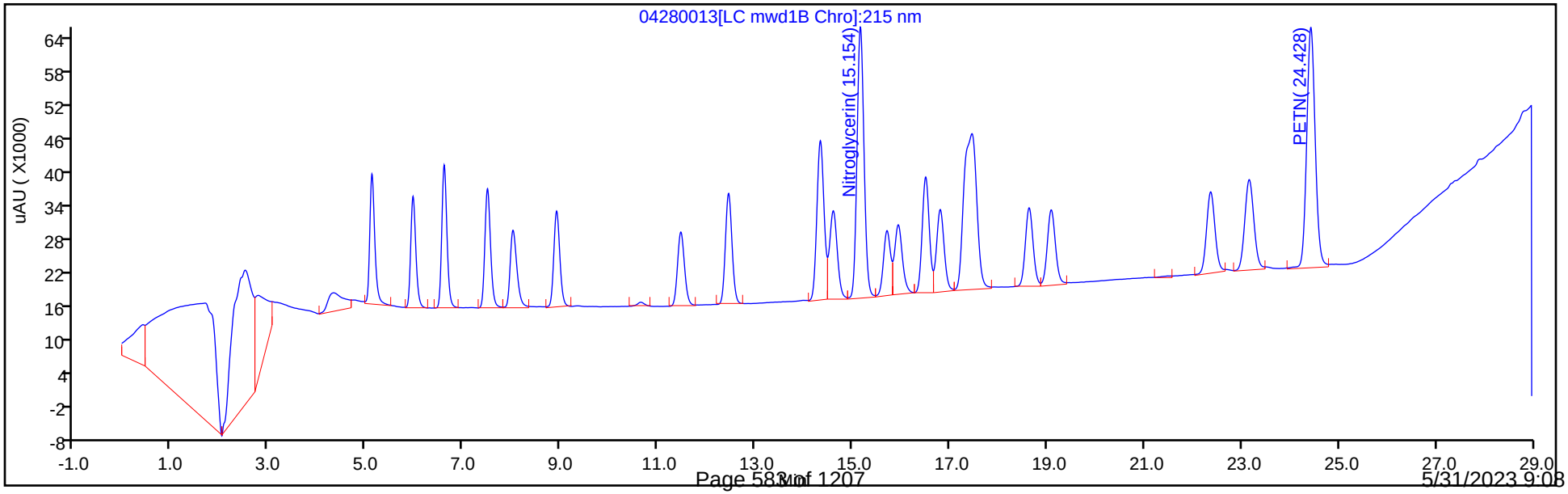
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280013.D

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

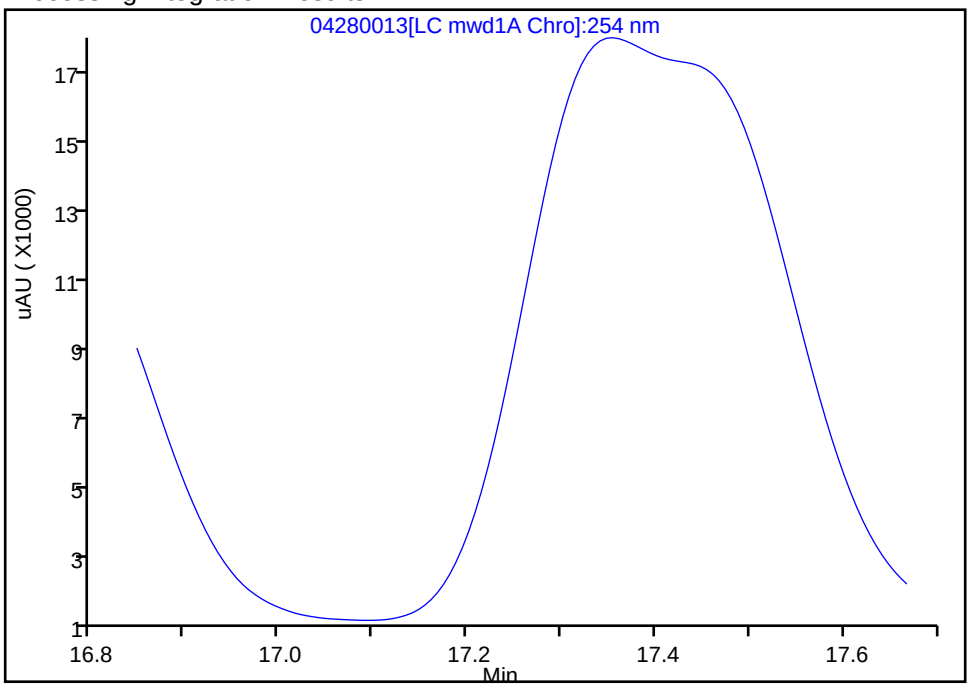
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280013.D				
Injection Date:	28-Apr-2023 20:08:59	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 6				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

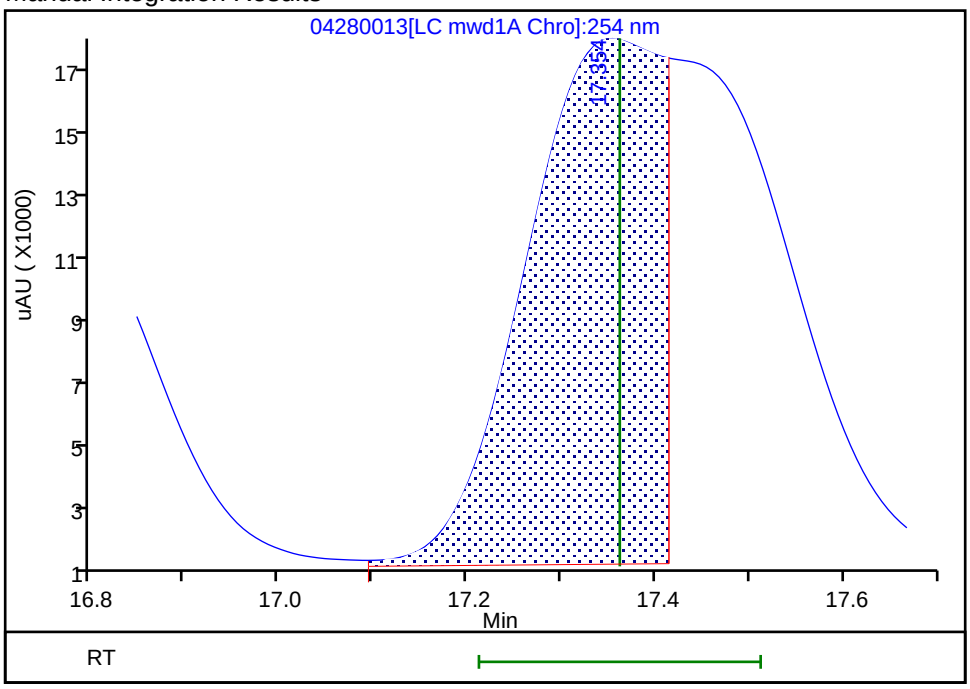
Not Detected
Expected RT: 17.36

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

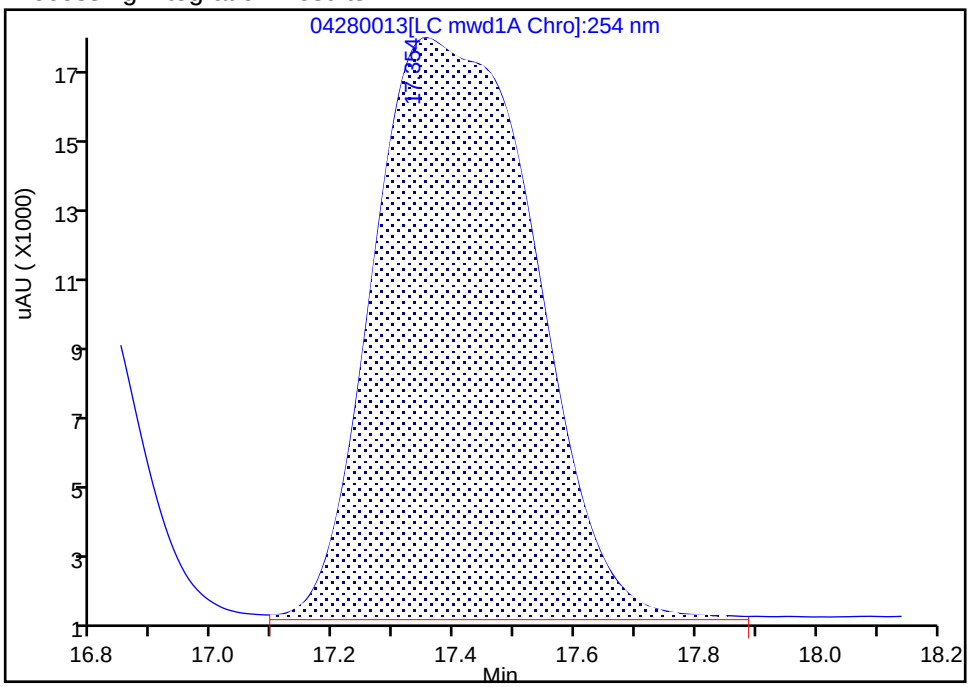
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280013.D				
Injection Date:	28-Apr-2023 20:08:59	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 6				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	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

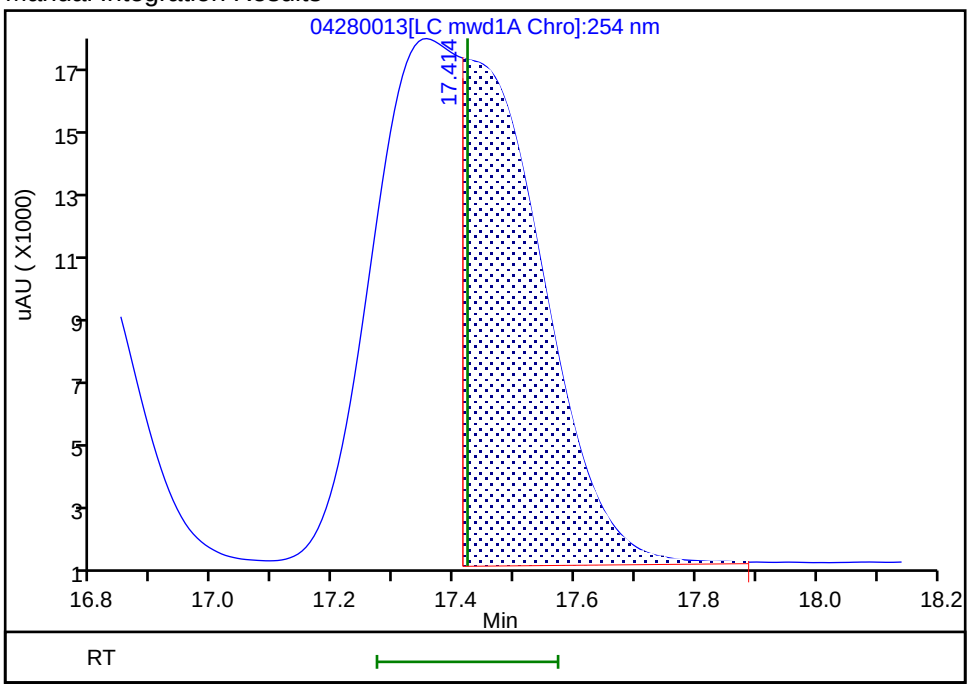
Processing Integration Results

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

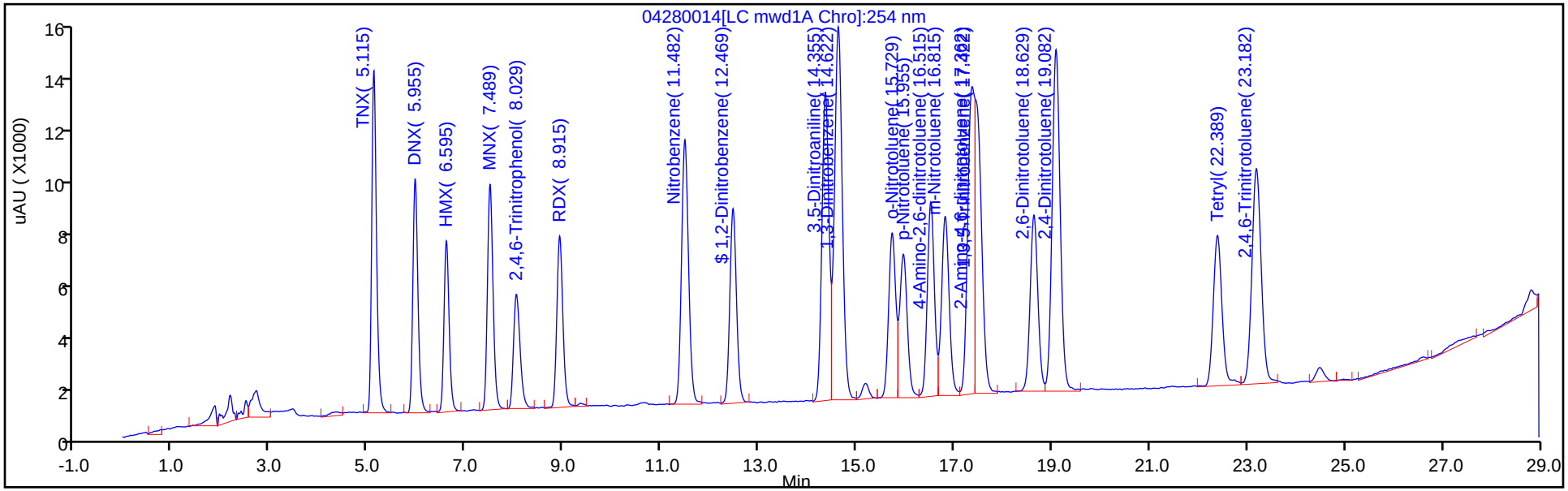
Report Date: 29-Apr-2023 13:04:18 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

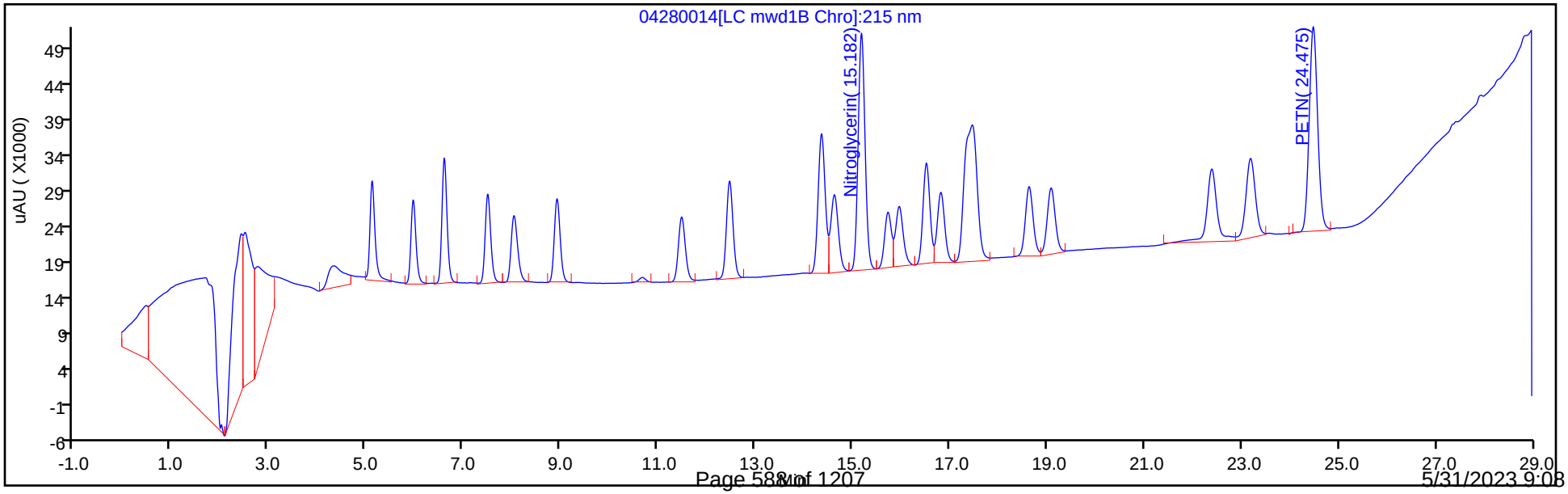
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280014.D

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

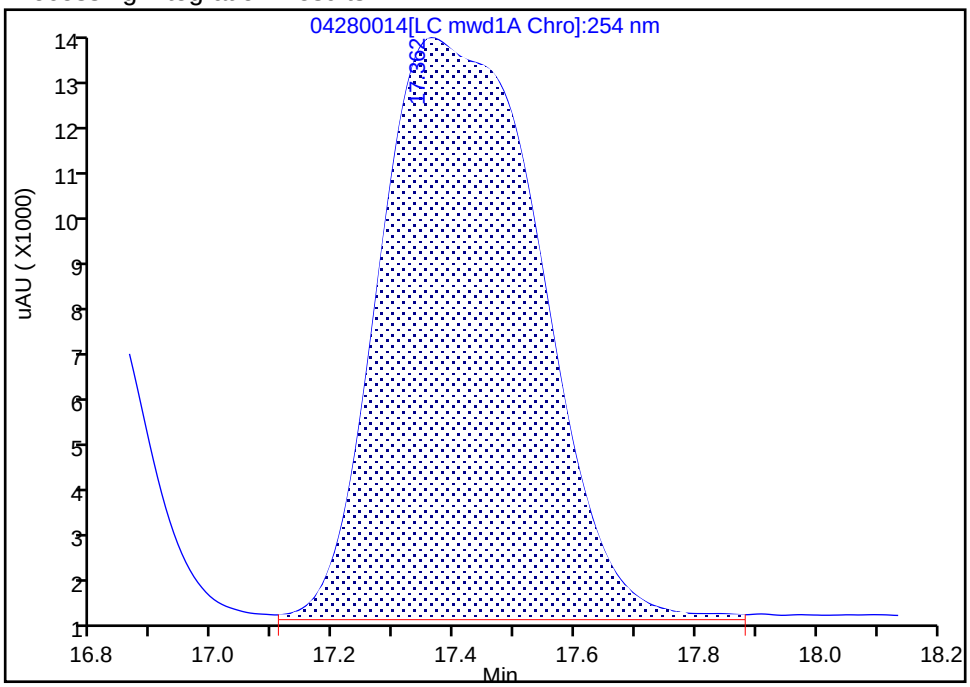
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280014.D				
Injection Date:	28-Apr-2023 20:43:54	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 5				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	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

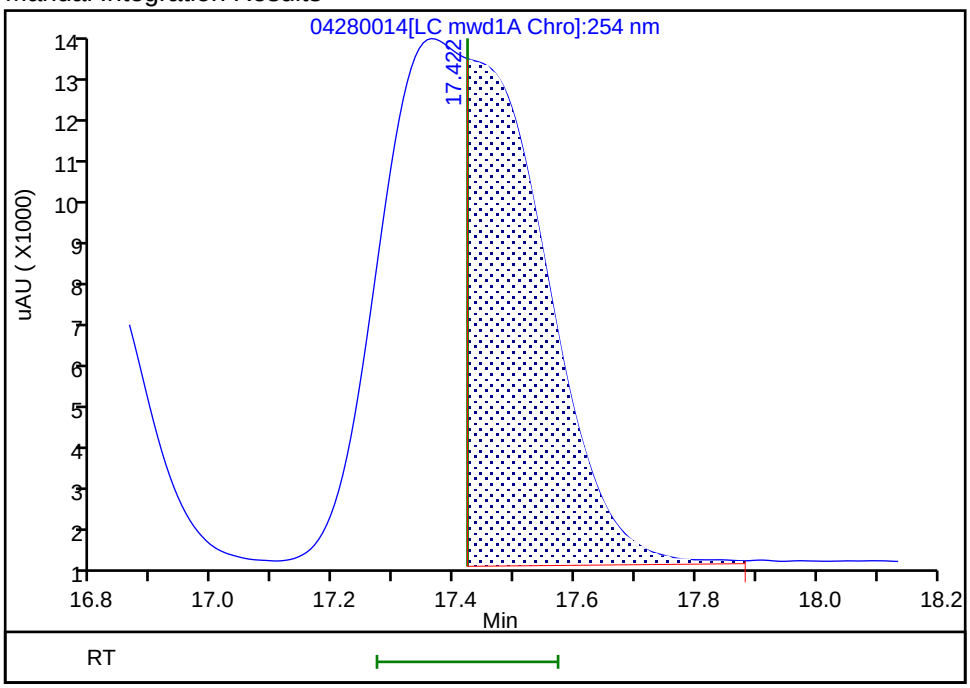
Processing Integration Results

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

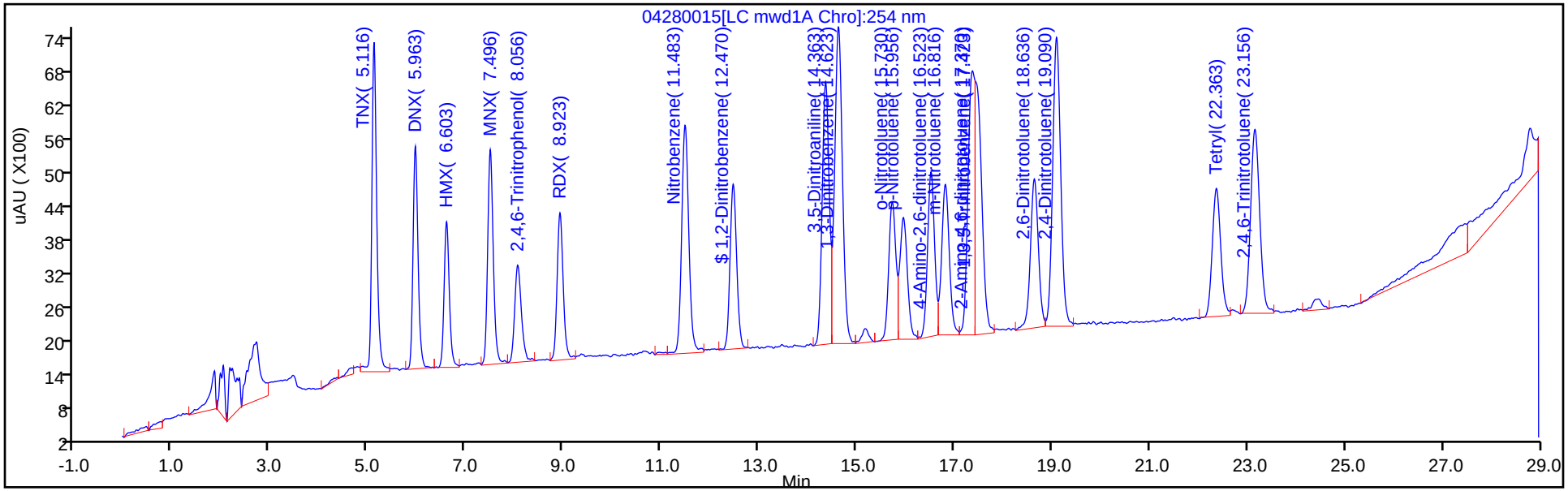
Report Date: 29-Apr-2023 13:04:19 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

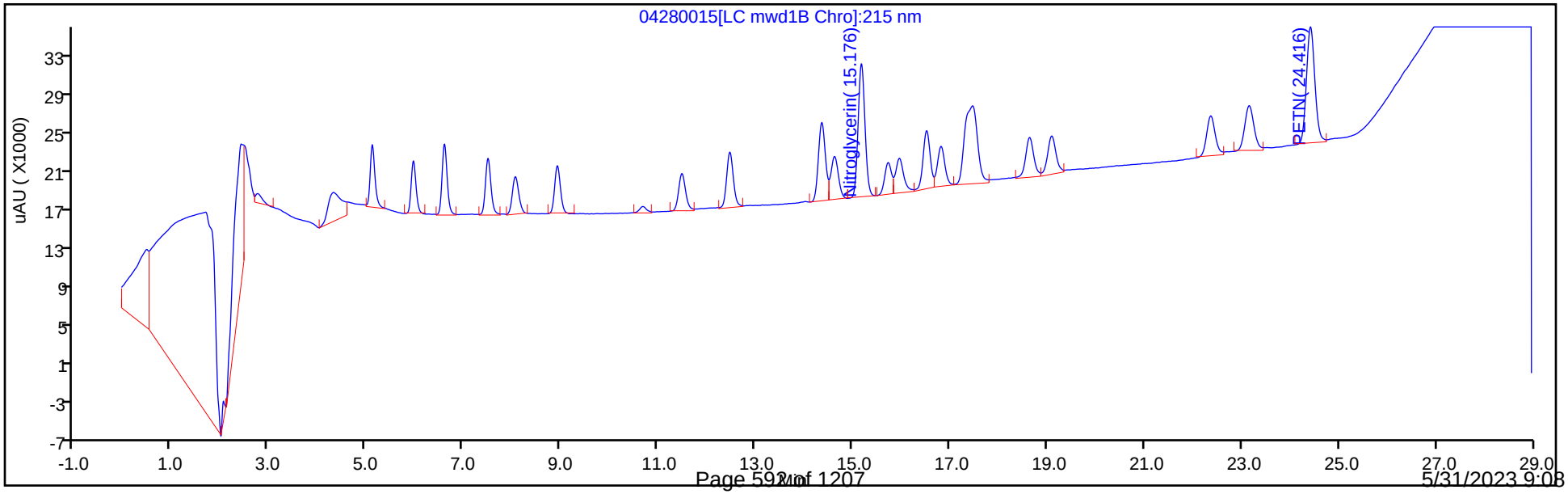
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280015.D

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



5/31/2023 9:08 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

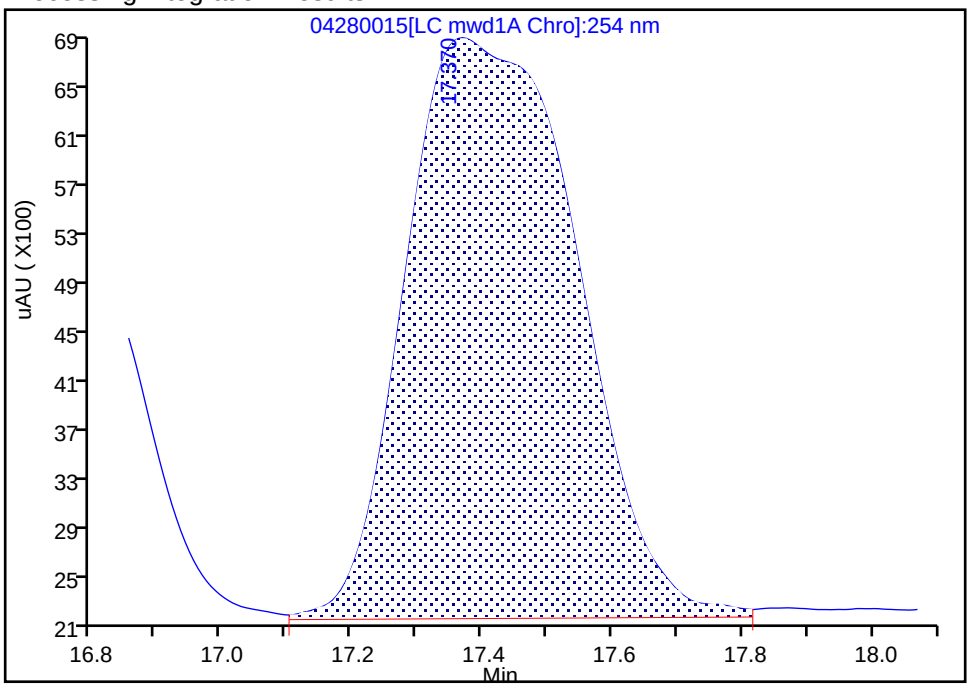
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280015.D				
Injection Date:	28-Apr-2023 21:18:48	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	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

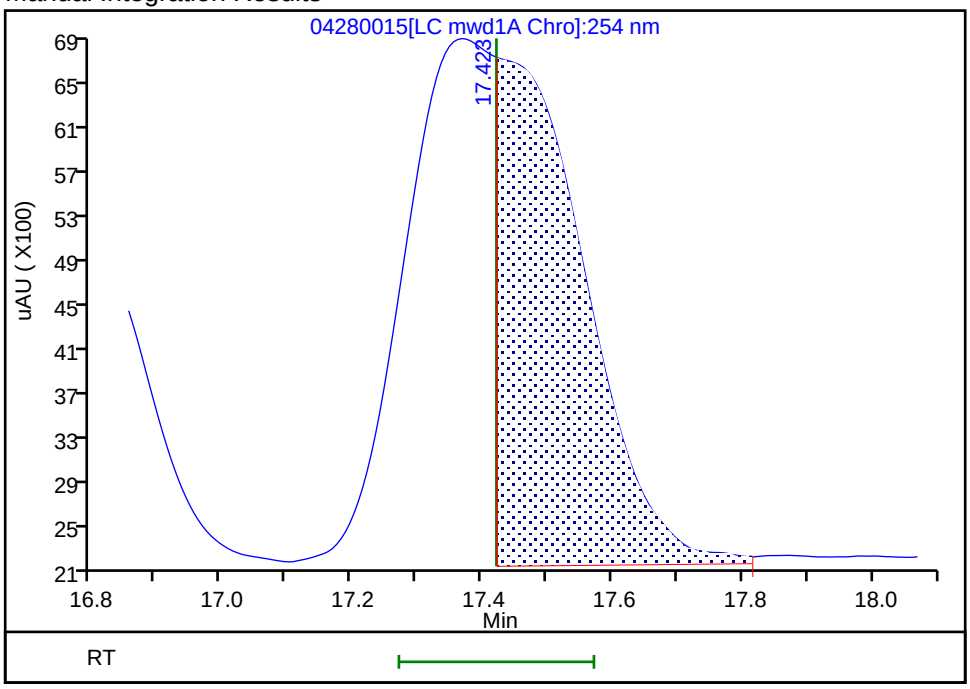
Processing Integration Results

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

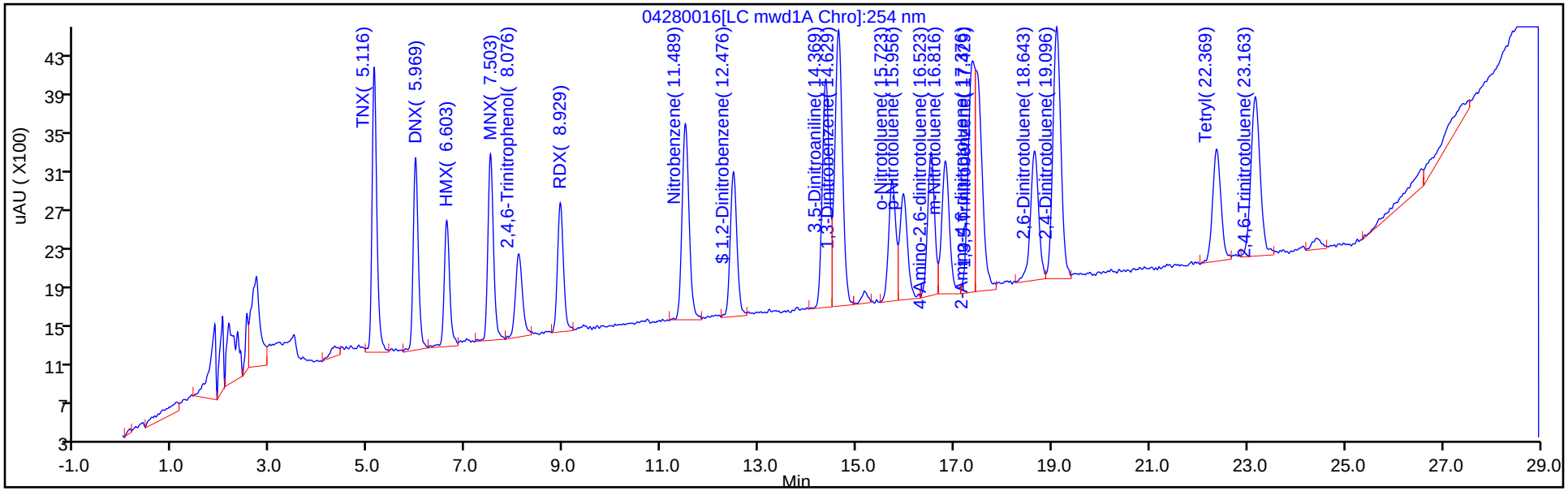
Report Date: 29-Apr-2023 13:04:19 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

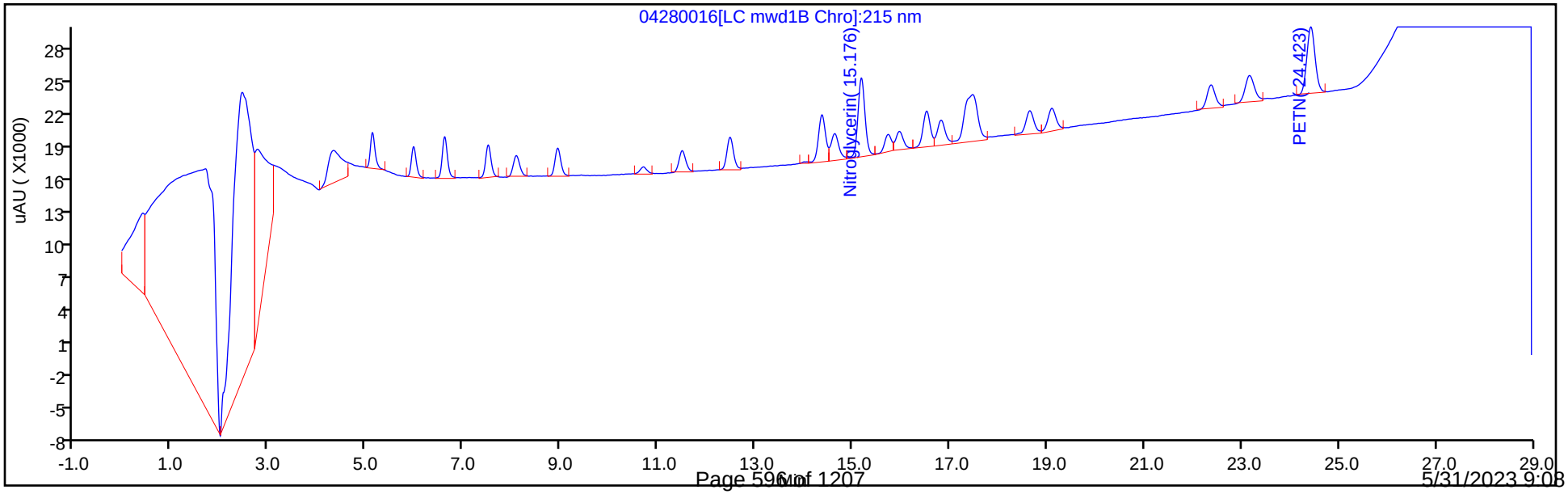
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280016.D

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



Manual Integration/User Assign Peak Report

Eurofins Denver

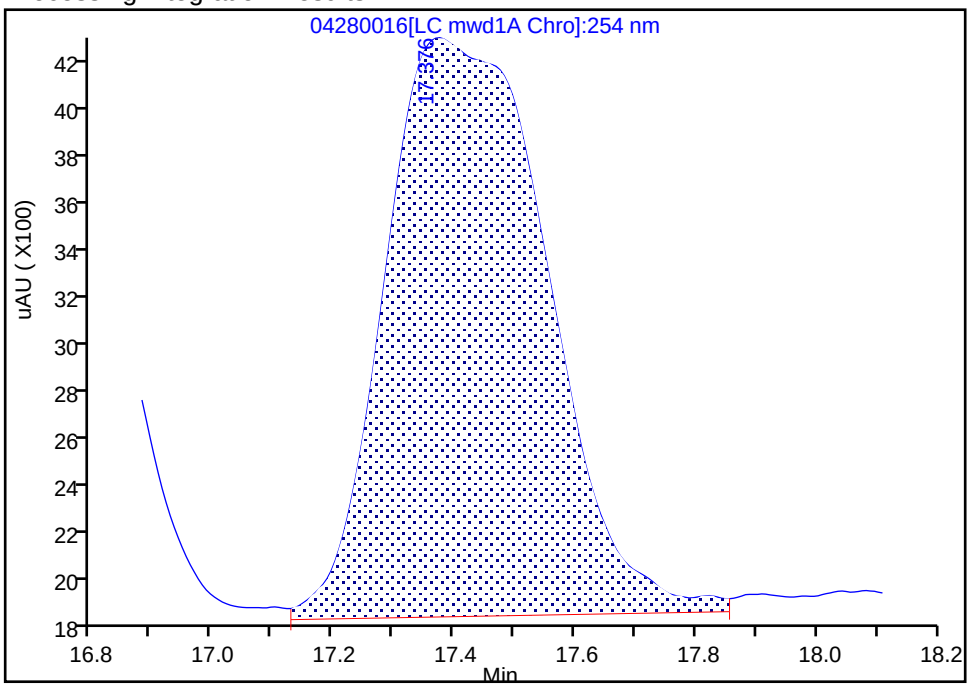
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280016.D				
Injection Date:	28-Apr-2023 21:53:46	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	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

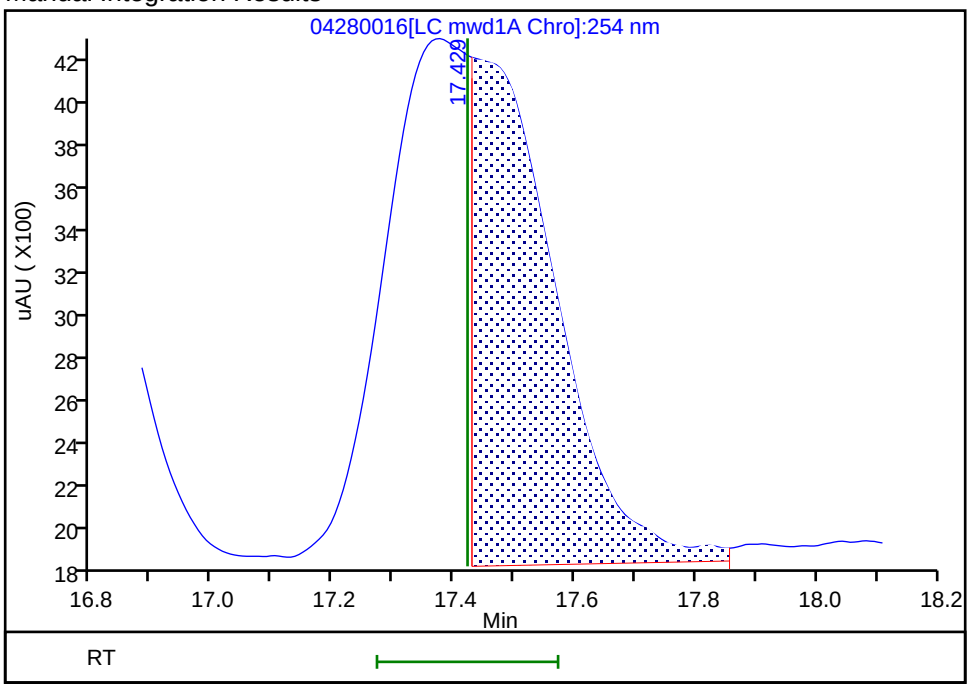
Processing Integration Results

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

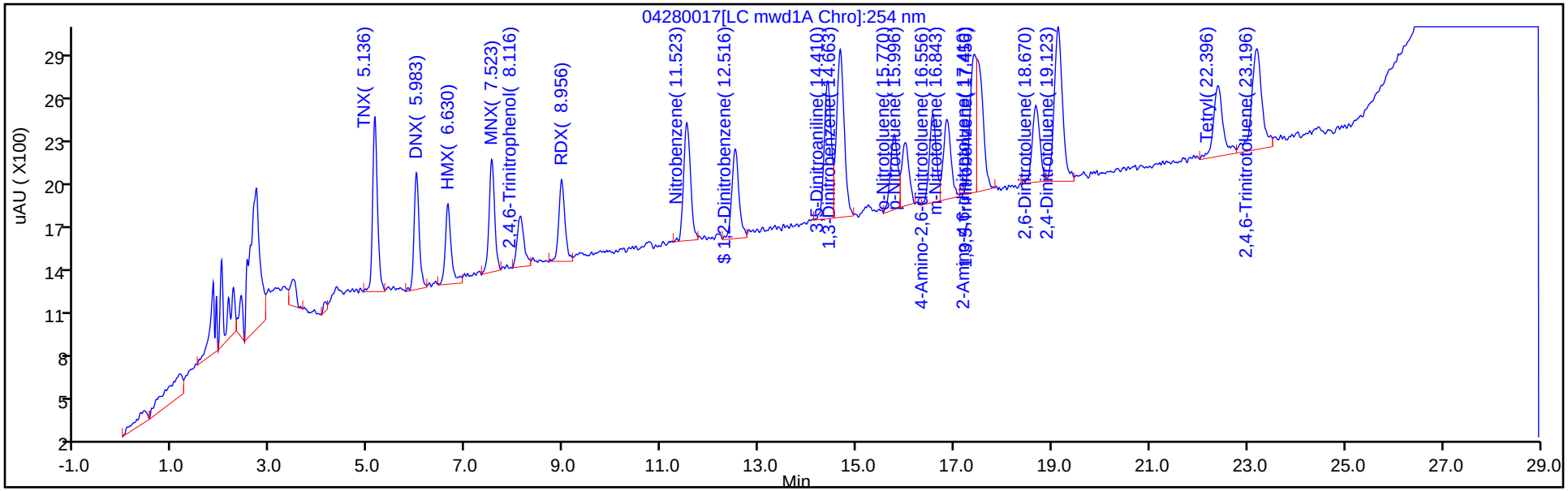
Report Date: 29-Apr-2023 13:04:20 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

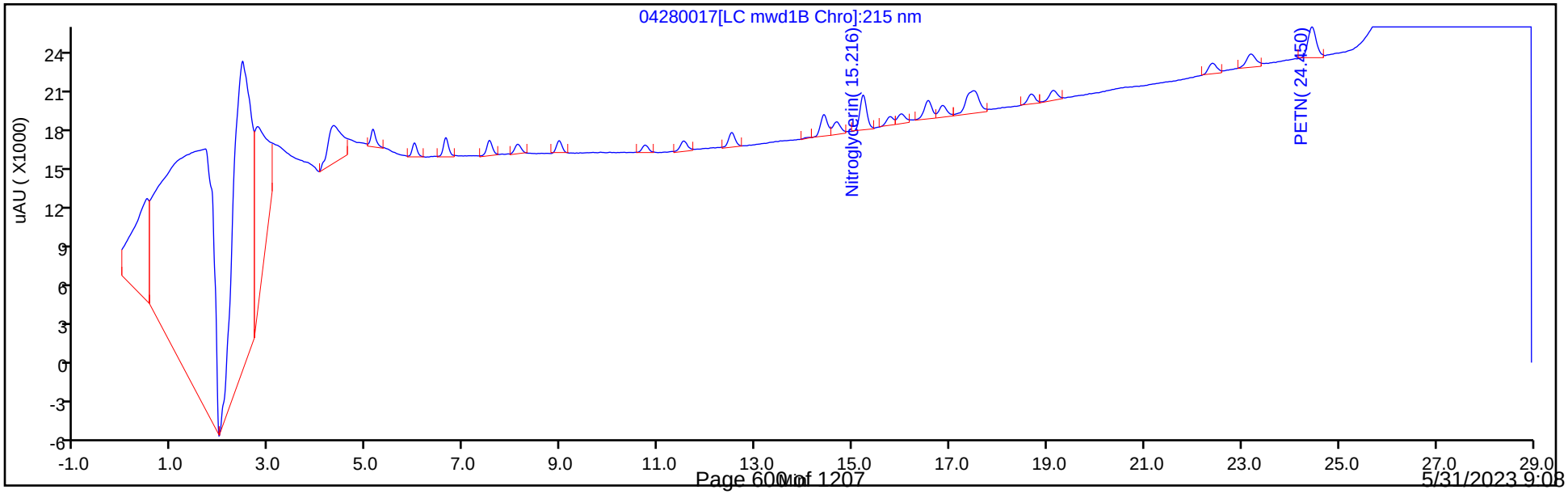
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280017.D

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



5/31/2023 9:08 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

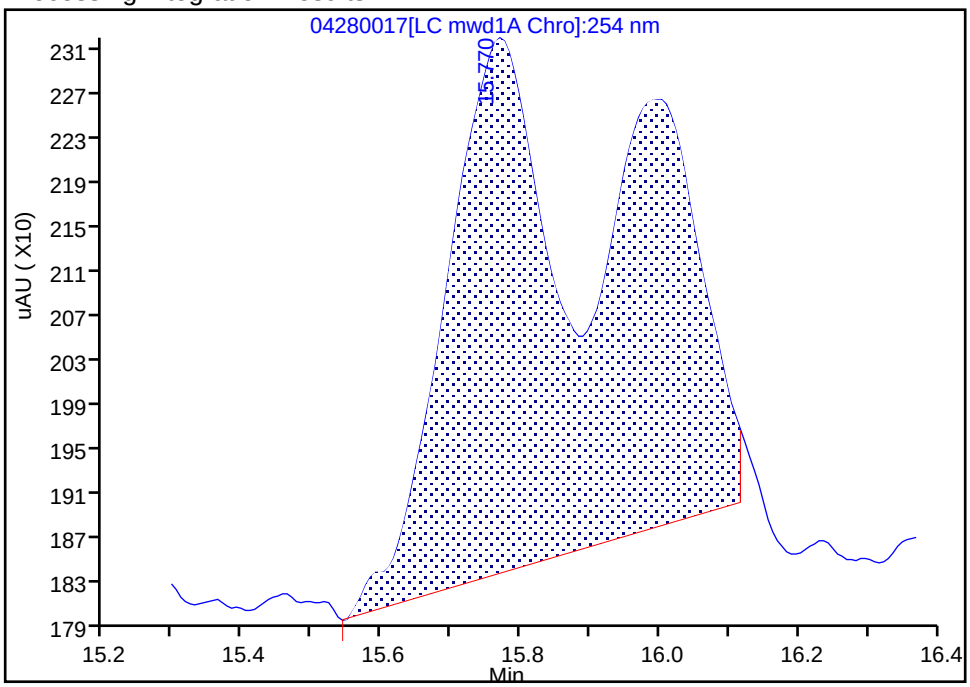
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280017.D				
Injection Date:	28-Apr-2023 22:28:39	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	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

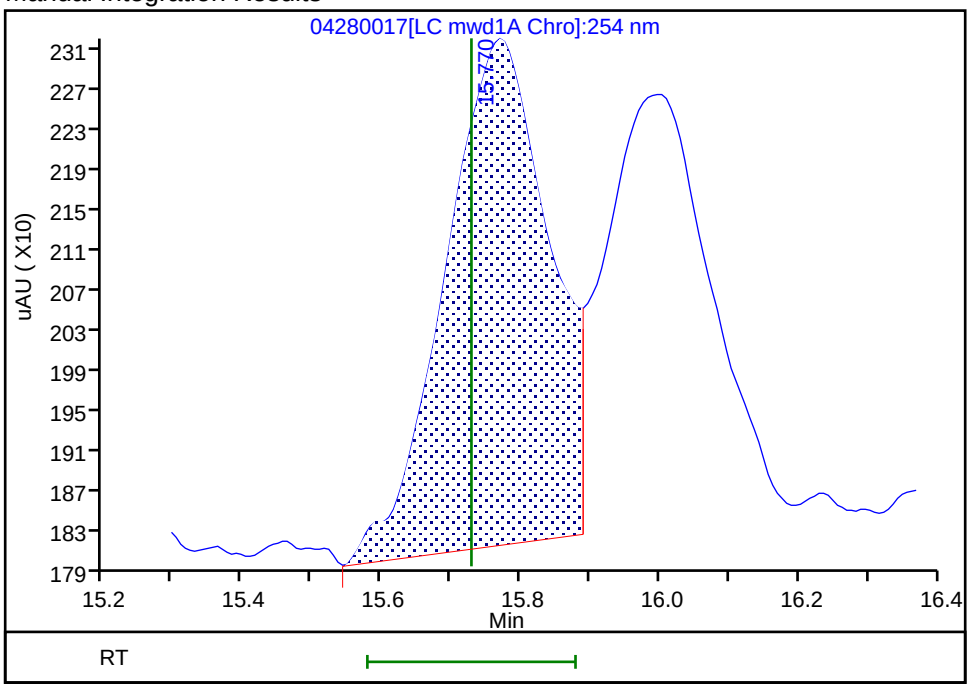
Processing Integration Results

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

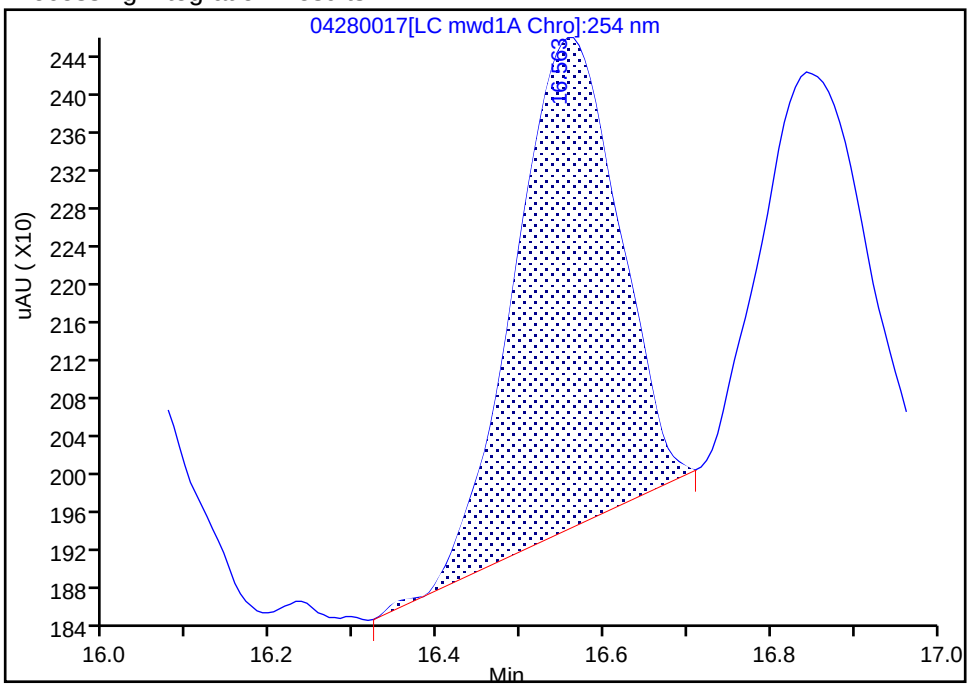
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280017.D				
Injection Date:	28-Apr-2023 22:28:39	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	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

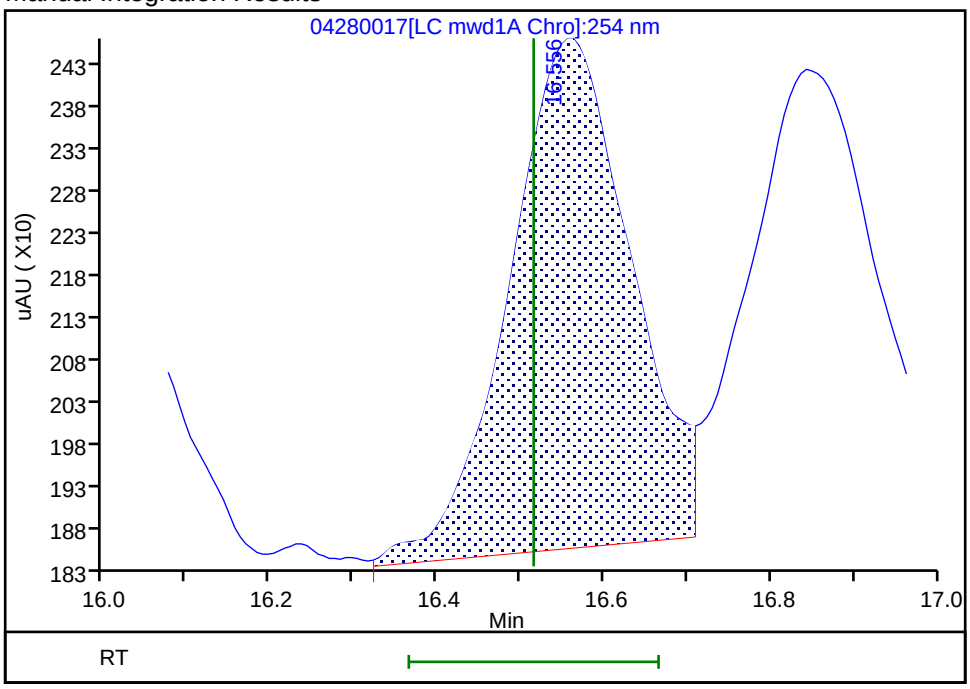
Processing Integration Results

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

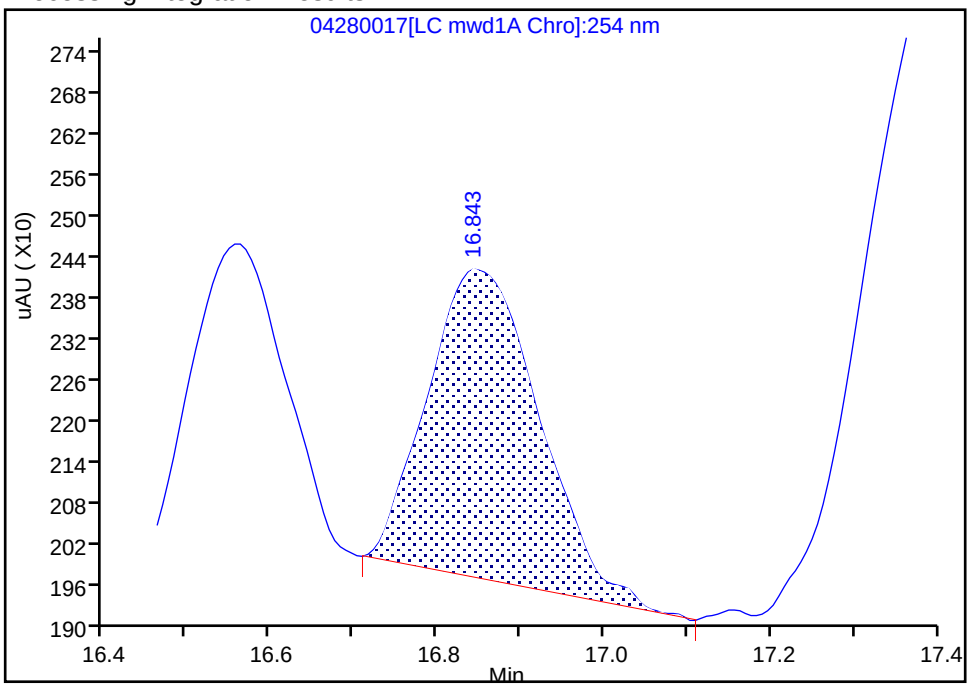
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280017.D				
Injection Date:	28-Apr-2023 22:28:39	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	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

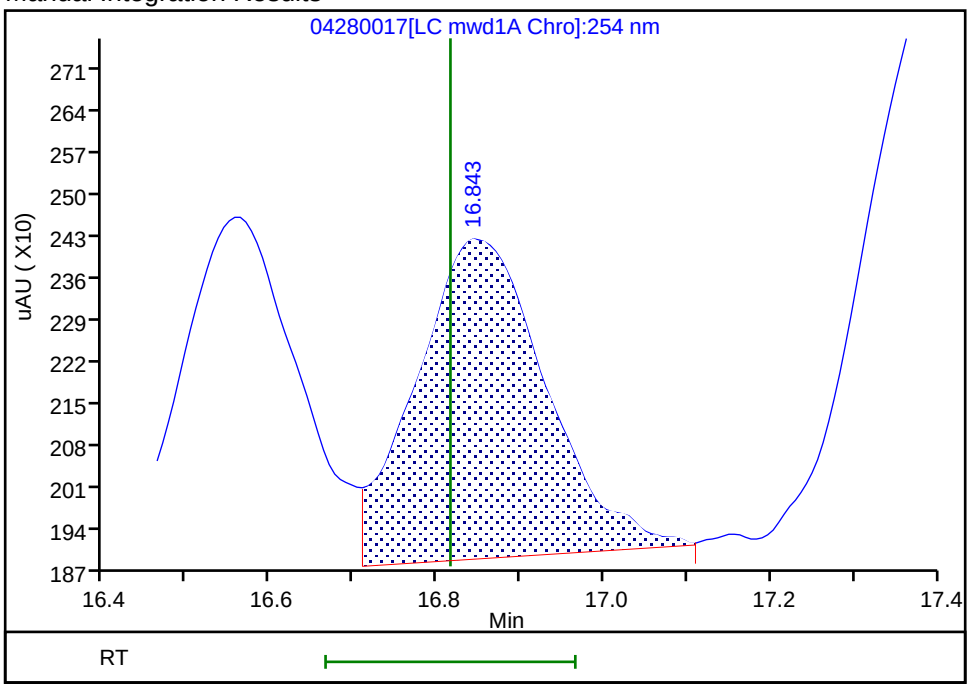
Processing Integration Results

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

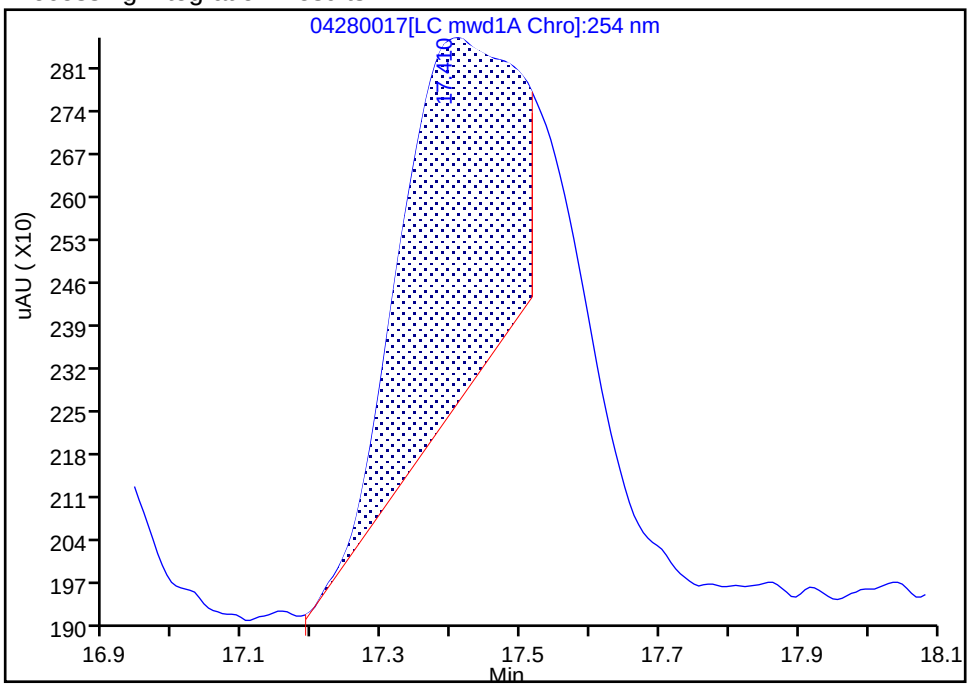
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280017.D				
Injection Date:	28-Apr-2023 22:28:39	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	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

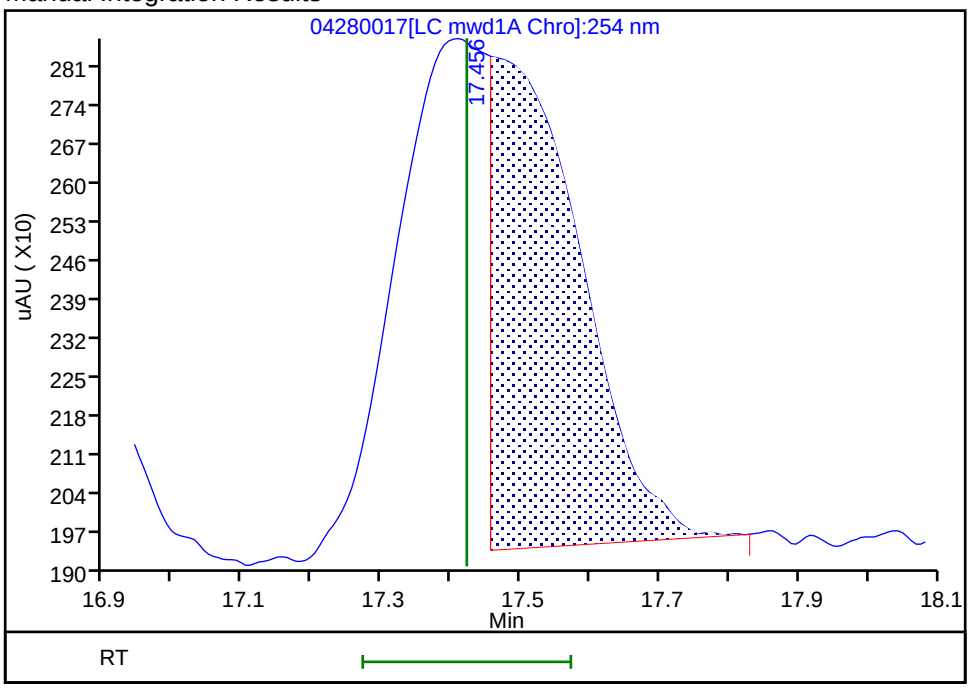
Processing Integration Results

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

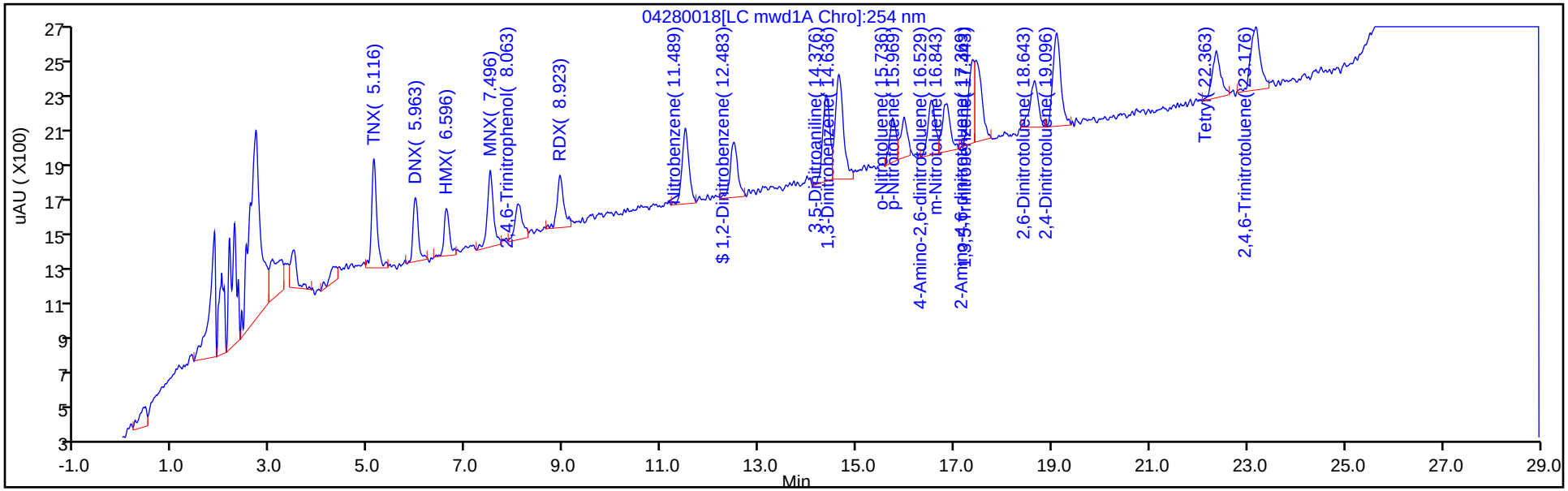
Report Date: 29-Apr-2023 13:04:20 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

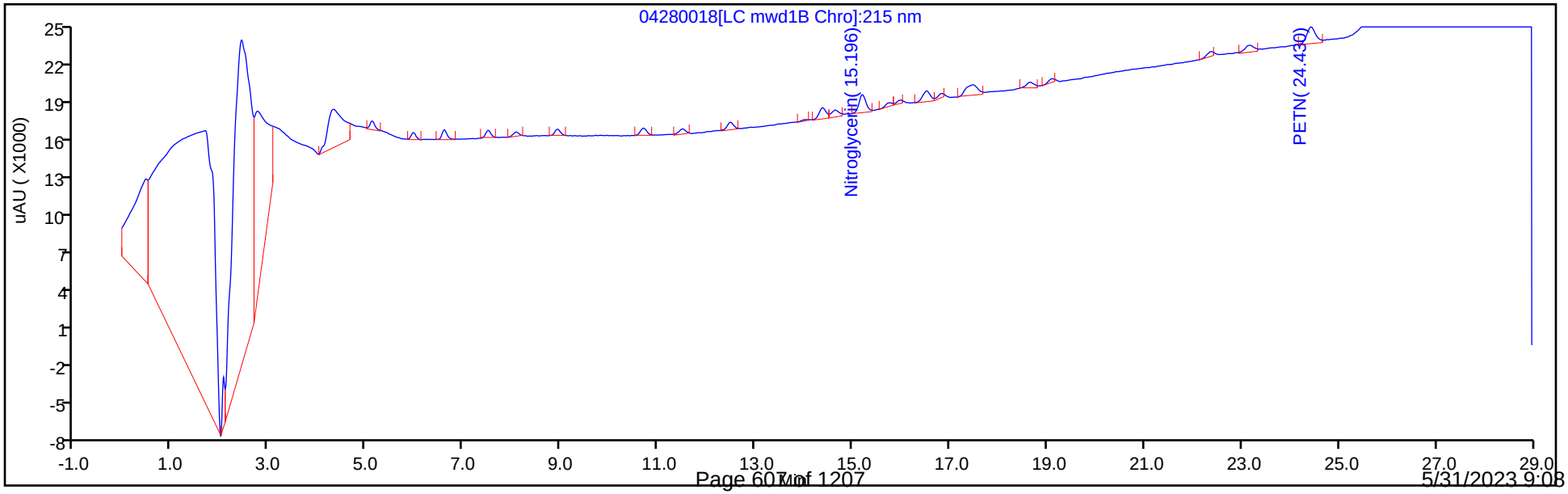
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280018.D

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



5/31/2023 9:08 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

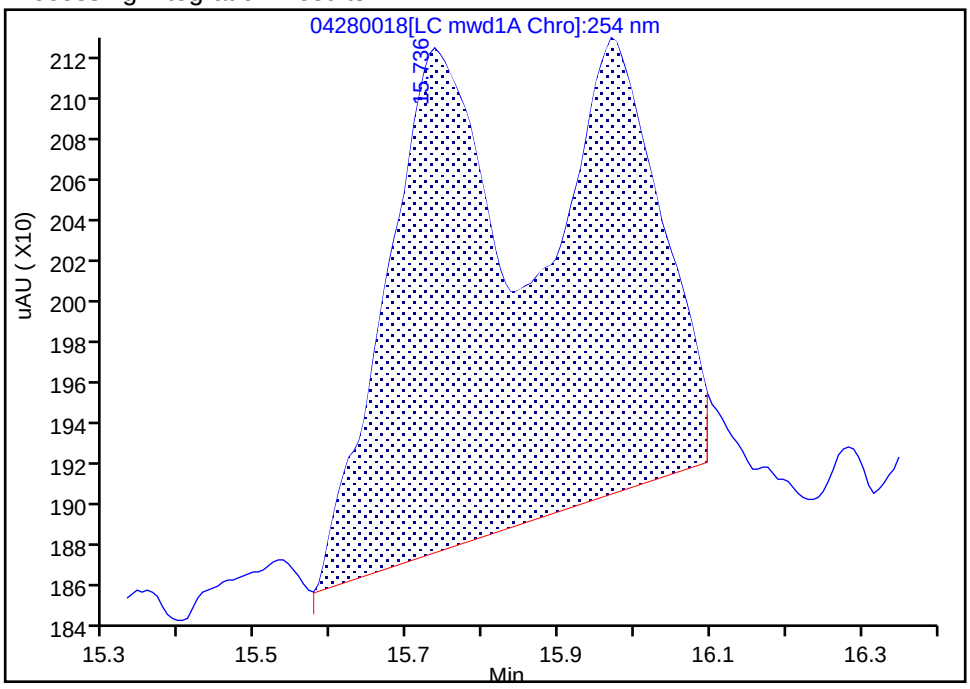
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280018.D				
Injection Date:	28-Apr-2023 23:03:35	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	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

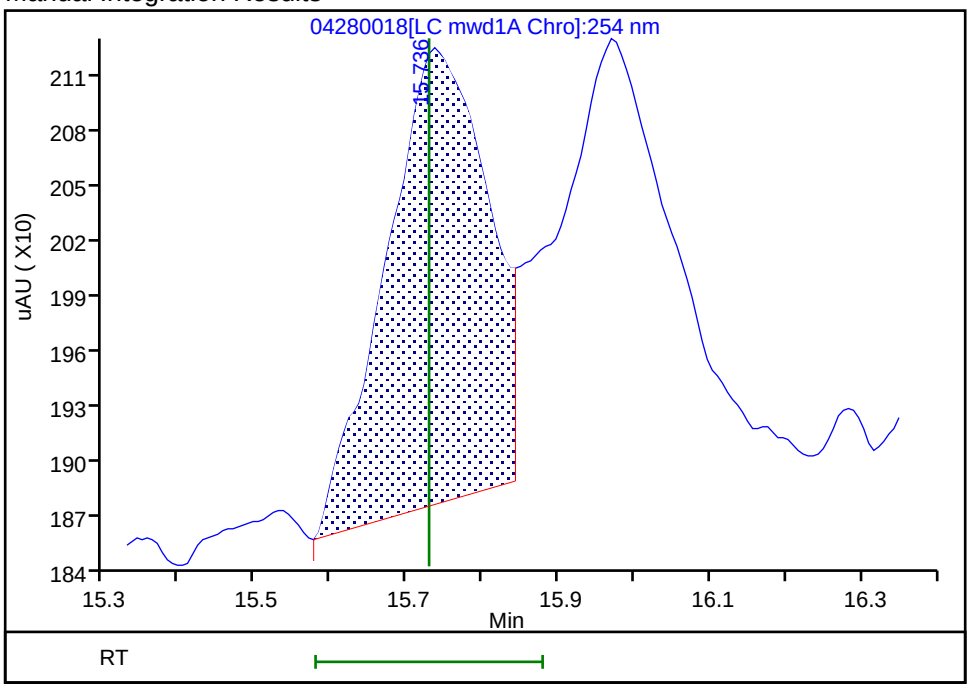
Processing Integration Results

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

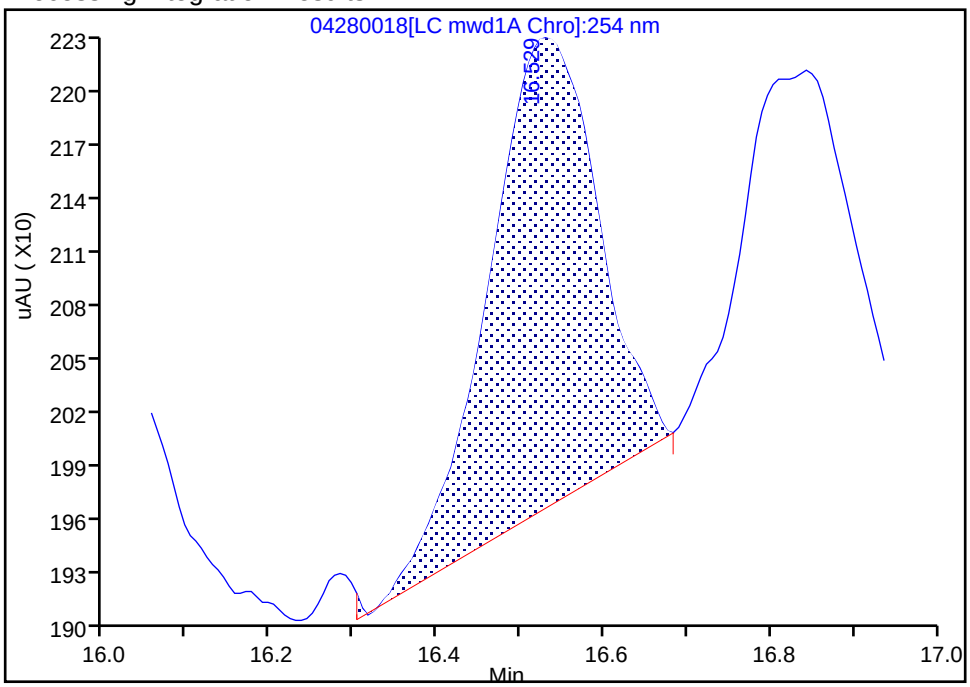
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280018.D				
Injection Date:	28-Apr-2023 23:03:35	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	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

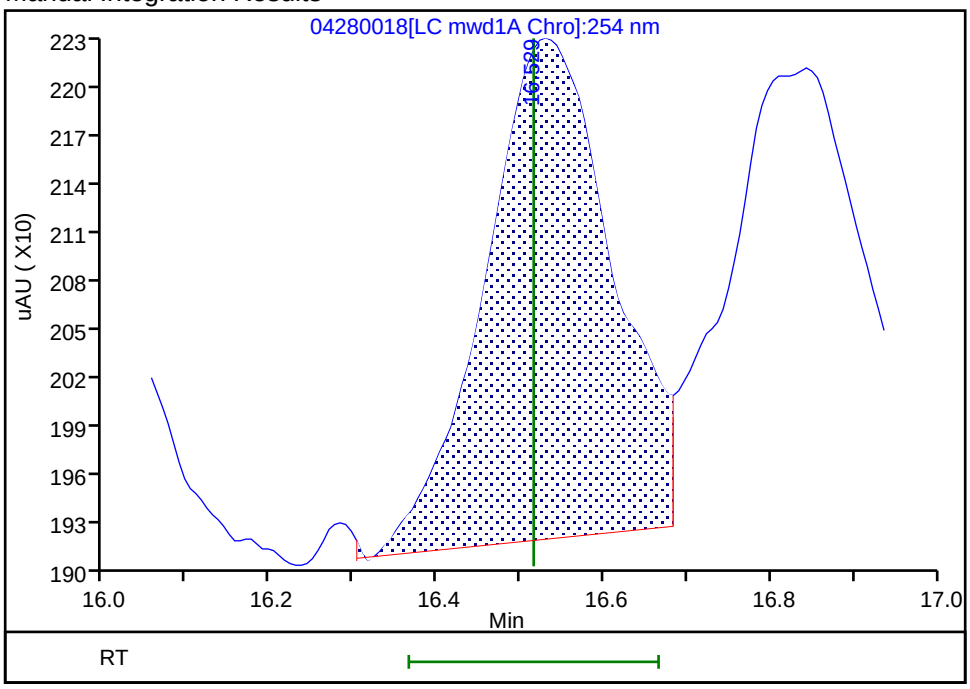
Processing Integration Results

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

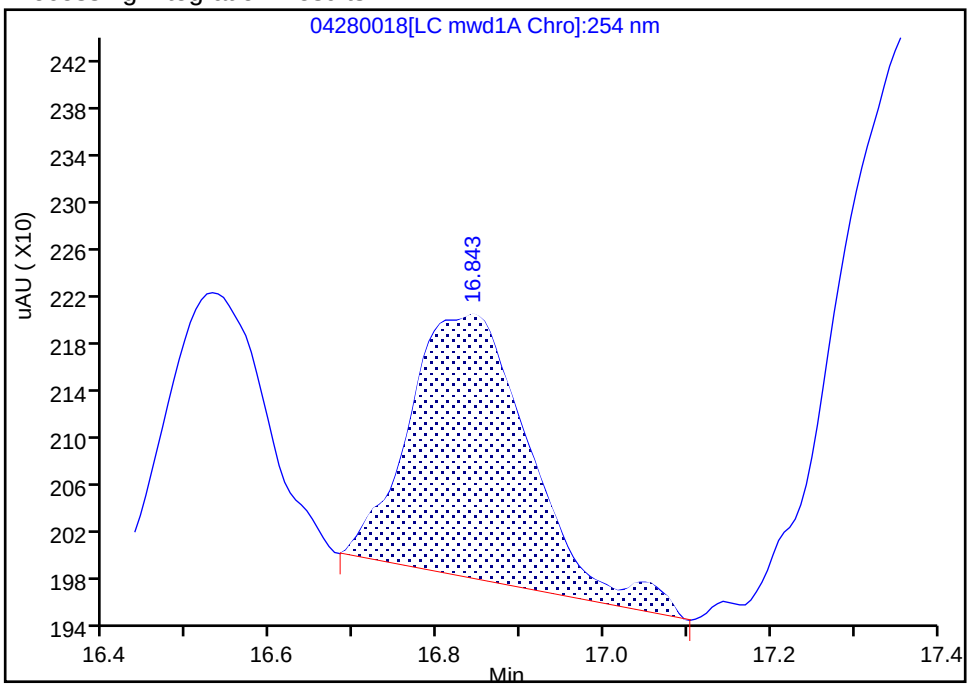
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280018.D				
Injection Date:	28-Apr-2023 23:03:35	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	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

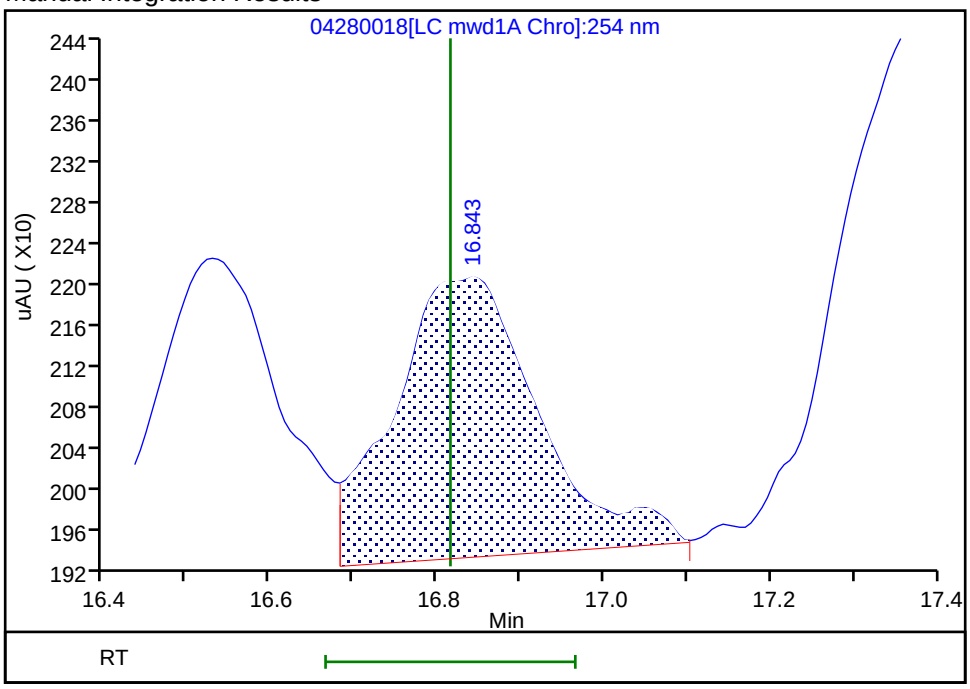
Processing Integration Results

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

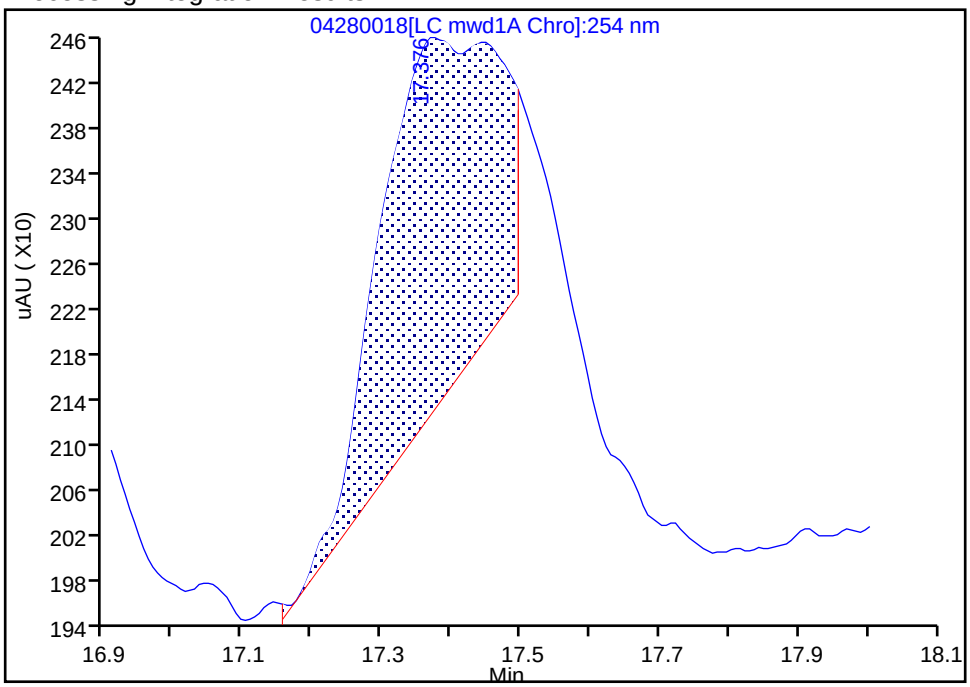
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280018.D				
Injection Date:	28-Apr-2023 23:03:35	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	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

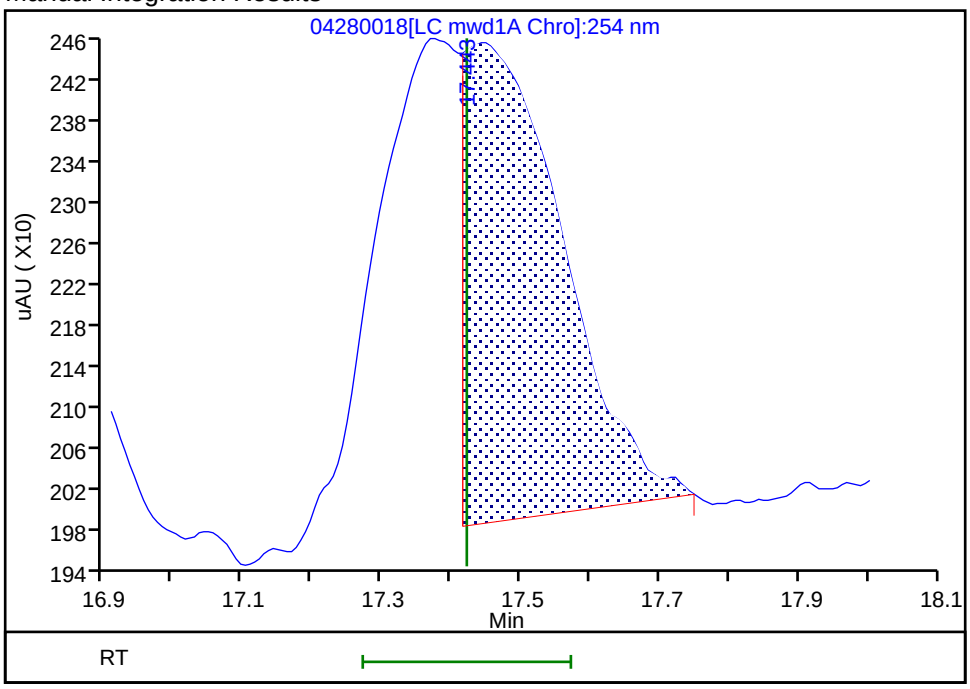
Processing Integration Results

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

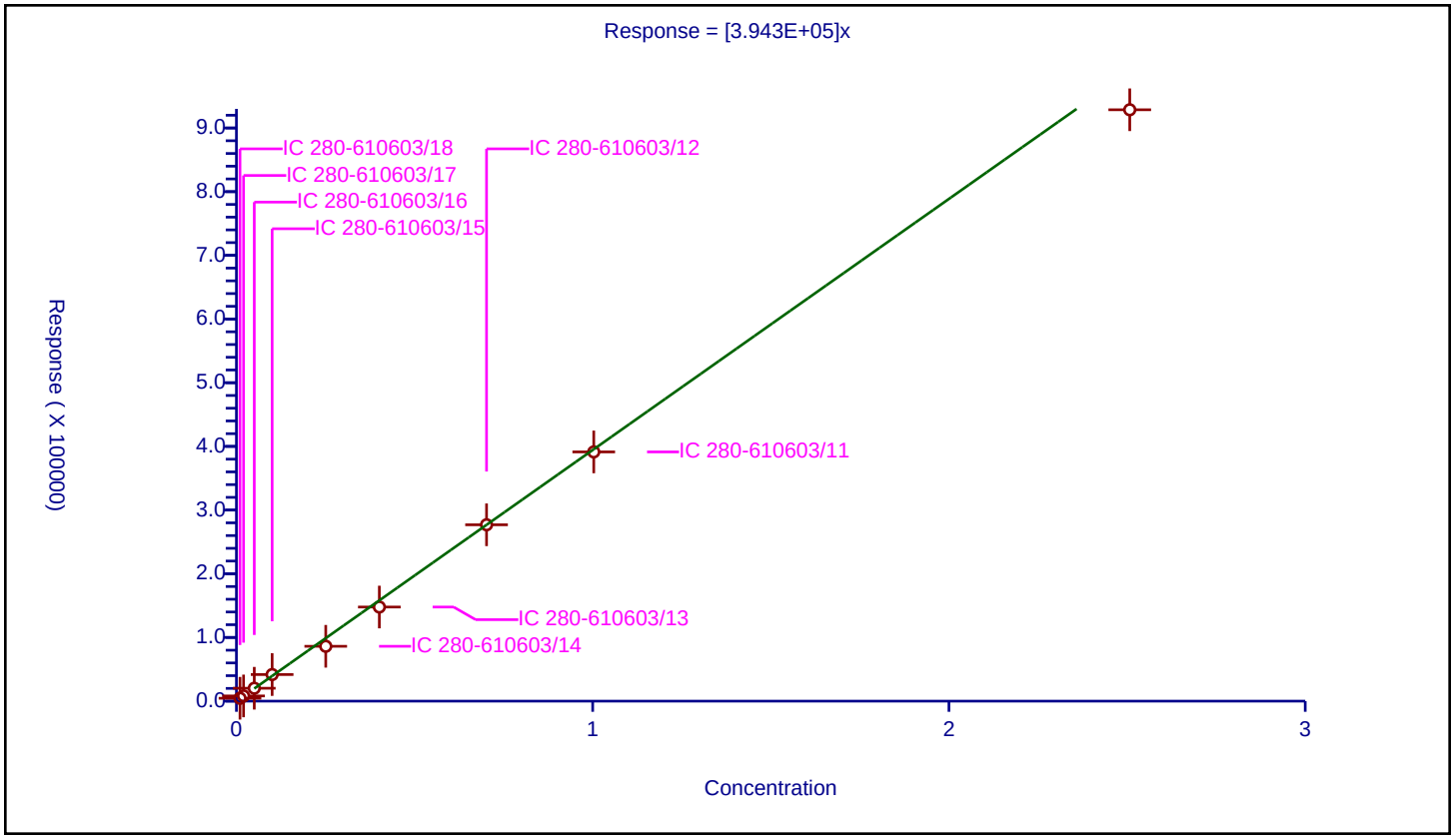
Curve Coefficients

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

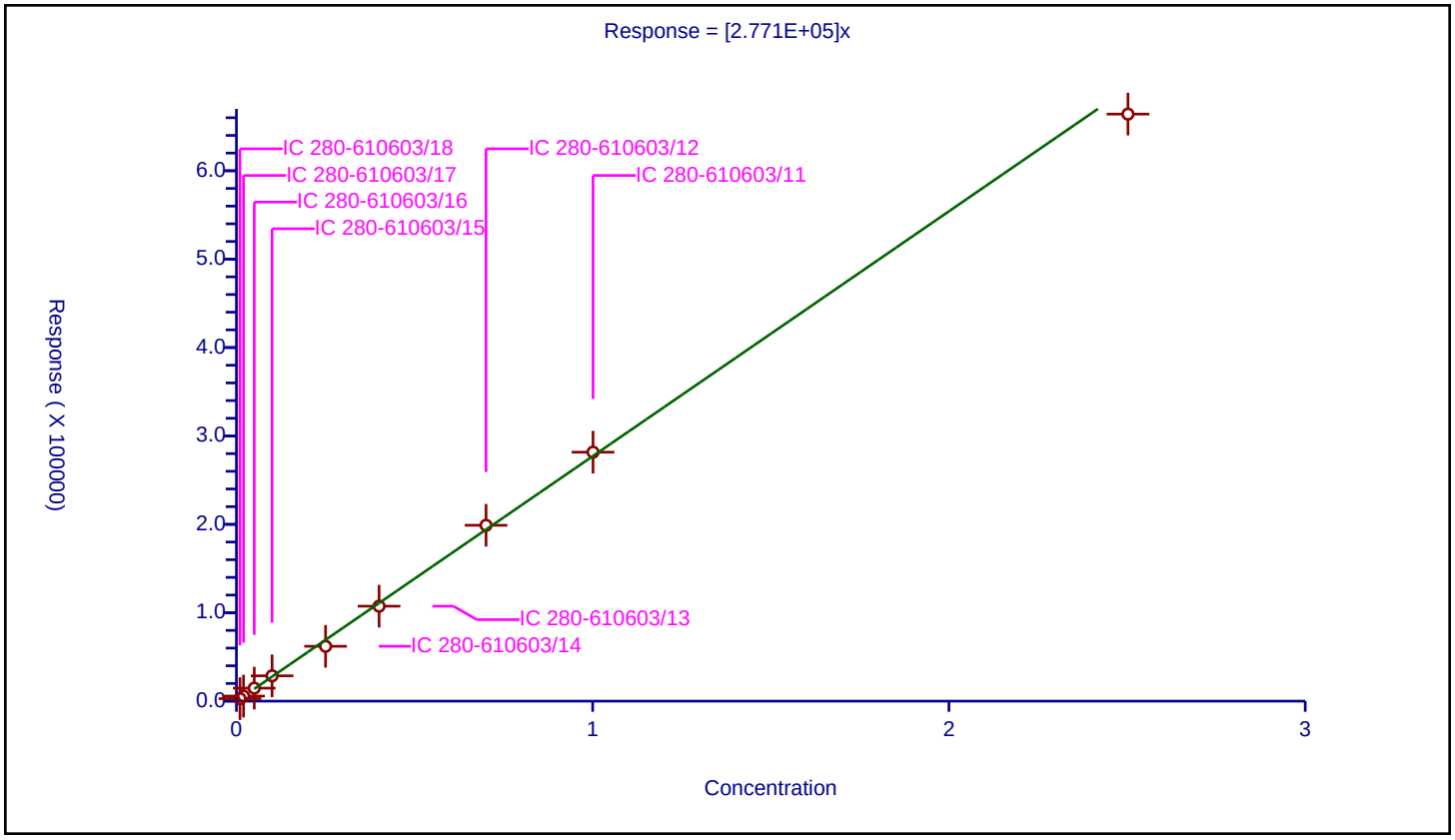
Curve Coefficients

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

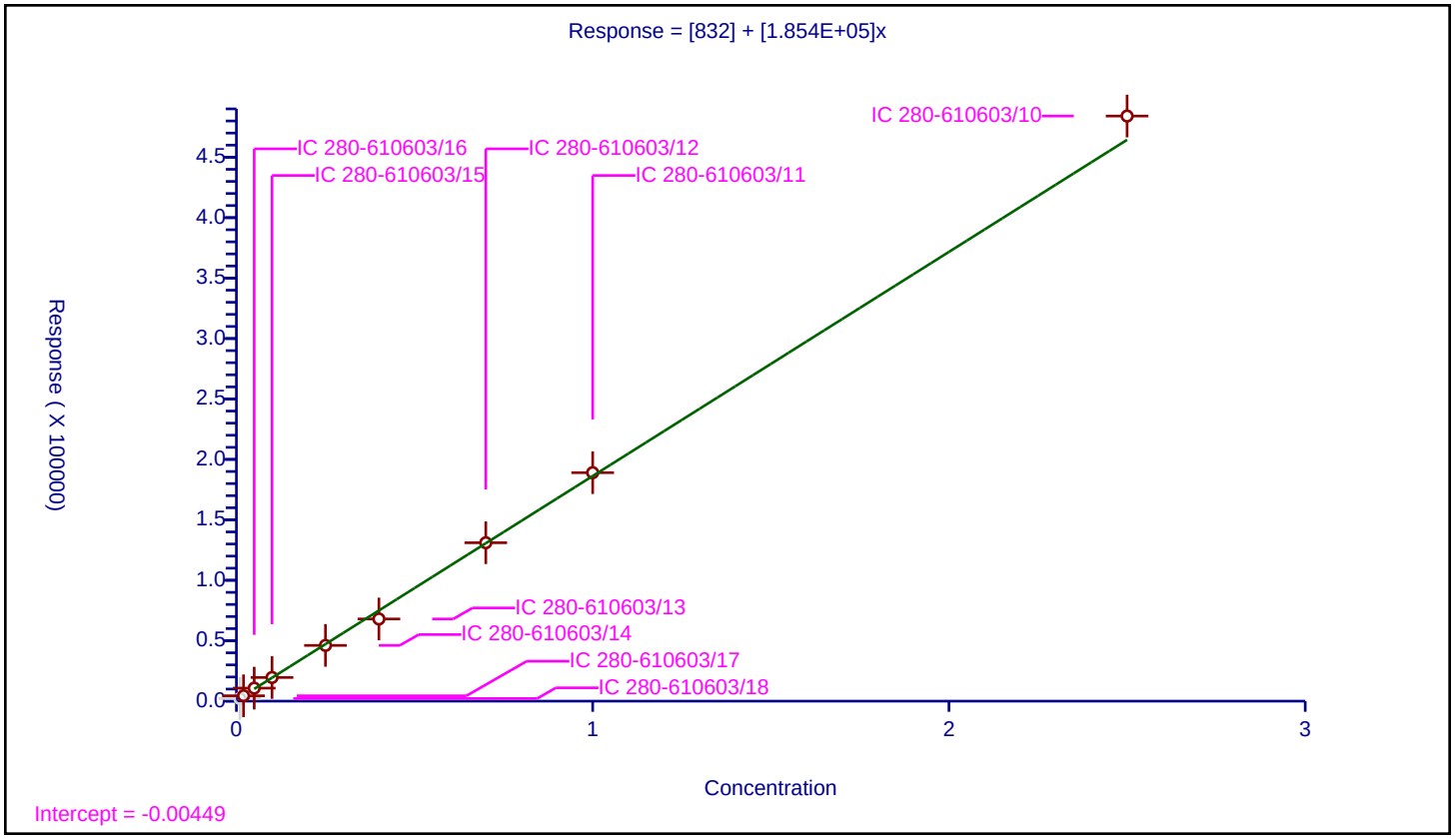
Curve Coefficients

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

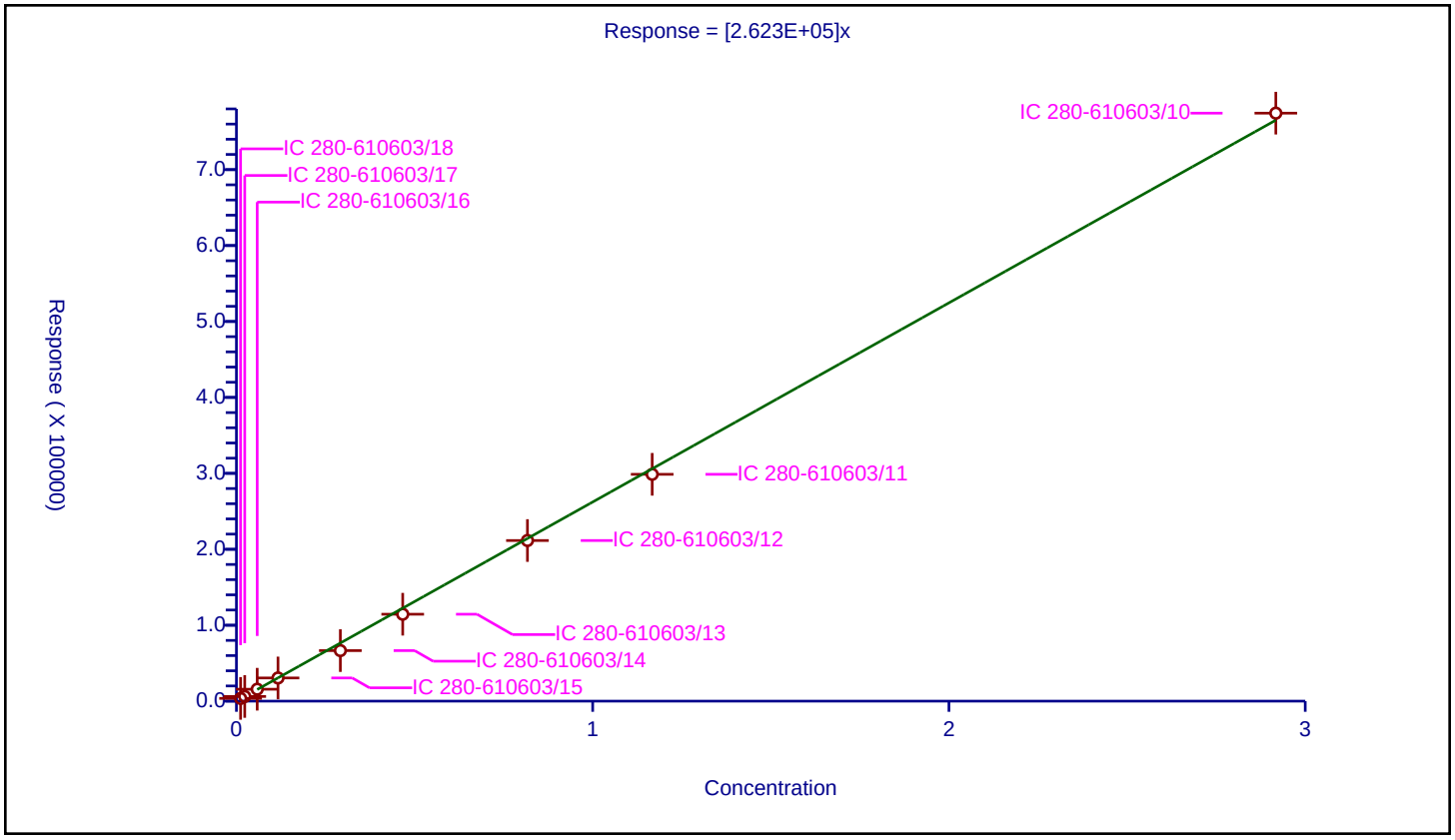
Curve Coefficients

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

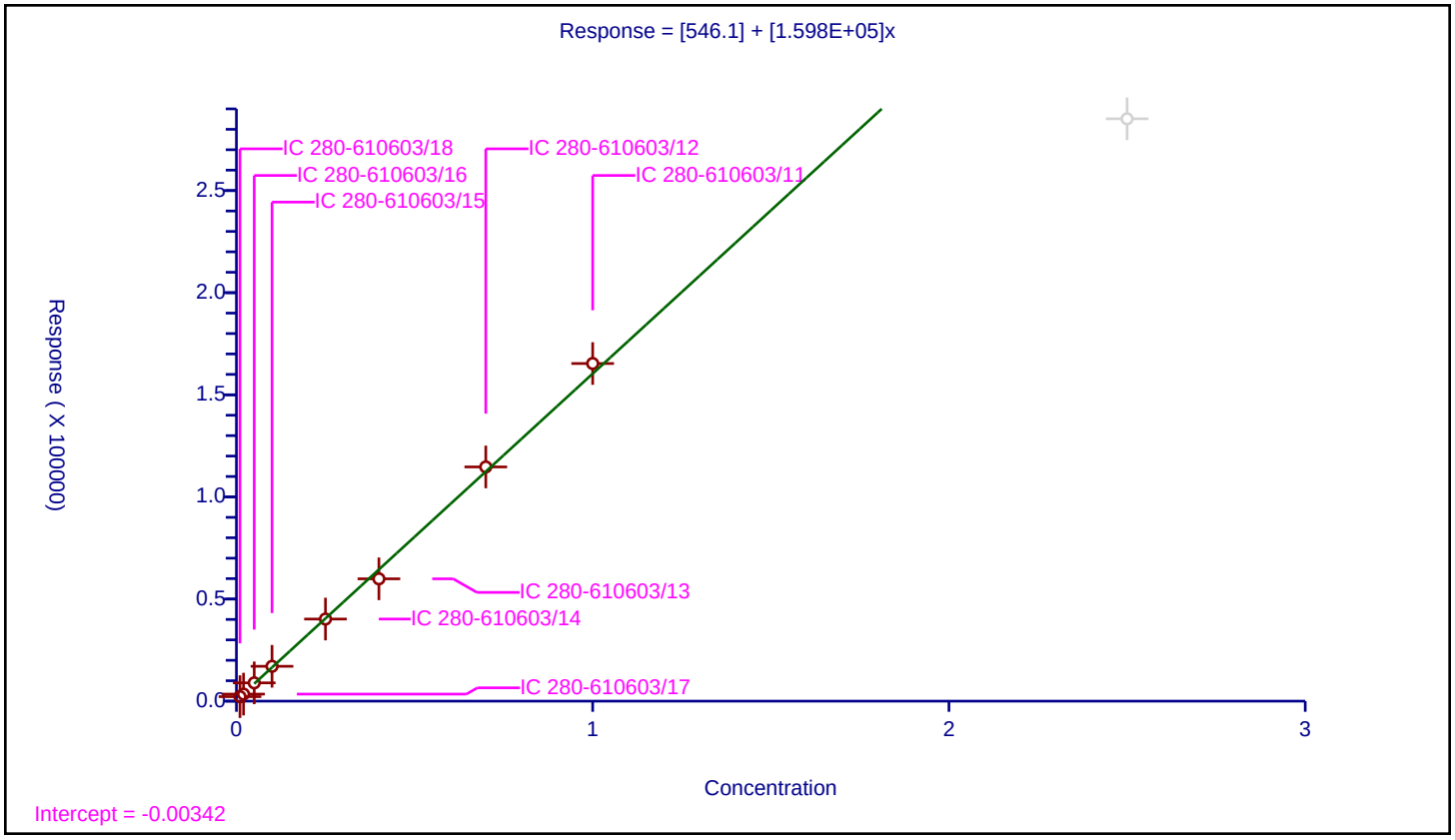
Curve Coefficients

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

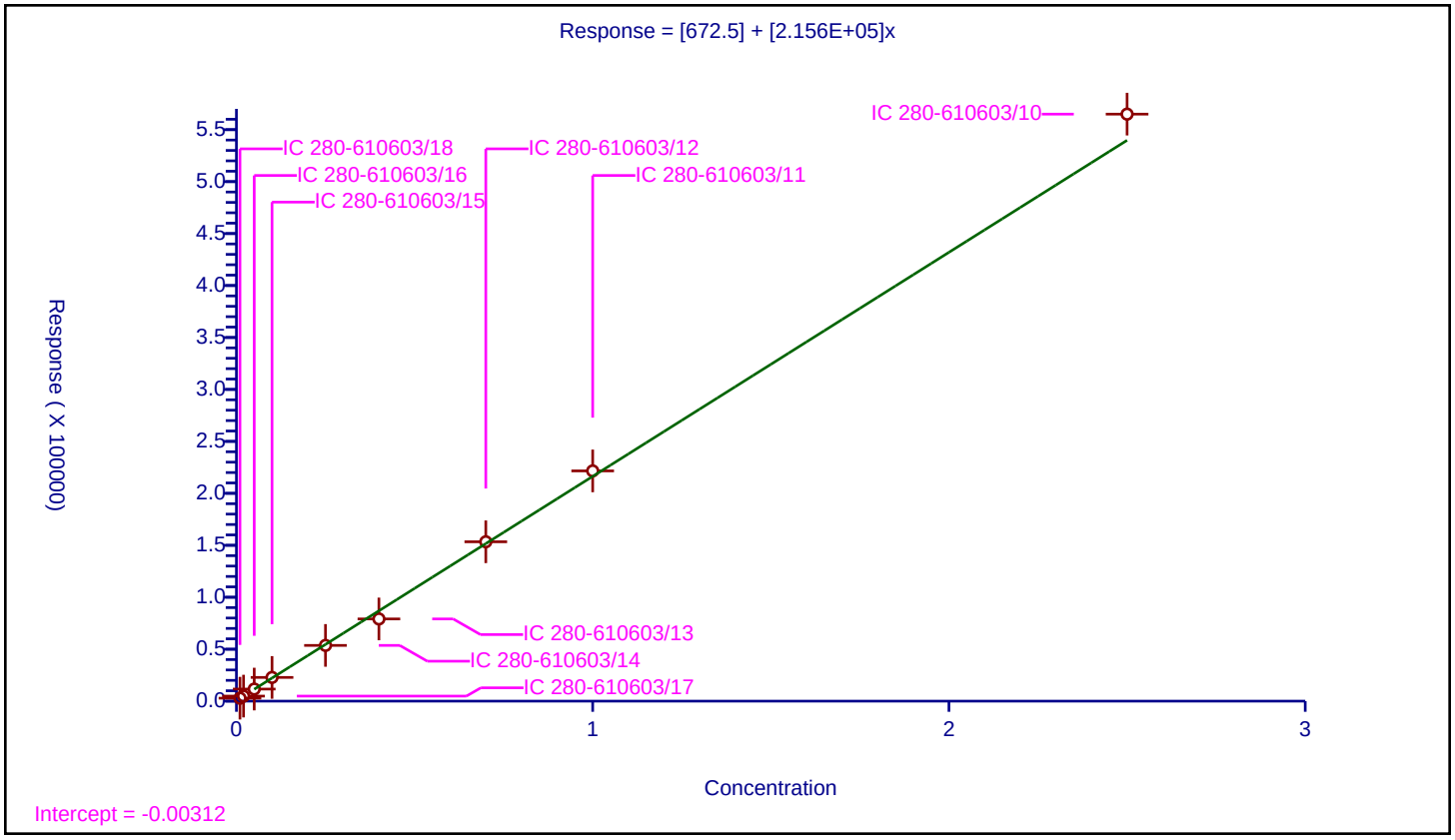
Curve Coefficients

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

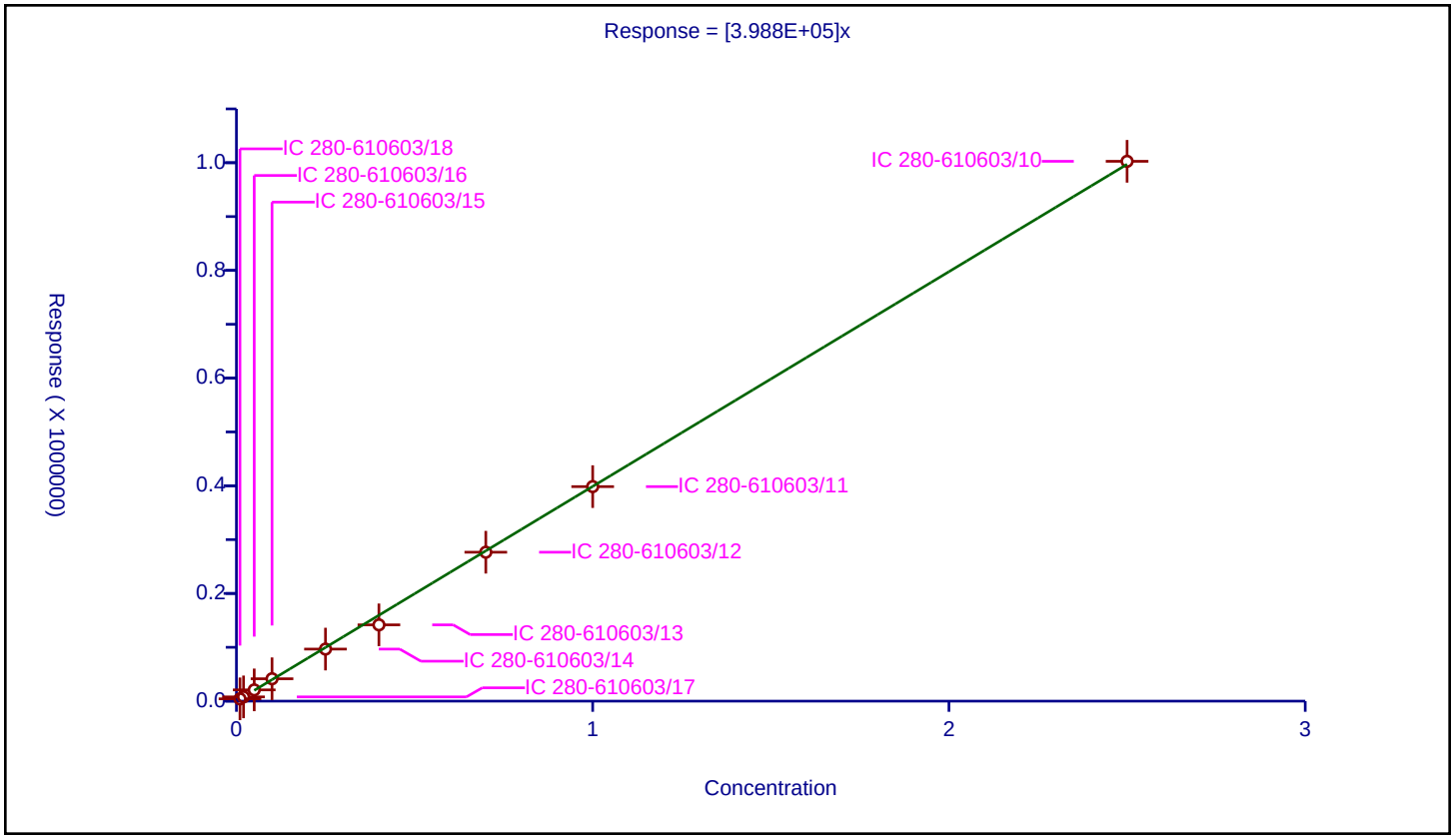
Curve Coefficients

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

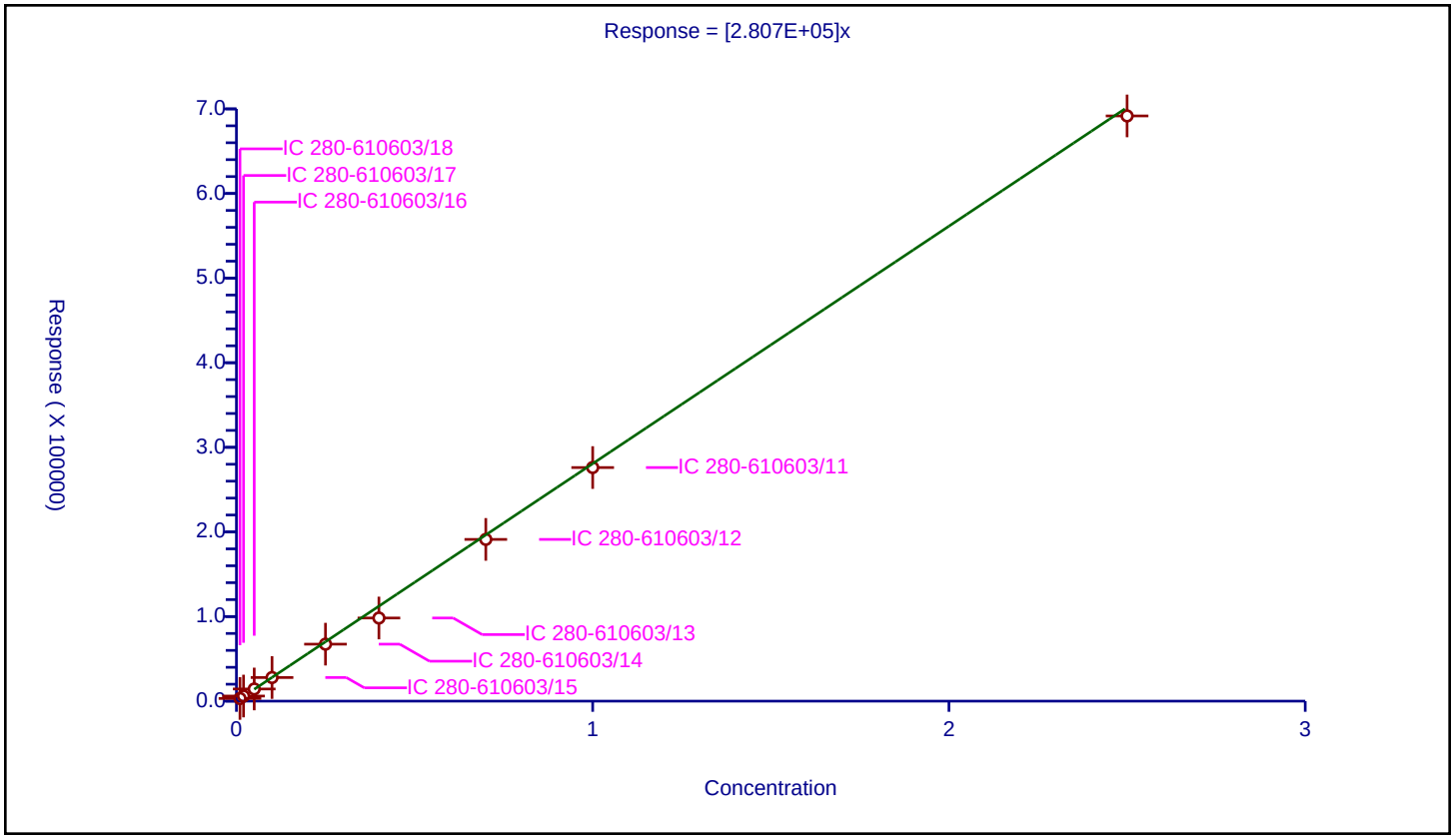
Curve Coefficients

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

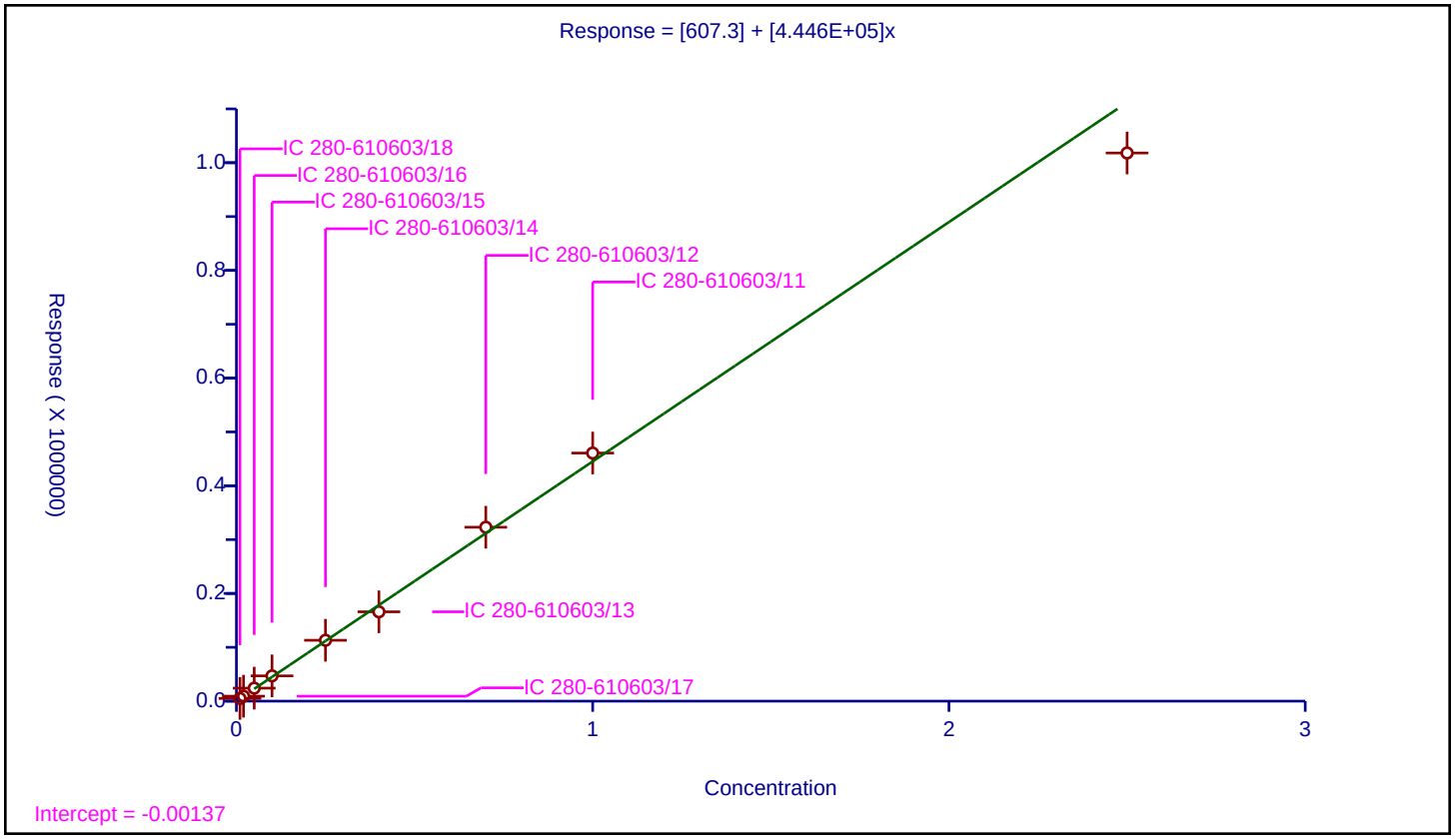
Curve Coefficients

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

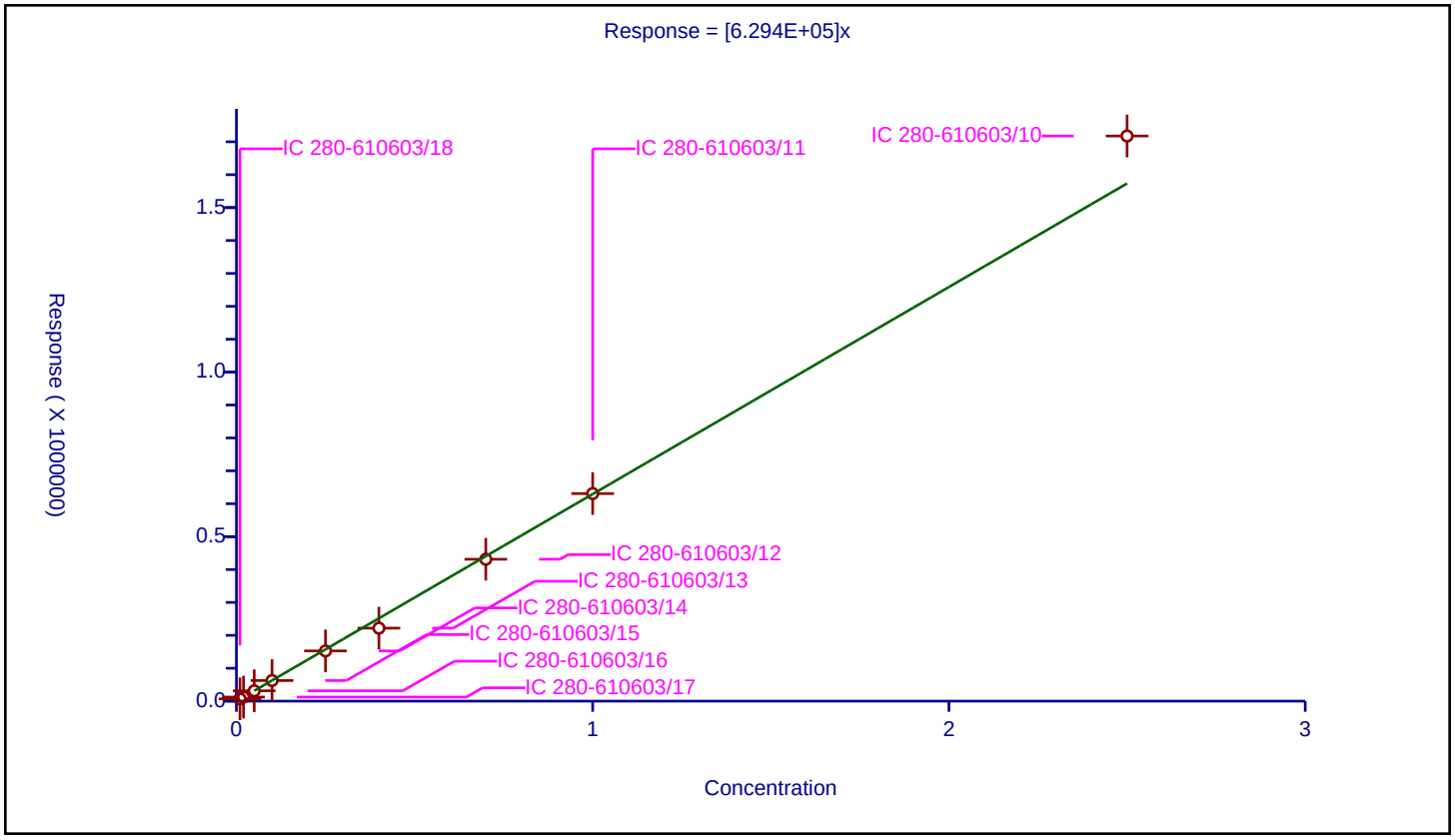
Curve Coefficients

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

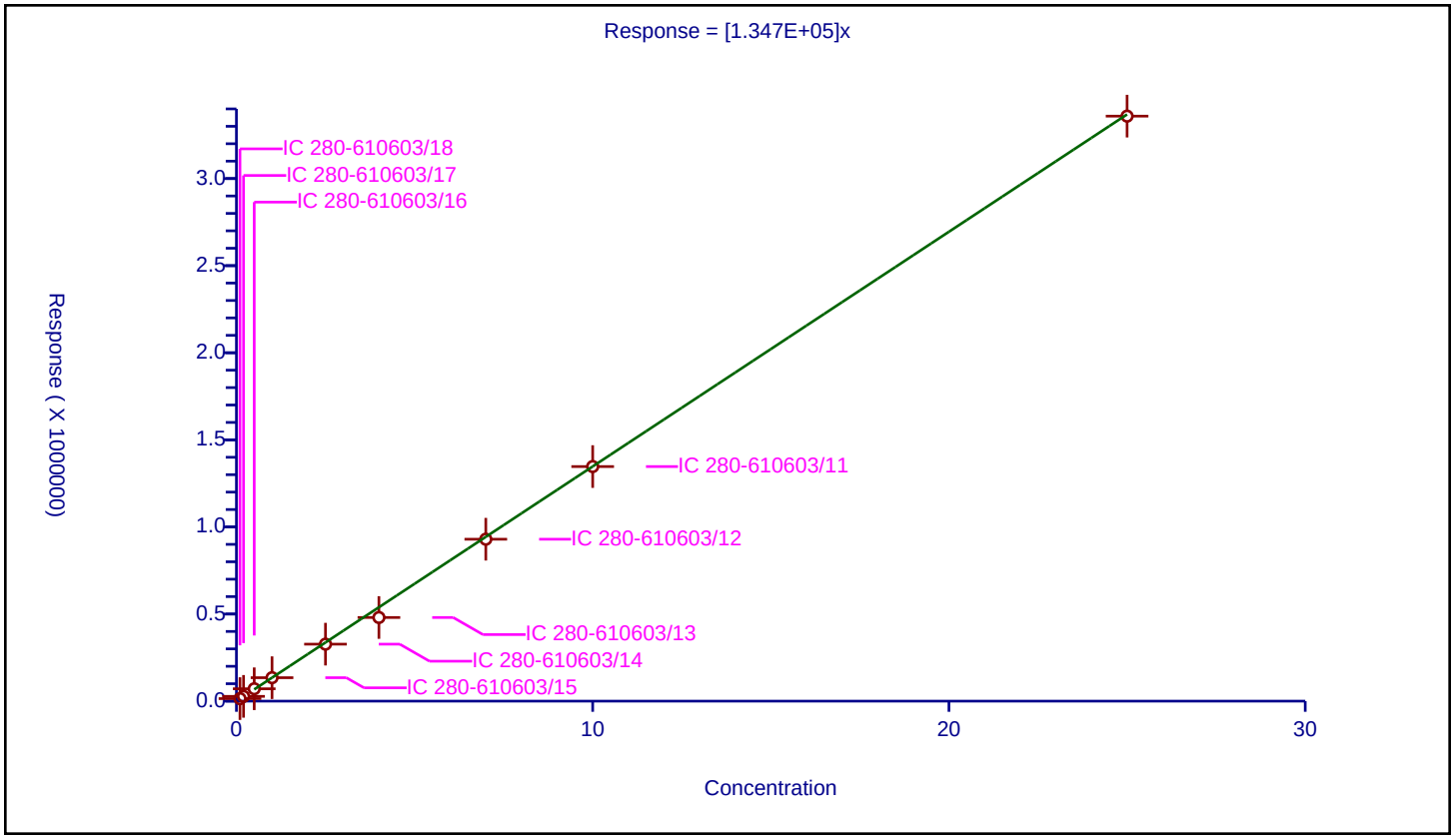
Curve Coefficients

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

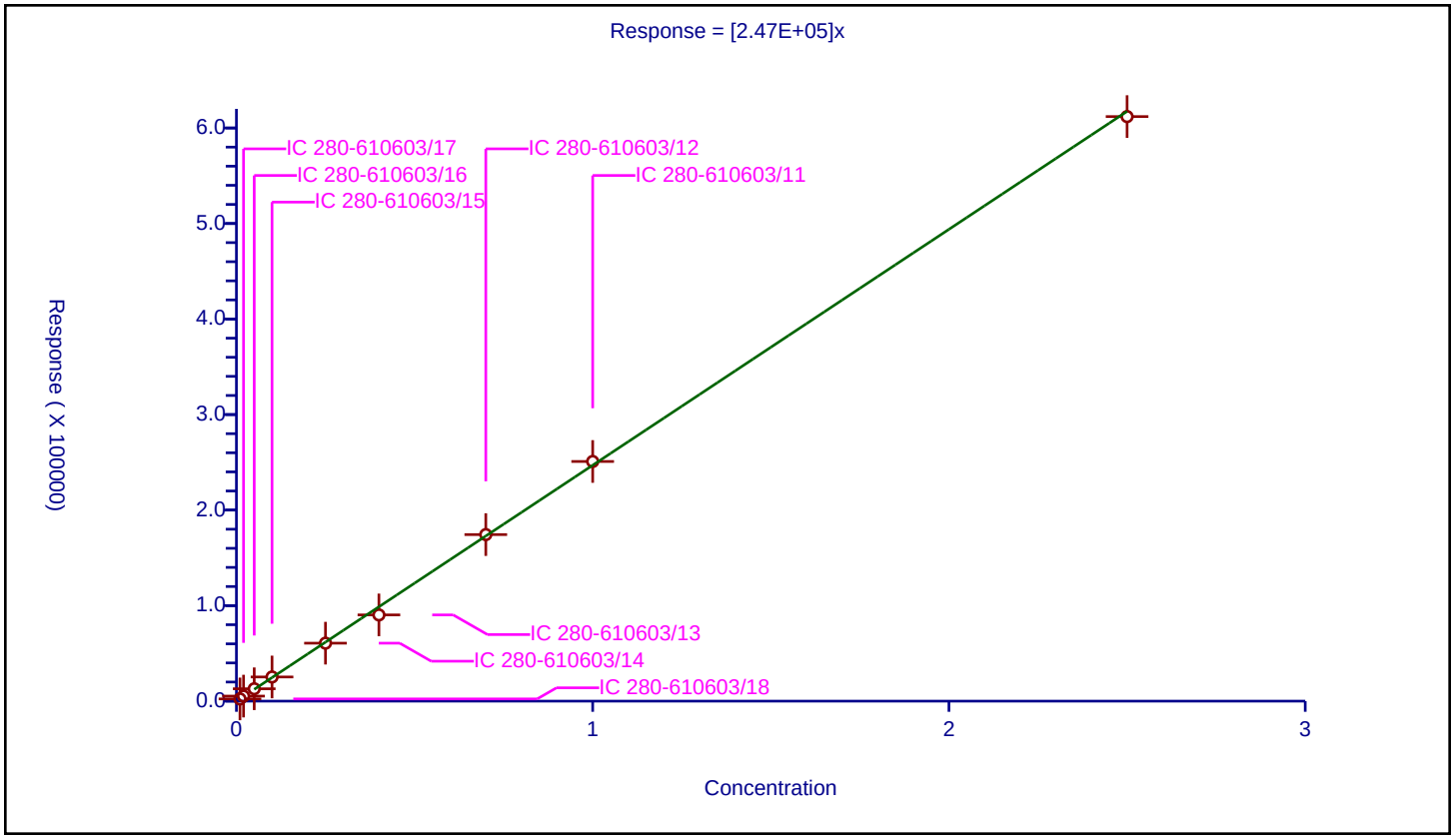
Curve Coefficients

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

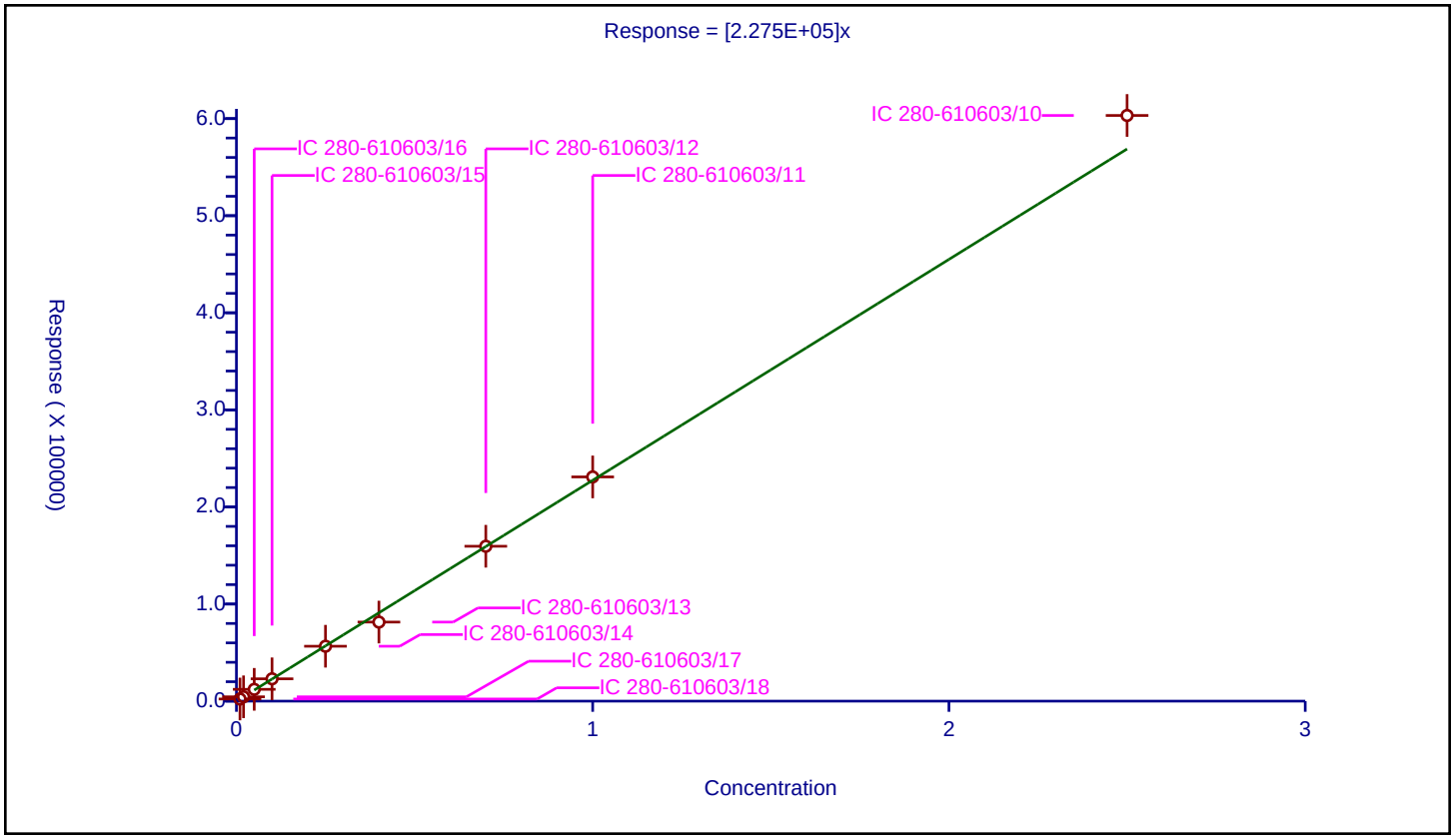
Curve Coefficients

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

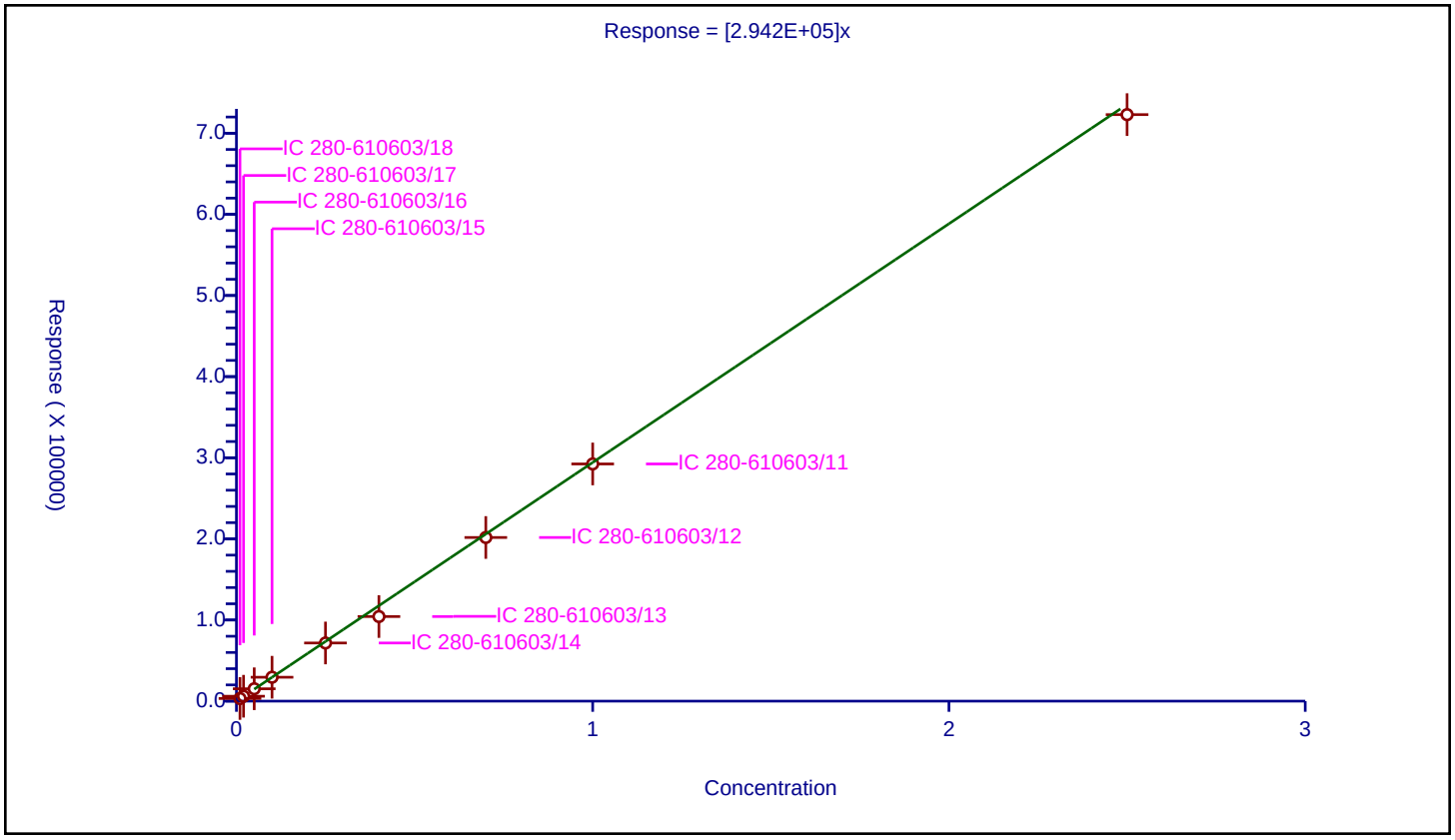
Curve Coefficients

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

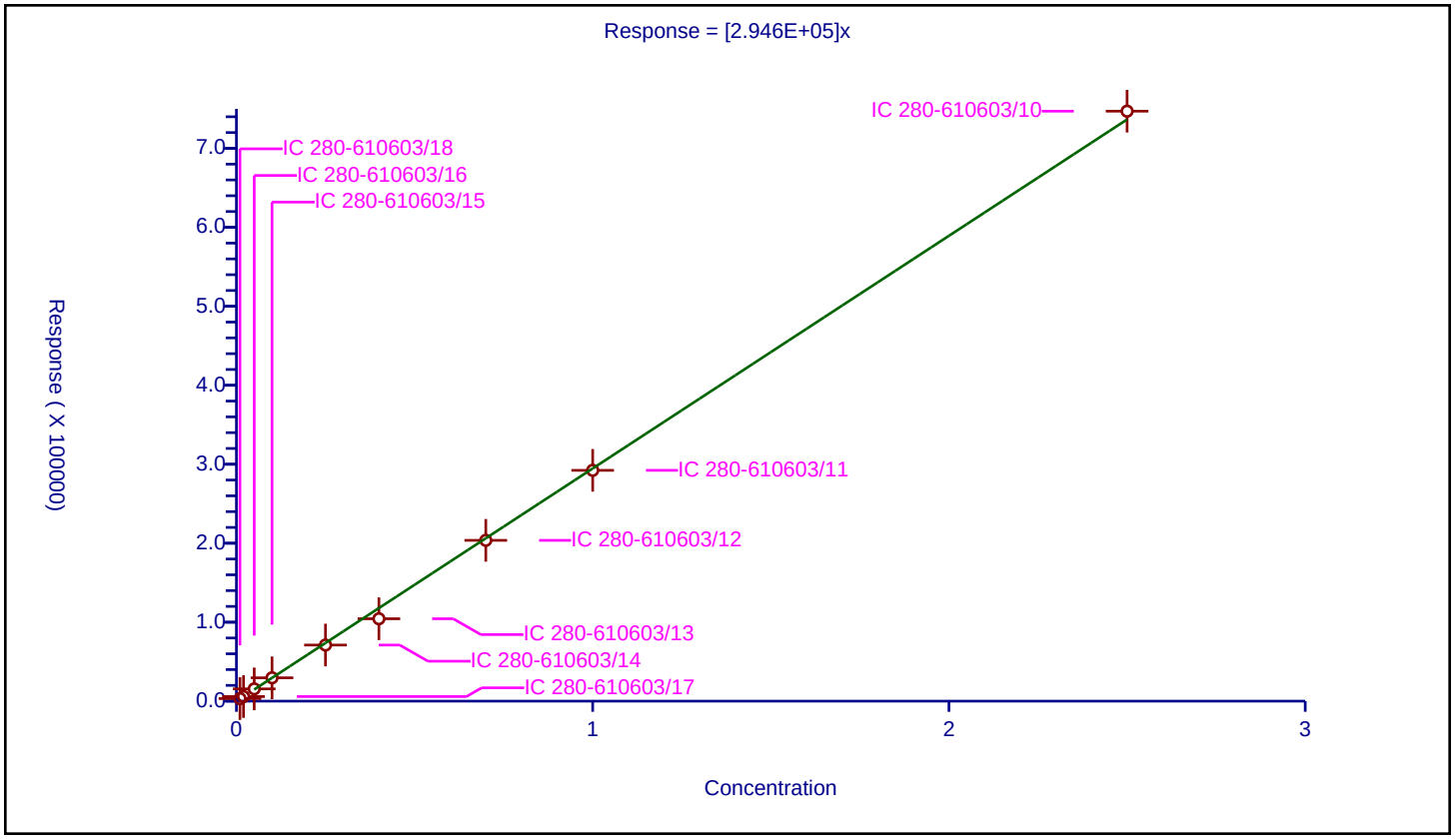
Curve Coefficients

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

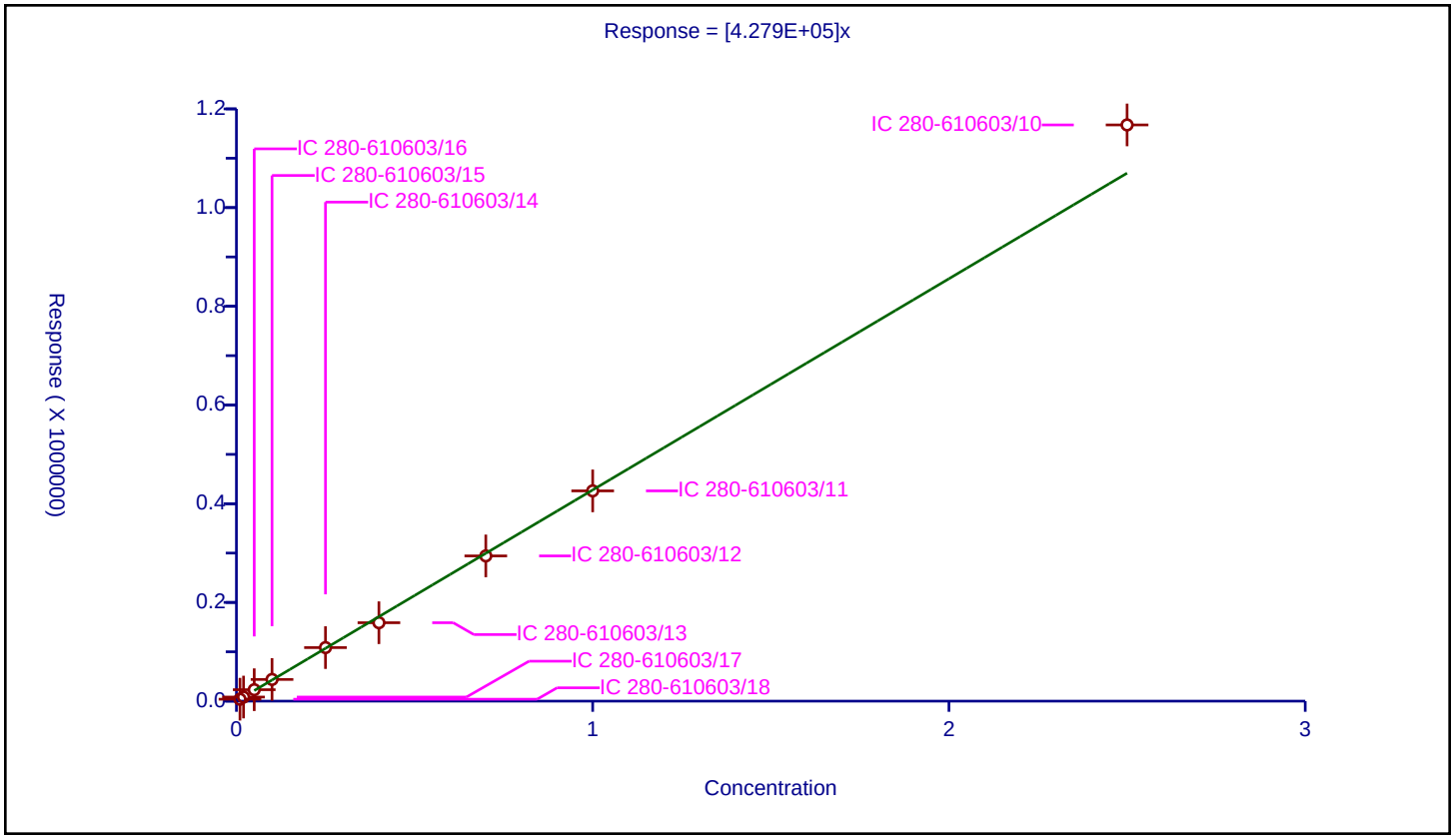
Curve Coefficients

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

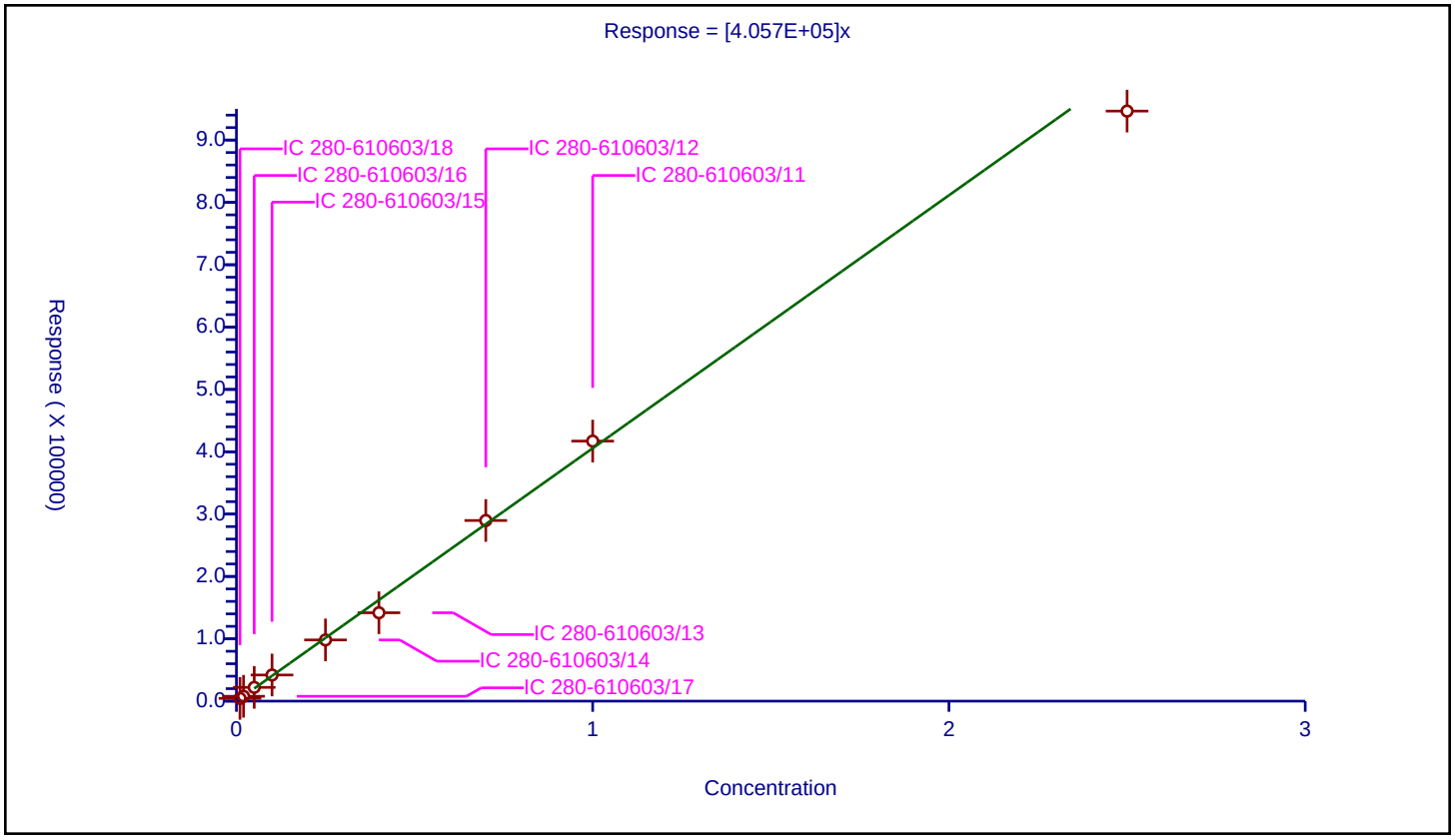
Curve Coefficients

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

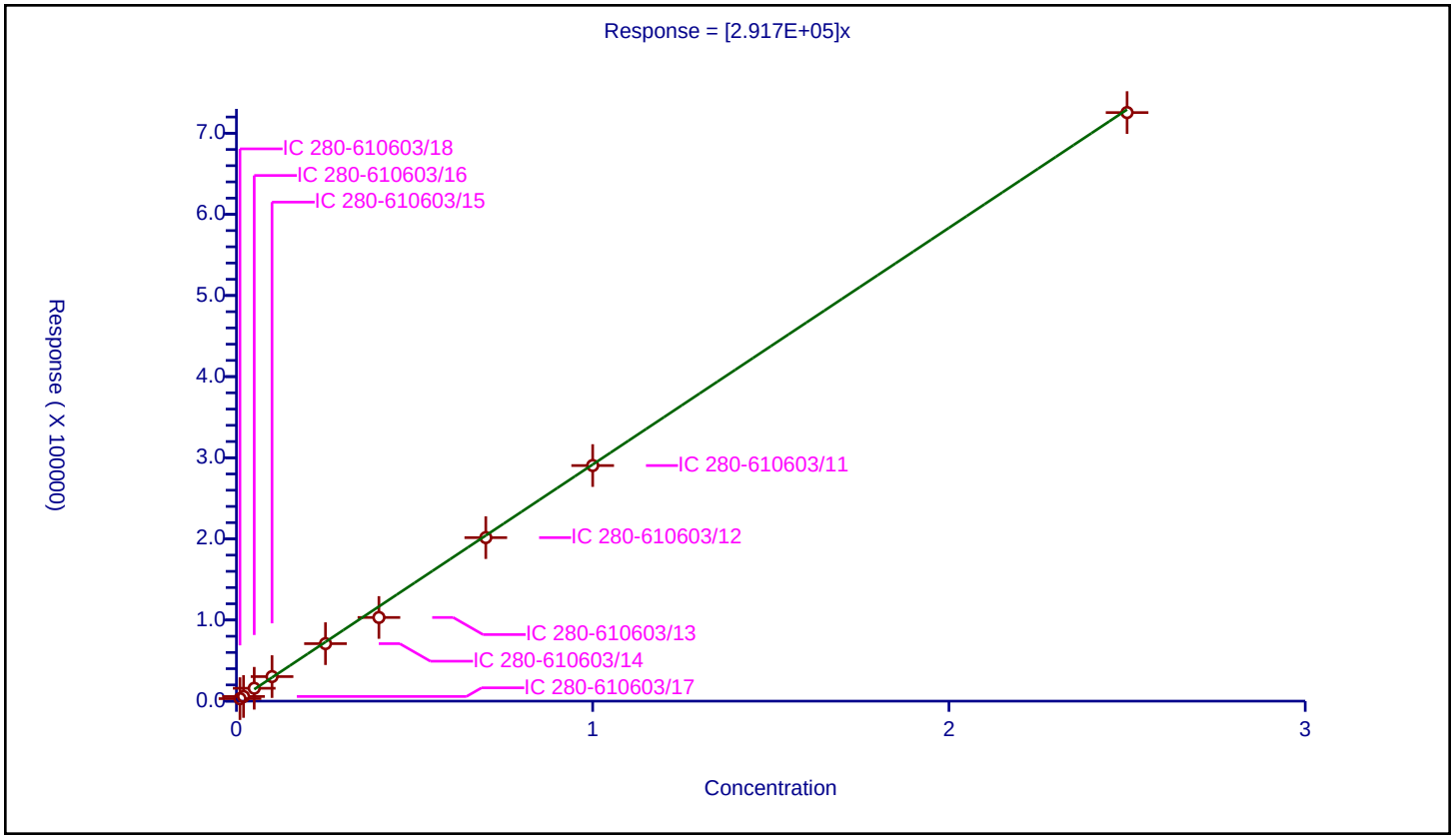
Curve Coefficients

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

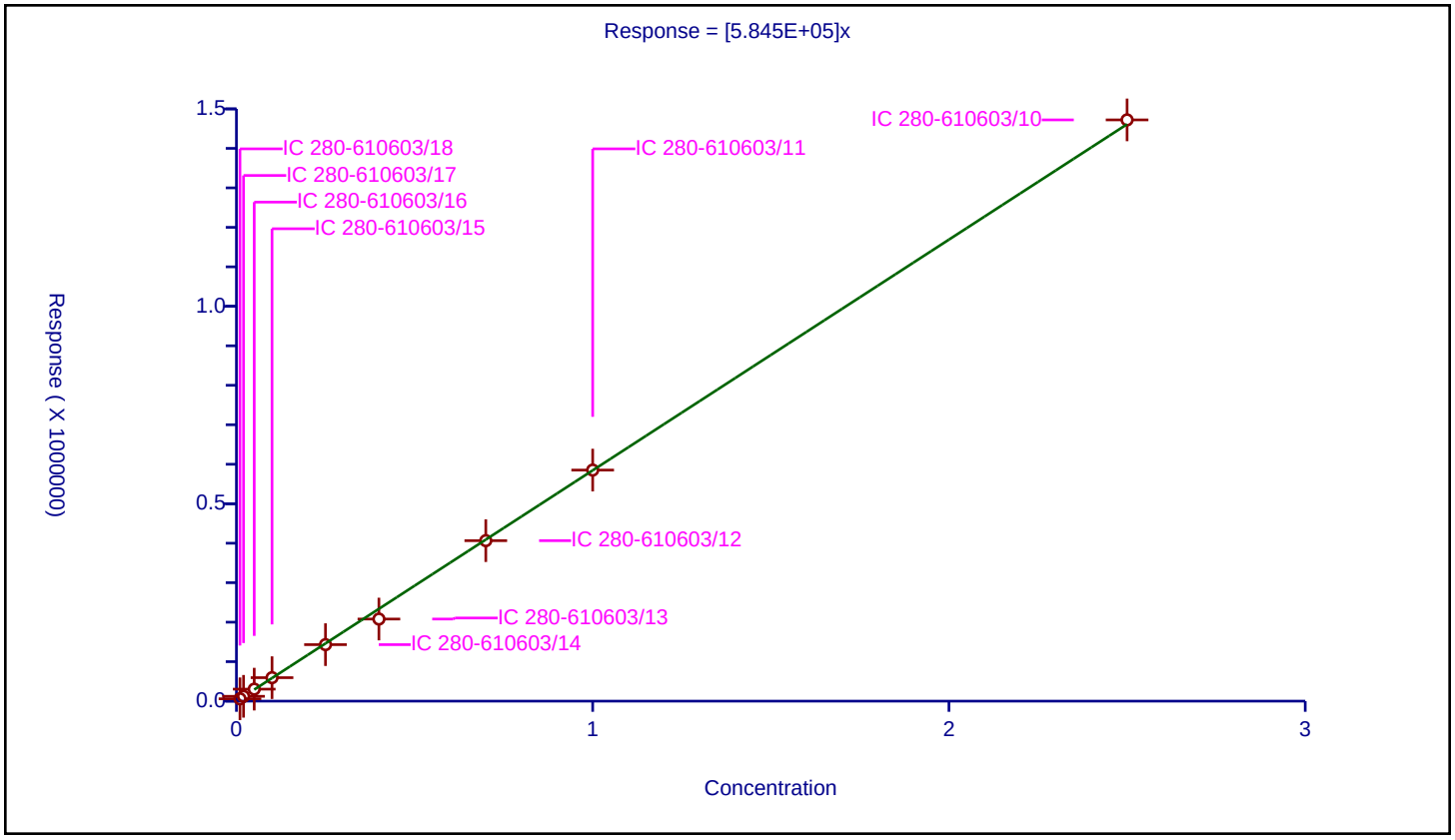
Curve Coefficients

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

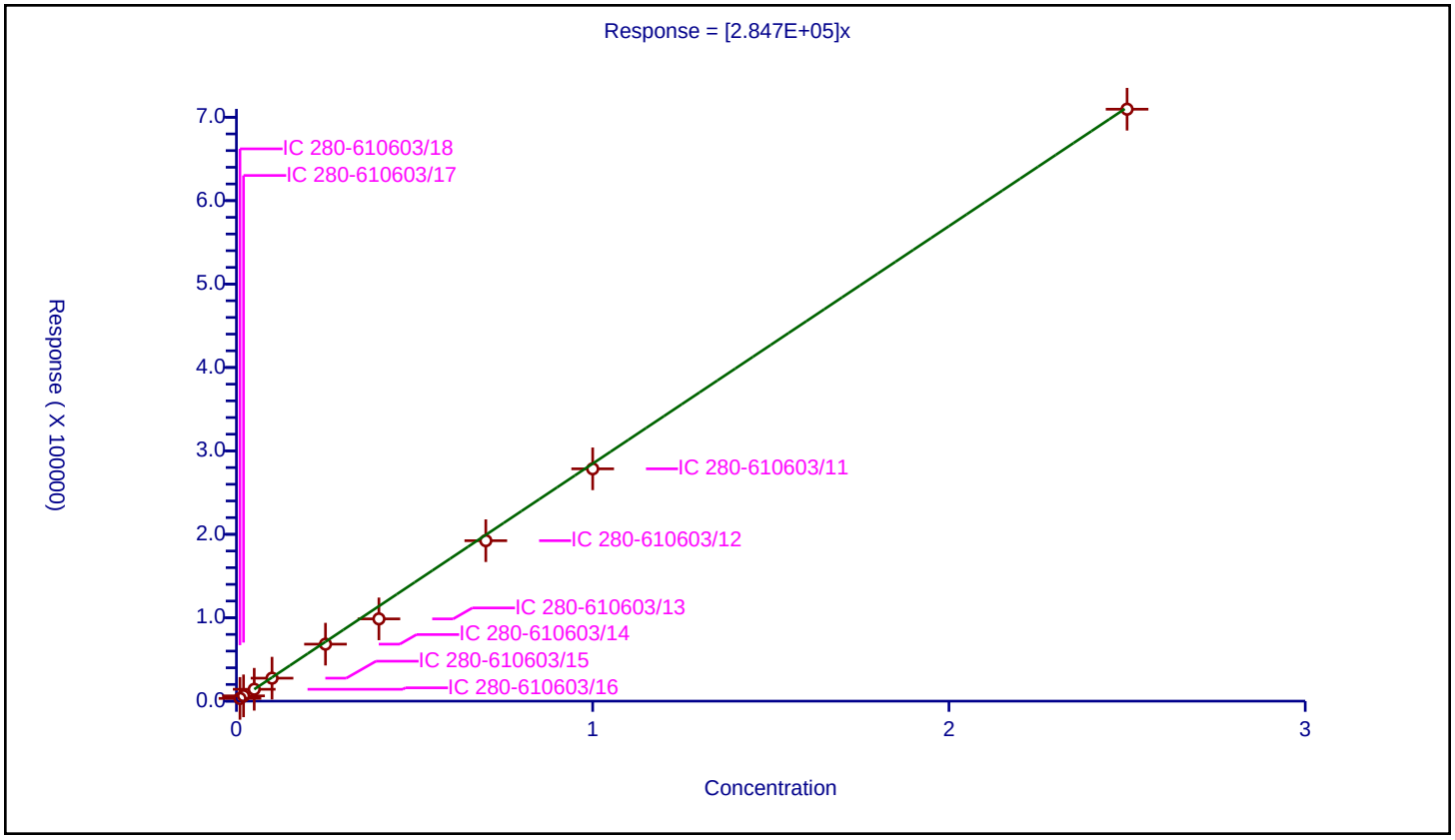
Curve Coefficients

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

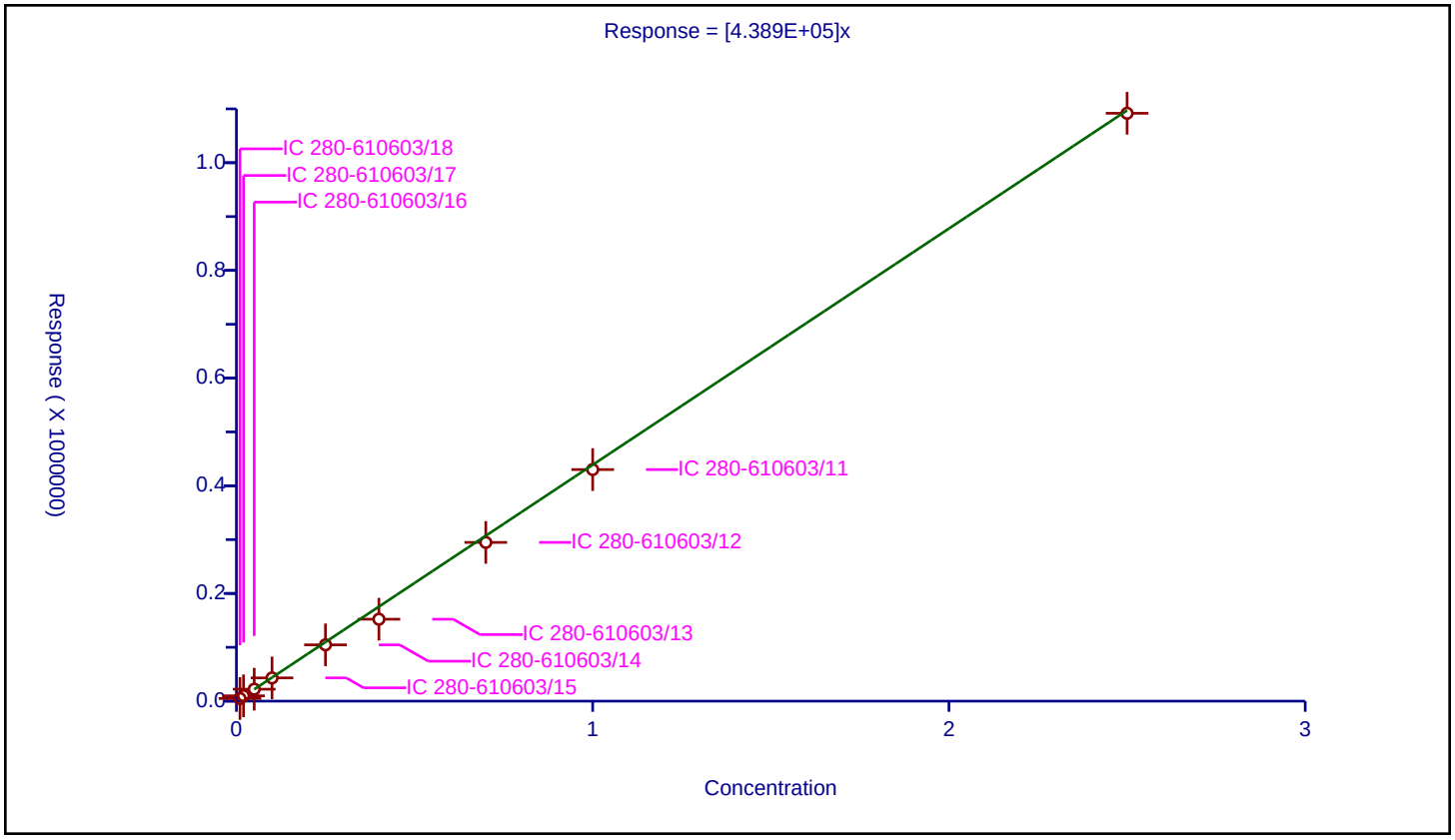
Curve Coefficients

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

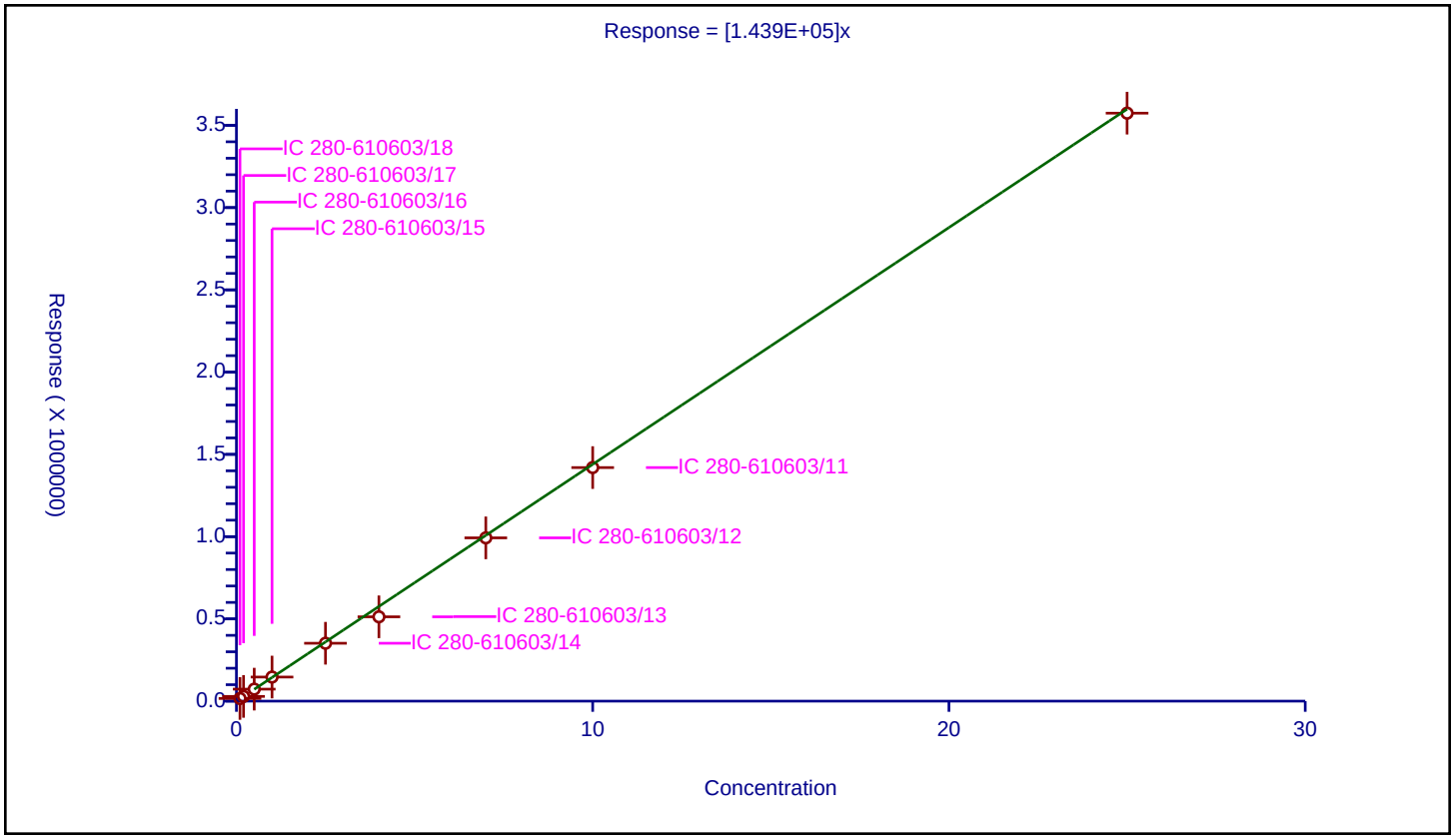
Curve Coefficients

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.: 280-176674-1 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.: 280-176674-1 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.: 280-176674-1 | 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

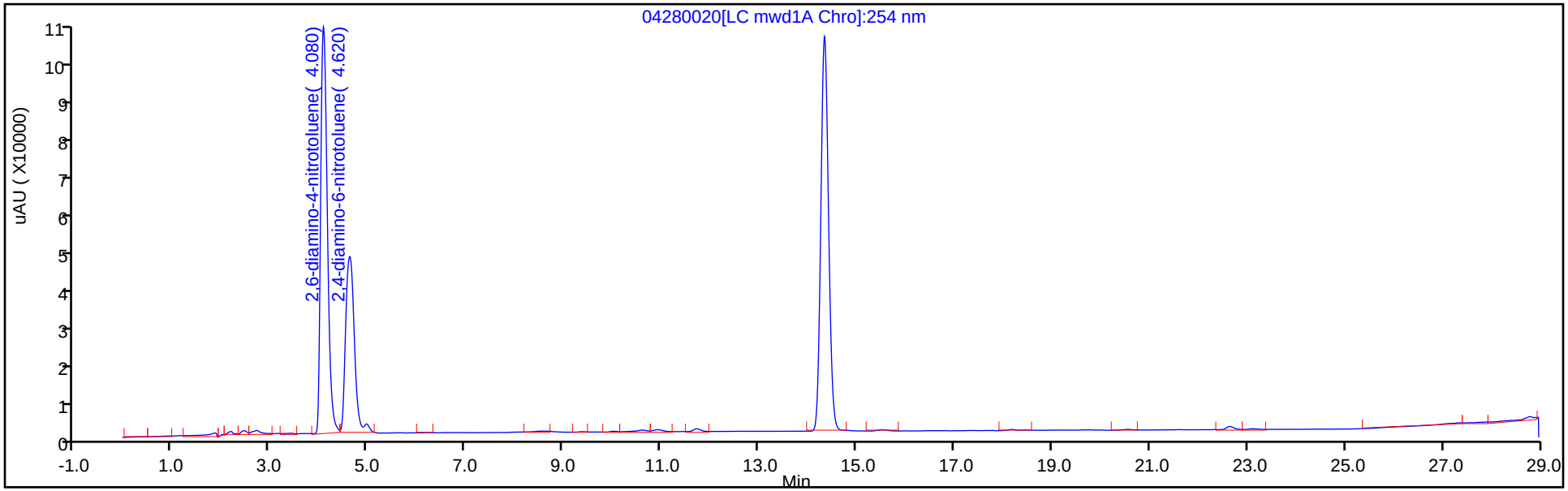
Report Date: 29-Apr-2023 13:04:21 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

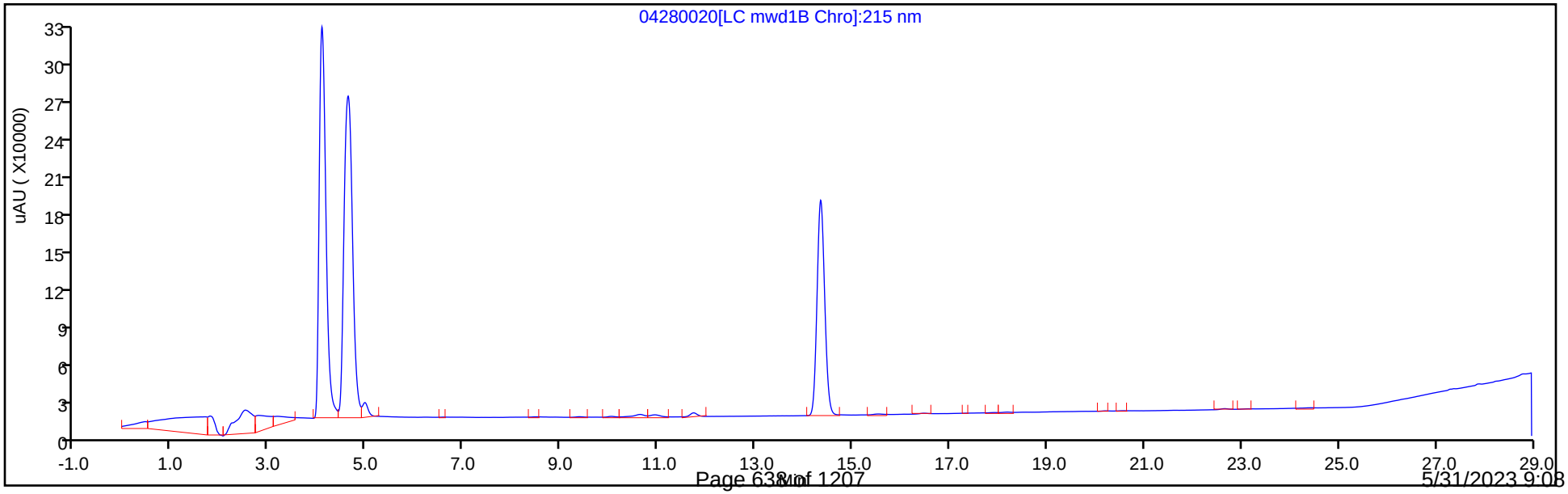
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280020.D

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

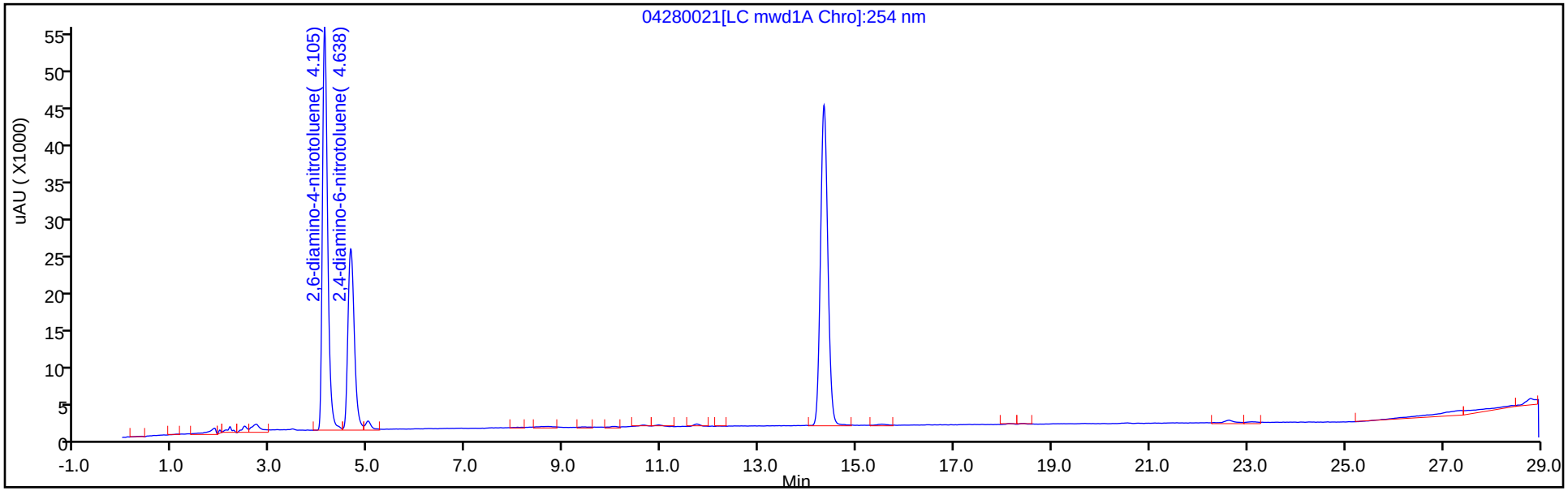
Report Date: 29-Apr-2023 13:04:21 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

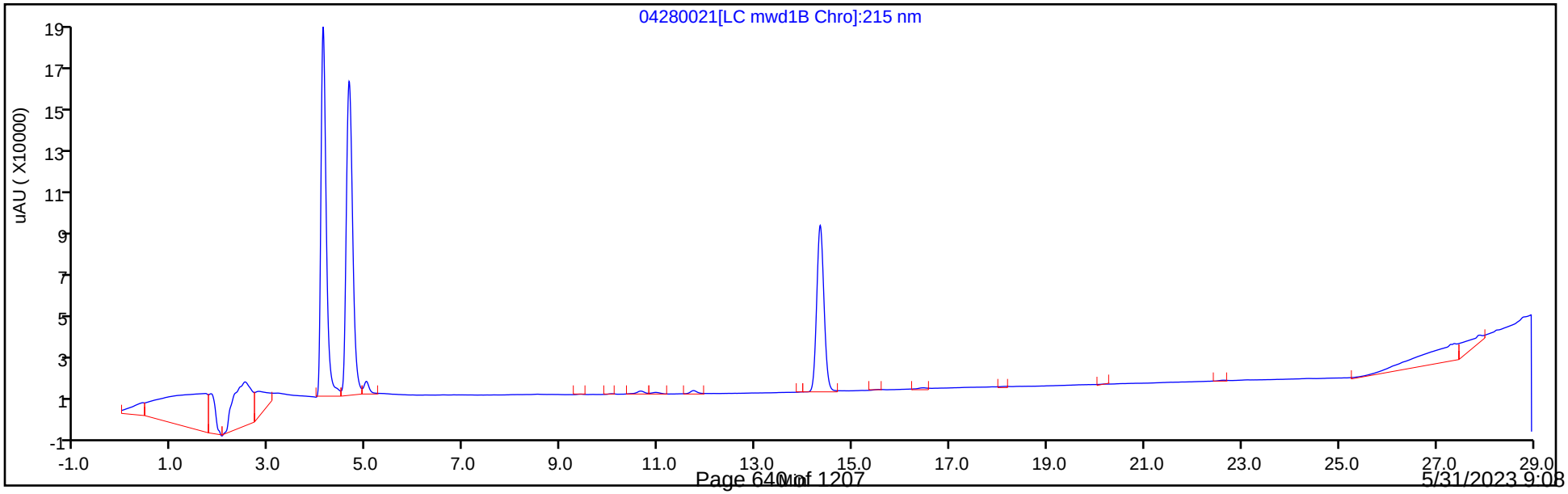
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280021.D

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

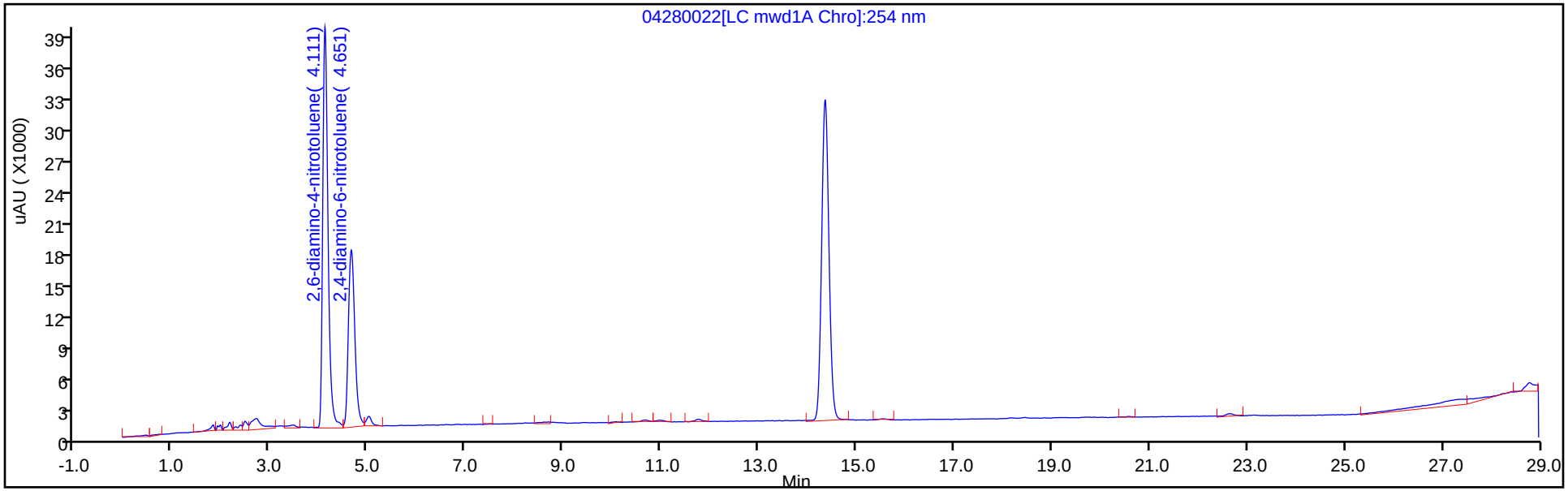
Report Date: 29-Apr-2023 13:04:22 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

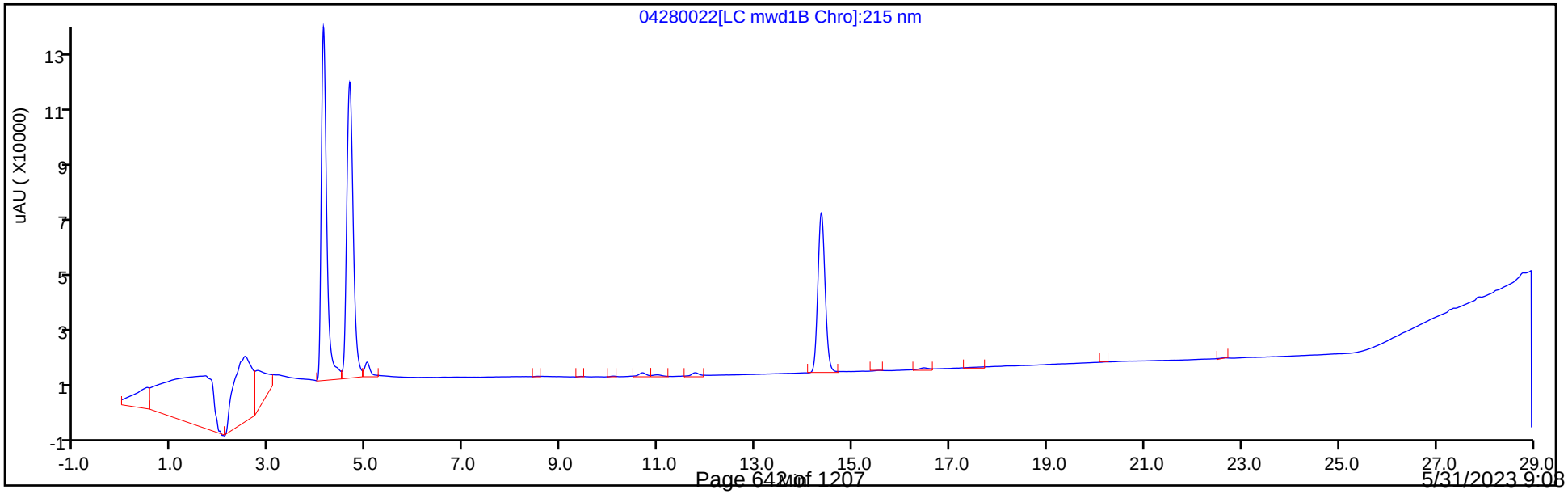
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280022.D

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

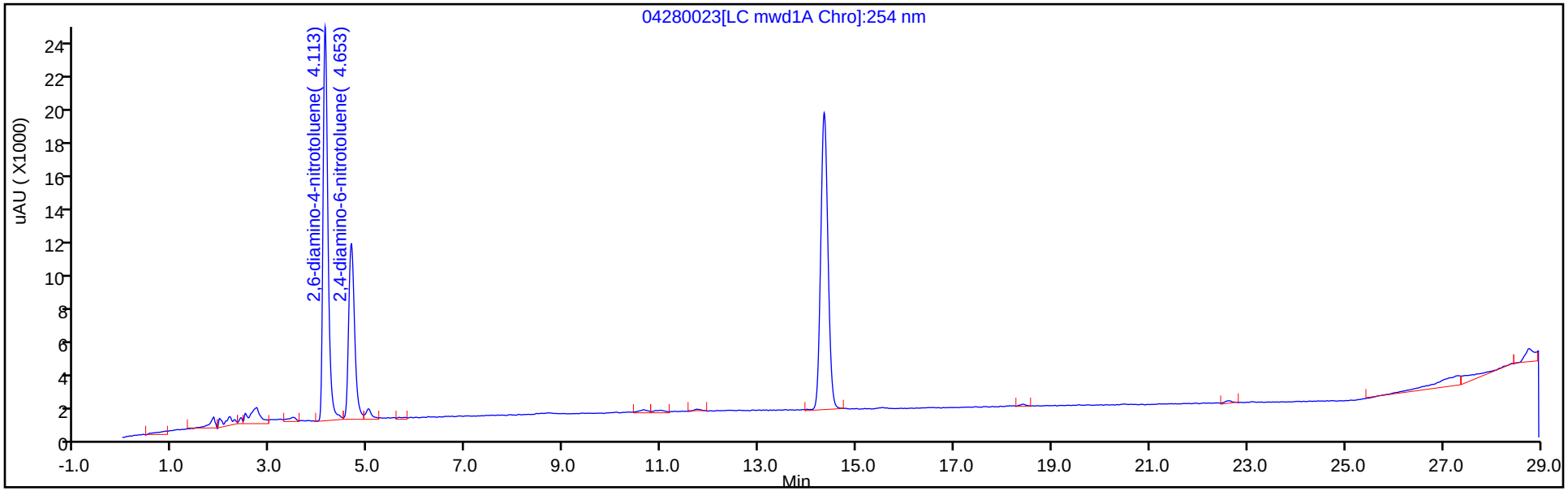
Report Date: 29-Apr-2023 13:04:22 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

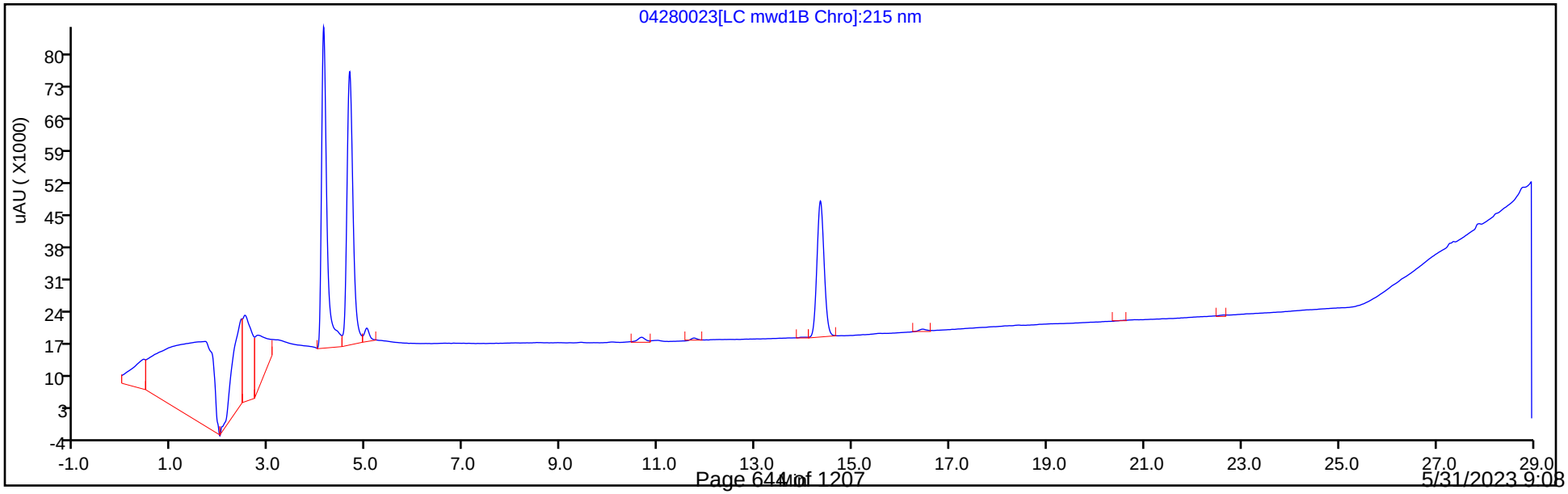
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280023.D

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

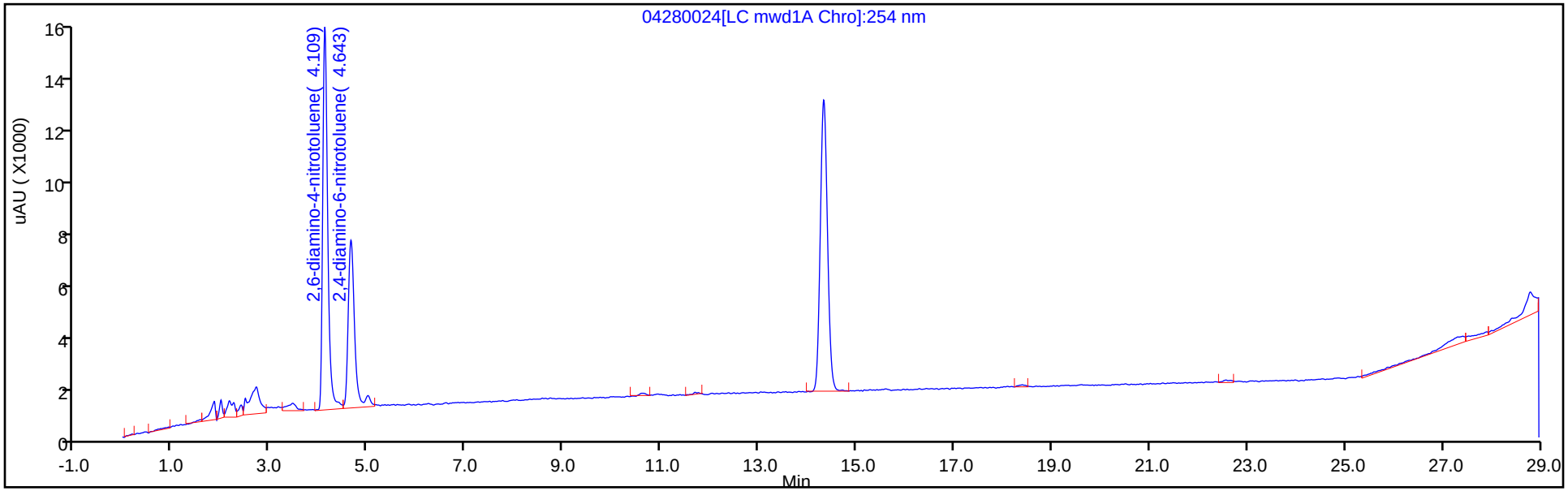
Report Date: 29-Apr-2023 13:04:22 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

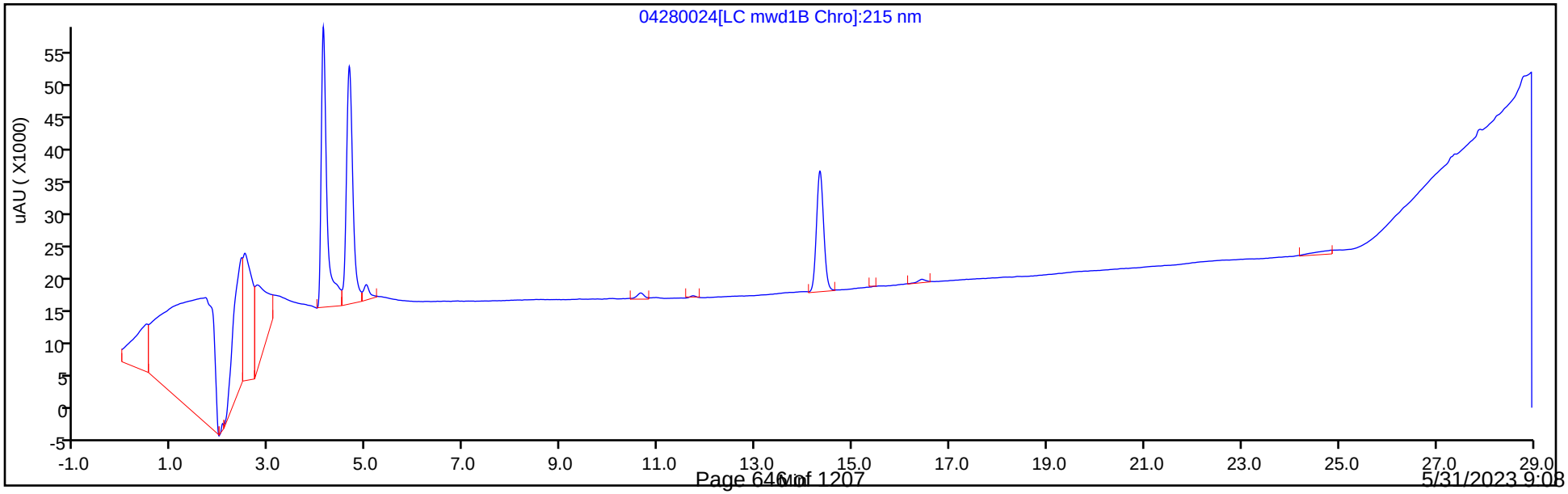
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280024.D

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

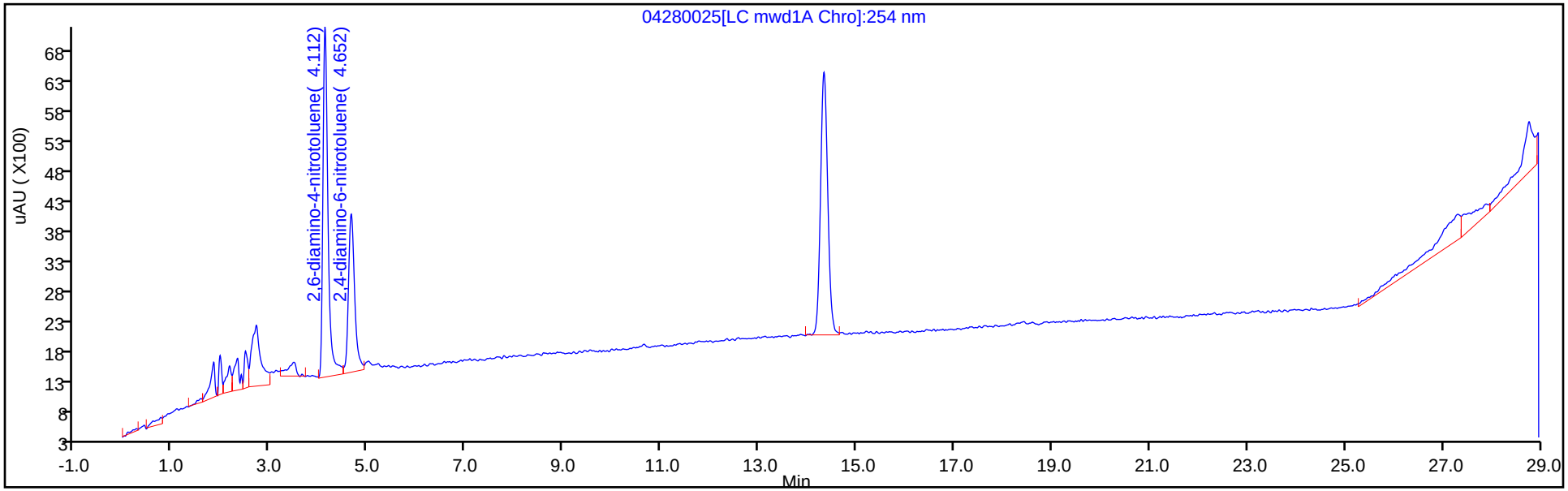
Report Date: 29-Apr-2023 13:04:23 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

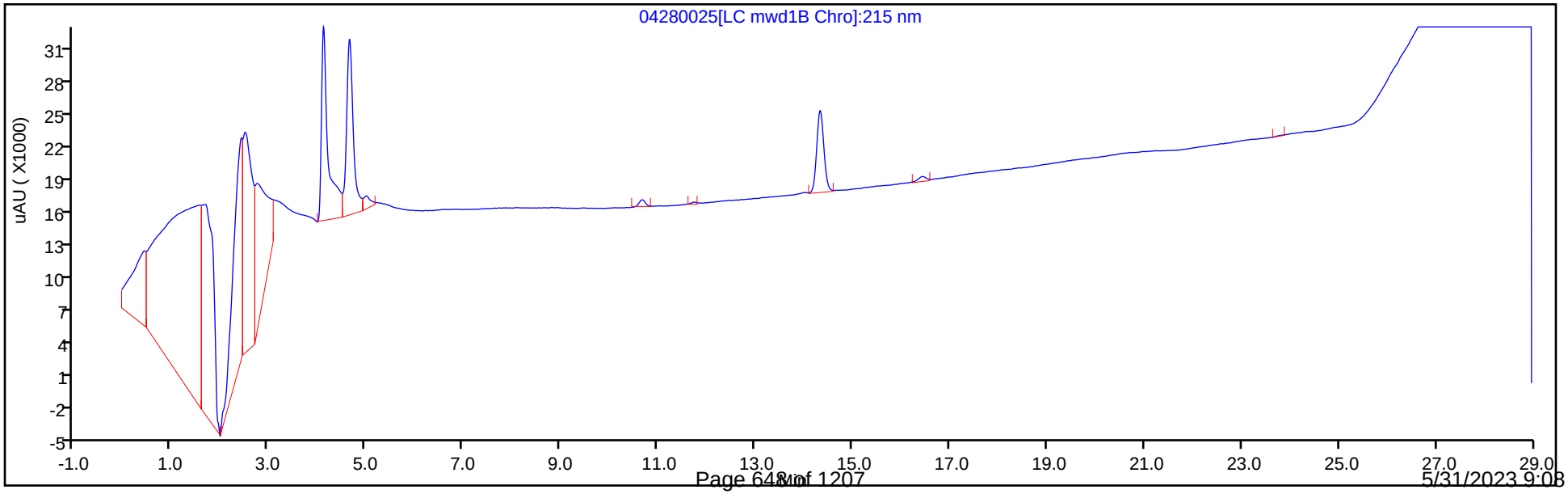
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280025.D

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

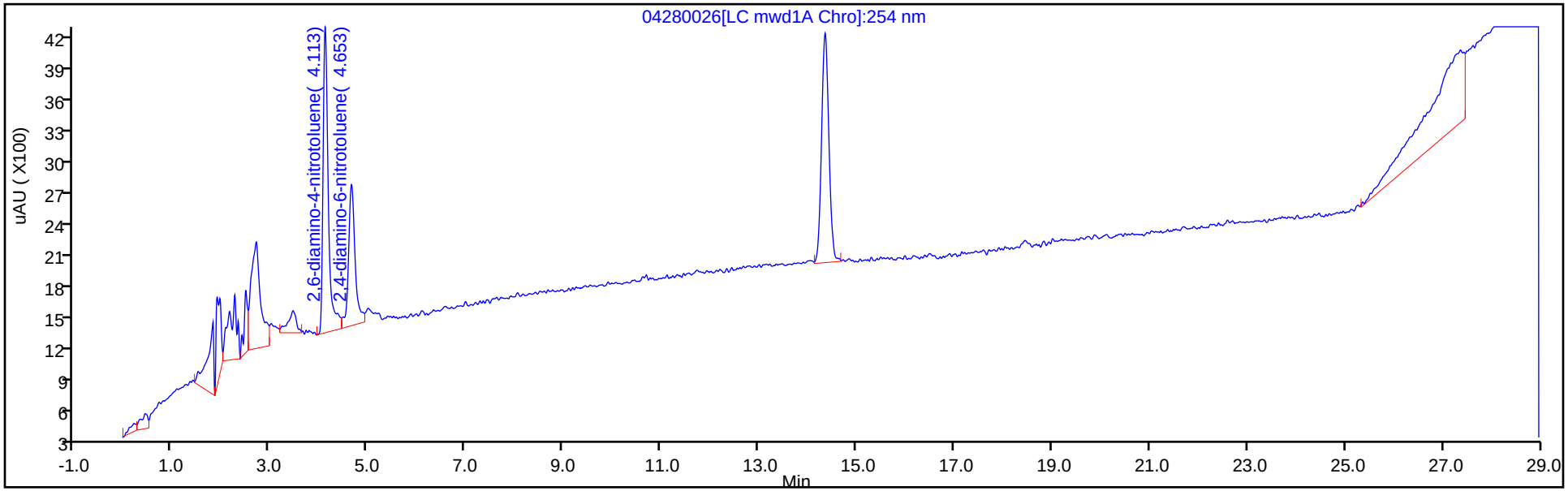
Report Date: 29-Apr-2023 13:04:23 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

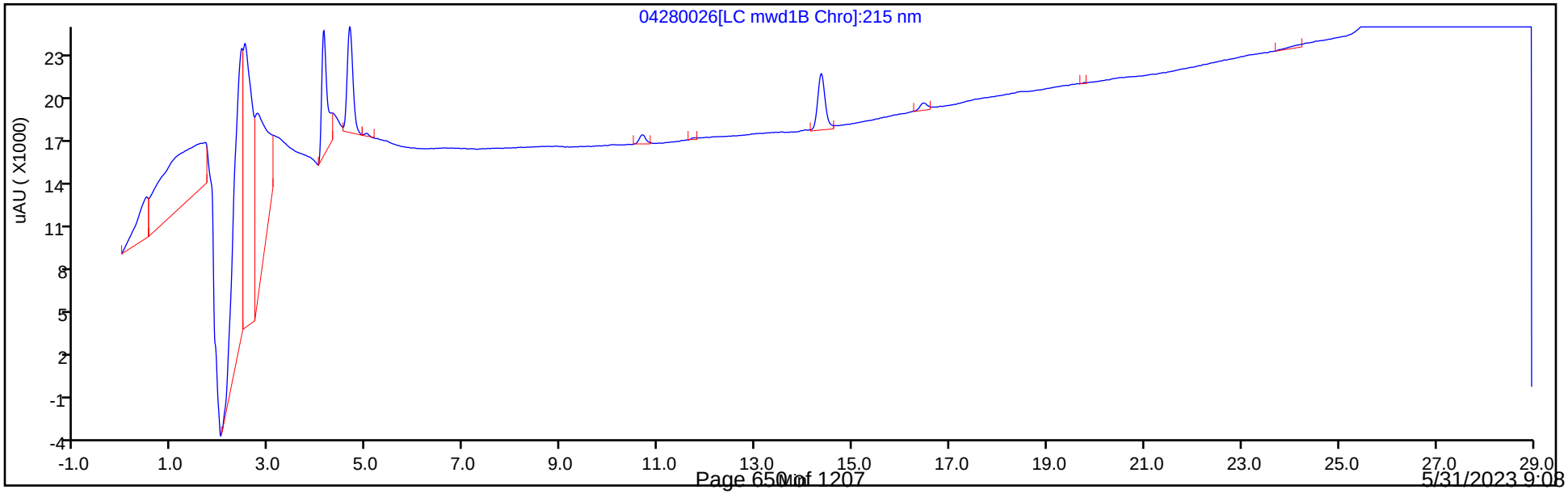
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280026.D

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

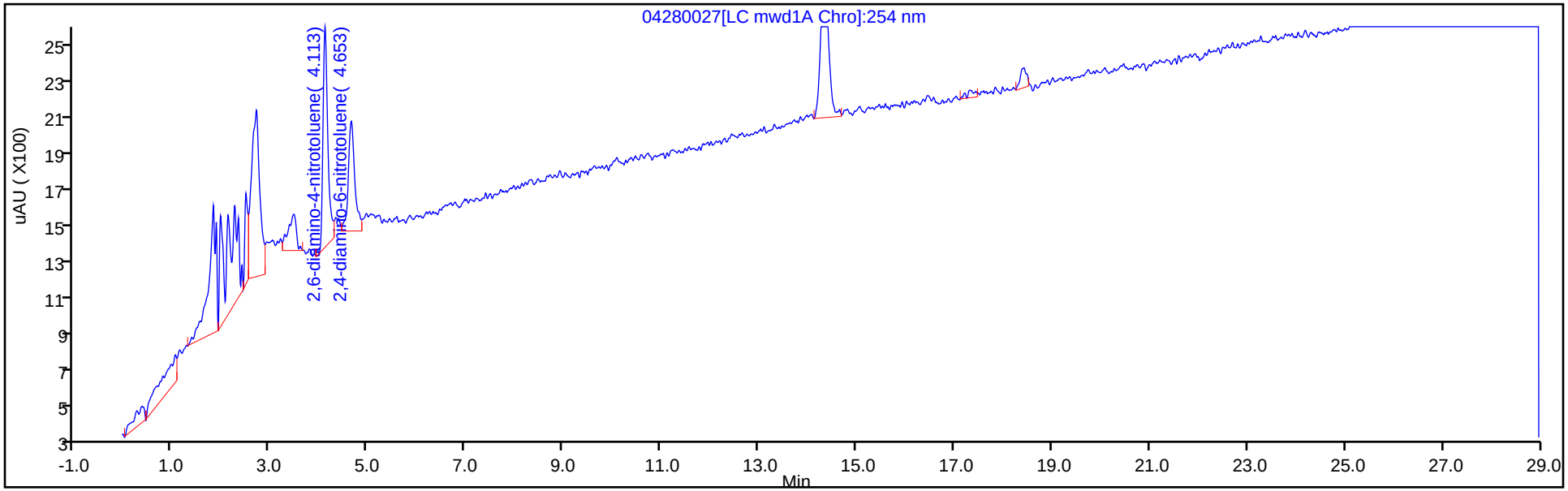
Report Date: 29-Apr-2023 13:04:24 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

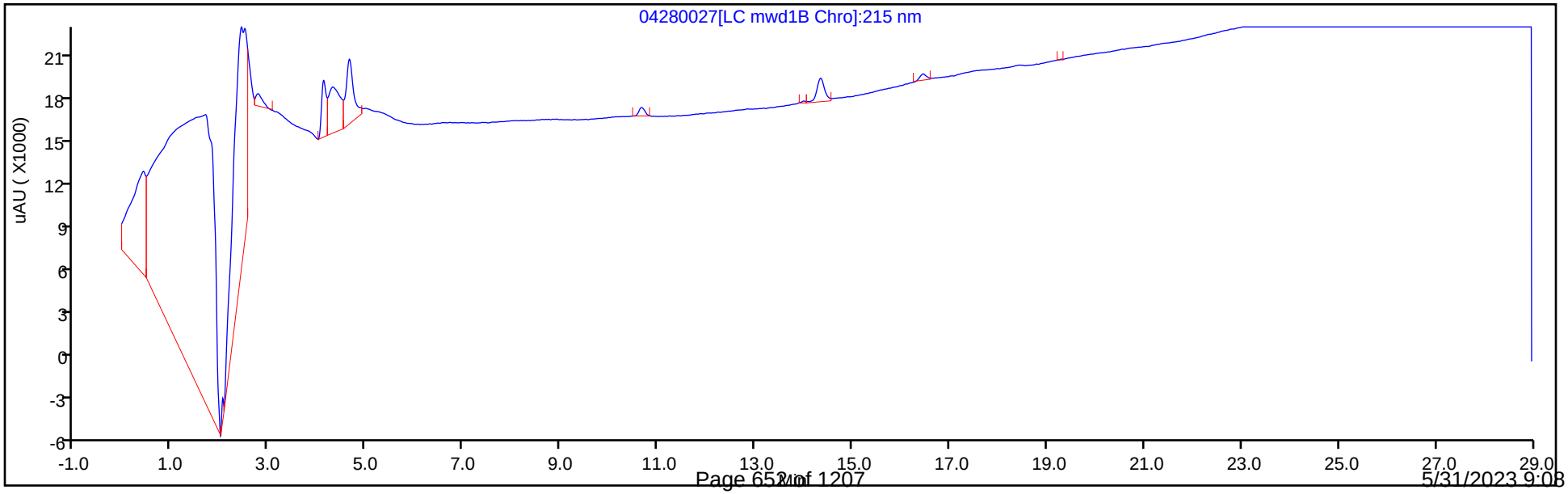
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

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

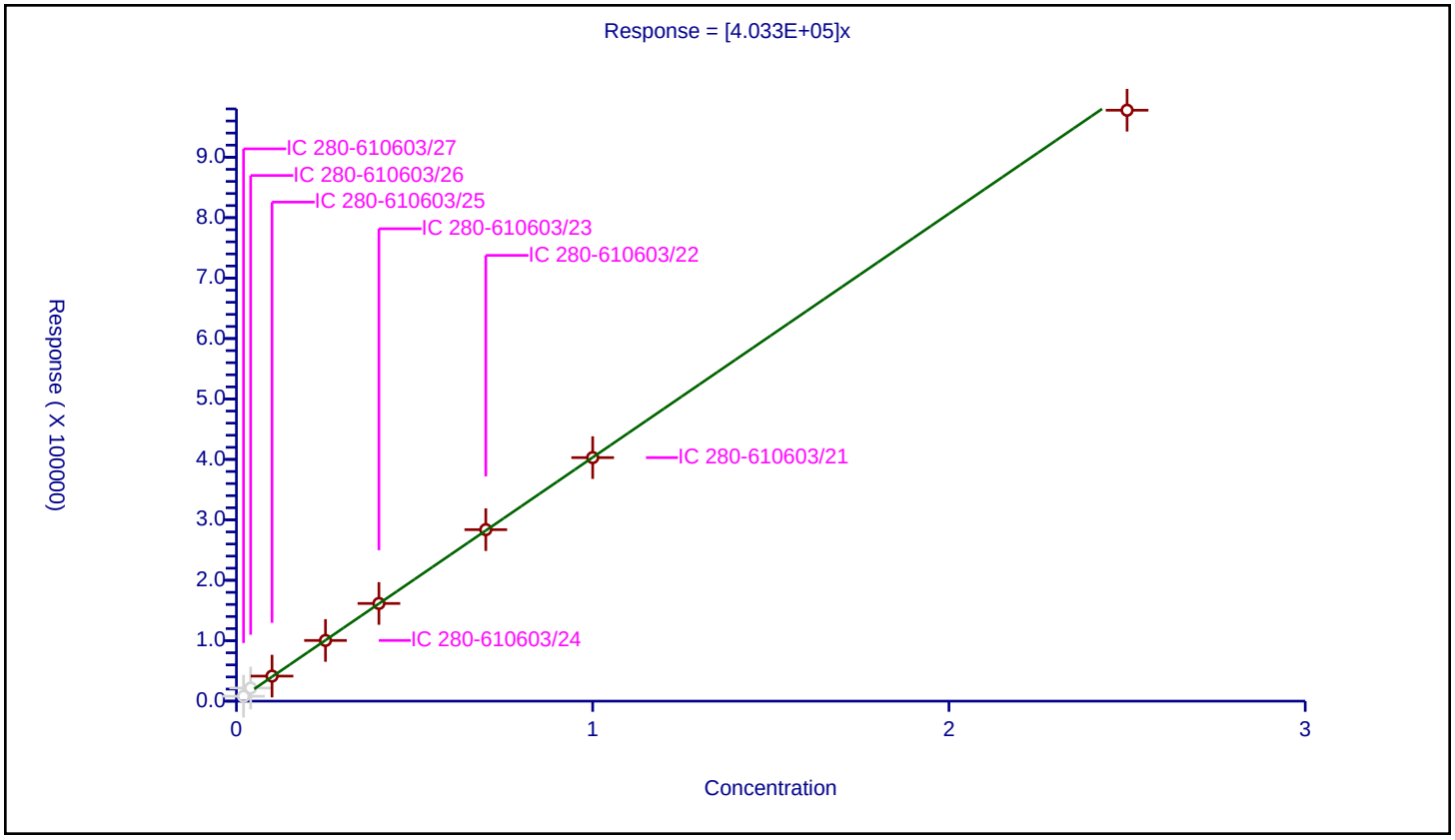
Curve Coefficients

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

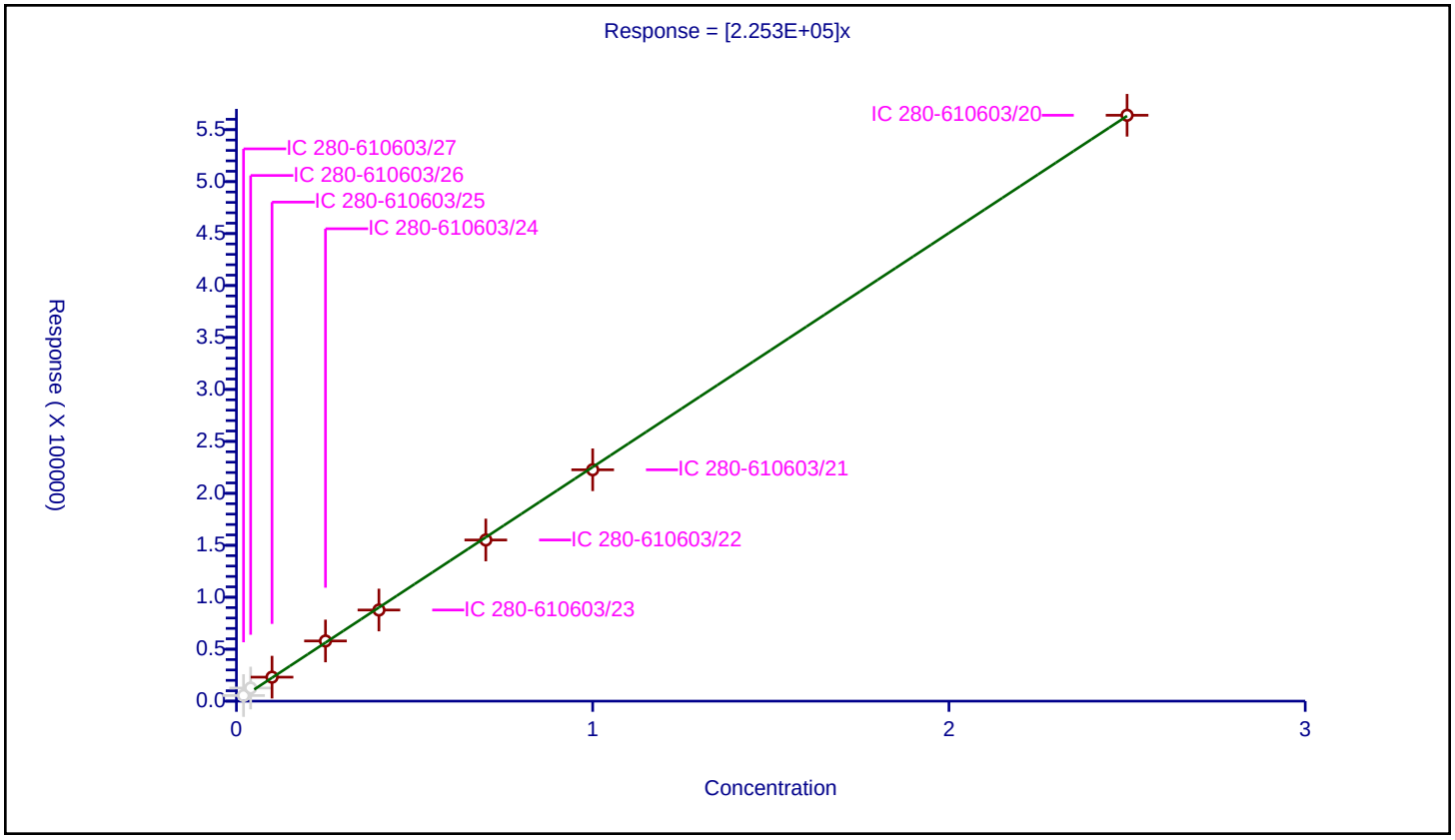
Curve Coefficients

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.: 280-176674-1

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.: 280-176674-1

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

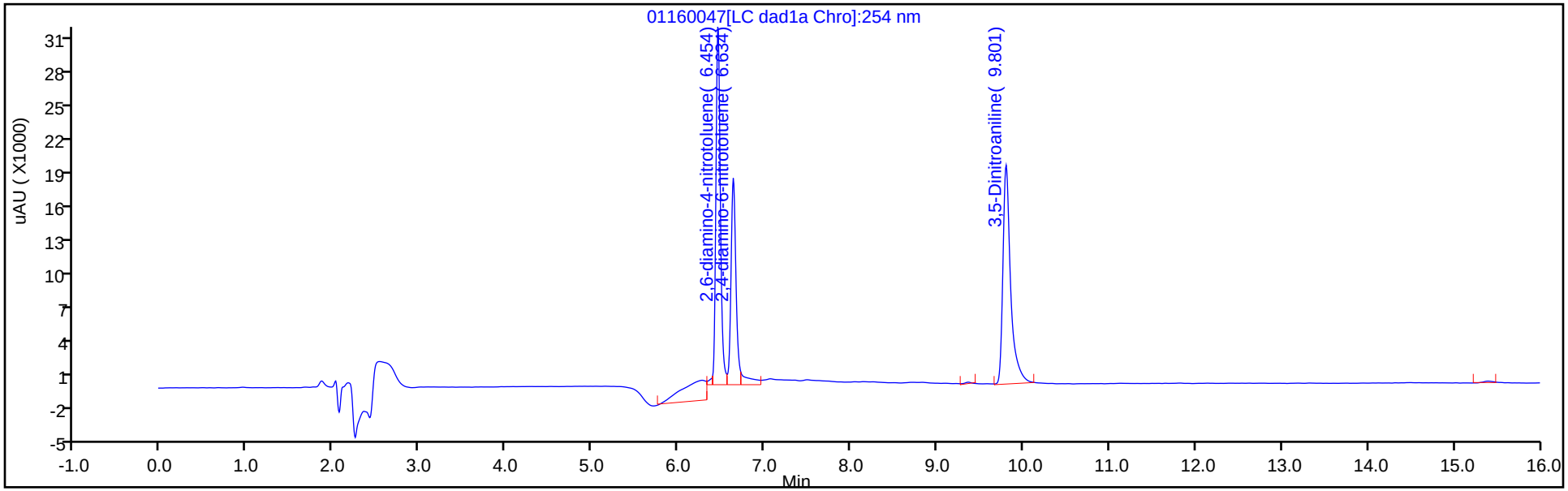
Report Date: 17-Jan-2023 12:54:42 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Denver

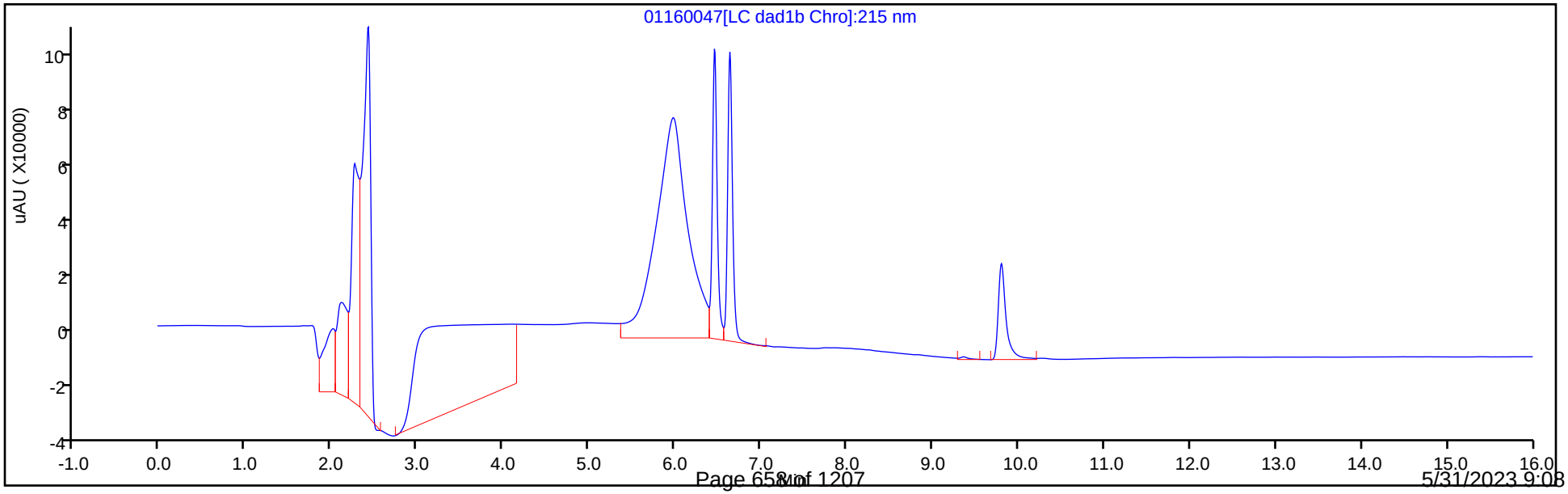
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160047.d

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

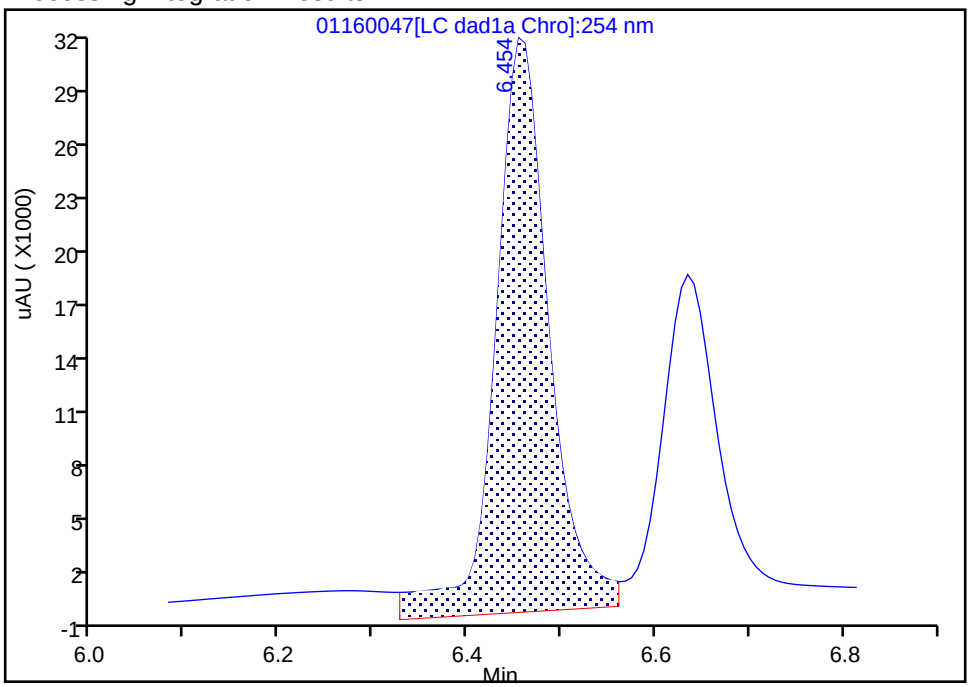
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160047.d				
Injection Date:	17-Jan-2023 03:40:08	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV ADD				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	50	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit 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

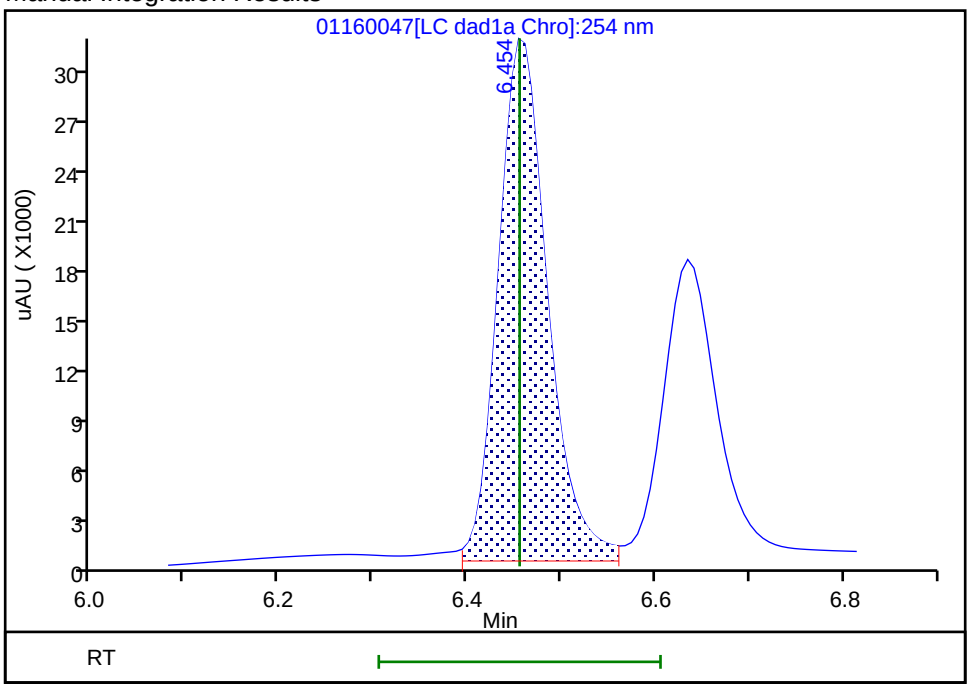
Processing Integration Results

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

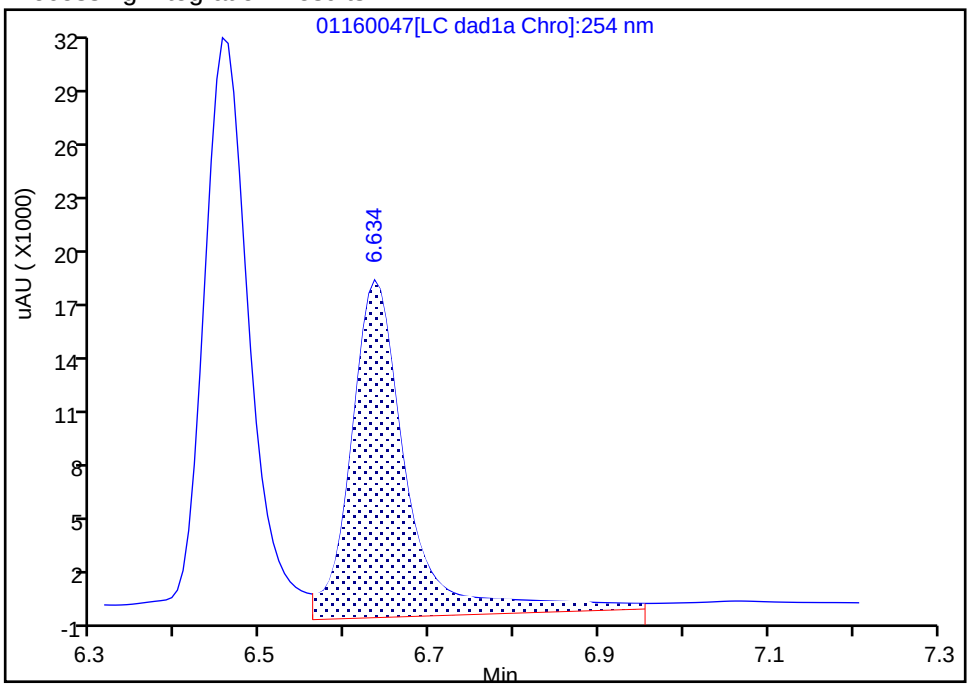
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160047.d
Injection Date: 17-Jan-2023 03:40:08 Instrument ID: CHHPLC_X3
Lims ID: ICV ADD
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 50 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

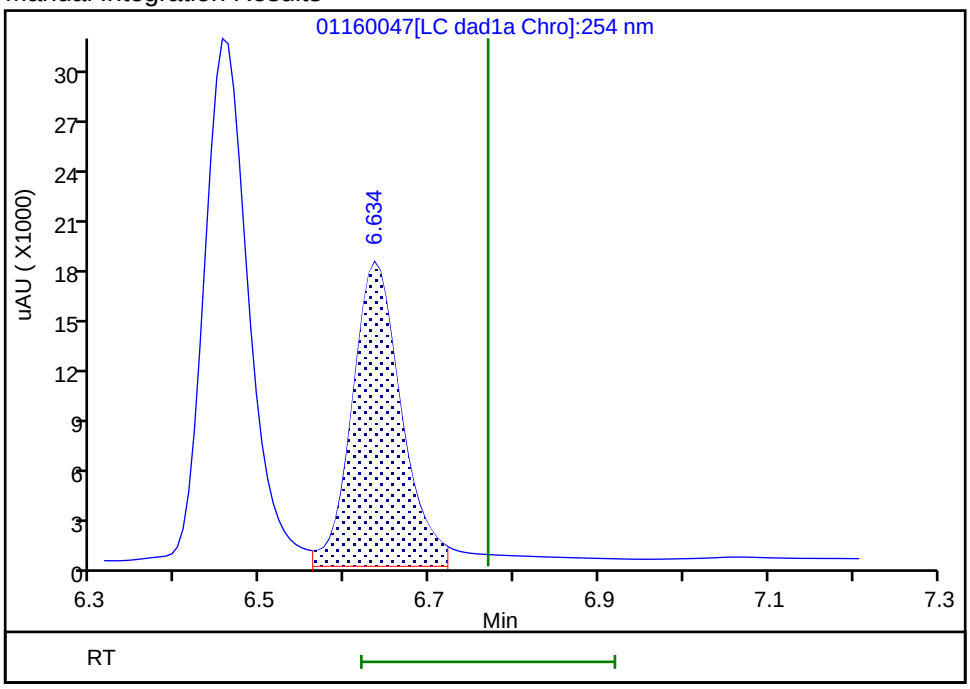
Processing Integration Results

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.: 280-176674-1

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.: 280-176674-1

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

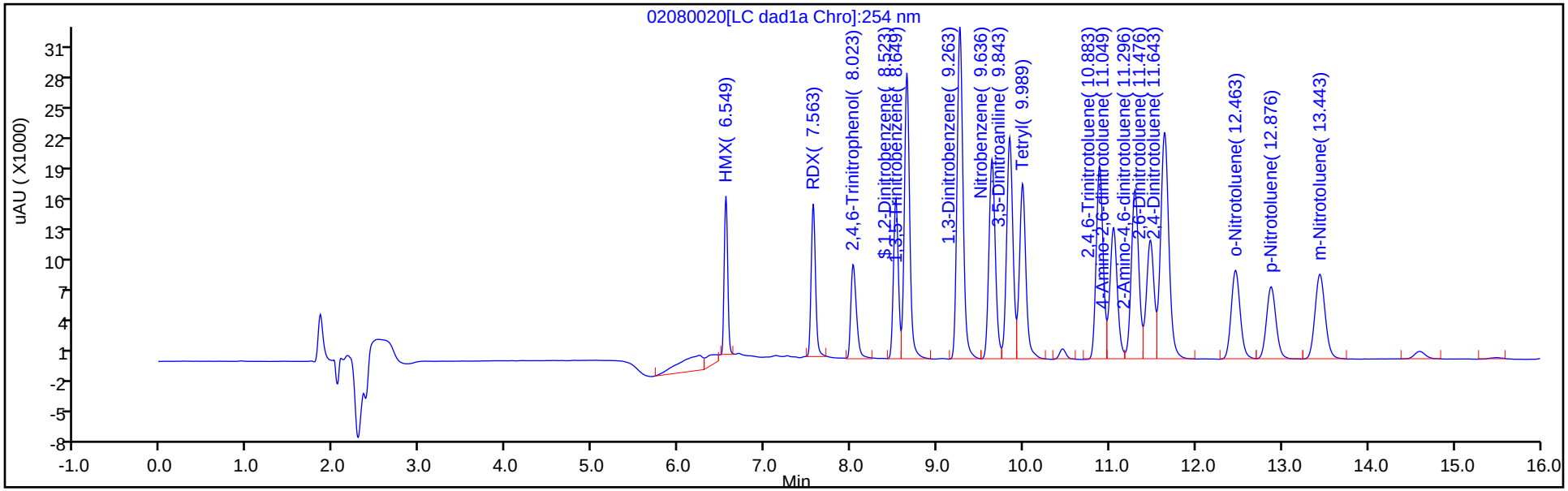
Report Date: 09-Feb-2023 13:04:01 Chrom Revision: 2.3 01-Feb-2023 13:23:06

Eurofins Denver

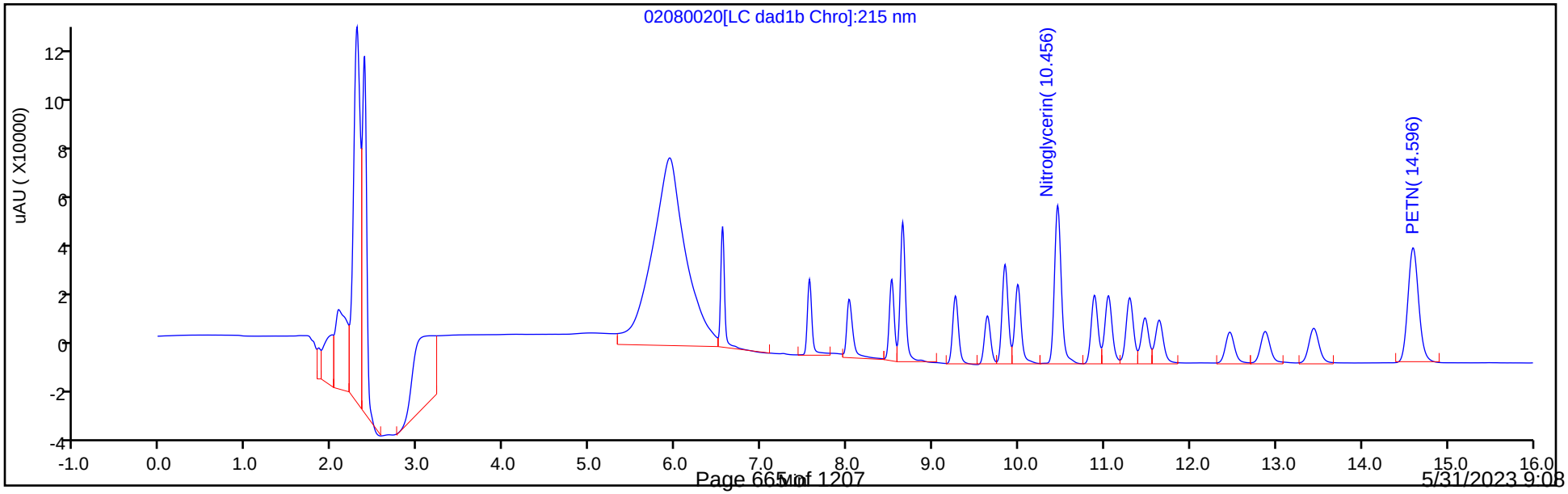
Data File: \\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080020.d

Injection Date:	08-Feb-2023 19:05:10	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	ICV INT			Worklist Smp#:	20
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins Denver

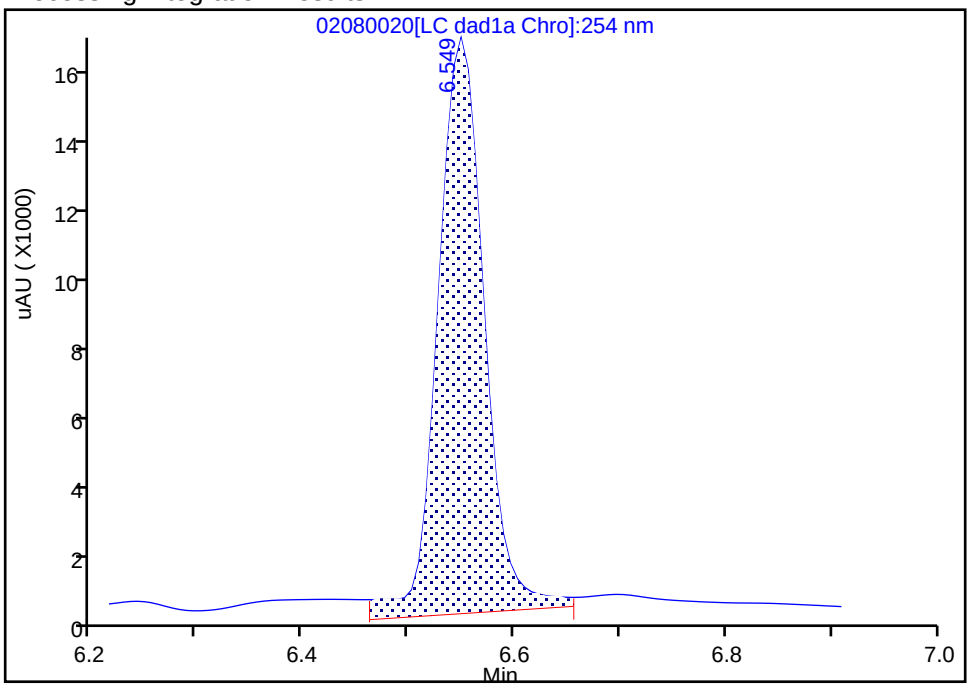
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080020.d				
Injection Date:	08-Feb-2023 19:05:10	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

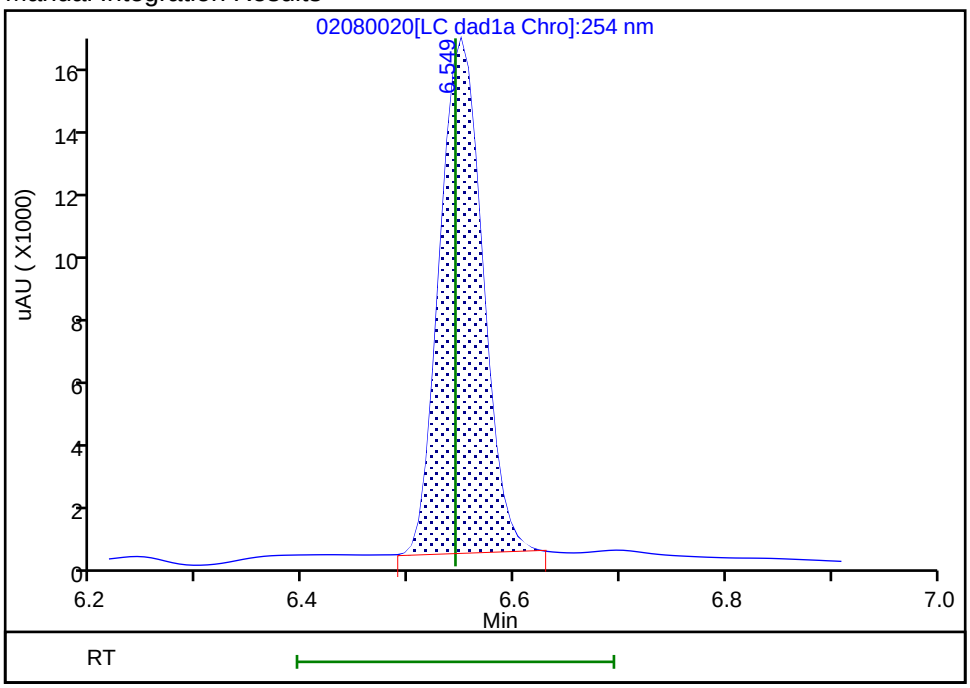
Processing Integration Results

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

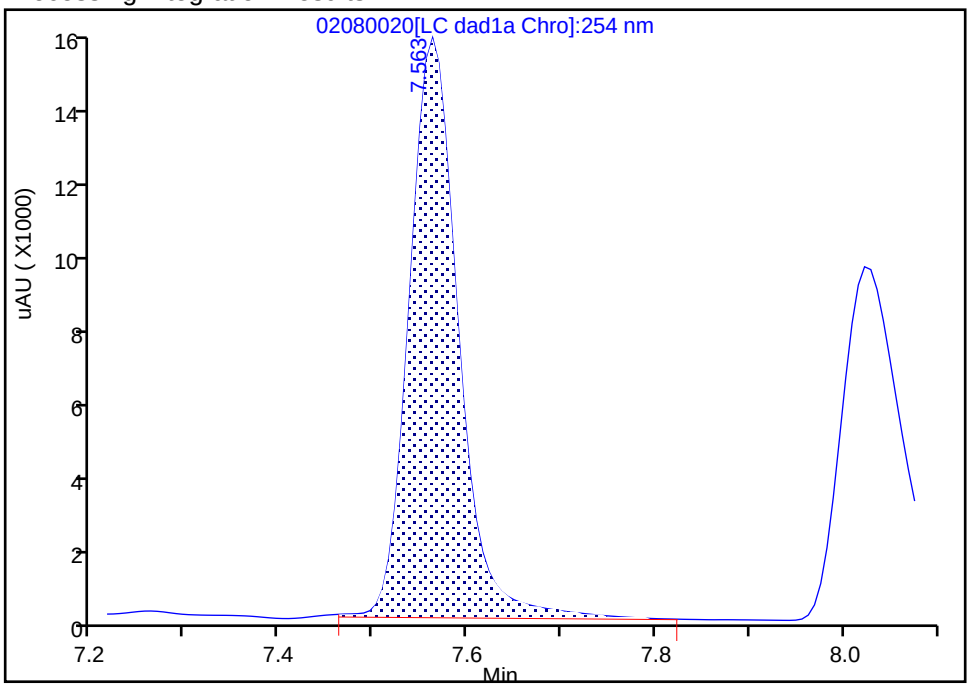
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080020.d				
Injection Date:	08-Feb-2023 19:05:10	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

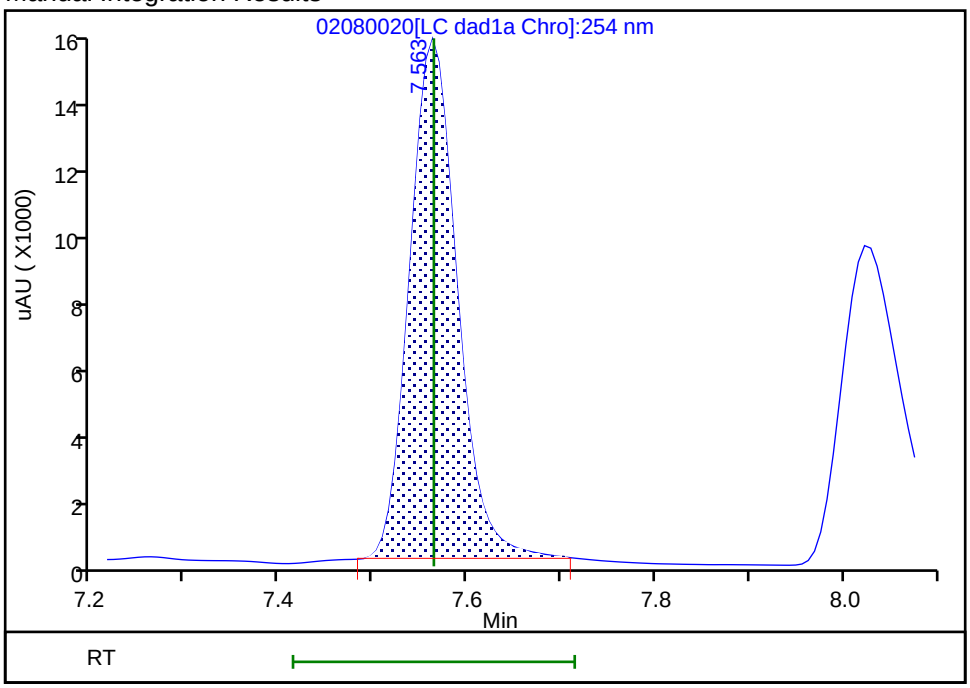
Processing Integration Results

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.: 280-176674-1

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.: 280-176674-1

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

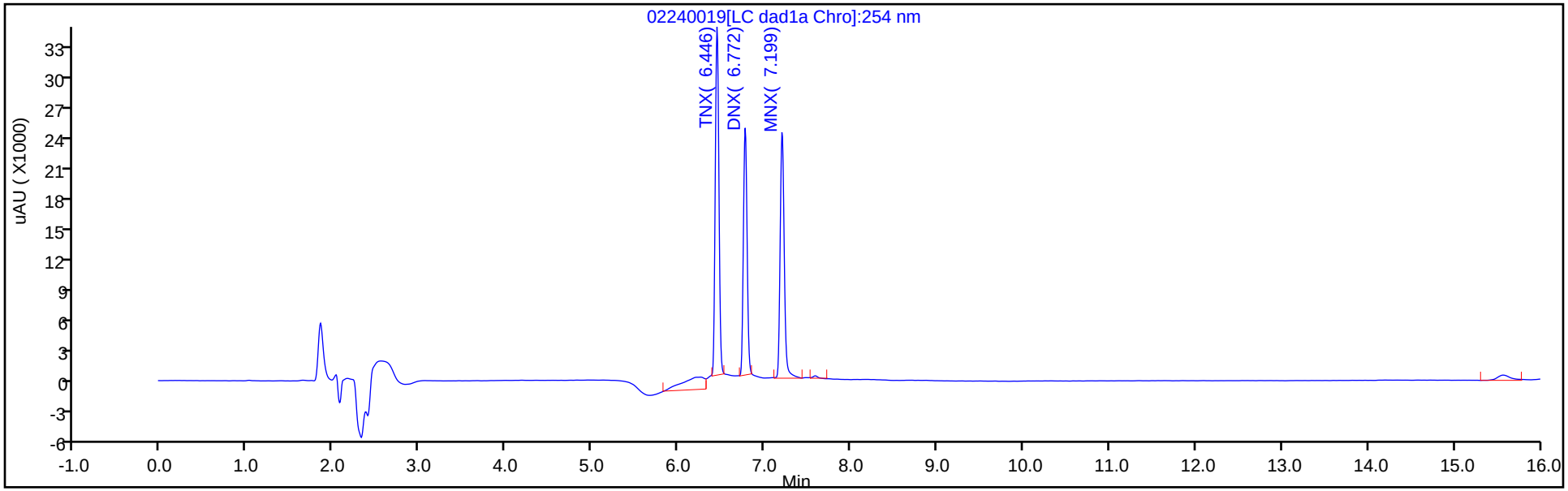
Report Date: 28-Feb-2023 13:33:59 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Denver

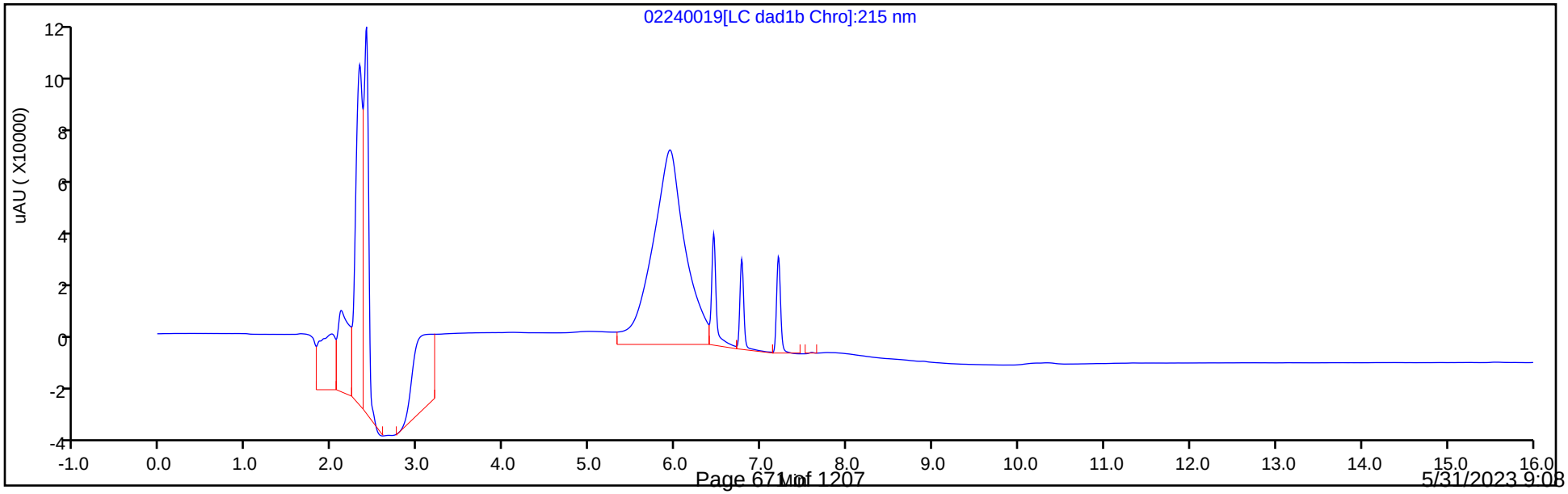
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240019.d

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

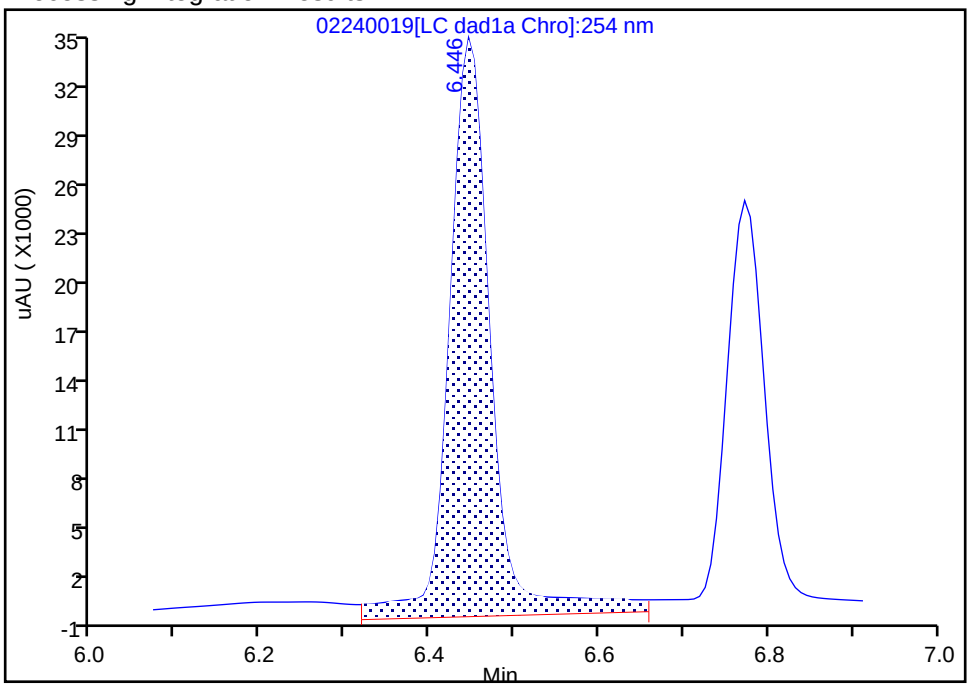
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240019.d
Injection Date: 24-Feb-2023 18:04:21 Instrument ID: CHHPLC_X3
Lims ID: ICV DMT
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

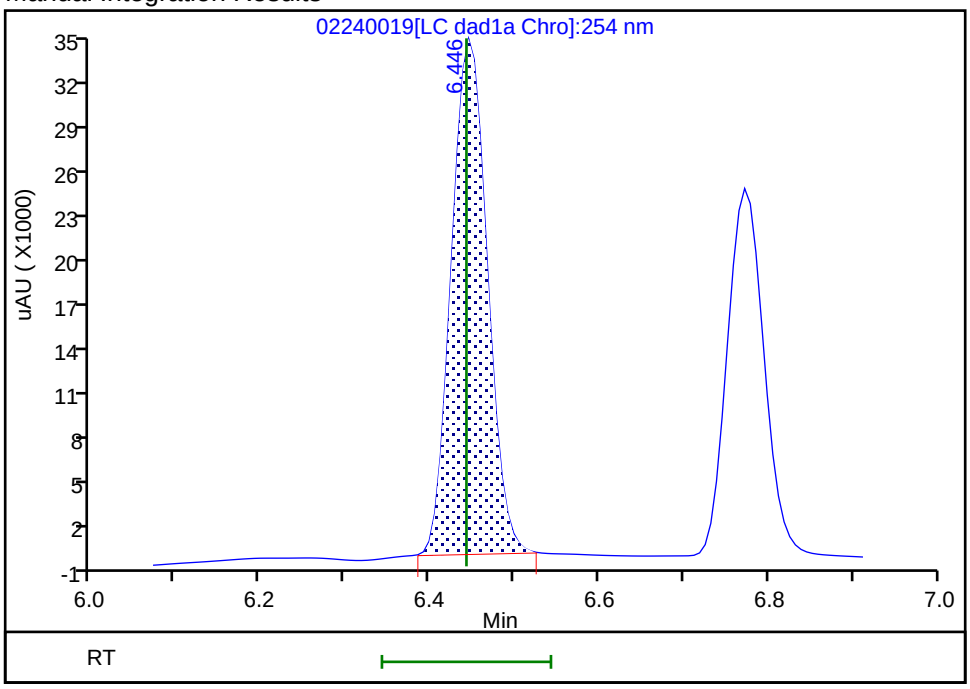
Processing Integration Results

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

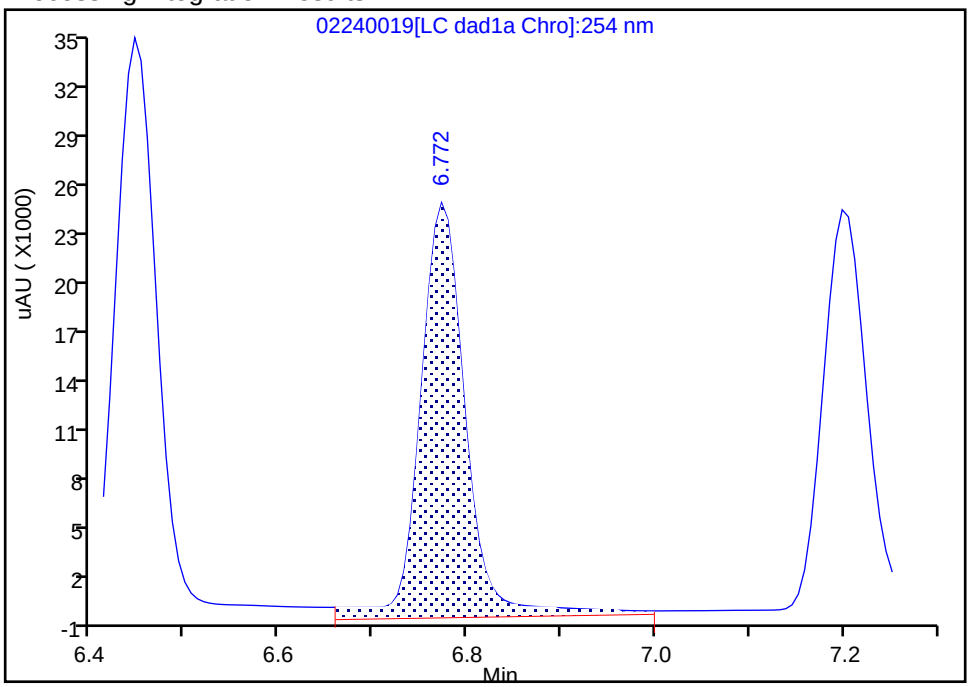
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240019.d				
Injection Date:	24-Feb-2023 18:04:21	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

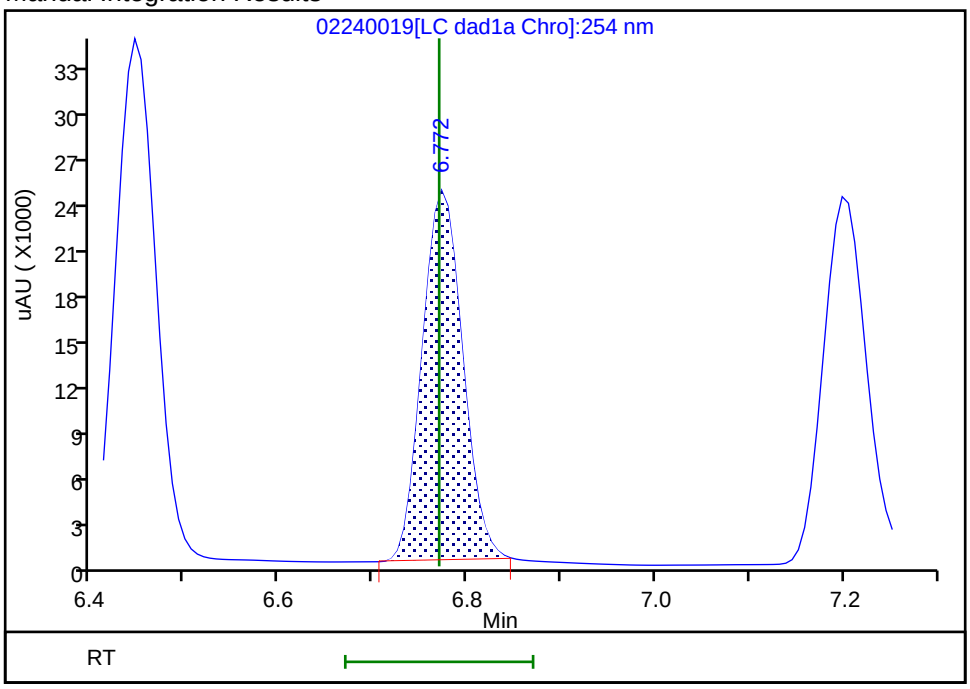
Processing Integration Results

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.: 280-176674-1

SDG No.:

Lab Sample ID: CCV 280-613168/32 | Calibration Date: 05/19/2023 22:41

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: 05190032.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	93528	97276		260	250	4.0	20.0
RDX	Ave	106380	114836		270	250	7.9	20.0
Picric acid	Ave	75830	83564		275	250	10.2	20.0
1,3,5-Trinitrobenzene	Ave	217147	230412		265	250	6.1	20.0
1,3-Dinitrobenzene	Ave	294397	314180		267	250	6.7	20.0
Nitrobenzene	Ave	191245	195144		255	250	2.0	20.0
3,5-Dinitroaniline	Lin2		242216		265	250	5.9	20.0
Tetryl	Ave	164121	147104		224	250	-10.4	20.0
Nitroglycerin	Ave	64070	68084		2660	2500	6.3	20.0
2,4,6-Trinitrotoluene	Ave	211040	215868		256	250	2.3	20.0
4-Amino-2,6-dinitrotoluene	Ave	154933	161716		261	250	4.4	20.0
2-Amino-4,6-dinitrotoluene	Ave	201410	206292		256	250	2.4	20.0
2,6-Dinitrotoluene	Ave	142745	155028		272	250	8.6	20.0
2,4-Dinitrotoluene	Ave	296667	312288		263	250	5.3	20.0
2-Nitrotoluene	Ave	127896	126744		248	250	-0.9	20.0
4-Nitrotoluene	Ave	111880	108304		242	250	-3.2	20.0
3-Nitrotoluene	Ave	140492	138916		247	250	-1.1	20.0
PETN	Ave	68845	74332		2700	2500	8.0	20.0
1,2-Dinitrobenzene	Ave	126309	141520		280	250	12.0	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Lab Sample ID: CCV 280-613168/32 Calibration Date: 05/19/2023 22:41

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: 05190032.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.55	6.40	6.70
RDX	7.57	7.42	7.72
Picric acid	7.97	7.81	8.11
1,3,5-Trinitrobenzene	8.64	8.50	8.80
1,3-Dinitrobenzene	9.27	9.13	9.43
Nitrobenzene	9.64	9.49	9.79
3,5-Dinitroaniline	9.88	9.73	10.03
Tetryl	10.00	9.87	10.17
Nitroglycerin	10.46	10.32	10.62
2,4,6-Trinitrotoluene	10.89	10.81	11.01
4-Amino-2,6-dinitrotoluene	11.09	11.02	11.22
2-Amino-4,6-dinitrotoluene	11.34	11.27	11.47
2,6-Dinitrotoluene	11.49	11.42	11.62
2,4-Dinitrotoluene	11.66	11.58	11.78
2-Nitrotoluene	12.48	12.37	12.67
4-Nitrotoluene	12.90	12.79	13.09
3-Nitrotoluene	13.47	13.37	13.67
PETN	14.63	14.55	14.85
1,2-Dinitrobenzene	8.52	8.37	8.67

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\05190032.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 19-May-2023 22:41:21 ALS Bottle#: 7 Worklist Smp#: 32
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\20230519-121647.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 20-May-2023 11:22:31 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: CTX1663

First Level Reviewer: LV5D Date: 20-May-2023 10:26:09

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.429	6.430	-0.001	49929	0.2508	0.2526	M
4 HMX	1	6.549	6.550	-0.001	24319	0.2500	0.2600	M
6 DNX	1	6.756	6.757	-0.001	37017	0.2503	0.2562	M
7 MNX	1	7.183	7.190	-0.007	40240	0.2918	0.3068	
8 RDX	1	7.569	7.570	-0.001	28709	0.2500	0.2699	
9 2,4,6-Trinitrophenol	1	7.969	7.963	0.006	20891	0.2500	0.2755	
$ 10 1,2-Dinitrobenzene	1	8.523	8.523	0.000	35380	0.2500	0.2801	
11 1,3,5-Trinitrobenzene	1	8.643	8.650	-0.007	57603	0.2500	0.2653	
12 1,3-Dinitrobenzene	1	9.269	9.277	-0.008	78545	0.2500	0.2668	
13 Nitrobenzene	1	9.636	9.643	-0.007	48786	0.2500	0.2551	
14 3,5-Dinitroaniline	1	9.876	9.883	-0.007	60554	0.2500	0.2649	
15 Tetryl	1	10.003	10.017	-0.014	36776	0.2500	0.2241	
16 Nitroglycerin	2	10.456	10.470	-0.014	170210	2.50	2.66	
17 2,4,6-Trinitrotoluene	1	10.889	10.910	-0.021	53967	0.2500	0.2557	
18 4-Amino-2,6-dinitrotoluene	1	11.089	11.117	-0.028	40429	0.2500	0.2609	
19 2-Amino-4,6-dinitrotoluene	1	11.343	11.370	-0.027	51573	0.2500	0.2561	
20 2,6-Dinitrotoluene	1	11.489	11.517	-0.028	38757	0.2500	0.2715	
21 2,4-Dinitrotoluene	1	11.663	11.683	-0.020	78072	0.2500	0.2632	
22 o-Nitrotoluene	1	12.483	12.517	-0.034	31686	0.2500	0.2477	
23 p-Nitrotoluene	1	12.896	12.937	-0.041	27076	0.2500	0.2420	
24 m-Nitrotoluene	1	13.469	13.517	-0.048	34729	0.2500	0.2472	
25 PETN	2	14.629	14.697	-0.068	185830	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

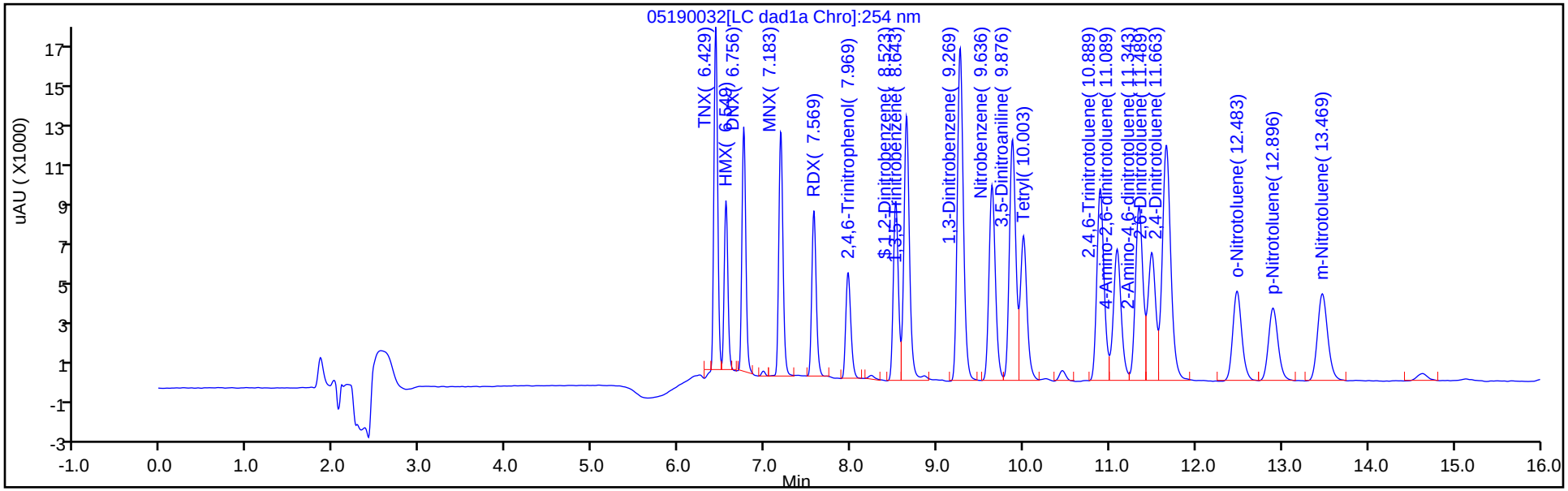
Report Date: 20-May-2023 11:22:31 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

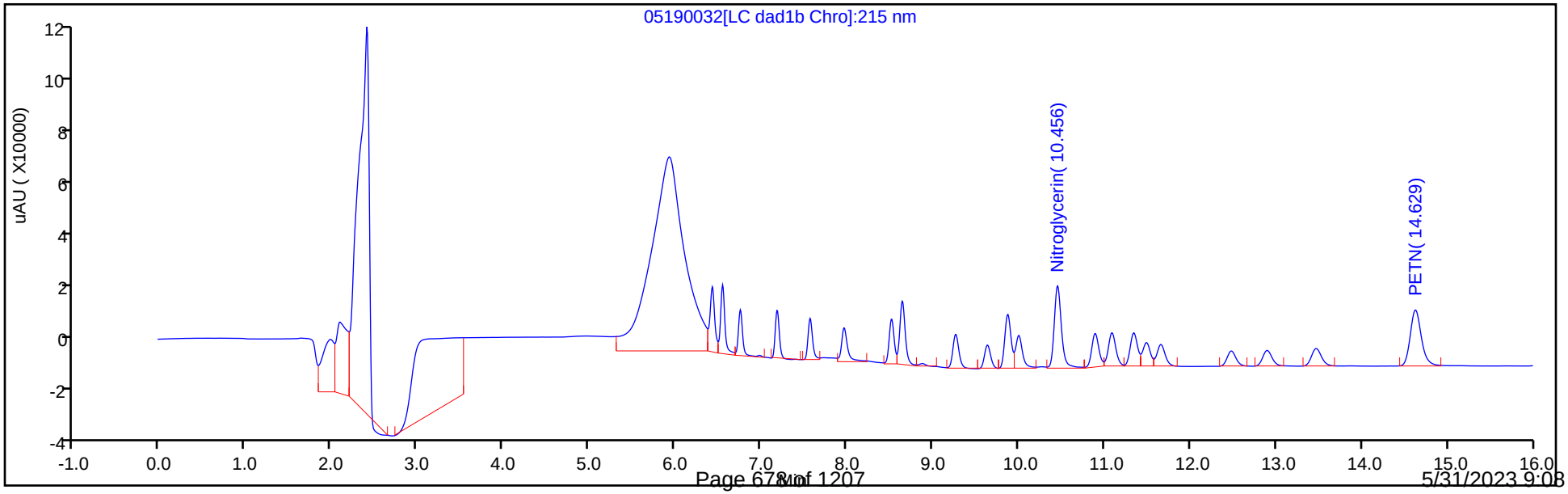
Data File: \\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190032.d

Injection Date:	19-May-2023 22:41:21	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	32
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

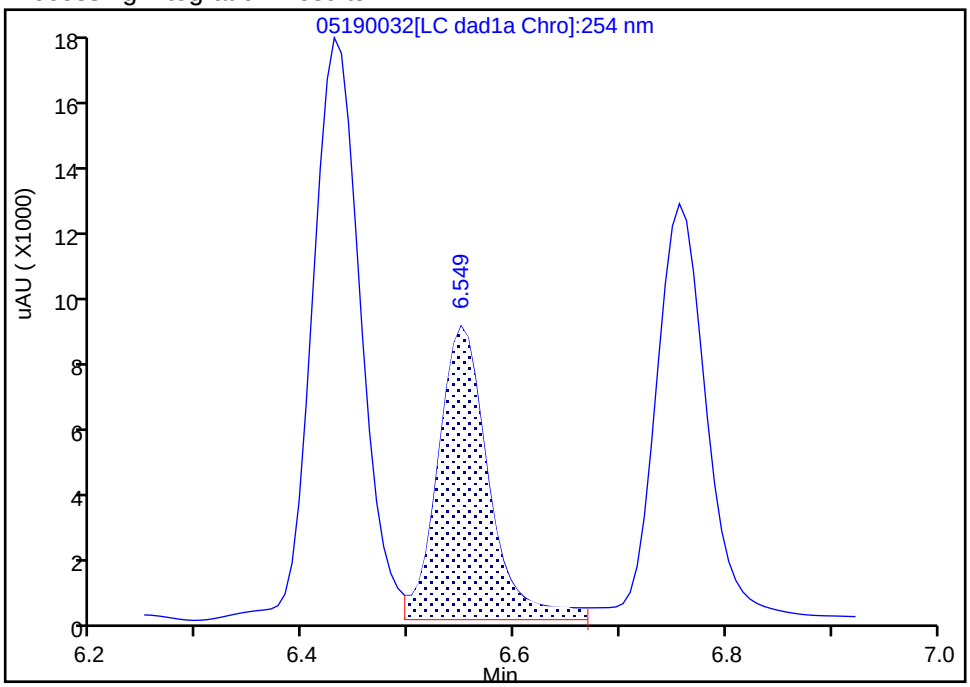
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190032.d				
Injection Date:	19-May-2023 22:41:21	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

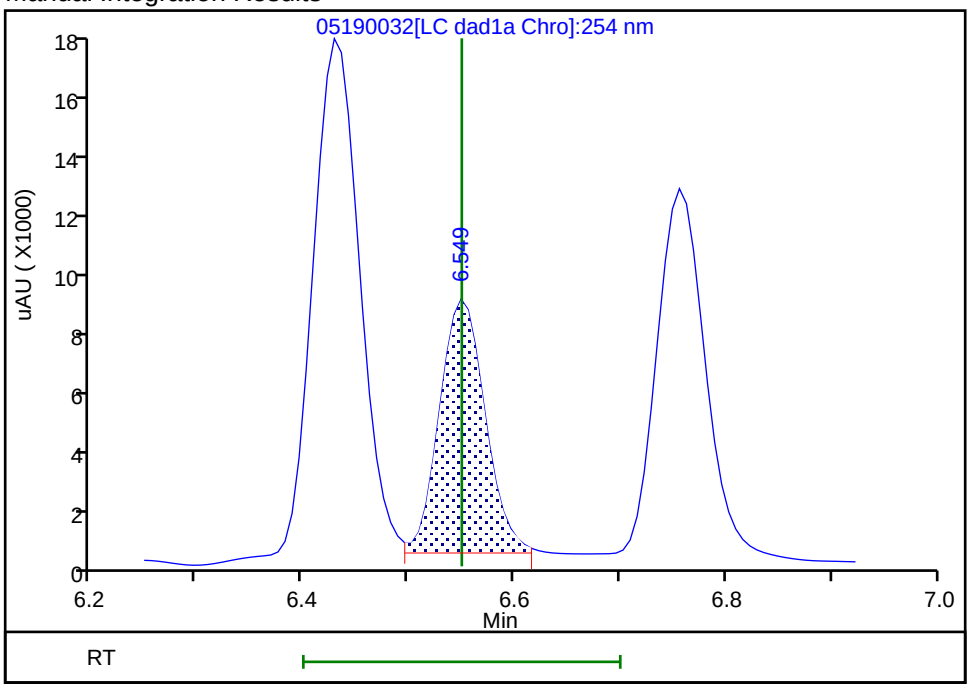
Processing Integration Results

RT: 6.55
Area: 28256
Amount: 0.302112
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 24319
Amount: 0.260018
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 10:26:03 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Lab Sample ID: CCV 280-613168/32 Calibration Date: 05/19/2023 22:41

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: 05190032.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	197687	199119		253	251	0.7	20.0
DNX	Ave	144462	147920		256	250	2.4	20.0
MNX	Ave	131172	137926		307	292	5.1	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Lab Sample ID: CCV 280-613168/32 Calibration Date: 05/19/2023 22:41

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: 05190032.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.43	6.33	6.53
DNX	6.76	6.66	6.86
MNX	7.18	7.04	7.34

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\05190032.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 19-May-2023 22:41:21 ALS Bottle#: 7 Worklist Smp#: 32
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\20230519-121647.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 20-May-2023 11:22:31 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: CTX1663

First Level Reviewer: LV5D Date: 20-May-2023 10:26:09

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.429	6.430	-0.001	49929	0.2508	0.2526	M
4 HMX	1	6.549	6.550	-0.001	24319	0.2500	0.2600	M
6 DNX	1	6.756	6.757	-0.001	37017	0.2503	0.2562	M
7 MNX	1	7.183	7.190	-0.007	40240	0.2918	0.3068	
8 RDX	1	7.569	7.570	-0.001	28709	0.2500	0.2699	
9 2,4,6-Trinitrophenol	1	7.969	7.963	0.006	20891	0.2500	0.2755	
$ 10 1,2-Dinitrobenzene	1	8.523	8.523	0.000	35380	0.2500	0.2801	
11 1,3,5-Trinitrobenzene	1	8.643	8.650	-0.007	57603	0.2500	0.2653	
12 1,3-Dinitrobenzene	1	9.269	9.277	-0.008	78545	0.2500	0.2668	
13 Nitrobenzene	1	9.636	9.643	-0.007	48786	0.2500	0.2551	
14 3,5-Dinitroaniline	1	9.876	9.883	-0.007	60554	0.2500	0.2649	
15 Tetryl	1	10.003	10.017	-0.014	36776	0.2500	0.2241	
16 Nitroglycerin	2	10.456	10.470	-0.014	170210	2.50	2.66	
17 2,4,6-Trinitrotoluene	1	10.889	10.910	-0.021	53967	0.2500	0.2557	
18 4-Amino-2,6-dinitrotoluene	1	11.089	11.117	-0.028	40429	0.2500	0.2609	
19 2-Amino-4,6-dinitrotoluene	1	11.343	11.370	-0.027	51573	0.2500	0.2561	
20 2,6-Dinitrotoluene	1	11.489	11.517	-0.028	38757	0.2500	0.2715	
21 2,4-Dinitrotoluene	1	11.663	11.683	-0.020	78072	0.2500	0.2632	
22 o-Nitrotoluene	1	12.483	12.517	-0.034	31686	0.2500	0.2477	
23 p-Nitrotoluene	1	12.896	12.937	-0.041	27076	0.2500	0.2420	
24 m-Nitrotoluene	1	13.469	13.517	-0.048	34729	0.2500	0.2472	
25 PETN	2	14.629	14.697	-0.068	185830	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

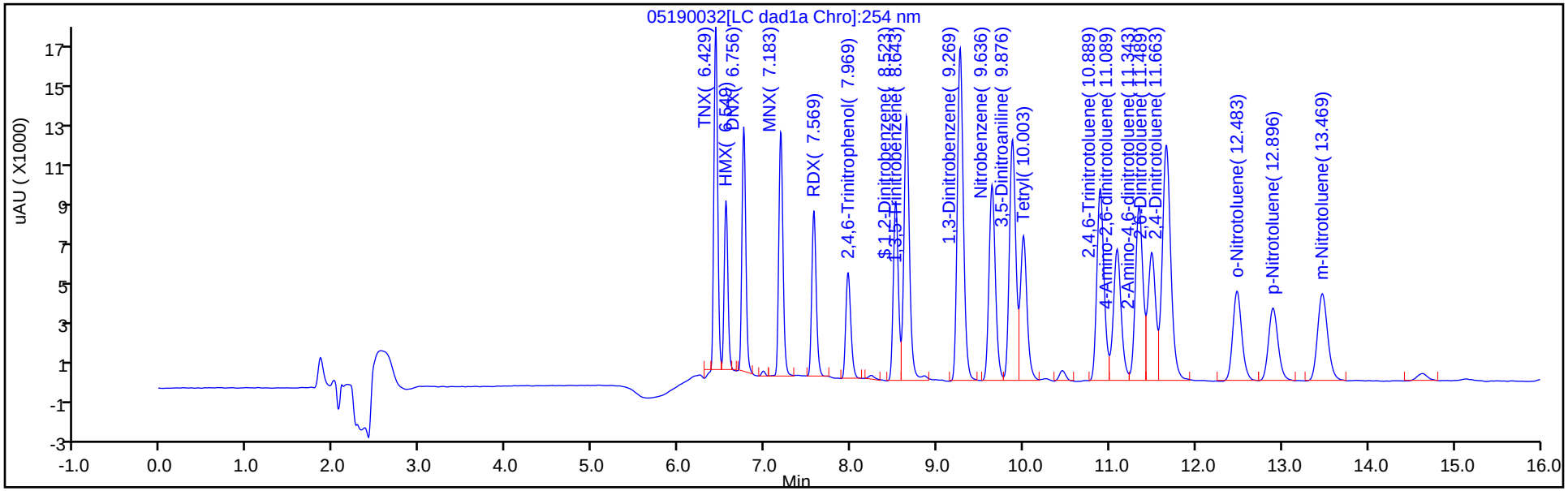
Report Date: 20-May-2023 11:22:31 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

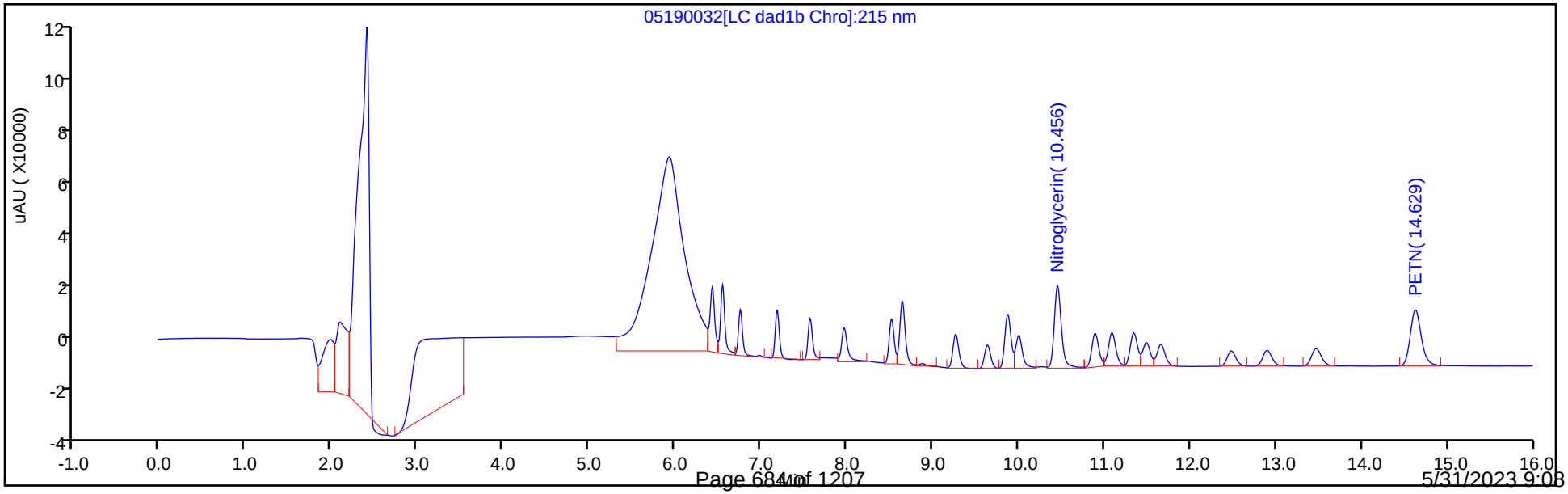
Data File: \\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190032.d

Injection Date:	19-May-2023 22:41:21	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	32
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

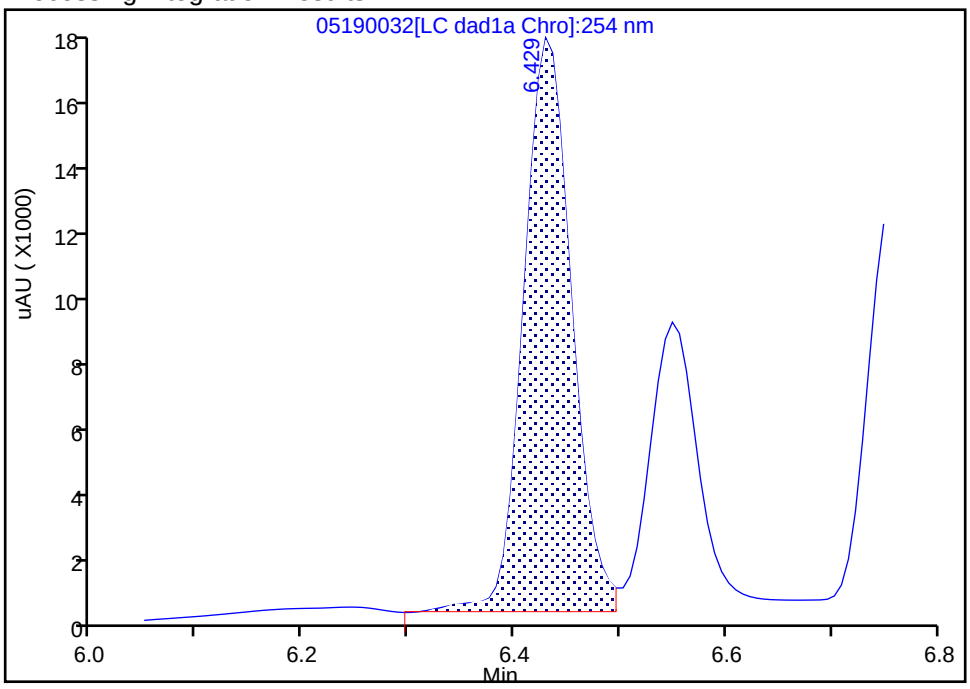
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190032.d				
Injection Date:	19-May-2023 22:41:21	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

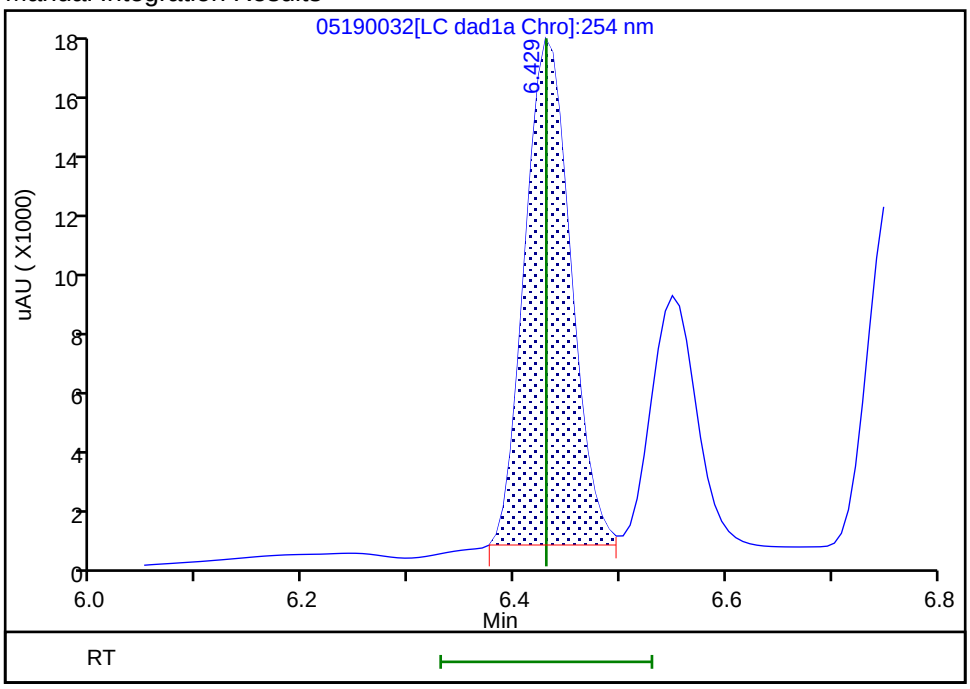
Processing Integration Results

RT: 6.43
Area: 53608
Amount: 0.271176
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 49929
Amount: 0.252566
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 10:26:02 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

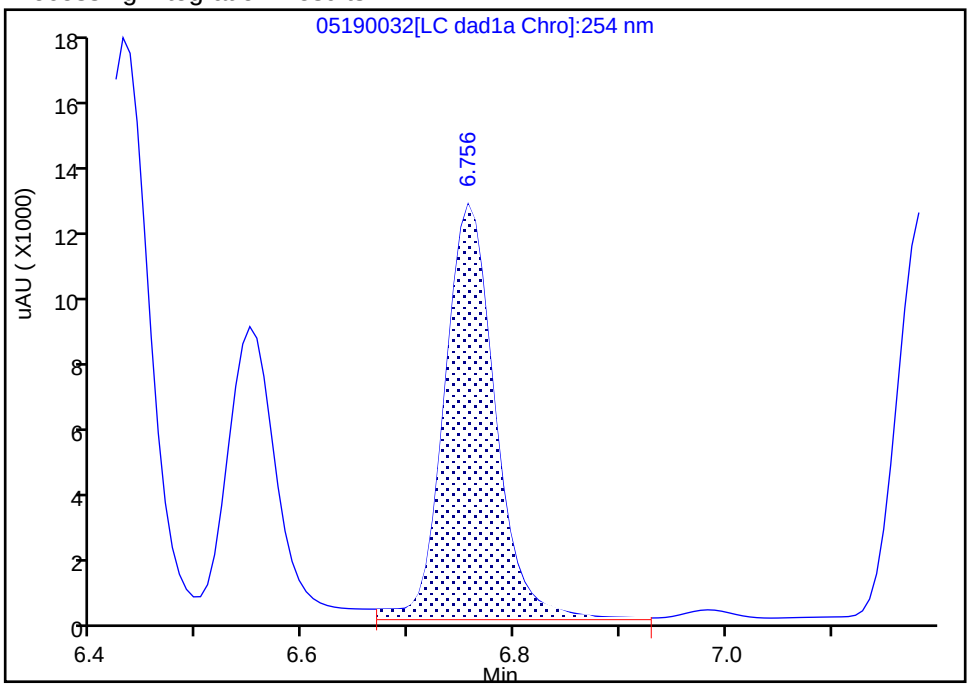
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190032.d				
Injection Date:	19-May-2023 22:41:21	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

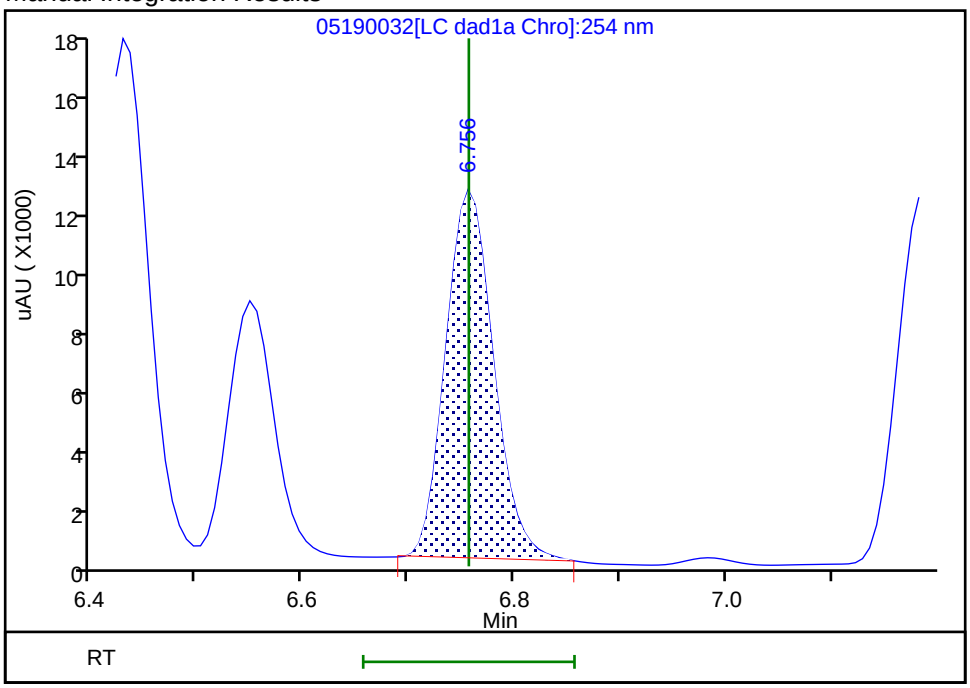
Processing Integration Results

RT: 6.76
Area: 40382
Amount: 0.279533
Amount Units: ug/mL



Manual Integration Results

RT: 6.76
Area: 37017
Amount: 0.256240
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 10:26:08 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Lab Sample ID: CCV 280-613168/33 Calibration Date: 05/19/2023 23:04

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: 05190033.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		221920		238	250	-4.9	20.0
2,4-diamino-6-nitrotoluene	Ave	146472	136996		234	250	-6.5	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Lab Sample ID: CCV 280-613168/33 Calibration Date: 05/19/2023 23:04

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: 05190033.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\20230519-121647.b\05190033.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 19-May-2023 23:04:19 ALS Bottle#: 8 Worklist Smp#: 33
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\20230519-121647.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 20-May-2023 11:22:31 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: CTX1663

First Level Reviewer: LV5D Date: 20-May-2023 10:26:15

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	6.431	-0.006	55480	0.2500	0.2378	M
5 2,4-diamino-6-nitrotoluene	1	6.618	6.618	0.000	34249	0.2500	0.2338	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00037 Amount Added: 12.50 Units: uL

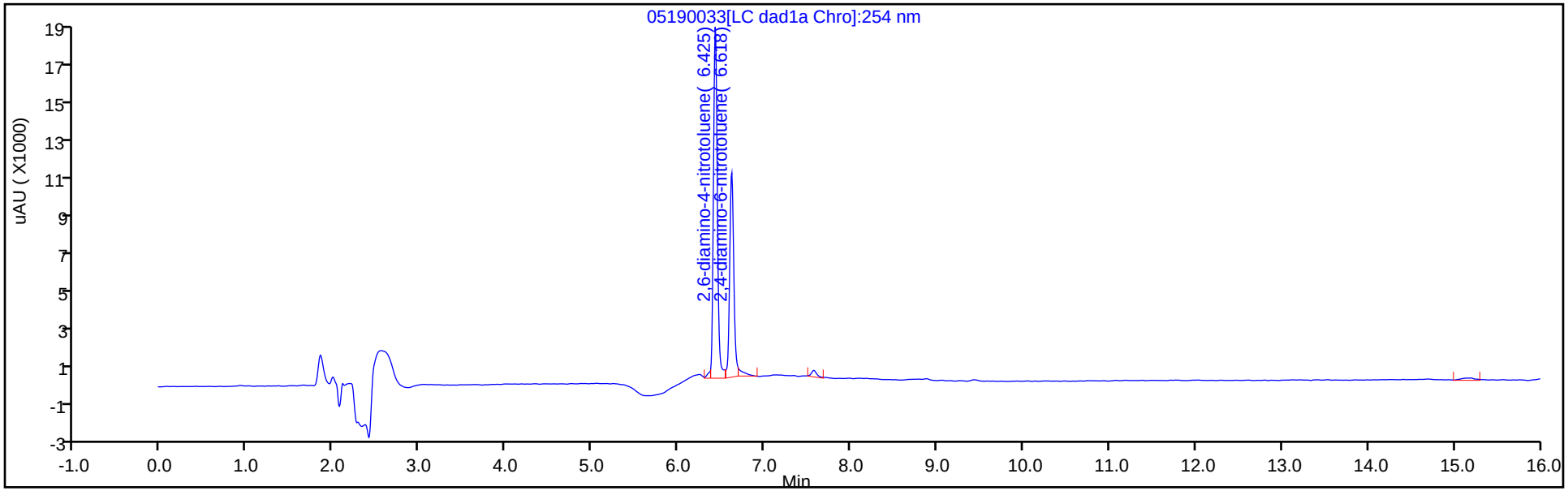
Report Date: 20-May-2023 11:22:31 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

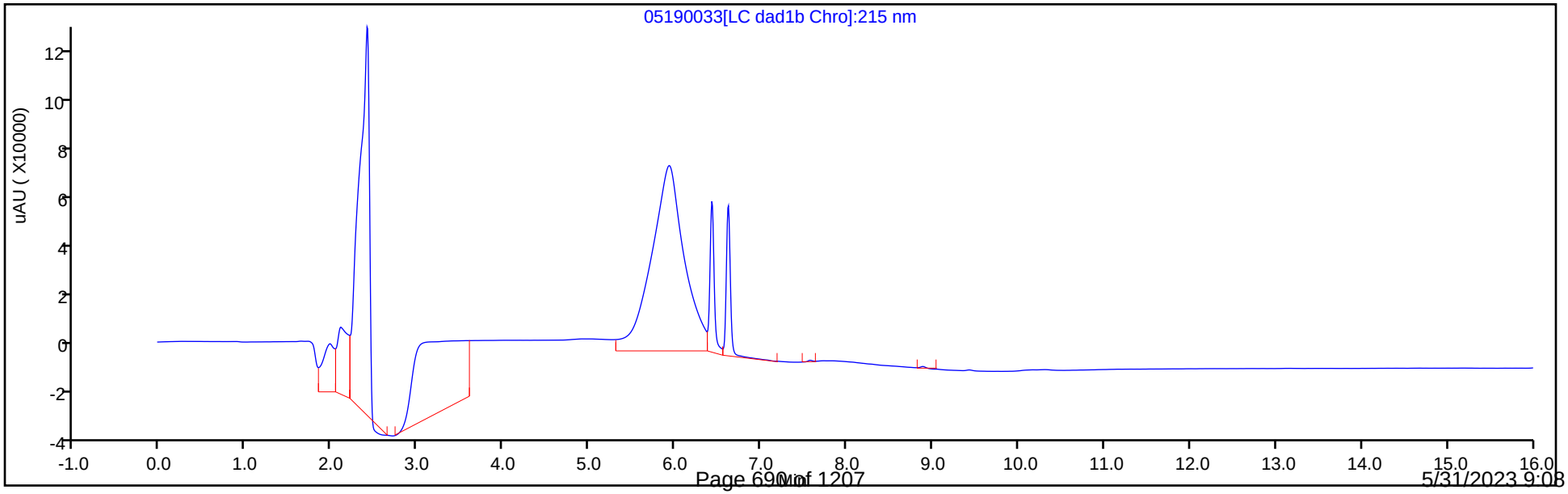
Data File: \\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190033.d

Injection Date:	19-May-2023 23:04:19	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	33
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

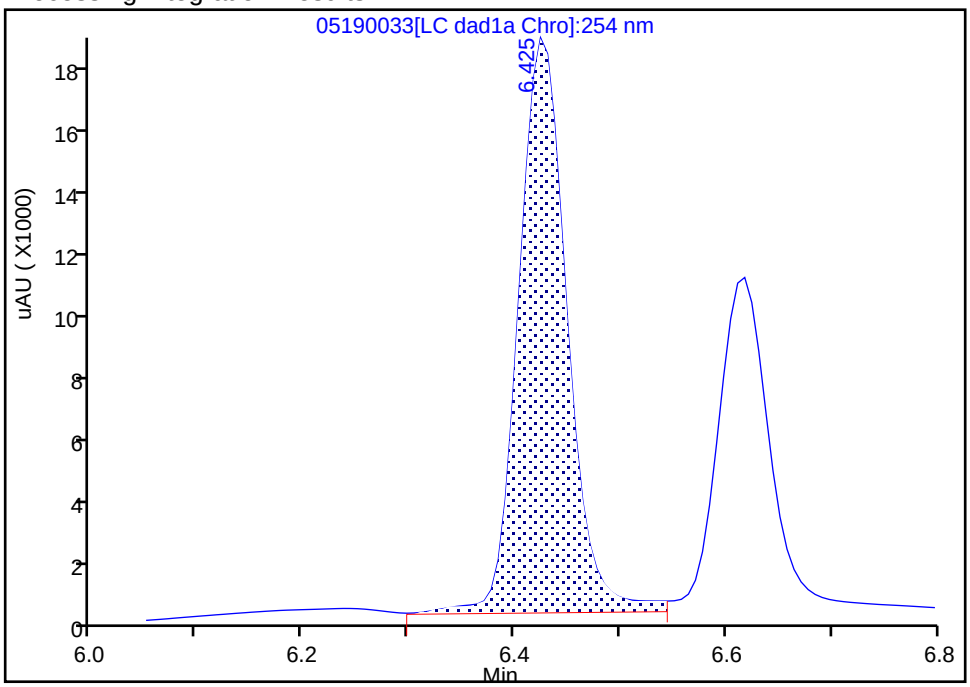
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190033.d				
Injection Date:	19-May-2023 23:04:19	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

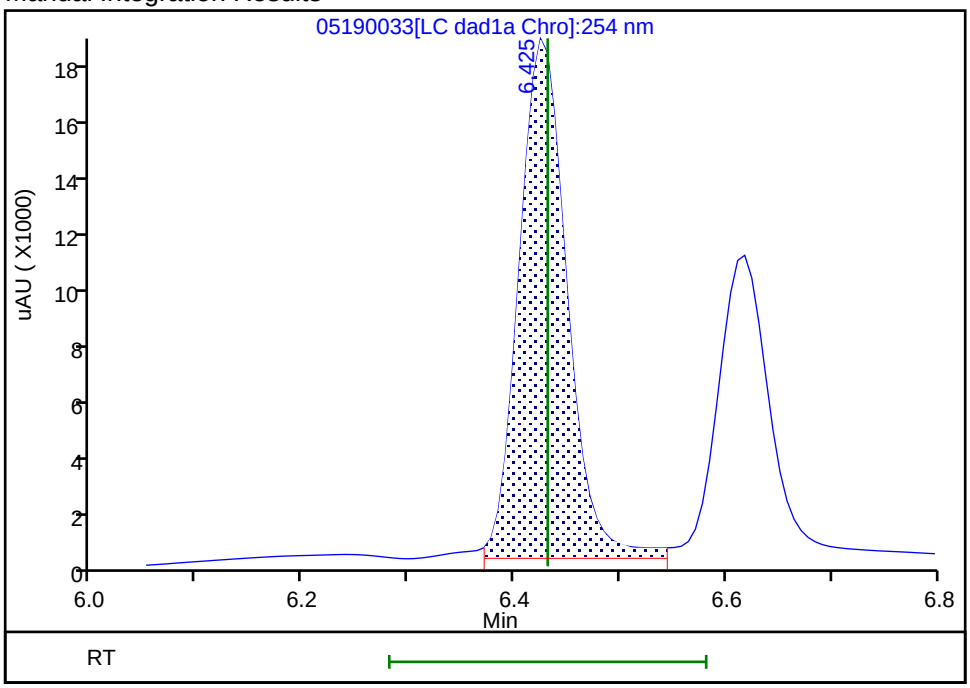
Processing Integration Results

RT: 6.42
Area: 56120
Amount: 0.240564
Amount Units: ug/mL



Manual Integration Results

RT: 6.42
Area: 55480
Amount: 0.237778
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 10:26:13 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

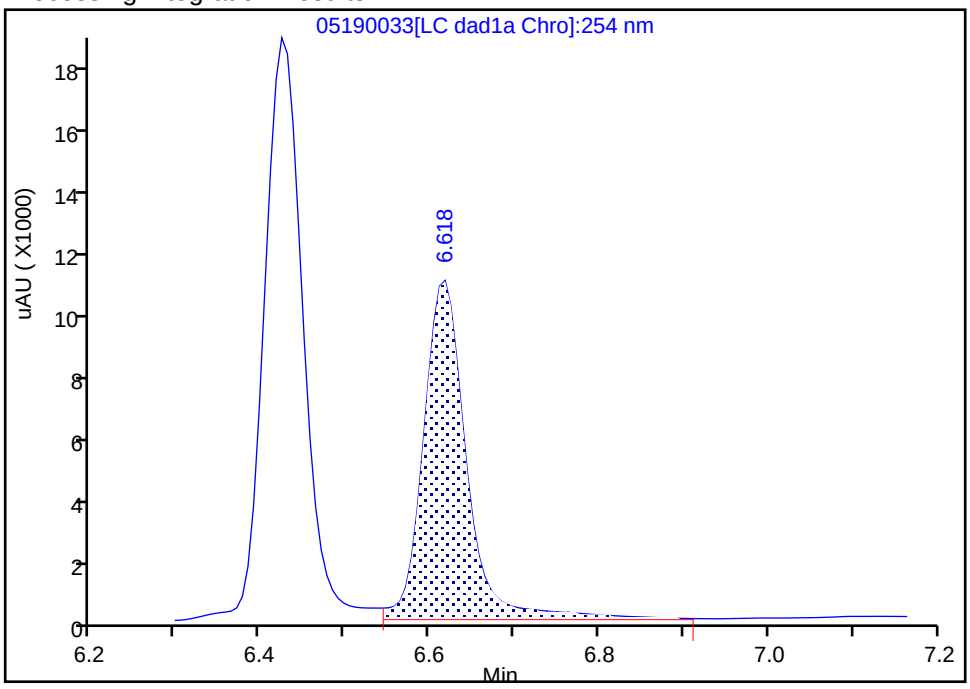
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190033.d				
Injection Date:	19-May-2023 23:04:19	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

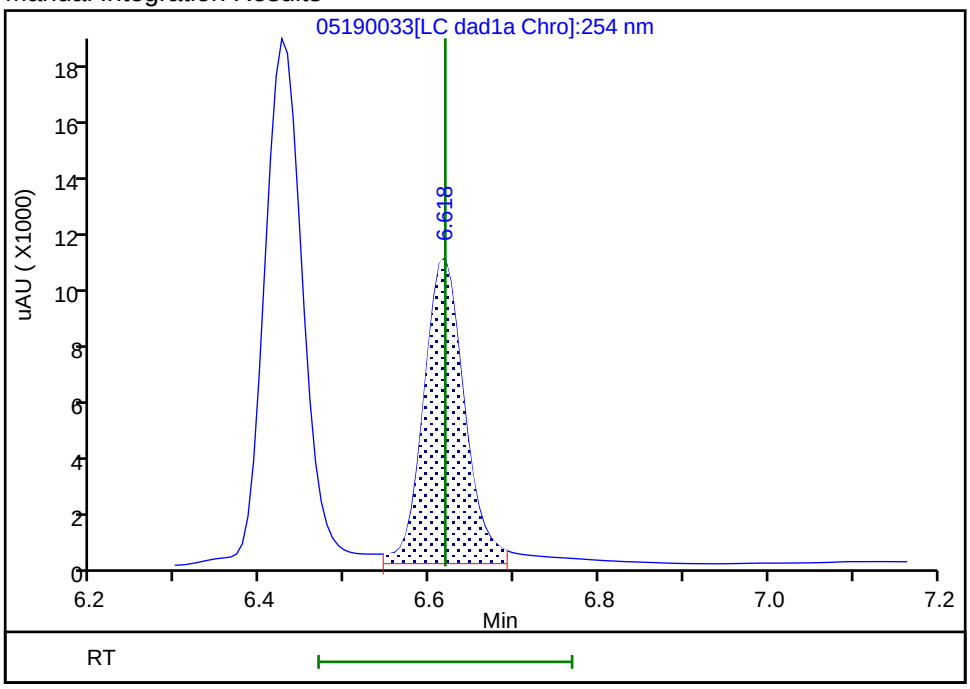
Processing Integration Results

RT: 6.62
Area: 36354
Amount: 0.248197
Amount Units: ug/mL



Manual Integration Results

RT: 6.62
Area: 34249
Amount: 0.233826
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 10:26:14 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Lab Sample ID: CCV 280-613168/44 Calibration Date: 05/20/2023 03:16

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: 05190044.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	93528	94944		254	250	1.5	20.0
RDX	Ave	106380	115160		271	250	8.3	20.0
Picric acid	Ave	75830	84904		280	250	12.0	20.0
1,3,5-Trinitrobenzene	Ave	217147	225564		260	250	3.9	20.0
1,3-Dinitrobenzene	Ave	294397	315568		268	250	7.2	20.0
Nitrobenzene	Ave	191245	191912		251	250	0.3	20.0
3,5-Dinitroaniline	Lin2		235100		257	250	2.8	20.0
Tetryl	Ave	164121	149828		228	250	-8.7	20.0
Nitroglycerin	Ave	64070	68442		2670	2500	6.8	20.0
2,4,6-Trinitrotoluene	Ave	211040	217880		258	250	3.2	20.0
4-Amino-2,6-dinitrotoluene	Ave	154933	161584		261	250	4.3	20.0
2-Amino-4,6-dinitrotoluene	Ave	201410	205692		255	250	2.1	20.0
2,6-Dinitrotoluene	Ave	142745	156192		274	250	9.4	20.0
2,4-Dinitrotoluene	Ave	296667	314000		265	250	5.8	20.0
2-Nitrotoluene	Ave	127896	125248		245	250	-2.1	20.0
4-Nitrotoluene	Ave	111880	107640		241	250	-3.8	20.0
3-Nitrotoluene	Ave	140492	136876		244	250	-2.6	20.0
PETN	Ave	68845	74703		2710	2500	8.5	20.0
1,2-Dinitrobenzene	Ave	126309	140776		279	250	11.5	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Lab Sample ID: CCV 280-613168/44 Calibration Date: 05/20/2023 03:16

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: 05190044.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.55	6.40	6.70
RDX	7.57	7.42	7.72
Picric acid	7.97	7.81	8.11
1,3,5-Trinitrobenzene	8.65	8.50	8.80
1,3-Dinitrobenzene	9.28	9.13	9.43
Nitrobenzene	9.65	9.49	9.79
3,5-Dinitroaniline	9.89	9.73	10.03
Tetryl	10.03	9.87	10.17
Nitroglycerin	10.48	10.32	10.62
2,4,6-Trinitrotoluene	10.92	10.81	11.01
4-Amino-2,6-dinitrotoluene	11.12	11.02	11.22
2-Amino-4,6-dinitrotoluene	11.37	11.27	11.47
2,6-Dinitrotoluene	11.52	11.42	11.62
2,4-Dinitrotoluene	11.69	11.58	11.78
2-Nitrotoluene	12.51	12.37	12.67
4-Nitrotoluene	12.93	12.79	13.09
3-Nitrotoluene	13.51	13.37	13.67
PETN	14.69	14.55	14.85
1,2-Dinitrobenzene	8.53	8.37	8.67

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\05190044.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 20-May-2023 03:16:42 ALS Bottle#: 7 Worklist Smp#: 44
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\20230519-121647.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 20-May-2023 11:22:12 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1663

First Level Reviewer: LV5D Date: 20-May-2023 11:05:27

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.432	6.430	0.002	49301	0.2508	0.2494	M
4 HMX	1	6.552	6.550	0.002	23736	0.2500	0.2538	M
6 DNX	1	6.758	6.757	0.001	36943	0.2503	0.2557	M
7 MNX	1	7.185	7.190	-0.005	39943	0.2918	0.3045	
8 RDX	1	7.572	7.570	0.002	28790	0.2500	0.2706	
9 2,4,6-Trinitrophenol	1	7.972	7.963	0.009	21226	0.2500	0.2799	
$ 10 1,2-Dinitrobenzene	1	8.532	8.523	0.009	35194	0.2500	0.2786	
11 1,3,5-Trinitrobenzene	1	8.652	8.650	0.002	56391	0.2500	0.2597	
12 1,3-Dinitrobenzene	1	9.278	9.277	0.001	78892	0.2500	0.2680	
13 Nitrobenzene	1	9.651	9.643	0.008	47978	0.2500	0.2509	
14 3,5-Dinitroaniline	1	9.891	9.883	0.008	58775	0.2500	0.2571	
15 Tetryl	1	10.025	10.017	0.008	37457	0.2500	0.2282	
16 Nitroglycerin	2	10.478	10.470	0.008	171104	2.50	2.67	
17 2,4,6-Trinitrotoluene	1	10.918	10.910	0.008	54470	0.2500	0.2581	
18 4-Amino-2,6-dinitrotoluene	1	11.118	11.117	0.001	40396	0.2500	0.2607	
19 2-Amino-4,6-dinitrotoluene	1	11.371	11.370	0.001	51423	0.2500	0.2553	
20 2,6-Dinitrotoluene	1	11.518	11.517	0.001	39048	0.2500	0.2735	
21 2,4-Dinitrotoluene	1	11.691	11.683	0.008	78500	0.2500	0.2646	
22 o-Nitrotoluene	1	12.511	12.517	-0.006	31312	0.2500	0.2448	
23 p-Nitrotoluene	1	12.931	12.937	-0.006	26910	0.2500	0.2405	
24 m-Nitrotoluene	1	13.511	13.517	-0.006	34219	0.2500	0.2436	
25 PETN	2	14.685	14.697	-0.012	186758	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

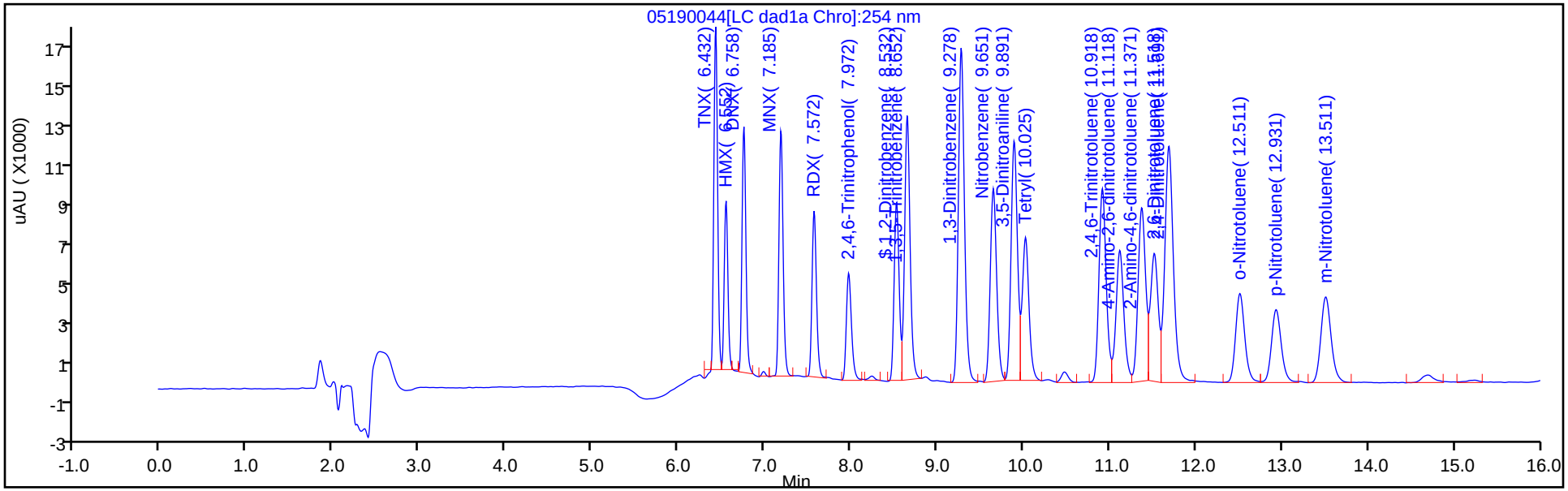
Report Date: 20-May-2023 11:22:13 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

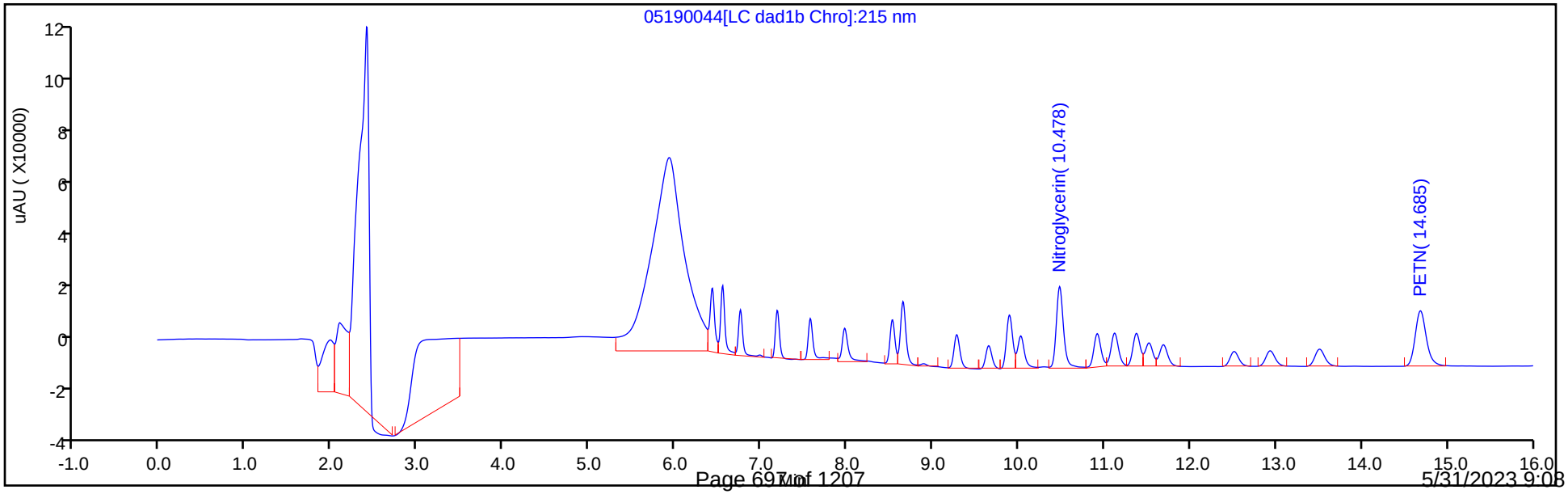
Data File: \\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190044.d

Injection Date:	20-May-2023 03:16:42	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	44
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

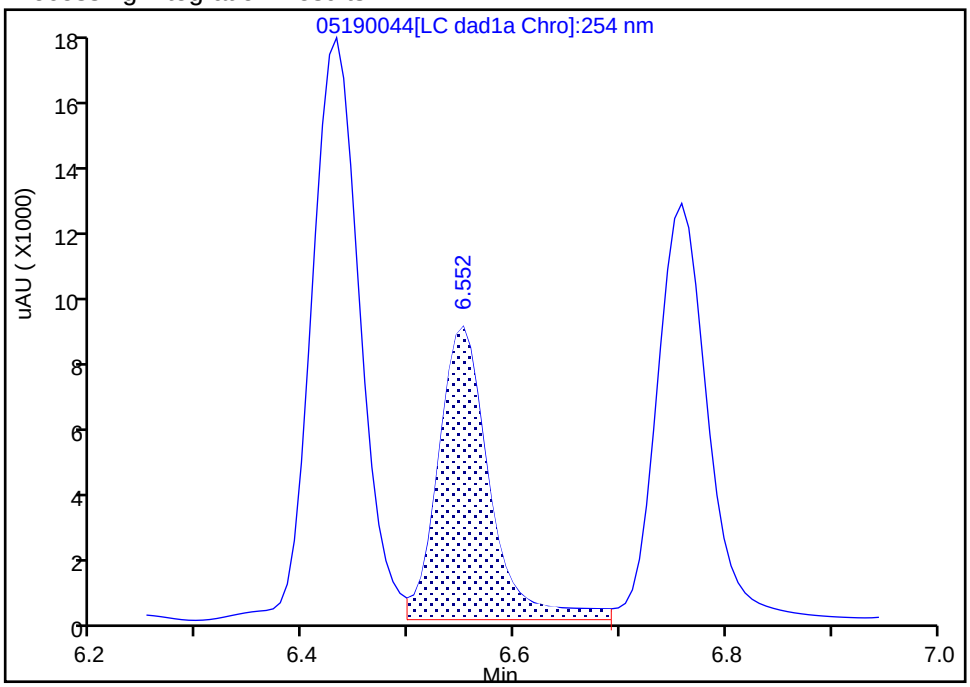
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190044.d				
Injection Date:	20-May-2023 03:16:42	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

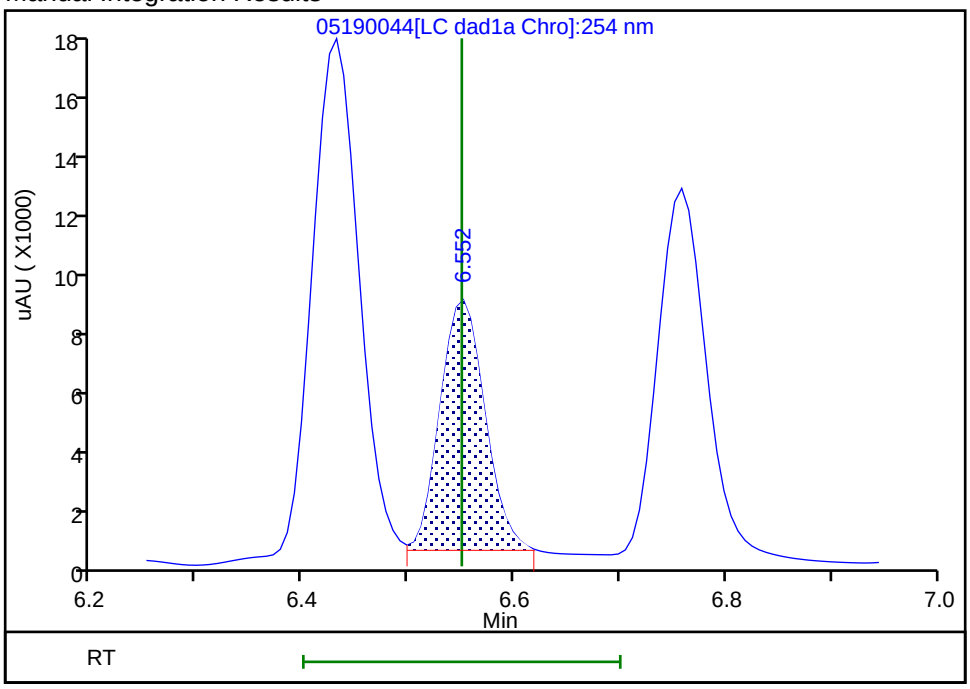
Processing Integration Results

RT: 6.55
Area: 28479
Amount: 0.304497
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 23736
Amount: 0.253785
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 11:05:20 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Lab Sample ID: CCV 280-613168/44 Calibration Date: 05/20/2023 03:16

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: 05190044.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	197687	196614		249	251	-0.5	20.0
DNX	Ave	144462	147624		256	250	2.2	20.0
MNX	Ave	131172	136908		305	292	4.4	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Lab Sample ID: CCV 280-613168/44 Calibration Date: 05/20/2023 03:16

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: 05190044.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.43	6.33	6.53
DNX	6.76	6.66	6.86
MNX	7.19	7.04	7.34

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\05190044.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 20-May-2023 03:16:42 ALS Bottle#: 7 Worklist Smp#: 44
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\20230519-121647.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 20-May-2023 11:22:12 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1663

First Level Reviewer: LV5D Date: 20-May-2023 11:05:27

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.432	6.430	0.002	49301	0.2508	0.2494	M
4 HMX	1	6.552	6.550	0.002	23736	0.2500	0.2538	M
6 DNX	1	6.758	6.757	0.001	36943	0.2503	0.2557	M
7 MNX	1	7.185	7.190	-0.005	39943	0.2918	0.3045	
8 RDX	1	7.572	7.570	0.002	28790	0.2500	0.2706	
9 2,4,6-Trinitrophenol	1	7.972	7.963	0.009	21226	0.2500	0.2799	
$ 10 1,2-Dinitrobenzene	1	8.532	8.523	0.009	35194	0.2500	0.2786	
11 1,3,5-Trinitrobenzene	1	8.652	8.650	0.002	56391	0.2500	0.2597	
12 1,3-Dinitrobenzene	1	9.278	9.277	0.001	78892	0.2500	0.2680	
13 Nitrobenzene	1	9.651	9.643	0.008	47978	0.2500	0.2509	
14 3,5-Dinitroaniline	1	9.891	9.883	0.008	58775	0.2500	0.2571	
15 Tetryl	1	10.025	10.017	0.008	37457	0.2500	0.2282	
16 Nitroglycerin	2	10.478	10.470	0.008	171104	2.50	2.67	
17 2,4,6-Trinitrotoluene	1	10.918	10.910	0.008	54470	0.2500	0.2581	
18 4-Amino-2,6-dinitrotoluene	1	11.118	11.117	0.001	40396	0.2500	0.2607	
19 2-Amino-4,6-dinitrotoluene	1	11.371	11.370	0.001	51423	0.2500	0.2553	
20 2,6-Dinitrotoluene	1	11.518	11.517	0.001	39048	0.2500	0.2735	
21 2,4-Dinitrotoluene	1	11.691	11.683	0.008	78500	0.2500	0.2646	
22 o-Nitrotoluene	1	12.511	12.517	-0.006	31312	0.2500	0.2448	
23 p-Nitrotoluene	1	12.931	12.937	-0.006	26910	0.2500	0.2405	
24 m-Nitrotoluene	1	13.511	13.517	-0.006	34219	0.2500	0.2436	
25 PETN	2	14.685	14.697	-0.012	186758	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

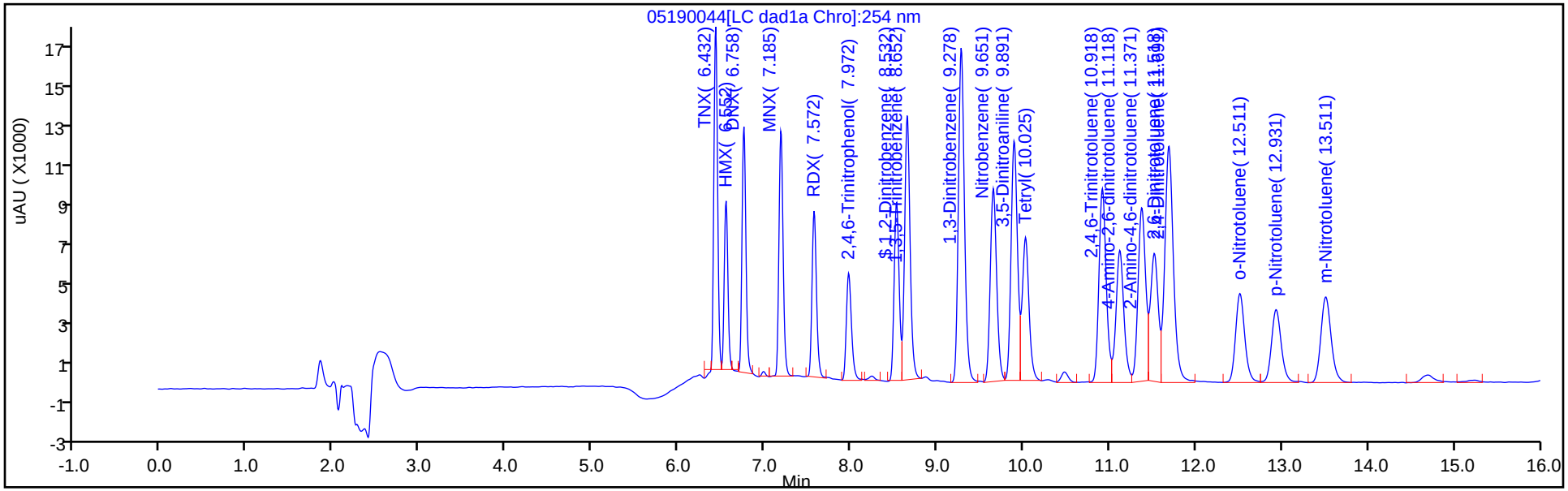
Report Date: 20-May-2023 11:22:13 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

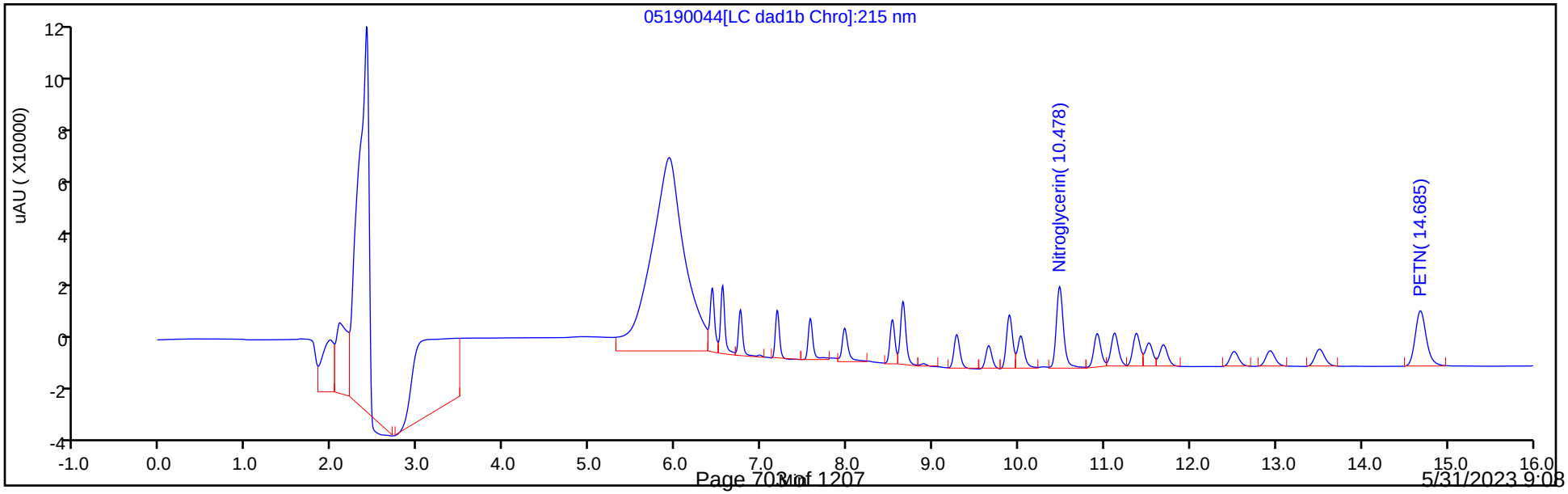
Data File: \\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190044.d

Injection Date:	20-May-2023 03:16:42	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	44
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

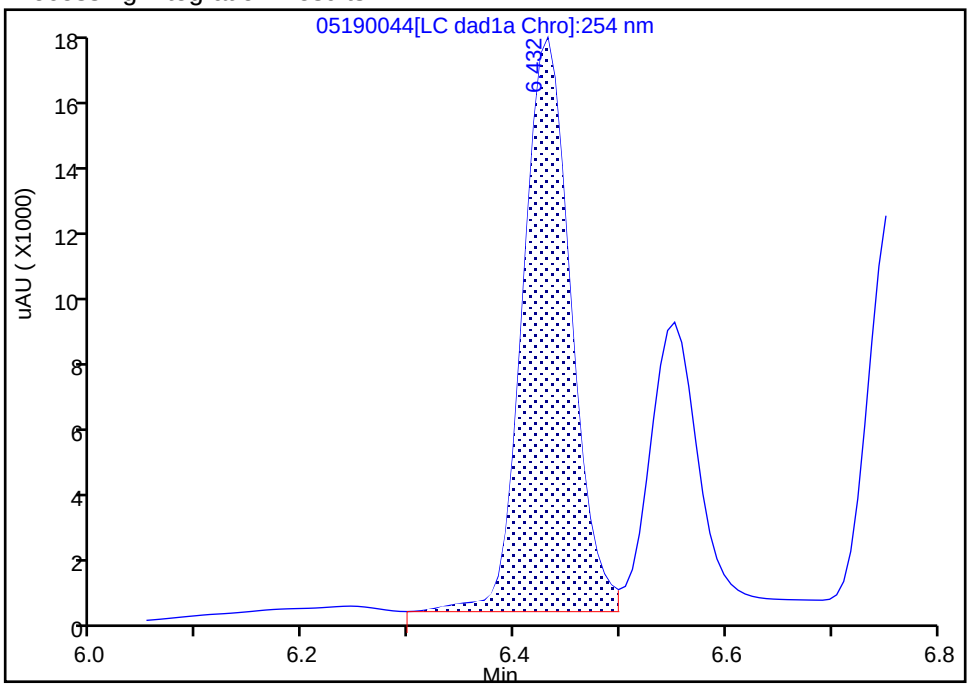
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190044.d				
Injection Date:	20-May-2023 03:16:42	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

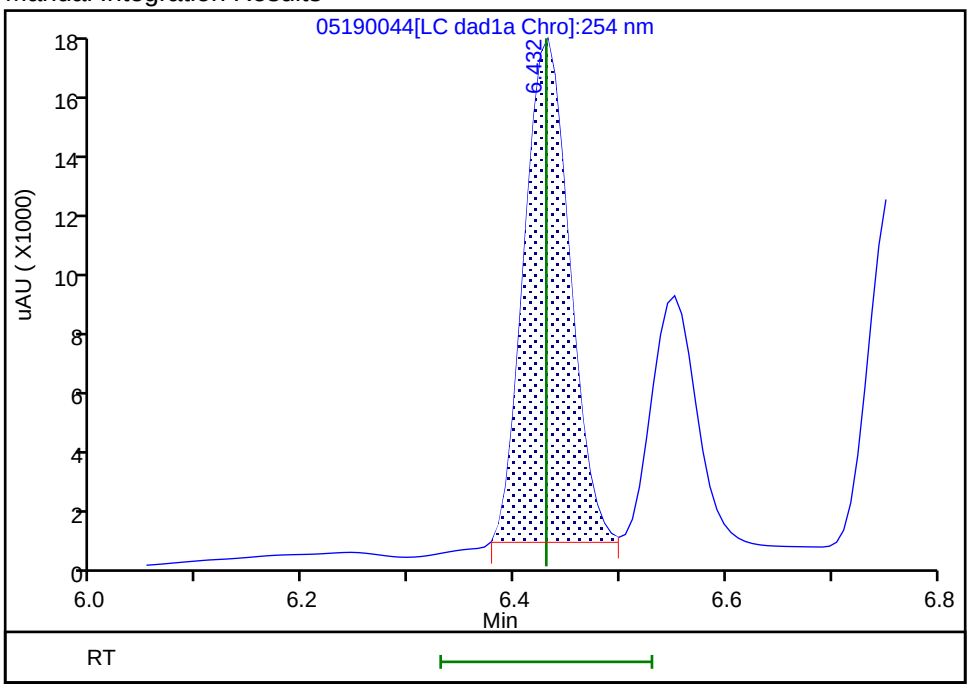
Processing Integration Results

RT: 6.43
Area: 53439
Amount: 0.270321
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 49301
Amount: 0.249389
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 11:05:19 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

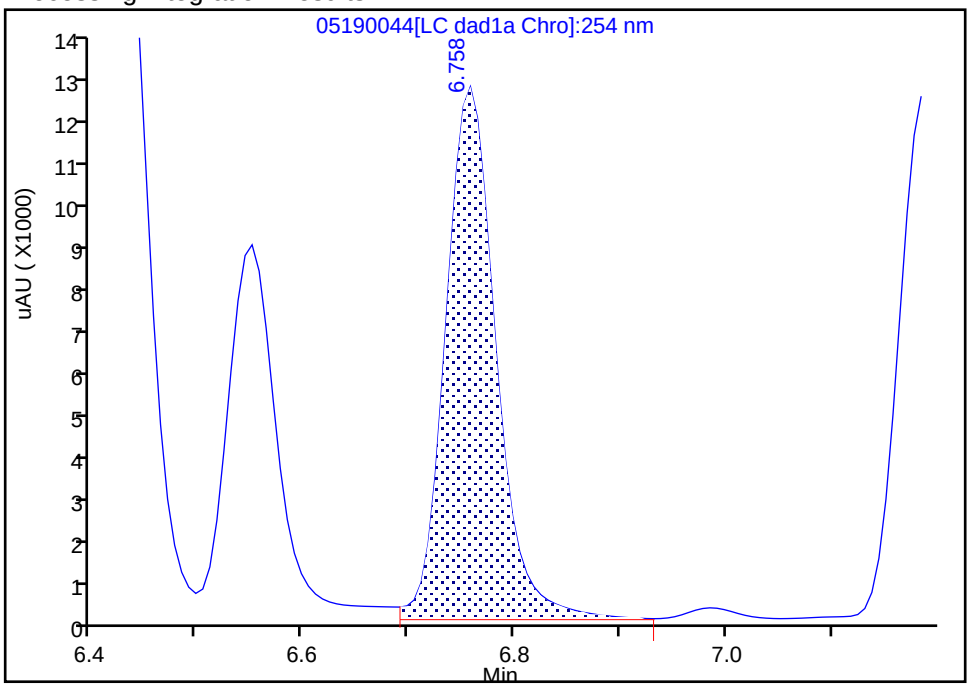
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190044.d				
Injection Date:	20-May-2023 03:16:42	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

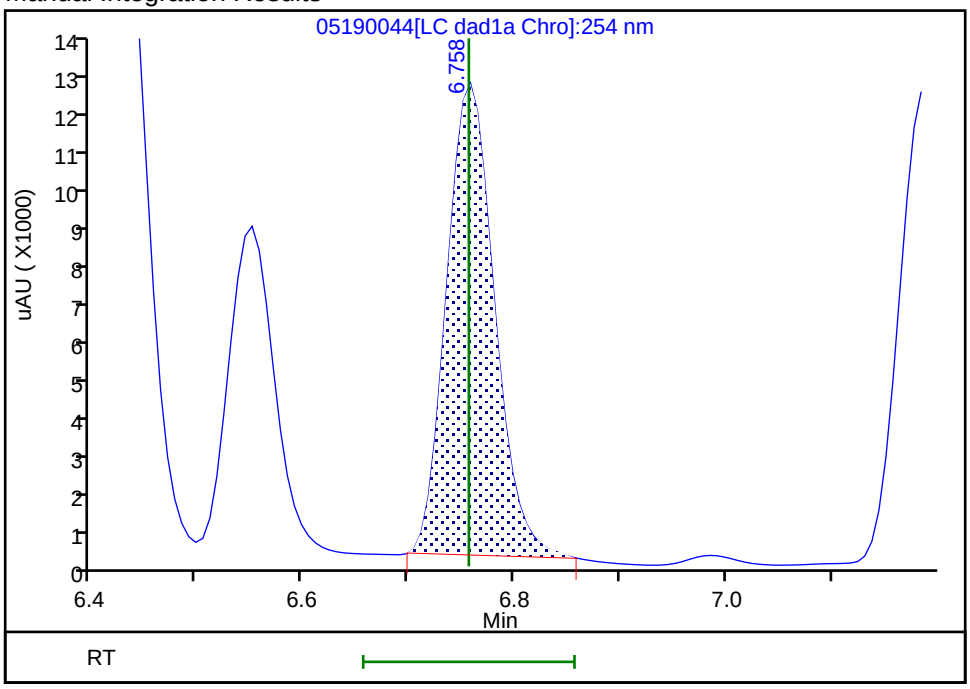
Processing Integration Results

RT: 6.76
Area: 39950
Amount: 0.276542
Amount Units: ug/mL



Manual Integration Results

RT: 6.76
Area: 36943
Amount: 0.255727
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 11:05:26 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Lab Sample ID: CCV 280-613168/45 Calibration Date: 05/20/2023 03:39

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: 05190045.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		220240		236	250	-5.6	20.0
2,4-diamino-6-nitrotoluene	Ave	146472	137824		235	250	-5.9	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Lab Sample ID: CCV 280-613168/45 Calibration Date: 05/20/2023 03:39

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: 05190045.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\20230519-121647.b\05190045.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 20-May-2023 03:39:42 ALS Bottle#: 8 Worklist Smp#: 45
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\20230519-121647.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 20-May-2023 11:22:13 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: CTX1663

First Level Reviewer: LV5D Date: 20-May-2023 11:05:33

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	6.426	6.431	-0.005	55060	0.2500	0.2359	M
5 2,4-diamino-6-nitrotoluene	1	6.619	6.618	0.001	34456	0.2500	0.2352	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00037 Amount Added: 12.50 Units: uL

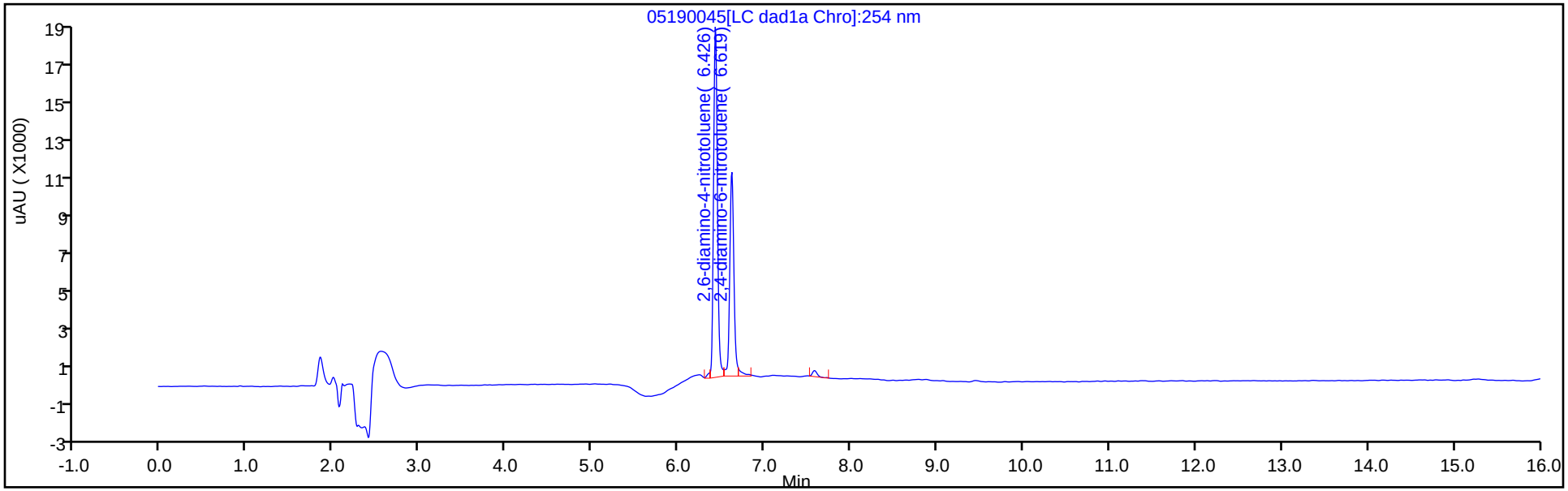
Report Date: 20-May-2023 11:22:13 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

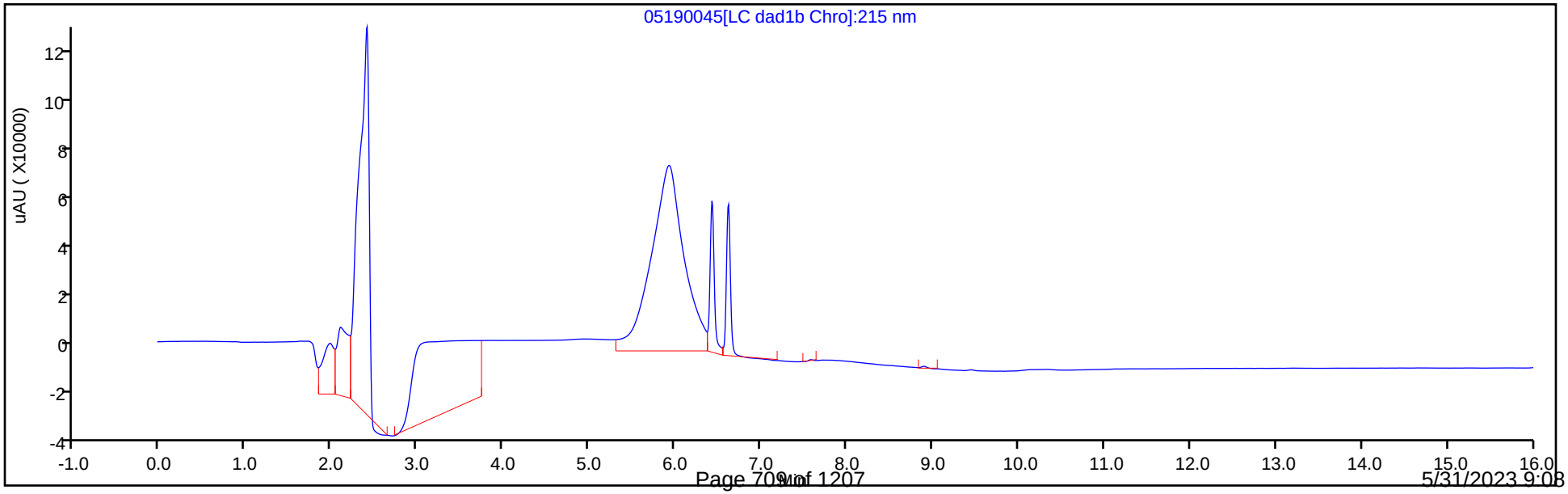
Data File: \\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190045.d

Injection Date:	20-May-2023 03:39:42	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	45
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

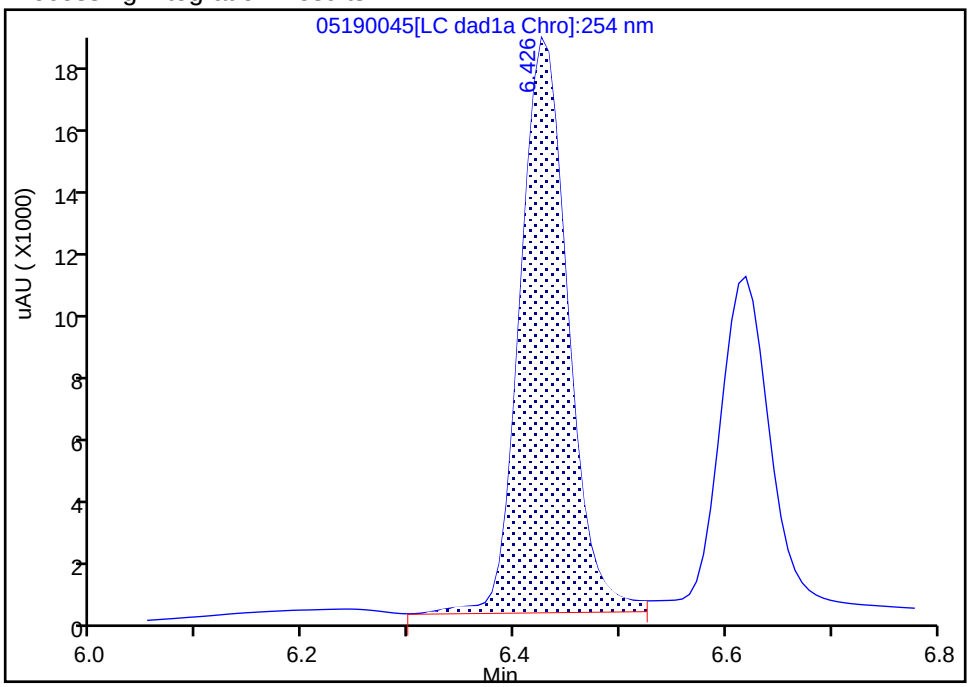
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190045.d				
Injection Date:	20-May-2023 03:39:42	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

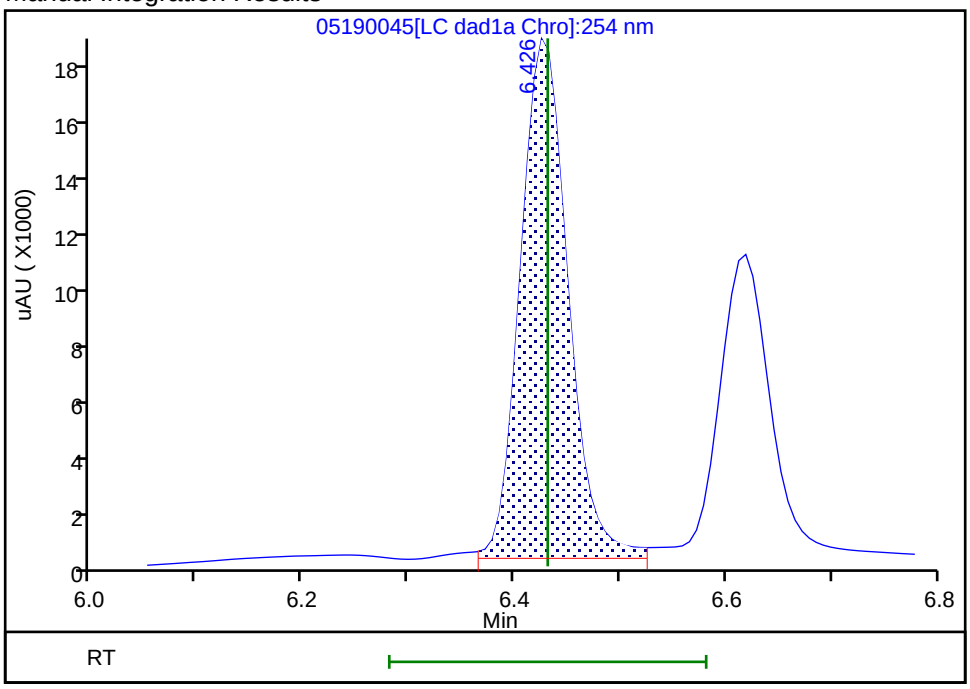
Processing Integration Results

RT: 6.43
Area: 55550
Amount: 0.238082
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 55060
Amount: 0.235949
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 11:05:31 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

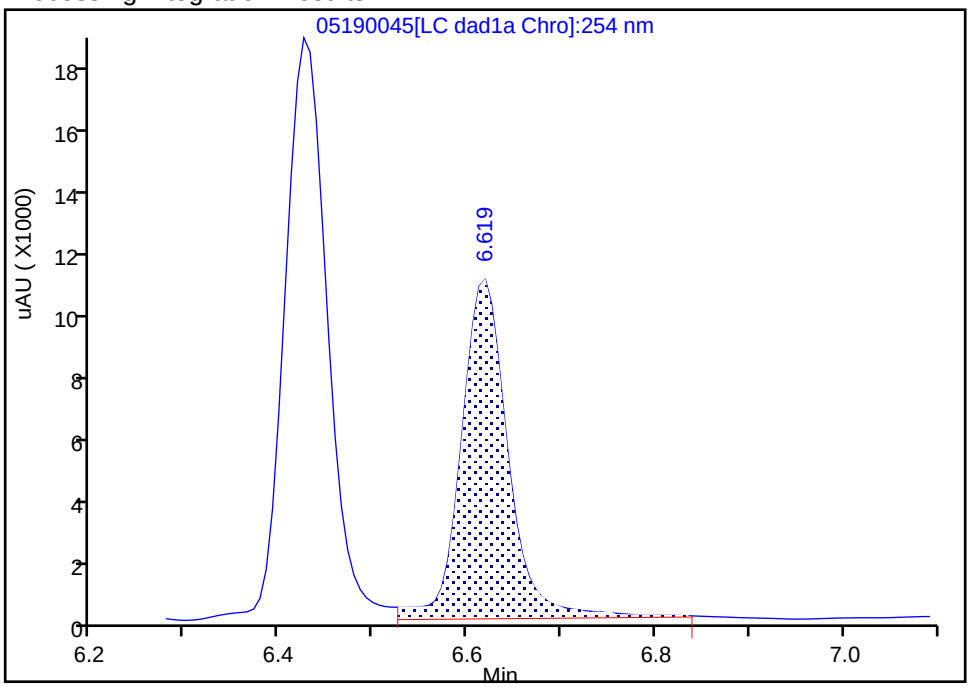
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190045.d				
Injection Date:	20-May-2023 03:39:42	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

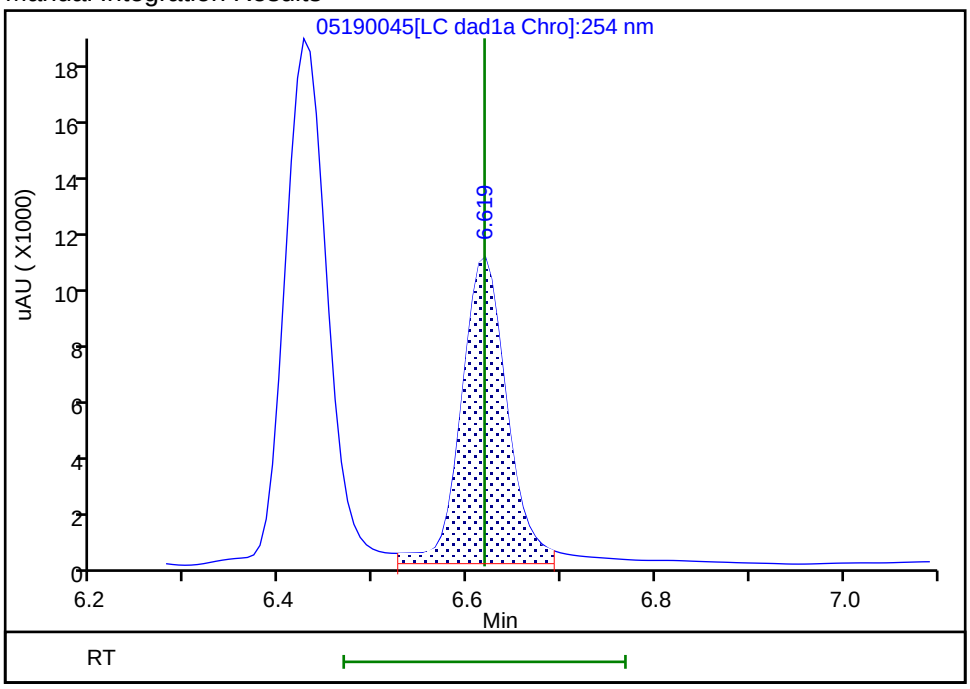
Processing Integration Results

RT: 6.62
Area: 35768
Amount: 0.244197
Amount Units: ug/mL



Manual Integration Results

RT: 6.62
Area: 34456
Amount: 0.235239
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 11:05:32 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Lab Sample ID: CCV 280-613168/56 Calibration Date: 05/20/2023 07:52

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: 05190056.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	93528	102472		274	250	9.6	20.0
RDX	Ave	106380	116316		273	250	9.3	20.0
Picric acid	Ave	75830	84504		279	250	11.4	20.0
1,3,5-Trinitrobenzene	Ave	217147	232972		268	250	7.3	20.0
1,3-Dinitrobenzene	Ave	294397	316060		268	250	7.4	20.0
Nitrobenzene	Ave	191245	192044		251	250	0.4	20.0
3,5-Dinitroaniline	Lin2		243092		266	250	6.3	20.0
Tetryl	Ave	164121	149672		228	250	-8.8	20.0
Nitroglycerin	Ave	64070	68638		2680	2500	7.1	20.0
2,4,6-Trinitrotoluene	Ave	211040	218544		259	250	3.6	20.0
4-Amino-2,6-dinitrotoluene	Ave	154933	161800		261	250	4.4	20.0
2-Amino-4,6-dinitrotoluene	Ave	201410	211024		262	250	4.8	20.0
2,6-Dinitrotoluene	Ave	142745	151340		265	250	6.0	20.0
2,4-Dinitrotoluene	Ave	296667	318628		269	250	7.4	20.0
2-Nitrotoluene	Ave	127896	124148		243	250	-2.9	20.0
4-Nitrotoluene	Ave	111880	106836		239	250	-4.5	20.0
3-Nitrotoluene	Ave	140492	136984		244	250	-2.5	20.0
PETN	Ave	68845	74686		2710	2500	8.5	20.0
1,2-Dinitrobenzene	Ave	126309	140368		278	250	11.1	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Lab Sample ID: CCV 280-613168/56 Calibration Date: 05/20/2023 07:52

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: 05190056.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.55	6.40	6.70
RDX	7.57	7.42	7.72
Picric acid	7.97	7.81	8.11
1,3,5-Trinitrobenzene	8.65	8.50	8.80
1,3-Dinitrobenzene	9.27	9.13	9.43
Nitrobenzene	9.64	9.49	9.79
3,5-Dinitroaniline	9.87	9.73	10.03
Tetryl	10.00	9.87	10.17
Nitroglycerin	10.45	10.32	10.62
2,4,6-Trinitrotoluene	10.89	10.81	11.01
4-Amino-2,6-dinitrotoluene	11.09	11.02	11.22
2-Amino-4,6-dinitrotoluene	11.34	11.27	11.47
2,6-Dinitrotoluene	11.49	11.42	11.62
2,4-Dinitrotoluene	11.66	11.58	11.78
2-Nitrotoluene	12.49	12.37	12.67
4-Nitrotoluene	12.91	12.79	13.09
3-Nitrotoluene	13.48	13.37	13.67
PETN	14.65	14.55	14.85
1,2-Dinitrobenzene	8.52	8.37	8.67

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\05190056.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 20-May-2023 07:52:17 ALS Bottle#: 7 Worklist Smp#: 56
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\20230519-121647.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 20-May-2023 11:22:18 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: CTX1663

First Level Reviewer: LV5D Date: 20-May-2023 11:16:53

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.433	6.430	0.003	51212	0.2508	0.2591	M
4 HMX	1	6.553	6.550	0.003	25618	0.2500	0.2739	M
6 DNX	1	6.760	6.757	0.003	37116	0.2503	0.2569	M
7 MNX	1	7.187	7.190	-0.003	40248	0.2918	0.3068	
8 RDX	1	7.573	7.570	0.003	29079	0.2500	0.2734	
9 2,4,6-Trinitrophenol	1	7.967	7.963	0.004	21126	0.2500	0.2786	
$ 10 1,2-Dinitrobenzene	1	8.520	8.523	-0.003	35092	0.2500	0.2778	
11 1,3,5-Trinitrobenzene	1	8.647	8.650	-0.003	58243	0.2500	0.2682	
12 1,3-Dinitrobenzene	1	9.267	9.277	-0.010	79015	0.2500	0.2684	
13 Nitrobenzene	1	9.640	9.643	-0.003	48011	0.2500	0.2510	
14 3,5-Dinitroaniline	1	9.873	9.883	-0.010	60773	0.2500	0.2658	
15 Tetryl	1	10.000	10.017	-0.017	37418	0.2500	0.2280	
16 Nitroglycerin	2	10.453	10.470	-0.017	171596	2.50	2.68	
17 2,4,6-Trinitrotoluene	1	10.893	10.910	-0.017	54636	0.2500	0.2589	
18 4-Amino-2,6-dinitrotoluene	1	11.087	11.117	-0.030	40450	0.2500	0.2611	
19 2-Amino-4,6-dinitrotoluene	1	11.340	11.370	-0.030	52756	0.2500	0.2619	
20 2,6-Dinitrotoluene	1	11.493	11.517	-0.024	37835	0.2500	0.2651	
21 2,4-Dinitrotoluene	1	11.660	11.683	-0.023	79657	0.2500	0.2685	
22 o-Nitrotoluene	1	12.487	12.517	-0.030	31037	0.2500	0.2427	
23 p-Nitrotoluene	1	12.907	12.937	-0.030	26709	0.2500	0.2387	
24 m-Nitrotoluene	1	13.480	13.517	-0.037	34246	0.2500	0.2438	
25 PETN	2	14.653	14.697	-0.044	186714	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

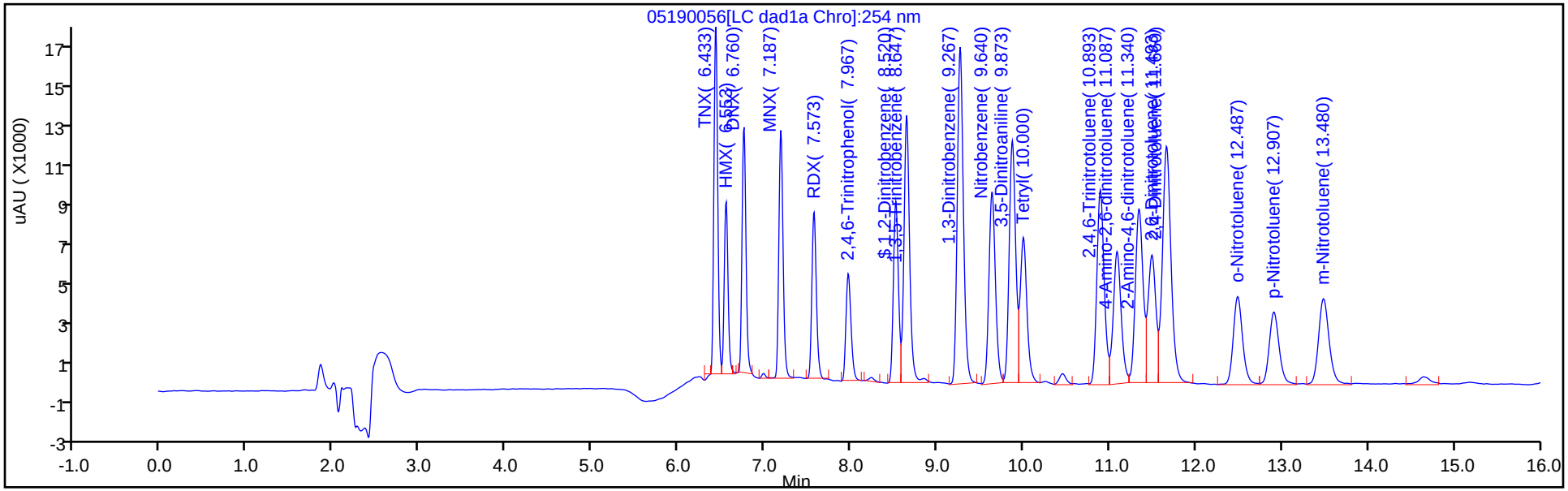
Report Date: 20-May-2023 11:22:18 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

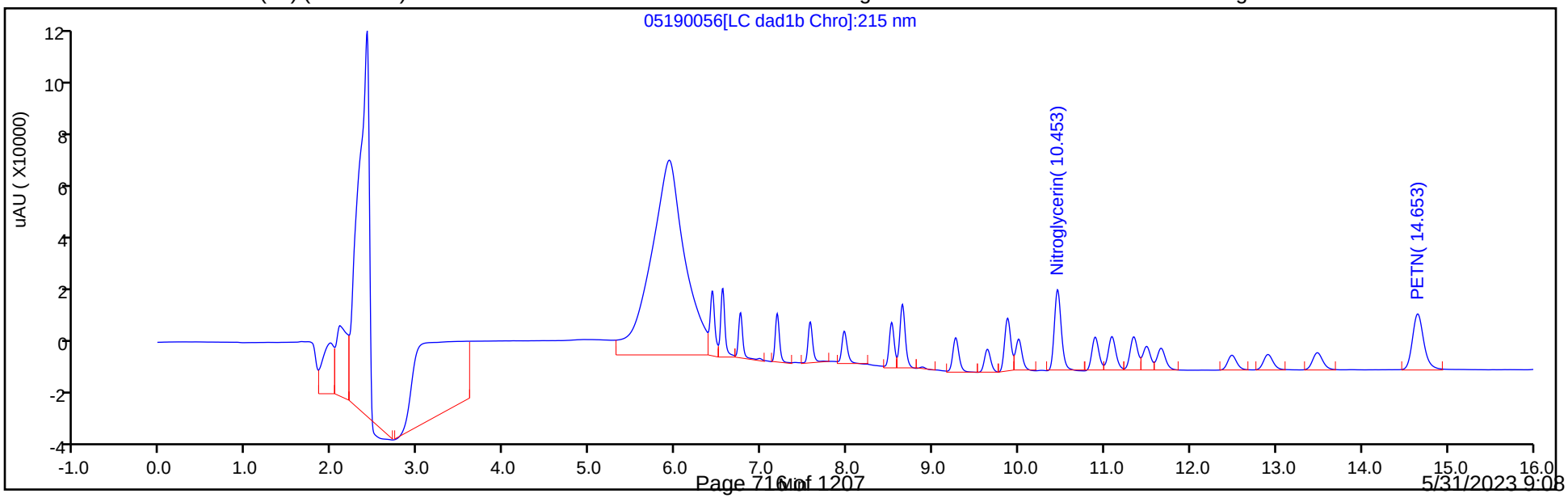
Data File: \\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190056.d

Injection Date:	20-May-2023 07:52:17	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	56
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

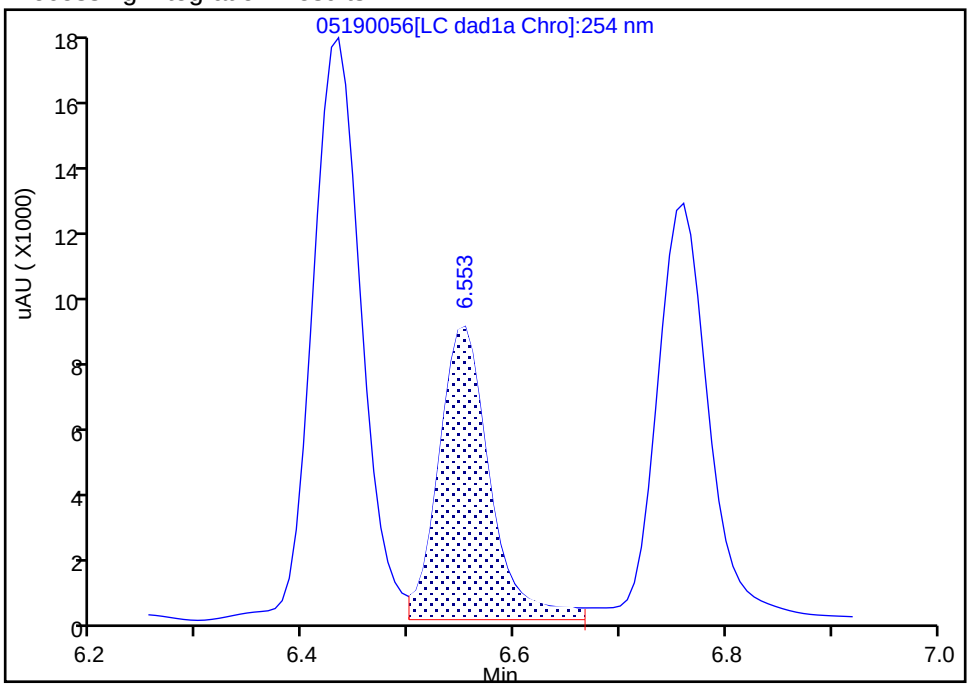
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190056.d				
Injection Date:	20-May-2023 07:52:17	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	56
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

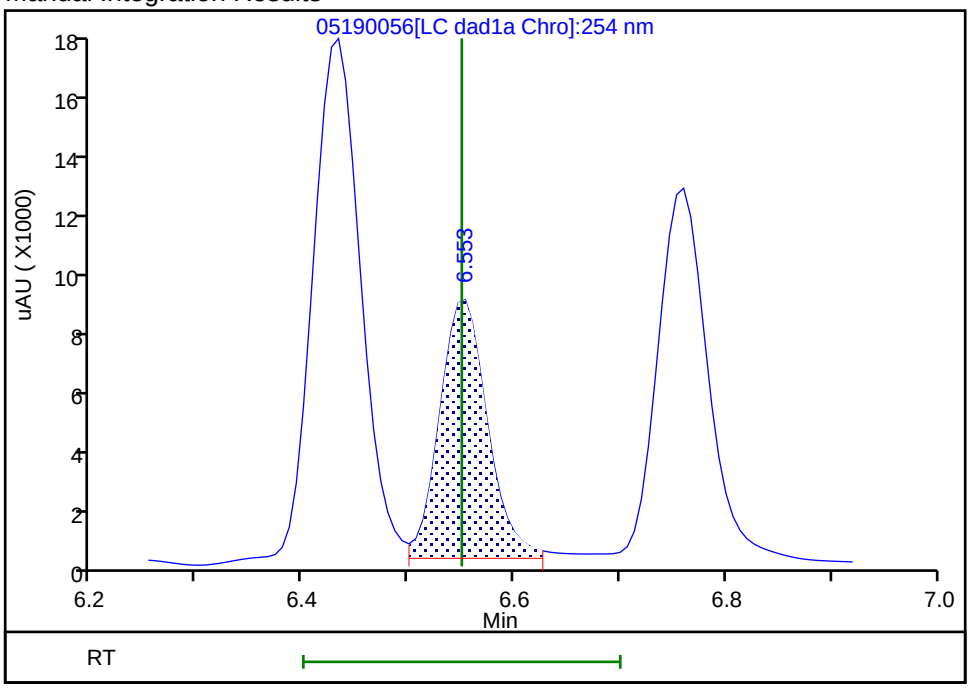
Processing Integration Results

RT: 6.55
Area: 28233
Amount: 0.301866
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 25618
Amount: 0.273907
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 11:16:49 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Lab Sample ID: CCV 280-613168/56 Calibration Date: 05/20/2023 07:52

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: 05190056.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	197687	204235		259	251	3.3	20.0
DNX	Ave	144462	148316		257	250	2.7	20.0
MNX	Ave	131172	137954		307	292	5.2	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Lab Sample ID: CCV 280-613168/56 Calibration Date: 05/20/2023 07:52

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: 05190056.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.43	6.33	6.53
DNX	6.76	6.66	6.86
MNX	7.19	7.04	7.34

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\05190056.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 20-May-2023 07:52:17 ALS Bottle#: 7 Worklist Smp#: 56
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\20230519-121647.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 20-May-2023 11:22:18 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: CTX1663

First Level Reviewer: LV5D Date: 20-May-2023 11:16:53

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.433	6.430	0.003	51212	0.2508	0.2591	M
4 HMX	1	6.553	6.550	0.003	25618	0.2500	0.2739	M
6 DNX	1	6.760	6.757	0.003	37116	0.2503	0.2569	M
7 MNX	1	7.187	7.190	-0.003	40248	0.2918	0.3068	
8 RDX	1	7.573	7.570	0.003	29079	0.2500	0.2734	
9 2,4,6-Trinitrophenol	1	7.967	7.963	0.004	21126	0.2500	0.2786	
$ 10 1,2-Dinitrobenzene	1	8.520	8.523	-0.003	35092	0.2500	0.2778	
11 1,3,5-Trinitrobenzene	1	8.647	8.650	-0.003	58243	0.2500	0.2682	
12 1,3-Dinitrobenzene	1	9.267	9.277	-0.010	79015	0.2500	0.2684	
13 Nitrobenzene	1	9.640	9.643	-0.003	48011	0.2500	0.2510	
14 3,5-Dinitroaniline	1	9.873	9.883	-0.010	60773	0.2500	0.2658	
15 Tetryl	1	10.000	10.017	-0.017	37418	0.2500	0.2280	
16 Nitroglycerin	2	10.453	10.470	-0.017	171596	2.50	2.68	
17 2,4,6-Trinitrotoluene	1	10.893	10.910	-0.017	54636	0.2500	0.2589	
18 4-Amino-2,6-dinitrotoluene	1	11.087	11.117	-0.030	40450	0.2500	0.2611	
19 2-Amino-4,6-dinitrotoluene	1	11.340	11.370	-0.030	52756	0.2500	0.2619	
20 2,6-Dinitrotoluene	1	11.493	11.517	-0.024	37835	0.2500	0.2651	
21 2,4-Dinitrotoluene	1	11.660	11.683	-0.023	79657	0.2500	0.2685	
22 o-Nitrotoluene	1	12.487	12.517	-0.030	31037	0.2500	0.2427	
23 p-Nitrotoluene	1	12.907	12.937	-0.030	26709	0.2500	0.2387	
24 m-Nitrotoluene	1	13.480	13.517	-0.037	34246	0.2500	0.2438	
25 PETN	2	14.653	14.697	-0.044	186714	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

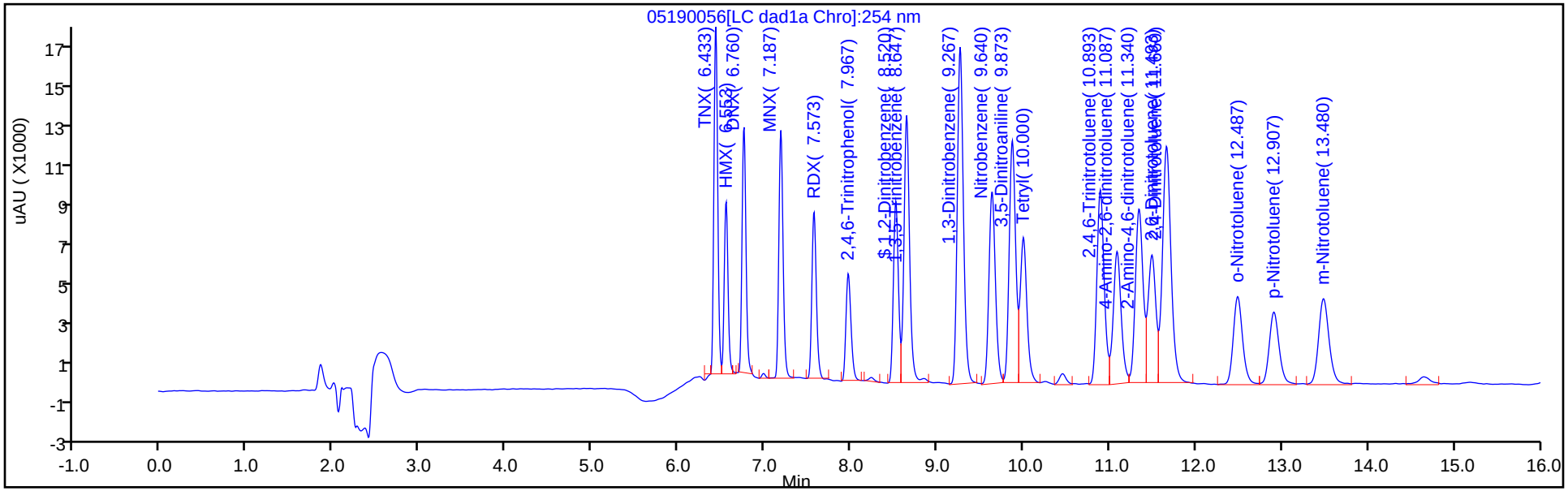
Report Date: 20-May-2023 11:22:18 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

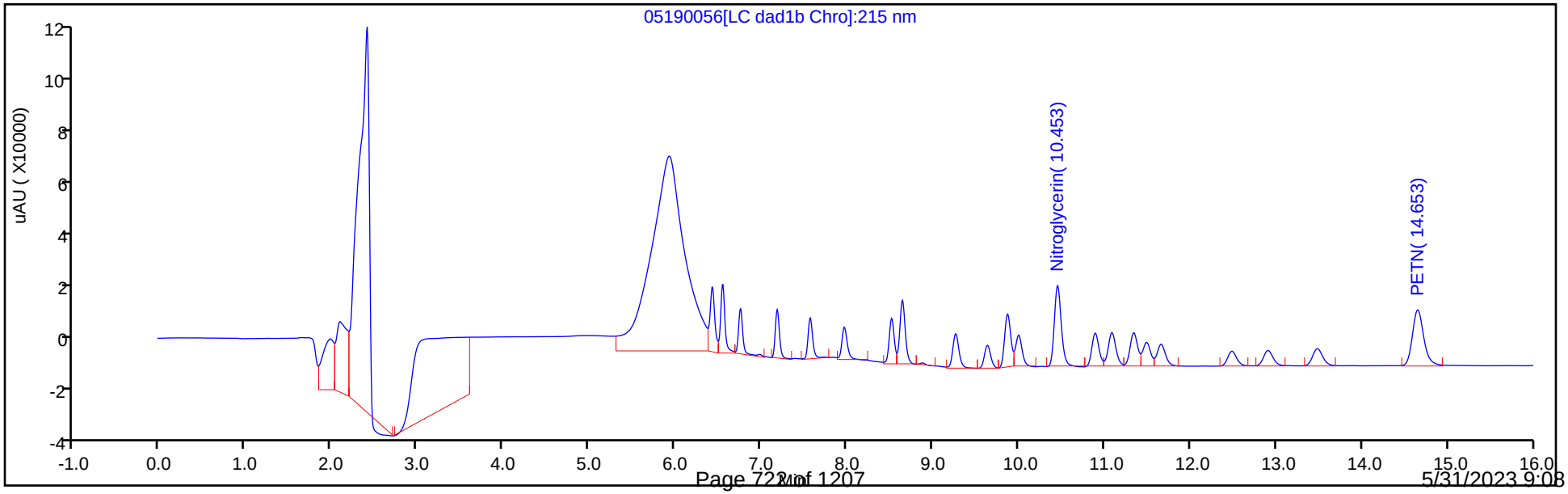
Data File: \\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190056.d

Injection Date:	20-May-2023 07:52:17	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	56
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

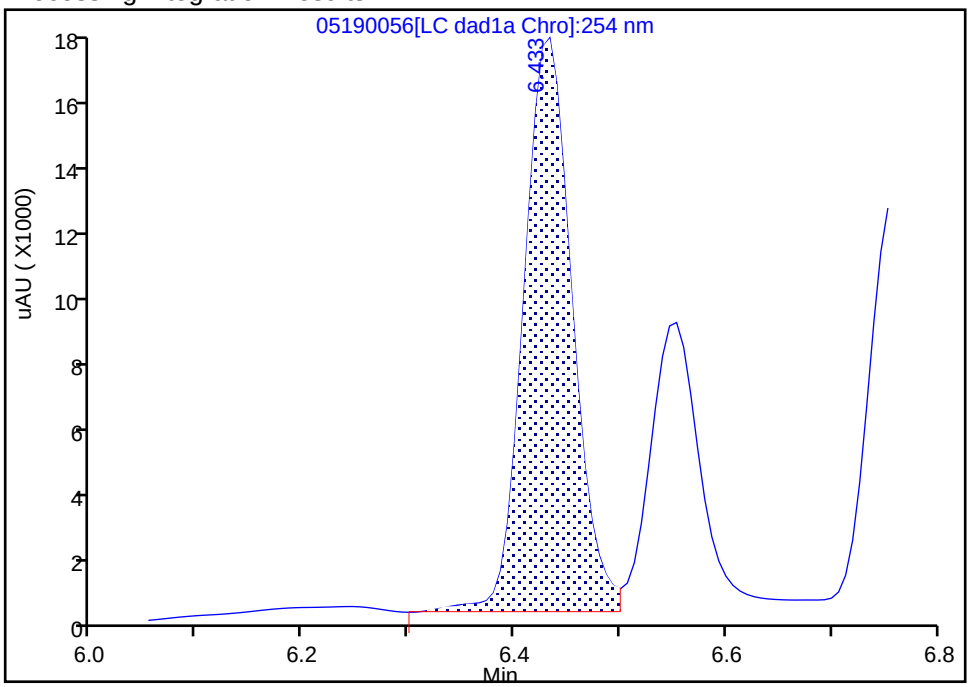
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190056.d				
Injection Date:	20-May-2023 07:52:17	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	56
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

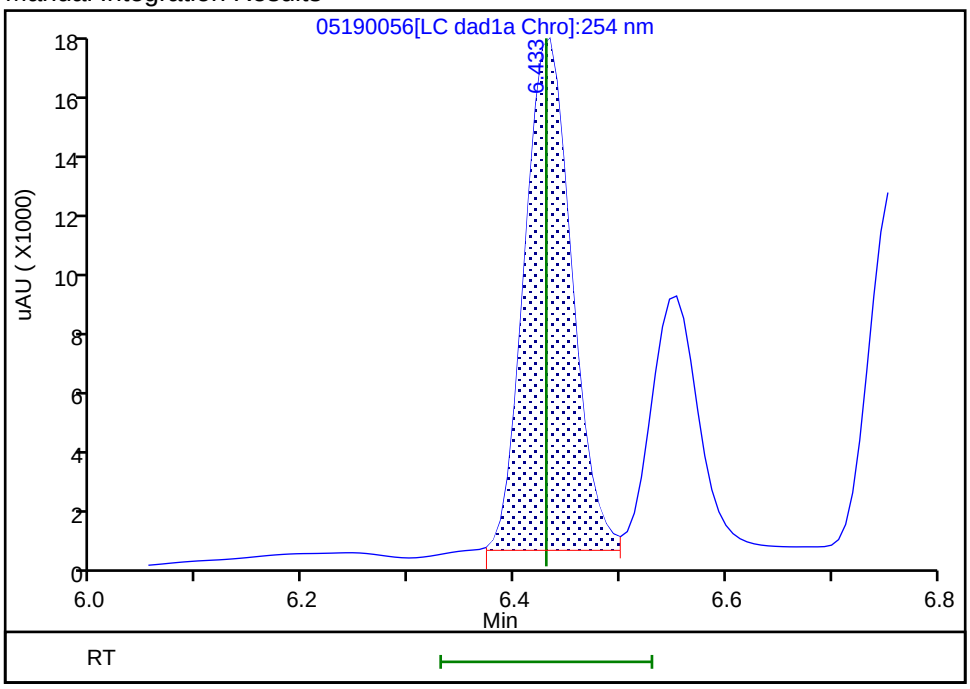
Processing Integration Results

RT: 6.43
Area: 53726
Amount: 0.271773
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 51212
Amount: 0.259056
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 11:16:48 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

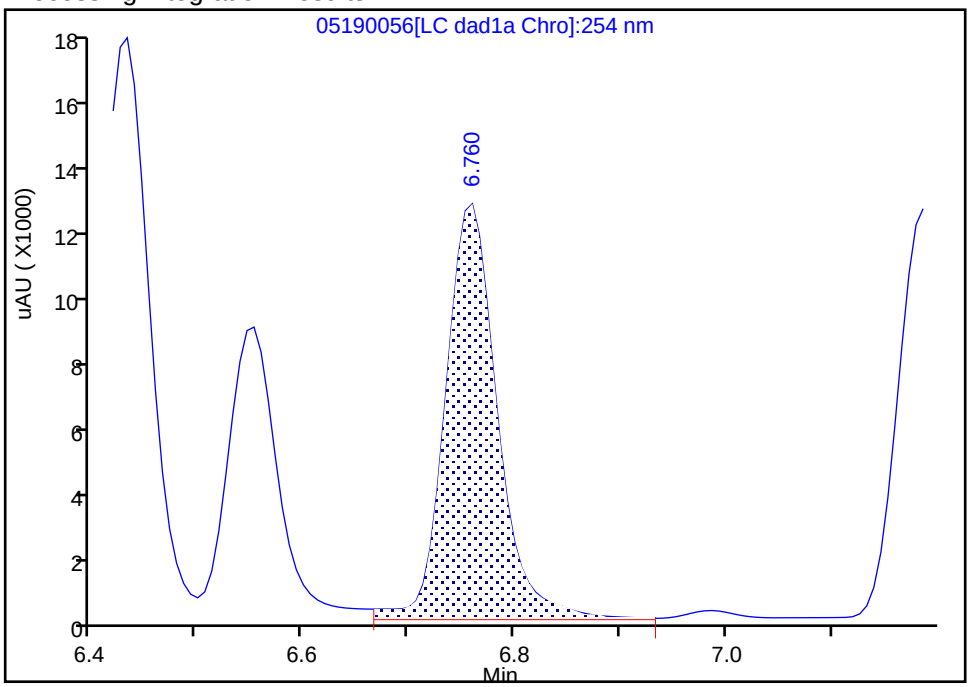
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190056.d				
Injection Date:	20-May-2023 07:52:17	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	56
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

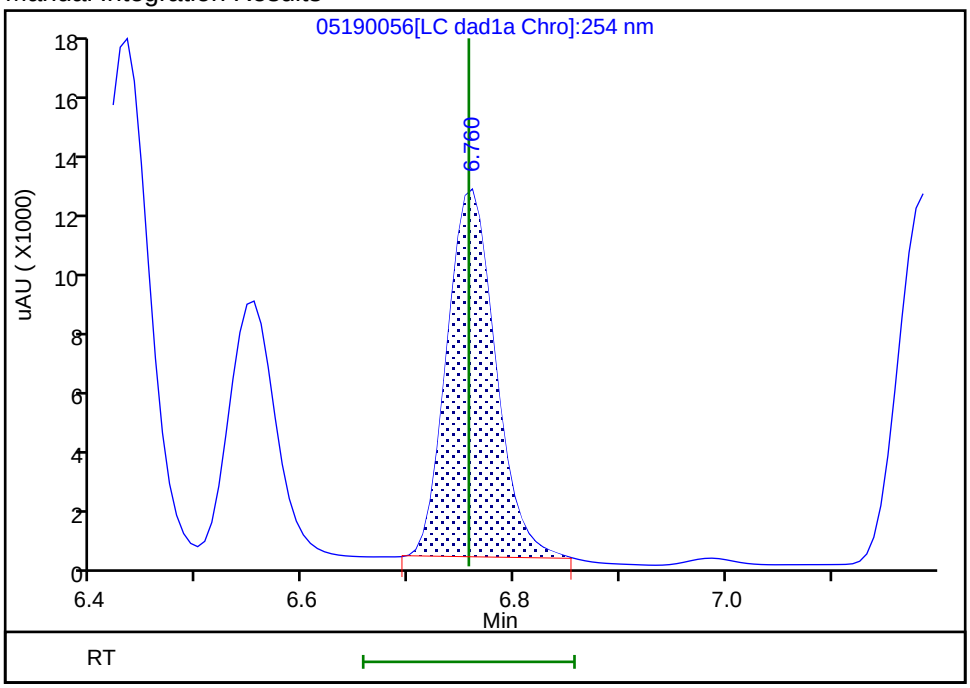
Processing Integration Results

RT: 6.76
Area: 41085
Amount: 0.284399
Amount Units: ug/mL



Manual Integration Results

RT: 6.76
Area: 37116
Amount: 0.256925
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 11:16:52 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Lab Sample ID: CCV 280-613168/57 Calibration Date: 05/20/2023 08:15

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: 05190057.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		221428		237	250	-5.1	20.0
2,4-diamino-6-nitrotoluene	Ave	146472	135328		231	250	-7.6	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Lab Sample ID: CCV 280-613168/57 Calibration Date: 05/20/2023 08:15

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: 05190057.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\20230519-121647.b\05190057.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 20-May-2023 08:15:18 ALS Bottle#: 8 Worklist Smp#: 57
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\20230519-121647.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 20-May-2023 11:22:18 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: CTX1663

First Level Reviewer: LV5D Date: 20-May-2023 11:17:00

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	6.429	6.431	-0.002	55357	0.2500	0.2372	M
5 2,4-diamino-6-nitrotoluene	1	6.622	6.618	0.004	33832	0.2500	0.2310	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00037 Amount Added: 12.50 Units: uL

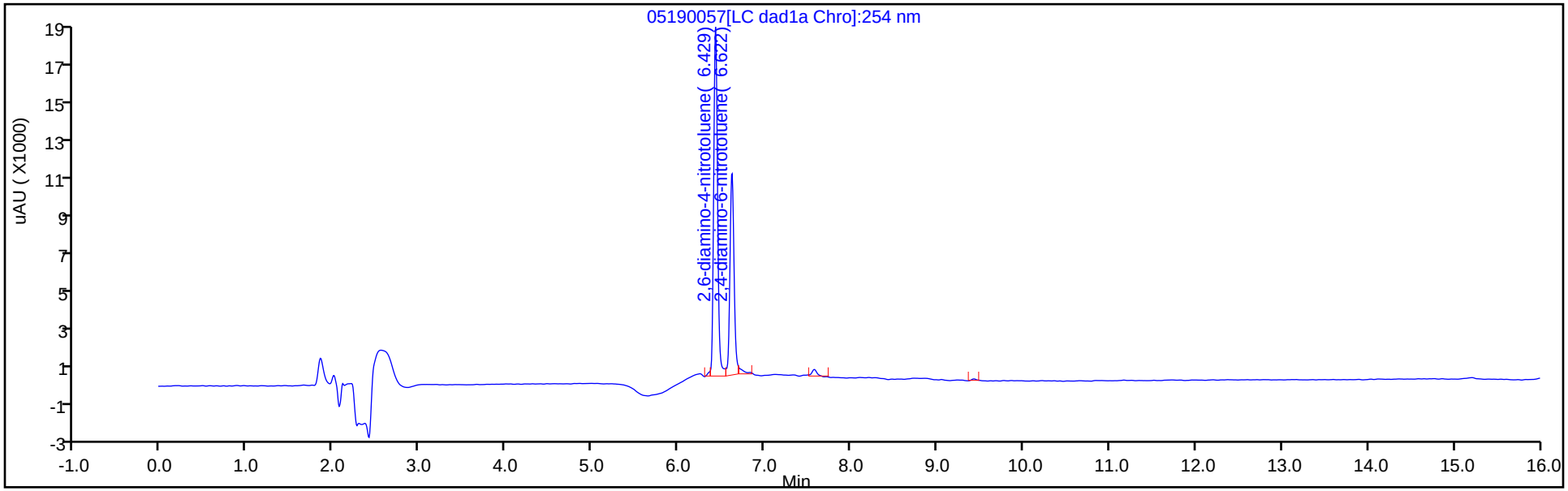
Report Date: 20-May-2023 11:22:18 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

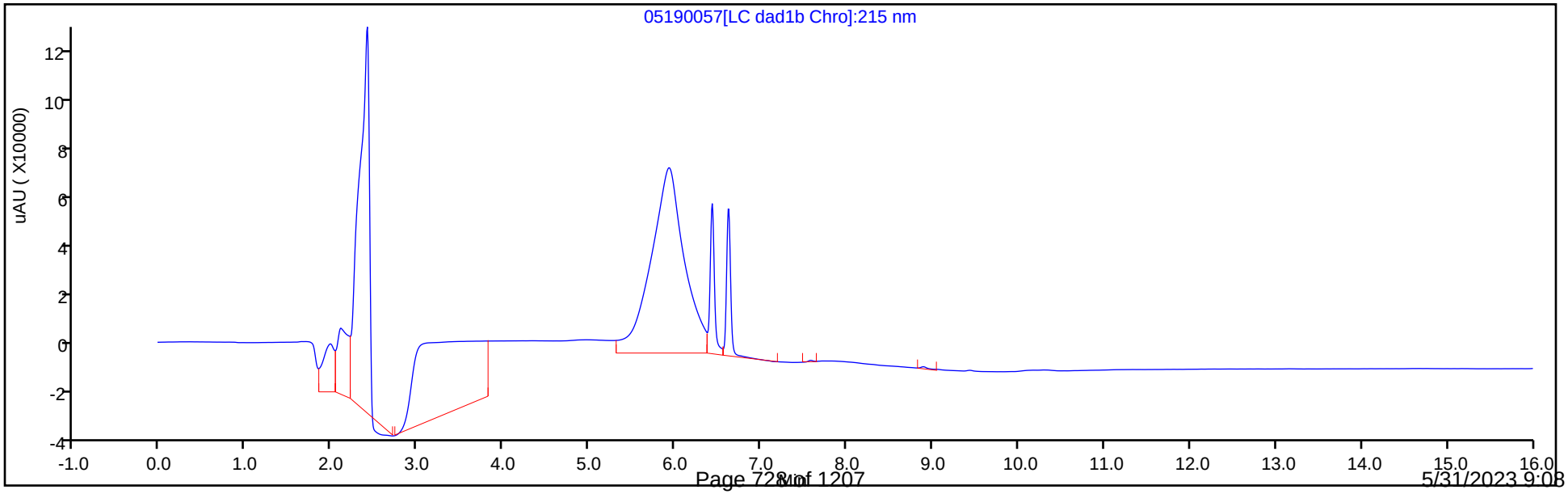
Data File: \\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190057.d

Injection Date:	20-May-2023 08:15:18	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	57
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

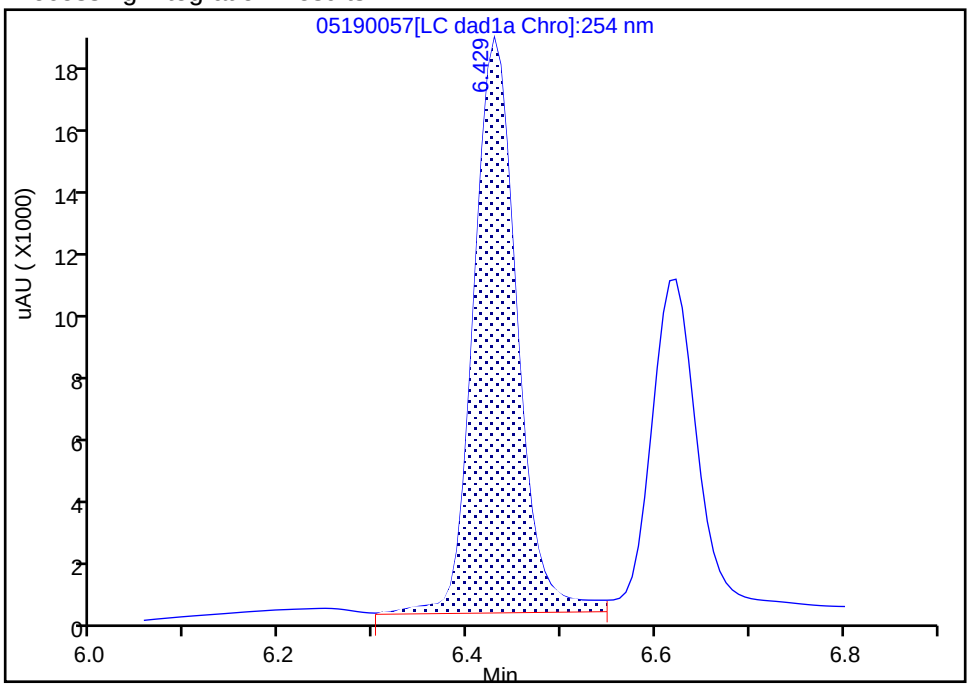
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190057.d				
Injection Date:	20-May-2023 08:15:18	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

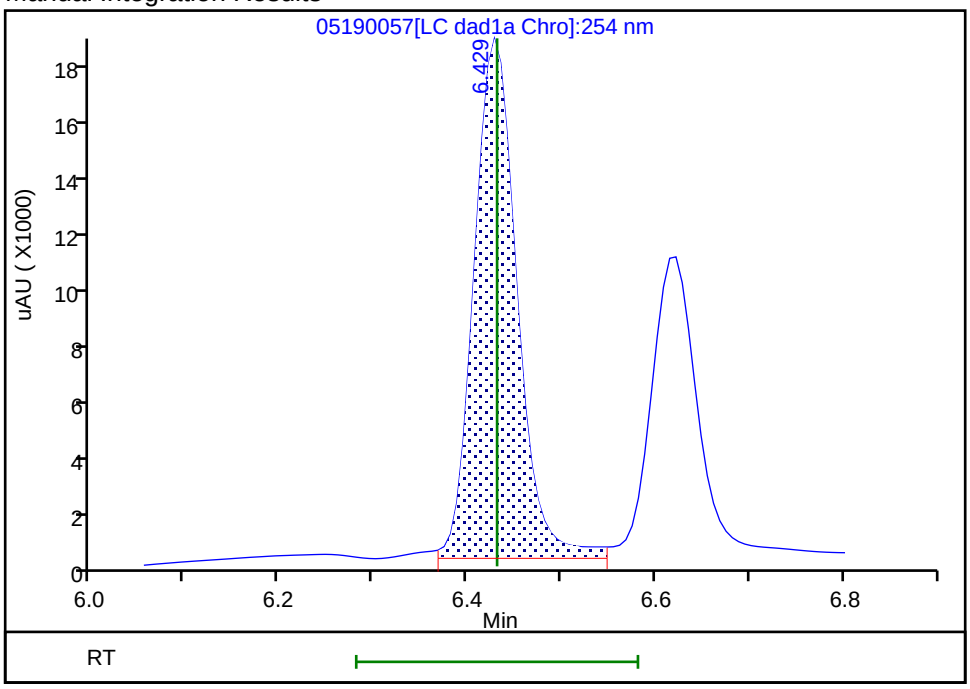
Processing Integration Results

RT: 6.43
Area: 55871
Amount: 0.239480
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 55357
Amount: 0.237242
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 11:16:57 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

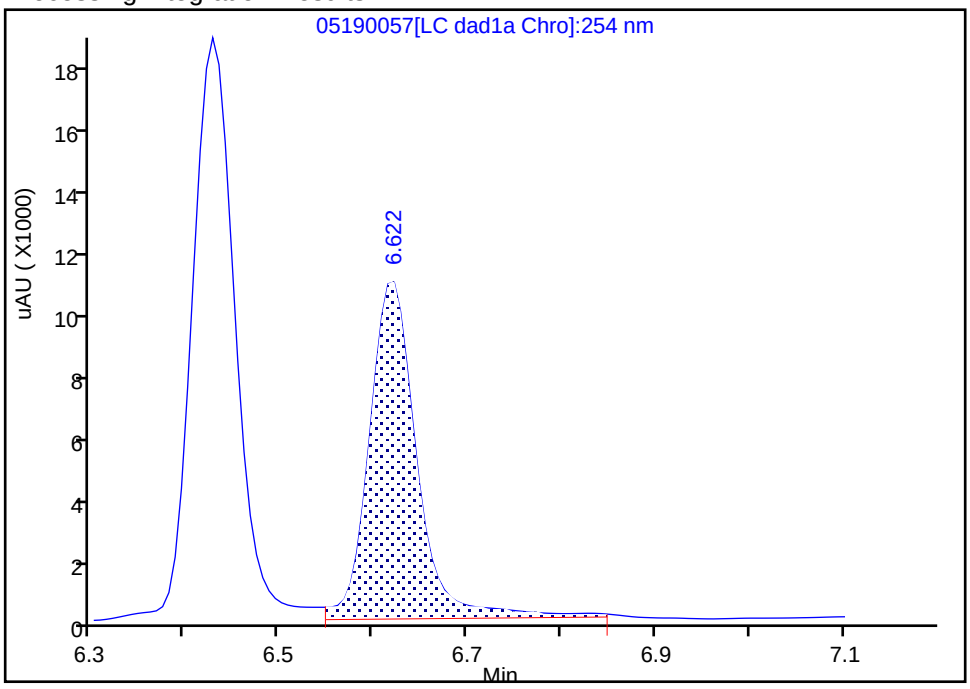
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190057.d				
Injection Date:	20-May-2023 08:15:18	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

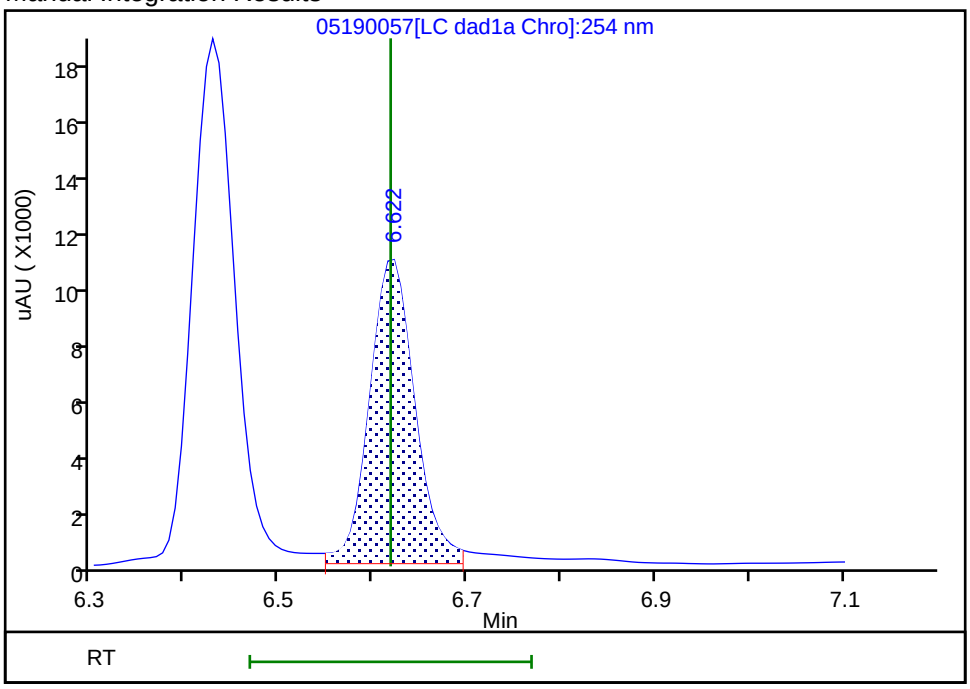
Processing Integration Results

RT: 6.62
Area: 35329
Amount: 0.241199
Amount Units: ug/mL



Manual Integration Results

RT: 6.62
Area: 33832
Amount: 0.230979
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 11:16:59 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-176674-1

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.: 280-176674-1

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

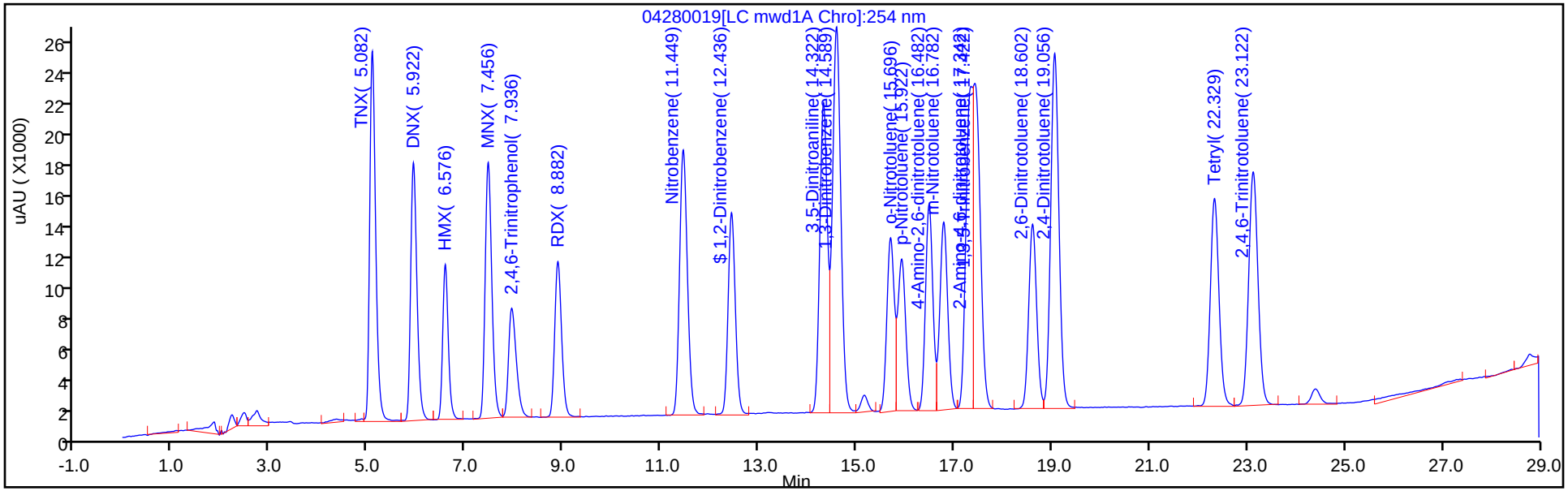
Report Date: 29-Apr-2023 13:06:04 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

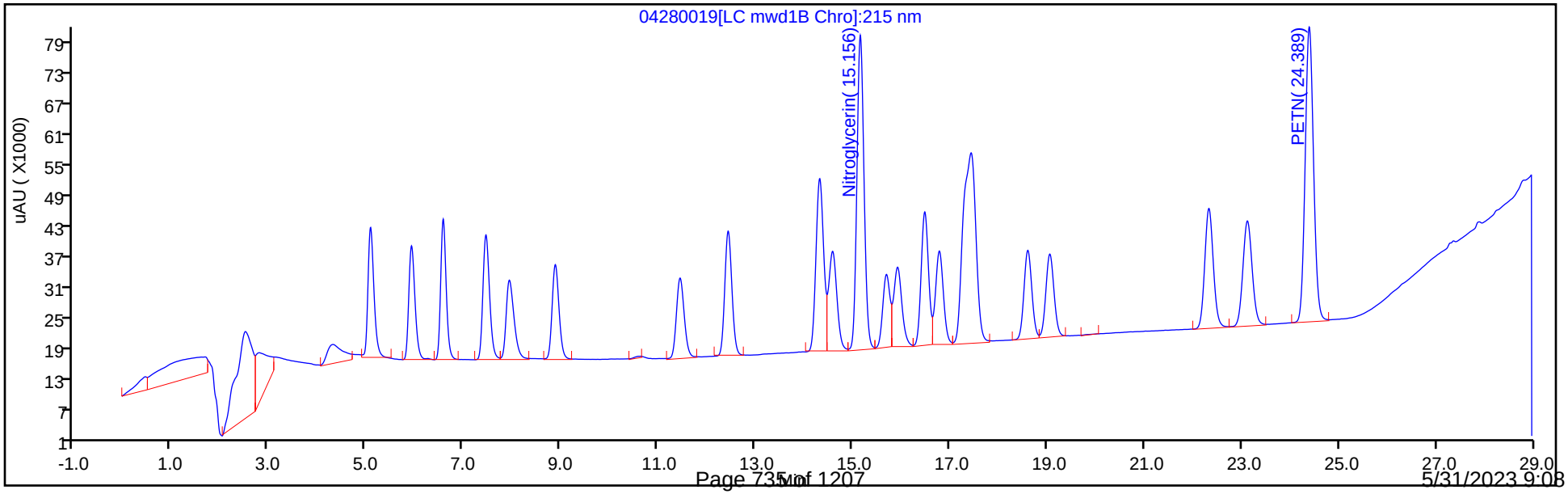
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280019.D

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



5/31/2023 9:08 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

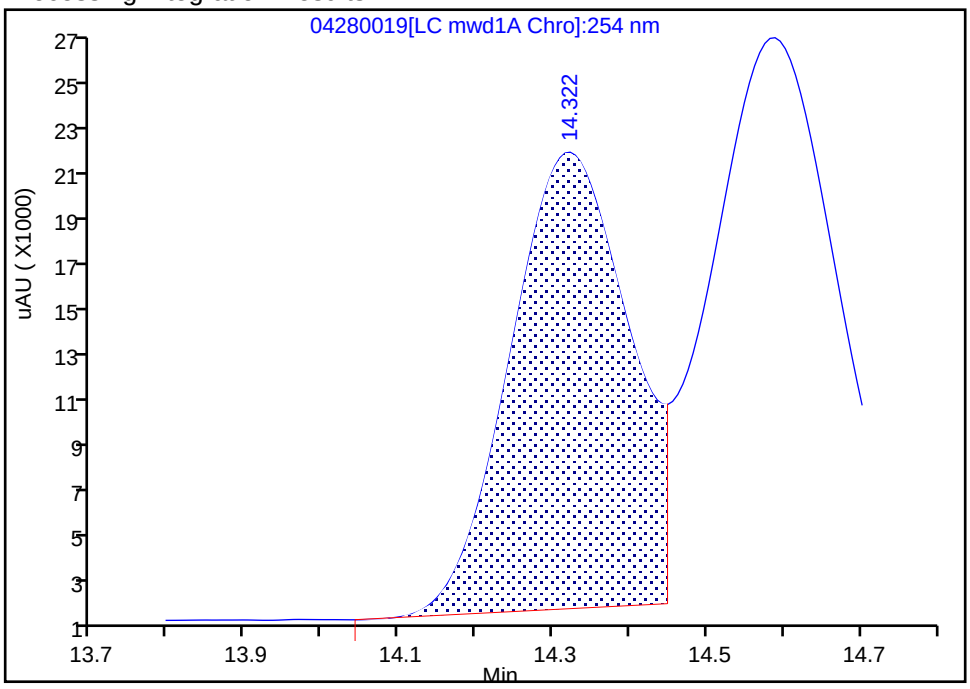
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280019.D				
Injection Date:	28-Apr-2023 23:38:32	Instrument ID:	CHHPLC_X5		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

11 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

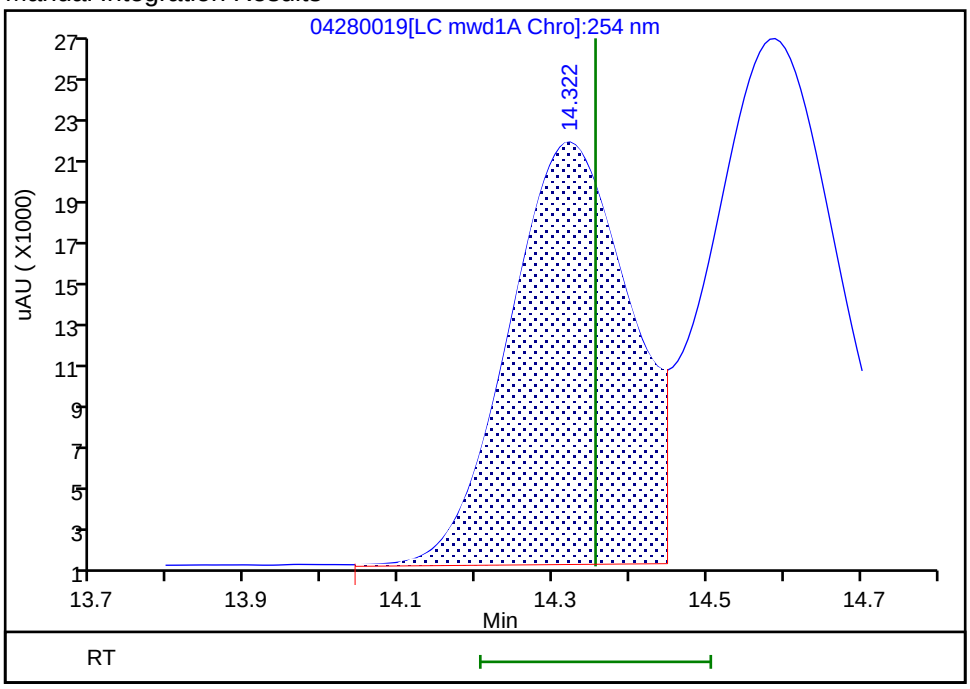
Processing Integration Results

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

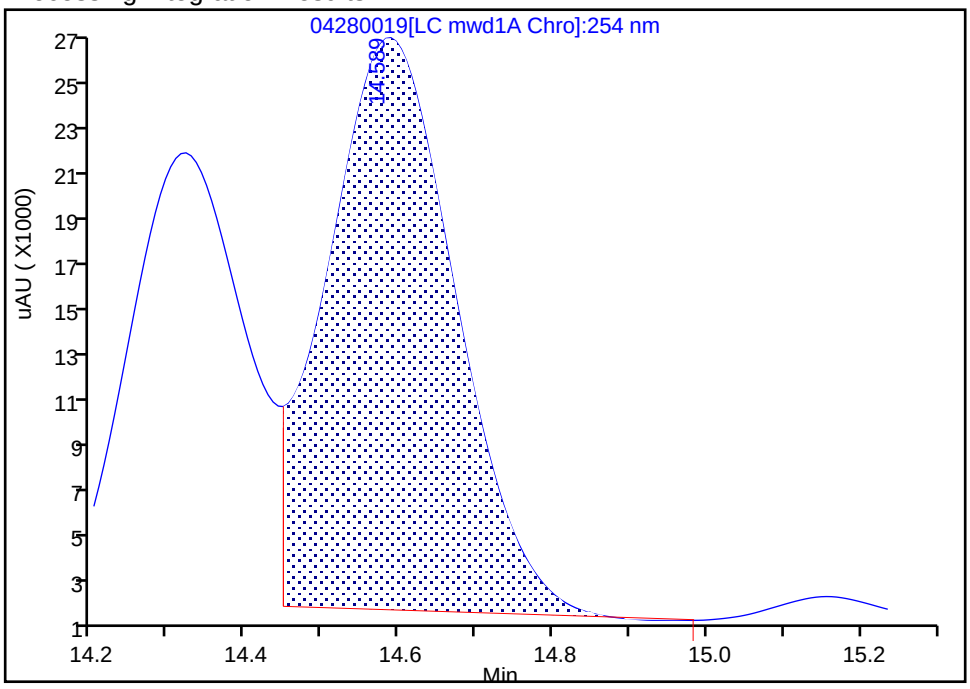
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280019.D				
Injection Date:	28-Apr-2023 23:38:32	Instrument ID:	CHHPLC_X5		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

Signal: 1

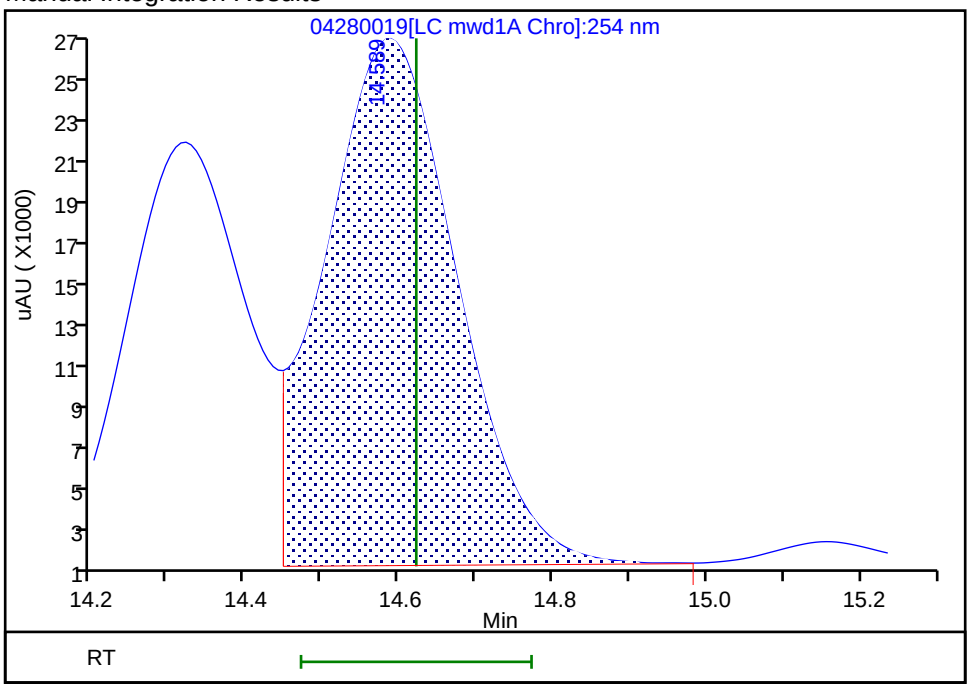
Processing Integration Results

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

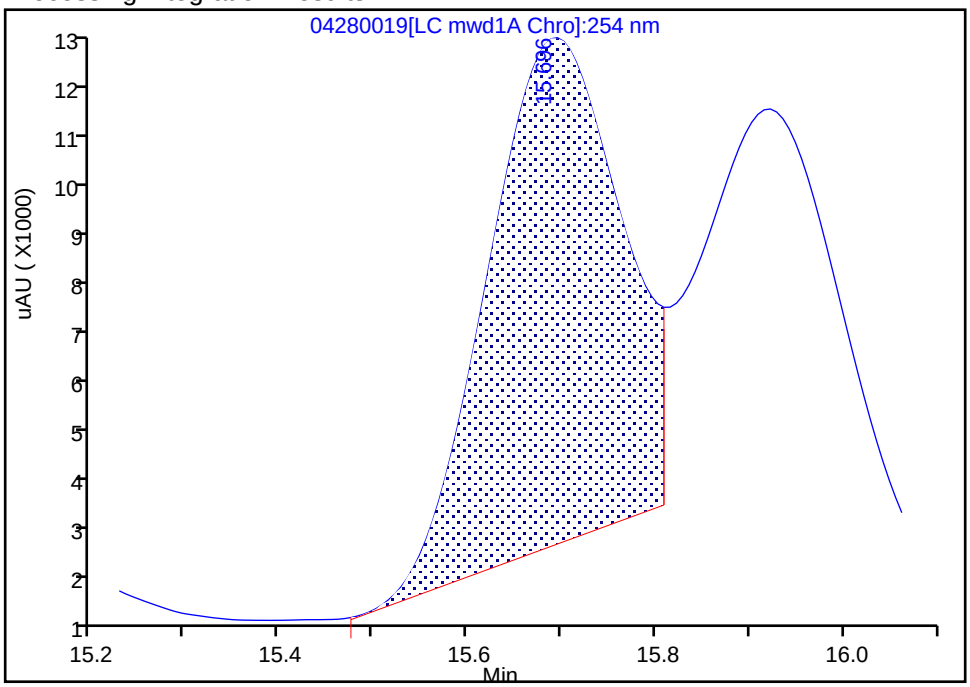
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280019.D				
Injection Date:	28-Apr-2023 23:38:32	Instrument ID:	CHHPLC_X5		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

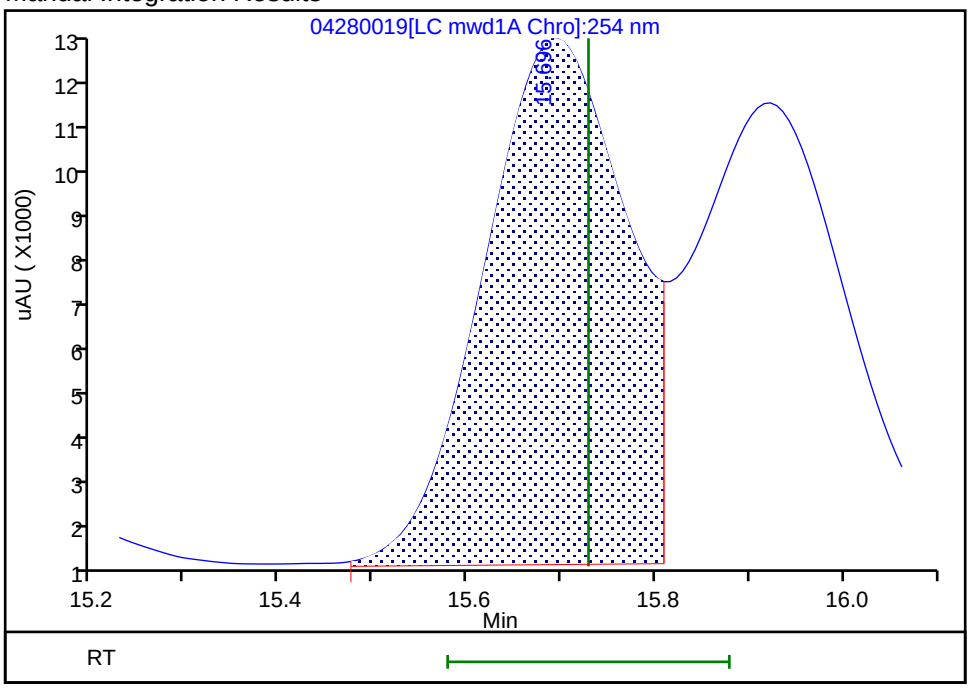
Processing Integration Results

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

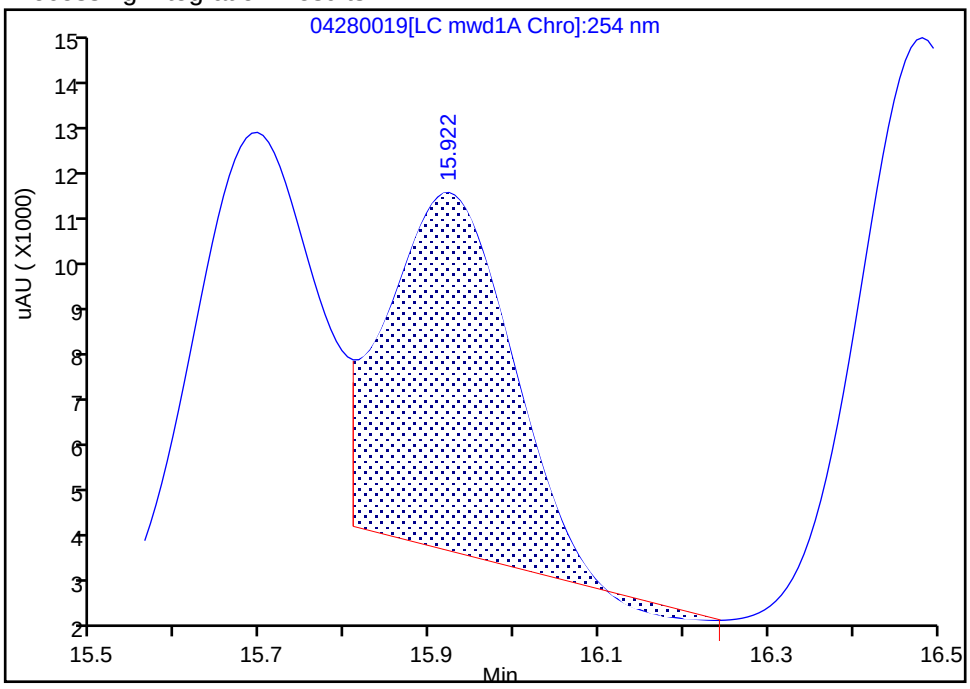
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280019.D				
Injection Date:	28-Apr-2023 23:38:32	Instrument ID:	CHHPLC_X5		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

16 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

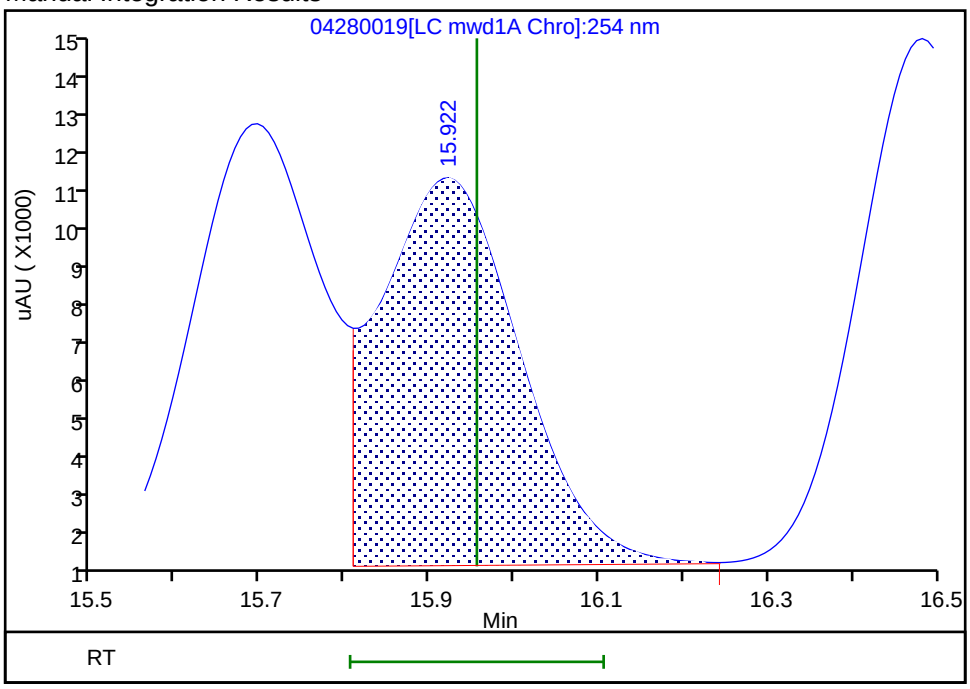
Processing Integration Results

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

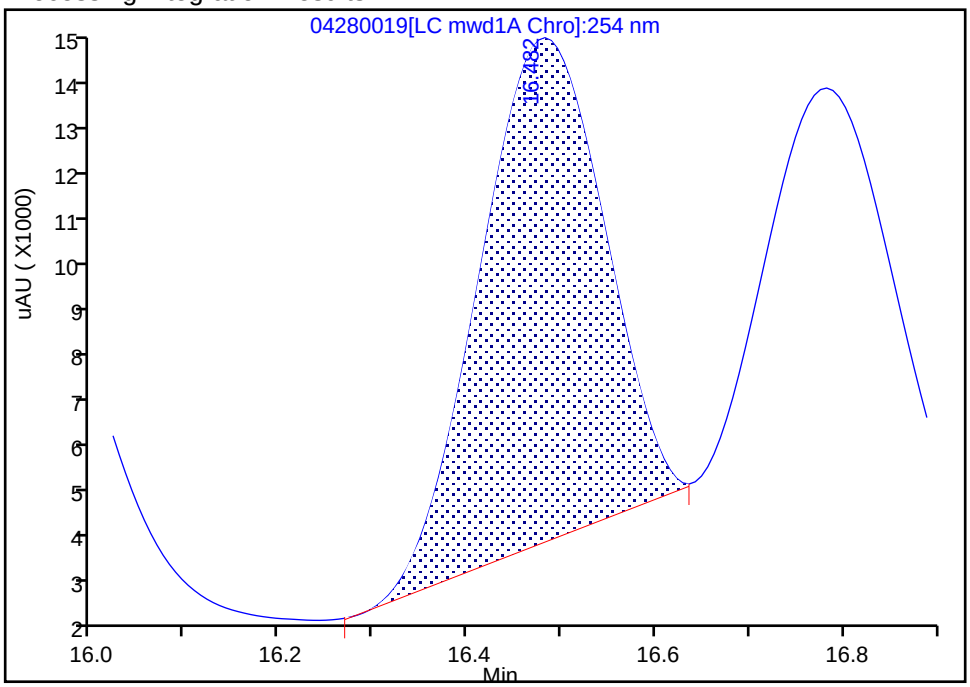
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280019.D				
Injection Date:	28-Apr-2023 23:38:32	Instrument ID:	CHHPLC_X5		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	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

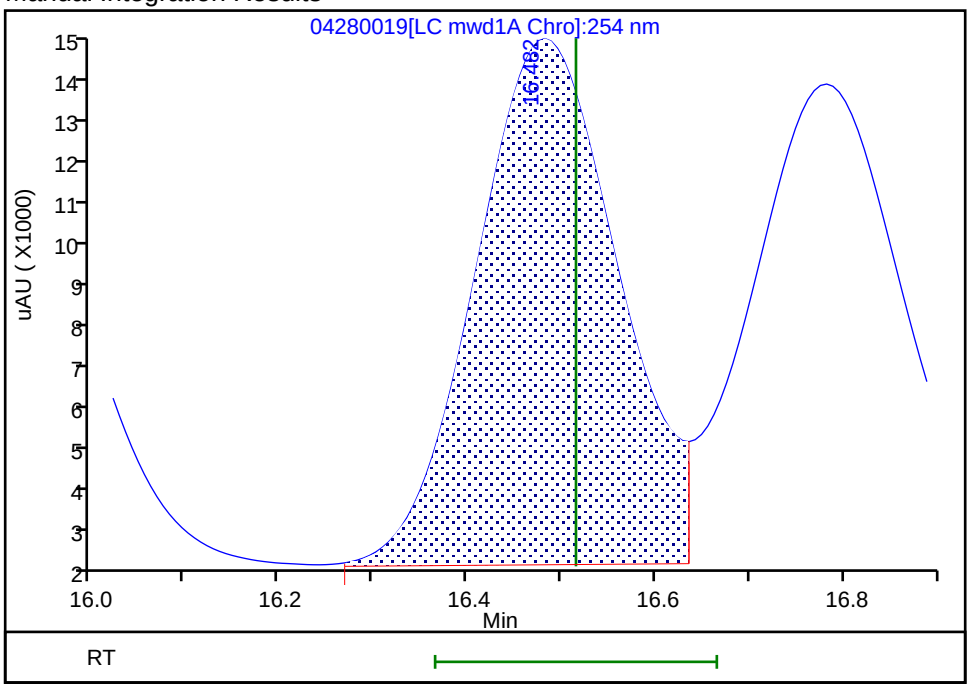
Processing Integration Results

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

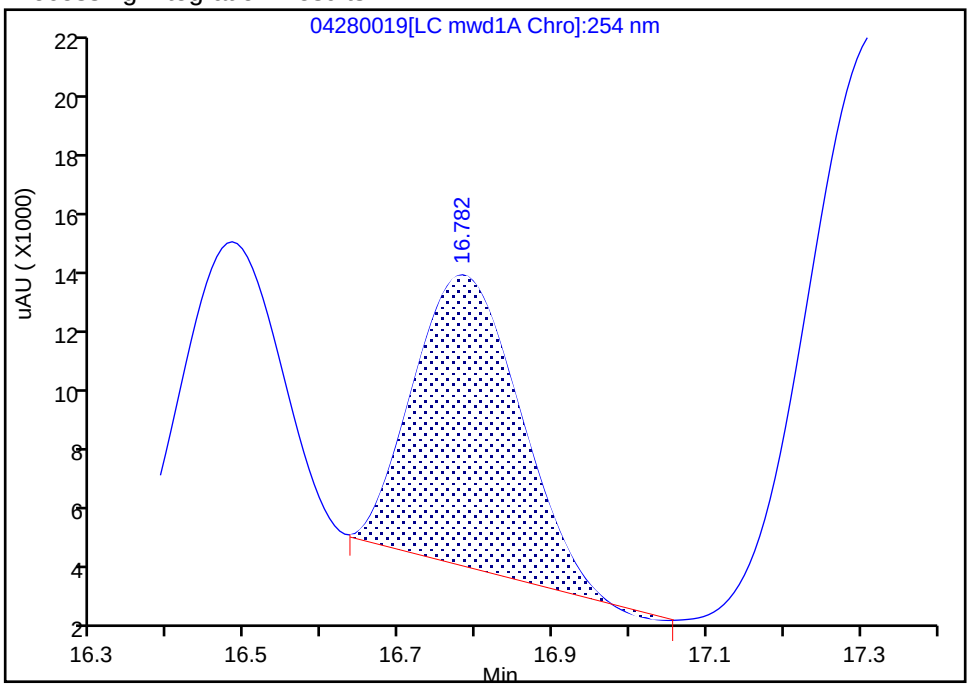
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280019.D				
Injection Date:	28-Apr-2023 23:38:32	Instrument ID:	CHHPLC_X5		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	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

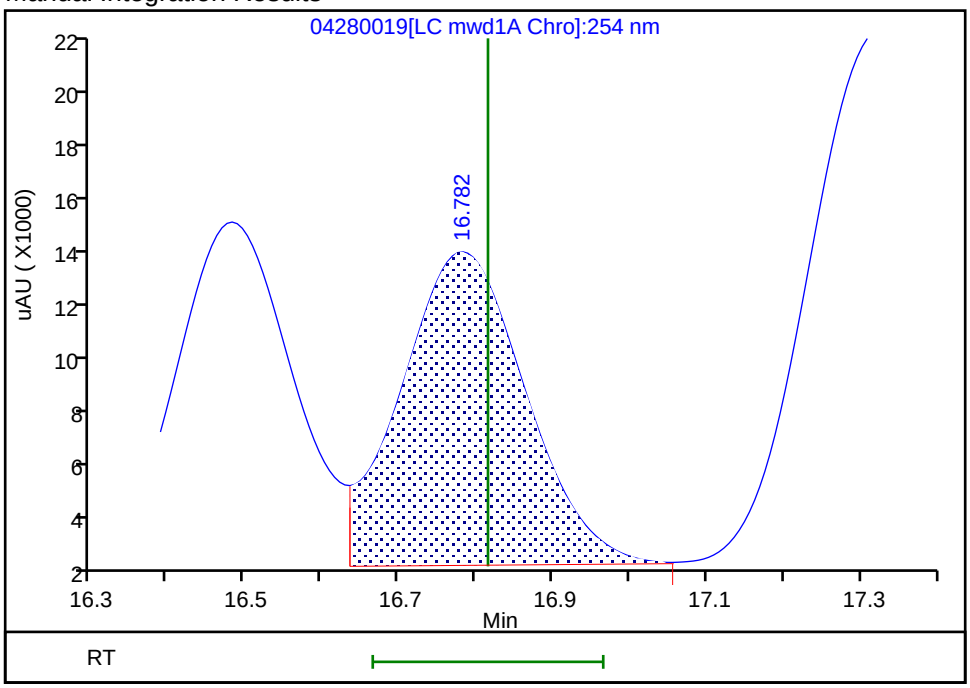
Processing Integration Results

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

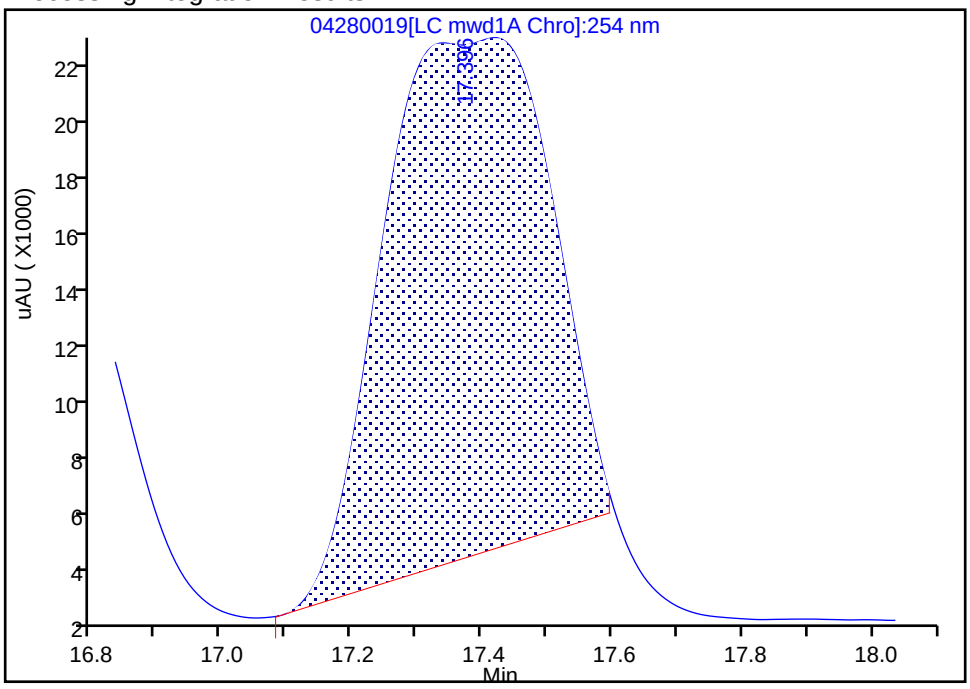
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280019.D				
Injection Date:	28-Apr-2023 23:38:32	Instrument ID:	CHHPLC_X5		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	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

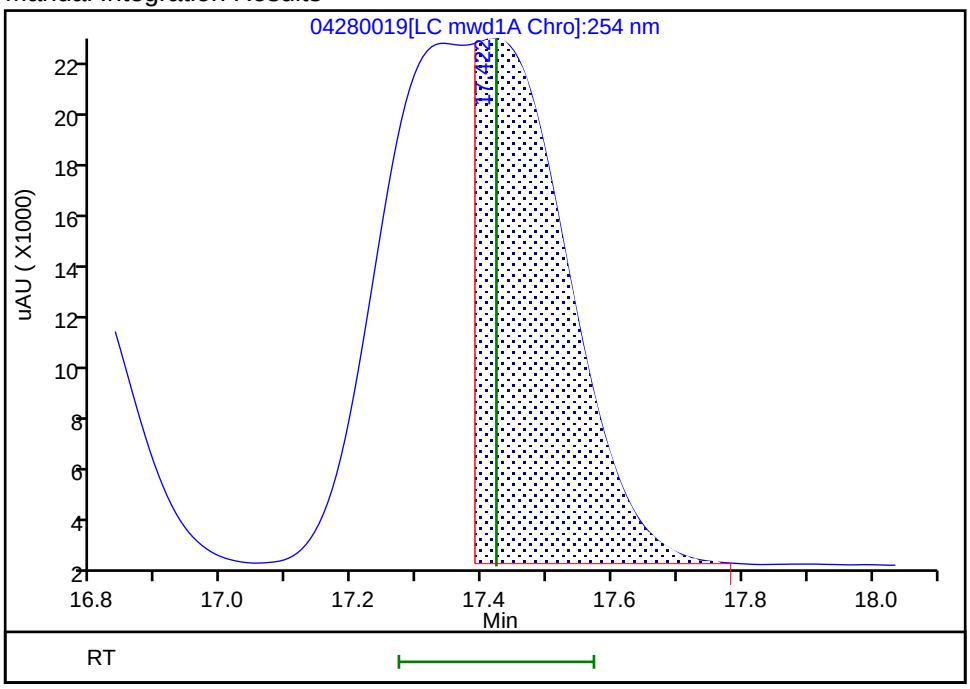
Processing Integration Results

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.: 280-176674-1

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.: 280-176674-1

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

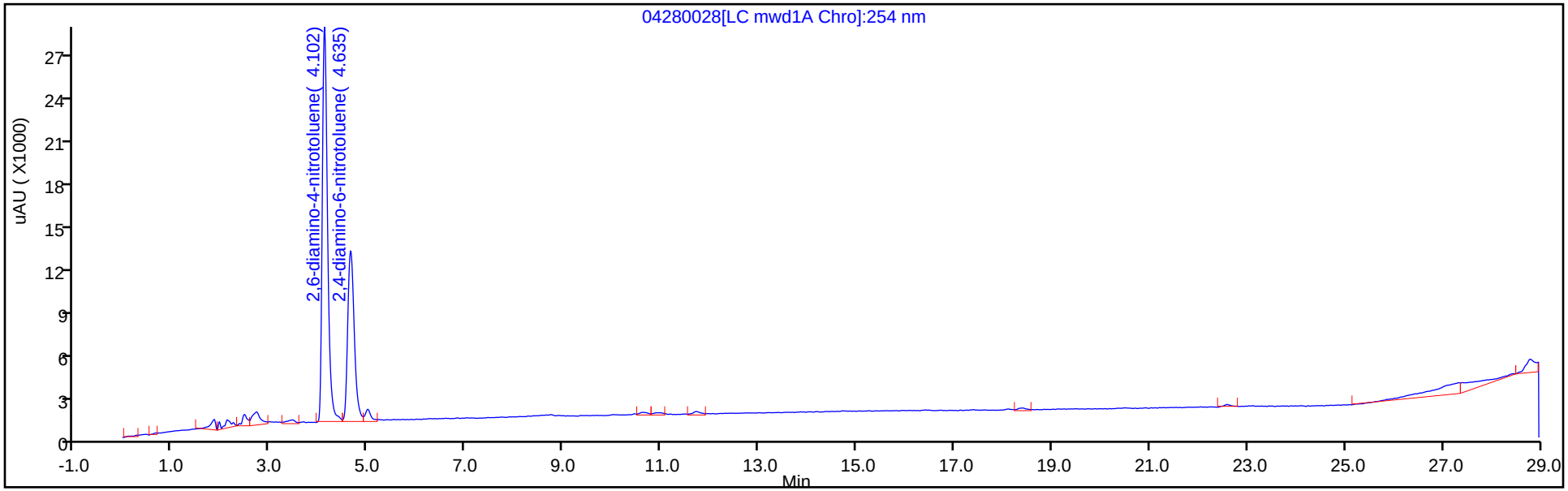
Report Date: 29-Apr-2023 13:06:04 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

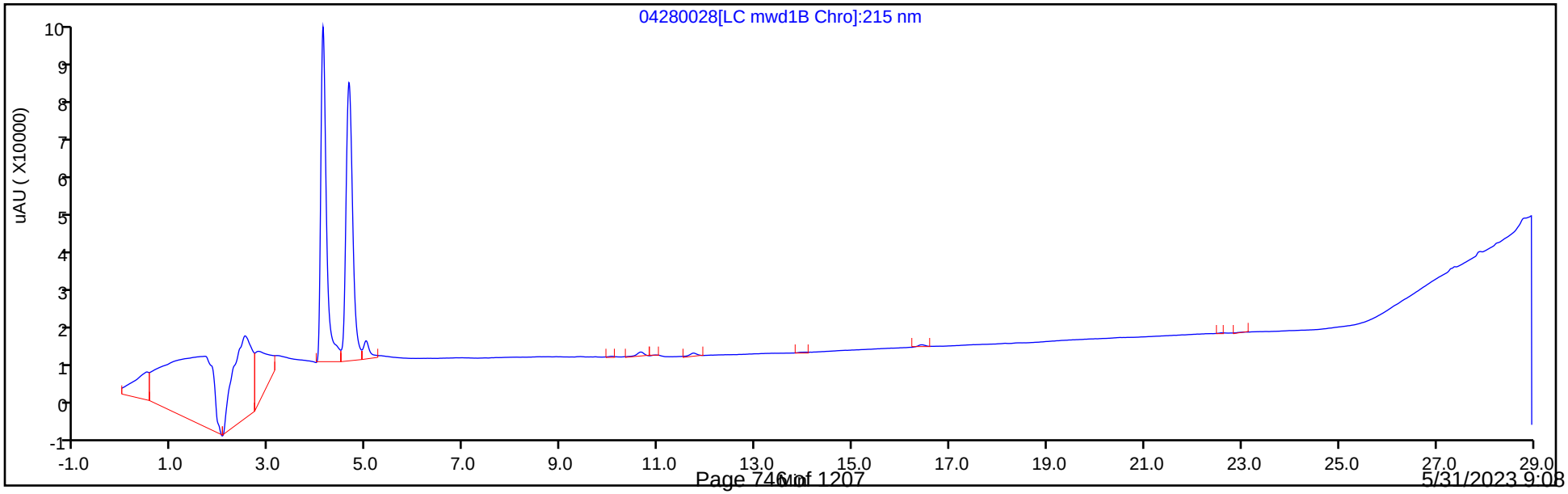
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280028.D

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.: 280-176674-1

SDG No.:

Lab Sample ID: CCV 280-613238/7 | Calibration Date: 05/20/2023 18:42

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: 05200007.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin2		193344		256	250	2.5	20.0
Picric acid	Lin2		165940		256	250	2.5	20.0
RDX	Lin2		225160		258	250	3.2	20.0
Nitrobenzene	Ave	398834	399416		250	250	0.1	20.0
3,5-Dinitroaniline	Lin2		474016		265	250	6.1	20.0
1,3-Dinitrobenzene	Ave	629351	630392		250	250	0.2	20.0
Nitroglycerin	Ave	134735	136176		2530	2500	1.1	20.0
2-Nitrotoluene	Ave	246963	255896		259	250	3.6	20.0
4-Nitrotoluene	Ave	227490	235428		259	250	3.5	20.0
4-Amino-2,6-dinitrotoluene	Ave	294210	299492		254	250	1.8	20.0
3-Nitrotoluene	Ave	294634	302560		257	250	2.7	20.0
2-Amino-4,6-dinitrotoluene	Ave	427939	426644		249	250	-0.3	20.0
1,3,5-Trinitrobenzene	Ave	405692	444348		274	250	9.5	20.0
2,6-Dinitrotoluene	Ave	291675	295332		253	250	1.3	20.0
2,4-Dinitrotoluene	Ave	584463	597064		255	250	2.2	20.0
Tetryl	Ave	284731	290312		255	250	2.0	20.0
2,4,6-Trinitrotoluene	Ave	438876	444388		253	250	1.3	20.0
PETN	Ave	143938	135777		2360	2500	-5.7	20.0
1,2-Dinitrobenzene	Ave	280697	280972		250	250	0.1	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Lab Sample ID: CCV 280-613238/7 Calibration Date: 05/20/2023 18:42

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: 05200007.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.76	6.61	6.91
Picric acid	8.49	8.34	8.64
RDX	9.01	8.86	9.16
Nitrobenzene	11.53	11.38	11.68
3,5-Dinitroaniline	14.38	14.23	14.53
1,3-Dinitrobenzene	14.64	14.49	14.79
Nitroglycerin	15.16	15.01	15.31
2-Nitrotoluene	15.72	15.57	15.87
4-Nitrotoluene	15.95	15.80	16.10
4-Amino-2,6-dinitrotoluene	16.51	16.36	16.66
3-Nitrotoluene	16.80	16.65	16.95
2-Amino-4,6-dinitrotoluene	17.35	17.20	17.50
1,3,5-Trinitrobenzene	17.40	17.25	17.55
2,6-Dinitrotoluene	18.61	18.46	18.76
2,4-Dinitrotoluene	19.05	18.90	19.20
Tetryl	22.33	22.18	22.48
2,4,6-Trinitrotoluene	23.13	22.98	23.28
PETN	24.37	24.22	24.52
1,2-Dinitrobenzene	12.51	12.36	12.66

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230520-121670.b\05200007.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 20-May-2023 18:42:13 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub7

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230520-121670.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 23-May-2023 13:12:40 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: CTX1626

First Level Reviewer: LV5D Date: 23-May-2023 12:44:07

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
5 HMX	1	6.758	6.758	0.000	48336	0.2500	0.2562	
7 2,4,6-Trinitrophenol	1	8.491	8.491	0.000	41485	0.2500	0.2562	
8 RDX	1	9.005	9.005	0.000	56290	0.2500	0.2579	
9 Nitrobenzene	1	11.531	11.531	0.000	99854	0.2500	0.2504	
$ 10 1,2-Dinitrobenzene	1	12.511	12.511	0.000	70243	0.2500	0.2502	
11 3,5-Dinitroaniline	1	14.378	14.378	0.000	118504	0.2500	0.2652	
12 1,3-Dinitrobenzene	1	14.638	14.638	0.000	157598	0.2500	0.2504	
13 Nitroglycerin	2	15.158	15.158	0.000	340440	2.50	2.53	
14 o-Nitrotoluene	1	15.718	15.718	0.000	63974	0.2500	0.2590	
16 p-Nitrotoluene	1	15.945	15.945	0.000	58857	0.2500	0.2587	
17 4-Amino-2,6-dinitrotoluene	1	16.505	16.505	0.000	74873	0.2500	0.2545	
18 m-Nitrotoluene	1	16.798	16.798	0.000	75640	0.2500	0.2567	a
19 2-Amino-4,6-dinitrotoluene	1	17.351	17.351	0.000	106661	0.2500	0.2492	Ma
20 1,3,5-Trinitrobenzene	1	17.398	17.398	0.000	111087	0.2500	0.2738	Ma
21 2,6-Dinitrotoluene	1	18.605	18.605	0.000	73833	0.2500	0.2531	
22 2,4-Dinitrotoluene	1	19.051	19.051	0.000	149266	0.2500	0.2554	
23 Tetryl	1	22.331	22.331	0.000	72578	0.2500	0.2549	M
24 2,4,6-Trinitrotoluene	1	23.125	23.125	0.000	111097	0.2500	0.2531	M
25 PETN	2	24.365	24.365	0.000	339443	2.50	2.36	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00076 Amount Added: 25.00 Units: uL

Manual Integration/User Assign Peak Report

Eurofins Denver

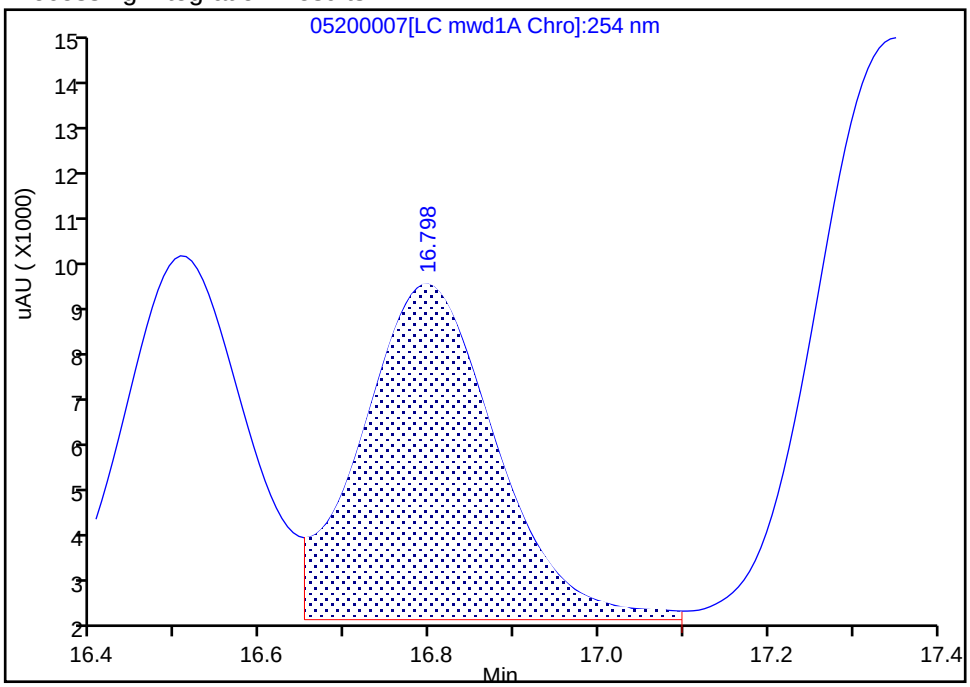
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230520-121670.b\05200007.D				
Injection Date:	20-May-2023 18:42:13	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

18 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

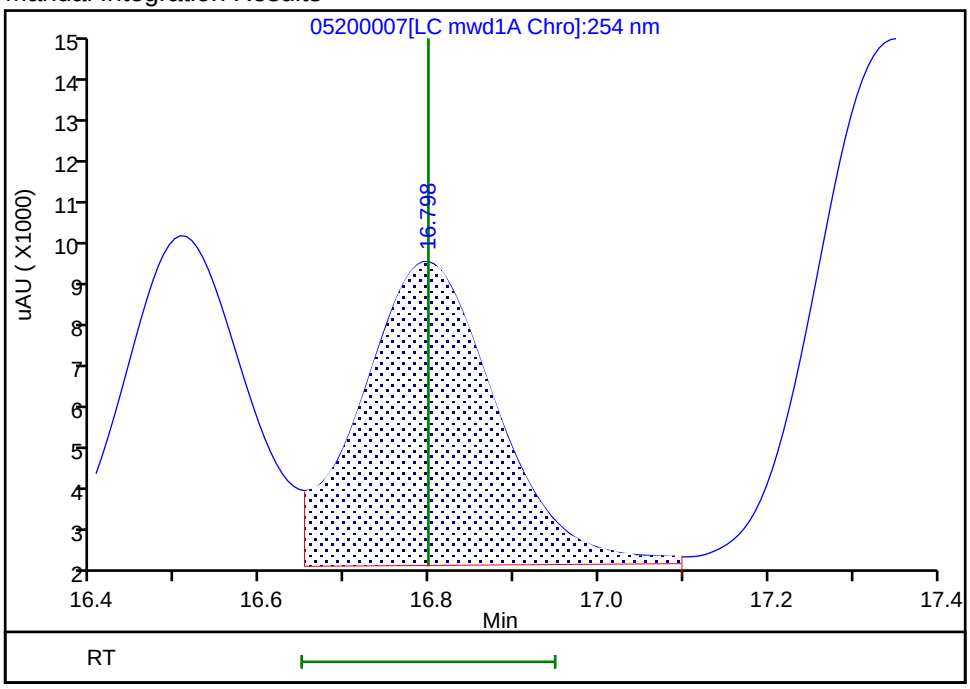
Processing Integration Results

RT: 16.80
Area: 75640
Amount: 0.256725
Amount Units: ug/ml



Manual Integration Results

RT: 16.80
Area: 75640
Amount: 0.256725
Amount Units: ug/ml



Reviewer: K8YG, 22-May-2023 11:10:41 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Denver

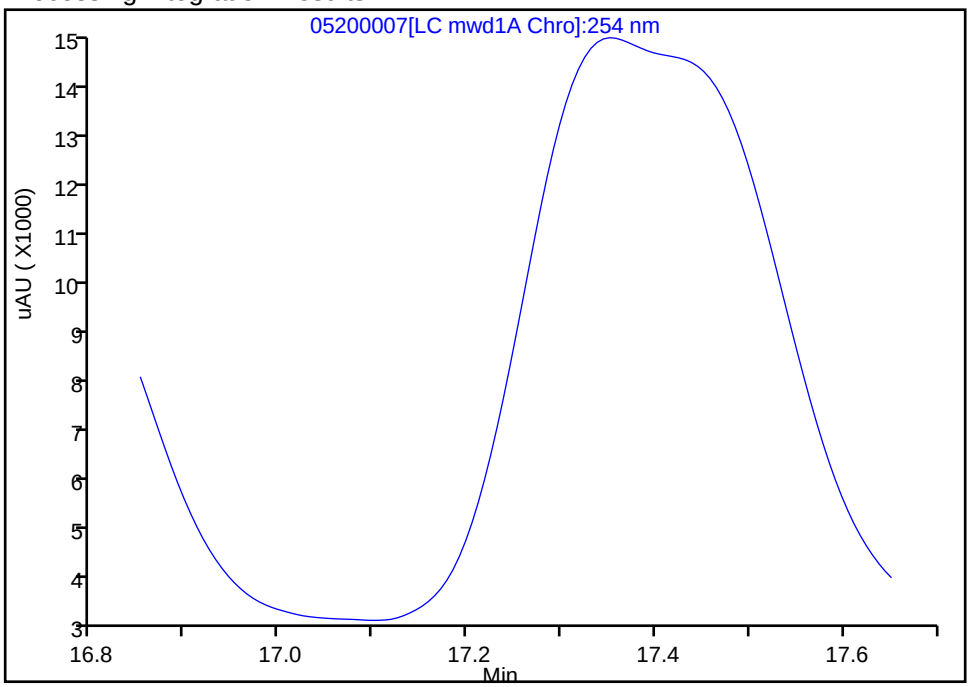
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230520-121670.b\05200007.D				
Injection Date:	20-May-2023 18:42:13	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit 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

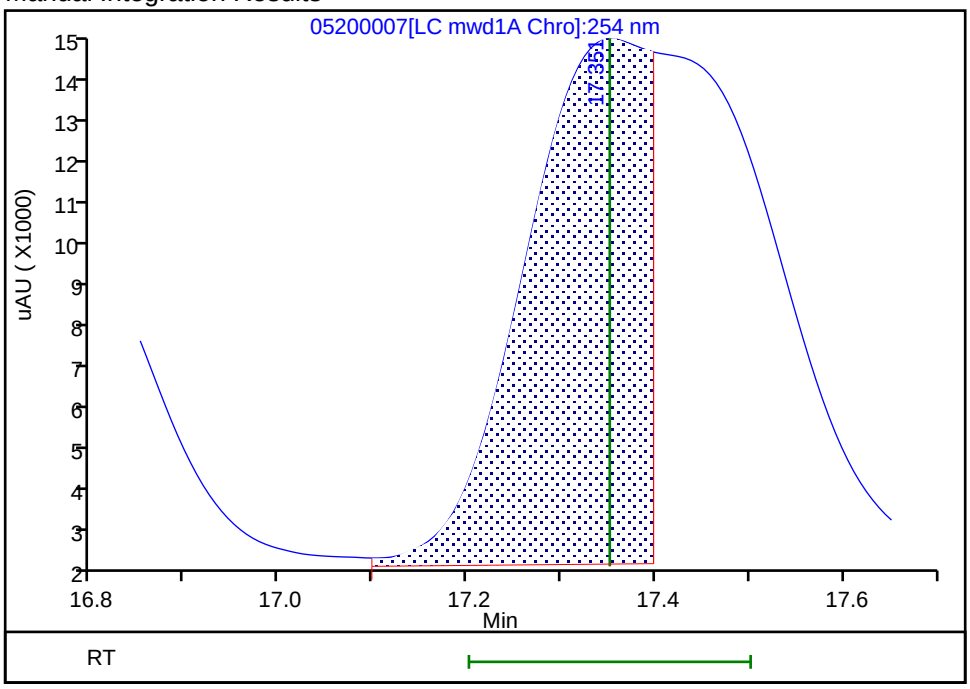
Not Detected
Expected RT: 17.35

Processing Integration Results



Manual Integration Results

RT: 17.35
Area: 106661
Amount: 0.249243
Amount Units: ug/ml



Reviewer: K8YG, 22-May-2023 11:11:04 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Denver

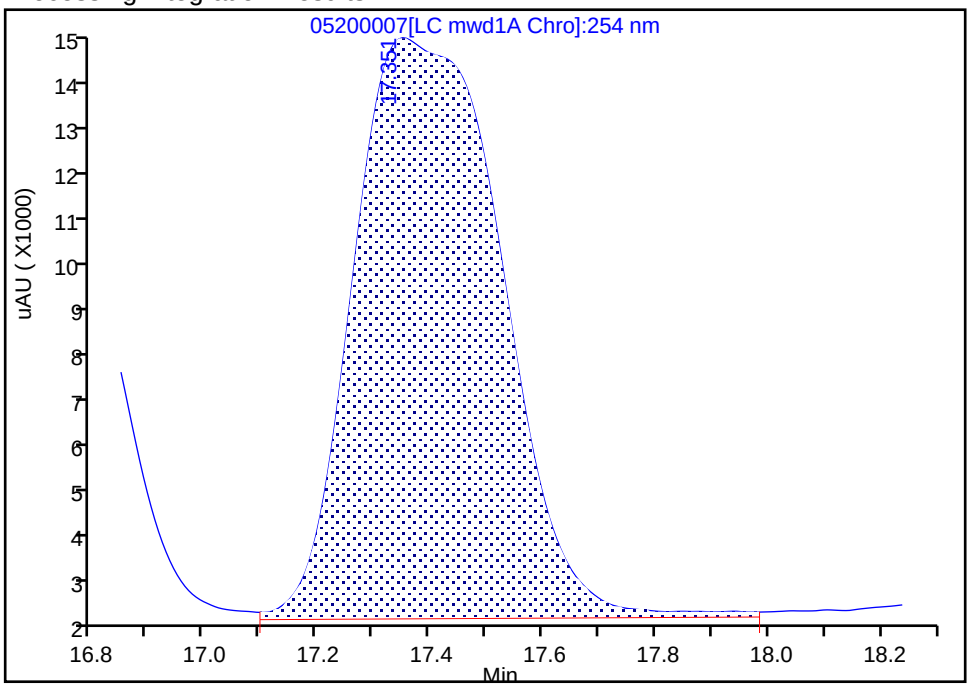
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230520-121670.b\05200007.D				
Injection Date:	20-May-2023 18:42:13	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit 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

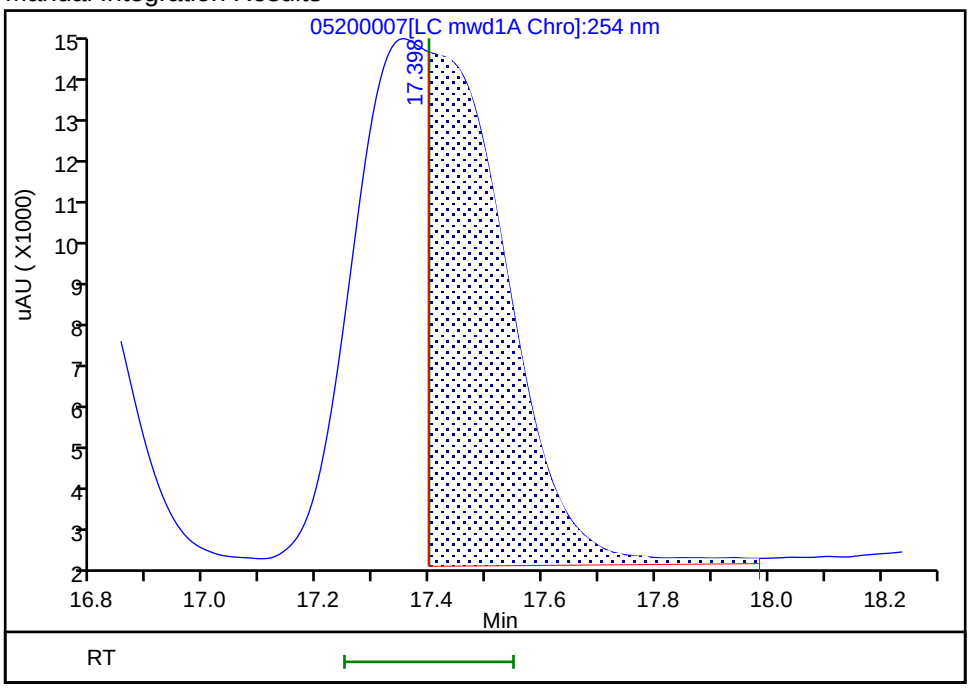
Processing Integration Results

RT: 17.35
Area: 217742
Amount: 0.536717
Amount Units: ug/ml



Manual Integration Results

RT: 17.40
Area: 111087
Amount: 0.273821
Amount Units: ug/ml



Reviewer: K8YG, 22-May-2023 11:11:10 -06:00:00 (UTC)

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Denver

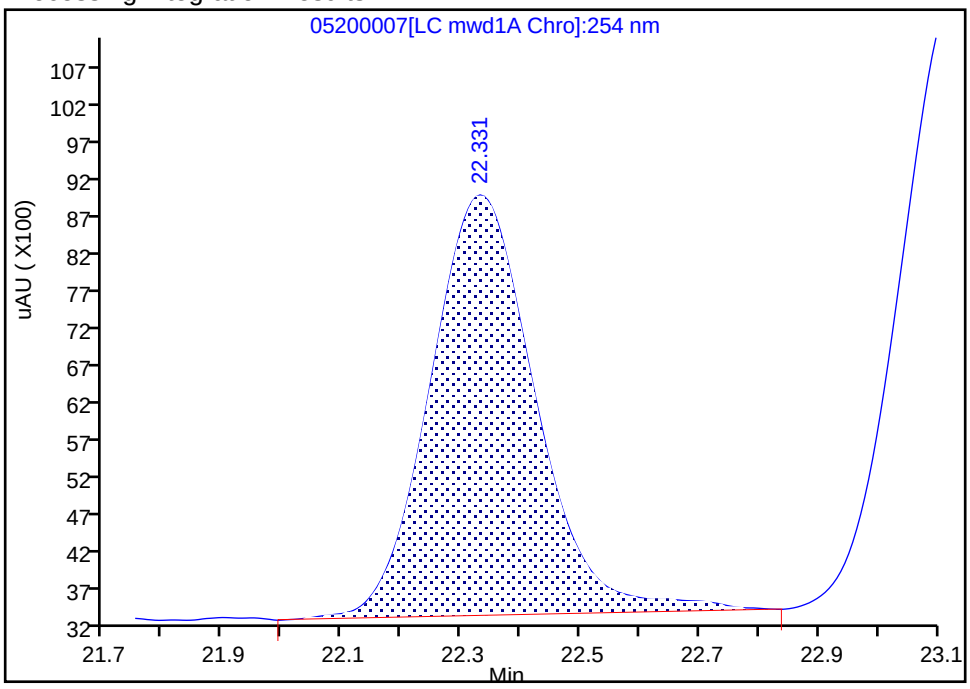
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230520-121670.b\05200007.D				
Injection Date:	20-May-2023 18:42:13	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

23 Tetryl, CAS: 479-45-8

Signal: 1

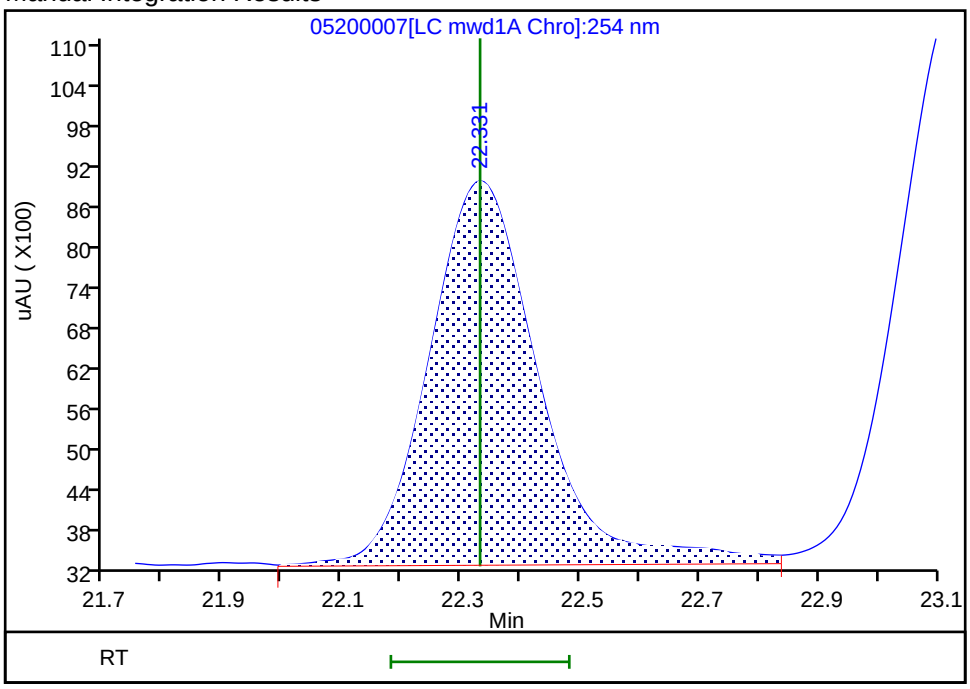
Processing Integration Results

RT: 22.33
Area: 69631
Amount: 0.244550
Amount Units: ug/ml



Manual Integration Results

RT: 22.33
Area: 72578
Amount: 0.254900
Amount Units: ug/ml



Reviewer: K8YG, 22-May-2023 11:11:23 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Denver

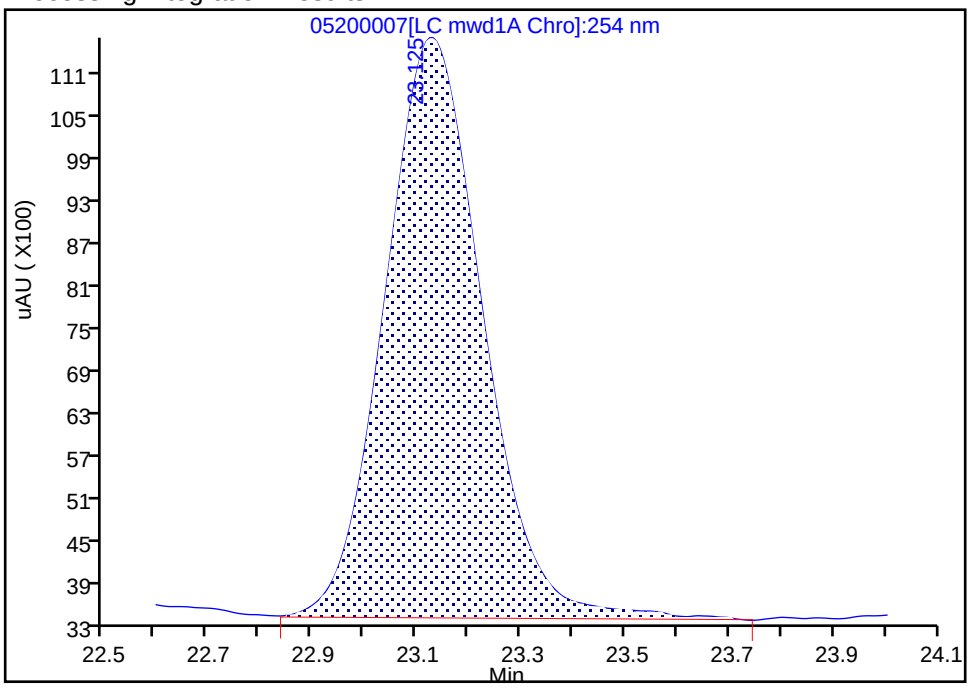
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230520-121670.b\05200007.D				
Injection Date:	20-May-2023 18:42:13	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

24 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

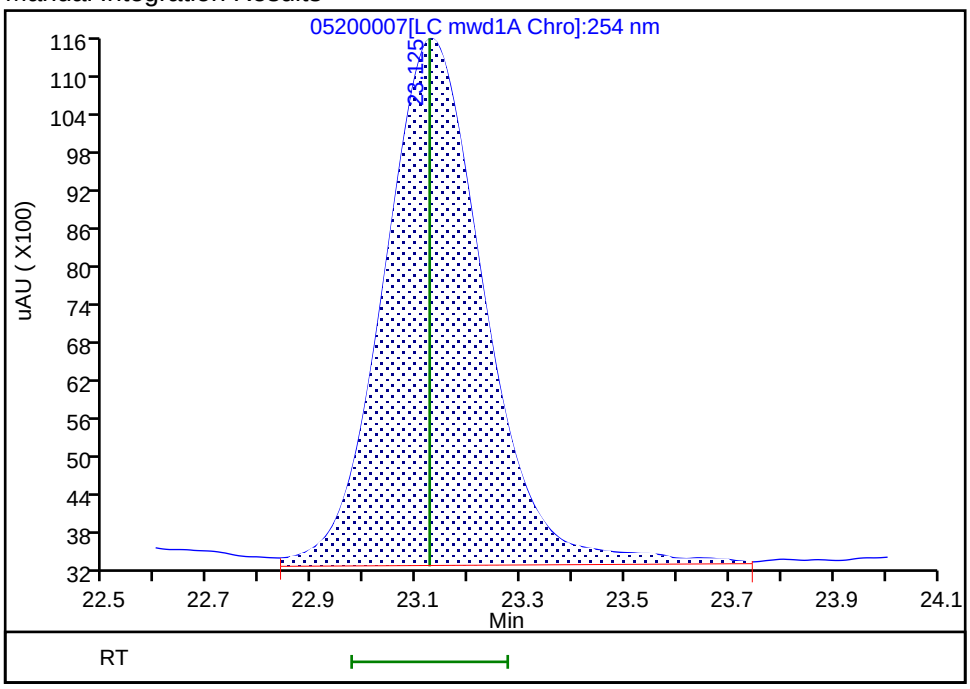
Processing Integration Results

RT: 23.12
Area: 107588
Amount: 0.245145
Amount Units: ug/ml



Manual Integration Results

RT: 23.12
Area: 111097
Amount: 0.253140
Amount Units: ug/ml



Reviewer: K8YG, 22-May-2023 11:11:23 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Split Peak

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-176674-1

SDG No.:

Lab Sample ID: CCV 280-613238/20 | Calibration Date: 05/21/2023 01:06

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: 05200020.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin2		195372		259	250	3.6	20.0
Picric acid	Lin2		167800		259	250	3.6	20.0
RDX	Lin2		229832		263	250	5.3	20.0
Nitrobenzene	Ave	398834	395272		248	250	-0.9	20.0
3,5-Dinitroaniline	Lin2		473648		265	250	6.0	20.0
1,3-Dinitrobenzene	Ave	629351	624272		248	250	-0.8	20.0
Nitroglycerin	Ave	134735	140513		2610	2500	4.3	20.0
2-Nitrotoluene	Ave	246963	250940		254	250	1.6	20.0
4-Nitrotoluene	Ave	227490	229120		252	250	0.7	20.0
4-Amino-2,6-dinitrotoluene	Ave	294210	296208		252	250	0.7	20.0
3-Nitrotoluene	Ave	294634	291452		247	250	-1.1	20.0
2-Amino-4,6-dinitrotoluene	Ave	427939	423056		247	250	-1.1	20.0
1,3,5-Trinitrobenzene	Ave	405692	416692		257	250	2.7	20.0
2,6-Dinitrotoluene	Ave	291675	294404		252	250	0.9	20.0
2,4-Dinitrotoluene	Ave	584463	597332		256	250	2.2	20.0
Tetryl	Ave	284731	290192		255	250	1.9	20.0
2,4,6-Trinitrotoluene	Ave	438876	442008		252	250	0.7	20.0
PETN	Ave	143938	143362		2490	2500	-0.4	20.0
1,2-Dinitrobenzene	Ave	280697	281760		251	250	0.4	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Lab Sample ID: CCV 280-613238/20 Calibration Date: 05/21/2023 01:06

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: 05200020.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.75	6.61	6.91
Picric acid	8.48	8.34	8.64
RDX	8.99	8.86	9.16
Nitrobenzene	11.49	11.38	11.68
3,5-Dinitroaniline	14.32	14.23	14.53
1,3-Dinitrobenzene	14.58	14.49	14.79
Nitroglycerin	15.09	15.01	15.31
2-Nitrotoluene	15.65	15.57	15.87
4-Nitrotoluene	15.87	15.80	16.10
4-Amino-2,6-dinitrotoluene	16.43	16.36	16.66
3-Nitrotoluene	16.71	16.65	16.95
2-Amino-4,6-dinitrotoluene	17.25	17.20	17.50
1,3,5-Trinitrobenzene	17.37	17.25	17.55
2,6-Dinitrotoluene	18.52	18.46	18.76
2,4-Dinitrotoluene	18.97	18.90	19.20
Tetryl	22.25	22.18	22.48
2,4,6-Trinitrotoluene	23.05	22.98	23.28
PETN	24.28	24.22	24.52
1,2-Dinitrobenzene	12.45	12.36	12.66

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230520-121670.b\05200020.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 21-May-2023 01:06:23 ALS Bottle#: 7 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub7

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230520-121670.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 23-May-2023 13:12:54 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: CTX1626

First Level Reviewer: K8YG Date: 22-May-2023 11:27:42

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
5 HMX	1	6.745	6.758	-0.013	48843	0.2500	0.2589	
7 2,4,6-Trinitrophenol	1	8.478	8.491	-0.013	41950	0.2500	0.2591	
8 RDX	1	8.992	9.005	-0.013	57458	0.2500	0.2633	
9 Nitrobenzene	1	11.485	11.531	-0.046	98818	0.2500	0.2478	
$ 10 1,2-Dinitrobenzene	1	12.452	12.511	-0.059	70440	0.2500	0.2509	
11 3,5-Dinitroaniline	1	14.318	14.378	-0.060	118412	0.2500	0.2650	M
12 1,3-Dinitrobenzene	1	14.578	14.638	-0.060	156068	0.2500	0.2480	M
13 Nitroglycerin	2	15.085	15.158	-0.073	351283	2.50	2.61	
14 o-Nitrotoluene	1	15.645	15.718	-0.073	62735	0.2500	0.2540	M
16 p-Nitrotoluene	1	15.872	15.945	-0.073	57280	0.2500	0.2518	M
17 4-Amino-2,6-dinitrotoluene	1	16.425	16.505	-0.080	74052	0.2500	0.2517	M
18 m-Nitrotoluene	1	16.712	16.798	-0.086	72863	0.2500	0.2473	Ma
19 2-Amino-4,6-dinitrotoluene	1	17.252	17.351	-0.099	105764	0.2500	0.2471	Ma
20 1,3,5-Trinitrobenzene	1	17.365	17.398	-0.033	104173	0.2500	0.2568	Ma
21 2,6-Dinitrotoluene	1	18.518	18.605	-0.087	73601	0.2500	0.2523	
22 2,4-Dinitrotoluene	1	18.972	19.051	-0.079	149333	0.2500	0.2555	
23 Tetryl	1	22.252	22.331	-0.079	72548	0.2500	0.2548	
24 2,4,6-Trinitrotoluene	1	23.052	23.125	-0.073	110502	0.2500	0.2518	
25 PETN	2	24.278	24.365	-0.087	358404	2.50	2.49	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00076 Amount Added: 25.00 Units: uL

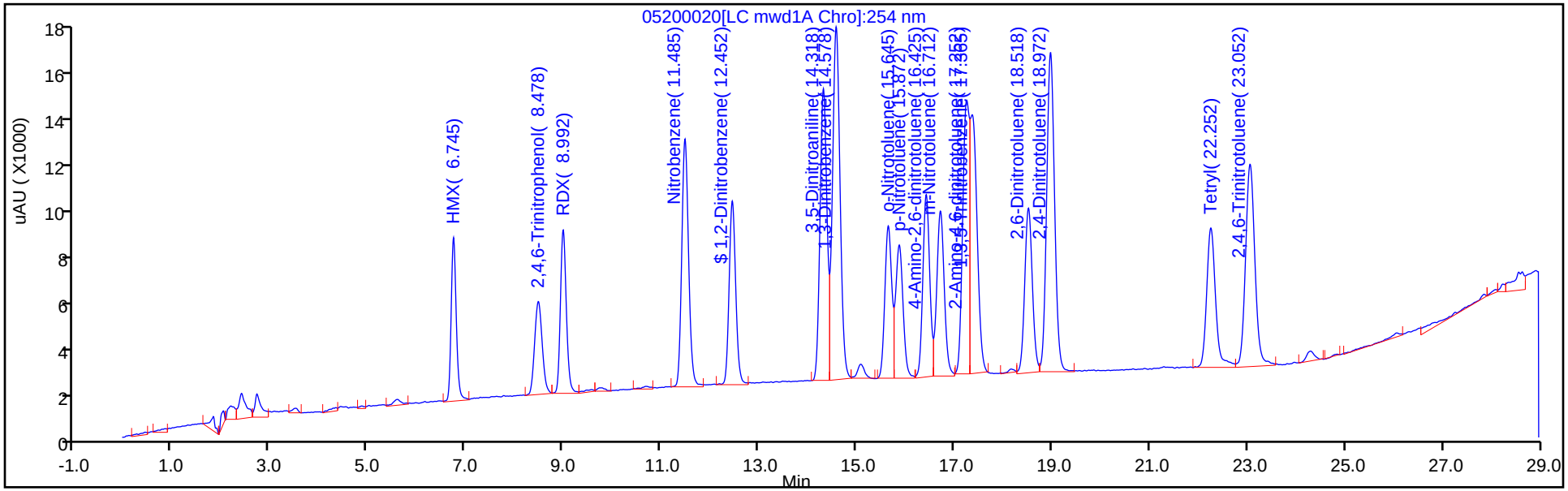
Report Date: 23-May-2023 13:12:54 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

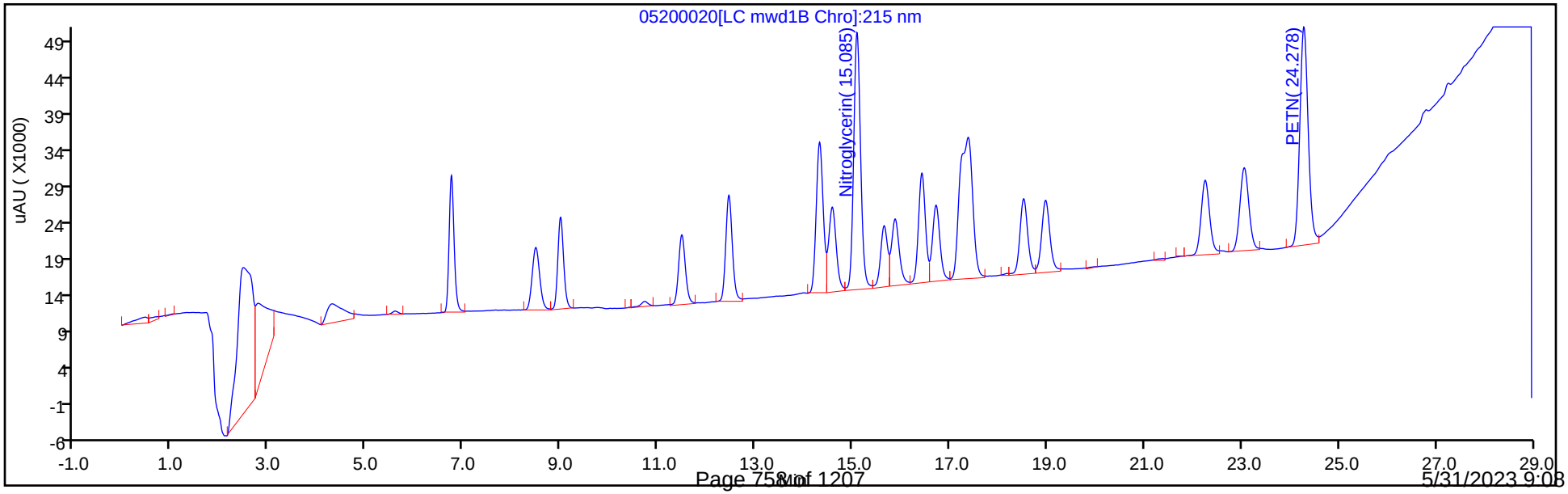
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230520-121670.b\05200020.D

Injection Date:	21-May-2023 01:06:23	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	CCV			Worklist Smp#:	20
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



Manual Integration/User Assign Peak Report

Eurofins Denver

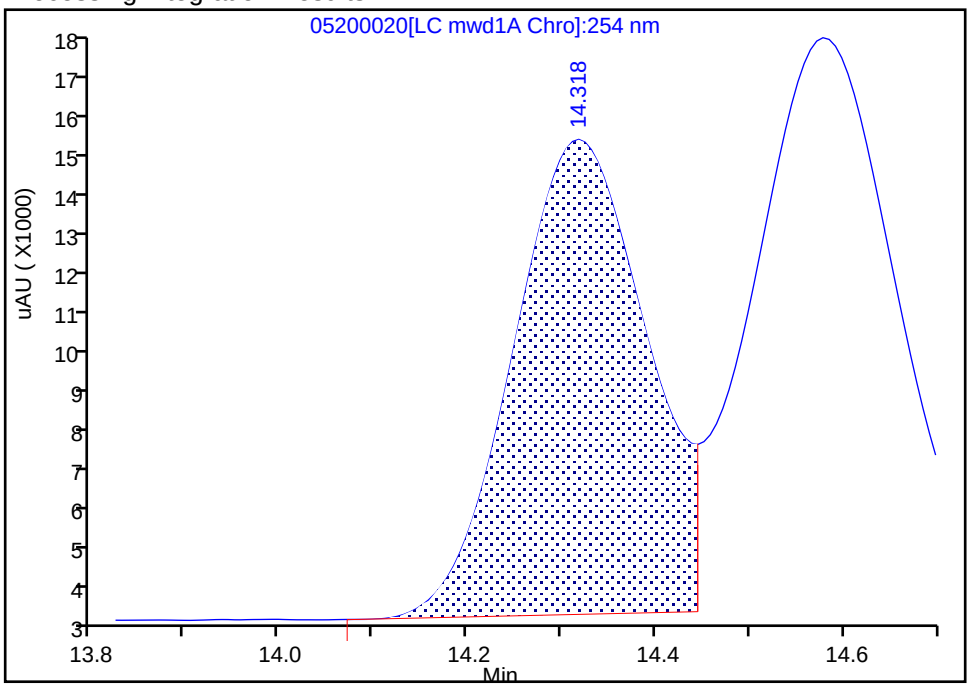
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230520-121670.b\05200020.D				
Injection Date:	21-May-2023 01:06:23	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit 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

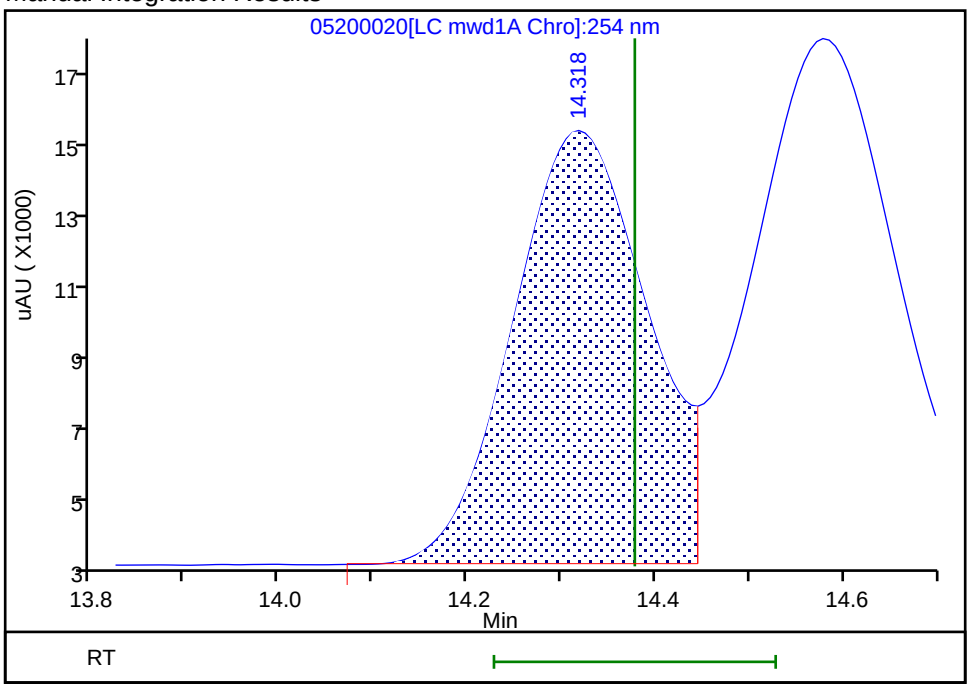
Processing Integration Results

RT: 14.32
Area: 116911
Amount: 0.261610
Amount Units: ug/ml



Manual Integration Results

RT: 14.32
Area: 118412
Amount: 0.264986
Amount Units: ug/ml



Reviewer: K8YG, 22-May-2023 11:25:27 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Denver

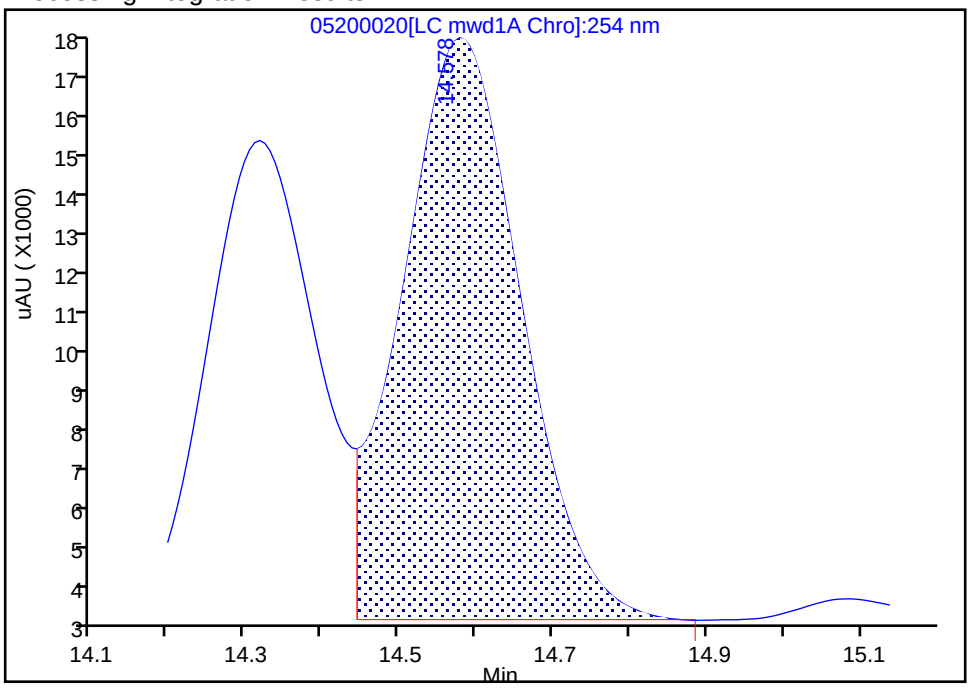
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230520-121670.b\05200020.D				
Injection Date:	21-May-2023 01:06:23	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit 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

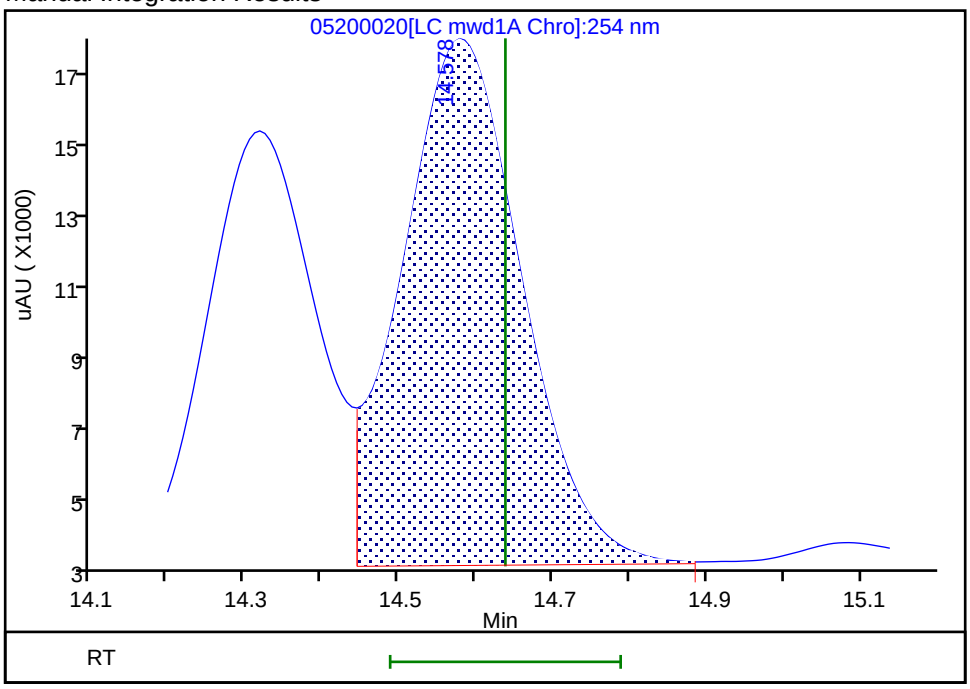
Processing Integration Results

RT: 14.58
Area: 153969
Amount: 0.244647
Amount Units: ug/ml



Manual Integration Results

RT: 14.58
Area: 156068
Amount: 0.247982
Amount Units: ug/ml



Reviewer: K8YG, 22-May-2023 11:25:27 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Denver

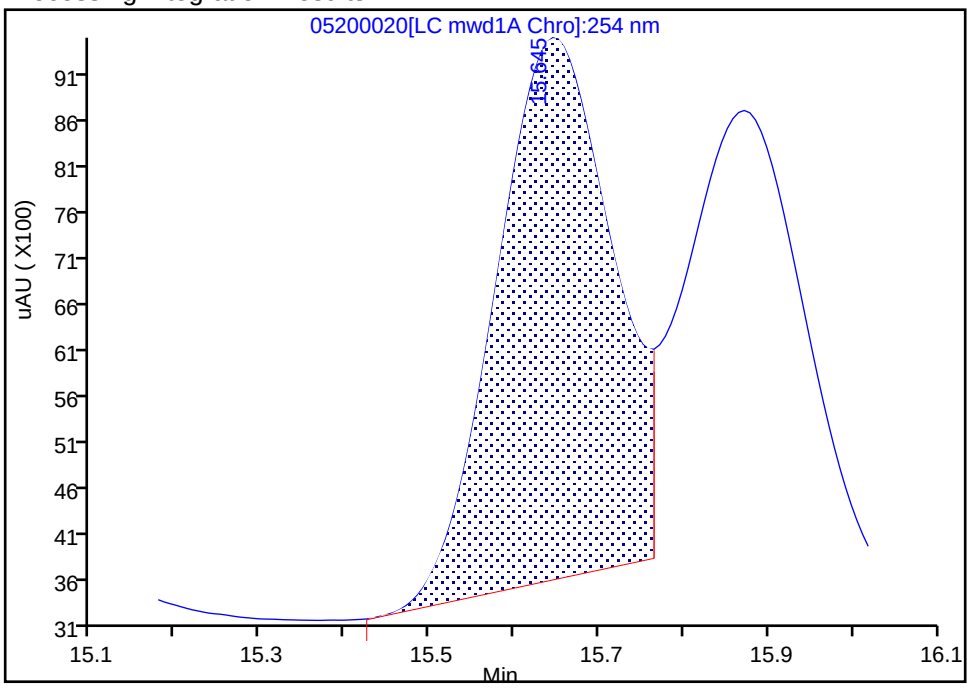
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230520-121670.b\05200020.D				
Injection Date:	21-May-2023 01:06:23	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

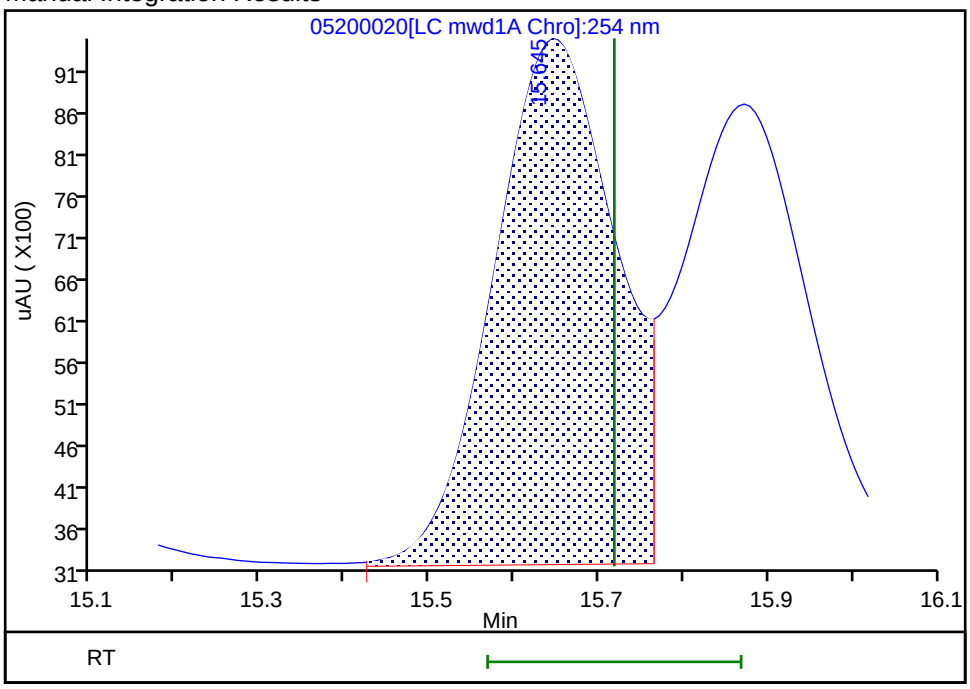
Processing Integration Results

RT: 15.64
Area: 55718
Amount: 0.225612
Amount Units: ug/ml



Manual Integration Results

RT: 15.64
Area: 62735
Amount: 0.254026
Amount Units: ug/ml



Reviewer: K8YG, 22-May-2023 11:25:22 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Denver

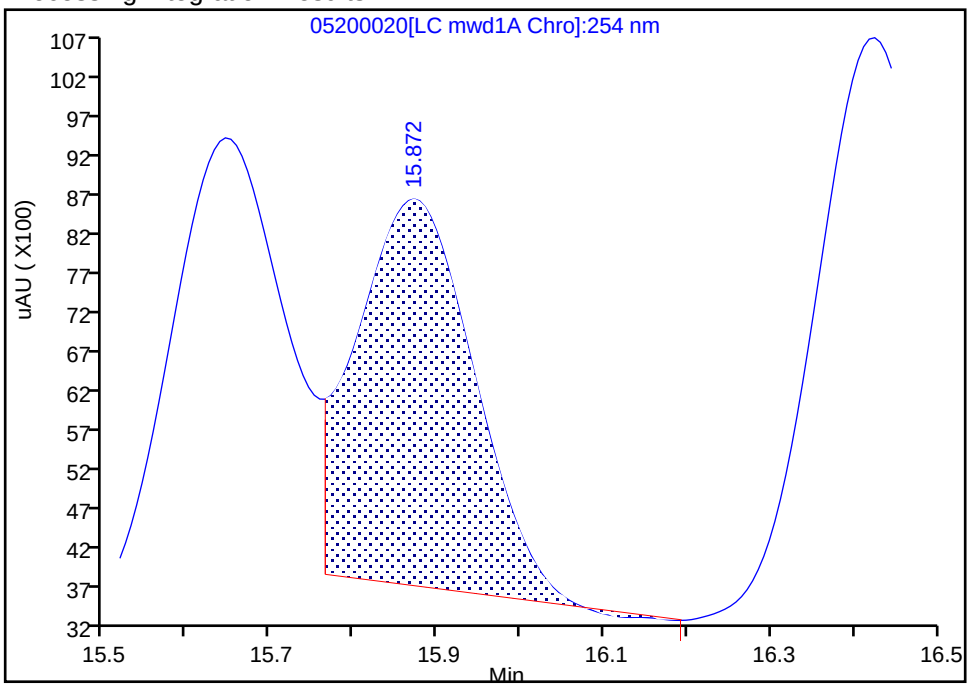
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230520-121670.b\05200020.D				
Injection Date:	21-May-2023 01:06:23	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

16 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

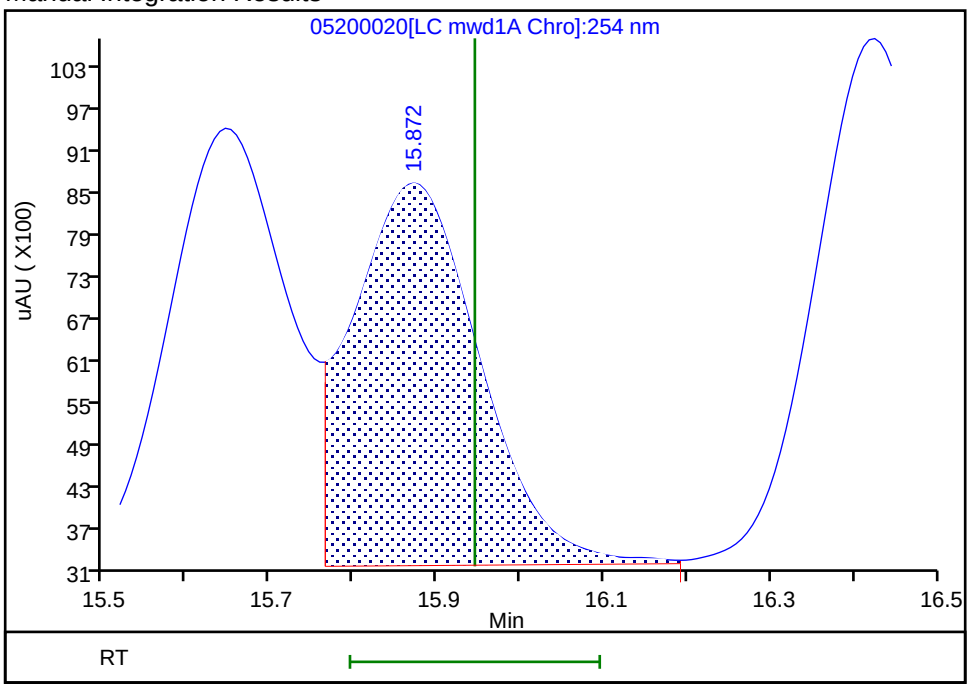
Processing Integration Results

RT: 15.87
Area: 49119
Amount: 0.215917
Amount Units: ug/ml



Manual Integration Results

RT: 15.87
Area: 57280
Amount: 0.251791
Amount Units: ug/ml



Reviewer: K8YG, 22-May-2023 11:25:22 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Denver

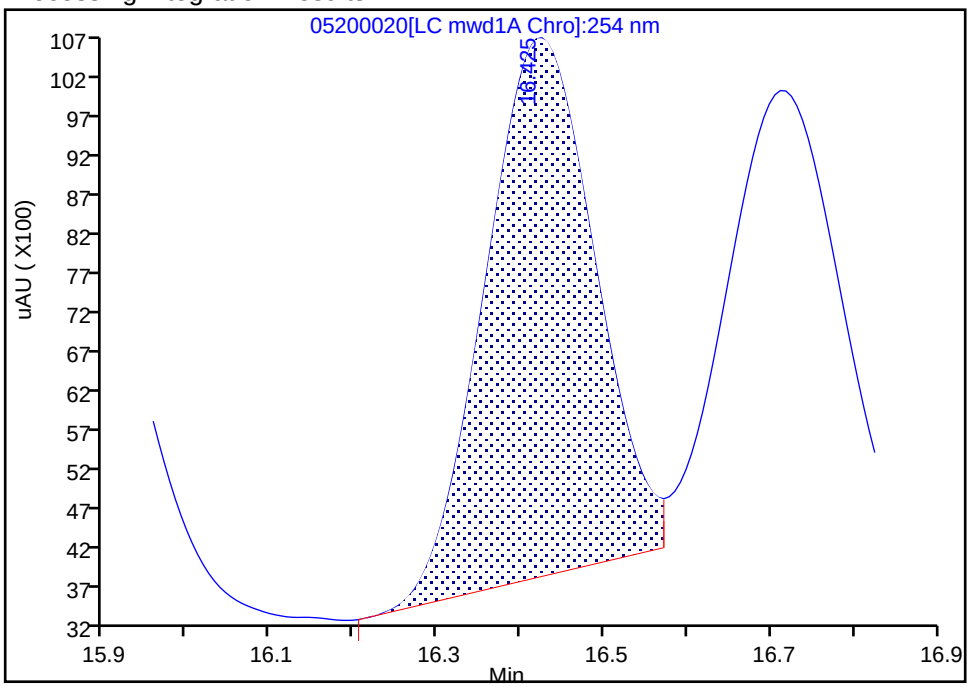
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230520-121670.b\05200020.D				
Injection Date:	21-May-2023 01:06:23	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit 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

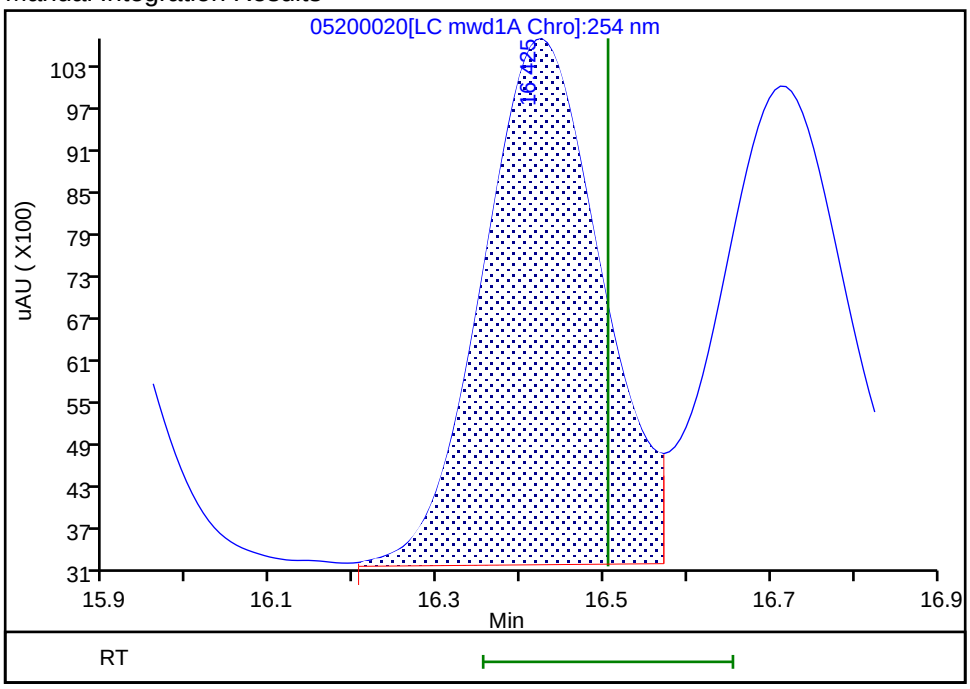
Processing Integration Results

RT: 16.42
Area: 63437
Amount: 0.215618
Amount Units: ug/ml



Manual Integration Results

RT: 16.42
Area: 74052
Amount: 0.251698
Amount Units: ug/ml



Reviewer: K8YG, 22-May-2023 11:25:22 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Denver

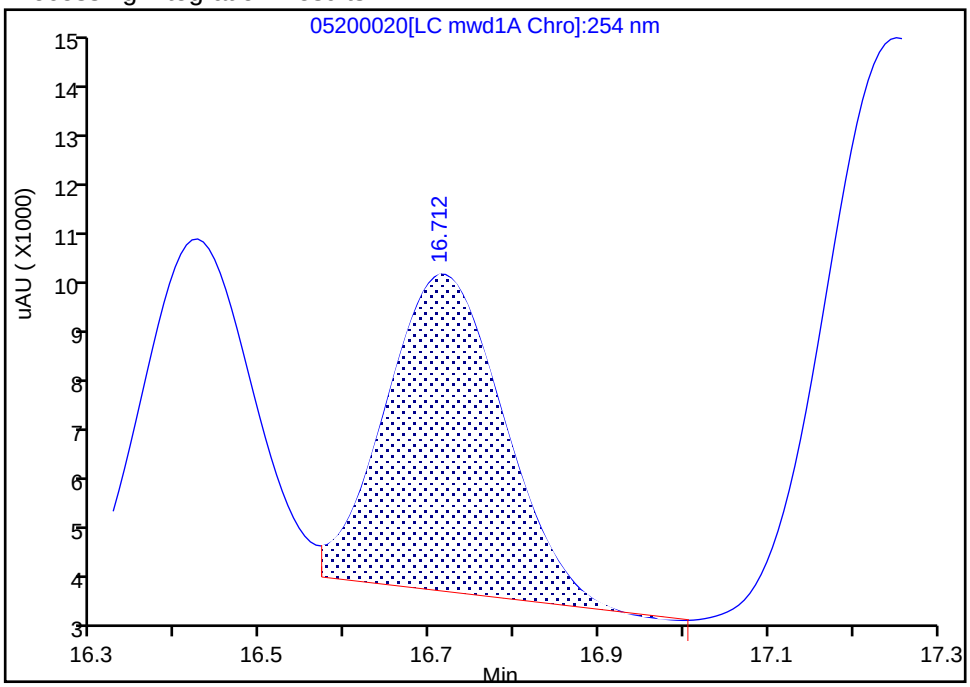
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230520-121670.b\05200020.D				
Injection Date:	21-May-2023 01:06:23	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

18 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

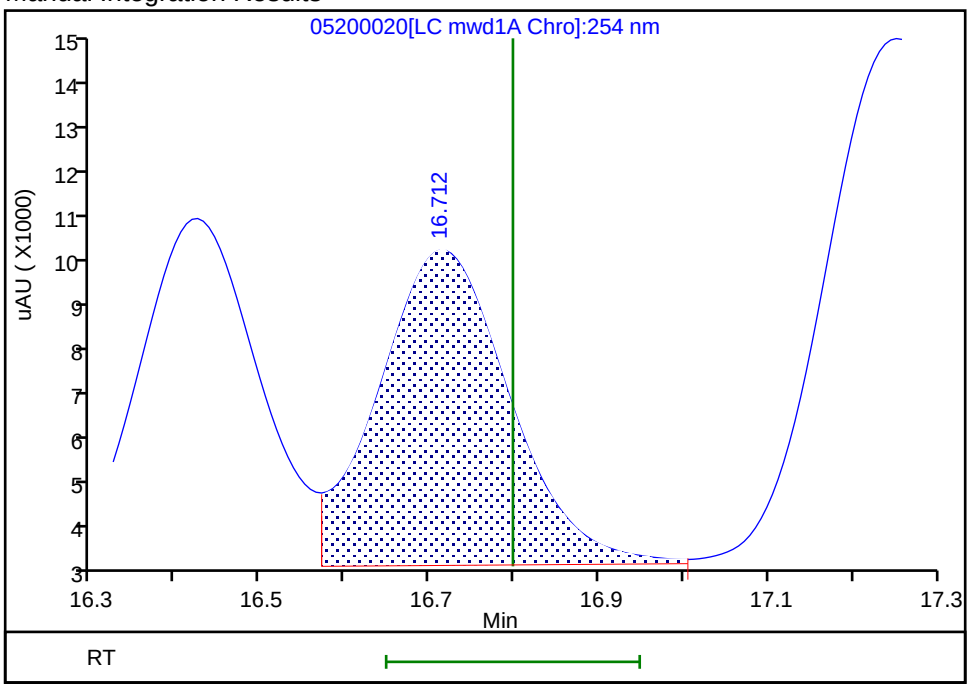
Processing Integration Results

RT: 16.71
Area: 60099
Amount: 0.203978
Amount Units: ug/ml



Manual Integration Results

RT: 16.71
Area: 72863
Amount: 0.247300
Amount Units: ug/ml



Reviewer: K8YG, 22-May-2023 11:27:33 -06:00:00 (UTC)

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Denver

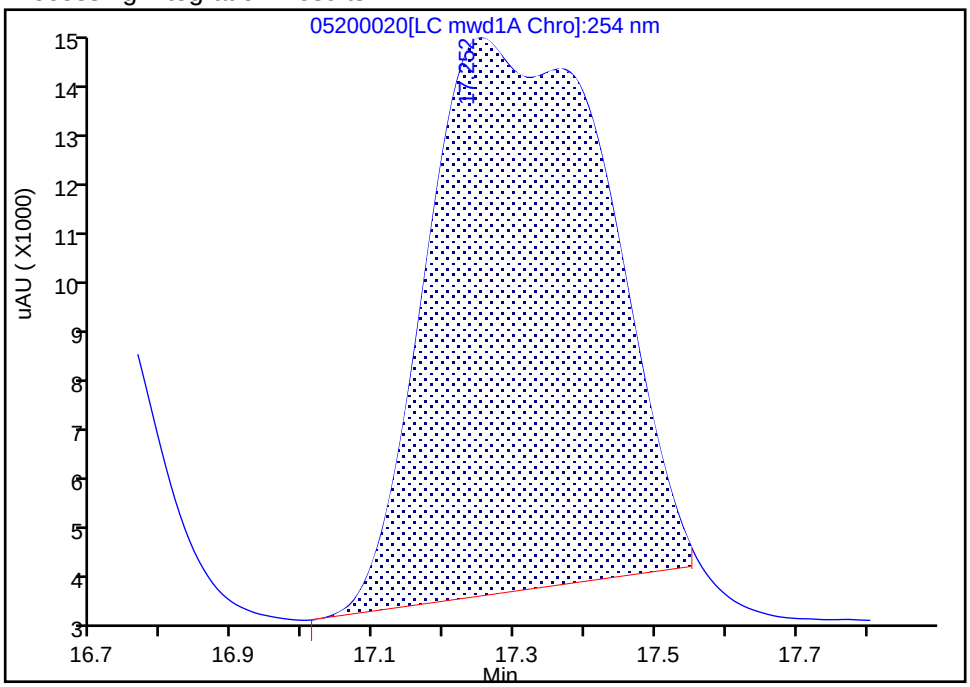
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230520-121670.b\05200020.D				
Injection Date:	21-May-2023 01:06:23	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit 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

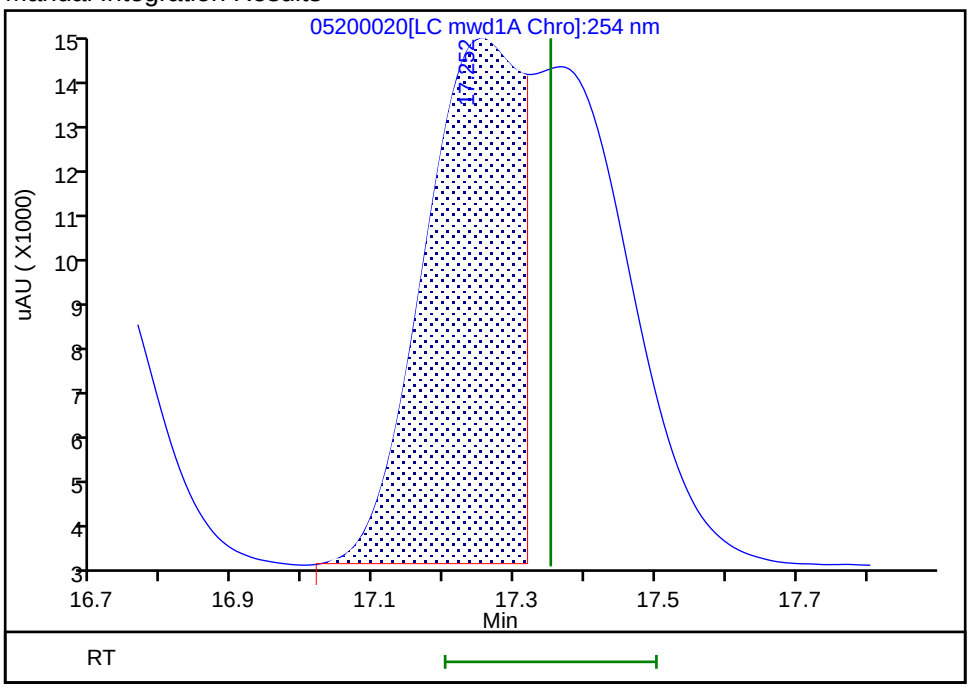
Processing Integration Results

RT: 17.25
Area: 190797
Amount: 0.445850
Amount Units: ug/ml



Manual Integration Results

RT: 17.25
Area: 105764
Amount: 0.247147
Amount Units: ug/ml



Reviewer: LV5D, 23-May-2023 12:44:14 -06:00:00 (UTC)

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

Eurofins Denver

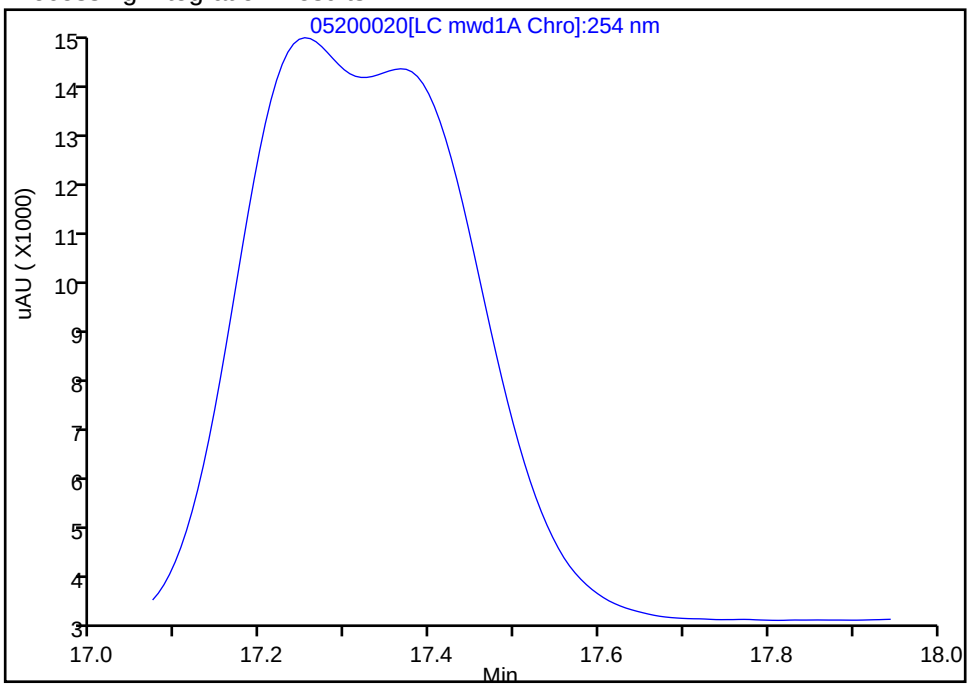
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230520-121670.b\05200020.D				
Injection Date:	21-May-2023 01:06:23	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit 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

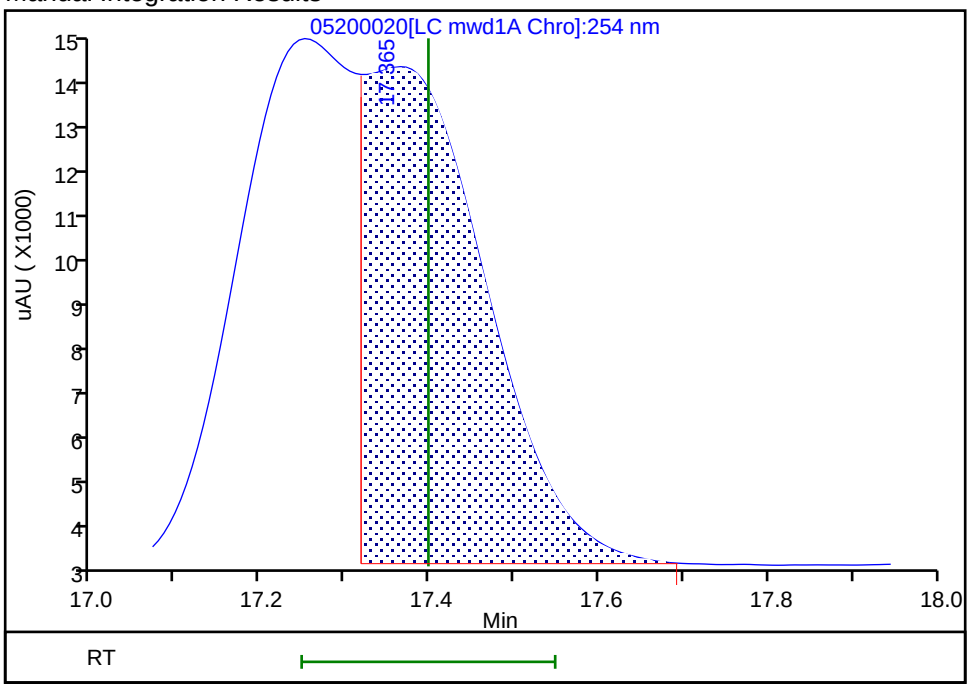
Not Detected
Expected RT: 17.40

Processing Integration Results



Manual Integration Results

RT: 17.36
Area: 104173
Amount: 0.256778
Amount Units: ug/ml



Reviewer: K8YG, 22-May-2023 11:26:20 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-176674-1

SDG No.:

Lab Sample ID: CCV 280-613683/8 | Calibration Date: 05/24/2023 19:13

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: 05240008.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	394332	368052		234	251	-6.7	20.0
DNX	Ave	277072	275600		249	250	-0.5	20.0
HMX	Lin2		196824		261	250	4.4	20.0
MNX	Ave	262267	253656		282	292	-3.3	20.0
Picric acid	Lin2		165684		256	250	2.3	20.0
RDX	Lin2		228684		262	250	4.8	20.0
Nitrobenzene	Ave	398834	398688		250	250	-0.0	20.0
3,5-Dinitroaniline	Lin2		469884		263	250	5.1	20.0
1,3-Dinitrobenzene	Ave	629351	624260		248	250	-0.8	20.0
Nitroglycerin	Ave	134735	137371		2550	2500	2.0	20.0
2-Nitrotoluene	Ave	246963	253404		257	250	2.6	20.0
4-Nitrotoluene	Ave	227490	233124		256	250	2.5	20.0
4-Amino-2,6-dinitrotoluene	Ave	294210	296312		252	250	0.7	20.0
3-Nitrotoluene	Ave	294634	299556		254	250	1.7	20.0
2-Amino-4,6-dinitrotoluene	Ave	427939	430188		251	250	0.5	20.0
1,3,5-Trinitrobenzene	Ave	405692	423372		261	250	4.4	20.0
2,6-Dinitrotoluene	Ave	291675	312336		268	250	7.1	20.0
2,4-Dinitrotoluene	Ave	584463	590292		252	250	1.0	20.0
Tetryl	Ave	284731	285060		250	250	0.1	20.0
2,4,6-Trinitrotoluene	Ave	438876	438628		250	250	-0.0	20.0
PETN	Ave	143938	141864		2460	2500	-1.4	20.0
1,2-Dinitrobenzene	Ave	280697	279280		249	250	-0.5	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Lab Sample ID: CCV 280-613683/8 Calibration Date: 05/24/2023 19:13

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: 05240008.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.21	5.06	5.36
DNX	6.05	5.90	6.20
HMX	6.69	6.54	6.84
MNX	7.55	7.40	7.70
Picric acid	8.54	8.39	8.69
RDX	8.95	8.80	9.10
Nitrobenzene	11.46	11.31	11.61
3,5-Dinitroaniline	14.29	14.14	14.44
1,3-Dinitrobenzene	14.55	14.40	14.70
Nitroglycerin	15.07	14.92	15.22
2-Nitrotoluene	15.62	15.47	15.77
4-Nitrotoluene	15.85	15.70	16.00
4-Amino-2,6-dinitrotoluene	16.41	16.26	16.56
3-Nitrotoluene	16.69	16.54	16.84
2-Amino-4,6-dinitrotoluene	17.24	17.09	17.39
1,3,5-Trinitrobenzene	17.33	17.18	17.48
2,6-Dinitrotoluene	18.49	18.34	18.64
2,4-Dinitrotoluene	18.95	18.80	19.10
Tetryl	22.24	22.09	22.39
2,4,6-Trinitrotoluene	23.04	22.89	23.19
PETN	24.28	24.13	24.43
1,2-Dinitrobenzene	12.43	12.28	12.58

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230524-121801.b\05240008.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 24-May-2023 19:13:25 ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub6

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230524-121801.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 25-May-2023 13:06:09 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: CTX1654

First Level Reviewer: LV5D Date: 24-May-2023 19:54:18

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.206	5.206	0.000	92289	0.2508	0.2340	
4 DNX	1	6.046	6.046	0.000	68969	0.2503	0.2489	
5 HMX	1	6.686	6.686	0.000	49206	0.2500	0.2609	
6 MNX	1	7.546	7.546	0.000	74004	0.2918	0.2822	
7 2,4,6-Trinitrophenol	1	8.539	8.539	0.000	41421	0.2500	0.2558	
8 RDX	1	8.946	8.946	0.000	57171	0.2500	0.2620	
9 Nitrobenzene	1	11.459	11.459	0.000	99672	0.2500	0.2499	
$ 10 1,2-Dinitrobenzene	1	12.426	12.426	0.000	69820	0.2500	0.2487	
11 3,5-Dinitroaniline	1	14.292	14.292	0.000	117471	0.2500	0.2629	
12 1,3-Dinitrobenzene	1	14.552	14.552	0.000	156065	0.2500	0.2480	
13 Nitroglycerin	2	15.066	15.066	0.000	343427	2.50	2.55	
14 o-Nitrotoluene	1	15.619	15.619	0.000	63351	0.2500	0.2565	
16 p-Nitrotoluene	1	15.846	15.846	0.000	58281	0.2500	0.2562	
17 4-Amino-2,6-dinitrotoluene	1	16.406	16.406	0.000	74078	0.2500	0.2518	
18 m-Nitrotoluene	1	16.692	16.692	0.000	74889	0.2500	0.2542	
19 2-Amino-4,6-dinitrotoluene	1	17.239	17.239	0.000	107547	0.2500	0.2513	M
20 1,3,5-Trinitrobenzene	1	17.332	17.332	0.000	105843	0.2500	0.2609	M
21 2,6-Dinitrotoluene	1	18.492	18.492	0.000	78084	0.2500	0.2677	
22 2,4-Dinitrotoluene	1	18.952	18.952	0.000	147573	0.2500	0.2525	
23 Tetryl	1	22.239	22.239	0.000	71265	0.2500	0.2503	
24 2,4,6-Trinitrotoluene	1	23.039	23.039	0.000	109657	0.2500	0.2499	
25 PETN	2	24.279	24.279	0.000	354659	2.50	2.46	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00013	Amount Added:	12.50	Units: uL
8330IntermStk_00076	Amount Added:	25.00	Units: uL

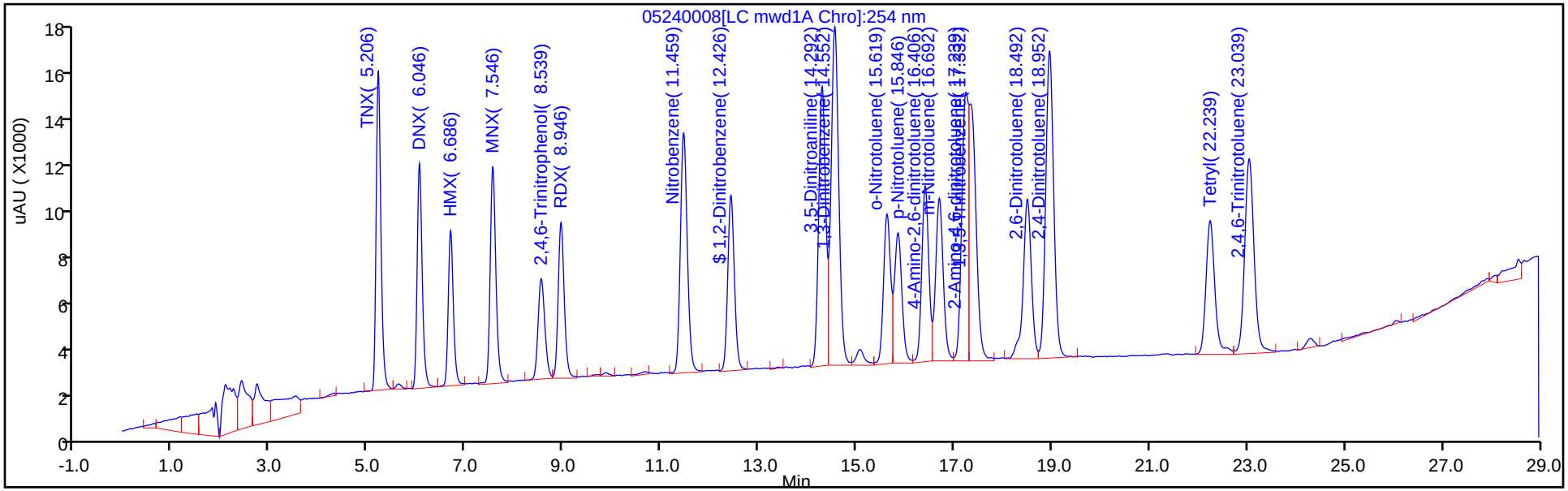
Report Date: 25-May-2023 13:06:09 Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Denver

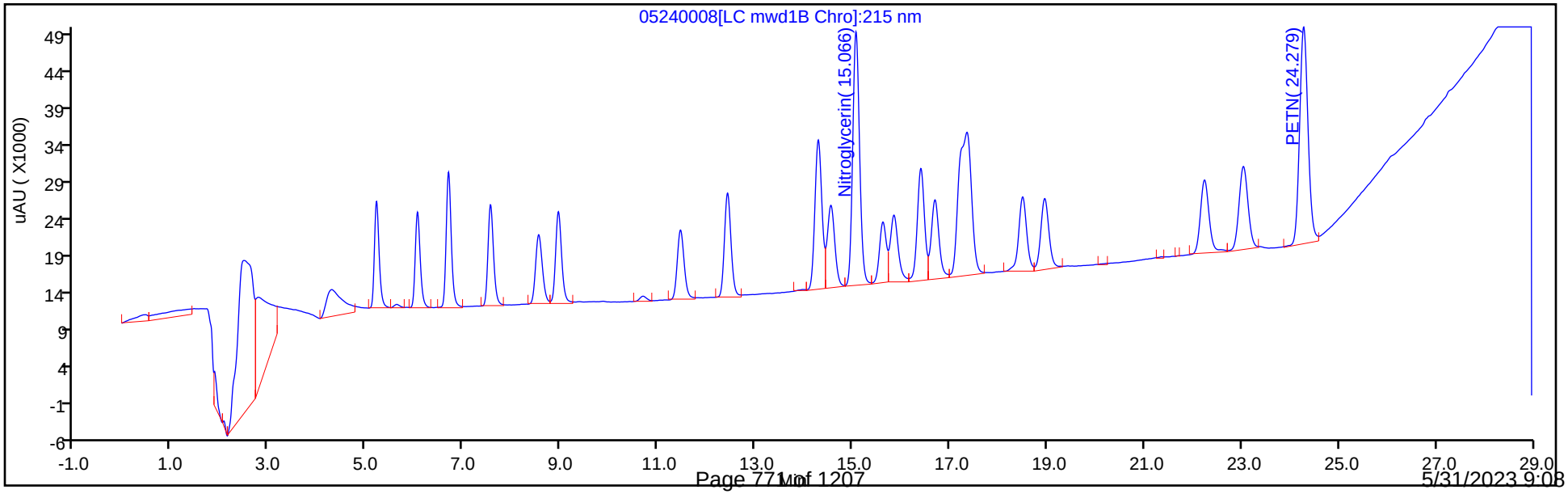
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230524-121801.b\05240008.D

Injection Date:	24-May-2023 19:13:25	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	8
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_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



5/31/2023 9:08 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

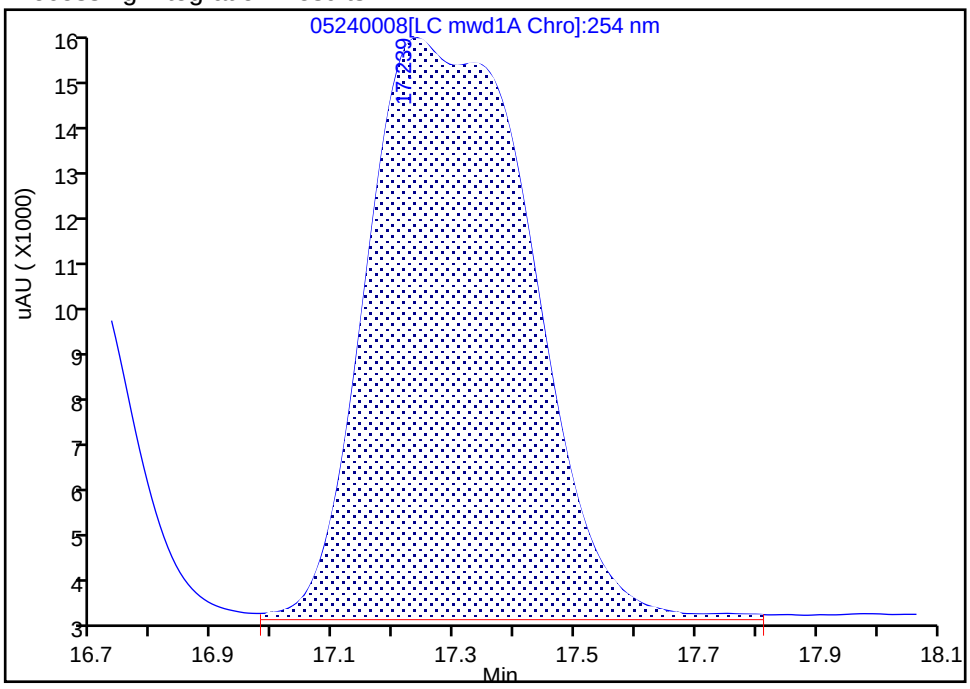
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230524-121801.b\05240008.D				
Injection Date:	24-May-2023 19:13:25	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	8
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit 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

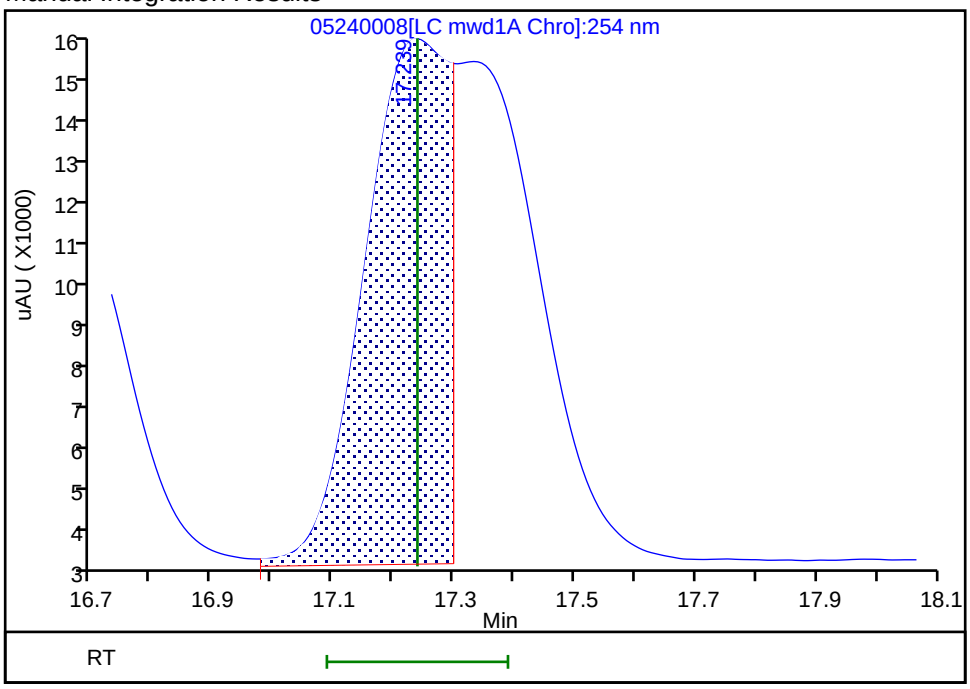
Processing Integration Results

RT: 17.24
Area: 213371
Amount: 0.498601
Amount Units: ug/ml



Manual Integration Results

RT: 17.24
Area: 107547
Amount: 0.251314
Amount Units: ug/ml



Reviewer: LV5D, 24-May-2023 19:54:12 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-176674-1

SDG No.:

Lab Sample ID: CCV 280-613683/18 | Calibration Date: 05/25/2023 00:28

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: 05240018.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	394332	372790		237	251	-5.5	20.0
DNX	Ave	277072	281950		255	250	1.8	20.0
HMX	Lin2		201336		267	250	6.8	20.0
MNX	Ave	262267	254687		283	292	-2.9	20.0
Picric acid	Lin2		168120		260	250	3.8	20.0
RDX	Lin2		231928		266	250	6.3	20.0
Nitrobenzene	Ave	398834	396548		249	250	-0.6	20.0
3,5-Dinitroaniline	Lin2		468764		262	250	4.9	20.0
1,3-Dinitrobenzene	Ave	629351	626840		249	250	-0.4	20.0
Nitroglycerin	Ave	134735	135780		2520	2500	0.8	20.0
2-Nitrotoluene	Ave	246963	248760		252	250	0.7	20.0
4-Nitrotoluene	Ave	227490	227292		250	250	-0.0	20.0
4-Amino-2,6-dinitrotoluene	Ave	294210	295572		251	250	0.5	20.0
3-Nitrotoluene	Ave	294634	291356		247	250	-1.1	20.0
2-Amino-4,6-dinitrotoluene	Ave	427939	415388		243	250	-2.9	20.0
1,3,5-Trinitrobenzene	Ave	405692	433976		267	250	7.0	20.0
2,6-Dinitrotoluene	Ave	291675	294584		252	250	1.0	20.0
2,4-Dinitrotoluene	Ave	584463	588900		252	250	0.8	20.0
Tetryl	Ave	284731	284520		250	250	-0.0	20.0
2,4,6-Trinitrotoluene	Ave	438876	439980		251	250	0.3	20.0
PETN	Ave	143938	141745		2460	2500	-1.5	20.0
1,2-Dinitrobenzene	Ave	280697	279344		249	250	-0.5	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Lab Sample ID: CCV 280-613683/18 Calibration Date: 05/25/2023 00:28

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: 05240018.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.21	5.06	5.36
DNX	6.05	5.90	6.20
HMX	6.68	6.54	6.84
MNX	7.54	7.40	7.70
Picric acid	8.48	8.39	8.69
RDX	8.92	8.80	9.10
Nitrobenzene	11.41	11.31	11.61
3,5-Dinitroaniline	14.21	14.14	14.44
1,3-Dinitrobenzene	14.48	14.40	14.70
Nitroglycerin	14.97	14.92	15.22
2-Nitrotoluene	15.52	15.47	15.77
4-Nitrotoluene	15.75	15.70	16.00
4-Amino-2,6-dinitrotoluene	16.30	16.26	16.56
3-Nitrotoluene	16.59	16.54	16.84
2-Amino-4,6-dinitrotoluene	17.12	17.09	17.39
1,3,5-Trinitrobenzene	17.26	17.18	17.48
2,6-Dinitrotoluene	18.38	18.34	18.64
2,4-Dinitrotoluene	18.84	18.80	19.10
Tetryl	22.08	22.09	22.39
2,4,6-Trinitrotoluene	22.90	22.89	23.19
PETN	24.11	24.13	24.43
1,2-Dinitrobenzene	12.36	12.28	12.58

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230524-121801.b\05240018.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 25-May-2023 00:28:05 ALS Bottle#: 7 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub6

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230524-121801.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 25-May-2023 13:06:15 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: CTX1654

First Level Reviewer: K8YG Date: 25-May-2023 09:19:36

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.209	5.206	0.003	93477	0.2508	0.2371	
4 DNX	1	6.049	6.046	0.003	70558	0.2503	0.2547	
5 HMX	1	6.683	6.686	-0.003	50334	0.2500	0.2670	
6 MNX	1	7.536	7.546	-0.010	74305	0.2918	0.2833	
7 2,4,6-Trinitrophenol	1	8.483	8.539	-0.056	42030	0.2500	0.2596	
8 RDX	1	8.923	8.946	-0.023	57982	0.2500	0.2658	
9 Nitrobenzene	1	11.409	11.459	-0.050	99137	0.2500	0.2486	
$ 10 1,2-Dinitrobenzene	1	12.363	12.426	-0.063	69836	0.2500	0.2488	
11 3,5-Dinitroaniline	1	14.209	14.292	-0.083	117191	0.2500	0.2622	
12 1,3-Dinitrobenzene	1	14.476	14.552	-0.076	156710	0.2500	0.2490	
13 Nitroglycerin	2	14.969	15.066	-0.097	339450	2.50	2.52	
14 o-Nitrotoluene	1	15.523	15.619	-0.096	62190	0.2500	0.2518	
16 p-Nitrotoluene	1	15.749	15.846	-0.097	56823	0.2500	0.2498	
17 4-Amino-2,6-dinitrotoluene	1	16.296	16.406	-0.110	73893	0.2500	0.2512	
18 m-Nitrotoluene	1	16.589	16.692	-0.103	72839	0.2500	0.2472	
19 2-Amino-4,6-dinitrotoluene	1	17.116	17.239	-0.123	103847	0.2500	0.2427	a
20 1,3,5-Trinitrobenzene	1	17.256	17.332	-0.076	108494	0.2500	0.2674	a
21 2,6-Dinitrotoluene	1	18.383	18.492	-0.109	73646	0.2500	0.2525	
22 2,4-Dinitrotoluene	1	18.836	18.952	-0.116	147225	0.2500	0.2519	
23 Tetryl	1	22.083	22.239	-0.156	71130	0.2500	0.2498	a
24 2,4,6-Trinitrotoluene	1	22.896	23.039	-0.143	109995	0.2500	0.2506	
25 PETN	2	24.109	24.279	-0.170	354363	2.50	2.46	a

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

8330 DMT_00013	Amount Added:	12.50	Units: uL
8330IntermStk_00076	Amount Added:	25.00	Units: uL

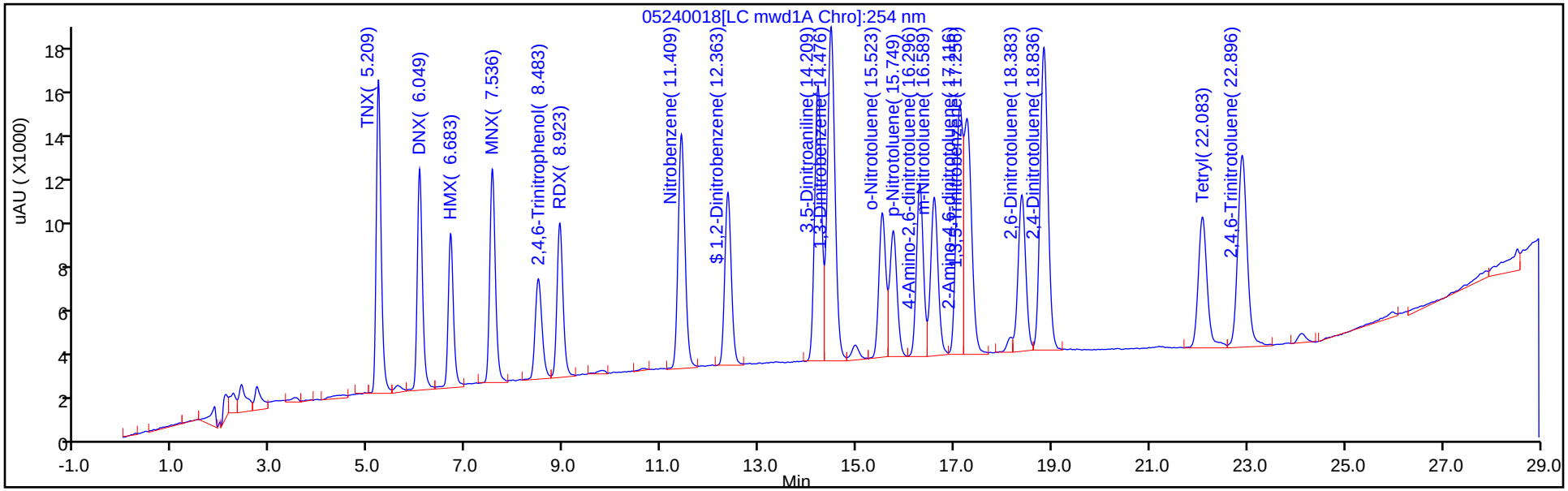
Report Date: 25-May-2023 13:06:16 Chrom Revision: 2.3 23-May-2023 13:55:56

Eurofins Denver

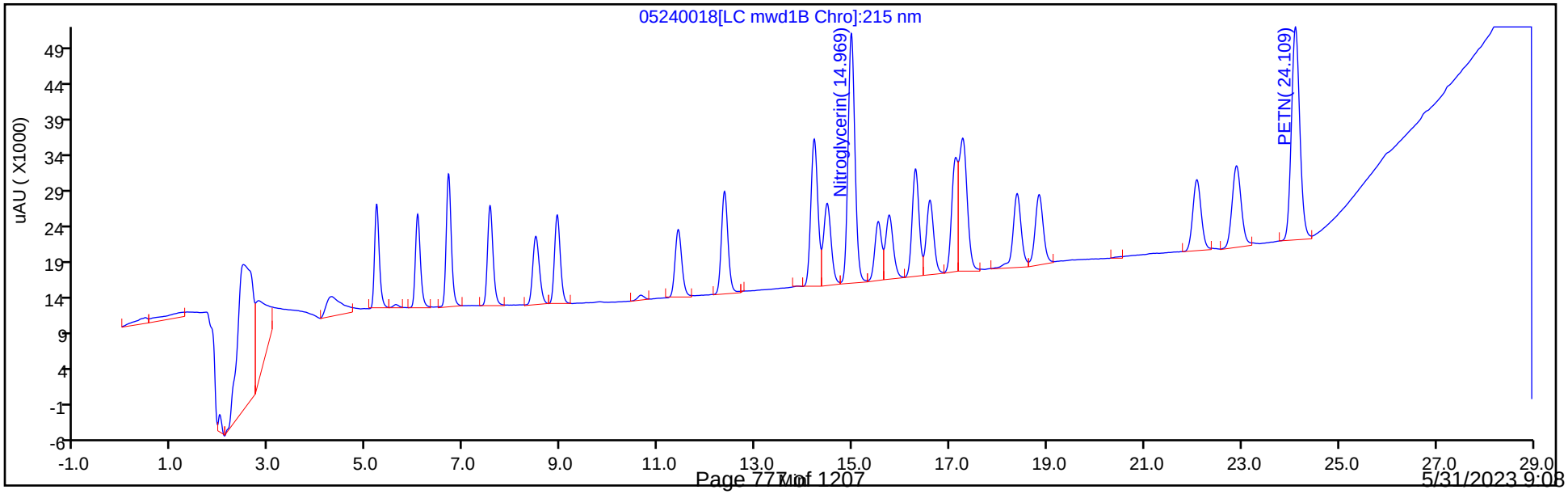
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230524-121801.b\05240018.D

Injection Date:	25-May-2023 00:28:05	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	18
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



Manual Integration/User Assign Peak Report

Eurofins Denver

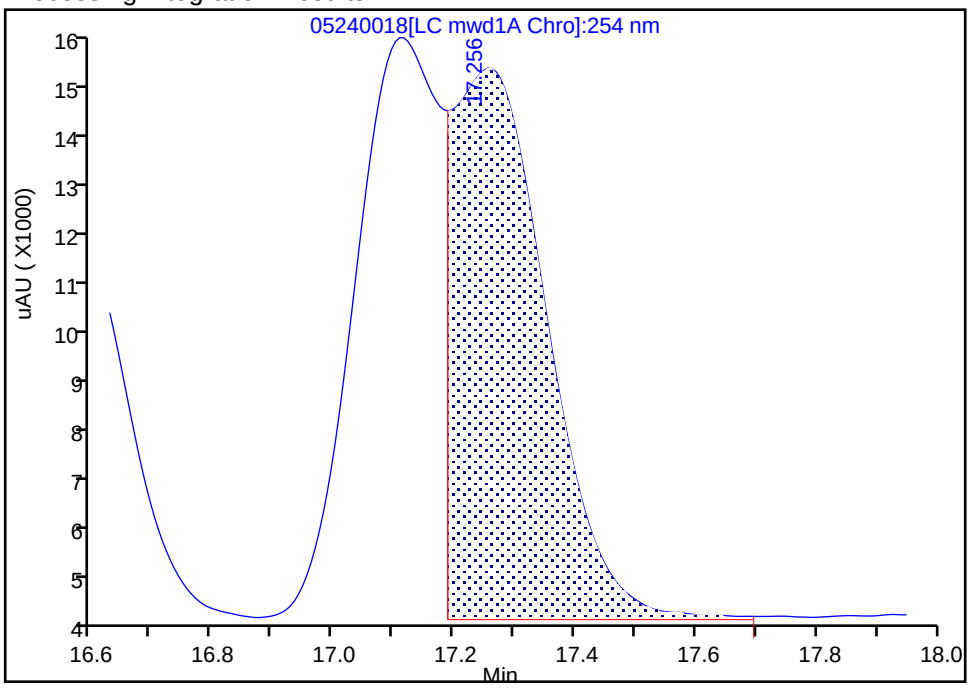
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230524-121801.b\05240018.D				
Injection Date:	25-May-2023 00:28:05	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

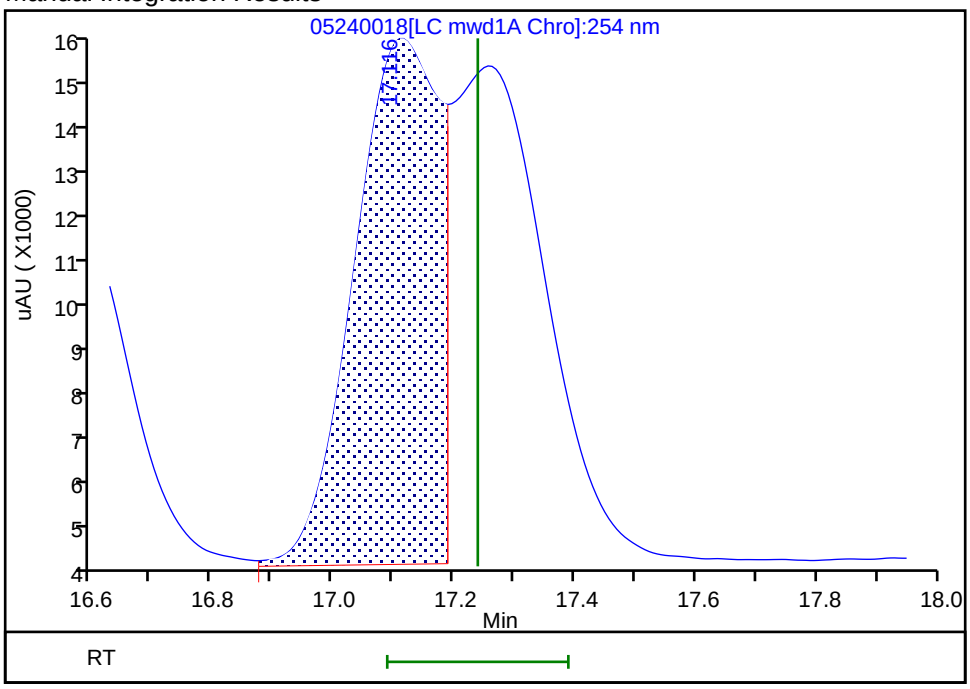
Processing Integration Results

RT: 17.26
Area: 108494
Amount: 0.253526
Amount Units: ug/ml



Manual Integration Results

RT: 17.12
Area: 103847
Amount: 0.242667
Amount Units: ug/ml



Reviewer: K8YG, 25-May-2023 09:17:32 -06:00:00 (UTC)

Audit Action: Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

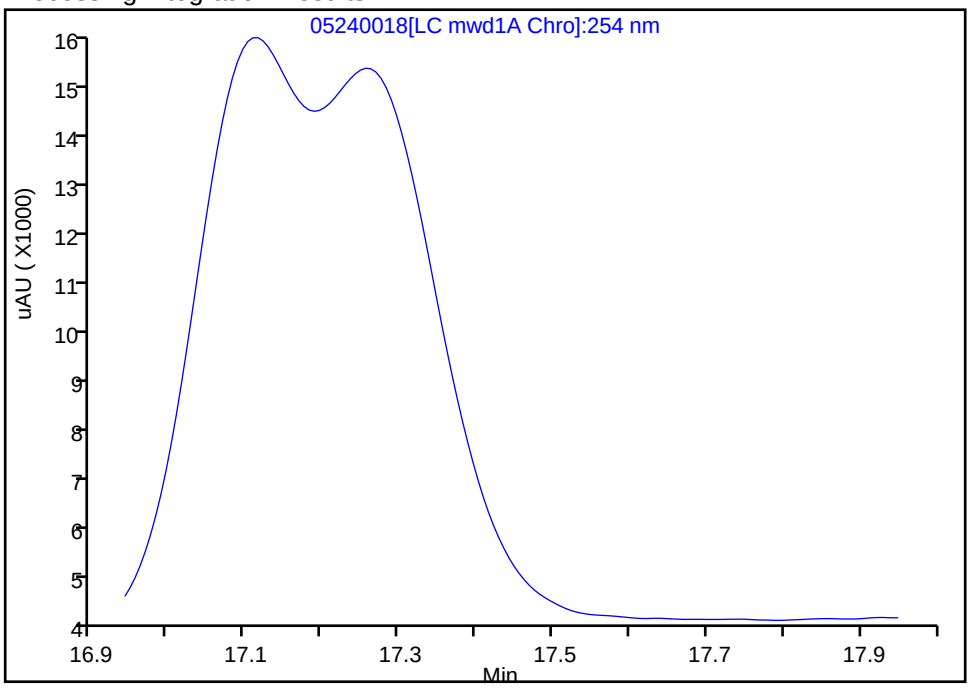
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230524-121801.b\05240018.D				
Injection Date:	25-May-2023 00:28:05	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	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

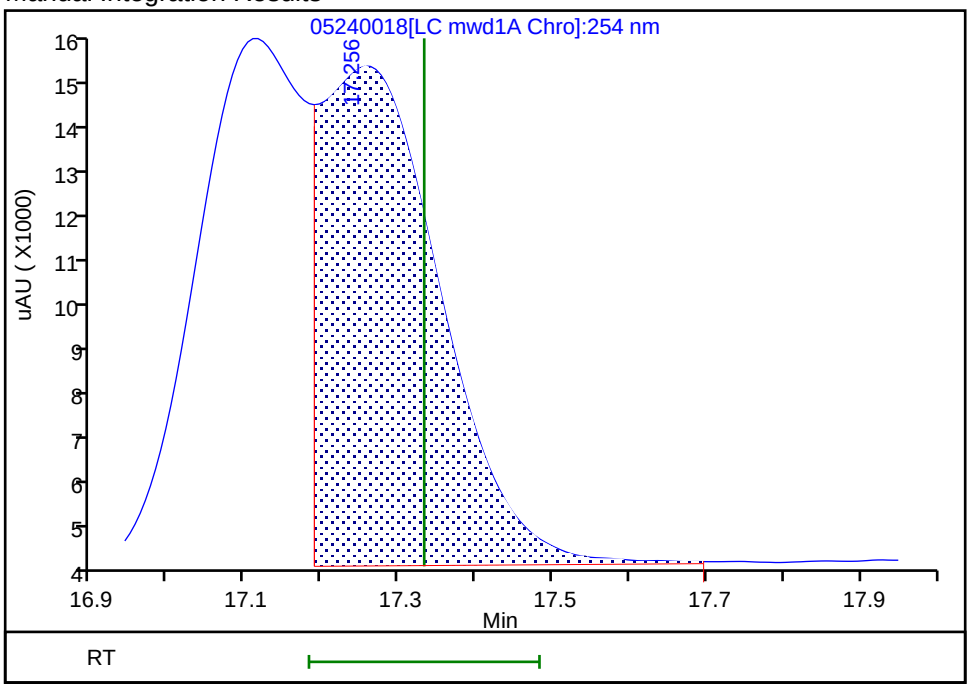
Not Detected
Expected RT: 17.33

Processing Integration Results



Manual Integration Results

RT: 17.26
Area: 108494
Amount: 0.267429
Amount Units: ug/ml



Reviewer: K8YG, 25-May-2023 09:17:34 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

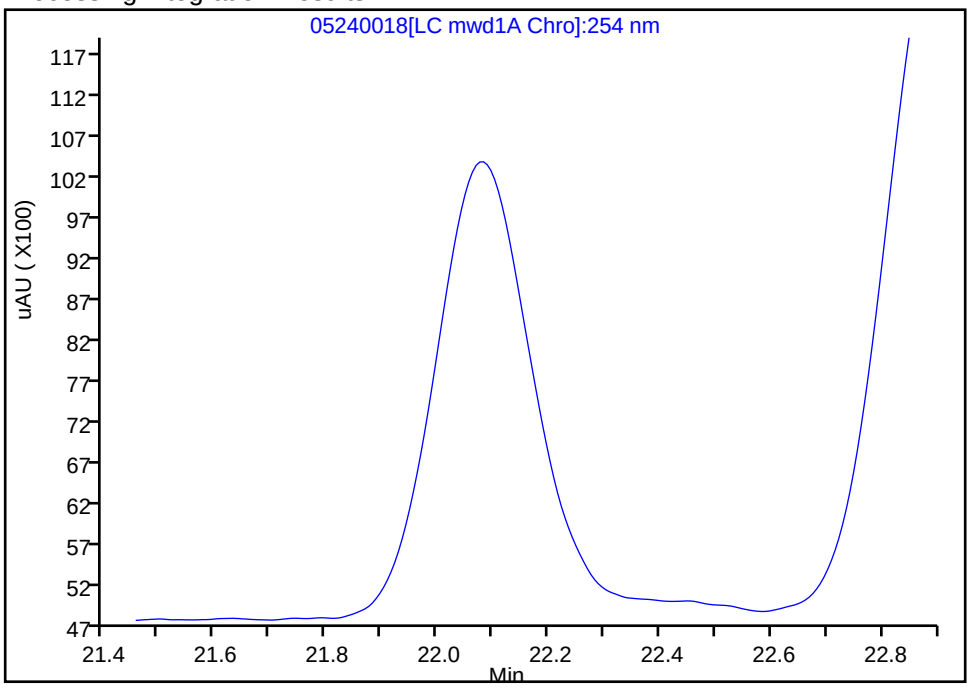
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230524-121801.b\05240018.D				
Injection Date:	25-May-2023 00:28:05	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

23 Tetryl, CAS: 479-45-8

Signal: 1

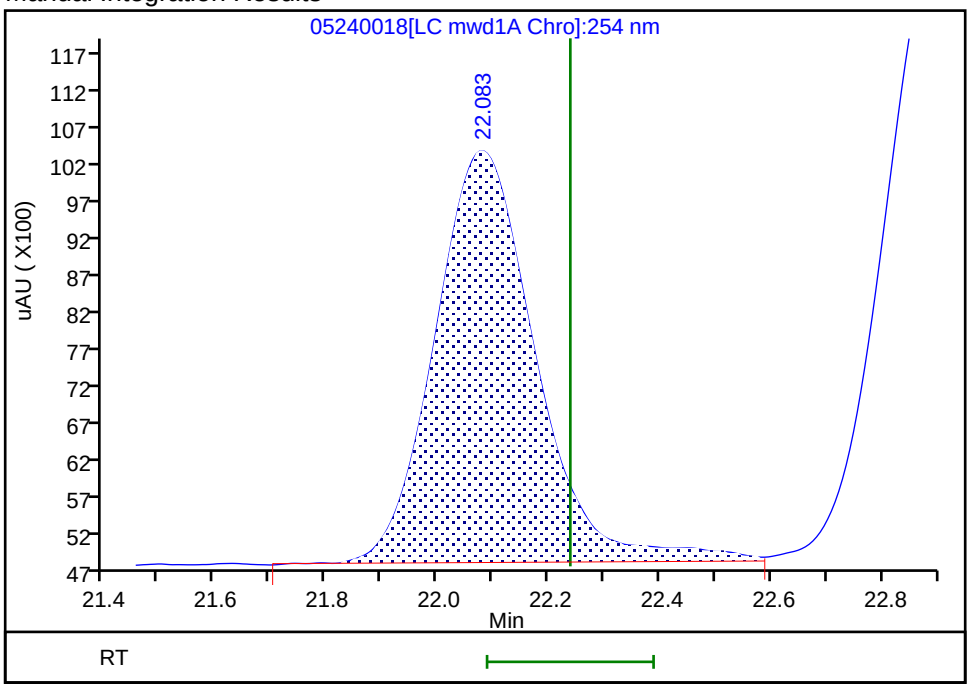
Not Detected
Expected RT: 22.24

Processing Integration Results



Manual Integration Results

RT: 22.08
Area: 71130
Amount: 0.249815
Amount Units: ug/ml



Reviewer: K8YG, 25-May-2023 09:17:39 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

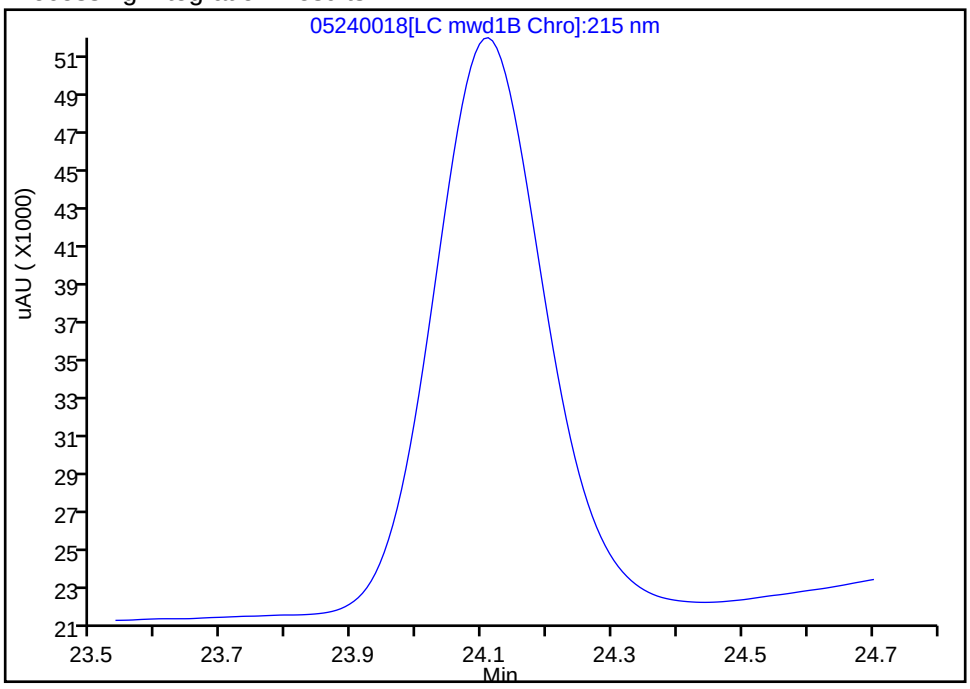
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230524-121801.b\05240018.D				
Injection Date:	25-May-2023 00:28:05	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1B, 215 nm		

25 PETN, CAS: 78-11-5

Signal: 1

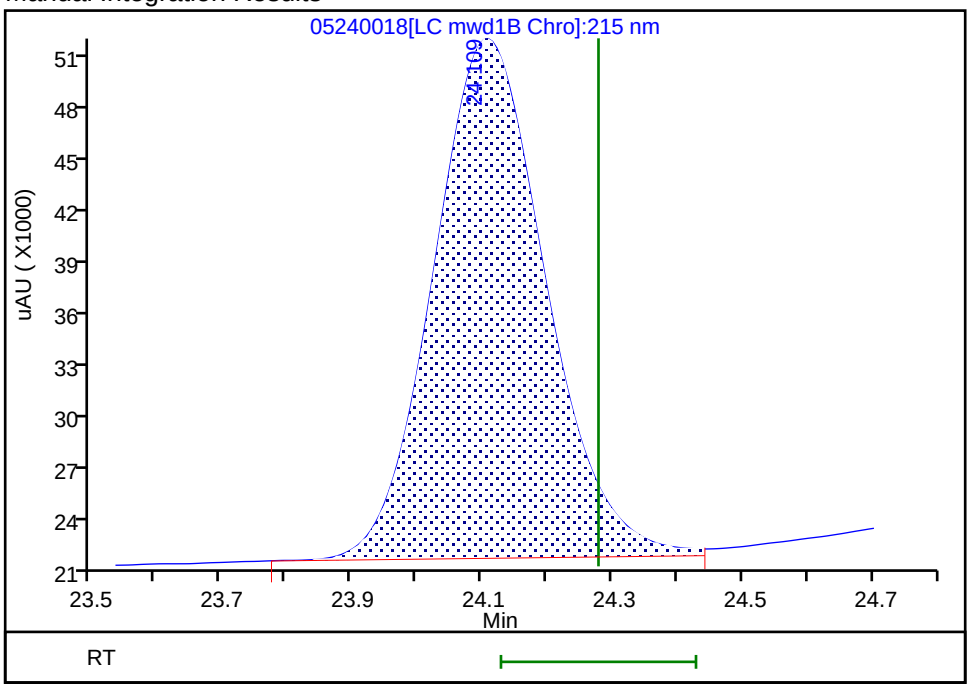
Not Detected
Expected RT: 24.28

Processing Integration Results



Manual Integration Results

RT: 24.11
Area: 354363
Amount: 2.461918
Amount Units: ug/ml



Reviewer: K8YG, 25-May-2023 09:17:43 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176674-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-613095/1-A

Matrix: Water | Lab File ID: 05190034.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/19/2023 13:39

Sample wt/vol: 500(mL) | Date Analyzed: 05/19/2023 23:27

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.: 613168 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U M	0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045
6629-29-4	2,4-diamino-6-nitrotoluene	0.90	U	1.0	0.90	0.43
121-14-2	2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027
59229-75-3	2,6-diamino-4-nitrotoluene	0.90	U M	1.0	0.90	0.22
606-20-2	2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051
88-72-2	2-Nitrotoluene	0.20	U	0.21	0.20	0.086
618-87-1	3,5-Dinitroaniline	0.30	U	0.40	0.30	0.13
99-08-1	3-Nitrotoluene	0.35	U	0.40	0.35	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058
99-99-0	4-Nitrotoluene	0.40	U	0.41	0.40	0.10
80251-29-2	DNX	0.25	U	0.50	0.25	0.097
2691-41-0	HMX	0.20	U	0.21	0.20	0.088
5755-27-1	MNX	0.29	U	0.50	0.29	0.093
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.091
55-63-0	Nitroglycerin	2.0	U	2.1	2.0	0.92
78-11-5	PETN	1.0	U	1.1	1.0	0.45
121-82-4	RDX	0.20	U	0.21	0.20	0.052
479-45-8	Tetryl	0.10	U	0.11	0.10	0.032
13980-04-6	TNX	0.25	U	0.50	0.25	0.079

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	102		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\05190034.D
Lims ID: MB 280-613095/1-A
Client ID:
Sample Type: MB
Inject. Date: 19-May-2023 23:27:21 ALS Bottle#: 34 Worklist Smp#: 34
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-613095/1-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 20-May-2023 11:22:31 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: CTX1663

First Level Reviewer: LV5D Date: 20-May-2023 10:26:22

	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	
	3 TNX	1		6.430				ND	
	2 2,6-diamino-4-nitrotoluene	1		6.431				ND	U
	4 HMX	1		6.550				ND	
	5 2,4-diamino-6-nitrotoluene	1		6.618				ND	
	6 DNX	1		6.757				ND	
	7 MNX	1		7.190				ND	
	8 RDX	1		7.570				ND	
	9 2,4,6-Trinitrophenol	1		7.963				ND	
$	10 1,2-Dinitrobenzene	1	8.526	8.523	0.003	25862	0.2000	0.2048	
	11 1,3,5-Trinitrobenzene	1		8.650				ND	U
	12 1,3-Dinitrobenzene	1		9.277				ND	
	13 Nitrobenzene	1		9.643				ND	
	14 3,5-Dinitroaniline	1		9.883				ND	
	15 Tetryl	1		10.017				ND	
	16 Nitroglycerin	2		10.470				ND	
	17 2,4,6-Trinitrotoluene	1		10.910				ND	
	18 4-Amino-2,6-dinitrotoluene	1		11.117				ND	
	19 2-Amino-4,6-dinitrotoluene	1		11.370				ND	
	20 2,6-Dinitrotoluene	1		11.517				ND	
	21 2,4-Dinitrotoluene	1		11.683				ND	
	22 o-Nitrotoluene	1		12.517				ND	
	23 p-Nitrotoluene	1		12.937				ND	
	24 m-Nitrotoluene	1		13.517				ND	
	25 PETN	2		14.697				ND	
	26 Ammonium Picrate	1		0.000				ND	

QC Flag Legend
Processing Flags

Review Flags
U - Marked Undetected

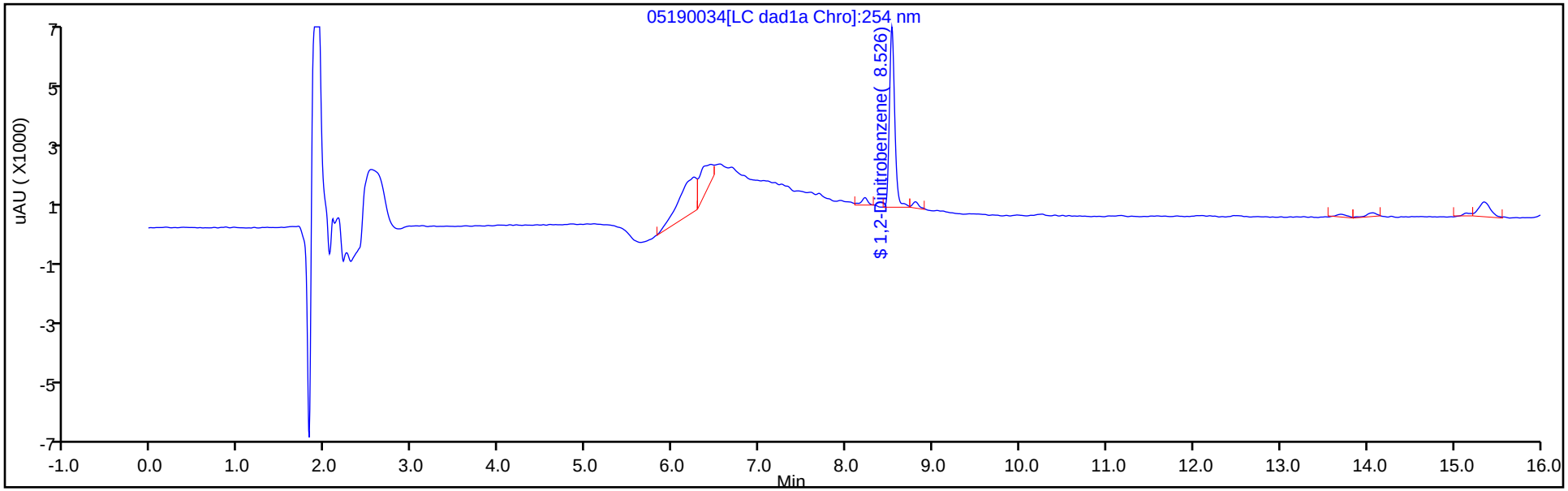
Report Date: 20-May-2023 11:22:32 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

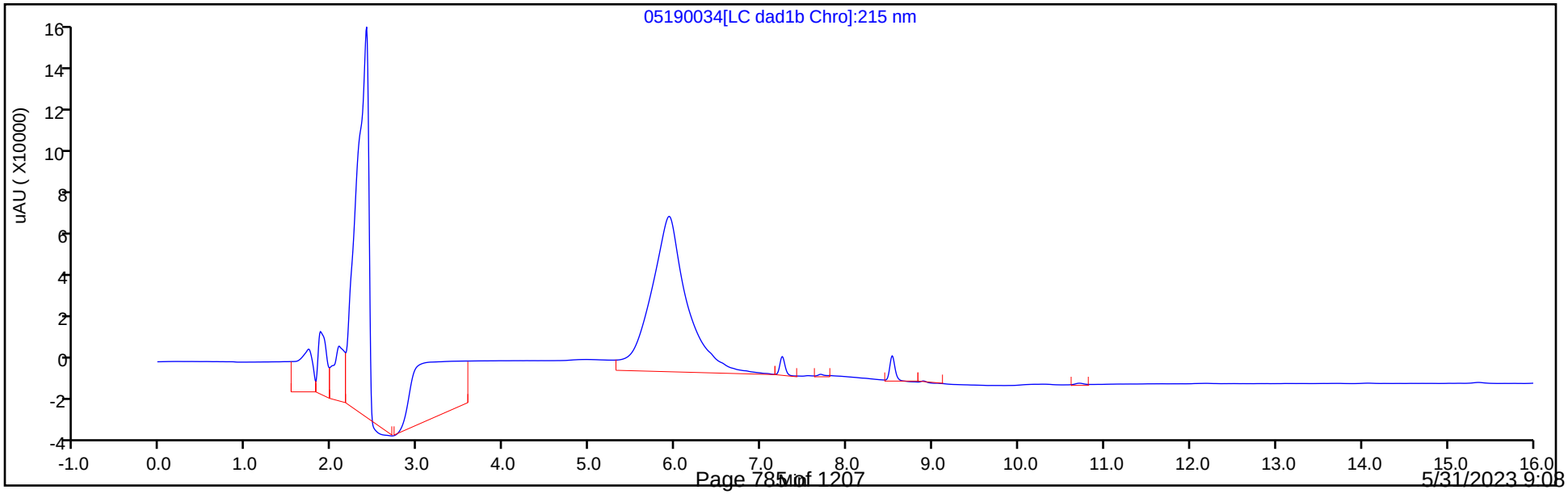
Data File: \\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190034.d

Injection Date:	19-May-2023 23:27:21	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	MB 280-613095/1-A			Worklist Smp#:	34
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	34
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\20230519-121647.b\05190034.D				
Lims ID:	MB 280-613095/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	19-May-2023 23:27:21	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	MB 280-613095/1-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	20-May-2023 11:22:31	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:	CTX1663				
First Level Reviewer: LV5D		Date:	20-May-2023 10:26:22		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2048	102.38

User Disabled Compound Report

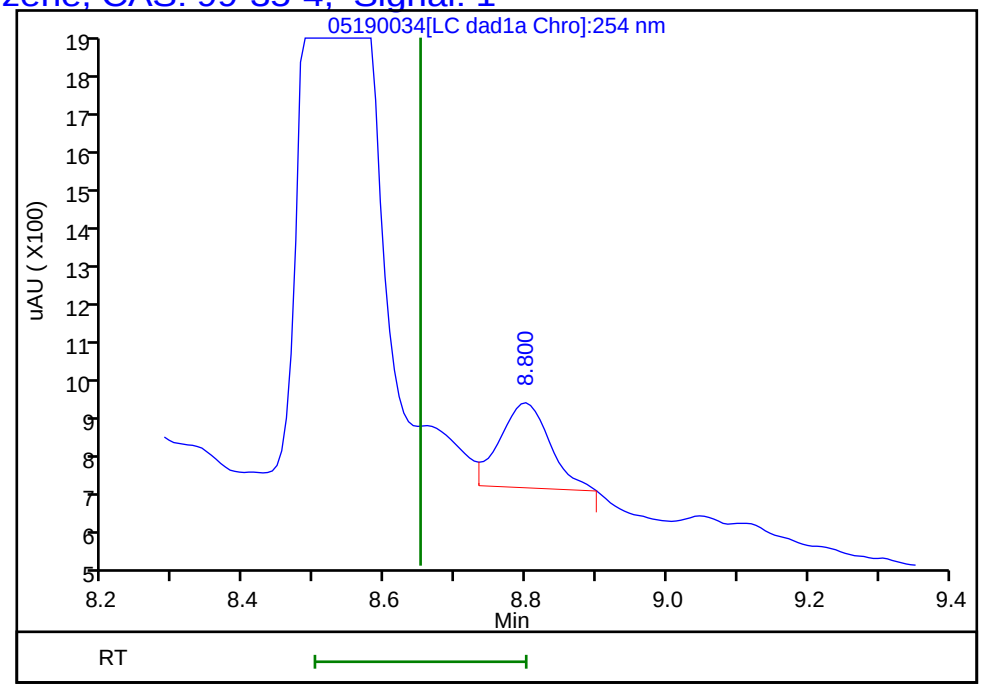
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190034.d
Injection Date: 19-May-2023 23:27:21 Instrument ID: CHHPLC_X3
Lims ID: MB 280-613095/1-A
Client ID:
Operator ID: JZ/JG ALS Bottle#: 34 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

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

RT: 8.80
Response: 1046
Amount: 0.004817



Reviewer: LV5D, 20-May-2023 10:26:22
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

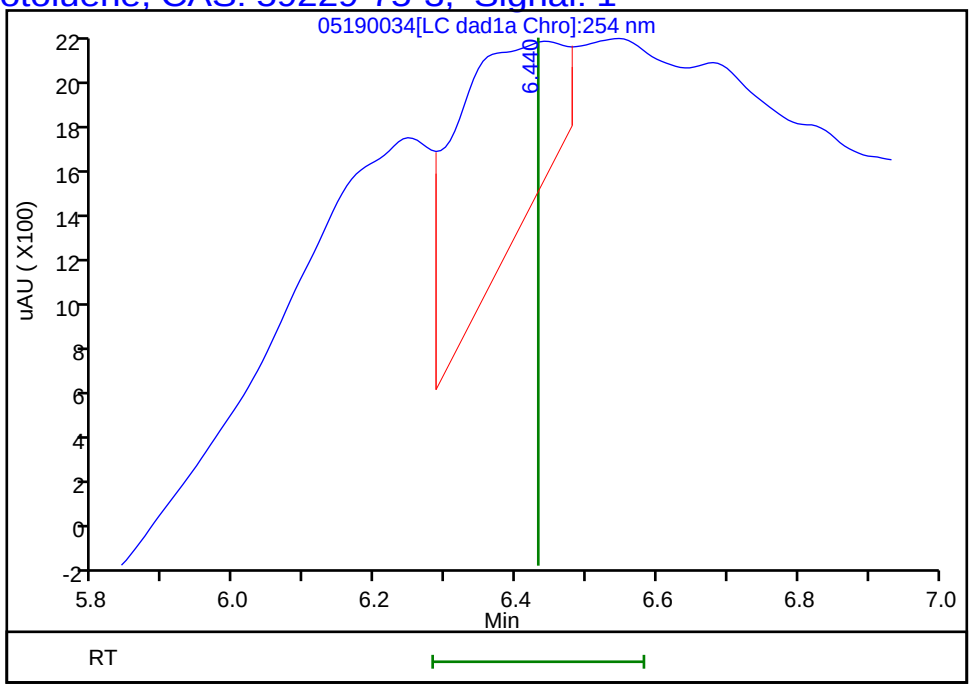
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190034.d
Injection Date: 19-May-2023 23:27:21 Instrument ID: CHHPLC_X3
Lims ID: MB 280-613095/1-A
Client ID:
Operator ID: JZ/JG ALS Bottle#: 34 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

RT: 6.44
Response: 9407
Amount: 0.037193



Reviewer: LV5D, 20-May-2023 10:26:22
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176674-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-613095/2-A

Matrix: Water | Lab File ID: 05190035.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/19/2023 13:39

Sample wt/vol: 500(mL) | Date Analyzed: 05/19/2023 23:50

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.: 613168 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.98		0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	1.90		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	1.83		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	1.82		0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	1.84		0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.80		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.56		0.21	0.20	0.086
618-87-1	3,5-Dinitroaniline	1.73		0.40	0.30	0.13
99-08-1	3-Nitrotoluene	1.54		0.40	0.35	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.78		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.56		0.41	0.40	0.10
80251-29-2	DNX	1.93	M	0.50	0.25	0.097
2691-41-0	HMX	1.62	M	0.21	0.20	0.088
5755-27-1	MNX	2.45		0.50	0.29	0.093
98-95-3	Nitrobenzene	1.74		0.21	0.20	0.091
55-63-0	Nitroglycerin	18.9		2.1	2.0	0.92
78-11-5	PETN	20.5		1.1	1.0	0.45
121-82-4	RDX	1.79		0.21	0.20	0.052
479-45-8	Tetryl	2.07		0.11	0.10	0.032
13980-04-6	TNX	1.88	M	0.50	0.25	0.079

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	93		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\05190035.D
Lims ID: LCS 280-613095/2-A
Client ID:
Sample Type: LCS
Inject. Date: 19-May-2023 23:50:14 ALS Bottle#: 35 Worklist Smp#: 35
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-613095/2-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 20-May-2023 11:22:31 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: CTX1663

First Level Reviewer: LV5D Date: 20-May-2023 10:26:38

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.429	6.430	-0.001	37089	0.2006	0.1876	M
4 HMX	1	6.549	6.550	-0.001	15150	0.2000	0.1620	M
6 DNX	1	6.755	6.757	-0.002	27816	0.2002	0.1925	M
7 MNX	1	7.182	7.190	-0.008	32117	0.2334	0.2448	
8 RDX	1	7.569	7.570	-0.001	19040	0.2000	0.1790	
9 2,4,6-Trinitrophenol	1	7.962	7.963	-0.001	16851	0.2000	0.2222	
$ 10 1,2-Dinitrobenzene	1	8.522	8.523	-0.001	23565	0.2000	0.1866	
11 1,3,5-Trinitrobenzene	1	8.649	8.650	-0.001	42888	0.2000	0.1975	
12 1,3-Dinitrobenzene	1	9.275	9.277	-0.002	55963	0.2000	0.1901	
13 Nitrobenzene	1	9.642	9.643	-0.001	33367	0.2000	0.1745	
14 3,5-Dinitroaniline	1	9.882	9.883	-0.001	39507	0.2000	0.1730	
15 Tetryl	1	10.015	10.017	-0.002	33961	0.2000	0.2069	
16 Nitroglycerin	2	10.462	10.470	-0.008	121383	2.00	1.89	
17 2,4,6-Trinitrotoluene	1	10.902	10.910	-0.008	38574	0.2000	0.1828	
18 4-Amino-2,6-dinitrotoluene	1	11.102	11.117	-0.015	27601	0.2000	0.1781	
19 2-Amino-4,6-dinitrotoluene	1	11.355	11.370	-0.015	36267	0.2000	0.1801	
20 2,6-Dinitrotoluene	1	11.502	11.517	-0.015	26241	0.2000	0.1838	
21 2,4-Dinitrotoluene	1	11.668	11.683	-0.015	53943	0.2000	0.1818	
22 o-Nitrotoluene	1	12.488	12.517	-0.029	19964	0.2000	0.1561	
23 p-Nitrotoluene	1	12.908	12.937	-0.029	17433	0.2000	0.1558	
24 m-Nitrotoluene	1	13.482	13.517	-0.035	21634	0.2000	0.1540	
25 PETN	2	14.655	14.697	-0.042	140997	2.00	2.05	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

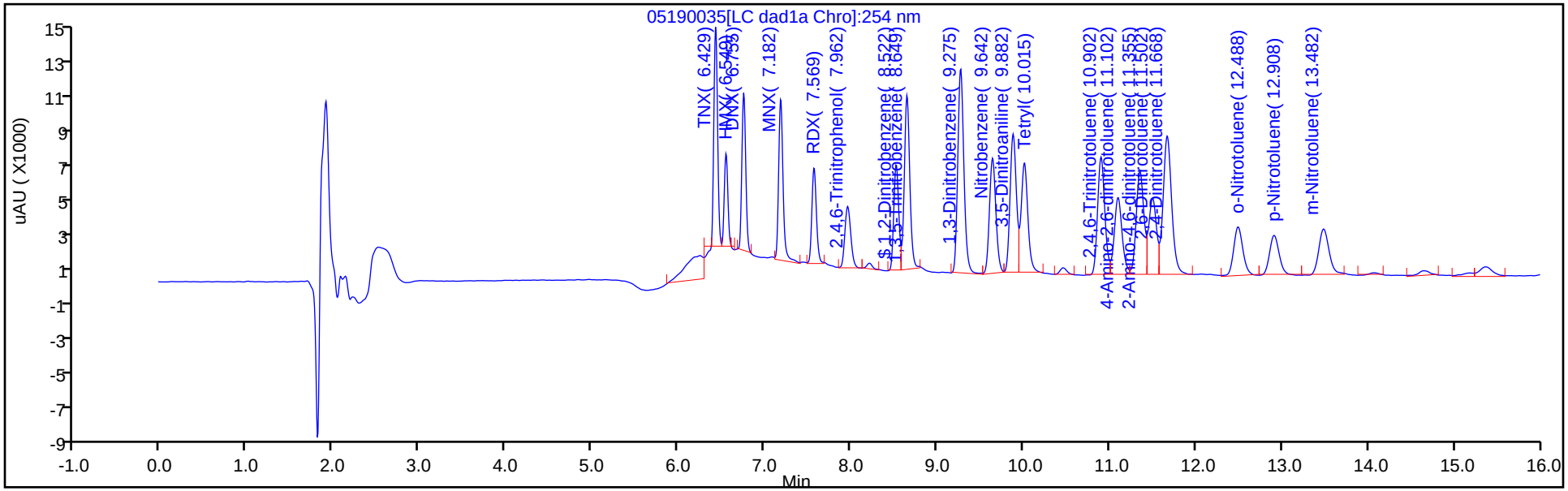
Report Date: 20-May-2023 11:22:32 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

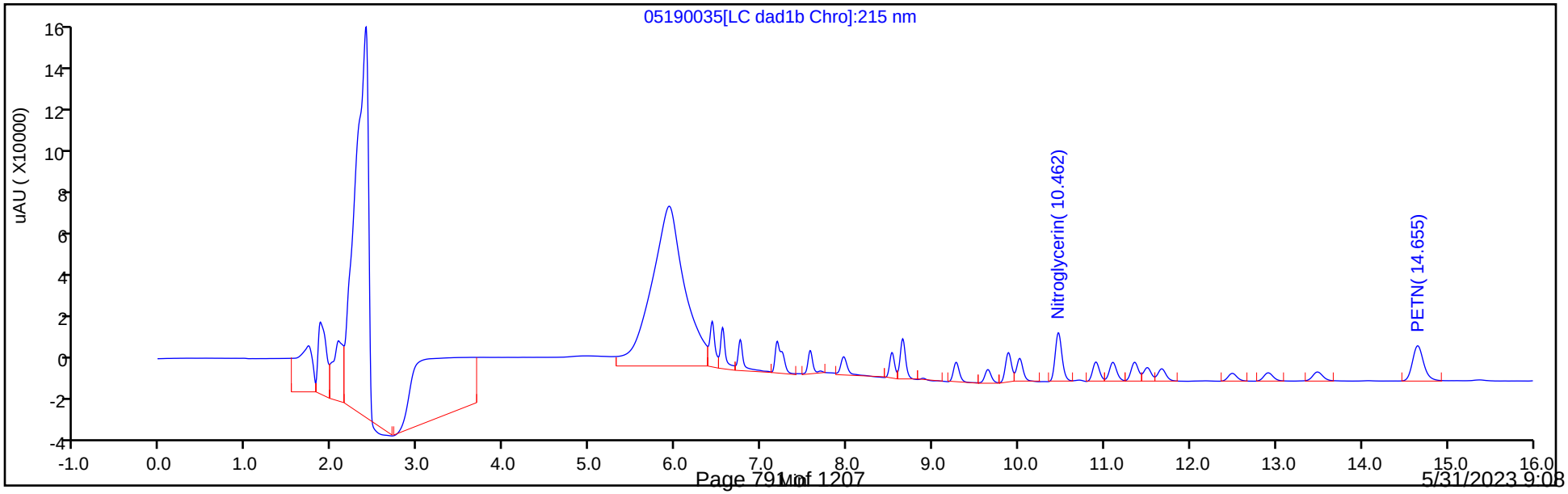
Data File: \\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190035.d

Injection Date:	19-May-2023 23:50:14	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	LCS 280-613095/2-A			Worklist Smp#:	35
Client ID:					
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\20230519-121647.b\05190035.D				
Lims ID:	LCS 280-613095/2-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	19-May-2023 23:50:14	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-613095/2-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	20-May-2023 11:22:31	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:	CTX1663				

First Level Reviewer: LV5D Date: 20-May-2023 10:26:38

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1866	93.28

Manual Integration/User Assign Peak Report

Eurofins Denver

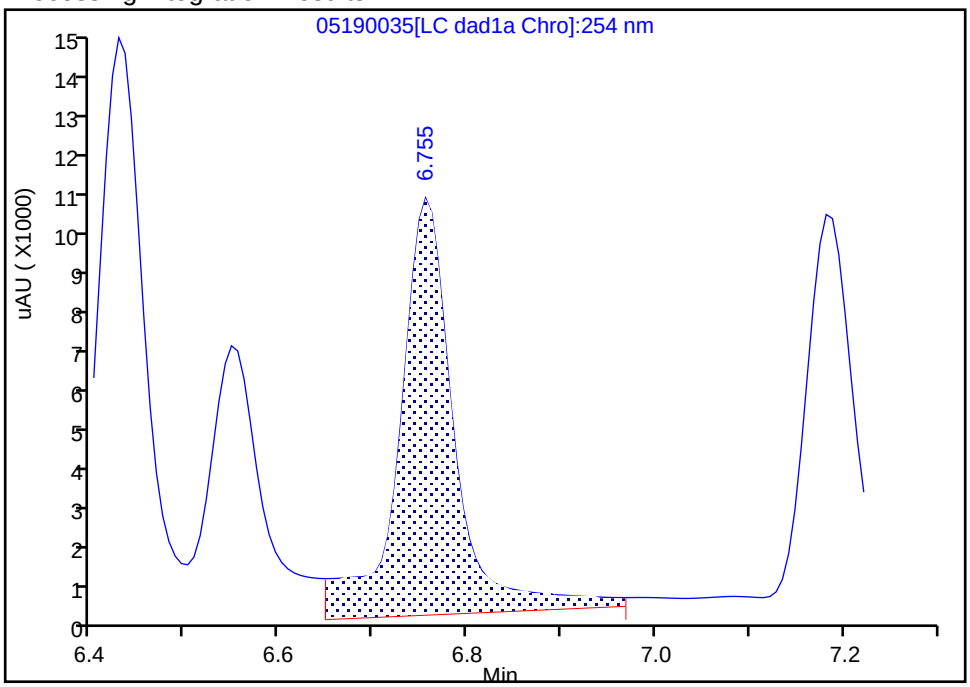
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190035.d				
Injection Date:	19-May-2023 23:50:14	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-613095/2-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

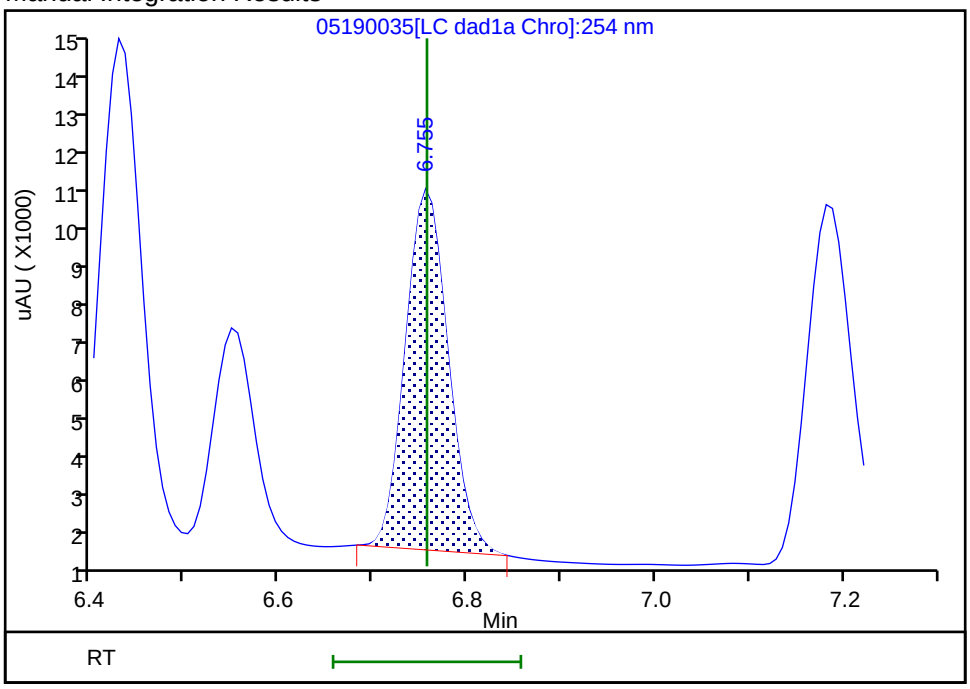
Processing Integration Results

RT: 6.76
Area: 39586
Amount: 0.274023
Amount Units: ug/mL



Manual Integration Results

RT: 6.76
Area: 27816
Amount: 0.192548
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 10:26:37 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

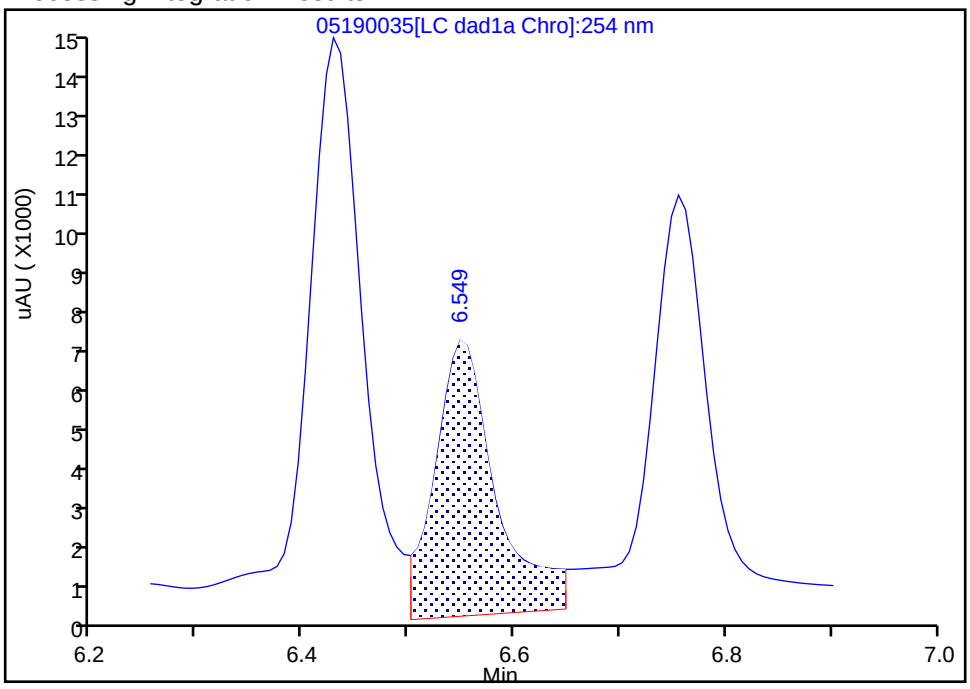
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190035.d				
Injection Date:	19-May-2023 23:50:14	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-613095/2-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

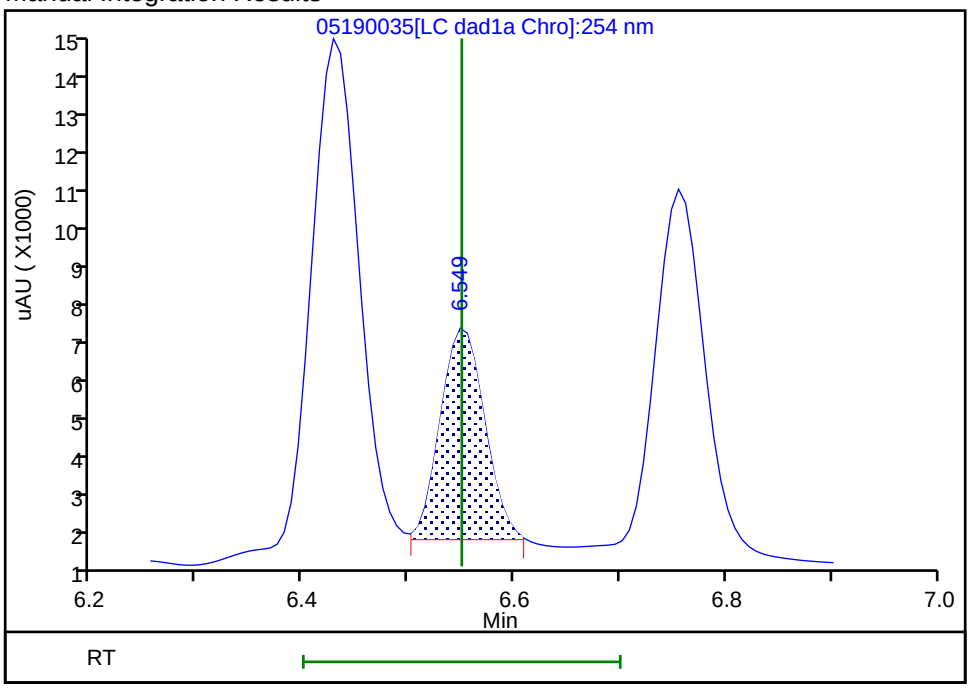
Processing Integration Results

RT: 6.55
Area: 25726
Amount: 0.275062
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 15150
Amount: 0.161983
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 10:26:34 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

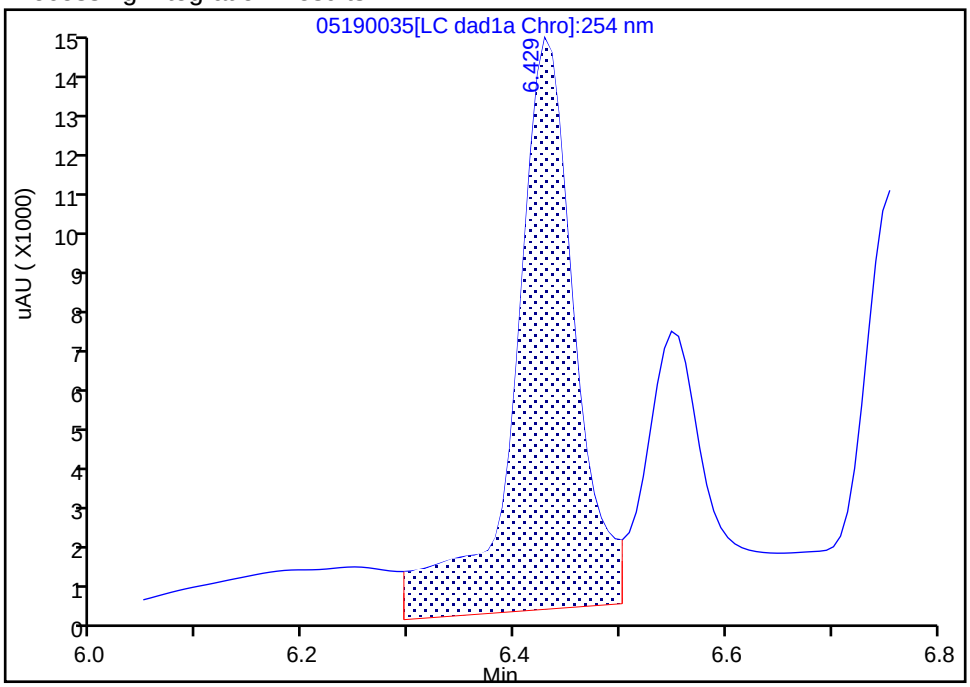
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190035.d				
Injection Date:	19-May-2023 23:50:14	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-613095/2-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

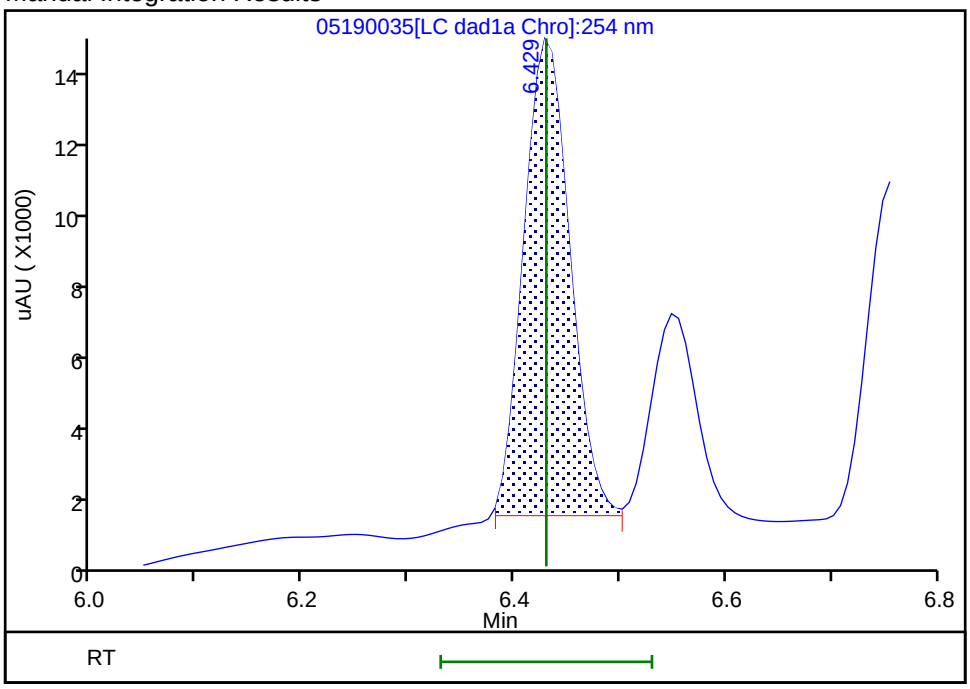
Processing Integration Results

RT: 6.43
Area: 54654
Amount: 0.276467
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 37089
Amount: 0.187614
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 10:26:32 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176674-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-613095/4-A

Matrix: Water | Lab File ID: 05190037.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/19/2023 13:39

Sample wt/vol: 500(mL) | Date Analyzed: 05/20/2023 00:36

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.: 613168 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
6629-29-4	2,4-diamino-6-nitrotoluene	1.61	M	1.0	0.90	0.43
59229-75-3	2,6-diamino-4-nitrotoluene	1.68	M	1.0	0.90	0.22

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	98		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\05190037.D
Lims ID: LCS 280-613095/4-A
Client ID:
Sample Type: LCS
Inject. Date: 20-May-2023 00:36:13 ALS Bottle#: 37 Worklist Smp#: 37
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-613095/4-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 20-May-2023 11:22:31 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: CTX1663

First Level Reviewer: LV5D Date: 20-May-2023 10:27:04

	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	6.431	-0.013	39464	0.2000	0.1680	M
5	2,4-diamino-6-nitrotoluene	1	6.605	6.618	-0.013	23586	0.2000	0.1610	M
$ 10	1,2-Dinitrobenzene	1	8.531	8.523	0.008	24832	0.2000	0.1966	

QC Flag Legend

Review Flags
M - Manually Integrated

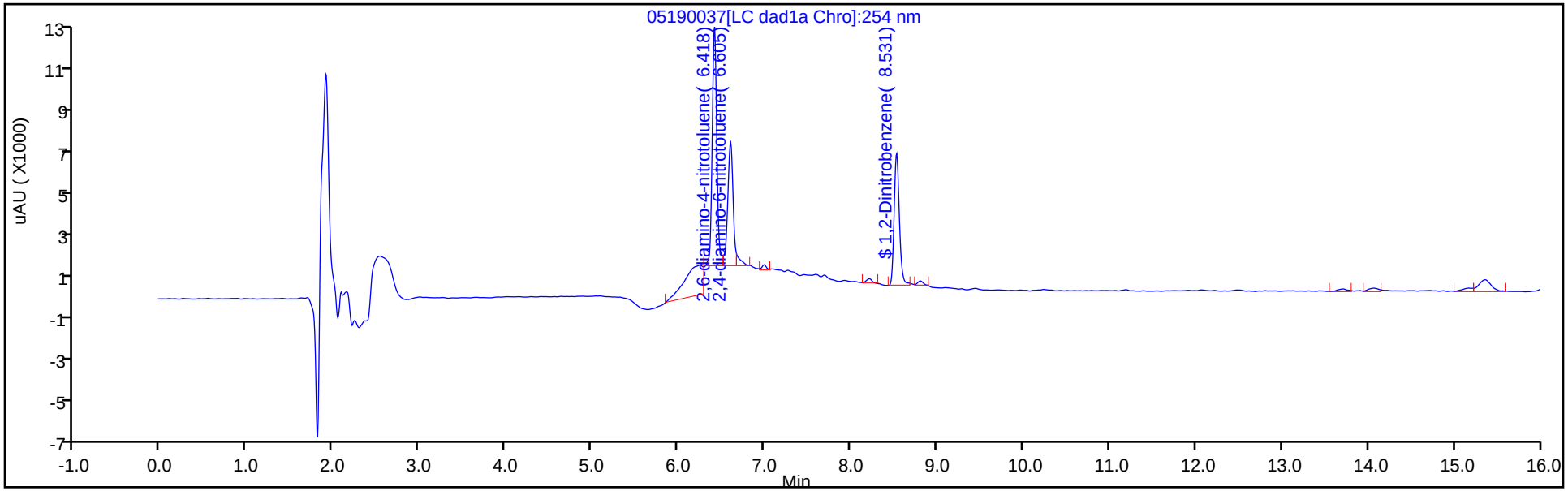
Report Date: 20-May-2023 11:22:33 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

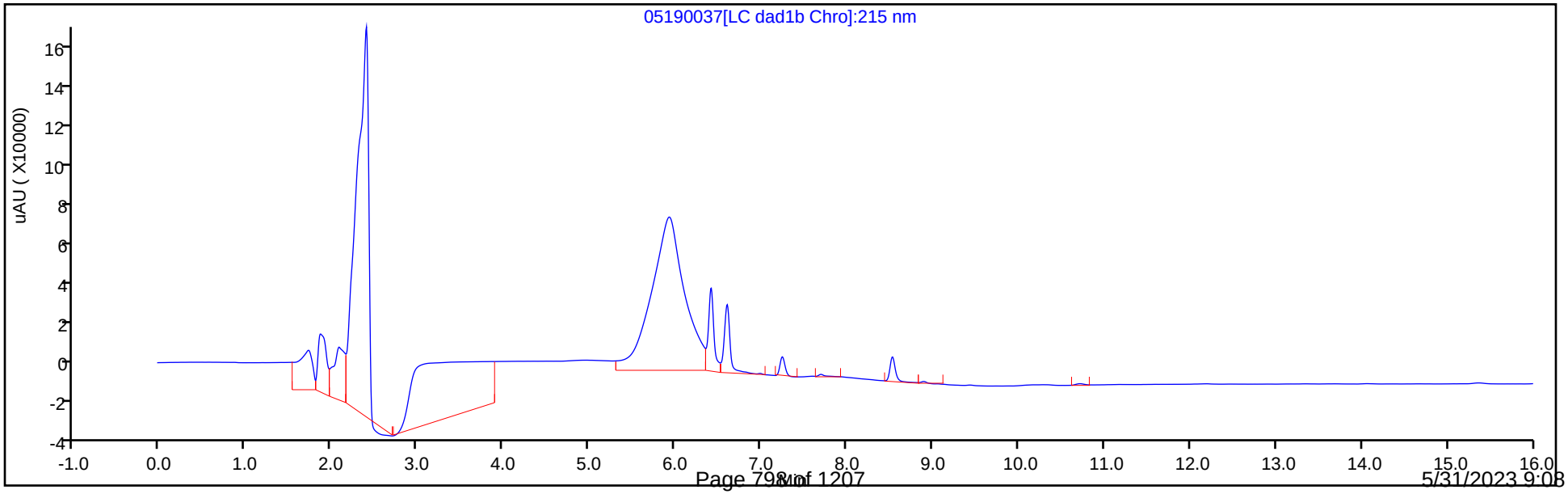
Data File: \\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190037.d

Injection Date:	20-May-2023 00:36:13	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	LCS 280-613095/4-A			Worklist Smp#:	37
Client ID:					
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\20230519-121647.b\05190037.D				
Lims ID:	LCS 280-613095/4-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	20-May-2023 00:36:13	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-613095/4-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	20-May-2023 11:22:31	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:	CTX1663				

First Level Reviewer: LV5D Date: 20-May-2023 10:27:04

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1966	98.30

Manual Integration/User Assign Peak Report

Eurofins Denver

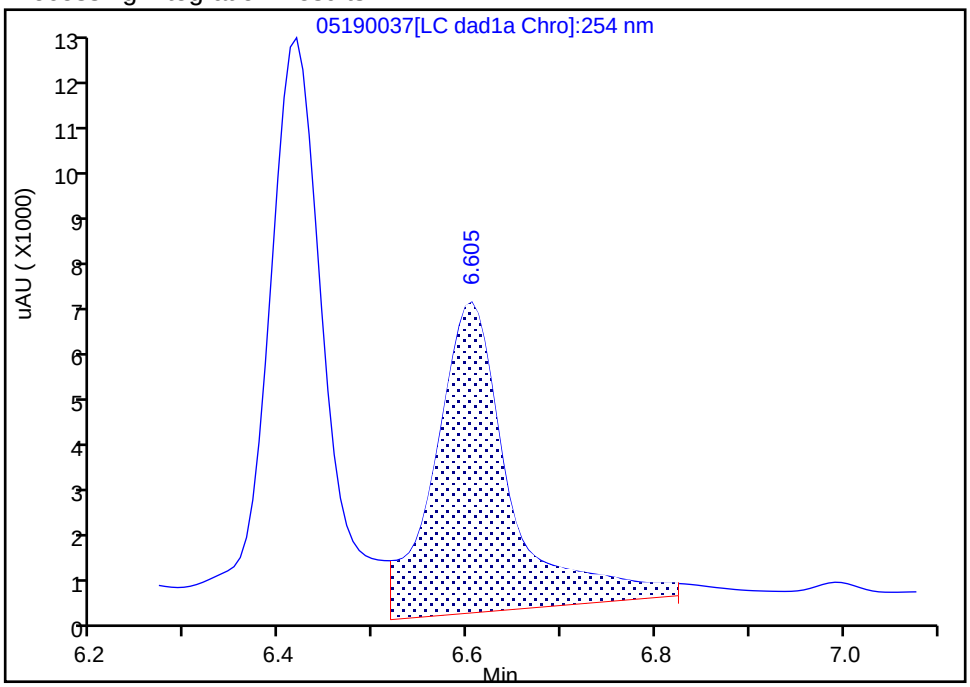
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190037.d				
Injection Date:	20-May-2023 00:36:13	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-613095/4-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

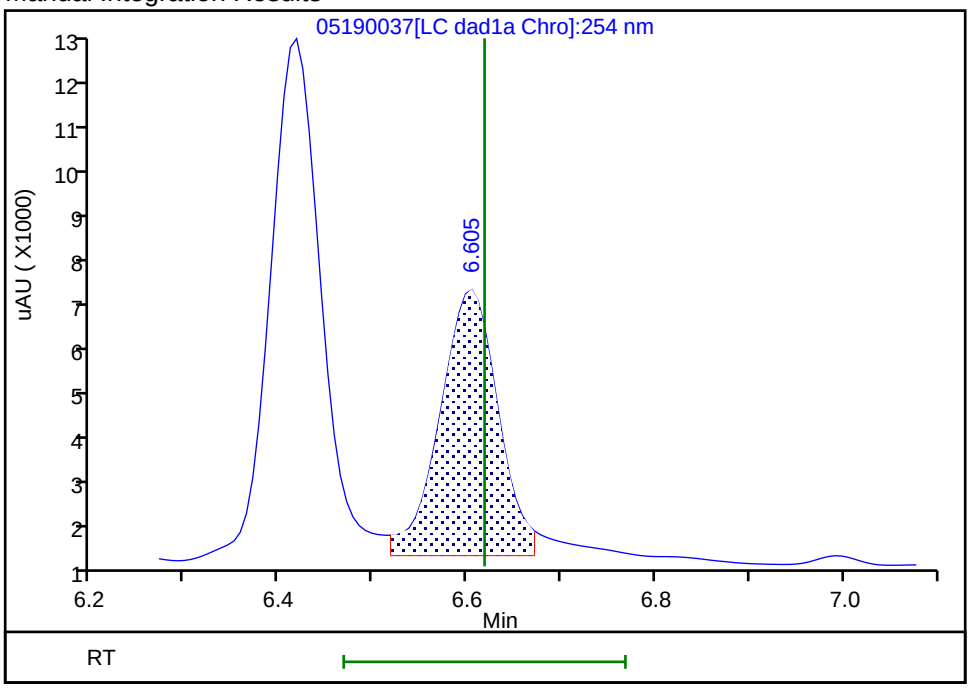
Processing Integration Results

RT: 6.60
Area: 34389
Amount: 0.234782
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 23586
Amount: 0.161027
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 10:27:04 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

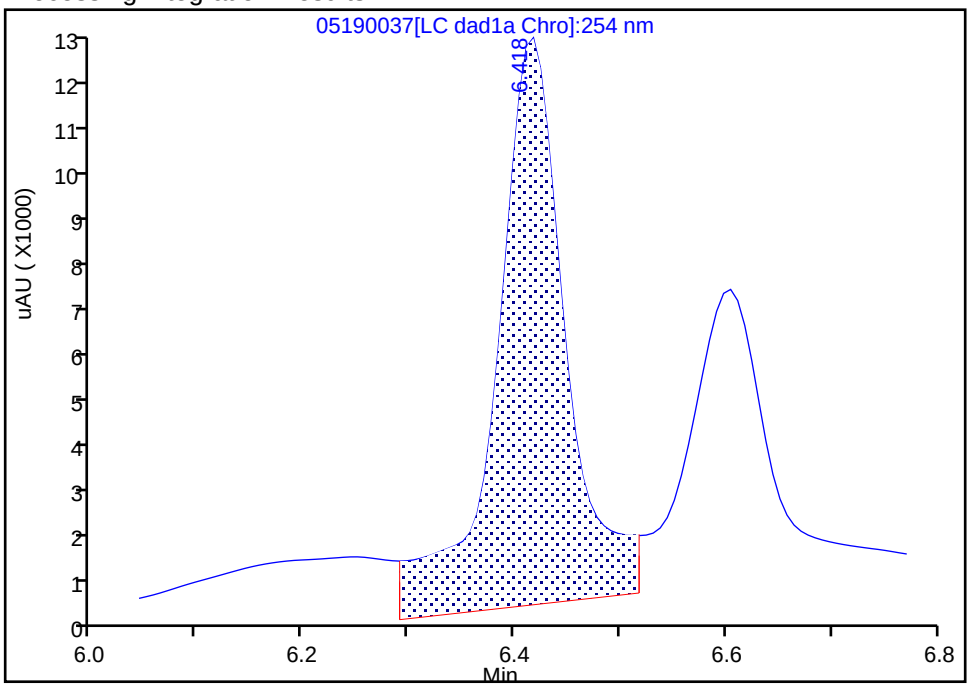
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190037.d				
Injection Date:	20-May-2023 00:36:13	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-613095/4-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	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

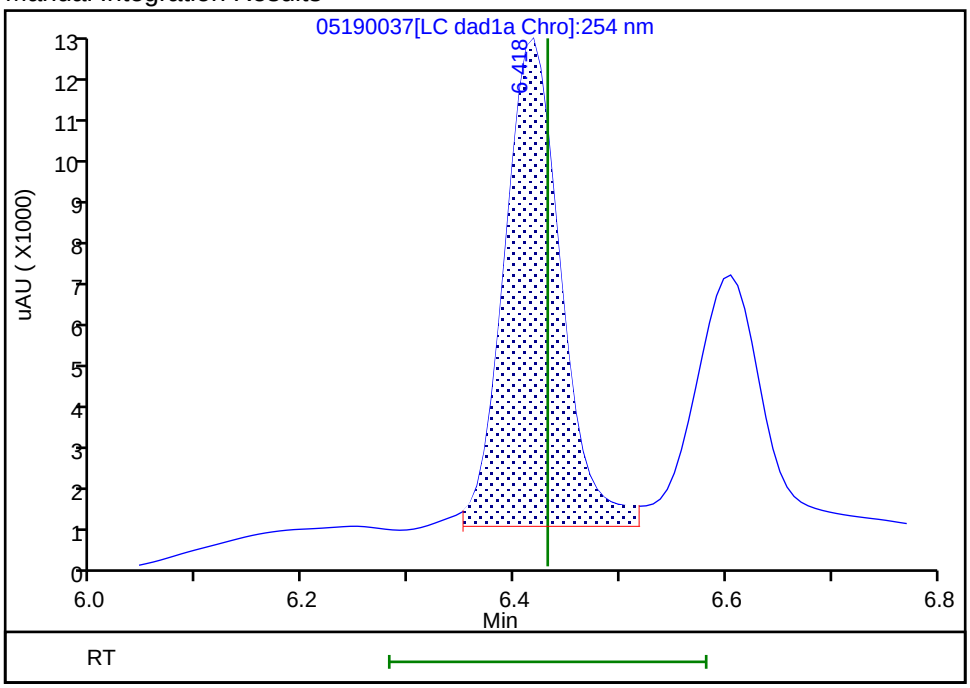
Processing Integration Results

RT: 6.42
Area: 53667
Amount: 0.229885
Amount Units: ug/mL



Manual Integration Results

RT: 6.42
Area: 39464
Amount: 0.168050
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 10:27:02 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176674-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 280-613095/3-A

Matrix: Water | Lab File ID: 05190036.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/19/2023 13:39

Sample wt/vol: 500(mL) | Date Analyzed: 05/20/2023 00:13

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.: 613168 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.04		0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	1.96		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	1.88		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	1.87		0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	1.95		0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.84		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.64		0.21	0.20	0.086
618-87-1	3,5-Dinitroaniline	1.83		0.40	0.30	0.13
99-08-1	3-Nitrotoluene	1.62		0.40	0.35	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.82		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.61		0.41	0.40	0.10
80251-29-2	DNX	1.95	M	0.50	0.25	0.097
2691-41-0	HMX	1.71	M	0.21	0.20	0.088
5755-27-1	MNX	2.47		0.50	0.29	0.093
98-95-3	Nitrobenzene	1.81		0.21	0.20	0.091
55-63-0	Nitroglycerin	19.5		2.1	2.0	0.92
78-11-5	PETN	21.1		1.1	1.0	0.45
121-82-4	RDX	1.84		0.21	0.20	0.052
479-45-8	Tetryl	2.06		0.11	0.10	0.032
13980-04-6	TNX	1.91	M	0.50	0.25	0.079

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	94		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\05190036.D
Lims ID: LCSD 280-613095/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 20-May-2023 00:13:13 ALS Bottle#: 36 Worklist Smp#: 36
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-613095/3-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 20-May-2023 11:22:31 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: CTX1663

First Level Reviewer: LV5D Date: 20-May-2023 10:26:51

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.430	6.430	0.000	37692	0.2006	0.1907	M
4 HMX	1	6.550	6.550	0.000	16032	0.2000	0.1714	M
6 DNX	1	6.757	6.757	0.000	28144	0.2002	0.1948	M
7 MNX	1	7.184	7.190	-0.006	32355	0.2334	0.2467	
8 RDX	1	7.570	7.570	0.000	19542	0.2000	0.1837	
9 2,4,6-Trinitrophenol	1	7.957	7.963	-0.006	17381	0.2000	0.2292	
$ 10 1,2-Dinitrobenzene	1	8.517	8.523	-0.006	23733	0.2000	0.1879	
11 1,3,5-Trinitrobenzene	1	8.644	8.650	-0.006	44269	0.2000	0.2039	
12 1,3-Dinitrobenzene	1	9.270	9.277	-0.007	57656	0.2000	0.1958	
13 Nitrobenzene	1	9.637	9.643	-0.006	34660	0.2000	0.1812	
14 3,5-Dinitroaniline	1	9.877	9.883	-0.006	41720	0.2000	0.1827	
15 Tetryl	1	10.010	10.017	-0.007	33876	0.2000	0.2064	
16 Nitroglycerin	2	10.464	10.470	-0.006	124924	2.00	1.95	
17 2,4,6-Trinitrotoluene	1	10.904	10.910	-0.006	39578	0.2000	0.1875	
18 4-Amino-2,6-dinitrotoluene	1	11.104	11.117	-0.013	28204	0.2000	0.1820	
19 2-Amino-4,6-dinitrotoluene	1	11.357	11.370	-0.013	37107	0.2000	0.1842	
20 2,6-Dinitrotoluene	1	11.504	11.517	-0.013	27882	0.2000	0.1953	
21 2,4-Dinitrotoluene	1	11.670	11.683	-0.013	55373	0.2000	0.1867	
22 o-Nitrotoluene	1	12.497	12.517	-0.020	21009	0.2000	0.1643	
23 p-Nitrotoluene	1	12.924	12.937	-0.013	17980	0.2000	0.1607	
24 m-Nitrotoluene	1	13.497	13.517	-0.020	22802	0.2000	0.1623	
25 PETN	2	14.670	14.697	-0.027	145328	2.00	2.11	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

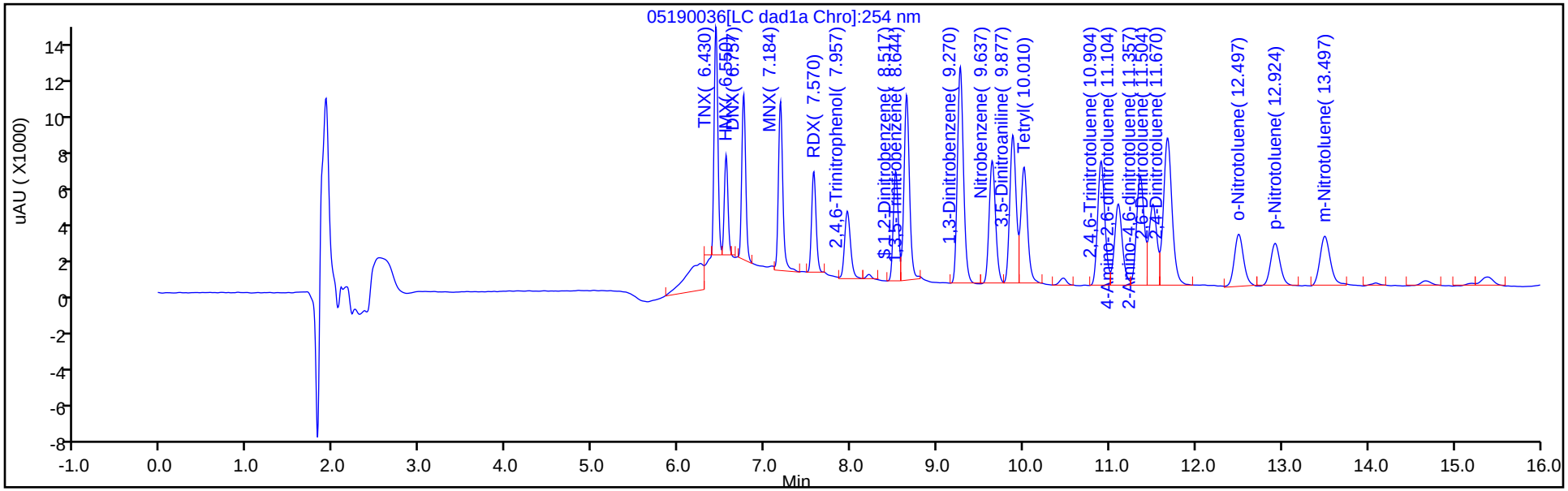
Report Date: 20-May-2023 11:22:33 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

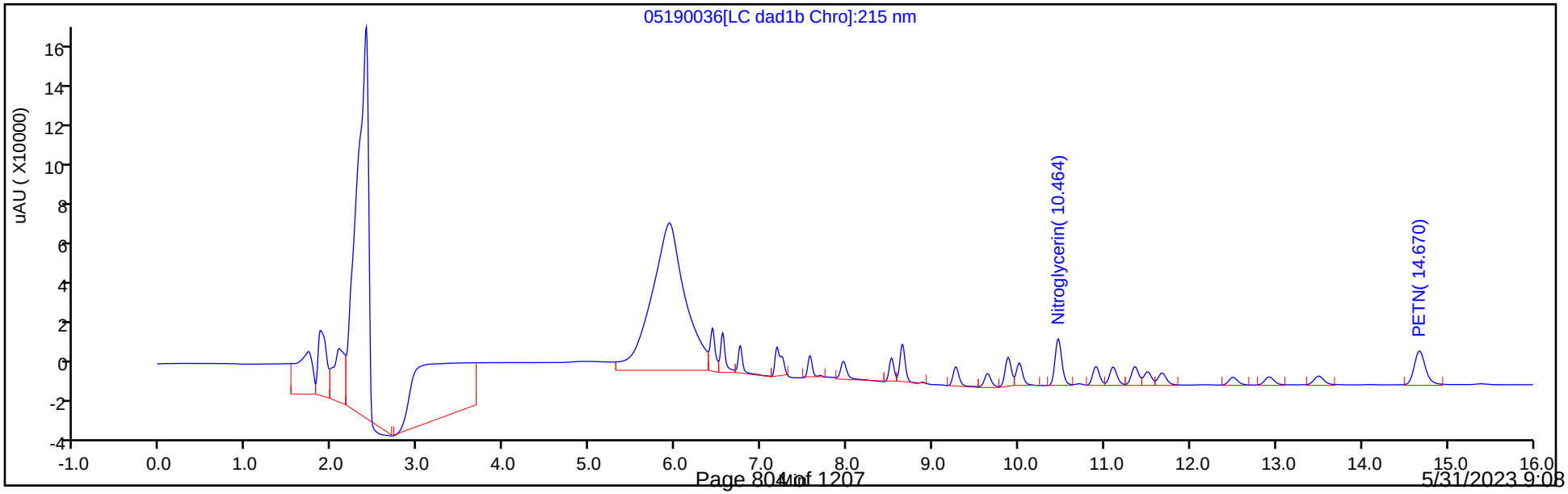
Data File: \\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190036.d

Injection Date:	20-May-2023 00:13:13	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	LCSD 280-613095/3-A			Worklist Smp#:	36
Client ID:					
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



5/31/2023 9:08 PM

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\05190036.D
Lims ID: LCSD 280-613095/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 20-May-2023 00:13:13 ALS Bottle#: 36 Worklist Smp#: 36
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-613095/3-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 20-May-2023 11:22:31 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: CTX1663

First Level Reviewer: LV5D Date: 20-May-2023 10:26:51

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1879	93.95

Manual Integration/User Assign Peak Report

Eurofins Denver

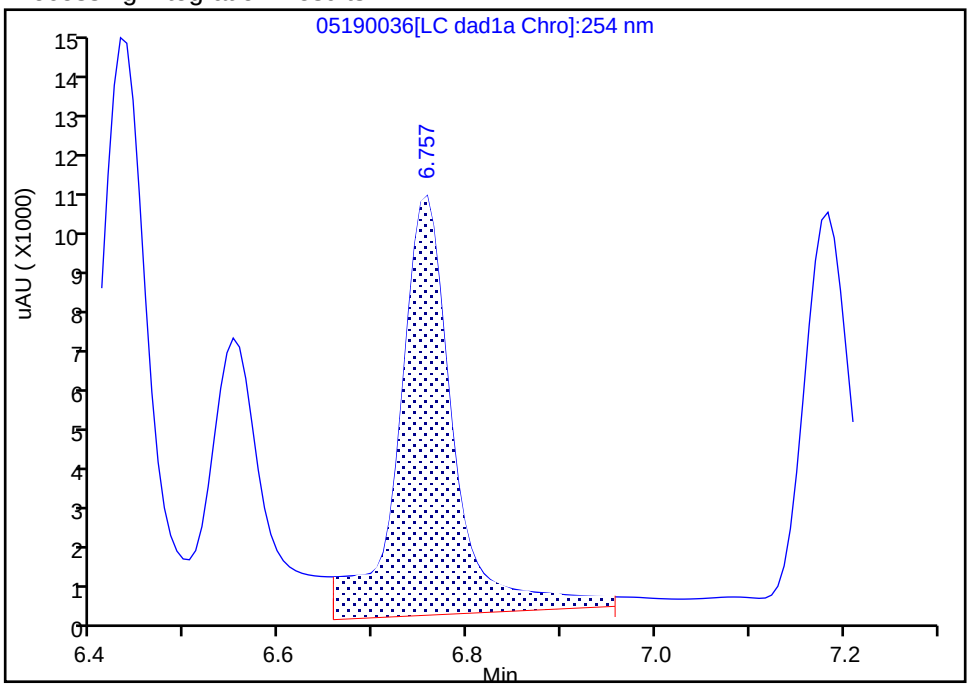
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190036.d				
Injection Date:	20-May-2023 00:13:13	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-613095/3-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

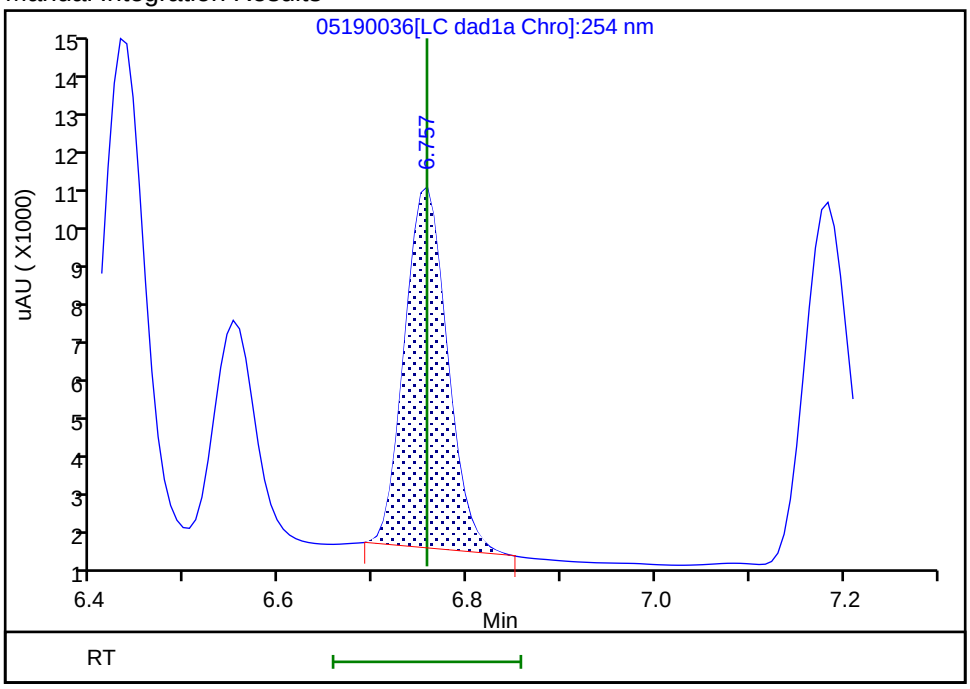
Processing Integration Results

RT: 6.76
Area: 39615
Amount: 0.274223
Amount Units: ug/mL



Manual Integration Results

RT: 6.76
Area: 28144
Amount: 0.194819
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 10:26:49 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

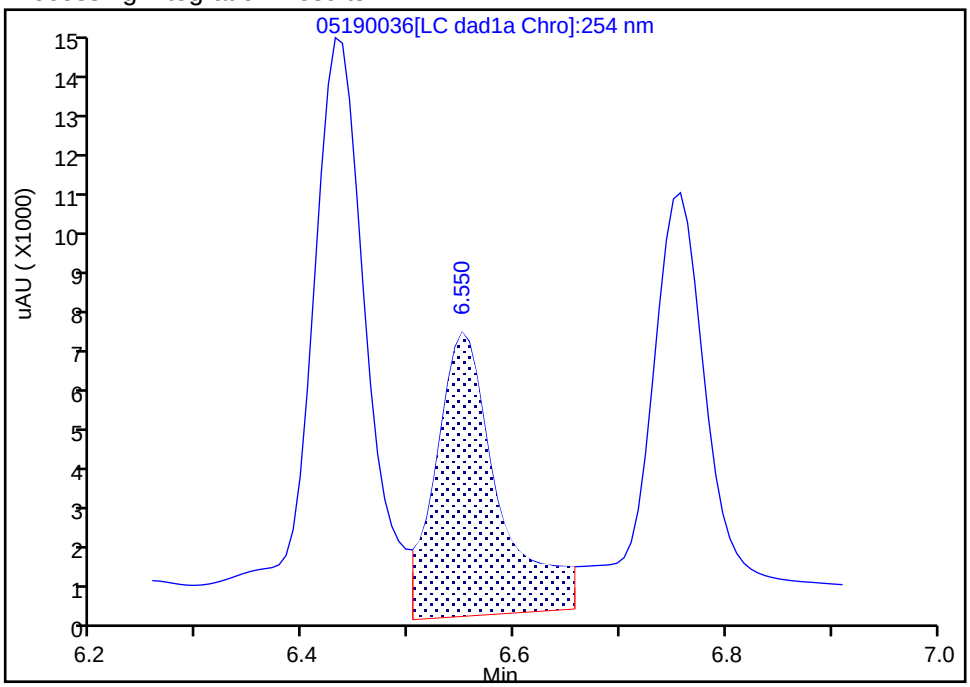
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190036.d				
Injection Date:	20-May-2023 00:13:13	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-613095/3-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

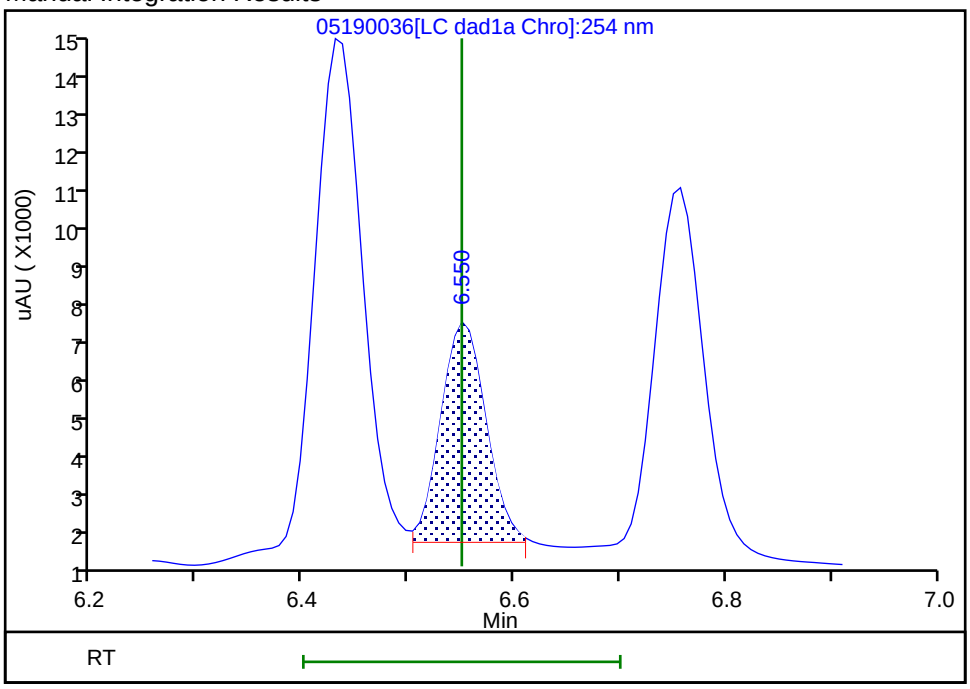
Processing Integration Results

RT: 6.55
Area: 27366
Amount: 0.292596
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 16032
Amount: 0.171414
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 10:26:46 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

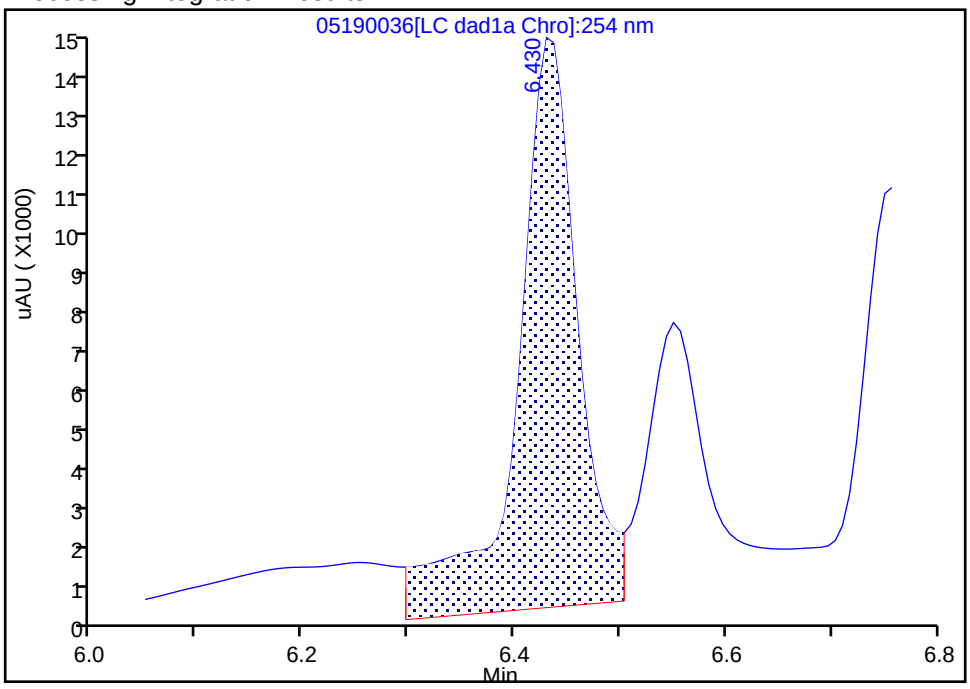
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190036.d				
Injection Date:	20-May-2023 00:13:13	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-613095/3-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

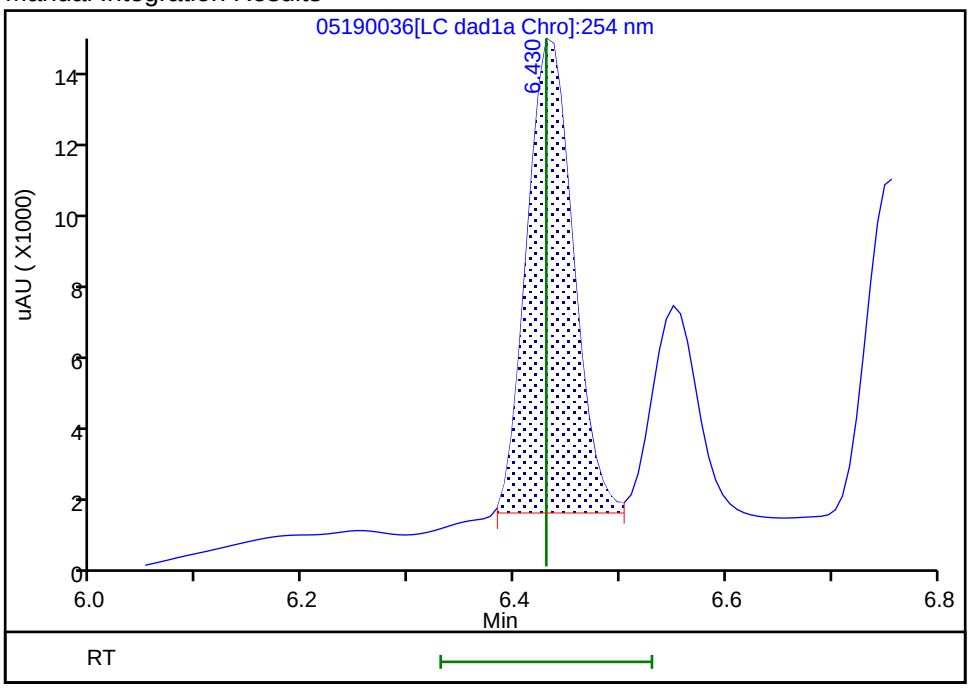
Processing Integration Results

RT: 6.43
Area: 56112
Amount: 0.283842
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 37692
Amount: 0.190665
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 10:26:45 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176674-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 280-613095/5-A

Matrix: Water | Lab File ID: 05190038.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/19/2023 13:39

Sample wt/vol: 500(mL) | Date Analyzed: 05/20/2023 00:59

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

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

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

Cleanup Factor:

Analysis Batch No.: 613168 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
6629-29-4	2,4-diamino-6-nitrotoluene	1.47	M	1.0	0.90	0.43
59229-75-3	2,6-diamino-4-nitrotoluene	1.56	M	1.0	0.90	0.22

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	98		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\05190038.D
Lims ID: LCSD 280-613095/5-A
Client ID:
Sample Type: LCSD
Inject. Date: 20-May-2023 00:59:08 ALS Bottle#: 38 Worklist Smp#: 38
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-613095/5-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 20-May-2023 11:22:31 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: CTX1663

First Level Reviewer: LV5D Date: 20-May-2023 10:27:14

	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	6.419	6.431	-0.012	36645	0.2000	0.1558	M
5	2,4-diamino-6-nitrotoluene	1	6.605	6.618	-0.013	21570	0.2000	0.1473	M
$ 10	1,2-Dinitrobenzene	1	8.525	8.523	0.002	24672	0.2000	0.1953	

QC Flag Legend

Review Flags
M - Manually Integrated

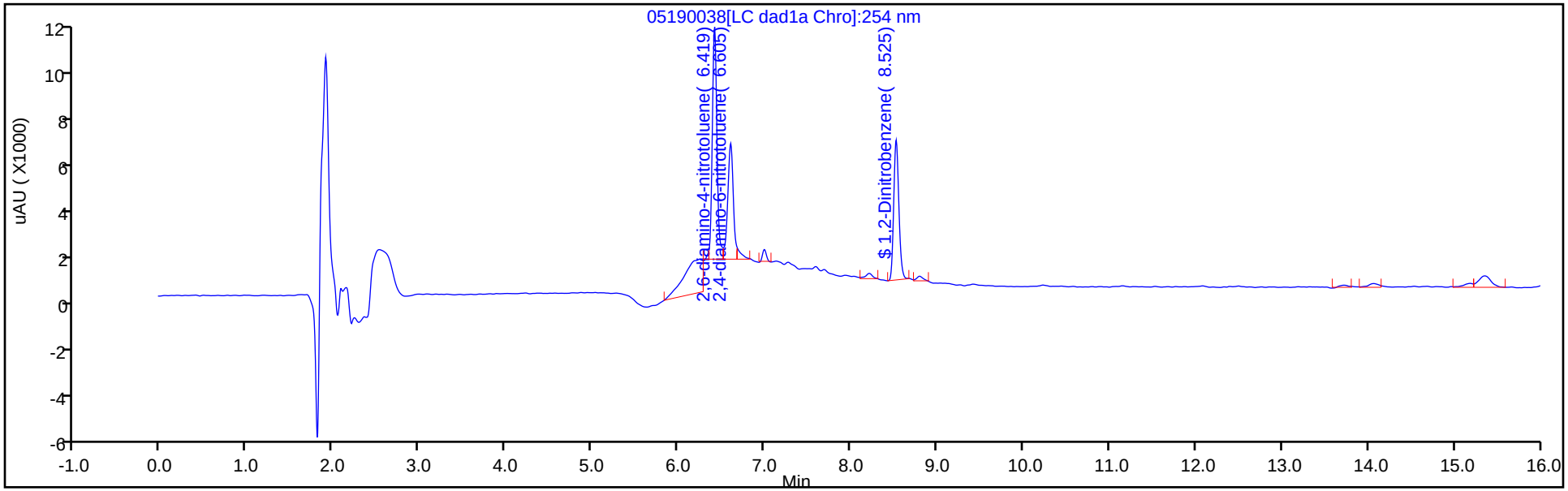
Report Date: 20-May-2023 11:22:34 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

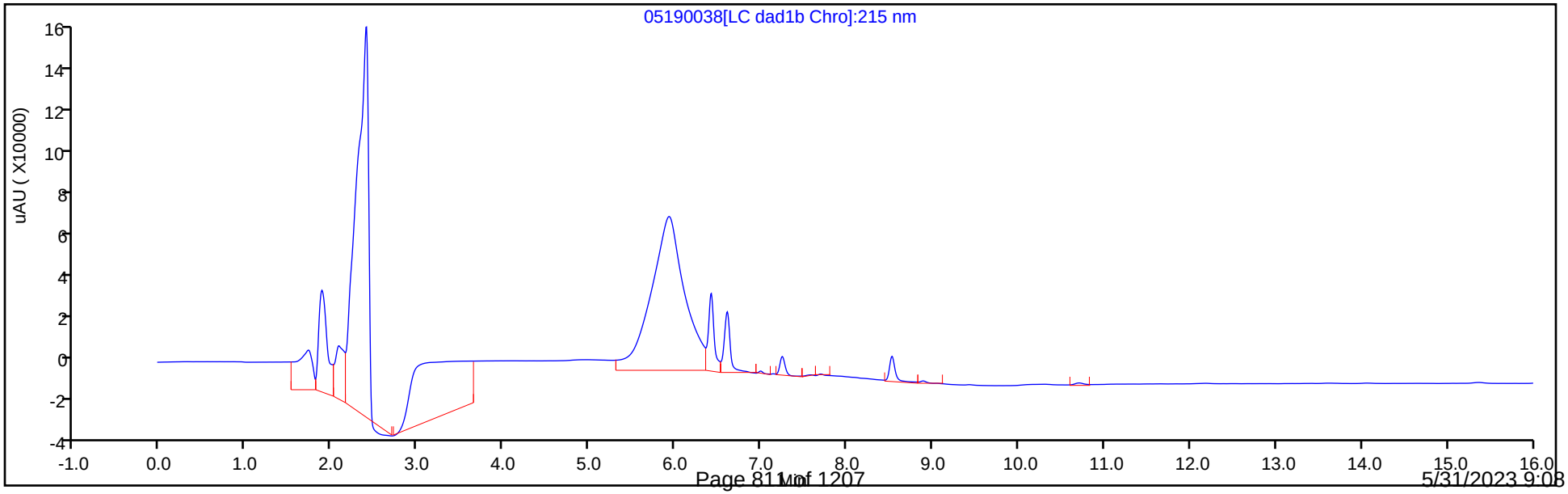
Data File: \\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190038.d

Injection Date:	20-May-2023 00:59:08	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	LCSD 280-613095/5-A			Worklist Smp#:	38
Client ID:					
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\20230519-121647.b\05190038.D
Lims ID: LCSD 280-613095/5-A
Client ID:
Sample Type: LCSD
Inject. Date: 20-May-2023 00:59:08 ALS Bottle#: 38 Worklist Smp#: 38
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-613095/5-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 20-May-2023 11:22:31 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: CTX1663

First Level Reviewer: LV5D Date: 20-May-2023 10:27:14

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1953	97.67

Manual Integration/User Assign Peak Report

Eurofins Denver

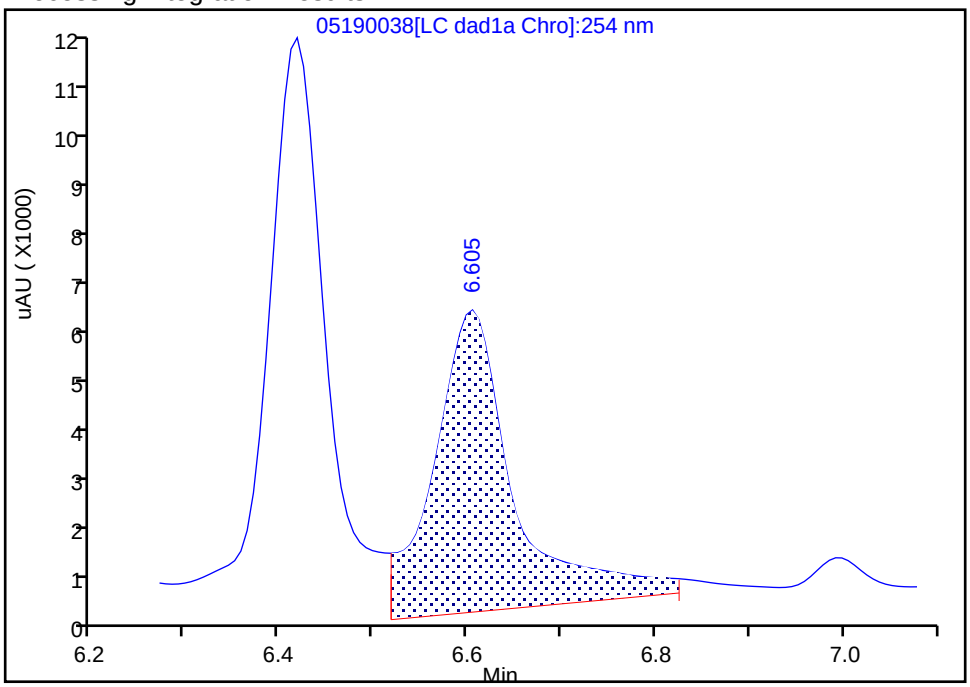
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190038.d				
Injection Date:	20-May-2023 00:59:08	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-613095/5-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

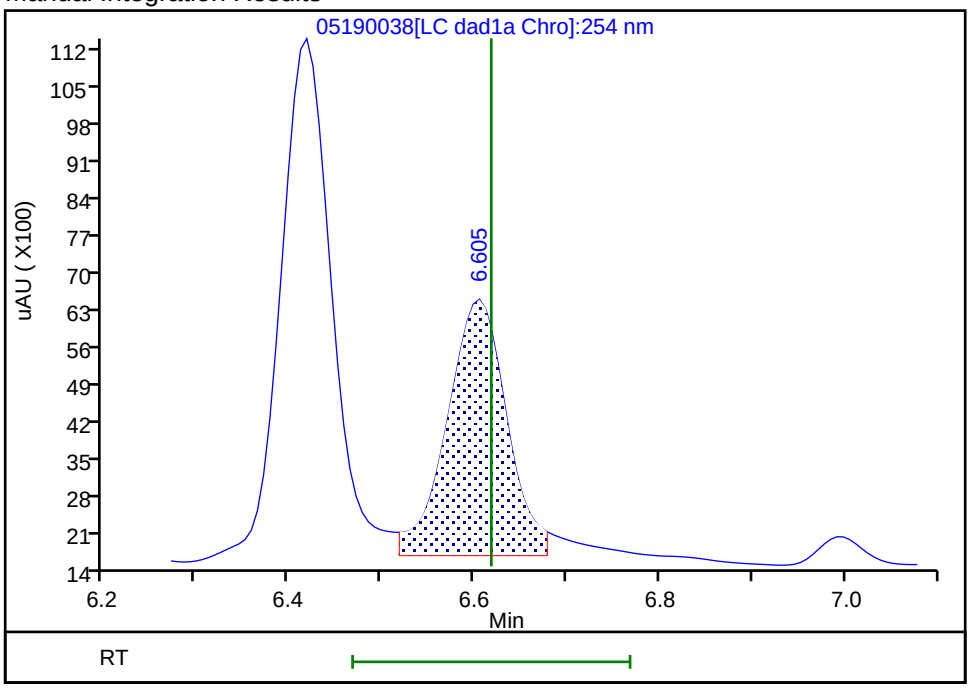
Processing Integration Results

RT: 6.61
Area: 32318
Amount: 0.220643
Amount Units: ug/mL



Manual Integration Results

RT: 6.61
Area: 21570
Amount: 0.147264
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 10:27:13 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

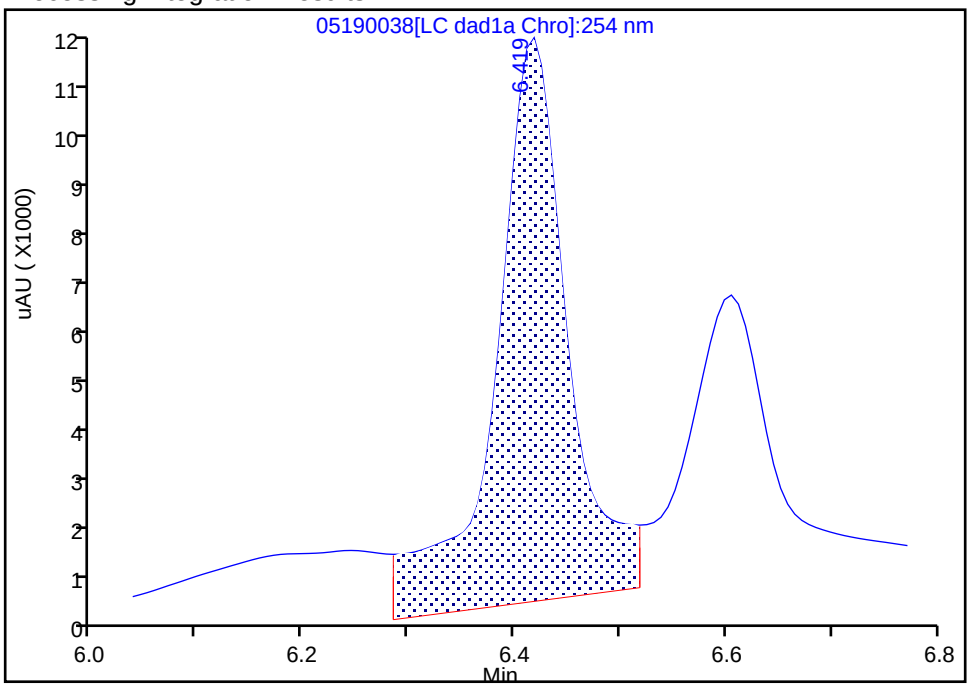
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190038.d				
Injection Date:	20-May-2023 00:59:08	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-613095/5-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

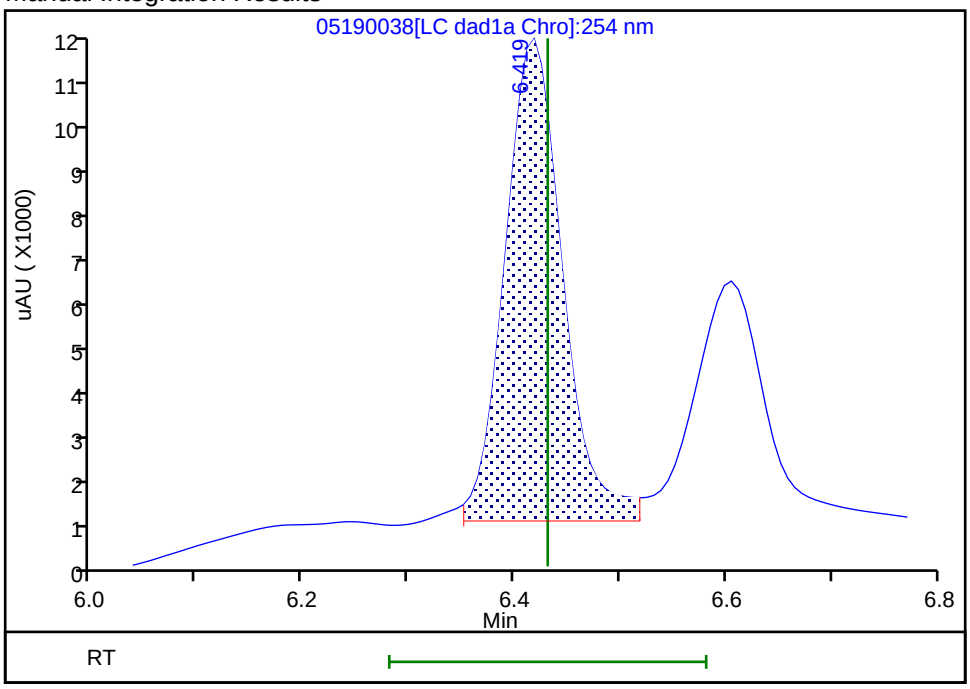
Processing Integration Results

RT: 6.42
Area: 51579
Amount: 0.220794
Amount Units: ug/mL



Manual Integration Results

RT: 6.42
Area: 36645
Amount: 0.155777
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 10:27:12 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176674-1

SDG No.:

Client Sample ID: FBQmw-175-230401-GW-R MS | Lab Sample ID: 280-176674-10 MS

Matrix: Water | Lab File ID: 05190049.D

Analysis Method: 8330B | Date Collected: 05/17/2023 08:58

Extraction Method: 3535 | Date Extracted: 05/19/2023 13:39

Sample wt/vol: 499.4(mL) | Date Analyzed: 05/20/2023 05:11

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

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

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

Cleanup Factor:

Analysis Batch No.: 613168 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.75	Q	0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	1.66	Q	0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	1.56	Q	0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	1.50	Q J1	0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	1.58	Q	0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.46	Q J1	0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.34	Q J1	0.21	0.20	0.086
618-87-1	3,5-Dinitroaniline	1.46	Q	0.40	0.30	0.13
99-08-1	3-Nitrotoluene	1.23	Q J1	0.40	0.35	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.44	Q J1	0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.30	Q J1	0.41	0.40	0.10
80251-29-2	DNX	1.56	M Q	0.50	0.25	0.097
2691-41-0	HMX	1.46	M Q	0.21	0.20	0.088
5755-27-1	MNX	1.98	M Q	0.50	0.29	0.093
98-95-3	Nitrobenzene	1.47	Q	0.21	0.20	0.091
55-63-0	Nitroglycerin	17.5	Q	2.1	2.0	0.92
78-11-5	PETN	18.1	Q	1.1	1.0	0.45
121-82-4	RDX	1.49	M Q	0.21	0.20	0.052
479-45-8	Tetryl	1.72	Q	0.11	0.10	0.032
13980-04-6	TNX	1.70	M Q	0.50	0.25	0.079

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	82	Q	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\05190049.D
Lims ID: 280-176674-B-10-A MS
Client ID: FBQmw-175-230401-GW-R
Sample Type: MS
Inject. Date: 20-May-2023 05:11:34 ALS Bottle#: 49 Worklist Smp#: 49
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-176674-B-10-A MS
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 20-May-2023 11:22:13 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: CTX1663

First Level Reviewer: LV5D Date: 20-May-2023 11:15:10

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	6.430	-0.002	33570	0.2006	0.1698	M
4 HMX	1	6.548	6.550	-0.002	13659	0.2000	0.1460	M
6 DNX	1	6.755	6.757	-0.002	22572	0.2002	0.1562	M
7 MNX	1	7.181	7.190	-0.009	25990	0.2334	0.1981	M
8 RDX	1	7.568	7.570	-0.002	15813	0.2000	0.1486	M
9 2,4,6-Trinitrophenol	1	7.948	7.963	-0.015	13879	0.2000	0.1830	M
$ 10 1,2-Dinitrobenzene	1	8.521	8.523	-0.002	20772	0.2000	0.1645	
11 1,3,5-Trinitrobenzene	1	8.648	8.650	-0.002	37864	0.2000	0.1744	
12 1,3-Dinitrobenzene	1	9.268	9.277	-0.009	48740	0.2000	0.1656	
13 Nitrobenzene	1	9.634	9.643	-0.009	28032	0.2000	0.1466	
14 3,5-Dinitroaniline	1	9.874	9.883	-0.009	33202	0.2000	0.1455	
15 Tetryl	1	10.008	10.017	-0.009	28215	0.2000	0.1719	
16 Nitroglycerin	2	10.454	10.470	-0.016	111863	2.00	1.75	
17 2,4,6-Trinitrotoluene	1	10.894	10.910	-0.016	32823	0.2000	0.1555	
18 4-Amino-2,6-dinitrotoluene	1	11.094	11.117	-0.023	22268	0.2000	0.1437	
19 2-Amino-4,6-dinitrotoluene	1	11.354	11.370	-0.016	29397	0.2000	0.1460	
20 2,6-Dinitrotoluene	1	11.494	11.517	-0.023	22479	0.2000	0.1575	
21 2,4-Dinitrotoluene	1	11.668	11.683	-0.015	44520	0.2000	0.1501	
22 o-Nitrotoluene	1	12.488	12.517	-0.029	17175	0.2000	0.1343	
23 p-Nitrotoluene	1	12.901	12.937	-0.036	14552	0.2000	0.1301	
24 m-Nitrotoluene	1	13.474	13.517	-0.043	17266	0.2000	0.1229	
25 PETN	2	14.641	14.697	-0.056	124233	2.00	1.80	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

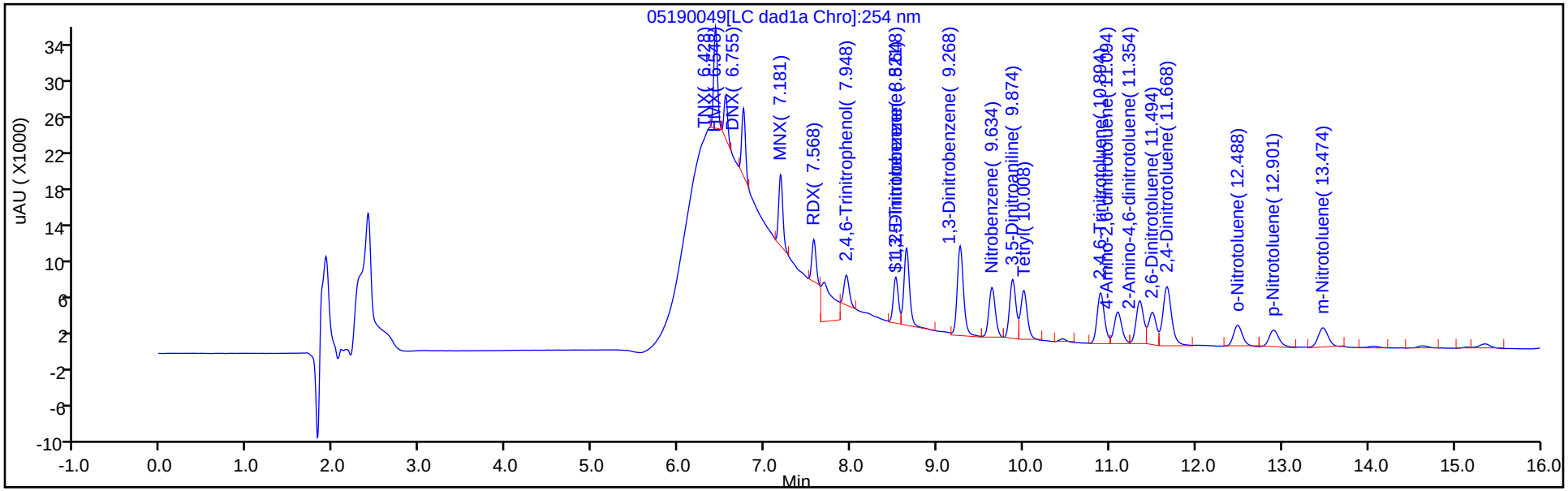
Report Date: 20-May-2023 11:22:15 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

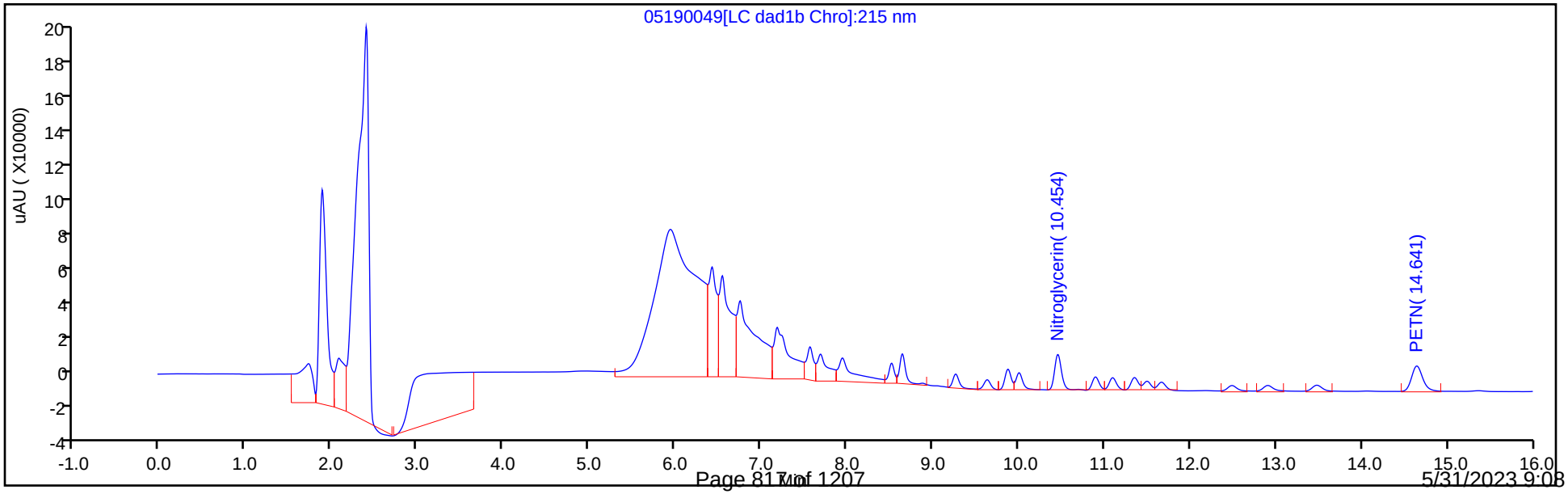
Data File: \\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190049.d

Injection Date:	20-May-2023 05:11:34	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-176674-B-10-A MS			Worklist Smp#:	49
Client ID:	FBQmw-175-230401-GW-R				
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



5/31/2023 9:08 PM

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\05190049.D				
Lims ID:	280-176674-B-10-A MS				
Client ID:	FBQmw-175-230401-GW-R				
Sample Type:	MS				
Inject. Date:	20-May-2023 05:11:34	ALS Bottle#:	49	Worklist Smp#:	49
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-176674-B-10-A MS				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	20-May-2023 11:22:13	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:	CTX1663				
First Level Reviewer: LV5D		Date:	20-May-2023 11:15:10		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1645	82.23

Manual Integration/User Assign Peak Report

Eurofins Denver

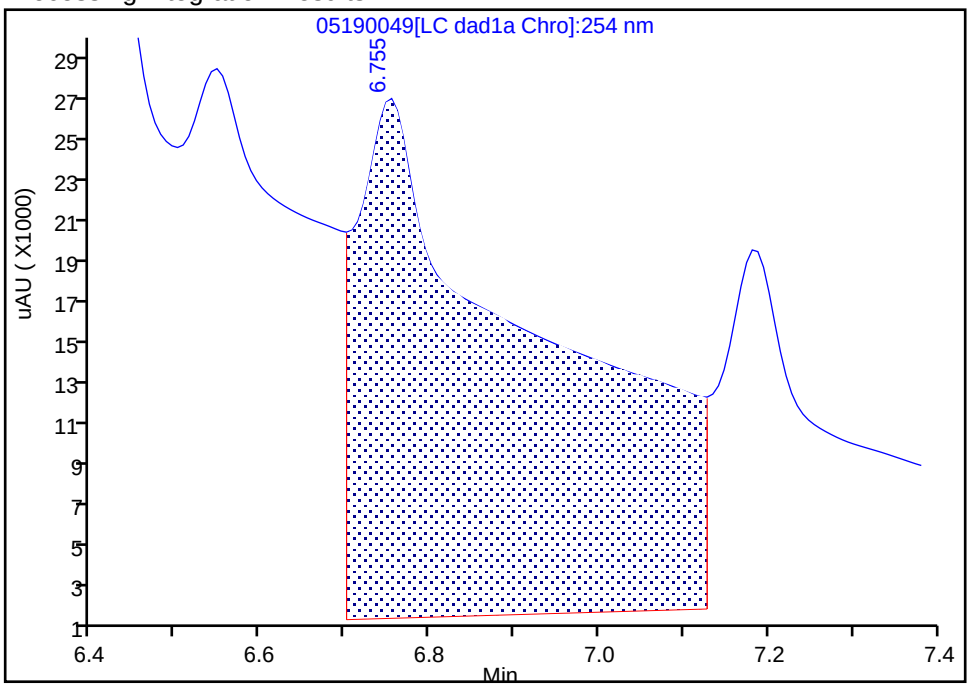
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190049.d				
Injection Date:	20-May-2023 05:11:34	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176674-B-10-A MS				
Client ID:	FBQmw-175-230401-GW-R				
Operator ID:	JZ/JG	ALS Bottle#:	49	Worklist Smp#:	49
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

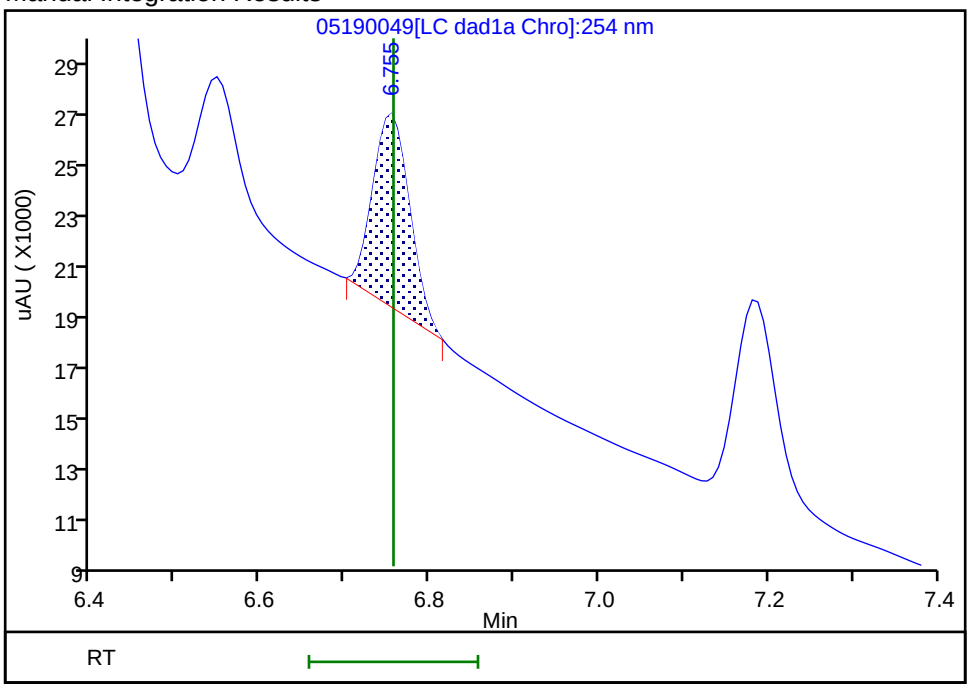
Processing Integration Results

RT: 6.75
Area: 379225
Amount: 2.625076
Amount Units: ug/mL



Manual Integration Results

RT: 6.75
Area: 22572
Amount: 0.156248
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 11:14:54 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

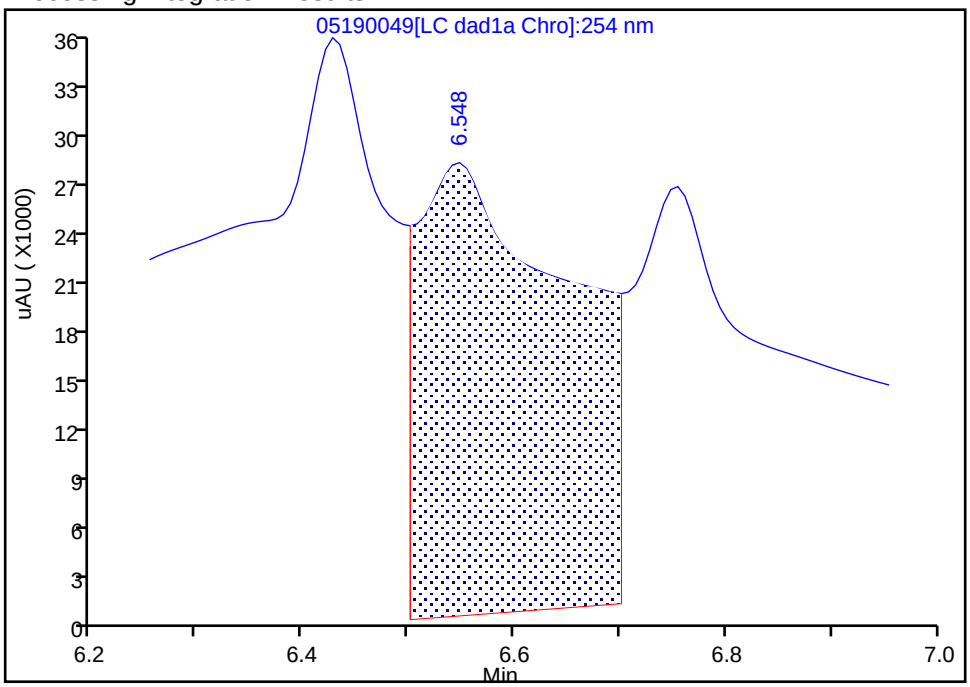
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190049.d				
Injection Date:	20-May-2023 05:11:34	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176674-B-10-A MS				
Client ID:	FBQmw-175-230401-GW-R				
Operator ID:	JZ/JG	ALS Bottle#:	49	Worklist Smp#:	49
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

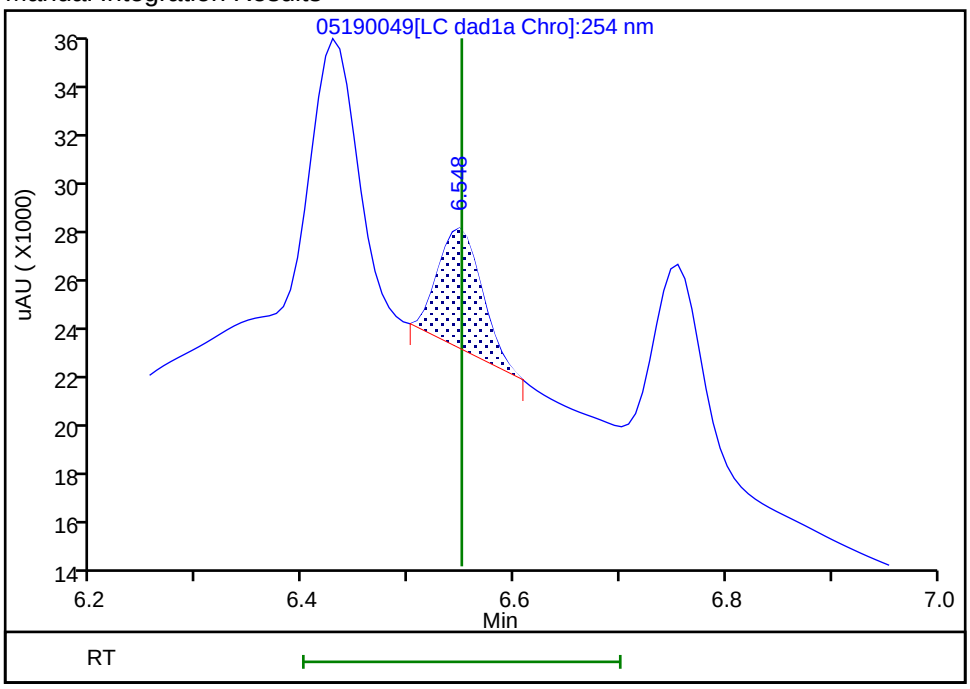
Processing Integration Results

RT: 6.55
Area: 265382
Amount: 2.837456
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 13659
Amount: 0.146042
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 11:14:49 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver

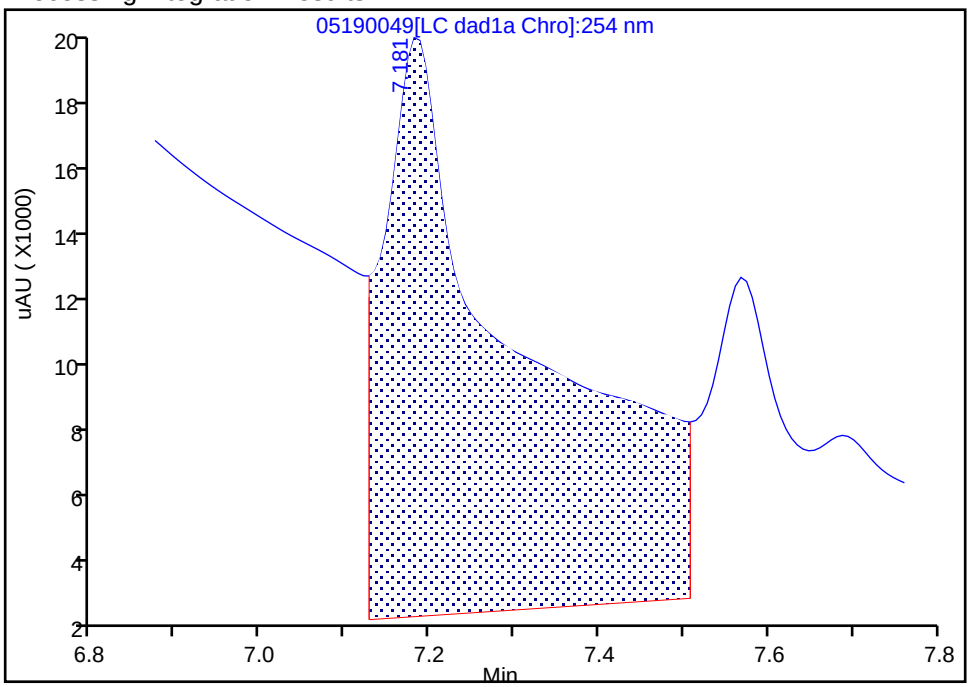
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190049.d				
Injection Date:	20-May-2023 05:11:34	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176674-B-10-A MS				
Client ID:	FBQmw-175-230401-GW-R				
Operator ID:	JZ/JG	ALS Bottle#:	49	Worklist Smp#:	49
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

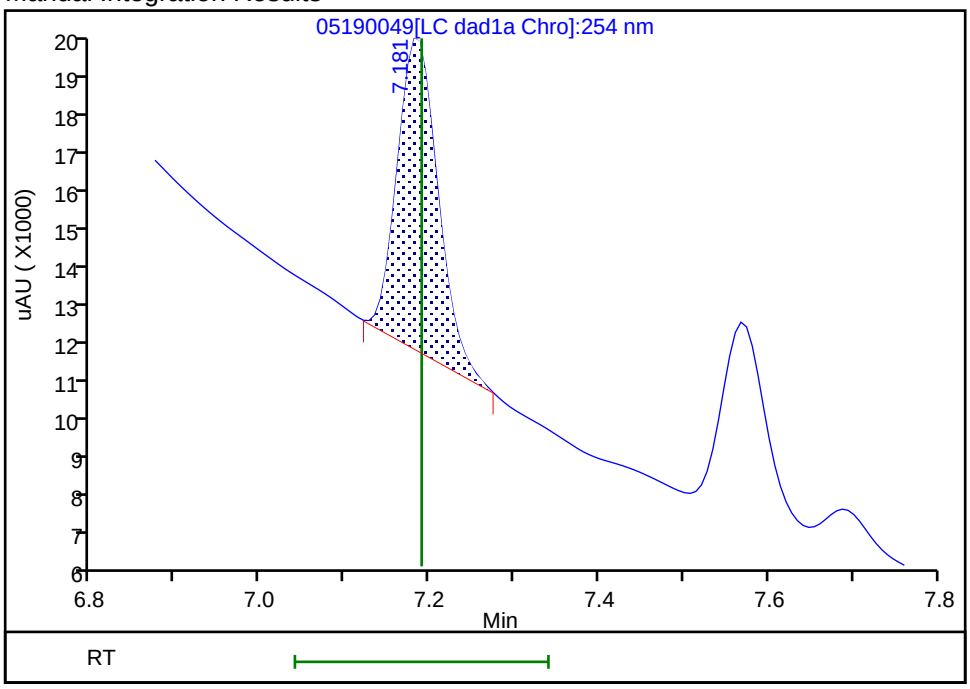
Processing Integration Results

RT: 7.18
Area: 196895
Amount: 1.501049
Amount Units: ug/mL



Manual Integration Results

RT: 7.18
Area: 25990
Amount: 0.198137
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 11:14:58 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

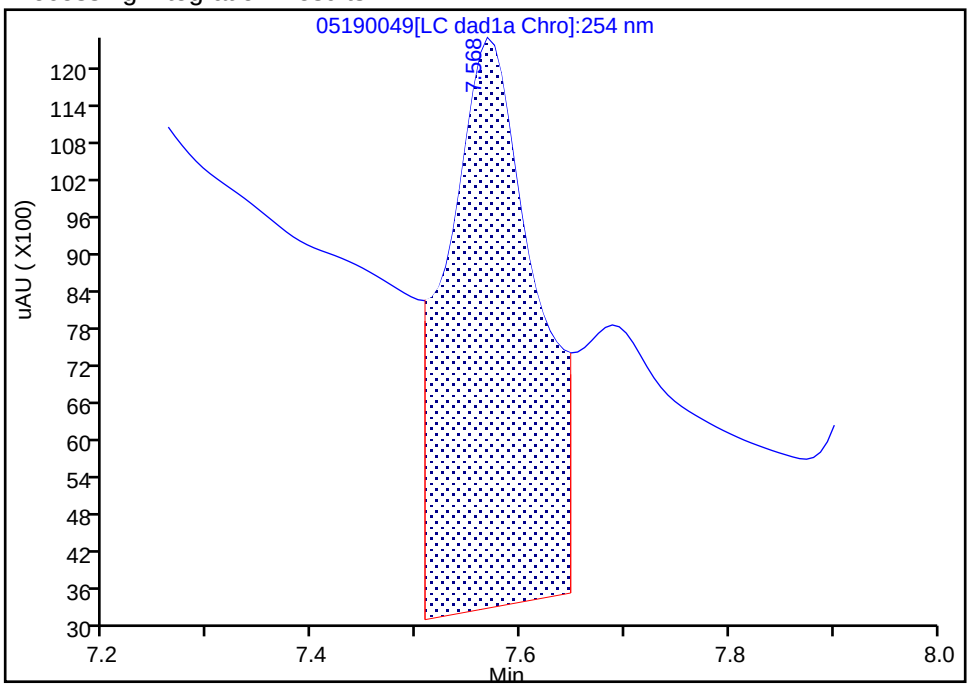
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190049.d				
Injection Date:	20-May-2023 05:11:34	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176674-B-10-A MS				
Client ID:	FBQmw-175-230401-GW-R				
Operator ID:	JZ/JG	ALS Bottle#:	49	Worklist Smp#:	49
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

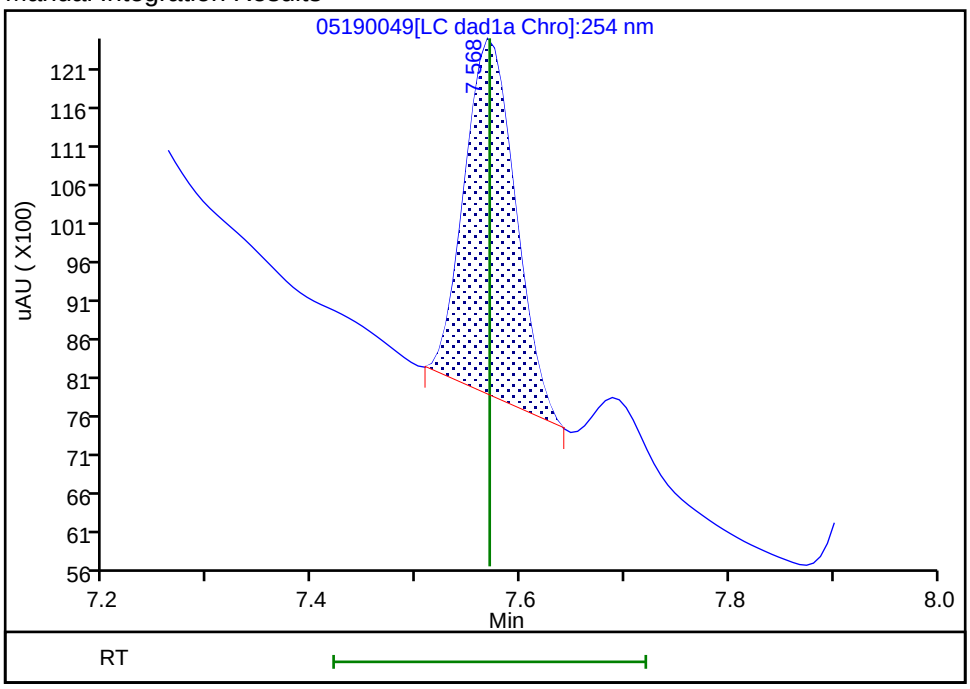
Processing Integration Results

RT: 7.57
Area: 54141
Amount: 0.508941
Amount Units: ug/mL



Manual Integration Results

RT: 7.57
Area: 15813
Amount: 0.148647
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 11:15:03 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

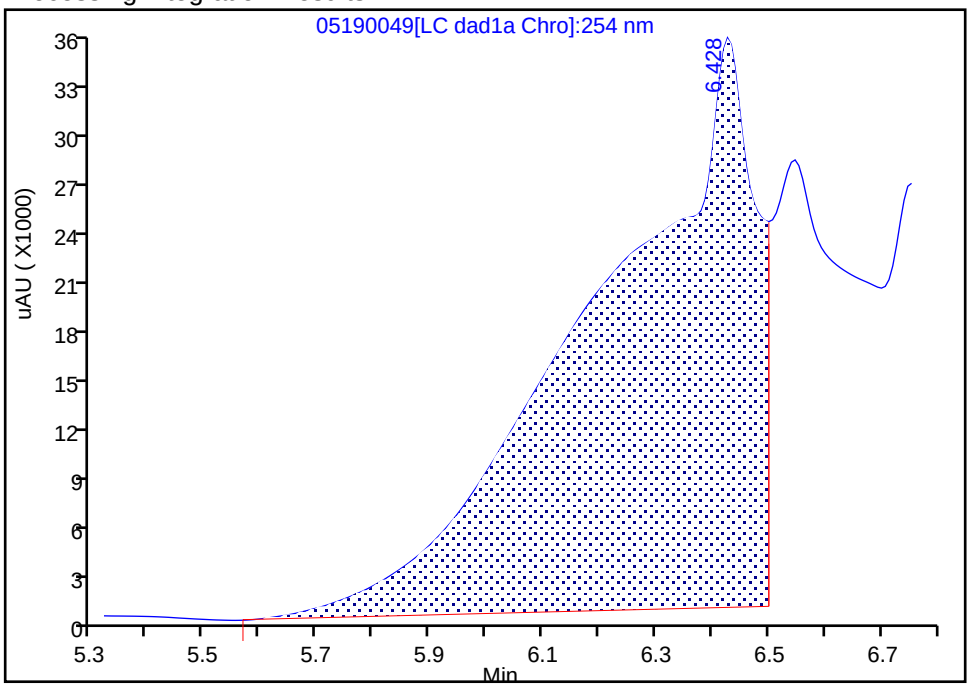
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190049.d				
Injection Date:	20-May-2023 05:11:34	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176674-B-10-A MS				
Client ID:	FBQmw-175-230401-GW-R				
Operator ID:	JZ/JG	ALS Bottle#:	49	Worklist Smp#:	49
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

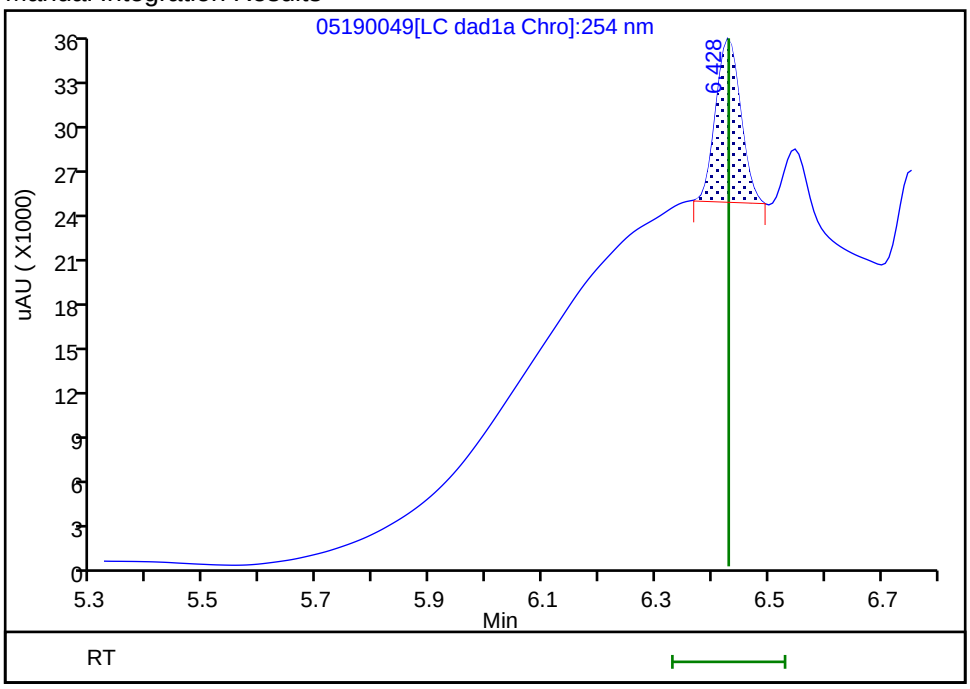
Processing Integration Results

RT: 6.43
Area: 686004
Amount: 3.470147
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 33570
Amount: 0.169814
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 11:14:47 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176674-1

SDG No.:

Client Sample ID: FBQmw-175-230401-GW-R MS | Lab Sample ID: 280-176674-10 MS

Matrix: Water | Lab File ID: 05190051.D

Analysis Method: 8330B | Date Collected: 05/17/2023 08:58

Extraction Method: 3535 | Date Extracted: 05/19/2023 13:39

Sample wt/vol: 498.7(mL) | Date Analyzed: 05/20/2023 05:57

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

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

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

Cleanup Factor:

Analysis Batch No.: 613168 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
6629-29-4	2,4-diamino-6-nitrotoluene	1.25	M J1	1.0	0.90	0.44
59229-75-3	2,6-diamino-4-nitrotoluene	1.60	M	1.0	0.90	0.22

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	95	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\05190051.D
Lims ID: 280-176674-C-10-A MS
Client ID: FBQmw-175-230401-GW-R
Sample Type: MS
Inject. Date: 20-May-2023 05:57:36 ALS Bottle#: 51 Worklist Smp#: 51
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-176674-C-10-A MS
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 20-May-2023 11:22:13 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: CTX1663

First Level Reviewer: LV5D Date: 20-May-2023 11:15:52

	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	6.418	6.431	-0.013	37412	0.2000	0.1591	M
	5 2,4-diamino-6-nitrotoluene	1	6.604	6.618	-0.014	18219	0.2000	0.1244	M
$	10 1,2-Dinitrobenzene	1	8.524	8.523	0.001	24080	0.2000	0.1906	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

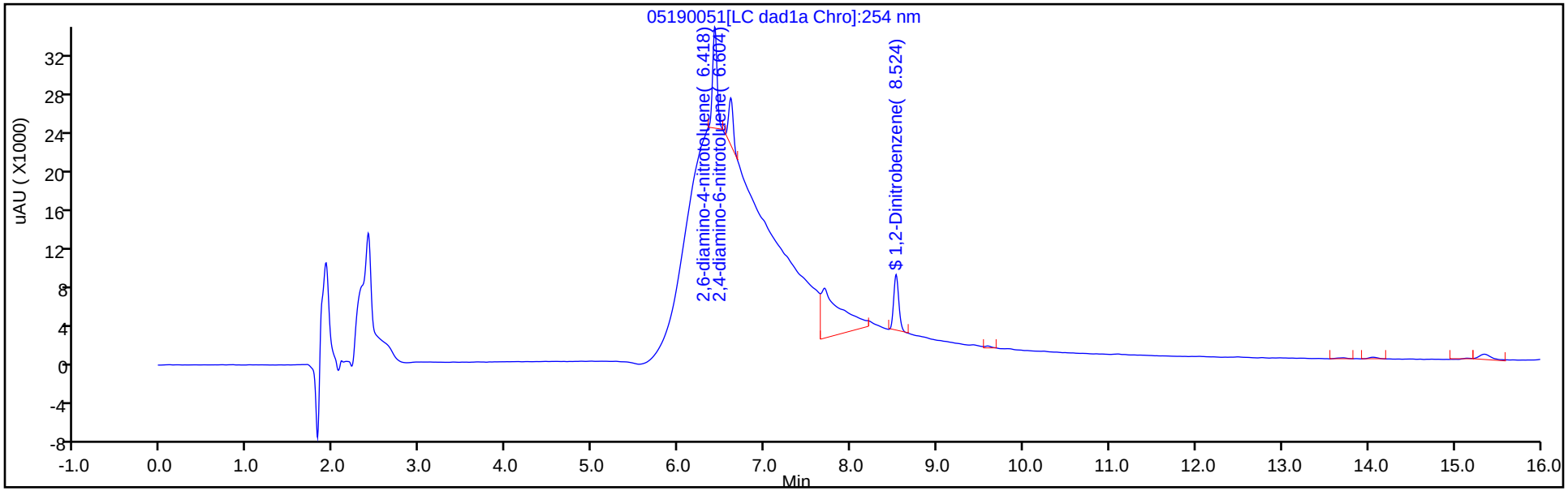
Report Date: 20-May-2023 11:22:16 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

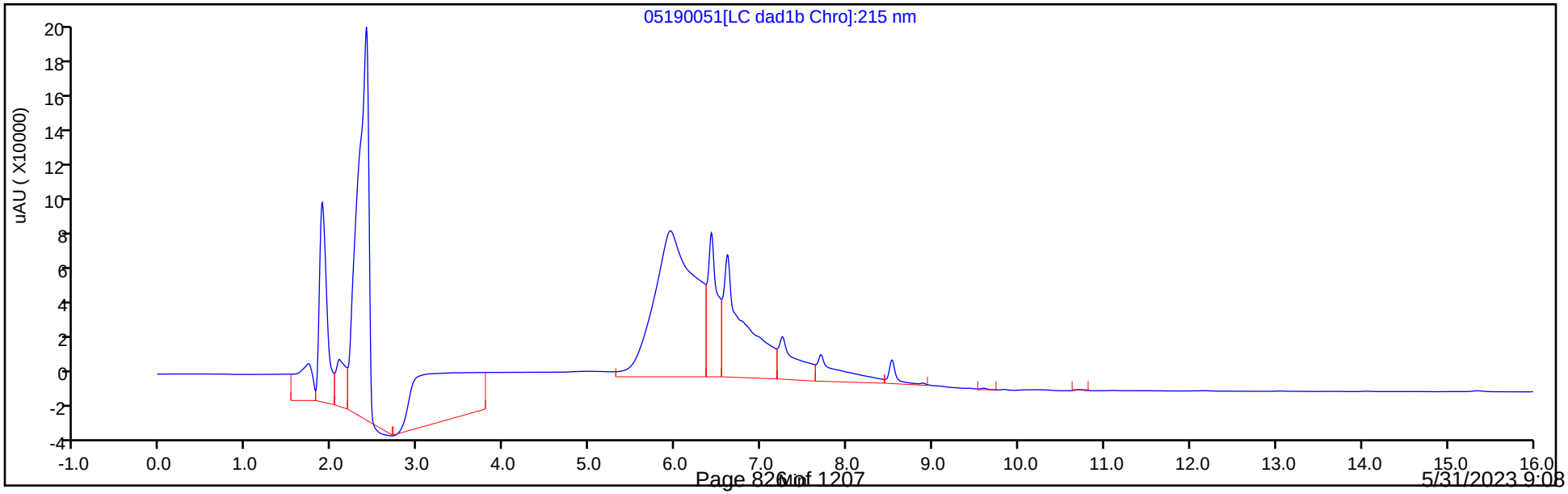
Data File: \\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190051.d

Injection Date:	20-May-2023 05:57:36	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-176674-C-10-A MS			Worklist Smp#:	51
Client ID:	FBQmw-175-230401-GW-R				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	51
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\05190051.D				
Lims ID:	280-176674-C-10-A MS				
Client ID:	FBQmw-175-230401-GW-R				
Sample Type:	MS				
Inject. Date:	20-May-2023 05:57:36	ALS Bottle#:	51	Worklist Smp#:	51
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-176674-C-10-A MS				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	20-May-2023 11:22:13	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:	CTX1663				
First Level Reviewer: LV5D		Date:	20-May-2023 11:15:52		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1906	95.32

Eurofins Denver

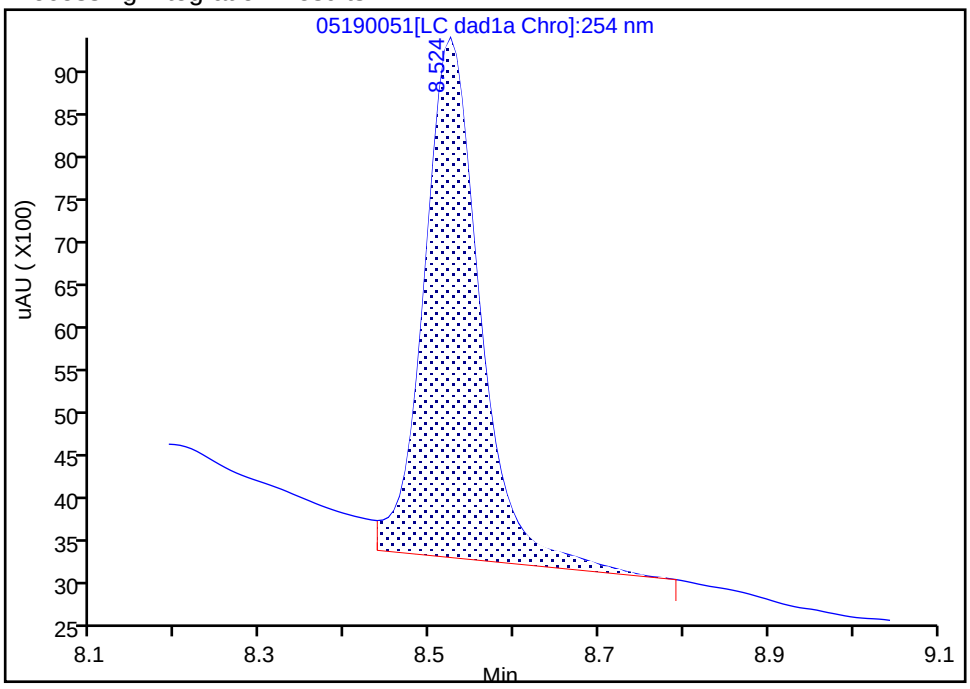
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190051.d				
Injection Date:	20-May-2023 05:57:36	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176674-C-10-A MS				
Client ID:	FBQmw-175-230401-GW-R				
Operator ID:	JZ/JG	ALS Bottle#:	51	Worklist Smp#:	51
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

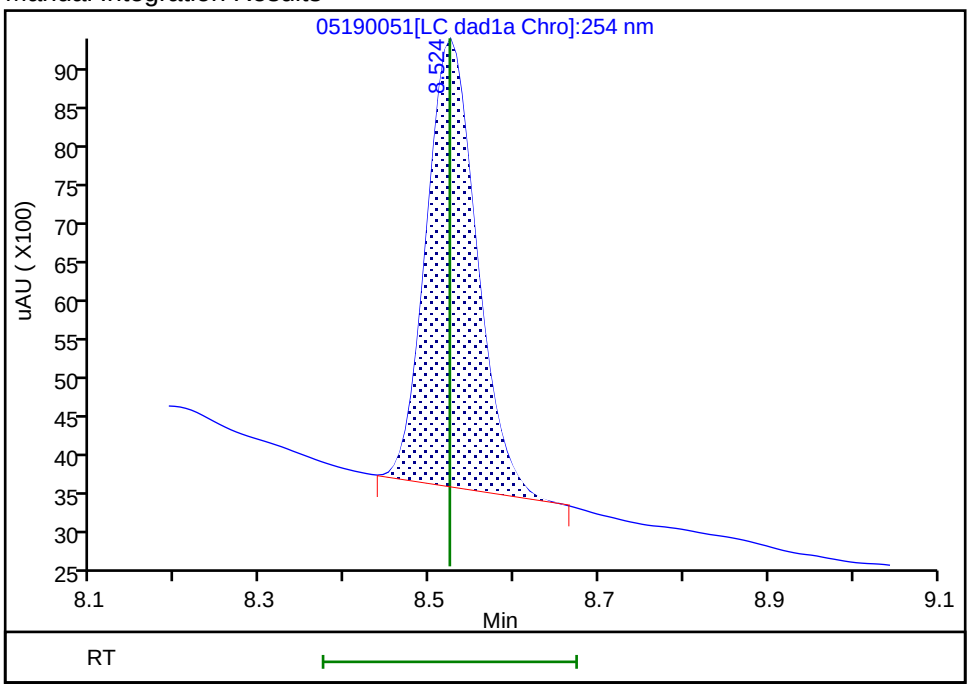
Processing Integration Results

RT: 8.52
Area: 28021
Amount: 0.221845
Amount Units: ug/mL



Manual Integration Results

RT: 8.52
Area: 24080
Amount: 0.190644
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 11:15:46 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

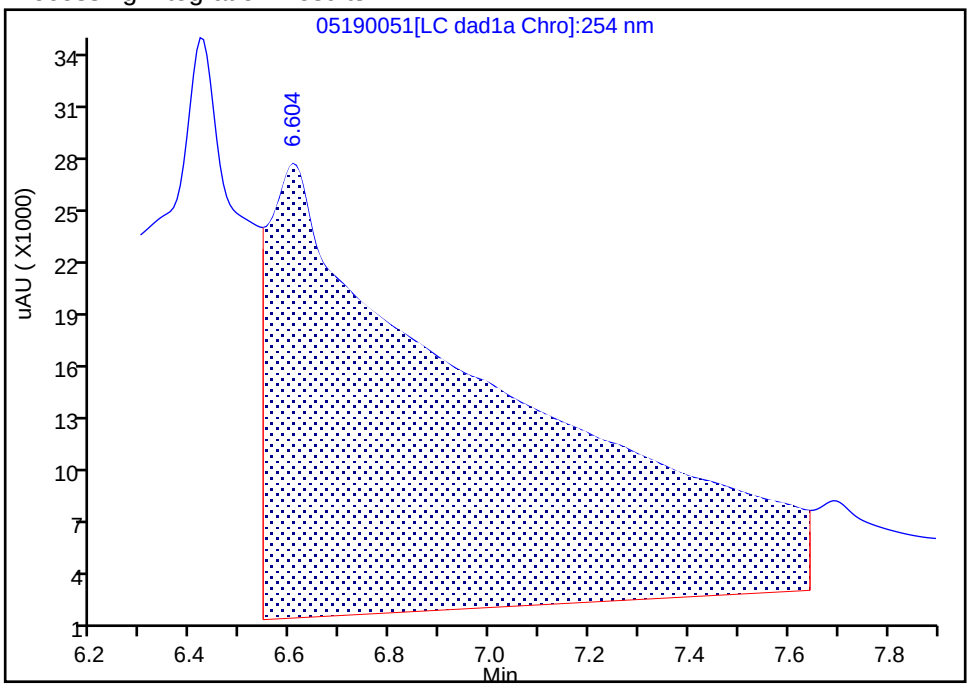
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190051.d				
Injection Date:	20-May-2023 05:57:36	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176674-C-10-A MS				
Client ID:	FBQmw-175-230401-GW-R				
Operator ID:	JZ/JG	ALS Bottle#:	51	Worklist Smp#:	51
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

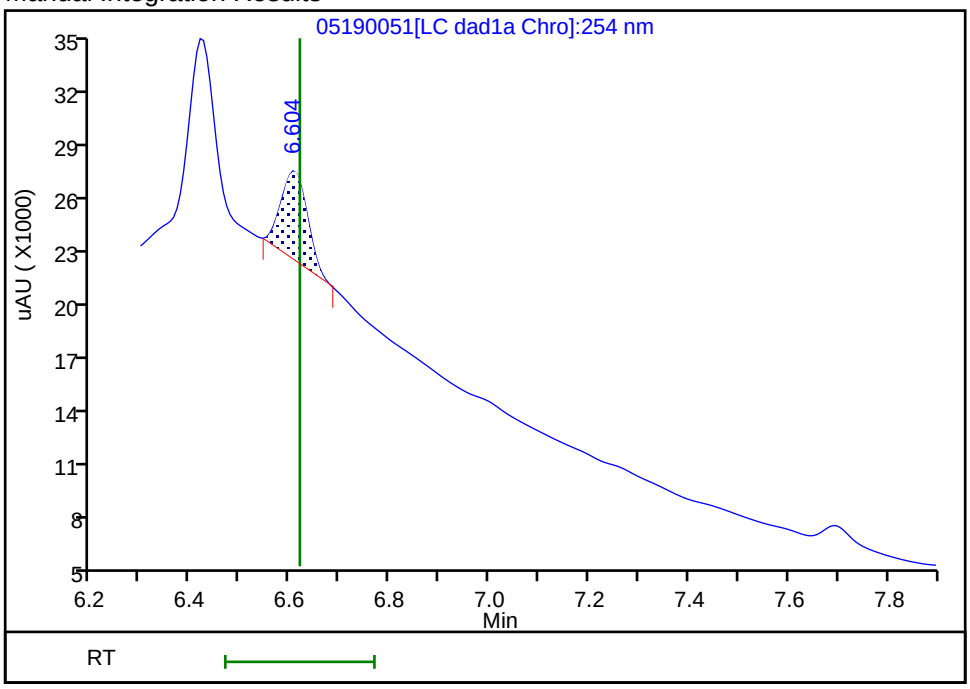
Processing Integration Results

RT: 6.60
Area: 825706
Amount: 5.637291
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 18219
Amount: 0.124385
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 11:15:51 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver

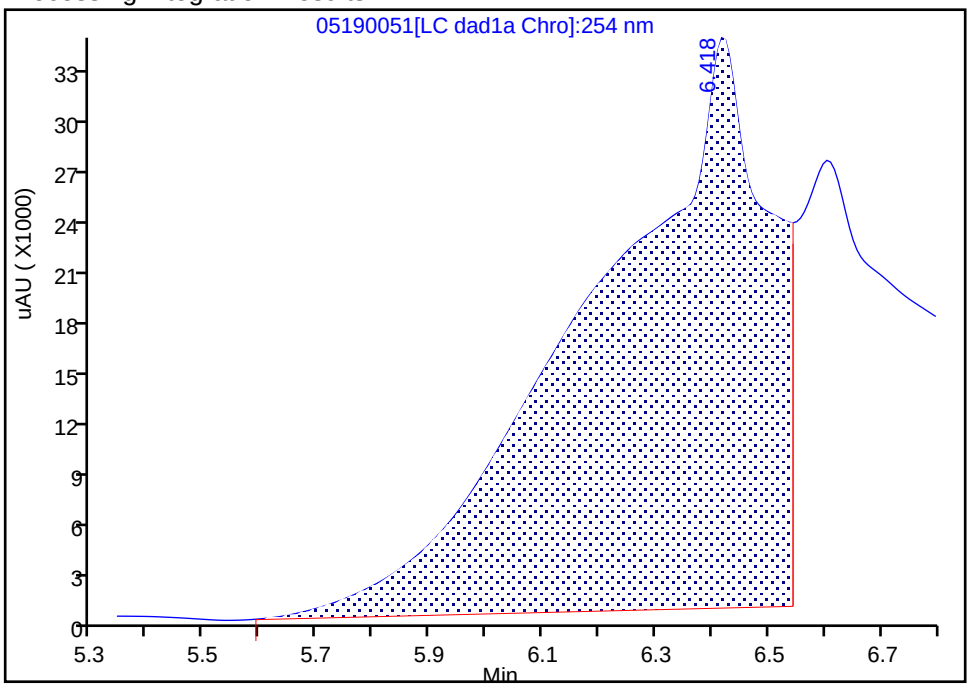
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190051.d				
Injection Date:	20-May-2023 05:57:36	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176674-C-10-A MS				
Client ID:	FBQmw-175-230401-GW-R				
Operator ID:	JZ/JG	ALS Bottle#:	51	Worklist Smp#:	51
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

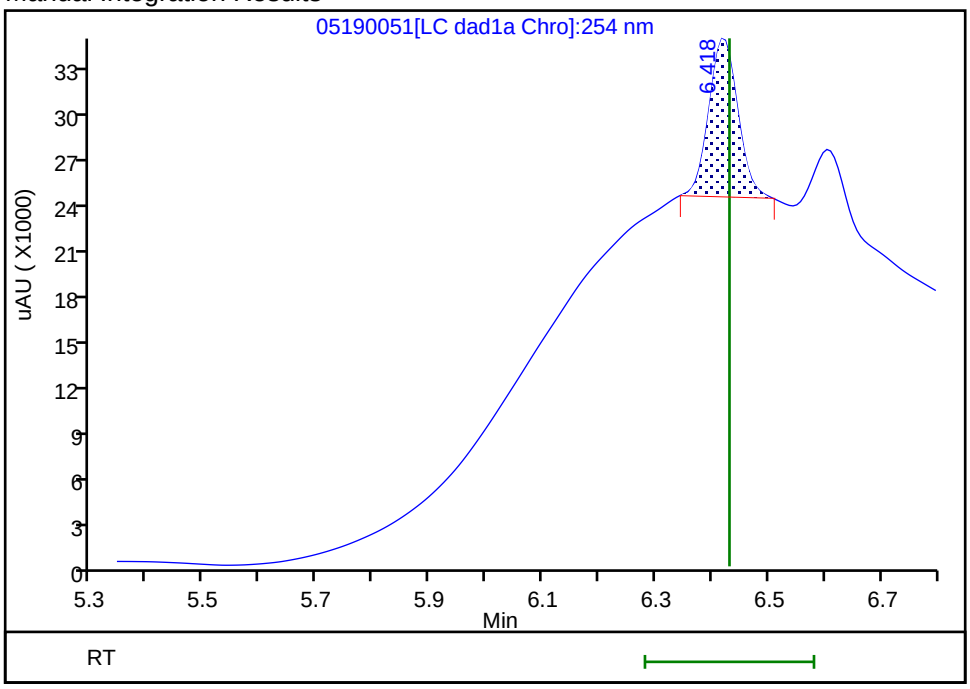
Processing Integration Results

RT: 6.42
Area: 743677
Amount: 3.233938
Amount Units: ug/mL



Manual Integration Results

RT: 6.42
Area: 37412
Amount: 0.159116
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 11:15:49 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176674-1

SDG No.:

Client Sample ID: FBQmw-175-230401-GW-R MSD | Lab Sample ID: 280-176674-10 MSD

Matrix: Water | Lab File ID: 05190050.D

Analysis Method: 8330B | Date Collected: 05/17/2023 08:58

Extraction Method: 3535 | Date Extracted: 05/19/2023 13:39

Sample wt/vol: 457.4(mL) | Date Analyzed: 05/20/2023 05:34

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

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

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

Cleanup Factor:

Analysis Batch No.: 613168 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.21	J1	0.23	0.22	0.092
99-65-0	1,3-Dinitrobenzene	2.13	J1	0.12	0.11	0.040
118-96-7	2,4,6-Trinitrotoluene	2.00	J1	0.12	0.11	0.049
121-14-2	2,4-Dinitrotoluene	2.00	J1	0.11	0.087	0.030
606-20-2	2,6-Dinitrotoluene	2.02	J1	0.11	0.087	0.044
35572-78-2	2-Amino-4,6-dinitrotoluene	1.96	J1	0.12	0.11	0.055
88-72-2	2-Nitrotoluene	1.78	J1	0.23	0.22	0.093
618-87-1	3,5-Dinitroaniline	1.86	J1	0.44	0.33	0.14
99-08-1	3-Nitrotoluene	1.67	J1	0.44	0.38	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	1.87	J1	0.16	0.13	0.063
99-99-0	4-Nitrotoluene	1.75	J1	0.45	0.44	0.11
80251-29-2	DNX	1.93	M J1	0.55	0.27	0.11
2691-41-0	HMX	1.77	M	0.23	0.22	0.096
5755-27-1	MNX	2.37	M	0.55	0.32	0.10
98-95-3	Nitrobenzene	1.94	J1	0.23	0.22	0.099
55-63-0	Nitroglycerin	21.5		2.3	2.2	1.0
78-11-5	PETN	22.4	J1	1.2	1.1	0.49
121-82-4	RDX	1.83	M J1	0.23	0.22	0.056
479-45-8	Tetryl	2.23	J1	0.12	0.11	0.035
13980-04-6	TNX	1.98	M	0.55	0.27	0.087

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	98		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\05190050.D
Lims ID: 280-176674-B-10-B MSD
Client ID: FBQmw-175-230401-GW-R
Sample Type: MSD
Inject. Date: 20-May-2023 05:34:33 ALS Bottle#: 50 Worklist Smp#: 50
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-176674-B-10-B MSD
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 20-May-2023 11:22:13 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: CTX1663

First Level Reviewer: LV5D Date: 20-May-2023 11:15:40

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.433	6.430	0.003	35886	0.2006	0.1815	M
4 HMX	1	6.546	6.550	-0.004	15136	0.2000	0.1618	M
6 DNX	1	6.753	6.757	-0.004	25551	0.2002	0.1769	M
7 MNX	1	7.179	7.190	-0.011	28473	0.2334	0.2171	M
8 RDX	1	7.566	7.570	-0.004	17855	0.2000	0.1678	M
9 2,4,6-Trinitrophenol	1	7.946	7.963	-0.017	15361	0.2000	0.2026	M
$ 10 1,2-Dinitrobenzene	1	8.519	8.523	-0.004	24659	0.2000	0.1952	
11 1,3,5-Trinitrobenzene	1	8.646	8.650	-0.004	43820	0.2000	0.2018	
12 1,3-Dinitrobenzene	1	9.266	9.277	-0.011	57363	0.2000	0.1948	
13 Nitrobenzene	1	9.639	9.643	-0.004	33936	0.2000	0.1774	
14 3,5-Dinitroaniline	1	9.879	9.883	-0.004	38777	0.2000	0.1699	
15 Tetryl	1	10.006	10.017	-0.011	33421	0.2000	0.2036	
16 Nitroglycerin	2	10.466	10.470	-0.004	125847	2.00	1.96	
17 2,4,6-Trinitrotoluene	1	10.899	10.910	-0.011	38698	0.2000	0.1834	
18 4-Amino-2,6-dinitrotoluene	1	11.099	11.117	-0.018	26512	0.2000	0.1711	
19 2-Amino-4,6-dinitrotoluene	1	11.359	11.370	-0.011	36151	0.2000	0.1795	
20 2,6-Dinitrotoluene	1	11.506	11.517	-0.011	26414	0.2000	0.1850	
21 2,4-Dinitrotoluene	1	11.673	11.683	-0.010	54377	0.2000	0.1833	
22 o-Nitrotoluene	1	12.499	12.517	-0.018	20853	0.2000	0.1630	
23 p-Nitrotoluene	1	12.919	12.937	-0.018	17936	0.2000	0.1603	
24 m-Nitrotoluene	1	13.499	13.517	-0.018	21452	0.2000	0.1527	
25 PETN	2	14.673	14.697	-0.024	141016	2.00	2.05	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

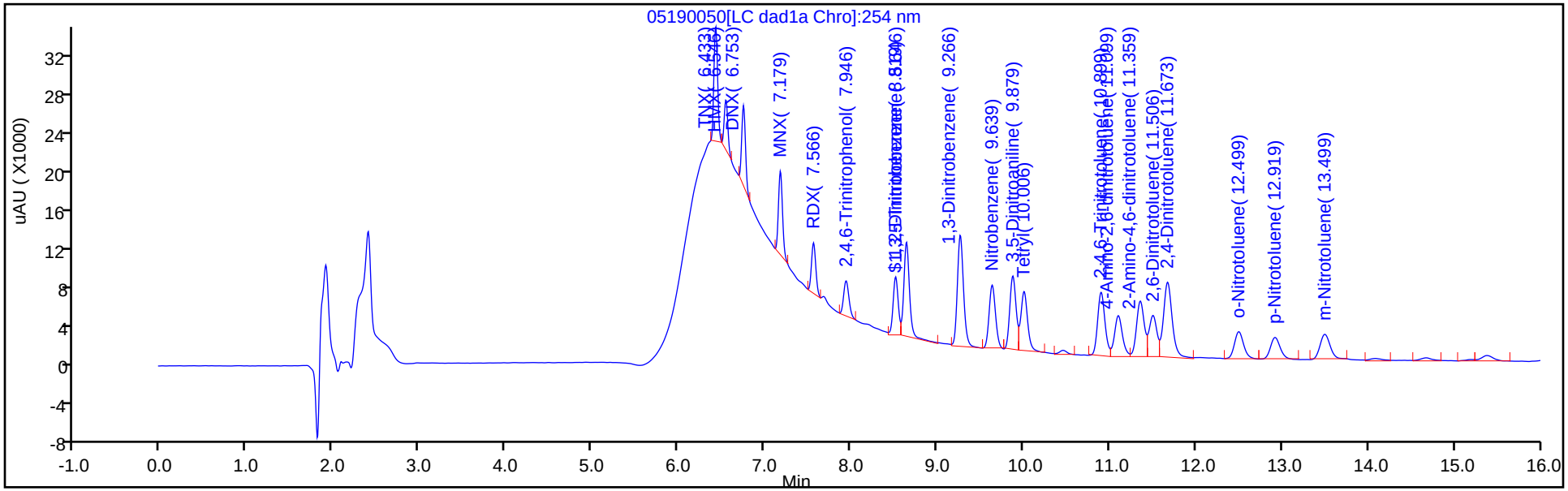
Report Date: 20-May-2023 11:22:15 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

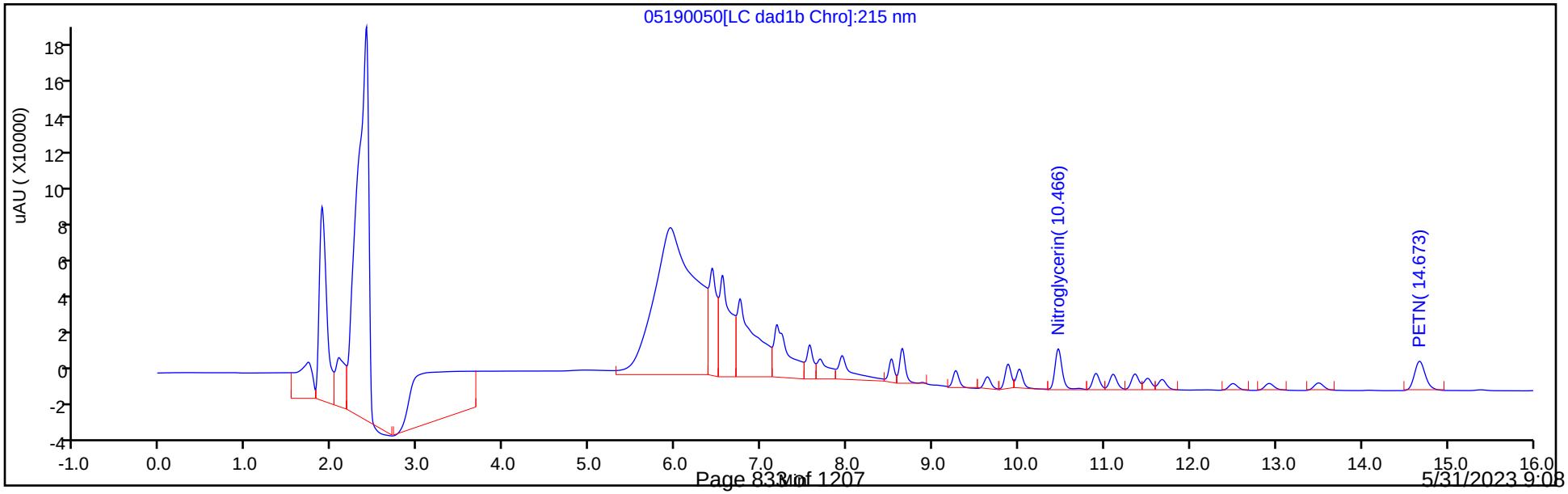
Data File: \\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190050.d

Injection Date:	20-May-2023 05:34:33	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-176674-B-10-B MSD			Worklist Smp#:	50
Client ID:	FBQmw-175-230401-GW-R				
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



5/31/2023 9:08 PM

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\05190050.D				
Lims ID:	280-176674-B-10-B MSD				
Client ID:	FBQmw-175-230401-GW-R				
Sample Type:	MSD				
Inject. Date:	20-May-2023 05:34:33	ALS Bottle#:	50	Worklist Smp#:	50
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-176674-B-10-B MSD				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	20-May-2023 11:22:13	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:	CTX1663				
First Level Reviewer: LV5D		Date:	20-May-2023 11:15:40		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1952	97.61

Manual Integration/User Assign Peak Report

Eurofins Denver

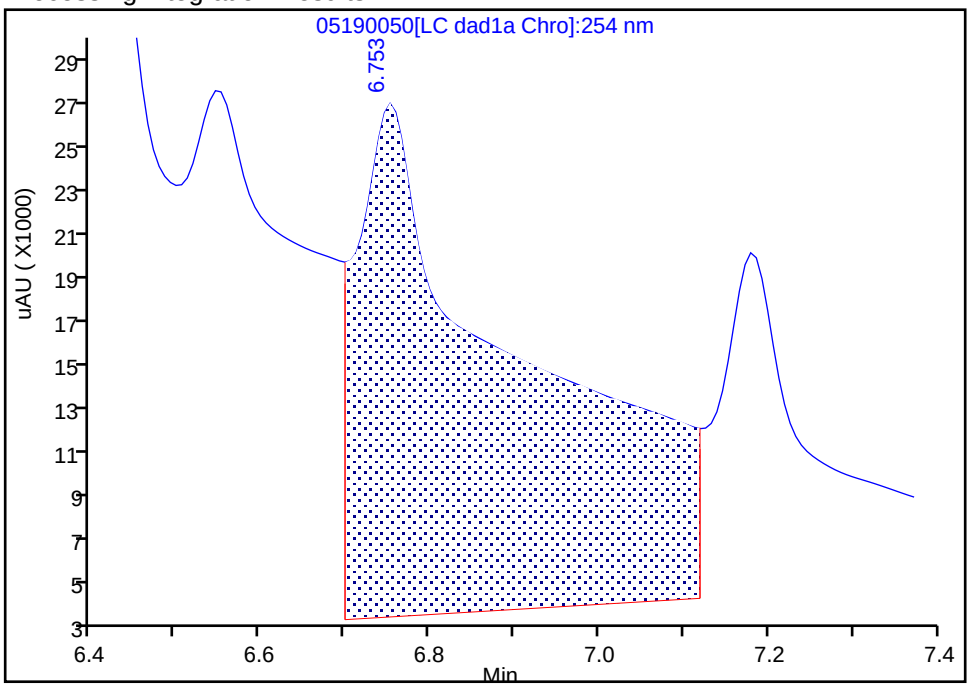
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190050.d				
Injection Date:	20-May-2023 05:34:33	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176674-B-10-B MSD				
Client ID:	FBQmw-175-230401-GW-R				
Operator ID:	JZ/JG	ALS Bottle#:	50	Worklist Smp#:	50
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

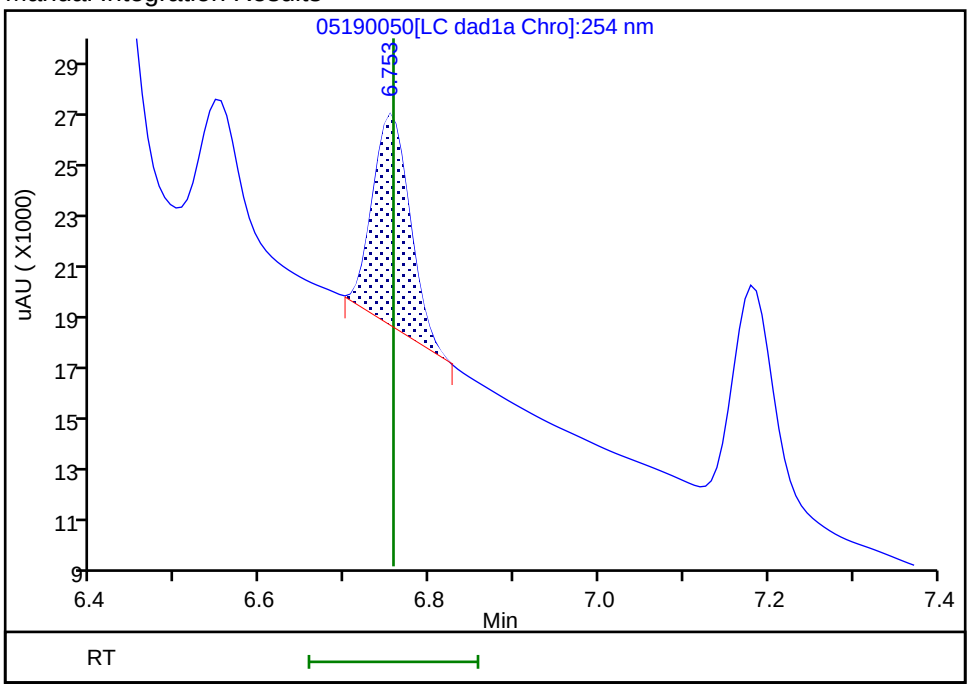
Processing Integration Results

RT: 6.75
Area: 316028
Amount: 2.187613
Amount Units: ug/mL



Manual Integration Results

RT: 6.75
Area: 25551
Amount: 0.176869
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 11:15:24 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

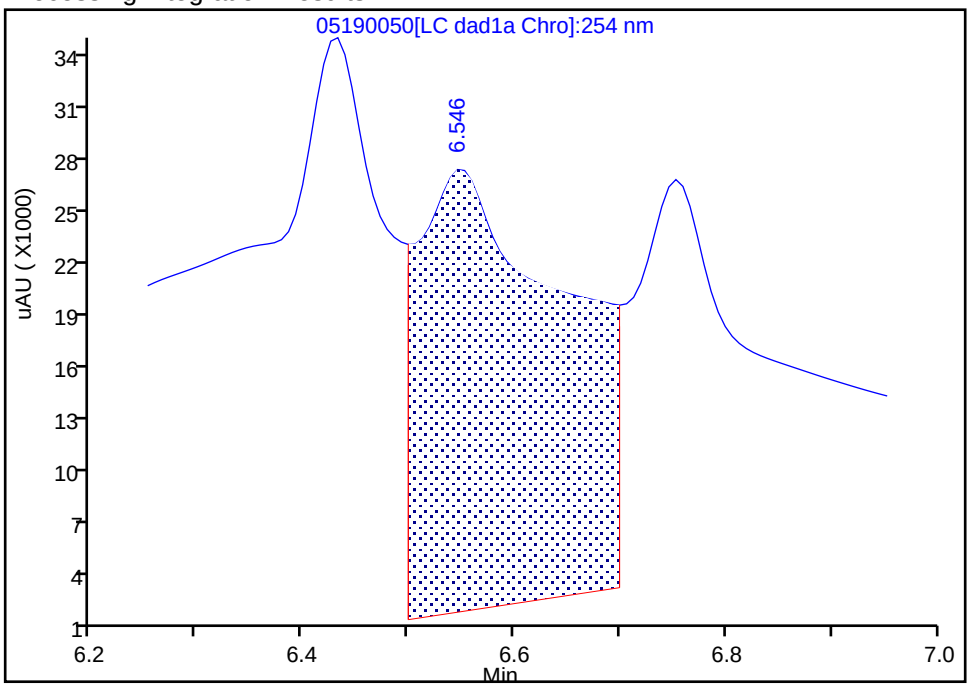
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190050.d				
Injection Date:	20-May-2023 05:34:33	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176674-B-10-B MSD				
Client ID:	FBQmw-175-230401-GW-R				
Operator ID:	JZ/JG	ALS Bottle#:	50	Worklist Smp#:	50
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

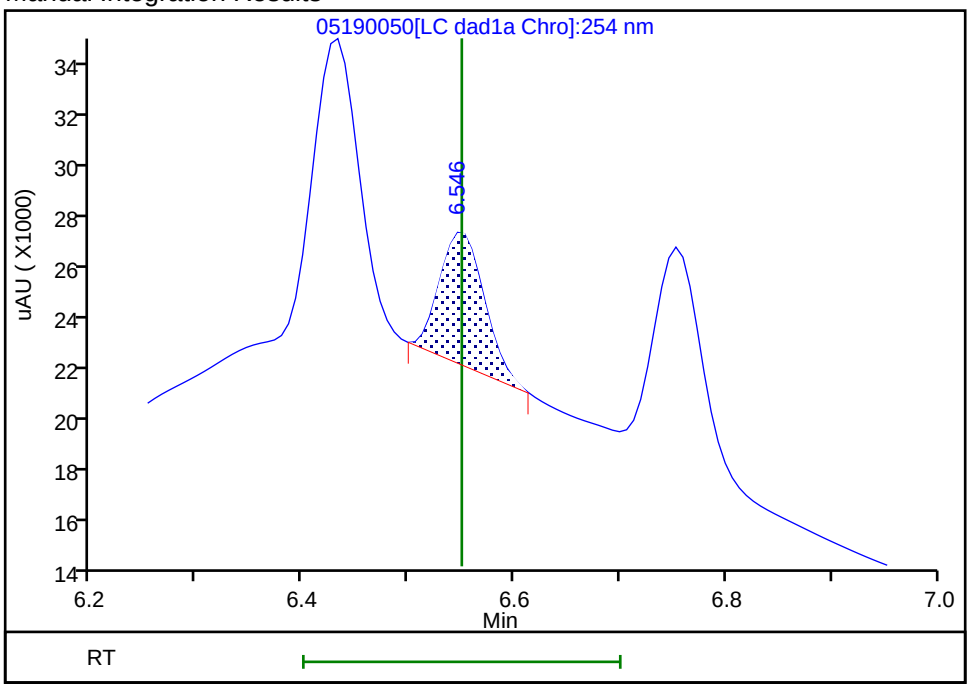
Processing Integration Results

RT: 6.55
Area: 240862
Amount: 2.575289
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 15136
Amount: 0.161834
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 11:15:18 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

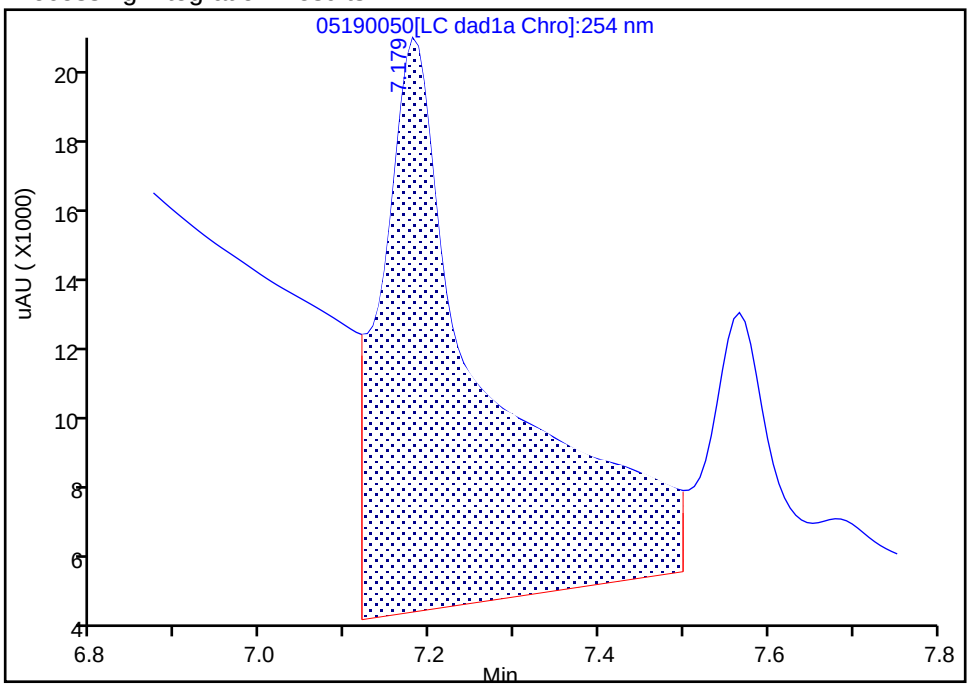
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190050.d				
Injection Date:	20-May-2023 05:34:33	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176674-B-10-B MSD				
Client ID:	FBQmw-175-230401-GW-R				
Operator ID:	JZ/JG	ALS Bottle#:	50	Worklist Smp#:	50
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

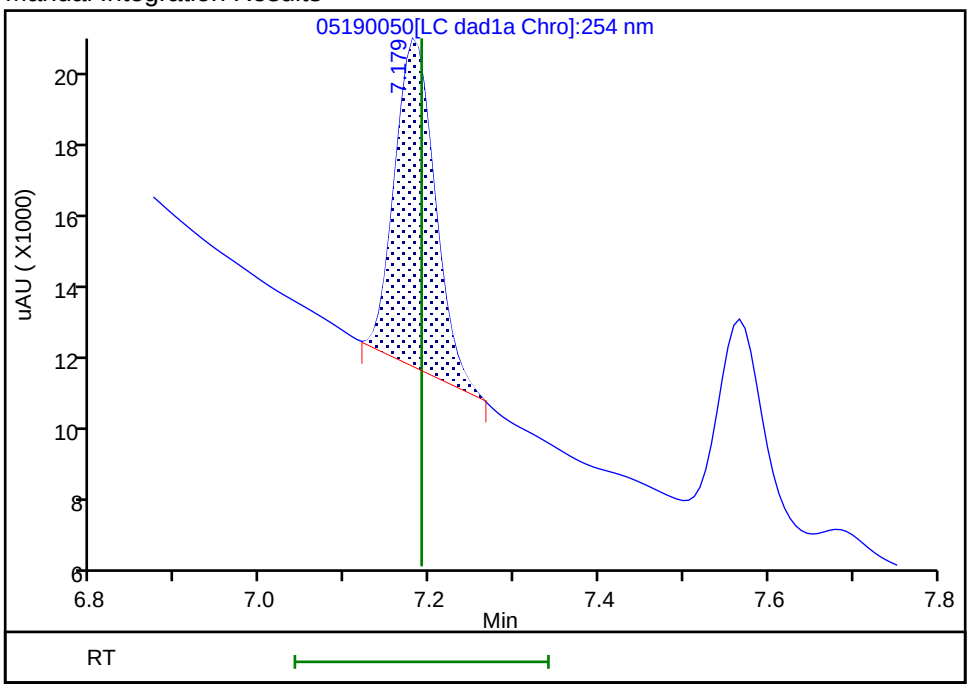
Processing Integration Results

RT: 7.18
Area: 138248
Amount: 1.053948
Amount Units: ug/mL



Manual Integration Results

RT: 7.18
Area: 28473
Amount: 0.217067
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 11:15:29 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

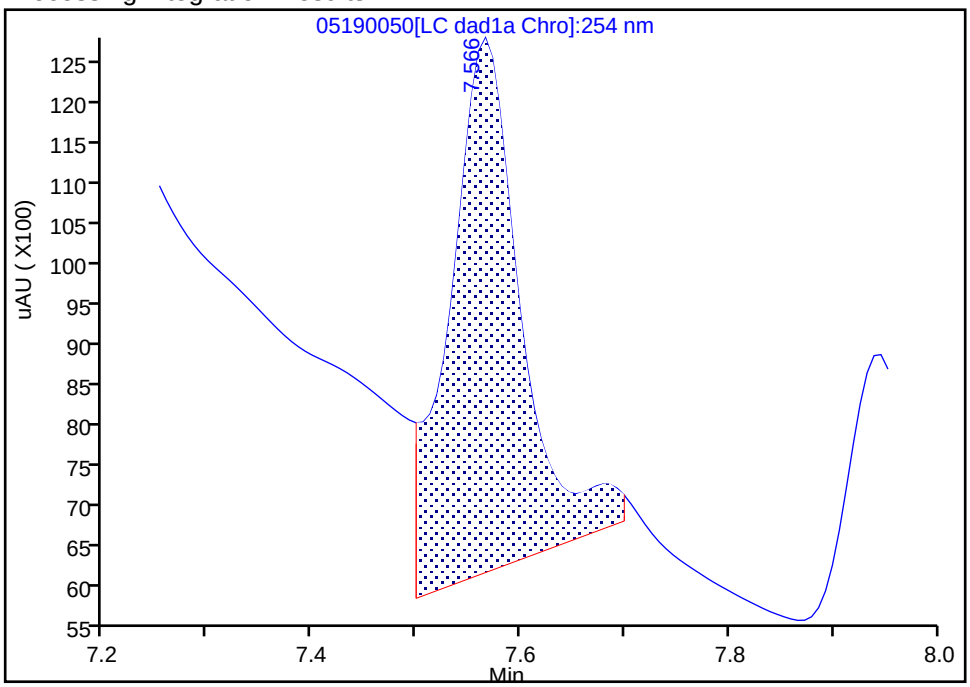
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190050.d				
Injection Date:	20-May-2023 05:34:33	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176674-B-10-B MSD				
Client ID:	FBQmw-175-230401-GW-R				
Operator ID:	JZ/JG	ALS Bottle#:	50	Worklist Smp#:	50
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

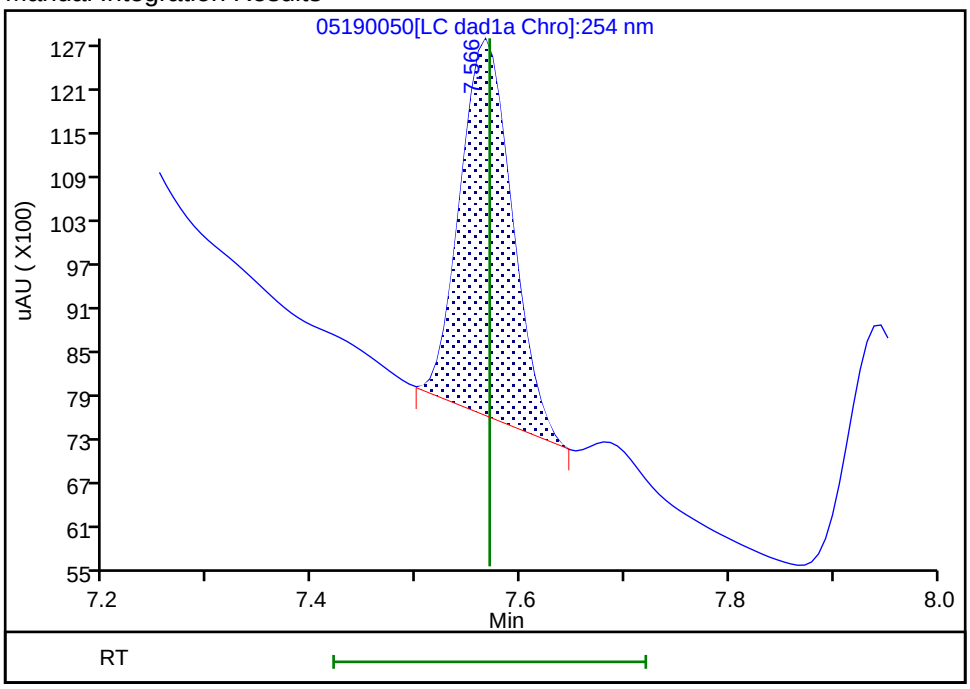
Processing Integration Results

RT: 7.57
Area: 31817
Amount: 0.299089
Amount Units: ug/mL



Manual Integration Results

RT: 7.57
Area: 17855
Amount: 0.167842
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 11:15:33 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

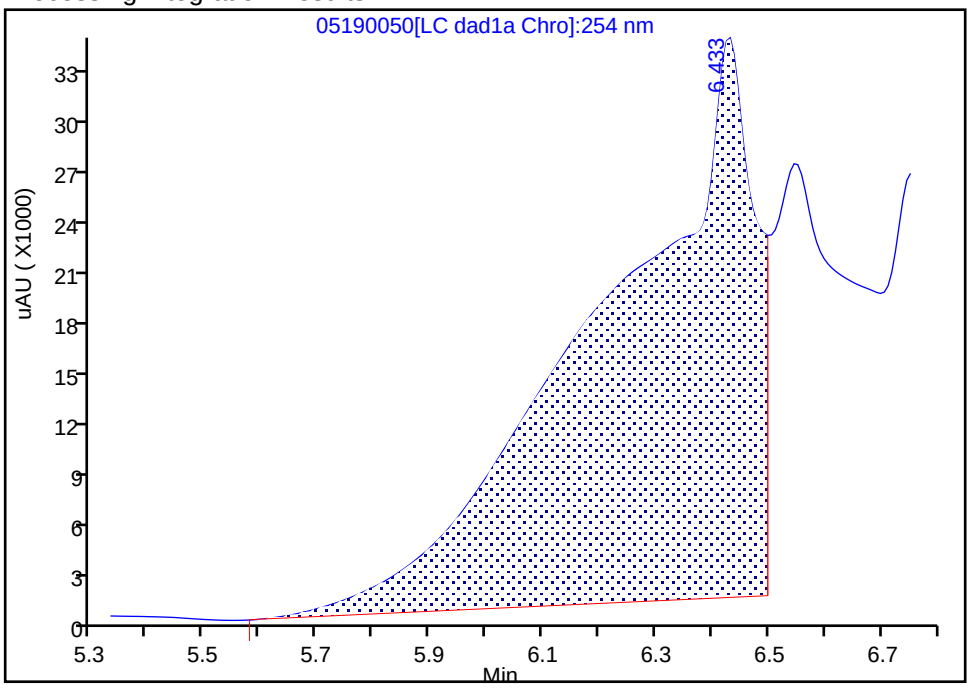
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190050.d				
Injection Date:	20-May-2023 05:34:33	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176674-B-10-B MSD				
Client ID:	FBQmw-175-230401-GW-R				
Operator ID:	JZ/JG	ALS Bottle#:	50	Worklist Smp#:	50
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

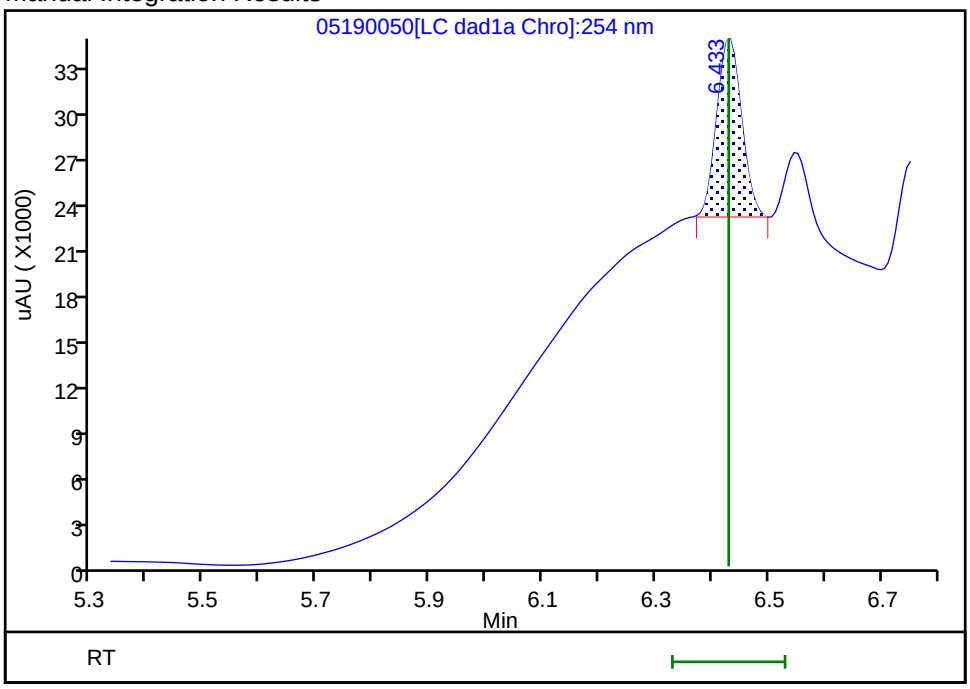
Processing Integration Results

RT: 6.43
Area: 622576
Amount: 3.149296
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 35886
Amount: 0.181529
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 11:15:16 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176674-1

SDG No.:

Client Sample ID: FBQmw-175-230401-GW-R MSD | Lab Sample ID: 280-176674-10 MSD

Matrix: Water | Lab File ID: 05190052.D

Analysis Method: 8330B | Date Collected: 05/17/2023 08:58

Extraction Method: 3535 | Date Extracted: 05/19/2023 13:39

Sample wt/vol: 498.8(mL) | Date Analyzed: 05/20/2023 06:20

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.: 613168 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
6629-29-4	2,4-diamino-6-nitrotoluene	1.03	M J1	1.0	0.90	0.44
59229-75-3	2,6-diamino-4-nitrotoluene	1.32	M J1	1.0	0.90	0.22

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	109		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\05190052.D
Lims ID: 280-176674-D-10-A MSD
Client ID: FBQmw-175-230401-GW-R
Sample Type: MSD
Inject. Date: 20-May-2023 06:20:33 ALS Bottle#: 52 Worklist Smp#: 52
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-176674-D-10-A MSD
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 20-May-2023 11:22:13 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: CTX1663

First Level Reviewer: LV5D Date: 20-May-2023 11:15:58

	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	6.417	6.431	-0.014	31161	0.2000	0.1319	M
5	2,4-diamino-6-nitrotoluene	1	6.604	6.618	-0.014	15008	0.2000	0.1025	M
$ 10	1,2-Dinitrobenzene	1	8.524	8.523	0.001	27619	0.2000	0.2187	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

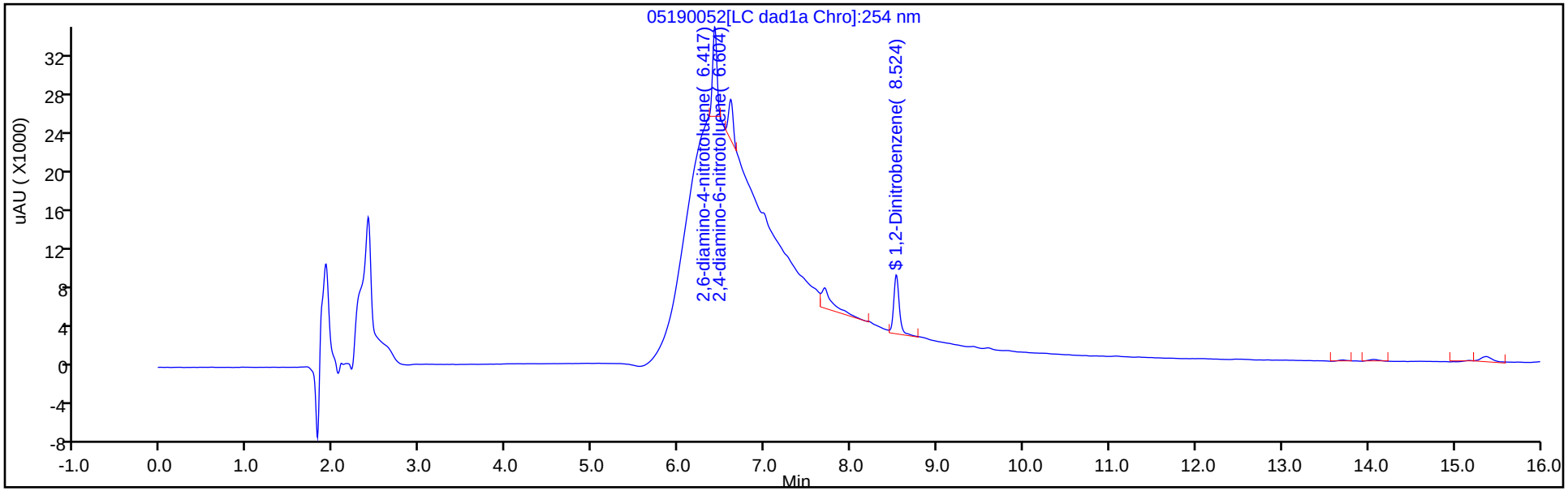
Report Date: 20-May-2023 11:22:16 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

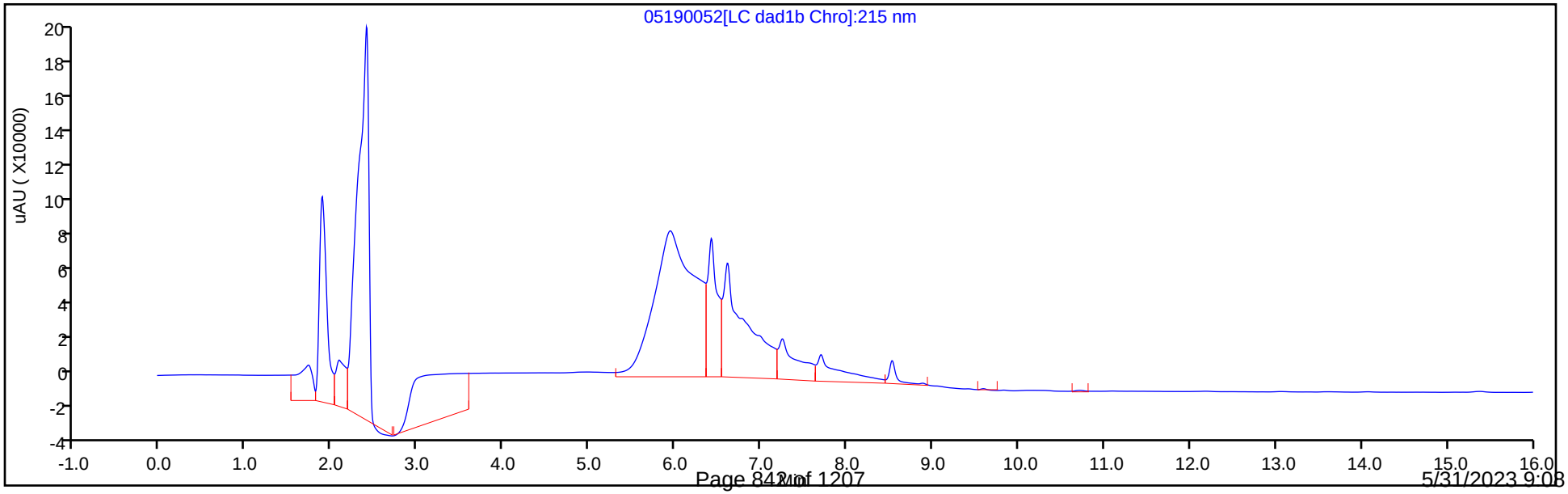
Data File: \\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190052.d

Injection Date:	20-May-2023 06:20:33	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-176674-D-10-A MSD			Worklist Smp#:	52
Client ID:	FBQmw-175-230401-GW-R				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	52
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\05190052.D				
Lims ID:	280-176674-D-10-A MSD				
Client ID:	FBQmw-175-230401-GW-R				
Sample Type:	MSD				
Inject. Date:	20-May-2023 06:20:33	ALS Bottle#:	52	Worklist Smp#:	52
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-176674-D-10-A MSD				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230519-121647.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	20-May-2023 11:22:13	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:	CTX1663				
First Level Reviewer: LV5D		Date:	20-May-2023 11:15:58		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2187	109.33

Eurofins Denver

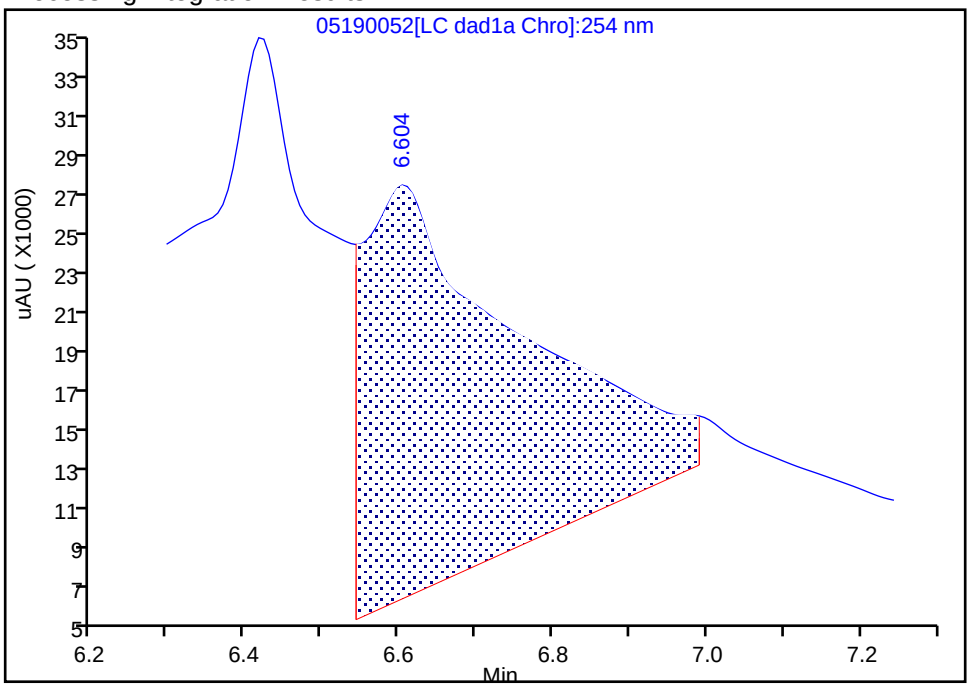
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190052.d				
Injection Date:	20-May-2023 06:20:33	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176674-D-10-A MSD				
Client ID:	FBQmw-175-230401-GW-R				
Operator ID:	JZ/JG	ALS Bottle#:	52	Worklist Smp#:	52
Injection Vol:	100.0 ul	Dil. Factor:	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

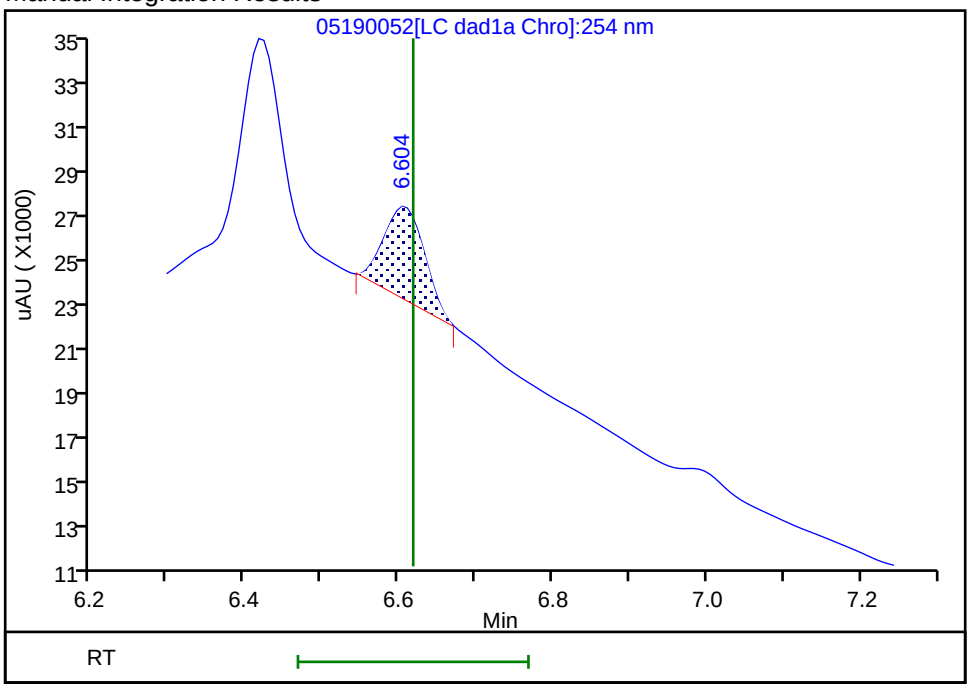
Processing Integration Results

RT: 6.60
Area: 293570
Amount: 2.004272
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 15008
Amount: 0.102463
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 11:15:57 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

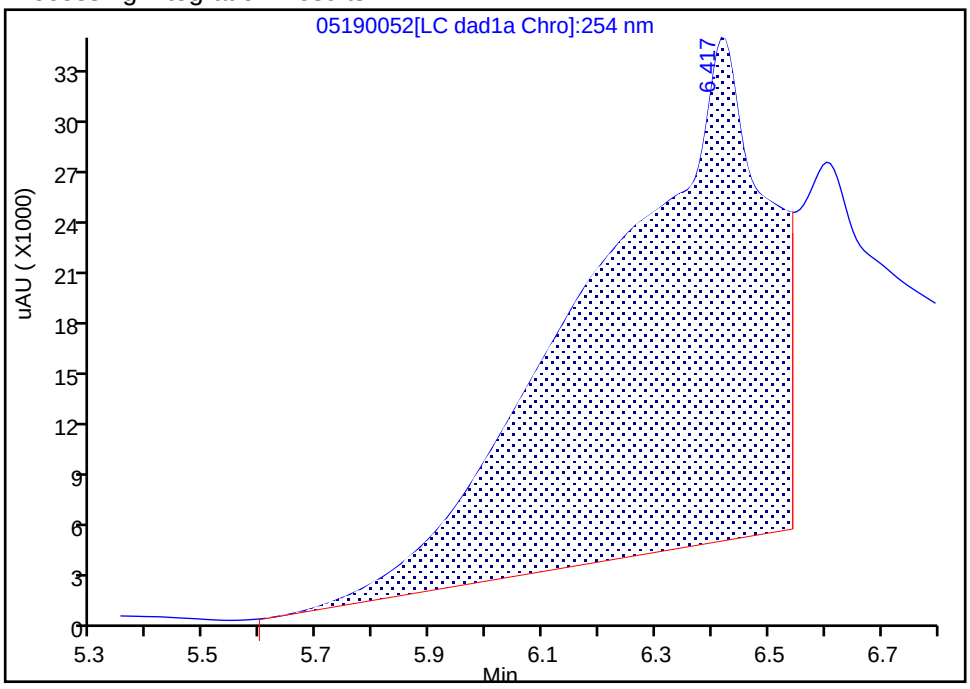
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230519-121647.b\05190052.d				
Injection Date:	20-May-2023 06:20:33	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176674-D-10-A MSD				
Client ID:	FBQmw-175-230401-GW-R				
Operator ID:	JZ/JG	ALS Bottle#:	52	Worklist Smp#:	52
Injection Vol:	100.0 ul	Dil. Factor:	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

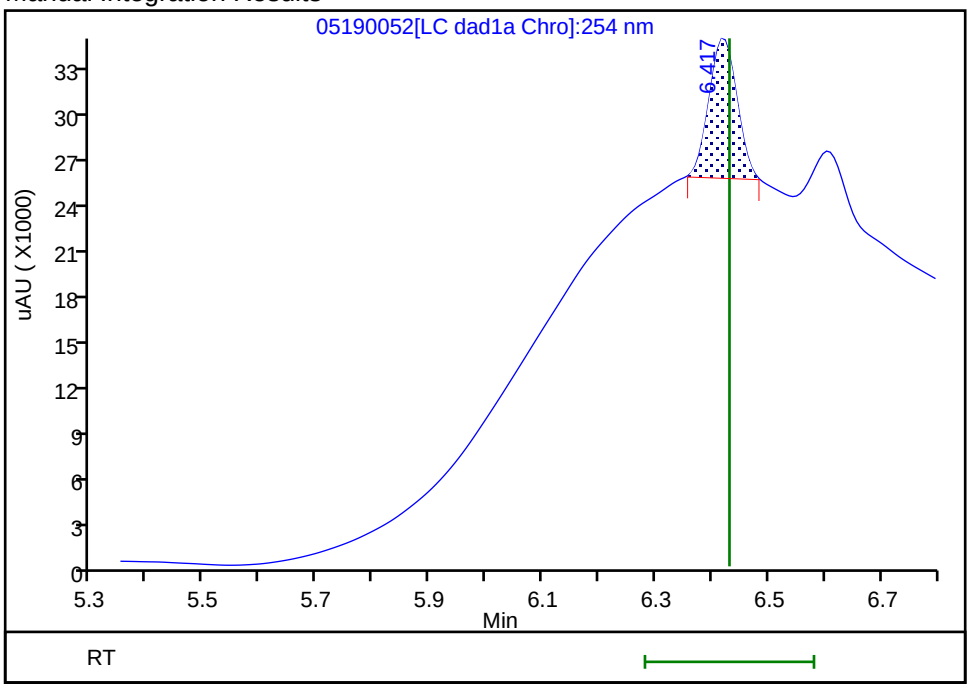
Processing Integration Results

RT: 6.42
Area: 644343
Amount: 2.801474
Amount Units: ug/mL



Manual Integration Results

RT: 6.42
Area: 31161
Amount: 0.131902
Amount Units: ug/mL



Reviewer: LV5D, 20-May-2023 11:15:56 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-176674-1

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.: 280-176674-1

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.: 280-176674-1

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.: 280-176674-1

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.: 280-176674-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 05/19/2023 22:41

Analysis Batch Number: 613168 End Date: 05/20/2023 12:04

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-613168/32		05/19/2023 22:41	1	05190032.D	UltraCarb5uODS 4.6(mm)
CCV 280-613168/33		05/19/2023 23:04	1	05190033.D	UltraCarb5uODS 4.6(mm)
MB 280-613095/1-A		05/19/2023 23:27	1	05190034.D	UltraCarb5uODS 4.6(mm)
LCS 280-613095/2-A		05/19/2023 23:50	1	05190035.D	UltraCarb5uODS 4.6(mm)
LCSD 280-613095/3-A		05/20/2023 00:13	1	05190036.D	UltraCarb5uODS 4.6(mm)
LCS 280-613095/4-A		05/20/2023 00:36	1	05190037.D	UltraCarb5uODS 4.6(mm)
LCSD 280-613095/5-A		05/20/2023 00:59	1	05190038.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		05/20/2023 01:22	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/20/2023 02:07	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/20/2023 02:30	1		UltraCarb5uODS 4.6(mm)
280-176674-2	FWGmw-015-230401-GW	05/20/2023 02:53	1	05190043.D	UltraCarb5uODS 4.6(mm)
CCV 280-613168/44		05/20/2023 03:16	1	05190044.D	UltraCarb5uODS 4.6(mm)
CCV 280-613168/45		05/20/2023 03:39	1	05190045.D	UltraCarb5uODS 4.6(mm)
280-176674-4	LL3mw-241-230401-GW	05/20/2023 04:02	1	05190046.D	UltraCarb5uODS 4.6(mm)
280-176674-7	FBQmw-173-230401-GW-R	05/20/2023 04:25	1	05190047.D	UltraCarb5uODS 4.6(mm)
280-176674-10	FBQmw-175-230401-GW-R	05/20/2023 04:48	1	05190048.D	UltraCarb5uODS 4.6(mm)
280-176674-10 MS	FBQmw-175-230401-GW-R MS	05/20/2023 05:11	1	05190049.D	UltraCarb5uODS 4.6(mm)
280-176674-10 MSD	FBQmw-175-230401-GW-R MSD	05/20/2023 05:34	1	05190050.D	UltraCarb5uODS 4.6(mm)
280-176674-10 MS	FBQmw-175-230401-GW-R MS	05/20/2023 05:57	1	05190051.D	UltraCarb5uODS 4.6(mm)
280-176674-10 MSD	FBQmw-175-230401-GW-R MSD	05/20/2023 06:20	1	05190052.D	UltraCarb5uODS 4.6(mm)
280-176674-11	FBQmw-175-230402-GW-R	05/20/2023 06:43	1	05190053.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		05/20/2023 07:06	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/20/2023 07:29	1		UltraCarb5uODS 4.6(mm)
CCV 280-613168/56		05/20/2023 07:52	1	05190056.D	UltraCarb5uODS 4.6(mm)
CCV 280-613168/57		05/20/2023 08:15	1	05190057.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		05/20/2023 08:38	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/20/2023 09:01	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/20/2023 09:24	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/20/2023 09:47	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/20/2023 10:09	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/20/2023 10:32	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/20/2023 10:55	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/20/2023 11:18	1		UltraCarb5uODS 4.6(mm)
CCV 280-613168/66		05/20/2023 11:41	1		UltraCarb5uODS 4.6(mm)
CCV 280-613168/67		05/20/2023 12:04	1		UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Instrument ID: CHHPLC_X5 Start Date: 05/20/2023 18:42

Analysis Batch Number: 613238 End Date: 05/21/2023 03:26

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-613238/7		05/20/2023 18:42	1	05200007.D	Luna-phenylhex 4.6(mm)
ZZZZZ		05/20/2023 19:17	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/20/2023 19:52	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/20/2023 20:27	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/20/2023 21:02	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/20/2023 21:36	10000		Luna-phenylhex 4.6(mm)
ZZZZZ		05/20/2023 22:11	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/20/2023 22:46	5		Luna-phenylhex 4.6(mm)
ZZZZZ		05/20/2023 23:21	1		Luna-phenylhex 4.6(mm)
280-176674-7	FBQmw-173-230401-GW-R	05/21/2023 00:31	1	05200019.D	Luna-phenylhex 4.6(mm)
CCV 280-613238/20		05/21/2023 01:06	1	05200020.D	Luna-phenylhex 4.6(mm)
ZZZZZ		05/21/2023 01:41	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/21/2023 02:16	5		Luna-phenylhex 4.6(mm)
ZZZZZ		05/21/2023 02:51	1		Luna-phenylhex 4.6(mm)
CCV 280-613238/24		05/21/2023 03:26	1		Luna-phenylhex 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Instrument ID: CHHPLC_X5 Start Date: 05/24/2023 19:13

Analysis Batch Number: 613683 End Date: 05/25/2023 00:28

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-613683/8		05/24/2023 19:13	1	05240008.D	Luna-phenylhex 4.6(mm)
280-176674-4	LL3mw-241-230401-GW	05/24/2023 19:48	1	05240010.D	Luna-phenylhex 4.6(mm)
ZZZZZ		05/24/2023 20:23	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/24/2023 20:58	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/24/2023 21:33	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/24/2023 22:08	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/24/2023 22:43	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/24/2023 23:18	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/24/2023 23:53	1		Luna-phenylhex 4.6(mm)
CCV 280-613683/18		05/25/2023 00:28	1	05240018.D	Luna-phenylhex 4.6(mm)

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-176674-1

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.: 280-176674-1

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.: 280-176674-1

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.: 280-176674-1

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.: 280-176674-1

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.: 280-176674-1

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.: 280-176674-1

SDG No.:

Batch Number: 613095 Batch Start Date: 05/19/23 13:39 Batch Analyst: Hermanova, Eva

Batch Method: 3535 Batch End Date: 05/19/23 16:39

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	8330 LCS 00125	8330_OP_DMT 00020
MB 280-613095/1		3535, 8330B				500 mL	5 mL		
LCS 280-613095/2		3535, 8330B				500 mL	5 mL	0.1 mL	0.1 mL
LCSD 280-613095/3		3535, 8330B				500 mL	5 mL	0.1 mL	0.1 mL
LCS 280-613095/4		3535, 8330B				500 mL	5 mL		
LCSD 280-613095/5		3535, 8330B				500 mL	5 mL		
280-176674-B-2	FWGmw-015-230401-GW	3535, 8330B	T	772.1 g	290.4 g	481.7 mL	5 mL		
280-176674-A-4	LL3mw-241-230401-GW	3535, 8330B	T	774.5 g	286.1 g	488.4 mL	5 mL		
280-176674-C-7	FBQmw-173-230401-GW-R	3535, 8330B	T	769.7 g	286.5 g	483.2 mL	5 mL		
280-176674-A-10	FBQmw-175-230401-GW-R	3535, 8330B	T	783.4 g	285.9 g	497.5 mL	5 mL		
280-176674-B-10 MS	FBQmw-175-230401-GW-R	3535, 8330B	T	784.4 g	285.0 g	499.4 mL	5 mL	0.1 mL	0.1 mL
280-176674-B-10 MSD	FBQmw-175-230401-GW-R	3535, 8330B	T	743.4 g	286.0 g	457.4 mL	5 mL	0.1 mL	0.1 mL
280-176674-C-10 MS	FBQmw-175-230401-GW-R	3535, 8330B	T	784.2 g	285.5 g	498.7 mL	5 mL		
280-176674-D-10 MSD	FBQmw-175-230401-GW-R	3535, 8330B	T	785.1 g	286.3 g	498.8 mL	5 mL		
280-176674-A-11	FBQmw-175-230402-GW-R	3535, 8330B	T	783.9 g	286.9 g	497 mL	5 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330DiaminLCS 00057	8330Surrogate 00144	AnalysisComment			
MB 280-613095/1		3535, 8330B			0.1 mL				
LCS 280-613095/2		3535, 8330B			0.1 mL	DMT			
LCSD 280-613095/3		3535, 8330B			0.1 mL	DMT			
LCS 280-613095/4		3535, 8330B		0.1 mL	0.1 mL	Diamino			
LCSD 280-613095/5		3535, 8330B		0.1 mL	0.1 mL	Diamino			
280-176674-B-2	FWGmw-015-230401-GW	3535, 8330B	T		0.1 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Batch Number: 613095 Batch Start Date: 05/19/23 13:39 Batch Analyst: Hermanova, Eva

Batch Method: 3535 Batch End Date: 05/19/23 16:39

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330DiaminLCS 00057	8330Surrogate 00144	AnalysisComment			
280-176674-A-4	LL3mw-241-230401-GW	3535, 8330B	T		0.1 mL				
280-176674-C-7	FBQmw-173-230401-GW-R	3535, 8330B	T		0.1 mL				
280-176674-A-10	FBQmw-175-230401-GW-R	3535, 8330B	T		0.1 mL				
280-176674-B-10 MS	FBQmw-175-230401-GW-R	3535, 8330B	T		0.1 mL	DMT			
280-176674-B-10 MSD	FBQmw-175-230401-GW-R	3535, 8330B	T		0.1 mL	DMT			
280-176674-C-10 MS	FBQmw-175-230401-GW-R	3535, 8330B	T	0.1 mL	0.1 mL	Diamino			
280-176674-D-10 MSD	FBQmw-175-230401-GW-R	3535, 8330B	T	0.1 mL	0.1 mL	Diamino			
280-176674-A-11	FBQmw-175-230402-GW-R	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.: 280-176674-1

SDG No.:

Batch Number: 613095 Batch Start Date: 05/19/23 13:39 Batch Analyst: Hermanova, Eva

Batch Method: 3535 Batch End Date: 05/19/23 16:39

Batch Notes	
First Start time	05/19/2023 13:59
First End time	05/19/2023 16:17
SPE Cartridge Type	Sep-Pak Porapak Rdx
SPE Cartridge Lot ID	005332286A
Balance ID	24350888
Manifold ID	Manifold: A, B
QC Bottle Lot ID	0420301F, 02024011
Pipette/Syringe/Dispenser ID	Dobby/DOD/Pugsley
Solvent Name	CaCl2
Solvent Lot #	CaCl2_Sol_00085
Rinse Solvent Name	Acetonotrile
Rinse Solvent Lot	Acetonitrile_00078
Acid Name	0.1% AAinACN
Acid ID	0.1% AAinACN_00207
Analyst ID - Spike Analyst	EH (Trainee), DL (Trainer)
Analyst ID - Spike Witness Analyst	Reviewer: NC
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: 280-176674-1

SDG No.:

Project: RVAAP FWGW

Client Sample ID	Lab Sample ID
LL12mw-187-230401-GW	280-176674-3
LL12mw-185-230401-GW	280-176674-5
LL12mw-185-230402-GW	280-176674-6
FBQmw-173-230401-GW-R	280-176674-7
FBQmw-173-230402-GW-R	280-176674-8
LL12mw-245-230401-GW	280-176674-9

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: LL12mw-187-230401-GW
Lab Sample ID: 280-176674-3
Lab Name: Eurofins Denver
Job No.: 280-176674-1
SDG ID.:
Matrix: Water
Date Sampled: 05/17/2023 13:40
Reporting Basis: WET
Date Received: 05/18/2023 09:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia as N	730	20	10	5.8	mg/L			200	350.1
Nitrate as N	1500	1000	400	180	mg/L		H D	2000	9056

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: LL12mw-185-230401-GW
Lab Sample ID: 280-176674-5
Lab Name: Eurofins Denver
Job No.: 280-176674-1
SDG ID.:
Matrix: Water
Date Sampled: 05/17/2023 09:45
Reporting Basis: WET
Date Received: 05/18/2023 09:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia as N	0.050	0.10	0.050	0.029	mg/L	U		1	350.1
Nitrate as N	67	10	4.0	1.8	mg/L		D M	20	9056

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: LL12mw-185-230402-GW
Lab Sample ID: 280-176674-6
Lab Name: Eurofins Denver
Job No.: 280-176674-1
SDG ID.:
Matrix: Water
Date Sampled: 05/17/2023 09:45
Reporting Basis: WET
Date Received: 05/18/2023 09:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia as N	0.050	0.10	0.050	0.029	mg/L	U		1	350.1
Nitrate as N	74	10	4.0	1.8	mg/L		D M	20	9056

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: FBQmw-173-230401-GW-R
Lab Sample ID: 280-176674-7
Lab Name: Eurofins Denver
Job No.: 280-176674-1
SDG ID.:
Matrix: Water
Date Sampled: 05/17/2023 11:47
Reporting Basis: WET
Date Received: 05/18/2023 09:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Sulfide	2.0	4.0	2.0	1.6	mg/L	U		1	9034
Nitrate as N	0.20	0.50	0.20	0.090	mg/L	J	M	1	9056
Nitrite as N	0.10	0.50	0.10	0.049	mg/L	U		1	9056
Sulfate	42	5.0	2.5	1.0	mg/L		M	1	9056A
Total Organic Carbon - Average	0.85	1.0	0.80	0.35	mg/L	J		1	9060
Alkalinity	18	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: FBQmw-173-230402-GW-R
Lab Sample ID: 280-176674-8
Lab Name: Eurofins Denver
Job No.: 280-176674-1
SDG ID.:
Matrix: Water
Date Sampled: 05/17/2023 11:47
Reporting Basis: WET
Date Received: 05/18/2023 09:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Sulfide	2.0	4.0	2.0	1.6	mg/L	U		1	9034
Nitrate as N	0.21	0.50	0.20	0.090	mg/L	J	M	1	9056
Nitrite as N	0.10	0.50	0.10	0.049	mg/L	U		1	9056
Sulfate	45	5.0	2.5	1.0	mg/L			1	9056A
Alkalinity	18	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: LL12mw-245-230401-GW
Lab Sample ID: 280-176674-9
Lab Name: Eurofins Denver
Job No.: 280-176674-1
SDG ID.:
Matrix: Water
Date Sampled: 05/17/2023 14:26
Reporting Basis: WET
Date Received: 05/18/2023 09:45

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia as N	0.050	0.10	0.050	0.029	mg/L	U		1	350.1
Nitrate as N	0.20	0.50	0.20	0.090	mg/L	U	M	1	9056

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Analyst: MMP Batch Start Date: 05/23/2023

Reporting Units: mg/L Analytical Batch No.: 613561

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
14	ICV	08:51	Ammonia as N	2.49	2.51	99	90-110		350.1 ICV_00564
15	ICVL	08:53	Ammonia as N	0.491	0.501	98	90-110		350.1 ICV_00564
16	ICB	08:56	Ammonia as N	0.050				U	
83	CCV	11:54	Ammonia as N	2.58	2.50	103	90-110		350.1 cal_00583
84	CCVL	11:57	Ammonia as N	0.520	0.500	104	90-110		350.1 cal_00583
85	CCB	12:00	Ammonia as N	0.050				U	
96	CCV	12:29	Ammonia as N	2.47	2.50	99	90-110		350.1 cal_00583
97	CCVL	12:32	Ammonia as N	0.512	0.500	102	90-110		350.1 cal_00583
98	CCB	12:34	Ammonia as N	0.050				U	
111	CCV	13:09	Ammonia as N	2.55	2.50	102	90-110		350.1 cal_00583
112	CCVL	13:12	Ammonia as N	0.494	0.500	99	90-110		350.1 cal_00583
113	CCB	13:14	Ammonia as N	0.050				U	
124	CCV	13:46	Ammonia as N	2.74	2.50	109	90-110		350.1 cal_00583
125	CCVL	13:49	Ammonia as N	0.551	0.500	110	90-110		350.1 cal_00583
195	CCV	16:56	Ammonia as N	2.56	2.50	102	90-110		350.1 cal_00583
196	CCVL	16:58	Ammonia as N	0.479	0.500	96	90-110		350.1 cal_00583
197	CCB	17:01	Ammonia as N	0.050				U	
209	CCV	17:33	Ammonia as N	2.54	2.50	102	90-110		350.1 cal_00583
210	CCVL	17:36	Ammonia as N	0.477	0.500	95	90-110		350.1 cal_00583
211	CCB	17:38	Ammonia as N	0.050				U	

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

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Analyst: MEC Batch Start Date: 05/18/2023

Reporting Units: mg/L Analytical Batch No.: 612961

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
7	ICV	13:25	Nitrate as N	1.95	2.00	98	90-110		IC ICV 5_00405
			Nitrite as N	1.99	2.00	100	90-110		IC ICV 5_00405
8	ICB	13:40	Nitrate as N	0.20				U	
			Nitrite as N	0.10				U	
24	CCV	17:41	Nitrate as N	2.43	2.50	97	90-110		IC LCS_01954
			Nitrite as N	2.54	2.50	101	90-110		IC LCS_01954
25	CCB	17:56	Nitrate as N	0.20				U	
			Nitrite as N	0.10				U	
36	CCV	20:42	Nitrate as N	2.43	2.50	97	90-110		IC LCS_01954
			Nitrite as N	2.53	2.50	101	90-110		IC LCS_01954
37	CCB	20:57	Nitrate as N	0.20				U	
			Nitrite as N	0.10				U	
48	CCV	23:41	Nitrate as N	2.52	2.50	101	90-110		IC LCS_01954
49	CCB	23:56	Nitrate as N	0.20				U	
60	CCV	02:42	Nitrate as N	2.68	2.50	107	90-110		IC LCS_01954
61	CCB	02:57	Nitrate as N	0.20				U	
72	CCV	05:42	Nitrate as N	2.67	2.50	107	90-110		IC LCS_01954
73	CCB	05:57	Nitrate as N	0.20				U	
84	CCV	08:42	Nitrate as N	2.55	2.50	102	90-110		IC LCS_01954
85	CCB	08:57	Nitrate as N	0.20				U	

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

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Analyst: EJS Batch Start Date: 05/22/2023

Reporting Units: mg/L Analytical Batch No.: 613351

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	16:00	Nitrate as N	2.43	2.50	97	90-110		IC LCS_01954
2	CCB	16:14	Nitrate as N	0.20				U	
17	CCV	19:59	Nitrate as N	2.42	2.50	97	90-110		IC LCS_01954
18	CCB	20:15	Nitrate as N	0.20				U	

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

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Analyst: MEC Batch Start Date: 05/18/2023

Reporting Units: mg/L Analytical Batch No.: 612962

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
7	ICV	13:25	Sulfate	81.8	80.0	102	90-110		IC SO4 ICV_00024
8	ICB	13:40	Sulfate	2.5				U	
24	CCV	17:41	Sulfate	48.9	50.0	98	90-110		IC LCS_01954
25	CCB	17:56	Sulfate	2.5				U	
36	CCV	20:42	Sulfate	49.4	50.0	99	90-110		IC LCS_01954
37	CCB	20:57	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.: 280-176674-1

SDG No.:

Analyst: ABW Batch Start Date: 05/19/2023

Reporting Units: mg/L Analytical Batch No.: 613268

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	18:03	Total Organic Carbon - Average	19.7	20.0	99	90-110		TOC ICV Std_00051
2	ICB	18:17	Total Organic Carbon - Average	0.80				U	
15	CCV	21:30	Total Organic Carbon - Average	24.5	25.0	98	90-110		TOC LCS Std_00057
16	CCB	21:45	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.: 280-176674-1

SDG No.:

Analyst: KEG Batch Start Date: 05/19/2023

Reporting Units: mg/L Analytical Batch No.: 613263

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
29	CCV	15:42	Alkalinity	182	200	91	90-110		Alk daily lcs 01088
30	CCB	15:49	Alkalinity	3.43				J	
44	CCV	17:30	Alkalinity	182	200	91	90-110		Alk daily lcs 01088
45	CCB	17:36	Alkalinity	3.58				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.: 280-176674-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	LOQ	Dil
Batch ID: 613561 Date: 05/23/2023 12:13							
350.1	MB 280-613561/90	Ammonia as N	0.050	U	mg/L	0.10	1
Batch ID: 613208 Date: 05/19/2023 17:27 Prep Batch: 613197 Date: 05/19/2023 15:58							
9034	MB 280-613197/2-A	Sulfide	2.0	U	mg/L	4.0	1
Batch ID: 612961 Date: 05/18/2023 14:55							
9056	MB 280-612961/13	Nitrate as N	0.20	U	mg/L	0.50	1
9056	MB 280-612961/13	Nitrite as N	0.10	U	mg/L	0.50	1
Batch ID: 612961 Date: 05/19/2023 01:26							
9056	MB 280-612961/55	Nitrate as N	0.20	U M	mg/L	0.50	1
Batch ID: 613351 Date: 05/22/2023 17:14							
9056	MB 280-613351/6	Nitrate as N	0.20	U	mg/L	0.50	1
Batch ID: 612962 Date: 05/18/2023 14:55							
9056A	MB 280-612962/13	Sulfate	2.5	U M	mg/L	5.0	1
Batch ID: 613268 Date: 05/19/2023 18:46							
9060	MB 280-613268/4	Total Organic Carbon - Average	0.80	U	mg/L	1.0	1
Batch ID: 613263 Date: 05/19/2023 16:11							
SM 2320B	MB 280-613263/33	Alkalinity	3.58	J	mg/L	10	1

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 613561 Date: 05/23/2023 13:04											
350.1	280-176674-5	Ammonia as N	0.050	U	mg/L						
350.1	280-176674-5 MS	Ammonia as N	1.05		mg/L	1.00	105	90-110			
Batch ID: 613268 Date: 05/19/2023 19:32											
9060	280-176674-7	Total Organic Carbon - Average	0.85	J	mg/L						
9060	280-176674-7 MS	Total Organic Carbon - Average	25.0		mg/L	25.0	97	88-112			

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM V-IN

5-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 613561 Date: 05/23/2023 13:06											
350.1	280-176674-5 MSD	Ammonia as N	1.03		mg/L	1.00	103	90-110	1	10	
Batch ID: 613268 Date: 05/19/2023 19:46											
9060	280-176674-7 MSD	Total Organic Carbon - Average	25.1		mg/L	25.0	97	88-112	0	15	

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM V-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 613561	Date: 05/23/2023 12:10										
						LCS Source: 350.1 cal_00583					
350.1	LCS 280-613561/89	Ammonia as N	2.58		mg/L	2.50	103	90-110			
Batch ID: 613208	Date: 05/19/2023 17:27	Prep Batch: 613197	Date: 05/19/2023 15:58								
						LCS Source: SFD CAL INT_02403					
9034	LCS 280-613197/1-A	Sulfide	16.0		mg/L	19.0	84	44-110			
Batch ID: 612961	Date: 05/18/2023 14:25										
						LCS Source: IC LCS_01954					
9056	LCS 280-612961/11	Nitrate as N	2.46		mg/L	2.50	98	88-111	0	10	
9056	LCS 280-612961/11	Nitrite as N	2.42		mg/L	2.50	97	87-111	1	10	
Batch ID: 612961	Date: 05/19/2023 00:56										
						LCS Source: IC LCS_01954					
9056	LCS 280-612961/53	Nitrate as N	2.50		mg/L	2.50	100	88-111	2	10	
Batch ID: 613351	Date: 05/22/2023 16:44										
						LCS Source: IC LCS_01954					
9056	LCS 280-613351/4	Nitrate as N	2.41		mg/L	2.50	96	88-111	0	10	
Batch ID: 612962	Date: 05/18/2023 14:25										
						LCS Source: IC LCS_01954					
9056A	LCS 280-612962/11	Sulfate	50.5		mg/L	50.0	101	87-112	1	10	
Batch ID: 613268	Date: 05/19/2023 18:31										
						LCS Source: TOC LCS Std_00057					
9060	LCS 280-613268/3	Total Organic Carbon - Average	24.8		mg/L	25.0	99	88-112			
Batch ID: 613263	Date: 05/19/2023 15:57										
						LCS Source: Alk daily lcs_01088					
SM 2320B	LCS 280-613263/31	Alkalinity	181		mg/L	200	91	89-110	1	10	

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.: 280-176674-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 612961	Date: 05/18/2023 14:40										
						LCSD Source: IC LCS_01954					
9056	LCSD 280-612961/12	Nitrate as N	2.45		mg/L	2.50	98	88-111	0	10	
9056	LCSD 280-612961/12	Nitrite as N	2.41		mg/L	2.50	96	87-111	1	10	
Batch ID: 612961	Date: 05/19/2023 01:11										
						LCSD Source: IC LCS_01954					
9056	LCSD 280-612961/54	Nitrate as N	2.45		mg/L	2.50	98	88-111	2	10	
Batch ID: 613351	Date: 05/22/2023 16:59										
						LCSD Source: IC LCS_01954					
9056	LCSD 280-613351/5	Nitrate as N	2.42		mg/L	2.50	97	88-111	0	10	
Batch ID: 612962	Date: 05/18/2023 14:40										
						LCSD Source: IC LCS_01954					
9056A	LCSD 280-612962/12	Sulfate	50.0		mg/L	50.0	100	87-112	1	10	
Batch ID: 613263	Date: 05/19/2023 16:04										
						LCSD Source: Alk daily lcs_01088					
SM 2320B	LCSD 280-613263/32	Alkalinity	183		mg/L	200	92	89-110	1	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.: 280-176674-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 612961	Date: 05/18/2023 14:10										
						LCS Source: IC Cal low_00709					
9056	MRL 280-612961/10	Nitrate as N	0.248	J	mg/L	0.250	99	50-150			
9056	MRL 280-612961/10	Nitrite as N	0.221	J	mg/L	0.250	89	50-150			
Batch ID: 613351	Date: 05/22/2023 16:29										
						LCS Source: IC Cal low_00709					
9056	MRL 280-613351/3	Nitrate as N	0.239	J	mg/L	0.250	95	50-150			
Batch ID: 612962	Date: 05/18/2023 14:10										
						LCS Source: IC CAL cl/so4_00480					
9056A	MRL 280-612962/10	Sulfate	2.98	J	mg/L	2.50	119	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: 280-176674-1

SDG No.: Analysis Batch No.: 612961

Instrument ID: WC_IonChrom10 Calibration ID: 80543

Start Date: 05/18/2023 11:56 End Date: 05/18/2023 13:10

Analytical Method: 9056

Analyte	Corr. Coeff.	Slope	Intercept	Calib. Type	Weighting
Nitrate as N	0.9995	45000000	-1160000	WLR	Inverse Conc
Nitrite as N	1.0000	42900000	-968000	WLR	Inverse Conc

16B-IN
INITIAL CALIBRATION

Lab Name: Eurofins Denver Job No: 280-176674-1

SDG No.: Analysis Batch No.: 612961

Instrument ID: WC_IonChrom10 Calibration ID: 80543

Start Date: 05/18/2023 11:56 End Date: 05/18/2023 13:10

Analytical Method: 9056 Concentration Units: ug/mL

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Nitrate as N	0.20	0.19	-5	0.50	0.54	7	1.0	0.98	-2
Nitrite as N	0.20	0.19	-6	0.50	0.52	4	1.0	1.0	3

16B-IN
INITIAL CALIBRATION

Lab Name: Eurofins Denver | Job No: 280-176674-1

SDG No.: | Analysis Batch No.: 612961

Instrument ID: WC_IonChrom10 | Calibration ID: 80543

Start Date: 05/18/2023 11:56 | End Date: 05/18/2023 13:10

Analytical Method: 9056 | Concentration Units: ug/mL

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Nitrate as N	2.5	2.5	-1	5.0	5.0	0			
Nitrite as N	2.5	2.5	0	5.0	5.0	-1			

16A-IN
INITIAL CALIBRATION SUMMARY

Lab Name: Eurofins Denver Job No: 280-176674-1

SDG No.: Analysis Batch No.: 612962

Instrument ID: WC_IonChrom10 Calibration ID: 80544

Start Date: 05/18/2023 11:56 End Date: 05/18/2023 13:10

Analytical Method: 9056A

Analyte	Corr. Coeff.	Slope	Intercept	Calib. Type	Weighting
Sulfate	0.9995	13800000	4650000	WLR	Inverse Conc

16B-IN
INITIAL CALIBRATION

Lab Name: Eurofins Denver | Job No: 280-176674-1

SDG No.: | Analysis Batch No.: 612962

Instrument ID: WC_IonChrom10 | Calibration ID: 80544

Start Date: 05/18/2023 11:56 | End Date: 05/18/2023 13:10

Analytical Method: 9056A | Concentration Units: ug/mL

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Sulfate	0.50	0.48	-4	1.3	1.1	-11	2.5	2.8	12

16B-IN
INITIAL CALIBRATION

Lab Name: Eurofins Denver | Job No: 280-176674-1

SDG No.: | Analysis Batch No.: 612962

Instrument ID: WC_IonChrom10 | Calibration ID: 80544

Start Date: 05/18/2023 11:56 | End Date: 05/18/2023 13:10

Analytical Method: 9056A | Concentration Units: ug/mL

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Sulfate	30.0	31.0	3	60.0	59.9	0	100	99.0	-1

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-176674-1

SDG Number:

Matrix: Water Instrument ID: WC_SKALAR_01

Method: 350.1 DL Date: 04/29/2022 13:46

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Ammonia as N		0.1	0.029

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-176674-1

SDG Number:

Matrix: Water Instrument ID: WC_SKALAR_01

Method: 350.1 XMDL Date: 03/28/2011 13:26

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Ammonia as N		0.1	0.0225

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-176674-1

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: 280-176674-1

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: 280-176674-1

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: 280-176674-1

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: 280-176674-1

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: 280-176674-1

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: 280-176674-1

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: 280-176674-1

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: 280-176674-1

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: 280-176674-1

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.: 280-176674-1

SDG No.:

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-613197/1-A	05/19/2023 15:58	613197		50	50
MB 280-613197/2-A	05/19/2023 15:58	613197		50	50
280-176674-7	05/19/2023 15:58	613197		50	50
280-176674-8	05/19/2023 15:58	613197		50	50

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Instrument ID: WC_SKALAR_01 Analysis Method: 350.1

Start Date: 05/23/2023 08:15 End Date: 05/23/2023 17:47

Lab Sample Id	D/F	Type	Time	Analytes
				NH3
ZZZZZZ			08:15	
ZZZZZZ			08:17	
ZZZZZZ			08:21	
ZZZZZZ			08:24	
ZZZZZZ			08:27	
ZZZZZZ			08:29	
ZZZZZZ			08:32	
ZZZZZZ			08:34	
ZZZZZZ			08:37	
ZZZZZZ			08:40	
ZZZZZZ			08:42	
ZZZZZZ			08:45	
ZZZZZZ			08:48	
ICV 280-613561/14	1		08:51	X
ICVL 280-613561/15	1		08:53	X
ICB 280-613561/16	1		08:56	X
ZZZZZZ			08:58	
ZZZZZZ			09:01	
ZZZZZZ			09:04	
ZZZZZZ			09:06	
ZZZZZZ			09:09	
ZZZZZZ			09:12	
ZZZZZZ			09:14	
ZZZZZZ			09:17	
ZZZZZZ			09:20	
ZZZZZZ			09:22	
CCV 280-613561/27			09:25	
CCVL 280-613561/28			09:28	
CCB 280-613561/29			09:30	
ZZZZZZ			09:33	
ZZZZZZ			09:36	
ZZZZZZ			09:38	
ZZZZZZ			09:41	
ZZZZZZ			09:43	
ZZZZZZ			09:46	
ZZZZZZ			09:49	
ZZZZZZ			09:52	
ZZZZZZ			09:54	
ZZZZZZ			09:57	
CCV 280-613561/40			09:59	
CCVL 280-613561/41			10:02	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Instrument ID: WC_SKALAR_01 Analysis Method: 350.1

Start Date: 05/23/2023 08:15 End Date: 05/23/2023 17:47

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
CCB 280-613561/42			10:05																									
ZZZZZZ			10:08																									
ZZZZZZ			10:10																									
ZZZZZZ			10:14																									
ZZZZZZ			10:16																									
ZZZZZZ			10:18																									
ZZZZZZ			10:21																									
ZZZZZZ			10:24																									
ZZZZZZ			10:26																									
ZZZZZZ			10:29																									
ZZZZZZ			10:32																									
ZZZZZZ			10:34																									
ZZZZZZ			10:37																									
CCV 280-613561/55			10:40																									
CCVL 280-613561/56			10:42																									
CCB 280-613561/57			10:45																									
ZZZZZZ			10:48																									
ZZZZZZ			10:50																									
ZZZZZZ			10:53																									
ZZZZZZ			10:56																									
ZZZZZZ			10:58																									
ZZZZZZ			11:01																									
ZZZZZZ			11:04																									
ZZZZZZ			11:06																									
ZZZZZZ			11:09																									
ZZZZZZ			11:12																									
CCV 280-613561/68			11:14																									
CCVL 280-613561/69			11:17																									
CCB 280-613561/70			11:20																									
ZZZZZZ			11:22																									
ZZZZZZ			11:25																									
ZZZZZZ			11:28																									
ZZZZZZ			11:30																									
ZZZZZZ			11:33																									
ZZZZZZ			11:36																									
ZZZZZZ			11:38																									
ZZZZZZ			11:41																									
ZZZZZZ			11:44																									
ZZZZZZ			11:46																									
ZZZZZZ			11:49																									
ZZZZZZ			11:52																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Instrument ID: WC_SKALAR_01 Analysis Method: 350.1

Start Date: 05/23/2023 08:15 End Date: 05/23/2023 17:47

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
CCV 280-613561/83	1		11:54	X																								
CCVL 280-613561/84	1		11:57	X																								
CCB 280-613561/85	1		12:00	X																								
ZZZZZZ			12:02																									
ZZZZZZ			12:05																									
ZZZZZZ			12:08																									
LCS 280-613561/89	1	T	12:10	X																								
MB 280-613561/90	1	T	12:13	X																								
ZZZZZZ			12:16																									
ZZZZZZ			12:18																									
ZZZZZZ			12:21																									
ZZZZZZ			12:24																									
ZZZZZZ			12:26																									
CCV 280-613561/96	1		12:29	X																								
CCVL 280-613561/97	1		12:32	X																								
CCB 280-613561/98	1		12:34	X																								
ZZZZZZ			12:37																									
ZZZZZZ			12:40																									
ZZZZZZ			12:43																									
ZZZZZZ			12:45																									
ZZZZZZ			12:48																									
ZZZZZZ			12:50																									
ZZZZZZ			12:53																									
ZZZZZZ			12:56																									
ZZZZZZ			12:58																									
280-176674-5	1	T	13:01	X																								
280-176674-5 MS	1	T	13:04	X																								
280-176674-5 MSD	1	T	13:06	X																								
CCV 280-613561/111	1		13:09	X																								
CCVL 280-613561/112	1		13:12	X																								
CCB 280-613561/113	1		13:14	X																								
ZZZZZZ			13:17																									
ZZZZZZ			13:20																									
ZZZZZZ			13:22																									
280-176674-6	1	T	13:25	X																								
280-176674-9	1	T	13:28	X																								
ZZZZZZ			13:30																									
ZZZZZZ			13:33																									
ZZZZZZ			13:37																									
ZZZZZZ			13:39																									
ZZZZZZ			13:43																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Instrument ID: WC_SKALAR_01 Analysis Method: 350.1

Start Date: 05/23/2023 08:15 End Date: 05/23/2023 17:47

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
CCV 280-613561/124	1		13:46	X																								
CCVL 280-613561/125	1		13:49	X																								
CCB 280-613561/126			13:51																									
ZZZZZZ			13:54																									
ZZZZZZ			13:57																									
ZZZZZZ			13:59																									
ZZZZZZ			14:02																									
ZZZZZZ			14:05																									
ZZZZZZ			14:08																									
ZZZZZZ			14:10																									
ZZZZZZ			14:13																									
ZZZZZZ			14:15																									
ZZZZZZ			14:18																									
ZZZZZZ			14:21																									
ZZZZZZ			14:24																									
CCV 280-613561/139			14:26																									
CCVL 280-613561/140			14:29																									
CCB 280-613561/141			14:32																									
ZZZZZZ			14:34																									
ZZZZZZ			14:37																									
ZZZZZZ			14:40																									
ZZZZZZ			14:42																									
ZZZZZZ			14:45																									
ZZZZZZ			14:48																									
ZZZZZZ			14:50																									
ZZZZZZ			14:53																									
ZZZZZZ			14:56																									
ZZZZZZ			14:58																									
CCV 280-613561/152			15:01																									
CCVL 280-613561/153			15:04																									
CCB 280-613561/154			15:06																									
ZZZZZZ			15:09																									
ZZZZZZ			15:12																									
ZZZZZZ			15:15																									
ZZZZZZ			15:17																									
ZZZZZZ			15:20																									
ZZZZZZ			15:22																									
ZZZZZZ			15:25																									
ZZZZZZ			15:28																									
ZZZZZZ			15:30																									
ZZZZZZ			15:33																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Instrument ID: WC_SKALAR_01 Analysis Method: 350.1

Start Date: 05/23/2023 08:15 End Date: 05/23/2023 17:47

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			15:35																									
ZZZZZZ			15:38																									
CCV 280-613561/167			15:41																									
CCVL 280-613561/168			15:44																									
CCB 280-613561/169			15:46																									
ZZZZZZ			15:49																									
ZZZZZZ			15:51																									
ZZZZZZ			15:54																									
ZZZZZZ			15:57																									
ZZZZZZ			16:00																									
ZZZZZZ			16:02																									
ZZZZZZ			16:05																									
ZZZZZZ			16:08																									
ZZZZZZ			16:10																									
ZZZZZZ			16:13																									
CCV 280-613561/180			16:16																									
CCVL 280-613561/181			16:18																									
CCB 280-613561/182			16:21																									
ZZZZZZ			16:24																									
ZZZZZZ			16:26																									
ZZZZZZ			16:30																									
ZZZZZZ			16:32																									
ZZZZZZ			16:34																									
ZZZZZZ			16:37																									
ZZZZZZ			16:39																									
ZZZZZZ			16:42																									
ZZZZZZ			16:45																									
ZZZZZZ			16:48																									
ZZZZZZ			16:50																									
ZZZZZZ			16:53																									
CCV 280-613561/195	1		16:56	X																								
CCVL 280-613561/196	1		16:58	X																								
CCB 280-613561/197	1		17:01	X																								
280-176674-3	200	T	17:04	X																								
ZZZZZZ			17:06																									
ZZZZZZ			17:09																									
ZZZZZZ			17:12																									
ZZZZZZ			17:14																									
ZZZZZZ			17:17																									
ZZZZZZ			17:19																									
ZZZZZZ			17:22																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Instrument ID: WC_SKALAR_01 Analysis Method: 350.1

Start Date: 05/23/2023 08:15 End Date: 05/23/2023 17:47

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			17:25																									
ZZZZZZ			17:28																									
ZZZZZZ			17:30																									
CCV 280-613561/209	1		17:33	X																								
CCVL 280-613561/210	1		17:36	X																								
CCB 280-613561/211	1		17:38	X																								
ZZZZZZ			17:41																									
ZZZZZZ			17:43																									
ZZZZZZ			17:47																									

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver　　Job No.: 280-176674-1

SDG No.:

Instrument ID: NOEQUIP　　Analysis Method: 9034

Start Date: 05/19/2023 17:27　　End Date: 05/19/2023 17:27

Lab Sample Id	D/F	Type	Time	Analytes																									
				S2																									
LCS 280-613197/1-A	1	T	17:27	X																									
MB 280-613197/2-A	1	T	17:27	X																									
ZZZZZZ			17:27																										
ZZZZZZ			17:27																										
ZZZZZZ			17:27																										
ZZZZZZ			17:27																										
ZZZZZZ			17:27																										
ZZZZZZ			17:27																										
ZZZZZZ			17:27																										
ZZZZZZ			17:27																										
280-176674-7	1	T	17:27	X																									
280-176674-8	1	T	17:27	X																									
ZZZZZZ			17:27																										

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056

Start Date: 05/18/2023 11:56 End Date: 05/19/2023 11:12

Lab Sample Id	D/F	Type	Time	Analytes																										
				NO2-N	NO3																									
STD 280-612961/1 IC			11:56	X	X																									
STD 280-612961/2 IC	1		12:11	X	X																									
STD 280-612961/3 IC	1		12:26	X	X																									
STD 280-612961/4 IC	1		12:40	X	X																									
STD 280-612961/5 IC	1		12:55	X	X																									
STD 280-612961/6 IC	1		13:10	X	X																									
ICV 280-612961/7	1		13:25	X	X																									
ICB 280-612961/8	1		13:40	X	X																									
RTC 280-612961/9			13:55																											
MRL 280-612961/10	1	T	14:10	X	X																									
LCS 280-612961/11	1	T	14:25	X	X																									
LCSD 280-612961/12	1	T	14:40	X	X																									
MB 280-612961/13	1	T	14:55	X	X																									
ZZZZZZ			15:10																											
ZZZZZZ			15:25																											
ZZZZZZ			15:40																											
ZZZZZZ			15:56																											
ZZZZZZ			16:11																											
280-176674-5	20	T	16:26		X																									
280-176674-6	20	T	16:41		X																									
ZZZZZZ			16:56																											
ZZZZZZ			17:11																											
ZZZZZZ			17:26																											
CCV 280-612961/24	1		17:41	X	X																									
CCB 280-612961/25	1		17:56	X	X																									
ZZZZZZ			18:11																											
ZZZZZZ			18:26																											
ZZZZZZ			18:41																											
ZZZZZZ			18:56																											
ZZZZZZ			19:11																											
280-176674-7	1	T	19:26	X	X																									
280-176674-8	1	T	19:41	X	X																									
ZZZZZZ			19:56																											
ZZZZZZ			20:11																											
ZZZZZZ			20:27																											
CCV 280-612961/36	1		20:42	X	X																									
CCB 280-612961/37	1		20:57	X	X																									
ZZZZZZ			21:12																											
ZZZZZZ			21:27																											

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056

Start Date: 05/18/2023 11:56 End Date: 05/19/2023 11:12

Lab Sample Id	D/F	Type	Time	Analytes																										
				NO2-N	NO3																									
ZZZZZZ			21:42																											
ZZZZZZ			21:57																											
ZZZZZZ			22:12																											
ZZZZZZ			22:27																											
ZZZZZZ			22:42																											
ZZZZZZ			22:57																											
ZZZZZZ			23:12																											
ZZZZZZ			23:26																											
CCV 280-612961/48	1		23:41		X																									
CCB 280-612961/49	1		23:56		X																									
ZZZZZZ			00:11																											
ZZZZZZ			00:26																											
ZZZZZZ			00:41																											
LCS 280-612961/53	1	T	00:56		X																									
LCSD 280-612961/54	1	T	01:11		X																									
MB 280-612961/55	1	T	01:26		X																									
ZZZZZZ			01:41																											
ZZZZZZ			01:56																											
ZZZZZZ			02:11																											
ZZZZZZ			02:26																											
CCV 280-612961/60	1		02:42		X																									
CCB 280-612961/61	1		02:57		X																									
ZZZZZZ			03:12																											
ZZZZZZ			03:27																											
ZZZZZZ			03:42																											
ZZZZZZ			03:57																											
ZZZZZZ			04:12																											
ZZZZZZ			04:27																											
ZZZZZZ			04:42																											
ZZZZZZ			04:57																											
ZZZZZZ			05:12																											
ZZZZZZ			05:27																											
CCV 280-612961/72	1		05:42		X																									
CCB 280-612961/73	1		05:57		X																									
ZZZZZZ			06:12																											
ZZZZZZ			06:27																											
280-176674-9	1	T	06:42		X																									
ZZZZZZ			06:57																											
ZZZZZZ			07:12																											

FORM XIII-IN

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056

Start Date: 05/18/2023 11:56 End Date: 05/19/2023 11:12

Lab Sample Id	D/F	Type	Time	Analytes																									
				NO2-N	NO3																								
ZZZZZZ			07:27																										
ZZZZZZ			07:42																										
ZZZZZZ			07:57																										
ZZZZZZ			08:12																										
ZZZZZZ			08:27																										
CCV 280-612961/84	1		08:42		X																								
CCB 280-612961/85	1		08:57		X																								
ZZZZZZ			09:12																										
ZZZZZZ			09:27																										
ZZZZZZ			09:42																										
ZZZZZZ			09:57																										
ZZZZZZ			10:12																										
ZZZZZZ			10:27																										
ZZZZZZ			10:42																										
CCV 280-612961/93			10:57																										
CCB 280-612961/107			11:12																										

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056

Start Date: 05/22/2023 16:00 End Date: 05/23/2023 03:30

Lab Sample Id	D/F	Type	Time	Analytes
				NO3
CCV 280-613351/1	1		16:00	X
CCB 280-613351/2	1		16:14	X
MRL 280-613351/3	1	T	16:29	X
LCS 280-613351/4	1	T	16:44	X
LCSD 280-613351/5	1	T	16:59	X
MB 280-613351/6	1	T	17:14	X
ZZZZZZ			17:29	
ZZZZZZ			17:44	
ZZZZZZ			17:59	
ZZZZZZ			18:14	
ZZZZZZ			18:29	
ZZZZZZ			18:44	
280-176674-3	2000	T	18:59	X
ZZZZZZ			19:14	
ZZZZZZ			19:29	
ZZZZZZ			19:44	
CCV 280-613351/17	1		19:59	X
CCB 280-613351/18	1		20:15	X
ZZZZZZ			20:30	
ZZZZZZ			20:45	
ZZZZZZ			21:00	
CCV 280-613351/29			23:00	
CCB 280-613351/30			23:15	
ZZZZZZ			01:31	
ZZZZZZ			01:46	
CCV 280-613351/41			02:01	
CCB 280-613351/42			02:16	
ZZZZZZ			02:31	
ZZZZZZ			02:46	
ZZZZZZ			03:01	
CCV 280-613351/46			03:16	
CCB 280-613351/47			03:30	

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056A

Start Date: 05/18/2023 11:56 End Date: 05/19/2023 11:12

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
STD 280-612962/1 IC	1		11:56	X																								
STD 280-612962/2 IC	1		12:11	X																								
STD 280-612962/3 IC	1		12:26	X																								
STD 280-612962/4 IC	1		12:40	X																								
STD 280-612962/5 IC	1		12:55	X																								
STD 280-612962/6 IC	1		13:10	X																								
ICV 280-612962/7	1		13:25	X																								
ICB 280-612962/8	1		13:40	X																								
RTC 280-612962/9			13:55																									
MRL 280-612962/10	1	T	14:10	X																								
LCS 280-612962/11	1	T	14:25	X																								
LCSD 280-612962/12	1	T	14:40	X																								
MB 280-612962/13	1	T	14:55	X																								
ZZZZZZ			15:25																									
ZZZZZZ			15:40																									
ZZZZZZ			15:56																									
ZZZZZZ			16:11																									
ZZZZZZ			16:26																									
ZZZZZZ			16:41																									
ZZZZZZ			16:56																									
ZZZZZZ			17:11																									
ZZZZZZ			17:26																									
CCV 280-612962/24	1		17:41	X																								
CCB 280-612962/25	1		17:56	X																								
ZZZZZZ			18:11																									
ZZZZZZ			18:26																									
ZZZZZZ			18:41																									
ZZZZZZ			18:56																									
ZZZZZZ			19:11																									
280-176674-7	1	T	19:26	X																								
280-176674-8	1	T	19:41	X																								
ZZZZZZ			19:56																									
ZZZZZZ			20:11																									
ZZZZZZ			20:27																									
CCV 280-612962/36	1		20:42	X																								
CCB 280-612962/37	1		20:57	X																								
ZZZZZZ			21:12																									
ZZZZZZ			21:27																									
ZZZZZZ			21:42																									
ZZZZZZ			21:57																									
ZZZZZZ			22:12																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056A

Start Date: 05/18/2023 11:56 End Date: 05/19/2023 11:12

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
ZZZZZZ			22:27																									
ZZZZZZ			22:42																									
ZZZZZZ			22:57																									
ZZZZZZ			23:12																									
ZZZZZZ			23:26																									
CCV 280-612962/48			23:41																									
CCB 280-612962/49			23:56																									
ZZZZZZ			00:11																									
ZZZZZZ			00:26																									
ZZZZZZ			00:41																									
ZZZZZZ			00:56																									
ZZZZZZ			01:11																									
ZZZZZZ			01:26																									
ZZZZZZ			01:41																									
ZZZZZZ			01:56																									
ZZZZZZ			02:11																									
ZZZZZZ			02:26																									
CCV 280-612962/60			02:42																									
CCB 280-612962/61			02:57																									
ZZZZZZ			03:12																									
ZZZZZZ			03:27																									
ZZZZZZ			03:42																									
ZZZZZZ			03:57																									
ZZZZZZ			04:12																									
ZZZZZZ			04:27																									
ZZZZZZ			04:57																									
ZZZZZZ			05:12																									
ZZZZZZ			05:27																									
CCV 280-612962/72			05:42																									
CCB 280-612962/73			05:57																									
ZZZZZZ			06:12																									
ZZZZZZ			06:27																									
ZZZZZZ			06:42																									
ZZZZZZ			06:57																									
ZZZZZZ			07:12																									
ZZZZZZ			07:27																									
ZZZZZZ			07:42																									
ZZZZZZ			07:57																									
ZZZZZZ			08:12																									
ZZZZZZ			08:27																									
CCV 280-612962/84			08:42																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056A

Start Date: 05/18/2023 11:56 End Date: 05/19/2023 11:12

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
CCB 280-612962/85			08:57																									
ZZZZZZ			09:12																									
ZZZZZZ			09:27																									
ZZZZZZ			09:42																									
ZZZZZZ			09:57																									
ZZZZZZ			10:12																									
ZZZZZZ			10:27																									
ZZZZZZ			10:42																									
CCV 280-612962/93			10:57																									
CCB 280-612962/107			11:12																									

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Instrument ID: WC_SHI5 Analysis Method: 9060

Start Date: 05/19/2023 18:03 End Date: 05/20/2023 17:05

Lab Sample Id	D/F	Type	Time	Analytes
				TOCQ
ICV 280-613268/1	1		18:03	X
ICB 280-613268/2	1		18:17	X
LCS 280-613268/3	1	T	18:31	X
MB 280-613268/4	1	T	18:46	X
ZZZZZZ			19:00	
280-176674-7	1	T	19:17	X
280-176674-7 MS	1	T	19:32	X
280-176674-7 MSD	1	T	19:46	X
ZZZZZZ			20:02	
ZZZZZZ			20:17	
ZZZZZZ			20:33	
ZZZZZZ			20:47	
ZZZZZZ			21:01	
ZZZZZZ			21:16	
CCV 280-613268/15	1		21:30	X
CCB 280-613268/16	1		21:45	X
ZZZZZZ			22:00	
ZZZZZZ			22:16	
ZZZZZZ			22:31	
ZZZZZZ			22:45	
ZZZZZZ			22:59	
ZZZZZZ			23:14	
ZZZZZZ			23:30	
ZZZZZZ			23:44	
ZZZZZZ			23:59	
ZZZZZZ			00:13	
CCV 280-613268/27			00:28	
CCB 280-613268/28			00:42	
ZZZZZZ			00:57	
ZZZZZZ			01:13	
ZZZZZZ			01:27	
ZZZZZZ			01:45	
ZZZZZZ			02:02	
ZZZZZZ			02:16	
ZZZZZZ			02:31	
ZZZZZZ			02:45	
ZZZZZZ			02:59	
ZZZZZZ			03:13	
CCV 280-613268/39			03:30	
CCB 280-613268/40			03:45	

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Instrument ID: WC_SHI5 Analysis Method: 9060

Start Date: 05/19/2023 18:03 End Date: 05/20/2023 17:05

Lab Sample Id	D/F	Type	Time	Analytes
				TOCQ
ZZZZZZ			03:59	
ZZZZZZ			04:14	
ZZZZZZ			04:30	
ZZZZZZ			04:44	
ZZZZZZ			05:02	
ZZZZZZ			05:19	
ZZZZZZ			05:33	
ZZZZZZ			05:47	
ZZZZZZ			06:02	
ZZZZZZ			06:16	
CCV 280-613268/51			06:32	
CCB 280-613268/52			06:47	
ZZZZZZ			07:01	
ZZZZZZ			07:17	
ZZZZZZ			07:33	
ZZZZZZ			07:48	
ZZZZZZ			08:04	
ZZZZZZ			08:21	
ZZZZZZ			08:37	
ZZZZZZ			08:51	
ZZZZZZ			09:07	
ZZZZZZ			09:22	
CCV 280-613268/63			09:36	
CCB 280-613268/64			09:51	
ZZZZZZ			10:05	
ZZZZZZ			10:19	
ZZZZZZ			10:33	
ZZZZZZ			10:48	
ZZZZZZ			11:02	
ZZZZZZ			11:18	
ZZZZZZ			11:34	
ZZZZZZ			11:49	
ZZZZZZ			12:03	
ZZZZZZ			12:19	
CCV 280-613268/75			12:36	
CCB 280-613268/76			12:50	
ZZZZZZ			13:05	
ZZZZZZ			13:19	
ZZZZZZ			13:35	
ZZZZZZ			13:49	

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Instrument ID: WC_SHI5 Analysis Method: 9060

Start Date: 05/19/2023 18:03 End Date: 05/20/2023 17:05

Lab Sample Id	D/F	Type	Time	Analytes																									
				TOCQ																									
ZZZZZZ			14:06																										
ZZZZZZ			14:21																										
ZZZZZZ			14:35																										
ZZZZZZ			14:49																										
ZZZZZZ			15:06																										
ZZZZZZ			15:20																										
CCV 280-613268/87			15:35																										
CCB 280-613268/88			15:50																										
ZZZZZZ			16:04																										
ZZZZZZ			16:20																										
ZZZZZZ			16:34																										
CCV 280-613268/92			16:51																										
CCB 280-613268/93			17:05																										

Prep Types:
T = Total/NA

FORM XIII-IN

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 05/19/2023 12:32 End Date: 05/20/2023 07:16

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
RINSE 280-613263/1			12:32																									
ZZZZZZ			12:40																									
ZZZZZZ			12:43																									
ZZZZZZ			12:51																									
ZZZZZZ			12:58																									
ZZZZZZ			13:04																									
ZZZZZZ			13:12																									
ZZZZZZ			13:21																									
ZZZZZZ			13:26																									
ZZZZZZ			13:33																									
ZZZZZZ			13:39																									
ZZZZZZ			13:47																									
ZZZZZZ			13:53																									
ZZZZZZ			14:00																									
ZZZZZZ			14:04																									
ZZZZZZ			14:11																									
CCV 280-613263/17			14:19																									
CCB 280-613263/18			14:25																									
ZZZZZZ			14:31																									
ZZZZZZ			14:37																									
ZZZZZZ			14:42																									
ZZZZZZ			14:47																									
ZZZZZZ			14:52																									
ZZZZZZ			14:59																									
ZZZZZZ			15:06																									
ZZZZZZ			15:15																									
ZZZZZZ			15:26																									
ZZZZZZ			15:35																									
CCV 280-613263/29	1		15:42	X																								
CCB 280-613263/30	1		15:49	X																								
LCS 280-613263/31	1	T	15:57	X																								
LCSD 280-613263/32	1	T	16:04	X																								
MB 280-613263/33	1	T	16:11	X																								
ZZZZZZ			16:22																									
ZZZZZZ			16:34																									
ZZZZZZ			16:40																									
ZZZZZZ			16:48																									
ZZZZZZ			16:55																									
ZZZZZZ			17:01																									
ZZZZZZ			17:06																									
ZZZZZZ			17:11																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 05/19/2023 12:32 End Date: 05/20/2023 07:16

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
280-176674-7	1	T	17:16	X																								
280-176674-8	1	T	17:22	X																								
CCV 280-613263/44	1		17:30	X																								
CCB 280-613263/45	1		17:36	X																								
ZZZZZZ			17:43																									
ZZZZZZ			17:50																									
ZZZZZZ			17:55																									
ZZZZZZ			18:01																									
ZZZZZZ			18:14																									
ZZZZZZ			18:21																									
ZZZZZZ			18:28																									
ZZZZZZ			18:38																									
ZZZZZZ			18:50																									
ZZZZZZ			19:01																									
CCV 280-613263/56			19:09																									
CCB 280-613263/57			19:14																									
ZZZZZZ			19:22																									
ZZZZZZ			19:28																									
ZZZZZZ			19:40																									
ZZZZZZ			19:51																									
ZZZZZZ			20:05																									
ZZZZZZ			20:21																									
ZZZZZZ			20:34																									
ZZZZZZ			20:49																									
ZZZZZZ			20:55																									
ZZZZZZ			21:00																									
ZZZZZZ			21:07																									
ZZZZZZ			21:15																									
CCV 280-613263/70			21:23																									
CCB 280-613263/71			21:29																									
ZZZZZZ			21:36																									
ZZZZZZ			21:45																									
ZZZZZZ			21:53																									
ZZZZZZ			22:02																									
ZZZZZZ			22:13																									
ZZZZZZ			22:18																									
ZZZZZZ			22:25																									
ZZZZZZ			22:32																									
ZZZZZZ			22:52																									
ZZZZZZ			23:12																									
CCV 280-613263/82			23:21																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 05/19/2023 12:32 End Date: 05/20/2023 07:16

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
CCB 280-613263/83			23:27																									
ZZZZZZ			23:35																									
ZZZZZZ			23:41																									
ZZZZZZ			23:47																									
ZZZZZZ			23:53																									
ZZZZZZ			23:59																									
ZZZZZZ			00:05																									
ZZZZZZ			00:11																									
ZZZZZZ			00:17																									
ZZZZZZ			00:23																									
ZZZZZZ			00:29																									
ZZZZZZ			00:37																									
ZZZZZZ			00:43																									
CCV 280-613263/96			00:51																									
CCB 280-613263/97			00:57																									
ZZZZZZ			01:12																									
ZZZZZZ			01:20																									
ZZZZZZ			01:41																									
ZZZZZZ			02:03																									
ZZZZZZ			02:10																									
ZZZZZZ			02:16																									
ZZZZZZ			02:24																									
ZZZZZZ			02:34																									
ZZZZZZ			02:42																									
ZZZZZZ			02:51																									
CCV 280-613263/108			02:59																									
CCB 280-613263/109			03:05																									
ZZZZZZ			03:12																									
ZZZZZZ			03:18																									
ZZZZZZ			03:26																									
ZZZZZZ			03:33																									
ZZZZZZ			03:39																									
ZZZZZZ			03:45																									
ZZZZZZ			03:51																									
ZZZZZZ			03:57																									
ZZZZZZ			04:03																									
ZZZZZZ			04:09																									
ZZZZZZ			04:15																									
ZZZZZZ			04:22																									
CCV 280-613263/122			04:30																									
CCB 280-613263/123			04:36																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 05/19/2023 12:32 End Date: 05/20/2023 07:16

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
ZZZZZZ			04:44																									
ZZZZZZ			04:51																									
ZZZZZZ			04:58																									
ZZZZZZ			05:04																									
ZZZZZZ			05:15																									
ZZZZZZ			05:35																									
ZZZZZZ			05:56																									
ZZZZZZ			06:15																									
ZZZZZZ			06:35																									
ZZZZZZ			06:55																									
RINSE 280-613263/134			07:02																									
CCV 280-613263/135			07:10																									
CCB 280-613263/136			07:16																									

Prep Types:
T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Batch Number: 613561 Batch Start Date: 05/23/23 08:15 Batch Analyst: Peterson, McKenzy M

Batch Method: 350.1 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	350.1 cal 00583	350.1 ICV 00564	
ICV 280-613561/14		350.1		no	100 mL	100 mL		2.5 mL	
ICVL 280-613561/15		350.1		no	100 mL	100 mL		0.5 mL	
ICB 280-613561/16		350.1		no	30 mL	30 mL			
CCV 280-613561/83		350.1		no	100 mL	100 mL	2.5 mL		
CCVL 280-613561/84		350.1		no	100 mL	100 mL	0.5 mL		
CCB 280-613561/85		350.1		no	10 mL	10 mL			
LCS 280-613561/89		350.1		no	100 mL	100 mL	2.5 mL		
MB 280-613561/90		350.1		no	30 mL	30 mL			
CCV 280-613561/96		350.1		no	100 mL	100 mL	2.5 mL		
CCVL 280-613561/97		350.1		no	100 mL	100 mL	0.5 mL		
CCB 280-613561/98		350.1		no	10 mL	10 mL			
280-176674-B-5	LL12mw-185-230401-GW	350.1	T	no	10 mL	10 mL			
280-176674-B-5 MS	LL12mw-185-230401-GW	350.1	T	no	10 mL	10 mL	0.1 mL		
280-176674-B-5 MSD	LL12mw-185-230401-GW	350.1	T	no	10 mL	10 mL	0.1 mL		
CCV 280-613561/111		350.1		no	100 mL	100 mL	2.5 mL		
CCVL 280-613561/112		350.1		no	100 mL	100 mL	0.5 mL		
CCB 280-613561/113		350.1		no	10 mL	10 mL			
280-176674-B-6	LL12mw-185-230402-GW	350.1	T	no	10 mL	10 mL			
280-176674-B-9	LL12mw-245-230401-GW	350.1	T	no	10 mL	10 mL			
CCV 280-613561/124		350.1		no	100 mL	100 mL	2.5 mL		
CCVL 280-613561/125		350.1		no	100 mL	100 mL	0.5 mL		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Batch Number: 613561 Batch Start Date: 05/23/23 08:15 Batch Analyst: Peterson, McKenzy M

Batch Method: 350.1 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	350.1 cal 00583	350.1 ICV 00564	
CCV 280-613561/195		350.1		no	100 mL	100 mL	2.5 mL		
CCVL 280-613561/196		350.1		no	100 mL	100 mL	0.5 mL		
CCB 280-613561/197		350.1		no	10 mL	10 mL			
280-176674-B-3	LL12mw-187-230401-GW	350.1	T	no	10 mL	10 mL			
CCV 280-613561/209		350.1		no	100 mL	100 mL	2.5 mL		
CCVL 280-613561/210		350.1		no	100 mL	100 mL	0.5 mL		
CCB 280-613561/211		350.1		no	10 mL	10 mL			

Batch Notes	
Dechlorination Agent ID	Na2S2O3_00002
pH Indicator ID	HC293086
Acid used for pH adjustment	SulfuricAcid_00288
Sodium Nitroprusside ID	Na Nitro_00050
Hypochlorite ID	Na Hypo_00050
EDTA Buffer ID	Buffer A_00039
Potassium Sodium Tartrate ID	Buffer B_00058
Carrier Identification	Ammonia Rinse_00056
Sodium Salicylate ID	Sodium Sal_00028
Pipette/Syringe/Dispenser ID	SAH500, 1000 INTERCESSOR, BWH 200

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.: 280-176674-1

SDG No.:

Batch Number: 613197 Batch Start Date: 05/19/23 15:58 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 280-613197/1		9030B, 9034		50 mL	50 mL	1	7 SU	<2 SU	5 mL
MB 280-613197/2		9030B, 9034		50 mL	50 mL	2	7 SU	<2 SU	5 mL
280-176674-E-7	FBQmw-173-230401-GW-R	9030B, 9034	T	50 mL	50 mL	11	12+ SU	<2 SU	5 mL
280-176674-B-8	FBQmw-173-230402-GW-R	9030B, 9034	T	50 mL	50 mL	12	12+ SU	<2 SU	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD CAL INT 02403					
LCS 280-613197/1		9030B, 9034		1 mL					
MB 280-613197/2		9030B, 9034							
280-176674-E-7	FBQmw-173-230401-GW-R	9030B, 9034	T						
280-176674-B-8	FBQmw-173-230402-GW-R	9030B, 9034	T						

Batch Notes	
Formaldehyde ID	Form_00125
Zinc Acetate Buffer ID	znac_00127
Pipette/Syringe/Dispenser ID	WC-5000BOD1
Sulfuric Acid Reagent ID Number	SulfuricAcid_00288
Balance ID	M19170
pH Indicator ID	HC157843
Oven, Bath or Block Temperature 1	80 Degrees C
Distillation Start Time	05/19/2023 12:30
Uncorrected Temperature 2	80 Degrees C
Oven, Bath or Block Temperature 2	80 Degrees C
Distillation End Time	05/19/2023 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.: 280-176674-1

SDG No.:

Batch Number: 613208 Batch Start Date: 05/19/23 17:27 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 280-613197/1-A		9034		0.0 mL	3.0 mL	1.25 mL	3 mL	50 mL	
MB 280-613197/2-A		9034		3.0 mL	4.0 mL	0.25 mL	1 mL	50 mL	
280-176674-E-7-A	FBQmw-173-230401-GW-R	9034	T	16.1 mL	17.1 mL	0.25 mL	1 mL	50 mL	
280-176674-B-8-A	FBQmw-173-230402-GW-R	9034	T	17.1 mL	18.0 mL	0.25 mL	0.899999999999999 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.: 280-176674-1

SDG No.:

Batch Number: 612961 Batch Start Date: 05/18/23 11:56 Batch Analyst: Collins, Michael E

Batch Method: 9056 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Cl ICV Std 00006	IC CAL cl/so4 00480	IC Cal low 00709	IC ICV 5 00405
STD 280-612961/2 IC		9056		10 mL	10 mL		0.1 mL	0.08 mL	
STD 280-612961/3 IC		9056		10 mL	10 mL		0.2 mL	0.2 mL	
STD 280-612961/4 IC		9056		10 mL	10 mL		2.4 mL	0.4 mL	
STD 280-612961/5 IC		9056		10 mL	10 mL		4.8 mL	1 mL	
STD 280-612961/6 IC		9056		10 mL	10 mL		8 mL	2 mL	
ICV 280-612961/7		9056		10 mL	10 mL	0.8 mL			0.8 mL
ICB 280-612961/8		9056		10 mL	10 mL				
MRL 280-612961/10		9056		10 mL	10 mL		0.1 mL	0.05 mL	
LCS 280-612961/11		9056		10 mL	10 mL				
LCSD 280-612961/12		9056		10 mL	10 mL				
MB 280-612961/13		9056		10 mL	10 mL				
280-176674-A-5	LL12mw-185-230401-GW	9056	T	10 mL	10 mL				
280-176674-A-6	LL12mw-185-230402-GW	9056	T	10 mL	10 mL				
CCV 280-612961/24		9056		10 mL	10 mL				
CCB 280-612961/25		9056		10 mL	10 mL				
280-176674-A-7	FBQmw-173-230401-GW-R	9056	T	10 mL	10 mL				
280-176674-A-8	FBQmw-173-230402-GW-R	9056	T	10 mL	10 mL				
CCV 280-612961/36		9056		10 mL	10 mL				
CCB 280-612961/37		9056		10 mL	10 mL				
CCV 280-612961/48		9056		10 mL	10 mL				
CCB 280-612961/49		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.: 280-176674-1

SDG No.:

Batch Number: 612961 Batch Start Date: 05/18/23 11:56 Batch Analyst: Collins, Michael E

Batch Method: 9056 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Cl ICV Std 00006	IC CAL cl/so4 00480	IC Cal low 00709	IC ICV 5 00405
LCS 280-612961/53		9056		10 mL	10 mL				
LCSD 280-612961/54		9056		10 mL	10 mL				
MB 280-612961/55		9056		10 mL	10 mL				
CCV 280-612961/60		9056		10 mL	10 mL				
CCB 280-612961/61		9056		10 mL	10 mL				
CCV 280-612961/72		9056		10 mL	10 mL				
CCB 280-612961/73		9056		10 mL	10 mL				
280-176674-A-9	LL12mw-245-230401-GW	9056	T	10 mL	10 mL				
CCV 280-612961/84		9056		10 mL	10 mL				
CCB 280-612961/85		9056		10 mL	10 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	IC LCS 01954	IC SO4 ICV 00024				
STD 280-612961/2 IC		9056							
STD 280-612961/3 IC		9056							
STD 280-612961/4 IC		9056							
STD 280-612961/5 IC		9056							
STD 280-612961/6 IC		9056							
ICV 280-612961/7		9056			0.8 mL				
ICB 280-612961/8		9056							
MRL 280-612961/10		9056							
LCS 280-612961/11		9056		5 mL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Batch Number: 612961 Batch Start Date: 05/18/23 11:56 Batch Analyst: Collins, Michael E

Batch Method: 9056 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	IC LCS 01954	IC SO4 ICV 00024				
LCSD 280-612961/12		9056		5 mL					
MB 280-612961/13		9056							
280-176674-A-5	LL12mw-185-230401-GW	9056	T						
280-176674-A-6	LL12mw-185-230402-GW	9056	T						
CCV 280-612961/24		9056		10 mL					
CCB 280-612961/25		9056							
280-176674-A-7	FBQmw-173-230401-GW-R	9056	T						
280-176674-A-8	FBQmw-173-230402-GW-R	9056	T						
CCV 280-612961/36		9056		10 mL					
CCB 280-612961/37		9056							
CCV 280-612961/48		9056		10 mL					
CCB 280-612961/49		9056							
LCS 280-612961/53		9056		10 mL					
LCSD 280-612961/54		9056		10 mL					
MB 280-612961/55		9056							
CCV 280-612961/60		9056		10 mL					
CCB 280-612961/61		9056							
CCV 280-612961/72		9056		10 mL					
CCB 280-612961/73		9056							
280-176674-A-9	LL12mw-245-230401-GW	9056	T						
CCV 280-612961/84		9056		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.: 280-176674-1

SDG No.:

Batch Number: 612961 Batch Start Date: 05/18/23 11:56 Batch Analyst: Collins, Michael E

Batch Method: 9056 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	IC LCS 01954	IC SO4 ICV 00024				
CCB 280-612961/85		9056							

Batch Notes	
Filter ID	SF020E
Pipette/Syringe/Dispenser ID	ARM5000, 100HEX, 200CJ, 100IC
Sufficient Volume for Batch QC	yes
Eluent 1 ID	IC10 Eluent_00006
Batch Comment	MEC

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Batch Number: 613351 Batch Start Date: 05/22/23 16:00 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 00480	IC Cal low 00709	IC LCS 01954	
CCV 280-613351/1		9056		10 mL	10 mL			10 mL	
CCB 280-613351/2		9056		10 mL	10 mL				
MRL 280-613351/3		9056		10 mL	10 mL	0.2 mL	0.1 mL		
LCS 280-613351/4		9056		10 mL	10 mL			10 mL	
LCSD 280-613351/5		9056		10 mL	10 mL			10 mL	
MB 280-613351/6		9056		10 mL	10 mL				
280-176674-A-3	LL12mw-187-230401-GW	9056	T	10 mL	10 mL				
CCV 280-613351/17		9056		10 mL	10 mL			10 mL	
CCB 280-613351/18		9056		10 mL	10 mL				

Batch Notes	
Filter ID	SF020E
Pipette/Syringe/Dispenser ID	ARM5000, 1000HEX, 200CJ, IC100, AB8A100, BMF100
Sufficient Volume for Batch QC	Y
Eluent 1 ID	IC10 ELUENT_00006
Batch Comment	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.: 280-176674-1

SDG No.:

Batch Number: 612962 Batch Start Date: 05/18/23 11:56 Batch Analyst: Collins, Michael E

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Cl ICV Std 00006	IC CAL cl/so4 00480	IC Cal low 00709	IC ICV 5 00405
STD 280-612962/1 IC		9056A		10 mL	10 mL		0.04 mL		
STD 280-612962/2 IC		9056A		10 mL	10 mL		0.1 mL	0.08 mL	
STD 280-612962/3 IC		9056A		10 mL	10 mL		0.2 mL	0.2 mL	
STD 280-612962/4 IC		9056A		10 mL	10 mL		2.4 mL	0.4 mL	
STD 280-612962/5 IC		9056A		10 mL	10 mL		4.8 mL	1 mL	
STD 280-612962/6 IC		9056A		10 mL	10 mL		8 mL	2 mL	
ICV 280-612962/7		9056A		10 mL	10 mL	0.8 mL			0.8 mL
ICB 280-612962/8		9056A		10 mL	10 mL				
MRL 280-612962/10		9056A		10 mL	10 mL		0.1 mL	0.05 mL	
LCS 280-612962/11		9056A		10 mL	10 mL				
LCSD 280-612962/12		9056A		10 mL	10 mL				
MB 280-612962/13		9056A		10 mL	10 mL				
CCV 280-612962/24		9056A		10 mL	10 mL				
CCB 280-612962/25		9056A		10 mL	10 mL				
280-176674-A-7	FBQmw-173-230401-GW-R	9056A	T	10 mL	10 mL				
280-176674-A-8	FBQmw-173-230402-GW-R	9056A	T	10 mL	10 mL				
CCV 280-612962/36		9056A		10 mL	10 mL				
CCB 280-612962/37		9056A		10 mL	10 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	IC LCS 01954	IC SO4 ICV 00024				
STD 280-612962/1 IC		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.: 280-176674-1

SDG No.:

Batch Number: 612962 Batch Start Date: 05/18/23 11:56 Batch Analyst: Collins, Michael E

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	IC LCS 01954	IC SO4 ICV 00024				
STD 280-612962/2 IC		9056A							
STD 280-612962/3 IC		9056A							
STD 280-612962/4 IC		9056A							
STD 280-612962/5 IC		9056A							
STD 280-612962/6 IC		9056A							
ICV 280-612962/7		9056A			0.8 mL				
ICB 280-612962/8		9056A							
MRL 280-612962/10		9056A							
LCS 280-612962/11		9056A		5 mL					
LCSD 280-612962/12		9056A		5 mL					
MB 280-612962/13		9056A							
CCV 280-612962/24		9056A		10 mL					
CCB 280-612962/25		9056A							
280-176674-A-7	FBQmw-173-230401-GW-R	9056A	T						
280-176674-A-8	FBQmw-173-230402-GW-R	9056A	T						
CCV 280-612962/36		9056A		10 mL					
CCB 280-612962/37		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.: 280-176674-1

SDG No.:

Batch Number: 612962 Batch Start Date: 05/18/23 11:56 Batch Analyst: Collins, Michael E

Batch Method: 9056A Batch End Date:

Batch Notes	
Filter ID	SF020E
Pipette/Syringe/Dispenser ID	ARM5000, 1000HEX, 200CJ, 100IC
Sufficient Volume for Batch QC	yes
Eluent 1 ID	IC10 Eluent_00006
Batch Comment	MEC

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Batch Number: 613268 Batch Start Date: 05/19/23 18:03 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 280-613268/1		9060		50 mL	50 mL	<2 SU	1 mL		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
ICB 280-613268/2		9060		20 mL	20 mL	<2 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
LCS 280-613268/3		9060		200 mL	200 mL	<2 SU		5 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
MB 280-613268/4		9060		20 mL	20 mL	<2 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-176674-D-7	FBQmw-173-230401-GW-R	9060	T	20 mL	20 mL	<2 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-176674-D-7 MS	FBQmw-173-230401-GW-R	9060	T	50 mL	50 mL	<2 SU		1.25 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-176674-D-7 MSD	FBQmw-173-230401-GW-R	9060	T	50 mL	50 mL	<2 SU		1.25 mL	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.: 280-176674-1

SDG No.:

Batch Number: 613268 Batch Start Date: 05/19/23 18:03 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 280-613268/15		9060		200 mL	200 mL	<2 SU		5 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
CCB 280-613268/16		9060		20 mL	20 mL	<2 SU			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.

Batch Notes	
Acid ID	0.2% H2SO4_00462, H2SO4_00214
Combustion Catylyst ID	S638-92069-02
Pipette/Syringe/Dispenser ID	BWH 5000,1000 MS
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.: 280-176674-1

SDG No.:

Batch Number: 613270 Batch Start Date: 05/19/23 18:03 Batch Analyst: Wondimu, Akewak B

Batch Method: 9060 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	Final pH	TOC ICV Std 00051	TOC LCS Std 00057
LCS 280-613270/3		9060		200 mL	200 mL	<2 SU	<2 SU		5 mL
MB 280-613270/4		9060		20 mL	20 mL	<2 SU	<2 SU		
280-176674-D-7	FBQmw-173-230401-GW-R	9060	T	20 mL	20 mL	<2 SU	<2 SU		
280-176674-D-7 MS	FBQmw-173-230401-GW-R	9060	T	50 mL	50 mL	<2 SU	<2 SU		1.25 mL
280-176674-D-7 MSD	FBQmw-173-230401-GW-R	9060	T	50 mL	50 mL	<2 SU	<2 SU		1.25 mL
LCSD 280-613270/35		9060		100 mL	100 mL	<2 SU	<2 SU	2.5 mL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
LCS 280-613270/3		9060		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
MB 280-613270/4		9060		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-176674-D-7	FBQmw-173-230401-GW-R	9060	T	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-176674-D-7 MS	FBQmw-173-230401-GW-R	9060	T	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-176674-1

SDG No.:

Batch Number: 613270 Batch Start Date: 05/19/23 18:03 Batch Analyst: Wondimu, Akewak B

Batch Method: 9060 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
280-176674-D-7 MSD	FBQmw-173-230401 -GW-R	9060	T	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
LCSD 280-613270/35		9060		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					

Batch Notes	
Acid ID	0.2% H2SO4_00462, H2SO4_00214
Combustion Catylyst ID	S638-92069-02
Pipette/Syringe/Dispenser ID	BWH 5000,1000 MS
pH Paper ID	HC205981
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.: 280-176674-1

SDG No.:

Batch Number: 613263 Batch Start Date: 05/19/23 12:32 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 01088				
CCV 280-613263/29		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-613263/30		SM 2320B		InitialAmount is blank					
LCS 280-613263/31		SM 2320B		InitialAmount is blank	10 mL				
LCSD 280-613263/32		SM 2320B		InitialAmount is blank	10 mL				
MB 280-613263/33		SM 2320B		InitialAmount is blank					
280-176674-A-7	FBQmw-173-230401-GW-R	SM 2320B	T	InitialAmount is blank					
280-176674-A-8	FBQmw-173-230402-GW-R	SM 2320B	T	InitialAmount is blank					
CCV 280-613263/44		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-613263/45		SM 2320B		InitialAmount is blank					

Batch Notes	
Nominal Amount Used	10 mL
Acid ID	0.02 H2SO4_00303
Normality of First Titrant	0.02 N
Sodium Carbonate ID	Alk Stk Std_00023
pH Buffer 1 ID	pH 2.0 buffer_00100
pH Buffer 2 ID	pH 4.0 buffer_00211
pH Buffer 3 ID	pH 7.0 buffer_00323
pH Buffer 4 ID	pH 7.0 buffer_00322
pH Buffer 5 ID	pH 10 buffer_00163
pH Buffer 6 ID	pH 12 buffer_00182
Probe ID	PCE 80 pH 1200D_8918
Batch Comment	KG

Basis	Basis Description
T	Total/NA

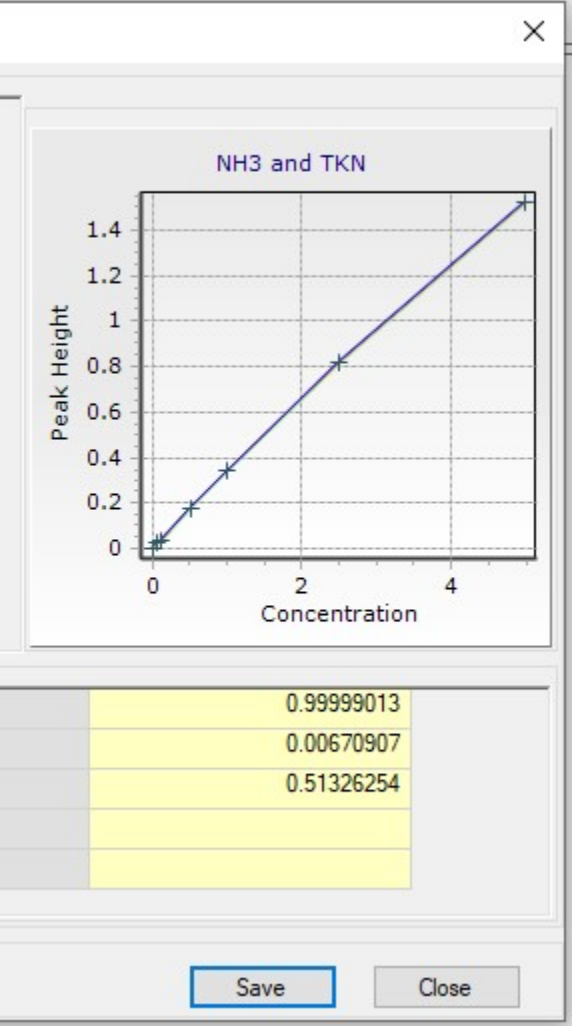
The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Select/deselect Standards

	SerialNumber	Cup position	Sample Type	Identity	Concentration	Corrected Height	Result	Use this	Y Residuals	Relative Error(%)
1	4	ST1	S1	0 mg/L	0.000	-0.001	-0.009	☑		
2	5	ST2	S2	0.05	0.050	0.021	0.055	☑	8.6%	10.5%
3	6	ST3	S3	0.1	0.100	0.038	0.104	☑	3.91%	4.32%
4	7	ST4	S4	0.5	0.500	0.172	0.496	☑	-0.75%	-0.76%
5	8	ST5	S5	1	1.000	0.342	1.005	☑	0.45%	0.47%
6	9	ST6	S6	2.5	2.500	0.816	2.498	☑	-0.09%	-0.09%
7	10	ST7	S7	5	5.000	1.524	5.000	☑	0.01%	0.01%

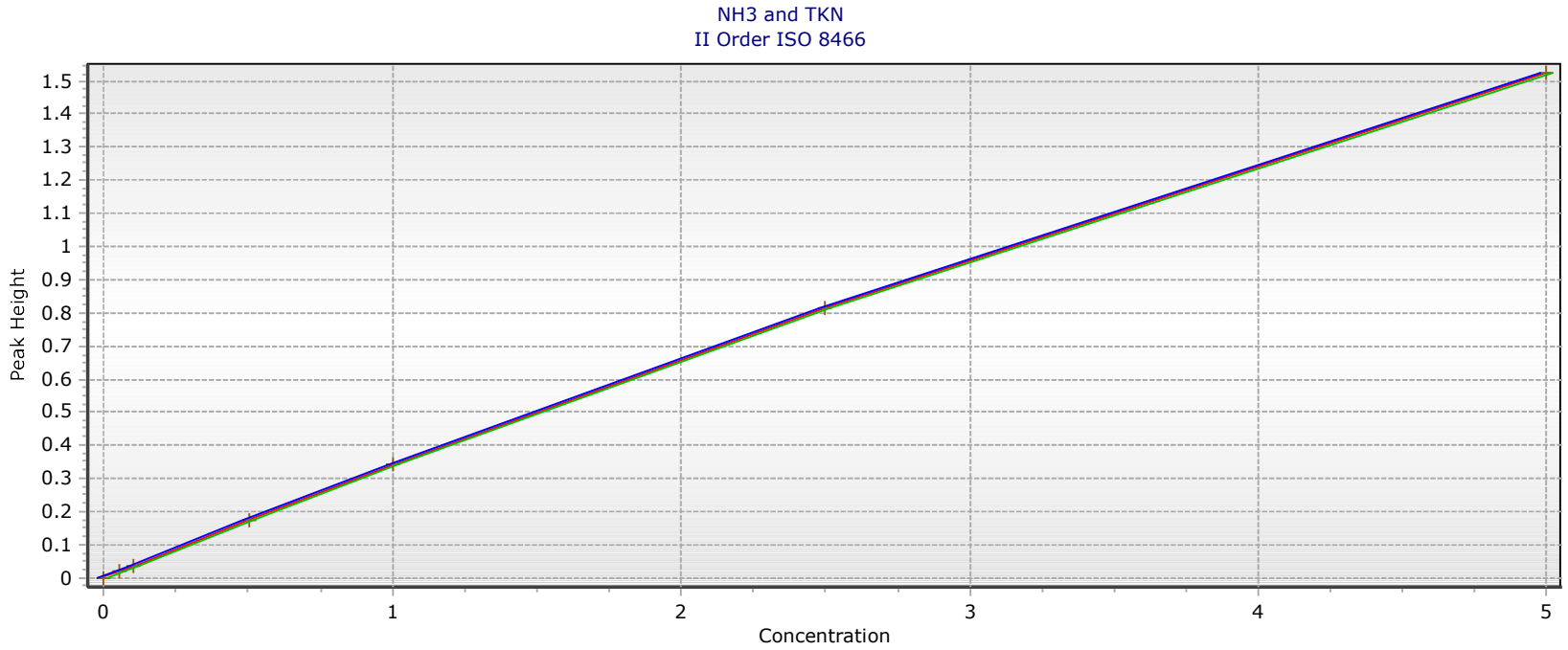
Method Name	Ammonia	a	0.00199894	R Squared
Module Name	NH3 and TKN	b	0.34728059	Constant Sx0
Calibration Order	II Order ISO 8466	c	-0.00856484	Constant Vx0
Residual Std. Dev. (Sy)	0.00217970902050	d		
		Correlation Coefficient	0.99933221	

Calibration Order: II Order ISO 8466


NH3 and TKN
Peak Height
1.4
1.2
1
0.8
0.6
0.4
0.2
0
0
2
4
Concentration
0.99999013
0.00670907
0.51326254
Save
Close

FlowAccessV3

Date:May 23 2023 5:29PM

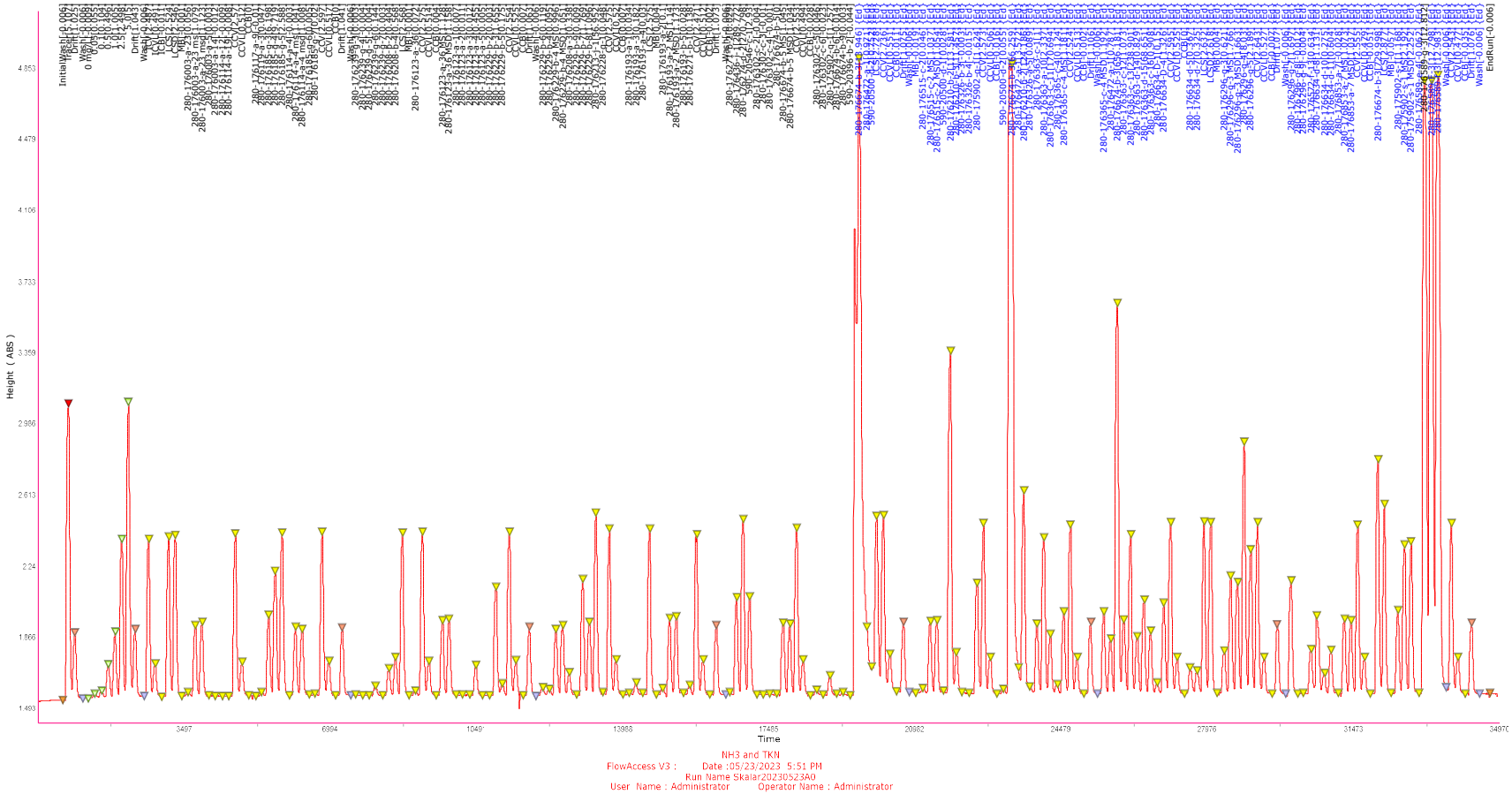


a = 0.0019989397283142 b = 0.3472805936030370 c =-0.0085648353783778 RSD = 0.00217970902050

r =0.99933221456885 R2 = 0.99999013246634

Run Name : Skalar20230523A0

User Name : Administrator Operator Name : Administrator



5/31/2023 9:08 PM

FlowAccessV3 Results Report

Run Name : Skalar20230523A0
DateTime :May 23 2023 8:05AM
User Name : Administrator Operator Name : Administrator

	Position	SampleType	SampleIdentity	Comments	ExternalDilution
1	IW	IW	InitialWash		1.0000
2	ST7	T	Tracer		1.0000
3	ST5	D	Drift		1.0000
4	WT	W	Wash		1.0000
5	ST1	S1	0 mg/L		1.0000
6	ST2	S2	0.05		1.0000
7	ST3	S3	0.1		1.0000
8	ST4	S4	0.5		1.0000
9	ST5	S5	1.0		1.0000
10	ST6	S6	2.5		1.0000
11	ST7	S7	5.0		1.0000
12	ST5	D	Drift		1.0000
13	WT	W	Wash		1.0000
14	ST8	U	ICV		1.0000
15	ST9	U	ICVL		1.0000
16	ST1	U	ICB		1.0000
17	D29	U	LCS		1.0000
18	D30	U	LCSD		1.0000
19	ST1	U	MB		1.0000
20	A1	U	280-176003-a-23		1.0000
21	A2	U	280-176003-a-23 ms		1.0000
22	A3	U	280-176003-a-23 msd		1.0000
23	A4	U	280-176003-a-5		1.0000
24	A5	U	280-176003-a-14		1.0000
25	A6	U	280-176114-a-12		1.0000
26	A7	U	280-176114-a-19		1.0000
27	ST6	U	CCV		1.0000
28	ST4	U	CCVL		1.0000
29	WT	U	CCB		1.0000
30	A8	U	280-176117-a-9		1.0000
31	A9	U	280-176119-a-3		1.0000
32	A10	U	280-176185-g-3		5.0000
33	A11	U	280-176185-g-4		5.0000
34	A12	U	280-176185-g-5		1.0000
35	A13	U	280-176114-a-4		1.0000
36	A14	U	280-176114-a-4 ms		1.0000
37	A15	U	280-176114-a-4 msd		1.0000
38	A16	U	280-176185-g-6		1.0000
39	A17	U	280-176185-g-7		1.0000
40	ST6	U	CCV		1.0000

Run Name : Skalar20230523A0
DateTime :May 23 2023 8:05AM
User Name : Administrator Operator Name : Administrator

	Position	SampleType	SampleIdentity	Comments	ExternalDilution
41	ST4	U	CCVL		1.0000
42	WT	U	CCB		1.0000
43	ST5	D	Drift		1.0000
44	WT	W	Wash		1.0000
45	A18	U	280-176239-g-3		1.0000
46	A19	U	280-176239-g-4		1.0000
47	A20	U	280-176239-g-5		1.0000
48	A21	U	280-176239-g-6		1.0000
49	A22	U	280-176239-g-7		1.0000
50	A23	U	280-176208-b-2		1.0000
51	A24	U	280-176208-b-4		1.0000
52	D29	U	LCS		1.0000
53	ST1	U	MB		1.0000
54	A25	U	280-176123-a-36		1.0000
55	ST6	U	CCV		1.0000
56	ST4	U	CCVL		1.0000
57	WT	U	CCB		1.0000
58	A26	U	280-176123-a-36 MS		1.0000
59	A27	U	280-176123-a-36 MSD		1.0000
60	A28	U	280-176123-a-1		1.0000
61	A29	U	280-176123-a-2		1.0000
62	A30	U	280-176123-a-3		1.0000
63	A31	U	280-176123-a-4		1.0000
64	A32	U	280-176123-a-5		1.0000
65	A33	U	280-176229-b-2		1.0000
66	A34	U	280-176229-b-3		1.0000
67	A35	U	280-176229-b-5		1.0000
68	ST6	U	CCV		1.0000
69	ST4	U	CCVL		1.0000
70	WT	U	CCB		1.0000
71	ST5	D	Drift		1.0000
72	WT	W	Wash		1.0000
73	B1	U	280-176229-b-6		1.0000
74	B2	U	280-176229-b-4		1.0000
75	B3	U	280-176229-b-4 MS		1.0000
76	B4	U	280-176229-b-4 MSD		1.0000
77	B5	U	280-176208-a-3		1.0000
78	B6	U	280-176229-b-9		1.0000
79	B7	U	280-176229-b-7		1.0000
80	B8	U	280-176229-b-8		1.0000

Run Name : Skalar20230523A0
DateTime :May 23 2023 8:05AM
User Name : Administrator Operator Name : Administrator

	Position	SampleType	SampleIdentity	Comments	ExternalDilution
81	B9	U	280-176213-j-1		20.0000
82	B10	U	280-176228-q-1		1.0000
83	ST6	U	CCV		1.0000
84	ST4	U	CCVL		1.0000
85	WT	U	CCB		1.0000
86	B11	U	280-176193-a-1		1.0000
87	B12	U	280-176193-a-3		1.0000
88	B13	U	280-176193-a-4		1.0000
89	D29	U	LCS		1.0000
90	ST1	U	MB		1.0000
91	B14	U	280-176193-a-2		1.0000
92	B15	U	280-176193-a-2 MS		1.0000
93	B16	U	280-176193-a-2 MSD		1.0000
94	B17	U	280-176193-b-5		1.0000
95	B18	U	280-176271-b-1		1.0000
96	ST6	U	CCV		1.0000
97	ST4	U	CCVL		1.0000
98	WT	U	CCB		1.0000
99	ST5	D	Drift		1.0000
100	WT	W	Wash		1.0000
101	B19	U	280-176271-b-2		1.0000
102	B20	U	280-176436-i-1		200.0000
103	B21	U	280-176274-d-2		100.0000
104	B22	U	590-20546-c-1		2.0000
105	B23	U	280-176302-c-2		1.0000
106	B24	U	280-176302-c-3		1.0000
107	B25	U	280-176302-c-4		1.0000
108	B26	U	280-176674-b-5		1.0000
109	B27	U	280-176674-b-5 MS		1.0000
110	B28	U	280-176674-b-5 MSD		1.0000
111	ST6	U	CCV		1.0000
112	ST4	U	CCVL		1.0000
113	WT	U	CCB		1.0000
114	B29	U	280-176302-c-5		1.0000
115	B30	U	280-176302-c-6		1.0000
116	B31	U	280-175902-q-1		5.0000
117	B32	U	280-176674-b-6		1.0000
118	B33	U	280-176674-b-9		1.0000
119	B34	U	590-20396-b-2		1.0000
120	B35	U	280-176674-b-3		1.0000

Run Name : Skalar20230523A0
DateTime :May 23 2023 8:05AM
User Name : Administrator Operator Name : Administrator

	Position	SampleType	SampleIdentity	Comments	ExternalDilution
121	C1	U	280-176472-a-1		1.0000
122	C2	U	590-20500-d-2		2.0000
123	D29	U	LCS		1.0000
124	ST6	U	CCV		1.0000
125	ST4	U	CCVL		1.0000
126	WT	U	CCB		1.0000
127	ST5	D	Drift		1.0000
128	WT	W	Wash		1.0000
129	ST1	U	MB		1.0000
130	C3	U	280-176515-c-2		1.0000
131	C4	U	280-176515-c-2 MS		1.0000
132	C5	U	280-176515-c-2 MSD		1.0000
133	C6	U	590-20500-d-1		2.0000
134	C7	U	280-176210-b-2		20.0000
135	C8	U	280-176210-b-3		20.0000
136	C9	U	280-176326-b-3		1.0000
137	C10	U	280-176326-b-4		1.0000
138	B31	U	280-175902-q-1	rerun @ no dilution	1.0000
139	ST6	U	CCV		1.0000
140	ST4	U	CCVL		1.0000
141	WT	U	CCB		1.0000
142	C2	U	590-20500-d-2	rerun @ no dilution	1.0000
143	B35	U	280-176674-b-3	rerun @ a dilution	5.0000
144	C1	U	280-176472-a-1	rerun @ a dilution	10.0000
145	C7	U	280-176210-b-2	rerun @ a higher dilution	40.0000
146	C11	U	280-176326-a-5		1.0000
147	C12	U	280-176363-c-1		1.0000
148	C13	U	280-176363-a-10		1.0000
149	C14	U	280-176363-C-11		200.0000
150	C15	U	280-176365-c-4		1.0000
151	C16	U	280-176365-c-4 MS		1.0000
152	ST6	U	CCV		1.0000
153	ST4	U	CCVL		1.0000
154	WT	U	CCB		1.0000
155	ST5	D	Drift		1.0000
156	WT	W	Wash		1.0000
157	C17	U	280-176365-c-4 MSD		1.0000
158	C1	U	280-176472-a-1	rerun @ 1x for elevated result	1.0000
159	B35	U	280-176674-b-3	rerun @ a higher dilution	100.0000
160	C18	U	280-176363-c-12		1.0000

Run Name : Skalar20230523A0
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User Name : Administrator Operator Name : Administrator

	Position	SampleType	SampleIdentity	Comments	ExternalDilution
161	C19	U	280-176363-c-13		100.0000
162	C20	U	280-176363-d-14		1.0000
163	C21	U	280-176363-d-15		50.0000
164	C22	U	280-176363-c-16		1.0000
165	C23	U	280-176634-D-1		1.0000
166	C24	U	280-176634-D-4		1.0000
167	ST6	U	CCV		1.0000
168	ST4	U	CCVL		1.0000
169	WT	U	CCB		1.0000
170	C25	U	280-176634-d-5		1.0000
171	C26	U	280-176634-d-7		1.0000
172	D29	U	LCS		1.0000
173	D30	U	LCSD		1.0000
174	ST1	U	MB		1.0000
175	C27	U	280-176296-g-3		1.0000
176	C28	U	280-176296-g-3 MS		1.0000
177	C29	U	280-176296-g-3 MSD		1.0000
178	C30	U	280-176296-g-4		2.0000
179	C31	U	280-176296-g-5		1.0000
180	ST6	U	CCV		1.0000
181	ST4	U	CCVL		1.0000
182	WT	U	CCB		1.0000
183	ST5	D	Drift		1.0000
184	WT	W	Wash		1.0000
185	C32	U	280-176296-g-7		1.0000
186	C33	U	280-176296-g-8		1.0000
187	C34	U	280-176296-g-9		1.0000
188	C35	U	280-176572-f-13		1.0000
189	D1	U	280-176634-d-8		1.0000
190	D2	U	280-176634-d-10		1.0000
191	D3	U	280-176634-d-11		1.0000
192	D4	U	280-176853-a-7		1.0000
193	D5	U	280-176853-a-7 MS		1.0000
194	D6	U	280-176853-a-7 MSD		1.0000
195	ST6	U	CCV		1.0000
196	ST4	U	CCVL		1.0000
197	WT	U	CCB		1.0000
198	B35	U	280-176674-b-3	rerun @ a higher dilution	200.0000
199	D29	U	LCS	FILTRATION	1.0000
200	ST1	U	MB	FILTRATION	1.0000

Run Name : Skalar20230523A0
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User Name : Administrator Operator Name : Administrator

	Position	SampleType	SampleIdentity	Comments	ExternalDilution
201	D8	U	280-175902-s-1	FILTRATION	1.0000
202	D9	U	280-175902-s-1 MS	FILTRATION	1.0000
203	D10	U	280-175902-s-1 MSD	FILTRATION	1.0000
204	D11	U	280-176589-e-4		1.0000
205	D12	U	280-176589-g-3	upreserved	1.0000
206	D13	U	280-176589-F-3	TREATED chlorine/iodine/peroxide+	1.0000
207	D14	U	280-176589-f-3	UNTREATED chlorine/iodine/peroxide	1.0000
208	WT	W	Wash		1.0000
209	ST6	U	CCV		1.0000
210	ST4	U	CCVL		1.0000
211	WT	U	CCB		1.0000
212	ST5	D	Drift		1.0000
213	WT	W	Wash		1.0000
214	E	E	EndRun		1.0000

Run Name : Skalar20230523A0
DateTime :May 23 2023 8:05AM
User Name : Administrator Operator Name : Administrator

	NH3 and TKN- Results	NH3 and TKN-	NH3 and TKN-
1	-0.006	0.0000	May 23 2023 8:15AM
2	5.107	1.5522	May 23 2023 8:17AM
3	1.025	0.3491	May 23 2023 8:21AM
4	-0.006	0.0000	May 23 2023 8:24AM
5	-0.009	-0.0010	May 23 2023 8:27AM
6	0.055	0.0212	May 23 2023 8:29AM
7	0.104	0.0381	May 23 2023 8:32AM
8	0.496	0.1722	May 23 2023 8:34AM
9	1.005	0.3423	May 23 2023 8:37AM
10	2.498	0.8160	May 23 2023 8:40AM
11	5.000	1.5244	May 23 2023 8:42AM
12	1.043	0.3547	May 23 2023 8:45AM
13	-0.006	0.0000	May 23 2023 8:48AM
14	2.487	0.8128	May 23 2023 8:51AM
15	0.491	0.1706	May 23 2023 8:53AM
16	-0.011	-0.0018	May 23 2023 8:56AM
17	2.524	0.8238	May 23 2023 8:58AM
18	2.546	0.8306	May 23 2023 9:01AM
19	-0.001	0.0015	May 23 2023 9:04AM
20	0.056	0.0213	May 23 2023 9:06AM
21	1.079	0.3667	May 23 2023 9:09AM
22	1.123	0.3811	May 23 2023 9:12AM
23	0.003	0.0031	May 23 2023 9:14AM
24	-0.012	-0.0021	May 23 2023 9:17AM
25	-0.009	-0.0012	May 23 2023 9:20AM
26	-0.008	-0.0007	May 23 2023 9:22AM
27	2.570	0.8378	May 23 2023 9:25AM
28	0.512	0.1774	May 23 2023 9:28AM
29	0.000	0.0019	May 23 2023 9:30AM
30	-0.010	-0.0014	May 23 2023 9:33AM
31	0.047	0.0184	May 23 2023 9:36AM
32	6.198	0.4193	May 23 2023 9:38AM
33	9.719	0.6447	May 23 2023 9:41AM
34	2.588	0.8435	May 23 2023 9:43AM
35	-0.003	0.0009	May 23 2023 9:46AM
36	1.041	0.3542	May 23 2023 9:49AM
37	1.008	0.3434	May 23 2023 9:52AM
38	0.005	0.0038	May 23 2023 9:54AM
39	0.020	0.0089	May 23 2023 9:57AM
40	2.597	0.8461	May 23 2023 9:59AM

Run Name : Skalar20230523A0
DateTime :May 23 2023 8:05AM
User Name : Administrator Operator Name : Administrator

	NH3 and TKN- Results	NH3 and TKN-	NH3 and TKN-
41	0.517	0.1794	May 23 2023 10:02AM
42	0.000	0.0020	May 23 2023 10:05AM
43	1.041	0.3544	May 23 2023 10:08AM
44	-0.006	0.0000	May 23 2023 10:10AM
45	0.003	0.0029	May 23 2023 10:14AM
46	-0.004	0.0006	May 23 2023 10:16AM
47	-0.004	0.0007	May 23 2023 10:18AM
48	0.144	0.0519	May 23 2023 10:21AM
49	0.003	0.0029	May 23 2023 10:24AM
50	0.404	0.1408	May 23 2023 10:26AM
51	0.568	0.1964	May 23 2023 10:29AM
52	2.568	0.8373	May 23 2023 10:32AM
53	-0.001	0.0017	May 23 2023 10:34AM
54	0.072	0.0270	May 23 2023 10:37AM
55	2.575	0.8396	May 23 2023 10:40AM
56	0.514	0.1784	May 23 2023 10:42AM
57	0.004	0.0033	May 23 2023 10:45AM
58	1.128	0.3830	May 23 2023 10:48AM
59	1.158	0.3928	May 23 2023 10:50AM
60	0.007	0.0045	May 23 2023 10:53AM
61	0.011	0.0057	May 23 2023 10:56AM
62	0.012	0.0061	May 23 2023 10:58AM
63	0.455	0.1582	May 23 2023 11:01AM
64	0.005	0.0038	May 23 2023 11:04AM
65	0.003	0.0031	May 23 2023 11:06AM
66	1.655	0.5533	May 23 2023 11:09AM
67	0.175	0.0625	May 23 2023 11:12AM
68	2.554	0.8332	May 23 2023 11:14AM
69	0.525	0.1820	May 23 2023 11:17AM
70	0.007	0.0046	May 23 2023 11:20AM
71	1.063	0.3615	May 23 2023 11:22AM
72	-0.006	0.0000	May 23 2023 11:25AM
73	0.119	0.0432	May 23 2023 11:28AM
74	0.095	0.0348	May 23 2023 11:30AM
75	0.996	0.3395	May 23 2023 11:33AM
76	1.051	0.3575	May 23 2023 11:36AM
77	0.338	0.1184	May 23 2023 11:38AM
78	0.009	0.0051	May 23 2023 11:41AM
79	1.769	0.5897	May 23 2023 11:44AM
80	1.096	0.3724	May 23 2023 11:46AM

Run Name : Skalar20230523A0
DateTime :May 23 2023 8:05AM
User Name : Administrator Operator Name : Administrator

	NH3 and TKN- Results	NH3 and TKN-	NH3 and TKN-
81	56.952	0.9215	May 23 2023 11:49AM
82	0.048	0.0187	May 23 2023 11:52AM
83	2.575	0.8395	May 23 2023 11:54AM
84	0.520	0.1802	May 23 2023 11:57AM
85	0.007	0.0043	May 23 2023 12:00PM
86	0.034	0.0137	May 23 2023 12:02PM
87	0.182	0.0650	May 23 2023 12:05PM
88	0.030	0.0125	May 23 2023 12:08PM
89	2.575	0.8394	May 23 2023 12:10PM
90	0.004	0.0034	May 23 2023 12:13PM
91	0.100	0.0366	May 23 2023 12:16PM
92	1.140	0.3869	May 23 2023 12:18PM
93	1.173	0.3975	May 23 2023 12:21PM
94	0.028	0.0118	May 23 2023 12:24PM
95	0.138	0.0499	May 23 2023 12:26PM
96	2.471	0.8078	May 23 2023 12:29PM
97	0.512	0.1777	May 23 2023 12:32PM
98	-0.002	0.0013	May 23 2023 12:34PM
99	1.073	0.3648	May 23 2023 12:37PM
100	-0.006	0.0000	May 23 2023 12:40PM
101	0.029	0.0122	May 23 2023 12:43PM
102	289.772	0.4872	May 23 2023 12:45PM
103	270.798	0.8796	May 23 2023 12:48PM
104	2.930	0.4923	May 23 2023 12:50PM
105	-0.004	0.0005	May 23 2023 12:53PM
106	-0.010	-0.0013	May 23 2023 12:56PM
107	-0.001	0.0016	May 23 2023 12:58PM
108	0.000	0.0020	May 23 2023 1:01PM
109	1.045	0.3555	May 23 2023 1:04PM
110	1.034	0.3520	May 23 2023 1:06PM
111	2.553	0.8329	May 23 2023 1:09PM
112	0.494	0.1716	May 23 2023 1:12PM
113	-0.028	-0.0076	May 23 2023 1:14PM
114	0.046	0.0180	May 23 2023 1:17PM
115	-0.023	-0.0060	May 23 2023 1:20PM
116	1.257	0.0888	May 23 2023 1:22PM
117	-0.014	-0.0029	May 23 2023 1:25PM
118	0.003	0.0031	May 23 2023 1:28PM
119	-0.044	-0.0134	May 23 2023 1:30PM
120	13.946	3.1794	May 23 2023 1:33PM

Run Name : Skalar20230523A0
DateTime :May 23 2023 8:05AM
User Name : Administrator Operator Name : Administrator

	NH3 and TKN- Results	NH3 and TKN-	NH3 and TKN-
121	0.971	0.3312	May 23 2023 1:37PM
122	0.752	0.1313	May 23 2023 1:39PM
123	2.728	0.8856	May 23 2023 1:43PM
124	2.736	0.8881	May 23 2023 1:46PM
125	0.551	0.1906	May 23 2023 1:49PM
126	0.011	0.0059	May 23 2023 1:51PM
127	1.075	0.3655	May 23 2023 1:54PM
128	-0.006	0.0000	May 23 2023 1:57PM
129	-0.019	-0.0046	May 23 2023 1:59PM
130	0.046	0.0178	May 23 2023 2:02PM
131	1.037	0.3528	May 23 2023 2:05PM
132	1.054	0.3586	May 23 2023 2:08PM
133	0.028	0.0069	May 23 2023 2:10PM
134	113.581	1.6980	May 23 2023 2:13PM
135	11.457	0.1981	May 23 2023 2:15PM
136	-0.003	0.0010	May 23 2023 2:18PM
137	-0.015	-0.0032	May 23 2023 2:21PM
138	1.624	0.5433	May 23 2023 2:24PM
139	2.573	0.8387	May 23 2023 2:26PM
140	0.506	0.1754	May 23 2023 2:29PM
141	-0.016	-0.0036	May 23 2023 2:32PM
142	0.055	0.0209	May 23 2023 2:34PM
143	66.259	3.1000	May 23 2023 2:37PM
144	3.572	0.1250	May 23 2023 2:40PM
145	124.186	0.9976	May 23 2023 2:42PM
146	0.089	0.0329	May 23 2023 2:45PM
147	1.000	0.3408	May 23 2023 2:48PM
148	2.337	0.7667	May 23 2023 2:50PM
149	170.694	0.2922	May 23 2023 2:53PM
150	0.124	0.0448	May 23 2023 2:56PM
151	1.181	0.4002	May 23 2023 2:58PM
152	2.524	0.8241	May 23 2023 3:01PM
153	0.513	0.1779	May 23 2023 3:04PM
154	-0.002	0.0013	May 23 2023 3:06PM
155	1.106	0.3755	May 23 2023 3:09PM
156	-0.006	0.0000	May 23 2023 3:12PM
157	1.192	0.4037	May 23 2023 3:15PM
158	0.787	0.2701	May 23 2023 3:17PM
159	656.181	1.9120	May 23 2023 3:20PM
160	1.073	0.3647	May 23 2023 3:22PM

Run Name : Skalar20230523A0
DateTime :May 23 2023 8:05AM
User Name : Administrator Operator Name : Administrator

	NH3 and TKN- Results	NH3 and TKN-	NH3 and TKN-
161	238.901	0.7828	May 23 2023 3:25PM
162	0.829	0.2840	May 23 2023 3:28PM
163	68.651	0.4627	May 23 2023 3:30PM
164	0.908	0.3102	May 23 2023 3:33PM
165	0.150	0.0539	May 23 2023 3:35PM
166	1.326	0.4475	May 23 2023 3:38PM
167	2.595	0.8455	May 23 2023 3:41PM
168	0.525	0.1818	May 23 2023 3:44PM
169	0.000	0.0018	May 23 2023 3:46PM
170	0.367	0.1283	May 23 2023 3:49PM
171	0.325	0.1141	May 23 2023 3:51PM
172	2.632	0.8569	May 23 2023 3:54PM
173	2.618	0.8525	May 23 2023 3:57PM
174	0.004	0.0034	May 23 2023 4:00PM
175	0.621	0.2144	May 23 2023 4:02PM
176	1.766	0.5886	May 23 2023 4:05PM
177	1.663	0.5558	May 23 2023 4:08PM
178	8.030	1.2583	May 23 2023 4:10PM
179	2.189	0.7212	May 23 2023 4:13PM
180	2.643	0.8599	May 23 2023 4:16PM
181	0.527	0.1826	May 23 2023 4:18PM
182	-0.007	-0.0005	May 23 2023 4:21PM
183	1.070	0.3639	May 23 2023 4:24PM
184	-0.006	0.0000	May 23 2023 4:26PM
185	1.697	0.5666	May 23 2023 4:30PM
186	-0.012	-0.0021	May 23 2023 4:32PM
187	-0.004	0.0007	May 23 2023 4:34PM
188	0.634	0.2188	May 23 2023 4:37PM
189	1.131	0.3839	May 23 2023 4:39PM
190	0.275	0.0968	May 23 2023 4:42PM
191	0.604	0.2087	May 23 2023 4:45PM
192	-0.028	-0.0077	May 23 2023 4:48PM
193	1.073	0.3648	May 23 2023 4:50PM
194	1.037	0.3529	May 23 2023 4:53PM
195	2.555	0.8335	May 23 2023 4:56PM
196	0.479	0.1665	May 23 2023 4:58PM
197	-0.051	-0.0156	May 23 2023 5:01PM
198	729.998	1.1555	May 23 2023 5:04PM
199	2.877	0.9302	May 23 2023 5:06PM
200	-0.057	-0.0178	May 23 2023 5:09PM

Run Name : Skalar20230523A0
DateTime :May 23 2023 8:05AM
User Name : Administrator Operator Name : Administrator

	NH3 and TKN- Results	NH3 and TKN-	NH3 and TKN-
201	1.168	0.3959	May 23 2023 5:12PM
202	2.192	0.7221	May 23 2023 5:14PM
203	2.252	0.7407	May 23 2023 5:17PM
204	-0.062	-0.0196	May 23 2023 5:19PM
205	12.812	3.0455	May 23 2023 5:22PM
206	12.798	3.0437	May 23 2023 5:25PM
207	12.983	3.0671	May 23 2023 5:28PM
208	-0.006	0.0000	May 23 2023 5:30PM
209	2.543	0.8297	May 23 2023 5:33PM
210	0.477	0.1657	May 23 2023 5:36PM
211	-0.035	-0.0101	May 23 2023 5:38PM
212	1.076	0.3659	May 23 2023 5:41PM
213	-0.006	0.0000	May 23 2023 5:43PM
214	-0.006	0.0000	May 23 2023 5:47PM

Run Name : Skalar20230523A0
DateTime :May 23 2023 8:05AM
User Name : Administrator Operator Name : Administrator

	NH3 and TKN-
1	-0.006
2	5.107
3	1.025
4	-0.006
5	-0.009
6	0.055
7	0.104
8	0.496
9	1.005
10	2.498
11	5.000
12	1.043
13	-0.006
14	2.487
15	0.491
16	-0.011
17	2.524
18	2.546
19	-0.001
20	0.056
21	1.079
22	1.123
23	0.003
24	-0.012
25	-0.009
26	-0.008
27	2.570
28	0.512
29	0.000
30	-0.010
31	0.047
32	1.240
33	1.944
34	2.588
35	-0.003
36	1.041
37	1.008
38	0.005
39	0.020
40	2.597

Run Name : Skalar20230523A0
DateTime :May 23 2023 8:05AM
User Name : Administrator Operator Name : Administrator

	NH3 and TKN-
41	0.517
42	0.000
43	1.041
44	-0.006
45	0.003
46	-0.004
47	-0.004
48	0.144
49	0.003
50	0.404
51	0.568
52	2.568
53	-0.001
54	0.072
55	2.575
56	0.514
57	0.004
58	1.128
59	1.158
60	0.007
61	0.011
62	0.012
63	0.455
64	0.005
65	0.003
66	1.655
67	0.175
68	2.554
69	0.525
70	0.007
71	1.063
72	-0.006
73	0.119
74	0.095
75	0.996
76	1.051
77	0.338
78	0.009
79	1.769
80	1.096

Run Name : Skalar20230523A0
DateTime :May 23 2023 8:05AM
User Name : Administrator Operator Name : Administrator

	NH3 and TKN-
81	2.848
82	0.048
83	2.575
84	0.520
85	0.007
86	0.034
87	0.182
88	0.030
89	2.575
90	0.004
91	0.100
92	1.140
93	1.173
94	0.028
95	0.138
96	2.471
97	0.512
98	-0.002
99	1.073
100	-0.006
101	0.029
102	1.449
103	2.708
104	1.465
105	-0.004
106	-0.010
107	-0.001
108	0.000
109	1.045
110	1.034
111	2.553
112	0.494
113	-0.028
114	0.046
115	-0.023
116	0.251
117	-0.014
118	0.003
119	-0.044
120	13.946

Run Name : Skalar20230523A0
DateTime :May 23 2023 8:05AM
User Name : Administrator Operator Name : Administrator

	NH3 and TKN-
121	0.971
122	0.376
123	2.728
124	2.736
125	0.551
126	0.011
127	1.075
128	-0.006
129	-0.019
130	0.046
131	1.037
132	1.054
133	0.014
134	5.679
135	0.573
136	-0.003
137	-0.015
138	1.624
139	2.573
140	0.506
141	-0.016
142	0.055
143	13.252
144	0.357
145	3.105
146	0.089
147	1.000
148	2.337
149	0.853
150	0.124
151	1.181
152	2.524
153	0.513
154	-0.002
155	1.106
156	-0.006
157	1.192
158	0.787
159	6.562
160	1.073

Run Name : Skalar20230523A0
DateTime :May 23 2023 8:05AM
User Name : Administrator Operator Name : Administrator

	NH3 and TKN-
161	2.389
162	0.829
163	1.373
164	0.908
165	0.150
166	1.326
167	2.595
168	0.525
169	0.000
170	0.367
171	0.325
172	2.632
173	2.618
174	0.004
175	0.621
176	1.766
177	1.663
178	4.015
179	2.189
180	2.643
181	0.527
182	-0.007
183	1.070
184	-0.006
185	1.697
186	-0.012
187	-0.004
188	0.634
189	1.131
190	0.275
191	0.604
192	-0.028
193	1.073
194	1.037
195	2.555
196	0.479
197	-0.051
198	3.650
199	2.877
200	-0.057

Run Name : Skalar20230523A0
DateTime :May 23 2023 8:05AM
User Name : Administrator Operator Name : Administrator

	NH3 and TKN-
201	1.168
202	2.192
203	2.252
204	-0.062
205	12.812
206	12.798
207	12.983
208	-0.006
209	2.543
210	0.477
211	-0.035
212	1.076
213	-0.006
214	-0.006

General Chemistry Raw Data Report

Job ID: 280-176674-1

Batch: 613208 **Analyst Initials: CAI**

Method: 9034 **Instrument: No Equipment Used for this Test**

Lab Sample ID: LCS 280-613197/1-A **Analysis Date: May 19, 2023 17:27**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	16	mg/L	50 mL	50 mL

Lab Sample ID: MB 280-613197/2-A **Analysis Date: May 19, 2023 17:27**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-176674-E-7-A **Analysis Date: May 19, 2023 17:27**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-176674-B-8-A **Analysis Date: May 19, 2023 17:27**

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:	CAI	SOP Information:	
Date:	5/19/2023	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:	952
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	8.20	5	8.20	944.000
CAL	5	8.20	16.20	5	8.00	960.000

ICV Information	
Source/Ver-Lot#:	INT_02291
Prep Date:	4/26/2023
Made By:	CAI
Concentration:	920
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	8.50	17.00	5	8.50	920.000

TALS Raw Data Report

Job Number: 280-176524-1
LIMS Batch: 613208
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-613197/1-A** Inj Date: 5/19/2023 5:27:00PM 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	84	44 110		
Sulfide as H2S		17 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-613197/2-A** Inj Date: 5/19/2023 5:27:00PM 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: **280-176524-E-1-A** Inj Date: 5/19/2023 5:27:00PM 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: **280-176524-E-1-B MS** Inj Date: 5/19/2023 5:27:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.2 mg/L	mg/L	80	44 110		
Sulfide as H2S		16.15 mg/L	mg/L				

RS# 5 Lab ID: **280-176524-E-1-C MSD** Inj Date: 5/19/2023 5:27:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.2 mg/L	mg/L	80	44 110	0	20
Sulfide as H2S		16.15 mg/L	mg/L				

RS# 6 Lab ID: **280-176524-E-4-A** Inj Date: 5/19/2023 5:27:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

TALS Raw Data Report

Job Number: 280-176526-1
LIMS Batch: 613208
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-613197/1-A** Inj Date: 5/19/2023 5:27:00PM 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	84	44 110		
Sulfide as H2S		17 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-613197/2-A** Inj Date: 5/19/2023 5:27:00PM 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: **280-176524-E-1-A** Inj Date: 5/19/2023 5:27:00PM 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: **280-176524-E-1-B MS** Inj Date: 5/19/2023 5:27:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.2 mg/L	mg/L	80	44 110		
Sulfide as H2S		16.15 mg/L	mg/L				

RS# 5 Lab ID: **280-176524-E-1-C MSD** Inj Date: 5/19/2023 5:27:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.2 mg/L	mg/L	80	44 110	0	20
Sulfide as H2S		16.15 mg/L	mg/L				

RS# 13 Lab ID: **280-176526-O-1-A** Inj Date: 5/19/2023 5:27:00PM 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				

TALS Raw Data Report

Job Number: 280-176591-1
LIMS Batch: 613208
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-613197/1-A** Inj Date: 5/19/2023 5:27:00PM 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	84	44 110		
Sulfide as H2S		17 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-613197/2-A** Inj Date: 5/19/2023 5:27:00PM 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: **280-176524-E-1-A** Inj Date: 5/19/2023 5:27:00PM 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: **280-176524-E-1-B MS** Inj Date: 5/19/2023 5:27:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.2 mg/L	mg/L	80	44 110		
Sulfide as H2S		16.15 mg/L	mg/L				

RS# 5 Lab ID: **280-176524-E-1-C MSD** Inj Date: 5/19/2023 5:27:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.2 mg/L	mg/L	80	44 110	0	20
Sulfide as H2S		16.15 mg/L	mg/L				

RS# 7 Lab ID: **280-176591-E-2-A** Inj Date: 5/19/2023 5:27:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

RS# 8 Lab ID: **280-176591-E-4-A** Inj Date: 5/19/2023 5:27:00PM 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# 9 Lab ID: **280-176591-E-6-A** Inj Date: 5/19/2023 5:27:00PM 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# 10 Lab ID: **280-176591-E-7-A** Inj Date: 5/19/2023 5:27:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

TALS Raw Data Report

Job Number: 280-176674-1
LIMS Batch: 613208
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-613197/1-A** Inj Date: 5/19/2023 5:27:00PM 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	84	44 110		
Sulfide as H2S		17 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-613197/2-A** Inj Date: 5/19/2023 5:27:00PM 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: **280-176524-E-1-A** Inj Date: 5/19/2023 5:27:00PM 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: **280-176524-E-1-B MS** Inj Date: 5/19/2023 5:27:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.2 mg/L	mg/L	80	44 110		
Sulfide as H2S		16.15 mg/L	mg/L				

RS# 5 Lab ID: **280-176524-E-1-C MSD** Inj Date: 5/19/2023 5:27:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.2 mg/L	mg/L	80	44 110	0	20
Sulfide as H2S		16.15 mg/L	mg/L				

RS# 11 Lab ID: **280-176674-E-7-A** Inj Date: 5/19/2023 5:27:00PM 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# 12 Lab ID: **280-176674-B-8-A** Inj Date: 5/19/2023 5:27:00PM 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				

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-122				
Lims ID:	STD L2				
Client ID:					
Sample Type:	IC	Calib Level:	2		
Inject. Date:	18-May-2023 12:11:00	ALS Bottle#:	0	Worklist Smp#:	2
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0121594-002				
Misc. Info.:	280-0121594-002				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Sublist:	chrom-Anions_IC10*sub5				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m				
Limit Group:	Wet - Anions				
Last Update:	19-May-2023 11:53:46	Calib Date:	18-May-2023 13:10:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1603				
First Level Reviewer: LVW8		Date:	18-May-2023 12:58:14		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.133	3.133	0.000	5835197	NC	NC	Ma
2 Chloride	4.300	4.300	0.000	20218551	NC	NC	
3 Nitrite as N	5.002	5.002	0.000	7062392	0.2000	0.1873	
4 Bromide	6.165	6.165	0.000	2255477	NC	NC	
5 Nitrate as N	6.953	6.953	0.000	7411099	0.2000	0.1905	
6 Orthophosphate as P	9.093	9.093	0.000	8660779	0.2000	0.1157	
7 Sulfate	10.245	10.245	0.000	20026015	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

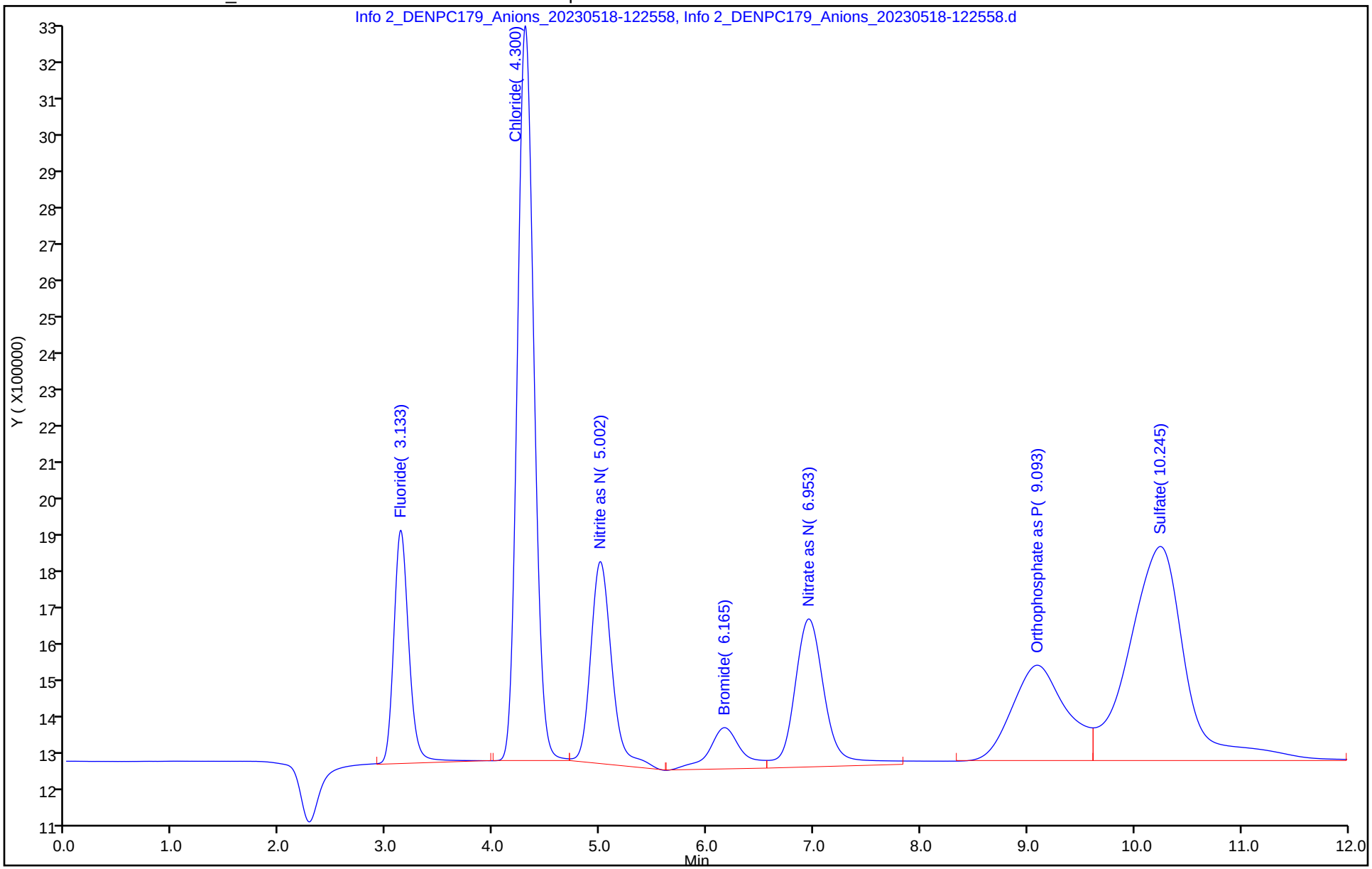
Reagents:

IC CAL cl/so4_00480	Amount Added:	0.10	Units: mL
IC Cal low_00709	Amount Added:	0.08	Units: mL

Report Date: 19-May-2023 11:53:46 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-122558.d				
Injection Date:	18-May-2023 12:11:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD L2			Worklist Smp#:	2
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/31/2023 9:08 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-124
Lims ID: STD L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 18-May-2023 12:26:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-003
Misc. Info.: 280-0121594-003
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 19-May-2023 11:53:47 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: LVW8 Date: 18-May-2023 12:58:34

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.137	3.137	0.000	18179755	NC	NC	Ma
2 Chloride	4.300	4.300	0.000	48348641	NC	NC	
3 Nitrite as N	5.000	5.000	0.000	21399863	0.5000	0.5218	
4 Bromide	6.162	6.162	0.000	4768597	NC	NC	
5 Nitrate as N	6.938	6.938	0.000	22979043	0.5000	0.5365	
6 Orthophosphate as P	9.075	9.075	0.000	20921591	0.5000	0.6419	
7 Sulfate	10.247	10.247	0.000	43450426	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

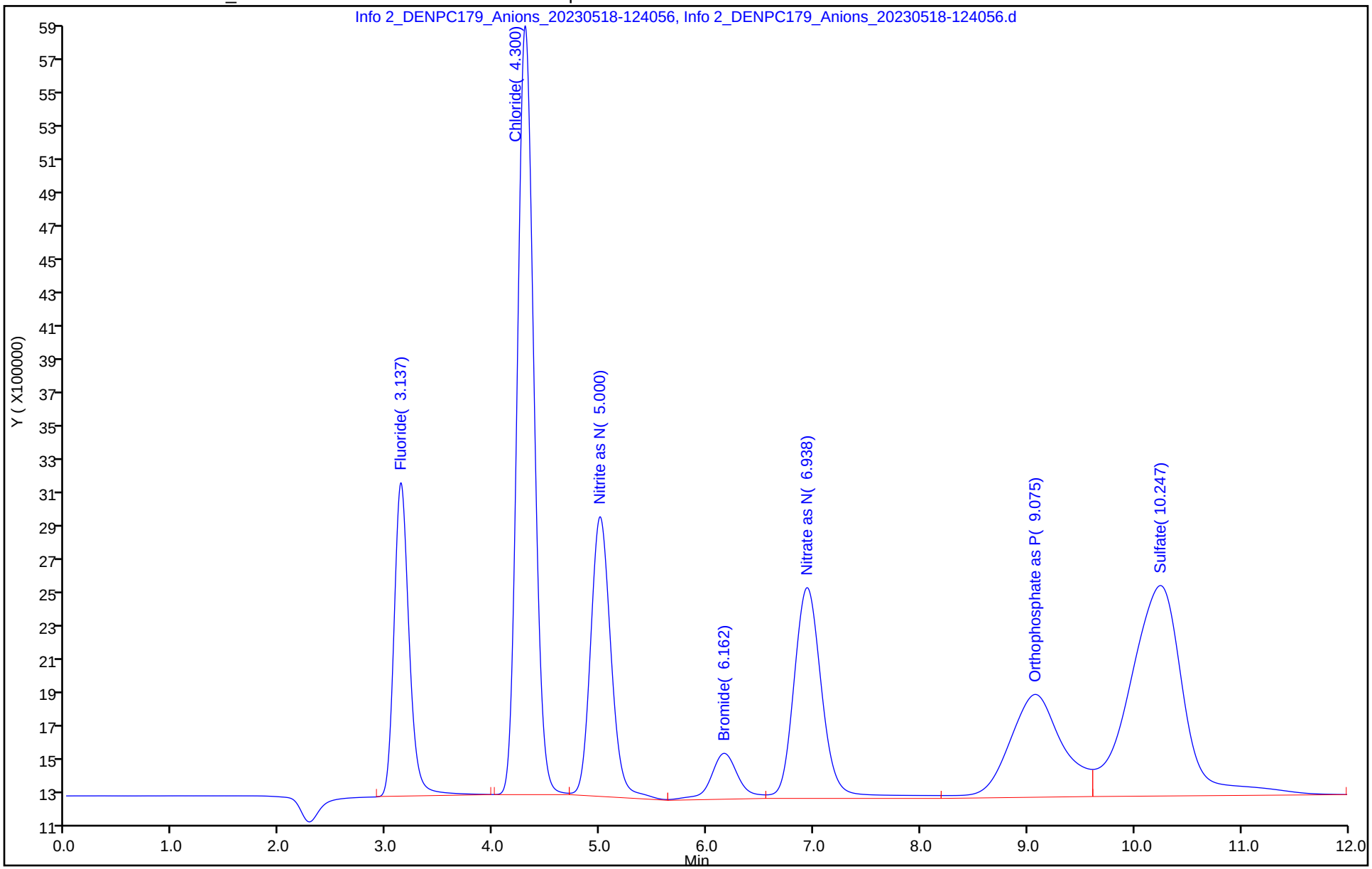
Reagents:

IC CAL cl/so4_00480 Amount Added: 0.20 Units: mL
IC Cal low_00709 Amount Added: 0.20 Units: mL

Report Date: 19-May-2023 11:53:47 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-124056.d				
Injection Date:	18-May-2023 12:26:00	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		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-125
Lims ID: STD L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 18-May-2023 12:40:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-004
Misc. Info.: 280-0121594-004
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 19-May-2023 11:53:47 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: LVW8 Date: 18-May-2023 13:29:45

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.138	3.138	0.000	39638142	NC	NC	Ma
2 Chloride	4.305	4.305	0.000	570289992	NC	NC	
3 Nitrite as N	5.000	5.000	0.000	43146865	1.00	1.03	
4 Bromide	6.162	6.162	0.000	7900278	NC	NC	
5 Nitrate as N	6.928	6.928	0.000	42854846	1.00	0.9783	
6 Orthophosphate as P	9.068	9.068	0.000	33022328	1.00	1.16	
7 Sulfate	10.242	10.242	0.000	432139991	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

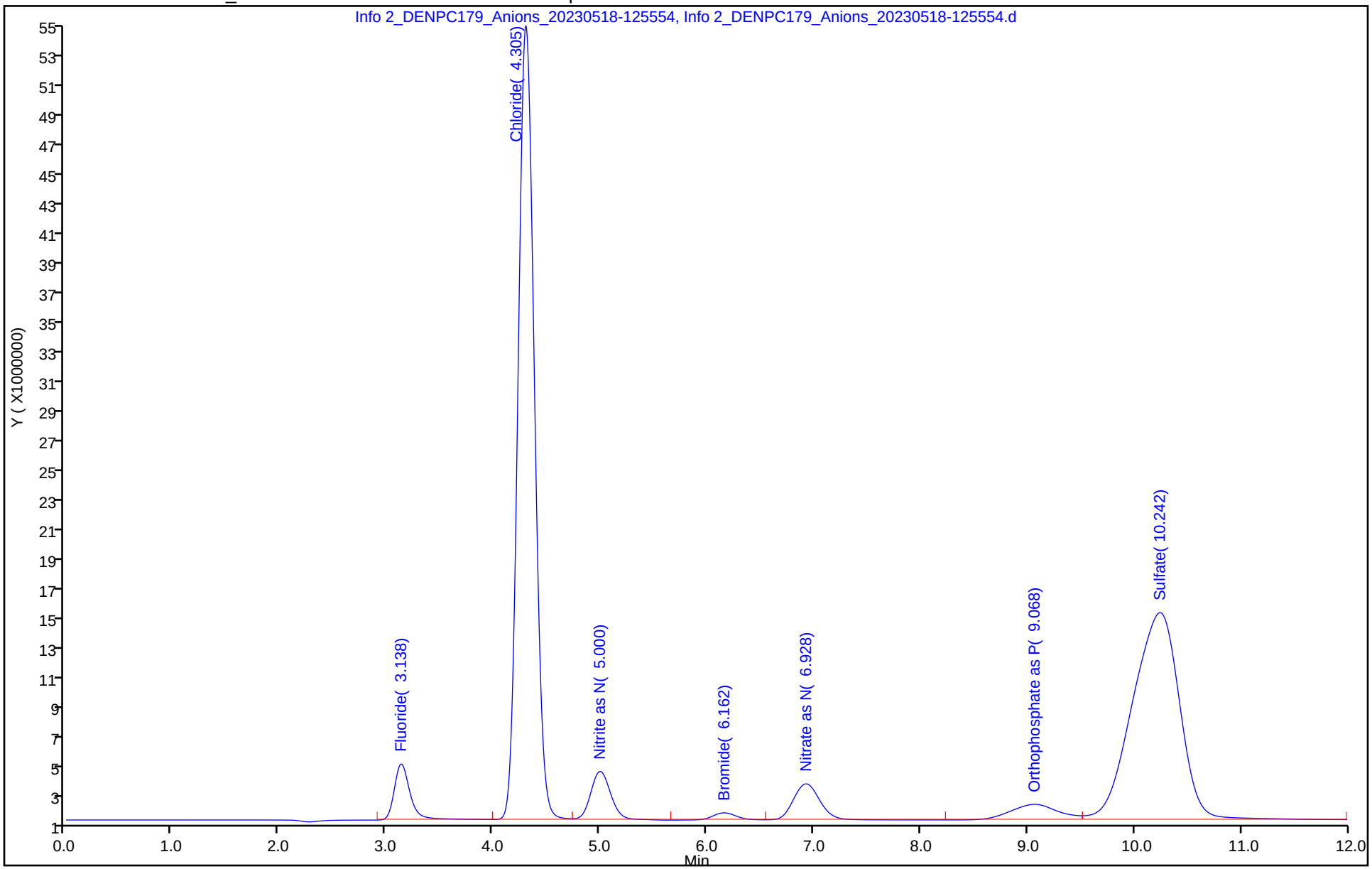
Reagents:

IC CAL cl/so4_00480 Amount Added: 2.40 Units: mL
IC Cal low_00709 Amount Added: 0.40 Units: mL

Report Date: 19-May-2023 11:53:47 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-125554.d				
Injection Date:	18-May-2023 12:40:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD L4			Worklist Smp#:	4
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-131				
Lims ID:	STD L5				
Client ID:					
Sample Type:	IC	Calib Level:	5		
Inject. Date:	18-May-2023 12:55:00	ALS Bottle#:	0	Worklist Smp#:	5
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0121594-005				
Misc. Info.:	280-0121594-005				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Sublist:	chrom-Anions_IC10*sub5				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m				
Limit Group:	Wet - Anions				
Last Update:	19-May-2023 11:53:48	Calib Date:	18-May-2023 13:10:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1603				
First Level Reviewer: LVW8		Date:	18-May-2023 13:30:00		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.140	3.140	0.000	102461401	NC	NC	Ma
2 Chloride	4.313	4.313	0.000	1123523133	NC	NC	
3 Nitrite as N	4.995	4.995	0.000	105836223	2.50	2.49	
4 Bromide	6.152	6.152	0.000	18980516	NC	NC	
5 Nitrate as N	6.903	6.903	0.000	110713949	2.50	2.49	
6 Orthophosphate as P	9.043	9.043	0.000	66560323	2.50	2.60	
7 Sulfate	10.227	10.227	0.000	831159688	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

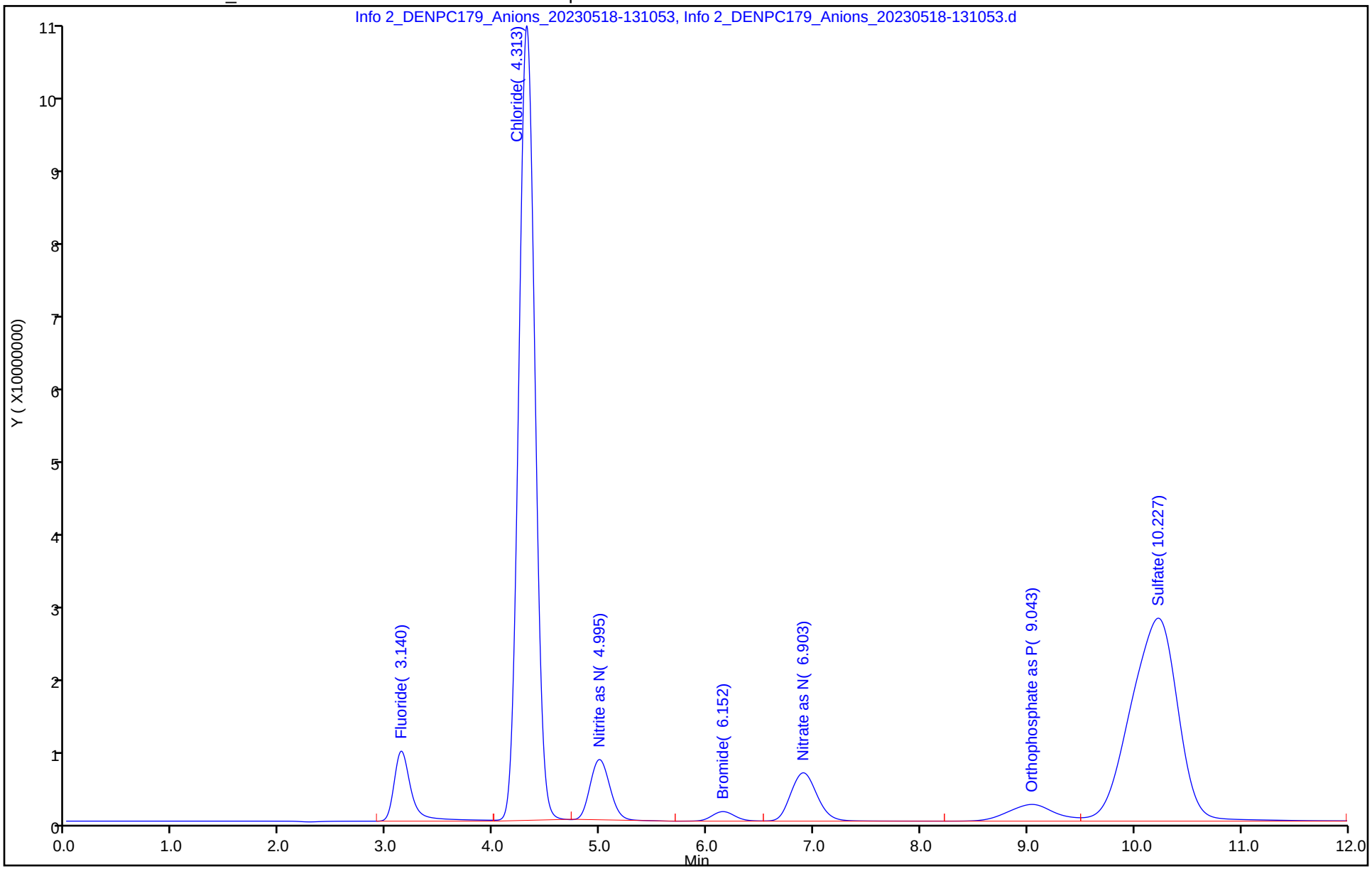
Reagents:

IC CAL cl/so4_00480	Amount Added:	4.80	Units: mL
IC Cal low_00709	Amount Added:	1.00	Units: mL

Report Date: 19-May-2023 11:53:48 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-131053.d				
Injection Date:	18-May-2023 12:55:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD L5			Worklist Smp#:	5
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/31/2023 9:08 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132
Lims ID: STD L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 18-May-2023 13:10:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-006
Misc. Info.: 280-0121594-006
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 19-May-2023 11:53:49 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: LVW8 Date: 18-May-2023 13:42:47

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.145	3.145	0.000	200510278	NC	NC	Ma
2 Chloride	4.333	4.333	0.000	1864000362	NC	NC	
3 Nitrite as N	4.997	4.997	0.000	212086804	5.00	4.97	
4 Bromide	6.150	6.150	0.000	38244681	NC	NC	
5 Nitrate as N	6.890	6.890	0.000	224161262	5.00	5.01	
6 Orthophosphate as P	9.035	9.035	0.000	115018456	5.00	4.68	
7 Sulfate	10.220	10.220	0.000	1371227441	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

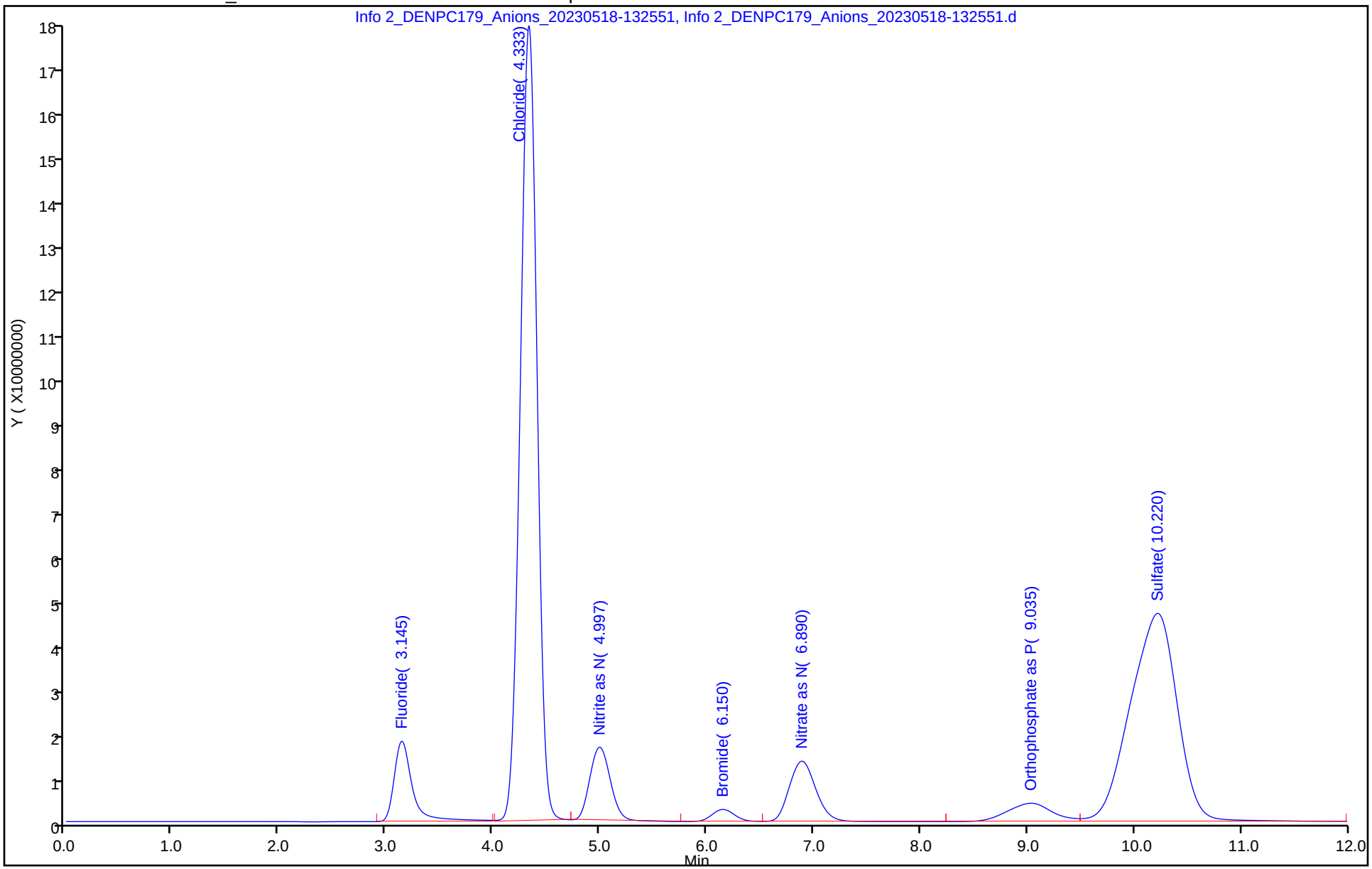
Reagents:

IC CAL cl/so4_00480 Amount Added: 8.00 Units: mL
IC Cal low_00709 Amount Added: 2.00 Units: mL

Report Date: 19-May-2023 11:53:49 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132551.d				
Injection Date:	18-May-2023 13:10:00	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		



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IC Instrument Information

WL: 121594 **Inst ID:** 1010 **Analysis Date:** 5/18/23 **Analyst:** MEC

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	176637	1	F Cl NO2 Br (NO3) PO4 SO4	MS/D	
☐	176589	1	F Cl (NO2) Br NO3 PO4 SO4	MS/D	
☐	176670	7	F (Cl) NO2 Br (NO3) PO4 (SO4)	MS/D	
☐	176676	15	(F) (Cl) (NO2) Br (NO3) PO4 (SO4)	MS/D	
☐	176674	4	F Cl (NO2) Br (NO3) PO4 (SO4)	MS/D	
☐	176678	5	F (Cl) (NO2) Br (NO3) PO4 (SO4)	MS/D	
☐	176669	4	F (Cl) NO2 Br (NO3) PO4 (SO4)	MS/D	
☐	176683	3	F (Cl) NO2 Br (NO3) PO4 (SO4)	MS/D	
☐	176668	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	

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\20230519-121638.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 19-May-2023 12:31:06
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\20230518-121594.b\Info 2_DENPC179_Anions_20230518-12110
Inj Date: 18-May-2023 11:56:00 Worklist: 121594 Sample#: 1
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-12255
Inj Date: 18-May-2023 12:11:00 Worklist: 121594 Sample#: 2
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-12405
Inj Date: 18-May-2023 12:26:00 Worklist: 121594 Sample#: 3
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-12555
Inj Date: 18-May-2023 12:40:00 Worklist: 121594 Sample#: 4
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-13105
Inj Date: 18-May-2023 12:55:00 Worklist: 121594 Sample#: 5
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-13255
Inj Date: 18-May-2023 13:10:00 Worklist: 121594 Sample#: 6

Start Cal Date: 18-May-2023 11:56:00 End Cal Date: 19-May-2023 12:01:00

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						
35311960	42799726	43146865	42334489	42417361		-967573			1.000
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			42866306		
7062392	21399863	43146865	105836223	212086804					
121594(2)	121594(3)	121594(4)	121594(5)	121594(6)					
5 Nitrate as N			Signal: 1						
37055495	45958086	42854846	44285580	44832252		-1159043			0.999
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			44990806		
7411099	22979043	42854846	110713949	224161262					
121594(2)	121594(3)	121594(4)	121594(5)	121594(6)					
6 Orthophosphate as P			Signal: 1				R1		
43303895	41843182	33022328	26624129	23003691		5964839			*0.980
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			23299922		
8660779	20921591	33022328	66560323	115018456					
121594(2)	121594(3)	121594(4)	121594(5)	121594(6)					

ICalib Error Legend
R1, Curve Fit Fail Error Limit Test

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230519-121638.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 19-May-2023 12:31:06
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\20230518-121594.b\Info 2_DENPC179_Anions_20230518-12110
Inj Date: 18-May-2023 11:56:00 Worklist: 121594 Sample#: 1
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-12255
Inj Date: 18-May-2023 12:11:00 Worklist: 121594 Sample#: 2
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-12405
Inj Date: 18-May-2023 12:26:00 Worklist: 121594 Sample#: 3
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-12555
Inj Date: 18-May-2023 12:40:00 Worklist: 121594 Sample#: 4
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-13105
Inj Date: 18-May-2023 12:55:00 Worklist: 121594 Sample#: 5
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-13255
Inj Date: 18-May-2023 13:10:00 Worklist: 121594 Sample#: 6

Start Cal Date: 18-May-2023 11:56:00 End Cal Date: 19-May-2023 12:01:00

Individual Compound Calibration Parameters

Quant Method: ESTD RF Calibration: Replace
Rule Name: Linear1 Curve: Linear Weighting: Conc
Origin: None Error: raw_COD Error Limit: 1.00
RF %Dif: 0.0 SPCC Limit: 0.0 CCC Limit: 0.0
Dependent Variable: Resp

Number of Compounds: 4

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
1 Fluoride				Signal: 1					
29175985	36359510	39638142	40984560	40102056		-2208602			1.000
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			41050846		
M5835197	M18179755	M39638142	M102461401	M200510278					
121594(2)	121594(3)	121594(4)	121594(5)	121594(6)					
2 Chloride				Signal: 1					
16780722	16174841	19339456	19009666	18725386	18640004	-1171132			1.000
0.500000(1)	1.2500 (2)	2.5000 (3)	30.0 (4)	60.0 (5)	100.0 (6)		18747994		
8390361	20218551	48348641	570289992	1123523133	1864000362				
121594(1)	121594(2)	121594(3)	121594(4)	121594(5)	121594(6)				
4 Bromide				Signal: 1					
11277385	9537194	7900278	7592206	7648936		806494			0.999
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			7404030		
2255477	4768597	7900278	18980516	38244681					
121594(2)	121594(3)	121594(4)	121594(5)	121594(6)					
7 Sulfate				Signal: 1					
22625290	16020812	17380170	14404666	13852661	13712274	4654296			0.999
0.500000(1)	1.2500 (2)	2.5000 (3)	30.0 (4)	60.0 (5)	100.0 (6)		13803812		
11312645	20026015	43450426	432139991	831159688	1371227441				
121594(1)	121594(2)	121594(3)	121594(4)	121594(5)	121594(6)				

Preliminary Report

Eurofins Denver
ICV, ICal Verification Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-13
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 18-May-2023 13:25:00 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-007
Misc. Info.: 280-0121594-007
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC7*sub4

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 19-May-2023 12:32:45 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-13

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: LVW8 Date: 19-May-2023 12:38:30

Start Cal Date: 18-May-2023 11:56:00
End Cal Date: 18-May-2023 13:10:00

Compound	Amount Added	Amount Detected	%Drift	Max. %Drift	%Rec	%Rec Limits
1 Fluoride	2.00	2.34	* 16.8	10.0	116.8	
2 Chloride	80.0	83.0	3.8	10.0	103.8	
4 Bromide	2.00	1.91	-4.7	10.0	95.3	
7 Sulfate	80.0	81.8	2.3	10.0	102.3	

Preliminary Report

Eurofins Denver
ICV, ICal Verification Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-13
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 18-May-2023 13:25:00 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-007
Misc. Info.: 280-0121594-007
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC7*sub4

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 19-May-2023 12:38:46 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-13

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: LVW8 Date: 19-May-2023 12:38:46

Start Cal Date: 18-May-2023 11:56:00
End Cal Date: 18-May-2023 13:10:00

Compound	Amount Added	Amount Detected	%Drift	Max. %Drift	%Rec	%Rec Limits
3 Nitrite as N	2.00	1.99	-0.3	10.0	99.7	
5 Nitrate as N	2.00	1.95	-2.3	10.0	97.7	
6 Orthophosphate as	2.00	2.30	* 14.8	10.0	114.8	

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-134				
Lims ID:	ICV				
Client ID:					
Sample Type:	ICV				
Inject. Date:	18-May-2023 13:25:00	ALS Bottle#:	0	Worklist Smp#:	7
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0121594-007				
Misc. Info.:	280-0121594-007				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Sublist:	chrom-Anions_IC7*sub4				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m				
Limit Group:	Wet - Anions				
Last Update:	19-May-2023 12:38:46	Calib Date:	18-May-2023 13:10:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1603				
First Level Reviewer: LVW8		Date:	19-May-2023 12:38:46		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.145	3.145	0.000	93724806	NC	NC	Ma
2 Chloride	4.328	4.328	0.000	1555403505	NC	NC	
3 Nitrite as N	5.000	5.000	0.000	84485309	2.00	1.99	
4 Bromide	6.162	6.162	0.000	14920856	NC	NC	
5 Nitrate as N	6.917	6.917	0.000	86743393	2.00	1.95	
6 Orthophosphate as P	9.058	9.058	0.000	59448017	2.00	2.30	
7 Sulfate	10.230	10.230	0.000	1134012406	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

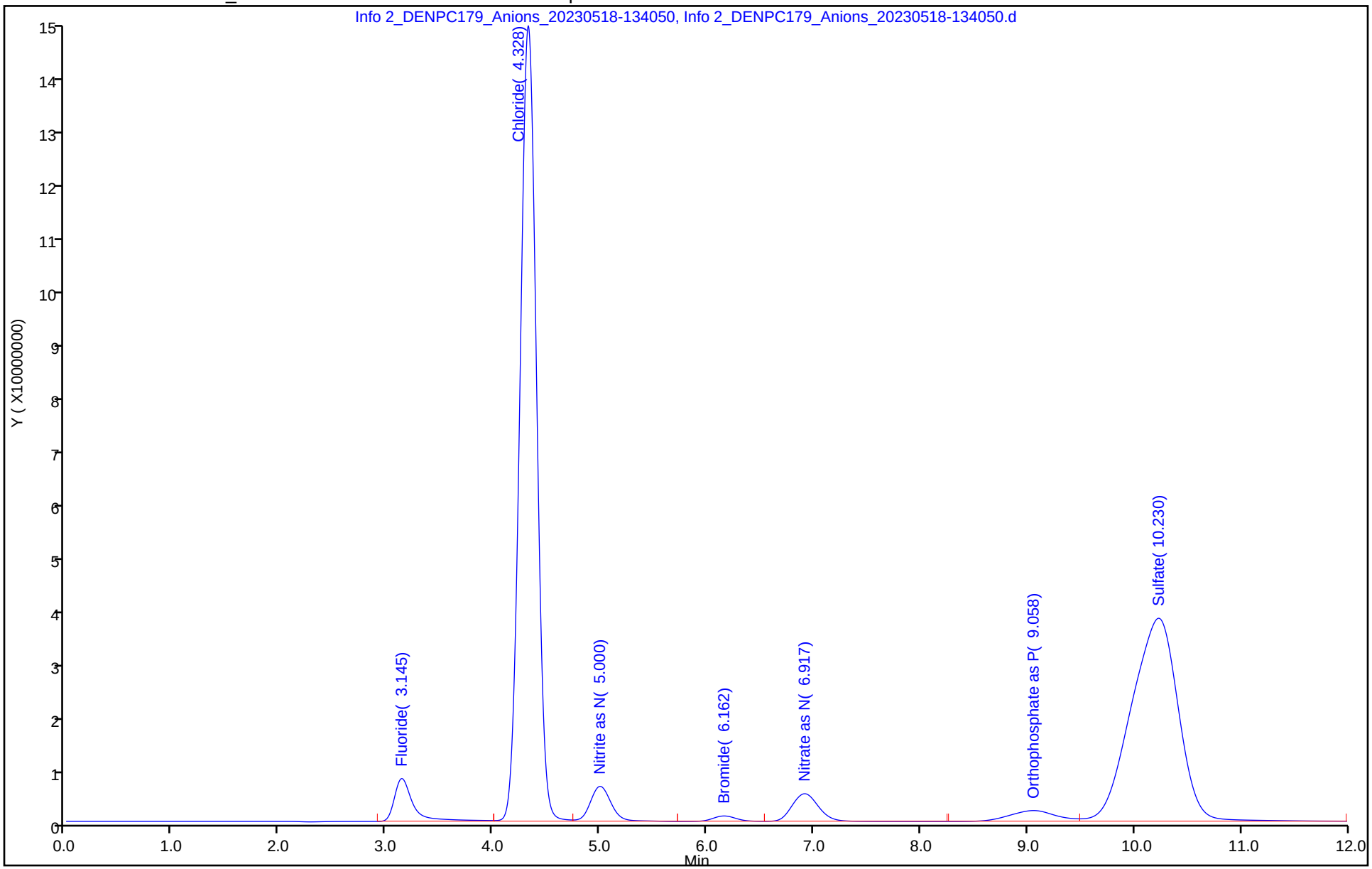
Reagents:

IC SO4 ICV_00024	Amount Added:	0.80	Units: mL
Cl ICV Std_00006	Amount Added:	0.80	Units: mL
IC ICV 5_00405	Amount Added:	0.80	Units: mL

Report Date: 19-May-2023 12:38:46 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-134050.d				
Injection Date:	18-May-2023 13:25:00	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		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-135
Lims ID: ICB
Client ID:
Sample Type: ICB
Inject. Date: 18-May-2023 13:40:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-008
Misc. Info.: 280-0121594-008
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 19-May-2023 12:31:30 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: LVW8 Date: 19-May-2023 11:57:30

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.145				ND	
2 Chloride		4.328				ND	
3 Nitrite as N		5.000				ND	
4 Bromide		6.162				ND	U
5 Nitrate as N		6.917				ND	
6 Orthophosphate as P	9.123	9.058	0.065	12987322		0.3014	
7 Sulfate	10.285	10.230	0.055	1071622		NC	M

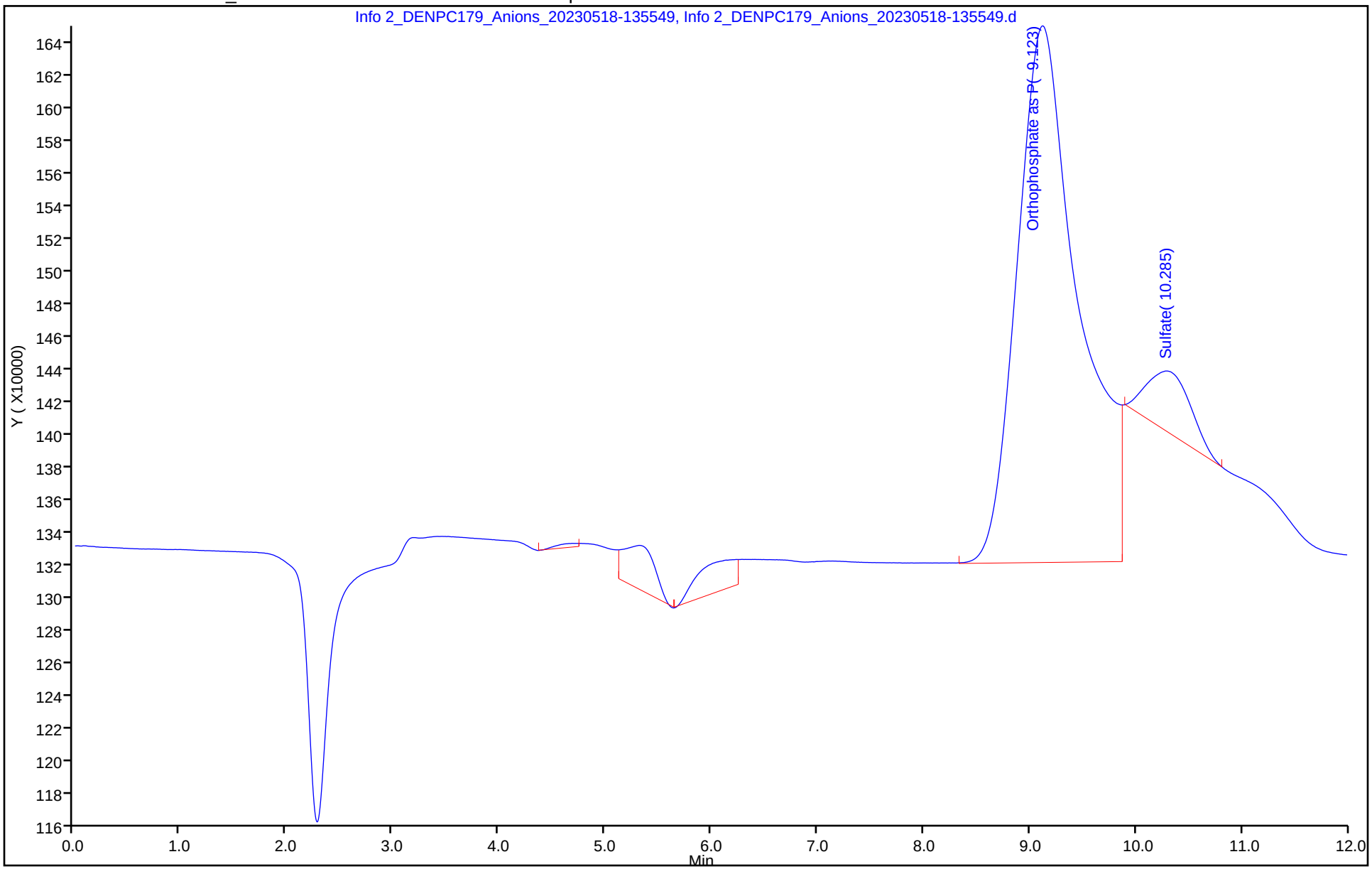
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 19-May-2023 12:31:31 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-135549.d				
Injection Date:	18-May-2023 13:40:00	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		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-142
Lims ID: MRL
Client ID:
Sample Type: MRL
Inject. Date: 18-May-2023 14:10:00 ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-010
Misc. Info.: 280-0121594-010
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 19-May-2023 12:31:32 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: LVW8 Date: 18-May-2023 14:58:41

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.145			ND	ND	
2 Chloride	4.302	4.313	-0.011	43926233	NC	NC	
3 Nitrite as N	5.003	4.998	0.005	8516946	0.2500	0.2213	
4 Bromide	6.178	6.163	0.015	2736457	NC	NC	
5 Nitrate as N	6.958	6.913	0.045	9978227	0.2500	0.2475	
6 Orthophosphate as P	9.105	9.060	0.045	20685657	0.2500	0.6318	
7 Sulfate	10.265	10.247	0.018	45774744	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

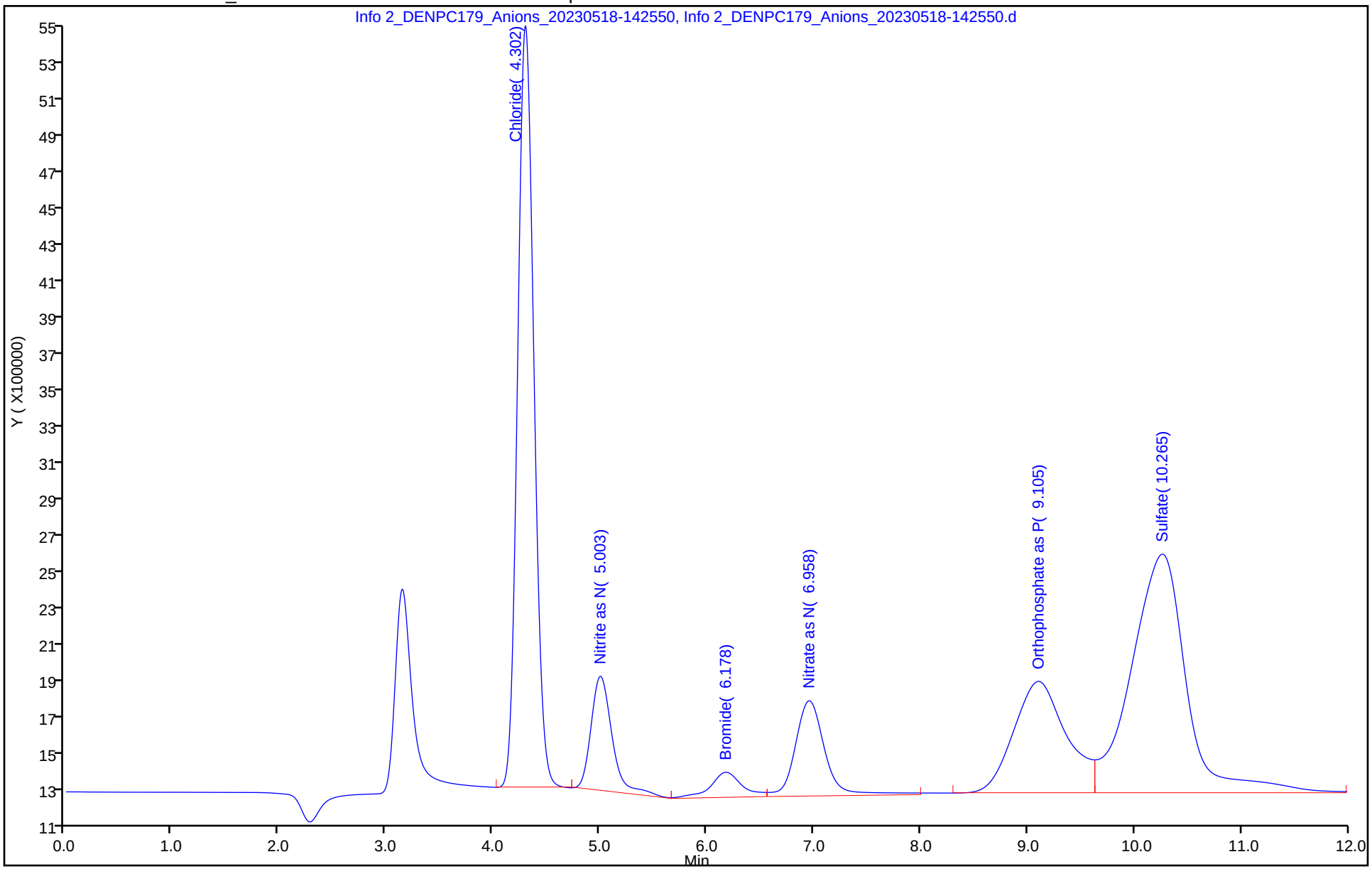
Reagents:

IC CAL cl/so4_00480 Amount Added: 0.10 Units: mL
IC Cal low_00709 Amount Added: 0.05 Units: mL

Report Date: 19-May-2023 12:31:33 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-142550.d				
Injection Date:	18-May-2023 14:10:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	MRL			Worklist Smp#:	10
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\20230518-121594.b\Info 2_DENPC179_Anions_20230518-144
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 18-May-2023 14:25:00 ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-011
Misc. Info.: 280-0121594-011
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 19-May-2023 12:31:32 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.145			ND	ND	
2 Chloride	4.313	4.313	0.000	924355606	NC	NC	
3 Nitrite as N	4.998	4.998	0.000	102973098	2.50	2.42	
4 Bromide	6.163	6.163	0.000	18068153	NC	NC	
5 Nitrate as N	6.912	6.913	-0.001	109333247	2.50	2.46	
6 Orthophosphate as P	9.062	9.060	0.002	71396675	2.50	2.81	
7 Sulfate	10.248	10.247	0.001	701445617	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

Reagents:

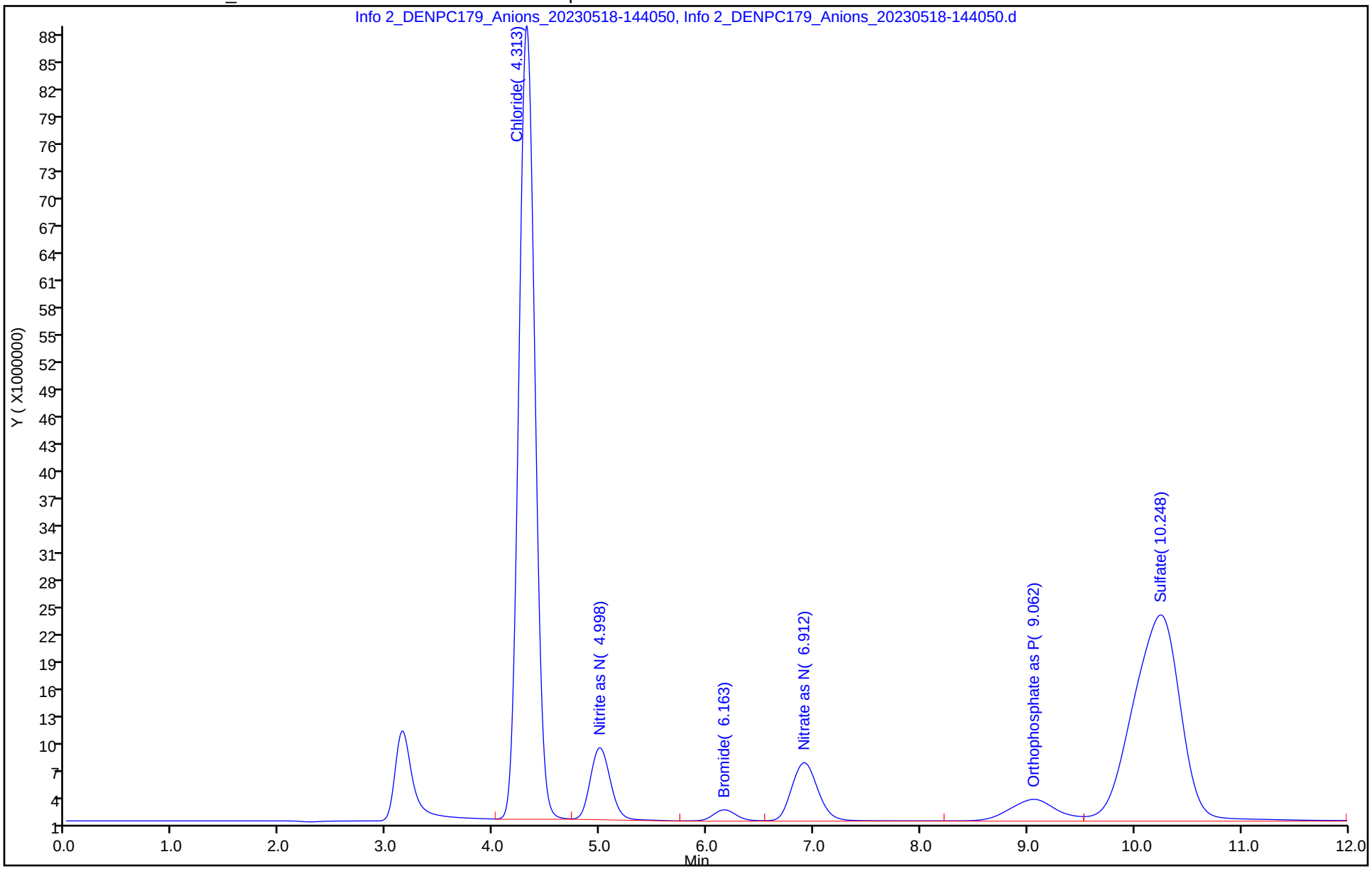
IC LCS_01954 Amount Added: 5.00 Units: mL

Report Date: 19-May-2023 12:31:33 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-144050.d

Injection Date:	18-May-2023 14:25:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	LCS			Worklist Smp#:	11
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\20230518-121594.b\Info 2_DENPC179_Anions_20230518-145
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 18-May-2023 14:40:00 ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-012
Misc. Info.: 280-0121594-012
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 19-May-2023 12:31:32 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.145			ND	ND	
2 Chloride	4.313	4.313	0.000	921265063	NC	NC	
3 Nitrite as N	4.998	4.998	0.000	102379982	2.50	2.41	
4 Bromide	6.163	6.163	0.000	17988727	NC	NC	
5 Nitrate as N	6.912	6.913	-0.001	108961704	2.50	2.45	
6 Orthophosphate as P	9.062	9.060	0.002	71915979	2.50	2.83	
7 Sulfate	10.250	10.247	0.003	695470892	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

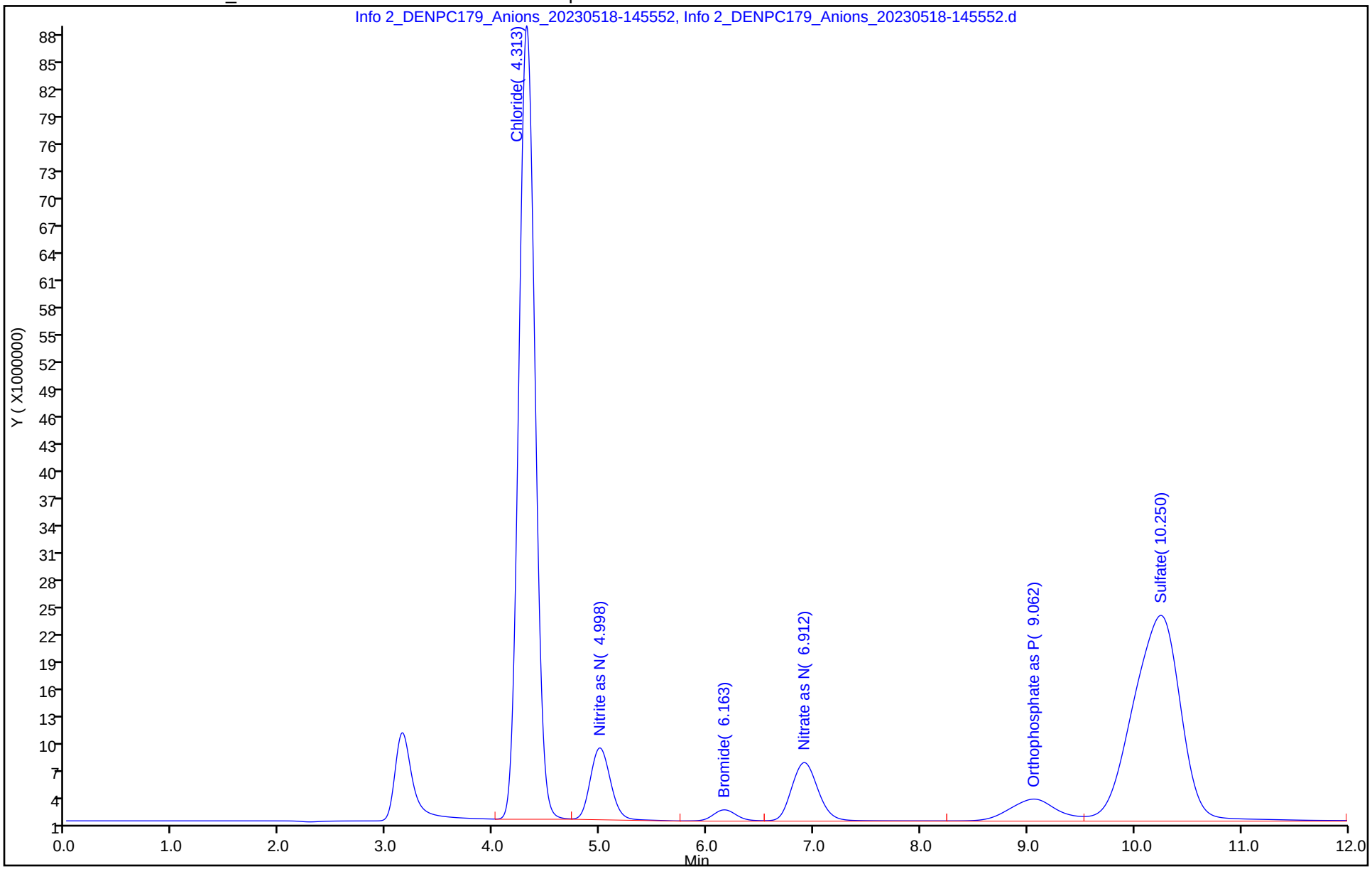
Reagents:

IC LCS_01954 Amount Added: 5.00 Units: mL

Report Date: 19-May-2023 12:31:34 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-145552.d				
Injection Date:	18-May-2023 14:40:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	LCSD			Worklist Smp#:	12
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/31/2023 9:08 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-151
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 18-May-2023 14:55:00 ALS Bottle#: 0 Worklist Smp#: 13
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-013
Misc. Info.: 280-0121594-013
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 19-May-2023 12:31:35 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: LVW8 Date: 19-May-2023 11:57:53

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.145				ND	
2 Chloride		4.313				ND	
3 Nitrite as N		4.998				ND	
4 Bromide		6.163				ND	U
5 Nitrate as N		6.913				ND	
6 Orthophosphate as P	9.127	9.127	0.000	13698318		0.3319	
7 Sulfate	10.300	10.300	0.000	1160087		NC	M

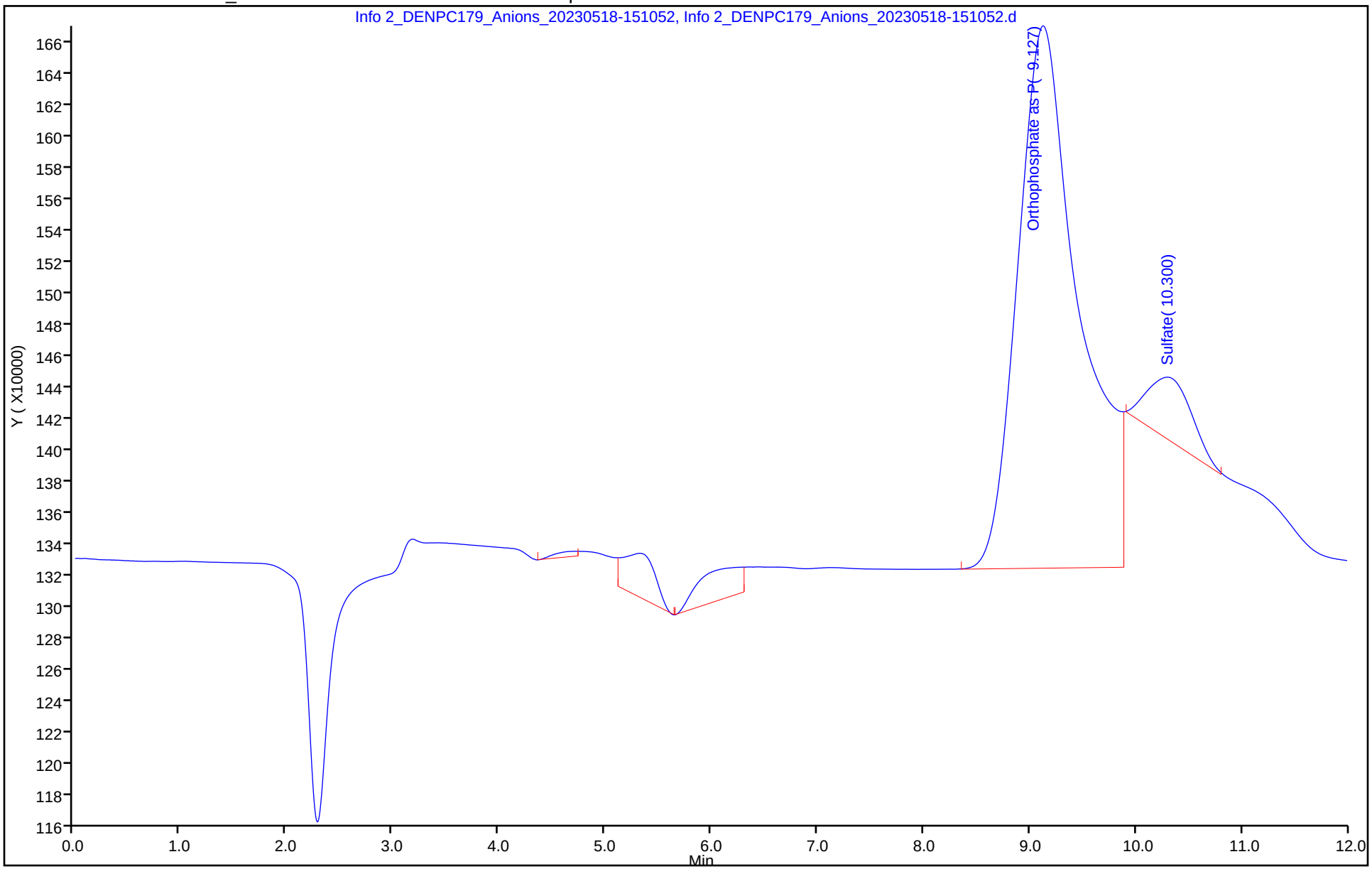
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 19-May-2023 12:31:35 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-151052.d				
Injection Date:	18-May-2023 14:55:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	MB			Worklist Smp#:	13
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/31/2023 9:08 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-164
Lims ID: 280-176674-A-5
Client ID: LL12mw-185-230401-GW
Sample Type: Client
Inject. Date: 18-May-2023 16:26:00 ALS Bottle#: 0 Worklist Smp#: 19
Injection Vol: 5.0 ul Dil. Factor: 20.0000
Sample Info: 280-0121594-019
Misc. Info.: 280-0121594-019
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 19-May-2023 12:31:35 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: LVW8 Date: 19-May-2023 11:59:05

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		3.145			ND	
2 Chloride	4.312	4.313	-0.001	766614887	NC	M
3 Nitrite as N		4.998			ND	
4 Bromide	6.152	6.163	-0.011	1354596	NC	
5 Nitrate as N	6.905	6.913	-0.008	149556743	3.35	M
6 Orthophosphate as P	9.153	9.127	0.026	1762122	-0.1804	
7 Sulfate	10.247	10.300	-0.053	224738382	NC	M

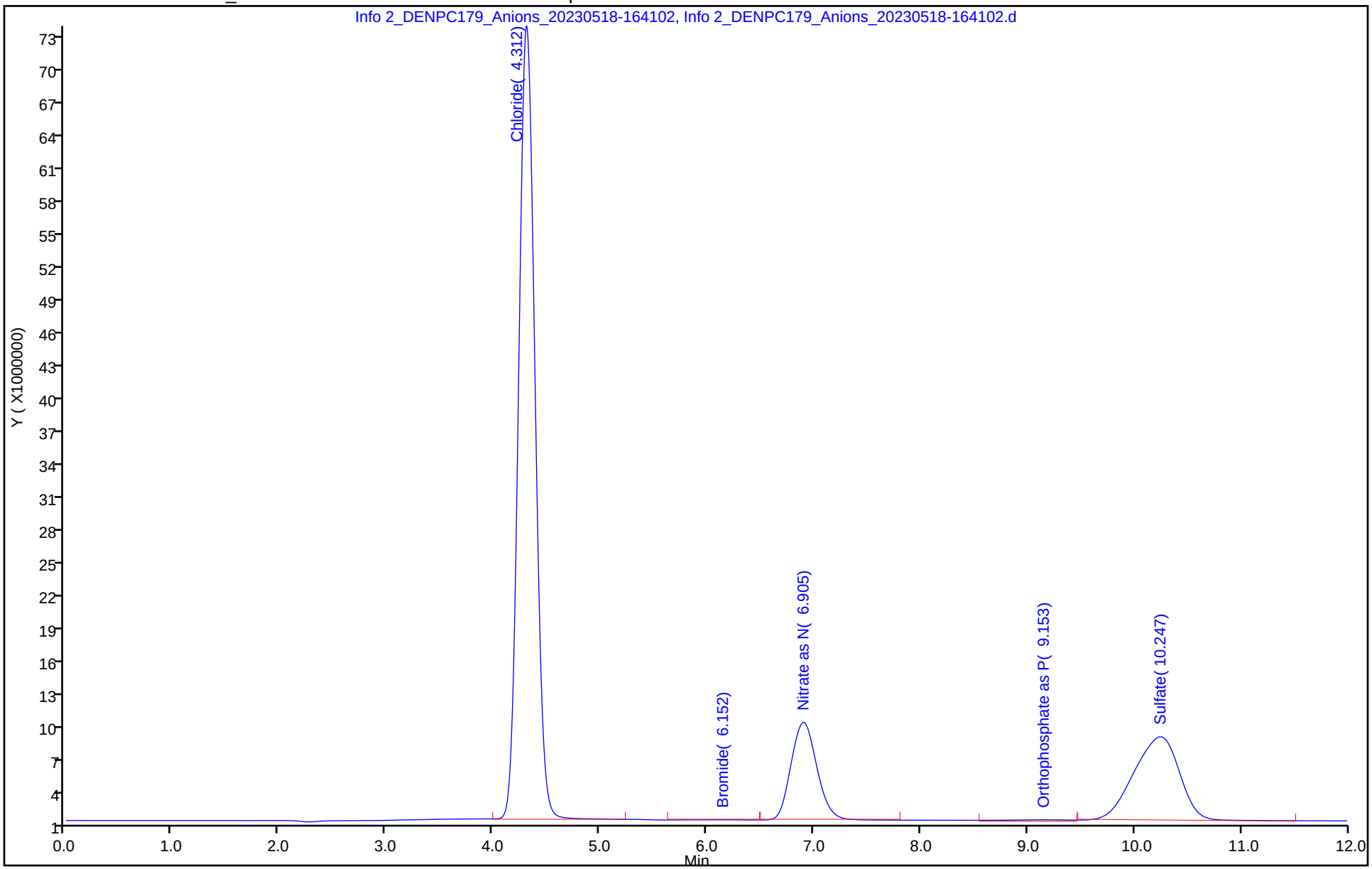
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 19-May-2023 12:31:38 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-164102.d				
Injection Date:	18-May-2023 16:26:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-176674-A-5	Lab Sample ID:	280-176674-5	Worklist Smp#:	19
Client ID:	LL12mw-185-230401-GW				
Injection Vol:	5.0 ul	Dil. Factor:	20.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/31/2023 9:08 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

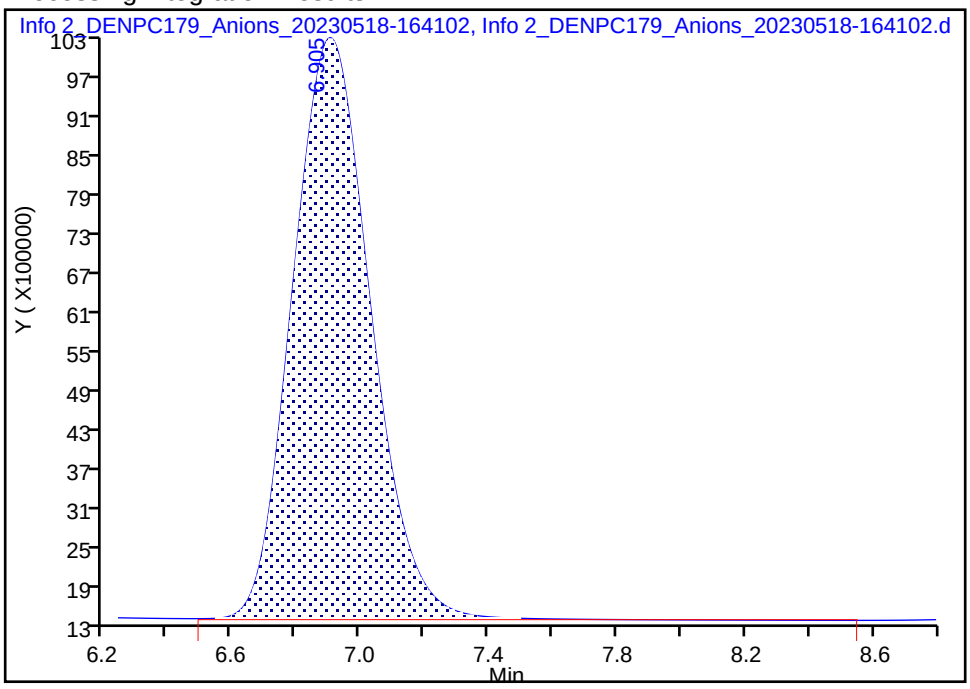
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-164				
Injection Date:	18-May-2023 16:26:00	Instrument ID:	WC_IonChrom10		
Lims ID:	280-176674-A-5	Lab Sample ID:	280-176674-5		
Client ID:	LL12mw-185-230401-GW				
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	19
Injection Vol:	5.0 ul	Dil. Factor:	20.0000		
Method:	Anions_IC10	Limit Group:	Wet - Anions		
Column:		Detector	Info 2_091554_1		

5 Nitrate as N, CAS: 14797-55-8

Signal: 1

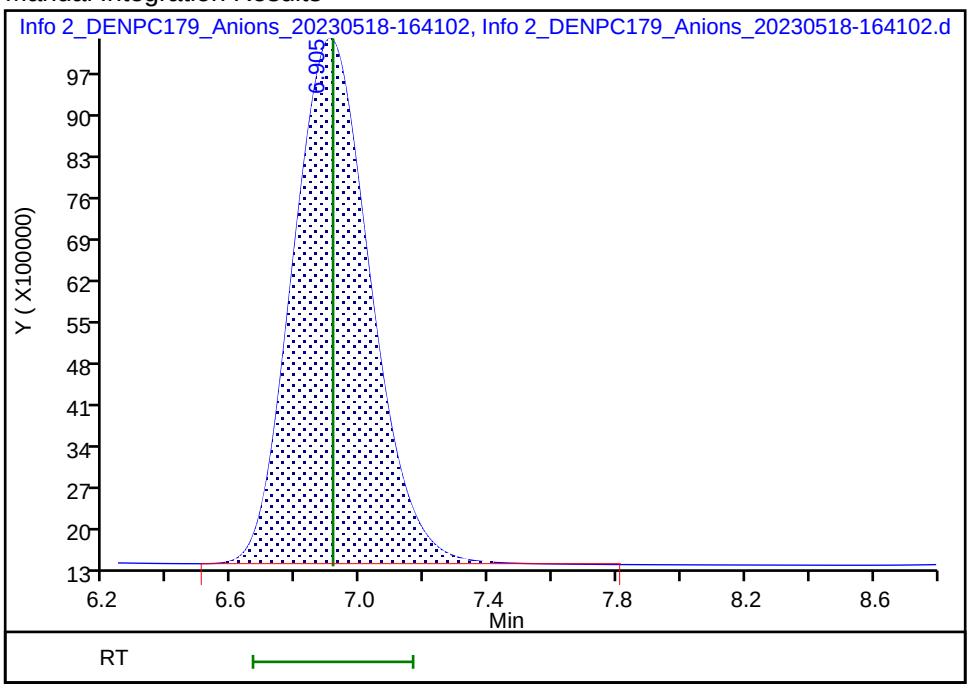
Processing Integration Results

RT: 6.91
Area: 150795607
Amount: 3.377460
Amount Units: ug/ml



Manual Integration Results

RT: 6.91
Area: 149556743
Amount: 3.349924
Amount Units: ug/ml



Reviewer: LVW8, 19-May-2023 11:58:59 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-165
Lims ID: 280-176674-A-6
Client ID: LL12mw-185-230402-GW
Sample Type: Client
Inject. Date: 18-May-2023 16:41:00 ALS Bottle#: 0 Worklist Smp#: 20
Injection Vol: 5.0 ul Dil. Factor: 20.0000
Sample Info: 280-0121594-020
Misc. Info.: 280-0121594-020
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 19-May-2023 12:31:35 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: LVW8 Date: 19-May-2023 11:59:17

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		3.145			ND	
2 Chloride	4.310	4.313	-0.003	841073588	NC	
3 Nitrite as N		4.998			ND	
4 Bromide	6.182	6.163	0.019	1031418	NC	
5 Nitrate as N	6.900	6.913	-0.013	165199089	3.70	M
6 Orthophosphate as P	9.192	9.127	0.065	2106909	-0.1656	
7 Sulfate	10.243	10.300	-0.057	248437087	NC	M

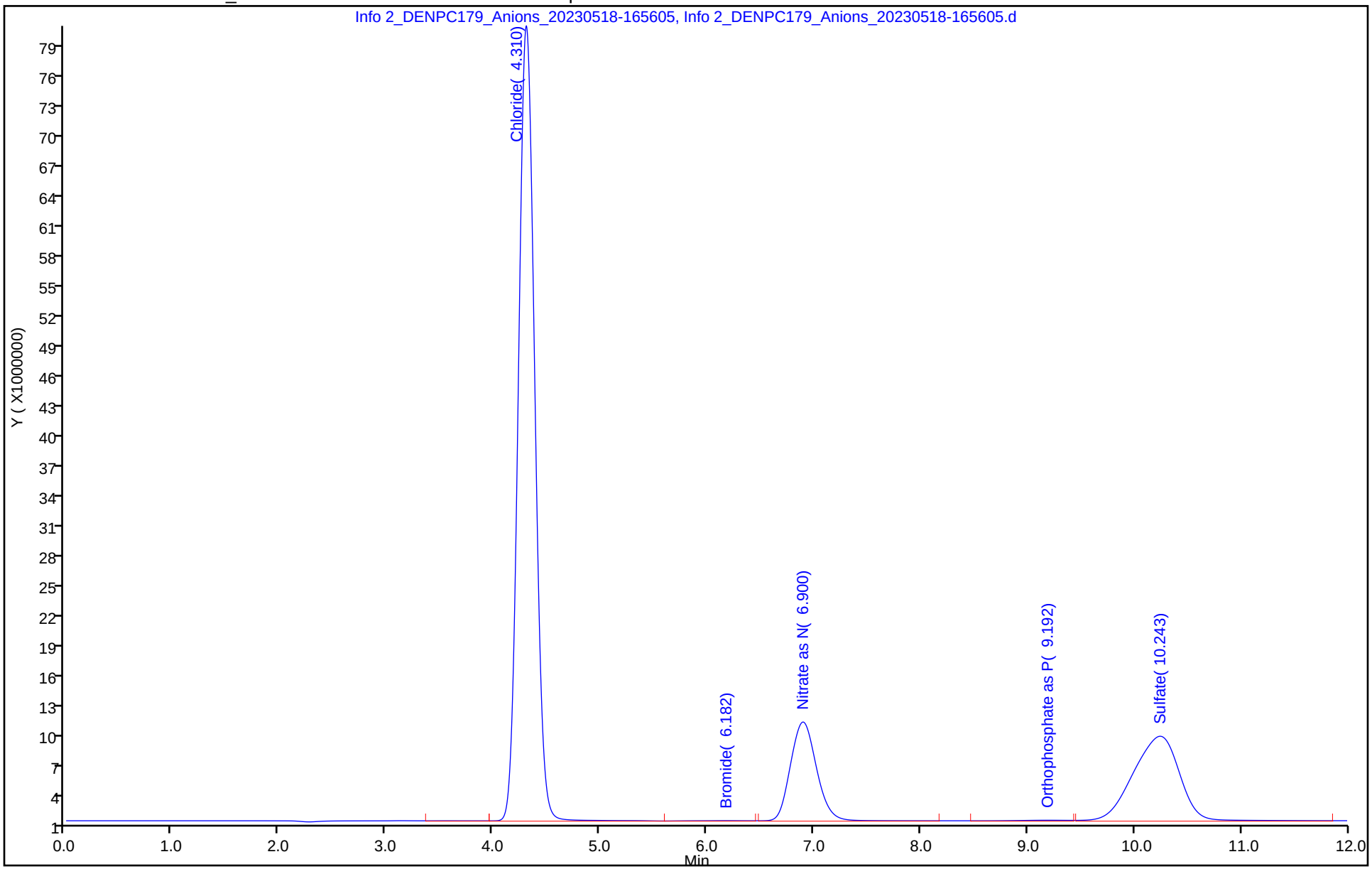
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 19-May-2023 12:31:39 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-165605.d				
Injection Date:	18-May-2023 16:41:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-176674-A-6	Lab Sample ID:	280-176674-6	Worklist Smp#:	20
Client ID:	LL12mw-185-230402-GW				
Injection Vol:	5.0 ul	Dil. Factor:	20.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/31/2023 9:08 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

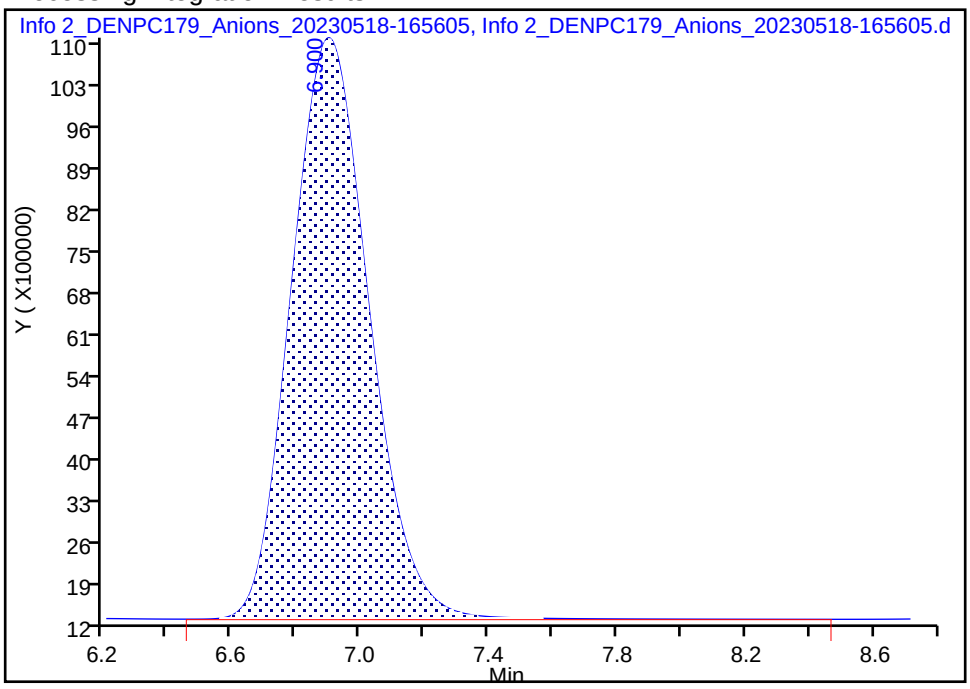
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-165				
Injection Date:	18-May-2023 16:41:00	Instrument ID:	WC_IonChrom10		
Lims ID:	280-176674-A-6	Lab Sample ID:	280-176674-6		
Client ID:	LL12mw-185-230402-GW				
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	20
Injection Vol:	5.0 ul	Dil. Factor:	20.0000		
Method:	Anions_IC10	Limit Group:	Wet - Anions		
Column:		Detector	Info 2_091554_1		

5 Nitrate as N, CAS: 14797-55-8

Signal: 1

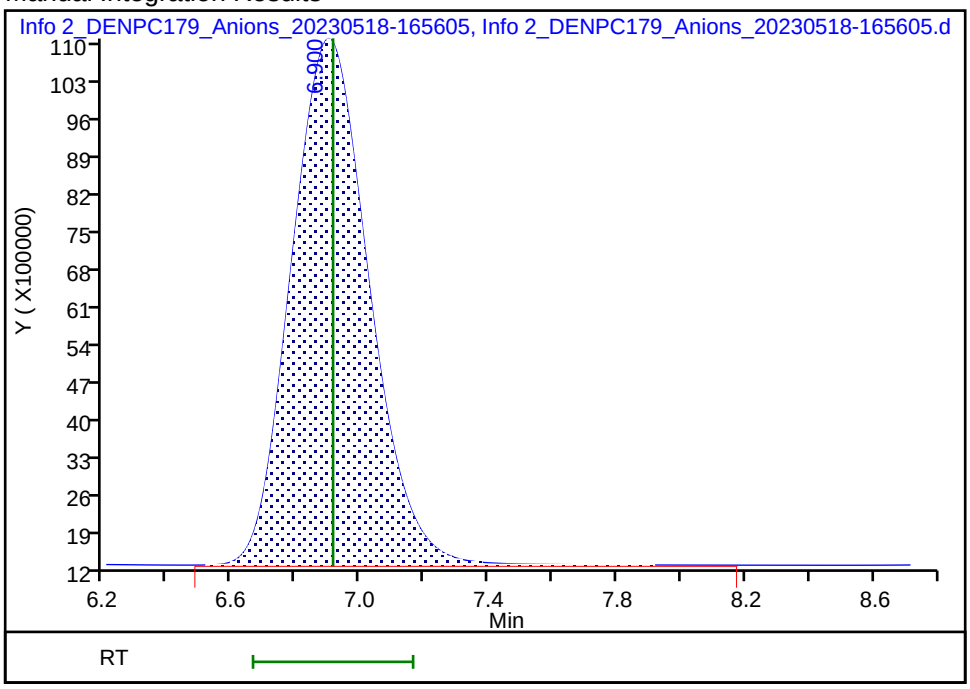
Processing Integration Results

RT: 6.90
Area: 167240152
Amount: 3.742969
Amount Units: ug/ml



Manual Integration Results

RT: 6.90
Area: 165199089
Amount: 3.697603
Amount Units: ug/ml



Reviewer: LVW8, 19-May-2023 11:59:11 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-175				
Lims ID:	ccv				
Client ID:					
Sample Type:	CCV				
Inject. Date:	18-May-2023 17:41:00	ALS Bottle#:	0	Worklist Smp#:	24
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0121594-024				
Misc. Info.:	280-0121594-024				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Sublist:	chrom-Anions_IC10*sub5				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m				
Limit Group:	Wet - Anions				
Last Update:	19-May-2023 12:31:42	Calib Date:	18-May-2023 13:10:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1603				
First Level Reviewer: XAY4		Date:	19-May-2023 09:47:24		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.145			ND	ND	
2 Chloride	4.312	4.313	-0.001	924998506	NC	NC	
3 Nitrite as N	5.000	4.998	0.002	107797836	2.50	2.54	
4 Bromide	6.140	6.163	-0.023	17602305	NC	NC	
5 Nitrate as N	6.903	6.913	-0.010	108124722	2.50	2.43	
6 Orthophosphate as P	9.045	9.127	-0.082	53503464	2.50	2.04	
7 Sulfate	10.223	10.300	-0.077	680174954	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

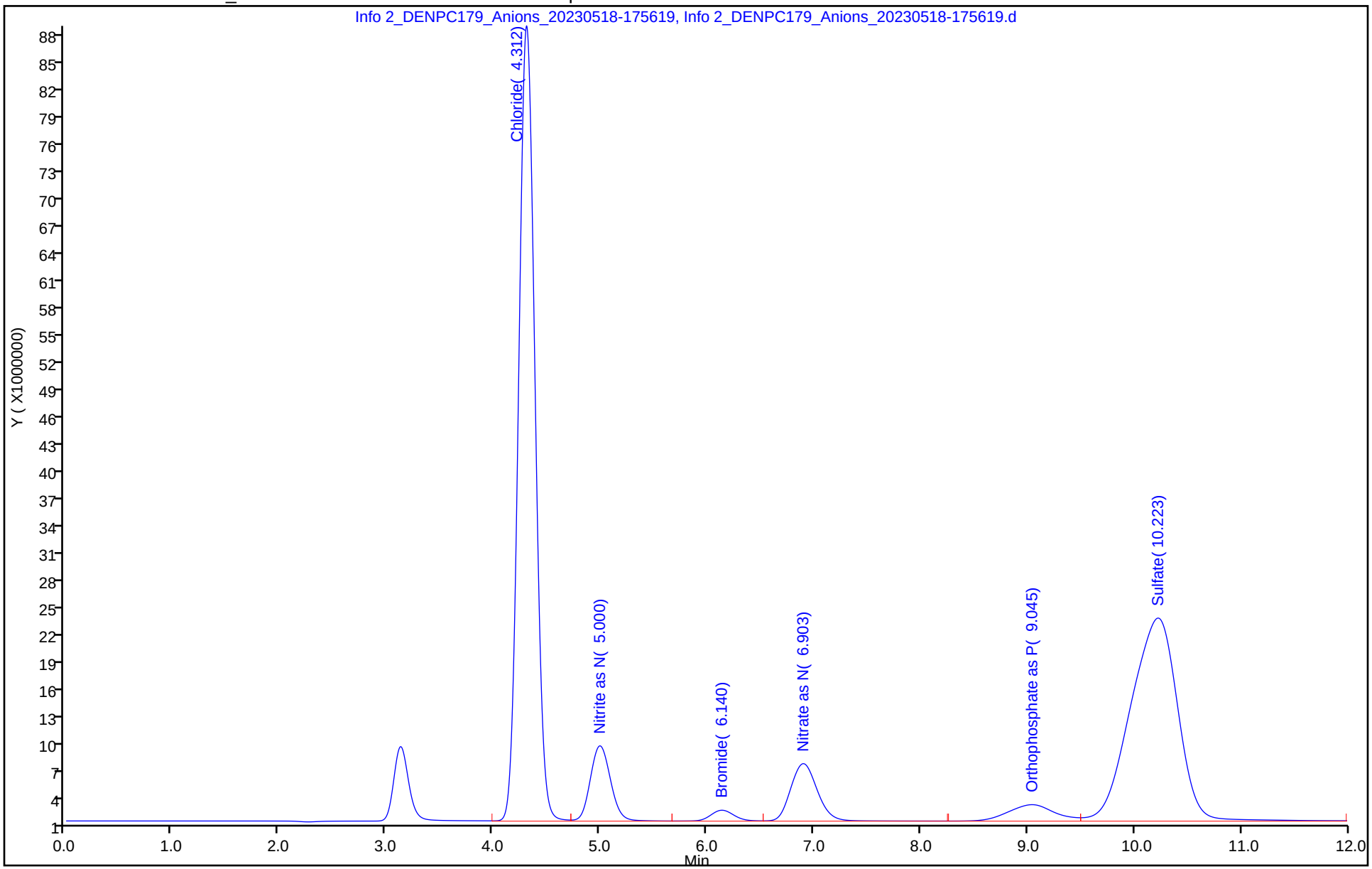
Reagents:

IC LCS_01954 Amount Added: 10.00 Units: mL

Report Date: 19-May-2023 12:31:42 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-175619.d				
Injection Date:	18-May-2023 17:41:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	24
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/31/2023 9:08 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-181
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 18-May-2023 17:56:00 ALS Bottle#: 0 Worklist Smp#: 25
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-025
Misc. Info.: 280-0121594-025
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 19-May-2023 12:31:42 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: LVW8 Date: 19-May-2023 12:00:26

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.145				ND	
2 Chloride		4.313				ND	
3 Nitrite as N		4.998				ND	U
4 Bromide		6.163				ND	U
5 Nitrate as N		6.913				ND	
6 Orthophosphate as P	9.133	9.127	0.006	5344408		-0.0266	
7 Sulfate	10.305	10.300	0.005	810551		NC	M

QC Flag Legend

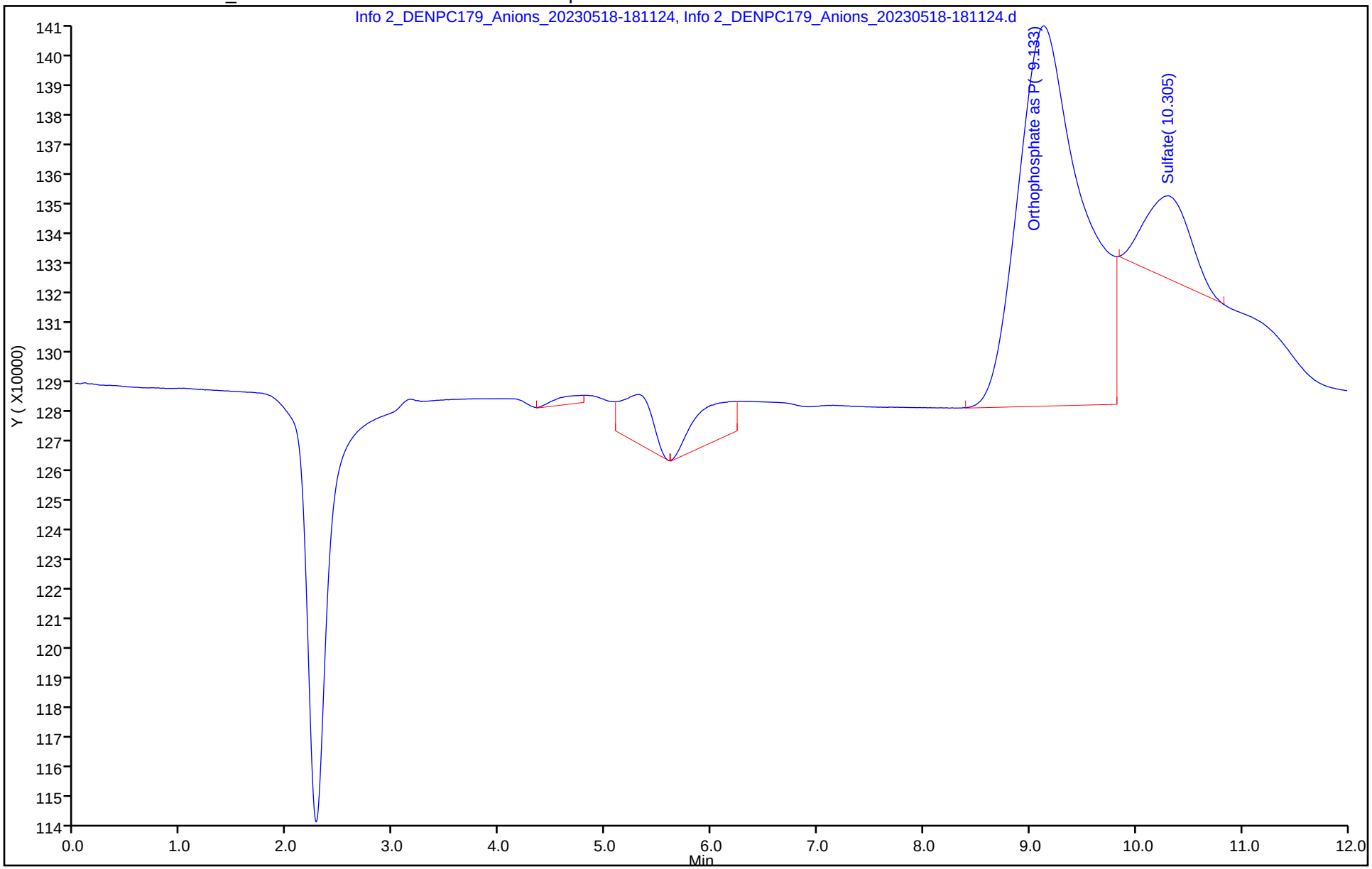
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 19-May-2023 12:31:43 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-181124.d

Injection Date:	18-May-2023 17:56:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	25
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/31/2023 9:08 PM

User Disabled Compound Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-181

Injection Date: 18-May-2023 17:56:00 Instrument ID: WC_IonChrom10

Lims ID: ccb

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 25

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions

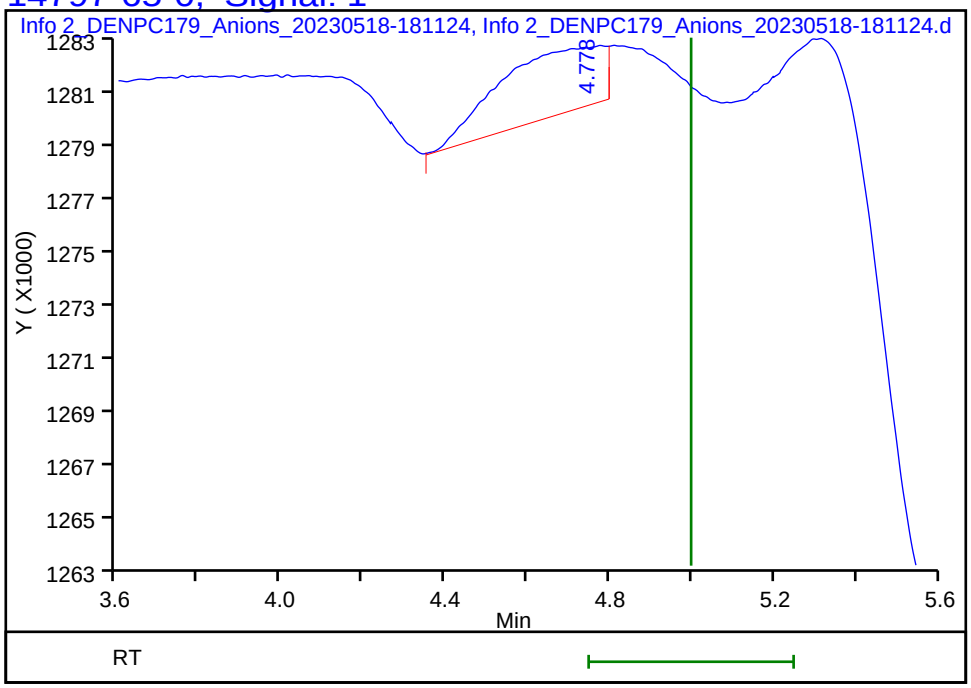
Column: Detector Info 2_091554_1

3 Nitrite as N, CAS: 14797-65-0, Signal: 1

RT: 4.78

Response: 44417

Amount: 0



Reviewer: LVW8, 19-May-2023 12:00:26

Audit Action: Manually Integrated Audit Reason:

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-194
Lims ID: 280-176674-A-7
Client ID: FBQmw-173-230401-GW-R
Sample Type: Client
Inject. Date: 18-May-2023 19:26:00 ALS Bottle#: 0 Worklist Smp#: 31
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-031
Misc. Info.: 280-0121594-031
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 19-May-2023 12:31:42 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: LVW8 Date: 19-May-2023 12:02:08

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		3.145			ND	
2 Chloride	4.303	4.313	-0.010	19574865	NC	M
3 Nitrite as N		4.998			ND	
4 Bromide	6.212	6.163	0.049	1197331	NC	
5 Nitrate as N	6.975	6.913	0.062	7707821	0.1971	M
6 Orthophosphate as P	9.138	9.127	0.011	8994927	0.1300	
7 Sulfate	10.243	10.300	-0.057	580169865	NC	M

QC Flag Legend

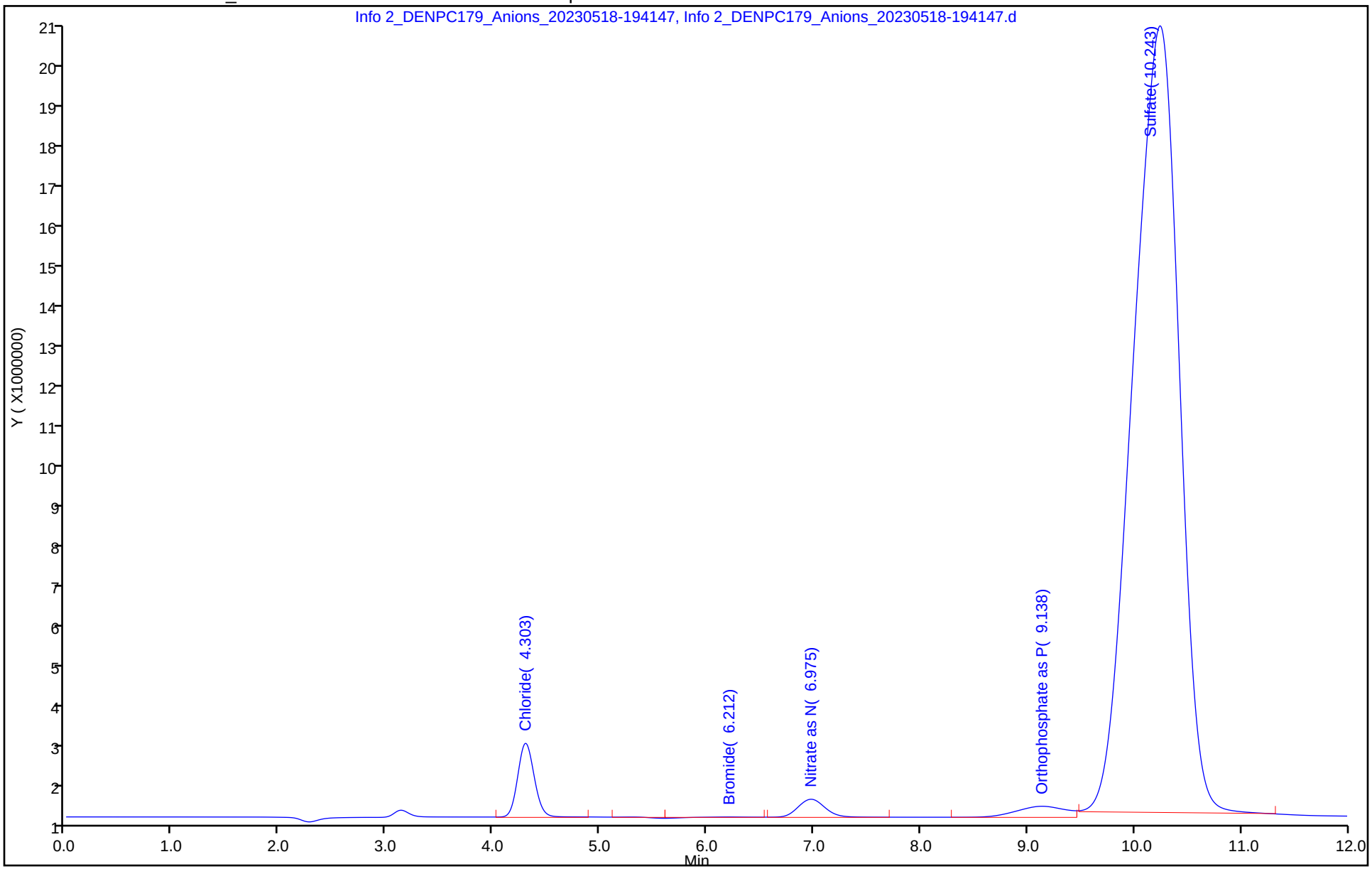
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 19-May-2023 12:31:47 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-194147.d

Injection Date:	18-May-2023 19:26:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-176674-A-7	Lab Sample ID:	280-176674-7	Worklist Smp#:	31
Client ID:	FBQmw-173-230401-GW-R				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/31/2023 9:08 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

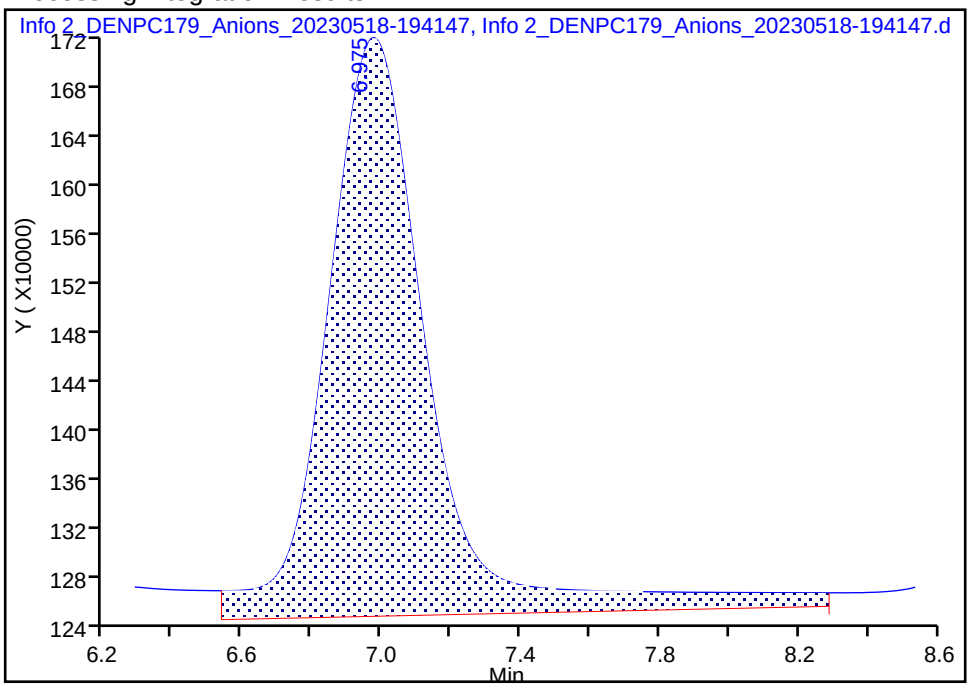
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-194				
Injection Date:	18-May-2023 19:26:00	Instrument ID:	WC_IonChrom10		
Lims ID:	280-176674-A-7	Lab Sample ID:	280-176674-7		
Client ID:	FBQmw-173-230401-GW-R				
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	31
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC10	Limit Group:	Wet - Anions		
Column:		Detector	Info 2_091554_1		

5 Nitrate as N, CAS: 14797-55-8

Signal: 1

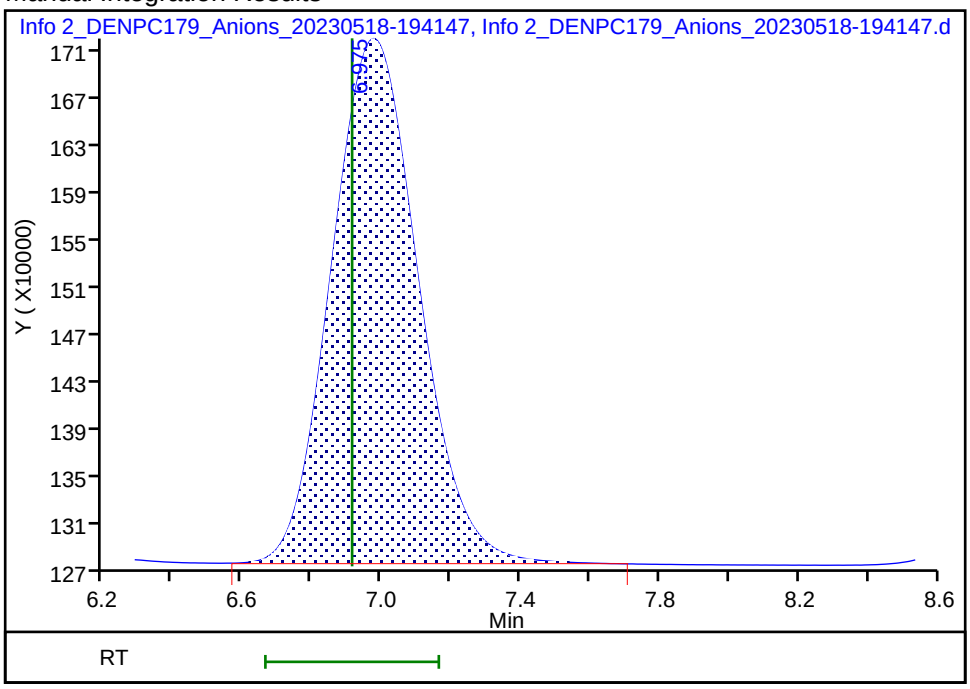
Processing Integration Results

RT: 6.98
Area: 9538418
Amount: 0.237770
Amount Units: ug/ml



Manual Integration Results

RT: 6.98
Area: 7707821
Amount: 0.197082
Amount Units: ug/ml



Reviewer: LVW8, 19-May-2023 12:01:59 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-195
Lims ID: 280-176674-A-8
Client ID: FBQmw-173-230402-GW-R
Sample Type: Client
Inject. Date: 18-May-2023 19:41:00 ALS Bottle#: 0 Worklist Smp#: 32
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-032
Misc. Info.: 280-0121594-032
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 19-May-2023 12:31:42 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: LVW8 Date: 19-May-2023 12:02:17

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		3.145			ND	
2 Chloride	4.302	4.313	-0.011	20099453	NC	M
3 Nitrite as N		4.998			ND	
4 Bromide	6.210	6.163	0.047	1338653	NC	
5 Nitrate as N	6.977	6.913	0.064	8138449	0.2067	M
6 Orthophosphate as P	9.148	9.127	0.021	5690064	-0.0118	
7 Sulfate	10.245	10.300	-0.055	627177033	NC	

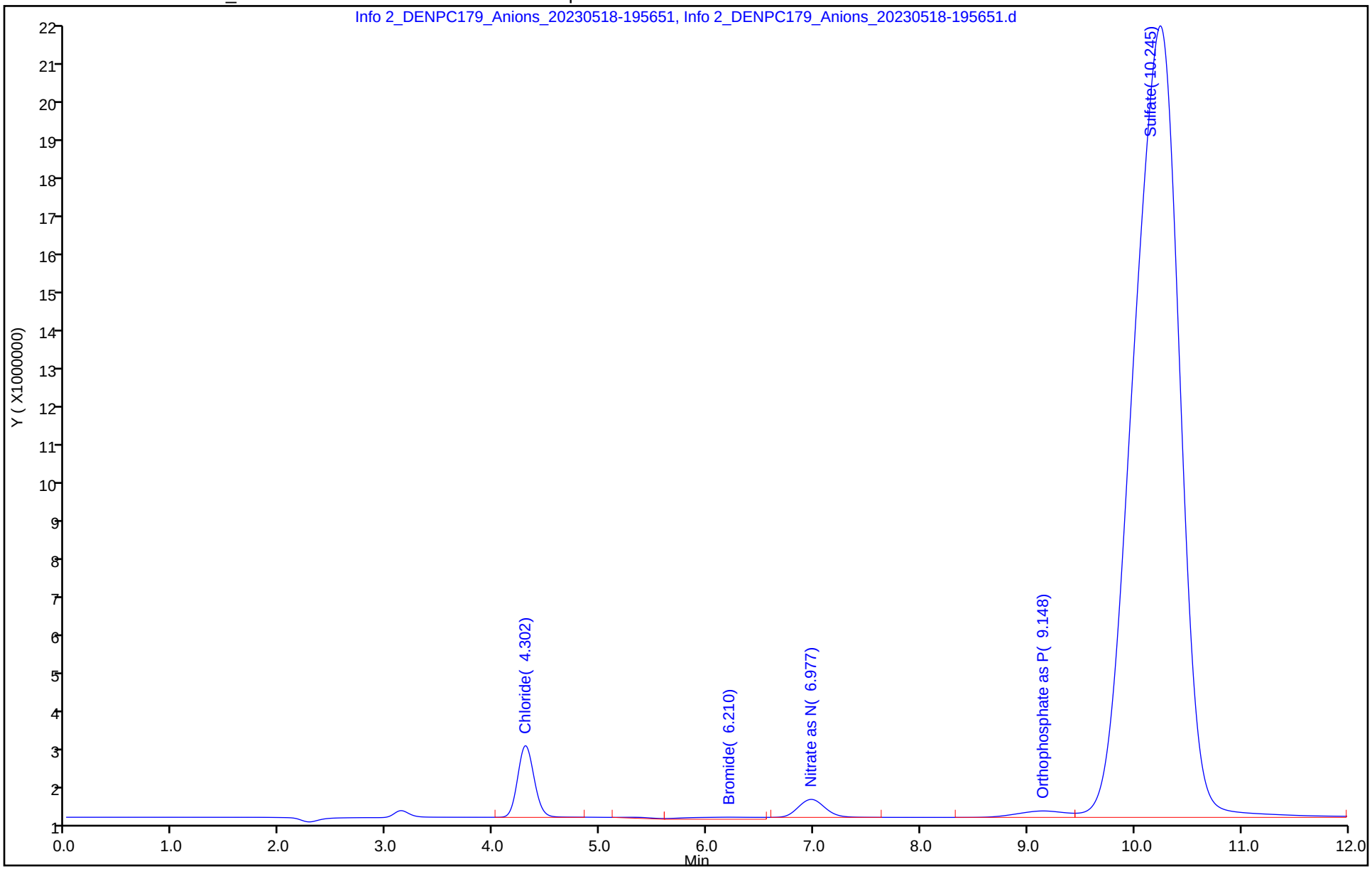
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 19-May-2023 12:31:48 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-195651.d				
Injection Date:	18-May-2023 19:41:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-176674-A-8	Lab Sample ID:	280-176674-8	Worklist Smp#:	32
Client ID:	FBQmw-173-230402-GW-R				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/31/2023 9:08 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

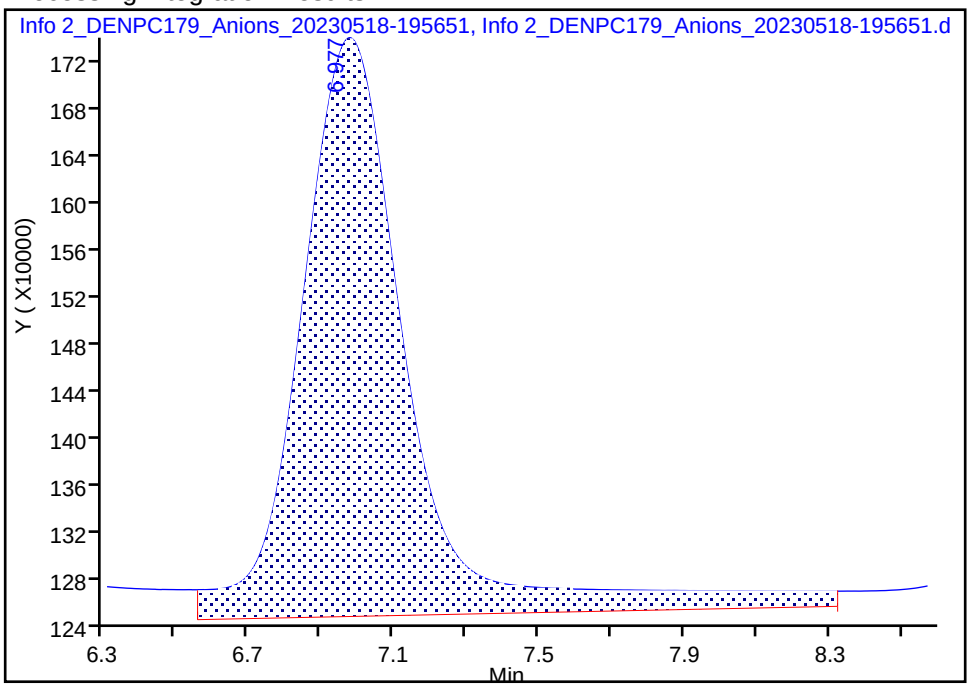
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-195				
Injection Date:	18-May-2023 19:41:00	Instrument ID:	WC_IonChrom10		
Lims ID:	280-176674-A-8	Lab Sample ID:	280-176674-8		
Client ID:	FBQmw-173-230402-GW-R				
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	32
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC10	Limit Group:	Wet - Anions		
Column:		Detector	Info 2_091554_1		

5 Nitrate as N, CAS: 14797-55-8

Signal: 1

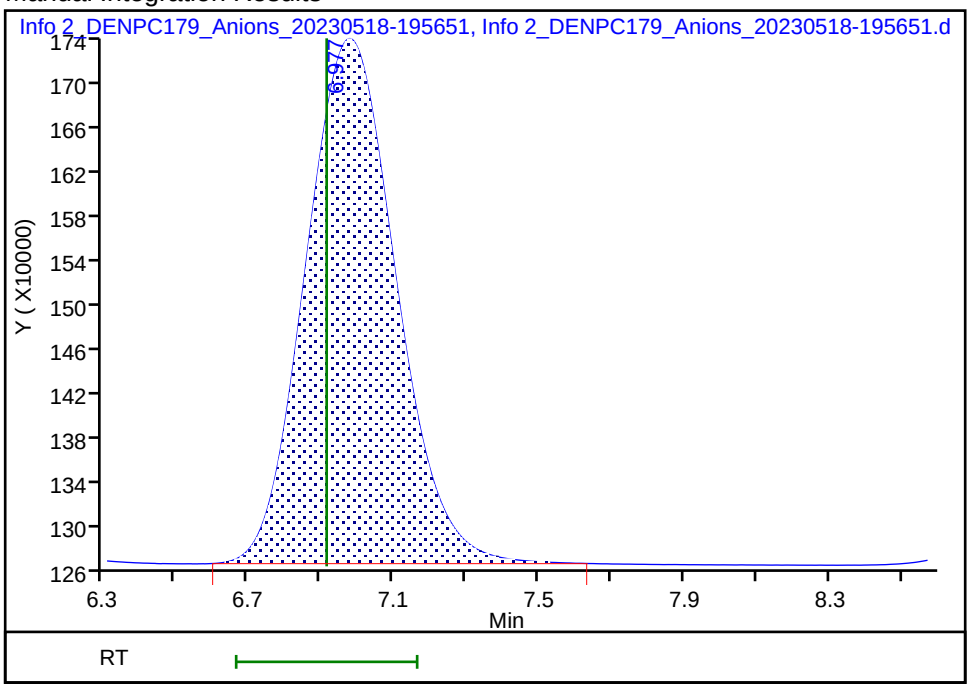
Processing Integration Results

RT: 6.98
Area: 10229136
Amount: 0.253122
Amount Units: ug/ml



Manual Integration Results

RT: 6.98
Area: 8138449
Amount: 0.206653
Amount Units: ug/ml



Reviewer: LVW8, 19-May-2023 12:02:12 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-205				
Lims ID:	ccv				
Client ID:					
Sample Type:	CCV				
Inject. Date:	18-May-2023 20:42:00	ALS Bottle#:	0	Worklist Smp#:	36
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0121594-036				
Misc. Info.:	280-0121594-036				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Sublist:	chrom-Anions_IC10*sub5				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m				
Limit Group:	Wet - Anions				
Last Update:	19-May-2023 12:31:51	Calib Date:	18-May-2023 13:10:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1603				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.145			ND	ND	
2 Chloride	4.315	4.313	0.002	926185158	NC	NC	
3 Nitrite as N	5.003	4.998	0.005	107572491	2.50	2.53	
4 Bromide	6.145	6.163	-0.018	17667283	NC	NC	
5 Nitrate as N	6.910	6.913	-0.003	108155910	2.50	2.43	
6 Orthophosphate as P	9.048	9.127	-0.079	53833009	2.50	2.05	
7 Sulfate	10.232	10.300	-0.068	686565829	NC	NC	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Reagents:

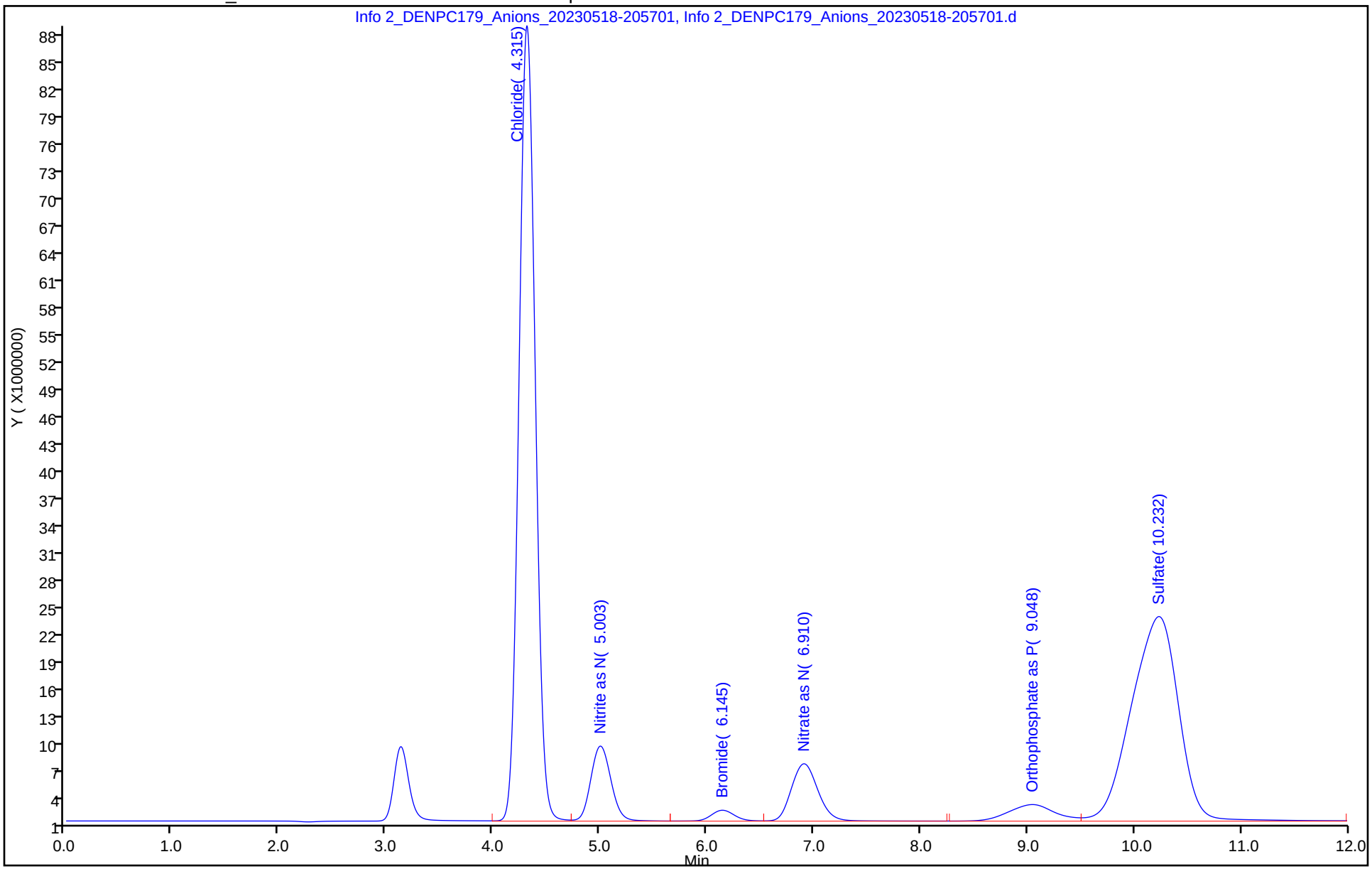
IC LCS_01954 Amount Added: 10.00 Units: mL

Report Date: 19-May-2023 12:31:51 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-205701.d

Injection Date:	18-May-2023 20:42:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	36
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/31/2023 9:08 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-211
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 18-May-2023 20:57:00 ALS Bottle#: 0 Worklist Smp#: 37
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-037
Misc. Info.: 280-0121594-037
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 19-May-2023 12:31:51 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: LVW8 Date: 19-May-2023 12:03:41

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.145				ND	
2 Chloride	4.305	4.313	-0.008	7127336		NC	M
3 Nitrite as N	5.003	4.998	0.005	116037		0.0253	M
4 Bromide	6.167	6.163	0.004	189030		NC	M
5 Nitrate as N	6.973	6.913	0.060	76369		0.0275	M
6 Orthophosphate as P	9.052	9.127	-0.075	6191477		0.009727	
7 Sulfate	10.250	10.300	-0.050	11085723		NC	M

QC Flag Legend

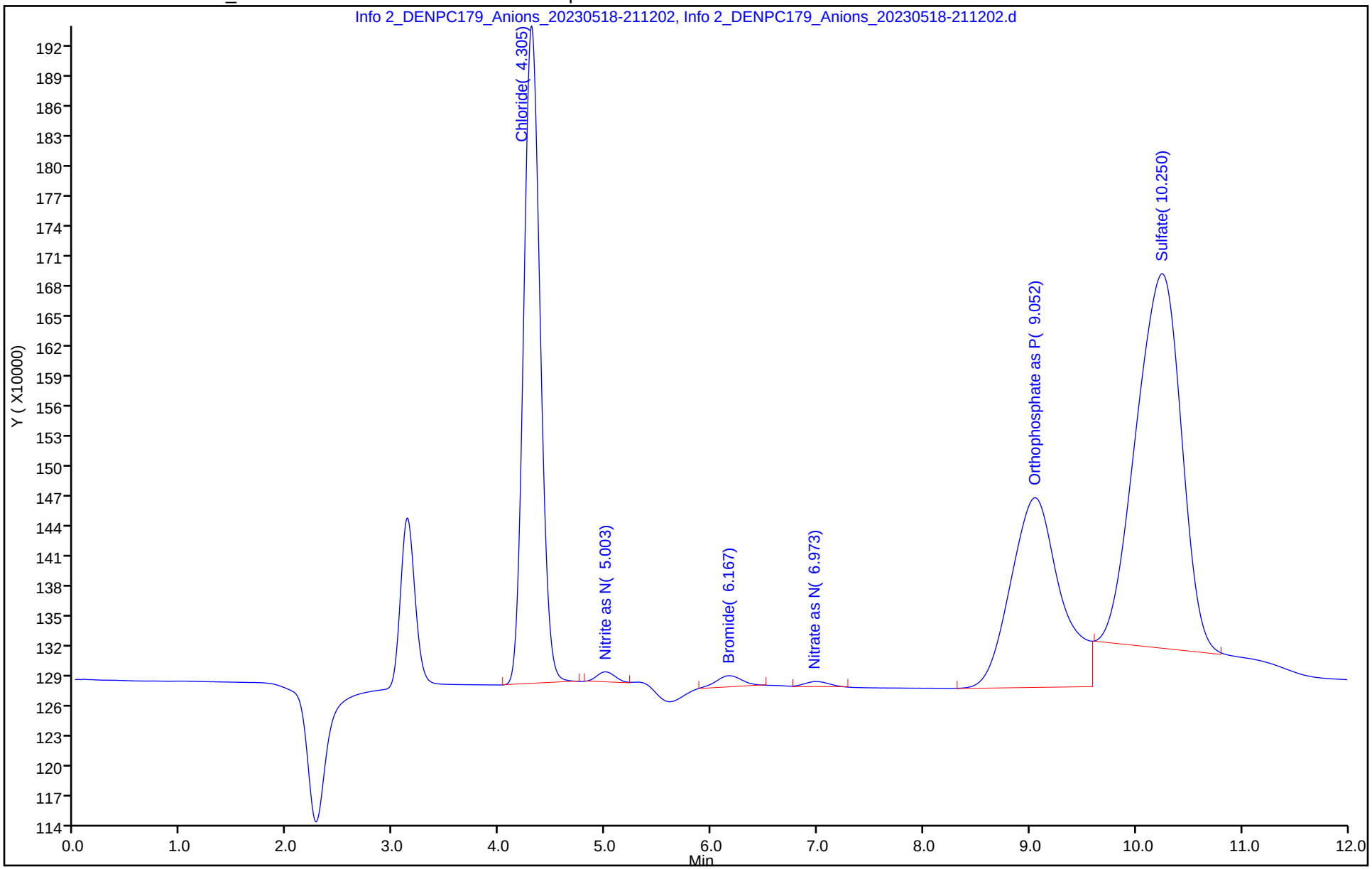
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 19-May-2023 12:31:51 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-211202.d

Injection Date:	18-May-2023 20:57:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	37
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/31/2023 9:08 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-211

Injection Date: 18-May-2023 20:57:00 Instrument ID: WC_IonChrom10

Lims ID: ccb

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 37

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions

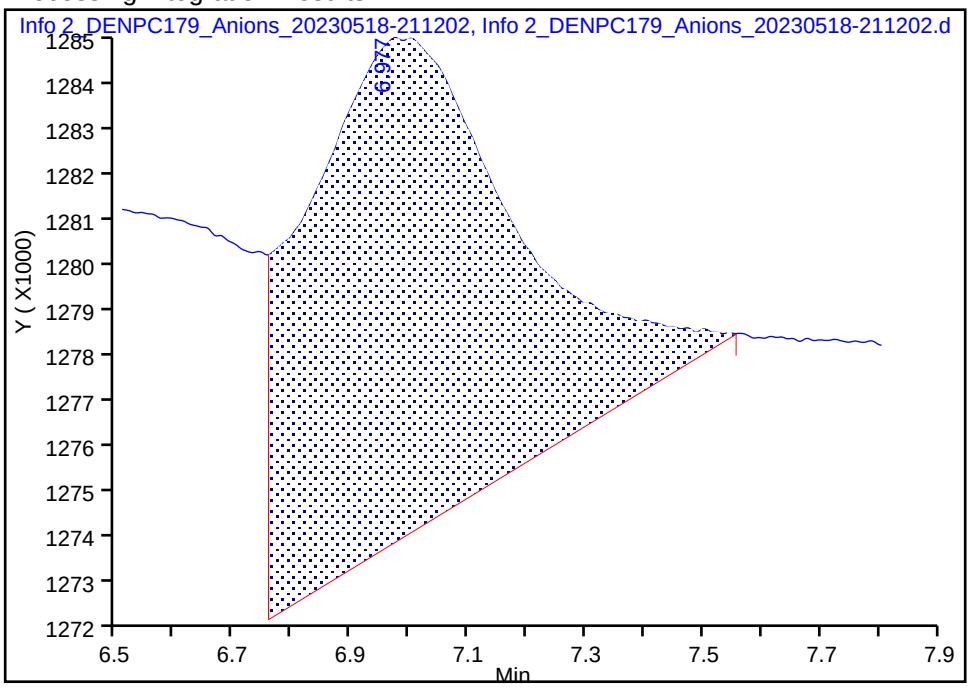
Column: Detector Info 2_091554_1

5 Nitrate as N, CAS: 14797-55-8

Signal: 1

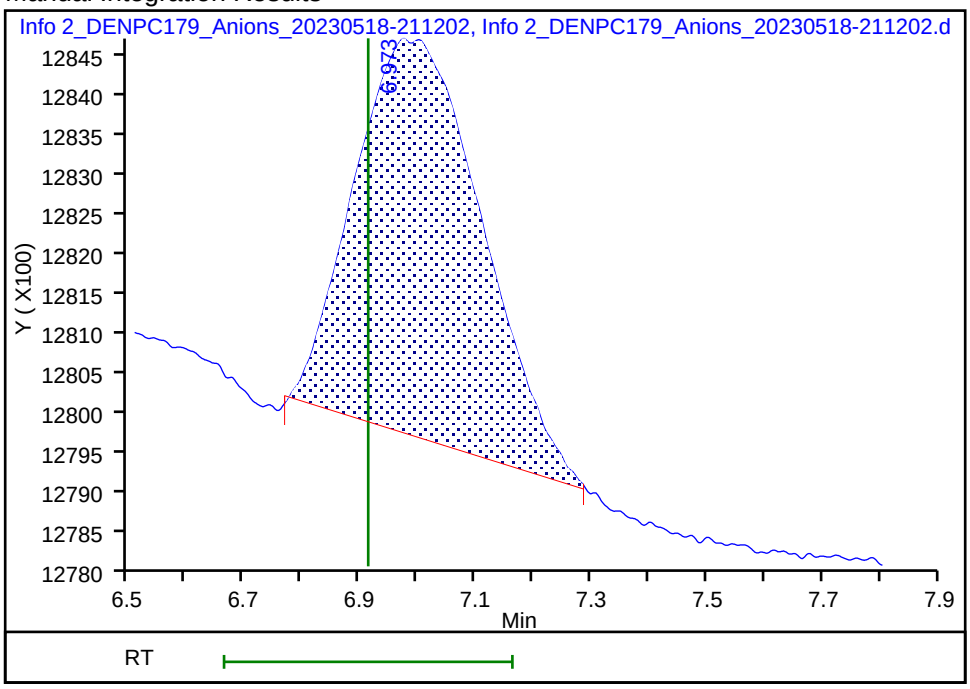
Processing Integration Results

RT: 6.98
Area: 265918
Amount: 0.031672
Amount Units: ug/ml



Manual Integration Results

RT: 6.97
Area: 76369
Amount: 0.027459
Amount Units: ug/ml



Reviewer: LVW8, 19-May-2023 12:03:29 -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\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-211

Injection Date: 18-May-2023 20:57:00 Instrument ID: WC_IonChrom10

Lims ID: ccb

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 37

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions

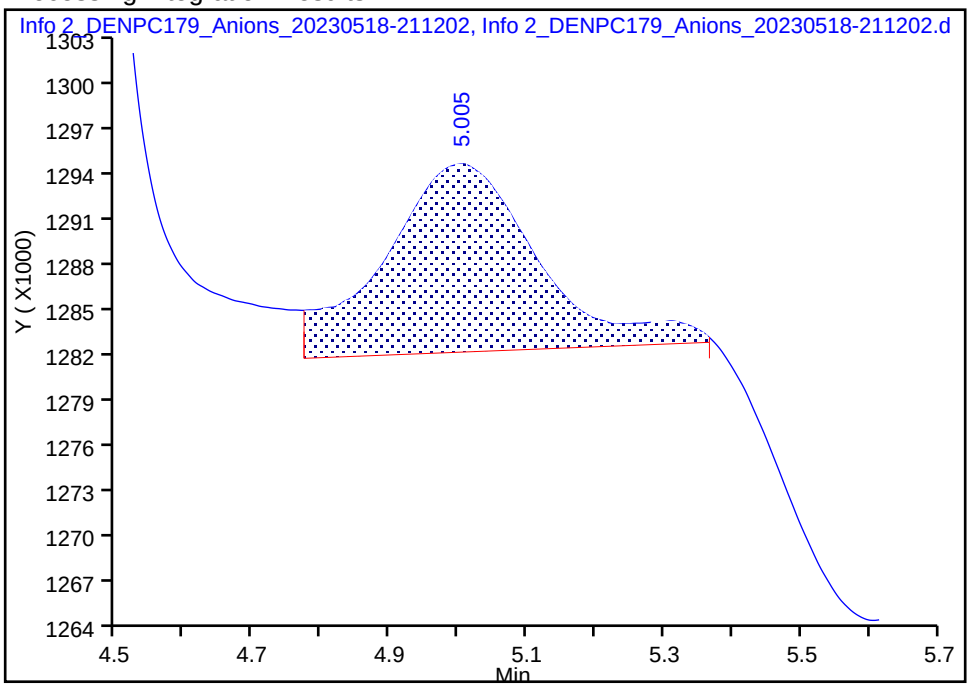
Column: Detector Info 2_091554_1

3 Nitrite as N, CAS: 14797-65-0

Signal: 1

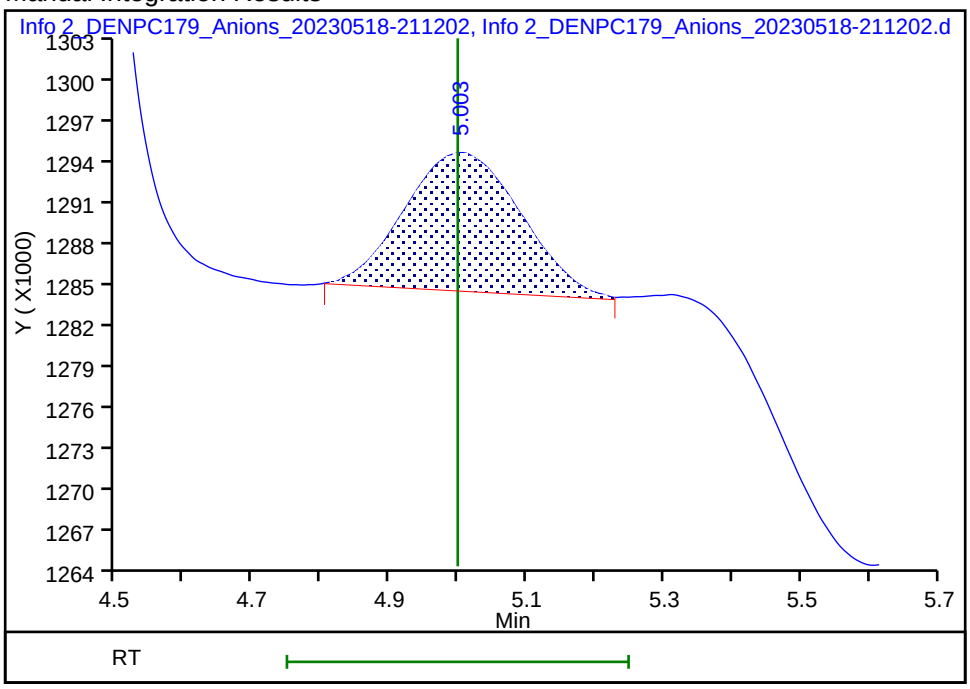
Processing Integration Results

RT: 5.01
Area: 191185
Amount: 0.027032
Amount Units: ug/ml



Manual Integration Results

RT: 5.00
Area: 116037
Amount: 0.025279
Amount Units: ug/ml



Reviewer: LVW8, 19-May-2023 12:03:26 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-235				
Lims ID:	ccv				
Client ID:					
Sample Type:	CCV				
Inject. Date:	18-May-2023 23:41:00	ALS Bottle#:	0	Worklist Smp#:	48
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0121594-048				
Misc. Info.:	280-0121594-048				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Sublist:	chrom-Anions_IC10*sub5				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m				
Limit Group:	Wet - Anions				
Last Update:	19-May-2023 12:32:00	Calib Date:	18-May-2023 13:10:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1603				
First Level Reviewer: XAY4		Date:	19-May-2023 10:54:12		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.145			NC	ND	
2 Chloride	4.313	4.313	0.000	1006185849	NC	NC	
3 Nitrite as N	5.000	4.998	0.002	113584540	2.50	2.67	
4 Bromide	6.127	6.163	-0.036	17948809	NC	NC	
5 Nitrate as N	6.897	6.913	-0.016	112164302	2.50	2.52	
6 Orthophosphate as P	9.023	9.127	-0.104	59801890	2.50	2.31	
7 Sulfate	10.212	10.300	-0.088	780948377	NC	NC	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

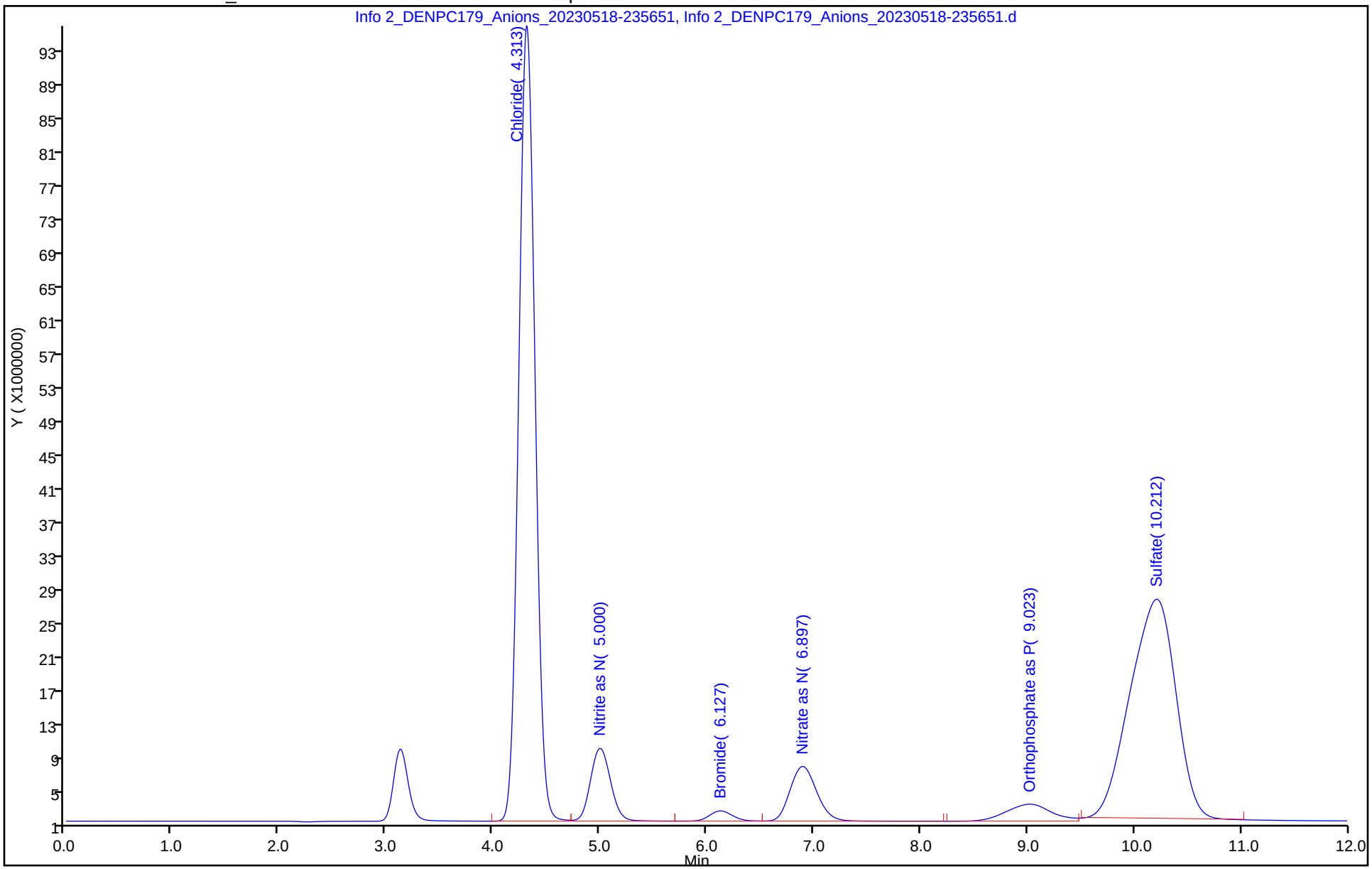
IC LCS_01954 Amount Added: 10.00 Units: mL

Report Date: 19-May-2023 12:32:00 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-235651.d

Injection Date:	18-May-2023 23:41:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	48
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/31/2023 9:08 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230519-001
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 18-May-2023 23:56:00 ALS Bottle#: 0 Worklist Smp#: 49
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-049
Misc. Info.: 280-0121594-049
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 19-May-2023 12:32:00 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: XAY4 Date: 19-May-2023 10:59:02

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.145				ND	
2 Chloride	4.303	4.313	-0.010	6683950		NC	M
3 Nitrite as N	5.003	4.998	0.005	102978		0.0250	M
4 Bromide	6.148	6.163	-0.015	157855		NC	M
5 Nitrate as N	6.975	6.913	0.062	54025		0.0270	M
6 Orthophosphate as P	9.042	9.127	-0.085	11087615		0.2199	
7 Sulfate	10.235	10.300	-0.065	10128974		NC	M

QC Flag Legend

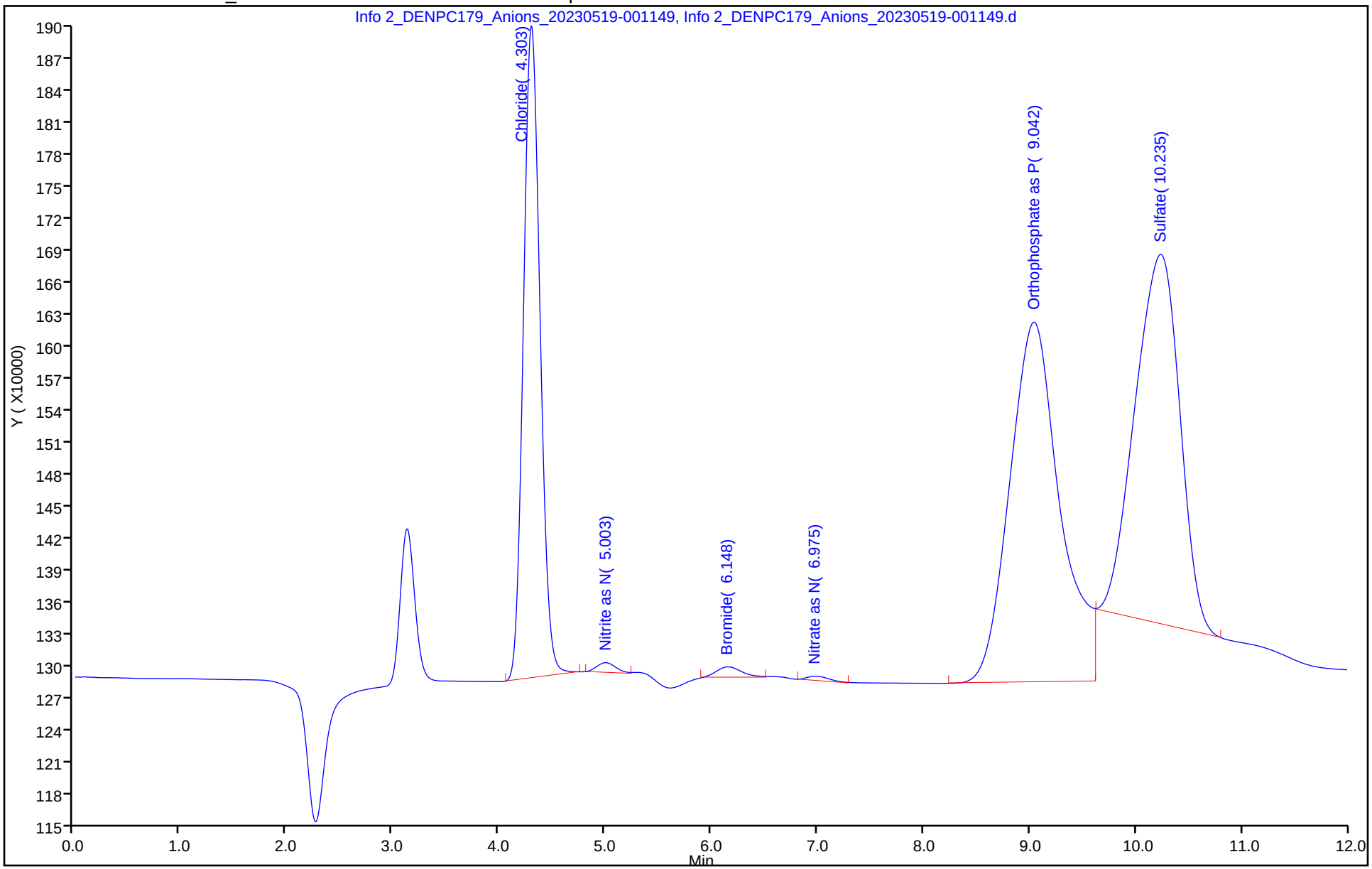
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 19-May-2023 12:32:00 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230519-001149.d

Injection Date:	18-May-2023 23:56:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	49
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/31/2023 9:08 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230519-001

Injection Date: 18-May-2023 23:56:00 Instrument ID: WC_IonChrom10

Lims ID: ccb

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 49

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions

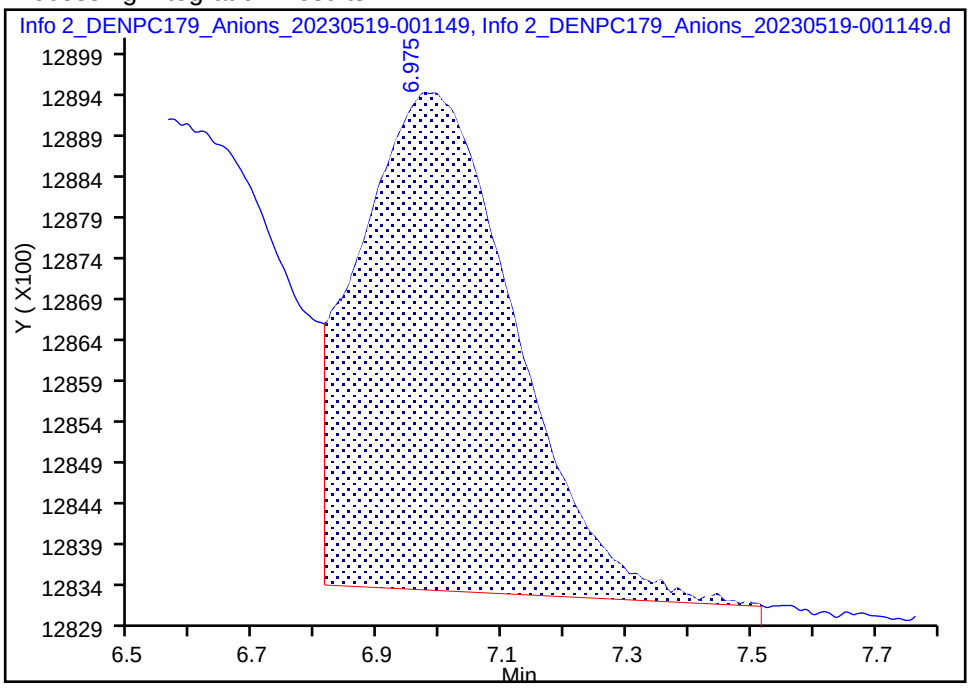
Column: Detector Info 2_091554_1

5 Nitrate as N, CAS: 14797-55-8

Signal: 1

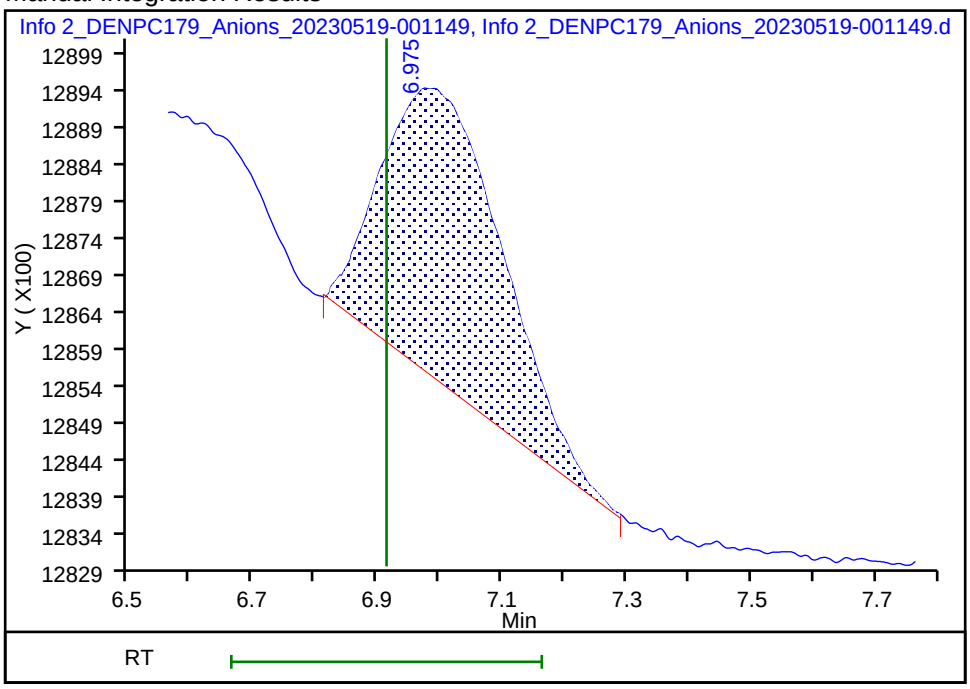
Processing Integration Results

RT: 6.98
Area: 107227
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 6.98
Area: 54025
Amount: 0.026963
Amount Units: ug/ml



Reviewer: LVW8, 19-May-2023 12:07:00 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230519-011
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 19-May-2023 00:56:00 ALS Bottle#: 0 Worklist Smp#: 53
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-053
Misc. Info.: 280-0121594-053
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 19-May-2023 12:32:00 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: XAY4 Date: 19-May-2023 10:54:45

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.145			NC	ND	
2 Chloride	4.315	4.313	0.002	985100117	NC	NC	
3 Nitrite as N	5.003	4.998	0.005	112986038	2.50	2.66	
4 Bromide	6.132	6.163	-0.031	18390855	NC	NC	
5 Nitrate as N	6.905	6.913	-0.008	111290713	2.50	2.50	
6 Orthophosphate as P	9.028	9.127	-0.099	58043149	2.50	2.24	
7 Sulfate	10.212	10.300	-0.088	876224058	NC	NC	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

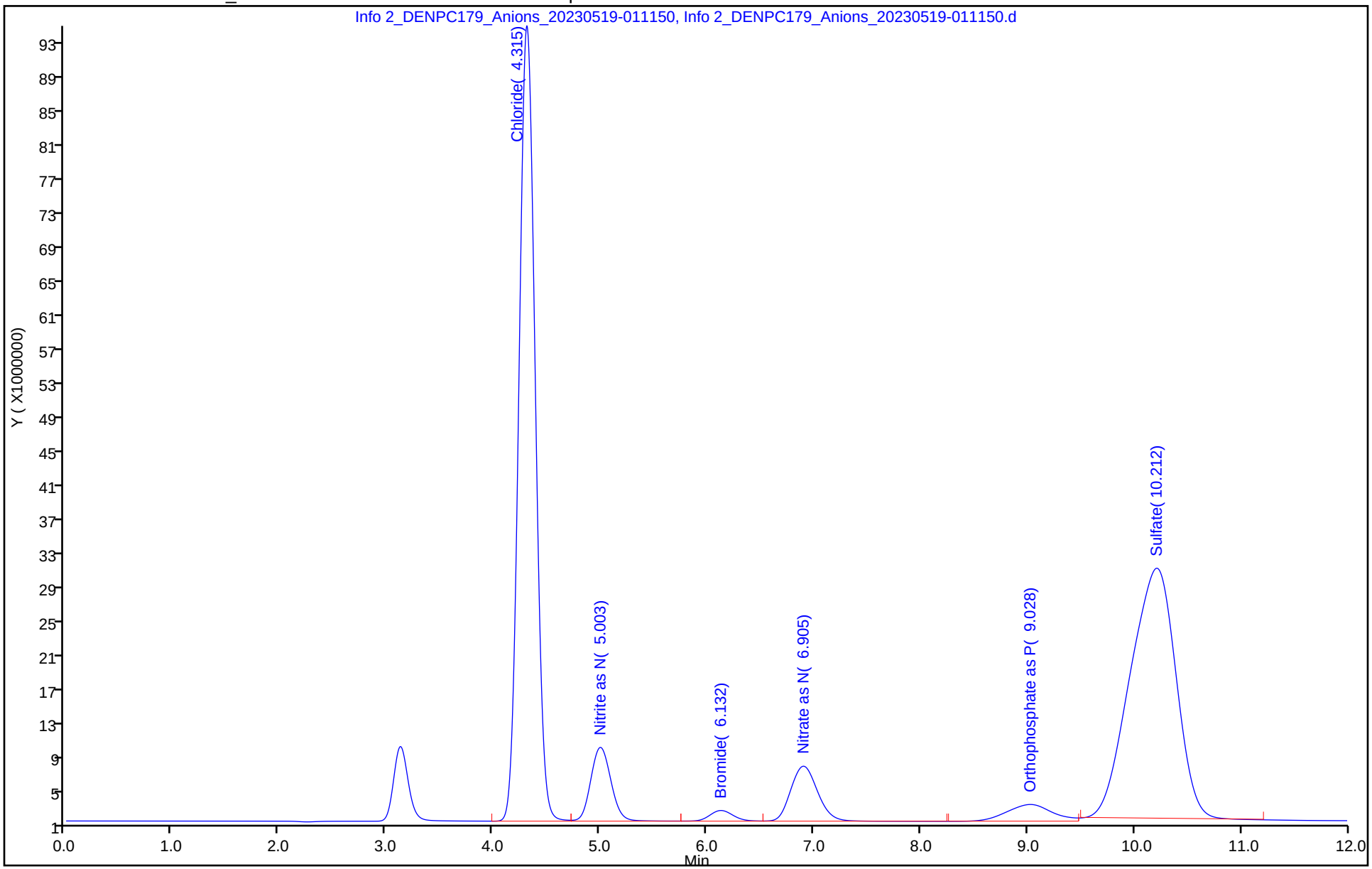
Reagents:

IC LCS_01954 Amount Added: 10.00 Units: mL

Report Date: 19-May-2023 12:32:03 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230519-011150.d				
Injection Date:	19-May-2023 00:56:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	lcs			Worklist Smp#:	53
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/31/2023 9:08 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230519-012
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 19-May-2023 01:11:00 ALS Bottle#: 0 Worklist Smp#: 54
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-054
Misc. Info.: 280-0121594-054
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 19-May-2023 12:32:00 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.145			ND	ND	
2 Chloride	4.313	4.313	0.000	961779421	NC	NC	
3 Nitrite as N	5.002	4.998	0.004	110662881	2.50	2.60	
4 Bromide	6.130	6.163	-0.033	18424761	NC	NC	
5 Nitrate as N	6.898	6.913	-0.015	109150694	2.50	2.45	
6 Orthophosphate as P	9.020	9.127	-0.107	57102319	2.50	2.19	
7 Sulfate	10.215	10.300	-0.085	717016076	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

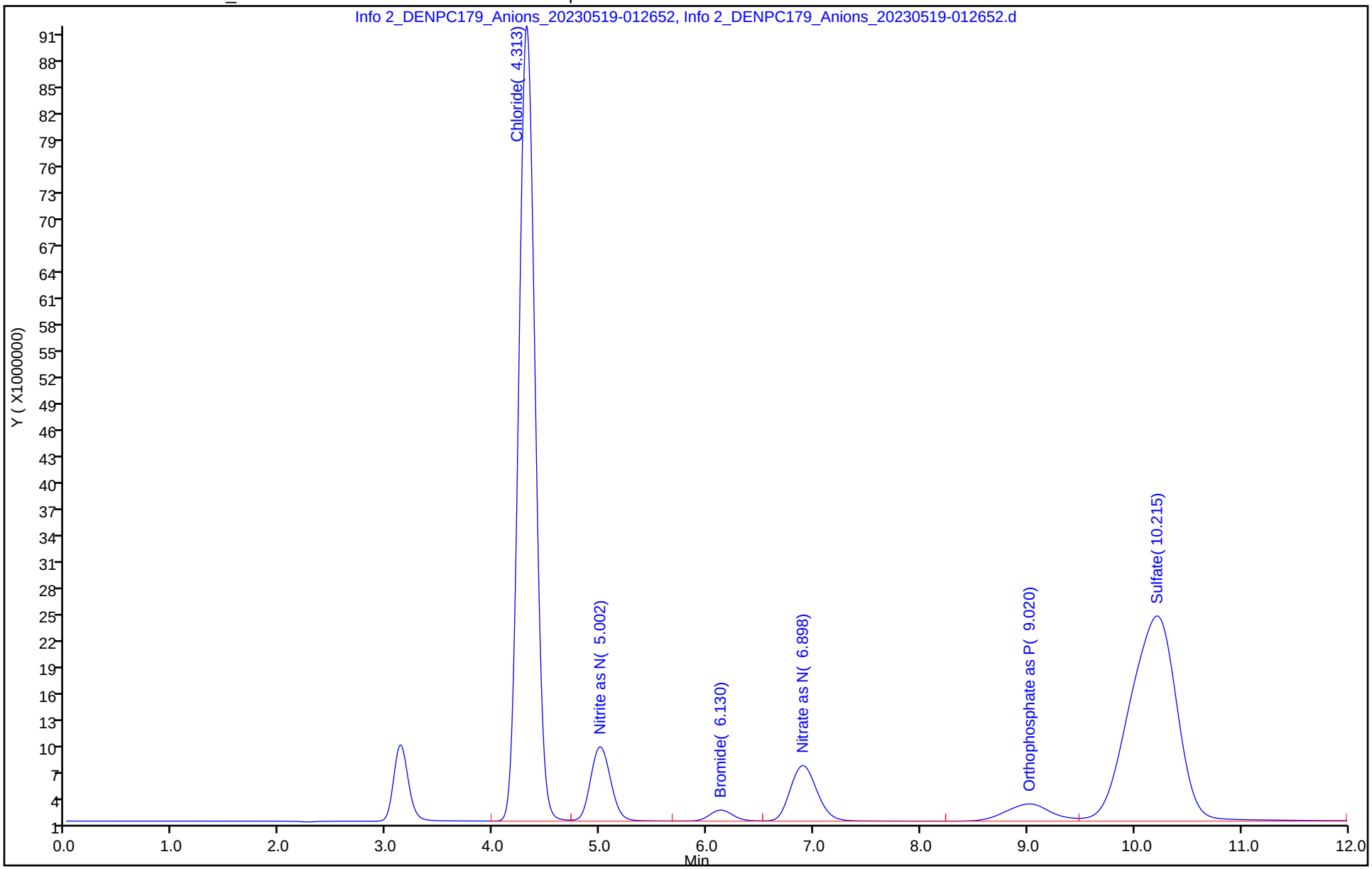
Reagents:

IC LCS_01954 Amount Added: 10.00 Units: mL

Report Date: 19-May-2023 12:32:03 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230519-012652.d				
Injection Date:	19-May-2023 01:11:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	lcsd			Worklist Smp#:	54
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/31/2023 9:08 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230519-014
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 19-May-2023 01:26:00 ALS Bottle#: 0 Worklist Smp#: 55
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-055
Misc. Info.: 280-0121594-055
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 19-May-2023 12:32:00 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: XAY4 Date: 19-May-2023 10:59:34

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.145				ND	
2 Chloride	4.303	4.313	-0.010	6687549		NC	M
3 Nitrite as N	5.003	4.998	0.005	132102		0.0257	M
4 Bromide	6.158	6.163	-0.005	137170		NC	M
5 Nitrate as N	6.982	6.913	0.069	60360		0.0271	M
6 Orthophosphate as P	9.037	9.127	-0.090	10239561		0.1835	
7 Sulfate	10.237	10.300	-0.063	9929845		NC	M

QC Flag Legend

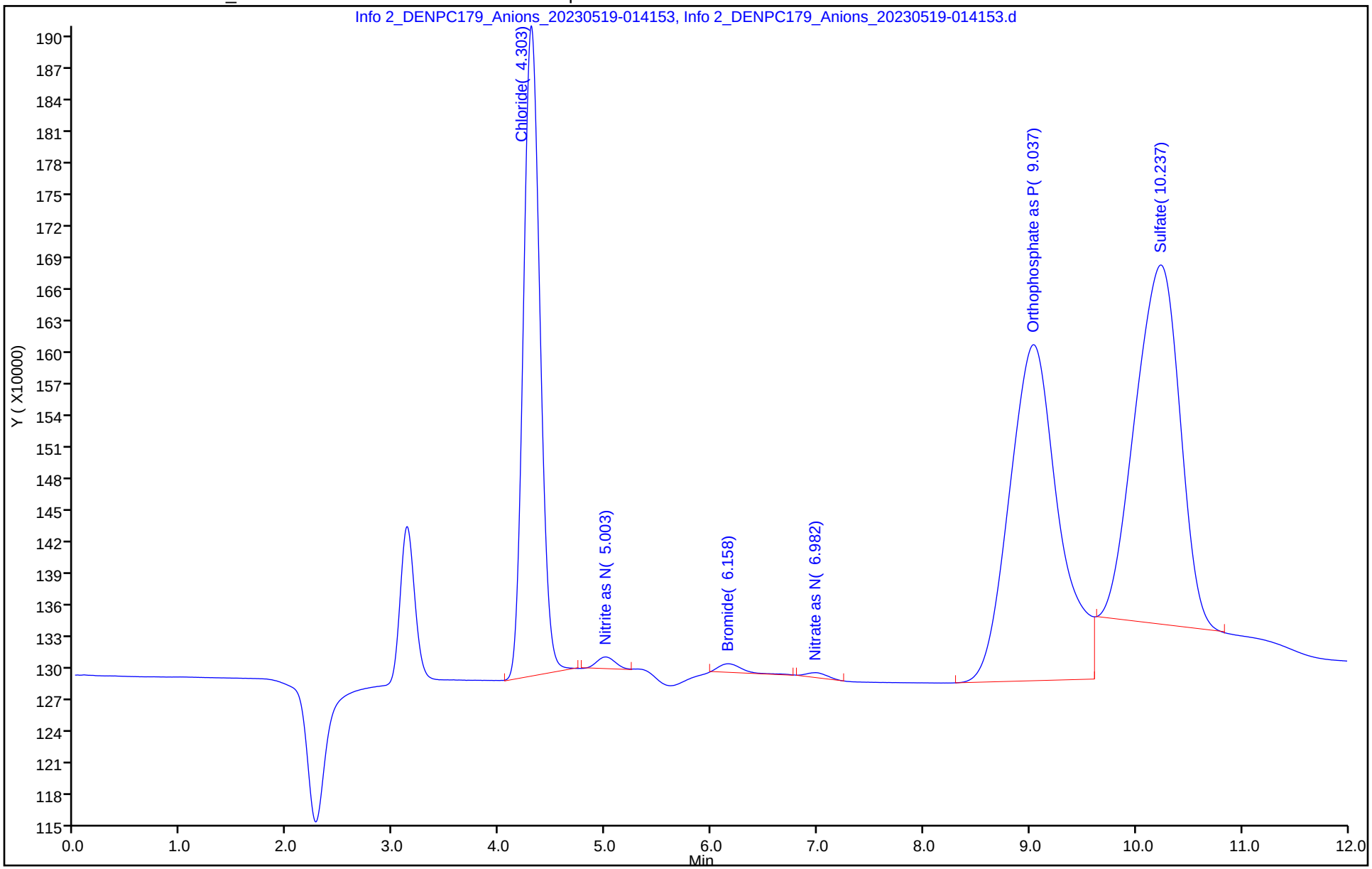
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 19-May-2023 12:32:04 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230519-014153.d

Injection Date:	19-May-2023 01:26:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	mb			Worklist Smp#:	55
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/31/2023 9:08 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230519-014

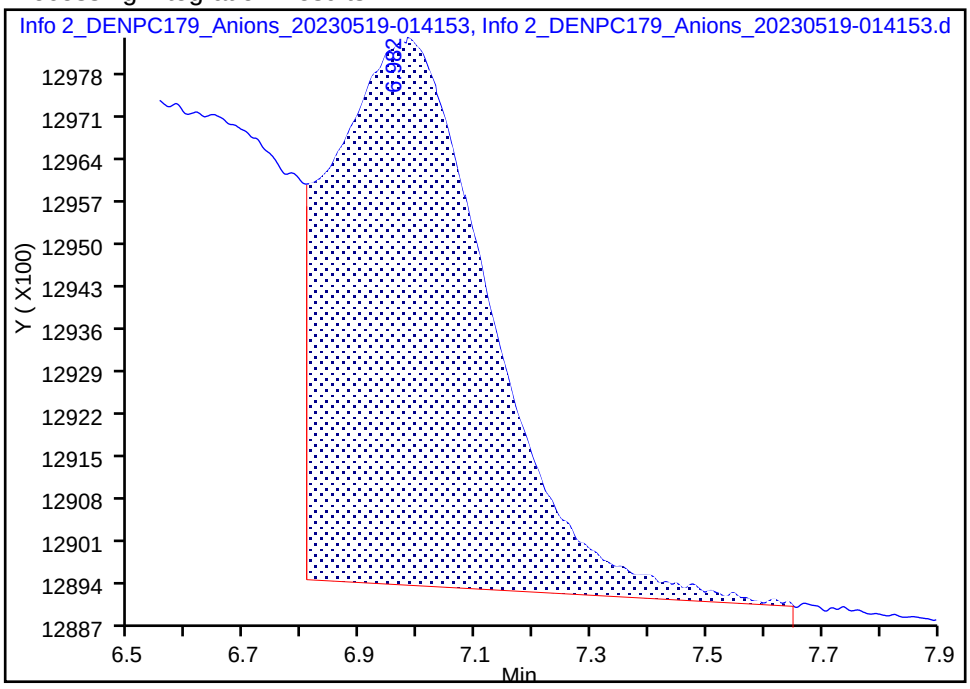
Injection Date:	19-May-2023 01:26:00	Instrument ID:	WC_IonChrom10
Lims ID:	mb		
Client ID:			
Operator ID:	wetchemd	ALS Bottle#:	0 Worklist Smp#: 55
Injection Vol:	5.0 ul	Dil. Factor:	1.0000
Method:	Anions_IC10	Limit Group:	Wet - Anions
Column:		Detector	Info 2_091554_1

5 Nitrate as N, CAS: 14797-55-8

Signal: 1

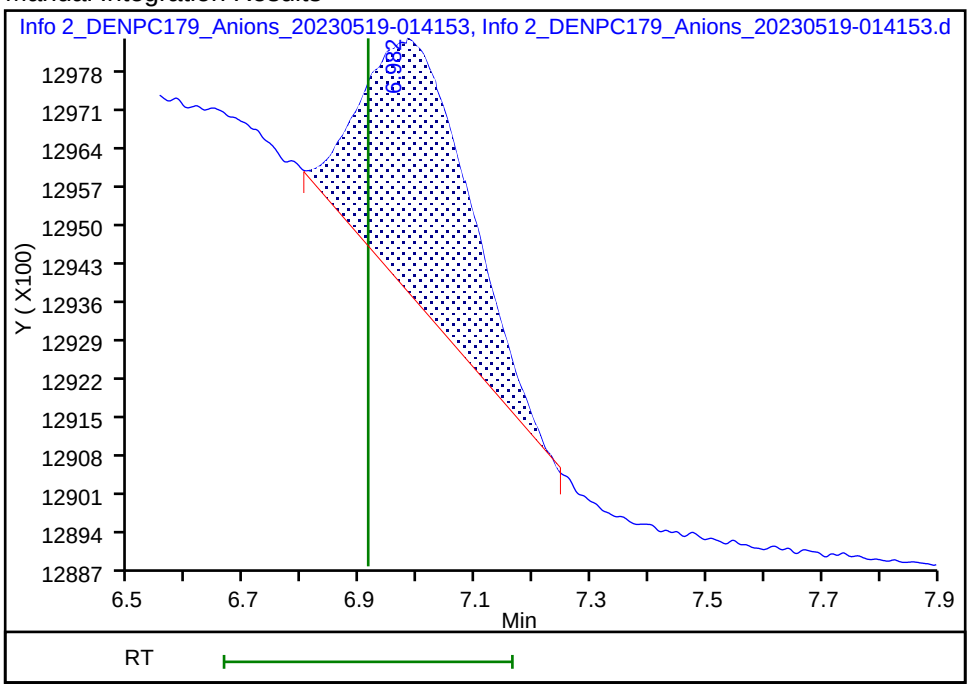
Processing Integration Results

RT: 6.98
Area: 170622
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 6.98
Area: 60360
Amount: 0.027103
Amount Units: ug/ml



Reviewer: LVW8, 19-May-2023 12:07:59 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230519-025
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 19-May-2023 02:42:00 ALS Bottle#: 0 Worklist Smp#: 60
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-060
Misc. Info.: 280-0121594-060
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 19-May-2023 12:32:07 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: XAY4 Date: 19-May-2023 09:48:09

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.145			NC	ND	
2 Chloride	4.315	4.313	0.002	951474195	NC	NC	
3 Nitrite as N	5.003	4.998	0.005	111742013	2.50	2.63	
4 Bromide	6.138	6.163	-0.025	17981985	NC	NC	
5 Nitrate as N	6.903	6.913	-0.010	119448879	2.50	2.68	M
6 Orthophosphate as P	9.030	9.127	-0.097	57271017	2.50	2.20	
7 Sulfate	10.220	10.300	-0.080	712406832	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

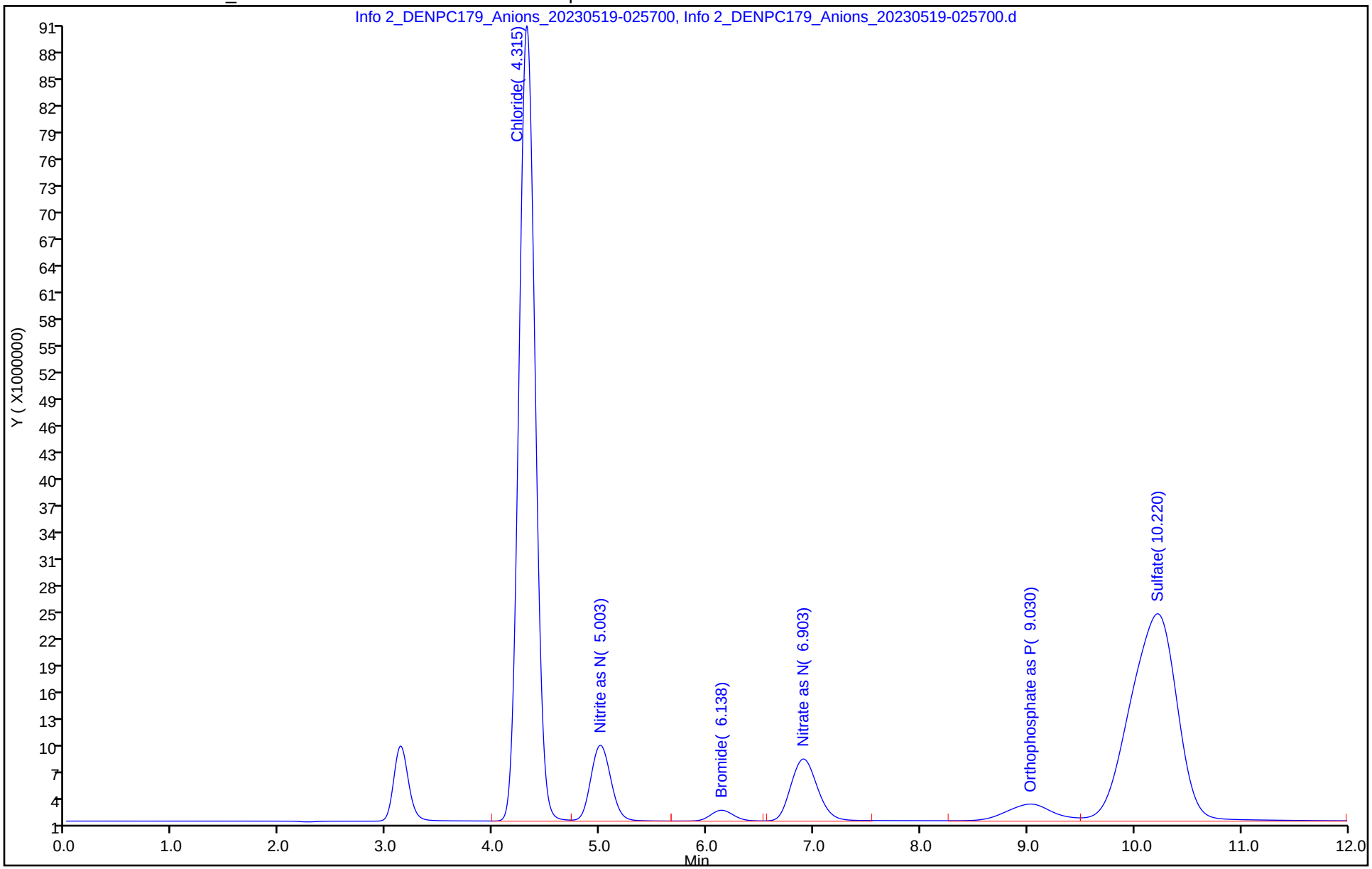
IC LCS_01954 Amount Added: 10.00 Units: mL

Report Date: 19-May-2023 12:32:07 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230519-025700.d

Injection Date:	19-May-2023 02:42:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	60
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/31/2023 9:08 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230519-025

Injection Date: 19-May-2023 02:42:00 Instrument ID: WC_IonChrom10

Lims ID: ccv

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 60

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions

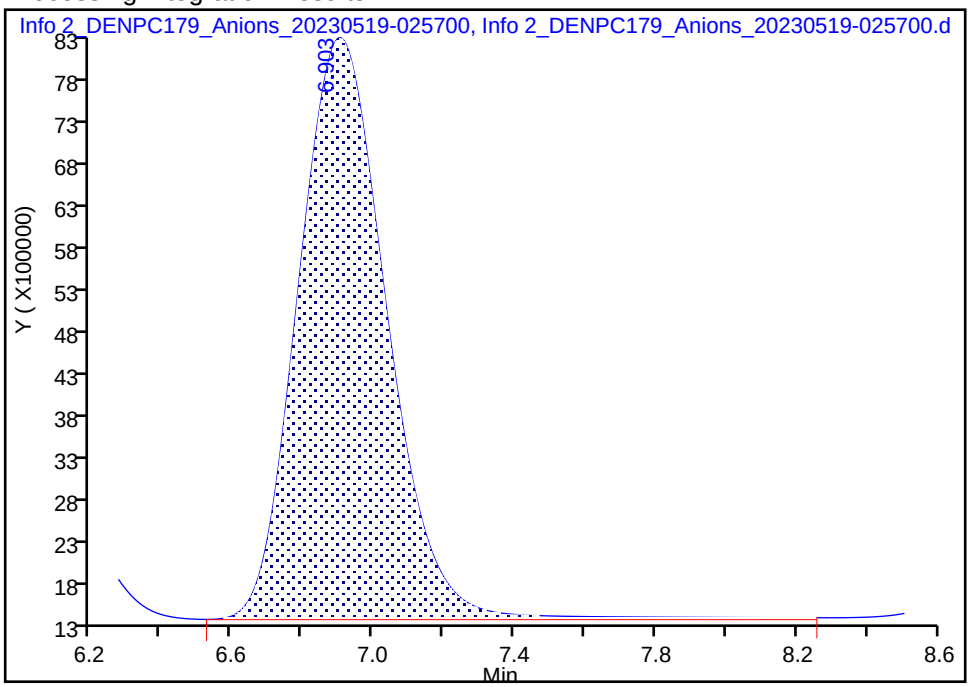
Column: Detector Info 2_091554_1

5 Nitrate as N, CAS: 14797-55-8

Signal: 1

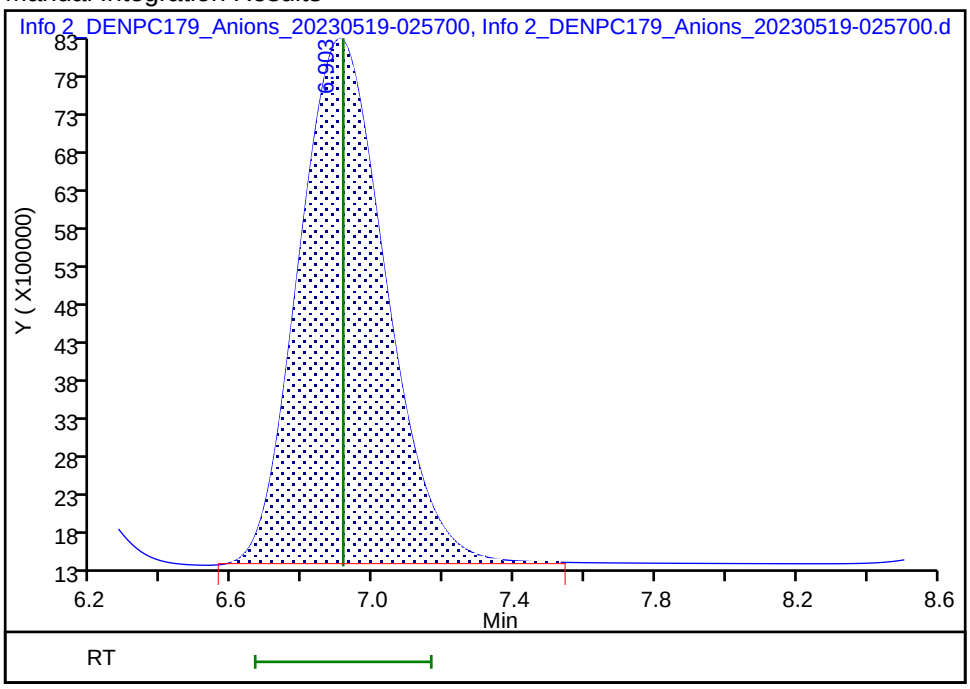
Processing Integration Results

RT: 6.90
Area: 122651005
Amount: 2.751897
Amount Units: ug/ml



Manual Integration Results

RT: 6.90
Area: 119448879
Amount: 2.680724
Amount Units: ug/ml



Reviewer: XAY4, 19-May-2023 09:48:05 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230519-031
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 19-May-2023 02:57:00 ALS Bottle#: 0 Worklist Smp#: 61
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-061
Misc. Info.: 280-0121594-061
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 19-May-2023 12:32:07 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: LVW8 Date: 19-May-2023 12:09:33

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.145				ND	
2 Chloride	4.307	4.313	-0.006	7010633		NC	M
3 Nitrite as N	5.005	4.998	0.007	181021		0.0268	M
4 Bromide	6.160	6.163	-0.003	189023		NC	M
5 Nitrate as N	7.007	6.913	0.094	431220		0.0353	M
6 Orthophosphate as P	9.048	9.127	-0.079	9019381		0.1311	
7 Sulfate	10.240	10.300	-0.060	10195287		NC	M

QC Flag Legend

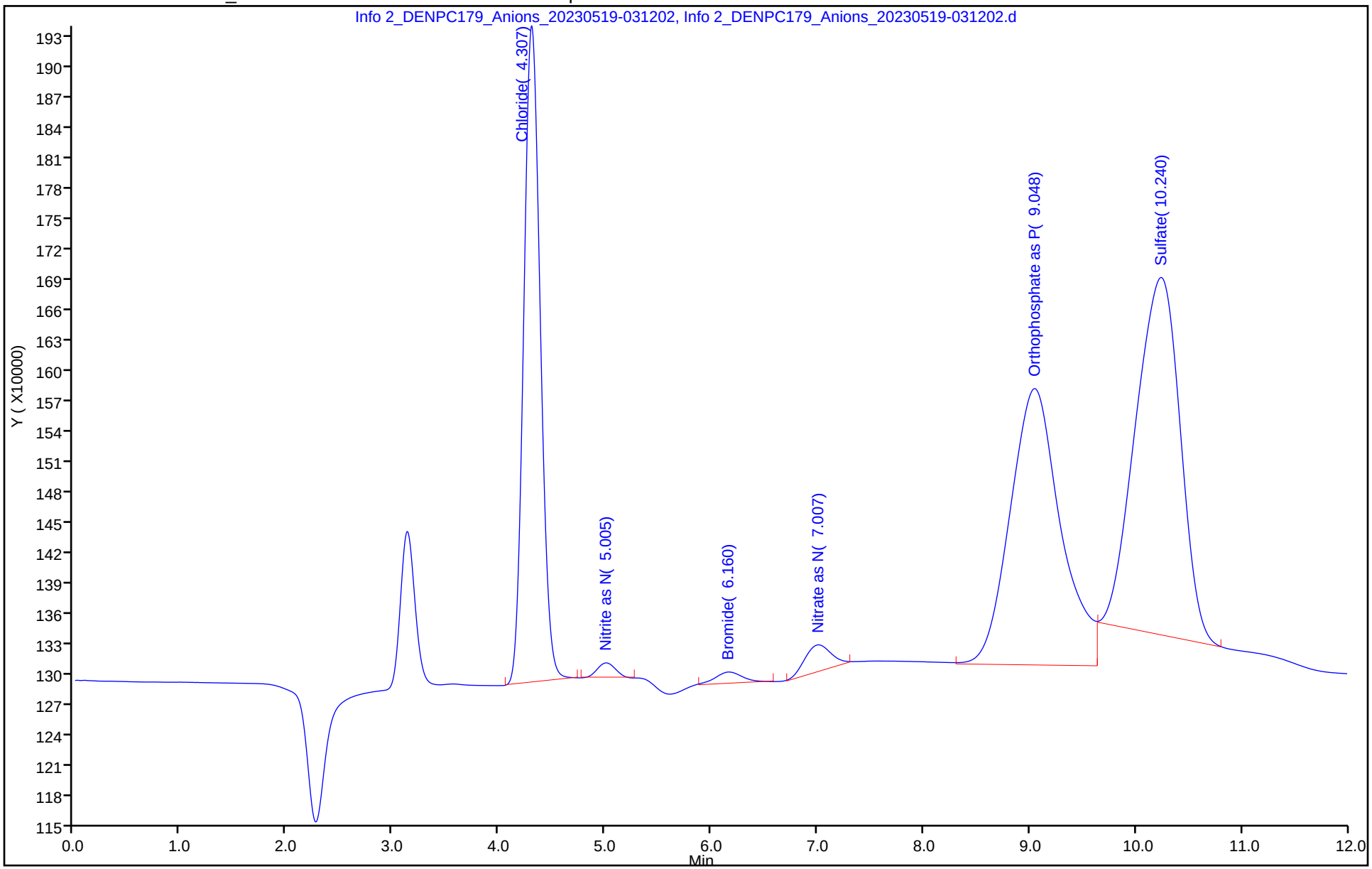
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 19-May-2023 12:32:08 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230519-031202.d

Injection Date:	19-May-2023 02:57:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	61
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/31/2023 9:08 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230519-031

Injection Date: 19-May-2023 02:57:00 Instrument ID: WC_IonChrom10

Lims ID: ccb

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 61

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions

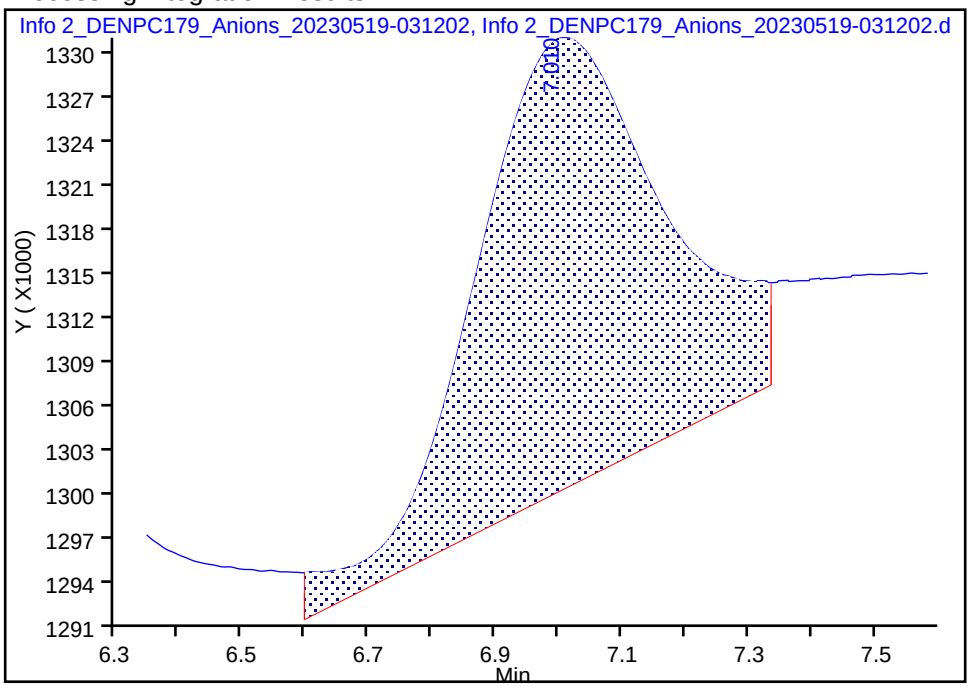
Column: Detector Info 2_091554_1

5 Nitrate as N, CAS: 14797-55-8

Signal: 1

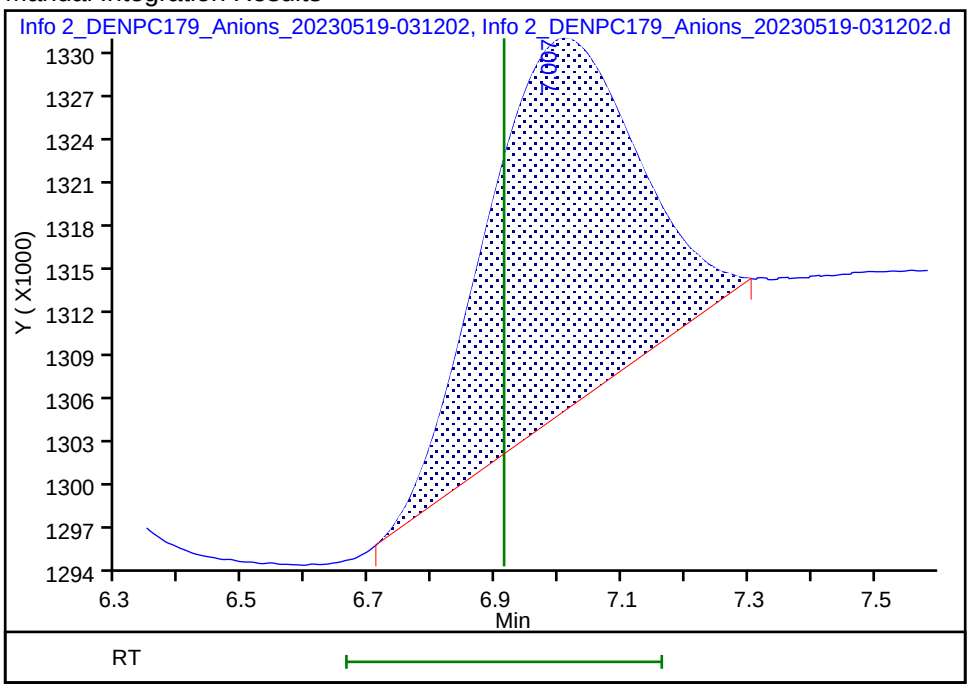
Processing Integration Results

RT: 7.01
Area: 633844
Amount: 0.039850
Amount Units: ug/ml



Manual Integration Results

RT: 7.01
Area: 431220
Amount: 0.035346
Amount Units: ug/ml



Reviewer: LVW8, 19-May-2023 12:09:23 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230519-055				
Lims ID:	ccv				
Client ID:					
Sample Type:	CCV				
Inject. Date:	19-May-2023 05:42:00	ALS Bottle#:	0	Worklist Smp#:	72
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0121594-072				
Misc. Info.:	280-0121594-072				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Sublist:	chrom-Anions_IC10*sub5				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m				
Limit Group:	Wet - Anions				
Last Update:	19-May-2023 12:32:15	Calib Date:	18-May-2023 13:10:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1603				
First Level Reviewer: XAY4		Date:	19-May-2023 09:48:31		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.145			NC	ND	
2 Chloride	4.313	4.313	0.000	1048693012	NC	NC	M
3 Nitrite as N	5.003	4.998	0.005	114016951	2.50	2.68	M
4 Bromide	6.137	6.163	-0.026	18725437	NC	NC	
5 Nitrate as N	6.910	6.913	-0.003	119161316	2.50	2.67	M
6 Orthophosphate as P	9.032	9.127	-0.095	69679815	2.50	2.73	
7 Sulfate	10.187	10.300	-0.113	1768620183	NC	NC	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

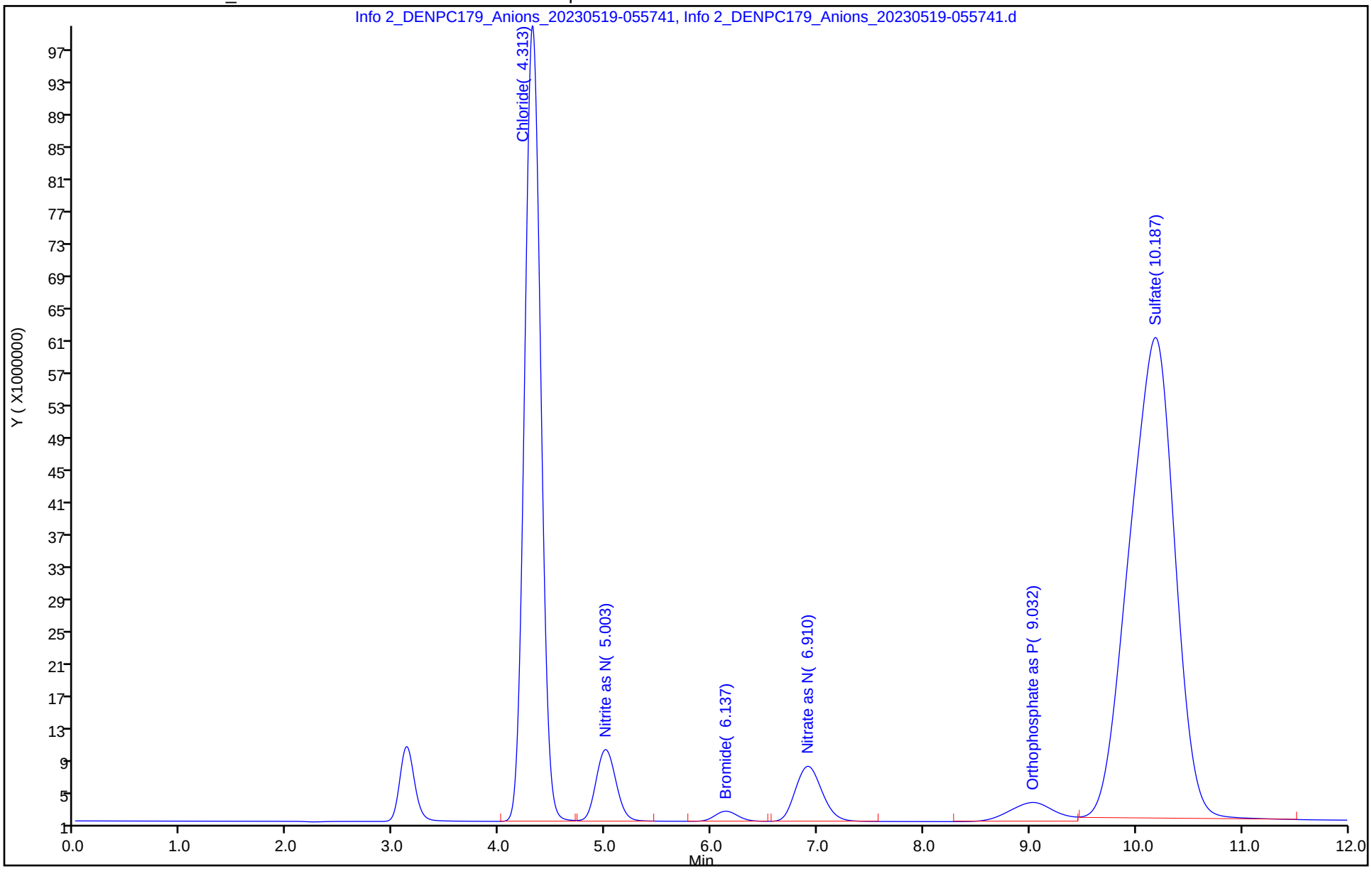
Reagents:

IC LCS_01954 Amount Added: 10.00 Units: mL

Report Date: 19-May-2023 12:32:15 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230519-055741.d				
Injection Date:	19-May-2023 05:42:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	72
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/31/2023 9:08 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230519-055

Injection Date: 19-May-2023 05:42:00 Instrument ID: WC_IonChrom10

Lims ID: ccv

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 72

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions

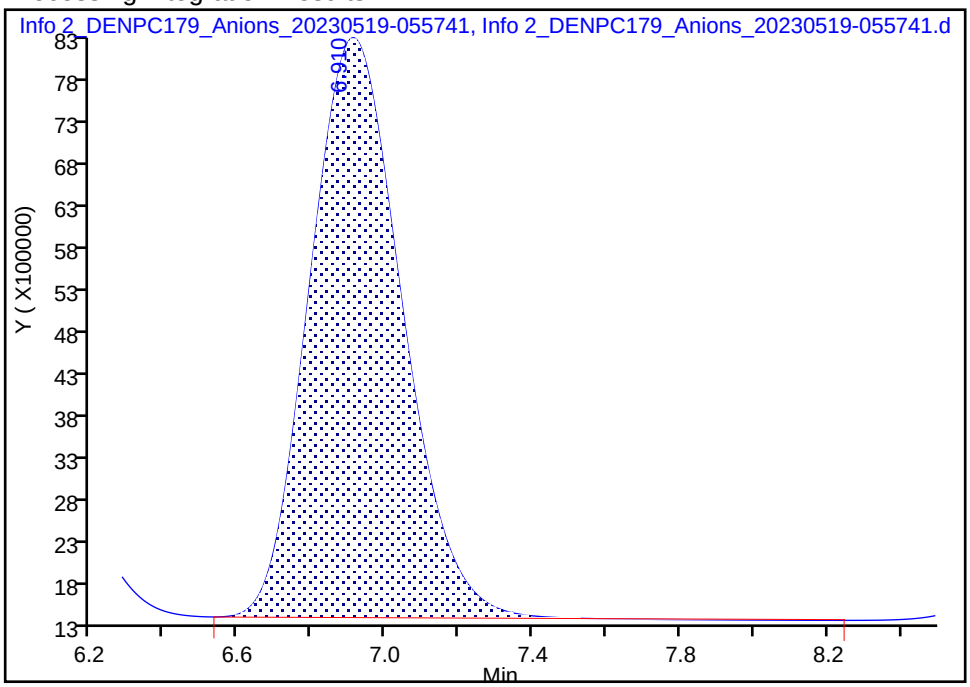
Column: Detector Info 2_091554_1

5 Nitrate as N, CAS: 14797-55-8

Signal: 1

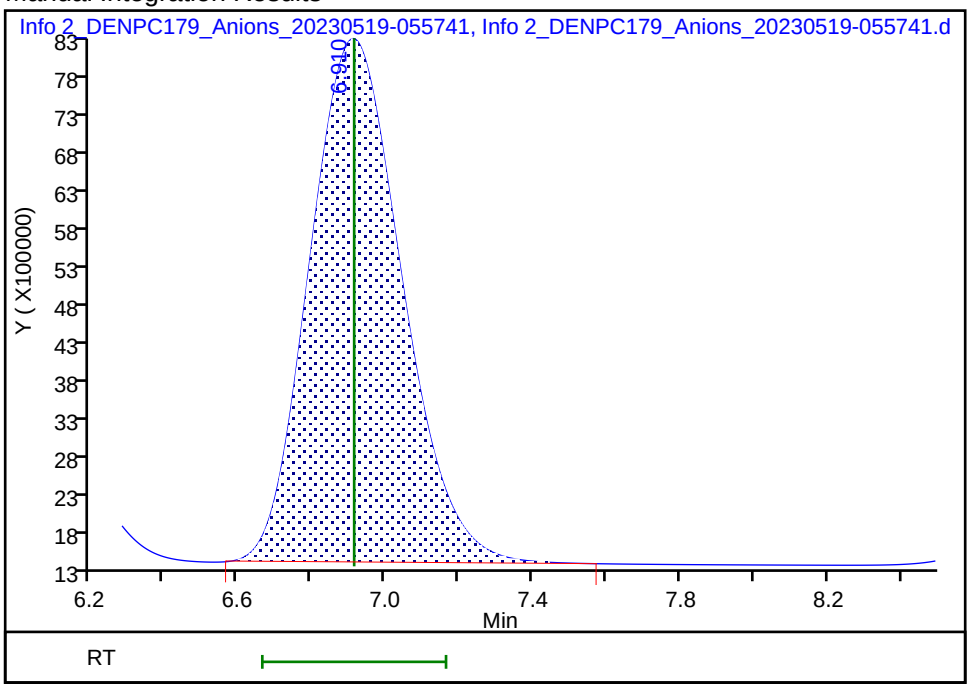
Processing Integration Results

RT: 6.91
Area: 119310357
Amount: 2.677645
Amount Units: ug/ml



Manual Integration Results

RT: 6.91
Area: 119161316
Amount: 2.674332
Amount Units: ug/ml



Reviewer: LVW8, 19-May-2023 12:11:59 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230519-061
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 19-May-2023 05:57:00 ALS Bottle#: 0 Worklist Smp#: 73
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-073
Misc. Info.: 280-0121594-073
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 19-May-2023 12:32:15 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: LVW8 Date: 19-May-2023 11:14:15

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.145				ND	
2 Chloride	4.307	4.313	-0.006	7258099		NC	M
3 Nitrite as N	5.010	4.998	0.012	183242		0.0268	M
4 Bromide	6.160	6.163	-0.003	166879		NC	M
5 Nitrate as N	7.003	6.913	0.090	191074		0.0300	M
6 Orthophosphate as P	9.042	9.127	-0.085	10457998		0.1928	
7 Sulfate	10.243	10.300	-0.057	11421829		NC	M

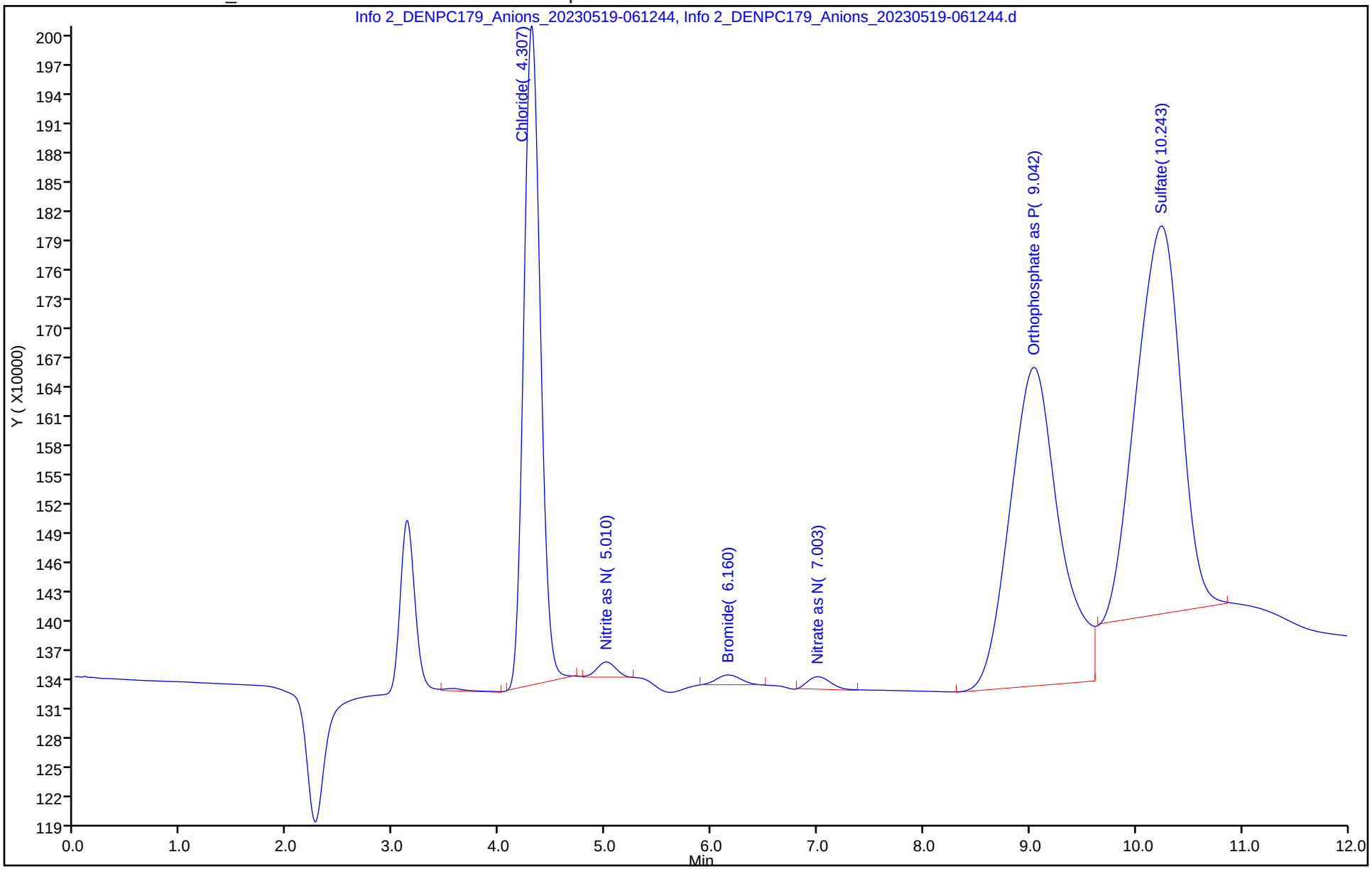
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 19-May-2023 12:32:16 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230519-061244.d				
Injection Date:	19-May-2023 05:57:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	73
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/31/2023 9:08 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230519-061

Injection Date: 19-May-2023 05:57:00 Instrument ID: WC_IonChrom10

Lims ID: ccb

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 73

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions

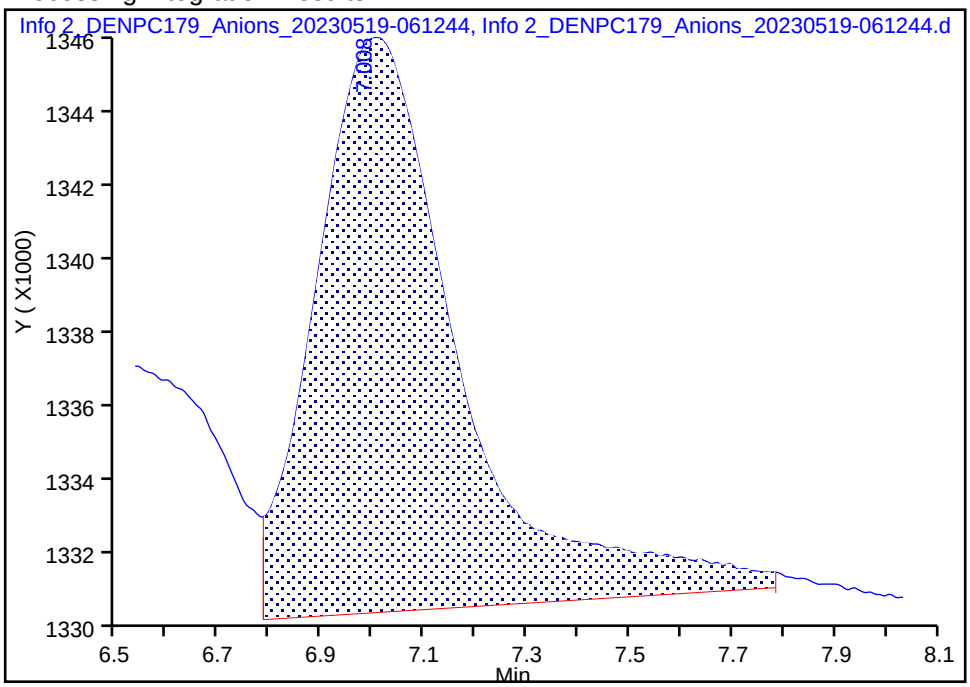
Column: Detector Info 2_091554_1

5 Nitrate as N, CAS: 14797-55-8

Signal: 1

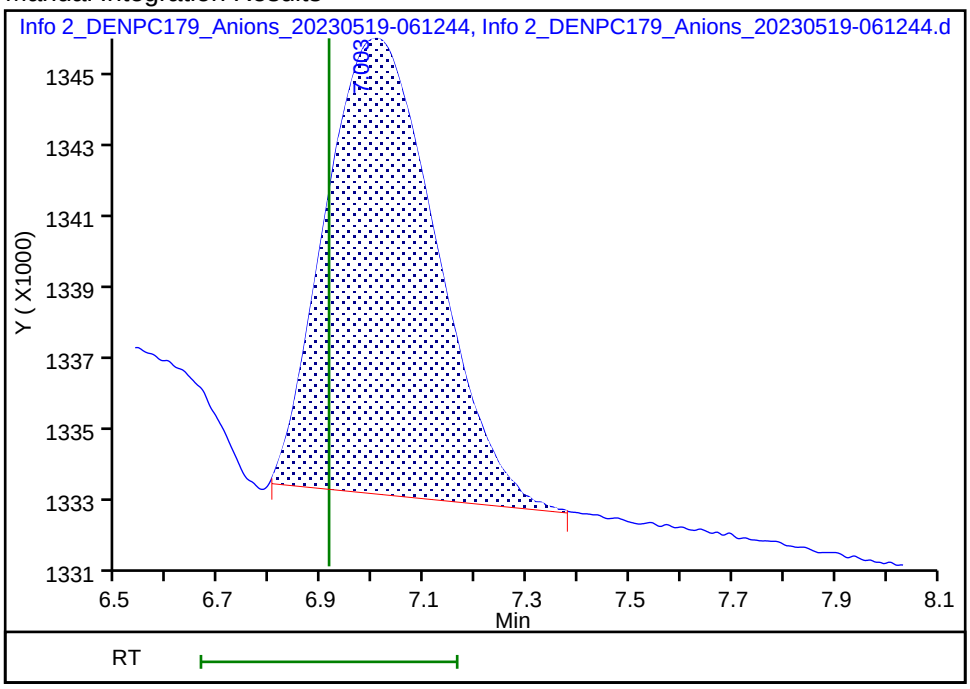
Processing Integration Results

RT: 7.01
Area: 293258
Amount: 0.032280
Amount Units: ug/ml



Manual Integration Results

RT: 7.00
Area: 191074
Amount: 0.030009
Amount Units: ug/ml



Reviewer: LVW8, 19-May-2023 12:12:21 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230519-065
Lims ID: 280-176674-A-9
Client ID: LL12mw-245-230401-GW
Sample Type: Client
Inject. Date: 19-May-2023 06:42:00 ALS Bottle#: 0 Worklist Smp#: 76
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-076
Misc. Info.: 280-0121594-076
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 19-May-2023 12:32:15 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: LVW8 Date: 19-May-2023 12:13:21

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		3.145			ND	
2 Chloride	4.342	4.313	0.029	185834867	NC	M
3 Nitrite as N		4.998			ND	
4 Bromide	6.292	6.163	0.129	1063857	NC	M
5 Nitrate as N	7.090	6.913	0.177	938335	0.0466	M
6 Orthophosphate as P	9.183	9.127	0.056	4723047	-0.0533	
7 Sulfate	10.220	10.300	-0.080	3278605455	NC	M

QC Flag Legend

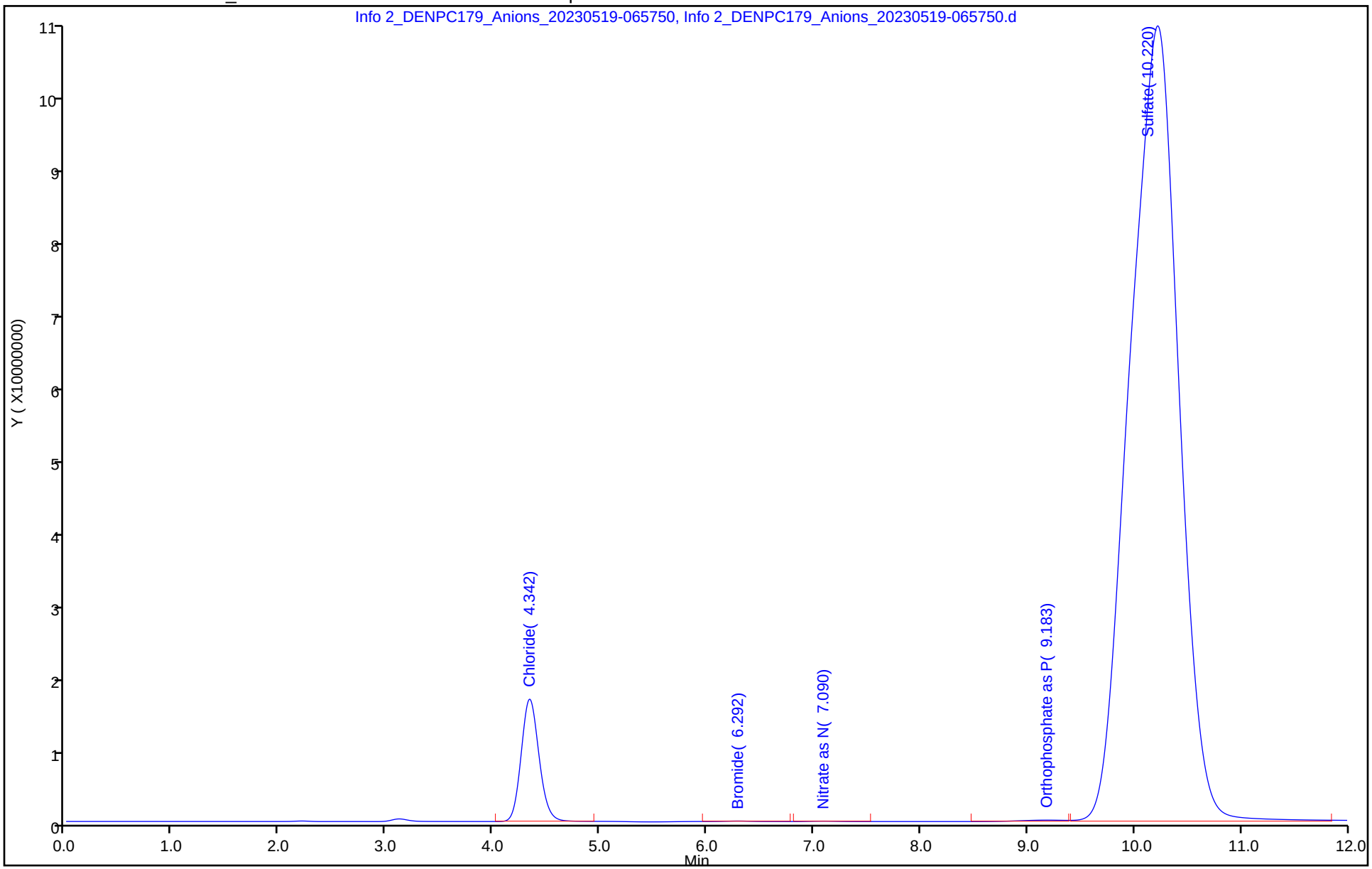
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 19-May-2023 12:32:18 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230519-065750.d

Injection Date:	19-May-2023 06:42:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-176674-A-9	Lab Sample ID:	280-176674-9	Worklist Smp#:	76
Client ID:	LL12mw-245-230401-GW				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/31/2023 9:08 PM

Eurofins Denver

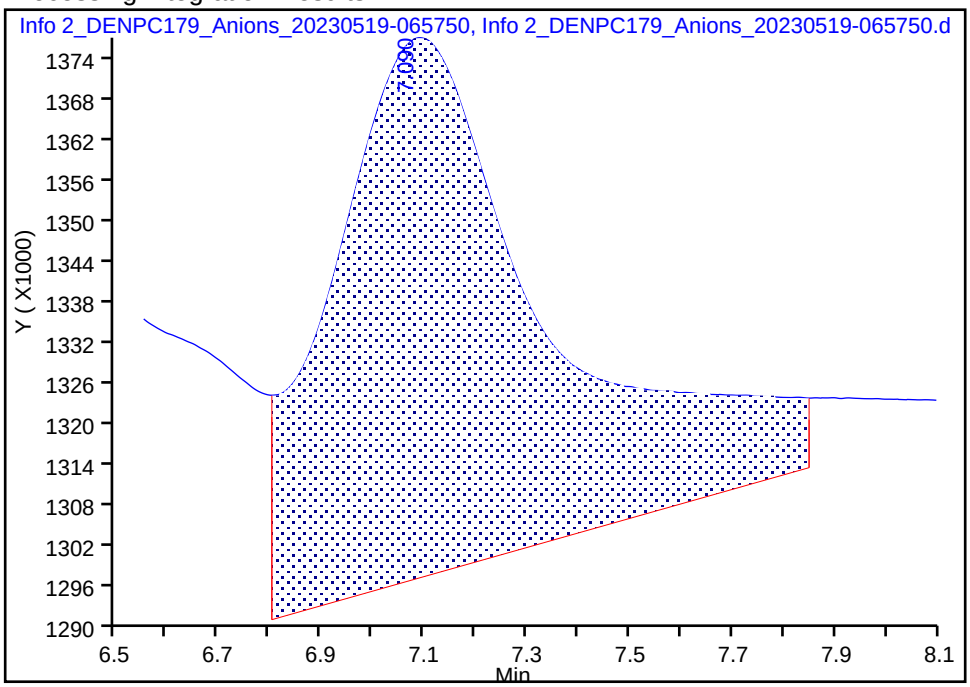
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230519-065				
Injection Date:	19-May-2023 06:42:00	Instrument ID:	WC_IonChrom10		
Lims ID:	280-176674-A-9	Lab Sample ID:	280-176674-9		
Client ID:	LL12mw-245-230401-GW				
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	76
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

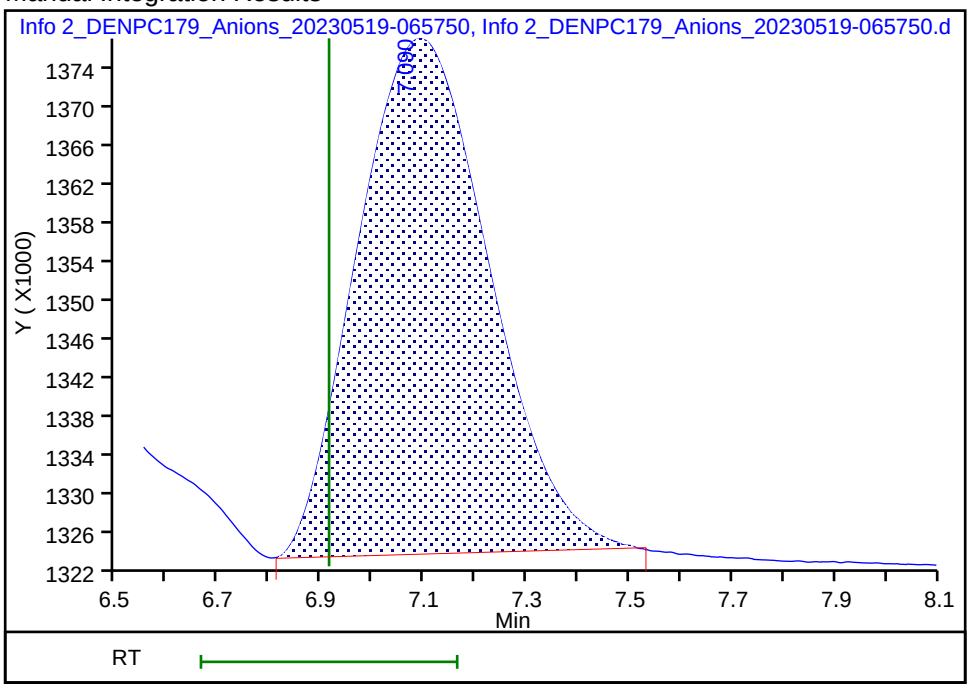
RT: 7.09
Area: 2335704
Amount: 0.077677
Amount Units: ug/ml

Processing Integration Results



RT: 7.09
Area: 938335
Amount: 0.046618
Amount Units: ug/ml

Manual Integration Results



Reviewer: LVW8, 19-May-2023 12:13:13 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230519-085				
Lims ID:	ccv				
Client ID:					
Sample Type:	CCV				
Inject. Date:	19-May-2023 08:42:00	ALS Bottle#:	0	Worklist Smp#:	84
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0121594-084				
Misc. Info.:	280-0121594-084				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Sublist:	chrom-Anions_IC10*sub5				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m				
Limit Group:	Wet - Anions				
Last Update:	19-May-2023 12:32:23	Calib Date:	18-May-2023 13:10:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1603				
First Level Reviewer: XAY4		Date:	19-May-2023 09:48:49		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.145			NC	ND	
2 Chloride	4.315	4.313	0.002	990692167	NC	NC	
3 Nitrite as N	5.005	4.998	0.007	111229675	2.50	2.62	M
4 Bromide	6.135	6.163	-0.028	19447213	NC	NC	
5 Nitrate as N	6.910	6.913	-0.003	113790663	2.50	2.55	
6 Orthophosphate as P	9.018	9.127	-0.109	54727773	2.50	2.09	
7 Sulfate	10.210	10.300	-0.090	953187267	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

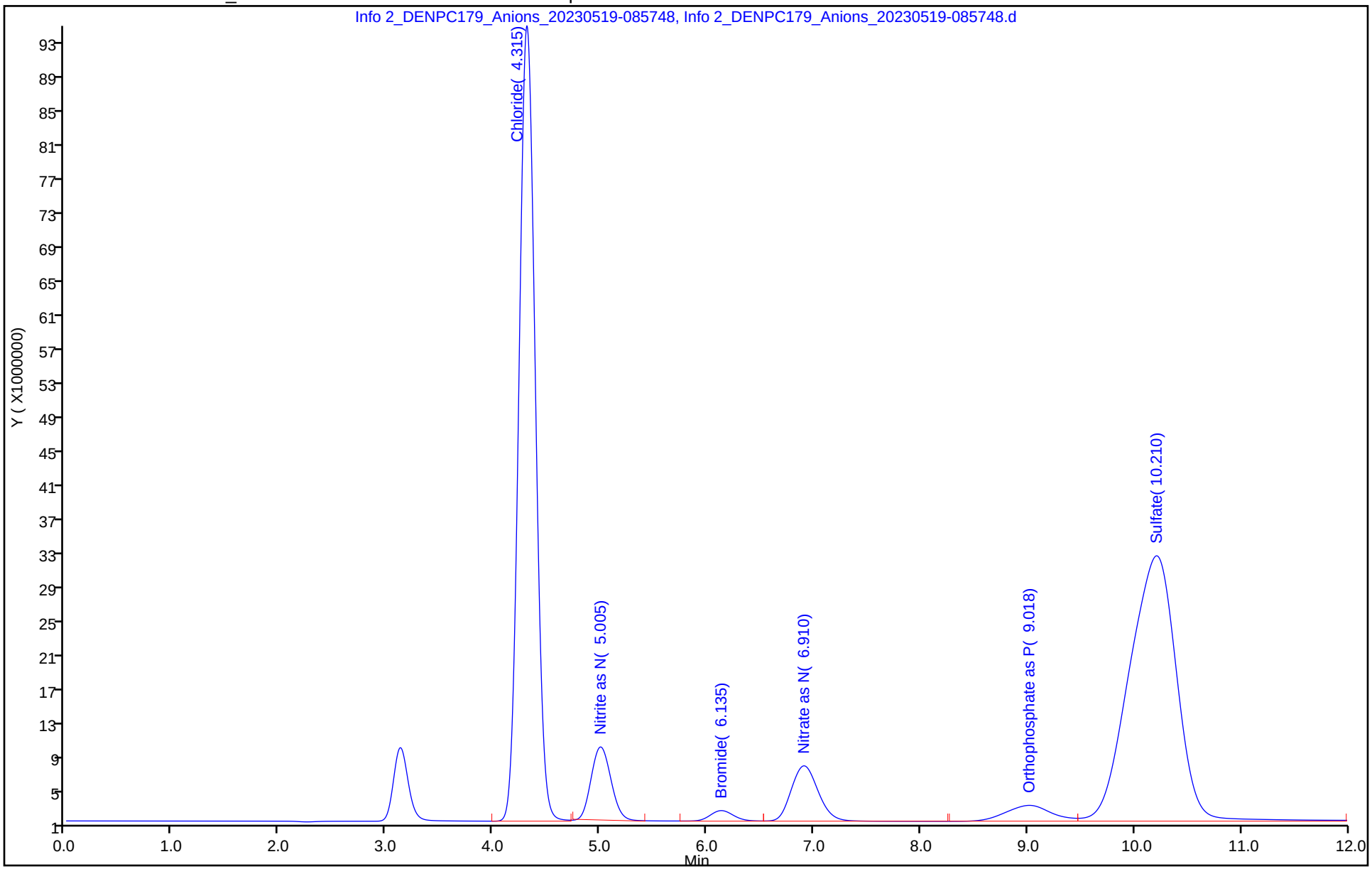
Reagents:

IC LCS_01954 Amount Added: 10.00 Units: mL

Report Date: 19-May-2023 12:32:23 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230519-085748.d				
Injection Date:	19-May-2023 08:42:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	84
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/31/2023 9:08 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230519-091
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 19-May-2023 08:57:00 ALS Bottle#: 0 Worklist Smp#: 85
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-085
Misc. Info.: 280-0121594-085
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 19-May-2023 12:32:23 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: LVW8 Date: 19-May-2023 11:14:37

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.145				ND	
2 Chloride	4.305	4.313	-0.008	7181062		NC	M
3 Nitrite as N	5.008	4.998	0.010	167665		0.0265	M
4 Bromide	6.162	6.163	-0.001	168568		NC	M
5 Nitrate as N	6.997	6.913	0.084	103094		0.0281	M
6 Orthophosphate as P	9.037	9.127	-0.090	7455528		0.0640	
7 Sulfate	10.245	10.300	-0.055	10601160		NC	M

QC Flag Legend

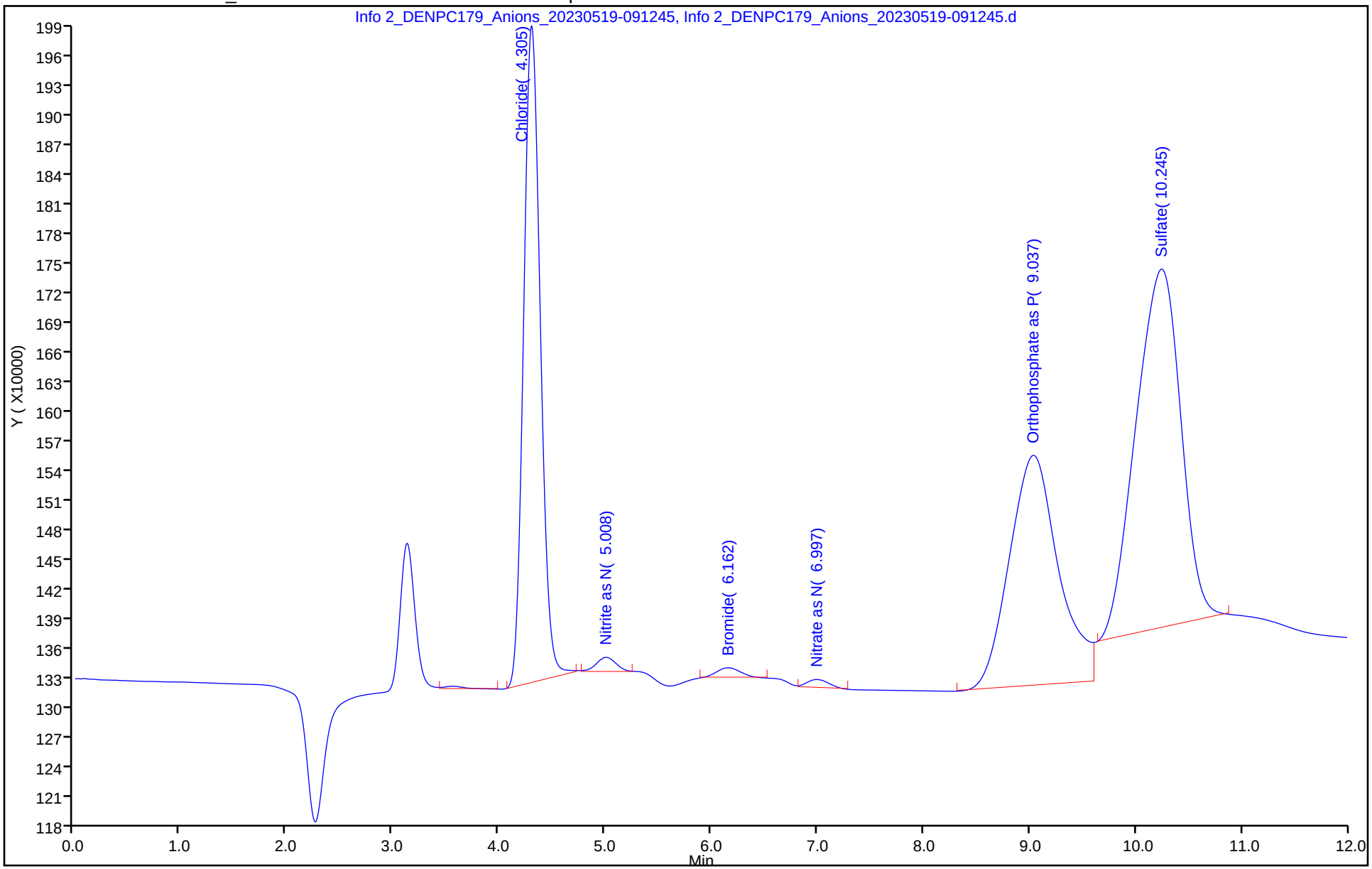
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 19-May-2023 12:32:24 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230519-091245.d

Injection Date:	19-May-2023 08:57:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	85
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/31/2023 9:08 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230519-091

Injection Date: 19-May-2023 08:57:00 Instrument ID: WC_IonChrom10

Lims ID: ccb

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 85

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions

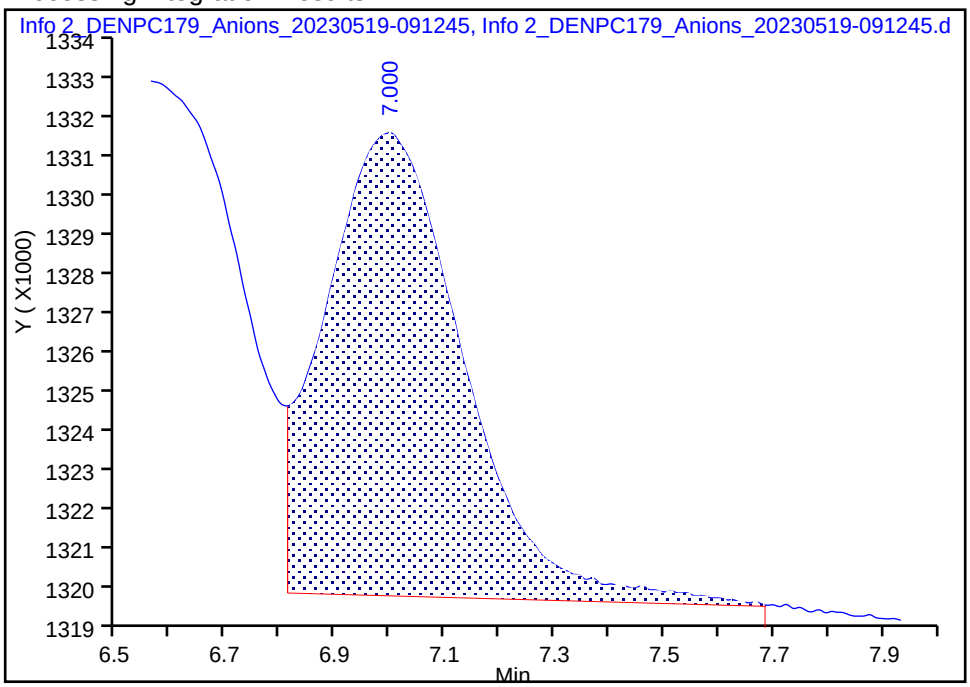
Column: Detector Info 2_091554_1

5 Nitrate as N, CAS: 14797-55-8

Signal: 1

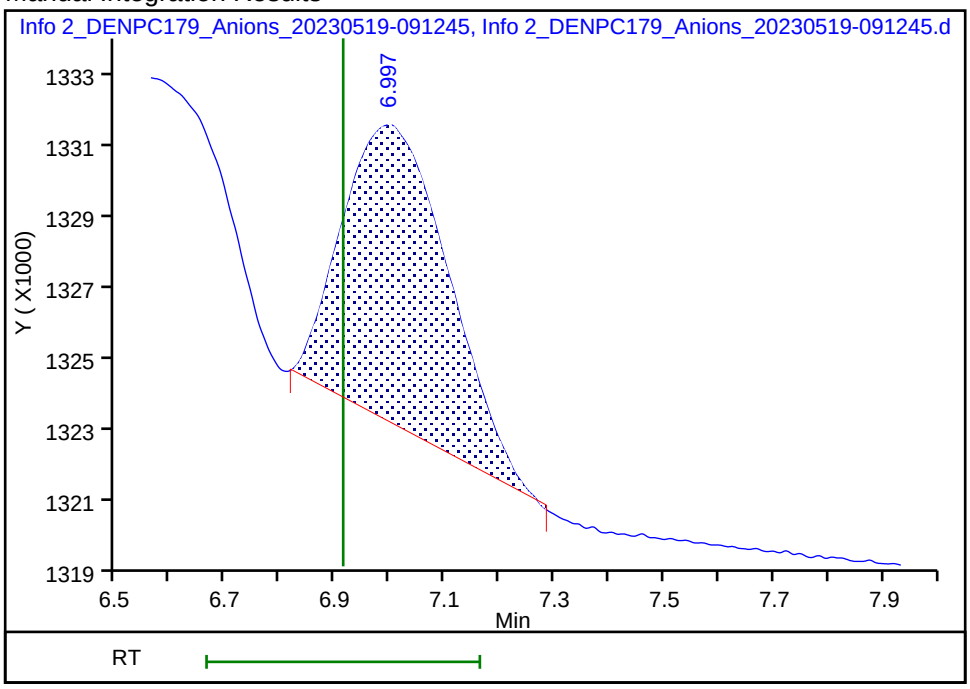
Processing Integration Results

RT: 7.00
Area: 187510
Amount: 0.029930
Amount Units: ug/ml



Manual Integration Results

RT: 7.00
Area: 103094
Amount: 0.028053
Amount Units: ug/ml



Reviewer: LVW8, 19-May-2023 12:14:03 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

IC Instrument Information

WL: 121704 **Inst ID:** IC10 **Analysis Date:** 5/22/23 **Analyst:** MEC

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	176839	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	176725	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	176674	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	176676	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	176678	2	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	176715	2	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	176737	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	176111	5	F Cl NO2 Br NO3 PO4 SO4	MS/D	
5/22 ☐	~~176725~~ GJS 5/22		F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	176859	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	

Dilutions

Job No.	Samples	Anions	Dilution	Reason
839	1	F Cl NO2 Br NO3 PO4 SO4	100x	test
674	1	F Cl NO2 Br NO3 PO4 SO4	2000x	test
676	1	F Cl NO2 Br NO3 PO4 SO4	20x	test
678	2	F Cl NO2 Br NO3 PO4 SO4	2x	test
715	2	F Cl NO2 Br NO3 PO4 SO4	2.5x	test
737	1	F Cl NO2 Br NO3 PO4 SO4	100x	test
111	5	F Cl NO2 Br NO3 PO4 SO4	20/50/100/200/500/1000x	- test
		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\20230519-121638.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 19-May-2023 12:31:06
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\20230518-121594.b\Info 2_DENPC179_Anions_20230518-12110
Inj Date: 18-May-2023 11:56:00 Worklist: 121594 Sample#: 1
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-12255
Inj Date: 18-May-2023 12:11:00 Worklist: 121594 Sample#: 2
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-12405
Inj Date: 18-May-2023 12:26:00 Worklist: 121594 Sample#: 3
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-12555
Inj Date: 18-May-2023 12:40:00 Worklist: 121594 Sample#: 4
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-13105
Inj Date: 18-May-2023 12:55:00 Worklist: 121594 Sample#: 5
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-13255
Inj Date: 18-May-2023 13:10:00 Worklist: 121594 Sample#: 6

Start Cal Date: 18-May-2023 11:56:00 End Cal Date: 19-May-2023 12:01:00

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					
35311960	42799726	43146865	42334489	42417361		-967573			1.000
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			42866306		
7062392	21399863	43146865	105836223	212086804					
121594(2)	121594(3)	121594(4)	121594(5)	121594(6)					
5 Nitrate as N				Signal: 1					
37055495	45958086	42854846	44285580	44832252		-1159043			0.999
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			44990806		
7411099	22979043	42854846	110713949	224161262					
121594(2)	121594(3)	121594(4)	121594(5)	121594(6)					
6 Orthophosphate as P				Signal: 1			R1		
43303895	41843182	33022328	26624129	23003691		5964839			*0.980
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			23299922		
8660779	20921591	33022328	66560323	115018456					
121594(2)	121594(3)	121594(4)	121594(5)	121594(6)					

ICalib Error Legend
R1, Curve Fit Fail Error Limit Test

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230519-121638.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 19-May-2023 12:31:06
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\20230518-121594.b\Info 2_DENPC179_Anions_20230518-12110
Inj Date: 18-May-2023 11:56:00 Worklist: 121594 Sample#: 1
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-12255
Inj Date: 18-May-2023 12:11:00 Worklist: 121594 Sample#: 2
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-12405
Inj Date: 18-May-2023 12:26:00 Worklist: 121594 Sample#: 3
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-12555
Inj Date: 18-May-2023 12:40:00 Worklist: 121594 Sample#: 4
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-13105
Inj Date: 18-May-2023 12:55:00 Worklist: 121594 Sample#: 5
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-13255
Inj Date: 18-May-2023 13:10:00 Worklist: 121594 Sample#: 6

Start Cal Date: 18-May-2023 11:56:00 End Cal Date: 19-May-2023 12:01:00

Individual Compound Calibration Parameters

Quant Method: ESTD RF Calibration: Replace
Rule Name: Linear1 Curve: Linear Weighting: Conc
Origin: None Error: raw_COD Error Limit: 1.00
RF %Dif: 0.0 SPCC Limit: 0.0 CCC Limit: 0.0
Dependent Variable: Resp

Number of Compounds: 4

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
1 Fluoride				Signal: 1					
29175985	36359510	39638142	40984560	40102056		-2208602			1.000
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			41050846		
M5835197	M18179755	M39638142	M102461401	M200510278					
121594(2)	121594(3)	121594(4)	121594(5)	121594(6)					
2 Chloride				Signal: 1					
16780722	16174841	19339456	19009666	18725386	18640004	-1171132			1.000
0.500000(1)	1.2500 (2)	2.5000 (3)	30.0 (4)	60.0 (5)	100.0 (6)		18747994		
8390361	20218551	48348641	570289992	1123523133	1864000362				
121594(1)	121594(2)	121594(3)	121594(4)	121594(5)	121594(6)				
4 Bromide				Signal: 1					
11277385	9537194	7900278	7592206	7648936		806494			0.999
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			7404030		
2255477	4768597	7900278	18980516	38244681					
121594(2)	121594(3)	121594(4)	121594(5)	121594(6)					
7 Sulfate				Signal: 1					
22625290	16020812	17380170	14404666	13852661	13712274	4654296			0.999
0.500000(1)	1.2500 (2)	2.5000 (3)	30.0 (4)	60.0 (5)	100.0 (6)		13803812		
11312645	20026015	43450426	432139991	831159688	1371227441				
121594(1)	121594(2)	121594(3)	121594(4)	121594(5)	121594(6)				

Preliminary Report

Eurofins Denver
ICV, ICal Verification Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-13
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 18-May-2023 13:25:00 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-007
Misc. Info.: 280-0121594-007
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC7*sub4

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 19-May-2023 12:32:45 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-13

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: LVW8 Date: 19-May-2023 12:38:30

Start Cal Date: 18-May-2023 11:56:00
End Cal Date: 18-May-2023 13:10:00

Compound	Amount Added	Amount Detected	%Drift	Max. %Drift	%Rec	%Rec Limits
1 Fluoride	2.00	2.34	* 16.8	10.0	116.8	
2 Chloride	80.0	83.0	3.8	10.0	103.8	
4 Bromide	2.00	1.91	-4.7	10.0	95.3	
7 Sulfate	80.0	81.8	2.3	10.0	102.3	

Preliminary Report

Eurofins Denver
ICV, ICal Verification Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-13
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 18-May-2023 13:25:00 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-007
Misc. Info.: 280-0121594-007
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC7*sub4

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 19-May-2023 12:38:46 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-13

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: LVW8 Date: 19-May-2023 12:38:46

Start Cal Date: 18-May-2023 11:56:00
End Cal Date: 18-May-2023 13:10:00

Compound	Amount Added	Amount Detected	%Drift	Max. %Drift	%Rec	%Rec Limits
3 Nitrite as N	2.00	1.99	-0.3	10.0	99.7	
5 Nitrate as N	2.00	1.95	-2.3	10.0	97.7	
6 Orthophosphate as	2.00	2.30	* 14.8	10.0	114.8	

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230522-121704.b\Info 2_DENPC179_Anions_20230522-161				
Lims ID:	ccv				
Client ID:					
Sample Type:	CCV				
Inject. Date:	22-May-2023 16:00:00	ALS Bottle#:	0	Worklist Smp#:	1
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0121704-001				
Misc. Info.:	280-0121704-001				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Sublist:	chrom-Anions_IC10*sub5				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230522-121704.b\Anions_IC10.m				
Limit Group:	Wet - Anions				
Last Update:	23-May-2023 10:59:14	Calib Date:	18-May-2023 13:10:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1623				
First Level Reviewer: LVW8		Date:	22-May-2023 16:19:27		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.140			ND	ND	
2 Chloride	4.315	4.315	0.000	926518595	NC	NC	
3 Nitrite as N	4.998	4.998	0.000	103103875	2.50	2.43	
4 Bromide	6.152	6.152	0.000	18468888	NC	NC	
5 Nitrate as N	6.905	6.905	0.000	108362993	2.50	2.43	
6 Orthophosphate as P	9.155	9.155	0.000	2988274	2.50	-0.1278	
7 Sulfate	10.285	10.285	0.000	703902223	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

Reagents:

IC LCS_01954 Amount Added: 10.00 Units: mL

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230522-121704.b\Info 2_DENPC179_Anions_20230522-162
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 22-May-2023 16:14:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121704-002
Misc. Info.: 280-0121704-002
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230522-121704.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 23-May-2023 10:59:15 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1623

First Level Reviewer: XAY4 Date: 23-May-2023 10:20:49

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.140				ND	
2 Chloride		4.315				ND	
3 Nitrite as N	4.762	4.762	0.000	67101		0.0241	
4 Bromide		6.152				ND	U
5 Nitrate as N		6.905				ND	
6 Orthophosphate as P	9.140	9.140	0.000	4188666		-0.0762	
7 Sulfate	10.360	10.360	0.000	3894449		NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230522-121704.b\Info 2_DENPC179_Anions_20230522-164
Lims ID: mrl
Client ID:
Sample Type: MRL
Inject. Date: 22-May-2023 16:29:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121704-003
Misc. Info.: 280-0121704-003
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230522-121704.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 23-May-2023 10:59:16 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1623

First Level Reviewer: LVW8 Date: 22-May-2023 17:51:11

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.140			ND	ND	
2 Chloride	4.302	4.302	0.000	43970753	NC	NC	
3 Nitrite as N	5.002	5.002	0.000	8614732	0.2500	0.2235	
4 Bromide	6.172	6.172	0.000	2650290	NC	NC	
5 Nitrate as N	6.953	6.953	0.000	9581243	0.2500	0.2387	
6 Orthophosphate as P	9.157	9.157	0.000	2494989	0.2500	-0.1489	
7 Sulfate	10.305	10.305	0.000	43075457	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

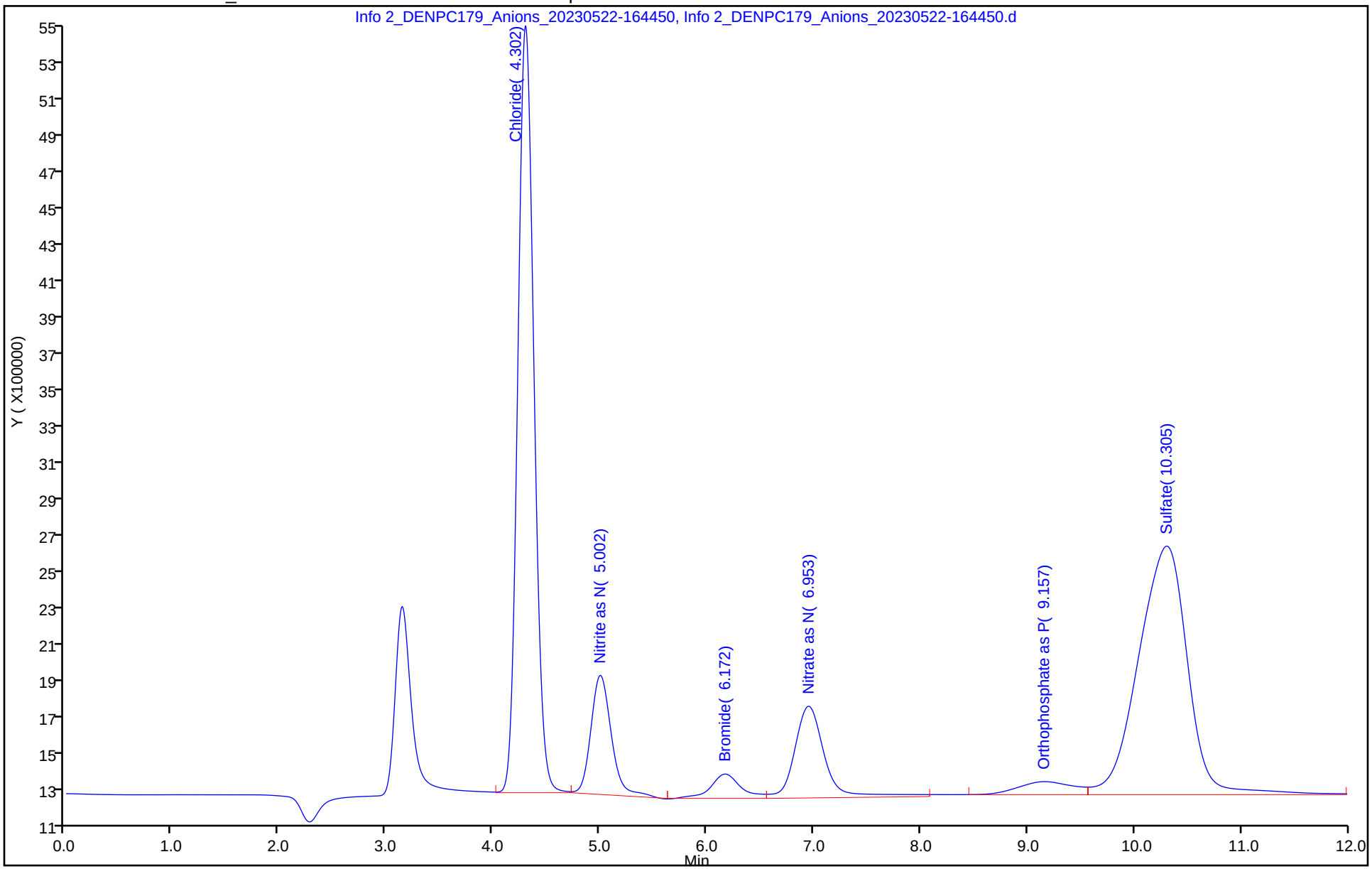
Reagents:

IC CAL cl/so4_00480 Amount Added: 0.20 Units: mL
IC Cal low_00709 Amount Added: 0.10 Units: mL

Report Date: 23-May-2023 10:59:16 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230522-121704.b\Info 2_DENPC179_Anions_20230522-164450.d				
Injection Date:	22-May-2023 16:29:00	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		



5/31/2023 9:08 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230522-121704.b\Info 2_DENPC179_Anions_20230522-165
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 22-May-2023 16:44:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121704-004
Misc. Info.: 280-0121704-004
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230522-121704.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 23-May-2023 10:59:17 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1623

First Level Reviewer: LVW8 Date: 22-May-2023 17:51:17

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.140			ND	ND	
2 Chloride	4.317	4.317	0.000	922923313	NC	NC	
3 Nitrite as N	4.998	4.998	0.000	103618457	2.50	2.44	
4 Bromide	6.153	6.153	0.000	18372126	NC	NC	
5 Nitrate as N	6.907	6.907	0.000	107220163	2.50	2.41	
6 Orthophosphate as P	9.163	9.163	0.000	1342060	2.50	-0.1984	
7 Sulfate	10.288	10.288	0.000	697393055	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

Reagents:

IC LCS_01954 Amount Added: 10.00 Units: mL

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230522-121704.b\Info 2_DENPC179_Anions_20230522-171
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 22-May-2023 16:59:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121704-005
Misc. Info.: 280-0121704-005
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230522-121704.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 23-May-2023 10:59:18 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1623

First Level Reviewer: LVW8 Date: 22-May-2023 17:51:22

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.140			ND	ND	
2 Chloride	4.313	4.313	0.000	926415322	NC	NC	
3 Nitrite as N	4.997	4.997	0.000	103572545	2.50	2.44	
4 Bromide	6.150	6.150	0.000	18444382	NC	NC	
5 Nitrate as N	6.903	6.903	0.000	107568099	2.50	2.42	
6 Orthophosphate as P	9.147	9.147	0.000	2150895	2.50	-0.1637	
7 Sulfate	10.287	10.287	0.000	696494797	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

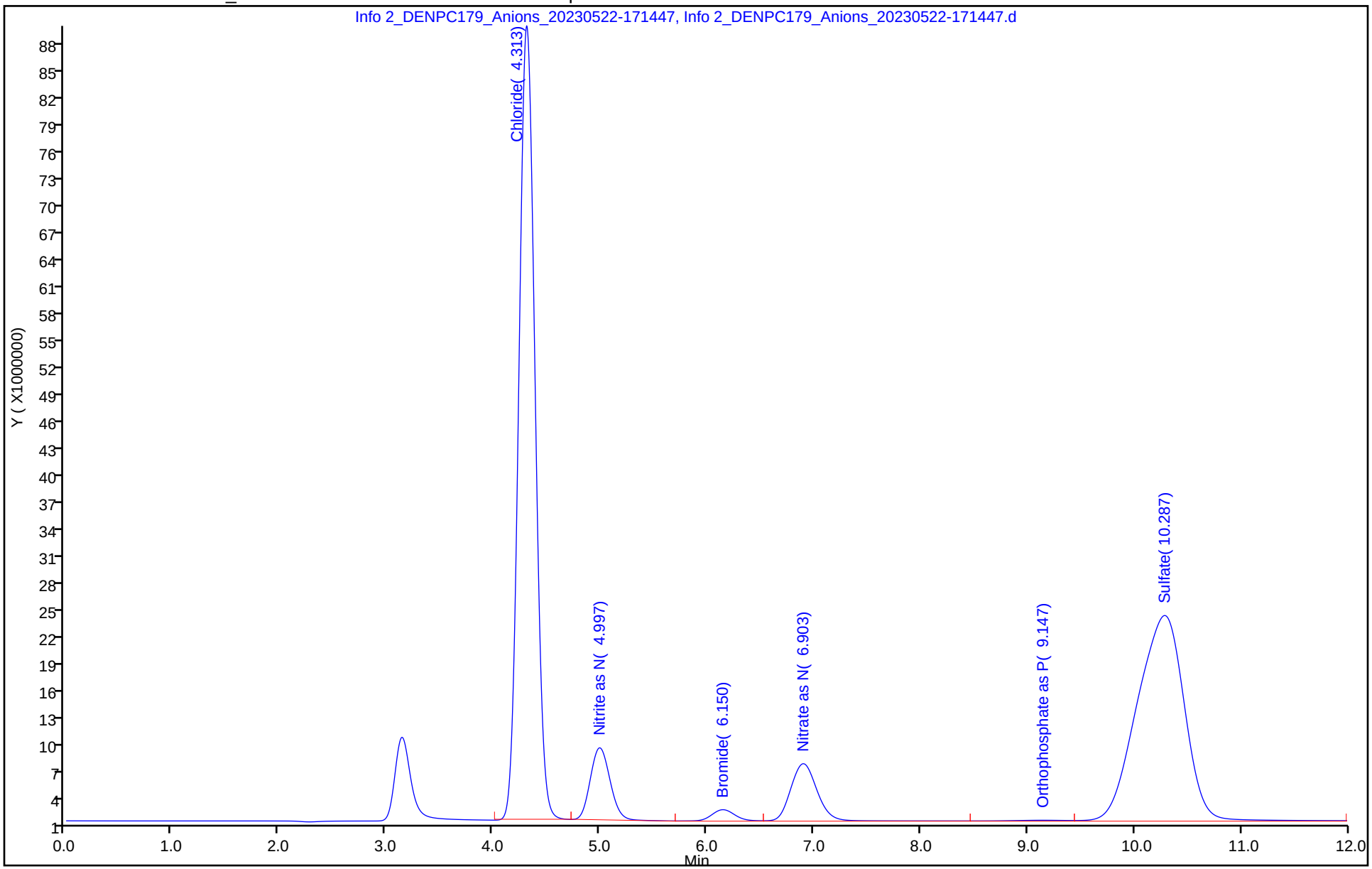
Reagents:

IC LCS_01954 Amount Added: 10.00 Units: mL

Report Date: 23-May-2023 10:59:18 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230522-121704.b\Info 2_DENPC179_Anions_20230522-171447.d				
Injection Date:	22-May-2023 16:59:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	lcsd			Worklist Smp#:	5
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



5/31/2023 9:08 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230522-121704.b\Info 2_DENPC179_Anions_20230522-172
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 22-May-2023 17:14:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121704-006
Misc. Info.: 280-0121704-006
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230522-121704.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 23-May-2023 10:59:18 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1623

First Level Reviewer: LVW8 Date: 22-May-2023 17:51:27

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.140				ND	
2 Chloride		4.313				ND	
3 Nitrite as N	4.755	4.755	0.000	76667		0.0244	
4 Bromide	6.325	6.325	0.000	701320		NC	
5 Nitrate as N		6.903				ND	
6 Orthophosphate as P	9.148	9.148	0.000	2761007		-0.1375	
7 Sulfate	10.372	10.372	0.000	3219626		NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230522-121704.b\Info 2_DENPC179_Anions_20230522-191				
Lims ID:	280-176674-A-3				
Client ID:	LL12mw-187-230401-GW				
Sample Type:	Client				
Inject. Date:	22-May-2023 18:59:00	ALS Bottle#:	0	Worklist Smp#:	13
Injection Vol:	5.0 ul	Dil. Factor:	2000.0000		
Sample Info:	280-0121704-013				
Misc. Info.:	280-0121704-013				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230522-121704.b\Anions_IC10.m				
Limit Group:	Wet - Anions				
Last Update:	23-May-2023 10:59:18	Calib Date:	18-May-2023 13:10:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1623				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		3.140			ND	
2 Chloride	4.300	4.313	-0.013	322362	NC	
3 Nitrite as N	4.983	4.755	0.228	160405	0.0263	
4 Bromide	6.148	6.325	-0.177	743682	NC	
5 Nitrate as N	6.908	6.903	0.005	32807745	0.7550	
6 Orthophosphate as P	9.085	9.148	-0.063	10142747	0.1793	
7 Sulfate	10.263	10.372	-0.109	7818321	NC	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230522-121704.b\Info 2_DENPC179_Anions_20230522-201				
Lims ID:	ccv				
Client ID:					
Sample Type:	CCV				
Inject. Date:	22-May-2023 19:59:00	ALS Bottle#:	0	Worklist Smp#:	17
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0121704-017				
Misc. Info.:	280-0121704-017				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Sublist:	chrom-Anions_IC10*sub5				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230522-121704.b\Anions_IC10.m				
Limit Group:	Wet - Anions				
Last Update:	23-May-2023 10:59:26	Calib Date:	18-May-2023 13:10:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1623				
First Level Reviewer: LVW8		Date:	23-May-2023 10:15:37		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.140			ND	ND	
2 Chloride	4.307	4.313	-0.006	932944574	NC	NC	
3 Nitrite as N	4.988	4.755	0.233	110845562	2.50	2.61	
4 Bromide	6.117	6.325	-0.208	18494660	NC	NC	
5 Nitrate as N	6.877	6.903	-0.026	107747893	2.50	2.42	
6 Orthophosphate as P	9.103	9.148	-0.045	1912491	2.50	-0.1739	
7 Sulfate	10.242	10.372	-0.130	666383474	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

Reagents:

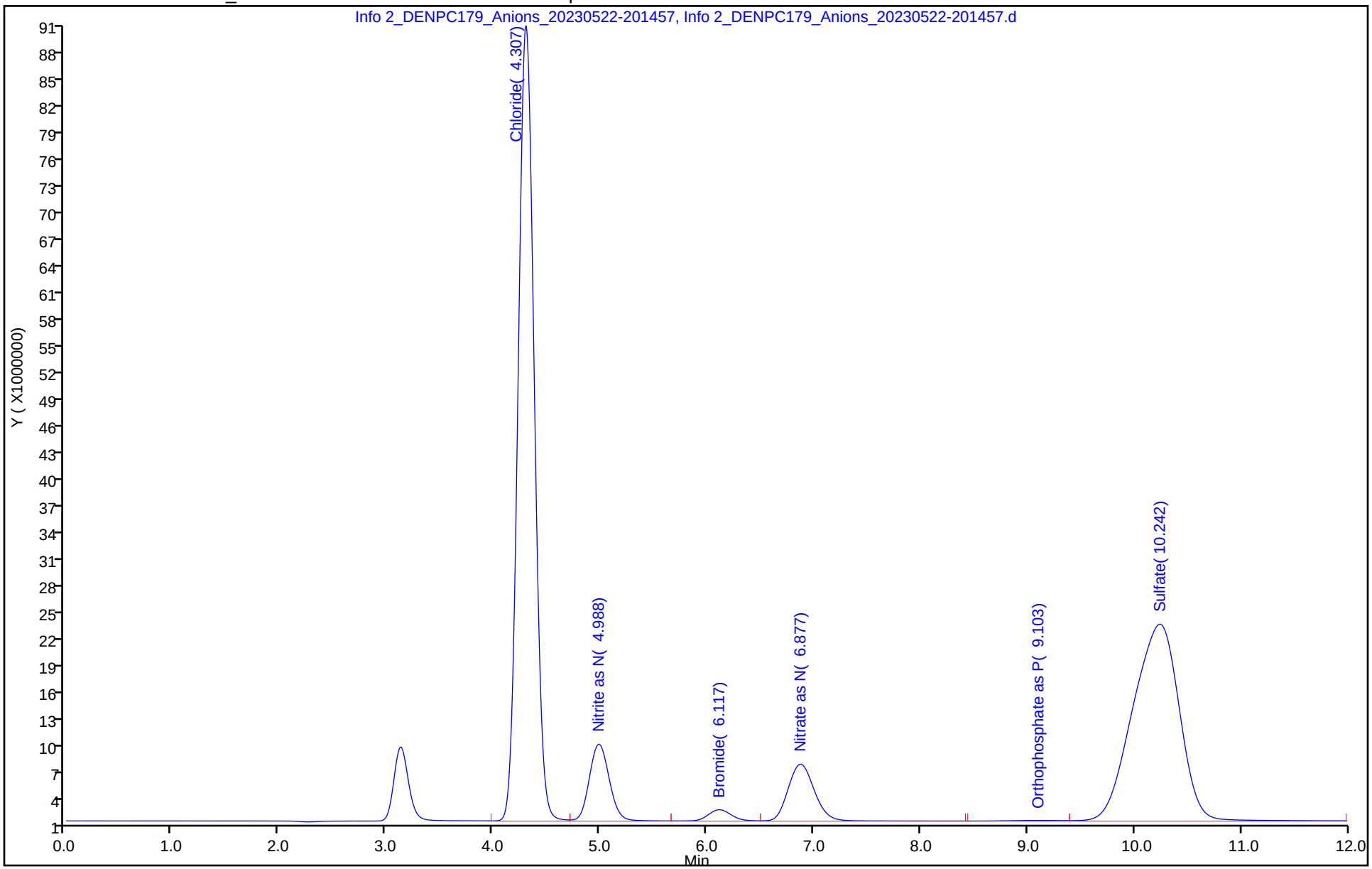
IC LCS_01954 Amount Added: 10.00 Units: mL

Report Date: 23-May-2023 10:59:26 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230522-121704.b\Info 2_DENPC179_Anions_20230522-201457.d

Injection Date:	22-May-2023 19:59:00	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		



5/31/2023 9:08 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230522-121704.b\Info 2_DENPC179_Anions_20230522-203
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 22-May-2023 20:15:00 ALS Bottle#: 0 Worklist Smp#: 18
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121704-018
Misc. Info.: 280-0121704-018
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230522-121704.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 23-May-2023 10:59:26 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1623

First Level Reviewer: XAY4 Date: 23-May-2023 10:21:55

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.140				ND	
2 Chloride		4.313				ND	
3 Nitrite as N		4.755				ND	U
4 Bromide		6.325				ND	U
5 Nitrate as N		6.903				ND	
6 Orthophosphate as P	9.115	9.148	-0.033	2602938		-0.1443	
7 Sulfate	10.322	10.372	-0.050	2963452		NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-121				
Lims ID:	STD L1				
Client ID:					
Sample Type:	IC	Calib Level:	1		
Inject. Date:	18-May-2023 11:56:00	ALS Bottle#:	0	Worklist Smp#:	1
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0121594-001				
Misc. Info.:	280-0121594-001				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Sublist:	chrom-Anions_IC10*sub5				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m				
Limit Group:	Wet - Anions 28D				
Last Update:	19-May-2023 11:53:45	Calib Date:	18-May-2023 13:10:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1603				
First Level Reviewer: LVW8		Date:	18-May-2023 12:57:44		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.145				ND	
2 Chloride	4.302	4.302	0.000	8390361	0.5000	0.5100	
3 Nitrite as N		4.998				ND	
4 Bromide		6.305				ND	U
5 Nitrate as N		6.913				ND	
6 Orthophosphate as P		9.127				ND	U
7 Sulfate	10.243	10.243	0.000	11312645	0.5000	0.4824	

QC Flag Legend

Processing Flags
Review Flags
U - Marked Undetected

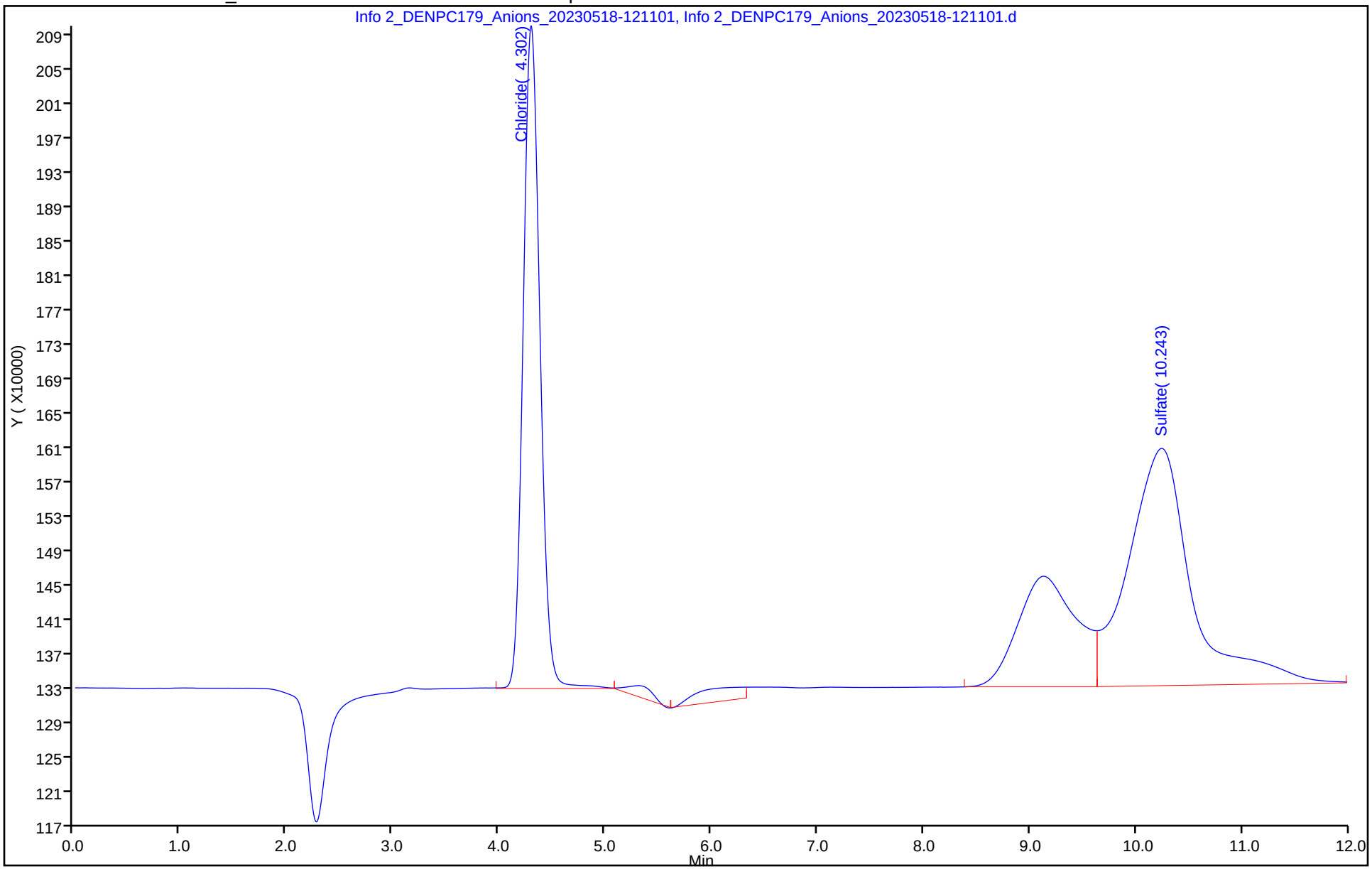
Reagents:

IC CAL cl/so4_00480	Amount Added:	0.04	Units: mL
IC Cal low_00709	Amount Added:	0.00	Units: mL

Report Date: 19-May-2023 11:53:45 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-121101.d				
Injection Date:	18-May-2023 11:56:00	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		



5/31/2023 9:08 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-122
Lims ID: STD L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 18-May-2023 12:11:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-002
Misc. Info.: 280-0121594-002
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 19-May-2023 11:53:46 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: LVW8 Date: 18-May-2023 12:58:14

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.133	3.133	0.000	5835197	0.2000	0.1959	Ma
2 Chloride	4.300	4.300	0.000	20218551	1.25	1.14	
3 Nitrite as N	5.002	5.002	0.000	7062392	NC	NC	
4 Bromide	6.165	6.165	0.000	2255477	0.2000	0.1957	
5 Nitrate as N	6.953	6.953	0.000	7411099	NC	NC	
6 Orthophosphate as P	9.093	9.093	0.000	8660779	NC	NC	
7 Sulfate	10.245	10.245	0.000	20026015	1.25	1.11	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

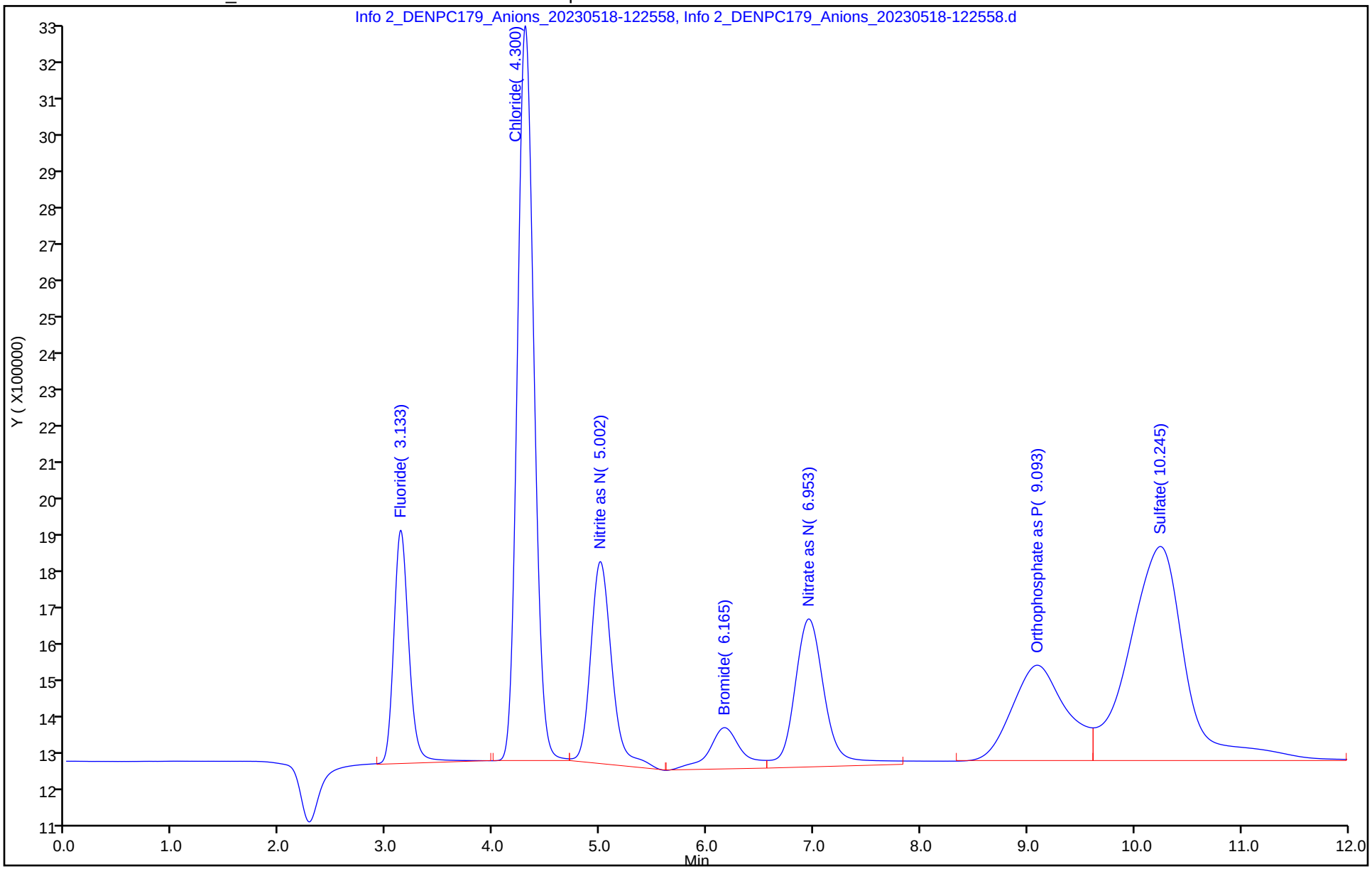
Reagents:

IC CAL cl/so4_00480 Amount Added: 0.10 Units: mL
IC Cal low_00709 Amount Added: 0.08 Units: mL

Report Date: 19-May-2023 11:53:46 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-122558.d				
Injection Date:	18-May-2023 12:11:00	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		



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Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-122

Injection Date: 18-May-2023 12:11:00 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

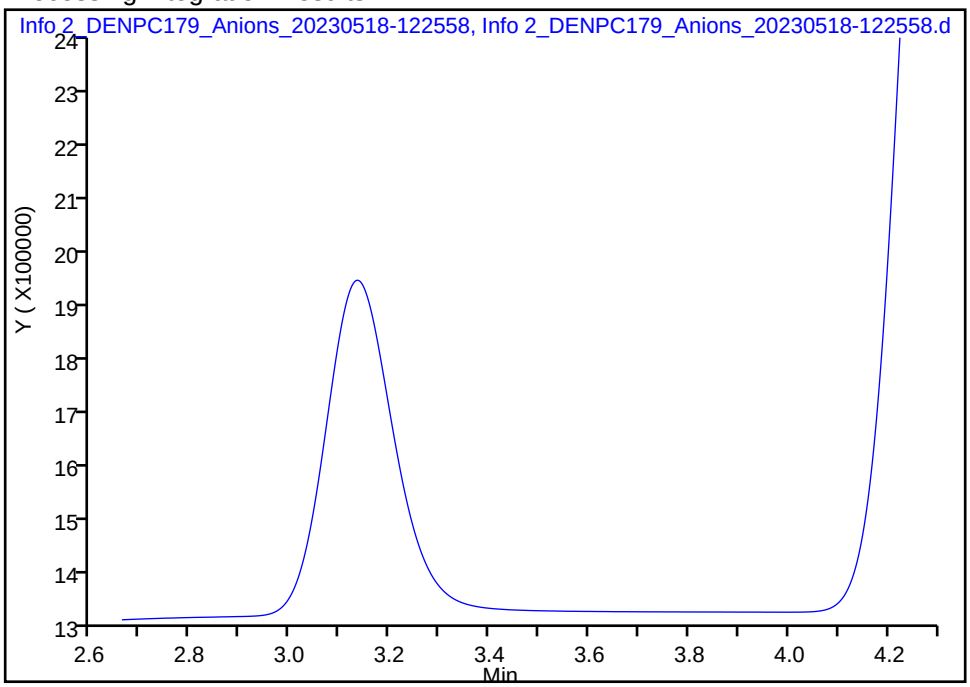
1 Fluoride, CAS: 16984-48-8

Signal: 1

Not Detected

Expected RT: 3.13

Processing Integration Results



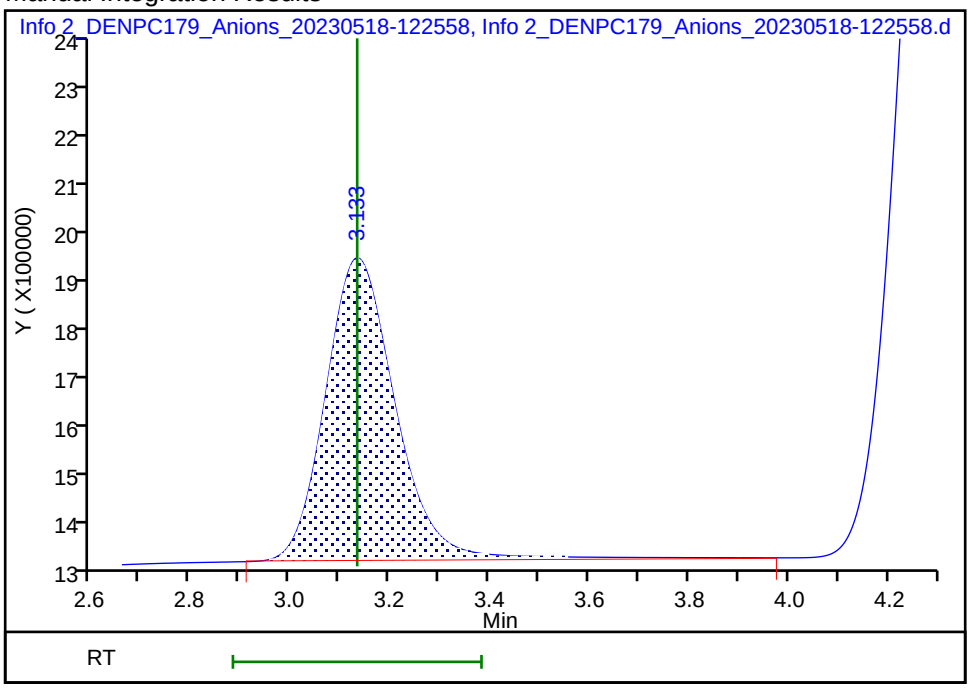
Manual Integration Results

RT: 3.13

Area: 5835197

Amount: 0.195947

Amount Units: ug/ml



Reviewer: LVW8, 18-May-2023 12:58:04 -06:00:00 (UTC)

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-124
Lims ID: STD L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 18-May-2023 12:26:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-003
Misc. Info.: 280-0121594-003
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 19-May-2023 11:53:47 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: LVW8 Date: 18-May-2023 12:58:34

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.137	3.137	0.000	18179755	0.5000	0.4967	Ma
2 Chloride	4.300	4.300	0.000	48348641	2.50	2.64	
3 Nitrite as N	5.000	5.000	0.000	21399863	NC	NC	
4 Bromide	6.162	6.162	0.000	4768597	0.5000	0.5351	
5 Nitrate as N	6.938	6.938	0.000	22979043	NC	NC	
6 Orthophosphate as P	9.075	9.075	0.000	20921591	NC	NC	
7 Sulfate	10.247	10.247	0.000	43450426	2.50	2.81	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

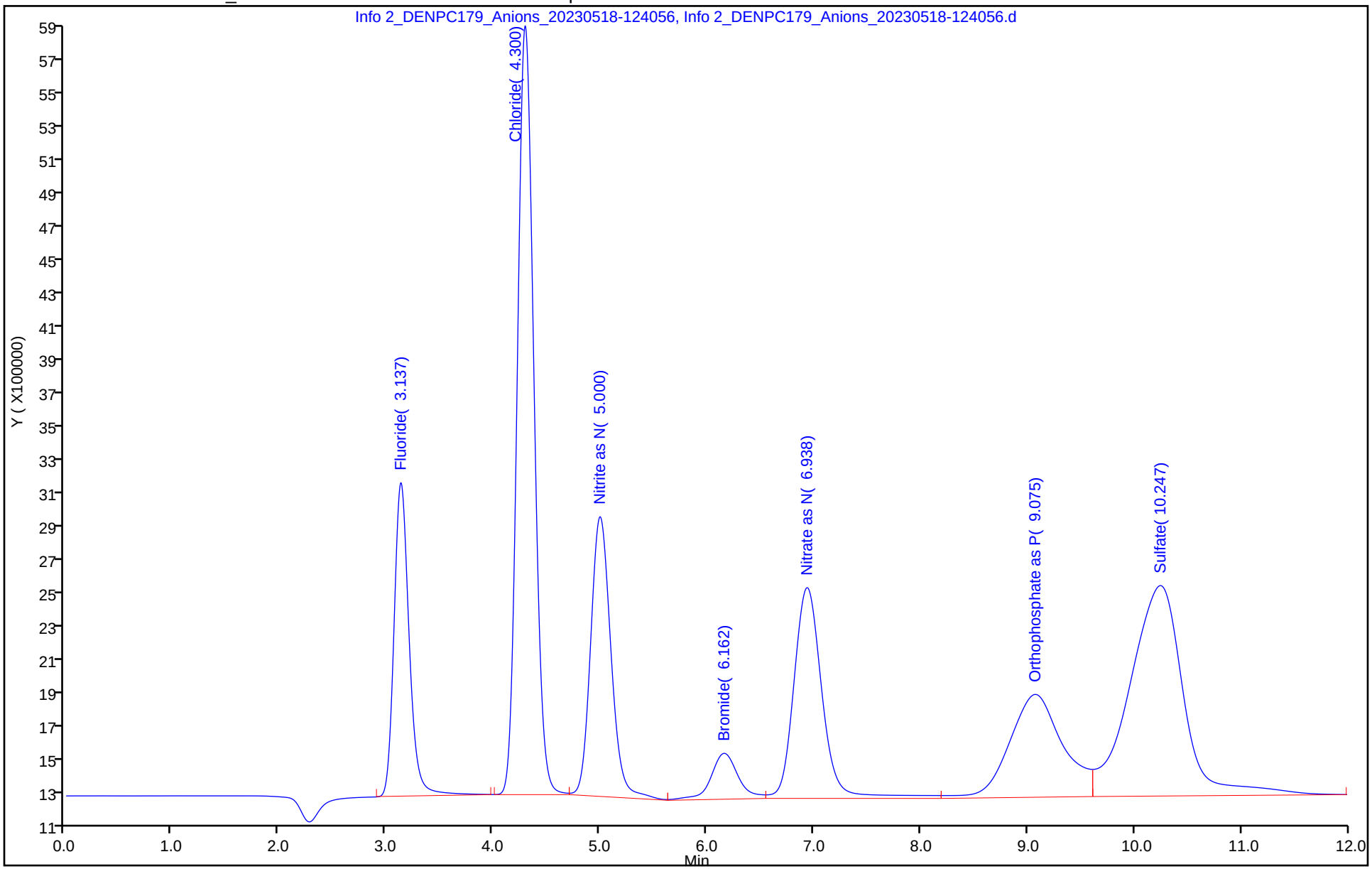
Reagents:

IC CAL cl/so4_00480 Amount Added: 0.20 Units: mL
IC Cal low_00709 Amount Added: 0.20 Units: mL

Report Date: 19-May-2023 11:53:47 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-124056.d				
Injection Date:	18-May-2023 12:26:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD L3			Worklist Smp#:	3
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



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Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-124

Injection Date: 18-May-2023 12:26:00 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

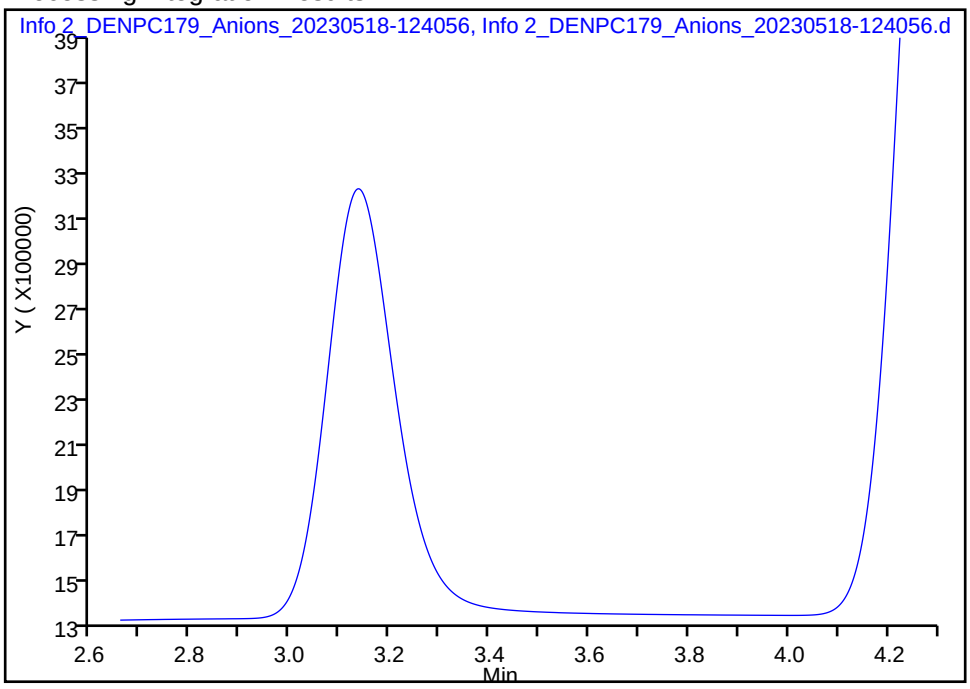
1 Fluoride, CAS: 16984-48-8

Signal: 1

Not Detected

Expected RT: 3.14

Processing Integration Results



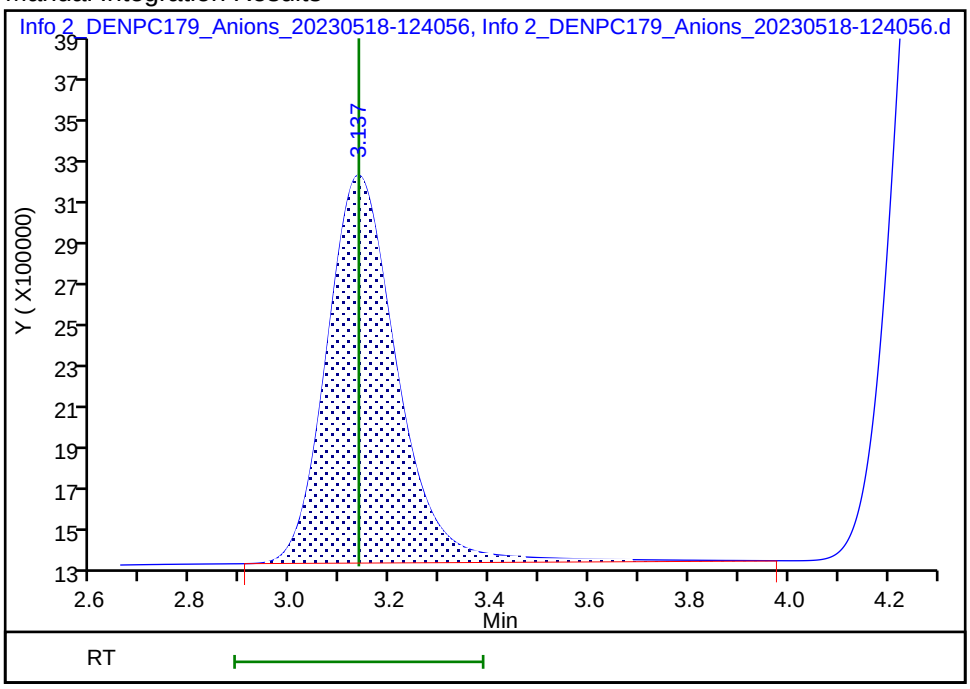
Manual Integration Results

RT: 3.14

Area: 18179755

Amount: 0.496661

Amount Units: ug/ml



Reviewer: LVW8, 18-May-2023 12:58:27 -06:00:00 (UTC)

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-125
Lims ID: STD L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 18-May-2023 12:40:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-004
Misc. Info.: 280-0121594-004
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 19-May-2023 11:53:47 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: LVW8 Date: 18-May-2023 13:29:45

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.138	3.138	0.000	39638142	1.00	1.02	Ma
2 Chloride	4.305	4.305	0.000	570289992	30.0	30.5	
3 Nitrite as N	5.000	5.000	0.000	43146865	NC	NC	
4 Bromide	6.162	6.162	0.000	7900278	1.00	0.9581	
5 Nitrate as N	6.928	6.928	0.000	42854846	NC	NC	
6 Orthophosphate as P	9.068	9.068	0.000	33022328	NC	NC	
7 Sulfate	10.242	10.242	0.000	432139991	30.0	31.0	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

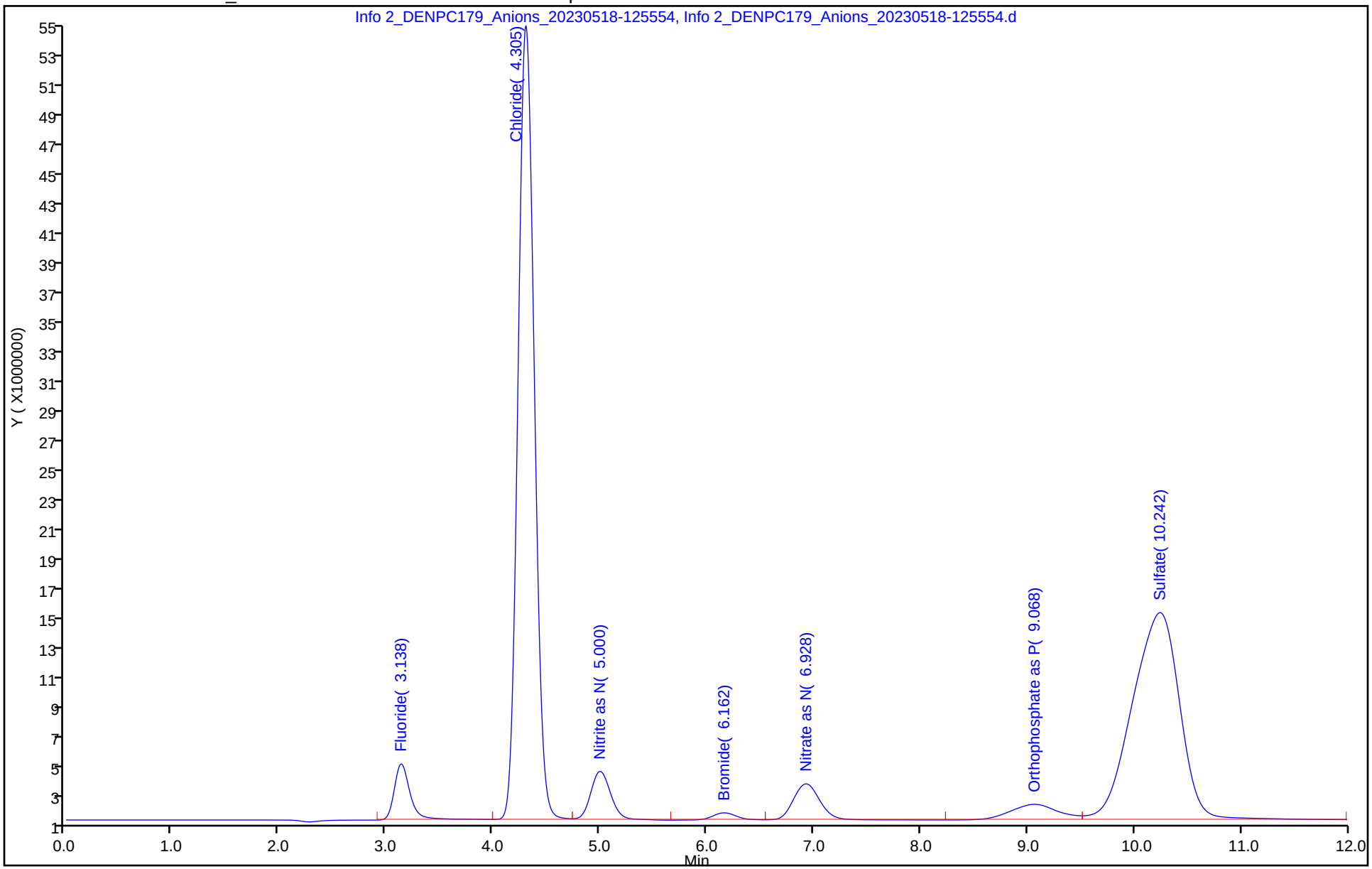
Reagents:

IC CAL cl/so4_00480 Amount Added: 2.40 Units: mL
IC Cal low_00709 Amount Added: 0.40 Units: mL

Report Date: 19-May-2023 11:53:47 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-125554.d				
Injection Date:	18-May-2023 12:40:00	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		



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Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-125

Injection Date: 18-May-2023 12:40:00 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

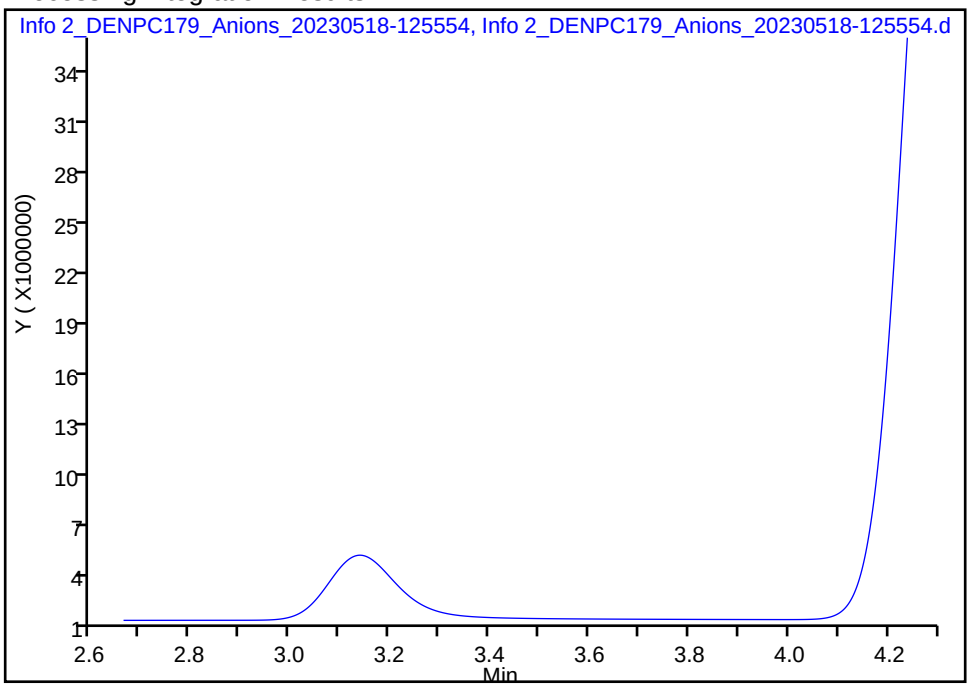
1 Fluoride, CAS: 16984-48-8

Signal: 1

Not Detected

Expected RT: 3.14

Processing Integration Results



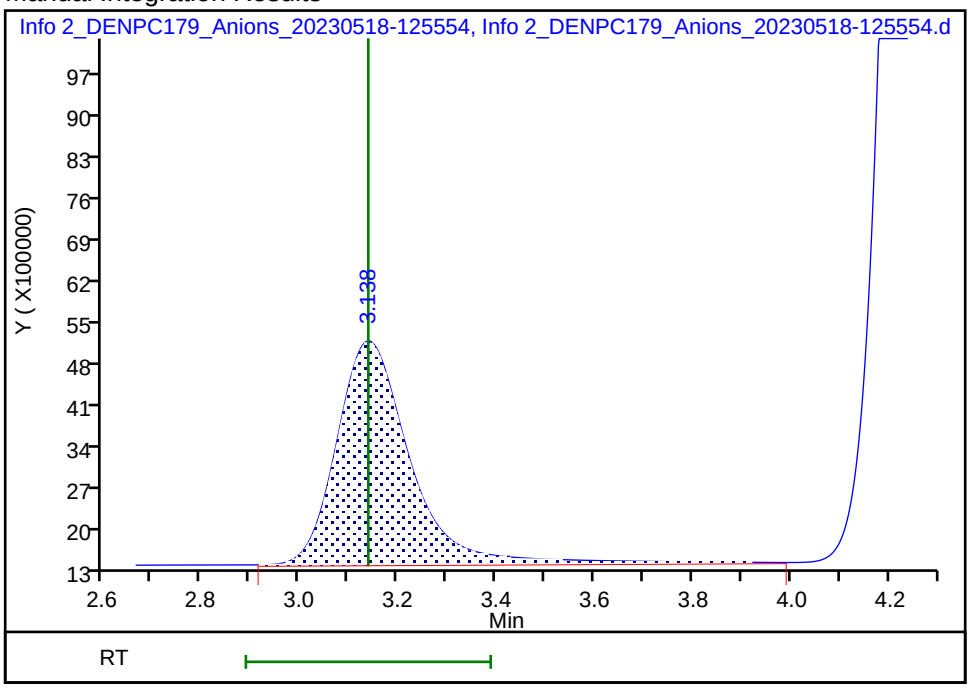
Manual Integration Results

RT: 3.14

Area: 39638142

Amount: 1.019388

Amount Units: ug/ml



Reviewer: LVW8, 18-May-2023 13:29:42 -06:00:00 (UTC)

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-131
Lims ID: STD L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 18-May-2023 12:55:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-005
Misc. Info.: 280-0121594-005
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 19-May-2023 11:53:48 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: LVW8 Date: 18-May-2023 13:30:00

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.140	3.140	0.000	102461401	2.50	2.55	Ma
2 Chloride	4.313	4.313	0.000	1123523133	60.0	60.0	
3 Nitrite as N	4.995	4.995	0.000	105836223	NC	NC	
4 Bromide	6.152	6.152	0.000	18980516	2.50	2.45	
5 Nitrate as N	6.903	6.903	0.000	110713949	NC	NC	
6 Orthophosphate as P	9.043	9.043	0.000	66560323	NC	NC	
7 Sulfate	10.227	10.227	0.000	831159688	60.0	59.9	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

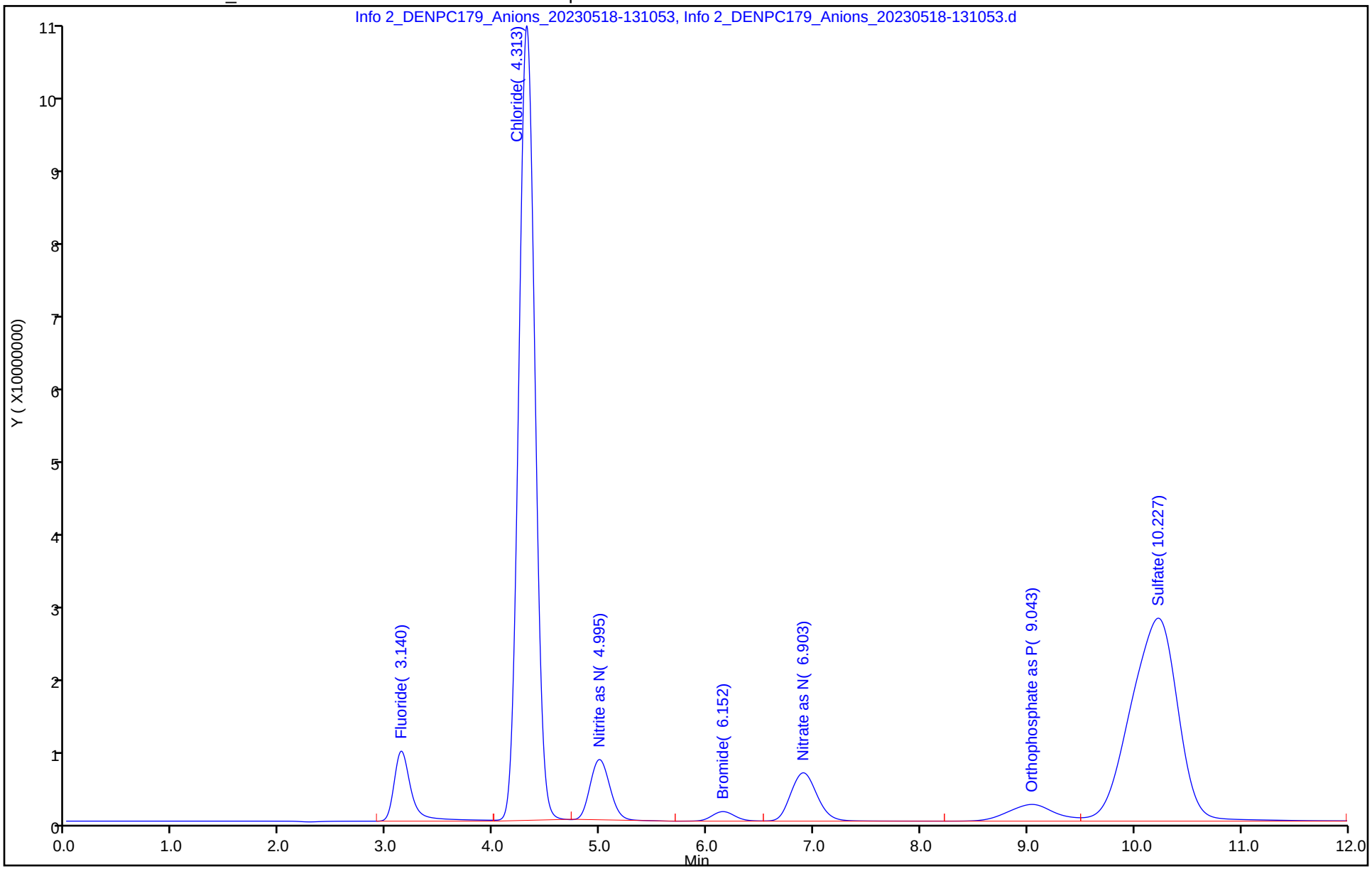
Reagents:

IC CAL cl/so4_00480 Amount Added: 4.80 Units: mL
IC Cal low_00709 Amount Added: 1.00 Units: mL

Report Date: 19-May-2023 11:53:48 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-131053.d				
Injection Date:	18-May-2023 12:55:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD L5			Worklist Smp#:	5
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



5/31/2023 9:08 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-131

Injection Date: 18-May-2023 12:55:00 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

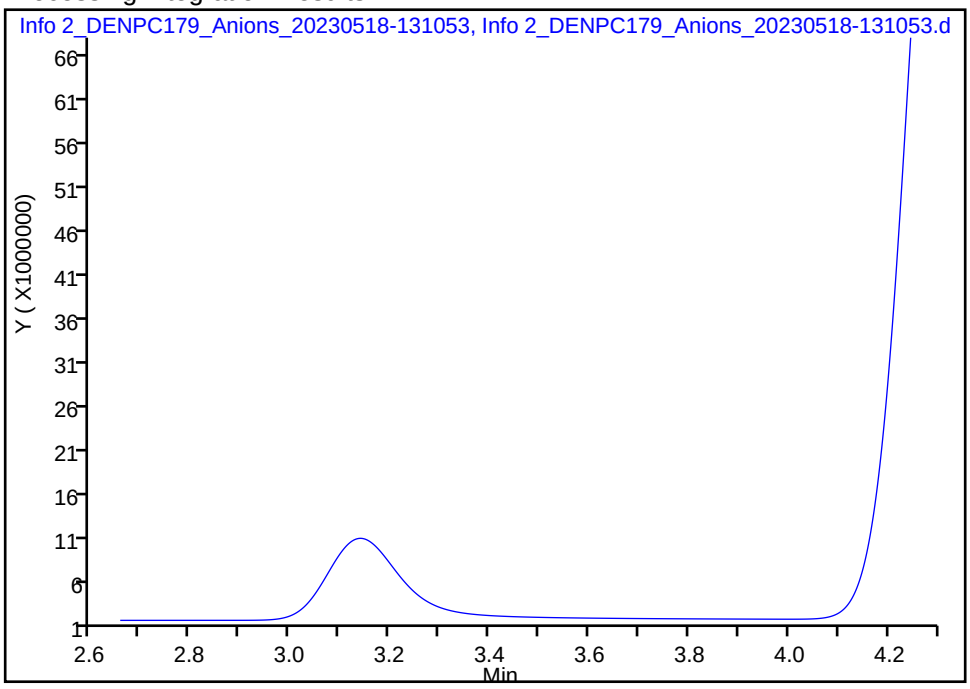
1 Fluoride, CAS: 16984-48-8

Signal: 1

Not Detected

Expected RT: 3.14

Processing Integration Results



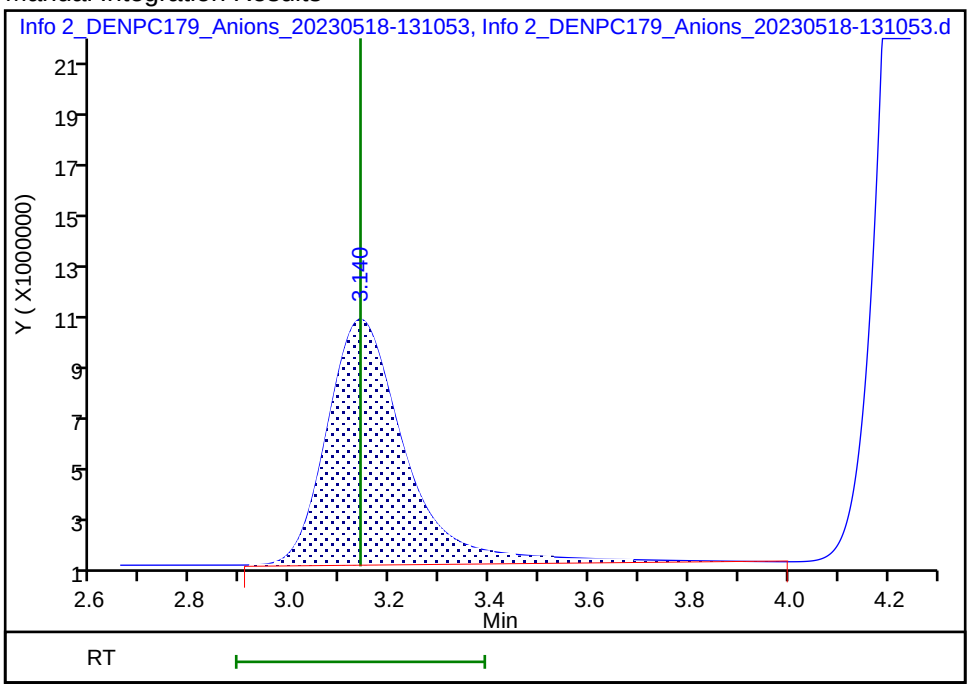
Manual Integration Results

RT: 3.14

Area: 102461401

Amount: 2.549765

Amount Units: ug/ml



Reviewer: LVW8, 18-May-2023 13:29:56 -06:00:00 (UTC)

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132
Lims ID: STD L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 18-May-2023 13:10:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-006
Misc. Info.: 280-0121594-006
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 19-May-2023 11:53:49 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: LVW8 Date: 18-May-2023 13:42:47

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.145	3.145	0.000	200510278	5.00	4.94	Ma
2 Chloride	4.333	4.333	0.000	1864000362	100.0	99.5	
3 Nitrite as N	4.997	4.997	0.000	212086804	NC	NC	
4 Bromide	6.150	6.150	0.000	38244681	5.00	5.06	
5 Nitrate as N	6.890	6.890	0.000	224161262	NC	NC	
6 Orthophosphate as P	9.035	9.035	0.000	115018456	NC	NC	
7 Sulfate	10.220	10.220	0.000	1371227441	100.0	99.0	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

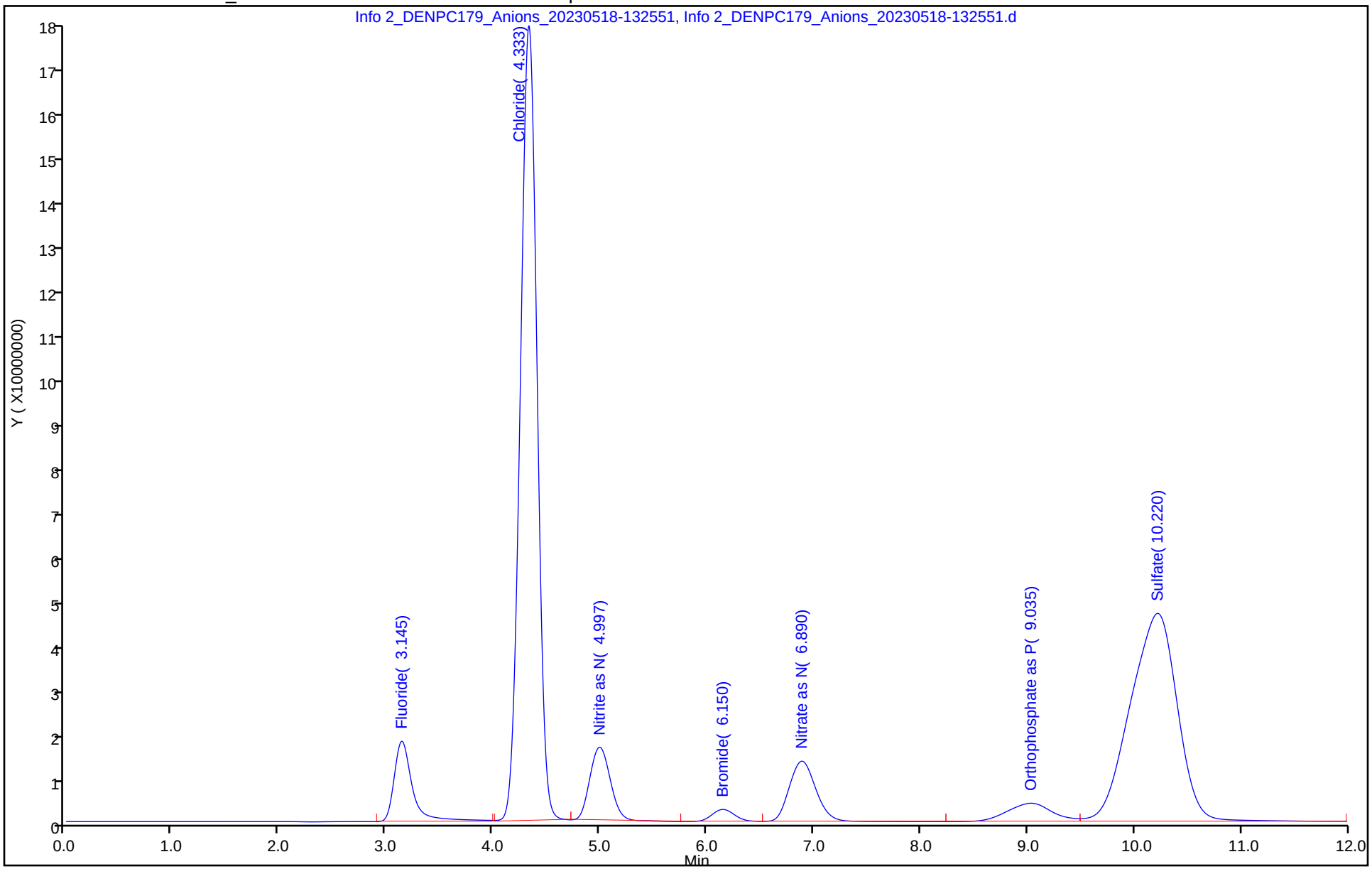
Reagents:

IC CAL cl/so4_00480 Amount Added: 8.00 Units: mL
IC Cal low_00709 Amount Added: 2.00 Units: mL

Report Date: 19-May-2023 11:53:49 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132551.d				
Injection Date:	18-May-2023 13:10:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD L6			Worklist Smp#:	6
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



5/31/2023 9:08 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Injection Date: 18-May-2023 13:10:00 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

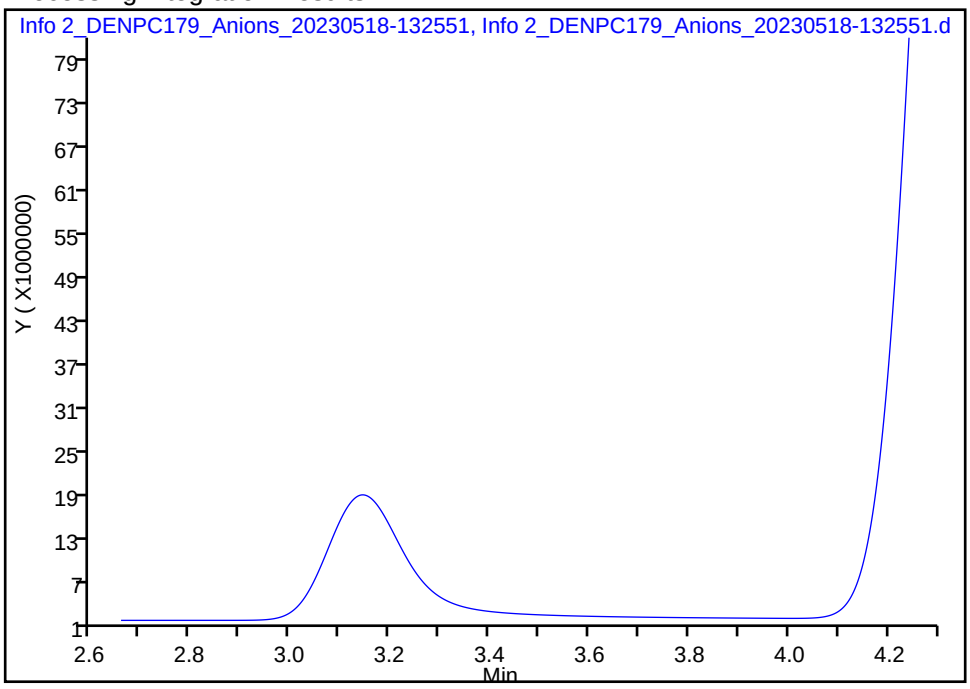
1 Fluoride, CAS: 16984-48-8

Signal: 1

Not Detected

Expected RT: 3.15

Processing Integration Results



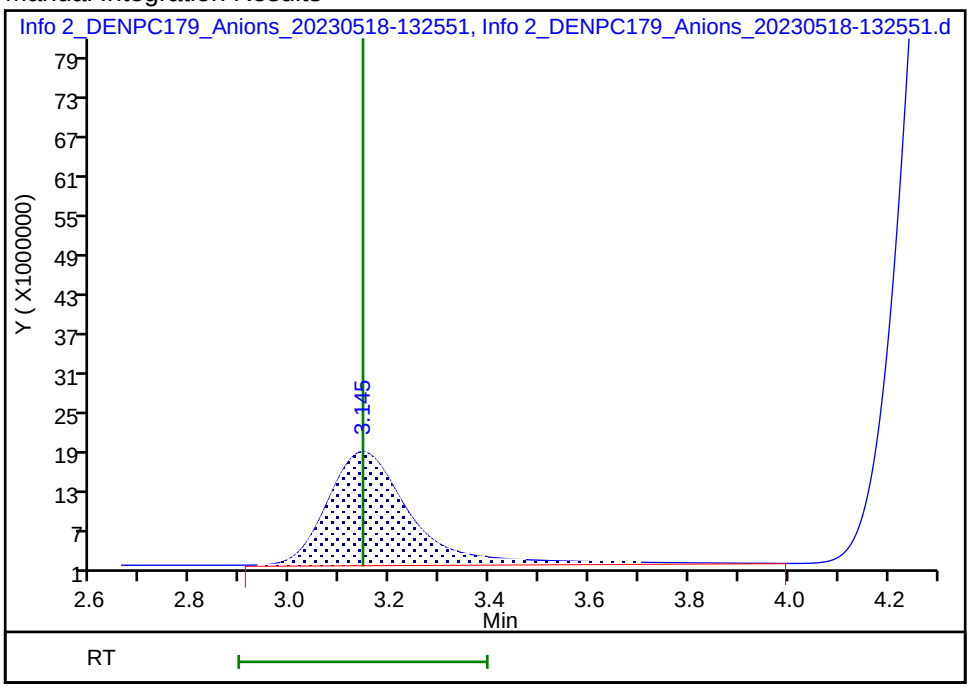
Manual Integration Results

RT: 3.15

Area: 200510278

Amount: 4.938239

Amount Units: ug/ml



Reviewer: LVW8, 18-May-2023 13:30:11 -06:00:00 (UTC)

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

IC Instrument Information

WL: 121594 **Inst ID:** 1010 **Analysis Date:** 5/18/23 **Analyst:** MEC

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	176637	1	F Cl NO2 Br (NO3) PO4 SO4	MS/D	
☐	176589	1	F Cl (NO2) Br NO3 PO4 SO4	MS/D	
☐	176670	7	F (Cl) NO2 Br (NO3) PO4 (SO4)	MS/D	
☐	176676	15	(F) (Cl) (NO2) Br (NO3) PO4 (SO4)	MS/D	
☐	176674	4	F Cl (NO2) Br (NO3) PO4 (SO4)	MS/D	
☐	176678	5	F (Cl) (NO2) Br (NO3) PO4 (SO4)	MS/D	
☐	176669	4	F (Cl) NO2 Br (NO3) PO4 (SO4)	MS/D	
☐	176683	3	F (Cl) NO2 Br (NO3) PO4 (SO4)	MS/D	
☐	176668	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	

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\20230519-121638.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 19-May-2023 12:31:06
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\20230518-121594.b\Info 2_DENPC179_Anions_20230518-12110
Inj Date: 18-May-2023 11:56:00 Worklist: 121594 Sample#: 1
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-12255
Inj Date: 18-May-2023 12:11:00 Worklist: 121594 Sample#: 2
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-12405
Inj Date: 18-May-2023 12:26:00 Worklist: 121594 Sample#: 3
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-12555
Inj Date: 18-May-2023 12:40:00 Worklist: 121594 Sample#: 4
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-13105
Inj Date: 18-May-2023 12:55:00 Worklist: 121594 Sample#: 5
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-13255
Inj Date: 18-May-2023 13:10:00 Worklist: 121594 Sample#: 6

Start Cal Date: 18-May-2023 11:56:00 End Cal Date: 19-May-2023 12:01:00

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					
35311960	42799726	43146865	42334489	42417361		-967573			1.000
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			42866306		
7062392	21399863	43146865	105836223	212086804					
121594(2)	121594(3)	121594(4)	121594(5)	121594(6)					
5 Nitrate as N				Signal: 1					
37055495	45958086	42854846	44285580	44832252		-1159043			0.999
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			44990806		
7411099	22979043	42854846	110713949	224161262					
121594(2)	121594(3)	121594(4)	121594(5)	121594(6)					
6 Orthophosphate as P				Signal: 1			R1		
43303895	41843182	33022328	26624129	23003691		5964839			*0.980
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			23299922		
8660779	20921591	33022328	66560323	115018456					
121594(2)	121594(3)	121594(4)	121594(5)	121594(6)					

ICalib Error Legend
R1, Curve Fit Fail Error Limit Test

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230519-121638.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 19-May-2023 12:31:06
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\20230518-121594.b\Info 2_DENPC179_Anions_20230518-12110
Inj Date: 18-May-2023 11:56:00 Worklist: 121594 Sample#: 1
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-12255
Inj Date: 18-May-2023 12:11:00 Worklist: 121594 Sample#: 2
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-12405
Inj Date: 18-May-2023 12:26:00 Worklist: 121594 Sample#: 3
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-12555
Inj Date: 18-May-2023 12:40:00 Worklist: 121594 Sample#: 4
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-13105
Inj Date: 18-May-2023 12:55:00 Worklist: 121594 Sample#: 5
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-13255
Inj Date: 18-May-2023 13:10:00 Worklist: 121594 Sample#: 6

Start Cal Date: 18-May-2023 11:56:00 End Cal Date: 19-May-2023 12:01:00

Individual Compound Calibration Parameters

Quant Method: ESTD RF Calibration: Replace
Rule Name: Linear1 Curve: Linear Weighting: Conc
Origin: None Error: raw_COD Error Limit: 1.00
RF %Dif: 0.0 SPCC Limit: 0.0 CCC Limit: 0.0
Dependent Variable: Resp

Number of Compounds: 4

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
1 Fluoride				Signal: 1					
29175985	36359510	39638142	40984560	40102056		-2208602			1.000
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			41050846		
M5835197	M18179755	M39638142	M102461401	M200510278					
121594(2)	121594(3)	121594(4)	121594(5)	121594(6)					
2 Chloride				Signal: 1					
16780722	16174841	19339456	19009666	18725386	18640004	-1171132			1.000
0.500000(1)	1.2500 (2)	2.5000 (3)	30.0 (4)	60.0 (5)	100.0 (6)		18747994		
8390361	20218551	48348641	570289992	1123523133	1864000362				
121594(1)	121594(2)	121594(3)	121594(4)	121594(5)	121594(6)				
4 Bromide				Signal: 1					
11277385	9537194	7900278	7592206	7648936		806494			0.999
0.200000(2)	0.500000(3)	1.0000 (4)	2.5000 (5)	5.0000 (6)			7404030		
2255477	4768597	7900278	18980516	38244681					
121594(2)	121594(3)	121594(4)	121594(5)	121594(6)					
7 Sulfate				Signal: 1					
22625290	16020812	17380170	14404666	13852661	13712274	4654296			0.999
0.500000(1)	1.2500 (2)	2.5000 (3)	30.0 (4)	60.0 (5)	100.0 (6)		13803812		
11312645	20026015	43450426	432139991	831159688	1371227441				
121594(1)	121594(2)	121594(3)	121594(4)	121594(5)	121594(6)				

Preliminary Report

Eurofins Denver
ICV, ICal Verification Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-13
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 18-May-2023 13:25:00 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-007
Misc. Info.: 280-0121594-007
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC7*sub4

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 19-May-2023 12:32:45 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-13

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: LVW8 Date: 19-May-2023 12:38:30

Start Cal Date: 18-May-2023 11:56:00
End Cal Date: 18-May-2023 13:10:00

Compound	Amount Added	Amount Detected	%Drift	Max. %Drift	%Rec	%Rec Limits
1 Fluoride	2.00	2.34	* 16.8	10.0	116.8	
2 Chloride	80.0	83.0	3.8	10.0	103.8	
4 Bromide	2.00	1.91	-4.7	10.0	95.3	
7 Sulfate	80.0	81.8	2.3	10.0	102.3	

Preliminary Report

Eurofins Denver
ICV, ICal Verification Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-13
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 18-May-2023 13:25:00 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-007
Misc. Info.: 280-0121594-007
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC7*sub4

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 19-May-2023 12:38:46 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-13

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: LVW8 Date: 19-May-2023 12:38:46

Start Cal Date: 18-May-2023 11:56:00
End Cal Date: 18-May-2023 13:10:00

Compound	Amount Added	Amount Detected	%Drift	Max. %Drift	%Rec	%Rec Limits
3 Nitrite as N	2.00	1.99	-0.3	10.0	99.7	
5 Nitrate as N	2.00	1.95	-2.3	10.0	97.7	
6 Orthophosphate as	2.00	2.30	* 14.8	10.0	114.8	

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-134
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 18-May-2023 13:25:00 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-007
Misc. Info.: 280-0121594-007
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC7*sub4

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 19-May-2023 12:38:46 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: LVW8 Date: 19-May-2023 12:38:46

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.145	3.145	0.000	93724806	2.00	2.34	Ma
2 Chloride	4.328	4.328	0.000	1555403505	80.0	83.0	
3 Nitrite as N	5.000	5.000	0.000	84485309	NC	NC	
4 Bromide	6.162	6.162	0.000	14920856	2.00	1.91	
5 Nitrate as N	6.917	6.917	0.000	86743393	NC	NC	
6 Orthophosphate as P	9.058	9.058	0.000	59448017	NC	NC	
7 Sulfate	10.230	10.230	0.000	1134012406	80.0	81.8	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

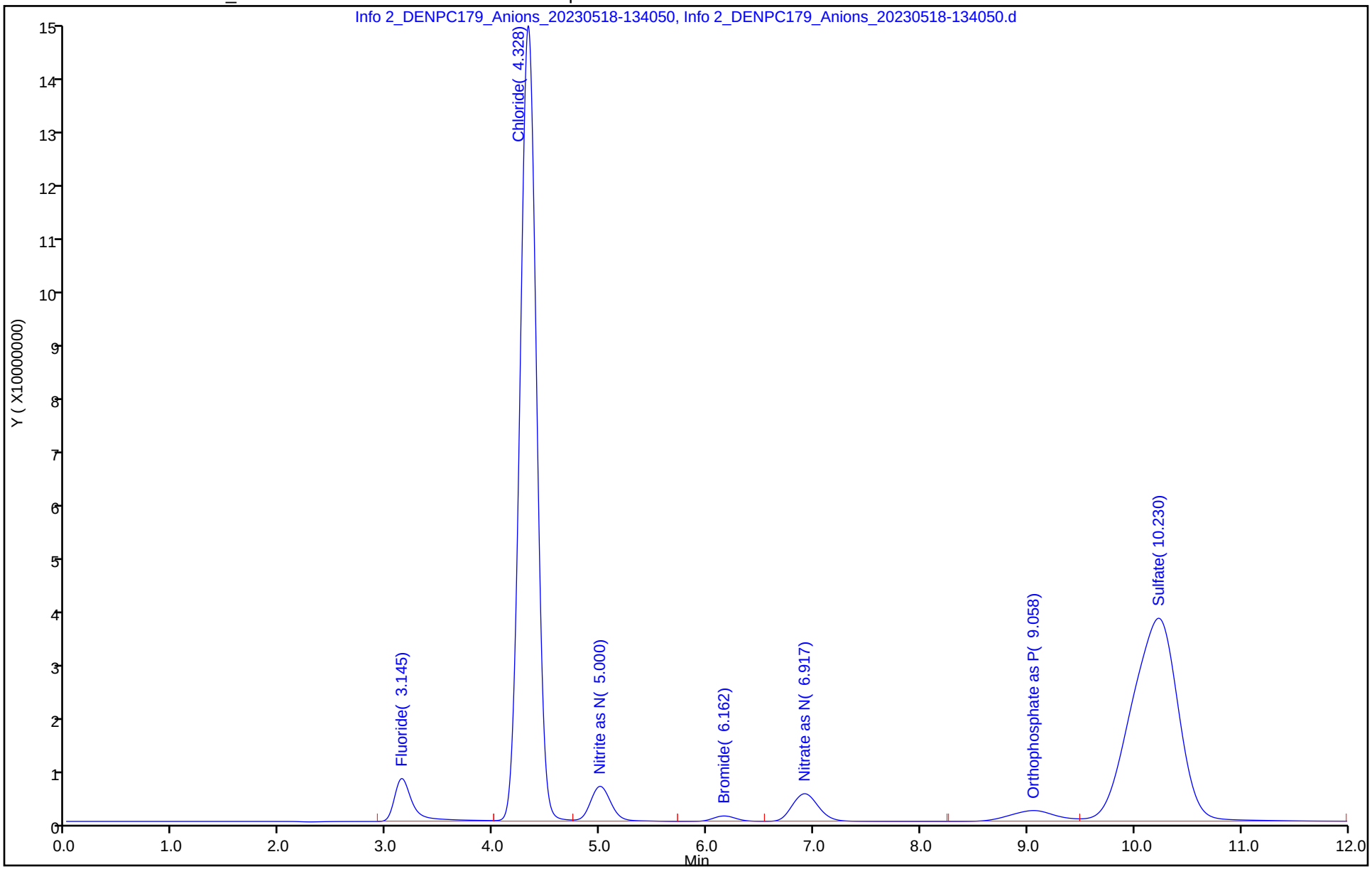
Reagents:

IC SO4 ICV_00024	Amount Added:	0.80	Units: mL
Cl ICV Std_00006	Amount Added:	0.80	Units: mL
IC ICV 5_00405	Amount Added:	0.80	Units: mL

Report Date: 19-May-2023 12:38:46 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-134050.d				
Injection Date:	18-May-2023 13:25:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ICV			Worklist Smp#:	7
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



5/31/2023 9:08 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-135
Lims ID: ICB
Client ID:
Sample Type: ICB
Inject. Date: 18-May-2023 13:40:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-008
Misc. Info.: 280-0121594-008
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 19-May-2023 12:31:30 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: LVW8 Date: 19-May-2023 11:57:30

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.145				ND	
2 Chloride		4.328				ND	
3 Nitrite as N		5.000				ND	
4 Bromide		6.162				ND	U
5 Nitrate as N		6.917				ND	
6 Orthophosphate as P	9.123	9.058	0.065	12987322		NC	
7 Sulfate	10.285	10.230	0.055	1071622		-0.2595	M

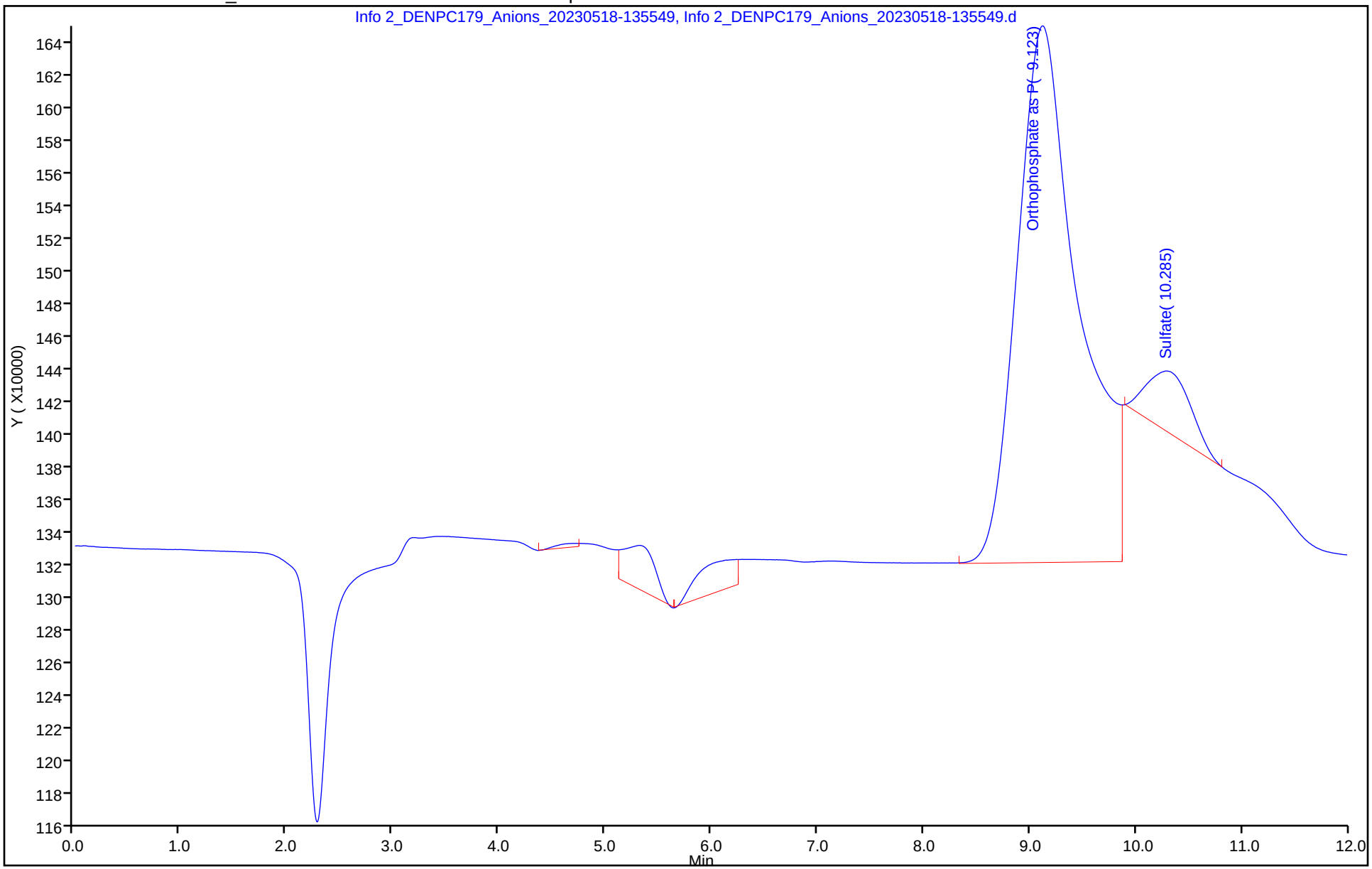
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 19-May-2023 12:31:31 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-135549.d				
Injection Date:	18-May-2023 13:40:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ICB			Worklist Smp#:	8
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



5/31/2023 9:08 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-135

Injection Date: 18-May-2023 13:40:00 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

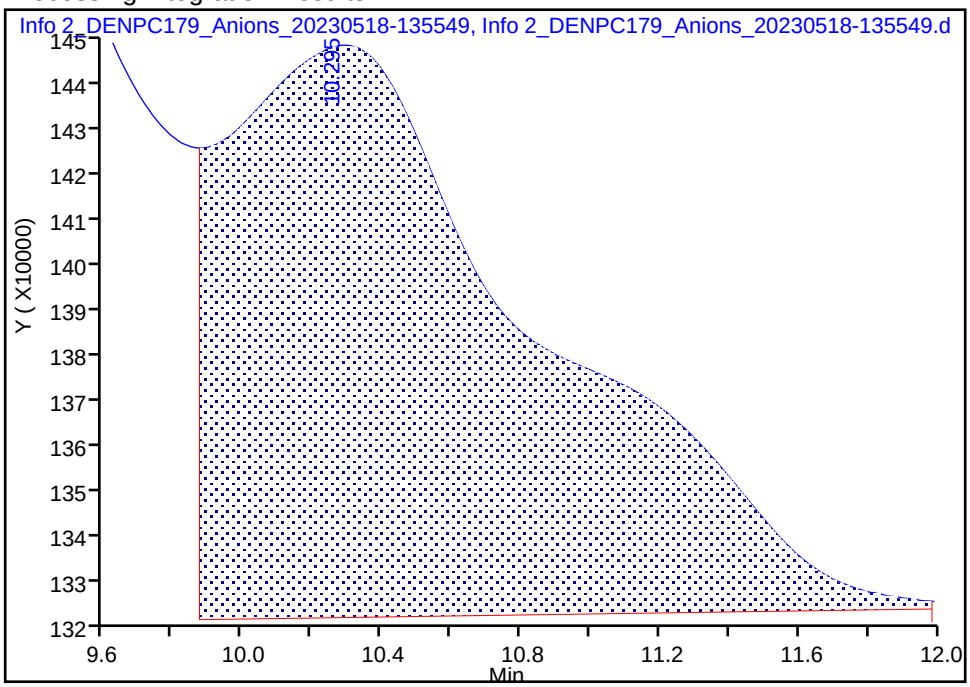
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

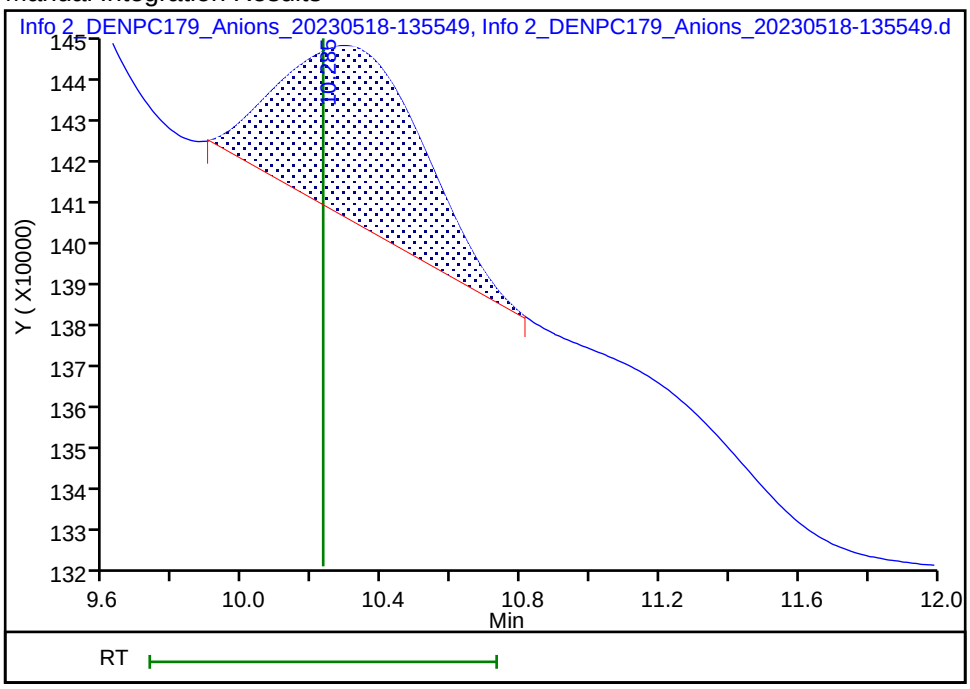
Processing Integration Results

RT: 10.30
Area: 7155425
Amount: 0.181191
Amount Units: ug/ml



Manual Integration Results

RT: 10.29
Area: 1071622
Amount: -0.259542
Amount Units: ug/ml



Reviewer: LVW8, 19-May-2023 11:57:25 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-142
Lims ID: MRL
Client ID:
Sample Type: MRL
Inject. Date: 18-May-2023 14:10:00 ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-010
Misc. Info.: 280-0121594-010
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 19-May-2023 12:31:32 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: LVW8 Date: 18-May-2023 14:58:41

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.145			ND	ND	
2 Chloride	4.302	4.313	-0.011	43926233	2.50	2.41	
3 Nitrite as N	5.003	4.998	0.005	8516946	NC	NC	
4 Bromide	6.178	6.163	0.015	2736457	0.2500	0.2607	
5 Nitrate as N	6.958	6.913	0.045	9978227	NC	NC	
6 Orthophosphate as P	9.105	9.060	0.045	20685657	NC	NC	
7 Sulfate	10.265	10.247	0.018	45774744	2.50	2.98	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

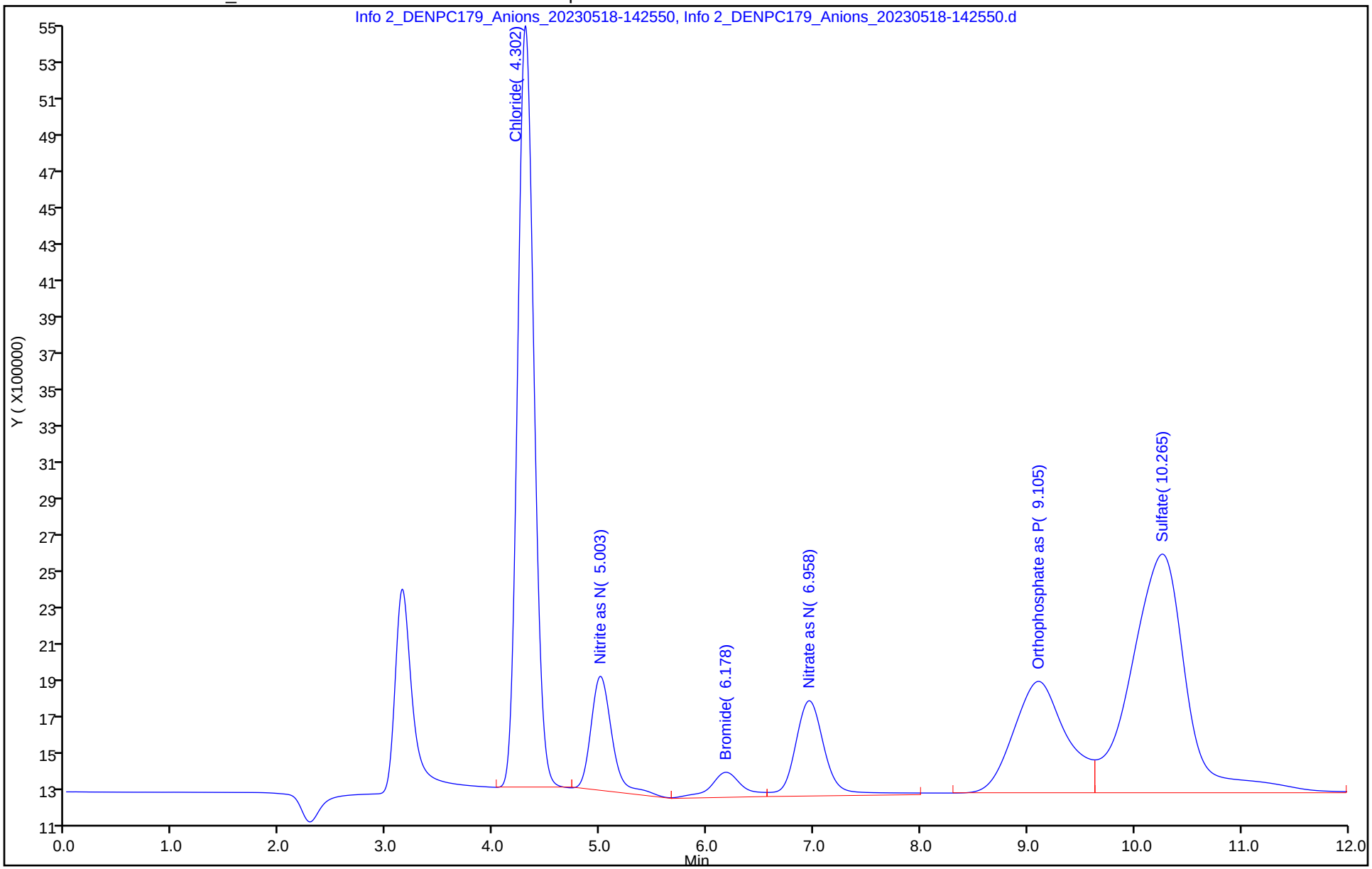
Reagents:

IC CAL cl/so4_00480 Amount Added: 0.10 Units: mL
IC Cal low_00709 Amount Added: 0.05 Units: mL

Report Date: 19-May-2023 12:31:33 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-142550.d				
Injection Date:	18-May-2023 14:10:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	MRL			Worklist Smp#:	10
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



5/31/2023 9:08 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-144
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 18-May-2023 14:25:00 ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-011
Misc. Info.: 280-0121594-011
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 19-May-2023 12:31:32 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.145			ND	ND	
2 Chloride	4.313	4.313	0.000	924355606	50.0	49.4	
3 Nitrite as N	4.998	4.998	0.000	102973098	NC	NC	
4 Bromide	6.163	6.163	0.000	18068153	2.50	2.33	
5 Nitrate as N	6.912	6.913	-0.001	109333247	NC	NC	
6 Orthophosphate as P	9.062	9.060	0.002	71396675	NC	NC	
7 Sulfate	10.248	10.247	0.001	701445617	50.0	50.5	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

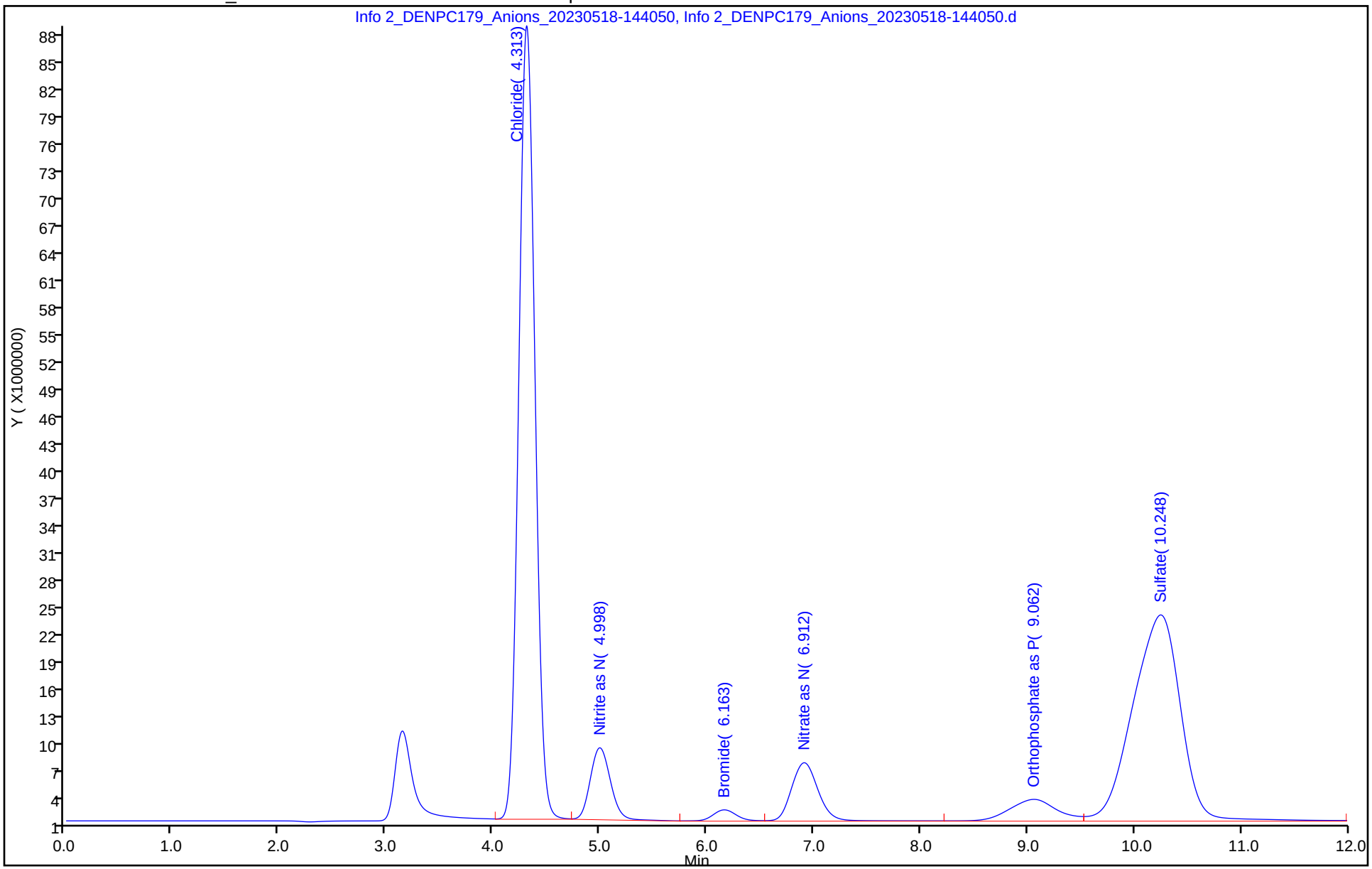
Reagents:

IC LCS_01954 Amount Added: 5.00 Units: mL

Report Date: 19-May-2023 12:31:33 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-144050.d				
Injection Date:	18-May-2023 14:25:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	LCS			Worklist Smp#:	11
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



5/31/2023 9:08 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-145
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 18-May-2023 14:40:00 ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-012
Misc. Info.: 280-0121594-012
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 19-May-2023 12:31:32 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.145			ND	ND	
2 Chloride	4.313	4.313	0.000	921265063	50.0	49.2	
3 Nitrite as N	4.998	4.998	0.000	102379982	NC	NC	
4 Bromide	6.163	6.163	0.000	17988727	2.50	2.32	
5 Nitrate as N	6.912	6.913	-0.001	108961704	NC	NC	
6 Orthophosphate as P	9.062	9.060	0.002	71915979	NC	NC	
7 Sulfate	10.250	10.247	0.003	695470892	50.0	50.0	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

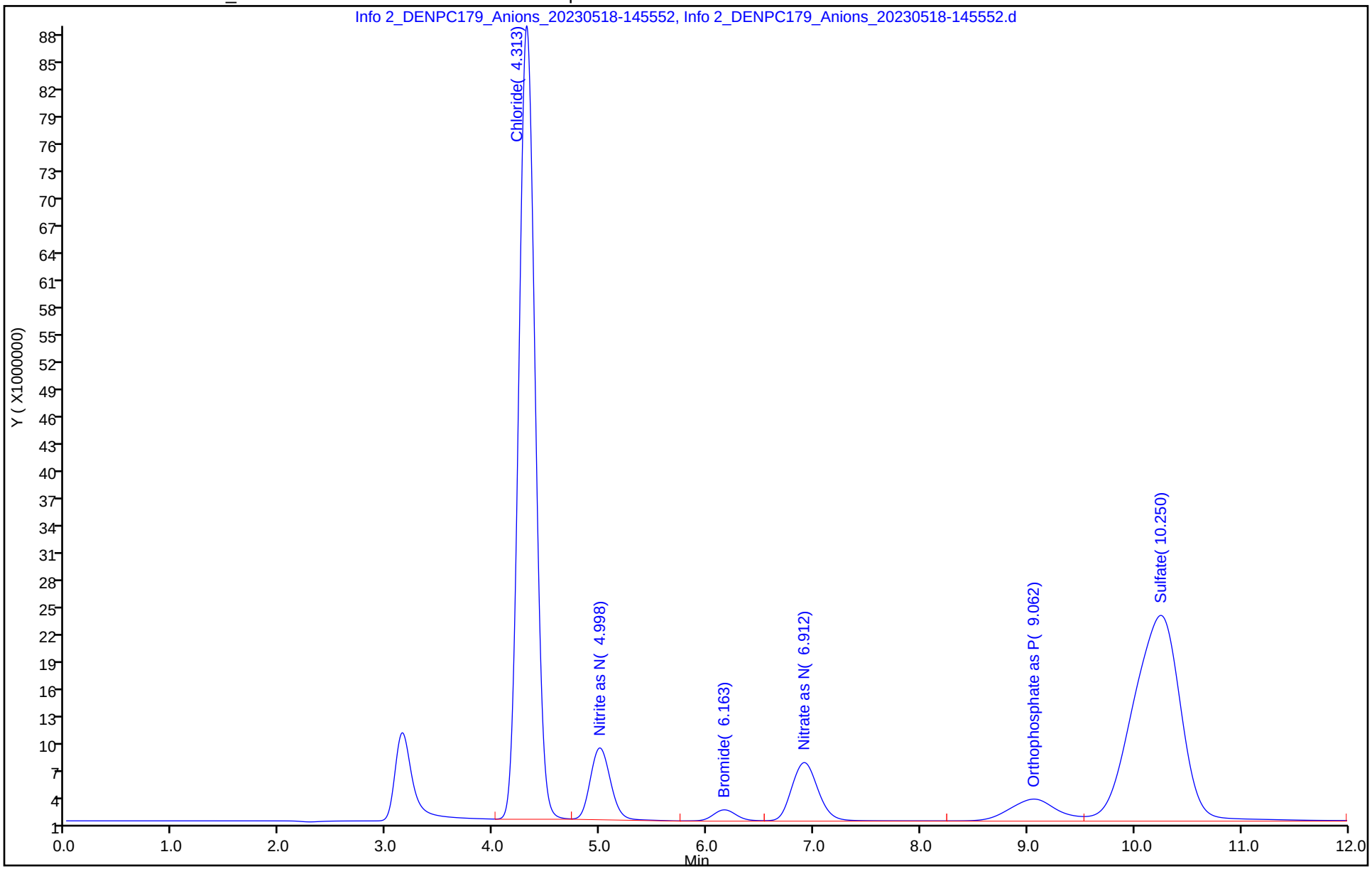
Reagents:

IC LCS_01954 Amount Added: 5.00 Units: mL

Report Date: 19-May-2023 12:31:34 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-145552.d				
Injection Date:	18-May-2023 14:40:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	LCSD			Worklist Smp#:	12
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



5/31/2023 9:08 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-151
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 18-May-2023 14:55:00 ALS Bottle#: 0 Worklist Smp#: 13
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-013
Misc. Info.: 280-0121594-013
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 19-May-2023 12:31:35 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: LVW8 Date: 19-May-2023 11:57:53

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.145				ND	
2 Chloride		4.313				ND	
3 Nitrite as N		4.998				ND	
4 Bromide		6.163				ND	U
5 Nitrate as N		6.913				ND	
6 Orthophosphate as P	9.127	9.127	0.000	13698318		NC	
7 Sulfate	10.300	10.300	0.000	1160087		-0.2531	M

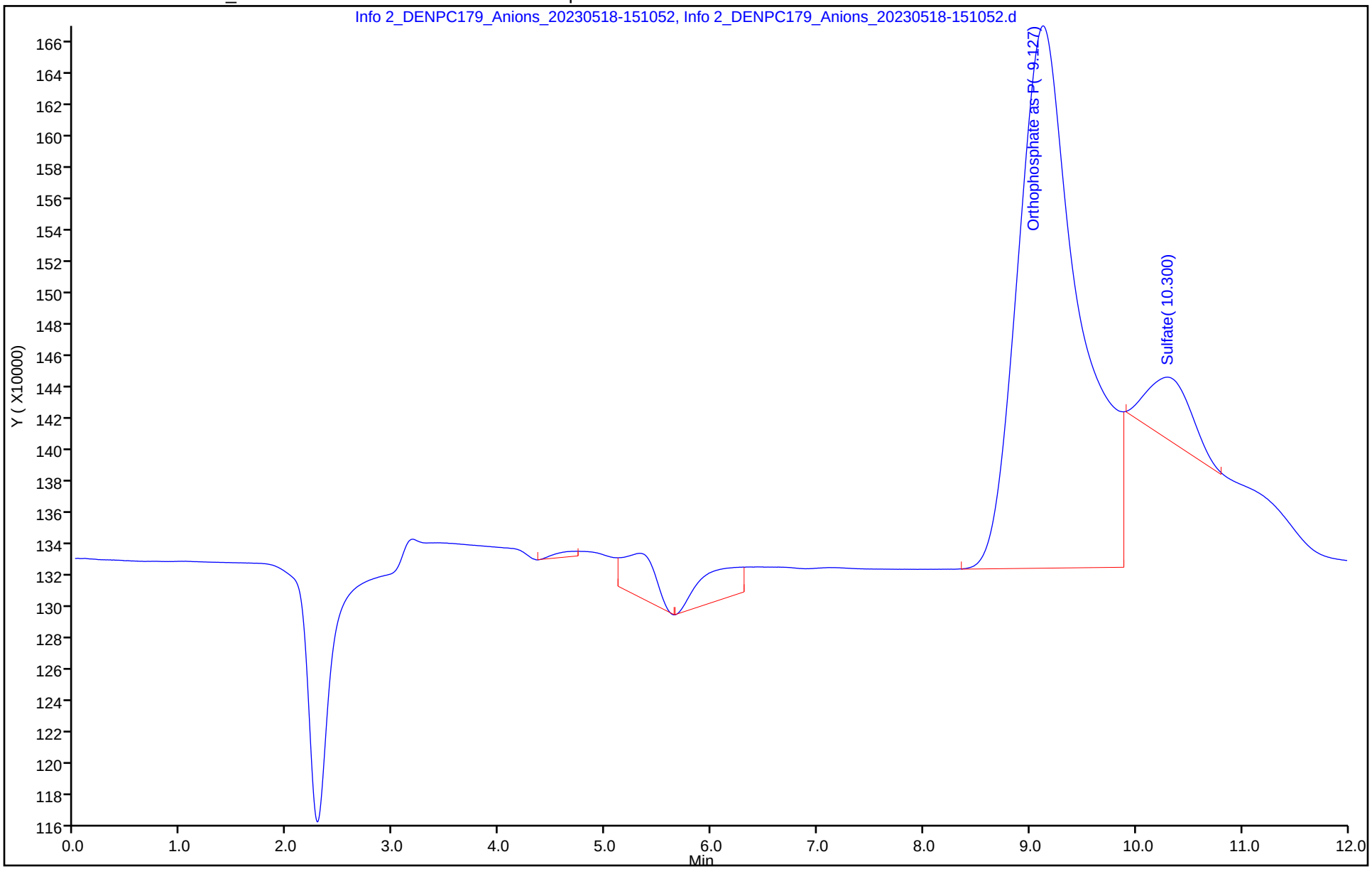
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 19-May-2023 12:31:35 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-151052.d				
Injection Date:	18-May-2023 14:55:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	MB			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		



5/31/2023 9:08 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-151

Injection Date: 18-May-2023 14:55:00 Instrument ID: WC_IonChrom10

Lims ID: MB

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 13

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions 28D

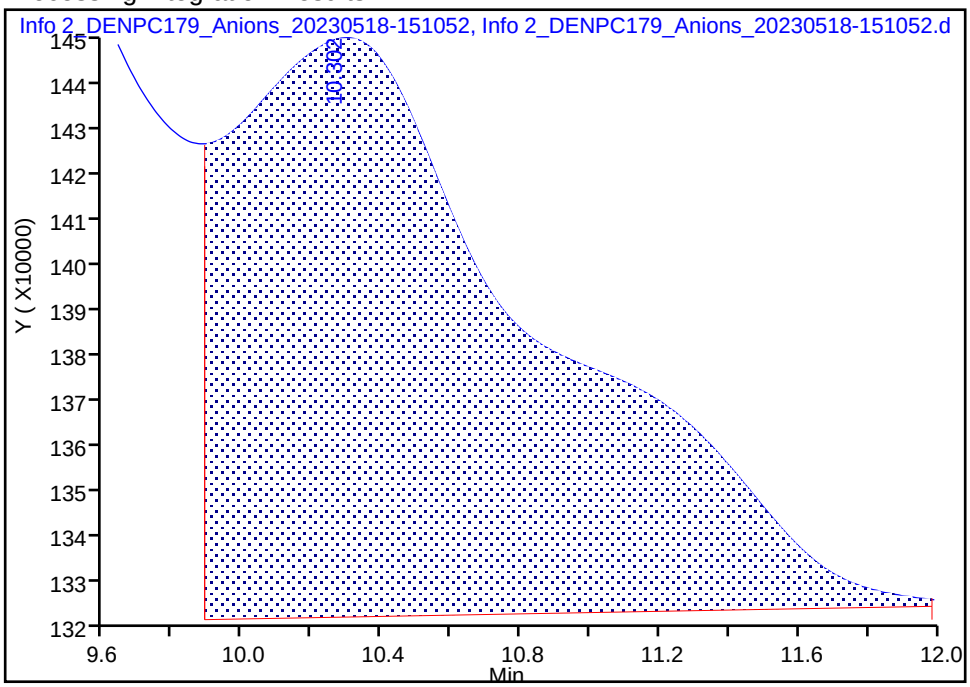
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

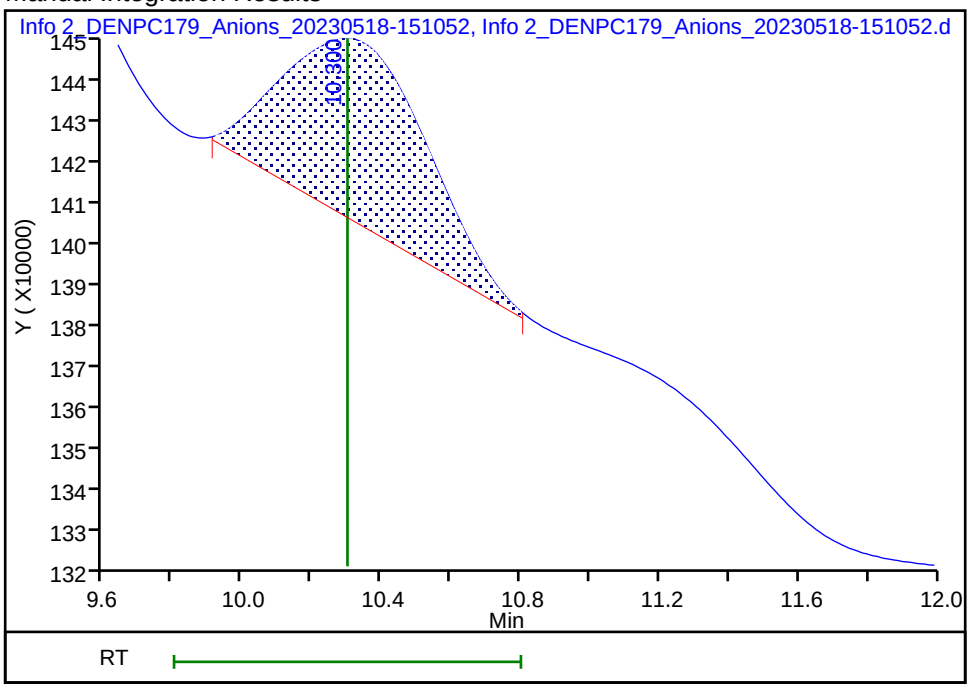
Processing Integration Results

RT: 10.30
Area: 7420754
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 10.30
Area: 1160087
Amount: -0.253134
Amount Units: ug/ml



Reviewer: LVW8, 19-May-2023 11:57:49 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-175				
Lims ID:	ccv				
Client ID:					
Sample Type:	CCV				
Inject. Date:	18-May-2023 17:41:00	ALS Bottle#:	0	Worklist Smp#:	24
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0121594-024				
Misc. Info.:	280-0121594-024				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Sublist:	chrom-Anions_IC10*sub5				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m				
Limit Group:	Wet - Anions 28D				
Last Update:	19-May-2023 12:31:42	Calib Date:	18-May-2023 13:10:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1603				
First Level Reviewer: XAY4		Date:	19-May-2023 09:47:24		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.145			ND	ND	
2 Chloride	4.312	4.313	-0.001	924998506	50.0	49.4	
3 Nitrite as N	5.000	4.998	0.002	107797836	NC	NC	
4 Bromide	6.140	6.163	-0.023	17602305	2.50	2.27	
5 Nitrate as N	6.903	6.913	-0.010	108124722	NC	NC	
6 Orthophosphate as P	9.045	9.127	-0.082	53503464	NC	NC	
7 Sulfate	10.223	10.300	-0.077	680174954	50.0	48.9	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

Reagents:

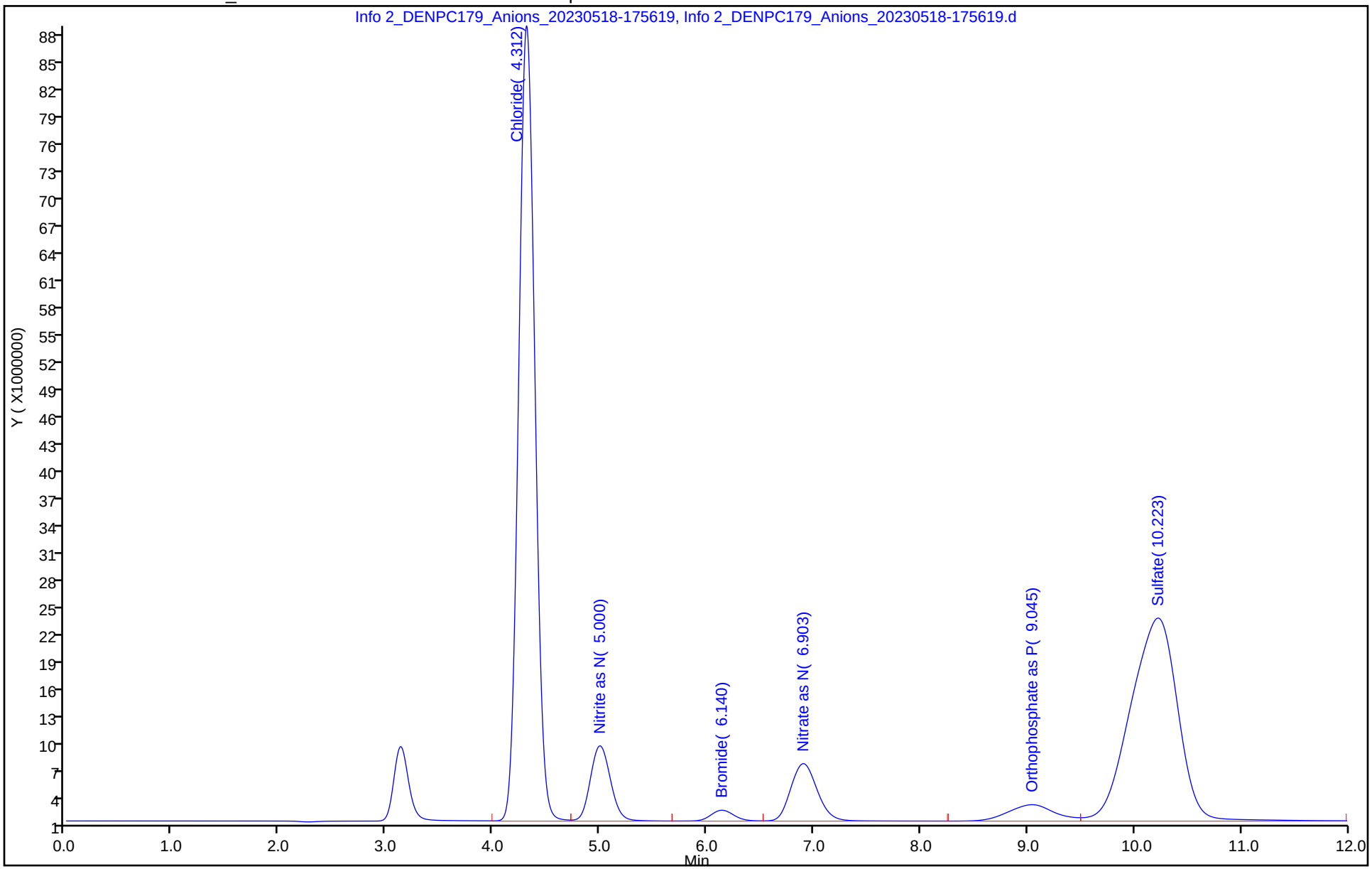
IC LCS_01954 Amount Added: 10.00 Units: mL

Report Date: 19-May-2023 12:31:42 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-175619.d

Injection Date:	18-May-2023 17:41:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	24
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



5/31/2023 9:08 PM

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-181				
Lims ID:	ccb				
Client ID:					
Sample Type:	CCB				
Inject. Date:	18-May-2023 17:56:00	ALS Bottle#:	0	Worklist Smp#:	25
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0121594-025				
Misc. Info.:	280-0121594-025				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m				
Limit Group:	Wet - Anions 28D				
Last Update:	19-May-2023 12:31:42	Calib Date:	18-May-2023 13:10:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1603				
First Level Reviewer: LVW8		Date:	19-May-2023 12:00:26		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.145				ND	
2 Chloride		4.313				ND	
3 Nitrite as N		4.998				ND	U
4 Bromide		6.163				ND	U
5 Nitrate as N		6.913				ND	
6 Orthophosphate as P	9.133	9.127	0.006	5344408		NC	
7 Sulfate	10.305	10.300	0.005	810551		-0.2785	M

QC Flag Legend

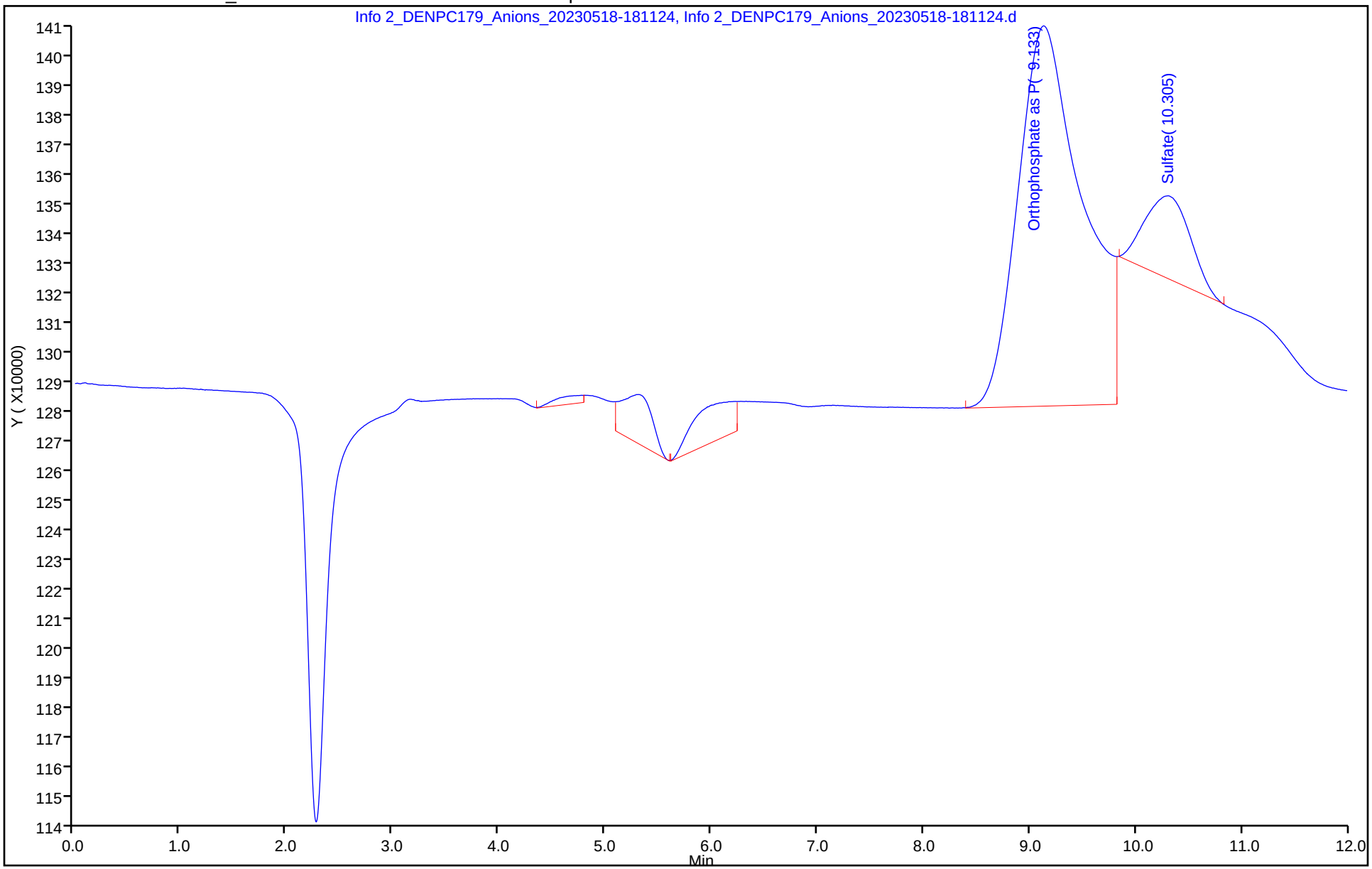
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 19-May-2023 12:31:43 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-181124.d

Injection Date:	18-May-2023 17:56:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	25
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



5/31/2023 9:08 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-181

Injection Date: 18-May-2023 17:56:00 Instrument ID: WC_IonChrom10

Lims ID: ccb

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 25

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions 28D

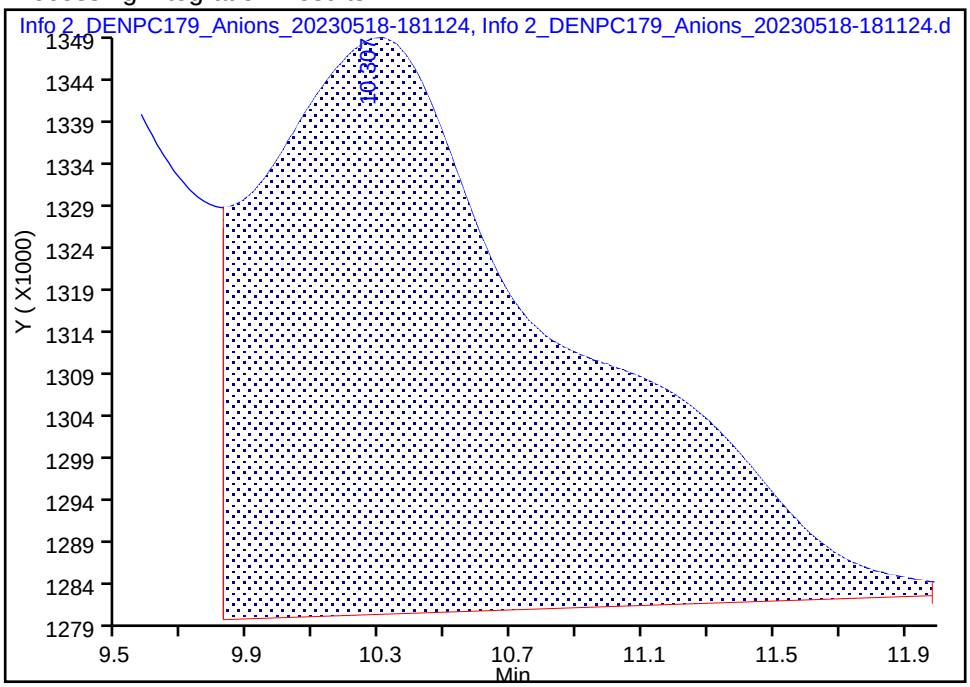
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

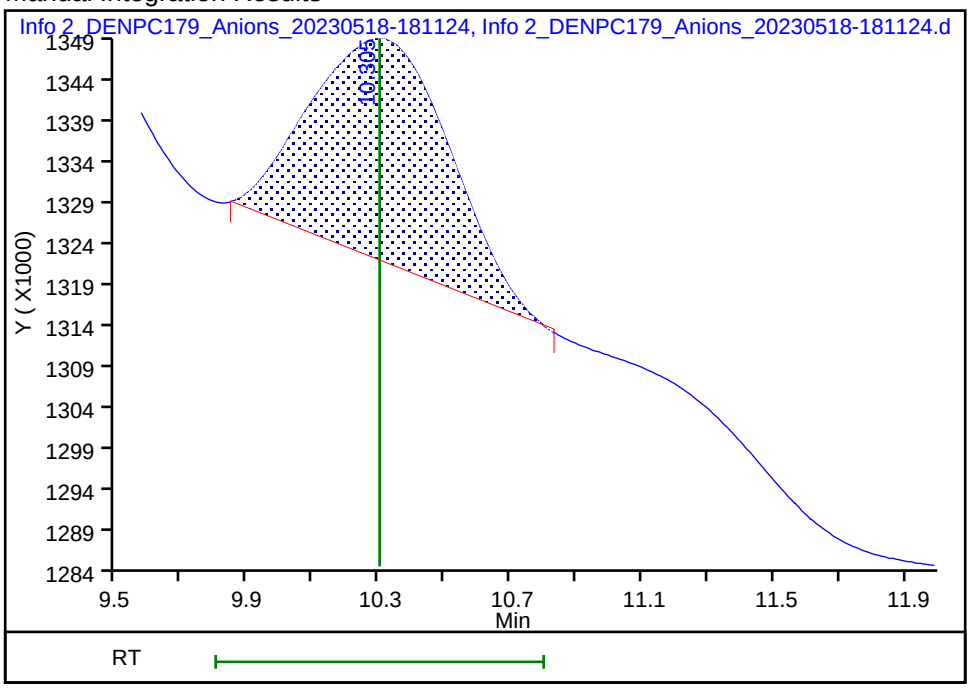
Processing Integration Results

RT: 10.31
Area: 4417823
Amount: -0.017131
Amount Units: ug/ml



Manual Integration Results

RT: 10.31
Area: 810551
Amount: -0.278455
Amount Units: ug/ml



Reviewer: LVW8, 19-May-2023 12:00:19 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-194
Lims ID: 280-176674-A-7
Client ID: FBQmw-173-230401-GW-R
Sample Type: Client
Inject. Date: 18-May-2023 19:26:00 ALS Bottle#: 0 Worklist Smp#: 31
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-031
Misc. Info.: 280-0121594-031
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 19-May-2023 12:31:42 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: LVW8 Date: 19-May-2023 12:02:08

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		3.145			ND	
2 Chloride	4.303	4.313	-0.010	19574865	1.11	M
3 Nitrite as N		4.998			ND	
4 Bromide	6.212	6.163	0.049	1197331	0.0528	
5 Nitrate as N	6.975	6.913	0.062	7707821	NC	M
6 Orthophosphate as P	9.138	9.127	0.011	8994927	NC	
7 Sulfate	10.243	10.300	-0.057	580169865	41.7	M

QC Flag Legend

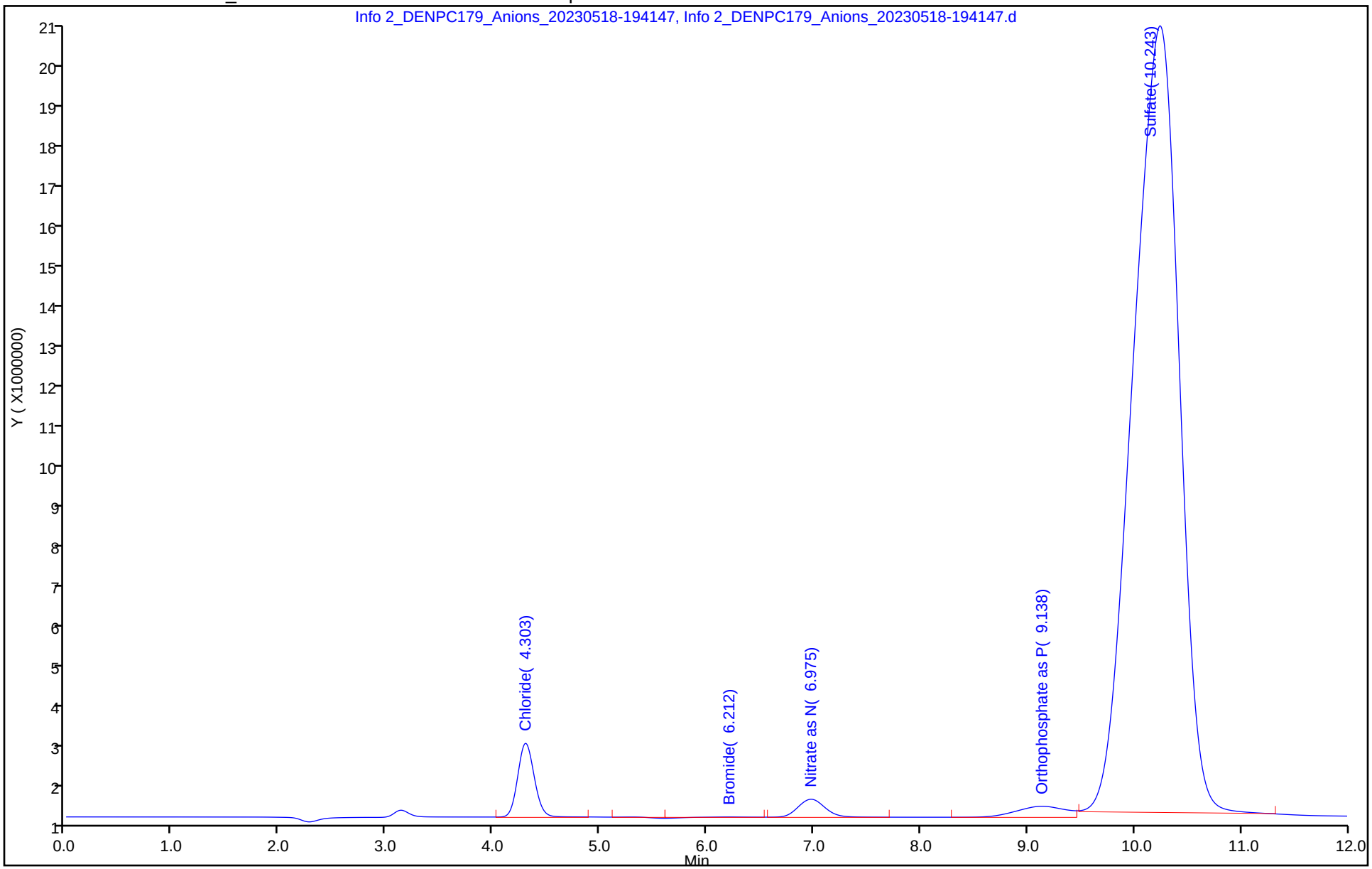
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 19-May-2023 12:31:47 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-194147.d

Injection Date:	18-May-2023 19:26:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-176674-A-7	Lab Sample ID:	280-176674-7	Worklist Smp#:	31
Client ID:	FBQmw-173-230401-GW-R				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



5/31/2023 9:08 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

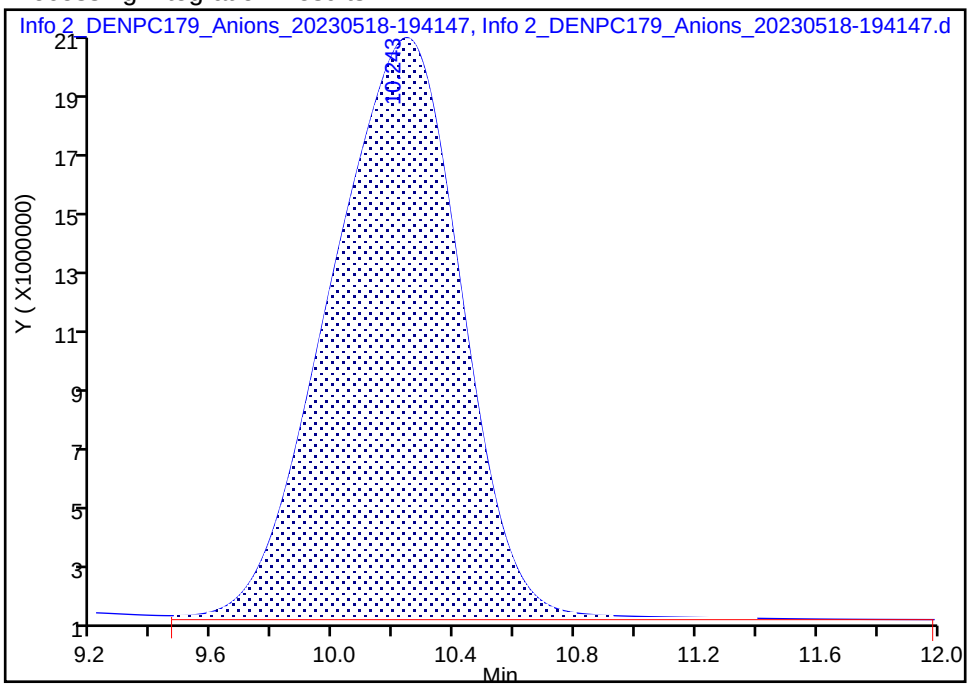
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-194				
Injection Date:	18-May-2023 19:26:00	Instrument ID:	WC_IonChrom10		
Lims ID:	280-176674-A-7	Lab Sample ID:	280-176674-7		
Client ID:	FBQmw-173-230401-GW-R				
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	31
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

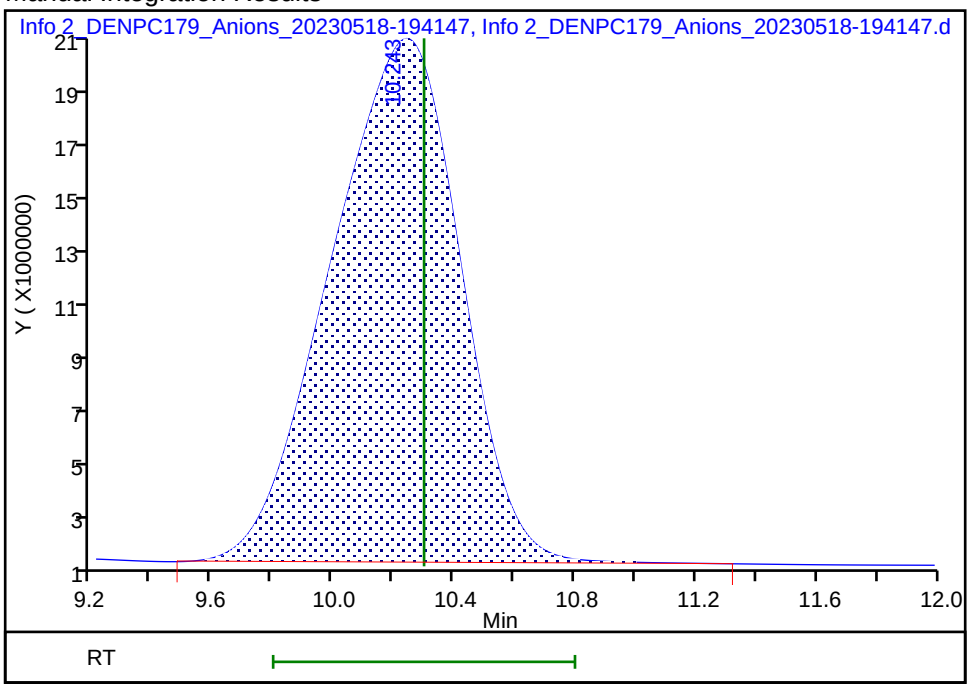
Processing Integration Results

RT: 10.24
Area: 593904893
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 10.24
Area: 580169865
Amount: 41.692511
Amount Units: ug/ml



Reviewer: LVW8, 19-May-2023 12:02:04 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-195
Lims ID: 280-176674-A-8
Client ID: FBQmw-173-230402-GW-R
Sample Type: Client
Inject. Date: 18-May-2023 19:41:00 ALS Bottle#: 0 Worklist Smp#: 32
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-032
Misc. Info.: 280-0121594-032
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 19-May-2023 12:31:42 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: LVW8 Date: 19-May-2023 12:02:17

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		3.145			ND	
2 Chloride	4.302	4.313	-0.011	20099453	1.13	M
3 Nitrite as N		4.998			ND	
4 Bromide	6.210	6.163	0.047	1338653	0.0719	
5 Nitrate as N	6.977	6.913	0.064	8138449	NC	M
6 Orthophosphate as P	9.148	9.127	0.021	5690064	NC	
7 Sulfate	10.245	10.300	-0.055	627177033	45.1	

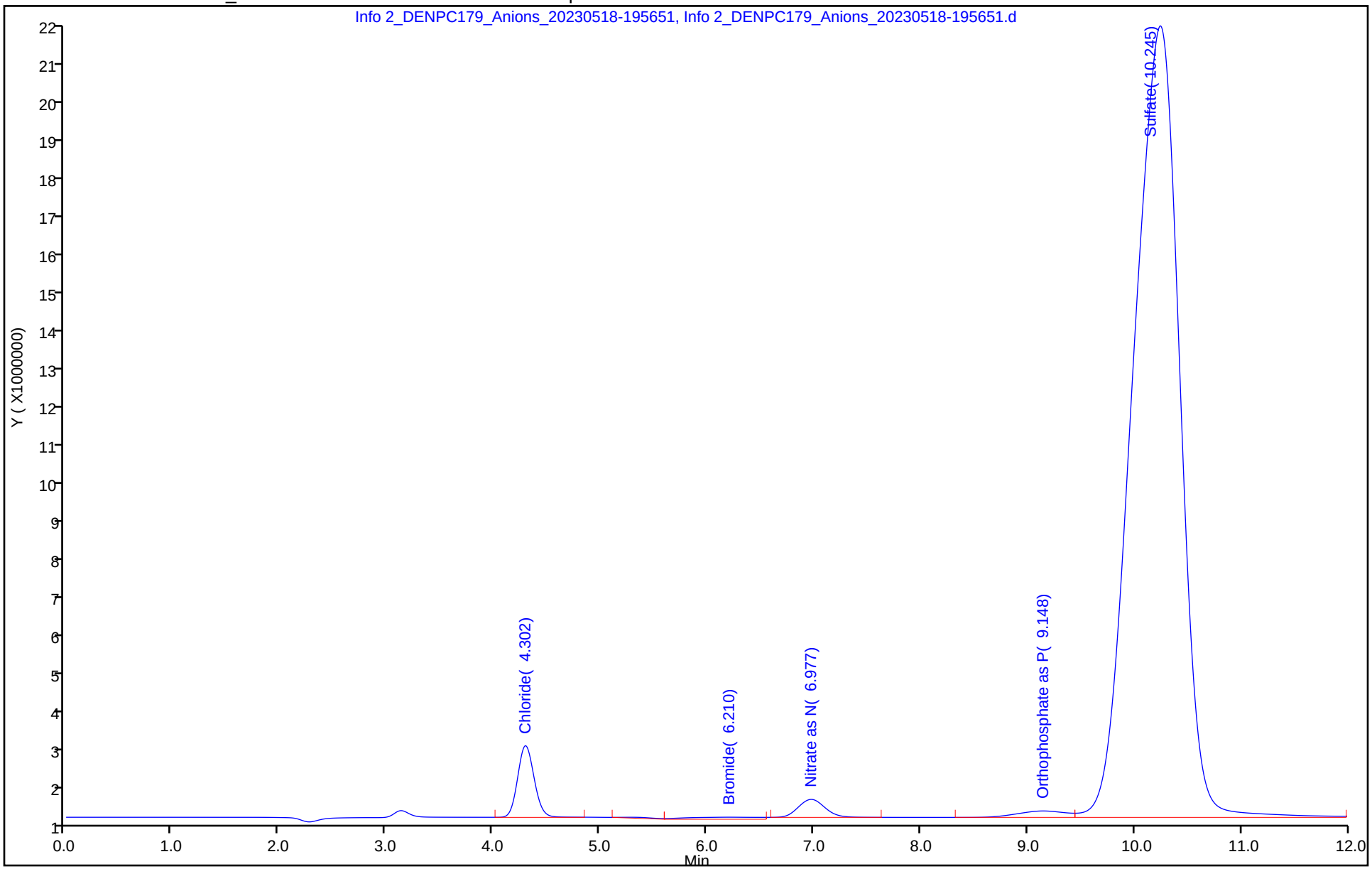
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 19-May-2023 12:31:48 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-195651.d				
Injection Date:	18-May-2023 19:41:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-176674-A-8	Lab Sample ID:	280-176674-8	Worklist Smp#:	32
Client ID:	FBQmw-173-230402-GW-R				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



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Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-205				
Lims ID:	ccv				
Client ID:					
Sample Type:	CCV				
Inject. Date:	18-May-2023 20:42:00	ALS Bottle#:	0	Worklist Smp#:	36
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0121594-036				
Misc. Info.:	280-0121594-036				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Sublist:	chrom-Anions_IC10*sub5				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m				
Limit Group:	Wet - Anions 28D				
Last Update:	19-May-2023 12:31:51	Calib Date:	18-May-2023 13:10:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1603				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.145			ND	ND	
2 Chloride	4.315	4.313	0.002	926185158	50.0	49.5	
3 Nitrite as N	5.003	4.998	0.005	107572491	NC	NC	
4 Bromide	6.145	6.163	-0.018	17667283	2.50	2.28	
5 Nitrate as N	6.910	6.913	-0.003	108155910	NC	NC	
6 Orthophosphate as P	9.048	9.127	-0.079	53833009	NC	NC	
7 Sulfate	10.232	10.300	-0.068	686565829	50.0	49.4	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Reagents:

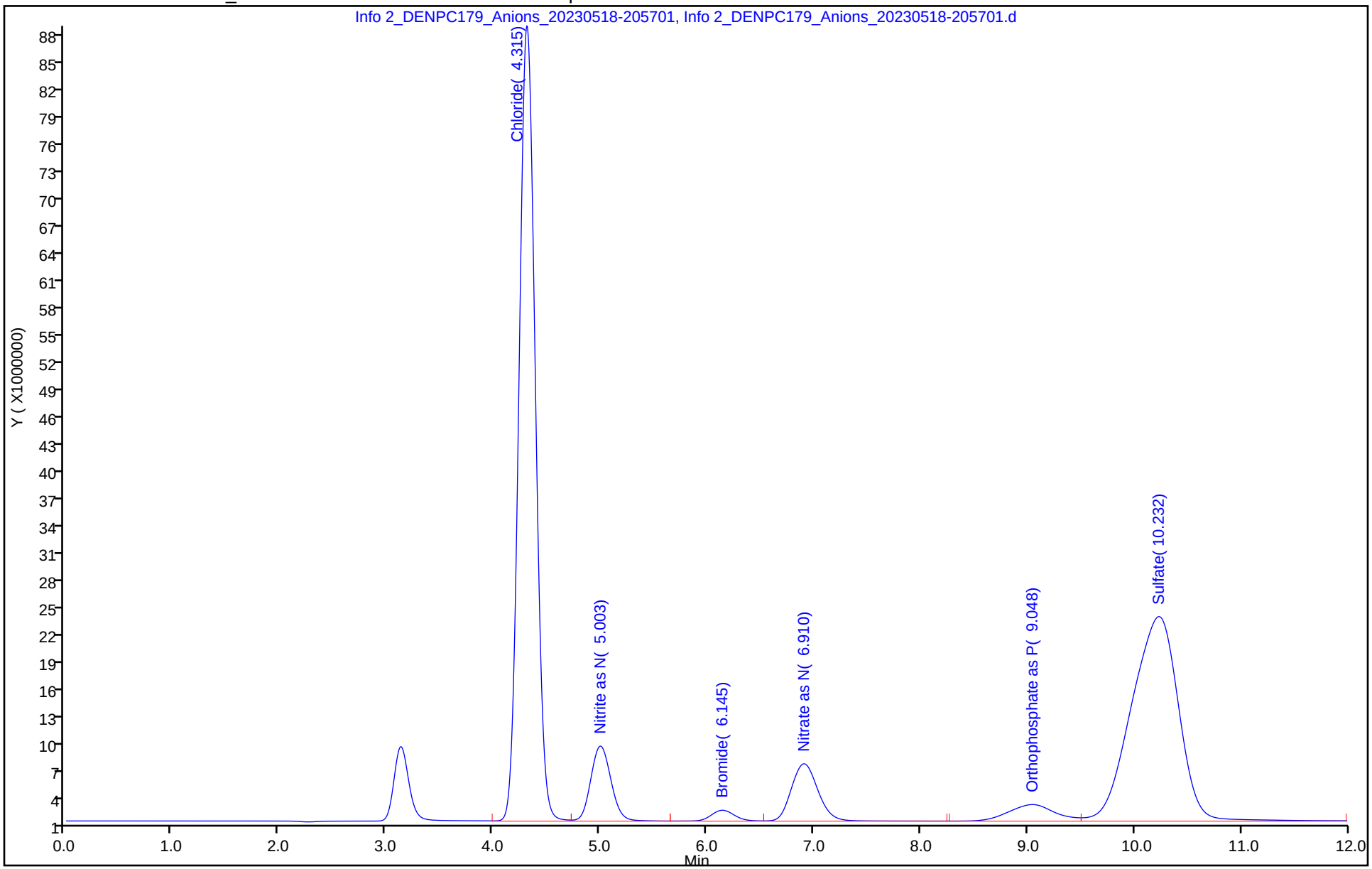
IC LCS_01954 Amount Added: 10.00 Units: mL

Report Date: 19-May-2023 12:31:51 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-205701.d

Injection Date:	18-May-2023 20:42:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	36
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



5/31/2023 9:08 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-211
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 18-May-2023 20:57:00 ALS Bottle#: 0 Worklist Smp#: 37
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0121594-037
Misc. Info.: 280-0121594-037
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 19-May-2023 12:31:51 Calib Date: 18-May-2023 13:10:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-132

Column 1 : Det: Info 2_091554_1
Process Host: CTX1603

First Level Reviewer: LVW8 Date: 19-May-2023 12:03:41

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.145				ND	
2 Chloride	4.305	4.313	-0.008	7127336		0.4426	M
3 Nitrite as N	5.003	4.998	0.005	116037		NC	M
4 Bromide	6.167	6.163	0.004	189030		-0.0834	M
5 Nitrate as N	6.973	6.913	0.060	76369		NC	M
6 Orthophosphate as P	9.052	9.127	-0.075	6191477		NC	
7 Sulfate	10.250	10.300	-0.050	11085723		0.4659	M

QC Flag Legend

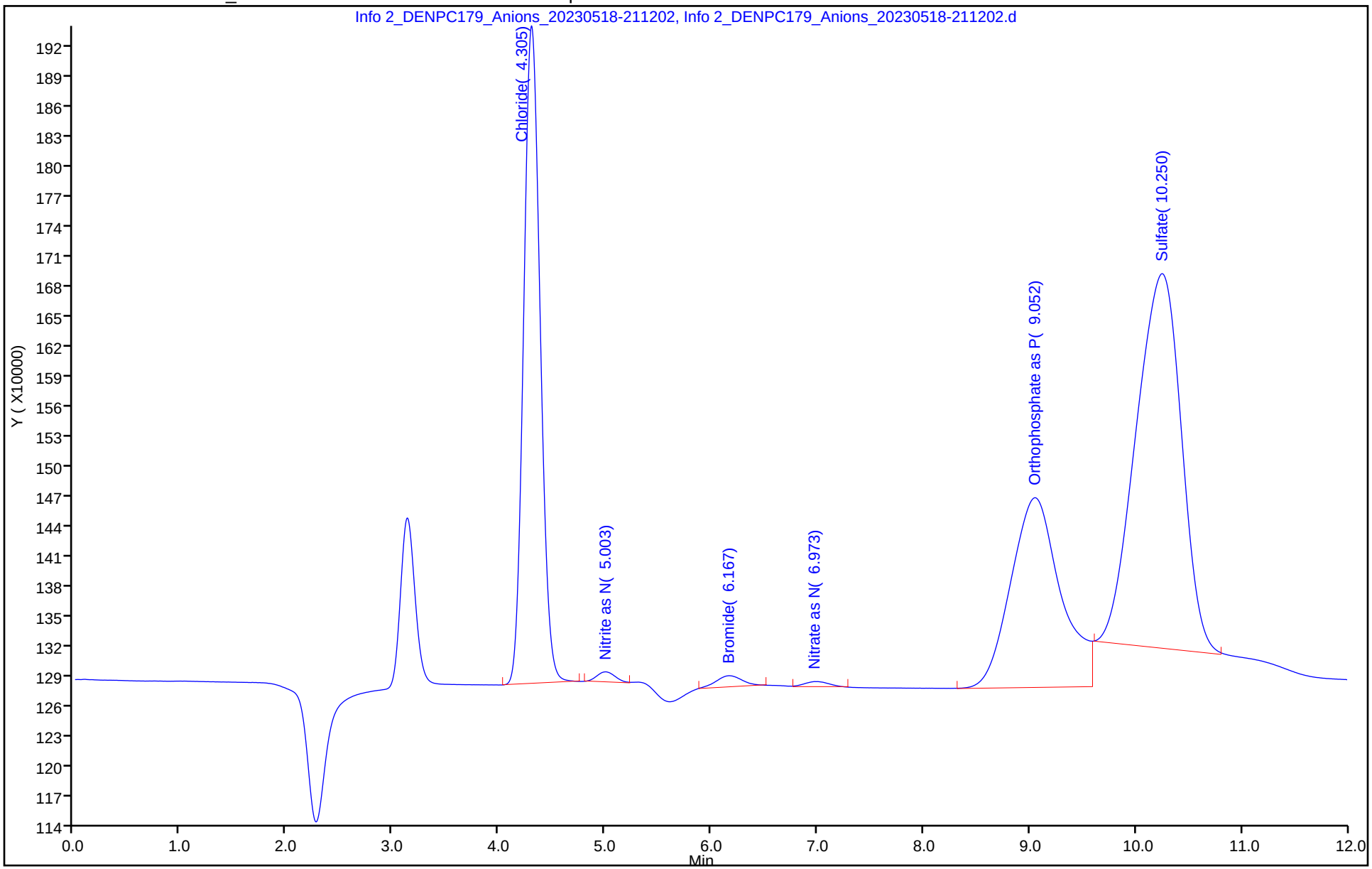
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 19-May-2023 12:31:52 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-211202.d

Injection Date:	18-May-2023 20:57:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	37
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



5/31/2023 9:08 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230518-121594.b\Info 2_DENPC179_Anions_20230518-211

Injection Date: 18-May-2023 20:57:00 Instrument ID: WC_IonChrom10

Lims ID: ccb

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 37

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions 28D

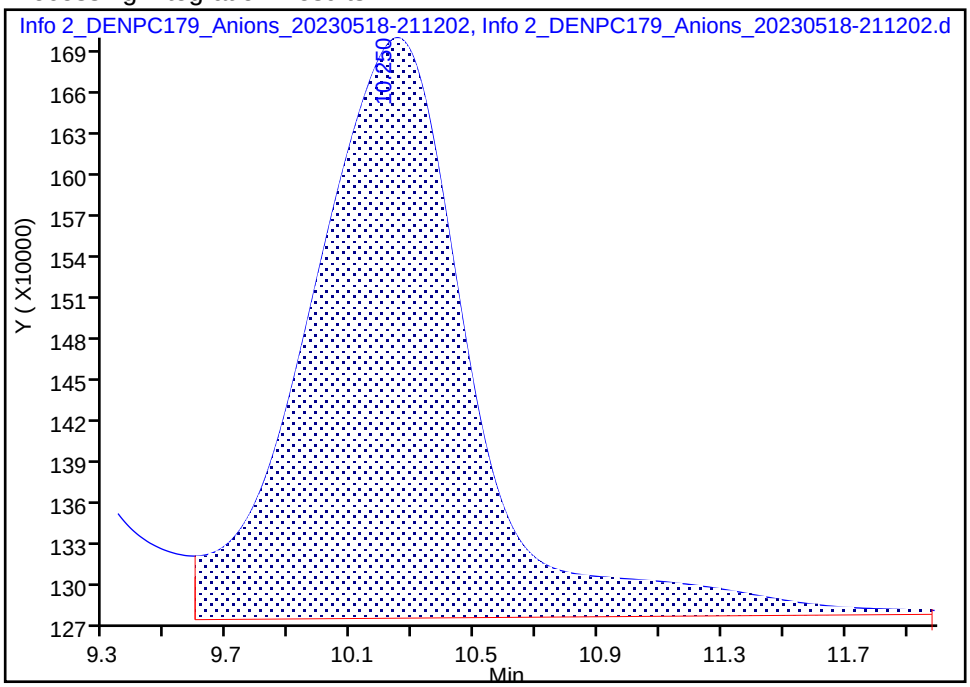
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

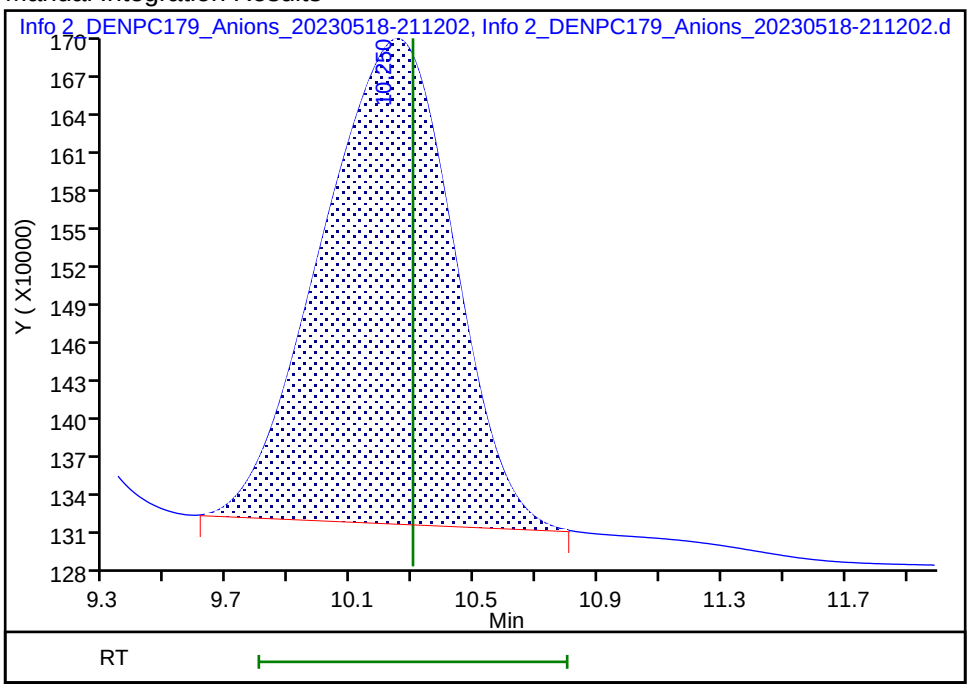
Processing Integration Results

RT: 10.25
Area: 14926462
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 10.25
Area: 11085723
Amount: 0.465917
Amount Units: ug/ml



Reviewer: LVW8, 19-May-2023 12:03:21 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

	Analysis	Sample Name	ObjectID
1	NPOC	ICV	0L-10900100866-10101000-134B17724A86-0000
2	NPOC	ICB	0L-10900100866-10101000-134B17724A86-0001
3	NPOC	LCS	0L-10900100866-10101000-134B17724A86-0002
4	NPOC	MB	0L-10900100866-10101000-134B17724A86-0003
5	NPOC	TIC	0L-10900100866-10101000-134B17724A86-0004
6	NPOC	280-176674-d-7	0L-10900100866-10101000-134B17724A86-0005
7	NPOC	MS 280-176674-d-7	0L-10900100866-10101000-134B17724A87-0000
8	NPOC	MSD 280-176674-d-7	0L-10900100866-10101000-134B17724A87-0001
9	NPOC	580-127209-p-1	0L-10900100866-10101000-134B17724A87-0002
10	NPOC	580-127209-p-3	0L-10900100866-10101000-134B17724A87-0003
11	NPOC	580-127209-p-5	0L-10900100866-10101000-134B17724A87-0004
12	NPOC	280-176349-d-8	0L-10900100866-10101000-134B17724A87-0005
13	NPOC	280-176349-c-11	0L-10900100866-10101000-134B17724A87-0006
14	NPOC	280-176123-a-35	0L-10900100866-10101000-134B17724A87-0007
15	NPOC	CCV	0L-10900100866-10101000-134B17724A87-0008
16	NPOC	CCB	0L-10900100866-10101000-134B17724A87-0009
17	NPOC	280-176363-c-1	0L-10900100866-10101000-134B17724A87-000A
18	NPOC	280-176363-a-2	0L-10900100866-10101000-134B17724A87-000B
19	NPOC	280-176363-c-3	0L-10900100866-10101000-134B17724A87-000C
20	NPOC	280-176363-d-5	0L-10900100866-10101000-134B17724A87-000D
21	NPOC	MS 280-176363-d-5	0L-10900100866-10101000-134B17724A87-000E
22	NPOC	MSD 280-176363-d-5	0L-10900100866-10101000-134B17724A87-000F
23	NPOC	280-176363-d-6	0L-10900100866-10101000-134B17724A87-0010
24	NPOC	280-176363-c-7	0L-10900100866-10101000-134B17724A87-0011
25	NPOC	280-176363-d-8	0L-10900100866-10101000-134B17724A87-0012
26	NPOC	280-176325-d-1	0L-10900100866-10101000-134B17724A87-0013
27	NPOC	CCV	0L-10900100866-10101000-134B17724A87-0014
28	NPOC	CCB	0L-10900100866-10101000-134B17724A87-0015
29	NPOC	280-176325-d-2	0L-10900100866-10101000-134B17724A87-0016
30	NPOC	280-176274-d-2	0L-10900100866-10101000-134B17724A87-0017
31	NPOC	280-176296-g-4	0L-10900100866-10101000-134B17724A87-0018
32	NPOC	590-20532-a-9	0L-10900100866-10101000-134B17724A87-0019
33	NPOC	590-20532-a-10	0L-10900100866-10101000-134B17724A87-001A
34	NPOC	LCS	0L-10900100866-10101000-134B17724A87-001B
35	NPOC	LCSD	0L-10900100866-10101000-134B17724A87-001C
36	NPOC	MB	0L-10900100866-10101000-134B17724A87-001D
37	NPOC	TIC	0L-10900100866-10101000-134B17724A87-001E
38	NPOC	280-176296-g-3	0L-10900100866-10101000-134B17724A87-001F
39	NPOC	CCV	0L-10900100866-10101000-134B17724A87-0020
40	NPOC	CCB	0L-10900100866-10101000-134B17724A87-0021
41	NPOC	MS 280-176296-g-3	0L-10900100866-10101000-134B17724A87-0022
42	NPOC	MSD 280-176296-g-3	0L-10900100866-10101000-134B17724A87-0023
43	NPOC	280-176296-g-5	0L-10900100866-10101000-134B17724A87-0024
44	NPOC	280-176296-g-7	0L-10900100866-10101000-134B17724A87-0025
45	NPOC	280-176296-g-8	0L-10900100866-10101000-134B17724A87-0026
46	NPOC	280-176296-g-9	0L-10900100866-10101000-134B17724A87-0027
47	NPOC	590-20532-a-1	0L-10900100866-10101000-134B17724A87-0028
48	NPOC	590-20532-a-2	0L-10900100866-10101000-134B17724A87-0029
49	NPOC	590-20532-a-3	0L-10900100866-10101000-134B17724A87-002A
50	NPOC	590-20532-b-5	0L-10900100866-10101000-134B17724A87-002B
51	NPOC	CCV	0L-10900100866-10101000-134B17724A87-002C
52	NPOC	CCB	0L-10900100866-10101000-134B17724A87-002D
53	NPOC	590-20532-a-6	0L-10900100866-10101000-134B17724A87-002E

	Origin	Manual Dilution	Result	Status
1	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:19.72mg/L	Completed
2	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.2162mg/L	Completed
3	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:24.75mg/L	Completed
4	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.2335mg/L	Completed
5	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.2530mg/L	Completed
6	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.8469mg/L	Completed
7	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:25.05mg/L	Completed
8	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:25.05mg/L	Completed
9	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:1.076mg/L	Completed
10	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.9633mg/L	Completed
11	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.7734mg/L	Completed
12	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	10.00	NPOC:299.3mg/L	Completed
13	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	25.00	NPOC:526.1mg/L	Completed
14	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	25.00	NPOC:521.9mg/L	Completed
15	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:24.55mg/L	Completed
16	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.2058mg/L	Completed
17	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	2.000	NPOC:45.94mg/L	Completed
18	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.3234mg/L	Completed
19	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	10.00	NPOC:234.1mg/L	Completed
20	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	10.00	NPOC:110.2mg/L	Completed
21	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	10.00	NPOC:340.1mg/L	Completed
22	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	10.00	NPOC:349.6mg/L	Completed
23	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.3406mg/L	Completed
24	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	2.000	NPOC:47.96mg/L	Completed
25	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	10.00	NPOC:219.6mg/L	Completed
26	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	500.0	NPOC:8359mg/L	Completed
27	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:24.68mg/L	Completed
28	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.2412mg/L	Completed
29	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	500.0	NPOC:4521mg/L	Completed
30	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	100.0	NPOC:226.3mg/L	Completed
31	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:1.785mg/L	Completed
32	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:2.131mg/L	Completed
33	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:1.902mg/L	Completed
34	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:24.69mg/L	Completed
35	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:24.82mg/L	Completed
36	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.2179mg/L	Completed
37	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.2542mg/L	Completed
38	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:2.625mg/L	Completed
39	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:24.31mg/L	Completed
40	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.2449mg/L	Completed
41	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:26.70mg/L	Completed
42	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:27.01mg/L	Completed
43	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:1.581mg/L	Completed
44	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:1.497mg/L	Completed
45	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.8961mg/L	Completed
46	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.8706mg/L	Completed
47	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.4120mg/L	Completed
48	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.3433mg/L	Completed
49	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.3826mg/L	Completed
50	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:1.602mg/L	Completed
51	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:24.52mg/L	Completed
52	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.2184mg/L	Completed
53	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:1.944mg/L	Completed

	Date / Time	Vial
1	5/19/2023 6:09:32 PM	1
2	5/19/2023 6:23:44 PM	2
3	5/19/2023 6:38:30 PM	3
4	5/19/2023 6:52:58 PM	4
5	5/19/2023 7:07:18 PM	5
6	5/19/2023 7:23:58 PM	6
7	5/19/2023 7:38:21 PM	7
8	5/19/2023 7:52:58 PM	8
9	5/19/2023 8:09:22 PM	9
10	5/19/2023 8:25:39 PM	10
11	5/19/2023 8:39:43 PM	11
12	5/19/2023 8:53:56 PM	12
13	5/19/2023 9:08:35 PM	13
14	5/19/2023 9:22:44 PM	14
15	5/19/2023 9:37:19 PM	15
16	5/19/2023 9:52:12 PM	16
17	5/19/2023 10:06:44 PM	17
18	5/19/2023 10:22:59 PM	18
19	5/19/2023 10:37:37 PM	19
20	5/19/2023 10:51:46 PM	20
21	5/19/2023 11:06:24 PM	21
22	5/19/2023 11:20:45 PM	22
23	5/19/2023 11:37:03 PM	23
24	5/19/2023 11:51:23 PM	24
25	5/20/2023 12:05:34 AM	25
26	5/20/2023 12:19:50 AM	26
27	5/20/2023 12:35:02 AM	27
28	5/20/2023 12:49:11 AM	28
29	5/20/2023 1:03:40 AM	29
30	5/20/2023 1:19:54 AM	30
31	5/20/2023 1:36:04 AM	31
32	5/20/2023 1:52:23 AM	32
33	5/20/2023 2:08:42 AM	33
34	5/20/2023 2:22:58 AM	34
35	5/20/2023 2:37:44 AM	35
36	5/20/2023 2:51:54 AM	36
37	5/20/2023 3:06:04 AM	37
38	5/20/2023 3:22:19 AM	38
39	5/20/2023 3:37:17 AM	39
40	5/20/2023 3:51:27 AM	40
41	5/20/2023 4:06:01 AM	41
42	5/20/2023 4:20:18 AM	42
43	5/20/2023 4:36:49 AM	43
44	5/20/2023 4:52:59 AM	44
45	5/20/2023 5:09:09 AM	45
46	5/20/2023 5:25:27 AM	46
47	5/20/2023 5:39:55 AM	47
48	5/20/2023 5:54:06 AM	48
49	5/20/2023 6:08:16 AM	49
50	5/20/2023 6:24:31 AM	50
51	5/20/2023 6:39:12 AM	51
52	5/20/2023 6:53:23 AM	52
53	5/20/2023 7:09:37 AM	53

	Analysis	Sample Name	ObjectID
54	NPOC	280-176326-b-1	0L-10900100866-10101000-134B17724A87-002F
55	NPOC	MS 280-176326-b-1	0L-10900100866-10101000-134B17724A87-0030
56	NPOC	MSD 280-176326-b-1	0L-10900100866-10101000-134B17724A87-0031
57	NPOC	280-176326-b-2	0L-10900100866-10101000-134B17724A87-0032
58	NPOC	280-176326-b-3	0L-10900100866-10101000-134B17724A87-0033
59	NPOC	280-176326-b-4	0L-10900100866-10101000-134B17724A87-0034
60	NPOC	280-176326-a-5	0L-10900100866-10101000-134B17724A87-0035
61	NPOC	590-20532-b-7	0L-10900100866-10101000-134B17724A87-0036
62	NPOC	590-20532-a-8	0L-10900100866-10101000-134B17724A87-0037
63	NPOC	CCV	0L-10900100866-10101000-134B17724A87-0038
64	NPOC	CCB	0L-10900100866-10101000-134B17724A87-0039
65	NPOC	590-20532-a-4	0L-10900100866-10101000-134B17724A87-003A
66	NPOC	590-20532-a-5	0L-10900100866-10101000-134B17724A87-003B
67	NPOC	590-20532-b-6	0L-10900100866-10101000-134B17724A87-003C
68	NPOC	LCS	0L-10900100866-10101000-134B17724A87-003D
69	NPOC	MB	0L-10900100866-10101000-134B17724A87-003E
70	NPOC	590-20532-a-7	0L-10900100866-10101000-134B17724A87-003F
71	NPOC	MS 590-20532-a-7	0L-10900100866-10101000-134B17724A87-0040
72	NPOC	MSD 590-20532-a-7	0L-10900100866-10101000-134B17724A87-0041
73	NPOC	590-20532-b-8	0L-10900100866-10101000-134B17724A87-0042
74	NPOC	590-20532-b-9	0L-10900100866-10101000-134B17724A87-0043
75	NPOC	CCV	0L-10900100866-10101000-134B17724A87-0044
76	NPOC	CCB	0L-10900100866-10101000-134B17724A87-0045
77	NPOC	590-20532-b-10	0L-10900100866-10101000-134B17724A87-0046
78	NPOC	280-176081-j-3	0L-10900100866-10101000-134B17724A87-0047
79	NPOC	280-176081-j-4	0L-10900100866-10101000-134B17724A87-0048
80	NPOC	280-176081-j-5	0L-10900100866-10101000-134B17724A87-0049
81	NPOC	280-176081-j-6	0L-10900100866-10101000-134B17724A87-004A
82	NPOC	280-176081-j-7	0L-10900100866-10101000-134B17724A87-004B
83	NPOC	280-176081-j-8	0L-10900100866-10101000-134B17724A87-004C
84	NPOC	280-176081-j-9	0L-10900100866-10101000-134B17724A87-004D
85	NPOC	MS 280-176081-j-9	0L-10900100866-10101000-134B17724A87-004E
86	NPOC	MSD 280-176081-j-9	0L-10900100866-10101000-134B17724A87-004F
87	NPOC	CCV	0L-10900100866-10101000-134B17724A87-0050
88	NPOC	CCB	0L-10900100866-10101000-134B17724A87-0051
89	NPOC	280-176081-j-10	0L-10900100866-10101000-134B17724A87-0052
90	NPOC	280-176081-j-11	0L-10900100866-10101000-134B17724A87-0053
91	NPOC	280-176081-j-12	0L-10900100866-10101000-134B17724A87-0054
92	NPOC	CCV	0L-10900100866-10101000-134B17724A87-0055
93	NPOC	CCB	0L-10900100866-10101000-134B17724A87-0056

	Origin	Manual Dilution	Result	Status
54	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.8675mg/L	Completed
55	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:25.16mg/L	Completed
56	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:24.99mg/L	Completed
57	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:1.143mg/L	Completed
58	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:1.043mg/L	Completed
59	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.5668mg/L	Completed
60	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.8970mg/L	Completed
61	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:1.996mg/L	Completed
62	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:1.972mg/L	Completed
63	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:24.33mg/L	Completed
64	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.2680mg/L	Completed
65	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.4453mg/L	Completed
66	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:1.620mg/L	Completed
67	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:1.911mg/L	Completed
68	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:24.81mg/L	Completed
69	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.2352mg/L	Completed
70	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:2.123mg/L	Completed
71	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:26.53mg/L	Completed
72	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:26.40mg/L	Completed
73	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:1.986mg/L	Completed
74	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:2.082mg/L	Completed
75	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:24.87mg/L	Completed
76	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.2183mg/L	Completed
77	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:1.906mg/L	Completed
78	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	10.00	NPOC:11.35mg/L	Completed
79	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	2.000	NPOC:8.942mg/L	Completed
80	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	2.000	NPOC:6.013mg/L	Completed
81	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	2.000	NPOC:6.591mg/L	Completed
82	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	2.000	NPOC:0.9532mg/L	Completed
83	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	2.000	NPOC:14.64mg/L	Completed
84	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	2.000	NPOC:5.626mg/L	Completed
85	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	2.000	NPOC:54.65mg/L	Completed
86	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	2.000	NPOC:54.46mg/L	Completed
87	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:24.75mg/L	Completed
88	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.2674mg/L	Completed
89	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	2.000	NPOC:1.446mg/L	Completed
90	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	2.000	NPOC:6.315mg/L	Completed
91	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	2.000	NPOC:4.506mg/L	Completed
92	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:24.82mg/L	Completed
93	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	1.000	NPOC:0.2411mg/L	Completed

	Date / Time	Vial
54	5/20/2023 7:25:48 AM	54
55	5/20/2023 7:40:14 AM	55
56	5/20/2023 7:54:37 AM	56
57	5/20/2023 8:11:17 AM	57
58	5/20/2023 8:27:35 AM	58
59	5/20/2023 8:43:47 AM	59
60	5/20/2023 8:57:58 AM	60
61	5/20/2023 9:14:16 AM	61
62	5/20/2023 9:28:23 AM	62
63	5/20/2023 9:43:09 AM	63
64	5/20/2023 9:57:24 AM	64
65	5/20/2023 10:11:35 AM	65
66	5/20/2023 10:25:46 AM	66
67	5/20/2023 10:40:05 AM	67
68	5/20/2023 10:54:21 AM	68
69	5/20/2023 11:10:37 AM	69
70	5/20/2023 11:26:47 AM	70
71	5/20/2023 11:41:23 AM	71
72	5/20/2023 11:55:33 AM	72
73	5/20/2023 12:11:49 PM	73
74	5/20/2023 12:28:10 PM	74
75	5/20/2023 12:42:57 PM	75
76	5/20/2023 12:57:08 PM	76
77	5/20/2023 1:11:19 PM	77
78	5/20/2023 1:25:30 PM	78
79	5/20/2023 1:42:05 PM	79
80	5/20/2023 1:58:53 PM	80
81	5/20/2023 2:13:21 PM	81
82	5/20/2023 2:27:32 PM	82
83	5/20/2023 2:41:43 PM	83
84	5/20/2023 2:57:59 PM	84
85	5/20/2023 3:12:34 PM	85
86	5/20/2023 3:27:21 PM	86
87	5/20/2023 3:42:03 PM	87
88	5/20/2023 3:56:15 PM	88
89	5/20/2023 4:10:27 PM	89
90	5/20/2023 4:26:44 PM	90
91	5/20/2023 4:43:04 PM	91
92	5/20/2023 4:57:54 PM	92
93	5/20/2023 5:12:10 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

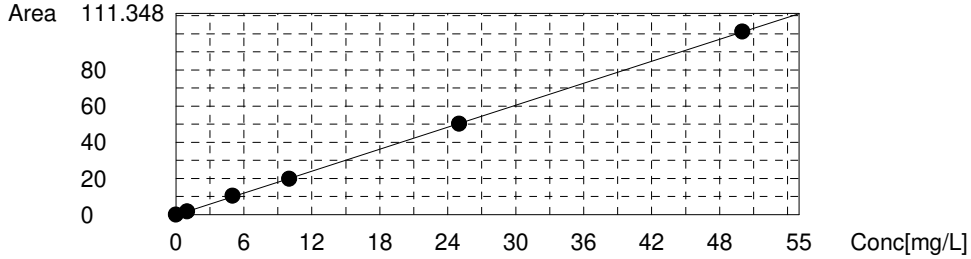
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 90.00sec
Mean Area 50.13
SD Area 0.9145
CV Area 1.82%
Vial 93
No Washes 2

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

ABW
2023_05_19_001.tlx

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

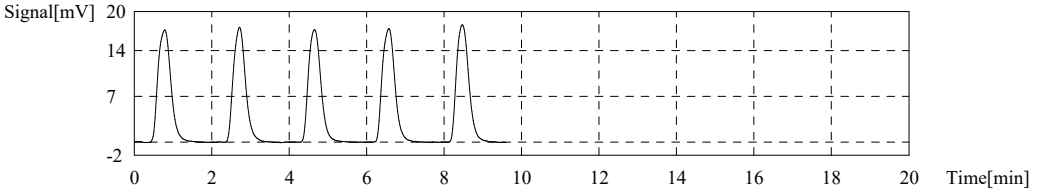
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:19.72mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	40.95	20.32mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 6:00:51 PM
2	39.32	19.51mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 6:03:08 PM
3	39.05	19.38mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 6:05:17 PM
4	40.02	19.86mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 6:07:27 PM
5	40.58	20.13mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 6:09:32 PM

Mean Area 39.74
Mean Conc. 19.72mg/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

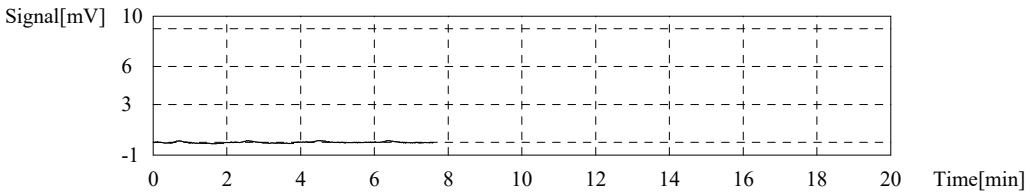
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2162mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2875	0.2295mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 6:17:21 PM
2	0.2897	0.2306mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 6:19:30 PM
3	0.2334	0.2028mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 6:21:39 PM
4	0.2315	0.2019mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 6:23:44 PM

Mean Area 0.2605
Mean Conc. 0.2162mg/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

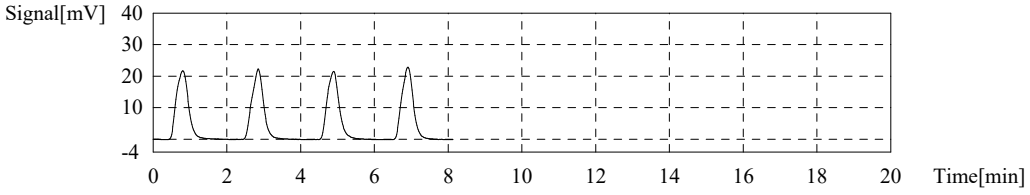
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.75mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	50.52	25.04mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 6:31:44 PM
2	49.42	24.50mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 6:34:00 PM
3	49.46	24.52mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 6:36:16 PM
4	50.34	24.95mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 6:38:30 PM

Mean Area 49.94
Mean Conc. 24.75mg/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

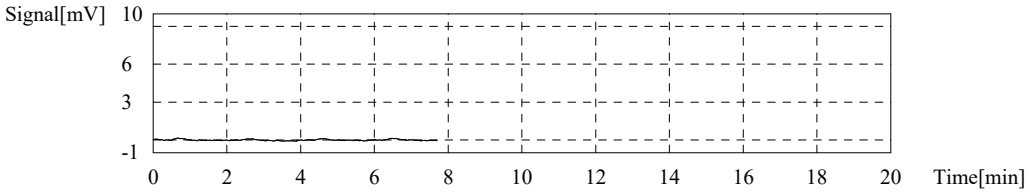
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2335mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3467	0.2588mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 6:46:24 PM
2	0.2552	0.2136mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 6:48:39 PM
3	0.2324	0.2023mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 6:50:47 PM
4	0.3480	0.2594mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 6:52:58 PM

Mean Area 0.2956
Mean Conc. 0.2335mg/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

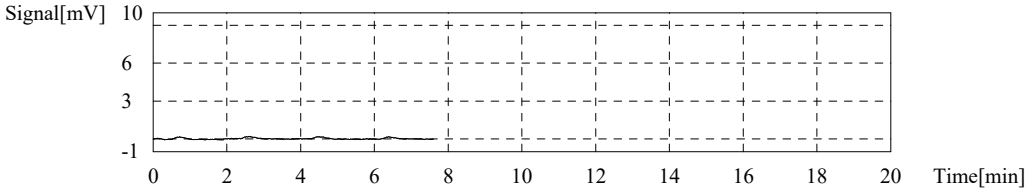
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2530mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3570	0.2639mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 7:00:52 PM
2	0.3151	0.2432mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 7:03:02 PM
3	0.3526	0.2617mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 7:05:10 PM
4	0.3152	0.2432mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 7:07:18 PM

Mean Area 0.3350
Mean Conc. 0.2530mg/L



Sample

Sample Name: 280-176674-d-7
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

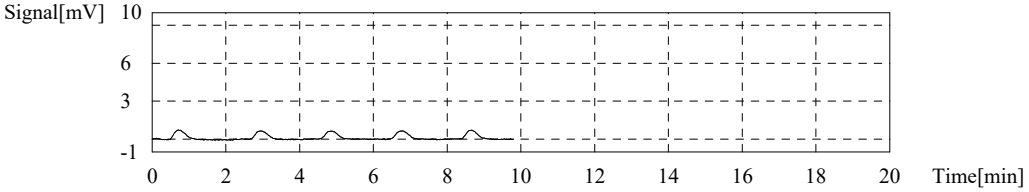
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.8469mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.732	0.9431mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 7:15:30 PM
2	1.583	0.8695mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 7:17:39 PM
3	1.464	0.8107mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 7:19:48 PM
4	1.559	0.8576mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 7:21:53 PM
5	1.543	0.8497mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 7:23:58 PM

Mean Area 1.537
Mean Conc. 0.8469mg/L



Sample

Sample Name: MS 280-176674-d-7
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

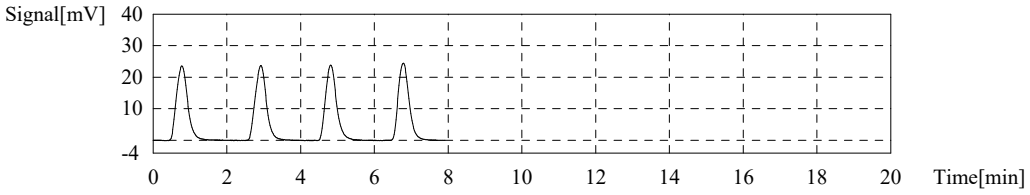
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.05mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	50.84	25.20mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 7:32:00 PM
2	50.55	25.06mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 7:34:06 PM
3	50.15	24.86mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 7:36:16 PM
4	50.57	25.07mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 7:38:21 PM

Mean Area 50.53
Mean Conc. 25.05mg/L



Sample

Sample Name: MSD 280-176674-d-7
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

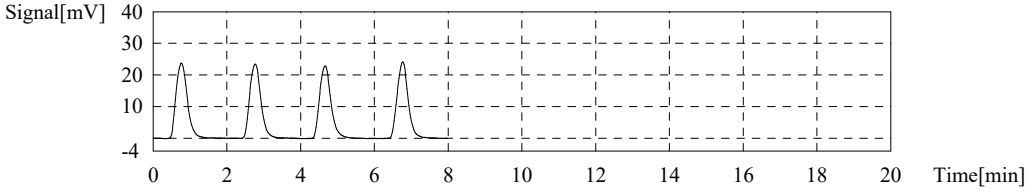
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.05mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	51.41	25.48mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 7:46:20 PM
2	49.70	24.64mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 7:48:29 PM
3	50.10	24.84mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 7:50:45 PM
4	50.94	25.25mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 7:52:58 PM

Mean Area 50.54
Mean Conc. 25.05mg/L



Sample

Sample Name: 580-127209-p-1
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

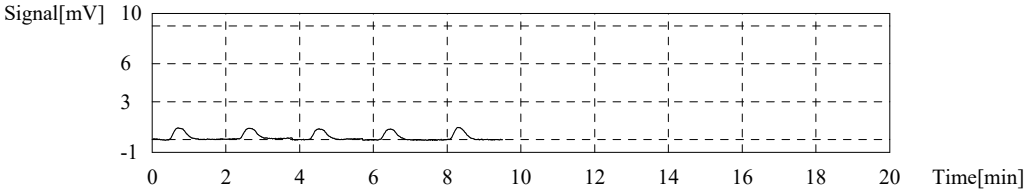
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.076mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.285	1.216mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 8:00:52 PM
2	1.959	1.055mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 8:02:57 PM
3	2.022	1.086mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 8:05:07 PM
4	1.965	1.058mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 8:07:17 PM
5	2.057	1.104mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 8:09:22 PM

Mean Area 2.001
Mean Conc. 1.076mg/L



Sample

Sample Name: 580-127209-p-3
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

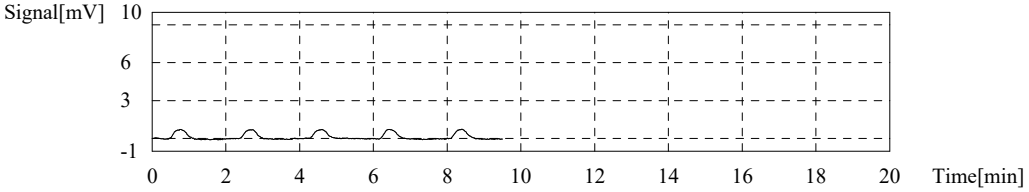
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.9633mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.868	1.010mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 8:17:11 PM
2	1.607	0.8813mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 8:19:20 PM
3	1.532	0.8443mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 8:21:29 PM
4	1.844	0.9984mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 8:23:34 PM
5	1.773	0.9633mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 8:25:39 PM

Mean Area 1.773
Mean Conc. 0.9633mg/L



Sample

Sample Name: 580-127209-p-5
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

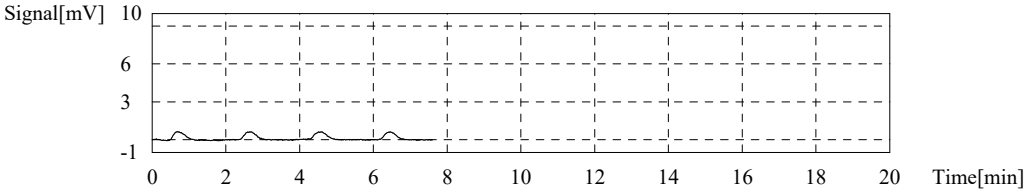
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.7734mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.459	0.8082mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 8:33:28 PM
2	1.383	0.7707mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 8:35:33 PM
3	1.365	0.7618mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 8:37:38 PM
4	1.347	0.7529mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 8:39:43 PM

Mean Area 1.389
Mean Conc. 0.7734mg/L



Sample

Sample Name: 280-176349-d-8
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

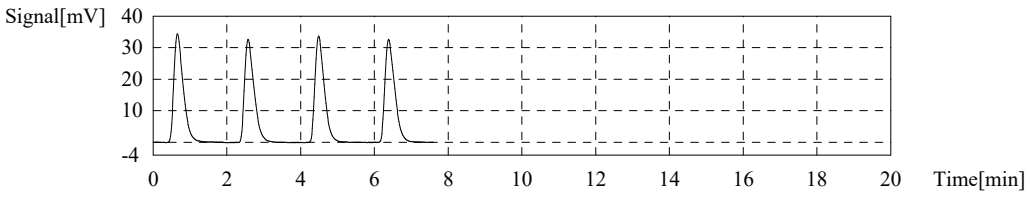
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:299.3mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	61.59	305.1mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 8:47:37 PM
2	59.61	295.3mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 8:49:46 PM
3	59.74	296.0mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 8:51:51 PM
4	60.68	300.6mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 8:53:56 PM

Mean Area 60.41
Mean Conc. 299.3mg/L



Sample

Sample Name: 280-176349-c-11
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

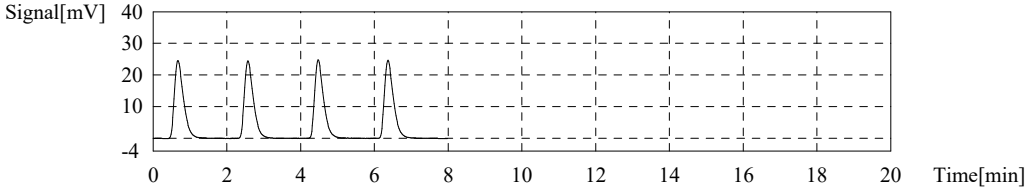
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	25.00	NPOC:526.1mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	42.85	531.4mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 9:01:50 PM
2	41.96	520.4mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 9:03:59 PM
3	42.13	522.5mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 9:06:04 PM
4	42.75	530.1mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 9:08:35 PM

Mean Area 42.42
Mean Conc. 526.1mg/L



Sample

Sample Name: 280-176123-a-35
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

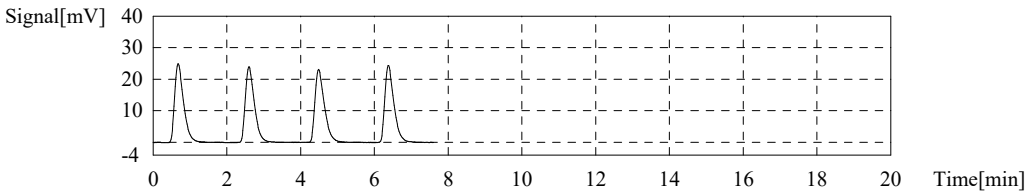
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	25.00	NPOC:521.9mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	42.91	532.1mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 9:16:29 PM
2	41.60	515.9mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 9:18:34 PM
3	41.49	514.6mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 9:20:39 PM
4	42.35	525.2mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 9:22:44 PM

Mean Area 42.09
Mean Conc. 521.9mg/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

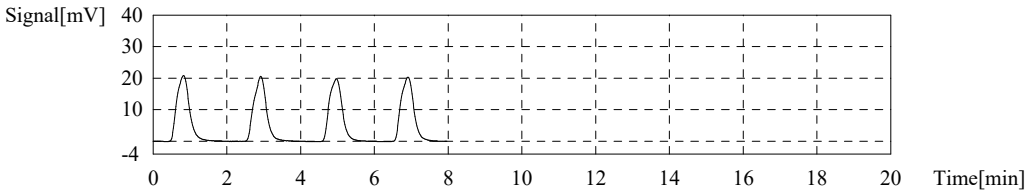
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.55mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	50.47	25.02mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 9:30:48 PM
2	48.96	24.27mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 9:33:07 PM
3	48.99	24.29mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 9:35:14 PM
4	49.63	24.60mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 9:37:19 PM

Mean Area 49.51
Mean Conc. 24.55mg/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

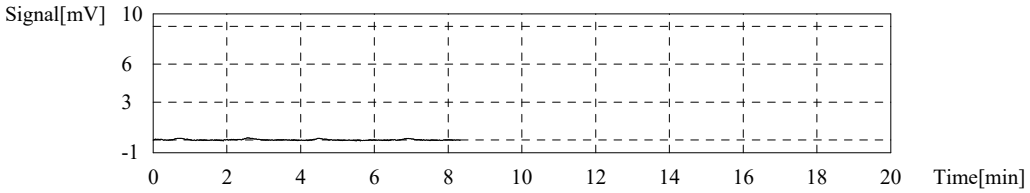
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2058mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2882	0.2299mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 9:45:13 PM
2	0.2427	0.2074mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 9:47:18 PM
3	0.2121	0.1923mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 9:49:53 PM
4	0.2147	0.1936mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 9:52:12 PM

Mean Area 0.2394
Mean Conc. 0.2058mg/L



Sample

Sample Name: 280-176363-c-1
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

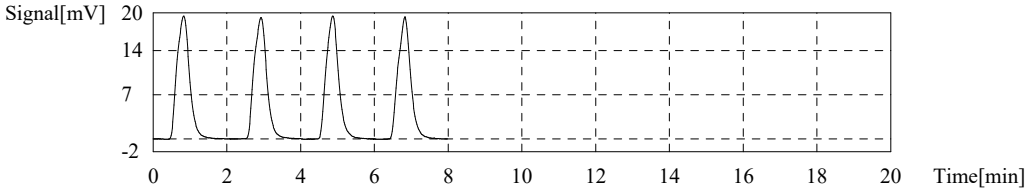
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:45.94mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	46.90	46.51mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 10:00:17 PM
2	45.93	45.55mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 10:02:25 PM
3	46.01	45.63mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 10:04:32 PM
4	46.45	46.07mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 10:06:44 PM

Mean Area 46.32
Mean Conc. 45.94mg/L



Sample

Sample Name: 280-176363-a-2
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

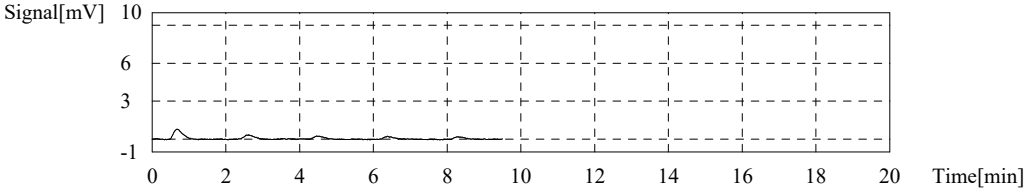
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3234mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.424	0.7909mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 10:14:38 PM
2	0.6734	0.4201mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 10:16:43 PM
3	0.4585	0.3140mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 10:18:49 PM
4	0.3988	0.2845mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 10:20:54 PM
5	0.3799	0.2752mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 10:22:59 PM

Mean Area 0.4777
Mean Conc. 0.3234mg/L



Sample

Sample Name: 280-176363-c-3
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

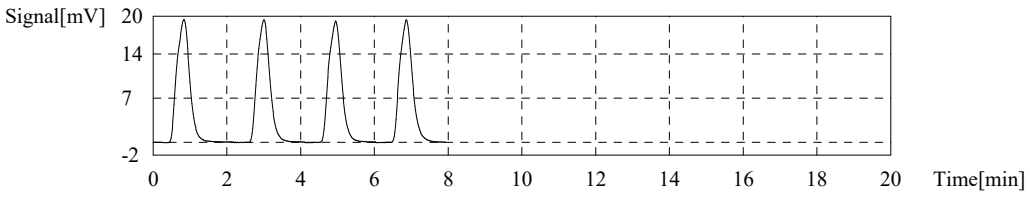
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:234.1mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	47.82	237.1mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 10:31:05 PM
2	46.59	231.0mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 10:33:18 PM
3	47.20	234.0mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 10:35:29 PM
4	47.26	234.3mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 10:37:37 PM

Mean Area 47.22
Mean Conc. 234.1mg/L



Sample

Sample Name: 280-176363-d-5
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

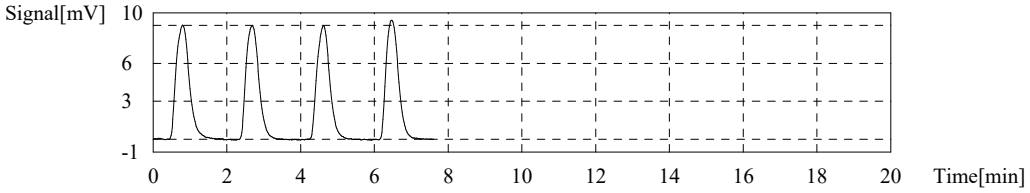
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:110.2mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	22.58	112.4mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 10:45:31 PM
2	21.96	109.4mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 10:47:36 PM
3	21.91	109.1mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 10:49:41 PM
4	22.11	110.1mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 10:51:46 PM

Mean Area 22.14
Mean Conc. 110.2mg/L



Sample

Sample Name: MS 280-176363-d-5
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

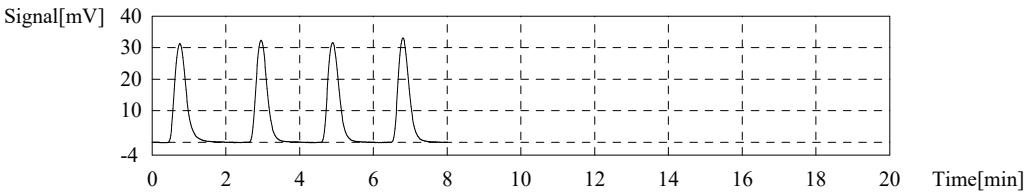
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:340.1mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	69.67	345.0mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 10:59:58 PM
2	67.96	336.6mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 11:02:10 PM
3	67.92	336.4mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 11:04:15 PM
4	69.11	342.3mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 11:06:24 PM

Mean Area 68.67
Mean Conc. 340.1mg/L



Sample

Sample Name: MSD 280-176363-d-5
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

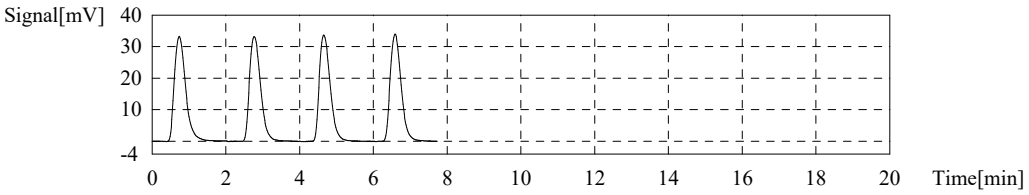
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:349.6mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	71.47	353.9mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 11:14:26 PM
2	70.24	347.8mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 11:16:35 PM
3	69.86	346.0mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 11:18:40 PM
4	70.79	350.6mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 11:20:45 PM

Mean Area 70.59
Mean Conc. 349.6mg/L



Sample

Sample Name: 280-176363-d-6
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

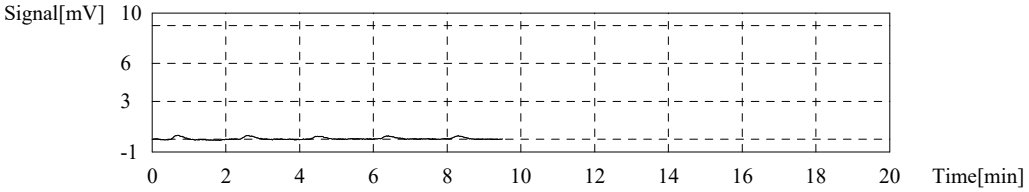
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3406mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6960	0.4313mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 11:28:39 PM
2	0.5866	0.3773mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 11:30:48 PM
3	0.4924	0.3307mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 11:32:53 PM
4	0.4737	0.3215mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 11:34:58 PM
5	0.4968	0.3329mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 11:37:03 PM

Mean Area 0.5124
Mean Conc. 0.3406mg/L



Sample

Sample Name: 280-176363-c-7
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

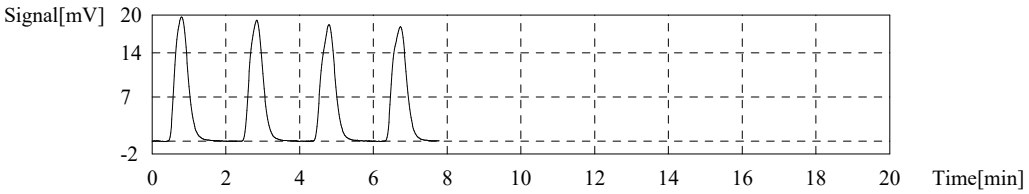
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:47.96mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	49.06	48.64mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 11:44:59 PM
2	48.07	47.67mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 11:47:10 PM
3	47.98	47.58mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 11:49:18 PM
4	48.38	47.97mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 11:51:23 PM

Mean Area 48.37
Mean Conc. 47.96mg/L



Sample

Sample Name: 280-176363-d-8
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

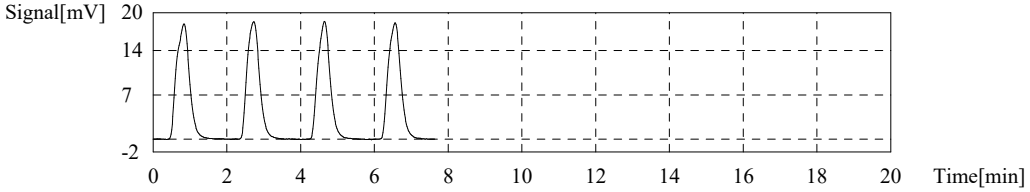
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:219.6mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	45.10	223.7mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/19/2023 11:59:18 PM
2	43.82	217.3mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 12:01:23 AM
3	43.84	217.4mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 12:03:29 AM
4	44.34	219.9mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 12:05:34 AM

Mean Area 44.27
Mean Conc. 219.6mg/L



Sample

Sample Name: 280-176325-d-1
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

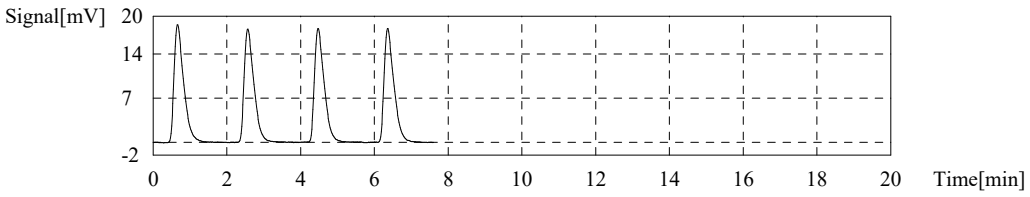
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	500.0	NPOC:8359mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	34.43	8548mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 12:13:28 AM
2	33.36	8283mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 12:15:37 AM
3	33.05	8207mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 12:17:42 AM
4	33.82	8397mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 12:19:50 AM

Mean Area 33.66
Mean Conc. 8359mg/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

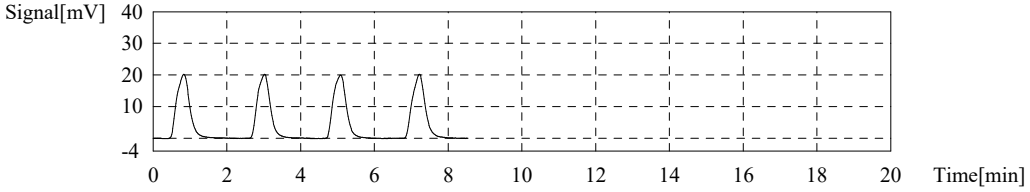
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.68mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	50.21	24.89mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 12:28:01 AM
2	49.21	24.40mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 12:30:20 AM
3	50.02	24.80mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 12:32:42 AM
4	49.73	24.65mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 12:35:02 AM

Mean Area 49.79
Mean Conc. 24.68mg/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

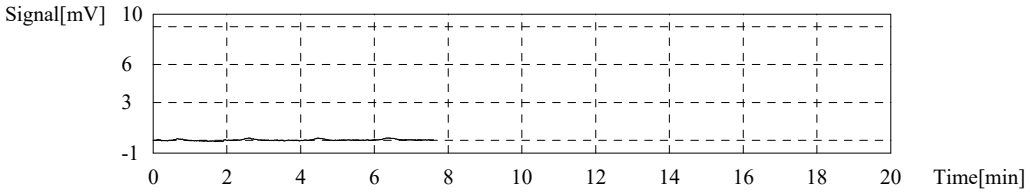
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2412mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2843	0.2279mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 12:42:56 AM
2	0.2469	0.2095mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 12:45:01 AM
3	0.2716	0.2217mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 12:47:06 AM
4	0.4420	0.3058mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 12:49:11 AM

Mean Area 0.3112
Mean Conc. 0.2412mg/L



Sample

Sample Name: 280-176325-d-2
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

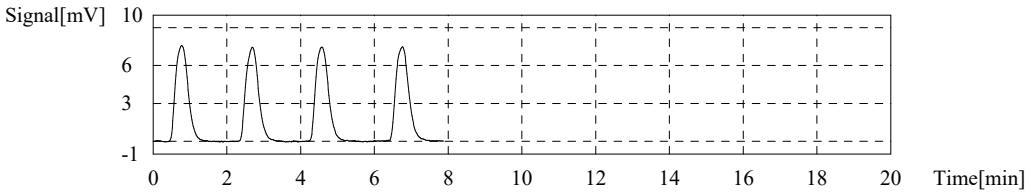
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	500.0	NPOC:4521mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	18.33	4571mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 12:57:05 AM
2	17.99	4487mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 12:59:14 AM
3	18.00	4490mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 1:01:35 AM
4	18.19	4536mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 1:03:40 AM

Mean Area 18.13
Mean Conc. 4521mg/L



Sample

Sample Name: 280-176274-d-2
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

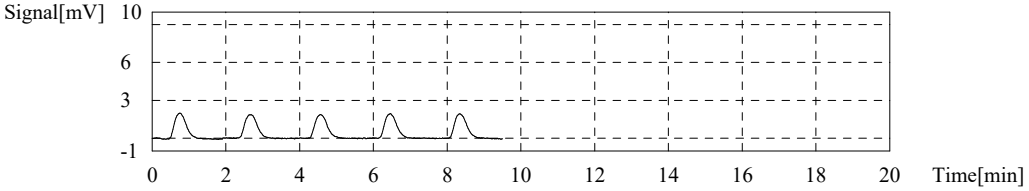
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	100.0	NPOC:226.3mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.606	236.3mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 1:11:34 AM
2	4.430	227.6mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 1:13:39 AM
3	4.359	224.1mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 1:15:44 AM
4	4.363	224.3mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 1:17:49 AM
5	4.466	229.4mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 1:19:54 AM

Mean Area 4.405
Mean Conc. 226.3mg/L



Sample

Sample Name: 280-176296-g-4
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

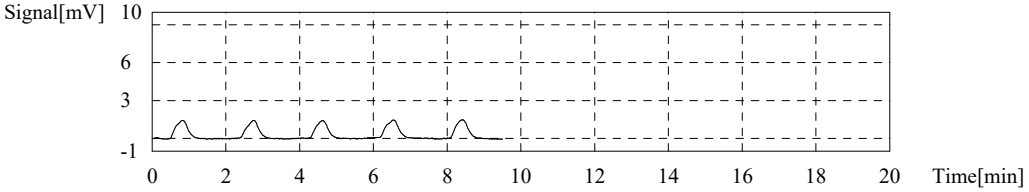
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.785mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.446	1.790mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 1:27:44 AM
2	3.274	1.705mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 1:29:49 AM
3	3.164	1.650mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 1:31:54 AM
4	3.510	1.821mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 1:33:59 AM
5	3.518	1.825mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 1:36:04 AM

Mean Area 3.437
Mean Conc. 1.785mg/L



Sample

Sample Name: 590-20532-a-9
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

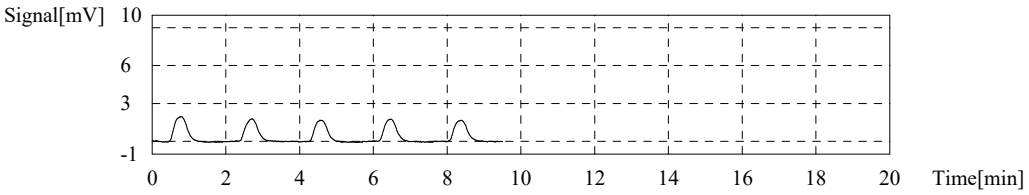
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.131mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.847	2.482mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 1:43:54 AM
2	4.324	2.223mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 1:45:59 AM
3	4.113	2.119mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 1:48:04 AM
4	4.095	2.110mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 1:50:13 AM
5	4.015	2.071mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 1:52:23 AM

Mean Area 4.137
Mean Conc. 2.131mg/L



Sample

Sample Name: 590-20532-a-10
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

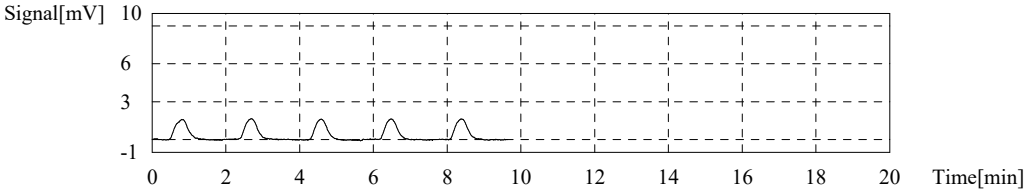
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.902mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.972	2.050mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 2:00:13 AM
2	3.706	1.918mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 2:02:18 AM
3	3.706	1.918mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 2:04:23 AM
4	3.712	1.921mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 2:06:28 AM
5	3.569	1.851mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 2:08:42 AM

Mean Area 3.673
Mean Conc. 1.902mg/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

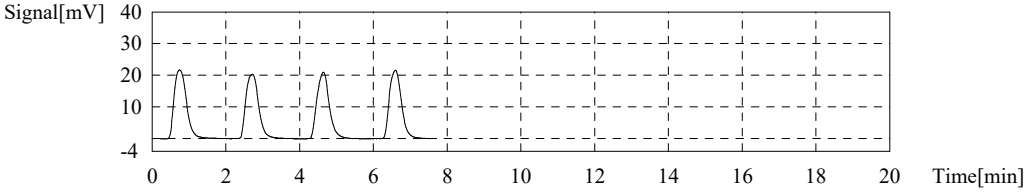
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.69mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	51.11	25.33mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 2:16:34 AM
2	49.01	24.30mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 2:18:43 AM
3	49.44	24.51mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 2:20:53 AM
4	49.63	24.60mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 2:22:58 AM

Mean Area 49.80
Mean Conc. 24.69mg/L



Sample

Sample Name: LCSD
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

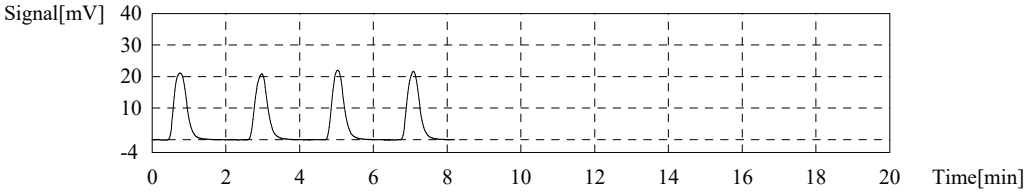
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.82mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	51.30	25.43mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 2:31:09 AM
2	49.43	24.50mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 2:33:26 AM
3	49.63	24.60mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 2:35:39 AM
4	49.92	24.75mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 2:37:44 AM

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

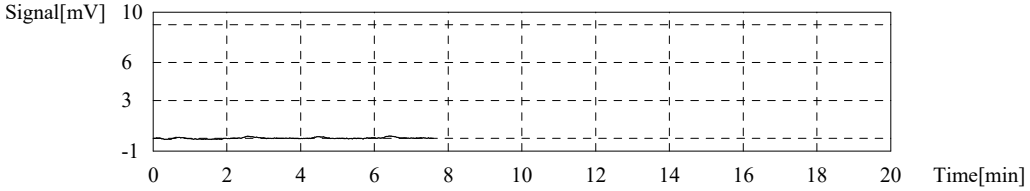
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2179mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2723	0.2220mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 2:45:39 AM
2	0.2274	0.1998mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 2:47:44 AM
3	0.2572	0.2146mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 2:49:49 AM
4	0.2991	0.2353mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 2:51:54 AM

Mean Area 0.2640
Mean Conc. 0.2179mg/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

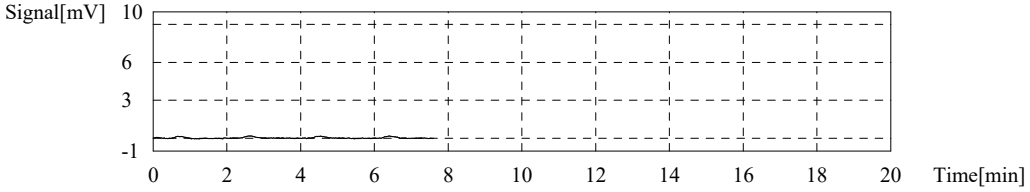
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2542mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3668	0.2687mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 2:59:49 AM
2	0.3002	0.2358mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 3:01:54 AM
3	0.3010	0.2362mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 3:03:59 AM
4	0.3819	0.2762mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 3:06:04 AM

Mean Area 0.3375
Mean Conc. 0.2542mg/L



Sample

Sample Name: 280-176296-g-3
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

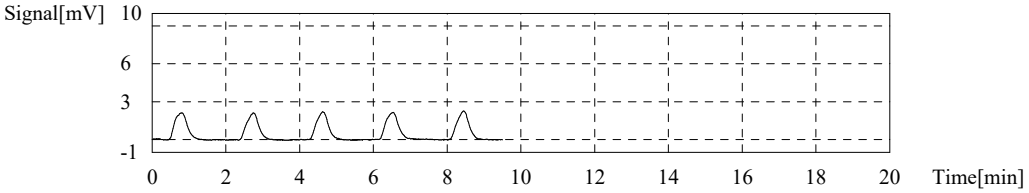
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.625mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.127	2.620mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 3:13:59 AM
2	4.908	2.512mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 3:16:04 AM
3	5.065	2.589mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 3:18:09 AM
4	5.175	2.644mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 3:20:14 AM
5	5.181	2.647mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 3:22:19 AM

Mean Area 5.137
Mean Conc. 2.625mg/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

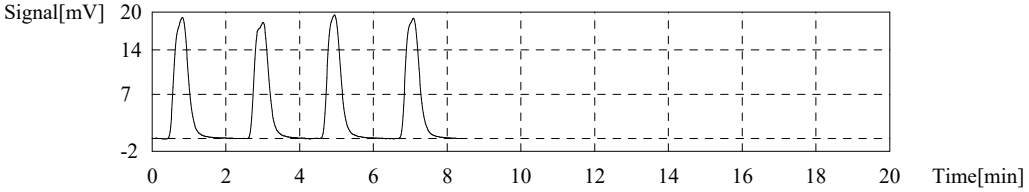
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.31mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	49.96	24.77mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 3:30:27 AM
2	48.59	24.09mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 3:32:40 AM
3	48.51	24.05mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 3:35:03 AM
4	49.08	24.33mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 3:37:17 AM

Mean Area 49.04
Mean Conc. 24.31mg/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

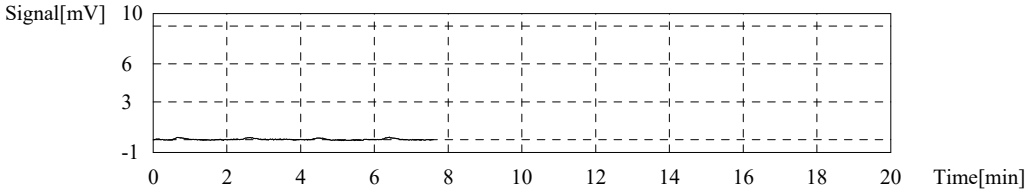
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2449mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3573	0.2640mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 3:45:11 AM
2	0.3310	0.2510mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 3:47:17 AM
3	0.2215	0.1969mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 3:49:22 AM
4	0.3651	0.2679mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 3:51:27 AM

Mean Area 0.3187
Mean Conc. 0.2449mg/L



Sample

Sample Name: MS 280-176296-g-3
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

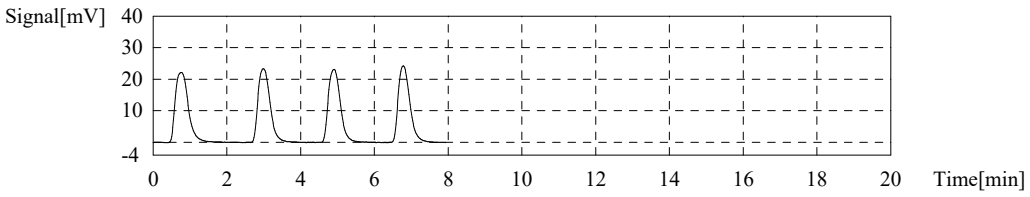
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.70mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	55.05	27.28mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 3:59:42 AM
2	53.44	26.49mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 4:01:50 AM
3	53.15	26.34mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 4:03:56 AM
4	53.85	26.69mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 4:06:01 AM

Mean Area 53.87
Mean Conc. 26.70mg/L



Sample

Sample Name: MSD 280-176296-g-3
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

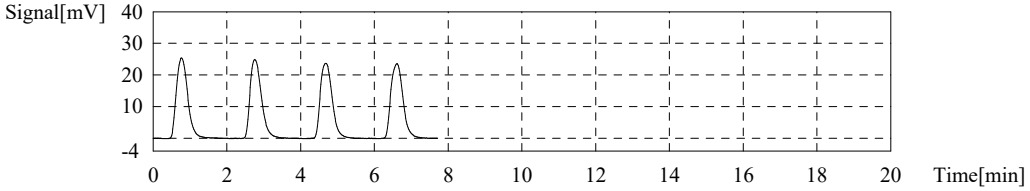
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:27.01mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	55.33	27.42mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 4:14:03 AM
2	54.07	26.80mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 4:16:08 AM
3	53.75	26.64mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 4:18:13 AM
4	54.82	27.17mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 4:20:18 AM

Mean Area 54.49
Mean Conc. 27.01mg/L



Sample

Sample Name: 280-176296-g-5
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

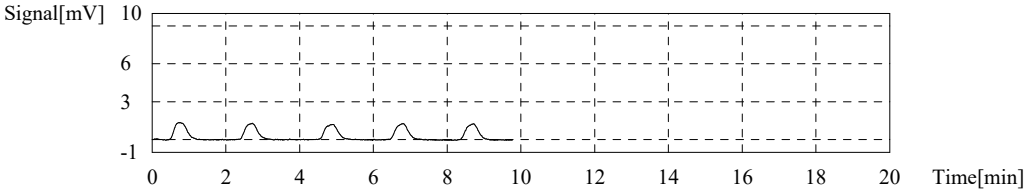
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.581mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.279	1.707mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 4:28:13 AM
2	2.991	1.565mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 4:30:34 AM
3	2.938	1.539mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 4:32:39 AM
4	3.099	1.618mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 4:34:44 AM
5	3.068	1.603mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 4:36:49 AM

Mean Area 3.024
Mean Conc. 1.581mg/L



Sample

Sample Name: 280-176296-g-7
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

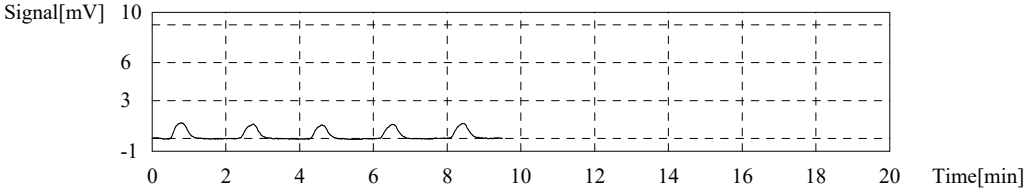
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.497mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.035	1.587mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 4:44:39 AM
2	2.743	1.442mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 4:46:43 AM
3	2.527	1.336mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 4:48:49 AM
4	2.766	1.454mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 4:50:54 AM
5	2.867	1.504mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 4:52:59 AM

Mean Area 2.853
Mean Conc. 1.497mg/L



Sample

Sample Name: 280-176296-g-8
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

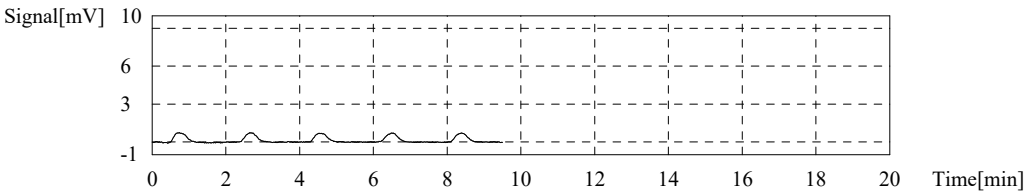
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.8961mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.917	1.034mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 5:00:49 AM
2	1.604	0.8798mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 5:02:54 AM
3	1.592	0.8739mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 5:04:59 AM
4	1.660	0.9075mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 5:07:04 AM
5	1.692	0.9233mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 5:09:09 AM

Mean Area 1.637
Mean Conc. 0.8961mg/L



Sample

Sample Name: 280-176296-g-9
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

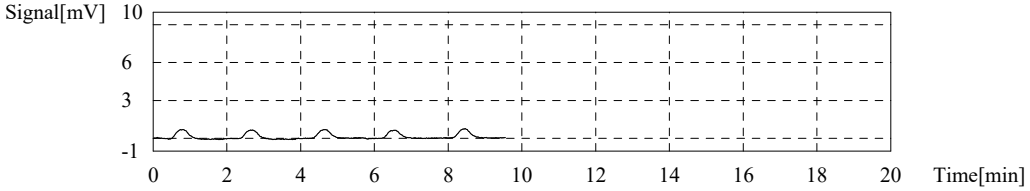
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.8706mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.781	0.9673mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 5:16:59 AM
2	1.557	0.8566mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 5:19:11 AM
3	1.596	0.8759mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 5:21:17 AM
4	1.558	0.8571mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 5:23:22 AM
5	1.630	0.8927mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 5:25:27 AM

Mean Area 1.585
Mean Conc. 0.8706mg/L



Sample

Sample Name: 590-20532-a-1
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

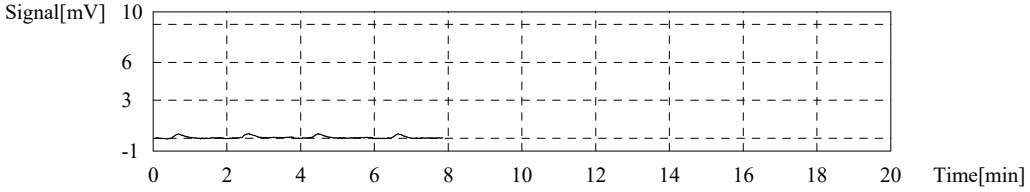
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4120mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.7423	0.4542mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 5:33:17 AM
2	0.6393	0.4033mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 5:35:26 AM
3	0.5976	0.3827mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 5:37:50 AM
4	0.6481	0.4076mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 5:39:55 AM

Mean Area 0.6568
Mean Conc. 0.4120mg/L



Sample

Sample Name: 590-20532-a-2
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

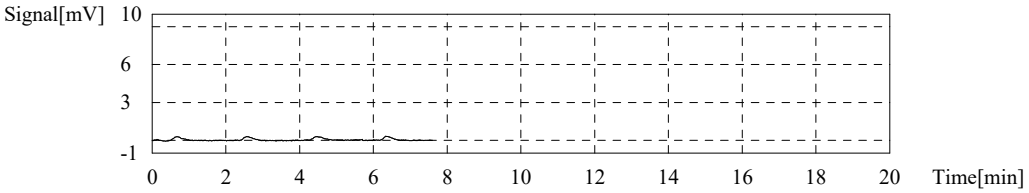
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3433mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5870	0.3775mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 5:47:50 AM
2	0.5106	0.3397mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 5:49:56 AM
3	0.4813	0.3253mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 5:52:00 AM
4	0.4928	0.3309mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 5:54:06 AM

Mean Area 0.5179
Mean Conc. 0.3433mg/L



Sample

Sample Name: 590-20532-a-3
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

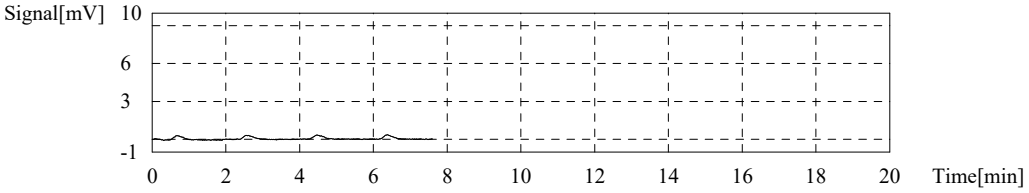
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3826mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5870	0.3775mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 6:02:01 AM
2	0.6129	0.3903mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 6:04:05 AM
3	0.5721	0.3701mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 6:06:10 AM
4	0.6175	0.3925mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 6:08:16 AM

Mean Area 0.5974
Mean Conc. 0.3826mg/L



Sample

Sample Name: 590-20532-b-5
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

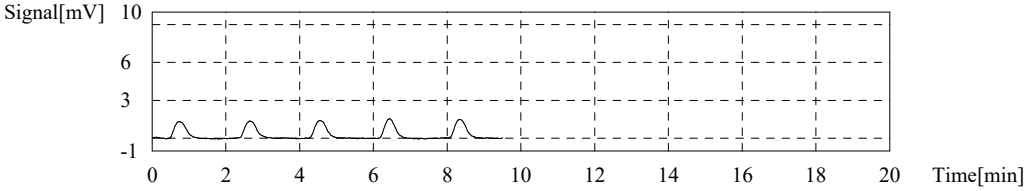
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.602mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.037	1.588mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 6:16:11 AM
2	2.995	1.567mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 6:18:16 AM
3	3.019	1.579mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 6:20:21 AM
4	3.222	1.679mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 6:22:27 AM
5	3.214	1.675mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 6:24:31 AM

Mean Area 3.066
Mean Conc. 1.602mg/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

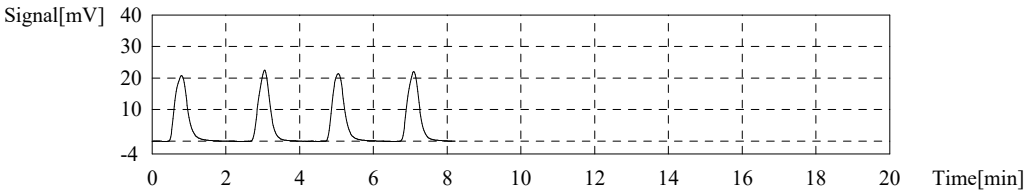
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.52mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	50.36	24.96mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 6:32:41 AM
2	49.20	24.39mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 6:34:54 AM
3	48.63	24.11mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 6:37:05 AM
4	49.63	24.60mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 6:39:12 AM

Mean Area 49.45
Mean Conc. 24.52mg/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

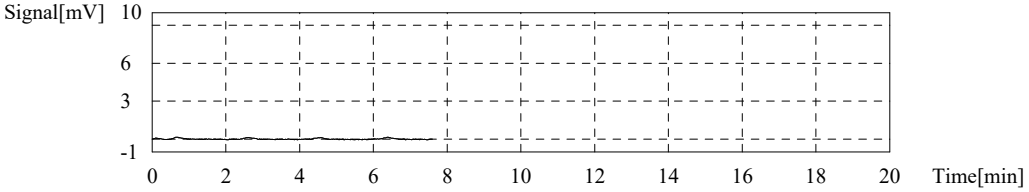
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2184mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3185	0.2448mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 6:47:07 AM
2	0.2386	0.2054mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 6:49:12 AM
3	0.2079	0.1902mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 6:51:17 AM
4	0.2946	0.2330mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 6:53:23 AM

Mean Area 0.2649
Mean Conc. 0.2184mg/L



Sample

Sample Name: 590-20532-a-6
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

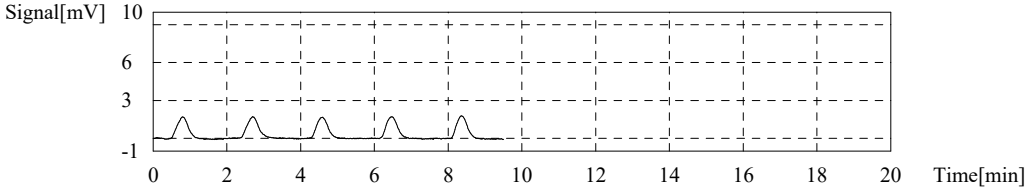
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.944mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.842	1.985mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 7:01:18 AM
2	3.779	1.954mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 7:03:23 AM
3	3.581	1.856mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 7:05:27 AM
4	3.668	1.899mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 7:07:33 AM
5	3.744	1.937mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 7:09:37 AM

Mean Area 3.758
Mean Conc. 1.944mg/L



Sample

Sample Name: 280-176326-b-1
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

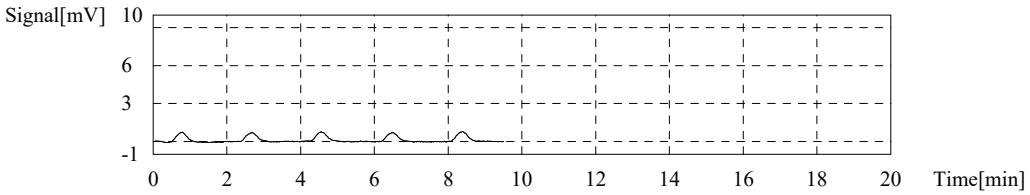
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.8675mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.686	0.9203mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 7:17:28 AM
2	1.513	0.8349mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 7:19:32 AM
3	1.715	0.9347mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 7:21:37 AM
4	1.538	0.8472mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 7:23:42 AM
5	1.579	0.8675mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 7:25:48 AM

Mean Area 1.579
Mean Conc. 0.8675mg/L



Sample

Sample Name: MS 280-176326-b-1
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

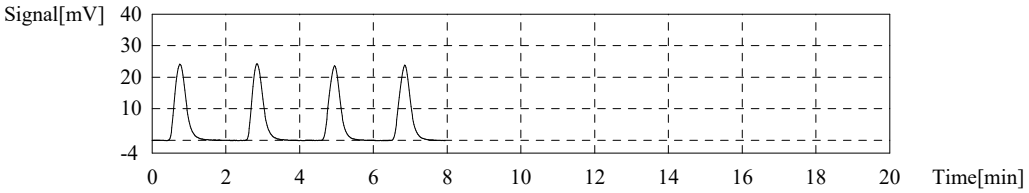
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.16mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	51.88	25.71mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 7:33:50 AM
2	50.49	25.03mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 7:36:04 AM
3	50.05	24.81mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 7:38:09 AM
4	50.59	25.08mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 7:40:14 AM

Mean Area 50.75
Mean Conc. 25.16mg/L



Sample

Sample Name: MSD 280-176326-b-1
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

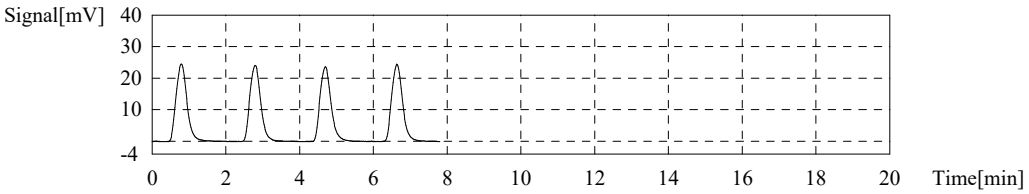
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.99mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	51.38	25.47mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 7:48:17 AM
2	49.66	24.62mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 7:50:22 AM
3	49.89	24.73mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 7:52:29 AM
4	50.68	25.12mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 7:54:37 AM

Mean Area 50.40
Mean Conc. 24.99mg/L



Sample

Sample Name: 280-176326-b-2
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

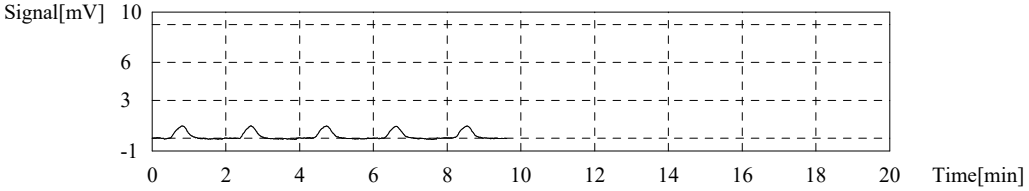
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.143mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.388	1.267mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 8:02:32 AM
2	2.085	1.117mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 8:04:49 AM
3	2.146	1.148mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 8:06:58 AM
4	2.204	1.176mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 8:09:07 AM
5	2.110	1.130mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 8:11:17 AM

Mean Area 2.136
Mean Conc. 1.143mg/L



Sample

Sample Name: 280-176326-b-3
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

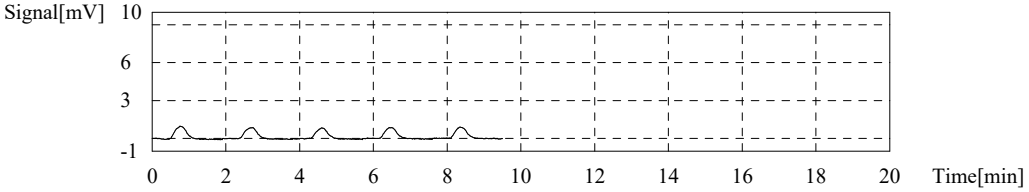
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.043mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.319	1.233mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 8:19:07 AM
2	2.016	1.083mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 8:21:16 AM
3	1.832	0.9925mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 8:23:22 AM
4	1.961	1.056mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 8:25:30 AM
5	1.931	1.041mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 8:27:35 AM

Mean Area 1.935
Mean Conc. 1.043mg/L



Sample

Sample Name: 280-176326-b-4
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

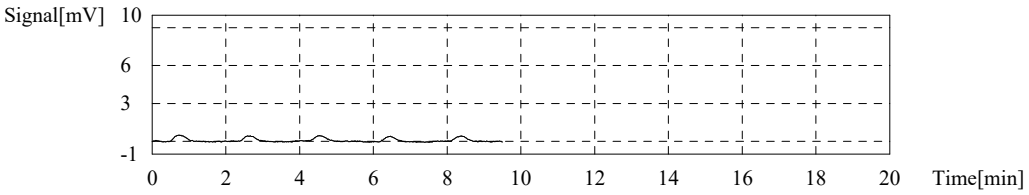
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5668mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.179	0.6699mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 8:35:26 AM
2	0.9629	0.5632mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 8:37:31 AM
3	1.159	0.6600mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 8:39:36 AM
4	0.8843	0.5243mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 8:41:42 AM
5	0.8751	0.5198mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 8:43:47 AM

Mean Area 0.9703
Mean Conc. 0.5668mg/L



Sample

Sample Name: 280-176326-a-5
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

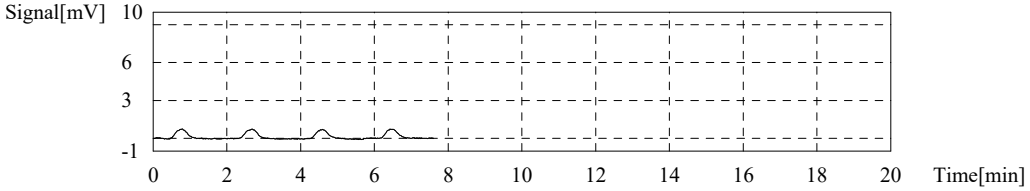
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.8970mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.674	0.9144mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 8:51:38 AM
2	1.646	0.9006mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 8:53:43 AM
3	1.662	0.9085mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 8:55:49 AM
4	1.573	0.8645mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 8:57:58 AM

Mean Area 1.639
Mean Conc. 0.8970mg/L



Sample

Sample Name: 590-20532-b-7
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

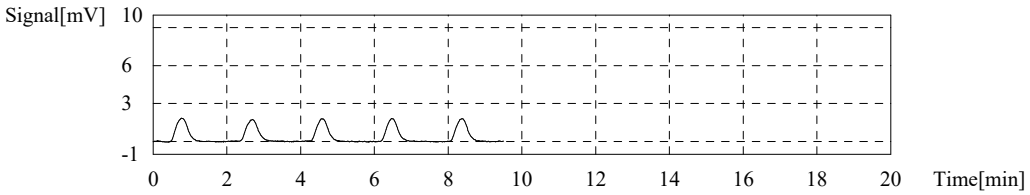
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.996mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.218	2.171mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 9:05:55 AM
2	3.755	1.942mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 9:07:59 AM
3	3.835	1.982mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 9:10:04 AM
4	3.875	2.002mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 9:12:10 AM
5	3.987	2.057mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 9:14:16 AM

Mean Area 3.863
Mean Conc. 1.996mg/L



Sample

Sample Name: 590-20532-a-8
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

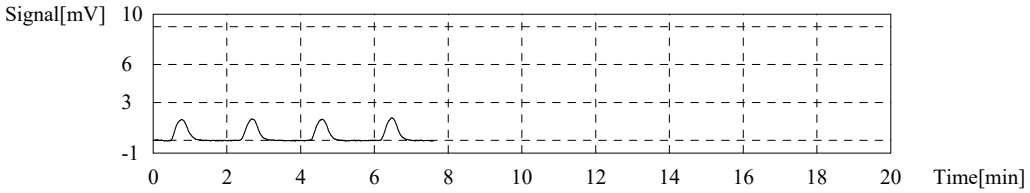
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.972mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.829	1.979mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 9:22:06 AM
2	3.880	2.004mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 9:24:11 AM
3	3.688	1.909mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 9:26:17 AM
4	3.863	1.996mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 9:28:23 AM

Mean Area 3.815
Mean Conc. 1.972mg/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

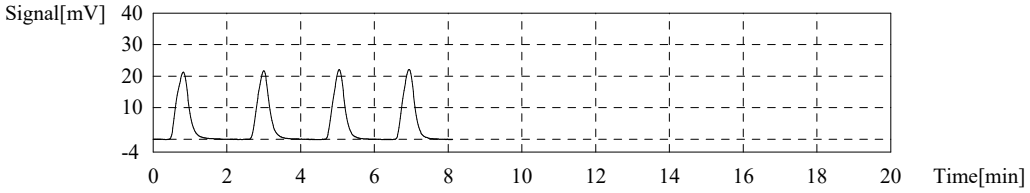
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.33mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	49.74	24.66mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 9:36:35 AM
2	48.60	24.09mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 9:38:53 AM
3	48.54	24.07mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 9:40:58 AM
4	49.39	24.48mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 9:43:09 AM

Mean Area 49.07
Mean Conc. 24.33mg/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

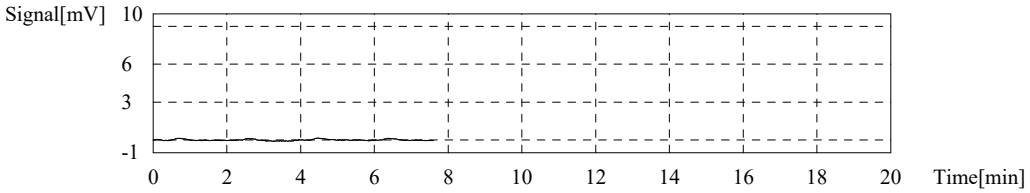
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2680mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3777	0.2741mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 9:51:04 AM
2	0.3175	0.2443mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 9:53:10 AM
3	0.2903	0.2309mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 9:55:19 AM
4	0.4760	0.3226mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 9:57:24 AM

Mean Area 0.3654
Mean Conc. 0.2680mg/L



Sample

Sample Name: 590-20532-a-4
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

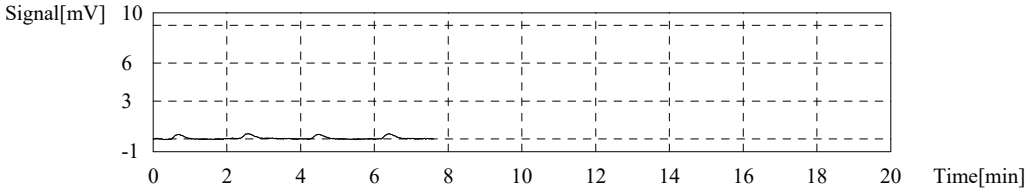
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4453mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.7756	0.4706mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 10:05:20 AM
2	0.6559	0.4115mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 10:07:26 AM
3	0.7025	0.4345mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 10:09:31 AM
4	0.7629	0.4644mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 10:11:35 AM

Mean Area 0.7242
Mean Conc. 0.4453mg/L



Sample

Sample Name: 590-20532-a-5
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

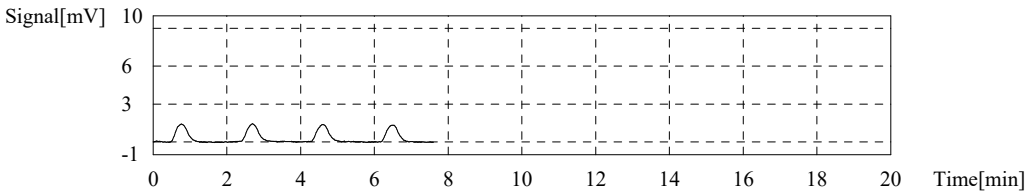
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.620mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.177	1.657mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 10:19:31 AM
2	3.177	1.657mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 10:21:36 AM
3	3.063	1.601mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 10:23:41 AM
4	2.996	1.567mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 10:25:46 AM

Mean Area 3.103
Mean Conc. 1.620mg/L



Sample

Sample Name: 590-20532-b-6
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

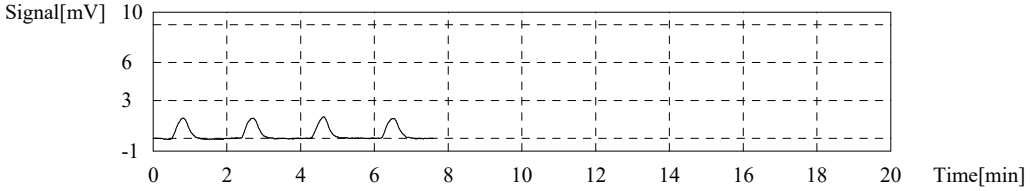
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.911mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.755	1.942mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 10:33:41 AM
2	3.734	1.932mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 10:35:51 AM
3	3.651	1.891mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 10:38:00 AM
4	3.629	1.880mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 10:40:05 AM

Mean Area 3.692
Mean Conc. 1.911mg/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

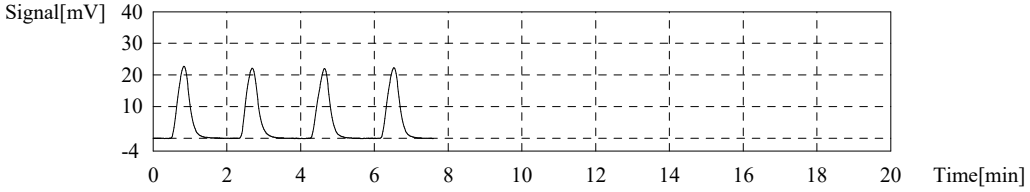
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.81mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	50.23	24.90mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 10:48:01 AM
2	49.93	24.75mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 10:50:11 AM
3	49.61	24.59mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 10:52:16 AM
4	50.46	25.01mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 10:54:21 AM

Mean Area 50.06
Mean Conc. 24.81mg/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

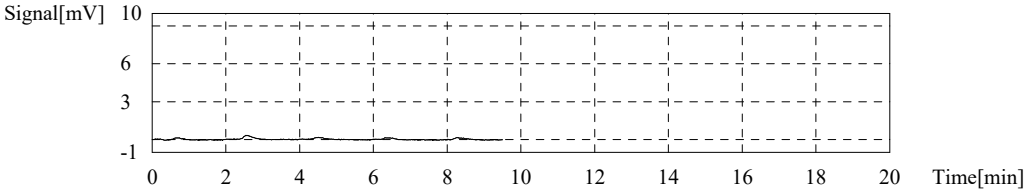
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2352mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3045	0.2379mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 11:02:16 AM
2	0.5415	0.3550mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 11:04:22 AM
3	0.2745	0.2231mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 11:06:27 AM
4	0.2332	0.2027mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 11:08:32 AM
5	0.3837	0.2770mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 11:10:37 AM

Mean Area 0.2990
Mean Conc. 0.2352mg/L



Sample

Sample Name: 590-20532-a-7
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

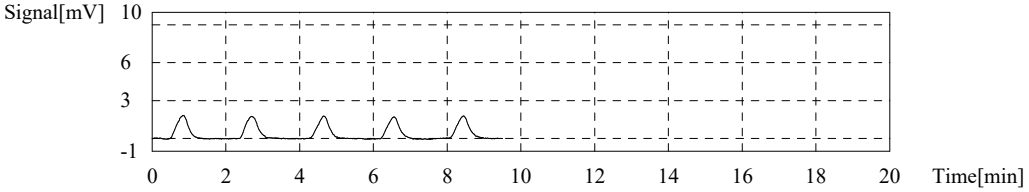
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.123mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.218	2.171mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 11:18:27 AM
2	4.156	2.140mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 11:20:32 AM
3	3.877	2.003mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 11:22:37 AM
4	3.954	2.041mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 11:24:42 AM
5	4.155	2.140mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 11:26:47 AM

Mean Area 4.121
Mean Conc. 2.123mg/L



Sample

Sample Name: MS 590-20532-a-7
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

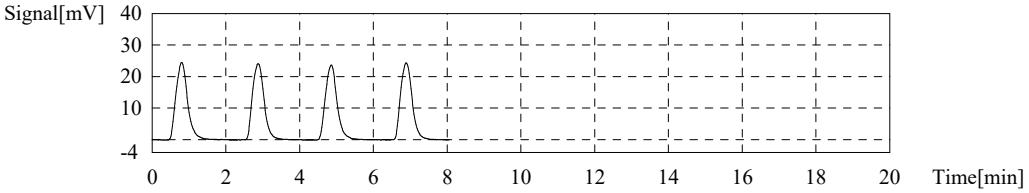
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.53mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	54.61	27.06mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 11:34:49 AM
2	53.18	26.36mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 11:37:01 AM
3	52.65	26.10mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 11:39:15 AM
4	53.69	26.61mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 11:41:23 AM

Mean Area 53.53
Mean Conc. 26.53mg/L



Sample

Sample Name: MSD 590-20532-a-7
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

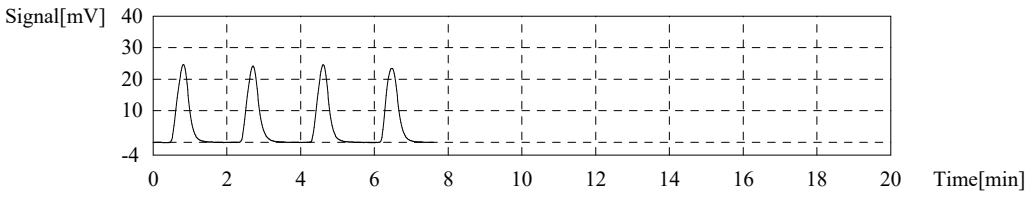
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.40mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	54.13	26.83mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 11:49:18 AM
2	53.00	26.27mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 11:51:23 AM
3	52.22	25.88mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 11:53:28 AM
4	53.68	26.60mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 11:55:33 AM

Mean Area 53.26
Mean Conc. 26.40mg/L



Sample

Sample Name: 590-20532-b-8
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

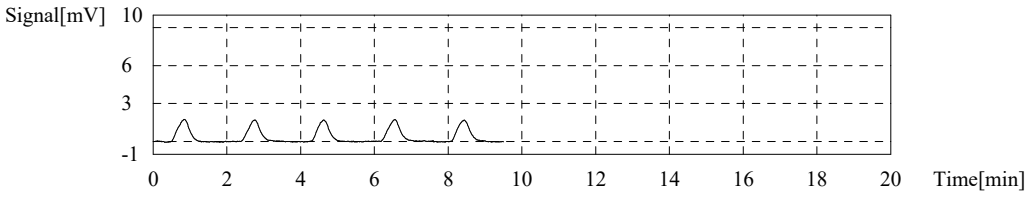
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.986mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.961	2.044mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 12:03:29 PM
2	3.774	1.952mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 12:05:34 PM
3	3.732	1.931mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 12:07:39 PM
4	3.903	2.015mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 12:09:44 PM
5	4.036	2.081mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 12:11:49 PM

Mean Area 3.843
Mean Conc. 1.986mg/L



Sample

Sample Name: 590-20532-b-9
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

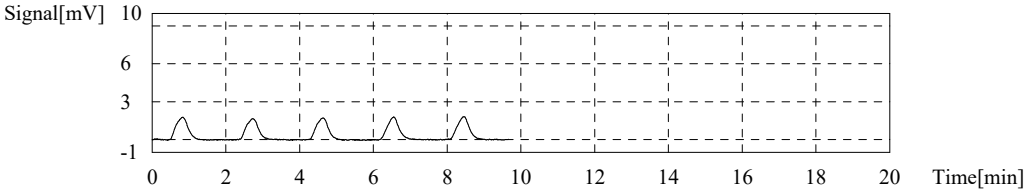
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.082mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.145	2.135mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 12:19:40 PM
2	3.791	1.960mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 12:21:45 PM
3	3.952	2.040mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 12:23:50 PM
4	3.940	2.034mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 12:25:55 PM
5	4.114	2.120mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 12:28:10 PM

Mean Area 4.038
Mean Conc. 2.082mg/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

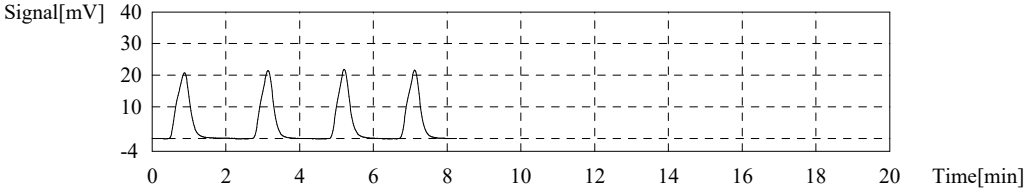
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.87mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	51.23	25.39mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 12:36:23 PM
2	49.86	24.72mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 12:38:41 PM
3	49.51	24.54mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 12:40:46 PM
4	50.08	24.83mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 12:42:57 PM

Mean Area 50.17
Mean Conc. 24.87mg/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

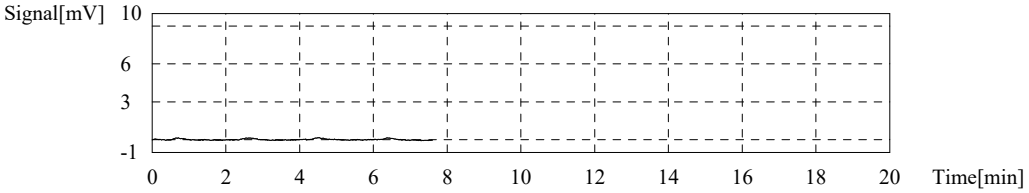
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2183mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2804	0.2260mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 12:50:53 PM
2	0.2777	0.2247mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 12:52:58 PM
3	0.2529	0.2124mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 12:55:03 PM
4	0.2482	0.2101mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 12:57:08 PM

Mean Area 0.2648
Mean Conc. 0.2183mg/L



Sample

Sample Name: 590-20532-b-10
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

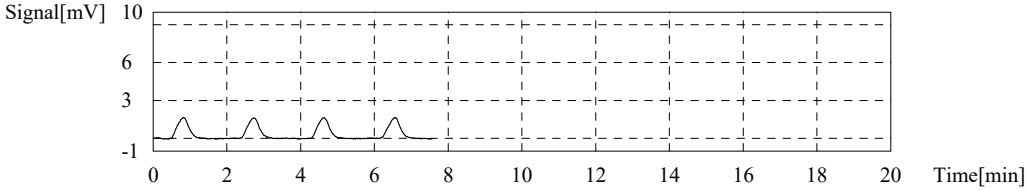
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.906mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.773	1.951mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 1:05:04 PM
2	3.641	1.886mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 1:07:09 PM
3	3.609	1.870mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 1:09:14 PM
4	3.702	1.916mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 1:11:19 PM

Mean Area 3.681
Mean Conc. 1.906mg/L



Sample

Sample Name: 280-176081-j-3
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

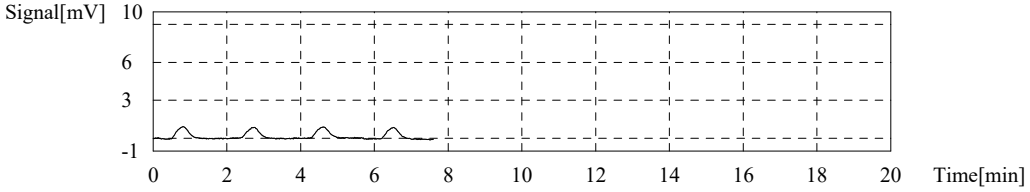
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:11.35mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.219	11.84mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 1:19:15 PM
2	2.084	11.17mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 1:21:20 PM
3	2.065	11.08mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 1:23:25 PM
4	2.111	11.30mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 1:25:30 PM

Mean Area 2.120
Mean Conc. 11.35mg/L



Sample

Sample Name: 280-176081-j-4
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

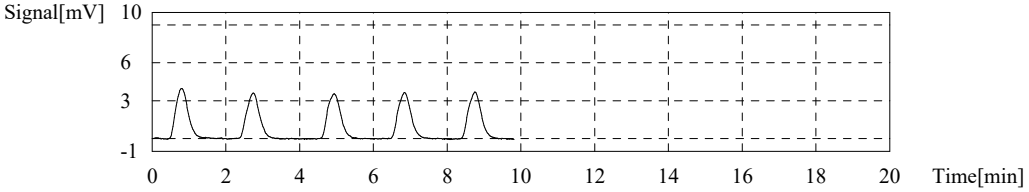
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:8.942mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.472	9.533mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 1:33:26 PM
2	8.916	8.984mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 1:35:50 PM
3	8.838	8.907mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 1:37:55 PM
4	8.702	8.772mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 1:40:00 PM
5	9.038	9.104mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 1:42:05 PM

Mean Area 8.873
Mean Conc. 8.942mg/L



Sample

Sample Name: 280-176081-j-5
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

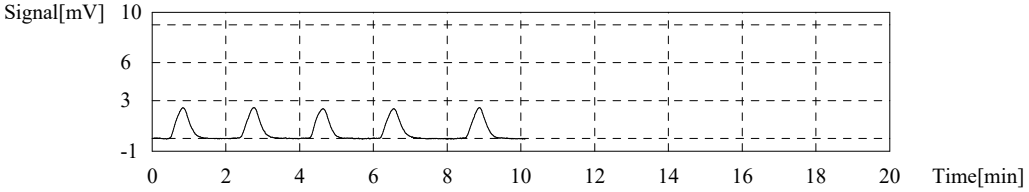
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:6.013mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.048	6.150mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 1:49:56 PM
2	5.829	5.934mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 1:52:01 PM
3	5.730	5.836mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 1:54:06 PM
4	6.030	6.132mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 1:56:36 PM
5	6.271	6.370mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 1:58:53 PM

Mean Area 5.909
Mean Conc. 6.013mg/L



Sample

Sample Name: 280-176081-j-6
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

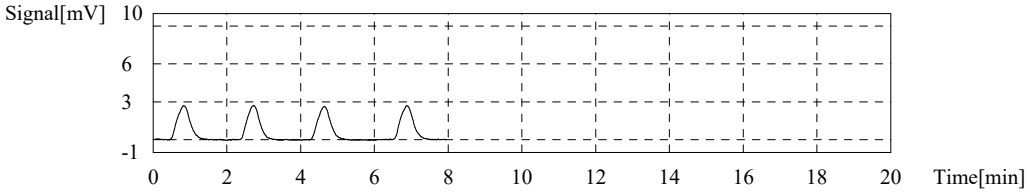
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:6.591mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.661	6.756mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 2:06:44 PM
2	6.372	6.470mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 2:08:50 PM
3	6.504	6.601mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 2:11:16 PM
4	6.441	6.538mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 2:13:21 PM

Mean Area 6.495
Mean Conc. 6.591mg/L



Sample

Sample Name: 280-176081-j-7
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

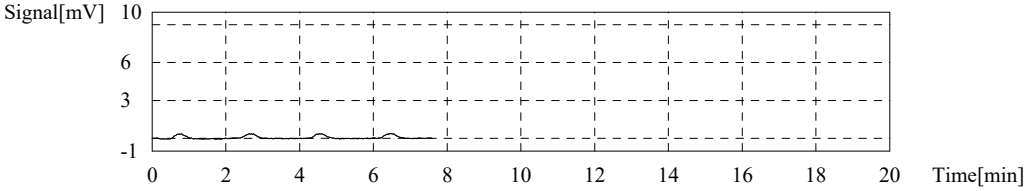
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:0.9532mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.7817	0.9473mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 2:21:17 PM
2	0.6991	0.8657mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 2:23:22 PM
3	0.8321	0.9971mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 2:25:27 PM
4	0.8379	1.003mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 2:27:32 PM

Mean Area 0.7877
Mean Conc. 0.9532mg/L



Sample

Sample Name: 280-176081-j-8
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

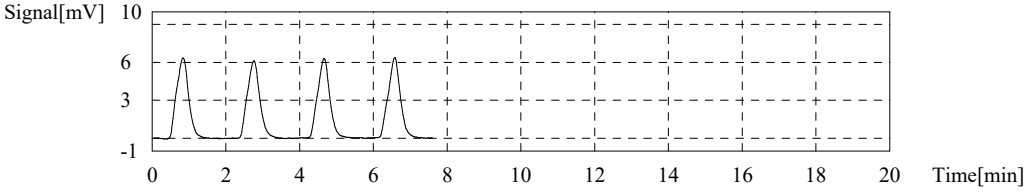
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:14.64mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.81	14.81mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 2:35:28 PM
2	14.49	14.49mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 2:37:33 PM
3	14.53	14.53mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 2:39:38 PM
4	14.72	14.72mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 2:41:43 PM

Mean Area 14.64
Mean Conc. 14.64mg/L



Sample

Sample Name: 280-176081-j-9
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

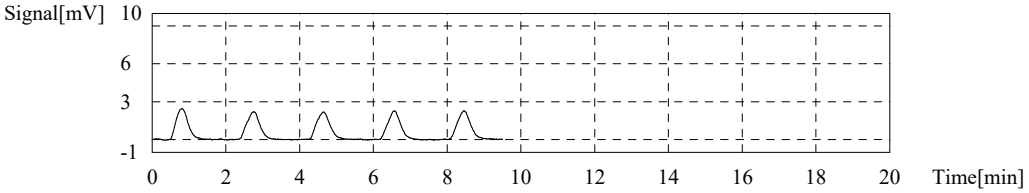
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:5.626mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.688	5.794mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 2:49:39 PM
2	5.430	5.540mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 2:51:44 PM
3	5.462	5.571mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 2:53:49 PM
4	5.488	5.597mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 2:55:54 PM
5	5.991	6.094mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 2:57:59 PM

Mean Area 5.517
Mean Conc. 5.626mg/L



Sample

Sample Name: MS 280-176081-j-9
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

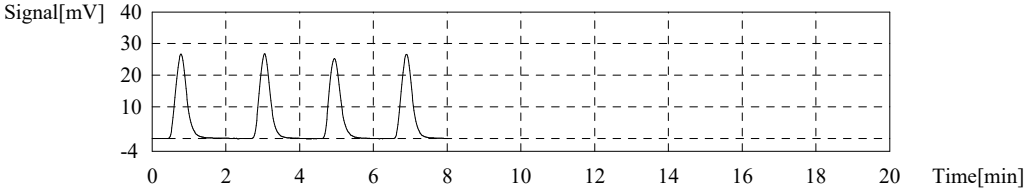
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:54.65mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	56.48	55.97mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 3:06:13 PM
2	54.68	54.20mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 3:08:22 PM
3	54.38	53.90mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 3:10:29 PM
4	55.03	54.54mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 3:12:34 PM

Mean Area 55.14
Mean Conc. 54.65mg/L



Sample

Sample Name: MSD 280-176081-j-9
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

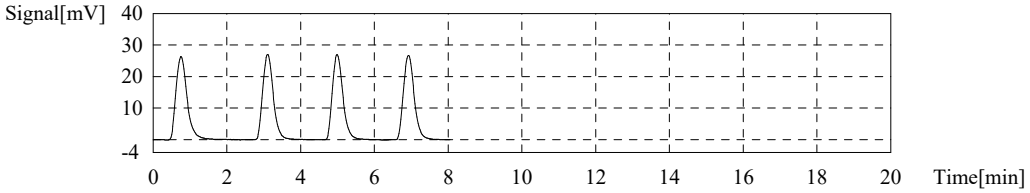
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:54.46mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	56.38	55.88mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 3:20:58 PM
2	54.48	54.00mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 3:23:07 PM
3	54.08	53.60mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 3:25:16 PM
4	54.84	54.35mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 3:27:21 PM

Mean Area 54.95
Mean Conc. 54.46mg/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

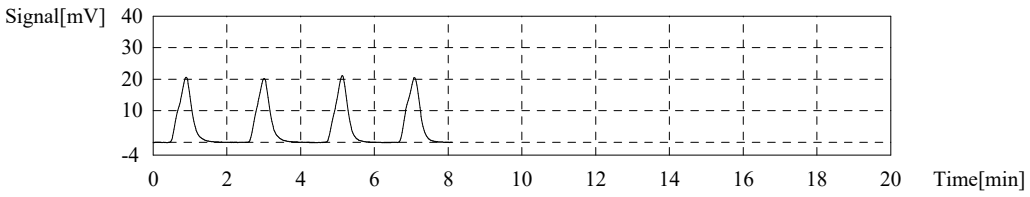
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.75mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	50.96	25.26mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 3:35:31 PM
2	49.22	24.40mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 3:37:49 PM
3	49.39	24.48mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 3:39:58 PM
4	50.14	24.86mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 3:42:03 PM

Mean Area 49.93
Mean Conc. 24.75mg/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

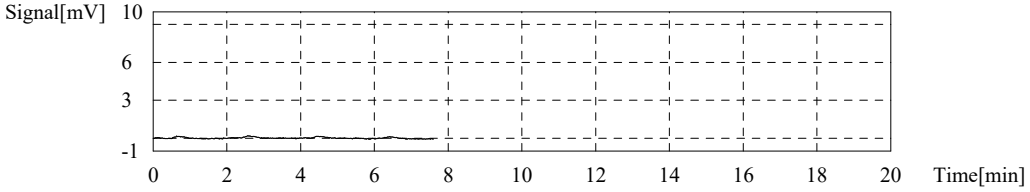
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2674mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3353	0.2531mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 3:50:00 PM
2	0.4765	0.3229mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 3:52:05 PM
3	0.3211	0.2461mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 3:54:10 PM
4	0.3236	0.2474mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 3:56:15 PM

Mean Area 0.3641
Mean Conc. 0.2674mg/L



Sample

Sample Name: 280-176081-j-10
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

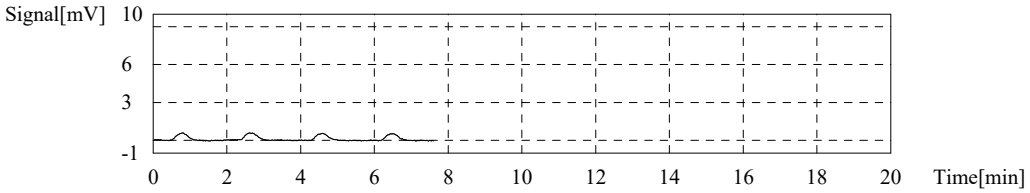
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:1.446mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.318	1.477mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 4:04:12 PM
2	1.258	1.418mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 4:06:17 PM
3	1.295	1.454mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 4:08:22 PM
4	1.275	1.435mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 4:10:27 PM

Mean Area 1.287
Mean Conc. 1.446mg/L



Sample

Sample Name: 280-176081-j-11
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

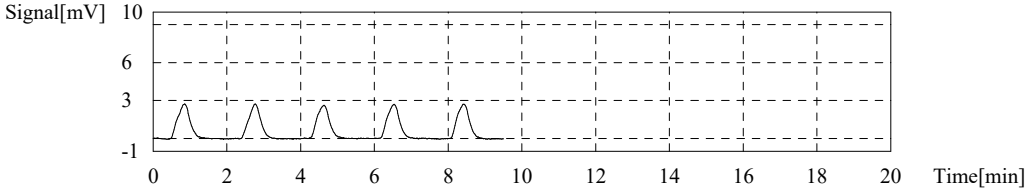
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:6.315mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.667	6.762mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 4:18:24 PM
2	6.103	6.204mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 4:20:29 PM
3	6.068	6.170mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 4:22:34 PM
4	6.299	6.398mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 4:24:39 PM
5	6.390	6.488mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 4:26:44 PM

Mean Area 6.215
Mean Conc. 6.315mg/L



Sample

Sample Name: 280-176081-j-12
Sample ID:
Origin: Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal
Status Completed
Chk. Result

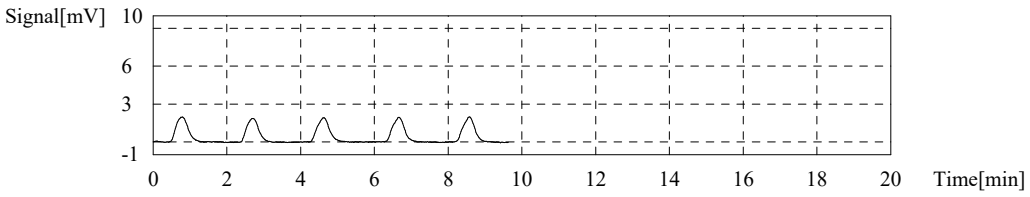
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:4.506mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.520	4.641mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 4:34:36 PM
2	4.289	4.412mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 4:36:41 PM
3	4.451	4.572mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 4:38:54 PM
4	4.274	4.398mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 4:40:59 PM
5	4.676	4.795mg/L	50uL	1.000	E	Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 4:43:04 PM

Mean Area 4.384
Mean Conc. 4.506mg/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

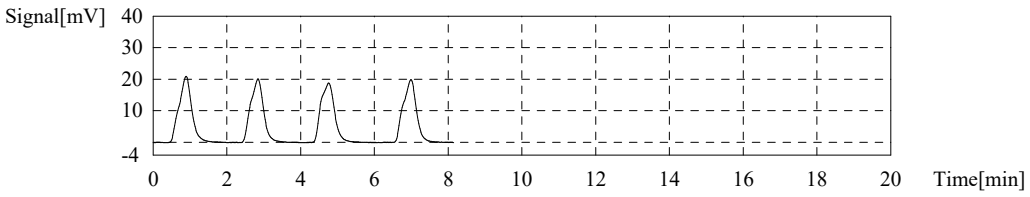
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.82mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	51.03	25.30mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 4:51:00 PM
2	49.62	24.60mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 4:53:11 PM
3	49.55	24.56mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 4:55:35 PM
4	50.08	24.83mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 4:57:54 PM

Mean Area 50.07
Mean Conc. 24.82mg/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

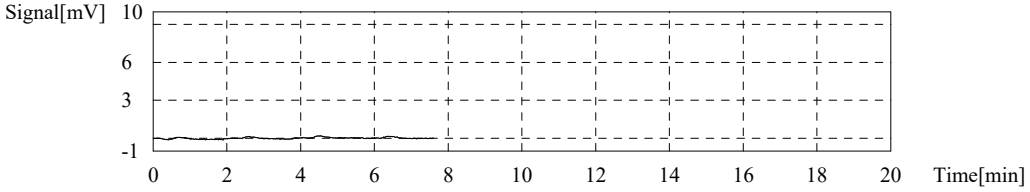
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2411mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4046	0.2874mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 5:05:51 PM
2	0.2701	0.2209mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 5:08:00 PM
3	0.2519	0.2119mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 5:10:05 PM
4	0.3168	0.2440mg/L	50uL	1.000		Calibration_10_31_22_Auto Dilution_Cal.2023_05_04_14_32_31.cal	5/20/2023 5:12:10 PM

Mean Area 0.3109
Mean Conc. 0.2411mg/L



Shi 5 TOC

9060

	Analysis	Sample Name	Result pH<2	Notes	Vial
1*	NPOC	ICV			1
2*	NPOC	ICB			2
3*	NPOC	LCS			3
4*	NPOC	MB			4
5*	NPOC	TIC			5
6*	NPOC	280-176674-d-7			6
7*	NPOC	MS 280-176674-d-7			7
8*	NPOC	MSD 280-176674-d-7			8
9*	NPOC	580-127209-p-1			9
10*	NPOC	580-127209-p-3			10
11*	NPOC	580-127209-p-5			11
12*	NPOC	280-176349-d-8		10x odor RR	12
13*	NPOC	280-176349-c-11		25x odor RR	13
14*	NPOC	280-176123-a-35		25x RR	14
15*	NPOC	CCV			15
16*	NPOC	CCB			16
17*	NPOC	280-176363-c-1		2x color	17
18*	NPOC	280-176363-a-2			18
19*	NPOC	280-176363-c-3		10x ~~2x~~ color	19
20*	NPOC	280-176363-d-5		10x color	20
21*	NPOC	MS 280-176363-d-5		10x ↓	21
22*	NPOC	MSD 280-176363-d-5		10x	22
23*	NPOC	280-176363-d-6			23
24*	NPOC	280-176363-c-7		2x color	24
25*	NPOC	280-176363-d-8		10x color	25
26*	NPOC	280-176325-d-1		500x color	26
27*	NPOC	CCV			27
28*	NPOC	CCB			28
29*	NPOC	280-176325-d-2		500x color	29
30*	NPOC	280-176274-d-2		100x odor	30
31*	NPOC	280-176296-g-4			31
32*	NPOC	590-20532-a-9			32
33*	NPOC	590-20532-a-10			33
34*	NPOC	LCS			34
35*	NPOC	LCSD			35
36*	NPOC	MB			36
37*	NPOC	TIC			37
38*	NPOC	280-176296-g-3			38
39*	NPOC	CCV			39
40*	NPOC	CCB			40
41*	NPOC	MS 280-176296-g-3			41
42*	NPOC	MSD 280-176296-g-3			42
43*	NPOC	280-176296-g-5			43
44*	NPOC	280-176296-g-7			44
45*	NPOC	280-176296-g-8			45
46*	NPOC	280-176296-g-9			46
47*	NPOC	590-20532-a-1			47
48*	NPOC	590-20532-a-2			48
49*	NPOC	590-20532-a-3			49
50*	NPOC	590-20532-b-5			50
51*	NPOC	CCV			51
52*	NPOC	CCB			52
53*	NPOC	590-20532-a-6			53

5310 ↓

5310

Shi 5 TOC

	Analysis	Sample Name	Result	Notes	Vial
54*	NPOC	280-176326-b-1	pH<2		54
55*	NPOC	MS 280-176326-b-1			55
56*	NPOC	MSD 280-176326-b-1			56
57*	NPOC	280-176326-b-2			57
58*	NPOC	280-176326-b-3			58
59*	NPOC	280-176326-b-4			59
60*	NPOC	280-176326-a-5			60
61*	NPOC	590-20532-b-7			61
62*	NPOC	590-20532-a-8			62
63*	NPOC	CCV			63
64*	NPOC	CCB			64
65*	NPOC	590-20532-a-4			65
66*	NPOC	590-20532-a-5			66
67*	NPOC	590-20532-b-6			67
68*	NPOC	LCS			68
69*	NPOC	MB			69
70*	NPOC	590-20532-a-7			70
71*	NPOC	MS 590-20532-a-7			71
72*	NPOC	MSD 590-20532-a-7			72
73*	NPOC	590-20532-b-8			73
74*	NPOC	590-20532-b-9			74
75*	NPOC	CCV			75
76*	NPOC	CCB			76
77*	NPOC	590-20532-b-10			77
78*	NPOC	280-176081-j-3			78
79*	NPOC	280-176081-j-4			79
80*	NPOC	280-176081-j-5			80
81*	NPOC	280-176081-j-6			81
82*	NPOC	280-176081-j-7			82
83*	NPOC	280-176081-j-8			83
84*	NPOC	280-176081-j-9			84
85*	NPOC	MS 280-176081-j-9			85
86*	NPOC	MSD 280-176081-j-9			86
87*	NPOC	CCV			87
88*	NPOC	CCB			88
89*	NPOC	280-176081-j-10			89
90*	NPOC	280-176081-j-11			90
91*	NPOC	280-176081-j-12			91
92*	NPOC	CCV			92
93*	NPOC	CCB			93

5310 DOC

9060 DOC

DOC

2X 10X color

2X

2X

2X

2X

2X

2X

2X

2X

2X color

2X

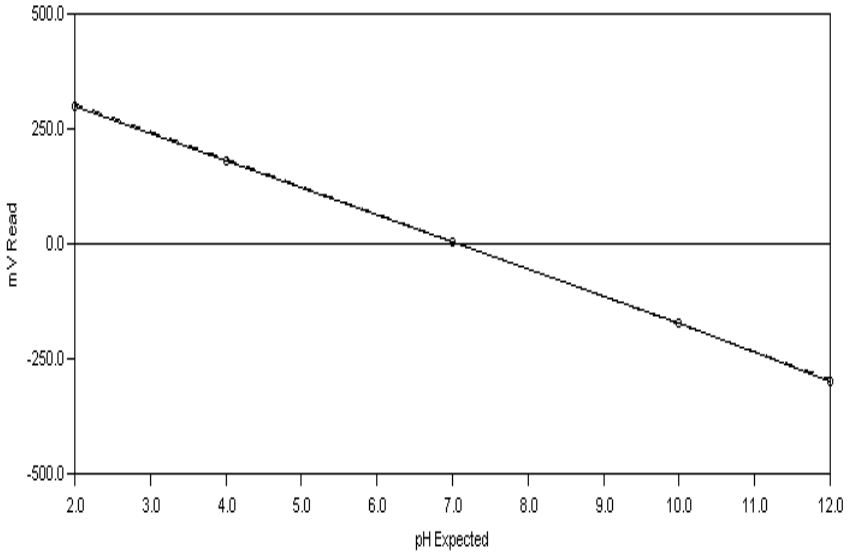
2X

BWH 5000,1000 MS.

MANTECH INC.

Calibration Report

Calibration Record # 664



Calibration Settings

Calibration ID	PH	Date	5/19/2023	
Channel	1	Time	10:48 AM	
Probe Type	pH	Temperature	294.24 K	21.09 C
Probe ID	PH ELECTRODE	Analysis Type	Single Line Fit	

Calibration Results

Slope	-59.835	CorrCoeff	0.9999
Intercept	2.124	Equation:	Y = (-59.835) X + (2.124)

Calibration Validity **True** Operator

	Result	Minimum	Maximum
Slope	-59.835	-65.00	-53.00
Intercept	2.124	-100.00	100.00
Correlation Coefficient	0.9999	0.99	1.00

Note: "True" means the calibration was within the specified ranges
"False" means the calibration was NOT within the specified ranges

Calibration Data	Standard	Reading
	2.00	300.41
	4.00	181.76
	7.00	2.07
	10.00	-173.33
	12.00	-300.29

Test America

AT4 Analyst:_____

Water Analysis Report

Run Number 1902 **Order Number** 20230519-2

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	5/19/2023	12:32 PM	20.77	-1.00	5.27	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
INITIAL CHECK	5/19/2023	12:40 PM	20.49	-1.00	10.51	136.58	180.71	.00	88.28	92.44	1.37	1.81	-1.00	.02
BUFFER 7	5/19/2023	12:43 PM	20.11	-1.00	7.03	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
LCS	5/19/2023	12:51 PM	20.15	-1.00	10.61	141.01	182.57	.00	83.12	99.45	1.41	1.83	-1.00	.02
LCSD	5/19/2023	12:58 PM	20.16	-1.00	10.63	139.13	182.96	.00	87.66	95.30	1.39	1.83	-1.00	.02
MB	5/19/2023	1:04 PM	20.34	-1.00	8.57	1.57	5.06	1.93	3.13	.00	.02	.06	.07	.02
280-176527-a-3	5/19/2023	1:12 PM	20.40	-1.00	7.15	.00	456.58	456.58	.00	.00	.00	4.57	-1.00	.02
DU 280-176527-a-3	5/19/2023	1:21 PM	20.59	-1.00	7.29	.00	464.21	464.21	.00	.00	.00	4.64	-1.00	.02
280-176527-a-11	5/19/2023	1:26 PM	20.74	-1.00	6.56	.00	6.22	6.22	.00	.00	.00	.07	.07	.02
280-176527-a-19	5/19/2023	1:33 PM	20.96	-1.00	6.53	.00	234.97	234.97	.00	.00	.00	2.35	-1.00	.02
280-176527-a-28	5/19/2023	1:39 PM	20.96	-1.00	6.70	.00	125.13	125.13	.00	.00	.00	1.25	-1.00	.02
280-176607-a-3	5/19/2023	1:47 PM	20.81	-1.00	6.98	.00	373.61	373.61	.00	.00	.00	3.74	-1.00	.02
280-176572-c-4	5/19/2023	1:53 PM	20.76	-1.00	7.03	.00	104.66	104.66	.00	.00	.00	1.05	-1.00	.02
280-176572-d-6	5/19/2023	2:00 PM	20.70	-1.00	7.00	.00	256.97	256.97	.00	.00	.00	2.57	-1.00	.02
280-176572-c-7	5/19/2023	2:04 PM	20.63	-1.00	4.79	.00	.68	.68	.00	.00	.00	.04	.08	.02
280-176572-a-15	5/19/2023	2:11 PM	20.66	-1.00	6.89	.00	254.83	254.83	.00	.00	.00	2.55	-1.00	.02
CCV	5/19/2023	2:19 PM	20.78	-1.00	10.57	145.36	181.23	.00	71.76	109.48	1.45	1.81	-1.00	.02
CCB	5/19/2023	2:25 PM	20.89	-1.00	8.36	.02	3.84	3.79	.05	.00	.00	.05	.07	.02
280-176607-a-12	5/19/2023	2:31 PM	20.98	-1.00	6.20	.00	129.23	129.23	.00	.00	.00	1.29	-1.00	.02
280-176607-a-19	5/19/2023	2:37 PM	21.21	-1.00	5.91	.00	.96	.96	.00	.00	.00	.03	.05	.02
280-176628-a-2	5/19/2023	2:42 PM	21.14	-1.00	6.17	.00	61.33	61.33	.00	.00	.00	.61	-1.00	.02
280-176628-a-9	5/19/2023	2:47 PM	20.99	-1.00	5.85	.00	4.46	4.46	.00	.00	.00	.05	.07	.02
280-176628-a-16	5/19/2023	2:52 PM	20.84	-1.00	6.18	.00	66.41	66.41	.00	.00	.00	.66	-1.00	.02
280-176642-a-5	5/19/2023	2:59 PM	20.81	-1.00	6.50	.00	287.41	287.41	.00	.00	.00	2.87	-1.00	.02
280-176642-a-12	5/19/2023	3:06 PM	20.89	-1.00	6.62	.00	260.58	260.58	.00	.00	.00	2.61	-1.00	.02
280-176696-a-2	5/19/2023	3:15 PM	20.91	-1.00	7.49	.00	455.40	455.40	.00	.00	.00	4.55	-1.00	.02
280-176696-a-10	5/19/2023	3:26 PM	21.03	-1.00	7.39	.00	890.86	890.86	.00	.00	.00	8.91	-1.00	.02

Run Number 1902 **Order Number** 20230519-2

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)
280-176696-a-17	5/19/2023	3:35 PM	21.21	-1.00	7.62	.00	434.13	434.13	.00	.00	.00	4.34	-1.00	.02
CCV	5/19/2023	3:42 PM	21.38	-1.00	10.54	150.49	182.39	.00	63.80	118.58	1.50	1.82	-1.00	.02
CCB	5/19/2023	3:49 PM	21.60	-1.00	8.28	.00	3.43	3.43	.00	.00	.00	.05	.07	.02
LCS	5/19/2023	3:57 PM	21.51	-1.00	10.56	141.23	181.27	.00	80.09	101.19	1.41	1.81	-1.00	.02
LCSD	5/19/2023	4:04 PM	21.32	-1.00	10.60	140.38	183.06	.00	85.36	97.70	1.40	1.83	-1.00	.02
MB	5/19/2023	4:11 PM	21.21	-1.00	8.33	.00	3.58	3.58	.00	.00	.00	.05	.07	.02
280-176698-a-2	5/19/2023	4:22 PM	21.12	-1.00	7.37	.00	933.54	933.54	.00	.00	.00	9.34	-1.00	.02
DU 280-176698-a-2	5/19/2023	4:34 PM	21.21	-1.00	7.35	.00	935.40	935.40	.00	.00	.00	9.35	-1.00	.02
280-176698-a-9	5/19/2023	4:40 PM	21.24	-1.00	6.77	.00	2.08	2.08	.00	.00	.00	.04	.06	.02
280-176705-a-2	5/19/2023	4:48 PM	21.19	-1.00	6.99	.00	336.19	336.19	.00	.00	.00	3.36	-1.00	.02
280-176591-c-2	5/19/2023	4:55 PM	21.24	-1.00	7.40	.00	271.98	271.98	.00	.00	.00	2.72	-1.00	.02
280-176591-c-4	5/19/2023	5:01 PM	21.38	-1.00	6.76	.00	176.44	176.44	.00	.00	.00	1.76	-1.00	.02
280-176591-c-6	5/19/2023	5:06 PM	21.51	-1.00	6.49	.00	48.52	48.52	.00	.00	.00	.49	-1.00	.02
280-176591-c-7	5/19/2023	5:11 PM	21.58	-1.00	5.94	.00	4.71	4.71	.00	.00	.00	.06	.07	.02
280-176674-a-7	5/19/2023	5:16 PM	21.38	-1.00	6.01	.00	17.97	17.97	.00	.00	.00	.20	.21	.02
280-176674-a-8	5/19/2023	5:22 PM	21.27	-1.00	6.02	.00	17.77	17.77	.00	.00	.00	.19	.21	.02
CCV	5/19/2023	5:30 PM	21.21	-1.00	10.51	140.19	182.03	.00	83.67	98.36	1.40	1.82	-1.00	.02
CCB	5/19/2023	5:36 PM	21.14	-1.00	8.34	.00	3.58	3.58	.00	.00	.00	.05	.07	.02
280-176514-g-1	5/19/2023	5:43 PM	21.09	-1.00	7.26	.00	257.23	257.23	.00	.00	.00	2.57	-1.00	.02
280-176514-g-2	5/19/2023	5:50 PM	21.12	-1.00	7.23	.00	181.33	181.33	.00	.00	.00	1.81	-1.00	.02
280-176699-b-1	5/19/2023	5:55 PM	21.15	-1.00	5.93	.00	5.65	5.65	.00	.00	.00	.07	.09	.02
280-176699-b-2	5/19/2023	6:01 PM	21.18	-1.00	6.01	.00	79.85	79.85	.00	.00	.00	.80	-1.00	.02
280-176699-b-3	5/19/2023	6:14 PM	21.32	-1.00	7.28	.00	1,161.09	1,161.09	.00	.00	.00	11.61	-1.00	.02
280-176699-b-4	5/19/2023	6:21 PM	21.61	-1.00	8.12	.00	192.21	192.21	.00	.00	.00	1.92	-1.00	.02
280-176699-b-5	5/19/2023	6:28 PM	21.69	-1.00	8.63	37.92	142.54	66.70	75.84	.00	.38	1.43	-1.00	.02
280-176363-c-10	5/19/2023	6:38 PM	21.38	-1.00	6.87	.00	802.17	802.17	.00	.00	.00	8.02	-1.00	.02
280-176363-b-19	5/19/2023	6:50 PM	21.25	-1.00	6.92	.00	905.30	905.30	.00	.00	.00	9.05	-1.00	.02
280-176363-b-23	5/19/2023	7:01 PM	21.21	-1.00	7.36	.00	801.32	801.32	.00	.00	.00	8.01	-1.00	.02
CCV	5/19/2023	7:09 PM	21.15	-1.00	10.44	142.53	184.29	.00	83.51	100.78	1.43	1.84	-1.00	.02
CCB	5/19/2023	7:14 PM	21.08	-1.00	8.00	.00	3.97	3.97	.00	.00	.00	.05	.07	.02

Run Number 1902 **Order Number** 20230519-2

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)
LCS	5/19/2023	7:22 PM	21.02	-1.00	10.48	138.48	182.98	.00	89.00	93.98	1.38	1.83	-1.00	.02
MB	5/19/2023	7:28 PM	21.06	-1.00	8.13	.00	3.06	3.06	.00	.00	.00	.05	.07	.02
280-176478-c-1	5/19/2023	7:40 PM	21.11	-1.00	7.47	.00	834.79	834.79	.00	.00	.00	8.35	-1.00	.02
DU 280-176478-c-1	5/19/2023	7:51 PM	21.27	-1.00	7.60	.00	846.30	846.30	.00	.00	.00	8.46	-1.00	.02
280-176590-e-1	5/19/2023	8:05 PM	21.43	-1.00	8.53	51.83	1,041.95	938.28	103.66	.00	.52	10.42	-1.00	.02
280-176590-e-2	5/19/2023	8:21 PM	21.76	-1.00	8.43	48.98	1,389.68	1,291.73	97.96	.00	.49	13.90	-1.00	.02
280-176590-f-3	5/19/2023	8:34 PM	21.53	-1.00	8.47	44.06	970.28	882.16	88.12	.00	.44	9.70	-1.00	.02
280-176590-f-4	5/19/2023	8:49 PM	21.34	-1.00	8.83	105.39	1,252.70	1,041.92	210.78	.00	1.05	12.53	-1.00	.02
280-176593-a-1	5/19/2023	8:55 PM	21.25	-1.00	6.70	.00	135.22	135.22	.00	.00	.00	1.35	-1.00	.02
280-176596-a-2	5/19/2023	9:00 PM	21.11	-1.00	6.68	.00	57.26	57.26	.00	.00	.00	.57	-1.00	.02
280-176601-a-1	5/19/2023	9:07 PM	21.02	-1.00	7.29	.00	158.20	158.20	.00	.00	.00	1.58	-1.00	.02
280-176606-a-1	5/19/2023	9:15 PM	20.99	-1.00	7.67	.00	347.01	347.01	.00	.00	.00	3.47	-1.00	.02
CCV	5/19/2023	9:23 PM	21.02	-1.00	10.41	146.52	185.93	.00	78.83	107.10	1.47	1.86	-1.00	.02
CCB	5/19/2023	9:29 PM	21.03	-1.00	8.17	.00	3.45	3.45	.00	.00	.00	.05	.07	.02
280-176606-a-2	5/19/2023	9:36 PM	21.08	-1.00	7.68	.00	353.68	353.68	.00	.00	.00	3.54	-1.00	.02
280-176606-a-3	5/19/2023	9:45 PM	21.22	-1.00	7.92	.00	449.21	449.21	.00	.00	.00	4.49	-1.00	.02
280-176606-a-4	5/19/2023	9:53 PM	21.41	-1.00	7.76	.00	359.19	359.19	.00	.00	.00	3.59	-1.00	.02
280-176606-a-5	5/19/2023	10:02 PM	21.58	-1.00	8.05	.00	530.27	530.27	.00	.00	.00	5.30	-1.00	.02
280-176606-a-6	5/19/2023	10:13 PM	21.38	-1.00	7.95	.00	708.56	708.56	.00	.00	.00	7.09	-1.00	.02
280-176606-a-7	5/19/2023	10:18 PM	21.25	-1.00	6.92	.00	6.12	6.12	.00	.00	.00	.07	.08	.02
280-176606-a-8	5/19/2023	10:25 PM	21.11	-1.00	7.38	.00	242.17	242.17	.00	.00	.00	2.42	-1.00	.02
280-176634-a-1	5/19/2023	10:32 PM	21.02	-1.00	7.60	.00	97.78	97.78	.00	.00	.00	.98	-1.00	.02
280-176634-a-2	5/19/2023	10:52 PM	20.99	-1.00	7.56	.00	.00	.00	.00	.00	.00	.00	.00	.02
280-176634-b-3	5/19/2023	11:12 PM	21.05	-1.00	7.65	.00	.00	.00	.00	.00	.00	.00	.00	.02
CCV	5/19/2023	11:21 PM	21.02	-1.00	10.33	162.94	193.27	.00	60.66	132.61	1.63	1.93	-1.00	.02
CCB	5/19/2023	11:27 PM	20.96	-1.00	7.74	.00	3.18	3.18	.00	.00	.00	.06	.08	.02
LCS	5/19/2023	11:35 PM	20.98	-1.00	10.37	142.27	185.64	.00	86.74	98.90	1.42	1.86	-1.00	.02
MB	5/19/2023	11:41 PM	21.12	-1.00	8.03	.00	2.82	2.82	.00	.00	.00	.05	.07	.02
280-176658-c-1	5/19/2023	11:47 PM	21.47	-1.00	6.93	.00	118.76	118.76	.00	.00	.00	1.19	-1.00	.02
DU 280-176658-c-1	5/19/2023	11:53 PM	21.25	-1.00	7.09	.00	119.55	119.55	.00	.00	.00	1.20	-1.00	.02

Run Number 1902 **Order Number** 20230519-2

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)
280-176658-b-2	5/19/2023	11:59 PM	21.09	-1.00	7.12	.00	122.09	122.09	.00	.00	.00	1.22	-1.00	.02
280-176658-b-3	5/20/2023	12:05 AM	20.98	-1.00	7.13	.00	122.93	122.93	.00	.00	.00	1.23	-1.00	.02
280-176658-b-4	5/20/2023	12:11 AM	20.88	-1.00	7.12	.00	122.57	122.57	.00	.00	.00	1.23	-1.00	.02
280-176658-b-5	5/20/2023	12:17 AM	20.85	-1.00	7.16	.00	122.91	122.91	.00	.00	.00	1.23	-1.00	.02
280-176658-b-6	5/20/2023	12:23 AM	20.81	-1.00	7.15	.00	125.25	125.25	.00	.00	.00	1.25	-1.00	.02
280-176658-b-7	5/20/2023	12:29 AM	20.77	-1.00	7.20	.00	128.46	128.46	.00	.00	.00	1.28	-1.00	.02
280-176634-b-4	5/20/2023	12:37 AM	20.80	-1.00	7.87	.00	314.73	314.73	.00	.00	.00	3.15	-1.00	.02
280-176634-a-5	5/20/2023	12:43 AM	20.84	-1.00	7.12	.00	73.82	73.82	.00	.00	.00	.74	-1.00	.02
CCV	5/20/2023	12:51 AM	20.92	-1.00	10.33	138.77	186.94	.00	96.34	90.60	1.39	1.87	-1.00	.02
CCB	5/20/2023	12:57 AM	21.02	-1.00	8.08	.00	4.30	4.30	.00	.00	.00	.06	.07	.02
280-176634-a-6	5/20/2023	1:12 AM	21.14	-1.00	9.92	.00	.00	.00	.00	.00	.00	.00	.00	.02
280-176634-b-7	5/20/2023	1:20 AM	20.94	-1.00	8.64	35.16	142.29	71.98	70.31	.00	.35	1.42	-1.00	.02
280-176634-b-8	5/20/2023	1:41 AM	20.74	-1.00	7.66	.00	.00	.00	.00	.00	.00	.00	.00	.02
280-176634-b-9	5/20/2023	2:03 AM	20.58	-1.00	7.71	.00	.00	.00	.00	.00	.00	.00	.00	.02
280-176634-b-10	5/20/2023	2:10 AM	20.44	-1.00	8.04	.00	129.94	129.94	.00	.00	.00	1.30	-1.00	.02
280-176634-b-11	5/20/2023	2:16 AM	20.33	-1.00	7.71	.00	84.59	84.59	.00	.00	.00	.85	-1.00	.02
280-176634-b-12	5/20/2023	2:24 AM	20.27	-1.00	7.85	.00	316.05	316.05	.00	.00	.00	3.16	-1.00	.02
280-176669-a-1	5/20/2023	2:34 AM	20.27	-1.00	8.21	.00	631.75	631.75	.00	.00	.00	6.32	-1.00	.02
280-176669-a-2	5/20/2023	2:42 AM	20.30	-1.00	8.60	52.79	413.71	308.13	105.58	.00	.53	4.14	-1.00	.02
280-176669-a-3	5/20/2023	2:51 AM	20.31	-1.00	8.10	.00	396.08	396.08	.00	.00	.00	3.96	-1.00	.02
CCV	5/20/2023	2:59 AM	20.40	-1.00	10.24	153.19	190.80	.00	75.22	115.58	1.53	1.91	-1.00	.02
CCB	5/20/2023	3:05 AM	20.77	-1.00	8.02	.00	4.67	4.67	.00	.00	.00	.07	.09	.02
LCS	5/20/2023	3:12 AM	20.65	-1.00	10.28	143.49	187.96	.00	88.94	99.02	1.43	1.88	-1.00	.02
MB	5/20/2023	3:18 AM	20.52	-1.00	8.06	.00	3.93	3.93	.00	.00	.00	.06	.07	.02
280-176669-a-4	5/20/2023	3:26 AM	20.45	-1.00	8.03	.00	280.02	280.02	.00	.00	.00	2.80	-1.00	.02
DU 280-176669-a-4	5/20/2023	3:33 AM	20.40	-1.00	8.17	.00	284.51	284.51	.00	.00	.00	2.85	-1.00	.02
280-176670-a-1	5/20/2023	3:39 AM	20.38	-1.00	7.36	.00	122.30	122.30	.00	.00	.00	1.22	-1.00	.02
280-176670-a-2	5/20/2023	3:45 AM	20.37	-1.00	7.27	.00	127.39	127.39	.00	.00	.00	1.27	-1.00	.02
280-176670-a-3	5/20/2023	3:51 AM	20.36	-1.00	7.29	.00	127.82	127.82	.00	.00	.00	1.28	-1.00	.02
280-176670-a-4	5/20/2023	3:57 AM	20.37	-1.00	7.18	.00	112.54	112.54	.00	.00	.00	1.13	-1.00	.02

Run Number 1902 **Order Number** 20230519-2

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)
280-176670-a-6	5/20/2023	4:03 AM	20.41	-1.00	6.56	.00	80.86	80.86	.00	.00	.00	.81	-1.00	.02
280-176670-a-5	5/20/2023	4:09 AM	20.45	-1.00	7.11	.00	129.46	129.46	.00	.00	.00	1.29	-1.00	.02
280-176670-a-8	5/20/2023	4:15 AM	20.54	-1.00	7.53	.00	131.08	131.08	.00	.00	.00	1.31	-1.00	.02
280-176722-e-1	5/20/2023	4:22 AM	20.77	-1.00	7.93	.00	346.50	346.50	.00	.00	.00	3.46	-1.00	.02
CCV	5/20/2023	4:30 AM	20.67	-1.00	10.22	135.42	190.65	.00	110.46	80.19	1.35	1.91	-1.00	.02
CCB	5/20/2023	4:36 AM	20.59	-1.00	7.97	.00	4.22	4.22	.00	.00	.00	.06	.08	.02
280-176722-e-2	5/20/2023	4:44 AM	20.51	-1.00	7.70	.00	337.46	337.46	.00	.00	.00	3.37	-1.00	.02
280-176683-a-1	5/20/2023	4:51 AM	20.48	-1.00	7.71	.00	246.60	246.60	.00	.00	.00	2.47	-1.00	.02
280-176683-a-2	5/20/2023	4:58 AM	20.48	-1.00	7.70	.00	248.05	248.05	.00	.00	.00	2.48	-1.00	.02
280-176683-a-3	5/20/2023	5:04 AM	20.47	-1.00	6.66	.00	4.46	4.46	.00	.00	.00	.07	.09	.02
280-176439-c-2	5/20/2023	5:15 AM	20.47	-1.00	9.16	177.06	798.65	444.54	354.12	.00	1.77	7.99	-1.00	.02
280-176526-j-1	5/20/2023	5:35 AM	20.47	-1.00	7.97	.00	2,487.05	2,487.05	.00	.00	.00	24.87	-1.00	.02
280-176663-m-1	5/20/2023	5:56 AM	21.12	-1.00	8.46	204.56	.00	-409.12	409.12	.00	2.05	.00	.00	.02
280-176663-l-2	5/20/2023	6:15 AM	21.51	-1.00	8.29	.67	.00	-1.35	1.35	.00	.01	.00	.00	.02
280-176663-k-3	5/20/2023	6:35 AM	21.87	-1.00	8.43	163.55	.00	-327.09	327.09	.00	1.64	.00	.00	.02
280-176663-k-4	5/20/2023	6:55 AM	21.90	-1.00	8.61	244.19	.00	-488.38	488.38	.00	2.44	.00	.00	.02
RINSE	5/20/2023	7:02 AM	21.90	-1.00	8.31	.00	10.02	10.02	.00	.00	.00	.13	.16	.02
CCV	5/20/2023	7:10 AM	21.82	-1.00	10.16	139.25	190.81	.00	103.13	87.68	1.39	1.91	-1.00	.02
CCB	5/20/2023	7:16 AM	21.77	-1.00	7.96	.00	3.35	3.35	.00	.00	.00	.06	.08	.02

Shipping and Receiving Documents

Chain of Custody Record

leidos

COC No.: RVAAP-357-TA

Page 1 of 1

Date: 5/17/2023

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

Laboratory Name: Test America - Canton
Address: 4955 Yarrow St
Arvada , CO 80002
Phone: (303) 736-0100
Fax:

Laboratory No.	Sample ID	Depth	Date	Time	Matrix	VOCs (1)(B)	SVOCs (2)(A)	LL PAHs (3)(A)	TPH GRO (4)(B)	TPH DRO (5)(A)	Explosives (6)(A)	Nitrate (7)(A)	Ammonia (8)(D)	Metals - LEAD (9)(C)	Temperature Blank	Total Number of Contai	OBSERVATIONS COMMENTS
	FBQmw-180-230301-GW	N/A	5/17/2023	1043	W						2					2	RUSH TAT 5 DAY

SK 5/17/23

Relinquished by	Date	Received by	Date
Signature		Signature	
Printed Name: Leidos	Time: 1700	Printed Name	Time: 0945
Company		Company	
Relinquished by	Date	Received by	Date
Signature		Signature	
Printed Name	Time	Printed Name	Time
Company		Company	

5/18/23

Notes: Total Number of Containers: 2

A. Cool, 4C
B. HCl, pH<2, Cool, 4C
C. HNO3, pH<2, Cool, 4C
D. H2SO4, pH<2, Cool 4C

1. SW 8260C	3 x 40 ml-VOA
2. SW 8270E	2 x 125 ml-amber
3. SW 8270E SIM	2 x 250 ml-amber
4. Modified 8015 (GRO)	3 x 40 ml-VOA
5. Modified 8015 (DRO)	2 x 1-L amber
6. SW 8330	2 x 500-ml amber
7. SW 9056	1 x 250-ml plastic
8. EPA 350.1	1 x 250-ml amber
8. SW 6020	1 x 500 ml plastic

Shipment Method:

Tracking Numbers:

8178 1968 1545
8178 1968 1554
8178 1968 1523

Temperature upon receipt

0.1, 3.2, 0.3°C IR14CF0.1

Leidos
8866 Commons Drive
Twinsburg, OH 44087
(330) 405-5802

280-176674 Chain of Custody

leidos

Chain of Custody Record

Re 5/17/2023

Page 1 of ~~1~~ 7

COC No.: RVAAP-558-TA
Date: 05/17/2023

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) Sarah Koshab

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
	FWGmw-015-230401-GW	N/A	N/A	5/17/23	1406	W	2		2	

SK 5/17/23

Relinquished by	Date	Received by	Date	
Signature: [signature]	5/17/2023	Signature: [signature]	5/18/23	
Printed Name: Ryan Lamm	Time: 1700	Printed Name: Matt Little	Time: 0945	
Company: Leidos		Company: ETA DEN		
Relinquished by	Date	Received by	Date	
Signature		Signature		
Printed Name	Time	Printed Name	Time	
Company		Company		

Notes: Total Number of Containers: 2

A. Cool, 4C
B. HCl, pH<2, Cool, 4C
C. HNO3, pH<2, Cool, 4C
D. NaOH, pH>12, Cool 4C

1. SW 8260B
2. SW 8270D
3. SW 8270D SIM
4. SW 8082A
5. SW 8081B
6. SW 8330
7. SW 6010/6020/7470
8. SW 9012B
9. SW 9034
10 SW 9056/9056A
11 SW 6860
12 EPA 353.2
13 SW 7196
14. SM2320B

Notes:

Shipment Method: Courier

8178 1968 1545
8178 1968 1554
8178 1968 1525

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 2 of 7

Page ~~of~~ 1 (2 of 7) 5/17/2023

COC No.: RVAAP-539-TA

Date: 5/17/23

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) Clee (Printed Name) Katie Lee

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	Nitrate (10)(A)	AMMONIA 15 (E)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	LL12mw-187-230401-GW	NA	NA	5/17/23	1340	W	1	1		2	

Relinquished by	Date	Received by	Date
Signature: Ryan Lamm	5/17/2023	Signature: Matt Little	5/18/23
Printed Name: Ryan Lamm	Time: 1700	Printed Name: Matt Little	Time: 0945
Company: Leidos		Company: ETADEN	
Relinquished by	Date	Received by	Date
Signature		Signature	
Printed Name	Time	Printed Name	Time
Company		Company	

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
E. H2SO4

1. SW 8260B
2. SW 8270D
3. SW 8270D SIM
4. SW 8082A
5. SW 8081B
6. SW 8330
7. SW 6010/6020/7470
8. SW 9012B
9. SW 9034
10. SW 9056/9056A
11. SW 6860
12. EPA 353.2
13. SW 7196
14. SM2320B
15. E350.1

Shipment Method: Courier

8178 1968 1545
8178 1968 1534
8178 1968 1525

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 3 of 7

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COC No.: RVAAP-340TA
Date: 5/17/23

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) CCee (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)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	LL3mw-241-230401-GW	NA	NA	5/17/23	1500	W	2		2	

5/17/23

Relinquished by	Date	Received by	Date
Signature	5/17/23	Signature	5/18/23
Printed Name: Ryan [illegible]	Time: 1700	Printed Name: Matt [illegible]	Time: 0945
Company: Leidos		Company: EIADEN	
Relinquished by	Date	Received by	Date
Signature		Signature	
Printed Name	Time	Printed Name	Time
Company		Company	

Notes: Total Number of Containers: 2
A. Cool, 4C
B. HCl, pH<2, Cool, 4C
C. HNO3, pH<2, Cool, 4C
D. NaOH, pH>12, Cool 4C

1. SW 8260B
2. SW 8270D
3. SW 8270D SIM
4. SW 8082A
5. SW 8081B
6. SW 8330
7. SW 6010/6020/7470
8. SW 9012B
9. SW 9034
10. SW 9056/9056A
11. SW 6860
12. EPA 353.2
13. SW 7196
14. SM2320B

Notes:

Shipment Method: Courier

8178 1968 1545
8178 1968 1534
8178 1968 1523

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 4 of 7

Page 1 of 1 5/17/23

COC No.: RVAAP-34 -TA

Date: 5/17/23

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) Clee (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	Nitrate (10)(A)	AMMONIA 15(E)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	LL12mw-185-230401-GW	GW	0	5/17/23	0945	W	1	1		2	
	LL12mw-185-230401-GWMSD			5/17/23	0945	W		1		1	
	LL12mw-185-230402-GW			5/17/23	0945	W	1	1		2	

Relinquished by — Signature — Printed Name: Leidos — Company — Date: 5/17/23 — Time: 1700

Received by — Signature — Printed Name: Matt Little — Company: ETADEN — Date: 5/18/23 — Time: 0945

Relinquished by — Signature — Printed Name — Company — Date — Time

Received by — Signature — Printed Name — Company — Date — Time

Notes: Total Number of Containers: 5

A. Cool, 4C
B. HCl, pH<2, Cool, 4C
C. HNO3, pH<2, Cool, 4C
D. NaOH, pH>12, Cool 4C
E. H2SO4

1. SW 8260B
2. SW 8270D
3. SW 8270D SIM
4. SW 8082A
5. SW 8081B
6. SW 8330
7. SW 6010/6020/7470
8. SW 9012B
9. SW 9034
10. SW 9056/9056A
11. SW 6860
12. EPA 353.2
13. SW 7196
14. SM2320B
15. E350.1

Shipment Method: Courier

8178 1968 1545
8172 1968 1534
8179 1969 1523

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

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COC No.: RVAAP-~~52~~-TA

Date: 5/17/2023

Name Leidos
Address: 8866 Commons Blvd. Suite 201, Twinsburg, OH 44087
Phone Number: (330) 405-5802
Project Manager: Jed Thomas
Project: RVAAP FWGW Sampling Event Spring 2023
Job/P.O. No.: P010216426
Sampler (Signature) Melissa 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
	FBQmw-173-230401-GW-R	NA	NA	5/17/23	1147	W	2	1	1		1		5	
	FBQmw-173-230402-GW-R	NA	NA	5/17/23	1147	W		1	1				2	

MR 5/17/23

Requested Parameters

Relinquished by	Date	Received by	Date	Notes: Total Number of Containers: 7
Signature: Ryan Lunn	5/17/2023	Signature: [illegible]	5/18/23	A. Cool, 4C
Printed Name: Ryan Lunn	Time: 1700	Printed Name: Matt Little	Time: 0945	B. HCl, pH<2, Cool, 4C
Company: Leidos		Company: ETADEN		C. HNO3, pH<2, Cool, 4C
				D. NaOH, pH>12, Cool 4C

Relinquished by	Date	Received by	Date	Notes:
Signature		Signature		1. SW 8260B
Printed Name	Time	Printed Name	Time	2. SW 8270D
Company		Company		3. SW 8270D SIM
				4. SW 8082A
				5. SW 8081B
				6. SW 8330
				7. SW 6010/6020/7470
				8. SW 9012B
				9. SW 9034
				10. SW 9056/9056A
				11. SW 6860
				12. EPA 353.2
				13. SW 7196
				14. SM2320B

Shipment Method: Courier

8178 1968 1545
8178 1968 1534
8178 1968 1523

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

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COC No.: RVAAP-345-TA

Date: 5/17/2023

Name Leidos
Address: 8866 Commons Blvd. Suite 201, Twinsburg, OH 44087
Phone Number: (330) 405-5802
Project Manager: Jed Thomas
Project: RVAAP FWGW Sampling Event Spring 2023
Job/P.O. No.: P010216426
Sampler (Signature) Melissa 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	Nitrate (10)(A)	AMMONIA 15 (E)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	LL12mw-245-230401-GW	NA	NA	5/17/23	1426	W	1	1		2	

MR 5/17/23

Relinquished by	Date	Received by	Date
Signature	5/17/23	Signature	5/18/23
Printed Name: Leidos	Time: 1700	Printed Name: ETADEN	Time: 0945
Company		Company	
Relinquished by	Date	Received by	Date
Signature		Signature	
Printed Name	Time	Printed Name	Time
Company		Company	

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
E. H2SO4

1. SW 8260B
2. SW 8270D
3. SW 8270D SIM
4. SW 8082A
5. SW 8081B
6. SW 8330
7. SW 6010/6020/7470
8. SW 9012B
9. SW 9034
10. SW 9056/9056A
11. SW 6860
12. EPA 353.2
13. SW 7196
14. SM2320B
15. E350.1

Shipment Method: Courier

8178 1968 154
8178 1968 1534
8178 1969 1523

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

COPY

leidos

Chain of Custody Record

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~~Page 1 of~~ 5/17/2023

COC No.: RVAAP-~~544~~ -TA

Date: 5/17/2023

Name Leidos
Address: 8866 Commons Blvd. Suite 201, Twinsburg, OH 44087
Phone Number: (330) 405-5802
Project Manager: Jed Thomas
Project: RVAAP FWGW Sampling Event Spring 2023
Job/P.O. No.: P010216426
Sampler (Signature) Melissa Rojo (Printed Name) Melissa Rojo

Laboratory Name: TA- Denver
Address: 4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0107
Contact: Patrick McEntee

Requested Parameters

Laboratory No.	Sample ID	Site Type	Depth	Date	Time	Matrix	Expanded Explosives (6)(A)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	FBQmw-175-230401-GW-R	NA	NA	5/17/23	0858	W	2		2	
	FBQmw-175-230401-GWMSD-R	NA	NA	5/17/23	0858	W	8		8	extra volume for MS/MSD
	FBQmw-175-230402-GW-R	NA	NA	5/17/23	0858	W	2		2	

MR 5/17/2023

Relinquished by	Date	Received by	Date	Notes: Total Number of Containers: 12	Shipment Method: Courier
Signature: Ryan Iverson	5/17/23	Signature:	5/18/23	A. Cool, 4C E. NaOH/Zn Acetate, pH>9, Cool 4C B. HCl, pH<2, Cool, 4C C. HNO3, pH<2, Cool, 4C D. NaOH, pH>12, Cool 4C	
Printed Name: Ryan Iverson	Time: 1700	Printed Name: Matt Little	Time: 0945	1. SW 8260B Notes: 2. SW 8270D 3. SW 8270D SIM 4. SW 8082A 5. SW 8081B	
Company: Leidos		Company: ETADEN		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	8178 1968 1545 8178 1968 1554 5/17/2023 8178 1968 ~~1554~~ 1523 Temperature Blank
Relinquished by	Date	Received by	Date		Lab: Leidos 8866 Commons Drive Twinsburg, OH 44087 (330) 405-5802
Signature		Signature			
Printed Name	Time	Printed Name	Time		
Company		Company			

Leidos White: Laboratory Pink: Project Manager Yellow: Project QAO Goldenrod: Field Project Manager

280-176674 Waybill

Part # 156297-435 RRDB EXP 11/23

ORIGIN ID:CAKA (330) 998-4246
RYAN LAURICH
LEIDOS
8866 COMMONS BLVD

TWINSBURG, OH 44087
UNITED STATES US

SHIP DATE: 17MAY23
ACTWGT: 51.55 LB
CAD: 6993880/SSFE2420
DIMS: 26x14x14 IN

BILL RECIPIENT

TO **EUROFINS ENVIRONMENT TE**
TESTAMERICA DENVER LAB
4955 YARROW ST

ARVADA CO 80002
(303) 736-0100 REF:
INV:
PO: DEPT:

FedEx Express

E

J232023040501uv

2 of 3

MPS# 0681 **3984 4714 4465**
Mstr# 8178 1968 1523 0215

THU - 18 MAY 10:30A
PRIORITY OVERNIGHT
DSR AHS
80002
CO-US **DEN**

NX LAAA

640 4 10:30 C 4465 05 18

FedEx Express® Package US Airbill

FedEx Tracking Number 8178 1968 1523

1 From
Date
Sender's Name Phone
Company
Address Dept./Floor/Suite/Room
City State ZIP

2 Your Internal Billing Reference

3 To
Recipient's Name Phone (303) 736-0100
Company
Address
We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept./Floor/Suite/Room
Address
Use this line for the HOLD location address or for continuation of your shipping address.
City State ZIP 80002

Hold Weekday
FedEx location address REQUIRED. NOT available for FedEx First Overnight.

Hold Saturday
FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Express Service
Packages up to 150 lbs.
For packages over 150 lbs., use the FedEx Express Freight US Airbill.

1 Business Day
- FedEx First Overnight
- FedEx Priority Overnight [X]
Next business morning.* Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
- FedEx Standard Overnight
Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days
- FedEx 2Day A.M.
Second business morning.* Saturday Delivery NOT available.
- FedEx 2Day
Second business afternoon.* Thursday shipments will be delivered on Monday unless Saturday Delivery is selected.
- FedEx Express Saver
Third business day.* Saturday Delivery NOT available.

5 Packaging *Declared value limit $500.
- FedEx Envelope*
- FedEx Pak*
- FedEx Box
- FedEx Tube
- Other [X]

6 Special Handling and Delivery Signature Options
- Saturday Delivery
NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.
- No Signature Required
Package may be left without obtaining a signature for delivery.
- Direct Signature [X]
Someone at recipient's address may sign for delivery.
- Indirect Signature

Does this shipment contain dangerous goods?
One box must be checked.
- No [X]
- Yes As per associated Shipper's Declaration.
- Yes Shipper's Declaration not required.
- Dry Ice Dry Ice, 9, UN 1845 ____ x ____ kg
- Cargo Aircraft Only

Restrictions apply for dangerous goods — see the current FedEx Service Guide.

7 Payment Bill to:
- Sender Acct. No. in Section 1 will be billed.
- Recipient [X]
- Third Party
- Credit Card
Enter FedEx Acct. No. below.
Obtain recip. FedEx Acct. No.
[redacted]

Total Packages 3 Total Weight 55 lbs.

†Our liability is limited to US$100 unless you declare a higher value. See the current FedEx Service Guide for details.

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611

Do not lift using this tag.

FedEx Express **Package US Airbill**

FedEx Tracking Number **8178 1968 1523**

Form ID No. **0215**

1 From

Date

Sender's Name Phone

Company

Address Dept./Floor/Suite/Room

City State ZIP

2 Your Internal Billing Reference

3 To

Recipient's Name Phone

Company

Address Dept./Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City State ZIP

Hold Weekday — FedEx location address REQUIRED. NOT available for FedEx First Overnight.

Hold Saturday — FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

8178 1968 1523

4 Express Package Service * To most locations.

Packages up to 150 lbs. For packages over 150 lbs., use the FedEx Express Freight US Airbill.

Next Business Day

- ☐ FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
- ☐ FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
- ☐ FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

- ☐ FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.
- ☐ FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless Saturday Delivery is selected.
- ☐ FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

☐ FedEx Envelope* ☐ FedEx Pak* ☐ FedEx Box ☐ FedEx Tube ☐ Other

6 Special Handling and Delivery Signature Options Fees may apply. See the FedEx Service Guide.

☐ Saturday Delivery — NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

☐ No Signature Required — Package may be left without obtaining a signature for delivery.

☐ Direct Signature — Someone at recipient's address may sign for delivery.

☐ Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only.

Does this shipment contain dangerous goods? One box must be checked.

☐ No ☐ Yes — As per associated Shipper's Declaration. ☐ Yes — Shipper's Declaration not required. ☐ Dry Ice — Dry Ice, 9, UN 1845 _____ x _____ kg

Restrictions apply for dangerous goods — see the current FedEx Service Guide. ☐ Cargo Aircraft Only

7 Payment *Bill to:*

☐ Sender — Acct. No. in Section 1 will be billed. ☐ Recipient ☐ Third Party — Enter FedEx Acct. No. below

Obtain recip. FedEx Acct No ☐

Total Packages Total Weight

_____ _____ lbs.

†Our liability is limited to US$100 unless you declare a higher value. See the current FedEx Service Guide for details.

611

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ORIGIN ID:CAKA (330) 998-4246
RYAN LAURICH
LEIDOS
8866 COMMONS BLVD
TWINSBURG, OH 44087
UNITED STATES US

SHIP DATE: 17MAY23
ACTWGT: 51.15 LB
CAD: 6993080/SSFE2420
DIMS: 26x14x14 IN
BILL RECIPIENT

TO EUROFINS ENVIRONMENT TE
TESTAMERICA DENVER LAB
4955 YARROW ST
ARVADA CO 80002
(303) 736-0100
INV:
PO:
REF:
DEPT:

Part # 156297-435 RHDB EXP 11/23

FedEx Express

J232023040501uv

1 of 3
TRK# 0215 8178 1968 1523
MASTER

NX LAAA

THU - 18 MAY 10:30A
PRIORITY OVERNIGHT
DSR AHS
80002
CO-US DEN

DEN
14
A

Align Open End of FedEx Pouch Here

ORIGIN ID:CAKA (330) 998-4246
RYAN LAURICH
LEIDOS
8866 COMMONS BLVD

TWINSBURG, OH 44087
UNITED STATES US

SHIP DATE: 17MAY23
ACTWGT: 49.75 LB
CAD: 6993880/SSFE2420
DIMS: 26x14x14 IN

BILL RECIPIENT

Part # 156297-435 RRDB EXP 11/23

TO EUROFINS ENVIRONMENT TE
TESTAMERICA DENVER LAB
4955 YARROW ST

ARVADA CO 80002
(303) 736-0100 REF:
INV:
PO: DEPT:

FedEx Express

E

J232023040501uv

3 of 3
MPS# 3984 4714 4476
0681
Mstr# 8178 1968 1523
0215

THU - 18 MAY 10:30A
PRIORITY OVERNIGHT
DSR AHS
80002
CO-US DEN

NX LAAA

FedEx Package US Airbill Express

FedEx Tracking Number 8178 1968 1545

Form ID No. 0215

From
Date [redacted]
Sender's Name Phone
Company
Address
Dept./Floor/Suite/Room
City State ZIP

Your Internal Billing Reference

To
Recipient's Name Phone
Company
Address
We cannot deliver to P.O. boxes or P.O. ZIP codes.
Dept./Floor/Suite/Room
Address
Use this line for the HOLD location address or for continuation of your shipping address.
City State ZIP

Hold Weekday
FedEx location address REQUIRED. NOT available for FedEx First Overnight.

Hold Saturday
FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

8178 1968 1545

4 Express Package Service *To most locations.
Packages up to 150 lbs. For packages over 150 lbs., use the FedEx Express Freight US Airbill.

Next Business Day
- FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
- FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
- FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days
- FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.
- FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless Saturday Delivery is selected.
- FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging *Declared value limit $500.
FedEx Envelope* | FedEx Pak* | FedEx Box | FedEx Tube | Other

6 Special Handling and Delivery Signature Options Fees may apply. See the FedEx Service Guide.
- Saturday Delivery — NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.
- No Signature Required — Package may be left without obtaining a signature for delivery.
- Direct Signature — Someone at recipient's address may sign for delivery.
- Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only.

Does this shipment contain dangerous goods?
One box must be checked.
No | Yes As per associated Shipper's Declaration. | Yes Shipper's Declaration not required. | Dry Ice Dry Ice, 9, UN 1845 ____ x ____ kg
Restrictions apply for dangerous goods — see the current FedEx Service Guide. Cargo Aircraft Only

7 Payment Bill to:
Sender Acct. No. in Section 1 will be billed. | Recipient | Third Party | Enter FedEx Acct. No. below | Obtain recip FedEx Acct No.
[redacted]
Total Packages [redacted] Total Weight [redacted] lbs.

Your liability is limited to US$100 unless you declare a higher value. See the current FedEx Service Guide for details.

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619

fedex.com 1.800.GoFedEx 1.800.463.3339

...open end of FedEx pouch here.

Login Sample Receipt Checklist

Client: Leidos, Inc.

Job Number: 280-176674-1

Login Number: 176674
List Number: 1
Creator: Held, Wesley

List Source: Eurofins Denver

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	